

STATE OF OHIO
BRIDGE INSPECTION REPORT

Structure File Number: 4304233

Inventory Bridge Number: LAK-00090-1151 _(4304233)

KING MEM RD over I-90

Inspection Type: Routine

Inspection Date: 07/13/2020

District: 12

County: 43 - Lake

Place Code (FIPS): 40670

Bridge Type:

4 - Steel continuous

02 - Stringer/Multi-beam or Girder

N- Not Applicable

Type of Service:

1 - Highway

Maintenance Responsibility:

01 - State Highway Agency

Inspection Responsibility:

01 - State Highway Agency

Routine Maintenance Responsibility:

01 - State Highway Agency

Lead Inspector: Banaszak, Ken

Reviewed by: Youssef Seif

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Ohio Bridge Inspection Summary Report

LAK-00090-1151 (4304233)

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 LAK

5A: Inventory Route 1 M0501
 7: Facility On KING MEM RD
 6: Feature Ints I-90
 9: Location 9.5 MI E SR615

Condition

58: Deck **4 - Poor Condition**
 58.01 Wearing Surface 7 - Good (1% distress)
 58.02 Joint 7- Good (no leaking)
59: Superstructure **7 - Good Condition**
 59.01 Paint & PCS 6 - Satisfactory (5-10% corr.)
60: Substructure **7 - Good Condition**
61: Channel **N - Not Applicable**
61.01 Scour **N - Not Applicable**
62: Culverts **N - Not Applicable**
67.01 GA **7**

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 3 - Latex Concrete or similar additive
 N- Not Applicable

Appraisal

36: Rail, Tr, Gd, Term Std 1 0 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 4 - Spread Footing
 536: Foundn: Pier 1 4 - Spread Footing
 539: Foundn: Pier 2 0 - Other

Geometric

48: Max Span Length (ft) 79.0
 49: Structure Length (ft) 437.0
 52: Deck Width, Out-To-Out (ft) 30.8
 424: Deck Area (sf) 13437.8
 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) 25
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 16.31
 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 1961 /
 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 1295
 109: % Trucks (%) 5

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 07/01/1973
 63: Analysis Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections

90: Routine Insp. *Months* 12 07/13/2020
 92A: FCM Insp. N
 92B: Dive Insp. N
 92C: Special Insp. N
 92D: UBIT Insp. N
 92E: Drone Insp.
 Inspector Banaszak, Ken

Inspector: Ken Banaszak
Inspection Date: 07/13/2020

Structure Number: 4304233
Facility Carried: KING MEM RD

Bridge Inspection Report

Location Map

Inspector: Ken Banaszak
Inspection Date: 07/13/2020

Structure Number: 4304233
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Bridge Inspection Report

Executive Summary

ODOT District: 12

LAK-00090-1151_(4304233)

Date Built: 07/01/1961

Major Maint: 01 - State Highway Agency

Facility Carried: KING MEM 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: LAK

9.5 MI E SR615

Insp Resp A:

Inspector Banaszak, Ken

Inspection Date 07/13/2020

Reviewer Youssef Seif

Insp Resp B:

National Bridge Inventory

Status 1 - SD Sufficiency Rating 72.4

Identification	Inspections
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(1) State Code	395 - Ohio	(90) Inspection Date	07/13/2020
(8) Structure File Number (SFN)	4304233	(91) Designated Inspection Frequency	12
(7) Facility Carried	KING MEM RD	(92) Critical Feature Inspection	(93) CFI Date
(208) Route on the Bridge	41 - Municipal	A. Fracture Critical Detail	N
(2) Highway Agency District	12	B. Underwater Inspection	N
(3) County Code	43 - Lake	C. Other Special Inspection	N
(209) Interstate Mile Marker		D.01 Snooper Inspection	N
(201) Special Designation		E.01 Drone Inspection	

Condition

(4) Place Code (FIPS)	40670 - KIRTLAND HILLS (LAK county)	(58) Deck	4 - Poor Condition
(5) Inventory Route		(58.01) Wearing Surface	7 - Good (1% distress)
(A) Record Type On/Under Always "On"	1: Route carried "on" the structure	(58.02) Expansion Joint	7- Good (no leaking)
(B) Route Signing Prefix (Highway System)	5 - CITY STREET	(59) Superstructure	7 - Good Condition
(C) Designated Level of Service (Highway Designation)	1 - MAINLINE	(59.01) Protective Coating System (PCS)	6 - Satisfactory (5-10% corr.)
(D) Route Number	M0501	(60) Substructure	7 - Good Condition
(E) Directional Suffix	0 - NOT APPLICABLE	(61) Channel & Channel Protection	N - Not Applicable
(6) Features Intersected	I-90	(61.01) Scour	N - Not Applicable
(9) Location	9.5 MI E SR615	(62) Culvert	N - Not Applicable
(11) Milepoint	0.61	(67.01) General Appraisal	7 - Good Condition (some minor problems)
(12) Base Highway Network	Inventory Route is not on the Base Network		
(13A) LRS Inventory Route			
(13B) Subroute Number			
(16) Latitude	41.64836 Degrees		
(17) Longitude	-81.30128 Degrees		
(16.01) Latitude - Ohio	41.648361		
(17.01) Longitude - Ohio	-81.301275		
(98A) Border Bridge State Code			
(98B) Border Bridge State Percent Responsibility			
(99) Border Bridge Struct No.			

ODOT District: 12

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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
9.5 MI E SR615

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 40670 - KIRTLAND HILLS (LAK county)

Location: LAK

Insp Resp B:

Inspector Banaszak, Ken Inspection Date 07/13/2020

Reviewer Youssef Seif

Structure Type and Material

Load Rating and Posting

(43) Main Structure Type

A. 4 - Steel continuous

B. 02 - Stringer/Multi-beam or Girder

C. N- Not Applicable

(31) Design Load 2 - H 15

(63) Operating Rating Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

(64) Operating Rating Factor 1

(44) Approach Type

A. 0 - Other

B. 00 - Other

C. N- Not Applicable

(65) Inventory Rating Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

(66) Inventory Rating Factor 0.8

(41) Structure Open, Posted, or Closed to Traffic A - Open

(45) Number of Spans in Main Unit 6

(70) Bridge Posting 5 - Equal to or above legal loads

(46) Number of Approach Spans 0

(70.01) Date Posted

(107) Deck Structure Type 1 - Concrete Cast-in-Place

(70.02) Posted Sign Type

(107.01)

(70.03) Posted Weight

(108B) External Deck Protection 3 - Epoxy

(108C) Internal Deck Protection N - NA

(422) Wearing Surface Date 08/31/2005

(108A) Wearing Surface Type 3 - Latex Concrete or similar additive

Appraisal

(108A.01) N- Not Applicable

(67) Structural Evaluation 6 - Equal to present minimum criteria

(423) Wearing Surface Thickness 1.2 in

(68) Deck Geometry 4 - Meets minimum tolerable limits

(483) Protective Coating System Date 10/21/2001

(69) Underclearances, Horizontal and Vertical 4 - Meets minimum tolerable limits

Age of Service

(27) Year Built 1961

(71) Waterway Adequacy N - Not Applicable

(263) Date Built 07/01/1961

(72) Approach Roadway Alignment 8 - Equal to present desirable criteria

(106) Year Reconstructed

(36) Traffic Safety Feature

(264) Major Reconstruction Date

A. Bridge Railings: 1 - Meets acceptable standards

(42) Type of Service

On 1 - Highway

B. Transitions: 0 - Does not meet acceptable standards/safety feature is required

Under 1 - Highway, with or w/out pedestrian

C. Approach Guardrail 1 - Meets acceptable standards

D. Approach Guardrail Ends 1 - Meets acceptable standards

(28) Lanes On 02 Under 04

(113) Scour Critical N - Not over waterway

(29) Average Daily Traffic 1295 (30) ADT Yr. 2015

(109) Truck Percentage 5 % Truck

(114) Future Avg Daily Traffic 71705 (115) Future ADT Yr. 2038

(19) Bypass Detour Length 2 mi.

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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
9.5 MI E SR615

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 40670 - KIRTLAND HILLS (LAK county)

Location: LAK

Insp Resp B:

Inspector Banaszak, Ken

Inspection Date 07/13/2020

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Classification	Geometric Data
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(112) NBIS Bridge	Yes	(48) Longest Span	79.0 Ft.
(104) Highway System of the Inventory Route	0 - Structure/Route is NOT on NHS	(49) Structure Length	437.0 Ft.
(26) Functional Classification of Inventory Route	19 - Urban - Local	(50A) Curb/Sidewalk Left Side - Width	2.1 Ft.
		(50B) Curb/Sidewalk Right Side - Width	2.1 Ft.
(100) Strahnet Highway Designation	Not a STRAHNET route	(51) Brdg Roadway Width Curb-to-Curb	24.0 Ft.
(101) Parallel Structure Designation	N - No parallel structure	(52) Deck Width, Out-to-Out	30.8 Ft.
(102) Direction of Traffic	2-way traffic	(32) Approach Roadway Width	24.0 Ft.
(103) Temporary Structure Design		(33) Bridge Median	0 - No median
(105) Federal Lands Highways	Not Applicable	(34) Skew	25 Deg.
(110) Designated National Network	Inventory route not on network	(35) Structure Flared	0 - No flare

Clearances

(225) Routine Maintenance Responsibility	A. 01 - State Highway Agency	(10) Practical Maximum Vertical Clearance	99 Ft.
	B.	(53) Minimum Vertical Clearance Over Bridge Roadway	99 Ft.
(21) Maintenance Responsibility	01 - State Highway Agency	(47) Total Horizontal Clearance (Inventory Route)	75.5 Ft.
(21B) Major Maint. Responsibility B			
(221) Inspection Program Responsibility	A. 01 - State Highway Agency	(54) Minimum Vertical Under Clearance	B. 16.31 Ft.
	B.	A. H - Highway beneath structure	
(22) Owner	01 - State Highway Agency	(56) Minimum Lateral Under Clearance on Left	10 Ft.
(37) Historical Significance	5 - Not eligible	(55) Minimum Lateral Under Clearance on Right	B. 10 Ft.
		A. H - Highway beneath structure	

Navigation Data

(38) Navigation Control	N - Not applicable, no waterway
(39) Nav Vert Clearance	0.0 Ft.
(40) Nav Horizontal Clearance	0.0 Ft.
(111) Pier or Abutment Protection	
(116) Minimum Navigation Vertical Clearance, Vertical Lift Bridge	0.0 Ft.

Inventory Route Clearances

NBI 005A: On/Under 1: Route carried "on" the structure
 NBI 005D: Route No. M0501

	<u>Cardinal</u> <u>Direction</u>		<u>Non-Cardinal</u> <u>Direction</u>	
(336) Minimum Vertical Clearance on IR	99	Ft.	0	Ft.
(335) Minimum Horizontal Clearance on IR	75.5	Ft.	75.5	Ft.

Ohio Bridge Inventory

General

(203) Bridge Name (Dedicated Name)	
(204) Ohio Designated MPO	08 - NOACA (Cleveland)
(205) Route Number Extension	
(206) Inventory Preferred Route	NP - Non Preferred Route
(5.01) Priority System Code (Inventory Route)	
(213) NLF_ID Inventory Route	MLAKMR00501**C
(218) Major Bridge	N - No
(220) Inventory Location	LAK
(226) Seismic Susceptibility	N - not applicable
(227) GASB	Y - Yes
(236) Future Traffic Factor	1.388
(245) Aperture Cards Fabrication	2 - No
(246) Aperture Cards Original	1 - Yes
(247) Aperture Cards Repair	1 - Yes
(248) Original Construction Project Number	004360
(251) Standard Drawing Number	CSB-2-56
(252) Microfilm Reel Number	LAK012
(261) Bridge Remarks	

LAK-00090-11510-

(265) Electric Line Present	U - Unknown
(266) Gas Line Present	U - Unknown
(269) Sanitary Sewer Present	U - Unknown
(306) NBIS Bridge Length	437
(207) Route Under the Bridge	10

Inventory Route Clearances

<u>Inventory Route</u>	<u>Cardinal</u>	<u>Non-Cardinal</u>	
(336) Minimum Vertical Clearance	99	0	ft.
(335) Minimum Horizontal Clearance	75.5	75.5	ft.

Load Rating

(717) 2F1 Operating Rating Factor (GVW 15 T)	
(720) 3F1 Operating Rating Factor (GVW 23 T)	
(723.01) 4F1 Operating Factor (GVW 27 T)	
(726.01) 5C1 Operating Rating Factor (GVW 40 T)	
(723.02) SU4 Operating Rating Factor (GVW 27 T)	
(726.02) SU5 Operating Rating Factor (GVW 31 T)	
(732.01) SU6 Operating Rating Factor (GVW 34.75 T)	
(732.02) SU7 Operating Rating Factor (GVW 38.75 T)	
(735) EV2 Operating Rating Factor (GVW 28.75 T)	
(738) EV3 Operating Rating Factor (GVW 43 T)	
(734) Ohio Percent Legal	150
(705) Load Rater First Name	
(706) Load Rater Last Name	
(707) Load Rater PE Number	0
(704) Load Rating Date	07/01/1973
(708) Load Rating Software	1 - BARS
(709) Rating Source	1 - Plan information available for load rating analysis (Default)

Inspection Access

(92.02) Snooper Inspection Traffic Control	
(92.03) Snooper Inspection Est. Crew Hours	
(459) Inspection Access	N - The bridge does not include this feature

Deck & Approach

(224) Temporary Subdecking	N - No		
(404) Approach Slab Type	1 - Reinforced Concrete		
(405) Approach Slab Length	0		
	1	2	3
(406) Bridge Median Type	N - None	N - Non Barrier	N - No Joint
(407) Bridge Railing Type	3 - Reinforced Concrete Safety Curb and Parapet with Aluminum Railing		
(408) Composite Deck Code	N - Non-composite Construction		
(419) Expansion Joint with Trough Retrofit 2			
(421) Joint Trough (Y/N)			
(431) Fence	Y - The bridge includes this feature		
(432) Fence Height on Bridge	6.0		
(433) Glare Screen	N - The bridge does not include this feature		
(434) Noise Barrier Walls	N - The bridge does not have Noise Barrier Walls		
(424) Deck Area	13437.8		
(427) Left Sidewalk/Curb Material	1 - Concrete		
(428) Left Sidewalk/Curb Type	1 - Safety Curb (2' or less width)		
(429) Right Sidewalk/Curb Material	1 - Concrete		
(430) Right Sidewalk/Curb Type	1 - Safety Curb (2' or less width)		

Substructure

(526) Abutment Forward Type	5 - Stub Gravity
(527) Abutment Forward Material Type	2 - Concrete
(528) Abutment Forward - Foundation Type	1 - Steel H Piles (Other size)
(531) Abutment Rear Type	5 - Stub Gravity
(532) Abutment Rear Material Type	2 - Concrete
(533) Abutment Rear - Foundation Type	4 - Spread Footing
(534) Pier 1 (Predominate) Type	5 - Capped Column
(535) Pier 1 (Predominate) Material	2 - Concrete
(536) Pier 1 Type - Foundation Type	4 - Spread Footing
(537) Pier 2 Type	N - None
(538) Pier 2 Material	N - None
(539) Pier 2 Type - Foundation Type	0 - Other
(547) Slope Protection Type	2 - Stone (No. 1 Aggregate)

Superstructure

(711) Live Load Response	S - Satisfactory		
(468) Hinges/Pins/Hangers Type	N - Not Applicable (structures with no hinges)		
(409) Deck Drainage Type	3 - Scuppers and downspouts		
(411) Deck Concrete Type	U - Unknown		
	A	B	C
(414) Expansion Joint Type	2 - Sliding Metal Plate Angle	N - None	N - None
(301) Horizontal Curve Degree			
(453) Bearing Device 1, Type	2 - Rockers & Bolsters		
(455) Bearing Device 2, Type	N - None		
(465) Framing Type	N - None or Not Applicable		
(466) Haunched Girder	N - Bridge does not contain a haunched girder		
(467) Haunched Girder Depth	0		
(474) Main Structure System	N - Not Applicable (i.e. Culvert, Beam, Slab, etc.)		
(475) Main Member Type	1 - Rolled Steel		
(482) Protective Coating System Type	5 - Paint System OZEU		
(487) Structural Member Steel Type	U - Unknown		
(498) Protective Coating System Surface Area	0		
(499) Structural Steel Paint	2 - Field		
(478) Post Tensioned Main Member Code	N - Bridge is not Post Tensioned		

Culvert and Waterway

(575) Culvert Type	N - Not a Culvert or Rigid Frame		
(578) Culvert Length Inlet_to_Outlet	0		
(580) Fill Depth Over Culvert	0		
(651) Scenic River	N - Waterway is not classified as Scenic River		
(587) Rise			
(588) Shape			
(655) Channel Protection Type	X - Not Applicable		
(663) Stream Velocity	0.0		
(672) pH			

Inspector: Ken Banaszak
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Structure Number: 4304233
 Facility Carried: KING MEM 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.	13438	sq. ft.	5128	7400	485	425
510 - Wearing Surfaces		10488	sq. ft.	6263	4225	0	0
107 - Steel Open Girder/Beam	3 - Mod.	1748	ft.	1702	40	6	0
515 - Steel Protective Coating		15417	sq. ft.	14032	1100	215	70
205 - Reinforced Concrete Column	3 - Mod.	15	each	15	0	0	0
215 - Reinforced Concrete Abutment	3 - Mod.	68	ft.	49	17	2	0
234 - Reinforced Concrete Pier Cap	3 - Mod.	170	ft.	153	8	9	0
305 - Assembly Joint without Seal	3 - Mod.	68	ft.	59	8	0	1
311 - Movable Bearing	3 - Mod.	24	each	16	2	6	0
313 - Fixed Bearing	3 - Mod.	4	each	4	0	0	0
321 - Reinforced Concrete Approach Slab	3 - Mod.	1200	sq. ft.	1160	40	0	0
331 - Reinforced Concrete Bridge Railing	3 - Mod.	874	ft.	723	150	1	0
815 - Drainage	3 - Mod.	7	each	7	0	0	0
830 - Abutment Backwall	3 - Mod.	68	ft.	47	14	7	0

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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: LAK

9.5 MI E SR615

Resp A:

Insp

Resp B:

Inspector

Banaszak, Ken

Inspection Date

07/13/2020

Reviewer Youssef Seif

Inspector Comments - Deck and Approach

Deck

Floor/Slab (SF)

Many cracks, mottled areas, rust stains and delaminations. Large delaminated areas over forward slope and pier 4. Approximately 650 sf of spalls including 360 degree exposed rebar and rust severed transverse rebar (over wb traffic). Small full depth repairs.

Bridge Wearing Surface (SF)

Cracks mostly hairline.

Curbs/Sidewalk (LF)

Some concrete patches. A few delams & shallow spalls. Cracks, some with rust stains.

Bridge Railing (LF)

Collision damage to right aluminum rail over median & near rear-right (broken post). Vertical cracks, some leaching. Minor spall at forward-left guardrail transition. Some rusting to fence hardware.

Expansion Joint (LF)

Minor rusted section loss. Rusted thru hole in rear-left curb plate.

Approach

Approach Wearing Surface (EA)

A few cracks, most sealed.

Approach Slab (SF)

Paved over.

Signs (EA)

No bridge end markers.

Inspector Comments - General Appraisal

Superstructure

Beams/Girders (LF)

Rusted section loss at abutments. Surface rust to some lower flanges over traffic.

Diaphragm/X-Frames (EA)

Minor endframe rusting section loss at rear abutment. One bent xframe in bay 3 over WB lane #2.
Cracked weld to xframe in rear bay 3.

Bearing Devices (EA)

Rusting section loss. Some pack rust.

Protective Coating System (LF)

Some chalking. Areas of peeling paint. Rust.

Fatigue (LF)

Welded moment plates at piers.

Substructure

Abutment Walls (LF)

Cracks. Some rust stains. Deterioration around some weep holes.

Pier Caps (LF)

Minor delams and shallow spalls. A few cracks.

Pier Columns/Bents (EA)

NOTE: Bottom half of columns for P1 & P5 are fiber wrapped.

Backwalls (LF)

2 SF by 6" deep spalls with exposed rebar in rear bay 1 & in forward backwall behind left fascia. Delams.
Leaching cracks.

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

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FIPS Code: 40670 - KIRTLAND HILLS (LAK county)

Location: LAK

9.5 MI E SR615

Resp A:

Insp

Resp B:

Inspector

Banaszak, Ken

Inspection Date 07/13/2020

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Under Records

Under Record 1

Identification

(1) State Code	395 - Ohio	(6) Features Crossed Over	KING MEMORIAL RD
(11) Milepoint	11.510	(7) Facility Carried Under	KING MEM RD
(201) Special Designation		(8) Structure No.	4304233
(5A) Roadway On/Under	2: Single route goes "under" the structure	(12) Base Highway Network	Inventory Route is not on the Base Network
(5B) Route Type	1 - INTERSTATE HIGHWAY	(13A) LRS Route	
(5C) Level of Service	1 - MAINLINE	(13B) Subroute Number	
(5D) Route Number	00090	(213) NLF_ID Under Route	SLAKIR00090**C
(5E) Directional Suffix	0 - NOT APPLICABLE	(206) Preferred Under Route	

Age of Service

(19) Bypass Detour Length		(381) Intersected Route Daily Truck Traffic	6701
(29) Est Average Daily Traffic	51661	(109) Average Daily Truck Traffic	13
(30) Year of Average Daily Traffic	2015		

Geometric Data

(10) Practical Maximum Vertical Clearance	19.6	(47) Total Horizontal Clearance	24
	CARDINAL		NON-CARDINAL
(336A) Minimum Vertical Clearance	19.6	(336B) Minimum Vertical Clearance	16.312
(335A) Minimum Horizontal Clearance	24	(335B) Minimum Horizontal Clearance	0

Classification

(20) Toll	3 - On Free Road	(101) Parallel Highway	N - No parallel structure
(26) Functional Classification	11 - Urban - Principal Arterial - Interstate	(102) Direction of Traffic	2-way traffic
(209) Interstate Mile Marker	197.551	(104) Highway System of the Under Route	1 - Under Route is on NHS
(100) STRAHNET Highway	Is on an Interstate STRAHNET route	(110) Designated National Network	Under route on National Truck Network

Inspector: Ken Banaszak

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Facility Carried: KING MEM RD

Bridge Inspection Report

Channel Measurement

Date of Channel Measurements:

Distance Measured From:

Depth Measured From:

Number of Measurement Points Taken:

Number of Fixed Objects in Channel:

Water Level:

High Water Mark:

Measurement Type:



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Bridge Inspection Report

Pictures

Inspector: Ken Banaszak
Inspection Date: 07/13/2020

Structure Number: 4304233
Facility Carried: KING MEM RD

Bridge Inspection Report

Sketches

ODOT District: 12

LAK-00090-1151_(4304233)

Date Built: 07/01/1961

Major Maint: 01 - State Highway Agency

Facility Carried: KING MEM 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: LAK

9.5 MI E SR615

Resp A:

Insp

Resp B:

Inspector

Banaszak, Ken

Inspection Date

07/13/2020

Reviewer

Youssef Seif

Summary Recommendations

LAK-00090-1151_(4304233)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Facility Carried: KING MEM RD

Traffic On: 1 - Highway

Date Built: 07/01/1961

Routine Maint: 01 - State Highway Agency

Feature Inters: I-90

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

Rehab Date:

FIPS Code: 40670 - KIRTLAND HILLS (LAK county)

Location: LAK

9.5 MI E SR615

Insp. Resp A: 01 - State Highway Agency

Insp Resp B:

Inspector

Banaszak, Ken

Inspection Date

07/13/2020

Reviewer Youssef Seif

Governing Members

ODOT District: 12

LAK-00090-1151_(4304233)

Date Built: 07/01/1961

Major Maint: 01 - State Highway Agency

Facility Carried: KING MEM 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: LAK

9.5 MI E SR615

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Complex Bridge Superstructure Comments

Historic Bridge Data

Status

(8) Structure File Number (SFN)	4304233	(37) Historical Significance Code	5 - Not eligible
(826) NR Recommendation		(837) Historical District	
(840) Historical National Register Listed		(834) Reviewed By	
(850) In Management Plan (2009)			

Identification

(825) Historical Bridge Name	(7) Facility Carried	KING MEM RD	
(22) Owner	01 - State Highway Agency	(6) Feature Intersected	I-90
(4) Place Code (FIPS)	40670 - KIRTLAND HILLS (LAK county)	(5) Inventory Route	
(3) County (Parish) Code	43 - Lake	(B) Route Signing Prefix	5 - CITY STREET
(2) Highway Agency District	12	(D) Route Number	M0501
(9) Location	9.5 MI E SR615	(16) Latitude at Rear Abutment	41.64836 degrees
(883) UTM		(17) Longitude at Rear Abutment	-81.30128 degrees

Structural Information

(43) Main Structure Type	4 - Steel continuous	02 - Stringer/ Multi-beam or Girder	N- Not Applicable	(827) Historical Year Built
(828) Historical Bridge Type				(836) Historical Data Source
(49) Structure Length	437.0	ft		(831) Historical Builder
(45) No. of Main Spans	6			(842) Historical Bridge Designer
(407) Bridge Railing Type	3 - Reinforced Concrete Safety Curb and Parapet with Aluminum Railing			(106) Year Reconstructed
				(829) Previous Inventory Date

Classification of Service

(26) Functional Class of Inventory Route	19 - Urban - Local	(29) Average Daily Traffic (ADT)	1295
(104) Highway System of the Inventory Route	0 - Structure/Route is NOT on NHS	(30) Year of ADT	2015
(71) Waterway Adequacy	N - Not Applicable	(109.01) Avg. Daily Truck Traffic (ADTT)	65
		(102) Direction of Traffic	2-way traffic

Historical Significance

(843) Historical Setting/Context

(844) Historical Physical Description

(845) Historical Integrity

(846) Historical Significant Description

(847) Historical Bridge Remarks

(860) Justification



Capacity

(51) Bridge Rdwy Width Curb-Curb	24.0	ft	(66) Inventory Rating Load	0.8	
(873) Bridge Rdwy Width Required		ft	(64) Operating Rating Load	1	
(872) Bridge Rdwy Width Adequare	Y		(878) Inventory Rating Load - Required		
(32) Approach Rdwy Width	24.0	ft	(877) Inventory Rating Load - Adequate	Y	
(841) Bridge Wider	N		(28) Lanes On	02	
(52) Deck Width Out-Out	30.8	ft	(880) Lanes On - Required		ft
(50A) Curb/Sidewalk Left Side - Width	2.1	ft	(879) Lanes On - Adequate	Y- Yes	
(50B) Curb/Sidewalk Right Side - Width	2.1	ft	(876) Geometry Adequate		
(10) Minimum Vertical Clearance On, Cardinal	99	ft	(871) Alignment/Sight Distance Adeqaute		

(874) Conformance Comments

(882) Structural Deficiency Summary

(875) Crash Data

Historic Bridge Management Plan

(853) Historical Management Summary

Preservation Potential

(861) Prudent and Feasible to Leave Bridge in Place

(862) Preservation Potential

(863) Preservation Summary

(864) No Build Alternative Consideration

(881) Rehab Without Adverse Effect

(865) Historic Bypass Information

(866) Other Preservation Options

(867) Preservation Recommendation

(868) Comment Recommendation

(869) Comment Date

(870) Plan Comment

