

Inspector: Miller,Jason

Inspection Date: 03/30/2023

Structure Number: 1814885

Facility Carried: USR 422

### Ohio Bridge Inspection Summary Report

**CUY-00422-1597L (1814885)**

2: District 72928 - SOLON (CUY county)  
ict  
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-99 (CANNON RD)  
9: Location 3 MI E I-271  
Lat, Lon 41.409588 ,-81.470106

Condition	Structure Type
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**58: Deck** **6 - Satisfactory Condition**  
58.01 Wearing Surface 7 - Good (1% distress)  
58.02 Joint 6- Satisfactory (isolated leaking)  
**59: Superstructure** **7 - Good Condition**  
59.01 Paint & PCS 7 - Good (1-5% corr.)  
**60: Substructure** **7 - Good Condition**  
**61: Channel** **N**  
**61.01 Scour** **N - Not Applicable**  
**62: Culverts** **N - Not Applicable**

43: Bridge Type 4 - Steel continuous  
02 - Stringer/Multi-beam or Girder  
N- Not Applicable  
45: Spans Main / Approach 3 / 0  
107: Deck Type 1 - Concrete Cast-in-Place  
408: Composite Deck N - Non-composite Construction  
414A Joint Type 1 2 - Sliding Metal Plate Angle  
414B: Joint Type 2 N - None  
108A: Wearing Surface 2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)  
1- Super Plasticized

67.01 GA 7

Appraisal
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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) 2.0  
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
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48: Max Span Length (ft) 75.0  
49: Structure Length (ft) 185.0  
52: Deck Width, Out-To-Out (ft) 69.5  
424: Deck Area (sf) 12857.5  
32: Appr Roadway Width (ft) 42.0  
51: Road Width, Curb-Curb (ft) 66.0  
50A: Curb/SW Width: Left (ft) 0  
50A: Curb/SW Width: Right (ft) 0  
34: Skew (deg) 32  
33: Bridge Median 0 - No median  
54B: Min Vert Underclearance (ft) 15.33  
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
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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 02  
19: Bypass Length 0  
29: ADT 37654  
109: % Trucks (%) 5

Load Posting
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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 07/01/1975  
63: Analysis Method 7 - Allowable Stress (AS) rating reported

Inspections
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90: Routine Insp. 12 Months 03/30/2023  
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 Miller,Jason

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<b>Inspection Date:</b>	03/30/2023	<b>Facility Carried:</b>	USR 422
	by rating factor (RF) method using MS18 loading.		

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	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12-Reinforced Concrete Deck</b>	3 - Mod.	12863	sq. ft.	12095	650	118	0
	CS2- A few leaching cracks. Small delams. CS3- Spalls throughout.						
510-Wearing Surfaces		12210	sq. ft.	11210	1000	0	0
	CS2- Transverse cracks.						
<b>107-Steel Open Girder/Beam</b>	3 - Mod.	1620	ft.	1560	10	50	0
	CS2-Surface rust. CS3- Arrested section loss at some beam ends.						
515-Steel Protective Coating		19547	sq. ft.	19147	400	0	0
	CS2- Chalking on exterior of fascia beams.						
<b>205-Reinforced Concrete Column</b>	3 - Mod.	10	each	9	0	1	0
	CS3- P2C5- 3 SF delams, 2 SF spalls						
<b>215-Reinforced Concrete Abutment</b>	3 - Mod.	164	ft.	144	20	0	0
	CS2- A few cracks.						
<b>234-Reinforced Concrete Pier Cap</b>	3 - Mod.	164	ft.	164	0	0	0
<b>305-Assembly Joint without Seal</b>	3 - Mod.	139	ft.	55	71	12	1
	Open joint- rated 6. CS2- Dirt & debris in joints. Cracks in exjt headers. CS3- Areas of section loss. CS4- Small rusting thru hole in rear-left curb plate.						
<b>311-Movable Bearing</b>	3 - Mod.	27	each	9	18	0	0
	CS2- Arrested section loss and surface rust to abutment bearings.						
<b>313-Fixed Bearing</b>	3 - Mod.	9	each	9	0	0	0
<b>321-Reinforced Concrete Approach Slab</b>	3 - Mod.	2100	sq. ft.	1875	210	0	15
	CS2- Cracks. CS4- Asphalt patches and breaking up concrete at rear.						
<b>331-Reinforced Concrete Bridge Railing</b>	3 - Mod.	370	ft.	230	100	40	0
	CS2- Long horizontal cracks. Collision scrapes and gouges. CS3- Wide horizontal cracks. Rust stained cracks.						
<b>815-Drainage</b>	3 - Mod.	8	each	8	0	0	0
	Debris in both berms.						
<b>830-Abutment Backwall</b>	3 - Mod.	164	ft.	143	17	4	0
	CS2- A few cracks. CS3- Spalls at construction joints. Wide gaps in construction joints filled with Great Stuff.						

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ODOT District: District 12

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Date Built: 07/01/1975

Major Maint: 01 - State Highway Agency

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Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: CR-99 (CANNON RD)

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

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 72928 - SOLON (CUY county)

Location: DISTRICT 12

3 MI E I-271

Insp Resp B:

Inspector

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Reviewer Seif,Youssef

**Inspector Comments - Deck and Approach**

**Deck**

**Approach**

**Approach Wearing Surface**

Sealed cracks.

**Approach Embankment**

Erosion at forward-left below concrete pull box (covered with vegetation).

**Approach Guardrail**

Cracks, rust stains & minor spalls to concrete approach rails.

**Inspector Comments - General Appraisal**

**Superstructure**

**Diaphragm/X-Frames**

Areas of rusted section loss.

**Fatigue**

Welded cover plates at piers.

**Substructure**

**Slope Protection**

Uneven settlement at rear. Concrete slid as much as 5" at forward & as much as 12" at rear. Minor undermining to CSP in isolated locations. *Note: ponding water & mud at base of rear slope and around P1 columns.*

**Culvert**

**Inspector Comments - Waterway**

**Waterway Adequacy**

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**Channel**

**Scour Critical**