Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
26 June 2025

Closing Date:
24 July 2025

PUBLIC NOTICE

IDEM ID Number:
2025-505-49-LDC-WQC

Corps of Engineers ID Number:
LRL-2025-00476-sjk

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

1. Applicant:
AES Indiana
Attn: Greg Ellis
3700 South Harding Street
Indianapolis, IN 46217

2. Agent:
Jocelyn Oshrin
GAI Consultants, Inc.
201 North Illinois Street, Suite 1700
Indianapolis, IN 46204

3. Project Location: AES Indiana Harding Street Station, 3700 South Harding Street, Indianapolis, IN 46217

4. Affected Waterbody: The proposed project will require permanent impacts to the White River streambed (0.0006 acre), one forested wetland (0.0002 acre) and one emergent wetland (0.12 acre) due to the placement of fill.

5. Project Description: The proposed project includes removal and replacement of existing intake screens, as well as the installation of a new conveyance-style fish ladder return system, at an existing surface water intake at the Harding Street Station along the east side of the White River. The proposed project also seeks to install an access road. Fill materials include steel drives piles, gravel, and concrete matting. Additional information may be found online at https://www.in.gov/idem/5474.htm

Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from L. David Cohen, Project Manager, by phone at 317-450-5380 or by e-mail at LCohen@idem.IN.gov. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Indiana Department of Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251 FAX: 317/232-8406

gai consultants

Indianapolis Office
201 North Illinois Street
Indianapolis, IN 46204

T 317.570.6800
F 317.570.6810

June 16, 2025

GAI Project No. R230959.00

Mr. David Cohen
Indiana Department of Environmental Management
Office of Water Quality Surface Water, Operations & Enforcement Branch
Wetlands and Storm Water Section, Section 401 WQC Program
100 N. Senate Avenue IGCN 1255
Indianapolis, Indiana 46204

IDEM Section 401 Individual Application
AES Indiana
Harding Street Station Intake Screen Replacement and Fish Return Installation Project
Indianapolis, Marion County, Indiana

Dear Mr. Cohen:

On behalf of AES Indiana (AESI), GAI Consultants, Inc. (GAI) is submitting the enclosed Section 401 Individual Application for temporary and permanent impacts to regulated waters associated with the Harding Street Station Intake Screen Replacement and Fish Return Installation Project (Project). The proposed work generally consists of the removal and replacement of the existing intake screens, as well as the installation of a new conveyance-style fish ladder return system, at an existing surface water intake at the Harding Street Station (HSS) facility along the east side of the White River in Indianapolis, Marion County, Indiana. The Project is in support of Section 316(b) of the Clean Water Act regulating the design and operation of intake structures, in order to minimize adverse impacts and to support anticipated permit compliance at AESI's existing industrial generation facility. The Project is required in the facility's National Pollutant Discharge Elimination System (NPDES) permit, including specific compliance deadlines to implement Section 316(b) of the Clean Water Act regulating the design and operation of intake structures, in order to minimize adverse impacts and to support anticipated permit compliance at AESI's existing industrial generation facility. Construction activities are tentatively anticipated to begin October 2025 in order to meet NPDES permit compliance schedule enforceable deadlines. The Indiana Department of Environmental Management (IDEM) Section 401 Individual Water Quality Certification Application Form is included in **Attachment A**. A Project Vicinity map is included in **Attachment B**, Figure 1.

Wetland and Stream Identification

Field work associated with stream and wetland investigation for the Project was conducted by GAI on November 19, 2024 with the purpose of the identifying streams and wetlands within and adjacent to the approximate 3.02-acre Project study area. The wetland delineation was performed in accordance with the 1987 United States Army Corps of Engineers (USACE) Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (USACE, 2010). During the site visit, GAI identified two jurisdictional perennial streams (Lick Creek and the White River) and a wetland complex consisting of palustrine forested (PFO), palustrine emergent (PEM), and palustrine scrub-shrub (PSS) wetlands in and/or adjacent to the Project area. The Wetland Delineation and Stream Identification Report (WDSIR) prepared for the Project is provided as **Attachment C** and contains detailed descriptions and photographs of delineated features. Locations of the delineated features can be found in Figure 2 of the WDISR (**Attachment C**).

Project Impacts Description

The Project involves the removal and replacement of the existing intake screens, as well as the installation of a new conveyance-style fish ladder at an existing surface water intake on the east (left) bank of the White River. The fish ladder return system will span from the main east bank of the White River, across the intake bay and riverine peninsula wetland complex, and extend into the White River west of the peninsula. Additionally, the Project will require mechanized clearing of woody vegetation and limited grading within wetland areas located on the riparian peninsula to make way for the installation of a 40-foot-wide gravel with a partial section of articulated concrete matting access road and 115-foot by 40-foot gravel crane pad. Of this, a 20-foot width of the access road and a 40-by-40-foot area of the crane pad will be permanently left and maintained to facilitate operations and maintenance activities for the fish return system. It is estimated that the temporary portion of the access road and crane pad will result in temporary impacts to approximately 0.21 acres of PEM wetland, 0.007 acres of PSS wetland, and 0.26 acres of PFO wetland, and the permanently maintained portion of the access road and turn-around area will result in the permanent loss of approximately 0.12 acres of PEM wetland. In addition, approximately 0.03 acres of permanent conversion of PFO wetland to PEM wetland will result from tree clearing for a 13-foot-wide operation and maintenance corridor around the proposed fish ladder system. Finally, the construction of the fish ladder return system will result in the permanent placement of eighteen (18) 15-inch by 15-inch driven steel piles within the bed of the White River, totaling approximately 0.0006 acres of permanent stream impact, and four driven piles within the PEM wetland, totaling approximately 0.001 acres of permanent PEM wetland impact. The permanent impacts resulting from the six driven piles to be located within PFO wetlands are accounted for within the PFO to PEM conversion permanent impact area. Temporary laydowns, as well as the eastern crane pad will be installed across from the peninsula in upland areas on the main bank of the White River, with no additional clearing or stream and wetland impacts anticipated necessary in this area.

The temporary and permanent wetland and permanent stream impacts are presented in the Project Engineering Plans (**Attachment D**) and Figure 3, Project Detail (**Attachment B**), and quantified in Tables 1, 2, and 3 below:

Table 1. Temporary Wetland Impact Summary

Feature	Feature Type	Temporary Impact Type	Total Fill Area
Wetland A	Forested Wetland (PFO)	Temporary Gravel or Articulated Concrete Mat	11,162 sq. ft. (0.26 ac)
Wetland A	Shrub-Scrub Wetland (PSS)	Temporary Gravel	303 sq. ft. (0.007 ac)
Wetland A	Emergent Wetland (PEM)	Temporary Gravel or Articulated Concrete Mat	9,012 sq. ft. (0.21 ac)
		Total Temporary Impact	**20,477 sq. ft.**
			0.47 ac

Table 2. Permanent Wetland Impact Summary

Feature	Feature Type	Permanent Impact Type	Total Fill Area
Wetland A	Emergent Wetland (PEM)	Permanent Gravel or Articulated Concrete Mat	5,207 sq. ft. (0.12 ac)
Wetland A	Emergent Wetland (PEM)	Permanent Driven Piles	4.36 sq. ft. (0.0001 ac)
Wetland A	Forested Wetland (PFO)	Permanent Tree Clearing/PFO Conversion and Driven Piles	1,307 sq. ft. (0.03 ac)
		Total Permanent Impact	**6,518 sq. ft.**
			0.15 ac

Table 3. Permanent Stream Impact Summary

Feature	Feature Type	Permanent Impact Type	Total Fill Area
White River	Perennial	Driven Piles	28 sq. ft.
		Total Permanent Impact	**28 sq. ft.**
			0.0006 acres

Full details of the documented regulated waters are presented in the Wetland Delineation and Stream Identification Report (WDSIR; **Attachment C**), and wetland and stream impacts are presented in the Figure 3, Project Details, in **Attachment B**. All temporary impacts will be restored to pre-construction conditions following the Regulated Waters and Floodway Habitat Restoration Plan as outlined in **Attachment E**. Permanent PEM and PFO impacts will require compensatory wetland mitigation, and it is proposed that IDNR In Lieu Fee Program and/or bank mitigation credits will be utilized based on availability at time of need.

Threatened and Endangered Species Correspondence

As part of due diligence under Section 7 of the Endangered Species Act, GAI utilized the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) web portal system to investigate and complete environmental review of the federally listed endangered and threatened species for Marion County, Indiana. Listed species include the federally endangered Indiana bat (*Myotis soldalis*), the proposed endangered Tricolor bat (*Perimyotis subflavus*), the candidate species Monarch Butterfly (*Danaus Plexippus*), and an experimental, non-essential population of whooping crane (*Grus americana*). Although there are mature trees that may be suitable as bat roosting habitat within the project area, clearing required to facilitate access for construction will occur between October 1 and March 31 to avoid adversely affecting any listed bat species. No new forested clearing is expected within any forested wetland. The monarch butterfly was recently added as federally endangered species, however critical habitat has not yet been designated. Construction activities associated with the Project are not anticipated to significantly impact migration or reproduction of the monarch butterfly.

In addition to the IPaC environmental review, coordination also took place with the Indiana Department of Natural Resources – Division of Nature Preserves (IDNR-DNP) regarding state-listed rare, threatened, and endangered (RTE) species. A response from the DNP received on December 20, 2024, indicated

that one state species of concern, the Peregrine falcon (*Falco peregrinus*), was documented within the 0.5-mile radius of the Project. Coordination was completed with IDNR Division of Fish and Wildlife (DFW), and a response was received from the IDNR-DFW on May 9, 2025 stating that "the Division of Fish and Wildlife does not expect negative impacts to the Peregrine Falcon due to this project." Accordingly, no further action or additional measures are necessary. The IPaC report, the IDNR-DNP and IDNR-DFW correspondence are included as **Attachment F**.

Cultural Resources and Historic Properties Correspondence

GAI completed a review of the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (DHPA) State Historic Architectural and Archaeological Research Database (SHAARD), which includes information on archaeological sites, the National Register of Historic Places (NRHP), the Indiana Historic Sites and Structures Inventory, and the Indiana Historic Bridge Inventory. The review indicated that eight archaeological sites and ten historic resources are located within the one-mile radius of the Project area. None of the previously recorded archaeological sites have been assessed for NRHP eligibility, and one site has been destroyed. None of these sites will be impacted by the Project. Of the ten historic resources, only one, the E.W. Stout Generating Station, is NRHP eligible and is located directly east of the Project area. However, because the Project does not include new or additional above-ground infrastructure, this resource will not be impacted by the Project. The findings of GAI's review are documented within the Cultural Resources Background Research Report included as **Attachment G**.

Please contact me at (317.436.4847) or j.oshrin@gaiconsultants.com if you have any questions or need additional information.

Sincerely,

GAI Consultants, Inc.

Jocelyn Oshrin
Assistant Environmental Manager

Marc Walters, MPA, CPESC
Assistant Environmental Director/ Senior Associate

cc. Greg Ellis, AES Indiana
Nysa Hogue, AES Indiana
Bruce Davis, AES Indiana

ATTACHMENT A
IDEM Section 401 Individual Water Quality Certification Application Form

APPLICATION TO DISCHARGE DREDGED OR FILL MATERIAL TO WATERS OF THE STATE

State Form 51821 (R3 / 2-25)

Indiana Department of Environmental Management

INSTRUCTIONS:
1. *Read the instruction sheet before filling out this form.*
2. *You must complete all applicable sections of this form*

1. Applicant Information

Name of Applicant AES Indiana
Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 3700 South Harding Street Indianapolis, IN 46217
Daytime Telephone Number 317-261-5584
Fax Number
E-mail address *(optional)* gregory.ellis@aes.com
Contact person *(required)* Greg Ellis

2. Agent Information

Name of Agent GAI Consultants, Inc.
Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 201 North Illinois Street, Suite 1700 Indianapolis, IN 46204
Daytime Telephone Number 317.436.4847
Fax Number
E-mail address *(optional)* j.oshrin@gaiconsultants.com
Contact person Jocelyn Oshrin

3. Project / Tract Location

County Marion County	Nearest city or town Indianapolis
Project street address *(if applicable)* 3700 South Harding Street Indianapolis, IN 46217	
Decimal Latitude: 39.710523	Decimal Longitude: -86.199809
Type of aquatic resource(s) to be impacted *(Attach Worksheet One.)* Jurisdictional PEM Wetland Jurisdictional PFO Wetland Jurisdictional PSS Wetland Jurisdictional Non-Section 10 Perennial Waterway	Project name or title *(if applicable)* Harding Street Station Intake Screen Replacement and Fish Return Installation Project

Descriptive project location information including directions from the nearest intersection:
From downtown Indianapolis, take Kentucky Ave southwest to W. Morris St. Turn right onto W. Morris St. drive 0.4 miles and turn left onto S. Harding St. Take S. Harding St. south for approximately 3 miles, and the Project location (AES IN Harding Street Station, 3700 S. Harding Street) will be on the right.

4. Project Purpose and Description *(Use additional sheet(s) if required.)*

Has any construction been started? ☐ Yes ☒ No	Anticipated start date *(month, day, year)* 10/1/2025
If yes, how much work is completed? n/a	

Purpose of project and overview of activities

The Project is required in the facility's National Pollutant Discharge Elimination System (NPDES) permit, including specific compliance deadlines to implement Section 316(b) of the Clean Water Act regulating the design and operation of intake structures, in order to minimize adverse impacts and to support anticipated permit compliance at AESI's existing industrial generation facility. Construction activities are tentatively anticipated to begin October 2025 in order to meet NPDES permit compliance schedule enforceable deadlines.

The Project involves the removal and replacement of the existing intake screen, as well as the installation of a new conveyance-style fish ladder return system at an existing surface water intake at the Harding Street Station (HSS) facility, along the east (left) bank of the White River in Indianapolis, Marion County, Indiana. The fish ladder return system will span from the main east bank of the White River, across the intake bay and riverine peninsula wetland complex, and extend into the White River west of the peninsula. Additionally, the Project will require mechanized clearing of woody vegetation and limited grading within wetland areas located on the riparian peninsula to make way for the installation of a 40-foot-wide gravel access road and 115-foot by 40-foot gravel crane pad. Of this, a 20-foot width of the gravel access road and a 40-by-40-foot area of the gravel crane pad will be permanently maintained to facilitate operations and maintenance activities for the fish return system. Temporary laydowns, as well as the eastern crane pad will be installed across from the peninsula in upland areas on the main bank of the White River, with no additional clearing or stream and wetland impacts anticipated necessary in this area.

5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions

(Use additional sheet(s) if necessary - provide a detailed response to all applicable questions.)

A. For projects with Class II isolated wetlands –

1. Is there a reasonable alternative to the proposed activity?
   n/a

2. Is the proposed activity reasonably necessary or appropriate?
   n/a

B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –

1. Is there a practicable alternative to the proposed activity?
   No - A "Do Nothing" alternative would not meet the need to improve water quality and anticipated permit compliance at AESI's existing industrial generation facility. No alternative location or construction access is applicable that would have a reduction in regulated waters impacts to facilitate construction.

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?
   Design efforts have minimized the footprint of the temporary and permanent access road and workspaces required for Project activities. Erosion control BMPs will be implemented prior to Project start, and following Project completion all temporary access, work pads and laydown areas will be re-graded (if required) to pre-project conditions and elevations. In wetland areas, a combination of native herbaceous seed and woody species will be planted adhering to the Project's Regulated Waters and Floodway Habitat Restoration Plan.

Describe all compensatory mitigation required for unavoidable impacts.
Temporary PFO, PSS and PEM wetland impacts resulting from the temporary portion of the construction access and crane pad will be restored to a higher quality than pre-project conditions, following the Regulated Waters and Floodway Habitat Restoration Plan . The proposed restoration of temporarily impacted wetlands will increase the habitat quality increasing the diversity of herbaceous native vegetation, as the existing herbacious vegetation is dominated by invasive reed canary grass (Phalaris arundinacea). Additionally, permanent PEM wetland habitat loss and PFO conversion will require compensatory wetland mitigation, and it is anticipated that IDNR In Lieu Fee Program and/or bank mitigation credits will be utilized.

6. Drawing / Plan Requirements *(Applicants must provide the following.)*

a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
b. Cross sectional view of areas of fill or alterations to streams and other waters.
c. North arrow, scale, property boundaries.
d. Include wetland delineation boundary *(if applicable)*. Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site *(if applicable)*.
f. Approximate water depths and bottom configurations *(if applicable)*.

7. Supplemental Application Materials *(Applicants must provide the following.)*

a. A wetland delineation of all wetlands on the project site *(for projects with wetland impacts)*.
b. At least three photographs of the project site. Indicate the photo locations on the project plans.
c. All correspondence from the Indiana Department of Natural Resources, Division of Nature Preserves including the Heritage Data Review *(required)*
d. Wetland mitigation plan and monitoring report.
e. Classification of all isolated wetlands on the tract *(if isolated wetlands are present onsite)*.
f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
g. Tract history *(see instructions)*.

8. Additional information that MAY be required *(IDEM will notify you if needed.)*

a. Erosion control and/or storm water management plans.
b. Sediment analysis.
c. Species surveys for fish, mussels, plants and threatened or endangered species.
d. Stream habitat assessment.
e. If applying for a State Regulated Wetland Permit and IDEM cannot determine the wetlands are non-jurisdictional, isolated wetlands, then correspondence from the USACE on the jurisdictional status of the wetland is necessary.
f. Any other information IDEM deems necessary to review the proposed project.

9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers? ☒ Yes ☐ No

If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit? ☐ Yes ☒ No

If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.

A RGP 001 PCN for the Project work will be submitted to the USACE concurrently.

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project? ☐ Yes ☒ No

Please give the permit name, permit number, and date of application, issuance or denial.

A Construction in a Floodway Permit application will be sumitted to IDNR-DW concurrently.

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project? ☐ Yes ☒ No

Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.

Due to the area of potential ground disturbance over 1 acre, a Notice of Intent will submitted to the Indiana Department of Environmental Management - Storm Water program prior to the commencement of Project work in order to comply with CRGP requirements. In addition, a Stormwater Drainage Permit and a Floodplain Development Permit will be obtained from the City of Indianapolis Department of Business and Neighborhood Services.

10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Name Heidelberg Materials (Hanson Aggregates Midwest, Inc.) Address *(number and street)* 300 E JOHN CARPENTER FWY STE 1700 City IRVING	State TX	ZIP Code 75062-2226	Name KENTUCKY AVENUE LAND CO Address *(number and street)* 5300 MILLER RD City KALAMAZOO	State MI	ZIP Code 49048-8564
Name Address *(number and street)* City	State	ZIP Code	Name Address *(number and street)* City	State	ZIP Code
Name Address *(number and street)* City	State	ZIP Code	Name Address *(number and street)* City	State	ZIP Code
Name Address *(number and street)* City	State	ZIP Code	Name Address *(number and street)* City	State	ZIP Code
Name Address *(number and street)* City	State	ZIP Code	Name Address *(number and street)* City	State	ZIP Code
Name Address *(number and street)* City	State	ZIP Code	Name Address *(number and street)* City	State	ZIP Code

11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature:  Date: 06/06/2025 *(mm/dd/yyyy)*

Print Name: Greg Ellis, AES Indiana Title: HSS Plant Manager

Worksheet – Summary of Onsite Water Resources and Project Impacts

A. Jurisdictional Wetlands (Existing Conditions)		Jurisdictional Wetlands (Proposed Impacts)			
Wetland Type	**Size of wetland** *(acreage)*	**To be Impacted?**	**Acreage**	**Fill quantity** *(cys)*	**ATF**
☐ EM ☐ SS ☒ FO	0.26 ac within Project area	☒ Yes ☐ No	0.0002	0.0	No
☐ EM ☒ SS ☐ FO	0.007 ac within Project area	☐ Yes ☒ No	n/a	n/a	No
☒ EM ☐ SS ☐ FO	0.33 ac within Project area	☒ Yes ☐ No	0.12	193.1	No
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			

Describe the type and composition of fill material to be placed in wetlands on the project site:
Permanent fill includes an approx. 1-ft thick, 20-ft-wide gravel and articulated concrete matting access road and 40-foot by 40-foot gravel pad within PEM wetland, and four 15-in by 15-in steel driven piles within PEM wetland and six within PFO wetland. Other non-fill impacts include approx 0.03 acre of permanent conversion of PFO to PEM wetland from tree clearing for a 13-ft-wide O&M corridor.

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from wetlands on the project site:
n/a

B. Isolated Wetlands (Existing Conditions)			Isolated Wetlands (Proposed Impacts)			
Wetland Class	**Type**	**Size of wetland** *(acreage)*	**To be Impacted?**	**Acreage**	**Fill quantity** *(cys)*	**ATF**
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ Yes ☐ No			

Describe the type and composition of fill material to be placed in isolated wetlands on the project site:

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from isolated wetlands on the project site:

C. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name

Description of impacts

Length of upstream bank impacts:
Left side: Right side:

Length of downstream bank impacts:
Left side: Right side:

Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot:

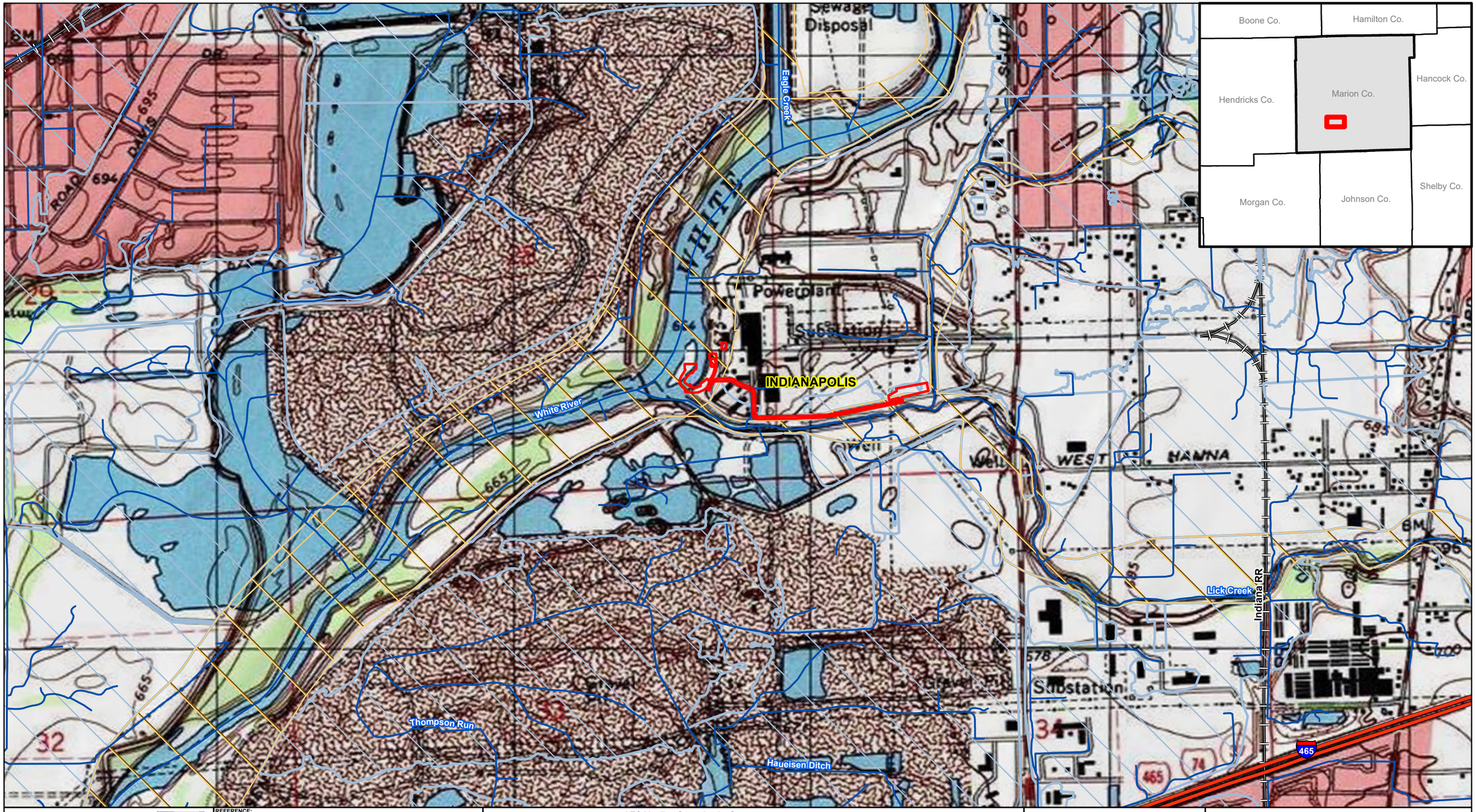
Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage:

D. Bank Stabilization – provide the following information for EACH segment *(Use additional sheet(s) if required.)*
Water body name
Description of impacts
Length of shoreline or bank protection
Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark

E. Stream Relocation	
Water body name	
Description of impacts	
Length of existing channel to be relocated *(linear feet)*	
Length of new channel to be constructed *(linear feet)*	
Existing channel to be backfilled? ☐ Yes ☐ No	Type of relocation ☐ Piping ☐ Open ☐ Channel ☐ Other:____
Type of fill and volume *(cubic yards)*	

F. Open Water Fill
Water body name White River
Description of impacts Proposed permanent fill includes eighteen 15-inch by 15-inch steel driven piles within the bed of the White River
Area of water body to be filled *(acres)* 0.0006 ac
Type of fill and volume *(cubic yards)* 15-inch by 15-inch steel piles ranging in height between 54.3 feet and 60.2 feet, totalling approximately 59.85 cubic yards

ATTACHMENT B
Figures



PROJECT LOCATION

MARION
COUNTY, IN

REFERENCE:
TOPOGRAPHIC MAP:
- Esri's USA Topo Map, Accessed: 6/12/2025.

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

RAILWAY:
- Indiana Department of Transportation's Active and Abandoned Rail System, 9/13/2006.

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/14/2025.

PROJECT DETAILS:
- AES Indiana.

Interstate Highway
Railway
Incorporated Area
AES Harding Street Intake Screen Replacement and Fish Return Installation
NHD Flowline
100-Year Floodplain
Floodway

aes
gai consultants

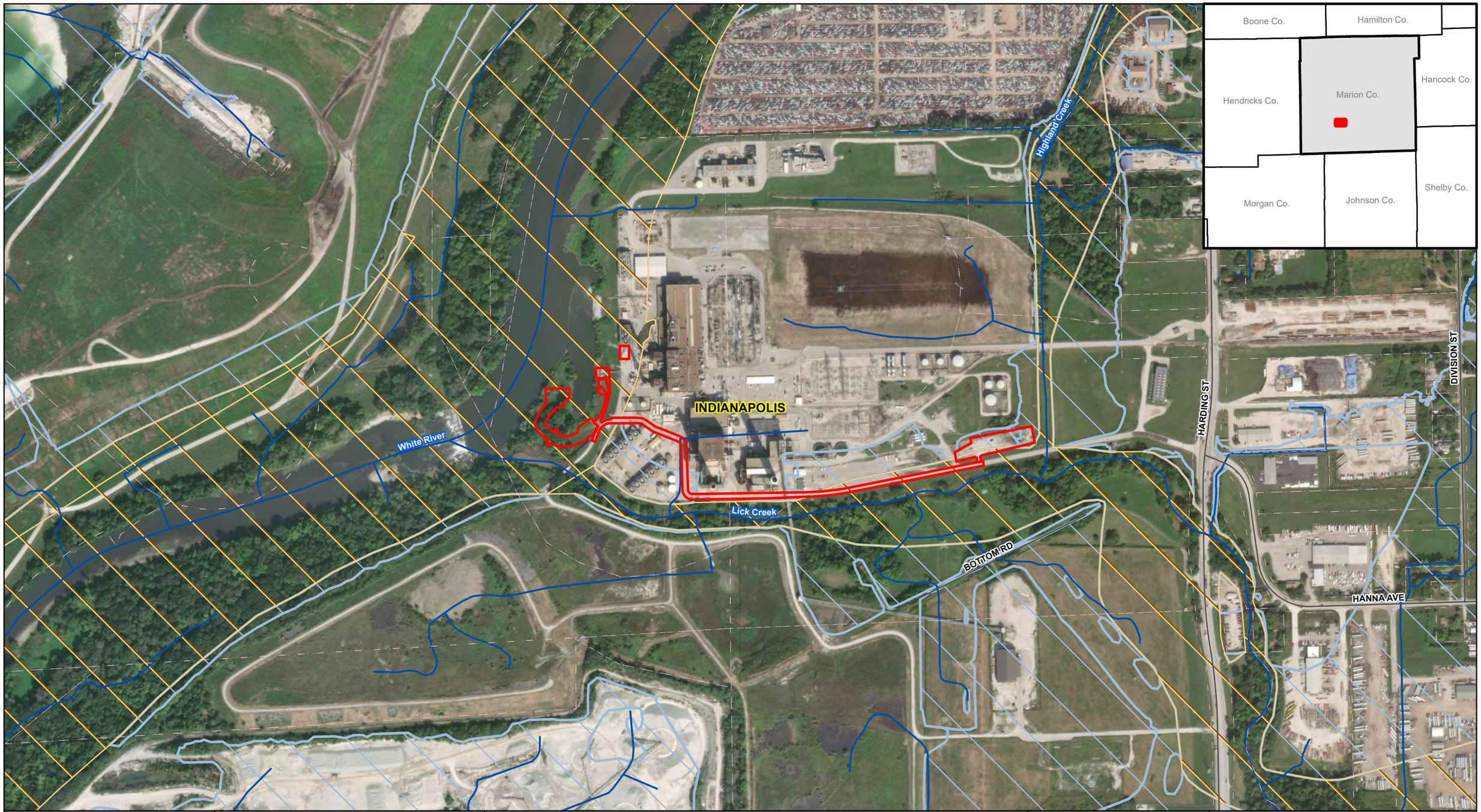
0 500 1,000 Feet
1 in. = 1,000 ft.

FIGURE 1
LOCATION MAP

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Return Installation Project

DRAWN BY: MBH
CHECKED: TDB
DATE: 6/12/2025
APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\CIF\R230959_00_HSS_Intake_Screen_AES_IN_CIF_20250605.aprx



PROJECT LOCATION

MARION
COUNTY, IN

REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2022, Accessed: 6/12/2025

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

LOCAL ROAD:
- Indiana Geographic Information Office's Street Centerlines, 12/18/2024.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Parcel Boundaries of Indiana Current, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/14/2025.

PROJECT DETAILS:
- AES Indiana.

Local Road
Incorporated Area
AES Harding Street Intake Screen Replacement and Fish Return Installation
NHD Flowline
100-Year Floodplain
Floodway
Parcel Boundary

gai consultants

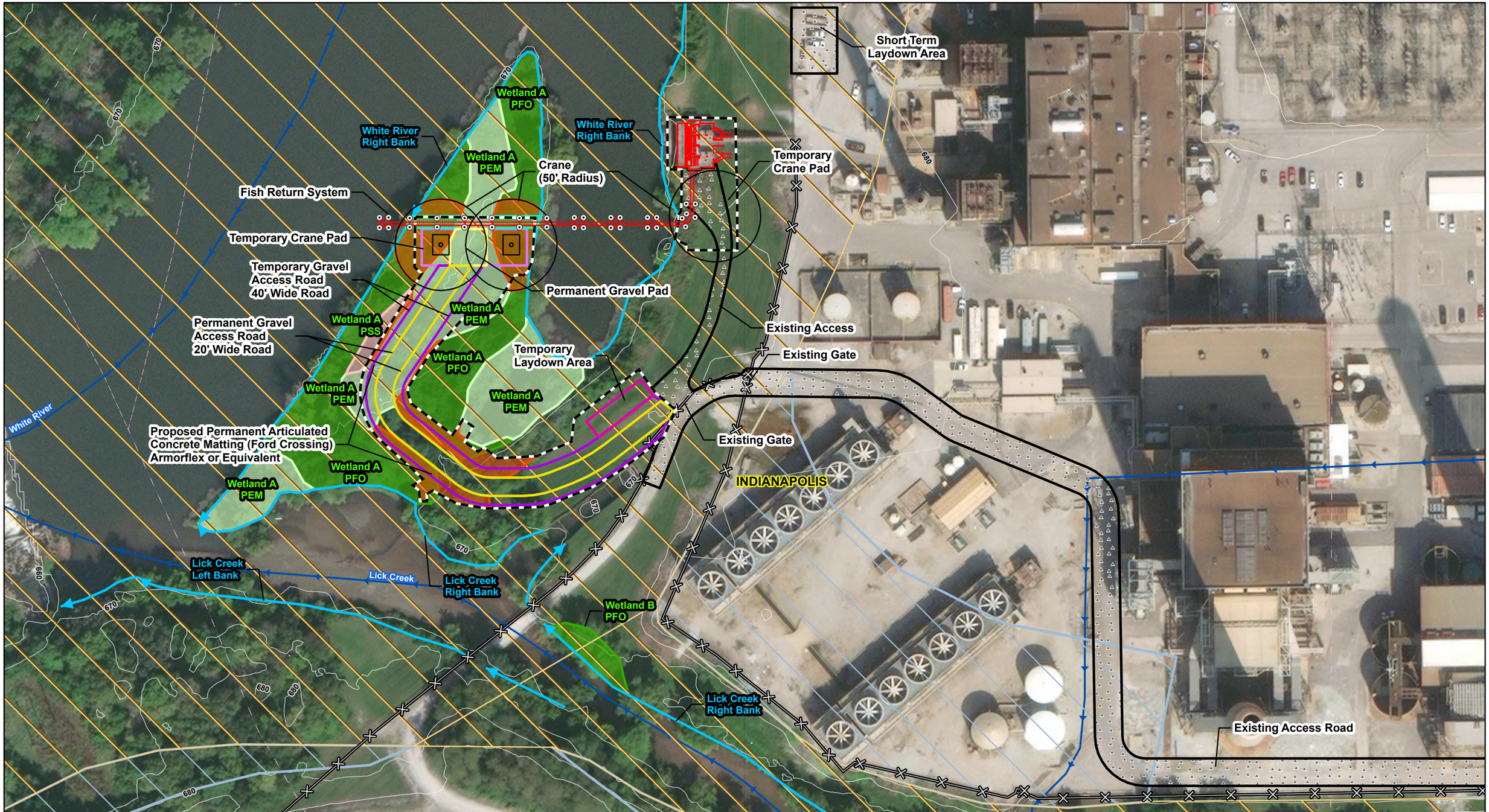
0 250 500 Feet
1 in. = 500 ft.

FIGURE 2
PROJECT SITE MAP

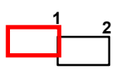
AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Return Installation Project

DRAWN BY: MBH
CHECKED: TDB
DATE: 6/12/2025
APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\CIF\R230959_00_HSS_Intake_Screen_AES_IN_CIF_20250605.aprx



SHEET INDEX



REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2021. Accessed: 6/12/2025

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

LOCAL ROAD:
- Indiana Geographic Information Office's Street Centerlines, 12/18/2024.

INCORPORATED AREA:
- Marion County's City and Town Boundaries, 2019.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Land Parcels, 12/18/2024.

5-FOOT CONTOUR:
- Created from Woolpert's LiDAR DEM, Marion County, 2011.

DELINEATED FEATURE:
- GAI Consultants.

PROJECT DETAILS:
- AES Indiana.

- Local Road
- Incorporated Area
- Proposed Driven Pile
- Fish Return System
- Existing Gravel
- Temporary Clearing
- Permanent Clearing
- Limit of Disturbance
- Proposed Permanent Gravel Pad
- Proposed Permanent Gravel Access Road 20' Wide
- Proposed Temporary Gravel Pad
- Proposed Temporary Gravel Access Road 40' Wide
- Proposed Temporary Laydown Area
- Delineated Stream
- Delineated Wetland - PFO
- Delineated Wetland - PEM
- Delineated Wetland - PSS
- NHD Flowline
- 100-Year Floodplain
- Floodway
- Parcel Boundary
- 5-Foot Contour

aes

gai consultants

0 50 100 Feet

1 in. = 100 ft.

FIGURE 3
PROJECT DETAILS

SHEET 1 of 2

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Return Installation Project

DRAWN BY: MBH DATE: 6/12/2025
CHECKED: TDB APPROVED: MRW

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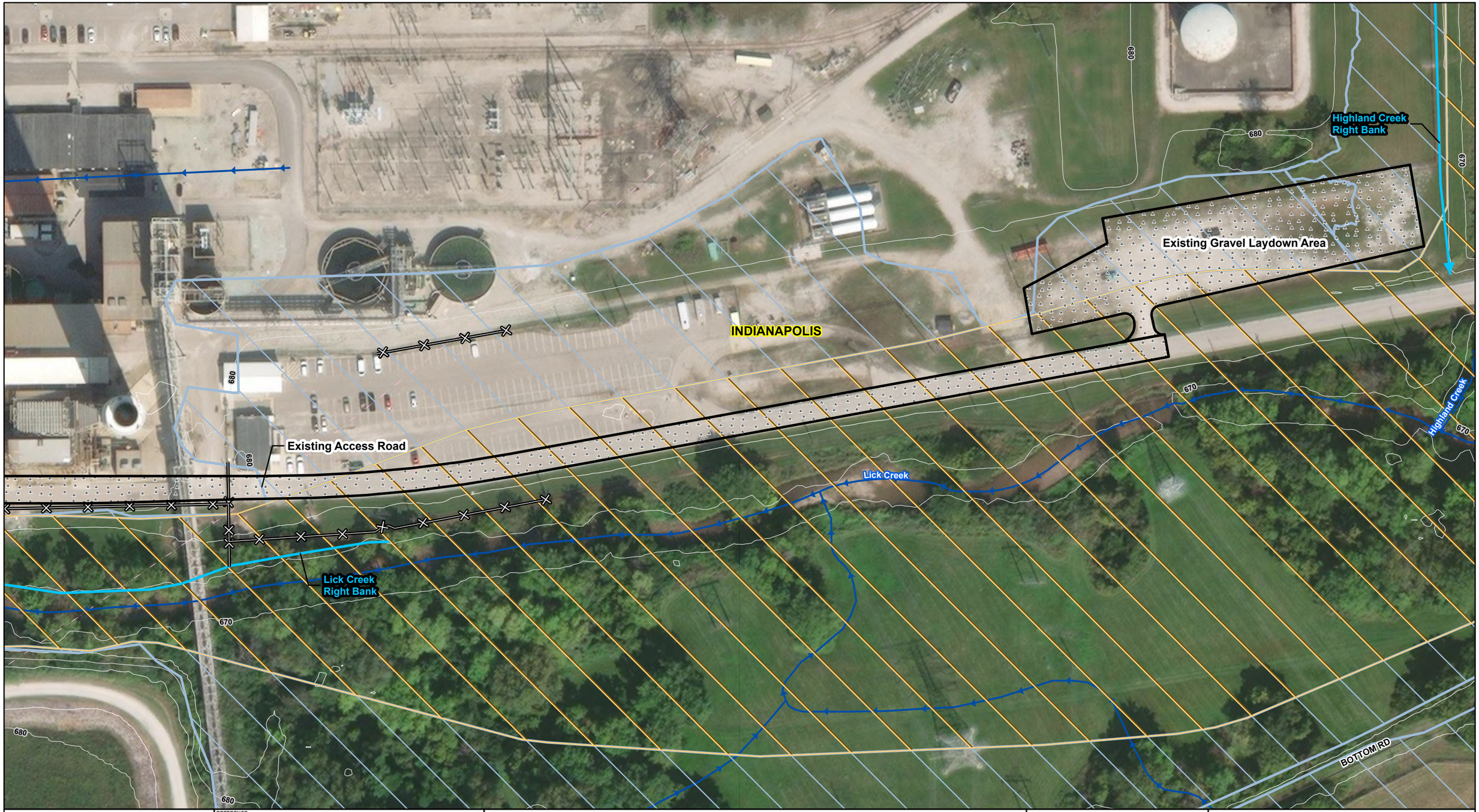

SHEET INDEX

1 2

Marion Co.

465

REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2021. Accessed: 6/12/2025

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

LOCAL ROAD:
- Indiana Geographic Information Office's Street Centerlines, 12/18/2024.

INCORPORATED AREA:
- Marion County's City and Town Boundaries, 2019.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Land Parcels, 12/18/2024.

5-FOOT CONTOUR:
- Created from Woolpert's LiDAR DEM, Marion County, 2011.

DELINEATED FEATURE:
- GAI Consultants.

PROJECT DETAILS:
- AES Indiana.

- Local Road
- Incorporated Area
- Proposed Driven Pile
- Fish Return System
- Existing Gravel
- Temporary Clearing
- Permanent Clearing
- Limit of Disturbance
- Proposed Permanent Gravel Pad
- Proposed Permanent Gravel Access Road 20' Wide
- Proposed Temporary Gravel Pad
- Proposed Temporary Gravel Access Road 40' Wide
- Proposed Temporary Laydown Area
- Delineated Stream
- Delineated Wetland - PFO
- Delineated Wetland - PEM
- Delineated Wetland - PSS
- NHD Flowline
- 100-Year Floodplain
- Floodway
- Parcel Boundary
- 5-Foot Contour

aes

gai consultants

0 50 100 Feet

1 in. = 100 ft.

FIGURE 3
PROJECT DETAILS

SHEET 2 of 2

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Return Installation Project

DRAWN BY: MBH DATE: 6/12/2025
CHECKED: TDB APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\CIF\R230959_00_HSS_Intake_Screen_AES_IN_CIF_20250605.aprx

June 16, 2025
GAI Project No. R230959.00

ATTACHMENT C
Wetland Delineation and Stream Identification Report

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Wetland Delineation and Stream Identification Report

AES Indiana
Harding Street Station
Intake Screen Replacement and Fish Return Installation Project
Marion County, Indiana

GAI Project Number: R230959.00

June 11, 2025

Prepared by: GAI Consultants, Inc.
Indianapolis Office
201 North Illinois Street, Suite 1700
Indianapolis, Indiana 46204

Prepared for: AES Indiana
1 Monument Circle
Indianapolis, Indiana 46204

Wetland Delineation and Stream Identification Report

AES Indiana
Harding Street Station
Intake Screen Replacement and Fish Return Installation Project

Marion County, Indiana

GAI Project Number: R230959.00

June 11, 2025

Prepared for:
AES Indiana
1 Monument Circle
Indianapolis, Indiana 46204

Prepared by:
GAI Consultants, Inc.
Indianapolis Office
201 North Illinois Street, Suite 1700
Indianapolis, Indiana 46204

Table of Contents

1.0 Introduction

AES Indiana (AESI) is proposing the Harding Street Station Intake Screen Replacement and Fish Return Installation Project (Project) located in the City of Indianapolis, Marion County, Indiana (IN). The Project will generally consist of the removal and replacement of the existing intake screen, as well as the installation of a new conveyance-style fish ladder, at an existing surface water intake at the Harding Street Station (HSS) facility, along the east side of the White River. The Project is in support of Section 316(b) of the Clean Water Act regulating the design and operation of intake structures, in order to minimize adverse impacts and to support anticipated permit compliance at AESI's existing industrial generation facility. The Project is located in Sections 27 and 28 of Township 15N, Range 3E of the Public Land Survey System (PLSS).

GAI Consultants, Inc. (GAI), on behalf of AESI, conducted a wetland delineation and waterbody investigation of the Project study area on November 19, 2024. GAI identified approximate boundaries of wetlands, open water, and streams located within an approximate 1.2-acre study area provided by AESI. Additional survey may have been completed outside of the study area for reference purposes. This report describes the methods and results of the environmental field review.

2.0 Methods

Wetland delineations were conducted in accordance with the 1987 United States Army Corps of Engineers (USACE) *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE, 2010). Wetlands were classified using the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979). Classification of the indicator status of vegetation is based on *The National Wetland Plant List:* 2016 wetland ratings (Lichvar et al. 2016).

The growing season in the Project Area is generally between mid-April and mid-October in Marion County, IN (USDA-NRCS, 2017). Field observations were supplemented with a review of United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, United States Department of Agriculture, Natural Resource Conservation Service (USDA-NRCS) soils mapping, historical aerial photography (ArcGIS and Google Earth), and local landscape topography/morphology to provide a determination of wetlands present within the study area.

Each wetland, open water, and/or stream feature was given a unique map designation, and each boundary was recorded using a Trimble R1 model global positioning system mapping grade unit with the capability of sub-meter accuracy. Upland and wetland soil test pits were located within the study corridor at the discretion of the delineator to confirm the presence or absence of wetlands in areas exhibiting wetland indicators. Wetland boundaries, stream tops-of-bank (TOB) and/or centerlines, and other associated stream data and measurements were collected and/or mapped.

3.0 Regulatory Discussion

3.1 Waters of the U.S.

"Waters of the U.S." are within the jurisdiction of the USACE under Section 404 of the Clean Water Act (CWA). "Waters of the U.S." is a broad term, which includes waters that are used or could be used for interstate commerce. This includes wetlands, ponds, lakes, territorial seas, rivers, tributary streams including some intermittent waterways. Also potentially included are manmade waterbodies such as quarries and ponds, which are no longer actively being mined or constructed and are connected to other "waters." Wetlands, mudflats, vegetated shallows, riffle and pool complexes, coral reefs, sanctuaries, and refuges are all considered special aquatic sites which involve more rigorous regulatory permitting requirements. Certain types of waters/wetlands are excluded from the "waters of the U.S." definition including prior converted cropland; waste treatment systems; certain ditches,

swales, and erosional features (e.g., gullies, washes); artificially irrigated areas; certain artificial lakes or ponds; artificial reflecting pools or swimming pools; and waterfilled depressions incidental to construction activities in upland areas. A specific, detailed definition of “Waters of the U.S.” can be found in the Federal Register (33 CFR 328).

The USACE will assert jurisdiction over traditionally navigable waters (TNWs), adjacent wetlands, and non-navigable tributaries of TNWs that have “relatively permanent” flow [i.e., relatively permanent waters (RPWs)], and wetlands that exhibit surface connection to these waters.

3.2 Waters of the State

“Waters of the State” are within the jurisdiction of the Indiana Department of Environmental Management (IDEM) under Section 401 of the CWA. They are generally defined as surface wetlands or other waters, which extend through or exist wholly in the State, which includes, but is not limited to, streams and both isolated and non-isolated wetlands. Private ponds, or any pond, reservoir, or facility built for reduction of pollutants prior to discharge are generally excluded from this definition, which is provided in 327 Indiana Administrative Code (IAC) 17. In addition to “Waters of the U.S.”, IDEM also regulates and issues permits for isolated wetland impacts. The State relies on the USACE decision regarding wetland determinations and delineations including whether a wetland is considered isolated or non-isolated.

3.3 Ditches and Non-Jurisdictional Drainages

All ditches, swales, erosional features, and other apparent surface drainages within the study area were also evaluated for consideration as jurisdictional “Waters of the U.S.” with respect to the CWA Rule [40 CFR 230]. Jurisdictional ditches must meet the definition of a tributary, have an OHWM, and flow directly or indirectly through another water to a TNW.

4.0 Results

The Project study area generally consists of maintained turf grasses on the main streambank, and native and non-native wetland grasses, forbs, shrubs and hardwood trees within the unmaintained floodway peninsula. Land use adjacent to the study area consists primarily of industrial land uses. The Project is located within the “Indiana and Ohio Till Plain” Major Land Resource Area (MLRA) (USDA-NRCS, 2022).

The Project study area is located within the boundaries of the Dollar Hide Creek-White River (51202011205) and Lick Creek (51202011203) 12-digit USGS Hydrologic Unit Code (HUC) watershed **(Figure 1, Project Vicinity)**.

The USFWS' NWI was reviewed for potential wetland locations. These maps identify potential wetlands on-site. The NWI maps were prepared from high altitude photography and in most cases, were not field verified. As a result, wetlands are sometimes erroneously identified, missed, or misidentified within this data set. The presence of an NWI wetland does not necessarily constitute the presence of a wetland meeting USACE criteria. One river, low gradient, perennial (R2UBH) wetland/water resource was identified on the NWI maps within the Project area **(Figure 2, Resource Location, Sheet Index).**

One palustrine emergent (PEM), palustrine shrub-scrub (PSS) and palustrine forested (PFO) wetland complex and two streams (Lick Creek and the White River) were identified corresponding with the R2UBH identified on the NWI maps of the area. One additional PFO wetland was collected for reference purposes due to proximity **(Figure 2, Resource Location)**.

The identified wetland/water resources are summarized in **Tables 1 and 2** and discussed below. Color photographs of delineated wetlands and streams accompany the tables. Wetland and upland data forms corresponding with the identified wetlands are provided in **Appendices A and B**, respectively. Soil map units within the study area are provided in **Appendix C**.

4.1 Wetlands

One likely jurisdictional PEM/PSS/PFO wetland complex totaling 0.81 acres within the study area was identified during the field review **(Figure 2, Resource Location)**. The wetland was not identified as a Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B). See **Table 1** for additional information.

Wetland A was observed to be a PEM/PSS/PFO wetland complex located on a peninsula within the White River and within the FEMA 100-year floodway. The Wetland B PFO component was observed outside of the Project Area.

Wetland A - PEM

PEM component of the wetland was observed to be located within and adjacent to the Project area, primarily in the center of the peninsula. Dominant species within the Project area included reed canary grass (*Phalaris arundinacea*). Soils were found to be naturally problematic and lacked hydric soil indicators likely due to frequent deposition of fluvial sediment because of its location within a floodway. Indicators of wetland hydrology included saturation, drift deposits, geomorphic position, and a positive FAC-neutral test. The area receives surface water from the adjacent White River and Lick Creek.

Wetland A – PSS

The PSS component was a small area observed to be located between the PEM and PFO components and only slightly within the limits of the study area. Dominant species included northern spicebush (*Lindera benzoin*) and reed canary grass. Soils were found to be naturally problematic and lacked hydric soil indicators likely due to frequent deposition of fluvial sediment because of its location within a floodway. Indicators of wetland hydrology included saturation, drift deposits, geomorphic position, and a positive FAC-neutral test The area receives surface water from the adjacent White River and Lick Creek.

Wetland A - PFO

The PEM wetland was observed to be located primarily along the perimeter of the peninsula and partially within the limits of the study area. Dominant species included silver maple (*Acer saccharinum)*, small white American-aster (*Symphyotrichum recemosum*), and reed canary. Soils were found to be naturally problematic and lacked hydric soil indicators likely due to frequent deposition of fluvial sediment because of its location within a floodway. Indicators of wetland hydrology included saturation, drift deposits, geomorphic position, and a positive FAC-neutral test. The area receives surface water from the adjacent White River and Lick Creek.

4.2 Streams

Two likely jurisdictional perennial streams, Lick Creek and White River, were identified in or adjacent to the Project area during the field review (**Figure 2, Resource Location**). No stream data forms were completed during field investigations; however, data was recorded for stream features including TOB width and depth, bankfull (BF) width and depth, and width and depth at OHWM. Additionally, the substrate characteristics and adjacent riparian buffer vegetation were documented and recorded in the field notes.

The identified stream features are not considered State Waters Designated for Special Protection in Indiana (i.e., Designated Salmonid Waters, Outstanding State Resource Waters, or Exceptional Use Streams), and are not on the Indiana Department of Natural Resources (IDNR) Listing of State Natural and Scenic Rivers or the IDNR Listing of Outstanding Rivers in Indiana. In addition, the identified stream features are not listed as USACE Section 10 Navigable Waters or IDNR Navigable Waterways. See **Table 2** for additional information.

5.0 Conclusions

A wetland delineation and stream investigation in support of the AESI Harding Street Station Intake Screen Replacement and Fish Return Installation Project was completed on November 19, 2024. GAI identified approximate boundaries of wetlands, open waters, and streams located within an approximate 1.2-acre Project area provided by AESI. Some features may have been collected outside of the presented study area for reference and presented herein accordingly. One PEM/PSS/PFO wetland complex was identified within and adjacent to the Project area during the field review. Two perennial streams were also identified within and/or adjacent to the study area.

All statements in this document pertaining to the jurisdictional status of streams and wetlands with regard to USACE and state regulations represent the opinion of GAI and are based on present USACE guidance. The jurisdictional status of these features may be confirmed by a USACE Jurisdictional Determination and/or by State agencies.

6.0 References

Cowardin, D.M., Carter, V., Golet, F.C., and La Roe, E.T. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Publication No. FWS/OBS-79/31. United States Department of the Interior, Fish and Wildlife Service, Washington, D.C.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. United States Department of the Army, United States Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List*: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.

United States Army Corps of Engineers (USACE). 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Mid-West Region, Version 2.0.* ERDC/EL TR-12.1. United States Army Engineer Research and Development Center, Vicksburg, Mississippi.

United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). 2017. *Field Office Technical Guide, WETS Climatic Data.* Available at http://agacis.rcc-acis.org/. Accessed September 25, 2022.

United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). 2006. *Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific.* U.S. Department of Agriculture Handbook, 296.

TABLE 1
Wetlands Identified Within the Project Study Area

Table 1.
Wetlands Identified Within the Project Study Area

Feature Designation[1]	Latitude[2]	Longitude[2]	Cowardin Classification[3]	NWI Wetland Classification[4]	Critical Wetland or Critical Special Aquatic Site[5]	Approximate Size (acres)[6]	Within a FEMA Designated Floodplain[7]	Open Ended[8]	"Waters of the U.S."
Wetland A - PFO	39.71039957	-86.19984205	PFO	R2UBH	None	0.54	Yes	Yes	Yes
Wetland A - PSS	39.71042498	-86.20007996	PSS	None	None	0.04	Yes	Yes	Yes
Wetland A - PEM	39.71045438	-86.19991586	PEM	R2UBH	None	0.23	Yes	Yes	Yes
Total Wetland Acreage within Study Area						**0.81 ac**			

Notes:

1 GAI map designation.
2 Decimal degrees; Coordinates provided in NAD 83.
3 Palustrine system wetlands were classified as emergent (PEM), forested (PFO), scrub-shrub (PSS), or unconsolidated bottom (PUB). Routine wetland data forms were not collected for any PUB features due to water depth and/or lack of any vegetation.
4 National Wetlands Inventory (NWI) wetland as mapped by the United States Fish and Wildlife Service.
5 IDEM defines Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B).
6 Extent of wetland within study area. Wetland may extend beyond these limits if open ended or displayed outside of study area.
7 Wetland residing within the limits of a designated Federal Emergency Management Agency (FEMA) designated 100-yr floodplain or floodway.
8 Wetland extends beyond study area boundary if noted as open ended.

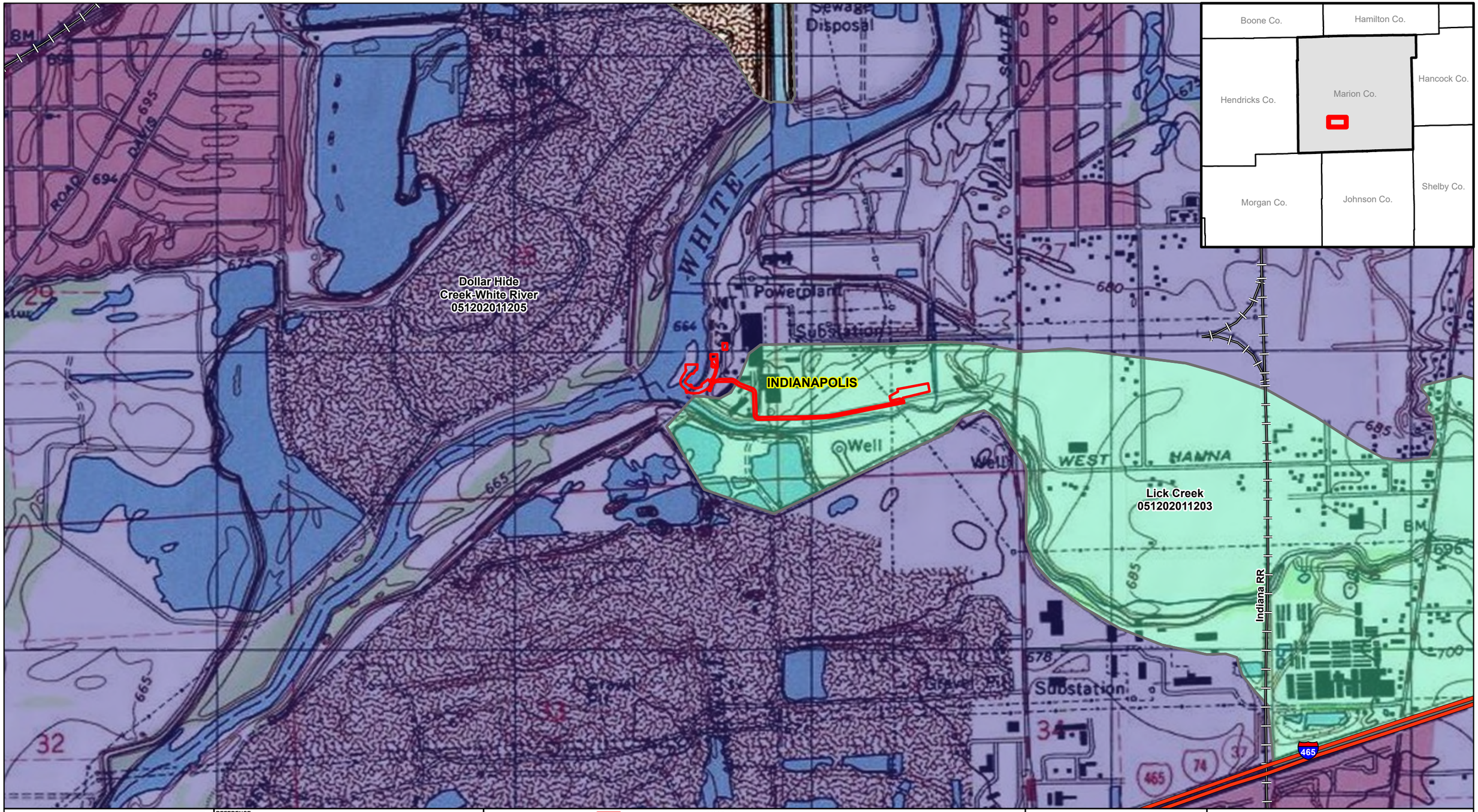
TABLE 2
Streams Identified Within the Project Study Area

Table 2.
Streams Identified Within the Project Study Area

Feature Designation[1]	Latitude[2]	Longitude[2]	Name	Type	OHWM Width (ft)	OHWM Depth (ft)	BF Width (ft)	BF Depth (ft)	TOB Width (ft)	TOB Depth (ft)	Length Within Study Area[3] (ft)	Indiana or Federal Special Listing[4,5,6,7,8]	Open Ended[9]
Stream 001	39.7106147	86.1995463	White River	Perennial	120 [10]	15 [10]	130 [10]	18 [10]	140 [10]	20 [10]	44.85	N	Y
Stream 002	39.709837	-86.200032	Lick Creek	Perennial	70	4	80	8	90	10	0.00	N	Y
Total Stream (feet) within Study Area											**44.85 ft**		

Notes:

1 GAI map designation.
2 Decimal degrees; Coordinates provided in NAD 83.
3 Extent of stream within study area. Stream may extend beyond these limits if noted as open ended.
4 USACE Navigable Streams in Indiana Listing (Section 10 Waters) Detroit District.
5 IDNR Listing of State Natural and Scenic Rivers.
6 IDNR Outstanding Rivers List for Indiana.
7 State Waters Designated for Special Protection in Indiana (Designated Salmonid Waters, Outstanding State Resource Waters, or Exceptional Use Streams).
8 IDNR Navigable Waterways Roster.
9 Stream extends beyond study area boundary if noted as open ended.
10 As measured from main bank to peninsula bank at the approximate location of the proposed fish ladder system



PROJECT LOCATION

MARION
COUNTY, IN

REFERENCE:
TOPOGRAPHIC MAP:
- Esri's USA Topo Map, Accessed: 6/12/2025.

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

RAILWAY:
- Indiana Department of Transportation's Active and Abandoned Rail System, 9/13/2006.

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

12-DIGIT WATERSHED:
- United States Geological Survey's 12-Digit Hydrologic Units, 12/27/2023.

PROJECT DETAILS:
- AES Indiana.

Interstate Highway
State Highway
Railway
Incorporated Area
Limit of Disturbance

HUC-12
Dollar Hide Creek-White River
Lick Creek

aes
gai consultants

0 500 1,000 Feet
1 in. = 1,000 ft.

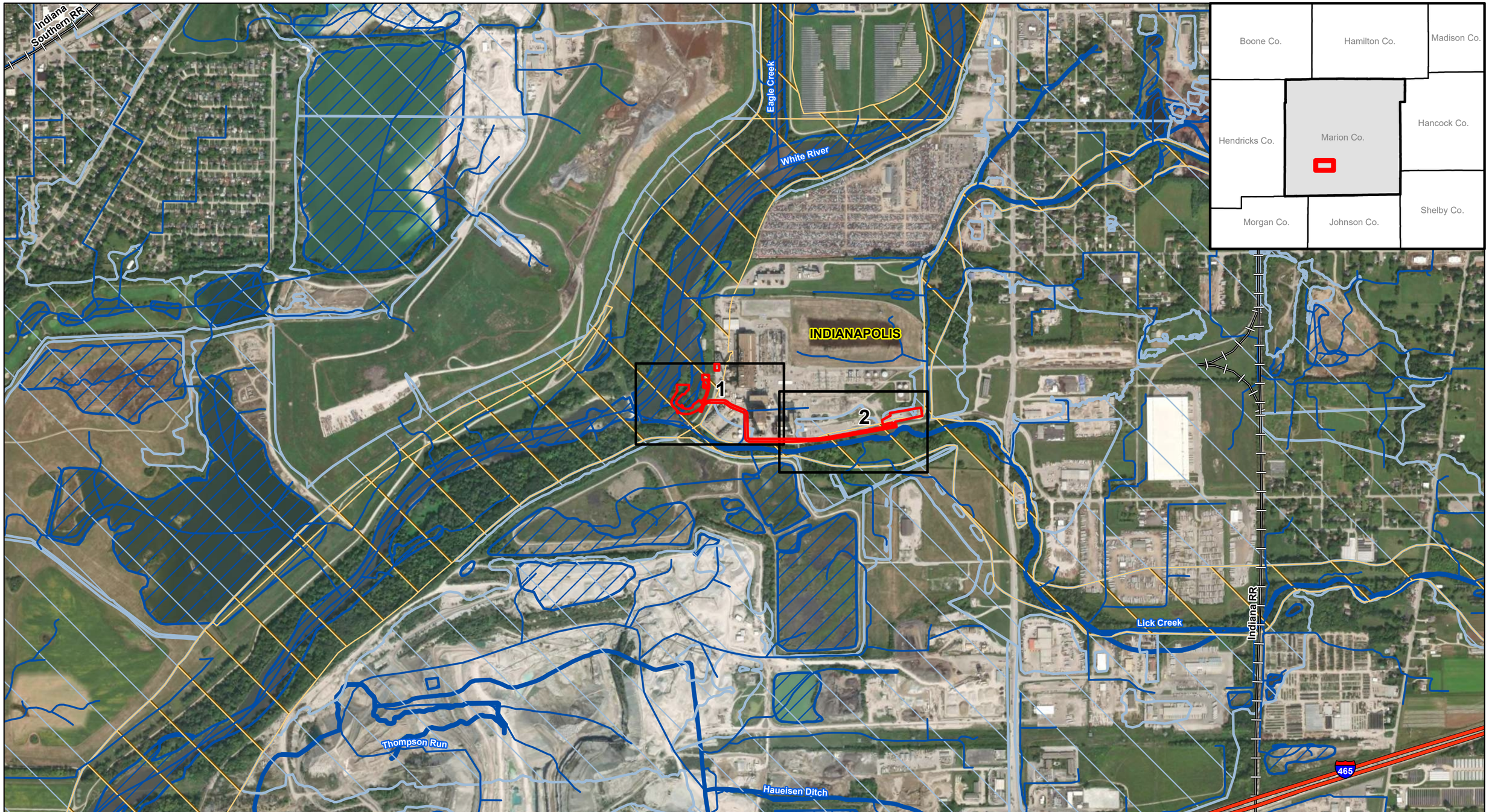
FIGURE 1
PROJECT VICINITY

Wetland Delineation and Stream Identification Report

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH
CHECKED: TDB
DATE: 6/12/2025
APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\WDSIR\R230959_00_HS_Fish_Intake_WDSIR_20250124.aprx



PROJECT LOCATION

MARION COUNTY, IN

REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2021, Accessed: 6/12/2025

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

RAILWAY:
- Indiana Department of Transportation's Active and Abandoned Rail System, 9/13/2006.

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

NWI WETLAND:
- United States Fish and Wildlife Service's National Wetland Inventory, 10/27/2024.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

PROJECT DETAILS:
- AES Indiana.

- Interstate Highway
- Railway
- Incorporated Area
- Limit of Disturbance
- Sheet Index
- NHD Flowline
- NWI Wetland
- 100-Year Floodplain
- Floodway

aes

gai consultants

0 500 1,000 Feet

1 in. = 1,000 ft.

FIGURE 2
RESOURCE LOCATION

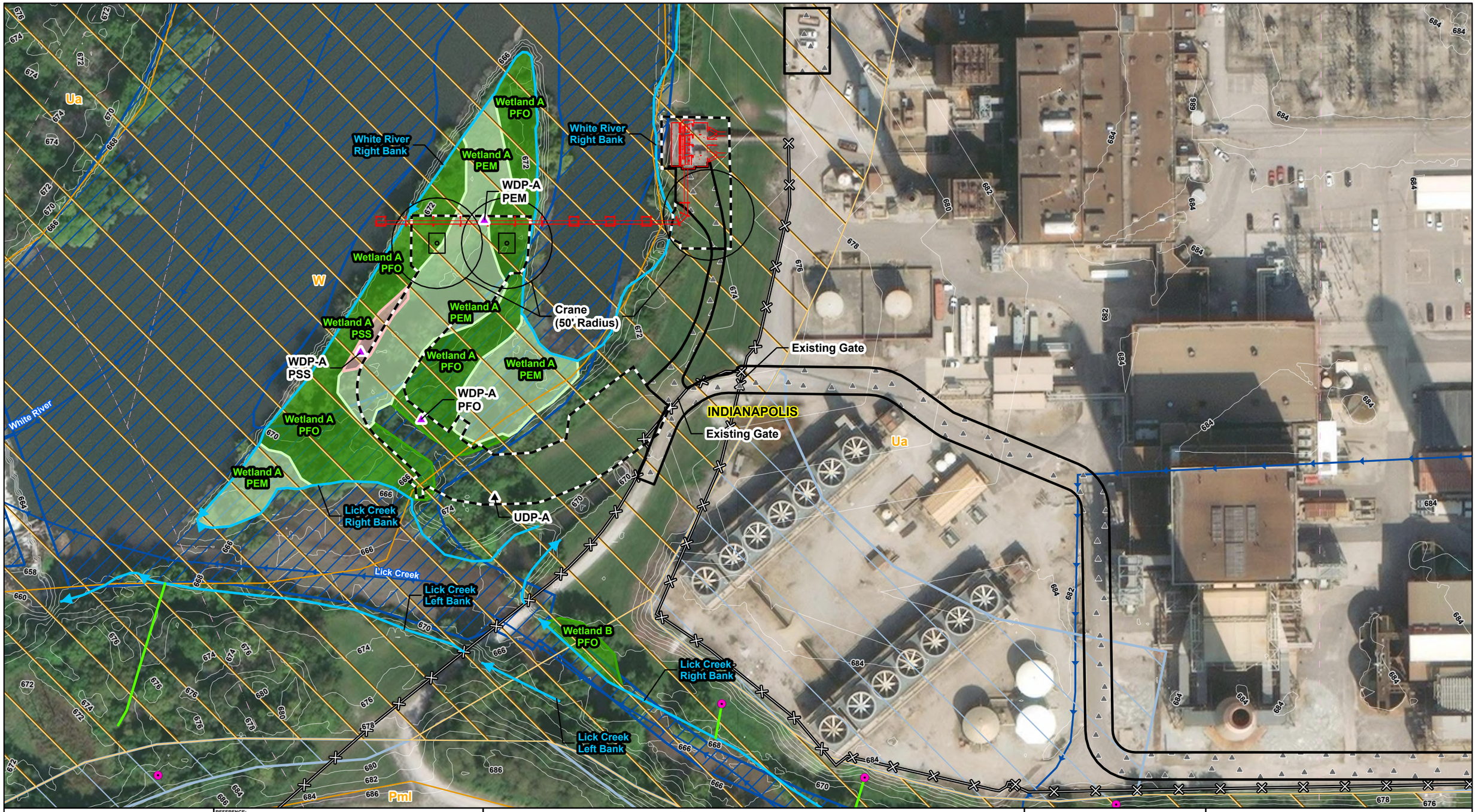
SHEET INDEX

Wetland Delineation and Stream Identification Report

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH DATE: 6/12/2025
CHECKED: TDB APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\WDSIR\R230959_00_HS_Fish_Intake_WDSIR_20250124.aprx



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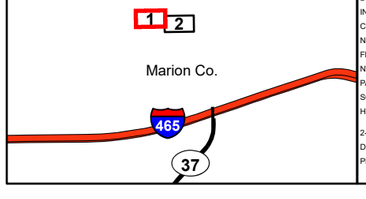

REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2022. Accessed: 6/12/2025

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INCORPORATED AREA:
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COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

NWI WETLAND:
- United States Fish and Wildlife Service's National Wetland Inventory, 10/27/2024.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Land Parcels, 12/18/2024.

SOIL TYPE BOUNDARY:
- United States Department of Agriculture's SSURGO, 10/01/2024.

HYDRIC SOIL TYPE CLASSIFICATION:
- Soil Type where proportion of the map unit classified as hydric is greater than 60 percent according to SSURGO database (hydcprs field)

2-FOOT CONTOUR:
- Created from Woolpert's LiDAR DEM, Marion County, 2011.

DELINEATED FEATURE:
- GAI Consultants.

PROJECT DETAILS:
- AES Indiana.

- Local Road
- Incorporated Area
- Culvert
- Upland Data Point
- Wetland Data Point
- Fence
- Fish Return
- Surface Drainage
- Delineated Stream
- Delineated Wetland - PFO
- Delineated Wetland - PEM
- Delineated Wetland - PSS
- Existing Gravel
- Limit of Disturbance
- NHD Flowline
- 100-Year Floodplain
- Floodway
- NWI Wetland
- Soil Type Boundary
- Hydric Soil Boundary
- Parcel Boundary
- 2-Foot Contour

aes

gai consultants

0 50 100 Feet
1 in. = 100 ft.

FIGURE 2
RESOURCE LOCATION

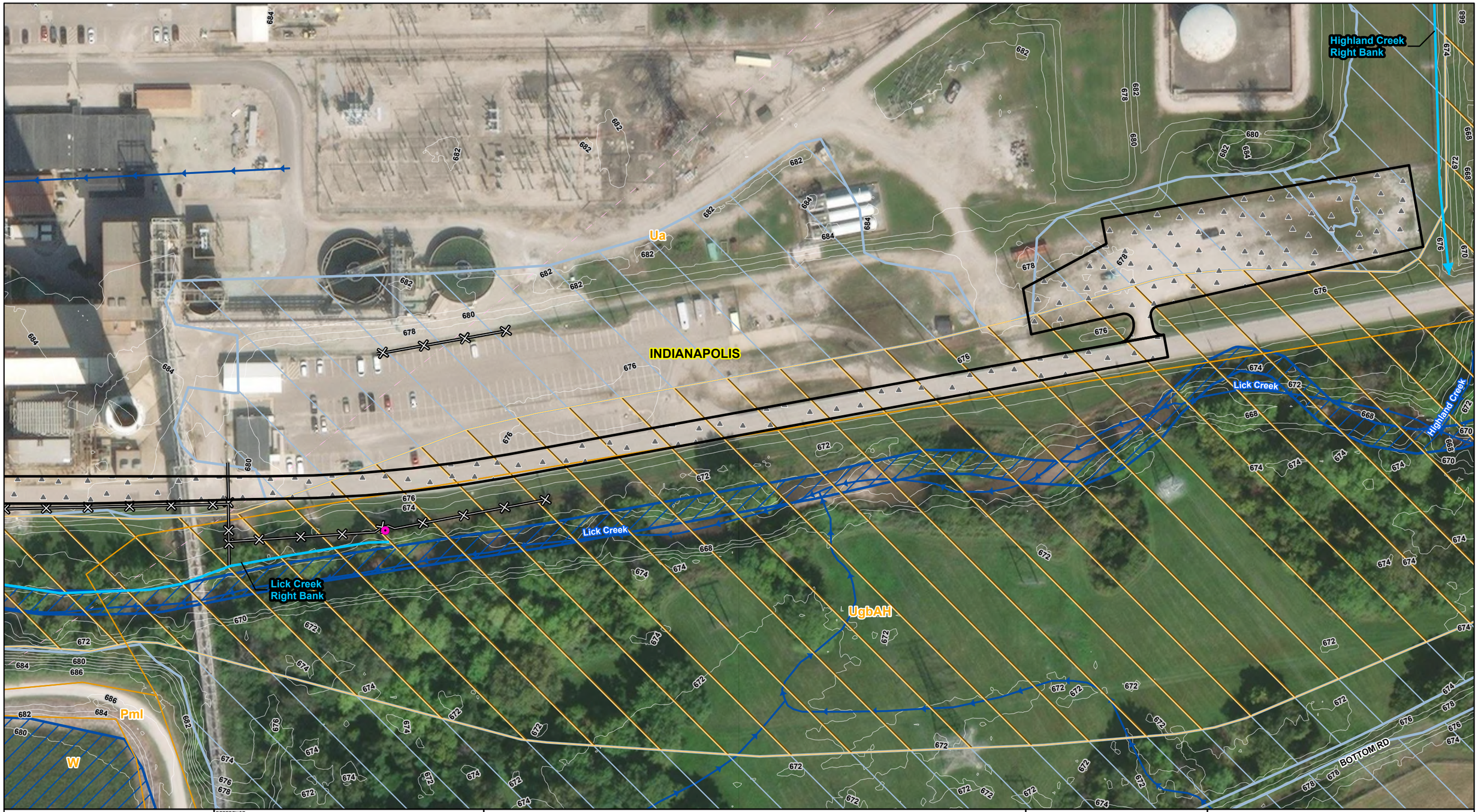
SHEET 1 of 2

Wetland Delineation and Stream Identification Report

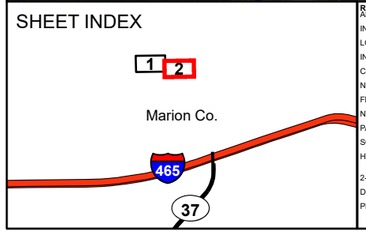
AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH DATE: 6/12/2025
CHECKED: TDB APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\WDSIR\R230959_00_HS_Fish_Intake_WDSIR_20250124.aprx



SHEET INDEX



REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2022. Accessed: 6/12/2025

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

LOCAL ROAD:
- Indiana Geographic Information Office's Street Centerlines, 12/18/2024.

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

NWI WETLAND:
- United States Fish and Wildlife Service's National Wetland Inventory, 10/27/2024.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Land Parcels, 12/18/2024.

SOIL TYPE BOUNDARY:
- United States Department of Agriculture's SSURGO, 10/01/2024.

HYDRIC SOIL TYPE CLASSIFICATION:
- Soil Type where proportion of the map unit classified as hydric is greater than 60 percent according to SSURGO database (hydcpnt field)

2-FOOT CONTOUR:
- Created from Woolpert's LiDAR DEM, Marion County, 2011.

DELINEATED FEATURE:
- GAI Consultants.

PROJECT DETAILS:
- AES Indiana.

- Local Road
- Incorporated Area
- Culvert
- Upland Data Point
- Wetland Data Point
- Fence
- Fish Return
- Surface Drainage
- Delineated Stream
- Delineated Wetland - PFO
- Delineated Wetland - PEM
- Delineated Wetland - PSS
- Existing Gravel
- Limit of Disturbance
- NHD Flowline
- 100-Year Floodplain
- Floodway
- NWI Wetland
- Soil Type Boundary
- Hydric Soil Boundary
- Parcel Boundary
- 2-Foot Contour

aes

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0 50 100 Feet
1 in. = 100 ft.

FIGURE 2
RESOURCE LOCATION

SHEET 2 of 2

Wetland Delineation and Stream Identification Report

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH DATE: 6/12/2025
CHECKED: TDB APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\WDSIR\R230959_00_HS_Fish_Intake_WDSIR_20250124.aprx

Soil Unit Symbol	Soil Unit Name	Acres	% within Study Area	Hydric[1]
Ua	Udorthents, cut and filled	2.25	74.33	No
UgbAH	Urban land-Gessie silt loam complex, 0 to 2 percent slopes, frequently flooded, brief duration	0.56	18.54	No
W	Water	0.22	7.13	No
	TOTAL	**3.02**	**100**	-

Notes:

[1] Predominantly hydric soil units are defined as those where the "proportion of the map unit, expressed as a class, which is "hydric" based on the hydric classification of individual map unit components" is greater than 50 percent according to the USDA SSURGO Database.

UNIT 5 & 6 FISH RETURN SYSTEM

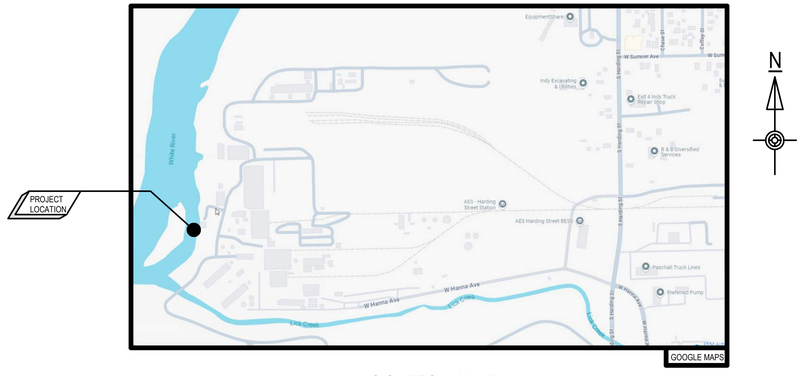
PREPARED FOR

AES INDIANA

PREPAED BY

verdantas

LIST OF DRAWINGS	
SHEET NUMBER	SHEET NAME
GENERAL	
CS	COVERSHEET
CIVIL	
CG-001	GENERAL NOTES
CG-002	OVERALL SITE PLAN
CC-010	SITE PLAN - ACCESS & STAGING
CC-011	SITE - DETAILS AND NOTES
STRUCTURAL	
SC-100	GENERAL NOTES
SC-101	OVERALL PLAN
SC-102	ENLARGED PLAN
SC-103	ELEVATION VIEWS
SC-104	ENLARGED PLANS
SC-105	SECTIONS AND DETAILS
SC-106	ELECTRICAL ENCLOSURE SUPPORT
MECHANICAL	
MD-101	DEMO PLAN
MC-101	OVERALL PLAN
MC-102	ENLARGED PLAN 1 OF 2
MC-103	ENLARGED PLAN 2 OF 2
MC-104	SECTIONS AND DETAILS
ELECTRICAL	
EG-001	GENERAL NOTES AND ISSUANCE RECORD
EG-002	GENERAL SPECIFICATIONS SHEET 1 OF 2
EG-003	GENERAL SPECIFICATIONS SHEET 2 OF 2
EG-004	LEGEND AND ABBREVIATIONS
ED-201	DEMOLITION - SINGLE LINES AND SCHEDULES #6 BUS (480V) & CW PUMP HOUSE
ED-202	DEMOLITION - SINGLE LINES - #5 BUS (480V)
ED-601	DEMOLITION LEVELS 1 & 2 - ELECTRICAL
ED-602	DEMOLITION LEVEL 3 & EXTERIOR - ELECTRICAL
ES-201	SINGLE LINES AND SCHEDULES
EC-601	NEW WORK LEVEL 3 & EXTERIOR - POWER
EC-602	NEW WORK LEVELS 1 & 2 - ELECTRICAL
EC-603	NEW WORK LEVEL 3 & EXTERIOR - CABLE TRAYS
LC-601	EXTERIOR LIGHTING (CONCEPTUAL)



LOCATION MAP

N

Wilkes-Barre
613 Baltimore Dr. Suite 300
Wilkes-Barre, PA 18702
570-821-1999

SEALS

PRELIMINARY
NOT FOR
CONSTRUCTION

REVISIONS

NO.	DATE	DESCRIPTION

DRAWING TITLE & PROJECT NAME

COVERSHEET

AES INDIANNA
UNIT 5 & 6 FISH RETURN SYSTEM
INDIANAPOLIS, INDIANA

DRAWN BY	MBG
CHECKED BY	TF
DATE	04/04/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	60% SUBMISSION FOR REVIEW
AES DRAWING NO.	006-00-67-7-7-7777
DRAWING NO.	CS

1 OVERALL PLAN
12" = 1'-0"

NOTE: DRAWING IS FOR GRAPHICAL REPRESENTATION ONLY

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NO.	DATE	DESCRIPTION

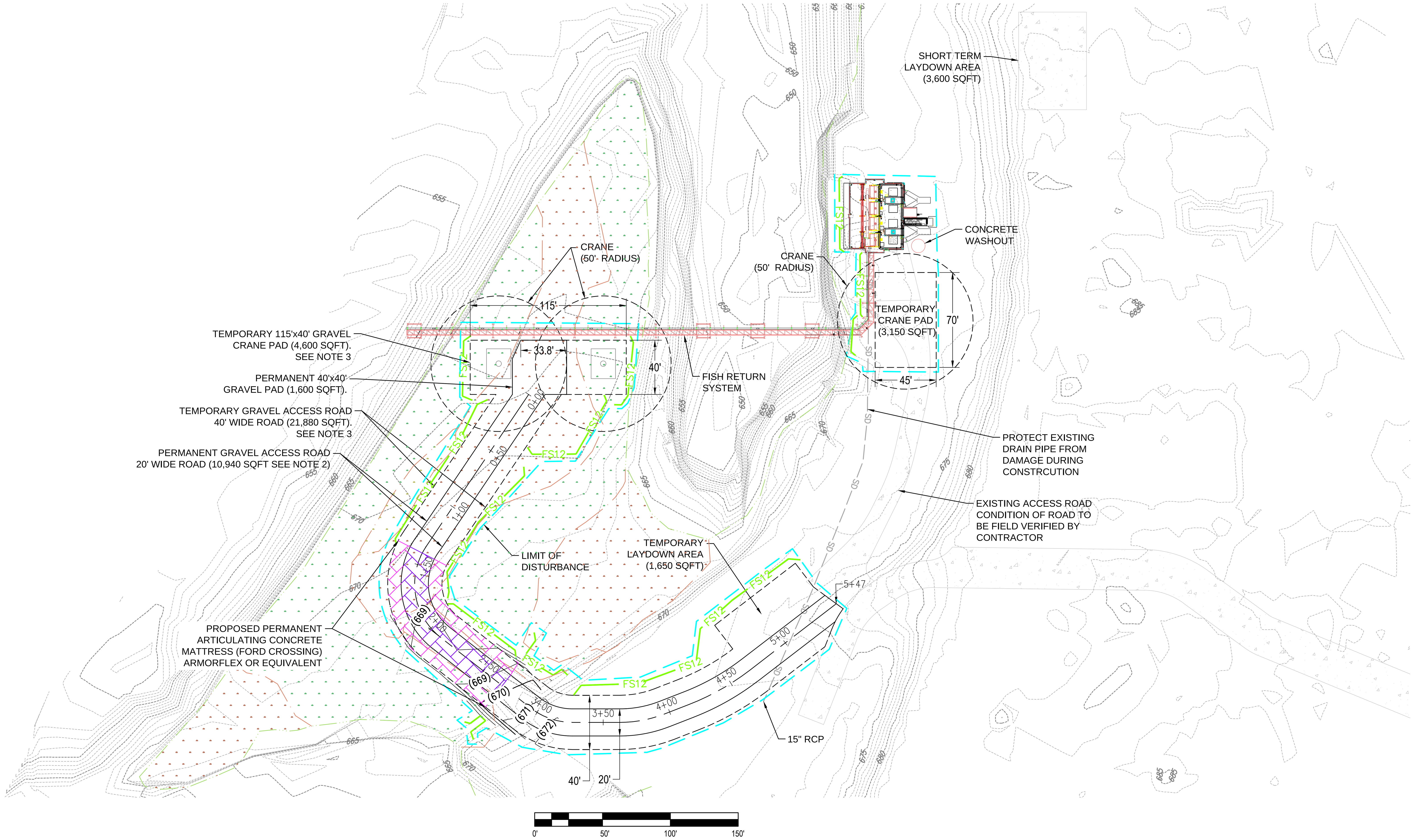
DRAWING TITLE & PROJECT NAME

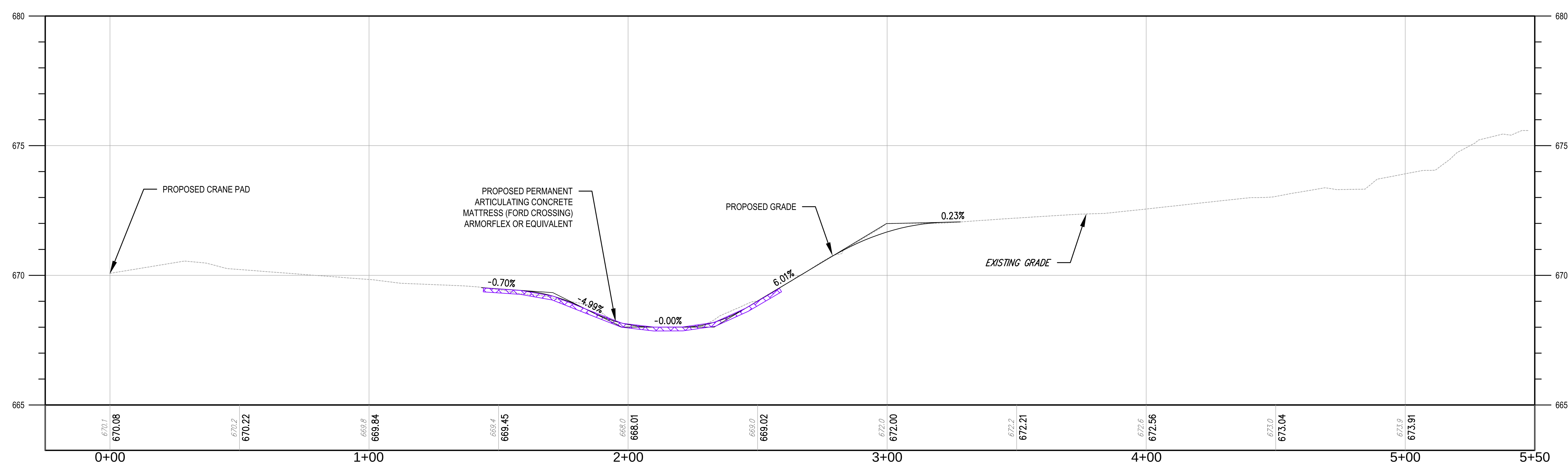
OVERALL SITE PLAN

AES INDIANNA
UNIT 5 & 6 FISH RETURN SYSTEM
INDIANAPOLIS, INDIANA

DRAWN BY	MBG
CHECKED BY	TP
DATE	04/04/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	
	60% SUBMISSION FOR REVIEW
AES DRAWING NO.	006-00-67-?-?-????
DRAWING NO.	

CG-002





PROPOSED ROAD: STA. -0+25 TO STA. 5+50

SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'

LEGEND AND SYMBOLS

- EXISTING CONTOUR LINE — 669
- PROPOSED CONTOUR LINE — (669)
- EXISTING DRAIN PIPE — SD
- LIMITS OF TEMPORARY GRAVEL ACCESS/CRANE PAD
- LIMITS OF PERMANENT GRAVEL ACCESS
- PERMANENT FORD CROSSING
- TEMPORARY FORD CROSSING
- LIMIT OF DISTURBANCE
- 12" COMPOST FILTER SOCK — FS12
- DELINEATED WATERCOURSE
- DELINEATED WETLAND
- PEM WETLAND
- PSS WETLAND
- PFO WETLAND

GENERAL NOTES:

1. CRANE ACCESS ROAD AND PAD GEOMETRY DESIGNED ASSUMING THE USE OF A MANITOWOC 11000-1 CRANE DRIVEN TO THE ISLAND. ROAD AND PAD DESIGN NOT COMPLETED.
2. RESTORE 40' TEMPORARY GRAVEL ACCESS ROAD TO 20' WIDTH AFTER CONSTRUCTION. TOPSOIL, SEED, AND MULCH 10' EACH SIDE OF TEMPORARY GRAVEL ACCESS ROAD.
3. TIMBER MATTING MAY BE USED IN PLACE OF THE TEMPORARY GRAVEL ACCESS ROAD/CRANE PAD.

WETLAND IMPACT TABLE		
DESCRIPTION	PERMANENT IMPACT AREA (SF)	TEMPORARY IMPACT AREA (SF)
PEM WETLAND	5,235	8,990
PSS WETLAND	0	311
PFO WETLAND	0	7,784

NORTH PROJECT NORTH

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DRAWING TITLE & PROJECT NAME

SITE PLAN - ACCESS & STAGING

AES INDIANNA UNIT 5 & 6 FISH RETURN SYSTEM

INDIANAPOLIS, INDIANA

DRAWN BY	MCJ
CHECKED BY	NRA
DATE	03/21/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	60% SUBMISSION FOR REVIEW
AES DRAWING NO.	006-00-67-S-?-????
DRAWING NO.	CC-010

Sheet Number	STRUCTURAL DRAWINGS LIST AND ISSUANCE RECORD Sheet Name	20250110 - 30% REVIEW	20250404 - 60% REVIEW
STRUCTURAL			
SG-001	GENERAL NOTES		X
SC-101	OVERALL PLAN	X	X
SC-102	ENLARGED PLAN	X	X
SC-103	ELEVATION VIEWS	X	X
SC-104	ENLARGED PLANS	X	X
SC-105	SECTIONS AND DETAILS	X	X
SC-106	ELECTRICAL ENCLOSURE SUPPORT		X

1 SC-101 OVERALL PLAN
SCALE: 1" = 15'-0"

NOTE: DRAWING IS FOR GRAPHICAL REPRESENTATION ONLY

NORTH PROJECT NORTH

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REVISIONS

NO.	DESCRIPTION	DATE

DRAWING TITLE & PROJECT NAME

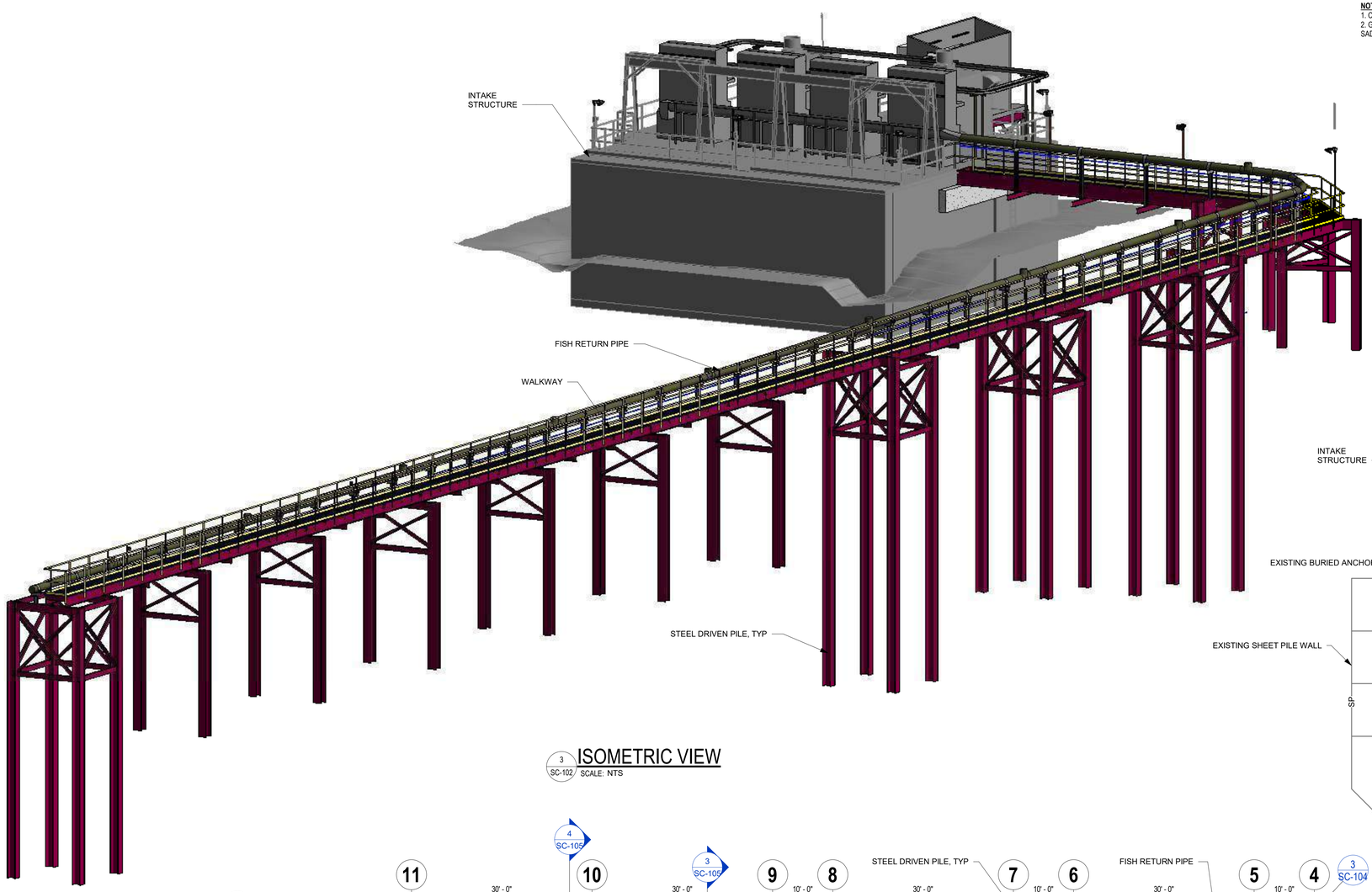
OVERALL PLAN

AES INDIANNA
UNIT 5 & 6 FISH RETURN SYSTEM
INDIANAPOLIS, INDIANA

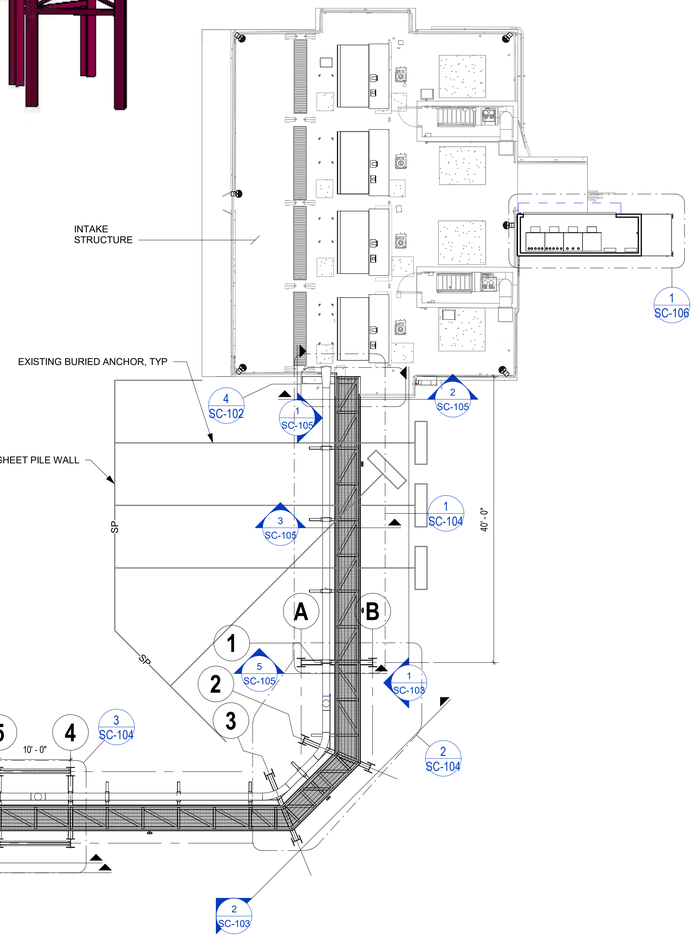
DRAWN BY	MBG
CHECKED BY	TGF
DATE	04/04/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	
	60% SUBMISSION FOR REVIEW
AES DRAWING NO.	006-00-67-S-?-????
DRAWING NO.	

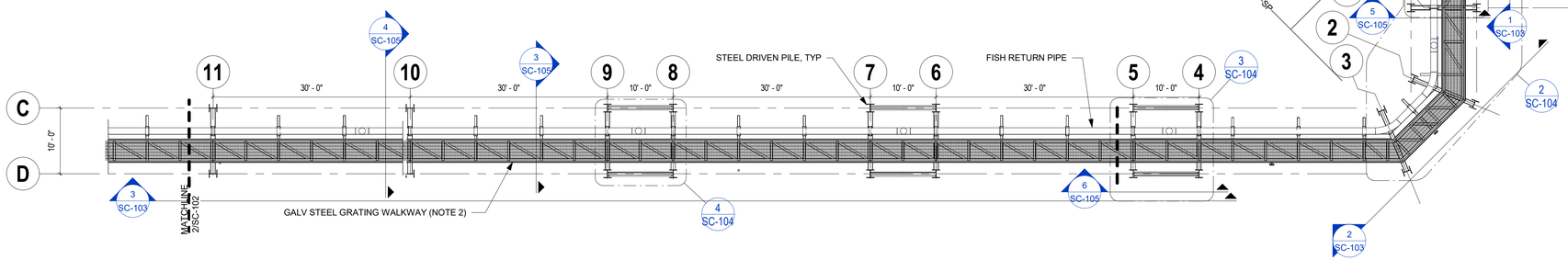
SC-101

NOTES:
1. COLOR SHOWN FOR CLARITY, REFER TO NOTES AND SPECIFICATIONS FOR COATINGS
2. GALVANIZED STEEL GRATING 1"x3/16" BEARING BARS @ 1 3/16" OC AND CROSS BARS @ 4" OC. BAND ALL EDGES OF GRATING. USE SADDLE TYPE CLIPS, MINIMUM 4 PER PANEL.

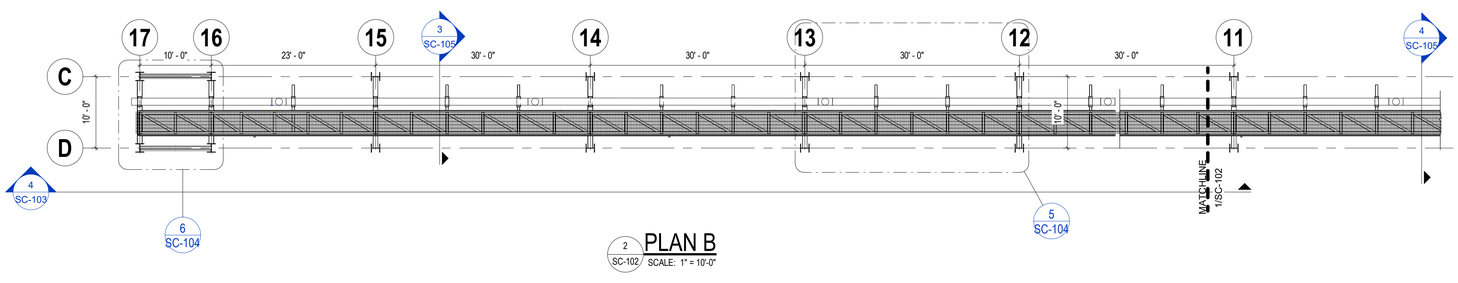


3 SC-102 / ISOMETRIC VIEW
SCALE: NTS

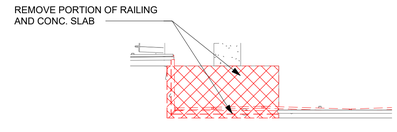




1 SC-102 / PLAN A
SCALE: 1" = 10'-0"



2 SC-102 / PLAN B
SCALE: 1" = 10'-0"



4 SC-102 / PLAN A - DEMO PLAN
SCALE: 1/4" = 1'-0"

NORTH PROJECT NORTH

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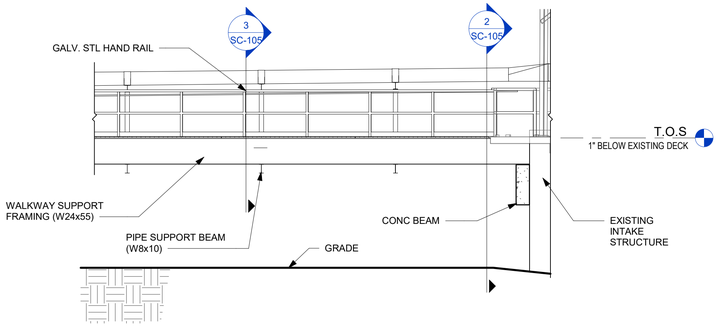
NO.	DATE	DESCRIPTION

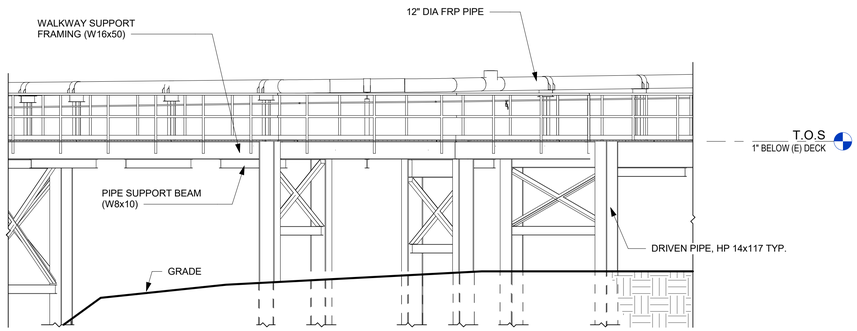
DRAWING TITLE & PROJECT NAME

ENLARGED PLAN

AES INDIANNA
UNIT 5 & 6 FISH RETURN SYSTEM
INDIANAPOLIS, INDIANA

DRAWN BY	MBG
CHECKED BY	TF
DATE	04/04/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	60% SUBMISSION FOR REVIEW
AES DRAWING NO.	006-00-87-S-2-7727
DRAWING NO.	SC-102



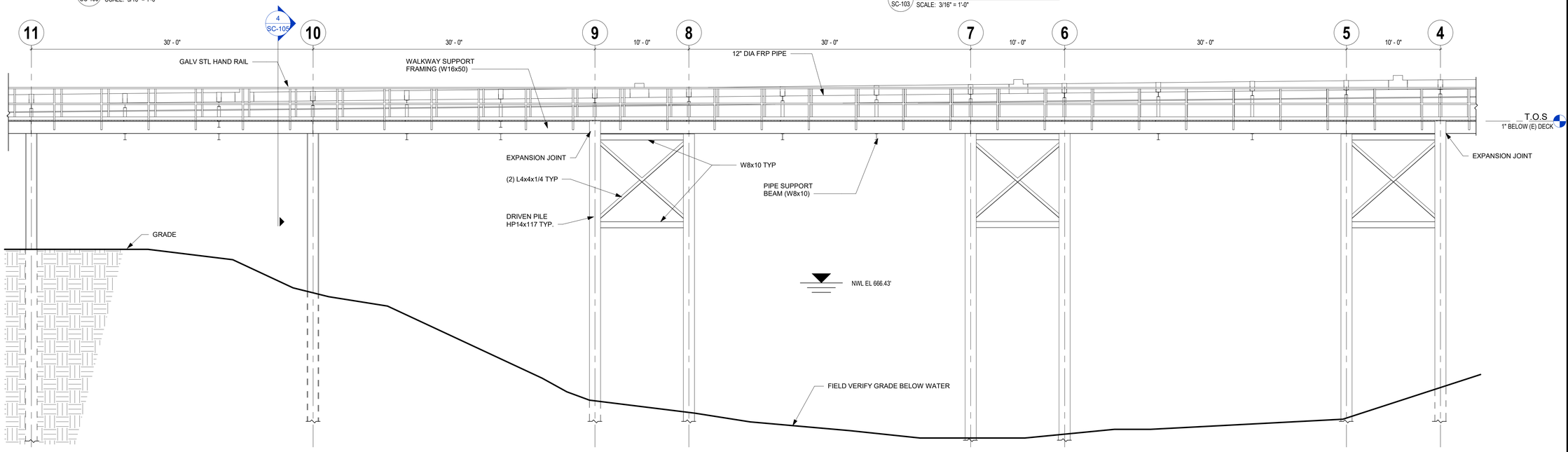


1 SC-103 ELEVATION @ EXISTING BUILDING

SCALE: 3/16" = 1'-0"

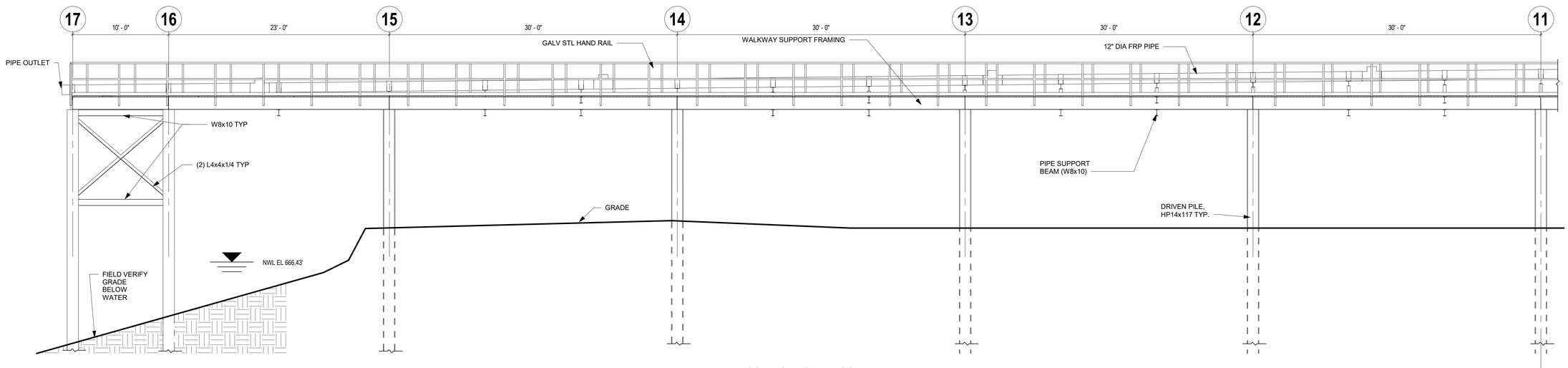
2 SC-103 ELEVATION AT BEND

SCALE: 3/16" = 1'-0"



3 SC-103 ELEVATION OF STRAIGHT RUN - A

SCALE: 3/16" = 1'-0"



4 SC-103 ELEVATION OF STRAIGHT RUN - B

SCALE: 3/16" = 1'-0"

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NO.	DESCRIPTION	DATE

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ELEVATION VIEWS

AES INDIANNA
UNIT 5 & 6 FISH RETURN SYSTEM
INDIANAPOLIS, INDIANA

DRAWN BY	MBG
CHECKED BY	TF
DATE	04/04/2025
PROJECT NO.	120.0000019303
PROJECT STATUS	
60% SUBMISSION FOR REVIEW	
AES DRAWING NO.	006-00-67-S-?-????
DRAWING NO.	

SC-103

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Regulated Waters and Floodway Habitat Restoration Plan

AES Indiana
Harding Street Station
Intake Screen Replacement and Fish Return Installation Project
Marion County, Indiana

GAI Project Number: R230959.00

June 16, 2025

Prepared by: GAI Consultants, Inc.
Indianapolis Office
201 N. Illinois Street, Suite 1700
Indianapolis, IN 46204

Prepared for: AES Indiana
One Monument Circle
Indianapolis, Indiana 46206

Regulated Waters and Floodway Habitat Restoration Plan

AES Indiana
Harding Street Station
Intake Screen Replacement and Fish Return Installation Project
Marion County, Indiana

GAI Project Number: R230959.00

June 16, 2025

Prepared for:
AES Indiana
One Monument Circle
Indianapolis, Indiana 46206

Prepared by:
GAI Consultants, Inc.
Indianapolis Office
201 N. Illinois Street, Suite 1700
Indianapolis, IN 46204

Table of Contents

1.0 Introduction

This Regulated Waters and Floodway Habitat Restoration Plan (Plan) has been prepared in support of U.S. Army Corps of Engineers (USACE), the Indiana Department of Environmental Management (IDEM), and the Indiana Department of Natural Resources Division of Water (IDNR-DW) permitting for AES Indiana's (AES's) Harding Street Station Intake Screen Replacement and Fish Return Project (Project). The Project will generally consist of the removal and replacement of the existing intake screen, as well as the installation of a new conveyance-style fish ladder, at an existing surface water intake at the Harding Street Station (HSS) facility along the east side of the White River in Marion County, Indiana. . The Project is in support of Section 316(b) of the Clean Water Act regulating the design and operation of intake structures, in order to minimize adverse impacts part of effluent treatment system updates proposed to improve water quality and to support anticipated permit compliance at AESI's existing industrial generation facility. The Project involves temporary impacts and the placement of fill within regulated "Waters of the U.S. (i.e., regulated waters) and floodway, as illustrated within **Figure 2**, Restoration Plan (**Appendix A**).

2.0 Goal and Objective

The overall goal and objective of this Plan is to compensate for temporary impacts to regulated waters and temporary loss of floodway habitat associated with Project activities by adhering to the IDNR's *Floodway Habitat Mitigation Guidelines* (mitigation guidelines) and Clean Water Act Section 401/404 requirements, where applicable.

3.0 Existing Site Conditions

The eastern portion of the Project limit of disturbance (LOD) consists of primarily of existing infrastructure associated with the Harding Street Generating Station, including gravel areas along the facility's western boundary, maintained turf areas, and existing intake structure and existing gravel access road. The western portion of the Project LOD consists primarily of the White River intake bay and a lower quality palustrine emergent (PEM) dominated by reed canary grass (*Phalaris arundinacea*), palustrine forested (PFO) dominated by silver maple (*Acer saccharinum)* and boxelder (*Acer negundo*)., and smaller sections of palustrine scrub shrub (PSS) wetland complex located on a riverine peninsula that separates the intake bay from the main White River channel. Project work will occur within the mapped Federal Emergency Management Agency (FEMA) 100-year floodplains and floodways of the White River and Lick Creek (**Appendix A**, Figures).

4.0 Floodway and Regulated Waters Impacts

The Project will require mechanized clearing of woody vegetation within floodway and wetland areas located on a riparian peninsula to make way for the western crane pad and turn around area as well as a gravel access path to this area. Grading, vegetation clearing, and the installation of a 40-foot-wide gravel and articulated concrete mat access road and 115-foot by 40- foot gravel crane pad will result in temporary impacts to the wetland complex identified on the riverine peninsula. It is estimated that approximately 0.21 acre of PEM wetland, 0.007 acre of PSS, and 0.26 acre of PFO wetland will be temporarily impacted. A 20-foot width of the access road and a 40-by-40-foot area of the crane pad will be permanently maintained to facilitate operations and maintenance activities for the fish return system. In addition, a 13-foot buffer around the fish ladder structure will be cleared and permanently maintained in an herbaceous (PEM) state. Floodway impacts will generally consist of those required for grading and construction of the access road and crane pad. The temporary clearing of woody vegetation to allow for project access will include the removal of some mature trees within riverine (floodway) habitat situated along the White River. Based on GAI's estimate (see **Appendix A**, **Figure**

2), it is anticipated that the Project will require the temporary clearing of wooded, riparian habitat from approximately 0.33 acre of regulatory floodplain/floodway (inclusive of the 0.26 acres of above-described PFO clearing). Temporary laydowns, as well as the eastern crane pad will be installed across from the peninsula on the main bank of the White River, with no additional clearing anticipated necessary in this area.

5.0 Restoration Work Plan

5.1 Work Plan

AESI will fully restore all temporarily impacted regulated waters and floodway habitat resulting from Project activities. This includes permanent restoration of all disturbed areas within the Project area that are part of the delineated PFO, PEM, and PSS wetlands in floodway and within non-wetland floodway areas (**Appendix A**).I

Specifically, following Project work, the contractor will remove temporary gravel and articulated concrete matting where it will not remain permanent. The temporarily disturbed areas will be graded (as necessary) to pre-construction conditions and elevations where required and planting areas will be installed as described below and depicted in **Figure 2, Appendix A**.

The stream banks are not proposed to be impacted by the project and therefore restoration is not expected to be required on the banks bank. However, streambanks will be monitored for proper stabilization during and after work completion.

5.2 Planting Plan

Upon completion of the Project construction activities and the removal of temporary gravel and concrete matting, permanent restoration will begin by grading the site to pre-construction contours where required. Following grading, the soil will be de-compacted by disking and/or raking the entire surface to remove any soil clods, resulting in a smooth and uniform surface for adequate seed-to-soil contact. Floodway and wetland planting will then commence with herbaceous seeding, when appropriate seasonal conditions allow. Herbaceous seeding shall take place from September 15 through December 15 (or until the ground is frozen) or March 1 (or after frost leaves the ground) until June 1 to ensure proper germination and to increase the survivability of herbaceous vegetation due to climatic considerations. If Project construction activities are completed outside of this timeframe, temporary stabilization and restoration will be required. Temporary stabilization and restoration will require that the site be graded to original contours, a temporary seed mix of annual cover crop installed (as specified in Table 1, Appendix B), and straw mulch shall be installed to provide immediate erosion control until permanent restoration can be initiated.

As discussed within GAI's Wetland Delineation and Stream Investigation Report (WDSIR) for the Project area, provided under separate cover, existing herbaceous vegetation in the Project area, within PEM, PSS and PFO wetland areas, generally contained common native species and certain aggressive non-native invasive species. To prevent further establishment of non-native invasive species within all disturbed areas, it is proposed that the appropriate native seed mixture (upland or wetland) containing grass, broadleaf, and annual temporary cover crop components be installed in all forested non-wetland floodway areas and all wetland (emergent, shrub-scrub and forested) areas where disturbance will occur. As such, the Wetland Native Herbaceous Seed Mix (**Table 2, Appendix B**) shall be installed in all areas of temporary disturbance, except areas returning to maintained turf, as shown in **Figure 2**, **Appendix A** using a mechanized seed drill and cultipacked in place as feasible. In areas where equipment access is restricted, seed shall be installed using a broadcast method and shall be raked in to ensure adequate seed-to-soil contact. Regardless of installation methods, seed shall be installed not more than 1/8-inch in depth. Prior to seeding, all seed materials shall be kept in a cool, dry place to

prevent unanticipated germination and/or desiccation prior to installation. The source for seed should be obtained from sources within the American National Standards Institute Plant Hardiness Zones 4, 5, or 6. Only species approved by the Indiana Department of Natural Resources (IDNR) are specified in this Plan. No hybrids, cultivars, or genetically modified plants are permissible. Species substitutions must be approved by AES Indiana and the IDNR prior to installation.

Straw mulch, natural fiber and biodegradable erosion control blanket, or a combination thereof shall be installed over all restored areas. Except for turf reinforcement mats, in no case will polypropylene (or other plastic) netting be used. Specific erosion control materials will depend on severity of slope and anticipated flood and surface waters. Erosion control blanket shall be installed per manufacturer specifications and will typically be used in areas of anticipated concentrated flow or slopes greater than 3:1. Other areas shall have straw mulch installed at 2,000 pounds per acre to adequately cover the entire seeded area. Additionally, if equipment access is feasible, straw mulch shall be crimped in to aid in retention of this mulch during anticipated flood events, surface flow, and wind. The erosion control blanket and/or straw mulch will aid in the establishment of herbaceous vegetation by ensuring seed-to-soil contact, retaining moisture, and will also provide immediate erosion control.

Restoration of forested floodway areas (wetland and non-wetland) will also be achieved by planting native canopy and understory trees at an appropriate ratio. Understory shrubs and understory trees are proposed to be planted in conjunction with all areas of forested restoration as well as within the shrub-scrub restoration area. One-to-three-gallon potted understory and canopy trees and shrubs (**Appendix B, Table 3**) will be installed at a 10-foot on center spacing within the entirety of the 0.06-acre Non-Wetland Floodway Habitat Restoration area and 0.23-acre Forested Wetland Restoration area displayed on **Figure 2, Appendix A**. Understory trees and shrubs only (no canopy species) will be installed at 5-foot on center spacing for the entirety of the 0.01-acre Shrub-Scrub Restoration Area (**Figure 2, Appendix A**). Tree and shrub species specified for restoration planting (**Appendix B, Table 3**) were selected from the IDNR Woody Riparian Vegetation List and further customized to specific areas based on local conditions, expected hydrologic conditions, and adjacent plant communities observed during the tree inventory.

6.0 Monitoring Requirements

In accordance with the Indiana Construction Stormwater General Permit (CSGP), all revegetated areas will be monitored to ensure 70% vegetative coverage as required with weekly and post-rain event inspections and reporting. Documentation of 70% coverage across the site will be required prior to submittal of the Notice of Termination (NOT) under the CSGP.

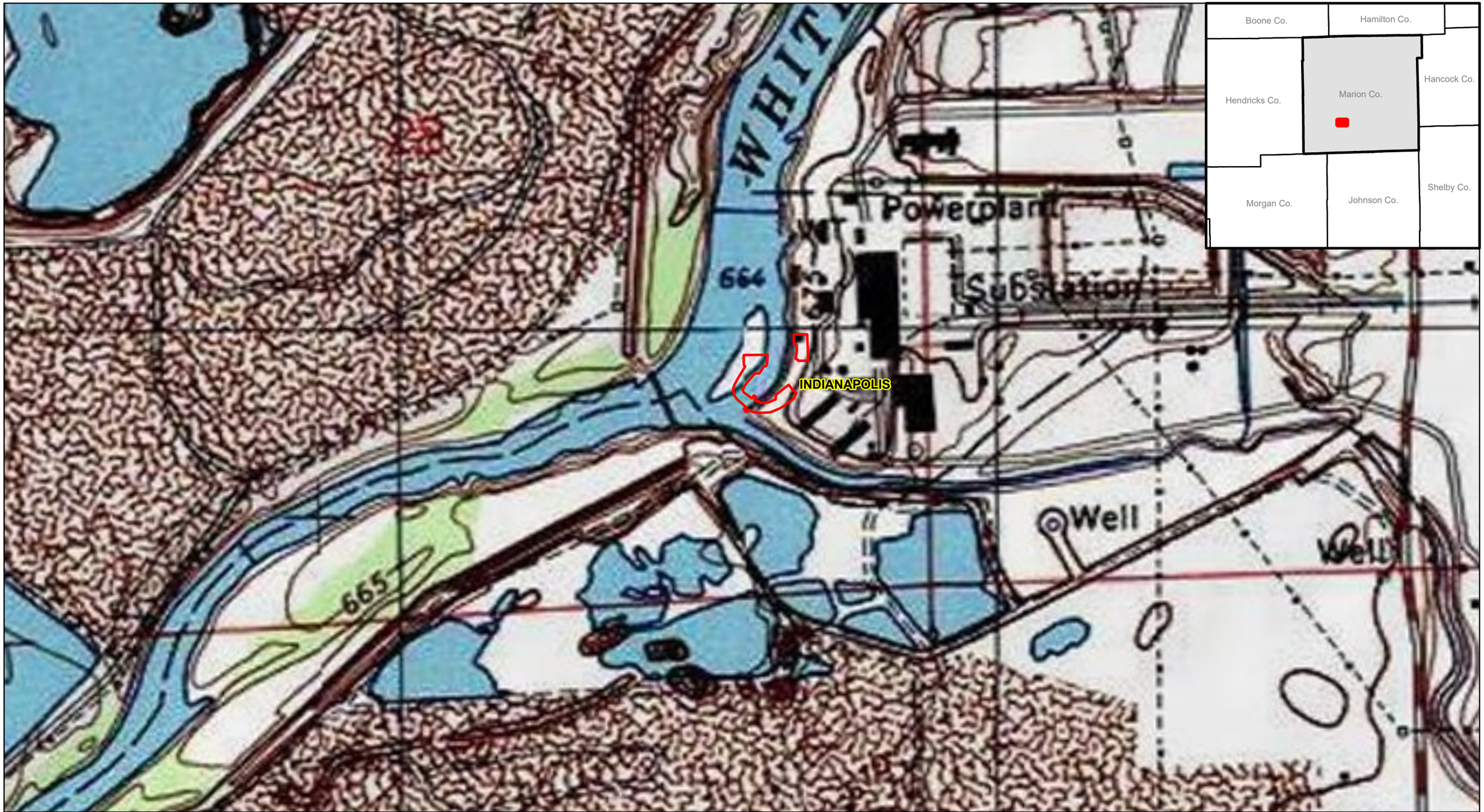
No performance standards and/or survivability requirements are currently being proposed for the floodway and regulated waters restoration efforts due to the nature of the temporary impacts and improvement of wetland quality with restoration efforts, and the utilization of the IDNR in-lieu-fee and/or mitigation bank program for permanent wetland impacts.

7.0 Maintenance Plan

Maintenance shall be performed to ensure that 70% vegetative coverage is met in accordance with CSGP requirements. Maintenance may include, but not limited to, additional temporary stabilization or seeding as determined necessary. Additional management tools and procedures may be considered as the restoration progresses.

8.0 Long-Term Management Plan

Long-term management will be the responsibility of AES Indiana unless otherwise arranged and will be consistent with operation and maintenance of existing AES Indiana facility.



PROJECT LOCATION

MARION
COUNTY, IN

REFERENCE:
TOPOGRAPHIC MAP:
- Esri's USA Topo Map, Accessed: 6/12/2025.

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

RAILWAY:
- Indiana Department of Transportation's Active and Abandoned Rail System, 9/13/2006.

INCORPORATED AREA:
- Indiana Geographic Information Office's Best Available Incorporated Areas, 12/18/2024.

COUNTY BOUNDARY:
- Indiana Geological Survey's County Boundaries of Indiana, 6/21/2002.

PROJECT DETAILS:
- AES Indiana.

Interstate Highway
Limit of Disturbance
Railway
Incorporated Area

aes
gai consultants

0 250 500 Feet
1 in. = 500 ft.

FIGURE 1
PROJECT VICINITY

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH
DATE: 6/12/2025
CHECKED: TDB
APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\Restoration\R230959_00_HSS_Intake_Screen_AES_IN_Restoration_20250516.aprx

Work within Floodplain and Wetland Will Require Special Restoration

Do Not Leave Felled Trees, Brush, or Debris in Wetland or Floodplain

Implement Regulated Waters and Floodway Habitat Restoration Plan

Impacts to Regulated Wetlands Require Restoration

Work in Wetlands Requires Construction Matting or Tracked Machinery

Do Not Leave Felled Trees, Brush, Soil Stock Piles, or Other Debris in Streams or Wetlands

Re-Establish Pre-Construction Elevations

Install Native Restoration Seed Trees and Shrubs and Stabilize

See Regulated Waters and Floodway Habitat Restoration Plan

White River

White River Right Bank

Wetland A PEM

670

White River Right Bank

670

INDIANAPOLIS

Wetland A PEM

Wetland A PSS

Wetland A PFO

Wetland A PEM

Wetland A PEM

670

Wetland A PFO

Lick Creek Right Bank

Wetland A PEM

670

680

SHEET INDEX

1

Marion Co.

465

REFERENCE:
AERIAL PHOTOGRAPH:
- Esri's World Imagery 2021. Accessed: 6/5/2025

INTERSTATE AND HIGHWAY:
- Esri's U.S. Major Roads, 5/10/2018.

LOCAL ROAD:
- Indiana Geographic Information Office's Street Centerlines, 12/18/2024.

INCORPORATED AREA:
- Marion County's City and Town Boundaries, 2019.

NHD FLOWLINE:
- United States Geological Survey's National Hydrography Dataset Best Resolution, 12/27/2023.

FLOODPLAIN AND FLOODWAY:
- Federal Emergency Management Agency's National Flood Hazard Layer, 2/17/2025.

PARCEL BOUNDARY:
- Indiana Geographic Information Office's Land Parcels, 12/18/2024.

5-FOOT CONTOUR:
- Created from Woolpert's LiDAR DEM, Marion County, 2011.

DELINEATED FEATURE:
- GAI Consultants.

PROJECT DETAILS:
- AES Indiana.

Local Road

Incorporated Area

Fish Return System

Delineated Stream

Delineated Wetland - PFO

Delineated Wetland - PEM

Delineated Wetland - PSS

Existing Gravel

Limit of Disturbance

Work Plan

Emergent Wetland Restoration (0.23 Acres)

Forested Wetland Restoration (0.23 Acres)

Maintained Turf (0.28 Acres)

Non-Wetland Floodway Habitat Restoration (0.056 Acres)

Shrub-Scrub Wetland Restoration (0.0067 Acres)

Permanent Access (0.29 Acres)

NHD Flowline

100-Year Floodplain

Floodway

Parcel Boundary

5-Foot Contour

aes

gai consultants

0 25 50 Feet

1 in. = 50 ft.

N

FIGURE 2
RESTORATION PLAN

SHEET 1 of 1

AES Indiana Harding Street Generating Station
Intake Screen Replacement and Fish Ladder Installation

DRAWN BY: MBH DATE: 6/5/2025

CHECKED: TDB APPROVED: MRW

G:_2024\R230959.00 - GIS\AGP\Restoration\R230959_00_HSS_Intake_Screen_AES_IN_Restoration_20250516.aprx

Table 1: Temporary Cover Seed Mix		
Common Name	**Scientific Name**	**Rate (ounce/acre)**
Temporary Cover		
Common Oat	Avena sativa	512
Annual Rye	Lolium multiflorum	240

Notes:

1 Mulch shall be applied at the rate of 6,000 lbs/acre to areas within 100 feet of waterbodies and wetlands.

Table 2: Native Herbaceous Seed Mix – Forested, Shrub-Scrub and Emergent Wetland Habitat Restoration		
Common Name	**Scientific Name**	**Rate (ounce/acre)**
Annual Cover Crop		
Common Oat	*Avena sativa*	360
Annual Rye	*Lolium multiflorum*	100
Permanent Grasses		
Bluejoint Grass	*Calamagrostic canadensis*	1
Bottlebrush Sedge	*Carex lurida*	3
Virginia Wild Rye	*Elymus virginicus*	4
Rice Cut Grass	*Leersia oryzoides*	24
Common Rush	*Juncus effusus*	2
Dark Green Rush	*Scirpus atrovirens*	2
Permanent Broadleaves		
Swamp Milkweed	*Asclepias incarnata*	2
Great Blue Lobelia	*Lobelia siphilitica*	0.50
New England Aster	*Symphyotrichum novae-angliae*	0.50
Ironweed (Various Mix)	*Vernonia spp.*	3
Wingstem	*Verbesina alternifolia*	4

Table 3: Woody Species and Quantities for Restoration of Forested Wetland and Non-Wetland Forested Floodway Habitat			
Common Name	**Scientific Name**	**2020 NWPL Indicator Status**	**Number**
Canopy Tree Species			
Ohio Buckeye	*Aesculus glabra*	FAC	20
American Sycamore	*Platanus occidentalis*	FACW	20
Swamp White Oak	*Quercus bicolor*	FACW	20
Silver Maple	*Acer saccharinum*	FACW	19
		Total	**79**
Understory Tree and Shrub Species			
Gray Dogwood	*Cornus racemosa*	FAC	24
Spicebush	*Lindera benzoin*	FACW	24
Common Ninebark	*Physocarpus opulifolius*	FACW	23
Black Willow	*Salix nigra*	OBL	23
		Total	**94**

Division of Nature Preserves
402 W. Washington St., Rm W267
Indianapolis, IN 46204-2739

December 20, 2024

Michael Rudolph
GAI Consultants, Inc.
2300 Cabot Drive, Suite 395
Lisle, IL 60532

Dear Michael Rudolph:

I am responding to your request for information on the threatened or endangered (T&E) species, high quality natural communities, and natural areas for the AES HSS Facility White River Fish Ladder Project located within Marion County, Indiana. The Indiana Natural Heritage Data Center has been checked and included you will find a datasheet with information on the T&E species documented within 0.5 mile of the project area.

If you need a review of the impacts to the animal species mentioned or a general environmental review, you can submit the project information (description, location map, and copy of this letter) to the DNR Division of Fish and Wildlife Environmental Coordinator, at environmentalreview@dnr.in.gov (preferred), or send to the street address below.

Department of Natural Resources
Environmental Review
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, Indiana 47403-2121
(812)334-4261

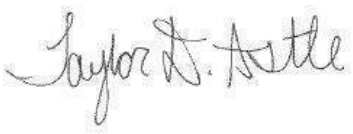
Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at

particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)233-2558 if you have any questions or need additional information.

Sincerely,



Taylor Davis Astle
Indiana Natural Heritage Data Center

Enclosure: invoice
datasheet

December 20, 2024

INDIANA HERITAGE DATA WITHIN 0.5 MILE OF:

AES HSS Facility White River Fish Ladder, Marion County

Sci. Name	Com. Name	State	Fed.	Date	Site	Comments
Bird						
Falco peregrinus	Peregrine Falcon	SSC		2016	INDIANAPOLIS POWER AND LIGHT STOUT PLANT	NEST SITE

Fed: E = Federal endangered; T = Federal threatened; C = Federal candidate species
State: SE = State endangered; ST= State threatened; SR = State rare; SX = State extirpated; SSC = State species of special concern; SG = State significant; no rank - not ranked but tracked to monitor status

Environmental Unit
402 W. Washington Street, Rm. W273
Indianapolis, IN 46204-2781

May 9, 2025

Michael Rudolph
GAI Consultants, Inc.
2300 Cabot Drive, Suite 395
Lisle, IL 60532

Re: ER-27397: AES HSS Facility White River Intake Screen Replacement and Fish Ladder Installation: removal and replacement of the existing intake screen, and installation of a new conveyance-style fish ladder/return system at an existing surface water intake at the Harding Street Station (HSS) facility, along the east side of the White River, Indianapolis, Marion County
****ETR review for RGP****

Dear Michael:

This letter is in response to your request, received on April 11, 2025, for comments from our agency regarding threatened and endangered species that may be present in the vicinity of the proposed project. This is only a preliminary review for this reason and is pursuant to the requirements of the Regional General Permit you have applied for or will be applying for.

This is not a permit or approval for the proposed project. You are responsible to make sure any other necessary permits or approvals are obtained, including those from our department, if required.

As indicated in the December 20, 2024, letter from DNR Division of Nature Preserves, the State special concern Peregrine Falcon (*Falco peregrinus*) has been documented within 0.5 miles of the project. The Division of Fish and Wildlife does not expect negative impacts to the Peregrine Falcon due to this project.

Our agency appreciates this opportunity to be of service. Please do not hesitate to contact me at (317) 232-8163 or RVanVoorhis@dnr.IN.gov if we can be of further assistance.

Sincerely,

Rachel Van Voorhis

Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife