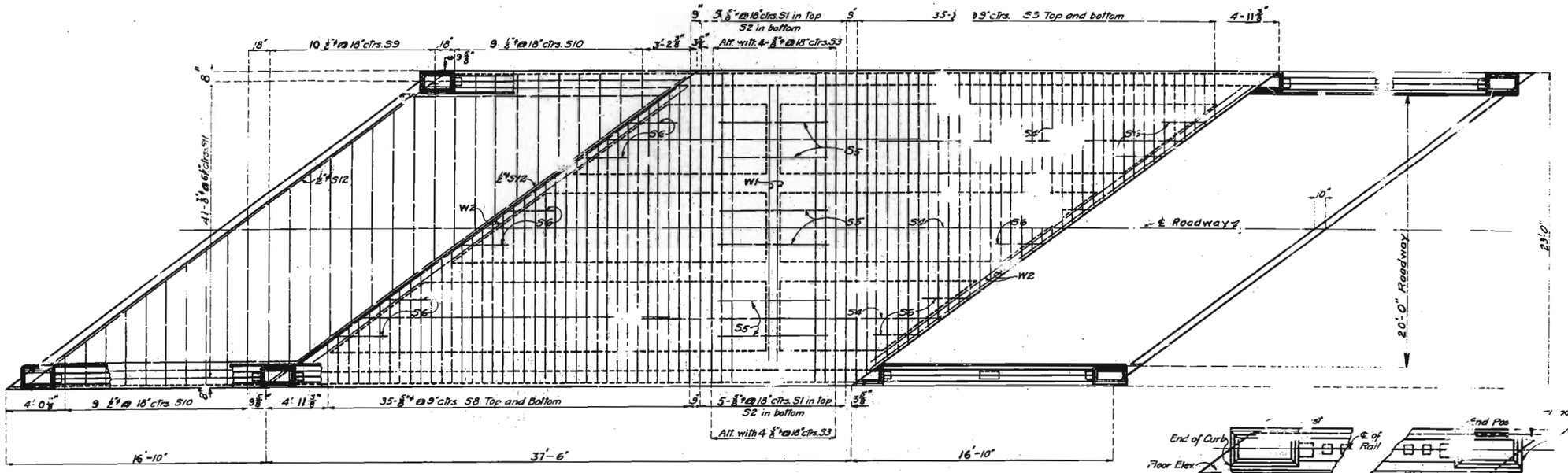
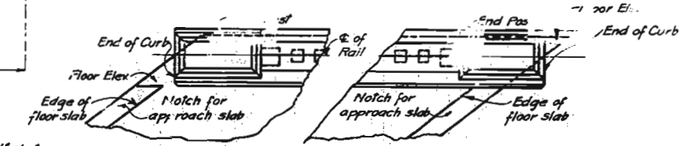
MISSOURI STATE HIGHWAY DEPARTMENT

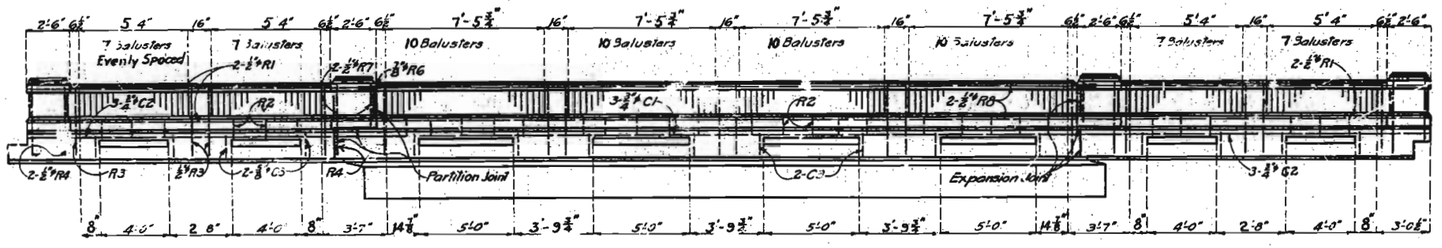
FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	M25-532		49	



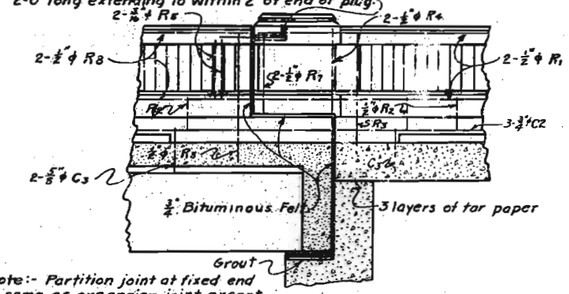
PLAN OF SLAB AND DECK GIRDER SHOWING REINFORCING



SKETCHES SHOWING LOCATION OF END POSTS OF HANDRAIL

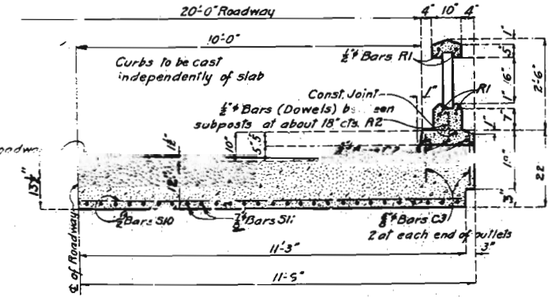


ELEVATION OF HANDRAIL



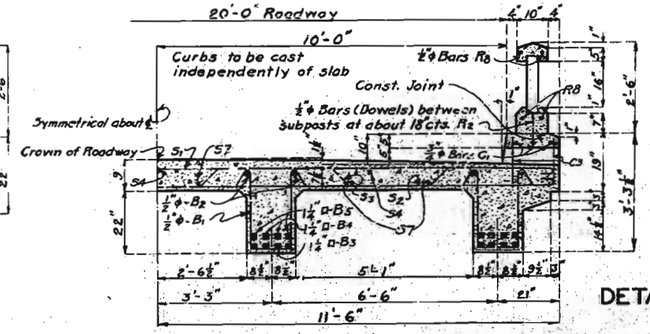
Note:- Partition joint at fixed end is same as expansion joint except 2 layers of tar paper instead of ¾" bituminous felt.

DETAILS OF EXPANSION JOINT



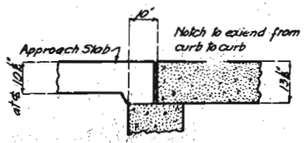
HALF SECTION THRU SLAB

AT RIGHT ANGLES TO ℄ OF ROADWAY



HALF SECTION THRU DECK GIRDER

AT RIGHT ANGLES TO ℄ OF ROADWAY



DETAILS OF NOTCH FOR APPROACH SLAB

SECTION PARALLEL TO ℄ OF ROADWAY

BRIDGE OVER DITCH NO. 25

(STATION) FROM DELTA TO ADVANCE

ABOUT 4 MILES FROM CROSSROAD

PROJ. R25-S32 STA 1322+22

CAPE GIRARDEAU COUNTY

SUBMITTED BY J. W. Barnlow ACTING BRIDGE ENGINEER May 15, 1926

PASSED BY [illegible] DATE 5/15/26 ASSISTANT TO CHIEF ENGINEER

[illegible] May 15 '26

6-23

STD.C5314
STD.C6335
H431

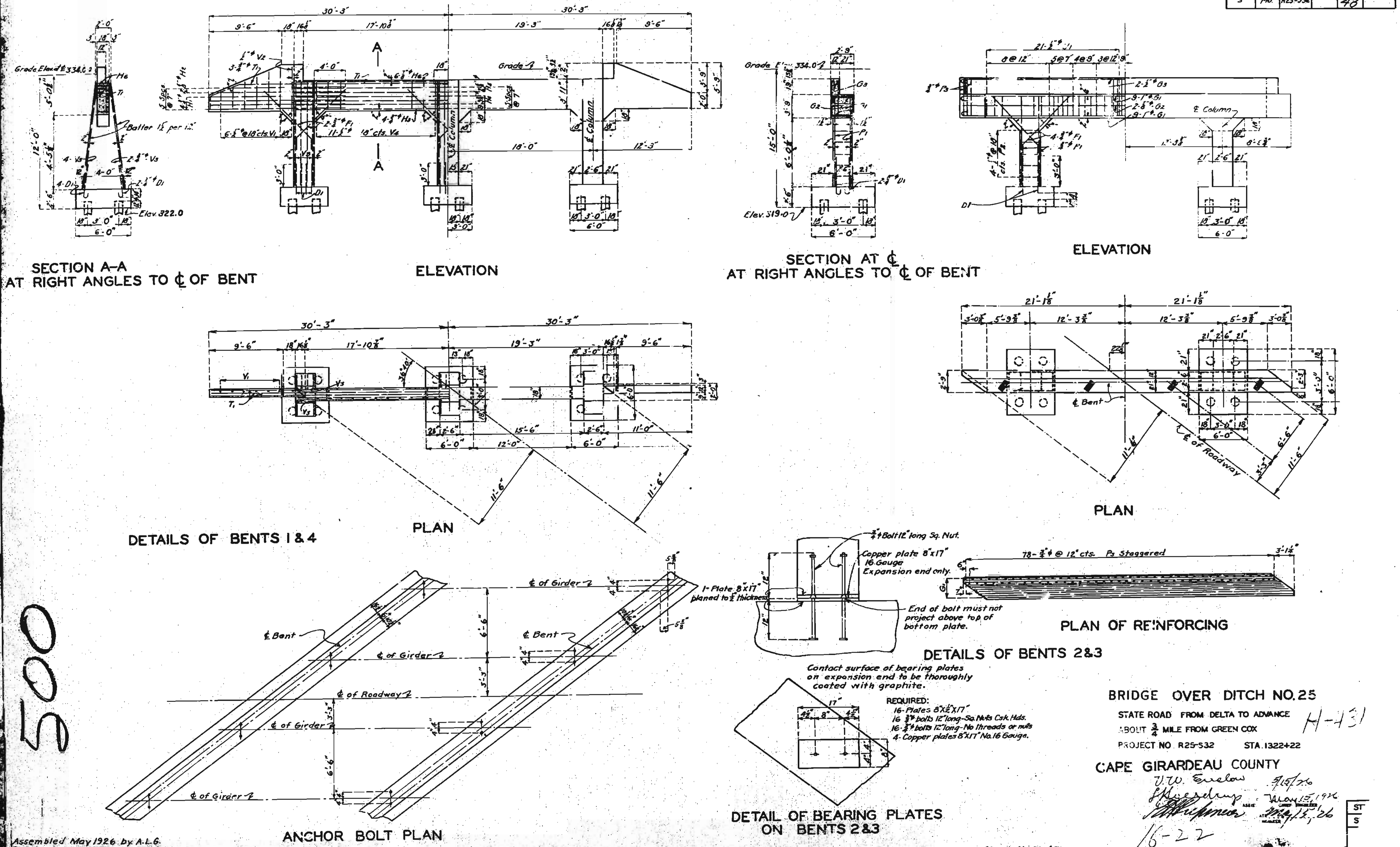
Assembled May 1926 by A.L.G.
Checked May 1926 by J.R.J.

Sheet No. 2 of 3

1926

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	R25-532		48	



BRIDGE OVER DITCH NO. 25

STATE ROAD FROM DELTA TO ADVANCE

ABOUT ¾ MILE FROM GREEN COX

PROJECT NO. R25-532 STA. 1322+22

CAPE GIRARDEAU COUNTY

H-131

Assembled May 1926 by A.L.G.
Checked May 1926 by J.A.J.

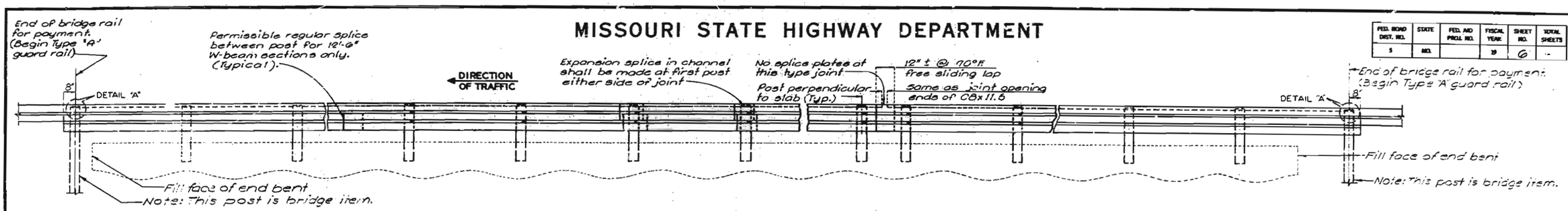
Sheet No. 3 of 3

16-22

500

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	6	--

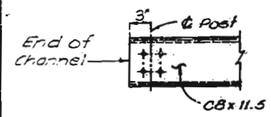


PART SECTION SHOWING RAIL

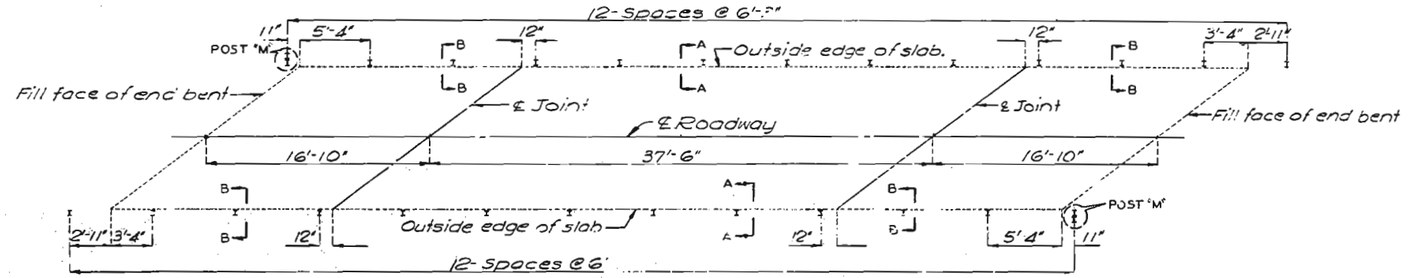
NOTE: EXPANSION SPLICE IN W-BEAM SHALL BE MADE AT EITHER THE FIRST OR SECOND POST EITHER SIDE OF JOINT. WHEN SPLICE IS MADE AT SECOND POST, AN EXPANSION SLOT SHALL BE PROVIDED IN W-BEAM FOR CONNECTION TO FIRST POST TO ALLOW FOR MOVEMENT. (TYPICAL UPPER AND LOWER W-BEAM SHOWN; HOWEVER UPPER AND LOWER W-BEAM ARE NOT TO BE SPLICED AT THE SAME LOCATION).

AT EXPANSION JOINTS

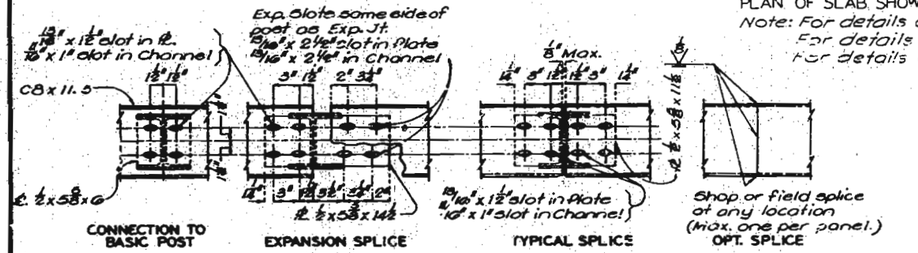
NOTE: IN ADDITION TO EXPANSION PROVISIONS AT THESE EXPANSION JOINTS, EXPANSION SPLICES IN CHANNEL MEMBER ONLY SHALL BE PROVIDED AT OTHER LOCATIONS SO THAT THE MAXIMUM LENGTH OF CHANNEL WITHOUT EXPANSION PROVISIONS DOES NOT EXCEED 200 FT.



PLAN OF DETAIL "A"



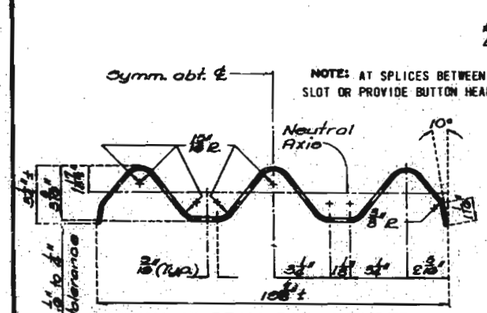
PLAN OF SLAB SHOWING RAIL POST SPACING
Note: For details of section A-A see sheet No. 2
For details of section B-B see sheet No. 3
For details of Post "M" see sheet No. 3

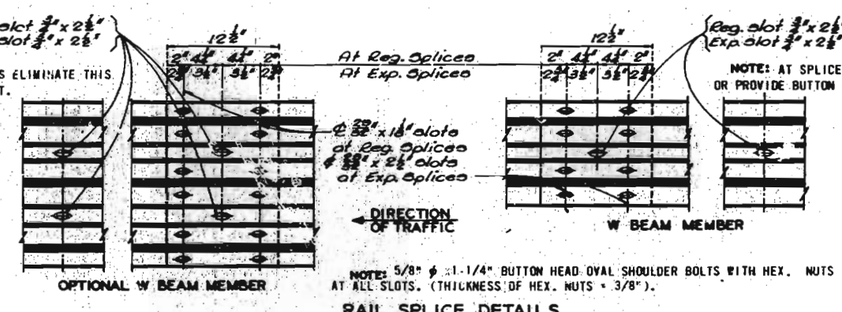


CHANNEL MEMBER DETAILS

NOTE: SHIM PLATES 6"x6"x1/16" MAY BE USED BETWEEN TOP OF POST AND CHANNEL MEMBER AS REQUIRED FOR VERTICAL ALIGNMENT.

ESTIMATED QUANTITIES		
ITEM		TOTAL
Bridge Guard Rail (W-Beam)	Lin. Ft.	150
Special Work	Lump Sum	1

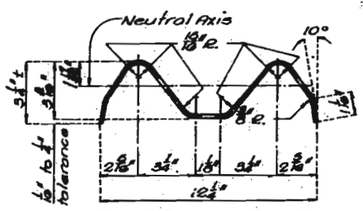




NOTE: 5/8" ϕ x 1-1/4" BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX. NUTS AT ALL SLOTS. (THICKNESS OF HEX. NUTS = 3/8").

RAIL SPLICE DETAILS

NOTE: SPECIAL DRILLING OF W-BEAM MAY BE REQUIRED AT SPLICES. (ALL DRILLING DETAILS ARE TO BE SHOWN ON SHOP DRAWINGS).



GENERAL NOTES.

DESIGN AASHTO 1973 SPECIFICATIONS.

PANEL LENGTHS OF CHANNEL MEMBERS SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF SIX (EXCEPT AT END BENTS).

ALL BOLTS, NUTS, WASHERS, PLATES AND ELASTOMERIC MATERIALS ARE CONSIDERED AS PARTS OF THE RAIL FOR PAYMENT.

ALL STEEL CONNECTING BOLTS AND FASTENERS FOR RAILING AND ALL ANCHOR BOLTS, NUTS, WASHERS AND PLATES SHALL BE GALVANIZED AFTER FABRICATION. FOR PROTECTIVE COATING AND MATERIAL REQUIREMENT OF STEEL RAILING SEE SECTION 1040 OF THE STANDARD SPECIFICATIONS.

RAIL POSTS SHALL BE SET PERPENDICULAR TO ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

AT EXPANSION SLOTS IN W-BEAM RAILS AND CHANNELS, TIGHTEN BOLTS, BACK OFF ONE-HALF TURN AND BURR THREADS.

MINIMUM LENGTH OF W-BEAM SECTIONS IS EQUAL TO ONE POST SPACE.

W-BEAM GUARD RAIL TO BE MADE OF STEEL AND SHALL BE 12 GAGE, AND ERECTED IN ACCORDANCE WITH STANDARD PLAN 606.00.

POST, SHIMS, PLATES, CHANNELS AND CHANNEL SPLICE PLATES TO BE FABRICATED FROM A-36 STEEL.

WASHERS SHALL BE USED AT ALL POST BOLTS (BETWEEN BOLT HEAD AND BEAM). THEY SHALL BE RECTANGULAR IN SHAPE (3" X 1-3/4" X 3/16" MIN.) AND FLAT, OR WHEN NECESSARY OF SUCH DESIGN TO FIT THE CONTOUR OF THE BEAM. WASHER SHALL HAVE 11/16" X 1" HOLE.

FABRICATION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH SECTION 712 OF THE STANDARD SPECIFICATIONS.

LIGHT DOTTED LINES INDICATE OLD WORK, HEAVY LINES INDICATE NEW WORK.

HIGH STRENGTH BOLTS IN CONCRETE ANCHORS TO BE SNUG TIGHT.

HIGH STRENGTH BOLTS SHALL BE A-325.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD BEFORE ORDERING MATERIALS.

REPAIRS TO DETERIORATED AREAS OF SLAB OVERHANG TO BE DONE WITH SPECIAL MORTAR (SEE SPECIAL PROVISIONS.)

THE CONTRACTOR SHALL MAINTAIN ONE LANE TRAFFIC ON THE BRIDGE DURING CONSTRUCTION.

B.M.

REPLACING BRIDGE HANDRAIL
BRIDGE OVER DITCH NO. 25
STATE ROAD FROM DELTA TO ADVANCE
ABOUT .75 MILE FROM GREEN COX
PROJECT NO. HES-25-2(9) **STA.** 1322+22
JOB NO. 0-X025-342 **RTE.** 25
CAPE GIRARDEAU **COUNTY**
DATE

STD. 606.00
STD. 617.00
H-431 R

DESIGNED MAR 1979
DETAILED MAR 1979
CHECKED APR 1979

Note: This drawing is not to scale. Follow dimensions.

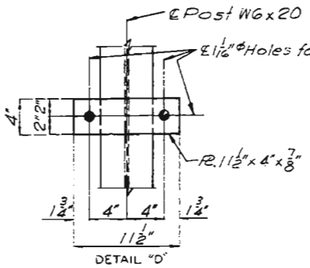
Sheet No. 1 of 3 SEE FINAL PLANS

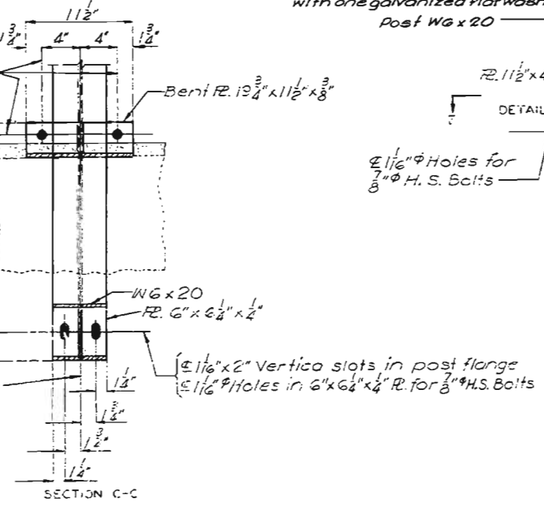
304

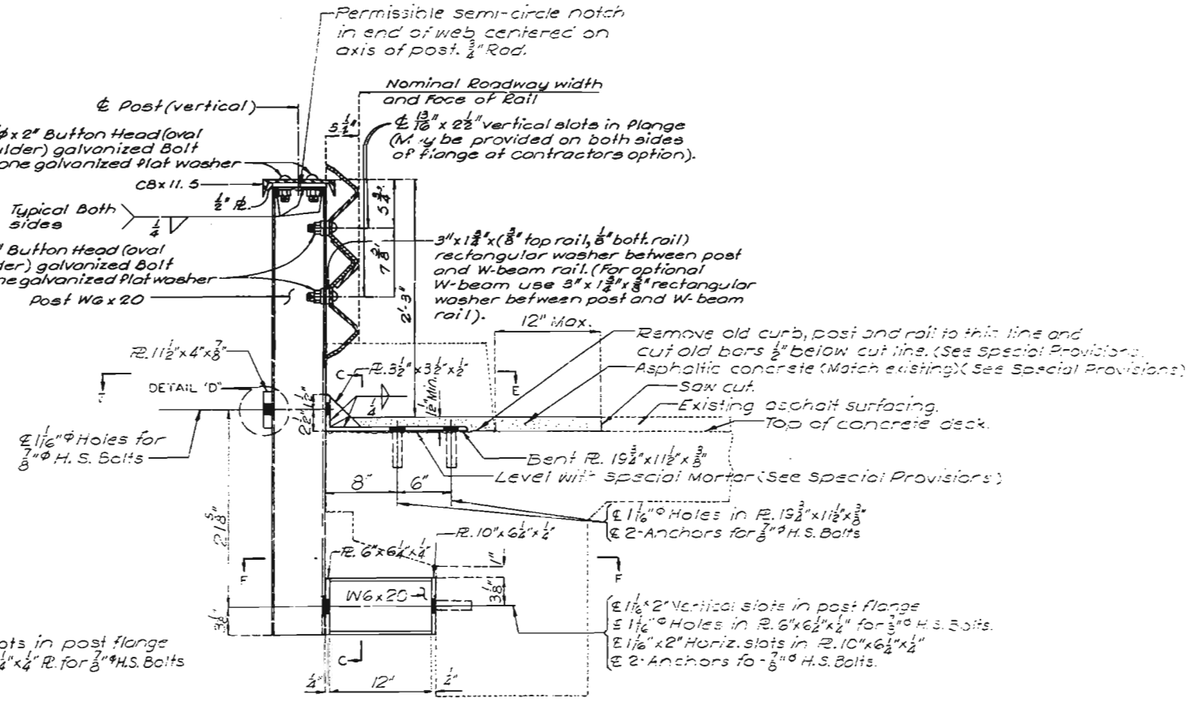
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	7	

505

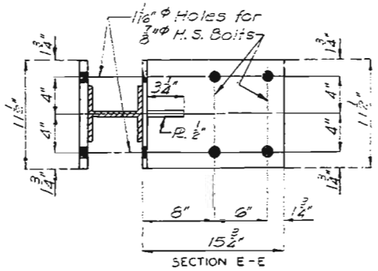


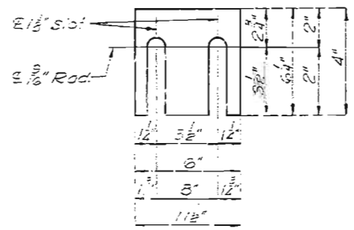




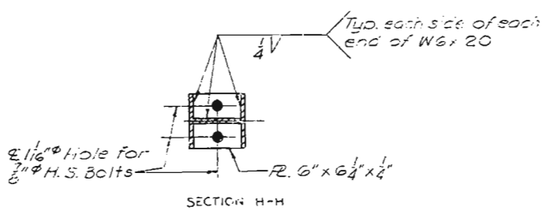
SECTION A-A
(From sheet No. 1)

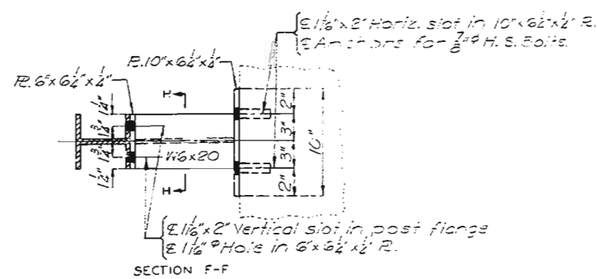
Note: Concrete anchors shall be the cone expansion type for hot-dip galvanized bolts. Concrete anchors shall have a certified concrete pull-out strength (Ultimate load) of at least 15,500 pounds in 3000 psi concrete.





Note: Shim plates 11" x 6 1/2" x 1/16" may be used between post WG x 20 and 6" x 6 1/2" x 1/2" plate and shim plates 11 1/2" x 4" x 1/16" may be used between post WG x 20 and 19 3/4" x 4" x 3/8" plate as required for horizontal alignment.





DETAILED MAR. 1979
CHECKED APR 1979

Note: This drawing is not to scale. Follow dimensions.

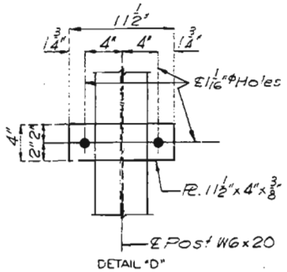
CAPE GIRARDEAU **COUNTY**

H-431R

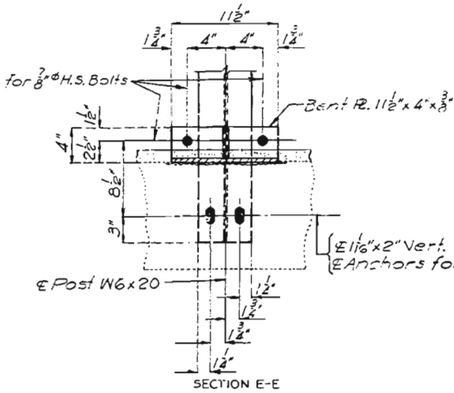
MISSOURI STATE HIGHWAY DEPARTMENT

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

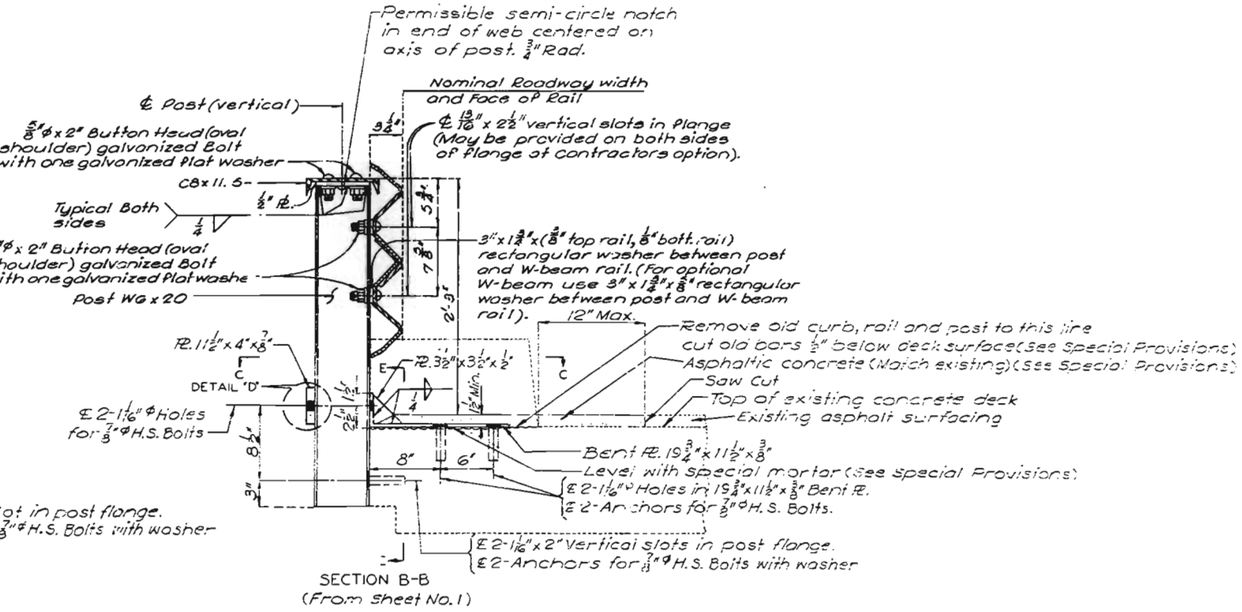
506



DETAIL "D"

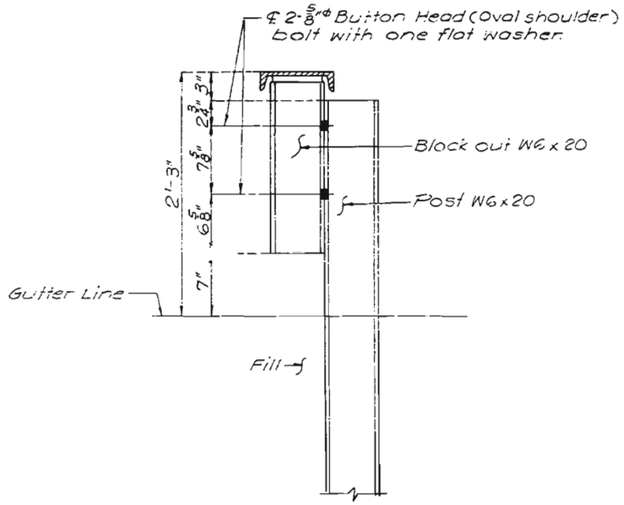


SECTION E-E

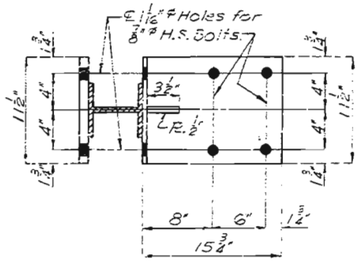


SECTION B-B
(From Sheet No. 1)

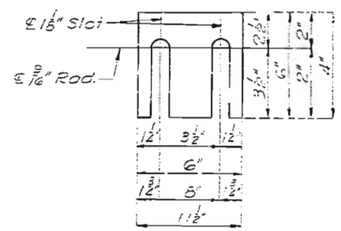
Note: Concrete anchors shall be the cone expansion type for hot-dip galvanized bolts. Concrete anchors shall have a certified concrete pull-out strength (ultimate load) of at least 15,500 pounds in 3,000 psi concrete.



DETAIL OF POST "M"
(From Sheet No. 1)



SECTION C-C



DETAIL OF SHIM PLATES

Note: Shim plates 6"x6"x 1/16" may be used between post W6x20 and old concrete and shim plates 1 15/16"x4"x⅛" may be used between post W6x20 and 19¾"x11½"x⅜" bent plate as required for horizontal alignment.

DETAILED MAR 1979
CHECKED APR. 1979

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3 of 3.

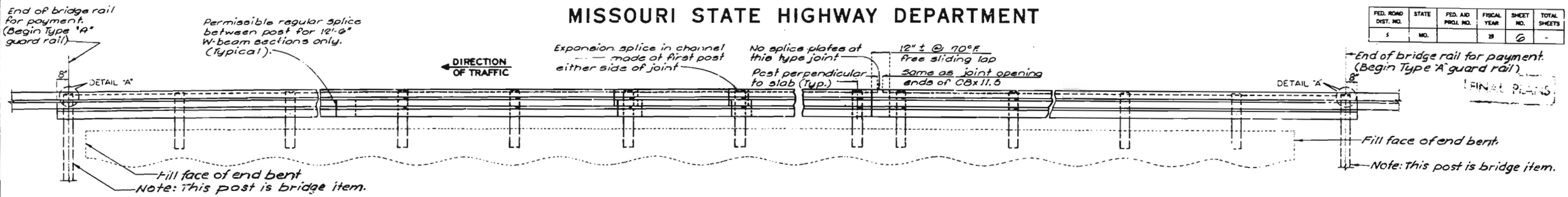
CAPE GIRARDEAU COUNTY

H-431R

MISSOURI STATE HIGHWAY DEPARTMENT

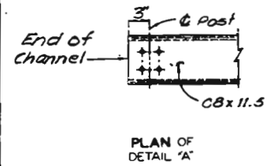
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	6	-

FINAL PLANS



PART SECTION SHOWING RAIL

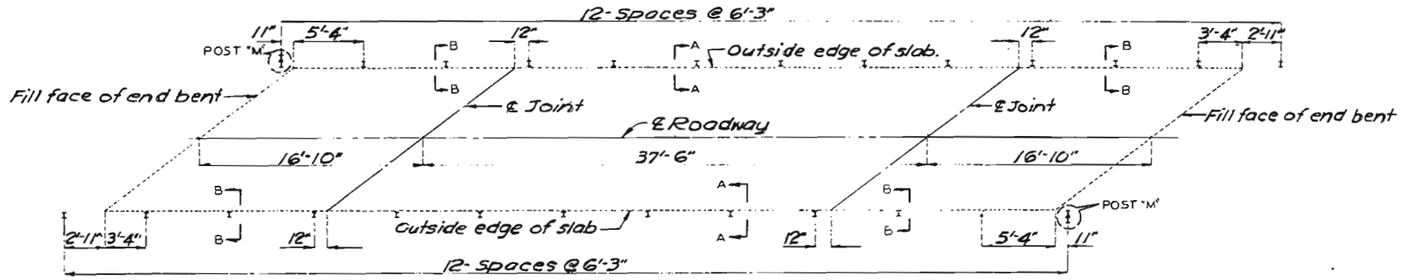
NOTE: EXPANSION SPLICE IN W-BEAM *WERE* MADE AT EITHER THE FIRST OR SECOND POST EITHER SIDE OF JOINT. WHEN SPLICE *WAS* MADE AT SECOND POST, AN EXPANSION SLOT *WAS* PROVIDED IN W-BEAM FOR CONNECTION TO FIRST POST TO ALLOW FOR MOVEMENT. (TYPICAL UPPER AND LOWER W-BEAM SHOWN; HOWEVER UPPER AND LOWER W-BEAM *WERE* NOT SPLICED AT THE SAME LOCATION).



PLAN OF DETAIL "A"

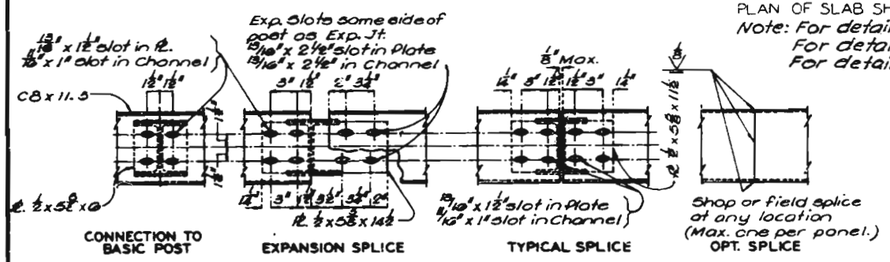
AT EXPANSION JOINTS

NOTE: IN ADDITION TO EXPANSION PROVISIONS AT THESE EXPANSION JOINTS, EXPANSION SPLICES IN CHANNEL MEMBER ONLY *WERE* PROVIDED AT OTHER LOCATIONS SO THAT THE MAXIMUM LENGTH OF CHANNEL WITHOUT EXPANSION PROVISIONS *DID* NOT EXCEED 200 FT.



PLAN OF SLAB SHOWING RAIL POST SPACING

Note: For details of section A-A see sheet No. 2
For details of section B-B see sheet No. 3
For details of Post "M" see sheet No. 3

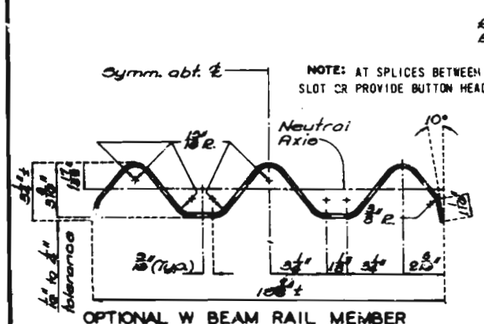


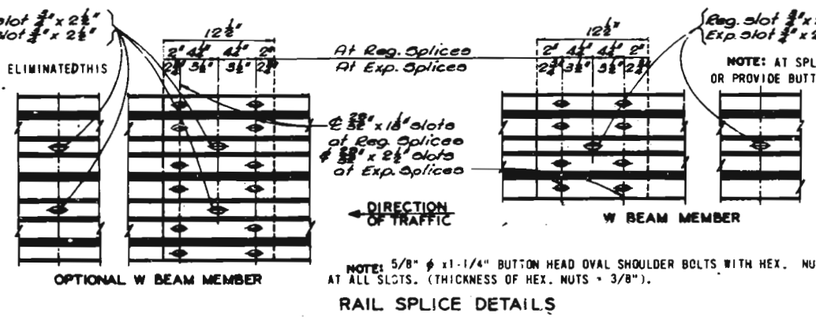
CHANNEL MEMBER DETAILS

NOTE: SHIM PLATES 6"x6"x1/16" *WERE* USED BETWEEN TOP OF POST AND CHANNEL MEMBER AS REQUIRED FOR VERTICAL ALIGNMENT.

FINAL QUANTITIES

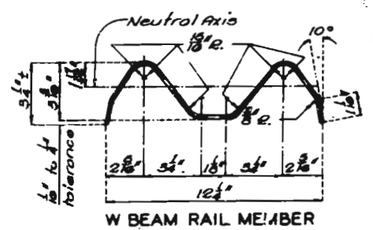
ITEM		TOTAL
Bridge Guard Rail (W Beam)	Lin. Ft.	150
Special Work	Lump Sum	1
Force Account		177.65





NOTE: 5/8" ϕ x1-1/4" BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX. NUTS AT ALL SLOTS. (THICKNESS OF HEX. NUTS = 3/8").

RAIL SPLICE DETAILS



NOTE: SPECIAL DRILLING OF W-BEAM *NOT* REQUIRED AT SPLICES. (ALL DRILLING DETAILS SHOWN ON SHOP DRAWINGS).

GENERAL NOTES:

DESIGN AASHTO 1973 SPECIFICATIONS.

PANEL LENGTHS OF CHANNEL MEMBERS *WERE* ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF SIX (EXCEPT AT END BENTS).

ALL BOLTS, NUTS, WASHERS, PLATES AND ELASTOMERIC MATERIALS *WERE* CONSIDERED AS PARTS OF THE RAIL FOR PAYMENT.

ALL STEEL CONNECTING BOLTS AND FASTENERS FOR RAILING AND ALL ANCHOR BOLTS, NUTS, WASHERS AND PLATES *WERE* GALVANIZED AFTER FABRICATION. FOR PROTECTIVE COATING AND MATERIAL REQUIREMENT OF STEEL RAILING SEE SECTION 1040 OF THE STANDARD SPECIFICATIONS.

RAIL POSTS *WERE* SET PERPENDICULAR TO ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

AT EXPANSION SLOTS IN W-BEAM RAILS AND CHANNELS, TIGHTEN BOLTS, BACK OFF ONE-HALF TURN AND BURR THREADS.

MINIMUM LENGTH OF W-BEAM SECTIONS *ARE* EQUAL TO ONE POST SPACE.

W-BEAM GUARD RAIL *ARE* MADE OF STEEL AND *ARE* 12 GAGE, AND *WERE* ERECTED IN ACCORDANCE WITH STANDARD PLAN 606.00.

POST SHIMS, PLATES, CHANNELS AND CHANNEL SPLICE PLATES *WERE* FABRICATED FROM A-36 STEEL.

WASHERS *WERE* USED AT ALL POST BOLTS (BETWEEN BOLT HEAD AND BEAM). THEY *WERE* RECTANGULAR IN SHAPE (3" X 1-3/4" X 3/16" MIN.) AND FLAT, OR WHEN NECESSARY OF SUCH DESIGN TO FIT THE CONTOUR OF THE BEAM. WASHER HAVE 11/16" X 1" HOLE.

FABRICATION OF STRUCTURAL STEEL *WERE* IN ACCORDANCE WITH SECTION 712 OF THE STANDARD SPECIFICATIONS.

LIGHT DOTTED LINES INDICATE OLD WORK. HEAVY LINES INDICATE NEW WORK.

HIGH STRENGTH BOLTS IN CONCRETE ANCHORS *ARE* SNUG TIGHT.

HIGH STRENGTH BOLTS *ARE* A-325.

CONTRACTOR *VARIFIED* ALL DIMENSIONS IN FIELD BEFORE ORDERING MATERIALS.

B.M.

REPLACING BRIDGE HANDRAIL
BRIDGE OVER DITCH NO. 25
STATE ROAD FROM DELTA TO ADVANCE
ABOUT .75 MILE FROM GREEN COX
PROJECT NO. HES-25-2(9) **STA.** 1322+22
JOB NO. 0-X025-342 **RTE** 25
CAPE GIRARDEAU **COUNTY**
DATE

STD. 606.00
STD. 617.00
H-431 R

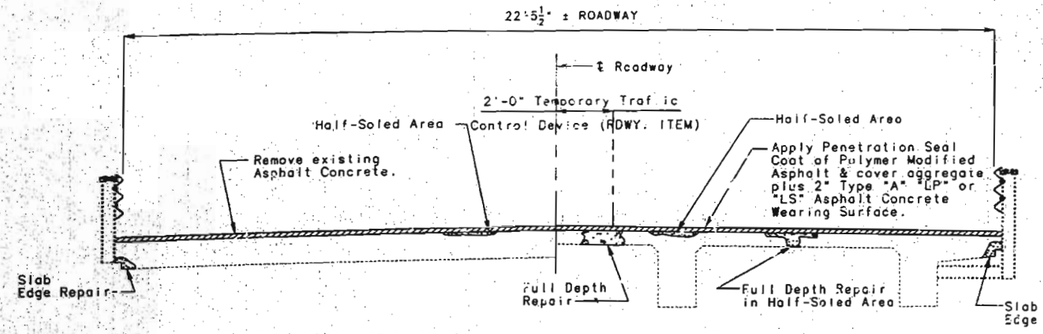
DESIGNED MAR 1979
DETAILED MAR 1979
CHECKED APR 1979

Note: This drawing is not to scale. Follow dimensions.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STATE	FED. NO.
MO.	STP-5[ ]-(5-2)[ ]
SEC./SUR.	28M TWP. 32 RGE. 11

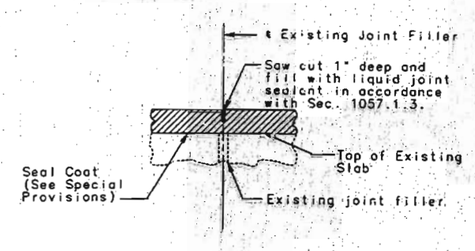
JOB NO. J0P0739



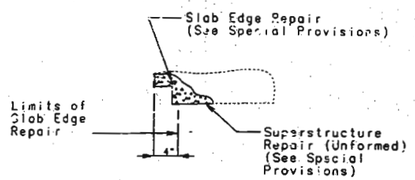
HALF SECTION SPANS (1-2) (3-4)

HALF SECTION SPANS (2-3)

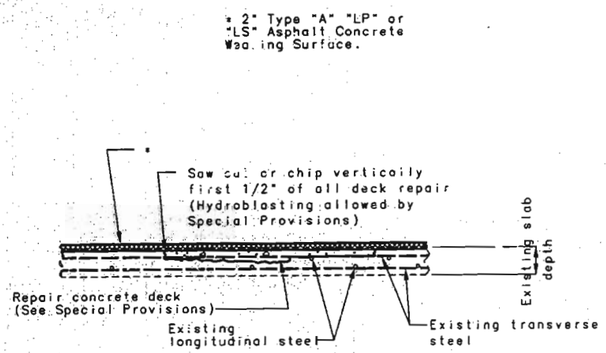
SECTION THRU SLAB



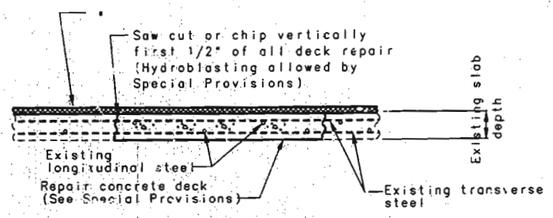
SECTION THRU JOINT



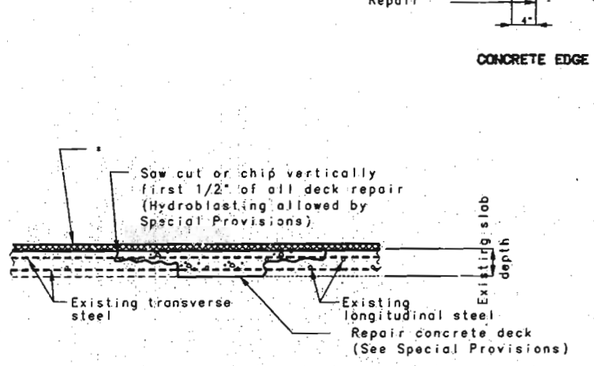
CONCRETE EDGE REPAIR



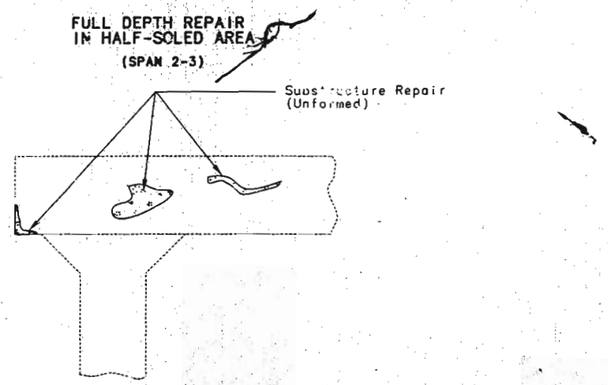
HALF-SOLED AREA
(ALL SPANS)



FULL DEPTH REPAIR
(SPAN 2-3)



FULL DEPTH REPAIR
IN HALF-SOLED AREA
(SPAN 2-3)



PART ELEVATION OF INT. BENT
SHOWING SUBSTRUCTURE REPAIR

GENERAL NOTES:

OLD WORK:

Outline of old work is indicated by light dashed lines. Heavy lines indicate new work.

MAINTAIN TRAFFIC:

Maintain one lane of traffic on structure during construction. (See Roadway Plans)

ROADWAY SURFACING:

Roadway surfacing adjacent to bridge ends to match bridge overlay (Roadway Item)

MAINTAIN GRADE:

In order to maintain grade and a minimum thickness of overlay as shown on plans it may be necessary to use additional quantities of overlay at various locations throughout the structure. No payment will be allowed for additional labor, materials or equipment for variations in thickness of overlay.

FINAL **QUANTITIES**

ITEM		TOTAL
ASPHALT REMOVAL (BRIDGES)	SQ. FT.	1637
ALTERNATE ASPHALTIC CONC. WEARING SURFACE (BRIDGE)	SQ. FT.	182
POLYMER MODIFIED ASPHALT (SEAL COAT)	GALLON	70
COVER AGGREGATE	TON	1
SUBSTRUCTURE REPAIR (UNFORMED)	SQ. FT.	25
SLAB EDGE REPAIR (BRIDGES)	LIN. FT.	80
REPAIRING CONCRETE DECK (HALF-SOLING)	SQ. FT.	0
FULL DEPTH REPAIR	SQ. FT.	6
SUPERSTRUCTURE REPAIR (UNFORMED)	SQ. FT.	10

Note: Polymer Modified Asphalt shall be applied at a rate of 0.35 gal. per sq. yd. (See Special Provisions)

Cover Aggregate shall be applied at a rate of 0.0125 tons per sq. yd. (See Special Provisions)

FINAL **QUANTITIES FOR ALTERNATE ASPHALTIC CONCRETE WEARING SURFACE**

TYPE OF WEARING SURFACE	ASPHALTIC CEMENT (TONS)	MINERAL AGGREGATE (TONS)	MIX USED (✓)
Limestone Porphyry (LP) Asphaltic Concrete Mix	1.0	19	✓
Limestone Steel Slag (LS) Asphaltic Concrete Mix	1.1	21	
Type A Asphaltic Concrete Mix	1.0	19	

MHTD construction personnel shall complete column labeled "Mix Used" (✓)

Type AC-20 asphalt cement is required in the asphaltic concrete mixes for bridge deck overlays when the adjacent roadways are not to be overlaid.

BRIDGE OVER DITCH NO. 25

STATE ROAD FROM DELTA TO ADVANCE
ABOUT 1.1 MILE S. W. OF GREER COX
PROJECT NO. STA. 1322+22 (MATCH EXIST.)
JOB NO. J0P0739 RTE. 25
CAPE GIRARDEAU COUNTY
DATE 1/22/96

DETAILED NOV. 1994
CHECKED NOV. 1994

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

SHEET NO. 1 OF 1

Missouri Department of Transportation
State Bridge Inspection Report

November 21, 2024
12:30:53PM

COUNTY: CAPE GIRARDEAU **DISTRICT: SE** **CLASS: STATBR** **FED-ID: 5203** **BRIDGE: H0431**

GENERAL STRUCTURE INFORMATION

ROUTE: MO25S	**# SPANS:** 3	**PLACE CODE:** 78280 WELCH	
FEATURE: DRAIN DTCH NO 25	**LANES ON:** 2	**LENGTH:** 71 FT 0 IN	
STATUS: A-OPEN	**LANES UNDER:** 0	**MAXIMUM SPAN:** 36 FT 3 IN	
LOG MILE: 23.819	**COMPASS DIRECTION:** NORTH to SOUTH	**APPROACH ROADWAY:** 20 FT 0 IN	
DETOUR: 22.00 MILES	**DIRECTION OF TRAFFIC:** 2-WAY TRAF	**CURB TO CURB:** 22 FT 6 IN	
NHS: NO	**FUNCTIONAL CLASS:** RL-MINOR ARTERIAL	**OUT TO OUT:** 23 FT 0 IN	
BUILT: 1926	**NBI OWNER:** MODOT	**AADT:** 4191	
REHAB:	**NBI MAINTAINED:** MODOT	**AADT YEAR:** 2023	
LOCATION: S 32 T 29 R 11 E	**MAINTENANCE DISTRICT:** SE	**AADT TRUCK:** 7.0%	
LATITUDE: 37 7 55.44 (DMS)	**MAINTENANCE COUNTY:** CAPE GIRARDEAU	**FUTURE AADT:** 6915	
LONGITUDE: 89 51 17.95 (DMS)	**SUB AREA:** 7H01	**FUTURE AADT YEAR:** 2043	

BRIDGE INSPECTION INFORMATION

DATE: 11/09/2023 **RESPONSIBILITY:** DISTRICT
FREQUENCY: 24 **CALCULATED INTERVAL**:** 24
TEAM LEADER: ZACHARY LEE **ELEMENT:** NO
INSPECTOR 2: **INSPECTOR 4:**
INSPECTOR 3:

** When calculated interval exceeds the frequency, a justification comment per BIRM is required.

GENERAL INSPECTION COMMENTS

FRACTURE CRITICAL INSPECTION INFORMATION

DATE: **RESPONSIBILITY:** **CATEGORY:**
FREQUENCY: **CALCULATED INTERVAL**:** **NBI:**
TEAM LEADER: **INSPECTOR 3:** **METHOD:**
INSPECTOR 2: **INSPECTOR 4:**

** When calculated interval exceeds the frequency, a justification comment per BIRM is required.

FRACTURE CRITICAL INSPECTION COMMENTS

INDEPTH INSPECTION INFORMATION

DATE: **RESPONSIBILITY:** **CATEGORY:**
FREQUENCY: **CALCULATED INTERVAL**:** **NBI:**
TEAM LEADER: **INSPECTOR 3:** **METHOD:**
INSPECTOR 2: **INSPECTOR 4:**

** When calculated interval exceeds the frequency, a justification comment per BIRM is required.

INDEPTH INSPECTION COMMENTS

SPECIAL INSPECTION INFORMATION

DATE: 08/06/2024 **RESPONSIBILITY:** DISTRICT **CATEGORY:** CHANNEL CROSS SEC
FREQUENCY: 120 **CALCULATED INTERVAL**:** 123 **NBI:** NO
TEAM LEADER: JERROD JERNIGAN **INSPECTOR 3:** **METHOD:** WT TAPE
INSPECTOR 2: **INSPECTOR 4:**

** When calculated interval exceeds the frequency, a justification comment per BIRM is required.

SPECIAL INSPECTION COMMENTS

UNDERWATER INSPECTION INFORMATION

DATE: 11/09/2023 **RESPONSIBILITY:** DISTRICT **CATEGORY:** DRY
FREQUENCY: 60 **CALCULATED INTERVAL**:** 24 **NBI:** NO
TEAM LEADER: ZACHARY LEE **INSPECTOR 3:** **METHOD:** VISUAL
INSPECTOR 2: **INSPECTOR 4:**

** When calculated interval exceeds the frequency, a justification comment per BIRM is required.

UNDERWATER INSPECTION COMMENTS

OTHER SPECIAL INSPECTIONS

DATE	FREQUENCY	CATEGORY	NBI	CALCULATED INTERVAL	RESPONSIBILITY	METHOD
05/15/2017	999	DAMAGE POST INCIDENT	NO		DISTRICT	

OTHER UNDERWATER INSPECTIONS

DATE	FREQUENCY	CATEGORY	NBI	CALCULATED INTERVAL	RESPONSIBILITY	METHOD

COUNTY: CAPE GIRARDEAU **DISTRICT: SE** **CLASS: STATBR** **FED-ID: 5203** **BRIDGE: H0431**

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:** **PROBLEM DIRECTION:**
COMMENTS:

GENERAL COMMENTS/MAJOR RATED ITEMS

GENERAL COMMENTS: (BOWDEJ1, 09/10/2008)--(17') CONC SOLID SLAB - (36') SMP DECK GDR - (17') CONC SOLID SLAB SPANS

[ITEM 58] DECK: 4-POOR CONDITION
RATING : 11/15/2019
COMMENTS: (ROBINC3, 11/15/2019)--SEVERE DAMAGE OF CONCRETE
(ROBINC3, 11/15/2019)--SEVERE EDGE DETER

[ITEM 59] SUPER: 4-POOR CONDITION
RATING : 11/15/2019
COMMENTS: (BLALOR1, 11/19/2013)--SEC LOS REBAR NO EFFECT STRUCTURAL CAPACITY
(ROBINC3, 11/15/2019)--DECK CONTROLS

[ITEM 60] SUB: 5-FAIR CONDITION
RATING : 11/14/2023
COMMENTS: (BLALOR1, 11/19/2013)--SPALLS
(CHAPMM1, 11/14/2023)--MODERATE EDGE DETERIORATION

[ITEM 61] BANK/CHANNEL: 6-WIDESPREAD MINOR DAMAGE
RATING : 11/14/2023
COMMENTS: (CHAPMM1, 11/14/2023)--CHANNEL MEANDERING & DEEPENING

[ITEM 113] SCOUR: 8-STABLE FOR CALCULATED
RATING : 05/18/2001
EVALUATION TYPE :
COMMENTS:

[ITEM 71] WATERWAY ADEQUACY: DECK ABOVE FLOOD ELEV
RATING : 05/18/2001
COMMENTS:

[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD
RATING : 05/18/2001
COMMENTS:

RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS

[ITEM 36A] BRIDGE RAILING RATING: *MEETS CURRENT STANDARDS-1* ***RATING :*** *01/10/2006* ***COMMENTS:***

MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS
GALVANIZED STEEL	THRIE BEAM	BOTH	

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	COMMENT
OTHER	RANDOM		NOT APPLICABLE	(SHUNAT1, 04/04/2018)--MINOR COLLISION DAMAGE NE SIDE OF BRIDGE

[ITEM 36B] TRANSITION RAILING RATING: *MEETS CURRENT STANDARDS-1* ***RATING :*** *05/18/2001* ***COMMENTS:***

MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS
GALVANIZED STEEL	THRIE BEAM TO W-BEAM	ALL	

[ITEM 36C] APPROACH RAILING RATING: *MEETS CURRENT STANDARDS-1* ***RATING :*** *05/18/2001* ***COMMENTS:***

MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS
GALVANIZED STEEL	W-BEAM	ALL	

[ITEM 36D] RAIL END TREATMENT RATING: *MEETS CURRENT STANDARDS-1* ***RATING :*** *05/18/2001* ***COMMENTS:***

MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS
GALVANIZED STEEL	BREKAWAY SYSTEM	ALL	

APPROACH PAVEMENT: *Overall condition assigned for each approach pavemenet component is shown below.

MATERIAL	CONSTRUCTION	DIRECTION	CONDITION*	COMMENTS
ASPHALT	BITUMINOUS MAT	BOTH	GOOD	

DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS

DECK PROTECTIVE COMPONENTS:

SERIES TYPE-#	COMPONENT	MATERIAL	CONSTRUCTION	THICKNESS	YEAR APPLIED	MANUFACTURE	OVERALL CONDITION
APPROACH SERIES-1	*WEARING SURFACE*	*ASPHALT*	*BITUMINOUS MAT*	*1.5 IN*	*2011*		*GOOD*
COMMENT:							
	DECK PROTECTION	*NOTAPPLICABLE*	*NONE*				
COMMENT:							
	MEMBRANE	*LIQUID SEALANT*	*BUILT-UP*				
COMMENT:							
	SECONDARY DECK PROTECTION	*LIQUID SEALANT*	*INTERNALLY SEALED*		*2011*	*PAVON INDECK*	
COMMENT:							
MAIN SERIES-2	*WEARING SURFACE*	*ASPHALT*	*BITUMINOUS MAT*	*1.5 IN*	*2011*		*GOOD*
COMMENT:							
	DECK PROTECTION	*NOTAPPLICABLE*	*NONE*				
COMMENT:							
	MEMBRANE	*LIQUID SEALANT*	*BUILT-UP*				
COMMENT:							
	SECONDARY DECK PROTECTION	*LIQUID SEALANT*	*INTERNALLY SEALED*		*2011*	*PAVON INDECK*	
COMMENT:							
APPROACH SERIES-3	*WEARING SURFACE*	*ASPHALT*	*BITUMINOUS MAT*	*1.5 IN*	*2011*		*GOOD*
COMMENT:							
	DECK PROTECTION	*LIQUID SEALANT*	*INTERNALLY SEALED*		*2011*	*PAVON INDECK*	
COMMENT:							

DRAINAGE COMPONENTS:

COMPONENT	MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS
DRAINAGE	*REINFORCED CONCRETE*	*CURB OUTLET*		

COUNTY: CAPE GIRARDEAU **DISTRICT: SE** **CLASS: STATBR** **FED-ID: 5203** **BRIDGE: H0431**

EXPANSION DEVICE COMPONENTS:

SUB UNIT-#	SUB LABEL	COMPONENT	MATERIAL	CONSTRUCTION	GAP	YEAR APPLIED	MANUFACTURE	OVERALL CONDITION
ABUTMENT-1		CLOSED EXPANSION JOINT	FELT	FILLED JOINT				
COMMENT:								
ABUTMENT-4		CLOSED EXPANSION JOINT	FELT	FILLED JOINT				
COMMENT:								

BANK/SLOPE PROTECTION COMPONENTS:

COMPONENT	MATERIAL	CONSTRUCTION	DIRECTION	COMMENTS

DECK COMPONENTS

SPAN TYPE-#	COMPONENT	MATERIAL	CONSTRUCTION	COMMENTS
APPROACH SPANS-1	DECK	REINFORCED CONCRETE	CAST-IN-PLACE	

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
DETERIORATION	EDGE		SEVERE		
EFFLORESCENCE	THROUGHOUT		MEDIUM		
LEACHING	THROUGHOUT		MODERATE		
LONGITUDINAL CRACKS	THROUGHOUT		MINOR		(SHUNAT1, 04/04/2018)--W/ EFF & RUST STAINS
REBAR EXPOSED	EDGE		MINOR		
TRANSVERSE CRACKS	THROUGHOUT		MINOR		

SPAN TYPE-#	COMPONENT	MATERIAL	CONSTRUCTION
MAIN SPANS-2	DECK	REINFORCED CONCRETE	CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
DELAMINATION	THROUGHOUT		MINOR		
DETERIORATION	EDGE		SEVERE		
DIAGONAL CRACKS	THROUGHOUT		MINOR		
EFFLORESCENCE	THROUGHOUT		MEDIUM		
LONGITUDINAL CRACKS	THROUGHOUT		MINOR		
TRANSVERSE CRACKS	THROUGHOUT		MINOR		

SPAN TYPE-#	COMPONENT	MATERIAL	CONSTRUCTION
APPROACH SPANS-3	DECK	REINFORCED CONCRETE	CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
COLLISION DAMAGE	RANDOM		SEVERE		(ROBINC3, 12/12/2019)--NW CONER @ GUARDRAIL CONNECTION
DETERIORATION	EDGE		SEVERE		
EFFLORESCENCE	THROUGHOUT		MEDIUM		
LEACHING	THROUGHOUT		MINOR		
LONGITUDINAL CRACKS	THROUGHOUT		MODERATE		
TRANSVERSE CRACKS	THROUGHOUT		MINOR		

SUPERSTRUCTURE COMPONENTS

SERIES TYPE-#	SPAN TYPE	MATERIAL	CONSTRUCTION	LABEL	COMMENTS
APPROACH SERIES-1	SIMPLE SPAN	REINFORCED CONCRETE	SOLID SLAB		

SPAN	COMPOSITE INDICATOR	LENGTH	WEATHERING STEEL	COMMENTS
APPROACH SPANS-1	NON-COMPOSITE	17 FT 6 IN	NO	

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

MAIN SERIES-2 *SIMPLE SPAN* *REINFORCED CONCRETE* *DECK GIR*

SPAN	COMPOSITE INDICATOR	LENGTH	WEATHERING STEEL	COMMENTS
MAIN SPANS-2	NON-COMPOSITE	36 FT 3 IN	NO	

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
DELAMINATION	THROUGHOUT		MINOR		
OTHER	DIAPHRAGMS		NOT APPLICABLE		(ROBINC3, 12/12/2019)--MINOR H CRACK
REBAR EXPOSED	EXTERIOR GIRDERS		MODERATE		
SECTION LOSS	THROUGHOUT		INITIAL		(BLALOR1, 11/27/2013)--W/ REBAR
SPALLS	EXTERIOR GIRDERS		MODERATE		
TRANSVERSE CRACKS	DIAPHRAGMS		MINOR		

APPROACH SERIES-3 *SIMPLE SPAN* *REINFORCED CONCRETE* *SOLID SLAB*

SPAN	COMPOSITE INDICATOR	LENGTH	WEATHERING STEEL	COMMENTS
APPROACH SPANS-3	NON-COMPOSITE	17 FT 6 IN	NO	

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

SUBSTRUCTURE COMPONENTS

SUBSTRUCTURE	SKEW	LENGTH	MATERIAL	CONSTRUCTION	LABEL	COMMENTS
ABUTMENT-1	*LA-53 DEGREES*	*37 FT 2 IN*	*REINFORCED CONCRETE*	*OPEN CONCRETE*		

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

ASSOCIATED COMPONENT	MATERIAL	CONSTRUCTION
BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
DELAMINATION	RANDOM		MINOR		
HORIZONTAL CRACKS	RANDOM		MINOR		
MAP CRACKS	RANDOM		FEW		

COLUMN — REINFORCED CONCRETE — CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

STRAIGHT WINGS — REINFORCED CONCRETE — CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
MAP CRACKS	THROUGHOUT		MINOR		(CHAPMM1, 11/14/2023)--W/EFFLO

FOOTING — REINFORCED CONCRETE — TIMBER PILE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

EXPANSION BEARING — TARPAPER — SLIDING LAYERS

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

BENT-2 *LA-53 DEGREES* *36 FT 1 IN* *REINFORCED CONCRETE* *MULTIPLE COLUMN*

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT

ASSOCIATED COMPONENT	MATERIAL	CONSTRUCTION
BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
DELAMINATION	RANDOM		MEDIUM		
DETERIORATION	ENDS		MODERATE		
HORIZONTAL CRACKS	THROUGHOUT		MEDIUM		
MAP CRACKS	ENDS		FEW		(ROBINC3, 11/24/2015)--W/ EFFLO
REBAR EXPOSED	RANDOM		MANY		(ROBINC3, 12/12/2019)--INITIAL SECTION LOSS
SPALLS	RANDOM		MODERATE		
VERTICAL CRACKS	THROUGHOUT		MINOR		(SHUNAT1, 04/04/2018)--W/ EFF & RUST STAINS

COLUMN — REINFORCED CONCRETE — CAST-IN-PLACE

CONDITION	LOCATION 1	LOCATION 2	SEVERITY	MEASUREMENT	COMMENT
SCALING	THROUGHOUT		HEAVY		

FOOTING	REINFORCED CONCRETE	TIMBER PILE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
FIXED BEARING	STEEL	FLAT PLATE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
SECTION LOSS	THROUGHOUT		MODERATE		
EXPANSION BEARING	TARPAPER	SLIDING LAYERS			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***

BENT-3 LA-53 DEGREES 36 FT 1 IN REINFORCED CONCRETE MULTIPLE COLUMN

CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
ASSOCIATED COMPONENT	***MATERIAL***	***CONSTRUCTION***			
BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
DELAMINATION	THROUGHOUT		MINOR		
EFFLORESCENCE	THROUGHOUT		MINOR		
HORIZONTAL CRACKS	THROUGHOUT		MINOR		
MAP CRACKS	RANDOM		RANDOM		
REBAR EXPOSED	RANDOM		FEW		(ROBINC3, 12/12/2019)--W/INITIAL SECTION LOSS
SPALLS	RANDOM		MINOR		
VERTICAL CRACKS	THROUGHOUT		MINOR		
COLUMN	REINFORCED CONCRETE	CAST-IN-PLACE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
SCALING	THROUGHOUT		MODERATE		
FOOTING	REINFORCED CONCRETE	TIMBER PILE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
FIXED BEARING	STEEL	FLAT PLATE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
SECTION LOSS	AT BEARING		MODERATE		
EXPANSION BEARING	TARPAPER	SLIDING LAYERS			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***

ABUTMENT-4 LA-53 DEGREES 37 FT 2 IN REINFORCED CONCRETE OPEN CONCRETE

CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
ASSOCIATED COMPONENT	***MATERIAL***	***CONSTRUCTION***			
BEAM CAP	REINFORCED CONCRETE	CAST-IN-PLACE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
DELAMINATION	THROUGHOUT		MINOR		
HORIZONTAL CRACKS	THROUGHOUT		FEW		
SPALLS	RANDOM		MINOR		(ROBINC3, 12/12/2019)--W/ EXPOSED REBAR & INITIAL SECTION LOSS
VERTICAL CRACKS	THROUGHOUT		MINOR		
COLUMN	REINFORCED CONCRETE	CAST-IN-PLACE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
MAP CRACKS	THROUGHOUT		MINOR		
STRAIGHT WINGS	REINFORCED CONCRETE	CAST-IN-PLACE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
FOOTING	REINFORCED CONCRETE	TIMBER PILE			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***
EXPANSION BEARING	TARPAPER	SLIDING LAYERS			
CONDITION	***LOCATION 1***	***LOCATION 2***	***SEVERITY***	***MEASUREMENT***	***COMMENT***

*****OVER/UNDER ROUTES CLEARANCE INFORMATION*****

CLEARANCES OVER DECK

**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.

VERTICAL CLEARANCE TYPE**	VALUE	DIRECTION	DATE	COMMENT

CLEARANCES UNDER BRIDGE

**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.

RECORD #	ROUTE	# LANES	DIRECTION OF TRAFFIC	RIGHT LATERAL CLEARANCE	LEFT LATERAL CLEARANCE	UR-ID

VERTICAL CLEARANCE TYPE**	VALUE	DIRECTION	DATE	COMMENT

STRUCTURE PAINT INFORMATION

CONDITION: **RUST AMOUNT :** **STEEL TONS :** 0

ORIGINAL PAINT		CONTRACT REPAINT		DEPARTMENT REPAINT	
PAINT TYPE :		PAINT TYPE :		PAINT TYPE :	MANUFACTURE :
NAME :		NAME :		NAME :	SURFACE PREP :
PAINT COLOR :		PAINT COLOR :		PAINT COLOR :	
PAINT YEAR :		PAINT YEAR :		PAINT YEAR :	
MILS :		MILS :		MILS :	

REQUESTED WORK ITEMS

GENERAL WORK COMMENTS:

RESPONSIBILITY	LOCATION	ITEM	CATEGORY	PRIORITY	DATE	WORK ITEM COMMENT
REGIONAL	SEE COMMENT	MISCELLANEOUS	DECK	2	11/13/2019	(ROBINC3, 12/12/2019)--REPAIR DECK @ GUARDRAIL CONNECTION SPAN 3 NW SECTION

UTILITY ATTACHMENTS

UTILITY	OWNER	METHOD	MEASUREMENT TYPE	VALUE	NUMBER	UTILITY ATTACHMENT COMMENT

PROGRAM NOTES INFORMATION

Missouri Department of Transportation
State Bridge Inspection Report

COUNTY: CAPE GIRARDEAU **DISTRICT: SE** **CLASS: STATBR** **FED-ID: 5203** **BRIDGE: H0431**

YEAR	PROJECT #	MONTH LET	YEAR LET	ITEMS	COMMENT
2026	9P3772	0	2026	REPLACE BRIDGE	

COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS

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.

Rated Item	Rating	Rating Date
[Item 67] Structure Evaluation Rating:	4-MEETS MINIMUM TOLERABLE	11/15/2019
[Item 68] Deck Geometry Rating:	2-BASICALLY INTOLRBLE REQ	5/18/2001
[Item 69] Underclearance:	N-NOT APPLICABLE	5/18/2001
Sufficiency Rating:	25.9%	11/15/2019
Deficiency:	STRUCTURAL	11/15/2019
Funding Eligibility:	FULL	----
Estimated New Structure Length:	112 FT.	----
Estimated Structure Cost:	$627,102	----
Estimated Total Project Cost:	$940,653	----
Year of Cost Estimate:	2024	----

NOTE: The above structure length and cost estimates are computer generated using algorithims in the TMS system. These algorthims 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.

ADVANCED SIGN INFORMATION

SIGN #	SIGN TYPE	PROBLEM	PROBLEM DIRECTION
1			

OUTFALL INSPECTION INFORMATION

 # OUTFALLS: 4 **INSPECTOR:** ZACHARY LEE

STATUS: PASS **DATE:** 11/09/2023

NOTES:

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

November 21, 2024
12:34:16pm

COUNTY : CAPE GIRARDEAU **BRIDGE :** H0431 2 **REVIEW STATUS :** APPROVED **NBI STATUS :** T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT **RUN DATE :** 8/23/2024 **SUBMITTAL YEAR :** 2024

GENERAL STRUCTURE INFORMATION

1	State	MISSOURI
2	District	SE
3	County	CAPE GIRARDEAU
8	Federal ID No.	5203
27	Year Built	1926
106	Year Reconstructed	0
42A	Type of Service On	HIGHWAY
21	Structure Maintenance	STATE HIGHWAY AGENCY
22	Structure Owner	STATE HIGHWAY AGENCY
33	Br. Median Code	NO MEDIAN
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP
101	Parallel Struc Desg	NONE EXISTS
103	Temporary Structure	NOT TEMPORARY
112	NBIS Bridge Length	YES

ROUTE DESIGNATION INFORMATION

5A	Record Type	ROUTE CARRIED 'ON' STRUCT
5B	Route Signing Prefix	MO
5C	Designated Level of Service	MAINLINE
5D	Route Number	00025
5E	Directional Suffix	NOT APPLICABLE
7	Facility Carried	MO 25 S
12	Base Hwy. Network	YES
13A	LRS Inventory Route No.	0000001012
13B	Subroute No.	00
20	Toll Status	ON FREE ROAD
26	Functional Classification	06-RURAL MINOR ARTERIAL
28A	Lanes on Structure	02
100	STRAHNET Designation	RTE NOT A DEFENSE HWY
104	National Highway System	NOT ON NHS
105	Federal Lands Highway	NOT APPLICABLE
110	Designated Nat. Network	YES

STRUCTURE LOCATION INFORMATION

4	Place	WELCH
	Code	78280
9	Location	S 32 T 29 N R 11 E
11	Milepoint	23.96 miles
16	Latitude	37 D 7 M 55 S
17	Longitude	89 D 51 M 18 S

STRUCTURE TRAFFIC INFORMATION

29	AADT	4191
30	AADT Year	2023
102	Direction of Traffic	2-WAY TRAFFIC
109	AADT Truck Percent	7%
114	Future AADT	6915
115	Future AADT Year	2043

UNDERRECORD INFORMATION

6	Features Intersected	DRAIN DTCH NO 25
42B	Type of Service Under	WATERWAY
28B	Lanes Under Structure	00
54A	Vert. Clearance Ref.	N/A
54B	Vert. Clearance	0 Ft. 0 In.
55A	Rt. Lat Clear Ref.	N/A
55B	Rt. Lat Clearance	0 Ft. 0 In.
56	Left Lat Clearance	0 Ft. 0 In.
38	Navigation Control	PERMIT NOT REQ
39	Nav Vertical Clear	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.
111	Nav. Pier Protection	
116	Nav. Cl. Vert. Clear	

STRUCTURE GEOMETRIC INFORMATION

10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
19	By pass Detour Length	21.88 miles
32	Approach Roadway Width	20 Ft. 0 In.
34	Skew	53.00 Degrees
35	Struct. Flared	NO
47	Total Horiz. Clear	22 Ft. 8 In.
48	Maximum Span Length	36 Ft. 1 In.
49	Structure Length	70 Ft. 10 In.
50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
51	Curb to Curb Br. Width	22 Ft. 8 In.
52	Deck Width (Out-Out)	22 Ft. 12 In.
53	Vert.Clearance Over Deck	99 Ft. 99 In.

Design_No = H0431 and Inventory_Appraisal_Submittal_Year = 2024

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

November 21, 2024
12:34:16pm

COUNTY : CAPE GIRARDEAU **BRIDGE :** H0431 2 **REVIEW STATUS :** APPROVED **NBI STATUS :** T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT **RUN DATE :** 8/23/2024 **SUBMITTAL YEAR :** 2024

LOAD RATING AND POSTING INFORMATION

31	Design Load	H 15
41	Structure Status	OPEN NO RESTRICTIONS
63	Oper. Rating Meth.	LOAD FACTOR
64	Operating Rating	41 Tons.
65	Inventory Rating Meth	LOAD FACTOR
66	Inventory Rating	25 Tons.
70	Bridge Posting Code	=>LEGAL LOADS

PROPOSED IMPROVEMENT INFORMATION

	Sufficiency Rating	25.9 Percent
	Deficiency Rating	STRUCTURAL
	Funding Eligibility	FULL
75A	Proposed Work	REPLACEMENT SUBSTND LOAD
75B	Work Done By	Contract
76	New Struc Length	98 Ft. 5 In.
94	Struc Improve Cost	$ 627,000
95	Roadway Improve Cost	$ 63,000
96	Total Project Cost	$ 941,000
97	Year of Cost Estimates	2024

APPRAISAL RATING INFORMATION

36A	Br. Rail App. Rating	MEETS ACCEPTBLE STND
36B	Transition Rail App. Rating	MEETS ACCEPTBLE STND
36C	Approach Rail App. Rating	MEETS ACCEPTBLE STND
36D	Rail End Treat. App. Rating	MEETS ACCEPTBLE STND
67	Struc Eval App. Rating	4
68	Deck Geometry App. Rating	2
69	Underclearance App. Rating	N
71	Waterway Adeq. App. Rating	8
72	Approach Road App. Rating	8
113	Scour Assess App. Rating	8

APPROVED POSTING INFORMATION

Approved Posting Category S-1

Ton1 Ton2 Ton3

Tonnage Values for Posting Sign

General Text for Posting Sign

NO POSTING REQUIRED

MATERIAL/CONSTRUCTION INFORMATION

43A	Main Struc. Mat type	CONCRETE
43B	Main struc Constr. Type	TEE BEAM
45	# of Main Spans	1
44A	Appr Struc. Mat type	CONCRETE
44B	Appr Struc. Cnstr. type	SLAB
46	# of Approach Span	2
107	Deck Mat/Constr.	1 CONCRETE CIP
108A	Wear Surf Mat/Constr.	6 BITUMINOUS
108B	Membrane Mat/Constr.	1 BUILT UP
108C	Deck Protect Mat/Constr.	0 NONE

CONDITION RATING INFORMATION

58	Deck Cond. Rating	4
59	Superstructure Cond. Rating	4
60	Substructure Cond. Rating	5
61	Channel /Channel Protection Cond. Rating	6
62	Culvert Cond. Rating	N

INSPECTION INFORMATION

90	Gen. Insp Date	11 / 23	
91	Gen. Insp. Frequency	24	Months
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		

BORDER BRIDGE INFORMATION

98	Neighboring State Code
98B	Neighboring State % Respon
99	Neighboring State Struc. No.

FIELD POSTING INFORMATION

Field Posting Category S-1

Ton1 Ton2 Ton3

Tonnage Values for Posting Sign

General Text for Posting Sign

NO POSTING REQUIRED

Design_No = H0431 and Inventory_Appraisal_Submittal_Year = 2024