

ADDENDUM No. 1

RFP No. 24-35

2024 - 2025 Bridge Inspection Project

Due: June 18, 2024 at 3:00 P.M. (local time)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes two hundred and twelve (212) pages.**

The Proposer is to acknowledge receipt of this Addendum No. 1 by signing and submitting Attachment B, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.

The following forms provided within the RFP Document should be included in submitted proposal:

- Attachment C - Non-Discrimination Declaration of Compliance
- Attachment D - Living Wage Declaration of Compliance
- Attachment E - Vendor Conflict of Interest Disclosure Form

Proposals that fail to provide these completed forms listed above upon proposal opening may be rejected as non-responsive and may not be considered for award.

I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the RFP documents which are outlined below are referenced to a page or Section in which they appear conspicuously. Offerors are to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

Section/Page(s)	Change
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Section IV	As provided in RFP No. 24-35 Document: Attachment A
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As updated herein:

Attachment A

BSIR SIA Forms

Comment: The intent with this is to provide the BSIR and SIA Summary Forms from last bridge inspection cycle for NBIS Structures only(18).

II. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

Question 1: Can we get plans for bridges, latest inspection reports for all bridges, latest load rating files, native files (AASHOWare BrR), hand calculations or engineering assumption; Summary and Assumption sheets (List of fabricator or construction companies if plans are not available), and Map of park bridge's locations?

Answer 1: Attached to this addendum are the latest BSIR forms for the 18 NBI Structures. All other requested documents, if available, will be given to the firm that is awarded the project.

Question 2: The City has 5 bridges over RR and according to RFP no right-of-entry will be required except only for Eisenhower Parkway over Ann Arbor RR. Why do the other 4 not require right-of-entry? Are they abandoned RR?

Answer 2: Access to RR right of way is not needed as there are other vantage points to complete the non-in-depth visual inspections of bridges. However, the Consultant is responsible for making sure they obtain all permits needed to complete the work, including permit to entry if it is required.

Question 3: The total number of park bridges is 35 (see sh.14 RFP). However, you are asking to inspect only 10 bridges (see sh.16). Are 10 just for 2024 and the rest of it for 2025?

Answer 3: Its only 10 park bridges for 2024, with none for 2025. We will be adding more park bridges for the next round of inspections in the 2026-2027 bridge inspections project that will depend on renewal of the Professional Services Agreement.

Question 4: Usually load rating for pedestrian bridges is not required. If the City wants load rating for pedestrian bridges to be done, is the original load capacity not available from fabricator?

Answer 4: Load rating for pedestrian bridges is not needed.

Question 5: In the RFP, the City has one tunnel: Huron Parkway over U of M Tunnel. Does this structure require tunnel inspection form or just regular bridge one?

Answer 5: We will require a simplified bridge inspection as outlined in scope of services in RFP and also as shown in the lates Culvert Summary form that is in this addendum.

Question 6: Would City of Ann Arbor consider a proposal to inspect these bridges with digital condition assessments/ methodology, assuming compliance?

Answer 6: We would consider the proposal if there it is compliance and satisfies fully the scope of services as outlined in the RFP.

Question 7: We are a Canadian based firm and we understand that we can submit W-8 form in lieu if W-9. Kindly confirm.

Answer 7: Yes, a W-8 form will suffice for a Canadian based firm.

Question 8: Please confirm if the bridges listed in table 1 are to be inspected twice. We understand that the bridges must be inspected biennial i.e. 2024 and 2026 & 2025 and 2027. Please confirm if scope and quotations should includes two inspections.

Answer 8: Bridges listed in table 1 are to be inspected once. The year of inspection is noted in the last column. Yes bridges will be inspected biennial.

Question 9: We understand that RR permit of entry cost will be reimbursed as per actuals.

Answer 9: Correct, City of Ann Arbor will reimburse permit to entry.

Question 10: Page 9 reads "The CONSULTANT shall review prior Bridge Safety Inspection Reports, available as-built records, load rating calculations, evaluations, and currently filed MDOT SIA and BSIR forms for each structure. Some of this information may not be available for every structure". Kindly clarify the expectations from the consultant in case these forms are not available for some structures.

Answer 10: The Consultant is responsible to review all available information for every structure. If not available the consultant is not expected to review.

Offerors are responsible for any conclusions that they may draw from the information contained in the Addendum.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14691

BRIDGE SAFETY INSPECTION REPORT

Facility BANDEMER PARK	Latitude / Longitude 42.3032 / -83.7465	MDOT Structure ID 814021299999B02	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 118.75 / 12 / 1	Owner City: ANN ARBOR(0212)	
Location BANDEMER PARK	Built / Recon. / Paint / Ovly. 1995 / / 2022 /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 10 Truss- Thru and Pony	Last NBI Inspection 12/07/2023 / PORM	Scour Evaluation 8 Stable Above Footing



NBI INSPECTION

PORM

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	22	12/07/2023

GENERAL NOTES

Single lane, single span weathering steel truss bridge serving as access to Bandemer Park. The bridge was added to the NBI in October 2023. Bridge was rehabilitated in 2022. Work included welded repairs to the floorbeams and truss members, stringer replacement, timber deck replacement, diagonal bracing repairs, guardrail replacement, and handrail replacement. Floorbeams and stringers were painted using a 3-coat system after all repairs were installed. Inspection frequency set to 22 months to get the bridge on the same inspection schedule as the rest of the City of Ann Arbor bridges.

DECK

01/01 12/23

1. Surface (SIA-58A)	8	New timber decking installed in 2022. Decking is in good condition with isolated minor splits and checks. (12/23) (01/01) ()
2. Expansion Joints	N	No joints on bridge (12/23) (01/01) ()
3. Other Joints	N	No joints on bridge (12/23) (01/01) ()
4. Railings	8	New Guardrail Type B installed in 2022. HSS tubes reinforce the guardrail and connect to the truss vertical members. Guardrail extends 20 ft beyond each end of the bridge. (12/23) (01/01) ()
5. Sidewalks or Curbs	N	Pedestrian bridge adjacent to the vehicle bridge. (12/23) (01/01) ()
6. Deck Bottom Surface (SIA-58B)	8	New timber decking installed in 2022. Decking is in good condition with isolated minor splits and checks. Decking is in contact with stringers. (12/23) (01/01) ()
7. Deck (SIA-58)	8	New timber decking installed in 2022. Decking is in good condition with isolated minor splits and checks. 2 boards at midspan and 1 board near the north field splice have loose connections. (12/23) (01/01) ()
8. Drainage		(12/23) (01/01) ()

SUPERSTRUCTURE

01/01 12/23

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
BANDEMER PARK	42.3032 / -83.7465	814021299999B02	Good Condition(7)
Feature	Length / Width / Spans	Owner	
HURON RIVER	118.75 / 12 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
BANDEMER PARK	1995 / / 2022 /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	3 Steel / 10 Truss- Thru and Pony	12/07/2023 / PORM	8 Stable Above Footing



9. Stringer (SIA-59)	7	Weathering steel truss composed of HSS members. Welded repairs were installed in 2022 at the floorbeam connections to the truss. Wide flange floorbeams are also weathering steel. Welded repairs were installed in 2022. Minor pitting without section loss is present in the webs. Floorbeams were painted with a 3-coat system in 2022. Stringers were replaced with galvanized HSS members in 2022. Stringers are not made of weathering steel. (12/23) (01/01) ()
10. Paint (SIA-59A)	9	Weathering steel floorbeams were painted in 2022 with a 3-coat system. Paint is in good condition with no localized failures. (12/23) (01/01) ()
11. Section Loss	3	Welded repairs were installed to deteriorated portions of the truss and floorbeams in 2022. Stringers were replaced at this time. Minor pitting is present on the webs of the floorbeams with no measurable section loss. (12/23) (01/01) ()
12. Bearings	6	Weathering steel truss shoe bearings. The base plate below truss shoes has rust and corrosion at all four bearing locations. Debris is present on the beam seats and bearings. (12/23) (01/01) ()

SUBSTRUCTURE

01/01 12/23

13. Abutments (SIA-60)	7	Shared concrete abutments with adjacent pedestrian bridge. Overall condition of abutments is good. Graffiti is present on the south abutment. (12/23) (01/01) ()
14. Piers (SIA-60)	N	(12/23) (01/01) ()
15. Slope Protection	N	Water crossing (12/23) (01/01) ()
16. Channel (SIA-61)	7	North abutment behind permanent steel sheet pile wall. Riprap present at south abutment. Minor bank erosion is present at the water line. Banks are well vegetated. (12/23) (01/01) ()
17. Scour Inspection	7	This portion of the Huron River is located between two elevation controlled dams. Stream is stable for scour. (12/23) (01/01) ()

APPROACH

01/01 12/23

18. Approach Pavement	5	HMA approaches on both ends of bridge. Spalling and settlement up to 1" is present along both abutments. Longitudinal and transverse cracks in both approaches. Sediment/debris is present near the abutments indicating that water is not draining to the nearby spillways but is ponding behind the abutments. (12/23) (01/01) ()
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Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 10 Truss- Thru and Pony	Last NBI Inspection 12/07/2023 / PORM	Scour Evaluation 8 Stable Above Footing



- 19. Approach Shoulders Sidewalks 6 HMA sidewalk along west side of bridge and carried by separate pedestrian bridge. South approach sidewalk is separated from the roadway by a concrete curb. North approach sidewalk is level with roadway pavement with bollards to prevent vehicles from accessing the pedestrian bridge. Minor settlement up to 1/2" debris is present along the abutments. (12/23) (01/01) ()
- 20. Approach Slopes Water is not draining to spillways on approach embankment. Slopes are well vegetated. (12/23) (01/01) ()
- 21. Utilities Gas line mounted to the east fascia of the bridge. (12/23) (01/01) ()
- 22. Drainage Culverts (12/23) (01/01) ()

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	0
36B. Transitions	0
36C. Approach Guardrail	0
36D. Approach Guardrail Ends	0

Other Items

Item	Rating
71. Water Adequacy	9
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	
Underwater Insp. Method	0

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical	22	12/07/2023
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

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SUPPORTING IMAGES

PORM 12/07/2023



Document Name: R0012530.JPG
 Category: Elevation
 Span Number: 1
 Comments: East elevation of bridge



Document Name: R0011732.JPG
 Category: Approach
 Span Number: 1
 Comments: HMA spall at south reference line



Document Name: R0012527.JPG
 Category: Approach
 Span Number:
 Comments: North approach



Document Name: R0012525.JPG
 Category: Railing
 Span Number: 1
 Comments: Guardrail and fencing on bridge

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Document Name: R0011727.JPG
 Category: Deck
 Span Number: 1
 Comments: Deck member with broken connection near midspan



Document Name: R0012526.JPG
 Category: Deck
 Span Number: 1
 Comments: Bridge deck looking south



Document Name: R0012532.JPG
 Category: Superstructure
 Span Number: 1
 Comments: Typical vertical truss member repair, located above floorbeam connections




Document Name: R0012534.JPG
 Category: Superstructure
 Span Number: 1
 Comments: Typical galvanized stringers and bottom of deck

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Document Name: R0012536.JPG
 Category: Superstructure
 Span Number: 1
 Comments: Typical floorbeam web repair and paint condition



Document Name: R0011742.JPG
 Category: Substructure
 Span Number: 1
 Comments: Typical abutment, south shown

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

NBI INSPECTION

DWYX

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

GENERAL NOTES

DLZ completed a routine visual inspection of the structure. Minor railing repairs completed in 2021.

DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	8	7	7	Minor transverse cracks. Diagonal cracks in SE, SW and NE corners of bridge deck (end spans). Concrete edge at north joint with HMA approach pavement has areas that are spalled. (10/22) Some minor transverse cracks, esp in north span. Some minor diagonal cracks in SE, SW and NE corners of bridge deck (end spans). Concrete edge at north joint with HMA approach pavement has areas that are spalled. (10/20) Some minor transverse cracks, esp in north span. Some minor diagonal cracks in SE, SW and NE corners of bridge deck (end spans). Concrete edge at north joint with HMA approach pavement has areas that are spalled. (10/18)
2. Expansion Joints	8	8	8	Expansion joint glands hold water and dirt, especially at gutter lines. (10/22) Expansion joint glands hold water and dirt, especially at gutter lines. (10/20) Expansion joint glands hold water and dirt, esp at gutter lines. (10/18)
3. Other Joints	6	6	6	Some filler missing at both deck end joints. (10/22) Some filler missing at both deck end joints. (10/20) Some filler missing at both deck end joints. (10/18)
4. Railings	6	6	7	Vertical cracks in concrete parapet. Metal portions have been hot-dipped galvanized and painted. The three horizontal metal railing sections attach to the concrete end walls in all quadrants. Concrete railing ends have been repaired. (10/22) Vertical cracks in concrete parapet. Metal portions have been hot-dipped galvanized and painted. The three horizontal metal railing sections attach to the concrete end walls in all quadrants. The northwest and northeast connections have spalled, delaminated or cracked concrete at four/six connection locations. A bolt is missing in the NW quadrant. SE quadrant has been patched. Some minor map cracking in concrete at posts. (10/20) Vertical cracks in concrete parapet. Metal portions have been hot-dipped galvanized and painted. The three horizontal metal railing sections attach to the concrete endwalls in all quadrants. The northwest and northeast connections have spalled, delaminated or cracked concrete at four/six connection locations. A bolt is missing in the NW quadrant. (10/18)
5. Sidewalks or Curbs	6	6	6	Cracking in top surfaces and fascia faces all spans. Several delaminations and minor pitting. Diagonal cracks in corners. Spall in curb at SE expansion joint. (10/22) Cracking in top surfaces and fascia faces all spans. Several delaminations and minor pitting. Diagonal cracks in corners. Spall in curb at SE expansion joint. (10/20) Cracking in top surfaces and fascia faces all spans. Several delaminations and minor pitting. Diagonal cracks in corners. (10/18)
6. Deck Bottom Surface (SIA-58B)	4	4	4	Approximately 20% of bottom of deck area has delaminations, incipient spalls, spalls to steel, cracks with efflorescence, and rust stains. (10/22) Approximately 20% of bottom of deck area has delaminations, incipient spalls, spalls to steel, cracks with efflorescence, and rust stains. (10/20) Approximately 20% of bottom of deck area has delaminations, incipient spalls, cracks with efflorescence, and rust stains. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

7. Deck (SIA-58) 5 5 5 Bottom of deck has evidence of moisture with cracks, exposed rebar, incipient spalls and delaminations. Top surface has some cracks in overlay. (10/22)
 Bottom of deck has evidence of moisture with cracks, exposed rebar, incipient spalls and delaminations. Top surface has some cracks in overlay. (10/20)
 Bottom of deck has evidence of moisture with cracks, exposed rebar, incipient spalls and delaminations. Top surface has some cracks in overlay. (10/18)

8. Drainage There are 3 deck drains along the west curb line in both the north and center spans. They are in good condition with downspouts below the deck. (10/22)
 There are 3 deck drains along the west curb line in both the north and center spans. In good condition with downspouts below the deck. (10/20)
 There are 3 deck drains along the west curb line in both the north and center spans. In good condition with downspouts below the deck. (10/18)

SUPERSTRUCTURE

10/18 10/20 10/22

9. Stringer (SIA-59) 6 6 6 Surface rust is present. Outside two beams on both sides have minor section loss at piers. South span beams have soot at piers due to homeless activity. Beam ends at piers are zone painted. Surface rust at bearings. (10/22)
 Surface rust is present. Outside two beams on both sides have minor section loss at piers. South span beams are in good condition. Beam ends at piers are zone painted Some minor surface rust at bearings. (10/20)
 Surface rust is present. Outside two beams on both sides have minor section loss at piers. South span beams are in good condition. Beam ends at piers are zone painted Some minor surface rust at bearings. (10/18)

10. Paint (SIA-59A) 5 5 5 Beam ends at piers have been zone painted. The paint system otherwise has failed. The top coat of paint is peeling or missing. Over 10% of prime coat is missing, primarily on the two outer beams on both sides of the bridge. (10/22)
 Beam ends at piers have been zone painted. The paint system otherwise has failed. The top coat of paint is peeling or missing. Over 10% of prime coat is missing, primarily on the two outer beams on both sides of the bridge. (10/20)
 Beam ends at piers have been zone painted. The paint system otherwise has failed. The top coat of paint is peeling or missing. Over 10% of prime coat is missing, primarily on the two outer beams on both sides of the bridge. (10/18)

11. Section Loss 1 1 1 Minor section loss at beam ends and end diaphragms at the piers. Section loss remains, but beam ends have been painted. (10/22)
 Minor section loss at beam ends and end diaphragms at the piers. Section loss remains, but beam ends have been painted. (10/20)
 Minor section loss at beam ends and end diaphragms at the piers. Section loss remains, but beam ends have been painted. (10/18)

12. Bearings 6 6 6 Bearing pads overhang the south side of the south pier at all beam lines. Elastomeric bearing pads are dried out and cracking. Shims are visible at some locations. Sole plates at piers have been painted. (10/22)
 Bearing pads overhang the south side of the south pier at all beam lines. Elastomeric bearing pads are dried out and cracking. Shims are visible at some locations. Sole plates at piers have been painted. (10/20)
 Bearing pads overhang the south side of the south pier at all beam lines. Elastomeric bearing pads are dried out and cracking. Shims are visible at some locations. Sole plates at piers have been painted. (10/18)

SUBSTRUCTURE

10/18 10/20 10/22

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University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

13. Abutments (SIA-60)	7	7	7	<p>South abutment is covered in graffiti with a few vertical cracks present. South backwall has cracks and is delaminated under conduits in west bay. North abutment has one spall and a few vertical cracks. North backwall has minor delaminations and vertical cracks. Joint filler missing in vertical construction joint. Steel sheet piling around upstream portion of abutment footings. (10/22)</p> <p>South abutment is covered in graffiti with a few vertical cracks present. South backwall has cracks and is delaminated under conduits in west bay. North abutment has one spall and a few vertical cracks. North backwall has minor delaminations and vertical cracks. Joint filler missing in vertical construction joint. Steel sheet piling around upstream portion of abutment footings. (10/20)</p> <p>South abutment is covered in graffiti with vertical cracks present. South backwall has cracks and is delaminated under conduits in west bay. North abutment has one spall and vertical cracking. North backwall has minor delaminations and vertical cracks. Joint filler missing between vertical construction joint. Steel sheet piling around upstream portion of abutment footings. (10/18)</p>
14. Piers (SIA-60)	7	7	7	<p>Piers have small delaminated areas and vertical cracks. South side of south pier is covered in graffiti. Steel sheet piling around upstream pier nosing. Filter bag protector at north pier. (10/22)</p> <p>Piers have small delaminated areas and vertical cracks. South side of south pier is covered in graffiti. Steel sheet piling around upstream pier nosing. (10/20)</p> <p>Piers have small delaminated areas and vertical cracks. South side of south pier is covered in graffiti. Steel sheet piling around upstream pier nosing. (10/18)</p>
15. Slope Protection	7	7	7	<p>Paved walkway on south side of south pier. Some riprap present. Steel sheet piling left in place around upstream end of piers and abutments. Significant trash present on south paved area. (10/22)</p> <p>Paved walkway on south side of south pier. Some riprap present. Steel sheet piling left in place around upstream end of piers and abutments. Significant trash present on south paved area. (10/20)</p> <p>Paved walkway on south side of south pier. Some riprap present. Steel sheet piling left in place around upstream end of piers and abutments. Significant trash present on south paved area. (10/18)</p>
16. Channel (SIA-61)	7	7	7	<p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2020. Channel banks and bottom appear stable. (10/22)</p> <p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2020. Channel banks and bottom appear stable. (10/20)</p> <p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2015. Channel banks and bottom appear stable. (10/18)</p>
17. Scour Inspection	7	7	7	<p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2020. Channel banks and bottom appear stable. (10/22)</p> <p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2020. Channel banks and bottom appear stable. (10/20)</p> <p>Small scour hole located under storm sewer outfall in NE wingwall. Stream cross sections obtained in 2015. Channel banks and bottom appear stable. (10/18)</p>

APPROACH

	10/18	10/20	10/22	
18. Approach Pavement	7	7	7	<p>North and south approaches are HMA in good condition. Some unsealed cracks in HMA at north end. (10/22)</p> <p>North and south approaches are HMA in good condition. Some unsealed cracks in HMA at north end. (10/20)</p> <p>North and south approaches are HMA in good condition. (10/18)</p>
19. Approach Shoulders Sidewalks	6	6	8	<p>Concrete sidewalks have minor cracking. (10/22)</p> <p>Concrete sidewalks have minor cracking. (10/20)</p> <p>Concrete sidewalks have minor cracking. (10/18)</p>
20. Approach Slopes				<p>(10/22)</p> <p>(10/20)</p> <p>(10/18)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

21. Utilities

Street light pole on east railing of bridge. Eight conduits in west bay. Eight conduits in second, west bay. Conduits are broken at several locations. Conduit attached to west fascia sidewalk fascia. (10/22)
 Street light pole on east railing of bridge. Eight conduits in west bay. Eight conduits in second, west bay. Conduits are broken at several locations. Conduit attached to west fascia sidewalk fascia. (10/20)
 Street light pole on east railing of bridge. Light pole has several holes and heavy rusting at base of pole. Eight conduits in west bay. Eight conduits in second, west bay. Conduits are broken at several locations. Conduit attached to west fascia sidewalk fascia. (10/18)

22. Drainage Culverts

(10/22)
(10/20)
(10/18)

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	0
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

Item	Rating
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

Bridge History, Type, Materials	
27 - Year Built	1982
106 - Year Reconstructed	
202 - Year Painted	1982
203 - Year Overlay	2015
43 - Main Span Bridge Type	3 32
44 - Appr Span Bridge Type	
77 - Steel Type	5
78 - Paint Type	2
79 - Rail Type	3
80 - Post Type	3
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	16
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	80.1
49 - Structure Length	207.6
50A - Width Left Curb/SW	10.5
50B - Width Right Curb/SW	10.5
33 - Median	0
51 - Width Curb to Curb	47
52 - Width Out to Out	70.9
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/19/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	5
58A/B - Deck Surface/Bottom	7 4
59 - Superstructure Rating	6
59A - Paint Rating	5
60 - Substructure Rating	7
61 - Channel Rating	7
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014517 07
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	4
29 - ADT	9000
30 - Year of ADT	2015
32 - Appr Roadway Width	46.9
32A/B - Ap Pvt Type/Width	4 47.01
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	47.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	17
110 - Truck Network	0
114 - Future ADT	9500
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	0
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	2
69 - Underclearance	N
71 - Waterway Adequacy	8
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	8

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	


Proposed Improvements	
75 - Type of Work	
76 - Length of Improvement	0
94 - Bridge Cost	0
95 - Roadway Cost	0
96 - Total Cost	0
97 - Year of Cost Estimate	0

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.92
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.79
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.75
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

No inspections available for bridge key 814021200129B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

WORK RECOMMENDATIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

WORK RECOMMENDATIONS

DWYX

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022


RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Sidewalk Rpr	L	Repair spalled sidewalk at expansion joint device (SE).
Full Paint	M	Complete painting of structural steel
Other	L	Replace damaged guardrail post in the northeast quadrant

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

SCOUR CRITICAL BRIDGE ACTION PLAN


Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

No plan available for bridge key 814021200129B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

LOAD RATING ASSUMPTIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/19/2022

Deterioration:

None that impacts capacity

Most Recent Year Construct / Reconstruct / Overlay: 2015

History of Work Impacting Load Rating:

None

Superstructure Component: 3 Steel Beam fy: 50.0 ksi Beam f'c / fb: ksi

Composite: No Number of Beams: 9 Shop Drawings Verified: No

Beam Size(s) & Names (each span): W36x150 rolled steel beams in spans 1 and 2; 9 beams per span, 2 spans. W36x182 in span 3; 9 beams, 1 span.

Deck: Thickness (in.): 10.0 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: latex conc Thickness (in.): 1.5 Unit Weight (pcf.): 150.0

LEFT

CENTER

RIGHT

Barrier: Type / Weight (plf.): 3 tube on conc / 400.0 / 3 tube on conc / 400.0

Sidewalk: Width / Thick (in.): 11.97 / 8.75 / 11.97 / 8.75

Clear Roadway (ft.): 47.0

Additional Loads:

1" deck haunch; (8) 7" dia. steel conduits; (8) 4" dia. steel conduits; 565 lb steel diaphragms at quarter points, north span, third points other 2 spans

Unique Factors That Affect Capacity:


Analyzed By: DLZ

Date: 10/22/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

LOAD RATING SUMMARY

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

Compliance Issue: None
Compliance Verified: No
Analysis Program: Merlin Dash
Analysis Program Version: 9.2
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/19/2022

Controlling component and failure mode:

Span 1, interior beam, positive flexure


NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.92
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.79
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.75
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: DLZ	Date: 10/22/2018
Checked By: DLZ	Date: 10/25/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
MAIDEN LANE	42.2875 / -83.7331	814021200129B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	207.6 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
200 FT N OF FULLER ROAD	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/19/2022 / DWYX	8 Stable Above Footing	

No inspections available for bridge key 814021200129B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11072

OUTSTANDING WORK

Facility MAIDEN LANE	Latitude / Longitude 42.2875 / -83.7331	MDOT Structure ID 814021200129B01	Structure Condition Fair Condition(5)	
Feature HURON RIVER	Length / Width / Spans 207.6 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 200 FT N OF FULLER ROAD	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / DWYX	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

SUPERSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Full Paint				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Complete painting of structural steel (Pedro Trana 04/20/2023)				

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Sidewalk Rpr				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Repair spalled sidewalk at expansion joint device (SE). (Pedro Trana 04/20/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Other				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Replace damaged guardrail post in the northeast quadrant (Pedro Trana 04/20/2023)				

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

BRIDGE SAFETY INSPECTION REPORT

Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)	
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir-Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway



NBI INSPECTION

TP3D

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/11/2023

GENERAL NOTES

Inspected all Levels P1-P4, under both S Fifth Ave and Library Lane. Parking structure had ongoing construction at time of inspection as part of the City of Ann Arbor's 2023 Parking Structures Restoration project. Scope of work on the bridge portion of the structure was joint repair at the north end of South Fifth Ave and joint waterproofing.

DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	7	7	Concrete deck is buried below concrete roadway surface. On roadway, there are several cracks across the south end of South Fifth Ave. Cracks at north end and at manhole cover. Isolated cracks along Library Lane. The crosswalk halfway along Library Lane has concrete patches that are cracked and spalled. The adjacent road joint is cracked and spalled near the road centerline. (10/23) Concrete deck is buried below concrete roadway surface. On roadway, there are several cracks across the south end of South Fifth Ave. Cracks at north end and at manhole cover. Isolated cracks along Liberty Lane. (10/21) Concrete deck is buried below concrete roadway surface. On roadway, there are several cracks across west lane at south end of South Fifth Ave. Crack at north end at manhole cover. (10/19)
2. Expansion Joints	N	N	N	(10/23) (10/21) (10/19)
3. Other Joints	7	7	6	Joints are in good condition with no evidence of leaking except at the north end of South Fifth Ave. The roadway joint and structure joints are offset by several feet resulting in a crack in the roadway above the structure joint. This joint is leaking between column lines A-1 and A-1.7, the width of the roadway. A new expansion joint in the roadway and waterproofing of the structure was under construction at the time of inspection. (10/23) Joints are in good condition with no evidence of leaking. (10/21) Joints are in good condition with no evidence of leaking. (10/19)
4. Railings	N	N	N	(10/23) (10/21) (10/19)
5. Sidewalks or Curbs	7	7	7	Concrete sidewalks are in good condition. Sidewalk was replaced around fire hydrant at north end of South Fifth Ave during 2023 project. Replacement sidewalk has cracks propagating from the handhole and fire hydrant. (10/23) Concrete sidewalks are in good condition. Cracking in sidewalk at fire hydrant. (10/21) Concrete sidewalks are in good condition. Cracking in sidewalk at fire hydrant. (10/19)
6. Deck Bottom Surface (SIA-58B)	7	7	7	No cracks, spalls or concrete delaminations. Utilities are suspended from the bottom of deck. (10/23) No cracks, spalls or concrete delaminations. Utilities are suspended from the bottom of deck. (10/21) No cracks, spalls or concrete delaminations. Utilities are suspended from the bottom of deck. (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SOUTH FIFTH AVE	42.2789 / -83.7456	814021200178Z01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
PARKING STRUCTURE	188.5 / 63.5 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
BTWN LIBERTY & WILLIAMS	2011 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	6 P/S Conc Continuous / 33 Gir-Flr Bm Comp	10/11/2023 / TP3D	N Not Over Waterway



7. Deck (SIA-58) 7 7 7 Top of deck is buried under concrete roadway and not visible for inspection. No defects visible on bottom of deck. Planters with trees and flowers located above top of slab in fill. (10/23)
 Top of deck is buried under concrete roadway and not visible for inspection. No defects visible on bottom of deck. Planters with trees and flowers located above top of slab in fill. (10/21)
 Top of deck is buried under concrete roadway and not visible for inspection. No defects visible on bottom of deck. Planters with trees and flowers located above top of slab in fill. (10/19)

8. Drainage Catch basins are located in northeast quadrant of roadway and west and east curb lines along South Fifth Ave. Catch basins also located along Library Lane on both sides of roadway. (10/23)
 Catch basins are located in northeast quadrant of roadway and west and east curb lines along South Fifth Ave. Catch basins also located along Library Lane on both sides of roadway. (10/21)
 Catch basins are located in northeast quadrant of roadway and west and east curb lines along South Fifth Ave. Catch basins also located along Library Lane on both sides of roadway. (10/19)

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	7	7	7	Post tensioned CIP beams and girders with post tensioned deck. No cracks, spalls or concrete delaminations. (10/23) Post tensioned CIP beams and girders with post tensioned deck. No cracks, spalls or concrete delaminations. (10/21) Post tensioned CIP beams and girders with post tensioned deck. No cracks, spalls or concrete delaminations. (10/19)
10. Paint (SIA-59A)	N	N	N	(10/23) (10/21) (10/19)
11. Section Loss	N	N	N	(10/23) (10/21) (10/19)
12. Bearings	N	N	N	Beams frame directly to cross girders or to columns. No bearings within structure. (10/23) Beams frame directly to cross girders or to columns. No bearings within structure. (10/21) Beams frame directly to cross girders or to columns. No bearings within structure. (10/19)

SUBSTRUCTURE

	10/19	10/21	10/23	
13. Abutments (SIA-60)	7	7	7	Abutments consist of cross girders supported on columns. Typical at column lines A and F, Levels P1-P4. Hairline cracks, some with minor leaching and staining. Minor concrete delaminations present. No spalls. The joint above the abutment is leaking between column lines A-1 and A-1.7 (10/23) Abutments consist of cross girders supported on columns. Typical at column lines A and F, Levels P1-P4. Hairline cracks, some with minor leaching and staining. Minor concrete delaminations present. No spalls. (10/21) Abutments consist of cross girders supported on columns. Typical at column lines A and F, Levels P1-P4. Hairline cracks, some with minor leaching and staining. Minor concrete delaminations present. No spalls. (10/19)
14. Piers (SIA-60)	7	7	7	Piers consist of cross girders supported on columns. Typical at Column Lines C and E, Levels P1-P4. Hairline cracks and minor concrete delaminations present. No spalls. (10/23) Piers consist of cross girders supported on columns. Typical at Column Lines C and E, Levels P1-P4. Hairline cracks and minor concrete delaminations present. No spalls. (10/21) Piers consist of cross girders supported on columns. Typical at Column Lines C and E, Levels P1-P4. Hairline cracks and minor concrete delaminations present. No spalls. (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SOUTH FIFTH AVE	42.2789 / -83.7456	814021200178Z01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
PARKING STRUCTURE	188.5 / 63.5 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
BTWN LIBERTY & WILLIAMS	2011 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	6 P/S Conc Continuous / 33 Gir-Flr Bm Comp	10/11/2023 / TP3D	N Not Over Waterway



15. Slope Protection	N	N	N	(10/23) (10/21) (10/19)
16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
17. Scour Inspection	N	N	N	(10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	7	7	7	HMA approach pavement to north and south along South Fifth Ave. Some cracks in surface that have been sealed. HMA approach pavement to east where Library Lane ends at South Division St. (10/23) HMA approach pavement to north and south along South Fifth Ave. Some cracks in surface. (10/21) HMA approach pavement to north and south along South Fifth Ave. Some cracks in surface. (10/19)
19. Approach Shoulders Sidewalks	7	7	7	Concrete sidewalk along both sides of roadway for portions of South Fifth Ave and Library Lane. Sidewalk in good condition. Vegetation growing along backs of curbs. (10/23) Concrete sidewalk along both sides of roadway for portions of South Fifth Ave and Library Lane. Sidewalk in good condition. (10/21) Concrete sidewalk along both sides of roadway for portions of South Fifth Ave and Library Lane. Sidewalk in good condition. (10/19)
20. Approach Slopes				(10/23) (10/21) (10/19)
21. Utilities				Multiple utilities running through the concrete beams. Several utilities attached to columns. On roadway surface, street light poles are along both sides of both roadways. (10/23) Multiple utilities running through the concrete beams. Several utilities attached to columns. On roadway surface, street light poles are along both sides of both roadways. (10/21) Multiple utilities running through the concrete beams. Several utilities attached to columns. On roadway surface, street light poles are along both sides of both roadways. (10/19)
22. Drainage Culverts				(10/23) (10/21) (10/19)

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	N	71. Water Adequacy	N
36B. Transitions	N	72. Approach Alignment	8
36C. Approach Guardrail	N	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	N	High Load Hit (M)	No
		Special Insp. Equipment	
		Underwater Insp. Method	0
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	


Critical Feature Inspections (SIA-92)

	Freq	Date
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MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

BRIDGE SAFETY INSPECTION REPORT


Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)	
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)		
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway	

- 92A. Fracture Critical
- 92B. Underwater
- 92C. Other Special
- 92D. Fatigue Sensitive

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
SOUTH FIFTH AVE	42.2789 / -83.7456	814021200178Z01	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
PARKING STRUCTURE	188.5 / 63.5 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
BTWN LIBERTY & WILLIAMS	2011 / / /	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	6 P/S Conc Continuous / 33 Gir-Flr Bm Comp	10/11/2023 / TP3D	N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	2011
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	6 33
44 - Appr Span Bridge Type	
77 - Steel Type	
78 - Paint Type	
79 - Rail Type	0
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	2
108B - Membrane	9
108C - Deck Protection	0

Structure Dimensions	
34 - Skew	
35 - Struct Flared	0
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	62.8
49 - Structure Length	188.5
50A - Width Left Curb/SW	5.9
50B - Width Right Curb/SW	2
33 - Median	0
51 - Width Curb to Curb	22
52 - Width Out to Out	63.5
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/11/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 7
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	
40 - Horizontal Clearance	
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	6
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014303 03
19 - Detour Length	1
20 - Toll Facility	3
26 - Functional Class	17
28A - Lanes On	2
29 - ADT	10544
30 - Year of ADT	2015
32 - Appr Roadway Width	30
32A/B - Ap Pvt Type/Width	29.99
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	30.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	1
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	11466
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	N
36B - Rail Transition	N
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	7
68 - Deck Geometry	2
69 - Underclearance	N
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	0
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	
56 - Left Horiz Clearance	
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	


Proposed Improvements	
75 - Type of Work	
76 - Length of Improvement	
94 - Bridge Cost	
95 - Roadway Cost	
96 - Total Cost	
97 - Year of Cost Estimate	

Load Rating and Posting	
31 - Design Load	5
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	1.61
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.19
64MC - Mich Oper Truck	18
65 - Inv Rtg Method	6
66 - Inventory Load	.96
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	C N

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

SAFETY INSPECTION REPORT - AASHTO ELEMENTS


Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)	
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)		
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway	

No inspections available for bridge key 814021200178Z01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

WORK RECOMMENDATIONS

Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)	
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)		
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

TP3D

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/11/2023

CREW RECOMMENDATIONS

CONTRACT RECOMMENDATIONS

Recommendation Type	Priority	Description	Recommendation Type	Priority	Description
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MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

LOAD RATING ASSUMPTIONS

Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)	
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway



Rating Considers Field Condition of Members: Yes Inspection Date: 10/16/2019

Deterioration:

None

Most Recent Year Construct / Reconstruct / Overlay: 2011

History of Work Impacting Load Rating:

None

Superstructure Component: 1 Concrete Beam fy: ksi Beam f'c / fb: 3.5 ksi

Composite: Yes Number of Beams: 3 Shop Drawings Verified: No

Beam Size(s) & Names (each span): 36" wide x 48" deep Span 1: 62'-9"; Span 2: 57'-0"; Span 3: 61'-0"

Deck: Thickness (in.): 12.0 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: None Thickness (in.): Unit Weight (pcf.):

Barrier: Type / Weight (plf.): LEFT CENTER RIGHT

Sidewalk: Width / Thick (in.): / / /

Clear Roadway (ft.):

Additional Loads:

8" concrete pavement; 13" granular fill

Unique Factors That Affect Capacity:

Structure is below grade parking structure - S Fifth Ave and Library Lane are supported on fill and concrete pavement above the top level.

Analyzed By: Daniel Krull, PE

Date: 07/13/2012

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

LOAD RATING SUMMARY

Facility SOUTH FIFTH AVE	Latitude / Longitude 42.2789 / -83.7456	MDOT Structure ID 814021200178Z01	Structure Condition Good Condition(7)
Feature PARKING STRUCTURE	Length / Width / Spans 188.5 / 63.5 / 3	Owner City: ANN ARBOR(0212)	
Location BTWN LIBERTY & WILLIAMS	Built / Recon. / Paint / Ovly. 2011 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	Last NBI Inspection 10/11/2023 / TP3D	Scour Evaluation N Not Over Waterway



Compliance Issue:	None
Compliance Verified:	Yes
Compliance Justification:	Bridge was designed using LFR and does not need to be rated using LRFR per R. Curtis email 5/28/13. (Creightyn McMunn, MDOT Load Rating Program Manager, 10/16/2015)
Analysis Program:	Other
Analysis Program Version:	STAAD Pro, hand Calcs & Excel Spreadsheet
Rating Considers Field Condition of Members:	Yes
Inspection Date:	10/16/2019
Controlling component and failure mode:	

Girder G134, Flexure, for federal inventory and operating & 1-unit truck
 Beam B110, Flexure, for 2-unit truck
 Beam B105, Flexure, for 3-unit truck

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	1.61
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.19
MDOT Item 64MC - Michigan Operating Truck	18
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	0.96
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	C
MDOT Item 193C - Overload Status	N-No Restriction
Analyzed By: Daniel Krull, PE	Date: 07/13/2012
Checked By: Robert Breen, PE	Date: 07/16/2012

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SOUTH FIFTH AVE	42.2789 / -83.7456	814021200178Z01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
PARKING STRUCTURE	188.5 / 63.5 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
BTWN LIBERTY & WILLIAMS	2011 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	10/11/2023 / TP3D	N Not Over Waterway



No inspections available for bridge key 814021200178Z01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13641

OUTSTANDING WORK

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SOUTH FIFTH AVE	42.2789 / -83.7456	814021200178Z01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
PARKING STRUCTURE	188.5 / 63.5 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
BTWN LIBERTY & WILLIAMS	2011 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	6 P/S Conc Continuous / 33 Gir- Flr Bm Comp	10/11/2023 / TP3D	N Not Over Waterway



No Outstanding Work Items available for bridge key 814021200178Z01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing



NBI INSPECTION

9SIW

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

GENERAL NOTES

Trail runs under both tail spans. Preventive maintenance repairs performed in the Summer of 2021. Repairs included application of healer sealer to the deck surface, deck patching, and rail and sidewalk patching.

DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	7	7	Sealed, hairline longitudinal and transverse cracks along wheel lines of outside lanes. No full depth longitudinal cracks. Few transverse cracks that are full depth. (10/23) Hairline longitudinal and transverse cracks along wheel line. No full depth longitudinal cracks. Few transverse cracks that are full depth. (10/21) Hairline longitudinal and transverse cracks along wheel line. No full depth longitudinal cracks. Few transverse cracks that are full depth. (10/19)
2. Expansion Joints	7	7	7	Debris has accumulated in the expansion joints and sidewalk cover plates. (10/23) Debris has accumulated in the expansion joints. (10/21) Debris has accumulated in the expansion joints. (10/19)
3. Other Joints	7	7	7	No evidence of leaking. Minor spalls along east sleeper slab joint. (10/23) No evidence of leaking. Minor spalls along east sleeper slab joint. (10/21) No evidence of leaking. Minor spalls along east sleeper slab joint. (10/19)
4. Railings	7	7	7	Hairline vertical cracks. Concrete parapet was coated in 2021, concrete posts were not. Black coating on handrail is chipped at several locations. (10/23) Hairline vertical cracks. Black coating on handrail is chipped at several locations. (10/21) Hairline vertical cracks. Leaching cracks at light pole. Black coating on handrail is chipped at several locations. One nut missing on post on south side. (10/19)
5. Sidewalks or Curbs	6	7	7	One patch in north sidewalk, five patches in south sidewalk. Patches have minor map cracking along the parapet railing. Transverse and longitudinal cracks. (10/23) Some patches, transverse and longitudinal cracks. (10/21) Some patches, transverse and longitudinal cracks, minor spalls and stone pops. A few delaminated concrete areas at locations of patch repairs. (10/19)
6. Deck Bottom Surface (SIA-58B)	7	7	7	No spalls or concrete delaminations. Few transverse hairline cracks with leaching. Transverse cracks do not extend beyond beams into adjacent bays. (10/23) No spalls or concrete delaminations. Few transverse hairline cracks with leaching. (10/21) No spalls or concrete delaminations. Few transverse full depth hairline cracks with leaching. (10/19)
7. Deck (SIA-58)	7	7	7	Sealed, hairline longitudinal and transverse cracks along wheel lines of outside lanes. Few transverse cracks that are full depth with leaching on the bottom surface. Few deck concrete delaminations along bridge centerline. Scaling of deck along south railing. (10/23) Hairline longitudinal and transverse cracks along wheel line of south, eastbound lane and north, westbound lane. Few transverse cracks that are full depth. Few deck concrete delaminations along bridge centerline. Scaling of deck along south railing. (10/21) Hairline longitudinal and transverse cracks along wheel line of south, eastbound lane and north, westbound lane. Few transverse cracks that are full depth. Few deck concrete delaminations along bridge centerline. Scaling of deck along south railing. (10/19)
8. Drainage				(10/23) (10/21) (10/19)

SUPERSTRUCTURE

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing



10/19 10/21 10/23

9. Stringer (SIA-59)	7	7	7	Beams in overall good condition. Spall with exposed mild reinforcement at beam end of Beam A in Span 2. Patched or spalled beam ends of Beams B, C, D, E, F, G and J in Span 2. Nearly horizontal crack noted in Beam B, south side at Pier 1, Span 2. Also at Pier 2, Span 2, on Beams B (north side), and Beams C, D and E (south side). (10/23)
10. Paint (SIA-59A)	N	N	N	Beams in overall good condition. Spall with exposed mild reinforcement at beam end of Beam A in Span 2. Patched or spalled beam ends of Beams B, C, D, E, F, G and J in Span 2. Nearly horizontal crack noted in Beam B, south side at Pier 1, Span 2. Also at Pier 2, Span 2, on Beams B (north side), and Beams C, D and E (south side). (10/21)
11. Section Loss	N	N	N	Spall with exposed mild reinforcement at beam end of Beam A in Span 2. Patched or spalled beam ends of Beams B, C, D, E, F, G and J in Span 2. Nearly horizontal crack noted in Beam B, south side at Pier 1, Span 2. Also at Pier 2, Span 2, on Beams B (north side), and Beams C, D and E (south side). (10/19)
12. Bearings	7	7	7	Good condition with no bulging or scaling. In full contact with bottom of beam. (10/23)

SUBSTRUCTURE

10/19 10/21 10/23

13. Abutments (SIA-60)	7	7	7	No spalls or concrete delaminations found. Vertical crack in west abutment near north fascia beam. Hairline cracks present in wingwalls. Graffiti present on walls. (10/23)
14. Piers (SIA-60)	7	7	7	No spalls or concrete delaminations found. Hairline cracks present in wingwalls. Graffiti present on walls. (10/21)
15. Slope Protection	7	7	7	No spalls or concrete delaminations found. Hairline cracks present in wingwalls. Graffiti present on walls. (10/19)
16. Channel (SIA-61)	8	7	7	Hairline cracking. No spalls or concrete delaminations found. The north column of the west pier has vertical cracks on the upstream face. (10/23)
17. Scour Inspection	8	8	8	Hairline cracking. No spalls or concrete delaminations found. (10/21)

APPROACH

10/19 10/21 10/23

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing



18. Approach Pavement	7	6	6	Deterioration/ spalling of east approach concrete pavement at the joints. Hairline longitudinal cracks in concrete pavement. The eastbound lanes of the west approach have minor spalls. (10/23) Deterioration/ spalling of east approach concrete pavement at the joints. Hairline cracks in concrete pavement. (10/21) Hairline cracks in concrete pavement. (10/19)
19. Approach Shoulders Sidewalks	7	7	7	Longitudinal hairline cracks in northeast quadrant. Hairline cracks and minor vegetation and one larger tree in southwest quadrant that is overhanging the sidewalk. Small trees are growing the the northwest quadrant riprap. Elevation difference in southwest quadrant has been corrected. Transverse crack in SW quadrant. (10/23) Longitudinal hairline cracks in northeast quadrant. Hairline cracks and minor vegetation and one larger tree in southwest quadrant. Elevation difference of 1" in southwest quadrant. Transverse crack in SW quadrant. (10/21) Longitudinal hairline cracks in northeast quadrant. Hairline cracks and minor vegetation and one larger tree in southwest quadrant. Elevation difference of 1" in southwest quadrant. Transverse crack in SW quadrant. (10/19)
20. Approach Slopes				Tree growing in SW and NW quadrants should be removed. (10/23) Tree growing in SW quadrant should be removed. (10/21) Tree growing in SW quadrant should be removed. (10/19)
21. Utilities				Lights attached to abutments. Street lights located on bridge. Lights at bottom of steps to path under bridge. (10/23) Lights attached to abutments. Street lights located on bridge. Lights at bottom of steps to path under bridge. (10/21) Lights attached to abutments. Street lights located on bridge. Lights at bottom of steps to path under bridge. (10/19)
22. Drainage Culverts				(10/23) (10/21) (10/19)

MISCELLANEOUS

Guard Rail		Other Items	
<u>Item</u>	<u>Rating</u>	<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	0	71. Water Adequacy	8
36B. Transitions	0	72. Approach Alignment	8
36C. Approach Guardrail	N	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	N	High Load Hit (M)	No
		Special Insp. Equipment	2
		Underwater Insp. Method	1
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	


Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

STRUCTURE INVENTORY AND APPRAISAL

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)	
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Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing	

Bridge History, Type, Materials	
27 - Year Built	2004
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	7
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	10
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	78.7
49 - Structure Length	166.7
50A - Width Left Curb/SW	9.9
50B - Width Right Curb/SW	9.9
33 - Median	0
51 - Width Curb to Curb	49.2
52 - Width Out to Out	73
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/10/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 7
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	7
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000014308 01
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	14
28A - Lanes On	4
29 - ADT	20630
30 - Year of ADT	2015
32 - Appr Roadway Width	48.9
32A/B - Ap Pvt Type/Width	5 49.02
42A - Service Type On	1
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	49.2
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	21773
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	7
68 - Deck Geometry	2
69 - Underclearance	N
71 - Waterway Adequacy	8
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	5

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	0
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	2
76 - Length of Improvement	0
94 - Bridge Cost	7
95 - Roadway Cost	0
96 - Total Cost	7
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.52
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.71
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.51
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing



NBI INSPECTION

9SIW

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/10/2023
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AASHTO ELEMENTS

(English Units)


Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Decks/Slabs							
803	Conc Deck - Coated Bars	12193	sq.ft	11583 95%	610 5%	0 0%	0 0%
815	Rigid Overlay	8031	sq.ft	7951 99%	80 1%	0 0%	0 0%
811	Conc Deck - Btm Surface	12193	sq.ft	12071 99%	122 1%	0 0%	0 0%
812	Reinf Conc Fascia	333	ft	286 86%	47 14%	0 0%	0 0%
Joints							
300	Strip Seal Exp Joint	222	ft	111 50%	111 50%	0 0%	0 0%
301	Pourable Joint Seal	320	ft	280 88%	40 12%	0 0%	0 0%
Superstructure							
823	P/S Concrete Box Beams	1463	ft	1404 96%	59 4%	0 0%	0 0%
826	Beam End Deterioration	54	(EA)	47 87%	7 13%	0 0%	0 0%
Bearings							
310	Elastomeric Bearing	54	each	54 100%	0 0%	0 0%	0 0%
Substructure							
205	Re Conc Column	10	each	10 100%	0 0%	0 0%	0 0%
215	Re Conc Abutment	215	ft	214 100%	1 0%	0 0%	0 0%
234	Re Conc Pier Cap	153	ft	153 100%	0 0%	0 0%	0 0%

Scour Countermeasure

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

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830	Plain Riprap	4800	sq.ft	4800	0	0	0
				100%	0%	0%	0%


Other Elements

321	Re Conc Approach Slab	2908	sq.ft	2617	291	0	0
				90%	10%	0%	0%
330	Metal Bridge Railing	333	ft	330	3	0	0
				99%	1%	0%	0%
515	Steel Protective Coating	1000	sq.ft	980	20	0	0
				98%	2%	0%	0%
331	Re Conc Bridge Railing	333	ft	256	77	0	0
				77%	23%	0%	0%
840	Reinf Conc Sidewalk	4050	sq.ft	3969	81	0	0
				98%	2%	0%	0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

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WORK RECOMMENDATIONS

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)	
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WORK RECOMMENDATIONS

9SIW

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Channel Repair	M	Place riprap along banks and at abutments.
Brush Cut	M	Remove trees in SW and NW quads.
Bridge Washing	M	Clean expansion joints.
Super Repair	L	Patch concrete beam ends.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

LOAD RATING ASSUMPTIONS

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing



Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/16/2019

Deterioration:

No impact

Most Recent Year Construct / Reconstruct / Overlay: 2004

History of Work Impacting Load Rating:

None

Superstructure Component: 5 Prestressed Concrete **Beam fy:** ksi **Beam f'c / fb:** 6.0 ksi

Composite: Yes **Number of Beams:** 9 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): 39" H x 48" W spread box beams. Span 1: 41'-3 1/4"; Span 2: 78'-8 7/8"; Span 3: 46'-7 7/8".

Deck: **Thickness (in.):** 9.0 **Fy / f'c:** 60.0 / 4.0 ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** Silica Fume Overlay **Thickness (in.):** 1.5 **Unit Weight (pcf.):** 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Steel ped rail / 0.1	/	Steel ped rail / 0.1
Sidewalk: Width / Thick (in.):	143.0 / 6.25	/	143.0 / 6.25

Clear Roadway (ft.): 49.3

Additional Loads:

Diaphragms: midspan spans 1 and 3, third points in span 2 - 2.160 kips each. Inside railings: 325 plf each.

Unique Factors That Affect Capacity:


Analyzed By: Carrie Hamel

Date: 10/17/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

LOAD RATING SUMMARY

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)	
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing	

Compliance Issue: None
Compliance Verified: No
Analysis Program: ConSpan
Analysis Program Version: 09.00.01.06
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/16/2019

Controlling component and failure mode:

Shear, span 2, interior, 22.9', HS-20 and Truck 17

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method 6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings 2.52
MDOT Item 64MA - Michigan Operating Method 6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating 1.71
MDOT Item 64MC - Michigan Operating Truck 17
NBI Item 65 - Inventory Rating Method 6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating 1.51
NBI Item 41 - Structure Open Posted Closed A A Open, no restriction
NBI Item 70 - Bridge Posting 5 5 - 100% or more
Posted By No Posting
MDOT Item 141 - Posted Loading
MDOT Item 193A - Michigan Overload Class
MDOT Item 193C - Overload Status
Analyzed By: Carrie Hamel **Date:** 10/17/2019
Checked By: Mark Lessens **Date:** 10/21/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
BROADWAY	42.2887 / -83.7402	814021200323B01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
HURON RIVER	166.7 / 73 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN STREET	2004 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/10/2023 / 9SIW	5 Stable w/in footing




No inspections available for bridge key 814021200323B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11075

OUTSTANDING WORK

Facility BROADWAY	Latitude / Longitude 42.2887 / -83.7402	MDOT Structure ID 814021200323B01	Structure Condition Good Condition(7)	
Feature HURON RIVER	Length / Width / Spans 166.7 / 73 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / 9SIW	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

SUPERSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Super Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Patch concrete beam ends. (Kyle Slavik 10/25/2023)

CHANNEL/SCOUR

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Channel Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Place riprap along banks and at abutments. (Kyle Slavik 10/25/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Remove trees in SW and NW quads. (Kyle Slavik 10/25/2023)

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Bridge Washing				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date



Comments

Clean expansion joints. (Kyle Slavik 10/25/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14690

BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
Feature HURON RIVER	Length / Width / Spans 124.75 / 12 / 3	Owner City: ANN ARBOR(0212)		
Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	Operational Status K Closed to all traffic(K)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Scour Evaluation 8 Stable Above Footing	

NBI INSPECTION

GWMI

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	6	02/01/2024

GENERAL NOTES

Structure was recently added to the National Bridge Inventory and the first routine inspection since being added was performed. Bridge is 3 span continuous with glulam beams. Single lane for vehicles with sidewalks on each side. Beams extend above decking and act as curbs to separate vehicles from pedestrians. A replacement bridge is currently being constructed adjacent to the existing bridge. Estimated completion is summer 2024 when the existing bridge will be demolished. Inspection frequency set to 6 months to monitor condition of the beams. Bridge is scheduled to be demolished during the week of February 12, 2024.

Weight limit signs in place on both ends of bridge	YES
Weight limit shown on signs at bridge	333333
Required advance warning weight limit signs in place	NO

DECK



01/01 02/24

1. Surface (SIA-58A)	4	Decking is composed of 3 glulam members oriented on their side and tied together by floorbeams and spreader beams. There is crushing up to 3" along the wheel lines for the entire length of the bridge. The crushing is worse at the edges of the decking members. (02/24) (01/01) ()
2. Expansion Joints	N	No expansion joints on bridge deck. (02/24) (01/01) ()
3. Other Joints	N	No joints on bridge deck. (02/24) (01/01) ()
4. Railings	0	The original timber railings have failed and chain link fence was installed on both sidewalks. Many of the timber railing connections to the deck have rotted out and the posts are not secure. The chain link fence is in good condition with no notable deficiencies. The fence posts are mounted to the deck with through bolts. (02/24) (01/01) ()
5. Sidewalks or Curbs	3	Sidewalks on both sides of the bridge. Each sidewalk is composed of 2 glulam members oriented on their side and tied together by floorbeams. The surface is generally worn with minor checks and splits throughout. The timber railings failed and chain link fence was installed along both fascias. The usable sidewalk width was reduced to 4 ft with the fences in place. Both sidewalks are leaning heavily outward resulting in cross slopes of 6-8%. The outside panel on each sidewalk has a 50 ft long crack over the center span. The west sidewalk was closed at the start of construction of the replacement bridge. (02/24) (01/01) ()
6. Deck Bottom Surface (SIA-58B)	6	Decking is composed of 3 glulam members oriented on their side and tied together by floorbeams and spreader beams. Shallow splits and checks present. Water and debris is passing through the joints between decking members. (02/24) (01/01) ()

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14690

BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
Feature HURON RIVER	Length / Width / Spans 124.75 / 12 / 3	Owner City: ANN ARBOR(0212)		
Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	Operational Status K Closed to all traffic(K)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Scour Evaluation 8 Stable Above Footing	

7. Deck (SIA-58)	4	Decking is composed of 3 glulam members oriented on their side and tied together by floorbeams and spreader beams. There is crushing up to 3" along the wheel lines for the entire length of the bridge. The crushing is worse at the edges of the decking members. The deck connections installed in 2020 are in good condition and are working as intended. (02/24) (01/01) ()
8. Drainage		Scuppers along both beams. (02/24) (01/01) ()

SUPERSTRUCTURE

01/01 02/24

9. Stringer (SIA-59)	1	2 glulam beams, continuous for all 3 spans. Beams extend above deck and act as curbs to separate vehicles from pedestrians. The center span has two splices, 5 ft from each pier. Both beams have crushing at the bearings and the splice plates. Knots are present in the internal layers and the surrounding wood has signs of rot. Minor splits and checks are present along both beams. The east beam has lamination separation on both sides of each splice. The west beam has a large split that extends the entire length between splices in the center span. The size up the opening varies along the beam but is as large as 1 inch for most of the length. The split generally runs along the top of the floorbeam connection plates but meanders between connections. Smaller splits and lamination separation is present at the splices. Glulam floorbeams are in good condition and the replacement decking connections are performing well. (02/24) (01/01) ()
10. Paint (SIA-59A)	N	(02/24) (01/01) ()
11. Section Loss	N	(02/24) (01/01) ()
12. Bearings	5	Bearings consist of a 1/2 inch neoprene bearing pad on a 1/4 inch steel plate with retainer angles. Bearing pads show signs of crushing. Abutment bearings had debris and sediment present. Pier bearings have bird nests adjacent to the retainer angles. (02/24) (01/01) ()

SUBSTRUCTURE



01/01 02/24

13. Abutments (SIA-60)	5	Pile supported timber abutments located behind previous bridge abutments. Previous abutments are grouted stone and retain the timber abutments. Grout has failed in some locations and stones are loose/missing but there is no apparent settlement of the timber abutments. (02/24) (01/01) ()
14. Piers (SIA-60)	6	Timber piles with a glulam pile cap and timber cross bracing. Minor deterioration of the piles at the water line. Piles have steel ice breakers on the upstream face. (02/24) (01/01) ()
15. Slope Protection	N	Water crossing (02/24) (01/01) ()

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
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Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	Operational Status K Closed to all traffic(K)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Scour Evaluation 8 Stable Above Footing	

- 16. Channel (SIA-61) 6 Minor bank erosion in all four quadrants. Banks west of bridge have been excavated or modified during the ongoing construction of the replacement bridge. (02/24)
(01/01)
()
- 17. Scour Inspection 6 Stable for scour. No scour along abutments but there is minor bank erosion adjacent to the old stone abutments. Banks west of bridge have been excavated or modified during the ongoing construction of the replacement bridge. Substructure units are pile supported. (02/24)
(01/01)
()

APPROACH

01/01 02/24

- 18. Approach Pavement 6 HMA approaches on both ends of bridge. Parking lot is present along north approach. Both approaches have unsealed cracks and settlement up to 1 inch. South approach has potholes along the reference line. (02/24)
(01/01)
()
- 19. Approach Shoulders Sidewalks 6 HMA pedestrian sidewalks and paths are present at each end of the bridge. HMA approach sidewalks in all four quadrants of the bridge. Some areas were closed off or rerouted due to the ongoing construction of the replacement bridge. All four quadrants have fencing but no guardrail is present. There is erosion and loss of fill along the edges of the HMA sidewalks causing the HMA to crack. (02/24)
(01/01)
()
- 20. Approach Slopes Erosion along the HMA sidewalks/paths is present in all four quadrants. (02/24)
(01/01)
()
- 21. Utilities None (02/24)
(01/01)
()
- 22. Drainage Culverts None (02/24)
(01/01)
()

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	0	71. Water Adequacy	8
36B. Transitions	0	72. Approach Alignment	8
36C. Approach Guardrail	0	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	0	High Load Hit (M)	No
		Special Insp. Equipment	1
		Underwater Insp. Method	2
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	



Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT



Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
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92D. Fatigue Sensitive

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

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SUPPORTING IMAGES

GWMI 02/01/2024



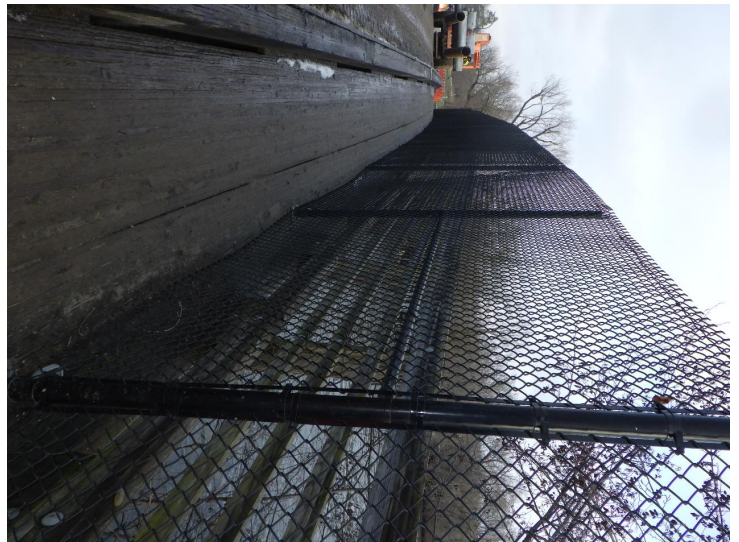
Document Name: R0011785.JPG
 Category: Elevation
 Span Number:
 Comments: West elevation of bridge



Document Name: R0011773.JPG
 Category: Deck
 Span Number:
 Comments: Bridge deck looking south



Document Name: R0011776.JPG
 Category: Deck
 Span Number:
 Comments: Worn wheel lines in decking, worse at edges of decking members





Document Name: R0011780.JPG
 Category: Deck
 Span Number:
 Comments: Typical sidewalk with chain link fence

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14690

BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
Feature HURON RIVER	Length / Width / Spans 124.75 / 12 / 3	Owner City: ANN ARBOR(0212)		
Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	Operational Status K Closed to all traffic(K)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Scour Evaluation 8 Stable Above Footing	



Document Name: R0011783.JPG
 Category: Deck
 Span Number: 2
 Comments: Boring hole near midspan of bridge



Document Name: R0011792.JPG
 Category: Superstructure
 Span Number: 2
 Comments: Large split in west beam



Document Name: R0011800.JPG
 Category: Superstructure
 Span Number:
 Comments: Typical bottom of decking and floorbeam




Document Name: R0011802.JPG
 Category: Superstructure
 Span Number:
 Comments: Hanger plate splice not supporting both sides of beam, typical all four locations

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14690

BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)
Feature HURON RIVER	Length / Width / Spans 124.75 / 12 / 3	Owner City: ANN ARBOR(0212)	
Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Operational Status K Closed to all traffic(K)
			Scour Evaluation 8 Stable Above Footing



Document Name: R0011803.JPG
 Category: Superstructure
 Span Number: 2
 Comments: Large split in west beam



Document Name: R0011805.JPG
 Category: Superstructure
 Span Number: 2
 Comments: Multiple splits in west beam near south splice



Document Name: R0011795.JPG
 Category: Bearings
 Span Number:
 Comments: Typical abutment bearings with debris/sediment





Document Name: R0011799.JPG
 Category: Substructure
 Span Number: 1
 Comments: Typical timber abutments located behind previous stone abutments

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14690

BRIDGE SAFETY INSPECTION REPORT

Facility GALLUP PARK ROAD	Latitude / Longitude 42.2756 / -83.7023	MDOT Structure ID 814021299999B01	Structure Condition Critical Condition(1)	
Feature HURON RIVER	Length / Width / Spans 124.75 / 12 / 3	Owner City: ANN ARBOR(0212)		
Location GALLUP PARK	Built / Recon. / Paint / Ovly. 1976 / / /	TSC Brighton(3)	Operational Status K Closed to all traffic(K)	
Region / County University(6) / Washtenaw(81)	Material / Design 7 Wood or Timber / 25 Girder-Thru	Last NBI Inspection 02/01/2024 / GWMI	Scour Evaluation 8 Stable Above Footing	



Document Name: R0011808.JPG
 Category: Substructure
 Span Number: 1
 Comments: South abutment missing grout between stones. Timber abutments behind previous bridge abutment




Document Name: R0011809.JPG
 Category: Substructure
 Span Number:
 Comments: Typical pier

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

BRIDGE SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

NBI INSPECTION

L4T8

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

GENERAL NOTES

High load hit (scrapes) on bottom of west fascia beam above path at north end of bridge. Have been noted for years - no damage to steel section, only paint damage. Deck repairs completed in 2022. High load hit damage on south span over Geddes Avenue. Performed only a visual inspection.


DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	6	6	7	Deck surface recently repaired. Multiple large deck patches in south bound lanes. Isolated minor longitudinal cracking in south bound lanes. (10/22) Map cracking, longitudinal cracks along beam lines and concrete patches present on southbound lanes. Multiple areas of delaminations on the deck surface are present in all lanes (NB and SB). Additional areas identified and some previous areas have expanded. Little or no spalled concrete. (10/20) Map cracking, longitudinal cracks along beam lines and concrete patches present on southbound lanes. Multiple areas of delaminations on the deck surface are present in all lanes. Additional areas identified and some previous areas have expanded. Little or no spalled concrete. (10/18)
2. Expansion Joints	6	6	7	Joints with minor debris and water ponding. No signs of leaking. Glands were replaced in 2022. (10/22) Joints filled with dirt. Some deterioration of glands noted. No signs of leaking. Gap in gaskets where longitudinal center joint meets the south expansion joint gaskets. Sidewalk joint on east side, south joint, has missing material adjacent to the rails. (10/20) Joints filled with dirt. Some deterioration of glands noted. No signs of leaking. Gap in gaskets where longitudinal center joint meets the south expansion joint gaskets. (10/18)
3. Other Joints	7	6	7	Joints are well sealed. (10/22) Elevation difference of 1/2" at south joint between concrete at reference line and approach slab, southbound lanes. Some separation of elastomeric concrete strip and adjacent concrete at south joint. Other joints are well sealed. Some vegetation at end joints in sidewalks. (10/20) Elevation difference of 1/2" at south joint between concrete at reference line and approach slab, southbound (west) lane. Some separation of elastomeric concrete strip and adjacent concrete at south joint. Other joints are well sealed. Some vegetation at end joints in sidewalks. (10/18)
4. Railings	7	7	7	Most rust spots coated with cold galvanizing paint. Some previously painted areas have failed and rust spots are present. Scrapes in coating are evidence of vehicle contact. (10/22) Most rust spots coated with cold galvanizing paint. Some previously painted areas have failed and rust spots are present. Scrapes in coating are evidence of vehicle contact. Vertical bar is broken in traffic side railing along west sidewalk. Three bolts missing from 2-tube railing expansion sleeve in west railing. 2 bolts are missing from the splice in the west rail at the north end. Concrete end walls have map cracking and NE wall has spall. (10/20) Most rust spots coated with cold galvanizing paint. Some previously painted areas have failed and rust spots are present. Scrapes in coating are evidence of vehicle contact. Vertical bar is broken in traffic side railing along west sidewalk. Three bolts missing from 2-tube railing expansion sleeve in west railing. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

BRIDGE SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

5. Sidewalks or Curbs	7	6	7	<p>Sidewalks recently repaired. (10/22)</p> <p>Spall at south expansion joint in west curb. 2 spalls at expansion joints in east curb. Rebar exposed at south expansion joint location at curb. Minor delamination/spalling in west curb line. Spall adjacent to joint on west sidewalk. Nearly all of the sidewalk has spalled areas adjacent to the SE expansion joint. Cover plate over south expansion joint in west sidewalk is not attached to the sidewalk and is misaligned. (10/20)</p> <p>Spall at south expansion joint in west curb. 2 spalls at expansion joints in east curb. Rebar exposed at south expansion joint location at curb. Minor delamination/spalling in west curb line. Spall adjacent to joint on west sidewalk. Cover plate over south expansion joint in west sidewalk is not attached to the sidewalk and is misaligned. (10/18)</p>
6. Deck Bottom Surface (SIA-58B)	7	7	7	<p>Minor cracking and leaching found. A few locations of exposed reinforcement. (10/22)</p> <p>Minor cracking and leaching found. A few locations of exposed reinforcement. (10/20)</p> <p>Minor cracking and leaching found. A few locations of exposed reinforcement. (10/18)</p>
7. Deck (SIA-58)	6	6	7	<p>Minor cracking. Multiple concrete deck patches present. Evidence of minor leaching on underside of deck. (10/22)</p> <p>Minor cracking. Multiple concrete deck patches present. Multiple delaminations of the deck on all lanes. Evidence of minor leaching on underside of deck. (10/20)</p> <p>Minor cracking. Multiple concrete deck patches present. Multiple delaminations of the deck on all lanes. Evidence of minor leaching on underside of deck. (10/18)</p>
8. Drainage				<p>Deck drains present along each curb line. Evidence of ponding water present along west curb line on south span. (10/22)</p> <p>Two deck drains were blocked and drainage was rerouted - one drain along each curb line. Evidence of ponding water present along west curb line on south span. (10/20)</p> <p>Two deck drains were blocked and drainage was rerouted - one drain along each curb line. Evidence of ponding water present along west curb line on south span. (10/18)</p>


SUPERSTRUCTURE

	10/18	10/20	10/22	
9. Stringer (SIA-59)	7	7	6	<p>Bolted beam repairs were added to areas with section loss in 2007. There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired. These areas were cleaned/coated and are performing well. Small holes noted in bottom of web stiffeners at both abutments. Pitting and minor section loss present in the beams near the ends at both abutments. Minor high load hit and scrapes in beams over Geddes Avenue (south span). (10/22)</p> <p>Bolted beam repairs were added to areas with section loss in 2007. There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired. These areas were cleaned/coated and are performing well. Small holes noted in bottom of web stiffeners at both abutments. (10/20)</p> <p>Bolted beam repairs were added to areas with section loss in 2007. There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired. These areas were cleaned/coated and are performing well. Small holes noted in bottom of web stiffeners at both abutments. (10/18)</p>
10. Paint (SIA-59A)	8	8	8	<p>Paint is in good condition. Minor "high load" scrapes in paint on bottom of west fascia beam above path at north abutment. Minor high load hit and scrapes in beams over Geddes Avenue (south span). (10/22)</p> <p>Paint is in good condition. Minor "high load" scrapes in paint on bottom of west fascia beam above path at north abutment. (10/20)</p> <p>Paint is in good condition. Minor "high load" scrapes in paint on bottom of west fascia beam above path at north abutment. (10/18)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

BRIDGE SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

11. Section Loss	2	2	2	<p>There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired in 2007. These areas were cleaned/coated and are performing well. One diaphragm connection plate noted as bent and with section loss, but cleaned and painted in 2007. Small holes noted in bottom of web stiffeners at both abutments. Pitting and minor section loss present in the beams near the ends at both abutments. (10/22)</p> <p>There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired in 2007. These areas were cleaned/coated and are performing well. One diaphragm connection plate noted as bent and with section loss, but cleaned and painted in 2007. Small holes noted in bottom of web stiffeners at both abutments (10/20)</p> <p>There are a few locations at the splice plates and cross-frame connections where minimal section loss was not repaired in 2007. These areas were cleaned/coated and are performing well. One diaphragm connection plate noted as bent and with section loss, but cleaned and painted in 2007. Small holes noted in bottom of web stiffeners at both abutments (10/18)</p>
12. Bearings	7	7	7	<p>Bearings show movement within range. Minor surface rusting present at some locations. West fascia bearing at north abutment tilted in opposite direction of other bearings. No negative impact noted. (10/22)</p> <p>Bearings show movement within range. Minor surface rusting present at some locations. West fascia bearing at north abutment tilted in opposite direction of other bearings. No negative impact noted. (10/20)</p> <p>Bearings show movement within range. Minor surface rusting present at some locations. West fascia bearing at north abutment tilted in opposite direction of other bearings. No negative impact noted. (10/18)</p>

SUBSTRUCTURE

	10/18	10/20	10/22	
13. Abutments (SIA-60)	6	6	6	<p>There are some vertical cracks present at the south abutment joint between beams 4w and 5w. The backwalls have minor cracking and scaling. The abutments were patched in 2022. (10/22)</p> <p>There are some vertical cracks and six small delaminations in the south abutment. The backwalls have minor cracking, scaling, spalling, and multiple delaminations that have expanded some from previous inspection. (10/20)</p> <p>There are some vertical cracks and six small delaminations in the south abutment. The backwalls have minor cracking, scaling, spalling, and multiple delaminations that have expanded some from previous inspection. (10/18)</p>
14. Piers (SIA-60)	7	7	7	<p>Some minor cracking. The piers were patched in 2022. (10/22)</p> <p>Some minor cracking, spalls, and delaminations. Six areas found with exposed rebar. (10/20)</p> <p>Some minor cracking, spalls, and delaminations. Six areas found with exposed rebar. (10/18)</p>
15. Slope Protection	8	7	8	<p>Heavy riprap is present. Flagstone slope paving at both abutments repaired in 2022. (10/22)</p> <p>Heavy riprap is present. North abutment slope has grouted riprap with one, 2 syd area of deteriorated/missing riprap present. (10/20)</p> <p>Heavy riprap is present. North abutment slope has grouted riprap with one, 2 syd area of deteriorated/missing riprap present. (10/18)</p>
16. Channel (SIA-61)	8	8	8	<p>Banks and pier columns are well protected with riprap. (10/22)</p> <p>Banks and pier columns are well protected with riprap. Trees growing in riprap at several piers that should be removed as they have grown to beam and deck levels. These trees make reach all access more difficult at some locations. (10/20)</p> <p>Banks and pier columns are well protected with riprap. Tree logs in river at upstream end of Pier 3 (from south end). Trees growing in riprap at several piers that should be removed as they have grown to beam and deck levels. These trees make reach all access more difficult at some locations. (10/18)</p>
17. Scour Inspection	8	8	8	<p>No observable scour noted. (10/22)</p> <p>No observable scour noted. (10/20)</p> <p>No observable scour noted. (10/18)</p>

APPROACH

10/18 10/20 10/22

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

BRIDGE SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)	
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing



18. Approach Pavement	7	7	7	HMA in good condition. Some minor cracking along north approach joint. (10/22) HMA in good condition. Some minor cracking along north approach joint. (10/20) HMA in good condition. Some minor cracking along north approach joint. (10/18)
19. Approach Shoulders Sidewalks	8	7	7	Concrete sidewalks are in good condition. (10/22) Concrete sidewalks are in good condition. There is vegetation between joints in the southwest quadrant. Elevation difference of 7/8" between approach sidewalk and bridge sidewalk in northeast and southeast quadrants. (10/20) Concrete sidewalks are in good condition. There is vegetation between joints in the southwest quadrant. Elevation difference of 7/8" between approach sidewalk and bridge sidewalk in northeast and southeast quadrants. (10/18)
20. Approach Slopes				(10/22) (10/20) (10/18)
21. Utilities				Street light poles present on bridge in line with 2-tube railings and on approaches. (10/22) Street light poles present on bridge in line with 2-tube railings and on approaches. (10/20) Street light poles present on bridge in line with 2-tube railings and on approaches. (10/18)
22. Drainage Culverts				(10/22) (10/20) (10/18)

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	1	71. Water Adequacy	9
36B. Transitions	1	72. Approach Alignment	8
36C. Approach Guardrail	1	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	1	High Load Hit (M)	Yes
		Special Insp. Equipment	4
		Underwater Insp. Method	1
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

STRUCTURE INVENTORY AND APPRAISAL

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

Bridge History, Type, Materials	
27 - Year Built	1968
106 - Year Reconstructed	2000
202 - Year Painted	2007
203 - Year Overlay	2000
43 - Main Span Bridge Type	4 82
44 - Appr Span Bridge Type	
77 - Steel Type	2
78 - Paint Type	4
79 - Rail Type	3
80 - Post Type	2
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	21
35 - Struct Flared	N
45 - Num Main Spans	7
46 - Num Apprs Spans	0
48 - Max Span Length	158.1
49 - Structure Length	1019
50A - Width Left Curb/SW	9.8
50B - Width Right Curb/SW	9.8
33 - Median	0
51 - Width Curb to Curb	51.2
52 - Width Out to Out	75.1
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/19/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 7
59 - Superstructure Rating	6
59A - Paint Rating	8
60 - Substructure Rating	6
61 - Channel Rating	8
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014296 02
19 - Detour Length	4
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	4
29 - ADT	19084
30 - Year of ADT	2015
32 - Appr Roadway Width	51.2
32A/B - Ap Pvt Type/Width	4 51.21
42A - Service Type On	5
47L - Left Horizontal Clear	27.2
47R - Right Horizontal Clear	26.9
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	19930
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	4
69 - Underclearance	4
71 - Waterway Adequacy	9
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	5

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	2
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	14 6
10R - Best 3m Unclr-Rt	14 6
PR Number	
Control Section	
11 - Mile Point	1
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014293 06
19 - Detour Length	1
20 - Toll Facility	3
26 - Functional Class	16
28B - Lanes Under	3
29 - ADT	11500
30 - Year of ADT	2014
42B - Service Type Under	8
47L - Left Horizontal Clear	0
47R - Right Horizontal Clear	39.99
54A - Left Feature	H
54B - Left Underclearance	0 0
54C - Right Feature	H
54D - Right Clearance	14 6
Under Clearance Year	
55A - Reference Feature	H
55B - Right Horiz Clearance	8.9
56 - Left Horiz Clearance	0
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	12700
115 - Year Future ADT	2034
Freeway	0

Proposed Improvements	
75 - Type of Work	35 1
76 - Length of Improvement	1019
94 - Bridge Cost	173
95 - Roadway Cost	20
96 - Total Cost	193
97 - Year of Cost Estimate	2020

Load Rating and Posting	
31 - Design Load	5
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	1.81
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.02
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.09
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
HURON PARKWAY	42.2738 / -83.6985	814021200259B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RV,GEDDES & NFS RR	1,019 / 75.1 / 7	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
1.0 MI W OF US-23	1968 / 2000 / 2007 / 2000	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	4 Steel Continuous / 82 PI Girder Comp	10/19/2022 / L4T8	5 Stable w/in footing




No inspections available for bridge key 814021200259B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

WORK RECOMMENDATIONS

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

L4T8

Inspector Name Pedro Trana	Agency / Company Name DLZ Michigan, Inc.	Insp. Freq. 24	Insp. Date 10/19/2022
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CREW RECOMMENDATIONS

CONTRACT RECOMMENDATIONS

Recommendation Type	Priority	Description
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Recommendation Type	Priority	Description
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MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11074

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)	
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing



PLAN OF ACTION AUTHORS

Name	Agency	Phone	Email	Last Modified Date
Francisca Chan	City of Ann Arbor	734-794-6410	fchan@a2gov.org	
David Dykman	City of Ann Arbor	734-794-6410	ddykman@a2gov.org	
Talia Belill	MDOT Bridge Design	517-230-6262	BelillT@michigan.gov	03/08/2023

SCOUR VULNERABILITY

Item 113 Scour Criticality	5	Source of Item 113	Assessed
Item 71 Waterway Adequacy	9		
Level I Assessment	N		
Level II Analysis	Y		

Executive Summary Scour Evaluation

Heavy riprap was placed in 2000 around the footings of Piers 3, 4, 5, and 6 as a scour countermeasure to protect the spread footings. It was designed to withstand a 50 year storm event. The "Distance below bottom chord (ft)" in the scour analysis table below is measured from the top of berm elevation at the north abutment.

Calculated Values

Scour Analysis Event Frequency	25 year	50 year	100 year	500 year	Comments
Anticipated Surface Elevation (ft)	748.88	749.5	750.0		
Distance Below Bottom chord (ft)	7.88	7.26	6.76		
Anticipated Flow (cubic ft/sec)	2782.0	7411.0	8485.0		
Anticipated Pressure Flow (Y/N)					

Substructure Information

Foundation	Normally in Water	Normal Water Depth (ft)	In Water (100 yr)	Footing Type	Depth Known	Soil Type
Abutment A	N	N/A				Cohesive
Abutment B	N	N/A				Cohesive
Pier 1						
Pier 2						
Pier 3						
Pier 4						
Pier 5						
Pier 6						

COUNTERMEASURE RECOMMENDATIONS

- Only Monitoring Required **Estimated Cost \$**
- Structural/Hydraulic Countermeasures Considered

Countermeasure Comments

Heavy riprap was installed in 2000 around the footings of Piers 3, 4, 5, and 6 as a scour countermeasure to protect the spread footings. This countermeasure is in good condition and has been designed for a 50 year storm event so that the bridge is no longer scour critical. Existing heavy riprap scour countermeasures are in good condition.

MONITORING PROGRAM

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Recommended Monitoring Requirements

Type	Frequency/ Amount	Comments
<input checked="" type="checkbox"/> Regular Inspection	24	
<input type="checkbox"/> Other Special Inspection		
<input type="checkbox"/> Underwater Inspection		
<input type="checkbox"/> Stream Bed Cross Sections		
<input type="checkbox"/> Monitoring Devices (Fixed, Sonar, etc.)		
<input type="checkbox"/> Flood Monitoring - Initiate monitoring when any of the following occur		
<input type="checkbox"/> NOAA Flood Warning (This includes both Flash Flood and Flood Warnings)		
<input type="checkbox"/> Flow Information		
<input type="checkbox"/> Discharge		
<input type="checkbox"/> Rainfall		
<input type="checkbox"/> WS Elevation		Measured from
<input type="checkbox"/> Pressure Flow		
<input type="checkbox"/> Debris Accumulation		

Items to Watch During Monitoring

Scour countermeasures should be evaluated to ensure proper location and functionality after a 50 year storm event and during biennial inspections.

Foundation	Items to Watch
Abutment A	
Abutment B	
Pier 1	
Pier 2	
Pier 3	
Pier 4	
Pier 5	
Pier 6	

Inspection Summary

Type	Latest Date Completed	Current Frequency	Inspector	Agency
Routine	10/19/2022	24	TRANAP8100	DLZ Michigan, Inc.
Underwater				
Cross Section				
Scour Inspection	10/17/2010		Talia Belill	MDOT Bridge Design
High Flow Monitoring				

BRIDGE CLOSURE


Conditions To Consider Bridge Closure

- Water Surface Elevation
- Overtopping of Road or Structure

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- O Pressure Flow
- X High Debris Accumulation**
- X Observed Structure Movement/Settlement**
- O Loss of Scour Countermeasures

Contacts Responsible for BRIDGE CLOSURE

Name	Title	Agency	Phone Number	Cell Number
Michigan State Police	Emergency Contact #		517-241-8000	517-241-8000
Michael Nearing, P.E.	Sr. Project Manager		734-794-6410	734-323-6511

Contacts Responsible for OPENING Bridge

Name	Title	Agency	Phone Number	Cell Number
No Contacts Listed for Opening Bridge				

DETOUR ROUTE

Possible Detour Route

Geddes Rd. to N. Dixboro Rd. to E. Huron River Dr. to W. Huron River Dr. (3.6 Miles)

Bridges on Detour Route include:
Structure Number 10973 and 10974 - N. Dixboro Rd. over Huron River
No Live Load Limitations Posted

Bridges/Culverts on Detour Route

Detour Bridge Numbers	Feature Intersected	Load Limitations	Scour Rating
No Data			


SCOUR INSPECTIONS

Date	Type	Freq	Inspector	Agency
10/17/2010	SCOUR		Talia Belill	MDOT Bridge Design
Comments No observed scour was noted during biennial bridge inspection. Riprap placed during 2000 project is still in place.				
Recommendations Other Low Existing heavy riprap scour countermeasures are in good condition.				
10/09/2016	ROUTINE	24	Mark Lessens	DLZ Michigan, Inc.
Comments Stream cross sections obtained. No observable scour noted.				
Recommendations Brush Cut High REMOVE TREES FROM RIPRAP AT PIERS.				
Joint Repair High CLOSE OPEN LONGITUDINAL DECK JOINT				
Deck Patching Low PATCH UNSOUND DECK AREAS				
10/07/2018	ROUTINE	24	Mark Lessens	DLZ Michigan, Inc.
Comments No observable scour noted.				
Recommendations Brush Cut High REMOVE TREES FROM RIPRAP AT PIERS.				
Joint Repair High CLOSE OPEN LONGITUDINAL DECK JOINT				
Deck Patching Low PATCH UNSOUND DECK AREAS				
10/17/2020	ROUTINE	24	Mark Lessens	DLZ Michigan, Inc.
Comments No observable scour noted.				

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Recommendations	Brush Cut	High	REMOVE TREES FROM RIPRAP AT PIERS.	
	Sidewalk Rpr	Medium	PATCH SIDEWALK SPALLS	
	Joint Repair	High	REPAIR OR RESEAL LONGITUDINAL DECK JOINT	
	Deck Patching	Low	PATCH UNSOUND DECK AREAS	
	Floodcoat	Medium	CONSIDER HEALER SEALER OR EPOXY OVERLAY AFTER DECK PATCHING.	
10/19/2022	ROUTINE	24	Pedro Trana	DLZ Michigan, Inc.
Comments	No observable scour noted.			

HIGH FLOW EVENTS

No Recorded High Flow Events

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SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
HURON PARKWAY	42.2738 / -83.6985	814021200259B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RV,GEDDES & NFS RR	1,019 / 75.1 / 7	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
1.0 MI W OF US-23	1968 / 2000 / 2007 / 2000	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	4 Steel Continuous / 82 PI Girder Comp	10/19/2022 / L4T8	5 Stable w/in footing



SUPPORTING IMAGES

MICHIGAN DEPARTMENT OF TRANSPORTATION

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LOAD RATING ASSUMPTIONS

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)	
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovlly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing



Rating Considers Field Condition of Members: Yes Inspection Date: 10/07/2018

Deterioration:

None that impacts capacity

Most Recent Year Construct / Reconstruct / Overlay: 2000

History of Work Impacting Load Rating:

SB deck: conc overlay placed in 2000; NB deck: replaced in 2000

Superstructure Component: 4 Steel Continuous Beam fy: 36.0 ksi Beam f'c / fb: ksi

Composite: Yes Number of Beams: 8 Shop Drawings Verified: Yes

Beam Size(s) & Names (each span): Variable haunch, structural steel plate girders (web depth varies from 54" to 94"); 8 beams per span; 7 spans

Deck: Thickness (in.): 8.5 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Thickness (in.): Unit Weight (pcf.):

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	2 tube + bike / 90.0	/	2 tube + bike / 90.0
Sidewalk: Width / Thick (in.):	12.0 / 8.5	/	12.0 / 8.5

Clear Roadway (ft.): 51.2

Additional Loads:

Bike railing along both fascias: 40 plf; Interior diaphragms of variable weights; Lateral bracing of variable weights

Unique Factors That Affect Capacity:

The girder steel grades vary. The 74'-0" long variable haunch girder sections over the piers are hybrid girders with the flanges and the bearing stiffeners being grade 50 steel and the rest of the girder is grade 36 steel. The constant 54" depth suspended sections are grade 36 steel.

The beams are continuous across the entire length of the bridge with 10 splices and also two hinges near the center of the structure.

The 11th Edition of the AASHTO code from 1973 states in sections 1.7.131 and 1.7.133 that for composite hybrid girders the shear in a transversely stiffened section can be calculated using the standard shear equations, so the shear capacity in BrR was overridden on one side of each splice location to reflect that.


Analyzed By: DLZ

Date: 11/16/2018

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LOAD RATING SUMMARY

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Compliance Issue:	None
Compliance Verified:	No
Analysis Program:	AASHTOWare Bridge Rating (BrR)
Analysis Program Version:	6.8.2.3002
Rating Considers Field Condition of Members:	Yes
Inspection Date:	10/07/2018
Controlling component and failure mode:	

Splice Stress

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	1.81
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.02
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.09
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: DLZ	Date: 11/16/2018
Checked By: DLZ	Date: 11/30/2018

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REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
HURON PARKWAY	42.2738 / -83.6985	814021200259B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RV,GEDDES & NFS RR	1,019 / 75.1 / 7	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
1.0 MI W OF US-23	1968 / 2000 / 2007 / 2000	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	4 Steel Continuous / 82 PI Girder Comp	10/19/2022 / L4T8	5 Stable w/in footing




No inspections available for bridge key 814021200259B01

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OUTSTANDING WORK

Facility HURON PARKWAY	Latitude / Longitude 42.2738 / -83.6985	MDOT Structure ID 814021200259B01	Structure Condition Fair Condition(6)	
Feature HURON RV,GEDDES & NFS RR	Length / Width / Spans 1,019 / 75.1 / 7	Owner City: ANN ARBOR(0212)		
Location 1.0 MI W OF US-23	Built / Recon. / Paint / Ovly. 1968 / 2000 / 2007 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 4 Steel Continuous / 82 PI Girder Comp	Last NBI Inspection 10/19/2022 / L4T8	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

DECKSLABS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deck Patching				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments COMPLETED IN 2022. (Pedro Trana 03/08/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Floodcoat				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments NOT NEEDED AT THIS TIME. (Pedro Trana 03/08/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Joint Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments COMPLETED IN 2022. (Pedro Trana 03/08/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments COMPLETED IN 2022. (Pedro Trana 03/08/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Sidewalk Rpr				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments COMPLETED IN 2022. (Pedro Trana 03/08/2023)				

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)	
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing



NBI INSPECTION

473R

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

GENERAL NOTES

This structure was rehabilitated in 2017.


DECK

	09/19	10/20	10/22	
1. Surface (SIA-58A)	7	7	7	Epoxy overlay, no visible cracks. Approx. 1"-2" of dirt is present on the south shoulder and adjacent to the toe of barrier on the bridge deck. This appears to be depositing on the deck from the adjacent intersection with Chalmers Drive, as well as from the south gravel shoulder east of the bridge. Minor loss of epoxy overlay in eastbound lane. (10/22) Epoxy overlay, no visible cracks. Approx. 1"-2" of dirt is present on the south shoulder and adjacent to the toe of barrier on the bridge deck. This appears to be depositing on the deck from the adjacent intersection with Chalmers Drive, as well as from the south gravel shoulder east of the bridge. Minor loss of epoxy overlay in eastbound lane. (10/20) Epoxy overlay, no visible cracks. Approx. 1"+ of dirt is present on the south shoulder of the bridge deck. This appears to be depositing on the deck from the adjacent intersection with Chalmers Drive, which is a gravel road. (09/19)
2. Expansion Joints	7	6	6	EJ3 joint at east end. Joint is full of epoxy stone and dirt. (10/22) EJ3 joint at east end. Joint is full of epoxy stone and dirt. (10/20) EJ3 joint at east end. Joint is full of epoxy stone and dirt. (09/19)
3. Other Joints	N	N	N	(10/22) (10/20) (09/19)
4. Railings	7	7	7	Aesthetic parapet railing with concrete surface coating along both fascias, placed in 2017. Vertical cracks in concrete portion under nearly every steel rail post, in addition to others. No leaching or staining from cracks, and no spalls or delaminations at these cracks. (10/22) Aesthetic parapet railing with concrete surface coating along both fascias, placed in 2017. Vertical cracks in concrete portion under nearly every steel rail post, in addition to others. No leaching or staining from cracks, and no spalls or delaminations at these cracks. One spall in end wall in SW quadrant below guardrail connection. (10/20) Aesthetic parapet railing with concrete surface coating along both fascias, placed in 2017. Vertical cracks in concrete portion under nearly every steel rail post, in addition to others. No leaching or staining from cracks, and no spalls or delaminations at these cracks. One spall in end wall in SW quadrant. (09/19)
5. Sidewalks or Curbs	N	N	N	(10/22) (10/20) (09/19)
6. Deck Bottom Surface (SIA-58B)	7	7	7	At west end, each bay has 2-4 cracks with efflorescence. 2 transverse cracks at east end of south bay with efflorescence. 1 crack at midspan in center bay. Delamination and section loss around drain castings has been patched. (10/22) At west end, each bay has 2-4 cracks with efflorescence. 2 cracks at east end of south bay with efflorescence. 1 crack at midspan in center bay. Delamination and section loss around drain castings has been patched. (10/20) At west end, each bay has 2-4 cracks with efflorescence. 2 cracks at east end of south bay with efflorescence. Delamination and section loss around drain castings has been patched. (09/19)

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7. Deck (SIA-58)	7	7	7	<p>Epoxy overlay on surface. Deck patching around deck drains. Leaching cracks in deck bottom. 1"-2" of dirt on south shoulder. Some rust staining on south deck fascia over east half. (10/22)</p> <p>Epoxy overlay on surface. Deck patching around deck drains. Leaching cracks in deck bottom. 1"-2" of dirt on south shoulder. Some rust staining on south deck fascia over east half. (10/20)</p> <p>Epoxy overlay on surface. Deck patching around deck drains. Leaching cracks in deck bottom. 1"+ of dirt on south shoulder. (09/19)</p>
8. Drainage				<p>Four deck drains present. SW drain is clogged, all others are open. No downspout extensions below deck level. (10/22)</p> <p>Four deck drains present. SW and SE mostly covered. NW partially covered. NE drain open. No downspout extensions below deck level. (10/20)</p> <p>Four deck drains present. SE drain covered with dirt. SW partially covered. North drains open. No downspout extension below deck level. (09/19)</p>

SUPERSTRUCTURE

09/19 10/20 10/22

9. Stringer (SIA-59)	7	6	6	<p>Concrete I beams. East end of beams 2N, 3N, 4N and 6N bottom corner delaminated/spalled at sole plate with some exposed steel. Edge cracks in beams 1N and 5N at east end sole plate. Concrete surface coating on fascia beams and beam ends. Minor concrete surface coating failure on south fascia beam bottom flange. Minor edge cracks in beam 1N at west end. Minor honeycomb in beam 2N at west end. Minor surface spall in beam 5N at west end. (10/22)</p> <p>Concrete I beams. East end of beams 2N, 3N, 4N and 6N bottom corner delaminated/spalled at sole plate with some exposed steel. Concrete surface coating on fascia beams and beam ends. Minor concrete surface coating failure on south fascia beam bottom flange. (10/20)</p> <p>Concrete I beams. East end of beams 2N, 3N, 4N and 6N bottom corner delaminated/spalled at sole plate. Concrete surface coating on fascia beams and beam ends. Minor concrete surface coating failure on south fascia beam bottom flange. (09/19)</p>
10. Paint (SIA-59A)	N	N	N	(10/22) (10/20) (09/19)
11. Section Loss	2	2	2	<p>Delaminations/spalls at east end of 4 beams. Beam ends covered with concrete surface coating. Minor edge cracks at sole plates. (10/22)</p> <p>Delaminations/spalls at east end of 4 beams. Beam ends covered with concrete surface coating. (10/20)</p> <p>Delaminations/spalls at east end of 4 beams. Beam ends covered with concrete surface coating. (09/19)</p>
12. Bearings	5	5	5	<p>Steel bearings have been cleaned and painted - some minor rust forming on plates. Four bearing pads at east end have splits and cracks. Pad at beam 3N is split along sides. Pad at beams 4N, 5N and 6N have layer separation. (10/22)</p> <p>Steel bearings have been cleaned and painted - some minor rust forming on plates. Four bearing pads at east end have splits and cracks. Pad at beam 3N is split along sides. Pad at beams 4N, 5N and 6N have layer separation. (10/20)</p> <p>Steel bearings have been cleaned and painted - some minor rust forming on plates. Two bearing pads at east end have splits and cracks. Pad at beam 3N is split along sides. Pad at beam 4N has layer separation. (09/19)</p>


SUBSTRUCTURE

09/19 10/20 10/22

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13. Abutments (SIA-60)	7	7	7	3 vertical cracks in east abutment and 1 in west. Riprap along length of east abutment. NE return wall has 2 vertical cracks. SE return wall has 1 vertical crack. No riprap at west abutment. Area of west bank is eroded under SW deck drain. Trees behind guardrail at all angled return walls. (10/22) 3 vertical cracks in east abutment and 1 in west. Riprap along length of east abutment. NE return wall has 2 vertical cracks. SE return wall has 1 vertical crack. No riprap at west abutment. Area of west bank is eroded under SW deck drain. Trees behind guardrail at all angled return walls. (10/20) 3 hairline vertical cracks in east abutment and 1 in west. Riprap along length of east abutment. No riprap at west abutment. Area of west bank is eroded under SW deck drain. (09/19)
14. Piers (SIA-60)	N	N	N	(10/22) (10/20) (09/19)
15. Slope Protection	5	5	5	Riprap along length of east abutment. No riprap at west abutment. Area of west bank is eroded under SW deck drain. (10/22) Riprap along length of east abutment. No riprap at west abutment. Area of west bank is eroded under SW deck drain. (10/20) Riprap along length of east abutment. No riprap at west abutment. Area of west bank is eroded under SW deck drain. (09/19)
16. Channel (SIA-61)	7	7	6	Flow along east abutment. Heavy vegetation on banks. Existing soil bank without riprap along west bank in front of abutment. Channel drift lodged under utility supports at south side. (10/22) Flow along east abutment. Heavy vegetation on banks. Existing soil bank without riprap along west bank in front of abutment. (10/20) Flow along east abutment. Heavy vegetation on banks. Existing soil bank without riprap along west bank in front of abutment. (09/19)
17. Scour Inspection	7	7	7	Riprap in place along east abutment and on NE and SE slopes. No riprap along west abutment stream bank - no scour noted. (10/22) Riprap in place along east abutment and on NE and SE slopes. No riprap along west abutment stream bank - no scour noted. (10/20) Riprap in place along east abutment and on NE and SE slopes. No riprap along west abutment stream bank - no scour noted. (09/19)

APPROACH

	09/19	10/20	10/22	
18. Approach Pavement	7	7	7	HMA approaches, no cracks. (10/22) HMA approaches, no cracks. (10/20) HMA approaches, no cracks. (09/19)
19. Approach Shoulders Sidewalks	7	6	6	HMA/gravel shoulders. Some erosion of shoulder gravel in SE quadrant. Brush has overgrown the approach guardrails, especially in the NE quadrant. (10/22) HMA/gravel shoulders. Some erosion of shoulder gravel in SE quadrant. Brush has overgrown the approach guardrails, especially in the NE quadrant. (10/20) HMA/gravel shoulders. Some erosion of shoulder gravel in SE quadrant. Brush has overgrown the approach guardrails, especially in the NE quadrant. (09/19)
20. Approach Slopes				Approach guardrail in all 4 quads. Riprap on SE and NE slopes (10/22) Approach guardrail in all 4 quads. Riprap on SE and NE slopes (10/20) Approach guardrail in all 4 quads. Riprap on SE and NE slopes (09/19)
21. Utilities				2 large sanitary sewers and smaller conduits under south side. Hangers painted in 2017 and in good condition. Overhead lines north and east of bridge. (10/22) 2 large sanitary sewers and smaller conduits under south side. Hangers painted in 2017 and in good condition. Overhead lines north and east of bridge. (10/20) 2 large sanitary sewers and smaller conduits under south side. Hangers painted in 2017 and in good condition. Overhead lines north and east of bridge. (09/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

BRIDGE SAFETY INSPECTION REPORT

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)	
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovl. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing



22. Drainage Culverts	(10/22) (10/20) (09/19)
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MISCELLANEOUS

Guard Rail

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	7
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)	
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)		
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing	

Bridge History, Type, Materials	
27 - Year Built	1979
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	2017
43 - Main Span Bridge Type	5 32
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	9
80 - Post Type	1
107 - Deck Type	1
108A - Wearing Surface	5
108B - Membrane	0
108C - Deck Protection	0

Structure Dimensions	
34 - Skew	0
35 - Struct Flared	N
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	54.2
49 - Structure Length	54.2
50A - Width Left Curb/SW	0
50B - Width Right Curb/SW	0
33 - Median	0
51 - Width Curb to Curb	38
52 - Width Out to Out	40.8
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/19/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 7
59 - Superstructure Rating	6
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	6
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	4
5C - Level of Service	0
5D - Route Number	02006
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014313 08
19 - Detour Length	3
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	2
29 - ADT	5954
30 - Year of ADT	2016
32 - Appr Roadway Width	30
32A/B - Ap Pvt Type/Width	4 30
42A - Service Type On	1
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	30.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	1
110 - Truck Network	0
114 - Future ADT	6847
115 - Year Future ADT	2036
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	5
69 - Underclearance	N
71 - Waterway Adequacy	7
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	8

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	0
148 - No. of Pin & Hangers	0

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	0
55A - Reference Feature	N
55B - Right Horiz Clearance	99.9
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	


Proposed Improvements		
75 - Type of Work	31	1
76 - Length of Improvement	74.1	
94 - Bridge Cost	250	
95 - Roadway Cost	50	
96 - Total Cost	340	
97 - Year of Cost Estimate	1991	

Load Rating and Posting		
31 - Design Load	6	
41 - Open, Posted, Closed	A	
63 - Fed Oper Rtg Method	6	
64F - Fed Oper Rtg Load	2.71	
64MA - Mich Oper Rtg Method	6	
64MB - Mich Oper Rtg	1.22	
64MC - Mich Oper Truck	17	
65 - Inv Rtg Method	6	
66 - Inventory Load	.95	
70 - Posting	5	
141 - Posted Loading		
193 - Overload Class		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

WORK RECOMMENDATIONS

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)	
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)		
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

473R

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Brush Cut	H	Trim brush in approach quadrants, especially NE where it reduces visibility. Cut down trees adjacent to abutments.
Remove Debris	H	Remove dirt buildup on deck (especially the south shoulder). Remove channel debris
Joint Repair	L	Clean out joint yearly
Other	H	Pave the approach shoulders or otherwise correct/limit the flow of water from the approaches onto the bridge deck that carry and deposit dirt

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
HURON RIVER DRIVE	42.2651 / -83.6859	814021200028B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
PITTSFIELD ANN ARBOR DRN	54.2 / 40.8 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
ANN ARBOR TWP SEC 35	1979 / / / 2017	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 32 Multi Str Comp	10/19/2022 / 473R	8 Stable Above Footing



No plan available for bridge key 814021200028B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

LOAD RATING ASSUMPTIONS

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)	
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing



Rating Considers Field Condition of Members: Yes Inspection Date: 10/19/2022

Deterioration:

Minor spalls at east beam ends on beams 2N, 3N, 4N and 6N - does not impact ratings.

Most Recent Year Construct / Reconstruct / Overlay: 2017

History of Work Impacting Load Rating:

Railings were replaced in 2017.

Superstructure Component:	5 Prestressed Concrete	Beam fy:	ksi	Beam f'c / fb:	6.0	ksi
Composite:	Yes	Number of Beams:	6	Shop Drawings Verified:	No	
Beam Size(s) & Names (each span):	45" deep AASHTO prestressed precast concrete beams					
Deck:	Thickness (in.): 9.0	Fy / f'c:	/ 4.0	ksi	Deck Design Load > H15:	Yes
Wearing Surface:	Mat'l: Epoxy Overlay	Thickness (in.):	0.25	Unit Weight (pcf.):	150.0	
	LEFT	CENTER	RIGHT			
Barrier: Type / Weight (plf.):	Aesthetic Parapet Tu / 320.0	/	Aesthetic Parapet / 320.0			
Sidewalk: Width / Thick (in.):	/	/	/			
Clear Roadway (ft.):	38.0					

Additional Loads:

A 42" dia sanitary sewer pipe is suspended between beams 3N and 4N, below the deck. A 36" dia sanitary sewer pipe is suspended between beams 4N and 5N, below the deck. These two pipes are suspended using pipe supports that are directly attached to the bottom of the bottom flange of beams 3N, 4N and 5N, at 4 locations along the beams.

Unique Factors That Affect Capacity:


Analyzed By: Carrie Hamel

Date: 02/01/2021

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

LOAD RATING SUMMARY

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)	
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)		
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing	

Compliance Issue: None
Compliance Verified: No
Analysis Program: Hand Calculations
Analysis Program Version: Tekla Tedds 2020
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/19/2022

Controlling component and failure mode:

Beam flexure (all beams) (64MB, MI Operating Rating and 64F Federal Operating Rating), tension in bottom strands (66, Federal Inventory Rating).

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method 6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings 2.71
MDOT Item 64MA - Michigan Operating Method 6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating 1.22
MDOT Item 64MC - Michigan Operating Truck 17
NBI Item 65 - Inventory Rating Method 6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating 0.95
NBI Item 41 - Structure Open Posted Closed A A Open, no restriction
NBI Item 70 - Bridge Posting 5 5 - 100% or more
Posted By No Posting
MDOT Item 141 - Posted Loading
MDOT Item 193A - Michigan Overload Class
MDOT Item 193C - Overload Status
Analyzed By: Carrie Hamel **Date:** 02/01/2021
Checked By: Mark Lessens **Date:** 02/05/2021

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
HURON RIVER DRIVE	42.2651 / -83.6859	814021200028B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
PITTSFIELD ANN ARBOR DRN	54.2 / 40.8 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
ANN ARBOR TWP SEC 35	1979 / / / 2017	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 32 Multi Str Comp	10/19/2022 / 473R	8 Stable Above Footing




No inspections available for bridge key 814021200028B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 10975

OUTSTANDING WORK

Facility HURON RIVER DRIVE	Latitude / Longitude 42.2651 / -83.6859	MDOT Structure ID 814021200028B01	Structure Condition Fair Condition(6)	
Feature PITTSFIELD ANN ARBOR DRN	Length / Width / Spans 54.2 / 40.8 / 1	Owner City: ANN ARBOR(0212)		
Location ANN ARBOR TWP SEC 35	Built / Recon. / Paint / Ovly. 1979 / / / 2017	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/19/2022 / 473R	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

JOINTS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Joint Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Clean out joint yearly (Pedro Trana 11/28/2022)				

CHANNEL/SCOUR

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Remove Debris				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Remove dirt buildup on deck (especially the south shoulder). Remove channel debris (Pedro Trana 11/28/2022)				

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Trim brush in approach quadrants, especially NE where it reduces visibility. Cut down trees adjacent to abutments. (Pedro Trana 11/28/2022)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Other				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Pave the approach shoulders or otherwise correct/limit the flow of water from the approaches onto the bridge deck that carry and deposit dirt (Pedro Trana 11/28/2022)				

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

BRIDGE SAFETY INSPECTION REPORT

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)	
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing



NBI INSPECTION

4NTU

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

GENERAL NOTES

Bridge rehabilitation in 2021. This included a new deck and railings.

DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	8	7	8	Concrete deck in good condition. (10/22) A thin HMA overlay or micro surface in place on approaches and across deck. Transverse and longitudinal cracks, most sealed, across deck. (10/20) A thin HMA overlay or micro surface in place on approaches and across deck. Minor trans cracking at reference lines. (10/18)
2. Expansion Joints	N	N	N	(10/22) (10/20) (10/18)
3. Other Joints	N	N	N	(10/22) (10/20) (10/18)
4. Railings	7	7	8	New railings installed in 2021. Minor vertical cracks. (10/22) Railings in good condition, but do not meet current standards. Chain link fence does eliminate large openings between horizontal rails. Some connections between fence and rails are loose near the bottom. (10/20) Railings in good condition, but do not meet current standards. Chain link fence does eliminate large openings between horizontal rails. (10/18)
5. Sidewalks or Curbs	6	6	8	Sidewalks and curbs are in good condition. (10/22) Minor vegetation growth between the three separate concrete beams in the south sidewalk. Elevation difference of 1 1/2" in south sidewalk at east reference line. Concrete spalls in edges of beams in south sidewalk surface. (10/20) Minor vegetation growth between the three separate concrete beams in the south sidewalk. Elevation difference of 1 1/2" in south sidewalk at east reference line. 3/4" diff at NE app sidewalk. Concrete spalls in edges of beams in south sidewalk surface. (10/18)
6. Deck Bottom Surface (SIA-58B)	N	N	N	(10/22) (10/20) (10/18)
7. Deck (SIA-58)	5	5	8	New concrete deck installed in 2021. (10/22) HMA wearing surface or micro surface above adjacent box beams. (10/20) Newer HMA wearing surface or micro surface above adjacent box beams. (10/18)
8. Drainage				(10/22) (10/20) (10/18)

SUPERSTRUCTURE

10/18 10/20 10/22

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)	
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing



9. Stringer (SIA-59)	6	6	7	Efflorescence, moisture and stalactites present at box beam joints. No spalls, delaminations, or exposed strands. Tie rod ends at center of bridge have minor rust. (10/22) Efflorescence, moisture and stalactites present at box beam joints. Grout is missing between beams. No spalls, delaminations, or exposed strands. (10/20) Efflorescence, moisture and stalactites present at box beam joints. Grout is missing between beams. No spalls, delaminations, or exposed strands. (10/18)
10. Paint (SIA-59A)	N	N	N	(10/22) (10/20) (10/18)
11. Section Loss	N	N	N	(10/22) (10/20) (10/18)
12. Bearings	6	6	7	Bearings are in good condition. (10/22) Elastomeric bearing pads slightly overhang the abutments. The pad at the south fascia beam on the east abutment overhangs by 1" but appears to be fully supported. (10/20) Elastomeric bearing pads slightly overhang the abutments. The pad at the south fascia beam on the east abutment overhangs by 1" but appears to be fully supported. (10/18)

SUBSTRUCTURE

	10/18	10/20	10/22	
13. Abutments (SIA-60)	7	7	7	Minor vertical cracking with no spalls and one delamination in west abutment. (10/22) Multiple locations of exposed rebar due to insufficient cover. Minor vertical cracking with no spalls and one delamination in west abutment. Trees growing on top of wingwalls. (10/20) Multiple locations of exposed rebar due to insufficient cover. Minor vertical cracking with no spalls and one delamination in west abutment. Trees growing on top of NE wingwall. (10/18)
14. Piers (SIA-60)	N	N	N	(10/22) (10/20) (10/18)
15. Slope Protection	4	4	7	Riprap added at ends of concrete channel lining. (10/22) Undermining of concrete channel lining. Scour at SW and NE quadrants. Vegetation along slopes. (10/20) Undermining of concrete channel lining. Scour at SW and NE quadrants. Vegetation along slopes. (10/18)
16. Channel (SIA-61)	6	6	7	Concrete channel lining under bridge. Riprap present at ends of channel lining. Minor debris in upstream (north) end. (10/22) Concrete channel lining under bridge is being undermined. Erosion is present approximately 12" deep extending 7' back at the SW quadrant, including a scour hole approx. 3' deep at corner of wingwall and abutment. Erosion is present 3" below the concrete liner, extending 3' back at the NE quadrant. The concrete lining is in fair condition with holes along the west abutment and corner cracks in undermined areas. (10/20) Concrete channel lining under bridge is being undermined. Erosion is present approximately 12" deep extending 7' back at the SW quadrant, including a scour hole approx. 3' deep at corner of wingwall and abutment. Erosion is present 3" below the the concrete liner, extending 3' back at the NE quadrant. The concrete lining is in fair condition with holes along the west abutment and corner cracks in undermined areas. (10/18)
17. Scour Inspection	4	4	8	No scour noted. (10/22) Erosion is present approximately 12" deep extending 7' back at the SW quadrant, including a scour hole approx. 3' deep at corner of wingwall and abutment. Erosion is present 3" below the concrete liner, extending 3' back at the NE quadrant. (10/20) Erosion is present approximately 12" deep extending 7' back at the SW quadrant, including a scour hole approx. 3' deep at corner of wingwall and abutment. Erosion is present 3" below the the concrete liner, extending 3' back at the NE quadrant. (10/18)

APPROACH

10/18 10/20 10/22

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

BRIDGE SAFETY INSPECTION REPORT

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)	
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing



18. Approach Pavement	8	7	8	New HMA is in good condition. (10/22) A thin HMA overlay or micro surface in place on approaches and across deck. Many sealed cracks on approaches. Not present in gutters. (10/20) A thin HMA overlay or micro surface in place on approaches and across deck. Minor trans cracking at reference lines. Not present in gutters. (10/18)
19. Approach Shoulders Sidewalks		7	8	Concrete sidewalks are in good condition. (10/22) Concrete sidewalks present in the NE, SE, and SW quadrants are in good condition. 1 1/2" elevation difference at east reference line on south sidewalk. (10/20) Concrete sidewalks present in the NE, SE, and SW quadrants are in good condition. 1 1/2" elevation difference at east reference line on south sidewalk. 3/4" elevation difference in NE quad. (10/18)
20. Approach Slopes				(10/22) (10/20) (10/18)
21. Utilities				8" diameter gas line under beam 2N through abutments. (10/22) Overhead lines along north side, parallel to road. 2" diameter conduit along south fascia - unsupported along length and sagging. 8" diameter (gas line?) under beam 2N through abutments. (10/20) Overhead lines along north side, parallel to road. 2" diameter conduit along south fascia - unsupported along length and sagging. 8" diameter (gas line?) under beam 2N through abutments. (10/18)
22. Drainage Culverts				(10/22) (10/20) (10/18)

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

Item	Rating
71. Water Adequacy	7
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

STRUCTURE INVENTORY AND APPRAISAL

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)	
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing	

Bridge History, Type, Materials

27 - Year Built	1962
106 - Year Reconstructed	2021
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	7
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions

34 - Skew	0
35 - Struct Flared	N
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	23
49 - Structure Length	24
50A - Width Left Curb/SW	5.1
50B - Width Right Curb/SW	8
33 - Median	0
51 - Width Curb to Curb	27.2
52 - Width Out to Out	42.7
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	10/19/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	8
58A/B - Deck Surface/Bottom	8 N
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	7
62 - Culvert Rating	N

Navigation Data

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)

5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000046049 63
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	19
28A - Lanes On	2
29 - ADT	959
30 - Year of ADT	2016
32 - Appr Roadway Width	25.9
32A/B - Ap Pvt Type/Width	4 25.98
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	27.2
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	1000
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal

36A - Bridge Railing	1
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	7
68 - Deck Geometry	5
69 - Underclearance	N
71 - Waterway Adequacy	7
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	8

Miscellaneous

37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	0
143 - Pin & Hanger Code	1
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)

5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements

75 - Type of Work	35 1
76 - Length of Improvement	24
94 - Bridge Cost	162
95 - Roadway Cost	176
96 - Total Cost	338
97 - Year of Cost Estimate	2016

Load Rating and Posting

31 - Design Load	4
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	8
64F - Fed Oper Rtg Load	1.3
64MA - Mich Oper Rtg Method	8
64MB - Mich Oper Rtg	1.26
64MC - Mich Oper Truck	4
65 - Inv Rtg Method	8
66 - Inventory Load	.91
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ISLAND DRIVE	42.2891 / -83.7316	815021200887B01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
TRAVER CREEK	24 / 42.7 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.75 MI E OF US-23 BR	1962 / 2021 / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/19/2022 / 4NTU	8 Stable Above Footing




No inspections available for bridge key 815021200887B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

WORK RECOMMENDATIONS

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)	
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

4NTU

Inspector Name Pedro Trana	Agency / Company Name DLZ Michigan, Inc.	Insp. Freq. 24	Insp. Date 10/19/2022
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CREW RECOMMENDATIONS

CONTRACT RECOMMENDATIONS

Recommendation Type	Priority	Description
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Recommendation Type	Priority	Description
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MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ISLAND DRIVE	42.2891 / -83.7316	815021200887B01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
TRAVER CREEK	24 / 42.7 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.75 MI E OF US-23 BR	1962 / 2021 / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/19/2022 / 4NTU	8 Stable Above Footing




No plan available for bridge key 815021200887B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

LOAD RATING ASSUMPTIONS

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)	
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/19/2022

Deterioration:

None that impact capacity

Most Recent Year Construct / Reconstruct / Overlay: 2021

History of Work Impacting Load Rating:

The bridge was rehabilitated in 2021. The scope of work included sidewalk and railing replacement, removal of the existing HMA wearing surface and placement of a 6" minimum concrete deck with a normal crown.

Superstructure Component: 5 Prestressed Concrete Beam fy: ksi Beam f'c / fb: 5.0 ksi

Composite: No Number of Beams: 14 Shop Drawings Verified: No

Beam Size(s) & Names (each span): (14) 12" deep x 36" wide; 1 span

Deck: Thickness (in.): 6.0 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Thickness (in.): Unit Weight (pcf.): 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Aesth. Parapet / 320.0 Tube	/	Aesth. Parapet / 320.0 Tube

Sidewalk: Width / Thick (in.): 75.5 / 10.2 / 111.0 / 11.3

Clear Roadway (ft.): 27.2

Additional Loads:

Pedestrian Loading applied to the beams directly under the sidewalks as a girder member load. A sidewalk load of 85 psf was applied as per the AASHTO Standard Specifications, 17th Edition, Section 3.14.1.1 for spans 0 ft to 25 ft in length. The applied loads as follows: 178 lb/ft @ G1 & G14, 255 lb/ft @ G2, G12, & G13.

Unique Factors That Affect Capacity:


Box beams act as sidewalk/curb on the outside of the roadway. 14 beams total, 2 beams act as north sidewalk, 3 beams act as south sidewalk, 9 beams below roadway. Bridge is non-composite. Two models were considered, one with all 14 beams and one with just the 9 roadway beams. The model with just the 9 roadway beams controlled the load rating.

Analyzed By: Carrie Hamel Date: 02/22/2023

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

LOAD RATING SUMMARY

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)	
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing	

Compliance Issue:	None
Compliance Verified:	No
Analysis Program:	AASHTOWare Bridge Rating (BrR)
Analysis Program Version:	7.1.1.3001
Rating Considers Field Condition of Members:	Yes
Inspection Date:	10/19/2022

Controlling component and failure mode:

Design Flexure Concrete, Truck #17 or #18
Girder G3 (3rd Beam from Left Fascia)

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	8 LRFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	1.3
MDOT Item 64MA - Michigan Operating Method	8 LRFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.26
MDOT Item 64MC - Michigan Operating Truck	4
NBI Item 65 - Inventory Rating Method	8 LRFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	0.91
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: Carrie Hamel	Date: 02/22/2023
Checked By: Kyle Slavik	Date: 02/22/2023

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
ISLAND DRIVE	42.2891 / -83.7316	815021200887B01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
TRAVER CREEK	24 / 42.7 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.75 MI E OF US-23 BR	1962 / 2021 / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/19/2022 / 4NTU	8 Stable Above Footing




No inspections available for bridge key 815021200887B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11081

OUTSTANDING WORK

Facility ISLAND DRIVE	Latitude / Longitude 42.2891 / -83.7316	MDOT Structure ID 815021200887B01	Structure Condition Good Condition(7)	
Feature TRAVER CREEK	Length / Width / Spans 24 / 42.7 / 1	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1962 / 2021 / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/19/2022 / 4NTU	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

CHANNEL/SCOUR

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Scour Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Fill in scour holes and undermined areas of channel lining. (Mark Lessens 11/20/2020)
REHAB COMPLETED IN 2021. (Pedro Trana 03/17/2023)

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Channel Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Fill in scour holes and undermined areas of channel lining. (Mark Lessens 11/20/2020)
REHAB COMPLETED IN 2021. (Pedro Trana 03/17/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Other				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date


Comments

Replace railings with compliant railings, including approach guardrails. (Mark Lessens 11/20/2020)
REHAB COMPLETED IN 2021. (Pedro Trana 03/17/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

ZYEF

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

GENERAL NOTES

Healer/sealer applied to bridge deck in 2012 during construction and opened to traffic on Nov. 14, 2012. Healer/sealer applied to bridge deck in Spring 2017.

DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	6	6	Healer/sealer applied to bridge deck in Spring 2017. There are open transverse cracks in the deck surface near midspan. There is map cracking and reflective cracking present throughout. (10/23) Healer/sealer applied to bridge deck in Spring 2017. There are open transverse cracks in the deck surface near midspan. There is map cracking and reflective cracking present throughout. (10/21) Healer/sealer applied to bridge deck in Spring 2017. Cracks are present, but additional cracks are very difficult to determine. (10/19)
2. Expansion Joints	6	6	6	Debris at shoulders and curb line. Some minor wearing of joint seals along the wheel lines. (10/23) Debris at shoulders and curb line. Some minor wearing of joint seals. (10/21) Debris at shoulders and curb line. Some minor wearing of joint seals. (10/19)
3. Other Joints	6	6	5	Minor debris present. Some minor adhesion loss, some material missing and material settlement. Spall in sidewalk adjacent to joint seal in SW and SE quadrants. The west joint is missing material in the eastbound lanes and shoulder. (10/23) Minor debris present. Some minor adhesion loss, some material missing and material settlement. Spall in sidewalk adjacent to joint seal. (10/21) Minor debris present. Some minor adhesion loss, some material missing and material settlement. Spall in sidewalk adjacent to joint seal. (10/19)
4. Railings	7	7	6	Concrete railing has vertical hairline cracks spaced every 4' to 5'. The south railing has map cracking on the vertical face near the east end of the bridge. The south railing joint material near midspan is loose. The protective coating on the steel handrails is flaking throughout. (10/23) Concrete railing has vertical hairline cracks spaced every 7' to 10'. (10/21) Concrete railing has vertical hairline cracks spaced every 7' to 10'. (10/19)
5. Sidewalks or Curbs	7	6	6	Concrete sidewalks along both sides have numerous full and partial width transverse cracks. Wider cracks at west end of bridge. There are open cracks with minor efflorescence in the north sidewalk at the east end. (10/23) Concrete sidewalks along both sides have numerous full and partial width transverse cracks. Wider cracks at west end of bridge. There are open cracks with minor efflorescence in the north sidewalk at the east end. (10/21) Concrete sidewalks along both sides have numerous full and partial width transverse cracks. Wider cracks at west end of bridge. (10/19)
6. Deck Bottom Surface (SIA-58B)	N	N	N	Adjacent box beams does not provide bottom of deck inspection. There is evidence that the healer/sealer penetrated all the way to the bottom of the grout joints between the beams (brownish color in small cracks). (10/23) Adjacent box beams does not provide bottom of deck inspection. There is evidence that the healer/sealer penetrated all the way to the bottom of the grout joints between the beams (brownish color in small cracks). (10/21) Adjacent box beams does not provide bottom of deck inspection. There is evidence that the healer/sealer penetrated all the way to the bottom of the grout joints between the beams (brownish color in small cracks). (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway



7. Deck (SIA-58)	7	7	6	<p>Healer/sealer applied to bridge deck in Spring 2017. Most of the previously sealed cracks have opened up. There are open longitudinal, transverse, and diagonal cracks throughout the bridge. The fascias have vertical cracks in line with the cracks in the railing. Healer/sealer was also applied to cracks prior to open to traffic in 2012. No spalls or delaminations. (10/23)</p> <p>Healer/sealer applied to bridge deck in Spring 2017. Cracks are present. There are open transverse cracks in the deck surface near midspan. Healer/sealer was also applied to cracks prior to open to traffic in 2012. No spalls or delaminations. (10/21)</p> <p>Healer/sealer applied to bridge deck in Spring 2017. Cracks are present. Healer/sealer was also applied to cracks prior to open to traffic in 2012. No spalls or delaminations. (10/19)</p>
8. Drainage				<p>Catch basins near the structure in the NE and SE quadrants. (10/23)</p> <p>Catch basins near the structure in the NE and SE quadrants. (10/21)</p> <p>Catch basins near the structure in the NE and SE quadrants. (10/19)</p>

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	7	7	7	<p>Diagonal hairline crack in north and south fascia beams at both ends. Area of cracked and light staining of grout between beams at east end appears to be filled with healer/sealer that penetrated to the bottom of the grout joints. Some signs of leakage between beams due to slight staining on bottoms. (10/23)</p> <p>Diagonal hairline crack in north and south fascia beams at both ends. Area of cracked and light staining of grout between beams at east end appears to be filled with healer/sealer that penetrated to the bottom of the grout joints. Some signs of leakage between beams due to slight staining on bottoms. (10/21)</p> <p>Diagonal hairline crack in north and south fascia beams at both ends. Area of cracked and light staining of grout between beams at east end appears to be filled with healer/sealer that penetrated to the bottom of the grout joints. Some signs of leakage between beams due to slight staining on bottoms. (10/19)</p>
10. Paint (SIA-59A)	N	N	N	(10/23) (10/21) (10/19)
11. Section Loss	N	N	N	(10/23) (10/21) (10/19)
12. Bearings	8	8	8	<p>Elastomeric bearings appear in good condition. No bulging or signs of overstress. (10/23)</p> <p>Elastomeric bearings appear in good condition. (10/21)</p> <p>Elastomeric bearings appear in good condition. (10/19)</p>

SUBSTRUCTURE

	10/19	10/21	10/23	
13. Abutments (SIA-60)	7	7	7	<p>Some full height vertical cracks. 1 delamination on southeast returnwall. Exposed rebar in northeast returnwall. The west abutment has rust staining below the fascia beams and a crack below the north fascia beam. (10/23)</p> <p>Some full height vertical hairline cracks. 1 delamination on southeast returnwall. Exposed rebar in northeast returnwall. (10/21)</p> <p>Some full height vertical hairline cracks. 1 delamination on southeast returnwall. Exposed rebar in northeast returnwall. (10/19)</p>
14. Piers (SIA-60)	N	N	N	(10/23) (10/21) (10/19)
15. Slope Protection	N	N	N	(10/23) (10/21) (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway



16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
17. Scour Inspection	N	N	N	(10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	6	6	6	Concrete approach pavement east and west of bridge. Partial healer/sealer applied to diagonal hairline cracks in 2012 from expansion joint in approach slab in NE and SW quadrants. Cracks still remain (healer/sealer not applied to approach slabs). (10/23) Concrete approach pavement east and west of bridge. Partial healer/sealer applied to diagonal hairline cracks in 2012 from expansion joint in approach slab in NE and SW quadrants. Cracks still remain (healer/sealer not applied to approach slabs). (10/21) Concrete approach pavement east and west of bridge. Partial healer/sealer applied to diagonal hairline cracks in 2012 from expansion joint in approach slab in NE and SW quadrants. Cracks still remain (healer/sealer not applied to approach slabs). (10/19)
19. Approach Shoulders Sidewalks	7	6	6	Concrete sidewalks in all quadrants have longitudinal and transverse cracking. SE quadrant has 1/2" elevation difference. (10/23) Concrete sidewalks in all quadrants have cracking. (10/21) Concrete sidewalks in all quadrants have minor cracking. (10/19)
20. Approach Slopes				(10/23) (10/21) (10/19)
21. Utilities				Street lights present on both sides of bridge. Light pole bases are rusty. (10/23) Street lights present on both sides of bridge. (10/21) Street lights present on both sides of bridge. (10/19)
22. Drainage Culverts				(10/23) (10/21) (10/19)

MISCELLANEOUS

Guard Rail		Other Items	
<u>Item</u>	<u>Rating</u>	<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1	71. Water Adequacy	N
36B. Transitions	N	72. Approach Alignment	8
36C. Approach Guardrail	N	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	N	High Load Hit (M)	No
		Special Insp. Equipment	
		Underwater Insp. Method	0
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	


Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

STRUCTURE INVENTORY AND APPRAISAL

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	2012
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	7
80 - Post Type	0
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	42
35 - Struct Flared	0
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	116.5
49 - Structure Length	118.3
50A - Width Left Curb/SW	11.5
50B - Width Right Curb/SW	8.5
33 - Median	0
51 - Width Curb to Curb	54.1
52 - Width Out to Out	77.1
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/10/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	6
58A/B - Deck Surface/Bottom	6 N
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000014295 06
19 - Detour Length	3
20 - Toll Facility	3
26 - Functional Class	14
28A - Lanes On	4
29 - ADT	28000
30 - Year of ADT	2010
32 - Appr Roadway Width	54.1
32A/B - Ap Pvt Type/Width	6 54
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	54.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	7
110 - Truck Network	0
114 - Future ADT	29780
115 - Year Future ADT	2030
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	N
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	7
68 - Deck Geometry	4
69 - Underclearance	6
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	0
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	2
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	R
55B - Right Horiz Clearance	22.1
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	


Proposed Improvements	
75 - Type of Work	35 1
76 - Length of Improvement	387.1
94 - Bridge Cost	27
95 - Roadway Cost	0
96 - Total Cost	27
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	B
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	8
64F - Fed Oper Rtg Load	2.82
64MA - Mich Oper Rtg Method	8
64MB - Mich Oper Rtg	1.11
64MC - Mich Oper Truck	18
65 - Inv Rtg Method	8
66 - Inventory Load	1.77
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	N

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

ZYEF

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/10/2023
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AASHTO ELEMENTS


(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Decks/Slabs							
803	Conc Deck - Coated Bars	9121	sq.ft	7297 80%	1824 20%	0 0%	0 0%
812	Reinf Conc Fascia	237	ft	213 90%	24 10%	0 0%	0 0%
Joints							
301	Pourable Joint Seal	310	ft	0 0%	232 75%	78 25%	0 0%
303	Assembly Joint With Seal	103	ft	73 71%	30 29%	0 0%	0 0%
Superstructure							
823	P/S Concrete Box Beams	2130	ft	1917 90%	213 10%	0 0%	0 0%
826	Beam End Deterioration	36	(EA)	32 89%	4 11%	0 0%	0 0%
Bearings							
310	Elastomeric Bearing	36	each	36 100%	0 0%	0 0%	0 0%
Substructure							
215	Re Conc Abutment	431	ft	381 88%	50 12%	0 0%	0 0%
Other Elements							
321	Re Conc Approach Slab	3067	sq.ft	2300 75%	767 25%	0 0%	0 0%
331	Re Conc Bridge Railing	237	ft	162 68%	75 32%	0 0%	0 0%
521	Conc Prot Coating	1654	sq.ft	1654 100%	0 0%	0 0%	0 0%
840	Reinf Conc Sidewalk	3615	sq.ft	2711 75%	904 25%	0 0%	0 0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

WORK RECOMMENDATIONS

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
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WORK RECOMMENDATIONS

ZYEF

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Bridge Washing	M	Clean expansion joint
Deep Overlay	M	Place deep concrete overlay on deck surface

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

LOAD RATING ASSUMPTIONS

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway



Rating Considers Field Condition of Members: Yes Inspection Date: 10/18/2019

Deterioration:

No impact

Most Recent Year Construct / Reconstruct / Overlay: 2012

History of Work Impacting Load Rating:

New construction

Superstructure Component: 5 Prestressed Concrete Beam fy: ksi Beam f'c / fb: 7.0 ksi

Composite: Yes Number of Beams: 18 Shop Drawings Verified: Yes

Beam Size(s) & Names (each span): 18 - 48"x48" box beams; single span

Deck: Thickness (in.): 6.0 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Monolithic concrete Thickness (in.): 1.5 Unit Weight (pcf.): 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Concrete / 600.0 parapet	/	Concrete / 600.0 parapet

Sidewalk: Width / Thick (in.): 156.5 / 10.25 / 120.5 / 9.75

Clear Roadway (ft.): 54.0

Additional Loads:

2.85" unifrom concrete haunch based off construction field notes from wet depth measurements (does not contribute to strength)

Unique Factors That Affect Capacity:

None


Analyzed By: Paul D. Izzo, P.E.

Date: 11/12/2013

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

LOAD RATING SUMMARY

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway	

Compliance Issue: None
Compliance Verified: No
Analysis Program: Other
Analysis Program Version: Bentley CONSPAN
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/18/2019

Controlling component and failure mode:

Interior beam, flexure

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	8 LRFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.82
MDOT Item 64MA - Michigan Operating Method	8 LRFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.11
MDOT Item 64MC - Michigan Operating Truck	18
NBI Item 65 - Inventory Rating Method	8 LRFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.77
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	N-No Restriction
Analyzed By: Paul D. Izzo, P.E.	Date: 11/12/2013
Checked By: Talia N. Belill, P.E.	Date: 11/18/2013

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
E STADIUM BLVD	42.263 / -83.7418	814021200015R01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
ANN ARBOR RAILROAD	118.3 / 77.1 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN ST	2012 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/10/2023 / ZYEF	N Not Over Waterway




No inspections available for bridge key 814021200015R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11066

OUTSTANDING WORK

Facility E STADIUM BLVD	Latitude / Longitude 42.263 / -83.7418	MDOT Structure ID 814021200015R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 118.3 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / ZYEF	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

DECKSLABS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deep Overlay				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Place deep concrete overlay on deck surface (Kyle Slavik 10/26/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Bridge Washing				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date


Comments

Clean expansion joint (Kyle Slavik 10/26/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

MQSF

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

GENERAL NOTES

Healer/sealer applied to bridge deck in 2012 during construction and opened to traffic on Nov. 14, 2012. Healer/sealer applied to bridge deck in Spring 2017. South sidewalk coated with epoxy.

DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	7	6	<p>Healer/sealer applied to surface in Spring 2017. All cracks present at that time were sealed. Diagonal cracks present at deck corners. Map and reflective cracking are also present. Some of the previously sealed cracks have opened up. Healer/sealer also applied to cracks prior to open to traffic in 2012. (10/23)</p> <p>Healer/sealer applied to surface in Spring 2017. All cracks present at that time were sealed. Diagonal cracks present at deck corners. Map and reflective cracking are also present. Some additional cracks may be present, but very difficult to determine. Healer/sealer also applied to cracks prior to open to traffic in 2012. (10/21)</p> <p>Healer/sealer applied to surface in Spring 2017. All cracks present at that time were sealed. Some additional cracks may be present, but very difficult to determine. Healer/sealer also applied to cracks prior to open to traffic in 2012. (10/19)</p>
2. Expansion Joints	7	7	7	<p>Some wear on seal and slight settlement. Debris at shoulders and curb line at sleeper slab. Small concrete spalls at east reference line in EB lane. Cracks with impending spalls at west reference line in WB lane. (10/23)</p> <p>Some wear on seal and slight settlement. Debris at shoulders and curb line at sleeper slab. Small concrete spalls at east reference line in EB lane. Cracks with impending spalls at west reference line in WB lane. (10/21)</p> <p>Some wear on seal and slight settlement. Debris at shoulders and curb line at sleeper slab. Small concrete spalls at east reference line in EB lane. (10/19)</p>
3. Other Joints	6	6	6	<p>Joint filler is intact, but some shrinkage and settlement has occurred, especially NE quadrant at sleeper slab. Minor concrete spalling at east sleeper slab area where the sleeper slab is lower than the approach slab. Vegetation is present near the curbs. (10/23)</p> <p>Joint filler is intact, but some shrinkage and settlement has occurred, especially NE quadrant at sleeper slab. Minor concrete spalling at east sleeper slab area where the sleeper slab is lower than the approach slab. (10/21)</p> <p>Joint filler is intact, but some shrinkage and settlement has occurred, especially NE quadrant at sleeper slab. Minor concrete spalling at east sleeper slab area where the sleeper slab is lower than the approach slab. (10/19)</p>
4. Railings	7	7	7	<p>Concrete railings have vertical hairline cracks spaced every 4-5'. The handrail coating is flaking throughout the bridge. (10/23)</p> <p>Concrete railings have vertical hairline cracks. (10/21)</p> <p>Concrete railings have vertical hairline cracks. (10/19)</p>
5. Sidewalks or Curbs	6	7	7	<p>South sidewalk coated with epoxy in Spring 2017. Epoxy coating is peeling along the curb and at the joints. Concrete sidewalk on north side has numerous transverse cracks and diagonal cracks near bridge end reference lines and a longitudinal crack for most of the bridge length. Spall in north curb at E3 joint in west sleeper slab. (10/23)</p> <p>South sidewalk coated with epoxy in Spring 2017. Concrete sidewalk on north side has numerous transverse cracks and diagonal cracks near bridge end reference lines. Spall in north curb at E3 joint in west sleeper slab. (10/21)</p> <p>South sidewalk coated with epoxy in Spring 2017. Concrete sidewalk on north side has numerous transverse cracks and diagonal cracks near bridge end reference lines. Spall in north curb at E3 joint in west sleeper slab. Cracks in north sidewalk at reference lines. (10/19)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)
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6. Deck Bottom Surface (SIA-58B)	N	N	N	(10/23) (10/21) (10/19)
7. Deck (SIA-58)	7	7	6	Healer/sealer applied to surface in Spring 2017. All cracks at that time were sealed. Some cracks have now opened up. Healer/sealer also applied to cracks prior to open to traffic in 2012. Minor spalls at east reference line. (10/23) Healer/sealer applied to surface in Spring 2017. All cracks sealed. Healer/sealer also applied to cracks prior to open to traffic in 2012. Minor spalls at east reference line. (10/21) Healer/sealer applied to surface in Spring 2017. All cracks sealed. Healer/sealer also applied to cracks prior to open to traffic in 2012. 4 delaminations at east reference line. (10/19)
8. Drainage				Catch basins near the structure in the NW and SW quadrants. (10/23) Catch basins near the structure in the NW and SW quadrants. (10/21) Catch basins near the structure in the NW and SW quadrants. (10/19)

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	8	8	7	No visible cracking, spalls, or delaminations. Minor cracking in grout between beams throughout. (10/23) No visible crackings, spalls, or delaminations. Minor cracking in grout between beams, east end, south side. (10/21) No visible crackings, spalls, or delaminations. Minor cracking in grout between beams, east end, south side. (10/19)
10. Paint (SIA-59A)	N	N	N	(10/23) (10/21) (10/19)
11. Section Loss	N	N	N	(10/23) (10/21) (10/19)
12. Bearings	7	8	8	Elastomeric bearings appear in good condition. No signs of bulging or overstress. (10/23) Elastomeric bearings appear in good condition. (10/21) Elastomeric bearings appear in good condition. (10/19)

SUBSTRUCTURE

	10/19	10/21	10/23	
13. Abutments (SIA-60)	8	8	7	Few hairline vertical cracks, most full height. Isolated surface spalls. The west abutment has leaking cracks at the wingwall interfaces. Both locations have staining and mineral buildup. One delamination at base of SE wingwall. Minor coating failures in SW, SE, and NE wingwalls. (10/23) Few hairline vertical cracks. Isolated surface spalls. One delamination at base of SE wingwall. (10/21) Few hairline cracks. No spalls. One delamination at base of SE wingwall. (10/19)
14. Piers (SIA-60)	N	N	N	(10/23) (10/21) (10/19)
15. Slope Protection	N	N	N	(10/23) (10/21) (10/19)
16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

BRIDGE SAFETY INSPECTION REPORT

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

17. Scour Inspection N N N (10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	7	7	7	Concrete approach to west. Minor pop-outs and scrapes in west approach at sleeper slab in south westbound lane. HMA pavement with sealed cracks to east. Minor pop-outs in east bridge approach at sleeper slab where there is a difference in elevation. Settlement at NE app slab/sleeper slab with dirt. Longitudinal and diagonal cracks in SW, SE and NW quads. One of the reflections along the centerline in the west approach is missing. Sleeper slab/approach pavement interface is sealed except for shoulders. (10/23) Concrete approach to west. Minor pop-outs and scrapes in west approach at sleeper slab in south westbound lane. HMA pavement to east. Minor pop-outs in east bridge approach at sleeper slab where there is a difference in elevation. Settlement at NE app slab/sleeper slab with dirt. Longitudinal and diagonal cracks in SW, SE and NW quads. (10/21) Concrete approach to west. Minor pop-outs in west approach at sleeper slab in south westbound lane. HMA pavement to east. Minor pop-outs in east bridge approach at sleeper slab where there is a difference in elevation. Settlement at NE app slab/sleeper slab with dirt. Longitudinal and diagonal cracks in SW, SE and NW quads. (10/19)
19. Approach Shoulders Sidewalks	7	7	7	Concrete sidewalks in all quadrants have cracking concentrated at light pole locations. South approach sidewalks have epoxy overlay that is peeling along the curb and joints. (10/23) Concrete sidewalks in all quadrants have cracking concentrated at light pole locations. (10/21) Concrete sidewalks in all quadrants have minor hairline cracking concentrated at light pole locations. (10/19)
20. Approach Slopes				(10/23) (10/21) (10/19)
21. Utilities				Street lights present on both sides of bridge. (10/23) Street lights present on both sides of bridge. (10/21) Street lights present on both sides of bridge. (10/19)
22. Drainage Culverts				(10/23) (10/21) (10/19)

MISCELLANEOUS

Guard Rail	Other Items		
Item	Rating	Item	Rating
36A. Bridge Railings	1	71. Water Adequacy	N
36B. Transitions	N	72. Approach Alignment	8
36C. Approach Guardrail	N	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	N	High Load Hit (M)	No
		Special Insp. Equipment	
		Underwater Insp. Method	0
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	

Critical Feature Inspections (SIA-92)	
	Date
92A. Fracture Critical	
92B. Underwater	
92C. Other Special	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
E STADIUM BLVD	42.2627 / -83.7404	814021200016S01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
SOUTH STATE STREET	74.4 / 77.1 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN ST	2012 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/10/2023 / MQSF	N Not Over Waterway




92D. Fatigue Sensitive

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	2012
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	0
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	20
35 - Struct Flared	0
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	73
49 - Structure Length	74.4
50A - Width Left Curb/SW	11.5
50B - Width Right Curb/SW	8.5
33 - Median	0
51 - Width Curb to Curb	54
52 - Width Out to Out	77.1
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/10/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	6
58A/B - Deck Surface/Bottom	6 N
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000014295 06
19 - Detour Length	3
20 - Toll Facility	3
26 - Functional Class	14
28A - Lanes On	4
29 - ADT	28000
30 - Year of ADT	2010
32 - Appr Roadway Width	54.1
32A/B - Ap Pvt Type/Width	6 54
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	54.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	7
110 - Truck Network	0
114 - Future ADT	29780
115 - Year Future ADT	2030
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	N
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	8
68 - Deck Geometry	4
69 - Underclearance	3
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	0
143 - Pin & Hanger Code	1
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	2
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	15 7
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000014275 08
19 - Detour Length	1
20 - Toll Facility	3
26 - Functional Class	14
28B - Lanes Under	2
29 - ADT	20420
30 - Year of ADT	2010
42B - Service Type Under	1
47L - Left Horizontal Clear	0
47R - Right Horizontal Clear	64.01
54A - Left Feature	H
54B - Left Underclearance	0 0
54C - Right Feature	H
54D - Right Clearance	15 5
Under Clearance Year	2013
55A - Reference Feature	H
55B - Right Horiz Clearance	
56 - Left Horiz Clearance	
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	23160
115 - Year Future ADT	2030
Freeway	0


Proposed Improvements	
75 - Type of Work	
76 - Length of Improvement	242.8
94 - Bridge Cost	27
95 - Roadway Cost	0
96 - Total Cost	27
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	B
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	8
64F - Fed Oper Rtg Load	2.68
64MA - Mich Oper Rtg Method	8
64MB - Mich Oper Rtg	1.43
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	8
66 - Inventory Load	2.07
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	N

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

MQSF

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/10/2023
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AASHTO ELEMENTS


(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Decks/Slabs							
803	Conc Deck - Coated Bars	5736	sq.ft	5736 100%	0 0%	0 0%	0 0%
812	Reinf Conc Fascia	236	ft	212 90%	24 10%	0 0%	0 0%
Joints							
301	Pourable Joint Seal	245	ft	149 61%	66 27%	30 12%	0 0%
303	Assembly Joint With Seal	82	ft	21 26%	61 74%	0 0%	0 0%
Superstructure							
823	P/S Concrete Box Beams	1340	ft	1340 100%	0 0%	0 0%	0 0%
826	Beam End Deterioration	36	(EA)	36 100%	0 0%	0 0%	0 0%
Bearings							
310	Elastomeric Bearing	36	each	36 100%	0 0%	0 0%	0 0%
Substructure							
215	Re Conc Abutment	465	ft	435 94%	30 6%	0 0%	0 0%
521	Conc Prot Coating	2000	sq.ft	1980 99%	20 1%	0 0%	0 0%
852	Reinf Concrete Wingwall	4	(EA)	4 100%	0 0%	0 0%	0 0%
Other Elements							
321	Re Conc Approach Slab	3067	sq.ft	1850 60%	1217 40%	0 0%	0 0%
331	Re Conc Bridge Railing	236	ft	169 72%	67 28%	0 0%	0 0%
521	Conc Prot Coating	1040	sq.ft	1040	0	0	0

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

SAFETY INSPECTION REPORT - AASHTO ELEMENTS


Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

				100%	0%	0%	0%
840	Reinf Conc Sidewalk	2615	sq.ft	2354	261	0	0
				90%	10%	0%	0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

WORK RECOMMENDATIONS

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

MQSF

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023


RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Bridge Washing	M	Clean expansion joint
Deep Overlay	M	Place deep concrete overlay on deck surface

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

LOAD RATING ASSUMPTIONS

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/18/2019

Deterioration:

None

Most Recent Year Construct / Reconstruct / Overlay: 2012

History of Work Impacting Load Rating:

New construction

Superstructure Component: 5 Prestressed Concrete Beam fy: ksi Beam f'c / fb: 7.0 ksi

Composite: Yes Number of Beams: 18 Shop Drawings Verified: Yes

Beam Size(s) & Names (each span): 18 - 33" x 48" box beams; single span

Deck: Thickness (in.): 6.0 Fy / f'c: 60.0 / 4.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Monolithic concrete Thickness (in.): 1.5 Unit Weight (pcf.): 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Concrete / 600.0 parapet	0 /	Concrete / 600.0 parapet
Sidewalk: Width / Thick (in.):	156.5 / 10.25	/	120.5 / 9.75

Clear Roadway (ft.): 54.0

Additional Loads:

1.44" uniform concrete haunch based off construction field notes from wet depth measurements (does not contribute to strength)

Unique Factors That Affect Capacity:

None


Analyzed By: Paul D. Izzo, P.E.

Date: 11/12/2013

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

LOAD RATING SUMMARY

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovly. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

Compliance Issue: None
Compliance Verified: No
Analysis Program: Other
Analysis Program Version: Bentley CONSPAN
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/18/2019

Controlling component and failure mode:

Interior beam, flexure

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	8 LRFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.68
MDOT Item 64MA - Michigan Operating Method	8 LRFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.43
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	8 LRFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	2.07
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	N-No Restriction
Analyzed By: Paul D. Izzo, P.E.	Date: 11/12/2013
Checked By: Talia N. Belill, P.E.	Date: 11/18/2013

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
E STADIUM BLVD	42.2627 / -83.7404	814021200016S01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
SOUTH STATE STREET	74.4 / 77.1 / 1	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN ST	2012 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/10/2023 / MQSF	N Not Over Waterway




No inspections available for bridge key 814021200016S01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11067

OUTSTANDING WORK

Facility E STADIUM BLVD	Latitude / Longitude 42.2627 / -83.7404	MDOT Structure ID 814021200016S01	Structure Condition Fair Condition(6)	
Feature SOUTH STATE STREET	Length / Width / Spans 74.4 / 77.1 / 1	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN ST	Built / Recon. / Paint / Ovl. 2012 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/10/2023 / MQSF	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

DECKS/SLABS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deep Overlay				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Place deep concrete overlay on deck surface (Kyle Slavik 10/26/2023)

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deep Overlay				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Place deep concrete overlay on deck surface (Kyle Slavik 10/26/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Bridge Washing				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Clean expansion joint (Kyle Slavik 10/26/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

BRIDGE SAFETY INSPECTION REPORT

Facility TREATMENT PLANT DR	Latitude / Longitude 42.2703 / -83.6683	MDOT Structure ID 815021200000B01	Structure Condition Fair Condition(5)	
Feature HURON RIVER	Length / Width / Spans 117.1 / 18.4 / 2	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E US-23	Built / Recon. / Paint / Ovly. 1934 / 1985 / 1986 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 10/19/2022 / A62W	Scour Evaluation 8 Stable Above Footing	

NBI INSPECTION

A62W

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

GENERAL NOTES

Delaminated areas of bridge deck overlay chipped and patched in Sept 2020.

DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	4	6	6	Deck patching project completed. Delaminated areas of bridge deck surface overlay chipped and patched with concrete by Contractor. Minor sand accumulation adjacent to both railings. Water ponding along south railing. (10/22) Recent (09/20) deck patching project completed. All delaminated areas of bridge deck surface overlay chipped and patched with concrete by Contractor. Minor sand accumulation adjacent to both railings. Water ponding along south railing. (10/20) Multiple cracks, delaminations, spalls, and concrete patches are present in the concrete overlay surface. Minor sand accumulation adjacent to both railings. Water ponding along south railing. (10/18)
2. Expansion Joints	7	7	7	Joint partially filled with dirt. No signs of leaking in gland. (10/22) Joint partially filled with dirt. No signs of leaking in gland. (10/20) Joint partially filled with dirt. No signs of leaking in gland. Joint was cleaned out during 2016 construction project. (10/18)
3. Other Joints	7	7	7	End joints in good condition due to new HMA approach. (10/22) End joints in good condition due to new HMA approach. (10/20) West approach HMA surface is across end joint. East joint in good condition due to new HMA approach. (10/18)
4. Railings	8	8	8	Railings are in good condition, but do not meet current standards due to oversized openings between posts. (10/22) Railings are in good condition, but do not meet current standards due to oversized openings between posts. (10/20) Railings are in good condition, but do not meet current standards due to oversized openings between posts. (10/18)
5. Sidewalks or Curbs	N	N	N	(10/22) (10/20) (10/18)
6. Deck Bottom Surface (SIA-58B)	4	4	4	Several transverse and longitudinal cracks with efflorescence. Some areas of minor delaminations and spalls. (10/22) Several transverse and longitudinal cracks with efflorescence. Some areas of minor delaminations and spalls. (10/20) Several transverse and longitudinal cracks with efflorescence. Some areas of minor delaminations and spalls. (10/18)
7. Deck (SIA-58)	4	5	5	Areas of deck overlay that were delaminated were chipped and patched in Sept 2020. Several transverse and longitudinal cracks with efflorescence present on underside of deck. Sand accumulation adjacent to both railings. Water ponding along south railing. (10/22) Areas of deck overlay that were delaminated were chipped and patched in Sept 2020. Several transverse and longitudinal cracks with efflorescence present on underside of deck. Sand accumulation adjacent to both railings. Water ponding along south railing. (10/20) Multiple cracks, delaminations, spalls, and concrete patches are present in the concrete overlay surface. Several transverse and longitudinal cracks with efflorescence present on underside of deck. Sand accumulation adjacent to both railings. Water ponding along south railing. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

8. Drainage Evidence of ponding along south railing, both spans. (10/22)
 Evidence of ponding along south railing, west span. (10/20)
 Evidence of ponding along south railing, west span. (10/18)

SUPERSTRUCTURE

	10/18	10/20	10/22	
9. Stringer (SIA-59)	7	7	7	Surface rust along fascia beams. Minor rusting along all beams top flanges. There is a minor gap between the fixed beam ends of the south beams. Utility supporting diaphragms at pier have been replaced. (10/22) Surface rust along fascia beams. Minor rusting along all beams top flanges. There is a minor gap between the fixed beam ends of the south beams. Utility supporting diaphragms at pier have been replaced. (10/20) Surface rust along fascia beams. Minor rusting along all beams top flanges. The north and center fixed beam ends are in contact with each other at the pier. There is a minor gap between the fixed beam ends of the south beams. Utility supporting diaphragms at pier have been replaced. (10/18)
10. Paint (SIA-59A)	5	5	5	The beam ends at the pier and abutments were blasted and painted in 2016. Approximately 5% of steel is exposed in other areas. Surface rust noted along fascia beams. (10/22) The beam ends at the pier and abutments were blasted and painted in 2016. Approximately 5% of steel is exposed in other areas. Surface rust noted along fascia beams. (10/20) The beam ends at the pier and abutments were blasted and painted in 2016. Approximately 5% of steel is exposed in other areas. Surface rust noted along fascia beams. (10/18)
11. Section Loss	2	2	2	Surface rust along fascia beams. Minor section loss in primary members. (10/22) Surface rust along fascia beams. Minor section loss in primary members. (10/20) Surface rust along fascia beams. No section loss in primary members. (10/18)
12. Bearings	7	7	7	Bearings at the pier and abutments were cleaned and painted in 2016, along with the beam ends. (10/22) Bearings at the pier and abutments were cleaned and painted in 2016, along with the beam ends. (10/20) Bearings at the pier and abutments were cleaned and painted in 2016, along with the beam ends. (10/18)

SUBSTRUCTURE

	10/18	10/20	10/22	
13. Abutments (SIA-60)	6	6	6	Minor cracks under bearings at east abutment. Minor spalls and delamination along top of walls. Horizontal crack at SE cheekwall. There is a large separation between the SE wingwall and abutment. Vertical crack and minor spalls/delaminations on the west abutment. Cracks in abutments were injected during the 2016 construction project. Areas of the backwalls around utility penetrations were chipped and patched, also. (10/22) Minor cracks under bearings at east abutment. Minor spalls and delamination along top of walls. Horizontal crack at SE cheekwall. There is a large separation between the SE wingwall and abutment. Vertical crack and minor spalls/delaminations on the west abutment. Cracks in abutments were injected during the 2016 construction project. Areas of the backwalls around utility penetrations were chipped and patched, also. (10/20) Minor cracks under bearings at east abutment. Minor spalls and delamination along top of walls. Horizontal crack at SE cheekwall. There is a large separation between the SE wingwall and abutment. Vertical crack and minor spalls/delaminations on the west abutment. Cracks in abutments were injected during the 2016 construction project. Areas of the backwalls around utility penetrations were chipped and patched, also. (10/18)
14. Piers (SIA-60)	7	7	7	Pier was chipped and patched (shotcrete) in 2016. Cracks in the pier were injected during the 2016 construction project. Minor delamination below fascia beams. (10/22) Pier was chipped and patched (shotcrete) in 2016. Cracks in the pier were injected during the 2016 construction project. (10/20) Pier was chipped and patched (shotcrete) in 2016. Cracks in the pier were injected during the 2016 construction project. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

15. Slope Protection	5	5	5	Defined slopes with heavy vegetation and minor erosion. Trees and brush were cut down as part of the 2016 construction project. (10/22) Defined slopes with heavy vegetation. Trees and brush were cut down as part of the 2016 construction project. (10/20) Defined slopes with heavy vegetation. Trees and brush were cut down as part of the 2016 construction project. (10/18)
16. Channel (SIA-61)	6	6	6	Due to the bend in the river, water has eroded soil at pier and east abutment. Water is approximately 3'-6' deep under the west span and approximately 5.5'-10' deep at the east span. The scour hole at the upstream end of the pier was filled with grout bags in 2016. Grout bags were also placed across the face of the east abutment in 2016. (10/22) Due to the bend in the river, water has eroded soil at pier and east abutment. Water is approximately 3'-8' deep under the west span and approximately 5.5'-10' deep at the east span. The scour hole at the upstream end of the pier was filled with grout bags in 2016. Grout bags were also placed across the face of the east abutment in 2016. (10/20) Due to the bend in the river, water has eroded soil at pier and east abutment. Water is approximately 3'-8' deep under the west span and approximately 5.5'-10' deep at the east span. The scour hole at the upstream end of the pier was filled with grout bags in 2016. Grout bags were also placed across the face of the east abutment in 2016. (10/18)
17. Scour Inspection	6	6	6	Underwater bridge inspection was completed in 2019. Stream cross sections obtained in 2022. No evidence of scour. (10/22) Underwater bridge inspection was completed in 2019. Stream cross sections obtained in 2018. No evidence of scour. (10/20) Underwater bridge inspection was completed in 2014. Stream cross sections obtained in 2018. No evidence of scour observed during this inspection. (10/18)

APPROACH

	10/18	10/20	10/22	
18. Approach Pavement	8	7	7	HMA surface newer at both ends of bridge. (10/22) HMA surface newer at both ends of bridge. (10/20) HMA surface new at both ends of bridge. West end extends across end joint and onto bridge deck. (10/18)
19. Approach Shoulders Sidewalks	7	7	7	Shoulders in good condition. (10/22) Shoulders in good condition. (10/20) Shoulders in good condition. (10/18)
20. Approach Slopes				(10/22) (10/20) (10/18)
21. Utilities				6" dia. conduit along south fascia. 3' dia. pipe in each beam bay. 3.5' dia. pipe along north fascia. Multiple overhead electric lines above north deck /pipe fascia, parallel to road. Storm sewer outfall located NE of bridge. Concrete flow control chamber located NE and SE of bridge. (10/22) 6" dia. conduit along south fascia. 3' dia. pipe in each beam bay. 3.5' dia. pipe along north fascia. Multiple overhead electric lines above north deck /pipe fascia, parallel to road. Storm sewer outfall located NE of bridge. Concrete flow control chamber located NE and SE of bridge. (10/20) 6" dia. conduit along south fascia. 3' dia. pipe in each beam bay. 3.5' dia. pipe along north fascia. Multiple overhead electric lines above north deck /pipe fascia, parallel to road. Storm sewer outfall located NE of bridge. Concrete flow control chamber located NE and SE of bridge. (10/18)
22. Drainage Culverts				(10/22) (10/20) (10/18)

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
Modified by: TRANAP8100 on 11/28/2022		Printed on 02/21/2023	

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

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36A. Bridge Railings	0	71. Water Adequacy	9
36B. Transitions	0	72. Approach Alignment	8
36C. Approach Guardrail	0	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	1	High Load Hit (M)	No
		Special Insp. Equipment	2
		Underwater Insp. Method	3

False Decking (Timber) Removed to Complete Inspection N/A - No False Decking


Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater	60	06/26/2019
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
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HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
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Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

Bridge History, Type, Materials

27 - Year Built	1934
106 - Year Reconstructed	1985
202 - Year Painted	1986
203 - Year Overlay	2000
43 - Main Span Bridge Type	3 02
44 - Appr Span Bridge Type	
77 - Steel Type	1
78 - Paint Type	9
79 - Rail Type	6
80 - Post Type	2
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	0

Structure Dimensions

34 - Skew	37
35 - Struct Flared	N
45 - Num Main Spans	2
46 - Num Apprs Spans	0
48 - Max Span Length	59.1
49 - Structure Length	117.1
50A - Width Left Curb/SW	0
50B - Width Right Curb/SW	0
33 - Median	0
51 - Width Curb to Curb	16.1
52 - Width Out to Out	18.4
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	10/19/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	Y 60
93B - Und Water Insp Date	06/26/2019
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	3
58 - Deck Rating	5
58A/B - Deck Surface/Bottom	6 4
59 - Superstructure Rating	7
59A - Paint Rating	5
60 - Substructure Rating	6
61 - Channel Rating	6
62 - Culvert Rating	N

Navigation Data

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)

5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000046048 77
19 - Detour Length	125
20 - Toll Facility	3
26 - Functional Class	19
28A - Lanes On	2
29 - ADT	75
30 - Year of ADT	2002
32 - Appr Roadway Width	20
32A/B - Ap Pvt Type/Width	4 20.01
42A - Service Type On	1
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	16.4
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	3
109 - Truck %	10
110 - Truck Network	0
114 - Future ADT	75
115 - Year Future ADT	2022
Freeway	0

Structure Appraisal

36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	0
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	3
69 - Underclearance	N
71 - Waterway Adequacy	9
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	8

Miscellaneous

37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	0
143 - Pin & Hanger Code	1
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)

5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements

75 - Type of Work	35 1
76 - Length of Improvement	117
94 - Bridge Cost	77
95 - Roadway Cost	
96 - Total Cost	77
97 - Year of Cost Estimate	2013

Load Rating and Posting

31 - Design Load	0
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.24
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.2
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

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SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)
Feature	Length / Width / Spans	Owner	
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing



No inspections available for bridge key 815021200000B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

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WORK RECOMMENDATIONS

Facility TREATMENT PLANT DR	Latitude / Longitude 42.2703 / -83.6683	MDOT Structure ID 815021200000B01	Structure Condition Fair Condition(5)	
Feature HURON RIVER	Length / Width / Spans 117.1 / 18.4 / 2	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E US-23	Built / Recon. / Paint / Ovly. 1934 / 1985 / 1986 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 10/19/2022 / A62W	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

A62W

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/19/2022

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Other	M	Place signing for narrow bridge

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078		UNDERWATER INSPECTION REPORT [SIA #92-B]		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
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UNDERWATER SPECIAL INSPECTION **MG20**

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Amy Trahey	Great Lakes Engineering Group, LLC	60	06/26/2019

GENERAL NOTES

Bridge rehabilitation contract occurred since the previous 2014 underwater inspection. The 2016 plans called out grout bags being installed as scour countermeasures along the east abutment and also at the upstream (north) end of Pier 1w. Grout bags were observers by the diver at the east abutment, but nothing was observed at the U/S end of Pier 1w - probable that it was scoured away due the high velocity and angel of attack on the pier nose. Cross sections were taken by the routine bridge inspector during last inspection and are available on the documents tab in MiBridge.

INSPECTION PROCEDURES

Qualified Team: The team performing the underwater inspection is qualified in accordance with the National Bridge Inspection Standards 23 CFR Part 650.309. The underwater inspection was conducted by a three-person team consisting of a Qualified Dive Inspector, a Professional Engineer Dive Team Leader/Qualified Dive Inspector, and a Dive Tender.

Equipment: The inspection was done using Self-Contained Underwater Breathing Apparatus (SCUBA). During the inspection the divers accessed the bridge and worked from a 10-foot jon boat. Two-way wireless communications were used to convey inspection notes from the diver to the team leader and recorded on note sheets. Other equipment consisted of an underwater digital video camera, high intensity flashlight, dive knife, scraper, probing rod, 25 survey rod, and a digital depth sounder with built in transducer. Substructure units and beams are labeled from the south to the north, or west to east. Pier 1w denotes the first pier from the west.

Level of Inspection: A Level I inspection was conducted on 100% of the submerged substructure units and a Level II inspection was conducted on 10% of the submerged substructure unit. The Level I underwater inspection consisted of a close visual and tactile examination using large sweeping motions of the hands where visibility was limited. The inspection was conducted over the total exterior surface of each underwater substructure unit. Probing along the mud line was also done along each substructure unit and the adjacent streambed.

Approvals: This bridge does not fall under the jurisdiction of the United States Coast Guard (USCG). Approval was not required to perform the underwater inspections. Coordination was needed with the Utilities Engineer of the Ann Arbor Waste Water Treatment plant - sign in and sign out of the dive team needed. Contact is Christopher J. Englert, P.E. 734-794-6450 ext 43823.

NAVIGATION PROTECTION SYSTEMS

Protection Systems
Inspection Comments
 None present.

SCOUR PROTECTION

Number of Substructure Elements in Waterway 0
Scour Counter Measures Grouted Bags
Inspection Comments
 Bridge rehabilitation contract occurred since the previous 2014 underwater inspection. The plans called out grout bags being installed as scour countermeasures along the east abutment and also at the upstream (north) end of Pier 1w. Grout bags were observers by the diver at the east abutment, but nothing was observed at the U/S end of Pier 1w - probable that it was scoured away due the high velocity and angel of attack on the pier nose.
Scour Critical Action Plan Available? N
Scour Critical Action Plan Location

WATERWAY & WEATHER CONDITIONS

Current Speed	4.0	Turbidity	4.0	Water Temperature	64
Stream Bed Material	Stone	Maximum Depth	9	Air Temperature	78

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078		UNDERWATER INSPECTION REPORT [SIA #92-B]	
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Marine Growth on Structure

There is 1/8" thick algae growth on all submerged abutment substructure units.

Weather Conditions on Day of Dive

Partly sunny, warm.

INSPECTION STAFF & EQUIPMENT

Engineer	Amy L. Trahey, P.E.
Diver	Casey Collings
Tender	Brian Trahey
Dive Equipment	Scuba, Boat

Nearest Boat Launch Site

NE quadrant used to haul boat down to waterway, adjacent to railroad property.

Safety Concerns

High velocity of water. Tethered Diver. Dam located 1 mile upstream.

INSPECTION DETAILS

Waterway and Bank Observations

The physical conditions associated with the flow of water through the bridge, such as stream stability and the condition of the channel and slope, were evaluated. Slope protection in the form of concrete retaining walls line the channel banks in all four quadrants surrounding the bridge.

There is an outlet culvert at the northeast quadrant. The channel bottom consists of gravel.

Substructure Observations (Above the waterline)

Several concrete patched areas observed at both abutment walls and the pierwall and epoxy injected cracks.

Substructure Observations (Below the waterline)

East Abutment: There grout bags installed as a scour countermeasure along the center 18 feet of the footing. There is 1/8 inch algae growth below the water line. Channel bottom consists of gravel bottom. Vertical epoxy injected crack extends to the grout bags/bottom of streambed.

West Abutment: There is 1/8 inch algae growth below the water line. Channel bottom consists of gravel bottom. Vertical epoxy injected crack extends to the bottom of streambed.

Pier 1w: There are several concrete patch repairs observed underwater on both the west and east faces of the pier wall. No grout bag scour countermeasures were observed at the north end of pier nose as denoted on rehab plans. Channel bottom consists of gravel bottom.

Debris in Waterway

None observed.

Recommendations

Underwater Video Available?	N
Underwater Video Description	
Underwater Video Location	
Stream Bed Profile Completed?	N
Site Plan Completed?	Y
Photographs?	Y

RECOMMENDATIONS AND ACTION ITEMS

Recommendation


Scour Repair

Priority Comments

MICHIGAN DEPARTMENT OF TRANSPORTATION

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UNDERWATER INSPECTION REPORT [SIA #92-B]

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L Install scour countermeasures at the east abutment and the upstream end of Pier 1w.

MICHIGAN DEPARTMENT OF TRANSPORTATION

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UNDERWATER INSPECTION REPORT [SIA #92-B]

Facility TREATMENT PLANT DR	Latitude / Longitude 42.2703 / -83.6683	MDOT Structure ID 815021200000B01	Structure Condition Fair Condition(5)	
Feature HURON RIVER	Length / Width / Spans 117.1 / 18.4 / 2	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E US-23	Built / Recon. / Paint / Ovly. 1934 / 1985 / 1986 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 10/19/2022 / A62W	Scour Evaluation 8 Stable Above Footing	

SUPPORTING IMAGES

MG20 06/26/2019



Document Name: DSCN3008.JPG
 Category: Elevation
 Span Number:
 Comments: South elevation



Document Name: DSCN3004.JPG
 Category: Substructure
 Span Number:
 Comments: East elevation of Pier 1w



Document Name: DSCN3005.JPG
 Category: Substructure
 Span Number:
 Comments: East abutment




Document Name: DSCN3006.JPG
 Category: Substructure
 Span Number:
 Comments: Concrete returnwall at the SE quadrant

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UNDERWATER INSPECTION REPORT [SIA #92-B]

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Region / County	Material / Design	Last NBI Inspection		
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W		



Document Name: DSCN3009.JPG
 Category: Substructure
 Span Number:
 Comments: West elevation of Pier 1w



Document Name: DSCN3010.JPG
 Category: Substructure
 Span Number:
 Comments: West abutment



Document Name: DSCN3013.JPG
 Category: Culvert
 Span Number:
 Comments: Outlet culvert NE quadrant




Document Name: DSCN3007.JPG
 Category: Channel
 Span Number:
 Comments: SE quadrant

MICHIGAN DEPARTMENT OF TRANSPORTATION

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UNDERWATER INSPECTION REPORT [SIA #92-B]

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Region / County	Material / Design	Last NBI Inspection		
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W		



Document Name: DSCN3011.JPG
 Category: Channel
 Span Number:
 Comments: SW quadrant



Document Name: DSCN3012.JPG
 Category: Channel
 Span Number:
 Comments: NW quadrant



Document Name: DSCN3014.JPG
 Category: Channel
 Span Number:
 Comments: Looking downstream/south



Document Name: DSCN3015.JPG
 Category: Channel
 Span Number:
 Comments: Looking upstream/north

MICHIGAN DEPARTMENT OF TRANSPORTATION

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UNDERWATER INSPECTION REPORT [SIA #92-B]

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Region / County	Material / Design	Last NBI Inspection	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	




Document Name: DSCN3017.JPG
 Category: Channel
 Span Number:
 Comments: NE quadrant

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

No plan available for bridge key 815021200000B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

LOAD RATING ASSUMPTIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/19/2022

Deterioration:

None that impacts capacity

Most Recent Year Construct / Reconstruct / Overlay: 2016

History of Work Impacting Load Rating:

None

Superstructure Component: 3 Steel Beam fy: 30.0 ksi Beam f'c / fb: ksi

Composite: No Number of Beams: 3 Shop Drawings Verified: No

Beam Size(s) & Names (each span): W36x230 rolled steel beams; 3 beams/span; 2 spans

Deck: Thickness (in.): 10.0 Fy / f'c: 33.0 / 3.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: latex conc Thickness (in.): 1.5 Unit Weight (pcf.): 150.0

LEFT CENTER RIGHT

Barrier: Type / Weight (plf.): Conc open para / 350.0 / Conc open para / 350.0

Sidewalk: Width / Thick (in.): / / /

Clear Roadway (ft.): 16.0

Additional Loads:

42" dia. steel pipe (north side); (2) 24" dia. steel pipes; 252 plf total

Unique Factors That Affect Capacity:

Analyzed By: DLZ

Date: 10/30/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

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LOAD RATING SUMMARY

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)
Feature	Length / Width / Spans	Owner	
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing



Compliance Issue: None
Compliance Verified: No
Analysis Program: Merlin Dash
Analysis Program Version: 9.2
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/19/2022

Controlling component and failure mode:

Span 1, interior beam, positive flexure


NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.0
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.24
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.2
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: DLZ	Date: 10/30/2018
Checked By: DLZ	Date: 11/01/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

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REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
TREATMENT PLANT DR	42.2703 / -83.6683	815021200000B01	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
HURON RIVER	117.1 / 18.4 / 2	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI E US-23	1934 / 1985 / 1986 / 2000	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 02 Multi Str Non Comp	10/19/2022 / A62W	8 Stable Above Footing	

No inspections available for bridge key 815021200000B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11078

OUTSTANDING WORK

Facility TREATMENT PLANT DR	Latitude / Longitude 42.2703 / -83.6683	MDOT Structure ID 815021200000B01	Structure Condition Fair Condition(5)	
Feature HURON RIVER	Length / Width / Spans 117.1 / 18.4 / 2	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E US-23	Built / Recon. / Paint / Ovly. 1934 / 1985 / 1986 / 2000	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 02 Multi Str Non Comp	Last NBI Inspection 10/19/2022 / A62W	Scour Evaluation 8 Stable Above Footing	

WORK RECOMMENDATIONS

CHANNEL/SCOUR

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Scour Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Install scour countermeasures at the east abutment and the upstream end of Pier 1w. (Amy Trahey 07/22/2019)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Other				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Place signing for narrow bridge (Pedro Trana 11/28/2022)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11076

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway



NBI INSPECTION

HVYW

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/09/2023

GENERAL NOTES

Visual inspection completed without the use of MDOT reach-all and no Amtrak flagman. Preventive maintenance repairs performed in the Summer of 2021. Repairs included application of healer sealer to the deck surface, deck patching, and rail and sidewalk patching.


DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	7	7	Sealed longitudinal and some transverse cracks. No full depth cracking. Minor scaling and delaminations concentrated along the centerline of the bridge, the joints and the along the curb lines. Diagonal cracks at SE corner of deck. (10/23) Longitudinal and some transverse cracks. No full depth cracking. Minor scaling and delaminations concentrated along the centerline of the bridge, the joints and the along the curb lines. Diagonal cracks at SE corner of deck. (10/21) Longitudinal and some transverse cracks. No full depth cracking. Minor scaling and delaminations concentrated along the centerline of the bridge and the joints. Diagonal cracks at SE corner of deck. (10/19)
2. Expansion Joints	7	7	7	Debris is present at expansion joint locations. Minor vegetation at curb lines. No evidence of leaking below. (10/23) Debris is present at expansion joint locations. Minor vegetation at curb lines. No evidence of leaking below. (10/21) Debris is present at expansion joint locations. Minor vegetation at curb lines. No evidence of leaking below. (10/19)
3. Other Joints	5	5	5	Pourable joint at east end approach slab joint missing material in the westbound lanes and sunken in places. (10/23) Pourable joint at east end approach slab joint missing material and sunken in places. (10/21) Pourable joint at east end approach slab joint missing material and sunken in places with weeds growing at ends. (10/19)
4. Railings	6	7	7	Minor vertical hairline cracks. Rails have been patched and sealed. The black coating over handrail is chipped throughout the bridge. (10/23) Minor vertical hairline cracks. Rails have been patched and sealed. Few locations where black coating over handrail is chipped. (10/21) Minor hairline cracks with some leaching and rust staining. Numerous leaching vertical hairline cracks at handrail connection to barrier wall. Four delaminations on interior side of north railing. Bolts and nuts missing on south railing connecting handrail to barrier wall. Several bolts are not tightened flush with baseplate. Few locations where black coating over handrail is chipped. (10/19)
5. Sidewalks or Curbs	6	7	7	Some isolated cracks primarily at locations of previous patches in sidewalk. Minor longitudinal cracks. Newer patches from 2021 construction have map cracking. (10/23) Some isolated cracks primarily at locations of previous patches in sidewalk. Minor longitudinal cracks. New patches recently installed. (10/21) Some delaminations and cracks primarily at locations of previous patches in sidewalk. Leaching present in patched areas. Previous ponding areas still present. Some patches are raised above adjacent sidewalk areas. (10/19)
6. Deck Bottom Surface (SIA-58B)	7	7	7	Isolated longitudinal cracks present. Minor leaching thru the construction joint in Span 3. No spalls or concrete delaminations found. (10/23) Isolated longitudinal cracks present. Minor leaching thru the construction joint in Span 3. No spalls or concrete delaminations found. (10/21) Longitudinal cracks present. No leaching, efflorescence, spalls, concrete delaminations found. (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11076

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)	
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway	

7. Deck (SIA-58) 7 7 7 Sealed longitudinal and some transverse cracks. No full depth cracking. Minor scaling and concrete delaminations concentrated along the centerline of the bridge, the joints and the curb lines. Diagonal cracks at SE corner of deck. (10/23)
 Longitudinal and some transverse cracks. No full depth cracking. Minor scaling and concrete delaminations concentrated along the centerline of the bridge, the joints and the curb lines. Diagonal cracks at SE corner of deck. (10/21)
 Longitudinal and some transverse cracks. No full depth cracking. Minor scaling and concrete delaminations concentrated along the centerline of the bridge and the joints. Diagonal cracks at SE corner of deck. (10/19)

8. Drainage The concrete parapet railing has regularly spaced scuppers at the top of the sidewalk. (10/23)
 The concrete parapet railing has regularly spaced scuppers at the top of the sidewalk. (10/21)
 The concrete parapet railing has regularly spaced scuppers at the top of the sidewalk. Previous ponding noted still present on sidewalks. (10/19)

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	7	7	7	Minor hairline horizontal cracks, vertical cracking and spalls at most beam ends at piers. Some delaminated patch material where previous repairs were made. Some minor corner spalls on bottom of beams at ends with exposed reinforcing steel with slight rusting. No midspan cracking. Hairline diagonal and horizontal shrinkage cracks on webs of several beams near piers and abutments. Soot in box beams over the railroad tracks. (10/23) Minor hairline horizontal cracks, vertical cracking and spalls at most beam ends at piers. Some delaminated patch material where previous repairs were made. Some minor corner spalls on bottom of beams at ends with exposed reinforcing steel with slight rusting. No midspan cracking. Hairline diagonal and horizontal shrinkage cracks on webs of several beams near piers and abutments. Soot in box beams over the railroad tracks. (10/21) Minor hairline horizontal cracks, vertical cracking and spalls at most beam ends at piers. Some delaminated patch material where previous repairs were made. Some minor corner spalls on bottom of beams at ends with exposed reinforcing steel with slight rusting. No midspan cracking. Hairline diagonal and horizontal cracks on webs of several beams near piers and abutments. (10/19)
10. Paint (SIA-59A)	N	N	N	(10/23) (10/21) (10/19)
11. Section Loss	N	N	N	(10/23) (10/21) (10/19)
12. Bearings	8	8	8	Good condition with no bulging or scaling. In full contact with bottom of beam. (10/23) Good condition with no bulging or scaling. In full contact with bottom of beam. (10/21) Good condition with no bulging or scaling. In full contact with bottom of beam. (10/19)

SUBSTRUCTURE

	10/19	10/21	10/23	
13. Abutments (SIA-60)	7	7	7	Full height hairline cracks at abutments and wingwalls. Leaching present at east backwall. Staining below fascia beams on both abutments. Minor cracking with rust stains present in west abutment, north side. No spalls or concrete delaminations present on abutments. Northwest and southwest wingwalls have isolated areas of map cracking. The northeast wingwall has vines growing the full height and onto the approach sidewalk. (10/23) Hairline cracks at abutments and wingwalls. Leaching present at east backwall. No spalls or concrete delaminations present. Minor cracking with rust stains present in west abutment, north side. (10/21) Hairline cracks at abutments and wingwalls. Leaching present at east backwall. No spalls or concrete delaminations present. (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11076

BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)	
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway



14. Piers (SIA-60)	7	7	7	Hairline vertical cracks full height in crashwalls. Map cracking at crashwall ends and side faces near ends. No spalls or concrete delaminations present. Small trees growing adjacent to crashwall at railroad tracks. Pier cap ends have minor map cracking but no concrete delaminations or spalls present. (10/23) Hairline vertical cracks full height in crashwalls. Map cracking at crashwall ends. No spalls or concrete delaminations present. Small trees growing adjacent to crashwall at railroad tracks. Pier cap ends have minor map cracking but no concrete delaminations or spalls present. (10/21) Hairline vertical cracks full height in crashwalls. No spalls or concrete delaminations present. Small trees growing adjacent to crashwall at railroad tracks. Pier cap ends have minor map cracking but no concrete delaminations or spalls present. (10/19)
15. Slope Protection	N	N	N	(10/23) (10/21) (10/19)
16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
17. Scour Inspection	N	N	N	(10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	7	6	6	Missing a portion of joint filler in east approach slab. Spalls at joints between sections. Transverse cracks along sleeper slab at west end. (10/23) Missing a portion of joint filler in east approach slab. Spalls at joints between sections. (10/21) Missing a portion of joint filler in east approach slab. Spalls at joints between sections. (10/19)
19. Approach Shoulders Sidewalks	6	6	6	Minor vegetation between sidewalk and back of railing. Diagonal cracking present in SE and SW quadrants. NE quadrant sidewalk approach has been corrected. (10/23) Minor vegetation between sidewalk and back of railing. Diagonal cracking present in SE and SW quadrants. NE quadrant has 3/4" vertical elevation difference at end of bridge. (10/21) Minor vegetation between sidewalk and back of railing. Minor cracking present. NE quadrant has 3/4" vertical elevation difference at end of bridge. (10/19)
20. Approach Slopes				(10/23) (10/21) (10/19)
21. Utilities				(10/23) (10/21) Street light poles on top of interior bridge railings. (10/19)
22. Drainage Culverts				(10/23) (10/21) (10/19)

MISCELLANEOUS

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	0	71. Water Adequacy	N
36B. Transitions	0	72. Approach Alignment	8
36C. Approach Guardrail	N	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	N	High Load Hit (M)	No

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)	
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Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway



Special Insp. Equipment
Underwater Insp. Method 0

False Decking (Timber) Removed to Complete Inspection N/A - No False Decking

Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
BROADWAY	42.2876 / -83.7423	814021200192S01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
DEPOT ST & MDOT RR COR	316.5 / 73 / 4	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN STREET	2004 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/09/2023 / HVYW	N Not Over Waterway



Bridge History, Type, Materials	
27 - Year Built	2004
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	7
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	28
35 - Struct Flared	N
45 - Num Main Spans	4
46 - Num Apprs Spans	0
48 - Max Span Length	77.5
49 - Structure Length	316.5
50A - Width Left Curb/SW	10
50B - Width Right Curb/SW	10
33 - Median	0
51 - Width Curb to Curb	49.2
52 - Width Out to Out	73
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/09/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 7
59 - Superstructure Rating	7
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000014308 01
19 - Detour Length	1
20 - Toll Facility	3
26 - Functional Class	14
28A - Lanes On	4
29 - ADT	20630
30 - Year of ADT	2015
32 - Appr Roadway Width	49.2
32A/B - Ap Pvt Type/Width	6 49.21
42A - Service Type On	1
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	49.2
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	21773
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	7
68 - Deck Geometry	2
69 - Underclearance	3
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	2
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	19 3
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014308 04
19 - Detour Length	1
20 - Toll Facility	3
26 - Functional Class	19
28B - Lanes Under	2
29 - ADT	8715
30 - Year of ADT	2004
42B - Service Type Under	4
47L - Left Horizontal Clear	0
47R - Right Horizontal Clear	26.21
54A - Left Feature	H
54B - Left Underclearance	24 0
54C - Right Feature	H
54D - Right Clearance	18 12
Under Clearance Year	2004
55A - Reference Feature	H
55B - Right Horiz Clearance	
56 - Left Horiz Clearance	
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	10634
115 - Year Future ADT	2021
Freeway	0


Proposed Improvements	
75 - Type of Work	1
76 - Length of Improvement	0
94 - Bridge Cost	8
95 - Roadway Cost	0
96 - Total Cost	8
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.34
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.37
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.4
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11076

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)	
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

HVYW

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/09/2023
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AASHTO ELEMENTS


(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Decks/Slabs							
803	Conc Deck - Coated Bars	23010	sq.ft	23010 100%	0 0%	0 0%	0 0%
815	Rigid Overlay	15572	sq.ft	14792 95%	780 5%	0 0%	0 0%
811	Conc Deck - Btm Surface	23010	sq.ft	22780 99%	230 1%	0 0%	0 0%
812	Reinf Conc Fascia	633	ft	633 100%	0 0%	0 0%	0 0%
Joints							
300	Strip Seal Exp Joint	332	ft	249 75%	83 25%	0 0%	0 0%
301	Pourable Joint Seal	332	ft	134 40%	119 36%	79 24%	0 0%
Superstructure							
823	P/S Concrete Box Beams	2804	ft	2692 96%	112 4%	0 0%	0 0%
826	Beam End Deterioration	72	(EA)	18 25%	54 75%	0 0%	0 0%
Bearings							
310	Elastomeric Bearing	72	each	72 100%	0 0%	0 0%	0 0%
Substructure							
205	Re Conc Column	15	each	15 100%	0 0%	0 0%	0 0%
210	Re Conc Pier Wall	249	ft	244 98%	5 2%	0 0%	0 0%
215	Re Conc Abutment	322	ft	307 95%	15 5%	0 0%	0 0%
234	Re Conc Pier Cap	256	ft	254 99%	2 1%	0 0%	0 0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11076

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)	
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway	


Other Elements

321	Re Conc Approach Slab	3170	sq.ft	3130 99%	40 1%	0 0%	0 0%
330	Metal Bridge Railing	633	ft	629 99%	4 1%	0 0%	0 0%
515	Steel Protective Coating	2000	sq.ft	1800 90%	200 10%	0 0%	0 0%
331	Re Conc Bridge Railing	633	ft	628 99%	5 1%	0 0%	0 0%
840	Reinf Conc Sidewalk	7539	sq.ft	7389 98%	150 2%	0 0%	0 0%

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WORK RECOMMENDATIONS

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WORK RECOMMENDATIONS

HVYW

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/09/2023


RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Bridge Washing	M	Clean expansion joints.
Super Repair	L	Patch concrete beam ends.

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LOAD RATING ASSUMPTIONS

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)	
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Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/16/2019

Deterioration:

No impact

Most Recent Year Construct / Reconstruct / Overlay: 2004

History of Work Impacting Load Rating:

None

Superstructure Component: 5 Prestressed Concrete **Beam fy:** ksi **Beam f'c / fb:** 6.0 ksi

Composite: Yes **Number of Beams:** 9 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): 39" H x 48" W spread box beams. Span 1: 79'-6"; Span 2: 78'-9"; Span 3: 78'-9"; Span 4: 79'-6".

Deck: **Thickness (in.):** 9.0 **Fy / f'c:** 60.0 / 4.0 ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** Silica Fume Overlay **Thickness (in.):** 1.5 **Unit Weight (pcf.):** 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Steel ped rail / 0.1	/	Steel ped rail / 0.1
Sidewalk: Width / Thick (in.):	143.0 / 6.25	/	143.0 / 6.25

Clear Roadway (ft.): 49.3

Additional Loads:

Diaphragms: third points 2.160k. Inner rails: 325 plf, each side

Unique Factors That Affect Capacity:


Analyzed By: Carrie Hamel

Date: 10/17/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

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LOAD RATING SUMMARY

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Compliance Issue:	None		
Compliance Verified:	No		
Analysis Program:	ConSpan		
Analysis Program Version:	08.01.00.10		
Rating Considers Field Condition of Members:	Yes	Inspection Date:	10/16/2019

Controlling component and failure mode:

Span 2, interior, shear, Truck 17

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.34
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.37
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.4
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: Carrie Hamel	Date: 10/17/2019
Checked By: Mark Lessens	Date: 10/21/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

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REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
BROADWAY	42.2876 / -83.7423	814021200192S01	Good Condition(7)
Feature	Length / Width / Spans	Owner	
DEPOT ST & MDOT RR COR	316.5 / 73 / 4	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI E OF MAIN STREET	2004 / / /	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/09/2023 / HVYW	N Not Over Waterway




No inspections available for bridge key 814021200192S01

MICHIGAN DEPARTMENT OF TRANSPORTATION

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OUTSTANDING WORK

Facility BROADWAY	Latitude / Longitude 42.2876 / -83.7423	MDOT Structure ID 814021200192S01	Structure Condition Good Condition(7)	
Feature DEPOT ST & MDOT RR COR	Length / Width / Spans 316.5 / 73 / 4	Owner City: ANN ARBOR(0212)		
Location 0.5 MI E OF MAIN STREET	Built / Recon. / Paint / Ovly. 2004 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/09/2023 / HVYW	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

SUPERSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Super Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Patch concrete beam ends. (Kyle Slavik 10/26/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Bridge Washing				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date


Comments

Clean expansion joints. (Kyle Slavik 10/26/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11077

BRIDGE SAFETY INSPECTION REPORT

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

VVH4

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

GENERAL NOTES

Visual inspection without MDOT reach-all and no railroad flagging. Ann Arbor Temporary Agreement Covering Right-of-Entry and railroad flagging required for detailed inspection.


DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	6	7	7	<p>Some hairline transverse cracks. Light scaling along longitudinal construction joint. Some rough patches in the wearing course along the south bike lane and gutter pan. There are isolated popouts in the surface. Flow line @ curb is not smooth - some depressions present. (10/23)</p> <p>Some hairline transverse cracks. Light scaling along longitudinal construction joint. Some rough patches in the wearing course along the south bike lane and gutter pan. There are isolated popouts in the surface. Flow line @ curb is not smooth - some depressions present. (10/21)</p> <p>Some hairline transverse and longitudinal cracks. Some rough patches in the wearing course along the south bike lane and gutter pan. Wearing in concrete texturing at wheel lines. Large popouts and spalls along approach slab joints patched with HMA; transverse hairline cracks. Flow line @ curb is not smooth - some depressions present. Minor spalls at Pier 2 joint - center of bridge. (10/19)</p>
2. Expansion Joints	6	6	5	<p>Dirt in joint seals. Both expansion joints have corrosion in the shoulders and in the center turn lane. (10/23)</p> <p>Dirt in joint seals. (10/21)</p> <p>Dirt in joint seals. (10/19)</p>
3. Other Joints	6	6	6	<p>Joint filler is missing at sleeper slab joint at west end in the center turn lane. Also missing at sleeper slab joint at east end in the southernmost lane. Minor deterioration along approach slab joints. Some loose and missing filler material. (10/23)</p> <p>Joint filler is missing at sleeper slab joint at west end. Minor deterioration along approach slab joints. Some loose and missing filler material. (10/21)</p> <p>Joint filler is missing at sleeper slab joint at west end. Large concrete spalls at joint locations filled with HMA. Vegetation in joint at curb line in NW, NE and SW quadrants. Some loose and missing filler material. (10/19)</p>
4. Railings	7	7	7	<p>Patches at expansion joint locations have cracks. Few cracks and rust stains on both railings. Missing nut on north steel railing at west pier. (10/23)</p> <p>Patches at expansion joint locations. Few cracks and rust stains. Missing nut on north steel railing at west pier. (10/21)</p> <p>Patches at expansion joint locations. Few cracks and rust stains. Missing nut on north steel railing at west pier. (10/19)</p>
5. Sidewalks or Curbs	7	7	7	<p>Few transverse cracks. Delamination and spalls noted. Patches at south and north expansion joint areas have started to spall in the curb face. (10/23)</p> <p>Few transverse cracks. Delamination and spalls noted. Patches at south and north expansion joint areas. (10/21)</p> <p>Few transverse cracks. Delamination and spalls noted. Patches at south and north expansion joint areas. (10/19)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

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BRIDGE SAFETY INSPECTION REPORT

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
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6. Deck Bottom Surface (SIA-58B)	6	6	6	<p>Transverse cracks with efflorescence. Several full depth concrete patches with some delaminated concrete and rust stains. Longitudinal construction joints have been sealed. (10/23)</p> <p>Transverse cracks with efflorescence. Several full depth concrete patches with some delaminated concrete and rust stains. Longitudinal construction joints have been sealed. (10/21)</p> <p>Hairline cracks with efflorescence. Several full depth concrete patches with some delaminated concrete and rust stains. (10/19)</p>
7. Deck (SIA-58)	6	6	6	<p>Some rough patches in the wearing course along the south bike lane and gutter pan. Wearing in concrete texturing at wheel lines. Isolated popouts in surface and transverse cracks with efflorescence in the bottom. Full depth patches present with rust stains in the bottom. (10/23)</p> <p>Some rough patches in the wearing course along the south bike lane and gutter pan. Wearing in concrete texturing at wheel lines. Isolated popouts in surface and transverse cracks with efflorescence in the bottom. Full depth patches present with rust stains in the bottom. (10/21)</p> <p>Some rough patches in the wearing course along the south bike lane and gutter pan. Wearing in concrete texturing at wheel lines. Large popouts and spalls concentrated along the joints and transverse hairline cracks. (10/19)</p>
8. Drainage				<p>Catch basins in northeast and southeast quadrants. (10/23)</p> <p>Catch basins in northeast and southeast quadrants. (10/21)</p> <p>Catch basins in northeast and southeast quadrants. (10/19)</p>

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	6	6	6	<p>Majority of concrete I-beams have vertical and horizontal cracking at beam ends. Some beams have diagonal cracking and spalled areas at the beam ends with exposed mild reinforcement. Some beam ends have impending spalls with cracking. Some beam ends have been patched and rust stains are present. Plywood is located between Beams C and D at Pier 1. (10/23)</p> <p>Majority of concrete I-beams have vertical and horizontal cracking at beam ends. Some beams have diagonal cracking and spalled areas at the beam ends with exposed mild reinforcement. Some beam ends have impending spalls with cracking. Some beam ends have been patched and rust stains are present. Plywood is located between Beams C and D at Pier 1. (10/21)</p> <p>Majority of concrete I-beams have vertical and horizontal cracking at beam ends. Some beams have diagonal cracking and spalled areas at the beam ends with exposed mild reinforcement. Some beam ends have been patched and rust stains are present. Plywood is located between Beams C and D at Pier 1. (10/19)</p>
10. Paint (SIA-59A)	N	N	N	(10/23) (10/21) (10/19)
11. Section Loss	N	N	N	(10/23) (10/21) (10/19)
12. Bearings	5	5	5	<p>Several elastomeric bearing pads are bulging, curling and have uplifted along edges, and appear to be overstressed. Rust is present at all beam sole plates and bearing plates on piers. (10/23)</p> <p>Several elastomeric bearing pads are bulging, curling and have uplifted along edges, and appear to be overstressed. Rust is present at all beam sole plates and bearing plates on piers. (10/21)</p> <p>Several elastomeric bearing pads are bulging, curling and have uplifted along edges, and appear to be overstressed. Rust is present at all beam sole plates and bearing plates on piers. (10/19)</p>


SUBSTRUCTURE

10/19 10/21 10/23

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13. Abutments (SIA-60)	6	7	7	Few hairline vertical cracks in both abutments. No spalls or delaminations found. Graffiti covered. The joint material in the east abutment construction joint is missing and approach fill is passing through. There are signs of water leaking through the joint also. (10/23) Few hairline vertical cracks. No spalls or delaminations found. Graffiti covered. The joint material in the east abutment construction joint is missing and approach fill is passing through. (10/21) Few hairline vertical cracks. No spalls or delaminations found. Graffiti covered. (10/19)
14. Piers (SIA-60)	6	6	6	Minor spalls, cracks and delaminated concrete with exposed reinforcement on pier columns and crashwalls. There are delaminated patches in a few pier columns. Debris is present along both crashwalls. The east pier has staining below Beam D but the stain is not changing. (10/23) Minor spalls, cracks and delaminated concrete with exposed reinforcement on pier columns and crashwalls. There are delaminated patches in a few pier columns. (10/21) Minor spalls, cracks and delaminated concrete with exposed reinforcement on pier columns and crashwalls. (10/19)
15. Slope Protection	6	6	6	Some growth of vegetation and trees found through the paving near the sides. Settlement and heaving in horizontal portion of slope paving at both abutments resulting in missing bricks and voids below remaining bricks. The slopes along the west slope paving has eroded in front of the crashwall and the header is visible. There is settlement at the north end of the east slope paving. (10/23) Some growth of vegetation and trees found through the paving. Settlement and heaving in horizontal portion of slope paving at both abutments. There is settlement at the north end of the east slope paving. (10/21) Some growth of vegetation and trees found through the paving. Settlement and heaving in horizontal portion of slope paving at west abutment. East abutment near abutment has void at the north end. (10/19)
16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
17. Scour Inspection	N	N	N	(10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	6	7	6	Concrete approach slabs in good condition. Potholes at approach ends have been filled with asphalt or sealed. Asphalt filled potholes have started to spall in the center lanes at the west sleeper slab and in the eastbound shoulder at the east sleeper slab. (10/23) Concrete approach slabs in good condition. Potholes at approach ends have been filled with asphalt or sealed. (10/21) Concrete approach slabs in good condition. HMA pavement has minor cracking concentrated along the longitudinal pavement joint and wheel lines. Map cracking throughout with most cracks sealed. Large and deep potholes adjacent to concrete deck, filled with HMA, three at west end, two large and several small spalls at east end. (10/19)
19. Approach Shoulders Sidewalks	9	6	6	Settlement of 3/4" in approach sidewalks in all 4 quadrants of the bridge. Multiple large cracks with uneven settlement in the southwest quadrant. Cracking is noted at all four quadrants. Vegetation is growing along back of curb. (10/23) Settlement in approach sidewalks in all 4 quadrants of the bridge. Large crack in the southwest quadrant. Cracking is noted at all four quadrants. Vegetation is growing along back of curb. (10/21) HMA sidewalk in SW and SE quadrants have longitudinal cracks. 1- 1/4" differential between approach sidewalk and bridge sidewalk in NE quad. Concrete portions of sidewalk adjacent to bridge have no deficiencies noted. The NW and NE concrete sidewalks have minor cracks. Vegetation along the back of curb in NW, SW and SE quadrants. (10/19)
20. Approach Slopes				All approach guardrails beyond bridge anchorages are newer. (10/23) All approach guardrails beyond bridge anchorages are newer. (10/21) All approach guardrails beyond bridge anchorages are newer. (10/19)

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21. Utilities

Overhead utility lines present over and under the western span. Sixth bay has formwork with styrofoam where a 16" watermain is present. Some of the insulation has been removed/damaged near the west abutment. Watermain pipe is heavily corroded where visible through the insulation. 3" dia. conduit along outside of north concrete bridge railing. (10/23)
 Overhead utility lines present over and under the western span. Sixth bay has formwork with styrofoam where a 16" watermain is present. 3" dia. conduit along outside of north concrete bridge railing. Some of the insulation has been removed/damaged near the west abutment. (10/21)
 Overhead utility lines present over and under the western span. Sixth bay has formwork with styrofoam where a 16" watermain is present. 3" dia. conduit along outside of north concrete bridge railing. Some of the insulation has been removed/damaged near the west abutment. (10/19)

22. Drainage Culverts

(10/23)
(10/21)
(10/19)

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	1
36B. Transitions	N
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

Item	Rating
71. Water Adequacy	N
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	
Underwater Insp. Method	0

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

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STRUCTURE INVENTORY AND APPRAISAL

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
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Bridge History, Type, Materials	
27 - Year Built	1974
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	2005
43 - Main Span Bridge Type	5 32
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	7
80 - Post Type	
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	0

Structure Dimensions	
34 - Skew	4
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	45.9
49 - Structure Length	132.4
50A - Width Left Curb/SW	6
50B - Width Right Curb/SW	6
33 - Median	0
51 - Width Curb to Curb	64
52 - Width Out to Out	78.4
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/10/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	6
58A/B - Deck Surface/Bottom	7 6
59 - Superstructure Rating	6
59A - Paint Rating	N
60 - Substructure Rating	6
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000046000 68
19 - Detour Length	4
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	4
29 - ADT	20888
30 - Year of ADT	2010
32 - Appr Roadway Width	56.1
32A/B - Ap Pvt Type/Width	4 56
42A - Service Type On	5
47L - Left Horizontal Clear	27.9
47R - Right Horizontal Clear	27.9
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	20888
115 - Year Future ADT	2030
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	N
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	7
69 - Underclearance	7
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	2
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	R
55B - Right Horiz Clearance	19.4
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	38 1
76 - Length of Improvement	433.1
94 - Bridge Cost	664
95 - Roadway Cost	0
96 - Total Cost	664
97 - Year of Cost Estimate	2016

Load Rating and Posting	
31 - Design Load	5
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.6
64MC - Mich Oper Truck	18
65 - Inv Rtg Method	6
66 - Inventory Load	1.2
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11077

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)	
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovl. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway



NBI INSPECTION

VVH4

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/10/2023
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AASHTO ELEMENTS


(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Decks/Slabs							
800	Conc Deck - Black Bars	10330	sq.ft	10227 99%	103 1%	0 0%	0 0%
815	Rigid Overlay	8412	sq.ft	8328 99%	84 1%	0 0%	0 0%
811	Conc Deck - Btm Surface	10330	sq.ft	9297 90%	1033 10%	0 0%	0 0%
812	Reinf Conc Fascia	265	ft	262 99%	3 1%	0 0%	0 0%
Joints							
301	Pourable Joint Seal	312	ft	234 75%	78 25%	0 0%	0 0%
303	Assembly Joint With Seal	160	ft	0 0%	160 100%	0 0%	0 0%
Superstructure							
109	Pre Opn Conc Girder/Beam	1567	ft	1471 94%	96 6%	0 0%	0 0%
826	Beam End Deterioration	48	(EA)	0 0%	48 100%	0 0%	0 0%
Bearings							
310	Elastomeric Bearing	48	each	0 0%	0 0%	48 100%	0 0%
316	Other Bearing	24	each	24 100%	0 0%	0 0%	0 0%
Substructure							
205	Re Conc Column	16	each	7 44%	2 12%	7 44%	0 0%
210	Re Conc Pier Wall	148	ft	128 86%	20 14%	0 0%	0 0%
215	Re Conc Abutment	207	ft	207 100%	0 0%	0 0%	0 0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

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SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

234	Re Conc Pier Cap	159	ft	154 97%	5 3%	0 0%	0 0%
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Other Elements

330	Metal Bridge Railing	265	ft	265 100%	0 0%	0 0%	0 0%
331	Re Conc Bridge Railing	265	ft	239 90%	26 10%	0 0%	0 0%
840	Reinf Conc Sidewalk	1909	sq.ft	1661 87%	248 13%	0 0%	0 0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

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WORK RECOMMENDATIONS

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

VVH4

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/10/2023

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Slope Repair	M	Repair slope paving at abutment
Joint Repair	M	Repair joint in east abutment.
Deck Patching	L	Patch spalled areas at ends of deck and at sleeper slab/approach slabs with concrete.
Super Repair	M	Repair beam ends at piers - continue to monitor.
Substr Repair	M	Repair deteriorated areas on piers.
Other	M	Replace bearing pads at piers.

MICHIGAN DEPARTMENT OF TRANSPORTATION

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LOAD RATING ASSUMPTIONS

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)	
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovlly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway



Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/18/2019

Deterioration:

Concrete beam ends at piers have spalled, delaminated and cracked concrete. Exposed reinforcing steel is also present on some beams.

Most Recent Year Construct / Reconstruct / Overlay: 2005

History of Work Impacting Load Rating:

Raised concrete median curbs were removed and replaced with full depth concrete and the two separate decks connected in 2005. 14' along each outside curb received a shallow concrete overlay. The center 36' received a deep concrete overlay, with the center 11'-6" of deck removed and replaced full-depth.

Superstructure Component: 5 Prestressed Concrete **Beam fy:** ksi **Beam f'c / fb:** 5.0 ksi

Composite: Yes **Number of Beams:** 12 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): Type II (36") AASHTO I beams. 12 per span. 3 spans: Center-to-Center bearing lengths: West Span: 44'-6"; Center Span: 41'-9 1/4"; East Span: 41'-10".

Deck: **Thickness (in.):** 10.3 **Fy / f'c:** / 3.5 ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** Microsilica conc **Thickness (in.):** 3.0 **Unit Weight (pcf.):** 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	conc/steel / 357.0	/	conc/steel / 357.0
Sidewalk: Width / Thick (in.):	86.5 / 10.75	/	86.5 / 10.75

Clear Roadway (ft.): 64.0

Additional Loads:

Loads on Precast: Diaphragm loads: 0.65 kips on beams 1, 6, 7 and 12 at midspan of all spans; 1.3 kips on beams 2-5 and 8-11 at midspan of all spans. 16" dia water main, 28" dia casing, insulation and boards: 0.21 klf on beams 6 and 7. Average deck thickness of 10.27 inches due to thickened portion at center of deck.

Unique Factors That Affect Capacity:

Shear rating factors were determined using the 1979 Interim Specifications in the AASHTOWare BrR program. Shear is only analyzed between the quarter points using user-defined points of interest. Each span was analyzed/modeled independently (three (3) single spans). The spans are all simple spans, with expansion joints at both piers.


Analyzed By: Carrie Hamel

Date: 07/16/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11077

LOAD RATING SUMMARY

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

Compliance Issue:	None
Compliance Verified:	No
Analysis Program:	AASHTOWare Bridge Rating (BrR)
Analysis Program Version:	6.8.2.3002
Rating Considers Field Condition of Members:	Yes
Inspection Date:	10/18/2019

Controlling component and failure mode:

Shear in Beam 2, Span 1, 30%, near Abut A.

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.0
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.6
MDOT Item 64MC - Michigan Operating Truck	18
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.2
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: Carrie Hamel	Date: 07/16/2018
Checked By: Mark Lessens	Date: 07/25/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11077

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
EISENHOWER PKWY	42.2442 / -83.732	814021200393R01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
ANN ARBOR RAILROAD	132.4 / 78.4 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.4 MI E OF STATE RD	1974 / / / 2005	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 32 Multi Str Comp	10/10/2023 / VVH4	N Not Over Waterway




No inspections available for bridge key 814021200393R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11077

OUTSTANDING WORK

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

DECKSLABS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deck Patching				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Patch spalled areas at ends of deck and at sleeper slab/approach slabs with concrete. (Kyle Slavik 11/16/2023)

JOINTS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Joint Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Repair joint in east abutment. (Kyle Slavik 11/16/2023)

SUPERSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Super Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Repair beam ends at piers - continue to monitor. (Kyle Slavik 11/16/2023)

SUBSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Substr Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Repair deteriorated areas on piers. (Kyle Slavik 11/16/2023)


OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Slope Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

MICHIGAN DEPARTMENT OF TRANSPORTATION

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OUTSTANDING WORK

Facility EISENHOWER PKWY	Latitude / Longitude 42.2442 / -83.732	MDOT Structure ID 814021200393R01	Structure Condition Fair Condition(6)	
Feature ANN ARBOR RAILROAD	Length / Width / Spans 132.4 / 78.4 / 3	Owner City: ANN ARBOR(0212)		
Location 0.4 MI E OF STATE RD	Built / Recon. / Paint / Ovly. 1974 / / / 2005	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 32 Multi Str Comp	Last NBI Inspection 10/10/2023 / VVH4	Scour Evaluation N Not Over Waterway	

Comments

Repair slope paving at abutment (Kyle Slavik 11/16/2023)

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Other				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date


Comments

Replace bearing pads at piers. (Kyle Slavik 11/16/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

BRIDGE SAFETY INSPECTION REPORT

Facility E MEDICAL CENTER	Latitude / Longitude 42.2858 / -83.7321	MDOT Structure ID 814021200000R01	Structure Condition Poor Condition(4)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 160 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.9 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 1982	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/08/2023 / 1SSL	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

1SSL

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	12	10/08/2023

GENERAL NOTES

Due to the poor condition of the north pier cap, the steel beams, the bridge deck and the leaking deck joints, it is recommended to maintain the inspection frequency at 12 months.

Detailed inspection completed using MDOT reach all, traffic control and Amtrak flagger. Completed on a Sunday to limit impacts to motoring public, which was very successful.

NS/Amtrak Contractor Safety Orientation Training required prior to detailed inspection. Railroad flagging required during detailed inspection.

Bridge scheduled to be rehabilitated in 2024.


DECK

	10/21	10/22	10/23	
1. Surface (SIA-58A)	4	4	4	Structural deck surface, no wearing surface present. Longitudinal and transverse full depth cracking and delaminated areas and spalls. Heaviest concentration of delaminations and spalls is in the north span. Diagonal cracking at skewed ends spaced at 3'. Approx. 2047 sft of surface defects, or approx. 18% of the deck and sidewalk areas. Additional 1270 sft of map cracking on sidewalks. HMA patches have failed. (10/23) Longitudinal and transverse full depth cracking and delaminated areas and spalls. Heaviest concentration of delaminations and spalls is in the north span. Diagonal cracking at skewed ends spaced at 3'. Approx. 1796 sft of surface defects, or approx. 16% of the deck and sidewalk areas. HMA patches have failed. (10/22) Longitudinal and transverse full depth cracking and delaminated areas and spalls. Heaviest concentration of delaminations and spalls is in the north span. Diagonal cracking at skewed ends spaced at 3'. Approx. 1796 sft of surface defects, or approx. 16% of the deck and sidewalk areas. HMA patches have failed. (10/21)
2. Expansion Joints	4	4	4	Leaking water and sediment below onto pier and beam ends. Joints are debris filled and partially broken. Retainer has broken off for entire width of left turn lane and extends into the southbound lane. Small piece broken off in northbound through lane. Spalls and delaminations along joint. East end at curb line is spalled and filled with debris. Light is visible through the joint from below the bridge. Areas of joint patched with asphalt. (10/23) Leaking below onto pier and beam ends. Joints are debris filled and partially broken. Spalls and delaminations along joint. East end at curb line is spalled and filled with debris. Light is visible through the joint from below the bridge. Areas of joint patched with asphalt. (10/22) Leaking below onto pier and beam ends. Joints are debris filled and partially broken. Spalls and delaminations along joint. East end at curb line is spalled and filled with debris. Light is visible through the joint from below the bridge. Areas of joint header move under traffic load. (10/21)
3. Other Joints	4	4	4	Leaking below joints at north pier onto beam ends and pier. Joint filler present at north pier. Joint is broken at north reference line. Large spall at south reference line joint. Seal material is separating. (10/23) Leaking below joints at north pier onto beam ends and pier. Joint filler present at north pier. Joint is broken at north reference line. Large spall at south reference line joint. Seal material is separating. (10/22) Leaking below joints at north pier onto beam ends and pier. Joint filler present at north pier. Joint is broken at north reference line. Large spall at south reference line joint. Seal material is separating. (10/21)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

4. Railings	6	6	6	<p>The concrete railing has vertical cracks spaced every 5' with some rust staining and is spalled at the steel tube connections to the concrete end wall at all quadrants. Vertical cracks are spaced every 2-3' at end walls. (10/23)</p> <p>The concrete railing has vertical cracks with some rust staining and is spalled at the steel tube connections to the concrete end wall at all quadrants. (10/22)</p> <p>The concrete railing has vertical cracks with some rust staining and is spalled at the steel tube connections to the concrete end wall at all quadrants. (10/21)</p>
5. Sidewalks or Curbs	5	5	4	<p>Cracking and minor spalls in all three spans, both sidewalks. Several large areas of delaminated concrete on east sidewalk, spans 1 and 2. Small delaminations concentrated along joints. Some leaching and rust stains. Delaminations, cracks, and spalls total 260 sft or 6.8% of the sidewalk areas with an additional 1270 sft of map cracking or 33% of the sidewalk areas. West sidewalk has map cracking in 50% of the surface in spans 2 and 3, east sidewalk has map cracking in 60% of the surface in spans 1 and 3. Differential settlement of 1/2" at reference lines in NW and NE quadrants. (10/23)</p> <p>Cracking and minor spalls. Several large areas of delaminated concrete on sidewalks. Some leaching and rust stains. Differential settlement at reference lines in NW and NE quadrants. (10/22)</p> <p>Cracking and minor spalls. Several large areas of delaminated concrete on sidewalks. Some leaching and rust stains. Differential settlement at reference lines in NW and NE quadrants. (10/21)</p>
6. Deck Bottom Surface (SIA-58B)	4	4	4	<p>Multiple leaching cracks, wet areas, delaminated and spalled concrete areas, approx. 15% of the deck bottom surface. Several areas of exposed rusted reinforcement. The north span is in the worst condition, corresponding with the top surface condition. (10/23)</p> <p>Multiple leaching cracks, wet areas, delaminated and spalled concrete areas. Several areas of exposed rusted reinforcement. (10/22)</p> <p>Many leaching cracks, wet areas, delaminated and spalled concrete areas. Several areas of exposed reinforcement. (10/21)</p>
7. Deck (SIA-58)	4	4	4	<p>Multiple cracks, spalls, and delaminated areas totaling 16% of the deck area. Largest concentration of deterioration is in the north span. Diagonal cracking at skew ends spaced at 3'. Approx. 3317 sft of surface defects noted (1270 sft of map cracking in sidewalks), or approx. 29% of the deck and sidewalk areas. (10/23)</p> <p>Multiple cracks, spalls, and delaminated areas totaling 16% of the deck area. Largest concentration of deterioration is in the north span. Diagonal cracking at skew ends spaced at 3'. Approx. 1802 sft of surface defects noted, or approx. 16% of the deck and sidewalk areas. (10/22)</p> <p>Multiple cracks, spalls, and delaminated areas totaling 16% of the deck area. Largest concentration of deterioration is in the north span. Diagonal cracking at skew ends spaced at 3'. Approx. 1796 sft of surface defects noted, or approx. 16% of the deck and sidewalk areas. (10/21)</p>
8. Drainage				<p>(10/23)</p> <p>(10/22)</p> <p>(10/21)</p>


SUPERSTRUCTURE

10/21 10/22 10/23

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

BRIDGE SAFETY INSPECTION REPORT

Facility E MEDICAL CENTER	Latitude / Longitude 42.2858 / -83.7321	MDOT Structure ID 814021200000R01	Structure Condition Poor Condition(4)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 160 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.9 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 1982	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/08/2023 / 1SSL	Scour Evaluation N Not Over Waterway	

9. Stringer (SIA-59)	4	4	4	<p>All of the beam ends at joints have corrosion and heavy pack rust. Diaphragms under joints have heavy corrosion, surface rust and paint failure. These diaphragms are non-structural secondary members. The majority of the beam length, away from the beam ends at the piers, are in satisfactory to fair condition. The north span beams away from the north pier joint have more corrosion than other spans. Paint system has failed and section loss exceeds 10% at most beam ends. See uploaded document "2023 EMCD Beam End Dimensions for BrR.xlsx" for detailed beam end measurements. (10/23)</p> <p>All of the beam ends at joints have corrosion and heavy pack rust. Diaphragms under joints have heavy corrosion, surface rust and paint failure. These diaphragms are non-structural secondary members. The majority of the beam length, away from the beam ends at the piers, are in satisfactory to fair condition. The north span beams away from the north pier joint have more corrosion than other spans. (10/22)</p> <p>All of the beam ends at joints have corrosion and heavy pack rust. Diaphragms under joints have heavy corrosion, surface rust and paint failure. These diaphragms are non-structural secondary members. The majority of the beam length, away from the beam ends at the piers, are in satisfactory to fair condition. The north span beams away from the north pier joint have more corrosion than other spans. (10/21)</p>
10. Paint (SIA-59A)	4	4	3	<p>Paint system has failed. Top coat is blistering in areas where it has not peeled off. Paint failure exceeds 15%. (10/23)</p> <p>Paint system has failed. Top coat is blistering in areas where it has not peeled off. Paint failure exceeds 15%. (10/22)</p> <p>Paint system has failed. Top coat is blistering in areas where it has not peeled off. Paint failure exceeds 15%. (10/21)</p>
11. Section Loss	1	1	1	<p>Beam ends at both piers have heavy surface rust with section loss. Section loss in bottom flanges up to 42.3% (Span 3, Beam J) and up to 39.8% in webs (Span 2, Pier 2, Beam H). Most beams have at least 10% section loss in the bottom flange. See uploaded document "2023 EMCD Beam End Dimensions for BrR.xlsx" for detailed beam end measurements. (10/23)</p> <p>Beam ends at both piers have heavy surface rust with section loss. (10/22)</p> <p>Beam ends at both piers have heavy surface rust with section loss. (10/21)</p>
12. Bearings	6	5	5	<p>Paint cracking due to movement on elastomeric pads. Rusted sole plates at Pier 2. Minor deformation in some elastomeric pads at piers. (10/23)</p> <p>Paint cracking due to movement on elastomeric pads. Rusted sole plates at Pier 2. Minor deformation in some elastomeric pads at piers. (10/22)</p> <p>Paint cracking due to movement on elastomeric pads. Rusted sole plates at Pier 2. Minor deformation in some elastomeric pads at piers. (10/21)</p>


SUBSTRUCTURE

	10/21	10/22	10/23	
13. Abutments (SIA-60)	7	7	7	<p>Multiple vertical hairline cracks. Graffiti covered surface. No delaminations found. (10/23)</p> <p>Multiple vertical hairline cracks. Graffiti covered surface. No delaminations found. (10/22)</p> <p>Few hairline cracks. Graffiti covered surface. No delaminations found. (10/21)</p>
14. Piers (SIA-60)	4	4	4	<p>Cracked, spalled and delaminated concrete totaling 300 sft for south pier (Pier 1) and 350 sft for north pier (Pier 2). Exposed rusted steel in north pier cap, north face. Graffiti covered surface. Water on surfaces from leaking joints above. Vertical cracks and delamination in 2nd column from east end in south pier. Vertical cracks and delamination on both faces of both crashwalls. Standing water present in front of south crashwall. (10/23)</p> <p>Cracked, spalled and delaminated concrete totaling 280 sft for south pier (Pier 1) and 320 sft for north pier (Pier 2). Exposed rusted steel in north pier cap, north face. Graffiti covered surface. Water on surfaces from leaking joints above. Vertical cracks and delamination in 2nd column from east end in south pier. (10/22)</p> <p>Cracked, spalled and delaminated concrete totaling 280 sft for south pier (Pier 1) and 320 sft for north pier (Pier 2). Exposed rusted steel in north pier cap, north face. Graffiti covered surface. Water on surfaces from leaking joints above. Vertical cracks and delamination in 2nd column from east end in south pier. (10/21)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

15. Slope Protection	7	7	7	Trees growing in slope paving. Slope paving is steep. North embankment was regraded adjacent to slope protection by Amtrak after previous inspection. Brush and debris are piled along the north embankment away from the slope protection. (10/23) Trees growing in slope paving. Slope paving is steep. (10/22) Trees growing in slope paving. Slope paving is steep. (10/21)
16. Channel (SIA-61)	N	N	N	(10/23) (10/22) (10/21)
17. Scour Inspection	N	N	N	(10/23) (10/22) (10/21)

APPROACH

	10/21	10/22	10/23	
18. Approach Pavement	6	6	6	South approach with some sealed cracks. North approach has some cracks. Deterioration and slight settlement at abutment reference lines up to 1/4". Spalls and potholes have been filled with asphalt. (10/23) South approach with some sealed cracks. North approach has some cracks. Deterioration and slight settlement at abutment reference lines. (10/22) No patches on south approach, some sealed cracks. North approach has some cracks. Deterioration and slight settlement at abutment reference lines. (10/21)
19. Approach Shoulders Sidewalks	6	6	6	HMA patches and spalls in SE, NE, and NW quadrants. Elevation difference between the approach curb line and bridge sidewalk exceeds 1" in NW, SW and SE quadrants. (10/23) HMA patches and spalls in SE, NE, and NW quadrants. Elevation difference between the approach curb line and bridge sidewalk exceeds 1" in NW, SW and SE quadrants. (10/22) HMA patches and spalls in SE, NE, and NW quadrants. Elevation difference between the approach curb line and bridge sidewalk exceeds 1" in NW, SW and SE quadrants. (10/21)
20. Approach Slopes				Approach slopes have no signs of erosion. Guradrail posts are in wood chipped areas. Beyond woodchips, the NW, NE, and SE quadrant slopes are heavily vegetated. The SW quadrant slope is grass. (10/23) (10/22) (10/21)
21. Utilities				Lights along bridge on west and east sides. Plans indicate conduits in sidewalks. (10/23) Lights along bridge on west and east sides. Plans indicate conduits in sidewalks. (10/22) Lights along bridge on west and east sides. Plans indicate conduits in sidewalks. (10/21)
22. Drainage Culverts				(10/23) (10/22) (10/21)

MISCELLANEOUS


Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	0	71. Water Adequacy	N
36B. Transitions	0	72. Approach Alignment	8
36C. Approach Guardrail	0	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	0	High Load Hit (M)	No
		Special Insp. Equipment	4
		Underwater Insp. Method	0
False Decking (Timber) Removed to Complete Inspection		N/A - No False Decking	

Critical Feature Inspections (SIA-92)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

BRIDGE SAFETY INSPECTION REPORT

Facility E MEDICAL CENTER	Latitude / Longitude 42.2858 / -83.7321	MDOT Structure ID 814021200000R01	Structure Condition Poor Condition(4)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 160 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.9 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 1982	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/08/2023 / 1SSL	Scour Evaluation N Not Over Waterway	


Freq Date

- 92A. Fracture Critical
- 92B. Underwater
- 92C. Other Special
- 92D. Fatigue Sensitive

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	1982
106 - Year Reconstructed	
202 - Year Painted	1982
203 - Year Overlay	1982
43 - Main Span Bridge Type	3 32
44 - Appr Span Bridge Type	
77 - Steel Type	5
78 - Paint Type	2
79 - Rail Type	3
80 - Post Type	3
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	36
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	62
49 - Structure Length	160
50A - Width Left Curb/SW	10.5
50B - Width Right Curb/SW	10.5
33 - Median	0
51 - Width Curb to Curb	46.9
52 - Width Out to Out	70.9
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/08/2023
91 - Inspection Freq	12
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	4
58A/B - Deck Surface/Bottom	4 4
59 - Superstructure Rating	4
59A - Paint Rating	3
60 - Substructure Rating	4
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	1
13 - LRS Route-Subroute	0000018392 04
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	14
28A - Lanes On	4
29 - ADT	17220
30 - Year of ADT	2014
32 - Appr Roadway Width	46.9
32A/B - Ap Pvt Type/Width	5 47.01
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	46.9
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	15356
115 - Year Future ADT	2030
Freeway	0

Structure Appraisal	
36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	0
36D - Rail Termination	0
67 - Structure Evaluation	4
68 - Deck Geometry	2
69 - Underclearance	6
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	2
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	R
55B - Right Horiz Clearance	18
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	36 1
76 - Length of Improvement	656.2
94 - Bridge Cost	2062
95 - Roadway Cost	0
96 - Total Cost	2062
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	1.93
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.18
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.16
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	B N

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)
Feature	Length / Width / Spans	Owner	Operational Status
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway




No inspections available for bridge key 814021200000R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

WORK RECOMMENDATIONS

Facility E MEDICAL CENTER	Latitude / Longitude 42.2858 / -83.7321	MDOT Structure ID 814021200000R01	Structure Condition Poor Condition(4)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 160 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.9 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 1982	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/08/2023 / 1SSL	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

1SSL

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	12	10/08/2023


RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Brush Cut	H	Remove vegetation overgrowth from all quadrants and slope paving.
Railing Repair	H	Remove and replace bridge railings.
Joint Repair	H	Replace all deck joints.
Full Paint	H	Paint structure, at least at joints (zone paint).
Super Repair	H	Repair beam ends under the existing deck joints.
Substr Repair	H	Replace both pier caps and make substructure repairs.
Deck Replace	H	Replace deck.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

LOAD RATING ASSUMPTIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/30/2022

Deterioration:

Beam Deterioration (2022): Span 1: Webs = 25% Loss, 3' Length at Pier 1, Bottom Flange = 10% Loss, North half of span. Span 2: Webs = 25% Loss, 3' Length at Piers 1 & 2, Bottom Flange = 10% Loss, South half of span, Span 3: Webs = 25% Loss, 3' Length at Pier 2, Bottom Flange = 15% Loss, Full span. See "2022 Beam end measurement tables.xlsx" for locations with further section loss. The end

Most Recent Year Construct / Reconstruct / Overlay: 1982

History of Work Impacting Load Rating:

None.

Superstructure Component: 3 Steel Beam fy: 50.0 ksi Beam f'c / fb: ksi

Composite: Yes Number of Beams: 12 Shop Drawings Verified: No

Beam Size(s) & Names (each span): Span 1: W27x94 w/ bottom flange cover plate; 55'-0 9/16". Span 2: @27x102 w/ bottom flange cover plate; 61'-8 5/8". Span 3: W27x84; 42'-7 1/16".

Deck: Thickness (in.): 9.0 Fy / f'c: 60.0 / 3.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Thickness (in.): Unit Weight (pcf.):

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Steel/Conc / 506.0	/	Steel/Conc / 506.0
Sidewalk: Width / Thick (in.):	141.13 / 12.3	/	144.13 / 12.3

Clear Roadway (ft.):

Additional Loads:

Diaphragms: third points in spans 1 and 2; midspan in Span 3. 0.325k max diaphragm load

Unique Factors That Affect Capacity:

8 1/2" x 3/4" cover plate on bottom of beams, Span 1 8 1/2" x 1" cover plate on bottom of beams, Span 2

Analyzed By: Carrie Hamel

Date: 01/27/2023

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

LOAD RATING SUMMARY

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)
Feature	Length / Width / Spans	Owner	
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway



Compliance Issue: None
Compliance Verified: No
Analysis Program: AASHTOWare Bridge Rating (BrR)
Analysis Program Version: 7.1.1.3001
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/30/2022
Controlling component and failure mode:

Beam H, Span 2, Design Shear - Steel @ Pier 1


NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	1.93
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.18
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.16
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	B
MDOT Item 193C - Overload Status	N-No Restriction
Analyzed By: Carrie Hamel	Date: 01/27/2023
Checked By: Kyle Slavik	Date: 01/27/2023

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

REQUEST FOR ACTION


Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

No inspections available for bridge key 814021200000R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

OUTSTANDING WORK

Facility E MEDICAL CENTER	Latitude / Longitude 42.2858 / -83.7321	MDOT Structure ID 814021200000R01	Structure Condition Poor Condition(4)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 160 / 70.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.9 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 1982	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/08/2023 / 1SSL	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

DECKS/SLABS

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Deck Replace				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Replace deck. (Kyle Slavik 11/14/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Joint Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Replace all deck joints. (Kyle Slavik 11/14/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Full Paint				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Paint structure, at least at joints (zone paint). (Kyle Slavik 11/14/2023)				


Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Super Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Repair beam ends under the existing deck joints. (Kyle Slavik 11/14/2023)				

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Substr Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments				

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11065

OUTSTANDING WORK

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
E MEDICAL CENTER	42.2858 / -83.7321	814021200000R01	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	160 / 70.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.9 MI E OF US-23 BR	1982 / / 1982 / 1982	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/08/2023 / 1SSL	N Not Over Waterway	

Replace both pier caps and make substructure repairs. (Kyle Slavik 11/14/2023)

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Remove vegetation overgrowth from all quadrants and slope paving. (Kyle Slavik 11/14/2023)

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Railing Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Remove and replace bridge railings. (Kyle Slavik 11/14/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



NBI INSPECTION

9TJE

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/20/2022

GENERAL NOTES

Epoxy overlay and maintenance repairs completed in 2021.

DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	7	7	7	Epoxy overlay installed in 2021. Minor hairline cracks. Several minor patches on deck. (10/22) Minor hairline cracks. Several minor delaminations or patches on deck. Minor spalls in deck. Nearly all of deck surface has polished aggregate. (10/20) Minor hairline cracks. Several minor delaminations or patches found on deck. Minor spalls in deck. Nearly all of deck surface has polished aggregate. (10/18)
2. Expansion Joints	7	7	7	Debris and vegetation present, especially at gutters. (10/22) Debris and vegetation present, especially at gutters. Delaminated concrete along west joint. (10/20) Debris and vegetation present, especially at gutters. Delaminated concrete found along west joint. (10/18)
3. Other Joints	5	5	7	Good condition. (10/22) Some spalled concrete and HMA patch adjacent to joint at west reference line and approach slab. Minor delaminations present along both joints. (10/20) Some spalled concrete and HMA patch adjacent to joint at west reference line and approach slab. Minor delaminations present along both joints. (10/18)
4. Railings	6	6	7	Minor vertical cracks at rail post locations. Rails recently patched and sealed. (10/22) Outside railing has vertical cracks at rail post locations, spall at east reference line, and spalled and delaminated concrete at west end of rail with exposed bolts and wood debris. Interior railing has vertical cracks at 8' spacing. Delaminated and spalled concrete adjacent to west exp. joint on back side of inner railing. (10/20) Outside railing has vertical cracks at rail post locations, spall at east reference line, and spalled and delaminated concrete at west end of rail with exposed bolts and wood debris. Interior railing has vertical cracks at 8' spacing. Delaminated and spalled concrete adjacent to west exp. joint on back side of inner railing. (10/18)
5. Sidewalks or Curbs	6	6	6	Hollow sounding area at the west reference line and the west sidewalk has an open transverse crack. Patched area in sidewalk at the east reference line. Cracking throughout. (10/22) Large hollow sounding areas at the west and east reference lines have both grown in size since 2012, and the west sidewalk has transverse crack at edge of void. Moisture may have entered through the joint causing undermining of the supporting soil. Concrete may not be fully supported along the reference lines. Spall at railing/sidewalk interface in approach slab with vegetation present. Cracking throughout. (10/20) Large hollow sounding areas at the west and east reference lines have both grown in size since 2012, and the west sidewalk has transverse crack at edge of void. Moisture may have entered through the joint causing undermining of the supporting soil. Concrete may not be fully supported along the reference lines. Spall at railing/sidewalk interface in approach slab with vegetation present. Cracking throughout. (10/18)
6. Deck Bottom Surface (SIA-58B)	N	N	N	(10/22) (10/20) (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



7. Deck (SIA-58)	7	7	7	Minor hairline cracks. Minor patches. Epoxy overlay installed in 2021. (10/22) Minor hairline cracks. Several delaminations or patches found on deck. One delamination on approach slab at west reference line. Spall at west ref line, south fascia. Minor spalls in deck. Polished aggregate across entire deck surface. (10/20) Minor hairline cracks. Several delaminations or patches found on deck. One delamination on approach slab at west reference line. Minor spalls in deck. Polished aggregate across entire deck surface. (10/18)
8. Drainage				(10/22) (10/20) (10/18)

SUPERSTRUCTURE

	10/18	10/20	10/22	
9. Stringer (SIA-59)	6	6	6	Beam ends at south fascia beam recently patched. Edge spall at south fascia beam end at east abutment. Minor surface spall at north fascia beam, east span. Grout missing for 10' at two beam lines and 1' at one beam line in the west span, but no evidence of leaking. No exposed strands. Moisture and some efflorescence noted between beams at grout joints. (10/22) Spall at north and south fascia beam ends, west pier, west beams. Dirt and vegetation present at beam ends on top of piers. Delamination and rust stains at south fascia beam end, east pier, east beam. Minor spalling at south fascia beam end, east pier, west beam. Spall and vegetation at north fascia beam end, west beam, west pier. Crack with efflorescence and rust stains at north fascia beam end, east beam, west pier. Spall and exposed/rusting rebar at south fascia beam end at west abutment. Grout missing for 10' at two beam lines and 1' at one beam line in the west span, but no evidence of leaking. No exposed strands. Moisture and some efflorescence noted between beams at grout joints. (10/20) Spall at north and south fascia beam ends, west pier, west beams. Dirt and vegetation present at beam ends on top of piers. Delamination and rust stains at south fascia beam end, east pier, east beam. Minor spalling at south fascia beam end, east pier, west beam. Spall and vegetation at north fascia beam end, west beam, west pier. Crack with efflorescence and rust stains at north fascia beam end, east beam, west pier. Spall and exposed/rusting rebar at south fascia beam end at west abutment. Grout missing for 10' at two beam lines and 1' at one beam line in the west span, but no evidence of leaking. No exposed strands. Moisture and some efflorescence noted between beams at grout joints. (10/18)
10. Paint (SIA-59A)	N	N	N	(10/22) (10/20) (10/18)
11. Section Loss	N	N	N	(10/22) (10/20) (10/18)
12. Bearings	6	6	6	Overhanging elastomeric bearing pad at south fascia beams on abutments and piers, but provides full support. (10/22) Overhanging elastomeric bearing pad at south fascia beams on abutments and piers, but provides full support. (10/20) Overhanging elastomeric bearing pad at south fascia beams on abutments and piers, but provides full support. (10/18)

SUBSTRUCTURE

	10/18	10/20	10/22	
13. Abutments (SIA-60)	7	7	7	Minor vertical cracks at abutments. No spalls or delaminations found. (10/22) Minor vertical cracks at abutments. No spalls or delaminations found. (10/20) Minor vertical cracks at abutments. No spalls or delaminations found. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



14. Piers (SIA-60)	7	7	7	Hairline vertical cracks, scaled concrete, and two minor spalls on the west pier at the north pier cap end and the east side of west pier at the coping. (10/22) Hairline vertical cracks, scaled concrete, and two minor spalls on the west pier at the north pier cap end and the east side of west pier at the coping. (10/20) Hairline vertical cracks, scaled concrete, and two minor spalls on the west pier at the north pier cap end and the east side of west pier at the coping. (10/18)
15. Slope Protection	6	6	6	Trees growing between EB and WB abutments. Riprap added at west abutment in 2021. East bank heavily armored with riprap. (10/22) Trees growing between EB and WB abutments. Geotextile fabric exposed at west abutment where riprap is missing. East bank heavily armored with riprap. (10/20) Trees growing between EB and WB abutments. Geotextile fabric exposed at west abutment where riprap is missing. East bank heavily armored with riprap. (10/18)
16. Channel (SIA-61)	7	7	7	Channel banks and bottom appear stable. Minor tree drift in east span. (10/22) Channel banks and bottom appear stable. (10/20) Channel banks and bottom appear stable. (10/18)
17. Scour Inspection	7	7	7	Channel banks and bottom appear stable. (10/22) Channel banks and bottom appear stable. (10/20) Channel banks and bottom appear stable. (10/18)

APPROACH

10/18 10/20 10/22

18. Approach Pavement	7	7		HMA pavement on west approach is newer. East approach has some map cracking which has been sealed. Joint between east approach slab and HMA approaches is well sealed. Cracks in approach slabs have been sealed. (10/22) HMA pavement on west approach is newer. East approach has some map cracking which has been sealed. Joint between east approach slab and HMA approaches is well sealed. Concrete approach slabs have a wide longitudinal crack at the centerline that has some missing sealant. (10/20) HMA pavement on west approach is newer. East approach has some map cracking which has been sealed. Joint between east approach slab and HMA approaches is well sealed. Concrete approach slabs have a wide longitudinal crack at the centerline that has some missing sealant. (10/18)
19. Approach Shoulders Sidewalks	6	6	6	SW sidewalk has transverse full-width crack. SE sidewalk has a large concrete patch. Longitudinal crack on east approach HMA sidewalk from the SE corner of the fence post. Vegetation along east sidewalk. (10/22) Concrete approach sidewalks are sound in SW and SE quadrants, but not fully supported. SW sidewalk has transverse full-width crack at edge of void. Longitudinal crack on east approach HMA sidewalk from the SE corner of the fence post. Vegetation along east sidewalk. (10/20) Concrete approach sidewalks are sound in SW and SE quadrants, but not fully supported. SW sidewalk has transverse full-width crack at edge of void. Longitudinal crack on east approach HMA sidewalk from the SE corner of the fence post. Vegetation along east sidewalk. (10/18)
20. Approach Slopes				(10/22) (10/20) (10/18)
21. Utilities				Light poles on bridge on top of outside barrier railing. Storm sewer outfall located south of bridge in SW and SE quadrants. (10/22) Light poles on bridge on top of outside barrier railing. Storm sewer outfall located south of bridge in SW and SE quadrants. (10/20) Light poles on bridge on top of outside barrier railing. Storm sewer outfall located south of bridge in SW and SE quadrants. (10/18)
22. Drainage Culverts				(10/22) (10/20) (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovl. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

Item	Rating
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking

Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

STRUCTURE INVENTORY AND APPRAISAL

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



Bridge History, Type, Materials

27 - Year Built	1993
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	2021
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	8
80 - Post Type	1
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions

34 - Skew	0
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	56.1
49 - Structure Length	168
50A - Width Left Curb/SW	0
50B - Width Right Curb/SW	11.2
33 - Median	1
51 - Width Curb to Curb	25.9
52 - Width Out to Out	41
112 - NBIS Length	Y

Inspection Data

90 - Inspection Date	10/20/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 N
59 - Superstructure Rating	6
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	7
62 - Culvert Rating	N

Navigation Data

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)

5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014481 04
19 - Detour Length	4
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	2
29 - ADT	11250
30 - Year of ADT	2015
32 - Appr Roadway Width	24.9
32A/B - Ap Pvt Type/Width	4 25
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	25.9
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	1
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	12950
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal

36A - Bridge Railing	1
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	2
69 - Underclearance	N
71 - Waterway Adequacy	8
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	5

Miscellaneous

37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	R
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	1
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)

5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements

75 - Type of Work	35 1
76 - Length of Improvement	168
94 - Bridge Cost	14
95 - Roadway Cost	
96 - Total Cost	14
97 - Year of Cost Estimate	2013

Load Rating and Posting

31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.98
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.85
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.79
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (EB)	42.2871 / -83.7254	814021200124B02	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1993 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / 9TJE	5 Stable w/in footing




No inspections available for bridge key 814021200124B02

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

WORK RECOMMENDATIONS

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

9TJE

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/20/2022

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Brush Cut	M	Brush cut at abutments on slopes

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (EB)	42.2871 / -83.7254	814021200124B02	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1993 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / 9TJE	5 Stable w/in footing



No plan available for bridge key 814021200124B02

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

LOAD RATING ASSUMPTIONS

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing



Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/20/2022

Deterioration:

None that impacts capacity.

Most Recent Year Construct / Reconstruct / Overlay: 1993

History of Work Impacting Load Rating:

None. Epoxy overlay added in 2021; however, increase in dead load on structure is negligible (thin overlay).

Superstructure Component: 5 Prestressed Concrete **Beam fy:** ksi **Beam f'c / fb:** 5.0 ksi

Composite: Yes **Number of Beams:** 13 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): (13) 27" deep x 36" wide adjacent box beams; 3 spans

Deck: **Thickness (in.):** 6.0 **Fy / f'c:** 60.0 / 4.0 ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** Concrete **Thickness (in.):** 6.0 **Unit Weight (pcf.):** 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Barrier Type 5 / 500.0	Bridge Type 5 + / 500.0	Bike Railing / 128.0

Sidewalk: Width / Thick (in.): 11.92 / 12.0 / 11.92 / 12.0

Clear Roadway (ft.): 26.0

Additional Loads:

1600 plf for 12' sidewalk along outside fascia; 574 lb internal diaphragms, 5 per span

Unique Factors That Affect Capacity:

None


Analyzed By: DLZ

Date: 11/09/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

LOAD RATING SUMMARY

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing	

Compliance Issue:	None		
Compliance Verified:	No		
Analysis Program:	ConSpan		
Analysis Program Version:	10.00.01.20		
Rating Considers Field Condition of Members:	Yes	Inspection Date:	10/20/2022

Controlling component and failure mode:

Span 1, interior beam, positive flexure

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.98
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.85
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.79
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: DLZ	Date: 11/09/2018
Checked By: DLZ	Date: 11/16/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (EB)	42.2871 / -83.7254	814021200124B02	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1993 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / 9TJE	5 Stable w/in footing




No inspections available for bridge key 814021200124B02

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11071

OUTSTANDING WORK

Facility FULLER ROAD (EB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B02	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1993 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / 9TJE	Scour Evaluation 5 Stable w/in footing	


WORK RECOMMENDATIONS

OTHER				
Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments				
Brush cut at abutments on slopes (Pedro Trana 03/21/2023)				

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

NBI INSPECTION

ABO5

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/20/2022

GENERAL NOTES

Epoxy overlay and maintenance repairs completed in 2021.


DECK

	10/18	10/20	10/22	
1. Surface (SIA-58A)	6	6	7	Minor hairline cracking. Minor deck patches. (10/22) Minor hairline cracking. Several areas of delaminated and spalled concrete on deck top surface. Areas in east span with spalls with exposed reinforcing steel. Some HMA patches. (10/20) Minor hairline cracking. Several areas of delaminated and spalled concrete found on deck top surface. Four areas in east span with spalls with exposed reinforcing steel. (10/18)
2. Expansion Joints	7	7	7	Debris and vegetation present, especially in gutter lines. No evidence of leaking. (10/22) Debris and vegetation present, especially in gutter lines. No evidence of leaking. Delaminated concrete along both joints. Minor spall at sidewalk fascia at east expansion joint. (10/20) Debris and vegetation present, especially in gutter lines. No evidence of leaking. Delaminated concrete found along both joints. Minor spall at sidewalk fascia at east expansion joint. (10/18)
3. Other Joints	5	5	7	Good condition. (10/22) Some spalled and delaminated concrete adjacent to joint at west reference line and approach slab. Missing portions of joint filler. Minor delamination along east reference line. (10/20) Some spalled and delaminated concrete adjacent to joint at west reference line and approach slab. Missing portions of joint filler. Minor delamination along east reference line. (10/18)
4. Railings	6	6	7	Minor vertical cracks at top of rails. Rails recently patched and sealed. (10/22) Outside railing has 6 sft of delaminated concrete with leaching along the top and sidewalk side at NE quadrant near reference line, and vertical cracks at rail posts. Interior rail has vertical cracks at 8' spacing. Some horizontal cracks present. Minor map cracking near top of railing near railing posts. (10/20) Outside railing has 6 sft of delaminated concrete with leaching along the top and sidewalk side at NE quadrant near reference line, and vertical cracks at rail posts. Interior rail has vertical cracks at 8' spacing. (10/18)
5. Sidewalks or Curbs	6	6	6	Significant map cracking. Debris located along south railing of north sidewalk. Trees overhanging sidewalks at most approach quadrants. (10/22) Large hollow sounding areas at the west and east reference lines have grown in size and now include the entire sidewalk area. Moisture may have entered through the joint causing undermining of the supporting soil. Significant map cracking. Debris located along south railing of north sidewalk. Trees overhanging sidewalks at most approach quadrants. (10/20) Large hollow sounding areas at the west and east reference lines have grown in size and now include the entire sidewalk area. Moisture may have entered through the joint causing undermining of the supporting soil. Elevation difference of 1.5" at west reference line. Significant map cracking. Debris located along south railing of north sidewalk. (10/18)
6. Deck Bottom Surface (SIA-58B)		N	N	(10/22) (10/20) (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

7. Deck (SIA-58) 6 6 7 Minor hairline cracking. Minor patches. Deck is 6" concrete wearing surface integral with the adjacent box beams. Epoxy overlay installed in 2021. (10/22)
 Minor hairline cracking. Delaminations found on deck. Two minor spalls/delaminations on west approach slab at west reference line. Areas of delaminated concrete total 96 sft, primarily in the east most span. Deck is 6" concrete wearing surface integral with the adjacent box beams. (10/20)
 Minor hairline cracking. Nine delaminations found on deck. Two minor spalls/delaminations on west approach slab at west reference line. Areas of delaminated concrete total 96 sft, primarily in the east most span. Deck is 6" concrete wearing surface integral with the adjacent box beams. (10/18)

8. Drainage (10/22)
 (10/20)
 (10/18)

SUPERSTRUCTURE

10/18 10/20 10/22

9. Stringer (SIA-59) 6 6 6 Beam ends at north fascia beam at piers recently patched. Edge spall at north fascia beam end at west abutment. Moisture at west abutment where beam joint has small stalactites. No missing grout between beams. Edge spall at north fascia beam end at east abutment. Longitudinal cracking and edge delamination at north fascia beam at east span. Vegetation is allowing this area to retain moisture and should be cleared. Longitudinal cracking on underside and exterior face with delaminations, approximately 3 feet, at north fascia beam at west span. (10/22)
 Spall at north fascia beam end, west pier, west beam with exposed exterior strand. Hairline vertical cracking and delamination at north fascia beam end, east pier, west beam. Rust stains at north fascia beam end, east pier, east beam. Hairline horizontal cracking at south fascia beam, west pier, east beam. Hairline horizontal cracking at south fascia beam, east pier, west beam. Moisture at west abutment where beam joint has small stalactites. No missing grout between beams. (10/20)
 Spall at north fascia beam end, west pier, west beam with exposed exterior strand. Hairline vertical cracking and delamination at north fascia beam end, east pier, west beam. Rust stains at north fascia beam end, east pier, east beam. Hairline horizontal cracking at south fascia beam, west pier, east beam. Hairline horizontal cracking at south fascia beam, east pier, west beam. Moisture at west abutment where beam joint has small stalactites. No missing grout between beams. (10/18)

10. Paint (SIA-59A) 9 N N (10/22)
 (10/20)
 (10/18)

11. Section Loss N N N (10/22)
 (10/20)
 (10/18)

12. Bearings 6 9 6 Overhanging elastomeric bearing pad at north fascia beams at abutments and south fascia beams at piers, but provides full support. (10/22)
 Overhanging elastomeric bearing pad at north fascia beams at abutments and south fascia beams at piers, but provides full support. (10/20)
 Overhanging elastomeric bearing pad at north fascia beams at abutments and south fascia beams at piers, but provides full support. (10/18)


SUBSTRUCTURE

10/18 10/20 10/22

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

13. Abutments (SIA-60)	8	8	8	Minor hairline cracks. No spalls or delaminations found. Trees are growing under both abutments and in the riprap slope protection between the WB and EB structures. There is a sidewalk located under the west span between the abutment and the water. (10/22) Minor hairline cracks. No spalls or delaminations found. Trees are growing under both abutments and in the riprap slope protection between the WB and EB structures. There is a sidewalk located under the west span between the abutment and the water. (10/20) Minor hairline cracks. No spalls or delaminations found. Trees are growing under west abutments and in the riprap slope protection between the WB and EB structures. There is a sidewalk located under the west span between the abutment and the water. (10/18)
14. Piers (SIA-60)	7	7	7	Minor hairline vertical cracks present. No spalls or delaminations. Concrete scaling on upstream side of west pier nosing. (10/22) Minor hairline vertical cracks present. No spalls or delaminations. Concrete scaling on upstream side of west pier nosing. (10/20) Minor hairline vertical cracks present. No spalls or delaminations. Concrete scaling on upstream side of west pier nosing. (10/18)
15. Slope Protection	6	6	6	Trees are growing between EB and WB abutments. Riprap recently added at west end. Banks are heavily armored with riprap. (10/22) Trees are growing between EB and WB abutments. Geotextile fabric exposed on west end due to missing riprap. Banks are heavily armored with riprap. (10/20) Trees are growing between EB and WB abutments. Geotextile fabric exposed on west end due to missing riprap. Banks are heavily armored with riprap. (10/18)
16. Channel (SIA-61)	7	7	7	Channel banks and bottom appear stable. (10/22) Channel banks and bottom appear stable. (10/20) Channel banks and bottom appear stable. (10/18)
17. Scour Inspection	7	7	7	Stream cross sections obtained in 2020. No scour noted. (10/22) Stream cross sections obtained. No scour noted. (10/20) Stream cross sections obtained. (10/18)

APPROACH

	10/18	10/20	10/22	
18. Approach Pavement	6	6	6	HMA pavement on west approach is newer. HMA spalls present at east approach slab/pavement joint with some areas patched. East approach HMA has multiple sealed cracks. Concrete approach slab cracks have been sealed. (10/22) HMA pavement on west approach is newer. HMA spalls present at east approach slab/pavement joint with some areas patched. East approach HMA has multiple sealed cracks. Concrete approach slab has a wide longitudinal crack at the centerline that is sealed. (10/20) HMA pavement on west approach is newer. HMA spalls present at east approach slab/pavement joint with some areas patched. East approach HMA has multiple sealed cracks. Concrete approach slab has a wide longitudinal crack at the centerline that is sealed. (10/18)
19. Approach Shoulders Sidewalks	6	6	6	Heavy vegetation along east HMA sidewalk. Patches in sidewalks at both ends. (10/22) Heavy vegetation along east HMA sidewalk. NW HMA sidewalk is 1.5" lower than the concrete approach sidewalk. (10/20) Heavy vegetation along east HMA sidewalk. NW HMA sidewalk is 1.5" lower than the concrete approach sidewalk. (10/18)
20. Approach Slopes				(10/22) (10/20) (10/18)
21. Utilities				Street light poles on top of outer railing. Protective collar at base of poles are cracked and mislocated. (10/22) Street light poles on top of outer railing. Protective collar at base of poles are cracked and mislocated. (10/20) Street light poles on top of outer railing. Protective collar at base of poles are cracked and mislocated. (10/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovlly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing



22. Drainage Culverts	(10/22)
	(10/20)
	(10/18)

MISCELLANEOUS

Guard Rail

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

STRUCTURE INVENTORY AND APPRAISAL

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

Bridge History, Type, Materials	
27 - Year Built	1994
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	2021
43 - Main Span Bridge Type	5 05
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	8
80 - Post Type	1
107 - Deck Type	1
108A - Wearing Surface	1
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	0
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	56.1
49 - Structure Length	168
50A - Width Left Curb/SW	11.2
50B - Width Right Curb/SW	0
33 - Median	1
51 - Width Curb to Curb	25.9
52 - Width Out to Out	41
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/20/2022
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	1
58 - Deck Rating	7
58A/B - Deck Surface/Bottom	7 N
59 - Superstructure Rating	6
59A - Paint Rating	N
60 - Substructure Rating	7
61 - Channel Rating	7
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000068012 94
19 - Detour Length	4
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	2
29 - ADT	11250
30 - Year of ADT	2015
32 - Appr Roadway Width	24.9
32A/B - Ap Pvt Type/Width	4 25
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	25.9
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	1
109 - Truck %	5
110 - Truck Network	0
114 - Future ADT	12950
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	1
36B - Rail Transition	1
36C - Approach Rail	1
36D - Rail Termination	1
67 - Structure Evaluation	6
68 - Deck Geometry	2
69 - Underclearance	N
71 - Waterway Adequacy	8
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	5

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	L
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	1
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	5
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	35 1
76 - Length of Improvement	168
94 - Bridge Cost	16
95 - Roadway Cost	0
96 - Total Cost	16
97 - Year of Cost Estimate	2013

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.98
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.85
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.79
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (WB)	42.2871 / -83.7254	814021200124B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1994 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / ABO5	5 Stable w/in footing




No inspections available for bridge key 814021200124B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

WORK RECOMMENDATIONS

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)		
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

ABO5

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Pedro Trana	DLZ Michigan, Inc.	24	10/20/2022

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Brush Cut	M	Remove trees and vegetation at abutments and over approach sidewalks.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

SCOUR CRITICAL BRIDGE ACTION PLAN

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (WB)	42.2871 / -83.7254	814021200124B01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	
HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1994 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / ABO5	5 Stable w/in footing



No plan available for bridge key 814021200124B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

LOAD RATING ASSUMPTIONS

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)
Feature HURON RIVER	Length / Width / Spans 168 / 41 / 3	Owner City: ANN ARBOR(0212)	
Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing



Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/20/2022

Deterioration:

None that impacts capacity

Most Recent Year Construct / Reconstruct / Overlay: 2021

History of Work Impacting Load Rating:

None. Epoxy overlay added in 2021; however, increase in dead load on structure is negligible (thin overlay).

Superstructure Component: 5 Prestressed Concrete **Beam fy:** ksi **Beam f'c / fb:** 5.0 ksi

Composite: Yes **Number of Beams:** 13 **Shop Drawings Verified:** No

Beam Size(s) & Names (each span): (13) 27" deep x 36" wide; 3 spans

Deck: **Thickness (in.):** 6.0 **Fy / f'c:** 60.0 / 4.0 ksi **Deck Design Load > H15:** Yes

Wearing Surface: **Mat'l:** Concrete **Thickness (in.):** 6.0 **Unit Weight (pcf.):** 150.0

LEFT

CENTER

RIGHT

Barrier: Type / Weight (plf.): Bike Railing / 128.0 Barrier Type 5 + / 500.0 Barrier Type 5 / 500.0

Sidewalk: Width / Thick (in.): 11.92 / 12.0 / 11.92 / 12.0

Clear Roadway (ft.): 26.0

Additional Loads:

1600 plf for 12' sidewalk; 574 lb internal diaphragms, 5 per span.

Unique Factors That Affect Capacity:

None


Analyzed By: DLZ

Date: 11/08/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

LOAD RATING SUMMARY

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
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Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

Compliance Issue:	None		
Compliance Verified:	No		
Analysis Program:	ConSpan		
Analysis Program Version:	10.00.01.20		
Rating Considers Field Condition of Members:	Yes	Inspection Date:	10/20/2022

Controlling component and failure mode:

Span 1, interior beam, positive flexure

NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.98
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.85
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.79
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: DLZ	Date: 11/08/2018
Checked By: DLZ	Date: 11/15/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD (WB)	42.2871 / -83.7254	814021200124B01	Fair Condition(6)
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HURON RIVER	168 / 41 / 3	City: ANN ARBOR(0212)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.5 MI EAST OF WALL ST	1994 / / / 2021	Brighton(3)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
University(6) / Washtenaw(81)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	10/20/2022 / ABO5	5 Stable w/in footing




No inspections available for bridge key 814021200124B01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11070

OUTSTANDING WORK

Facility FULLER ROAD (WB)	Latitude / Longitude 42.2871 / -83.7254	MDOT Structure ID 814021200124B01	Structure Condition Fair Condition(6)	
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Location 0.5 MI EAST OF WALL ST	Built / Recon. / Paint / Ovly. 1994 / / / 2021	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	Last NBI Inspection 10/20/2022 / ABO5	Scour Evaluation 5 Stable w/in footing	

WORK RECOMMENDATIONS

OTHER				
Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date

Comments

Remove trees and vegetation at abutments and over approach sidewalks. (Pedro Trana 03/21/2023)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

NBI INSPECTION

AXTJ

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/09/2023

GENERAL NOTES

Rehab project completed in late summer 2015. Visual inspection without the use of the MDOT Reach-all or Amtrak Flagging.


DECK

	10/19	10/21	10/23	
1. Surface (SIA-58A)	7	7	6	<p>Concrete overlay placed on entire deck surface in summer 2015. Some minor delaminations and diagonal cracking along the west reference line. Map cracking is present throughout, worse at the east end. Delamination and cracking in center lane at east expansion joint. Transverse and diagonal hairline cracks in acute corners at ends of deck. Three, 3 inch dia. spall in EB outside lane, center span. (10/23)</p> <p>Concrete overlay placed on entire deck surface in summer 2015. Some minor delaminations and diagonal cracking along the west reference line. Map cracking along the east expansion joint, in the two WB lanes. Delamination and cracking in center lane at east expansion joint. Transverse and diagonal hairline cracks in acute corners at ends of deck. One, 3 inch dia. spall in EB outside lane, center span. (10/21)</p> <p>Concrete overlay placed on entire deck surface in summer 2015. Some small delaminations along the west reference line. Two areas of map cracking in the center span, near center of roadway; 1 near west end, 1 approx. midspan. Transverse and diagonal hairline cracks in acute corners at ends of deck. One, 3 inch dia spall in EB outside lane, center span. (10/19)</p>
2. Expansion Joints	7	7	7	<p>Expansion joint placed on deck and sidewalks in 2015 above west set of pin and hangers. Minor dirt and debris along the joint. The joint had standing water. (10/23)</p> <p>Expansion joint placed on deck and sidewalks in 2015 above west set of pin and hangers. Minor dirt and debris along the joint. (10/21)</p> <p>Expansion joint placed on deck and sidewalks in 2015 above west set of pin and hangers. (10/19)</p>
3. Other Joints	7	7	6	<p>Joints placed at east set of pin and hangers in 2015 and at ends of bridge. Some joint material missing at west and east joints at HMA/concrete deck location. (10/23)</p> <p>Joints placed at east set of pin and hangers in 2015 and at ends of bridge. Some joint material missing at west and east joints at HMA/concrete deck location. (10/21)</p> <p>Joints placed at east set of pin and hangers in 2015 and at ends of bridge. Some joint material missing at west and east joints at HMA/concrete deck location. (10/19)</p>
4. Railings	7	7	6	<p>Vertical hairline cracks with some leaching spaced at 3' increments and at baseplate connections in concrete portion. Map cracking throughout. Minor spalls, rusting, and leaching. Repairs made at steel rail end connections and at expansion and other joints. Steel railing portion was cleaned, hot-dip galvanized and coated in 2015. Some areas of patched concrete in north railing are beginning to crack. The patched steel rail end connections have spalled for 2/3 rails in the southeast endwall. (10/23)</p> <p>Vertical hairline cracks with some leaching spaced at 3' increments and at baseplate connections in concrete portion. Minor spalls, rusting, and leaching. Repairs made at steel rail end connections and at expansion and other joints. Steel railing portion was cleaned, hot-dip galvanized and coated in 2015. Some areas of patched concrete in north railing are beginning to crack. (10/21)</p> <p>Vertical hairline cracks with some leaching spaced at 3' increments and at baseplate connections in concrete portion. Minor spalls, rusting, and leaching. Repairs made at steel rail end connections and at expansion and other joints. Steel railing portion was cleaned, hot-dip galvanized and coated in 2015. Some areas of patched concrete in north railing. (10/19)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

5. Sidewalks or Curbs	5	5	5	<p>Sidewalk on both sides of bridge. Portions of sidewalks and curbs have been repaired at the joints. Map cracking present. Diagonal cracking at skewed ends. Longitudinal cracking in both sidewalks. Curb spalled with exposed rebar in northwest corner. (10/23)</p> <p>Sidewalk on both sides of bridge. Portions of sidewalks and curbs have been repaired at the joints. Map cracking present. Diagonal cracking at skewed ends. Longitudinal cracking in north sidewalk. Curb spalled with exposed rebar in northwest corner. (10/21)</p> <p>Sidewalk on both sides of bridge. Portions of sidewalks and curbs have been repaired at the joints. Map cracking present. Diagonal cracking at skewed ends. (10/19)</p>
6. Deck Bottom Surface (SIA-58B)	6	6	6	<p>Minor spalling, cracking, concrete delaminations and some rusting at exposed reinforcement with efflorescence. The north bays are worse than the south bays. Some minor leaking below fixed joint on deck bottom near pier. Transverse cracking in deck coping. (10/23)</p> <p>Minor spalling, cracking, concrete delaminations and some rusting at exposed reinforcement with efflorescence. Some minor leaking below fixed joint on deck bottom near pier. Transverse cracking in deck coping. (10/21)</p> <p>Minor spalling, cracking, concrete delaminations and some rusting at exposed reinforcement with efflorescence. Some minor leaking below fixed joint on deck bottom near pier. (10/19)</p>
7. Deck (SIA-58)	7	7	6	<p>Top surface received concrete overlay in 2015. Defects on bottom surface remain. Several small concrete delaminations along west reference line. Map cracking in deck surface throughout the bridge, worse at the east end. (10/23)</p> <p>Top surface received concrete overlay in 2015. Defects on bottom surface remain. Several small concrete delaminations along west reference line. Map cracking in deck surface along the east expansion joint. (10/21)</p> <p>Top surface received concrete overlay in 2015. Defects on bottom surface remain. Several small concrete delaminations along west reference line. Two areas of map cracking in center span concrete overlay surface. (10/19)</p>
8. Drainage				<p>(10/23)</p> <p>(10/21)</p> <p>(10/19)</p>

SUPERSTRUCTURE

	10/19	10/21	10/23	
9. Stringer (SIA-59)	7	7	7	<p>Beam ends have been painted 5' each side of both sets of pin and hangers in center span. The south fascia beam in east span has a slight negative camber. Rust remains on beams adjacent to newly painted areas, but no section loss. The original paint system is failing near the abutments. Graffiti on beams near abutments. (10/23)</p> <p>Beam ends have been painted 5' each side of both sets of pin and hangers in center span. The south fascia beam in east span has a slight negative camber. Rust remains on beams adjacent to newly painted areas, but no section loss. Graffiti on beams near abutments. (10/21)</p> <p>Beam ends have been painted 5' each side of both sets of pin and hangers in center span. The south fascia beam in east span has a slight negative camber. Rust remains on beams adjacent to newly painted areas, but no section loss. Graffiti on beams near abutments. (10/19)</p>
10. Paint (SIA-59A)	7	7	6	<p>Primer coat is bubbling in locations where it has not flaked off away from painted beam ends at pin and hangers. Zone painting has small, localized failures in beam 9S at west pin and beams 5S, 6S, and 7S at east pin. Original paint system is failing near abutments. (10/23)</p> <p>Primer coat is bubbling in locations where it has not flaked off away from newly painted beam ends. (10/21)</p> <p>Primer coat is bubbling in locations where it has not flaked off away from newly painted beam ends. (10/19)</p>
11. Section Loss	2	2	2	<p>Beam ends have been painted and pitted areas remain beneath paint. (10/23)</p> <p>Beam ends have been painted and pitted areas remain beneath paint. (10/21)</p> <p>Beam ends have been painted and pitted areas remain beneath paint. (10/19)</p>
12. Bearings	7	7	6	<p>Rockers are in alignment at piers. Bearings are close to the west pier face at Pier 2. Abutment bearings have mild corrosion. (10/23)</p> <p>Rockers are in alignment at piers. Bearings are close to the west pier face at Pier 2. (10/21)</p> <p>Rockers are in alignment at piers. Bearings are close to the west pier face at Pier 2. (10/19)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

SUBSTRUCTURE

	10/19	10/21	10/23	
13. Abutments (SIA-60)	7	7	7	Few hairline cracks. Few spalls in backwall typically on north and south sides of beams have mostly been repaired. Minor separation between top of slope paving and west abutment face at north end. Wingwalls have minor hairline cracks. Graffiti covered. Minor water leakage in backwall in SE quadrant. Tree immediately behind SE wingwall. (10/23) Few hairline cracks. Few spalls in backwall typically on north and south sides of beams have mostly been repaired. Minor separation between top of slope paving and abutment face. Wingwalls have minor hairline cracks. Graffiti covered. Minor water leakage in backwall in SE quadrant. (10/21) Few hairline cracks. Few spalls in backwall typically on north and south sides of beams have mostly been repaired. Minor separation between top of slope paving and abutment face. Wingwalls have minor hairline cracks. Graffiti covered. Minor water leakage in backwall in SE quadrant. (10/19)
14. Piers (SIA-60)	7	7	7	No spalls noted in pier caps; one delaminated concrete area on east pier cap. Hairline cracks across top of crashwalls. 12.6 sft delamination at Pier 1 and 9.5 sft delamination at Pier 2. Small areas of exposed rebar on top of crashwalls. Graffiti covered. (10/23) No spalls noted; one delaminated concrete area on east pier cap. Hairline cracks across top of crashwalls. 12.6 sft delamination at Pier 1 and 9.5 sft delamination at Pier 2. Small areas of exposed rebar on top of crashwalls. Graffiti covered. (10/21) No spalls noted; one delaminated concrete area on east pier cap. Hairline cracks across top of crashwalls. 12.6 sft delamination at Pier 1 and 9.5 sft delamination at Pier 2. Small areas of exposed rebar on top of crashwalls. Graffiti covered. (10/19)
15. Slope Protection	7	7	7	Minor separation between top of slope paving and west abutment, north half. Steep slope paving. Heavy vegetation and trees along edges of slope paving. (10/23) Minor separation between top of slope paving and west abutment, north half. Steep slope paving. (10/21) Minor separation between top of slope paving and west abutment, north half. Steep slope paving. (10/19)
16. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
17. Scour Inspection	N	N	N	(10/23) (10/21) (10/19)

APPROACH

	10/19	10/21	10/23	
18. Approach Pavement	7	7	7	Some open cracks and minor deterioration of west approach at reference line. Approach pavement has settled in the north lanes. Sealed cracks in east approach. (10/23) Some open cracks and minor deterioration of west approach at reference line. Sealed cracks in east approach. (10/21) HMA at both ends of bridge and in good condition. Some sealed cracks and cracked surface present. (10/19)
19. Approach Shoulders Sidewalks	8	7	7	Approach sidewalks adjacent to bridge reference lines has been replaced or is in good condition. Crack in northeast quadrant. Minor settlement (<= 7/8") in northwest quadrant. (10/23) Approach sidewalks adjacent to bridge reference lines has been replaced or is in good condition. Crack in northeast quadrant. Minor settlement (<= 7/8") in northwest quadrant. (10/21) Approach sidewalks adjacent to bridge reference lines has been replaced or is in good condition. (10/19)

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

BRIDGE SAFETY INSPECTION REPORT

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

20. Approach Slopes (10/23)
(10/21)
(10/19)

21. Utilities
Light pole on south side of bridge has damaged cover plate. Light poles also present on north side, but just off of the bridge. Multiple conduits present in north and south bays. Conduits in south bay are damaged in two locations near the west abutment and are dripping water onto the slope paving. (10/23)
Light pole on south side of bridge. Light poles also present on north side, but just off of the bridge. Multiple conduits present in north and south bays. (10/21)
Lights on south side of bridge have been removed. Multiple conduits in north and south bays. (10/19)

22. Drainage Culverts (10/23)
(10/21)
(10/19)

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	0
36B. Transitions	0
36C. Approach Guardrail	0
36D. Approach Guardrail Ends	0

Other Items

Item	Rating
71. Water Adequacy	N
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	
Underwater Insp. Method	0

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking


Critical Feature Inspections (SIA-92)

	Freq	Date
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
FULLER ROAD	42.2858 / -83.7342	814021200123R01	Fair Condition(6)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	261 / 81.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.75 MI E OF US-23 BR	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/09/2023 / AXTJ	N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	1982
106 - Year Reconstructed	
202 - Year Painted	1982
203 - Year Overlay	2015
43 - Main Span Bridge Type	3 32
44 - Appr Span Bridge Type	
77 - Steel Type	5
78 - Paint Type	2
79 - Rail Type	3
80 - Post Type	3
107 - Deck Type	1
108A - Wearing Surface	3
108B - Membrane	0
108C - Deck Protection	1

Structure Dimensions	
34 - Skew	60
35 - Struct Flared	N
45 - Num Main Spans	3
46 - Num Apprs Spans	0
48 - Max Span Length	101
49 - Structure Length	261
50A - Width Left Curb/SW	10.5
50B - Width Right Curb/SW	10.5
33 - Median	0
51 - Width Curb to Curb	58
52 - Width Out to Out	81.9
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/09/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	6
58A/B - Deck Surface/Bottom	6 6
59 - Superstructure Rating	7
59A - Paint Rating	6
60 - Substructure Rating	7
61 - Channel Rating	N
62 - Culvert Rating	N

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	0
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	0
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000014303 08
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	5
29 - ADT	18600
30 - Year of ADT	2015
32 - Appr Roadway Width	58.1
32A/B - Ap Pvt Type/Width	5 58.01
42A - Service Type On	5
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	58.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	11
110 - Truck Network	0
114 - Future ADT	20400
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	0
36B - Rail Transition	0
36C - Approach Rail	0
36D - Rail Termination	0
67 - Structure Evaluation	7
68 - Deck Geometry	2
69 - Underclearance	6
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	0
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	2
148 - No. of Pin & Hangers	20

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	2
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	R
55B - Right Horiz Clearance	16.1
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	1
76 - Length of Improvement	0
94 - Bridge Cost	0
95 - Roadway Cost	0
96 - Total Cost	0
97 - Year of Cost Estimate	2017

Load Rating and Posting	
31 - Design Load	9
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.88
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	1.55
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.73
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

SAFETY INSPECTION REPORT - AASHTO ELEMENTS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
FULLER ROAD	42.2858 / -83.7342	814021200123R01	Fair Condition(6)
Feature	Length / Width / Spans	Owner	Operational Status
NORFOLK SOUTHERN RR	261 / 81.9 / 3	City: ANN ARBOR(0212)	A Open, no restriction(A)
Location	Built / Recon. / Paint / Ovly.	TSC	Scour Evaluation
0.75 MI E OF US-23 BR	1982 / / 1982 / 2015	Brighton(3)	N Not Over Waterway
Region / County	Material / Design	Last NBI Inspection	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/09/2023 / AXTJ	



No inspections available for bridge key 814021200123R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

WORK RECOMMENDATIONS

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

AXTJ

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/09/2023


RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Brush Cut	M	Clear brush/vegetation in all four quadrants, remove tree growing along SE wingwall.
Full Paint	M	Full paint when needed.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

LOAD RATING ASSUMPTIONS

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
FULLER ROAD	42.2858 / -83.7342	814021200123R01	Fair Condition(6)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	261 / 81.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.75 MI E OF US-23 BR	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/09/2023 / AXTJ	N Not Over Waterway	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/16/2019

Deterioration:

No impact

Most Recent Year Construct / Reconstruct / Overlay: 2015

History of Work Impacting Load Rating:

Concrete hydro-demolition and scarifying, along with placement of concrete overlay, on deck. The removal and placement thicknesses were the same, so no net change in dead load.

Superstructure Component: 3 Steel Beam fy: 50.0 ksi Beam f'c / fb: ksi

Composite: Yes Number of Beams: 10 Shop Drawings Verified: No

Beam Size(s) & Names (each span): All Spans: W36x182 with cover plates. Span 1: 70'-11 3/8"; Span 2: 100'-10 13/16"; Span 3: 89'-1 15/16".

Deck: Thickness (in.): 10.0 Fy / f'c: 60.0 / 3.0 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: Latex Conc Thickness (in.): 2.0 Unit Weight (pcf.): 150.0

	LEFT	CENTER	RIGHT
Barrier: Type / Weight (plf.):	Steel/Conc / 0.47	/	Steel/Conc / 0.47

Sidewalk: Width / Thick (in.):	140.5 / 10.0	/	140.5 / 10.0
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Clear Roadway (ft.): 58.0

Additional Loads:

Intermediate diaphragms: 0.19k; third points in Span 1; quarter points in Spans 2 and 3. End diaphragms: 0.95k. Conduits: 0.120 klf for ducts, 0.012 klf for supports.

Unique Factors That Affect Capacity:

Analyzed By: Carrie Hamel

Date: 10/21/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

LOAD RATING SUMMARY

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

Compliance Issue: None
Compliance Verified: No
Analysis Program: Merlin Dash
Analysis Program Version: 9.2
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/16/2019
Controlling component and failure mode:

Span 1, Service flexure, Interior beams, 30.96'


NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.88
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	1.55
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.73
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	
MDOT Item 193C - Overload Status	
Analyzed By: Carrie Hamel	Date: 10/21/2019
Checked By: Mark Lessens	Date: 10/21/2019

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
FULLER ROAD	42.2858 / -83.7342	814021200123R01	Fair Condition(6)	
Feature	Length / Width / Spans	Owner		
NORFOLK SOUTHERN RR	261 / 81.9 / 3	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.75 MI E OF US-23 BR	1982 / / 1982 / 2015	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	3 Steel / 32 Multi Str Comp	10/09/2023 / AXTJ	N Not Over Waterway	

No inspections available for bridge key 814021200123R01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 11069

OUTSTANDING WORK

Facility FULLER ROAD	Latitude / Longitude 42.2858 / -83.7342	MDOT Structure ID 814021200123R01	Structure Condition Fair Condition(6)	
Feature NORFOLK SOUTHERN RR	Length / Width / Spans 261 / 81.9 / 3	Owner City: ANN ARBOR(0212)		
Location 0.75 MI E OF US-23 BR	Built / Recon. / Paint / Ovly. 1982 / / 1982 / 2015	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 3 Steel / 32 Multi Str Comp	Last NBI Inspection 10/09/2023 / AXTJ	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

SUPERSTRUCTURE

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Full Paint				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Full paint when needed. (Kyle Slavik 11/16/2023)				

OTHER

Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Brush Cut				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments Clear brush/vegetation in all four quadrants, remove tree growing along SE wingwall. (Kyle Slavik 11/16/2023)				

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

CULVERT SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2954 / -83.7045	MDOT Structure ID 814021200276V01	Structure Condition Good Condition(7)	
Feature PEDESTRIAN/UTILITIES	Length / Width / Spans 29 /	Owner City: ANN ARBOR(0212)		
Location 0.25 MI S OF PLYMOUTH RD	Built / Recon. / Paint / Ovly. 2001 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 1 Concrete / 19 Culvert	Last NBI Inspection 10/11/2023 / 6IR5	Scour Evaluation N Not Over Waterway	

CULVERT INSPECTION

6IR5

Inspector Name Kyle Slavik	Agency / Company Name DLZ Michigan	Insp. Freq. 24	Insp. Date 10/11/2023
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GENERAL NOTES

This structure is a buried tunnel between two (2) U of M buildings, passing beneath Huron Parkway. It consists of two interior sections - one for people to pass between buildings, and a portion that is partitioned to carry several utility pipes between buildings. U of M staff remove several ceiling tiles to allow access to view the bottom side of the tunnel top slab. The load rating calcs consist of several BrR runs due to different concrete material strengths and different depth of earth cover/lane locations.

NBI INSPECTION

	10/19	10/21	10/23	
1. Culvert Rating (SIA-62)	7	7	7	(10/23) (10/21) (10/19)
2. Channel (SIA-61)	N	N	N	(10/23) (10/21) (10/19)
3. Scour	N	N	N	(10/23) (10/21) (10/19)

AASHTO ELEMENTS

(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
<u>Culvert</u>							
241	Re Conc Culvert	362	ft	356 98%	6 2%	0 0%	0 0%

Some transverse cracks noted in the bottom of the top slab, above the ceiling in the main portion of the tunnel. These cracks are narrow/hairline and have been noted for several years, with no changes noted. There are also some similar cracks in the walls and ceiling of the mechanical chase portion of the tunnel. These cracks have also been noted in the past and no changes have taken place. There is no leaching or staining at any of the cracks. There is a small area of map cracking near the east end of the mechanical chase portion.

857	Culvert Joints	2	(EA)	0 0%	0 0%	2 100%	0 0%
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The culvert joints are each one (1) seal, approximately 2-3 inches wide, one at each end of the tunnel where it abuts the adjacent building. These joints have lost some of their adhesive to the concrete walls, but show no signs of leaking. The east joint has one tear in the interior wall of the mechanical chase portion. The west joint has two tears in the interior wall and one in the ceiling of the mechanical chase portion. The joint material is hanging from the ceiling where it is torn.

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	N
36B. Transitions	N
36C. Approach Guardrail	N
36D. Approach Guardrail Ends	N

Other Items


Item	Rating
71. Water Adequacy	N
72. Approach Alignment	8
Special Insp. Equipment	9
Underwater Insp. Method	0

RECOMMENDATIONS & ACTION ITEMS

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

CULVERT SAFETY INSPECTION REPORT

Facility HURON PARKWAY	Latitude / Longitude 42.2954 / -83.7045	MDOT Structure ID 814021200276V01	Structure Condition Good Condition(7)	
Feature PEDESTRIAN/UTILITIES	Length / Width / Spans 29 /	Owner City: ANN ARBOR(0212)		
Location 0.25 MI S OF PLYMOUTH RD	Built / Recon. / Paint / Ovly. 2001 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 1 Concrete / 19 Culvert	Last NBI Inspection 10/11/2023 / 6IR5	Scour Evaluation N Not Over Waterway	

Recommendation Type

Joint Repair

Priority

L


Description

Repair torn portions of the end joints.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
HURON PARKWAY	42.2954 / -83.7045	814021200276V01	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
PEDESTRIAN/UTILITIES	29 /	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.25 MI S OF PLYMOUTH RD	2001 / / /	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	1 Concrete / 19 Culvert	10/11/2023 / 6IR5	N Not Over Waterway	

Bridge History, Type, Materials	
27 - Year Built	2001
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	1 19
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	0
80 - Post Type	
107 - Deck Type	N
108A - Wearing Surface	N
108B - Membrane	N
108C - Deck Protection	N

Structure Dimensions	
34 - Skew	24
35 - Struct Flared	N
45 - Num Main Spans	2
46 - Num Apprs Spans	0
48 - Max Span Length	29
49 - Structure Length	29
50A - Width Left Curb/SW	2
50B - Width Right Curb/SW	2
33 - Median	2
51 - Width Curb to Curb	0
52 - Width Out to Out	
112 - NBIS Length	Y

Inspection Data	
90 - Inspection Date	10/11/2023
91 - Inspection Freq	24
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/Freq	N
93C - Oth Spec Insp Date	
92D - Fatigue Req/Freq	N
93D - Fatigue Insp Date	
176A - Und Water Insp Method	0
58 - Deck Rating	N
58A/B - Deck Surface/Bottom	
59 - Superstructure Rating	N
59A - Paint Rating	
60 - Substructure Rating	N
61 - Channel Rating	N
62 - Culvert Rating	7

Navigation Data	
38 - Navigation Control	N
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brgd Vert Clear	0

Route Carried By Structure(ON Record)	
5A - Record Type	1
5B - Route Signing	5
5C - Level of Service	1
5D - Route Number	00000
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr-Rt	99 99
PR Number	
Control Section	
11 - Mile Point	1
12 - Base Highway Network	0
13 - LRS Route-Subroute	0000046039 04
19 - Detour Length	2
20 - Toll Facility	3
26 - Functional Class	16
28A - Lanes On	4
29 - ADT	13428
30 - Year of ADT	2015
32 - Appr Roadway Width	78.1
32A/B - Ap Pvt Type/Width	5 77.99
42A - Service Type On	1
47L - Left Horizontal Clear	0.0
47R - Right Horizontal Clear	78.0
53 - Min Vert Clr Ov Deck	99 99
100 - STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	2
110 - Truck Network	0
114 - Future ADT	14457
115 - Year Future ADT	2035
Freeway	0

Structure Appraisal	
36A - Bridge Railing	N
36B - Rail Transition	N
36C - Approach Rail	N
36D - Rail Termination	N
67 - Structure Evaluation	7
68 - Deck Geometry	N
69 - Underclearance	N
71 - Waterway Adequacy	N
72 - Approach Alignment	8
103 - Temporary Structure	
113 - Scour Criticality	N

Miscellaneous	
37 - Historical Significance	5
98A - Border Bridge State	
98B - Border Bridge %	
101 - Parallel Structure	N
EPA ID	
Stay in Place Forms	
143 - Pin & Hanger Code	
148 - No. of Pin & Hangers	

Route Under Structure (UNDER Record)	
5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr-Rt	
PR Number	
Control Section	
11 - Mile Point	
12 - Base Highway Network	
13 - LRS Route-Subroute	
19 - Detour Length	
20 - Toll Facility	
26 - Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B - Service Type Under	3
47L - Left Horizontal Clear	
47R - Right Horizontal Clear	
54A - Left Feature	
54B - Left Underclearance	99 99
54C - Right Feature	
54D - Right Clearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B - Right Horiz Clearance	0
56 - Left Horiz Clearance	0
100 - STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

Proposed Improvements	
75 - Type of Work	
76 - Length of Improvement	
94 - Bridge Cost	
95 - Roadway Cost	
96 - Total Cost	
97 - Year of Cost Estimate	

Load Rating and Posting	
31 - Design Load	5
41 - Open, Posted, Closed	A
63 - Fed Oper Rtg Method	6
64F - Fed Oper Rtg Load	2.77
64MA - Mich Oper Rtg Method	6
64MB - Mich Oper Rtg	2.77
64MC - Mich Oper Truck	17
65 - Inv Rtg Method	6
66 - Inventory Load	1.66
70 - Posting	5
141 - Posted Loading	
193 - Overload Class	A

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126		SAFETY INSPECTION REPORT - AASHTO ELEMENTS		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
HURON PARKWAY	42.2954 / -83.7045	814021200276V01	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
PEDESTRIAN/UTILITIES	29 /	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.25 MI S OF PLYMOUTH RD	2001 / / /	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	1 Concrete / 19 Culvert	10/11/2023 / 6IR5	N Not Over Waterway	

NBI INSPECTION **6IR5**

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Kyle Slavik	DLZ Michigan	24	10/11/2023

AASHTO ELEMENTS **(English Units)**

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
<u>Culvert</u>							
241	Re Conc Culvert	362	ft	356 98%	6 2%	0 0%	0 0%

Some transverse cracks noted in the bottom of the top slab, above the ceiling in the main portion of the tunnel. These cracks are narrow/hairline and have been noted for several years, with no changes noted. There are also some similar cracks in the walls and ceiling of the mechanical chase portion of the tunnel. These cracks have also been noted in the past and no changes have taken place. There is no leaching or staining at any of the cracks. There is a small area of map cracking near the east end of the mechanical chase portion.


857	Culvert Joints	2	(EA)	0 0%	0 0%	2 100%	0 0%
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The culvert joints are each one (1) seal, approximately 2-3 inches wide, one at each end of the tunnel where it abuts the adjacent building. These joints have lost some of their adhesive to the concrete walls, but show no signs of leaking. The east joint has one tear in the interior wall of the mechanical chase portion. The west joint has two tears in the interior wall and one in the ceiling of the mechanical chase portion. The joint material is hanging from the ceiling where it is torn.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

WORK RECOMMENDATIONS

Facility HURON PARKWAY	Latitude / Longitude 42.2954 / -83.7045	MDOT Structure ID 814021200276V01	Structure Condition Good Condition(7)	
Feature PEDESTRIAN/UTILITIES	Length / Width / Spans 29 /	Owner City: ANN ARBOR(0212)		
Location 0.25 MI S OF PLYMOUTH RD	Built / Recon. / Paint / Ovly. 2001 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 1 Concrete / 19 Culvert	Last NBI Inspection 10/11/2023 / 6IR5	Scour Evaluation N Not Over Waterway	


WORK RECOMMENDATIONS

6IR5

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

LOAD RATING ASSUMPTIONS

Facility HURON PARKWAY	Latitude / Longitude 42.2954 / -83.7045	MDOT Structure ID 814021200276V01	Structure Condition Good Condition(7)	
Feature PEDESTRIAN/UTILITIES	Length / Width / Spans 29 /	Owner City: ANN ARBOR(0212)		
Location 0.25 MI S OF PLYMOUTH RD	Built / Recon. / Paint / Ovly. 2001 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 1 Concrete / 19 Culvert	Last NBI Inspection 10/11/2023 / 6IR5	Scour Evaluation N Not Over Waterway	

Rating Considers Field Condition of Members: Yes Inspection Date: 10/16/2019

Deterioration:

No impact

Most Recent Year Construct / Reconstruct / Overlay: 2001

History of Work Impacting Load Rating:

None

Superstructure Component: 1 Concrete Beam fy: ksi Beam f'c / fb: 3.5 ksi

Composite: No Number of Beams: Shop Drawings Verified: No

Beam Size(s) & Names (each span): Flat slab construction. Span 1: 19'-8". Span 2: 9'-4".

Deck: Thickness (in.): 21.0 Fy / f'c: 60.0 / 3.5 ksi Deck Design Load > H15: Yes

Wearing Surface: Mat'l: HMA Thickness (in.): 6.0 Unit Weight (pcf.): 150.0

LEFT CENTER RIGHT

Barrier: Type / Weight (plf.): / / /

Sidewalk: Width / Thick (in.): / / /

Clear Roadway (ft.): 96.0

Additional Loads:

2' to 14' of earth fill.

Unique Factors That Affect Capacity:

Buried culvert/tunnel for pedestrian use (CIP). 2'-14' of earth fill, west to east. 7.12' avg fill over tunnel segments below the roadway (Huron Parkway). Portions of the tunnel are 3.5 ksi concrete and 5.0 ksi.


Analyzed By: Carrie Hamel

Date: 07/20/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

LOAD RATING SUMMARY

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
HURON PARKWAY	42.2954 / -83.7045	814021200276V01	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
PEDESTRIAN/UTILITIES	29 /	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.25 MI S OF PLYMOUTH RD	2001 / / /	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	1 Concrete / 19 Culvert	10/11/2023 / 6IR5	N Not Over Waterway	

Compliance Issue: None
Compliance Verified: No
Analysis Program: AASHTOWare Bridge Rating (BrR)
Analysis Program Version: 6.8.2.3002
Rating Considers Field Condition of Members: Yes **Inspection Date:** 10/16/2019
Controlling component and failure mode:

Shear in the exterior wall.


NEW INVENTORY CODING

NBI Item 63 - Operating Rating Method	6 LFR in Rating Factor
NBI Item 64F - Federal Operating Ratings	2.77
MDOT Item 64MA - Michigan Operating Method	6 LFR in Rating Factor
MDOT Item 64MB - Michigan Operating Rating	2.77
MDOT Item 64MC - Michigan Operating Truck	17
NBI Item 65 - Inventory Rating Method	6 LFR in Rating Factor
NBI Item 66 - Federal Inventory Rating	1.66
NBI Item 41 - Structure Open Posted Closed	A A Open, no restriction
NBI Item 70 - Bridge Posting	5 5 - 100% or more
Posted By	No Posting
MDOT Item 141 - Posted Loading	
MDOT Item 193A - Michigan Overload Class	A
MDOT Item 193C - Overload Status	
Analyzed By: Carrie Hamel	Date: 07/20/2018
Checked By: Mark Lessens	Date: 07/24/2018

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

REQUEST FOR ACTION

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
HURON PARKWAY	42.2954 / -83.7045	814021200276V01	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
PEDESTRIAN/UTILITIES	29 /	City: ANN ARBOR(0212)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.25 MI S OF PLYMOUTH RD	2001 / / /	Brighton(3)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
University(6) / Washtenaw(81)	1 Concrete / 19 Culvert	10/11/2023 / 6IR5	N Not Over Waterway	

No inspections available for bridge key 814021200276V01

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 13126

OUTSTANDING WORK

Facility HURON PARKWAY	Latitude / Longitude 42.2954 / -83.7045	MDOT Structure ID 814021200276V01	Structure Condition Good Condition(7)	
Feature PEDESTRIAN/UTILITIES	Length / Width / Spans 29 /	Owner City: ANN ARBOR(0212)		
Location 0.25 MI S OF PLYMOUTH RD	Built / Recon. / Paint / Ovly. 2001 / / /	TSC Brighton(3)	Operational Status A Open, no restriction(A)	
Region / County University(6) / Washtenaw(81)	Material / Design 1 Concrete / 19 Culvert	Last NBI Inspection 10/11/2023 / 6IR5	Scour Evaluation N Not Over Waterway	

WORK RECOMMENDATIONS

JOINTS				
Request For	Contact/User	Agency/Company Name	Estimated Quantity	Unit
Joint Repair				
Activity	Material	Other Material	Actual Quantity	Unit
Personnel Hours	Equipment			Complete Date
Comments				
Repair torn portions of the end joints. (Kyle Slavik 10/26/2023)				