

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 2/6/2023

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Preeti Samra, 8320 Craig St., Indianapolis, IN 46250

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The project is located on State Road (SR) 225 over Wabash River, 0.60 mile north of SR 25 in Tippecanoe County, Indiana. The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT), Crawfordsville District, are planning to proceed with a bridge rehabilitation project on SR 225 over Wabash River. The proposed project includes full replacement and partial replacement of original truss members, including the floor system. The deck will be replaced, a new railing will be constructed, and patching of substructure units will occur to repair damaged piers and abutments.

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

State: **IN** County/parish/borough: **Tippecanoe** City: **Delphi**

Center coordinates of site (lat/long in degree decimal format):

Lat.: **40.49530** Long.: **-86.82379**

Universal Transverse Mercator: **16S**

Name of nearest waterbody: **Wabash River**

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s):

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wabash River	40.49530	-86.82379	130 ft	non-wetland	Section 404

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

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

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: Figure 1-10
- Data sheets prepared/submitted by or on behalf of the PJD requestor.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Rationale: _____
- Data sheets prepared by the Corps: _____
- Corps navigable waters' study: _____
- U.S. Geological Survey Hydrologic Atlas: Figure 5
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Figure 2A and 2B, Parr
- Natural Resources Conservation Service Soil Survey. Citation: Figure 5, SSURGO
- National wetlands inventory map(s). Cite name: Figure 4, NWI, USFWS
- State/local wetland inventory map(s): _____
- FEMA/FIRM maps: Figure 6
- 100-year Floodplain Elevation is: 536.3 (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): State of Indiana Best Available Orthophotography various years 2016-2019
or Other (Name & Date): Ground-level photos, August 17, 2022
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): _____

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory staff member
completing PJD

Preeti Samra Digitally signed by Preeti Samra
Date: 2023.01.19 12:04:26 -05'00'

Signature and date of
person requesting PJD
(REQUIRED, unless obtaining
the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.

Raquel Walker

From: Washburn, Eric A CIV USCG D8 (USA) <Eric.Washburn@uscg.mil>
Sent: Wednesday, May 17, 2023 3:29 PM
To: Long, Joshua A
Subject: RE: Potential Section 9 for INDOT Bridge Project

No permit required. A little far upriver for us. Tks.

Eric

From: Long, Joshua A <JLong1@indot.IN.gov>
Sent: Friday, April 14, 2023 2:24 PM
To: Washburn, Eric A CIV USCG D8 (USA) <Eric.Washburn@uscg.mil>
Subject: [Non-DoD Source] RE: Potential Section 9 for INDOT Bridge Project

Hi Eric,

I was reaching out to see if you had a chance to determine is a section 9 permit will be need for the project mentioned below.

Thank you,

Josh Long

Ecology and Waterway Permitting Specialist
INDOT Environmental Services Division
100 N Senate Ave IGCN 758-ES
Indianapolis, IN 46204
(463) 271-6043



From: Long, Joshua A
Sent: Monday, February 13, 2023 2:03 PM
To: eric.washburn@uscg.mil
Subject: Potential Section 9 for INDOT Bridge Project

Good afternoon Eric,

INDOT intends to proceed with a bridge rehabilitation project on the Wabash River. Could you see if a section 9 permit will be required for this project? I have attached a map of the general area. The project will include placement of riprap into the Wabash River at abutments and dumped Class 1 riprap around two piers. No work will occur on the island in the satellite map. Please let me know if you need any additional information.

Coordinates: 40.49530, -86.82379

Thank you,

Josh Long

Ecology and Waterway Permitting Specialist
INDOT Environmental Services Division
100 N Senate Ave IGCN 758-ES

Appendix G:

Public Involvement

NOTICE OF SURVEY
August 20,2021

Property Owner Address

Re: Battleground, Indiana
State Road 225 over Wabash River
Bridge Rehabilitation Project
Des. No. 2002077

Dear Property Owner:

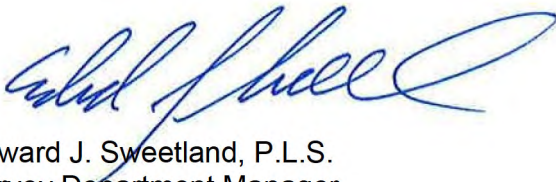
Our information indicates that you own or occupy property near this proposed bridge rehabilitation project. Our employees will be doing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is permitted by law per Indiana Code IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

At this stage, we generally do not know what effect, if any, our project may eventually have on your property. If it is determined that your property is involved, you will be contacted with additional information.

The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey is needed for the proper planning and design of this bridge rehabilitation project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please speak to our field crew or contact me at the telephone number or address shown above.

Sincerely,

BEAM, LONGEST AND NEFF, L.L.C.



Edward J. Sweetland, P.L.S.
Survey Department Manager
xc: 180081/210052

Appendix H:

Air Quality

Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Indiana Department of Transportation	43431 / 2002077	Init.	SR 225	Truss Reconstruction Or Repair	Crawfordsville	0	STBG	\$5,567,000.00	Bridge Construction	CN	\$3,995,200.00	\$998,800.00		\$4,994,000.00			
									Bridge ROW	RW	\$32,000.00	\$8,000.00	\$40,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: 0.60 mi N of Old SR 25, over Wabash River																	
Comments:Include DES 2002077																	
Indiana Department of Transportation	43441 / 2002033	Init.	US 52	Bridge Deck Overlay	Crawfordsville	.95	STBG	\$1,385,000.00	Bridge ROW	RW	\$32,000.00	\$8,000.00	\$40,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: US 52 over over NSRR 1.09 mi E of US 231 and over Gaylord Branch; I65 over N&S RR 0.06 mi S of SR 38, NB and SB over SR 38 EB/WB, NB and SB over SR 26 EB/WB and NB and SB over Wildcat Creek																	
Comments:Include DES 2001743, 2002033, 2002042, 2002107, 2002108, 2002109, 2002110, 2002111, 2002112, 2002113																	
Indiana Department of Transportation	43447 / 2001932	Init.	I 65	Small Structure Pipe Lining	Crawfordsville	.55	NHPP	\$2,772,459.00	Bridge ROW	RW	\$135,000.00	\$15,000.00	\$120,000.00	\$30,000.00			
									Bridge Construction	CN	\$1,873,800.00	\$208,200.00	\$150,000.00	\$1,932,000.00			
Performance Measure Impacted: Safety																	
Location: I-65, CR 680 S over ditch; I-74, 1.04 mi E of US 41; SR 63, 0.07 mi S of SR 28. and at SR 63, 0.58 mi N of SR 28.																	
Comments:Include DES 2001932, 2002185, 2002187, 2002190																	
Indiana Department of Transportation	43450 / 2002143	Init.	US 52	Bridge Thin Deck Overlay	Crawfordsville	.15	NHPP	\$2,999,712.00	Bridge Construction	CN	\$2,320,000.00	\$580,000.00		\$2,900,000.00			
									Bridge Consulting	PE	\$80,000.00	\$20,000.00	\$100,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: from 0.87 mi W of E jct. US 231, WB & EB over Wabash River.																	
Comments:Include DES 2002143, 2002144																	
Indiana Department of Transportation	43680 / 2100720	Init.	I 65	Bridge Thin Deck Overlay	Crawfordsville	0	NHPP	\$1,715,986.00	Bridge Consulting	PE	\$450,000.00	\$50,000.00	\$500,000.00				
									Bridge Construction	CN	\$968,400.00	\$107,600.00			\$1,076,000.00		
Performance Measure Impacted: Bridge Condition																	
Location: I-65, over I-65 NB/SB, 1.12 mi N of SR 43, includes a total of (4) Bridge Thin Deck Overlays																	
Comments:Include DES 2100678, 2100719, 2100720, 2100756, 2101091																	
Indiana Department of Transportation	44116 / 2101617	Init.	SP 52	Small Structures & Drains Construction	Crawfordsville	0	STBG	\$826,000.00	District Other ROW	RW	\$40,000.00	\$10,000.00	\$50,000.00				
									District Other Construction	CN	\$400,000.00	\$100,000.00			\$500,000.00		

*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

Table 6: Funded Indiana Department of Transportation Projects, continued

Project Location & Description	Ph	Fund Code	Federal Funds	State Funds	Total Cost	Anticipated Year
16 US 52, Contract # B-44428, Des # 2200993					P.M.: Bridge Condition	
WB bridge over Wabash River	PE					
Superstructure Repair/Rehab	RW					
	CN	STBG	242,400	60,600	303,000	2024
<i>Contract Total Cost (includes costs prior to SFY 2024)</i>			352,662			
17 SR 225, Contract # B-43431, Des # 2002077					P.M.: Bridge Condition	
0.6 mi N of SR 25	PE					
Truss Rehabilitation or Repair	RW	STBG	32,000	8,000	40,000	2024
	CN	STBG	3,995,200	998,800	4,994,000	2025
<i>Contract Total Cost (includes costs prior to SFY 2024)</i>			352,662			
18 I-65, Contract # R-42039, Des # 1900647					P.M.: Pavement Condition	
At SR 38 Interchange	PE					
Concrete Pavement Restoration	RW					
	CN	NHPP	2,898,234	322,026	3,220,260	2024
<i>Contract Total Cost (includes costs prior to SFY 2024)</i>			3,236,164			
19 I-65, Contract # R-43447, Des # 2001932					P.M.: Safety	
CR 680S over Ditch	PE					
Small Structure Pipe Lining	RW	NHPP	108,000	12,000	120,000	2024
	RW	NHPP	27,000	3,000	30,000	2025
	CN	NHPP	13,500	1,500	15,000	2024
	CN	NHPP	1,738,800	193,200	1,932,000	2025
<i>Contract Total Cost (includes costs prior to SFY 2024)</i>			2,097,000			
20 I-65, Contract # B-43680, Lead Des # 2100720					P.M.: Bridge Condition	
I-65, Des # 2100720	PE					
CR 600N bridge over I-65	RW					
Bridge Thin Deck Overlay	CN	NHPP	274,500	30,500	305,000	2026
I-65, Des # 2100678	PE					
CR 900E bridge over I-65	RW					
Bridge Thin Deck Overlay	CN	NHPP	167,400	18,600	186,000	2026
I-65, Des # 2100719	PE					
Swisher Road bridge over I-65	RW					
Bridge Thin Deck Overlay	CN	NHPP	225,000	25,000	250,000	2026
I-65, Des # 2101091	PE					
East County Line Road over I-65	RW					
Bridge Thin Deck Overlay	CN	NHPP	146,700	16,300	163,000	2026
<i>Contract Total Cost (includes costs prior to SFY 2024)</i>			1,095,400			

Appendix I:
Additional Studies

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800028	1800028	Tippecanoe	Tippecanoe County Fairgrounds
1800101	1800101	Tippecanoe	Wabash River Park - McAllister Park
1800101.2	1800101.2	Tippecanoe	South Tipp Park
1800115	1800115	Tippecanoe	Wabash River Golf Course - McAllister Park
1800121	1800121	Tippecanoe	Tapawingo Park
1800155	1800155	Tippecanoe	Happy Hollow Park
1800256	1800256	Tippecanoe	Tommy Johnston Park
1800275	1800275	Tippecanoe	Tippecanoe Battlefield Park
1800279	1800279	Tippecanoe	Hanna Park
1800345	1800345	Tippecanoe	McCaw Park
1800345.2	1800345.2	Tippecanoe	Munger Park
1800494	1800494	Tippecanoe	Celery Bog Nature Area
1800506	1800506	Tippecanoe	Celery Bog Nature Area
1800515	1800515	Tippecanoe	Celery Bog Nature Area
1800517	1800517	Tippecanoe	Celery Bog Nature Area
1800532	1800532	Tippecanoe	Prophetstown State Park
1800532.1	1800532.1	Tippecanoe	Prophetstown State Park
1800532.2	1800532.2	Tippecanoe	Prophetstown State Park

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

Bridge Inspection Report

225-79-04016 G
SR 225
over
WABASH RIVER

Inspection Date: 05/23/2022

Inspected By: Matthew Ference

Inspection Type(s): Routine
Fracture Critical (NSTM)

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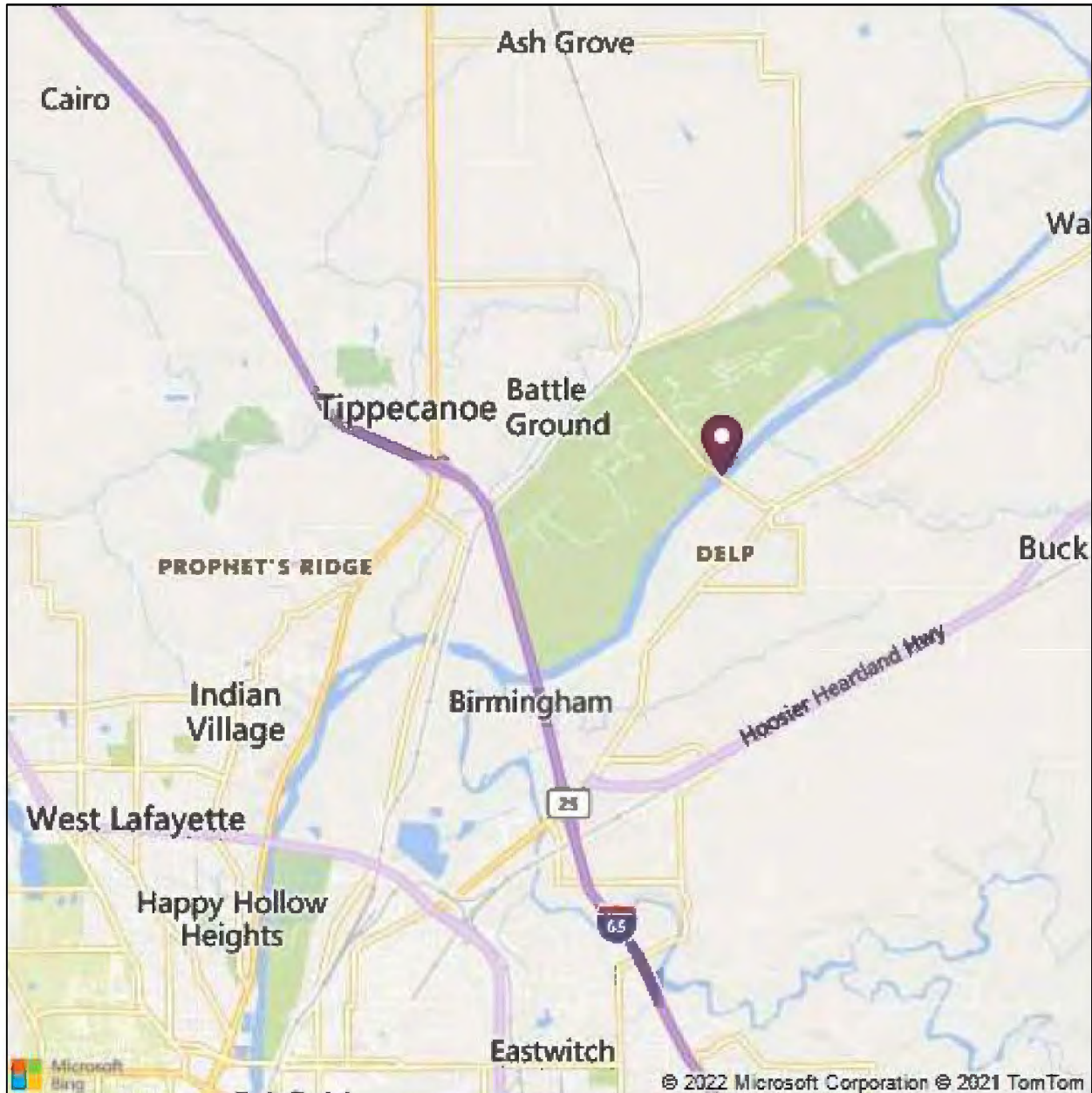
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Portions of the Bridge Inspection Report have been removed to reduce the file size. The full report can be made available upon request.

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report



Latitude: 40.49552
Longitude: -86.82329

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

Routine

This bridge is in poor overall condition. There is a crack in a non-fracture critical diagonal that has not been repaired, corrosion with section loss on all of the steel bearings, and all steel truss members have varying degrees of deterioration, The concrete deck has many wide cracks, deep spalls, and patches. This bridge is posted at 12 tons with a speed limit of 10 mph. There has been an ongoing issue of overweight vehicles traveling across this bridge since last year and camera's have been installed. The Bridge Program Manager, Area Engineer, and Crawfordsville BAE receive email notifications with videos when the weight limit is surpassed.

Fracture Critical

May 23rd & 24th, 2022: A Fracture Critical Inspection of this bridge began on May 23rd and was completed on May 24th. During this inspection Matt Ference was the lead inspector, Steve Hurst (Seymour District) assisted in the platform, Jacob Gould (Area Engineer) inspected half of the upper truss portions day 1, Jessica Waggoner (Seymour District) inspected half of the upper truss portions day 1/drove the UB-32 day 2, and Dan Bewley drove the UB-32 day 1. This inspection was completed using the UB-32 and bucket truck with the road closed. The Lafayette Unit and Deb Calder (Crawfordsville District Communications Director) were contacted 4 weeks prior to the inspection to coordinate the road closure. The weather was sunny with temperatures ranging from mid 60's to low 80's. The scope of this inspection was to conduct an up-close visual inspection of all fracture critical members and connections. This inspection took approximately 14.00 hours split between 2 days. No special tools were needed during this inspection other than fall protection harnesses.

During this inspection 2 new cracks were found and 1 critical find was reported. The fracture critical member and connection ratings range from 7 to 3 due to section loss, pack rust, 2 previously documented cracks, and 2 new cracks. The new cracks were located upstream in span B on members U1L1 and U7L7. See the critical find and the report attachments for more details. Due to the cracks emergency repairs are recommended, and the bridge has been closed to traffic until the repairs are complete. The recommendation is to remain at a 12 month inspection frequency for all fracture critical members.

History

- 1912, Original build, New bridge
- 1954, Shear Studs, New Deck, Floor Beam bearings at Pier 3 and pedestals at Piers 2 and 4.
- 1977, Aluminum Railing
- 1988, Replaced Stringers and End Floor Beams Installed new Bridge Rail. Reconstructed Pier Noses, Bridge Seats at all substructure units and installed Pier Encasement. Painted Floor System and Lower Portion of Trusses.
- 1993, Replaced Damaged Diagonal A-US L2-U1 and Vertical C-US L2-U2. Repaired Bridge Railing.
- 1995, Installed One-Way Signals
- 1997, Replaced Damaged Diagonal A-DS L3-U2.
- 2002, Bridge Painted
- 2003, Installed Lower Chord A-DS L0-L1 and Lower Chord A-US L0-L1 Repair member
- 2014, Repaired damaged diagonal A-DS L4-U3 (didn't get fixed) and C-DS L7-U7
- **Project Programmed (Short-Term Shelf), Contract B-39365, Des Number 1593270, Bridge Rehabilitation & Repair, Current Letting Date 04-06-2022**

Inspector: Matthew Ference
 Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
 Facility Carried: SR 225

Bridge Inspection Report

IDENTIFICATION

(1) STATE CODE:	185 - Indiana	(12) BASE HIGHWAY NETWORK:	0
(8) STRUCTURE:	029150	(13A) INVENTORY ROUTE:	
(5 A-B-C-D-E) INV. ROUTE:	1 - 3 - 1 - 00225 - 0	(13B) SUBROUTE NUMBER:	
(2) HIGHWAY AGENCY DISTRICT:	01 - Crawfordsville	(16) LATITUDE:	40.49552
(3) COUNTY CODE:	079 - TIPPECANOE	(17) LONGITUDE:	-86.82329
(4) PLACE CODE:	00000 - N/A	(98) BORDER	
(6) FEATURES INTERSECTED:	WABASH RIVER	A) STATE NAME:	
(7) FACILITY CARRIED:	SR 225	B) PERCENT	%
(9) LOCATION:	00.60 N OLD SR 25	(99) BORDER BRIDGE STRUCT. NO:	
(11) MILEPOINT:	0000.600		

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN:		(45) NUMBER OF SPANS IN MAIN	004
A) KIND OF MATERIAL/DESIGN:	3 - Steel	UNIT:	
B) TYPE OF DESIGN/CONSTR:	10 - Truss - Thru	(46) NUMBER OF APPROACH SPANS:	0000
(44) STRUCTURE TYPE, APPROACH SPANS:		(107) DECK STRUCTURE TYPE:	1 - Concrete Cast-in-Place
A) KIND OF MATERIAL/DESIGN:	0 - Other	(108) WEARING SURFACE/PROT SYS:	
B) TYPE OF DESIGN/CONSTR:	00 - Other	A) WEARING SURFACE:	1 - Monolithic Concrete (concurrently placed with structural deck)
		B) DECK MEMBRANE:	0 - None
		C) DECK PROTECTION:	1 - Epoxy Coated Reinforcing

AGE OF SERVICE

(27) YEAR BUILT:	1912	(28) LANES:	
(106) YEAR RECONSTRUCTED:	1989	A) ON BRIDGE:	01
(42) TYPE OF SERVICE:		B) UNDER BRIDGE:	00
A) ON BRIDGE:	1 - Highway	(29) AVERAGE DAILY TRAFFIC:	000960
B) UNDER BRIDGE:	5 - Waterway	(30) YEAR OF AVERAGE DAILY TRAFFIC:	2009
		(109) AVERAGE DAILY TRUCK TRAFFIC:	08 %
		(19) BYPASS DETOUR LENGTH:	004 MI

Inspector: Matthew Ference
 Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
 Facility Carried: SR 225

Bridge Inspection Report

GEOMETRIC DATA

(48) LENGTH OF MAX SPAN: 00158.0 FT	(35) STRUCTURE FLARED: 0 - No flare
(49) STRUCTURE LENGTH: 00642.0 FT	(10) INV RTE, MIN VERT CLEARANCE: 17.42 FT
(50) CURB/SIDEWALK WIDTHS:	(47) TOT HORIZ CLEARANCE: 014.3 FT
A) LEFT 00.6 FT	(53) VERT CLEAR OVER BR RDWY: 15.92 FT
B) RIGHT: 00.6 FT	(54) MIN VERTICAL UNDERCLEARANCE:
(51) BRDG RDWY WIDTH CURB-TO-CURB: 014.3 FT	A) REFERENCE FEATURE: N
(52) DECK WIDTH, OUT-TO-OUT: 015.5 FT	B) MIN VERT UNDERCLEAR: 00.00 FT
(32) APPROACH ROADWAY 018.0 FT	(55) LATERAL UNDERCLEARANCE RIGHT:
(33) BRIDGE MEDIAN: 0 - No median	A) REFERENCE FEATURE: N
(34) SKEW: 00 DEG	B) MIN LATERAL UNDERCLEAR: 000.0 FT
	(56) MIN LATERAL UNDERCLEAR ON LEFT: 000.0 FT

INSPECTIONS

(90) INSPECTION DATE: 05/23/2022	(91) DESIGNATED INSPECTION FREQUENCY: 12 MONTHS
(92) CRITICAL FEATURE INSPECTION:	(93) CRITICAL FEATURE INSPECTION DATE:
A) FRACTURE CRITICAL REQUIRED/FREQUENCY: Y 12	A) FRACTURE CRITICAL DATE: 05/23/2022
B) UNDERWATER INSPECTION REQUIRED/FREQUENCY: Y 60	B) UNDERWATER INSP DATE: 04/25/2019
C) OTHER SPECIAL INSPECTION REQUIRED/FREQUENCY: N	C) OTHER SPECIAL INSP DATE: 06/01/2011

CONDITION

(58) DECK: 4 - Poor Condition (advanced deterioration)	(60) SUBSTRUCTURE: 4 - Poor Condition (advanced deterioration)
(58.01) WEARING SURFACE: 4 - Poor Condition	(61) CHANNEL/CHANNEL PROTECTION: 5 - Bank eroded.. major damage
(59) SUPERSTRUCTURE: 3 - Serious Condition (primary structure affected)	(62) CULVERTS: N - Not Applicable

CONDITION COMMENTS

(58) DECK: 4 - Poor Condition (advanced deterioration)
 Comments:
 There are many transverse cracks in all spans at approximately 5' apart. Most of cracks of previously reported cracks have been patched.

(58.01) WEARING SURFACE: 4 - Poor Condition
 Comments:
 (Monolithic) See the deck comments above

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

(59) SUPERSTRUCTURE: 3 - Serious Condition (primary structure affected)

Comments:
 All truss members have various degrees of corrosion. Many members have section loss. See the attachments for more details.

(60) SUBSTRUCTURE: 4 - Poor Condition (advanced deterioration)

Comments:
 There are wide cracks and abrasion at end bents. There is a wide gap between bent 4 and the south wingwall.

(61) CHANNEL/CHANNEL PROTECTION 5 - Bank eroded.. major damage

Comments:
 The channel flows from north to south. The river banks are protected with riprap and trees. There is an island at pier 3 with moderate bank erosion along both banks.

(62) CULVERTS: N - Not Applicable

Comments:

LOAD RATING AND POSTING

(31) DESIGN LOAD:	4 - H 20	(66) INVENTORY RATING:	12.67
(70) BRIDGE POSTING	0 - More than 39.9% below legal loads (0 tons)	(65) INVENTORY RATING METHOD:	1 - Load Factor (LF)
(41) STRUCTURE OPEN/POSTED/CLOSED:	P - Posted for Load	(66B) INVENTORY RATING (H):	
(64) OPERATING RATING:	21.132	(66C) TONS POSTED :	12
(63) OPERATING RATING METHOD:	1 - Load Factor (LF)	(66D) DATE POSTED/CLOSED:	11-DEC-13

APPRAISAL

SUFFICIENCY RATING:	5.5	(36) TRAFFIC SAFETY FEATURE:	
STATUS:	1	36A) BRIDGE RAILINGS:	0
(67) STRUCTURAL EVALUATION:	3	36B) TRANSITIONS:	0
(68) DECK GEOMETRY:	2	36C) APPROACH GUARDRAIL:	0
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL:	N	36D) APPROACH GUARDRAIL ENDS:	1

(71) WATERWAY ADEQUACY: 6 - Occasional Overtopping of Approaches - Insignificant Delays

Comments:
 Bridge is built above floodplain, level with north/west approach road, however south approach road is at lower level in flood plain area.

(72) APPROACH ROADWAY ALIGNMENT: 3 - Basically intolerable requiring high priority of corrective action

Comments:
 There are traffic lights at both ends of bridge requiring traffic to stop in case of oncoming traffic. Additional 12 tons load limits have been posted along SR 225 to deter heavy loading on bridge, however the sensors have recorded excessive loading ever since.
 There is a 10 mph speed limit on this bridge put in place with regards to the load rating. There is also poor sight distance at both ends of the bridge .

Inspector: Matthew Ference
 Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
 Facility Carried: SR 225

Bridge Inspection Report

(113) SCOUR CRITICAL BRIDGES: **7 - Countermeasures installed to correct scour problem**

Comments:

The Steel Sheet Piling Cofferdams placed with previous rehab project to countermeasure scouring around Piers 2 and 4. This bridge is now considered as LOW Risk for scouring previous Underwater Inspection reported no scour-related deficiencies.

CLASSIFICATION

(20) TOLL:	3 - On Free Road	(21) MAINT. RESPONSIBILITY:	01 - State Highway Agency
(22) OWNER:	01 - State Highway Agency	(26) FUNCTIONAL CLASS OF INVENTORY RTE:	07 - Rural - Major Collector
(37) HISTORICAL SIGNIFICANCE:	2 - Eligible for National Register	(100) STRAHNET HIGHWAY:	Not a STRAHNET route
(101) PARALLEL STRUCTURE:	N - No parallel structure	(102) DIRECTION OF TRAFFIC:	One lane bridge for 2-way traffic
(103) TEMPORARY STRUCTURE:		(104) HIGHWAY SYSTEM OF INVENTORY ROUTE:	0 - Structure/Route is NOT on NHS
(105) FEDERAL LANDS HIGHWAYS:	0-Not Applicable	(110) DESIGNATED NATIONAL NETWORK:	Inventory route not on network
(112) NBIS BRIDGE LENGTH:	Yes		

NAVIGATION DATA

(38) NAVIGATION CONTROL:	0 - No navigation control on waterway (bridge permit not required)	(39) NAVIGATION VERTICAL CLEAR:	000.0 FT
(111) PIER OR ABUTMENT PROTECTION:		(116) MINIMUM NAVIGATION VERT. CLEARANCE, VERT. LIFT BRIDGE:	FT
		(40) NAV HORIZONTAL CLEARANCE:	0000.0 FT

PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK:		(95) ROADWAY IMPROVEMENT COST:	\$ 000000
(75B) WORK DONE BY:		(96) TOTAL PROJECT COST:	\$ 000000
(76) LENGTH OF IMPROVEMENT:	000000. FT	(97) YR OF IMPROVEMENT COST EST:	
	0	(114) FUTURE AVG DAILY TRAFFIC:	001594
(94) BRIDGE IMPROVEMENT COST:	\$ 000000	(115) YR OF FUTURE ADT:	2033

Inspector: Ference, Matthew
Inspection Date: 05/23/2022

Structure Number: 029150
Facility Carried: SR 225

Bridge Inspection Report

Miscellaneous Asset Data
Asset Management

029150

Load Rating 2:

Has the dead load or the structural condition of the primary load carrying members changed since the last inspection? No

Extended Frequency:

Submittal Date:

Inspector:

INDOT Reviewer:

This bridge has been accepted into the Extended Frequency Program.

Approval Date:

Joints: * Indicate location, type, and rating of lowest rated joint.

Transverse North/East B 6

Comments:

All of the joints are partially filled with debris.

Terminal Joints: *Rating of lowest rated terminal joint. N

Comments:

Concrete Slopewall: *Rating of lowest rated slopewall. N

Comments:

Bearings: * Indicate type, and rating of lowest rated bearing.

1 - Steel 5

Comments:

All of the steel bearings have corrosion with minor to moderate section loss. The elastomeric pads over Piers 2 and 4 were reset by maintenance since the previous inspection.

Inspector: Ference,Matthew
Inspection Date: 05/23/2022

Structure Number: 029150
Facility Carried: SR 225

Bridge Inspection Report

Approach Slabs: * Indicate if present & condition rating.

1 - Approach Slabs 6 - Satisfactory condition, mild crack, wide spacing

Comments:

Both approach slabs have a few small spalls and patches.

Paint: * Indicate if paint present , year painted & condition rating.

1 - Steel Beams 5 - Fair Condition – 2002
areas of light rust
and minor peeling

Comments:

All truss members have missing paint/corrosion along the connections along with widespread fading/dulling of the paint. The steel pins at the ends of the trusses were painted in May of 2000. The rest of the bridge was painted light blue in 2002 under Contract B-26086.

Endangered Species: * If yes, add one photo to the dropdown field

Bats: seen or heard under structure? * N

Birds/swallows/nests seen? Empty nests present? * Y

BRIDGE Culvert Geometry:

Barrel Length:

Height:

Width:

Inspector: Ference, Matthew
Inspection Date: 05/23/2022

Structure Number: 029150
Facility Carried: SR 225

Bridge Inspection Report

NBI Data come from National Inventory

NBI 113: Scour Critical Bridges 7

NBI 113a Scour Critical Bridges Comments

The Steel Sheet Piling Cofferdams placed with previous rehab project to countermeasure scouring around Piers 2 and 4. This bridge is now considered as LOW Risk for scouring previous Underwater Inspection reported no scour-related deficiencies.

To Be Completed by Hydraulics

Scour Analysis Status 1-Scour Analysis on file

Scour Analysis Date 03/15/2022

Scour Analysis Determination 2 – Scour Analysis complete, bridge IS hydraulically scour critical by analysis

Hydraulics Comments

To Be Completed by Bridge Inspection

Scour Critical Safety Status

Date of Counter Measure Placed or Field Verified

Bridge Inspector Comments

Scour Delineators installed

LOAD RATING - BRADIN

Load Rating Date: 31-MAR-20

National Bridge Inventory (NBI):

(65) INVENTORY RATING METHOD:	1	(31) DESIGN LOAD:	4
(66) INVENTORY RATING:	12.67	(70) BRIDGE POSTING:	0
(63) OPERATING RATING METHOD:	1	(41) STRUCTURE OPEN/POSTED/CLOSED:	P
(64) OPERATING RATING:	21.132	(66C) TONS POSTED:	12
		(66D) DATE POSTED/CLOSED:	11-DEC-13

Posting Configurations:

Emergency Vehicles:

EV2: LEGAL RF:	0.666
EV3: LEGAL RF:	0.45

5-Axles:

AASHTO TYPE 3S2: LEGAL RF:			0.699
SU5: LEGAL RF:			0.624
TOLL ROAD LOADING NO. 1: ROUTINE PERMIT RF:			

2-Axles:

H20-44: LEGAL RF:	0.701
ALTERNATE MILITARY: LEGAL RF:	0.661

6+-Axles:

AASHTO TYPE 3-3: LEGAL RF:			0.689
LANE TYPE: LEGAL RF:			

3-Axles:

HS20: LEGAL RF:	0.587
AASHTO TYPE 3: LEGAL RF:	0.791

SU6: LEGAL RF:			0.566
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4-Axles:

SU4: LEGAL RF:	0.676
TOLL ROAD LOADING NO. 2: ROUTINE PERMIT RF:	

SPECIAL TOLL ROAD TRUCK: ROUTINE PERMIT RF:			
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SU7: LEGAL RF:			0.528
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MICHIGAN TRAIN TRUCK NO. 5: ROUTINE PERMIT RF:

MICHIGAN TRAIN TRUCK NO. 8: ROUTINE PERMIT RF:

Other Configurations:

H20-44: DESIGN RF:	0.42
NRL: LEGAL RF:	0.493

SUPERLOAD-11 AXLES: SPECIAL PERMIT RF:			0.376
--	--	--	-------

SUPERLOAD-13 AXLES: SPECIAL PERMIT RF:			0.387
--	--	--	-------

SUPERLOAD-14 AXLES: SPECIAL PERMIT RF:			0.267
--	--	--	-------

SUPERLOAD-19 AXLES (152.5T): SPECIAL PERMIT RF:			0.325
---	--	--	-------

SUPERLOAD-19 AXLES (240.045T): SPECIAL PERMIT RF:			0.237
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Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

Date Reported: 10/20/2021
Priority: Green - 3
Work Code: Channel Debris Removal

Deficiency Description:

There is a buildup of tree debris at the Piers 2 and 4 and in the channel section. This issue was reported in 2017.

Work Description:

Date Repairs Completed:**Maintenance Comments:**

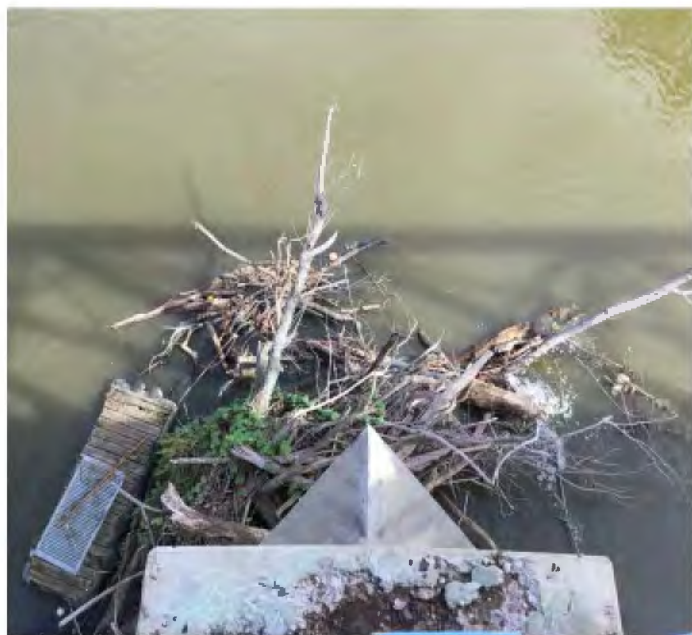
Stage: Open

PHOTO 1 Description Log jam on east side of pier 2

Stage: Open

PHOTO 2 Description Look north at east side of Pier 2 log jam

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

Stage: Open



PHOTO 3 Description Looking north at Pier 4

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

Date Reported: 10/20/2021
Priority: Green - 3
Work Code: Deck Patch

Deficiency Description:

There are cracks and spalling in deck at all spans. This issue was reported in 2019.

Work Description:

Date Repairs Completed:**Maintenance Comments:**

Stage: Open

PHOTO 1 Description Span A with patching and spalling

Stage: Open

PHOTO 2 Description Span A with delamination and exposed rebar

Bridge Inspection Report

Stage: Open



PHOTO 3 Description West end of Span B with more patching and cracks

Stage: Open



PHOTO 5 Description Spalling at mid span D

Stage: Open



PHOTO 4 Description Span C with many spallings

Stage: Open



PHOTO 6 Description Span D wide width transverse cracks at 5 feet apart

Inspector: Matthew Ference
Inspection Date: 05/23/2022

Asset Name: 225-79-04016 G
Facility Carried: SR 225

Bridge Inspection Report

Stage: Open



PHOTO 7 Description Spalling at north end of span D

CRITICAL FINDING

029150

Data Entry By: **Matt Ference** Entry Date: 05/23/2022 Team Leader Reporting: Ference, Mathew
 Team Leader Number: IN000237-2023-ATL-F- Structure #: 225-79-04016 G NBI 029150
 Facility Carried: SR 225 Feature Intersected: WABASH RIVER
 Location 00.60 N OLD SR 25 County: 079
 Critical Finding Type Urgent-Action Completed / 3 days Date of Finding: 05/23/2022
 Notification of SPM Date: 05/23/2022 Notification of Owner Date: 05/23/2022

Description of Issue: A crack was identified in 2 different fracture critical members.

- 1.) Fracture Critical Member U1L1 (Upstream Truss, Span B): 1" long crack located on the east interior angle flange, 4.5" from the bottom of the vertical
- 2.) Fracture Critical Member U7L7 (Upstream Truss, Span B): 0.25" long crack located on the east interior angle flange, 20" from the bottom of the vertical

Team Leader Recommended Actions:

The recommendation is to close the bridge until the truss members are repaired.

Recommended Date of Action: 05/23/2022

I have attached () photos to this document. 6+

Safety Action Taken Lafayette Unit Foreman Scott Krintz and staff have closed the bridge to traffic with road closure barriers. Once the Fracture Critical Inspection is complete (next 2 days) more permanent barriers will be placed at both ends of the bridge.
 (By Whom/When)

The permanent concrete barriers were placed at both ends of the bridge late afternoon on May 24th by the Lafayette Maintenance Unit Personnel. Additional Road Closure Signage was placed in both directions along the SR 225 Route leading to the bridge on May 25th by Crawfordsville Traffic Personnel.

Critical Finding Addressed 05/23/2022

Safety Action Closeout 5/27: Received text message on 5/26 from inspector confirming that the maintenance unit finished placing all the closure barricades and advanced notification signage. Photographs uploaded confirming that the bridge has been closed to all vehicular traffic. Initial critical finding notification closed. [Anthony Marino, SPM].

Must submit to State Program Manager through WorkFlow.

Date Closed by State Program Manager in BIAS: 05/27/2022 Estimated Final Resolution Date 05/25/2022

Final Resolution Taken

5/27: Bridge closed to all traffic; barriers and advance warning signage placed. Bridge also has cameras and sensors placed, so INDOT will know if these barriers are removed in an unauthorized manner. INDOT Asset Management will now begin evaluating options for this historic and select bridge. Critical finding incident fully closed out. [Anthony Marino, SPM].

Final Resolution Date 05/26/2022



File Description US Span B,
U1L1, 1" crack
in interior
flange, 4.5"
from bottom of
vertical pic 1

File Type Category Critical Finding



File Description US Span B,
U1L1, 1" crack
in interior
flange, 4.5"
from bottom of
vertical pic 2

File Type Category Critical Finding



File Description US Span B,
U1L1, 1" crack
in interior
flange, 4.5"
from bottom of
vertical pic 3

File Type Category Critical Finding



File Description US Span B,
U1L1, 1" crack
in interior
flange, 4.5"
from bottom of
vertical pic 4

File Type Category Critical Finding



File Description US Span B, U7L7, 0.25" crack in interior angle flange, 20" from the bottom of the vertical pic 1

File Type Category Critical Finding



File Description US Span B, U7L7, 0.25" crack in interior angle flange, 20" from the bottom of the vertical pic 2

File Type Category Critical Finding



File Description Road Closure Signage in Prophets Town

File Type Category CF Closeout



File Description Road Closure Signage northwest of the bridge

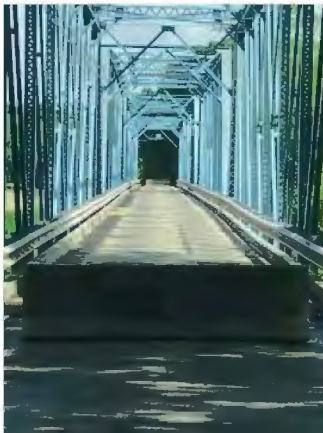
File Type Category CF Closeout



File Description Road closure
 File Type Category Condition, Critical Finding



File Description Concrete Barrier at the northwest end of the bridge pic 1
 File Type Category CF Closeout



File Description Concrete Barrier at the northwest end of the bridge pic 2
 File Type Category CF Closeout



File Description Road Closure Signage at Old SR 25 and SR 225
 File Type Category CF Closeout



File Description Road Closure Signage at SR 43 and SR 225

File Type Category CF Closeout



File Description Road Closure Signage between Prophets Town and the northwest end of the bridge pic 1

File Type Category CF Closeout



File Description Road Closure Signage between Prophets Town and the northwest end of the bridge pic 2

File Type Category CF Closeout



File Description Road Closure Signage in between Prophets Town and the northwest end of the bridge pic 3

File Type Category CF Closeout

File Type Category CF Closeout



File Description Road Closure Signage in Prophets Town pic 3

File Type Category CF Closeout

This bridge was evaluated by personnel from the Indiana Department of Transportation (INDOT) Bridge Design Unit, the District Office and the designer. The attached Draft Historic Bridge Alternatives Analysis has been reviewed by the INDOT Bridge Design Unit and Cultural Resources Office for thoroughness of the rehabilitation option and compliance with INDOT design policies. Concurrence by INDOT with the proposed Scope of Work does not constitute Final Approval of the Historic Bridge Alternatives Analysis. This draft HBAA may now be distributed to the historic consulting parties for review.



ALTERNATIVES ANALYSIS REPORT

SR 225 OVER THE WABASH RIVER

BRIDGE FILE #:225-79-04016-G

NBI NO.: 029150

DESIGNATION #: 2002077



PREPARED FOR:

PREPARED BY: BEAM, LONGEST & NEFF

THE INDIANA DEPARTMENT OF TRANSPORTATION

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HISTORIC BRIDGE ALTERNATIVES ANALYSIS
BRIDGE NO. 225-79-04016-G (NATIONAL BRIDGE INVENTORY NO. 029150)
SR 225 OVER THE WABASH RIVER
TIPPECANOE COUNTY, INDIANA
DES. NO. 2002077

I. EXISTING STRUCTURE DATA

A. Identification/History

Bridge No.: 225-79-04016-G

Project Location: SR 225 over the Wabash River

Des. No.: 2002077

Year Built: 1912

Year Repaired: 1954, 1977, 1988, 1993, 1995, 1997, 2002, 2003 & 2014

Most Recent Field Inspection Date: INDOT inspected on 10/29/2019

Average Daily Traffic (ADT)/Year of ADT: 1,184 vpd /2018

Percentage of Commercial Vehicles: 19 %

Low Volume Road: No

Functional Classification: Rural Major Collector

Detour Length: Approximately 10 miles

Load Rating: 12 Ton H Inventory Rating

Sufficiency Rating: 10.4

National Register of Historic Places (NRHP) Status: Eligible

Historic Bridge Prioritization Status: Select

Historic Character-Defining Features:

Bridge was built during the initial period of development or application of standards for its type in Indiana. As such, it represents an important phase in construction. The bridge displays exceptional overall or main span length for its type representing an innovative design and/or construction method. The bridge represents an early use of riveting or bolting as an initial application of a new metal bridge construction technique. The bridge also exhibits the important contributions made by an accomplished Indiana builder, Lafayette Engineering Company, and displays distinctive engineering and/or aesthetic characteristics.

B. Structure/Dimensions

MAIN SPANS

Surface Type: Variable depth (5 1/8 in. to 6 1/2 in.) Reinforced Concrete Deck.

Out to Out of Copings: 15 ft. 11 in.

Out to Out of Bridge Floor: 646 ft.

Clear Roadway Width: 14 ft. 5 in.

Number of Lanes on Structure: 1.

Skew: 0 degrees.

Type of Superstructure: Steel Pratt Truss.

Spans: 4 spans @ 158 ft.

Type of Substructure/Foundation: Jointed concrete abutments on piles and concrete piers on piles.

Seismic Zone: Preliminary investigation, Seismic Design Category A.

APPROACH SPANS

N/A

C. Appurtenances

Bridge Railing: Not original to structure, W-Beam Steel Guardrail with curb.

Curbs: 9" wide x 8" tall concrete curb.

Sidewalks: N/A.

Utilities: Traffic signal wires attached to upstream truss.

Railroad: N/A

D. Approaches

Roadway Width: 24 ft. (2 - 12 ft. travel lanes with 2 ft. aggregate shoulders).

Surface Type: Asphalt.

Guardrail: W-beam at all four corners

Guardrail Transition: Guardrail Class HS.

II. EXISTING CONDITIONS

Photos detailing the existing conditions are included in Appendix B.

A. Bridge Deck

General: The deck currently has a 6 (out of 9; Satisfactory) overall condition rating. The existing deck was built to 1.5% cross-slope.

Surface Condition: The wearing surface currently has a 5 (out of 9; Fair) overall condition rating.

Deficiencies: The deck has cracking, spalling and the presence of previous patching. From sounding the deck, the following areas of delamination were determined:

- Span A – 380 sft (17%)
- Span B – 230 sft (11%)
- Span C – 230 sft (10%)
- Span D – 270 sft (12%)

Underside Condition: There are areas of map and transverse cracking with efflorescence, delaminations, and spalling. A small number of full depth and partial depth patches were noted.

Drainage: Each span has four drains per coping; eight total drains per span. The drains were originally installed with the 1954 bridge deck and were cleaned, painted and re-installed with the 1988 bridge deck replacement.

Bridge Railing: The existing bridge railing is w-beam railing attached to posts which are attached to the side of the exterior stringers and concrete curb. The bridge railing was installed as part of the 1988 rehabilitation project. Prior to the current configuration, lattice railing attached to the truss members was in place from the 1912 until 1977. In 1977, the lattice railing was replaced by aluminum railing attached to the truss members. The railing was attached to the truss members until the 1988 rehabilitation. It was noted that 7 members in Span A, 8 members in Span B, 5 members in Span C and 7 members in Span D have evidence of impact damage. This is most likely the result of having the railing directly attached to the truss members prior to the 1988 rehabilitation. There is no documentation regarding whether the members themselves were impacted by the vehicle, or if the railing was impacted and the load was distributed to the member, causing damage. As part of the 1988 rehabilitation, the railing was attached to the concrete deck and stringers. The attachment to the deck allows the majority of the impact load to be transferred to the deck, which prevents the damage of the steel truss members.

Sidewalks: There is no sidewalk over the bridge or leading up to the bridge

Median: There is no median over the bridge or leading up to the bridge.

B. Superstructure

MAIN SPANS

General: The steel Pratt thru truss has a 4 (out of 9; poor) overall condition rating.

Repair/Maintenance Work: The bridge was rehabilitated in the following years:

- 1954 – A new bridge deck was constructed and shear studs were added to the stringers to make the deck composite. New floor beam bearings were installed at Pier 3 and concrete pedestals were constructed for the floor beams at Piers 2 and 4.

1977 – The existing metal railing was removed and new aluminum railing was installed

1988 – The stringers and end floor beams were replaced and painted. The bridge seats at all substructure units were reconstructed and the lower portions of the truss were painted.

1993 – The bridge railing was repaired and the damaged diagonal A-US L2-U1 and damaged vertical C-US L2-U2 were replaced.

1997 – The damaged diagonal A-DS L3-U2 was replaced.

2002 – The truss was painted

2003 – Lower chord repair members for A-US and A-DS L0-L1 were installed.

2014 – The damaged diagonal A-DS L4-U3 and damaged vertical C-DS L7-U7 were repaired

Deficiencies: The amount of surface rust, expansion rust and section loss varies from member to member; however, there are specific locations that had regular deterioration which has/will affect the load capacity of the bridge:

- a. Gusset Plate at Vertical Members – At the vertical interface of the gusset plate and the vertical members, advanced expansion rust and section loss is present along either part or all of the length of the interface. The section loss for a “block shear” failure plane was estimated as being up to 25% (B-US L3).
- b. Gusset Plate at Diagonal Members – At the interface of the gusset plate and the diagonal members, advanced expansion rust and section loss is between the gusset plate and diagonals. The section loss of the gusset plates at these diagonal member connections was estimated as being up to 50% (B-DS L5).
- c. Diagonal Members at Gusset Plate – Similar to the deficiency noted regarding the gusset plates at the diagonal members, the diagonal members themselves have significant section loss. The section loss of the diagonal members was estimated as being up to 25% (B-US L5U6) of the entire diagonal member.
- d. Vertical Member at Gusset Plate along connection length – Similar to the deficiency noted regarding the gusset plates at the vertical members, the vertical members themselves have significant section loss along their length where they are in contact with the gusset plate. The section loss of the vertical members was estimated as being up to 16% (B-DS L3) of the vertical member.
- e. Vertical Member above Floorbeam/Gusset Plate Connection – At the top of the Floorbeam/Gusset Plate interface with the vertical, advanced expansion rust and section loss is present along one leg of the angles. The deterioration is more pronounced on the interior angles, but section loss is also present in the exterior angles. The section loss of the vertical members was estimated as being up to 15% (B-US L4-U4, D-US L5-U5, B-DS L4-U4 & B-DS L5-U5) of the vertical member. Due to the location of this deterioration, it is coupled with the deterioration of the vertical member at the bottom of lattice; typically creating a “worst-case” section loss location.
- f. Vertical Member at bottom of lattice – At the interface between the lattice and the floor beam connection plate, expansion rust is present in the between the legs of the angles of the vertical members. This is causing section loss of the vertical member and severe section loss of the lattice. The section loss of the vertical members was estimated as being up to 12.5% (B-US L4-U4). Due to the location of this deterioration, it is coupled with the deterioration of the vertical member above the floorbeam/gusset plate connection; typically creating a “worst-case” section loss location.

Cracks were noted in:

- a. Diagonal A-DS L4-U3 at A-DS L4
- b. Vertical D-US L7-U7 at D-US U7
- c. Lateral Bracing D-DS L3 to D-US L2 at D-DS L3

Using data provided by INDOT, BLN performed a preliminary load rating and analyzed the current capacity of the bridge. Based on the amount of traffic over the bridge and the Functional Classification of the Roadway (Rural Collector), the required live load is an HS-15 loading. Combining the noted deterioration with the load rating data, the number of members which do not meet the HS-15 loading was determined and is summarized in Table 1. These members do not have sufficient capacity, either due to being undersized or due to deterioration.

Table 1A – Presumed Original Members not meeting HS-15 Capacity

Member	Symmetric Member	Total No. of Members	No. of Members with less than HS-15 Capacity in Current Condition	No. of Additional Members with less than HS-15 capacity with Future Minor Section Loss	
Int. Floorbeam		28	28	0	*
L0-L1	L7-L8	16	1	0	***
L1-L2	L6-L7	16	0	0	
L2-L3	L5-L6	16	0	0	
L3-L4	L4-L5	16	0	0	
L0-U1	L8-U7	16	0	0	
U1-U2	U6-U7	16	0	0	
U2-U3	U5-U6	16	0	0	
U3-U4	U4-U5	16	0	0	
L1-U1	L7-U7	16	0	0	
L2-U2	L6-U6	16	16	0	*
L3-U3	L5-U5	16	0	0	
L4-U4	N/A	8	0	0	
L2-U1	L6-U7	16	12	4	**
L3-U2	L5-U6	16	16	0	**
L3-U4	L5-U4	16	0	0	
L4-U3	L4-U5	16	16	0	*
	Total	276	89	4	

Table 1B – Members from 1988 Rehabilitation not meeting HS-15 Capacity

Member	Symmetric Member	Total No. of Members	No. of Members with less than HS-15 Capacity in Current Condition	No. of Additional Members with less than HS-15 capacity with Future Minor Section Loss	
Ext. Stringer		64	64	0	*
Int. Stringer		128	0	128	**
End Floorbeam		8	8	0	*
	Total	200	72	128	

- * Undersized member which would not have HS-15 capacity with no section loss (pristine condition).
- ** Undersized members which would not have HS-15 capacity with minor (less than 10%) section loss.
- *** Adequately Sized Members with deterioration that limits load capacity

A total of 89 presumed original members have insufficient capacity in their current condition to meet the HS-15 loading. However, many of the members would not have enough capacity even in their pristine condition. Their “pristine” condition is meant to describe the member with no section loss. These members were not designed for an HS-15 or greater loading. At the time of the design, 1912, the weight demands of the travelling public were significantly less than what is required by recent design loadings, such as an HS-15 loading. An additional four truss members and 128 interior stringers have HS-15 capacity in the pristine condition, but minor section loss would result in the member having less than HS-15 capacity. Minor section loss is considered less than 10% section. At 10% section loss, the condition rating of the member transitions from Satisfactory to Fair. Due to the age of the truss, it is assumed that all members have some form of section loss, which may not be visible due to the existing paint.

Fracture-Critical Members: This structure is fracture critical and has details that have lower fatigue resistance which should be highlighted during inspections. A fracture critical structure has steel members that are in tension and whose failure would probably cause a portion of or the entire bridge to collapse. Fatigue is the initiation and/or

propagation of a crack by the repeated variation of normal stress in a tension member. This structure has many fatigue details that are category D due to the connections being riveted. Some members were noted as being repaired with bolts. Member C-US L5U6 was repaired with low quality welds at L5, which result in a Category E' fatigue detail.

Bearings/Pedestals: The bearings are rated in Fair condition (5 out of 9). However, the bearings at Abutment No. 1 are in poor condition (see the photos in Appendix D).

Damage: Due to the bridge having railing being mounted to the end posts and vertical members until the 1988 rehabilitation, the following members have evidence of impact damage (See Appendix B for diagrams):

- a. End Post A-US L0-U1
- b. Vertical A-US L1-U1
- c. Vertical A-DS L1-U1
- d. Vertical A-DS L3-U3
- e. Vertical A-DS L5-U5
- f. Vertical A-DS L7-U7
- g. End Post A-DS L8-U7
- h. End Post B-US L0-U1
- i. Vertical B-US L4-U4
- j. Vertical B-US L5-U5
- k. Vertical B-US L7-U7
- l. End Post B-DS L0-U1
- m. Vertical B-DS L5-U5
- n. Vertical B-DS L7-U7
- o. End Post B-DS L8-U7
- p. End Post C-US L0-U1
- q. End Post C-US L8-U7
- r. End Post C-DS L0-U1
- s. Vertical C-DS L6-U6
- t. End Post C-DS L8-U7
- u. End Post D-US L0-U1
- v. End Post D-US L8-U7
- w. End Post D-DS L0-U1
- x. Vertical D-DS L2-U2
- y. Vertical D-DS L4-U4
- z. Vertical D-DS L7-U7
- aa. End Post D-DS L8-U7

APPROACH SPANS – N/A

C. Substructure and Foundations

General: The substructure has an overall condition rating of 5 (out of 9; fair). The abutments are full-faced abutments on timber piles (assumed) foundations. The piers are wall piers on timber pile (assumed) foundations.

Repair/Maintenance Work: As part of the 1988 rehabilitation, sheet piling was installed around the existing piers and the pier noses were reconstructed. The space between the sheet piling and pier was backfilled with Class A Concrete. In 1988 the bridge seats of the piers and abutments were reconstructed and the tops of the wingwalls were reconstructed.

Deficiencies: Abutment No. 1 has a large vertical crack at the southwest corner but is in otherwise satisfactory condition. Abutment No. 5 has a large crack at the northwest corner and varying levels of weathering of the original portion of the abutments. The piers have map cracking with some leaching. There is a large amount of debris against Pier No. 4.

Drainage: There are no weep drains through the substructure units. There are no riprap turnouts at the bridge corners.

Scour: There is no scour noted.

D. Approaches

General: The approaches are mostly straight except there are horizontal angular breaks on each end of the bridge. The bridge appears to be built level with hills on both ends of the bridge; both of which sloping up to the west.

Approach Pavement: Approach slabs, constructed in 1988, are present on both ends of the bridge. The approach pavement is in fair condition with cracking and rutting. The east approach has more cracking and rutting than the west approach.

Guardrail: W-beam guardrail is at all four corners of the bridge. The guardrail was installed as part of the 1988 rehabilitation. 219' of guardrail was installed in the northwest, northeast and southeast quadrants. 284' was installed in the southwest quadrant. All four quadrants have Guardrail End Treatments, Type 1 at the ends.

Drives and Public Roads: A drive is located in the northwest quadrant near the bridge. Away from the bridge, there is a field entrance approximately 350' east of the end of the bridge and the intersection of SR 225 and Huston Road is located approximately 700' west of the end of the bridge.

Miscellaneous: The existing roadway is posted 50 mph. However, the roadway is only posted from the west approach. At the bridge, the roadway is posted for 10 mph. In addition, there are traffic signals at each end of the bridge to regulate the traffic over the one lane bridge

E. Slopewalls

General: The channel has an overall condition rating of 6 (out of 9; fair).

Deficiencies: There is some bank slumping and widespread minor damage. The river flows to the south at a 0 degree skew to the bridge. Riprap is present in front of both abutments and there is no sign of scour.

III. PURPOSE AND NEED

A. Background

This bridge carries SR 225 over the Wabash River in Tippecanoe County. The bridge is located in Sections 25 and Brummett's Reserve Section 6, Township 24 North and Range 4 West on the 7.5 minute Lafayette East, Indiana USGS quadrangle map. The Wabash River flows from northeast to southwest under the bridge. For the purpose of this report and the attached exhibits, it was assumed that SR 225 is an east-west road and that the Wabash River flows north-south. The Wabash River is considered a navigable waterway and is listed on the Indiana Department of Natural Resources (IDNR) Listing of Outstanding Rivers and Streams.

Bridge No. 225-79-04016-G consists of a four-span, steel Pratt truss with a concrete deck built in 1912 and rehabilitated in 1954, 1977, 1988, 1993, 1995, 1997, 2002, 2003 and 2014. The bridge is 646 ft 0 in. in length and the deck is 15 ft. 11 in. wide and provides a 14 ft. 5 in. clear roadway width. The existing w-beam guardrail railing is not original to the structure.

According to the Indiana Historic Bridge Inventory, Bridge No. 225-79-04016-G is listed as eligible for inclusion in the National Register of Historic Places (NRHP) under Criterion C for the following reasons:

- This bridge was built during the initial period of development or application of standards for its type in Indiana. As such, it represents an important phase in construction.
- This bridge displays exceptional overall or main span length for its type representing an innovative design and/or construction method. This bridge is the longest extant riveted Pratt structure in Indiana.
- Early use of riveting or bolting represents the initial application of a new metal bridge construction technique.
- This bridge exhibits the important contributions made by an accomplished Indiana builder, Lafayette Engineering Company, and displays distinctive engineering and/or aesthetic characteristics.

In the 2009 Mead and Hunt Indiana Historic Bridge Inventory, it also lists this bridge as eligible under Criterion C for the following reason "Metal substructures and caissons, often patented structural elements, provide an important construction feature within this bridge type". However, no metal substructure is present.

B. Need

The most recent inspection and Bridge Inspection Report indicates there are structural deficiencies that need to be addressed. The deficiencies include:

- The existing bridge deck has cracking, leaching and spalling with up to 17% delamination per span.
- There is widespread deterioration of the truss members and gusset plates, which is worsened by exposure to roadway runoff. The existing curbs do not protect the truss members from all roadway runoff.
- 161 of the truss and superstructure members do not have a load capacity that meets the Indiana Design Manual (IDM) requirement for load capacity. This results in the bridge having substandard load capacity. See Table 1A and 1B for a breakdown of the member locations. Several members are undersized due to the loads in which they were originally designed for and other members have deteriorated which has reduced their capacity. Due to this, the bridge is posted for a low load capacity (12 tons).
- Abutment No. 1 and Abutment No. 5 have cracking and weathering. If this deterioration continues to worsen, it could jeopardize the structural integrity of the abutments.

C. Purpose

The purpose of this project is to improve portions of the bridge as required to increase the load capacity of the bridge to meet an HS-15 loading and to protect the members that are at risk of future deterioration. The goals of the project will be met by:

- Addressing the bridge deck cracking, leaching and spalling.
- Protecting the truss elements from roadway runoff and other environmental elements.
- Improving the superstructure members to provide a HS-15 load capacity for the bridge.
- Addressing the abutment deterioration to prevent further deterioration, which could compromise the structural integrity of the bridge.

IV. ALTERNATIVES

The alternatives described in this document are based on the guidance for a writing historic bridge Section 4(f) alternatives analysis produced by INDOT, Cultural Resource Office and finalized on December 14, 2012. Per the guidance, alternatives A through F must be analyzed in consecutive order until a feasible and prudent alternative has been determined. Once a feasible and prudent alternative has been determined, the remaining alternatives do not need to be discussed. A feasible alternative is one that is possible to engineer, design, and build. A prudent alternative is one that does not present significantly unique or unusual factors (e.g. cost; social, economic, or environmental impacts; community disruption).

A. The No-Build/Do-Nothing Alternative

The No-Build/Do-Nothing Alternative was considered as a possible solution for the proposed project. This alternative proposed utilization of the existing facilities with no expenditure of capital funds or improvement of the roadway. The No-Build/Do-Nothing Alternative would not address the overall purpose of the project. If the No-Build/Do-Nothing Alternative would be selected, deterioration of the bridge deck and superstructure would continue and weight restrictions would eventually be placed on the bridge until it becomes impassable in approximately 15 years. Vehicles would then have to use the closest detour route (I-65) which would add approximately 10 miles to a through trip causing additional user cost and travel time. State Road 225 currently has an ADT of 1,184 vpd. Increasing the travel route would have a negative impact to the traveling public. Although this alternative is feasible, it is not prudent to allow the bridge to deteriorate until it is impassable causing a significant community disruption and additional user cost and travel time.

B. B.1 Rehabilitation of the Existing Bridge for Continued Vehicular Use (Two-Way Option) Meeting Secretary of Interior’s Standards (SOIS) for Rehabilitation

The Secretary of the Interior (DOI) defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values” (<https://www.nps.gov/tps/standards/four-treatments/treatment-rehabilitation.htm>). The Standards for rehabilitation follow the Department of Interior regulations 36 CFR 67, which defines rehabilitation as “the process of returning a building (structure) to a state of utility, through repair or alteration, which makes possible an efficient use while preserving those portions and features of the structure and its site and environment which are significant to its historic, architectural, and cultural values as determined by the Secretary”.

This alternative includes the rehabilitation of the existing bridge to current INDOT and FHWA criteria for structural capacity and safety features. The bridge clear roadway width will not be improved with this alternative. Although the existing bridge is a one-lane bridge, which is considered sub-standard according to IDM 412-2B, it is acceptable to allow the bridge to stay as a one-lane bridge. SR 225 experiences low-to-moderate traffic. In addition, it is not possible to widen the existing historic bridge and the existing bridge has acceptable performance in its current configuration. The scope of work for the rehabilitation will include repairing or replacing superstructure elements that meet the following criteria:

- **Undersized Members** – All members that do not have a HS-15 load capacity in pristine or with less than 10% section loss will be replaced, regardless of the current condition. At 10% section loss, the condition rating of the member transitions from Satisfactory to Fair.
- **Adequately Sized Members with Deterioration that limits Load Capacity** – All members that have a HS-15 load capacity with less than 10% section loss, but the current deterioration results in less than an HS-15 load capacity will be repaired as required.
- **Adequately Sized Members with Excessive Deterioration but acceptable Load Capacity** – Any individual component of a truss member where the section loss is 20% or greater, that specific component would be repaired or replaced. Members with section loss of 25% or more are classified as Poor Condition. Therefore, even if the member has load capacity with deterioration, components with 20% or greater section loss should be repaired or replaced. The decision to repair or replace will be determined during plan development based on the extent of the deterioration. 20% was selected to give variability for deterioration obstructed by paint or expansion rust.
- **Gusset Plates with Excessive Deterioration** – Due to the complexity of Gusset Plates, any gusset plate with greater than 15% section loss at a member connection would be replaced (see page 11). The flow of stresses through a gusset plate is complex, where load capacity can diminish quickly if deterioration crosses a critical section of the gusset plate. The complicated stress paths of gusset plates warrants a lower threshold of deterioration for replacement.

In all, it is anticipated that the entire floor system be replaced. Full member replacements would be recommended for Verticals L2-U2, Verticals L6-U6, Diagonals L2-U1, Diagonals L3-U2, Diagonals L4-U3, Diagonals L4-U5, Diagonals L5-U6 and Diagonals L6-U7 due to their low load capacity in the pristine condition. Diagonals L2-U1, Diagonals L3-U2, Diagonals L5-U6 and Diagonals L6-U7 have greater than an HS-15 capacity in their pristine condition, but minor section loss (less than 10%) drops the capacity below HS-15. To account for future corrosion and existing corrosion that is hidden by the paint, it is recommended that these members be replaced with a member of the same dimensions, but with higher strength steel. Truss members have the same force throughout their length; therefore, to strengthen a truss member to be able to carry the required design force, undersized members would need to be strengthened full length. It would be more invasive to the bridge to patch repair localized sections (or full length) of a truss member with cover plates or patch plates, than to replace the member. A summary of all superstructure members to be replaced or repaired is listed in Table 2A and Table 2B.

Table 2A – Presumed Original Members requiring Replacement or Repair

Member	Symmetric Member	Total No. of Members	Full Replacement	Partial Replacement or Repair
Int. Floorbeam		28	28	0
L0-L1	L7-L8	16	0	3
L1-L2	L6-L7	16	0	1
L2-L3	L5-L6	16	0	0
L3-L4	L4-L5	16	0	0
L0-U1	L8-U7	16	0	9
U1-U2	U6-U7	16	0	0
U2-U3	U5-U6	16	0	0
U3-U4	U4-U5	16	0	0
L1-U1	L7-U7	16	0	4
L2-U2	L6-U6	16	16	0
L3-U3	L5-U5	16	0	8
L4-U4	N/A	8	0	3
L2-U1	L6-U7	16	16	0
L3-U2	L5-U6	16	16	0
L3-U4	L5-U4	16	0	5
L4-U3	L4-U5	16	16	0
	Total	276	92	33

Table 2B – Members from 1988 Rehabilitation requiring Replacement or Repair

Member	Symmetric Member	Total No. of Members	Full Replacement	Partial Replacement or Repair
Ext. Stringer		64	64	0
Int. Stringer		128	128	0
End Floorbeam		8	8	0
	Total	200	200	0

In addition to the member repair and replacement, the following gusset plates should be replaced due to greater than 15% section loss at a member connection.

- B-US L2 Interior Gusset Plate
- B-US L3 Interior Gusset Plate
- B-US L3 Exterior Gusset Plate
- B-US L5 Interior Gusset Plate
- B-US L5 Exterior Gusset Plate
- B-US L6 Interior Gusset Plate
- C-US L3 Interior Gusset Plate
- D-US L3 Interior Gusset Plate
- D-US L3 Exterior Gusset Plate
- D-US L5 Interior Gusset Plate
- D-US L6 Interior Gusset Plate
- A-DS L2 Interior Gusset Plate
- B-DS L3 Interior Gusset Plate
- B-DS L3 Exterior Gusset Plate
- B-DS L4 Interior Gusset Plate
- B-DS L5 Interior Gusset Plate
- B-DS L5 Exterior Gusset Plate
- C-DS L3 Interior Gusset Plate
- C-DS L5 Interior Gusset Plate
- C-DS L6 Interior Gusset Plate
- D-DS L3 Interior Gusset Plate

See Appendix B for a truss schematic which shows all the required truss member repairs/replacements as well as the required gusset plate replacements. Appendix B references the photos contained in Appendix C. After the floor system is replaced and the truss is repaired, the structural steel of the bridge should be cleaned and painted to protect it from deterioration. The paint color shall match the color of the existing floor system and truss.

In addition to the floor system replacement and the truss member replacement/repairs, the deck would be replaced, and new railing would be constructed. The current railing was installed in 1988 and has no historical significance. It is anticipated that PF-1 railing would be installed. However, with a 1'-0" width, the clear roadway would be reduced from 14'-5" to 14'-0". The standard railing offset would be reduced to maintain a 14'-0" clear roadway. One aspect to note is that during the bridge inspection, access to the low chord is provided by stepping on the existing curb and stepping over the existing steel railing. Installing PF-1 railing and having a minimal lip behind the railing would make access to the low chord more difficult.

Finally, patching of the substructure units would be included to repair the damaged portions of the piers and abutments while protecting them from future deterioration.

This alternative will be constructed under full closure utilizing a detour. Table 3 highlights the design criteria for this alternative.

Table 3 – Design Criteria

Design Element	Design Manual Section	Minimum Design Criteria	Existing Condition	Proposed Condition	Design Exception Required
Design Speed	Fig 55-3B	10 mph	10 mph	10 mph	No
Lane Width	Fig 55-3B	11 ft.	11 ft.	11 ft.	No
Useable Shoulder	Fig 55-3B	3 ft	1 ft. 7 ½ in.	1 ft. 6 in.	Yes
Paved Shoulder	Fig 55-3B	2 ft	1 ft. 7 ½ in.	1 ft. 6 in.	Yes
Bridge Clear Roadway	Fig 55-3B	16 ft. 4 in.	14 ft. 5 in.	14 ft.	Yes
Structural Capacity	Fig 55-3B	HS-15	< HS-15	HS 15	No
Travel Lane Cross Slope	Fig 55-3B	Existing	1.5%	2%	No
Bridge Railing Safety	IDM 404-4.0	Existing	Guardrail with Curb	PF-1	No

The estimated cost of this alternative is \$4,570,000 which is 46% of the estimated total bridge replacement cost of \$10,000,000. The breakdown of the cost is attached in Appendix D.

Based on the scope of this rehabilitation, it is anticipated the next required work to the bridge would be in 25 years, which would include joint replacement, a bridge deck overlay and cleaning and painting of the structural steel.

By replacing the deck, constructing new railing which will protect the lower truss connections, cleaning and painting the bridge, replacing and/or repairing the truss members and patching the abutments, this alternative meets the purpose and need it is a feasible alternative. This alternative is also a prudent alternative.

V. MINIMIZATION AND MITIGATION

A. Minimization

Only members undersized for the required design loadings will be replaced. Members that have adequate capacity with minimal section loss will be repaired or cleaned and painted.

Per Attachment B (Standard Treatment Approach for Historic Bridges) of the Historic Bridges PA, INDOT will provide rehabilitation plans to the Indiana SHPO when the design is approximately 30 % complete, 60 % complete, and when final design plans are complete. The 1912 original design plans and all available rehabilitation plans are provided in Appendix C. Current design plans are not yet available.

B. Bridge Marketing

The existing bridge will not be put into the bridge marketing program because INDOT will continue to maintain jurisdiction over the bridge.

C. Mitigation

Per Attachment B (Standard Treatment Approach for Historic Bridges) of the Historic Bridges PA, INDOT will consult with the Indiana SHPO to determine if any photo documentation will be necessary as a result of the preferred alternative.

VI. PRELIMINARY PREFERRED ALTERNATIVE

The preliminary preferred alternative for this project is B.1 Rehabilitation for Continued Vehicular Use (Two-way option). This will result in significantly extending the life of the bridge at under half the cost of bridge replacement (Appendix D). Therefore, this alternative is both feasible and prudent and is the preferred alternative. A comparison of project alternatives is provided in Table 4.

Table 4 – Comparison of Project Alternatives

Alternative	Meets Project Purpose and Need?	Construction Cost	Right of Way Amount & Cost	Total Cost	Other Factors	Feasible Prudent
A.-No Build	No	\$0	No R/W	\$0	N/A	Yes No
B.1- Rehabilitation for Continued Two-Way Vehicular Use, meeting the SIOS for Rehabilitation	Yes	\$4,570,000	Temporary R/W for Construction Access - \$20,000	\$4,590,000	N/A	Yes Yes

The appendices of the Alternatives Analysis have been removed to reduce the file size, but can be made available upon request.

Raquel Walker

From: Laycock, Tom <TLaycock@dnr.IN.gov>
Sent: Wednesday, December 20, 2023 10:44 AM
To: Hasselkus, Kenneth (INDOT)
Cc: Tyler Wolf; Brian Shaw; Raquel Walker
Subject: RE: DES 2002077 - SR 225 over Wabash

This Message Is From an External Sender

This message came from outside your organization.

Report Suspicious

It is part of the overall state park holdings but is behind the guardrail in the grade up to the bridge elevation so it is not really accessible to the general public.

Thomas Laycock, Director
DNR Land Acquisition Division
402 W. Washington Street, Room W255-A

Direct: 317-234-3419
Cell: 317-473-6345
tlaycock@DNR.in.gov.

From: Hasselkus, Kenneth (INDOT) <KHasselkus1@indot.IN.gov>
Sent: Wednesday, December 20, 2023 9:57 AM
To: Laycock, Tom <TLaycock@dnr.IN.gov>
Cc: Tyler Wolf <twolf@b-l-n.com>; Brian Shaw <bshaw@b-l-n.com>; Raquel Walker <rwalker@b-l-n.com>
Subject: RE: DES 2002077 - SR 225 over Wabash

Hi Tom. Can you answer Raquel's question?

Ken Hasselkus

R/W Services Supervisor

Indiana Department of Transportation

Office: 317-234-8113

Email: khasselkus1@indot.in.gov

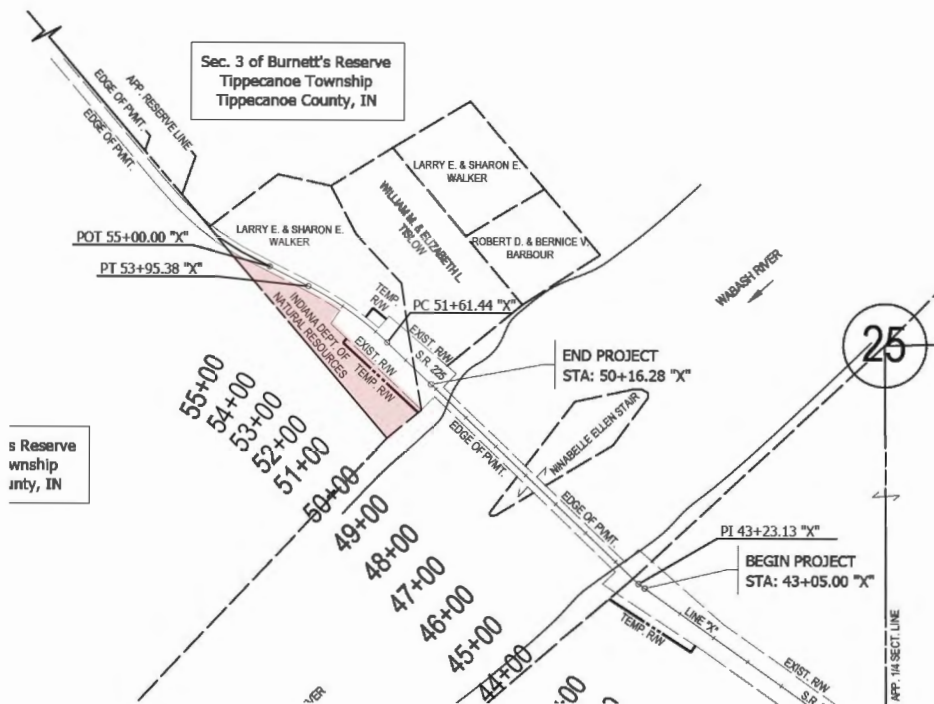
From: Raquel Walker <rwalker@b-l-n.com>
Sent: Wednesday, December 20, 2023 9:19 AM
To: Hasselkus, Kenneth (INDOT) <KHasselkus1@indot.IN.gov>
Cc: Tyler Wolf <twolf@b-l-n.com>; Brian Shaw <bshaw@b-l-n.com>
Subject: DES 2002077 - SR 225 over Wabash

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

Hi Ken –

I am working on the Environmental Document for the rehabilitation of the bridge carrying SR 225 over the Wabash River. INDOT recently acquired a small amount of temporary right-of-way for construction access from the parcel shown in red below. In 2002, land in the area was transferred to the Recreational Development Commission for Prophetstown State Park, but this area was not transferred. As a comment on the Environmental Document, the reviewer wanted to know what IDNR uses this land for? Our gut reaction was that it is in accessible due to the small creek that separates it, so it is just floodplain land, but we wanted to confirm with the IDNR. If you are not the person to answer this, do you know who would be?

Thank you,



RAQUEL WALKER
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