# FHWA-Indiana Environmental Document CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM GENERAL PROJECT INFORMATION

State Road (SR) 912 / Lake County

Road No./County:

Desig	nation Number(s):	1703011, 1703012, 1700105, 1700359, 1700370, and 1703000
Projec Descr	ct iption/Termini:	SR 912 Michigan Avenue Bridges Project / Michigan Avenue Bridge over SR 912, ramps, and railroads (Michigan Avenue Bridge) and SR 912, from approximately 950 feet west to 1,545 feet southeast of the Michigan Avenue Bridge (Des. 1703011)  SR 912 and Michigan Avenue Interchange, from the southwest side of the interchange, including the Ramp B over B Bridge (Des. 1703012) and the Ramp H over B Bridge (Des. 1700105), to approximately 215 feet north of the Michigan Avenue Bridge; including the westbound (WB) SR 912 off-ramp to northbound (NB) Michigan Avenue (Ramp I Bridge, Des. 1700359), the southbound Michigan Avenue to WB SR 912 on-ramp (Ramp NEC Bridge, Des. 1700370), and a closed Pedestrian Bridge over railroads (Closed Pedestrian Bridge, Des. 1703000).
	Categorical Exclusion,	, Level 2 – Required Signatories: INDOT DE and/or INDOT ESD
	Categorical Exclusion,	, Level 3 – Required Signatories: INDOT ESD
Х	Categorical Exclusion,	, Level 4 – Required Signatories: INDOT ESD and FHWA
	Environmental Assess	ment (EA) – Required Signatories: INDOT ESD and FHWA
	Additional Investigatio environmental documen	on (AI) – The proposed action included a design change from the original approved it. Required Signatories must include the appropriate environmental approval authority
Approv		N/A  T DE Signature and Date  INDOT ESD Signature and Date  INDOT ESD Signature and Date  VA Signature and Date
Releas	se for Public Involvem	INDOT DE Initials and Date  ATR 9/1/2022  INDOT ESD Initials and Date
Certific	cation of Public Involv	vement Lisa Shrader 10/26/2022
INDOT D	DE/ESD Reviewer Signature	Office of Public Involvement Signature and Date  Your as 1. Beaudian  02/02/2023
Name ar	nd Organization of CE/EA P	Preparer:Juliet Port, LPG / Parsons Transportation Group

			Indiana De	partment	t of Transportat	ion		
County	Lake		Route	SR 912		Des. No.	1703011 (	lead)
			Part I -	- Public	<u>Involvement</u>			
					ding for early and con			
	oes the projec No, then:	t have a histori	c bridge process	ed under the	Historic Bridges PA*	Yes X	No	
	Opportunity f	or a Public Hea	ring Required?					
	earing is requ IPO, and the A		ric bridges proce	essed under t	the Historic Bridges P	rogrammatic i	Agreement be	etween INDOT,
meetings, ເ	special purpos	se meetings, ne	wspaper articles	, etc.) have c	ected property owner occurred for this projec	ct.	•	
the project	ct and that ind	ividuals respons		veying and fi	wners near the projec eld activities may be s			
the plan of stakehold	n November :	23, 2021. The pance with the cu	urpose of the PI	P is to establ	Indiana Department of ish goals and strategionent Public Involvent	es for engagir	ng with the pu	ublic and key
Bridges P project te the <i>Indiar</i> <i>Times</i> on December to D-70).	Programmatic am marketed napolis Star or December 18 r 17, 2020 (December 18) The marketing	Agreement, dat the availability of December 17, 8, 2020 (Append 71 to D-72); an g period continu	ed July 17, 2006 of the bridge for r 2020 (Appendix dix D-67 to D-68) d a bridge marke ed through the e	(Historic Bridge of Children (Historic Bridge) (	Bridge, which is class dges PA). Due to the nt in several ways. Sp 6); a public notice publity of the bridge was is installed at the bridgolic hearing comment hing ownership of the	proposed removerifically, a polished in the posted to the ge site on Jan period, discus	oval of this s ublic notice w Northwest Ind INDOT mark uary 19, 202	tructure, the vas published in diana (NWI) eting website on 1 (Appendix D-69
finding of comment	"No Adverse pursuant to 3	Effect" was pub 6 CFR 800.2(d)	lished in the <i>NW</i> , 800.3(e), and 8	// Times on F 800.6(a)(4). A	I notice of the Federa ebruary 10, 2022 offe as advertised, the pub dication appear in App	ering the public lic comment p	c an opportur period ended	nity to submit 30 days later on
Manual, in submit co copies we https://www.sent along religious i published	ncluding Stipu omments and/o ere posted onl ow.in.gov/indo g with project nstitutions, civ I in both the N	lation III.B. of the request a put ine and placed t/about-indot/ce maps to project vic organization orthwest Indian	ne Historic Bridge blic hearing. Follo at the City of Eas entral-office/welco stakeholders, in s, and consulting	es PA, which owing release st Chicago Pome-to-the-la cluding adjact parties on Stanapolis Sta	ent INDOT Project De requires the project se of the draft environnublic Library, INDOT I aporte-district/. A Legacent landowners, electory on September 13, 2022 (Arr on September 13 arr	sponsor to offenental docume LaPorte Districal Notice of Putted officials, r Appendix G-23	er the public a ent for public ct Office and ablic Hearing egulatory age 3 to G-26). TI	an opportunity to involvement, online at: (Notice) was encies, schools, ne Notice was
consisting G-48 to G developm submit pu (Appendix hearing to or verbal	g of project tea 6-49). During the ent process, the blic comment of G-43 to G-47 of answer quest comments we	am members ar he hearing, the the project's pur s (Appendix G- 7), project poste tions. Before the re received at t	nd representative project team gaverpose and need, 27 to G-42). At the property of the propert	s from the ac ye a presenta alternatives one hearing, a esented, and procedures, ng the advert	ast Chicago Campus. djacent fire station and ation that covered stat considered, details ab ttendees were provided project team member team members discussed comment period ect team indicating an	d East Chicag keholders, pre- cout the prefer ed a welcome ers were availanced the project that ended or	o transit autherious outreadered alternative letter and handle before allect with attental October 11,	ority (Appendix ch, the project re, and how to indouts and after the dees. No written 2022, no

County	Lake	Route	SR 912	Des. I	No	1703011 (l	ead)
	October 24, 2022, the Eas angerment to known sites			onded that the project	propos	es No Adv	erse Effect or
	ontroversy on Env lic controversy concerning pacts.			pacts, including what is	s being	done durir	ng the project to
	, there is no substantial pu	blic controversy con	cerning impacts to	the community or to n	atural r	esources.	
<u>Part</u>	II - General Pro	<u>ject Identific</u>	ation, Desc	ription, and D	<u>)esig</u>	<u>ın Info</u>	<u>rmation</u>
Sponsor of	the Project:	INDOT			INDOT	District:	LaPorte
Local Name	e of the Facility:	SR 912 (Cline Ave	nue) and Michigan	Avenue Bridge (Inland	d Overp	oass)	
Fur	nding Source ( <i>mark all that</i>	apply): Fede	eral X State	X Local	Other*		
*If c	other is selected, please inc	dentify the funding so	ource:				
PURPOS	E AND NEED:						
	ould describe the specific abjective of the project. The						should describe
Need: The	primary needs for the projection						pavement
September scale, with	on of each of the bridges the 29, 2020 (Appendix I-1 to 0 representing "Failed Con These conditions are sum	I-24). Per the INDO	F <i>Bridge Inspection</i> e, bridge beyond o	n Manual, bridge condi	itions ar	re rated on	a 0 to 9 numeric

SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

This is page 3 of 40 Project name:

County Lake Route SR 912 Des. No. 1703011 (lead)

		Duidno Nonco			Rating	
INDOT Structure No.	Des.	Bridge Name Type	Deck	Wearing Surface	Superstructure	Substructure
		Michigan Avanua over CD 012 rompo and	6	6	5	5
912-45-02543 B	1703011	Michigan Avenue over SR 912, ramps, and three railroads (Michigan Avenue Bridge) 7-span rolled steel beams		pier walls; dec	le cracks in the subst k and steel superstru	
			5	4	5	5
912-45-06596 B	1703012	Ramp B over B 1-span 3-sided cast-in-place reinforced concrete rigid frame	abutment walls the longitudinal deck and crack	. Spalling and r construction joing of the walls	in the deck, bridge ra ust staining of the de bint and coping. Map of are also indicated. T g in the abutments.	ck underside at cracking of the
			5	5	5	6
912-45-06596 JA	1700105	Ramp H over B 1-span adjacent prestressed concrete box beams		abutments. Ad	ng, spalling along cop ditionally, the superst	
010 45 005 40 4 DI	1700250	Ramp I	6	5	6	6
912-45-02543 A RI	1700359	12-span prestressed concrete girders	Cracking, delar	nination, spalls	, and exposed steel a	re noted.
		Ramp NEC over railroads and Ramp NER	6	6	6	6
912-45-02543 A NEC	1700370	(Ramp NEC) 6-span steel plate girders	The deck, wear	ring surface, ar	d approaches are cra	icked.
			NA	NA	NA	NA
912-45-02545 ADJ	1703000	Closed Pedestrian Bridge over railroad (Closed Pedestrian Bridge) 6-span steel and concrete beams	advanced deter	rioration (note, trian bridges). 7	ubstructure are in poot the numerical rating s This bridge is closed. is a maintenance, sa	system does not The poor and

Source: Bridge Inspection Reports, September 29, 2020 (Appendix I-1 to I-24) NA = Not Applicable

According to the December 11, 2017 *Roadway Project Application*, the SR 912 interchange ramp pavement has joint distresses, mid-panel cracking, corner breaks, and surface spalling (Appendix I-25). Additionally, asphalt shoulders are significantly heaved. Other existing issues include retaining walls that are cracked and settling. Also, the SR 912 median barrier does not meet current standards.

Several secondary project needs are identified based on substandard geometric deficiencies that do not meet minimum requirements, as described in the current *Indiana Design Manual* (IDM). This includes inadequate inside and outside shoulder widths, substandard vertical clearances, and deviations for horizontal stopping sight distance, which has resulted in Ramp B over B being struck by vehicles multiple times. As Ramp B over B and Ramp H over B are directly abutting each other, these collisions affect both bridges. The bridge and approaches have been painted to provide motorists notice, but drivers continue to collide with the structure (Appendix D-86 to D-87).

**Purpose**: The primary purpose of the project is to extend the life of the interchange by:

- Providing condition rating of at least 7, good condition, for each bridge element (deck, wearing surface, superstructure, and substructure);
- Improving the condition and extending the service life of roadway and bridge approach pavement by at least 20 years;
- Correcting cracked/settled retaining walls and providing a median barrier along SR 912 that meets current standards; and,
- Reducing the maintenance, safety, and liability concerns associated with the Closed Pedestrian Bridge.

The secondary purpose of the project would increase the safety of the interchange by providing adequate horizontal stopping sight distances, improve or alleviate unsafe merge points within curves, and improve inside and outside shoulder widths.

This is page 4 of 40	Project name:	SR 912 Michigan Avenue Bridges Project	Date:	February 1, 2023
THIS IS Page 4 UI 40	ribjett name.	SK 912 Michigan Avenue Bridges Froject	Dale.	rebluary 1, 4

County	Lake	Route	SR 912		Des. No.	1703011 (lead)
PROJEC	T DESCRIPTIO	N (PREFERRED ALTERNA	ATIVE):			
County:	Lake	Muni	cipality:	City of East Chicag	0	
Limits of P	roposed Work:		ue Intercha t north of t chigan Ave	ange, from the southw he Michigan Avenue E enue (Ramp I Bridge),	est part of th Bridge; include the WB SR	ne interchange to ding the WB SR 912 off-ramp 912 on-ramp from southbound
Total Work	c Length:	0.33 Mile(s)		Total Work Area:	15.96	Acre(s)
If y Ac Describe loc current defic impacts, an	res, when did the ficeptability?  1 If an IAD is requisited final approval of a cation of project in ciencies, roadway of how the project	cluding township, range, city, description, surrounding featu will meet the Purpose and Nee	n of Engin CE/EA doc county, roures, etc. Fed. Logica	ument must be submi ads, etc. Existing cond Preferred alternative sl I termini and independ	tted to the F ditions shoul hould include dent utility al	d include current conditions, e the scope of work, anticipated so need discussed.
in the City miles west in Sections 10 West (A The project interchang lakefront for interchang	of East Chicago, I of US 12, as shown as 15, 22, 23, 26, and Appendix B-3).  It is located in a deletion is the main entra acilities. The area lie, and the Inland	Lake County, Indiana (Append	dix B-1 and begical Survice Range 9 W y industria steel mill a s: the abo ittal Huma	B-2). Specifically, the rey (USGS) Topograp rest as well as Section II, commercial, and resund an alternate accessive-referenced Ramp E	e project is lothic Whiting, a 18 and 19 of the sidential project to the Ame B over B Bride.	Indiana Quadrangle Map. It is of Township 37 North, Range perties. The project eristar Casino and other dge located within the project
with 12-for Avenue has through lar raised cen (Appendix Existing st throughou	of wide inside shounds three 11.8-foot wide as three 11.8-foot wines and a 5.9-foot ter concrete media B-3 and B-4), and ormwater facilities	section of SR 912 has three 12 ulders and 11-foot wide outside wide travel lanes with a 5.9-foot wide outside shoulder. Variable an. Existing conditions are shoulder project photographs (Appendiculate include curb and gutter, inlets There are no existing pedestript of further below).	e shoulder out wide out oble-width a bwn on the dix B-7 to E	rs, plus auxiliary lanes tside shoulder. NB Miduxiliary lanes are separes Exhibit and E3-8).	for the interchigan Aven arated by co Existing Con	change ramps. SB Michigan ue has two 11.8-foot wide ncrete barrier and there is a ditions aerial photograph
SEL), EB S Avenue to includes W	SR 912 to NB Micl SB Michigan Ave VB SR 912 to NB N	ange includes the following raingan Avenue (Ramp SER), Nuue (Ramp C), and SB Michig Michigan Avenue, the Ramp I e Existing Conditions aerial ph	B Michiga an Avenue Bridge, an	n Avenue to NB Michi e to EB SR 912 (Ramp d SB Michigan Avenu	gan Avenue o H). The no	rthside of the interchange
and ramps Bridges ta	s (Appendix B-3). I ble in the Purpose	and Need section, there are of the project's bridges and their and Need section, and furthes a "Non-Select" historic bridge	existing cordetails a	onditions are summar re provided below in the	ized in the E ne Bridges a	xisting Conditions of the Six and Small Structures section.
						chigan Avenue Bridge over SR 215 feet north of the Michigan

		Indiana Depa	artment of Tra	nsportation	
County	Lake	Route	SR 912	Des. No.	1703011 (lead)
Within the	project area, SR 912, Mich	nigan Avenue, and th	e associated ramp	Ramp NEC Bridge, and the s are classified as Principal and the WB SR 912 off-ram	Arterials. This project does
and the "M 1703011 is noted, som	lother Des" (aka lead Des) s now the lead Des for the	was 1800067 (e .g., SR 912 Michigan Avents include study ar	Appendix D-1 to Denue Bridges Proje	ed with other INDOT project -7). The project contract bu ect under Contract R-44264 stigated for related projects	ndles were revised and (Appendix H-12 to H-13). As
The preferrinterchang SER, and the Ramp I, and	and 1703000), and Two R red alternative will replace e. The southern ramps, Ra the Ramp H over B and Ra	amp Bridge Rehabi the Michigan Avenue amp G, Ramp H, and amp B over Ramp B abilitated. Additionally	litations (Des. 170) e bridge and provid Ramp B, will be re- pridges, will be remove, the Closed Pede	e a new roundabout on the aligned. The redundant ran loved. The northern ramp b strian Bridge will be remove	southern portion of the nps, Ramp SEL and Ramp ridges, Ramp NEC and
over Block realigned e	Avenue/Callahan Place to	Ramp SER. A portion Pavement will be real	on of the existing la moved and replace		ach of the SR 912 Bridge d/or re-striped to tie into the stored as soil planted with a
ramps and disturbed a	a roundabout. The existin	g retaining walls and ored with soil planted	redundant ramps v	ant ramps and bridges will will be removed. The area ved mix. All movements with	vill be regraded and all
structure w 104 feet (s be 19.6 fee	vill be similar in width and hee Appendix B-23 to B-25	neight to the current of for details). The app clearance will be pro	structure (within two roximate minimum vided for the railroa		
concrete, p deck overla	olacing fiber wraps, installir	ng anodes, as well as slabs and the deck d	grouting and seal	existing overlay, replacing joing retaining wall (Appendix be replaced. Additionally, i	B-26 to B-29). A new rigid
deck patch	ning, replacing joints, concr rs (Appendix B-30 to B-32)	ete patching, barrier	patching and seali	the existing overlay and unsing, as well as cleaning and esystem will be replaced, a	coating the existing steel
will be add	ressed including regrading	and the extension o	r replacement of se	s needed. Additionally, drair everal small structures (und hting system will be installe	
approxima proposed r construction	tely 4.83 acres of tempora maintenance of traffic (MO	ry ROW, including "ri T) will maintain traffic s will be used to mair	ght-of-entry" ROW along SR 912, an	turbed right-of-way (ROW). (Appendix B-12 and B-15). d it will include ramp and br esidences and businesses	During construction, the
Steel Office	e Building (see the Cultura	I Resources and Sec	tion 4(f) sections o	it will have No Adverse Eff f this CE for further discuss oitat and 0.072 acre of wetla	ion). This project will not

County Lake	Route SR 912	Des. No.	1703011 (lead)
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The preferred alternative will meet the purpose and need of the project by extending the life of the interchange by providing condition rating of at least 7, good condition, for each bridge element; improving the condition and extending the service life of roadway and bridge approach pavement by at least 20 years; correcting cracked/settled retaining walls and providing a median barrier along SR 912 that meets current standards; and reducing the maintenance, safety, and liability concerns associated with the Closed Pedestrian Bridge. Additionally, the preferred alternative will increase the safety of the interchange by providing adequate horizontal stopping sight distances, improving or alleviating unsafe merge points within curves, and improving inside and outside shoulder widths.

Logical Termini/Independent Utility: The termini of the SR 912 Michigan Avenue Bridges Project, described above under Limits of Proposed Work, include the project bridges, their approaches, and portions of the SR 912 Michigan Avenue interchange. This includes areas that will be impacted by this project to meet the purpose and need and construct the preferred alternative, which will connect to the existing network of roadways. Therefore, this project has rational endpoints. This project is a reasonable expenditure even if no additional transportation improvements in the area are made, and it should not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Therefore, this project meets FHWA criteria for independent utility and logical termini (www.environment.fhwa.dot.gov/legislation/nepa/ guidance\_project\_termini.aspx).

#### OTHER ALTERNATIVES CONSIDERED:

Provide a header for each alternative. Describe all discarded alternatives, including the No Build Alternative. Explain why each discarded alternative was not selected. Make sure to state how each alternative meets or does not meet the Purpose and Need and why.

Alternatives considered for the SR 912 Michigan Avenue Bridges Project were evaluated under a variety of scenarios. Due to the historic Ramp B over B Bridge, multiple alternatives were considered as documented in the *Historic Bridge Alternatives Analysis* (HBAA), prepared by Parsons and ASC Group, Inc. (ASC), and concurred by INDOT on November 2, 2021 (Appendix D-81 to D-95). Alternatives for the interchange and the associated five project vehicular bridges were evaluated in the *Final Engineer's Report - SR* 912 Interchange Improvement, October 2020 (Appendix I-28 to I-40). Additionally, alternatives for the Closed Pedestrian Bridge were evaluated in a *Call Application Report* dated June 29, 2018 (Appendix I-26 to I-27). These alternatives are summarized below and further details are provided in the referenced appendices.

#### **HISTORIC RAMP B OVER B BRIDGE (DES. 1703012)**

In accordance with the INDOT Historic Bridges PA, this bridge was determined to be a "Non-Select" historic bridge. According to the INDOT *Cultural Resources Manual*, "Non-Select Bridges may be replaced if no avoidance alternative is determined to be feasible and prudent or no alternative that poses the least harm to the bridge is determined to be feasible and prudent".

The alternatives evaluated under the Historic Bridges PA process were documented in the HBAA and are summarized below. When evaluating rehabilitation options, the HBAA report noted that the Ramp B over B structure is a 63-year old, cast-in-place reinforced concrete, three-sided rigid frame structure that is difficult to repair and includes an outdated type of rebar that corrodes and deteriorates. The current conditions, summarized in the Purpose and Need section, are consistent with heavy truck traffic, heavy chloride use, and long-term settlement and consolidation. Further details are provided in the HBAA (Appendix D-81 to D-95). See Appendix D-95 for a summary table that compares alternatives, including estimated costs (except the No Build, which was also considered).

#### Alternative A - No Build:

This alternative would leave the structure in its current deteriorating and substandard condition. While this alternative would incur no costs and is considered feasible, the structure would continue to deteriorate, and the substandard and dangerous conditions would persist. This alternative would not meet the project's purpose and need, and is not prudent; therefore, it was dismissed from further consideration.

# Alternative B1 - Rehabilitation for Continued Vehicular Use (Two-Lane or One-Lane Option) Meeting the Secretary of Interior's Standard for Rehabilitation:

This alternative would require major rehabilitation of the existing bridge, including pavement overlay removal and replacement, partial depth patching, full depth repair at longitudinal joints, partial depth repair on abutment and wing walls, and anode treatments. This alternative is not prudent as it would not provide a condition rating of at least 7, good condition, for each bridge element. Furthermore, it would require three Level 1 design exceptions: inadequate shoulder width, inadequate clear roadway width, and inadequate vertical clearance. While this alternative is considered feasible, it would not meet the project's purpose and need and it is not prudent; therefore, it was dismissed from further consideration.

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# Alternative B2 - Rehabilitation for Continued Vehicular Use (Two-Lane or One-Lane Options) Not Meeting the Secretary of Interior's Standard for Rehabilitation:

This alternative proposes to replace the entire structure, replicating the historic design. Although this alternative is considered feasible, it would not maintain the structure's status as a "Non-Select" historic bridge. This alternative would cost significantly more than rehabilitation or replacement with a modern structure. Additionally, geometric deficiencies would remain so it would require three Level 1 design exceptions: inadequate shoulder width, inadequate clear roadway width, and inadequate vertical clearance. Although this alternative would meet the project's purpose and need, it is not prudent because it would cost significantly more than the preferred alternative (almost double), and not preserve the historic structure. Therefore, this alternative was dismissed from further consideration.

# Alternatives C1 and C2 - Rehabilitation for Continued Vehicular Use (One-Way Pair Option) Meeting (and NOT Meeting) the Secretary of Interior's Standard for Rehabilitation:

These alternatives, required by the Historic Bridges PA, are based on the assumption the existing bridge carries a typical two-way road. However, this structure carries a one-way ramp, Ramp B, and it is paired with the Ramp H over B Bridge, which is also one-way. These alternatives would include rehabilitation of the existing bridge, and construction of a new bridge, to create a "one-way pair option". An additional lane cannot be engineered to act as a "one-way pair" option. Therefore, these alternatives are not feasible or applicable to this structure, and they were dismissed from further consideration.

#### Alternative D - Bypass (Non-Vehicular Use)/ Build New Structure:

This alternative proposes to rehabilitate the historic bridge for non-vehicular use and the construction of a new bridge, which is not feasible or applicable to this structure because it is situated within an interchange. The project area lacks usable pedestrian facilities and interchanges are not conducive to pedestrian use. Additional ROW and pedestrian facilities to connect to (i.e., logical termini) would be required to create a non-vehicular facility. According to the HBAA, this alternative could be considered prudent if someone steps forward before the end of the public hearing comment period to assume ownership of the structure. This alternative has been dismissed from further consideration because it is not feasible.

#### Alternative E - Relocation of Historic Bridge and New Bridge Construction:

This alternative proposes to move the historic bridge to a new location for some other use and the construction of a new bridge in its place. This alternative would meet the project's purpose and need. However, due to the type of bridge (cast in place reinforced concrete three-sided rigid frame structure), the structure would not likely survive intact if relocation is attempted. None-the-less, this alternative would be prudent if someone steps forward before the end of the public hearing comment period to assume ownership of the structure. Since, this alternative is not likely feasible and may not be prudent, it was not selected as the preferred alternative. As discussed in the Public Involvement section, no party contacted INDOT or the project team indicating an interest in assuming ownership of the bridge.

#### Alternative F - Replacement - Demolition of Historic Bridge and New Bridge Construction:

This alternative proposes demolition of the historic bridge and the construction of a new bridge in its place that would replicate the current structure, including its geometry. Therefore, this alternative would address structural issues but not correct the geometric deficiencies, and the previously-described design exemptions would be required. Although this alternative could be considered feasible (if design exemptions were approved), it would not meet the project's secondary purpose and need. Therefore, it was dismissed from further consideration.

#### SR 912 INTERCHANGE / FIVE VEHICULAR BRIDGES (DES. 1703011, 1703012, 1700105, 1700359, and 1700370)

Based on the *Final Engineer's Report - SR 912 Interchange Improvement*, several alternatives, including the No Build and the preferred alternative, "Alternative 2" - Roundabout with One Bridge Replacement, Three Bridge Eliminations, and Two Bridge Rehabilitations, were considered for the interchange improvements. The other alternatives are summarized below. Details including maps are provided in Appendix I-28 to I-40.

#### No Build

This alternative would leave the bridges and interchange ramps in their current condition. This alternative would incur no costs, and it would not impact any historic or water resources. However, the bridges and ramp pavement would continue to deteriorate, and safety and geometric deficiencies would remain. Since this alternative does not meet the purpose and need of the project, it was dismissed from further consideration.

Base Scope and "Alternative 1" - Three Bridge Replacements Along the Same Alignment and Two Bridge Rehabilitations
These alternatives would replace the Michigan Avenue, Ramp B over H, and Ramp B over B bridges along the same approximate
alignments, and they would rehabilitate the Ramp I and Ramp NEC bridges (Appendix I-29 to I-33). The primary difference between
the two alternatives is "Alternative 1" would replace the closed wall abutment and an eastern retaining wall with embankment slopes.

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County	Lake	Ro	ute SR 912		Des. No.	1703011 (lead)
exemptions	s, such as inadequa	configuration would relate shoulder widths and of the project, they we	d substandard ve	rtical clearances.	Since these altern	everal Level 1 design natives would not meet the
This alternation	ative would realign on the from Michigan A	Ramps SEL, SER, B, a venue (Appendix I-36	and H. A collector to I-37). Based or	distributor ramp the qualitative s	would accommod afety analysis, this	Bridge Rehabilitations ate the SR 912 on and off s alternative did not perform rom further consideration.
Based on the	he Call Application	OGE OVER RAILROA Report dated June 29 on (preferred alternativ	2018 (Appendix	I-26 to I-27), two		considered for this
it would not	t require any ROW	or impacts to natural r	esources. However	er, the bridge wo	uld continue to det	e would incur no costs, and teriorate, and safety issues from further consideration.
It w It w It w It w It w	rould not correct exityould not correct exityould not correct the rould not correct exityould not correct exity exityould not correct exity exityould not correct exity exityould not correct exity exityould not correct exity ex	tive is not feasible, p sting capacity deficien sting safety hazards; e existing roadway geo sting deteriorated con- us impacts to the moto	cies; metric deficiencie ditions and mainte	s; enance problems	; or	X X X
	AY CHARACTER					
		: multiple roadways, cor	mplete and duplic	ate for each road	way.	
If the propos	sed action includes o	multiple roadways, cor SR 912 (EB)	mplete and duplic	ate for each road	way.	
If the propose  Name of Reference  Functional  Current AD	sed action includes a oadway Classification: DT:	multiple roadways, cor SR 912 (EB) Freeway		ate for each road sign Year ADT:		PD (2042)
If the propose  Name of Reference  Functional  Current AD  Design Hou	sed action includes of oadway Classification:	SR 912 (EB)  Freeway 20,180 V 3,816 Truck F				PD (2042)
If the propose  Name of Reference  Functional  Current AD  Design Hou	oadway Classification: 0T: ur Volume (DHV):	SR 912 (EB)  Freeway 20,180 V 3,816 Truck F	PD (2022) De ercentage (%)	sign Year ADT:		PD (2042)
If the propose  Name of Reference of Referen	sed action includes a oadway Classification: DT: ur Volume (DHV): Speed (mph):	SR 912 (EB) Freeway 20,180 V 3,816 Truck F 60 Legal S	PD (2022) De ercentage (%)	sign Year ADT: 10 55  Proposed		PD (2042)
Mame of Refunctional Current AD Design Hou Designed S	oadway Classification: 0T: ur Volume (DHV):	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S   Existing   3	PD (2022) De lercentage (%) peed (mph):	sign Year ADT: 10 55		PD (2042)
Name of Refunctional Current AD Design Hou Designed S	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S   Existing   3   Through and A   40-56   ft.	PD (2022) De Percentage (%) peed (mph):	sign Year ADT: 10 55  Proposed 2 Through 36-56 ft.		PD (2042)
Name of Refunctional Current AD Design Hou Designed S	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width: pulder Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S   Existing   3   Through and A   40-56   ft.   10-12   ft.	PD (2022) De Percentage (%) peed (mph):	sign Year ADT: 10 55  Proposed 2 Through 36-56 ft. 10-12 ft.		PD (2042)
Name of Refunctional Current AD Design Hou Designed S	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S   Existing   3   Through and A   40-56   ft.	PD (2022) De Percentage (%) peed (mph):	sign Year ADT: 10 55  Proposed 2 Through 36-56 ft.		PD (2042)
Name of Refunctional Current AD Design Hou Designed S  Nur Typ Pav Sho Med Side	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: oe of Lanes: vement Width: oulder Width: dian Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S   Existing   3   Through and A   40-56   ft.   10-12   ft.   N/A   ft.	PD (2022) De ercentage (%) peed (mph):	sign Year ADT: 10 55  Proposed 2 Through 36-56 ft. 10-12 ft. N/A ft.		PD (2042)
Name of Refunctional Current AD Design Hou Designed S  Nur Typ Pav Sho Med Side	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width: bulder Width: dian Width: lewalk Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S     Existing   3   Through and A   40-56   ft.   N/A   ft.   N/A   ft.   N/A   ft.   X   Urban   Urban   Control   Urban   Control   Con	PD (2022) De ercentage (%) peed (mph):	sign Year ADT:  10 55  Proposed 2 Through 36-56 ft. 10-12 ft. N/A ft. N/A ft. N/A ft.	20,772 V	PD (2042)
Name of Refunctional Current AD Design Hou Designed S  Nur Typ Pav Sho Med Side	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width: bulder Width: dian Width: lewalk Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S     Existing   3   Through and A   40-56   ft.   N/A   ft.   N/A   ft.   N/A   ft.   X   Urban   Urban   Control   Urban   Control   Con	PD (2022) De ercentage (%) peed (mph):	sign Year ADT:  10 55  Proposed 2 Through 36-56 ft. 10-12 ft. N/A ft. N/A ft. N/A ft.	20,772 V	PD (2042)
Name of Refunctional Current AD Design Hou Designed S  Nur Typ Pav Sho Med Side	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width: bulder Width: dian Width: lewalk Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S     Existing   3   Through and A   40-56   ft.   N/A   ft.   N/A   ft.   N/A   ft.   X   Urban   Urban   Control   Urban   Control   Con	PD (2022) De ercentage (%) peed (mph):	sign Year ADT:  10 55  Proposed 2 Through 36-56 ft. 10-12 ft. N/A ft. N/A ft. N/A ft.	20,772 V	PD (2042)
Name of Refunctional Current AD Design Hou Designed S  Nur Typ Pav Sho Med Side	oadway Classification: DT: ur Volume (DHV): Speed (mph):  mber of Lanes: pe of Lanes: vement Width: bulder Width: dian Width: lewalk Width:	SR 912 (EB)   Freeway   20,180   V   3,816   Truck F   60   Legal S     Existing   3   Through and A   40-56   ft.   N/A   ft.   N/A   ft.   N/A   ft.   X   Urban   Urban   Control   Urban   Control   Con	PD (2022) De ercentage (%) peed (mph):	sign Year ADT:  10 55  Proposed 2 Through 36-56 ft. 10-12 ft. N/A ft. N/A ft. N/A ft.	20,772 V	PD (2042)

County <u>Lake</u>	Route SR 912 Des. No1703011 (lead)
Name of Roadway	Michigan Avenue
Functional Classification:	Freeway (Ramp)
Current ADT:	5,288 VPD (2022) Design Year ADT: 5,317 VPD (2042)
Design Hour Volume (DHV):	
Designed Speed (mph):	Legal Speed (mph):
Number of Lanes:	Existing Proposed 5
Type of Lanes:	Through and Auxiliary Through and Auxiliary
Pavement Width:	17-32 ft. 17-32 ft.
Shoulder Width:	5.9 ft. 5.9 ft.
Median Width:	2.5   ft.   2.5   ft.
Sidewalk Width:	N/A ft. N/A ft.
Setting:	X Urban Suburban Rural
Topography:	X Level Rolling Hilly
Name of Roadway Functional Classification:	Ramp B / "Line PR-B" (EB SR 912/NB Michigan Avenue to NB Michigan Avenue) Freeway (Ramp)
Current ADT:	3,917 VPD (2023) Design Year ADT: 4,685 VPD (2043)
Design Hour Volume (DHV):	
Designed Speed (mph):	Legal Speed (mph):
	Existing Proposed
Number of Lanes:	1 1
Type of Lanes:	Ramp Ramp
Pavement Width:	16-36 ft. 16 ft.
Shoulder Width:	2 ft. N/A* ft. *2-ft curb/gutter
Median Width:	N/A   ft.   N/A   ft.
Sidewalk Width:	N/A ft. N/A ft.
Sidewalk Width.	N/A II.
Setting:	X Urban Suburban Rural
Topography:	X Level Rolling Hilly
Name of Roadway	Ramp C / "Line PR-C Rev" (SB Michigan Avenue to SB Michigan Avenue)
Functional Classification:	Freeway (Ramp)
Current ADT:	756 VPD (2023) Design Year ADT: 905 VPD (2043)
Design Hour Volume (DHV):	
Designed Speed (mph):	25 Legal Speed (mph): 25
	Existing Proposed
Number of Lanes:	1 1
Type of Lanes:	Ramp Ramp
Pavement Width:	16-36 ft. 16 ft.
Shoulder Width:	2 ft. N/A* ft. *2-ft curb/gutter
Median Width:	N/A ft. N/A ft.
Sidewalk Width:	N/A ft. N/A ft.
Setting:	X Urban Suburban Rural
Topography:	X Level Rolling Hilly
- · ·	
This is page 10 of 40 P	Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 20

	Lake		_	Route	SR 912		Des. No.	1703011 (lead)
Name of	f Roadway	Rami	p G (NB Mic	higan Av	enue to FF	SR 912)		
	nal Classification:		way (Ramp)		ondo to LL	01(012)		
Current A		5,865		VPD (2	2022) D	esign Year ADT	: 5,826	VPD (2042)
	Hour Volume (DHV):	814		•	ntage (%)	9	. 0,020	VI D (2042)
	d Speed (mph):	25		al Speed	• , ,	25		
Designe	а орееа (трп).	_23		ai opeeu	(IIIpii).			
			Existing			Proposed		
1	Number of Lanes:		=xioting				dant ramp to be	
				1			moved)	
	Гуре of Lanes:			Ramp			N/A	
	Pavement Width:		30-36	ft.		N/A ft.		
5	Shoulder Width:		4-10	ft.		N/A ft.		
	Median Width:		N/A	ft.		N/A ft.		
	Sidewalk Width:		N/A	ft.		N/A ft.		
	Setting:	Х	Urban			Suburban	Rural	
	Topography:	X	Level			Rolling	Hilly	
ļ	городгарпу.	_ ^	Level		<u> </u>	Coming	I IIIIy	
Name of	f Roadway	Ram	p H / "Line F	PR-H" (SE	Michigan	Avenue to EB S	R 912)	
Function	nal Classification:	Free	way (Ramp)					
Current A	ADT:	7,343	3	VPD (2	2023) D	esign Year ADT	: 8,783	VPD (2043)
Design F	Hour Volume (DHV):	1,255	5 True	ck Percer	ntage (%)	11		
Designe	d Speed (mph):	25	Leg	al Speed	(mph):	25		
				•				
			Existing			Proposed		
1	Number of Lanes:		_,	2			2	7
7	Гуре of Lanes:			Ramp		F		
	Гуре of Lanes: Pavement Width:		40-50	Ramp ft.		44-52 ft.	Ramp	
F			40-50 4-10					]
F	Pavement Width:			ft.		44-52 ft.		]
F	Pavement Width: Shoulder Width:		4-10	ft.		44-52 ft. 10 ft.		]
F S N	Pavement Width: Shoulder Width: Median Width: Sidewalk Width:		4-10 N/A N/A	ft. ft. ft.		44-52 ft. 10 ft. N/A ft. N/A ft.	Ramp	]
F S N	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting:	X	4-10 N/A N/A Urban	ft. ft. ft.		44-52 ft. 10 ft. N/A ft. N/A ft.	Ramp Rural	
F S N	Pavement Width: Shoulder Width: Median Width: Sidewalk Width:	X	4-10 N/A N/A	ft. ft. ft.		44-52 ft. 10 ft. N/A ft. N/A ft.	Ramp	
F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting:	X	4-10 N/A N/A Urban	ft. ft. ft. ft.		44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling	Ramp Rural	
Name of	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Fopography:	<b>X</b> Ram	4-10 N/A N/A Urban Level	ft. ft. ft. ft.		44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling	Ramp Rural	
Name of	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Topography:  f Roadway nal Classification:	Ram Free	4-10 N/A N/A Urban Level p I (WB SR way (Ramp)	ft. ft. ft. ft.	3 Michigan	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue)	Ramp Rural Hilly	
Name of Function	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Topography:  f Roadway nal Classification: ADT:	Ram Free	4-10 N/A N/A Urban Level p I (WB SR way (Ramp)	ft. ft. ft. ft. VPD (2	3 Michigan	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue)	Ramp Rural Hilly	VPD (2042)
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Topography:  f Roadway nal Classification:	Ram Free	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3	ft. ft. ft. ft. VPD (2	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue)	Ramp Rural Hilly	
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Fopography:  f Roadway nal Classification: ADT: Hour Volume (DHV):	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25	Ramp Rural Hilly	
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Fopography:  f Roadway nal Classification: ADT: Hour Volume (DHV): d Speed (mph):	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51	Ramp Rural Hilly	
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Fopography:  f Roadway nal Classification: ADT: Hour Volume (DHV): d Speed (mph):	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25  Proposed	Rural Hilly  : 6,890	
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting: Fopography:  f Roadway nal Classification: ADT: Hour Volume (DHV): d Speed (mph):  Number of Lanes: Type of Lanes:	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg Existing	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25  Proposed	Ramp Rural Hilly	
Name of Function Current Design F	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Fopography:  If Roadway nal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Pavement Width:	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg Existing	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25  Proposed	Rural Hilly  : 6,890	
Name of Function Current Designe	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Fopography:  If Roadway Inal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Pavement Width: Shoulder Width:	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg Existing 25 2.5-6.5	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25 Proposed  25 ft. 2.5-6.5 ft.	Rural Hilly  : 6,890	
Name of Function Current Designe	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Fopography:  If Roadway nal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Pavement Width:	Ram Free 6,648 3,547	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 True Leg Existing	ft. ft. ft. ft. 912 to NE VPD (2 ck Percer al Speed	3 Michigan 2022) D ntage (%)	44-52 ft. 10 ft. N/A ft. N/A ft. Suburban Rolling Avenue) esign Year ADT 51 25  Proposed	Rural Hilly  : 6,890	
Name of Function Current Designe	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Topography: If Roadway nal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Type of Lanes: Pavement Width: Shoulder Width: Median Width: Sidewalk Width:	Ram Free 6,648 3,547 25	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) B T True Leg Existing  25 2.5-6.5 N/A N/A	ft. ft. ft. ft.  912 to NE  VPD (2 ck Percer al Speed  1 Ramp ft. ft. ft.	3 Michigan 2022) D ntage (%) (mph):	44-52 ft.  10 ft.  N/A ft.  N/A ft.  Suburban Rolling  Avenue)  esign Year ADT  51  25  Proposed  25 ft.  2.5-6.5 ft.  N/A ft.	Ramp Rural Hilly  : 6,890	VPD (2042)
Name of Function Current Designe	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Topography: If Roadway Inal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Type of Lanes: Pavement Width: Shoulder Width: Median Width: Sidewalk Width: Setting:	Ram Free 6,648 3,547 25	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) 3 7 True Leg Existing 25 2.5-6.5 N/A N/A Urban	ft. ft. ft. ft.  912 to NE  VPD (2 ck Percer al Speed  1 Ramp ft. ft. ft.	3 Michigan 2022) D ntage (%) (mph):	44-52 ft.  10 ft.  N/A ft.  N/A ft.  Suburban Rolling  Avenue)  esign Year ADT  51  25  Proposed  25 ft.  2.5-6.5 ft.  N/A ft.  N/A ft.	Ramp Rural Hilly  1 Ramp Rural	VPD (2042)
Name of Function Current Designe	Pavement Width: Shoulder Width: Median Width: Median Width: Sidewalk Width: Setting: Topography: If Roadway nal Classification: ADT: Hour Volume (DHV): If Speed (mph):  Number of Lanes: Type of Lanes: Pavement Width: Shoulder Width: Median Width: Sidewalk Width:	Ram Free 6,648 3,547 25	4-10 N/A N/A Urban Level p I (WB SR way (Ramp) B T True Leg Existing  25 2.5-6.5 N/A N/A	ft. ft. ft. ft.  912 to NE  VPD (2 ck Percer al Speed  1 Ramp ft. ft. ft.	3 Michigan 2022) D ntage (%) (mph):	44-52 ft.  10 ft.  N/A ft.  N/A ft.  Suburban Rolling  Avenue)  esign Year ADT  51  25  Proposed  25 ft.  2.5-6.5 ft.  N/A ft.	Ramp Rural Hilly  : 6,890	VPD (2042)

This is page 11 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County <u>Lake</u>	Route S	SR 912 Des. No1703011 (le	ead)
Name of Roadway Functional Classification: Current ADT: Design Hour Volume (DHV): Designed Speed (mph):	Ramp NEC (SB Michigan Av Freeway (Ramp)  5,865 VPD (202  530 Truck Percentag  Legal Speed (m	22) Design Year ADT: 5,826 VPD (2042) ge (%) 9	<u> </u>
Number of Lanes: Type of Lanes: Pavement Width: Shoulder Width: Median Width: Sidewalk Width:	1   Ramp   25   ft.     ft.     N/A   ft.	Proposed  1 Ramp  25 ft. 2.5-6.5 N/A N/A ft. N/A ft.	
Setting: Topography:	X Urban X Level	Suburban Rural Rolling Hilly	
Name of Roadway Functional Classification: Current ADT: Design Hour Volume (DHV): Designed Speed (mph):	Ramp SEL / "Line PR-SEC" (912)         Freeway (Ramp)         5,201       VPD (202         718       Truck Percentage         25       Legal Speed (mg/s)	ge (%)12	<u> </u>
Number of Lanes: Type of Lanes: Pavement Width: Shoulder Width: Median Width: Sidewalk Width:	1-2   Ramp     20-32   ft.     2-8   ft.     N/A   ft.	1-2   Ramp     16-32   ft.     1/A     ft. *2-ft curb/gutter   ft.     1/A       1/A	
Sidewalk Width.	N/A ft.	N/A ft.	
Setting: Topography:	N/A ft.  X Urban Level	N/A ft.  Suburban Rural Rolling Hilly	
Setting:	X Urban X Level	Suburban Rural Hilly  R 912 to NB Michigan Avenue)  23) Design Year ADT: 413 VPD (2043)  ge (%) 8	<u> </u>

This is page 12 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

Coun	ty Lake			Route	SR 912		De	s. No.	1703011 (lead)
			-						
Nome	of Pondway	Pa	dahaut /"D	۸۵"۱					
	of Roadway		ndabout ("R						
	onal Classification:		way (Ramp)		2022) 5	) o o i o =	DT. N/A		VDD (2042)
	nt ADT:	N/A		VPD (		Design Year A	NDT: <u>N/A</u>		VPD (2043)
	Hour Volume (DHV):	N/A			ntage (%)	N/A			
Desigr	ned Speed (mph):	25	Leg	gal Speed	d (mph):	25			
						_			
i		1	Existing			Proposed	<u> </u>		$\neg$
	Number of Lanes:			N/A			1		4
	Type of Lanes:			N/A			Roundabout		
	Pavement Width:		N/A	ft.		28-43	ft.		
	Shoulder Width:		N/A	ft.		10.7	ft. plus curb/		
	Median Width:		N/A	ft.		N/A*	ft. *Variable	truck ap	oron
	Sidewalk Width:		N/A	ft.		N/A	ft.		
								_	
	Setting:	X	Urban			Suburban		Rura	
	Topography:	X	Level			Rolling		Hilly	
The follo	owing roadways are with	hin the	project area	a, situated	d beneath <sub>l</sub>	project bridge	es, and no wor	k is prop	osed: WB SR 912,
Ramp N	IER, and Block Avenue								
-									
DDID	GES AND/OR SMAL	I CTD	LICTURE	(C).					
BKID	GES AND/OR SIVIAL	LSIN	OCTORE	(3).					
	oposed action includes						h bridge and/c	r small s	tructure. Include both
existing	and proposed bridge(s	and/o	r small strud	cture(s) ir	n this section	an .			
					i iiiio oooii	JII.			
				( )	7 11/10 00011	JII.			
	Michigan Avenue Bri	<u>idge</u>		( )	runo oooli	ori.			
		<u>idge</u>		( )	7 11 110 000 110	Jri.			
Structu	Michigan Avenue Bri	Existi	ng: 912-45-	-02543 B	/ 33032		ncy Rating:		September 29, 2020 <i>Bridge</i>
Structo		Existi		-02543 B	/ 33032		ncy Rating:	Inspec	ction Report, Appendix I-4)
Structo		Existi	ng: 912-45-	-02543 B	/ 33032		ncy Rating:	Inspec	
Structi		Existi	ng: 912-45-	-02543 B	/ 33032		ncy Rating:	Inspec	ction Report, Appendix I-4)
Structu		Existi	ng: 912-45-	-02543 B	/ 33032	Sufficie —— Proposed		Inspec (Rati	ction Report, Appendix I-4)
Structu		Existi Propo	ng: 912-45- osed: 912-4 Existing	-02543 B	/ 33032 (TBD)	Sufficie —— Proposed	ncy Rating: d Steel Beams	Inspec (Rati	ction Report, Appendix I-4)
Structu	ure/NBI Number(s):  Bridge/Structure Type	Existi Propo	ng: 912-45- osed: 912-4 Existing	-02543 B -5-02815/	/ 33032 (TBD)	Sufficie —— Proposed		Inspec (Rati	ction Report, Appendix I-4)
Structu	ure/NBI Number(s):  Bridge/Structure Type Number of Spans:	Existi Propo	ng: 912-45- osed: 912-4 Existing	-02543 B -5-02815/ d Steel B	/ 33032 (TBD)	Sufficie —— Proposed	d Steel Beams	Inspec (Rati	ction Report, Appendix I-4)
Structu	ure/NBI Number(s):  Bridge/Structure Type Number of Spans: Weight Restrictions:	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A	-02543 B -5-02815/ d Steel B -7 ton	/ 33032 (TBD)	Sufficie Proposed Rolle N/A	d Steel Beams 6ton	Inspec (Rati	ction Report, Appendix I-4)
Structu	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions:	Existi Propo	ng: 912-45- osed: 912-4 Existing Roller N/A N/A	-02543 B 5-02815/ d Steel B 7 ton ft.	/ 33032 (TBD)	Sufficie Proposed Rolle N/A N/A	d Steel Beams 6 ton ft.	Inspec (Rati	ction Report, Appendix I-4)
Structu	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width:	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121	-02543 B 5-02815/ d Steel B 7 ton ft. .5 ft.	/ 33032 (TBD)	Proposed Rolle N/A N/A 61.5-146.5	d Steel Beams 6 ton ft. ft.	Inspec (Rati	ction Report, Appendix I-4)
Structo	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122	-02543 B -5-02815/ d Steel B 7 ton ft. .5 ft. .5 ft.	/ 33032 (TBD)	Sufficie Proposed Rolle N/A N/A	d Steel Beams 6 ton ft. ft. ft.	Inspec (Rati	ction Report, Appendix I-4)
Structu	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width:	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121	-02543 B 5-02815/ d Steel B 7 ton ft. .5 ft.	/ 33032 (TBD)	Proposed Rolle N/A N/A 61.5-146.5	d Steel Beams 6 ton ft. ft.	Inspec (Rati	ction Report, Appendix I-4)
Structo	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122	-02543 B -5-02815/ d Steel B 7 ton ft. .5 ft. .5 ft.	/ 33032 (TBD)	Proposed Rolle N/A N/A 61.5-146.5	d Steel Beams 6 ton ft. ft. ft.	Inspec (Rati	ction Report, Appendix I-4)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridge	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A	-02543 B -5-02815/  d Steel B -7	/ 33032 / (TBD) eams	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5	d Steel Beams 6 ton ft. ft. ft. ft. ft.	Inspec (Rati	tion Report, Appendix I-4) ing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A	-02543 B -5-02815/  d Steel B -7	/ 33032 / (TBD) eams	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5	d Steel Beams 6 ton ft. ft. ft.	Inspection (Rational Rational	ing, Source of Information) September 29, 2020 <i>Bridge</i>
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridge	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A	-02543 B -5-02815/  d Steel B -7	/ 33032 / (TBD) eams	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5	d Steel Beams 6 ton ft. ft. ft. ft. ft.	Inspection (Rational Rational	Etion Report, Appendix I-4) ing, Source of Information) September 29, 2020 Bridge etion Report, Appendix I-8)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridge	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A	-02543 B -5-02815/  d Steel B -7	/ 33032 / (TBD) eams	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5	d Steel Beams 6 ton ft. ft. ft. ft. ft.	Inspection (Rational Rational	ing, Source of Information) September 29, 2020 <i>Bridge</i>
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridge	Existi Propo	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A ng: 912-45- osed: N/A	-02543 B -5-02815/  d Steel B -7	/ 33032 / (TBD) eams	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5	d Steel Beams 6 ton ft. ft. ft. ft. ft.	Inspection (Rational Rational	Etion Report, Appendix I-4) ing, Source of Information) September 29, 2020 Bridge etion Report, Appendix I-8)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):	Existi Propo dth:	ng: 912-45- osed: 912-4 Existing Rolled N/A N/A 61.8-121 64.1-122 N/A ng: 912-45-osed: N/A  Existing	-02543 B -5-02815/  d Steel B -7 - ton -ft5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	/ 33032 (TBD) eams / 033035	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5 Sufficie	d Steel Beams 6 ton ft. ft. ft. ft. ft. ncy Rating:	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridge	Existi Propo dth:	ng: 912-45- osed: 912-4  Existing Rolled N/A N/A 61.8-121 64.1-122 N/A ng: 912-45-osed: N/A  Existing 3-Sided C	-02543 B -5-02815/  d Steel B -7 - ton -ft5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	/ 33032 (TBD) eams / 033035	Sufficie  Proposed  Rolle  N/A  N/A  61.5-146.5  59.5-148.5  Sufficie  Proposed  N/A (will be	d Steel Beams 6 ton ft. ft. ft. ft. ft. oncy Rating:	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type	Existi Propo dth:	ng: 912-45- osed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A ng: 912-45-osed: N/A  Existing 3-Sided C Frame	-02543 B -5-02815/  d Steel B -7 - ton -ft5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	/ 33032 (TBD) eams / 033035	Proposed  N/A  N/A  61.5-146.5  59.5-148.5  Sufficie  Proposed  N/A (will be roundabout	d Steel Beams 6 ton ft. ft. ft. ft. ft. oncy Rating:	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type Number of Spans:	Existi Propo dth:	ng: 912-45- psed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A ng: 912-45- psed: N/A  Existing 3-Sided C Frame 1	-02543 B -5-02815/  d Steel B -7 - ton -ft5 -5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	/ 33032 (TBD) eams / 033035	Proposed  N/A  N/A 61.5-146.5 59.5-148.5  Sufficie  Proposed  N/A (will be roundabout N/A	d Steel Beams 6 ton ft. ft. ft. ft. ft. oncy Rating:	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type Number of Spans: Weight Restrictions:	Existi Propo dth:	ng: 912-45- psed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A  ng: 912-45- psed: N/A  Existing 3-Sided C Frame 1 N/A	-02543 B -5-02815/  d Steel B -7 - ton - ft5 -06596 B  Cast-In-Pl	/ 33032 (TBD) eams / 033035	Proposed  N/A  N/A  61.5-146.5  59.5-148.5  Sufficie  Proposed  N/A (will be roundabout N/A  N/A  N/A	d Steel Beams 6 ton ft. ft. ft. ft. ft. st. e eliminated/rest)	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions:	Existi Propo dth:	ng: 912-45- psed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A  ng: 912-45- psed: N/A  Existing 3-Sided C Frame 1 N/A N/A	-02543 B -5-02815/  d Steel B -7 - ton - ft5 -5 -66596 B  Cast-In-Pl	/ 33032 (TBD) eams / 033035	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5 Sufficie  Proposed N/A (will be roundabout N/A N/A N/A	d Steel Beams 6 ton ft. ft. ft. ft. ft. st. e eliminated/rest)	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type Number of Spans: Weight Restrictions:	Existi Propo dth:	ng: 912-45- psed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A  ng: 912-45- psed: N/A  Existing 3-Sided C Frame 1 N/A	-02543 B -5-02815/  d Steel B -7 - ton - ft5 -06596 B  Cast-In-Pl	/ 33032 (TBD) eams / 033035	Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5 Sufficie  Proposed N/A (will be roundabout N/A N/A N/A N/A	d Steel Beams 6 ton ft. ft. ft. ft. ft. st. e eliminated/rest)	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)
	Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions: Curb to Curb Width: Outside to Outside Wi Shoulder Width:  Ramp B over B Bridgure/NBI Number(s):  Bridge/Structure Type Number of Spans: Weight Restrictions: Height Restrictions:	Existi Propo	ng: 912-45- psed: 912-4  Existing Roller N/A N/A 61.8-121 64.1-122 N/A  ng: 912-45- psed: N/A  Existing 3-Sided C Frame 1 N/A N/A	-02543 B -5-02815/  d Steel B -7 - ton - ft5 -06596 B  Cast-In-Pl	/ 33032 (TBD) eams / 033035	Sufficie  Proposed Rolle N/A N/A 61.5-146.5 59.5-148.5  Sufficie  Proposed N/A (will be roundabout N/A N/A N/A N/A N/A	d Steel Beams 6 ton ft. ft. ft. ft. ft. ft. steeliminated/rest) ton ft.	Ration (Ration	September 29, 2020 Bridge stion Report, Appendix I-4) Sing, Source of Information)

This is page 13 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

		inaian	а рера	rtment	or iran	sportation		
Count	ty Lake		Route	SR 912		_ Do	es. No.	1703011 (lead)
	Ramp H over Ramp B							
Structu		Existing: 912-45- Proposed: N/A	06596 JA/	33036	Suffic ——	iency Rating:	Inspect	eptember 29, 2020 <i>Bridge</i> ion Report, Appendix I-11)
							(Ratir	ng, Source of Information)
		Existing			Propose	d		
	Bridge/Structure Type:	Adjacent I			N/A (will b	oe eliminated/re	placed by	′
ļ	<del></del>	Concrete	Box Beam	IS	roundabo	ut)		
	Number of Spans:	1			N/A	T		
	Weight Restrictions:	N/A	ton		N/A	ton		
	Height Restrictions:	N/A	ft.		N/A	ft.		
	Curb to Curb Width:	33.1	ft.		N/A	ft.		
	Outside to Outside Wid		ft.		N/A	ft.		
	Shoulder Width:	N/A	ft.		N/A	ft.		
	_	912-45-02453 A	RI / 03303	7			Inspect (Ratir	ion Report, Appendix I-16) ng, Source of Information)
		Existing			Propose	d		
	Bridge/Structure Type:	Prestresse Girders	ed Concre	te		ed Concrete Gi	irders	
	Number of Spans:	12			12			
	Weight Restrictions:	N/A	ton		N/A	ton		
	Height Restrictions:	N/A	ft.		N/A	ft.		
	Curb to Curb Width:	25.0	ft.		25.0	ft.		
	Outside to Outside Wid		ft.		28.5	ft.		
	Shoulder Width:	2.5-6.5	ft.		2.5-6.5	ft.		
Structu	Ramp NEC Bridge ure/NBI Number(s):	912-45-02543 A	NEC/ 3303	34	Suffic	iency Rating:	Inspect	eptember 29, 2020 <i>Bridge</i> ion Report, Appendix I-20)
							(Ratir	ng, Source of Information)
		Existing			Propose	d		
	Bridge/Structure Type:	Rolled Ste	el Beams		Steel Plat			
ļ	Number of Spans:	6			6			
	Weight Restrictions:	N/A	ton		N/A	ton		
	Height Restrictions:	N/A	ft.		N/A	ft.		

	Existing		Propose	d
Bridge/Structure Type:	Rolled S	teel Beams	Steel Pla	te Girder
Number of Spans:	6		6	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	25.0	ft.	25.0	ft.
Outside to Outside Width:	28.4	ft.	28.4	ft.
Shoulder Width:	2.5 to	ft.	2.6 to	ft.
	6.5		6.6	

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County	Lake	Route	SR 912	De	es. No.	1703011 (lead)	
Clo	osed Pedestrian I	Bridge					
Structure/N	NBI Number(s):	Existing: 912-45-02543 AE Proposed: N/A	DJ/ 33033	Sufficiency Rating:	N/A (September 29, 2020 <i>Bridge Inspection Report</i> , Appendix I-24)		
				_	(Rati	ng, Source of Information)	

	Existing		Proposed			
Bridge/Structure Type:	Steel and	Concrete Beams	N/A			
Number of Spans:	6		N/A			
Weight Restrictions:	N/A	ton	N/A	ton		
Height Restrictions:	N/A	ft.	N/A	ft.		
Curb to Curb Width:	6.0	ft.	N/A	ft.		
Outside to Outside Width:	7.0	ft.	N/A	ft.		
Shoulder Width:	N/A	ft.	N/A	ft.		

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

This project involves six bridges that are summarized in the above- and below-tables. Current and proposed structure locations are shown on the exhibits in Appendix B-3 to B-6.

INDOT Structure No. NBI No.	Des. No.	Bridge Name Historic Status	Summary of Work*	Impacts to Water Resources or Cultural Resources
912-45-02543 B 33032	1703011	Michigan Avenue not historic	Bridge Replacement	0.072 acre of wetlands (see the Wetlands section for further discussion)
912-45-06596 B 33050	1703012	Ramp B over B "Non-Select" historic	Bridge Removal	Bridge will be demolished (see Cultural Resources and Section 4(f) Sections for further discussion)
912-45-06596 JA 33036	1700105	Ramp H over B not historic	Bridge Removal	None
912-45-02543 A RI 007200	1700359	Ramp I not historic	Bridge Rehabilitation	None
912-45-02543 A NEC 33034	1700370	Ramp NEC not historic	Bridge Rehabilitation	None
912-45-02545 ADJ 33033	1703000	Closed Pedestrian Bridge not historic	Bridge Removal	None

<sup>\*</sup> Refer to the Project Description (Preferred Alternative) section and the Project Plans in Appendix B-9 to B-32 for further details.

Additionally, several existing drainage culverts (less than 36-inches in diameter) will be extended and/or replaced within the southern portion of the interchange, and drainage inlets will be replaced/upgraded as needed. This drainage work will connect to the existing subgrade storm sewer system. Therefore, it will not impact water resources.

This is page 15 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

				Indi	ana De	epari	tment	ot Ira	anspo	rtatıo	n					
County	/	Lake			Rout	e _	SR 912				Des. N	lo	170301	1 (lea	d)	
MAINT	EN	IANCE OF	TRAFFIC	(MOT) D	URING (	CONS	STRUC	TION:								
	Is a Will	a temporary a temporary I the project Provisions v Provisions v Provisions v I the proposi here substan	roadway prinvolve the vill be made vill be made vill be made ed MOT su	oposed? use of a de for access for throug to accome bstantially	s by local h-traffic d modate ar change th	traffic epend ny loca ne envi	and so dent bus al specia ironmen	posted. inesses. al events tal cons	or festive	/als. es of the		?	Yes  X X X X		No X X X	
measure wetlands The MC 912 will and NE closed.	s sl c. Ar OT f be C to Du	sures and/or hould be qua ny local cond or the projec maintained o remain ope ring the seco ed per India	antified to to cerns abounce the control of the con	ne extent por t access and nducted in construction e south side nase the Mi	ossible, pod traffic fl two, year on, as welle of the S chigan Av	articul low sh long   ll as bo R 912 venue	larly with ould be phases oth WB 2 Michiga	respect detailed (Append anes of an Aven	to prope as well. lix B-5, a SR 912. ue interd	erties sand B-13 The firehange	uch as 3 3 to B-1 st year- and the	Sectio 8). At long p	n 4(f) re least or hase w gan Ave	ne EB ill allov	es and lane alow Ramporidge w	ong SF os I vill be
federal 912 dur bridge I 912-45- motoris railroad residen	faci ing oca -12( ts c ls (a tial/	nce with the ility. There a construction ted approximated approximated an access the and southwest commercial echange, local	re nearby, n (see Phot mately 0.4- ndix B-5). ne public m st of Lake l area south	well-signed o 2, Appen mile southe This structu arina and b Michigan). I of the proj	I, redunda dix B-7 and east of the lire carries beach par Motorists ect intercl	ant ran nd Pho Michi ramp k, cas (includ	nps and oto 7, Apigan Aveous to and ino, steeding public will be a	bridges opendix enue Brid from SF mill, ar lic transable to a	that will B-8 for edge at the R 912 over other and other it) needing ccess the	continuexample ae "Ame yer the ramenition amenition ang to crais area	ie to pro e signs). ristar Ir railroad ies loca ross SR via ram	ovide a Spec tercha tracks ted no 912 a	access to ifically, ange", If to Aldisortheast and the indicate indicate indicate the indicate i	to both there i NDOT s Stree of SR railroa	sides of san over Structuret, when 912 and sides of sides	of SR verpass ure No. re ud the the
(Appendent of Appendent of Appe	dix oord d. A ed t r 11 cts (	transit auth J-11 to J-13 dination lette a representa the project v , 2022. Coo (RFC) stage ronmental C	). The East ers (ECLs) vitive of the livith team merdination with the continuation was not been the continuation with the continuation was not be continuation.	Chicago B were sent to East Chicago members (A ith the two ractor will b	dus Transi to the trans go transit ppendix O transit au le required	it "Wes sit author author 3-48). thoritied to no	st Calum horities rity atter No com es and C otify tran	net" route on Marc ided the ments w City of Ea	e utilizes h 30, 20 public h ere rece ast Chica	the Mid 22 (Applearing I eived wil ago office	chigan A bendix ( held on thin the cials wil	Avenu C-1 to Septe comn I be re	e bridge C-3). No mber 2 nent per quired p	e (App o resp 7, 202 riod tha prior to	endix J onse w 2 and at ende o Ready	-13). as d on / for
public to	rans	sed closures sit, and eme ct completio	rgency ser													
		8, 2021, ECI dination sec										s (App	endix C	-1 to C	C-3), se	e the

County La	аке			Route _	SK	912			Des. No	-	1703011 (lead	<u>a)</u>	
ESTIMATED	STIMATED PROJECT COST AND SCHEDULE:												
Engineering: (Appendix H-1	\$ \$ 2 to	93,320 50,000 H-13)	(2022) (2024)	_Right-of-Way:	\$		ROW	(2022) for FY 20	_Construction:	\$ o sta	36,877,437 te funding.	(2024)	_
Anticipated St	art [	Date of Con	struction:	Spring 2024									

#### **RIGHT OF WAY:**

	Amour	nt (acres)
Land Use Impacts	Permanent	Temporary
Residential	N/A	N/A
Commercial	N/A	N/A
Agricultural	N/A	N/A
Forest	N/A	N/A
Wetlands	N/A	N/A
Other: Industrial	N/A	4.83
Other:		
TOTA	AL <b>N/A</b>	4.83

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition, reacquisition or easements, either known or suspected, and their impacts on the environmental analysis should be discussed.

The existing ROW primarily consists of the project roadways and ramps, the project bridges, and the maintained grassy infields in the southern portion of the interchange. There is also shared ROW beneath the Michigan Avenue, Ramp I, and Ramp NEC bridges, consisting of INDOT ramps, local streets, and the railroad corridor that is "shared" by INDOT with the applicable entity (City of Chicago and/or railroads). The existing ROW averages approximately 1,200 to 1,500 feet wide at the interchange. This project includes approximately 0.11 acre of reacquisition of existing apparent ROW, which is already in a transportation use as the embankments at the north end of the Michigan Avenue Bridge (Appendix B-12 and J-14).

The project requires approximately 2.81 acres of temporary ROW, plus 2.02 acres of "right-of-entry" ROW. The 2.81 acres of temporary ROW is needed from industrial landowners for work along the north side of the Michigan Avenue Bridge abutment and approach, and the foundations of the Closed Pedestrian Bridge (Appendix B-12 and J-14). This project also requires 2.02 acres of restricted, temporary "right-of-entry" ROW to allow contractors access to the project area. This area consists of an existing, paved private drive owned by an industrial entity. No construction work will be allowed within this area, including but not limited to staging, excavating, etc. Since this area was not included in the initial environmental study area (including Section 106), a firm commitment is included in the Environmental Commitments section of this CE document.

The ECLs sent during preliminary project development under-estimated the amount of temporary ROW that would be required (specifically, 0.79 acre) (Appendix C-2). Further coordination with resource agencies was not needed because it is limited to temporary ROW from the adjacent steel mill and railroad that is already functioning as maintained roadside embankment or paved private drives (see Appendix B-6). The increase in temporary ROW amount was communicated to the INDOT Cultural Resources Office (CRO) on February 8, 2022 and further action was not required (Appendix D-101 to D-102).

If the scope of work or permanent or temporary ROW amounts change, INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

This is page 17 of 40	Project name:	SR 912 Michigan Avenue Bridges Project	Date:	February 1, 2023

Version: April 2021

County	Lake	Route SR 912	Des. No. 1703011 (lead)

# Part III - Identification and Evaluation of Impacts of the Proposed Action

#### **SECTION A - EARLY COORDINATION:**

List the date(s) coordination was sent and all resource agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

ECLs were sent on June 18, 2021 (Appendix C-1 to C-3).

Agency	Dates Sent	Date Response Received	<u>Appendix</u>
FHWA	June 18, 2021	No response received	N/A
Indiana Geological and Water Survey (IGWS)*	June 18, 2021	June 18, 2021	C-8 to C-10
Indiana Department of Natural Resources, Division of Fish and Wildlife (IDNR-DFW)	June 18, 2021	July 16, 2021	C-4 to C-5
Indiana Department of Environmental Management (IDEM)*	June 18, 2021	N/A*	N/A
National Park Service	June 18, 2021	No response received	N/A
US Department of Housing & Urban Development (US HUD)	June 18, 2021	No response received	N/A
INDOT LaPorte District	June 18, 2021	No response received	N/A
INDOT Environmental Services	June 18, 2021	No response received	N/A
INDOT Office of Aviation	June 18, 2021	June 21, 2021	C-11
US Army Corps of Engineers (USACE), Chicago District	June 18, 2021	No response received	N/A
US Fish and Wildlife Service (USFWS)	June 18, 2021	July 1, 2021	C-6 to C-7
Lake County Council	June 18, 2021	No response received	N/A
Lake County Highway Department	June 18, 2021	No response received	N/A
Lake County Surveyor	June 18, 2021	No response received	N/A
Lake County Commission	June 18, 2021	No response received	N/A
City of East Chicago Police Department	June 18, 2021	No response received	N/A
City of East Chicago Fire Department	June 18, 2021	No response received	N/A
Northwestern Indiana Regional Planning Commission (NIRPC)	June 18, 2021	No response received	N/A
School City of East Chicago	June 18, 2021	No response received	N/A
City of East Chicago Marina	June 18, 2021	No response received	N/A
City of East Chicago Mayor's Office	June 18, 2021	No response received	N/A
City of East Chicago Common Council	June 18, 2021	No response received	N/A
City of East Chicago Parks and Recreation	June 18, 2021	No response received	N/A
Gary Public Transportation Corp	March 30, 2022	No response received	N/A
East Chicago Bus Transit	March 30, 2022	No response received	N/A

<sup>\*</sup> Electronic coordination (The IDEM electronic-coordination letter was omitted per recent INDOT guidance)

All applicable recommendations are included in the Environmental Commitments section of this CE document.

This is page 18 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County Lake		Route	SR 912	Des. N	o 1703011 (lead)
SECTION B - E	COLOGICAL RE	SOURCES:			
Federal State Nationw Outstan	Rivers, Watercour Wild and Scenic R atural, Scenic or Re vide Rivers Invento ding Rivers List for ble Waterways project area:	tivers ecreational Rivers ry (NRI) listed Indiana		Presence es	Impacts Yes No
Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, US, appendix reference)	flow direction, likely Water of the
N/A	N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	N/A	
impacts (both perma or state lists for India mitigate if impacts w Based on the desk	anent and tempora ana. Include if feato vill occur. top review, the aer	ry) will occur to the ures are subject to ial map of the proj	e features identifie federal or state ju ect area (Appendi	d. Include if the streams or risdiction. Discuss measur	ect area. Include whether or not rivers are listed on any federal res to avoid, minimize, and (Appendix E-1 to E-11), there are
watercourse, or oth 15, and 16, 2021, a expected.  A <i>Waters of the US</i> 2022. Please refer	ner jurisdictional fe and October 5, 202 S (WOUS) <i>Report</i> to to Appendix F-3 to	atures within or ad 21, by Parsons (he was approved by th 5 F-24 for the WOL	jacent to the proje reinafter referred t ne INDOT Ecology JS. It was determin	ct area, which was confirm o as the 2021 site visits). To and Waterway Permitting	Office (EWPO) on January 26, ms, rivers, watercourse, or other
	d revegetating distu	ırbed areas (Appe	ndix C-4 to C-5). <i>A</i>	rd recommendations to pro	otect water resources, such as tions are included in the
Reserve Lakes Farm Po Retentio Storm V				Presence Imp	pacts No
This is page 19	of 40 Project na	ame: <u>SR 912 N</u>	/lichigan Avenue E	Bridges Project	Date: _February 1, 2023

County	Lake		Rou	ite SR 9	912	_	Des. No.	1703011 (le	ad)
temporary) wavoid, minim	open water featuill occur to the fize, and mitigate	features iden e if impacts v	tified. Include vill occur.	if features a	are subject to	federal or sta	ate jurisdiction	on. Discuss me	easures to
four open w	ne desktop revie vater features wi the project area	ithin the 0.5-r	mile search ra	dius, includ	ling Lake Mich	igan. There	are no open	water features	
Lake Michig 2019, Lake	to early coordin gan Coastal Pro <i>Michigan Coast</i> xempt because i	gram Federa tal Zone Guid	al Consistency dance ( <u>https:/</u>	/ review ma /www.in.go\	y be required ( //indot/engine	(Appendix Cering/files/LN	-4 to C-5). E ICP-guidano	Based on INDO ceOctober-20	T's October 019.pdf) this
						Preser	<u>1Ce</u>	Impacts	
We	tlands					X		Yes No	
Total wetlar	nd area:		0.072	Acre(s)	Total wetland	area impact	ed:	0.072	Acre(s)
(If a determ	ination has not l	been made f	or non-isolate	d/isolated w	vetlands, fill in	the total we	tland area in	npacted above	.)
Wetland I	No. Classific		otal Size (Acres)	Impacted A	Acres Comm	•	cation, likely	Water of the U	JS, appendix
Wetland 1	Emerge			0.042	Locate Avenu State; jurisdi	ed south of Sile/Ramp C (however, INction.	Appendix F- NDOT is requ	north of Michig 15). Likely a W uesting USACE	Vater of the take
Wetland 2	Emerge	nt 0.03	30	0.030	Avenu	ie Bridge (A	ppendix F-1	underneath, the 8). Likely a Wa g USACE take	ter of the State;
We	tlands (Mark all	that annly)		Doc	<u>umentation</u>		ESD .	Approval Date	<u>es</u>
'	Netland Determ	ination		Į.	X	[	January 1		
	<i>N</i> etland Delinea JSACE Isolated		ermination		X	-	January 18	8, 2022	
	rovements tha				acts are not p	racticable b	pecause suc	ch avoidance	
	Substantial adv Substantially in Unique enginee	erse impacts	s to adjacent ject costs;	homes, bus		improved pr	operties;		X
	Substantial adv The project not				ntal impacts, o	r			X

This is page 20 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County Lake	Route	SR 912	Des. N	lo1703011 (lead)	
Describe all wetlands identified adjac will occur to the features identified. In and mitigate if impacts will occur.	nclude if features are su	bject to federal or	state jurisdiction. Disc	uss measures to avoid, mir	nimize,
Based on the desktop review, the a two wetlands within the 0.5-mile se was updated to two by the 2021 sit	arch radius. There are n				
A WOUS Report was approved by report. As previously discussed, so investigated for related projects tha likely jurisdictional wetlands presen above table and shown on the figur	me of the appended doo t are covered under sep t within or adjacent to th	cuments, including parate environmer ne project area tot	the WOUS Report, in tal documents. It was aling 0.072 acre. The v	clude study areas that were determined that there are to vetlands are summarized in	e wo n the
Wetland 1 is classified as an emerg Michigan Avenue/Ramp C (Append 0.042 acre, will be impacted by this	lix F-15). Wetland 1 is a				
Wetland 2 is classified as an emergunderneath, the Michigan Avenue E 0.030 acre, will be impacted by this	Bridge (Appendix F-18).				nd 2,
Impacts to Wetlands 1 and 2 cannot regraded and reconfigured, and the discussion). The project will require impacting these resources. Mitigatic construction in wetlands and the prefrom such use. FHWA approval of the second such as the secon	Michigan Avenue Bridge a USACE Section 404 on for wetlands impacts oposed action includes	ge needs to be rep permit and an IDE is not anticipated all practicable me	placed (see the Purpos M Section 401 Water There is no practicab asures to minimize har	e and Need section for furt Quality Certification before le alternative to the propose m to wetlands which may re	her ed new
IDND DEW					
IDNR-DFW responded to early coo program and the USACE 404 progr					/ 401
		ands in the projec	t area (Appendix C-4 t	o C-5).	// 401
		ands in the projec	t area (Appendix C-4 t	o C-5).   <u>mpacts</u>	/I 4U1
Terrestrial Habitat  Total terrestrial habitat in project and Describe types of terrestrial habitat (or not impacts will occur to habitat in	ea: 7.5 i.e. forested, grassland, lentified. Include total tel	Acre(s)  farmland, lawn, errestrial habitat im	resence Yes X Total tree clearing: _tc.) adjacent or within it	mpacts S No  0.00  the project area. Include wh	Acre(s)
program and the USACE 404 program  Terrestrial Habitat  Total terrestrial habitat in project and Describe types of terrestrial habitat (	ea: 7.5 i.e. forested, grassland, lentified. Include total terigate if impacts will occurisit on March 12, 2020 Isist of maintained grass	Acre(s)  Acre(s)  farmland, lawn, errestrial habitat imur. by Parsons, and to y infield and roads	resence Yes X Total tree clearing: tc.) adjacent or within a pacted and total tree clearing and total tree cone aerial map of the proside. Dominant species	0.00  the project area. Include who learing that will occur. Discovering the project area (Appendix B-4), is include common species of	Acre(s) nether uss
Terrestrial Habitat  Total terrestrial habitat in project and Describe types of terrestrial habitat (or not impacts will occur to habitat id measure to avoid, minimize, and mits assed on a desktop review, a site is habitats within the project area con grasses (Festuca arundinacea and	ea: 7.5 i.e. forested, grassland, lentified. Include total terigate if impacts will occurisit on March 12, 2020 Isist of maintained grass Setaria pumila), clover of terrestrial habitat will be configured. All disturbed de a net benefit to terrespacts to terrestrial habit	Acre(s)  Acre(s)  farmland, lawn, exprestrial habitat imus. by Parsons, and to y infield and roads (Trifolium repens) the disturbed by this I areas will be payostrial habitat by reat is not feasible to	resence Yes X Total tree clearing: tc.) adjacent or within a pacted and total tree clearing and broadleaf plantai sproject, primarily with ed or completed with smoving redundant rame acause it is present w	o C-5).  mpacts s No  0.00  the project area. Include whelearing that will occur. Disciple tarea (Appendix B-4), is include common species on (Plantago major). Much on the southern interchanguoil and a standard seed mit ps and replacing them with ithin existing ROW, and the	Acre(s) nether uss  of of the e x.
Terrestrial Habitat  Total terrestrial habitat in project and Describe types of terrestrial habitat (or not impacts will occur to habitat id measure to avoid, minimize, and mits and material measure to avoid, minimize, and mits assed on a desktop review, a site of habitats within the project area con grasses (Festuca arundinacea and project area is paved.  A total of approximately 7.5 acres of where the existing ramps will be real threefore, this project should proving maintained vegetation. Avoiding im and sidewalks need to be replaced.	ea: 7.5 i.e. forested, grassland, lentified. Include total terigate if impacts will occurisit on March 12, 2020 Issist of maintained grass Setaria pumila), clover of terrestrial habitat will be configured. All disturbed de a net benefit to terrespacts to terrestrial habitat. There are no trees with will differ such as small market area as the majority	Acre(s)  Acre(s)  farmland, lawn, exprestrial habitat imur. by Parsons, and to y infield and roads (Trifolium repens)  be disturbed by this areas will be payential habitat by reat is not feasible to him the project are mmals, reptiles, both of the project areas	resence Yes X Total tree clearing: tc.) adjacent or within a pacted and total tree clearing and broadleaf plantai sproject, primarily with ed or completed with smoving redundant rampecause it is present was therefore, no tree triefds (including migrator is industrial land. World is industrial land. World in the contract of the contr	o C-5).  mpacts s No  0.00  the project area. Include whelearing that will occur. Disciple tarea (Appendix B-4), is include common species on (Plantago major). Much on the southern interchanguoil and a standard seed mit ps and replacing them with ithin existing ROW, and the mming or clearing will occurry birds), and amphibians like on the Michigan Avenue	Acre(s) nether uss  of of the e x. e bridge ir. kely

This is page 21 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County	Lake	Route	SR 912	De:	s. No	1703011 (	lead)
impacts, ar		coordination on July 16, 20 ed surfaces (Appendix C-4 document.					
Fed	Section 7 informal co	ing and Consultation (IPaC nsultation completed (IPaC sultation Biological Assess	cannot be comple	eted)	Yes	]	No
Det	ermination Received	for Listed Bats from USFV	VS: NE	NLAA	X	] LAA	
		uded in IPaC ecies found in project area d) found in project area (ba			Yes	]	No X X
Ī		ence of birds (i.e. nests) sed upon coordination with	IDNR		Yes	]	No X X
Indiana ba	at and northern long-e	I species identified. Descri eared bat impacts. Discuss and the determination that	if other federally l	isted species were	identified	l. If so, inclu	ude
County End preserves/f C-5), the N threatened	dangered, Threatened iles/np_Lake.pdf. Acc atural Heritage Progr , endangered, or rare	the RFI report (Appendix Ed and Rare (ETR) Species cording to the IDNR-DFW cam's Database has been chave been reported to oct the presence of endanger	List has been che early coordination checked, and no pl cur in the project vi	cked and is provide response letter date ant or animal speci	ed at <u>http</u> ed July 1 ies listed	<u>s://www.in.</u> 6, 2021 (Ap as state or	gov/dnr/nature- pendix C-4 to federally
species list	was generated (App	ed through the USFWS's Ir endix C-12 to C-24). The p I bat (NLEB) ( <i>Myotis septe</i>	roject is within ran				
dated May Administrat were obser provided, the reviewed a received from Minimization	2016 (revised Februation (FTA), and USFV ved at the structures are project was found and concurred with the DT USFWS within the IME MEASURES (AMMs)	ge-wide Programmatic Info ary 2018), between FHWA VS. Bridge inspections occ An effect determination ke "Not Likely To Adversely As e effect finding on March 29 14-day review period; the for this project include Ligh mental Commitments sect	the Federal Railro urred on July 14 a ey was completed ffect" the Indiana b 0, 2022, and reque refore, it was cond ting AMM1, Lighti	bad Administration and 15, 2021, and non March 28, 2022 bat and/or the NLEI sted USFWS's reveluded they concuring AMM 2, and Ge	(FRA), the one evidence of the control of the contr	te Federal Tope of migrates of migrates on the red on the red on the red of t	Transit tory birds or bats responses C-36). INDOT or response was bidance and
piping plove This project 2013 USFV also mentice	er ( <i>Charadrius melod</i> t will not impact the ty VS Interim Policy ( <u>htt</u> ons the monarch butte	d from IPaC indicated thre us) and federally threatene upes of habitat typically as ps://www.in.gov/indot/engierfly (Danaus plexippus) as in is needed with USFWS.	ed red knot ( <i>Calidri</i> sociated with these neering/files/USFV	is canutus rufa) and e species (e.g., lake VS-Interim-Policy 2	d pitcher's eshore du 2013.pdf)	s thistle ( <i>Ci</i> ines), and i . The officia	rsium pitcheri). t falls under the al species list

County	Lake	Route	SR 912	Des. No	1703011 (lead)
species (A plover, Ruf	V's response to early coordination d ppendix C-4 to C-5). USFWS respo fa red knot, and pitcher's thistle with C-6 to C-7).	nded to early	y coordination or	n July 1, 2021, stating there	e is no habitat for the piping
amended.	ides the need for further consultatio If new information on endangered s for consultation.				
	Project located within the Potential Karst features identified within or a Oil/gas or exploration/abandoned w	djacent to the vells identifie	e project area d in the project a	na	es No X X X
Da	te Karst Study/Report reviewed by I	NDOT EWP	O (if applicable):		
area (from F were identifi study/report by INDOT E		m IGWS coo be if any imp investigatior	ordination. Discus acts will occur to must comply wi	ss if any mines, oil/gas, or o any karst features. Includ ith the current Karst MOU o	exploration/abandoned wells le discussion of karst and coordinated and reviewed
MOU. Acco	a desktop review, the project is loca ording to the topo map of the project v.indianamap.org/), there are no kar	t area (Appe	endix B-2), the RI	FI report (Appendix E-1 to	E-11), and IndianaMap
(Appendix resources, mineral res	y coordination response dated Febru C-8 to C-10). Their response noted a low potential for sand and gravel sources extraction sites in the area 4, 2022. No impacts are expected.	that the pro resources, a	ject area has a h a 1% annual cha	igh liquefaction potential, a nce flood hazard, and that	a high potential for bedrock there are documented active
SECTION	I C – OTHER RESOURCES				
	inking Water Resources Wellhead Protection Area(s) Source Water Protection Area(s) Water Well(s) Urbanized Area Boundary Public Water System(s)			Presence In Yes X X X	npacts s No X X X
	the project located in the St. Joseph If Yes, is the FHWA/EPA SSA MOU If Yes, is a Groundwater Assessme	J Applicable	?	Yes	S NO X

This is page 23 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County	Lake	Route	SR 912	Des. No.	1703011 (lead)
coordination	ppropriate boxes and discus responses and any mitigati	on commitments. R	eference responses in	the Appendix.	
designated Aquifer Me	t is located in Lake County, in sole source aquifer in the sole source aquifer in the sole morandum of Understanding pacts are expected.	tate of Indiana. The	refore, the FHWA/Envi	ironmental Protection A	gency (EPA) Sole Source
January 10 (SWA) for with City of public water plans, among Construction Storm Water	ong other responsibilities ( <a "="" entapps.indot.in.gov="" href="https://h&lt;/td&gt;&lt;td&gt;oject is not located with the SWA cannot be bring (see Utility Log or defining their SW ps://www.in.gov/ide hit (Rule 5 permit) for (SWPPP). This pro&lt;/td&gt;&lt;td&gt;within a Wellhead Prote&lt;br&gt;e avoided because it is&lt;br&gt;, Appendix J-1). Based&lt;br&gt;A, identifying potential&lt;br&gt;m/cleanwater/2456.htm&lt;br&gt;or stormwater manager&lt;br&gt;ject will comply with th&lt;/td&gt;&lt;td&gt;ection Area, but it is wit&lt;br&gt;clocated throughout the&lt;br&gt;don the IDEM Ground&lt;br&gt;sources of contaminan&lt;br&gt;n). This project required&lt;br&gt;ment and erosion contre&lt;br&gt;e SWA because any po&lt;/td&gt;&lt;td&gt;hin a Source Water Area e project area. Coordination Water website, community sts, and creating contingency s an IDEM Rule 5 ol measures, including a otential sources of&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Water Well Record Databas&lt;br&gt;lo wells are located near this&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;l on February 10, 2022, by&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;(https://ent.&lt;br&gt;located wit&lt;br&gt;2021 (Appe&lt;br&gt;Chicago. A&lt;/td&gt;&lt;td colspan=8&gt;Parsons. No wells are located near this project. Therefore, no impacts are expected.  Based on a desktop review of the INDOT Municipal Separate Storm Sewer Systems (MS4) website (&lt;a href=" https:="" ms4="">https://entapps.indot.in.gov/MS4/</a> ) by Parsons on January 10, 2022, and the RFI report (Appendix E-1 to E-11), this project is located within the City of East Chicago's Urban Area Boundary (UAB). An ECL was sent to the local MS4 Coordinator on June 18, 2021 (Appendix C-1 to C-3). A response was not received. Utility coordination for this project is ongoing and includes the City of East Chicago. A copy of the Utility Coordination Log is provided in Appendix J-1. The project includes storm water system improvements that will comply with 327 IAC 15-13 (Rule 13). Therefore, no impacts are expected.				
project is to the public v	a desktop review, the 2021 s ocated where there is a publ water supply will not be affect J-1). The City of East Chica	ic water system, oper cted because utility	erated by the City of Eacoordination is occurring	ast Chicago. Although t ng and there will be no	there are conflicts to resolve,
	odplains Project located within a regu Longitudinal encroachment Transverse encroachment Homes located in floodplain	·	vnstream from project	Presence Ye	Impacts es No
If a	pplicable, indicate the Flood	plain Level?			<del></del> -
Lev	vel 1 Level 2	Level	3 Level 4	Level 5	
according to during desig The Indian	<i>In to insure consistency with</i> a Department of Natural Re	encroachment on a the local flood plair sources Indiana Flo	n flood plain will occur, n planning. odway Information Por	coordinate with the Loc	cal Flood Plain Administrator
floodplain a		d IDNR floodplain m	naps (Appendix F-2). T	herefore, it does not fa	t is not located in a regulatory Il within the guidelines for the
This is	page 24 of 40 Project nar	no: SP 042 Mio	nigan Avenue Bridges	Project Date	e: February 1, 2023
11115 15	page 24 of 40 Project nar	ile. ON SIZ WIC	ingan Avenue bliuges	i iojeci Dale	e. I colualy 1, 2023

County	Lake	Route _	SR 912		Des. No.	1703011 (lead)
F	armland Agricultural Lands Prime Farmland (per NRC Total Points (from Section \ *If 160 or greater, see CE Man	/II of CPA-106/AD-100	6*)	<u>Presence</u>		Impacts Yes No
Based or the defini	d.  a desktop review, the 2021	site visits, and the aer armland Protection Pol	ial map of th	ne project area (Appe PA) within or adjacen	endix B-4)	ion and minimization measures , there is no land that meets oject area. The requirements
SECTIO	N D – CULTURAL RESC	OURCES				
F	linor Projects PA  ull 106 Effect Finding No Historic Properties Affet ligible and/or Listed Resort NRHP Building/Site/Distric	urces P <u>resen</u> t	Adverse Eff	ect X Adv	OT Appro	
D	ocumentation Prepared (n APE, Eligibility and Effect 800.11 Documentation Historic Properties Report Archaeological Records C Archaeological Phase Ia S Archaeological Phase Ic S Other: Historic Bridge Alte Other:	Determination or Short Report heck and Assessment urvey Report urvey Report rnatives Analysis	X X X X	February 3, 2022 February 3, 2022 May 18, 2021 May 18, 2021 November 2, 2021  MOA Signature Da  (Not required under	F F J J C C C C C C C C C C C C C C C C	,

SR 912

Route

the project falls under the MPPA,	describe the category(ies) th	at the project falls under and	d any approval dates. If	the project requires
II Castian 100 was the baselines	musicials at The assemblation of t	ha Caatian 100 mmaaaa manu	vives that a Lamal Nistia.	منا أممام المانيين ما ما

Des. No.

1703011 (lead)

If full Section 106, use the headings provided. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of the paper(s) and the comment period deadline. Include any further Section 106 work which must be completed at a later date, such as mitigation from a MOA or avoidance commitments.

Per the terms of the Historic Bridges PA, the FHWA will satisfy its Section 106 responsibilities involving "Select" and "Non-Select" bridges through the Project Development Process (PDP) of the Historic Bridges PA (Stipulation III). Since the Ramp B over B Bridge is "Non-Select", the procedures outlined in Stipulation III.B. of the Historic Bridges PA will be followed to fulfill FHWA's Section 106 responsibilities for the bridge. A copy of the Historic Bridges PA can be downloaded here: http://www.in.gov/indot/2530.htm.

Area of Potential Effect (APE): Pursuant to 36 CFR 800.16(d), the Area of Potential Effect (APE) for aboveground resources was determined by sight lines and extends approximately 370 to 1,115 feet from the project area. The APE for archaeology was the project footprint.

Coordination with Consulting Parties (CPs): Early coordination was initiated on December 10, 2020 with a letter inviting organizations and individuals to become CPs (Appendix D-28 to D-34). The Indiana State Historic Preservation Officer (SHPO) from IDNR-Division of Historic Preservation and Archaeology (DHPA) is a designated CP. The following is a list of the organizations and individuals formally invited to become a CP (those organizations who accepted the invitation to become a CP are identified by bold text):

- Mayor, City of East Chicago
- East Chicago Common Council Members
- City Engineer, City of East Chicago
- Planning and Economic Development, City of East Chicago
- Lake County Commissioners
- Lake County Highway Department
- Indiana Landmarks

County

Lake

- Northwest Indiana Regional Planning
- Lake County Historical Society and Museum
- East Chicago Historical Society
- Indiana Historic Spans Task Force
- Historic Hoosier Bridges
- Historic Bridge Foundation
- Historic Bridges.org
- DePauw University
- Eastern Shawnee Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Peoria Tribe of Indians of Oklahoma
- Pokagon Band of Potawatomi Indians
- Shawnee Tribe
- Forest County Potawatomi Community

The SHPO responded to the early coordination letter on December 28, 2020 (Appendix D-39 to D-40). The Miami Tribe of Oklahoma and the Pokagon Band of Potawatomi accepted consulting party status on January 8, 2021 (Appendix D-41 and D-42). The responses to early coordination did not identify potential resources; they requested stop-work and immediate consultation if any archaeological resources are discovered (Appendix D-41 to D-42).

Archaeology: Pursuant to 36 CFR § 800.4(b), staff from ASC conducted a project review and records check, which did not identify potential resources (Appendix D-9). No further work was recommended. The results of the archaeology review were distributed to CPs on May 18, 2021 (Appendix D-43 to D-49). The Pokagon Band of Potawatomi Indians responded on June 14, 2021, indicating the project should have No Adverse Effect on significant resources (Appendix D-50). The SHPO responded on June 16, 2021, and did not identify known archaeological resources within the project area (Appendix D-51 to D-52). No further responses were received.

Historic Properties: ASC prepared the Historical Properties Report (HPR) on May 18, 2020 (Appendix D-24 to D-25). The following two resources within the APE are listed in, or are eligible for listing in, the National Register of Historic Places (NRHP):

Inland Steel Office Building/ArcelorMittal Human Resources (Indiana Historic Sites and Structures Inventory [IHSSI] No. 089-679-35181); This seven-story Art Deco office building was built circa 1930 and designed by the noted Chicago architectural firm of Graham, Anderson, Probst, and White, who designed a variety of notable buildings in the early twentieth century. The building was

This is page 26 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date:	Februar	y 1, 2023
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		indiana Depa	irtment of Tran	sportation	
County	Lake	Route	SR 912	_ Des. No.	1703011 (lead)
	d eligible under Criteria A a f Art Deco architecture (Ap		nce as a component of	of Inland Steel's East Chi	cago complex and as a good
concrete ri exemplifies distinctive	s an uncommon highway b	959, with horizontal cu ridge type in Indiana. on, design, or enginee	urved decks that repr The structure is eligering and it retains hi	esent an important bridge ible under Criteria C as it storic integrity (Appendix	e construction technique and
on June 14	1, 2021, indicating the proje	ect should have No A	dverse Effect on sign	ificant resources (Appen	watomi Indians responded dix D-50). The SHPO er responses were received.
responsibi November of the histo purpose ar	ed in the Other Alternative lities for the bridge and any 8, 2021 (Appendix D-54 to bric bridge, and replacing the need. The SHPO respond need that is both feasib	y effect to the bridge to D-59). Based on the ne bridge in its curren nded on December 3	through the Historic E HBAA, no reasonab It location would leav , 2021, concurring th	Bridges PA. The HBAA was and prudent alternative in place geometric definate there is no alternative	as distributed to CPs on e would result in the salvage ciencies outlined in the that meets the project's
	o the Historic Bridges PA, occurred include:	several steps were u	ndertaken to market	he Ramp B over B Bridg	e. The marketing measures
•	A public notice publis A public notice publis Availability of the brid	hed in the <i>NWI Times</i> ge posted to the IND	s on December 18, 2 OT marketing websit	17, 2020 (Appendix D-6- 020 (Appendix D-67 to D e on December 17, 2020 ary 19, 2021 (Appendix	-70); (D-71 to D-72); and
	ed in the Public Involveme of the bridge.	ent section, no party o	contacted INDOT or t	ne project team indicatin	g an interest in assuming
<b>Documen</b> D-15):	tation Findings: INDOT, a	acting on behalf of FH	IWA, issued the follo	wing findings on Februar	y 3, 2022 (Appendix D-5 to
The project complete, component neglect to the structu change in	the preferred alternative's t of the project is 0.07 mile the building. The undertak re, and it will not introduce ownership of the building.	s on this structure. The roundabout and its application (365 feet) south of the roundabout and introduce and atmospheric or	e existing interchang oproaches will be in a ne office building. The an intrusive new visu audible elements to t	e is in the view shed of the same less project will not physical all element that will dimin he resource's setting. Ac	ne office building, and when ocation. The nearest ly impact, remove, or cause ish the integrity of setting of
INDOT CR Approval u adverse in 'No Advers serves as Review Bo	CO requested that the Division of the Conference	ion Director issue a lendix D-96 to D-98). O Office Building], we had be a certificate of a	etter of clearance exing April 27, 2022, SH ave determined, pur pproval from the Revito D-100). Interested then the division dire	empting this project from PO issued a letter stating suant to 312 IAC 20-4-11 iew Board is not necessa persons have 15 days to ctor's letter of clearance	obtaining a Certificate of "since there will be no .5(f), that with a finding of ary. Accordingly, this letter or equest a member of the is affirmed. Additionally, a

County	Lake		Route	SR 912		Des. No.	1703011 (lead)
The preferi	red alternative v		ource. As pr	eviously stated			as a "Non-Select" bridge by ges PA are being followed.
to demolition	on (Appendix D A (Appendix D-	-74 to D-76). On Ap	ril 14, 2022, more, INDO	INDOT CRO s T CRO clarifie	submitted the reque	ested photog	ographic documentation prior graphic documentation to not applicable since the
		PO responded that t ed at the State Arch					l). The photographic s not required.
advertised,	the public com	blic notice of the "Noment period ended ( Appendix D-77 to E	30 days late	r on March 12,	2022. The text of t		s on February 10, 2022. As otice and affidavit of
Section 10 September ended on 0 assuming 0	6 have been ful 27, 2022. Deta October 11, 202 ownership of the	filled. In order to fulf tils are discussed in 2, no comments we	ill the require the Public Ir re received a r 24, 2022, t	ements of the had not been to be a control of the had no party control of the Eastern Sha	Historic Bridges PA ction of this CE doc ontacted INDOT or awnee Tribe of Okl	, a public he ument. Dur the project ahoma resp	sibilities of the FHWA under earing was held on ring the comment period that team indicating an interest in conded that the project
This is	page 28 of 40	Project name: _	SR 912 Mic	higan Avenue	Bridges Project	Dat	e: February 1, 2023

indiana	Department of Trai	insportation
County Lake F	Route SR 912	Des. No. <u>1703011 (lead)</u>
SECTION E – SECTION 4(f) RESOURCES/	SECTION 6(f) RESOUR	RCES
Parks and Other Recreational Land Publicly owned park Publicly owned recreation area Other (school, state/national forest, bikeway, et Wildlife and Waterfowl Refuges National Wildlife Refuge National Natural Landmark State Wildlife Area State Nature Preserve Historic Properties Site eligible and/or listed on the NRHP NRHP Bridge(s)	Yes  X X X tc.)  X X X X X X X X X X	Use X X X X
	Evaluations Prepared	
must be included in the appendix and summarized and summarized and summarized and summarized and summarized and summarized and section 4(f) of the U.S. Department of Transportation funded transportation facilities unless there is no for parks, recreation areas, wildlife / waterfowl refuges subject to this law are considered Section 4(f) resonable to this law are considered Section 4(f) resonab	below. Discuss proposed allurement for Section 4(f) apption Act of 1966 prohibits the easible and prudent alternatis, and NRHP eligible or lister ources.  project area (Appendix B-4) action 4(f) resources located ite visits, there are three Section 4(f) resources located area (Appendix B-4) are are three Section 4(f) resources located area (Fround historic resources, the cago Marina and Jerose Parak Beach properties, these are properties are located adjurction will not block or limit and park resources by taking that the protected activities, aired (i.e., constructive use)	the use of certain public and historic lands for federally ative. The law applies to significant publicly owned and historic properties regardless of ownership. Lands by the law applies are a section 4(f) resources located within or adjacent to the law applies and the Ramp B over B ark Beach.  The are a Section 4(f) resource because they are a ligacent to the northeast of project area (Appendices B-4 tracess because the nearby Ameristar interchange willing permanent ROW (i.e., permanent incorporation) and and applies for the project of the resources for the law applies that qualify the resources the law applies that qualify the resources the law applies that qualify the resources the law applies that qualify the
As discussed in the Cultural Resources section, the NRHP. See the Cultural Resources section		ing and the Ramp B over B Bridge are eligible for listing assion of each resource's characteristics.
	f significance regardless of	historic sites that are listed, or eligible for inclusion, in whether or not the historic site is publicly owned or

This is page 29 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County	Lake	Route	SR 912	Des. No.	1703011 (lead)
	<u> </u>	·		_	

According to 23 CFR 774.17, a Section 4(f) "Use" is defined as

Except as set forth in §§ 774.11 and 774.13, a "use" of Section 4(f) property occurs: (1) When land is permanently incorporated into a transportation facility; (2) When there is a *temporary occupancy* of land that is adverse in terms of the statute's preservation purpose as determined by the criteria in § 774.13(d); or (3) When there is a *constructive use* of a Section 4(f) property as determined by the criteria in § 774.15.

Per 23 CFR 774.17, the SHPO is considered the official with jurisdiction (OWJ) for historic properties for the purposes of Section 4(f).

#### Inland Steel Office Building/ArcelorMittal Human Resources (IHSSI No. 089-679-35181): No Use

The project will not use this resource by taking permanent ROW (i.e., permanent incorporation) and will not indirectly use the resource in such a way that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (i.e., constructive use). Therefore, no use is expected. Per the 800.11 Documentation, no Section 4(f) evaluation was required (Appendix D-4 to D-5). The SHPO concurred with these findings on February 17, 2022 (Appendix D-74 to D-76).

#### Ramp B over B Bridge Structure No. 912-45-06596 B; NBI No. 33035): Use

This structure is already in a transportation use. The proposed removal of the Ramp B over B Bridge is evaluated through the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges* (Appendix D-4) (hereinafter referred to as the Historic Bridge Programmatic Section 4(f) Evaluation). According to the Historic Bridge Programmatic Section 4(f) Evaluation, a proposed action will "use" a historic bridge when the action impairs the historic integrity of the bridge either by rehabilitation or demolition.

The Historic Bridge Programmatic Section 4(f) Evaluation may be applied to projects which meet the following criteria:

- The bridge is to be replaced or rehabilitated with Federal funds.
   As stated in the Project Description (Preferred Alternative) section this project involves FHWA funds.
- The project will require the use of a historic bridge structure which is on or is eligible for listing on the NRHP. As discussed in the Cultural Resources section, the Ramp B over B Bridge is eligible for the NRHP.
- The bridge is not a National Historic Landmark.

  The Ramp B over B Bridge is not on the NPS list of National Historic Landmarks (<a href="https://www.nps.gov/subjects/">https://www.nps.gov/subjects/</a> nationalhistoriclandmarks/list-of-nhls-by-state.htm)
- The FHWA Division Administrator determines that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation.
  FHWA final approval of this CE document will affirm that all programmatic Section 4(f) evaluation requirements have been fully addressed, serve to confirm that FHWA has concluded its responsibilities under Section 106, and serve as FHWA approval of the Historic Bridge Programmatic 4(f) Evaluation and the preferred alternative.
- Agreement among the FHWA, the SHPO, and the Advisory Council on Historic Preservation (ACHP) has been reached through procedures pursuant to Section 106 of the NHPA.
   As discussed in the Cultural Resources section, the procedures pursuant to Section 106 of the NHPA were followed, and the No Adverse Effect finding was concurred by SHPO on February 22, 2022 (Appendix D-74 to D-76). Since the finding was No Adverse Effect and the ACHP is a signatory to both the Historic Bridge PA and the Historic Bridge Programmatic Section 4(f) Evaluation, further coordination with the ACHP is not required.

To apply the Historic Bridge Programmatic Section 4(f) Evaluation, three alternatives that avoid any use of the historic bridge must be examined. These alternatives were considered in the HBAA and are listed below. For further details, see the Other Alternatives section and the HBAA excerpts provided in Appendix D-81 to D-95.

- a) No Build/ Do Nothing
   The No Build alternative was examined and it does not meet the project's purpose and need, and it is not prudent.
- b) build a new structure at a different location without affecting the historic integrity of the historic bridge
   This alternative was examined under Alternative D, which is not feasible due to the existing bridge's location within an interchange.
- c) rehabilitate the historic bridge without affecting the historic integrity of the structure

  This alternative was examined under Alternative B1, which would not meet the primary purpose and need, as well as Alternative C1, which was not feasible.

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County	Lake		Route	SR 912	De	s. No.	1703011 (lead)
SHPO con	curred with the I		dance and m				ction 4(f) Evaluation. The t in their letter dated
ensures the	at the proposed g bridge is made	action includes all available for an al	possible plai ternative use	nning "Measures to e, provided a resp	to Minimize Harm". onsible party agrees	For bridg s to main	/A Division Administrator es that are to be replaced, tain and preserve the bridge. ctions fulfills this requirement.
period end	ed on October 1		G-15 to G-2	2). No comments			dvertised, the comment contacted INDOT or the
confirm tha	at FHWA has co		sibilities unde				n fully addressed, serve to of the Historic Bridge
Sec	ction 6(f) Involv	rement			<u>Presence</u>		Use Yes No
Sec	ction 6(f) Prope	erty					
vill occur, di	iscuss the conve	ersion approval.		_			of this project. If conversion
created to	preserve, develo		essibility to d	outdoor recreation			Fund (LWCF), which was is Act prohibits conversion of
							County (Appendix J-16). npacts to 6(f) resources.
			•	, ,	,		
This is	page 31 of 40	Project name:	SR 912 Mic	higan Avenue Bri	dges Project	Dat	e: _February 1, 2023

County	Lake	Route	SR 912	Des. No1703011 (lead)
SECTION	I F – Air Quality			
Is t Is t Is t	the project in the most current STIP/ the project located in an MPO Area? the project in an air quality non-attain Yes, then:  Is the project in the most current Mills the project exempt from conforming If No, then:  Is the project in the Transportation is a hot spot analysis required (0)	TIP?  nment or ma  PO TIP?  ity?  on Plan (TP		Yes No
Loc	cation in STIP:			Modifications 01 and 05 (Appendix H-12 to H-13)
Na	me of MPO (if applicable):			NIRPC
Loc	cation in TIP (if applicable):			Amendment #20-22.05 (Appendix H-1 to H-11)
Lev	vel of MSAT Analysis required?			
Lev	vel 1a X Level 1b	Level 2	Level 3	Level 4 Level 5
located. Indi the TP and	icate whether the project is exempt TIP. Describe if a hot spot analysis	from a confo is required a	ormity determinati and the MSAT Lev	
2026 State (https://ww maintenan	ewide Transportation Improvement F ww.in.gov/idem/sips/nonattainment-s ce areas:	Program (ST status-of-cou	TIP) (Appendix H- inties/), the projec	t is within the following non-attainment and/or
st		but is being	evaluated for cor	inment area for Ozone under the 1997 Ozone 8-hour informity due to the February 16, 2018, South Coast Air Et.Al. Decision.
	his project is in Lake County, which vas reclassified to attainment with a			r the 8-Hour Ozone (2008) standard on July 20, 2021, but , 2022.
	he project is within North Township, ate of November 7, 2022.	which is a r	nonattainment are	a for the 8-Hour Ozone (2015) standard, with an effective
conform to has been in	the State Implementation Plan (SIF	P). Therefore quality analy	e, the conformity rais in accordance	NIRPC Transportation Plan (TP) and the TIP, and both requirements of 40 CFR 93 have been met. This project with 40 CFR Part 93.126 and this project is not of air gnificant impact on air quality.
	ct is of a type qualifying as a catego rule under 40 CFR 93.126, and as			er 23 CFR 771.117(c), or exempt under the Clean Air Act xics analysis is not required.

This is page 32 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County	Lake	_ Route	SR 912	Des	s. No. <u>1703</u>	011 (lead)
SECTIO	N G - NOISE					
Describe if were identii  This proje	a noise analysis required in a noise analysis required in a noise Analysis was appeared in a noise in a noise in a noise in a noise analysis a noise analysis analysi	proved/technically suff Type III project. If it is a identified, describe if a accordance with 23 CF	icient by INDOT Type I project, a abatement is feas	ESD: lescribe the studies c sible and reasonable	oise policy?	statement of likelihood.
SECTION	N H – COMMUNITY IMI	PACTS				
W W W W Do Do Discuss ho	egional, Community & Ne will the proposed action con ill the proposed action result the proposed action result the proposed action result construction activities imposes the community have an If No, are steps being mades the project comply with which the project complies with and impact community even	nply with the local/reginult in substantial impactult in substantial impactupact community event approved transition pade to advance the contact the transition plan? (In the area's local/regional to substantial impactual in the area's local/regional transition plan?	ts to community ts to local tax ba is (festivals, fairs blan? mmunity's transite explain in the disc nal development	cohesion? se or property values etc.)? on plan? cussion below) patterns; whether the	?  X  p project will im	X
NIRPC 20 Comprehe Indiana R Plan.pdf). proposed  Coordinat preliminar impacts to provide al  The contra Departme Environme The City of (https://ww project is area (exce	12 Michigan Avenue Bridg 140 Comprehensive Region 140 Comprehensive Region 140 Comprehensive Plan (https://www.eegional Pedestrian and Bid There will be no change in ROW, no impacts to the tailon with local stakeholders y planning and selection of fair, festivals, etc., have beternative access during contactor will be required to cont, Gary Public Transportate and Commitments section of East Chicago has an And www.eastchicago.com/Docucoordinating with public transport for the Closed Pedestrip's transition plan.	nal Plan,				

This is page 33 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

		India	na Depa	artment of	Transportat	ion		
County	Lake		Route	SR 912		Des. No.	1703011 (I	ead)
Public Faci	ilities and Se	ervices						
how the imp	pacts have be ties, educatio	ities and services are peen minimized and wha nal facilities, public and cycle facilities.	t coordinatio	on has occurre	d. Some example	es of public fac	ilities and se	ervices include
Based on 17 religiou mile of the facility), ar will be no	a desktop revise facilities, two project. Non and the previous change to the	view, the aerial map of the schools, two airports are of these facilities are usly-discussed East Chase properties, and accommentate responses regar	, seven reconsideration , seven reconsiderated and additional seven reconsisting to the seven reconsisted and	reational facilition the project are na and Jerose operties will be	es, one trail, and a except Eugene Park Beach prop maintained durir	three manage Field Element perties (see the ag construction	d lands loca tary (school Section 4(f)	ted within 0.5 and recreational ) section). There
and Rail C		oads, pipelines, and utingoing utility engineerind.						
height, fur the close	ther coordina proximity of G	21, 2021 response to ention will be required with eary Airport and the needent 77 standards. This	h our office ed for any ol	and the Federa estructions with	al Aviation Author in 5 miles to mee	rity (FAA) (App et a 100:1 glide	endix C-11) eslope to the	. This is due to nearest runway
	d former indu	d in the Purpose and Nestrial parking lot have n						
		hould not impact prope at economic or commun						unity cohesion.
Du Do	ring the deve les the projec (ES, then: Are any E	Justice (EJ) (Presider elopment of the project of the project of trequire an EJ analysis.  J populations located was a second of the project	were EJ iss s? vithin the pro	ues identified?  Dject area?			Yes X	No X
	Will the pr	oject result in adversely	/ high and c	disproportionate	impacts to EJ p	opulations?		<u> X</u>

Date: \_ February 1, 2023

This is page 34 of 40 Project name: SR 912 Michigan Avenue Bridges Project

County Lake Route SR 912 Des. No. 1703011	i (lead)
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Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high and adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT *Categorical Exclusion Manual*, an EJ Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. This project is in a disadvantaged area, and will require approximately 2.81 acres of temporary ROW, as well as 2.02 acres of temporary "right of entry" ROW. Furthermore, this project involves the proposed removal of the historic Ramp B over B Bridge. Therefore, INDOT determined an EJ analysis was warranted.

#### **Identification of Populations**

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist, and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Lake County. The community that overlaps the project area is called the affected community (AC). In this project, the ACs are the following Census Track (CT) Block Groups (CTBGs): Block Group 2, CT 303 (AC-A), Block Group 1, CT 302 (AC-B), and Block Group 1, CT 301 (AC-C).

An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the Census.gov 2019 American Community Survey (ACS) 5-year Estimates were obtained from the census.gov website on February 10, 2022. The data collected for minority and low-income populations within the AC are summarized in the below table.

Minority and Low-Income Data (2019 ACS 5-Year Estimates)

	COC Lake County	AC-A	AC-B	AC-C	
Percent Minority	38.1	91.5	84.2	98.2	
125% of COC	47.6		AC > 125% COC?		
EJ Population of Concern?		Yes	Yes	Yes	
Percent Low-Income	15.6	54.7	42.8	72.2	
125% of COC	19.5	AC > 125% COC?			
EJ Population of Concern?		Yes	Yes	Yes	

Source: census.gov

AC-A has a percent minority of 91.5, which is above 50% and the 125% COC threshold. Therefore, AC-A does contain a minority population of EJ concern. AC-A has a percent low-income of 54.7, which is above 50% and the 125% COC threshold. Therefore, AC-A does contain a low-income population of EJ concern.

AC-B has a percent minority of 84.2, which is above 50% and the 125% COC threshold. Therefore, AC-B does contain a minority population of EJ concern. AC-B has a percent low-income of 42.8, which is below 50%, but is above the 125% COC threshold. Therefore, AC-B does contain a low-income population of EJ concern.

AC-C has a percent minority of 98.2, which is above 50% and the 125% COC threshold. Therefore, AC-C does contain a minority population of EJ concern. AC-C has a percent low-income of 72.2, which is above 50% and the 125% COC threshold. Therefore, AC-C does contain a low-income population of EJ concern.

The census data sheets, maps, and calculations can be found in Appendix J-2 to J-8.

#### **Impact Analysis**

<u>US HUD Resources:</u> The US HUD Resource Locator (<a href="https://resources.hud.gov/">https://resources.hud.gov/</a>) was researched to identify potential EJ resources and/or populations. Sixty-one HUD resources were identified within 0.5 mile of the project area (Appendix J-9 to J-10). US HUD did not respond to early coordination. No impacts are expected.

ROW / RELOCATIONS: The proposed temporary ROW is contained within AC-A, which does contain EJ populations. The proposed ROW will be acquired from industrial properties. These areas are on the north side of the project area, adjacent to the Michigan Avenue bridge and the railroad (Appendix B-12 and J-14). There are no relocations resulting from the project. Therefore, the proposed acquisition of ROW is not anticipated to disproportionately impact EJ populations.

This is page 35 of 40 Pro	oject name: Sl	SR 912 Michigan Avenue Bridges	Project	Date:	February 1	1, 2023

County Lake	Route	SR 912		Des. No	o. <u>170301</u>	l1 (lead)
Maintenance of Traffic (MOT): As discussed furth include ramp and bridge closures. Motorists will and bridges located within a mile of the interchar detours will temporarily increase traffic along local Minor Arterial in an area with EJ populations and delays are anticipated, and all inconveniences at businesses will be maintained throughout construction by the state of the state	still be ab nge, show al roadwa I resource nd delays	le to access to non the Mains, primarily es. The MOT will cease up	ooth sides of S ntenance of Tr Guthrie Street will pose a ten oon project cor	SR 912 due to the raffic graphic in a This two-lane, inporary inconverseletion. Acces	ne redundan Appendix B- two-way roa nience; how s to all resid	t system of ramps -6. The local ad with sidewalk is a vever, no significant ences and
Transit Service: As previously-discussed, Gary project area. Currently, there is one route that wi Avenue bridge and has stops on both sides of the near the entrance to the casino, and Stop 10 is a (Appendix J-13). Transit authorities did not respect the public hearing held on September 27, 2022 a received.	II be dired e project on the sou and to ear	ctly impacted area. Stop 9 ath side, at the ly coordination	by this project is near the inte e intersection on. A represen	The West Caluersection of Aldiof Guthrie Streettative of East C	umet route us s Street and t and Michig hicago trans	itilizes the Michigan I Michigan Avenue gan Avenue it authority attended
Coordination with the two transit authorities and required to notify transit authorities at least 30 dathis document. Therefore, the proposed project is	ays prior t	o closures. T	nis is included	in the Environn		
<u>Pedestrian Facilities</u> : As previously-discussed, th Pedestrian Bridge which is unsafe and does not				in facilities, exce	ept removal	of the Closed
Community Access/Barriers: This project will ma community barriers or divisions. For further discusservices, and Public Facilities and Services sect	ussion se	e the Project	Description (P	referred Alterna		
Conclusion The project area contains EJ populations of conductive bridges and will eliminate safety concerns associated motorized vehicles and pedestrians. Therefore, the community. The proposed ROW impacts are liming public transit during construction will be minimized commitment). Based on this analysis, there does not near the project area.	iated with he SR 91 ited to ac ed througl	the Closed F 2 Michigan A quisitions from a coordination	Pedestrian Brid venue Bridges n industrial pro n with transit a	dge. There will be sproject should operties (Appen uthorities and lo	e no change provide a be dix J-14). Po cal governn	e in access for enefit to the otential impacts to nental officials (firm
The project's public hearing was held at a nearby represent EJ populations such as elected official institutions, and civic organizations were invited Spanish language speaker, which was noted on about the hearing are provided in the Public Involuded not comments were received.	s, transit, (Appendi: their nam	local housing x G-23 to G-2 te tag and on	gauthorities, a 6). The project project hando	idjoining landow ct team who atte outs (Appendix C	ners, public ended the m 3-45 to G-46	schools, religious eeting included a s). Further details
On April 6, 2022, INDOT Environmental Services consider the impacts associated with this project income populations of EJ concern relative to nor FHWA Order 6640.23a. No further EJ Analysis is	as causi EJ popu	ng a dispropo lations in acc	rtionately high ordance with t	n and adverse e	ffect on mind	ority and/or low-
·	•					
Relocation of People, Businesses or F	arms				Yes	s No
Will the proposed action result in the relo Is a BIS or CSRS required?		people, busir	esses or farm	s?		X X
Number of relocations: Residences  Discuss any relocations that will occur due to the		Busines		Farms: 0 discuss the res	Others	

This is page 36 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

No relocations of people, businesses, or farms will take place as a result of this project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES  Hazardous Materials & Regulated Substances (Mark all that apply) Red Flag Investigation (RFI) Phase I Environmental Site Assessment (Phase I ESA) Phase I Environmental Site Assessment (Phase I ESA) Design/Specifications for Remediation required?  Date RFI concurrence by INDOT SAM (if applicable): January 19, 2022  Include a summany of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, setc.) will be needed, include an discussion. Include applicable commitments.  Based on a review of GIS and available public records, an RFI was approved by INDOT SIA guidance. If additional documentation (special provisions, pay quantities, setc.) will be needed, included in discussion. Include applicable commitments.  Based on a review of GIS and available public records, an RFI was approved by INDOT Site Assessment & Management (SAM) on January 19, 2022 (Appendix F to E-11). Four Resource Conservation and Recovery Act (RCRA) generate sites, and one RCRA Corrective Action site, are located within 0.5 mile of the project area. Two State Cleanup sites, seven underground storage tank there are 11 National Pollutant Discharge Elimination System (INDES) flacillies and 17 NPDES place place tarea. Additional Brothard to Scharge Elimination System (INDES) flacillies and 17 NPDES place placetant within 0.5 mile of the project area. Two states are located within 0.5 mile of the project area. Two states are located within 0.5 mile of the project area. Two states are located within 0.5 mile of the project area. Two states are located within 0.5 mile of the project area. Additional Pollutant One Sharge Placetant Plac			iliulalia Depa	irtinent or manspor	lalion	
Hazardous Materials & Regulated Substances (Mark all that apply) Red Flag Investigation (RFI) Phase I Environmental Site Assessment (Phase I ESA) Phase II Environmental Site Assessment (Phase II ESA) Phase II Environmental Site Assessment (Phase II ESA) Design/Specifications for Remediation required?  Date RFI concurrence by INDOT SAM (if applicable):  January 19, 2022  Include a summary of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, etc.) will be needed, include in discussion. Include applicable commitments.  Based on a review of GIS and available public records, an RFI was approved by INDOT SAM sassesment & Management (SAM) on January 19, 2022 (Appendix E-1 to E-11). Four Resource Conservation and Recovery Act (RCRA) generator sites, and one RCRA Corrective Action site, are located within 0.5 mile of the project area. Thireten browfield sites are located within 0.5 mile of the project area. Thireten browfield sites are located within 0.5 mile of the project area. Nineteen institutional controls (IC) sites are located within 0.5 mile of the project area. Additionally there are 11 National Pollutant Discharge Elimination System (NPDES) facilities and 17 NPDES pipe location within 0.5 mile of the project area. The RFI identified one hazmat site that could affect the project area: Arcelormittal USA, AID 11557, 3210 Watling Street.  Arcelormittal USA (currently Cleveland Cliffs), AID 11557, 3210 Watling Street, has offices adjacent to the northwest of the project area. The steel mill begins north of the project area and extends over hundreds of acres. This facility has multiple solid waste management areas (SWMAs) under the closure process in RCRA Corrective Action. The nearest is SWMA 14, the "Former Coal Tar Plant Area", located adjacent to the north of the project area. Based on the July 24,	County	Lake	Route	SR 912	Des. No.	1703011 (lead)
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	This is incli	uded in the Environmental C	commitments section	n of this CE document.		

This is page 37 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County	Lake	Route SR 912	Des. No.	1703011 (lead)

Part IV – Permits and Comm	<u>itments</u>
PERMITS CHECKLIST	
Permits (mark all that apply) <u>Likely Required</u>	
Army Corps of Engineers (404/Section10 Permit)  Nationwide Permit (NWP)  Regional General Permit (RGP)  Individual Permit (IP)  Other  IN Department of Environmental Management (401/Rule 5)  Nationwide Permit (NWP)  X	
Regional General Permit (RGP) Individual Permit (IP) Isolated Wetlands Rule 5 Other IN Department of Natural Resources	
Construction in a Floodway Navigable Waterway Permit Other  Mitigation Required US Coast Guard Section 9 Bridge Permit Others (Please discuss in the discussion below)  X	
List the permits likely required for the project and summarize why the permits are nee	
More than one acre of land will be disturbed; therefore, an IDEM Rule 5 permit is an	ticipated.
A USACE Section 404 Nationwide General Permit and an IDEM Section 401 Water response to early coordination discussed these permit requirements (Appendix C-4	
If any object, obstruction, or equipment will exceed 100 feet in height, further coordi the FAA (Appendix C-11). This is due to the close proximity of Gary Airport and the a 100:1 glideslope to the nearest runway according to 14 CFR Part 77 standards. Tommitments section of this CE document.	need for any obstructions within 5 miles to meet
Applicable recommendations provided by resource agencies are included in the Endocument. If permits are found to be necessary, the conditions of the permit will be these recommendations.	
It is the responsibility of the project sponsor to identify and obtain all required permit	S.

This is page 38 of 40 Project name: SR 912 Michigan Avenue Bridges Project Date: February 1, 2023

County Lake		Route SR 912	Des. No 1703011 (lead)
ENVIRONMEN	TAL COMMITMENTS		
List all commitmen should be numbere	•	ncy/organization requesting/requ	uiring the commitment(s). Listed commitments
Firm:			
			the INDOT Environmental Services Division (ESD) (INDOT ESD and INDOT District)
2) It is the respon	sibility of the project sponsor to	notify school corporations and e	emergency services at least two weeks prior to any

- construction that would block or limit access. (INDOT ESD)
- 3) General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
- 4) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- 5) Lighting AMM 2: When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (USFWS)
- 6) The "Right-of-Entry" ROW area is labeled "Temp. R/W for Drive Access" on project plans and will be used for access only. No construction work is allowed, including but not limited to staging, ground disturbance, excavations, etc. (INDOT ESD and CRO)
- 7) Coordination with Gary Public Transportation Corporation, East Chicago Bus Transit, Cleveland Cliffs, Ameristar Casino, and the City of East Chicago (Departments of Public Works, Parks, and Marina) regarding the proposed MOT will occur prior to RFC. The contractor will be required to notify these entities at least 30 days prior to any roadway, bridge or ramp closures. (INDOT ESD)
- 8) Arcelormittal USA (currently Cleveland Cliffs), AID 11557, 3210 Watling Street, is adjacent to the northwest of the project area. The steel mill extends over hundreds of acres. This facility has multiple solid waste management areas (SWMAs) under the closure process in RCRA Corrective Action. The nearest is SWMA 14, the "Former Coal Tar Plant Area", located adjacent to the north of the project area. Based on the July 24, 2020 Second Quarter RCRA Corrective Action Status Report, dense non-aqueous phase liquid (DNAPL) monitoring and recovery continues in SWMA 14, and the organic dissolved phase plume contaminants of concern remain non-detect in downgradient wells. In the figure entitled "2nd Quarter 2020 Quarterly Report Identified Areas of Separate Phase and Summary of Stabilization Measures" the "discontinuous coal tar DNAPL" plume appears to extend beneath the northern Michigan Avenue Bridge approach, approximately 0.03 mile north of the northern limits of work. A Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT Site Assessment and Management (SAM) for review and approval. In addition, coordination will be conducted with the IDEM Project Manager identified in the VFC documentation, Chris Myers, and the USEPA Project Manager, Mr. Brandon Pursel, before further site activities occur. (INDOT SAM)
- 9) If any object, obstruction, or equipment will exceed 100 feet in height, further coordination will be required with INDOT Aviation and the FAA. This is due to the close proximity of Gary Airport and the need for any obstructions within 5 miles to meet a 100:1 glideslope to the nearest runway according to 14 CFR Part 77. (INDOT Aviation)

#### For Further Consideration:

- 10) Improving wildlife passage at existing or proposed bridge locations is a priority for the DFW to reduce wildlife mortality along roadways. The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. For crossing replacements, the new structure should include wildlife passage appropriate for the type of replacement structure being proposed. (IDNR-DFW)
- 11) The International Dark-Sky Association (IDA) states that, to minimize the negative impacts of artificial lighting on wildlife, "lighting should only be on when needed, only light the area that needs it, be no brighter than necessary, minimize blue light emissions, [and] be fully shielded (pointing downward)". The IDNR-DFW strongly encourages visiting the IDA's website to learn more about selecting lighting fixtures that minimize the harmful effects of lighting on humans and wildlife: <a href="http://darksky.org/lighting/lighting-basics/">http://darksky.org/lighting/lighting-basics/</a>. (IDNR-DFW)

This is page 39 of 40 F	Project name:	SR 912 Michigan Avenue Bridges Project	Date:	February 1, 2023	

County	Lake		Route	SR 912	Des. I	No. <u>1</u>	703011 (lead)
12) Do not height (IDNR-	(dbh), living or d	uitable for Indiana l lead, with loose har	bat or Norther nging bark, or	rn Long-eared bat roos with cracks, crevices,	sting (greater than or cavities) from A	5 inches	s diameter-at-breast- rough September 30.
This is	page 40 of 40	Project name:	SR 912 Mic	higan Avenue Bridges	Project	Date:	February 1, 2023

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# **PARSONS**

# **Appendix A**

**INDOT Supporting Documentation** 

#### Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 41
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"		"Adverse Effect" Or Historic Bridge involvement <sup>2</sup>
Stream Impacts <sup>3</sup>	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts		USACE Individual 404 Permit <sup>4</sup>
Wetland Impacts <sup>3</sup>	No adverse impacts to wetlands	< 0.1 acre		< 1.0 acre	≥ 1.0 acre
Right-of-way <sup>5</sup>	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	3	7
Relocations <sup>6</sup>	None	1.00	11 1 194 11	< 5	≥5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	"No Effect", "Not likely to Adversely Affect" (With select AMMs <sup>7</sup> )	"Not likely to Adversely Affect" (With any AMMs or commitments)		"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic <sup>8</sup>
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or "No Effect"	"Not likely to Adversely Affect"			"Likely to Adversely Affect"
Environmental Justice	No disproportionately high and adverse impacts	329	-		Potential <sup>9</sup>
Sole Source Aquifer	No Detailed Groundwater Assessment	3.0	4		Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	*	iπ	40	Substantial Impacts
Section 4(f) Impacts	None		16 16		Any <sup>10</sup>
Section 6(f) Impacts	None		100		Any
Permanent Traffic Alteration	None			-	Any
Noise Analysis Required	No		14		Yes
Air Quality Analysis Required	No		/	-	Yes <sup>11</sup>
District Env. (DE)     Env. Serv. Div. (ESD)     FHWA	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

<sup>&</sup>lt;sup>3</sup> Total permanent impacts to streams (linear feet) and wetlands (acres).

<sup>&</sup>lt;sup>4</sup>US Army Corps of Engineers Individual 404 Permit

<sup>&</sup>lt;sup>3</sup>Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

<sup>8</sup>If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.

Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

Project Followides:

A Confirm Research Followides:

Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower-level CE.

Potential for causing a disproportionately high and adverse impact.

<sup>10</sup> Section 4(f) use resulting in an Individual, Programmatic, or de minimis evaluation. The only exception is a de minimis evaluation for historic properties (Effective January 2, 2020). If a historic property de minimis and no other use, mark the None column.

<sup>11</sup> Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

<sup>\*</sup> Includes the threatened/endangered species critical habitat

Note: Substantial public or agency controversy may require a higher-level NEPA document.