

Inspector: Schmidt,Eric

Inspection Date: 11/03/2025

Structure Number: 3110443

Facility Carried: NB IR 75

Ohio Bridge Inspection Summary Report

HAM-00075-1102R (3110443)

B.L.04: District District 0802428

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 00075

7: Facility On NB IR 75

6: Feature Ints W FK MIL CR;GALBRAITH RD

9: Location 1.6 MI N OF SR 4
Lat, Lon 39.211769 ,-84.4578

Condition

B.C.01: Deck 6

58.01: Wearing Surface 7

B.C.08: Joint 4

B.C.02: Superstructure 6

59.01: Paint & PCS 5

B.C.03: Substructure 6

B.C.09: Channel 6

B.C.11: Scour 7

B.C.10: Channel Prot. N

B.C.05: Bridge Railing 5

B.C.06: Transitions 8

B.C.07: Bearings 7

B.C.04: Culverts N

Ohio GA 6

Appraisal

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

Geometric

48: Max Span Length (ft) 100.0
49: Structure Length (ft) 507.0
52: Deck Width, Out-To-Out (ft) 54.3
424: Deck Area (sf) 27530.1
32: Appr Roadway Width (ft) 40.0
51: Road Width, Curb-Curb (ft) 50.0
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) 14.58
336A: Min Vert Clrnce IR Cardinal (ft) 99
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 (%) 135
704: Analysis Date 04/12/2019
63: Analysis Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

Structure Type

43: Bridge Type 4 - Steel continuous
02 - Stringer/Multi-beam or Girder
N- Not Applicable

45: Spans Main / Approach 6 / 0

107: Deck Type 1 - Concrete Cast-in-Place

408: Composite Deck U - Unknown

414A Joint Type 1 8 - Elastomeric Strip Seal

414B: Joint Type 2 N - None

108A: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)
1 - Super Plasticized Dense Concrete (SDC)

422: WS Date 07/01/2009

423: WS Thick (in) 2.7

482: Protective Coating 4 - Paint System B

483: PCS Date 01/01/1984

453: Bearing Type 1 3 - Sliding (Bronze)

455: Bearing Type 2 N - None

528: Foundn: Abut Fwd 4 - Spread Footing (on soil)

533: Foundn: Abut Rear 4 - Spread Footing (on Soil)

536: Foundn: Pier 1 8 - Steel H Piles (HP 12 x 53)

539: Foundn: Pier 2 8 - Steel H Piles (HP 12 x 53)

Age and Service

27: Year Built/ 106 Rehab 1965 / 0000

42A: Service On 1 - Highway

42B: Service Under 6 - Highway - waterway

28A: Lanes on 03

28B: Lanes Under 04

19: Bypass Length 0

29: ADT 61277

109: % Trucks (%) 16

Inspections

		Months	
B.IE.03 Routine Insp.		12	10/28/2025
B.IE.03: NSTM Insp.	Y	24	09/10/2025
B.IE.03: UW Insp.	N		
B.IE.03: Special Insp.			
UBIT Insp.	N	0	
Drone Insp.	Y	24	09/15/2022

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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.	27547	sq. ft.	25989	1520	38	0
	CS2: Unsealed transverse cracks, some with spacing between 1' to 3' apart and efflor. Small spalls in haunch at forward and rear spans. Deck edges have unsealed transverse cracks, some with efflor. CS3: Span 5, bay 5, 1'x1' spall with resteel. Few haunch spalls wider than 6", rear and fwd. spans. Areas of heavier cracking and saturation/stalactites to several OS deck ends. Saturated area at the rear deck end in span 1, bay 4.						
510-Wearing Surfaces		25350	sq. ft.	22813	2535	2	0
	CS2: Unsealed longitudinal cracks <.05in wide. Sound patch at rear exp. jnt. CS3: Delam/shallow spall along intermediate joint.						
107-Steel Open Girder/Beam	3 - Mod.	3546	ft.	2454	1084	8	0
	CS2: Lower half of beam ends at rear abutment are half inch from b/w with one beam touching. Left O/S beam #1 over EB roadway has scrape marks. Beam #4, 5, and box girder over westbound roadway has scrape marks and gouges, along with one stiffener bent at bottom flange. Freckled rust and corrosion have initiated on bottom flanges, few areas of pack rust at bottom of stiffeners. Areas of old LOS and thinning at beam ends. CS3: Areas of heavier old LOS, rear and at intermediate joint of beam 1. 2020, possible fresh paint scrape in span 3, EB Galbraith Rd., bottom flange, bm 2 and 3.						
515-Steel Protective Coating		44860	sq. ft.	11284	27691	5885	0
	Beam ends and pins and hangers painted (rust staining bleeding down from joint). CS2: Fading, chalking, and some exposed primer. CS3: Freckled rust, corrosion and pack rust has initiated. Areas of heavier rust lower areas of vertical stiffeners and around drainage pipes on bottom flange of beams. Spans 1 and 2, beam 1 has areas of loss of protection. Rusting to outside fascia, lower flanges and webs.						
152-Steel Floor Beam	3 - Mod.	272	ft.	259	10	3	0
	CS2: 2023 FC inspection performed by Collins Engineering. (See attached report.) [Pier Cap 3 was in overall SATISFACTORY condition [6]. The pier cap is a built-up steel plate sections of varying thicknesses and heights. The interior of Pier Cap 3 was dry at the time of inspection. Pier 3, on the south side of the bottom flange west of Girder 3, there is a 4" long area of impact damage. Pier 4, Impact damage at north face at girder 5. Pier Cap 4 was in overall GOOD condition [7]. This cap interior was dry at the time of the inspection. Overall, there were no major changes to the conditions from the prior inspection. CS3: Pier 3, on the south side of the bottom flange west of Girder 3, there is a 4" long area of impact damage. Pier 4, impact damage at north face at girder 5.						
515-Steel Protective Coating		20672	sq. ft.	9303	10336	1033	0
	CS2: 2023 FC Report; Pier 3-The interior paint was in GOOD condition [7]. The paint system of the pier cap exterior was in SATISFACTORY condition [6] and exhibited widespread areas of chalking. Pier 4-The paint system of the pier cap interior was in GOOD condition [7] overall. The paint system of the pier cap exterior was in SATISFACTORY condition [6]. CS3: Exterior of Pier 3-There is flaking paint with active surface corrosion along the underside of the bottom flange plate and along the corners. Exterior of Pier 4- There were isolated areas of peeling paint and surface corrosion with no section loss along both flange plates and on the web plates. There are several small areas of minor freckling corrosion and peeling paint on the bottom flange near the bearings and the top flange between the girders. There is moderate surface corrosion on the west end of the pier cap resulting in 5/16" of pack rust between the bottom flange and the pier cap.						

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[illegible]

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ODOT District: District 08

HAM-00075-1102R_(3110443)

Date Built: 07/01/1965

Major Maint: 01 - State Highway Agency

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Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: W FK MIL CR;GALBRAITH RD

Traffic Under: 6 - Highway - waterway

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 02428 - ARLINGTON HTS (HAM county)

Location: DISTRICT 08

1.6 MI N OF SR 4

Insp

Resp B:

Inspector

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Reviewer Collett,Brandon

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Floor/Slab

Transverse cracks throughout all spans, some with efflor. Small haunch spalls at deck ends, few larger spalls with resteel exposed. Area of saturation in bay 4, span 1 at rear deck end.

Bridge Wearing Surface

Longitudinal cracks, few sound, concrete patches. Delam, shallow spall along intermediate joint.

Bridge Railing

Vertical and horizontal cracks. Left rail has long run of horizontal cracks with heavy efflor., rust staining and unsoundness. Left rear rail has material covering surface from previous spill due to collision. Open 2022 thru 2024; WO 128988 submitted for loose concrete on west rail over WB traffic.

Drainage

Some grates completely clogged and several partially clogged. Layered rust to bottom of several downspouts. Debris in shoulders with some water ponding, left.

Expansion Joint

Cracks in headers and some sound concrete patches fwd. Rear has failing concrete and asphalt patches in left lanes. Leakage at intermediate joint.

Approach

Approach Wearing Surface

Few unsealed cracks. Wide transverse crack along rear slab. Transverse and longitudinal cracks in fwd. along slab.

Approach Slabs

Asphalt overlay. Some transverse cracks, narrow patches along rear header failing. Potholes along fwd. header, left lanes. Map cracking fwd. left along pavement joint.

Approach Embankment

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Right fwd. has groundhog hole under slab.

Inspector Comments - General Appraisal

Superstructure, Bearings

Beams/Girders

Some LOS/pitting to beam ends at rear and intermediate joint. Freckled rust/corrosion throughout bottom flanges with pack rust at bottom of stiffeners to exterior face of OS beams. Scrape marks to beam 1 over EB Galbraith Rd. Scrapes to beams 4 and 5 over WB Galbraith Rd., these extend into floor beam at pier 4. Cracks in between bottom flange and beams; 4, 5 and 6 at steel floor beam, pier 3. (REVIEWER NOTE: Cracks between the bottom flange of Pier 3 at Beam 6 south side, Beam 5 north side and Beam 4 north side were found during the fracture critical inspections measuring 1.5", 1.5" and 1.0" respectively.) 2014; Rear beams 1, 3, 4, 7 against wall. 2016; Only rear, #7 against wall. 2017; Rear beams, 1 and 7 touching, 3 and 4 within 1/4", 5 and 6 within 1", 70 deg. 2018; Rear beams not touching at 38 degrees. 2020; Bm 1, 3, 4 and 7 rear against wall. 2021; Rear, beams 1, 3, 4, 7 touching at 64 degrees.

Floor Beam

Some corrosion to interior of pier 3 at west hatch and areas of corrosion to exterior. Cracks in pier 3 at beams 4, 5 and 6 have not changes since last FC inspection in 2021. Few gouges to bottom flanges; pier 3 at girder 3 and pier 4 at girder 5. 2022, Checked cracks in beams 4 thru 7 in 9/19/2022, no change.

2023: (See attached report.) FC Inspection performed by Collins Engineers Inc. [Pier Cap 3 was in overall SATISFACTORY condition [6]. The pier cap is a built-up steel plate sections of varying thicknesses and heights. The interior paint was in GOOD condition [7] and the interior of Pier Cap 3 was dry at the time of inspection. The paint system of the pier cap exterior was in SATISFACTORY condition [6] and exhibited widespread areas of chalking.] [Pier Cap 4 was in overall GOOD condition [7]. This cap interior was dry at the time of the inspection. Overall, there were no major changes to the conditions from the prior inspection. The paint system of the pier cap interior was in GOOD condition [7] overall. The paint system of the pier cap exterior was in SATISFACTORY condition [6].]

2021 FC Inspection performed by Gannett Fleming. "Based on the 2021 inspection, Pier Cap 3 is in [7, GOOD] condition. Based on the 2021 inspection, Pier Cap 4 is in [7, GOOD] condition." It was noted that previous cracks found in pier 3 at girders 4, 5 and 6 have shown no signs of growth. Random areas of rust to exterior of cap. Interior, top of bottom flange at west hatch, has rust, but no notice of leakage at hatches this inspection.

2019 FC inspection performed by Palmer Engineering on 7 -26 19 Caps rated a 7 and bearings rated 7. S

Inspected by Gannett Fleming 2017. (REVIEWER NOTE: Cracks between the bottom flange of Pier 3 at Beam 6 South side, Beam 5 north side, and Beam 4 north side were found during the fracture critical inspections measuring 1.5", 1.5" and 1.0" respectively.)

Special inspection performed by DJK, of exterior (Pier 3), 12/5/2017, of the area of the lower girder flange and the edge of pier cap lower flange. G-1 thru G-7, found grinder marks and cracks 1" up to 4". 2018-Special Inspections 3/2018 and 12/2018. Special inspection for pier 3 - 11/4/2020 DJK.

Pins and Hangers

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Old LOS around the hanger in the plate. Pins and hangers have been refurbished. Girder 4, 5 and 6, top pin rotating. Girders 1 and 2, bottom pin rotating. Exterior areas have old LOS, minor new rust, and rust stains. Hangers 1 and 2 interior, silicone caulk on the "plate" that is behind the hanger, has an appearance of a crack. Checked in 2022, not a crack. Dirt in the silicone. Few Hanger area plates at girders with old areas of deep LOS.

Diaphragm/X-Frames

LOS to members, mainly in areas of exp. joints and intermediate joint. Rear, bay 4, has perforations in end-frame plate.

Bearings

Some light corrosion to bearing plates. A few abutment bearings have pack rust between shims and plates, some causing movement of plate.

2023 Collins Engineers Report: Pier 3; [The east bearing exhibits minor surface corrosion with some laminating corrosion around the anchor bolts. The west bearing exhibits minor surface corrosion on the masonry plate and anchor bolts. No major changes were observed for this inspection. Both bearing devices for Pier Cap 4 exhibit minor corrosion with no section loss on the masonry plate and anchor bolts. The bearings function as designed. This has not changed since the prior inspection.]

Protective Coating System

Beam ends at abutments and hangers, previously painted. Fading and chalking throughout. Rust and corrosion throughout, some areas of pack rust to exterior face of OS beams at bottom of stiffeners. Rust to webs, mainly exterior beams. Random areas of corrosion to steel pier caps, scrapes/gouges. Up to 13% of paint failing. Left beam has material on OS face from collision that spilled over side of structure.

Utilities

3 light poles, rusting to nuts & anchor bolts. Base cover missing from 1 light pole, covered with tape.

Substructure

Abutments

Spall in rear abutment under bearing, vertical crack fwd., 1/16 inch wide. 1sf delam in fwd. below bearing 6.

Pier Columns

Few minor collision marks.

Pier Walls

Pier 2, footer has 2' of vertical face exposed, rear.

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Pier Caps

Few vertical cracks.

Backwalls

Previous rehab has sloped rear BW away from beam ends but areas are still in contact. Few vertical cracks with spall at left rear.

Substructure Scour

Erosion at pier 2 exposing footer on stream side for a length of 3 feet and a depth of 2.5 feet. Exposed on left side for a length of 6 feet and a depth of 4". Not undermined, but normal stream flow is 5 feet below bottom of footer elevation. Rock has been placed all around the bottom rear side of the pier. Forward right bank is washed out and undercut with tree roots exposed. Rear slope left, minor erosion.

Culvert

Inspector Comments - Waterway

Channel Protection

Channel

Channel Protection

Right fwd. bank of channel shows some deep erosion to slope adjacent to pier 2. Right rear channel has some erosion to bank.

Scour

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Bridge Inspection Report

Pictures