

Inspector: Bishop,Dwayne

Inspection Date: 10/02/2025

Structure Number: 3101215

Facility Carried: RAMP TO I71 SB

Ohio Bridge Inspection Summary Report

HAM-00042-0257R (3101215)

B.L.04: District District 0815000 - CINCINNATI (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 00071

7: Facility On RAMP TO I71 SB

6: Feature Ints US42*N;RAMP=I71*N-US42*N

9: Location W OF EDEN PARK

Lat, Lon 39.116761 ,-84.50015

Condition

B.C.01: Deck 7

58.01: Wearing Surface 7

B.C.08: Joint 7

B.C.02: Superstructure 7

59.01: Paint & PCS 7

B.C.03: Substructure 7

B.C.09: Channel N

B.C.11: Scour N

B.C.10: Channel Prot. N

B.C.05: Bridge Railing 7

B.C.06: Transitions 5

B.C.07: Bearings 7

B.C.04: Culverts N

Ohio GA 7

Appraisal

B.AP.03: Scour Vul. Not over Waterway

Geometric

48: Max Span Length (ft) 127.0

49: Structure Length (ft) 330.0

52: Deck Width, Out-To-Out (ft) 30.3

424: Deck Area (sf) 9999

32: Appr Roadway Width (ft) 28.0

51: Road Width, Curb-Curb (ft) 28.0

50A: Curb/SW Width: Left (ft) 0

50A: Curb/SW Width: Right (ft) 0

34: Skew (deg) 15

33: Bridge Median 0 - No median

54B: Min Vert Underclearance (ft) 15.25

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 (%) 161

704: Analysis Date 07/01/1983

63: Analysis Method 7 - Allowable Stress (AS) rating reported by rating factor (RF) method using MS18 loading.

Structure Type

43: Bridge Type 4 - Steel continuous

02 - Stringer/Multi-beam or Girder

N- Not Applicable

45: Spans Main / Approach 3 / 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 3 - Latex Concrete or similar additive

N - Not Applicable

422: WS Date 05/30/1996

423: WS Thick (in) 1.7

482: Protective Coating 5 - Paint System OZEU

483: PCS Date 07/01/2010

453: Bearing Type 1 2 - Rockers & Bolsters

455: Bearing Type 2 4 - Elastomeric (Plain)

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

533: Foundn: Abut Rear 1 - Steel H Piles (Other Size)

536: Foundn: Pier 1 1 - Steel H Piles (Other size)

539: Foundn: Pier 2 4 - Spread Footing (on Soil)

Age and Service

27: Year Built/ 106 Rehab 1969 / 0000

42A: Service On 6 - Overpass structure at an interchange or second level of a multilevel interchange

42B: Service Under 1 - Highway, with or w/out pedestrian

28A: Lanes on 01

28B: Lanes Under 03

19: Bypass Length 1

29: ADT 2380

109: % Trucks (%) 11

Inspections

B.IE.03 Routine Insp. 12 10/02/2025

B.IE.03: NSTM Insp. Y 24 06/20/2026

B.IE.03: UW Insp. 0

B.IE.03: Special Insp.

UBIT Insp. N 0

Drone Insp. N 0

Inspector Bishop,Dwayne

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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.	10010	sq. ft.	8104	1906	0	0
	CS2: Unsealed transverse cracks, some with effl, spaced 10'-20'. Hairline map cracks over crossframes. Full depth sound patch at left rear, span #1. A couple old haunch spalls at ends of beams. A couple small areas of unconsolidated concrete. Deck edges have unsealed transverse cracks, few with efflor. 2 form rods left in place at left rear and a couple stalactites.						
510-Wearing Surfaces		9240	sq. ft.	8145	1050	45	0
	CS2: A couple very small shallow spalls/popouts. A couple 20'L longitudinal cracks near CL in span 1 @ 2 out from pier cap and along left shoulder. Several random transverse cracks throughout. CS3: Longitudinal unsound crack, left, open >.06in. A couple cracks at rear expansion are unsound						
107-Steel Open Girder/Beam	3 - Mod.	1320	ft.	1310	10	0	0
	CS2: Span 2, girder 3, bay 3, between crossframe 3 & 4 vert., stiffener deflected near bottom girder flange, up to approx. 1/2" deflect. Old LOS to exterior beam ends.						
515-Steel Protective Coating		22478	sq. ft.	22472	0	6	0
	CS3: Some rust between steel pier cap and bottom flange of OS beams.						
205-Reinforced Concrete Column	3 - Mod.	4	each	3	1	0	0
	CS2: Pier 1, column 2, facing span 1 - vert. sealed crack approx. 1'-6" length.						
521-Concrete Protective Coating		502	sq. ft.	502	0	0	0
215-Reinforced Concrete Abutment	3 - Mod.	63	ft.	50	12	1	0
	CS2: Unsealed vertical crack at rear abutment at construction joint. Horizontal cracks with efflor.; spall/delam at right rear corner and top in bay 1. Vertical cracks in rustication grooves. CS3: Few cracks with rust staining.						
521-Concrete Protective Coating		252	sq. ft.	252	0	0	0
231-Steel Pier Cap	3 - Mod.	69	ft.	0	69	0	0
	Fracture Critical Inspection: June 9 and 16, 2021 Performed by Gannett Fleming. June 20 & 21, 2023 FC Inspection performed by Collins engineering. CS2: Consultant 2021 & 2023; Pier Cap 1 is in GOOD CONDITION [7] overall. Although it did rain during the inspection, there was moisture evident throughout the entire cap. There appears to be heavy condensation on the top flange inside the cap at all bays causing areas of active light to moderate rust throughout, along with some water ponding at the east end. The interior of the pier cap also exhibits locations of tri□axial welds where the stiffener welds meet the top/bottom flange to web welds. Several retrofits were performed prior to the 2010 inspection to address fatigue prone deficiencies. PCS also rated "7" for interior and exterior. (See attached report) 2025-Consultant's inspection report is on file in I drive. Summary Based on the inspection, the NSTM Member, Pier 1 Cap of Bridge No. HAM□42□0257R and its associated fatigue prone details are in GOOD condition [7] overall. The recommendations for maintenance of the pier cap are presented in the report.						
515-Steel Protective Coating		5589	sq. ft.	5589	0	0	0

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
234-Reinforced Concrete Pier Cap	3 - Mod.	26	ft.	23	3	0	0
	CS2: Few small shallow spalls in concrete cap.						
521-Concrete Protective Coating		364	sq. ft.	364	0	0	0
300-Strip Seal Joint	3 - Mod.	61	ft.	39	22	0	0
	CS2: Minor debris in joints. Patches to headers and a couple hl cracks.						
311-Movable Bearing	3 - Mod.	14	each	5	6	3	0
	CS2: Rear abut., bearing #1 - shim extended beyond face of wall by approx. 1" to 3". Masonry plate edge is @ edge of wall. Rear bearings 2-4 also extend slightly over face of abutment. Rusting to a couple masonry plates. Light rust on bearing 1,2 and 4 at forward abutment.						
321-Reinforced Concrete Approach Slab	3 - Mod.	1568	sq. ft.	1282	277	9	0
	CS2: Unsealed cracking and small spalls along slab/header joints. (Not cut for BW top.) DuraPatch placed to seal cracks in slabs at header joints. Left and right fwd. has short diagonal cracks at corners along pavement joint that are delamed. CS3: Shallow 1' spalls at left and right along header joint in rear slab. Spall at left fwd. and spall/delam at left rear. Map cracking along right edge line.						
331-Reinforced Concrete Bridge Railing	3 - Mod.	660	ft.	333	311	16	0
	CS2: Numerous vertical cracks every 2-4 feet both sides. CS3: Left & right forward transition rail with up to 1 1/2 " W vertcial crack 8" from expansion joint, left side vertical resteel visible. Right starting to spall at expansion joint area. Few areas of collision damage.						
521-Concrete Protective Coating		5280	sq. ft.	5280	0	0	0
815-Drainage	3 - Mod.	3	each	1	0	2	0
	CS3: 2 scuppers & downspouts clogged, with vegetation growing in them. East downspout at pier 1 column has perf and leaking.						
830-Abutment Backwall	3 - Mod.	63	ft.	36	19	8	0
	CS2: Left fwd. BW at beam 1 has 3.5' by 1' w delam/unsound. CS3: Backwall at right fwd. has large spall with resteel exposed. Top of backwall overlaid with approach slab & no joint cut between the two, result is cracking along header/approach slab joint.						
521-Concrete Protective Coating		315	sq. ft.	315	0	0	0

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ODOT District: District 08

HAM-00042-0257R_(3101215)

Date Built: 07/01/1969

Major Maint: 01 - State Highway Agency

Facility Carried: RAMP TO I71 SB

Traffic On: 6 - Overpass structure at an interchange or second level of a multi-level interchange

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: US42*N;RAMP=I71*N-US42*N

Traffic Under: 1 - Overpass structure at an interchange or second level of a multi-level interchange

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 15000 - CINCINNATI (HAM county)

Location: DISTRICT 08

W OF EDEN PARK

Insp Resp B:

Inspector

Bishop,Dwayne

Inspection Date 10/02/2025

Reviewer Collett,Brandon

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Floors/Slabs

HL transverse cracks in all spans, some with efflor. in span 2 with few HL diagonal at deck ends. Delamed/stained area at rear deck end. Small haunch spalls at ends with transverse cracks in deck edges with efflor. and stalactites.

Wearing Surface

Longitudinal cracks, some open up to 1/8". Transverse cracks randomly throughout. Small pop-outs.

Railing

Vertical cracks left and right. Random collision damage. Approach rails at left and right fwd. have large delams/spalls at expansion joints. (Vegetation/tree limbs hanging over approach railings at fwd.)

Drainage

Few scuppers clogged, vegetation growing from grate. Perforations to downspout at pier 1.

Expansion Joints

Patches in slab headers, debris in joints. Few HL cracks.

Approach

Approach Wearing Surface

New asphalt rear and fwd. in 2018. Transverse crack rear.

Approach Slabs

Cracking and small spalls along headers. Few patches along headers rear and fwd. Delam in fwd. slab, left at pvmt.

Approach Embankment

Minor settlement in left forward shoulder area.

Inspector Comments - General Appraisal

Superstructure, Bearings

Beams/Girders

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Old LOS to beam ends. Small deflection to stiffener, beam 3, in span 2. (Fwd. beams, 2 and 3, upper flange, within 1/2" of touching back wall, beam 4 less than 1/2").

Diaphragm/X-Frames

Perforation (painted over) in forward end frame, bay 3 at beam 4. Freckled rusting to a couple end frames.

Bearings

Rear bearing 1, shim extends over abutment face, 1-3 inches, few others extend slightly. Rust to few abutment bearings. Light rust on bearing 1,2 and 4 at forward abutment.

Protective Coating System

Some minor rust between steel cap, bottom flanges of OS beams.

Substructure

Abutment

Vertical cracks rear and fwd., some with rust staining. Horizontal cracks with efflor. Delam top of rear abutment.

Pier Columns

Pier 1, column has HL vertical cracks.

Concrete Pier Caps

Few small spalls.

Steel Pier Cap

Fractured Critical Inspection in 2019, performed by Gannett Fleming. (See attached report.).

June 20 & 21, 2023 FC Inspection performed by Collins engineering.

2025-Consultant's inspection report is on file in I drive.

Summary

Based on the inspection, the NSTM Member, Pier 1 Cap of Bridge No. HAM-42-0257R and its associated

fatigue prone details are in GOOD condition [7] overall. The recommendations for maintenance of the pier cap are presented in the report.

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Backwalls

Tops of fwd. beams 1, 2 and 3 are 1/2" to 1/4" from backwall, beam 4 top 1/16" at top and 1 3/4" at bottom from backwall. Delam in left fwd. BW and spall to right fwd, resteel exposed.

Wingwalls

Right rear has crack with leakage at both lower & upper portions w/steel showing in lower portion.

Slope Protection

Concrete cracks with up to 1 1/2" settlement.

Culvert

Inspector Comments - Waterway

Channel Protection

Channel

Scour

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Bridge Inspection Report

Pictures