

Inspector: Kent Jr.,Daniel

Inspection Date: 06/24/2025

Structure Number: 3101223

Facility Carried: RMP I71 TO US22/42

Ohio Bridge Inspection Summary Report

HAM-00042-0264R (3101223)

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 RMP I71 TO US22/42

6: Feature Ints I71S RMP/US42/EDEN PARK

9: Location W OF EDEN PARK

Lat, Lon 39.118489 ,-84.499739

Condition

B.C.01: Deck 7

58.01: Wearing Surface 7

B.C.08: Joint 6

B.C.02: Superstructure 5

59.01: Paint & PCS 7

B.C.03: Substructure 6

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 7

B.C.07: Bearings 7

B.C.04: Culverts N

Ohio GA 5

Appraisal

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

Geometric

48: Max Span Length (ft) 106.0

49: Structure Length (ft) 528.0

52: Deck Width, Out-To-Out (ft) 40.3

424: Deck Area (sf) 21278.4

32: Appr Roadway Width (ft) 43.0

51: Road Width, Curb-Curb (ft) 38.0

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

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

34: Skew (deg) 3

33: Bridge Median 0 - No median

54B: Min Vert Underclearance (ft) 31.5

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 (%) 150

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 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 3 - Latex Concrete or similar additive
N - Not Applicable

422: WS Date 08/30/1996

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 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 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 02

28B: Lanes Under 09

19: Bypass Length 2

29: ADT 9785

109: % Trucks (%) 5

Inspections

B.IE.03 Routine Insp. 12 Months 06/24/2025

B.IE.03: NSTM Insp. Y 24 06/24/2025

B.IE.03: UW Insp. N 0

B.IE.03: Special Insp.

UBIT Insp. N 0 11/05/2014

Drone Insp. N 0

Inspector Kent Jr.,Daniel

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12-Reinforced Concrete Deck	3 - Mod.	21252	sq. ft.	18779	2470	3	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++++ ++++++ -The top of deck was walked along the right shoulder for the 2023 inspection. -The deck is in good condition overall. There are minor haunch spalls with exposed rebar chairs. -CS2: The soffit exhibited map and transverse cracks at crossframe locations, and transverse cracks with efflorescence randomly throughout the structure(2470 SF). No major changes overall from the 2022 inspection. -CS3: An isolated location of honeycombing/spall (3SF) with exposed steel reinforcing was noted in Bay 2 near Abutment 2.						
510-Wearing Surfaces		20064	sq. ft.	17481	2583	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++++ ++++++ The wearing surface is in good condition, with minor random cracks and small isolated delaminations at random locations. CS2: Hairline transverse and longitudinal cracks throughout, and minor delamination in the right lane over Span 5. (2583 SF)						
107-Steel Open Girder/Beam	3 - Mod.	3454	ft.	3435	19	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++++ ++++++ CS2: Section loss of up to 1/8in. was observed on the Girder G lower flange and web stiffener behind the rocker bearing at Abutment 2. This is past the bearing and the load has been transferred to the substructure at this location (2LF). - Localized corrosion and water staining is present on the bottom flange splices in Span 2 and the outside beams ends at the forward part of the bridge. This has not changed. (8LF) - The 13th web stiffener in Span 3 (from Pier 4) on Girder G is bent (just north of the sign supports). No change (1LF). - Localized minor distortion (likely construction damage) was noted on the bottom flange of Girder G just north of the south bottom flange transition in Span 4. The east edge of the flange is bent downward, and the west half of the flange is bent upward (8LF). - Sign support brackets are connected to the fascia girder webs north of Pier Cap 3 in Span 4 to support the overhead sign supports for the overhead signs above the roadway. No changes or cracks noted. General: Girders B and C terminate prior to Abutment 2. The superstructure alignment is good with no major defects to note. Isolated locations of tack welds exist between the connection angles and the girder webs at girder connections to the pier caps. Most of the tack welds have been removed (ground down) at these locations. No change. The cross frames are welded and bolted to the vertical stiffeners of the girders.						

Inspector: Kent Jr.,Daniel
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
515-Steel Protective Coating		59566	sq. ft.	59546	14	6	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ CS2: Very minor areas of active corrosion throughout (20SF). CS3: Localized corrosion and water staining is present on the bottom flange splices in Span 2 and the outside beams ends at the forward part of the bridge. Section loss of up to 1/8in. was observed on the Girder G lower flange and web stiffener behind the rocker bearing at Abutment 2. This is past the bearing and the load has been transferred to the substructure at this location.						
205-Reinforced Concrete Column	3 - Mod.	11	each	7	4	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ The west column for Pier Cap 3 has an overhead light and junction box mounted to the north face. CS2: There are isolated spalls and delaminations on the columns, generally at the corners. No exposed rebar was present. The largest is on the west column of Pier 4. (4)						
215-Reinforced Concrete Abutment	3 - Mod.	108	ft.	87	21	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ CS2: Abutment 1: The east end of the bearing seat between Girders 6 and 7 has a deck drainpipe that runs through the stem. It appears that the drainpipe is clogged inside the stem due to water staining and small sediment present on the abutment seat, the breastwall, and down along the slope protection. This is an old comment that does not appear to have changed since the prior inspection. Some minor crack (7LF) are present on the abutment around this area. - Abutment 2: At the corner where the backwall meets the abutment seat, the concrete has poor finish work behind Girders C and D (old comment); there is one errant rebar that sticks up (stem reinforcing is exposed) and minor cracks are present. There is water and rust staining on the backwall and abutment seat due to the leaking joint above. The abutment has previously been sealed and painted (14LF).						
231-Steel Pier Cap	3 - Mod.	180	ft.	125	55	0	0

Inspector: Kent Jr.,Daniel
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4	
No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++ ++++							
The web plates have been retrofit with stress relief drilled holes connected by vertical saw-cuts adjacent to the welded connections of the girder bottom flange tie plates at all girders, 2017. The retrofit for the intersecting welds of the girder interior diaphragm stiffeners to the bottom flange were non-performed due to the welds not intersecting. See inspection report for RFI 5 details. No change to this.							
CS2: Pier 3, corrosion holes are present at the base of the knee braces at the east end of the cap. The northern knee brace corrosion hole measures 5 in. x 5 in and the center brace measures 3 in. high x up to 4-1/2 in. wide (Photographs 29 and 30). This has increased since the prior inspection. Painted over pitting is present in isolated areas on the exterior of the cap and on the interior near the ends. On the interior some of this has reactivated.							
CS2: several minor cracks to the knee braces supporting girders framing into pier caps, see below: Pier 2 -A 1/4 in. long vertical crack was present at the bottom of the fillet weld between the pier cap south web and the east knee brace below Girder G on the west stiffener of the seat connection -A 3/16 in. long vertical crack was present at the bottom of the fillet weld between the pier cap north web and the east knee brace below Girder C on the north cap web plate -A 1/8 in. long vertical crack was present at the bottom of the fillet weld between the pier cap north web and the west knee brace below Girder C Pier 3 -A 3/16 in. long vertical crack was present at the bottom of the fillet weld between the pier cap south web and the east knee brace below Girder B. The crack has not propagated into the base metal and has not changed since the prior inspection -There are minor areas of active corrosion or pitting and various weld defects. Several previous repair areas were not repainted and the bare steel is exposed on cap interiors. (50ft). -There are various gouges, tack welds, weld remnants, undercuts, porosity, backing bars, etc. present on the cap interiors. These are all old comments and have not changed for this inspection. -Triaxial welds are present but no cracks have currently resulted from excessive restraint.							
300-Strip Seal Joint	3 - Mod.	81	ft.	57	24	0	0
No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++ ++++							
CS2: The deck joint over Abutment 1 is leaking in Bay 4 (no change). The deck joint over Abutment 2 is leaking in Bays 3 and 4 (no change). 24LF total							
311-Movable Bearing	3 - Mod.	25	each	13	9	3	0

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4	
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ +++++						
	CS2: Active laminating surface corrosion is present throughout the bearings, usually on the masonry plate (9). Painted over pitting up to 1/16in. deep is present on the masonry plate at Girder D, Abutment 1. Fascia girder bearings exhibit active corrosion with minor soil and debris present. Steel cap pot bearings are in good condition. The bearings overall function as designed. - The bearings at Abutment 2 have active corrosion and rust staining and debris on the bearing and the masonry plate. The bearings appear to function as intended. - The rocker bearings at Abutment 1 were not uniformly in expansion at the time of the inspection. Girders A and G were expanded less than the others. This appears similar to prior inspections. - The rocker bearings at Abutment 2 are in expansion between 8 and 11 degrees at 70F. - The rocker bearing anchor bolt under Girder B at Pier Cap 5 is not fully seated. CS3 - Bearings 1 and 5 at the FWD and bearing 1 at rear have pack rust.						
321-Reinforced Concrete Approach Slab	3 - Mod.	2150	sq. ft.	2062	88	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ +++++						
	CS2: The forward approach slab and the forward approach roadway have a minor vertical misalignment, which is causing minor impact damage to the end of the approach slab. Both approach slabs have a few small spalls/popouts along the edges. Light is present scaling in the forward slab and has not changed. (88 SF)						
331-Reinforced Concrete Bridge Railing	3 - Mod.	1060	ft.	625	435	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ +++++						
	CS2: The parapet was sealed in the past; however, the parapet exhibits minor vertical cracks at intervals spaced 3ft to 5ft throughout. Minor impact scrapes are present. Delaminations are present on the top corner of the left rear parapet, with some minor areas of collision damage (435ft). No major changes overall.						
815-Drainage	3 - Mod.	4	each	2	0	2	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. +++++ +++++						
	- The previously welded brackets to the pier cap webs have been removed as part of past rehabilitation efforts and are now secured via bolted connections. - CS3: The drainage at Abutment 1 is clogged and exhibits rust staining down the abutment wall and section loss/small rust holes at ends of downspout; this is an old comment that has not changed. - CS2: The drainpipes through the slope protection at Abutment 2 have corrosion and section loss up to 1/8in. at the outlets of the pipes. - CS2: Drains and scuppers exhibit signs of being clogged due to debris.						

Inspection Date: 06/24/2025

Structure Number: 3101223

Facility Carried: RMP I71 TO US22/42

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
830-Abutment Backwall	3 - Mod.	108	ft.	100	8	0	0
	No significant changes observed during the GF 2025 NSTM & Routine Inspection. Reference attached NSTM Summary Report for Additional Information. ++++++ ++++++						
	CS2: Minor vertical cracks in both abutment backwalls, along with rust staining in abutment 1 backwall in bay 4. (8")						

Inspector: Kent Jr.,Daniel

Structure Number: 3101223

Inspection Date: 06/24/2025

Facility Carried: RMP I71 TO US22/42

ODOT District: District 08

HAM-00042-0264R_(3101223)

Date Built: 07/01/1969

Major Maint: 01 - State Highway Agency

Facility Carried: RMP I71 TO US22/42

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: I71S RMP/US42/EDEN PARK

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

Inspector

Kent Jr.,Daniel

Inspection Date

06/24/2025

Reviewer

Kent Jr.,Daniel

Insp

Resp B:

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

NO SIGNIFICANT CHANGES

OBSERVED DURING THE GF 2025 NSTM & ROUTINE INSPECTION. REFERENCE ATTACHED NSTM SUMMARY REPORT FOR ADDITIONAL INFORMATION.

+++++

- The top of deck was walked along the right shoulder for the 2023 inspection.
- The deck is in good condition overall. There are minor haunch spalls with exposed rebar chairs.
- The soffit exhibited map and transverse cracks over the crossframes, with efflorescence present randomly along the structure. No major changes overall from the 2022 inspection.
- An isolated location of honeycombing (2SF) with exposed steel reinforcing was noted in Bay 2 near Abutment 2.
- The wearing surface is in good condition, with minor random cracks and small isolated delaminations at random locations.
- The parapet was sealed in the past; however, the parapet exhibits minor vertical cracks at intervals spaced 3ft to 5ft throughout. Minor impact scrapes are present. No major changes overall.
- See the individual element comments for specifics.

Approach

NO SIGNIFICANT CHANGES

OBSERVED DURING THE GF 2025 NSTM & ROUTINE INSPECTION. REFERENCE ATTACHED NSTM SUMMARY REPORT FOR ADDITIONAL INFORMATION.

+++++

- The right shoulder of the approach was walked in 2022.
- The south approach has a few broken up sections, mostly towards the center, with potholes and cold patch repairs present. A few random cracks are present in the asphalt.
- The approach roadway is ravelly but overall has a smooth transition from the approach slab.
- Approach guardrail is in good condition, no defects noted.
- Approach slab visible and has minor cracking and small spalls throughout.
- Trees are present on the roadway shoulder at the west end of Span 1 and the west (right) shoulder in the south approach. These can be cut back.

Inspector: Kent Jr.,Daniel

Structure Number: 3101223

Inspection Date: 06/24/2025

Facility Carried: RMP I71 TO US22/42

Inspector Comments - General Appraisal

Superstructure, Bearings

NO SIGNIFICANT CHANGES

OBSERVED DURING THE GF 2025 NSTM & ROUTINE INSPECTION. REFERENCE ATTACHED NSTM SUMMARY REPORT FOR ADDITIONAL INFORMATION.

+++++

- Superstructure have minor corrosion and pitting to girders and steel pier caps.
- Bearings have minor surface corrosion/pitting to bearings throughout.
- Steel pier caps have areas of corrosion and pitting as well as non-active small cracks in steel knee braces supporting girders. Retrofits were performed in 2017 to address fatigue prone details throughout the three caps. The web plates have been retrofit with stress relief drilled holes connected by vertical saw-cuts adjacent to the welded connections of the girder bottom flange tie plates at all girders, 2017. The retrofit for the intersecting welds of the girder interior diaphragm stiffeners to the bottom flange were non-performed due to the welds not intersecting. See inspection report for RFI 5 details.
- Pier 2 knee brace below Girder G, north web, 1/4" crack in weld, Pier 2 knee brace below Girder C, north web, 3/16" crack, Pier 2 knee brace below Girder C, south web, 1/8" crack in weld, Pier 3 knee brace below Girder B, south web, 3/16" crack in weld. No crack propagation observed during 2021 inspection.
- See the individual element comments for specifics.

Substructure

NO SIGNIFICANT CHANGES

OBSERVED DURING THE GF 2025 NSTM & ROUTINE INSPECTION. REFERENCE ATTACHED NSTM SUMMARY REPORT FOR ADDITIONAL INFORMATION.

+++++

- Substructures have minor vertical cracking throughout pier columns and abutments and some minor spalls in wingwalls.
- Abutments have minor vertical cracking and rust staining in stems and backwalls.
- Wingwalls have minor cracking and some spalls throughout, one with exposed rebar.
- Piers have only minor cracking and very small spalls some pier columns.
- See the individual element comments for specifics.

Non-element substructure comments include:

Slope Protection

Inspector: Kent Jr.,Daniel

Structure Number: 3101223

Inspection Date: 06/24/2025

Facility Carried: RMP I71 TO US22/42

-Under Pier 1 at Column 3, the slope protection has settled up to 4 inches.

-The slope protection around Abutment 1 and the east side of the slope protection at Abutment 2 has light vegetation growth along the joints throughout. Vegetation is starting in the western joint at Abutment 2.

-There is a full length 2in. wide x 1in. deep settlement along one joint of the slope protection under Bay 1.

Wingwalls

-The southwest wingwall has sealed cracks with efflorescence at the west corner of Abutment 1; no change.

-Spalls are present on the wingwalls. These are at: 1.5ft high x 6in. long x up to 2ft deep spall at the southeast wingwall joint with a 4ft long section of missing joint filler; 5ft high x 5in. long x 10in. deep spall at a joint in the southeast wingwall joint approximately 100' south of the abutment; has slightly grown.

-The northeast wingwall could be considered a continuation of Abutment 2 due to proximity to the adjacent bridge abutment.

-Minor spalls/popouts are typical along the wingwalls due to formwork attachments during construction.

-The embankments are in good condition with no major defects.

Culvert

Inspector Comments - Waterway

Channel Protection

Channel

Scour

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 1

Description South abutment



PHOTO 2

Description North abutment

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 3

Description West bridge elevation



PHOTO 4

Description Typical pier 1

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 5

Description Pier 2 and typical superstructure



PHOTO 6

Description Typical condition of abutment bearings

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 7

Description West fascia girder elevation



PHOTO 8

Description Typ. steel pier cap bearing

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 9

Description Typical deck



PHOTO 10

Description Typical deck

Inspector: Daniel Kent Jr.
Inspection Date: 06/24/2025

Structure Number: 3101223
Facility Carried: RMP I71 TO US22/42

Bridge Inspection Report

Pictures



PHOTO 11

Description Typical steel pier cap welded drain pipe connections