

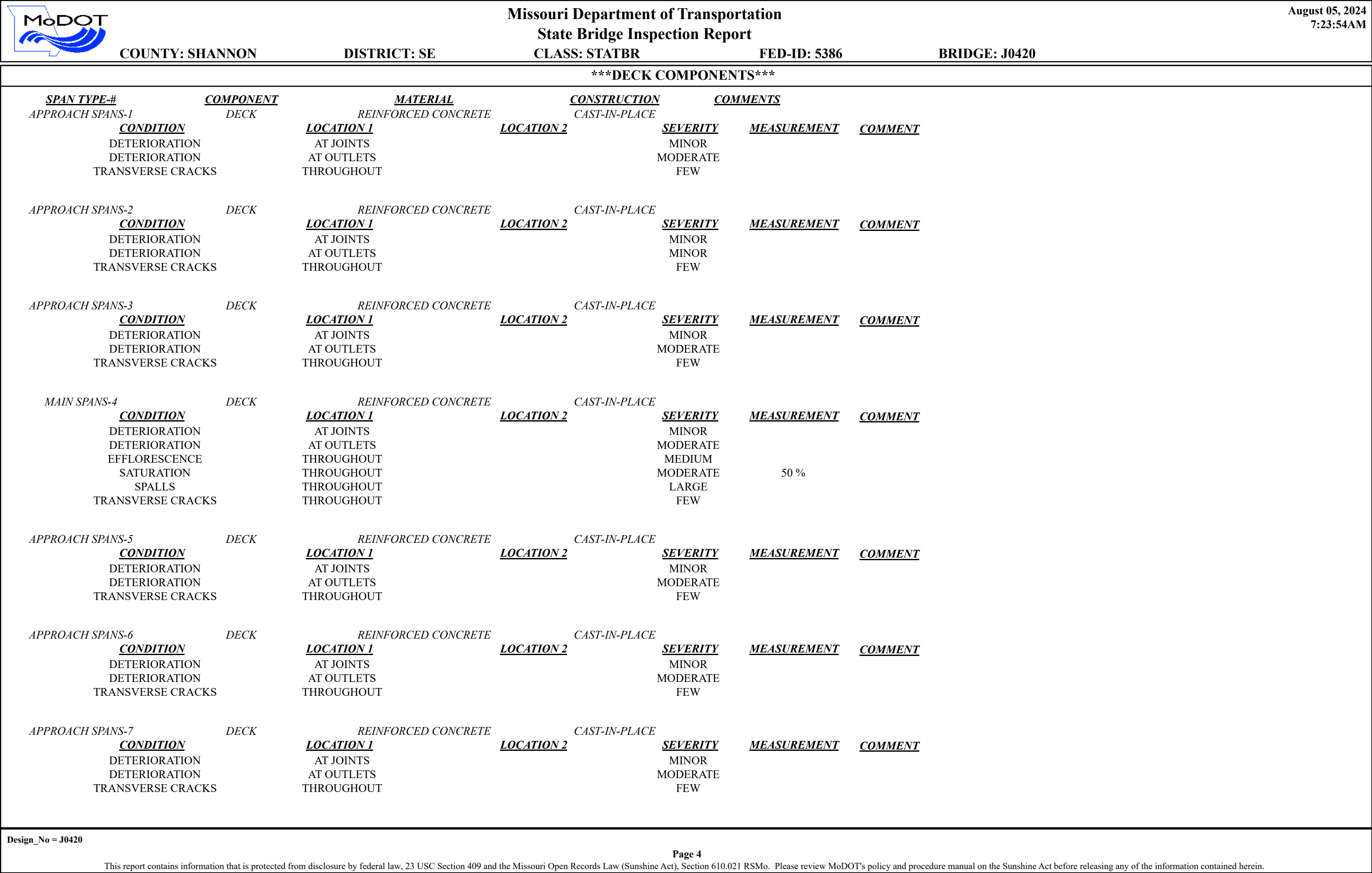
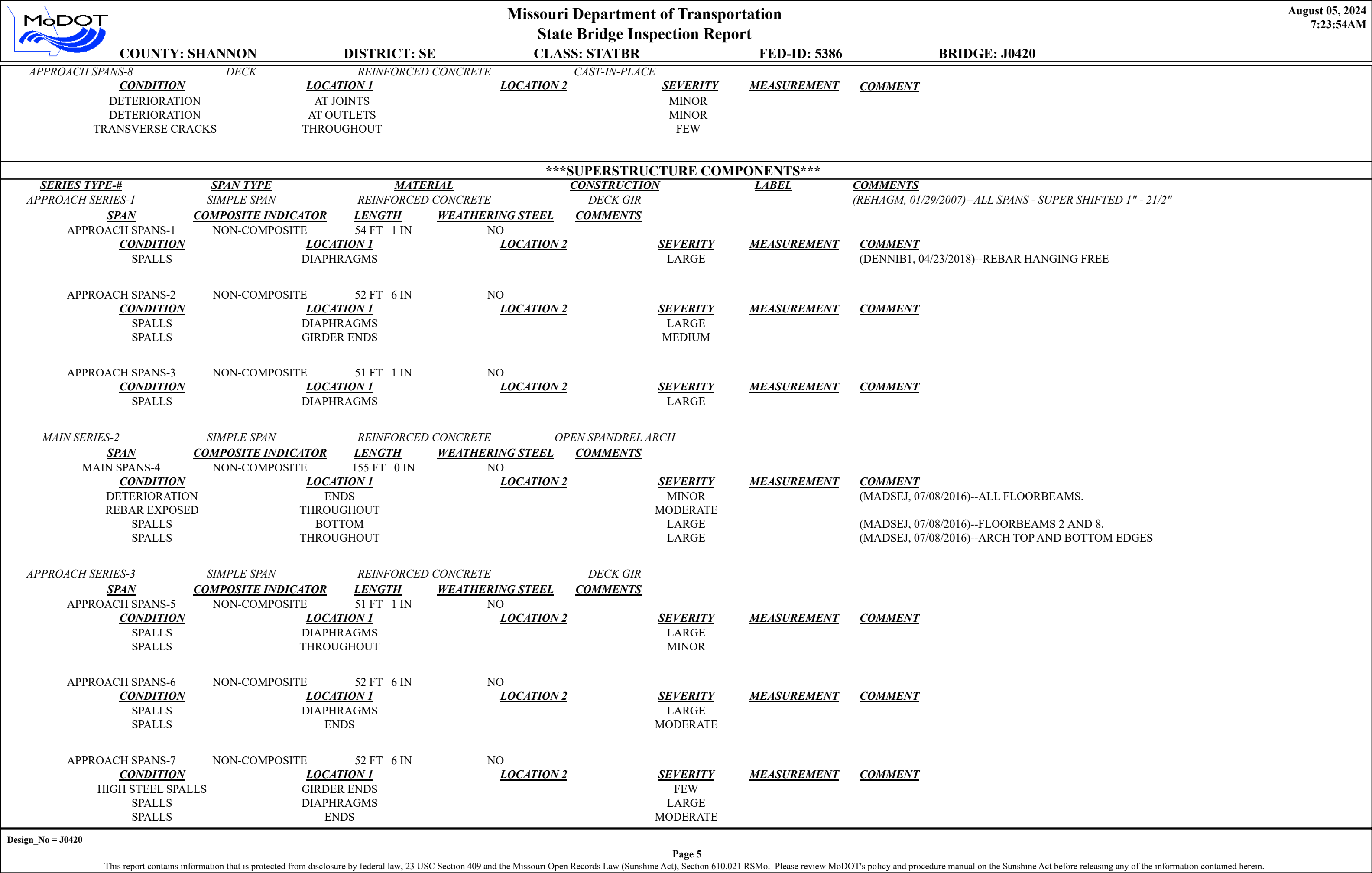

		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>August 05, 2024</div> <div>7:23:54AM</div>			
COUNTY: SHANNON		DISTRICT: SE		CLASS: STATBR		FED-ID: 5386		BRIDGE: J0420	
GENERAL STRUCTURE INFORMATION							***BRIDGE INSPECTION INFORMATION***		
<div>ROUTE: MO19S</div> <div>FEATURE: RND SPRGCAV RD PRK, SP</div> <div>STATUS: A-OPEN</div> <div>LOG MILE: 196.478</div> <div>DETOUR: 55.00 MILES</div> <div>NHS: NO</div> <div>BUILT: 1930</div> <div>REHAB:</div> <div>LOCATION: S 20 T 30 R 4 W</div> <div>LATITUDE: 37 16 54.52 (DMS)</div> <div>LONGITUDE: 91 24 34.46 (DMS)</div>		<div># SPANS: 8</div> <div>LANES ON: 2</div> <div>LANES UNDER: 2</div> <div>COMPASS DIRECTION: NORTH to SOUTH</div> <div>DIRECTION OF TRAFFIC: 2-WAY TRAF</div> <div>FUNCTIONAL CLASS: RL-MINOR ARTERIAL</div> <div>NBI OWNER: MODOT</div> <div>NBI MAINTAINED: MODOT</div> <div>MAINTENANCE DISTRICT: SE</div> <div>MAINTENANCE COUNTY: SHANNON</div> <div>SUB AREA: 7H52</div>		<div>PLACE CODE: 22294 EMINENCE</div> <div>LENGTH: 523 FT 0 IN</div> <div>MAXIMUM SPAN: 155 FT 0 IN</div> <div>APPROACH ROADWAY: 22 FT 0 IN</div> <div>CURB TO CURB: 20 FT 0 IN</div> <div>OUT TO OUT: 23 FT 0 IN</div> <div>AADT: 416</div> <div>AADT YEAR: 2023</div> <div>AADT TRUCK: 18.5%</div> <div>FUTURE AADT: 624</div> <div>FUTURE AADT YEAR: 2043</div>		<div>DATE: 12/14/2022</div> <div>RESPONSIBILITY: DISTRICT</div> <div>FREQUENCY: 24</div> <div>CALCULATED INTERVAL**: 24</div> <div>TEAM LEADER: ED HESS</div> <div>ELEMENT: NO</div> <div>INSPECTOR 2:</div> <div>INSPECTOR 4:</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: 07/10/2014</div> <div>FREQUENCY: 72</div> <div>TEAM LEADER:</div> <div>INSPECTOR 2: ED HESS</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY: DISTRICT</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY: CHANNEL CROSS SEC</div> <div>NBI: NO</div> <div>METHOD: WT TAPE</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
SPECIAL INSPECTION COMMENTS					UNDERWATER INSPECTION COMMENTS				
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>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>				
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<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>									

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		State Bridge Inspection Report				7:23:54AM	
COUNTY: SHANNON		DISTRICT: SE		CLASS: STATBR		FED-ID: 5386	
				BRIDGE: J0420			
STRUCTURE POSTING							
APPROVED CATEGORY: S-1		NO POSTING REQUIRED					
Ton 1:		Ton 2:		Ton 3:			
COMMENTS:							
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, 04/08/2008)--(54'-52'-51') SMP DECK GDR - (151') OPEN SPANDREL CONC ARCH - (51'-52'-52'-54') SMP DECK GDR SPANS							
[ITEM 58] DECK: 4-POOR CONDITION		COMMENTS: (DENNIB1, 04/23/2018)--LATERAL CRACKING THROUGHOUT ASPHALT OVERLAY					
RATING : 12/13/2018		(DENNIB1, 12/13/2018)--APPROXIMATELY 50% SATURATION AND SPALLS THROUGHOUT THE MAIN SPAN. MODERATE TO SEVERE EDGE DETERIORATION THE MAIN SPAN.					
[ITEM 59] SUPER: 4-POOR CONDITION		COMMENTS: (MADSEJ, 07/08/2016)--MINOR TO MODERATE SPALLING THROUGHOUT MAIN SPAN ARCHES AND FLOORBEAMS.					
RATING : 12/16/2022		(DENNIB1, 04/23/2018)--REBAR EXPOSED IN MOST CASES					
		(BRAWLK1, 12/16/2022)--SPALL AT BEARING AFFECTING BEARING					
[ITEM 60] SUB: 6-SATISFACTORY CONDITION		COMMENTS: (DENNIB1, 04/23/2018)--A FEW CRACKS AND SPALLS THROUGHOUT ALL BENT BEAMCAPS AND COLUMNS WITH REBAR EXPOSED IN MOST CASES					
RATING : 05/18/2001							
[ITEM 61] BANK/CHANNEL: 5-MAJOR DAMAGE		COMMENTS: (MADSEJ, 07/08/2016)--VEGETATION AND DEBRIS THROUGHOUT THE CHANNEL IS SLIGHTLY RESTRICTING FLOW.					
RATING : 12/16/2022		(BRAWLK1, 12/16/2022)--MODERATE SCOUR AROUND BENT 4					
[ITEM 113] SCOUR: 5-FOUNDATION STABLE		COMMENTS: (BRAWLK1, 12/16/2022)--MOD SCOUR AROUND BENT 4					
RATING : 12/16/2022							
EVALUATION TYPE :							
[ITEM 71] WATERWAY ADEQUACY: DECK/APPRCH OVERTOP SLIGT		COMMENTS:					
RATING : 05/18/2001							
[ITEM 72] APPRRDWY ALIGNMENT: 6-SATISFACTORY		COMMENTS:					
RATING : 05/18/2001							
RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS							
[ITEM 36A] BRIDGE RAILING RATING: DOESNT MEET CURRNT STND-0		RATING : 12/10/2014		COMMENTS:			
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>COMMENTS</u>	
REINFORCED CONCRETE		CURB		BOTH			
<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>	
DETERIORATION		THROUGHOUT				MODERATE	
REBAR EXPOSED		THROUGHOUT				MANY	
REINFORCED CONCRETE		BALUSTER		BOTH			
[ITEM 36B] TRANSITION RAILING RATING: NOT PROVIDED-0		RATING : 05/18/2001		COMMENTS:			
[ITEM 36C] APPROACH RAILING RATING: NOT PROVIDED-0		RATING : 05/18/2001		COMMENTS:			
Design_No = J0420							
Page 2							
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				BRIDGE: J0420			
[ITEM 36D] RAIL END TREATMENT RATING: NOT PROVIDED-0				RATING : 05/18/2001		COMMENTS:	
APPROACH PAVEMENT: *Overall condition assigned for each approach pavemenet component is shown below.							
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>CONDITION*</u>	
ASPHALT		BITUMINOUS MAT		BOTH			
DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS							
<u>DECK PROTECTIVE COMPONENTS:</u>							
<u>SERIES TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
APPROACH SERIES-1		WEARING SURFACE		ASPHALT		BITUMINOUS MAT	
<u>COMMENT:</u>							
		DECK PROTECTION		NOTAPPLICABLE		NONE	
<u>COMMENT:</u>							
		MEMBRANE		LIQUID SEALANT		BUILT-UP	
<u>COMMENT:</u>							
MAIN SERIES-2		WEARING SURFACE		ASPHALT		BITUMINOUS MAT	
<u>COMMENT:</u>							
		DECK PROTECTION		NOTAPPLICABLE		NONE	
<u>COMMENT:</u>							
		MEMBRANE		LIQUID SEALANT		BUILT-UP	
<u>COMMENT:</u>							
<u>DRAINAGE COMPONENTS:</u>							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
DRAINAGE		REINFORCED CONCRETE		CURB OUTLET			
<u>EXPANSION DEVICE COMPONENTS:</u>							
<u>SUB UNIT-#</u>		<u>SUB LABEL</u>		<u>COMPONENT</u>		<u>MATERIAL</u>	
BENT-2		CLOSED EXPANSION JOINT		FELT		FILLED JOINT	
<u>COMMENT:</u>							
BENT-3		CLOSED EXPANSION JOINT		FELT		FILLED JOINT	
<u>COMMENT:</u>							
<u>BANK/SLOPE PROTECTION COMPONENTS:</u>							
<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>	
BANK PROTECTION		ROCK		BLANKET		BOTH	
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APPROACH SPANS-8		NON-COMPOSITE		54 FT 1 IN		NO	
<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>	
SPALLS		DIAPHRAGMS				LARGE	
SUBSTRUCTURE COMPONENTS							
<u>SUBSTRUCTURE</u>	<u>SKEW</u>	<u>LENGTH</u>	<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>LABEL</u>	<u>COMMENTS</u>	
ABUTMENT-1	RA-45 DEGREES	26 FT 3 IN	REINFORCED CONCRETE	OPEN CONCRETE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>	<u>CONSTRUCTION</u>			
COLUMN			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
STRAIGHT WINGS			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
	SPALLS		RANDOM			FEW	
FOOTING			REINFORCED CONCRETE	SPREAD			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BACKWALL			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
	SPALLS		BOTTOM			MODERATE	(DENNIB1, 04/23/2018)--STEEL SHOWING & DETERIORATED
BEAM CAP			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
EXPANSION BEARING			BRONZE	SLIDING CURVED/FLAT PL			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BENT-2	RA-45 DEGREES	25 FT 10 IN	REINFORCED CONCRETE	MULTIPLE COLUMN			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>	<u>CONSTRUCTION</u>			
COLUMN			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
	VERTICAL CRACKS		TOP			FEW	
FOOTING			REINFORCED CONCRETE	SPREAD			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BEAM CAP			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
	HONEY COMBS		BOTTOM			MINOR	
	SPALLS		BOTTOM			MEDIUM	
TIE BEAM			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
DIAPHRAGM			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
EXPANSION BEARING			BRONZE	SLIDING CURVED/FLAT PL			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
BENT-3	RA-45 DEGREES	25 FT 10 IN	REINFORCED CONCRETE	MULTIPLE COLUMN			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>	<u>CONSTRUCTION</u>			
COLUMN			REINFORCED CONCRETE	CAST-IN-PLACE			
	<u>CONDITION</u>		<u>LOCATION 1</u>	<u>LOCATION 2</u>		<u>SEVERITY</u>	<u>MEASUREMENT</u> <u>COMMENT</u>
	VERTICAL CRACKS		TOP			FEW	

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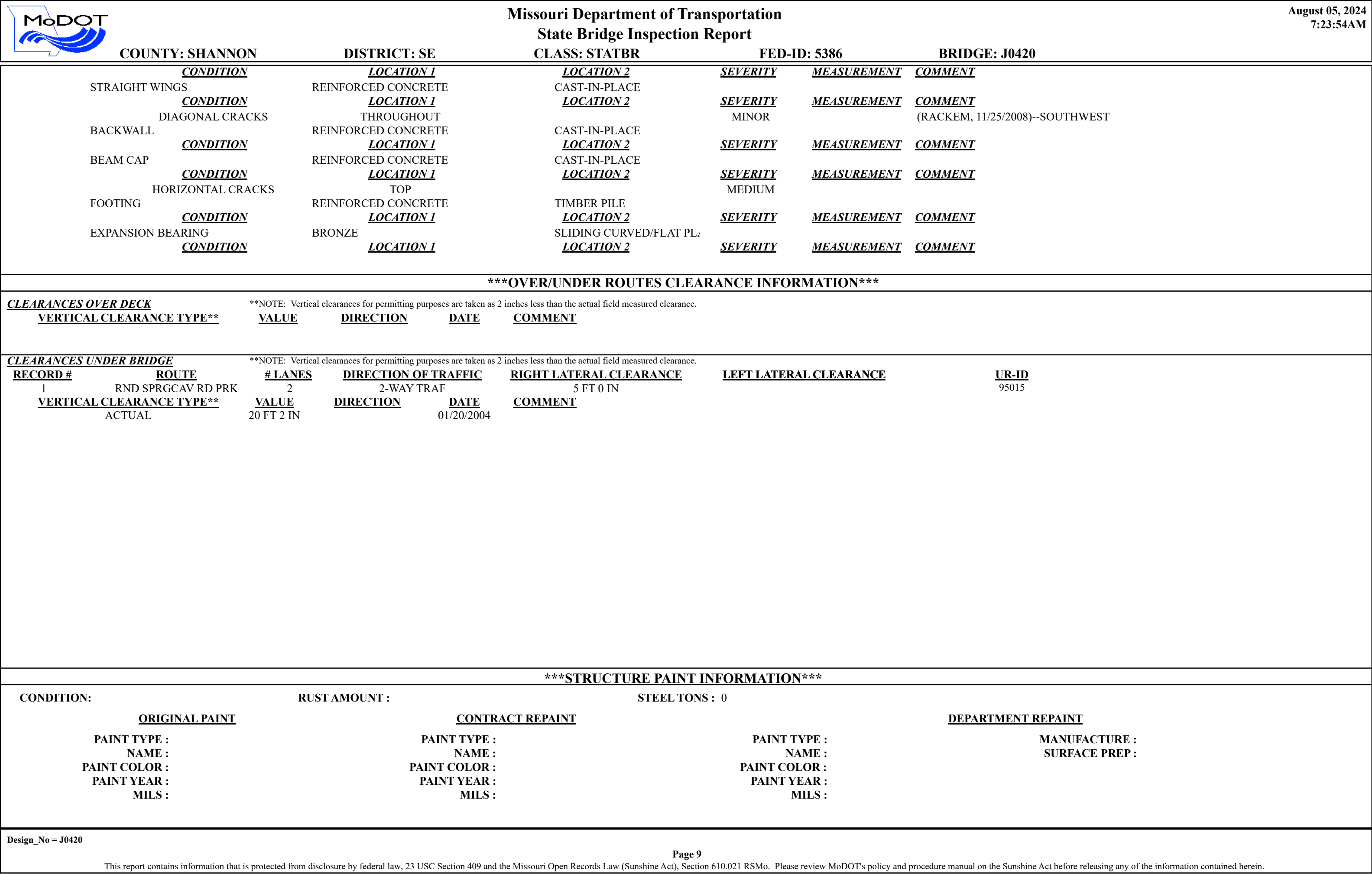
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COUNTY: SHANNON		DISTRICT: SE		CLASS: STATBR		FED-ID: 5386		BRIDGE: J0420
FOOTING	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	SPREAD	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
BEAM CAP	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
DELAMINATION		THROUGHOUT		FEW				
TIE BEAM	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
EXPANSION BEARING	<u>CONDITION</u>	BRONZE	<u>LOCATION 1</u>	SLIDING CURVED/FLAT PL/	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
PIER-4								
RA-45 DEGREES	<u>CONDITION</u>	25 FT 0 IN	REINFORCED CONCRETE	MULTIPLE COLUMN				
<u>ASSOCIATED COMPONENT</u>		<u>MATERIAL</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
COLUMN	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
HONEY COMBS		BOTTOM				MODERATE		
REBAR EXPOSED		THROUGHOUT				MODERATE		
SPALLS		BOTTOM				MODERATE		
VERTICAL CRACKS		TOP				FEW		
FOOTING	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	SPREAD	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
BEAM CAP	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
DELAMINATION		THROUGHOUT				MODERATE		
SPALLS		THROUGHOUT				MEDIUM		
SPALLS		TOP				MEDIUM		
TIE BEAM	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
EXPANSION BEARING	<u>CONDITION</u>	BRONZE	<u>LOCATION 1</u>	SLIDING CURVED/FLAT PL/	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
DIAPHRAGM	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
PIER-5								
RA-45 DEGREES	<u>CONDITION</u>	25 FT 0 IN	REINFORCED CONCRETE	MULTIPLE COLUMN				
<u>ASSOCIATED COMPONENT</u>		<u>MATERIAL</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
COLUMN	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
FOOTING	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	SPREAD	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
BEAM CAP	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
HORIZONTAL CRACKS		RANDOM				FEW		
TIE BEAM	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
EXPANSION BEARING	<u>CONDITION</u>	BRONZE	<u>LOCATION 1</u>	SLIDING CURVED/FLAT PL/	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
DIAPHRAGM	<u>CONDITION</u>	REINFORCED CONCRETE	<u>LOCATION 1</u>	CAST-IN-PLACE	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
BENT-6								
RA-45 DEGREES		25 FT 10 IN	REINFORCED CONCRETE	MULTIPLE COLUMN				


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<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>		<u>CONSTRUCTION</u>						
COLUMN			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
SPALLS			THROUGHOUT				MINOR				
FOOTING			REINFORCED CONCRETE		SPREAD						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
BEAM CAP			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
TIE BEAM			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
EXPANSION BEARING			BRONZE		SLIDING CURVED/FLAT PL						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
BENT-7	RA-45 DEGREES	25 FT 10 IN	REINFORCED CONCRETE		MULTIPLE COLUMN						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>		<u>CONSTRUCTION</u>						
COLUMN			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
VERTICAL CRACKS			RANDOM				FEW				
FOOTING			REINFORCED CONCRETE		SPREAD						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
BEAM CAP			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
HONEY COMBS			BOTTOM				MINOR				
TIE BEAM			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
SPALLS			TOP				FEW				
EXPANSION BEARING			BRONZE		SLIDING CURVED/FLAT PL						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
BENT-8	RA-45 DEGREES	25 FT 10 IN	REINFORCED CONCRETE		MULTIPLE COLUMN						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>		<u>CONSTRUCTION</u>						
COLUMN			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
FOOTING			REINFORCED CONCRETE		SPREAD						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
BEAM CAP			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
DETERIORATION			ENDS				MINOR				
HORIZONTAL CRACKS			BOTTOM				MEDIUM				
TIE BEAM			REINFORCED CONCRETE		CAST-IN-PLACE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
EXPANSION BEARING			BRONZE		SLIDING CURVED/FLAT PL						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
ABUTMENT-9	RA-45 DEGREES	26 FT 3 IN	REINFORCED CONCRETE		OPEN CONCRETE						
<u>CONDITION</u>			<u>LOCATION 1</u>		<u>LOCATION 2</u>		<u>SEVERITY</u>		<u>MEASUREMENT</u>		<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>			<u>MATERIAL</u>		<u>CONSTRUCTION</u>						
COLUMN			REINFORCED CONCRETE		CAST-IN-PLACE						

Design_No = J0420

Page 8

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.



		Missouri Department of Transportation				August 05, 2024																																										
		State Bridge Inspection Report				7:23:54AM																																										
COUNTY: SHANNON		DISTRICT: SE		CLASS: STATBR		FED-ID: 5386																																										
						BRIDGE: J0420																																										
REQUESTED WORK ITEMS																																																
GENERAL WORK COMMENTS:																																																
<table><tr><td>RESPONSIBILITY</td><td>LOCATION</td><td>ITEM</td><td>CATEGORY</td><td>PRIORITY</td><td>DATE</td><td colspan="2">WORK ITEM COMMENT</td></tr><tr><td colspan="8"> </td></tr></table>								RESPONSIBILITY	LOCATION	ITEM	CATEGORY	PRIORITY	DATE	WORK ITEM COMMENT																																		
RESPONSIBILITY	LOCATION	ITEM	CATEGORY	PRIORITY	DATE	WORK ITEM COMMENT																																										
UTILITY ATTACHMENTS																																																
<table><tr><td>UTILITY</td><td>OWNER</td><td>METHOD</td><td>MEASUREMENT TYPE</td><td>VALUE</td><td>NUMBER</td><td colspan="2">UTILITY ATTACHMENT COMMENT</td></tr><tr><td colspan="8"> </td></tr></table>								UTILITY	OWNER	METHOD	MEASUREMENT TYPE	VALUE	NUMBER	UTILITY ATTACHMENT COMMENT																																		
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PROGRAM NOTES INFORMATION																																																
<table><tr><td>YEAR</td><td>PROJECT #</td><td>MONTH LET</td><td>YEAR LET</td><td>ITEMS</td><td colspan="3">COMMENT</td></tr><tr><td>2026</td><td>9P3814</td><td>0</td><td>2026</td><td>REPLACE BRIDGE</td><td colspan="3"> </td></tr></table>								YEAR	PROJECT #	MONTH LET	YEAR LET	ITEMS	COMMENT			2026	9P3814	0	2026	REPLACE BRIDGE																												
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2026	9P3814	0	2026	REPLACE BRIDGE																																												
COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS					***ADVANCED SIGN INFORMATION***																																											
<p>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.</p> <table><tr><td><u>Rated Item</u></td><td><u>Rating</u></td><td><u>Rating Date</u></td></tr><tr><td>[Item 67] Structure Evaluation Rating:</td><td>4-MEETS MINIMUM TOLERABLE</td><td>12/17/2022</td></tr><tr><td>[Item 68] Deck Geometry Rating:</td><td>3-BASICALLY INTOL CORRECT</td><td>3/6/2024</td></tr><tr><td>[Item 69] Underclearance:</td><td>4-MEETS MINIMUM TOLERABLE</td><td>12/10/2014</td></tr><tr><td>Sufficiency Rating:</td><td>19.4%</td><td>3/6/2024</td></tr><tr><td>Deficiency:</td><td>STRUCTURAL</td><td>12/17/2018</td></tr><tr><td>Funding Eligibility:</td><td>FULL</td><td>----</td></tr><tr><td>Estimated New Structure Length:</td><td>548 FT.</td><td>----</td></tr><tr><td>Estimated Structure Cost:</td><td>\$3,177,852</td><td>----</td></tr><tr><td>Estimated Total Project Cost:</td><td>\$4,766,778</td><td>----</td></tr><tr><td>Year of Cost Estimate:</td><td>2024</td><td>----</td></tr></table> <p>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.</p>					<u>Rated Item</u>	<u>Rating</u>	<u>Rating Date</u>	[Item 67] Structure Evaluation Rating:	4-MEETS MINIMUM TOLERABLE	12/17/2022	[Item 68] Deck Geometry Rating:	3-BASICALLY INTOL CORRECT	3/6/2024	[Item 69] Underclearance:	4-MEETS MINIMUM TOLERABLE	12/10/2014	Sufficiency Rating:	19.4%	3/6/2024	Deficiency:	STRUCTURAL	12/17/2018	Funding Eligibility:	FULL	----	Estimated New Structure Length:	548 FT.	----	Estimated Structure Cost:	\$3,177,852	----	Estimated Total Project Cost:	\$4,766,778	----	Year of Cost Estimate:	2024	----	<table><tr><td>SIGN #</td><td>SIGN TYPE</td><td>PROBLEM</td><td>PROBLEM DIRECTION</td></tr><tr><td>1</td><td></td><td></td><td></td></tr></table>			SIGN #	SIGN TYPE	PROBLEM	PROBLEM DIRECTION	1			
<u>Rated Item</u>	<u>Rating</u>	<u>Rating Date</u>																																														
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Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

August 5, 2024
7:18:02am

COUNTY : SHANNON BRIDGE : J0420 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	SE	5B	Route Signing Prefix	MO
3	County	SHANNON	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	5386	5D	Route Number	00019
27	Year Built	1930	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	MO 19 S
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	YES
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	0000000054
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	00
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	POSSIBLY ELIG NR OF HP	26	Functional Classification	06-RURAL MINOR ARTERIAL
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	EMINENCE	29	AADT	416
	Code	22294	30	AADT Year	2023
9	Location	S 20 T 30 N R 4 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	197.63 miles	109	AADT Truck Percent	19%
16	Latitude	37 D 16 M 55 S	114	Future AADT	624
17	Longitude	91 D 24 M 34 S	115	Future AADT Year	2043
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	RND SPRGCAV RD PRK, SP	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	HIGHWAY-WATERWAY	19	By pass Detour Length	55.63 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	21 Ft. 12 In.
54A	Vert. Clearance Ref.	HIGHWAY	34	Skew	45.00 Degrees
54B	Vert. Clearance	20 Ft. 2 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	HIGHWAY	47	Total Horiz. Clear	20 Ft. 0 In.
55B	Rt. Lat Clearance	4 Ft. 11 In.	48	Maximum Span Length	154 Ft. 10 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	522 Ft. 12 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	20 Ft. 0 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	22 Ft. 12 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design_No = J0420 and Inventory_Appraisal_Submittal_Year = 2024



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

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RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	H 15	43A	Main Struc. Mat type	CONCRETE
41	Structure Status	OPEN NO RESTRICTIONS	43B	Main struc Constr. Type	ARCH - DECK
63	Oper. Rating Meth.	LOAD FACTOR	45	# of Main Spans	1
64	Operating Rating	31 Tons.	44A	Appr Struc. Mat type	CONCRETE
65	Inventory Rating Meth	LOAD FACTOR	44B	Appr Struc. Cnstr. type	TEE BEAM
66	Inventory Rating	19 Tons.	46	# of Approach Span	7
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 19.4 Percent			108B	Membrane Mat/Constr.	1 BUILT UP
Deficiency Rating STRUCTURAL			108C	Deck Protect Mat/Constr.	0 NONE
Funding Eligibility FULL			CONDITION RATING INFORMATION		
75A	Proposed Work	REPLACEMENT SUBSTND LOAD	58	Deck Cond. Rating	4
75B	Work Done By	Contract	59	Superstructure Cond. Rating	4
76	New Struc Length	547 Ft. 11 In.	60	Substructure Cond. Rating	6
94	Struc Improve Cost	\$ 3,178,000	61	Channel /Channel Protection Cond. Rating	5
95	Roadway Improve Cost	\$ 318,000	62	Culvert Cond. Rating	N
96	Total Project Cost	\$ 4,767,000	INSPECTION INFORMATION		
97	Year of Cost Estimates	2024	90	Gen. Insp Date	12 / 22
APPRAISAL RATING INFORMATION			91	Gen. Insp. Frequency	24 Months
36A	Br. Rail App. Rating	DOES NOT MEET ACCEPT 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	DOES NOT MEET ACCEPT STND	92B	Underwater Inspection	N Months
36D	Rail End Treat. App. Rating	DOES NOT MEET ACCEPT STND	93B	Underwater Insp. Date	
67	Struc Eval App. Rating	4	92C	Special Inspection	N Months
68	Deck Geometry App. Rating	3	93C	Special Inspection Date	
69	Underclearance App. Rating	4	BORDER BRIDGE INFORMATION		
71	Waterway Adeq. App. Rating	6	98	Neighboring State Code	
72	Approach Road App. Rating	6	98B	Neighboring State % Respon	
113	Scour Assess App. Rating	5	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 = J0420 and Inventory_Appraisal_Submittal_Year = 2024



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

August 5, 2024
7:18:02am

COUNTY : SHANNON BRIDGE : J0420 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE 'UNDER' STRUCT Code : 2
2	District	SE	5B	Route Signing Prefix	CRD
3	County	SHANNON	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	5386	5D	Route Number	00000
27	Year Built	1930	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	MO 19 S
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	
21	Structure Maintenance		13A	LRS Inventory Route No.	
22	Structure Owner		13B	Subroute No.	
33	Br. Median Code		20	Toll Status	ON FREE ROAD
37	Historical Significance		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		104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	EMINENCE	29	AADT	200
	Code	22294	30	AADT Year	2022
9	Location	S 20 T 30 N R 4 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	0.00 miles	109	AADT Truck Percent	10%
16	Latitude	37 D 16 M 55 S	114	Future AADT	
17	Longitude	91 D 24 M 34 S	115	Future AADT Year	
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	RND SPRGCAV RD PRK	10	Inventory Rte. Vert. Clear	20 Ft. 2 In.
42B	Type of Service Under	HIGHWAY-WATERWAY	19	By pass Detour Length	0.00 miles
28B	Lanes Under Structure	02	32	Approach Roadway Width	
54A	Vert. Clearance Ref.		34	Skew	
54B	Vert. Clearance		35	Struct. Flared	
55A	Rt. Lat Clear Ref.		47	Total Horiz. Clear	29 Ft. 10 In.
55B	Rt. Lat Clearance		48	Maximum Span Length	154 Ft. 10 In.
56	Left Lat Clearance		49	Structure Length	522 Ft. 12 In.
38	Navigation Control		50A	Left Curb/Sidewalk Width	
39	Nav Vertical Clear		50B	Right Curb/Sidewalk Width	
40	Nav Horizontal Clear		51	Curb to Curb Br. Width	
111	Nav. Pier Protection		52	Deck Width (Out-Out)	
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	

Design_No = J0420 and Inventory_Appraisal_Submittal_Year = 2024



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

August 5, 2024
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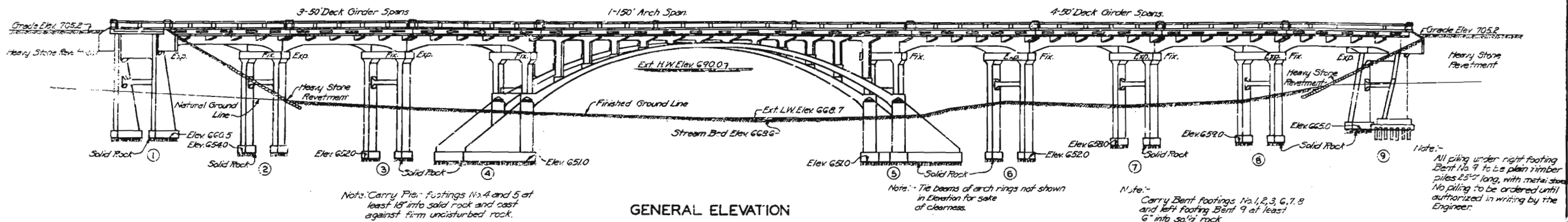
COUNTY : SHANNON BRIDGE : J0420 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE 'UNDER' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

LOAD RATING AND POSTING INFORMATION		MATERIAL/CONSTRUCTION INFORMATION	
<div>31</div> Design Load		<div>43A</div> Main Struc. Mat type	CONCRETE
<div>41</div> Structure Status		<div>43B</div> Main struc Constr. Type	ARCH - DECK
<div>63</div> Oper. Rating Meth.		<div>45</div> # of Main Spans	
<div>64</div> Operating Rating		<div>44A</div> Appr Struc. Mat type	
<div>65</div> Inventory Rating Meth		<div>44B</div> Appr Struc. Cnstr. type	
<div>66</div> Inventory Rating		<div>46</div> # of Approach Span	
<div>70</div> Bridge Posting Code		<div>107</div> Deck Mat/Constr.	
		<div>108A</div> Wear Surf Mat/Constr.	
		<div>108B</div> Membrane Mat/Constr.	
		<div>108C</div> Deck Protect Mat/Constr.	
PROPOSED IMPROVEMENT INFORMATION		CONDITION RATING INFORMATION	
Sufficiency Rating		<div>58</div> Deck Cond. Rating	
Deficiency Rating		<div>59</div> Superstructure Cond. Rating	
Funding Eligibility		<div>60</div> Substructure Cond. Rating	
<div>75A</div> Proposed Work		<div>61</div> Channel /Channel Protection Cond. Rating	
<div>75B</div> Work Done By		<div>62</div> Culvert Cond. Rating	
<div>76</div> New Struc Length			
<div>94</div> Struc Improve Cost		INSPECTION INFORMATION	
<div>95</div> Roadway Improve Cost		<div>90</div> Gen. Insp Date	
<div>96</div> Total Project Cost		<div>91</div> Gen. Insp. Frequency	
<div>97</div> Year of Cost Estimates		<div>92A</div> Frac. Critical Inspection	
		<div>93A</div> Frac. Critical Insp. Date	
		<div>92B</div> Underwater Inspection	
		<div>93B</div> Underwater Insp. Date	
		<div>92C</div> Special Inspection	
		<div>93C</div> Special Inspection Date	
APPRAISAL RATING INFORMATION		BORDER BRIDGE INFORMATION	
<div>36A</div> Br. Rail App. Rating		<div>98</div> Neighboring State Code	
<div>36B</div> Transition Rail App. Rating		<div>98B</div> Neighboring State % Respon	
<div>36C</div> Approach Rail App. Rating		<div>99</div> Neighboring State Struc. No.	
<div>36D</div> Rail End Treat. App. Rating			
<div>67</div> Struc Eval App. Rating			
<div>68</div> Deck Geometry App. Rating			
<div>69</div> Underclearance App. Rating			
<div>71</div> Waterway Adeq. App. Rating			
<div>72</div> Approach Road App. Rating			
<div>113</div> Scour Assess App. Rating			
APPROVED POSTING INFORMATION		FIELD POSTING INFORMATION	
Approved Posting Category		Field Posting Category	
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	

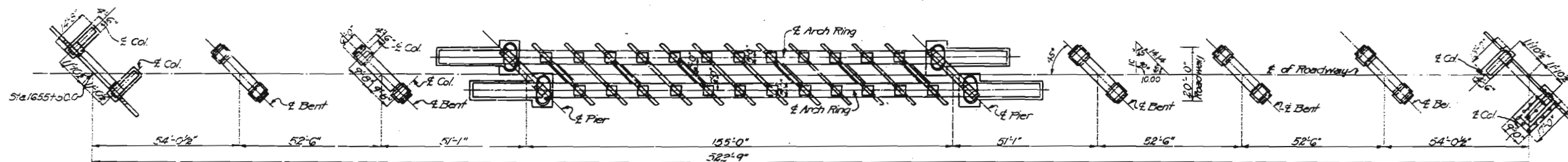
Design_No = J0420 and Inventory_Appraisal_Submittal_Year = 2024

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2	MO	RA-535	12		



GENERAL ELEVATION

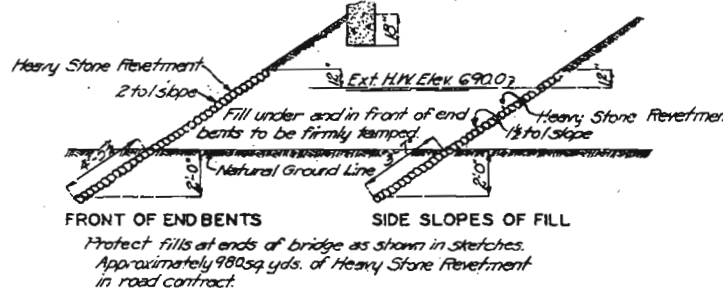


PLAN

ESTIMATED QUANTITIES

Item	Concrete Cu. Yds.		
	Class 1	Class 2	Class 3
Reinforcing Steel	498		
Deck Girder Spans 1-2, 2-3, 3-4, 5-6, 6-7, 7-8 & 8-9		636.3	
Slab and Curbs over Arch Span		116.0	
Arch Rings			153.6
Piers above Elev. 679.29			44.6
Piers below Elev. 679.29			497.6
Spandrel Bents			61.0
Girder Bents			440.6
Totals	498	752.3	1197.4
Phosphor Bronze Bearing Plates	Lbs.	6260	
Excavation Class 1	Cu. Yds.	360	
Excavation Class 2	Cu. Yds.	2095	
Plain Timber Piles	Lin. Ft.	435	
Plain Timber Pile Cut-Offs	Lin. Ft.	45	
Reinforcing Steel	Lbs.	244,000	

Note: Excavation above Elev. 672.0 is to be paid for as Class 1 excavation. Excavation below Elev. 672.0 is to be paid for as Class 2 excavation.



SKETCH SHOWING STONE REVETMENT

GENERAL NOTES:

Concrete in handrail to be Class "A"; all deck girders Class "X"; slab and curbs over arch span Class "X" and all girder bents, piers, spandrel bents and arch rings Class "B". Concrete shall be proportioned by the weight proportioning method. See Specifications.

Exposed surfaces to be rubbed to a smooth and uniform appearance. No plastering permitted.

Arch shall be poured in radial blocks in the order indicated on the detail drawings.

Corresponding sections in both ribs of span shall be poured at the same time.

Columns over arch shall not be cast until after wedges under ring have been released.

Provision must be made in the arch centering to bring loading upon all points of the ring as nearly simultaneously as practical in removing centering.

The centering shall not be removed from the span until the concrete over it has reached the required strength.

No permanent camber desired in finished spans.

Where bituminous felt is used in expansion or partition joints in concrete, stitch felt in vertical joint securely to one face of concrete with copper wire.

Horizontal expansion joints in slab on arch span to consist of 3 layers of roofing felt applied on smoothly finished surfaces.

Two Name Plates, type "A" as shown on Std. S-818 to be furnished and placed by contractor. Cast of name plates to be included in price bid for other items.

Excavation in accordance with Section I of Standard Specifications issued April 1, 1930 except that excavation paid for will be computed from extreme L.W. Elev. 668.7 where existing ground line is below this elevation and will include actual removal of any material lying within such plan limits as shown for Piers No. 4 and 5 on Sheet No. 4 of design plans instead of allowing quantities to only 18" outside of footings. See Special Provisions.

Exposed edges shall be beveled 1/2" where no other level is noted.

INDEX OF SHEETS:

Sheet No. 1 General Elevation and Plan.
Sheet No. 2 Bill of Reinforcing Steel & Bents No. 2, 3, 6, 7 & 8.
Sheet No. 3 Details of Bents No. 1 & 9.
Sheet No. 4 Details of Piers No. 4 & 5.
Sheet No. 5 Details of Deck Girder Spans 1-2, 2-3, 3-4, 4-5, 5-6, 6-7, 7-8 & 8-9.
Sheet No. 6 Details of Deck Girder Spans 3-4 & 5-6.
Sheet No. 7 Elevation and Plan of Arch Ring.
Sheet No. 8 Details of Arch Span.

B.M. Elev. 679.39 Head Spike in base of 20" Elm 85' Rt. Sta. 1659+30.

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.3 MILES NORTH OF WINONA
PROJECT NO. R19-S35 STA. 1655+50

SHANNON COUNTY

SUBMITTED BY *[Signature]* DATE 4/14/30
APPROVED BY *[Signature]* BRIDGE ENGINEER
DATE 4/14/30
CHIEF ENGINEER

STD. S-818

J-420

Sheet No. 1 of 8

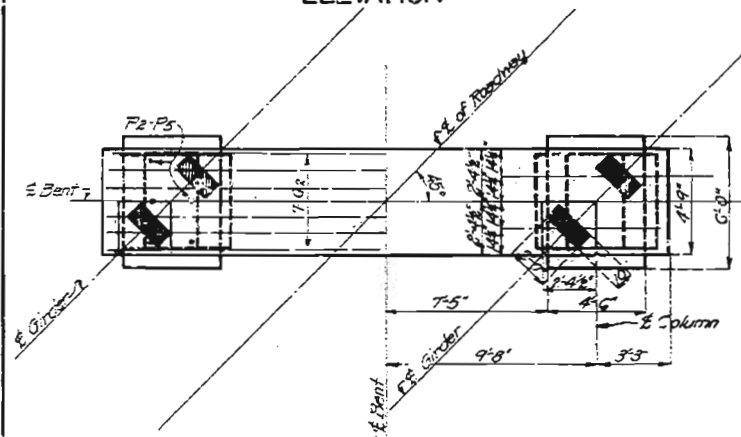
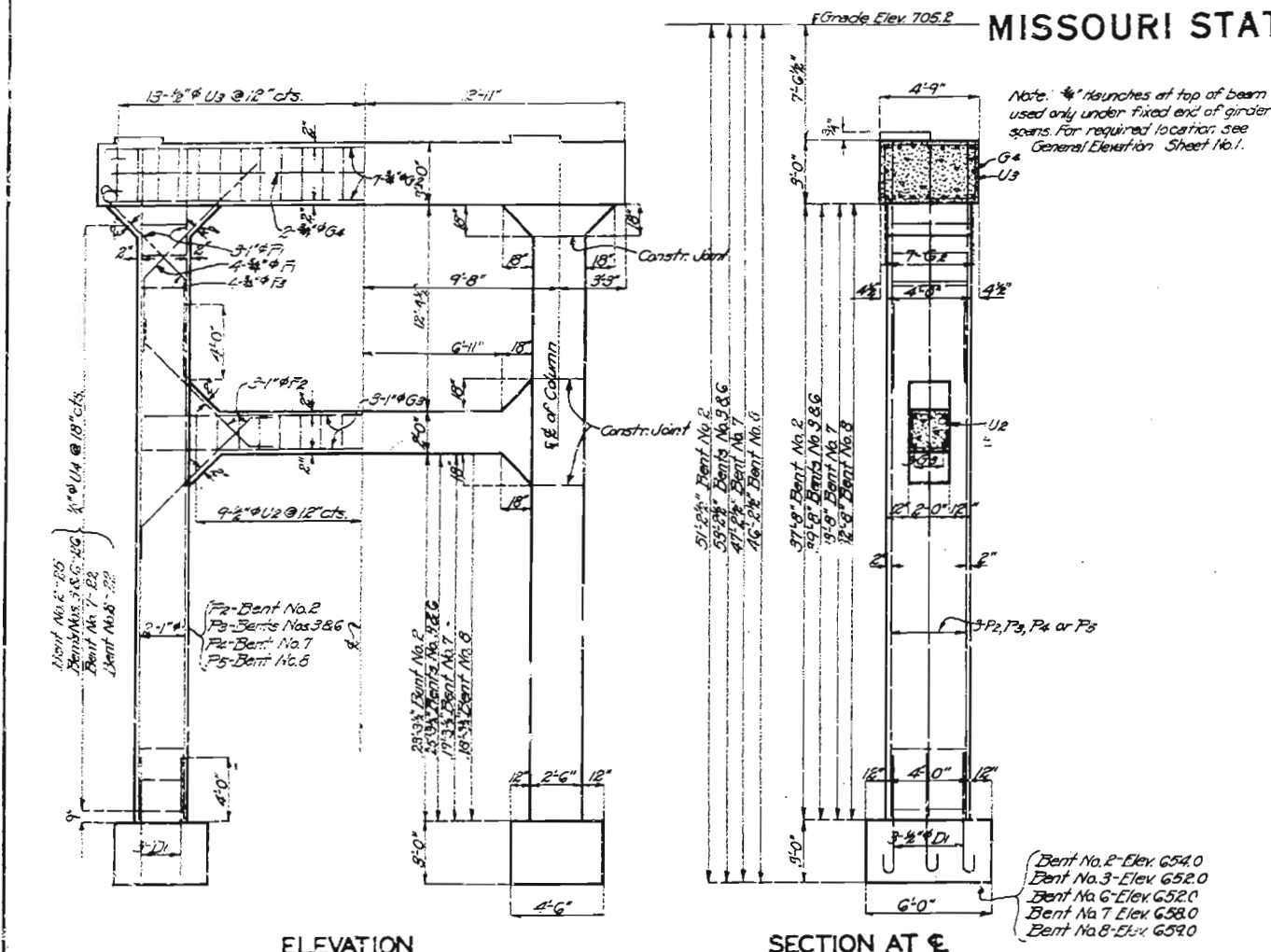
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Traced Mar. 1930 By H.W.H.
Checked Apr. 1930 By H.M.R.

LOCATION SKETCH

264

MISSOURI STATE HIGHWAY DEPARTMENT

ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	719-S35	19		



DETAILS OF BENTS NO. 2, 3, 6, 7 & 8.

COMPLETE BILL OF REINFORCING STEEL

No.	Size	Length	Mark	Location
Superstructure				
Deck Girder Spans				
350	1/2"	10'-6"	B1	Girders
356	1/2"	27'-0"	B2	"
364	1/2"	54'-3"	B3	"
288	1/2"	51'-9"	B4	"
356	1/2"	55'-9"	B5	"
288	1/2"	47'-0"	B6	"
356	1/2"	52'-0"	B7	"
288	1/2"	10'-9"	B8	"
288	1/2"	11'-3"	B9	"
288	1/2"	11'-3"	B10	"
288	1/2"	11'-3"	B11	"
288	1/2"	11'-3"	B12	"
288	1/2"	11'-9"	B13	"
288	1/2"	12'-0"	B14	"
288	1/2"	12'-3"	B15	"
288	1/2"	12'-6"	B16	"
288	1/2"	13'-0"	B17	"
288	1/2"	13'-6"	B18	"
288	1/2"	14'-0"	B19	"
288	1/2"	14'-6"	B20	"
288	1/2"	15'-0"	B21	"
288	1/2"	15'-6"	B22	"
288	1/2"	16'-0"	B23	"
288	1/2"	16'-6"	B24	"
112	1/2"	16'-6"	B25	"
128	1/2"	16'-6"	B26	"
132	1/2"	24'-0"	S2	Slab
143	1/2"	24'-0"	S3	"
540	1/2"	27'-0"	S4	"
132	1/2"	16'-9"	S5	"
94	1/2"	27'-0"	S6	"
12	1/2"	27'-3"	S7	"
138	1/2"	27'-3"	S8	"
92	1/2"	26'-9"	S9	"
40	1/2"	9'-0"	W1	Brackets
8	1/2"	32'-3"	W2	Web of Arch
168	1/2"	6'-0"	W3	Webs
140	1/2"	20'-9"	W4	End Webs
8	1/2"	21'-9"	W5	Web of Arch
22	1/2"	16'-3"	W6	"
204	1/2"	6'-6"	W7	Web
204	1/2"	10'-0"	W8	"
24	1/2"	21'-9"	W9	"
24	1/2"	28'-6"	C1	Curb
288	1/2"	13'-0"	C2	"
36	1/2"	27'-6"	C3	"
24	1/2"	26'-9"	C4	"
40	1/2"	12'-0"	R1	Rail
350	1/2"	9'-0"	R2	"
232	1/2"	7'-9"	R3	Sub-Posts
12	1/2"	4'-0"	R4	Posts
356	1/2"	18'-0"	R5	Balusters
40	1/2"	9'-6"	R6	Rail
28	1/2"	2'-3"	R7	Posts
120	1/2"	9'-9"	R8	Rail
16	1/2"	11'-4"	R9	"
48	1/2"	9'-3"	R10	"
16	1/2"	12'-9"	R11	Post
Arch Span				
50	1/2"	35'-0"	S12	Slab
152	1/2"	13'-0"	S13	"
60	1/2"	14'-0"	S14	"
57	1/2"	18'-9"	S15	"
91	1/2"	31'-6"	S16	"
38	1/2"	17'-3"	S17	"
40	1/2"	14'-3"	S18	"
40	1/2"	15'-9"	S19	"
104	1/2"	15'-0"	C5	Curb
16	1/2"	34'-6"	C6	"
12	1/2"	24'-6"	C7	"
104	1/2"	11'-3"	R12	Rail
Arch Ring				
168	1/2"	42'-6"	A1	Ring
48	1/2"	24'-6"	A2	"
244	1/2"	4'-9"	A3	"
48	1/2"	16'-0"	A4	Tie Beams
Spandrel Bents				
48	1/2"	6'-3"	G5	Bracket
48	1/2"	32'-3"	G6	Beam
60	1/2"	18'-9"	G7	"
32	1/2"	24'-6"	P1	Column
16	1/2"	35'-6"	P2	"
32	1/2"	14'-3"	P3	"
Substructure				
End Bents No. 1 & 9				
21	1/2"	9'-6"	D1	Footings
24	1/2"	9'-3"	D2	"
24	1/2"	9'-3"	F1	Haunch
12	1/2"	25'-9"	F2	"
16	1/2"	19'-0"	G1	Beam
30	1/2"	19'-0"	G2	Wing
4	1/2"	35'-9"	H3	"
40	1/2"	28'-0"	H4	Beam
8	1/2"	25'-9"	H5	Backwall
14	1/2"	25'-9"	H6	"
12	1/2"	18'-3"	I1	Wing Wall
6	1/2"	26'-3"	I2	Backwall
50	1/2"	12'-9"	U1	Beam
40	1/2"	8'-0"	U2	Tie Beam
28	1/2"	8'-0"	U3	Backwall Column
6	1/2"	12'-9"	V1	Wing
4	1/2"	7'-9"	V2	"
12	1/2"	6'-3"	V3	"
28	1/2"	9'-3"	V4	Backwall
16	1/2"	8'-0"	V5	Column
12	1/2"	11'-6"	V7	"
14	1/2"	26'-9"	V8	"
7	1/2"	28'-9"	V9	"
7	1/2"	21'-6"	V10	"
Bents No. 2, 3, 6, 7 & 8				
60	1/2"	7'-9"	D1	Footings
40	1/2"	9'-3"	F1	Haunch
60	1/2"	9'-3"	F2	"
40	1/2"	8'-7"	F3	"
70	1/2"	27'-0"	G2	Beam
30	1/2"	21'-6"	G3	Tie Beam
0	1/2"	25'-6"	G4	Beam
60	1/2"	25'-6"	P1	Column
12	1/2"	31'-0"	P2	"
24	1/2"	33'-0"	P3	"
12	1/2"	27'-0"	P4	"
12	1/2"	26'-0"	P5	"
28	1/2"	8'-0"	U2	Tie Beam
125	1/2"	15'-6"	U3	Beam
242	1/2"	13'-0"	U4	Column
Piers No. 4 & 5				
60	1/2"	9'-3"	A5	Shaft
120	1/2"	23'-9"	A6	"
24	1/2"	28'-3"	A7	"
112	1/2"	25'-0"	D3	Footings
24	1/2"	25'-0"	G8	Beam
32	1/2"	18'-3"	F4	Columns
32	1/2"	19'-0"	F5	Tie Beams
42	1/2"	10'-0"	U4	"
80	1/2"	12'-0"	U6	"
22	1/2"	2'-5"	F4	Haunch

Note: Dimensions are given along & of bars and are for computed lengths. For bending sketches of bars P1 to P10 inclusive see Sheet No. 8.

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NO R19-S35 STA. 1655 + 50

SHANNON COUNTY

SUBMITTED BY: *M. J. H. H.* DATE: 4/16/38
APPROVED BY: *M. J. H. H.* DATE:
BRIDGE ENGINEER
CITY ENGINEER

STD.S-818
J-420

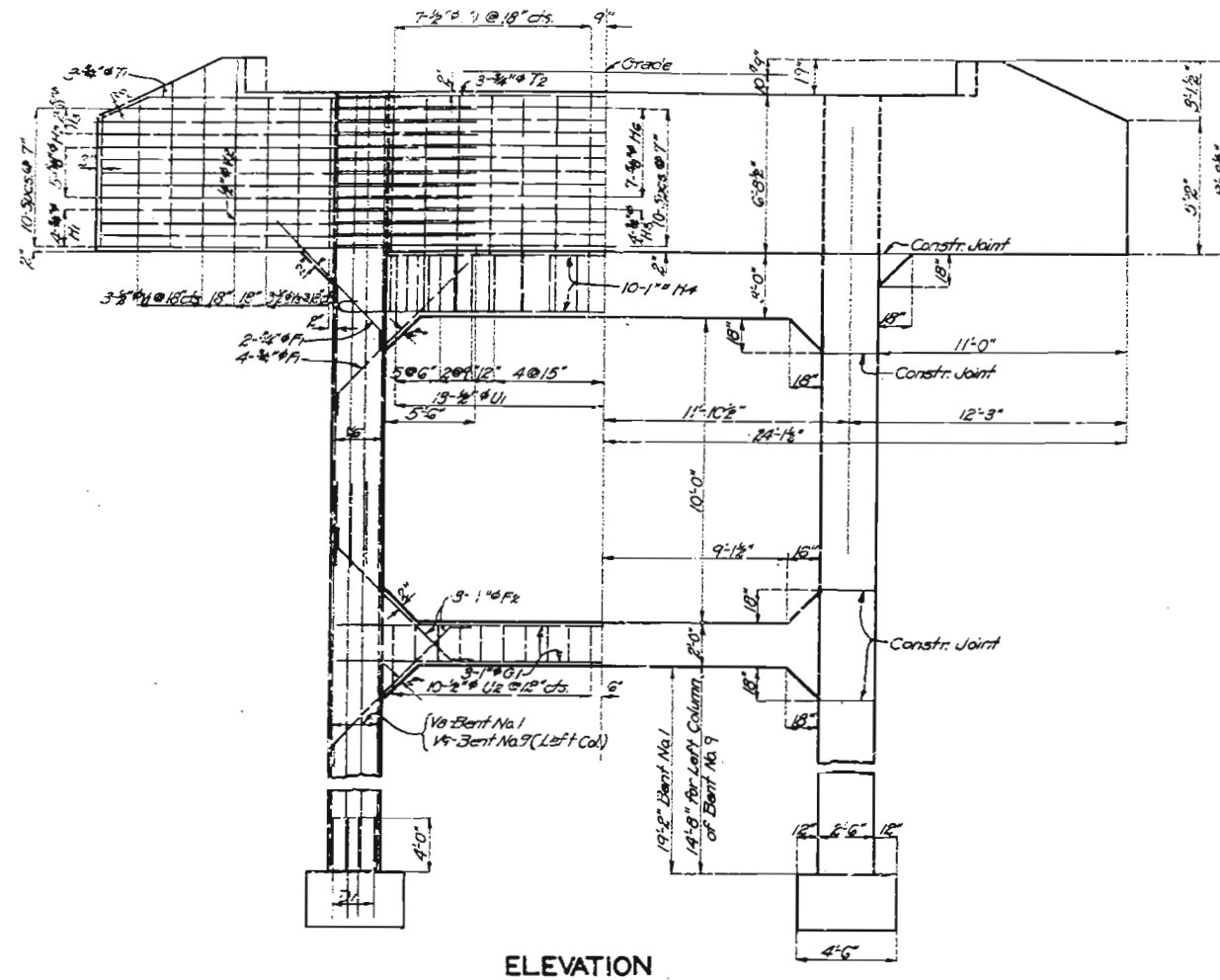
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Checked Apr. 1930 By J.R.O. - F.C.L. - N.Y.R.

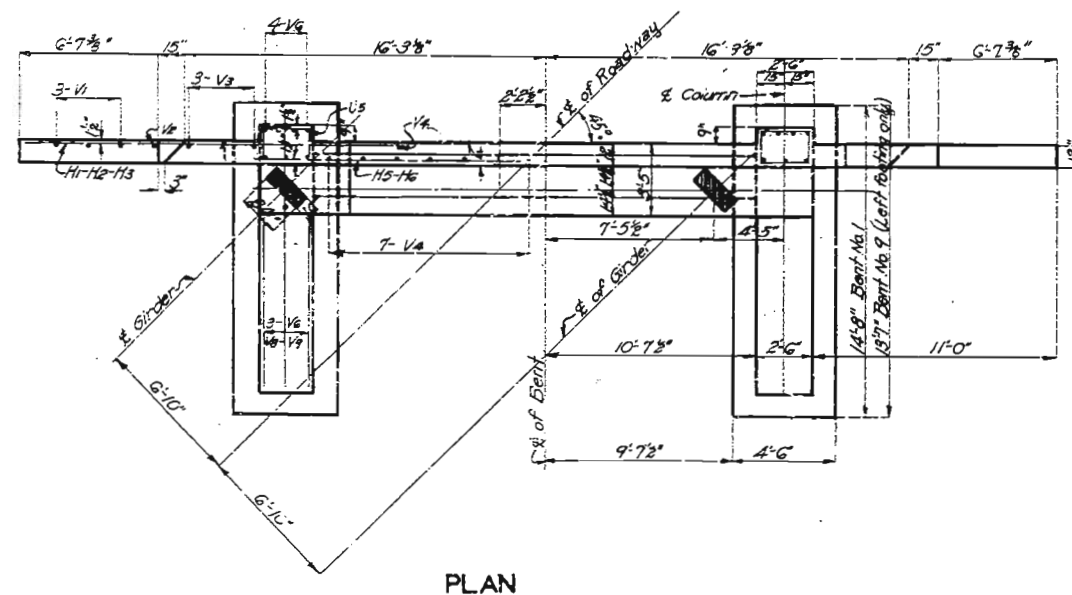
Sheet No. 2 of 3

MISSOURI STATE HIGHWAY DEPARTMENT

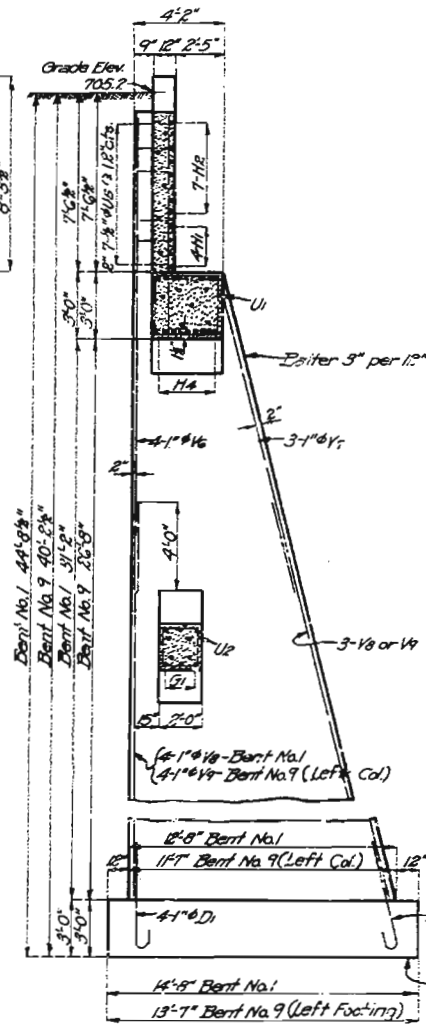
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5	MO	1919-535	19		



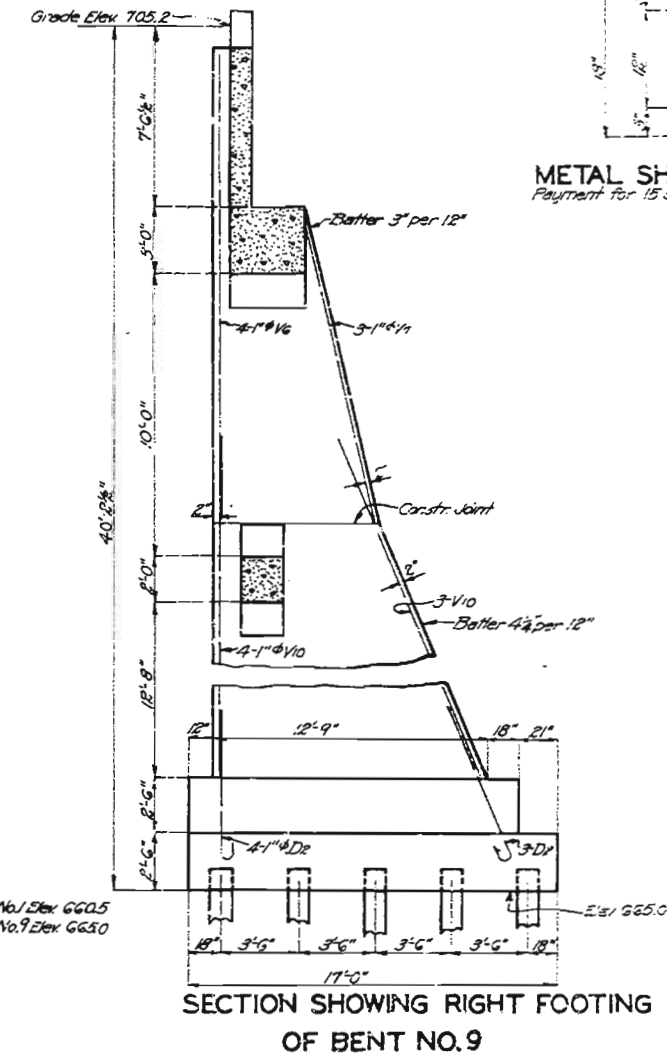
ELEVATION



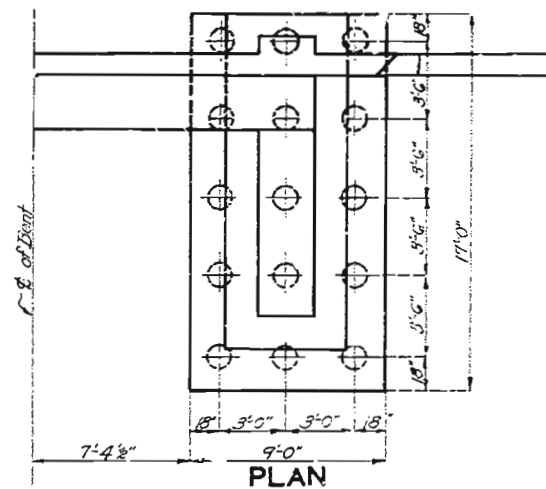
PLAN



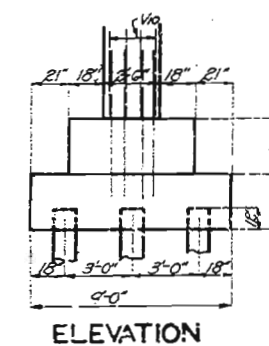
SECTION AT E



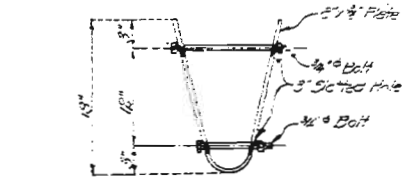
SECTION SHOWING RIGHT FOOTING OF BENT NO. 9



DETAIL OF RIGHT COLUMN AND FOOTING BENT NO. 9



ELEVATION



METAL SHOES FOR TIMBER PILES
Payment for 15 shoes to be made in accordance with specifications

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NO R19-535 STA. 1655+50

SHANNON COUNTY

DATE 4/14/30
APPROVED BY [Signature]
BRIDGE ENGINEER


STD. S-818
J-420

NON

Drawn Mar. 1930 By H.E.C
Traced April 1930 By H.W.H.
Checked Apr. 1930 By M.W.R.



ELEVATION



SECTION THRU TIE BEAM

The diagram illustrates the maximum limits of excavation to be paid for. It shows a cross-section of an excavation with a dashed line representing the original ground surface and a solid line representing the excavation profile. The excavation profile is defined by a top width of 18', a bottom width of 18', and a depth of 18'. The excavation is bounded by a 15° slope on the left and a 18° slope on the right. The right side of the excavation is labeled 'Outline of Footing' and 'R/L of Roadway'. The left side is labeled 'Maximum Limits of excavation to be paid for'.

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NQR19-S35 STA.1655+ 50

SHANNON. *28* COUNTY

SUBMITTED BY

COUNTY

SUBMITTED BY

DATE
PROJECT ENGINEER

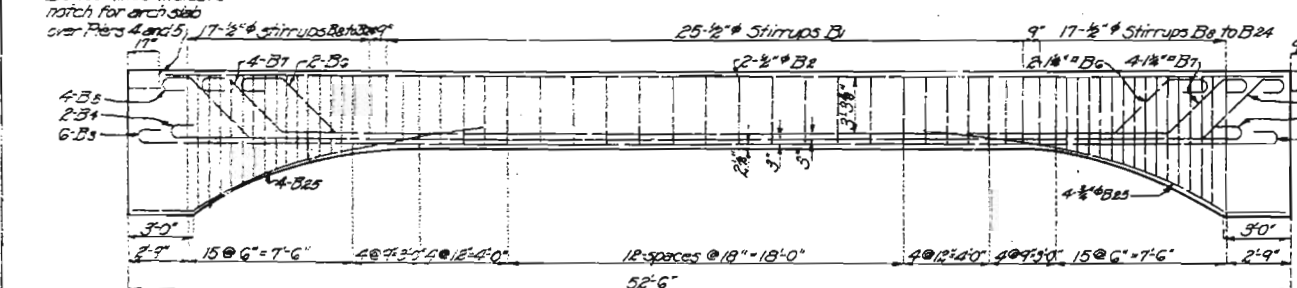
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Sheet No. 4 of 8

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	210-005	19		

Note:
Dotted lines indicate
notch for arch slab
over Piers 4 and 5; 17'- $\frac{1}{2}$ " ϕ stirrups between



Note:-
Dotted lines indicate slab extension at end bents No. 1 and 9.

Note:- 1) mixture of flake graphite and oil to be placed between plates before placing in concrete.

End Bent
1/2" Bit Rail
End Post
Same elevation as top of curb
End of Curb
1/2" of Rail
Drop overhanging 6" below top of slab. May be cast with curb.
Notch for approach slab

End Bent
1/2" Bit Rail
End Post
Drop overhanging 6" below top of slab. May be cast with curb.
End of Curb
Same elevation as top of slab.
Edge of floor/slab
Notch for approach slab

SUBMITTED BY *J. J. Johnson* DATE *4/11/68*
APPROVED BY *T. H. H. H.* BRIDGE ENGINEER
DATE *4/11/68*

STD. S-818
J-420

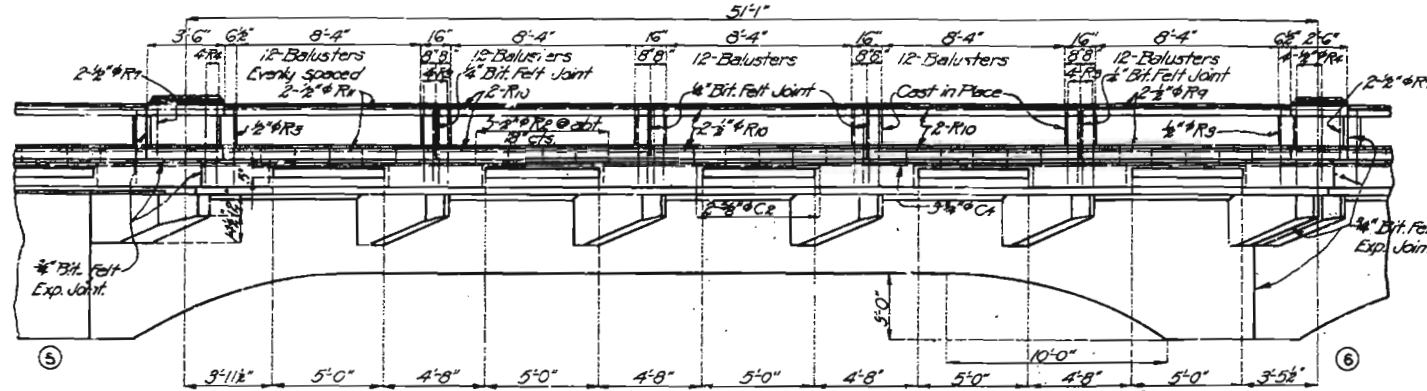
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Sheet No 5 of 8

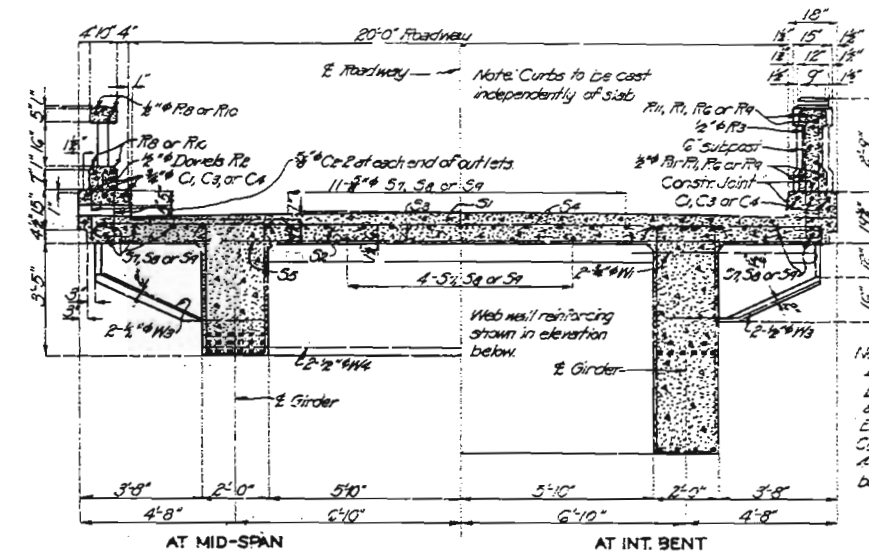
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	719-535	15		

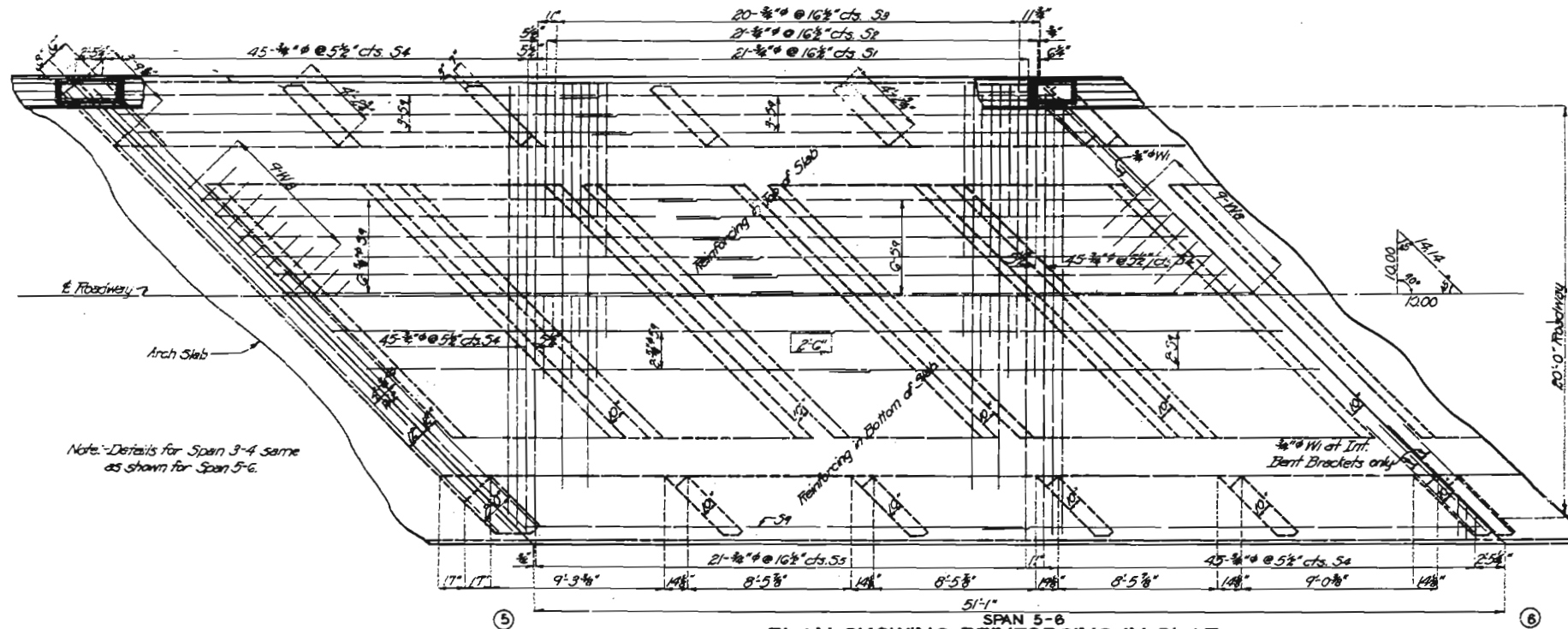
Note: 4"x4" Balusters at about 5' cts. 20" long. Precast. Each reinforced with 4-#6 wires 18" long. RS. Dimensions given are along E. of Handrail. Posts, subposts and rails to be cast in place.



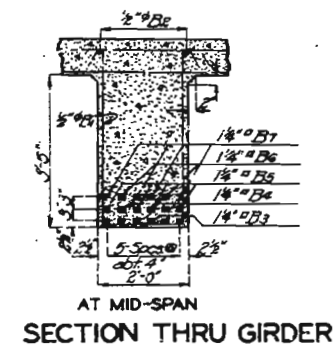
ELEVATION OF HANDRAIL CURB AND GIRDER



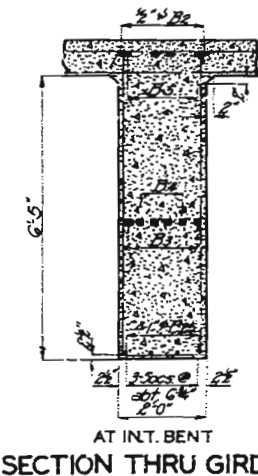
CROSS SECTION THRU ROADWAY



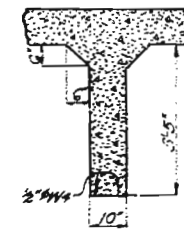
PLAN SHOWING REINFORCING IN SLAB



SECTION THRU GIRDER AT MID-SPAN



SECTION THRU GIRDER AT INT. BENT

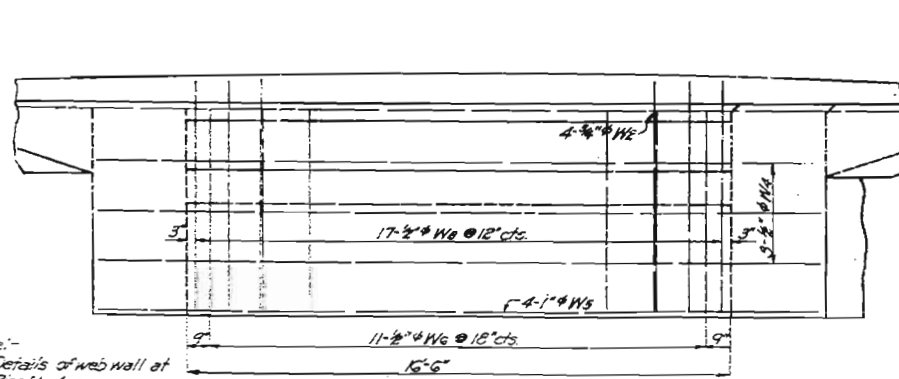


SECTION THRU INTERMEDIATE WEB WALL

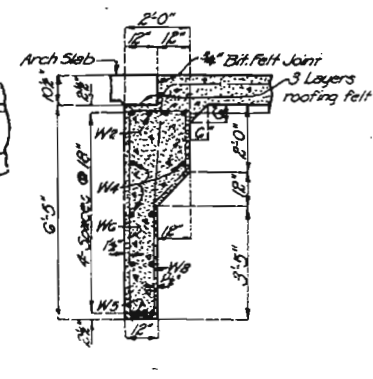
Note: All intermediate web walls to be 3'-5" deep.

Note: Details of web wall at Bent No. 1 same as shown for Bent No. 9.

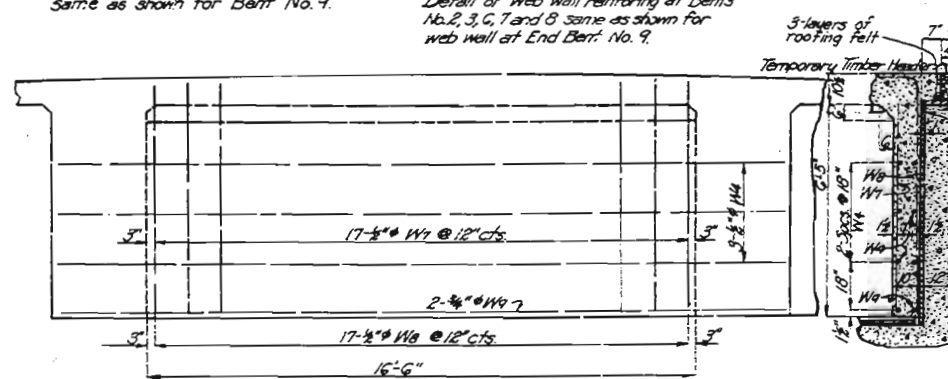
Note: Detail of web wall reinforcing at Bents No. 2, 3, 6, 7 and 8 same as shown for web wall at End Bent No. 9.



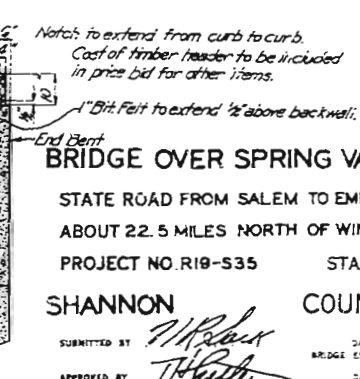
PART END ELEVATION OF GIRDER SPAN NO. 5 & 6



SECTION AT E. ROADWAY



PART END ELEVATION OF GIRDER SPAN NO. 8-9



SECTION AT E. ROADWAY

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NO. R19-535 STA. 1655+50

SHANNON COUNTY

SUBMITTED BY: J. H. R. L. DATE: 4/15/30.
APPROVED BY: J. H. R. L. DATE: 4/15/30.
BRIDGE ENGINEER
CHIEF ENGINEER

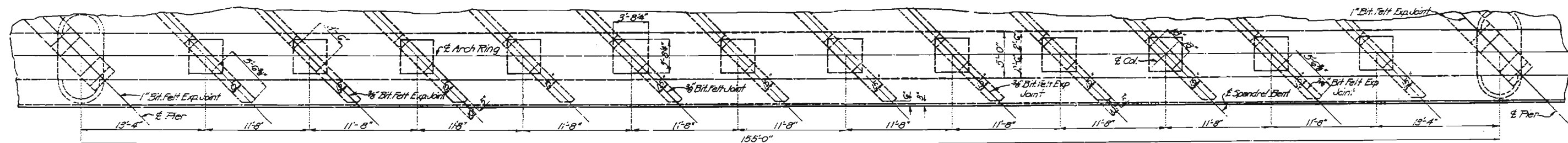
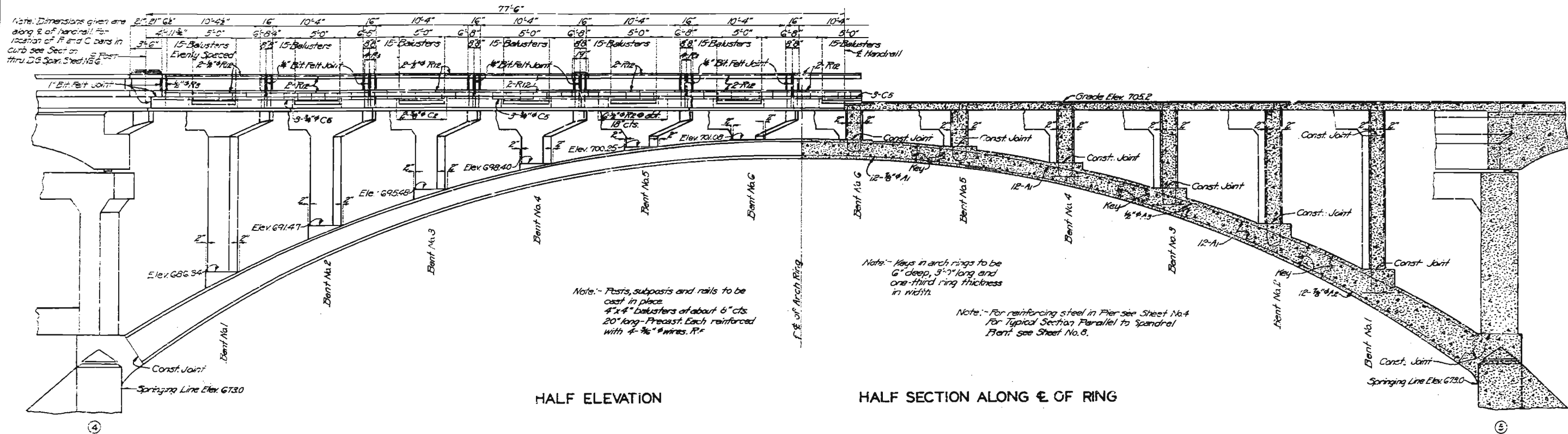
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Traced Mar. 1930 By H.W.H.
Checked April 1930 By F.C.L.

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Sheet No. 6 of 8

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	119-535	19		



BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NO. 119-535 STA. 1655+50

SHANNON COUNTY

SUBMITTED BY: *[Signature]* DATE: 4/16/30
APPROVED BY: *[Signature]* DATE:
BRIDGE ENGINEER
DATE:
CHIEF ENGINEER

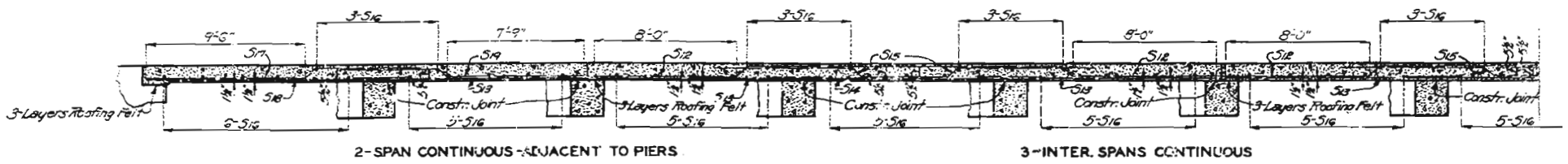
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Checked Apr. 1930 By H.M.R.

Sheet No. 7 of 8

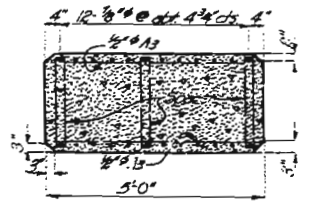
STD.S-818
J-420

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	P19-535	19	11	15



SECTION ALONG C OF ROADWAY



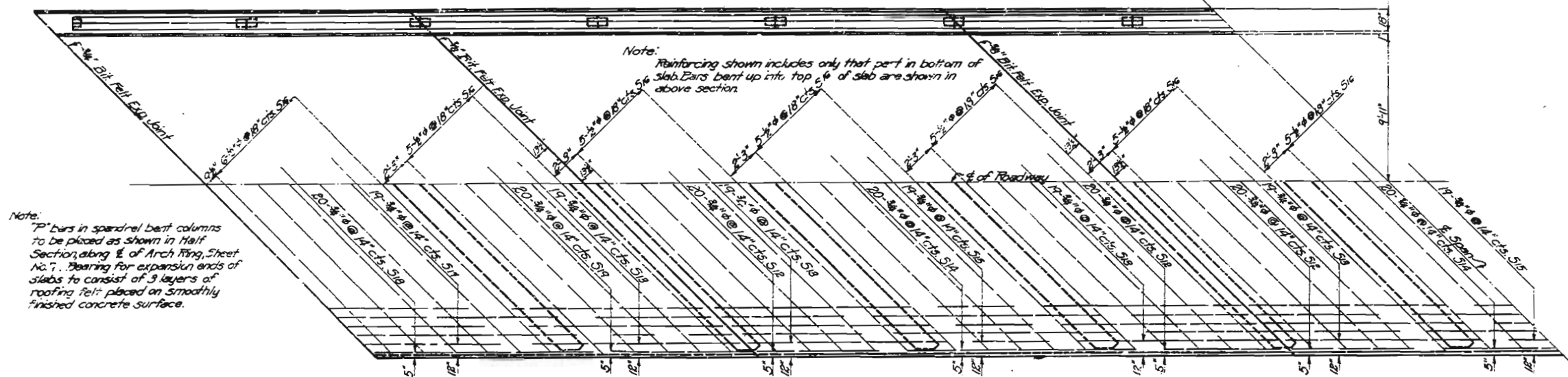
Note: - 1/2" bars as @ 2'-6" cts measured horizontally, are to be placed in ring at points where arch ribs are shown in detail, giving "Dimensions of Arch Ring."
Pacers to be placed as shown in above detail and spaced same as 1/2" tie bars.
Wire spacers securely to both main and transverse steel.

SECTION THRU ARCH RING SHOWING REINFORCING

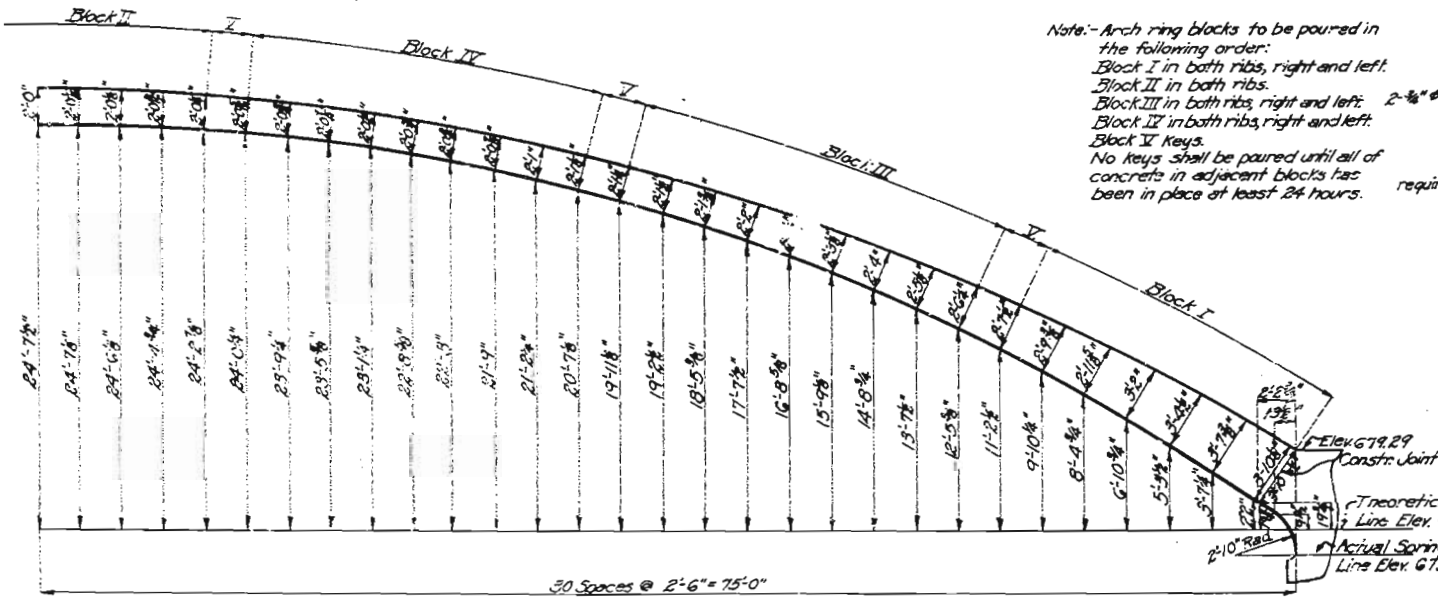
BAR SPACERS FOR RINGS

No. of Bar	Dimen. A	No. of Bar	Dimen. A	No. of Bar	Dimen. A
12	3'-6"	12	2'-0"	24	20"
12	3'-3"	12	2'-3"	48	20 1/2"
12	3'-0"	12	2'-6"	48	20 1/4"
12	2'-10 1/4"	12	2'-2"		
12	2'-7"	12	2'-2"		
12	2'-5 1/2"	12	2'-1 1/4"		
12	2'-3 3/4"	12	2'-1 1/2"		
12	2'-2 1/4"	24	2'-1 1/4"		
12	2'-1 1/4"	24	2'-1"		

Note: - Weight of bar spacers included in weight of arch ring reinforcement.

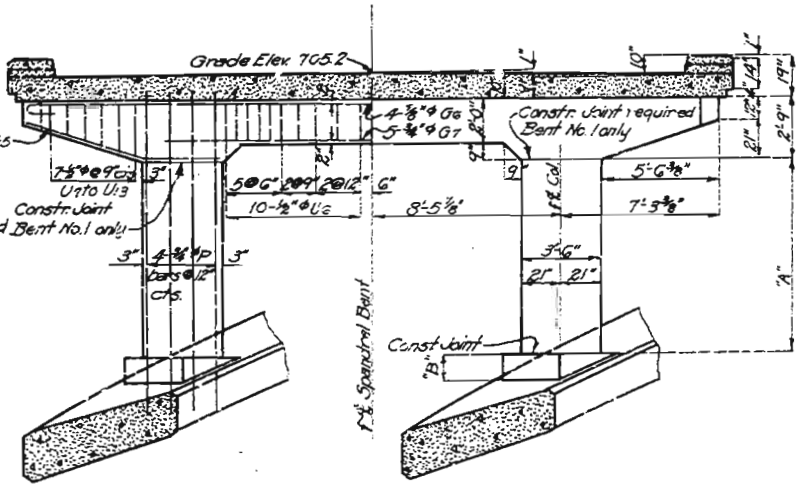


HALF PLAN OF SLAB SPANS OVER ARCH SHOWING REINFORCING



DIMENSIONS OF ARCH RING

Note: - Arch ring blocks to be poured in the following order:
Block I in both ribs, right and left.
Block II in both ribs.
Block III in both ribs, right and left.
Block IV in both ribs, right and left.
Block V keys.
No keys shall be poured until all of concrete in adjacent blocks has been in place at least 24 hours.



SECTION PARALLEL TO SPANDREL BENT

DIMENSIONS AND BARS FOR SPANDREL BENTS			
Bent No.	Dimensions	Bent No.	Dimensions
1	15'-3 3/4" x 18"	5	16'-3 3/4" x 18"
2	10'-1 1/2" x 18"	6	6'-2" x 18"
3	6'-1 1/2" x 13 1/2"		
4	3'-2 1/2" x 9 1/2"		
5	16'-3 3/4" x 18"		
6	6'-2" x 18"		

Note: - For length of "P" bars see "Complete Bill of Reinforcing Steel Sheet No. 2."

BRIDGE OVER SPRING VALLEY

STATE ROAD FROM SALEM TO EMINENCE
ABOUT 22.5 MILES NORTH OF WINONA
PROJECT NO. R19-535 STA. 1655 + 50

SHANNON COUNTY

SUBMITTED BY: [Signature]
APPROVED BY: [Signature]
DATE: 4/1/30

Drawn Mar. 1930 By H.E.C.
Traced Mar. 1930 By H.W.H.
Checked Apr. 1930 By K.H.R.