

Ohio Bridge Inspection Summary Report

CUY-00422-1627R (1814915)

2: District 72928 - SOLON (CUY county)
 District 12

5A: Inventory Route 1 00422

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 USR 422
 6: Feature Ints CR-18 (HARPER RD)
 9: Location 3.1 MI E I-271
 Lat, Lon 41.405939 , -81.466836

Condition		Structure Type	
58: Deck	6 - Satisfactory Condition	43: Bridge Type	4 - Steel continuous
58.01 Wearing Surface	7 - Good (1% distress)		02 - Stringer/Multi-beam or Girder
58.02 Joint	7- Good (no leaking)		N- Not Applicable
59: Superstructure	6 - Satisfactory Condition	45: Spans Main / Approach	4 / 0
59.01 Paint & PCS	7 - Good (1-5% corr.)	107: Deck Type	1 - Concrete Cast-in-Place
60: Substructure	7 - Good Condition	408: Composite Deck	N - Non-composite Construction
61: Channel	N	414A Joint Type 1	2 - Sliding Metal Plate Angle
61.01 Scour	N - Not Applicable	414B: Joint Type 2	N - None
62: Culverts	N - Not Applicable	108A: Wearing Surface	2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)

67.01 GA 6

Appraisal	
Sufficiency Rating	98.0 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	07/01/1975
423: WS Thick (in)	1.8
482: Protective Coating	5 - Paint System OZEU
483: PCS Date	11/07/2009
453: Bearing Type 1	2 - Rockers & Bolsters
455: Bearing Type 2	N - None
528: Foundn: Abut Fwd	2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)
533: Foundn: Abut Rear	2 - Cast-in-Place reinforced Concrete Piles (Other diameter)
536: Foundn: Pier 1	2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)
539: Foundn: Pier 2	0 - Other

Geometric	
48: Max Span Length (ft)	68.0
49: Structure Length (ft)	236.0
52: Deck Width, Out-To-Out (ft)	54.0
424: Deck Area (sf)	12744
32: Appr Roadway Width (ft)	52.0
51: Road Width, Curb-Curb (ft)	50.5
50A: Curb/SW Width: Left (ft)	0
50A: Curb/SW Width: Right (ft)	0
34: Skew (deg)	40
33: Bridge Median	0 - No median
54B: Min Vert Underclearance (ft)	14.83
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	1975 / 0000
42A: Service On	1 - Highway
42B: Service Under	1 - Highway, with or w/out pedestrian
28A: Lanes on	02
28B: Lanes Under	04
19: Bypass Length	0
29: ADT	24975
109: % Trucks (%)	6

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	07/01/1976
63: Analysis Method	7 - Allowable Stress (AS) rating reported by rating factor (RF) method using MS18 loading.

Inspections		
	Months	
90: Routine Insp.	12	06/14/2022
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
Inspector	Persanyi, Andrea	

Inspector: Andrea Persanyi
 Inspection Date: 06/14/2022

Structure Number: 1814915
 Facility Carried: USR 422

Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	3 - Mod.	12744	sq. ft.	11250	911	583	0
	CS2- Cracks. A few leached cracks. CS3- Spalls and delams. Long sealed spall along right fascia in span 3 (old collision damage).						
510 - Wearing Surfaces		11918	sq. ft.	8918	2500	500	0
	CS2- Cracks. Scaling. CS3- Transverse cracks as wide as 1/16".						
107 - Steel Open Girder/Beam	3 - Mod.	1652	ft.	1473	50	129	0
	Note: Repair to right fascia with additional splice plate in span 3. CS2- Some surface rust. Scrapes to all lower flanges over N/B lane #2. CS3- Areas of arrested section loss near beam ends, some heavy. Worst is rear beam 5.						
515 - Steel Protective Coating		18202	sq. ft.	18021	181	0	0
	CS 2 - Some chalking of outside surfaces of fascia beams, isolated spots of rust.						
205 - Reinforced Concrete Column	3 - Mod.	15	each	11	4	0	0
	CS2- P2C1- 5 SF delam P2C2- 7 SF delam P2C3- 7 SF delam P2C4- 3 SF sealed spall < 1" deep						
215 - Reinforced Concrete Abutment	3 - Mod.	141	ft.	115	22	4	0
	CS2- Cracks. Some honey combing. CS3- A few delams. Missing cheek wall at rear right.						
234 - Reinforced Concrete Pier Cap	3 - Mod.	212	ft.	211	0	1	0
	CS3- Delam to P3 corner between C2-C3						
305 - Assembly Joint without Seal	3 - Mod.	108	ft.	54	46	8	0
	CS2- A few gouges to armor. Dirt and debris in joint. CS3- Small spall in rear ExJt header (lane #2). Section loss to armor. Wide cracks to header.						
311 - Movable Bearing	3 - Mod.	28	each	10	14	4	0
	CS2- Areas of surface rust. CS3- Rusted section loss.						
313 - Fixed Bearing	3 - Mod.	7	each	7	0	0	0

Inspector: Andrea Persanyi
Inspection Date: 06/14/2022

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Element Inspection

321 - Reinforced Concrete Approach Slab	3 - Mod.	2600	sq. ft.	1985	400	85	130	CS2- Cracks. CS3- Wide cracks in both slabs. CS4- Asphalt patches and broken up concrete areas.
331 - Reinforced Concrete Bridge Railing	3 - Mod.	472	ft.	449	23	0	0	CS2- A few cracks. Minor collision scrapes. Shallow pop-outs.
830 - Abutment Backwall	3 - Mod.	141	ft.	105	36	0	0	CS2- Cracks. Concrete patches to top of both backwalls in bays 1-3. Construction joints sealed with Great Stuff.

ODOT District: District 12

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Date Built: 07/01/1975

Major Maint: 01 - State Highway Agency

Facility Carried: USR 422

Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: CR-18 (HARPER RD)

Traffic Under: 1 - Highway, with or w/out pedestrian

Insp: 01 - State Highway Agency

FIPS Code: 72928 - SOLON (CUY county)

Location: DISTRICT 12

3.1 MI E I-271

Resp A:

Insp

Resp B:

Inspector

Persanyi,Andrea

Inspection Date 06/14/2022

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Approach

Approach Guardrail

Minor collision damage to FWD right and rear left.

Approach Wearing Surface

Cracks. Asphalt patches. Asphalt break up along both slabs.

Approach Embankment

Erosion at rear-left (covered with vegetation).

Inspector Comments - General Appraisal

Superstructure

Diaphragm/X-Frames

Heavy section loss with rusted thru holes to some end frames. Horizontal angle of rear end frames 3, 4 & 5 are missing.

Fatigue

Welded moment plates at piers.

Substructure

Slope Protection

Cracks. Uneven settlement. gap at forward abutment as wide as 11". Large tufa deposit below weep hole at rear-left.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical