

**Voting Members**

Clarksville: Paul Fetter -Town Council President, Tony Munich, Jamie Hunt

Jeffersonville: Mayor Mike Moore, Philip Hendershot – Chair, Chris Fox -Treasurer

New Albany: Mayor Jeff Gahan, Christopher Gardner – Vice-Chair, Krystina Jarboe

Non-Voting Members

SoIN Tourism: Jim Epperson

One Southern Indiana: Wendy Dant Chesser

Indiana DNR: Lucas Green

Indiana DOT: Jim Ude

November 18, 2019

via electronic mail only

Mr. Dylan Fisher, Director
Department of Redevelopment
Town of Clarksville
2000 Broadway Street
Clarksville, IN 47129

Subject: Section 4(f) Concurrence
Riverside Drive Improvements

Dear Mr. Fisher:

In response to your November 4, 2019 request, the Ohio River Greenway Development Commission (Commission) expresses our support and concurrence for the Riverside Drive Project in Clarksville, and specifically the Department of Transportation Act of 1966 Section 4(f) requirements for protection of public parks and recreational areas.

Sincerely,

Philip T. Hendershot, Chair

November 4, 2019

Clarksville Parks and Recreation
Attn: R. Brian Kaluzny, Superintendent
2000 Broadway Street, Suite 221
Clarksville, IN 47129

Re: Section 4(f) Transportation Enhancement to the Clarksville Heritage Connector Trail and Ashland Park – Town of Clarksville’s Riverside Drive Improvement Project

Dear R. Brain Kaluzny,

Purpose of the Letter: The Town of Clarksville has programmed a project that will improve Riverside Drive. Due to the use of federal funds, the proposed transportation project is subject to the requirements of Section 4(f) of the *Department of Transportation (DOT) Act of 1966*, which affords protection to publicly-owned parks, recreation areas, and wildlife and waterfowl refuges. ***The purpose of this correspondence is to document that the Official with Jurisdiction (in this case, you) concurs with the measures to minimize harm and the assessment of impacts to Ashland Park and the Clarksville Heritage Trail connector segment.*** Your concurrence is critical to the project moving forward and will be reviewed by INDOT.

Project Description: The project will start on the east side of the parking lot at Ashland Park (located approximately 0.16 mile west from the intersection of Riverside Drive and Woerner Avenue) and will extend east to the Clarksville town limits. See Exhibit 1 for the approximate project limits in red. The project will include the reconstruction of the existing Riverside Drive to provide on-street parallel parking, curbs and storm sewer, sidewalks and a 10-foot-wide cycle track. The proposed cycle track will complete Clarksville’s portion of the Ohio River Greenway.

Clarksville Heritage Trail Connector of Ohio River Greenway:

Existing Conditions: According to IndianaMap and the approved Clarksville Parks and Recreation Department 2018 Master Plan, the Clarksville Heritage Trail Connector of the Ohio River Greenway is managed by the Clarksville Park and Recreation Department (see excerpts from the Parks Master Plan in Exhibit 2). It presently runs north-south as a shared-use route with motor vehicles along Woerner Avenue to Riverside Drive where it connects to the Ohio River Greenway.

Project Proposal: The Riverside Drive project will include crosswalk enhancements at Riverside/Woerner so the Clarksville Heritage Trail safely connects to the Ohio River Greenway (see Exhibit 3). The Clarksville Heritage Trail connector segment to the Ohio River Greenway will be temporarily detoured away from this intersection during construction.

The following measures to minimize harm will be incorporated into the project :

- Appropriate detour signage will be installed to alert users of construction activities.

- The contractor will coordinate with the Town of Clarksville and Clarksville Parks and Recreation regarding the schedule for the detour of the Clarksville Heritage Trail connector segment at Riverside Drive.
- The staging and/or storage of construction equipment will not take place outside proposed construction limits.

In accordance with 23 CFR 774.13(g), the proposed project appears to constitute a **transportation enhancement** for the Clarksville Heritage Trail Connector of Ohio River Greenway 4(f) property, based on the following assessment:

- The use of the 4(f) property will preserve and enhance the Heritage Trail Connector and the activities, features and attributes that qualifies the trail for Section 4(f) protection by tying the trail route into a designated multi-use path (the Ohio River Greenway) at its southern terminus
- The official with jurisdiction (OWJ) (Clarksville Parks and Recreation Department) agrees with this determination [pending your agreement and response to this letter]

Conclusion: Based on the scope of the proposed project and type of work, there will be no permanent interference with or adverse effects to the recreational activities, features and/or attributes associated with the Clarksville Heritage Trail Connector of the Ohio River Greenway.

Ashland Park:

Existing Conditions: Ashland Park, managed by the Clarksville Parks and Recreation Department, is present at the west end of the project. The Park is located on Marathon Ashland Petroleum LLC owned property under a lease agreement.

Project Proposal: The project will require temporary closure of the most eastern parking lot of Ashland Park during construction. The project will require an estimated 0.1 acres of temporary right-of-way (for construction access) and 0.33 acres of permanent right-of-way from the Marathon Ashland Petroleum LLC owned property (see preliminary plan sheets as Exhibit 4). Three other parking lots are available 0.25-mile to the west and will remain open during construction. The park and trail amenities that encircle this parking lot (i.e. benches, trash receptacles, street lights, information boards, and the overlook area) will remain open and will be accessible via the existing Ohio River Greenway. Access to the parking lot and functionality of the Park and Greenway will not be permanently altered by the project.

The following measures to minimize harm will be incorporated into the project:

- Appropriate detour signage will be installed to alert users of construction activities and direct them to the other open parking lots.
- The contractor will coordinate with the Town of Clarksville and Clarksville Parks and Recreation regarding the schedule for the most eastern parking lot closure along Riverside Drive at Ashland Park.
- The staging and/or storage of construction equipment will not take place outside proposed construction limits within Ashland Park.

In accordance with 23 CFR 774.13(d), it appears the project will result in a **transportation enhancement** of the **Ashland Park** 4(f) property, based on the following assessment:

- The project will not adversely affect the features, attributes, or activities qualifying Ashland Park for protection under Section 4(f) and will not change the recreational aspects of the park
- Temporary closure of one parking lot (no longer than the duration of the Riverside Drive detour) with no change in ownership
- Nature and magnitude of changes to the property are minimal
- With three other parking lots available, temporary closure of this parking lot is not considered an adverse effect on the protected activities, features or attributes or on access to the park
- The use of the 4(f) property will preserve and enhance Ashland Park and the activities, features and attributes that qualifies the park for Section 4(f) protection, as the existing greenway that is currently separated from traffic through Ashland Park will no longer end, but continue eastward to the Town limits
- The official with jurisdiction (OWJ) (Clarksville Parks and Recreation Department) agrees with this determination [pending your agreement and response to this letter]

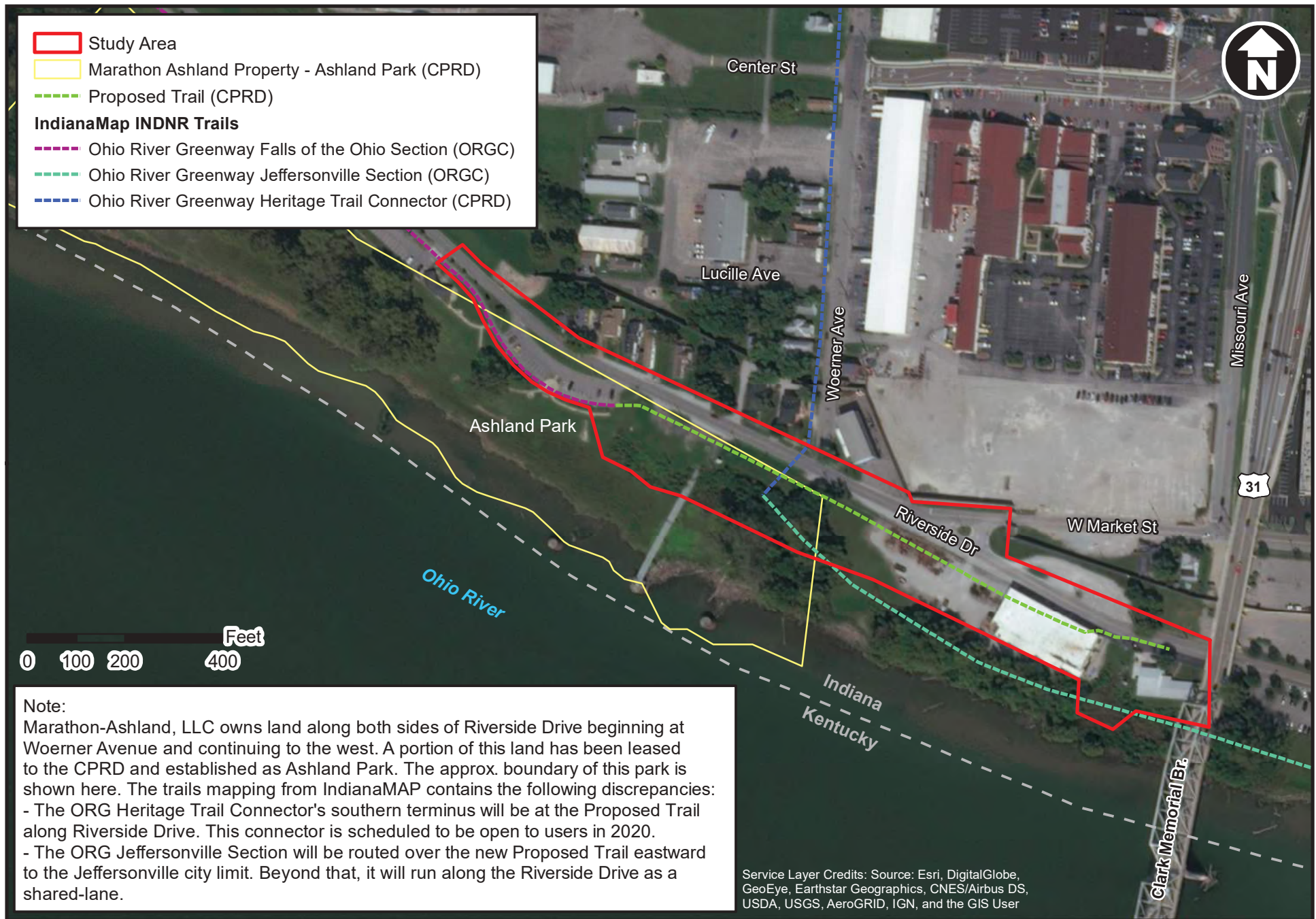
Conclusion: Based on the scope of the proposed project and type of work, there will be no permanent interference with or adverse effects to the recreational activities, features and/or attributes associated with Ashland Park. Any existing fence that surrounds the non-public portions of the Marathon Ashland property that is impacted by the project will be reset to the new right of way line. This will either be included in the costs due to the landowner during land acquisition or by the project's contractor.

If you concur with the measures to minimize harm and the assessment of impacts in regard to the proposed project, please indicate as such by **responding accordingly to this letter no later than fourteen (14) days from the date of this letter.**

Thank you for your time and cooperation on this matter. If you have questions and/or concerns, please feel free to contact Dylan Fisher, Redevelopment Director at dfisher@townofclarksville.com, 812-283-1407.



Dylan W. Fisher
Town of Clarksville



Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN

Section 4(f) Resources

C-53

Author: Alexandra Zelles (9/11/2019)



Figure 4. Clarksville Trail System

GASKELL PARK

Gaskell Park is located on approximately 2 acres of land located on Briarwood Drive, near the intersection of Briarwood Drive and Altawood Drive. It services the Blackiston Heights neighborhood, and provides picnic tables, updated playground equipment, and a basketball court.

GATEWAY PARK

Gateway Park is Clarksville's newest park, opened on May 3, 2016. The park features an adventure playground with multiple pieces of unique and interactive playground equipment, splash pad (open seasonally), shelter house, restrooms, an event lawn, and a covered stage area. Clarksville's Outdoor Concert and Movie Series takes place in Gateway Park during the summer months. A new event was also recently begun at Gateway Park, called Comedy in the Park, where local comedians entertain the audience with jokes that are family friendly.

Gateway Park is also home to the Clarksville Youth Baseball/Softball complex. This beautiful seven field complex opened in April of 2009, and is home to the Clarksville Youth Baseball/Softball League. Among the seven fields is a state-of-the-art "Challenger Field," which is for children with physical and/or mental disabilities. The spectator portion of the complex features a large concession facility, as well as several covered seating areas.

The park also features a half-mile walking path with fitness equipment, which surrounds the complex. There are two playgrounds on the property for families with young children to enjoy, as well as a shelter house for picnics.

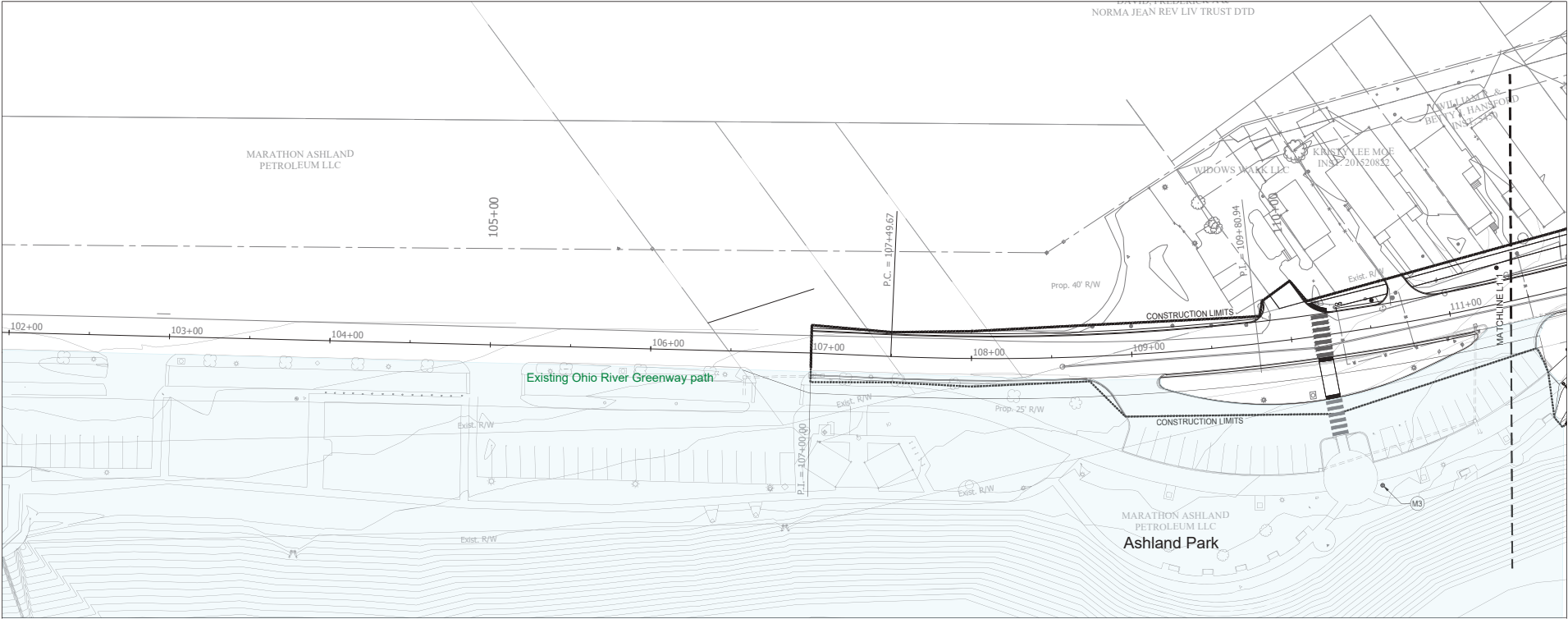
HERITAGE TRAIL

The 2.7-mile Heritage Trail links the residential heart of Clarksville, Indiana, with its growing trail system and two local parks. It creates a loop with the Levee Trail, and also has a connection to the future Central Trail, which will be located along an abandoned portion of the CSX railroad. It begins at Ashland Park, at the south end of Woerner Avenue, and ends at the north end of the Clarksville Wastewater Treatment Plant, near Brown Station Way. Parking is located in Ashland Park.

LAPPING PARK

This 332-acre park holds Wooded View Golf Course, an 18-hole course and driving range, as well as a softball complex and other recreational opportunities. The softball complex faces Potters Lane and houses two softball fields, a concession stand, restrooms and ample parking. The entrance to Lapping Park is located at the junction of Potters Lane and Greentree Boulevard North. Besides the golf course, the park boasts walking trails, an 18-hole disc golf course, one basketball court, two horseshoe pits, volleyball space, two shelter houses, an amphitheater, and Endris Lodge.

The amphitheater and two shelter houses are also available for rent and are suitable for weddings, church services or other outdoor activities. Endris Lodge can also be rented for wedding receptions, parties or business meetings. Picnic tables and a grill are outside the lodge and provide for additional capacity.





STRIPING & SIGNAGE LEGEND

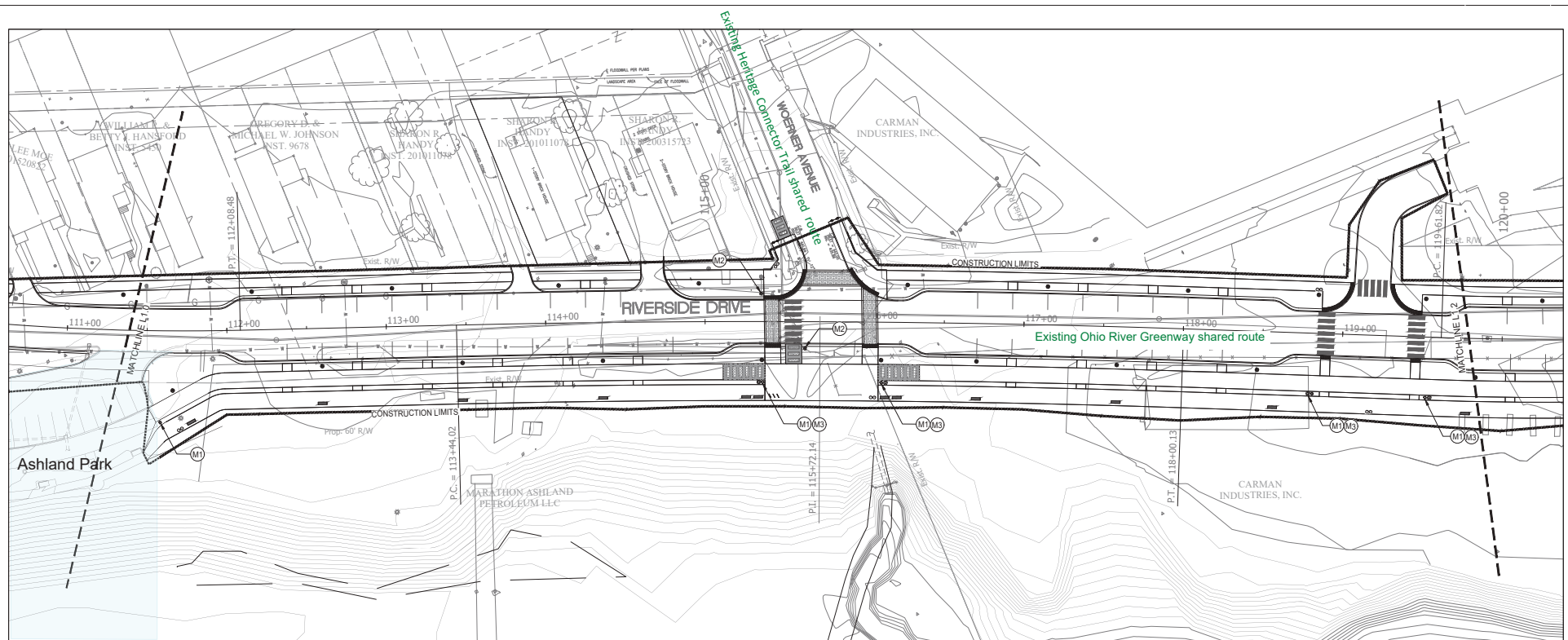
M1	⊕	BICYCLE FACILITY STOP SIGN
M2	⊞	BICYCLE/PEDESTRIAN KEEP LEFT/RIGHT SIGN
M3	⊙	BIKE YIELD TO PEDESTRIAN SIGN
M4	🚲	SHARED LANE MARKING
M5		PLACEHOLDER

Existing Functional Area of Ashland Park

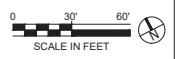



 Engineers and Consultants 8790 PURDUE ROAD INDIANAPOLIS, IN 46268-6128 PHONE: (317) 298-4500		RECOMMENDED FOR APPROVAL DESIGN ENGINEER 4/8/2019 DATE	TOWN OF CLARKSVILLE	HORIZONTAL SCALE 1" = 30'		BRIDGE FILE	
				VERTICAL SCALE N/A		DESIGNATION N/A	
DESIGNED: JB 4/8/2019 DRAWN: JB 4/8/2019 CHECKED: BD 4/8/2019	CHECKED: BD 4/8/2019	CHECKED: BD 4/8/2019	SIGNAGE AND STRIPING PLAN RIVERSIDE DRIVE	SURVEY BOOK N/A		SHEETS 1 of 1	
				CONTRACT TBD		PROJECT TBD	

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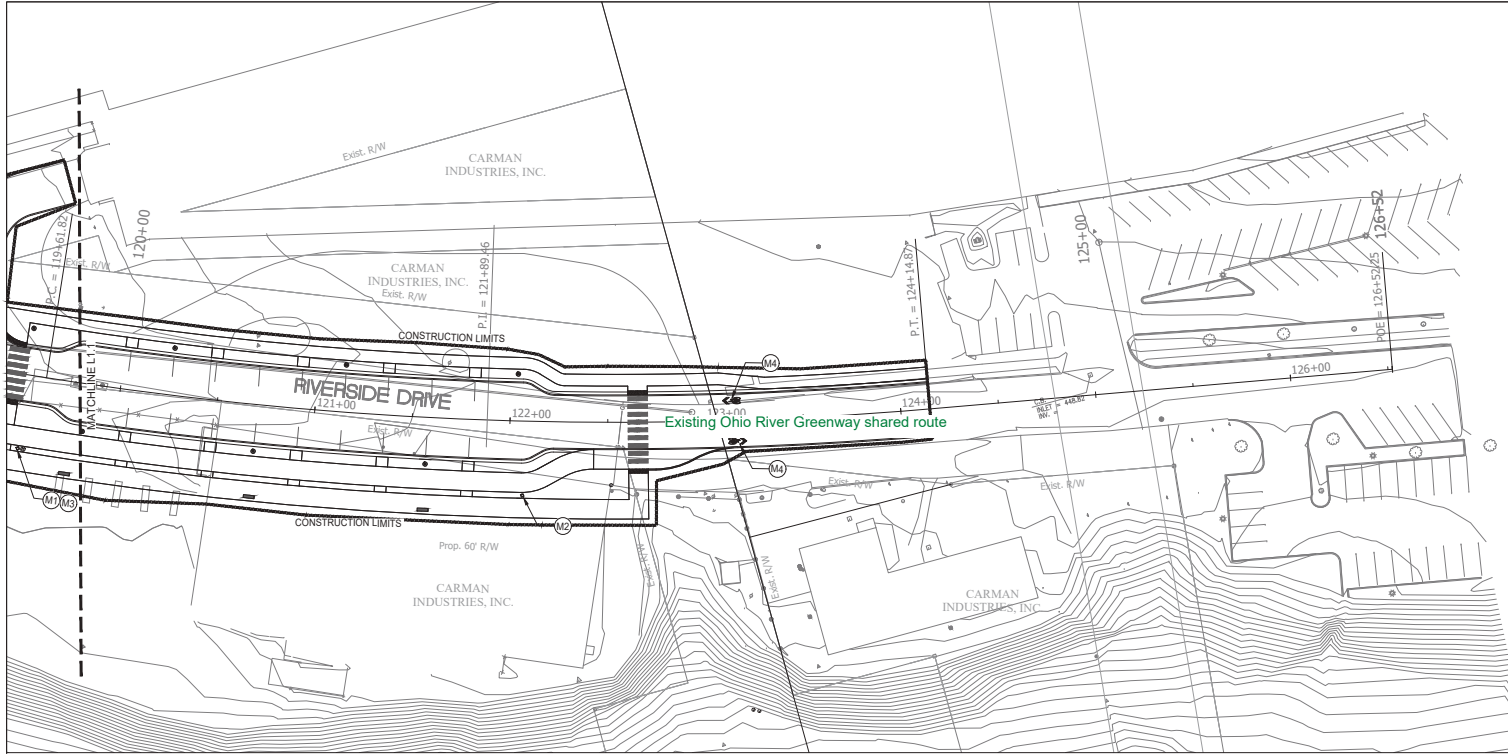


STRIPING & SIGNAGE LEGEND		
(M1)	⊕	BICYCLE FACILITY STOP SIGN
(M2)	⊞	BICYCLE/PEDESTRIAN KEEP LEFT/RIGHT SIGN
(M3)	⊙	BIKE YIELD TO PEDESTRIAN SIGN
(M4)	🚲	SHARED LANE MARKING
(M5)		PLACEHOLDER
Existing Functional Area of Ashland Park		



 Engineers and Consultants 8790 PURDUE ROAD INDIANAPOLIS, IN 46268-6128 PHONE: (317) 298-4500	NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____ DATE: 4/8/2019	TOWN OF CLARKSVILLE	HORIZONTAL SCALE 1" = 30'	BRIDGE FILE N/A
		DESIGNED: JB 4/8/2019 DRAWN: JB 4/8/2019		DESIGNATION N/A	SHEETS 1 of 1
		CHECKED: BD 4/8/2019 CHECKED: BD 4/8/2019	SIGNAGE AND STRIPING PLAN RIVERSIDE DRIVE	SURVEY BOOK N/A	PROJECT TBD
				CONTRACT TBD	

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STRIPING & SIGNAGE LEGEND

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M2	⊞	BICYCLE/PEDESTRIAN KEEP LEFT/RIGHT SIGN
M3	⊙	BIKE YIELD TO PEDESTRIAN SIGN
M4	🚲	SHARED LANE MARKING
M5		PLACEHOLDER



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Engineers and Consultants
8790 PURDUE ROAD
INDIANAPOLIS, IN 46268-6128
PHONE: (317) 298-4500

NOT FOR
CONSTRUCTION

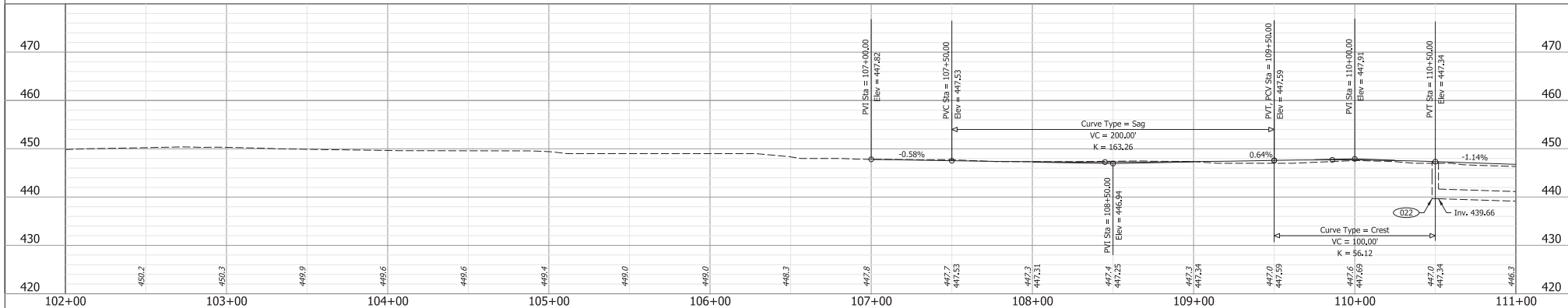
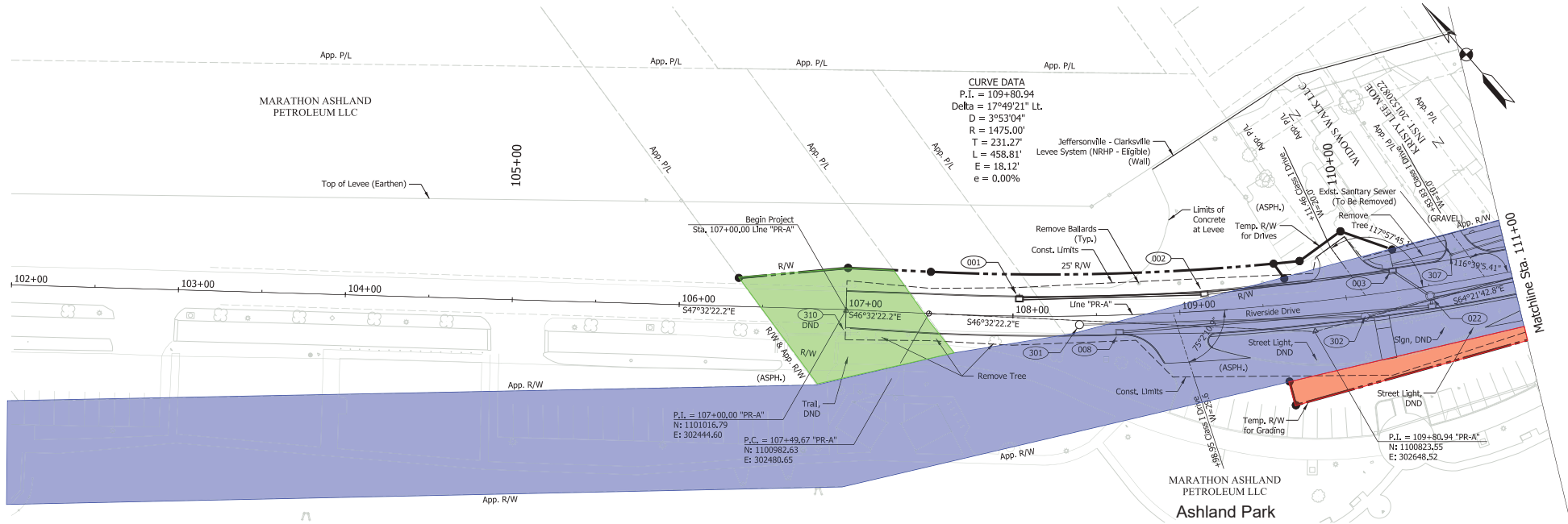
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	4/8/2019	DATE
DESIGNED: JB	4/8/2019	DRAWN: JB	4/8/2019
CHECKED: BD	4/8/2019	CHECKED: BD	4/8/2019

TOWN OF CLARKSVILLE

SIGNAGE AND STRIPING PLAN
RIVERSIDE DRIVE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION
N/A	H18901
SURVEY BOOK	SHEETS
N/A	1 of 1
CONTRACT	PROJECT
TBD	TBD

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- Existing R/W
- Permanent R/W from Marathon Ashland
- Temporary R/W from Marathon Ashland



8790 PURDUE ROAD
INDIANAPOLIS, IN 46268-6128
PHONE: (317) 298-1500

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	5/2/2019
DESIGNED: INDH	5/2/2019	DRAWN: INDH
CHECKED: LNB	5/2/2019	CHECKED: LNB

TOWN OF CLARKSVILLE

PLAN AND PROFILE
RIVERSIDE DRIVE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION
1" = 3'	1700725
SURVEY BOOK	SHEETS
N/A	9 of 36
CONTRACT	PROJECT
TBD	1700725



Clarksville Parks & Recreation

Phone: 812-283-5313
Fax: 812-288-1380
Info@ClarksvilleParks.com

2000 Broadway Street
Suite 221
Clarksville, IN 47129



November 5, 2019

Mr. Dylan Fisher, Director
Clarksville Redevelopment Commission
2000 Broadway Street
Clarksville, Indiana 47129


Re: Section 4(f) Town of Clarksville Riverside Drive Improvement Project

Dear Mr. Fisher:

I have read and understand the project scope of the Riverside Drive Improvement Project. I concur, based on the proposed project scope, that there will be no adverse effects or permanent interference with the recreational opportunities or amenities in Ashland Park or the Clarksville Heritage Trail Connector of the Ohio River Greenway.

I agree with the measures outlined to minimize any impacts. They will be sufficient to allow the public to enjoy the park. In addition, the improvements will enhance the opportunities for trail access and connectivity.

Very truly yours,


Robert R. Kaluzny
Superintendent



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>



In Reply Refer To:

October 30, 2019

Consultation Code: 03E12000-2019-SLI-0214

Event Code: 03E12000-2020-E-00765

Project Name: Riverside Drive Improvements (Des. No. 1700725)

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Kentucky Ecological Services Field Office

J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
(502) 695-0468

Project Summary

Consultation Code: 03E12000-2019-SLI-0214

Event Code: 03E12000-2020-E-00765

Project Name: Riverside Drive Improvements (Des. No. 1700725)

Project Type: TRANSPORTATION

Project Description: The proposed project will involve the reconstruction of Riverside Drive from the town limits to the second parking lot of Ashland Park, about 1,400 feet to the west. The project will widen the roadway to the south to accommodate a new typical cross section consisting of two travel lanes, on-street parking on both sides of the roadway, curbs, sidewalk (six foot on the north side and ten foot on the south side of the roadway), planting zones, and a twelve foot above-grade two-way cycle track within the right of way on the south side of the roadway. The project will also complete Clarksville's portion of the Ohio River Greenway, a multi-use trail, connecting Jeffersonville, Clarksville and New Albany. New right of way acquisition is anticipated.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.269793610394586N85.75361228869033W>



Counties: Clark, IN | Jefferson, KY

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf	Endangered

Clams

NAME	STATUS
Sheepnose Mussel <i>Plethobasus cyphus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6903	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
Phone: (502) 695-0468 Fax: (502) 695-1024
<http://www.fws.gov/frankfort/>

In Reply Refer To:

October 30, 2019

Consultation Code: 04EK1000-2019-SLI-0160

Event Code: 04EK1000-2020-E-00247

Project Name: Riverside Drive Improvements (Des. No. 1700725)

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Your concern for the protection of endangered and threatened species is greatly appreciated. The purpose of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. The species list attached to this letter fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA to provide information as to whether any proposed or listed species may be present in the area of a proposed action. This is not a concurrence letter; additional consultation with the Service may be required.

The Information in Your Species List:

The enclosed species list identifies federal trust species and critical habitat that may occur within the boundary that you entered into IPaC. For your species list to most accurately represent the species that may potentially be affected by the proposed project, the boundary that you input into IPaC should represent the entire “action area” of the proposed project by considering all the potential “effects of the action,” including potential direct, indirect, and cumulative effects, to federally-listed species or their critical habitat as defined in 50 CFR 402.02. This includes effects of any “interrelated actions” that are part of a larger action and depend on the larger action for their justification and “interdependent actions” that have no independent utility apart from the action under consideration (e.g.; utilities, access roads, etc.) and future actions that are reasonably certain to occur as a result of the proposed project (e.g.; development in response to a new road). If your project is likely to have significant indirect effects that extend well beyond the project footprint (e.g., long-term impacts to water quality), we highly recommend that you

coordinate with the Service early to appropriately define your action area and ensure that you are evaluating all the species that could potentially be affected.

We must advise you that our database is a compilation of collection records made available by various individuals and resource agencies available to the Service and may not be all-inclusive. This information is seldom based on comprehensive surveys of all potential habitats and, thus, does not necessarily provide conclusive evidence that species are present or absent at a specific locality. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please note that “critical habitat” refers to specific areas identified as essential for the conservation of a species that have been designated by regulation. Critical habitat usually does not include all the habitat that the species is known to occupy or all the habitat that may be important to the species. Thus, even if your project area does not include critical habitat, the species on the list may still be present.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and associated information. To re-access your project in IPaC, go to the IPaC web site (<https://ecos.fws.gov/ipac/>), select “Need an updated species list?”, and enter the consultation code on this letter.

ESA Obligations for Federal Projects:

Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

If a Federal project (a project authorized, funded, or carried out by a federal agency) may affect federally-listed species or critical habitat, the Federal agency is required to consult with the Service under section 7 of the ESA, pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). Recommended contents of a Biological Assessment are described at 50 CFR 402.12. For projects other than major construction activities, the Service suggests that a biological evaluation

similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat.

ESA Obligations for Non-federal Projects:

Proposed projects that do not have a federal nexus (non-federal projects) are not subject to the obligation to consult under section 7 of the ESA. However, section 9 of the ESA prohibits certain activities that directly or indirectly affect federally-listed species. These prohibitions apply to all individuals subject to the jurisdiction of the United States. Non-federal project proponents can request technical assistance from the Service regarding recommendations on how to avoid and/or minimize impacts to listed species. The project proponent can choose to implement avoidance, minimization, and mitigation measures in a proposed project design to avoid ESA violations.

Additional Species-specific Information:

In addition to the species list, IPaC also provides general species-specific technical assistance that may be helpful when designing a project and evaluating potential impacts to species. To access this information from the IPaC site (<https://ecos.fws.gov/ipac/>), click on the text “My Projects” on the left of the black bar at the top of the screen (you will need to be logged into your account to do this). Click on the project name in the list of projects; then, click on the “Project Home” button that appears. Next, click on the “See Resources” button under the “Resources” heading. A list of species will appear on the screen. Directly above this list, on the right side, is a link that will take you to pdfs of the “Species Guidelines” available for species in your list. Alternatively, these documents and a link to the “ECOS species profile” can be accessed by clicking on an individual species in the online resource list.

Next Steps:

Requests for additional technical assistance or consultation from the Kentucky Field Office should be submitted following guidance on the following page <http://www.fws.gov/frankfort/PreDevelopment.html> and the document retrieved by clicking the “outline” link at that page. When submitting correspondence about your project to our office, please include the Consultation Tracking Number in the header of this letter. (There is no need to provide us with a copy of the IPaC-generated letter and species list.)

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Kentucky Ecological Services Field Office

J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
(502) 695-0468

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Indiana Ecological Services Field Office

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

Project Summary

Consultation Code: 04EK1000-2019-SLI-0160

Event Code: 04EK1000-2020-E-00247

Project Name: Riverside Drive Improvements (Des. No. 1700725)

Project Type: TRANSPORTATION

Project Description: The proposed project will involve the reconstruction of Riverside Drive from the town limits to the second parking lot of Ashland Park, about 1,400 feet to the west. The project will widen the roadway to the south to accommodate a new typical cross section consisting of two travel lanes, on-street parking on both sides of the roadway, curbs, sidewalk (six foot on the north side and ten foot on the south side of the roadway), planting zones, and a twelve foot above-grade two-way cycle track within the right of way on the south side of the roadway. The project will also complete Clarksville's portion of the Ohio River Greenway, a multi-use trail, connecting Jeffersonville, Clarksville and New Albany. New right of way acquisition is anticipated.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.269793610394586N85.75361228869033W>



Counties: Clark, IN | Jefferson, KY

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
<p>Gray Bat <i>Myotis grisescens</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6329</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/21/office/42431.pdf</p>	Endangered
<p>Indiana Bat <i>Myotis sodalis</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> ▪ The project area includes 'potential' habitat. All activities in this location should consider possible effects to this species. <p>Species profile: https://ecos.fws.gov/ecp/species/5949</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/1/office/42431.pdf</p>	Endangered
<p>Northern Long-eared Bat <i>Myotis septentrionalis</i></p> <p>No critical habitat has been designated for this species.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> ▪ The specified area includes areas in which incidental take would not be prohibited under the 4(d) rule. For reporting purposes, please use the "streamlined consultation form," linked to in the "general project design guidelines" for the species. <p>Species profile: https://ecos.fws.gov/ecp/species/9045</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/10043/office/42431.pdf</p>	Threatened

Clams

NAME	STATUS
Clubshell <i>Pleurobema clava</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3789 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/352/office/42431.pdf	Endangered
Fanshell <i>Cyprogenia stegaria</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4822 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/368/office/42431.pdf	Endangered
Northern Riffleshell <i>Epioblasma torulosa rangiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/527 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/374/office/42431.pdf	Endangered
Orangefoot Pimpleback (pearlymussel) <i>Plethobasus cooperianus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1132 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/340/office/42431.pdf	Endangered
Purple Cat's Paw (=purple Cat's Paw Pearlymussel) <i>Epioblasma obliquata obliquata</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5602 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/323/office/42431.pdf	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5165 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/3645/office/42431.pdf	Threatened
Ring Pink (mussel) <i>Obovaria retusa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4128 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/341/office/42431.pdf	Endangered
Rough Pigtoe <i>Pleurobema plenum</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
<p>Species profile: https://ecos.fws.gov/ecp/species/6894</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/338/office/42431.pdf</p>	
<p>Sheepnose Mussel <i>Plethobasus cyphus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6903</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/7816/office/42431.pdf</p>	Endangered
<p>Spectaclecase (mussel) <i>Cumberlandia monodonta</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7867</p> <p>General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/4490/office/42431.pdf</p>	Endangered

Flowering Plants

NAME	STATUS
<p>Running Buffalo Clover <i>Trifolium stoloniferum</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2529</p> <p>Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1041/office/42431.pdf</p> <p>Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/1041/office/42431.pdf</p>	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Assistant Director-Ecological Services

1849 C Street NW

Room 3345

Washington, DC 20240-0001

Phone: (202) 208-4646 Fax: (202) 208-5618



In Reply Refer To:

December 11, 2019

Consultation Code: 04EK1000-2019-I-0160

Consultation Code: 03E12000-2019-I-0214

Event Code: 03E12000-2020-E-01800

Project Name: Riverside Drive Improvements (Des. No. 1700725)

Subject: Concurrence verification letter for the 'Riverside Drive Improvements (Des. No. 1700725)' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Riverside Drive Improvements (Des. No. 1700725)** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Clubshell, *Pleurobema clava* (Endangered)
- Fanshell, *Cyprogenia stegaria* (Endangered)
- Gray Bat, *Myotis grisescens* (Endangered)
- Northern Riffleshell, *Epioblasma torulosa rangiana* (Endangered)
- Orangefoot Pimpleback (pearlymussel), *Plethobasus cooperianus* (Endangered)
- Purple Cat's Paw (=purple Cat's Paw Pearlymussel), *Epioblasma obliquata obliquata* (Endangered)
- Rabbitsfoot, *Quadrula cylindrica cylindrica* (Threatened)
- Ring Pink (mussel), *Obovaria retusa* (Endangered)
- Rough Pigtoe, *Pleurobema plenum* (Endangered)
- Running Buffalo Clover, *Trifolium stoloniferum* (Endangered)
- Sheepnose Mussel, *Plethobasus cyphyus* (Endangered)
- Spectaclecase (mussel), *Cumberlandia monodonta* (Endangered)

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

Riverside Drive Improvements (Des. No. 1700725)

Description

The proposed project will involve the reconstruction of Riverside Drive from the town limits to the second parking lot of Ashland Park, about 1,400 feet to the west. The proposed improvements include the reconstruction of Riverside Drive. This project will provide a multi-use path separated from traffic to complete the Town's portion of the Ohio River Greenway, provide pedestrians with ADA-compliant walking areas that connect to existing sidewalks in the area, and upgrade the pavement and drainage to provide an extended service life. The Ohio River Greenway is a multi-use trail, connecting Jeffersonville, Clarksville and New Albany. The project will widen the roadway to the south to accommodate a new typical cross section consisting of two travel lanes, on-street parking on both sides of the roadway, curbs, sidewalk (six feet on the north side and ten feet on the south side of the roadway), planting zones, and a twelve foot above-grade two-way bicycle path within the right-of-way on the south side of the roadway. The project will also install new permanent street lighting and landscape trees; and include a new storm sewer system. No temporary lighting for the project will be required. New right of way acquisition is anticipated. Suitable habitat is present in the area in the form of human-made structures, forested areas, and the Ohio River riparian corridor. Predominant tree species in the project corridor include silver maple, Bradford pear and other street landscape trees. A total of approximately 10 individual trees (0.9 acre) will be removed within 100 feet of existing roadway as part of the project during the inactive season. No trees will be removed beyond 100 feet of existing roadway. A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula and capture sites was conducted on November 19, 2018. There are no documented sites within a half mile the project area. Site visits by CMT, Inc. conducted on September 18, 2018 identified one tree (*Populus deltoides*; 30" dbh) exhibiting bat habitat characteristics. During the September 18, 2018 site visit, one culvert was identified and inspected for the presence or use of bats, and none was observed.

Note: a portion of the project area (owned by Carman Industries) was unable to be accessed and investigated for species habitat because access was denied by the property owner; therefore, this property is not included as part of this consultation. When access is granted by the property owner, consultation for the Carman Industries property will be completed. A firm environmental commitment to complete consultation on the property will be included in the environmental document.

Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat^[1]?

[1] See [Indiana bat species profile](#)

Automatically answered

Yes

2. Is the project within the range of the Northern long-eared bat^[1]?

[1] See [Northern long-eared bat species profile](#)

Automatically answered

Yes

3. Which Federal Agency is the lead for the action?

A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction^[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces^[1]?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum^[1]?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable^[1] summer habitat for Indiana Bat or NLEB **within** the project action area^[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [national consultation FAQs](#).

Yes

9. Will the project remove *any* suitable summer habitat^[1] and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys^{[1][2]} been conducted^{[3][4]} **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

12. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur^[1]?

[1] Coordinate with the local Service Field Office for appropriate dates.

B) During the inactive season

15. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

16. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

Yes

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

B) During the inactive season

18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

Yes

19. Will the tree removal alter *any* **documented** Indiana bat or NLEB roosts and/or alter any surrounding summer habitat **within** 0.25 mile of a documented roost?

No

20. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

No

21. Are *all* trees that are being removed clearly demarcated?

Yes

22. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

No

23. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

No

24. Does the project include slash pile burning?

No

25. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

No

26. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

No

27. Will the project involve the use of **temporary** lighting *during* the active season?

Yes

28. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

29. Will the project install new or replace existing **permanent** lighting?

Yes

30. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting will be installed or replaced?

Yes

31. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?

No

32. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

Yes

33. Will the project raise the road profile **above the tree canopy**?

No

34. Are the project activities that are not associated with habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

Automatically answered

Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

35. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

36. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

Automatically answered

Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

37. General AMM 1

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

38. Tree Removal AMM 1

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal^[1] in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

39. Tree Removal AMM 3

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

40. Tree Removal AMM 4

Can the project avoid cutting down/removal of *all* (1) **documented**^[1] Indiana bat or NLEB roosts^[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

41. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

42. **Lighting AMM 2**

Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society^{[1][2]} to rate the amount of light emitted in unwanted directions?

[1] Refer to [Fundamentals of Lighting - BUG Ratings](#)

[2] Refer to [The BUG System—A New Way To Control Stray Light](#)

No

43. **Lighting AMM 2**

Will *all* **permanent** lighting use downward-facing, full cut-off^[1] lens lights (with same intensity or less for replacement lighting)?

[1] Refer to [Luminaire classification for controlling stray light](#)

Yes

44. **Lighting AMM 2**

Will *all* **permanent** lighting be directed away from *all* areas with suitable habitat?

Yes

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

No

3. How many acres^[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.9

Avoidance And Minimization Measures (AMMs)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 02, 2019. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

U.S. Fish & Wildlife Service Contact List

Indiana Ecological Services Field Office

620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

Kentucky Ecological Services Field Office

J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
(502) 695-0468

APPENDIX D: Bridge/Structure Assessment Form

This form will be completed and submitted to the District Environmental Manager by the Contractor prior to conducting any work below the deck surface either from the underside; from activities above that bore down to the underside; from activities that could impact expansion joints; from deck removal on bridges; or from structure demolition for bridges/structures within 1000 feet of suitable bat habitat.

DOT Project # 1700725	Water Body UNT1 of Ohio River	Date/Time of Inspection 09/18/2018 10:30am	Within 1,000ft of suitable bat habitat (circle one) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
---------------------------------	---	---	--

Route	County	Federal Structure ID
Riverside Dr.	Clark	38.269637, -85.753411

If the bridge/structure is 1,000 feet or more from suitable bat habitat (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check box and STOP HERE. No assessment required. ☐

Please submit to the U.S. Fish and Wildlife Service.

Areas Inspected (Check all that apply)

Bridges		Culverts/Other Structures		Summary Info (circle all that apply)			
All vertical crevices sealed at the top and 0.5-1.25" wide & ≥4" deep	<input type="checkbox"/>	Crevices, rough surfaces or imperfections in concrete	<input checked="" type="checkbox"/>	Human disturbance or traffic under bridge/in culvert or at the structure	High <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	None <input type="checkbox"/>
All crevices >12" deep & not sealed	<input type="checkbox"/>	Spaces between walls, ceiling joists	<input checked="" type="checkbox"/>	Possible corridors for netting	None/poor <input type="checkbox"/>	Marginal <input checked="" type="checkbox"/>	Excellent <input type="checkbox"/>
All guardrails	<input type="checkbox"/>						
All expansion joints	<input type="checkbox"/>						
Spaces between concrete end walls and the bridge deck	<input type="checkbox"/>						

Last Revised May 31, 2017

Vertical surfaces on concrete I-beams	<input type="checkbox"/>					
---------------------------------------	--------------------------	--	--	--	--	--

Evidence of Bats (Circle all that apply) Presence of one or more indicators is sufficient evidence that bats may be using the structure.

None ☒

Visual (e.g. survey, thermal, emergent etc.)

- Live __ number seen
- Dead __ number seen

Photo documentation YES ☐ NO ☐

Guano ☐

Odor YES ☐ NO ☐

Photo documentation YES ☐ NO ☐

Staining definitively from bats ☐

Photo documentation YES ☐ NO ☐

Audible ☐

Assessment Conducted By: <u>Marion Wells</u> Signature(s): <u>Marion Wells</u> <div style="text-align: right; font-size: small;"> Digitally signed by Marion Wells Date: 2019.11.18 08:17:53 -05'00' </div>
District Environmental Use Only: Date Received by District Environmental Manager: _____

DOT Bat Assessment Form Instructions

1. Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges, regardless of whether assessments have been conducted in the past.
2. Any bridge/structure suspected of providing habitat for any species of bat will be removed from work schedules until such time that the DOT has coordinated with the USFWS. Additional studies may be undertaken by the DOT to determine what species may be utilizing each structure identified as supporting bats prior to allowing any work to proceed.
3. Any questions should be directed to the District Environmental Manager.

Riverside Drive Improvements

CE Level 4

APPENDIX D: SECTION 106 OF THE NHPA



**FEDERAL HIGHWAY ADMINISTRATION'S
SECTION 4(F) COMPLIANCE REQUIREMENTS (FOR HISTORIC PROPERTIES) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECTS
ELIGIBILITY DETERMINATIONS
EFFECT FINDING
RIVERSIDE DRIVE IMPROVEMENTS
IN THE TOWN OF CLARKSVILLE, JEFFERSONVILLE TOWNSHIP, CLARK COUNTY, INDIANA
DES NO.: 1700725**

AREA OF POTENTIAL EFFECTS

(Pursuant to 36 CFR § 800.4(a)(1))

The Area of Potential Effects (APE) for this roadway improvement project includes above-ground properties adjacent to the project area and extends east and west from the termini to incorporate those resources that would likely have a view of the project. The APE for archaeological resources was defined as the project footprint. (See Appendix A: Maps & Plans.)

ELIGIBILITY DETERMINATIONS

(Pursuant to 36 CFR § 800.4(c)(2)). Four properties are listed, or eligible for listing, in the National Register of Historic Places (NRHP) within the APE for this undertaking: Louisville Municipal Bridge (Indiana Historic Sites and Structures Inventory [IHSSI] No.: 019-446-58215; NR-0681), Ohio Falls Car and Locomotive Company Historic District (IHSSI Nos.: 019-446-61001 to 019-446-641017; NR-2081), House at 519 Riverside Drive (IHSSI No.: 019-446-64205), Jeffersonville-Clarksville Levee System (WA 1).

Louisville Municipal Bridge (IHSSI No.: 019-446-58215; NR-0681) – Louisville Municipal Bridge carries U.S. 31 over the Ohio River between Jeffersonville, Indiana and Louisville, Kentucky and was constructed 1928-1929. The bridge is set on eight limestone piers which support two large, continuous span Warren thru-trusses, a simple span thru-truss, and simple approach spans on both sides of the river. The bridge approaches are marked by smooth, lighted, Art Deco-style limestone pylons that mark the Indiana and Kentucky sides of the structure. The Louisville Municipal Bridge was listed in the NRHP in 1984 under Criteria A and C for significance in the areas of Engineering, Transportation, and Architecture. The period of significance is 1928-1929, the time of its construction.

Ohio Falls Car and Locomotive Company Historic District (IHSSI Nos.: 019-446-61001 to 019-446-641017; NR-2081) – The Ohio Falls Car and Locomotive Company Historic District consists of fifteen Contributing and five Non-Contributing resources north of the Ohio River. Most buildings are nineteenth-century brick Romanesque structures connected to the industrial and productive activities of the Ohio Falls Car and Locomotive Company. The industrial complex is significant under NRHP Criterion A in the areas of Industry and Transportation for its association with the Ohio Car and Locomotive Company's nineteenth-century production of railroad cars for passengers and freight and related components. The property was determined eligible for NRHP by the National

Park Service in 2009. The period of significance spans from 1872, when the earliest of the buildings on the site was constructed, to 1930, when the business closed.

House at 519 Riverside Drive (IHSSI No.: 019-446-64205) - Built around 1870, this slightly L-shaped, one-story dwelling is topped by a hipped roof with wide eaves. The Italianate-style brick house features a slightly recessed side entry topped by a cornice embellished by four decorative brackets (two large and two small). This house is recommended eligible under Criterion C as a rare, intact example of the late nineteenth century homes that once lined Riverside Drive in Clarksville. The period of significance is circa 1870, the date of construction.

Jeffersonville-Clarksville Levee System (WA 1) – The Jeffersonville-Clarksville Levee System includes sections of concrete flood wall standing fifteen feet tall. An earthen levee system, covered by manicured grass and reinforced by a sloping brick abutment, continues west of the flood wall within the APE, north of Ashland Park. The system is recommended eligible under Criterion A, given the extensive nature of the flood control infrastructure that was constructed in the Ohio River Valley, particularly in the area around Clarksville and Jeffersonville, as a result of the 1937 flood. The period of significance is circa 1940, the approximate construction date of the system.

In addition, **Site 12CL0977** is a previously recorded historic site that was not accessible during this investigation as permission to access the property was denied and a legal injunction filed to that effect. The investigation of archaeological resources is ongoing and the eligibility of Site 12CL0977 and any other archaeological resources located within the archaeological APE will be determined at a later date.

EFFECT FINDING

Louisville Municipal Bridge – No Adverse Effect

Ohio Falls Car and Locomotive Company Historic District – No Adverse Effect

House at 519 Riverside Drive – No Adverse Effect

Jeffersonville-Clarksville Levee System – No Adverse Effect

Federal Highway Administration (FHWA) has determined a finding of “Adverse Effect” is appropriate for this undertaking due to ongoing archaeological investigations.

FHWA respectfully requests the Indiana State Historic Preservation Office provide written concurrence with the Section 106 determination of Adverse Effect based on the fact that the effect of the undertaking on archaeological resources is not yet known. Eligibility of individual archaeological sites will be addressed at a later date. FHWA intends to address any archaeological work that may need to be completed through stipulations in a Memorandum of Agreement (MOA).

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

Louisville Municipal Bridge - This undertaking will not convert property from the Louisville Municipal Bridge, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Louisville Municipal Bridge.

Ohio Falls Car and Locomotive Company Historic District – This undertaking will not convert property from the Ohio Falls Car and Locomotive Company Historic District, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the Ohio Falls Car and Locomotive Company Historic District.

House at 519 Riverside Drive – This undertaking will not convert property from the House at 519 Riverside Drive, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the House at 519 Riverside Drive.

Jeffersonville-Clarksville Levee System – This undertaking will not convert property from the Jeffersonville-Clarksville Levee System, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the Jeffersonville-Clarksville Levee System.

FHWA respectfully requests the Indiana State Historic Preservation Officer to provide written concurrence with the Section 106 determination of Adverse Effect based on the fact that the effect of the undertaking on archaeological resources is not yet known. FHWA respectfully request the Indiana State Historic Preservation Office to provide written concurrence that no adverse effect will occur to any above-ground resources. FHWA intends to address any archaeological work that may need to be completed in a Memorandum of Agreement.



Mayela Sosa
Division Administrator
FHWA-IN Division

9/27/19

Approved Date



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

PHONE: (317) 234-5168

Eric Holcomb, Governor
Joe McGuinness, Commissioner

July 1, 2019

RE: Riverside Drive Improvements Project
Riverside Drive, in the Town of Clarksville, Jeffersonville Township, Clark County
Des. No.: 1700725

Dear Ms. McCord,

The Town of Clarksville, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), proposes to reconstruct a portion of Riverside Drive. Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties. The federal involvement in this project is the funding from the FHWA. Weintraut & Associates, Inc. is under contract to advance the Section 106 documentation for Crawford, Murphy & Tilly (CMT).

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals have accepted the invitation to join consultation: Miami Tribe of Oklahoma and the Office of the Indiana State Historic Preservation Officer (SHPO).

The proposed improvements would occur along Riverside Drive beginning at the entrances to Ashland Park and continuing east/southeast to the town limits with the City of Jeffersonville. The undertaking is within a portion of Section 1 of the Clark Military Grant as shown on the Jeffersonville, Indiana USGS topographic quadrangle map. The proposed project would reconstruct about 1,400 feet of Riverside Drive and would include the addition of on-street parking, street-scaping amenities, sidewalks, and storm sewer upgrades. A multi-use path would be added along the south side and would complete Clarksville's portion of the Ohio River Greenway. Street lighting, trees, and benches are expected to be added to the corridor. Minor approach work at the intersections with Woerner Avenue and Market Street would involve adding Americans with Disabilities Act (ADA)-compliant curb ramps with marked crosswalks.

An Early Coordination Letter was distributed on February 21, 2019, and provided instructions for accessing the Historic Property Report (HPR). The HPR identified one resource within the area of potential effects (APE) that is listed in the National Register of Historic Places (NRHP) and one property previously determined eligible for listing in the NRHP: the Louisville Municipal Bridge (Indiana Historic Sites and Structures Inventory Number [IHSSI No.]: 019-446-58215; NR-0681) and the Ohio Falls Car and Locomotive Company Historic District (IHSSI Nos.: 019-446-61001 to 019-446-641017; NR-2081, determined eligible). The report also recommended two resources eligible for listing in the NRHP: the House at 519 Riverside Drive (IHSSI No.: 019-446-64205) and the Jeffersonville-Clarksville Levee System (WA 1).

In a letter dated March 21, 2019, SHPO concurred that the Louisville Municipal Bridge is listed in the NRHP and remains eligible and that the Ohio Falls Car and Locomotive Company Historic District was determined eligible for the NRHP and remains eligible. Finally, SHPO agreed that the House at 519 Riverside Drive and the Jeffersonville-Clarksville Levee System (WA 1) are eligible for inclusion in the NRHP.

The archaeology short report (ASR) was distributed on May 6, 2019. The Phase Ia reconnaissance located no archaeological resources within the portion of the project area that was accessible; therefore, no further work was recommended in the accessible portion of the project area. The ASR noted that Site **12CL0977**, identified during the archaeological records check, was within a portion of the inaccessible project area; therefore, the report recommended additional survey for the inaccessible area.

In a letter dated May 31, 2019, the SHPO concurred with the opinion of the archaeologist, stated in the ASR “that no further archaeological investigations are necessary within the majority of the proposed project.” SHPO also acknowledged that a portion of the project area (the western portion at the location of Carman Industries) was not accessible during the survey and contains site 12CL0977, “a potentially eligible nineteenth to twenty-first century historical dump.” SHPO also stated that the un-surveyed portion of the project area “may . . . contain other undocumented archaeological deposits.” SHPO stated the unsurveyed portion of the project area must either be avoided by ground disturbing activities or subjected to an archaeological investigation “before the Indiana SHPO will resume identification and evaluation procedures for this project.”

In addition, since the early coordination letter noted the project would require permanent and temporary right-of-way, the SHPO requested plans “showing where right-of-way will be acquired and where curb lines and other structures will be built on or within close proximity to the identified historic properties.”

Annotated plan sheets are included with this submission. In addition, this letter describes project activities and likely effects of this project on historic resources.

Louisville Municipal Bridge – Project activities would end west of the bridge. New concrete sidewalks and curbs will tie into existing curb and sidewalk (north side) or transition to the existing roadway (south side) approximately sixty feet west of the bridge deck. There would be no direct impact to the structure and visual changes in the broader setting would not adversely affect this resource’s significance in the areas of Transportation, Engineering, or Architecture.

Ohio Falls Car and Locomotive Company Historic District – The project would occur south of the Ohio Falls Car and Locomotive Company Historic District. In most locations, the Jeffersonville-Clarksville Levee System wall (which does not contribute to this historic district) would block views. The district may have a view to the undertaking from the east boundary along Market Street; however, that minor visual impact would not adversely affect the district’s significance in the areas of Industry and Transportation.

House at 519 Riverside Drive – The House at 519 Riverside Drive would not be directly impacted by the project. No temporary right-of-way or permanent right-of-way is being acquired from the property. The broader setting of the property would be changed, however, by the addition of street lighting and by the shifting of the sidewalk south approximately three feet closer to the road and by the widening of Riverside Drive approximately ten feet to allow for on-street parking. These changes in setting would not adversely affect the significance of the House as a rare, intact example of the late nineteenth century homes that once lined Riverside Drive. The setting of this resource has already been altered by the existing, modern streetscape and the construction of nearby modern residences to the west of this house.

Jeffersonville-Clarksville Levee System - The project would occur south of the levee system and would not directly impact the historic boundary; at its nearest location, west of Market Street, the project would end approximately 15 feet from the levee system. The project would introduce visual elements into the broader setting through the installation of sidewalks and widening of Riverside Drive for on-street parking. These visual effects would not adversely affect this property's significance under Criterion A, as part of the flood infrastructure system in Clarksville and Jeffersonville.

Finally, as noted above, **Site 12CL0977** is a previously recorded site that was not accessible during the archaeological investigation; however, the property's location overlooking the Ohio River combined with the historic record suggests the un-surveyed area has a high probability of containing additional unrecorded sites. The eligibility of archaeological resources located within the archaeological APE will be determined at a later date.

Given that the effect of the undertaking on archaeological resources is not yet known, the Federal Highway Administration (FHWA) intends to issue a finding of Adverse Effect and to address any archaeological work that may need to be completed in a Memorandum of Agreement.

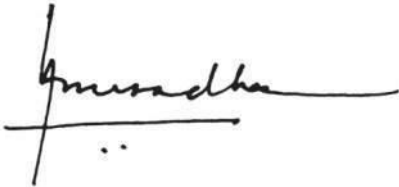
Please review the information and comment within thirty (30) calendar days of receipt.

For questions concerning specific project details, you may contact Linda Weintraut of Weintraut & Associates, Inc. at 317.733.9770 or linda@weintrautinc.com. All future responses regarding the proposed project should be forwarded to Weintraut & Associates, Inc. at the following address:

Linda Weintraut, Ph.D.
President
Weintraut & Associates
PO Box 5034
Zionsville, IN 46077
Email: Linda@weintrautinc.com
Phone: 317.733.9770

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Sincerely,



Anuradha V. Kumar, Manager
Cultural Resources Office
Environmental Services

Enclosures:

Annotated Project Plan Sheets

Distribution List:

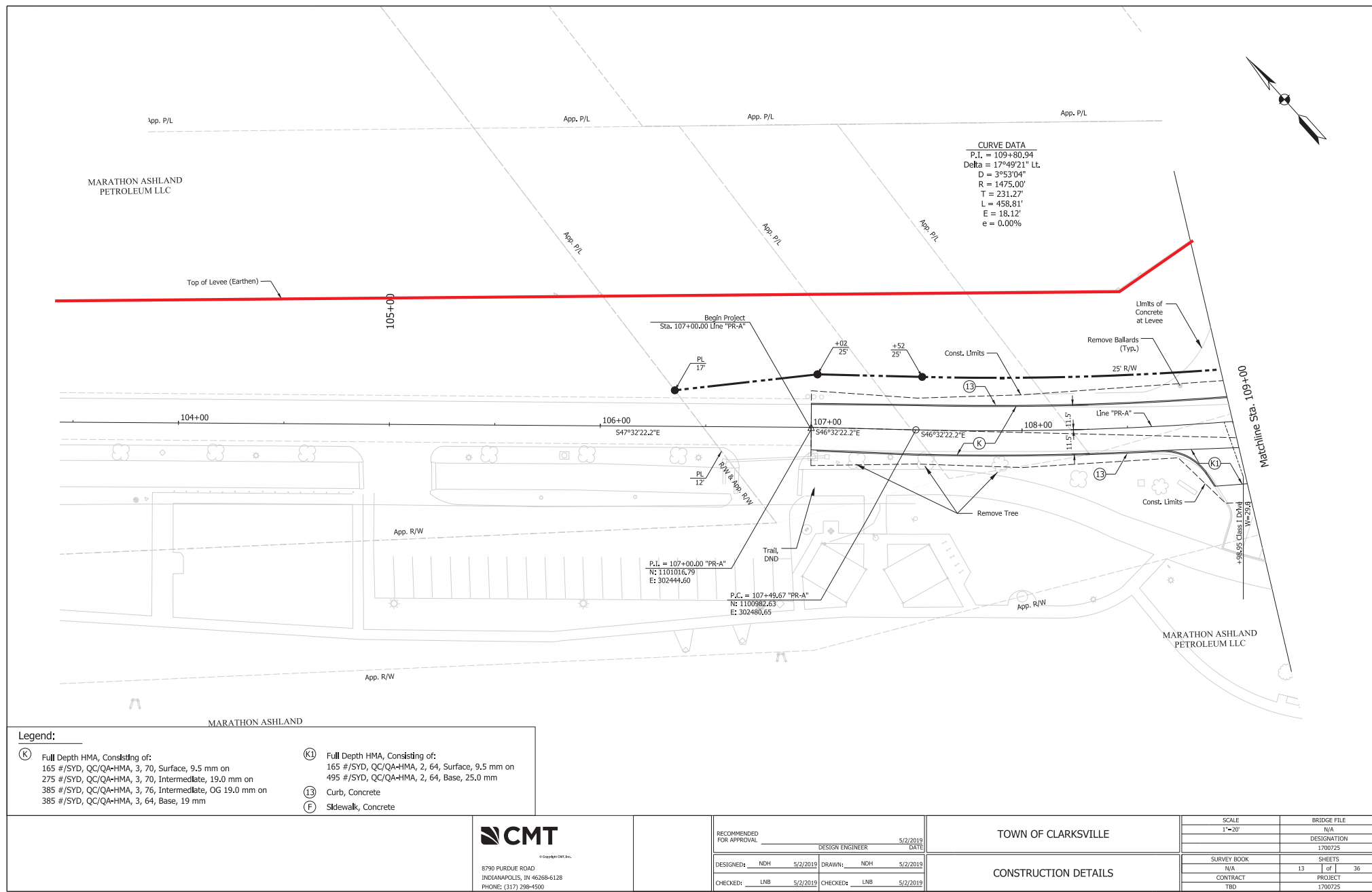
Miami Tribe of Oklahoma

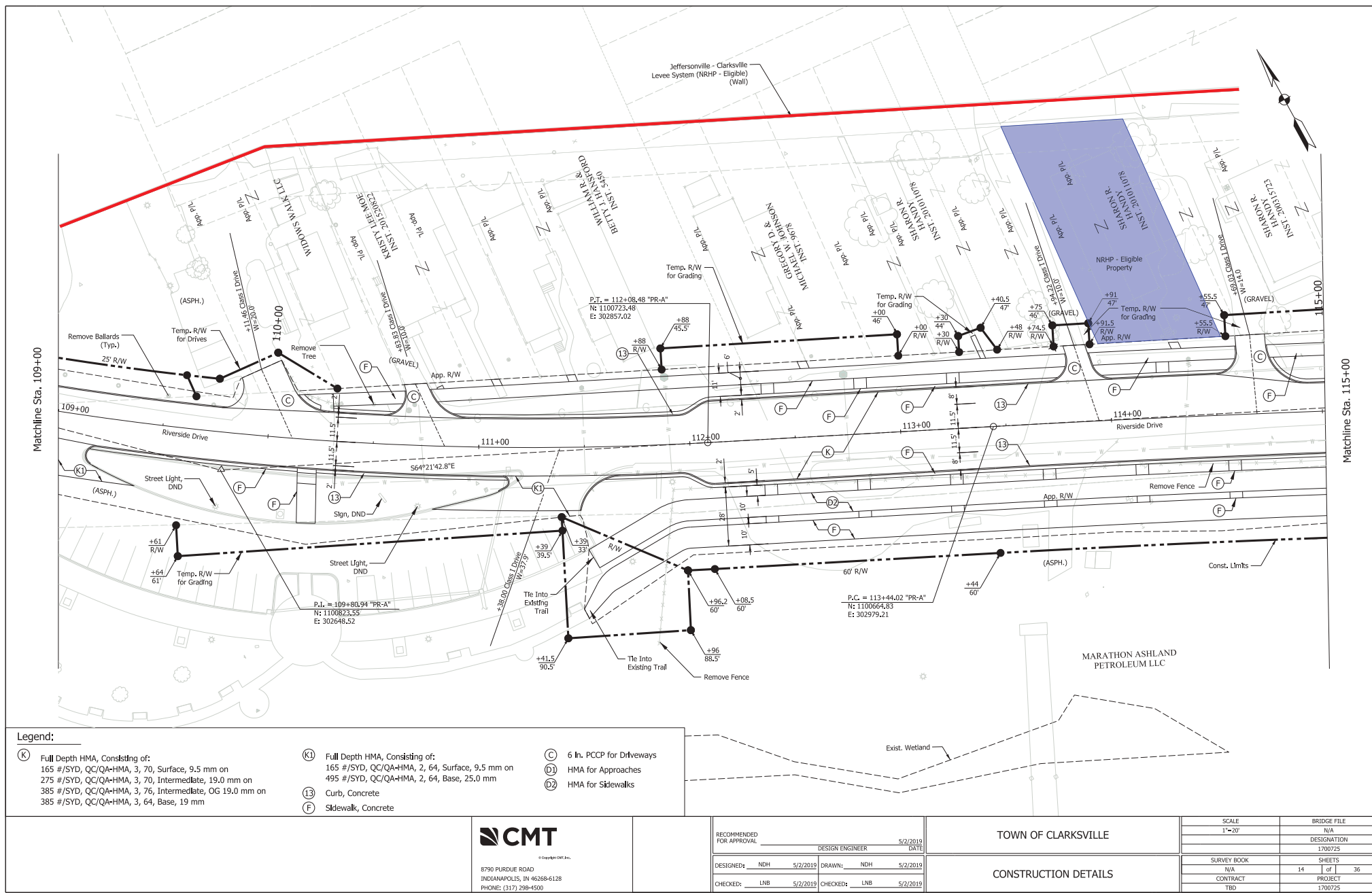
Indiana State Historic Preservation Officer

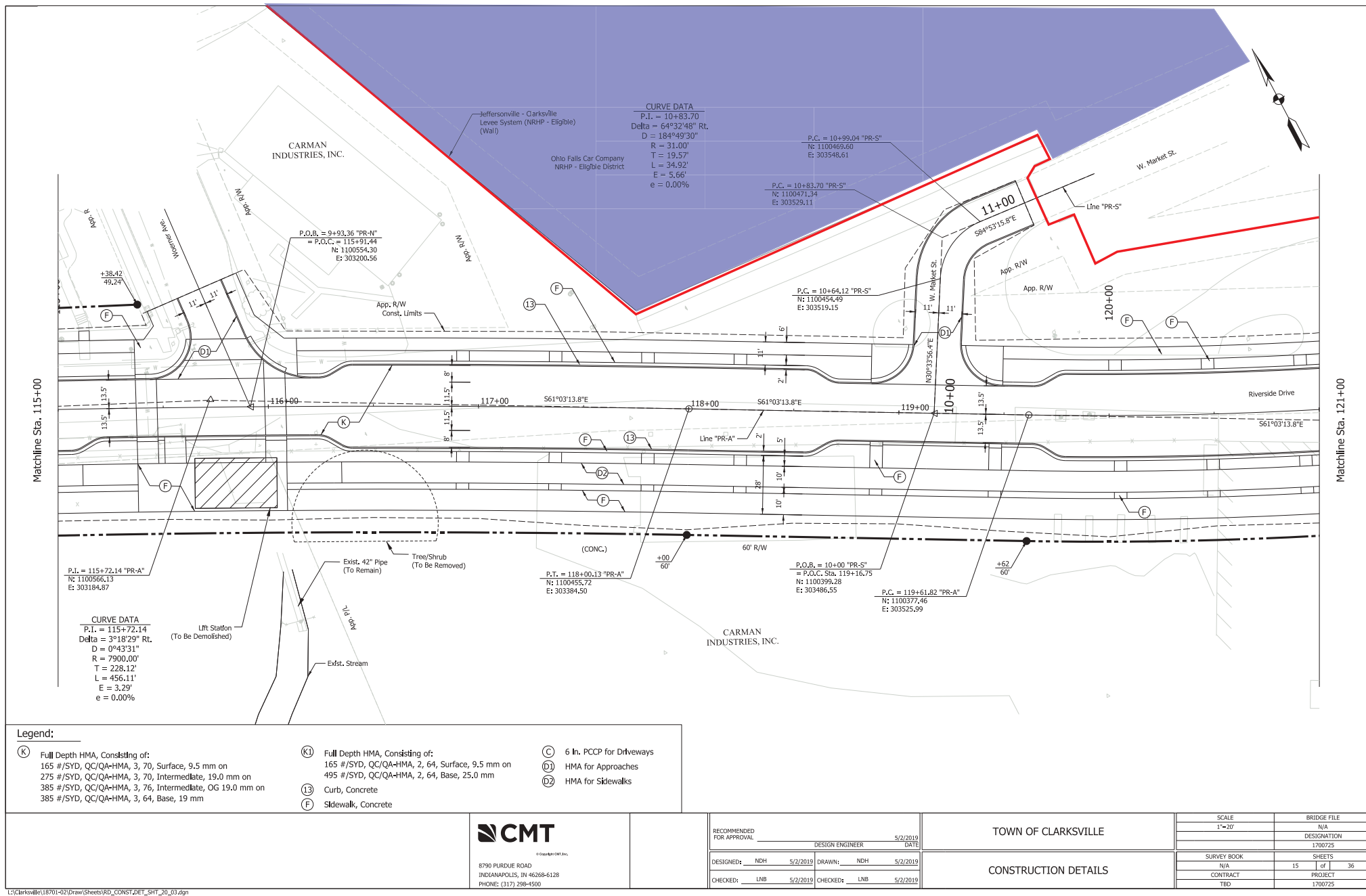
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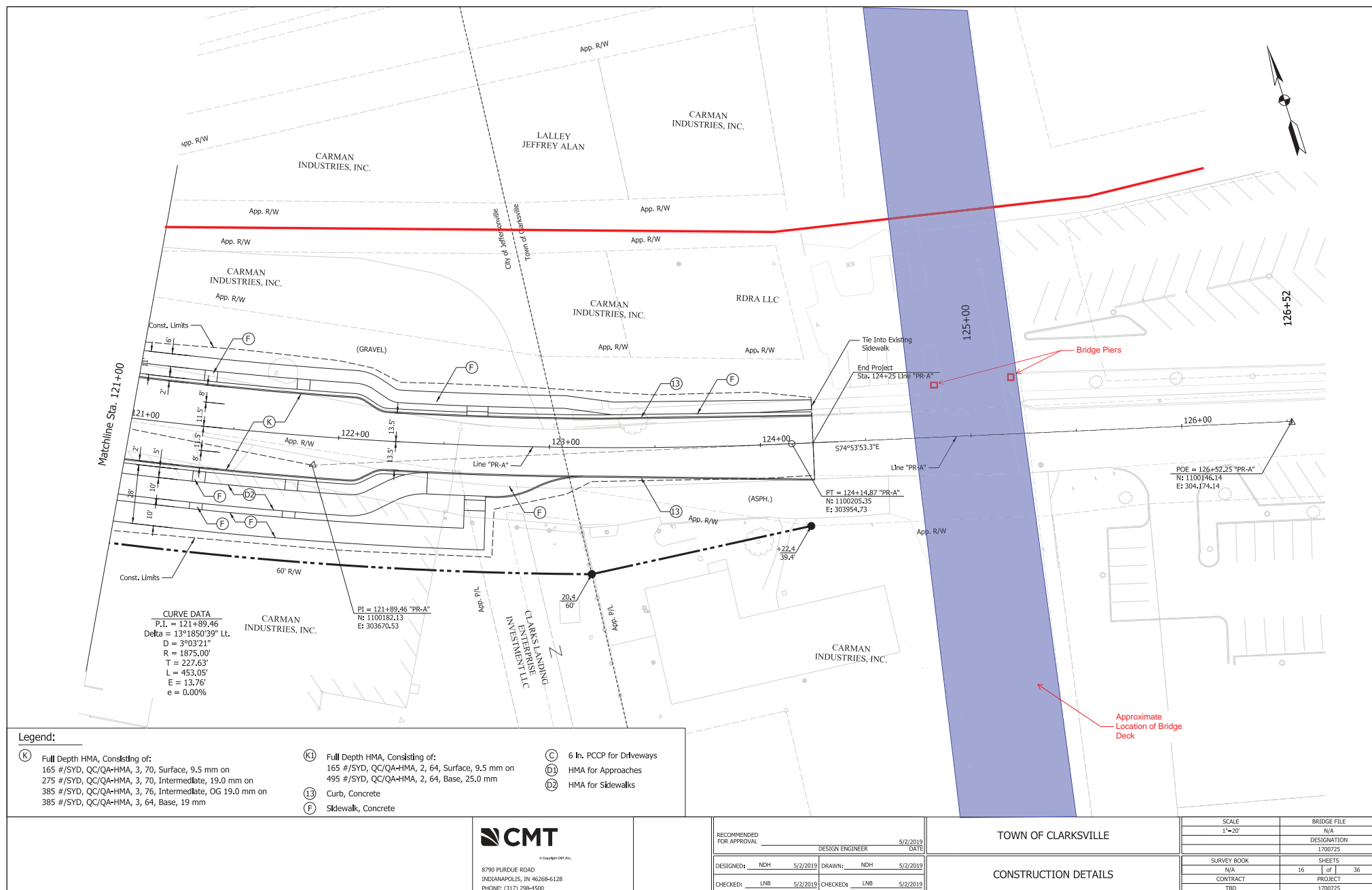
Crawford Murphy & Tilly

Weintraut & Associates, Inc.









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Division of Historic Preservation & Archaeology · 402 W. Washington Street, W274 · Indianapolis, IN 46204-2739
Phone 317-232-1646 · Fax 317-232-0693 · dhpa@dnr.IN.gov · www.IN.gov/dnr/historic



July 28, 2019

Linda Weintraut, Ph.D.
President
Weintraut & Associates, Inc.
Post Office Box 5034
Zionsville, Indiana 46077

Federal Agency: Indiana Department of Transportation ("INDOT"),
on behalf of Federal Highway Administration, Indiana Division ("FHWA")

Re: Effects letter and annotated plan sheets for the Riverside Drive Improvements Project in
the Town of Clarksville, Jeffersonville Township, Clark County, Indiana (Des. No.
1700725; DHPA No. 23528)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and the Indiana State Historic Preservation Officer Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO" or "INDNR-DHPA") has reviewed INDOT's effects letter dated July 1, 2019, with selected plan sheets enclosed, which we received on July 5.

Thank you for providing the annotated plan sheets and the verbal analysis of likely effects on above-ground historic properties. Based on this information, we agree that the Louisville Municipal Bridge, the Ohio Falls Car and Locomotive Company Historic District, the House at 519 Riverside Drive, and the Jeffersonville-Clarksville Levee System will not be adversely affected by this project.

As stated in our May 31, 2019 letter in terms of archaeology, no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within the portion of the proposed project area that was accessible at the time of the survey and we concur with the opinion of the archaeologist that no further archaeological investigations are necessary within this portion of the proposed project. The western portion of the proposed project (Carman Industries property) that was inaccessible at the time of the survey contains site 12CI977, a potentially eligible nineteenth to twenty-first century historical dump. The unsurveyed portion of the project may also contain other undocumented archaeological deposits.

We note it is FHWA's intent to issue a Finding of Adverse Effect given the presence of site 12CI977, the high probability of additional unrecorded archaeological sites, and the present inability to identify and assess those sites known and unknown. We understand that a Memorandum of Agreement will provide stipulations for the completion of archaeological investigations. The stipulations must demonstrate a level of effort consistent with 36 C.F.R. Part 800 regulations and affirm that prior to the commencement of ground-disturbing activities, INDOT

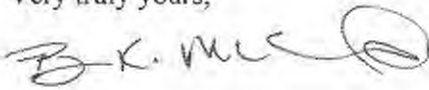
and/or its consultants shall complete the identification and evaluation of archaeological resources for inclusion in the NRHP in any of these areas of ground disturbance.

Pertaining to the remainder of the project, if any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800.

The archaeological reviewer for this project on the Indiana SHPO staff is Beth McCord, and the structures reviewer is John Carr. However, if you have questions about our comments or about the review process, please contact initially the INDOT Cultural Resources Office staff members assigned to this project.

In all future correspondence regarding the Riverside Drive Improvements Project in Clarksville (Des. No. 1700725), please continue to refer to DHPA No. 23528.

Very truly yours,



Beth K. McCord
Deputy State Historic Preservation Officer

BKM:JLC:bkm

cmc: Michelle Allen, FHWA
Anuradha Kumar, INDOT
Shaun Miller, INDOT
Susan Branigin, INDOT
Anthony Ross, Ph.D., INDOT
Shirley Clark, INDOT
Miami Tribe of Oklahoma
Nick Batta, P.E., Crawford, Murphy & Tilly
Linda Weintraut, Ph.D., Weintraut & Associates, Inc.
Craig Arnold, Weintraut & Associates, Inc.
Kelly Molloy, Weintraut & Associates, Inc.
Bethany Natali, Weintraut & Associates, Inc.
Beth K. McCord, INDNR-DHPA
Chad Slider, INDNR-DHPA
John Carr, INDNR-DHPA

**MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
AND THE INDIANA STATE HISTORIC PRESERVATION OFFICER
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 C.F.R. Section 800.6(b)(iv)
REGARDING THE RIVERSIDE DRIVE IMPROVEMENTS PROJECT IN THE TOWN
OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725**

WHEREAS, the Federal Highway Administration (“FHWA”) plans to fund the Riverside Drive Improvements Project (“Project”) pursuant to Title 23 of the United States Code (23 U.S.C.); and

WHEREAS, the Project will reconstruct Riverside Drive between the entrances of Ashland Park and the town limits with Jeffersonville and will install a new multi-use path along the south side of Riverside that will be part of the Ohio River Greenway; and

WHEREAS, the FHWA, in consultation with the Indiana State Historic Preservation Officer (“SHPO”), has defined the Project’s area of potential effects (“APE”), as the term is defined in 36 C.F.R. § 800.16(d), to encompass the area for aboveground resources as illustrated on “Attachment A”; and

WHEREAS, the FHWA, in consultation with the Indiana SHPO, has defined the Project’s APE for archaeological resources (“Archaeology APE”) for the Project, as the term is defined in 36 CFR § 800.16(d), to be the area illustrated on “Attachment B” of this document; and

WHEREAS, the FHWA, in consultation with the Indiana SHPO, has found that archaeological site 12CL0977 is within the APE; and

WHEREAS, the FHWA and its representatives were unable to access the parcel containing archaeological site 12CL0977 and to evaluate the eligibility of site 12CL0977 for inclusion in the National Register of Historic Places (“NRHP”) or to evaluate if any other archaeological sites are present or eligible for the NRHP on the parcel containing site 12CL0977; and

WHEREAS, the FHWA, in consultation with the Indiana SHPO, has determined, pursuant to 36 C.F.R. Section 800.4(c), that archaeological site 12CL0977 is potentially eligible for inclusion in the NRHP, and that the site must be avoided or subjected to further archaeological investigations; and

WHEREAS, the FHWA, in consultation with the Indiana SHPO, has determined pursuant to 36 C.F.R. Section 800.5(a) that the Project has the potential to adversely affect archaeological site 12CL0977; and

WHEREAS, the FHWA has consulted with the Indiana SHPO in accordance with Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and its implementing regulations (36 C.F.R. Section 800) to resolve the potential adverse effect on archaeological site 12CL0977; and

WHEREAS, in accordance with 36 C.F.R. Section 800.4, FHWA in consultation with the Indiana SHPO has determined that the identification and evaluation of archaeological properties within portions of the archaeological APE remains to be completed; and

WHEREAS, the FHWA, in consultation with the SHPO, has determined that the APE contains one aboveground resource listed in the NRHP: the Louisville Municipal Bridge (NR-0681); and

WHEREAS, the FHWA, in consultation with the SHPO, has determined that the APE contains one aboveground resource that was previously determined eligible for listing in the NRHP by the National Park Service: the Ohio Falls Car and Locomotive Company Historic District (NR-2081); and

WHEREAS, the FHWA, in consultation with the SHPO, has determined that the APE contains two aboveground resources that are eligible for listing in the NRHP: the House at 519 Riverside Drive (IHSSI No.: 019-446-64205) and the Jefferson-Clarksville Levee System (WA-1); and

WHEREAS, the FHWA has determined that the Project will not have an adverse effect on the aforementioned NRHP-listed or eligible aboveground resources and has consulted with the SHPO pursuant to 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act (16 USC § 470f); and

WHEREAS, the FHWA has consulted with the Indiana Department of Transportation (“INDOT”) and the Town of Clarksville regarding the effects of the Project on historic properties and has invited them to sign this MOA as invited signatories; and

WHEREAS, the FHWA invited the Eastern Shawnee Tribe of Indians of Oklahoma, Miami Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, Pokagon Band of Potawatomi Indians, United Keetoowah Band of Cherokee Indians, Delaware Tribe of Indians; and

WHEREAS, the Miami Tribe of Oklahoma have participated in the consultation; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (“Council”) of its adverse effect determination with specified documentation, and the Council has not chosen to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, the public was given an opportunity to comment on the Project’s adverse effect in a notice published on October 9, 2019 in the *Jeffersonville News and Tribune*;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the submission of a copy of this executed memorandum of agreement, as well as the documentation specified in 36 C.F.R Section 800.11(e) and (f) to the Council, the Project shall be implemented in accordance with the following stipulations in order to take into account the potential effect of the Project on historic properties.

STIPULATIONS

The FHWA shall ensure that the following measures are carried out:

I. PROFESSIONAL QUALIFICATIONS AND STANDARDS

FHWA, in coordination with INDOT, shall ensure that work carried out pursuant to this MOA shall be performed by or under the direct supervision of historic preservation professionals who meet the Secretary of the Interior's Professional Qualifications Standards, as Amended and Annotated at http://www.nps.gov/history/local-law/arch_stnds_9.htm and all relevant Indiana state guidelines and standards, including 14-21-1, 312 IAC 22, and the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology's most current *Guidebook for Indiana Sites and Structures* ("qualified professionals"). The FHWA and INDOT shall ensure that consultants retained for services pursuant to the MOA meet these standards.

II. MITIGATION MEASURES

- A. One previously reported archaeological site, 12CL0977, was identified within the project area. The owner of the parcel containing site 12CL0977 refused archaeologists access to the property, therefore this parcel (and site 12CL0977) was not surveyed or evaluated as part of the Phase Ia reconnaissance. Site 12CL0977 remains potentially eligible for inclusion on the NRHP and was recommended for further study or avoidance.
- B. Before commencing ground-disturbing construction activities within a segment of this Project that could affect the parcel containing site 12CL0977, FHWA or its representatives shall complete a Phase I archaeological reconnaissance of the parcel to examine the parcel and to re-evaluate the potential eligibility of archaeological site 12CL0977 for inclusion in the NRHP.
- C. If archaeological site 12CL0977 or any new archaeological sites located on the parcel are potentially eligible for inclusion on the NRHP, FHWA or its representatives shall complete a Phase II investigation of these sites to determine their NRHP eligibility.
- D. If any site on the parcel is determined to be eligible for inclusion in the NRHP, Phase III data recovery shall be conducted to mitigate for impacts to the sites from this Project.
- E. No less than 10% of a site within the project limits shall be tested during Phase II investigations; Phase III data recovery, if required, shall excavate no less than an additional 25% of the site area within the project limits as mitigation.

- F. Prior to fieldwork, an archaeological Treatment Plan outlining the methodologies to be followed during any Phase I, Phase II, and/or Phase III investigations shall be submitted to the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology for approval under IC-14-21-1-25.
- G. A report of investigations detailing all archaeological investigations shall be provided to SHPO for their review and concurrence within one (1) year after fieldwork ends.

III. GENERAL TREATMENT OF ARCHAEOLOGICAL RESOURCES

A. Statutory and Regulatory Standards

1. All archaeological studies shall demonstrate a level of effort consistent with the 36 C.F.R. part 800 regulations in effect on the date upon which the last of the required signatories has signed this MOA and shall provide FHWA with the information to determine, in consultation with the Indiana SHPO, which archaeological properties are eligible for inclusion in the NRHP. FHWA shall acknowledge and seek the special expertise of any federally recognized Indian Tribes which have previously entered into consultation in assessing the eligibility of historic properties that may possess religious and cultural significance to them.
2. In implementing Stipulation III.A through III.D., FHWA and its consultants may consult with the consulting parties and others identified in accordance with the 36 C.F.R. part 800 regulations in effect on the date upon which this MOA is fully executed.
3. In accordance with Section 304 of the NHPA and the 36 C.F.R. part 800 regulations in effect on the date upon which this MOA is fully executed, FHWA and its consultants shall ensure that sensitive information regarding the nature and location of human remains and grave goods, and the location, character, and ownership of archaeological sites is kept confidential from the public.
4. In ensuring that any human remains and grave goods identified are treated in a sensitive, respectful, and careful manner, FHWA and its consultants shall be guided by the Council's "Policy Statement Regarding Treatment of Human Remains and Grave Goods" (February 23, 2007) and the Native American Graves Protections and Repatriation Act ("NAGPRA") regulations set forth in 43 C.F.R. part 10, and other guidelines as appropriate.
5. If any human remains are encountered during project construction activities, work shall cease within 100 feet of the discovery area and the human remains left undisturbed. FHWA or its consultants shall contact the county coroner and law enforcement officials immediately, and the discovery must be reported to the Indiana SHPO within two (2) business days. The discovery must be treated in accordance with Indiana Code 14-21-1 and 312 Indiana Administrative Code 22. Work at the discovery site shall not resume until a plan for the treatment of the human remains is

developed and approved in consultation with the Indiana SHPO, the INDOT Cultural Resources Office, and any appropriate consulting parties.

6. Any dispute regarding the report(s) shall be resolved in accordance with Stipulation V.

B. Identification & Evaluation

1. All archaeological investigations shall be conducted according to the Secretary of the Interior's Standards and Guidelines for Archaeology, Indiana code 14-21-1, 312 IAC 21, and the most current *Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites*.
2. Modification or modifications ("modifications") to the Project or changes to the construction right-of-way which fall outside the current APE for archaeological resources (depicted in Attachment A) shall be subject to archaeological investigation, evaluation, and assessment per Stipulations III.B. and III.C.
3. Upon completion of archaeological investigation, FHWA shall follow the procedures set forth in the 36 C.F.R. part 800 regulations in effect on the date upon which this MOA is fully executed which shall include updated documentation described in those regulations, if it is determined that no historic properties shall be affected.

C. Assessment of Effects

1. FHWA, in consultation with the Indiana SHPO, federally recognized Indian Tribes that may ascribe traditional cultural and religious significance to affected properties, and other parties whom FHWA deems appropriate, shall determine if the Project will adversely affect archeological properties determined eligible for inclusion in the NRHP pursuant to the 36 C.F.R. part 800 regulations in effect on the date upon which this MOA is fully executed.
2. If FHWA determines the Project will adversely affect NRHP-eligible archeological properties, then FHWA shall make reasonable efforts to avoid or minimize the adverse effect. If, after this consultation, FHWA determines it is not possible to avoid or minimize adverse effects, then FHWA shall treat the archaeological resource in accordance with Stipulation III.D.
3. Any dispute regarding the determination of effects on NRHP-eligible archaeological properties shall be resolved in accordance with applicable Federal and State standards and guidelines listed in Stipulation V.

D. Treatment

If FHWA, in consultation with the Indiana SHPO, federally recognized Indian Tribes that may ascribe traditional cultural and religious significance to affected properties,

and other parties whom FHWA deems appropriate, determines that the adverse effect to an archaeological site that is eligible for listing in the NRHP cannot be avoided or minimized, FHWA or its representatives shall develop and implement a Treatment Plan, as part of the above consultation, to mitigate the adverse effects to an archeological resource on a site-by-site basis. The implementation of the Treatment Plan must be completed for each site prior to the initiation of any project construction activities that could affect that site.

IV. POST-REVIEW DISCOVERIES

- A.** If properties are discovered that may be historically significant or unanticipated effects on historic properties are found, FHWA or their representatives shall follow the procedure specified in 36 C.F.R. § 800.13.
- B.** If human remains are discovered at any time during the implementation of the Project, the agency shall follow the procedure specified in 36 C.F.R. § 800.13 as well as the provisions of the Native American Graves Protection and Repatriation Act (25 USC § 3001) and IC 14-21-1-27 and IC 14-21-1-29, by stopping work within 100 feet of the discovery area and informing the Indiana SHPO and the INDOT Cultural Resources Office of such unanticipated discoveries within two (2) business days.
- C.** If the remains are found to be Native American, in accordance with applicable law, a Treatment Plan shall be developed by FHWA and SHPO in consultation with appropriate federally recognized Indian tribes. FHWA shall ensure that any treatment and reburial plan is fully implemented. If the remains are not Native American, the appropriate local authority shall be consulted to determine final disposition of the remains. Avoidance and preservation in place is the preferred option for treating human remains.
- D.** Any necessary archaeological investigations will be conducted according to the provisions of IC 14-21-1, 312 IAC 21, 312 IAC 22, and the most current *Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites*.

V. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the FHWA shall consult with such party to resolve the objection. If the FHWA determines that such objection cannot be resolved, the FHWA will:

- A.** Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide the FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute

from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The FHWA will then proceed according to its final decision.

- B.** If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, the FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.
- C.** The FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

VI. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

VII. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VI above.

VIII. TERMINATION

- A.** If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation VI, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.
- B.** Once the MOA is terminated, and prior to work continuing on the Project, FHWA must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the FHWA and SHPO and implementation of its terms evidence that FHWA has taken into account the effects of this Project on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES (required):

FEDERAL HIGHWAY ADMINISTRATION

INDIANA STATE HISTORIC PRESERVATION OFFICER

INVITED SIGNATORY:

INDIANA DEPARTMENT OF TRANSPORTATION

TOWN OF CLARKSVILLE

CONCURRING PARTIES (Optional)

SIGNATORY PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
AND THE INDIANA STATE HISTORIC PRESERVATION OFFICER
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 C.F.R. Section 800.6(b)(iv)
REGARDING THE RIVERSIDE DRIVE IMPROVEMENTS PROJECT IN THE TOWN
OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725**

REQUIRED SIGNATORY:

FEDERAL HIGHWAY ADMINISTRATION

Erica Tait

Digitally signed by Erica Tait
Date: 2020.02.18 09:47:41
-05'00'

By:

Mayela Sosa, Division Administrator

Date:

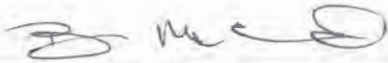
SIGNATORY PAGE

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OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725**

REQUIRED SIGNATORY:

INDIANA STATE HISTORIC PRESERVATION OFFICER

By:



Beth McCord, Deputy State Historic Preservation Officer

Date:

12-11-19

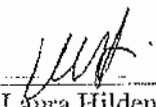
SIGNATORY PAGE

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OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725

INVITED SIGNATORY

INDIANA DEPARTMENT OF TRANSPORTATION

By:


Laura Hilden, Environmental Services Director

Date:


12/10/2019

SIGNATORY PAGE

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AND THE INDIANA STATE HISTORIC PRESERVATION OFFICER
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 C.F.R. Section 800.6(b)(iv)
REGARDING THE RIVERSIDE DRIVE IMPROVEMENTS PROJECT IN THE TOWN
OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725**

INVITED SIGNATORY

THE TOWN OF CLARKSVILLE

By: 
Ryan Ramsey, Council President

Date: 1.21.2020

SIGNATORY PAGE

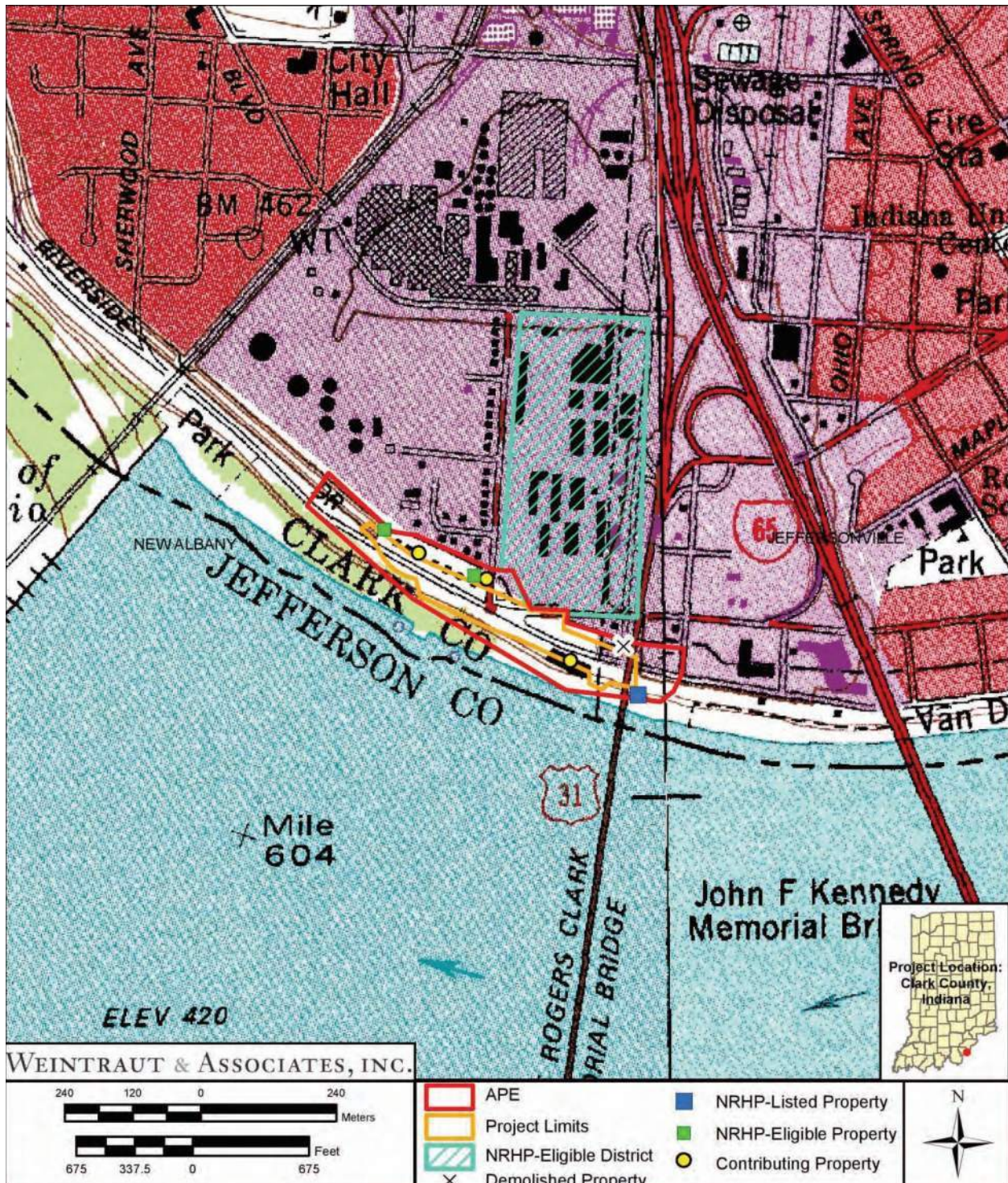
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OF CLARKSVILLE, JEFFERSON TOWNSHIP,
CLARK COUNTY, INDIANA.
DES. NO.: 1700725**

Optional: **CONCURRING PARTY**

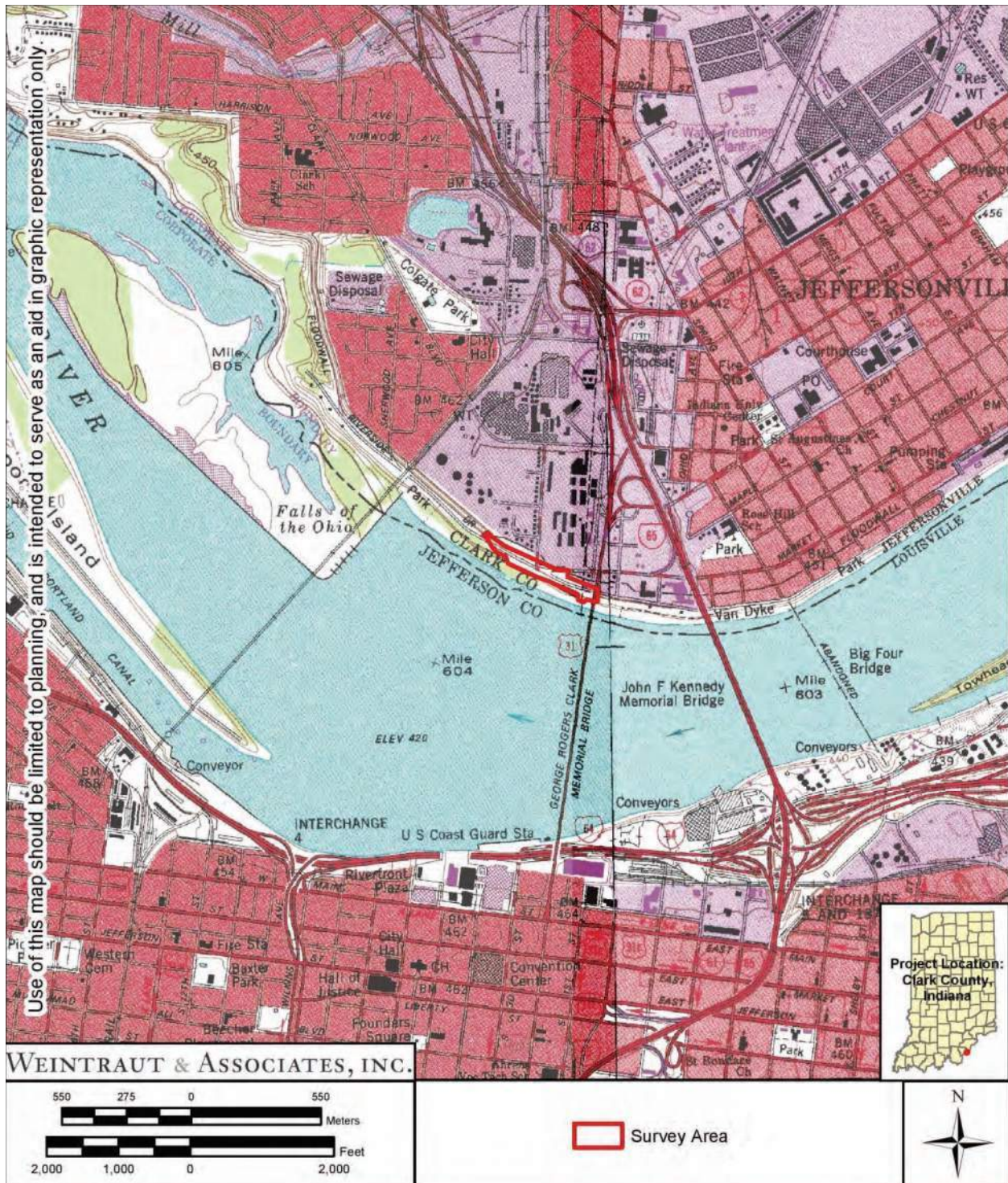
By: _____
Name, Title

Date: _____

Attachment A



Attachment B





**Phase Ia Archaeological Records Check and Field Reconnaissance:
Riverside Drive Improvements in the Town of Clarksville, Jefferson-
ville Township, Clark County, Indiana (Des. No. 1700725)**

Prepared for
Crawford, Murphy, and Tilly, Inc. &
Federal Highway Administration/
Indiana Department of Transportation

Prepared by
Colin D. Graham
WEINTRAUT & ASSOCIATES, INC.

Principal Investigator: Craig R. Arnold
P.O. Box 5034 | Zionsville, Indiana | (317)733-9770 | linda@weintrautinc.com

April 2018



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (1-11)

INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION
AND ARCHAEOLOGY
402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology.

Author: Colin D. Graham, B.A.

Date (month, day, year):

April 10, 2019

Project Title:

Phase Ia Archaeological Records Check and Field Reconnaissance: Riverside Drive Improvements in the Town of Clarksville, Jeffersonville Township, Clark County, Indiana (Des. No.: 1700725).

PROJECT OVERVIEW

Project Description:

The Town of Clarksville, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT) plans to reconstruct about 1,765 feet (ft) of Riverside Drive between the entrances of Ashland Park to the town limits with Jeffersonville. The project will improve Riverside Drive to add on-street parking, street-scaping amenities, sidewalks, and storm sewer upgrades. A multi-use path will be constructed along the south side; this path would complete Clarksville's portion of the Ohio River Greenway. Street lighting, trees, and benches are expected to be added to the corridor. Minor approach work at the intersections with Woerner Avenue and Market Street will involve adding Americans with Disabilities Act (ADA)-compliant curb ramps with marked crosswalks. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of their undertakings on historic properties. The federal involvement is funding from the FHWA.

The undertaking is located along Riverside Drive, north of the Ohio River and immediately west of U.S. 31 in Jefferson Township, Clarksville, Indiana. The project area is within a portion of Section 1 of the Clark Military Grant as shown on the New Albany, Indiana, USGS topographic quadrangle map (Figure 1).

The proposed project area is set within an urban stretch of Riverside Drive. Present land use includes a municipal park, greenway trail, residences, and commercial/light industrial properties. Riverside Drive is part of the Ohio River Scenic Byway, and the undertaking is located approximately one-quarter mile (mi) east from the Falls of the Ohio State Park. The Ohio River and green space associated with the Ohio River Greenway and Ashland Park parallel Riverside Drive on the south. A western berm and concrete levee runs along Riverside Drive to the north and is part of the Jeffersonville-Clarksville Levee System. The Louisville Municipal Bridge (Indiana Historic Sites and Structures Inventory [IHSSI] No.: 019-446-58215; National Register [NR] No. 0681) carries U.S. 31 over Riverside Drive and the Ohio River at the east end of the

project location (Figure 2).

INDOT Designation Number/ Contract Number:

1700725

Project Number:

DHPA Number:

23528

Approved DHPA Plan Number:

Prepared For:

Crawford, Murphy, and Tilly, Inc. (CMT)

Contact Person:

Nick Batta

Address:

8790 Purdue Road

City:

Indianapolis

State:

IN

ZIP Code:

46268

Telephone Number:

317-492-9162

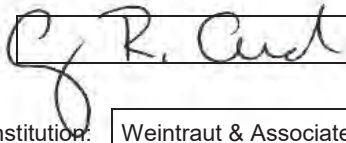
E-mail Address:

nbatta@cmtengr.com

Principal Investigator:

Craig R. Arnold

Signature:



Company/Institution:

Weintraut & Associates, Inc. (W&A)

Address:

P.O. Box 5034

City:

Zionsville

State:

IN

ZIP Code:

46077

Telephone Number:

317-733-9770

E-mail Address:

carnold@weintrautinc.com

PROJECT LOCATION

County:

Clark

☒ The archaeological records check has determined that the project area has the potential to contain archaeological resources and a Phase Ia archaeological reconnaissance is recommended.

☐ The archaeological records check has determined that the project area does not have the potential to contain archaeological resources and no further work is recommended before the project is allowed to proceed.

☒ The Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and it is recommended that the project be allowed to proceed as planned.

☐ The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits. It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed.

☐ The Phase Ia archaeological reconnaissance has determined that the project area is within 100 feet of a cemetery and a Cemetery Development Plan is required per IC-14-21-1-26.5.

Cemetery Name:

No further work is necessary within the project area that was accessible and that could be surveyed during the current W&A reconnaissance. However, the Carman Industries property was not surveyed during the current reconnaissance as permission was denied and a legal injunction filed to that effect (see Figures 2 and 3). The Carman Industries property contains one previously recorded archaeology site (12CL0977). The property's location overlooking the Ohio River combined with the historic record suggests the unsurveyed area has the high probability of containing additional unrecorded sites. It is recommended that additional survey is warranted for this area.

Other Recommendations/Commitments:

During the CRAI survey when site 12CL0977 was recorded, the western boundary was not defined beyond the Carman Industries office building limits. The CRAI report indicates the materials recovered from the site are consistent with at least one 19th- and early 20th-century residential occupation and several historic and modern dumping episodes. Augers revealed a deep (up to 4 m below ground surface) layer of historic fill and evidence of stratified historic fill layers. In some instances the fill could not be penetrated, and the little information obtained during the survey was insufficient to make any recommendation as to the National Register of Historic Places (NRHP) eligibility of the site (Cupka Head 2016). A resurvey of the site is necessary to define the western boundary and fully assess the significance of the site deposits, as well as the significance of the additional unsurveyed areas of the Carman Industries property.

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.



Historic Property Report
Riverside Drive Improvements
In the Town of Clarksville, Jeffersonville Township, Clark County, Indiana
DES No.: 1700725

Prepared by
WEINTRAUT & ASSOCIATES, INC.
Principal Investigator: Dr. Linda Weintraut
Authors: Kelly Lally Molloy, M.A. and Bethany Natali, M.A.
P.O. Box 5034 | Zionsville, Indiana 46077 | 317.733.9770 | Linda@weintrautinc.com

November 20, 2018

Riverside Drive Improvements | In the Town of Clarksville, Jeffersonville Township, Clark County, Indiana | Des. No.: 1700725

Management Summary:

This report documents the identification and evaluation efforts for properties included in the Area of Potential Effects (APE) for the Riverside Drive Improvements Project in the Town of Clarksville, Jeffersonville Township, Clark County, Indiana. Aboveground resources located within the project APE were identified and evaluated in accordance with Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and the regulations implementing Section 106 (36 CFR Part 800).

As a result of the NHPA, as amended, and CFR Part 800, federal agencies are required to take into account the impact of federal undertakings upon historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects, and/or districts that are eligible for or listed in the National Register of Historic Places (NRHP). As this project is receiving funding from the Federal Highway Administration (FHWA), it is subject to a Section 106 review.

The APE contains one property listed in the NRHP and one property previously determined eligible for listing in the NRHP:

- Louisville Municipal Bridge
(IHSSI No.: 019-446-58215; NR-0681)

- Ohio Falls Car and Locomotive Company Historic District (IHSSI Nos.: 019-446-61001 to 019-446-641017; NR-2081, determined eligible)

The APE also contains two resources recommended eligible for listing in the NRHP:

- House at 519 Riverside Drive
(IHSSI No.: 019-446-64205)
- Jeffersonville-Clarksville Levee System
(WA 1)

Alexandra Zelles

From: Linda Weintraut <linda@weintrautinc.com>
Sent: Thursday, February 21, 2019 10:30 AM
To: McCord, Beth K; Slider, Chad; south@indianalandmarks.org; Tfaith@unix.adept.net; hsmsteam@aol.com; info@clarksvillehistoricalsociety.com; teresaperkins323@sbcglobal.net; ahuffman@cityofjeff.net; info@jeffmainstreet.org; jeanne_b@hotmail.com; jarrett.haley@kipda.org; bglover@co.clark.in.us; jcoffman@co.clark.in.us; csellers@co.clark.in.us; basketbarb@sbcglobal.net; bdixon@co.clark.in.us; James L. Cooper; Paul Brandenburg
Cc: Kumar, Anuradha; Branigin, Susan; Miller, Shaun (INDOT); Carpenter, Patrick A; Nick Batta; bethany w; Craig Arnold; Summers, Terry; bamontgomery@townofclarksville.com
Subject: FHWA Project: Des. No. 1700725; Riverside Drive Improvements, Clark County, Indiana

Des. No.: 1700725

Project Description: Riverside Drive Improvements

Location: Town of Clarksville, Jeffersonville Township, Clark County

The Town of Clarksville, with funding from the Federal Highway Administration and administrative oversight from the Indiana Department of Transportation, proposes to proceed with the Riverside Drive Improvements Project (Des. No.: 1700725).

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

- Eastern Shawnee Tribe of Indians of Oklahoma
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- United Keetoowah Band of Cherokee Indians
- Delaware Tribe of Indians
- Indiana State Historic Preservation Officer
- Indiana Landmarks--Southern Regional Office
- Clark's Grant Historical Society
- Howard Steamboat Museum/Clark County Historical Society
- Clarksville Historical Society
- Jeff-Clark Preservation, Inc.
- Jeffersonville Historic Preservation Commission
- Jeffersonville Main Street
- Clark County Historian
- Kentuckiana Regional Planning and Development Agency
- Clark County Board of Commissioners
- Clark County Council
- Clark County Engineer
- Professor Emeritus of History, DePauw University / Bridge Historian
- Historic Spans Taskforce

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the letter [and any other document(s) currently available: HPR, archaeology report, etc.] located in IN SCOPE at <http://erms.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN SCOPE), and respond with your comments on any historic resource impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party in the time allotted, the project will proceed consistent with the proposed design. **Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.**

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Thank you in advance for your input,

--

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
PO Box 5034
4649 Northwestern Drive
Zionsville, Indiana 46077
317.733.9770 ext. 310

www.weintrautinc.com

Alexandra Zelles

From: Moffatt, Charles D <CMoffatt@indot.IN.gov>
Sent: Wednesday, May 8, 2019 12:52 PM
To: thpo@estoo.net; 'dhunter@miamination.com'; lpappenfort@peoriatribe.com; Matthew Bussler (Matthew.Bussler@pokagonband-nsn.gov); lheady@delawaretribe.org; cwolf@ukb-nsn.gov; ethompson@ukb-nsn.gov
Cc: Miller, Shaun (INDOT); Allen, Michelle (FHWA); Kumar, Anuradha; Branigin, Susan; Nick Batta
Subject: FHWA Project: Des. No. 1700725; Riverside Drive Improvements, Clark County, Indiana

Des. No.: 1700725

Project Description: Riverside Drive Improvements

Location: Town of Clarksville, Jeffersonville Township, Clark County

The Town of Clarksville, with funding from the Federal Highway Administration and administrative oversight from the Indiana Department of Transportation, proposes to proceed with the Riverside Drive Improvements Project (Des. No.: 1700725).

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The following agencies/individuals are being invited to become consulting parties:

- Eastern Shawnee Tribe of Indians of Oklahoma
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- United Keetoowah Band of Cherokee Indians
- Delaware Tribe of Indians
- Indiana State Historic Preservation Officer
- Indiana Landmarks--Southern Regional Office
- Clark's Grant Historical Society
- Howard Steamboat Museum/Clark County Historical Society
- Clarksville Historical Society
- Jeff-Clark Preservation, Inc.
- Jeffersonville Historic Preservation Commission
- Jeffersonville Main Street
- Clark County Historian
- Kentuckiana Regional Planning and Development Agency
- Clark County Board of Commissioners
- Clark County Council
- Clark County Engineer
- Professor Emeritus of History, DePauw University / Bridge Historian
- Historic Spans Taskforce

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above Des. Number and project description in your reply and your comments will be incorporated into the formal environmental study.

Please review the letter [and any other document(s) currently available: HPR, archaeology report, etc.] located in IN SCOPE at <http://erms.indot.in.gov/Section106Documents/> (the Des. No. is the most efficient search term, once in IN

SCOPE), and respond with your comments on any historic resource impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If a hard copy of the materials is needed, please respond to this email with your request within seven (7) days.

Consulting parties have thirty (30) calendar days from receipt of this information to review and provide comment. If we do not receive a response from an invited consulting party in the time allotted, the project will proceed consistent with the proposed design. **Therefore, if we do not receive a response within thirty (30) days, your agency or organization will not receive any further information on the project unless the scope of work changes.**

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317-233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Thank you in advance for your input,

David Moffatt
Archaeologist
Environmental Services
Cultural Resources Office
Indiana Department of Transportation
317-233-3703

Alexandra Zelles

From: Nick Batta
Sent: Thursday, December 19, 2019 8:52 AM
To: Alexandra Zelles
Subject: FW: Finding of Adverse Effect documentation and draft MOA for Riverside Drive Improvements Project; Des. No. 1700725, DHPA No. 23528

FYI. I will update the comments accordingly in the draft CE.

NICK BATT | Crawford, Murphy & Tilly | w 317.492.9162 | m 317.409.0665
Project Manager

From: Carpenter, Patrick A <PACarpenter@indot.IN.gov>
Sent: Wednesday, November 6, 2019 9:43 AM
To: Linda Weintraut <linda@weintrautinc.com>
Cc: Nick Batta <nbatta@cmtengr.com>; bethany w <bethany@weintrautinc.com>; Moffatt, Charles D <CMoffatt@indot.IN.gov>; Miller, Shaun (INDOT) <smiller@indot.IN.gov>
Subject: RE: Finding of Adverse Effect documentation and draft MOA for Riverside Drive Improvements Project; Des. No. 1700725, DHPA No. 23528

Linda,

No tribal comments received. You can go ahead and update/finalize the MOA and send back to us. Then we'll get INDOT's signature and send back to you to procure SHPO and Clarksville signatures. Once we get those, we'll forward to FHWA for final signature.

Let us know if any questions.

Thank you,

Patrick Carpenter
Section 106 Specialist, Cultural Resources Office
Environmental Services
Indiana Department of Transportation
100 N Senate Ave., IGCN-Rm. N-642
Indianapolis, IN 46204-2216
317-233-2061

From: Linda Weintraut [<mailto:linda@weintrautinc.com>]

Sent: Monday, November 04, 2019 5:02 PM

To: Carpenter, Patrick A <PA Carpenter@indot.IN.gov>

Cc: Nick Batta <nbatta@cmtengr.com>; bethany w <bethany@weintrautinc.com>

Subject: Fwd: Finding of Adverse Effect documentation and draft MOA for Riverside Drive Improvements Project; Des. No. 1700725, DHPA No. 23528

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

Patrick,

Have any tribes responded? The 30-day comment period ends on Wednesday; I would like to upload and circulate then, if there are no other comments. Will you be around?

Thanks! Linda

----- Forwarded message -----

From: McCord, Beth K <BMccord@dnr.in.gov>

Date: Mon, Oct 28, 2019 at 8:27 AM

Subject: Finding of Adverse Effect documentation and draft MOA for Riverside Drive Improvements Project; Des. No. 1700725, DHPA No. 23528

To: Linda Weintraut <linda@weintrautinc.com>

Cc: michelle.allen@dot.gov <michelle.allen@dot.gov>, Kumar, Anuradha <akumar@indot.in.gov>, Miller, Shaun (INDOT) <smiller@indot.in.gov>, Branigin, Susan <S Branigin@indot.in.gov>, Ross, Anthony <ARoss3@indot.in.gov>, Clark, Shirley <SCLARK@indot.in.gov>, Diane Hunter <dhunter@miamination.com>, nbatta@cmtengr.com <nbatta@cmtengr.com>, Craig Arnold <carnold@weintrautinc.com>, Bethany Natali <bethany@weintrautinc.com>, kelly@weintrautinc.com <kelly@weintrautinc.com>, Slider, Chad (DNR) <CSlider@dnr.in.gov>, Carr, John <JCarr@dnr.in.gov>

Please see the attached letter.

Beth K. McCord

Director

Department of Natural Resources

Division of Historic Preservation and Archaeology

402 W. Washington St., Room W274

Indianapolis, IN 46204

317-232-3492



www.dnr.IN.gov

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Linda Weintraut, Ph.D.
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ORDER CONFIRMATION (CONTINUED)

Salesperson: JEANNE VARBLE

Printed at 10/03/19 11:18 by jgall

Acct #: 233874

Ad #: 1590056

Status: New

Public Notice (Des. No.: 1700725) The Town of Clarksville is planning to undertake a road reconstruction project, funded in part by the Federal Highway Administration (FHWA) with administrative oversight from the Indiana Department of Transportation (INDOT). The project is located along Riverside Drive beginning at the entrance to Ashland Park and continuing east/southeast to the town limits of the City of Jeffersonville. Under the preferred alternative, the proposed project will reconstruct about 1,400 feet of Riverside Drive and will include the addition of on-street parking, street-scaping amenities, sidewalks, and storm sewer upgrades. A multi-use path will be added along the south side and will complete Clarksville's portion of the Ohio River Greenway. Street lighting, trees, and benches are expected to be added to the corridor. Minor approach work at the intersections with Woerner Avenue and Market Street will involve adding Americans with Disabilities Act (ADA)-compliant curb ramps with marked crosswalks. Permanent and temporary right-of-way is required for this project. Properties listed in or eligible for the National Register of Historic Places (NRHP) located within the Area of Potential Effects (APE) include the Louisville Municipal Bridge (Indiana Historic Sites and Structures Inventory [IHSSI] No.: 019-446-58215; NR-0681), Ohio Falls Car and Locomotive Company Historic District (IHSSI Nos.: 019-446-61001 to 019-446-641017; NR-2081), House at 519 Riverside Drive (IHSSI No.: 019-446-64205), and the Jeffersonville-Clarksville Levee System (WA 1). The proposed action impacts properties listed in or eligible for the NRHP. FHWA has issued an "Adverse Effect" finding for the project based on the fact that the project's effect on archaeological resources is not yet known. In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.4(d)(2), the documentation specified in 36 CFR 800.11(e) is available for inspection at the offices of CMT, 8790 Purdue Road, Indianapolis, IN 46268. Additionally, this documentation can be viewed electronically by accessing INDOT's Section 108 document posting website IN SCOPE at <http://forms.indot.in.gov/Section108Documents>. This documentation serves as the basis for the "Adverse Effect" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Dr. Linda Weintraub, P.O. Box 5034, Zionsville, IN 46077, 317-733-9770, Linda@weintraub.com, no later than November 5th, 2019. In accordance with the "Americans with Disabilities Act", if you have a disability for which the Town of Clarksville needs to provide accessibility to the document(s) such as interpreters or readers, please contact Dylan Fisher, Redevelopment Director, DFisher@townofclarksville.com, 812-283-1510.

hspax/p

**Proof of
Publication**

**STATE OF INDIANA
COUNTY OF CLARK -SS**

Theresa Wheatbrook on oath says that she is
bookkeeper of NEWS AND TRIBUNE and in
the employ of the publisher of

NEWS AND TRIBUNE,

a daily newspaper of general circulation printed and
published in the city of Jeffersonville, Clark County,
State of Indiana, and further says that the annexed
advertisement was published in said paper for
#(1) time(s) to-wit: In issue of said NEWS AND TRIBUNE
Dated: 10-05 2019

(X) Theresa Wheatbrook

**STATE OF INDIANA
COUNTY OF CLARK**

Subscribed and sworn to before me this

9TH day of October 2019

(X) Joann Galligan
Joann Galligan



Notary Public, Clark County, Indiana
(My Commission Expires August 27, 2022
Commission Number 655965

**Publication
Fee \$ 234.36**

1590056

ID # 04-3314494

Riverside Drive Improvements

CE Level 4

APPENDIX E: RED FLAG AND HAZARDOUS MATERIALS





Date: March 26, 2019

To: Site Assessment and Management
Environmental Policy Office – Environmental Services Division
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Alexandra Zelles
Crawford, Murphy & Tilly, Inc.
8790 Purdue Road
Indianapolis, IN 46268
azelles@cmtengr.com

Re: RED FLAG INVESTIGATION
DES No. 1700725, Local Project
Riverside Drive Improvements
Clarksville, Clark County, Indiana

PROJECT DESCRIPTION

Brief Description of Project:

The proposed project will involve the reconstruction of Riverside Drive, a designated Ohio River Scenic Byway, from the town limits to the second parking lot of Ashland Park, about 1,400 feet to the west, in Clarksville, Clark County, Indiana. The project will widen the roadway to the south to accommodate a new typical cross section consisting of two travel lanes, on-street parking on both sides of the roadway, curbs, sidewalk (six foot on the north side and ten foot on the south side of the roadway), planting zones, and a twelve foot above-grade two-way cycle track within the right of way on the south side of the roadway. The project will also complete Clarksville's portion of the Ohio River Greenway, a multi-use trail, connecting Jeffersonville, Clarksville and New Albany. New right of way acquisition is anticipated. The project is located in Clark County Land Grant Section 1 on the USGS New Albany and Jeffersonville Quadrangles.

Bridge and/or Culvert Project: Yes ☐ No ☒ Structure # _____

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

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

Proposed right of way: Temporary ☒ # Acres 0.75 Permanent ☒ # Acres 8.05

A total of six parcels are expected to be impacted by right of way acquisition. Attempts are being made to avoid temporary right of way from the parcels along the north side of Riverside Drive (west of Woerner Avenue). The total anticipated permanent right of way acreage is 1.34 acres; however, if the Carman Industries parcels are determined to be total acquisitions, an additional 6.71 acres will also need to be acquired.

Type of excavation: Excavation will involve removal of the existing roadbed and installation of a storm sewer system. Anticipated excavation depth is approximately five (5) feet.

Maintenance of traffic: Anticipated maintenance of traffic (MOT) will involve a road closure to through traffic with a detour for both vehicles and users of the Ohio River Greenway. Access to all residences and businesses on Riverside Drive will be maintained at all times during construction as required by INDOT specifications.

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

State Project: ☐ LPA: ☒

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	1*	Recreational Facilities	4*
Airports ¹	1*	Pipelines	1
Cemeteries	1	Railroads	7*
Hospitals	N/A	Trails	6
Schools	1*	Managed Lands	1

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) unmapped religious facility is located within the 0.5 mile search radius. West Maple Baptist Church, is located approximately 0.34 mile northeast of the project area. No impact is expected.

Airports*: Although not located within the 0.5 mile search radius, one unmapped (1) public airport, the Holiday Inn Lakeview/Sheraton Lakeview Heliport, is located within 3.8 miles (20,000 feet) of the project area. While the Indiana Map data indicates this is a private airport, the FAA circle search indicated this facility is open to the public. The public airport is located approximately 0.82 mile north of the project area; therefore, early coordination with INDOT Aviation will occur.

Cemeteries: One (1) cemetery is located within the 0.5 mile search radius. The Colston Memorial Park (i.e. Richard H. Colston Park), is located approximately 0.29 mile east of the project area. According to the City of Jeffersonville Parks Department website, several hundred union and confederate soldiers were buried on the site between 1861 and 1865. In 1927 the Jeffersonville Council determined the site would be better used as playground for children, rather than a forgotten burial ground. No bodies have been exhumed. No impact is expected.

Schools*: One (1) unmapped school is located within the 0.5 mile search radius. The Indiana University Southeast Graduate Center is located approximately 0.15 mile north of the project area. No impact is expected.

Recreational Facilities*: Four (4) recreational facilities, three (3) mapped and one (1) unmapped, are located within the 0.5 mile search radius. The Ashland Park and Clarksville Trail are located within the project area. Coordination with the Clarksville Parks and Recreation Department will occur.

Pipelines: One (1) pipeline segment is located within the 0.5 mile search radius. The segment, associated with Indiana Gas Co., Inc., is located approximately 0.38 mile east of the project area. No impact is expected.

Railroads*: Seven (7) railroad segments, six (6) mapped and one unmapped, are located within the 0.5 mile search radius. Four (4) mapped segments were identified as no longer present. The nearest railroad segment, associated with the Louisville and Indiana Railroad, is located approximately 0.26 mile west of the project area. No impact is expected.

Trails: Six (6) trail segments are located within the 0.5 mile search radius. One (1) trail segment (Ohio River Greenway) and two (2) planned trail segments (Ohio River Greenway and Ohio River Greenway Connector) are located within the project area. Coordination with the Ohio River Greenway Commission and the Clarksville Parks and Recreation Department will occur.

Managed Lands: One (1) managed land is located within the 0.5 mile search radius. The managed land, Falls of the Ohio State Park, is located approximately 0.24 mile west 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	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	13
Canal Structures – Historic	N/A	Lakes	N/A
NPS NRI Listed	N/A	Floodplain - DFIRM	1
NWI-Lines	N/A	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	1	Sinkhole Areas	N/A
Rivers and Streams	2	Sinking-Stream Basins	N/A

Explanation:

IDEM 303d Listed Streams and Lakes (Impaired): One (1) 303d Listed River and Stream segment is located within the 0.5 mile search radius. The Ohio River is located adjacent to the project area. The Ohio River is listed as impaired for dioxin, *E. coli*, and PCBs and mercury in fish tissue. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Exposure to PCBs and mercury in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary. Coordination with INDOT ES will occur.

Rivers and Streams: Two (2) river and stream segments are located within the 0.5 mile search radius. The Ohio River is located adjacent to the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

NWI-Wetlands: Thirteen (13) wetlands are located within the 0.5 mile search radius. Two (2) wetlands are located within the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

Floodplain – DFIRM: One (1) floodplain polygon is located within the 0.5 mile search radius. The project area is located within the floodplain polygon for the Ohio River. Coordination with the appropriate agency will occur.

URBANIZED AREA BOUNDARY SUMMARY

Explanation: This project lies within the Clarksville and Jeffersonville UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area will be sent to the Town of Clarksville MS4 Coordinator at 125 East Harrison Avenue, Clarksville, Indiana 47129 and the City of Jeffersonville MS4 Coordinator at 1420 Bates-Bouyer Road, Jeffersonville, Indiana 47130.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation: No mining and/or mineral exploration 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	1	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	2	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	5	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	1	Brownfields	7
Construction Demolition Waste	N/A	Institutional Controls	2
Solid Waste Landfill	N/A	NPDES Facilities	6
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	8*	Notice of Contamination Sites	N/A

Explanation:

RCRA Generators/TSD: One (1) RCRA generator/TSD facility is located within the 0.5 mile search radius. The facility, Carman Industries Incorporated (1007 West Riverside Drive; AI ID 1486), is located within the eastern portion of the

project area. According to the IDEM Virtual File Cabinet (VFC), the facility was listed as a small quantity generator of paint waste materials in 2018. The facility appears to be in compliance. No impact is expected.

State Cleanup Sites: Two (2) state cleanup sites facilities are located within the 0.5 mile search radius. The nearest facility, Commercial Logistics Corporation (Missouri Avenue and Court Avenue; AI ID 7012), is mapped approximately 0.20 mile north of the project area; however, the property is located adjacent to the project area. The IDEM issued a No Further Action letter, dated February 7, 2003, following the investigation and bioremediation of petroleum impacted soil and groundwater. Following site investigation activities completed in 2003, the site was transitioned to the Voluntary Remediation Program (VRP). Please refer to the VRP section below.

Voluntary Remediation Program: One (1) voluntary remediation program (VRP) site is located within the 0.5 mile search radius. The facility, Commercial Logistics Corporation (400 Missouri Avenue; AI ID 7012), is adjacent to the north of the project area across Riverside Drive. The IDEM issued a Covenant Not to Sue, dated December 23, 2009, following the recording of an Environmental Restrictive Covenant (ERC) on the deed of the property. Residual petroleum impacted soil and groundwater remain on-site and likely extend off-site to the south toward the project area.

If excavation occurs in this area, it is likely that petroleum, arsenic and/or lead contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary. Coordination with IDEM will occur.

Underground Storage Tank (UST) Sites: Five (5) UST sites are located within the 0.5 mile search radius. The nearest UST site, Marathon Petroleum Company LLC (214 Center Street; AI ID 15000), is mapped approximately 0.13 mile north of the project area; however, the facility is located approximately 0.03 mile north of the project area. According to IDEM's VFC, the site was a terminal facility for the then Ashland Petroleum Company. In February 1990, one 5,000 gallon UST containing used oil was removed from the site. Closure sampling was completed and identified a release of petroleum to the subsurface. Additional details are provided in the LUST section below.

Leaking Underground Storage (LUST) Sites: Seven (7) LUST sites were mapped within the 0.5 mile search radius, and one (1) additional LUST site was discovered during VFC file review. Two (2) of the sites are associated with the same facility.

Controlled Temperature Transit (1450 Woerner Avenue; AI ID 3902)

The nearest LUST site is Controlled Temperature Transit, mapped approximately 0.10 mile north of the project area. According to the IDEM VFC, IDEM issued an NFA for the site on October 30, 2001. No impact is expected.

Marathon Petroleum Company LLC (214 Center Street; AI ID 15000)

This site was also listed under the UST Sites database and is mapped approximately 0.13 mile north of the project area; however, the facility is located approximately 0.03 mile north of the project area. According to IDEM's VFC, one 5,000 gallon UST containing used oil was removed from the site in February 1990. An Initial Incident Report Log was filed on March 15, 1990 by Ashland Petroleum Company. The UST was located on-site to the north of the Center Street entrance. Soils were reported as over-excavated with total petroleum hydrocarbons (TPH) of 18 mg/kg remaining. No impact is expected.

Brownfields: Seven (7) brownfield sites are located within the 0.5 mile search radius. The nearest two (2) facilities, B&O Piggy Back Yard and ABF Group Property are located approximately 0.06 mile northeast of the project area.

B&O Piggy Back Yard (Market Street and Southern Indiana Avenue (formerly Illinois Avenue); AI ID 6965)

According to the IDEM VFC, the B&O Piggy Back Yard historically occupied a 10-acre site along both sides of Broadway Street, extending from Market Street on the south to Court Avenue on the north. On May 14, 2004, IDEM issued a letter stating that the Owner had demonstrated conditions at that time did not warrant further response and that IDEM did not plan to take any further action at the site. No impact is expected.

ABF Group Property (Woerner Avenue and Lucille Avenue; AI ID 120692)

According to the IDEM VFC, the site is a 0.159 acre parcel that is currently a vacant, paved lot. The property was historically developed as a residence by 1891 until at least 1973. IDEM issued a Comment Letter - Comfort Letter Request, dated July 26, 2018, indicating that no contamination was observed or identified during subsurface investigation. No impact is expected.

Institutional Controls: Two (2) institutional control sites are located within the 0.5 mile search radius. Both sites are part of the Commercial Logistics Corporation facility (ID 6040406), located adjacent to the north of the project area, across Riverside Drive at 400 Missouri Avenue, and are also part of the VRP. An ERC was recorded on the deed of the property on June 17, 2009 and restricts the use of the property and restricts the extraction of groundwater from the site.

NPDES Facilities: Six (6) NPDES facilities are located within the 0.5 mile search radius. The nearest facility, Court Avenue Extension (Permit No. INR10K519) is located approximately 0.15 mile north of the project area at Court Avenue and Woerner Avenue. There have been no discharge related violations reported from this site. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Clark 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 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".

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

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE:

Airports: Although not mapped within the 0.5 mile search radius, one (1) public airport, the Holiday Inn Lakeview/Sheraton Lakeview Heliport, is located within 3.8 miles (20,000 feet) of the project area. Coordination with INDOT Aviation will occur.

Recreational Facilities: One (1) recreational facility, the Ashland Park and Clarksville Trail, is located within the project area. Coordination with the Clarksville Parks and Recreation Department will occur.

Trails: One (1) trail segment (Ohio River Greenway) and two (2) planned trail segments (Ohio River Greenway and Ohio River Greenway Connector) are located within the project area. Coordination with the Ohio River Greenway Commission and the Clarksville Parks and Recreation Department will occur.

WATER RESOURCES:

A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur for the following features:

- Two (2) NWI wetlands are located within the project area.
- One (1) river and stream segment, associated with the Ohio River, is located adjacent to the project area.

IDEM 303d Listed Streams and Lakes (Impaired): One (1) 303d Listed River and Stream segment, associated with the Ohio River, is located adjacent to the project area. The Ohio River is listed as impaired for dioxin, *E. coli*, and PCBs and mercury in fish tissue. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Exposure to PCBs and mercury in fish tissue is considered low, assuming workers are not eating biota surrounding or associated with the water body. If there will be sediment and/or soils disturbed by construction, additional investigation may be necessary. Coordination with INDOT ES will occur.

Floodplain – DFIRM: One (1) floodplain polygon, associated with the Ohio River, is located within the project area. Coordination with the appropriate agency will occur.

URBANIZED AREA BOUNDARY:

This project lies within the Clarksville and Jeffersonville UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area will be sent to the Town of Clarksville MS4 Coordinator at 125 East Harrison Avenue, Clarksville, Indiana 47129 and the City of Jeffersonville MS4 Coordinator at 1420 Bates-Bouyer Road, Jeffersonville, Indiana 47130.

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS:

State Cleanup Sites, Volunteer Remediation Program and Institutional Controls: One (1) state cleanup and VRP site, Commercial Logistics Corporation (Missouri Avenue and Court Avenue; AI ID 7012), is located adjacent to the north of the project area. The IDEM issued a No Further Action letter, dated February 7, 2003, following the investigation and bioremediation of petroleum impacted soil and groundwater and a Covenant Not to Sue, dated December 23, 2009, following the recording of an Environmental Restrictive Covenant (ERC) on the deed of the property. Residual petroleum impacted soil and groundwater remain on-site and likely extend off-site to the south toward the project area. If excavation occurs in this area, it is likely that petroleum, arsenic and/or lead contamination will be encountered. Proper removal and disposal of soil and/or groundwater may be necessary. Coordination with IDEM will 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 USFW’s IPaC System for Listed Bat Consultation for INDOT Projects”.

Nicole Fohey-
Breting

Digitally signed by Nicole Fohey-
Breting
DN: cn=Nicole Fohey-Breting,
o=INDOT, ou=Environmental Services,
HazMat,
email=NFoheyBreting@indot.in.gov,
c=US
Date: 2019.03.27 11:14:17 -04'00'

INDOT Environmental Services concurrence:

(Signature)

Prepared by:

Alexandra Zelles
Environmental Scientist
Crawford, Murphy & Tilly

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES

INFRASTRUCTURE: YES

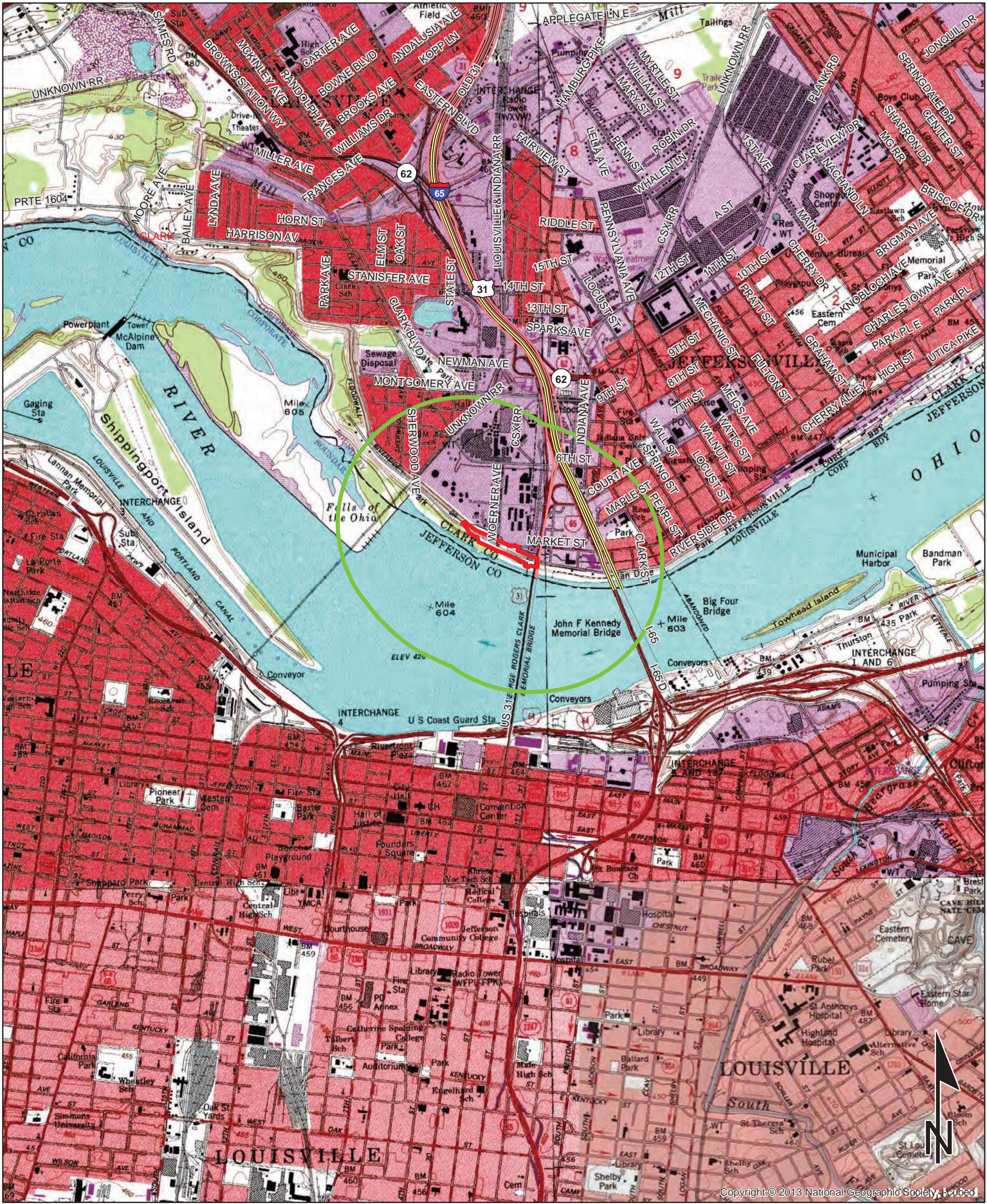
WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: YES

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: YES

Red Flag Investigation - Site Location
Riverside Drive Improvement Project
Des. No. 1700725, Roadway Reconstruction
Clark County, Indiana



Sources: 0.5 0.25 0 0.5 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.

NEW ALBANY AND
JEFFERSONVILLE QUADRANGLES
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
Riverside Drive Improvement Project
Des. No. 1700725, Roadway Reconstruction
Clark 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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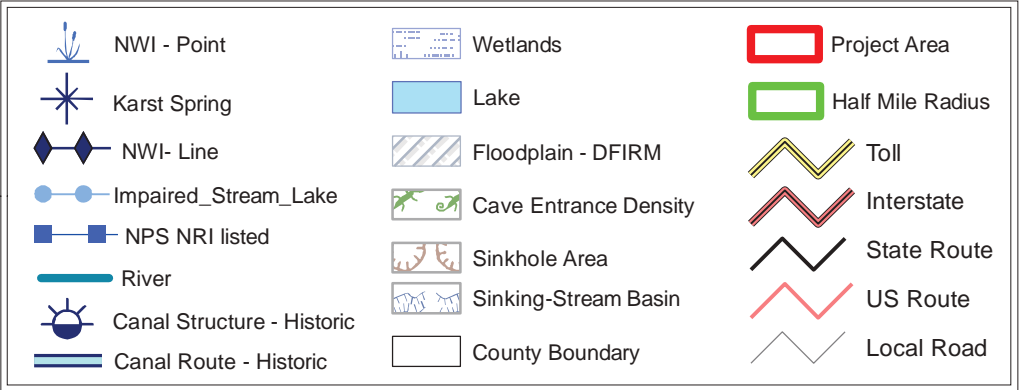
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources
Riverside Drive Improvement Project
Des. No. 1700725, Roadway Reconstruction
Clark 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

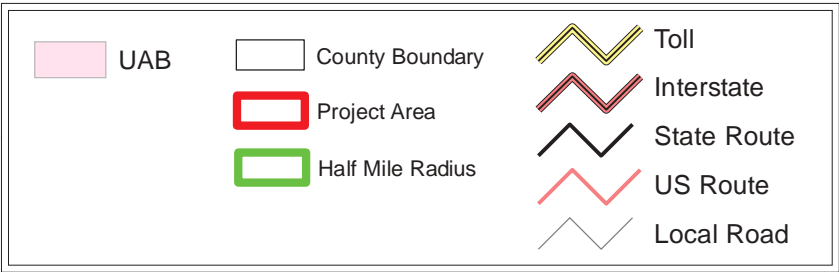
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Red Flag Investigation - Urbanized Area Boundary
Riverside Drive Improvement Project
Des. No. 1700725, Roadway Reconstruction
Clark County, Indiana



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)
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Red Flag Investigation - Hazardous Material Concerns
Riverside Drive Improvement Project
Des. No. 1700725, Roadway Reconstruction
Clark 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 Facilities		Voluntary Remediation Program		Local Road
	NPDES Pipe Locations		Waste Transfer Station		
	Open Dump Waste Site				

0.15 0.075 0 0.15
Miles

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Sources:
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Data - Obtained from the State of Indiana Geographical Information Office Library
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Map Projection: UTM Zone 16 N **Map Datum:** NAD83

Indiana County Endangered, Threatened and Rare Species List

County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
Platyhelminthes (Flatworms)					
Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	G4	S3
Diplopoda					
Pseudotremia nefanda	Clark Cave Millepede		SE	G3G4	S2
Dipluran					
Campodea plusiochaeta	A Dipluran		SE	GNR	S1
Crustacean: Malacostraca					
Caecidotea jordani	Jordan's groundwater isopod		SE	G2G3	S1
Crangonyx ohioensis	An Amphipod			G1G2	S1
Crangonyx packardi	Packard's Cave Amphipod		WL	G4	S3
Gammarus bousfieldi	Bousfield's spring amphipod		SE	G1	S1
Stygobromus mackini	Mackin's cave amphipod		SE	G5	S1
Synurella dentata	Dentate amphipod		WL	GNR	S4
Crustacean: Copepoda					
Diacyclops jeanneli	Jeannel's Cave Copepod		ST	G3G4	S2
Mollusk: Bivalvia (Mussels)					
Fusconaia subrotunda	Longsolid	C	SE	G3	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Potamilus capax	Fat Pocketbook	LE	SE	G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Mollusk: Gastropoda					
Fontigens cryptica	Hidden Springs Snail		SE	G1	S1
Ellipluran: Collembola					
Pseudosinella fonsa	Fountain Cave Springtail		ST	G3G4	S2
Sinella alata	Springtail		WL	G5	S4
Sinella cavernarum	A Springtail		WL	G5	S3
Insect: Coleoptera (Beetles)					
Aleochara lucifuga	Rove beetle		WL	GNR	S4
Atheta annexa	Rove beetle		WL	G4	S4
Batrissodes krekeri	Krekeler's cave ant beetle		SE	G1	S1
Dryobius sexnotatus	Six-banded Longhorn Beetle		ST	GNR	S2
Pseudanophthalmus barri	Cave Beetle		SE	G1G2	S1
Insect: Lepidoptera (Butterflies & Moths)					
Artogeia virginiensis	West Virginia White		SR	G3?	S3
Celastrina nigra	Dusky Azure		ST	G4	S2
Arachnida					
Dolomedes scriptus	Lined Nursery Web Spider			G5	S1?
Fish					
Acipenser fulvescens	Lake Sturgeon		SE	G3G4	S1

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Indiana County Endangered, Threatened and Rare Species List

County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Esox masquinongy</i>	Ohio River Muskellunge		SSC	G5	S1
<i>Etheostoma variatum</i>	Variegate Darter		SE	G5	S1
Amphibian					
<i>Acris blanchardi</i>	Northern Cricket Frog		SSC	G5	S4
<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern Hellbender	C	SE	G3G4T3T4	S1
Reptile					
<i>Clonophis kirtlandii</i>	Kirtland's Snake	C	SE	G2	S2
<i>Crotalus horridus</i>	Timber Rattlesnake		SE	G4	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>Aimophila aestivalis</i>	Bachman's Sparrow			G3	SXB
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Coragyps atratus</i>	Black Vulture			G5	S1N,S2B
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SSC	G5	S2
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike		SE	G4	S3B
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron		SE	G5	S1B
<i>Pandion haliaetus</i>	Osprey		SE	G5	S1B
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
Mammal					
<i>Mustela nivalis</i>	Least Weasel		SSC	G5	S2?
<i>Myotis grisescens</i>	Gray Bat	LE	SE	G4	S1
<i>Myotis sodalis</i>	Indiana Bat or Social Myotis	LE	SE	G2	S1
<i>Sorex hoyi</i>	Pygmy Shrew		SSC	G5	S2
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Acalypha deamii</i>	Mercury		SR	G4?	S2
<i>Asclepias viridis</i>	Green Milkweed		SE	G4G5	S1
<i>Asplenium resiliens</i>	Black-stem Spleenwort		SE	G5	S1
<i>Asplenium ruta-muraria</i>	Wallrue Spleenwort		SR	G5	S2
<i>Aster schreberi</i>	Schreber Aster		SE	G4	S1
<i>Azolla caroliniana</i>	Carolina Mosquito-fern		ST	G5	S2
<i>Calamagrostis porteri</i> ssp. <i>insperata</i>	Reed Bent Grass		ST	G4T3	S1
<i>Carex eburnea</i>	Ebony Sedge		SR	G5	S2
<i>Carex straminea</i>	Straw Sedge		ST	G5	S2
<i>Chaerophyllum procumbens</i> var. <i>shortii</i>	Wild Chervil		ST	G5T3T4Q	S1

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Indiana County Endangered, Threatened and Rare Species List

County: Clark

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Cirsium carolinianum	Carolina Thistle		SR	G5	S2
Cornus amomum ssp. amomum	Silky Dogwood		SE	G5T5	S1
Cuscuta indecora	Pretty Dodder		SE	G5	S1
Eleocharis bifida	Glades spikerush		SE	G3G4	S1
Euphorbia obtusata	Bluntleaf Spurge		SE	G5	S1
Heliotropium tenellum	Slender Heliotrope		ST	G5	S2
Hexalectris spicata	Crested Coralroot		SR	G5	S2
Hottonia inflata	Featherfoil		ST	G4	S2
Iresine rhizomatosa	Eastern Bloodleaf		SR	G5	S2
Isoetes engelmannii	Appalachian Quillwort		SE	G4	S1
Lathyrus venosus	Smooth Veiny Pea		ST	G5	S2
Leavenworthia uniflora	Michaux Leavenworthia		SE	G4	S1
Lechea racemulosa	Illinois Pinweed		SE	G5	S1
Linum sulcatum	Grooved Yellow Flax		SR	G5	S2
Ludwigia decurrens	Primrose Willow		WL	G5	S2
Magnolia acuminata	Cucumber Magnolia		SE	G5	S1
Matelea obliqua	Angle Pod		SR	G4?	S2
Melica nitens	Three-flower Melic Grass		ST	G5	S2
Melothria pendula	Creeping Cucumber		SE	G5?	S1
Ophioglossum engelmannii	Limestone Adder's-tongue		SR	G5	S2
Oxalis illinoensis	Illinois Woodsorrel		WL	G4Q	S2
Panicum bicknellii	A Panic-grass		SE	G4?Q	S1
Passiflora incarnata	Purple Passion-flower		SR	G5	S2
Penstemon deamii	Deam Beardtongue		SR	G1	S1
Phlox amplifolia	Large-leaved Phlox		SR	G3G5	S2
Pleopeltis polypodioides	Resurrection Fern		SR	G5	S2
Rhexia mariana var. mariana	Maryland Meadow Beauty		ST	G5T5	S1
Rubus centralis	Illinois Blackberry		SE	G2?Q	S1
Satureja glabella var. angustifolia	Calamint		SE	G5	S1
Scutellaria parvula var. australis	Southern Skullcap		WL	G4T4?	S2
Sedum telephioides	Allegheny Stonecrop		SR	G4	S2
Solidago squarrosa	Stout-ragged Goldenrod		SE	G4G5	S1
Spiranthes magnicamporum	Great Plains Ladies'-tresses		SE	G3G4	S1
Stachys clingmanii	Clingman Hedge-nettle		SE	G2	S1
Strophostyles leiosperma	Slick-seed Wild-bean		ST	G5	S2
Sullivantia sullivantii	Sullivantia		ST	G4	S2
Thalictrum pubescens	Tall Meadowrue		ST	G5	S2
Tragia cordata	Heart-leaved Noseburn		WL	G4	S2
Trifolium reflexum var. glabrum	Buffalo Clover		SE	G5T2T4Q	S1
Trifolium stoloniferum	Running Buffalo Clover	LE	SE	G3	S1

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Indiana County Endangered, Threatened and Rare Species List

County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
Valerianella chenopodiifolia	Goose-foot Corn-salad		SE	G4	S1
Viburnum molle	Softleaf Arrow-wood		SR	G5	S2
Viola hirsutula	Southern Wood Violet		SE	G4	S1
High Quality Natural Community					
Barrens - bedrock limestone	Limestone Glade		SG	G4	S2S3
Barrens - bedrock siltstone	Siltstone Glade		SG	G2	S2
Forest - upland dry Highland Rim	Highland Rim Dry Upland Forest			GNR	S3
Forest - upland dry-mesic Bluegrass	Bluegrass Dry-mesic Upland Forest			GNR	S1
Forest - upland dry-mesic Highland Rim	Highland Rim Dry-mesic Upland Forest			GNR	S3
Forest - upland mesic Bluegrass	Bluegrass Mesic Upland Forest			GNR	S3
Forest - upland mesic Highland Rim	Highland Rim Mesic Upland Forest			GNR	S3
Other Significant Feature					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Riverside Drive Improvements CE Level 4

APPENDIX F: WATER RESOURCES



Waters Report

**Riverside Drive Improvement Project
City of Clarksville, Clark County, Indiana
Roadway Reconstruction**

DES No: 1700725

Completed Date: FEBRUARY 22, 2019
INDOT EWPO Approval Date:



PREPARED BY:

CRAWFORD, MURPHY & TILLY, INC.
8790 PURDUE ROAD
INDIANAPOLIS, INDIANA 46268



PREPARED FOR:

INDIANA DEPARTMENT
OF TRANSPORTATION
SEYMOUR DISTRICT OFFICE

Waters Report
Riverside Drive in Clark County, Indiana
Roadway Reconstruction
DES No: 1700725

Prepared by: Alexandra Zelles
Contact Information: azelles@cmtengr.com, 630-556-1135
Company: Crawford, Murphy & Tilly, Inc.
Completed Date: February 22, 2019

PROJECT INFORMATION

Date of Field Reconnaissance: September 18, 2018

Location:

Clark County Grant, Section 1
New Albany Indiana, Quadrangle
Clark County, Indiana
38.269656 Latitude
-85.754160 Longitude

PROJECT DESCRIPTION

The proposed project is located along Riverside Drive from the Clarksville town limits to the westernmost parking lot of Ashland Park, about 1,400 feet to the west in the Town of Clarksville, Clark County, Indiana. The study area is situated in the New Albany Indiana USGS Quadrangle and Clark County Grant, Section 1.

Proposed improvements include the reconstruction of Riverside Drive. The project will widen the roadway to the south to accommodate a new typical cross section consisting of two travel lanes, on-street parking on both sides of the roadway, curbs, sidewalk (six feet on the north side and ten feet on the south side of the roadway), planting zones, and a twelve foot above-grade two-way cycle track within the right-of-way on the south side of the roadway. The project will also complete Clarksville's portion of the Ohio River Greenway, a multi-use trail, connecting Jeffersonville, Clarksville and New Albany. New right-of-way acquisition is anticipated.

Land use in the vicinity of the project is mixed use residential, commercial and industrial. The Ohio River is located 146 feet south of the study area. Topography is sloped to the south, and surface water within the study area drains south towards the Ohio River.

The project has been programmed by INDOT as Riverside Drive Improvement Project, DES No: 1700725. The study area was established using the anticipated project footprint to construct the proposed improvements. The location of the project within Clark County and the study area are shown on the attached mapping.

The Carmen Industries property, shown on the attached mapping, is located within the eastern third of the study area. Access was not granted to the Carmen Industries property; therefore, the presence of water resources was not assessed in this portion of the study area. An addendum report for this portion of the study area will be submitted when access to the Carmen Industries property has been granted.

DESKTOP RECONNAISSANCE

SOILS

According to the Soil Survey Geographic (SSURGO) Database for Clark County, Indiana, the study area does not contain soil areas with nationally listed hydric soils.

Soil Name	Map Abbreviation	Hydric Range
Udorthents, cut and filled	Uaa	Not rated
Udifulvents, cut and filled-Urban land complex	UaoAK	Not rated
Urban land-Udifulvents complex, leveed	UndAY	Not rated

NATIONAL WETLAND INVENTORY (NWI) INFORMATION

Two (2) freshwater forested/shrub wetlands are identified within the study area. Four (4) additional freshwater forested/shrub wetlands, and one (1) lake are located near the study area.

Wetland Type	Location
Freshwater Forested/Shrub Wetland (PFO1A)	A forested/shrub wetland is mapped within the central portion of the study area along the southern boundary.
Freshwater Forested/Shrub Wetland (PSS1A)	A forested/shrub wetland is mapped within the western portion of the study area along the southern boundary.
Freshwater Forested/Shrub Wetland (PFO1A)	A forested/shrub wetland is mapped approximately 30 feet south of the study area.
Freshwater Forested/Shrub Wetland (PFO1A)	A forested/shrub wetland is mapped approximately 44 feet east of the study area.
Freshwater Forested/Shrub Wetland (PSS1Ch)	A forested/shrub wetland is mapped approximately 127 feet south of the study area.
Freshwater Forested/Shrub Wetland (PFO1Ah)	A forested/shrub wetland is mapped approximately 155 feet south of the study area.
Lake (L1UBHh)	A lake (the Ohio River) is mapped approximately 159 feet south of the study area.

12 DIGIT HUC

051401010904 – Fall Run-Ohio River

USGS NATIONAL HYDROGRAPHY DATASET (NHD)

According to the USGS National Hydrography Dataset (NHD layer), two (2) NHD layer streams and two (2) NHD layer pipelines are identified within the study area. Both streams flow generally south into the Ohio River. Both pipelines are located along Riverside Drive and drain into the eastern NHD layer stream, and ultimately into the Ohio River.

FEMA FLOOD INSURANCE RATE MAP (FIRM)

According to the FEMA Flood Insurance Rate Map (FIRM), the entire project site is located within FEMA Flood Zone AE, which corresponds to the 1% annual chance of a flood with base flood elevations known. This flood zone is the FEMA designated 100-year floodplain for the Ohio River.

A total of 1,782 linear feet and 7.26 acres of the study area is located within Zone AE of the floodplain.

ATTACHED DOCUMENTS

- Project Mapping (Project Location, Aerial, Topographic, NRCS Soils, NWI, USGS NHD, and Floodplain)
- Photographs with Photo Location Map
- Wetland Data Sheets
- HHEI Data Sheet

FIELD RECONNAISSANCE

One (1) wetland and one (1) stream were identified within the study area during the onsite investigation for the presence of wetlands and other Waters of the United States (WOTUS) by Crawford Murphy and Tilly, Inc (CMT).

The investigation for wetlands was conducted in accordance with the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the August 2010 Midwest Regional Supplement (Version 2.0) Manual*. Supporting materials used for identifying, delineating, and verifying wetlands included the soil survey report and hydric soil list for Clark County, the State of Indiana 2016 Wetland Plant List and indicator status for the Midwest Region, topography, USGS topo map, NWI map, and the Field Indicators for Hydric Soils of the United States V 8.1, 2017. The wetland boundary was flagged and surveyed using a handheld GPS device with sub-foot accuracy.

Streams were evaluated according to the definition of a Water of the United States in 33 CFR 328.3(a). At the time of the assessment, it was unknown whether mitigation would be required for impacts to the stream; therefore, stream quality was assessed using the Headwater Habitat Evaluation Index (HHEI) for streams with a drainage area less than one square mile. The attached WOTUS Map depicts the location of identified surface water resources, including the wetland and upland data point locations, on an aerial photograph. Routine Wetland Determination data forms and an HHEI data form are attached. Representative photographs are provided.

STREAMS

One (1) stream was identified within the study area. A summary of the stream is provided in the table below. Details on the stream quality are provided on the attached HHEI data form. Photographs of the stream are attached within the WOTUS Photographic Log B.

Stream Summary Table									
Water Feature Name	WOTUS Photolog B Photo #	Lat/Long	OHWM Width (ft)	OHWM Depth (in)	USGS Blue-Line? Type?	Riffles? Pools?	Quality	Substrate	Likely Water of the U.S.?
UNT1	41-44	38.269550°N -85.753456°W	20	8	No	Yes	Poor	Artificial, silt, leaf pack/woody debris, cobble, gravel, sand	Yes

UNT1 OF THE OHIO RIVER

An unnamed tributary (UNT1) of the Ohio River, is located within the central portion of the study area. UNT1 originates from an existing culvert outlet and flows generally south through an open channel for 77 linear feet within the study area. The origination point of the culvert is unknown. The drainage area upstream of the study area is estimated to be 0.13 square miles. Although UNT1 is not mapped on the USGS topographic quadrangle as a 'blue-line' feature, it exhibits connectivity to the Ohio River, a mapped perennial 'blue-line' feature. From the study area, UNT1 flows south approximately 136 feet directly into the Ohio River. Based on the ultimate connection to the Ohio River, a Section 10 Traditional Navigable Water (TNW), UNT1 of the Ohio River is likely to fall under the jurisdiction of the USACE. The USACE will make the final determination of jurisdiction.

Within the study area, UNT1 has intermittent flow and artificial, silt, leaf pack, cobble, gravel and sand substrate. The width of the ordinary high water mark (OHWM) ranges from 19 to 21 feet with an average width of 20 feet within the study area. The depth of the OHWM was consistent with an average depth of 8 inches within the study area. This stream has riffle/pool complexes within the study area. Within the study area the stream was dominated by two deep, silty pools with concrete piles, wood debris piles, and cobble, gravel, and sand riffles present in between the pools.

Based on a dominant substrates of concrete (artificial) and silt, a moderate stream gradient, observed erosion, 85% overhead canopy cover, and past stream channel modifications from the construction of Riverside Drive, UNT1 of the Ohio River is a poor quality stream.

Based on a HHEI score of 67, UNT1 is a modified Small Drainage Warm Water Primary Headwater Habitat (PHWH) Stream. This score was based on a dominate substrate of artificial and silt with the presence of cobble and gravel, moderate pool depth of 8 inches, a bank full width of 20 feet, and a flowing channel. The stream was identified as recovering from human-caused channel modifications. Small Drainage Warm Water streams are normally intermittent, but some may have perennial flow derived from shallow groundwater, in which case the ambient stream temperature remains relatively warm in the summer and fluctuates to a greater degree seasonally compared to a Spring Water stream. Small Drainage Warm Water streams may exhibit moderately diverse communities of warm water adapted native fauna present either seasonally or year-round. Prevailing temperature conditions in intermittent streams prevent establishment of biological communities present in perennial streams associated with colder water derived from deeper groundwater.

WETLANDS

One (1) wetland was identified in the study area. A summary of the data points and the wetland is provided in the tables below. Details on the soil, hydrology and dominant vegetation for the wetland and the non-wetland data points are provided on the attached Routine Wetland Determination data forms. Photographs of the wetland and the non-wetland data points are attached within the WOTUS Photographic Log B.

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

Wetland Summary Table						
Wetland Name	WOTUS Photolog B Photo #	Lat/Long	Type	Quality	Likely Water of the U.S.?	Total Area Within Study Area (acres)
Wetland A	31-36	38.269927°N -85.754777°W	PEM1A	Average	Yes	0.09

WETLAND A

Wetland A is a 0.09 acre, palustrine emergent persistent temporarily flooded (PEM1A) wetland located in the western portion of the study area. Wetland A extends beyond the study area to the south, where it is seasonally flooded, abutting the Ohio River, a Section 10 Traditional Navigable Water (TNW). Based on the connection and adjacency to a TNW, this wetland is likely federally jurisdictional.

WETLAND DATA POINT A₁

The vegetation was dominated by honey-locust (*Gleditsia triacanthos*, FACU, 10%) and American sycamore (*Platanus occidentalis*, FACW, 5%) in the tree layer and large barnyard grass (*Echinochloa crus-galli*, FACW, 30%) and black bent (*Agrostis gigantea*, FACW, 20%) in the herbaceous layer. The vegetative community had a dominance test of >50%; therefore, the vegetation is hydrophytic. From the surface to 18 inches deep, the soil matrix had a color of 10YR 4/1 with 10% redox features with a color of 7.5YR 4/6. The soil at this site was clay with silt and met the Depleted Matrix hydric soil indicator. Wetland A exhibited two primary hydrology

indicators including, saturation to the surface and oxidized rhizospheres on living roots. Wetland A also exhibited three secondary wetland hydrology indicators including, drainage patterns, geomorphic position and a positive FAC-neutral test. All three wetland criteria including, vegetation, soils, and hydrology were met at this data point; therefore, data point A1 is within a wetland. Based on soil, hydrology, moderate diversity, and the limited presence of invasive species, Wetland A is an average quality wetland.

Data point A1 is identified on the NWI map as a palustrine scrub-shrub broad-leaved deciduous temporarily flooded wetland (PSSIA). Within the study area, the wetland is dominated by herbaceous emergent plants with few scattered shrubs and no trees. While data point A1 is located within a mapped NWI wetland, the wetland is a palustrine emergent wetland rather than a palustrine scrub-shrub wetland.

UPLAND DATA POINT A₂

Upland point A2 was taken on a hillslope near Wetland A, to determine the boundary of Wetland A. The vegetation in this area failed to meet the requirements for the dominance test or the prevalence index and, therefore, is not hydrophytic. The soil profile failed to meet any hydric soil indicators. No wetland hydrology indicators were observed. None of the three wetland criteria were met; therefore, data point A2 is not within a wetland. The boundary of Wetland A was determined by geomorphic position, the presence of hydrophytic plants and hydrology indicators.

NON-WETLAND DATA POINTS

UPLAND DATA POINT B₁

Upland point B1 was taken in the central portion of the study area along the southern boundary, at a mapped NWI wetland, to determine the presence or absence of wetlands. The vegetation in this area failed to meet the requirements for the dominance test or the prevalence index and, therefore, is not hydrophytic. The soil profile failed to meet any hydric soil indicators. No wetland hydrology indicators were observed. None of the three wetland criteria were met; therefore, data point B1 is not a wetland.

OPEN WATER

No open water areas were observed within the study area.

OTHER FEATURES

ROADSIDE DITCHES

No roadside ditches were observed within the study area.

DRAINAGE FEATURES WITHOUT OHWM

No drainage features without an OHWM were observed within the study area.

CONCLUSIONS

One (1) potentially jurisdictional palustrine emergent wetland and one (1) stream were identified within the study area.

Wetland A, within the study area, is a 0.09 acre palustrine emergent persistent temporarily flooded (PEM1A) wetland located in the western portion of the study area along the southern boundary. Beyond the study area, Wetland A is abutting the Ohio River. Wetland A is likely federally jurisdictional.

An unnamed tributary (UNT1) of the Ohio River is located within the central portion of the study area. The stream is 77 feet in length within the study area and originates at the outlet of an existing culvert. From the study area, the stream flows south for approximately 136 feet to the Ohio River. UNT1 is likely to fall under the jurisdiction of the USACE.

These waterways are likely Waters of the U.S. 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 U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

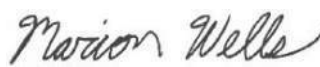
ACKNOWLEDGEMENT

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.



Alexandra Zelles
Environmental Scientist
Crawford, Murphy & Tilly, Inc.

Date: 2/22/2019

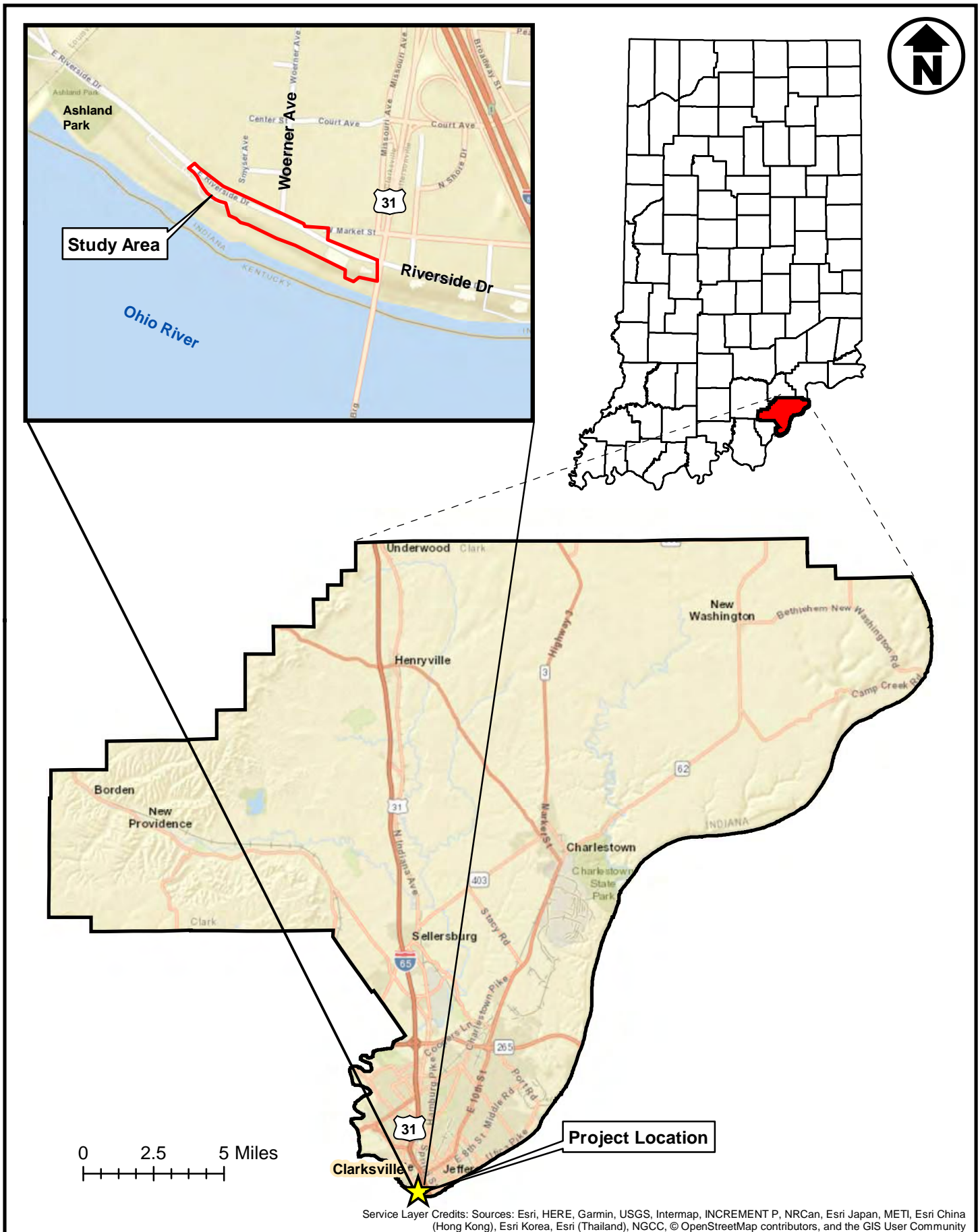


Marion Wells – Reviewer
Environmental Scientist
Crawford, Murphy & Tilly, Inc.

Date: 2/22/2019

SUPPORTING DOCUMENTATION

- Maps
- Photos
- Wetland Delineation Data Sheets
- HHEI Data Sheet

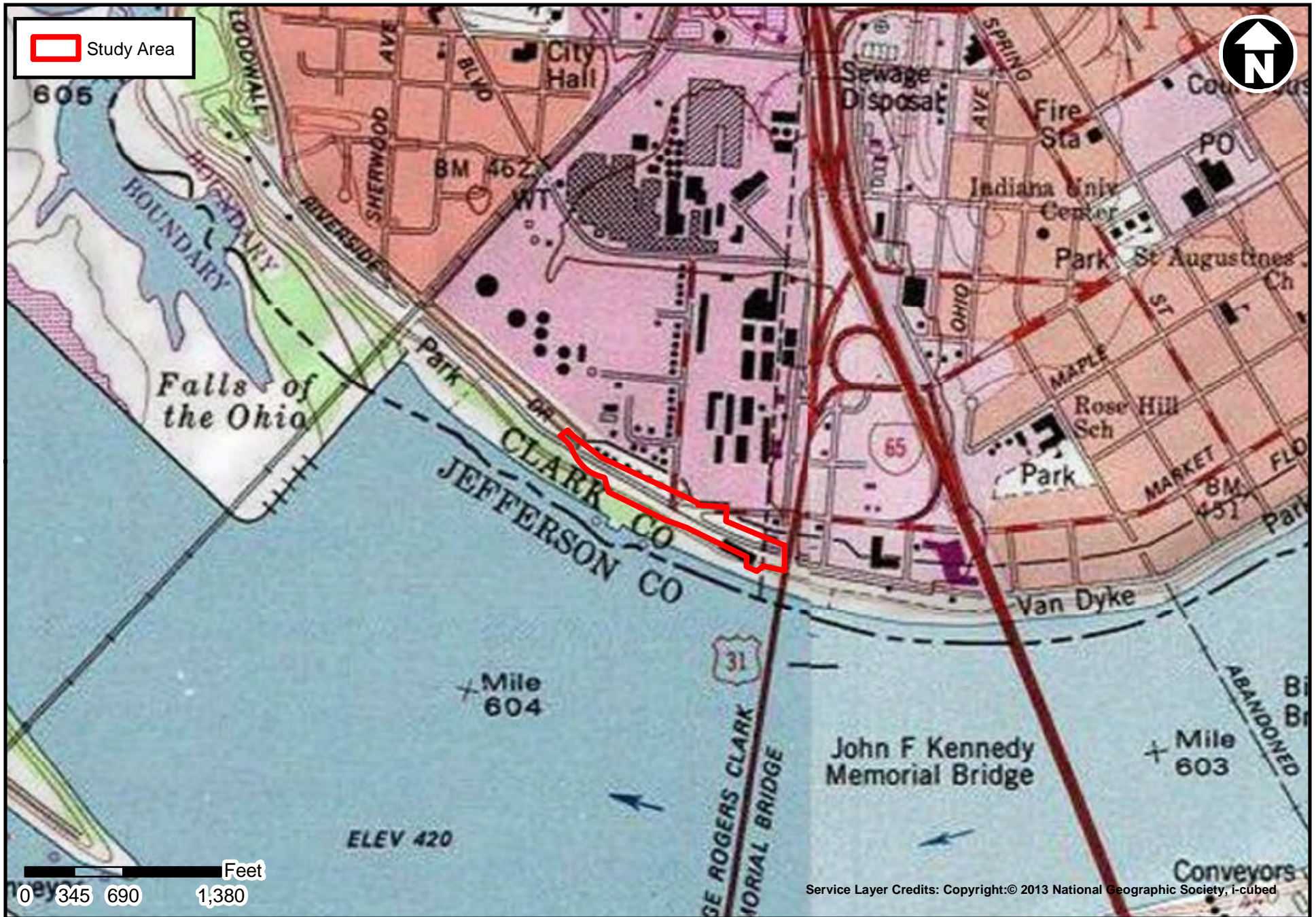


Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN

Location Map - Clark County, Indiana

Author: Marion Wells; 9/12/2018

Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN
USGS Topographic Map - New Albany, IN Quadrangle Marion Wells
9/12/2018



Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN **USGS Topographic Map - New Albany, IN Quadrangle**

Marion Wells
9/12/2018



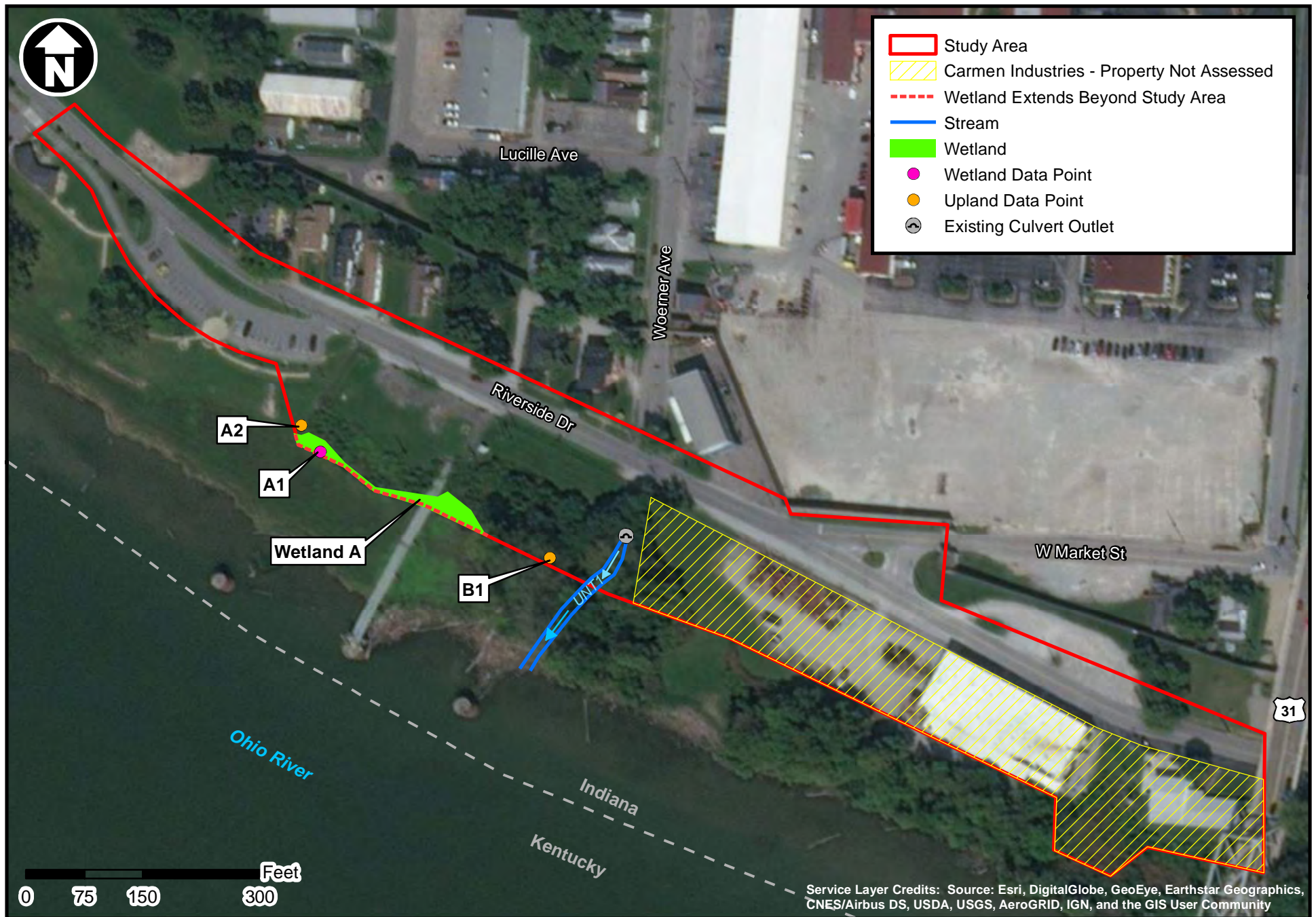
Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN

Aerial Map

F-13

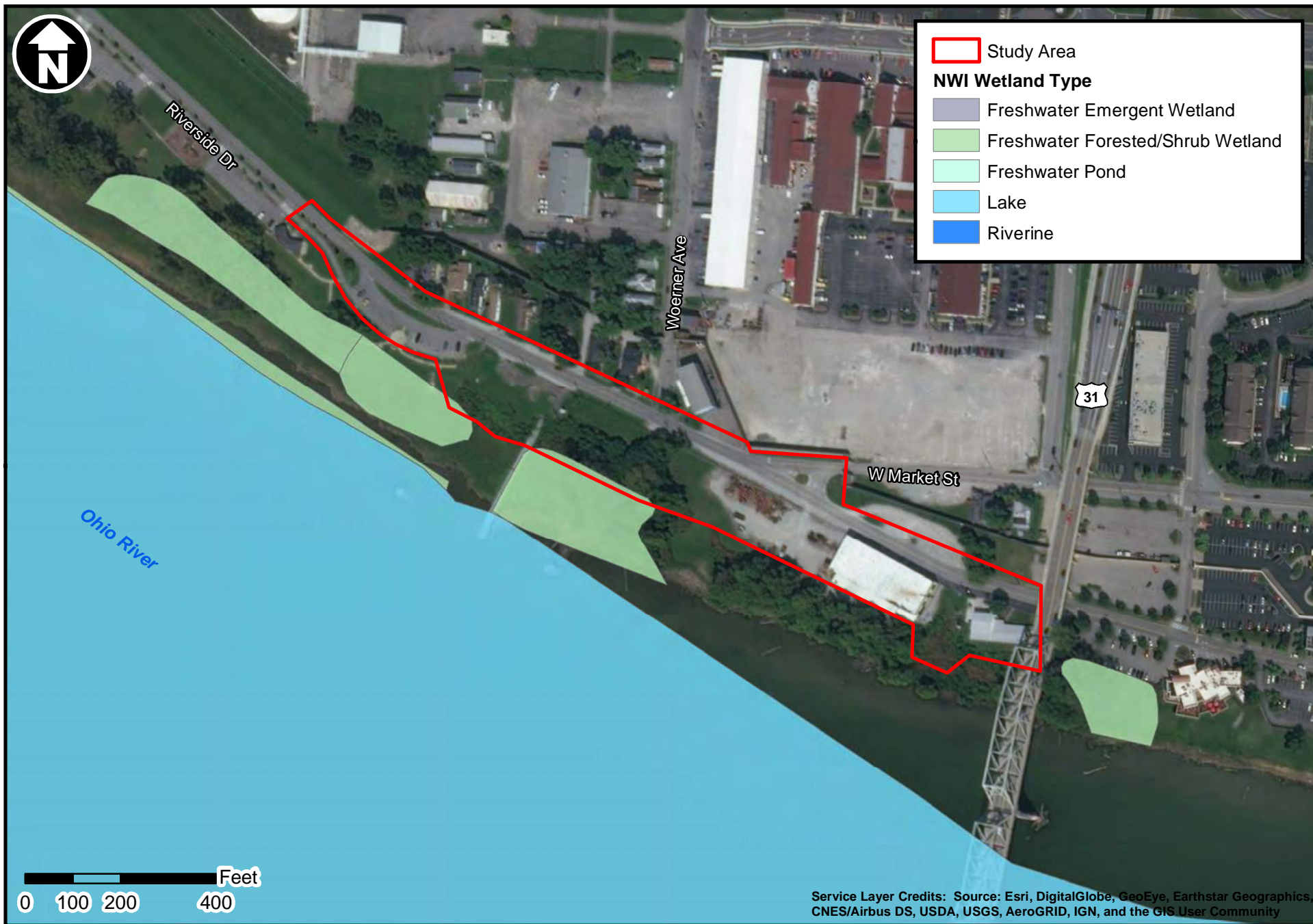
Austin Clarridge
9/12/2018

CMT
Crawford, Murphy & Tilly



Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN **Waters of the United States (WOTUS) Map**

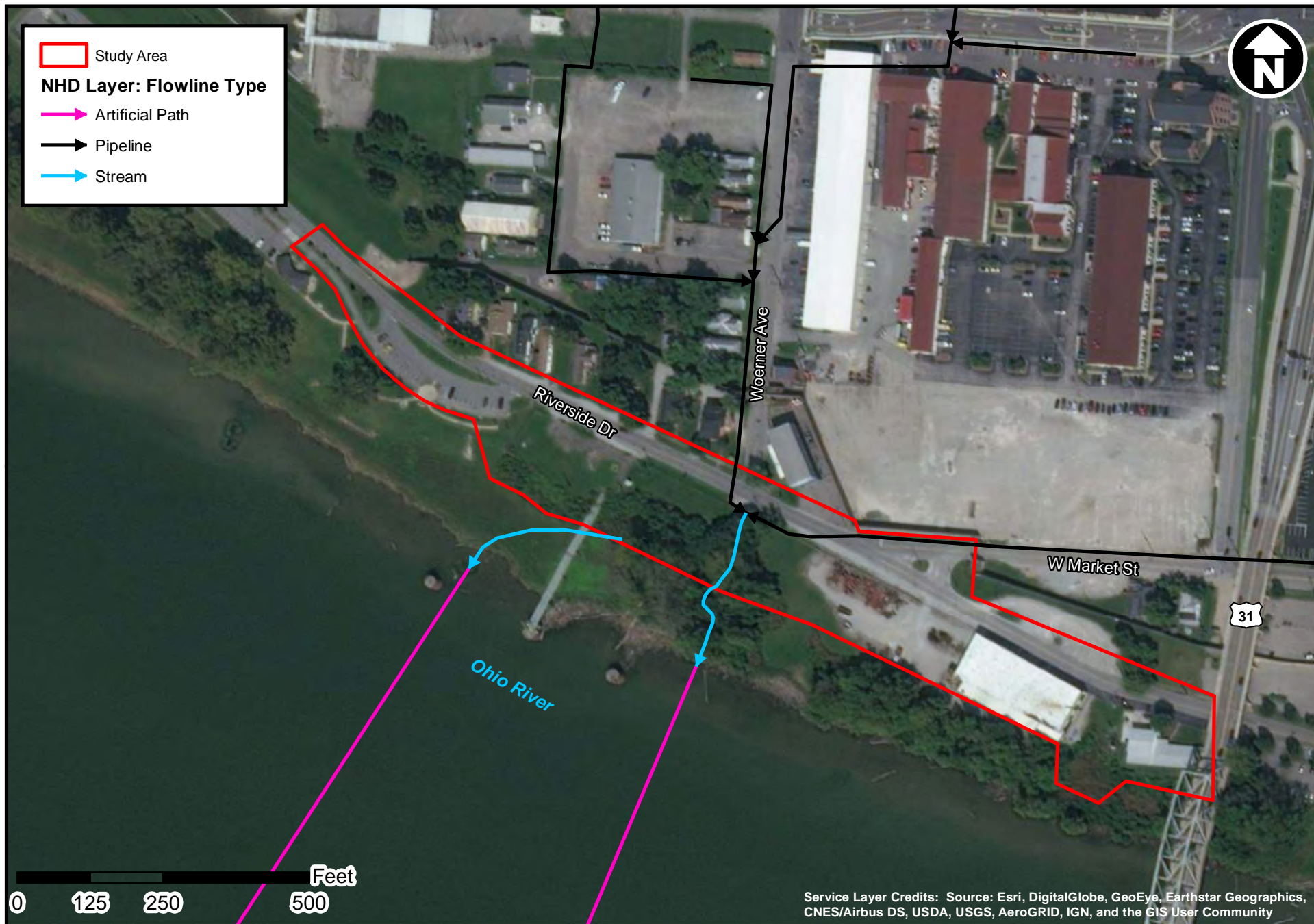




Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN

National Wetland Inventory Map

Austin Clarridge
9/12/2018



Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN

USGS National Hydrography Dataset Map

Author: Alexandra Zelles, 2/21/2019

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



Study Area

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/14/2018 at 9:25:27 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





Riverside Drive Improvements (Des No. 1700725) - Clarksville, Clark Co., IN **NRCS Soils Map**

F-18

Austin Clarridge
9/12/2018



Map Unit Description (Brief, Generated)

Clark County, Indiana

[Minor map unit components are excluded from this report]

Map unit: Uaa - Udorthents, cut and filled

Component: Udorthents, cut and filled (83%)

The Udorthents, cut and filled component makes up 83 percent of the map unit. Slopes are 0 to 90 percent. This component is on fills. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches (or restricted depth) 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: 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 (or restricted depth) 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: UndAY - Urban land-Udifluvents complex, leveed, 0 to 2 percent slopes

Component: Urban land (65%)

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

Component: Udifluvents (25%)

The Udifluvents component makes up 25 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 (or restricted depth) is very low. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.