

Oklahoma Dept. of Transportation - Bridge Inspection Report

NBI No.: 15573	Structure No.: 5568 0634 X	Local ID: -1	Suff. Rating: 77.00	FO																														
Bridge Description: <u>IDENTIFICATION</u> 41ft.-55ft.-60ft.-60ft.-50ft.-41 CONT. CONC. SLAB SPANS WITH (2)-3ft. SIDEWALKS 1. State: Oklahoma 2. Division: Division 4 3. County: OKLAHOMA 4. City: OKLA. CITY Admin Area: Unknown 5a. On/Under: Route On Structure 5b. Kind of Hwy: City Street 5c. Lvl of Svc: Mainline 5d. Route No.: 09541 5e. Dir. Sufx: N/A (NBI)		INSPECTION <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Type</th> <th>Insp. Req.</th> <th>Insp. Done</th> <th>Freq.</th> <th>Insp. Date</th> <th>Next Insp.</th> </tr> </thead> <tbody> <tr> <td>NBI:</td> <td></td> <td>1</td> <td>24 months</td> <td>2/3/2020</td> <td>02/03/2022</td> </tr> <tr> <td>FC:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>UW:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>OS:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> </tbody> </table>			Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.	NBI:		1	24 months	2/3/2020	02/03/2022	FC:	N	0		NA	NA	UW:	N	0		NA	NA	OS:	N	0		NA	NA
Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.																													
NBI:		1	24 months	2/3/2020	02/03/2022																													
FC:	N	0		NA	NA																													
UW:	N	0		NA	NA																													
OS:	N	0		NA	NA																													
7. Facility Carried : FAU 9541 DOUGLAS B 6. Feat. Intersect: I-40 UNDER 9. Location: 6.5 MI E OF JCT I35 11. Mile Post: 6.339 mi 13. LRS Inv. / Sub Rte: -1 / -1 16. Latitude: 35° 25' 53.23" 17. Longitude: 097° 22' 14.36" 98. Border Brdg: Not Applicable (P) % Responsible: 0.00 99. Border Brdg #: Unknown		CLASSIFICATION 12. Base Hwy Net.: Not on Base Network 20. Toll Facility: On free road 21. Custodian: State 22. Owner: State 26. Function Class: 17 Urban Collector 37. Historical Sig.: Not eligible for NRHP 100. Def. Hwy: Not a STRAHNET hwy 101. Parallel Str.: No bridge exists 102. Traffic Dir.: 2-way traffic 103. Temp. Str.: Not Applicable (P) 104. Hwy System: Not on NHS 105. Fed Land Hwy: N/A (NBI) 110. Defense Hwy: Not a STRAHNET hwy 112. NBIS Length: Long Enough																																
STRUCTURE TYPE AND MATERIALS 43a/b. Main Span: Conc. Cont. / Slab 44a/b. Appr. Span: N/A / Not Applicable (P) 45. # of Main Spans: 6 46. # of Appr. Spans: 0 107. Deck Type: Concrete-Cast-in-Place 108a. Wearing Surface: Monolithic Concrete 108b. Membrane: None 108c. Deck protection: None		CONDITION 58. Deck: 5 Fair 62. Culvert: N/A (NBI) Flowline Notes 59. Sup.: 6 Satisfactory 60. Sub: 5 Fair 61. Chan./Chan. Prot.: N/A (NBI)																																
AGE AND SERVICE 19. Detour Length: 2.0 mi 27. Year Built: 1962 28a/b. Lanes on/und: 6 / 8 29. ADT: 5,000 30. Year of ADT: 2018 42a/b. Type of Svc on/und: Hwy-ped. / Highway		LOAD RATING AND POSTING 31. Design Load: MS 18 (HS 20) Date Rated: 12/21/2010 41. Post. Status: A Open, no restriction 70. Posting: 5 At/Above Legal Loads 63. Op / 65. Inv. Rating Meth.: 1 LF Load Factor / 1 LF Load Factor <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>H</th> <th>HS</th> <th>3-3</th> <th>EV3</th> <th>SHV</th> </tr> </thead> <tbody> <tr> <td>64. Operating Rating (tons):</td> <td>48.39</td> <td>53.46</td> <td>84.55</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>66. Inventory Rating (tons):</td> <td>34.50</td> <td>31.97</td> <td>50.60</td> <td>-1.00</td> <td></td> </tr> </tbody> </table>				H	HS	3-3	EV3	SHV	64. Operating Rating (tons):	48.39	53.46	84.55	0.00	0.00	66. Inventory Rating (tons):	34.50	31.97	50.60	-1.00													
	H	HS	3-3	EV3	SHV																													
64. Operating Rating (tons):	48.39	53.46	84.55	0.00	0.00																													
66. Inventory Rating (tons):	34.50	31.97	50.60	-1.00																														
GEOMETRIC DATA 10. Vert. Clearance: 99.99 ft 32. Appr Rwy Width: 80.00 ft 33. Median: Closed Med w/o Barri 34. Skew: 23.00° 35. Struct. Flared: No flare 47. Horizontal Clr: 80.00 ft 48. Length Max Span: 60.00 ft 49. Struct. Length: 303.00 ft 50a. Curb/Sdwk Width L: 3.00 ft 50b. Curb/Sdwk Width R: 3.00 ft 51. Width Curb to Curb: 80.00 ft 52. Width Out to Out: 88.00 ft Deck Area: 26,662.21 sq. ft 53. Min. Vert. Cl. Ovr Brg: 99.99 ft 54a. Min. Vt. Undclr. Ref.: H Hwy beneath stru 54b. Min. Vert. Undclr.: 16.40 ft 55a. Min. Lat. Undclr. Ref.: H Hwy beneath str 55. Min. Lat. Underclr. R: 9.00 ft 56. Min. Lat. Underclr. L: 18.50 ft		APPRAISAL 36a. Brdg Rail: 0 Substandard 36b. Transition: 0 Substandard 36c. Appr. Rail: 0 Substandard 36d. Appr. Rail Ends: 0 Substandard 67. Str Evaluation: 5 Above Min Toler 68. Deck Geom.: 5 Above Tolerable 69. Vert./Horiz. Undclr: 2 Intolerable - Repl 71. Waterway Adeq: N Not applicable 72. Appr. Alignment: 6 Equal Min Criteria 113. Scour Critical: N Not Over Waterway																																
OKLAHOMA ITEMS 200c. Temperature: 66 200d. Weather: Ptly Cloudy 201. Struc. Stl. ASTM Desig.: -1 / -1 202. Waterprf. Membrane: -1 Date Installed: 01/01/1901 203. Type Exp. Device: Pourable 204. Type of Railing: HR-3 205. Material Quantity: -1.00 208a. Type of Abutment: Skeleton b. Type of Found.: Bears on Natural Found. 209. Type of Pier/Found.: 8 / No No Piling/Drilled Shaft 210. Foundation Elev.: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> </table> 211. Wear. Surf. Prot. Sys: None Date Installed: 01/01/1901 213. Utilities Attached:		-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	214a. Posted Weight Limit: NR b. Posted Speed Limit: 45 c. Narrow/1way Brdg Sign: No d. Vertical Clr. Sign: Yes Adv. Warning Sign: No e. Navigation Lights?: NA Working/Not Working: NA 215. Overpass: INTERSTATE 221. Substr. Cond. (U/W): 222. Fill Over RCB: 223. Appr. Slab/Rwy Cond.: 3 225. Paint Type/Ovrct: N/A N/A 226. Date Painted: 227. Paint Color: - 233. Deck Forming: Conventional Forming 238. School Bus Rte.: Current & Desired route 240. Appr. Rwy Type.: Concrete 243. Grdr Spacing/No.: /																										
-1.00	-1.00	-1.00																																
-1.00	-1.00	-1.00																																
200c. Temperature: 66 200d. Weather: Ptly Cloudy 201. Struc. Stl. ASTM Desig.: -1 / -1 202. Waterprf. Membrane: -1 Date Installed: 01/01/1901 203. Type Exp. Device: Pourable 204. Type of Railing: HR-3 205. Material Quantity: -1.00 208a. Type of Abutment: Skeleton b. Type of Found.: Bears on Natural Found. 209. Type of Pier/Found.: 8 / No No Piling/Drilled Shaft 210. Foundation Elev.: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> </table> 211. Wear. Surf. Prot. Sys: None Date Installed: 01/01/1901 213. Utilities Attached:		-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	PROPOSED IMPROVEMENTS 94. Bridge Cost: \$2,452,692 95. Roadway Cost: \$4,046,942 96. Total Cost: \$6,867,538 97. Yr. of Cost Est.: 2015 75. Type of Work: 31 Repl-Load Capacity 76. Lngth of Improvement: 313.6 ft 114. Future ADT: 8,000 115. Yr. of Future ADT: 2038																										
-1.00	-1.00	-1.00																																
-1.00	-1.00	-1.00																																
200c. Temperature: 66 200d. Weather: Ptly Cloudy 201. Struc. Stl. ASTM Desig.: -1 / -1 202. Waterprf. Membrane: -1 Date Installed: 01/01/1901 203. Type Exp. Device: Pourable 204. Type of Railing: HR-3 205. Material Quantity: -1.00 208a. Type of Abutment: Skeleton b. Type of Found.: Bears on Natural Found. 209. Type of Pier/Found.: 8 / No No Piling/Drilled Shaft 210. Foundation Elev.: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> </table> 211. Wear. Surf. Prot. Sys: None Date Installed: 01/01/1901 213. Utilities Attached:		-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	NAVIGATION DATA 38. Nav. Control: NA-no waterway 39. Vert. Clearance: 0.0 ft 40. Horiz. Clearance: 0.0 ft 111. Pier Protect.: Not Applicable (P) 116. Lift Bridge Vert. Clr.: 0.0 ft 244. Span Lengths: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>41</td> <td>55</td> <td>60</td> </tr> <tr> <td>60</td> <td>50</td> <td>41</td> </tr> </table> 245. Girder Depth: 246a. Type of Overlay: NA b. Overlay Thickness: 0.00 c. Overlay Date: 01/01/1901 d. Ovlv Depth Changed >1": N 247. Protective Systems: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; height: 20px;"></td> <td style="width: 50%; height: 20px;"></td> </tr> <tr> <td style="width: 50%; height: 20px;"></td> <td style="width: 50%; height: 20px;"></td> </tr> </table> 248. # Field Splices w/ Corrosion: 249. Scour Crit. POA Exists?: - 250. Headwall: 254. Thru Truss Type: 257a. OkiePROS Truck Routing: Yes 258. Plans w/Found.in ODOT File: 259. Scour Eval. in ODOT File: 263. Interchange at Intersection: Full 264. Interstate Milepoint: 159.62			41	55	60	60	50	41																		
-1.00	-1.00	-1.00																																
-1.00	-1.00	-1.00																																
41	55	60																																
60	50	41																																

Oklahoma Dept. of Transportation - Bridge Inspection Report

NBI No.: 15573	Structure No.: 5568 0634 X	Local ID: -1	Suff. Rating: 77.00	FO
--------------------------	--------------------------------------	------------------------	-------------------------------	-----------

Inspection Date: 2/3/20 Gary Hines

Invoice No.: GLH0220 Inspected With: Gary Richardson

BRIDGE NOTES:

INSPECTION NOTES: 2/3/20

G Hines inspection comments - 2/03/2020
 FX - The North slopewall is breaking up near the top * The deck has a 4' wide mountable median * Satisfactory side drains * PX - Erosion is developing at the SW wing gap & under the upper area of the SW slopewall (2020 photo) * PX - Bearings need attention at the abutments soon (reset 2/10/2020) *

ELEMENT CONDITION STATE DATA

Elem. / Env	Description	Unit	Total Qty	% 1	Qty. 1	% 2	Qty. 2	% 3	Qty. 3	% 4	Qty. 4
38 / 4	Re Concrete Slab	sq.ft	24,240.00	0%	0.00	99%	24,034.10	1%	205.90	0%	0.00
PX - The deck has some small minor patches with some scaling and spalling is present - mainly along the outer curb areas (2006 photo). Newer asphalt patching noted in the SB lane of spans #1 & #3. The entire deck has light to heavy alligator cracking - almost every square inch has cracking present. Lots of minor popouts noted as well. The deck is rotating 6 to 8 inches CCW due to skew forces.											
205 / 4	Re Conc Column	each	40.00	48%	19.00	18%	7.00	35%	14.00	0%	0.00
PX - At bent #1 the 1st column is spalled with rebar exposed (2006 photo). The 4th- 5th 6th & 7th columns in bent #1 have smaller spalls mainly near the bottom with cracking present on #2 & 3. Some minor scaling is also present on the 6th & 7th columns. At bent #2 there is some minor spalls on the 1st & 4th columns & a moderate spall on the 3rd column. Small delaminations noted on the 2nd & 6th columns with minor defects noted on the 5th one. At bent #3 there is a spall on the 5th column. At bent #4 there are moderate spalls noted on the 3rd & 4th columns with a delamination at the bottom of #5. At bent #5 the 5th column has moderate spalling (2010 photo). Minor scrapes are present on each column in bent #5. Still solid overall.											
215 / 4	Re Conc Abutment	ft	191.20	60%	114.20	27%	51.00	14%	26.00	0%	0.00
PX - Large spall is present at the NW & SW corners. Lots of small spalls on the East third of the North abutment. Light to moderate horizontal cracking with scaling are present on both abutments. Stable at this time.											
234 / 4	Re Conc Pier Cap	ft	460.00	95%	435.00	4%	19.00	1%	6.00	0%	0.00
PX - One moderate spall on the South face of the 3rd cap above the 7th column. Small spall present at the SW corner of the 4th cap & the North face below the 4th beam with a delamination at the NE & NW corners. Rebar chair stains noted on the 2nd cap between the 6th & 7th columns. Small delaminations present on the 1st cap; one at the South face above the 4th column & at the NE area. On the 2nd cap there are delaminations at the East & North areas of bent #2. Minor cracking noted on the SE area of 3rd cap - on the West end of the 5th cap & both ends of 2nd cap. Some outer end faces have light pattern cracks developing. Satisfactory condition overall.											
301 / 4	Pourable Joint Seal	ft	501.00	0%	0.00	0%	0.00	0%	0.00	100%	501.00
PX - The sealant over the abutments has lost most of its adhesion and is allowing debris and water to pass through. There is some minor chipping of the deck present along the abutment joints with spalling in the NE approach slab. Each joint needs completely redone. There is a full-length OPEN joint down the median that needs to be sealed; it is about one inch wide and small rocks &/or debris can fall into traffic below.											
310 / 4	Elastomeric Bearing	each	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00
There is one solid pad end to end on bent #3 (w/o steel element). Supplement bearings have been removed at the abutments.											
311 / 4	Moveable Bearing	each	144.00	0%	0.00	84%	121.00	13%	19.00	3%	4.00
PX - ALL ABUTMENT ROLLERS WERE REPLACED BY THE PERRY BRIDGE CREW IN LATE 2011 (2012 PHOTOS). THE SOUTH ABUTMENT BEARING STILL NEED TO BE PAINTED. ALSO THE UPPER EARS DON'T LINE UP WITH THE ORIGINAL HOLES DUE TO DECK ROTATION. MANY OF THE ROLLERS ON THE NORTH (7-14-15-16- 21- 22- 23 & 24) ARE OUT OF POSITION A SIGNIFICANT AMOUNT (2014 PHOTO). ALL OF THE MORTAR PLATES AT THE ABUTMENTS HAVE SOME DEGREE OF EXFOLIATION WITH SOME LOSS DEVELOPING ON MANY OF THE ROLLERS. INITIAL SURFACE RUST IS DEVELOPING AT THE TOP & BOTTOM AREAS OF THE BEARINGS AT THE BENTS WITH SOME HEAVIER RUST AT THE ABUTMENTS. THE 1st & 12th ROLLERS ON THE SOUTH ABUTMENT AND THE 12th & 17th AT THE NORTH ABUTMENT ARE OUT OF POSITION (2018 PHOTO #17 @ NORTH). 2/2020 = #12 & 17 ON THE NORTH AND #12 ON THE SOUTH WERE RESET ON 2/10/2020 BY THE PERRY BRIDGE CREW.											
321 / 4	Re Conc Approach Slab	sq.ft	4.00	0%	0.00	75%	3.00	25%	1.00	0%	0.00
PX - The NW approach slab is badly broken with areas of upheaval at the curb drain (2006 photo). The NW & NE slabs also have deep spalling along the bridge deck (5/2011 & 2014 photos @ NE). The SE & SW slabs have minor to moderate cracking - all 4 have minor wear. PX - The SW slab has shovled about 5 inches from the bridge deck causing erosion to develop under the slab.											
330 / 4	Metal Bridge Railing	ft	547.00	0%	0.00	100%	547.00	0%	0.00	0%	0.00
The steel portion of the railing has moderate surface rust overall. The concrete rail has been repaired since the 2014 inspection.											
919 / 4	St.(Rail) Prot. Coat	(SF)	1,641.00	0%	0.00	0%	0.00	100%	1,641.00	0%	0.00
FX - The steel portion of the railing has moderate surface rust overall.											
331 / 4	Re Conc Bridge Railing	ft	60.00	55%	33.00	45%	27.00	0%	0.00	0%	0.00
The previously damaged rail sections & posts have been repaired since the 2014 inspection. The remaining concrete portions have minor weathering overall.											
859 / 4	Soffit	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00
There are 5 longitudinal construction joints in each span. Most have some minor seepage with stains & light efflorescence present. Lots of discoloration & sweating noted in 2014 (2014 photo). Spall noted along the open centerline joint (see #301) in span #3 (not over traffic). The fascia areas have some discoloration & light cracking. Approximately 70% to 95% of each span has some type of distress.											

Oklahoma Dept. of Transportation - Bridge Inspection Report

<u>NBI No.:</u> 15573		<u>Structure No.:</u> 5568 0634 X		<u>Local ID:</u> -1				<u>Suff. Rating:</u> 77.00				FO
870 / 4	Concrete Wingwall	(EA)	4.00	0%	0.00	50%	2.00	0%	0.00	50%	2.00	
PX - The SW wing is completely broken away from the abutment & leaning badly (2008 & 2020 photos). It is no longer being held up by the exposed rebar. Some loss of fill is causing settlement along the grassy shoulder area. The NE wing leans almost as bad as well but is still attached via the rebar. The SE & NW wings are cracked (CS 2) but still functioning as intended. The SW & NE needs attention soon.												
958 / 4	Concrete Cracking SF	(EA)	1.00	0%	0.00	0%	0.00	0%	0.00	100%	1.00	
PX - The deck is entirely covered with pattern cracking - the cracks are of minor to severe in size & density. There is not a 4 inch X 4 inch area that does not have a crack of some size. The deck really needs a high-density overlay or epoxy flood coat soon.												
967 / 4	Sub.Traffic Impact SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00	
Minor scrapes are present on the south face of each column in bents #4 & #5.												