

Inspector: Bishop,Dwayne

Inspection Date: 01/02/2026

Structure Number: 3102521

Facility Carried: US50

Ohio Bridge Inspection Summary Report

HAM-00050-0376L (3102521)

B.L.04: District District 084938 - WHITEWATER TWP (HAM county)

B.CL.02: Major Maint 01 - State Highway Agency /

225 Routine Main A/B 01 - State Highway Agency /

221 Inspection A/B 01 - State Highway Agency /

5A: Inventory Route 1 00050

7: Facility On US50

6: Feature Ints GREAT MIAMI R;PRIVATE DR

9: Location JUST E OF SR128

Lat, Lon 39.1704 ,-84.75905

Condition

B.C.01: Deck 6

58.01: Wearing Surface 6

B.C.08: Joint 6

B.C.02: Superstructure 5

59.01: Paint & PCS 5

B.C.03: Substructure 5

B.C.09: Channel 6

B.C.11: Scour 7

B.C.10: Channel Prot. 7

B.C.05: Bridge Railing 6

B.C.06: Transitions 6

B.C.07: Bearings 6

B.C.04: Culverts N

Ohio GA 5

Appraisal

B.AP.03: Scour Vul. 0 - Scour appraisal has not been completed.

Geometric

48: Max Span Length (ft) 248.0
49: Structure Length (ft) 893.0
52: Deck Width, Out-To-Out (ft) 40.6
424: Deck Area (sf) 36255.8
32: Appr Roadway Width (ft) 24.0
51: Road Width, Curb-Curb (ft) 32.0
50A: Curb/SW Width: Left (ft) 0
50A: Curb/SW Width: Right (ft) 0
34: Skew (deg) 0
33: Bridge Median 0 - No median
54B: Min Vert Underclearance (ft) 12.08
336A: Min Vert Clrnce IR Cardinal (ft) 18.583
336B: Min V Clr IR Non-Cardinal (ft) 0
578: Culvert Length (ft) 0

Load Posting

41: Op/Post/Closed A - Open
70: Posting 5 - Equal to or above legal loads
70.01: Date
70.02: Sign Type
734: Percent Legal (%) 150
704: Analysis Date 02/28/2020
63: Analysis Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Structure Type

43: Bridge Type 3 - Steel
10 - Truss - Thru
N- Not Applicable
45: Spans Main / Approach 4 / 0
107: Deck Type 1 - Concrete Cast-in-Place
408: Composite Deck N - Non-composite Construction
414A Joint Type 1 2 - Sliding Metal Plate Angle
414B: Joint Type 2 N - None
108A: Wearing Surface 1 - Monolithic Concrete (concurrently placed with structural deck)
N - Not Applicable
422: WS Date 01/01/1989
423: WS Thick (in) 1.2
482: Protective Coating 0 - Other Paint
483: PCS Date 01/01/1992
453: Bearing Type 1 2 - Rockers & Bolsters
455: Bearing Type 2 N - None
528: Foundn: Abut Fwd 1 - Steel H Piles (Other size)
533: Foundn: Abut Rear 1 - Steel H Piles (Other Size)
536: Foundn: Pier 1 1 - Steel H Piles (Other size)
539: Foundn: Pier 2 N - None (Such as most Culverts)

Age and Service

27: Year Built/ 106 Rehab 1959 / 0000
42A: Service On 1 - Highway
42B: Service Under 5 - Waterway
28A: Lanes on 02
28B: Lanes Under 00
19: Bypass Length 4
29: ADT 9907
109: % Trucks (%) 7

Inspections

		Months	
B.IE.03 Routine Insp.		12	01/02/2026
B.IE.03: NSTM Insp.	Y	24	07/10/2024
B.IE.03: UW Insp.	Y	72	08/15/2024
B.IE.03: Special Insp.			
UBIT Insp.	N	0	
Drone Insp.	N	0	

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12-Reinforced Concrete Deck	3 - Mod.	29867	sq. ft.	12727	17100	40	0
CS3: -Spalling of the haunches is typical along the top flanges of the exterior stringers, up to 1-inch deep with no exposed reinforcement noted -A few isolated spalls are present near deck fascia cracks at the floor beams. This typically occurs at the piers. The spalls average 10 inches wide x 20 inches high and are up to 8 inches deep -There is a 2 SF spall with exposed rebar in Span 3 between Panel Points 2 and 3. CS2: -The bridge floor (underside) exhibits extensive transverse, random, and map cracking throughout and there are isolated locations of abrasion dust between the deck soffit and stringer top flange interfaces. No "pumping" was observed between the deck and the stringer top flange. -Moderate vertical, diagonal and random cracks are present to the deck fascia above the floor beams -All cracks are hairline to 1/16" wide.							
805-Wearing Surface - Monolithic Concrete		29867	sq. ft.	26527	3300	40	0
CS3: -There is a 10SF spall at the downstream curb of Span 2 between PP5 and PP6 -There is a broken RPM with pointed metal protruding above the deck in Span 4 near PP2 -Spall in span 2 left lane, 4 sf total. -2 spalls Span 3 left lane, 1 sf each. -Failing asphalt patches in span 4 left lane, 9 sf total. -Several narrow/shallow spalls along the first intermediate joint, 14 sf total. CS2: -The wearing surface exhibits moderate wear throughout the length of the structure -Minor shallow spalls up to 6 inches in diameter exist adjacent to the Pier 2 expansion joint -Several patches exist on the concrete wearing surface. These patches are in good condition but exhibit hairline cracks. -Hairline transverse shrinkage cracks are typical along the gutter line -Sound patches in span 2 mostly in right lane = 25 sf.							
113-Steel Stringer	3 - Mod.	4413	ft.	3728	670	15	0
CS2: -The edges of the exterior stringer top flanges exhibit active surface corrosion with no section loss due to the deck haunches being spalled off. No gaps were noted between the stringer top flanges and the deck floor. This indicates that pack rust has not formed between the stringer and the deck -There are isolated examples of interior stringers exhibiting minor fretting corrosion at the top flange near the deck interface -Isolated exterior stringers exhibit minor painted over pitting, usually less than 1/16-inch deep -Several locations of poor quality welds exist at stringer connections to floor beams and top and bottom flange cover/splice plate end welds. No cracks were observed; however, these are fatigue prone details and should continue to be monitored during future inspections							
515-Steel Protective Coating		19390	sq. ft.	19190	200	0	0
Stringers have minor freckling							
120-Steel Truss	3 - Mod.	1786	ft.	0	1334	452	0

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Verticals CS3: -The verticals exhibit active corrosion with section loss up to 1/8" deep as well as painted over pitting up to 3/16" deep in the splash zone, at the gusset plates, and near former railing attachments -There is a 1" diameter active corrosion hole in the web of L6U6 near L6 of Span 2, North Truss -There are undercut tack welds on the flange of L2U2 of Span 1, South Truss -There is a 1' long deformation in the flange of L7U7 of Span 4, North Truss -Pack rust up to 1/8-inch thick is typical between truss verticals and gusset plates Diagonals CS3: -The diagonals exhibit active corrosion with section loss up to 3/16" deep as well as painted over pitting up to 3/16" deep in the splash zone, at the gusset plates, and near former railing attachments -The diagonals exhibit pack rust up to 1/4-inch thick between the member and the lower gusset plates -The inboard flange of U1L2, Span 4, North Truss is deformed up to 1/2" out of plane -Span 2, South Truss U4L5, 5 feet above M4.5, there is a 1/2-inch inward kink in the bottom inboard flange over an 8-inch length Upper Chord CS3: -There is pack rust up to 1/8-inch thick between lateral bracing connection plates and upper chord cover plates -Excessive rusting between lattice bracing and bottom flanges of upper chord. Severed lattice bracing. CS2: -The upper chord members exhibit minor spot rust and isolated surface corrosion throughout -There is reactivating corrosion between the channels and web plates -A ground/gouged area exists to U7U8 at U7 in Span 2, north truss. This appears to be a rolled defect End Posts: CS3: -In the splash zones, there is laminating corrosion with section loss up to 3/16" on the channels and pack rust up to 1/8" thick under the cover plates -The lacing bars exhibit typically exhibit advanced section loss and deformations due to pack rust -Deterioration to lacing bars at endposts is present at L0U1 in Span 4 NT, U9L10 in Span 2 ST, and L0U1 in Span 3 ST -Isolated locations of painted over pitting up to 1/8-inch deep were observed on the exterior of the channel webs -The endposts typically exhibit pack rust up to 1/8-inch thick between the top cover plate and portal bracing connection plates CS2: -The end posts exhibit surface corrosion throughout Lower Chord CS3: -Pack rust of 1/8" to 1/4" is typical between lower chord plates in all spans with isolated locations up to 3/4" -Pack rust up to 1/4" exists between the lower chord and the gusset plates -Pack rust up to 1" thick is present under the lower chord diaphragm angles -The lower chords exhibit surface corrosion throughout with active pitting up to 3/16" deep on the plate edges and around the diaphragm angles, with laminar corrosion with section loss up to 1/8" deep at the gusset plates -The most significant area of section loss is L0L1 near L0 in Span 2 of the North Truss with 1/8" section loss along the full width of the inboard plate (originally 13/16" thick), approximately 8% of the total cross-sectional area of the member - Several lower chord members exhibit minor bowing and local deformations CS2: -Active surface corrosion is present on the lower chords throughout						
515-Steel Protective Coating	54837	sq. ft.	0	52606	1809	422

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	CS4: -The protective coating system exhibits isolated areas of paint failure and active corrosion to the upper portions of the truss -Throughout the lower chords and splash zone of the trusses the paint system is failing, with active pack rust and corrosion CS3: -The paint on the upper half of the trusses is in good condition with isolated areas of peeling paint and surface corrosion. CS2, Fading and light rust.						
152-Steel Floor Beam	3 - Mod.	1500	ft.	780	390	330	0
	CS3: -Painted over section loss up to 3/16-inch deep exists on the bottom 4 inches of the webs for the end 4 feet of the floor beams -The floor beams typically exhibit painted over section loss up to 3/16-inch deep along the top faces of the top flange near the truss connection -There are isolated areas of laminating corrosion and pack rust at the gusset plate connection angles CS2: -Reactivating corrosion exists at the interface of the floor beam top flange and the deck fascia, and on the bottom flange near the truss connections -Isolated rivet heads at the connection angles exhibit up to 25% section loss. The section loss generally is less than 1/8-inch deep -Several locations of poor quality welds exist at stringer connections to floor beams. No cracks were observed; however, this detail is a fatigue prone detail and should continue to be monitored during future inspections						
515-Steel Protective Coating		8360	sq. ft.	8142	84	92	42
	The paint system for the floorbeams are in good condition with isolated areas of corrosion.						
162-Steel Gusset Plate	3 - Mod.	400	each	28	292	80	0
	CS3: -The gusset plates typically exhibit active pack rust up to 3/16" thick -There is active pack rust up to 3/8" thick under the lower chord splice plates at the gussets -The gusset plates exhibit active laminating and surface corrosion with section loss up to 3/16" deep, as well as painted over pitting up to 3/16" deep -There is laminating corrosion and corrosion holes in the gusset plate stiffening angles behind the bearings in several locations -There are corrosion holes in the top cover plate of L10 in Span 2 of the North Truss -There are corrosion holes in the top cover plate of L8 of Span 1 of both trusses -The gussets exhibit bowing up to 1/4" out of plane; no significant changes in the gusset bowing dimensions were observed compared to the 2020 inspection CS2: -There are improperly installed rivets at U6, Span 2, South Truss 2023 CS3, Span 3, south, L4 (end post L0), warped gusset from pack rust, at bottom forward, (bolted at rear).						
515-Steel Protective Coating		3120	sq. ft.	0	2989	94	37
	CS3/CS4 The protective coating system typically exhibits areas of paint failure and active corrosion at all lower chord gusset plates. CS2 - Fading and light rust.						
210-Reinforced Concrete Pier Wall	3 - Mod.	138	ft.	0	90	48	0

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
	CS3: -Pier 2 has two 4'x4' spalls with exposed rebar on the east face and the west face. There is a debonded rebar in the west face. -There is widespread spalling with exposed rebar on the west face of Pier 4 and a spall with exposed rebar on the east face. There is a debonded bar on the east face. CS2: -The piers typically exhibit full height vertical cracks up to 1/16-inch wide, which typically wrap around the top face of the wall -Pier 2 has map cracking with efflorescence and widespread delamination on both faces -Pier 3 has widespread delaminations and map cracking throughout -Pier 4 has widespread delaminations and map cracking throughout -On all piers, the delaminations are concentrated in the upper half of the pier wall. 1-3-2026 inspection Numerous areas of delams/spalling at all pier walls. Quantities carried over from a Future Project Scope work performed in 2023. Pier1- 564.14 sf Pier 2-380.30 sf Pier 3- 309.29 sf There is also some potential epoxy injection work on some of the cracks. Photos can be found in the I drive- Structures/HAM/US50/0376L under heading SCOPE FUTURE PROJECT- AUGUST 2023						
215-Reinforced Concrete Abutment	3 - Mod.	101	ft.	36	25	40	0
	CS3: -The rear abutment has a 24' wide by 3" deep by full height delaminated area between Stringers 1 and 4; delaminations could not be removed with a hammer and extend 1' onto the beam seat. -There are multiple large spalls and cracks up to 1/2" wide between Stringers 2 and 4 of the rear abutment -The forward abutment has a 12'W x 2.5'H area of delamination and spalls up to 3" deep with exposed rebar between Stringers 3 and 4. The delaminated concrete extends the full width of the bearing seat. -The forward abutment has a 6"W x 1' H spall with exposed rebar under Stringer 2 1/3/2026 inspection Areas of delams/spalls at both forward and rear abutments. F. Abut-38.94 sf R. Abut- 172.89 sf Photos can be found in the I drive- Structures/HAM/US50/0376L under heading SCOPE FUTURE PROJECT- AUGUST 2023 CS2: -There are widespread areas of delamination on the rear abutment seat between Stringers 1 and 4 -There is a 4'W x 2.5'H area of delamination on the forward abutment under Stringers 4 and 5						
234-Reinforced Concrete Pier Cap	3 - Mod.	141	ft.	49	48	44	0
	CS3: -Pier Cap 2 has a 4W' x 3'H spall and a 1'W x 2'H spall on the west face -Pier Cap 3 has a 12'W x 2'H x 2"D spall with exposed rebar on the east face between Stringer 2 and 4 and a 5'W x 4'H spall with exposed rebar on the west face under Stringer 2 -Pier Cap 4 has a 15'W x 3'H area of spalls with exposed rebar with minor section loss on the west face between Stringers 1 and 3 and a 2' x 2' spall on the east face CS2: -The pier caps typically exhibit areas of delamination, minor spalls, and debris accumulation around the bearings						

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ODOT District: District 08

HAM-00050-0376L_(3102521)

Date Built: 07/01/1959

Major Maint: 01 - State Highway Agency

Facility Carried: US50

Traffic On: 1 - Highway

Rehab Date: 07/01/1990

Routine Maint: 01 - State Highway Agency

Feature Inters: GREAT MIAMI R;PRIVATE DR

Traffic Under: 5 - Waterway

Insp. 01 - State Highway Agency

FIPS Code: 84938 - WHITEWATER TWP (HAM county)

Location: DISTRICT 08

JUST E OF SR128

Insp

Resp B:

Inspector

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Reviewer Collett,Brandon

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Wearing Surface (SF)

RPM's are missing or partially missing.

The deck is in satisfactory condition. The deck underside exhibits transverse hairline cracks and isolated hairline map cracking. There is a spall with exposed rebar in the top of deck in Span 3.

Approach

The asphalt approach wearing surface is in good condition, with longitudinal and transverse hairline cracks throughout. The approach guardrail has been replaced since the previous inspection.

Inspector Comments - General Appraisal

Superstructure, Bearings

The superstructure is in fair condition, with active corrosion, pack rust, and section loss throughout the truss members and floorbeams.

Substructure

Pier Walls

1-3-2026 inspection

Numerous areas of delams/spalling at all pier walls. Quantities carried over from a Future Project Scope work performed in 2023.

Pier1- 564.14 sf

Inspector: Bishop,Dwayne
Inspection Date: 01/02/2026

Structure Number: 3102521
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Pier 2-380.30 sf

Pier 3- 309.29 sf

There is also some potential epoxy injection work on some of the cracks. Photos can be found in the I drive- Structures/HAM/US50/0376L under heading SCOPE FUTURE PROJECT- AUGUST 2023

Abutment quantities also carried from the same scope of work

Abutment (FT)

1/3/2026 inspection

Areas of delams/spalls at both forward and rear abutments.

F. Abut-38.94 sf

R. Abut- 172.89 sf

Photos can be found in the I drive- Structures/HAM/US50/0376L under heading SCOPE FUTURE PROJECT- AUGUST 2023

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Inspection Date: 01/02/2026

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Substructure Scour

2024 Dive Inspection Comments:

Culvert

N/A

Inspector Comments - Waterway

Channel Protection

The hydraulic opening is adequate.

Channel

Channel Alignment

The channel is fairly well aligned with the bridge and substructures. There is an island just upstream that splits the river into two channels, each oriented with up to a 10 degree angle of attack with one pier. The secondary channel and Pier 2L were dry at the time of inspection.

Channel Protection

The banks are gradual and heavily vegetated, with mature trees overhanging the channel, and timber debris along the banks. The remains of the upstream and downstream ends of abandoned sheet pile are located 10' downstream of the pier, extending to the downstream end of the right bridge. Aggradation is present along the full length of the forward face and extends approximately 75' downstream. Riprap protection extends up to 15' away from Pier 1 on all faces and consisted of 1' to 3' Dia. rock. The rear

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embankment consisted of 3' to 4' Dia. riprap and the forward embankment consisted of 2" to 4" Dia. river rock. Channel bottom around Pier 1L consists of sand and river rock with up to 2" penetration.

Scour

N/A

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Pictures