

Inspector: Miller,Jason

Inspection Date: 02/08/2024

Structure Number: 1805223

Facility Carried: IR 71

Ohio Bridge Inspection Summary Report

CUY-00071-1640 (1805223)

2: District 16000 - CLEVELAND (CUY county)
ict
12

5A: Inventory Route 1 00071

21: Major Maint A/B 01 - State Highway Agency /
225 Routine Main A/B 01 - State Highway Agency /
221 Inspection A/B 01 - State Highway Agency /
220: Inv. Location DISTRICT 12

7: Facility On IR 71
6: Feature Ints W&LE RR
9: Location 1.11 MI. S. OF JCT. US-42
Lat, Lon 41.452958 , -81.721431

Condition	Structure Type
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58: Deck **6 - Satisfactory Condition**
58.01 Wearing Surface 7 - Good (1% distress)
58.02 Joint 4- Poor (heavy leaking, offset)
59: Superstructure **6 - Satisfactory Condition**
59.01 Paint & PCS N - Not Applicable
60: Substructure **7 - Good Condition**
61: Channel **N**
61.01 Scour **N - Not Applicable**
62: Culverts **N - Not Applicable**
67.01 GA **6**

43: Bridge Type 2 - Concrete continuous
01 - Slab
N- Not Applicable
45: Spans Main / Approach 3 / 0
107: Deck Type 1 - Concrete Cast-in-Place
408: Composite Deck N - Non-composite Construction
414A Joint Type 1 8 - Elastomeric Strip Seal
414B: Joint Type 2 N - None
108A: Wearing Surface 4 - Low Slump Concrete
2- MicroSilica

Appraisal

Sufficiency Rating 89.0 SD/FO 0 - ND
36: Rail, Tr, Gd, Term Std 1 1 1 1
72: Approach Alignment 8 - Equal to present desirable criteria
113: Scour Critical N - Not over waterway
71: Waterway Adequacy N - Not Applicable

422: WS Date 05/31/2003
423: WS Thick (in) 2.5
482: Protective Coating N - None or Not Applicable
483: PCS Date
453: Bearing Type 1 0 - Other
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 1 - Steel H Piles (Other size)

Geometric

48: Max Span Length (ft) 55.0
49: Structure Length (ft) 147.0
52: Deck Width, Out-To-Out (ft) 146.0
424: Deck Area (sf) 21462
32: Appr Roadway Width (ft) 142.0
51: Road Width, Curb-Curb (ft) 144.0
50A: Curb/SW Width: Left (ft) 0
50A: Curb/SW Width: Right (ft) 0
34: Skew (deg) 24
33: Bridge Median 1 - Open median
54B: Min Vert Underclearance (ft) 22.17
336A: Min Vert Clrnce IR Cardinal (ft) 99
336B: Min V Clr IR Non-Cardinal (ft) 0
578: Culvert Length (ft) 0

Age and Service

27: Year Built/ 106 Rehab 1967 / 0000
42A: Service On 1 - Highway
42B: Service Under 2 - Railroad
28A: Lanes on 08
28B: Lanes Under 00
19: Bypass Length 2
29: ADT 63912
109: % Trucks (%) 3

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 (%) 140
704: Analysis Date 12/07/2023
63: Analysis Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

Inspections

	Months	
90: Routine Insp.	12	02/08/2024
92A: FCM Insp.	N	0
92B: Dive Insp.	N	0
92C: Special Insp.	N	0
92D: UBIT Insp.	N	0
92E: Drone Insp.	N	0

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
38-Reinforced Concrete Slab	3 - Mod.	21462	sq. ft.	11562	9000	900	0
	<p>CS2- Rust stains from rebar chairs throughout. Leaching cracks.</p> <p>CS3- Spalls with exposed rebar and delaminations along median joint. Other spalls with exposed rebar, mainly in span 3. Leaching delaminated cracks that run entire length in spans 2 and 3. Mottled areas in span 2. Areas of heavy pattern map cracks in span 2.</p>						
510-Wearing Surfaces		21168	sq. ft.	9661	10500	1000	7
	<p>Northbound is in worse condition than Southbound.</p> <p>CS2- Large areas of map cracking. Longitudinal cracks at 2'-4' spacing.</p> <p>CS3- Transverse and longitudinal wide cracks. Areas of heavy map cracking.</p> <p>CS4- Asphalt patch in lane 2 Southbound at forward.</p>						
205-Reinforced Concrete Column	3 - Mod.	24	each	17	3	4	0
	<p>CS2-P2C6, 3 sf of spalls and delams. P2C7, 2 sf spall. P2C12, 5 sf spall.</p> <p>CS3- P1C7, 1 sf spall with shallow rebar exposed. P1C9, 1 sf spall with exposed rebar. P2C10, 8 sf shallow spall with rebar exposure. P2C11, 2 sf spall and delamination with rebar exposure.</p>						
210-Reinforced Concrete Pier Wall	3 - Mod.	320	ft.	278	27	15	0
	<p>CS2- Cracks. Areas of moderate scaling.</p> <p>CS3- Shallow spalls some with exposed rebar to slope side of walls.</p>						
215-Reinforced Concrete Abutment	3 - Mod.	320	ft.	295	9	16	0
	<p>CS2- Cracks, some full-height.</p> <p>CS3- Rear abutment and footer are through cracked 10' from left end (crack as wide as 1/4"). Deep spall at rear to bearing 4 from median joint that exposes bearing plate. Spalls with exposed rebar to both (areas of minor seat loss due to spalling). Undermining to abutment at Forward left, measured 18-20 inch deep void approximately 4 foot wide. A few wide vertical cracks to rear.</p>						
234-Reinforced Concrete Pier Cap	3 - Mod.	320	ft.	313	7	0	0
	<p>CS2- Cracks in floor extend into P2 cap.</p>						
300-Strip Seal Expansion Joint	3 - Mod.	292	ft.	0	0	146	146
	<p>Evidence of leaking below.</p> <p>CS2- Gouges to deck armor. Dirt and debris in joints.</p> <p>CS3- Areas of strip seal that torn, ruptured and leaking at all joints. Impact damage to riser bars. Asphalt in joint at spots.</p> <p>CS4- Asphalt patches to rear headers. Forward headers paved over.</p>						
316-Other Bearing	3 - Mod.	106	each	106	0	0	0
	<p>Areas of minor seat loss due to spalling</p>						

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[illegible]

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ODOT District: District 12

CUY-00071-1640 _(1805223)

Date Built: 07/01/1967

Major Maint: 01 - State Highway Agency

Facility Carried: IR 71

Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: W&LE RR

Traffic Under: 2 - Railroad

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 16000 - CLEVELAND (CUY county)

Location: DISTRICT 12

1.11 MI. S. OF JCT. US-42

Insp
Resp B:

Inspector

Miller,Jason

Inspection Date 02/08/2024

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Approach

Approach Wearing Surface

Cracks. Asphalt patches & breaking up asphalt.

Approach Embankment

Erosion ruts at rear-left. Ditch flows from left to right under the bridge between P1 & railroad tracks. This has caused erosion along p1 & erosion downstream of the bridge along base of rear-right embankment.

Approach Guardrail

Forward-left concrete approach rail tips out 1.5". Rear-right tipped out 2.5". Spall to outside of rear right approach rail, northbound rear median, and southbound forward median.

Signs

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Substructure

Wingwalls

Large compression spalls with 360° rebar exposure to rear-left & forward-left wingwalls.

Slope Protection

As much as 11" vertical face of rear abutment footer is exposed at 2 locations under SB traffic. Forward abutment footer is fully exposed at left end & is undermined. As much as 4" of forward abutment footer is exposed under median joint.

Culvert

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Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

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Pictures