

Bridge Inspection Report

05651

State Highway 253

over

Mackenay Creek Seb. Co.



Inspection Date:

Inspected By:

Inspection Type(s):



Inspector:

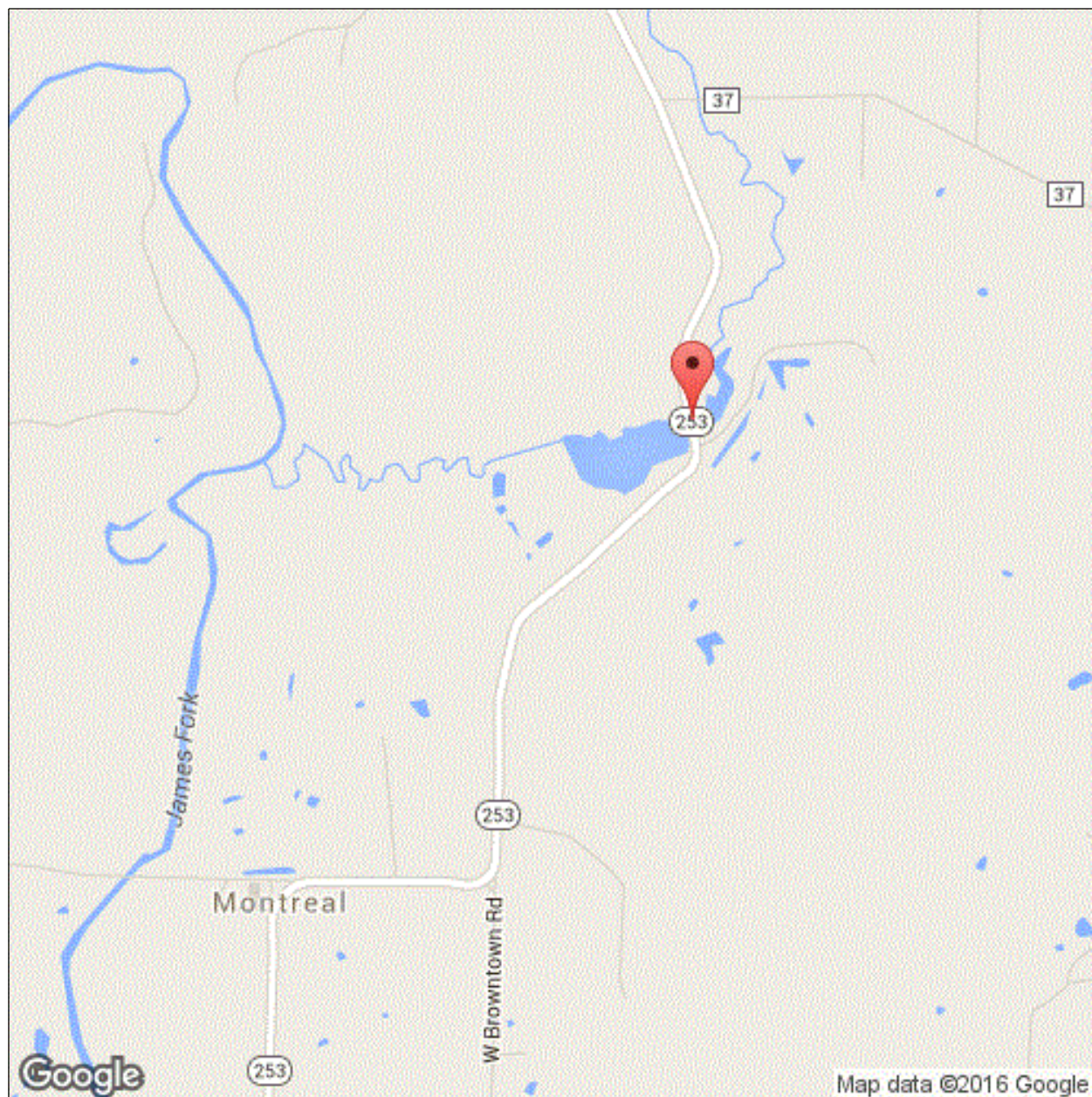
Structure Number: 05651

Inspection Date:

Facility Carried: State Highway 253

Bridge Inspection Report

Location Map



Latitude: 35.13303

Longitude: -94.33227

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Executive Summary

04/12/2016 - JCJ & JML - There are no significant changes apparent since the last inspection.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	04/12/2016
(8) STRUCTURE NUMBER	05651	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 253 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 131	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Mackenay Creek Seb. Co.	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	State Highway 253		
(9) LOCATION	5.45 MI S JCT SH 10 & 253		
(11) MILEPOINT 5.269	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.13303	(17) LONGITUDE -94.33227		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	7
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(59) SUPERSTRUCTURE	7
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(60) SUBSTRUCTURE	7
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	7
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1977	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	4
(42) TYPE OF SERVICE ON 1 UNDER 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 00		(64) OPERATING RATING	55.0
(29) AVERAGE DAILY TRAFFIC 880	(19) BYPASS DETOUR LENGTH 6	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	33.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 31	(49) STRUCTURE LENGTH (ft.) 93	(67) STRUCTURAL EVALUATION	7
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 26.2		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 28.9		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 24.0		(72) APPROACH ROADWAY ALIGNMENT	7
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 27.2		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		36C) APPROACH GUARDRAIL:	1
(54) VERTICAL UNDER CLEARANCE (ft.) N 0		36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	8
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	0
		STATUS	86.0
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 0		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 1581	(115) YEAR OF FUTURE ADT 2028	(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
38 - Reinforced Concrete Slab	1- Ben.	2366	sq. ft.	1909	150	307	0
	04/12/2016 - JCJ & JML - Bridge deck has long term creep with 1/2 inch sag at mid-span of all spans. Superficial spalling adjacent to the deck joints. There are diagonal cracks in the corners of each slab over the bearing area visible from the driving surface of the deck. There are spalls / delaminated areas in the Left edge of deck over Bent 3 cap. Delaminated areas adjacent to the deck drains are visible from the undersurface of the deck. Hairline Longitudinal, transverse and map cracking visible from undersurface of the deck.						
1080 - Delamination/Spall/Patched Area		7				7	
1130 - Cracking (RC and Other)		450			150	300	
205 - Reinforced Concrete Column	1- Ben.	4	each	0	4	0	0
	04/12/2016 - JCJ & JML - There is up to medium abrasion in the columns.						
1190 - Abrasion/Wear (PSC/RC)		4			4		
215 - Reinforced Concrete Abutment	1- Ben.	40	ft.	37	1	2	0
	04/12/2016 - JCJ & JML - Bent 1 has one vertical crack located approximately 6 feet from each end of the cap.						
1130 - Cracking (RC and Other)		3			1	2	
234 - Reinforced Concrete Pier Cap	1- Ben.	57	ft.	50	3	4	0
	04/12/2016 - JCJ & JML - Bent 2 vertical cracks over the exterior face of each column.						
	Bent 3 has areas with horizontal cracking.						
1130 - Cracking (RC and Other)		7			3	4	
301 - Pourable Joint Seal	1- Ben.	56	ft.	0	0	56	0
	04/12/2016 - JCJ & JML - Deck joint sealant is deteriorated and leaks over the intermediate bents.						
2310 - Leakage		56				56	
331 - Reinforced Concrete Bridge Railing	1- Ben.	186	ft.	186			
	04/12/2016 - JCJ & JML - No apparent noteworthy deficiencies at this inspection.						

Agency Inventory

Structural

BRIDGE GROUP

WEARING SURFACE THICKNESS IN

WEATHERING STEEL No

PIN / HANGER No

STAY IN PLACE FORMS No

STEEL TONS Tons(41) STRUCTURE
OPEN/POSTED/CLOSED A**Location**ROAD / ROUTE NAME SECTION ZONE **Seismic**

SEISMIC

SEISMIC YEAR / ZONE **Notification**SCHOOL DISTRICT EMAIL OWNER EMAIL

LATE REASON

Load Po**Calculated**

CODE 4 VEHICLE (22 tons)

CODE 9 VEHICLE (31 tons)

CODE 5 VEHICLE (40 tons)

Posted

Bridge Beginning

CODE 4 TonsCODE 9 TonsCODE 5 Tons**Stip**

APHN

STIP

JOB NUMBER

PROG. JOB NUMBER

OLD BRIDGE NUMBER

NEW BRIDGE NUMBER

BRIDGE CONDITION INDEX

Notes

North/South

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Maintenance Needs

Date Reported: 04/12/2016

Priority: D - Routine

Work Code:

Deficiency Description:

There is minor asphalt settlement in the approach roadway adjacent to the abutments.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description South approach roadway

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Maintenance Needs

Date Reported: 04/12/2016

Priority: D - Routine

Work Code:

Deficiency Description:

Expansion joints -

The pourable type joint material at the intermediate bents has deteriorated and is missing in locations allowing water to leak onto the substructure and incompressible materials to enter the joints.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Deck joint sealant

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Maintenance Needs

Date Reported: 04/12/2016

Priority: D - Routine

Work Code:

Deficiency Description:

Deck / superstructure -

The left edge of the deck / superstructure in Spans # 2 and # 3 has delaminated areas over Bent # 3.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Bent 3. Left

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Maintenance Needs

Date Reported: 04/12/2016

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Driving surface of the deck -

The driving surface of the deck has sealable diagonal cracking at both ends of all spans on the left and right sides of structure.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Left side of deck over Bent 2.

Stage: Assigned



PHOTO 2 Description Diagonal cracking over Bent 3.