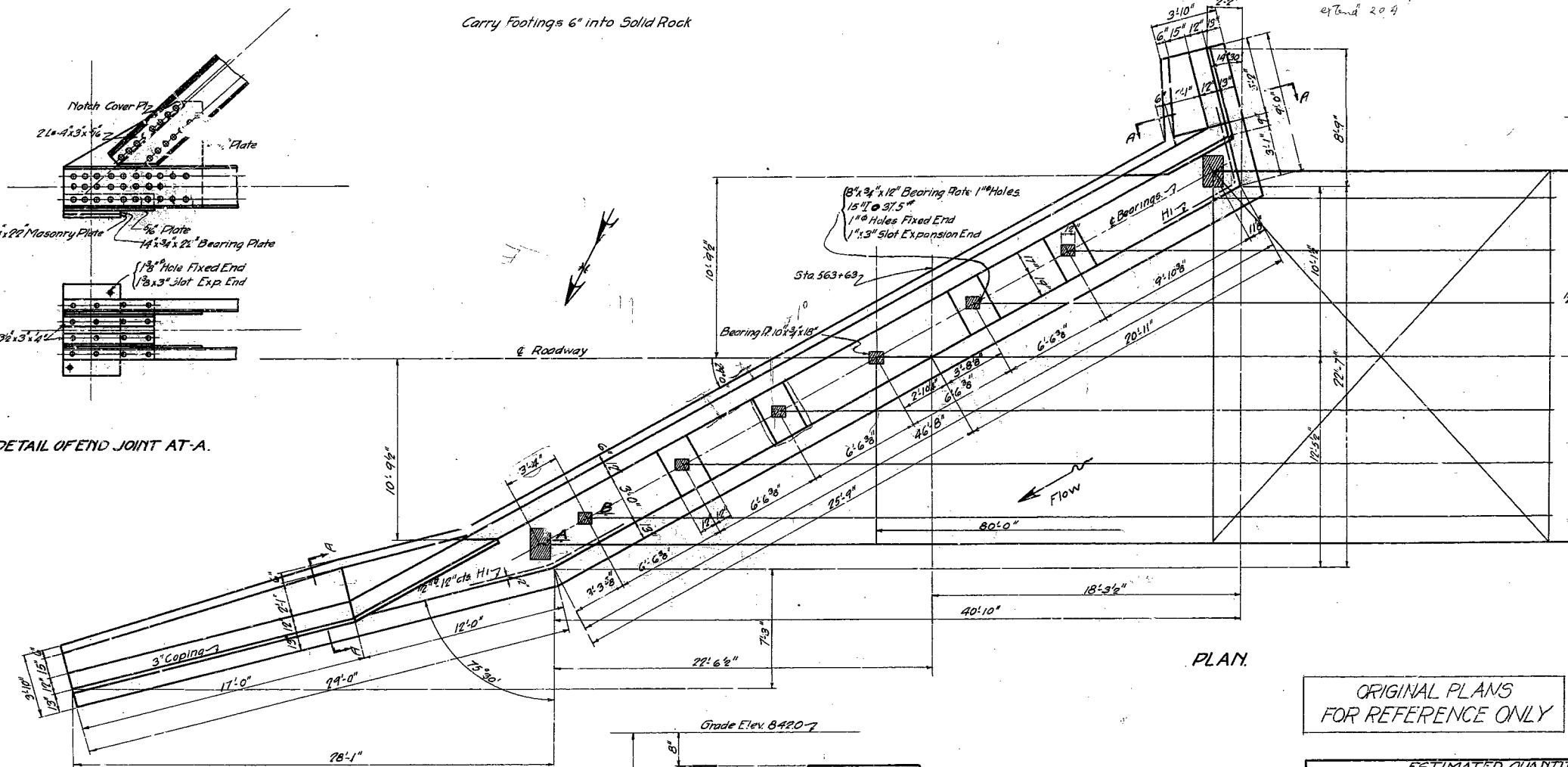
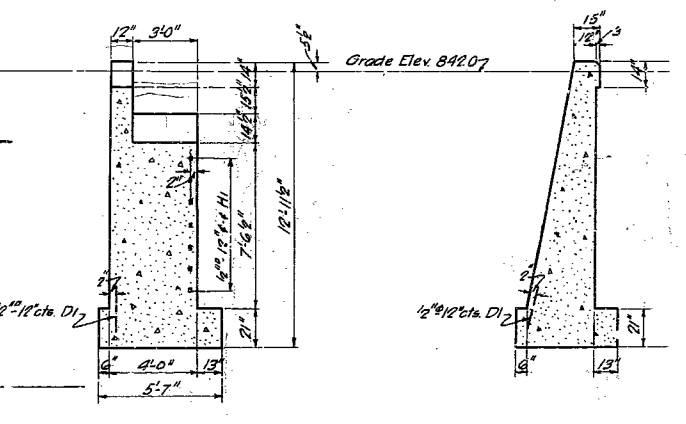


DETAIL OF END JOINT AT A.



PLAN.



SECTION THRU ABUT

SECTION AA THRU WING

No	Size	Length	Mark
156	1/2"	2' 0"	DI
28	1/2"	10' 0"	HI

GENERAL NOTES:  
All general notes on 55 apply to this bridge.  
Concrete in abutments 1:3:5 mix.  
Bevel exposed edges 1/2" where no other bevel is shown.

See G-248R1 for Superstructure Replacement

ORIGINAL PLANS FOR REFERENCE ONLY

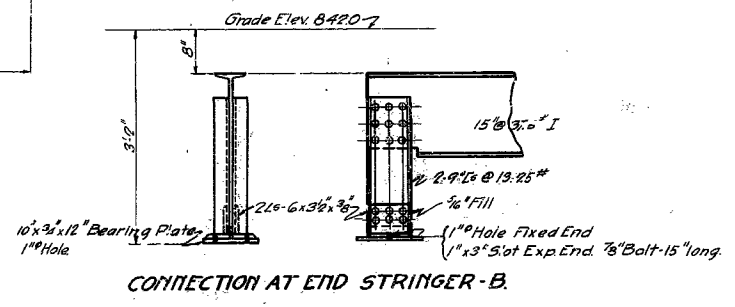
	Superstruc.	Substruc.	Total
Concrete 1:2:3 mix Cuyda	422		422
Concrete 1:3:5 mix Cuyda		225.2	225.2
Rein. Steel Lbs.	8112	300	8412
150 Strus Steel Lbs.	61700		61700
Gas Pipe Rail Lin. Ft.	366		366
Excavation Cu Yds.		350	350

MISSOURI STATE HIGHWAY DEPARTMENT  
BRIDGE OVER BEAR CREEK  
STATE ROAD FROM ST LOUIS TO SPRINGFIELD  
ABOUT 3 MILES FROM SLEEPER  
PROJECT NO. R14 Sec. 36 STA. 53+60

LACLEDE COUNTY

SUBMITTED BY *Chas. D. Mann* BRIDGE ENGINEER  
APPROVED BY *W. H. Repner* STATE HIGHWAY ENGINEER

570  
55  
514  
G248



CONNECTION AT END STRINGER-B.

DRAWN Jan. 1923 BY C.M.C.  
CHK'D Jan. 1923 BY R.L.T.

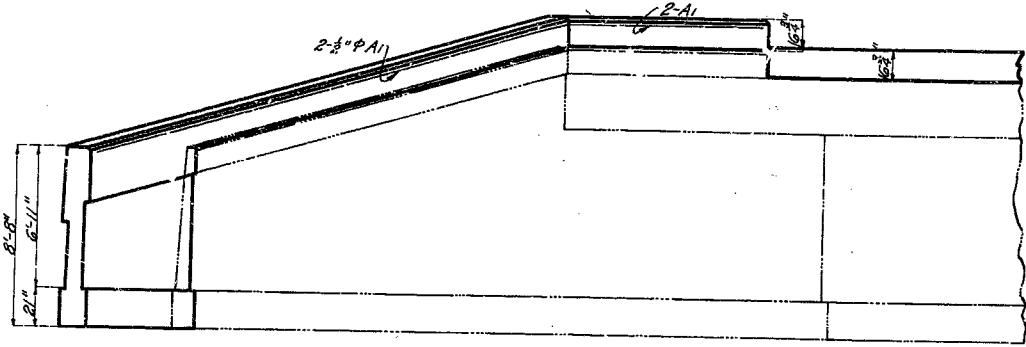
Sheet 1 of 2 Sheets

53-16

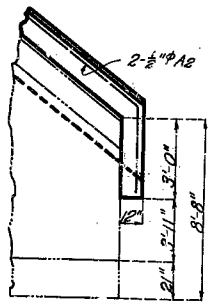
252

MISSOURI STATE HIGHWAY DEPARTMENT

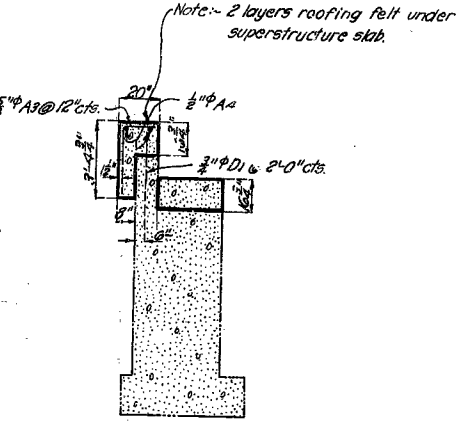
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	MO.	33A(15.6)	18		



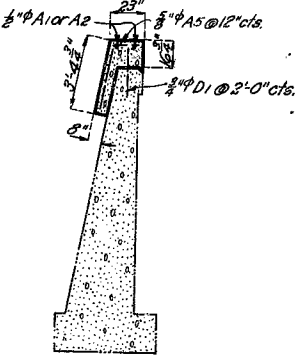
PART ELEVATION



DETAIL SHOWING OVERHANG AT END OF SHORT WING



SECTION THRU ABUTMENT



SECTION THRU WING WALL

Note:-  
lines indicate work in place.  
lines indicate new work.

Notes:-  
Holes to be drilled into old concrete, filled with cement mortar grout and dowel "D" bars to be driven into grout.  
All surfaces to receive new concrete are to be roughened by bush hammering and then painted with cement wash just before placing concrete.  
Truss Span to be raised 1.4'. See Special Provisions.  
Dowels to extend at least 12" into old concrete and placed not less than 4" from edge.

Maximum Limits of Excavation to be paid for

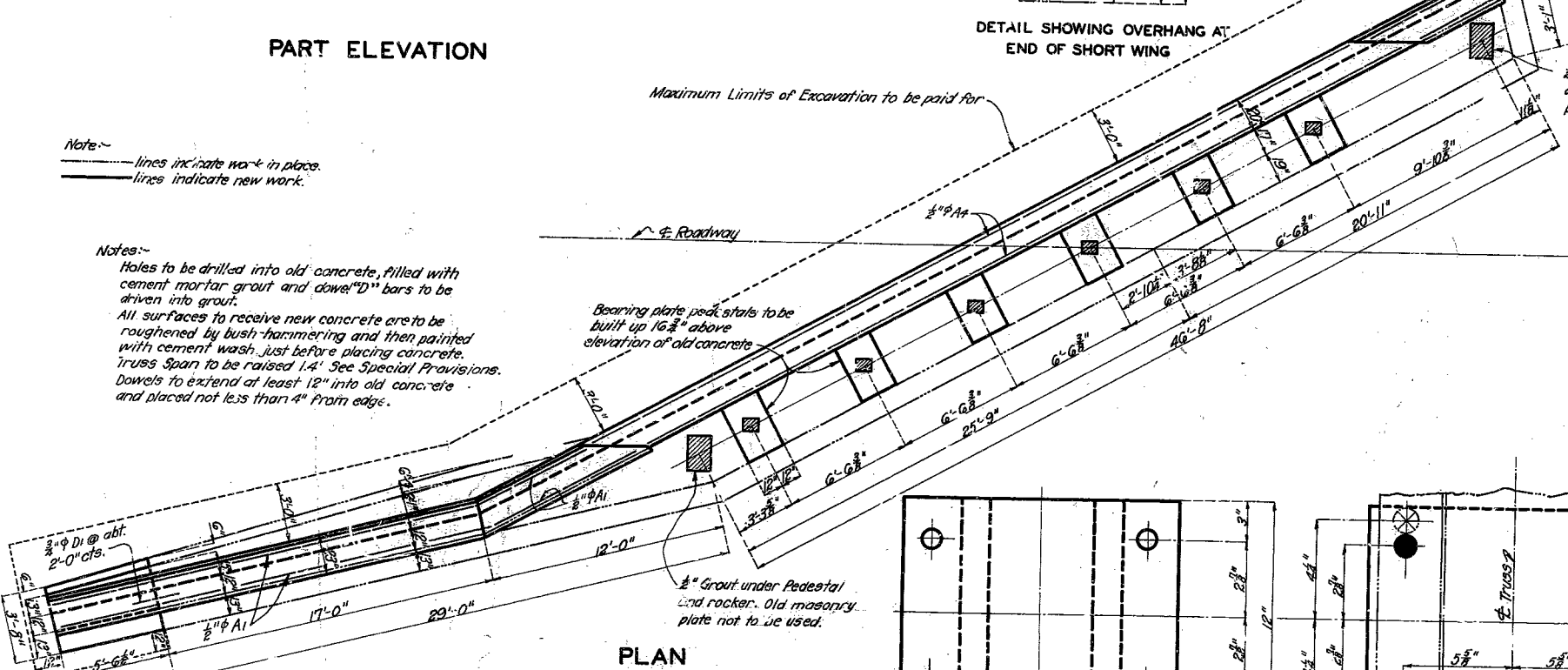
Bearing plate pedestals to be built up 16 3/4" above elevation of old concrete

1/2" Grout under Pedestal and rocker. Old masonry plate not to be used.

ESTIMATED QUANTITIES		
ITEM		TOTAL
Excavation	Cu. Yds.	70
Concrete 1:3:5 mix.	Cu. Yds.	35.6
Reinforcing Steel	Lbs.	1350
Cast Steel	Lbs.	1370
Structural Steel	Lbs.	520

GENERAL NOTES:-

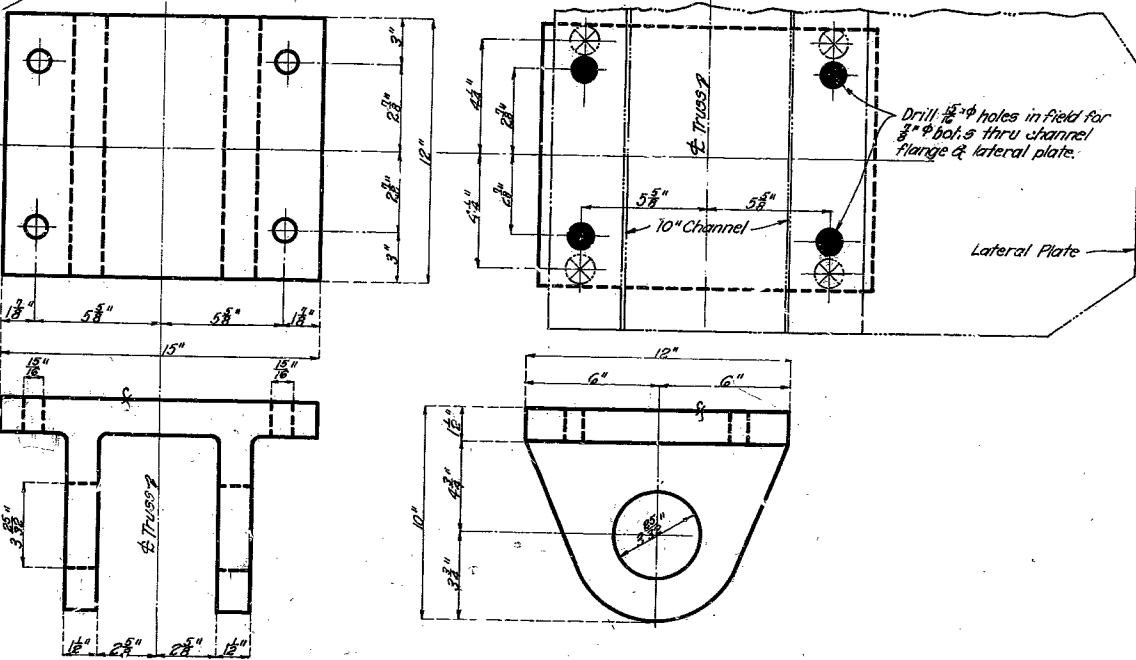
All concrete to be 1:3:5 mix.  
Exposed edges to be beveled 1/2".  
Excavation in accordance with specification XLIX of Standard Specifications issued November 1, 1936 except that quantities paid for will be computed from within such limits as shown in Plan on this sheet and as noted in Special Provisions.



PLAN

REINF. STEEL			
No.	Size	Length	Mark
4	1/2" $\phi$	28'-6"	A1
4	1/2" $\phi$	17'-0"	A2
90	3/8" $\phi$	4'-6"	A3
8	1/2" $\phi$	23'-3"	A4
80	3/8" $\phi$	4'-9"	A5
94	3/8" $\phi$	2'-0"	D1

Bars to be bent as shown in field.



DETAIL OF UPPER CASTINGS  
4- REQUIRED

B.M. Elev. 874.23 N. & W. in Root 8" Elm 36' Lt. Sta. 287+29.

BRIDGE OVER BEAR CREEK

STATE ROAD FROM LEBANON TO ROLLA  
ABOUT 3 MILES SOUTHEAST OF SLEEPER  
PROJECT NO. 139A (U.S. 66) STA. 284+96.

LACLEDE COUNTY

SUBMITTED BY *W. R. Davis* DATE *4/1/38*  
APPROVED BY *W. R. Cullen* DATE *4/1/38*  
BRIDGE ENGINEER  
CHIEF ENGINEER

Drawn Feb. 1930 By H.B.A. & H.E.C.  
Traced Feb. 1930 By H.E.C.  
Checked Feb. 1930 By F.C.L.

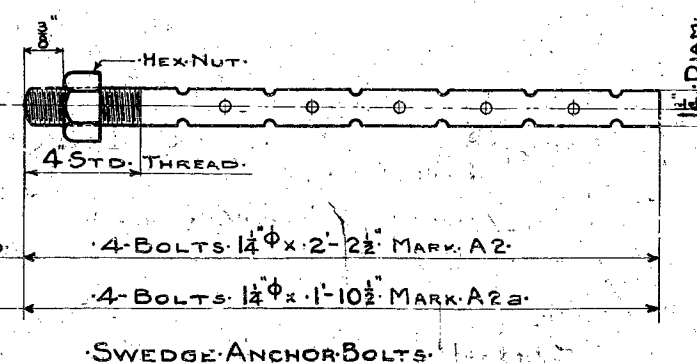
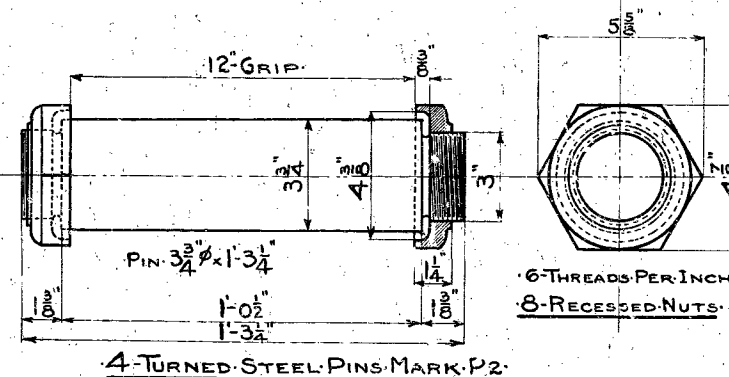
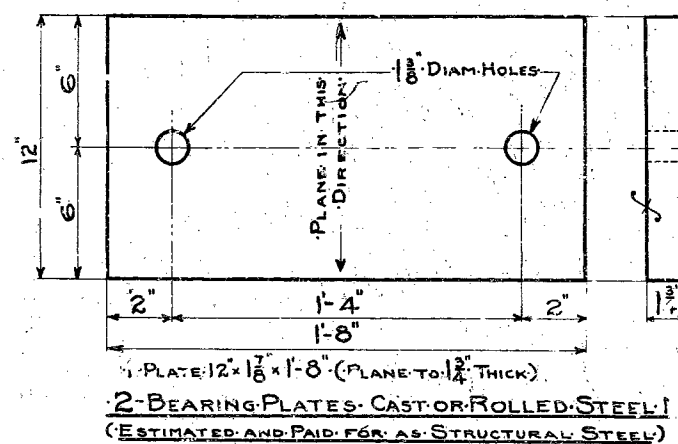
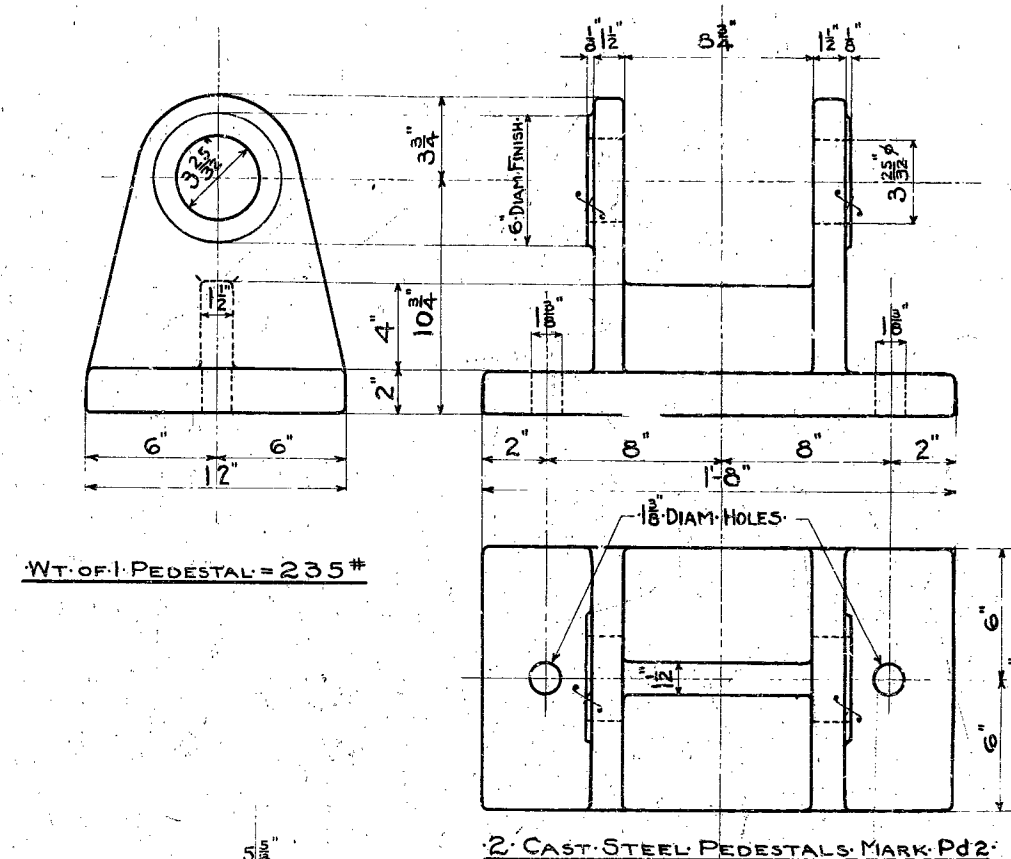
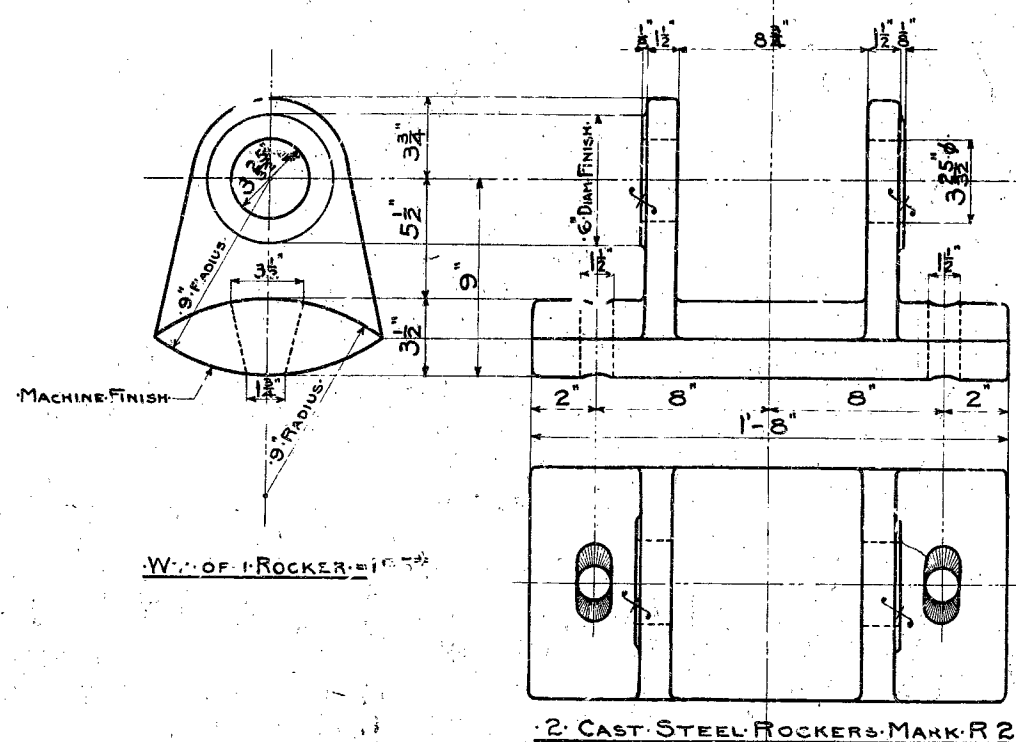
Sheet No. 1 of 2

F.A.

G-248R

## MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Mo.	139A (U.S. 66)			



BRIDGE OVER BEAR CREEK

STATE ROAD FROM LEBANON TO ROLLA  
ABOUT 3 MILES SOUTHEAST OF SLEEPER  
PROJECT NO. 139 A (U.S.66) STA. 284+96.

LACLEDE COUNTY

SUBMITTED BY W. K. K. DATE 3/4/30  
BRIDGE ENGINEER

APPROVED BY *T. H. K...* . . . . . DATE  
CHIEF ENGINEER

G-248 R

MADE JAN. 1926 BY M.B.S.  
TRACED APRIL 1926 BY M.B.S.  
CHECKED APRIL 1926 BY *[Signature]*

Sheet No. 2 of 2

F.A

552

[illegible]

Note: All dimensions shown are horizontal.

Design Specifications A.A.S.H.O. -1969  
Design Loading H15-44

[illegible]

HALF SECTION NEAR INT. DIAPH.

Note: For detail's of rail and post see Sheet No. 4 of 4.

The diagram shows a cross-section of a bridge deck with four stringers. The spacing between the stringers is labeled as 3' 6", 3' 6", 4' 0", and 4' 0". The total width of the deck is labeled as 5 = 80' 0". The stringers are labeled as follows:

- \* 24% Stringers #1 & #6
- 33% Stringers #2 & #5
- 28% Stringers #3 & #4

The diagram also shows a deflection curve over the stringers, with a label "E Brq." below the deck.

ESTIMATED QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Bridge Rail	LIN FT	12	120
Class B1 Concrete	Sq Yd	69.0	69.0
Reinforcing Steel	Lb.	690	14,190
Fabricated Structural Carbon Steel	Lb.	92,520	92,520

REPAIRS TO  
BRIDGE OVER BEAR CREEK  
STATE ROAD FROM LEBANON TO ROLLA  
ABOUT 3 MILES SOUTHEAST OF SLEEPER  
PROJECT NO. 139A (US 66) STA. 284 + 96  
LACLEDE COUNTY

Sheet No. 1 of 4 .

6-748R1

652

[illegible]

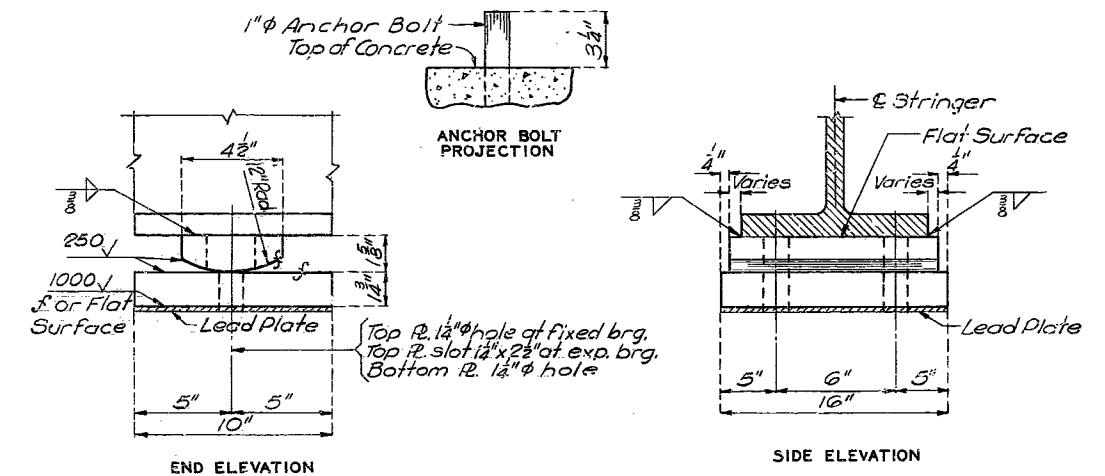
PLAN OF WEST ABUTMENT  
(East Abutment similar by 180° Rotation)

**G-248RI**

258

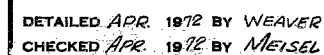
[illegible]

BILL OF REINFORCING STEEL					CUTTING & BENDING SKETCHES
NO.	SIZE	LENGTH	MARK	LOCATION	
<b>SUPERSTRUCTURE</b>					
132	#5	28'-6"	S1	Slab	
170	#5	29'-1 1/2"	S2	"	
4	#5	26'-6"	S3	"	
87	#4	30'-7"	S4	"	
66	#5	45'-6"	S5	"	
112	#4	12"	S6	"	
<b>ABUTMENTS 1 &amp; 2</b>					
12	#4	2'-3"	H1	Beam	
90	#4	2'-9"	H2	"	
8	#5	47'-9"	H3	"	
30	#4	5'-3"	U1	"	



### GENERAL NOTES FOR BEARINGS

TYPE "C" BEARINGS  
(Estimated Weight 1340#)

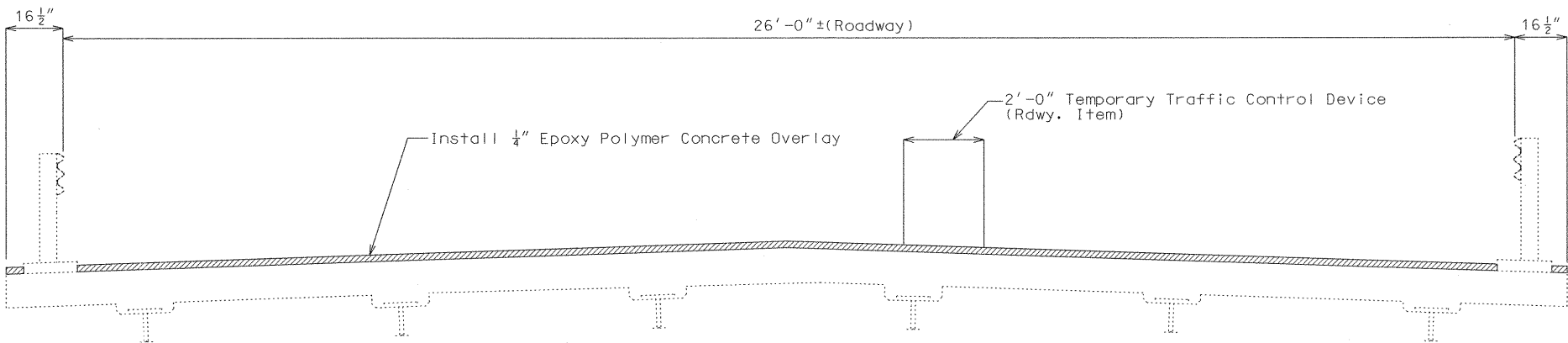


Sheet No. 3 of 4.

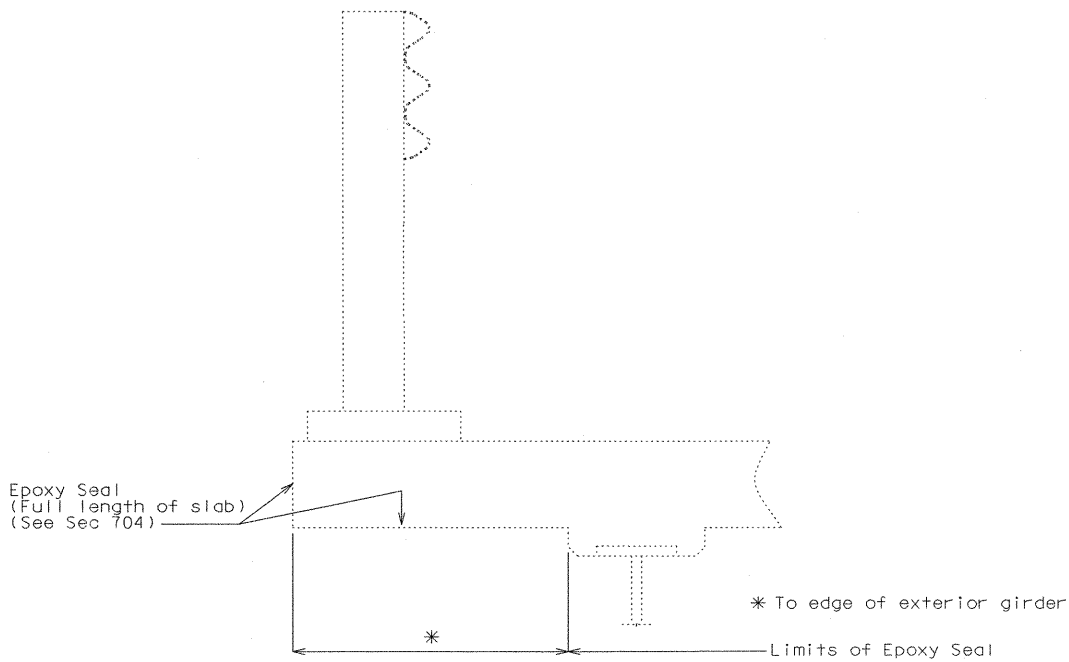
G-248R1

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

U.I.P. EXISTING (80') WIDE FLANGE BEAM SPAN



SECTION THRU SLAB



TYPICAL SECTION OF EXISTING  
EDGE OF SLAB

ESTIMATED QUANTITIES		
ITEM		TOTAL
Epoxy Polymer Concrete Overlay	sq. yard	287

State	Proj. No.	Sheet No.
MO		86
SEC/SUR 28	TWP 35N RGE 15W	

GENERAL NOTES:

Design Specifications:  
2002 - AASHTO 17th Edition  
Bridge Deck Rating = 7

Traffic:  
Traffic over structure to be maintained during construction.  
(See roadway plans for traffic control)

Miscellaneous:  
Outline of old work is indicated by dashed lines. Heavy lines indicate new work.  
Contractor shall verify all dimensions in field before ordering new material.

"Sec" refers to the sections in the Missouri standard and supplemental specifications unless specified otherwise.

The contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the epoxy polymer concrete.

Epoxy Polymer Concrete Overlay shall be applied to the edge of the slab. The area measured will be longitudinally from end to end of bridge deck and transversely between the edge of slabs.




DATE 8-31-05


REPAIRS TO BRIDGE OVER BEAR CREEK

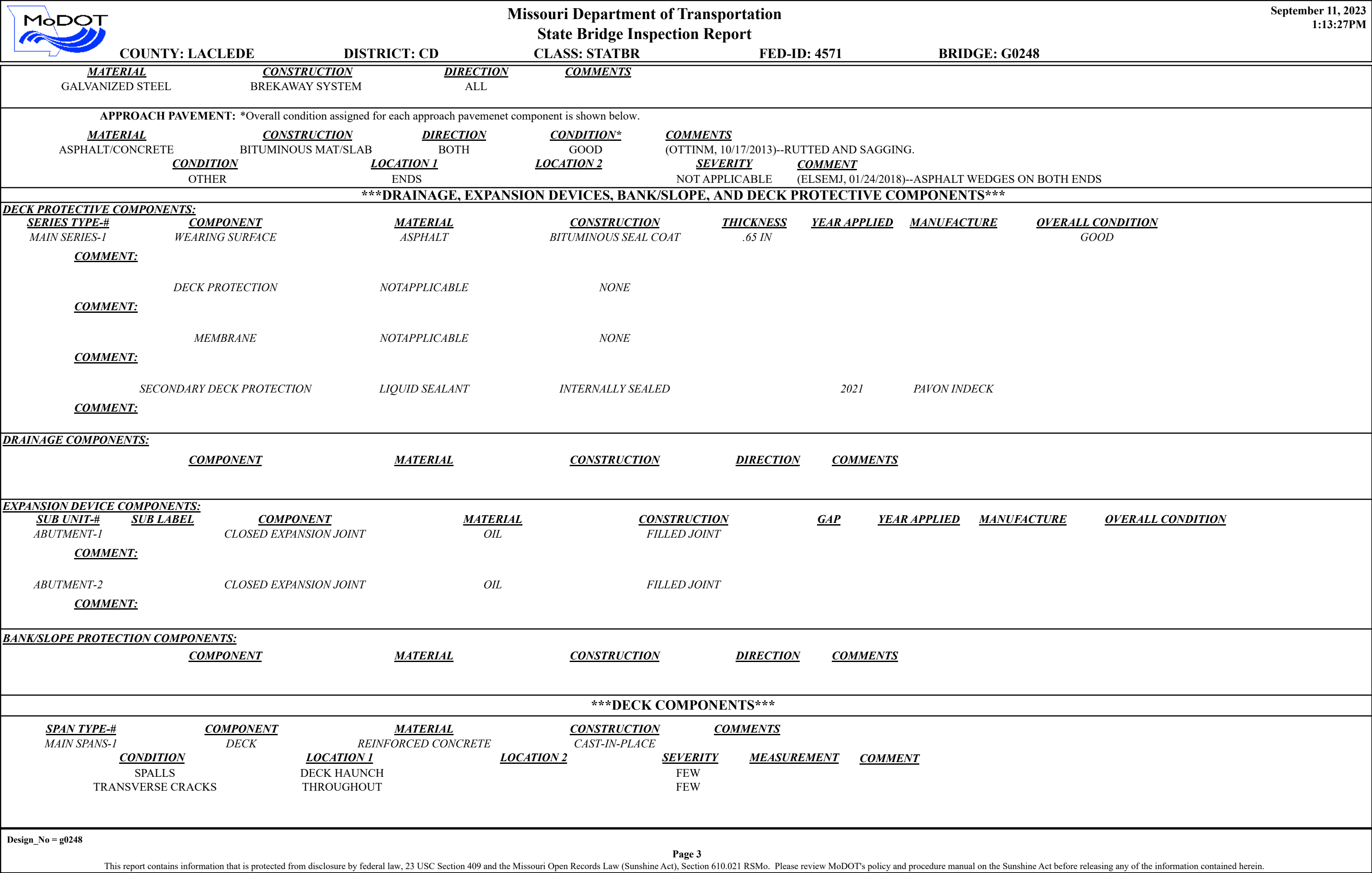
STATE ROAD FROM LEBANON TO ROLLA  
ABOUT 3 MILES SOUTHEAST FROM SLEEPER  
PROJECT NO. STA. 284+96.00± (Match Existing)  
JOB NO. J8P0822 RTE. I-44 O.R.

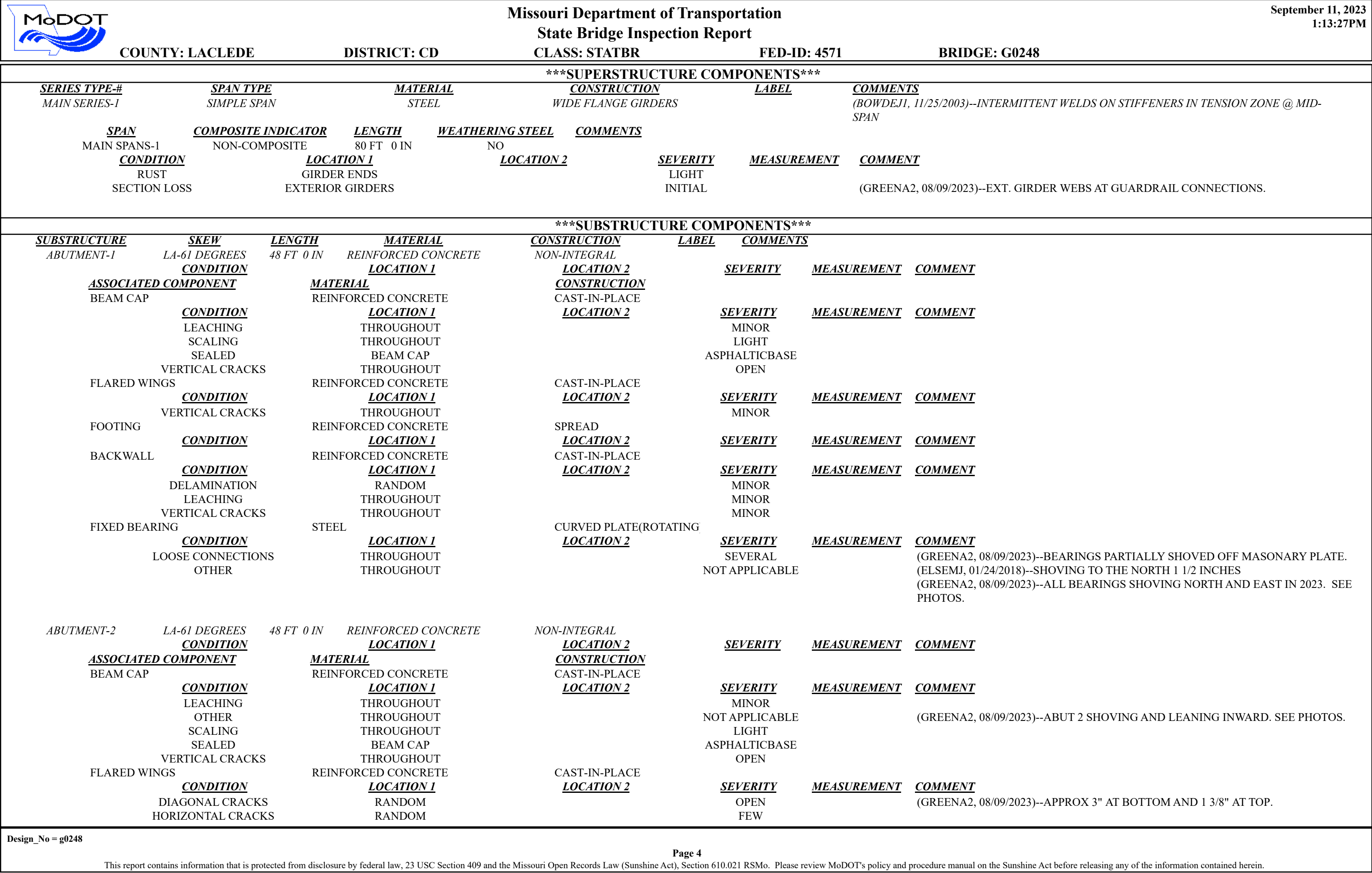


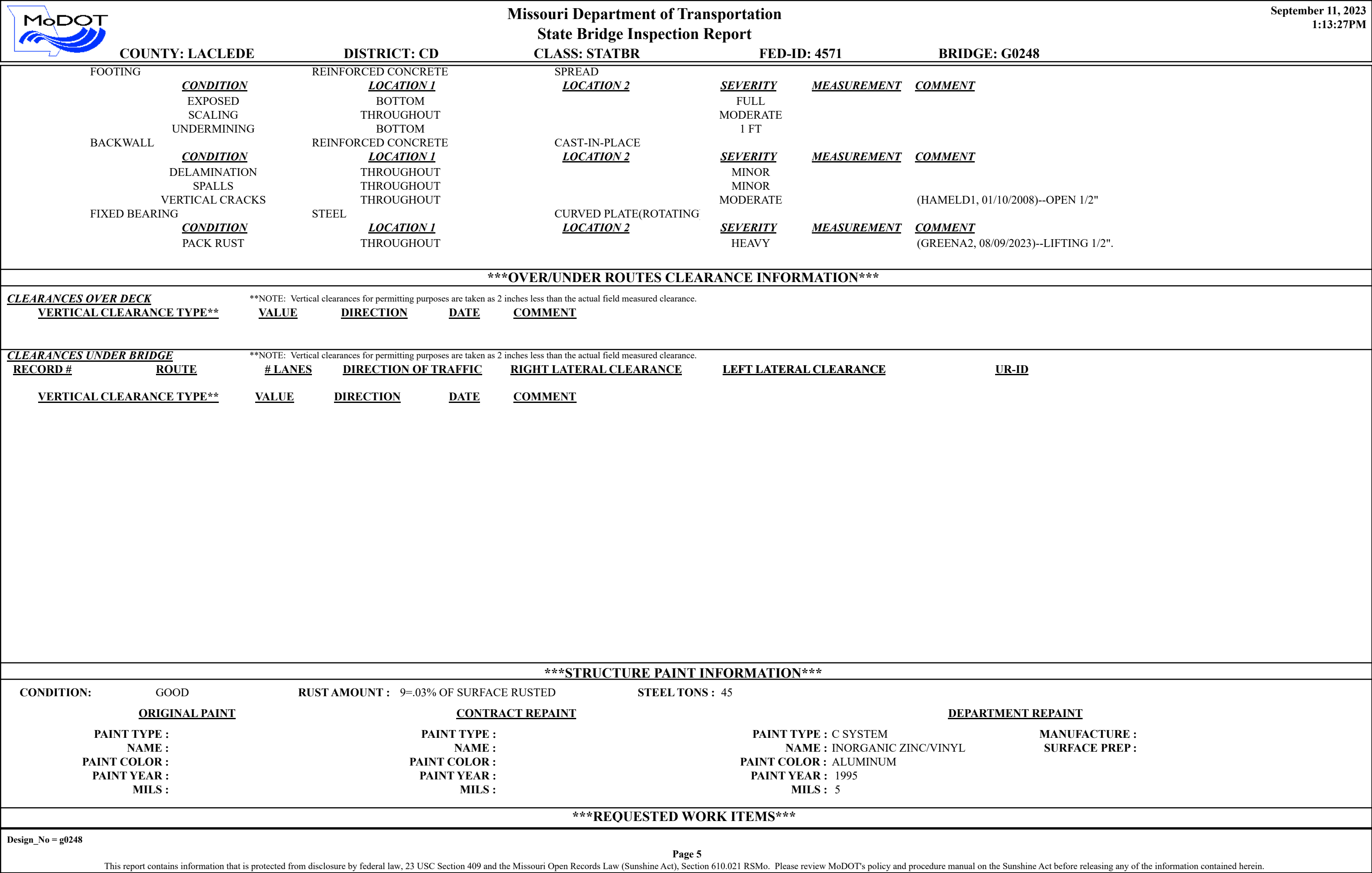
		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>September 11, 2023</div> <div>1:13:27PM</div>			
COUNTY: LACLEDE		DISTRICT: CD		CLASS: STATBR		FED-ID: 4571		BRIDGE: G0248	
***GENERAL STRUCTURE INFORMATION***							***BRIDGE INSPECTION INFORMATION***		
<div>ROUTE: OR44E</div> <div>FEATURE: BEAR CR</div> <div>STATUS: A-OPEN</div> <div>LOG MILE: 4.968</div> <div>DETOUR: 2.00 MILES</div> <div>NHS: NO</div> <div>BUILT: 1923</div> <div>REHAB: 1972</div> <div>LOCATION: S 28 T 35 R 15 W</div> <div>LATITUDE: 37 44 26.61 (DMS)</div> <div>LONGITUDE: 92 35 10.67 (DMS)</div>		<div># SPANS: 1</div> <div>LANES ON: 2</div> <div>LANES UNDER: 0</div> <div>COMPASS DIRECTION: EAST to WEST</div> <div>DIRECTION OF TRAFFIC: 2-WAY TRAF</div> <div>FUNCTIONAL CLASS: RL-LOCAL</div> <div>NBI OWNER: MODOT</div> <div>NBI MAINTAINED: MODOT</div> <div>MAINTENANCE DISTRICT: CD</div> <div>MAINTENANCE COUNTY: LACLEDE</div> <div>SUB AREA: 7D33</div>		<div>PLACE CODE: 41186 LEBANON</div> <div>LENGTH: 90 FT 0 IN</div> <div>MAXIMUM SPAN: 80 FT 0 IN</div> <div>APPROACH ROADWAY: 22 FT 0 IN</div> <div>CURB TO CURB: 26 FT 0 IN</div> <div>OUT TO OUT: 28 FT 10 IN</div> <div>AADT: 416</div> <div>AADT YEAR: 2022</div> <div>AADT TRUCK: 9.6%</div> <div>FUTURE AADT: 624</div> <div>FUTURE AADT YEAR: 2042</div>		<div>DATE: 08/08/2023</div> <div>RESPONSIBILITY: DISTRICT</div> <div>FREQUENCY: 24</div> <div>CALCULATED INTERVAL**: 24</div> <div>TEAM LEADER: JOE GREEN</div> <div>ELEMENT: NO</div> <div>INSPECTOR 2:</div> <div>INSPECTOR 4:</div> <div>INSPECTOR 3:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>			
						GENERAL INSPECTION COMMENTS			
***FRACTURE CRITICAL INSPECTION INFORMATION***					***INDEPTH INSPECTION INFORMATION***				
<div>DATE:</div> <div>FREQUENCY:</div> <div>TEAM LEADER:</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY:</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY:</div> <div>NBI:</div> <div>METHOD:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
FRACTURE CRITICAL INSPECTION COMMENTS					INDEPTH INSPECTION COMMENTS				
***SPECIAL INSPECTION INFORMATION***					***UNDERWATER INSPECTION INFORMATION***				
<div>DATE: 01/23/2018</div> <div>FREQUENCY: 999</div> <div>TEAM LEADER: JESSE ELSEMAN</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY: BRIDGEDIV</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY: QUALITY ASSURANCE</div> <div>NBI: NO</div> <div>METHOD:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
SPECIAL INSPECTION COMMENTS					UNDERWATER INSPECTION COMMENTS				
(ELSEMJ, 01/24/2018)--USING THE FIELD VERIFICATION MODEL (FVM) - AS A THRID PARTY INSPECTOR, I TOOK THE PREVIOUS INSP REPORT INTO THE FIELD AND VERIFIED THOUROUGHNESS OF REPORT WITH ASSIGNED CONDITION AND APPRAISAL RATINGS					(MEYERM3, 05/11/2020)--NOT DRY 2019, NEEDS WADERS (TRAMPA, 10/25/2017)--NOT DRY '17;				
OTHER SPECIAL INSPECTIONS					OTHER UNDERWATER INSPECTIONS				
<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div> <div>08/10/2015</div> <div>120</div> <div>CHANNEL CROSS SECTIONS</div> <div>NO</div> <div>DISTRICT</div> <div>WT TAPE</div>					<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>				
Design_No = g0248									
<div>Page 1</div> <div>This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.</div>									




		Missouri Department of Transportation			September 11, 2023	
		State Bridge Inspection Report			1:13:27PM	
COUNTY: LACLEDE		DISTRICT: CD	CLASS: STATBR	FED-ID: 4571	BRIDGE: G0248	
***STRUCTURE POSTING***						
APPROVED CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		
COMMENTS: (KLIETL2, 02/28/2022)--LOAD POSTING LETTER,2/25/2022,MODOT.						
FIELD CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		PROBLEM:
COMMENTS:		PROBLEM DIRECTION:				
***GENERAL COMMENTS/MAJOR RATED ITEMS***						
GENERAL COMMENTS: (BOWDEJ1, 08/07/2008)--(80') SMP WF GDR SPAN						
[ITEM 58] DECK: 7-GOOD CONDITION			COMMENTS: (RACKEM, 10/27/2011)--FEW TRANS CRACK			
RATING : 05/18/2001						
[ITEM 59] SUPER: 5-FAIR CONDITION			COMMENTS: (STEGEC, 11/27/2017)--LIGHT RUSTING THRU-OUT IN 2017			
RATING : 08/09/2023			(GREENA2, 08/09/2023)--INITIAL SECTION LOSS IN WEBS OF EXTERIOR GIRDERS AT GUARDRAIL CONNECTIONS.			
[ITEM 60] SUB: 4-POOR CONDITION			COMMENTS: (GREENA2, 08/04/2021)--OPEN CRACK, LEACH			
RATING : 08/09/2023			(GREENA2, 08/09/2023)--WEST ABUT SHOVING EAST. UNEQUAL TRANSFER OF LOAD AT BEARINGS.			
[ITEM 61] BANK/CHANNEL: 6-WIDESPREAD MINOR DAMAGE			COMMENTS: (GREENA2, 08/09/2023)--LOCAL SCOUR @ W ABUT - MINOR UNDERMINE OF FOOTINGS AT W. ABUT.			
RATING : 01/06/2004						
[ITEM 113] SCOUR: 8-STABLE FOR CALCULATED			COMMENTS:			
RATING : 05/18/2001						
EVALUATION TYPE :						
[ITEM 71] WATERWAY ADEQUACY: SIGNIFICANT DELAY APPRCH			COMMENTS:			
RATING : 05/18/2001						
[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD			COMMENTS:			
RATING : 05/18/2001						
***RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS***						
[ITEM 36A] BRIDGE RAILING RATING: MEETS CURRENT STANDARDS-1			RATING : 01/10/2008		COMMENTS:	
<u>MATERIAL</u>		<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>		
GALVANIZED STEEL		THRIE BEAM	BOTH			
<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	
OTHER		RANDOM			NOT APPLICABLE	
					(MEYERM3, 02/20/2020)--PACK RUST IN BRACKETS	
[ITEM 36B] TRANSITION RAILING RATING: DOESNT MEET CURRNT STND-0			RATING : 10/17/2013		COMMENTS:	
<u>MATERIAL</u>		<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>		
GALVANIZED STEEL		THRIE BEAM TO W-BEAM	ALL			
[ITEM 36C] APPROACH RAILING RATING: MEETS CURRENT STANDARDS-1			RATING : 01/10/2008		COMMENTS:	
<u>MATERIAL</u>		<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>		
GALVANIZED STEEL		W-BEAM	ALL			
[ITEM 36D] RAIL END TREATMENT RATING: MEETS CURRENT STANDARDS-1			RATING : 01/10/2008		COMMENTS:	
Design_No = g0248						
Page 2						
This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.						







		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>September 11, 2023</div> <div>1:13:27PM</div>																																										
COUNTY: LACLEDE		DISTRICT: CD		CLASS: STATBR		FED-ID: 4571		BRIDGE: G0248																																								
GENERAL WORK COMMENTS:																																																
<div>RESPONSIBILITY</div> <div>DISTRICT ROUTINE</div> <div>DISTRICT SPECIAL</div>		<div>LOCATION</div> <div>SUPER-GIRDERS</div> <div>ROADWAY SURFACE</div>		<div>ITEM</div> <div>REMOVE DRIFT</div> <div>SEAL DECK WITH IN DECK</div>		<div>CATEGORY</div> <div>CHANNEL</div> <div>DECK</div>		<div>PRIORITY</div> <div>3</div> <div>3</div>		<div>DATE</div> <div>10/25/2017</div> <div>08/04/2024</div>		<div>WORK ITEM COMMENT</div>																																				
***UTILITY ATTACHMENTS***																																																
<div>UTILITY</div>		<div>OWNER</div>		<div>METHOD</div>		<div>MEASUREMENT TYPE</div>		<div>VALUE</div>		<div>NUMBER</div>		<div>UTILITY ATTACHMENT COMMENT</div>																																				
***PROGRAM NOTES INFORMATION***																																																
<div>YEAR</div>		<div>PROJECT #</div>		<div>MONTH LET</div>		<div>YEAR LET</div>		<div>ITEMS</div>		<div>COMMENT</div>																																						
***COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS***								***ADVANCED SIGN INFORMATION***																																								
<div>NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS.</div> <table><tr><td><div>Rated Item</div></td><td><div>Rating</div></td><td><div>Rating Date</div></td></tr><tr><td>[Item 67] Structure Evaluation Rating:</td><td>4-MEETS MINIMUM TOLERABLE</td><td>8/14/2023</td></tr><tr><td>[Item 68] Deck Geometry Rating:</td><td>5-BETTER THAN MINIMUM</td><td>3/21/2002</td></tr><tr><td>[Item 69] Underclearance:</td><td>N-NOT APPLICABLE</td><td>5/18/2001</td></tr><tr><td>Sufficiency Rating:</td><td>54.8%</td><td>8/14/2023</td></tr><tr><td>Deficiency:</td><td>STRUCTURAL</td><td>8/14/2023</td></tr><tr><td>Funding Eligibility:</td><td></td><td>----</td></tr><tr><td>Estimated New Structure Length:</td><td></td><td>----</td></tr><tr><td>Estimated Structure Cost:</td><td></td><td>----</td></tr><tr><td>Estimated Total Project Cost:</td><td></td><td>----</td></tr><tr><td>Year of Cost Estimate:</td><td></td><td>----</td></tr></table> <div>NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.</div>								<div>Rated Item</div>	<div>Rating</div>	<div>Rating Date</div>	[Item 67] Structure Evaluation Rating:	4-MEETS MINIMUM TOLERABLE	8/14/2023	[Item 68] Deck Geometry Rating:	5-BETTER THAN MINIMUM	3/21/2002	[Item 69] Underclearance:	N-NOT APPLICABLE	5/18/2001	Sufficiency Rating:	54.8%	8/14/2023	Deficiency:	STRUCTURAL	8/14/2023	Funding Eligibility:		----	Estimated New Structure Length:		----	Estimated Structure Cost:		----	Estimated Total Project Cost:		----	Year of Cost Estimate:		----	<table><tr><td><div>SIGN #</div><div>1</div></td><td><div>SIGN TYPE</div></td><td><div>PROBLEM</div></td><td><div>PROBLEM DIRECTION</div></td></tr></table>				<div>SIGN #</div> <div>1</div>	<div>SIGN TYPE</div>	<div>PROBLEM</div>	<div>PROBLEM DIRECTION</div>
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								***OUTFALL INSPECTION INFORMATION***																																								
								<div># OUTFALLS:</div> <div>INSPECTOR:</div> <div>STATUS:</div> <div>DATE:</div> <div>NOTES:</div>																																								



Missouri Department of Transportation  
Bridge Inventory and Inspection System  
Structural Inventory & Appraisal Sheet

September 11, 2023  
1:12:08pm

COUNTY : LACLEDE      BRIDGE : G0248 3      REVIEW STATUS : APPROVED      NBI STATUS : P  
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT      RUN DATE : 3/2/2023      SUBMITTAL YEAR : 2022

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	CD	5B	Route Signing Prefix	MO
3	County	LACLEDE	5C	Designated Level of Service	SERVICE AND/OR UNCLASS
8	Federal ID No.	4571	5D	Route Number	00044
27	Year Built	1923	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	1972	7	Facility Carried	OR 44 E
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	NO
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP	26	Functional Classification	09-RURAL LOCAL
101	Parallel Struc Desg	NONE EXISTS	28A	Lanes on Structure	02
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	LEBANON	29	AADT	416
	Code	41186	30	AADT Year	2022
9	Location	S 28 T 35 N R 15 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	4.96 miles	109	AADT Truck Percent	10%
16	Latitude	37 D 44 M 27 S	114	Future AADT	624
17	Longitude	92 D 35 M 11 S	115	Future AADT Year	2042
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	BEAR CR	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	WATERWAY	19	By pass Detour Length	1.86 miles
28B	Lanes Under Structure	00	32	Approach Roadway Width	21 Ft. 12 In.
54A	Vert. Clearance Ref.	N/A	34	Skew	61.00 Degrees
54B	Vert. Clearance	0 Ft. 0 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	N/A	47	Total Horiz. Clear	25 Ft. 11 In.
55B	Rt. Lat Clearance	0 Ft. 0 In.	48	Maximum Span Length	80 Ft. 1 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	89 Ft. 11 In.
38	Navigation Control	PERMIT NOT REQ	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	25 Ft. 11 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	28 Ft. 10 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design\_No = g0248





Missouri Department of Transportation  
Bridge Inventory and Inspection System  
Structural Inventory & Appraisal Sheet

September 11, 2023  
1:12:08pm

COUNTY : LACLEDE BRIDGE : G0248 3 REVIEW STATUS : APPROVED NBI STATUS : P  
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/2/2023 SUBMITTAL YEAR : 2022

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	H 15	43A	Main Struc. Mat type	STEEL
41	Structure Status	A - OPEN NO RESTRICTIONS	43B	Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	LOAD FACTOR	45	# of Main Spans	1
64	Operating Rating	41 Tons.	44A	Appr Struc. Mat type	
65	Inventory Rating Meth	LOAD FACTOR	44B	Appr Struc. Cnstr. type	
66	Inventory Rating	24 Tons.	46	# of Approach Span	0
70	Bridge Posting Code	=>LEGAL LOADS	107	Deck Mat/Constr.	1 CONCRETE CIP
			108A	Wear Surf Mat/Constr.	6 BITUMINOUS
			108B	Membrane Mat/Constr.	0 NONE
			108C	Deck Protect Mat/Constr.	0 NONE
PROPOSED IMPROVEMENT INFORMATION			CONDITION RATING INFORMATION		
Sufficiency Rating 70.9 Percent			58	Deck Cond. Rating	7
Deficiency Rating NOT DEFICIENT			59	Superstructure Cond. Rating	8
Funding Eligibility			60	Substructure Cond. Rating	5
75A	Proposed Work		61	Channel /Channel Protection Cond. Rating	6
75B	Work Done By		62	Culvert Cond. Rating	N
76	New Struc Length	0 Ft. 0 In.			
94	Struc Improve Cost	\$ 0,000	INSPECTION INFORMATION		
95	Roadway Improve Cost	\$ 0,000	90	Gen. Insp Date	8 / 21
96	Total Project Cost	\$ 0,000	91	Gen. Insp. Frequency	24 Months
97	Year of Cost Estimates	0	92A	Frac. Critical Inspection	N Months
			93A	Frac. Critical Insp. Date	
			92B	Underwater Inspection	N Months
			93B	Underwater Insp. Date	
			92C	Special Inspection	N Months
			93C	Special Inspection Date	
APPRAISAL RATING INFORMATION			BORDER BRIDGE INFORMATION		
36A	Br. Rail App. Rating	MEETS ACCEPTBLE STND	98	Neighboring State Code	
36B	Transition Rail App. Rating	DOES NOT MEET ACCEPT STND	98B	Neighboring State % Respon	
36C	Approach Rail App. Rating	MEETS ACCEPTBLE STND	99	Neighboring State Struc. No.	
36D	Rail End Treat. App. Rating	MEETS ACCEPTBLE STND			
67	Struc Eval App. Rating	5	APPROVED POSTING INFORMATION		
68	Deck Geometry App. Rating	5	FIELD POSTING INFORMATION		
69	Underclearance App. Rating	N	Approved Posting Category S-1		
71	Waterway Adeq. App. Rating	5	Field Posting Category S-1		
72	Approach Road App. Rating	8	Ton1 Ton2 Ton3		
113	Scour Assess App. Rating	8	Ton1 Ton2 Ton3		
			Tonnage Values for Posting Sign		
			General Text for Posting Sign		
			NO POSTING REQUIRED		

Design\_No = g0248





Missouri Department of Transportation  
Bridge Inventory and Inspection System  
Structural Inventory & Appraisal Sheet

September 11, 2023  
1:12:08pm

COUNTY : LACLEDE      BRIDGE : G0248 3      REVIEW STATUS : APPROVED      NBI STATUS : T  
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT      RUN DATE : 8/14/2023      SUBMITTAL YEAR : 2023

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	CD	5B	Route Signing Prefix	MO
3	County	LACLEDE	5C	Designated Level of Service	SERVICE AND/OR UNCLASS
8	Federal ID No.	4571	5D	Route Number	00044
27	Year Built	1923	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	1972	7	Facility Carried	OR 44 E
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	NO
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP	26	Functional Classification	09-RURAL LOCAL
101	Parallel Struc Desg	NONE EXISTS	28A	Lanes on Structure	02
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	LEBANON	29	AADT	416
	Code	41186	30	AADT Year	2022
9	Location	S 28 T 35 N R 15 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	5.00 miles	109	AADT Truck Percent	10%
16	Latitude	37 D 44 M 27 S	114	Future AADT	624
17	Longitude	92 D 35 M 11 S	115	Future AADT Year	2042
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	BEAR CR	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	WATERWAY	19	By pass Detour Length	1.88 miles
28B	Lanes Under Structure	00	32	Approach Roadway Width	21 Ft. 12 In.
54A	Vert. Clearance Ref.	N/A	34	Skew	61.00 Degrees
54B	Vert. Clearance	0 Ft. 0 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	N/A	47	Total Horiz. Clear	25 Ft. 11 In.
55B	Rt. Lat Clearance	0 Ft. 0 In.	48	Maximum Span Length	80 Ft. 1 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	89 Ft. 11 In.
38	Navigation Control	PERMIT NOT REQ	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	25 Ft. 11 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	28 Ft. 10 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design\_No = g0248



Missouri Department of Transportation  
Bridge Inventory and Inspection System  
Structural Inventory & Appraisal Sheet

September 11, 2023  
1:12:08pm

COUNTY : LACLEDE BRIDGE : G0248 3 REVIEW STATUS : APPROVED NBI STATUS : T  
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 8/14/2023 SUBMITTAL YEAR : 2023

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	H 15	43A	Main Struc. Mat type	STEEL
41	Structure Status	OPEN NO RESTRICTIONS	43B	Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	LOAD FACTOR	45	# of Main Spans	1
64	Operating Rating	41 Tons.	44A	Appr Struc. Mat type	000
65	Inventory Rating Meth	LOAD FACTOR	44B	Appr Struc. Cnstr. type	000
66	Inventory Rating	24 Tons.	46	# of Approach Span	0
70	Bridge Posting Code	=>LEGAL LOADS	107	Deck Mat/Constr.	1 CONCRETE CIP
PROPOSED IMPROVEMENT INFORMATION			108A	Wear Surf Mat/Constr.	6 BITUMINOUS
Sufficiency Rating 54.8 Percent			108B	Membrane Mat/Constr.	0 NONE
Deficiency Rating STRUCTURAL			108C	Deck Protect Mat/Constr.	0 NONE
Funding Eligibility PARTIAL			CONDITION RATING INFORMATION		
75A	Proposed Work	REHAB-GENERAL DETERIORAT	58	Deck Cond. Rating	7
75B	Work Done By	Contract	59	Superstructure Cond. Rating	5
76	New Struc Length	121 Ft. 5 In.	60	Substructure Cond. Rating	4
94	Struc Improve Cost	\$ 403,000	61	Channel /Channel Protection Cond. Rating	6
95	Roadway Improve Cost	\$ 40,000	62	Culvert Cond. Rating	N
96	Total Project Cost	\$ 605,000	INSPECTION INFORMATION		
97	Year of Cost Estimates	2023	90	Gen. Insp Date	8 / 23
APPRAISAL RATING INFORMATION			91	Gen. Insp. Frequency	24 Months
36A	Br. Rail App. Rating	MEETS ACCEPTBLE STND	92A	Frac. Critical Inspection	N Months
36B	Transition Rail App. Rating	DOES NOT MEET ACCEPT STND	93A	Frac. Critical Insp. Date	
36C	Approach Rail App. Rating	MEETS ACCEPTBLE STND	92B	Underwater Inspection	N Months
36D	Rail End Treat. App. Rating	MEETS ACCEPTBLE STND	93B	Underwater Insp. Date	
67	Struc Eval App. Rating	4	92C	Special Inspection	N Months
68	Deck Geometry App. Rating	5	93C	Special Inspection Date	
69	Underclearance App. Rating	N	BORDER BRIDGE INFORMATION		
71	Waterway Adeq. App. Rating	5	98	Neighboring State Code	
72	Approach Road App. Rating	8	98B	Neighboring State % Respon	
113	Scour Assess App. Rating	8	99	Neighboring State Struc. No.	
APPROVED POSTING INFORMATION			FIELD POSTING INFORMATION		
Approved Posting Category S-1			Field Posting Category S-1		
Ton1 Ton2 Ton3			Ton1 Ton2 Ton3		
Tonnage Values for Posting Sign			Tonnage Values for Posting Sign		
General Text for Posting Sign			General Text for Posting Sign		
NO POSTING REQUIRED			NO POSTING REQUIRED		

Design\_No = g0248

Bridge Number:

G0248R3

Route/County:

OR 44/Laclede

Asbestos-Containing Material Present?

Yes: ☐

No: ☒

If yes, see report for location(s).

Structural Steel Present?

Yes: ☒

No: ☐

If No, then skip the following.

Lead-Based Paint (LBP) Present?

Yes: ☐

No: ☒

Trusses LBP?

Yes: ☐ No: ☐

Girder LBP?

Yes: ☐ No: ☒

Railing LBP?

Yes: ☐ No: ☒

Pile LBP?

Yes: ☐ No: ☐



## MEMORANDUM

### Missouri Department of Transportation Construction and Materials Central Laboratory

**TO:** TMS

**FROM:** Diane Roegge *Diane Roegge*  
Environmental Chemist

**DATE:** October 10, 2017

**SUBJECT:** Materials  
Asbestos Inspection & Heavy Metal Paint Survey  
Route OR 44  
Bridge G-0248R3  
Laclede County

We are providing you with the results of the inspection on the above referenced bridge. The inspection report contains an asbestos and a heavy metals survey. The asbestos inspection included identifying suspect asbestos-containing material and NVLAP accredited testing to confirm the presence of asbestos.

Form T746 – This will show if samples were taken, where from, and, if the sample was found to contain asbestos, our estimated quantity of material present. Under the column “Friability Category”, this is the meaning for the following:

N-ACM – No asbestos detected.

I NF – Asbestos is present. Material shall be handled carefully by a licensed abatement worker and kept wet if removing as part of a maintenance activity.

II NF – Asbestos is present. If removal is required for the maintenance activity, use an abatement contractor.

In accordance with Missouri Department of Natural Resources’ Technical Bulletin “Managing Construction and Demolition Waste” dated January 31, 2003, a heavy metal paint survey has been performed on the above referenced bridge. This survey includes locating concrete which has been painted with something other than traffic paint or graffiti, and testing the painted surface(s) to determine if hazardous heavy metals are present. If the bridge is being removed completely, or the maintenance repairs include removing the painted concrete, then, non-hazardous painted concrete may be used as clean fill materials, if properly handled. You must contact the Central Office Design Division for proper handling of the reported painted surfaces.

Although our survey included observing and sampling all accessible areas, it is possible that potentially hidden asbestos-containing materials may exist within the structure. Should you have any questions regarding these reports, please contact me at (573) 526-4359.

db/fr/dr

[http://sharepoint/systemdelivery/cm/chemicallab/environmental/shared  
documents/asbestos/districts/central \(cd\)/mt/g0248r3/dr17101003.docx](http://sharepoint/systemdelivery/cm/chemicallab/environmental/shared/documents/asbestos/districts/central(cd)/mt/g0248r3/dr17101003.docx)  
Attachments





MISSOURI DEPARTMENT OF TRANSPORTATION  
CONSTRUCTION AND MATERIALS

# Asbestos Survey Report

**All materials requiring removal or special handling.**

**ROUTE:** OR 44

**MODOT JOB NO.:** N/A

CD  
DISTRICT:

**COUNTY:** Laclede

**DATE OF TESTS:** October 17, 2017

PARCEL NO.: Bridge G-0248R3

**TESTED BY:**

**CERTIFICATION #:**

**SITE ADDRESS:**

**TYPE(S) OF STRUCTURE(S):**

Diane Roegge

7020102516MOIR7165, D.R.

## Over Bear Creek

Bridge[illegible]

INF = Category I Nonfriable

## II NF = Category II Nonfriable

F = Friable

\* = Tested By Point Count Procedure








## MEMORANDUM

Missouri Department of Transportation  
Construction and Materials  
Central Laboratory

**TO:** TMS

**CC:**

**FROM:** Diane Roegge   
Environmental Chemist, Lead License #110506-300003365

**DATE:** October 11, 2017

**SUBJECT:** Materials  
Job No. N/A  
OR 44/Laclede County  
Bridge G-0248R3

On October 10, 2017, a field check of the paint system and a paint screening for regulated heavy metals was performed on the subject bridge. The following results were obtained:

	17MD1R765	17MD1R766
<b>LOCATION:</b>	Railing	Girder
Arsenic (As)	LOD*	LOD*
Chromium (Cr)	50 ppm**	243 ppm**
Lead (Pb)	1,500 ppm (0.2%)	2,236 ppm (0.2%)
Cadmium (Cd)	183 ppm	108 ppm
Selenium (Se)	LOD	LOD
Barium (Ba)	166 ppm	872 ppm
Mercury (Hg)	LOD	LOD
Silver (Ag)	LOD	LOD

\*LOD = below the detection limit of the instrument

\*\*ppm = parts per million

TMS paint data shows System C Aluminum paint, applied in 1995. The field check and results verify the information found in TMS.

The existing paint system is NOT lead-based paint.

Should further screenings be required, please contact Todd Bennett, Chemical Laboratory Director, at (573) 751-1045. Should you have any questions, feel free to call me at (573) 526-4359.

fr/dr

[http://sharepoint/systemdelivery/cm/chemicallab/environmental/shared  
documents/asbestos/districts/central\(cd\)/mt/g0248r3/lbp\\_g0248r3.docx](http://sharepoint/systemdelivery/cm/chemicallab/environmental/shared/documents/asbestos/districts/central(cd)/mt/g0248r3/lbp_g0248r3.docx)

Expiration Date 10/25/2017  
Training Date: 10/25/2016

Certificate Number: 7020102516MOIR7165

**Missouri State Certificate for Asbestos Related Occupations**

issued by Department of Natural Resources

P.O. Box 176  
Jefferson City, MO 65102  
Phone (573) 751-4817

**Diane R Roegge**

has successfully completed the requirements for certification as a INSPECTOR. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

12/2/2016

Date

Director of Air Pollution Control Program

