

Ohio Bridge Inspection Summary Report

LAK-00090-1031 (4304179)

2: District 40670 - KIRTLAND HILLS (LAK county)
 ict
 12

5A: Inventory Route 1 M0507

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 LT MNTN RD
 6: Feature Ints I-90
 9: Location APPROX 1MI E SR615
 Lat, Lon 41.647936 ,-81.324447

Condition	Structure Type
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58: Deck **7 - Good Condition**
 58.01 Wearing Surface 7 - Good (1% distress)
 58.02 Joint 5- Fair (obvious leaking, 1" offset)
59: Superstructure **6 - Satisfactory Condition**
 59.01 Paint & PCS 5 - Fair (10-15% corr.)
60: Substructure **6 - Satisfactory Condition**
61: Channel **N**
61.01 Scour **N - Not Applicable**
62: Culverts **N - Not Applicable**
67.01 GA **6**

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 N - Non-composite Construction
 414A Joint Type 1 2 - Sliding Metal Plate Angle
 414B: Joint Type 2 N - None
 108A: Wearing Surface 3 - Latex Concrete or similar additive
 N- Not Applicable

Appraisal

Sufficiency Rating 71.3 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 08/31/2005
 423: WS Thick (in) 1.2
 482: Protective Coating 5 - Paint System OZEU
 483: PCS Date 10/21/2001
 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 0 - Other

Geometric

48: Max Span Length (ft) 87.0
 49: Structure Length (ft) 478.0
 52: Deck Width, Out-To-Out (ft) 34.3
 424: Deck Area (sf) 16395.4
 32: Appr Roadway Width (ft) 28.0
 51: Road Width, Curb-Curb (ft) 28.0
 50A: Curb/SW Width: Left (ft) 2.1
 50A: Curb/SW Width: Right (ft) 2.1
 34: Skew (deg) 35
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 16.43
 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 1962 / 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 2
 29: ADT 4194
 109: % Trucks (%) 8

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 09/12/2019
 63: Analysis Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

Inspections

	<i>Months</i>	
90: Routine Insp.	12	06/09/2022
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: 06/09/2022

Structure Number: 4304179
 Facility Carried: LT MNTN RD

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.	16372	sq. ft.	10220	6120	32	0
	CS2- Transverse cracks, some leaching and rust stained. Areas of map cracking. Minor delams. CS3- Some spalls.						
510 - Wearing Surfaces		13384	sq. ft.	12184	1200	0	0
	CS2- Hairline cracks.						
107 - Steel Open Girder/Beam	3 - Mod.	1888	ft.	1773	100	15	0
	CS2- Rusted section loss at beam ends. CS3- Some deep pitting to webs of fascia beams. Gouge in lower flange of left fascia over WB high speed berm.						
515 - Steel Protective Coating		21224	sq. ft.	5824	15000	350	50
	CS2- Areas of fading. Surface rust, mainly to lower flange and xframes over traffic. CS3- Areas of peeling paint. CS4- Areas of bare rusted metal.						
205 - Reinforced Concrete Column	3 - Mod.	20	each	20	0	0	0
215 - Reinforced Concrete Abutment	3 - Mod.	84	ft.	19	50	15	0
	CS2- Cracks, some with rust stains. CS3- Spalls, some with exposed rebar						
234 - Reinforced Concrete Pier Cap	3 - Mod.	209	ft.	200	8	1	0
	CS2- Minor cracks CS3- Delam above P4C4						
305 - Assembly Joint without Seal	3 - Mod.	68	ft.	0	67	1	0
	CS 2- Some section loss, debris in both joints. CS 3- discontinuity in expansion joint armor on approach side at forward left lane line, with no movement.						
311 - Movable Bearing	3 - Mod.	24	each	5	19	0	0
	CS2- Some pack rust						
313 - Fixed Bearing	3 - Mod.	4	each	4	0	0	0
321 - Reinforced Concrete Approach Slab	3 - Mod.	1700	sq. ft.	1700	0	0	0
	Paved over with asphalt.						

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Element Inspection

331 - Reinforced Concrete Bridge Railing	3 - Mod.	956	ft.	818	135	3	0
CS2- Vertical cracks, some leaching. Some missing nuts on aluminum rail post anchor bolts. minor rust to fence hardware.							
CS3- Minor spalls and delams.							
815 - Drainage	3 - Mod.	12	each	0	12	0	0
CS2- All scuppers are partially plugged.							
830 - Abutment Backwall	3 - Mod.	84	ft.	21	36	27	0
CS2- Cracks, minor delams.							
CS3- Spalls, some with exposed rebar.							

ODOT District: District 12

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Date Built: 07/01/1962

Major Maint: 01 - State Highway Agency

Facility Carried: LT MNTN RD

Traffic On: 1 - Highway

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: I-90

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

Insp: 01 - State Highway Agency

FIPS Code: 40670 - KIRTLAND HILLS (LAK county)

Location: DISTRICT 12

APPROX 1MI E SR615

Resp A:

Insp

Resp B:

Inspector

Persanyi,Andrea

Inspection Date 06/09/2022

Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Curbs/Sidewalk

Cracks. Shallow spalls with exposed wire mesh and rebar. Rust stains. Concrete patches.

Approach

Approach Wearing Surface

Sealed cracks. Small pothole at rear. Asphalt patches.

Signs

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Diaphragm/X-Frames

End frame rusted section loss with rusted thru holes. Bent end frame angle in rear bay 3. Broken weld between beam 1 & bent horizontal angle of 2nd x-frame from forward abutment in bay 1. Rusted thru hole in endframe gusset plate in forward bay 3.

Fatigue

Welded moment plates at piers.

Utilities

Rusting section loss to conduit, with thru holes at forward backwall. Conduit separations.

Substructure

Slope Protection

As much as 13" of forward abutment footing is exposed below bay 3.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

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Pictures