Bridge Inspection Report

02227
SH 28
over
Gilkey Branch

Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Inspection Date:

Structure Number: 02227

Facility Carried: SH 28

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION

(1) STATE CODE 056 - Arkansas
(8) STRUCTURE NUMBER 02227
(5) INV. ROUTE (ON/UNDER) 1 3 1 28 0
(2) HIGHWAY AGENCY 08 (3) COUNTY CODE 149
(4) PLACE CODE 00000
(6) FEATURES INTERSECTED Gilkey Branch
(7) FACILITY CARRIED SH 28
(9) LOCATION 2.68 M E OF SH 27
(11) MILEPOINT 2.679 (12) BASE HIGHWAY NETWORK 0
(13A) LRS INVENTORY ROUTE 0000000000 (13B) SUBROUTE NUMBER 00
(16) LATITUDE 34.98225 (17) LONGITUDE -93.34535
(98A) BORDER BRIDGE CODE
PERCENT RESPONSIBILITY (99) BORDER BRIDGE STRUCT

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN
A) KIND OF MATERIAL/DESIGN: 1 - Concrete
B) TYPE OF DESIGN/CONSTR: 22 - Channel Beam
(44) STRUCTURE TYPE, APPROACH SPANS
A) KIND OF MATERIAL/DESIGN: 0 - Other
B) TYPE OF DESIGN/CONSTR: 00 - Other
(45) NUMBER OF SPANS IN MAIN 4 (46) NUMBER OF APPROACH 0
(107) DECK STRUCTURE TYPE 2 (108A) WEARING SURFACE 6
(108B) DECK MEMBRANE 0 (108C) DECK PROTECTION 0

AGE OF SERVICE

(27) YEAR BUILT 1952 (106) YEAR RECONSTRUCTED 0000
(42) TYPE OF SERVICE ON 1 UNDER 5
(28) LANES ON 02 UNDER 00
(29) AVERAGE DAILY TRAFFIC 1200 (19) BYPASS DETOUR LENGTH 7
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014
(109) AVERAGE DAILY TRUCK TRAFFIC 1

GEOMETRIC DATA

(48) LENGTH OF MAX SPAN (ft.) 19 (49) STRUCTURE LENGTH (ft.) 76
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 23.3
(52) DECK WIDTH, OUT-TO-OUT (ft.) 24.6
(32) APPROACH ROADWAY WIDTH (ft.) 27.9
(33) BRIDGE MEDIAN 0 (34) SKEW (DEG.) 0
(35) STRUCTURE FLARED 0 (10) INV RTE, MIN VERT CLEAR (ft.) 99.99
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 24.0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99
(54) VERTICAL UNDER CLEARANCE (ft.) N 0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0

PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK PROPOSED 31 (75B) WORK DONE BY 1
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 102.0
(94) BRIDGE IMPROVEMENT COST ($) 0
(95) ROADWAY IMPROVEMENT COST ($) 117
(96) TOTAL PROJECT COST 305
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2002
(114) FUTURE ADT 2044 (115) YEAR OF FUTURE ADT 2028

INSPECTIONS

(90) INSPECTION DATE 07/20/2016
(91) DESIGNATED INSPECTION FREQUENCY 24
(92) CRITICAL FEATURE INSPECTION (93) CFI DATE
A. FRACTURE CRITICAL DETAIL N
B. UNDERWATER INSPECTION N
C. OTHER SPECIAL N

CONDITION

(58) DECK 6
(59) SUPERSTRUCTURE 5 (60) SUBSTRUCTURE 7
(61) CHANNEL & CHANNEL PROTECTION 7 (62) CULVERT N

LOAD RATING AND POSTING

(31) DESIGN LOAD 2
(63) METHOD USED TO DETERMINE OPERATING RATING 1
(64) OPERATING RATING 60.0
(65) METHOD USED TO DETERMINE INVENTORY RATING 1
(66) INVENTORY RATING 36.0
(70) BRIDGE POSTING 5
(41) STRUCTURE OPEN/POSTED/CLOSED A

APPRAISAL

(67) STRUCTURAL EVALUATION 5
(68) DECK GEOMETRY 3
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
(71) WATERWAY ADEQUACY 8
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURE
36A) BRIDGE RAILINGS: 0
36B) TRANSITIONS: 0
36C) APPROACH GUARDRAIL: 0
36D) APPROACH GUARDRAIL ENDS: 0
(113) SCOUR CRITICAL BRIDGES 8
SUFFICIENCY RATING 2 STATUS 66.0

CLASSIFICATION

(112) NBIS BRIDGE LENGTH Y
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 0
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 07
(100) STRAHNET HIGHWAY DESIGNATION 0
(101) PARALLEL STRUCTURE DESIGNATION N
(102) DIRECTION OF TRAFFIC 2
(103) TEMP STRUCTURE
(105) FEDERAL LANDS HIGHWAYS 0
(110) DESIGNATED NATIONAL NETWORK 0
(20) TOLL 3
(21) MAINTENANCE RESPONSIBILITY 01
(22) OWNER 01
(37) HISTORICAL 5

NAVIGATION DATA

(38) NAVIGATION CONTROL 0
(111) PIER OR ABUTMENT PROTECTION 1
(39) NAV VERT CLEARANCE (ft.) 0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.) 0
(40) NAV HORIZONTAL CLEARANCE (ft.) 0

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	1870	sq. ft.	1870			
	5" asphalt overlay - major transverse cracks over joints, minor scale in 10% of wearing surface. Span #3 - 1 patch area approx. 3 sf. Rail - metal with concrete post - one section (25') has minor rust.						
510 - Wearing Surfaces		1763	sq. ft.	1635	3	125	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		3			3		
3220 - Crack (Wearing Surface)		125				125	
110 - Reinforced Concrete Open Girder/Beam	1- Ben.	532	ft.	154	99	279	0
	Spalls, delamination and cracks throughout. Minor section loss of some reinforcing steel. See attached notes for Channel Beams for complete details.						
1080 - Delamination/Spall/Patched Area		138				138	
1130 - Cracking (RC and Other)		240			99	141	
205 - Reinforced Concrete Column	1- Ben.	6	each	6			
215 - Reinforced Concrete Abutment	1- Ben.	50	ft.	46	2	2	0
	A few minor spalls at bearing area at various locations. Minor erosion under abutment # 1.						
1080 - Delamination/Spall/Patched Area		4			2	2	
234 - Reinforced Concrete Pier Cap	1- Ben.	74	ft.	73	1	0	0
	Pier #4, ahead side - Minor spall with rebar exposed						
1080 - Delamination/Spall/Patched Area		1			1		
330 - Metal Bridge Railing	1- Ben.	152	ft.	127	25	0	0
	Rail - metal with concrete post - one section (25') has minor rust.						
1000 - Corrosion		25			25		
515 - Steel Protective Coating		456	sq. ft.	206	100	100	50
3440 - Effectiveness (Steel Protective Coatings)		250			100	100	50