2026 Routine Element Level Inspection Report

HAM-00071-00.000L

SFN 3105946, PID 109780

Cincinnati, Ohio

DRAFT

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Prepared by
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Department of Transportation

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AssetWise Bridge Inspection Report

Chapter 1: Introduction

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1.1 BRIDGE DESCRIPTION

HAM-00071-00.000L (SFN: 3105946) carries four southbound lanes of vehicular traffic from Interstate Route 75, Interstate Route 71 (Fort Washington Way), and Third Street to the upper deck of the Brent Spence Bridge (**Figure 1**). The deck width and the number of travel lanes varies as the different ramps converge towards the Brent Spence Bridge. The structure was built by Peneker Construction and opened to traffic in 1963.

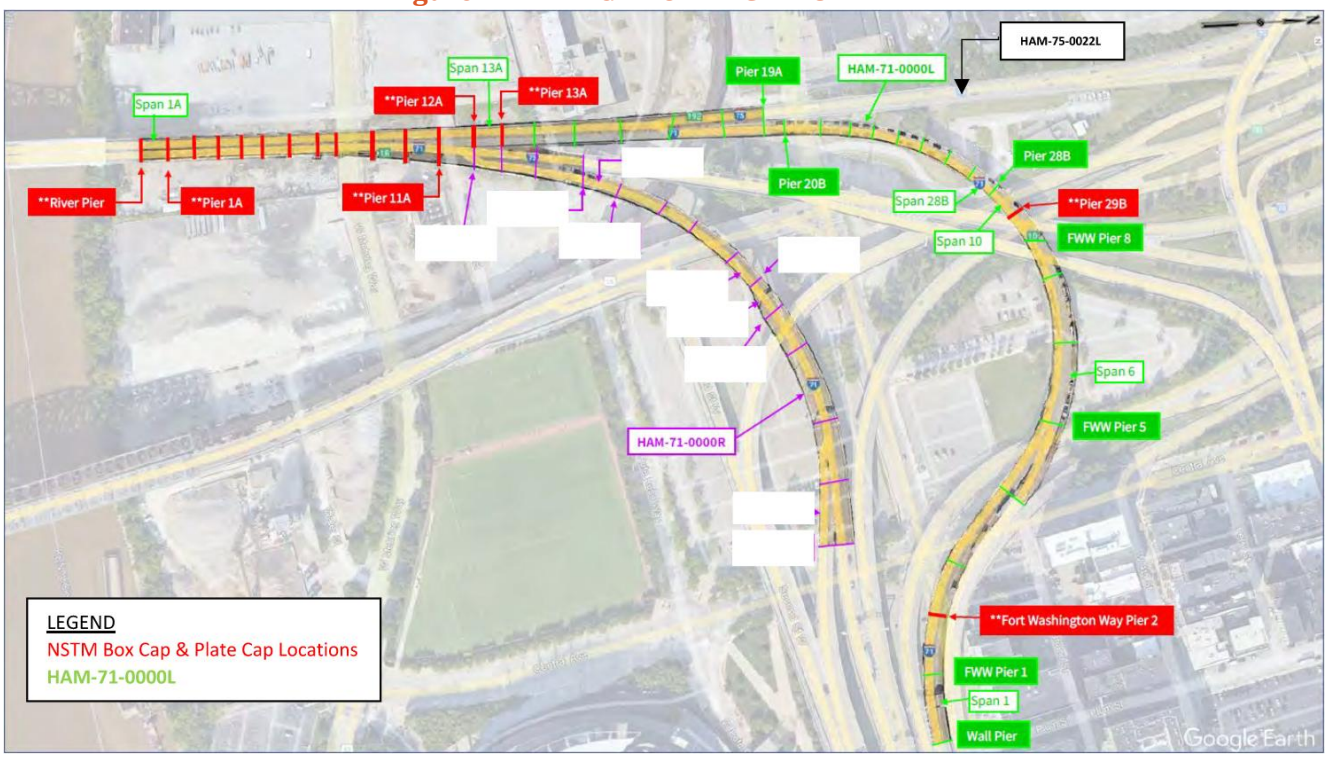
Figure 1—LOCATION MAP



The bridge is a 38-span structure with a total length of approximately 2,683' and consists of ten units separated by expansion joints. The units consist of rolled or welded steel girders that support a reinforced concrete deck continuously between the expansion joints. Cross frames are welded or bolted to the transverse stiffeners at varied spacings in all spans. The steel girders frame into steel pier caps or bear on reinforced concrete substructures, including cap and column piers, hammerhead piers, a wall type pier/ abutment, all with deep concrete pile foundations. The River Pier, Piers 1A-13A, and Pier 29B are Non-Redundant Steel Tension Member steel pier caps on concrete columns; Piers 14A-28B, Pier 1 (FWW) and Piers 3-8 (FWW) are concrete cap-and-column piers; and Pier 2 (FWW) is a Non-Redundant Steel Tension Member steel box pier cap on a concrete hammerhead pier.

The nomenclature for the bridge follows the original 1960 design plans and the 1999 FWW rehabilitation plans. Spans, cross frames and substructure units are labeled from south to north. For components of the bridge decks in all spans, locations are based on the alignment of the original bridge. Substructure units for the original structure are numbered from the River Pier, Pier 1A to Pier 20A, and Pier 21B to Pier 28B. The FWW spans start at Pier 28B and continue through Pier 29B, Pier 8 to Pier 1, and the Wall Pier (**Figure 2**).

Figure 2—BRIDGE NOMENCLATURE



1.2 INSPECTION SCOPE AND PROCEDURE

AECOM performed the inspection from August 19, 2026 to September 16, 2026. The team accessed the bridge using a 125-foot telescoping boom lift, a drone, and on foot. Ground access was coordinated with Walsh-Kokosing as part of the Brent Spence Bridge Corridor construction project. Access was limited for certain areas of the bridge based on active construction. The inspection was performed in accordance with the D08 BI 2025/2026 (A) Consultant Bridge Inspection Scope of Services. Unless noted otherwise, all defects were visually inspected for any changes from the previous inspection report and the dimensions provided were carried forward from the previous inspection report.

- Travis Baker, P.E.: Team Leader, Project Manager
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1.3 CONDITION DESCRIPTIONS AND RATINGS

State and federal guidelines for evaluating the condition of bridges have been developed to promote uniformity in the inspections performed by different teams and at different times. Condition ratings are used to describe the existing, in-place bridge as compared to the as-built condition. The following table (Table 7-2 of the ODOT Bridge Inspection Manual) is a general guide in evaluating the condition of the various members of the bridge. More in-

depth tables and figures can be found in Chapter 7 in the 2025 ODOT Bridge Inspection Manual.

Table 1—CONDITION RATING GUIDELINES (TABLE 7.2-ODOT MBIS 2025)

Condition		Defect Severity				Strength or Performance Affected
		Inherent	Minor	Moderate	Major	
9	Excellent	Isolated				No
8	Very Good	Some				No
7	Good		Some			No
6	Satisfactory		Widespread	Isolated		No
5	Fair			Some	Isolated AND	No
4	Poor			Widespread	Isolated AND	Yes—advanced deterioration of structure. Repairs are necessary.
3	Serious				≥ Isolated	Yes—local failures possible. Urgent repairs are necessary.
2	Critical				≥ Isolated	Yes—severe loss of strength. Emergency repairs are required.
1	Imminent Failure					Yes—bridge is closed pending major repairs or rehabilitation.
0	Failed					Yes—bridge is closed and beyond repair.

Chapter 2: Bridge Condition

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2.1 ITEM B.C.01—DECK CONDITION RATING

2.1.1 Element 12—Reinforced Concrete Deck

The reinforced concrete deck is in SATISFACTORY CONDITION (6) overall. Steel grates and wood panel shielding are installed between the girders in Spans 1A through 13A. The panels were lifted on last year's inspection to gain access for visual inspection of the deck underside in various locations. The underside of the deck within the limits of the grating and wood panels has hairline transverse and map cracking and one isolated 36" wide by 12" long by 3" deep spall with exposed reinforcement in Span 8A between Girders A and B near Pier 8A. Hairline to moderate width cracks with efflorescence typically spaced between 1' to 6' apart are present throughout the deck underside in Spans 14A through 28B. There was limited access to Span 18A due to the presence of the railroad tracks below. This span typically exhibits a dark layer of soot throughout all framing members and underside of the deck. Cracking with efflorescence is typical throughout the underside of deck for the full width of the bays between the girders in the FWW spans (**Figure 3**) and under Girder F in Span 8. Individual cracks are typically spaced 2'-4' apart within each bay.

There are areas of patches and spalls with exposed reinforcement in isolated locations throughout. The most notable locations are as follows:

- Span 19A – 18" long by 24" wide by 2" deep spall with two exposed transverse reinforcing bars between Girders G and H near Pier 19A and an additional 1' spall with exposed reinforcing over the Pier (**Figure 4**).
- Span 20B – 12" diameter by 1" deep spall with one exposed transverse reinforcing bar between Girders A and B at midspan, a 9" diameter by 1" deep spall between Girders D and E just past midspan.
- Span 21B – 18" long by full deck width by 2" deep spall with two exposed transverse reinforcing bars with 1/16" section loss from Girder A through Girder E at midspan cross frames.
- Span 23B – 24" long by 12" wide by 1" deep spall with two exposed transverse reinforcing bars with 1/16" section loss between Girders D and E just past the first cross frame from Pier 22B.
- Span 26B – Spalls up to 36" long by 36" wide by 3" deep with up to four transverse and two longitudinal reinforcing bars exposed between Girders D and E at the second cross frame from Pier 25B (**Figure 5**).
- Span 27B – 48" long by 36" wide by 3" deep spall with four transverse and three longitudinal reinforcing bars exposed between Girders D and E at the first cross frame from Pier 26B.

Haunch spalls are typical along the edge of the top flange of Girders A through E in Spans 20B through 28B. There are typical full depth 48" by 48" concrete patches where the expansion joints were replaced at Piers 4A, 8A, 15A, and 19A. There are two spalls, 24"

wide by 12" long by 3" deep and 24" wide by 24" long by 3" deep along the north side of the patch at the Pier 19A east overhang in Span 20B.

The deck overhangs typically exhibit hairline map cracking and isolated spalls with exposed reinforcement. The following are the most significant locations:

- Span 1A – Two 8" diameter by 1" deep spalls with exposed reinforcement in the east overhang near the River Pier and a 21" long by 12" wide by 1" deep edge spall with exposed reinforcement on the east face of the east overhang near midspan.
- Span 5A – There is a 5" diameter by 1" deep spall with exposed rebar in the east face of the deck at midspan.
- Span 6A – There are two spalls up to 2" long by 4" wide by 2" deep in the underside of the west overhang with exposed reinforcement.
- Span 8A – 24" long by 12" wide by 1" deep spall with exposed reinforcement in the west overhang and a 5' long by 20" wide by 5" deep spall with exposed reinforcement in the east overhang, both near midspan.
- Span 20B – 1’ diameter spall up to 3” deep with exposed rebar near Pier 19.
- Span 20B – 60” long by 36” wide by 4" deep spall with exposed reinforcement in the east overhang 15’ from Pier 19A (**Figure 6**) and a 4’ long by 2’ wide spall with transverse reinforcing exposed on the East overhang near Pier 19A.
- Span 21B - There is a large spall with efflorescence between the structure and HAM-00075-00.220L on the West overhang.
- Span 23B - 18" long by 12" wide by 12" high by 5" deep corner spall with one transverse reinforcing bar exposed in the west overhang at the Pier 23B joint.
- Span 25B – 1’ long by 1’ wide by 4" deep spall with exposed reinforcing bars on the West overhang near Pier 24B.
- Spans 25B and 28B – Areas of wide cracking and heavy efflorescence typically throughout the east bottom edge of the deck.

Figure 3—CRACKS WITH EFFLORESCENCE ON FWW DECK UNDERSIDE (SPAN 3)



Figure 4—18" L X 24" W X 2" DEEP SPALL WITH EXPOSED REBAR BETWEEN GIRDERS G AND H (PIER 19A)



Figure 5—SPALLS UP TO 36" L X 36" W X 3" DEEP WITH EXPOSED REBAR BETWEEN GIRDERS D AND E (SPAN 26B)



Figure 6—5' L X 3' W X 4" DEEP SPALL AT EAST OVERHANG NEAR MIDSPAN (SPAN 20B)



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2.2 ITEM B.C.01.01—WEARING SURFACE CONDITION RATING

2.2.1 Element 510—Wearing Surface

The wearing surface is in SATISFACTORY CONDITION (6) overall with minor spalls and hairline to moderate longitudinal, diagonal, and transverse cracks throughout. Small shallow pop-out spalls less than 6" in diameter are typical throughout all spans (**Figure 7**). There are typical full width transverse hairline cracks spaced 2'-4' apart throughout the FWW spans (**Figure 8**). The high friction treatment of the wearing surface in these spans is worn away in the travel lanes but still present in the shoulders. There are multiple isolated concrete and asphalt patches throughout Spans 6A, 8A, 14A, and 25B. There are several areas of delamination throughout based on the 2020 ODOT Concrete Wearing Surface Delamination Report (available from the District).

Figure 7—THREE POTHOLES UP TO 6" DIAMETER (SPAN 28B)



Figure 8—TYPICAL WEARING SURFACE CONDITION ON FWW SPANS (SPAN 8)



2.3 ITEM B.C.02—SUPERSTRUCTURE CONDITION RATING

The superstructure is in FAIR CONDITION (5) overall. There are localized areas of moderate laminar corrosion with up to 1/8" deep section loss to the top of the bottom flanges, mainly found at the fascia girders. The girders in Spans 15A – 28B exhibit paint failure and active corrosion throughout, with this condition being most advanced on the fascia girders.

2.3.1 Element 107—Steel Open Beams/Girders

The steel beams and girders are in SATISFACTORY CONDITION (6) overall with areas of laminating corrosion and up to 1/8" deep section loss. The girders in Spans 1A – 14A were painted in 2021 and are in good condition overall (**Figure 9**). There is 1/8” painted over pitting on Girder A in Span 4A near Pier 4A. There is also active corrosion on the remaining original spans. Typically, there is up to 3/4" thick painted over pack rust between the girder bottom flange and seat angles at the steel box pier caps in these spans, in some cases the angles are bent up to 2”. The bottom flange of Girder G in Span 1A is bent upward 1/2" over an 18" length. The bottom flange of Girder E and F are bent 3/4” at midspan of Span 17A. There are two 1" diameter holes in the web of Girder F between the bearing stiffeners at the hinge assembly at Pier 4A.

The girders in the remaining original spans typically exhibit minor surface corrosion and freckled rust throughout due to the failed protective coating system. The bottom flanges, lower webs, and transverse stiffeners of the fascia girders in Spans 16A-22B exhibit isolated areas of laminating corrosion with section loss up to 3/16" deep (**Figure 10**). The bottom flange of Girder H in Span 18A exhibits a 7" wide by 3/16" deep area of section loss 22' from Pier 17A. There is laminating corrosion with section loss up to 1/8" on the bottom flange of Girder A of Span 20B adjacent to the timber shielding installed between HAM-75-00.220L and HAM-71-00.000L (**Figure 11**). There is a bent stiffener on the east side of Girder E near Pier 21B in Span 22B. The top flange, stiffeners, and web of Girder A in Span 23B have areas of laminating corrosion with section loss up to 1/8" deep.

The end 10' of the girders at the expansion joints at Piers 15A, 19A, and 23B were cleaned and painted in 2017 and remain in good condition. Painted over pitting up to 1/4" deep is present on the bottom flange of the Span 16A girders at Pier 15A and the Span 19A girders at Pier 19A. There is a 3/4" diameter inactive corrosion hole on all exterior stiffeners of Girder G in Span 16A near Pier 15A. There is a 3" long x 1" wide inactive corrosion hole in the web behind the bearing stiffener of Girder D, Span 19A at Pier 19A. Painted over pitting is present in the lower 3" of the web of Girder A near Pier 23B in Span 24B (**Figure 12**).

There are fatigue-prone welds from previous attachments on the bottom flanges of the girders in Span 15A, 12' from Piers 14A and 15A.

The girders in Spans 1-10 (FWW) are in good condition, with no significant defects noted.

Figure 9—TYPICAL GIRDER CONDITION ON REPAINTED SPANS (SPAN 4A)



Figure 10—LAMINATING CORROSION ON BOTTOM FLANGE (GIRDER A, SPAN 19A)



Figure 11—LAMINATING CORROSION WITH UP TO 1/8" SECTION LOSS ON BOTTOM FLANGE (GIRDER A, SPAN 20B)



Figure 12—PAINTED OVER PITTING ON LOWER 3" OF WEB (GIRDER A, SPAN 24B)



2.3.2 Element 820—Steel Seated-Hinge Assembly

The steel seated-hinge assemblies in Spans 4A, 8A and 12A are in FAIR CONDITION (5). There are isolated areas of painted over section loss on several of the bearing plates. Localized rust staining was observed at the interface of the bearing plates at Girder A in Span 8A near Pier 8A (**Figure 13**).

Figure 13—FASCIA STEEL SEATED-HINGE ASSEMBLY WITH LOCAL RUST STAINING (GIRDER A, PIER 8A)



2.4 ITEM B.C.02.01–PROTECTIVE COATING SYSTEM CONDITION RATING

2.4.1 Element 515—Steel Protective Coating System

The steel protective coating system is paint and is in FAIR CONDITION (5) overall.

As previously mentioned, Spans 1A-14A were painted in 2020-2021; the paint in these spans is in excellent condition. The pier caps were also painted as part of the 2020-2021 paint contract. Some of the steel pier caps have isolated minor rust staining along the bottom of the web.

As part of the 2017 Rehabilitation, all steel members within approximately 10' of the expansion joints at Piers 15A, 19A, and 23B were cleaned and painted (**Figure 14**). The paint in these locations is in good condition.

In the areas of the original spans not recently painted (i.e., Spans 15A-28B), paint failure is typical on all girders with chalking, dulling, flaking, and peeling throughout (**Figure 15**). Surface corrosion is active at all locations where the paint has failed. The fascia girders exhibit the most severe paint condition with complete paint failure to the bottom flanges and bottom portions of the web with areas of moderate to severe surface and laminating corrosion with section loss.

The paint on the FWW spans is typically in good condition with small areas of isolated surface rust throughout.

Figure 14—LOCALIZED PAINTING OF BEAMS IN VICINITY OF EXPANSION PIER (PIER 23B)



Figure 15—TYPICAL PAINT FAILURE AND SURFACE CORROSION (SPAN 26B)



2.5 ITEM B.C.03 – SUBSTRUCTURE CONDITION RATING

The substructure is in FAIR CONDITION (5) overall. The reinforced concrete substructure exhibits isolated areas of spalling with exposed reinforcing and areas with hairline vertical and horizontal cracking. The original bridge substructure consists of twenty-nine reinforced concrete cap-and-column piers, one hammerhead pier, and one wall-type pier. Fourteen of the cap-and-column piers, from Piers River to 13A, feature steel box pier caps, while one, Pier 29B, features a steel web pier cap. The single hammerhead pier at FWW Pier 2 supports a steel box pier cap. The concrete piers in the original spans typically exhibit minor hairline vertical and horizontal cracking, with isolated areas of spalling and exposed reinforcing. Concrete patches and Fiber Reinforced Polymer (FRP) wrapping were present on Piers 5A, 7A, 15A, 19A, 23B, and 28B. Several hairline flexural cracks were observed on the Fort Washington Way concrete pier cap overhangs.

2.5.1 Element 205—Reinforced Concrete Column

The reinforced concrete pier columns are in SATISFACTORY CONDITION (6). Typically, there are isolated minor spalls with exposed reinforcement and hairline cracking throughout. Isolated portions of Piers 5A, 7A, 12A, 15A, 19A, 23B, and 28B were repaired with concrete patches and FRP wrapping as part of the 2017 rehabilitation project. The FRP wrapping is in good condition with only isolated areas of peeling/failing protective coating, most notably at Pier 12A on the East face. Shallow spalls with exposed

reinforcement due to lack of cover are typical at various pier columns at or near deck level. The locations of the more notable spalls with exposed reinforcement are as follows:

- Pier 9A, Column 1 – There is a spall with exposed reinforcing on the Northeast corner under the bearing.
- Pier 11A, Column 2 – There is a 16" high by 9" wide by 8" deep corner spall with one exposed reinforcing bar at the top northeast corner (**Figure 16**).
- Pier 13A, Column 2, South Face – There is a 48" high by 12" wide by 3" deep corner spall with exposed reinforcement (**Figure 17**).
- Pier 16A, Columns 1 & 2, North and South Faces – There are 12" diameter by 1" deep corner spalls at each existing corner protection bracket.
- Pier 17A, Column 1, South Face – Four spalls with exposed reinforcement up to 18" wide by 12" high by 1" deep (total about ten feet below the pier cap) (**Figure 18**).
- Pier 17A, Column 1 and 2 – Spalls around corner armor (**Figure 19**).
- Pier 18A, Column 2 – Erosion present and is associated with a broken/disconnected drainage pipe (**Figure 20**).
- Pier 23B, Column 2, South Face - 72" high by 36" wide by 1" deep spall with exposed reinforcement and minor section loss near the base of the column (**Figure 21**).
- Pier 24B, Column 2, Northwest corner – 40” high by 12” wide by 2” deep spall with exposed reinforcement at base of column (**Figure 22**).
- Pier 29B, Column 2, Top Face - 6" wide by 7" long by 1" deep spall at the masonry plate for the east bearing of Pier Cap 29B.

Figure 16—16" H X 9" W X 8" DEEP CORNER SPALL WITH EXPOSED REBAR AT TOP NORTHEAST CORNER (COLUMN 2, PIER 11A)



Figure 17—48" H X 12" W X 3" DEEP CORNER SPALL WITH EXPOSED REBAR (COLUMN 2, PIER 13A)



Figure 18—FOUR SPALLS WITH EXPOSED REBAR UP TO 18" W X 12" H X 1" DEEP (COLUMN 1, PIER 17A)

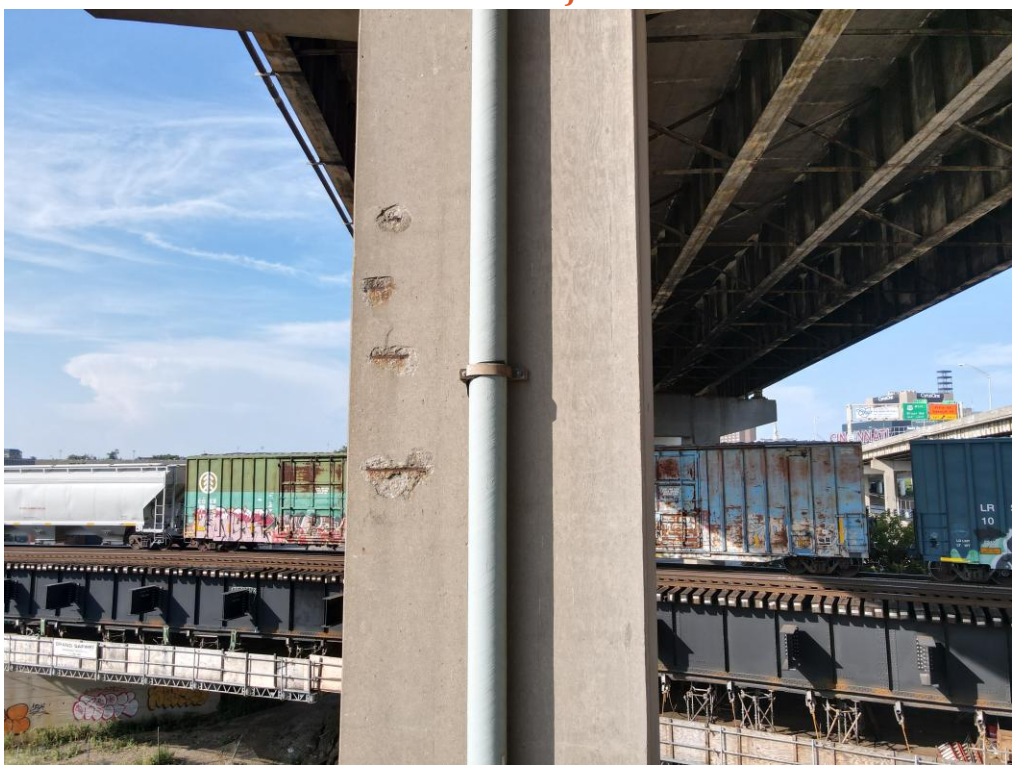


Figure 19—SPALLS AROUND CORNER ARMOR (COLUMN 2, PIER 17A)



Figure 20—EROSION DUE TO DISCONNECTED DOWNSPOUT (COLUMN 2, PIER 18A)



Figure 21—72" H X 36" W X 1" D SPALL WITH EXPOSED REBAR AT BASE (COLUMN 2, PIER 23B)



Figure 22—40" H X 12" W X 2" D SPALL WITH EXPOSED REBAR AT BASE (COLUMN 2, PIER 24B)



2.5.2 Element 210—Reinforced Concrete Pier Wall

The reinforced concrete pier wall is in GOOD CONDITION (7) with no significant deficiencies noted.

2.5.3 Element 231—Steel Pier Cap

The steel pier caps are in FAIR CONDITION (5) overall. The interiors of the steel pier caps were not inspected during the 2026 routine inspection. The steel pier caps at the River Pier and Piers 1A-13A were painted in 2021.

For the original steel box pier caps (**Figure 23**), pack rust up to 1.5" thick is typical between the web plates and flange connection angles and between the bottom flange plates and connection angles. Pack rust up to ½" thick is typical between the web plates and the girder seat angles. There are also isolated areas of pack rust up to 1/8" thick under the top flange plates. There is minor to moderate pack rust at the ends of most caps between the internal angles and flange plates where they are not protected from the elements. Many areas of pack rust were caulked in 2017; the majority of the caulk appears to be functioning as intended. There is an isolated area of reactivating pack rust between the North web plate and the west end plate connection angle of Pier Cap 12A. There are areas of painted-over pitting on the web plates, bottom flange plates, and bottom flange angles up to 1/8" deep. A minor scrape with surface corrosion is present on Pier Cap 10A. There are inactive corrosion holes in the seal plates at the west end of Pier Caps 9A and 10A; these plates are intended to keep moisture and animals out of the cap interior and are not structural members.

The steel single-web pier cap at Pier 29B is in good condition, with minor active surface corrosion on the bottom flange at the bearings and on the bottom flange splice bolts (**Figure 24**).

The steel box pier cap at Pier 2 (FWW) is in very good condition, with no significant deficiencies noted (**Figure 25**).

Figure 23—TYPICAL ORIGINAL STEEL BOX PIER CAP WITH LIGHT CORROSION (PIER 9)



Figure 24—STEEL SINGLE-WEB PIER CAP (PIER 29B)



Figure 25—FWW STEEL BOX PIER CAP (PIER 2)



2.5.4 Element 234—Reinforced Concrete Pier Cap

The reinforced concrete pier caps are in SATISFACTORY CONDITION (6). The concrete pier caps are located at Piers 1-8 (FWW), Piers 14A-20A (original), and Piers 21B-28B (original). The concrete pier caps at Piers 1-8 (FWW) were constructed during the Fort Washington Way Reconstruction Project and are in good condition overall. There is a 2' wide by 2' high by 4" deep corner spall with exposed reinforcement noted in the north overhang of Pier 2 (FWW). Isolated areas between the pier columns and overhangs exhibit hairline vertical cracking with minor efflorescence throughout the FWW pier caps. There are moderate width flexural cracks with rust staining on the south and bottom faces of Pier Cap 4 between the pier columns (**Figure 26**).

During the 2017 rehabilitation project, many of the previously noted delaminations and spalls were repaired on the original concrete pier caps. As part of the same project, many portions of the original piers were partially wrapped with FRP wrapping. The FRP wrapping is typically in good condition with only isolated areas of failing/peeling protective coating at Pier 23B. Typical map cracking was noted on the vertical faces of the original pier caps. There are also typical horizontal hairline cracks near the top of each original pier cap. There are transverse cracks with rust staining along the bottom south edge of the west overhang of Pier Cap 19A. A 1' diameter by 1" deep spall with rust staining was noted on the east face of Pier Cap 15A. The spall is surrounded by two wide longitudinal cracks with rust staining spanning the full length of the east face and extending onto both the south and north faces. There is a 10" high by 4" wide by 1" deep spall on the southeast corner of the Pier Cap 18A east overhang (**Figure 27**). Two 2' long by 1' wide by up to 3" deep spalls with exposed reinforcement were noted on the top of

Pier Cap 27B adjacent to either side of the Girder E bearing. Both spalls extend down from the top face onto either vertical face of the cap; however, there was no loss of bearing area noted at the time of the inspection.

Figure 26—CRACKS WITH RUST STAINING AT PIER CAP UNDERSIDE (PIER 4)



Figure 27—10" H X 4" W X 1" DEEP SPALL ON EAST OVERHANG (PIER CAP 18A)



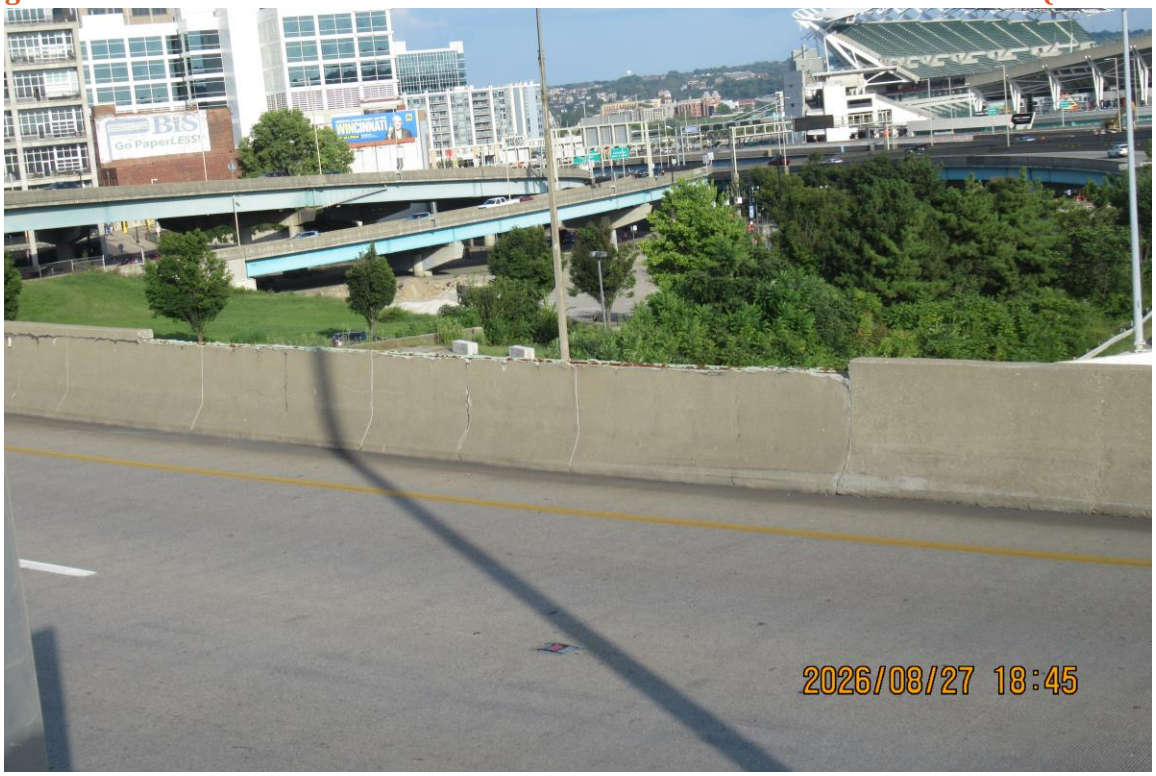
2.6 ITEM B.C.05—BRIDGE RAILING CONDITION RATING

2.6.1 Element 331—Reinforced Concrete Bridge Railing

The reinforced concrete bridge railings are in FAIR CONDITION (5) overall with isolated spalls with exposed reinforcement, isolated minor delaminations, and hairline to wide transverse and longitudinal cracking with efflorescence and rust staining throughout. The exterior face of the railings in all spans typically exhibit full height hairline vertical cracking with efflorescence spaced 1'-2' apart. The interior faces typically exhibit wide longitudinal cracks located approximately 6" below the top edge and full height vertical cracking spaced 1' apart throughout.

There are isolated spalls throughout the railings in the original spans. A 12" long by 6" high by 2" deep spall with exposed reinforcement is present in the top corner of the west railing at the River Pier joint. The spall is surrounded by delaminated concrete and wide longitudinal and vertical cracks with water and rust staining. A large spall with exposed rebar is present along the top of the railing in Span 10 (**Figure 28**) and the top 6” of the railing has a through crack in Spans 1 through 10. The cracked concrete appears to be held in place by the railing top longitudinal reinforcement, but consideration should be given to sounding and/or removing the cracked concrete in spans over traffic, as this could not be accessed during this inspection. Isolated concrete patches are present throughout both railings, typically at the top edge. The patches are sound and in good condition overall.

Figure 28—LARGE SPALL WITH EXPOSED REBAR ALONG TOP OF EAST RAILING (SPAN 10)



2.7 ITEM B.C.07—BRIDGE BEARINGS CONDITION RATING

2.7.1 Element 310—Elastomeric Bearing

The elastomeric bearings are in SATISFACTORY CONDITION (6) overall. Elastomeric bearings are present at Piers 15A, 16A, 19A, and 23B. The bearings typically have some minor areas of surface corrosion and isolated paint failure. The elastomeric bearing pads beneath Girder A and E in Span 23B and Girder A in Span 24B at Pier 23B exhibit minor expansion and rust staining between the layers (**Figure 29**). The remaining bearings showed very few signs of expansion and were in a neutral position.

Isolated bearing pads exhibit minor distortion, however, they do not appear to be sliding on the pier cap. Painted-over pitting is typical throughout the bearing risers in Span 24B at Pier 23B. A painted-over 1" diameter hole was observed in the web of the bearing riser of Girder E at Pier 23B (**Figure 29**).

Previous inspection reports noted that the ends of the Span 24B girders at Span 23B were observed swaying laterally under live load, causing the bearings to rock side-to-side. This movement was not observed, and no evidence of the bearings walking out was observed at the time of the inspection.

Figure 29—EXPANDED ELASTOMERIC BEARINGS AT 85º F WITH 1" DIA. CORROSION HOLE IN BEARING RISER (BEARING E, PIER 23B)



2.7.2 Element 311—Movable Bearing

The movable bearings are in SATISFACTORY CONDITION (6) overall. The original girder rocker bearings typically exhibit paint failure and surface corrosion throughout. Pack rust between the rocker and masonry plate was noted at Bearing A at Pier 14A, Bearing A at Piers 24B and Pier 27B, and Bearing E at Piers 22B and 28B, however no bearing uplift was observed.

The bearings for the steel pier caps were all painted in 2021, but there is minor rust staining on the bottoms of several of the bearing plates. The east bearing of Pier Cap 11A is misaligned, with the south keeper lug of the rocker plate sitting on top of the masonry plate. There are loose anchor nuts at the west bearing of Pier Cap 8A, the east bearing of Pier Cap 12A, and the east bearing of Pier Cap 13A. A bent anchor rod was observed at Bearing E of Pier Cap 28B (**Figure 30**).

Figure 30—BENT ANCHOR ROD (BEARING E, PIER 28B)



2.7.3 Element 313—Fixed Bearing

The fixed bearings are in SATISFACTORY CONDITION (6) overall and typically exhibit paint failure and moderate surface corrosion throughout (**Figure 31**). There are two loose anchor nuts on bearing B at Pier 12A (**Figure 32**). Bearing A at Pier 12A has ½" deformation in the stiffener. Bearings B and A at Pier 13A have loose anchor nuts.

Figure 31—TYPICAL CONDITION OF FIXED BEARINGS (BEARINGS A-E, PIER 17A)



Figure 32—TWO LOOSE ANCHOR NUTS (BEARING B, PIER 12A)



2.7.4 Element 314—Pot Bearing

The pot bearings of the FWW spans are in SATISFACTORY CONDITION (6) overall (**Figure 33**). The pot bearings typically exhibit minor paint failure and moderate to heavy surface corrosion throughout. There are a few instances of the elastomer bulging or becoming extruded from the bearing pot. The anchor rods of the bearings at Pier 5 and Pier 7 are bent. The teflon pad at Bearing 7 on Pier 6 is extruded 6" from the pot bearing.

Figure 33—EXPANDED POT BEARING AT 85º F (PIER 28B)



2.8 ITEM B.C.08—BRIDGE JOINTS CONDITION RATING

2.8.1 Element 300—Strip Seal Expansion Joint

The expansion joints are in FAIR CONDITION (5) overall with minor to heavy debris impaction, deterioration, and isolated areas of leakage. There are strip seal expansion joints located at Piers 4A, 8A, 12A, 15A, 19A, 23B, 28B, 7 (FWW), 4 (FWW), and the Wall Pier. The expansion joints at Piers 4A, 8A, 15A, and 19A were replaced in 2017. All joints typically exhibit minor debris impaction throughout the entire length and minor tears are present at Piers 15A, 23B, 28B (**Figure 34**), and 7 (FWW) (**Figure 35**). Signs of water leakage were noted at these locations.

Figure 34—STRIP SEAL EXPANSION JOINT WITH ACCUMULATED DEBRIS AND TEAR (PIER 28B)



Figure 35—STRIP SEAL EXPANSION JOINT WITH ACCUMULATED DEBRIS (PIER 7)



2.9 OTHER BRIDGE ELEMENTS

2.9.1 Element 815—Drainage

The bridge deck drainage is in POOR CONDITION (4), due to multiple drainpipes being completely or partially clogged at the deck level scupper locations and at the ground level, causing water ponding on the deck. Scuppers that are 100% clogged are located in Spans 3A, 6A, 8A, 9A, 10A, 17A, 18A, 19A, and at the Wall Pier in Span 1 (FWW). The drain grate in the left lane of Span 2A is missing. The drainage grate over the scupper near the east railing at Pier 19A has multiple broken bars.

There are disconnected and misaligned drain boots at Piers 4A, 6A, 8A, 18A, 19A, and 22B (**Figure 36**). There are numerous locations where there is a large gap between the deck drainpipe and the drainpipe attached to the pier columns. The exposed drainage bells are typically fully clogged with debris. The drainpipe T-joint is disconnected on the north face of Column 1 at Pier 12A, and the pipe is cracked, but this condition has not changed from the 2024 inspection. There are completely disconnected downspouts at the ground terminations of Column 2 at Pier 4A and Column 2 at Pier 18A. The missing pipes have caused erosion of the asphalt material below both locations. Various locations throughout are also disconnected from the underground drainage termination, but do not show signs of erosion. Several drainpipes are cracked with corrosion holes through the pipe wall throughout the structure. A corroded drainpipe is present on the east overhang of Pier 17A (**Figure 37**).

Figure 36—DISCONNECTED DRAIN BOOT ON NORTH FACE (COLUMN 2, PIER 19A)



Figure 37—CORRODED DRAINPIPE ON EAST OVERHANG (PIER 17A)



2.9.2 Crossframes and Diaphragms

The diaphragms and cross frames are in good condition with only minor surface corrosion noted throughout the FWW spans (**Figure 38**), and significant paint failure with minor surface corrosion throughout the original spans.

Figure 38—TYPICAL DIAPHRAGMS CONDITION ON FWW SPANS (SPAN 10)



2.9.3 Alignment

Alignment is in good condition without any problems in the vertical or horizontal alignment noted through visual inspection.

2.9.4 Fatigue

The superstructure fatigue prone details are in good condition.

2.10 SIGNS AND UTILITIES

2.10.1 Signs

The structure-mounted sign supports are in satisfactory condition. There is one overhead sign mounted to the structure in Span 1 (FWW) and one in Span 16A (**Figure 39**). There is minor surface corrosion throughout the anchor bolts and cantilever supports at each sign support.

Figure 39—OVERHEAD SIGN SUPPORT (SPAN 16A)



2.10.2 Utilities

The utilities on the structure are in SATISFACTORY CONDITION (6) overall, however there is a utility junction box with areas of 100% section loss throughout the bottom and side plates at Pier 13A. The section loss has exposed the internal electrical wiring, and the box is impeding access to the west pier cap hatch. The junction box at the west end of Pier 26B has active corrosion and missing connections. There are multiple nonfunctioning roadway lights throughout Spans 1A-12A, and one lens is shattered in both Spans 9A and 11A. Some of the light pole handhole covers are missing.

2.11 ITEM B.C.13.01—GENERAL APPRAISAL

Based on the 2026 Routine Inspection, the HAM-00071-00.000L bridge is in FAIR CONDITION (5). The overall rating is controlled by the conditions of the substructure and superstructure. The AssetWise Bridge Inspection Report reflecting the element level condition ratings can be found in Appendix A.

Chapter 3: Recommendations

AECOM

Ohio Department of Transportation

The recommendations below are provided for the HAM-00071-00.000L bridge with respect to its remaining service life of approximately 4 years:

Deck

- Clean debris from clogged drainage scuppers.
- Patch spalls/potholes in the concrete wearing surface.
- Sound and/or remove the cracked concrete on top of the railing in spans over traffic.

Superstructure

- None

Substructure

- Repair disconnected drainage components to prevent continued erosion at Pier 18A.
- Monitor erosion at Pier 18A.

APPENDIX A

AssetWise Bridge Inspection Report

Inspector: Nepal,Prateek
Inspection Date: 09/16/2026

Structure Number: 3105946
Facility Carried: SB IR 71

Ohio Bridge Inspection Summary Report

HAM-00071-0000L_(3105946)

B.L.04: District District 08 15000 - CINCINNATI (HAM county)
B.CL.02: Major Maint. 01 - State Highway Agency /
B.CL.02.02: Rou. Maint A/B 01 - State Highway Agency /
B.CL.02.03: Inspection A/B 01 - State Highway Agency /

Condition

B.C.01: Deck	6
58.01: Wearing Surface	6
B.C.08: Joint	5
B.C.02: Superstructure	5
59.01: Paint & PCS	5
B.C.03: Substructure	5
B.C.09: Channel	N
B.C.11: Scour	N
B.C.10: Channel Prot.	N
B.C.05: Bridge Railing	5
B.C.06: Transitions	6
B.C.07: Bearings	6
B.C.04: Culverts	N
Ohio GA	5

Appraisal

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

Geometric

B.G.01: NBIS Bridge Length (ft)	2683.0
B.G.02: Total Bridge Length (ft)	2683.1
B.G.03: Max Span (ft)	127
B.G.05: Deck Width, Out-To-Out (ft)	40
B.G.16: Calc Deck Area (sf)	107324
B.G.09: Appr Roadway Width (ft)	36.1
B.G.06: Bridge Width, Curb-Curb (ft)	38.1
B.G.07: Curb/SW Width: Left (ft)	0
B.G.08: Curb/SW Width: Right (ft)	0
B.G.11: Skew (deg)	12
54B: Min Vert Underclearance (ft)	15.08
336A: Min Vert Clrnce IR Cardinal (ft)	99
336B: Min V Clr IR Non-Cardinal (ft)	0
B.SP.16.02: 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
B.LR.03: Rating Date 02/07/2000
B.LR.04: Rating Method LFR - Load Factor Rating

5A: Inventory Route 1 00071
7: Facility On SB IR 71
6: Feature Ints USR 42
9: Location OH-KY LINE
Lat, Lon 39.093039 , -84.522619

Structure Type

43: Bridge Type 4 - Steel continuous
02 - Stringer/Multi-beam or Girder
N- Not Applicable
45: Spans Main / Approach 40 / 0
107: Deck Type 1 - Concrete Cast-in-Place
408: Composite Deck U - Unknown
414A Joint Type 1 2 - Sliding Metal Plate Angle
414B: Joint Type 2 N - None
108: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)
3 - MicroSilica
B.SP.10.03: WS Date 07/01/2007
B.SP.10.02: WS Thick (in) 2.8
B.SP.07.01: PCS Type 3 - Paint System A
483: PCS Date 01/01/1978
453: Bearing Type 1 2 - Rockers & Bolsters
455: Bearing Type 2 C - Elastomeric (laminated)
528: Foundn: Abut Fwd 1 - Steel H Piles (Other size)
533: Foundn: Abut Rear N - None (such as most Culverts)
536: Foundn: Pier 1 2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)
539: Foundn: Pier 2 N - None (Such as most Culverts)

Age and Service

B.W.01: Year Built / Rehab	1963 / 0000
42A: Service On	1 - Highway
42B: Service Under	4 - Highway - railroad
28A: Lanes on	03
28B: Lanes Under	08
19: Bypass Length	0
29: ADT	67393
109: % Trucks (%)	15

Inspections

		Months	
B.IE.03 Routine Insp.		12	
B.IE.03: NSTM Insp.	Y	24	09/26/2025
B.IE.03: UW Insp.		0	
B.IE.03: Special Insp.		0	
UBIT Insp.	N	0	04/09/2014
Drone Insp.	N	0	
Inspector	Nepal,Prateek		

Inspector: Nepal,Prateek
Inspection Date: 09/16/2026

Structure Number: 3105946
Facility Carried: SB IR 71

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12-Reinforced Concrete Deck	3 - Mod.	153754	sq. ft.	107221	46108	425	0

CS2:
-Transverse hairline cracks are present throughout the deck underside for the full width of the bay between girders. Spans 1A through 16A exhibit hairline cracking spaced at approximately 6'. Spans 17A through Span 28B exhibit moderate width cracks with efflorescence spaced at approximately 4'-6'.
-The FWW spans typically exhibit minor to moderate cracking with efflorescence throughout the deck underside for the full width of the bay between girders; these cracks are spaced at 2-4' on average.
-Minor to moderate width map cracking is typical throughout the overhangs of the deck.
-Span 8 has heavy efflorescence under Girder F.
-Span 14 has a 1-square foot patched spall.
-Full depth 4' x 4' concrete patches are typical at replaced expansion joints at Piers 4A, 8A, 15A, and 19A.

CS3:
-Span 4 has a 2' L x 1' W spall with exposed reinforcing bars above the grate hinge in Bay 5.
-Span 19A has a 18" long by 24" wide by 2" deep spall with two exposed transverse reinforcing bars between Girders G and H near Pier 19A.
-Span 19A has a 1' diameter spall with exposed reinforcing bars over Pier 18A.
-Span 20B has a 12" diameter by 1" deep spall with one exposed transverse reinforcing bar between Girders A and B at midspan and 9" diameter by 1" deep spall between Girders D and E.
-Span 21B has a 18" long by full deck width by 2" deep spall with two exposed transverse reinforcing bars with 1/16" section loss from Girder A through Girder E, at midspan crossframes.
-Span 23B has a 24" long by 12" wide by 1" deep spall with two exposed transverse reinforcing bars with 1/16" section loss between Girders D and E just past the first crossframe from Pier
22B.
-In Span 26B, Bay 4 there are spalls up to 3' L x 3' W x 3" D with up to four transverse and two longitudinal reinforcing bars exposed.
-In Span 27B, Bay 4 there is a 48" L x 36" W x 3" D spall with four transverse and three longitudinal reinforcing bars exposed.
-In Span 23B, Girders D and E have haunch spalling; Span 24 B Girders A and E have haunch spalling; all girders in Span 20B and 28B have intermittent haunch spalling throughout.

Overhangs
Span 1A -Two 8" diameter by 1" deep spalls with exposed reinforcement in the east overhang near the River Pier and a 21" long by 12" wide by 1" deep edge spall with exposed
reinforcement on the east face of the east overhang near midspan
Span 5A – There is a 5" diameter by 1" deep spall with exposed rebar in the east face of the deck at midspan.
Span 6A – There are two spalls up to 2" long by 4" wide by 2" deep in the underside of the west overhang with exposed reinforcement.
Span 8A – 24" long by 12" wide by 1" deep spall with exposed reinforcement in the west overhang and a 5' long by 20" wide by 5" deep spall with exposed reinforcement in the east
overhang, both near midspan.
-The east overhang patch at Pier 19A has spalling adjacent to the north side of the patch, two spalls (24" wide by 12" long by 3" deep and 24" wide by 24" long by 3" deep)
-Span 20B on the east overhang there is a spall measuring 5' L x 3' W x 4" D with exposed reinforcement.
-Span 20B has a 4' x 2' x 4" deep area of spalling and delamination with exposed transverse reinforcing bars on the east overhang.
-Span 21B has a large spall with efflorescence at the west overhang between the 00L and 22L bridges.
-Span 23B has 18" long by 12" wide by 12" high by 5" deep corner spall with one transverse reinforcing bar exposed in the west overhang at the Pier 23B joint
-There are areas of minor to moderate cracking with heavy efflorescence and spalling in the west overhang of Span 23B and the east overhangs of Span 25B to 28B.
-In Span 25, there is a 1' x 1' x 4" spall near Pier 24B on the west overhang.

Inspector: Nepal,Prateek
Inspection Date: 09/16/2026

Structure Number: 3105946
Facility Carried: SB IR 71

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
510-Wearing Surfaces		156158	sq. ft.	13209	142168	781	0
	CS2: -There are locations of hairline to moderate transverse, diagonal, and longitudinal cracks. -There are isolated concrete patches that are starting to break up and deteriorate in Spans 6A and 8A. Asphalt patches were present at 8A in 2025 inspection; these are in satisfactory condition. -The bridge deck was sounded by ODOT in December 2020, multiple delaminated areas were found throughout the wearing surface. -There are typical gouges, scrapes, and popouts throughout 10% of the deck. CS3: -Minor pop-out spalls were present throughout the surface of the wearing surface. -There are multiple small (6” diameter) spalls in the west lane of Span 14A and Span 25B. -There are three potholes up to 6" diameter in the east lane of Span 28B. -There are asphalt patches in Spans 6A and 8A; these are in satisfactory condition.						
107-Steel Open Girder/Beam	3 - Mod.	21338	ft.	13434	7569	335	0
	CS2: -There is a 3/4" bend at the midspan on the bottom flanges of Girders E and F at Span 17. -There is a minor deformation (approximately 1” out of plane over 6”) to the bottom flange of Girder G in Span 1A. -The original girders typically exhibit minor surface corrosion and freckled rust where the paint system has failed, particularly on the fascia girders. -There is a bent stiffener on the east side of Girder E near Pier 21B in Span 22B. -There are isolated areas of spot rust on the fascia girders in the FWW spans. -Typical isolated 2" deformations on the lower angles of the stringers. CS3: -Painted-over pack rust up to 3/8” thick is typical on the girder support angles at the steel pier caps. -In Span 4A, there is painted- over pitting up to 1/8” deep on the bottom flange of Girder G at the hinge assembly and at Girder A near Pier 4A, and two 1" diameter holes in the web of Girder F at the hinge assembly. -Painted-over pitting up to 1/4” deep is present on the bottom flange of the Span 16A girders at Pier 15A and the Span 19B girders at Pier 19B. -Girder G has typical inactive section loss on the lower 3/4" of all its exterior stiffeners. -Area of 3/16" deep section loss bottom flange of Girder H in Span 18A -There is a 3” x 1” inactive corrosion hole in the web behind the bearing of Girder D, Span 19A at Pier 19A. -The bottom flanges, lower webs, and transverse stiffeners of the fascia girders in Spans 16A-22B exhibit isolated areas of laminating corrosion with section loss up to 3/16” deep. -The top flange, stiffeners, and web of Girder A in Span 23B exhibits areas of laminating corrosion with section loss up to 1/8” deep. -There is laminating corrosion with section loss up to 1/8” on the bottom flange of Girder A of Span 20B adjacent to the timber falsework installed between HAM-00075-00.220L and HAM-00071-00.000L. -There is painted over pitting on the lower 3" of the web of Girder A in Span 24B.						
515-Steel Protective Coating		225402	sq. ft.	157681	22561	33858	11302
	CS2: -Chalking, dulling, and flaking are typical throughout (Spans 15A-28B). -There are small areas of spot rust throughout the FWW spans. CS3: -Paint peeling is typical throughout the structure. CS4: -The paint has failed throughout much of Spans 15A-28B. -Surface corrosion is active at all locations where the paint has failed, and rust staining is evident on the protective system remaining. -The fascia girders exhibit the most severe paint condition with complete paint failure to the bottom flanges and bottom portions of the web with areas of moderate to severe surface and laminating corrosion.						
205-Reinforced Concrete Column	3 - Mod.	80	each	38	33	9	0

Inspector: Nepal,Prateek
Inspection Date: 09/16/2026

Structure Number: 3105946
Facility Carried: SB IR 71

Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
CS2: -Pier 2A, Column 1 has map cracking at the bearing on the north face. -Pier 5A, Column 1 has efflorescence with scorch marks. -Pier 12A, Columns 1 and 2 have minor cracking and peeling FRP on the east faces. -Pier 12A, Column 1 has a moderate width vertical crack at the top near the bearing. -Exposed rebar due to lack of cover is common throughout. -Moderate width cracking and minor spalling is typical throughout. -Isolated delaminations on columns. CS3: -Pier 1A Column 1 has minor delamination and spall near base. -Pier 9A, Column 1 has a corner spall with exposed reinforcing on the west end of the northeast corner under bearing. -Pier 11A Column 2 – There is a 16" high by 9" wide by 8" deep corner spall with one exposed reinforcing bar at the top northeast corner. -Pier 13A, Columns 1 & 2, South Face – There is a 48" high by 12" wide by 3" deep corner spall with exposed reinforcement. -Pier 16A, Columns 1 & 2, North and South Faces – There are 12" diameter by 1" deep corner spalls at each existing corner protection bracket -Pier 17A, Column 1, South Face – Four spalls with exposed reinforcement up to 18" wide by 12" high by 1" deep (total) about ten feet below the pier cap. -Pier 23B, Column 2, South Face - 72" high by 36" wide by 1" deep spall with exposed reinforcement and minor section loss near the base of the column -Pier 23B, Column 2 has mid length vertical cracking on the top east face and rust staining on the north face. -Pier 24B, on the northwest corner there is a 40" high by 12" wide by 2" deep corner spall with exposed reinforcement at the base of the column -Pier 29B, Column 2, Top Face - 6" wide by 7" long by 1" deep spall at the masonry plate for the east bearing of Pier Cap 29B						
210-Reinforced Concrete Pier Wall	3 - Mod.	73	ft.	73	0	0	0
231-Steel Pier Cap	3 - Mod.	910	ft.	109	108	693	0
CS2: -The steel single-web pier cap at Pier 29B is in good condition, with minor active surface corrosion on the bottom flange at the bearings and on the bottom flange splice bolts. -Isolated broken tack welds on the interiors of the original steel box pier caps. -Pier 9A has 3/4" pack rust at the top flange plate in the overhang portion. CS3: For the original steel box pier caps -Pack rust up to 1.5" thick is typical between the web plates and flange connection angles and between the bottom flange plates and connection angles. -Pack rust up to 1/2” thick is typical between the web plates and the girder seat angles. -There are also isolated areas of pack rust up to 1/8” thick under the top flange plates. -There is minor to moderate pack rust at the ends of most caps between the internal angles and flange plates where they are not protected from the elements. -Many areas of pack rust were caulked in 2017; the majority of the caulk appears to be functioning as intended. -There are areas of painted-over pitting on the web plates, bottom flange plates, and bottom flange angles up to 1/8" deep. -Pier Cap 2A has impact damage on the center 2 lanes with localized damage and scrapes to the edges and bottom of the bottom flange. -Pier Cap 9A and 10A have inactive corrosion holes in the seal plates at the west ends. -Pier Cap 12A has an isolated area of reactivating pack rust between the north web plate and the west end plate connection angle.						

Inspector: Nepal,Prateek
Inspection Date: 09/16/2026

Structure Number: 3105946
Facility Carried: SB IR 71

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
515-Steel Protective Coating		27612	sq. ft.	13883	11140	2589	0
	CS2: -Some of the steel pier caps have isolated minor rust staining along the bottom of the web. CS3: -The protective coating on the interior of the pier caps have some areas of minor freckled rust throughout and intermittent areas of active corrosion and paint failure concentrated to the east and west ends of the pier caps (2021 Inspection).						
234-Reinforced Concrete Pier Cap	3 - Mod.	1226	ft.	1039	179	8	0
	CS2: -There is typically map cracking on the concrete pier caps between pier columns on the original piers. -On the north and south face of many of the original concrete pier caps, there is a horizontal hairline crack approximately 12” from the top. -There are minor to moderate width cracks with efflorescence on several of the overhangs of the FWW pier caps. -There are also minor to moderate width vertical cracks between pier columns and in the concrete bearing pedestals. -There is rust staining on the east overhang and the FRP is beginning to flake and peel on the south face at Pier 23B. -There are 2 minor corner spalls on the east face of Pier 28B. CS3: -There is a 12" diameter x 1” deep spall with rust staining on the east face of Pier Cap 15A. -There is a 10" high by 4" wide by 1" deep spall on the southeast corner of the Pier Cap 18A east overhang. -There are two 2’L x 1’W spalls up to 3” deep with exposed rebar at the top of Pier Cap 27B on each side of Bearing E; these spalls are beginning to encroach on the bearing, with no loss of bearing area at this time. -There are cracks with rust stains on Pier Cap 19A. -There is a 2' wide by 2' high by 4" deep corner spall with exposed reinforcement noted in the north overhang of Pier 2 (FWW). -There are moderate width flexural cracks with rust staining on the south and bottom faces of Pier Cap 4 (FWW) between the pier columns.						
300-Strip Seal Joint	3 - Mod.	704	ft.	100	540	26	38
	CS2: -Isolated areas of loosely packed debris in all expansion joints on the deck. CS3: - Joint at the wall pier has heavy debris. -Minor tears are present at Piers 15A, 23B, 28B, and 7 (FWW). CS4: -The strip seals at the Wall Pier and Pier 4 (FWW) have areas of tearing that has led to leaking through the joint. -The seals are beginning to tear in the joints at Piers 15A, 23B, 28B, and 7 (FWW).						
310-Elastomeric Bearing	3 - Mod.	36	each	25	7	4	0
	CS2: -There are some minor areas of surface corrosion and isolated paint failure on the steel bearing plates. -There is minor bulging in the fascia bearings of both Spans 23B and 24B at Pier 23B. All Span 24B bearings at Pier 23B were observed rocking side-to-side during a previous inspection. No indications of the bearing walking out were observed during the 2026 inspection. -The edge distance to caps on all bearings at Pier 23B is 1"-2" in Span 23. CS3: -There is a 1” diameter corrosion hole in the bearing riser of Girder E, Span 24B. -There is painted–over pitting present on several bearing risers. -At Bearing A of Span 24B, Pier 23B is bulging with rust staining between layers.						
515-Steel Protective Coating		36	sq. ft.	26	6	4	0
	CS2: -There is isolated minor surface corrosion on some steel bearings. CS3: -There are some minor to moderate areas of surface corrosion and isolated paint failure on the steel bearing plates.						

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
311-Movable Bearing	3 - Mod.	76	each	30	42	4	0
	CS2: -The original girder rocker bearings typically exhibit minor peeling paint and surface corrosion throughout. -The anchor rod of Bearing C at Pier 28B is bent 1" to the south. -A bent anchor rod was observed at Bearing E of Pier Cap 28B. -The bearing at Girder A was contracted 7° to the south and Girder B bearing was contracted 3° to the south at Pier 14A at 81°F; the other bearings at this pier had minimal rotation. -The bearings for the steel pier caps were all painted in 2021, but there is minor rust staining on the bottoms of several of the bearing plates. -There are backed off anchor nuts at the west bearing of Pier Cap 8A, the east bearing of Pier Cap 12A, and the east bearing of Pier Cap 13A. CS3: -Pack rust between the rocker and masonry plate was noted at Bearing A at Pier 14A, Bearing A at Piers 24B and 27B, and Bearing E at Piers 22B and 28B. -The east bearing of Pier Cap 11A is misaligned, with the south keeper lug of the rocker plate sitting on top of the masonry plate.						
515-Steel Protective Coating		76	sq. ft.	31	35	10	0
	CS2: -Minor isolated corrosion. CS3: -The original girder rocker bearings typically exhibit minor to moderate paint failure and surface corrosion throughout.						
313-Fixed Bearing	3 - Mod.	27	each	4	20	3	0
	CS2: -The original steel fixed bearings typically exhibit paint failure and moderate surface corrosion throughout. -Pier 12A has a 1/2" deformation in the stiffener at Bearing A and 2 loose bolts at Bearing B. -Pier 13A has 1 loose bolt at Bearings A and B. CS3: -Pack rust is typical on the bearings.						
515-Steel Protective Coating		27	sq. ft.	7	12	8	0
	CS2: -Isolated minor surface corrosion. CS3: -The original steel fixed bearings typically exhibit paint failure and moderate surface corrosion throughout.						
314-Pot Bearing	3 - Mod.	67	each	2	56	9	0
	CS2: -The pot bearings typically exhibit minor paint failure and moderate to heavy surface corrosion throughout. -There are a few instances of the elastomer bulging or walking out of the bearing pot. -The anchor rods of the bearings at Pier 5 and Pier 7 are bent. CS3: -The Pier 4 bearings exhibit laminating corrosion with negligible section loss on the bearing plates, shim plates, and pots.						
515-Steel Protective Coating		67	sq. ft.	12	40	15	0
	CS3: -The pot bearings typically exhibit minor paint failure and moderate to heavy surface corrosion throughout.						
331-Reinforced Concrete Bridge Railing	3 - Mod.	6496	ft.	2965	3304	227	0

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
	CS2: -There is minor to moderate to wide transverse and map cracks throughout both bridge railings, spaced 1 ft-3 ft apart with some exhibiting efflorescence, rust staining, and/or moisture staining. -There is minor impact damage to the west railing of Span 21B. -There are concrete patches in the railings throughout; these patches are in good condition. -There is vertical cracking at 6' on center. CS3: -There is a 12" x 6” x 2” spall with exposed reinforcement in the north railing at the Wall Pier. -A 12" long by 6" high by 2" deep spall with exposed reinforcement is present in the top corner of the west railing at the River Pier joint. The spall is surrounded by delaminated concrete and wide longitudinal and vertical cracks with water and rust staining. -The spall is surrounded by delaminated concrete and wide longitudinal and vertical cracks with water and rust staining. -There is a 2’ long full width spall with exposed rebar in the top of the east railing near Pier 23B and the top 6” of the railing is delaminated for approximately 20’ adjacent to the spall. -A large spall with exposed rebar is present along the top of the railing in FWW Span 10.						
815-Drainage	3 - Mod.	37	each	12	11	13	1
	CS2: -There are numerous locations where there is a large gap between the deck drainpipe and the downspout attached to the pier columns. CS3: -The drainpipe sections are disconnected at Piers 4A, 6A, and 8A near the Pier cap. -Scuppers that are 100% clogged are located in Spans 3A, 9A, 10A, 17A, 18A, 19A, and at the Wall Pier in Span 1 (FWW) -The downspouts at Piers 6A and 8A are clogged with debris. -There are disconnected or misaligned drainpipe boots at Piers 18A, 19A, and 22B. The disconnected downspout at Column 2 of Pier 18A has caused significant erosion below the column. - The downspout is completely disconnected at the ground termination of Column 2 at Pier 4A. The missing pipe has caused significant erosion of the asphalt material below Column 2 on the north side of the pier. -The drainage grate in the east gutter at Pier 19A has broken bars. -The downspout T-joint is disconnected on the north face of Column 1 at Pier 12A and the pipe is breaking, but this condition does not appear to have changed from the 2022 inspection. CS4: -The drainage grate to the left lane in Span 2A is missing.						
820-Steel Seated-Hinge Assembly	3 - Mod.	21	each	10	8	3	0
	CS2: -Minor isolated painted-over pitting areas. -Localized rust staining was observed at the interface of the bearing plates at Girder A in Span 8A near Pier 8A. CS3: -The 2021 inspection noted that the bronze shim plate of the Girder C hinge in Span 4A was walked out 2” to the south; no indication of significant additional displacement was observed at 2026 inspection. -There is isolated painted-over pitting on several of the bearing plates.						

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ODOT District:	District 08					Date Built:	07/01/1963
Major Maint:	01 - State Highway Agency	Facility Carried:	SB IR 71	Traffic On:	1 - Highway	Rehab Date:	
Routine Maint:	01 - State Highway Agency	Feature Inters:	USR 42	Traffic Under:	4 - Highway - railroad	Insp. Resp A:	01 - State Highway Agency
FIPS Code:	15000 - CINCINNATI (HAM county)	Location:	DISTRICT 08	OH-KY LINE		Insp Resp B:	
Inspector	Nepal,Prateek	Inspection Date	09/16/2026	Reviewer	Not Approved		

Inspector Comments - Deck and Approach

Deck, Wearing Surface, Joints, Railing

Reinforced Concrete Deck
As part of the 2021 paint contract, steel grates and new wood shielding were installed between the girders in Spans 1A through 13A. Panels can be lifted and visually inspected. The panels were removed as part of the 2025 NSTM inspection.
Span 18A exhibits a dark layer of soot due to the railroad tracks below the span.

Bridge Wearing Surface
Bridge wearing surface was visually inspected.

Bridge Railing
Bridge railings were visually inspected.

Expansion Joint
The expansion joints were inspected visually from the boom lift and drone. Strip seal expansion joints are located at Piers 4A, 8A, 12A, 15A, 19A, 23B, 28B, 7 (FWW), 4 (FWW), and the Wall pier. Joints at Piers 4A, 8A, 15A, and 19A were replaced in 2017.

Drainage
In 2017 as part of the rehabilitation project, drains at various locations were replaced and scuppers were cleaned.

Approach

Signs
There are two overhead signs mounted to the bridge, one in Span 16A and another in Span 1 (FWW).The signs on the structure are in Good Condition with minor corrosion on the support bolts of the overhead exit signs and moderate active corrosion on the cantilever support underneath the sign support. Complete inspection of the overhead sign structures was outside the scope of this inspection.

Utilities
The utilities on the structure are in Good condition and consist of electrical conduits in Span 27B and Span 10 (FWW) in Bay 1. There is a utility junction box with areas of 100% section loss throughout the bottom and side plates at Pier 13A.; this box also impedes easy access to the adjacent pier cap hatch. The utility box at Pier 26B has active corrosion and missing connections. There are various roadway lights supported from the girders that are nonfunctioning in Spans 1A through 12A and one lens is broken in both Spans 9A and 11A. The handhole covers on various light poles are missing. The grounding cable between the girders at Pier 3, FWW is broken on the right exterior side.

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Inspector Comments - General Appraisal

Superstructure, Bearings

Steel Open Girder/Beam
The girders in Spans 1A-14A were painted as part of the 2021 paint contract. The end 10' of the girders at the expansion joints at Piers 15A, 19A, and 23B were cleaned and painted during the 2017 rehabilitation. There are fatigue-prone welds from previous attachments on the bottom flanges of the girders in Span 15A, 12’ from Piers 14A and 15A.

Elastomeric Bearings
There are elastomeric bearings at Piers 15A, 16A, 19A, 23B, and 28B.

Steel Protective System
Spans 1A-14A were painted in 2020-2021. The pier caps were also painted as part of the 2020 -2021 paint contract. As part of the 2017 Rehabilitation, all steel members within approximately 10' of the expansion joints at Piers 15A, 19A, and 23B were cleaned and painted.

Diaphragm and Crossframes
The steel crossframes are in Good condition, with minor surface corrosion present on the crossframes.

Alignment
Alignment is in Good condition without any problems in the vertical or horizontal alignment noted through visual inspection.

Fatigue
The superstructure fatigue elements are in Good condition with no deficiencies noted.

Substructure

Reinforced Concrete Column
As part of the 2017 rehabilitation, concrete patches and FRP wrapping were applied to Piers 5A, 7A, 15A, 19A, 23B, and 28B.

Reinforced Concrete Pier Wall
Access to the Pier Wall was restricted due to a utility fence and utilities impeding a proper inspection, but no significant deficiencies were observed.

Reinforced Concrete Pier Cap
As part of the 2017 rehabilitation, concrete patches and FRP wrapping were applied to portions of Piers 15A, 19A, 23B, and 28B.

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Steel Pier Cap

The interiors of the steel pier caps were inspected during the 2023 NSTM element level inspection. Detailed descriptions of each pier cap can be found in the 2025 In-depth and NSTM inspection report. The steel pier caps at the River Pier and Piers 1A-13A were painted in 2021. Many areas of pack rust were caulked in 2017; the majority of the caulk appears to be functioning as intended.

Culvert

N/A

Inspector Comments - Waterway

Channel Protection

N/A

Channel

N/A

Scour

N/A