

OKLAHOMA DEPARTMENT OF TRANSPORTATION - Bridge Inspection Report

Suff. Rating: 74.7
ND

Health Index :
66.4

NBI No.: 14409

Structure No.: 3625 0698EX

Local ID:-1

IDENTIFICATION
Description: 30'-45'-45'-30' CONT. CONC SLAB SPANS
1. State: Oklahoma 2. SHD District: Division 4
3. County Code: KAY 4. Place Code: TONKAWA
Admin. Area: Unknown
5. Inventory Route (Route On Structure) : 1 - 1 - 1 - 00035 - 0
6. Feature Intersected: U.S. 60 UNDER
7. Facility Carried: I-35 I-35
9. Location: JCT US 60 11. Mile Post: 6.979 mi
13. LRS Inv. Route./ Subroute.: 3625 0000 01
16. Latitude: 36 41 42.49 17. Longitude: 097 20 44.32
98. Border Br. Code: Not Applicab % Resp.: 0 99. Border Br. #: Unknown

STRUCTURE TYPE AND MATERIALS
43. Main Span Material and Design Type
Concrete Continuous Slab
44. Approach Span Material and Design Type
Not Applicable (P) Not Applicable (P)
45. No. of Spans Main Unit: 4 46. No. of Approach Spans: 0
107. Deck Type: 1 Concrete-Cast-in-Place
108A. Wearing Surface: 6 Bituminous
108B. Membrane: 8 Unknown
108C. Deck Protection: 8 Unknown

AGE AND SERVICE
27. Year Built: 1959 106. Year Reconstructed: -4
28A. Lanes on: 2 28B. Lanes Under: 4 19. Detour Length: 0.1 mi
29. ADT: 8750 30. Year of ADT: 2015 109. Truck ADT %: 36
42A. Type of Service on: 1 Highway
42B. Type of Service under: 1 Highway

GEOMETRIC DATA
10. Inv. Rte. Min. Vert. Clr.: 328.1 ft
32. Approach Roadway Width (W/ Shoulders): 38.0 ft
Deck Area: 6,533.7 sq. ft 33. Median: 0 No median
34. Skew: 0 35. Structure Flared: 0 No flare
47. Inv. Rte. Total Horiz. Clr.: 38.0 ft
48. Length Maximum Span: 44.9 ft 49. Structure Length: 151.9 ft
50A. Curb/Sdwk Wth L: 0.2 ft 50B. Curb/Sidewalk Width R: 0.2 ft
51. Width Curb to Curb: 38.0 ft 52. Width Out to Out: 43.0 ft
53. Minimum Vertical Clearance Over Bridge: 328.1 ft
54A/54B. Min. Vert. Underclearance : H Hwy beneath struct 15.6 ft
N/E S/W
Meas. E1510 E1601 -1 W1510 W1601 -1
Post. DO NOT U DO NOT U DO NOT U DO NOT U DIV. 4 -1
55A/55B. Minimum Lateral Underclearance R: H Hwy beneath struct 9.3 ft
56. Minimum Lateral Underclearance L: 7.4 ft

INSPECTION

Type	Insp Req.	Insp Done	Freq:	Insp. Date:	Next Insp.:
NBI:		Y	24	11/2/2017	11/2/2019
FC Freq.:	N	N	NA	NA	NA
UW Freq.:	N	N	NA	NA	NA
OS Freq.:	N	N	NA	NA	NA

CLASSIFICATION
12. Base Hwy Network : On Base Network 20. Toll Facility: 3 On free road
21. Custodian: 01 State Highway Agency 22. Owner: 01 State Highway Agency
26. Functional Class: 01 Rural Interstate 37. Historical Sig.: 5 Not eligible for NRHP
100. Defense Highway: 1 On Interstate STRAF 101. Parallel Structure: Right of || bridge
102. Dir. of Traffic: 1 1-way traffic 103. Temp. Structure: Not Applicable (P)
104. Highway System: 1 On the NHS 105. Fed. Land Hwy 0 N/A (NBI)
110. National Truck Network: 1 Part of natl ne 112. NBIS Length: Long Enough

CONDITION
58. Deck: 5 Fair 59. Super.: 5 Fair 60. Sub.: 5 Fair
62. Culvert: N N/A (NBI) 61. Channel/Channel Protection: N N/A (NBI)
Flowline Notes:

LOAD RATING AND POSTING
31. Design Load: 5 MS 18 (HS 20) 41. Posting status: A Open, no restriction
63. Op. Rating Method: 1 LF Load Factor-Ton Alt. Op. Rating Meth.: 1 LF Load Factor-To
64. Operating Rating (H/ HS / 3-3) : 26.7 42.4 68.2
66. Inventory Rating (H/ HS / 3-3) : 16.0 25.5 40.9
65. Inv. Rating Method: 1 LF Load Factor-Tor Alt. Inv. Rating Meth.: 1 LF Load Factor-Tor
70. Posting: 5 At/Above Legal Loads Date Rated : 10/28/2009

PROPOSED IMPROVEMENTS
94. Bridge Cost: \$688,846 75. Type of Work: 31 Repl-Load Capacity
95. Roadway Cost: \$1,136,596 76. Lgth. of Improvement: 275.6 ft
96. Total Cost: \$1,928,769 114. Future ADT: 14000
97. Year of Cost Est.: 2015 115. Year of Future ADT: 2035

NAVIGATION DATA
38. Navigation Control: NA-no waterway
39. Vertical Clearance: 0.0 ft 40. Horizontal Clearance: 0.0 ft
111. Pier Protection: Not Applicable (P) 116. Lift Bridge Vert. Clear.: 0.0 ft

APPRAISAL
36A. Bridge Rail: 1 Meets Standards 36C. Approach Rail: 1 Meets Standards
36B. Transition: 1 Meets Standards 36D. Approach Rail Ends: 1 Meets Standards
67. Str. Evaluation: 5 Above Min Tolerable 68. Deck Geometry: 6 Equal Min Criteria
69. Underclearance, Vertical and Horizontal: 4 Tolerable
71. Waterway Adequacy: N Not applicable
72. Approach Alignment: 8 Equal Desirable Crit
113. Scour Critical: N Not Over Waterway

200c. Temperature: 76
200d. Weather: CLEAR
201. Structural Steel ASTM Desig.: -1 -1
202. Waterproof Membrane : -1
Date Installed : 1/1/1901
203. Type Exp. Dev. : -
204. Type of Handrail: Parapet Retrofit
205. Material and Quantity : -1.0
208. Type of Abutment : Skeleton
Type of Foundation : Concrete Piling
209. Type of Pier / Found.: 3 Piers Yes
Concrete Piling
210. Foundation Elev. -1.0 -1.0
9475.0 9377.0 -1.0
211. Wear. Surf. Prot. System : None
Date Installed : 1/1/1901
213. Utilities Attached : -1
-1 -1 -1
-1 -1 -1

214a. Posted Weight Limit: NR
b. Posted Speed Limit : 70
c. Narrow/One Lane Bridge sign : NO
d. Vertical Clearance Sign: YES
Advanced Warning Sign : NO
e. Navigation Lights : -
Working/Not Working : -
215. Overpass : A - Interstate
221. Substructure Cond. (U/W) : -
222. Fill over RCB: -1
223. Appr. Slab/Rdwy Cond.: Satisfactory
225. Paint Type : Not Applicable
Overcoat : Not Applicable
226. Date Painted: -1
227. Paint Coloring: -1
233. Deck Forming: Conventional Forming
238. School Bus Rte: Current and Desired Route
240. Appr. Roadway Type: Asphalt/Bituminous

243. Girder Spacing/Number : -1.0 / -1
244. Span Lengths :
30 30 -1
45 -1 -1
45 -1
245. Girder Depth : -1.000
246. Type of Overlay : AC Overlay
246. Overlay Thickness : 3.0
246. Overlay Date : 10/3/2005
246. Overlay Depth Changed > 1"? No
247. Protective Systems : 1: -
2: - 3: -
4: - 5: -
248. No. of Field Splices w/ Corrosion : -1
249. Scour Crit. POA exists?: -
250. Culvert Headwall Dist.: -1.0
256. Chan. Profile Up/Down Stream?: -
257a. OkiePROS Auto. Truck Routing Yes
258. Plans w/ found. are in file at ODOT:
259. Scour Eval. is in file at ODOT:
263. Interchange at Intersection: Full Interchang
264. Interstate Milepoint: 214.71

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NBI No.: 14409 Structure No.: 3625 0698EX Local ID:-1

Inspection Date: 11/2/2017 Reported By: GHINES
Invoice No.: -1 Inspected With: Gary Richardson
Agency :



Structure / Inspection Notes

- * THIS BRIDGE CONTROLS THE UNDER CLEARANCES FOR * THIS PAIR OF BRIDGES.
- * THIS BRIDGE IS IN THE TONKAWA CITY LIMITS.
- * 9/14/2016 - INSPECTION FOLLOWING 5.8 EARTHQUAKE REVEALED NO NEW DAMAGE (G. HINES).

G Hines inspection comments - 11/02/2017

Cavity under the SE abutment & slopewalls has been repaired * PX - Fair side drains - the overlay is restricting the openings * PX - Safety rail should be added below on the bents * Satisfactory asphalt approach roadway * The retro-fit railing has eliminated most of the curb width * PX - There is a pothole that needs filled on the South approach *

Elm.	Env.	Description	Un.	Qty.	Qty.St. 1	% 1	Qty.St. 2	% 2	Qty.St. 3	% 3	Qty.St. 4	% 4	Qty.St. 5	% 5
38	4	Reinforced Concrete Slab	(SF)	5,772	0	0 %	5,200	90 %	572	10 %	0	0 %	0	0 %
205	4	Reinforced Conc Column or Pile Extension	(EA)	9	0	0 %	9	100 %	0	0 %	0	0 %	0	0 %
215	4	Reinforced Conc Abutment	(LF)	90	0	0 %	90	100 %	0	0 %	0	0 %	0	0 %
234	4	Reinforced Conc Cap	(LF)	123	103	84 %	12	10 %	8	7 %	0	0 %	0	0 %
310	4	Elastomeric Bearing	(EA)	5	5	100 %	0	0 %	0	0 %	0	0 %	0	0 %
331	4	Reinforced Conc Bridge Railing	(LF)	305	299	98 %	4	1 %	2	1 %	0	0 %	0	0 %
510	4	Wearing Surfaces	(SF)	5,772	4,906	85 %	866	15 %	0	0 %	0	0 %	0	0 %
859	4	Soffit of Concrete Decks and Slabs	(EA)	1	0	0 %	0	0 %	1	100 %	0	0 %	0	0 %
924	4	Concrete Railing Protective Coating	(SF)	1,753	0	0 %	0	0 %	0	0 %	1,753	100 %	0	0 %
962	4	Superstructure Traffic Impact	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %

Additional Elements

Elem.	Element Notes (Include Size and Location of Deterioration)
38	The overlay is in good shape in the wheel lanes - in 2014 the north 1/2 of the RH lane was redone. Some cracking noted in the RH shoulder area. Down-graded due to soffit condition (See element #859).
205	Minor scaling & popouts are present at the bottom on all piers in each bent. Some cracking noted on the 1st pier in bents #1 & #2. One minor delamination & crack on the 2nd pier in bent #1 at the ground. South abutment piles have been covered.
215	The abutments were cleaned & repaired by State Forces on 11-2-2017 (photo @ North).
234	Small spalls noted at the SW, SE, & NW corners of the 1st cap with some minor scale & popouts on the SE area. Small spalls also present on the NW, SW, & SE corners and the East end face of the 2nd cap with some scaling. Tiny spalls on the West end & SW corner of the 3rd cap. Still solid at this time.
310	< none >
331	FX - Superficial defects on most areas. There are two tiny spalls & 4 light cracks noted.
510	The overlay is in good shape in the wheel lanes - in 2014 the north 1/2 of the RH lane was redone. Some minor cracking noted in the RH shoulder area.
859	Lots of light pattern cracking in each span with some minor efflorescence, leaching, & discoloration mainly at the outer edges . One moderate delamination noted in span #1. Large spall on the lower East edge of span #4. Patching done at the SW seat area. Approximately 30% to 60% of each span has some type of distress.
924	The waterproof coating is failing in all areas.
962	There is some old & newer damage on the East edge of span #3 soffit (2009 photo). No loose areas noted. Not serious at this time.

Roadway Name : U.S. 60 UNDER		NBI Information Applicable To The Route Under The Structure	
5. Inventory Route (Route Under Structure :	2 - 2 - 1 - 00060 - 0	102. Traffic Dir.:	2 2-way traffic
10. Min. Vert. Clr.(ft.):	15.6	104. Highway System :	0 Not on NHS
12. Base Hwy Network :	On Base Network	105. Fed Land Hwy :	0 N/A (NBI)
13. LRS Inv. Rt./ Subroute :	3602 0000 / 01	109. Truck ADT% :	16
19. Detour Len.(Mi.):	0.0	110. Natl. Truck Network :	0 Not part of natl netwo
20. Toll Facility :	3 On free road	114. Future ADT :	2400
26. Function Class.:	06 Rural Minor Arterial		
		28b. Lanes Und.:	4
		29. ADT :	1500
		32. Appr. Roadway Width (ft.) :	38.0
		47. Total Horiz. Clr.(ft.):	42.3
		51. Roadway Width (ft.) :	38.0
		100. Defense Highway :	0 Not a STRAHNET hwy
Agency Field: 1.(Under Rte.):	<input type="text" value="U"/>	2.(Vert. X-Ref.):	<input type="text" value="-1"/>
		3.(Compass Dir.):	<input type="text" value="E"/>
		4.(Vert. Post. Inc.):	<input type="text" value="1507"/>
		5.(Vert. Post. Dec.):	<input type="text" value="1507"/>