Ohio Bridge Inspection Summary Report

LAK-00090-1051 (4304209)

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

5A: Inventory Route	1	M0503
7: Facility On	HART RD	
6: Feature Ints	I-90	
9: Location	1.2 MI E SR615	
Lat, Lon	41.647878	,-81.320339

Condition

58: Deck	**7 - Good 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	6 - Satisfactory (5-10% corr.)
60: Substructure	**7 - Good Condition**
61: Channel	**N**
61.01 Scour	**N - Not Applicable**
62: Culverts	**N - Not Applicable**
67.01 GA	**7**

Appraisal

Sufficiency Rating	76.4	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			

Geometric

48: Max Span Length (ft)	71.0
49: Structure Length (ft)	388.0
52: Deck Width, Out-To-Out (ft)	30.8
424: Deck Area (sf)	11950.4
32: Appr Roadway Width (ft)	24.0
51: Road Width, Curb-Curb (ft)	24.0
50A: Curb/SW Width: Left (ft)	2.1
50A: Curb/SW Width: Right (ft)	2.1
34: Skew (deg)	2
33: Bridge Median	0 - No median
54B: Min Vert Underclearance (ft)	16.34
336A: Min Vert Clrnce IR Cardinal (ft)	99
336B: Min V Clr IR Non-Cardinal (ft)	0
578: 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 (%)	105
704: Analysis Date	09/11/2019
63: Analysis Method	6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Structure Type

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	1 - Monolithic Concrete (concurrently placed with structural deck)
	N- Not Applicable
422: WS Date	06/25/2009
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	1 - Steel H Piles (Other size)

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	1433
109: % Trucks (%)	7

Inspections

		Months	
90: Routine Insp.		24	08/19/2021
92A: FCM Insp.	N	0	
92B: Dive Insp.	N	0	
92C: Special Insp.	N	0	
92D: UBIT Insp.	N		
92E: Drone Insp.			

Inspector Gerstenslager,Michael

Inspector: Michael Gerstenslager **Structure Number:** 4304209

Inspection Date: 08/19/2021 **Facility Carried:** HART 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.	11931	sq. ft.	9551	2225	155	0
	CS2- Cracks, some leaching and rust stained. Some honeycombed areas. Epoxy injected areas. CS3- Spalls, some with exposed rebar. Delams.						
805 - Wearing Surface - Monolithic Concrete		9312	sq. ft.	6767	2540	5	0
	CS2- Cracks, mostly transverse cracks. Minor delams. CS3- Shallow spalls and asphalt patches.						
107 - Steel Open Girder/Beam	3 - Mod.	1552	ft.	1525	25	2	0
	CS2- Rusted section loss at abutments. CS3- Collision damage to right fascia over EB right berm.						
515 - Steel Protective Coating		13596	sq. ft.	11511	1550	500	35
	CS2- Surface rust CS3- Heavier rust, start of peeling CS4- Isolated spot of bare rusted metal.						
205 - Reinforced Concrete Column	3 - Mod.	15	each	13	1	1	0
	CS2- P1C3- 4 SF delam CS3- P5C1- 6 SF spall with exposed rebar with section loss, 2 SF delam						
215 - Reinforced Concrete Abutment	3 - Mod.	62	ft.	47	15	0	0
	CS2- Cracks, some with rust stains.						
234 - Reinforced Concrete Pier Cap	3 - Mod.	155	ft.	141	11	3	0
	CS2- Minor cracks, some rust stains. CS3- Spall to P1 with exposed rebar. Spall to P2						
303 - Assembly Joint with Seal	3 - Mod.	62	ft.	0	21	28	13
	Note: Open joints in safety curbs. CS2- Debris in joint CS3- Rusting section loss to armor. A few gouges. End dam at forward and rear bay #2 is slightly banging under live traffic. CS4- Rusted thru holes to both joint. Evidence of leaking FWD and rear Bays 1,2,3						
311 - Movable Bearing	3 - Mod.	20	each	12	8	0	0
	CS2- Abutment bearing have rust						
313 - Fixed Bearing	3 - Mod.	4	each	4	0	0	0

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Element Inspection

321 - Reinforced Concrete Approach Slab	3 - Mod.	1200	sq. ft.	550	650	0	0
	CS2- Large areas of map cracks, Some with rust stains.						
331 - Reinforced Concrete Bridge Railing	3 - Mod.	776	ft.	626	150	0	0
	CS2- Cracks, some leaching. Minor scaling to left rail. A few aluminum post anchor nuts are missing.						
815 - Drainage	3 - Mod.	12	each	4	8	0	0
	CS2- 8 Scuppers are partially plugged.						
830 - Abutment Backwall	3 - Mod.	62	ft.	43	10	9	0
	CS2- Cracks, some leaching. Rust stains. CS3- Spalls and delams						

ODOT District: 12

LAK-00090-1051 _(4304209)

Date Built: 07/01/1962

Major Maint: 01 - State Highway Agency | Facility Carried: HART 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. Resp A: 01 - State Highway Agency

FIPS Code: 40670 - KIRTLAND HILLS (LAK county) | Location: DISTRICT 12 1.2 MI E SR615 | Insp Resp B:

Inspector Gerstenslager,Michael | Inspection Date 08/19/2021 | Reviewer Seif,Youssef

Inspector Comments - Deck and Approach

Deck

Floor/Slab (SF)

SOT. EB #2 Bays 2 and 3. WB #2 bay 1

Edge of Floor/Slab (LF)

A few cracks, some rust stains.

Curbs/Sidewalk (LF)

Cracks, minor spalls and delams.

Approach

Approach Wearing Surface (EA)

Sealed cracks.

Approach Guardrail (EA)

Minor collision damage to rear left. Broken aluminum post to forward-right. Post rot.

Signs (EA)

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Diaphragm/X-Frames (EA)

Endframe rusted section loss. Bent horizontal endframe angle in rear bay 1. Crack to endframe weld in forward bay 1. Nearly rust severed horizontal end frame angle at rear in bay 3.

Fatigue (LF)

Welded moment plates at piers.

Substructure

Wingwalls (EA)

Spall to forward-left wingwall.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

Inspector: Michael Gerstenslager **Structure Number:** 4304209

Inspection Date: 08/19/2021 **Facility Carried:** HART RD

Bridge Inspection Report

Pictures