Environmental Report (ER) and Environmental Assessment (EA) Template

06-25-2019 Wisconsin Department of Transportation

Project Summary

Project ID	**Project Termini**	**Funding Sources *(check all that apply)***
1228-22-01	I-43 from Capitol Drive to Hampton Avenue	☒ Federal ☒ State ☐ Local
Construction ID **1228-22-71**		**Estimated Total Project Cost (design, construction, real estate, etc). Include delivery cost in Year of Expenditure (YOE).** $60M **in** 2021 **dollars**
Route Designation *(if applicable)* I-43 North-South	Nearest Municipality City of Milwaukee and City of Glendale	
National Highway System (NHS) Route ☒ Yes ☐ No		Real Estate Acquisition Portion of Estimated Cost (YOE) $5M in 2021 dollars
County Milwaukee County	Section / Township / Range T7N R22E Sec. 5 T8N R22E Sec. 32	Utility Relocation Portion of Estimated Cost (YOE) $100,000 in 2021 dollars

Project Title
I-43 North-South, Capitol Drive to Hampton Avenue

Bridge Number(s) *(if applicable)*
B-40-116
B-40-117
B-40-115
B-40-73
B-40-67
B-40-66

For an ER, indicate the date of the first tribal notification letter.
For an EA, indicate the date the Process Initiation Letter (PIL) was accepted by FHWA. 1/10/2019

Right of Way Acquisition	**Acres**
Fee	7.56
TLE	1.37
PLE	0.0

Functional Classification of Existing Route (FDM 4-1-10 & 4-1-15)	**Urban**	**Rural**
Freeway/Expressway	☒	☐
Principal Arterial	☐	☐
Minor Arterial	☐	☐
Major Collector	☐	☐
Minor Collector	☐	☐
Local	☐	☐
No Functional Class	☐	☐
Other	☐	☐

WisDOT Project Classification (FDM 3-5)	
Perpetuation – Preservation/Restoration	☐
Perpetuation – Resurfacing	☐
Perpetuation – Bridge Rehabilitation	☒
Rehabilitation - Reconditioning	☐
Rehabilitation – Pavement Replacement	☒
Rehabilitation - Bridge Replacement	☒
Modernization - Reconstruction	☐
Modernization - Expansion	☐
Preventative Maintenance	☐
State Majors	☐
Other – Describe:	☐

☐ FHWA Draft Categorical Exclusion (CE)/WisDOT Draft Environmental Report (ER). **No significant impacts indicated by initial assessment.**
☐ FHWA/WisDOT Environmental Assessment (EA). **No significant impacts indicated by initial assessment.**

(Print – Preparer Name, Title, Company/Organization) (Date – m/d/yy)

(Signature – Director, Bureau of Technical Services) (Date – m/d/yy)

(Signature, Title) (Date – m/d/yy)
☒ Region ☐ Aeronautics ☐ Railroads & Harbors

(Signature, Title) (Date – m/d/yy)
☒ FHWA ☐ FAA ☐ FTA ☐ FRA

A Public Hearing was not required. After reviewing and addressing substantive public comments and coordinating with other agencies, it is determined this action:

☒ **Will NOT significantly affect** the quality of the human environment. This document is a Final CE/Final ER.

☐ **Will NOT significantly affect** the quality of the human environment. This document is a Final EA/Finding of No Significant Impact (FONSI).

☐ **Has potential to significantly affect** the quality of the human environment. Draft Environmental Impact Statement (EIS) required.

A Public Hearing was held, and after reviewing and addressing substantive public comments, updating the Draft CE/ER or EA and coordinating with other agencies, it is determined this action*:

☐ **Will NOT significantly affect** the quality of the human environment. This document is a Final CE/Final ER.

☐ **Will NOT significantly affect** the quality of the human environment. This document is a Final EA/Finding of No Significant Impact (FONSI).

☐ **Has potential to significantly affect** the quality of the human environment. Draft Environmental Impact Statement (EIS) required.

(Print – Preparer Name, Title, Company/Organization)	(Date – m/d/yy)	(Signature – Director, Bureau of Technical Services)	(Date – m/d/yy)
			3-13-2020
(Signature, Title)	(Date – m/d/yy)	(Signature, Title)	(Date – m/d/yy)
	3/12/20	PETER M GARCIA Digitally signed by PETER M GARCIA Date: 2020.03.13 10:20:42 -05'00'	
☒ Region ☐ Aeronautics ☐ Railroads & Harbors		☒ FHWA ☐ FAA ☐ FTA ☐ FRA	

*Include Environmental Document Availability and Hearing Summary following this page.

1. Table of Contents:

BASIC SHEETS

FACTOR SHEETS

APPENDICES

2. Abbreviations and Acronyms:

(A)ADT – (Annual) average daily traffic
AAWT – Average annual weekday traffic
ACHP – Advisory Council on Historic Preservation
ACS – American Community Survey
ADID – Advanced Identification (Wetlands)
AHI – Architecture & History Inventory
AOP – Aquatic Organism Passage
APE – Area of potential effects
ATR – Automatic Traffic Recorder
BMP – Best management practices
BTS - WisDOT Bureau of Technical Services
CFR – Code of Federal Regulations
CWA – Clean Water Act
DATCP - Department of Agriculture, Trade and Consumer Protection
DOA – Department of Administration
DHV – Design hourly volume
DNR – Wisconsin Department of Natural Resources
EA - Environmental Assessment
ECIP - Erosion control implementation plan
EJ – Environmental justice
EO – Executive order
EPA – United States Environmental Protection Agency
EPDS - WisDOT Environmental Process and Documents Section
ER – Environmental Report
ESA – Endangered Species Act
FDM – WisDOT Facilities Development Manual
FEMA – Federal Emergency Management Agency
FHWA – Federal Highway Administration
FIRM – Flood Insurance Rate Map
HMA – Hazardous Materials Assessment
IPaC – United States Fish and Wildlife's Information, Planning, and Consultation System
LWCF – Land and Water Conservation Funds
LOS – Level of service
MOA - Memorandum of agreement
MCTS – Milwaukee County Transit System
MEV – Million entering vehicles
MPH – Miles per hour
MPO – Metropolitan planning organization
MS4 - Municipal Separate Storm Sewer System permit
MSAT – Mobile source air toxics
MVM – Million vehicle miles
NAAQS – National Ambient Air Quality Standards
NBI – National Bridge Inventory
NEPA – National Environmental Policy Act
NFIP – National Flood Insurance Program
NHL – National Historic Landmark
NHPA - National Historic Preservation Act
NHS – National Highway System
NLC – Noise level criteria
NLEB – Northern long-eared bat
NPDES – National Pollutant Discharge Elimination System Permit
NRHP – National Register of Historic Places

O3 – Ozone
PCI – Pavement condition index
PCN – Pre-Construction Notification
PI – Public Involvement
PIM – Public involvement meeting
PIP – Public involvement plan
PLE – Permanent limited easement
$PM_{2.5}$ – Fine particulate matter, 2.5 microns or less
PS&E – Plans, specifications and estimates
REC – Region environmental coordinator
ROW – Right of way
RTP – Regional Transportation Plan
Section 106 – Section 106 of the National Historic Preservation Act
Section 4(f) – Section 4(f) of the U.S. Department of Transportation Act of 1966
Section 6(f) – Section 6(f) of the Land and Water Conservation Fund Act
SEWRPC – Southeast Wisconsin Regional Planning Commission
SHPO – Wisconsin State Historic Preservation Office
SIP – State implementation plan
SSD – Stopping site distance
STIP – State transportation improvement program
STSP – Standard Special Provision
T&E – Threatened and endangered species
TCGP – Transportation Construction General Permit
TIP – Transportation improvement program
Title VI – Title VI of the Civil Rights Act of 1964
TLE – Temporary limited easement
TMDL – Total maximum daily load
TMP – Transportation management plan
TRANS 400 – Wisconsin Administrative Code for the Wisconsin Environmental Policy Act
TRGP - Transportation Regional General Permit
TS4 - Transportation Separate Storm Sewer System Permit
TSS – Total Suspended Solids
USC – United States Code
USACE – United States Army Corps of Engineers
USCG – United States Coast Guard
USFWS – United States Fish and Wildlife Service
UST – Underground Storage Tank
URT – Union Refrigerator Transit Line
VMT – vehicle miles of travel
VPD – Vehicles per Day
VPH – Vehicles per Hour
WDNR – Wisconsin Department of Natural Resources
WHS – Wisconsin Historical Society
WEPA – Wisconsin Environmental Policy Act
WisDOT - Wisconsin Department of Transportation
WPDES – Wisconsin Pollutant Discharge Elimination System Permit
WQC – Water Quality Certification
YOE – Year of expenditure

3. Document Type: Environmental Report

This project meets the requirements for a Categorical Exclusion as listed under 23 CFR 771.117(a) and (b), as defined by FHWA. This project can then be classified under 23 CFR 771.177(c) Actions as (c)(26).[1] Typically, projects that are classified as (c)(26) may be processed using a Categorical Exclusion Checklist. However, per the FHWA—WisDOT 2015 Categorical Exclusion Agreement[2], this project falls under Wisconsin-specific unusual circumstances since it includes a new auxiliary lane. Due to these circumstances, the FHWA—WisDOT Agreement requires that WisDOT consult with FHWA to determine the appropriate class of action for environmental analysis and documentation. At a meeting on 10/30/18, WisDOT and FHWA agreed an Environmental Report would be appropriate documentation for this project.

4. Environmental Document Statement:

This environmental document is an essential component of the National Environmental Policy Act (NEPA) and/or Wisconsin Environmental Policy Act (WEPA) project development process, which supports and complements public involvement and interagency coordination.

The environmental document is a full-disclosure document which provides a description of the purpose and need for the proposed action, the existing environment, analysis of the anticipated beneficial or adverse environmental effects resulting from the proposed action and potential mitigation measures to address identified effects. This document also allows others the opportunity to provide input and comment on the proposed action, alternatives and environmental impacts. Finally, it provides the decision maker with appropriate information to make a reasoned choice when identifying a preferred alternative.

This environmental document must be read entirely so the reader understands the reasons that one alternative is identified as the preferred alternative over other alternatives considered.

5. Fiscal Constraint:

For federally-funded actions, indicate whether the project is included in the most recent version of the WisDOT Statewide Transportation Improvement Program (STIP) or included in a STIP amendment:

☐	The proposed action will not require FHWA funding and/or approval.
☐	The proposed action will use FHWA funds and/or require an FHWA approval and it is included in the most recent version of the STIP or included in a STIP amendment – Indicate the name of the STIP or STIP amendment, the portion of the proposed project funded and the page number on which the project can be found:
☒	For projects in a Metropolitan Planning Area, the proposed action will use FHWA funds and/or require an FHWA approval and it is included in the most recent version of the Transportation Improvement Plan (TIP) or included in a TIP amendment – Indicate the name of the TIP or TIP amendment, the portion of the proposed project funded and the page number on which the project can be found: Regional Transportation Improvement Program for Southeastern Wisconsin: 2019-2022, Resolution No. 2019-03 (February 21, 2019); Project No. 322 - Replacement of the IH 43 bridges from Capitol Drive to Hampton Avenue (B-40-115, 0073, 0066, & 0067) in Milwaukee County; Page A-1.

[1] (c)(26) Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (including parking, weaving, turning, and climbing lanes), if the action meets the constraints in paragraph (e) of this section.

[2] Programmatic Agreement between the Federal Highway Administration, Wisconsin Division and the Wisconsin Department of Transportation Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects. https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrces/environment/pace2015.pdf

6. Purpose and Need:

The Wisconsin Department of Transportation (WisDOT) Southeast Region is evaluating alternatives and conducting environmental analysis for the proposed rehabilitation of I-43 and its service interchanges between Capitol Drive and Hampton Avenue in Milwaukee County. See project location map in Appendix A.

The proposed action for this section of I-43 will not restrict consideration of alternatives developed for future improvements to a southern section of I-43 between Brown Street and Capitol Drive. As determined with FHWA in a project meeting on October 30, 2018, there are two projects with logical termini in the I-43 corridor; the northern section between Capitol Drive and Hampton Avenue, which is the subject of this Environmental Report (ER) and a southern section between Brown Street and Capitol Drive. For the southern section WisDOT will evaluate alternatives that address geometric, pavement and safety deficiencies as well as traffic operational needs, which are independent of the proposed action north of Capitol Drive. WisDOT anticipates the completion of the NEPA evaluation of the southern I-43 section in 2020, and construction is anticipated in 2024.

Purpose

The purpose of the project is to address deteriorating bridge and pavement conditions to maintain safe vehicular movement along I-43 between Capitol Drive and Hampton Avenue. This project is intended to primarily address the most critical needs of I-43 consistent with WisDOT's bridge preservation policy and asset management strategies while not precluding future modernization needs as recommended in the Southeast Wisconsin Regional Planning Commission's (SEWRPC) Vision 2050 land use and transportation plan. Future modernization needs, and related alternatives and NEPA analyses will be addressed as a separate study under a future I-43 corridor project.

Project needs are broken into two categories, primary needs and secondary needs. Primary needs are directly related to the purpose of the project. Alternative development will be focused on addressing these primary needs. Secondary needs are not included as part of the purpose of the project but are present along the corridor. The secondary needs will be considered during alternative development and screening but may not be addressed.

Primary Needs

Structural Deficiencies

This section discusses the existing condition of structures along the project corridor based on the latest WisDOT Bridge Inspection Reports and the National Bridge Inventory (NBI) condition rating system.[3] NBI condition ratings range from 0 (failed condition) to 9 (excellent condition). According to the WisDOT *Bridge Preservation Policy Guide (2016)*, "bridges with a condition rating of poor (NBI Rating < 5) are considered deficient. Deficient bridges that are open for operations are safe; however, these structures may need corrective action to ensure current and future operation."

The I-43 corridor between Capitol Drive and Hampton Avenue has six bridge structures that were originally constructed between 1959 and 1962. (See Appendix A, Project Location Map, for bridge locations) Many of the structures have reached a point where major rehabilitation or replacement will be required in the near future. Three bridges within the project limits have NBI ratings of 4 or less indicating those bridges are deficient. Also, recent bridge inspection reports for the corridor indicated additional bridge maintenance and repair needs. The condition of each bridge within the project limits is summarized below from south to north.

B-40-117: I-43 Southbound Exit Ramp for Capitol Drive Interchange

Structure B-40-117 is a 125-foot long three-span bridge on the southbound exit ramp to Green Bay Road for the Capitol Drive interchange. The bridge provides a single-lane over the northbound exit ramp for the Capitol Drive interchange. In 2014, the Average Daily Traffic (ADT) was 3,900 on the bridge and 5,300 under the bridge. Originally constructed in 1961, the bridge has subsequently received new railing in 1984 and an asphalt overlay in 2002.

The March 2017 bridge inspection report identified several maintenance and repair needs for this bridge including a recommendation to replace the bridge deck due to concrete delamination and cracking, monitor and remove loose concrete on the

[3] The NBI condition rating for structures is defined by Report FHWA-PD-96-001, Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges.

underside of the bridge deck, and seal expansion joints to address leakage. Also, the bridge's steel components, including girders, display evidence of heavy corrosion and warped plates with important structural components needing replacement. In addition, ongoing patches on concrete components, including columns and abutments, are required to address cracking and spalling. The NBI condition ratings, per the inspection report, are listed in Table 1.

Table 1: NBI Condition Ratings for B-40-117

Bridge Element	Rating (March 2017)
Deck	5 (fair condition)
Superstructure	5 (fair condition)
Substructure	6 (satisfactory condition)

B-40-116: I-43 Mainline Over Northbound Exit Ramp to Green Bay Road

Structure B-40-116 is a 139-foot long three-span bridge on the I-43 mainline near the Capitol Drive Interchange. The bridge has six lanes that carry the I-43 northbound and southbound lanes over the northbound exit ramp for the Capitol Drive interchange. In 2014, the ADT on the bridge was 111,000. Originally constructed in 1961, the bridge subsequently received new railing and deck replacement in 1984 and a concrete overlay in 2002.

The March 2019 bridge inspection report identified several maintenance and repair needs for this bridge. The report identified the repair or replacement of miscellaneous bearings as a high priority need. In addition, the report identified the need to patch potholes, replace missing parapet cover plates and patch barrier wall as medium priorities. Also, the bridge's concrete elements, including the bridge deck, exhibit delamination, spalling and cracking, and it is showing exposed steel reinforcement bars in some places of the bridge deck. In addition, steel elements are showing rust and cracking. The NBI condition ratings, per the inspection report, are listed in Table 2.

Table 2: NBI Condition Ratings for B-40-116

Bridge Element	Rating (March 2019)
Deck	5 (fair condition)
Superstructure	6 (satisfactory condition)
Substructure	6 (satisfactory condition)

B-40-115: I-43 Mainline Over Abandoned Railroad

Structure B-40-115 is a 1,468-foot long 12-span bridge on the I-43 mainline south of Glendale Avenue. The bridge has six lanes that carry the I-43 northbound and southbound lanes over undeveloped land and an abandoned railroad corridor, formerly known as the Union Refrigerator Transit Line (URT). In 2016, the ADT was 124,000 on the bridge. Originally constructed in 1962, the bridge subsequently received a concrete overlay in 1974, an asphalt overlay in 1980, a new deck in 1984 and substructure repairs in 2013.

The March 2019 bridge inspection report identified several high priority maintenance needs including installation of a new concrete deck overlay, repair or replacement of bearings, steel superstructure repairs, replacement of expansion joints, and clear and repair drainage downspouts. The bridge's concrete elements, including the bridge deck, exhibit delamination, spalling, cracking and numerous patches. Also, the bridge's steel elements are showing corrosion, cracking and distortion. In addition, the seals at expansion joints show signs of leakage, damage and cracking that cause uneven driving surfaces. Milwaukee County maintenance forces are breaking snow plow blades on uneven deck joints complicating winter operations. The structure has over 300 bearings, most of which will require significant rehabilitation to repair or replace them. A handful of bearings are currently gapped and not supporting the girder. The NBI condition ratings, per the inspection report, are listed in Table 3.

Table 3: NBI Condition Ratings for B-40-115

Bridge Element	Rating (March 2019)
Deck	5 (fair condition)
Superstructure	5 (fair condition)
Substructure	5 (fair condition)

B-40-73: I-43 Mainline Over Glendale Avenue

Structure B-40-73 is a 130-foot long three-span bridge on the I-43 mainline. The bridge has six lanes that carry the I-43 northbound and southbound lanes over Glendale Avenue. The ADT on the bridge was 124,000 in 2016 and 2,300 under the bridge in 2013. Originally constructed in 1960, the bridge subsequently received structure widening in 1974, a new deck in 1983, substructure

repairs in 2002 and repair or replacement of deteriorated bearings in 2016.

The March 2018 inspection report identified high priority maintenance needs including deck repair or replacement, and abutment and wingwall repair. Medium priority maintenance includes repairing superstructure cracks. Concrete elements, including the bridge deck exhibit delamination, spalling, cracking and numerous patches. Concrete spalling is showing exposed steel reinforcement bars in some places on abutments. Steel elements are also showing corrosion and damage. Seals at expansion joints show signs of leakage, damage and cracking that cause uneven driving surfaces. The NBI condition ratings, per the inspection report, are show in Table 4. The ratings indicate that the bridge is deficient due to a substructure rating of 4 (poor condition).

Table 4: NBI Condition Ratings for B-40-73

Bridge Element	NBI Rating (March 2018)
Deck	6 (satisfactory condition)
Superstructure	6 (satisfactory condition)
Substructure	4 (poor condition)

B-40-67: I-43 Southbound Entrance Ramp Over Milwaukee River at Hampton Avenue

Structure B-40-067 is a 374-foot long six-span bridge that carries two lanes of traffic entering southbound I-43 from Hampton Avenue over the Milwaukee River. In 2016, the ADT was 6,400 on the bridge. Originally constructed in 1962, the bridge has subsequently received a concrete overlay in 1983 and an asphalt overlay and new bearings in 2002. The bridge also received surface repair, abutments expansion bearing replacement, joint seals and rehabilitation in 2002.

The March 2018 inspection report identified high priority maintenance needs including complete structure replacement and expansion joint repair. Concrete elements, including the bridge deck and girders exhibit delamination, spalling, cracking and patches. Seals show signs of leakage, damage and cracking. The NBI condition ratings listed in Table 5, per the inspection report, indicate that based on a deck rating of 4 the bridge deck is deficient.

Table 5: NBI Condition Ratings for B-40-067

Bridge Element	NBI Rating (2018)
Deck	4 (poor condition)
Superstructure	5 (fair condition)
Substructure	5 (fair condition)

B-40-66: I-43 Mainline Over Hampton Avenue and the Milwaukee River

Structure B-40-66 is a 576-foot long nine span bridge on the I-43 mainline. The bridge has six lanes that carry the I-43 northbound and southbound lanes over Hampton Avenue and the Milwaukee River. In 2016, the ADT on the bridge was 124,000 and 13,800 under the bridge on Hampton Avenue. Originally constructed in 1959, subsequent improvements include a concrete overlay in 1978, deck replacement in 1983, and new bearings in 2002. Other maintenance activities include pavement patching and repairs to address broken concrete, potholes, spalling and delamination in 2017 and an asphalt overlay in 2018.

The March 2018 inspection report identified high priority maintenance needs including complete structure replacement, pier repair, girder repair, and removing and monitoring loose concrete. Concrete elements, including the bridge deck and girders exhibit delamination, spalling, cracking and numerous patches. These defects are widespread along the bridge deck. The NBI condition ratings listed in Table 6, per the inspection report, indicate that based on a substructure rating of 4 (poor condition) the bridge is structurally deficient.

Table 6: NBI Condition Ratings for B-40-66

Bridge Element	NBI Rating (March 2018)
Deck	5 (fair condition)
Superstructure	5 (fair condition)
Substructure	4 (poor condition)

Since July of 2018, the bridge deck has experienced three failure incidents, to the extent that emergency repairs have been required. These incidents required closing two lanes during peak hours, resulting in traffic queues up to five miles. Due to these incidents, WisDOT performed an emergency repair project to install wooden cribbing on the underside of the deck over Hampton Avenue, to prevent material from falling onto the under passing vehicles.

Pavement Condition

The pavement in the project corridor is over 50 years old. WisDOT resurfaced the pavement along I-43 in the 1970's, 1990's and most recently in 2014. Each resurfacing has a shorter life span because the original pavement, still in place, provides a less effective base as it continues to crack and deteriorate. A condition called "faulting" occurs in the joints that cross the roadway as slabs of concrete are pushed up at slightly different elevations, making for an uneven driving surface.

WisDOT uses the Pavement Condition Index (PCI) method to rate pavement condition based on visual signs of pavement distress. As shown in Table 7, the pavement along I-43 between Capitol Drive and Hampton Avenue is currently rated as fair (PCI=62). By the year 2024, WisDOT estimates the PCI will be 36 (very poor) along the project corridor by 2024.

Table 7: Pavement Condition Index

Rating	Descriptor	Project Corridor	
		Year 2018	Year 2024
100-85	Good		
85-70	Satisfactory		
70-55	Fair	62	
55-40	Poor		
40-25	Very Poor		36

Secondary Needs

Design Deficiencies

I-43 infrastructure, constructed between 1959 to 1962, does not meet current freeway design standards. The I-43 corridor between Capitol Drive and Hampton Avenue includes the following roadway design deficiencies:

- Throughout the entire corridor, I-43 does not meet the standards for inside shoulder width. Existing outside shoulder width is ten feet. Existing inside shoulder width ranges from two to ten feet. A twelve-foot paved width is required for both inside and outside shoulders.
- Throughout the entire corridor, I-43 has substandard sag vertical and crest vertical curves; curves meet 40 to 50 mile per hour (mph) Category 3 Stopping Site Distance (SSD) minimums, but are required to meet 60 mph Category 3 SSD[4].
- None of the six ramps at the Capitol Drive interchange meet vertical and horizontal geometry standards.
- None of the three ramps at the Hampton Avenue Interchange meet vertical geometry standards and neither of the two northbound exit ramps meet horizontal geometry standards.
- The Capitol Drive and Hampton Avenue ramps have substandard acceleration and deceleration lanes for entering and exiting the freeway.

These deficiencies contribute to the existing high crash rates and congestion along the corridor and impact the safety of vehicular travel.

Safety

Crash data for a five-year period between 2013 and 2017 was reviewed for the project corridor to assess the safety of the corridor as shown on Table 8. Between 2013 and 2017, the Capitol Drive to Hampton Avenue corridor exhibited crash rates higher than the statewide average. The crash rate for the Capitol Drive to Hampton Avenue corridor ranges from 147 crashes per 100 million vehicle miles traveled (M VMT) to 161 crashes per 100M VMT, compared to the statewide average of 102 crashes per 100 M VMT. The segment north of Hampton Avenue, between Hampton Avenue and Silver Spring Drive, exhibits lower crash rates with 78.8 to 102.8 crashes per 100M VMT.

Rear end crashes account for almost half (47 percent) of all crashes on I-43 Southbound from Hampton Avenue to Capitol Drive,

[4] Stopping Site Distance is the length of roadway ahead that is visible to drivers that is sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a station object in its path. For more information, see https://wisconsindot.gov/rdwy/fdm/fd-11-10-att.pdf#fd11-10a5.1

which are typically the result of congested operations. Sideswipe crashes account for about 16 percent of all crashes within the corridor and are typically associated with traffic congestion and poor merging or diverging operations.

In the northbound direction, single vehicle crashes account for almost half (49%) of the crashes from Capitol Drive to Hampton Avenue. Almost a third (30%) are due to single vehicle crashes (crashes only involving one vehicle) into the median barrier and twenty-one percent of these crashes occur on the interchange ramps.

Table 8: I-43 Project Corridor Crash Rates

ROADWAY SECTION*	CRASH RATE (crashes/100M VMT)	STATEWIDE CRASH RATE
I-43 Northbound: Capitol Drive to Hampton Avenue	161.8	102.0
I-43 Northbound: Hampton Avenue to Silver Spring Drive	102.8	
I-43 Northbound Total	**134.1**	**108.8**
I-43 Southbound: Capitol Drive to Hampton Avenue	147.3	102.0
I-43 Southbound: Hampton Avenue to Silver Spring Drive	78.8	
I-43 Southbound Total	**115.0**	**109.0**

*Roadway sections include crashes on both mainline and ramps

Between 2013 and 2017 several crashes occurred at the freeway interchange off-ramps due to poor geometry that increase the potential for driver error (See Table 9). Almost a third (32%) of the ramp crashes occur in the I-43 northbound exit ramp to westbound Hampton Avenue, which is north of the Milwaukee River. All but one of the crashes at the ramp are single vehicle run-off-the-road type crashes, with vehicle operating speeds being a factor in all but one of those. Additionally, the Capitol Drive/Green Bay Avenue Southbound entrance ramp was the site of eight crashes during this time period, with a crash rate of 0.94 million entering vehicles (MEV).

Table 9: Ramp Crash Locations (2013-2017)

CRASH RAMP	TOTAL CRASHES	CRASH RATE (MEV)
Capitol Drive/Green Bay Avenue NB Exit Ramp	7	0.62
Capitol Dr/Green Bay Ave SB Entrance Ramp	8	0.94
Capitol Drive NB Entrance Ramp	0	0.00
Capitol Drive/Green Bay Avenue SB Exit Ramp	3	0.31
Hampton Ave (east)/ NB Exit Ramp	3	0.27
Hampton Avenue SB Entrance Ramp	7	0.56
Hampton Avenue (west) NB Exit Ramp	13	4.12

The Hampton Avenue exit ramps also carry substantially different traffic volumes (See Table 10). The existing (2019) Hampton Avenue (east) exit ramp volumes are more than twice the volumes of the Hampton Avenue (west) exit ramp volumes during the peak hours, and the estimated average weekday daily volume is more than two and a half times greater. SEWRPC is showing a slight decrease in the peak hour volumes for the Hampton Avenue (west) ramp in 2050. The future traffic volumes at the ramps conservatively assume capacity expansion from Brown Street to Hampton Avenue, as well as I-43 further between Silver Spring to WIS 60.

Table 10: Hampton Avenue Exit Ramp Traffic Volumes

Ramp	2019			2050		
	AM (vph*)	PM (vph)	Est AAWT* (vpd*)	AM (vph)	PM (vph)	AAWT (vpd)
Hampton Avenue (west) NB Exit Ramp	130	180	2000	120	160	2000
Hampton Avenue (east) NB Exit Ramp	310	430	5700	540	600	6500

*vph: vehicles per hour
vpd: Vehicles per day
AAWT: Average annual weekday traffic

Capacity

As shown in Table 11, existing (2019) traffic volumes on I-43 in the project corridor range between 114,750 Annual Average Daily Traffic (AADT) near Hampton Avenue and 131,750 AADT near Capitol Drive. Traffic volumes in the design year, 2050, are projected to increase to 131,100 AADT near Hampton Avenue and 150,600 at Capitol Drive, a 14 percent increase at all locations in the project corridor.

Table 11: I-43 Traffic Volumes

	2019 AADT	2050 AADT	Percent Change
I-43 at Capitol Drive	131,750	150,600	14
I-43 between Capitol Drive and Hampton Avenue	128,950	146,800	14
I-43 between Hampton Avenue and Silver Spring Road	114,750	131,100	14

Table 12 and Table 13 summarize the level of service (LOS) for northbound and southbound I-43, respectively, for existing (2019) and future No Build (2050) conditions during the morning (AM) and afternoon (PM) peak hours.[5] LOS is a quantitative measure that refers to the overall quality of traffic flow ranging from very good, represented by LOS A, to very poor, represented by LOS F. LOS D is used to define desirable peak hour operating conditions for the project corridor mainline and interchange ramps.

Under existing (2019) conditions, I-43 generally operates between LOS D and E in the northbound direction and between LOS C and D in the southbound direction during the AM and PM peak hours. Slow speeds (30 mph or less) regularly occur along I-43 southbound between Capitol Drive and Hampton Avenue during the weekday AM peak hour as peak period traffic demand exceeds the capacity of the corridor. On I-43 northbound, traffic generally operates near 50 mph during the AM and PM peak hours as traffic is metered by upstream congestion outside the project limits. The northbound exit ramp for the Capitol Drive interchange operates at LOS E in the AM and PM peak hours. This is primarily due to the short, tapered design of the deceleration lane along with mainline traffic demand that is at or near capacity in this area. The sections upstream of the northbound Capitol Drive exit ramp and between Capitol Drive and Hampton Avenue also operate at LOS E during the PM peak hour. The peak hour analysis indicates that I-43 southbound is generally worse during the AM peak hour and I-43 northbound is generally worse during the PM peak hour, which is primarily due to the highly directional distribution of traffic during the peak hours (AM inbound to downtown area and PM outbound from downtown area).

The future No Build (2050) scenario assumes I-43 would remain in its existing configuration. Operations generally degrade from existing (2019) peak hour conditions due to the increased future traffic traveling through the already congested six-lane corridor. In the 2050 AM and PM peak hours, there are eight locations in which the LOS is projected to degrade from D to E:

[5] Based on traffic counts, the weekday morning peak hour was identified as 6:45-7:45 AM and the weekday afternoon peak hour was identified as 4:30-5:30PM for existing and future conditions.

- I-43 southbound from Hampton Avenue to Capitol Drive (AM)
- I-43 southbound Capitol Drive/Green Bay Avenue exit ramp (AM)
- I-43 southbound Capitol Drive/Green Bay Avenue entrance ramp (AM)
- I-43 northbound between the Capitol Drive northbound to eastbound exit ramp and Capitol Drive/Green Bay Avenue exit ramp (AM)
- I-43 northbound between the Capitol Drive/Green Bay Avenue exit ramp and Capitol Drive entrance ramp (PM)
- I-43 northbound from Capitol Drive to Hampton Avenue (AM)
- I-43 northbound Hampton Avenue/Port Washington Road exit ramp (PM)

Each section is expected to be over-capacity based on future year volumes and turbulence created by adjacent ramp merge and diverge operations. In addition, two other sections are expected to degrade from LOS C to D during the future year PM peak hour: 1) I-43 southbound from Silver Spring Drive to Hampton Avenue and 2) I-43 southbound Capitol Drive/Green Bay Avenue entrance ramp. Existing (2019) sections on I-43 northbound which already operate at LOS E in either peak hour would continue to do so in the future year. All other sections are expected to operate at LOS C or D during the future year peak hours.

Table 12: Northbound I-43 Level of Service

Section	2019		2050	
	AM Peak	PM Peak	AM Peak	PM Peak
I-43 between Capitol Drive NB-EB Exit Ramp and Capitol Drive/Green Bay Avenue Exit Ramp	D	E	E	E
Capitol Drive/Green Bay Avenue Exit Ramp	E	E	E	E
I-43 between Capitol Drive/Green Bay Avenue Exit Ramp and Capitol Drive Entrance Ramp	D	D	D	E
Capitol Drive Entrance Ramp	D	D	D	D
I-43 Capitol Drive to Hampton Avenue	D	E	E	E
Hampton Avenue/Port Washington Road Exit Ramp	D	D	D	E
I-43 between Hampton Avenue Ramps	D	D	D	E
Hampton Avenue Exit Ramp	D	D	D	D
I-43 Hampton Avenue to Silver Spring Drive	D	D	D	D

Table 13: Southbound I-43 Level of Service

Section	2019		2050	
	AM Peak	PM Peak	AM Peak	PM Peak
I-43 Silver Spring Drive to Hampton Avenue	D	C	D	D
Hampton Avenue Entrance Ramp	D	C	D	C
I-43 Hampton Avenue to Capitol Drive	D	D	E	D
Capitol Drive/Green Bay Avenue Exit Ramp	D	D	E	D
Capitol Drive/Green Bay Avenue Entrance Ramp	D	C	E	D

System Linkage

I-43 is part of the National Interstate System and identified in WisDOT's Connections 2030 plan as a system-level priority corridor linking south-central and eastern Wisconsin. Priority corridors are "critical to Wisconsin's travel patterns and support the state's economy."[6] I-43 is also a designated federal and state long truck route that allows longer commercial vehicles to use the freeway.

The 190-mile-long I-43 corridor connects to I-39/I-90 in Beloit at the Wisconsin/Illinois border, and to US 41/US 141 in Green Bay in

[6] See priority corridor map at: https://wisconsindot.gov/Documents/projects/multimodal/conn2030/maps/milwaukee-mpa.pdf

northeastern Wisconsin. The freeway is a gateway to popular tourist locations in northern Wisconsin and links major industrial centers in south-central Wisconsin, Milwaukee and Green Bay.

In the Milwaukee metropolitan area, I-43 provides an important freeway connection for several Milwaukee County communities and downtown Milwaukee. Also, I-43/I-894 is part of a bypass around the city of Milwaukee for through-traffic. I-43 is concurrent with I-94 and US 41 between the Mitchell Interchange and the Marquette Interchange, serving as part of the north-south freeway link between Chicago and Milwaukee.

In addition to highway system linkages, I-43 provides important connections to air, rail, intercity bus and water transportation in southeastern Wisconsin including:

- Airports: I-43 is an important access route of passengers arriving and departing at the Wisconsin's two international airports: General Mitchell International Airport in Milwaukee and Austin Straubel International Airport in Green Bay.
- Passenger Train: I-43 provides a freeway access route to the Amtrak Stations at General Mitchell International Airport and at the Milwaukee Intermodal Station in downtown Milwaukee.
- Intercity Bus Access: Badger Bus, Greyhound, Indian Trails, Jefferson Lines, Lamers, MegaBus and Wisconsin Coach/Coach USA bus companies utilize the study corridor freeway to provide intercity bus service.
- Local Bus: Milwaukee County Transit Service (MCTS) uses I-43 for express bus service. In Milwaukee County, express buses connect northern Milwaukee county communities and the University of Wisconsin-Milwaukee and downtown Milwaukee. MCTS also operates the Ozaukee County Express, which provides service between Port Washington in Ozaukee County and downtown Milwaukee.
- Water Transport: I-43 is part of the highway network serving the Port of Milwaukee. This port on Lake Michigan is a regional transportation and distribution center with a primary market that includes Wisconsin, northern and western Illinois, and Minnesota. The Lake Express Ferry operates out of the port, providing service between Milwaukee and Muskegon, Michigan. I-43 also provides Interstate access to Manitowoc, where the Badger Ferry provides service to Ludington, Michigan.

7. Summary of Alternatives:

The following alternatives were considered for the Project.

No Build Alternative

The No Build Alternative would not improve the I-43 mainline and its associated bridges and interchange ramps. The mainline would continue to exhibit deteriorating pavement and substandard inside shoulder widths. Bridges along the corridor would not be reconstructed or rehabilitated. The existing Glendale Avenue bridge, I-43 over Hampton Avenue bridge and the I-43 over Milwaukee River bridge would continue to be deficient. Existing design deficiencies would remain with no improvements to safety. The No-Build Alternative does not meet the purpose and need for the project because the bridges would remain sub-standard and deficient, design deficiencies remain, and pavement condition would not be addressed. The No Build Alternative provides a baseline for comparison to the Build Alternative Rehabilitation.

Build Alternative Rehabilitation (WisDOT Preferred Alternative)

The Build Alternative Rehabilitation is the WisDOT Preferred Alternative. The Build Alternative Rehabilitation improves the six-lane I-43 freeway corridor between Capitol Drive and Hampton Avenue in generally the same configuration and meets the expected service life of the freeway. The Build Alternative Rehabilitation replaces the pavement along the corridor, except for an 800-foot section at the southern end that will be rehabilitated[7]; adds new southbound and northbound auxiliary lanes between the Capitol Drive and Hampton Avenue interchanges to address merging and diverging conflicts; and includes new shoulders, medians and median barriers that meet current design standards.

[7] The pavement at the southern 800 feet of the project will be rehabilitated as a temporary measure to match into a future project for I-43 between Brown Street and Capitol Drive, which WisDOT will evaluate as a separate action in 2020 (See Section 3).

To determine bridge actions for the Build Alternative Rehabilitation, WisDOT applied its bridge preservation policy that uses an asset management approach. Table 14 summarizes bridge improvement options WisDOT considered as part of its decision-making process. The Build Alternative Rehabilitation addresses bridge conditions by replacing three bridges and rehabilitating two bridges. Also, since the URT bridge (B-40-115) no longer has a functional purpose, the Build Alternative Rehabilitation removes the bridge and reconstructs I-43 on fill with retaining walls.

The Build Alternative Rehabilitation replaces the ramps on the north side of the Capitol Drive interchange to correct substandard horizontal curvature and rehabilitates the poor pavement conditions on the ramps to the south of the interchange. The Build Alternative Rehabilitation reconstructs the existing Hampton Avenue interchange ramps to meet current design standards and design year traffic volumes. The ramps would be replaced in generally the same location, except the northbound exit ramp to westbound Hampton Avenue that is north of the Milwaukee River would be removed. The northbound exit ramp to westbound Hampton Avenue does not meet vertical nor horizontal geometry standards and has a substandard deceleration lane. Additionally, the exit ramp exhibits low traffic volumes (2,000 AAWT in 2019) with a high crash rate (13 crashes between 2013 and 2017). Traffic previously using the removed northbound exit ramp would be routed to the reconstructed exit ramp south of the Milwaukee River. The northbound exit ramp intersection with Port Washington Road would be reconstructed to accommodate anticipated traffic increase, including enough ramp storage length for queuing vehicles.[8]

Table 14: Proposed Bridge Actions

Bridge ID	Location	Proposed Action	Other Options Considered	Rationale for Proposed Action
B-40-117	I-43 Southbound Exit Ramp for Capitol Drive Interchange	Replace bridge with one new bridge that is widened to meet current design standards	Deck Replacement, painting, superstructure and substructure retrofits, bearing replacement.	Costs were similar between options, so replacement is more cost effective
B-40-116	I-43 Mainline Over Northbound Exit Ramp to Green Bay Road	Rehabilitate bridge - concrete overlay and painting	No Build Alternative	Asset management decision to improve bridge life given current condition
B-40-115	I-43 Mainline Over Abandoned Railroad (URT)	Remove bridge and reconstruct I-43 mainline on fill supported by retaining walls	• Concrete overlay; spot painting, bearing replacement, substructure repair and joint repair • New, single-span bridges and retaining wall abutments • Replace in kind	Removal is most cost-effective action for a bridge that no longer requires grade separation over abandoned rail yard; The City of Glendale and property owner do not intend to construct roadway under freeway.
B-40-73	I-43 Mainline Over Glendale Avenue	Replace bridge that is widened to not preclude future modernization of freeway	• Concrete overlay (no widening for future modernization)* • Concrete overlay (with widening)* • Deck replacement (with widening)* *All options include full painting, bearing replacement, substructure repair and joint repair	To address substandard geometrics (including low vertical clearance) at the northbound off-ramp to Port Washington Road, this structure needed to be widened, at a minimum. Widening of structure would decrease already low vertical clearance without replacement. Replacement is most cost effective.

[8] The left turn lane from northbound Port Washington Road to westbound Hampton Avenue is being lengthened with another WisDOT project to accommodate the additional left turning vehicles from the reconstructed northbound exit ramp.

Bridge ID	Location	Proposed Action	Other Options Considered	Rationale for Proposed Action
B-40-67	I-43 Southbound Entrance Ramp Over Milwaukee River at Hampton Avenue	Rehabilitate bridge – replace deck and widen to address substandard shoulders	• Reconstruct bridge in-kind with standard shoulders • Concrete overlay* • Deck replacement* *Options include full painting, bearing replacement, substructure repair and joint repair	Deck replacement most cost effective
B-40-66	I-43 Mainline Over Hampton Avenue and the Milwaukee River	Replace bridge with two new bridges that are widened to not preclude future modernization of freeway	• Deck replacement with bearing replacement, substructure and superstructure repair • Replace bridge wider to accommodate the northbound exit ramp to westbound Hampton Avenue.	Substructure rating indicates structural deficiency; deck overlay or redeck and repairs would not be cost effective given age of bridge (60 years). More cost effective to remove the northbound exit ramp and construct narrower mainline bridge.

8. Description of Preferred Alternative:

The Build Alternative Rehabilitation (WisDOT Preferred Alternative) improves nearly 1.5 miles of I-43 between Capitol Drive in the City of Milwaukee and 2,100 feet north of Hampton Avenue in the City of Glendale. The Build Alternative Rehabilitation replaces or rehabilitates the existing six through lanes of mainline freeway in generally the same configuration and in a manner to not preclude the future modernization and capacity expansion of the corridor in the future[9]. (See Appendix B-1: Design Plans and Appendix B-2: Typical Sections) The Build Alternative replaces the pavement and adds auxiliary lanes; replaces and improves bridges; removes the URT bridge and reconstructs the mainline on fill with retaining walls; reconstructs the Hampton Avenue interchange ramps; and reconstructs or overlays pavement of the Capitol Drive interchange ramps. Also, the Build Alternative Rehabilitation replaces the existing noise barrier on the west side of I-43 and adds two new barriers north of Capitol Drive. Stormwater will be conveyed to two detention ponds. In addition, the Build Alternative Rehabilitation includes traffic management measures to maintain traffic during construction (See Appendix B-3: Detour Routes). Project construction is planned from Spring 2021 to Summer 2024. The Build Alternative Rehabilitation is described in more detail below:

Roadway

The Build Alternative Rehabilitation reconstructs the roadway and replaces the pavement along the project corridor, except for an 800-foot section of I-43 north of Capitol Drive that will be milled and resurfaced. The reconstructed roadway would include six 12-foot wide through lanes, 8 to 12-foot outside shoulders in both directions and a 30.5-foot wide median with a 56-inch tall concrete median barrier. In addition, new southbound and northbound auxiliary lanes will be added along the I-43 mainline between the Capitol Drive and the Hampton Avenue interchanges to improve movement for vehicles entering and exiting the freeway. The mainline will be shifted east by 46-feet to 74-feet within the existing right of way at the Milwaukee River to straighten the curvature of the roadway and avoid impacts to Lincoln Park on the west side of this freeway section.

[9] SEWRPC's VISION 2050 does not make any recommendations with respect to whether I-43 between Howard Avenue and Silver Spring Drive, when reconstructed, should be reconstructed with or without additional lanes. This determination would be made during preliminary engineering, after which VISION 2050 would be amended to reflect the decision made as to how this segment of I-43 would be reconstructed. Any construction along this segment of I-43 prior to preliminary engineering - such as bridge reconstruction – should fully preserve and accommodate the future option of rebuilding the freeway with additional lanes. http://www.sewrpc.org/SEWRPCFiles/Vision2050/PlanSummaryDec2016.pdf

Bridges

The Build Alternative Rehabilitation replaces three bridges, rehabilitates two bridges and removes the URT bridge over land and replaces the I-43 mainline on fill within retaining walls. Table 15 summarizes the proposed bridge actions for the Build Alternative Rehabilitation.

Table 15: Proposed Bridge Actions

Bridge ID	Location	Proposed Action	Details
B-40-117	I-43 Southbound Exit Ramp for Capitol Drive Interchange	Replace bridge with one new bridge that is widened to meet current design standards	Replace existing deficient 3-span, 119-foot long steel girder structure with 3-span, prestressed concrete girder bridge.
B-40-116	I-43 Mainline Over Northbound Exit Ramp to Green Bay Road	Rehabilitate bridge - concrete overlay and painting	Bridge will require removal and replacement of median barrier to accommodate construction staging and traffic control. Bridge will remain at existing width.
B-40-115	I-43 Mainline Over Abandoned Railroad (URT)	Remove bridge and reconstruct I-43 mainline on fill supported by retaining walls	Construct mainline on 1,475-linear feet of new fill (5 to 25-feet high), supported by MSE panel retaining walls. Per coordination with the city of Glendale and local property owners, there will be no access under I-43.
B-40-73	I-43 Mainline Over Glendale Avenue	Replace bridge with a new bridge that is widened to not preclude future modernization of freeway	Replace existing 3-span, 126-foot long steel girder structure with three single-span prestressed concrete girder bridges and MSE retaining wall abutments.
B-40-67	I-43 Southbound Entrance Ramp Over Milwaukee River at Hampton Avenue	Rehabilitate bridge – replace deck and widen to address substandard shoulders	Replace existing deck and widen with extended exterior overhangs (no additional girders required). Substructure repairs will be completed as a part of the redeck.
B-40-66	I-43 Mainline Over Hampton Avenue and the Milwaukee River	Replace bridge with two new bridges that are widened to not preclude future modernization of freeway	Replace existing 9-span, 572-foot long prestressed concrete girder structure with two 5-span pre-stressed concrete girder bridges. Piers in the Milwaukee River, as well as piers and abutments outside the river would be replaced.

Interchanges

The Build Alternative Rehabilitation will make the following improvements to the Capitol Drive and Hampton Avenue interchanges.

Capitol Drive Interchange

The Build Alternative Rehabilitation reconstructs the southbound exit and northbound entrance ramps at the Capitol Drive interchange to correct substandard horizontal curvature. The reconstructed interchange ramps will be replaced in generally the same configuration and with the same access points at Green Bay Avenue and N. 7th Street/W. Fiebrantz Avenue. Also, the Build Alternative Rehabilitation will mill and overlay the pavement along the southbound entrance and northbound exit ramps of the Capitol Drive interchange.

Hampton Avenue Interchange

The Build Alternative Rehabilitation reconstructs the existing Hampton Avenue interchange ramps to meet current design standards and traffic volumes. The ramps will be replaced in generally the same location, except the northbound exit ramp to westbound Hampton Avenue that is north of the Milwaukee River is removed due to substandard design deficiencies, low traffic volumes (see Table 10) and safety issues. Traffic previously using the removed northbound exit ramp will be routed to the reconstructed northbound exit ramp to Hampton Avenue/Port Washington Road on the south side of the Milwaukee River. The reconstructed exit ramp will be improved by increasing the deceleration length and adding a barrier separating it from the adjacent entrance ramps of Port Washington Road.

Noise Barriers

The west side of I-43 between approximately the Milwaukee River and just south of Glendale Avenue has an existing 1,300-foot long and 21.4-foot high (average height) noise barrier. The Build Alternative Rehabilitation replaces the barrier with a new barrier that would be 1,349-feet long and 14 to 22 feet high. In addition, two new barriers were determined to be feasible and reasonable:

- I-43 northbound and the I-43 northbound off ramp to Green Bay Avenue - This noise barrier will be 740-feet long and 14 to 24 feet high. This barrier would extend east along the West Fiebrantz Avenue on ramp to I-43 northbound until approximately 7th Street.
- I-43 southbound and the Green Bay Avenue on ramp to I-43 southbound – This noise barrier along I-43 southbound would be 426-feet long and 14 to 16 feet high. This barrier would extend west along 9th Street for approximately 90 feet of the total length.

A public involvement meeting will occur following approval of this ER to determine whether the feasible and reasonable barriers described above would likely be incorporated into the project.

Stormwater Management

The Build Alternative Rehabilitation will construct stormwater detention ponds to convey runoff and improve water quality. The existing stormwater runoff from the freeway directly discharges to the Milwaukee River and does not provide reduction of total suspended solids (TSS) as required under the Wisconsin Administrative Code NR 151 and WisDOT's Transportation Separate Storm Sewer System Permit (TS4) permit requirement for 40% TSS removal.

Construction Staging and Traffic Management

The Build Alternative Rehabilitation will be constructed in three stages that will require through lane closures along the mainline and ramp closures at interchanges. A minimum of two lanes of through traffic in each direction will be maintained during construction except for short-term nighttime freeway closures.

During the first stage of construction, the northbound exit ramp to westbound Hampton Avenue will be closed permanently and the northbound exit ramp to Port Washington Road will be closed temporarily during to facilitate construction operations. During the second stage of construction, one lane in both the northbound and southbound directions will be closed on the mainline, and southbound traffic will be placed on the existing northbound pavement while the existing southbound freeway section is reconstructed. Southbound access from Hampton Avenue and to Green Bay Avenue will be closed during a sub-stage. During the third stage of construction, one lane in both the northbound and southbound directions will continue to be closed on the mainline and northbound traffic will be placed onto the southbound pavement while the northbound freeway section is reconstructed. Northbound freeway access from Capitol Drive (via Fiebrantz Avenue) and to Hampton Avenue will be closed during a sub-stage.

The existing adjacent local roadway network and interchange ramps will provide detour routes during construction. Detour routes on north-south roadways include Port Washington Road and Green Bay Avenue. Detour routes for east-west roadways include Capitol Drive, Hampton Avenue, and Silver Spring Drive. Specific detour routes for each ramp closure will be signed as necessary during each construction stage. No offsite improvements are required on local roads, WisDOT will adjust signal timings and coordinate with local municipalities as needed.

Other I-43 Corridor Studies and other Area Highway Improvement Projects

WisDOT has programmed the Build Alternative Rehabilitation along with other projects within the I-43 corridor to address safety, deteriorating roadway and bridge infrastructure, and operational concerns. The other planned projects along I-43 are outlined in Table 16 below and shown on a map in Appendix C. Each action has independent utility and separate environmental studies will be undertaken for each Proposed Action. The other actions described below within the I-43 corridor do not make commitments for future work nor do they restrict consideration of other future alternatives for the I-43 corridor.

Table 16: Other I-43 Corridor Projects

Project	Project Design ID	Schedule	Description
I-43 North-South Freeway: Silver Spring Drive to WIS 60	1229-04-01	2021-2024	This project includes the expansion of I-43 from two lanes to three lanes in each direction. The project will also rebuild the five existing interchanges along the corridor and build a new interchange at Highland Road. The Union Pacific railroad bridge over I-43 in Glendale will be replaced, and a section of Port Washington Road in Glendale will be expanded from one to two

			lanes in each direction.
Silver Spring Interchange with I-43	1228-22-02	2020	This project includes maintenance of bridges, partial replacement of northbound ramp pavement, and traffic signal improvements at Hampton Avenue and Port Washington Road.
I-43 North-South Freeway: Brown Street to Capitol Drive	1228-22-00	2022-2024	This project will rehabilitate existing pavement and structures primarily within the existing footprint. Consider restriping to add driving lane, and/or consider auxiliary improvements on I-43. Operational analysis of area local roads, Halyard Street and North Avenue bridges may be separate independent project.
Hillside Interchange with I-43	1228-28-00	2021	This project includes maintenance of Kilbourn tunnel and overpassing bridges.
West and North legs of Marquette Interchange with I-43	1228-09-04	2020	This project includes maintenance of an existing perpetual pavement project.

9. Land Use Adjoining the Project and Surrounding Area:

The current land use in the immediate project area is a freeway and its associated right-of-way. The proposed action would maintain that land use. The land uses within a half-mile of the project corridor are detailed in Table 17 below. The existing land use adjacent to the project area is comprised of urban development and includes industrial, commercial, residential and recreational land uses.

Table 17: Existing Land Uses in Project Area

Category	Acres*	Percent
Residential	355	25
Commercial	88	6
Industrial	84	6
Transportation	475	33
Communications and Utility	2	0
Government and Institutional	65	5
Unused Lands	88	6
Recreational	160	11
Wetlands and Woodlands	52	4
Surface Water	68	5
Total	1,437	100

* Land use acres were calculated for a ½-mile buffer around the project corridor
Source: Southeastern Wisconsin Regional Planning Commission, 2010 Land Use File

Immediately west of the corridor are a variety of different land uses, ranging from recreational, residential, commercial and industrial. Lincoln Park and the Lincoln Park Golf Course are at the northwest portion of the corridor, north of the Milwaukee River. Just south of the Milwaukee River and west of I-43 is a small residential neighborhood with Glendale Avenue as its southern boundary. South of Glendale Avenue, light industrial uses are along I-43 with Evergreen Cemetery to the west. South of Evergreen cemetery, the western portion of the project corridor is dominated by industrial uses with a small residential neighborhood near the Capitol Drive interchange.

East of the corridor land uses range from residential, recreational, commercial and industrial. North of Hampton Avenue is a single-family residential neighborhood, and to the south is Estabrook Park. South of the Milwaukee River is primarily commercial and institutional uses with numerous businesses along with two educational facilities and a hospital. At the south end of the corridor, a small residential neighborhood and Messmer High School, are just north of Capitol Drive.

The project area was historically developed primarily in the 1920's through the 1940's. Some commercial and industrial redevelopment occurred along the Port Washington corridor during the 1990's and early 2000's. Based on review of historic aerial photography, no other major commercial, industrial or residential developments have taken place in the project area over the past 20 years. A large former rail yard, which is now vacant, is present in the project area and could be redeveloped in the future.

Population projections for the municipalities within the project area are shown below in Table 18. Milwaukee is projected to

grow by 3.2 percent between 2020 and 2040, while Glendale's population is expected to decline by 1.6 percent in that same time.

Table 18: Project Area Municipalities Population Forecasts

Municipality	2015	2020 Projection	2025 Projection	2030 Projection	2040 Projection	2050 Projection
Milwaukee	599,498	607,750	607,200	608,950	622,150	627,400
Glendale	12,914	12,870	12,710	12,590	12,710	12,660

Source: U.S. Census Bureau, American Community Survey, 2015 and State Population Projections, 2010-2040, Wisconsin DOA

10. Planning and Zoning:

Transportation Improvement Program for Southeastern Wisconsin: 2019-2022

SEWRPC is the federally designated organization that ensures air quality conformity in the seven-county southeastern Wisconsin region. In accordance with the 1990 Clean Air Act Amendments, proposed highway improvements must be included in an approved Transportation improvement Plan (TIP) and the adopted regional transportation system plan to be in conformance with the State Implementation Plan (SIP) for air quality. The TIP lists all arterial highway, public transit, and other transportation improvement projects proposed to be carried out by state and local governments over a 4-year period. This project is included as project number 322 in the TIP (2019-2022).

VISION 2050: Developing the vision and Plan (2017)

SEWRPC completed VISION 2050, a long-range plan for land use and transportation in Southeastern Wisconsin in July 2016. The plan is an advisory vision for how the seven-county region can achieve the type of land use and transportation infrastructure that will help attract new talent and encourage economic growth. Key plan recommendations include preservation of primary environmental corridors; encouraging more compact development; improving public transit; enhancing bicycle and pedestrian networks; keeping major streets in a state of good repair; and strategically adding capacity to congested roadways and implementing complete streets policy. The 2050 regional land use plan identifies the I-43 project area as mixed-use traditional neighborhood with residential and other urban land that is at least 7.0 to 17.9 dwelling units per net residential acre.

SEWRPC's VISION 2050 does not make any recommendations with respect to whether I-43 between Howard Avenue and Silver Spring Drive, when reconstructed, should be reconstructed with or without additional lanes. This determination would be made during preliminary engineering, after which VISION 2050 would be amended to reflect the decision made as to how this segment of I-43 would be reconstructed. Any construction along this segment of I-43 prior to preliminary engineering - such as bridge reconstruction – should fully preserve and accommodate the future option of rebuilding the freeway with additional lanes. The Build Alternative Rehabilitation is compatible with *Vision 2050* because the proposed improvements are being designed and constructed in a manner to not preclude the modernization of the corridor the future. The plan is available at: https://www.vision2050sewis.org/

City of Glendale: Smart Growth Update (2011)

In 2011 the City of Glendale updated its comprehensive plan, *City of Glendale Smart Growth Update*. The plan update included a vision for the community, *Glendale 2021 – Our Vision*. The vision for the community focuses on connecting the community and improving infrastructure and encourages residents to maintain their personal property to improve the appearance of the city. Overall, the plan does not envision major changes to the existing land use patterns found within Glendale as it is a fully developed community. The plan highlights I-43 as a key transportation asset for the community and its businesses, and the plan supports the maintenance of local road surfaces. The Build Alternative Rehabilitation is compatible with the goals of the plan because it improves and maintains the I-43 corridor, which is a key transportation asset for the community. The plan is available at: https://www.glendale-wi.org/DocumentCenter/View/181/Comprehensive-Plan?bidId=

City of Glendale Zoning

Zoning regulations are contained in Chapter 13 of the City of Glendale Code of Ordinances and administered by the city's Community Development Department. Zoning adjacent to the project corridor in the City of Glendale largely reflects the existing land uses and includes Conservancy District (Lincoln Park), Business, Manufacturing and Residential classifications. Also, Planned Unit Development Districts (PD) are present to the east of Port Washington Road. The Build Alternative Rehabilitation is compatible with Glendale's zoning classifications as the freeway will be replaced in generally same configuration. A zoning map is available at: https://www.glendale-wi.org/DocumentCenter/View/184/Zoning-Map?bidId=

Northeast Side Area Plan (2009)

The Northeast Side Area Plan covers the neighborhoods of Harambee, Riverworks, Riverwest, the Milwaukee River, Upper East Side, Lower East Side and the Lakefront. The plan aims to capitalize on existing improvement and redevelopment efforts in the area and protect assets so that all neighborhoods and uses can be preserved and enhanced. The vision for the Northeast Side is to create "vital and diverse urban neighborhoods" with a "nucleus of quality jobs, education, and culture." The plan states I-43 is a major asset for retail development. The Build Alternative Rehabilitation is compatible with the goals and strategies within the Northeast Side Area Plan since it maintains and improves the access points to and from I-43 and is being replaced generally within the existing alignment. The plan is available at: https://city.milwaukee.gov/AreaPlans/Northeast.htm#.XVMx5-NKhhE

Near North Side Area Plan (2009)

The Near North Side Area Plan covers the north east area of the City of Milwaukee and is roughly bounded by Silver Spring Drive and North Ave. The plan aims to provide long-term value and job creation by balancing residential, commercial and industrial investments. The plan does not recommend major land use changes and instead emphasizes building upon existing neighborhood assets. I-43 serves as a major connection to east-west streets in this area, including Silver Spring Drive, Capitol Drive, and Sherman Boulevard. The plan recommends "improving access and gateways between [I-43] and commercial corridors, notably Capitol Drive". The area plan's transportation recommendations focus on improving routes to employment centers to give residents more opportunities. Strategies include improving transit stops, increasing pedestrian access between employment centers, and planning for future transit systems. The Build Alternative Rehabilitation is compatible with the goals and strategies outlined in the Near North Side Area Plan since it maintains and improves the access points to and from I-43 including the Capitol Drive interchange. The plan is available at: https://city.milwaukee.gov/AreaPlans/NearNorth.htm#.XVMyHeNKhhE

City of Milwaukee Zoning

The City of Milwaukee Zoning Code is administered by the Department of Neighborhood Services. The city's zoning code regulates development within the city and promotes land uses that are consistent with the city's comprehensive plan. Within the project area zoning classifications within the City of Milwaukee include residential, industrial, commercial and park. The Build Alternative Rehabilitation is compatible with Milwaukee's zoning classifications as the freeway will be replaced in generally same configuration. The zoning code can be viewed at: https://city.milwaukee.gov/zoningcode#.XVMtkuNKhhE

11. Indirect Impacts:

If any of the following boxes are checked, the Pre-Screening Worksheet for EA and ER Projects for Determining the Need to Conduct a Detailed Indirect Effects Analysis must be completed and attached to this environmental document.

An alternative being carried forward for detailed analysis includes:

- ☐ Economic development as an element of the purpose and need
- ☐ Construction of one or more new or additional through lanes
- ☐ Construction of a new interchange or elimination of an existing interchange
- ☒ Construction of one or more additional ramps or relocation of a ramp lane to a new quadrant on an existing interchange
- ☐ Relocation of an existing roadway to a new alignment (this does not include minor modifications to the existing roadway alignment)
- ☐ Changing an at-grade intersection to a grade-separated intersection with no access or a grade-separated intersection to an at-grade intersection.
- ☐ Construction of one or more additional intersections along the mainline created by a new side road access.
- ☐ One or more new access points along a side road within 500' of the mainline.

☐ None of the above boxes have been checked, it has therefore been concluded that the proposed action will not result in indirect effects.

☒ The proposed action may result in indirect effects. The Pre-Screening Worksheet for EA and ER Projects for Determining the Need to Conduct a Detailed Indirect Effects Analysis attached here: Appendix D indicates a detailed indirect effects analysis is not required.

☐ The proposed action may result in indirect effects. It has been determined that a detailed indirect effects analysis is required. A summary of the detailed analysis is located here:

12. Environmental Justice (EJ):

How was information obtained about the presence of populations covered by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (EO 12898)? *(check all that apply)*	
☐ Public Involvement Plan (PIP)	☐ EJ plan for the project
☒ U.S. Census data (2013-2017 ACS 5-year Estimates)	☐ Survey/questionnaire
☐ Local government	☐ U.S. EPA EJ Screen
☐ Real estate company	☐ WisDOT Real Estate

☐ Public involvement meeting(s)	☐ Windshield survey*
☐ Official plan (such as a comprehensive plan or MPO plan)	
☐ Health and human services agencies or organizations Identify agency or organization:	
☐ Other – identify:	

*Conducting only a windshield survey is not sufficient to decide if populations are present.

A. Based on data obtained from the methods above, are minority populations or low-income populations present in the project area?

☐ No

☒ Yes, describe: Within a half mile of the project corridor, 69 percent of the population is minority. Black or African American is the largest minority group within the study area accounting for 61 percent of the population. Milwaukee County's population is 36 percent minority and 26 percent Black or African American. The median household income ranges from $18,424 to $124,375 for the census block groups within a half-mile of the project corridor. The median household income for Milwaukee County is $46,784. Within a half a mile of the project corridor, five out of nine census tracts have poverty rates above 30 percent. In Milwaukee County, 20.5% of its persons are below the poverty line.

B. Will there be potential impacts of any kind to minority populations or low-income populations identified above?

☐ No

☒ Yes, describe: Minority and low-income populations would experience traffic noise impacts as traffic noise levels approach or exceed the Noise Level Criteria. Two feasible and reasonable noise barriers proposed to the north of Capitol Drive would mitigate traffic noise impacts. Minority and low-income populations would experience short-term construction-related inconveniences such as construction noise and dust. Also, minority and low-income populations may experience traffic delays and travel indirection from lane and ramp closures during construction. In addition, the Oak Leaf Trail connection at Hampton Avenue would be temporarily closed and detoured during construction. See the Environmental Justice Factor Sheet.

13. Title VI of the Civil Rights Act of 1964 and Additional Nondiscrimination Requirements

A. Indicate if issues have been identified or concerns have been expressed related to Title VI of the Civil Rights Act of 1964 or other nondiscrimination laws, regulations, executive orders and policies under the Title VI umbrella.

☒ No. Issues related to the above laws, regulations, executive orders and policies were not identified and concerns were not expressed.

☐ Yes. Issues related to the above laws, regulations, executive orders and policies were identified and/or concerns were expressed, describe:

14. Public Involvement

A. Briefly describe the Public Involvement Plan (PIP): The I-43 North-South Freeway (Capitol Drive to Hampton Avenue) PIP is multi-faceted to meet the needs of the diverse range of stakeholders on this project. The PIP objectives include: provide project information to the public and local and state officials; implement the media/communications strategy to create awareness; and inform regional, statewide and local stakeholders about the Project. Public outreach activities described in the plan include: public involvement meetings, noise wall public meetings and meetings with businesses, interest groups, neighborhoods and elected officials.

B. Public Meetings

Date (mm/dd/yyyy)	**Meeting Sponsor** (WisDOT, RPC, MPO, etc.)	**Type of Meeting** (PIM, Public Hearings, etc.)	**Location**	**Approx. Number of Attendees**
8/22/2019	WisDOT	PIM	David Hobbs Honda Community Room; Glendale, WI	38

C. Other methods such as those identified in the Public Involvement Plan and Environmental Justice Plan (if applicable):
The Public Involvement Meeting (PIM) notice went out via direct mail to over 1,300 addresses, a display ad was run in the Milwaukee Journal Sentinel on 8/14/19, and WisDOT sent out a press release announcing the PIM. Local officials were asked to help distribute the PIM notifications at the 8/13/19 local official meeting to their email and social media lists. Also, following the PIM notifications, WisDOT coordinated via telephone with neighborhood association representatives who wanted to learn more

about the project and schedule a date for a future coordination meeting. In December 2019, WisDOT mailed a newsletter to addresses along the project corridor following the PIM to provide a project update.

D. Indicate any accommodations that were requested by the public or provided to comply with Title VI, EJ or nondiscrimination laws.

- ☐ Interpreters
- ☐ Transportation provided
- ☐ Childcare provided
- ☐ Bilingual materials provided
- ☐ Other, describe
- ☐ Listening aids
- ☐ Accessibility for elderly populations or individuals
- ☐ Accessibility for disabled populations or individuals
- ☐ Sign language provided

E. Describe populations, groups and individuals who participated in the public involvement process. Include any organizations and special interest groups: Local elected officials and city staff, residents from adjacent neighborhoods, representatives from Messmer High School.

F. Indicate plans for additional public involvement, if applicable: As the project progresses WisDOT will continue to meet with neighborhood organizations, property owners and businesses upon request to provide information and obtain feedback on design plans. WisDOT will continue providing project updates to local, state and federal government officials. The table below summarizes meetings WisDOT has attended/will attend with public stakeholders.

Date	With whom
9/6/2019	North Shore Football Club
10/23/2019	Building manager, Columbia School of Nursing
10/23/2019	Javic Wholesale
10/24/2019	Sprecher Brewing Co.
10/26/2019	Five Points Neighborhood Association (5PNA)
10/29/2019	Home Depot store manager
10/31/2019	Maglio Industries
11/20/2019	Alderwoman Milele Coggs
12/18/2019	Messmer High School
1/27/2020	Northshore Rotary

15. Summarize the Results of Public Involvement:

A. Describe the issues, if any, identified by individuals or groups during the public involvement process:

Construction Timelines and Detours

At the August 13, 2019 Local Officials Meeting, local communities expressed concern regarding the construction impacts from this project combined with potentially overlapping timelines with other projects in the I-43 corridor. Similar concerns were expressed at the public involvement meeting held on August 22, 2019, including a request not to close the Capitol Drive and Hampton Avenue interchanges at the same time. Other participants noted concern about traffic detouring through local streets during construction for this project and other projects on I-43.

Consolidated Hampton Avenue Exit Ramp

Other issues raised at the public involvement meeting included concerns about the impact of closing the northbound exit ramp to Hampton Avenue (west) and rerouting traffic to the reconstructed exit ramp south of the Milwaukee River. Residents were concerned that the added traffic will further deteriorate traffic operations on Port Washington Road, where there are long queues of traffic turning left from Port Washington onto westbound Hampton Avenue.

Noise Impacts

Residents raised concerns about noise impacts; indicating the existing barrier is not effective and the replaced barrier should be extended onto the I-43 entrance ramp and mainline bridges over the Milwaukee River. Another comment requested not to tine the pavement to avoid further noise impact.

Route of the Badger

The Route of the Badger, a 700-mile trail system planned for Southeast Wisconsin, includes a planned trail segment underneath the I-43 Mainline Over Abandoned Railroad (URT) bridge (B-40-115). The Build Alternative would remove the URT bridge (B-40-115) and reconstruct I-43 mainline on fill supported by retaining walls. Concerns were raised that under the Build Alternative, there would be no access under I-43 at this location.

Messmer High School

Messmer High School provided input that the potential noise barrier would block views of the high school building from I-

43. Concern also expressed to route traffic away from the 7th Street access to the I-43 northbound on-ramp and encourage using Fiebrantz Avenue from Port Washington Road as the primary access to the on-ramp

Oak Leaf Trail Bridge
Members of the public noted the need for paint on the bridge carrying the Oak Leaf Zip Line trail over I-43.

Bridge Lighting
Some participants requested lighting under the I-43 bridge over Glendale Avenue to improve safety.

Meetings with public stakeholders noted in Question 14.B above primarily focused on project design and related impacts at specific locations. WisDOT will continue to follow up with stakeholders as designs evolve to refine and reduce impacts.

B. Briefly describe how the issues identified above were addressed:

Construction Timelines & Detours
WisDOT will coordinate construction schedules to minimize the overall construction time and temporary loss of local access. WisDOT will coordinate with local communities to communicate construction schedules and temporary closures and detours. Detours will be routed onto arterial streets during temporary freeway closures and will not route traffic through residential neighborhoods (see also Appendix B-3 for proposed detour routes). WisDOT will avoid closing the Capitol Drive and Hampton Avenue interchanges at the same time to the greatest extent practicable.

Consolidated Hampton Avenue Exit Ramp
To mitigate potential impacts at the reconstructed Hampton Avenue exit ramp, the added auxiliary lane on I-43 will allow traffic to decelerate as it exits and the left turn lanes on the exit ramp will be lengthened to store exiting vehicles at the ramp signal. The ramp signal will be synchronized with the signal at the Port Washington Road/Hampton Road intersection to minimize impacts to traffic operations. The volume of northbound vehicles exiting to the existing Hampton Avenue (west) ramp is approximately 180 vehicles per hour during peak evening times. Rerouting the diverted existing traffic to a single exit ramp will not cause further deterioration to existing and future queues at the Port Washington Road/Hampton Avenue intersection. Under a separate project, WisDOT will add an extension to the left turn lane at the Port Washington Road and Hampton Avenue intersection, providing further mitigation for any traffic increases for vehicles travelling north to west at the intersection.

Noise Impacts
WisDOT completed noise analysis, which is discussed in detail in the Traffic Noise Factor Sheet. As part of the WisDOT Preferred Alternative, WisDOT will replace the existing noise barrier west of I-43 between the Milwaukee River to just south of Glendale Avenue. The replaced barrier will meet WisDOT criteria for noise abatement, resulting in an 8 to 9 decibel reduction at receptors (residences) benefiting from the barrier. Two additional noise barriers are feasible and reasonable and would be located on either side of I-43, north of Capitol Drive. Consistent with WisDOT policy, additional noise barriers will not be constructed on bridges. The WisDOT Preferred Alternative would replace the existing pavement with asphalt pavement and will not be tined.

Route of the Badger
WisDOT will continue to coordinate with the Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger to determine an appropriate crossing under I-43.

Messmer High School
Based on input from Messmer High School, WisDOT has adjusted the location of a noise barrier to avoid blocking views of the high school building from I-43. Reconfiguring the northbound on-ramp from Capitol Drive is outside the scope of this project. WisDOT will continue coordination with Messmer High School and the City of Milwaukee regarding how traffic accesses the northbound entrance ramp and review alternatives to encourage traffic to use Fiebrantz Avenue instead of 7th Street.

Oak Leaf Trail Bridge
Milwaukee County has jurisdiction over the Oak Leaf Trail/Zip Line bridge crossing I-43 and would be responsible for maintaining, including painting, the bridge.

Bridge Lighting
WisDOT will coordinate with Milwaukee County regarding the addition of lighting under the I-43 bridge during final design. Lighting along Hampton Avenue, including under the I-43 bridges would be responsibility of Milwaukee County.

16. Local, County, State, Tribal, Federal Government Coordination:

A. Identify units of government contacted and provide the date coordination was initiated.

Unit of Government (Village, Town, MPO, RPC, City, County, Tribe, Federal, etc.)	**Coordination** Correspondence Attached	**Coordination Initiation Date** (mm/dd/yyyy)	**Comments**
Local Officials Meeting	☐ Yes ☒ No	8/13/2019	A local officials meeting was held on 8/13/19 to provide a preview of the information to be presented at the 8/22/19 PIM. The invite list included government representatives and elected officials from Milwaukee County, City of Milwaukee, City of Glendale, Village of Shorewood and Village of Whitefish Bay. Also, state and federal legislators were invited to the meeting.
Milwaukee County Parks	☒ Yes ☐ No	8/15/2019 8/27/2019	The project would require temporary construction work in the Milwaukee River Parkway and Lincoln Park Golf Course to reconstruct mainline pavement, reconstruct the Oak Leaf Trail under I-43, perform roadway work on Hampton Avenue, and stage construction equipment to replace the I-43 mainline bridge over the Milwaukee River and Hampton Avenue. WisDOT met with Milwaukee County Parks staff to discuss temporary construction impacts. Milwaukee County Parks indicates the project will require a right of entry permit and will not adversely affect the activities, features, and attributes that qualify the properties for protection under Section 4(f).
City of Glendale	☒ Yes ☐ No	6/3/2019	Letter from WisDOT to City of Glendale confirming that the city no longer has plans for an access road under I-43 (at the Glendale Yards property) and that the Department's alternatives no longer includes a structure to provide cross access. Glendale signed and retuned the letter indicating their concurrence.
City of Glendale	☐ Yes ☒ No	1/25/2019	WisDOT met with representatives from the City of Glendale and Glendale Partners (owner/developer of Glendale Yards) to brief them on the project and to discuss development plans for the Glendale Yards property and a potential cross access road.
City of Glendale and City of Milwaukee	☐ Yes ☒ No	9/8/2017	WisDOT initiated coordination with representatives from the cities of Glendale and Milwaukee to brief them on early concepts for the project and to discuss the Glendale Yards property and the need for a potential cross access road under the URT bridge.
City of Milwaukee Department of Public Works (DPW)	☐ Yes ☒ No	10/24/2017	Continued coordination on project status.

Unit of Government (Village, Town, MPO, RPC, City, County, Tribe, Federal, etc.)	**Coordination** Correspondence Attached	**Coordination Initiation Date** (mm/dd/yyyy)	**Comments**
Milwaukee County Department of Transportation (DOT)	☐ Yes ☒ No	11/19/2019	Continued coordination on project status.

B. Describe the issues, if any, identified by units of government during the public involvement process:

1) Local Officials Meeting (8/13/2019): Substantive issues raised at the meeting include:
   - Concern about the timing of multiple construction projects along I-43 and their impact to local roadways in communities adjacent to the freeway.
   - Impact of routing traffic to one exit ramp at Hampton Avenue on Port Washington Road. There is existing congestion now and concerns additional traffic will make traffic operations worse.
   - Why not add a fourth lane to the freeway now?
   - What is the timing for ramp closures?
   - There may be construction conflicts with local projects including traffic signal work on Silver Spring in 2021 and ramp construction at WIS 57 and Silver Spring Drive interchange (approximately 1 mile west of I-43).

2) Milwaukee County: Coordination with Milwaukee County Parks was conducted to address potential impacts to the Milwaukee River Parkway, Lincoln Park Golf Course and the Oak Leaf Trail.

3) City of Glendale: Coordination was conducted with the City of Glendale and the property owner of Glendale Yards to discuss potential impacts to the property and future development plans. Glendale and the property owner expressed concern about how right of way impacts may affect their development plans. They also originally expressed interest creating cross access under the freeway for a local roadway.

4) City of Milwaukee DPW and Milwaukee County DOT: No specific issues identified; maintain ongoing communication.

C. Briefly describe how the issues identified above were addressed:

1) Local Officials Meeting (8/13/19):
   - I-43 construction projects: WisDOT will coordinate construction schedules to minimize the overall construction time and temporary loss of local access. WisDOT will coordinate with local communities to communicate construction schedules and temporary closures and detours.
   - Impacts to Port Washington Road traffic operations: Improvements on I-43, including an auxiliary lane and left turn lane improvements at the exit ramp and signalization will minimize impacts to traffic operations (see also Section 15 B, above).
   - Adding additional travel lanes is outside the scope of this project. The project's purpose is to address deteriorating bridge and pavement conditions to maintain safe vehicular movement along I-43 between Capitol Drive and Hampton Avenue.
   - Timing for ramp closures: WisDOT will be communicating schedules with local municipalities, including emergency responders during construction.
   - Local construction conflicts: WisDOT will continue outreach with local municipalities to coordinate construction schedules and public communications.

2) Milwaukee County: The design plans for the project shift I-43 at the Milwaukee River slightly to the east to avoid impacts to Lincoln Park. WisDOT is replacing the section of Oak Leaf Trail under the freeway at Hampton Avenue with a 10-foot wide path. WisDOT will continue coordination with Milwaukee County Parks and work with the construction contractor to procure right of entry permits during construction.

3) City of Glendale: WisDOT obtained concurrence from the City of Glendale that they are no longer planning for an access road under I-43 at Glendale Yards property. This allows WisDOT to remove the bridge and rebuild I-43 on fill with retaining walls. The retaining walls minimize right of way impacts to Glendale Yards and preserve developable land to the extent possible.

4) City of Milwaukee DPW and Milwaukee County DOT: WisDOT will continue ongoing coordination as the project proceeds through final design and construction.

D. Indicate any unresolved issues or ongoing discussions: None

17. Public Hearing Requirement:

A. ☐ This document is an Environmental Assessment.
   ☐ A Notice of Opportunity to Request a Public Hearing **will be** published, or,
   ☐ A Public Hearing **will be** held.

B. ☒ This document is a Categorical Exclusion / Environmental Report.

☐ 1. A substantial amount of right-of-way **will** be acquired.
☐ 2. The proposed action **will** substantially change the layout or functions of connecting roadways or of the facility being improved.
☐ 3. The proposed action **will** have a substantial adverse impact on abutting property.
☐ 4. The proposed action **will** have other substantial social, economic, or environmental effects.
☐ 5. The department has determined that a public hearing is in the public interest.

If one or more of boxes 1-5 above have been checked, you must check one the of the next 2 boxes

☐ A Notice of Opportunity to Request a Public Hearing **will be** published, or,
☐ A Public Hearing **will be** held.

If none of boxes 1-5 above have been checked then check the box below.

☒ Notice of Opportunity to Request a Public Hearing **will not** be published, and a Public Hearing **is not** required

When a Notice of Opportunity to Request a Public Hearing is published, and/or a Public Hearing is held, the final EA or CE / ER will include the Environmental Document Availability and Hearing Summary sheet at the beginning of the document, after the signature page.

For projects requiring FHWA funding and/or approval(s), FHWA approval of this environmental document indicates concurrence with the department's Public Hearing requirement determination.

18. Traffic Summary:

☐ Traffic Forecast is not required, explain: and skip to Question 19.

Traffic Summary Matrix	ALTERNATIVES/SECTIONS					
	No Build	Build (Rehabilitation)				
TRAFFIC VOLUMES						
Base Yr. AADT Yr. 2019	128,950	128,950				
Const. Yr. AADT Yr. 2021	130,100	130,100				
Const. Plus 10 Yr. AADT Yr. 2031	135,850	135,850				
Design Yr. AADT Yr. 2050	146,800	146,800				
DHV Yr. 2050	12,450	12,450				
TRAFFIC FACTORS						
K: (%)	8.5%	8.5%	%	%	%	%
D (%)	51%	51%	%	%	%	%
Design Year T (% of AADT)	7.3%	7.3%	%	%	%	%
T (% of DHV)	7%	7%	%	%	%	%
Level of Service	E	D				
SPEEDS						
Existing Posted	55	55				
Future Posted	55	55				
Design Year Project Design Speed	55	55				
OTHER *(specify)*						
P (% of AADT)	6.9%	6.9%	%	%	%	%
K_8 (% OF AADT)	50.7%	50.7%	%	%	%	%
Other						

AADT = Annual Average Daily Traffic
DHV = Design Hourly Volume
K [$_{30/100/200}$] : K_{30} = Interstate, K_{100} = Rural, K_{250} = Urban, % = AADT in DHV
D = % DHV in predominate direction of travel
T = Trucks
P = % AADT in peak hour
K_8 = % AADT occurring in the average of the 8 highest consecutive hours of traffic on an average day (required only if CO analysis is required).

A. Identify the agency that generated the data included in the Traffic Summary Matrix: Base year AADT, design year AADT, and design hour volumes were developed using Southeastern Wisconsin Regional Planning Commission (SEWRPC) forecasts. SEWRPC provided average weekday daily volumes (AWDT) for interim and design year scenarios. Construction year and construction year plus 10 AADT volumes were estimated based on linear interpolation between base and design year AADTs.

B. Identify the date (month/year) that the traffic forecast data included in the Traffic Summary Matrix was developed: The interim and design year daily volume (AWDT) forecasts were received by WisDOT in March 2019 from SEWRPC.

C. Identify the methodology and/or computer program(s) used to develop the data included in the Traffic Summary Matrix: SEWPRC utilized their regional travel demand model to develop the No Build and Build forecast scenario volumes for the I-43 corridor. The No Build and Build levels of service (LOS) were developed using HCS 7 software, which utilizes Highway Capacity Manual 6th Edition analysis methodologies.

D. If a metric other than Annual Average Daily Traffic (AADT) is used for describing traffic volumes such as Average Annual Weekday Traffic (AWDT), explain why a different metric was used and how it compares to AADT: SEWRPC provided No Build and Build AWDT forecast volumes for the I-43 corridor as the regional demand model simulates an average weekday. Forecast AWDTs were converted to AADTs using a conversion factor derived from data collected at two separate automatic traffic recorder (ATR) stations within the I-43 corridor.

19. Agency and Tribal Coordination:

Agency	Coordination Required?	Correspondence Attached?	Comments
WisDOT			
Region Real Estate Section	☐ No	N/A	Coordination is not required because there will be no Fee, PLE or TLE acquisitions.
	☒ Yes	☐ Yes ☒ No	Coordination is being done by WisDOT Real Estate including discussion of project effects and relocation assistance, explain: WisDOT Real Estate attends monthly program meetings for the project. The project will have FEE and TLE but no relocations.
Bureau of Aeronautics	☒ No	N/A	Coordination is not required. The project is not located within 5 miles of a public or military use airport.
	☐ Yes	☐ Yes ☐ No	Coordination has been completed and project effects have been addressed. Explain:
Railroads and Harbors Section	☒ No	N/A	Coordination is not required because no railways or harbors are in or planned for the project area.
	☐ Yes	☐ Yes ☐ No	Coordination has been completed and project effects have been addressed. Explain:
STATE AGENCIES			
Natural Resources (DNR)	☒ Yes	☒ Yes ☐ No	6/15/19 – Initial review received from DNR (See Appendix E) Meetings on 7/18/19 and 8/29/19 to discuss initial review comments and project design. Meetings on 11/19/19 and 12/12/19 to continue coordination to avoid and minimize impacts to state-listed threatened and endangered species.
State Historic Preservation Office (SHPO)	☒ Yes	☒ Yes ☐ No	Approximately 0.11 acres (4,891 square feet) of permanent easement and 0.08 acres of temporary easement will be acquired for freeway reconstruction in Evergreen Cemetery. WisDOT is coordinating with Wisconsin Historic Society (WHS) to procure permits for further subsurface investigations to determine presence or absence of burials. See Section 23, Environmental Commitments for more information. SHPO concurred with a finding of no adverse effect on the Milwaukee River Parkway/Lincoln Park Golf Course and Messmer High School on 1/24/20. See Appendix F.
Agriculture (DATCP)	☐ Yes ☒ No	☐ Yes ☒ No	
Other, (identify)	☐ Yes ☒ No	☐ Yes ☒ No	
FEDERAL AGENCIES			
U.S. Army Corps of Engineers (USACE)	☒ Yes ☐ No	☒ Yes ☐ No	Coordination letter sent 8/9/19 (See Appendix E.) A confirmation of receipt email response was received on 8/21/2019. A Section 404 permit application will be submitted to USACE for wetland impacts prior to PS&E.
U.S. Fish and Wildlife Service (USFWS)	☒ Yes ☐ No	☒ Yes ☐ No	WisDOT completed the online IPaC query to identify any federally threatened, endangered, proposed and candidate species that may occur within the boundary of the project. USFWS identified the following two species are present in the project area: Northern Long-eared Bat, Myotis septentrionalis, (threatened) and Red Knot Calidris canutus rufa (Threatened). No critical habitats within project area were identified. The verification letter from USFWS dated July 24, 2019 indicated the IPaC-assisted determination allows WisDOT to rely on the Programmatic Biological Opinion (PBO) for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. This means the Action may affect the northern long-eared bat; however, any take that may occur as a result of

Agency	Coordination Required?	Correspondence Attached?	Comments
			the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). The PBO does not apply to the Red Knot, Calidris canutus rufa (Threatened). (*Note: WisDOT has made a determination the project will not affect the Red Knot due to lack of suitable habitat. See Threatened, Endangered and Protected Resources Factor Sheet*). If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between WisDOT and USFWS is required. (See Appendix E).
U.S. Forest Service (USFS)	☐ Yes ☒ No	☐ Yes ☐ No	
Natural Resources Conservation Service (NRCS)	☐ Yes ☒ No	☐ Yes ☐ No	
U.S. National Park Service (NPS)	☐ Yes ☒ No	☐ Yes ☐ No	
U.S. Coast Guard (USCG)	☒ Yes ☐ No	☒ Yes ☐ No	USCG responded on July 31, 2019 indicating the project does not require a Coast Guard Bridge Permit. Also, no coordination with USCG is required during construction. (See Appendix E)
U.S. Environmental Protection Agency (EPA)	☐ Yes ☒ No	☐ Yes ☐ No	
Advisory Council on Historic Preservation (ACHP)	☐ Yes ☒ No	☐ Yes ☐ No	
Other (identify)	☐ Yes ☐ No	☐ Yes ☐ No	
SOVEREIGN NATIONS			
American Indian Tribes	☒ Yes	Standard Letters have been sent and an example is attached ☒ Yes	WisDOT sent coordination letters to 13 American Indian Tribes with an interest in projects in Milwaukee County. The Forest County Potawatomi Community provided a response to the letter. Appendix E includes a sample of the letter and the response from Forest County Potawatomi Community.
Project Involves American Indian Tribal Lands or Reservation Lands	☒ No	N/A	
	☐ Yes	☐ Yes	
Other Entities: Milwaukee County Parks	☒ Yes	☒ Yes	WisDOT met on 8/15/2019 and 8/27/19 with the Milwaukee County Parks to discuss temporary construction impacts to the Milwaukee River Parkway and Lincoln Park Golf Course to reconstruct the Oak Leaf Trail under I-43. Milwaukee County Parks Department concurred on October 21, 2019 with the temporary impacts at Milwaukee River Parkway and Lincoln Golf Course. See Section #16 above for more information and Appendix E for correspondence.

20. Alternatives Comparison:

All estimates including costs are based on conditions described in this document at the time of preparation; costs are provided in the year of expenditure (YOE). Additional agency or public involvement may change these estimates in the future.

		Alternatives/Sections					
PROJECT PARAMETERS	**Unit of Measure**	**No Build**	**Build Alternative Rehabilitation (WisDOT Preferred Alternative)**				
Project length	Miles	1.5	1.5				
PRELIMINARY COST ESTIMATE (YOE)							
Construction	Million $	$0	$55				
Real Estate	Million $	$0	$5				
TOTAL	Million $	$0.25^	$60				
LAND CONVERSIONS							
Total area converted to ROW	Acres	0	6.8				
REAL ESTATE							
Number of farms affected	Number	0	0				
Total area required from farm operations	Acres	0	0				
AIS required		☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Farmland rating (not applicable)	Score						
Total buildings required	Number	0	0				
Housing units required	Number	0	0				
Commercial units required	Number	0	0				
Other buildings or structures required	Number & Type	0	0				
ENVIRONMENTAL FACTORS							
Indirect impacts		☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Cumulative impacts		☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Environmental justice population(s) affected	Yes/No	No	Yes				
Number of historic properties affected	Number	0	2				
Burial site protection *(authorization required)*		☐ Yes ☒ No	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Section 106 MOA required		☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Section 4(f) evaluation or determination required	Number	0	0				
Section 6(f) land conversion required	Number	0	0				
Impacts to other specially funded properties	Number	0	0				
Floodplain impacts	Number	0	0.01 acres				
Unique upland habitat impacted	Number	0	0				
Total wetlands permanently impacted	Acres	0	0.69				
Stream crossings	Number	1	1				
Noise analysis required receptors impacted	Number	0	77				
Contaminated sites impacted	Number	0	0				
	Number						

^ No build cost accounts for routine maintenance and inspection, but could be greater pending ongoing needs to resolve inherent deficiencies

*If 1 or more acres or in an urbanized area a stormwater permit will be required.

21. Significance Criteria:

In determining whether a proposed action is a "major action significantly affecting the quality of the human environment," the proposed action must be assessed considering the definition of significantly as used in NEPA and requires the consideration of both context and intensity (as defined by CEQ in 40 CFR 1508.27):

Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. Both short- and long-term effects are relevant.

Intensity means to the severity of the impact. Responsible officials must bear in mind that more than one agency may make a decision about partial aspects of a major action.

If a significant impact(s) will result the no-build alternative should be selected or the preparation of an Environmental Impact Statement (EIS) should commence.

Indicate whether the issues listed below is a concern for the proposed action or alternative and if the issue is a concern, explain how it is to be addressed or where it is addressed in the environmental document. If the document preparer believes the "Yes" box should be checked for any of the following items, contact your REC and BTS-EPDS liaison immediately to discuss.

A. Will the proposed action result in a significant beneficial or adverse impact?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

B. Will the proposed action stimulate significant indirect environmental impacts?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

C. Will the proposed action result in a significant impact to public health or safety?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

D. Will the proposed action result in a significant impact to geographically scarce resources?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

E. Will the proposed action have possible impacts on the human environment that are highly controversial, highly uncertain or involve unique or unknown risks?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

F. Will the direct and indirect impacts of proposed action when combined with past, present and reasonably foreseeable actions result in significant cumulative impacts?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

G. Will the proposed action violate an applicable law or requirement imposed for the protection of the environment?
   - ☒ No
   - ☐ Yes, explain or indicate where addressed:

22. Environmental Factors Matrix (check all that apply):

If the effects on the environmental factor can't be adequately summarized in several sentences, the Factor Sheet for the environmental factor must be included. If the Factor Sheet is completed include a brief summary.

Factors	Adverse Impact	Beneficial Impact	No Impacts Identified	Factor Sheet Attached	For those Factors not present in the project area indicate not present. Effects
Business and Economic	☒	☒	☐	☒	The Build Alternative Rehabilitation maintains access points and improves infrastructure for daily businesses activities. Retaining walls minimize right of way impacts to Glendale Yards, a planned industrial development. Short term inconveniences would occur during construction such as noise, dust and detours during temporary freeway closures. See Business and Economic Factor Sheet.
Community	☒	☒	☐	☒	The Build Alternative Rehabilitation maintains access and improves aging infrastructure serving local communities. The Oak Leaf Trail connection along Hampton Avenue would be reconstructed. Local sidewalks may be temporarily closed or relocated for new sidewalk construction or intersection curb ramps. Short term inconveniences would occur during construction such as noise, dust and detours during temporary freeway closures. The Route of the Badger, a 700-mile trail system planned for Southeast Wisconsin, includes a planned trail segment underneath the I-43 Mainline Over Abandoned Railroad (URT) bridge (B-40-115). The Build Alternative would remove the URT bridge (B-40-115) and reconstruct I-43 mainline on fill supported by retaining walls. Under the Build Alternative, there would be no access under I-43 at this location. WisDOT is continuing is coordination with the Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger to determine an appropriate crossing under I-43. Two express bus routes use I-43 to connect destinations in Milwaukee and Ozaukee counties with downtown Milwaukee and could experience travel delays during construction. Local MCTS bus stops on Port Washington Road would be temporarily relocated or removed during construction. The Build Alternative Rehabilitation would benefit transit operations in the corridor by improving the condition of the roadway and bridges along I-43 and maintaining safety. See Community Factor Sheets.
Aesthetics	☐	☐	☒	☐	Overall, the Build Alternative Rehabilitation would not change the aesthetics or viewsheds of the area since I-43 is reconstructed in generally the same configuration except for the following areas: • URT bridge - The view from properties adjacent to the existing URT bridge would be changed since the bridge would be removed and the I-43 mainline reconstructed on fill supported by retaining walls. This change is not expected to impact any sensitive viewsheds since the main views of the bridge are from adjacent vacant land or the backside/service areas of commercial uses. • The mainline would be shifted east by 46-feet to 74-feet within the existing right of way to the north of the Milwaukee River. The view of the freeway would be slightly closer to residential properties on the east side of Port Washington Road to the north of Hampton Avenue. Although the freeway would be closer, the view from residences would continue to be of a freeway. The removal of the northbound off ramp

Factors	Adverse Impact	Beneficial Impact	No Impacts Identified	Factor Sheet Attached	For those Factors not present in the project area indicate not present. Effects
					from I-43 to Port Washington Road would be removed, eliminating the view of the ramp from these residential properties. • New noise barriers would be constructed north of Capitol Drive, on either side of I-43. This would eliminate views of and from the freeway in these locations. See the Traffic Noise Factor Sheet for more information on noise barrier locations.
Agriculture	☐	☐	☒	☐	No agricultural uses are present in the project area.
Relocations	☐	☐	☒	☐	No relocations required.
Indirect Impacts	☐	☐	☒		The Build Alternative Rehabilitation is not expected to cause indirect effects since I-43 would be replaced in the generally the same configuration with no capacity expansion and no new access points. See Appendix D.
Cumulative Impacts	☐	☐	☒		The Build Alternative Rehabilitation is not expected to contribute to cumulative effects given the project's minimal direct project impacts and the lack of indirect effects. See Appendix D.
Environmental Justice	☒	☐	☐	☒	Minority and low-income populations present in project area and would be impacted by traffic noise and temporary construction-related inconveniences such as noise, dust, transit changes and detours during temporary freeway closures. These impacts would occur throughout the project area and would not have a disproportionately high and adverse effect on any environmental justice populations, individuals, groups, or populations. See Environmental Justice Factor Sheet.
Historic Properties	☐	☐	☒	☒	The project would require 0.35 acres temporary construction easement within the Milwaukee River Parkway/Lincoln Park Golf Course, a resource listed on the National Register of Historic Places (NRHP). No right of way is required from Messmer High School, an NRHP-eligible property located in the northeast quadrant of the I-43/Capital Drive interchange. See Historic Properties Factor Sheet.
Burial Sites	☒	☐	☐		Approximately 0.11 (4,891 square feet) acres of permanent easement would be acquired for freeway reconstruction at Evergreen Cemetery. Approximately 0.08 acres of temporary easement would be required to accommodate equipment during construction. WisDOT is coordinating with WHS to procure permits for further subsurface investigations to determine presence or absence of burials. See Historic Properties Factor Sheet.
Tribal	☐	☐	☒		WisDOT sent coordination letters to 13 American Indian Tribes with an interest in projects in Milwaukee County. Forest County Potawatomi requested archeological survey and SHPO response. No other responses received. Appendix E includes a sample tribal letter and the response from Forest County Potawatomi Community.
Section 4(f)	☐	☐	☒	☒	Approximately 0.35 acres of temporary construction easement is required in NRHP-listed Milwaukee River Parkway/Lincoln Park Golf Course to reconstruct the Oak Leaf Trail under I-43. See Section 4(f) Factor Sheet.
Section 6(f) and other Unique Funding	☐	☐	☒	☒	Approximately 0.17 acres of temporary construction easement is required at Lincoln Park Golf Course to reconstruct the Oak Leaf Trail under I-43. See Section 6(f) and other Unique Funding Factor Sheet and Appendix G.

Factors	Adverse Impact	Beneficial Impact	No Impacts Identified	Factor Sheet Attached	For those Factors not present in the project area indicate not present. Effects
Wetlands	☒	☐	☐	☒	The Build Alternative Rehabilitation would permanently impact 0.55 acres of wetlands from filling and grading activities for roadway and bridge construction. Approximately 0.14 acres would be temporarily impacted during construction. See Wetlands Factor Sheet.
Surface Water Resources	☐	☐	☒	☒	The Build Alternative Rehabilitation crosses the Milwaukee River. See Surface Water Resources Factor Sheet.
Groundwater, Wells, and Springs	☐	☐	☒	☐	No groundwater, wells and springs identified
Coastal Zones	☐	☐	☒		The project is in Milwaukee County, adjacent to Lake Michigan. Coordination for coastal zone consistency is being completed through ongoing coordination with WDNR.
Floodplains	☒	☐	☐	☒	New piers for replaced bridge over the Milwaukee River would encroach on 0.01 acres of floodplain; an estimated 0.24 acres in reduced encroachment due to removal of existing piers. See Floodplain Factor Sheet.
Unique Wildlife and Habitat	☐	☐	☒		New piers for replaced bridge over the Milwaukee River would impact 0.013 acres of the primary environmental corridor.
Threatened, Endangered or Protected Resources	☐	☐	☒	☒	USFWS and WDNR identified federal and state listed species that are either threatened, endangered or species of Special Concern. Migratory birds are known to nest on freeway infrastructure. See Threatened, Endangered or Protected Species Factor Sheet.
Air Quality	☐	☐	☒	☒	The project is exempt from air quality conformity. See Air Quality Factor Sheet.
Construction Sound	☐	☐	☒	☒	Noise would be generated by construction equipment used to reconstruct the roadway. Typical construction equipment would include dump trucks, graders, cranes, bulldozers, piledriving equipment and pavement construction equipment. The noise generated by this construction equipment would vary greatly, depending upon the equipment type and model, mode and duration of operation, and specific type of work effort; however, typical noise levels may occur in the 75-to-95-dBA range (at 50 feet). See Construction Sound Factor Sheet.
Traffic Noise	☒	☐	☐	☒	The Build Alternative Rehabilitation impacts 69 residential and 8 recreational receptors. One existing noise barrier will be replaced, and two additional feasible and reasonable noise barriers are proposed north of Capitol Drive, on either side of I-43. See Traffic Noise Factor Sheets.
Hazardous Substances, Contamination and Asbestos		☐	☐	☒	The Phase 1 Hazardous Material Assessment identified four sites within the project limits that contain hazardous substances. For one of the sites, no further investigation was recommended in the Phase 1 investigations. For two of the sites, no further investigation was required due to the proximity of the subject project to these sites or excavation depth requirements. At the remaining site no further investigation was recommended, however, soil boring investigation is underway at an adjacent bridge.

Factors	Adverse Impact	Beneficial Impact	No Impacts Identified	Factor Sheet Attached	For those Factors not present in the project area indicate not present. **Effects**
					In addition to these contaminated sites, the Milwaukee River limits within the project area is undergoing sediment sampling to identify whether hazardous sediment will be encountered during construction. No asbestos was identified on bridge structures. See Hazardous Substances, Contamination and Asbestos Factor Sheet.
Stormwater	☐	☒	☐	☒	The Build Alternative Rehabilitation would convey and treat stormwater to two wet detention ponds within the existing right of way and reduce Total Suspended Solids (TSS) in conformance with Trans 401 and the WDNR Transportation Separate Storm Sewer System permit (TS4) requirements. See Stormwater Factor Sheet.
Erosion and Sediment Control	☐	☐	☒	☐	Erosion control during construction will be addressed through standard WisDOT processes and contract Special Provisions. The contractor is required to provide an Erosion Control Implementation Plan to WisDOT and DNR for review and approval prior to construction. WisDOT will use its standard erosion control inspection process during construction.
OTHER FACTORS					
	☐	☐	☐	☐	
	☐	☐	☐	☐	

23. Environmental Commitments:

Identify and describe any avoidance, minimization or compensation measures (commitments) in detail. Be specific on what needs to happen and specifically where on the project. Indicate when the commitment should be implemented and who in WisDOT is responsible for fulfilling each commitment (Project Manager, Environmental Coordinator, etc.). Please note if the commitment will be indicated on the final plan, recorded in the Plans, Specifications and Estimates (PS&E), under special provisions in the final plan set, in construction notes, or some other written format. Attach a copy of this completed matrix to the design study report and the PS&E submittal package. Be sure to update it if further commitments are made after the Environmental Document is signed.

Factor	**Commitment** (If none, include N/A)
Business and Economics	WisDOT construction project manager will maintain access to local businesses during construction. Detour routes will be signed during full freeway and ramp closures.
Community	Throughout design and construction, WisDOT design project manager and WisDOT construction project manager will coordinate with the cities of Glendale and Milwaukee to minimize the overall construction time and temporary loss of local access and communicate construction schedules and temporary closures and detours. Detours will be routed onto arterial streets during temporary freeway closures and will not route traffic through residential neighborhoods. WisDOT construction project manager will avoid closing the Capitol Drive and Hampton Avenue interchanges at the same time to the greatest extent practicable. WisDOT construction project manager will maintain access to local residences and community facilities during construction. Detour routes will be signed during full freeway and ramp closures. WisDOT construction project manager will coordinate with emergency services prior to and during construction to provide advanced notice for any closures. The WisDOT design project manager and WisDOT construction project manager will coordinate with MCTS prior to and during construction to communicate construction schedules and determine alternate bus stop locations. WisDOT construction project manager will replace sidewalks disturbed by construction activities. WisDOT design project manager will continue coordination with Messmer High School and the City of Milwaukee regarding traffic access to northbound entrance ramp. WisDOT design project manager will continue coordination with Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger planned trail underneath I-43. WisDOT construction project manager will coordinate with local communities to adjust signal timings, as needed, during construction
Aesthetics	N/A
Agriculture	N/A
Relocations	N/A
Indirect Impacts	N/A
Cumulative Impacts	N/A
Environmental Justice	WisDOT will coordinate with MCTS prior to and during construction to minimize impacts to bus routes and identify alternate bus stop locations.
Historic Properties	To minimize and mitigate impacts to vegetation within Lincoln Park Golf Course, the WisDOT design project manager will coordinate with Milwaukee County Parks Department to identify where mature trees can be avoided and develop a planting plan to replace vegetation to restore screening from the freeway. The WisDOT construction project manager will restore grading and lawn disturbed around the Oak Leaf Trail, within the Milwaukee River Parkway to its prior condition or better. During final design, the WisDOT deign project manager will conduct additional investigations within Evergreen Cemetery coincident with the proposed permanent right of way acquisition and temporary easement to assess for the presence/absence of burials. The methods and techniques used during the study will follow standards promulgated in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and the Guide for Public Archeology in Wisconsin, as revised. The WisDOT design project manager will incorporate additional mitigation measures into special provision language as prescribed during coordination with the WHS per Wis. Stat. 157.50. The WisDOT design project manager to notify the WisDOT Bureau of Technical Services/Cultural

Factor	**Commitment** (If none, include N/A)
	Resources when the project is within one year of construction starting. the WisDOT Bureau of Technical Services/Cultural Resources will then petition WHS to work within the boundaries of the burial sites.
Burial Sites	Archaeological fieldwork within an uncatalogued burial site at Evergreen Cemetery is underway. Based on the results on the fieldwork, if graves are identified, WisDOT will consult with WHS regarding the appropriate next steps. Assuming that no burial features are encountered, WisDOT will request excluding the acquisition area from the provisions of Wis. Stat. §157.70. If human bone is discovered during the project, all work will cease and WisDOT construction manager will contact the Wisconsin Historical Society to be in compliance with Wis. Stat. §157.70 which provides for the protection of human burial sites
Tribal Lands	WisDOT design project manager will forward a copy of the archeology report and SHPO response to the Forest County Potawatomi Tribe.
Section 4(f)	WisDOT design project manager will continue coordination with Milwaukee County Parks and work with the construction contractor to obtain a right of entry permit from Milwaukee County Parks to reconstruct the Oak Leaf Trail, freeway and I-43 bridge over Hampton Avenue in the Milwaukee River Parkway and Lincoln Park Golf Course. The WisDOT design project manager will coordinate with the Milwaukee County Department of Parks to develop plans to restore disturbed areas in the parkway and golf course in kind. Prior to temporary closure of the Oak Leaf Trail, WisDOT construction project manager will notify Milwaukee County Department of Parks in advance of construction and will post detour signs for trail users. The WisDOT construction project manager will keep the Oak Leaf trail open to trail traffic via temporary trail or on-street accommodations when the trail is not closed for construction. The WisDOT construction project manager will restore disturbed areas as determined by the WisDOT design project manager and the Milwaukee County Department of Parks.
Section 6(f) or Other Specially Funded Lands	See Section 4(f) above
Wetlands	WisDOT (Southeast Region Technical Services Section Supervisor) will oversee mitigating unavoidable impacts of 0.55 acres of wetlands at a replacement ratio per the WisDOT Wetland Mitigation Banking Technical Guideline. WisDOT design project manager will obtain a Section 404 Permit for permanent impacts.
Surface Water Resources	The WisDOT construction project manager will be responsible for all instream work. The WisDOT construction project manager will implement STSP-203-020, Removing Old Structure Over Waterway with Minimal Debris. The WisDOT construction project manager will oversee constructing a debris containment system that is attached to the existing deck/girders of the bridge to catch debris during bridge demolition. The WisDOT design project manager will coordinate with DNR during final design to determine in-stream construction measures and construction commitments to be implemented by the WisDOT construction manager. The WisDOT design project manager will work with DNR to determine which type of navigational aids are needed in accordance with the project design and methods used during construction. The WisDOT design project manager will complete and obtain a Waterway Marker Application and Permit prior to construction. If buoys are required, WisDOT will coordinate with local authorities to ensure ordinance approval. The WisDOT construction project manager will oversee placement of navigational aids around the construction area during construction to aid recreational watercraft. WisDOT construction project manager will ensure there will be no in-stream disturbance between March 1st and June 1st, with both dates inclusive of the timeout period. The WisDOT design project manager and construction project manager will coordinate with DNR to provide project specific construction site considerations, including an Erosion Control Plan and will require the contractor to outline construction methods in an Erosion Control Implementation Plan. WisDOT construction project manager will oversee project equipment will be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code.
Floodplains	The WisDOT design project manager will provide results of Hydrology and Hydraulic Analysis with both WDNR and the City of Glendale zoning administrator during final design.
Groundwater, Wells and Springs	N/A
Coastal Zones	N/A

Factor	**Commitment** (If none, include N/A)
Unique Wildlife and Habitat Concerns	N/A
Threatened and/or Endangered Species	The WisDOT design project manager will continue coordination with DNR to identify avoidance and minimization measures to avoid impacts to threatened and endangered species. If impacts are unavoidable, the WisDOT design project manager will obtain an Incidental Take Authorization from DNR. The WisDOT construction project manager will implement requirements to avoid and minimize impacts pending the outcome of DNR coordination or the Incidental Take Authorization. The WisDOT design project manager will include special provisions for migratory bird protection, noting project demolition and construction will either occur only between August 30 and May 1st. (non-nesting season) or the WisDOT construction project manager will utilize measures to prevent nesting (e.g., remove unoccupied nests during the non-nesting season and install barrier netting prior to May 1). If netting is used, the WisDOT construction project manager will ensure it is properly maintained, then removed as soon as the nesting period is over. If neither of these options is practicable, the WisDOT construction project manager will notify the Southeast Region Technical Services Section Supervisor who will contact USFWS to apply for a depredation permit.
Air Quality	N/A
Construction Sound	WisDOT construction project manager will implement Standard Specifications 107.8(6) and 108.7.1.
Traffic Noise	WisDOT design project manager will oversee the public involvement process and design for three feasible and reasonable noise barriers at the following locations: • The west side of I-43 between approximately the Milwaukee River and Glendale Avenue (replacing existing barrier). • Along I-43 northbound and the I-43 northbound off ramp to Green Bay Avenue. • Along I-43 southbound and the Green Bay Avenue on ramp to I-43 southbound
Hazardous Substances, Contamination and Asbestos	WisDOT design project manager will include in the contract special provisions a Notice to Contractor describing the potential contamination with names and locations of the sites. WisDOT construction project manager will properly dispose of any contaminated materials encountered. WisDOT construction project manager will implement Standard Special Provision (STSP) 107-125. As part of geotechnical investigations, WisDOT advanced soil borings at Site 20 adjacent to the existing bridge B-40-115. If further results of soil boring data indicate potential presence of hazardous materials, the WisDOT design project manager will pursue further investigations.
Stormwater	The WisDOT design project manager will obtain a Transportation Construction General Permit (TCGP) from DNR during final design.
Erosion Control	The WisDOT design project manager will obtain coverage under the WisDOT Transportation Construction General Permit prior to construction activities. If erosion control matting is to be used along stream banks, WisDOT construction project manager will use of biodegradable non-netted matting (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C) and avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

BUSINESS AND ECONOMICS Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Reconstruction	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. Describe the existing business and/or economic development areas affected by the proposed action:

Existing business activity immediately adjacent to the project corridor includes retail facilities, offices, wholesale and light industrial. Retail facilities in the area include a car wash, restaurant, home improvement, and car dealership. A higher concentration of retail business is located one mile north of the project area at the Bayshore Town Center. Downtown Milwaukee, two miles south of the project, also has a high concentration of retail business. Wholesale activity in the area includes Maglio Companies, which delivers produce to locations all over the United States. Koss produces and delivers headphone and speaker products. More wholesale business activity is south of the project area continuing to downtown Milwaukee that include food, clothing, and other industries. Sprecher Brewing Company (light industrial) produces bottled soft drinks and beer to the west of I-43 in the project area.

To the east of the project corridor are major industrial/business clusters in the Estabrook Corporate Park, Glendale Technology Center and Riverworks. The Estabrook Corporate Park occupies 110 acres at the northeast quadrant of Port Washington Road and Estabrook Boulevard and is home to a number of businesses including Ascension Wisconsin's Corporate Office and River Woods Urgent Care. The Glendale Technology Center sits on 150 acres at the southeast quadrant of Port Washington Road and Estabrook Boulevard and includes businesses such as Boelter Foodservice, Forrer Business Interiors and Weyco Group. Further south near Capitol Drive is the Riverworks Industrial Center, a 35-acre business park with light industrial businesses.

The Glendale Yard Master Development Plan aims to redevelop the former Glendale Rail Yard into multiple industrial and flex-space buildings that could total over 375,000 square feet. The Glendale Yard property is adjacent to and under the I-43 URT bridge (B-40-115). The area under the bridge contains an existing freeway easement.

2. Identify and discuss existing modes of transportation within the existing business and/or economic development area and how they serve businesses or other economic interests:

The primary modes of transportation in the project area are passenger vehicles and delivery trucks that utilize the local roadways and regional freeway system. The local roadway network directly serves existing businesses and economic interests in the area. I-43 provides regional and interstate access with full interchange access at Capitol Drive and partial interchange access at Hampton Avenue.

Milwaukee County Transit System (MCTS) serves businesses in the project area with several local bus routes along the major roads in the project area including Port Washington Road, Green Bay Road, Capitol Drive and Silver Spring Drive. Also, freeway flyer bus routes operate along I-43 through the project area including Route 49, Brown Deer-Bayshore Flyer, and Route 143, Ozaukee County Express.

Sidewalks are present in many of the areas adjacent to the freeway although some gaps in the sidewalk network are present within the industrial areas.

3. **Identify and discuss effects of the proposed action on the existing businesses and the economic development potential in the area:**

The proposed action is not expected to have long-term impacts to existing businesses since the Build Alternative Rehabilitation would replace the six-lane I-43 freeway in generally the same configuration. Overall, the Build Alternative would improve I-43 and maintain this vital regional connection for nearby businesses and economic activity.

The only access change would be at the Hampton Avenue Interchange. The Build Alternative Rehabilitation reconstructs the existing ramps in generally the same location, except the northbound exit ramp to westbound Hampton Avenue that is north of the Milwaukee River is removed due to substandard design deficiencies, low traffic volumes and safety issues. Traffic previously using the removed northbound exit ramp would be routed to the reconstructed northbound exit ramp to Hampton Avenue (east)/Port Washington Road on the south side of the Milwaukee River. Under the Build Alternative Rehabilitation, the Hampton Avenue Interchange would provide the same level of access to nearby businesses with a new northbound exit that meets current design standards.

The Build Alternative Rehabilitation would remove the current URT bridge and reconstruct the mainline on fill supported by retaining walls. This action would require WisDOT to acquire land from the Glendale Yard property and turn the existing freeway easement into permanent right of way. WisDOT has coordinated with the City of Glendale and the Glendale Yard property owner who have confirmed they no longer have plans to construct a road under I-43 (See correspondence in Appendix E). The proposed retaining walls minimize right of way impacts to the Glendale Yard property and preserve developable land.

~~4.~~ **Identify and discuss any issues or concerns related to business and economics identified by business people, elected officials, community members, or other stakeholders that they believe are important or controversial.**

☐ None identified

☒ Issues identified, describe: At the August 13, 2019 Local Officials Meeting, local communities expressed concern regarding the construction impacts from this project combined with potentially overlapping timelines with other projects in the I-43 corridor. Similar concerns were expressed at the public involvement meeting held on August 22, 2019, including a request not to close the Capitol Drive and Hampton Avenue interchanges at the same time.

Other issues raised at the public involvement meeting included concerns about the impact of closing the northbound exit ramp to Hampton Avenue (west) and rerouting traffic to the reconstructed exit ramp south of the Milwaukee River. Comments indicated that the added traffic will further deteriorate traffic operations on Port Washington Road, where there are long queues of traffic turning left from Port Washington onto westbound Hampton Avenue.

Messmer High School identified concerns about heavy use of 7th Street to access the I-43 northbound on-ramp and requested WisDOT to look at measures encouraging traffic to use Fiebrantz Avenue from Port Washington Road as the primary access to the on-ramp.

See Basic Sheets, Question 15 for a summary of issues identified during the public involvement process.

5. **Identify the estimated number of businesses and jobs that would be created or displaced because of the project. If no businesses will be displaced, Items 7 through 13 do not need to be addressed or included in the environmental document. If no jobs will be displaced, Item 6 does not need to be answered either.**

No business or jobs will be displaced by the Build Alternative Rehabilitation.

Business/Job Type*	Businesses			Jobs	
	Created	Displaced	Value	Created	Displaced
☐ Temp ☒ Perm Retail	0	0	0	0	0
☐ Temp ☒ Perm Service	0	0	0	0	0
☐ Temp ☒ Perm Wholesale	0	0	0	0	0
☐ Temp ☒ Perm Manufacturing	0	0	0	0	0
☐ Temp ☒ Perm Project Design and Construction	0	0	0	0	0
Other ( )					
*Indicate if these are temporary or permanent					

6. **Are any owners or employees of created or displaced businesses low-income or minority? If yes, these answers must be consistent with the information on the Environmental Justice (EJ) Factor Sheet.**
   ☐ No
   ☐ Yes, those being displaced constitute an environmental justice population (low-income population or minority population), briefly describe:

7. **Is a Conceptual Stage Plan (CSP) attached to this document?**
   ☐ Yes, describe where the document it can be found:
   ☐ No, it is in the project file

8. **Describe the business relocation potential in the area:**
   A. Total number of available business buildings in the area:
   B. Number of available and comparable business buildings by type and price (include business buildings in price ranges comparable to those being dislocated, if any)
      Number of available and comparable type business buildings in the price range of:
      Number of available and comparable type business buildings in the price range of:
      Number of available and comparable type business buildings in the price range of:

9. **Identify all sources of information used to obtain data in item 8:**

☐ WisDOT Real Estate Conceptual Stage Plan	☐ Multiple Listing Service (MLS)
☐ Newspaper listing(s) – List:	☐ Other - Identify:

10. **Describe how relocation assistance will be provided in compliance with the WisDOT Real Estate Program Manual or FHWA regulation 49 CFR Part 24. Check all that apply:**
    ☐ Business acquisitions and relocations will be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended.
    In addition to providing for payment of "Just Compensation" for property acquired, additional benefits are available to eligible displaced persons forced to relocate from their business. Some available benefits include relocation advisory services, reimbursement of moving expenses, replacement of business payments. In compliance with State law, no person would be displaced unless a comparable replacement business would be provided.
    Compensation is available to all displaced persons without discrimination. Before initiating property acquisition activities, property owners will be contacted and given an explanation of the details of the acquisition process and Wisconsin's Eminent Domain Law under Section 32.05, Wisconsin Statutes. Any property to be acquired will be inspected by one or more professional appraisers. The property owner will be invited to accompany the appraiser during the inspection to ensure the appraiser is informed of every aspect of the property. Property owners will be given the opportunity to obtain an appraisal by a qualified appraiser that will be considered by WisDOT in establishing just compensation. Reasonable cost of an owner's appraisal will be reimbursed to the owner if received within 60 days of initiation of negotiations. Based on the appraisal(s) made, the value of the property will be determined, and that amount offered to the owner.

☐ Other relocation assistance requirements, not identified above, describe:

11. Identify any difficulties relocating a business displaced by the proposed action and describe any special services needed to remedy identified unusual conditions:

12. Briefly describe any additional measures which will be used to minimize adverse effects or provide benefits to those relocated. Also discuss accommodations made to minimize adverse effects to businesses that may be affected by the project, but not relocated:

COMMUNITY Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Give a brief description of the community, neighborhood or area affected by the proposed alternative:**
   Name of community/neighborhood/area: Milwaukee study area
   Is the community an incorporated municipality or part of an incorporated municipality?
   ☒ Yes ☐ No
   Name of incorporated municipality(ies), if applicable: City of Milwaukee
   Total population (include year and source): 6,029 (American Community Survey, 2017 5-Year Estimates)
   Demographic characteristics: This factor sheet focuses on the area within a ½-mile of the project corridor in the City of Milwaukee. Residential areas in the Milwaukee study area are present on the east and west sides of I-43 and to the north and south of Capitol Drive and include portions of the Grover Heights, Williamsburg, Arlington Heights and Rufus King neighborhoods. The residential areas contain primarily single-family and duplex homes with some small apartment buildings.

   The Milwaukee study area contains an estimated 6,029 residents. The study area's population is approximately 95.6 percent minority, with Black/African American (89.9 percent) representing the largest minority group. An estimated 9 percent of the population in the study area is 65 years or older. The median incomes for the block groups in the study area range from $18,000 and $50,000. The area has an unemployment rate of approximately 10.3 percent. The table below summarizes the demographic data for the study area and provides data for the City of Milwaukee and Milwaukee County for comparison purposes.

   Milwaukee Study Area Demographic Summary

Demographics	Milwaukee Study Area[1]	City of Milwaukee	Milwaukee County
Population	6,029	458,241	956,586
Percent Minority	95.6	64.2	47.8
Percent Black/African American	89.9	38.5	26.1
Percent 65 Years and Older	9.0	10.0	12.6
Median Income	$18,000 to $50,000	44,723	$46,784
Unemployment Rate	10.3	9.0	7.1

   Source: American Community Survey, 2017 5-Year Estimates

   Community facilities within the ½-mile Milwaukee study area include Messmer High School, Estabrook Park, Green Bay Avenue Elementary, Zebaoth Lutheran Church, Gospel Evangelical Lutheran Church & School, Holy Angels School & Church and North Shore Congregation Kingdom Hall of Jehovah's Witnesses.

2. **Are there groups or individuals in the community, neighborhood or area that use or depend on transit, bicycle or pedestrian facilities?**
   ☒ None identified
   ☐ Groups or individuals identified – Discuss: Within the Milwaukee study area, 14.9 percent of the workers commute to work via transit and another 2.6 percent walk or use a bicycle to commute to work. Also, 28 percent of households do not have a vehicle available within the Milwaukee study area.

3. **Identify and discuss existing modes of transportation and their importance in the community, neighborhood or area:** Personal vehicles are an important mode of transportation for residents in Milwaukee study area.

[1] Census data was collected for census tract and block groups within a 1/2 mile of the project corridor. A percentage was then applied to each dataset based on the percentage of tract or block group area within the buffer.

Approximately 60 percent of study area workers drive alone to work and 72 percent of households in the study area have one or more vehicles available.

Milwaukee County Transit System provides local bus service in the Milwaukee study area. Local routes include Route 15 along Port Washington Road and Route 80 along Green Bay Road. Also, the Red Line provides limited stop service between Wauwatosa and UW-Milwaukee via Capitol Drive with stops near the project area. Route 143 (Ozaukee County Express) provides express service from Ozaukee County to downtown Milwaukee via I-43 and Route 49, Brown Deer-Bayshore Flyer, provides express service between Brown Deer and downtown. These routes are primarily used for commuter-based trips and have limited stops in the project area. Local bus routes are important for connecting residents in the study area with employment, goods, services and other destinations especially since 14.9 percent of workers in the study area use transit to commute to work and 28 percent of households do not have a vehicle available.

Residents in the Milwaukee study area can access the Oak Leaf Trail, a 125-mile multiuse trail system in Milwaukee County, to the east of I-43 at Capitol Drive. This section of the Oak Leaf Trail is on a dedicated path that extends from Brown Deer through the study area and over I-43 to downtown Milwaukee and lakefront. The Oak Leaf Trail is an important recreational amenity to the surrounding neighborhoods and communities as it provides a predominately off-road non-motorized connection that links several communities and recreational facilities throughout Milwaukee County. It can also be used for bicycle commuting.

Most of the streets in the Milwaukee study area have sidewalks. Also, an on-street bike lane is present along Port Washington Road within the City of Milwaukee from Olive Street to Dr. Martin Luther King Jr. Drive. The sidewalks and bike lanes allow residents to move about the community without an automobile and walk or bike to nearby schools, parks and business.

4. **Identify and discuss the probable changes that could result from the proposed alternative to the existing modes of transportation and their function within the community, neighborhood or area:** During construction, ramp closures and nighttime freeway closures would require vehicles in the study area to use detour routes. This may result in periodic traffic delays and less direct travel for some trips in the study area.

   Buses may experience minor delays caused by increased traffic along detour routes (i.e. Route 80 on Green Bay Avenue) in the study area during the two to three-year construction period. Also, bus stop locations near interchange ramps (Port Washington Road, Fiebrantz Avenue and Green Bay Avenue) may need to be moved or closed during the second and possibly third construction years. In addition, express routes along I-43 (Routes 143 and 49) may experience delays in the construction zone. No bus routes would be discontinued during construction and bus route detours are not anticipated during construction. WisDOT will coordinate with MCTS prior to and during construction to determine impacts and alternate bus stop locations.

   Temporary sidewalk closures during construction may occur at the Capitol Drive and Hampton Avenue interchange ramps. Temporary closures will be detoured on opposite sides of streets to the greatest extent practicable and signed in advance of construction. Currently the sidewalks at the Capitol Drive interchange ramps are not ADA compliant. Any sidewalks that are disturbed by construction activities will be replaced and improved to conform to ADA standards.

   The Route of the Badger, a 700-mile trail system planned for Southeast Wisconsin, includes a planned trail segment underneath the I-43 Mainline Over Abandoned Railroad (URT) bridge (B-40-115). The Build Alternative would remove the URT bridge (B-40-115) and reconstruct I-43 mainline on fill supported by retaining walls. Under the Build Alternative, there would be no access under I-43 at this location. WisDOT is in coordination and will continue to coordinate with the Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger.

5. **Address any changes to emergency services or other public services during and after construction of the proposed alternative:** During construction at least two lanes of traffic along I-43 would be maintained and remain open to emergency services. The reduction of capacity along the freeway during construction may increase congestion and cause delays to emergency vehicles that utilize the freeway in the project area. Emergency vehicles may also be affected by ramp closures during construction and would need to utilize detour or alternate routes. Also, cross streets with I-43 at Glendale Avenue and Hampton may experience short-term closures typically during nighttime hours for bridge construction. WisDOT and the construction project manager will coordinate with emergency services prior to and during construction to provide advanced notice for any closures.

6. **Describe any physical or access changes that would result:** The project would not acquire land from residential properties and it would not require relocations.

   The Capitol Drive and Hampton Avenue interchanges would remain as service interchanges in the project area. The only change in access is that the northbound exit ramp to Hampton Avenue (west) north of the Milwaukee River would be removed due to substandard design and low traffic volumes. Traffic previously using the removed northbound exit ramp will be routed to the reconstructed northbound exit ramp to Port Washington Road on the south side of the Milwaukee River. The reconstructed exit ramp would be improved by increasing the deceleration length and adding a barrier separating it from the adjacent entrance ramps of Port Washington Road.

   During construction, the community could experience short-term construction-related impacts such as increased levels of noise and dust. Also, the community may experience temporary traffic inconveniences from night closures along the mainline and interchange ramps closures. These temporary closures will include signed detour routes that will maintain access to and from the freeway to residential areas, businesses and community facilities during construction.

   Two new noise barriers were found to be feasible and reasonable in the study area north of Capitol Drive as follows:
   - Along I-43 northbound and the I-43 northbound off ramp to Green Bay Avenue - This noise barrier would be 740-feet long and 14 to 24 feet high. The barrier would turn east along the West Fiebrantz Avenue on ramp to I-43 northbound for approximately 180 feet of the total length.
   - Along I-43 southbound and the Green Bay Avenue on ramp to I-43 southbound – This noise barrier along I-43 southbound would be 426-feet long and 14 to 16 feet high. The barrier would turn west along 9th Street for approximately 90 feet of the total length.

   A public involvement meeting will occur following approval of this ER to determine whether the feasible and reasonable barriers described above would likely be incorporated into the project.

7. **Indicate whether a community or neighborhood facility (such as parks, recreation facilities, community centers, libraries, food pantries, DMV offices, clinics, hospitals, schools, child care centers, churches, etc.) could be affected by the proposed alternative and indicate what effect(s) this could have on the community or neighborhood**: No community or neighborhood facilities would be affected by the Build Alternative Rehabilitation within the Milwaukee study area.

8. **Identify and discuss community, neighborhood or area issues that residents, local units of government or community stakeholders have indicated to be important or controversial**:

   At the August 13, 2019 Local Officials Meeting, local communities expressed concern regarding the construction impacts from this project combined with potentially overlapping timelines with other projects in the I-43 corridor. Similar concerns were expressed at the public involvement meeting held on August 22, 2019, including a request not to close the Capitol Drive and Hampton Avenue interchanges at the same time.

Messmer High School staff commented on concerns regarding heavy traffic use on 7th Street to access I-43 and the need to encourage traffic to Fiebrantz Avenue from Port Washington Road as the primary access to the on-ramp. WisDOT held a separate meeting with Messmer High School to discuss a potential noise barrier placement that would avoid blocking views of the school from I-43.

See Community Factor Sheet for the Glendale study area for other comments received at the public involvement meeting.

9. **List any community or neighborhood design considerations and potential mitigation measures identified during public involvement or agency coordination (as well as local government coordination) and indicate whether they will be included in the proposed alternative:**

   WisDOT will coordinate with local communities to minimize the overall construction time and temporary loss of local access and communicate construction schedules and temporary closures and detours. Detours will be routed onto arterial streets during temporary freeway closures and will not route traffic through residential neighborhoods (see also Appendix B-3 for proposed detour routes). WisDOT will avoid closing the Capitol Drive and Hampton Avenue interchanges at the same time to the greatest extent practicable.

   Reconfiguring the northbound on-ramp from Capitol Drive is outside the scope of this project. WisDOT will continue coordination with Messmer High School and the City of Milwaukee regarding how traffic accesses the northbound entrance ramp and review alternatives to encourage traffic to use Fiebrantz Avenue instead of 7th Street. The proposed barrier would not block views of the school from I-43.

   Meetings with public stakeholders primarily focused on project design and related impacts at specific locations. WisDOT will continue to follow up with stakeholders as designs evolve to refine and reduce impacts.

   Based on input from Messmer High School, WisDOT has adjusted the location of a noise barrier to avoid blocking views of the high school building from I-43.

   WisDOT construction project manager will maintain access to local residences and community facilities during construction. Detour routes will be signed during full freeway and ramp closures.

   WisDOT construction project manager will coordinate with emergency services prior to and during construction to provide advanced notice for any closures.

   WisDOT design project manager will continue coordination with Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger planned trail underneath I-43.

   See Community Factor Sheet for the Glendale study area for design considerations and potential mitigation measures identified in response to issues raised at the public involvement meeting.

10. **Describe any additional measures that will be used to minimize impacts or provide benefits to the community, neighborhood or area:** Overall, the project minimizes right of way impacts since the Build Alternative Rehabilitation replaces the existing six through lanes of mainline freeway in generally the same configuration. The project would also provide improved safety along the freeway with standard shoulder widths, auxiliary lanes for improved ramp acceleration and deceleration, and improved geometrics at some interchange ramps.

COMMUNITY Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Give a brief description of the community, neighborhood or area affected by the proposed alternative:**
   Name of community/neighborhood/area: Glendale Study Area
   Is the community an incorporated municipality or part of an incorporated municipality?
   ☒ Yes ☐ No
   Name of incorporated municipality(ies), if applicable: City of Glendale
   Total population (include year and source): 3,238 (American Community Survey, 2017 5-Year Estimates)
   Demographic characteristics: This factor sheet focuses on the study area within a ½-mile of the project corridor in the City of Glendale and a small portion of the City of Whitefish Bay. The Glendale study area has three main residential areas including a residential neighborhood to the south of the Milwaukee River and west of the I-43; to the north of Hampton Avenue and east of Port Washington Road and to the north of Henry Clay Street and east of Port Washington Road. The residential areas in the Glendale study area contain primarily single-family homes with some duplex homes and small apartment buildings.

   The Glendale study area contains 3,238 residents. The study area's population is 20.8 percent minority, with Black/African American representing the largest minority group (8.5 percent). An estimated 16.5 percent of the population in the study area is 65 years or older. The median income for the census block groups in the study area range from $50,000 to $124,000. The study area has an unemployment rate of approximately 3.2 percent. The table below summarizes the demographic data for the study area and provides data for the City of Milwaukee and Milwaukee County for comparison purposes.

   Glendale Study Area Demographic Summary

Demographics	Glendale Study Area[1]	City of Glendale	Milwaukee County
Population	3,238	12,868	956,586
Percent Minority	20.8	24.4	47.8
Percent Black/African American	8.5	14.4	26.1
Percent 65 Years and Older	16.5	23.8	12.6
Median Income	$50,000 to $124,000	$65,992	$46,784
Unemployment Rate	3.2	2.6	7.1

Source: American Community Survey, 2017 5-Year Estimates

   Community facilities in the Glendale study area include Milwaukee River Parkway system and Lincoln Park Golf Course, the Oak Leaf Trail, Columbia College of Nursing, Ascension Columbia St. Mary's Urgent Care, Children's Hospital/River Glen Pediatrics, North Shore Montessori School and Lydell School.

2. **Are there groups or individuals in the community, neighborhood or area that use or depend on transit, bicycle or pedestrian facilities?**
   ☐ None identified
   ☒ Groups or individuals identified – Discuss: Within the Glendale study area, 3 percent of the workers commute to work via transit and another 3.2 percent walk or use a bicycle to commute to work. Also, 9.4 percent of households do not have a vehicle available within the Glendale study area.

[1] Census data was collected for census tract and block groups within a 1/2 mile of the project corridor. A percentage was then applied to each dataset based on the percentage of tract or block group area within the buffer.

3. **Identify and discuss existing modes of transportation and their importance in the community, neighborhood or area:** Personal vehicles are the dominant mode of transportation for residents in the Glendale study area. Approximately 81 percent of the workers in the study area drive alone to work. Also, 90.6 percent of households in the study area have one or more vehicles available.

   Milwaukee County Transit System (MCTS) provides local bus service in the Glendale study area. MCTS Route 15 provides north-south connectivity along Port Washington Road in the study area. The route extends from Silver Spring Drive/Bayshore Town Center to downtown Milwaukee and south to the City of South Milwaukee. Route 15 is important to transit users in the study area because it connects with several community facilities in the area and major employment and shopping areas along Port Washington Road including Bayshore Town Center and Estabrook Corporate Park. It also connects study area residents with employment clusters in downtown and along Packard Avenue in South Milwaukee. Route 15 connects with several MCTS east-west routes near the study area including Route 63 along Silver Spring Drive and the Red Line along Capitol Drive, which also connect transit users in the study area to other areas of employment and shopping. Route 143 (Ozaukee County Express) provides express service from Ozaukee County to downtown Milwaukee via I-43 and Route 49, Brown Deer-Bayshore Flyer, provides express service between Brown Deer and downtown. These routes are primarily used for commuter-based trips and have limited stops in the project area.

   Two sections of the Oak Leaf Trail, a 125-mile multiuse trail system in Milwaukee County, cross the Glendale study area: Milwaukee River Line and Zip Line. The Milwaukee River Line runs along a path in Lincoln Park and crosses I-43 at Hampton Avenue where it continues along a path through Estabrook Park and into downtown Milwaukee and the lakefront. The Zip Line crosses I-43 via a bridge over the freeway at the northern end of the project limits. The Zip Line is located on a dedicated path that extends from Brown Deer through the study area and links with the Milwaukee River Line at Capitol Drive. The Oak Leaf Trail is an important recreational amenity to the surrounding neighborhoods and communities as it provides a predominately off-road non-motorized connection that links several communities and recreational facilities throughout Milwaukee County. It can also be used for bicycle commuting.

   Most of the streets in the Glendale study area have sidewalks. The sidewalks allow residents to move about the community without an automobile and walk to nearby schools, parks and business.

4. **Identify and discuss the probable changes that could result from the proposed alternative to the existing modes of transportation and their function within the community, neighborhood or area:** During construction, ramp closures and nighttime freeway closures would require vehicles in the study area to use detour routes. This may result in periodic traffic delays and less direct travel for some trips in the study area.

   Buses may experience minor delays caused by increased traffic along detour routes (i.e. Route 80 on Green Bay Avenue) in the study area during the two to three-year construction period. Also, bus stop locations near interchange ramps (Port Washington Road, Fiebrantz Avenue and Green Bay Avenue) may need to be moved or closed during the second and possibly third construction years. In addition, express routes along I-43 (Routes 143 and 49) may experience delays in the construction zone. No bus routes would be discontinued during construction and bus route detours are not anticipated during construction. WisDOT will coordinate with MCTS prior to and during construction to determine bus route impacts and alternate bus stop locations.

   Temporary sidewalk closures during construction may occur at the Capitol Drive and Hampton Avenue interchange ramps. Temporary closures will be detoured on opposite sides of streets to the greatest extent practicable and signed in advance of construction. Currently the sidewalks at the Capitol Drive interchange ramps are not ADA compliant. Any sidewalks that are disturbed by construction activities will be replaced and improved to conform to ADA standards.

   The Oak Leaf Trail (Milwaukee River Line) at Hampton Avenue would be impacted by the replacement of the I-43 bridge (B-40-66) over the Milwaukee River and Hampton Avenue. The sidewalk and Oak Leaf Trail on Hampton

Avenue will be accommodated with a temporary separation on Hampton Avenue. The trail would be replaced as part of the project with a new 10-foot wide path under the freeway.

The Route of the Badger, a 700-mile trail system planned for Southeast Wisconsin, includes a planned trail segment underneath the I-43 Mainline Over Abandoned Railroad (URT) bridge (B-40-115). The Build Alternative would remove the URT bridge (B-40-115) and reconstruct I-43 mainline on fill supported by retaining walls. Under the Build Alternative, there would be no access under I-43 at this location. WisDOT will continue coordination with the Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger.

5. **Address any changes to emergency services or other public services during and after construction of the proposed alternative:** During construction at least two lanes of traffic along I-43 would be maintained and remain open to emergency services. The reduction of capacity along the freeway during construction may increase congestion and cause delays to emergency vehicles that utilize the freeway in the project area. Emergency vehicles may also be affected by ramp closures during construction and would need to utilize detour or alternate routes. Also, cross streets with I-43 at Capitol Drive, Glendale Avenue and Hampton may experience short-term closures typically during nighttime hours during bridge construction. WisDOT and the construction project manager will coordinate with emergency services prior to and during construction to provide advanced notice for any closures.

6. **Describe any physical or access changes that would result:** The project would not acquire land from residential properties and it would not require relocations.

   The Capitol Drive and Hampton Avenue interchanges would remain as service interchanges in the project area. The only change in access is that the northbound exit ramp to Hampton Avenue (west) north of the Milwaukee River would be removed due to substandard design and low traffic volumes. Traffic previously using the removed northbound exit ramp would be routed to the reconstructed northbound exit ramp to Port Washington Road on the south side of the Milwaukee River. The reconstructed exit ramp would be improved by increasing the deceleration length and adding a barrier separating it from the adjacent entrance ramps of Port Washington Road.

   The mainline would be shifted east by 46-feet to 74-feet within the existing right of way to the north of the Milwaukee River. This moves the freeway slightly closer to residential properties on the east side of Port Washington Road to the north of Hampton Avenue. This shift avoids impacts to Lincoln Park Golf Course.

   During construction, the community could experience short-term construction-related impacts such as increased levels of noise and dust. Also, the community may experience temporary traffic inconveniences from night closures along the mainline and interchange ramps closures. These temporary closures will include signed detour routes that will maintain access to and from the freeway to residential areas, businesses and community facilities during construction.

   The Build Alternative Rehabilitation replaces the existing noise barrier on the west side of I-43 between approximately the Milwaukee River and just south of Glendale Avenue in generally the same configuration in the Glendale study area. See the Traffic Noise Factor Sheet for more information.

7. **Indicate whether a community or neighborhood facility (such as parks, recreation facilities, community centers, libraries, food pantries, DMV offices, clinics, hospitals, schools, child care centers, churches, etc.) could be affected by the proposed alternative and indicate what effect(s) this could have on the community or neighborhood**:

   The design plans for the project shift I-43 at the Milwaukee River slightly to the east to avoid impacts to Lincoln Park Golf Course. A right of entry permit from Milwaukee County will be required at the Oak Leaf Trail crossing under I-43 and on golf course property during construction. See Section 4(f) and Section 6(f) Factor Sheets for more details. WisDOT will replace the section of the Oak Leaf Trail under the freeway at Hampton Avenue with a 10-foot wide path. While the trail section at Hampton Avenue would be impacted during construction, the resulting trail would provide an improved facility. No other community or neighborhood facilities would be affected by the Build Alternative Rehabilitation.

8. **Identify and discuss community, neighborhood or area issues that residents, local units of government or community stakeholders have indicated to be important or controversial**:

   At the August 13, 2019 Local Officials Meeting, local communities expressed concern regarding the construction impacts from this project combined with potentially overlapping timelines with other projects in the I-43 corridor. Similar concerns were expressed at the public involvement meeting held on August 22, 2019, including a request not to close the Capitol Drive and Hampton Avenue interchanges at the same time.

   Other issues raised at the public involvement meeting included concerns about the impact of closing the northbound exit ramp to Hampton Avenue (west) and rerouting traffic to the reconstructed exit ramp south of the Milwaukee River. Residents were concerned that the added traffic will further deteriorate traffic operations on Port Washington Road, where there are long queues of traffic turning left from Port Washington onto westbound Hampton Avenue.

   Residents also raised concerns about noise impacts; indicating the existing barrier isn't effective and the replaced barrier should be extended onto the I-43 entrance ramp and mainline bridges over the Milwaukee River. Another comment requested not to tine the pavement to avoid further noise impact.

   Other comments:
   - Paint the bridge carrying the Oak Leaf Zip Line trail over I-43
   - Put lighting under the I-43 bridge over Glendale Avenue bridge to improve safety
   - Concern about traffic detouring through local streets during construction for this project and other projects on I-43

9. **List any community or neighborhood design considerations and potential mitigation measures identified during public involvement or agency coordination (as well as local government coordination) and indicate whether they will be included in the proposed alternative:**

   WisDOT will coordinate with local communities to minimize the overall construction time and temporary loss of local access and communicate construction schedules and temporary closures and detours. Detours will be routed onto arterial streets during temporary freeway closures and will not route traffic through residential neighborhoods (see also Appendix B-3 for proposed detour routes). WisDOT will avoid closing the Capitol Drive and Hampton Avenue interchanges at the same time to the greatest extent practicable.

   To mitigate potential impacts at the reconstructed Hampton Avenue exit ramp, the added auxiliary lane on I-43 will allow traffic to decelerate as it exits and the left turn lanes on the exit ramp would be lengthened to store exiting vehicles at the ramp signal. The ramp signal would be synchronized with the signal at the Port Washington Road/Hampton Road intersection to minimize impacts to traffic operations. The volume of northbound vehicles exiting to the existing Hampton Avenue (west) ramp is approximately 180 vehicles per hour

during peak evening times. Rerouting the diverted existing traffic to a single exit ramp would not cause further deterioration to existing and future queues at the Port Washington Road/Hampton Avenue intersection.

WisDOT completed a noise analysis, which is discussed in detail in the Traffic Noise Factor Sheet. As part of the WisDOT Preferred Alternative, WisDOT would replace the existing noise barrier west of I-43 between the Milwaukee River to just south of Glendale Avenue. The replaced barrier would meet WisDOT criteria for noise abatement, resulting in an 8 to 9 decibel reduction at receptors (residences) benefiting from the barrier. Two additional noise barriers were determined to be feasible and reasonable. A public involvement meeting will occur following approval of this ER to determine whether the reasonable and feasible barriers described above would likely be incorporated into the project. These barriers would be located on either side of I-43, north of Capitol Drive. The Build Alternative Rehabilitation would replace the existing pavement with asphalt pavement and would not be tined.

Milwaukee County has jurisdiction over the Zip Line bridge crossing I-43 and would be responsible for maintaining, including painting, the bridge. WisDOT will coordinate with Milwaukee County regarding the addition of lighting under the I-43 bridge during final design. Lighting along Glendale Avenue, including under the I-43 bridges would be responsibility of the City of Glendale.

Meetings with public stakeholders primarily focused on project design and related impacts at specific locations. WisDOT will continue to follow up with stakeholders as designs evolve to refine and reduce impacts.

WisDOT construction project manager will maintain access to local residences and community facilities during construction. Detour routes will be signed during full freeway and ramp closures.

WisDOT construction project manager will coordinate with emergency services prior to and during construction to provide advanced notice for any closures.

WisDOT design project manager will continue coordination with Rails to Trails Conservancy and the Wisconsin Bike Fed regarding the Route of the Badger planned trail underneath I-43.

10. Describe any additional measures that will be used to minimize impacts or provide benefits to the community, neighborhood or area:

Overall, the project minimizes right of way impacts since the Build Alternative Rehabilitation replaces the existing six through lanes of mainline freeway in generally the same configuration. The project would also provide improved safety along the freeway with standard shoulder widths, auxiliary lanes for improved ramp acceleration and deceleration, and improved geometrics at some interchange ramps.

ENVIRONMENTAL JUSTICE Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. Identify and give a brief description of minority populations and low-income populations that may be affected by the alternative. For each population identified, include the pertinent demographic characteristics and relative size. If the minority populations identified are also low-income populations, indicate so in the description.

The Census Bureau's 2017 American Community Survey (ACS) 5-year Estimates were used to describe minority and low-income populations that are present in the project area. ACS data was collected for a 1/2-mile buffer around the project corridor. Census tract or block groups were used depending on the availability of data for census geographies. Since the tracts and block groups have irregular shapes that extend well beyond the ½-mile buffer in some cases, a percentage was applied to each dataset based on the portion of the tract area or block group area within the buffer. Black is the largest minority group in the project area comprising 61.4 percent of the population.

Population Groups

☒ Black (origins in any of the black racial groups of Africa)
Describe: Blacks make up 61.4 percent of the population in the project area and are the largest minority group in the project area. The percentage of Black or African American populations in the project area is higher than Milwaukee County (26.1 percent).

☒ Hispanic or Latino (of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race)
Describe: Hispanics make up of 3.7 percent of the project area population. The percentage is lower than Milwaukee County (14.6 percent)

☒ Asian American (origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent)
Describe: Asian Americans comprise 0.2 percent of the project area population. The percentage is lower than Milwaukee County (4.1 percent).

☒ American Indian and Alaska Natives (origins in any of the original people of North America or South America (including Central America), and who maintain cultural identification through tribal affiliation or community recognition)
Describe: American Indian and Alaska Native populations make up a small percentage (0.1 percent) of the project area population. The percentage is lower than Milwaukee County (0.5 percent).

☒ Native Hawaiian and Other Pacific Islander (origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands)
Describe: Native Hawaiian and Other Pacific Islander populations make up a small percentage (0.02 percent) of the project area population. The percentage is similar to Milwaukee County (less than 0.01 percent).

☒ 2 or more races including any of the above categories, as defined by U.S. Census
Describe: Two or more races makes up 2 percent of the project area population. The percentage of two or more races is similar to Milwaukee County (2.5 percent).

☒ Minority and low-income
Describe: 69 percent of the population within the project area is minority which is larger than Milwaukee County's 36 percent minority population. Within a half-mile of the project corridor, the median household income for the census block groups range from $18,424 to $124,375. The median household income for Milwaukee County is $46,784. The 2019 Department of Health and Human Services poverty guideline for a family of four is $25,750. The project area likely has households living below the poverty guideline since three block groups have median household incomes below the guideline. Census tract poverty data within the project area also indicates the presence of low-income populations as five of the

nine census tracts have poverty rates above 30 percent, compared to Milwaukee County's poverty rate of 20.5 percent.

☐ Low-income and non-minority
Describe:

2. **Describe how information on the alternative was communicated to minority populations and low-income populations:** The notice for the Public Involvement Meeting (PIM) held on 8/22/19 went out via direct mail to over 1,300 addresses adjacent to the project corridor. The public notice was also mailed to elected officials from Milwaukee and Glendale who represent minority and low-income populations along the project corridor. Local officials were asked to help distribute the PIM notifications at the 8/13/19 local official meeting to their email and social media lists. Also, WisDOT distributed a press release and a display ad was run in the Milwaukee Journal Sentinel on 8/14/19. The PIM included displays, handouts and maps showing the Build Alternative Rehabilitation and provided opportunities for the public to speak with project staff and provide written comments.

   Some methods that could be used to communicate project information to minority populations and low-income populations include:

☒ Public involvement meetings (PIMs)	☐ Brochures	☐ Public service announcements
☐ Newsletters	☒ Notices	☐ Key persons
☐ Utility bill inserts	☐ Emails	☒ Direct mailings
☒ Advertisements	☐ Others, identify:	

3. **How was input from minority populations or low-income populations obtained? Check all that apply:**

☒ Public Involvement Meeting	☒ Focused small group involvement meetings
☐ Door-to-door interviews	☐ Focused workshop/conferences
☐ Focus group research	☐ Mailed surveys
☐ Public hearings	☐ Key person interviews

   Other, identify: WisDOT met with the 5 Points Neighborhood Association on October 26, 2019 to present the project and answer questions. WisDOT confirmed the project would not add travel lanes to the freeway and no residents or business would be acquired. The project would benefit transit services using the freeway.

4. **If there is a project advisory committee, identify which minority populations or low-income populations are represented and by whom.**

   ☐ Yes, there was a project advisory committee. Indicate if any of the individuals participating self-identify as representing a minority population or low-income population. Describe:

   ☒ No project advisory committee was formed, explain: A project advisory committee was not formed for this project because the project is a rehabilitation project that will replace the freeway in generally the same configuration and along generally the same alignment.

5. **Will there be potential impacts of any kind to minority populations or low-income populations identified above?**

   ☐ No

   ☒ Yes, describe: Minority and low-income populations would experience traffic noise impacts as traffic noise levels approach or exceed the Noise Level Criteria. Two feasible and reasonable noise barriers proposed to the north of Capitol Drive would mitigate traffic noise impacts.

Minority and low-income populations would experience short-term construction-related inconveniences such as construction noise and dust. Also, minority and low-income populations may experience traffic delays and travel indirection from lane and ramp closures during construction. In addition, the Oak Leaf Trail connection at Hampton Avenue would be temporarily closed and detoured during construction.

Patrons using bus transportation may experience minor delays caused by increased traffic along detour routes (i.e.

Route 80 on Green Bay Avenue) in the study area during the two to three-year construction period. Also, bus stop locations near interchange ramps (Port Washington Road, Fiebrantz Avenue and Green Bay Avenue) may need to be moved or closed during the second and possibly third construction years. In addition, express routes along I-43 (Routes 143 and 49) may experience delays in the construction zone. No bus routes would be discontinued during construction and route detours are not anticipated. WisDOT will coordinate with MCTS prior to and during construction to determine impacts and alternate bus stop locations.

Temporary sidewalk closures during construction may occur at the Capitol Drive and Hampton Avenue interchange ramps. Temporary closures will be detoured on opposite sides of streets to the greatest extent practicable and signed in advance of construction. Currently the sidewalks at the Capitol Drive interchange ramps are not ADA compliant. Any sidewalks that are disturbed by construction activities will be replaced. and improved to conform to ADA standards.

6. **Have issues been identified concerning effects on minority populations or low-income populations related to the alternative been identified?**

☐ No issues or concerns related to effects have been raised.

☒ Yes, issues or concerns related to effects have been identified. Describe what the issues or concerns are, who identified the issues or concerns (for example, identify if the issues were raised by the project team, through public involvement, through interagency coordination or by other means), and how the issues or concerns will be addressed: Messmer High School, which serves minority and low-income students identified concerns about heavy traffic use of 7th Street to access the northbound on-ramp to I-43.

7. **Would this alternative result in disproportionately high and adverse effects on minority populations or low-income populations? If the alternative will not result in disproportionately high and adverse effects, as indicated by checking the first or second box below, the remainder of this Factor Sheet does not need to be completed.**

☒ No disproportionately high and adverse effects on minority populations or low-income populations have been identified, explain: The Build Alternative Rehabilitation replaces the existing six through lanes of mainline freeway in generally the same configuration and generally along the same alignment. As a result, no relocations are required for the project and no residential properties would be impacted by right of way acquisition. Also, the Capitol Drive and Hampton Avenue interchanges would be improved and continue to provide access from the freeway to residential, business, and employment areas in the project area as well as community facilities and services.

Reconfiguring the northbound on-ramp from Capitol Drive is outside the scope of this project. WisDOT will continue coordination with Messmer High School and the City of Milwaukee regarding how traffic accesses the northbound entrance ramp and review alternatives to encourage traffic to use Fiebrantz Avenue instead of 7th Street. At the request of the Five Points Neighborhood Association, WisDOT met with the neighborhood residents on October 26, 2019 to discuss the project, as well as future plans to improve I-43 between Brown Street and Capitol Drive.

Traffic noise impacts are spread throughout the project area and experienced by all populations in the project area. Two noise barriers were determined to be feasible and reasonable. A public involvement meeting will occur following approval of this ER to determine whether the reasonable and feasible barriers described above would likely be incorporated into the project. These barriers would be located near the Capitol Drive interchange which mitigate traffic noise near census tracts and block groups that contain minority and low-income populations.

WisDOT will coordinate with MCTS prior to and during construction to minimize impacts to bus routes and identify alternate bus stop locations. Construction impacts are spread throughout the project area and will be experienced by all populations. Construction-related traffic impacts are temporary and would be minimized by traffic management plans that provide signed detour routes for lane and ramp closures.

Access to and from the freeway to residential areas, businesses and community facilities will be maintained during construction.

☐ Potential disproportionately high and adverse effects on minority populations or low-income populations could result from this alternative. Mitigation measures identified through consultation and public involvement have addressed all effects, explain:

☐ Some or all disproportionately high and adverse effects on minority populations or low-income populations remain for this alternative.
Mitigation measures identified through consultation and public involvement have addressed some effects, describe:
Identify and describe the disproportionately high and adverse effects that remain:

8. Will the alternative be carried forward with the remaining disproportionately high and adverse effects on minority populations and low-income populations? Approval of this document indicates concurrence with this determination.

A. ☐ No, the alternative will not be carried forward because of disproportionately high and adverse effects on minority populations and low-income populations that cannot be mitigated. Check the appropriate box below.
   1. ☐ Another alternative with less severe effects on minority populations and low-income populations can meet the purpose and need of the proposed action and is practicable
   2. ☐ Other, describe:

B. ☐ Yes, the alternative will be carried forward with disproportionately high and adverse effects on minority populations and low-income populations. The alternative will be carried through final design without fully mitigating disproportionately high and adverse effects on minority populations or low-income populations. No additional practicable mitigation measures or alternatives to avoid or reduce the disproportionately high and adverse effects exist. A substantial need for the alternative exists based on the overall public interest. Alternatives that would have less adverse effects on minority populations and low-income populations would have:
   1. ☐ Adverse social, economic, environmental or human health impacts that are more severe; or
   2. ☐ Would involve increased costs of an extraordinary magnitude.

   Describe why it is appropriate to proceed with an alternative that has disproportionately high and adverse effects on minority populations and low-income populations:

HISTORIC PROPERTIES Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Identify which of the following apply to the Historic Property(ies) being discussed on this Factor Sheet:**
   - ☐ 44.40 No Adverse Effects with Commitments
   - ☐ 44.40 Adverse Effects with mitigation
   - ☒ Section 106 Determination of No Adverse Effects (DNAE) with commitments
   - ☐ Section 106 Adverse Effects.
   - ☐ National Historic Landmark (NHL) in the Area of Potential Effect (APE).

2. **Is there Federal Participation (funding, permitting, etc.)?**
   - ☐ No, state participation only, follow §44.40 process (complete questions 3 – 4, 9 and 11 below).
   - ☒ Yes, FHWA approval or funding is required, follow Section 106 process as delegated by FHWA (complete questions 5 - 11 below)
   - ☐ Yes, non-FHWA federal involvement, indicate which agency, complete remainder of sheet as applicable:

   Describe the project applicant's (WisDOT or local unit of government) role in meeting state and federal requirements:

STATE 44.40 PROCESS

3. **Results of Archival and Literature Search (i.e. Wisconsin Historic Preservation Database WHPD):**
   - ☐ Sites reported, go to question 4 for State (44.40)

   List date of archival and literature search completed:

4. **SHPO §44.40 concurrence date:**
   - ☐ No adverse effects with commitments
   - ☐ Adverse effect with mitigation.

FEDERAL SECTION 106 PROCESS

5. **Describe Area(s) of Potential Effect (APE); see Section IV of Section 106 Form DT1635:**

   ☒ Archaeology APE: Existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption

   ☒ History APE: Those structures that are immediately adjacent to, or fronting on, the proposed I-43 improvement.

   Indicate location of APE map: The architectural survey worksheet provided a verbal description of the APE.

6. **Parties notified (see Section III of Section 106 form DT1635):**

Parties Contacted (includes consulting parties)	Date Contacted	Comments Received		
		No	Yes	Response Sent
City of Milwaukee	7/4/2019	☐	☒	☒ Date: 7/11/2019
Milwaukee County Historical Society	7/4/2019	☐	☒	☒ Date: 7/22/2019
Forest County Potawatomi (Native American Tribe)	1/10/2019	☐	☒	☒ Date: 2/11/2019

Parties Contacted (includes consulting parties)	Date Contacted	Comments Received		
		No	Yes	Response Sent
Other Native Tribes/representatives: Bureau of Indian Affairs, Bad River Band of Lake Superior Chippewa Indians of Wisconsin, Ho-Chunk Nation, Lac Vieux Desert Band of Lake Superior Chippewa Indians, Menominee Indian Tribe of Wisconsin, Prairie Band Potawatomi Nation, Prairie Island Indian Community, Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin, Sac and Fox Nation of Missouri in Kansas and Nebraska, Sac and Fox Nation of Oklahoma, Sac and Fox of the Mississippi in Iowa, Sokaogon Chippewa Community Mole Lake Band	1/10/2019	☒	☐	☐ Date:

Summarize notable comments/feedback here: City of Milwaukee identified two NRHP-listed properties (Chief Lippert Fire House at 642 W. North Avenue and St. Matthew Christian Methodist Episcopal Church at 2944 N. 9th Street) and one potentially historic property (Green Bay Avenue School at 3872 N. 8th Street). The three properties are in close proximity to the freeway and may be affected by placement of noise barriers. (*Note: these three properties are outside the APE)*.

The city also noted Lincoln Park and Milwaukee River Parkway, which are part of the NRHP listed Milwaukee County Parkway System could be affected by placement of sound barriers.

The Milwaukee County Historical Society did not identify County Landmark properties.

The Forest County Potawatomi Tribe requested a copy of the archeological survey and SHPO response.

7. Properties Identified (see Sections V, VI, VII of the Section 106 Form DT1635 and/or the arch/history reports)*:

Archaeological Site Inventory (ASI #) or Architecture and History Inventory (AHI #)	Name	Type	Recommended for Evaluation Y/N	Determined Eligible for or already listed in the NRHP Y/N	Effects Avoided Y/N
AHI #191685	Milwaukee River Parkway/Lincoln Park Golf Course	Parkway system	Y	Y	Y
AHI #115568	Messmer High School	School Building	Y	y	Y
BMI-0179	Evergreen Cemetery	Burial site	N	N	Y

*Map of identified properties is attached here: See Appendix B-1

8. **Describe effects on those properties identified in Question 7 (or provide appropriate pages from *e*-106 Question 11, https://www.achp.gov/sites/default/files/guidance/2018-09/e106-instructions-2018.pdf):**

Property	Effects, Adverse or Other
Milwaukee River Parkway/Lincoln Park Golf Course	Approximately 0.35 acres of temporary construction easement will be required to replace the Milwaukee River bridge and reconstruct the Oak Leaf Trail along Hampton Avenue, under I-43. The existing 5-foot trail will be temporarily closed and replaced with a 10-foot wide pavement. Trail users will be directed to the Oak Leaf Zip Line trail during construction. SHPO concurred with the determination of no adverse effect (See Appendix F).
Messmer High School	I-43 pavement will be resurfaced within existing right of way, west of the school building. A noise barrier is proposed north of W. Messmer Street. The barrier would not block views of the school from I-43. SHPO concurred with the determination of no adverse effect (See Appendix F).
Evergreen Cemetery	Approximately 0.11 acres (4,891 square feet) of permanent easement will be acquired for freeway reconstruction. Approximately 0.08 acres of temporary easement will be required to accommodate equipment during construction. WisDOT is coordinating with Wisconsin Historic Society (WHS) to procure permits for further subsurface investigations to determine presence or absence of burials.

9. **Additional Documentation that was completed for Historic Properties (check all that apply):**

Project File	Attached to Environmental Document	Documentation
☐	☐, location:	Screening List, Archaeology
☐	☐, location:	Screening List, History
☐	☐, location:	44.40 Form
☐	☒, location: Appendix F	Section 106 Form DT 1635 (SHPO and/or THPO concurrence)
☐	N/A	Archaeology Report
☐	N/A	History Report
☐	N/A	DOE
☐	☐, location: Appendix F	DNAE and/or DNAE signature page
☐	N/A	D for C (*e*-106)
☐	☐, location:	Memorandum of Agreement (MOA)
☐	☐, location:	Other Agreement Document (i.e. Programmatic Agreement (PA) or Project specific agreement)
☐	☐, location:	Other, describe:

10. **Will effects to historic properties identified on this Factor Sheet result in a Section 4(f) use or qualify for an exception to Section 4(f) identified in 23 CFR 774.13?**

☐ No

☒ Yes, complete the Section 4(f) Factor Sheet for each applicable historic property.

11. **List all 44.40 or Section 106 commitments below:**

To minimize and mitigate impacts to vegetation within Lincoln Park Golf Course, the WisDOT design project manager will coordinate with Milwaukee County Parks Department to identify where mature trees can be avoided and develop a planting plan to replace vegetation to restore screening from the freeway. The WisDOT construction project manager will restore grading and lawn disturbed around the Oak Leaf Trail, within the Milwaukee River Parkway to its prior condition or better.

During final design, the WisDOT design project manager will conduct additional investigations within Evergreen Cemetery coincident with the proposed permanent right of way acquisition and temporary easement to assess for the presence/absence of burials. The methods and techniques used during the study will follow standards promulgated in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and the Guide for Public Archeology in Wisconsin, as revised. The WisDOT design project manager will incorporate additional mitigation measures into special provision language as prescribed during coordination with the WHS per Wis. Stat. 157.50.

The WisDOT design project manager to notify the WisDOT Bureau of Technical Services/Cultural Resources when the project is within one year of construction starting. The WisDOT Bureau of Technical Services/Cultural Resources will then petition WHS to work within the boundaries of the burial sites.

SECTION 4(f) Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Resource Name:** Milwaukee River Parkway/Lincoln Park Golf Course

2. **Location:** The Milwaukee River Parkway, which includes Lincoln Park Golf Course generally follows the Milwaukee River between Good Hope Road and Capitol Drive and crosses under I-43 along Hampton Avenue. The Oak Leaf Trail, a bicycle and pedestrian trail also travels along Hampton Avenue under I-43. Lincoln Park Golf Course is located west of the project corridor, directly adjacent to I-43 between Hampton Avenue and W. Lawn Avenue.
   Map attached here: See Appendix B-1

3. **Ownership and/or Agency with Jurisdictional Authority:** Milwaukee County Parks

4. **Type of Resource:**
   ☒ Park
   ☐ Recreational lands
   ☐ Wildlife Refuge
   ☐ Waterfowl Refuge
   ☒ Historic/Archaeological site eligible for the National Register of Historic Places (NRHP)
   ☒ Other – Identify: parkway system that includes comfort stations, bridges and baseball diamonds. The Oak Leaf Trail travels along Hampton Avenue within the parkway.

5. **Briefly describe use of the resource:** Lincoln Park Golf Course is a 9-hole golf course within Lincoln Park, which surrounds the Milwaukee River. Lincoln Park, which is not impacted by the project, provides several additional recreational opportunities, including: aquatic center, athletic fields and riverscape areas.

6. **Type of Section 4(f) Documentation**
   ☒ Section 4(f) Exception or questions of Section 4(f) Applicability (Proceed to Questions 7, then 11)
   ☐ *De minimis* (Proceed to Questions 8, then 11)
   ☐ Programmatic Section 4(f) (Proceed to Questions 9, then 11)
   ☐ Individual Section 4(f) (Proceed to Questions 10, then 11)

7. **23 CFR 774.11 applicability and 23 CFR 774.13 exceptions to Section 4(f) approvals:**
FHWA has identified various instances when a Section 4(f) analysis might not be necessary for a potential Section 4(f) resource. These instances are listed below: (check the exception to Section 4(f) that applies to the resource AND check the conditions to ensure that they are met). Supporting documentation for use of the exception checked below is attached here:

See Appendix E for correspondence from the Milwaukee County Department of Parks.

The project would temporarily occupy a portion (approximately 0.35 acres) the parkway system and golf course to reconstruct the Oak Leaf Trail under I-43, perform roadway work on Hampton Avenue, and stage construction equipment to replace the I-43 mainline bridge over the Milwaukee River and Hampton Avenue. Reconstructing the I-43 pavement at the far northeast corner of Lincoln Park Golf Course will require temporary occupancy of about 0.08 acres to complete construction.
The Oak Leaf Trail would be closed for intermittently during construction and trail traffic detoured to the Zip Line Trail.

☐ The resource, in its entirety, is not significant per 23 CFR 774.11(c). The officials with jurisdiction have provided information to support this indication.

☐ Multiple Use. Where Federal lands or other public land holdings (e.g., State forests) are administered/managed for multiple uses per 23 CFR 774.11(d). Section 4(f) only applies to the portions of the resource that function as, or as designated as significant park, recreation, or wildlife and waterfowl purposes. The officials with jurisdiction have provided information to support this indication.

☐ Section 4 (f) does not apply per 23 CFR 774.11 (h)The resource is formally reserved for a future transportation facility and temporarily functions for park, recreation, or wildlife and waterfowl refuge purposes in the interim, and as a result the interim activity, regardless of duration, will not subject the resource to Section 4(f).

☐ Joint Planning. When a resource is formally reserved for a future transportation facility before or at the same time a park, recreation area, or wildlife and waterfowl refuge is established, and concurrent or joint planning occurs, then any resulting impacts will not be considered a Section 4(f) use. Formal reservation of a Section 4(f) resource for future transportation use can be demonstrated by any of the documents described at 23 CFR 774.11(i).

☐ Section 4(f) does not apply to the use of historic transportation facilities in certain circumstances per 23 CFR 774.13(a) Any of the following criteria must be met:

- ☐ (1) Common post-1945 concrete or steel bridges and culverts that are exempt from individual review under 54 U.S.C. 306108 (Section 106).
- ☐ (2) Improvement of railroad or rail transit lines that are in use or were historically used for the transportation of goods or passengers, including, but not limited to, maintenance, preservation, rehabilitation, operation, modernization, reconstruction, and replacement of railroad or rail transit line elements, except for:
  - (i) Stations;
  - (ii) Bridges or tunnels on railroad lines that have been abandoned, or transit lines not in use, over which regular service has never operated, and that have not been railbanked or otherwise reserved for the transportation of goods or passengers; and
  - (iii) Historic sites unrelated to the railroad or rail transit lines.
- ☐ (3) Maintenance, preservation, rehabilitation, operation, modernization, reconstruction, or replacement of historic transportation facilities. Include necessary documentation to support this determination based on consultation under 36 CFR 800.5, that:
  - (i) Such work will not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, or this work achieves compliance with Section 106 through a program alternative under 36 CFR 800.14; and
  - (ii) The official(s) with jurisdiction over the Section 4(f) resource have not objected to the Administration conclusion that the proposed work does not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, or the Administration concludes this work achieves compliance with 54 U.S.C. 306108 (Section 106) through a program alternative under 36 CFR 800.14.

☐ Section 4(f) does not apply per 23 CFR 774.13(b). Archeological sites that are listed in or determined eligible for the National Register when (both conditions must be satisfied):

- ☐ (1) The archeological resource is important primarily because of what can be learned by data recovery and has minimal value for preservation in place. This exception applies both to situations where data recovery is undertaken and where it is decided in agreement with the official(s) with jurisdiction, not to recover the resource; and
- ☐ (2) The official(s) with jurisdiction over the Section 4(f) resource have been consulted and have not objected to the finding in paragraph (b)(1) above.

☐ Section 4(f) does not apply per 23 CFR 774.13(c). Designations of park and recreation lands, wildlife and waterfowl refuges, and historic sites that are made, or determinations of significance that are changed, late in the development of a proposed action. With the exception of the treatment of archeological resources in § 774.9(e), the Administration may permit a project to proceed without consideration under Section 4(f) if the property interest in the Section 4(f) land was acquired for transportation purposes prior to the

designation or change in the determination of significance and if an adequate effort was made to identify properties protected by Section 4(f) prior to acquisition. However, if it is reasonably foreseeable that a property would qualify as eligible for the National Register prior to the start of construction, then the property should be treated as a historic site for the purposes of this section.

☒ Section 4(f) does not apply per 23 CFR 774.13(d). Temporary occupancies of land that are so minimal as to not constitute a use. All the following conditions must be satisfied:

- ☒ (1) Duration must be temporary, *i.e.*, less than the time needed for construction of the project, and there should be no change in ownership of the land;
- ☒ (2) Scope of the work must be minor, *i.e.*, both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
- ☒ (3) There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- ☒ (4) The land being used must be fully restored, *i.e.*, the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- ☒ (5) There must be documented agreement from the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

☐ Section 4(f) does not apply per 23 CFR 774.13(e). Projects for the Federal lands transportation facilities described in 23 U.S.C. 101(a)(8).

☐ Section 4(f) does not apply per 23 CFR 774.13(f). Certain trails, paths, bikeways, and sidewalks, in the following circumstances:

- ☐ (1) Trail-related projects funded under the Recreational Trails Program, 23 U.S.C. 206(h)(2);
- ☐ (2) National Historic Trails and the Continental Divide National Scenic Trail, designated under the National Trails System Act, 16 U.S.C. 1241- 1251, with the exception of those trail segments that are historic sites as defined in § 774.17;
- ☐ (3) Trails, paths, bikeways, and sidewalks that occupy a transportation facility right-of-way without limitation to any specific location within that right-of-way, so long as the continuity of the trail, path, bikeway, or sidewalk is maintained; and
- ☐ (4) Trails, paths, bikeways, and sidewalks that are part of the local transportation system and which function primarily for transportation.

☐ Section 4(f) does not apply per 23 CFR 774.13(g). Transportation enhancement activities, transportation alternatives projects and mitigation activities, where (both must be checked):

- ☐ (1) The use of the Section 4(f) property is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection; and
- ☐ (2) The official(s) with jurisdiction over the Section 4(f) resource agrees in writing to paragraph (g)(1) of this section.

8. 23 CFR 774.7(b) Finding of *de minimis* Impact

Indicate which Finding of *de minimis* impact applies (attached here:)

- ☐ Finding of *de minimis* impact on a Historic Property
- ☐ Finding of de minimis impact on Parks, Recreation Areas and Wildlife and Waterfowl Refuges

9. 23 CFR 774.3(d) Programmatic Section 4(f) Evaluation

Indicate which Section 4(f) Programmatic Evaluation(s) applies (attached here:)

- ☐ Independent bikeway or walkway construction projects
- ☐ Historic Bridges
- ☐ Park minor involvement
- ☐ Historic site minor involvement.
- ☐ Net Benefit to Section 4(f) Property

10. 23 CFR 774.3 Individual Section 4(f) Evaluation

☐ Draft Individual Section 4(f) evaluation approved on . (Attached here)

☐ Final Individual Section 4(f) evaluation approved on . (Attached here)

11. Was special funding (Federal funds such as Land and Water Conservation Fund Act, Dingell Johnson Act, Pittman-Robertson Act or State funding sources) used to acquire the land or to make improvements on the property?

☐ No, special funding was not used for the acquisition or enhancement of this property.

☒ Yes, complete the Section 6(f) and Other Unique Properties Factor Sheet.

SECTION 6(f) OR OTHER UNIQUE PROPERTIES Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Property Name:** Lincoln Park and Lincoln Park Golf Course

2. **Location:** Lincoln Park, which includes Lincoln Park Golf Course, is located west of I-43 between Hampton Avenue and Lawn Street. Lincoln Park Golf Course is immediately adjacent to I-43. The golf course and Lincoln Park are part of the Milwaukee River Parkway system that generally travels along the Milwaukee River between Good Hope Road and Capitol Drive and crosses under I-43 along Hampton Avenue.

3. **What type of special funding was used to acquire the land or to make improvements on the property?**
   - ☒ LWCF funds (DNR and National Park Service) (See DNR correspondence; Appendix E)
   - ☐ Dingell-Johnson funds (DNR and U.S. Fish and Wildlife Service)
   - ☐ Pittman-Robertson funds (DNR and U.S. Fish and Wildlife Service)
   - ☐ Knowles-Nelson State Stewardship funds (DNR)
   - ☐ NRCS easements or reserve programs (farmland, wetland, forests) define type:
   - ☐ Other, identify:

4. **Ownership and/or administrator (state or Federal agency):** Milwaukee County

5. **Do FHWA requirements for Section 4(f) apply to the project's use of the property?**
   - ☐ No:
     - ☐ Project is not federally funded.
     - ☐ Other, explain:
   - ☒ Yes. Complete Section 4(f) Factor Sheet.

6. **Describe the proposed alternative's effects on this property (a map, sketch, plan or other graphic which clearly illustrates the use of the property and the project's use and effects on the property must be included and its location clearly indicated):**

The project would temporarily occupy approximately 0.17 acres in the Lincoln Park Golf Course.) Approximately 0.09 acres are temporarily occupied at the southeast corner of the golf course along Hampton Avenue to reconstruct the Oak Leaf Trail under I-43, perform roadway work on Hampton Avenue, and stage construction equipment to replace the I-43 mainline bridge over the Milwaukee River and Hampton Avenue (See Appendix G). Reconstructing the I-43 pavement at the far northeast corner of the golf course would require temporary occupancy of about 0.08 acres to complete construction (See Appendix G).

7. **Briefly describe any measures that will be used to avoid, minimize or compensate for unavoidable adverse impacts or enhance beneficial effects (check all that apply):**
   - ☐ Replacement of lands used with lands of reasonably equivalent usefulness and of at least comparable value
   - ☐ The Small Conversion Policy for Lands Subject to Section 6(f) will be used
   - ☒ Restoration and landscaping of disturbed areas
   - ☐ Incorporation of design features and habitat features where necessary to reduce or minimize impacts to the property, discuss:
   - ☐ Other, describe:

8. **Briefly summarize the results of coordination with other agencies that were consulted about the project and its effects on the property:** WisDOT met with Milwaukee County Parks Department on August 15, 2019 and August 29, 2019 to review the project and anticipated impacts. Milwaukee County Parks staff indicate the project will require a right of entry permit and will not adversely affect recreational functions that qualify the property for protection under Section 6(f) (See Appendix E).

WETLANDS Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

Describe Wetlands

1. **Describe Wetlands Along the Project (a map may be helpful):**

	Name (if known)	County	Section-Township-Range	Location Map	Wetland Type(s)	Total Wetland Loss	Temporary Wetland Loss	Is the wetland contiguous with a stream, lake or other?	Name the contiguous waterbody (ies)
Wetland *1*	W-1	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0.02 acres	0 acres	☐ Yes ☒ No	
Wetland *2*	W-2	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	SHALLOW MARSH	0.2 acres	0.01 acres	☐ Yes ☒ No	
Wetland *3*	W-3	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	SHALLOW MARSH	0.01 acres	0 acres	☐ Yes ☒ No	
Wetland *4*	W-4	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0.02 acres	0 acres	☐ Yes ☒ No	
Wetland *5*	W-5	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0.05 acres	0.01 acres	☐ Yes ☒ No	
Wetland *6*	W-6	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0.06 acres	0.01 acres	☐ Yes ☒ No	
Wetland *7*	W-7	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0.02 acres	0 acres	☐ Yes ☒ No	
Wetland *8*	W-8	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	SHALLOW MARSH	0.01 acres	0 acres	☐ Yes ☒ No	
Wetland *9*	W-9	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	SHALLOW MARSH	0.14 acres	0 acres	☐ Yes ☒ No	
Wetland *10*	W-10	MILWAUKEE	S-5, T-7, R-22	Exhibit: App. B-1	WET MEADOW	0 acres	0.11 acres	☒ Yes ☐ No	Milwaukee River
Wetland *11*	W-11	MILWAUKEE	S-32, T-8, R-22	Exhibit: App. B-1	WET MEADOW	0.02 acres	0 acres	☐ Yes ☒ No	

2. **Describe method for evaluating wetlands along project.**
   - ☒ Wetland delineation. Date completed: June 2019
   - ☐ Interagency wetland determination. Date completed:
   - ☐ Other. Describe and indicate date completed:
   - ☐ Evaluation not necessary or not completed. Explain:

3. **Are any impacted wetlands considered "wetlands of special status," "red flag wetlands," or "rare and high-quality wetlands"? Refer to WisDOT Wetland Mitigation Banking Technical Guideline, page 10 for additional information.**
   - ☐ No

☒ Yes:
- ☒ Advanced Identification Program (ADID) Wetlands – Wetland W-10 is an ADID wetland
- ☐ Other – Describe:

4. **List any observed or expected waterfowl and wildlife inhabiting or dependent upon the wetland (List should include both permanent, migratory and seasonal residents):** Species tolerant of urban development, including a variety of common amphibians, insects, reptiles, birds and waterfowl, and mammals.

Describe Work and Anticipated Impacts

5. **Describe proposed work in the wetland(s), e.g., excavation, fill, marsh disposal, temporary impacts, other:** The Build Alternative Rehabilitation would permanently impact 0.55 acres of wetlands from filling and grading activities for roadway and bridge construction. Approximately 0.14 acres temporarily impacted by pier construction to replace the bridge over the Milwaukee River.

6. **Wetland Avoidance and Impact Minimization:** [Note: Consideration of avoidance and minimization strategies is required before evaluating compensatory mitigation needs.]
   A. Wetlands avoided: <1 acre
      1. Describe methods used to avoid the use of wetlands, such as tightening slopes, using a lower level of improvement or placing the roadway on new location, etc.: The stormwater pond on the north end of the project was placed to avoid impacts to a wetland and floodplain.
      2. Indicate the total area of wetlands avoided: <1 acre
   B. Wetlands impacts minimized: <1 acre
      1. Describe methods used to minimize the use of wetlands, such as increasing side slopes, use of retaining walls, equalizer pipes, upland disposal of hydric soils, etc.: The Build Alternative Rehabilitation would replace the URT bridge with fill supported by retaining walls. Retaining walls have fewer physical impacts compared to a wider impact footprint required for fill without retaining walls.
      2. Indicate the total area of wetlands saved through minimization: <1 acre

7. **Erosion control or stormwater management practices which will be used to protect the wetland are described on Factor Sheets, check all that apply:**
   - ☐ Erosion Control Factor Sheet completed
   - ☒ Stormwater Factor Sheet completed
   - ☐ Neither Factor Sheet will be used, briefly describe measures to be used:

Coordination and Permitting

8. **US Army Corps of Engineers (USACE) Jurisdiction and Section 404 Permit (Clean Water Act):**
   - ☐ Not applicable, no impacts anticipated to waters under USACE jurisdiction.
     Date of approved jurisdictional determination:
   - ☒ Applicable, impacts anticipated to wetlands under USACE jurisdiction.
     Indicate acres of wetlands filled: 0.55 acres; temporarily impacted: 0.14 acres

   Type of 404 permit anticipated:
   - ☐ Individual Section 404 Permit required.
   - ☒ General Permit (GP) or Letter of Permission (LOP) required.
     Indicate which GP or LOP is required:
     - ☒ Transportation Regional General Permit (TRGP; expires 02/20/23). Permit category: 2 (Modification-Linear Transportation)
     - ☐ Nationwide General Permit (NWP). NWP number:
     - ☐ Letter of Permission (LOP-06-WI; issued 04/17/06 – or – LOP-10-R; issued 08/30/10)

   Pre-construction notification (PCN):
   - ☐ Not required. Explain:
   - ☒ Required. Status of PCN: Pending - PCN will be submitted to Corps upon completion of this ER.

9. **Wisconsin Department of Natural Resources (WDNR) Coordination and Section 401 Water Quality Certification (WQC):**
   - ☐ WDNR provided concurrence on the project's wetland delineation. Date received or anticipated:
   - ☒ 401 WQC anticipated: anticipated by project let date of March 2021

10. **Federal Highway Administration (FHWA) Wetland Policy:**
   - ☒ Individual wetland finding required. Summarize all practicable measures included in the project to minimize harm to wetlands and explain why there are no practicable alternatives to the proposed action and wetland use: Stormwater ponds located outside wetland areas and reconstructed roadway placed on fill with retaining wall to minimize road footprint. The Milwaukee River bridge will span the river to minimize impact to the waterway, but will require piers within the river channel (See Surface Water Factor Sheet).
     Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to the wetlands which may result from such use (per FHWA Technical Advisory T6640.8A and Executive Order 11990).
   - ☐ Not applicable, explain:

11. **Section 10 Waters (Rivers and Harbors Act). For navigable waters of the United States (Section 10) indicate which 404 Permit is required:**
   - ☒ No Section 10 waters. Section 10 permit not required.
   - ☐ Section 10 waters present.
     - ☐ Individual Permit
     - ☐ Nationwide Permit, NWP number:
     - ☐ Transportation Regional General Permit, TRGP category:

   Pre-construction notification (PCN):
     - ☐ Not required, explain:
     - ☐ Required, status of PCN:

Compensation

12. **Describe compensation for unavoidable wetland loss including wetland type, acres of loss, the mitigation ratio to be used, the type and acres of compensation and the Wetland Mitigation Site (if known) where mitigation will occur:**
    The project will unavoidably impact the following wetland types:
    Shallow Marsh: 0.36 acres
    Wet Meadow: 0.19 acres

    Mitigation will occur at a WisDOT wetland mitigation bank in accordance with WisDOT Wetland Mitigation Banking Technical Guideline.

    According to Section 404(b)(1) of the Clean Water Act, wetland compensatory mitigation procedures and sequencing will conform to the USACE and U.S. Environmental Protection Agency (EPA) joint rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332; and 40 CFR Part 230; dated April 10, 2008).

    Compensatory mitigation will be consistent with amendments to the Cooperative Agreement between WDNR and WisDOT on compensatory mitigation for unavoidable losses (July 2012) and WisDOT Wetland Mitigation Banking Technical Guideline (March 2002).

13. **Summarize the coordination to date and that still needs to be completed with USACE, WDNR and other agencies or organizations regarding compensation for unavoidable wetland losses below and indicate where the documentation is located:** WisDOT initiated consultation with WDNR and USACE regarding overall project impacts to wetlands and the proposed Milwaukee River crossing. See Appendix E for agency correspondence.

SURFACE WATERS Factor Sheet

06-10-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Waterbody name:** Milwaukee River

2. **Location of waterbody:**
   Section-Township-Range: **S-5, T-7, R-22** Municipality Name: **Glendale**

3. **Waterbody type (check all that apply):**
   - ☐ Lake
   - ☐ Pond
   - ☐ Impoundment or flowage
   - ☒ River or Stream
     - ☒ Warm water
     - ☐ Cold water, if trout stream, identify trout stream classification:
     - ☐ Wild and scenic river
     - ☐ Outstanding resource water (ORW), per NR 102.10, describe:
     - ☐ Exceptional resource water (ERW), per NR 102.11, describe:
   - ☐ Other, describe:

4. **Watershed name:** Milwaukee River South Watershed **Size:** 168 **(square miles)**

5. **Hydrologic characteristics:**
   - ☒ Permanent (year-round)
   - ☐ Temporary (wet part of year**)**

6. **Waterbody characteristics:**
   A. Substrate:
      - ☒ Sand
      - ☒ Silt
      - ☒ Clay
      - ☐ Cobbles
      - ☒ Other, describe: Bedrock is approximately 1 foot below the river bottom

   B. Area of water body (for lakes): acres

   C. Average water depth: 1-4 feet

   D. Vegetation in waterbody:
      - ☒ Absent
      - ☐ Present, if known, describe:

   E. Identify aquatic organisms or water-dependent species observed or expected: **Fish species tolerant of lower water quality, including carp.** Non-native species such as rainbow trout, coho and chinook salmon migrate from Lake Michigan into the Milwaukee River during their seasonal spawning runs. Habitat and water quality are not sufficient to allow for successful reproduction of these species in the rivers where they spawn so annual stocking of these species is needed to maintain recreational fishing opportunities.
   https://dnr.wi.gov/water/watershedDetail.aspx?code=MI02&Name=Milwaukee River South

F. Summarize water quality data, if available: The Milwaukee River Watershed Total Maximum Daily Load (TMDL) was approved by the EPA on March 9, 2018 and covers waters in the basin impaired for Total Phosphorus, Sediment/Total Suspended Solids, and bacteria (E. coli and Fecal Coliform). https://dnr.wi.gov/water/impairedDetail.aspx?key=426339

G. Is this waterbody on the DNR's "Impaired Waters" list?

☐ No

☒ Yes, describe: Water is impaired due to one or more pollutants (Total Phosphorus, PCBs, E. coli and Unspecified Metals). https://dnr.wi.gov/water/watershedImpaired.aspx?code=MI02

7. **Describe land adjacent to waterbody:** Private residences on south side of Milwaukee River, west of I-43. Undeveloped land and Lincoln Park Golf Course in the Milwaukee River Parkway on north side of river, west of I-43. East of I-43, Estabrook Park, consists of open recreational space is on the north side of the river. Suburban office space and hotel development occupy the south side of the river east of I-43.

8. **Describe proposed work in, over, or adjacent to the waterbody:** The existing Milwaukee River bridge crossing would be replaced with a new structure, including new piers. The existing 9-span prestressed girder structure (B-40-66) is to be replaced with two 5-span prestressed girder structures (to be renamed B-40-1016 and B-40-1018). The existing structure would be completely removed within the river (footings may remain in place if they are deep enough), and piers/abutments outside of the river would be removed as needed to the standard depth below ground per WisDOT Standard Specifications (See Question 12).

   The existing three 92' 7-1/2"x3'8" piers in the Milwaukee River would be replaced with four 26'x4' piers (two piers for each bridge).

9. **Discuss physical impacts to the waterbody during and after construction. Include information regarding anticipated impacts on wildlife and plants inhabiting or dependent upon the lake or water body:** Temporary construction requires in-stream work, including construction of temporary causeways and de-watering around piers to replace three existing bridge piers. The means for construction would be determined with the contractor and WDNR to avoid and minimize impacts to the river, wildlife and plants. No long-term post construction impacts are anticipated since the existing piers would be replaced. The existing stream width will be maintained throughout the project area. Lateral distance between the proposed structure abutments and limits of the river would provide a safe passage for local fauna to cross under I-43. Similar to the existing bridge structure, the proposed bridge structure would be sufficiently long to accommodate aquatic passage.

10. **Discuss probable impacts to water quality during and after construction. Include information regarding anticipated impacts on wildlife and plants inhabiting or dependent upon the waterbody:** Temporary construction impacts could include increased erosion and sedimentation. The long-term impacts of the bridge replacement would not substantially impact water quality since the action replaces the existing bridge and piers.

11. **Describe coordination with the public, municipalities and state and federal agencies concerning waterbodies:** WDNR provided an initial review of the project on June 15, 2019. Follow up meetings were held with WDNR on July 18, 2019 to discuss WDNR initial review comments including stormwater management requirements, and on August 29, 2019 to discuss ongoing stormwater management and other in-stream work and restrictions. Additional coordination meetings occurred on November 19, 2019 (field review) and December 12, 2019. WisDOT initiated coordination with the U.S. Army Corps of Engineers (USACE) regarding proposed work in the Milwaukee River. See Appendix E for agency correspondence.

12. Are measures proposed to avoid, minimize, or compensate for impacts:

☐ No

☒ Yes, describe: WisDOT will use WisDOT Standard Special Provisions (STSP) 203-020, "Removing Old Structure Over Waterway With Minimal Debris" bid item to reduce impacts to the waterway. The actual removal methods used would be determined by the contractor and may include a cofferdam around each existing pier, dewatering the area and removing the structure with standard methods. As the water is not very deep in this area and bedrock is shallow, a standard steel sheet piling-type cofferdam may not be feasible. WisDOT will continue coordination with WDNR and the contractor to determine how to get equipment to the necessary locations for removal and construction activities. WisDOT, through coordination with WDNR will determine methods and timing for constructing causeways in the river.

The WisDOT design project manager will work with DNR to determine which type of navigational aids are needed in accordance with the project design and methods used during construction. The WisDOT design project manager will complete and obtain a Waterway Marker Application and Permit prior to construction. If buoys are required, WisDOT will coordinate with local authorities to ensure an ordinance is in place to regulate boat traffic within the river. The WisDOT construction project manager will oversee placement of navigational aids around the construction area during construction to aid recreational watercraft.

WisDOT is continuing coordination with DNR to determine appropriate measures to avoid and minimize impacts during fish spawning periods that overlap with in-stream construction activities. In-stream work includes any work that will disturb the bed or the banks of the waterway.

The WisDOT design project manager and construction project manager will coordinate with DNR to provide project specific construction site considerations, including an Erosion Control Plan and will require the contractor to outline construction methods in an Erosion Control Implementation Plan. The WisDOT design project manager will obtain a Transportation Construction General Permit (TCGP) from DNR during final design.

If erosion control matting is to be used along stream banks, WisDOT will use biodegradable non-netted matting (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C) and avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

Project equipment would be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code.

13. Are measures proposed to enhance beneficial effects:

☒ No

☐ Yes, describe:

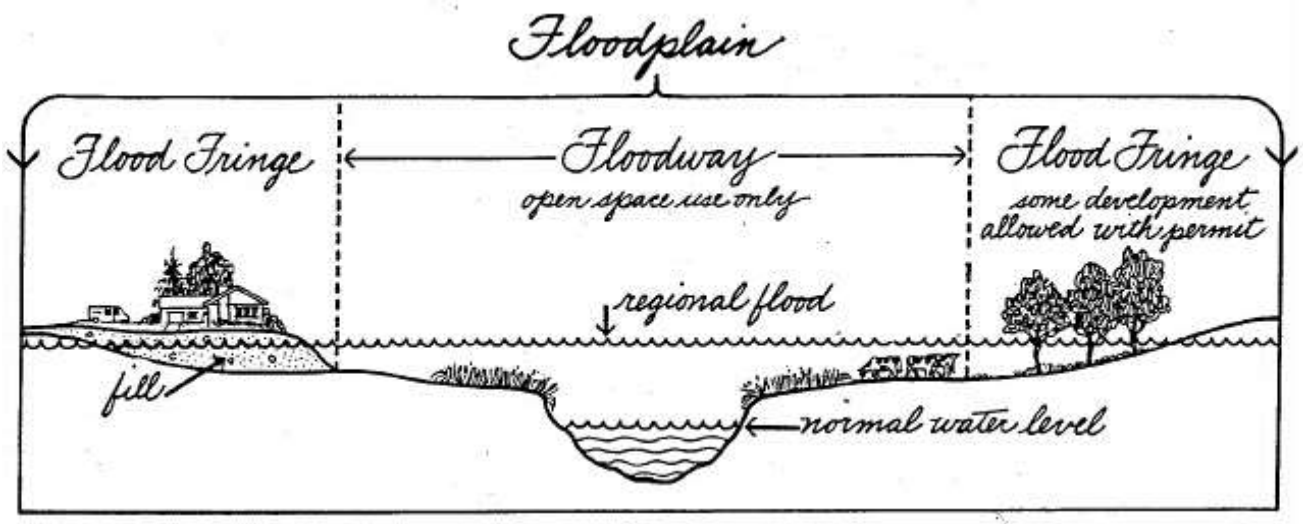
FLOODPLAIN Factor Sheet

06-12-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

When completed this Factor Sheet along with the Environmental Document acts as the Location Study consistent with 23 CFR 650.111.

1. **Name the floodplain watershed (and floodplain zoning authority), where your project is located and encroaching. Encroaching includes modification or repair of existing transportation facilities already in a floodplain. Confirm if the community participates in the Federal Emergency Management Administration (FEMA) voluntary National Flood Insurance Program (NFIP):**



A. Floodplain: Milwaukee River Floodplain
B. Watershed: Milwaukee River South Size: 168 (square miles)
C. Municipality: Glendale
D. NFIP Applicability: ☒ Yes (website reviewed: 8/6/19) ☐ No, status date:
E. Attach map illustrating watershed, floodplain, and project limits. Map location: See Appendix B-1 for project limits and floodplain. The entire project area is within the Milwaukee River South watershed.

2. **Indicate watershed characteristics:**

☐ Rural Watershed
☐ Rapidly Urbanizing Watershed - NR 116.03 (40)
☐ Urban Watershed
☒ Priority watershed – NR 120.02 (30)

Provide additional description of the upstream and downstream flow characteristics and potential floodwater receptors based on the context and intensity of the alternative within the watershed:
The Milwaukee River South Watershed begins west of the Village of Fredonia in Ozaukee County and flows southerly about 48-miles to the Milwaukee Harbor near downtown Milwaukee. There are three small named lakes, several unnamed lakes and many park ponds within the Milwaukee River South Watershed. According to the DNR Watershed details (2001) “the watershed is about 33 percent urban, with agriculture (25%), grasslands (21%), forests (12%) and wetlands (6%) making up the rest of the major land cover types.” The project is in a developed urban area characterized by open park space on both sides of I-43, north of the Milwaukee River. On the south side of the river, residential development is west of I-43 and commercial development is east of I-43.

3. **Indicate key regulatory zones the alternative encroaches upon, per Wisconsin Department of Natural Resources (DNR) Floodplain Management definitions and confirm mapping status for your location in E below:**
   - A. ☒ Floodplain
   - B. ☒ Floodway
   - C. ☐ Flood Fringe
   - D. ☐ Flood Storage
   - E. ☒ Confirmed DNR approved mapping status on this date: Approved September 26, 2008 FIRMs; In 2018, the City of Glendale requested a flood map revision for nearly 100 properties in the city between Hampton Avenue and Good Hope Road to provide more appropriate floodplain representation. Modeling has been completed and maps are under local review and pending DNR and FEMA approval.
     1. ☒ Mapped Floodplain
     2. ☐ Unmapped Floodplain

4. **Indicate zones your alternative encroaches upon, per Floodplain Zoning Authority Zoning Map:**
   ☒ Municipal Floodplain Zoning Map approved, map date: September 26, 2008 FIRMs or not applicable ☐.
   Map location: See Appendix B-1 (floodplain per September 26, 2008 FIRMs)
   - A. ☒ Floodway district
   - B. ☐ Flood fringe district
   - C. ☐ Regional flood elevation
   - D. ☐ Shallow depth flooding district
   - E. ☐ Flood storage district
   - F. ☐ Coastal floodplain district
   - G. ☐ Floodplain Island

5. **Indicate floodplain zone(s) your alternative encroaches per FEMA NFIP Flood Insurance Rate Map (FIRM) risk identification map legend definitions.**
   ☒ Special Flood Hazard Areas (SFHAs) in Zone: AE
   ☒ Floodway Areas in Zone AE
   ☐ The project footprint is outside the SFHA and Floodway Areas in Zone AE
   A copy of the FIRM Map with overlay of project encroachment must be included. Map location: See Appendix B-1 (floodplain per September 26, 2008 FIRM map)

6. **Briefly describe encroachment and proposed work in, over, or adjacent to floodplain and complete questions below**:

   The proposed action contains two areas with encroachment or proposed work in, over or adjacent to floodplain. Along the Milwaukee River, the project will replace the existing bridge piers for the I-43 mainline over the Milwaukee River. These piers are located within the floodplain and will require work within the floodplain. (*Note: the existing FEMA floodplains show the 100-year flood plain extending across I-43 at the northern end of the project near the Oak Leaf Trail overpass. Existing freeway infrastructure precludes the floodplain in this area and is not counted as an impact*).

   A. Indicate type of encroachment:
      ☒ Structure, describe type: The project will replace the bridge, including piers for the I-43 mainline over the Milwaukee River with new piers.
      ☐ Drainage improvement, pipe culvert replacement or extension
      ☒ Roadway/embankment fill
      ☐ Temporary causeway expected
      ☐ Other (explain):

B. Indicate type/s of encroachment alignment, length and scale of overall footprint on floodplain for the alternative:
☒ Transverse – length 294 ☒ ft. ☐ miles
☐ Longitudinal - length ☒ ft. ☐ miles
☐ Combined transverse and longitudinal encroachment will occur
☒ Encroachment footprint: 0.01 acres from four individual piers in the floodplain

C. Will this be a new footprint encroachment or a modification to existing infrastructure resulting in encroachment or possibly a reduction in historical transportation facility footprints on the floodplain?
☐ New footprint
☐ Modification to existing footprint
☐ No change in footprint
☒ Reduction in footprint – the footprint of three existing 92'-7.5''x 3'8" piers in the floodplain is approximately 1,019 square feet, or 0.23 acre. Estimated footprint reduction of 0.22 acres

7. What are your anticipated floodplain backwater conditions from this alternative based on the DOT approved computed Hydrology and Hydraulic Analysis methodology? Reference results to DNR Floodplain Management NR 116 criteria:
☐ Increase in regional flood height (a calculated rise equal to or > 0.01 ft)
☐ No change in regional flood height
☒ Decrease in regional flood height: Reducing by .06' (XS 7.189)
Indicate methodology used and date of analysis: HEC RAS, August 2019

8. Indicate effects of backwater change and encroachment actions on the physical, chemical and biological integrity of the floodplain ecosystem services.

A. ☐ Physical integrity (floodway flow and flood risk to property loss and hazard to life)
☐ benefit
☒ no effect
☐ adverse effect
Describe:

B. ☐ Chemical integrity (surface water and groundwater quality)
☐ benefit
☒ no effect
☐ adverse effect
Describe:

C. ☐ Biological integrity (human environment and ecological functions and services)
☐ benefit
☒ no effect
☐ adverse effect
Describe:

9. What avoidance, minimization or compensation measures will be considered: The proposed bridge will feature smaller piers in the water, reducing overall floodplain footprint (See Question 6).

10. Are there beneficial opportunities to develop new floodplain storage or reestablish old floodplain storage to offset or mitigate impact as part of infrastructure development? Are there other feasible ecological restoration or enhancement opportunities such as wetland restoration, stream restoration, aquatic organism passage (AOP), wildlife crossings or other:
☐ yes, describe:
☒ no, describe: The proposed bridge replacement will maintain existing floodplain benefits.

11. Describe and provide the results of coordination with any regulatory agency or floodplain zoning authority, and describe any public comments related to the encroachment action: On 8/13/2019, WisDOT held a local

Officials Meeting, including officials from the City of Glendale. No comments were made regarding the encroachment action.

12. Is the alternative compatible with Federal, State or Local floodplain land use plans and expectations?

☒ yes
☐ no

Describe:

The project replaces the existing Milwaukee River bridge within floodway and will be consistent with state and local flood ordinances. The *City of Glendale Smart Growth Update* does not envision or prescribe major land use changes within the project area and the WisDOT Preferred Alternative will not result in incompatible development in the floodplain.

13. If this project is an FHWA action, indicate if the alternative would cause any of the following SIGNIFICANT ENCROACHMENTS per FHWA Regulations (23 CFR Subpart A 650.105(q)):(If the project is not a FHWA action skip to question 14.)

☐ Significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or a community's only evacuation route. Describe:

☐ Significant risk. Risk means the consequences associated with the probability of flooding attributable to an encroachment. It includes the potential for property loss and hazard to life during the service life of highway. Describe:

☐ Significant adverse impact on natural and beneficial floodplain values such as fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge. Describe:

If any of the boxes above are checked, a significant encroachment on a floodplain will occur, requiring FHWA to prepare an Only Practicable Alternative Finding (Finding). FHWA signature on the final environmental document indicates adoption of the Finding described below:

☒ No significant encroachment, explain:

The alternative must be located in the floodplain as I-43 travels north/south in this area and must cross the Milwaukee River (floodway). Alternatives that span the Milwaukee River without encroaching on the floodplain were not feasible or practicable. The action will slightly modify existing encroachments at bridge piers and I-43 mainline near the Oak Leaf Trail and will not create additional encroachment. The proposed action will reduce the existing encroachment of 0.23 acres to 0.01 acres. The Build Alternative Rehabilitation conforms to State and Local floodplain protection standards. Based on these factors, WisDOT and FHWA have determined that the encroachment is not significant.

14. Indicate the timing of possible State or Federal Agency permits, approval and coordination for the floodplain encroachment and list the Agencies. In addition to DNR and FHWA, other possible Agency approvals may include: US Army Corp of Engineers (USACE), FEMA, United States Coast Guard (USCG), United States Environmental Protection Agency (EPA) and United States Fish and Wildlife Service (USFWS):

☐ Prior to completion of environmental document:
☐ Post environmental document approval and included as an environmental commitment:
☒ Prior to Construction Let: USACE 404 Permit, DNR Final Concurrence prior to March 2021 let
☐ Prior to Construction:

15. **Impacts from all proposed construction affecting hydraulic characteristics of mapped floodplains have been evaluated. Implementation procedures for data sharing, landowner notifications and legal arrangements for addressing concerns associated with waterway crossings and other floodplain encroachment as identified by NR 116 (Wisconsin's Floodplain Management Program) and NR 320 (Bridges and Culverts In or Over Navigable Waterways) have been or will be addressed prior to construction pursuant to the DOT/DNR February 11, 1988 Cooperative Agreement Implementation Memo of the DOT/DNR Cooperative Agreement, Section VII – Waterway Crossings and Other Floodplain Encroachments (March 1987):**

☐ Yes, procedure for mapped areas is complete

☐ Yes, procedure for unmapped areas is complete

☒ No, procedure for mapped areas is pending final design (add to environmental commitments), discuss: The WisDOT design project manager will provide results of Hydrology and Hydraulic Analysis with both WDNR and the City of Glendale zoning administrator during final design.

☐ No, procedure for unmapped areas are pending final design (add to environmental commitments), discuss:

THREATENED, ENDANGERED and PROTECTED RESOURCES Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None Identified	Project ID: 1228-22-01

Federal Resources

1. **Complete the following table using the Official Species List from U.S. Fish and Wildlife Service (FWS):**

Species Common Name	Species Scientific Name	Federal Status	Effect Determination	Justification/ Explanation
Red Knot	Calidris canutus rufa	Threatened	No effect	The project limits do not overlap with potential suitable habitat.
Northern Long-eared Bat	Myotis septentrionalis	Threatened	May affect, but not likely to adversely affect. See Question 3, below.	On July 24, 2019, WisDOT completed an IPaC assisted determination for the Northern Long Eared Bat, with a determination of may affect, but not likely to adversely affect. USFWS verification of this determination is attached in Appendix E. Tree removal will not occur within 0.25 miles of a known hibernacula at any time of the year, nor will the activity remove a known maternity roost tree or any other tree within 150 feet of a known maternity roost tree from June 1-July 31.

Date of Official Species List: June 04, 2019

2. **Is there designated or proposed critical habitat within or near the project?**
   - ☒ No
   - ☐ Yes, describe critical habitat, proximity to project, and potential impacts to the critical habitat (you may want to complete the Other Factor Sheet to document the critical habitat):

3. **Has Section 7 consultation with FWS been completed?**
   - ☐ No, explain:
   - ☒ Yes, describe consultation efforts and conclusions and indicate location within the environmental document: On July 24, 2019, WisDOT completed an IPaC assisted determination for the Northern Long Eared Bat, with a determination of may affect, but not likely to adversely affect the NLEB; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR s. 17.40(o). USFWS verification of this determination is attached in Appendix E.

4. **Are avoidance, minimization or compensatory mitigation measures required?**
   - ☒ No, explain:
   - ☐ Yes, briefly describe here:

State Resources

1. **Are threatened or endangered species known to occur in the vicinity of the project?**
   - ☐ None identified.
   - ☒ Yes – Complete the following table and include the date of the most recent Natural Heritage Inventory (NHI) review by WDNR: (Note: No survey was conducted because of the low risk of encountering threatened or endangered species within the project limits.)

Species Common Name	Species Scientific Name	State Status	Effect Determination	Justification/ Explanation
Redfin Shiner	Lythrurus umbratilis	Threatened	Impact possible	An Incidental Take Authorization will be required for unavoidable work in the waterway within in-stream restriction dates.
Longear Sunfish	Lepomis megalotis	Threatened	Impact possible	An Incidental Take Authorization will be required for unavoidable work in the waterway within in-stream restriction dates.
Shrubby St. John's-wort	Hypericum prolificum	Special concern	There will be no prohibited take	Proposed action confined to disturbed area in existing transportation corridor and will not affect habitat (prairies, swamps, cliffs and woods)
Hairy Beardtongue	Penstemon hirsutus	Special concern	There will be no prohibited take	Proposed action confined to disturbed area in existing transportation corridor and will not affect habitat (dry gravelly and sandy prairies or in hillside oak hardwoods)
Common Tern	Sterna hirundo	Endangered	There will be no prohibited take	Proposed action confined to disturbed area in existing transportation corridor and will not affect habitat (sparsely vegetated islands or peninsulas in large lakes with sandy substrates)
Butler's Gartersnake	Thamnophis butleri	Special concern	There will be no prohibited take	Proposed action confined to disturbed area in existing transportation corridor and will not affect habitat (semi-open canopy wetland and adjacent semi-open upland habitat)
Waxleaf Meadowrue	Thalictrum revolutum	Special concern	There will be no prohibited take	Proposed action confined to disturbed area in existing transportation corridor and will not affect habitat (moist, calcareous prairies and meadows and thickets near rivers)
Elktoe	Alasmidonta marginata	Special concern	There will be no prohibited take	Per DNR email of 8/17/19 (See Appendix E**), only highly tolerant species found in area. No furtheraction required.**
Rusty Patched Bumble Bee (HP)	**Bombus affinis**	**Special concern**	**There will be no prohibited take**	**Proposed action is in a low potential zone;no further action required**

Date of Natural Heritage Inventory (NHI) database review: June 15, 2019

2. Has threatened and endangered resource coordination with DNR been completed?

☒ No, explain: WisDOT has been meeting regularly with DNR to determine appropriate measures to avoid impacts to both threatened fish species and minimize impacts during spawning times for other fish species that are not threatened or endangered. To date, WisDOT met with DNR on July 18, August 29, November 19 (field review) and December 12, 2019. Coordination will continue to determine the need for an Incidental Take Authorization and final avoidance and minimization measures.

☐ Yes, attach and reference location in this document:

3. Are avoidance, minimization or compensatory mitigation measures required?

☐ No, describe:

☒ Yes, briefly describe: WisDOT will continue coordination with DNR to address avoidance, minimization and mitigation measures as part of an anticipated Incidental Take Authorization for the Redfin Shiner and Longear Sunfish.

Other Protected Resources

Bald and Golden Eagles

1. **Are bald and/or golden eagles known to occur near the project?**
   - ☒ None identified
   - ☐ Yes, describe:

2. **Will there be adverse or beneficial effects on bald and/or golden eagles as a result of the project?**
   - ☒ No, explain: Bald and/or golden eagles are not known to occur near the project.
   - ☐ Yes, describe general proximity to project and potential impacts:

3. **Has bald and golden eagle-related coordination with WDNR and/or FWS been completed?**
   - ☒ No, explain: eagles not identified in early USFWS coordination (see IPaC in Appendix E) and DNR initial review letter (See letter in in Appendix E).
   - ☐ Yes, attach and reference location in this document:

4. **Are avoidance, minimization or compensatory mitigation measures required?**
   - ☒ No, explain: Bald and/or golden eagles are not known to occur near the project and no adverse effects are expected as a result of this project.
   - ☐ Yes, briefly describe:

Migratory Birds

1. **Are migratory birds known to occur in the vicinity of the project?**
   - ☐ None identified
   - ☒ Yes, describe: In their initial review letter dated June 15, 2019, the Wisconsin DNR noted that the project area is near a migratory bird concentration site, and there is evidence of past migratory bird nesting and migratory bird concentration sites within the project area. Presence is likely on/under bridges in the corridor.

2. **Will there be adverse or beneficial effects on migratory birds because of the project?**
   - ☐ No, explain:
   - ☒ Yes, describe general proximity to project and potential impacts: Migratory birds may use bridge structures for nesting. Construction activities can potentially disrupt nesting. Replacing bridges will continue to benefit species nesting and life cycle.

3. **Has migratory bird-related coordination with WDNR and/or FWS been completed?**
   - ☐ No, explain:
   - ☒ Yes, attach and reference location in this document: Coordination meetings held July 18, 2019 and August 29, 2019 where avoidance, minimization and mitigation measures were discussed. See Question 4, below.

4. **Are avoidance, minimization or compensatory mitigation measures required?**
   - ☐ No, explain:
   - ☒ Yes, briefly describe: WisDOT design project manager will include special provisions noting project demolition and construction will either occur only between August 30 and May 1st. (non-nesting season) or the WisDOT construction manager will utilize measures to prevent nesting (e.g., remove unoccupied nests during the non-nesting season and install barrier netting prior to May 1). If netting is used, the WisDOT construction manager will ensure it is properly maintained, then removed as soon as the nesting period is over. If neither of these options is practicable, the WisDOT construction manager will notify the Southeast Region Technical Services Section Supervisor who will contact USFWS to apply for a depredation permit.

AIR QUALITY Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. Ozone:

A. Is the project located in an area which is designated nonattainment or maintenance for ozone?

- ☒ No, proceed to question 2
- ☐ Yes, proceed to question 1B

B. Is this project exempt from a conformity determination per 40 CFR 93.126 or per 40 CFR 93.128 as a traffic signal synchronization project or is the project exempt from regional emissions analysis requirements per 40 CFR 93.127?

- ☐ No, proceed to question 1C
- ☐ Yes, explain which exemption applies and proceed to question 2:

C. This project is a non-exempt project. One of the following boxes must be checked:

☐ This project is included in a Metropolitan Planning Organization (MPO) Board-approved Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) endorsed by the region's MPO. The RTP and TIP were found to conform to the State Implementation Plan (SIP) for ozone by the Federal Highway Administration and the Federal Transit Administration. There has been no significant change in the design concept or scope from the project description in the RTP and TIP. Provide the following information:

MPO Name:
RTP Name:
TIP Name:
TIP Number:
TIP Project Description:
Conformity Finding Date(s):

☐ Through the interagency consultation process for air quality, this project has been determined to be Not Regionally Significant and is not included in the conforming RTP and TIP. Documentation supporting this conclusion is attached as

☐ This project is located outside of a Metropolitan Planning Organization's boundaries and has received a positive conformity determination per the rural conformity section of the 2012 Interagency Memorandum of Agreement Regarding Determination of Conformity of Transportation Plans, Programs and Projects to State Implementation Plans.
Conformity Finding Date:

☐ Other, describe:

2. Fine Particulate Matter, less than 2.5 microns or less ($PM_{2.5}$)

A. Is the project located in an area which is designated nonattainment or maintenance for $PM_{2.5}$?

- ☐ No, proceed to question 3
- ☒ Yes, proceed to question 2B

B. Is this project exempt from a conformity determination per 40 CFR 93.126 or per 40 CFR 93.128 as a traffic signal synchronization project or is the project exempt from regional emissions analysis requirements per 40 CFR 93.127?

- ☐ No, proceed to question 2C or 2D.
- ☒ Yes, explain which exemption applies and proceed to question 3:

This project is listed as 'exempt' as TIP project number 322 in *Resolution No. 2019-03, Resolution of the Southeastern Wisconsin Regional Planning commission Amending the Transportation Improvement Program for Southeastern Wisconsin: 2019-2022*. 40 CFR 93.126 lists projects with 'pavement resurfacing and/or rehabilitation, shoulder improvements and widening narrow pavements and bridge reconstruction

(no additional travel lanes) as exempt projects. The purpose of this project is to address deteriorating bridge and pavement conditions to maintain safe vehicular movement along I-43 between Capitol Drive and Hampton Avenue.

C. This project is a non-exempt project but does not fall under the category of projects listed under 40CFR93.123(b)(1). Through the interagency consultation process for air quality, this project is not considered a project of local air quality concern. If the following box can be checked, proceed to Question 3. If the following box cannot be checked, continue to Question 2D.

☐ This project is included in a Metropolitan Planning Organization (MPO) Board-approved Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) endorsed by the region's MPO. The RTP and TIP were found to conform to the State Implementation Plan (SIP) for $PM_{2.5}$ by the Federal Highway Administration and the Federal Transit Administration. There has been no significant change in the design concept or scope from the project description in the RTP and TIP. The conformity determinations of the Plan and TIP were based on the latest planning assumptions, using EPA's most recent emissions estimation model. No hot-spot analysis is required.

Provide the following information:

MPO Name:
RTP Name:
TIP Name:
TIP Number:
TIP Project Description:
Conformity Finding Date(s):

D. This project is a non-exempt project and it falls under the category of projects listed under 40 CFR 93.123(b)(1). Through the interagency consultation process for air quality, this project is considered a project of local air quality concern. If the following box can be checked, proceed to Question 3. If the following cannot be checked, continue to Question 2E.

☐ This project is included in a Metropolitan Planning Organization (MPO) Board-approved Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) endorsed by the region's MPO. The RTP and TIP were found to conform to the State Implementation Plan (SIP) for $PM_{2.5}$ by the Federal Highway Administration and the Federal Transit Administration. There has been no significant change in the design concept or scope from the project description in the RTP and TIP. The conformity determinations of the Plan and TIP were based on the latest planning assumptions, using EPA's most recent emissions estimation model. Through the interagency consultation process for air quality, this project is considered a project of local air quality concern per 40 CFR 93.123(b)(1). A quantitative hot-spot analysis was performed and a determination was made, through the interagency consultation process, that implementation of the project will not cause or contribute to any new localized PM violation, increase the frequency or severity of any existing violations, or delay timely attainment of the NAAQS or any required interim emission reductions or other milestone in the PM nonattainment or maintenance area. Documentation supporting this conclusion is attached as .

Provide the following information:

MPO Name:
RTP Name:
TIP Name:
TIP Number:
TIP Project Description:
Conformity Finding Date(s):

E. This project is a new non-exempt project that is of local air quality concern but is not included in a metropolitan plan or TIP. The following box must be checked:

☐ This project was not initially included in a conforming metropolitan plan and TIP. Through the interagency consultation process for air quality, this project is considered a project of local air quality concern per 40 CFR 93.123(b)(1). The plan and TIP have been amended to include the project. A quantitative hot-spot analysis was performed and a determination was made, through the interagency consultation process,

that implementation of the project will not cause or contribute to any new localized PM violation, increase the frequency or severity of any existing violations, or delay timely attainment of the NAAQS or any required interim emission reductions or other milestone in the PM nonattainment or maintenance area. Documentation supporting this conclusion is attached as . Provide the following information:

MPO Name:
RTP Name:
TIP Name:
TIP Number:
TIP Project Description:
Conformity Finding Date(s):

F. Are mitigation measures for $PM_{2.5}$ proposed?

☐ No, explain why: The project is exempt from
☐ Yes, discuss mitigation options considered and identify those measures proposed for implementation:

3. Mobile Source Air Toxics (MSATs):

A. For this project, what level of analysis is required for MSATs?

☒ No analysis is required. The project has no meaningful potential MSAT effects or is an exempt project. One of the following boxes must be checked.

☒ The project qualifies as a categorical exclusion action under 23 CFR 771.117
☐ The project is exempt under 40 CFR 93.126
☐ This document is an environmental assessment, but the project will have no meaningful impact on traffic volume or vehicle mix. Documentation supporting this conclusion is here:

☐ A qualitative analysis is required. The project has low potential for MSAT effects. One of the following boxes must be checked. The qualitative analysis is attached here:

☐ The project is a minor widening project
☐ The project is a new interchange connecting an existing roadway with a new roadway
☐ The project is a new interchange connecting new roadways
☐ The project makes minor improvements or expansions to intermodal centers or other projects that affect truck traffic
☐ The project improves highway, transit or freight operations without adding substantial capacity

☐ A quantitative analysis is required. The project has a higher potential for MSAT effects. One of the following two boxes must be checked and the third box must also be checked. The quantitative analysis is attached here:

☐ The project will create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location, involving a significant number of diesel vehicles for new projects or accommodating with a significant increase in the number of diesel vehicles for expansion projects
☐ The project will create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 or greater by the design year and
☐ The project is proposed to be in proximity to populated areas.

B. Are mitigation measures for MSATs proposed?

☒ No, explain why: Exempt project.
☐ Yes, discuss mitigation options considered and identify those measures proposed for implementation:

CONSTRUCTION SOUND Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Identify and describe residences, schools, libraries, government or social services offices or other noise sensitive areas near the proposed project which will be in use during construction window of the proposed project. Include the number of persons potentially affected:**

   There are 380 residences (Land Use Category B), seventeen (17) recreational facilities (Land Use Category C), including Lincoln Park Golf Course, Evergreen Cemetery, two (2) daycares, and outdoor use at Messmer High School and River Glen Pediatrics, three (3) interior institutional facilities (Land Use Category D), including Outreach Community Health Center, St. James Deliverance Church and Columbia College of Nursing, and five (5) office, hotel or restaurant facilities with outdoor use (Land Use Category E) abutting the proposed roadway improvement within the project limits.

2. **Describe the types of construction equipment to be used on the project. Discuss the expected severity of noise levels including the frequency and duration of any anticipated high noise levels:**

   Noise will be generated by construction equipment used to construct and reconstruct the study-area local roadway system. Typical construction equipment would include dump trucks, graders, cranes, bulldozers, and pavement construction equipment. The noise generated by this type of construction equipment will vary greatly, depending upon the equipment type and model, mode and duration of operation, and specific type of work effort; however, typical noise levels may occur in the 75 to 95 dBA range (at 50 feet). Other distance-typical noise level ranges are shown on Table 1: Construction Noise/Distance Relationships.

   Variations in building setbacks and land use, local intensity of specific construction activities, and sequencing and timing of construction will result in varying degrees of exposure to construction noise and hence varying levels of resulting construction noise impacts. Adverse effects related to construction noise are anticipated to be of a localized, temporary, and transient nature.

3. **Describe the construction stage noise abatement measures to minimize identified adverse noise effects:**
   . Check all that apply:

   ☒ WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply.

   ☐ WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply with the exception that the hours of operation requiring the engineer's written approval for operations will be changed to _____ p.m. until _____a.m.

   ☐ Special construction stage noise abatement measures will be required. Describe:

Table 1: Construction Noise/ Distance Relationships

Distance from Construction Site (feet)	Range of Typical Noise Levels (dBA)[1]
25	82 – 102
50	75 – 95
100	69 – 89
200	63 – 83
300	59 – 79
400	57 – 77
500	55 – 75
1000	49 – 69

[1] Point sources = 6 dBA reduction per doubling of distance
Source: FDM 23-40, Attachment 1.1

TRAFFIC NOISE Factor Sheet

06-11-2019 Wisconsin Department of Transportation

Alternative: Build	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Need for Noise Analysis:**
   Is the proposed action considered a Type I project? (A Type I project is defined in FDM 23-10-1.1).
   ☐ No, complete the Construction Stage Sound Quality Impact Evaluation Factor Sheet.
   ☒ Yes, complete the Construction Stage Sound Quality Impact Evaluation Factor Sheet and the rest of this sheet.

2. **Traffic Data:**
   Indicate whether traffic volumes for sound prediction are different from the Design Hourly Volume (DHV) on The ER and EA Template in Question 18:
   ☒ No
   ☐ Yes – Indicate volumes and explain why they were used:
   Automobiles: Vehicles/hour
   Trucks: Vehicles/hour
   Or Percentage (T): %

3. **Sound Level Analysis Technique:**
   Identify and describe the noise analysis technique or program used to identify existing and future sound levels: A receptor location map must be included with this document. (See attached receptor location map in Appendix H).

   Aerial photos and land use data of the entire study area were reviewed to select 216 representative noise receivers (N1 – N210) representing 380 residential receptors, seventeen (17) recreational outdoor use receptors, three (3) interior use receptors and five (5) commercial with outdoor use receptors. Receiver/receptor locations are identified in Appendix H.

   The Federal Highway Administration (FHWA) Traffic Noise Model, v 2.5 (TNM®2.5) was used to model existing (2019) and future (2050) peak hour noise levels at the 216 representative noise receptors.

4. **Sensitive Receptors:**
   Identify sensitive receptors, e.g., schools, libraries, churches, hospitals, residences, resources protected by Section 4(f), etc., potentially affected by traffic sound: (See attached receptor location map –Appendix H).

   There are 380 residences (Land Use Category B), seventeen (17) recreational facilities (Land Use Category C), including Lincoln Park Golf Course, Evergreen Cemetery, two (2) daycares, and outdoor use at Messmer High School and River Glen Pediatrics, three (3) interior institutional facilities (Land Use Category D), including Outreach Community Health Center, St. James Deliverance Church and Columbia College of Nursing, and five (5) office, hotel or restaurant facilities with outdoor use (Land Use Category E) abutting the proposed roadway improvement within the project limits.

5. **Noise Impacts:**
   If this alternative is constructed would future sound levels produce a noise impact:
   ☐ No
   ☒ Yes
   ☒ The Noise Level Criteria (NLC) is approached (1 dBA less than the NLC) or exceeded
   ☐ Existing sound levels will increase by 15 dBA or more

The future noise levels developed with TNM indicate that sixty-seven (67) residences and eight (8) recreational land uses would be exposed to Leq noise levels that approach or exceed the criteria. No receptors in the project study area would be exposed to an increase in sound levels of 15 dBA or more. The results of the TNM analysis are presented on Pages 4 of 9 through 8 of 9.

6. Abatement:

Will traffic noise abatement measures be implemented?

☐ Not applicable, traffic noise impacts will not occur.

☐ No, traffic noise abatement is not reasonable or feasible, explain:
In areas currently undeveloped, local units of government shall be notified of predicted sound levels for land use planning purposes.

☒ Yes, traffic noise abatement has been determined to be feasible and reasonable, a map of likely abatement locations is included in Appendix H. Describe any traffic noise abatement measures which are proposed to be implemented and explain the process by which the implementation, or lack thereof, was determined:

Various methods were reviewed to mitigate the noise impact of the proposed project. Among these were vertical and horizontal alignment shifts, restriction of truck traffic to specific times of the day, a total prohibition of truck traffic, the use of berms and the use of sound barriers.

Shifts in the alignment are not practical because of limited right-of-way and fixed termini. Prohibition of truck traffic is not feasible for this project. Due to right-of-way limitation, the construction of noise berms is neither feasible nor reasonable. Therefore, only the construction of noise barriers was reviewed. Abatement is recommended only when it is feasible and reasonable to construct a noise barrier.

WisDOT's Facilities Development Manual Chapter 23 Noise (FDM 23 Noise) has established criteria for determining noise barrier feasibility and reasonableness and summarized as follows:

> The barrier must provide a minimum 5-decibel noise reduction at one (1) impacted receptor or common use area to be considered feasible.
>
> One receptor or common use area must meet the 9-decibel noise reduction design goal for the noise barrier to be considered for reasonableness.
>
> A noise barrier must reduce noise levels by a minimum of 8 decibels for a receptor or common use area to be considered as benefited for the purposes of determining reasonableness. The total cost of the barrier may not exceed $47,000 per benefited receptor based on a noise barrier cost of $28.00 per square foot.
>
> If a common noise environment exists within the project termini, cost-averaging of multiple barriers within the common noise environment may occur as part of the reasonableness determination. Noise barriers exceeding $94,000 per benefited receptor cannot be included in the cost averaging. The order of cost averaging of eligible multiple barriers will start with the most cost-effective noise barrier increasing to the second most cost-effective barrier to the third, etc., until the average cost approaches or equals but does not exceed $47,000 per benefited receptor. The noise barriers included in the cost averaging may be carried forward for a determination of whether they will be incorporated into the project. The department must receive a vote of support for the project from a simple majority of all votes cast by the owners or residents of the benefited receptors.

Seven noise barriers (NB-1 through NB-7) were analyzed adjacent to the study-area. The noise barriers are identified in Appendix H.

The results of the noise barrier analysis, including barrier location, future Leq(h) noise levels without and with a barrier, barrier length and height, estimated cost, the number of benefited receptors, the noise reduction provided by the barrier and the cost per benefited receptor are presented on Page 9 of 9. Three noise barriers analyzed would meet FDM 23 Noise feasibility criteria and reasonableness criteria. Cost averaging provided cost reasonableness for one noise barrier (NB-3); however, this barrier is an existing noise barrier that will be replaced as part of the proposed improvement.

The replacement for the existing noise barrier (NB-3) would be located along I-43 southbound and the West Hampton Avenue on ramp to I-43 southbound between approximately the Milwaukee River and just south of Glendale Avenue. This barrier would be 1,349-feet long and 14 to 22 feet high. This barrier would extend over the existing bridge at West Glendale Avenue in order to replace the existing barrier that is already located on this bridge structure. The replacement noise barrier would benefit 15 receptors, and the resulting cost per benefited receptor would be $49,181 before cost-averaging.

The two new noise barriers would be located north of West Messmer Street along I-43 northbound and the I-43 northbound off ramp to Green Bay Avenue (NB-6) and along I-43 southbound and the Green Bay Avenue on ramp to I-43 southbound (NB-7). The noise barrier along I-43 northbound (NB-6) would be 740-feet long and 14 to 24 feet high; this barrier would turn east along the West Fiebrantz Avenue on ramp to I-43 northbound for approximately 180 feet of the total length. The noise barrier would benefit 12 receptors, and the resulting cost per benefited receptor would be $33,573. The noise barrier along I-43 southbound (NB-7) would be 426-feet long and 14 to 16 feet high; this barrier would turn west along North 9th Street for approximately 90 feet of the total length. The noise barrier would benefit 8 receptors, and the resulting cost per benefited receptor would be $22,101.

Receivers south of West Capitol Drive shown in Appendix H are outside of the project limit for this project section (1228-22-01). These receptors were included in the noise analysis because they are within 500 feet of the southern project termini. Noise barriers for impacts south of West Capitol Drive will be analyzed with an adjacent project section (1228-22-00).

In the undeveloped areas of the project the 66 dBA Leq setback distance along I-43 would be 250 feet. This setback distance indicates that noise levels within this distance, measured perpendicular to the centerline of the nearest lane in either direction, is 66 dBA Leq or greater. This setback distance was developed to assist local planning authorities in developing land use control over the remaining undeveloped lands along the project in order to prevent further development of incompatible land use.

7. Summary of Receptor Data (complete the following table):

			Sound Level L_{eq} (dBA)[1]			Impact Evaluation		
A. Receptor Location or Site Identification (See map attached here: E-2/E-3)	**B. Distance from C/L of Mainline Near Lane (Existing / Future) to Receptor in feet (ft.)**	**C. Number of Families or People Typical of this Receptor Site**	**D. Noise Level Criteria[2] (NLC) (dBA)**	**E. Future Sound Level (dBA)**	**F. Existing Sound Level (dBA)**	**G. Difference in Future and Existing Sound Levels (E minus F) (dBA)**	**H. Difference in Future Sound Levels and Noise Level Criteria (E minus D) (dBA)**	**I. Impact (I) or No Impact[3] (N)**
N1	197	1	72	69	69	0	-3	N
N2	331	1	67	61	61	0	-6	N
N3	207	1	67	67	67	0	0	I
N4	370	1	67	63	62	1	-4	N
N5	104	1	67	74	74	0	7	I
N6	395 / 448	1	67	64	64	0	-3	N
N7	132 / 189	1	67	67	69	-2	0	I
N8	109 / 163	1	67	68	70	-2	1	I
N9	377	1	72	61	61	0	-11	N
N10	160	2	67	73	73	0	6	I
N11	297 / 294	2	67	63	63	0	-4	N
N12	177 / 172	2	67	70	72	-2	3	I
N13	319 / 308	2	67	63	62	1	-4	N
N14	188 / 171	2	67	70	71	-1	3	I
N15	339 / 317	2	67	63	63	0	-4	N
N16	495 / 474	4	67	60	59	1	-7	N
N17	204 / 172	2	67	71	71	0	4	I
N18	350 / 315	2	67	63	63	0	-4	N
N19	230 / 183	2	67	71	70	1	4	I
N20	365 / 319	2	67	63	62	1	-4	N
N21	532 / 488	4	67	60	59	1	-7	N
N22	394 / 338	2	67	63	62	1	-4	N
N23	260 / 200	2	67	70	69	1	3	I
N24	562 / 502	3	67	61	60	1	-6	N
N25	412 / 349	2	67	64	63	1	-3	N
N26	280 / 212	1	67	70	69	1	3	I
N27	447 / 371	2	67	65	64	1	-2	N
N28	296 / 218	2	67	70	69	1	3	I
N29	595 / 521	3	67	60	59	1	-7	N
N30	458 / 374	2	67	64	63	1	-3	N
N31	323 / 233	2	67	69	69	0	2	I
N32	627 / 537	4	67	59	59	0	-8	N
N33	469 / 377	2	67	64	63	1	-3	N
N34	340 / 242	2	67	68	69	-1	1	I
N35	475 / 376	2	67	63	63	0	-4	N
N36	647 / 546	3	67	59	58	1	-8	N
N37	354 / 251	1	67	68	68	0	1	I
N38	484 / 382	2	67	63	63	0	-4	N
N39	338 / 239	14	67	69	69	0	2	I
N40-1	651 / 552	2	67	60	60	0	-7	N
N40-2	651 / 552	2	67	63	62	1	-4	N
N41	505 / 408	14	67	62	63	-1	-5	N
N42	158 / 176	1	67	63	64	-1	-4	N

[1] Use whole numbers only.

[2] Insert the actual Noise Level Criteria from WisDOT Facilities Development Manual, Section 23-30, Table 2.1.

[3] An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.

7. Summary of Receptor Data (cont'd):

			Sound Level L_{eq} (dBA)[1]			Impact Evaluation		
A. Receptor Location or Site Identification (See map attached here: E-2/E-3)	**B. Distance from C/L of Mainline Near Lane (Existing / Future) to Receptor in feet (ft.)**	**C. Number of Families or People Typical of this Receptor Site**	**D. Noise Level Criteria[2] (NLC) (dBA)**	**E. Future Sound Level (dBA)**	**F. Existing Sound Level (dBA)**	**G. Difference in Future and Existing Sound Levels (E minus F) (dBA)**	**H. Difference in Future Sound Levels and Noise Level Criteria (E minus D) (dBA)**	**I. Impact (I) or No Impact[3] (N)**
N43	119 / 137	1	67	62	63	-1	-5	N
N44	196 / 214	1	67	63	64	-1	-4	N
N45	249 / 266	1	67	63	64	-1	-4	N
N46	281 / 298	1	67	63	63	0	-4	N
N47	314 / 331	1	67	62	63	-1	-5	N
N48	358 / 374	1	67	61	62	-1	-6	N
N49	399 / 415	1	67	61	62	-1	-6	N
N50	463 / 477	1	67	61	61	0	-6	N
N51	521 / 534	1	67	60	61	-1	-7	N
N52	170 / 177	1	67	60	61	-1	-7	N
N53	321 / 327	1	67	59	61	-2	-8	N
N54	168 / 174	1	67	60	61	-1	-7	N
N55	398 / 401	1	67	57	59	-2	-10	N
N56	179 / 182	1	67	60	61	-1	-7	N
N57	491 / 494	1	67	58	59	-1	-9	N
N58	178 / 179	1	67	60	61	-1	-7	N
N59	329 / 330	2	67	58	60	-2	-9	N
N60	179	1	67	60	61	-1	-7	N
N61	520 / 517	3	67	56	58	-2	-11	N
N62	377 / 374	1	67	56	59	-3	-11	N
N63	176 / 174	1	67	60	61	-1	-7	N
N64	177 / 172	1	67	60	61	-1	-7	N
N65	332 / 327	2	67	57	60	-3	-10	N
N66	179 / 172	1	67	60	61	-1	-7	N
N67	389 / 381	1	67	59	59	0	-8	N
N68	516 / 507	3	67	56	58	-2	-11	N
N69	176 / 167	1	67	60	62	-2	-7	N
N70	180 / 170	1	67	60	62	-2	-7	N
N71	333 / 320	2	67	57	59	-2	-10	N
N72	178 / 165	1	67	60	61	-1	-7	N
N73	523 / 506	3	67	56	58	-2	-11	N
N74	177 / 160	1	67	60	61	-1	-7	N
N75	332 / 314	2	67	57	58	-1	-10	N
N76	177 / 157	1	67	60	61	-1	-7	N
N77	523 / 493	2	67	56	56	0	-11	N
N78	173 / 149	1	67	61	62	-1	-6	N
N79	331 / 304	2	67	57	58	-1	-10	N
N80	172 / 145	1	67	61	61	0	-6	N
N81	171 / 140	1	67	61	62	-1	-6	N
N82	325 / 286	2	67	58	57	1	-9	N
N83	464 / 419	1	67	57	57	0	-10	N
N84	162 / 125	1	67	62	63	-1	-5	N
N85	522 / 470	1	67	59	59	0	-8	N

[1] Use whole numbers only.

[2] Insert the actual Noise Level Criteria from WisDOT Facilities Development Manual, Section 23-30, Table 2.1.

[3] An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.

7. Summary of Receptor Data (cont'd):

			Sound Level L_{eq} (dBA)[1]			Impact Evaluation		
A. Receptor Location or Site Identification (See map attached here: E-2/E-3)	**B. Distance from C/L of Mainline Near Lane (Existing / Future) to Receptor in feet (ft.)**	**C. Number of Families or People Typical of this Receptor Site**	**D. Noise Level Criteria[2] (NLC) (dBA)**	**E. Future Sound Level (dBA)**	**F. Existing Sound Level (dBA)**	**G. Difference in Future and Existing Sound Levels (E minus F) (dBA)**	**H. Difference in Future Sound Levels and Noise Level Criteria (E minus D) (dBA)**	**I. Impact (I) or No Impact[3] (N)**
N86	489 / 422	1	72	59	58	1	-13	N
N87	689 / 632	1	72	61	62	-1	-11	N
N88	126 / 91	1	67	65	70	-5	-2	N
N89	251 / 233	1	72	66	66	0	-6	N
N90	545 / 539	1	67	63	64	-1	-4	N
N91	138 / 111	1	52	47	46	1	-5	N
N92	512 / 443	1	67	61	62	-1	-6	N
N93	327 / 254	1	67	65	63	2	-2	N
N94	578 / 493	1	67	61	62	-1	-6	N
N95	386 / 304	1	67	64	63	1	-3	N
N96	242 / 163	1	67	67	64	3	0	I
N97	145 / 68	1	67	71	65	6	4	I
N98	193 / 192	1	67	64	65	-1	-3	N
N99	352 / 351	2	67	64	64	0	-3	N
N100	496 / 495	3	67	63	63	0	-4	N
N101	770 / 769	1	67	66	66	0	-1	I
N102	195 / 194	1	67	65	65	0	-2	N
N103	838 / 836	1	67	61	61	0	-6	N
N104	201	1	67	65	66	-1	-2	N
N105	855 / 854	1	67	58	58	0	-9	N
N106	361	2	67	64	64	0	-3	N
N107	522	8	67	64	64	0	-3	N
N108	205	2	67	66	66	0	-1	I
N109	864	3	67	58	58	0	-9	N
N110	505	1	67	64	64	0	-3	N
N111	370	4	67	65	65	0	-2	N
N112	726	1	52	46	46	0	-6	N
N113	486	4	67	65	65	0	-2	N
N114	873	2	67	55	55	0	-12	N
N115	378	2	67	66	66	0	-1	I
N116	879	4	67	55	55	0	-12	N
N117	901	4	67	54	54	0	-13	N
N118	702	1	67	63	63	0	-4	N
N119	635	2	67	68	68	0	1	I
N120	910	3	67	55	55	0	-12	N
N121	654	2	67	65	64	1	-2	N
N122	795	3	67	57	56	1	-10	N
N123	772	3	67	58	58	0	-9	N
N124	762	3	67	60	60	0	-7	N
N125	926	4	67	58	57	1	-9	N
N126-1	96	1	67	75	75	0	8	I
N126-2	96	1	67	77	77	0	10	I
N127	769	4	67	59	59	0	-8	N

[1] Use whole numbers only.

[2] Insert the actual Noise Level Criteria from WisDOT Facilities Development Manual, Section 23-30, Table 2.1.

[3] An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.

7. Summary of Receptor Data (cont'd):

			Sound Level L_{eq} (dBA)[1]			Impact Evaluation		
A. Receptor Location or Site Identification (See map attached here: E-2/E-3)	**B. Distance from C/L of Mainline Near Lane (Existing / Future) to Receptor in feet (ft.)**	**C. Number of Families or People Typical of this Receptor Site**	**D. Noise Level Criteria[2] (NLC) (dBA)**	**E. Future Sound Level (dBA)**	**F. Existing Sound Level (dBA)**	**G. Difference in Future and Existing Sound Levels (E minus F) (dBA)**	**H. Difference in Future Sound Levels and Noise Level Criteria (E minus D) (dBA)**	**I. Impact (I) or No Impact[3] (N)**
N128-1	98	1	67	75	74	1	8	I
N128-2	155	1	67	60	60	0	-7	N
N129	622	1	67	65	64	1	-2	N
N130	934	4	67	57	57	0	-10	N
N131-1	99	1	67	75	74	1	8	I
N131-2	99	1	67	77	76	1	10	I
N132	102	1	67	75	74	1	8	I
N133	610	2	67	64	64	0	-3	N
N134-1	104	1	67	74	74	0	7	I
N134-2	157	1	67	60	60	0	-7	N
N135	778	4	67	59	59	0	-8	N
N136	105	1	67	75	74	1	8	I
N137	609	3	67	60	60	0	-7	N
N138	779	3	67	58	58	0	-9	N
N139	612	2	67	57	57	0	-10	N
N140	640	2	67	57	57	0	-10	N
N141	566	4	67	58	58	0	-9	N
N142	476	4	67	63	62	1	-4	N
N143	439	1	67	62	62	0	-5	N
N144	434	2	67	58	58	0	-9	N
N145	293	4	67	58	58	0	-9	N
N146	948	2	67	54	54	0	-13	N
N147	800	3	67	56	56	0	-11	N
N148	630	2	67	59	60	-1	-8	N
N149	476	1	67	63	63	0	-4	N
N150	943	1	67	54	55	-1	-13	N
N151	792	3	67	56	56	0	-11	N
N152	620	3	67	60	60	0	-7	N
N153	471	2	67	64	64	0	-3	N
N154	468	2	67	66	66	0	-1	I
N155	931	2	67	55	55	0	-12	N
N156	787	3	67	56	56	0	-11	N
N157	608	2	67	61	61	0	-6	N
N158	998	1	67	56	56	0	-11	N
N159	458	1	67	66	66	0	-1	I
N160-1	256	1	67	66	66	0	-1	I
N160-2	317	1	67	62	62	0	-5	N
N161	594	3	67	62	62	0	-5	N
N162	764	3	67	58	58	0	-9	N
N163	915	2	67	56	56	0	-11	N
N164	456	1	67	65	65	0	-2	N
N165	251	1	67	66	66	0	-1	I
N166	245	1	67	66	66	0	-1	I

[1] Use whole numbers only.

[2] Insert the actual Noise Level Criteria from WisDOT Facilities Development Manual, Section 23-30, Table 2.1.

[3] An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.

7. Summary of Receptor Data (cont'd):

			Sound Level L_{eq} (dBA)[1]			Impact Evaluation		
A. Receptor Location or Site Identification (See map attached here: E-2/E-3)	**B. Distance from C/L of Mainline Near Lane (Existing / Future) to Receptor in feet (ft.)**	**C. Number of Families or People Typical of this Receptor Site**	**D. Noise Level Criteria[2] (NLC) (dBA)**	**E. Future Sound Level (dBA)**	**F. Existing Sound Level (dBA)**	**G. Difference in Future and Existing Sound Levels (E minus F) (dBA)**	**H. Difference in Future Sound Levels and Noise Level Criteria (E minus D) (dBA)**	**I. Impact (I) or No Impact[3] (N)**
N167	589	2	67	60	60	0	-7	N
N168	759	2	67	56	56	0	-11	N
N169	412	1	67	64	64	0	-3	N
N170	910	2	67	55	56	-1	-12	N
N171	239	1	67	67	67	0	0	I
N172	953	1	67	55	55	0	-12	N
N173	752	3	67	55	56	-1	-12	N
N174	582	2	67	59	59	0	-8	N
N175	235	1	67	68	68	0	1	I
N176	414	1	67	64	63	1	-3	N
N177	899	1	67	53	54	-1	-14	N
N178	232	1	67	69	68	1	2	I
N179	434	2	67	64	63	1	-3	N
N180	577	2	67	58	57	1	-9	N
N181	747	2	67	55	55	0	-12	N
N182	916	1	67	53	54	-1	-14	N
N183	232	1	67	69	69	0	2	I
N184	229	1	67	69	68	1	2	I
N185	430	3	67	63	63	0	-4	N
N186	735	1	67	54	54	0	-13	N
N187	76	1	67	77	76	1	10	I
N188	572	3	67	55	55	0	-12	N
N189	73	1	67	77	76	1	10	I
N190	732	4	67	54	54	0	-13	N
N191	425	1	67	63	62	1	-4	N
N192	569	3	67	54	54	0	-13	N
N193	73	1	67	77	76	1	10	I
N194	409	1	67	63	62	1	-4	N
N195	78	1	67	76	76	0	9	I
N196	233	1	67	68	68	0	1	I
N197	323	1	67	62	61	1	-5	N
N198	282	1	67	63	63	0	-4	N
N199	567	2	67	56	56	0	-11	N
N200	99	1	67	74	74	0	7	I
N201	347	1	52	41	41	0	-11	N
N202	395	3	67	58	58	0	-9	N
N203	353	2	67	59	59	0	-8	N
N204	296	2	67	62	62	0	-5	N
N205	265	2	67	64	64	0	-3	N
N206	396	2	67	58	57	1	-9	N
N207	326	1	67	60	60	0	-7	N
N208	445	1	67	56	55	1	-11	N
N209	205	2	67	70	70	0	3	I
N210	235	1	67	66	66	0	-1	I

[1] Use whole numbers only.

[2] Insert the actual Noise Level Criteria from WisDOT Facilities Development Manual, Section 23-30, Table 2.1.

[3] An impact occurs when future sound levels exceed existing sound levels by 15 dB or more, **or**, future sound levels approach or exceed the Noise Level Criteria ("approach" is defined as 1 dB less than the Noise Level Criteria, therefore an impact occurs when Column (h) is –1 dB or greater). I = Impact, N = No Impact.

8. Summary of Noise Barrier Data:

Acoustical Mitigation—Noise Barrier Locations Analyzed											
Barrier Number	Locations	Existing L_{eq}(1h) Noise Levels, dBA	Range of Future L_{eq}(1h) Noise Levels, dBA		Noise Reduction (dB)	Barrier Characteristics		Cost[a]	Number of Benefited Receptors[b]	Cost per Benefited Receptor	Feasible and Reasonable
			w/o Barrier	Barrier		Length (ft)	Height (ft)				
1	West of I-43 along right-of-way between Oak Leaf Trail and Hampton Ave.	74	74	65	9	1,780	10	$498,518	1	$498,518	N
2	East of I-43 between Hampton Ave and Oak Leaf Trail.	68-73	68-73	65-68	1-6	1,663	24	$1,117,303	0	N/A	N
3	West of I-43 from Milwaukee River to South of Glendale Ave	61-62	68-69	60-61	8-9	1,349	14-22	$737,716	15	$49,181	Y[c,d]
4	West of I-43 between Glendale Ave and Capitol Dr at Evergreen Cemetery	64-65	67-71	59-61	8-10	973	6-16	$372,467	2	$186,234	N
5	West of I-43 along SB I-43 off ramp to Green Bay Ave right-of-way north of Capitol Dr.	66	66	58-61	5-8	592	24	$397,745	0	N/A	N
6	East of I-43 between W Messmer St and Fiebrantz Ave on ramp to NB I-43	66-76	66-77	58-68	8-15	740	14-24	$402,878	12	$33,573	Y
7	West of I-43 along 9th St north of Capitol Dr.	74-77	74-77	63-69	8-12	426	14-16	$176,808	8	$22,101	Y

[a] Based on $28.00 per square foot

[b] Benefited receptors within the termini of the barrier

[c] Based on cost averaging of multiple barriers within the common noise environment

[d] This is an existing noise barrier that will be replaced as part of the proposed improvement.

HAZARDOUS SUBSTANCES, CONTAMINATION and ASBESTOS Factor Sheet

06-10-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

I. HAZARDOUS SUBSTANCES and CONTAMINATION

1. Briefly describe the results of the Phase 1 Hazardous Materials Assessment for this alternative. Do not use property identifiers including owner name, address or business name. Attach additional sheets if necessary.

Site Reference #	Land Use of Concern (Past or Present)	Contaminants of Concern	Phase 1 Recommendations (No further action, or is a phase 2, 2.5 or 3 recommended for this site, and why?)
18	Historical Auto Station	Potential residual soil / groundwater impacts associated with underground storage tank (UST)	Phase 1 investigations identified Site 18 as site of concern requiring additional investigation. Upon further review, WisDOT determined the residual contamination that may be present, along with the subject project excavation requirements did not result in a determination for further investigation. Proximity of the subject project or excavation depth requirements led to this determination.
19	Auto Sales and Service	Active very small quantity hazardous waste generator	Phase 1 investigations identified Site 19 as site of concern requiring additional investigation. Upon further review, WisDOT determined the residual contamination that may be present, along with the subject project excavation requirements did not result in a determination for further investigation. Proximity of the subject project or excavation depth requirements led to this determination.

Site Reference #	Land Use of Concern (Past or Present)	Contaminants of Concern	Phase 1 Recommendations (No further action, or is a phase 2, 2.5 or 3 recommended for this site, and why?)
20	Commercial Retail	Inactive very small quantity hazardous waste generator and an active small quantity hazardous waste generator. Wastes previously handled at this facility are not listed, and the wastes currently handled include benzene, cadmium, mercury, methyl ethyl ketone, non-listed corrosives and ignitable wastes, and spent non-halogenated solvents.	Phase 1 Report recommends no further action at Site 20. Considering the distance of residual soil and groundwater impacts (~650 to 1,000 feet), this site is unlikely to impact the proposed improvements. As part of geotechnical investigations, WisDOT advanced soil borings at Site 20 adjacent to the existing bridge B-40-115. If further results of soil boring data indicate potential presence of hazardous materials, WisDOT will pursue further investigations.
21	Vacant Buildings/Lot	Leaded gasoline UST, Unleaded gasoline UST, used oil UST, chemical UST, and new oil UST	Phase I investigations recommended no further action at Site 21. Considering the distance of residual soil impacts (~350 feet) and depth to groundwater (> 16 feet bgs), this site is unlikely to impact the proposed improvements.
22	Former Gas Station	Fuel oil UST	Phase 1 investigations recommended a Phase 2 investigation at Site 22. However, this site was the subject of a subsurface investigation in March of 2017 under project 1228-22-02/72. This effort did not identify soil contamination within the project limits. No further action required.

Additional comments: The Phase 1 Hazardous Materials Assessment (HMA) was completed for I-43 between North Avenue and Bender Road and the sites identified above are the only sites within the Phase 1 HMA study area of I-43 between Capitol Drive and Hampton Avenue.

2.Were any parcels not included in the Phase 1 assessment?

☒ No
☐ Yes, how many:
Why were parcels not reviewed? Explain:

3. Are there any sites with continuing obligations or deed restrictions?

☐ No
☒ Yes, complete the table for each site closed with continuing obligations or deed restrictions:

Site Reference #	Soil or Excavation Restrictions	Groundwater Restrictions	Cover Restrictions	Other Restrictions	DNR Notification Required?
21	Residual soil contamination remains at depth greater than 4-feet. Soil excavation restrictions and requirements remain for the site.	None	None	None	☒ No ☐ Yes ☐ Yes, DNR has been notified. DNR response is attached.

4. Have Phase 2, 2.5 or 3 Assessments been completed? Discuss the results: Per, Question 1 above, no Phase 2 investigations were advanced.

Site Reference #	Phase 2, 2.5 or 3 Recommendations	Materials Handling Plan or Remediation Recommended?		Is WisDOT a Responsible Party?	
		Yes	No	Yes	No

5. Describe the results of any additional investigations performed by WisDOT or others (Include the number of sites investigated, the level of investigation and results for each site that relates to this project): Soil borings were advanced at Site 20 related to geotechnical investigations adjacent to the existing bridge B-40-115 and results are pending. Additionally, sediment sampling is underway at the Milwaukee River within the project area.

6. Describe any design elements that have been incorporate into this alternative to avoid any contaminated sites: None required at this time.

7. Describe the remediation and waste management practices to be included in the design for areas where contamination cannot be avoided (e.g., materials handling plan, remediation of contamination, design changes to minimize disturbances): Disturbance near potentially contaminated sites would be minimized to the extent possible and practicable. As applicable, the contract special provisions would include a Notice to Contractor describing the potential contamination with names and locations of the sites. WisDOT will properly dispose of any contaminated materials encountered.

8. List any parcels with known contamination which are proposed for acquisition: The proposed action would partially acquire portions of Site #20 and Site #21, but acquisition is not expected to affect impacted soil or groundwater.

II. ASBESTOS

1. Have all the bridges on the project been inspected for the presence of asbestos containing material (ACM):

☐ No, explain:

☒ Yes, fill out the table below and insert additional data as needed:

Bridge Number	Results of Asbestos Sampling	Proposed Work (brief description)	List the Appropriate Special Provision
B-40-117	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Replace bridge with one new bridge that is widened to meet current design standards	Standard Special Provision (STSP) 107-125 should be included in the specifications.
B-40-116	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Rehabilitate bridge - concrete overlay and painting	Standard Special Provision (STSP) 107-125 should be included in the specifications.
B-40-115	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Remove bridge and reconstruct I-43 mainline on fill supported by retaining walls	Standard Special Provision (STSP) 107-125 should be included in the specifications.
B-40-073	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Replace bridge that is widened to not preclude future modernization of freeway	Standard Special Provision (STSP) 107-125 should be included in the specifications.
B-40-067	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Rehabilitate bridge – replace deck and widen to address substandard shoulders	Standard Special Provision (STSP) 107-125 should be included in the specifications.
B-40-066	No potentially asbestos-containing materials (ACM) tested positive for asbestos	Replace bridge with two new bridges that are widened to not preclude future modernization of freeway	Standard Special Provision (STSP) 107-125 should be included in the specifications.

2. **Number of structures (buildings) proposed to be acquired and demolished:** None

3. **Number of structures (buildings) proposed to be acquired and relocated:** None

4. **Are there utilities with known transite conduit or piping located within the project limits?**
   ☒ **No** ☐ **Yes - answer 4.a. and 4.b.**
   a. **Number of linear feet of conduit expected be impacted:**
      Who will conduct the abatement during construction?
      ☐ **Utility** ☐ **Municipality** ☐ **Included in construction contract***
      * STSP 203-006 must be included as an environmental commitment.
   b. **Number of linear feet of conduit expected to be protected:**

STORMWATER Factor Sheet

06-13-2019 Wisconsin Department of Transportation

Alternative: Build Alternative Rehabilitation	Preferred: ☒ Yes ☐ No ☐ None identified	Project ID: 1228-22-01

1. **Special consideration should be given to areas that are sensitive to water quality degradation. Indicate whether a sensitive area is present and provide specific recommendations on the level of protection needed.**
   - ☐ No, special natural resources are not affected by the alternative
   - ☒ Yes, special natural resources exist in the project area
     - ☐ DNR designated Outstanding Resource Waters (ORW)
     - ☐ DNR Designated Exceptional Resource Waters (ERW)
     - ☒ Wetland(s)
     - ☐ Lake
     - ☐ Endangered species or critical habitat
     - ☐ Cold water stream
     - ☒ Other waterways
     - ☐ Areas of groundwater recharge
     - ☒ Total Maximum Daily Load (TMDL)
     - ☐ Other, describe:

   Describe protection recommendations: Two wet detention ponds proposed within along the project will conform to TS4 requirements. The U.S. Environmental Protection Agency (EPA) approved the Milwaukee River TMDLs in March 2018. The proposed wet detention basins will be consistent with current stormwater management requirements as the Wisconsin Department of Natural Resources (DNR) completes the implementation planning phase that will identify future strategies for achieving TMDL.

2. **Indicate whether circumstances exist in the project vicinity that require additional consideration such as an increase in peak flow, total suspended solids (TSS) or water volume.**
   - ☐ No, additional or special circumstances are not present.
   - ☒ Yes, additional or special circumstances exist. Indicate all that are present:
     - ☐ Areas of groundwater discharge
     - ☐ Stream relocations
     - ☐ Long or steep cut or fill slopes
     - ☐ Increased backwater
     - ☐ Rural to urban conversion
     - ☒ Impaired waterway
     - ☐ High velocity flows
     - ☐ Large quantity flows
     - ☐ Significant increase in impervious surface
     - ☐ Other – Describe any unique, innovative, or atypical stormwater management measures to be used:

3. **Describe the overall stormwater management strategy to minimize adverse effects and enhance beneficial effects:** The existing stormwater runoff from the freeway directly discharges to the Milwaukee River and does not provide TSS reduction. The Build Alternative Rehabilitation would implement new stormwater management strategies including the construction of two stormwater wet detention ponds that would reduce runoff and improve water quality. Construction details associated with these ponds include reconstructing less than 1.5 miles of roadway and roadway bed widening less than 100 feet.

4. **Indicate how the stormwater management plan will be compatible with fulfilling Trans 401 and the WDNR Transportation Separate Storm Sewer System permit (TS4) requirements:** Proposed storm water management strategies will conform to NR 151/TS4 requirement for 40% TSS removal.

5. Identify the stormwater management measures to be considered:

☐ Swale treatment (parallel to flow) Trans 401.106(10)	☐ In-line storm sewer treatment, such as catch basins, non-mechanical treatment systems
☐ Vegetated filter strip (perpendicular to flow)	☒ Detention basins
☐ Distancing outfalls from waterway edge	☐ Constructed storm water wetlands
☐ Infiltration – Trans 401.106(5)	☐ Buffer areas – Trans 401.106(6)
☐ Other – Describe:	☐ Other – Describe:

6. Indicate whether any Drainage District may be affected by the project (https://datcp.wi.gov/Pages/Programs_Services/DrainageDistricts.aspx**).**

☒ No, none identified

☐ Yes, has initial coordination with a drainage board been completed?

- ☐ No, explain why:
- ☐ Yes, discuss results:

7. Indicate whether the project is within a WDNR Municipal Separate Storm Sewer System (MS4) permitted stormwater management area or a WDNR TS4 stormwater management area.

☐ No, the project is outside of a MS4 or TS4 stormwater management area

☒ Yes, the project affects one of the following and is regulated by a WPDES stormwater discharge permit, issued by the WDNR:

- ☒ A WDNR MS4 storm sewer system (connecting highways or local roads)
- ☒ A WDNR TS4 storm sewer system for WisDOT highways (outside of connecting highway limits)

Describe coordination and BMPs below and indicate location of evidence of coordination here:

TS4:	Coordination: ongoing with City of Glendale and City of Milwaukee	BMPs: storm water wet detention ponds
MS4:	Coordination: ongoing with City of Glendale and City of Milwaukee	BMPs: storm water wet detention ponds

8. Has the effect on downstream properties been considered?

☒ No, explain: No increase in peak flow

☐ Yes, coordination has been completed or is in process, describe:

APPENDIX A

PROJECT LOCATION


Washington County
Ozaukee County
Waukesha County
Map Area
Lake Michigan
Milwaukee County
Racine County
43
94
PROJECT LIMIT
HENRY CLAY ST
Village of Whitefish Bay
LINCOLN PARK
LINCOLN PARK GOLF COURSE
MILWAUKEE RIVER
HAMPTON AVE
Bridge ID: B-40-067
Bridge ID: B-40-066
ESTABROOK PARK
Bridge ID: B-40-073
GLENDALE AVE
PORT WASHINGTON RD
City of Glendale
EVERGREEN CEMETERY
GREEN BAY AVE
Bridge ID: B-40-115
ESTABROOK BLVD
City of Milwaukee
Bridge ID: B-40-117
Bridge ID: B-40-116
PROJECT LIMIT
CAPITOL DR
N
0 250 500 1,000 Feet
bing
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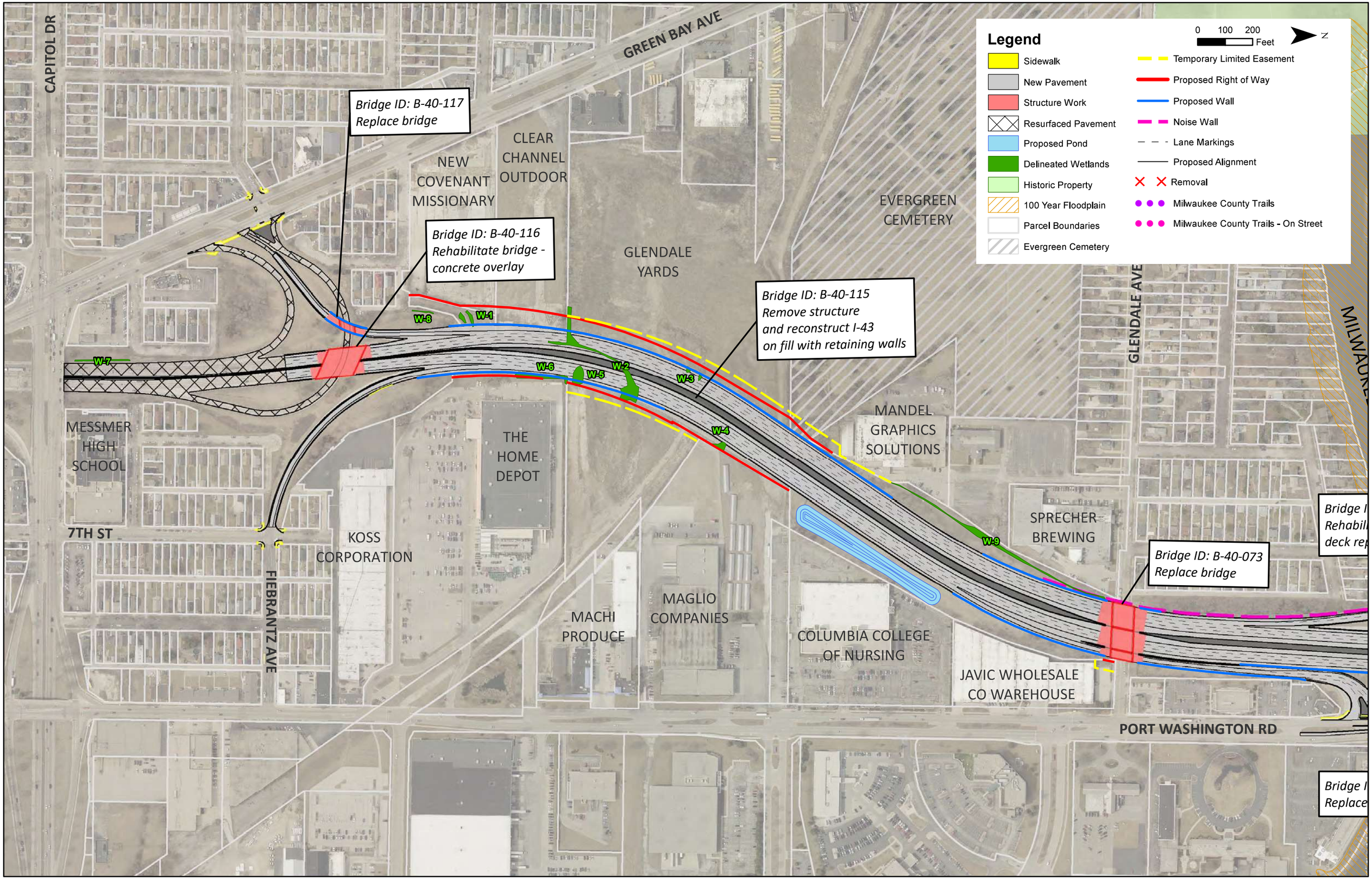
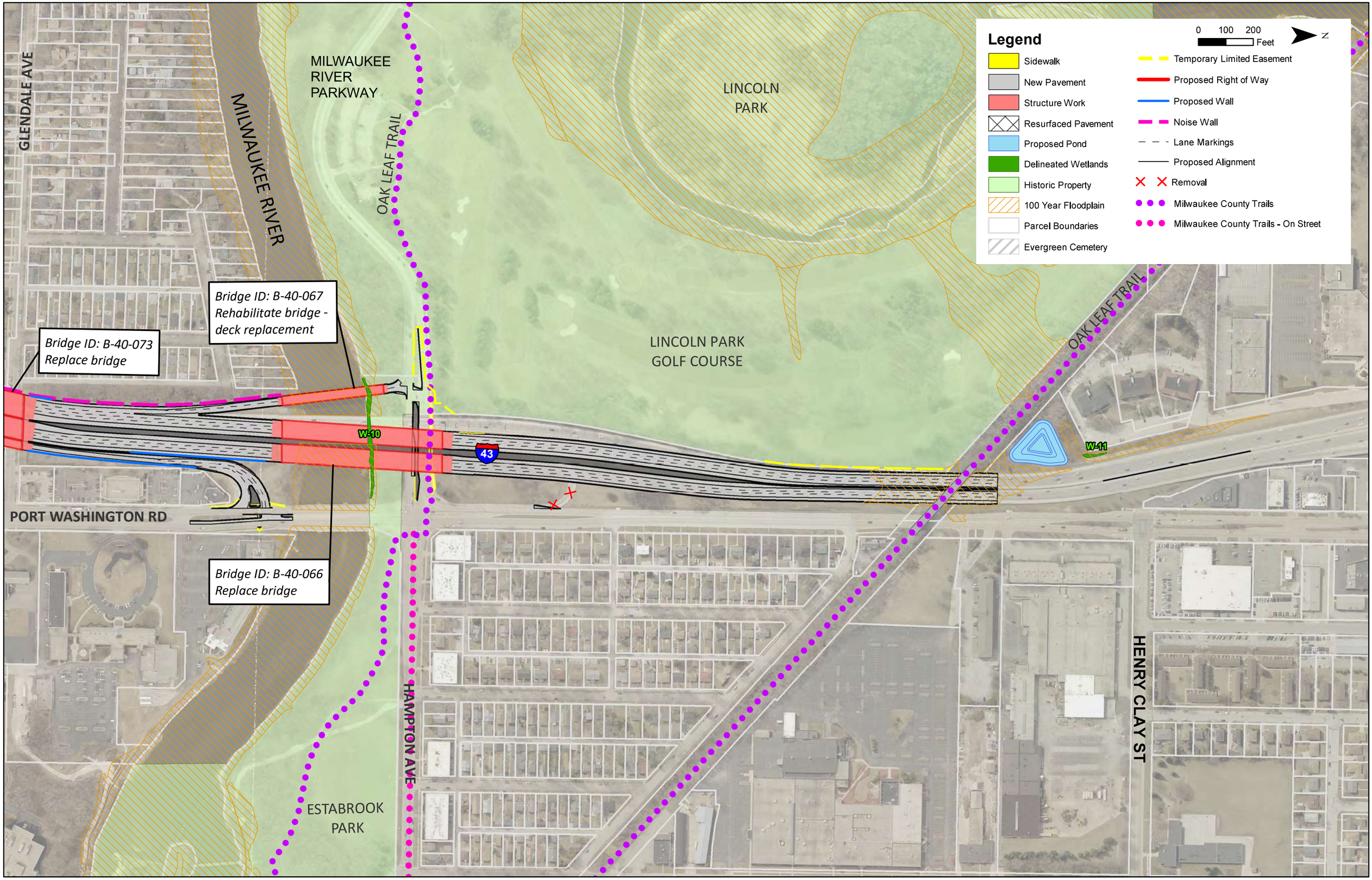
APPENDIX B-1

DESIGN PLANS


Legend
Sidewalk
New Pavement
Structure Work
Resurfaced Pavement
Proposed Pond
Delineated Wetlands
Historic Property
100 Year Floodplain
Parcel Boundaries
Evergreen Cemetery
Temporary Limited Easement
Proposed Right of Way
Proposed Wall
Noise Wall
Lane Markings
Proposed Alignment
Removal
Milwaukee County Trails
Milwaukee County Trails - On Street
0 100 200
Feet
N
Bridge ID: B-40-117
Replace bridge
Bridge ID: B-40-116
Rehabilitate bridge - concrete overlay
Bridge ID: B-40-115
Remove structure and reconstruct I-43 on fill with retaining walls
Bridge ID: B-40-073
Replace bridge
W-1
W-2
W-3
W-4
W-5
W-6
W-7
W-8
W-9
CAPITOL DR
GREEN BAY AVE
NEW COVENANT MISSIONARY
CLEAR CHANNEL OUTDOOR
GLENDALE YARDS
EVERGREEN CEMETERY
GLENDALE AVE
MILWAUKEE
MESSMER HIGH SCHOOL
7TH ST
FIEBRANTZ AVE
KOSS CORPORATION
THE HOME DEPOT
MACHI PRODUCE
MAGLIO COMPANIES
COLUMBIA COLLEGE OF NURSING
JAVIC WHOLESALE CO WAREHOUSE
MANDEL GRAPHICS SOLUTIONS
SPRECHER BREWING
PORT WASHINGTON RD

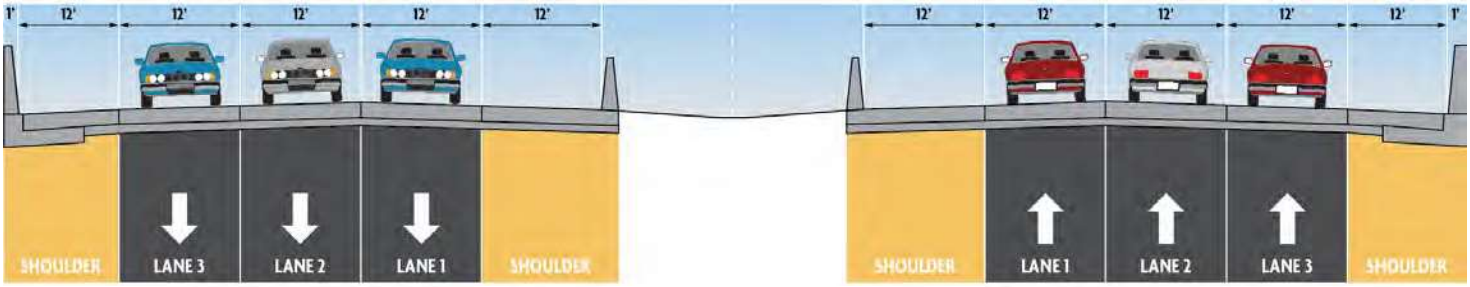

Legend
Sidewalk
New Pavement
Structure Work
Resurfaced Pavement
Proposed Pond
Delineated Wetlands
Historic Property
100 Year Floodplain
Parcel Boundaries
Evergreen Cemetery
Temporary Limited Easement
Proposed Right of Way
Proposed Wall
Noise Wall
Lane Markings
Proposed Alignment
Removal
Milwaukee County Trails
Milwaukee County Trails - On Street
0 100 200
Feet
N
GLENDALE AVE
MILWAUKEE RIVER
MILWAUKEE RIVER PARKWAY
OAK LEAF TRAIL
LINCOLN PARK
LINCOLN PARK GOLF COURSE
Bridge ID: B-40-073
Replace bridge
Bridge ID: B-40-067
Rehabilitate bridge - deck replacement
W-10
43
W-11
PORT WASHINGTON RD
Bridge ID: B-40-066
Replace bridge
HAMPTON AVE
ESTABROOK PARK
HENRY CLAY ST

APPENDIX B-2

TYPICAL SECTION

I-43 North-South Capitol Drive to Hampton Avenue

Proposed Typical Section



TYPICAL SECTION

APPENDIX B-3

CONSTRUCTION DETOUR ROUTES

Oak Leaf Trail

Milwaukee River Pkwy

57

43

Lydell Ave

Marne Ave

Oak Leaf Trail

Glendale Ave

Cornell St

Green Bay Ave

Port Washington Rd

Estabrook Blvd

Olive St

57

Fiebrantz Ave

Olive St

Oak Leaf Trail

Milwaukee River Pkwy

57

43

Lydell Ave

Marne Ave

Oak Leaf Trail

Milwaukee

Glendale Ave

Cornell St

Green Bay Ave

43

Port Washington Rd

Estabrook Blvd

Olive St

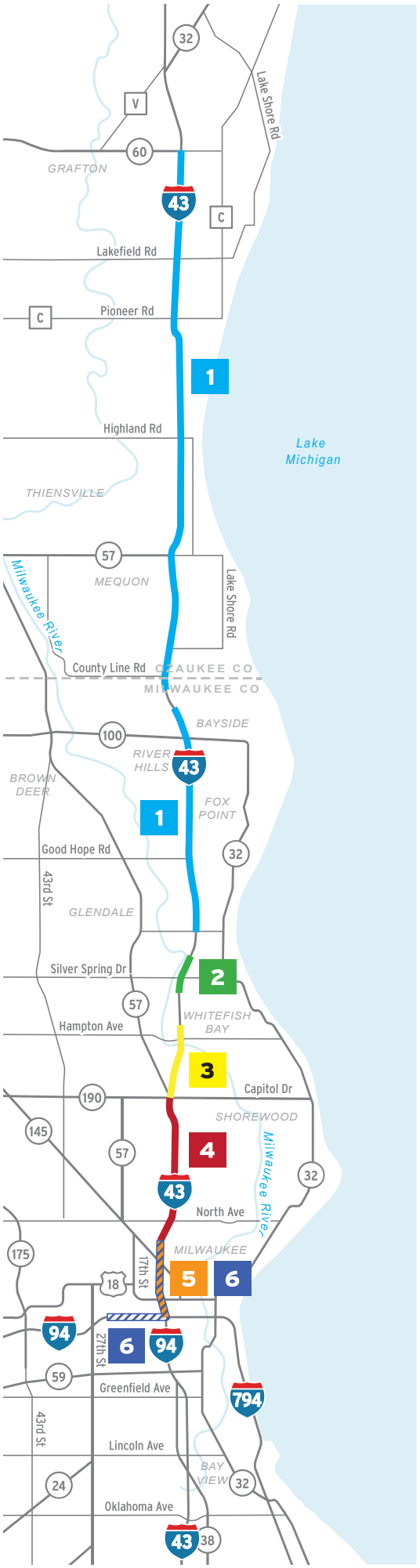
57

Olive St

Fiebrantz Ave

APPENDIX C

I-43 CORRIDOR PROJECTS



I-43 CORRIDOR PROJECTS

1 2021-2024 - I-43 NORTH-SOUTH FREEWAY: SILVER SPRING DRIVE to WIS 60

This project includes the expansion of I-43 from two lanes to three lanes in each direction. The project will also rebuild the five existing interchanges along the corridor and build a new interchange at Highland Road. The Union Pacific railroad bridge over I-43 in Glendale will be replaced, and a section of Port Washington Road in Glendale will be expanded from one to two lanes in each direction.

2 2020 - SILVER SPRING INTERCHANGE

This project includes maintenance of bridges, partial replacement of northbound ramp pavement, and traffic signal improvements at Hampton Avenue and Port Washington Road.

3 2021-2023 - CAPITOL DRIVE to JUST NORTH OF HAMPTON AVENUE

Rehab or replace bridges; remove bridge over abandoned railroad yard; add auxiliary lane between Capitol Drive and Hampton Avenue; remove northbound exit to westbound Hampton Avenue and move all northbound exit movements to south of Milwaukee River; replace existing noise wall; construct two stormwater ponds on existing right of way.

4 2022-2024 - BROWN STREET to CAPITOL DRIVE

This project will rehabilitate existing pavement and structures primarily within the existing footprint. Consider restriping to add driving lane, and/or consider auxiliary improvements on I-43. Operational analysis of area local roads, Halyard Street and North Avenue bridges may be separate independent project.

5 2021 - HILLSIDE INTERCHANGE

This project includes maintenance of Kilbourn tunnel and overpassing bridges.

6 2020 - WEST AND NORTH LEGS of MARQUETTE INTERCHANGE

This project includes maintenance of an existing perpetual pavement project.

Additional resurfacing and rehabilitation projects may occur in this corridor.

APPENDIX D

INDIRECT AND CUMULATIVE EFFECTS ANALYSIS WORKSHEETS

I-43 North-South Capitol Drive to Hampton Avenue

Pre-Screening Worksheet for Indirect Effects Analysis

This pre-screening worksheet was completed to determine the need for a detailed indirect effects analysis to comply with NEPA requirements for the I-43 North-South project from Capitol Drive to Hampton Avenue in the cities of Milwaukee and Glendale in Milwaukee County. The worksheet is based on the template provided in the Wisconsin Department of Transportation (WisDOT) Guidance for Conducting an Indirect Effects Analysis, Appendix A: WisDOT's Pre-Screening Worksheet for EA and ER Projects for Determining the Need to Conduct a Detailed Indirect Effects Analysis.

The worksheet considers a range of factors discussed below for the Build Alternative Rehabilitation (Preferred Alternative) for the project. Data for this analysis were gathered from the U.S. Census Bureau, local and regional plans, the Wisconsin Department of Administration, and municipal websites.

1. Project Design Concepts and Scope

Do the project design concepts include any one of the following?

- ☐ Additional thru travel lanes(expansion)
- ☐ New alignment
- ☒ New and/or improved interchanges and access (some existing ramps will have improved geometrics and pavement; no new access provided)
- ☐ Bypass alternatives

The Build Alternative Rehabilitation (Preferred Alternative) improves nearly 1.5 miles of I-43 between Capitol Drive in the City of Milwaukee and 2,100 feet north of Hampton Avenue in the City of Glendale. The Build Alternative Rehabilitation replaces the existing six through lanes of mainline freeway in generally the same configuration and in a manner to not preclude the potential modernization and capacity expansion of the corridor in the future. (See Appendix B-1: Design Plans and Appendix B-2: Typical Sections) The Build Alternative replaces the pavement and adds auxiliary lanes; replaces and improves bridges; removes the URT bridge and reconstructs the mainline on fill with retaining walls; reconstructs the Hampton Avenue interchange ramps; and reconstructs or overlays pavement of the Capitol Drive interchange ramps.

The Build Alternative Rehabilitation is not a capacity expansion project as it does not include new through travel lanes. The proposed auxiliary lanes are being constructed to address substandard acceleration and deceleration lanes at the Capitol Drive and Hampton Avenue interchange ramps. The auxiliary lanes will minimize traffic weaving which will improve safety and traffic operations in the project area.

The Build Alternative Rehabilitation will improve some of the existing interchange ramps, but overall access will remain the same with the Capitol Drive and Hampton Avenue interchanges remaining in place. The only change in access is that the northbound exit ramp to westbound Hampton Avenue that is north of the Milwaukee River is removed due to substandard design deficiencies, low traffic volumes and safety issues. Traffic previously using the removed northbound exit ramp will be routed to the reconstructed northbound exit ramp to Hampton Avenue/Port Washington Road on the south side of the Milwaukee River. The reconstructed exit ramp will be improved by increasing the deceleration length and adding a barrier separating it from the adjacent entrance ramps of Port Washington Road.

2. Project Purpose and Need

Does the project purpose and need include:

- ☐ Economic development – in part or full (i.e. improved access to a planned industrial park, new interchange for a new warehouse operation).

The project purpose and need does not include economic development. The purpose of the project is to

address deteriorating bridge and pavement conditions to maintain safe vehicular movement along I-43 between Capitol Drive and Hampton Avenue. This project is intended to primarily address the most critical needs of I-43 consistent with WisDOT's bridge preservation policy while not precluding the future potential modernization needs as recommended in the Southeast Wisconsin Regional Planning Commission's (SEWRPC), Vision 2050 land use and transportation plan. The need for the project is related to structural deficiencies and poor pavement conditions of the I-43 bridges and mainline between Capitol Drive and Hampton Avenue. Other related geometric, safety and traffic operations needs are also identified that the project should address within the context of addressing structural and pavement deficiencies.

3. Project Type

What is the project document"type"?

- ☐ EIS project—a detailed indirect effects analysis is warranted.
- ☐ Many EAs will require a detailed indirect effects analysis however, it also depends on the project design concepts and other factors noted here.
- ☒ If a Categorical Exclusion applies, a detailed assessment is not generally warranted, however documentation must be provided that addresses this determination including basic sheet information.

This project meets the requirements for a Categorical Exclusion as listed under 23 CFR 771.117(a) and (b), as defined by FHWA. This project can then be classified under 23 CFR 771.177(c) Actions as (c)(26). Typically, projects that are classified as (c)(26) may be processed using a Categorical Exclusion Checklist. However, per the FHWA—WisDOT 2015 Categorical Exclusion Agreement, this project falls under Wisconsin-specific unusual circumstances since it includes a new auxiliary lane and may have impacts to properties protected by Section 106 of the National Historic Preservation Act. Due to these circumstances, the FHWA—WisDOT Agreement requires that WisDOT consult with FHWA to determine the appropriate class of action for environmental analysis and documentation. At a meeting on 10/30/18, WisDOT and FHWA agreed to complete a more detailed document and submit the project as an Environmental Report. Also, meetings with local officials and public involvement indicated no additional substantial impacts or controversy, therefore, an Environmental Report is an appropriate class of action for the project's environmental documentation.

4. Facility Function

What is the primary function of the existing facility? What is the proposed facility?

- ☒ Principal Arterial
- ☐ Minor Arterial
- ☐ Local

The I-43 project corridor is designated in the National Highway System as a principal arterial (interstate). Following WisDOT guidance, I-43 is considered an urban arterial. The proposed facility would remain an interstate.

5. Project Location (Location can be a combination.)

- ☒ Urban (within an Metropolitan Planning Area)
- ☐ Suburban (part of larger metropolitan/regional area, may or may not be part of a metropolitan planning area)
- ☐ Small community (population under 5000)
- ☐ Rural with scattered development
- ☐ Rural, primarily farming/agricultural area

The project is in an urban location in the metropolitan Milwaukee area within the City of Milwaukee and the City of Glendale. The Southeastern Wisconsin Regional Planning Commission (SEWRPC) is the official planning agency (MPO) for southeastern Wisconsin, which includes Kenosha, Milwaukee, Ozaukee,

Racine, Walworth, Washington, and Waukesha counties. Both Milwaukee and Glendale are located within Milwaukee County.

6. Improved travel times to an area or region

Will the proposed project provide an improvement of 5 or more minutes? (Based on research, improvements in travel time can impact the attractiveness of an area for new development.)

The Build Alternative Rehabilitation would not change travel times to an area or region as it does not change the type of facility, add capacity to the roadway or add new access points. Plus, the project length is only 1.5 miles long.

7. Land Use and Planning

What are the existing land use types in project area?

The existing land use adjacent to the project area is comprised of urban development and includes industrial, commercial, residential and recreational land uses. The land is fully developed except for a vacant property that was a former rail yard, known as the Glendale Yard.

What do the local plans, neighborhood plans, and regional plans, indicate for future changes in land use?

Since the communities around the project corridor are fully developed, the local and regional plans do not anticipate change to the surrounding land uses. Overall, the plans focus on improving and enhancing neighborhoods and employment centers and targeting redevelopment of underutilized parcels. The SEWRPC's 2050 regional land use plan identifies the I-43 project area as mixed-use traditional neighborhood with residential and other urban land.

The following local and regional plans were reviewed for this analysis:

- City of Glendale: Smart Growth Update (2011) (https://www.glendale-wi.org/DocumentCenter/View/181/Comprehensive-Plan?bidId=)
- Northeast Side Area Plan (2009) (https://city.milwaukee.gov/AreaPlans/Northeast.htm#.XVMx5-NKhhE)
- Near North Side Area Plan (2009) (https://city.milwaukee.gov/AreaPlans/NearNorth.htm#.XVMyHeNKhhE)
- VISION 2050: Developing the vision and Plan (2017) (https://www.vision2050sewis.org/)

The City of Glendale is planning to redevelop the former Glendale Rail Yard into multiple industrial and flex-space buildings that could total over 375,000 square feet. The Glendale Yard property is adjacent to the I-43 URT bridge (B-40-115) along both sides of the project corridor and is the only large vacant property near the project. The City of Glendale received a $435,000 state grant in 2018 to advance the first phase of the redevelopment which includes the construction of a flex-space building and the construction of a public street to access the parcel.

What types of permitted uses are indicated in the local zoning?

The City of Glendale Code of Ordinances, Chapter 13, is administered by the city's Community Development Department. Zoning adjacent to the project corridor in the City of Glendale largely reflects the existing land uses and includes Conservancy District (Lincoln Park), Business, Manufacturing and Residential classifications. Also, Planned Unit Development Districts (PD) are present to the east of Port Washington Road. The City of Milwaukee Zoning Code is administered by the Department of Neighborhood Services. Zoning adjacent to the project corridor in the City of Milwaukee reflects the existing land use and includes residential, industrial, commercial and park zoning districts.

Would the project potentially conflict with plans in the project area? (e.g., capacity expansion in areas in which agricultural preservation is important to local government(s)?)

The project is consistent with local plans since the freeway will be replaced in generally the same configuration, along generally the same alignment and with generally the same access points. The only change to access will be the removal of the substandard and low traffic volume exit ramp to westbound Hampton Avenue along northbound I-43. Traffic will be routed to the nearby northbound exit ramp to Port Washington Road south of Hampton Avenue. Since the project does not add capacity, does not improve or add new access and is adjacent to an existing developed area, it is not expected to induce land use change.

8. Population/Demographic Changes

Have the population changes over past 5, 10 and 20 years been high, medium, low growth rate vs. state average over same period? (i.e. USDA defines high growth in rural areas as greater than annual population growth of 1.4%.)

The population in the study area has declined from 9,806 in 2000 to 9,267 in 2017, a 5.5 percent decrease. This rate of growth is low compared to the state, which grew by a 7.45 percent during this same time. The past population trends for the cites of Milwaukee and Glendale show generally stable populations with a slowly declining population in Glendale and slight population gain in Milwaukee.

Past Population Trends

Area	2000	2010	2017	Percent Change 2000 to 2017
Project Area	9,806	8,996	9,267	-5.5
Milwaukee	596,974	594,833	599,086	0.35
Glendale	13,367	12,872	12,868	-3.73
Wisconsin	5,363,675	5,686,986	5,763,217	7.45

Source: Population Estimates - Time Series (2000 - 2017, Wisconsin DOA & U.S. Census Bureau American Community Survey 2017 5-Year Estimates.

What are the projections for the future for population? (Use Wisconsin DOA projections.)

The table below shows the population projections for the cities of Milwaukee and Glendale and Wisconsin. Between 2020 and 2040 the population in the city of Milwaukee is expected to increase by 3.23 percent and the city of Glendale's population is expected to decline by 1.63 percent. These rates of growth are lower compared to the state of Wisconsin which is expected to increase in population by 8.1 percent during this time.

Projected Population Trends

Area	2020	2040	Percent Change 2020 to 2040
Milwaukee	607,750	627,400	3.23
Glendale	12,870	12,660	-1.63
Wisconsin	6,005,080	6,491,635	8.10

Source: State Population Projections, 2010-2040, Wisconsin DOA

Have there been considerable changes for population demographics and employment over the past 10 – 20 or more years?

The project area is a mature, fully developed community that has a relatively stable population and employment base. A review of aerial photography from the year 2000 to present shows that the community has remained largely unchanged over this time. As a mature community, substantial population increases are not expected or planned for. The redevelopment of the Glendale Yard property may add new jobs to the area but would not substantially change the overall mix of use in the area.

9. Rate of Urbanization

Does the project study area contain proposed new developments?

Since the study area is primarily built out, limited opportunities for new development are present. The only known redevelopment area is the at the former Glendale Rail Yard. The City of Glendale is planning to change this vacant property into multiple industrial and flex-space buildings that could total over 375,000 square feet.

What are the main changes in developed area vs. undeveloped areas over the past 5, 10 and 20 years?

A review of aerial photography from the year 2000 to present shows that the community has remained largely unchanged over this time.

Have there been significant conversions of agricultural land uses to other land use types, such as residential or industrial?

This is an urbanized area that was originally developed between the 1920's and 1940's. No agricultural land is present or has been converted in recent history.

10. Public, State and/or Federal Agency Concerns

Have local officials, federal and/or state agencies, property owners, stakeholders or others raised concerns related to potential indirect effects from the project? (e.g., land use changes, "sprawl", increase traffic, loss of farmland, etc.)

A local officials meeting was held on 8/13/19 and a public information meeting was held on 8/22/19. Participants at the meetings did not express concerns about potential indirect effects from the project.

11. Conclusion

Identify whether or not the results of this prescreening of potential indirect effects indicates a detailed indirect effects analysis is required.

Through screening analysis using WisDOT's pre-screening for indirect effects procedure and FDM guidance on indirect effects, it is concluded that the factors of the project, its location and other conditions do not warrant further detailed analysis of the potential for indirect effects. The project will not have the likelihood to result in *significant* indirect effects as defined by NEPA. This conclusion was based on the evaluation of the preceding 10 pre-screening factors including project design concepts and scope; project purpose and need; project type; facility function (current and planned); project location; improved travel times to an area; local land use and planning considerations; population and demographic considerations; rate of urbanization; and public/agency concerns. Therefore, further evaluation of indirect effects in a detailed analysis is not warranted. If changes are made to the project design and alternatives, this screening will be re-examined for sufficiency.

I-43 Rehabilitation Project
Capitol Drive to Hampton Avenue
Cumulative Effects Analysis

INTRODUCTION

The purpose of this memorandum is to document potential cumulative effects resulting from the implementation of the Build Alternative Rehabilitation (WisDOT Preferred Alternative) for the I-43 North-South Capitol Drive to Hampton Avenue project. This memorandum has been prepared using the Wisconsin Department of Transportation's (WisDOT) *Guidance for Conducting a Cumulative Effects Analysis*.

The National Environmental Policy Act (NEPA) defines cumulative effects as follows:

> *The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).*

This cumulative effects analysis considers resources that could be affected directly or indirectly by the Build Alternative Rehabilitation (WisDOT Preferred Alternative) when combined with other actions that potentially affect the same resources.

As part of the WisDOT Guidance for Conducting Cumulative Effects Analysis, it states:

> *If a proposed project will have no significant impact on the environment, the use of a categorical exclusion (CE) is appropriate. In reaching this conclusion, the cumulative effects on the resource must be considered. However, when a CE is selected as the appropriate level of environmental documentation, no more than a cursory examination of cumulative effects is usually warranted.*

Since this project falls under the Environmental Report category, the level of documentation required for a categorical exclusion is appropriate. Thus, a brief qualitative analysis will be completed.

SCOPING FOR THE CUMULATIVE EFFECTS ANALYSIS

Per WisDOT's guidance, this cumulative effects analysis only considers the resources that could be affected directly or indirectly by the Build Alternative Rehabilitation (WisDOT Preferred Alternative) when combined with other past, present, or reasonably foreseeable future actions that potentially affect the same resource or human communities. Based on the anticipated direct and indirect project effects, the following resources were reviewed for potential cumulative effects within the project corridor:

- Community and Business
- Cultural Resources
- Wetlands
- Stormwater
- Traffic Noise

- Construction

Resources that will be unaffected by this project both directly or indirectly will not result in any cumulative effects and are therefore not analyzed in this document.

As documented in the Pre-Screening Worksheet for Indirect Effects Analysis, the Build Alternative Rehabilitation is not expected to induce land use change and therefore, would not have the likelihood to result in significant indirect effects as defined by NEPA.

The study area for cumulative effects is approximately one mile surrounding the project corridor.

IDENTIFY OTHER PAST, PRESENT, OR REASONABLY FORESEEABLE FUTURE ACTIONS

Milwaukee County has been historically exposed to urbanization as development moved north from downtown Milwaukee and west from Lake Michigan. The communities adjacent to the project corridor are characterized as a fully built out and established urban areas. In general, local community plans are focused on maintaining development and redeveloping or infilling underutilized commercial and former industrial properties.

Past, present, or reasonably foreseeable future actions may contribute to cumulative impacts of the project. The other projects in the following tables were considered in combination with the Build Alternative Rehabilitation (WisDOT Preferred Alternative) in the cumulative effect analysis. These projects were identified through historical aerial imagery, local and regional planning documents, transportation plans and internet-based research.

<u>Past</u>

Project	Description	Timeframe	Responsible Entity
River Woods Urgent Care	Medical facility providing urgent care services	Early 2000s	Ascension Columbia St. Mary's
Weyco Group Inc Expansion	276,000-square-foot expansion for shoe manufacturer	2003	Weyco Group Inc.
4655 North Port Washington Road Building	Construction of three floor building currently housing the Children's Hospital of Wisconsin and other tenants.	2003	Robert Schmidt (developer)
Bayshore Town Center Redevelopment	Redevelopment of Bayshore Mall into mixed use Bayshore Town Center including apartments and office space.	2006	Steiner + Associates (developer)
Lincoln Creek - Milwaukee River Phase 1	Water cleanup of almost 140,000 cubic yards of contaminated sediment	2012	DNR, Milwaukee County Parks, U.S. EPA
Oak Leaf Trail over 1-43	Development of railroad corridor into an extension of the Oak Leaf Trail over I-43.	2015	Milwaukee County
Estabrook Park Dam	The dam was removed to improve water quality and fish passage. Natural ecological function was restored to this portion of the Milwaukee River.	2018	MMSD

Heartis Senior Living Village	An assisted living center was developed to the east of the project area off N River Woods Parkway	2019	Caddis Acquisition Partners LLC
Various local road maintenance and reconstruction	City of Milwaukee, City of Glendale and WisDOT have performed reconstruction on various roadways in the past 20 years throughout the study area	Varies	City of Milwaukee, City of Glendale and WisDOT

Present

Project	Description	Timeframe	Responsible
Silver Spring Drive Bridge	The Silver Spring Drive Bridge will receive a bridge deck overlay as well as minor roadway rehabilitation leading up to the bridge.	June 2019 to August 2019	WisDOT
North Port Washington Avenue Bridge Over Capitol Drive	The reconstruction of North Port Washington Avenue Bridge over West Capitol Drive consists of removing the existing structurally deficient bridge and replacing it with a new steel girder structure	May 2019 to October 2019	City of Milwaukee
North Teutonia Avenue Reconstruction Project	Reconstruction of North Teutonia Avenue from Garfield Avenue to Groeling Avenue.	April 2019 to December 2019	City of Milwaukee

Future

Project	Description	Timeframe	Responsible
Lincoln Creek - Milwaukee River Phase 2	Cleanup includes the Milwaukee River from the railroad bridge north of the Lincoln Park down to the Estabrook dam fixed crest spillway and the Eastern Oxbow of the river.	TBD	DNR, Milwaukee County Parks, U.S. EPA
Bayshore Town Center	Planned redevelopment of existing Bayshore Town Center.	TBD	Cypress Equities/City of Glendale
I-43 North-South Silver Springs to WIS 60	Freeway modernization and capacity expansion.	2023	WisDOT
I-43 between Brown Street and Capitol Drive	Freeway maintenance, scope to be determined through ongoing design and operational evaluations.	2024	WisDOT
Glendale Yard Master Development Plan	The Glendale Yard Master Development Plan aims to redevelop the former Glendale Rail Yard into multiple industrial and flex-space buildings that could total over 375,000 square feet.	TBD	Earthbound Development LLC

CUMULATIVE EFFECTS ANALYSIS

Based on the anticipated direct and indirect project effects, the following resources were examined to determine the potential for cumulative effects when combined with the other past, present or future projects.

Community and Business Resources

The Build Alternative Rehabilitation would not require the relocation of businesses and residences and access at the Capitol Drive and Hampton Avenue interchanges would remain. The only change in access is that the northbound exit ramp to westbound Hampton Avenue located north of the Milwaukee River would be removed and rerouted to the northbound exit ramp to Hampton Avenue/Port Washington Road on the south side of the Milwaukee River.

Other past, present and reasonably foreseeable projects in the study area could impact residential and business resources. However, development regulations and processes are in place to ensure projects would be consistent with local plans, which are typically aimed at redeveloping underutilized properties or maintaining aging infrastructure.

The relatively low intensity of the community and business impacts from the Build Alternative Rehabilitation, in combination with the limited impacts anticipated from other past, present and reasonably foreseeable projects, is not expected to contribute to negative cumulative effects for businesses or residences in the study area.

Cultural Resources

The Build Alternative Rehabilitation would require approximately 0.10 acres of permanent easement and 0.08 acres of temporary easement at the far east end of Evergreen Cemetery. No burials are anticipated to be impacted. WisDOT has committed to hiring a qualified archeologist to monitor construction activities and will have a procedure in place to manage undocumented burials if they are encountered.

Other past, present and reasonably foreseeable projects in the study area are not likely to have impacted burials given protections under state statutes and local land use regulation.

The relatively low likelihood of burial impacts from the Build Alternative Rehabilitation, in combination with impact avoidance from past, present and reasonably foreseeable projects, is not expected to contribute to negative cumulative effects on burial sites in the study area.

Wetlands

Wetland filling and dredging from past urban development and continuing development in the study area are the primary causes of wetland loss and degradation. State and federal laws regulate filling and dredging in wetlands. The goal of the regulations is to avoid net loss of wetlands.

The Build Alternative Rehabilitation will permanently impact 0.55 acres of wetlands and temporarily impact 0.14 acres of wetlands. Additional wetlands in the project area could be affected from other reasonably foreseeable future projects. The cumulative effect to wetlands would be minimized and avoided with existing local, state and federal regulations that regulate development activity in wetlands.

The project will avoid, minimize and mitigate wetland impacts in accordance with the Cooperative Agreement between DNR and WisDOT on compensatory mitigation for unavoidable losses (July 2012)

and WisDOT Wetland Mitigation Banking Technical Guideline (March 2002). Future private development that proposes to impact wetlands must obtain a permit from the Wisconsin DNR and before proceeding with the project through the requirements of section 281.36 of the Wisconsin State Statutes and NR 299 and NR 103 of the Wisconsin Administrative Code. Development impacting wetlands under the jurisdiction of the U.S. Army Corps of Engineers are subject to permit review and approval under Section 404 of the Clean Water Act.

Given the limited impacts to wetlands from the Build Alternative Rehabilitation, along with the avoidance, minimization mitigation strategies and existing regulations that regulate development in the study area, the project is not expected to contribute to substantial cumulative impacts to wetlands in the study area.

Stormwater

The Build Alternative Rehabilitation will increase the amount of impervious surface from pavement widening for added auxiliary lanes, and shoulders and wider medians that meet design standards. The increased impervious surface will result in increased stormwater runoff in the project area. Other reasonably foreseeable future developments may also result in increased stormwater runoff from increases in impervious surfaces in the study area. If left unmanaged this could lead to degraded water quality and increased risk of flooding.

A cumulative effect to stormwater would be minimized since the project and other developments occurring in the study area would be required to design and construct stormwater facilities in accordance with local, state and federal regulations. The Build Alternative Rehabilitation will construct two wet detention basins that will reduce the peak discharge and conform to Trans 401 and the DNR Transportation Separate Storm Sewer System permit (TS4) requirements. These requirements are expected to improve the stormwater quality from the freeway, as currently freeway runoff directly discharges to the Milwaukee River without any treatment. Also, other projects in the areas have benefited water quality along the Milwaukee River including cleaning up contaminated sediment and removing a dam.

Short-term highway construction impacts to water quality would be avoided or minimized by using WisDOT's Standard Specifications for Road and Bridges Construction and complying with Trans 401, which regulates construction erosion control and stormwater management for transportation facilities.

Given the existing regulations and requirements for stormwater management, the permanent and temporary impacts from the project are unlikely to generate a cumulative impact to stormwater when assessed with other projects.

Traffic Noise

The Build Alternative Rehabilitation will result in traffic noise levels approaching or exceeding the Federal Highway Administration noise abatement criteria and impacted noise receptors have been identified along the project corridor. One existing noise barrier will be replaced, and potentially two new noise barriers will be constructed to mitigate the traffic noise impacts from the project. Ongoing development and anticipated increases in traffic may contribute to increase noise in the study area from other reasonably foreseeable projects.

The cumulative effect to noise in the study area would be minimized by noise barrier mitigation for this project (where reasonable and feasible), which will be a positive effect for adjacent residences. Also, federal and state laws would require a project-by-project basis assessment of noise impacts from other state or federally funded transportation projects in the area.

Construction Impacts

The Build Alternative Rehabilitation will be constructed in three stages that will require through lane closures along the I-43 mainline and ramp closures at interchanges. Residents and businesses will likely experience temporary delays or detours during construction from these closures. Nearby local roadway projects and future freeway projects within this corridor will likely create additional construction impacts and closures for communities, businesses and residences that travel this corridor. WisDOT will manage the schedules of multiple projects planned along I-43 to minimize traffic impacts to adjacent communities and WisDOT will coordinate construction schedules with local communities to manage potential overlap with any local construction work. WisDOT will also coordinate with local communities, transit and emergency service providers to communicate construction schedules and detours.

APPENDIX E

CORRESPONDENCE

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor
Preston D. Cole, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 15, 2019

Dave Pittman, P.E.
Wisconsin Department of Transportation
Southeast Region
141 NW Barstow Street
Waukesha, WI 53187

Subject: DNR Initial Project Review
Project I.D. 1228-22-01
I43 North-South Freeway
Capitol Drive to Hampton Avenue
Milwaukee County

Dear Mr. Pittman :

The Wisconsin Department of Natural Resources (DNR) has received the information you provided for the above-referenced project. According to your proposal, the purpose of this project is roadway reconstruction.

Preliminary information has been reviewed by DNR staff for the project under the DNR/DOT (Wisconsin Department of Transportation) Cooperative Agreement. Initial comments on the project as proposed are included below, and we assume that additional information will be provided that addresses all resource concerns identified. To ensure compliance with resource protections, we are recommending that Special Provisions be developed for specific resource protections described below. DNR expects that the full range of DOT roadway standards will be applied throughout the design and construction process.

A. Project-Specific Resource Concerns

Section 4(f) Requirement:
Public lands are present in the vicinity of this project. If there is potential for impacts to these lands, please begin coordination with us as soon as possible.

There is a U.S. Dept. of Transportation "Section 4(f)" process for federally funded transportation projects that impact various types of public parks, wildlife refuges, and recreation areas. This requirement is coordinated by state and federal transportation departments. Please ensure the 4f process is followed according to the DOT facilities development manual.

Stewardship Funded Lands:
An additional review requirement applies to Milwaukee River Parkway per the state Knowles-Nelson Stewardship grant program. The subject property was acquired or developed with financial assistance

via the Stewardship program. The Stewardship property in question is owned by Milwaukee County, who will need to be engaged in the review process.

Avoiding impacts to Stewardship property is ideal. However, if avoidance is not practicable, option to replace impacted property with additional land or development of equal or greater value than the impacted property. The process is coordinated by the DNR Transportation Liaison, working with the DNR Grant Manager, and, in cases where the 6(f) property is not owned by DNR, the property owner.

Wetlands:

There is potential for wetland impacts to occur as a result of this project. Wetland impacts must be avoided and/or minimized to the greatest extent practicable. Unavoidable wetland losses must be compensated for in accordance with the DNR/DOT Cooperative Agreement and the DOT Wetland Mitigation Banking Technical Guideline. DNR requests information regarding the amount and type of unavoidable wetland impacts.

Fisheries/Stream Work:
The Milwaukee River is a navigable waterway. There shall be no in-stream disturbance between March 1st and June 1st, with both dates inclusive of the timeout period. This construction BMP minimizes impacts to fish and other aquatic organisms during sensitive time periods such as spawning, and migration. In water work includes any work that will disturb the bed or the banks of the waterway.

If erosion control matting is to be used along stream banks, DNR recommends biodegradable non-netted matting (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animal entrapment. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

Aquatic Connectivity and Culvert Work:
Culverts should be set and sized in such a manner to avoid or minimize impacts to stream morphology, aquatic organism passage, and water quality. The invert elevation of the new culvert(s) should be set an adequate distance below the natural streambed elevation, to allow for a natural and continuous streambed condition to occur. The invert elevations of the existing and proposed structure(s), the water surface elevations, and the natural streambed elevations upstream and downstream should be specified in the plans.

Habitat Connectivity:
The DNR has identified valuable wildlife habitat along the proposed project limits, and if not properly designed, this project will likely result in a disruption to wildlife passage. DNR requests that wildlife passage accommodations be incorporated at the Milwaukee River, in order to maintain or improve habitat connectivity.

Endangered Resources:

Based upon a review of the Natural Heritage Inventory (NHI) dated [date], the project area is near a known occurrence for the threatened and/or endangered species listed below, and there is potential for these species to occur if there is suitable habitat within your project limits. To ensure there are no adverse impacts, habitat suitability should be determined for these listed species. If suitable habitat is found within the project limits, and impacts to that habitat cannot be avoided, then additional surveys may be necessary:

Shrubby St. John's-wort	Hypericum prolificum	Plant
Hairy Beardtongue	Penstemon hirsutus	Plant
Common Tern	Sterna hirundo	Bird
Butler's Gartersnake	Thamnophis butleri	Snake
Waxleaf Meadowrue	Thalictrum revolutum	Plant
Elktoe	Alasmidonta marginata	Mussel
Redfin Shiner	Lythrurus umbratilis	Fish
Longear Sunfish	Lepomis megalotis	Fish

Rusty Patched Bumble Bee Federal High Potential Zone
Migratory Bird Concentration Site

With this review the following has also been determined:

- There are no known Northern Long-eared Bat (NLEB) maternity roost trees within 150 feet of the project, or known hibernacula within 0.25 miles of the proposed project area.

❖ *NHI Disclaimer: This review letter may contain NHI data, including specific locations of endangered resources, which are considered sensitive and are not subject to Wisconsin's Open Records Law. As a result, information contained in this review letter may be shared only with individuals or agencies that require this information in order to carry out specific roles in the permitting, planning and implementation of the proposed project. Specific locations of endangered resources may not be released or reproduced in any publicly disseminated documents.*

Migratory Birds:

Based on the information provided/based on site review, there is evidence of past migratory bird nesting and migratory bird concentration sites within the project area. Under the U.S. Migratory Bird Treaty Act, destruction of swallows and other migratory birds or their nests is unlawful unless a permit has been obtained from the U.S. Fish & Wildlife Service (USFWS). Therefore, the project should either occur during non-nesting season or utilize measures to prevent nesting *(e.g., remove unoccupied nests during the non-nesting season and install barrier netting prior to May 1)*. If netting is used, ensure it is properly maintained, then removed as soon as the nesting period is over. If neither of these options is practicable then the USFWS must be contacted to apply for a depredation permit.

Invasive Species and Viral Hemorrhagic Septicemia (VHS):
All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.

Emerald Ash Borer: This project has the potential for spreading the Emerald Ash Borer (EAB) beetle. It is illegal to move or transport ash material, the emerald ash borer, and hardwood debris (i.e.

firewood) from EAB quarantined areas to a non-quarantined area without a compliance agreement issued by WI Department of Agriculture, Trade and Consumer Protection. Regulated items include cut hardwood (non-coniferous) firewood, ash logs, ash mulch or bark fragments larger than on inch in diameter, or ash nursery stock (DATCP statute 21).

- For more information regarding the EAB and quarantine areas please click on the following link: http://datcpservices.wisconsin.gov/eab/article.jsp?topicid=20
- Recommendations to reduce the spread of EAB in potentially infested Ash wood: http://datcpservices.wisconsin.gov/eab/articleassets/Recommendations%20to%20reduce%20the%20spread%20of%20EAB.pdf

Floodplains:
A determination must be made as to whether the project lies within a mapped/zoned floodplain. Any proposed temporary or permanent changes to the road or waterway geometry in mapped floodplain areas requires that DOT coordinate with the Milwaukee Zoning Administrator to ensure compliance with the local zoning ordinance and NR116. Examples of floodplain development activity includes, but not limited to, the following: changes to waterway crossings; culvert extensions; changes to road surface elevations and/or side-slopes; temporary causeways; temporary structures; general fill.

- A preliminary review of the Surface Water Data Viewer (SWDV) indicates that floodplain conditions exist within the project limits.

Storm Water Management & Erosion Control:

- For projects disturbing an acre or more of land, erosion control and storm water measures must adhere to the Wisconsin Pollutant Discharge Elimination System Transportation Construction General Permit (TCGP) for Storm Water Discharges. Coverage under TCGP is required prior to construction. DOT should apply for permit coverage just before the project goes to final PS&E. Permit coverage will be issued by the DNR after design is complete and documentation shows that the project will meet construction and post-construction performance standards. For more information regarding the TCGP you can go to the following link, and click on the "Transportation" tab: https://dnr.wi.gov/topic/Sectors/Transportation.html.

- All projects require an Erosion Control Plan (ECP) that describes best management practices that will be implemented before, during and after construction to minimize pollution from storm water discharges. Additionally, the plan should address how post-construction storm water performance standards will be met for the specific site. The project design and Erosion Control Implementation Plan (ECIP) must comply with the TCGP in order to receive "permit-coverage" from the DNR.

- Once the project contract has been awarded, the contractor will be required to outline their construction methods in the ECIP. An adequate ECIP for the project must be developed by the contractor and submitted to this office for review at least 14 days prior to the preconstruction conference. For projects regulated under the TCGP, submit the ECIP as an amendment to the ECP.

Selected Site & Commercial Non-Metallic Mines:

- The DOT Select Site process must be adhered to for clean fill or any other material that leaves the work site. The DNR liaison will review all proposed select sites and a site visit may be required. Filling of wetlands, waterways or floodplain is not allowed under the select site

process, unless the site owner obtains required permits. No new impermeable surfaces can be left at a select site (including gravel roads or pads), unless the site owner obtains required permits. Contaminated materials leaving the site need to adhere to the Hazardous Material Management Plan.

- Use of Commercial Non-Metallic Mines must accompany documentation that such mines have received all applicable local, state and federal permits before being used on the project, including local non-metallic mining reclamation permits and applicable WPDES permits as issued by the DNR.

Asbestos:
A Notification of Demolition and/or Renovation and Application for Permit Exemption, DNR form 4500-113 (chapters NR 406, 410, and 447 Wis. Adm. Code) may be required. Please refer to DOT FDM 21-35-45 and the DNR's notification requirements web page: http://dnr.wi.gov/topic/Demo/Asbestos.html for further guidance on asbestos inspections and notifications. Contact Mark Davis, Air Management Specialist 262-574-2118, with questions on the form. The notification must be submitted 10 working days in advance of demolition projects.

Structure Removal/Bridge Demolition:

Due to the characteristics of this section of the, **STSP 203-020**, *Removing Old Structure Over Waterway With Minimal Debris*, is required for this project. This means that the contractor must construct a debris containment system that is attached to the existing deck/girders of the bridge to catch debris during bridge demolition. Boats or other floating devices will not be acceptable methods of debris containment and will not be approved if proposed by the contractor..

Temporary Structure:
Due to the Milwaukee River at the project site, a temporary causeway would not be allowed during construction. Project provisions should include documentation that no temporary filling of the bed or banks of the Milwaukee River will be allowed for bridge construction. **A cofferdam constructed of metal sheet piling will be required for pier demolition and construction as well as any other bridge components that are below the ordinary high water mark of the waterway and should be included in the project plans. A cofferdam is required because the velocity of the waterway exceeds the requirements of a turbidity barrier. The minimum height of the cofferdam must be the elevation of the two-year flood event, to meet TRANS 401 requirements and this height specified in the project plan.**

Temporary Stream Channel or Culvert:
If a temporary channel is needed for culvert construction, the channel should be lined with plastic or other non-erodible material and weighted down with clean stone. A temporary channel or culvert must be capable of carrying all stream flows during the construction period, and must maintain a suitable depth and velocity to allow the passage of migrating fish and aquatic species. Fish that become stranded in dewatered areas or temporary channels should be captured and returned to the active channel immediately.

Public Waterway Navigation Issues:

The bridge should be designed to maintain the existing navigation; however, new navigational buoys may be required to ensure long-term safety is maintained.

This reach of Milwaukee River is regularly used by recreational watercraft. It will be necessary to place navigational aids around the construction area during construction. A Waterway Marker Application and Permit is required for both types of navigational markers (informational vs. control/restrictive) prior to construction. A local ordinance will also be required for buoys that control or restrict navigation. Adequate time should be allowed for the passage of an ordinance with the local municipality. A local ordinance is not required for informational navigational aids (a waterway marker permit is required). DNR will determine which type of navigational aids are needed in accordance with the project design and methods used during construction. The general steps for submission of a Waterway Marker Application and Permit are as follows:

1. Please fill out the Waterway Marker Application and Permit form: http://dnr.wi.gov/files/PDF/forms/8700/8700-058.pdf
2. The Wisconsin Department of Transportation should be listed as the applicant.
3. Be sure to include an aerial map-diagram or engineered-diagram of the work location and the placement of the waterway markers (buoys). If proposed GPS coordinates for each buoy are not provided, then markers placed on the diagram must show distance (in feet) from each marker location and from one permanent fixture as a benchmark.
4. Provide the completed application/permit to the local municipality having jurisdictional authority over the area in which the waterway markers will be placed. If an ordinance is required, consult with the local municipality regarding their ordinance process.
5. Forward the signed application/permit to myself as well as the Boating Program Specialist:

   Penny Kanable
   Wisconsin Dept. of Natural Resources
   101 S Webster Street - LE/8
   Madison WI 53703

6. The Boating Program Specialist will communicate with the local Warden and Recreational Safety Warden in processing and finalizing the permit. If the permit application is incomplete or additional information is needed the Boating Program Specialist will work with DNR's Regional DOT Liaison to resolve.

7. Permanent Navigation Aids: The process outlined above will also apply to the placement of permanent navigational aids. This includes modifications, additions or temporary relocations of existing navigational aids. The locations of existing buoys (or other navigational aids) must be included in the permit application.

Other Issues:
This project may require a permit from the U.S. Army Corps of Engineers (USACE). All local, state, and federal permits and/or approvals must be obtained prior to commencing construction activities.

The above comments represent the DNR's initial concerns for the proposed project and do not constitute final concurrence. Final concurrence will be granted after further review of refined project plans, and additional consultation if necessary. If any of the concerns or information provided in this letter requires further clarification, please contact this office at (414) 507-4946, or email at Kristina.betzold@wi.gov .

Sincerely,

Kristina Betzold
Environmental Analysis & Review Specialist

From: Kitchel, Lisie E - DNR
To: Betzold, Kristina A - DNR
Cc: Rowe, Stacy A - DNR
Subject: RE: I43 over Milwaukee River
Date: Saturday, August 17, 2019 6:50:21 PM
Attachments: image007.jpg
image009.gif
image010.gif
image011.gif
image012.gif
image013.gif
image014.gif

We looked for Estabrook and did not find but a few common highly tolerant species, I don't' think a mussels survey is necessary, thanks for asking.
Hope all is well with you, have not seen you in forever!

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Lisie Kitchel
Phone: 608-220-5180

From: Betzold, Kristina A - DNR <Kristina.Betzold@wisconsin.gov>
Sent: Thursday, August 15, 2019 12:07 PM
To: Kitchel, Lisie E - DNR <Lisie.Kitchel@wisconsin.gov>
Cc: Rowe, Stacy A - DNR <Stacy.Rowe@wisconsin.gov>
Subject: I43 over Milwaukee River

Hi Lisie,

Hope you are well. I have an upcoming bridge project with includes I43 mainline over the Milwaukee River in Milwaukee County. The bridge is south of Hampton Avenue and will include a full reconstruction of the bridge and piers. There are three sets of piers in the waterway, so there will be fairly extensive disturbance to the bed and banks of the water way to remove the piers/abutments and construct new ones. The photo below shows the bridge from adjacent roadway. The Hampton Avenue ramp bridge will also be completely reconstructed (behind mainline bridge).

There were mussel occurrences that came up on NHI review for the project, but I know you have done work in the Milwaukee River somewhat recently and I thought DNR had mussel surveys done for Estabrook Dam removal, which is ~1750 feet downstream.

Would you recommend a survey at the bridge location and/or relocation of mussels from the project area prior to construction? Would your team have time next spring to help out with necessary actions or should DOT find a consultant to do the work? This project is on a 'fast-track' schedule and construction is planned to start in late 2020. Thanks!!

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Kristina Betzold
Environmental Analysis and Review Specialist
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King Jr. Drive
Phone: (414) 507-4946
kristina.betzold@wi.gov
dnr.wi.gov

From:	Pittman, David - DOT
To:	Caron Kloser; Carolyn Seboe
Cc:	Ruenger, Brenda H - DOT; Foy, Beth; Timothy E. Anheuser, PE; Erin Sullivan; Paul G. Stankevich, PE; Gallamore, Joe D - DOT
Subject:	FW: Oak Leaf Trail and Lincoln Park
Date:	Monday, August 19, 2019 11:25:52 AM
Attachments:	image001.gif image002.gif image003.gif image004.gif image005.gif image006.gif

Caron-

One note for the PIM handout. We may not have to impact the park with permanent impacts. See the conversation below. There will probably be some temporary impacts still.

Dave

From: Pittman, David - DOT
Sent: Monday, August 19, 2019 10:53 AM
To: Brown, Joel R - DOT <Joel.Brown@dot.wi.gov>; Ruenger, Brenda H - DOT <Brenda.Ruenger@dot.wi.gov>
Cc: Gallamore, Joe D - DOT <Joe.Gallamore@dot.wi.gov>
Subject: RE: Oak Leaf Trail and Lincoln Park

All-

As we have done more research into the ROW line at the north end of the project, we have determined that we may not have a permanent impact to the park in that area. The ROW we were using was from GIS, but drawing an updated line from legal descriptions and section lines keeps our permanent impacts out of the park. We will have temporary impacts for grading, for reconnecting the Oak Leaf trail, to do some work on the Hampton Avenue median, and for contractor access for bridge demo.

As for the Oak Leaf Trail portion with stewardship funds, we will not be impacting that portion of the trail.

Dave

From: Brown, Joel R - DOT
Sent: Monday, August 19, 2019 10:47 AM
To: Ruenger, Brenda H - DOT <Brenda.Ruenger@dot.wi.gov>
Cc: Pittman, David - DOT <David.Pittman@dot.wi.gov>; Brown, Joel R - DOT <Joel.Brown@dot.wi.gov>
Subject: RE: Oak Leaf Trail and Lincoln Park

Brenda,

Thank you for forwarding.

I assume the project is not touching to disrupting the Oak Leaf Trail portion with stewardship funds. Specific to Lincoln Park, what impacts would occur to the park itself? Will any real estate acquisition be needed?

Joel Brown
WisDOT – Bureau of Technical Services
608-630-3202

From: Ruenger, Brenda H - DOT
Sent: Monday, August 19, 2019 10:05 AM
To: Brown, Joel R - DOT <Joel.Brown@dot.wi.gov>
Cc: Pittman, David - DOT <David.Pittman@dot.wi.gov>
Subject: FW: Oak Leaf Trail and Lincoln Park

Joel – please see below.

From: Betzold, Kristina A - DNR
Sent: Monday, August 19, 2019 10:01 AM
To: Ruenger, Brenda H - DOT <Brenda.Ruenger@dot.wi.gov>; Pittman, David - DOT <David.Pittman@dot.wi.gov>
Subject: FW: Oak Leaf Trail and Lincoln Park

Hi, please see below for info on the park land you asked about. We can discuss this in further detail on Wed.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Kristina Betzold
Environmental Analysis and Review Specialist
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King Jr. Drive
Phone: (414) 507-4946
kristina.betzold@wi.gov
dnr.wi.gov

From: Kozik, Christine R - DNR <Christine.Kozik@wisconsin.gov>
Sent: Monday, August 19, 2019 9:58 AM
To: Betzold, Kristina A - DNR <Kristina.Betzold@wisconsin.gov>
Cc: DeBruijn, Sara N - DNR <Sara.Debruijn@wisconsin.gov>

Subject: Oak Leaf Trail and Lincoln Park

Yes to LWCF funding on Lincoln Park (55-00548) (LAWCON)

No to LWCF funding on Oak Leaf Trail

Yes to Stewardship to acquire the UP Railroad to expand the OLT (from Hampton Ave NW to Glendale Recreation Center area)

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Chrissy Kozik
Community Services Specialist – Community Financial Assistance
Wisconsin Department of Natural Resources
Phone: (414) 263-8676
Christine.Kozik@wisconsin.gov

dnr.wi.gov

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229-9565
Phone: (920) 866-1717 Fax: (920) 866-1710

In Reply Refer To:
Consultation Code: 03E17000-2019-SLI-1042
Event Code: 03E17000-2019-E-02515
Project Name: I-43 - Capitol to Hampton

June 04, 2019

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

To Whom It May Concern:

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

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

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

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229-9565
(920) 866-1717

Project Summary

Consultation Code: 03E17000-2019-SLI-1042

Event Code: 03E17000-2019-E-02515

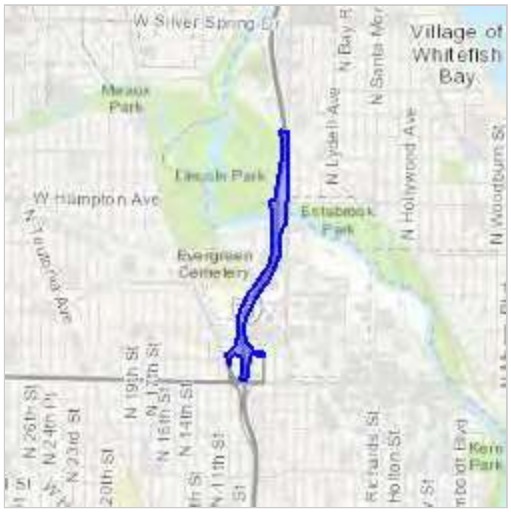
Project Name: I-43 - Capitol to Hampton

Project Type: TRANSPORTATION

Project Description: The scope of the project includes the reconstruction of nearly one and one-half miles of I-43 between Capitol Drive in the City of Milwaukee and 2100' north of Hampton Avenue in the City of Glendale. The project includes reconstructing the existing six-lane to a pavement width that will not preclude expansion to eight lanes in the future. The project will also include reconstructing and improving geometrics at the interchanges along the mainline corridor. As part of the I-43 project, the bridge carrying I-43 over LAND will be removed and replaced with fill within retaining walls, the bridge carrying I-43 over Glendale Avenue will be replaced, and the bridge carrying I-43 over the Milwaukee River over Hampton Avenue will be replaced, and the bridge carrying the southbound off-ramp to Green Bay Avenue over the northbound off-ramp to Green Bay Avenue will be replaced. In addition, the bridge carrying I-43 over the northbound off ramp to Green Bay Avenue and the bridge carrying the southbound I-43 on-ramp over the Milwaukee River will be rehabilitated. Project construction is planned from April 1, 2021 to July 1, 2024.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/43.09972078694905N87.9183475042353W



Counties: Milwaukee, WI

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Red Knot *Calidris canutus rufa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Critical habitats

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

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Green Bay Ecological Services Field Office
2661 Scott Tower Drive
New Franken, WI 54229-9565
Phone: (920) 866-1717 Fax: (920) 866-1710

In Reply Refer To: July 24, 2019
Consultation Code: 03E17000-2019-TA-1042
Event Code: 03E17000-2019-E-03758
Project Name: I-43 - Capitol to Hampton

Subject: Verification letter for the 'I-43 - Capitol to Hampton' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear David Pittman:

The U.S. Fish and Wildlife Service (Service) received on July 24, 2019 your effects determination for the 'I-43 - Capitol to Hampton' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Red Knot, *Calidris canutus rufa* (Threatened)

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

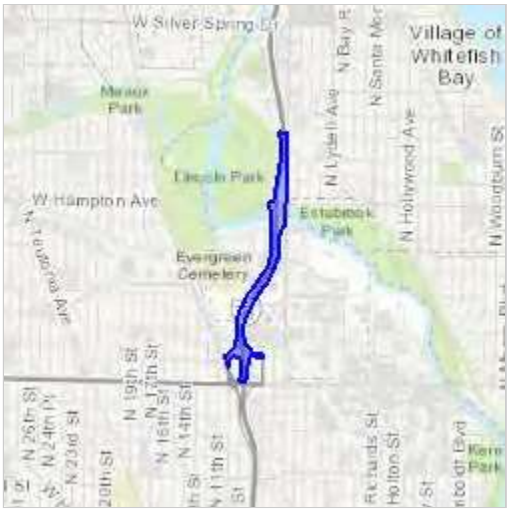
I-43 - Capitol to Hampton

2. Description

The following description was provided for the project 'I-43 - Capitol to Hampton':

> The scope of the project includes the reconstruction of nearly one and one-half miles of I-43 between Capitol Drive in the City of Milwaukee and 2100' north of Hampton Avenue in the City of Glendale. The project includes reconstructing the existing six-lane to a pavement width that will not preclude expansion to eight lanes in the future. The project will also include reconstructing and improving geometrics at the interchanges along the mainline corridor. As part of the I-43 project, the bridge carrying I-43 over LAND will be removed and replaced with fill within retaining walls, the bridge carrying I-43 over Glendale Avenue will be replaced, and the bridge carrying I-43 over the Milwaukee River over Hampton Avenue will be replaced, and the bridge carrying the southbound off-ramp to Green Bay Avenue over the northbound off-ramp to Green Bay Avenue will be replaced. In addition, the bridge carrying I-43 over the northbound off ramp to Green Bay Avenue and the bridge carrying the southbound I-43 on-ramp over the Milwaukee River will be rehabilitated. Project construction is planned from April 1, 2021 to July 1, 2024.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/43.09972078694905N87.9183475042353W



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

   No

3. Will your activity purposefully **Take** northern long-eared bats?

   No

4. Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

   Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

7. Will the action involve Tree Removal?

   Yes

8. Will the action only remove hazardous trees for the protection of human life or property?

   No

9. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

   No

10. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

    No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

1.5

2. If known, estimated acres of forest conversion from April 1 to October 31

1.5

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

From:	Caron Kloser
To:	Carolyn Seboe
Subject:	FW: USACE Coordination - 1228-22-01/71, North-South Freeway, Capitol Drive to Hampton Avenue, I-43, Milwaukee County
Date:	Saturday, August 10, 2019 8:14:07 AM
Attachments:	12282271_Project Location Map-Milw Co.pdf

For the EA agency coordination appendix and basic sheet.

From: Pittman, David - DOT <David.Pittman@dot.wi.gov>
Sent: Friday, August 9, 2019 10:35 AM
To: usace_requests_wi@usace.army.mil
Cc: Ruenger, Brenda H - DOT <Brenda.Ruenger@dot.wi.gov>; Caron Kloser <CKloser@HNTB.com>; Gallamore, Joe D - DOT <Joe.Gallamore@dot.wi.gov>
Subject: USACE Coordination - 1228-22-01/71, North-South Freeway, Capitol Drive to Hampton Avenue, I-43, Milwaukee County

Ms. Kopka-

The Wisconsin Department of Transportation (Southeast Region office) is planning to rehabilitate and replace bridges and reconstruct pavement on I-43 from Capitol Drive to 2100' north of Hampton Avenue, a distance of approximately 1.3 miles, in Milwaukee County. The project will reconstruct the existing 6-lane interstate highway in generally the same configuration and in a manner that would not preclude the potential modernization of the corridor in the future. The project would replace the pavement along the corridor, add new southbound and northbound auxiliary lanes between the Capitol Drive and Hampton Avenue interchanges to address merging and diverging conflicts and include new shoulders, medians and median barriers that meet current design standards.

As part of the project, the Department will also replace the existing bridge over the Milwaukee River on I-43, the existing bridge over Glendale Avenue on I-43, and the existing bridge over the northbound off-ramp to Green Bay Avenue on the southbound off-ramp to Green Bay Avenue. The bridge carrying I-43 over a former railroad yard just north of Capitol Drive will be removed and replaced with retaining walls and fill. The bridge carrying I-43 over the northbound off-ramp to Green Bay Avenue, and the bridge carrying the southbound on-ramp from Hampton Avenue over the Milwaukee River will be rehabilitated. See the attached project location map.
WisDOT is preparing an Environmental Report and wetland delineations are have been completed to inform our impact analysis. Federal funds will be used for project development. We anticipate completing the environmental document in Fall 2019 and submitting a Section 404 permit application in early winter of 2019. Please let us know of any specific issues or concerns to address as we complete our environmental analysis in advance of permit applications. We look forward to your response. If you have any questions or require additional information, please contact me.

David Pittman, P.E.
Project Manager
WisDOT Southeast Region, SEF Backbone
141 N.W. Barstow St.
P.O. Box 798

Waukesha, WI 53187-0798
Phone: (262) 548-6439
Cell: (414) 750-2340
david.pittman@dot.wi.gov

From:	Kopka, Marie H CIV USARMY CEMVP (USA)
To:	Huber, Ryan J CIV CEMVP CEMVD (US)
Cc:	Ruenger, Brenda H - DOT; Caron Kloser; joe.gallamore@dot.wi.gov
Subject:	FW: USACE Coordination - 1228-22-01/71, North-South Freeway, Capitol Drive to Hampton Avenue, I-43, Milwaukee County (UNCLASSIFIED)
Date:	Wednesday, August 21, 2019 12:47:37 PM
Attachments:	12282271_Project Location Map-Milw Co.pdf

CLASSIFICATION: UNCLASSIFIED

Ryan: Would you have time to assist me with this one?

Brenda/Caron/Joe: I'm copying you just so you know that we received the email!

Marie

Marie H. Kopka, Lead Project Manager
U.S. Army Corps of Engineers
St. Paul District, Regulatory Branch
Brookfield Field Office
250 N. Sunnyslope Road, Suite 296
Brookfield, Wisconsin 53005
Office: 651-290-5733 | Marie.H.Kopka@usace.army.mil

We are pleased to introduce our new paperless communication procedures in Wisconsin. Requests for action (pre-application consultations, permit applications, requests for delineation concurrences, requests for jurisdictional determinations, and mitigation bank proposals) should be sent directly to the following email: usace_requests_wi@usace.army.mil. Please include the county name in the subject line of the email (e.g. Washington County). These changes will improve efficiency, reduce costs and reduce environmental footprint. Additional information can be found in our public notice located here: http://www.mvp.usace.army.mil/Missions/Regulatory.aspx

-----Original Message-----
From: USACE_Requests_WI
Sent: Friday, August 16, 2019 2:38 PM
To: Kopka, Marie H CIV USARMY CEMVP (USA) <Marie.H.Kopka@usace.army.mil>
Subject: FW: USACE Coordination - 1228-22-01/71, North-South Freeway, Capitol Drive to Hampton Avenue, I-43, Milwaukee County

FYI

-----Original Message-----
From: Pittman, David - DOT [mailto:David.Pittman@dot.wi.gov]
Sent: Friday, August 9, 2019 10:35 AM
To: USACE_Requests_WI <USACE_Requests_WI@usace.army.mil>
Cc: Ruenger, Brenda H - DOT <Brenda.Ruenger@dot.wi.gov>; Caron Kloser <CKloser@HNTB.com>; Gallamore, Joe D - DOT <Joe.Gallamore@dot.wi.gov>
Subject: [Non-DoD Source] USACE Coordination - 1228-22-01/71, North-South Freeway, Capitol Drive to Hampton Avenue, I-43, Milwaukee County

Ms. Kopka-

The Wisconsin Department of Transportation (Southeast Region office) is planning to rehabilitate and replace bridges and reconstruct pavement on I-43 from Capitol Drive to 2100' north of Hampton Avenue, a distance of approximately 1.3 miles, in Milwaukee County. The project will reconstruct the existing 6-lane interstate highway in generally the same configuration and in a manner that would not preclude the potential modernization of the corridor in the future. The project would replace the pavement along the corridor, add new southbound and northbound auxiliary lanes between the Capitol Drive and Hampton Avenue interchanges to address merging and diverging conflicts and include new shoulders, medians and median barriers that meet current design standards.

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WisDOT is preparing an Environmental Report and wetland delineations are have been completed to inform our impact analysis. Federal funds will be used for project development. We anticipate completing the environmental document in Fall 2019 and submitting a Section 404 permit application in early winter of 2019. Please let us know of any specific issues or concerns to address as we complete our environmental analysis in advance of permit applications. We look forward to your response. If you have any questions or require additional information, please contact me.

David Pittman, P.E.
Project Manager
WisDOT Southeast Region, SEF Backbone
141 N.W. Barstow St.
P.O. Box 798
Waukesha, WI 53187-0798
Phone: (262) 548-6439
Cell: (414) 750-2340
david.pittman@dot.wi.gov

CLASSIFICATION: UNCLASSIFIED

U.S. Department of Homeland Security
United States Coast Guard

Commander
Ninth Coast Guard District

1240 E 9th St
Cleveland, OH 44199
Staff Symbol: (dpb)
Phone: (216) 902-6087
FAX: (216) 902-6088
E-mail: Scot.M.Striffler@uscg.mil

16590
July 31, 2019
B-164/wbs

Mr. David Pittman, P.E.
Wisconsin Department of Transportation
141 N.W. Barstow St.
Waukesha, WI 53187

Dear Mr. Pittman:

We are responding to your email dated July 22, 2019 regarding the proposed replacement of the I-43 fixed highway bridge across Milwaukee River, City of Milwaukee, Milwaukee County, Wisconsin.

In accordance with the Coast Guard Authorization Act of 1982 (33 CFR 115.50(c)) a Coast Guard Bridge Permit is not required for the project as proposed. Additionally, based on the location of the proposed replacement bridge and the associated marine traffic the Coast Guard will not be enforcing a bridge lighting requirement at this location. If conditions on the waterway change the Coast Guard may enforce a bridge lighting requirement in the future. No coordination with the Coast Guard during construction activities for the proposed replacement bridge is required.

You are encouraged to provide for navigation clearances that would allow small craft to pass at high water stages.

Although a Coast Guard bridge permit will not be required for this project as proposed, you may need to comply with the requirements of other federal, state, or local agencies. Please ensure these requirements are satisfied.

If you require further assistance in this matter, or to schedule construction activities, please contact me at (216) 902-6086 or william.b.stanifer@uscg.mil.

Sincerely,

W. B. STANIFER
Chief, Bridge Branch
U. S. Coast Guard
By direction

Division of Transportation System Development
Southeast Regional Office
141 N.W. Barstow Street
P.O. Box 798
Waukesha, WI 53187-0798

Governor Tony Evers
Secretary Craig Thompson
Internet: wisconsindot.gov

Telephone: (262) 548-5903
Facsimile (FAX): (262) 548-5662
E-Mail: waukesha.dtd@dot.wi.gov

January 10, 2019

Mr. Timothy Guyah
Bureau of Indian Affairs
Suite 500
Bloomington, MN 55437

Re: Notice of federal undertaking and request for comments under 36 CFR 800

I am writing to you regarding the following project:

Bridge Replacement, Preservation (ID: 1228-22-71) located in Milwaukee County, Wisconsin, on IH 43 from Capitol Drive to Hampton Avenue.

The Wisconsin Department of Transportation (WisDOT), in cooperation with the Federal Highway Administration, is considering an undertaking located on IH 43 from Capitol Dr. to approximately 2,000 ft. North of Hampton Ave. in Milwaukee County. The proposed undertaking will consist of Bridge Replacement, Bridge Deck Replacement, Bridge Rehabilitation, and Roadway Reconstruction.

Your tribe has requested to be notified of undertakings in this area of Wisconsin. Attached is information regarding the proposed undertaking to assist you in providing comments regarding the determination of the area of potential effect (APE) and potential impacts to historic properties and/or burial sites.

WisDOT would be pleased to receive any comments your tribe wishes to share regarding the determination of the APE or potential impacts to historic properties and/or burials in this undertaking. Also, other environmental studies may be conducted to include endangered species survey, contaminated material investigations, soil testing and right-of-way surveys. Results of these studies will assist the engineers in the design to avoid, minimize or mitigate the proposed project's effect upon cultural and natural resources. To ensure your comments are considered during this early phase of project development, WisDOT requests a response within 30 days of receipt of this letter.

If your tribe wishes to become a consulting party under Section 106 of the National Historic Preservation Act or would like to receive additional information regarding this proposed project, please contact WisDOT Project Manager David Pittman

Sincerely,

David Pittman, P.E.
Project Manager
Wisconsin Dept. of Transportation, SE Region
141 NW Barstow St.
Waukesha, WI 53187
Ph: (262) 548-6439

CC: Lynn Cloud, Bureau of Environmental Services

Company	Title	First Name	Last Name	Credentials	Email	Phone Number	Office Building	Address 1	Address 2	City	State	Postal Code
Bureau of Indian Affairs	Mr.	Timothy	Guyah			(612) 713-4400 or (612) 725-4500	5600 W. American Blvd	Suite 500		Bloomington	MN	55437
Bad River Band of Lake Superior Chippewa Indians of Wisconsin	Ms.	Edith	Leoso	THPO	thpo@badriver-nsn.gov	(715) 682-7123 Ext. 1662		P.O. Box 39		Odanah	WI	54861
Forest County Potawatomi Community of Wisconsin	Mr.	Michael	LaRonge	THPO	michael.laronge@fcpotawatomi-nsn.gov	(715) 478-7354	Tribal Office	5320 Wensaut Lane, P.O. Box 340		Crandon	WI	54520
Ho-Chunk Nation	Mr.	William	Quackenbush	THPO	bill.quackenbush@ho-chunk.com	(715) 284-7181	Executive Offices	P.O. Box 667		Black River Falls	WI	54615
Lac Vieux Desert Band of Lake Superior Chippewa Indians	Ms.	Daisy	McGeshick	THPO	daisy.mcgeshick@lvdtribal.com	(906) 358-0137	Ketegitigaanig Ojibwe Nation	P.O. Box 249		Watersmeet	MI	49969
Menominee Indian Tribe of Wisconsin	Mr.	David	Grignon	THPO	dgrignon@mitw.org	(715) 779-0910		P.O. Box 910		Keshena	WI	54135
Prairie Band Potawatomi Nation	Ms.	Hattie	Mitchell	THPO				16281 Q Road		Mayetta	KS	66509
Prairie Island Indian Community	Mr.	Noah	White	THPO	noah.white@piic.org	(651) 385-4175		5636 Sturgeon Lake Road		Welch	MN	55089
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin	Mr.	Marvin	DeFoe	THPO	marvin.defoe@redcliff-nsn.gov	(715) 779-3700 Ext. 4244	Red Cliff Band of Lake Superior Chippewa Indians	88385 Pike Road, Highway 13		Bayfield	WI	54814
Sac and Fox Nation of Missouri in Kansas and Nebraska	Mr.	Gary	Bahr					305 North Main		Reserve	KS	66434
Sac and Fox Nation of Oklahoma	Ms.	Sandra	Massey	Historic Preservation Officer	smassey@sacandfoxnation-nsn.gov	(918) 968-3526 Ext. 1070		920883 S Hwy 99 Bldg A, RR 2, Box 246		Stroud	OK	74079
Sac and Fox of the Mississippi in Iowa	Mr.	Jonathan	Buffalo	NAGPRA Representative		(641) 484-3185		349 Meskwaki Road		Tama	IA	52339
Sokaogon Chippewa Community Mole Lake Band	Mr.	Adam	VanZile	THPO	adam.vanzile@scc-nsn.gov	(715) 478-6435		3051 Sand Lake Road		Crandon	WI	54520

From:	Pittman, David - DOT
To:	Limberatos, Evan P - DOT; Ruenger, Brenda H - DOT
Subject:	FW: Re: WisDOT Project ID 1228-22-71, IH 43 Bridge Replacement (Capitol Drive to Hampton Avenue) Milwaukee County, Wisconsin.
Date:	Monday, February 11, 2019 10:59:00 AM

FYI

From: Michael LaRonge <Michael.LaRonge@fcpotawatomi-nsn.gov>
Sent: Monday, February 11, 2019 10:57 AM
To: Pittman, David - DOT <David.Pittman@dot.wi.gov>
Subject: Re: WisDOT Project ID 1228-22-71, IH 43 Bridge Replacement (Capitol Drive to Hampton Avenue) Milwaukee County, Wisconsin.

Re: WisDOT Project ID 1228-22-71, IH 43 Bridge Replacement (Capitol Drive to Hampton Avenue) Milwaukee County, Wisconsin.

Dear Mr. Pittman,

Pursuant to consultation under Section 106 of the National Historic Preservation Act (1966 as amended) the Forest County Potawatomi Community, a Federally Recognized Native American Tribe, reserves the right to comment on Federal undertakings, as defined under the act.

This response pertains to the project mention above. This project falls within the current geographic area of interest for the Forest County Potawatomi Community and being adjacent to the Milwaukee Rover has a higher potential to impact historic properties related to tribal history. Therefore the Tribal Historic Preservation Office, on behalf of the Tribe, requests the archaeology report associated with the project and the SHPO comments on the same.

Your interest in protecting Wisconsin's cultural and historic properties is appreciated. If you have any questions or concerns, please contact me at the email or number listed below.

Respectfully,

Michael LaRonge
Tribal Historic Preservation Officer
Natural Resources Department
Forest County Potawatomi Community
5320 Wensaut Lane
P.O. Box 340
Crandon, Wisconsin 54520
Phone: 715-478-7354
Fax: 715-478-7225
Email: Michael.LaRonge@FCPotawatomi-nsn.gov

WisDOT DTSD
Southeast Regional Office
141 NW Barstow St., Suite 218
P.O. Box 798
Waukesha, WI 53187-0798

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (262) 548-5903
FAX: (262) 548-5662
Email: waukesha.dtd@dot.wi.gov

June 3, 2019

Rachel Safstrom
Administrator
City of Glendale
5909 N. Milwaukee River Parkway
Glendale, WI 53209

Dear Ms. Safstrom,

Thank you for meeting with WisDOT and the Glendale yards LLC on April 12, 2019, and again on April 24, 2019, to discuss the departments rehabilitation plans for I-43 within the city of Glendale. This letter is to document that the City of Glendale has ~~no~~ no longer plans for an access road under I-43 with in the development limits.

The Department's alternatives will no longer include a structure to provide any cross access. The design alternatives will show a lower profile and wall system that will minimize the impacts on the abutting properties.

Existing access will be maintained to the properties from Green Bay Ave (STH 57) on the west and Port Washington Rd on the east.

Please provide concurrance by signing below and returning to me. If you have any further questions, please feel free to contact me at 414-750-5938.

Sincerely,

Roberto Gutierrez, P.E.
DTSD SE Region
Southeast Freeways Chief

City of Glendale ~~As~~ As Amended

By: Rachel A Safstrom
Title: City Administrator
Date: 6-21-19

DP/dp

CC: Dewayne Johnson, WisDOT SE Region Director
Sheri Schmit, WisDOT SE Region Deputy Director
Jim Robinette, WisDOT SE Region TSS Chief
Joe Gallamore, WisDOT Supervisor
Dave Pittman, WisDOT Project Manager
Alan Marcuvitz, von Briesen & Roper, S.C.
Phillip Ferris, WisDOT Assistant General Counsel

David Pittman
Project Manager
WisDOT Southeast Region, SEF Backbone
141 N.W. Barstow St.
P.O. Box 798
Waukesha, WI 53187-0798

Milwaukee County Parks
9480 Watertown Plank Rd,
Wauwatosa, WI 53226
(414) 257-PARK

October 21, 2019

RE: Milwaukee River Parkway and Lincoln Park 4f Determination
Project ID 1228-22-01/71, I-43 Capitol Drive to Hampton Avenue

Dear David Pittman,

Thank you for meeting with us to discuss the proposed construction on I-43 and potential work required along the Milwaukee River Parkway and Lincoln Park Golf Course. As a publicly owned park and recreational resource, the parkway and golf course are subject to Section 4(f) considerations in accordance with FHWA's Department of Transportation Act of 1966. Parts of the property were also developed using federal Land and Water Conservation funds and thus also subject to review under Section 6(f) of the Land and Water Conservation Fund Act.

Further, the parkway and golf course are listed on the National Register of Historic Places and subject to consultation in accordance with Section 106 of the Historic Preservation Act. Local historic designations may apply and are the responsibility of WisDOT to investigate.

As discussed in our meeting, WisDOT anticipates temporarily occupying a portion (approximately 0.35 acres) the parkway system and golf course to reconstruct the Oak Leaf Trail under I-43, perform roadway work on Hampton Avenue, and stage construction equipment to replace the I-43 mainline bridge over the Milwaukee River and Hampton Avenue. Reconstructing the I-43 pavement at the far northeast corner of Lincoln Park Golf Course will require temporary occupancy of about 0.08 acres to complete construction. Construction activities are anticipated to be of short duration, approximately 30 weeks. Work on Hampton Avenue may take up to 60 weeks over the course of 2 years.

The Oak Leaf Trail will be closed for intermittently for a total of approximately 10 weeks and trail traffic will be detoured to the Zip Line Trail. WisDOT will keep the Oak Leaf trail open to trail traffic via temporary trail or on-street accommodations at all other times. WisDOT will notify Milwaukee County in advance of construction and will post signs for trail users to clarify detour routes approved by Parks. The Oak Leaf Trail will be restored as a 10-foot wide paved path in the area of disturbance. Other areas of disturbance in the parkway and the golf course will also be restored in kind. WisDOT will need to obtain a right-of-entry permit for construction activities from Milwaukee County Parks Department prior to starting construction.

At this time, Milwaukee County Parks Department has no objections to the proposed work, including the need for temporary occupancy to complete construction as described above. Our finding is based on the following conditions:

- The land use is of short duration (defined as less than the time needed for the construction of the project).
- There is no change in ownership of the property.
- The scope of work is minor.
- There are no temporary or permanent adverse changed to the activities, features, or attributes of the property.
- The land will be fully restored to a condition at least as good as prior to the project

We are also in receipt of correspondence from Heritage Research, LTD regarding the assessment of effects on the historic aspects of the parkway and golf course in compliance with Section 106 consultation requirements. Given WisDOT's continued coordination to minimize and mitigate impacts to removed vegetation, we agree with the assessment that the project will not affect the historic significance of the parkway or golf course.

Milwaukee County agrees that the project is acceptable and that all reasonable alternatives to avoid transportation use of the parklands have been considered and that all practicable planning to minimize impacts to the parklands has also occurred.

If you have questions on the information provided above, please contact Sarah Toomsen at 414/257-7389 or sarah.toomsen@milwaukeecountywi.gov.

Sincerely,

Guy Smith

Executive Director

APPENDIX F

SECTION 106 COORDINATION

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 6/2014

For instructions, see FDM Chapter 26.

SHPO RECEIVED NOV 20 2019 BY:

I. PROJECT INFORMATION

☐ Amended Submittal *(include new information only)*

Project ID	Highway – Street	County
1228-22-01	I-43	Milwaukee
Project Termini		**Region – Office**
Capitol Drive to 2,100 feet north of Hampton Avenue		Southeast
Regional Project Engineer – Project Manager		**(Area Code) Telephone Number**
David Pittman, P.E.		(262) 548-6439
Consultant Project Engineer – Project Manager		**(Area Code) Telephone Number**
Paul Stankevich P.E., Kapur and Associates		(414) 751-7227
Archaeological Consultant		**(Area Code) Telephone Number**
David Keene, PhD, RPA-Archeological Research, Inc.		(773) 456-1811
Architecture/History Consultant		**(Area Code) Telephone Number**
John Vogel, PhD - Heritage Research, Ltd.		(262) 251 7792
Date of Need		**SHSW Number**
November 30, 2019		19-1461 M1
Return a Signed Copy of This Form to		
David Pittman, P.E.		

II. PROJECT DESCRIPTION

Project Length	Land to be Acquired: Fee Simple	Land to be Acquired: Easement
1.5 miles	6.8 acres	0.8 acres

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width	0'-423'	202'-423'	Terrace Width	NA	NA
Shoulder	50'-52'	0'-154'	Sidewalk Width	NA	NA
Slope Intercept	NA	10'-219'	Number of Lanes	6	6+aux. lane
Edge of Pavement	40'-45'	0'-144'	Grade Separated Crossing See attached continuation sheet for bridge details	See continuation sheet	See continuation sheet
Back of Curb Line	51'-58'	0'-157'	Vision Triangle acres	NA	NA
Realignment	NA	0'-80'	Temporary Bypass acres	NA	NA
Other – List:			Stream Channel Change	☐ Yes	☒ No
Attach Map(s) that Depict "Maximum" Impacts.	☒ Yes	☐ No	Tree Topping and/or Grubbing	☐ Yes	☒ No

Brief Narrative Project Description: Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements. For amendments (e.g. design refinements, scope changes, etc) description should only include new/added project actions and materials.

See attached continuation sheet.

☒ Add continuation sheet, if needed.

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION *(continued)*

Wisconsin Department of Transportation DT1635

III. CONSULTATION

How has notification of the project been provided to:

☒ Property Owners
- ☒ Public Information Meeting Notice
- ☒ Letter - Required for Archaeology
- ☐ Telephone Call
- ☐ Other: **See Attachment A**

☒ Historical Societies/Organizations
- ☒ Public Information Meeting Notice
- ☒ Letter
- ☐ Telephone Call
- ☐ Other:

☒ Native American Tribes
- ☒ Public Info. Mtg. Notice
- ☒ Letter
- ☐ Telephone Call
- ☐ Other:

Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS – APE

ARCHAEOLOGY: Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.

HISTORY: Describe the area of potential effects for buildings/structures.

The area of potential effect has been defined to include those structures that are immediately adjacent to, or fronting on, the proposed I-43 improvement.

V. PHASE I – ARCHAEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
☒ Archaeological survey **is needed**	☒ Architecture/History survey **is needed**
☐ Archaeological survey **is not needed**	☐ Architecture/History survey **is not needed**
☐ Screening list (date)	☐ Screening list (date)
☐ Burial site in project area, Wis. Stat. 157.70 applies	☐ No structures or buildings of any kind within APE
	☐ Non-Survey History Documentation attached

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
☒ **NO** archaeological sites(s) identified – ASFR attached	☐ **NO** buildings/structures identified – Report attached
☐ **NO** potentially eligible site(s) in project area – Phase I Report attached	☒ Potentially eligible buildings/structures identified in the APE – Report attached
☐ Potentially eligible site(s) identified-Phase I Report attached	☐ Avoided through redesign
☐ Avoided through redesign	☒ Previously listed/eligible property identified in the APE – Report attached
☐ Phase II conducted – go to VII (Evaluation)	
☒ Phase I Report – Cemetery/cataloged burial documentation	

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

☐ No arch site(s) eligible for NRHP – Phase II Report attached	☐ No buildings/structure(s) eligible for NRHP – DOE attached
☐ Arch site(s) eligible for NRHP – Phase II Report attached	☒ Building/structure(s) eligible for NRHP – DOE attached
☐ Site(s) eligible for NRHP – DOE attached	

VIII. COMMITMENTS/SPECIAL PROVISIONS – must be included with special provisions language

☒ Per Wis. Stat. 157.70 obtain burial authorization from WHS one year prior to construction. – Attached

During final design, the WisDOT design manager will conduct additional investigations within Evergreen Cemetery coincident with the proposed permanent right of way acquisition and temporary easement to assess for the presence/absence of burials. The methods and techniques used during the study will follow standards promulgated in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation and the Guide for Public Archeology in Wisconsin, as revised. The WisDOT design project manager will incorporate additional mitigation measures into special provision language as prescribed during coordination with WHS per Wis. Stat. 157.70.

IX. PROJECT DECISION

☐ No historic properties (historical or archaeological) in the APE.

☐ No historic properties (historical or archaeological) affected.

☒ Historic properties (historical and/or archaeological) may be affected by project;
- ☐ Go to Step 4: Assess affects and begin consultation on affects.
- ☒ Documentation for Determination of No Adverse Effects is included with this form. WisDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

X. SIGNATURES

X [signature]	10/22/19	X [signature]	11-18-19	X [signature]	Jan 24 2020
(Regional Project Manager Signature)	(Date – m/d/yy)	(WisDOT Historic Preservation Officer Signature)	(Date – m/d/yy)	(State Preservation Officer Signature)	(Date – m/d/yy)
X Carrie S Kloser	10/11/19				
(Consultant Project Manager Signature)	(Date – m/d/yy)				

WisDOT I.D. 1228-22-01
I-43 North-South Capitol Drive to Hampton Avenue
dt1635 Continuation Sheet
Project Description

The Build Alternative Rehabilitation improves nearly 1.5 miles of I-43 between Capitol Drive in the City of Milwaukee and 2,100 feet north of Hampton Avenue in the City of Glendale. **(See Attachment B, Project Location)** The Build Alternative Rehabilitation replaces the existing six through lanes of mainline freeway in generally the same configuration and in a manner to not preclude the potential modernization and capacity expansion of the corridor in the future.

The Build Alternative replaces the pavement and adds auxiliary lanes; replaces and improves bridges; removes the URT bridge and reconstructs the mainline on fill with retaining walls; reconstructs the Hampton Avenue interchange ramps; and reconstructs or overlays pavement of the Capitol Drive interchange ramps to the north of Capitol Drive. Also, the Build Alternative Rehabilitation replaces the existing noise barrier on the west side of I-43 and potentially adds new barriers pending the results of the noise analysis. Project construction is planned from Spring 2021 to Summer 2024. **(See Attachment C, Proposed Design Plans)**

The Build Alternative Rehabilitation is described in more detail below:

Roadway

The Build Alternative Rehabilitation reconstructs the roadway and replaces the pavement along the project corridor. The reconstructed roadway would include six 12-foot wide through lanes, 8 to 12-foot outside shoulders in both directions and a 30.5-foot wide median with a 56-inch tall concrete median barrier. In addition, new southbound and northbound auxiliary lanes will be added along the I-43 mainline between the Capitol Drive and the Hampton Avenue interchanges to improve movement for vehicles entering and exiting the freeway. The mainline will be shifted east by 46-feet to 74-feet within the existing right of way at the Milwaukee River to straighten the curvature of the roadway. Approximately 800-feet of I-43 north of Capitol Drive will be milled and resurfaced to tie the reconstructed section into the section of freeway to the south of Capitol Drive.

Bridges

The Build Alternative Rehabilitation replaces three bridges, rehabilitates two bridges and removes the URT bridge over land and replaces the I-43 mainline on fill within retaining walls. The following table summarizes the proposed bridge actions for the Build Alternative Rehabilitation.

Bridge ID	Location	Proposed Action	Details
B-40-117	I-43 Southbound Exit Ramp for Capitol Drive Interchange	Replace bridge with one new bridge that is widened to meet current design standards	Replace existing structurally deficient 3-span, 119-foot long steel girder structure with 3-span, prestressed concrete girder bridge.
B-40-116	I-43 Mainline Over Northbound Exit Ramp to Green Bay Road	Rehabilitate bridge - concrete overlay and painting	Bridge will require removal and replacement of median barrier to accommodate construction staging and traffic control. Bridge will remain at existing width.
B-40-115	I-43 Mainline Over Abandoned Railroad (Union Refrigerated Transit Line - URT)	Remove bridge and reconstruct I-43 mainline on fill supported by retaining walls	Construct mainline on 1,475-linear feet of new fill (5 to 25-feet high), supported by MSE panel retaining walls. Per coordination with the city of Glendale and local property owners, there will be no access under I-43.

WisDOT I.D. 1228-22-01
I-43 North-South Capitol Drive to Hampton Avenue
dt1635 Continuation Sheet

Bridge ID	Location	Proposed Action	Details
B-40-73	I-43 Mainline Over Glendale Avenue	Replace bridge with three new bridges that are widened to not preclude future modernization of freeway	Replace existing 3-span, 126-foot long steel girder structure with three single-span prestressed concrete girder bridges and MSE retaining wall abutments.
B-40-67	I-43 Southbound Entrance Ramp Over Milwaukee River at Hampton Avenue	Rehabilitate bridge – replace deck and widen to address substandard shoulders	Replace existing deck and widen with extended exterior overhangs (no additional girders required). Substructure repairs will be completed as a part of the redeck.
B-40-66	I-43 Mainline Over Hampton Avenue and the Milwaukee River	Replace bridge with two new bridges that are widened to not preclude future modernization of freeway	Replace existing 9-span, 572-foot long prestressed concrete girder structure with two 5-span pre-stressed concrete girder bridges. Piers in the Milwaukee River, as well as piers and abutments outside the river would be replaced.

Interchanges

The Build Alternative Rehabilitation will make the following improvements to the Capitol Drive and Hampton Avenue interchanges.

Capitol Drive Interchange

The Build Alternative Rehabilitation reconstructs the southbound exit and northbound entrance ramps at the Capitol Drive interchange to correct substandard horizontal curvature. The reconstructed interchange ramps will be replaced in generally the same configuration and with the same access points at Green Bay Avenue and N. 7th Street/W. Fiebrantz Avenue. Also, the Build Alternative Rehabilitation will mill and overlay the pavement along the southbound entrance and northbound exit ramps of the Capitol Drive interchange.

Hampton Avenue Interchange

The Build Alternative Rehabilitation reconstructs the existing Hampton Avenue interchange ramps to meet current design standards and traffic volumes. The ramps will be replaced in generally the same location, except the northbound exit ramp to westbound Hampton Avenue that is north of the Milwaukee River is removed due to substandard design deficiencies, low traffic volumes and safety issues. Traffic previously using the removed northbound exit ramp will be routed to the reconstructed northbound exit ramp to Hampton Avenue/Port Washington Road on the south side of the Milwaukee River. The reconstructed exit ramp will be improved by increasing the deceleration length and adding a barrier separating it from the adjacent entrance ramps of Port Washington Road.

Noise Barriers

The west side of I-43 between approximately the Milwaukee River and about 200-feet south of Glendale Avenue has an existing 1,300-foot long and 21.4-foot high (average height) precast concrete noise barrier. This barrier will be replaced as part of the project. Also, the project may construct new barriers pending the results of the noise analysis.

WisDOT I.D. 1228-22-01
I-43 North-South Capitol Drive to Hampton Avenue
dt1635 Continuation Sheet
Anticipated Impacts to Historic and Archeological Resources

Historic Resources

See attached Determination of No Adverse Effects for detailed discussion of project effects on historic resources.

this section of the barrier was removed from the plan

Messmer High School

WisDOT proposes to construct a noise barrier along the northbound lanes of I-43 offset approximately 10 feet off the existing WisDOT right way. The barrier will remain within existing WisDOT right of way. The barrier will be 14 feet high at this location and approximately 86 feet west of the school building. No temporary or permanent right-of-way will be acquired from the site to construct the barrier.

Milwaukee River Parkway/Lincoln Park Golf Course

The Project requires 1.41 acres of temporary construction right of entry as I-43 crosses the Milwaukee River Parkway near Hampton Avenue (to remove and replace the I-43 mainline bridge over the Milwaukee River and Hampton Avenue), as well as along the eastern edge of Lincoln Park Golf Course (for freeway pavement reconstruction).

Archeological Resources

One uncatalogued cemetery, Evergreen Cemetery, is within the APE. Pursuant to Wis. Statutes 157.70, WisDOT is pursuing further coordination with the Wisconsin Historical Society regarding proposed work within the cemetery.

Evergreen Cemetery

The existing I-43 mainline is within an existing transportation easement as it travels over a former rail yard. The existing WisDOT bridge B-40-115, abuts the southeast tip of the Evergreen Cemetery property. The bridge would be removed and the I-43 mainline would be reconstructed on fill supported by retaining walls. WisDOT would convert the transportation easement to permanent right of way. The new mainline construction would require 4,891 square feet (0.11 acre) for permanent right of way within Evergreen Cemetery. Construction activities would require an additional 3,278 square feet (0.08 acres) temporary easement within the cemetery. After construction is complete, WisDOT would restore landscaping within the temporary easement area. See Attachment C-2 for a map of proposed work within the cemetery.

19-1461 M

(Revised May 20[illegible])

Wisconsin Historical Society
Determination of Eligibility Form

WisDOT Project ID #: 1228-22-01

WHS #:

Property Name(s): Messmer High School

Address/Location: 742 W. Capitol Drive

City & County: City of Milwaukee, Milwaukee County **Zip Code:** 53206

Town: **Range:** **Section:**

Date of Construction: 1929, circa 2000

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

X Meets the National Register of Historic Places criteria.
___Does not meet the National Register of Historic Places criteria.

11-1019

WisDOT Historic Preservation Officer **Date**

State Historic Preservation Office

In my opinion, the property:

X Meets the National Register of Historic Places criteria.
___Does not meet the National Register of Historic Places criteria.

12/9/19

State Historic Preservation Officer **Date**

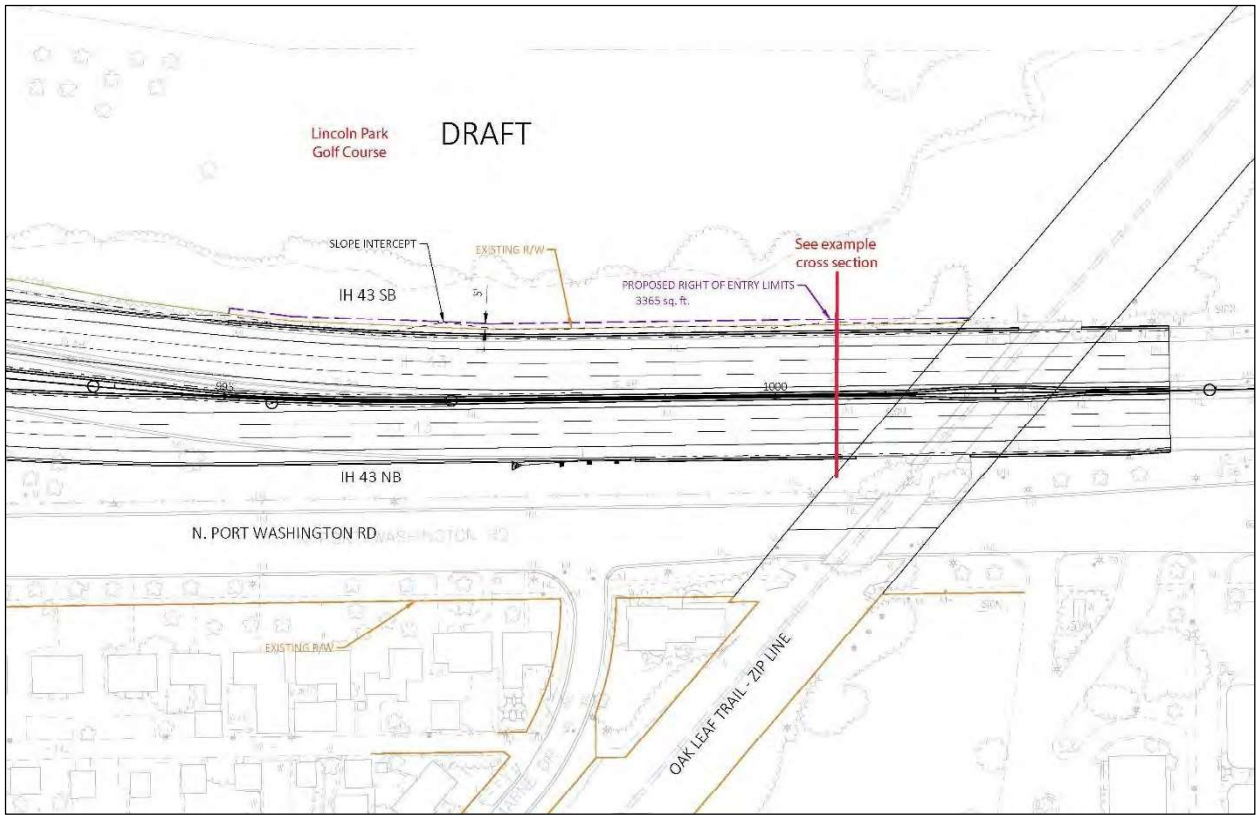
Comments (FOR AGENCY USE ONLY):

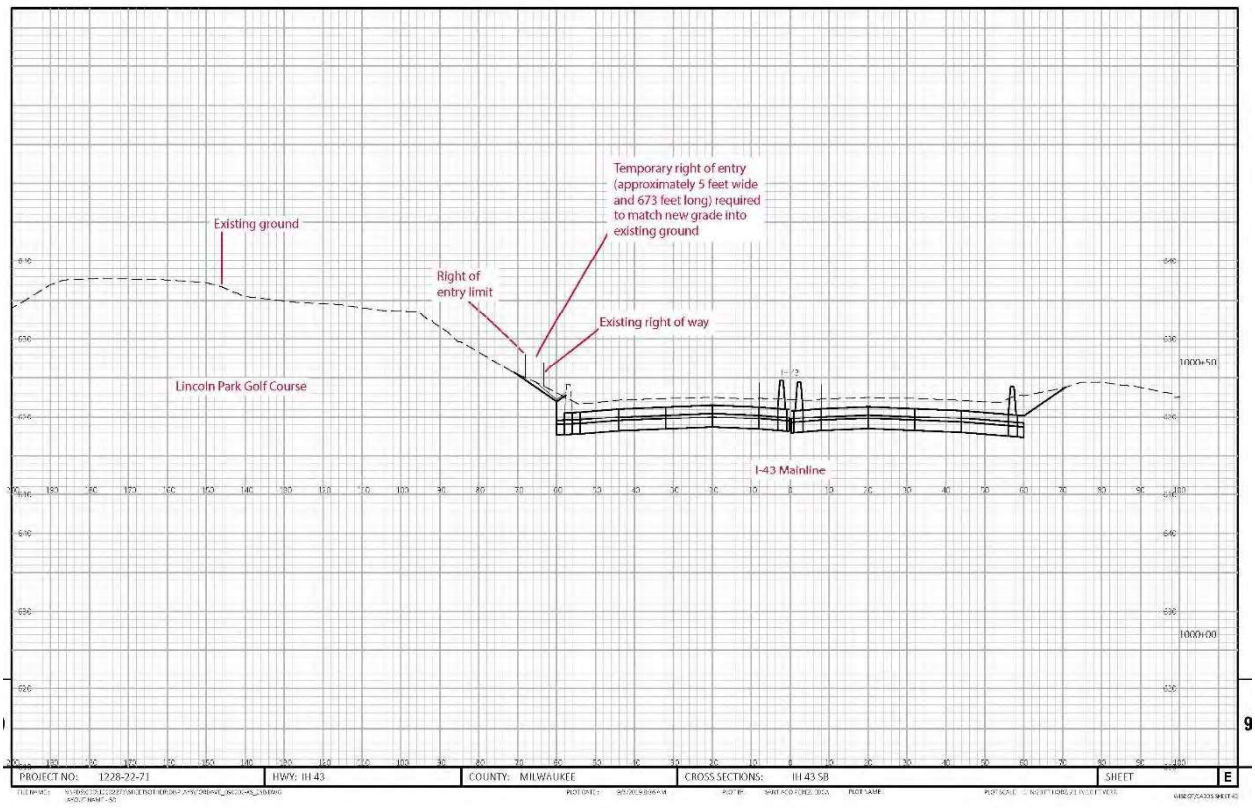
NE for C but elig for A for it's role in Catholic education.
Period of significance 1929 - 1970

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706

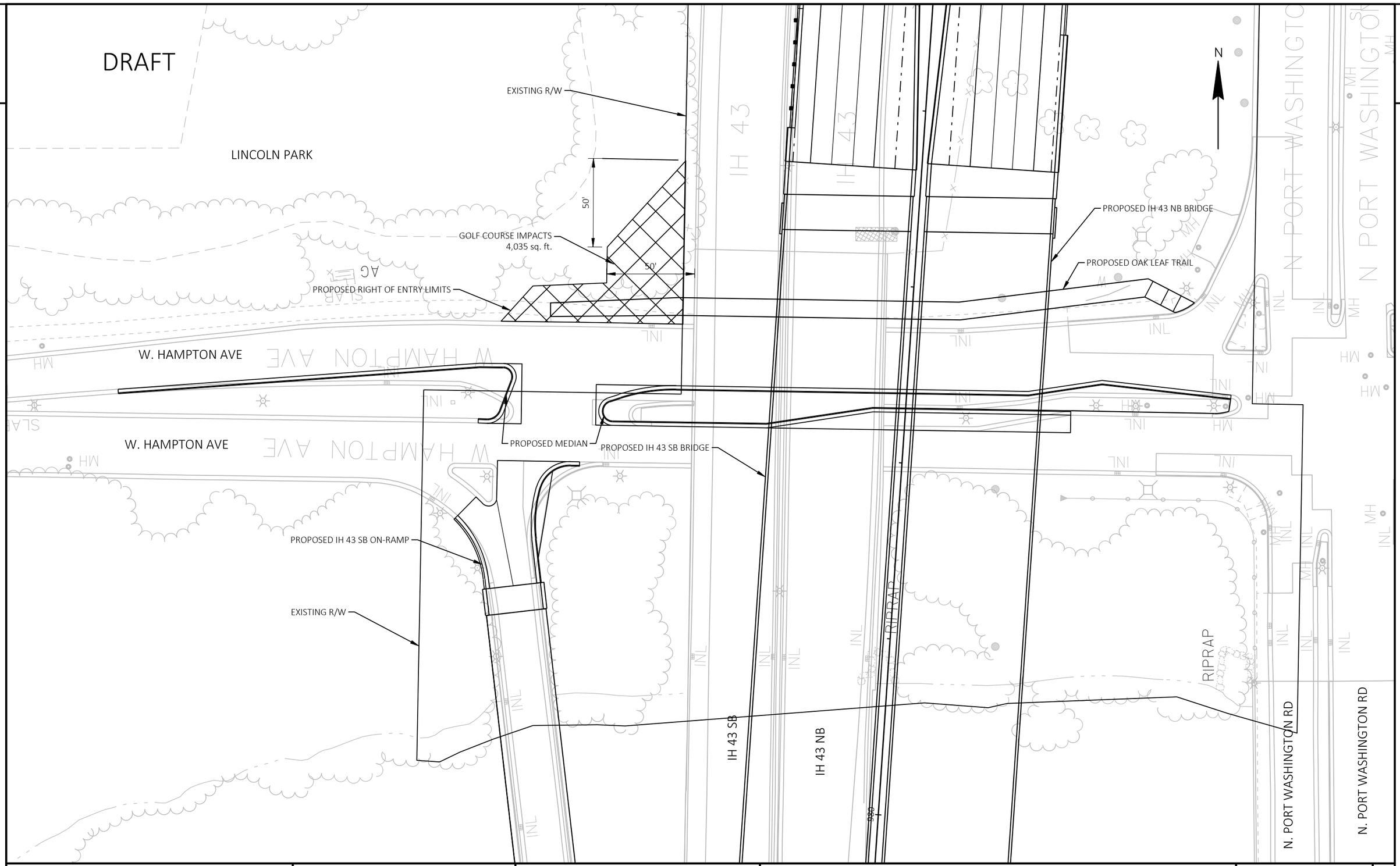
APPENDIX G

SECTION 6(F) IMPACTS AT LINCOLN PARK GOLF COURSE


Lincoln Park
Golf Course
DRAFT
SLOPE INTERCEPT
EXISTING R/W
IH 43 SB
PROPOSED RIGHT OF ENTRY LIMITS
3365 sq. ft.
See example
cross section
IH 43 NB
N. PORT WASHINGTON RD
EXISTING R/W
OAK LEAF TRAIL - ZIP LINE


Existing ground
Temporary right of entry
(approximately 5 feet wide
and 673 feet long) required
to match new grade into
existing ground
Right of
entry limit
Existing right of way
Lincoln Park Golf Course
I-43 Mainline
1000+50
1000+00
PROJECT NO: 1228-22-71
HWY: IH 43
COUNTY: MILWAUKEE
CROSS SECTIONS: IH 43 SB
SHEET
E

DRAFT



PROJECT NO: 1228-22-71	HWY: IH 43	COUNTY: MILWAUKEE	HAMPTON AVE	SHEET E

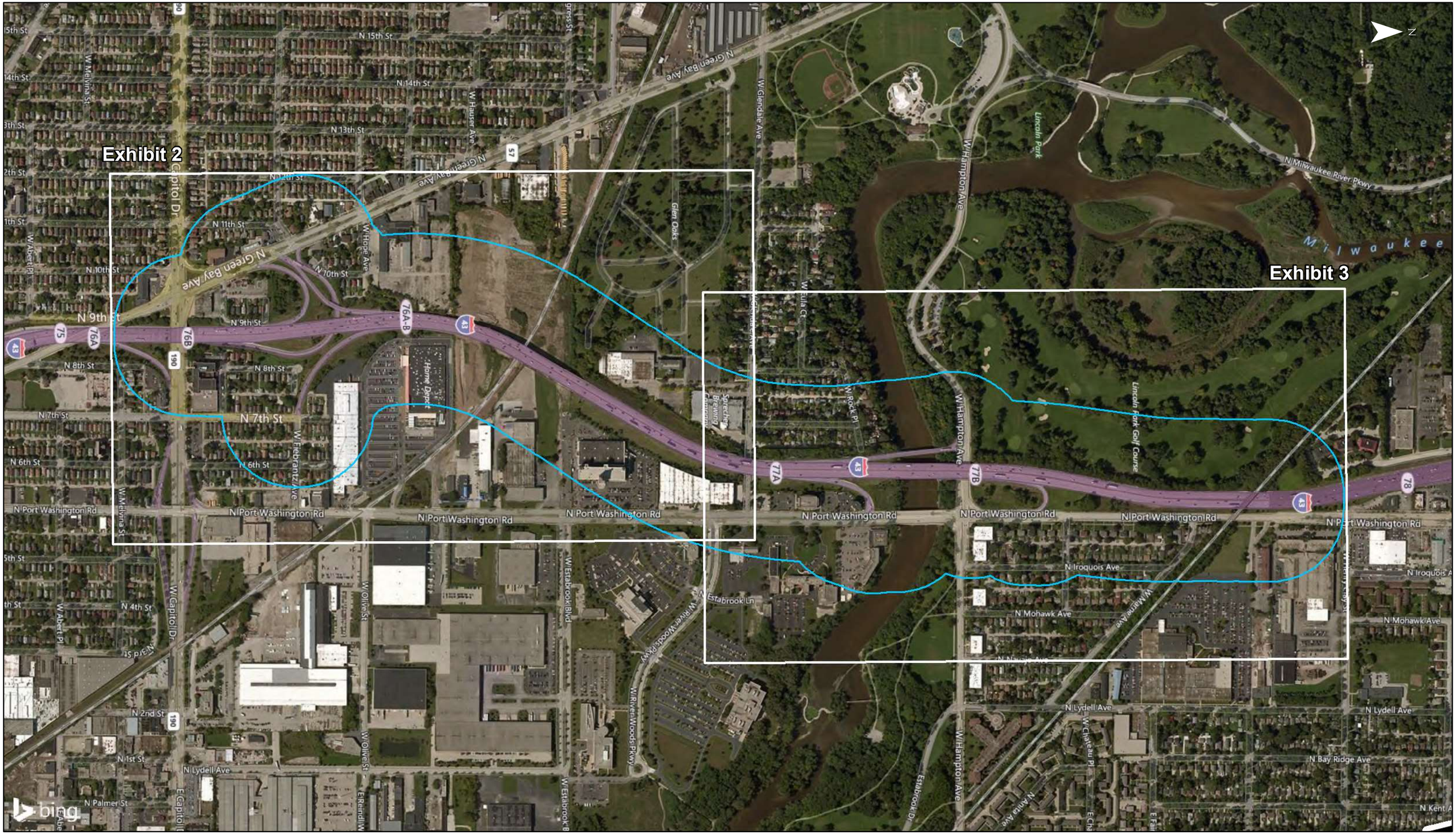
FILE NAME : N:\PDS\C3D\12282271\SHEETSOTHER\JCJ\GOLF COURSE IMPACTS.DWG
LAYOUT NAME - Hampton Ave Work Display

PLOT DATE : 12/10/2019 1:05 PM PLOT BY : JELACIC, JOSEPH C PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

APPENDIX H

NOISE REFERENCE MATERIALS AND EXHIBITS



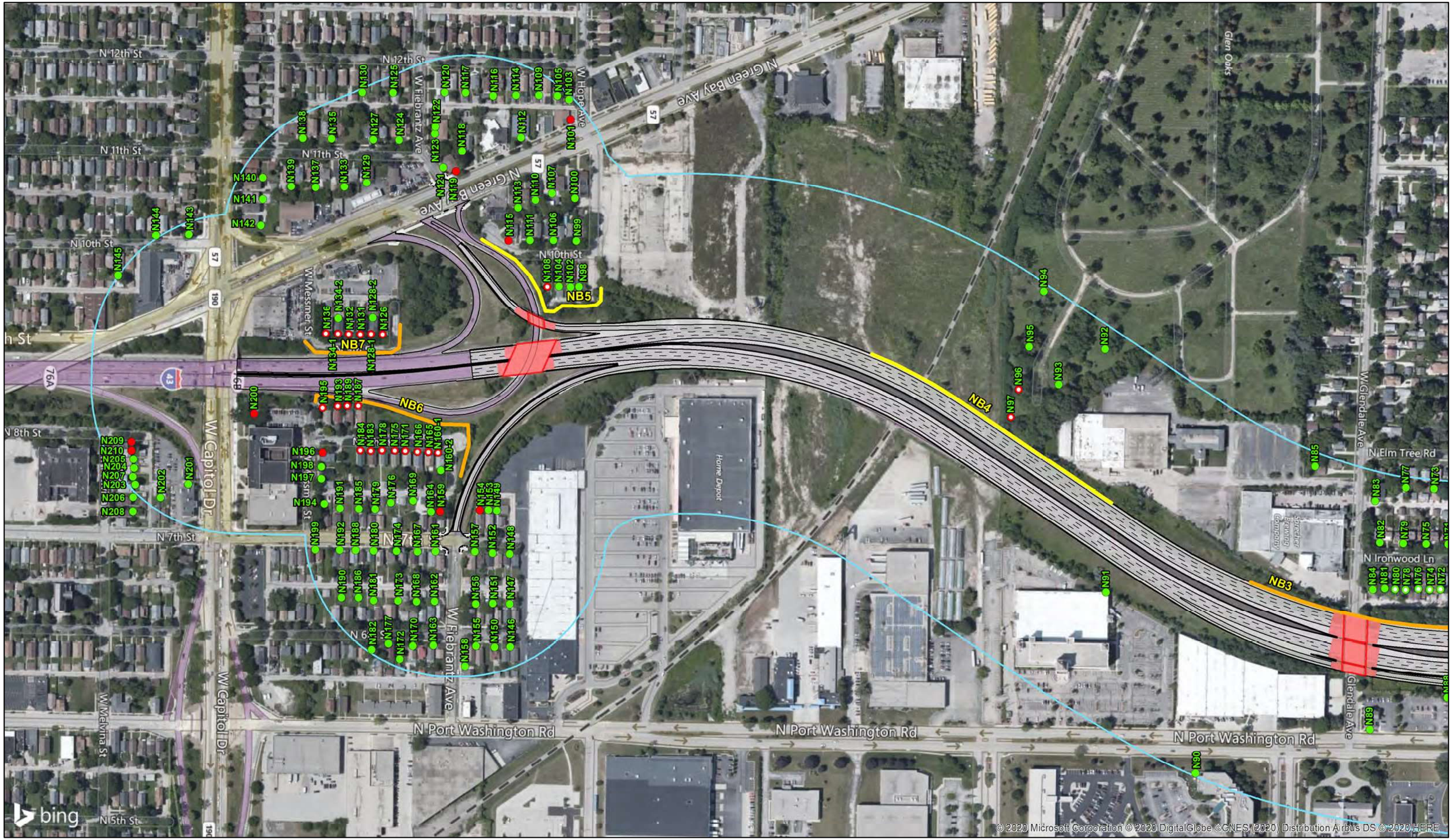
500' Project Buffer

0 300 600 1,200 Feet

1 inch = 600 feet

Page 1 of 3

I-43 North-South Freeway
Capitol Drive to Hampton Avenue
Project ID 1228-22-01
Traffic Noise Evaluation
EXHIBIT E-1



- Not Impacted / Benefited
- Impacted / Benefited
- Not Impacted / Not Benefited
- Impacted / Not Benefited
- 500' Project Buffer

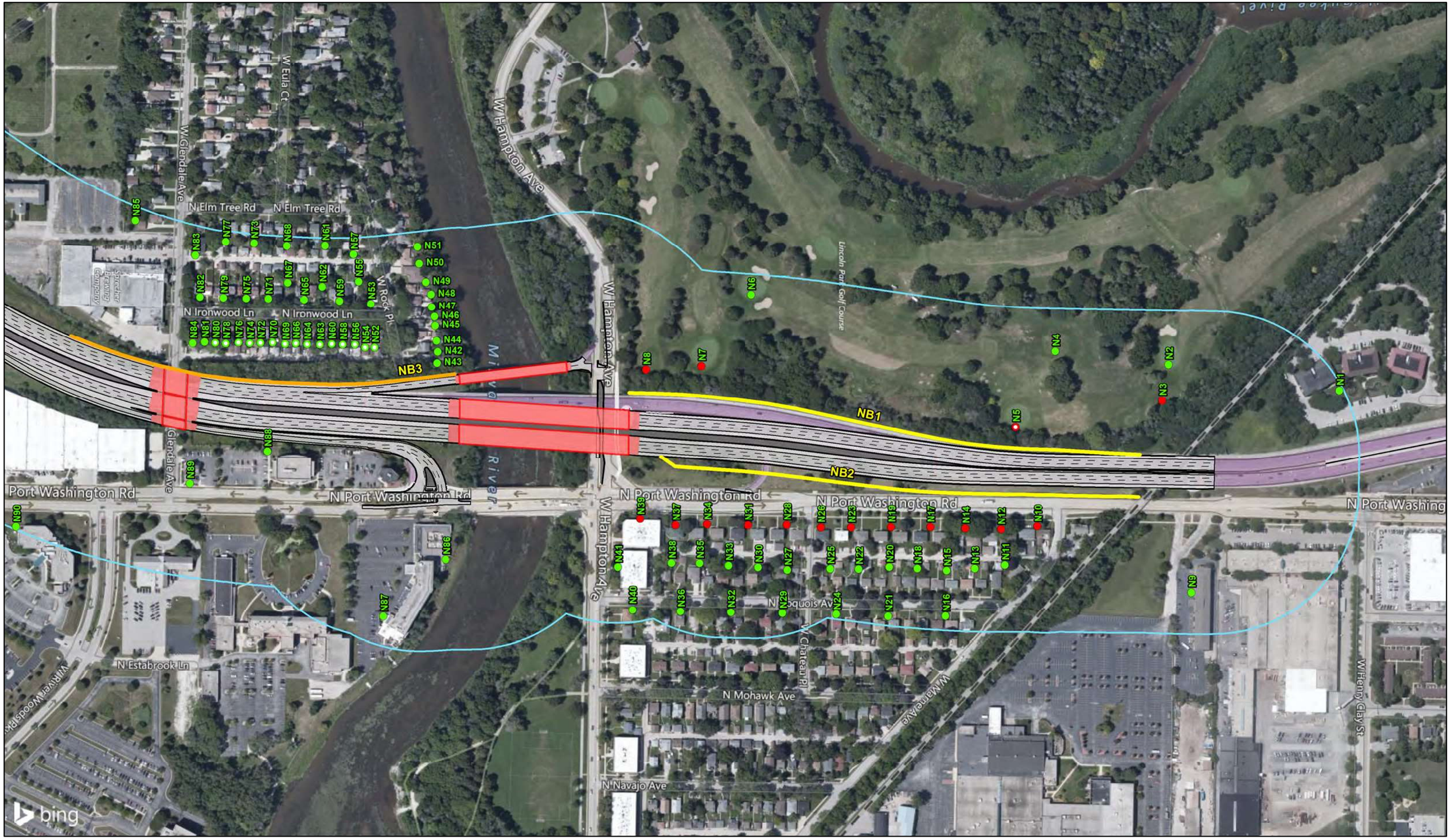
- Noise Barriers Analyzed
- Feasible and Reasonable Noise Barrier

0 150 300 600 Feet

1 inch = 300 feet

Page 2 of 3

I-43 North-South Freeway
Capitol Drive to Hampton Avenue
Project ID 1228-22-01
Traffic Noise Evaluation
EXHIBIT E-2



- Not Impacted / Benefited
- Impacted / Benefited
- Not Impacted / Not Benefited
- Impacted / Not Benefited
- 500' Project Buffer
- Noise Barriers Analyzed
- Feasible and Reasonable Noise Barrier

0 150 300 600 Feet

1 inch = 300 feet

Page 3 of 3

I-43 North-South Freeway
Capitol Drive to Hampton Avenue
Project ID 1228-22-01
Traffic Noise Evaluation
EXHIBIT E-3