

DESIGN DESIGNATION

A0248 AADT (2011) - 8094
 L0935 AADT (2011) - 43594
 L0936 AADT (2011) - 6332
 V = 55 M.P.H.

FUNCTIONAL CLASSIFICATION - INTERSTATE

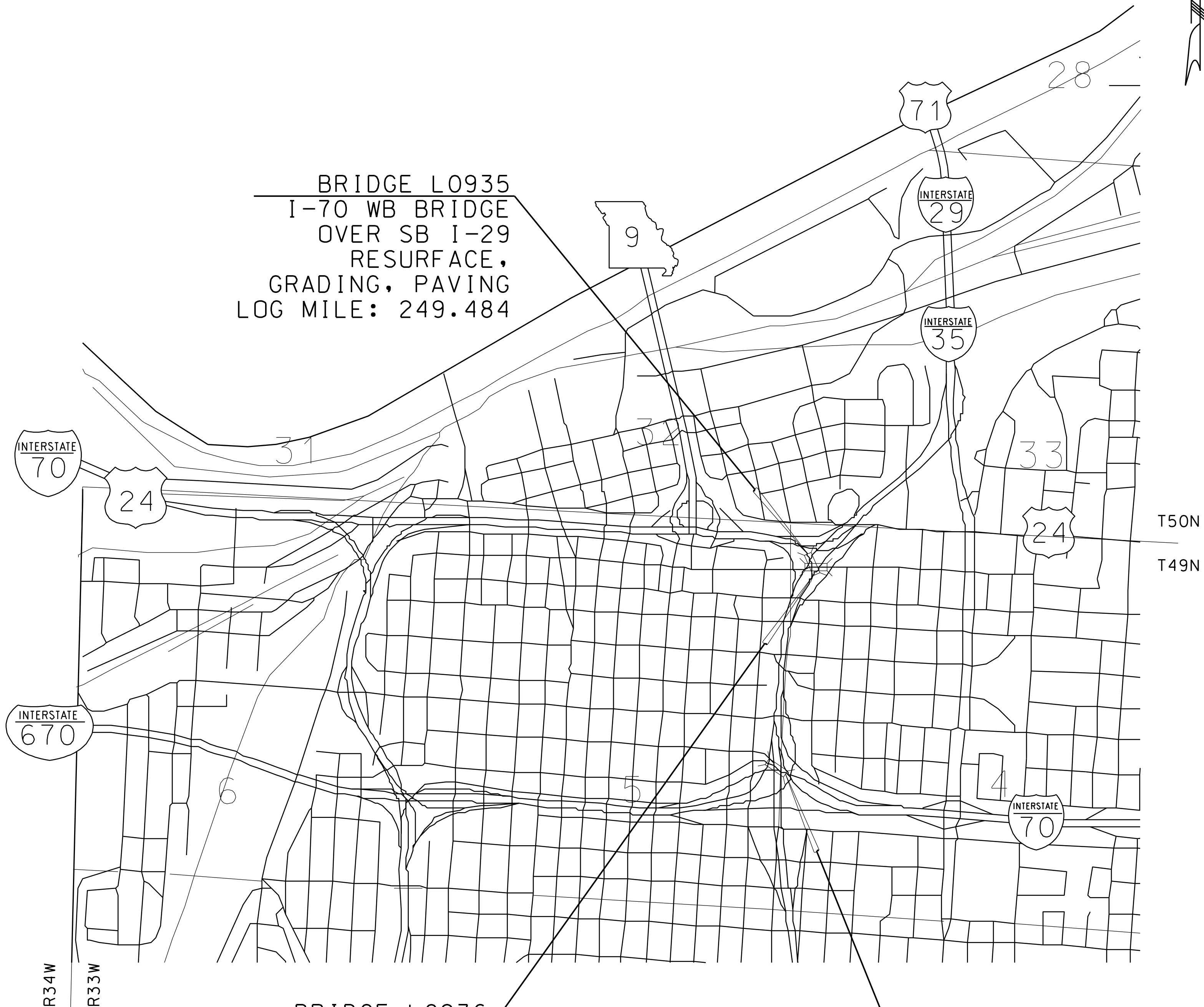
NO RIGHT OF WAY
 IS REQUIRED

CONVENTIONAL SYMBOLS
 (USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES	[Symbol]	[Symbol]
GUARD RAIL	[Symbol]	[Symbol]
CONCRETE RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
STEEL RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
LOCATION SURVEY MARKER	[Symbol]	[Symbol]
UTILITIES		
FIBER OPTICS	-FO-	-FO-
OVERHEAD TELEPHONE	-T-	-T-
UNDERGROUND TELEPHONE	-P-	-P-
OVERHEAD POWER	-G-	-G-
UNDERGROUND POWER	-W-	-W-
GAS	[Symbol]	[Symbol]
WATER	[Symbol]	[Symbol]
MANHOLE	[Symbol]	[Symbol]
FIRE HYDRANT	[Symbol]	[Symbol]
WATER VALVE	[Symbol]	[Symbol]
WATER METER	[Symbol]	[Symbol]
DROP INLET	[Symbol]	[Symbol]
DITCH BLOCK	[Symbol]	[Symbol]
GROUND MOUNTED SIGN	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
H-FRAME POWER POLE	[Symbol]	[Symbol]
TELEPHONE PEDESTAL	[Symbol]	[Symbol]
FENCE		
CHAIN LINK	[Symbol]	[Symbol]
WOVEN WIRE	[Symbol]	[Symbol]
GATE POST	[Symbol]	[Symbol]
BENCHMARK	[Symbol]	[Symbol]

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 PLANS FOR PROPOSED
 STATE HIGHWAY
 JACKSON COUNTY



BRIDGE L0935
 I-70 WB BRIDGE
 OVER SB I-29
 RESURFACE,
 GRADING, PAVING
 LOG MILE: 249.484

BRIDGE L0936
 ADMIRAL STREET
 OVER I-70/I-29
 RESURFACE
 LOG MILE: 0.443

BRIDGE A0248
 14TH ST TO I-70 EB
 OVER WB I-670
 RESURFACE
 LOG MILE: 0.088

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET -----	1A-1B
TYPICAL SECTIONS (TS) (5 SHEETS)---	2
QUANTITIES (QU) (5 SHEETS)-----	3
PLAN-PROFILE (PP)-----	4-5
REFERENCE POINTS (RP)-----	6-7
SPECIAL SHEETS (SS)-----	8-9A
TRAFFIC CONTROL SHEETS (TC)-----	10-33
EROSION CONTROL SHEETS (EC)-----	NA
LIGHTING (LT)-----	NA
SIGNALS (SG)-----	34-44
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PAVEMENT MARKING (PM)-----	49-52
BRIDGE DRAWINGS (B)	
A0248-----	1-10
L0935-----	1-7
L0936-----	1-8
A1496-----	1-4

LENGTH OF PROJECT

BRIDGE A0248	
BEGINNING LOG MILE	0.088
END LOG MILE	0.119
BRIDGE L0935	
BEGINNING LOG MILE	249.484
END LOG MILE	249.511
BRIDGE L0936	
BEGINNING LOG MILE	0.443
END LOG MILE	0.533
APPARENT LENGTH	0.148 MILES
EQUATIONS AND EXCEPTIONS:	NONE
TOTAL CORRECTIONS	0 MILES
NET LENGTH OF PROJECT	0.148 MILES
STATE LENGTH	0.148 MILES

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

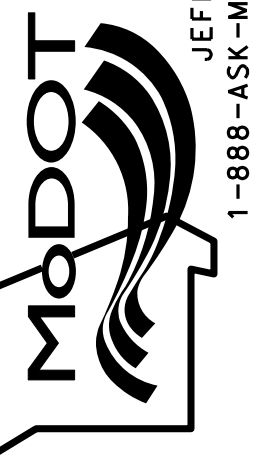
DATE PREPARED
 1/15/2013
 ROUTE
 VAR. MO
 DISTRICT
 KC 1A
 COUNTY
 JACKSON/CASS
 JOB NO.
 J413012
 CONTRACT ID.

PROJECT NO.
 BRIDGE NO.
 A0248, L0935, L0936

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

REV.

NOT TO SCALE

DESIGN DESIGNATION

A.A.D.T. - 2011 = 6332
 A.A.D.T. - 2031 = 11714
 D.H.V. = NA
 T = 16%
 V = 35 M.P.H.
 D = NA

FUNCTIONAL CLASSIFICATION - PRINCIPAL ARTERIAL

NO RIGHT-OF-WAY REQUIRED

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION PLANS FOR PROPOSED STATE HIGHWAY CASS COUNTY

INDEX OF SHEETS

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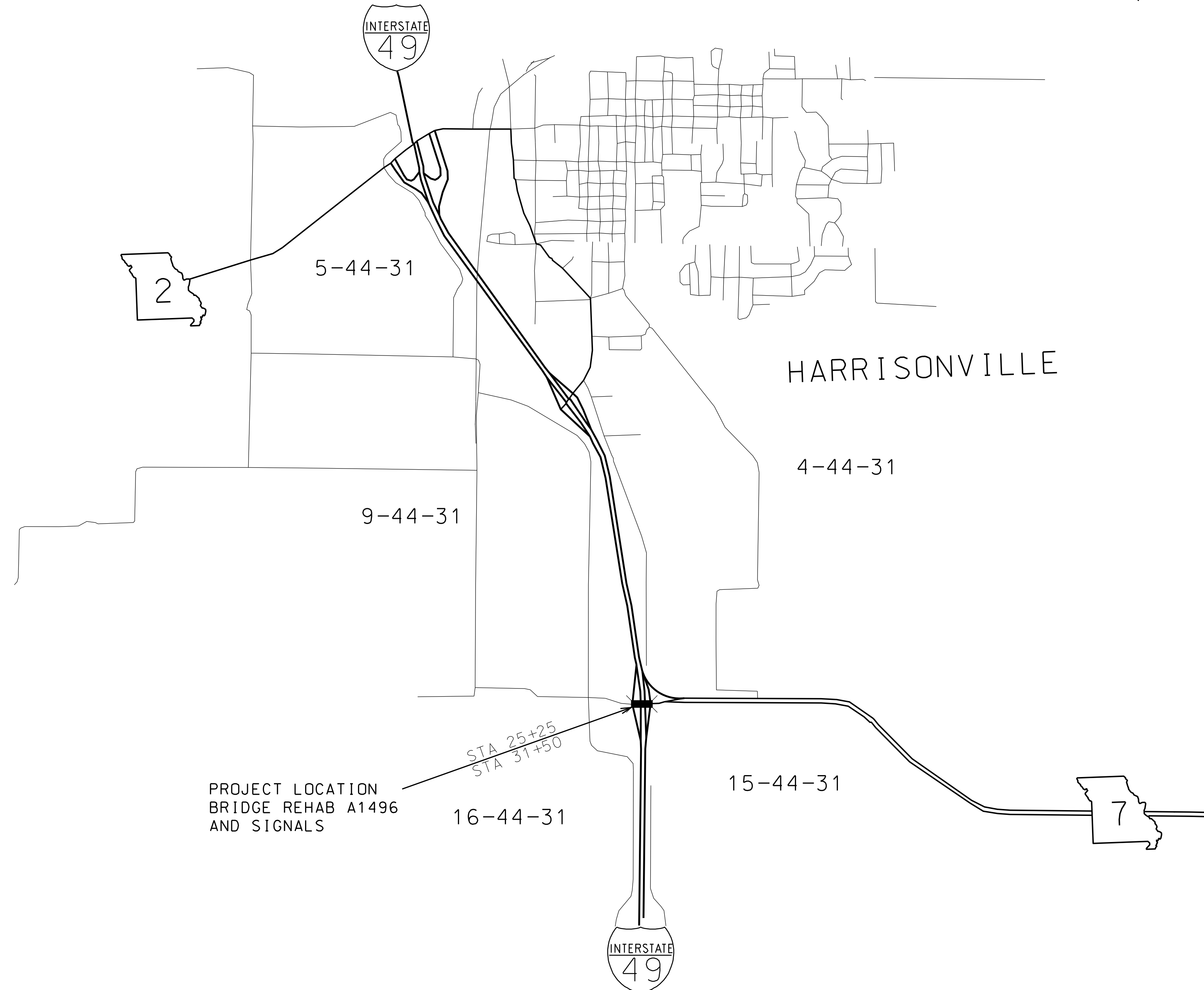
DATE PREPARED
 12/14/2012
 ROUTE STATE
 VAR. MO
 DISTRICT SHEET NO.
 KC 1B
 COUNTY
 JACKSON/CASS
 JOB NO.
 J413012
 CONTRACT ID.
 PROJECT NO.
 BRIDGE NO.
 A1496

DESCRIPTION	DATE

CONVENTIONAL SYMBOLS (USED IN PLANS)

- | | EXISTING | NEW |
|------------------------------|----------|----------|
| BUILDINGS AND STRUCTURES | [Symbol] | [Symbol] |
| GUARD RAIL | [Symbol] | [Symbol] |
| CONCRETE RIGHT-OF-WAY MARKER | [Symbol] | [Symbol] |
| STEEL RIGHT-OF-WAY MARKER | [Symbol] | [Symbol] |
| LOCATION SURVEY MARKER | [Symbol] | [Symbol] |
| UTILITIES | | |
| FIBER OPTICS | -FO- | -FO- |
| OVERHEAD TELEPHONE | -T- | -T- |
| UNDERGROUND TELEPHONE | -T- | -T- |
| OVERHEAD POWER | -P- | -P- |
| UNDERGROUND POWER | -P- | -P- |
| GAS | -G- | -G- |
| WATER | -W- | -W- |
| MANHOLE | [Symbol] | [Symbol] |
| FIRE HYDRANT | [Symbol] | [Symbol] |
| WATER VALVE | [Symbol] | [Symbol] |
| WATER METER | [Symbol] | [Symbol] |
| DROP INLET | [Symbol] | [Symbol] |
| DITCH BLOCK | [Symbol] | [Symbol] |
| GROUND MOUNTED SIGN | [Symbol] | [Symbol] |
| LIGHT POLE | [Symbol] | [Symbol] |
| H-FRAME POWER POLE | [Symbol] | [Symbol] |
| TELEPHONE PEDESTAL | [Symbol] | [Symbol] |
| FENCE | | |
| CHAIN LINK | [Symbol] | [Symbol] |
| WOVEN WIRE | [Symbol] | [Symbol] |
| GATE POST | [Symbol] | [Symbol] |
| BENCHMARK | [Symbol] | [Symbol] |

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES



LENGTH OF PROJECT

BEGINNING OF PROJECT STA. 25+25.00
 END OF PROJECT STA. 31+50.00

APPARENT LENGTH 625.00 FEET

EQUATIONS AND EXCEPTIONS:

TOTAL CORRECTIONS 0.00 FEET
 NET LENGTH OF PROJECT 625.00 FEET
 STATE LENGTH 0.118 MILES



MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 2

COUNTY
JACKSON/CASS

JOB NO.
J413012

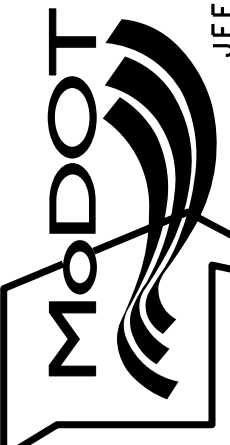
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A0248

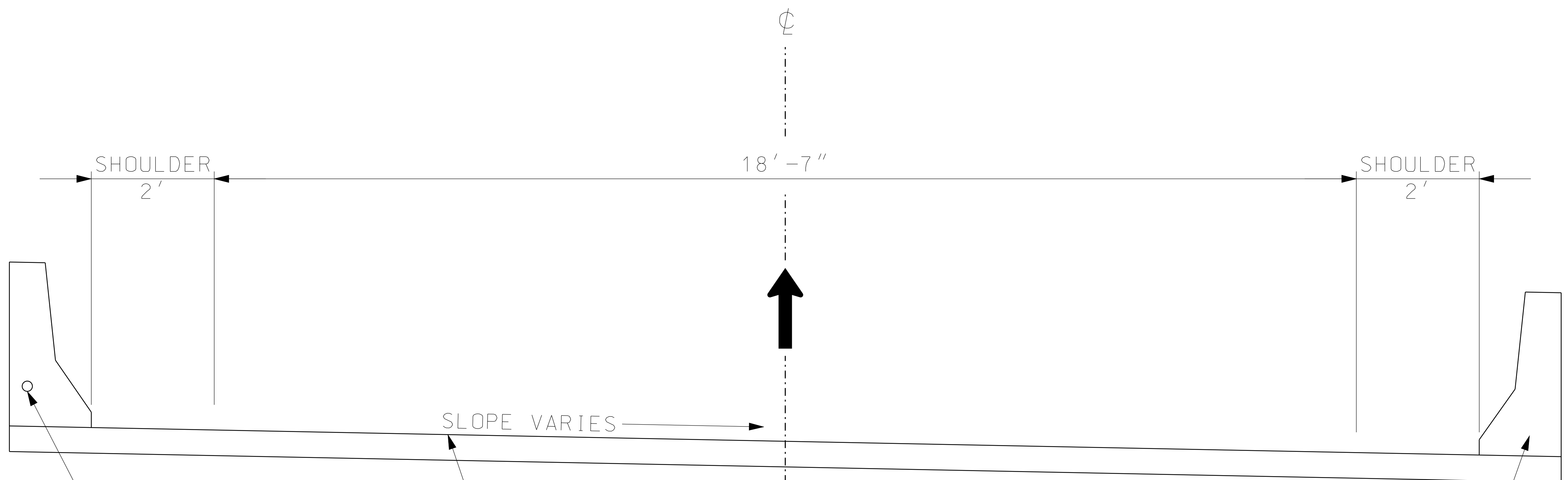
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



INSTALL
3" PVC CONDUIT

SLOPE VARIES

REMOVE EXISTING 5" POST TENSION SLAB
REPLACE WITH 5" REINFORCED CONCRETE SLAB OVERLAY

BUILD 16" SAFETY BARRIER CURB
(BOTH SIDES)

A0248 EXISTING
TYPICAL SECTION
SHEET 1 OF 5

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 2

COUNTY
JACKSON/CASS

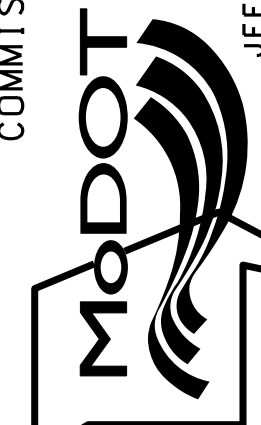
JOB NO.
J413012

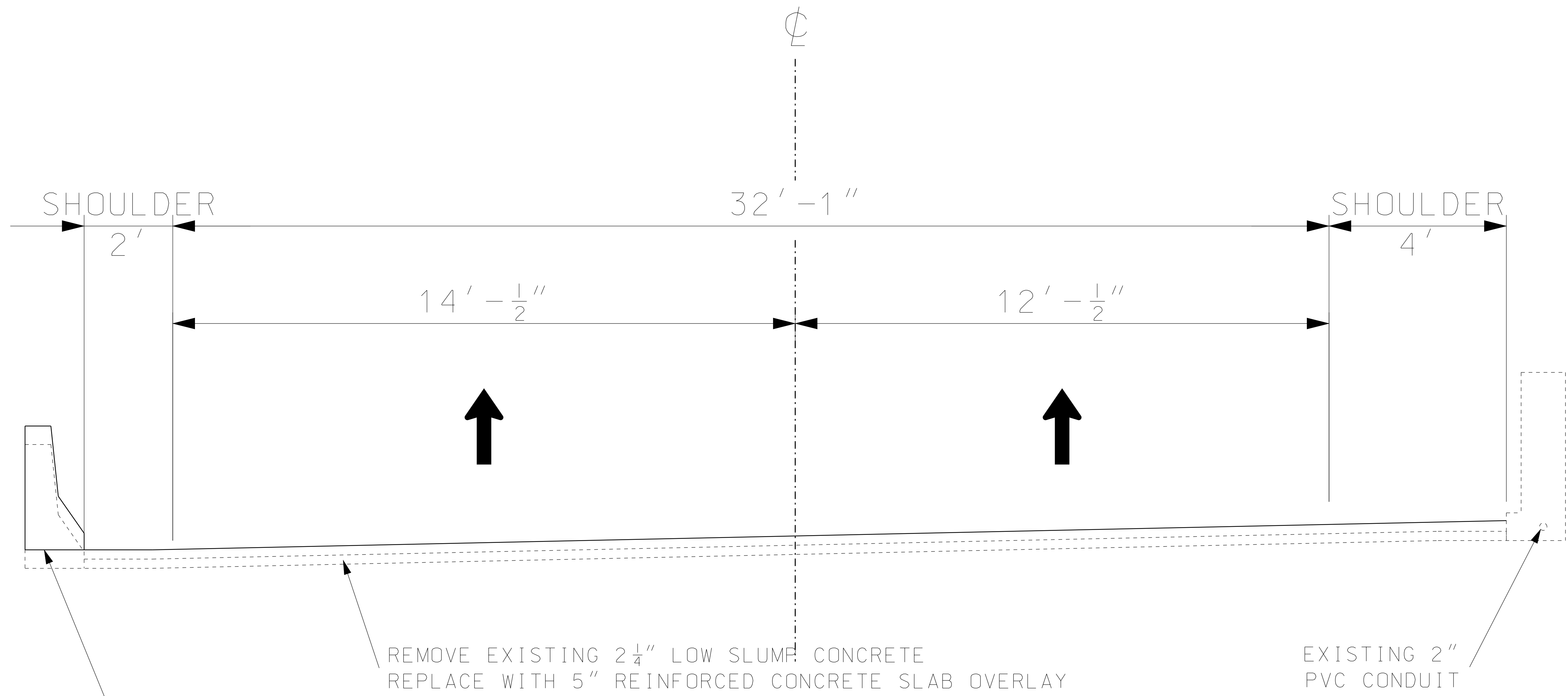
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0935

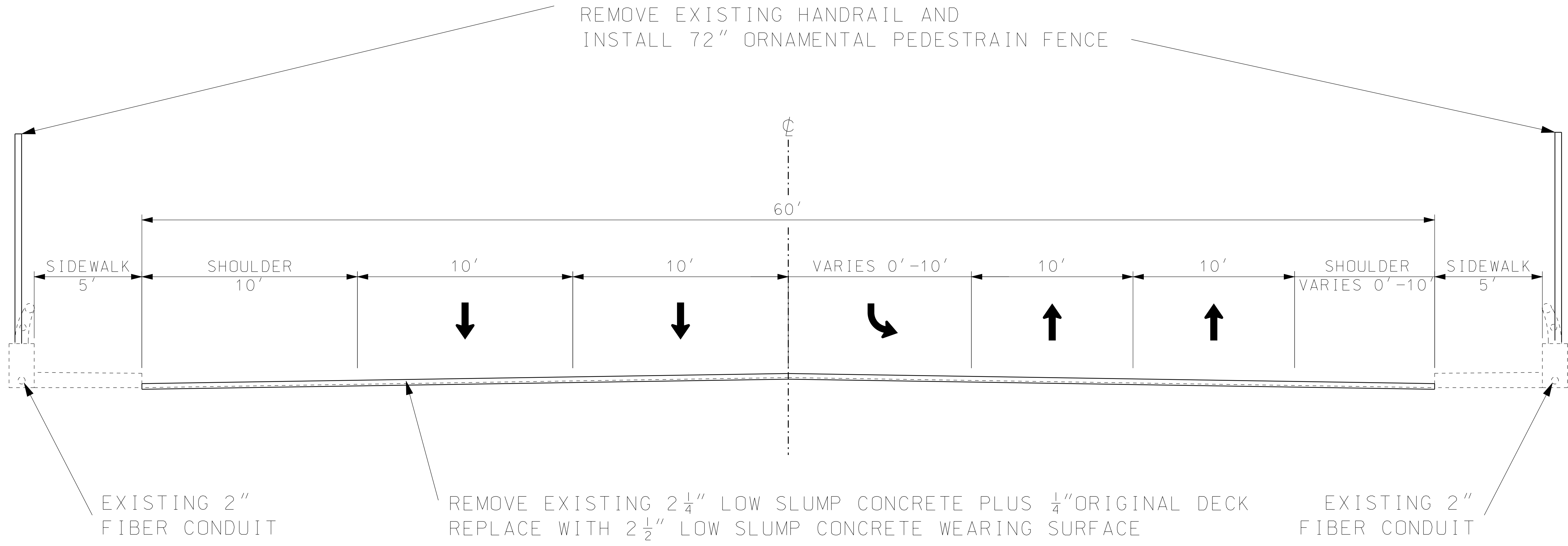
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



L0935 EXISTING
TYPICAL SECTION
SHEET 2 OF 5

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



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DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
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DISTRICT KC	SHEET NO. 2
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COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0936

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

L0936 EXISTING
TYPICAL SECTION
SHEET 3 OF 5

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 2

COUNTY
JACKSON/CASS

JOB NO.
J413012

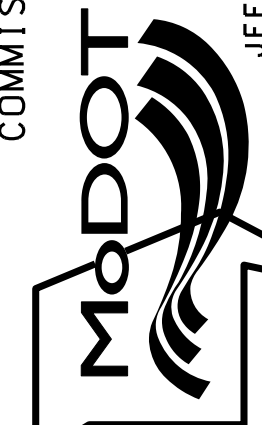
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0936

DESCRIPTION	DATE

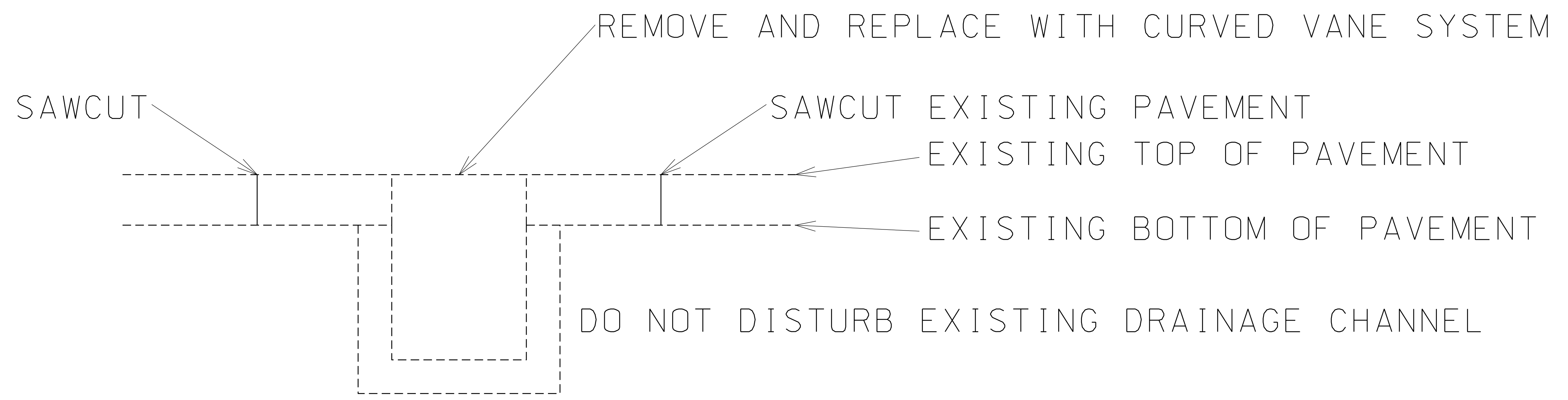
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

GENERAL CONSTRUCTION NOTES:

1. ALL EFFORTS SHOULD BE TAKEN TO MINIMIZE THE DISTURBANCE OF TREE OR BUSH ROOTS.
2. ANY AREAS DAMAGED DUE TO CONSTRUCTION OPERATION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
3. PAVEMENT REMOVAL AND REPAIR WILL BE PAID FOR AS "FULL DEPTH PAVEMENT REPAIR AND ALL RELATED ITEMS"



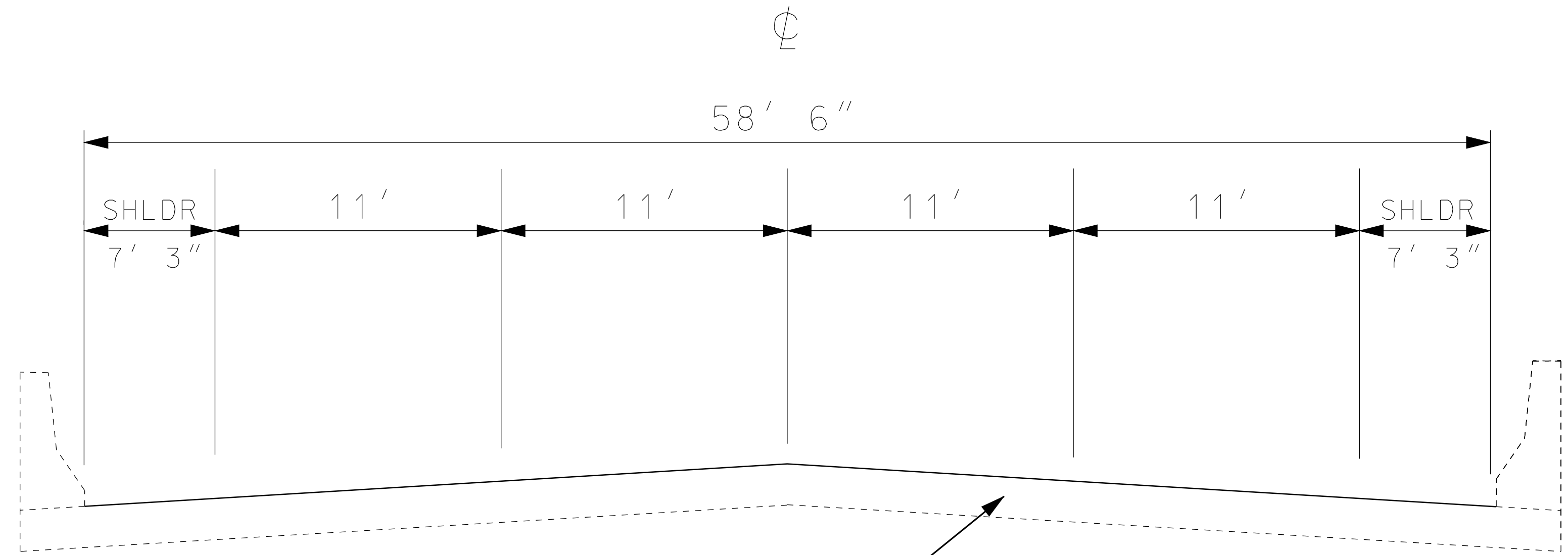
DROP INLET REPLACEMENT DETAIL
ADMIRAL STREET
TYPICAL SECTION
SHEET 4 OF 5

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

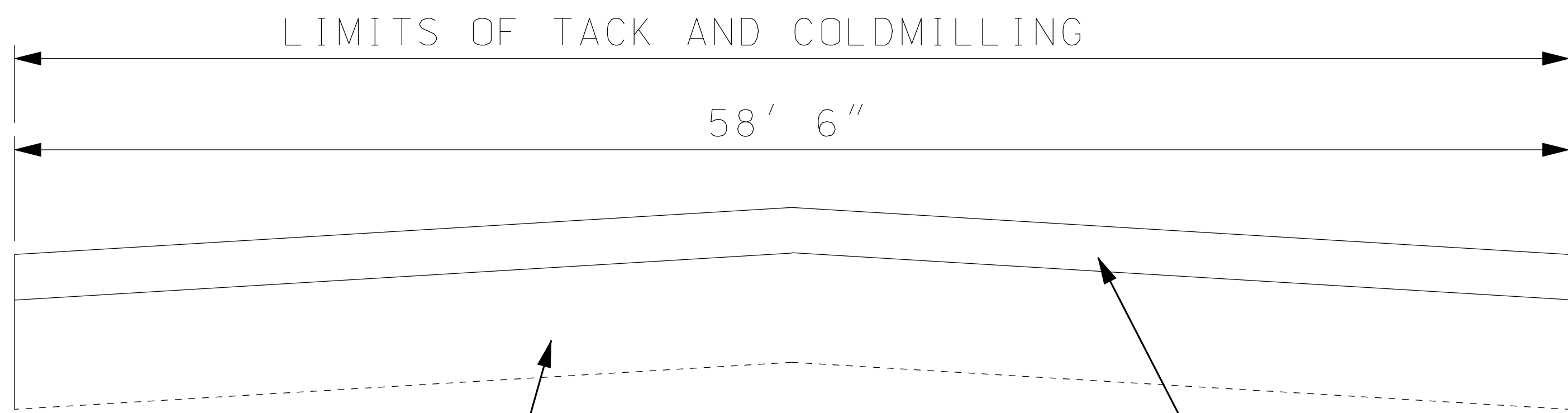
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DATE PREPARED
12/19/2012
ROUTE STATE
VAR. MO
DISTRICT SHEET NO.
KC 2
COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.
PROJECT NO.
BRIDGE NO.



REMOVE EXISTING 2 1/4" LOW SLUMP CONCRETE WEARING SURFACE PLUS 1/4" ORIGINAL DECK
SCARIFY 1" OF WIDENED DECK AREA ON NORTHSIDE
INSTALL 2 1/2" POLYESTER POLYMER CONCRETE OVERLAY ON ORIGINAL DECK
INSTALL 1" POLYESTER POLYMER CONCRETE ON WIDENED DECK AREA ON NORTHSIDE

TYPICAL SECTION BRIDGE A1496



EXISTING PAVEMENT THICKNESS

1 3/4" SP 125C


TYPICAL SECTION ROUTE 7 AT BRIDGE (A1496) ENDS

ASPHALT FACTORS
1 3/4" SP 125C PG70-22 - 1.990 TONS/CY
TACK - 0.1 GALLONS/SY

AT EACH BRIDGE END MILL & FILL 1 3/4"
50' PAST THE NEW BRIDGE APPROACH SLAB

A1496 EXISTING
TYPICAL SECTION
SHEET 5 OF 5

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED

1/15/2013

ROUTE STATE

VAR. MO

DISTRICT SHEET NO.

KC 3

COUNTY

JACKSON/CASS

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

MOBILIZATION
LUMP SUM

REMOVAL OF IMPROVEMENTS

PLAN SHEET	ITEM	QUANTITY	UNITS	REMARKS
4	1.5' X 4' GRATE AND BEARING PLATE	1	EACH	BETWEEN ON-RAMP AND ENTRANCE SOUTH SIDE OF ADMIRAL ST
4	CURB	15.5	LF	SW CORNER OF ADMIRAL ST AND ON-RAMP
4	SIDEWALK	7.9	SY	SW CORNER OF ADMIRAL ST AND ON-RAMP
4	CURB	54	LF	AROUND ISLAND AT ADMIRAL ST & ON-RAMP INTERSECTION
4	CONCRETE MEDIAN	15	SY	ISLAND AT ADMIRAL ST & ON-RAMP INTERSECTION
4	CURB	28	LF	NW CORNER OF ADMIRAL AND OLD 6TH ST
4	SIDEWALK	10.3	SY	NW CORNER OF ADMIRAL AND OLD 6TH ST TO BRIDGE
4	CURB	57	LF	SE CORNER OF ADMIRAL ST AND ON-RAMP
4	SIDEWALK	14.1	SY	SE CORNER OF ADMIRAL ST AND ON-RAMP
4	CURB	24.5	LF	NE CORNER OF ADMIRAL ST AND OLD 6TH ST
4	SIDEWALK	11.1	SY	NE CORNER OF ADMIRAL ST AND OLD 6TH ST
4	2' X 4' GRATE AND BEARING PLATE	1	EACH	BETWEEN ON-RAMP AND WEST BRIDGE END SOUTH SIDE OF ADMIRAL ST
4	2' X 4' GRATE AND BEARING PLATE	1	EACH	BETWEEN OLD 6TH ST AND WEST BRIDGE END SOUTH SIDE OF ADMIRAL ST
5	CURB	84	LF	SW CORNER OF ADMIRAL ST AND OFF-RAMP
5	SIDEWALK	3.7	SY	FROM BRIDGE TO SW CORNER OF ADMIRAL ST AND OFF-RAMP
5	SIDEWALK	2.1	SY	AT NE BRIDGE END AROUND SIGNAL POLE
5	SIDEWALK	9.2	SY	SE CORNER OF ADMIRAL ST AND OFF-RAMP/ENTRANCE
5	2' X 4' GRATE AND BEARING PLATE	1	EACH	SE CORNER OF ADMIRAL ST AND OFF-RAMP
5	CURB	20.5	LF	NW CORNER OF ADMIRAL ST AND RAMP TO US-24
5	SIDEWALK	5.8	SY	NW CORNER OF ADMIRAL ST AND RAMP TO US-25
5	SIDEWALK PANEL	5.5	SY	ON SOUTHSIDE OF ADMIRAL ST NEXT TO TREE
5	CURB	14	LF	NE CORNER OF ADMIRAL ST AND RAMP TO US-25
5	SIDEWALK	49	SY	NE CORNER OF ADMIRAL ST AND RAMP TO US-25 TO ENTRANCE
5	1.5' X 3' GRATE AND BEARING PLATE	1	EACH	NE CORNER OF ADMIRAL ST AND RAMP TO US-24
5	TREE	1	EACH	NE CORNER OF ADMIRAL ST AND RAMP TO US-24
5	1.5' X 3' GRATE AND BEARING PLATE	1	EACH	BETWEEN CURB CUT AND TROOST AVE ON SOUTH SIDE OF ADMIRAL ST
5	CATHODIC PROTECTION SYSTEM CABINET	2	EACH	SE CORNER OF BRIDGE L0936
NA	SLOPE PROTECTION	4	SY	NE CORNER OF BRIDGE L0936
NA	1.5' X 3' GRATE AND BEARING PLATE	1	EACH	14TH ST RAMP UNDER IS-670 RAMP BRIDGE
NA	1.5' X 2' GRATE AND BEARING PLATE	1	EACH	14TH ST RAMP UNDER US-71 SB BRIDGE
NA	1.5' X 3' GRATE AND BEARING PLATE	1	EACH	14TH ST RAMP WEST OF BRIDGE END
N/A	BRIDGE ANCHOR SECTION AND TRANSITION SECTION	2	EACH	BRIDGE L0935 SW CORNER
N/A	ALL GUARDRAIL	362.5	LF	BRIDGE L0936 NE CORNER
N/A	ALL GUARDRAIL	500	LF	BRIDGE L0936 SW CORNER
N/A	ALL GUARDRAIL	337.5	LF	BRIDGE L0936 SE CORNER
N/A	ALL GUARDRAIL	275	LF	BRIDGE A0248 NW CORNER
N/A	ALL GUARDRAIL	212.5	LF	BRIDGE A0248 SW CORNER
N/A	ALL GUARDRAIL	412.5	LF	BRIDGE A0248 SE CORNER
N/A	GUARDRAIL, TRANSITION SECTION, AND END SECTION	69	LF	BRIDGE A1496 NE CORNER
N/A	GUARDRAIL, TRANSITION SECTION, AND END SECTION	94	LF	BRIDGE A1496 NW CORNER
N/A	GUARDRAIL, TRANSITION SECTION, AND END SECTION	69	LF	BRIDGE A1496 SE CORNER
N/A	GUARDRAIL, TRANSITION SECTION, AND END SECTION	337.5	LF	BRIDGE A1496 SW CORNER
TOTAL		1	LUMP SUM	

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REMOVAL AND RELOCATED SIGN

PLAN SHEET	LOCATION	CONCRETE FOOTINGS	BREAKAWAY	REMARKS
		EMBEDDED	ASSEMBLY	
		CY	EACH	
4	ON-RAMP TO I-70	0.4	1	RELOCATE IN NEW CONCRETE MEDIAN
TOTAL		0.4	1	

CONCRETE MEDIAN

PLAN SHEET	LOCATION	6" CONCRETE	REMARKS
		MEDIAN	
		SY	
4	ON-RAMP TO I-70	14	INTERSECTION OF ADMIRAL AND ON-RAMP TO I-70
TOTAL		14	

CULVERT CLEANOUT

PLAN SHEET	LOCATION	EACH	REMARKS
4	ADMIRAL ST	1	WEST SIDE OF BRIDGE BETWEEN DROP INLETS
TOTAL		1	

PREFORMED REMOVABLE MARKING TAPE

LOCATION	MARKING TAPE	MARKING TAPE	REMARKS
	4 IN. WHITE (L.F.)	4 IN. YELLOW (INT.) (L.F.)	
BRIDGE A0248	1094	-	14TH STREET
BRIDGE L0936	1170	2205	ADMIRAL BLVD.
TOTAL		2264	2205

SUMMARY SHEET
SHEET 1 OF 5

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

DATE PREPARED

1/15/2013

ROUTE STATE

VAR. MO

DISTRICT SHEET NO.

KC 3

COUNTY

JACKSON/CASS

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

TYPE 1 ROCK DITCH LINER (ROCK FLUME UNDER BRIDGE)			
LOCATION	FURNISHING SY	PLACING SY	REMARKS
NE CORNER BRIDGE L0936	17	17	PLACE ROCK TO MAINTAIN THE EXISTING EROSION
TOTAL	17	17	

SLOPE PROTECTION		
LOCATION	SY	REMARKS
NE CORNER BRIDGE L0936	4	REPAIR EXISTING SLOPE PROTECTION
TOTAL	4	

MODIFIED COLDMILLING (DEPTH TRANSITIONS)		
LOCATION	MODIFIED COLDMILLING SY	REMARKS
BRIDGE L0935 NORTH END	446.0	MATCH ADJACENT BRIDGE OVERLAY
BRIDGE L0935 SOUTH END	446.0	MATCH ADJACENT BRIDGE OVERLAY
TOTAL	892.0	

SIDEWALK					
PLAN SHEET	LOCATION	SIDE	4" SIDEWALK SY	REMARKS	
4	ADMIRAL ST	NORTH	3.7	ADDITIONAL SIDEWALK AROUND LIGHT POLE	
4	ADMIRAL ST	SOUTH	4.6	NEW SIDEWALK NEXT TO NEW ISLAND AT TOP OF I-70 ON RAMP	
4	ADMIRAL ST	SOUTH	19.6	FROM NEW TRUCK APRON TO WEST BRIDGE END	
5	ADMIRAL ST	NORTH	2.5	AROUND SIGNAL NEXT TO EAST BRIDGE END	
5	ADMIRAL ST	SOUTH	25.2	FROM EAST BRIDGE END TO NEW TRUCK APRON	
5	ADMIRAL ST	SOUTH	5.9	SIDEWALK PANEL NEXT TO TREE AND BUILDING	
5	ADMIRAL ST	NORTH	40.6	ENTIRE SIDEWALK EAST OF RAMP TO ENTRANCE	
TOTAL			102.1		

GUARDRAIL						
LOCATION	TYPE A GUARDRAIL L.F.	BRIDGE ANCHOR SECTION EACH	TRANSITION SECTION EACH	TYPE A CRASHWORTHY END TERMINAL EACH	END ANCHOR EACH	REMARKS
BRIDGE L0935 NORTH END	-	2	2	-	-	REPLACE EXISTING BRIDGE ANCHOR AND TRANSITION, CONNECT TO EXISTING GUARDRAIL
BRIDGE L0936 NE CORNER	362.5	1	1	-	1	REPLACE ALL EXISTING GUARDRAIL ALONG US-24 RAMP, ATTACH TO BRIDGE
BRIDGE L0936 SW CORNER	500	1	1	-	1	REPLACE ALL EXISTING GUARDRAIL ALONG I-70 ON-RAMP, ATTACH TO BRIDGE
BRIDGE L0936 SE CORNER	337.5	1	1	1	-	REPLACE ALL EXISTING GUARDRAIL ALONG US-71 OFF-RAMP, ATTACH TO BRIDGE
BRIDGE A0248 NE CORNER	275	1	1	1	-	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A0248 NW CORNER	212.5	1	1	1	-	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A0248 SW CORNER	412.5	1	1	-	1	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A1496 NE CORNER	12.5	-	1	1	-	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A1496 NW CORNER	37.5	-	1	1	-	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A1496 SE CORNER	12.5	-	1	1	-	REPLACE ALL EXISTING GUARDRAIL
BRIDGE A1496 SW CORNER	337.5	-	1	-	1	REPLACE ALL EXISTING GUARDRAIL ALONG I-49 SB ON-RAMP
TOTAL	2500	8	12	6	4	

CURB						
PLAN SHEET	LOCATION	SIDE	REPAIR TYPE S CURB* LF	BUILD 6" TYPE S CURB LF	BUILD TYPE F CURB LF	REMARKS
4	OLD 6TH ST	WEST	20			NORTH OF NEW CURB RAMP
4	ADMIRAL BLVD	SOUTH		73.8		AROUND NEW ISLAND
4	ON RAMP TO I-70	EAST			16.0	CAN BE INTEGRAL WITH TRUCK APRON, INCLUDES 5' TRANSITION TO EXISTING CURB
4	ADMIRAL BLVD	SOUTH			13.0	BETWEEN NEW CURB RAMP AND DROP INLET, CAN BE INTEGRAL WITH TRUCK APRON
4	ADMIRAL BLVD	SOUTH		19.5		FROM NEW TRUCK APRON TO WEST BRIDGE END, INCLUDES 5' TRANSITION FROM TYPE F CURB
4	ADMIRAL BLVD	NORTH	14			FROM NEW CURB RAMP TO WEST BRIDGE END
5	ADMIRAL BLVD	SOUTH		27		FROM THE EAST BRIDGE END TO NEW TRUCK APRON, INCLUDES 5' TRANSITION TO NEW CURB RAMP
5	OFF RAMP FROM US-71	WEST			36	CAN BE INTEGRAL WITH TRUCK APRON, INCLUDES 5' TRANSITION TO EXISTING CURB
5	ADMIRAL BLVD	NORTH		24		BEHIND NEW CURB RAMP AND LANDING ON NW CORNER OF ADMIRAL AND US-24 RAMP
5	ADMIRAL BLVD	NORTH		4.5		BETWEEN CROSSINGS OF THE NEW LANDING AT NW CORNER OF ADMIRAL AND US-24 RAMP
5	RAMP TO US-24	EAST		14		FROM NEW CURB RAMP TO EXISTING, MATCH EXISTING
5	ADMIRAL BLVD	NORTH		8		NW CORNER OF ADMIRAL BLVD AND ENTRANCE
TOTAL			34.0	170.8	65	

*PAID FOR AS 6" TYPE S CURB

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SUMMARY SHEET
SHEET 2 OF 5

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

DATE PREPARED

1/15/2013

ROUTE STATE

VAR. MO

DISTRICT SHEET NO.

KC 3

COUNTY

JACKSON/CASS

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

CURB RAMPS						
PLAN SHEET	LOCATION	SIDE	CONCRETE CURB RAMP SY	TRUNCATED DOMES SF	CURB RAMP TYPE	REMARKS
4	ON RAMP TO I-70	WEST	6.6	12	PARALLEL (CHANGING DIRECTION)	SW CORNER OF ADMIRAL AND ON-RAMP
4	ADMIRAL ST	NORTH	10.3	14	PARALLEL	NW CORNER OF ADMIRAL AND OLD 6TH ST
4	ON RAMP TO I-70	MEDIAN		12		SIDEWALK NEXT TO MEDIAN ISLAND
4	ON RAMP TO I-70	MEDIAN		12		SIDEWALK NEXT TO MEDIAN ISLAND
4	ON RAMP TO I-70	EAST	2.7	12	PERPENDICULAR	SE CORNER OF ADMIRAL AND ON-RAMP, 9" THICK
4	ADMIRAL ST	NORTH	11.1	14	PARALLEL	NE CORNER OF ADMIRAL AND OLD 6TH ST
5	OFF RAMP FROM US-71	WEST	11.1	25	PERPENDICULAR (LARGE RADIUS)	SW CORNER OF ADMIRAL AND OFF-RAMP, 9" THICK
5	ADMIRAL ST	SOUTH	9.2	12	PERPENDICULAR (SMALL RADIUS)	SE CORNER OF ADMIRAL AND OFF-RAMP/ENTRANCE
5	ADMIRAL ST	NORTH	8.8	16	PERPENDICULAR	NW CORNER OF ADMIRAL AND RAMP
5	ADMIRAL ST	NORTH	7.8	13		NW CORNER OF ADMIRAL AND RAMP
5	ADMIRAL ST	NORTH	7.8	10	PERPENDICULAR	NE CORNER OF ADMIRAL AND RAMP
TOTAL			67.6	152.0		

DI GRATE REPLACEMENT							
PLAN SHEET	LOCATION	SIDE	4' X 2' CURVED VANE GRATE EACH	3' X 1'-6" GRATE AND BEARING PLATE EACH **	2' X 1'-6" GRATE AND BEARING PLATE EACH **	PAVEMENT REPAIR* SY	REMARKS
4	ADMIRAL ST	SOUTH	1			4.4	BETWEEN ON-RAMP AND ENTRANCE
4	ADMIRAL ST	SOUTH	1			4.4	BETWEEN WEST END OF BRIDGE AND ON-RAMP
4	ADMIRAL ST	NORTH	1			4.4	BETWEEN WEST END OF BRIDGE AND ON-RAMP
5	ADMIRAL ST	SOUTH	1			4.4	BETWEEN OFF-RAMP AND ENTRANCE
5	ADMIRAL ST	NORTH	1			4.4	EAST OF RAMP TO EB US-24
5	ADMIRAL ST	SOUTH	1			4.4	BETWEEN ENTRANCE AND TROOST AVE
NA	14TH ST ON-RAMP	SOUTH		1			UNDER IS-670 RAMP BRIDGE
NA	14TH ST ON-RAMP	SOUTH			1		UNDER US-71 SB BRIDGE
NA	14TH ST ON-RAMP	SOUTH		1			WEST OF BRIDGE END
TOTAL			6	2	1	26.4	

*SEE SPECIAL SHEET 2 OF 3

** PAID FOR WITH PAY ITEM 614.99-02, SEE SPECIAL SHEET 3 OF 3, REFER TO SPEC 614.10

PAVEMENT						
PLAN SHEET	LOCATION	9" NON-REINFORCED PCCP SY	4" TYPE 5 AGGREGATE BASE SY	SP125BSM W/ PG 76-22 TONS	TACK COAT GAL	REMARKS
4	ON-RAMP TO I-70	9.3	9.3			SE CORNER OF INTERSECTION
5	OFF-RAMP FROM I-70	15	15			SW CORNER OF INTERSECTION
NA	BRIDGE L0935 NORTH END			57.0	45.0	MATCH ADJACENT BRIDGE OVERLAY
NA	BRIDGE L0935 SOUTH END			57.0	45.0	MATCH ADJACENT BRIDGE OVERLAY
TOTAL		24.3	24	114.0	90.0	

EST. FACTOR = 2.301 TONS/CY

PAVEMENT MARKING								
LOCATION	ACRYLIC WATERBORNE PAVEMENT MARKING 6 IN. SOLID WHITE (L.F.)	ACRYLIC WATERBORNE PAVEMENT MARKING 6 IN. SOLID YELLOW (L.F.)	ACRYLIC WATERBORNE PAVEMENT MARKING 4 IN. SOLID WHITE (L.F.)	ACRYLIC WATERBORNE PAVEMENT MARKING 4 IN. INTERMITTENT WHITE (L.F.)	ACRYLIC WATERBORNE PAVEMENT MARKING 4 IN. SOLID YELLOW (L.F.)	TYPE 2 PREFORMED MARKING TAPE (GROOVED) 24 IN. WHITE (L.F.)	PAVEMENT MARKING REMOVAL (L.F.)	REMARKS
BRIDGE L0936	-	-	1392	230	2100	24	24	ADMIRAL BLVD.
BRIDGE A0248	160	160	-	-	-	-	-	RAMP
SUBTOTALS	160	160	1392	230	2100	24	24	
TOTALS	160	160	1622	230	2100	24	24	

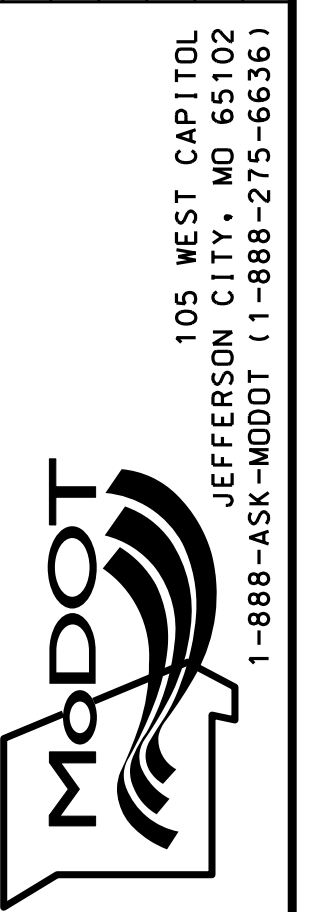
NOTE: STRIPING FOR BRIDGE L0935 WILL BE PAID FOR ON JOB #J412371

SUMMARY SHEET
SHEET 3 OF 5

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

PREFORMED REMOVABLE MARKING TAPE				
LOCATION	4" WHITE FT	4" YELLOW FT	MARKING REMOVAL FT	REMARKS
RTE. 7 W/O I-49 RAMP		250	30	STAGE 1
SB RTE. I-49 RAMP		190	165	STAGE 1
BETWEEN RAMP		400	790	STAGE 1
RTE. 7 E/O I-49 RAMP	495	560	1250	STAGE 1
RTE. 7 W/O I-49 RAMP	250			STAGE 2
BETWEEN RAMP		400	175	STAGE 2
RTE. 7 E/O I-49 RAMP		1115		STAGE 2
TOTALS	745	2915	2410	

PERMANENT PAVEMENT MARKING			
LOCATION	6" WHITE FT	6" YELLOW FT	24" WHITE FT
RTE. 7 W/O I-49 RAMP	30		32
SB RTE. I-49 RAMP	165		24
BETWEEN RAMP	1100	800	24
RTE. 7 E/O I-49 RAMP	100	1150	
TOTALS	1395	1950	80

SP 125C PG 70-22, TACK AND COLDMILLING			
LOCATION	1 3/4" SP125C TONS	TACK GAL	COLDMILLING SY
W/O BRIDGE A1496	31.44	32.5	325
E/O BRIDGE A1496	31.44	32.5	325
TOTALS	62.88	65	650

FULL DEPTH SHOULDER REPAIR						
LOCATION	FURNISHING AND PLACING CONCRETE SY	SUBGRADE COMPACTION SY	TYPE 1 OR 5 AGG FOR BASE SY	SAW CUT LF	DOWEL BAR EACH	REMARKS
SW QUADRANT OF BRIDGE	46.7	5	5	152	82	TO BE DIRECTED BY ENGINEER
TOTALS	46.7	5	5	152	82	

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/19/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 3

COUNTY

JACKSON/CASS

JOB NO.

J413012

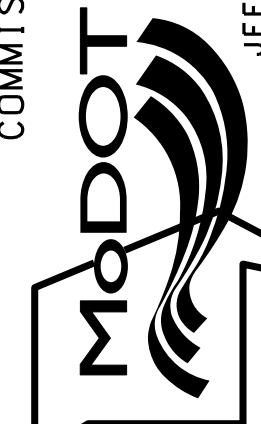
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

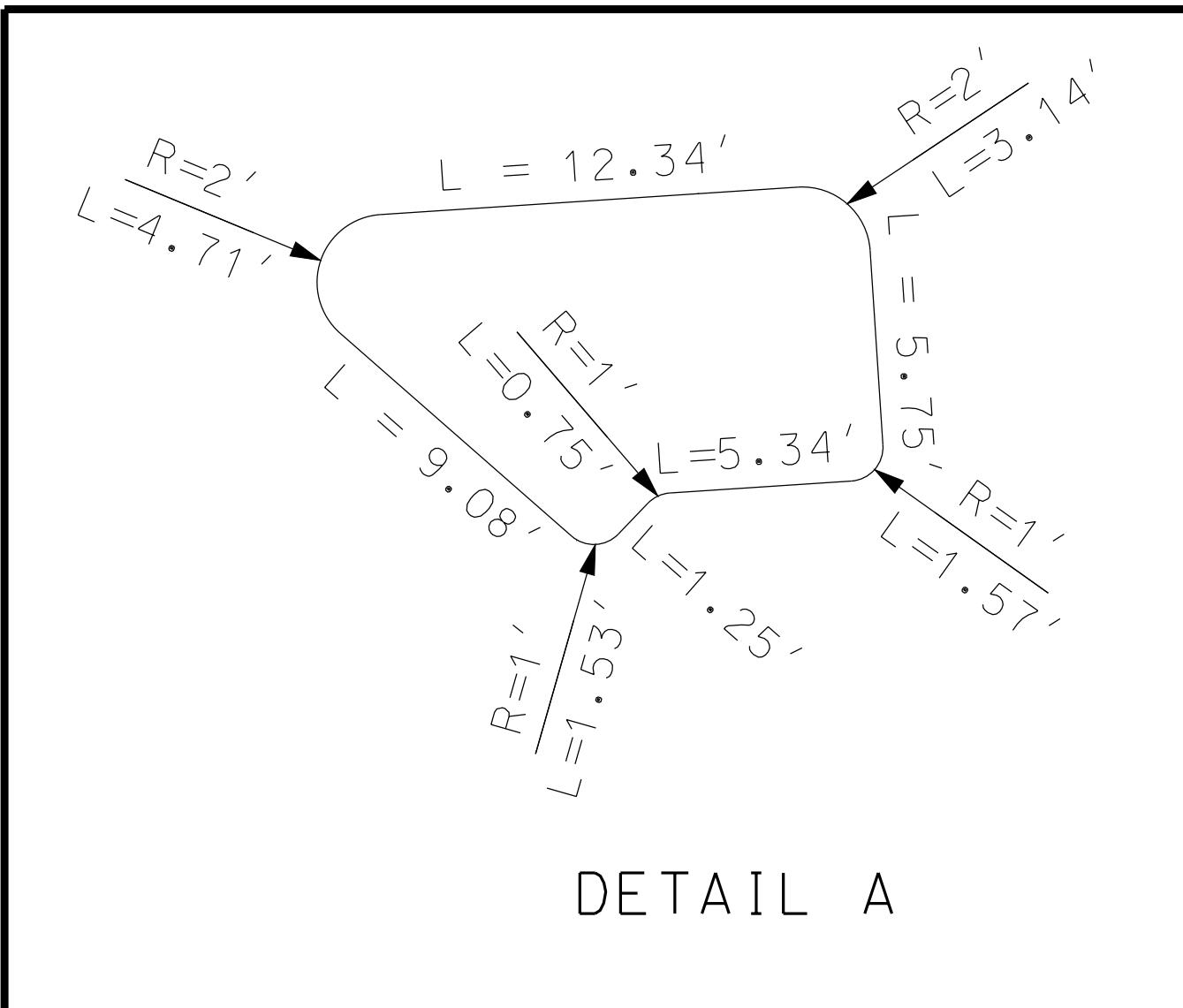
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

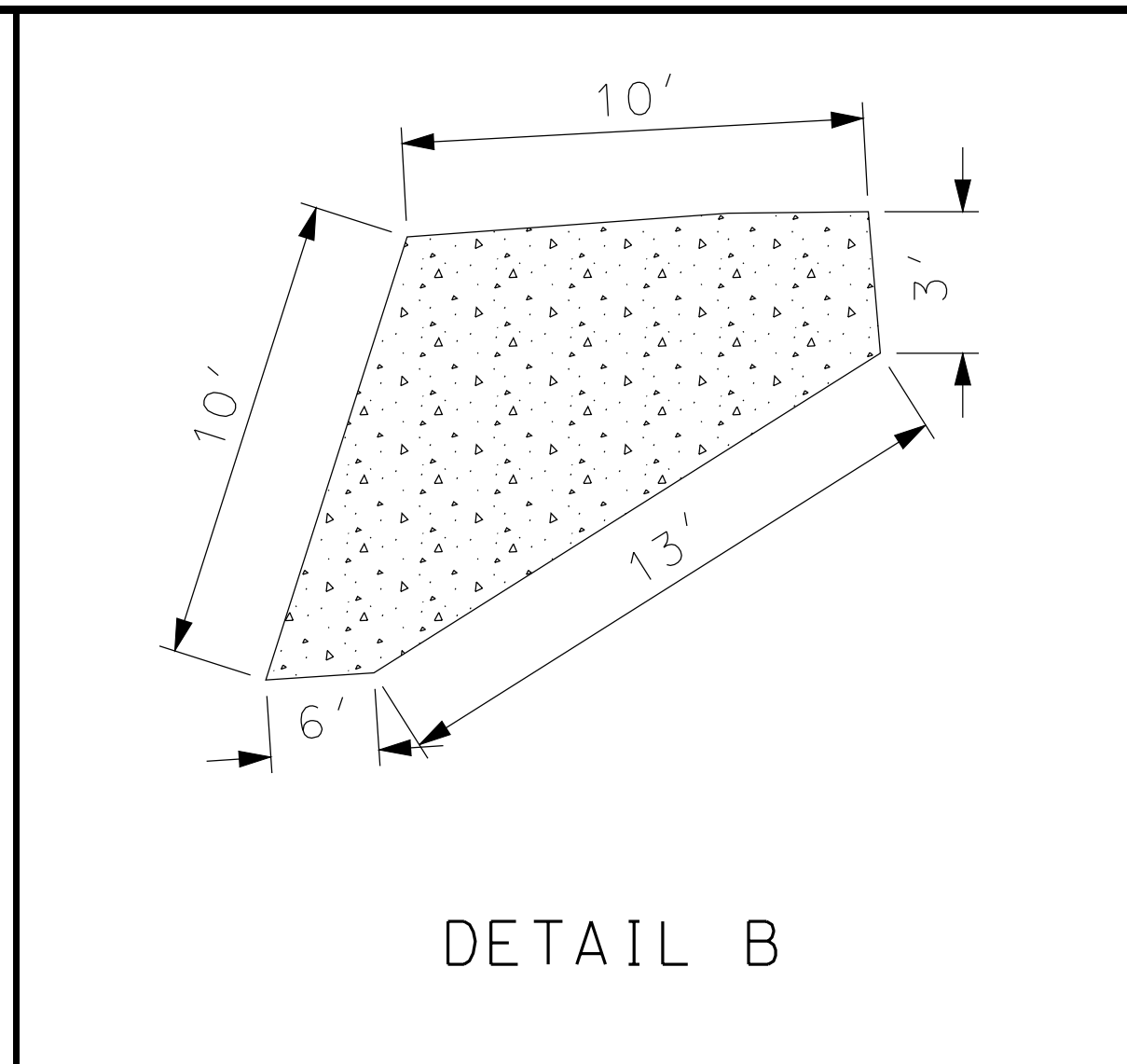


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

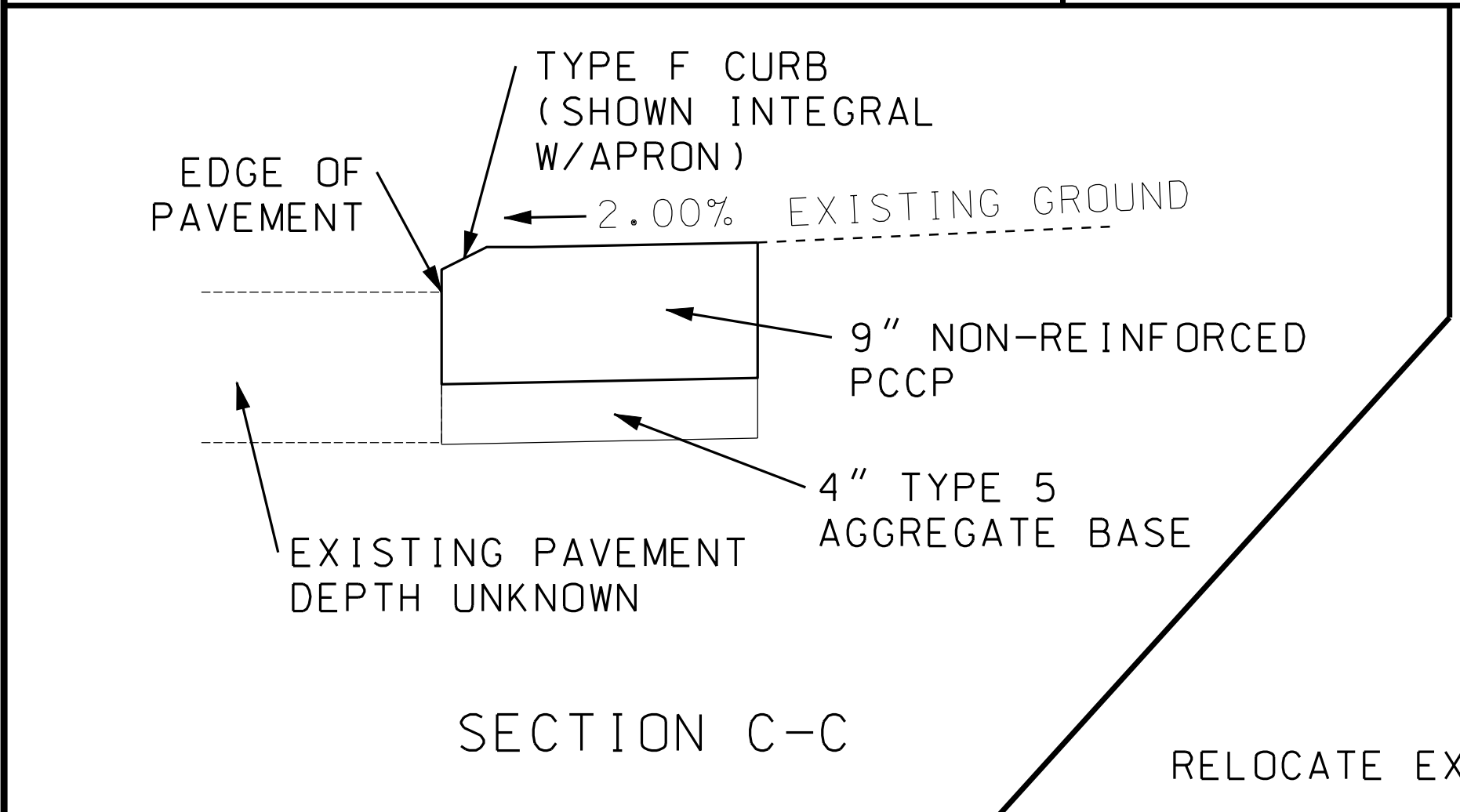
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



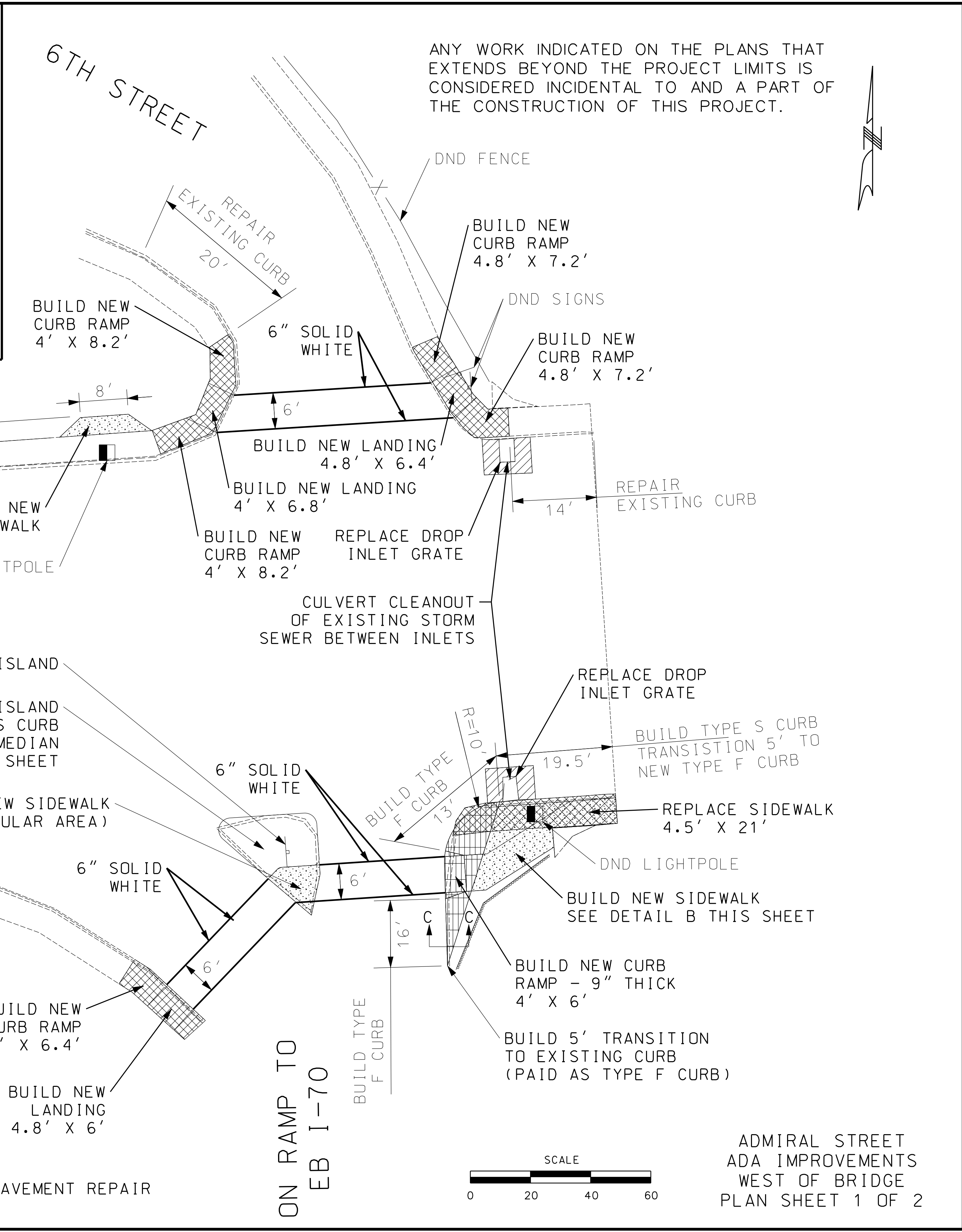
DETAIL A



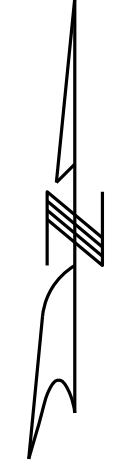
DETAIL B



SECTION C-C



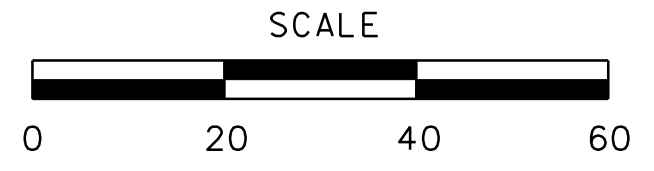
ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.



ADMIRAL BLVD

ON RAMP TO EB I-70

- REMOVE EXISTING CURB AND SIDEWALK
- BUILD OR REPLACE WITH NEW SIDEWALK
- BUILD 9" THICK RAISED CONCRETE TRUCK APRON
- PAVEMENT REPAIR

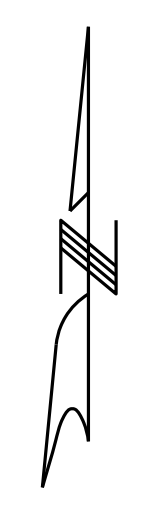
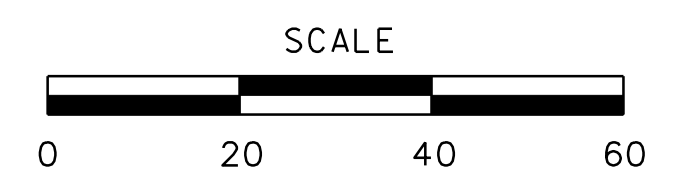
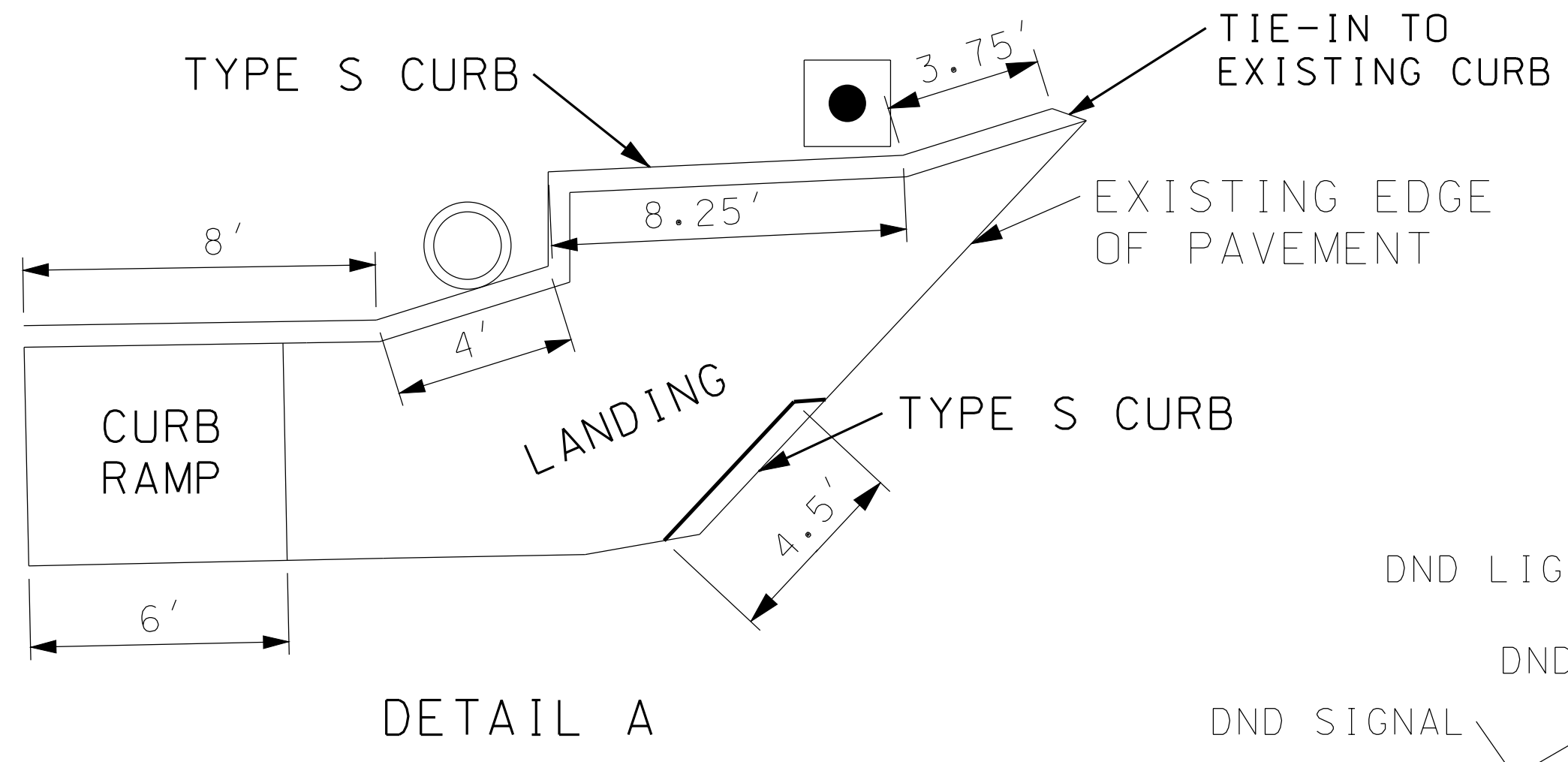
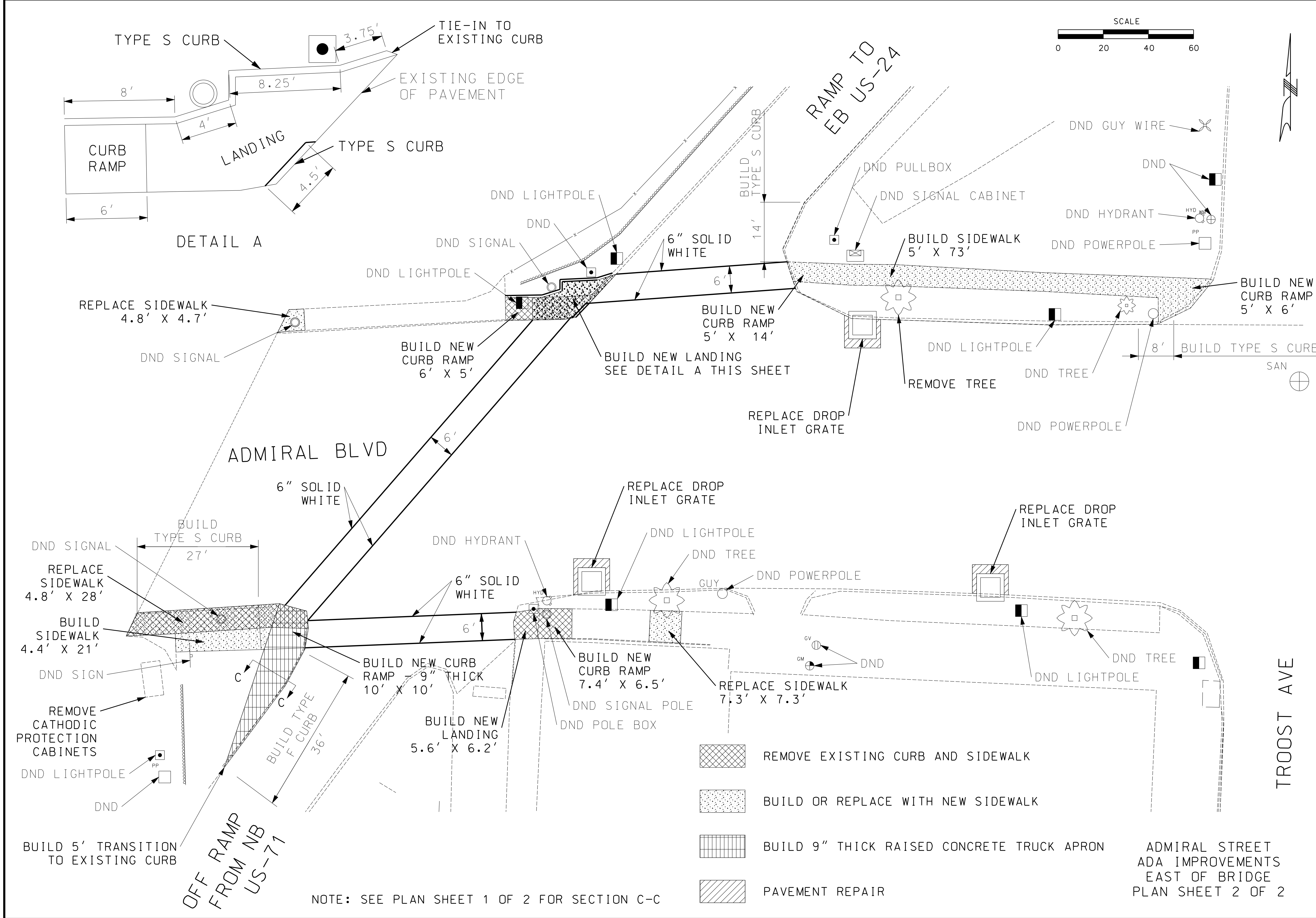


ADMIRAL STREET
ADA IMPROVEMENTS
WEST OF BRIDGE
PLAN SHEET 1 OF 2

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 4
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L0936	
DESCRIPTION	DATE
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED: 12/14/2012

ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	5
COUNTY	
JACKSON/CASS	
JOB NO.	
J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
L0936	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

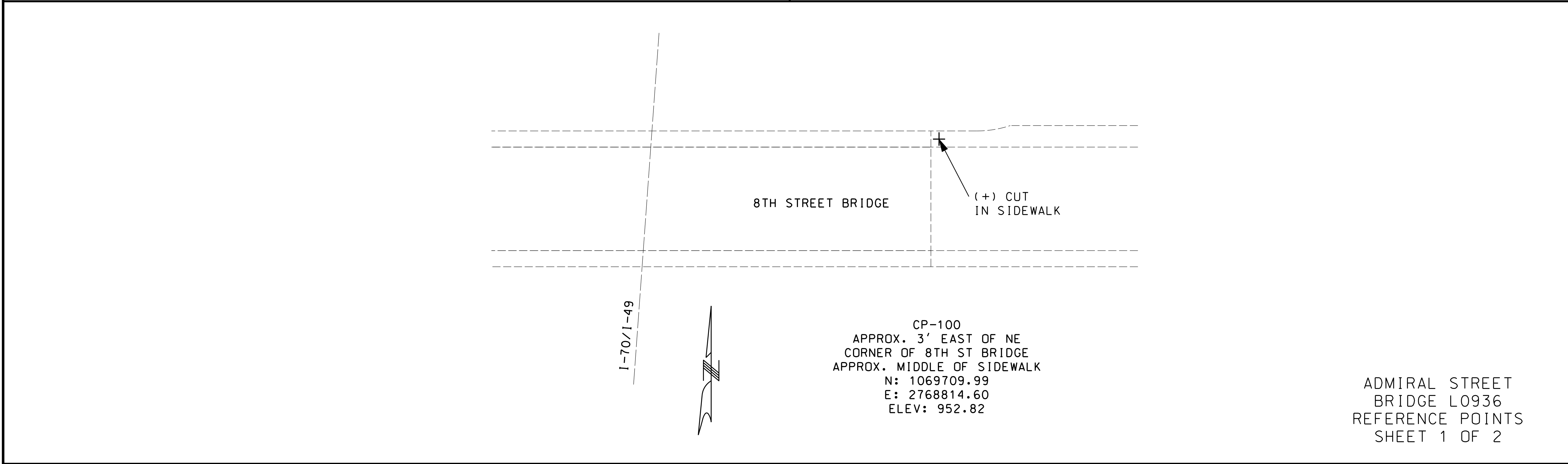
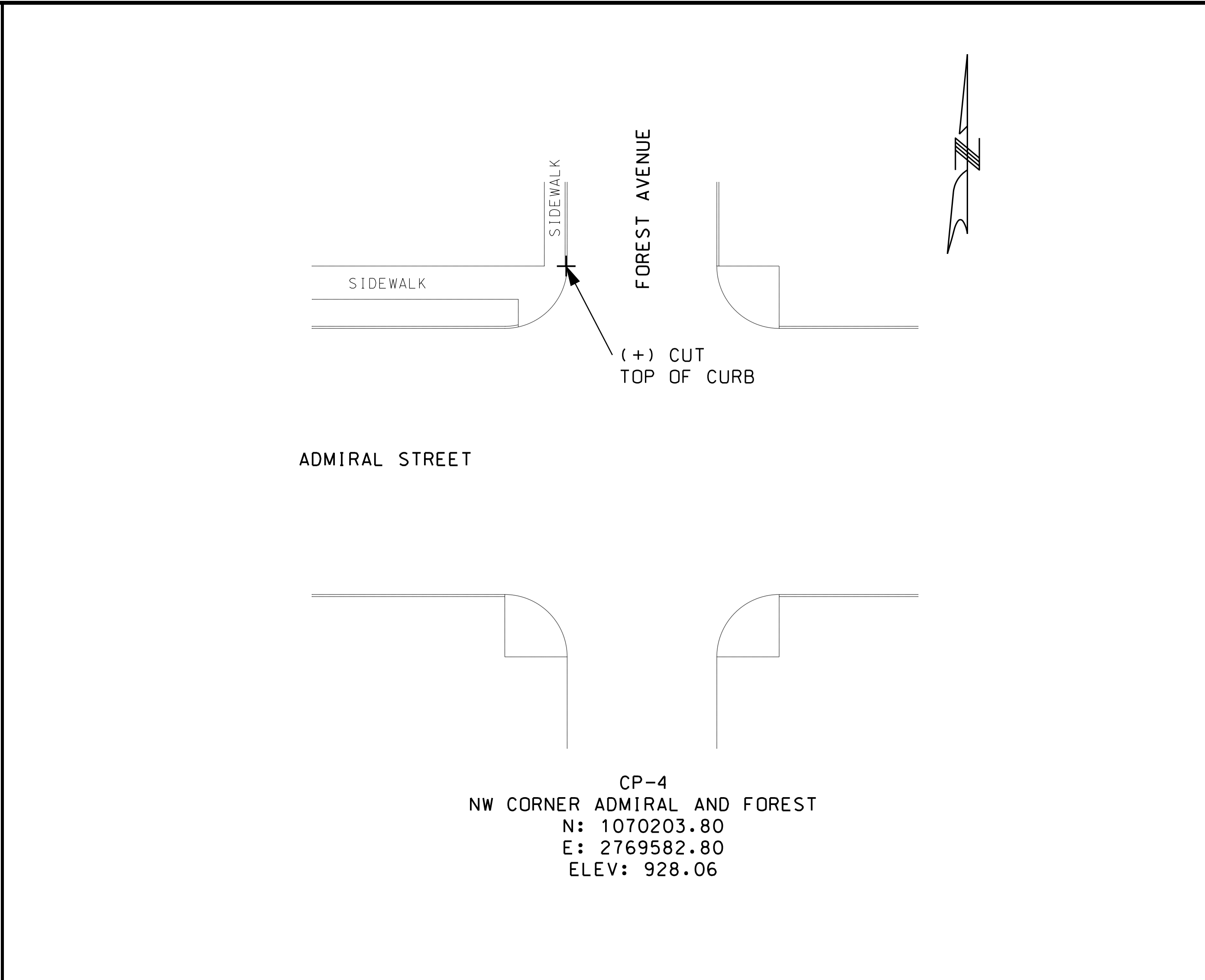
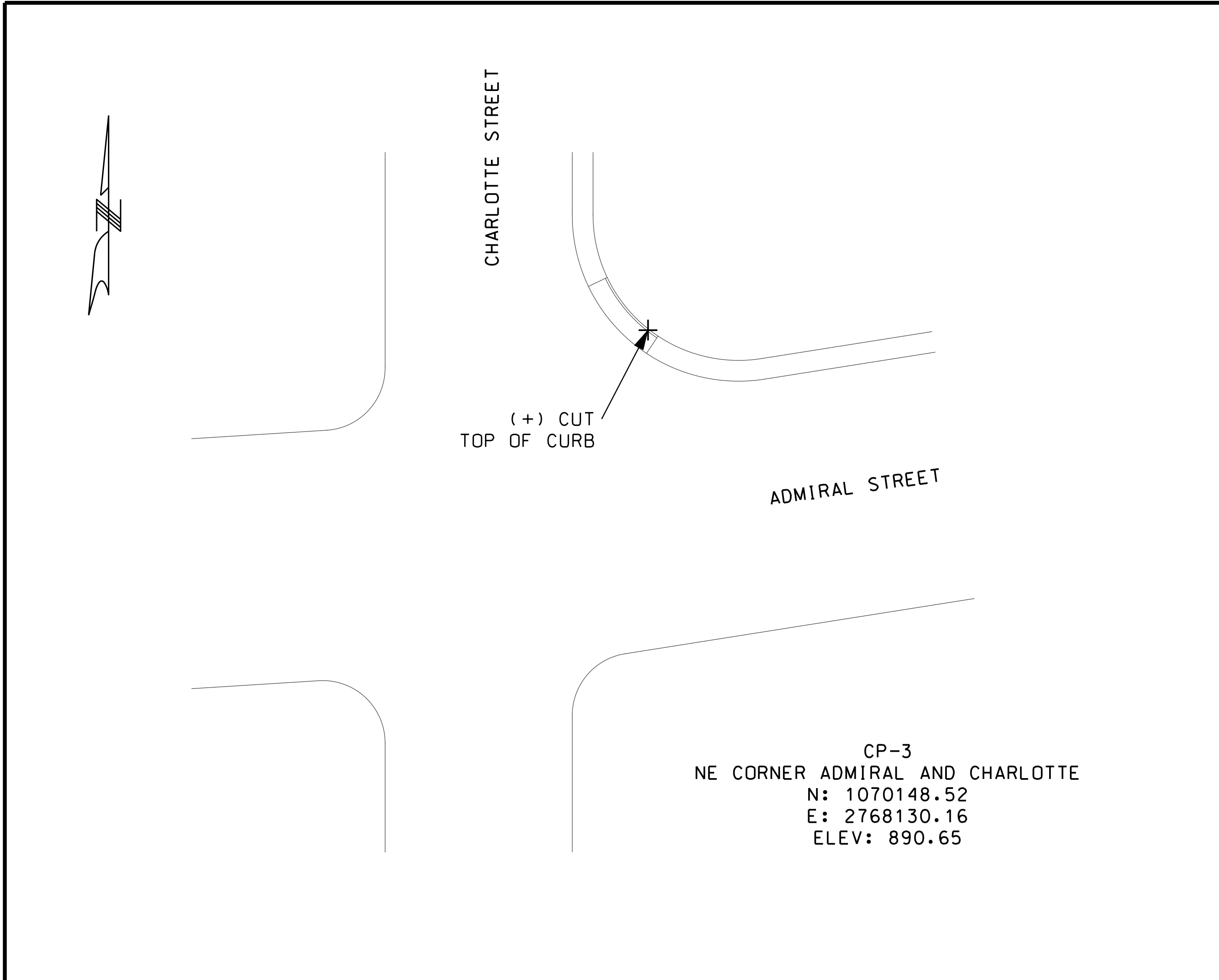
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

- REMOVE EXISTING CURB AND SIDEWALK
- BUILD OR REPLACE WITH NEW SIDEWALK
- BUILD 9" THICK RAISED CONCRETE TRUCK APRON
- PAVEMENT REPAIR

ADMIRAL STREET
ADA IMPROVEMENTS
EAST OF BRIDGE
PLAN SHEET 2 OF 2

NOTE: SEE PLAN SHEET 1 OF 2 FOR SECTION C-C

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 6

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0936

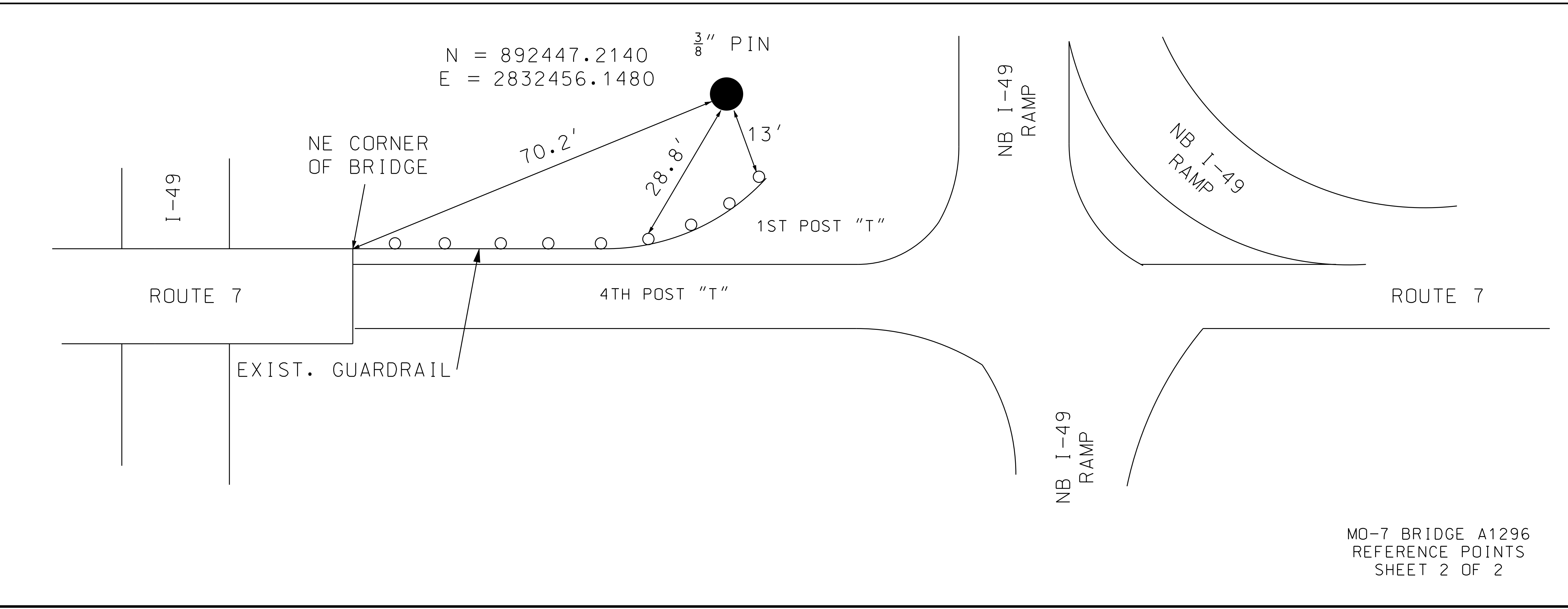
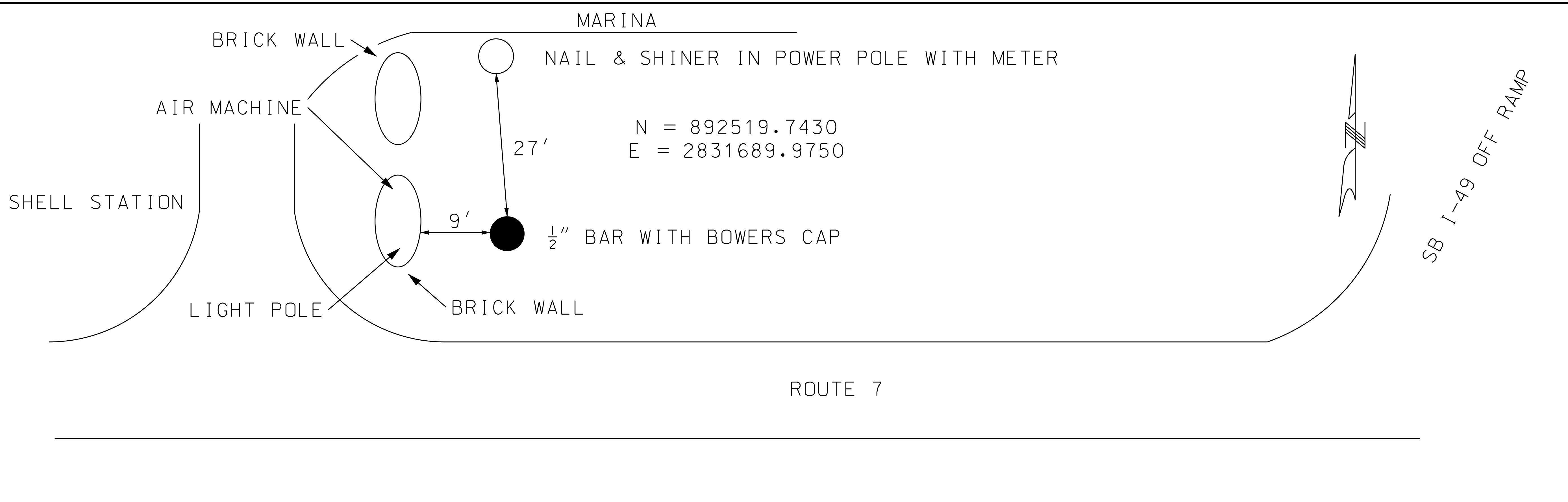
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE
VAR.

STATE
MO

DISTRICT
KC

SHEET NO.
7

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A1496

DATE	DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

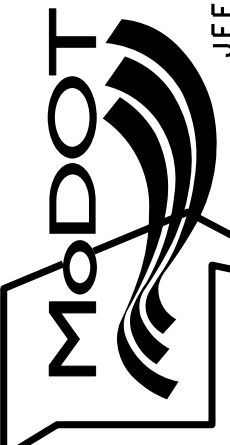
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DATE

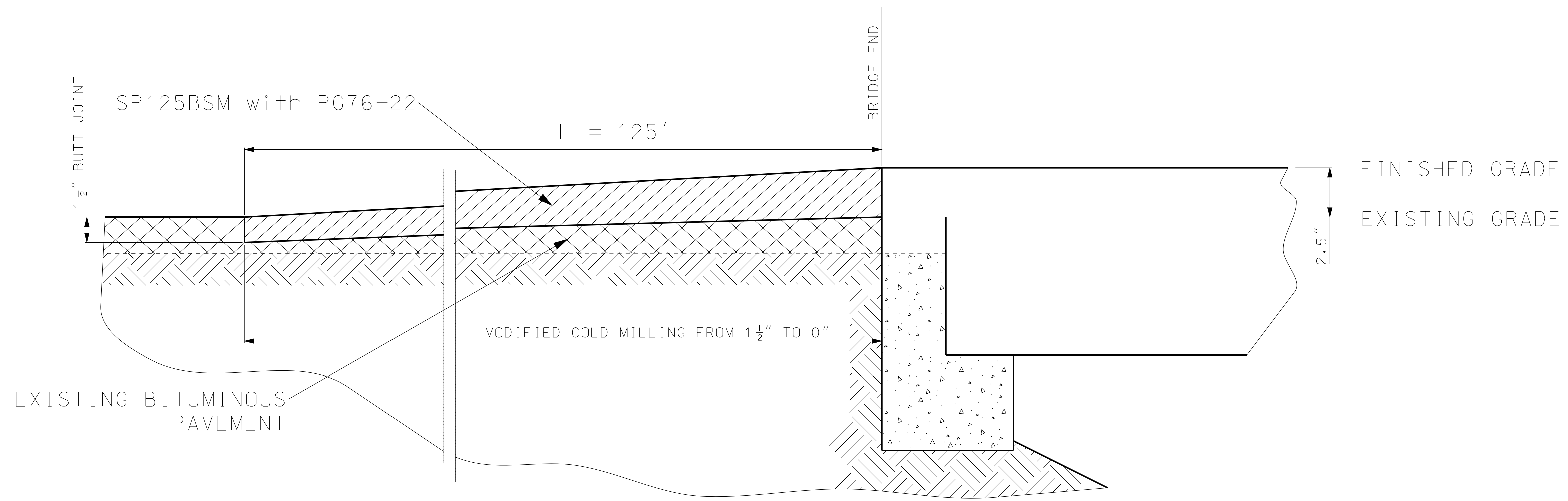
DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NOTE: MAINTAIN SUPERELEVATION THROUGHOUT PROFILE GRADE CHANGE


I-70 BRIDGE L0935
 PAVEMENT TRANSITION AT BRIDGE ENDS
 FOR BRIDGE GRADE CHANGE
 SPECIAL SHEET 1 OF 3

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 8
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L0935	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
1/11/2013

ROUTE VAR. MO
DISTRICT KC SHEET NO. 9
COUNTY

JACKSON/CASS

JOB NO. J413012
CONTRACT ID.

PROJECT NO.

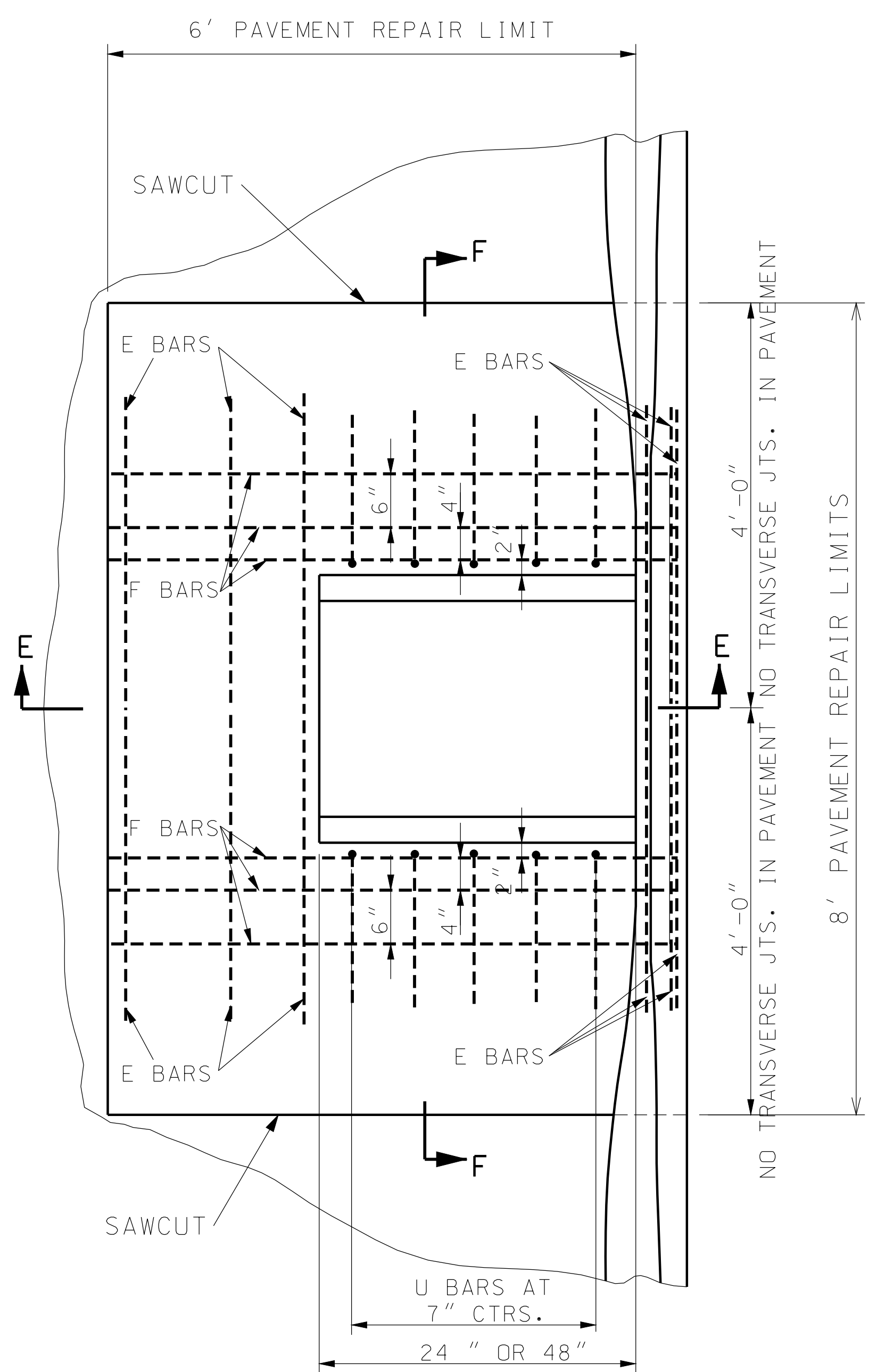
BRIDGE NO. L0936

DATE	DESCRIPTION

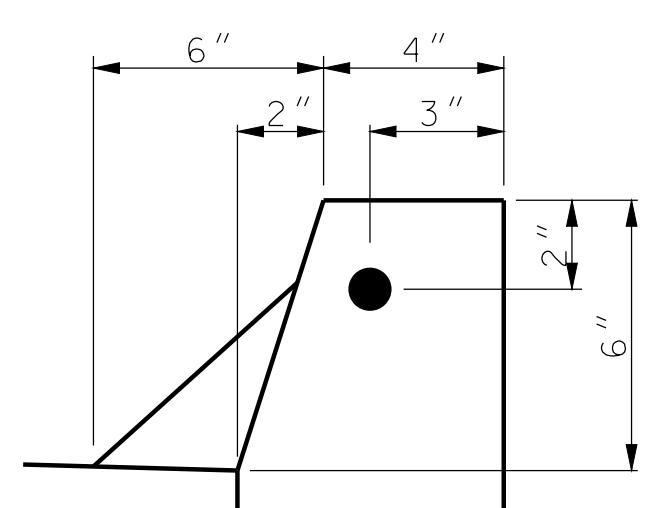
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

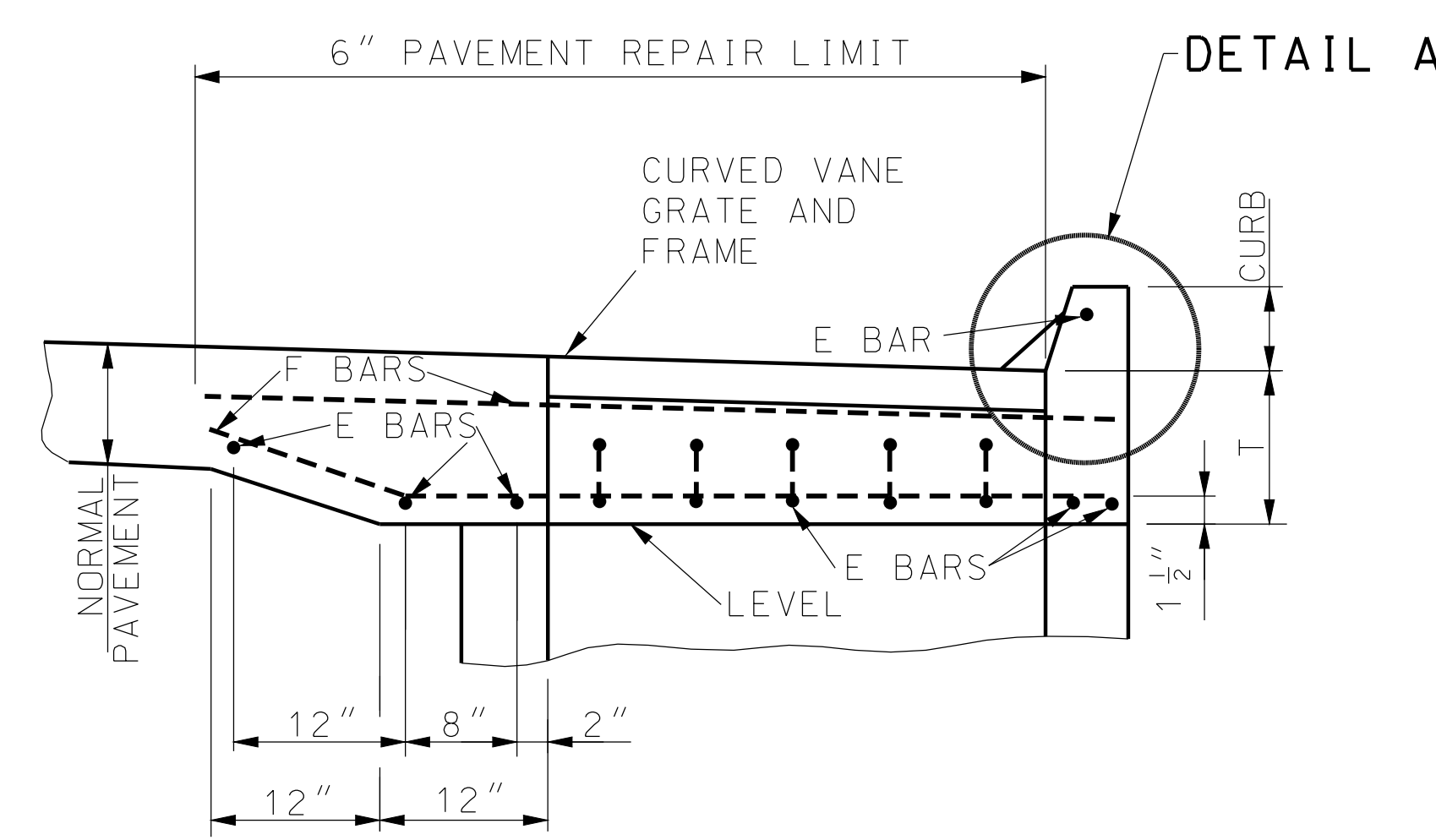
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PLAN

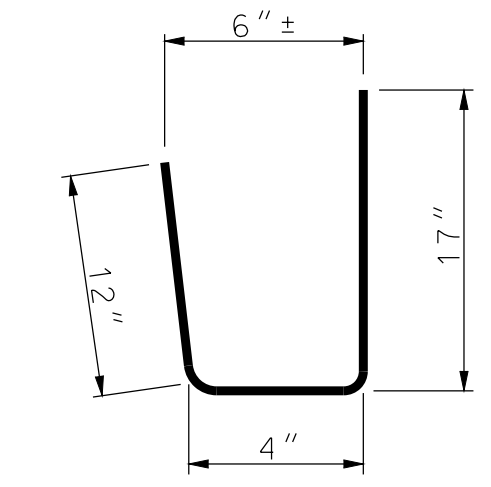


DETAIL A

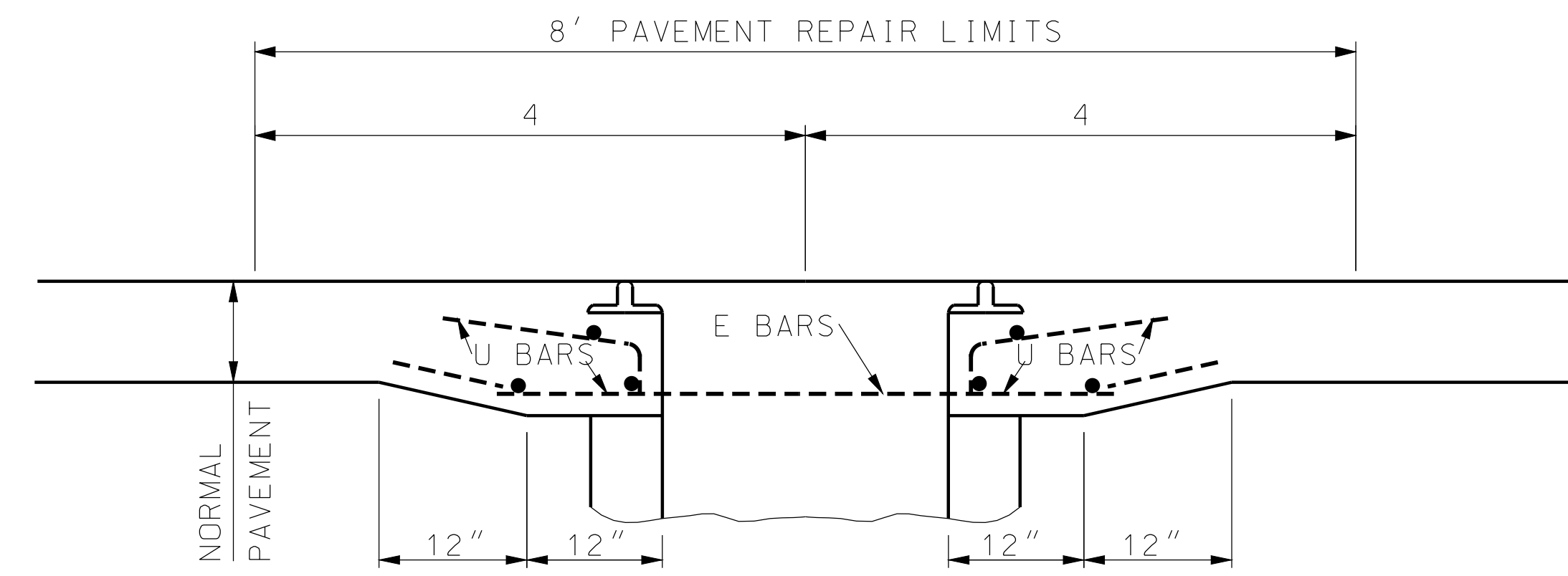


SECTION E-E

NORMAL PAVEMENT THICKNESS	"T" DIMENSION
LESS THAN OR EQUAL TO 11"	11"
12"	12"
13"	13"
GREATER THAN OR EQUAL TO 14"	14"



U-BARS BENDING DIAGRAM

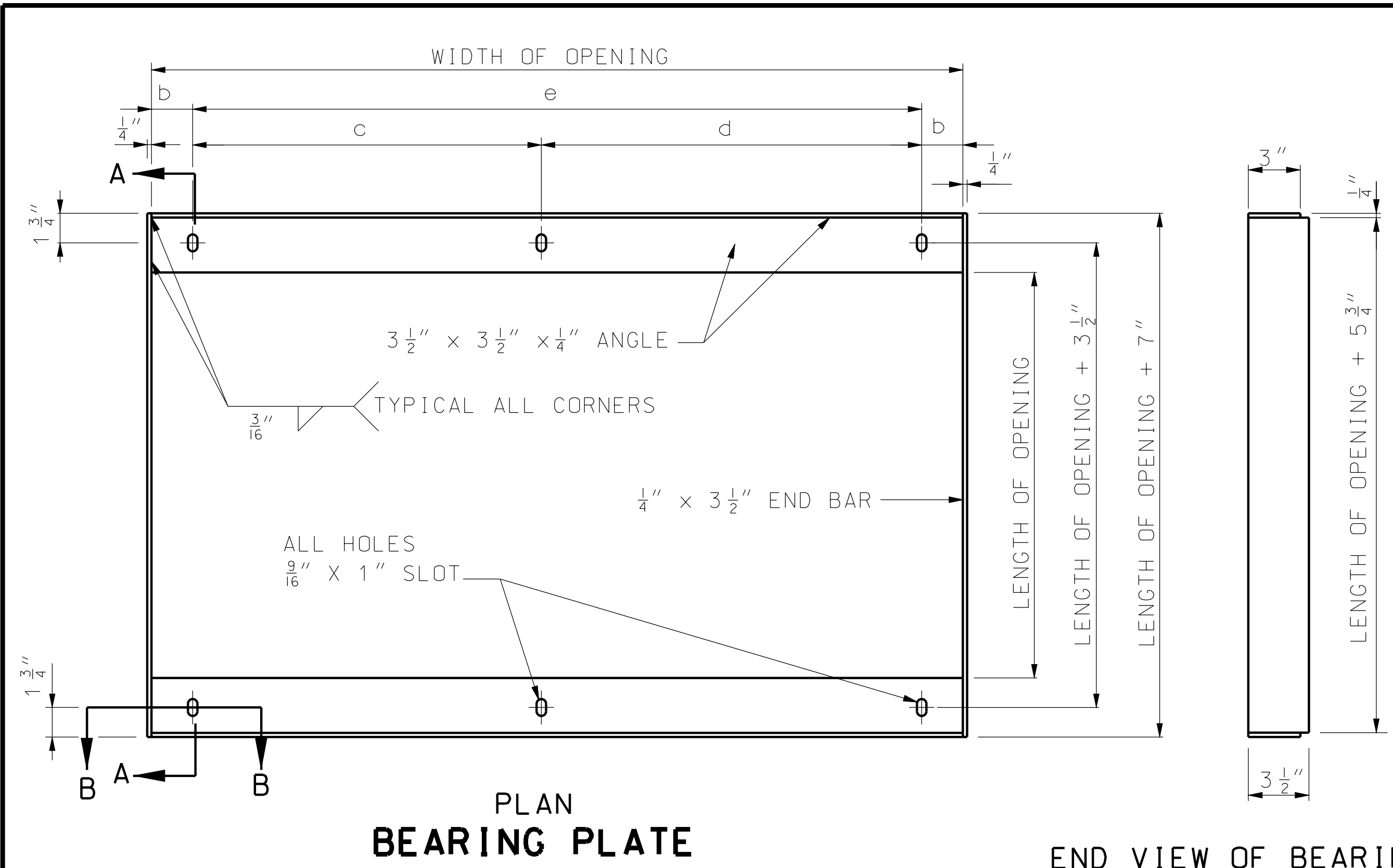


SECTION F-F

TYPE	WIDTH	LENGTH	MARK	NO.	LENGTH
A	4'	2'	E	6	6'-0"
			F	6	6'-6"
			U	14	2'-9"
A	2'	2'	E	6	6'-0"
			F	6	4'-6"
			U	8	2'-9"

BARS E, F, & U.....#4

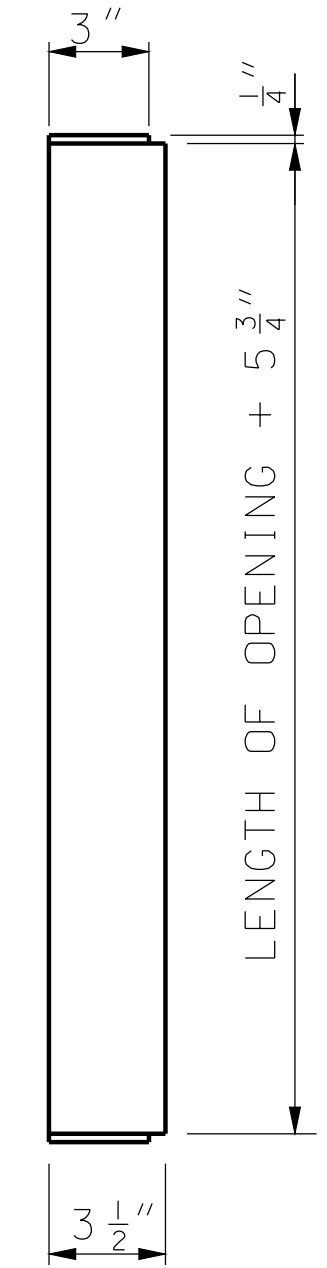
CURVED VANE GRATE REPLACEMENT DETAIL
 SPECIAL SHEET
 SHEET 2 OF 3



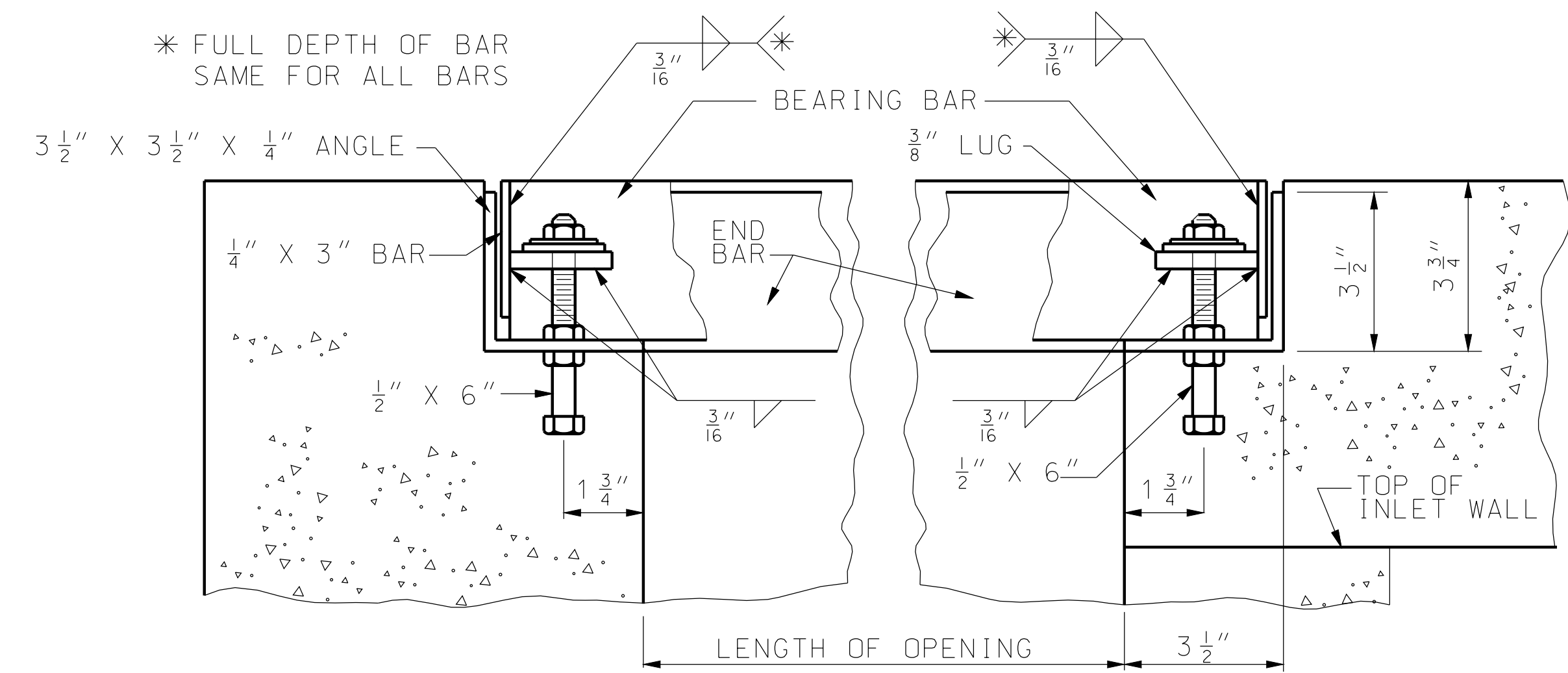
PLAN BEARING PLATE

WEIGHT AND DIMENSIONS DATA													
OPENING		WEIGHT (1) LBS.	BEARING BARS				DIMENSIONS						REMARKS
WIDTH	LENGTH		x	y	LENGTH	NUMBER	a	b	c	d	e		
3'-0"	1'-6"	190	3/8"	3"	2'-5 3/4"	11	13/16"	2 13/16"				2'-6 3/8"	USE WITH TYPE S-1 INLETS AND TYPE S HEADWALLS
2'-0"	1'-6"	190	3/8"	3"	2'-5 3/4"	11	13/16"	2 13/16"				1'-6 3/8"	

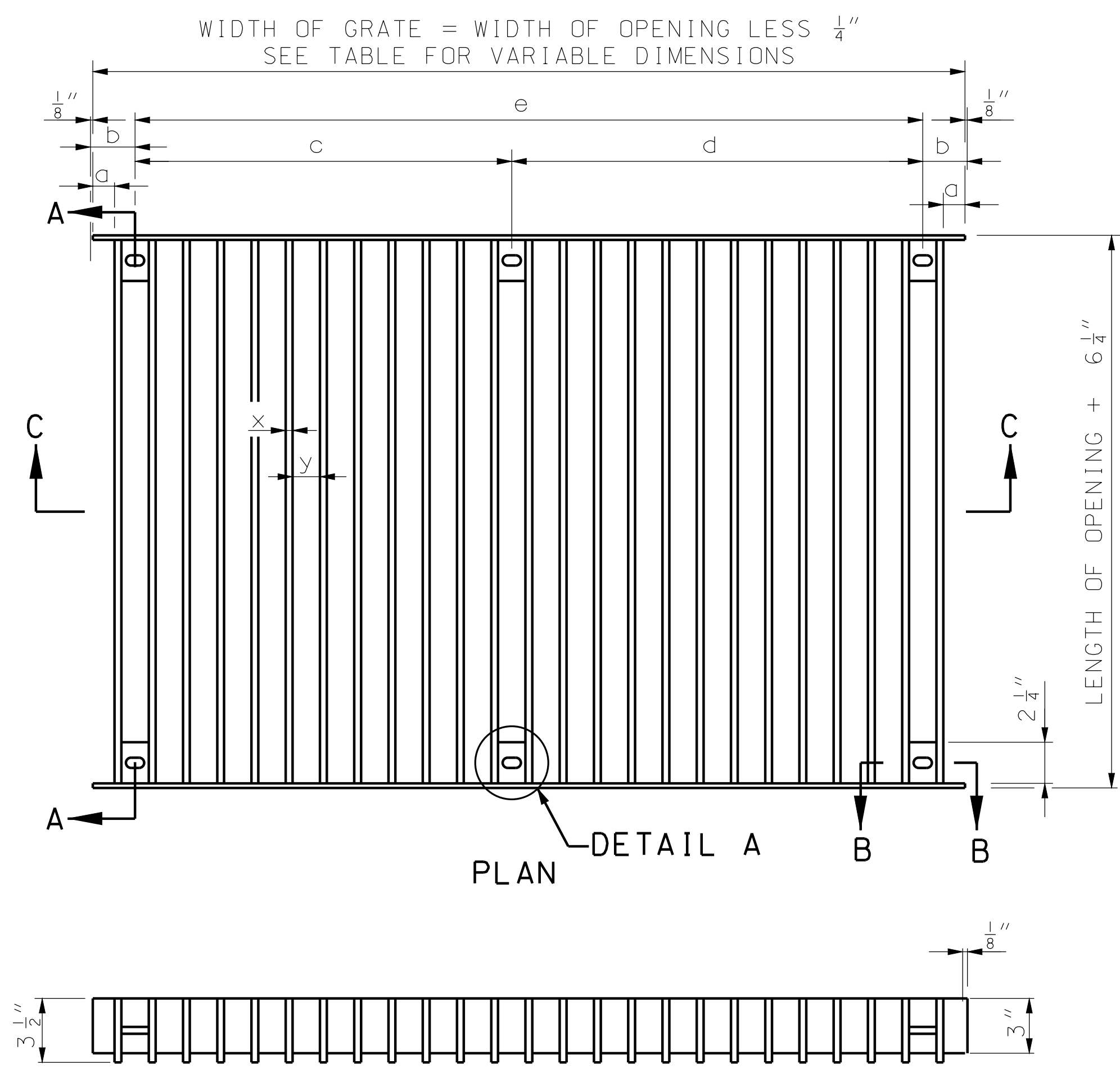
(1) THE WEIGHT OF THE GRATE AND BEARING PLATE INCLUDES THE BOLTS, NUTS, AND WASHERS AND SHALL BE AS SHOWN WITH A TOLERANCE OF 5 PERCENT.



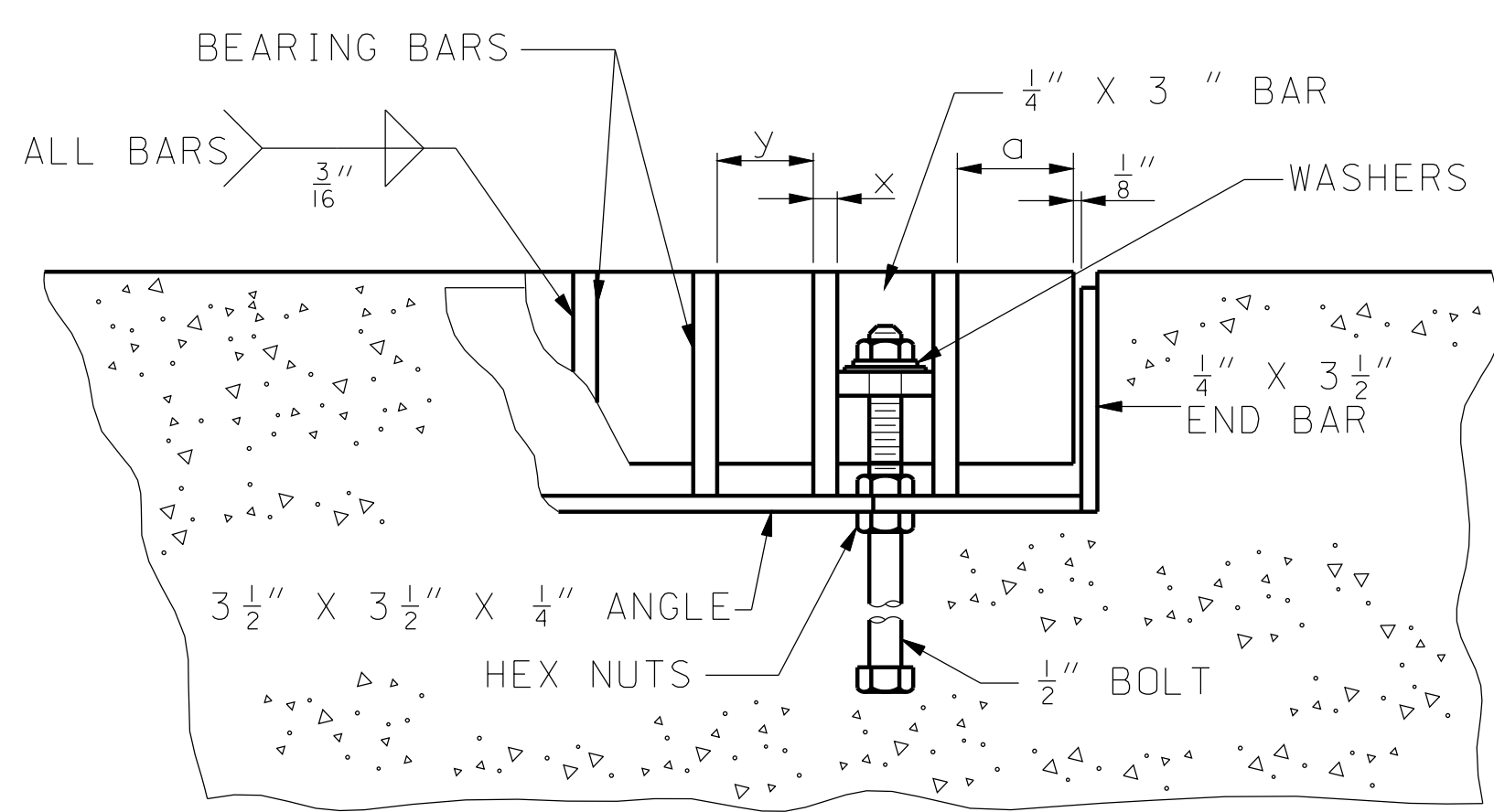
END VIEW OF BEARING BAR



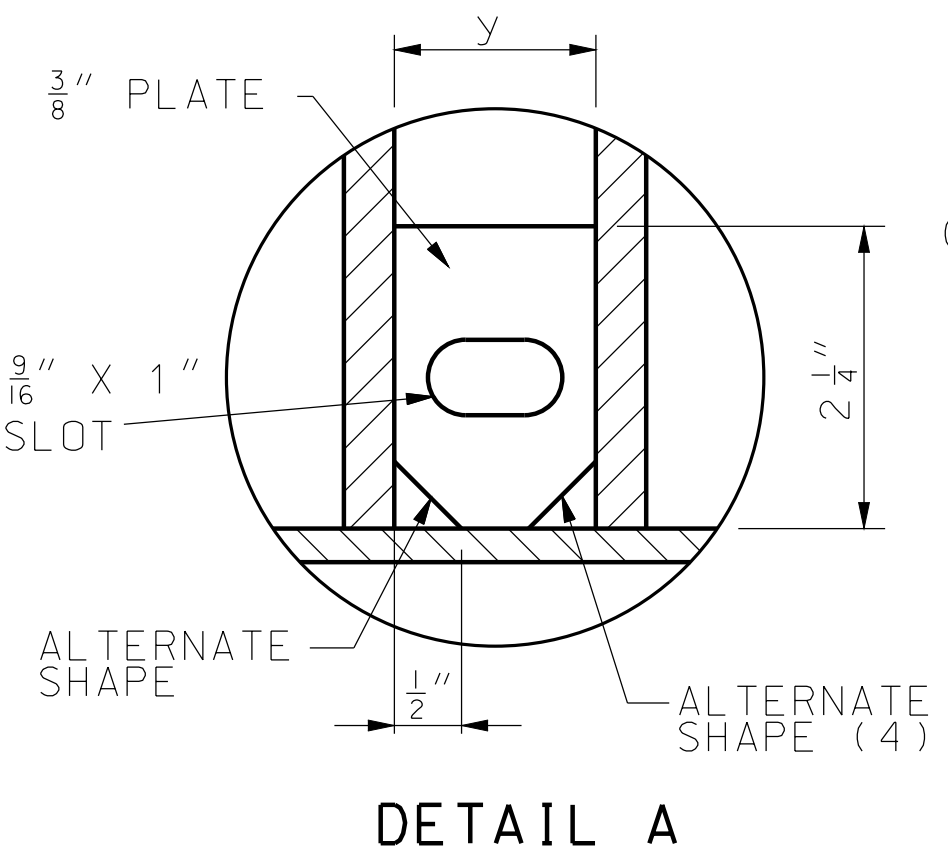
SECTION A-A



SECTION C-C
GRATE



SECTION B-B



DETAIL A

GENERAL NOTES:
WHEN BOLTS ARE CUT IN THE FIELD, THREADS MUST BE CLEANED TO PERMIT THE FINAL NUT TO RUN FREELY ON THE BOLT.
THE WELDING REQUIREMENTS SHOWN ON THIS DRAWING ARE FOR PAINTED GRATES AND BEARING PLATES. IF GALVANIZED, ALL TIGHTLY CONTACTING SURFACES SHALL BE COMPLETELY SEALED, ON ALL SIDES BY WELDING, PRIOR TO GALVANIZING.

(4) OTHER ALTERNATE SHAPES ARE ALLOWED, UPON APPROVAL, PROVIDED 4 LINEAR INCHES WELD IS MAINTAINED SYMMETRICALLY AROUND THE PLATE AND THE NOMINAL DIMENSIONS OF THE PLATE AND SLOT ARE MAINTAINED.

**GRATES AND BEARING PLATES
14TH STREET
SPECIAL SHEET
SHEET 3 OF 3**

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED: 1/15/2013

ROUTE: VAR. MO
DISTRICT: KC SHEET NO.: 9A

COUNTY: JACKSON/CASS
JOB NO.: J413012
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

Sign Spacing, Device Spacing, Channelizing Taper Lengths And Recommended Maximum Speed Reductions

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES						
SPEED (P) MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MINIMUM TAPER SHOULDER (T1)	MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT		THROUGH TAPER	THROUGH WORK AREA
0-35	205 FT	225 FT	245 FT	70	35 FT	50 FT
40-45	450 FT	495 FT	540 FT	150	40 FT	100 FT
50-55	550 FT	605 FT	660 FT	185	50 FT	100 FT
60-70	700 FT	770 FT	840 FT	235	60 FT	100 FT

TAPER LENGTH (L)

L = W X P FOR 40 MPH OR MORE
 L = $\frac{WP^2}{60}$ FOR 35 MPH OR LESS
 L = TAPER LENGTH IN FEET
 W = LATERAL SHIFT IN FEET
 P = POSTED SPEED PRIOR TO ROAD WORK IN MPH

LONGITUDINAL BUFFER SPACE	
SPEED (P) MPH	BUFFER SPACE (FEET)
0-35	250
40-45	360
50-55	495
60-70	730

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
SPEED (P) MPH	NON-DIVIDED HIGHWAYS (S)	
	NON-DIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200 FT	200 FT
40-45	350 FT	500 FT
50-55	500 FT	1000 FT
60-70	SA-1000 FT, SB-1500 FT, SC-2640 FT **	

** THE SA DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN.
 THE SB DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS.
 THE SC DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS.
 (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE)

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

- (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION
- (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS

EPG TABLE 616.29 RECOMMENDED MAXIMUM SPEED REDUCTIONS	
ACTIVITY (I.E. WORKERS, EQUIPMENT OR MATERIAL) LOCATION	RECOMMENDED WORK ZONE SPEED REDUCTION (WHEN APPLICABLE)
10 FT. BEYOND EDGE OF TRAVELWAY TO EDGE OF RIGHT OF WAY	NO SPEED REDUCTION
IN TRAFFIC LANE OR WITHIN 10FT. OF THE TRAFFIC LANE	10 MPH
HEAD-TO-HEAD ON MULTILANE	10 MPH
SPECIAL CIRCUMSTANCES WITHIN A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY WARRANT A LOWER SPEED LIMIT THAN RECOMMENDED ABOVE. ALL SPEED LIMIT REDUCTIONS GREATER THAN 10 MPH SHALL BE DOCUMENTED, SUBMITTED TO AND APPROVED BY THE DISTRICT WORK ZONE COORDINATOR.	

GENERAL NOTES:

1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN
2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
4. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE. ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS.

DEVICE SPACING
 TEMPORARY TRAFFIC CONTROL
 SHEET 1 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 10

COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

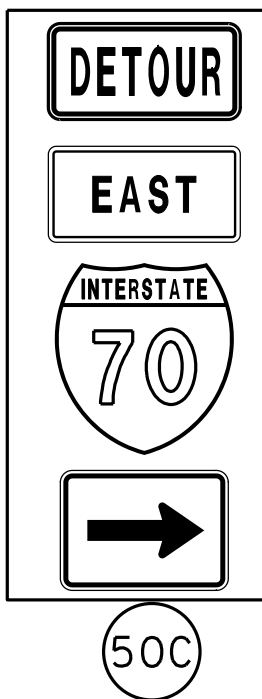
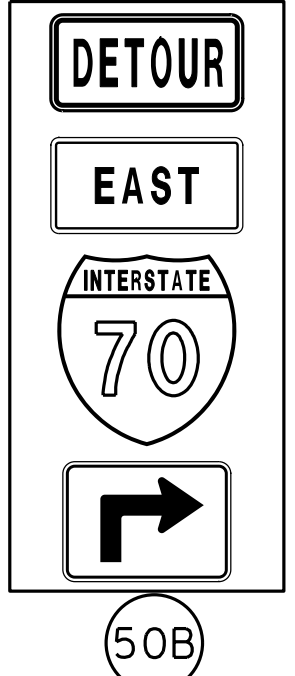
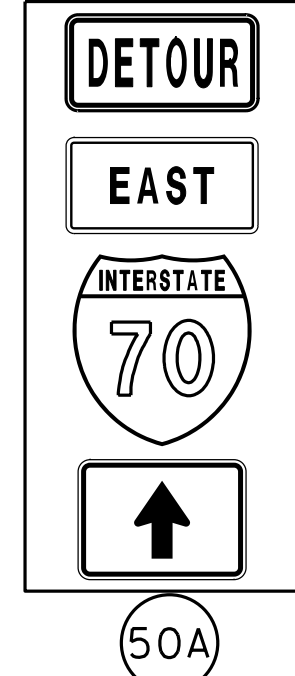
"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 11
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A0248	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.



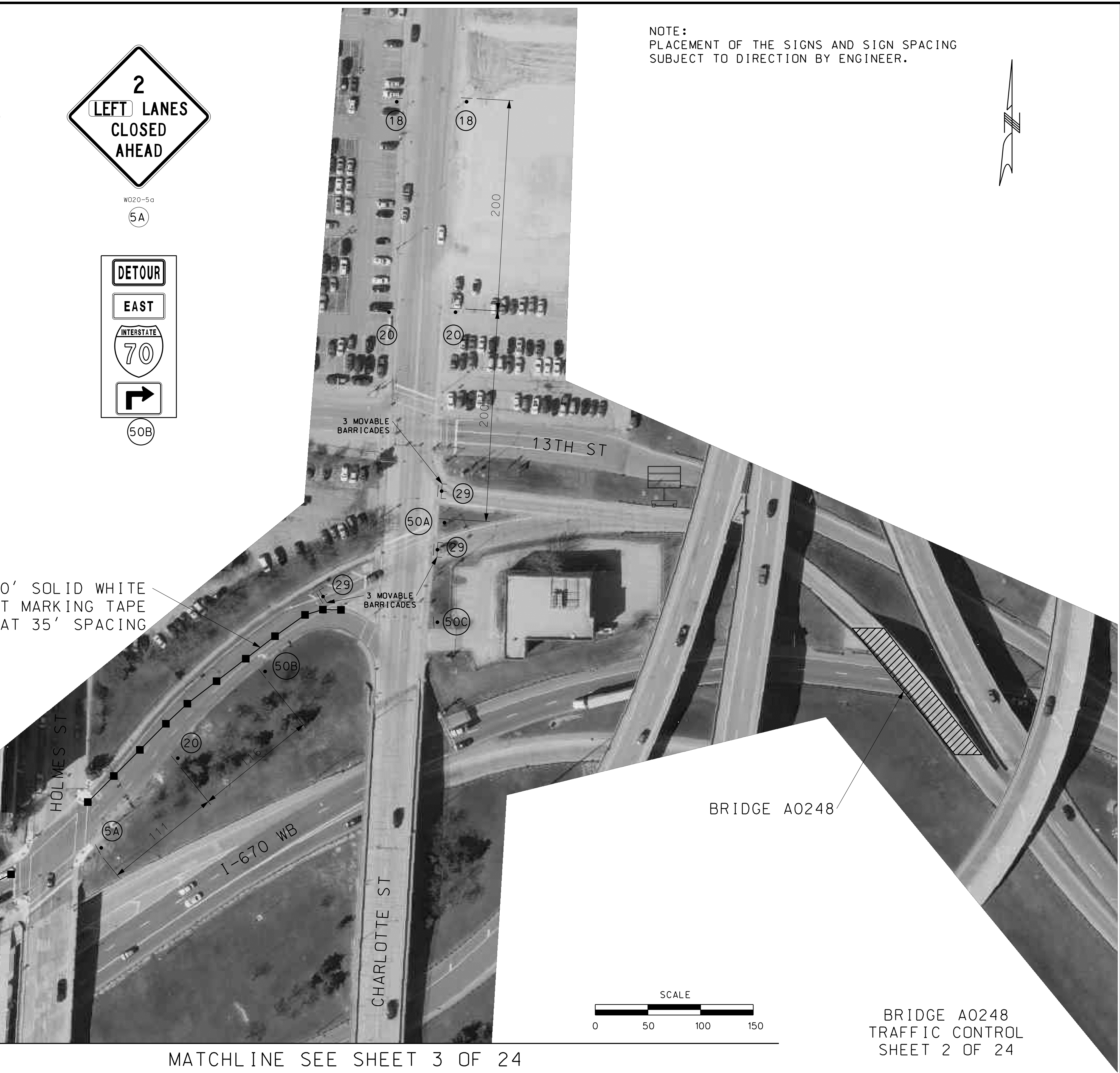
310' SOLID WHITE TEMPORARY PAVEMENT MARKING TAPE
11 CHANNILIZERS AT 35' SPACING

■ CHANNILIZERS

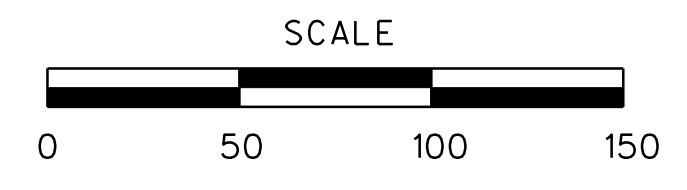
CHANGEABLE MESSAGE SIGN



255' SOLID WHITE TEMPORARY PAVEMENT MARKING TAPE
8 CHANNILIZERS AT 35' SPACING



BRIDGE A0248

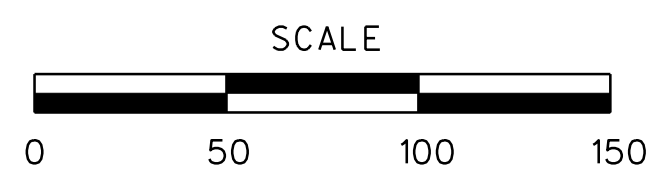
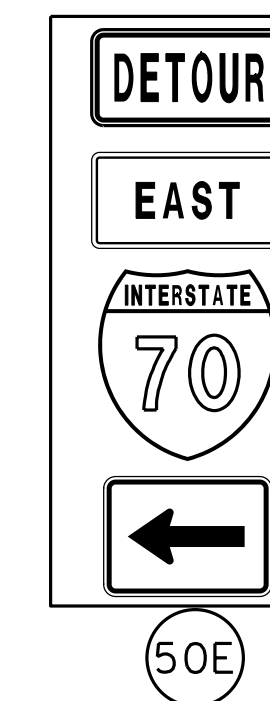
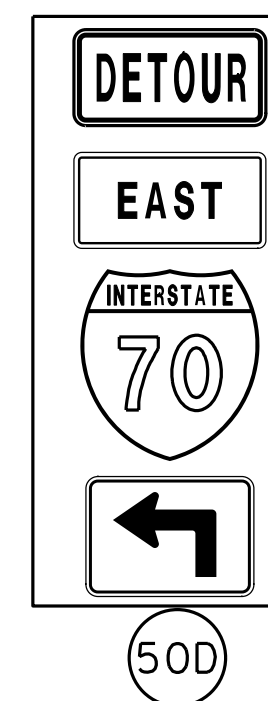


BRIDGE A0248
TRAFFIC CONTROL
SHEET 2 OF 24

MATCHLINE SEE SHEET 3 OF 24

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MATCHLINE SEE SHEET 2 OF 24



NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.

BRIDGE A0248
TRAFFIC CONTROL
SHEET 3 OF 24

MATCHLINE SEE SHEET 4 OF 24

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

"THIS MEDIA SHOULD
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DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	12

COUNTY
JACKSON/CASS

JOB NO.
J413012

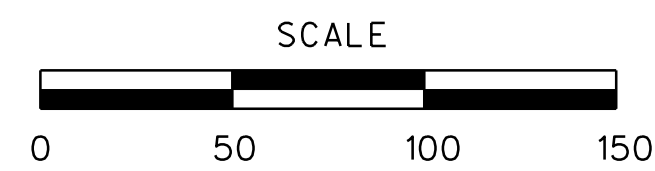
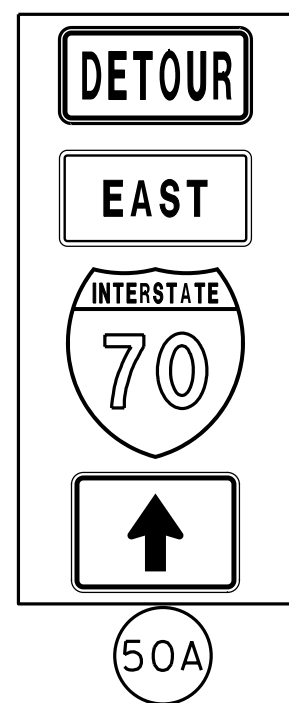
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A0248

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MATCHLINE SEE SHEET 3 OF 24



NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.

MATCHLINE SEE SHEET 5 OF 24

BRIDGE A0248
TRAFFIC CONTROL
SHEET 4 OF 24

"THIS MEDIA SHOULD
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DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 13

COUNTY
JACKSON/CASS

JOB NO.
J413012

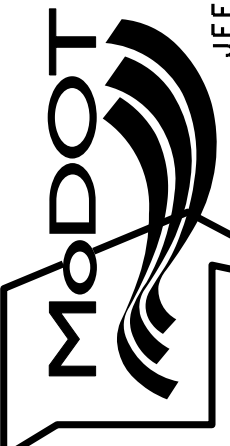
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A0248

DATE	DESCRIPTION

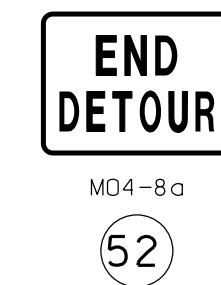
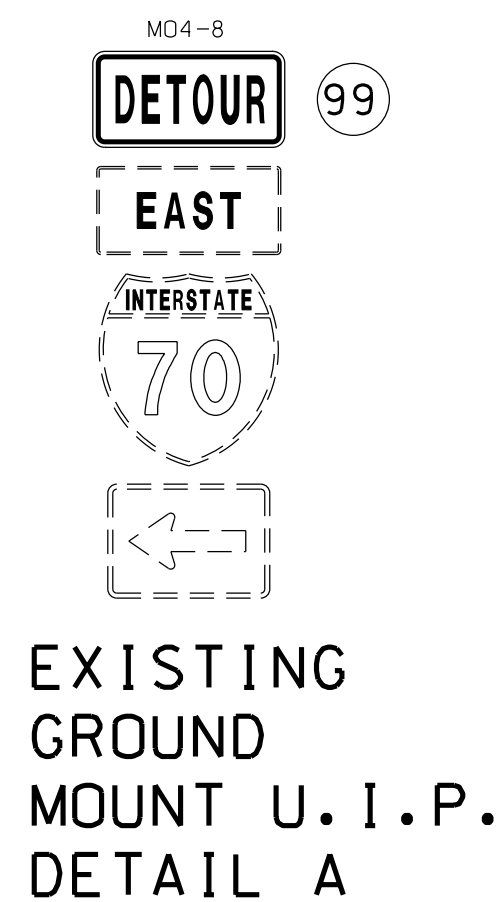
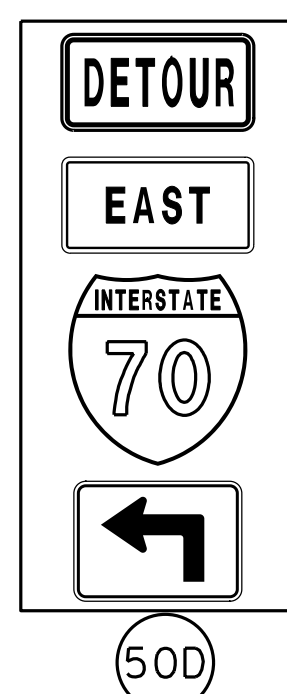
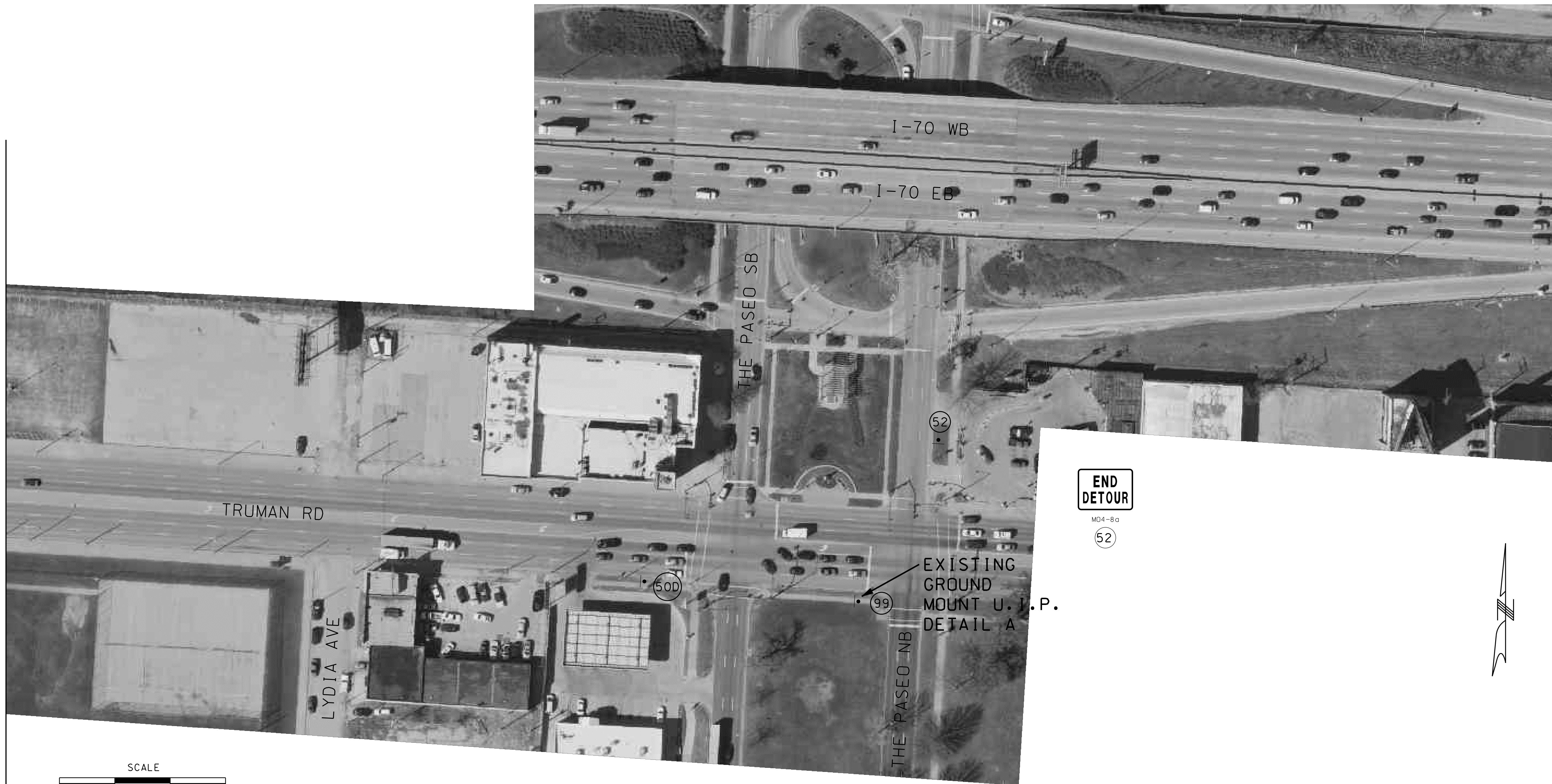
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MATCHLINE SEE SHEET 4 OF 24



NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.

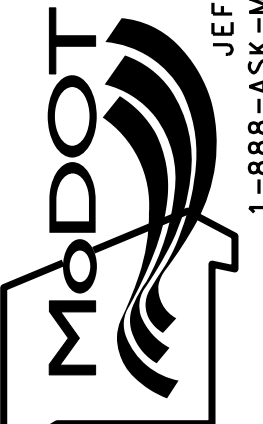
BRIDGE A0248
TRAFFIC CONTROL
SHEET 5 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012
ROUTE STATE
VAR. MO
DISTRICT SHEET NO.
KC 14
COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.

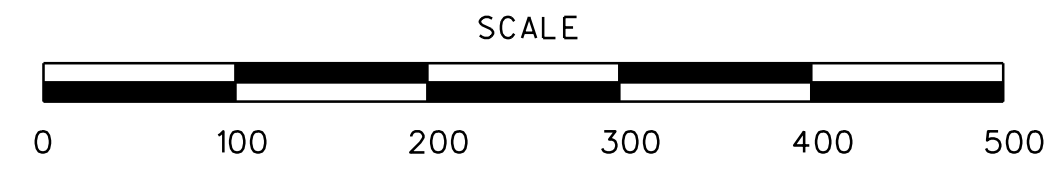
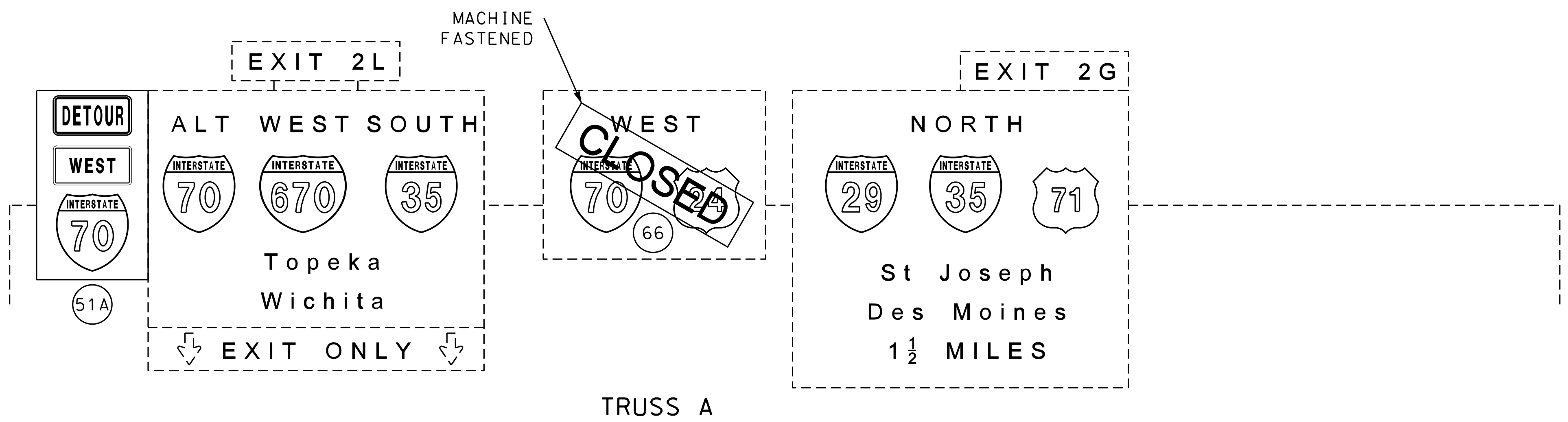
PROJECT NO.
BRIDGE NO.
A0248

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-278-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MATCHLINE SEE SHEET 7 OF 24



NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.

BRIDGE L0935
TRAFFIC CONTROL
SHEET 6 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED: 12/14/2012

ROUTE: VAR. STATE: MO

DISTRICT: KC SHEET NO.: 15

COUNTY: JACKSON/CASS

JOB NO.: J413012

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.: L0935

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

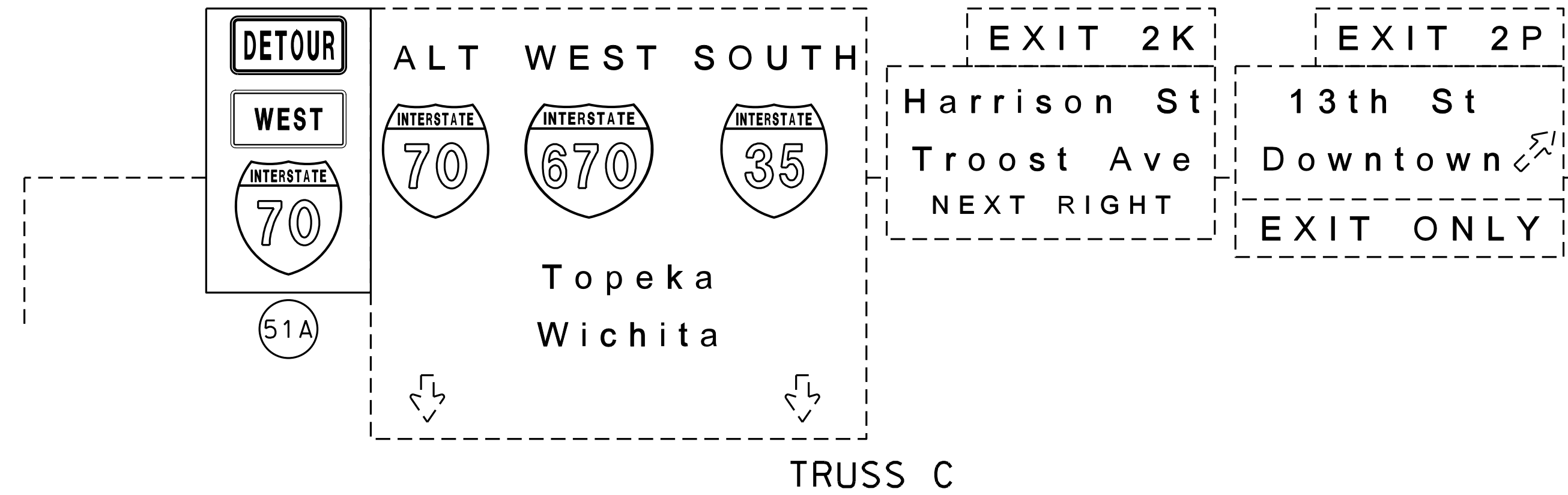
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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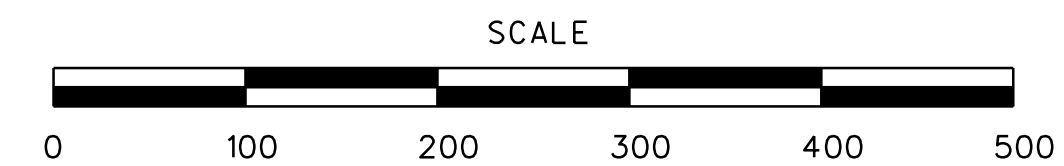
MATCHLINE SEE SHEET 10 OF 24



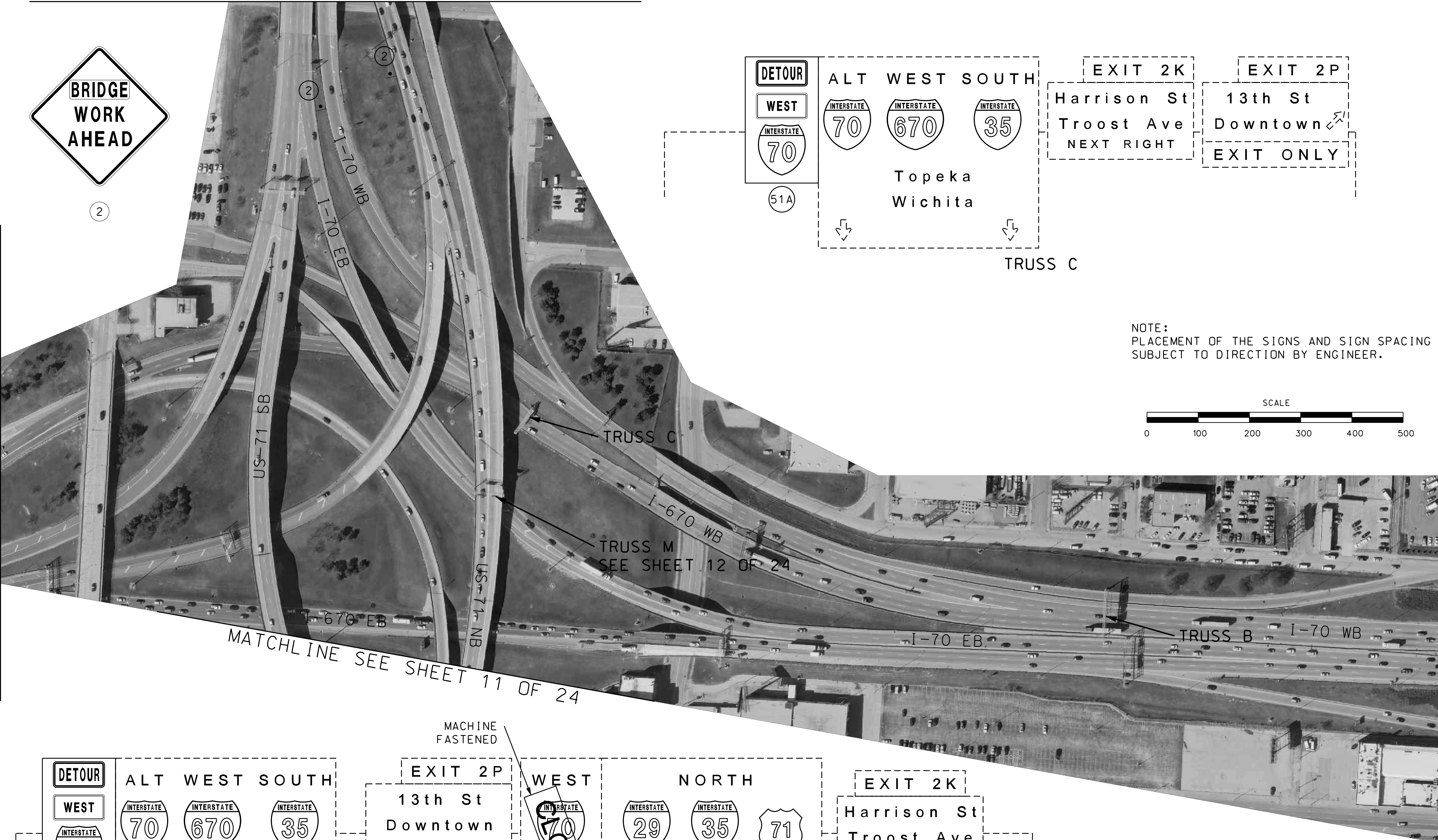
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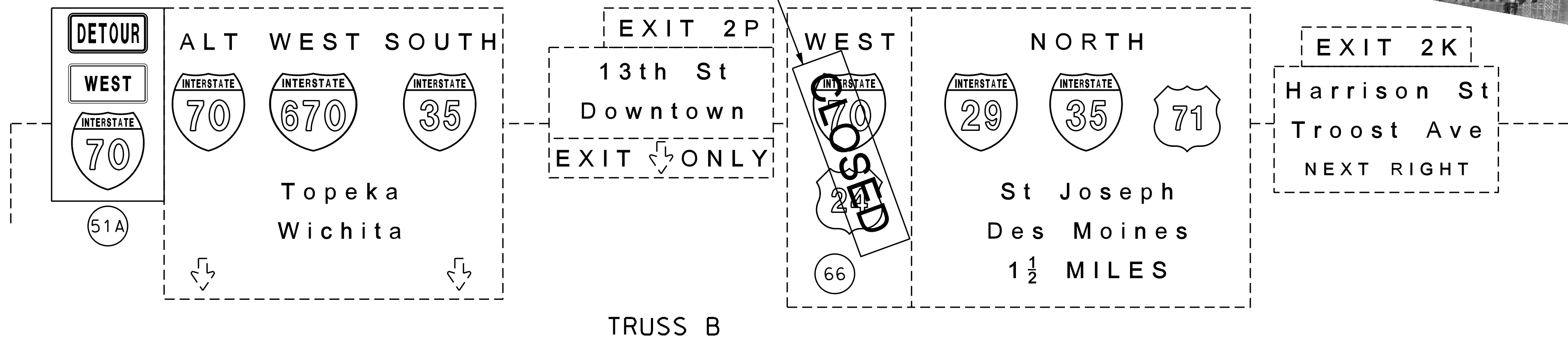
NOTE:
 PLACEMENT OF THE SIGNS AND SIGN SPACING
 SUBJECT TO DIRECTION BY ENGINEER.



MATCHLINE SEE SHEET 8 OF 24



MATCHLINE SEE SHEET 11 OF 24



TRUSS B

BRIDGE L0935
 TRAFFIC CONTROL
 SHEET 7 OF 24

MATCHLINE SEE SHEET 6 OF 24

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DATE PREPARED: 12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 16

COUNTY: JACKSON/CASS
 JOB NO.: J413012
 CONTRACT ID.:
 PROJECT NO.:
 BRIDGE NO.: L0935

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO
DISTRICT SHEET NO.
KC 17

COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0935

DESCRIPTION

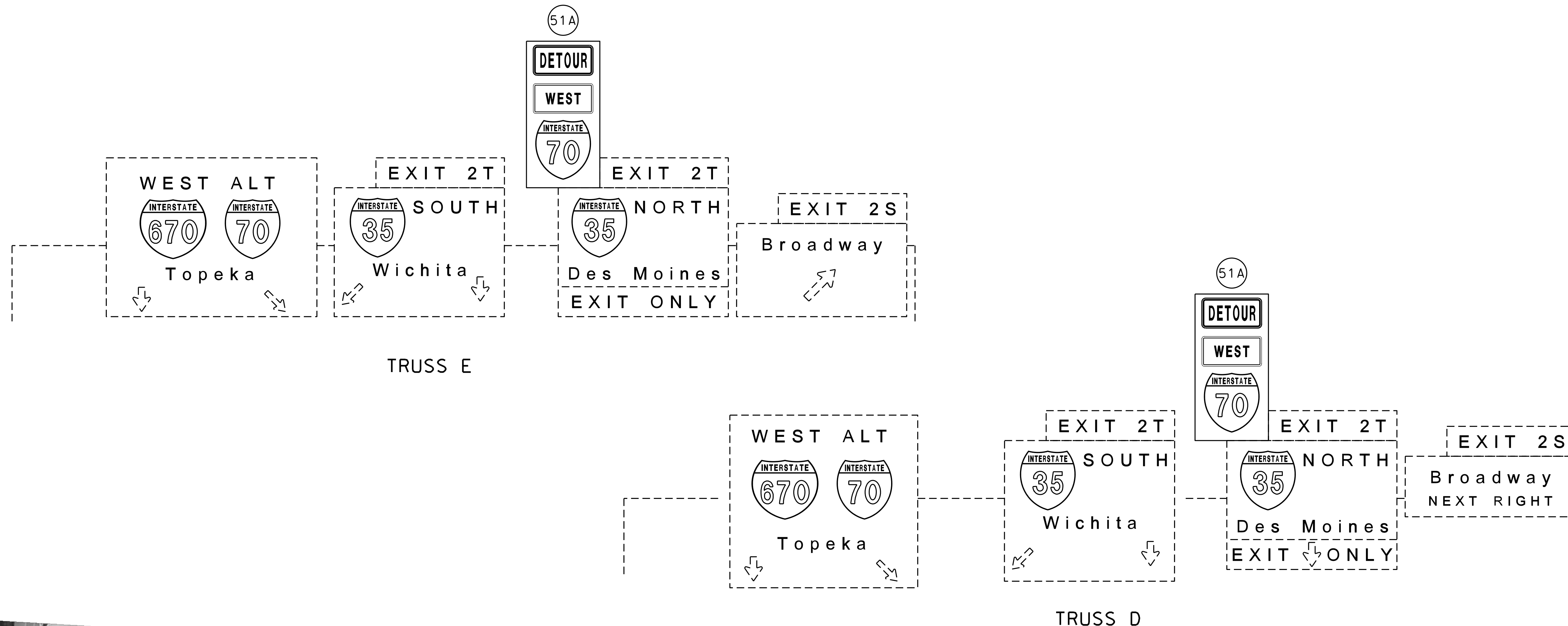
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



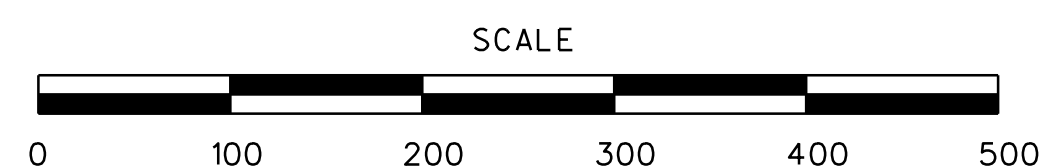
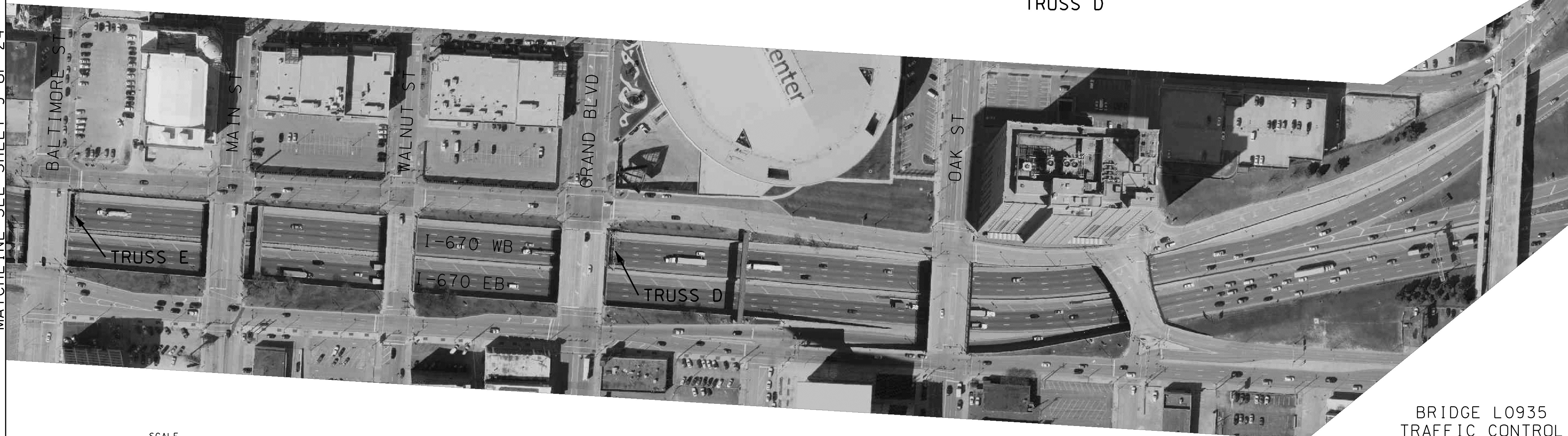
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



MATCHLINE SEE SHEET 9 OF 24

MATCHLINE SEE SHEET 7 OF 24

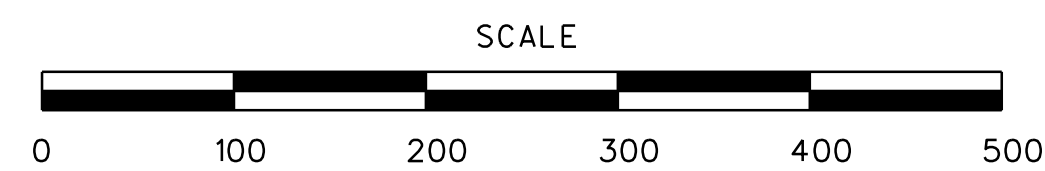
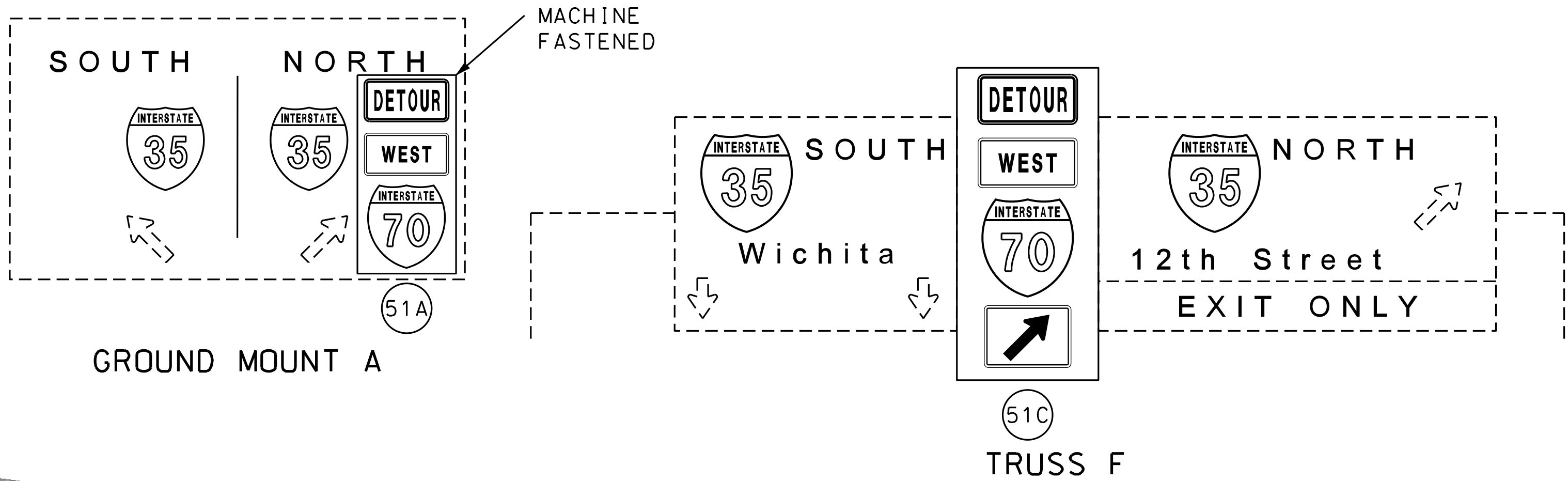


BRIDGE L0935
TRAFFIC CONTROL
SHEET 8 OF 24



END
DETOUR

MO4-8a
52



NOTE:
PLACEMENT OF THE SIGNS AND SIGN SPACING
SUBJECT TO DIRECTION BY ENGINEER.

BRIDGE L0935
TRAFFIC CONTROL
SHEET 9 OF 24

MATCHLINE SEE SHEET 8 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 18

COUNTY JACKSON/CASS
 JOB NO. J413012
 CONTRACT ID.

PROJECT NO.

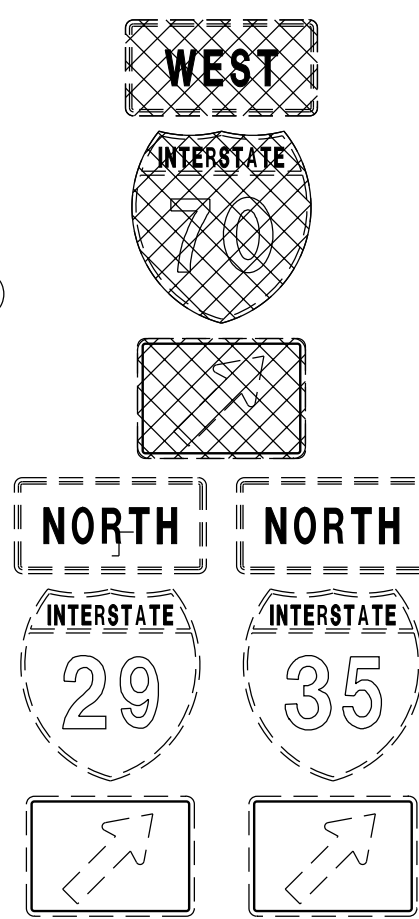
BRIDGE NO. L0935

DATE	DESCRIPTION

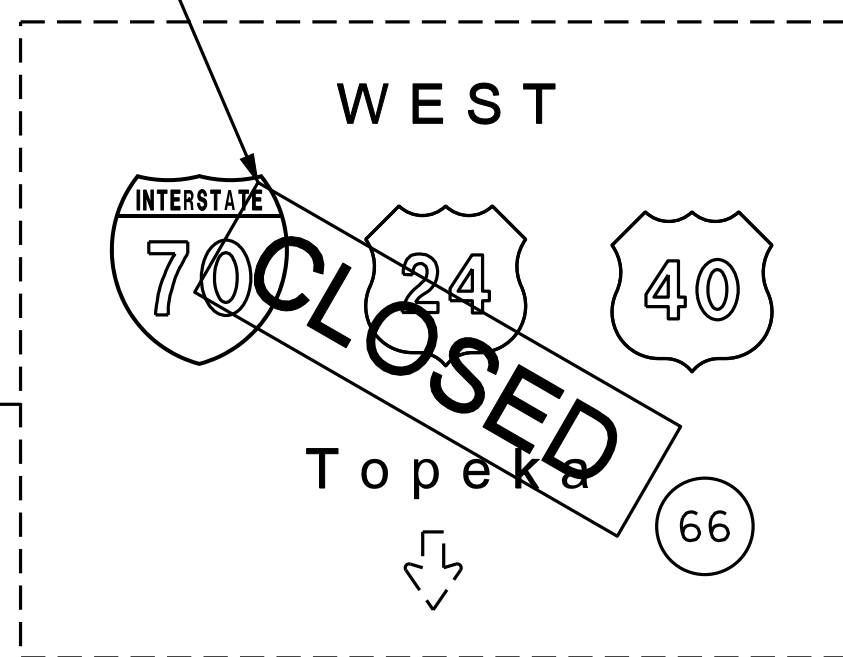
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

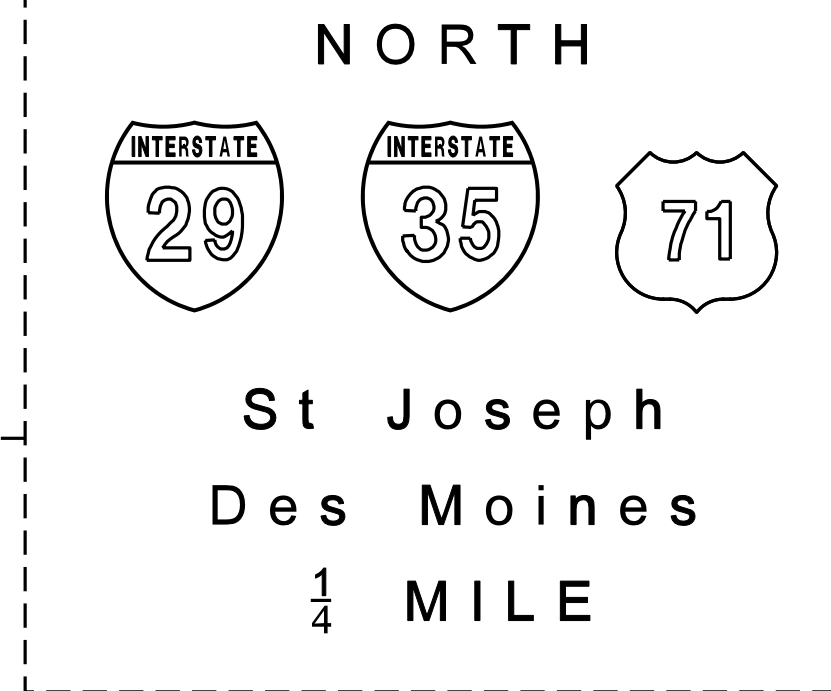
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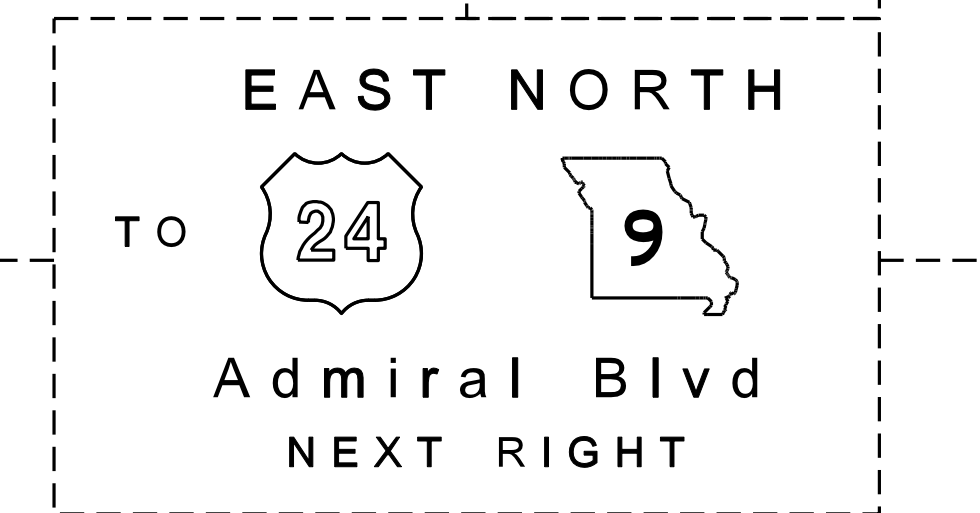
MACHINE FASTENED



EXIT 2G



EXIT 2H



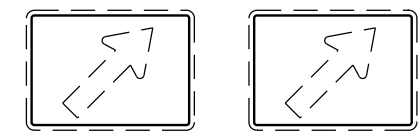
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CHANNELIZERS

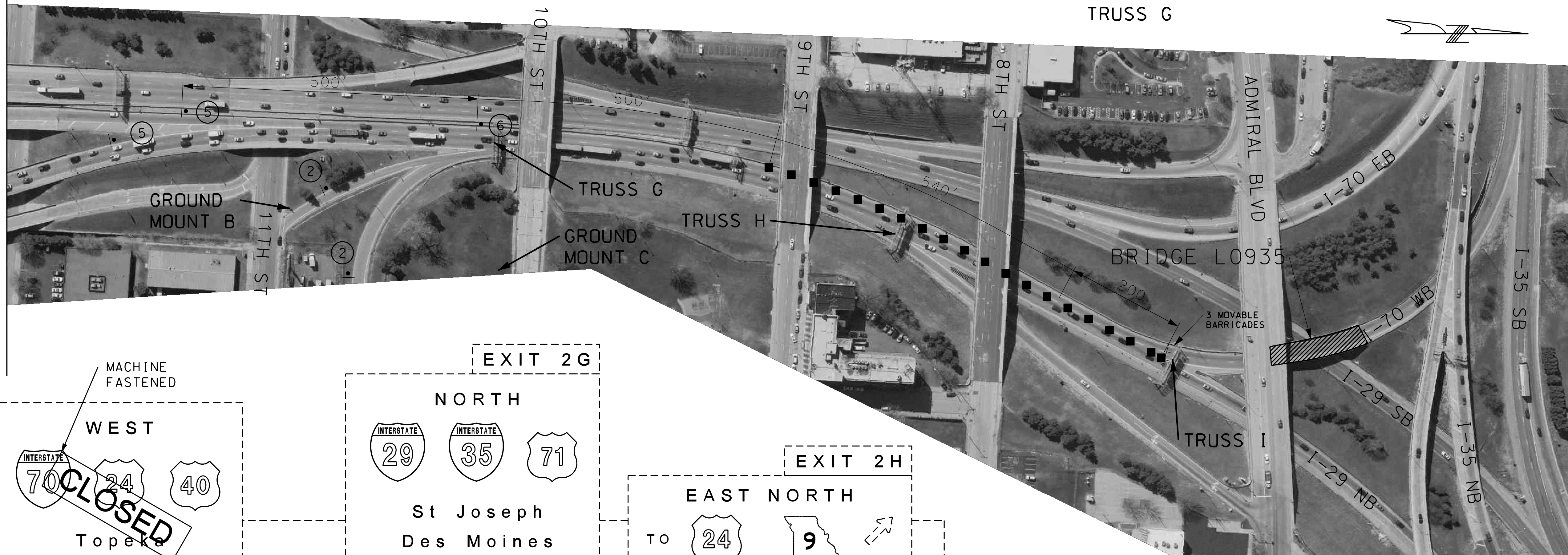
GROUND MOUNT B



TRUSS G



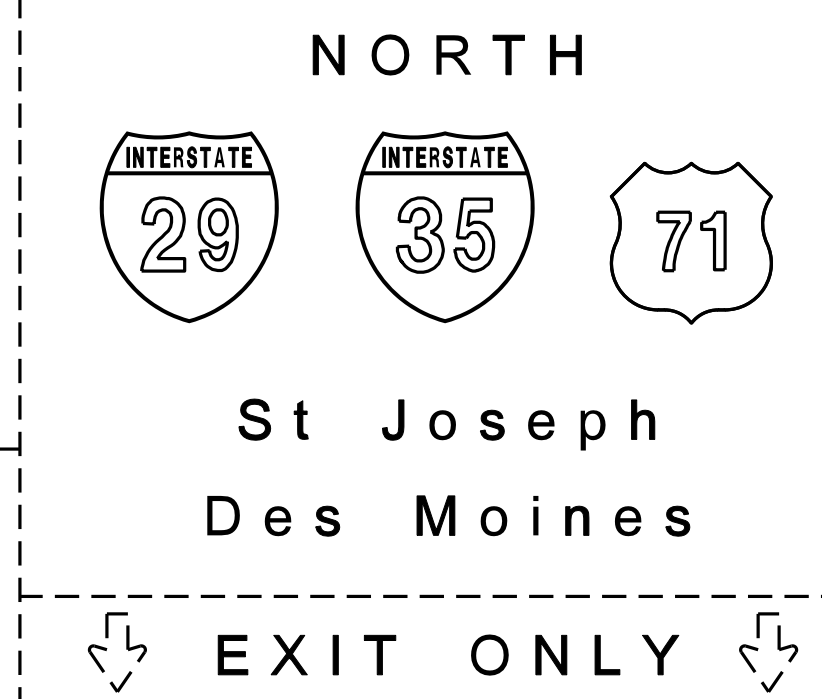
MATCHLINE SEE SHEET 7 OF 24



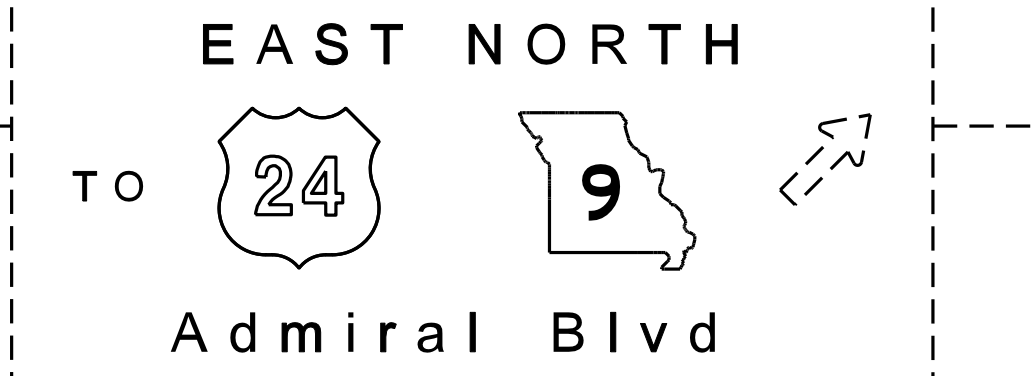
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EXIT 2G

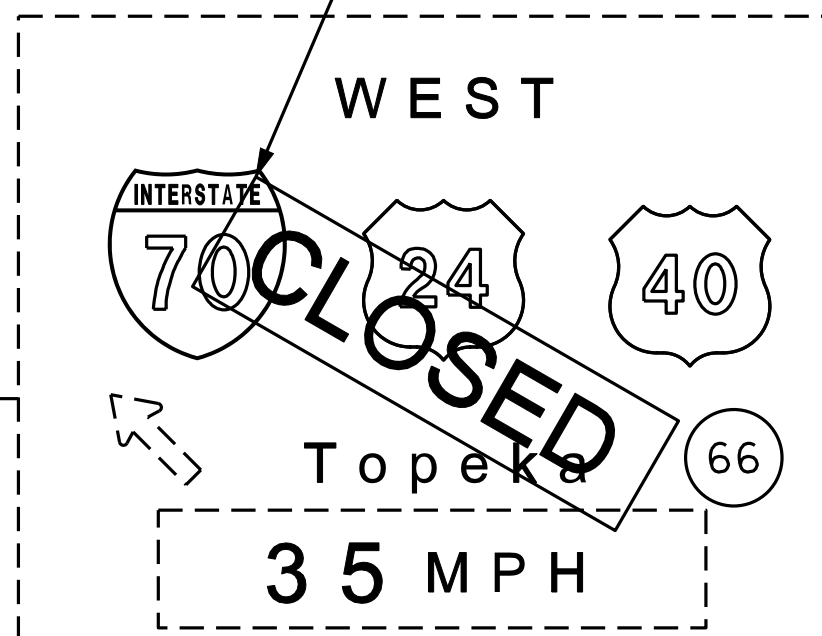


EXIT 2H

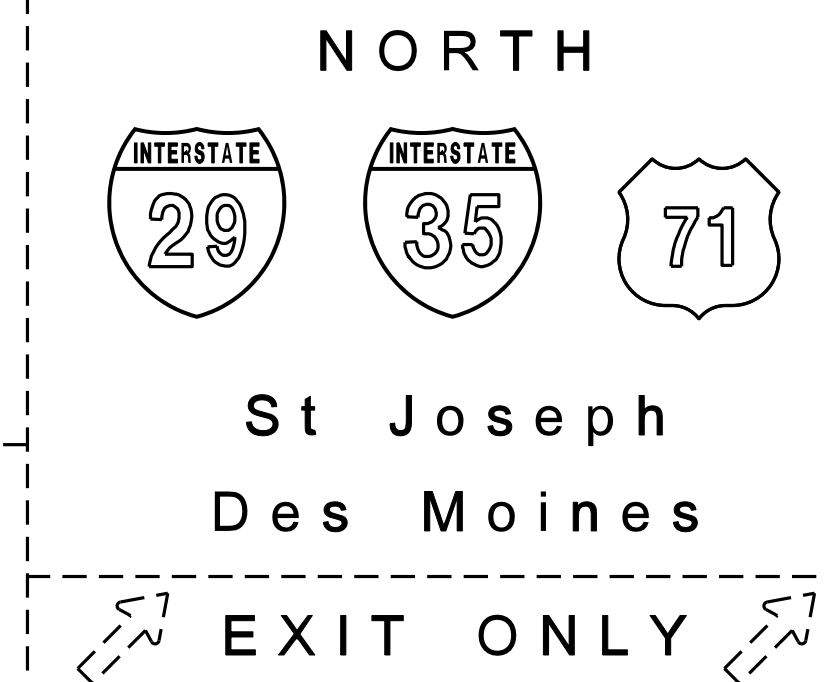


TRUSS H

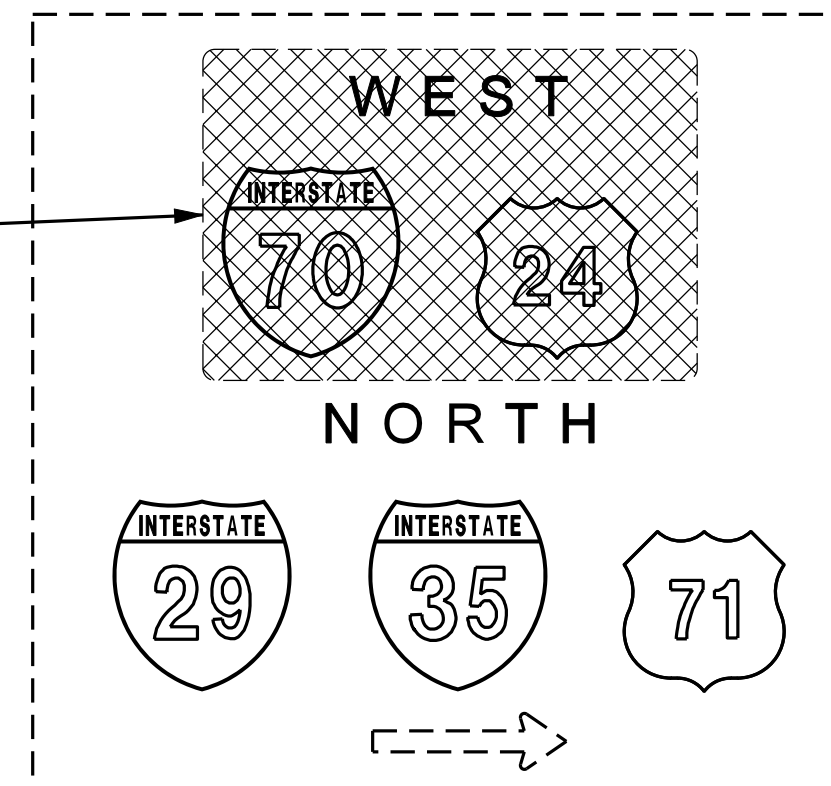
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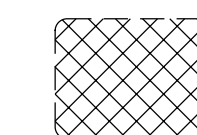
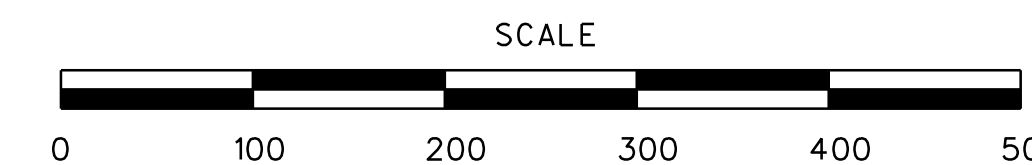
EXIT 2G



MACHINE FASTENED



GROUND MOUNT C



COVER SIGN

NOTE: PLACEMENT OF THE SIGNS AND SIGN SPACING SUBJECT TO DIRECTION BY ENGINEER.

BRIDGE L0935 TRAFFIC CONTROL SHEET 10 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012

ROUTE VAR. MO STATE MO DISTRICT KC SHEET NO. 19 COUNTY JACKSON/CASS

JOB NO. J413012 CONTRACT ID.

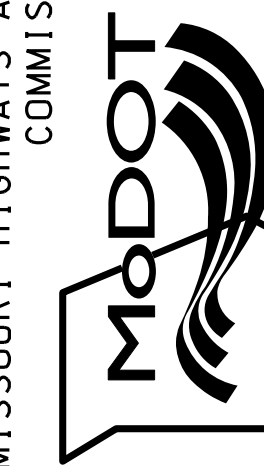
PROJECT NO.

BRIDGE NO. L0935

DESCRIPTION

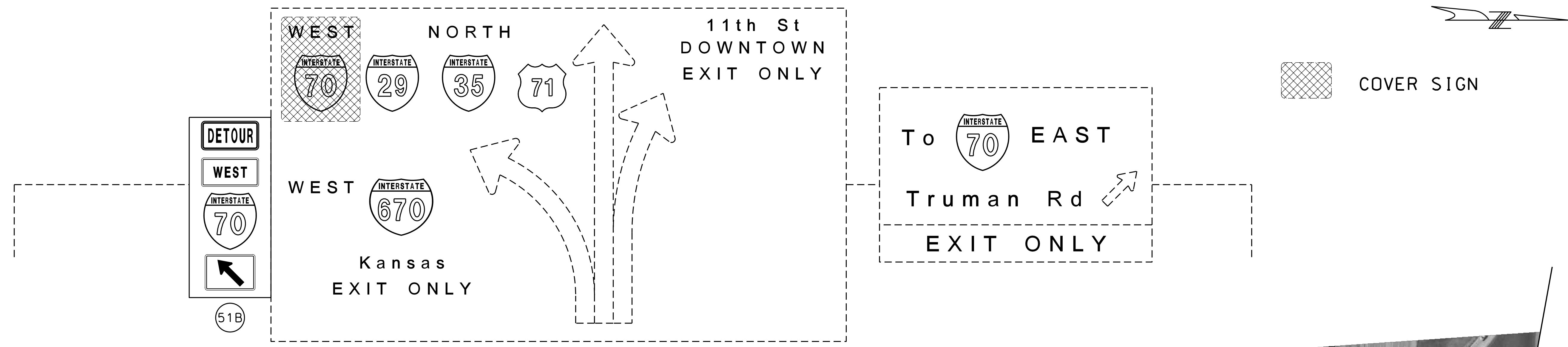
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

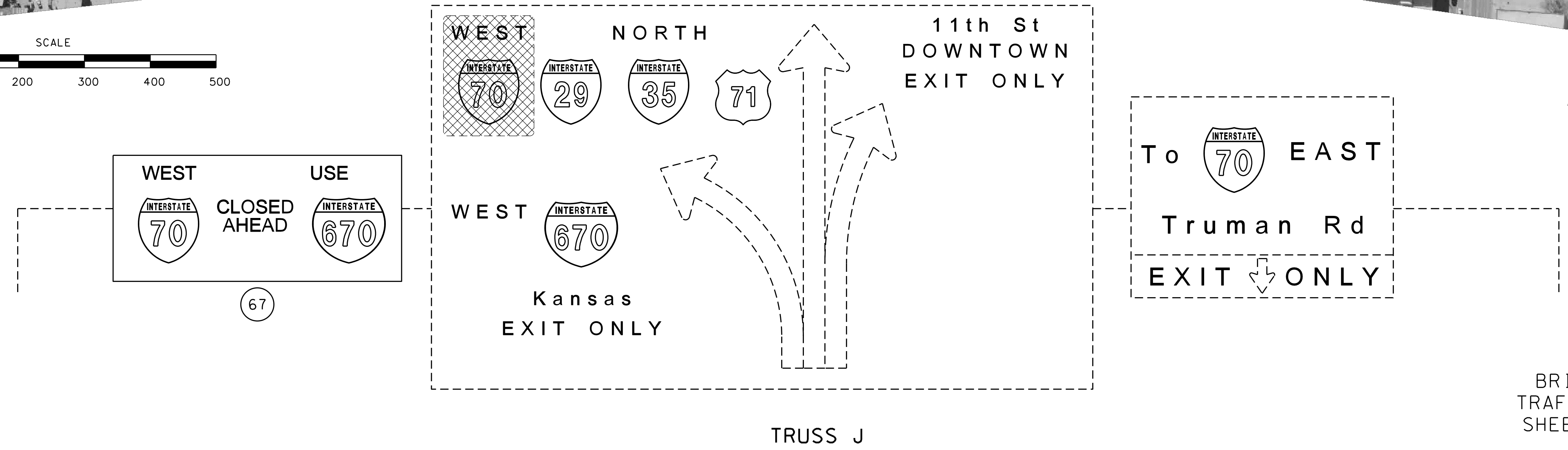
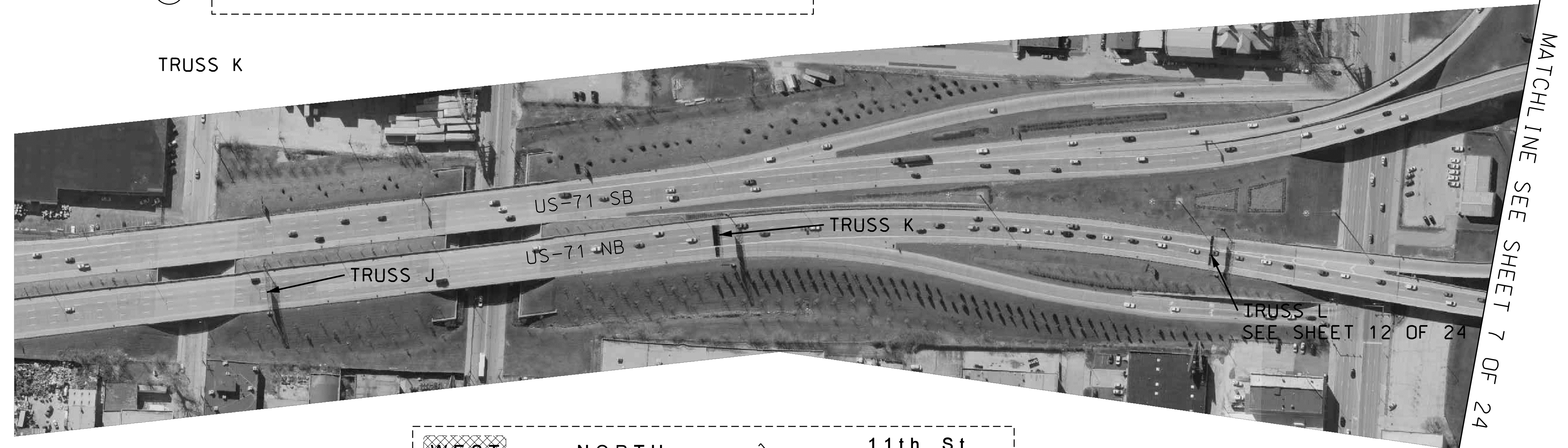


105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



TRUSS K



TRUSS J

BRIDGE L0935
TRAFFIC CONTROL
SHEET 11 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012	
ROUTE VAR. MO	STATE MO
DISTRICT KC	SHEET NO. 20
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L0935	

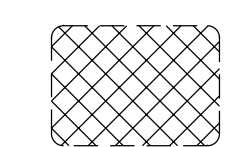
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

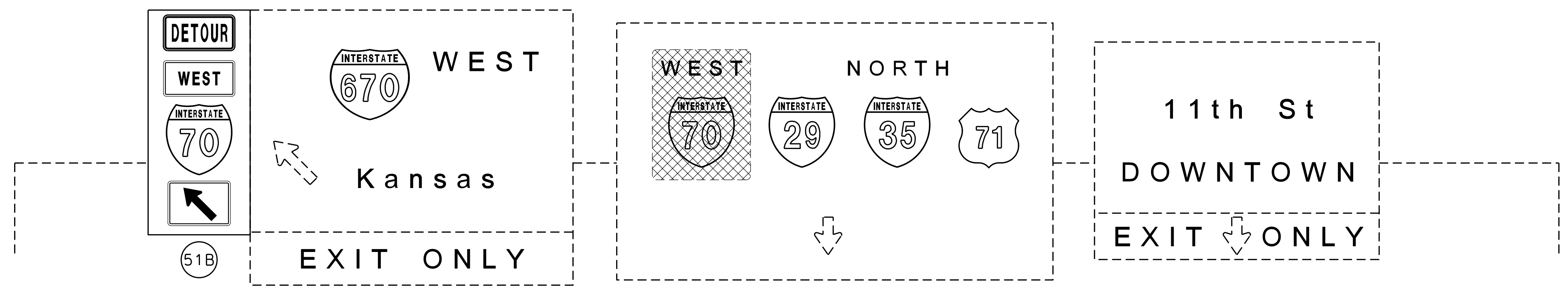
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

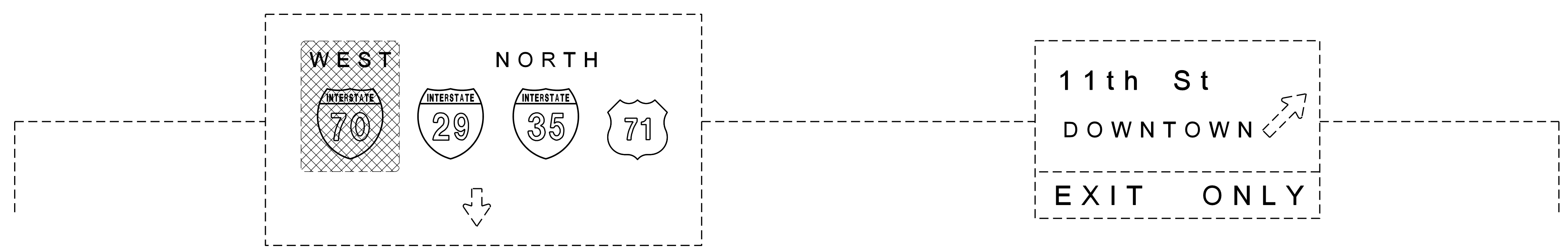
"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."



COVER SIGN



TRUSS L



TRUSS M

NO SCALE

BRIDGE L0935
TRAFFIC CONTROL
SHEET 12 OF 24

DATE PREPARED	
12/14/2012	
ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	21
COUNTY	
JACKSON/CASS	
JOB NO.	
J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
L0935	

DATE	DESCRIPTION

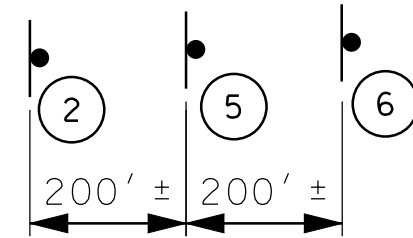
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

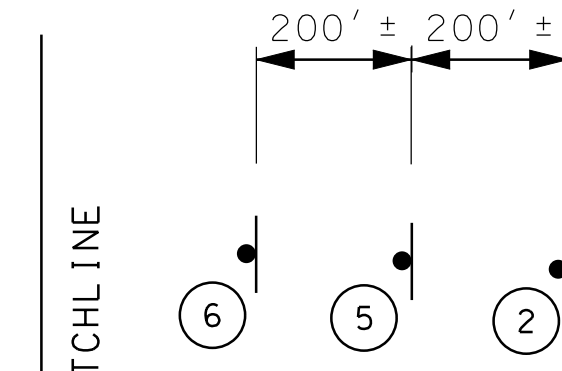
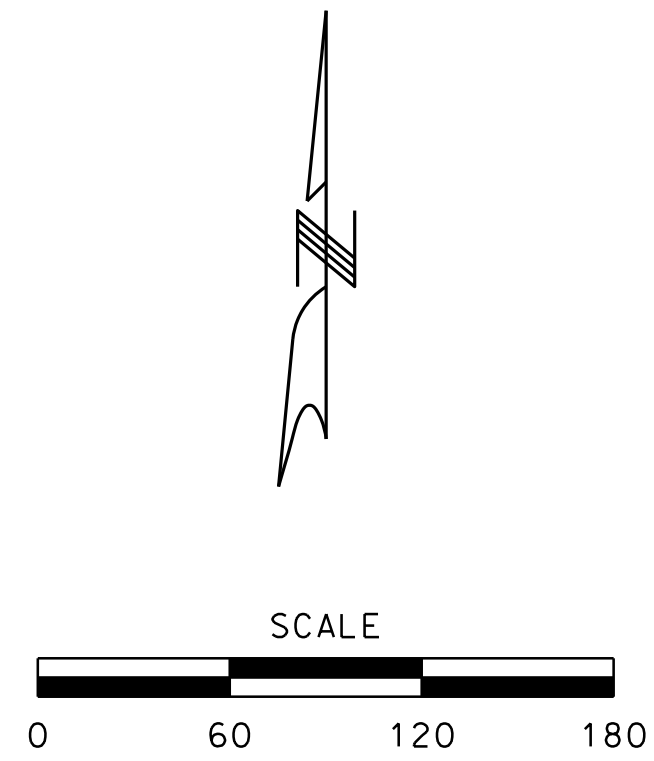
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

NOTE:
 1. PLACEMENT OF THE SIGNS AND SIGN SPACING SUBJECT TO DIRECTION BY ENGINEER.
 2. THE CONTRACTOR SHALL NOT SIMULTANEOUSLY CLOSE BOTH SIDES OF BRIDGE. ONE CONTINUOUS SIDEWALK FROM ONE SIDE OF THE BRIDGE TO THE OTHER WILL BE LEFT OPEN AT ALL TIMES

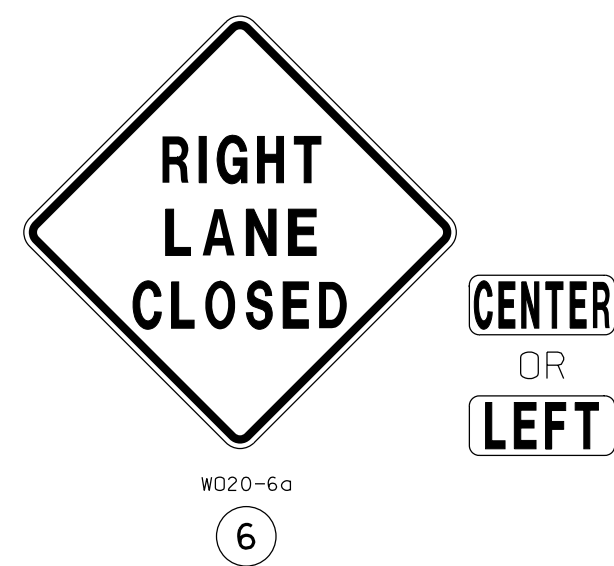
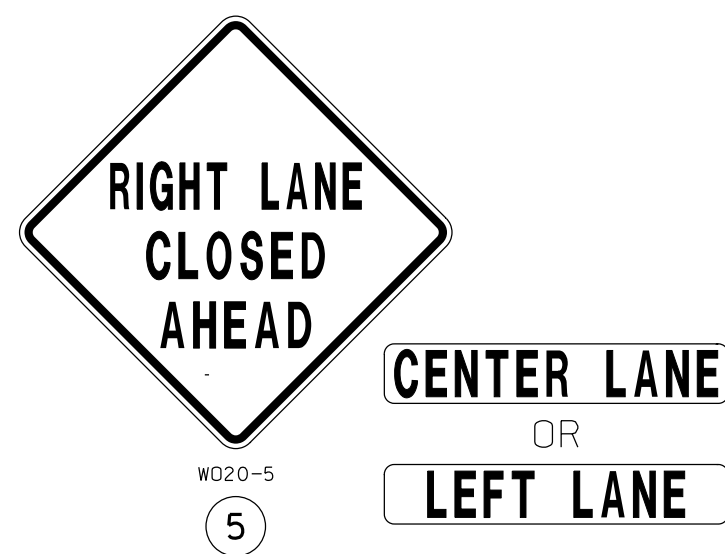
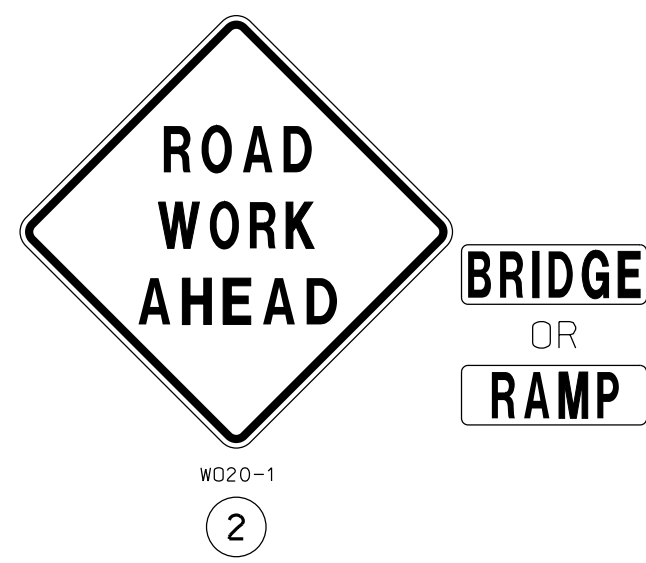
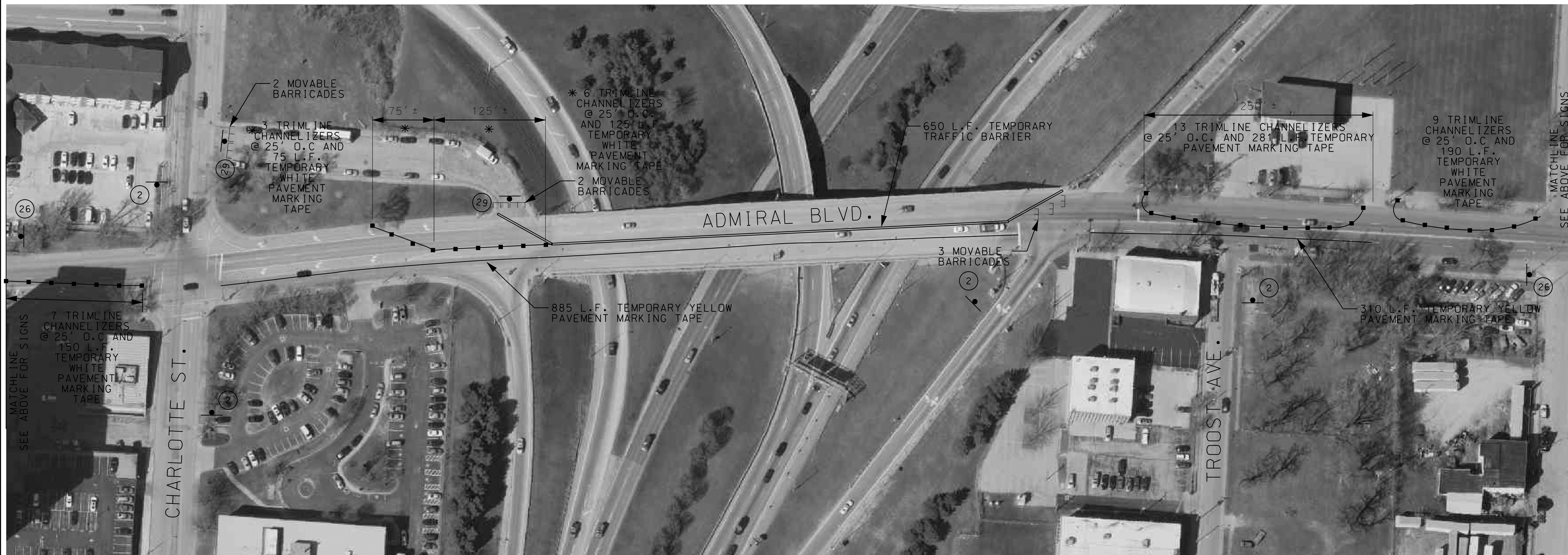
ADMIRAL BLVD.



MATCHLINE



ADMIRAL BLVD.



MOVABLE BARRICADE

TRIMLINE CHANNELIZERS

BRIDGE L0936
 WESTBOUND CLOSED
 TRAFFIC CONTROL
 SHEET 13 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
 12/14/2012
 ROUTE STATE
 VAR. MO
 DISTRICT SHEET NO.
 KC 22
 COUNTY
 JACKSON/CASS
 JOB NO.
 J413012
 CONTRACT ID.

PROJECT NO.
 BRIDGE NO.
 L0936

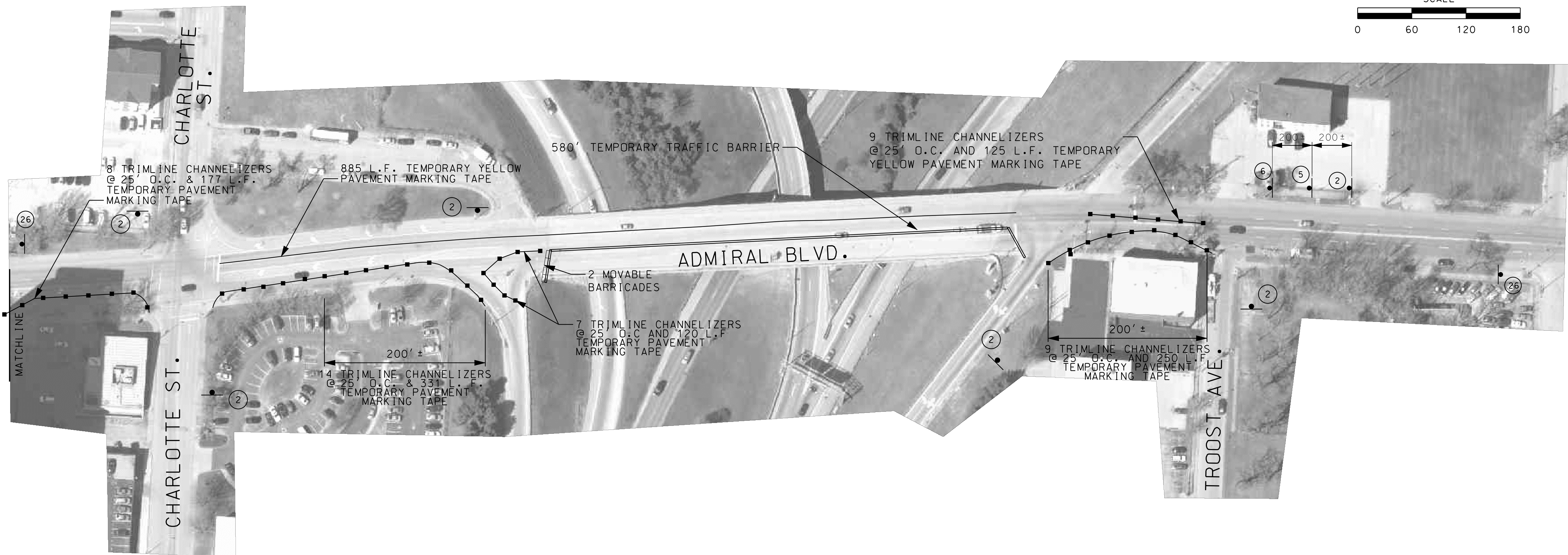
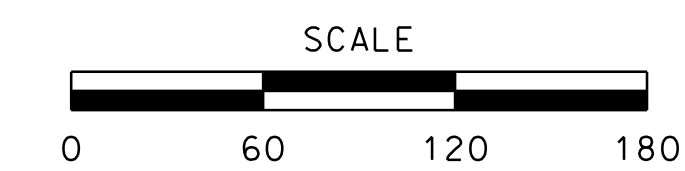
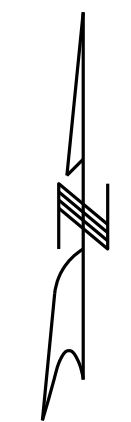
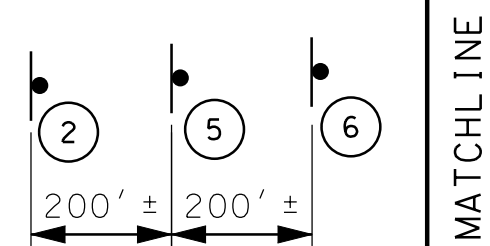
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.
 REV.

ADMIRAL BLVD.



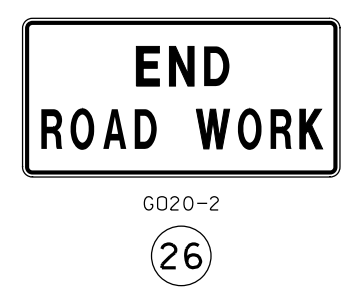
BRIDGE
OR
RAMP



CENTER LANE
OR
LEFT LANE



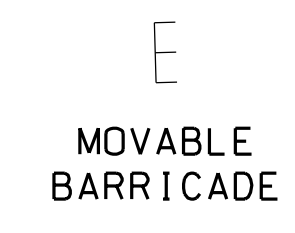
CENTER
OR
LEFT



GG20-2
(26)



TRIMLINE CHANNELIZERS



MOVABLE BARRICADE

NOTE:
1. PLACEMENT OF THE SIGNS AND SIGN SPACING SUBJECT TO DIRECTION BY ENGINEER.
2. THE CONTRACTOR SHALL NOT SIMULTANEOUSLY CLOSE BOTH SIDES OF BRIDGE, ONE CONTINUOUS SIDEWALK FROM ONE SIDE OF THE BRIDGE TO THE OTHER WILL BE LEFT OPEN AT ALL TIMES

BRIDGE L0936
EASTBOUND CLOSED
TRAFFIC CONTROL
SHEET 14 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED: 12/14/2012

ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	23

COUNTY: JACKSON/CASS

JOB NO.: J413012

CONTRACT ID.:

PROJECT NO.:

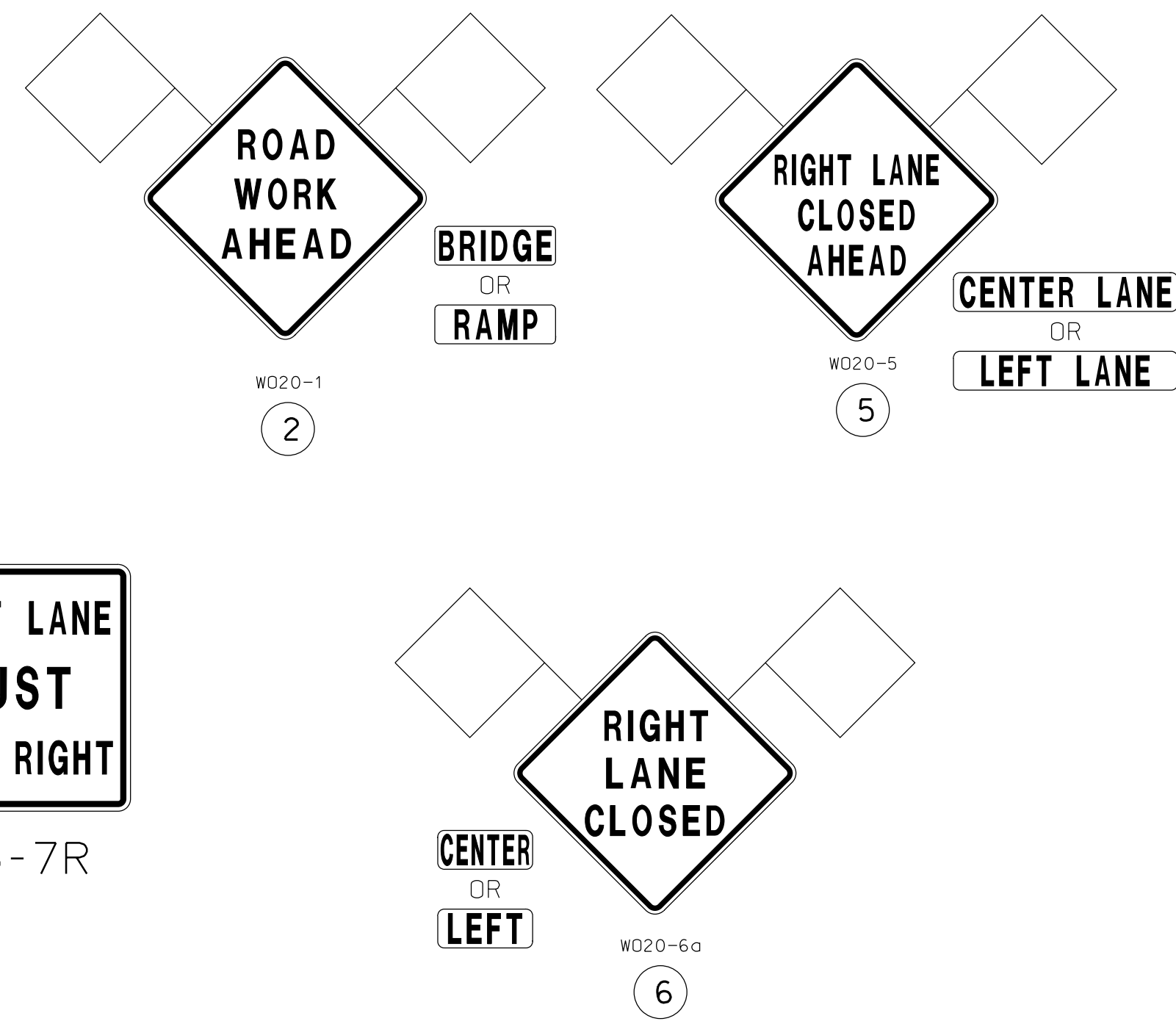
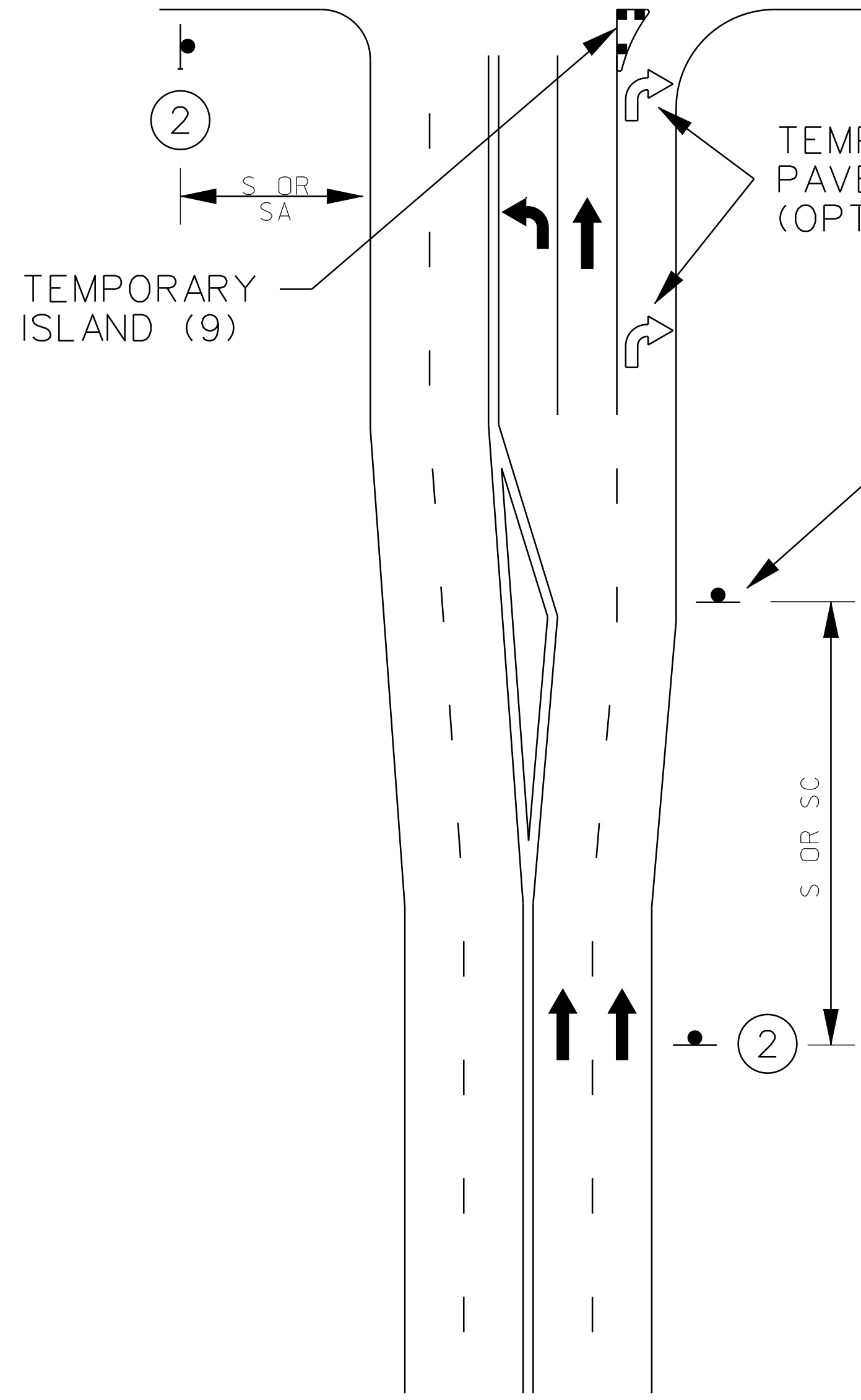
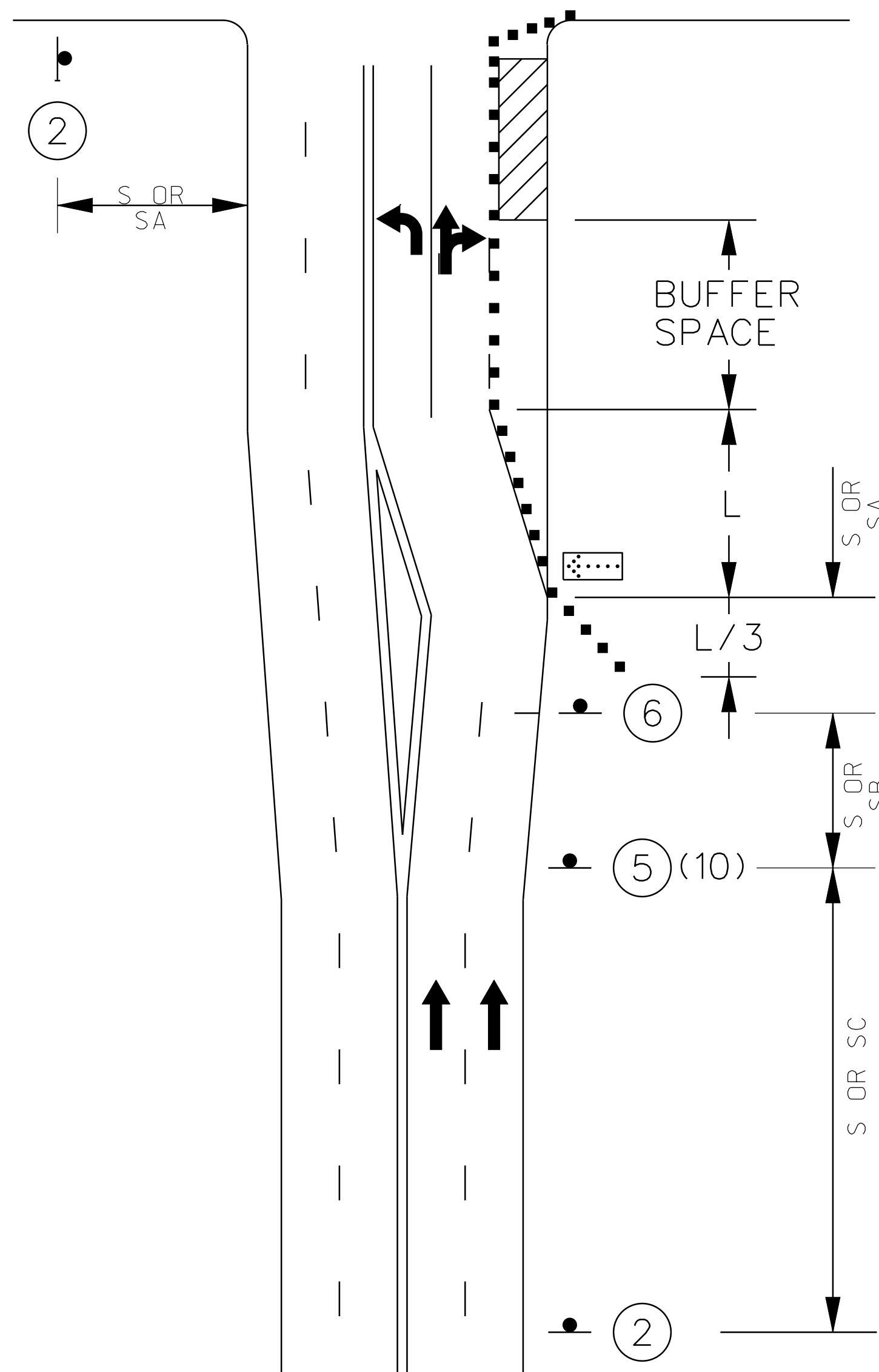
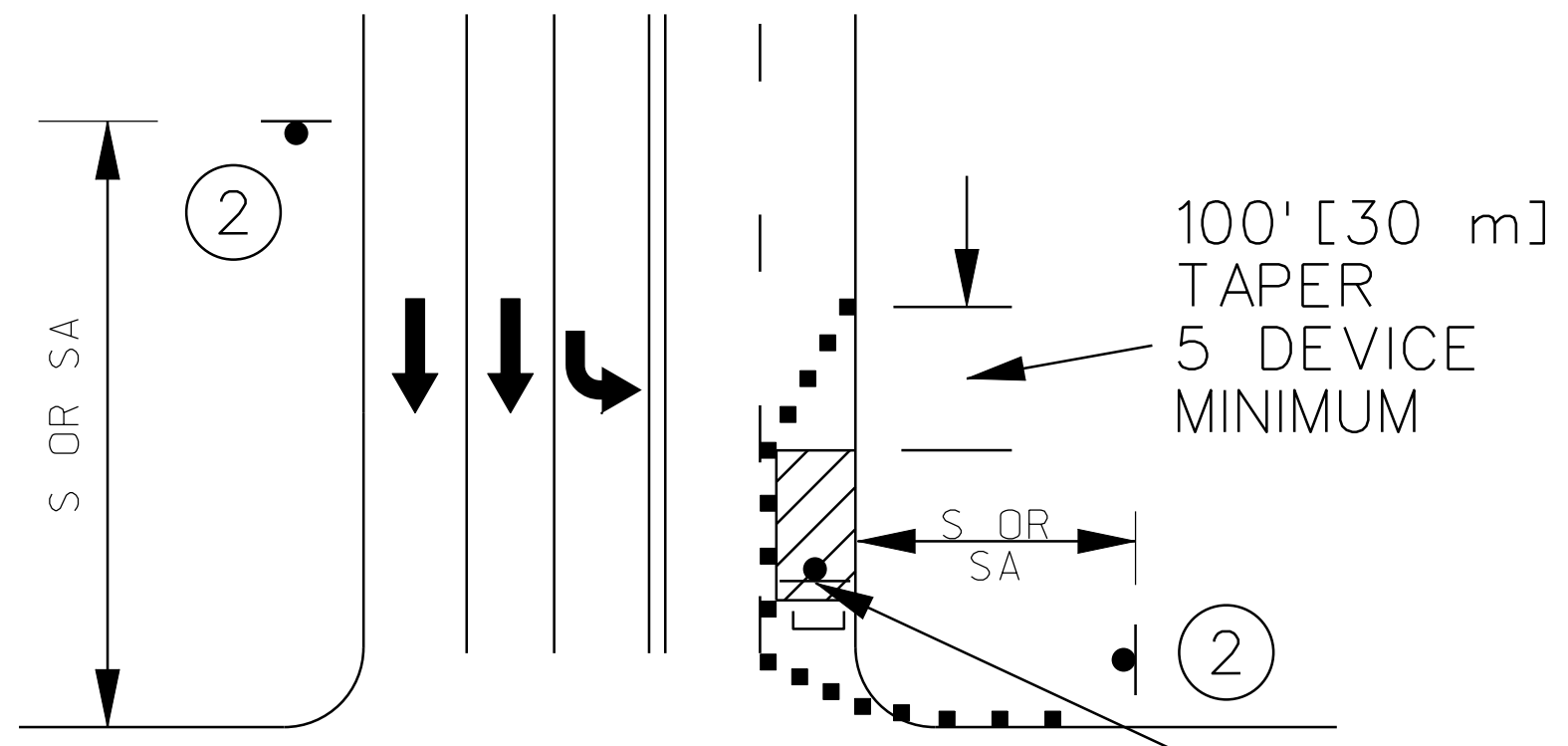
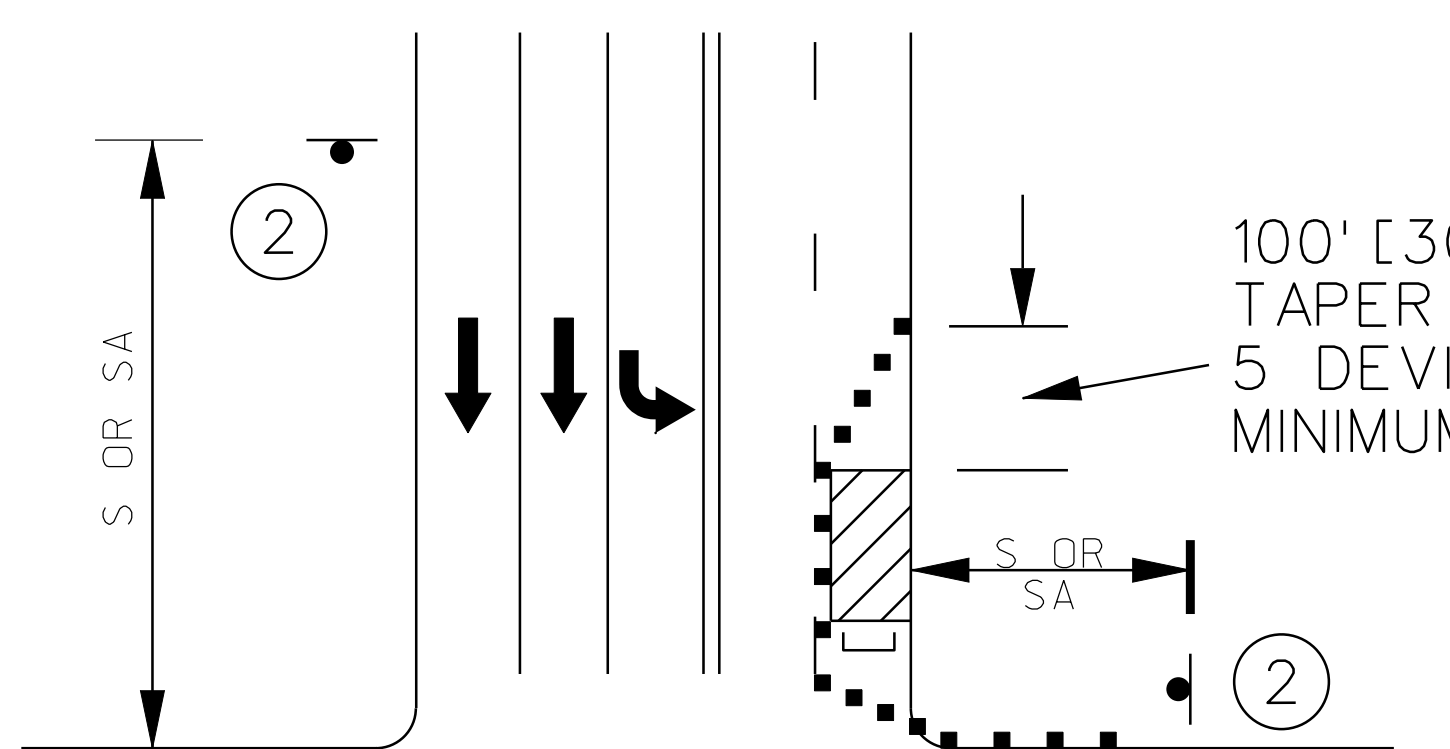
BRIDGE NO.: L0936

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NOTES:

- (1). SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- (2). SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- (3). FOR SIGNALIZED INTERSECTIONS, ADJUSTMENTS MAY NEED TO BE MADE TO SIGNAL PHASING, TIMING, INDICATIONS OR DETECTOR SETTINGS.
- (4). REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.
- (5). PAVEMENT MARKING AND BARRICADES OPTIONAL FOR SHORT TERM OPERATIONS.
- (6). TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.
- (7). FOR SHORT TERM OPERATIONS, WHERE IT IS NOT FEASIBLE TO MODIFY PAVEMENT MARKING, A 10' DEVICE SPACING IS USED WHERE TRAFFIC IS GUIDED ACROSS DOUBLE YELLOW LINES OR OTHER CONFLICTING PAVEMENT MARKINGS. ALL OTHER SPACINGS ARE ONE HALF OF THE SPACING SHOWN ON TRAFFIC CONTROL SHEET 1.
- (8). THIS FIGURE ONLY APPLIES WHERE A SIGNIFICANT PERCENTAGE OF THE APPROACH VOLUME.
- (9). TEMPORARY ISLAND MAY BE USED TO EMPHASIZE THE MANDATORY RIGHT TURN MOVEMENT WHERE THERE IS A SUFFICIENT RIGHT TURN RADIUS.
- (10). SIGN (5) MAY BE OMITTED IN LOW SPEED URBAN AREAS WHERE THERE IS NOT SUFFICIENT SPACE FOR THE FULL SIGN SERIES.

WORK ON NEAR OR FAR SIDE

WORK ON FAR SIDE ONLY (8)

LANE CLOSURE
RIGHT LANE CLOSURE AT INTERSECTION

RIGHT LANE CLOSURE
AT INTERSECTION
TEMPORARY
TRAFFIC CONTROL
SHEET 15 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 24

COUNTY
JACKSON/CASS

JOB NO.
J413012

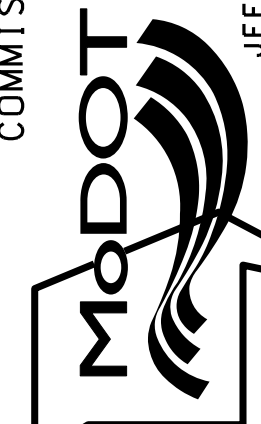
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

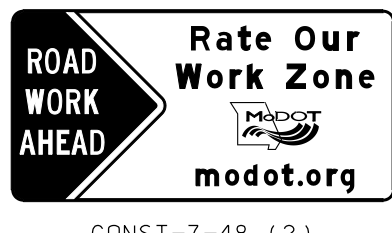
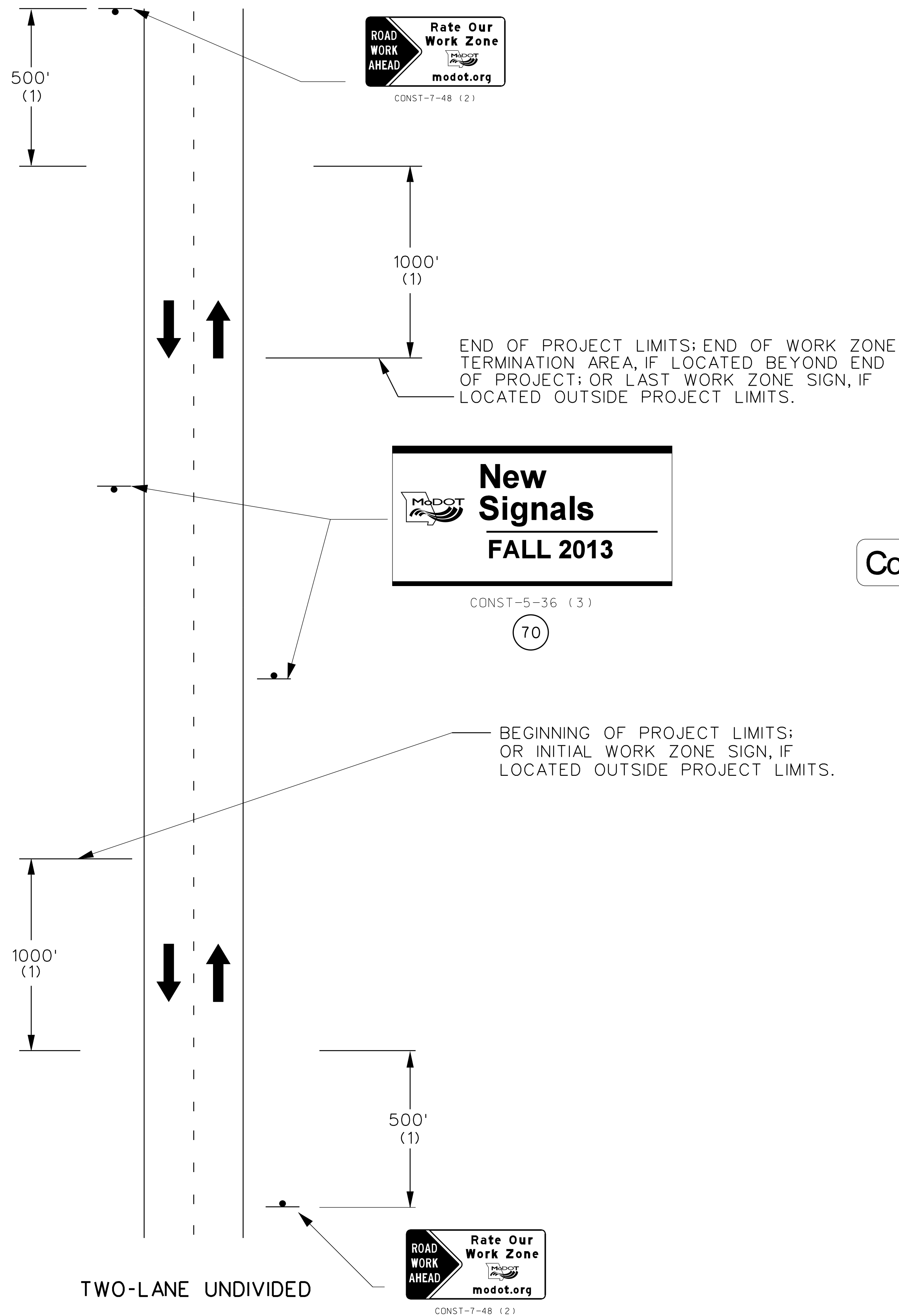
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



CONST-7-48 (2)

1000'
(1)

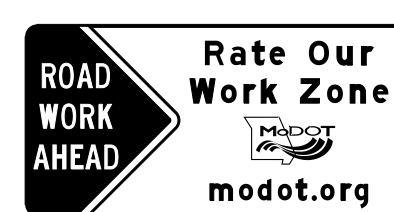


CONST-5-36 (3)

(70)

(71)

500'
(1)



CONST-7-48 (2)

END OF PROJECT LIMITS; END OF WORK ZONE TERMINATION AREA, IF LOCATED BEYOND END OF PROJECT; OR LAST WORK ZONE SIGN, IF LOCATED OUTSIDE PROJECT LIMITS.

BEGINNING OF PROJECT LIMITS; OR INITIAL WORK ZONE SIGN, IF LOCATED OUTSIDE PROJECT LIMITS.

TWO-LANE UNDIVIDED

BEGIN/END OF PROJECT SIGNING
(FOR USE ON ALL PROJECTS)

Completed as Promised

NOTES:
OTHER SIGNS SUCH AS DETOUR OR ALTERNATE ROUTE SIGNING MAY BE USED OUTSIDE THE PROJECT LIMITS.
ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
(1) DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA, ADDITIONAL SIGNING MAY BE NEEDED.
(2) SIGN CONST-7-48 IS PLACED 500 FEET BEFORE THE BEGINNING OF PROJECT LIMITS OR THE ROAD WORK AHEAD SIGN OR ROAD WORK NEXT XX MILES SIGN, IF USED, WHEN THESE SIGNS ARE LOCATED OUTSIDE THE PROJECT LIMITS.
(3) SIGN CONST-5-36 IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-48.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 25

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

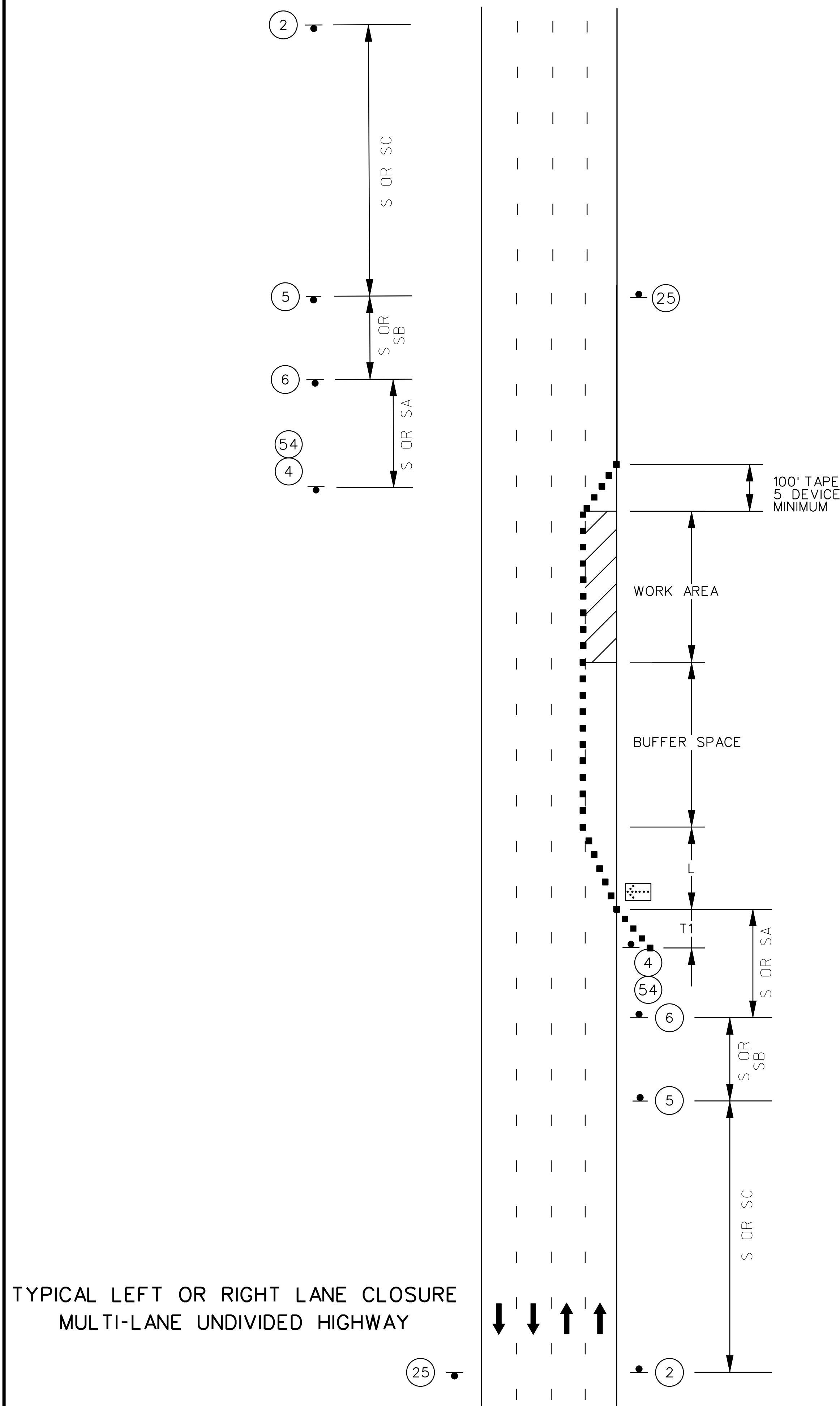
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

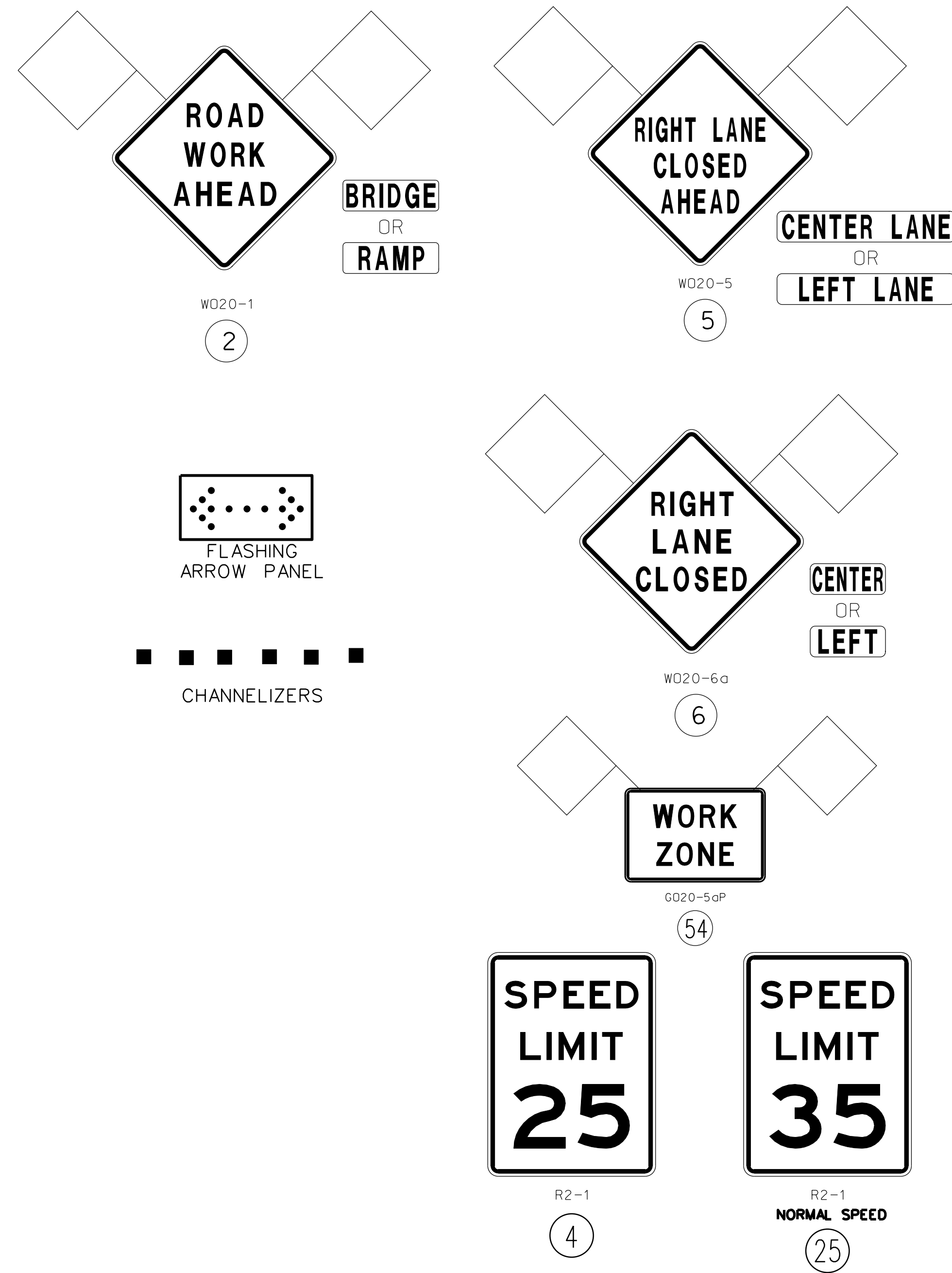
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

BEGIN/END
TEMPORARY
TRAFFIC CONTROL
SHEET 16 OF 24

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



TYPICAL LEFT OR RIGHT LANE CLOSURE
MULTI-LANE UNDIVIDED HIGHWAY



NOTES:

- (1). SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- (2). SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- (3). SEE SHEET FIGURE 616.0.5, SHEET 2 OF 2, FOR A LANE CLOSURE WITH WIDTH RESTRICTION.
- (4). REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.
- (5). TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.
- (6). ALTERNATIVE TEMPORARY TRAFFIC CONTROL SET-UPS SHOULD BE CONSIDERED WHEN REDUCTION IN CAPACITY CANNOT BE TOLERATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

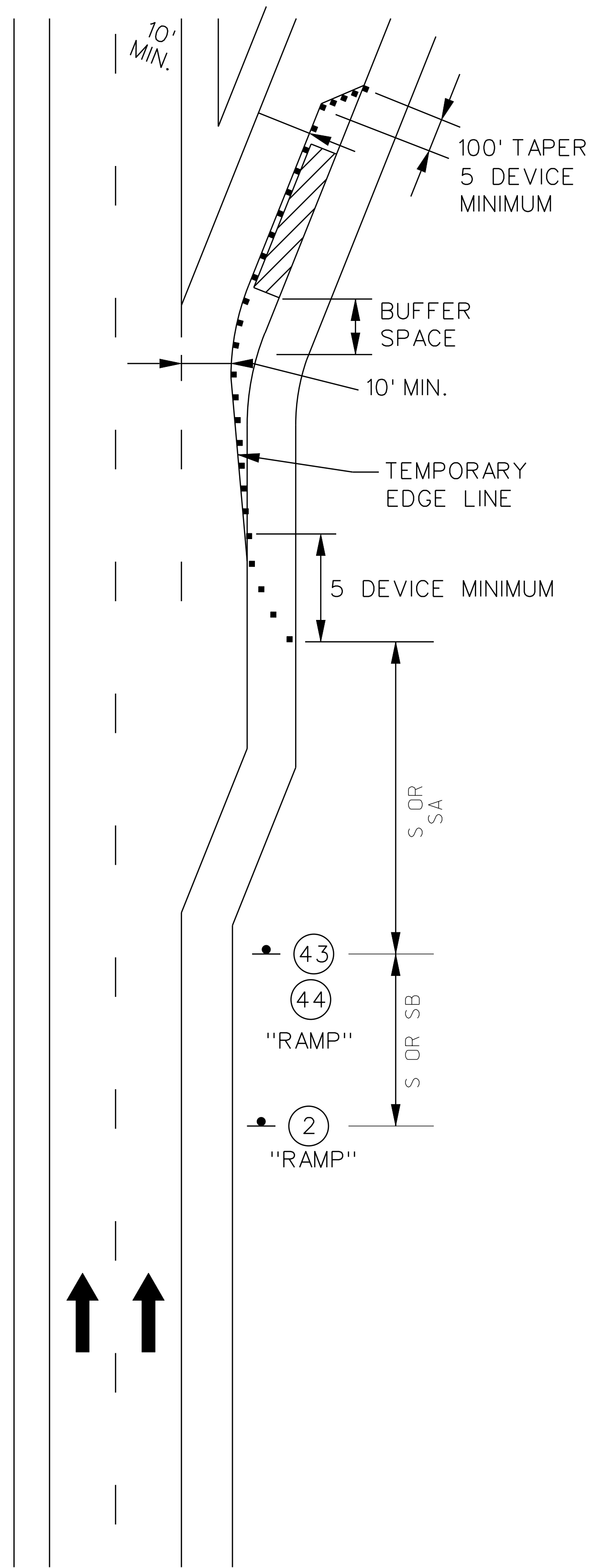
DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 26
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

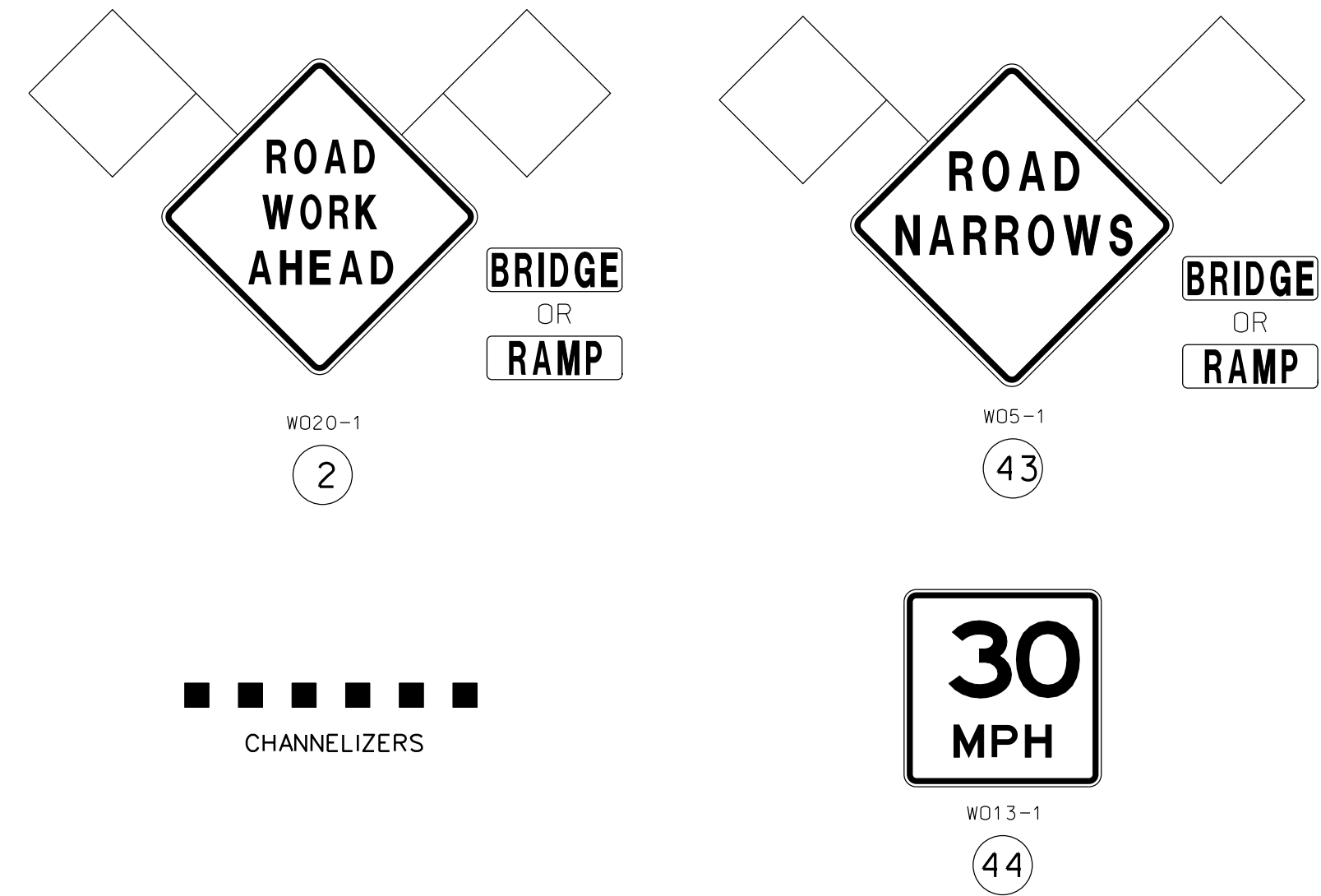


PARTIAL LANE

LANE CLOSURE
PARTIAL RAMP CLOSURE

NOTES:

- (1). SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- (2). SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- (3). TEMPORARY PAVEMENT MARKING OPTIONAL FOR SHORT TERM OPERATIONS.



PARTIAL
RAMP CLOSURE
TEMPORARY
TRAFFIC CONTROL
SHEET 18 OF 24

"THIS MEDIA SHOULD
NOT BE CONSIDERED
A CERTIFIED
DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO
DISTRICT SHEET NO.
KC 27

COUNTY
JACKSON/CASS

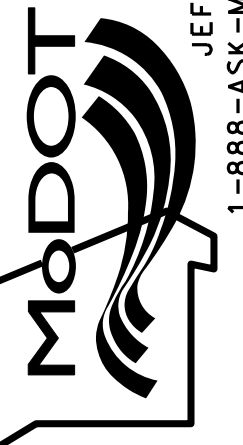
JOB NO.
J413012
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

■ CHANNELIZERS

REMOVE SOLID WHITE LINE

4" YELLOW TEMP. TAPE

MAINTAIN A MIN.
16' LANE WIDTH

4" YELLOW TEMP. TAPE

REMOVE INTERMITTENT
WHITE PAVEMENT MARKING

ROUTE 7

CHANNELIZER SPACING SHALL
BE A MAXIMUM 35'

NOT TO SCALE

SB I-49 RAMP

SB I-49 RAMP

BRIDGE A1496
TRAFFIC CONTROL
STAGE 1
SHEET 19 OF 24

"THIS MEDIA SHOULD
NOT BE CONSIDERED
A CERTIFIED
DOCUMENT."

DATE PREPARED

12/14/2012

ROUTE STATE

VAR. MO

DISTRICT SHEET NO.

KC 28

COUNTY

JACKSON/CASS

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

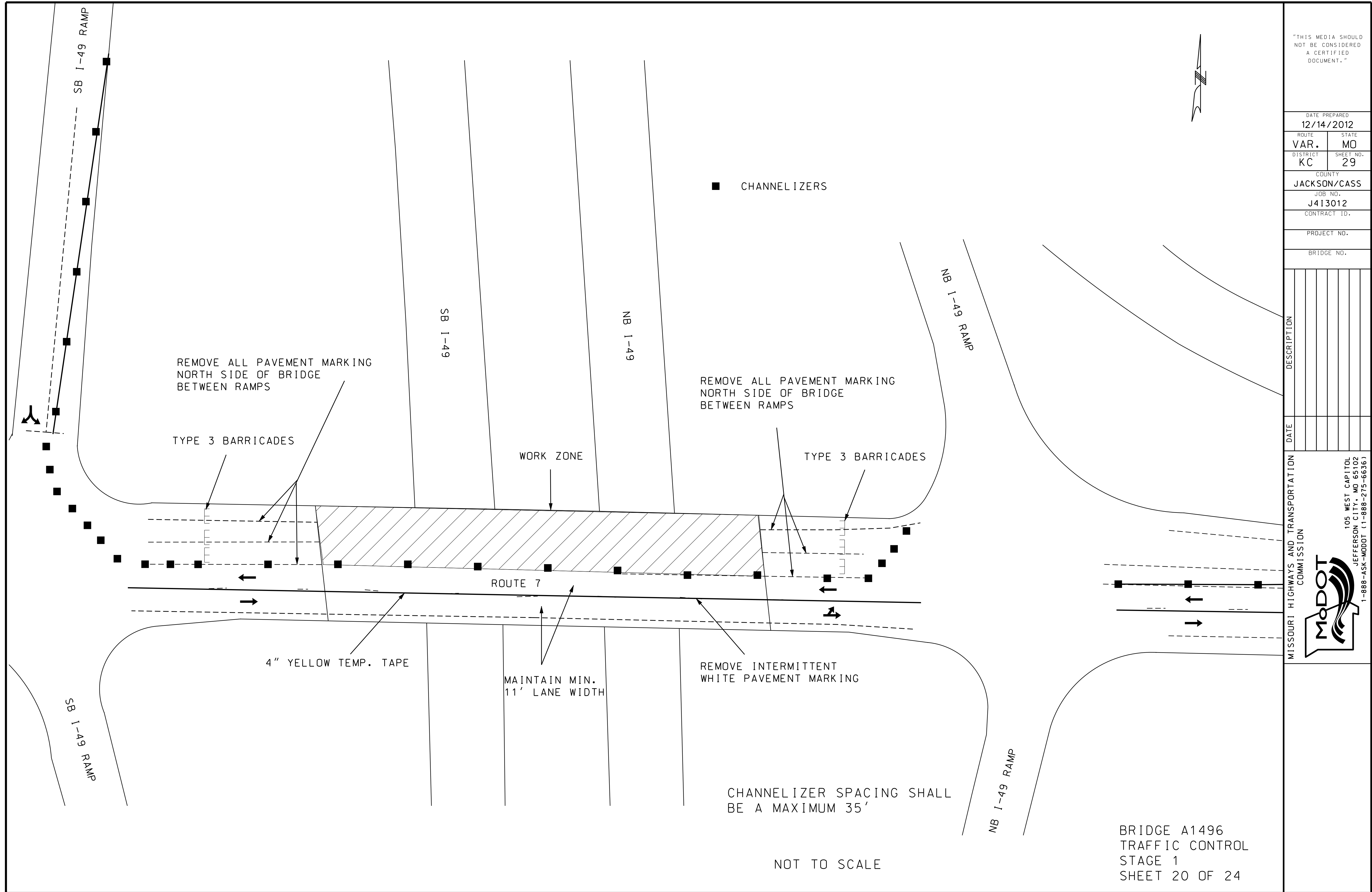
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

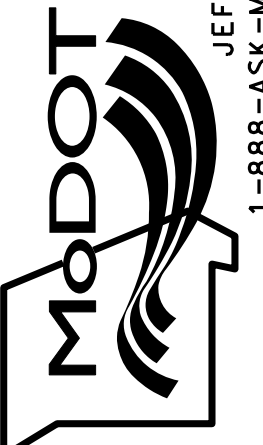
DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 29

COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

■ CHANNELIZERS

REMOVE ALL PAVEMENT MARKING NORTH SIDE OF BRIDGE BETWEEN RAMPS

REMOVE ALL PAVEMENT MARKING NORTH SIDE OF BRIDGE BETWEEN RAMPS

TYPE 3 BARRICADES

WORK ZONE

TYPE 3 BARRICADES

ROUTE 7

4" YELLOW TEMP. TAPE

MAINTAIN MIN. 11' LANE WIDTH

REMOVE INTERMITTENT WHITE PAVEMENT MARKING

CHANNELIZER SPACING SHALL BE A MAXIMUM 35'

NOT TO SCALE

BRIDGE A1496
TRAFFIC CONTROL
STAGE 1
SHEET 20 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 30

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

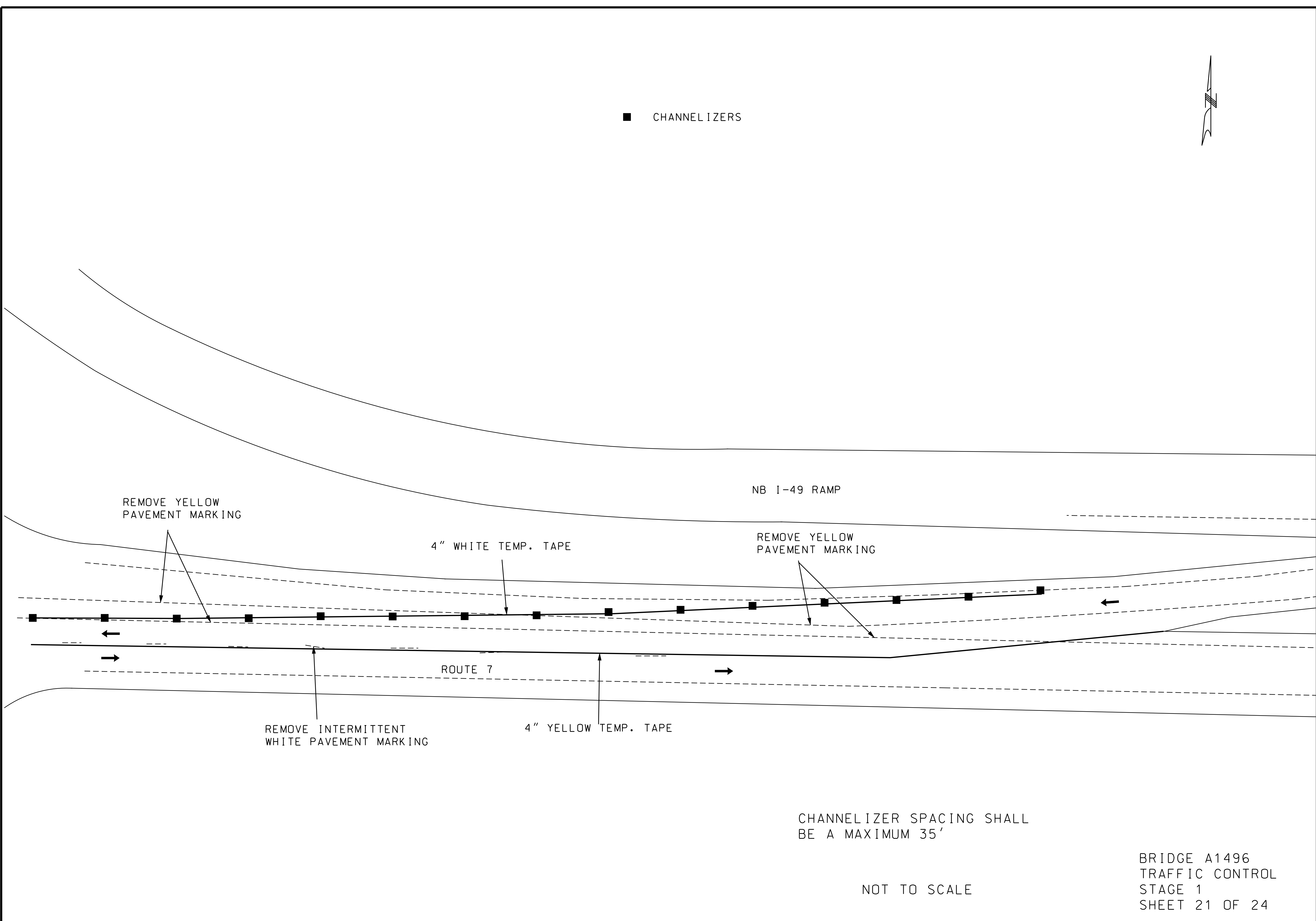
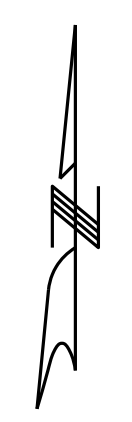
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

■ CHANNELIZERS



CHANNELIZER SPACING SHALL BE A MAXIMUM 35'

NOT TO SCALE

BRIDGE A1496
TRAFFIC CONTROL
STAGE 1
SHEET 21 OF 24

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 31

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

DATE

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DESCRIPTION

DATE

DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

■ CHANNELIZERS

MAINTAIN A MIN.
16' LANE WIDTH

4" WHITE TEMP. TAPE

ROUTE 7

SB I-49 RAMP


SB I-49 RAMP

CHANNELIZER SPACING SHALL
BE A MAXIMUM 35'

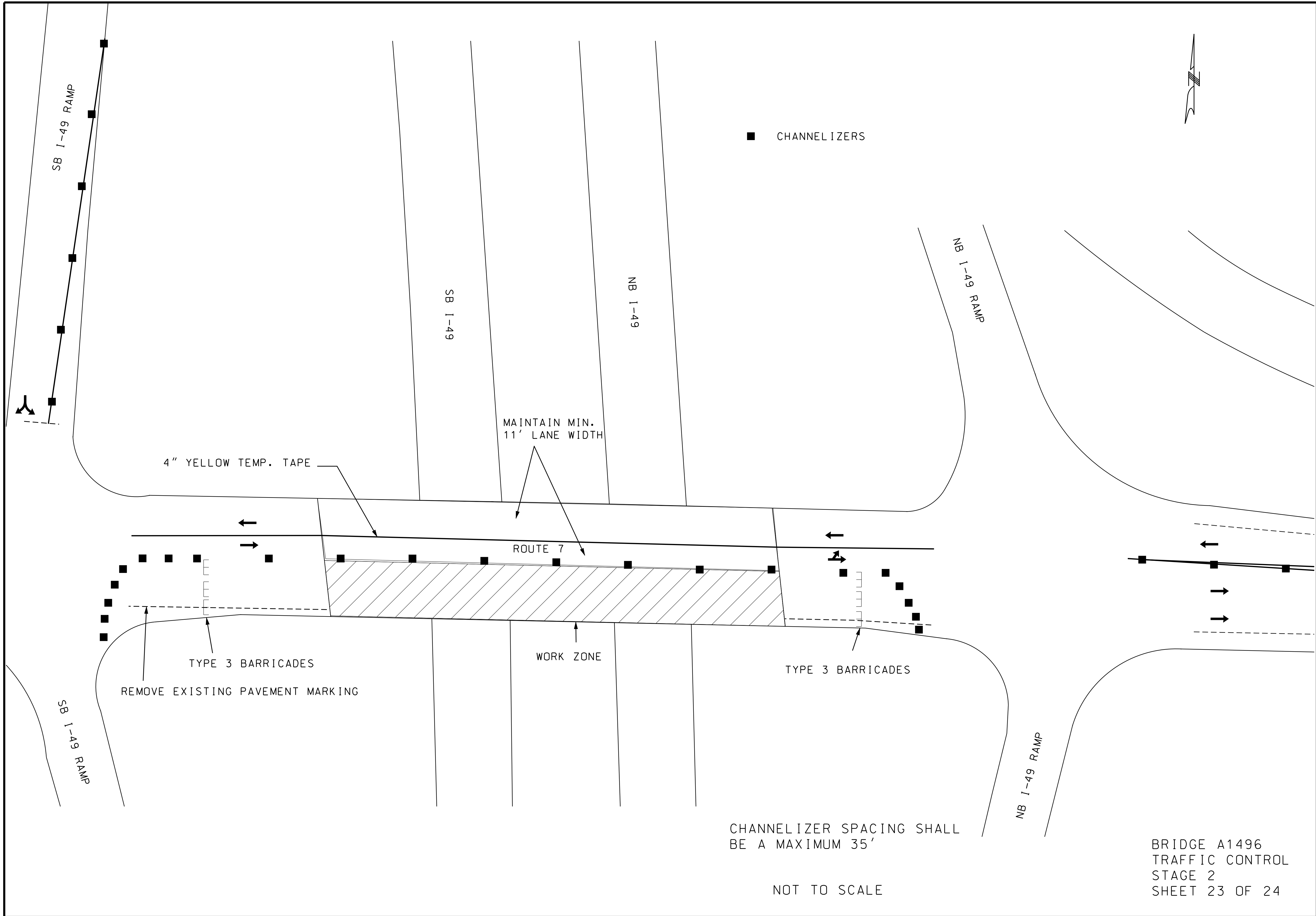
NOT TO SCALE

BRIDGE A1496
TRAFFIC CONTROL
STAGE 2
SHEET 22 OF 24

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 32

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

BRIDGE A1496
TRAFFIC CONTROL
STAGE 2
SHEET 23 OF 24

NOT TO SCALE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 33

COUNTY
JACKSON/CASS

JOB NO.
J413012

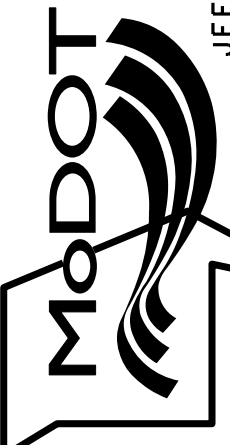
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

■ CHANNELIZERS

NB I-49 RAMP

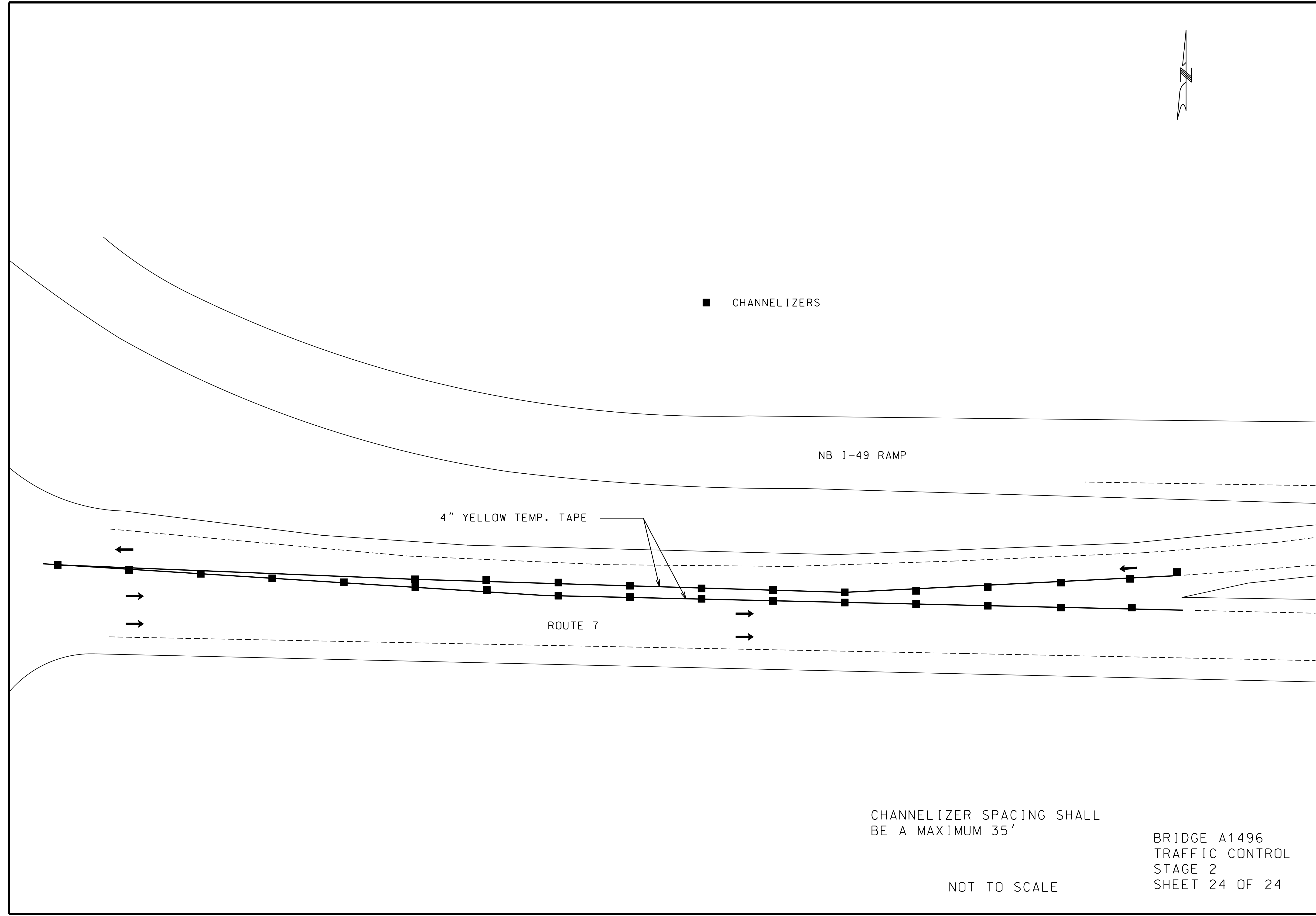
4" YELLOW TEMP. TAPE

ROUTE 7

CHANNELIZER SPACING SHALL BE A MAXIMUM 35'

NOT TO SCALE

BRIDGE A1496
TRAFFIC CONTROL
STAGE 2
SHEET 24 OF 24





"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	34

COUNTY
JACKSON/CASS

JOB NO.
J413012

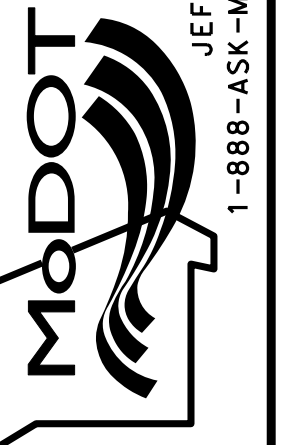
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PROJECT NO.

BRIDGE NO.

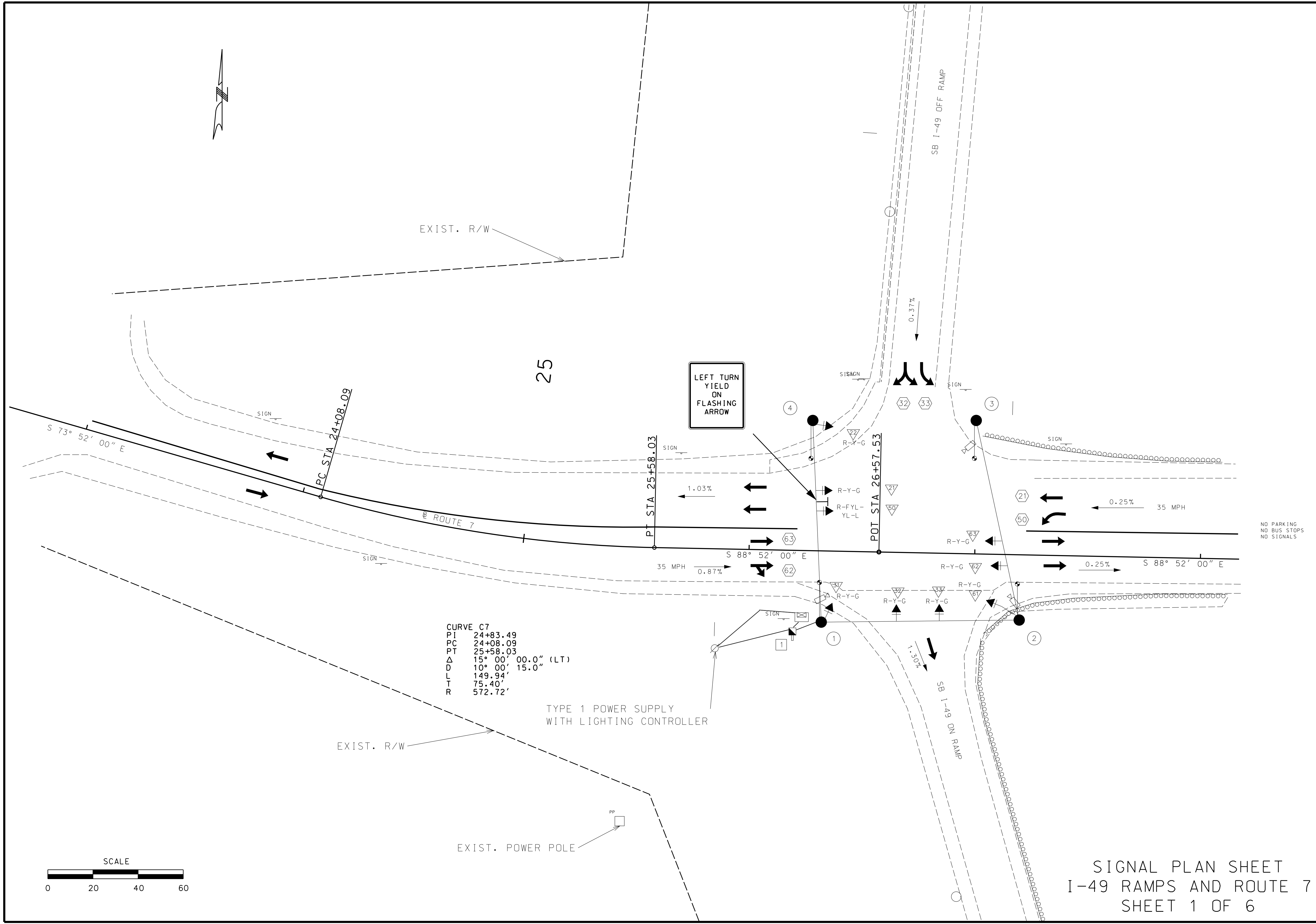
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

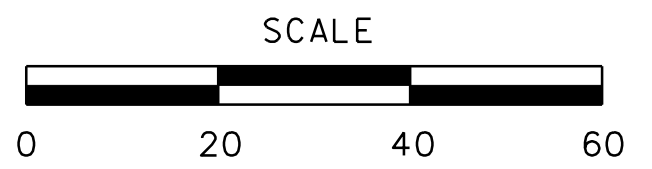


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NO PARKING
NO BUS STOPS
NO SIGNALS



SIGNAL PLAN SHEET
I-49 RAMP AND ROUTE 7
SHEET 1 OF 6

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012
ROUTE VAR. MO
DISTRICT KC SHEET NO. 35
COUNTY JACKSON/CASS
JOB NO. J413012
CONTRACT ID.

PROJECT NO.
BRIDGE NO.

Table with 2 columns: DESCRIPTION, DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

Main project data table with columns: LOCATION, BASE, PULL BOX, POST, LUMINAIRE BRACKET ARM*

SUBTOTAL and TOTAL rows for the main project data table

SIGNAL HEADS

Table for SIGNAL HEADS with columns: SPAN NUMBER, POST NUMBER, FACE NUMBER, LUMINAIRE, INDICATIONS, VISORS, LOUVERS, BACKPLATE, BRACKET, ONE-FACE, TWO-FACE

SPAN WIRE POLES table with columns: POST NUMBER, WOOD CLASS IV, STEEL (A10 BASE REQUIRED)

SUBTOTAL OPTICALLY LIMITED, SUBTOTAL CONVENTIONAL, SUBTOTAL COMBINATION OL & CONV

SPAN WIRE CABLE SPANS table with columns: SPAN NUMBER, FROM POST, TO POST, SINGLE MESSENGER ASSEMBLY, MESSENGER ASSEMBLY WITH TETHER

REMARKS: ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED. * ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE. ** SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES. *** USE D3-16 FOR ONE LINE. USE D3-18 FOR TWO LINE.

SIGNS table with columns: QUANTITY, MUTCD SIGN NUMBER, SIZE (INCHES), AREA (SQ. FT.), TOTAL AREA EACH SIGN (SQ. FT.)

SUBTOTAL AREA ITEM NO. 903-50.68
TOTAL AREA ITEM NO. 903-50.68

LEGEND: T - TOP MOUNT, S - SIDE MOUNT, C - SPANWIRE MOUNT, B - MAST ARM MOUNT
SB 1-49 RAMPS AND ROUTE 7
INTERSECTION SHEET 2 OF 6

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO
DISTRICT SHEET NO.
KC 36

COUNTY
JACKSON/CASS
JOB NO.
J413012
CONTRACT ID.

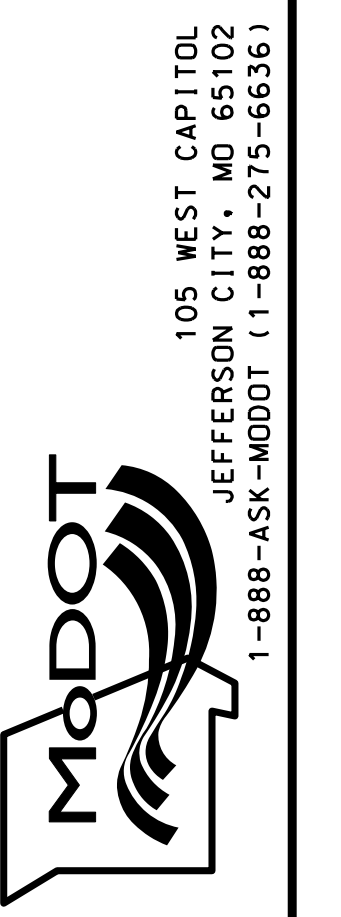
PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

CONDUIT

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	TRENCH				PUSHED			MEDIAN			ON STRUCTURE		REMARKS	FROM	TO	CENTER TO CENTER DISTANCE	POWER		CONTROL			CLOSED LOOP INTERCONNECT	LUMINAIRE		DETECTOR		FIBER		REMARKS					
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"					1c #8	2c #16	5c #16	7c #16	3c #16		3 PAIR #16	CONTROL	POLE & BRACKET	1c #14 IN DUCT	2c #14 LEAD-IN CABLE	SINGLE-MODE		MULTI-MODE				
Ø	⊠	45'		50'												Ø	⊠	45'	88'																	
⊠	1	7'		11'												⊠	32	103'																		
Ø	1	35'		40'												⊠	32	84'																		
1	1	14'		18'												⊠	32	33'																		
																⊠	62	173'																		
																⊠	62	163'																		
																⊠	62	25'																		
																⊠	21	109'																		
																⊠	50	99'																		
																⊠	21	30'																		
																⊠	49'																			
																⊠	132'																			
																⊠	132'																			
																⊠	139'																			
SUBTOTALS																SUBTOTALS																				
TOTALS																TOTALS																				

POWER SUPPLY													
LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE		
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	CONTROLLER		POWER SUPPLY DISCONNECT		120 VOLT CONTROL CABINET		CONTRACT FURNISH	UTILITY COMPANY	
					AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER	SIGNALS LIGHTING					
ROUTE 7	25+85.65	44.1' RT	Type 1	902.15	15 Amps	30 Amps	40 Amps	40 Amps	40	15 Amps	C1.4	35 Ft.	
			Type		15 Amps						C1.	Ft.	

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT																										
LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *					NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *							
APPROACH	STATION	OFFSET	NEMA		170		TYPE		12C/7C HARDWARE (1)		TIME BASE	CLOSED LOOP		FIBER	TIME * CLOCK	E			332		336S		BITRAN		WAPITI	
							I	II	MASTER	LOCAL		NEMA	170													
ROUTE 7	26+23.87	29.55' RT			1		1				1															

DETECTOR SCHEDULE						
DETECTOR NUMBER	APPROACH	TYPE				
		PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
			STANDARD	DELAY/EXTEND *	CALL UNIT *	
32	SB ROUTE 71 OFF RAMP					3
33	SB ROUTE 71 OFF RAMP					
21	WB ROUTE 7					1
50	WB ROUTE 7					
63	EB ROUTE 7					2
62	EB ROUTE 7					
TOTAL						1 EACH

- * ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
- (1) MODOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWARE INTERCONNECT.
 - (2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.
 - (3) VIDEO SHALL BE BROADBAND OVER POWER.
 - (4) USE WWV INPUT FOR TIME.
 - (5) MANUAL CONTROL SWITCH SHALL BE INCLUDED.

NEMA DETECTOR ASSIGNMENT									
CARD POSITION									
	1	2	3	4	5	6	7	8	
CHANNEL	1	VIDEO							
	2								

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

170 INPUT FILE ASSIGNMENTS														
CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U													
	L	N/A												
"J"	U													
	L													

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

170 OUTPUT FILE ASSIGNMENTS						
FR1	FR2	FR3	FR4	FR5	FR6	MONITOR
		N/A				

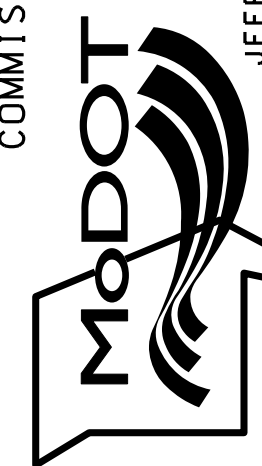
170 AUXILIARY OUTPUT FILE						
FR5	FR6	FR7	FR8	FR9	FR10	FR11
		N/A				

SB ROUTE 71 RAMPS AND ROUTE 7

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-273-6636)

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 1/15/2013

ROUTE VAR. MO

DISTRICT KC SHEET NO. 37

COUNTY JACKSON/CASS

JOB NO. J413012

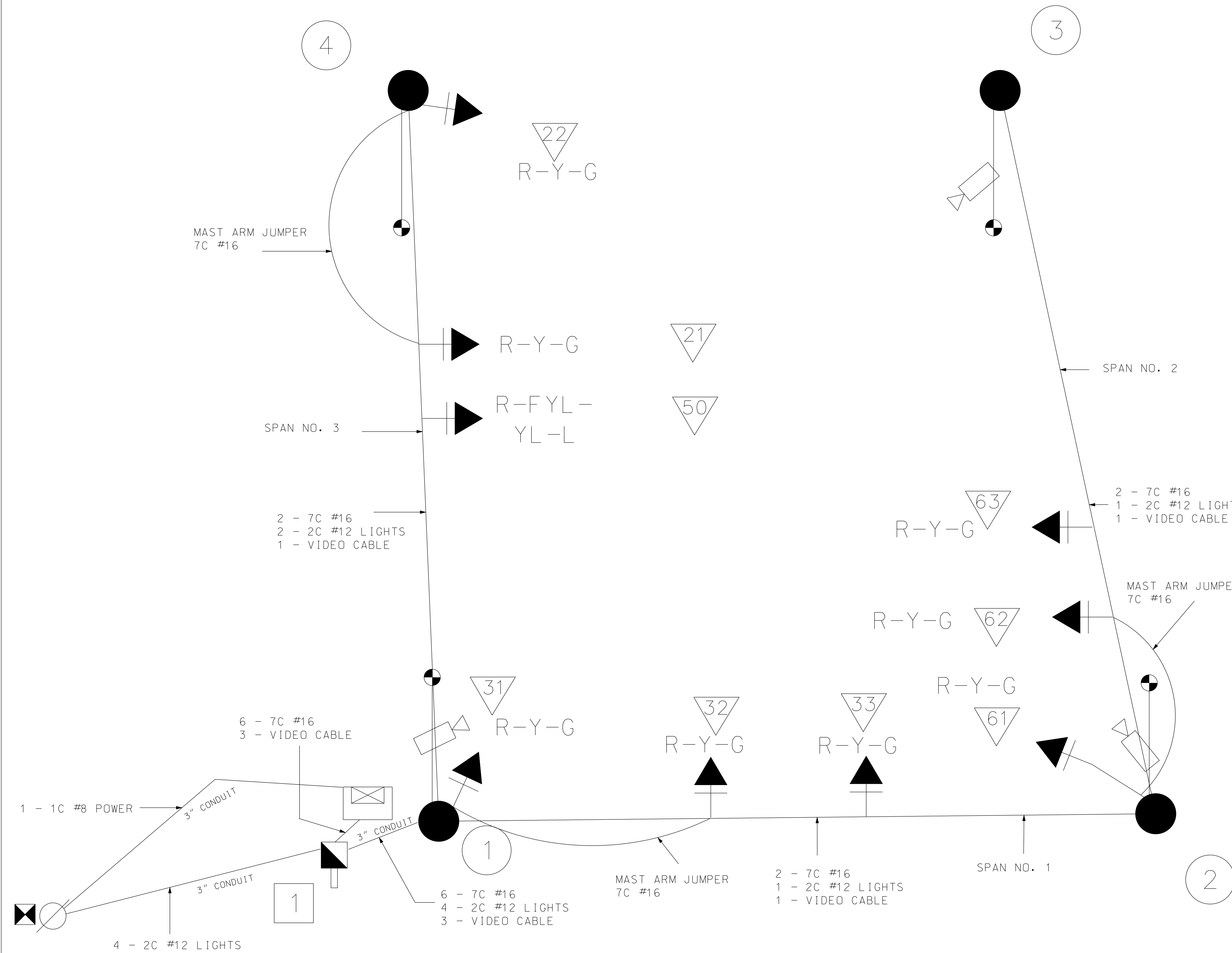
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

WIRING DIAGRAM



LEGEND

- 3" CONDUIT CONTAINING CABLE WITH SIZE
- CABLE
- X-Xc MULTI-CONDUCTOR CABLE #12 AWG (UNLESS OTHERWISE INDICATED)
- LIC #14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)
- [X] PULL BOX WITH NUMBER
- (X) POST WITH NUMBER
- (X) POST WITH MAST ARM
- (X) POST WITH MAST ARM AND LUMINAIRE
- (X) DETECTOR WITH NUMBER
- [X] SIGNAL HEAD WITH NUMBER
- [X] SIGNAL CONTROLLER
- [X] POWER SUPPLY
- [X] LIGHTING CONTROLLER

SB I-49 RAMPS AND ROUTE 7

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 38
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED

12/14/2012

ROUTE

VAR. MO

DISTRICT SHEET NO.

KC 39

COUNTY

JACKSON/CASS

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

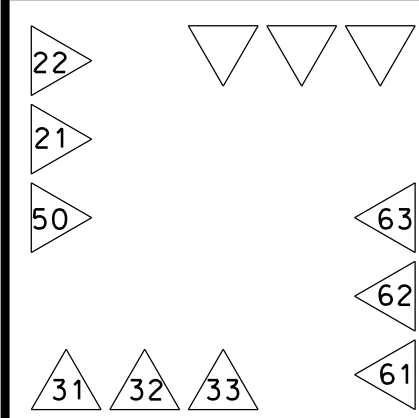
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

PHASE	PHASE 5	PHASE 2	PHASE 6	PHASE 3	PHASE	PHASE	PHASE	PHASE	PED + OVERLAP	PED + OVERLAP	PED + OVERLAP	PED + OVERLAP
FACE NUMBERS	50	21 22	61 62 63	31 32 33								
SIGNAL INDICATIONS	R	R	R R	R R R	R R R							
	Y	YL	Y Y	Y Y Y	Y Y Y							
	FYA	FYA	G G	G G G	G G G							
DETECTOR ASSIGNMENTS	1	1	2	3								
DETECTOR ASSIGNMENTS (PEDS. ONLY)												
OVERLAP PARENT PHASES												

FACE NUMBERS

SIGNAL INDICATIONS

DETECTOR ASSIGNMENTS

PHASE	PHASE 2	PHASE 3	PHASE	
RING 1	FUTURE	←	↘	FUTURE
RING 2	↘	→	FUTURE	FUTURE
PHASE 5	PHASE 6	PHASE	PHASE	

BARRIER

RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- ▷ NON-ACTUATED VEHICULAR MOVEMENT
- ▷ PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- ▷ NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED
- FDW — FLASHING DON'T WALK
- R/W — RIGHT OF WAY INTERVAL
- DW — DON'T WALK
- YRT — YELLOW RIGHT ARROW
- RT. — GREEN RIGHT ARROW
- W — WALK
- LY -YL — YELLOW LEFT ARROW
- L — GREEN LEFT ARROW
- S — GREEN STRAIGHT AHEAD ARROW
- G — CIRCULAR GREEN
- Y — CIRCULAR YELLOW
- R — CIRCULAR RED
- Ø — TRAFFIC PHASE
- A — ALL OTHERS
- FR — FLASHING RED
- FY — FLASHING CIRCULAR YELLOW
- FYA — FLASHING YELLOW ARROW
- FYL — FLASHING YELLOW LEFT ARROW
- FYR — FLASHING YELLOW RIGHT ARROW

FLASHING OPERATION

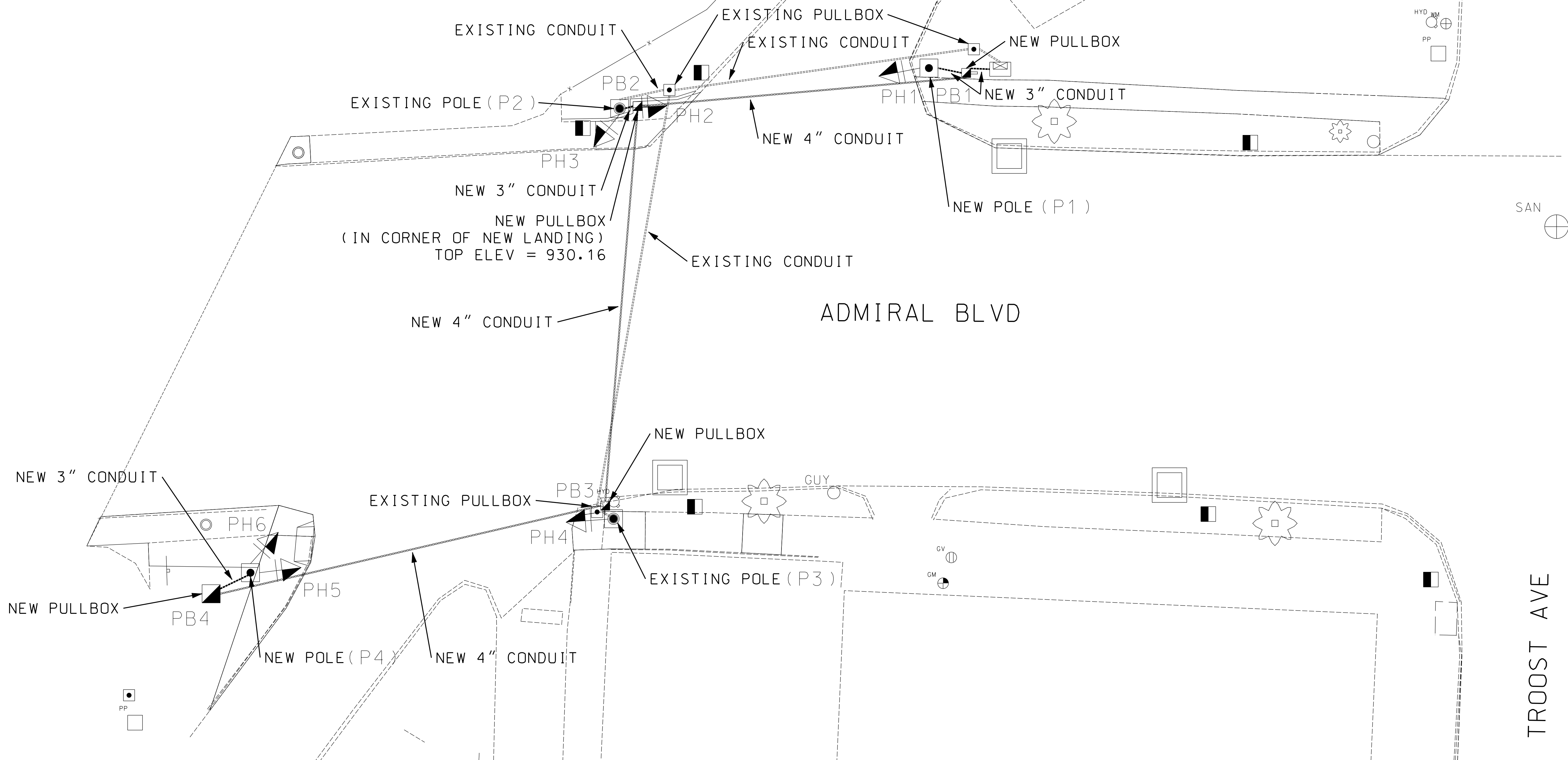
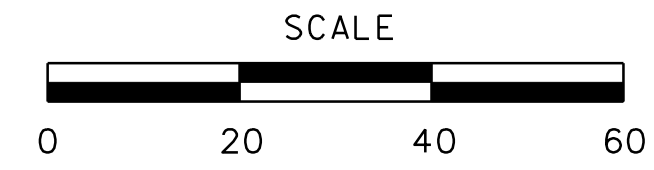
SB I-49 RAMP	FR
ROUTE 7	FY

CONTROLLER TYPE 8 Ø

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF SB ROUTE 71 RAMPS
WITH ROUTE 7

TRAFFIC SIGNALS LEGEND			
	CONTROLLER		CONDUIT MEDIAN
	CONTROLLER (EXISTING)		CONDUIT PUSHED
	JUNCTION BOX		CONDUIT BRIDGE
	POWER SOURCE		CONDUIT EXISTING
	POWER SUPPLY		CONDUIT TRENCHED
	WOOD POST		SPAN WIRE
	SIGNAL HEAD (OPT LIM CONV)		TYPE C MAST ARM A BASE
	SIGNAL HEAD (OPT LIM)		TYPE C MAST ARM F BASE
	SIGNAL HEAD (PEDESTRIAN)		
	SIGNAL HEAD (STANDARD)		
	VIDEO DETECTOR		
	PUSH BUTTON DETECTOR		
	PREFORMED PULL BOX TYPE 1		
	PREFORMED PULL BOX TYPE 2		
	PULL BOX TYPE 1		
	PULL BOX TYPE 2		
	ITS PULL BOX TYPE 2		
	ITS PULL BOX TYPE 5		
	6 X 6 LOOP DETECTOR		
	6 X 15 LOOP DETECTOR		
	30 X 6 LOOP DETECTOR		



OFF RAMP FROM NB US-71

ADMIRAL BLVD AT US-71/US-24 RAMPS
PEDESTRIAN SIGNALS
EAST OF BRIDGE
SHEET 1 OF 5

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED	
1/15/2013	
ROUTE	STATE
VAR.	MO
DISTRICT	SHEET NO.
KC	40
COUNTY	
JACKSON/CASS	
JOB NO.	
J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
L0936	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

POWER SUPPLY														
LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL *(ON POWER SUPPLY)		SERVICE POLE			
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	CONTROLLER		POWER SUPPLY DISCONNECT				CONTRACT FURNISH		UTILITY COMPANY	
EXISTING			Type		AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER	SIGNALS	LIGHTING	120 VOLT CONTROL CABINET	MAIN BREAKER	Amperes	Feet	
			Type		15 Amps	Amps	Amps	Amps	Amps		Amps	Ci.	Ft.	

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT																							
LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *					TIME * CLOCK			NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	TYPE		12C/7C HARDWARE (1)		TIME BASE	CLOSED LOOP		FIBER	E	EV	DOUBLE	332	336S	BITRAN	WAPITI		
EXISTING							I	II	MASTER	LOCAL		NEMA	170										

DETECTOR SCHEDULE						
DETECTOR NUMBER	APPROACH	TYPE				
		PUSH BUTTON	INDUCTION LOOP (2)		VIDEO	
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
PH1		1 (ADA APPROVED)				
PH2		1 (ADA APPROVED)				
PH3		1 (ADA APPROVED)				
PH4		1 (ADA APPROVED)				
PH5		1 (ADA APPROVED)				
PH6		1 (ADA APPROVED)				
TOTAL		6				

- * ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
- MoDOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWIRE INTERCONNECT.
 - PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.
 - ALL PUSH BUTTONS SHALL HAVE AUDIBLE AND VIBROTACTILE FEATURES AND SHALL BE COMPLIANT WITH THE CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND THE MANUAL ON UNIFORM CONTROL DEVICES.

170 OUTPUT FILE ASSIGNMENTS						
FR1						
FR2	N/A					MONITOR
FR3						
FR4						

170 AUXILIARY OUTPUT FILE						
FR5						
FR6	N/A					X

NEMA DETECTOR ASSIGNMENT								
CARD POSITION								
	1	2	3	4	5	6	7	8
CHANNEL 1		X	X	X				
CHANNEL 2								

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

170 INPUT FILE ASSIGNMENTS															
	CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U														
	L				N/A										
"J"	U														
	L														

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

NEMA LOAD SWITCH ASSIGNMENTS											
1	2	3	4	5	6	7	8	9	10	11	12
								X	X	X	

X = CONTACT TRAFFIC ENGINEER FOR DETECTOR AND LOAD SWITCH ASSIGNMENTS

ADMIRAL BLVD AT US-71/US-24 RAMPS

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED: 1/15/2013

ROUTE: VAR STATE: MO

DISTRICT: KC SHEET NO.: 43

COUNTY: JACKSON/CLAY

JOB NO.: J413012

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

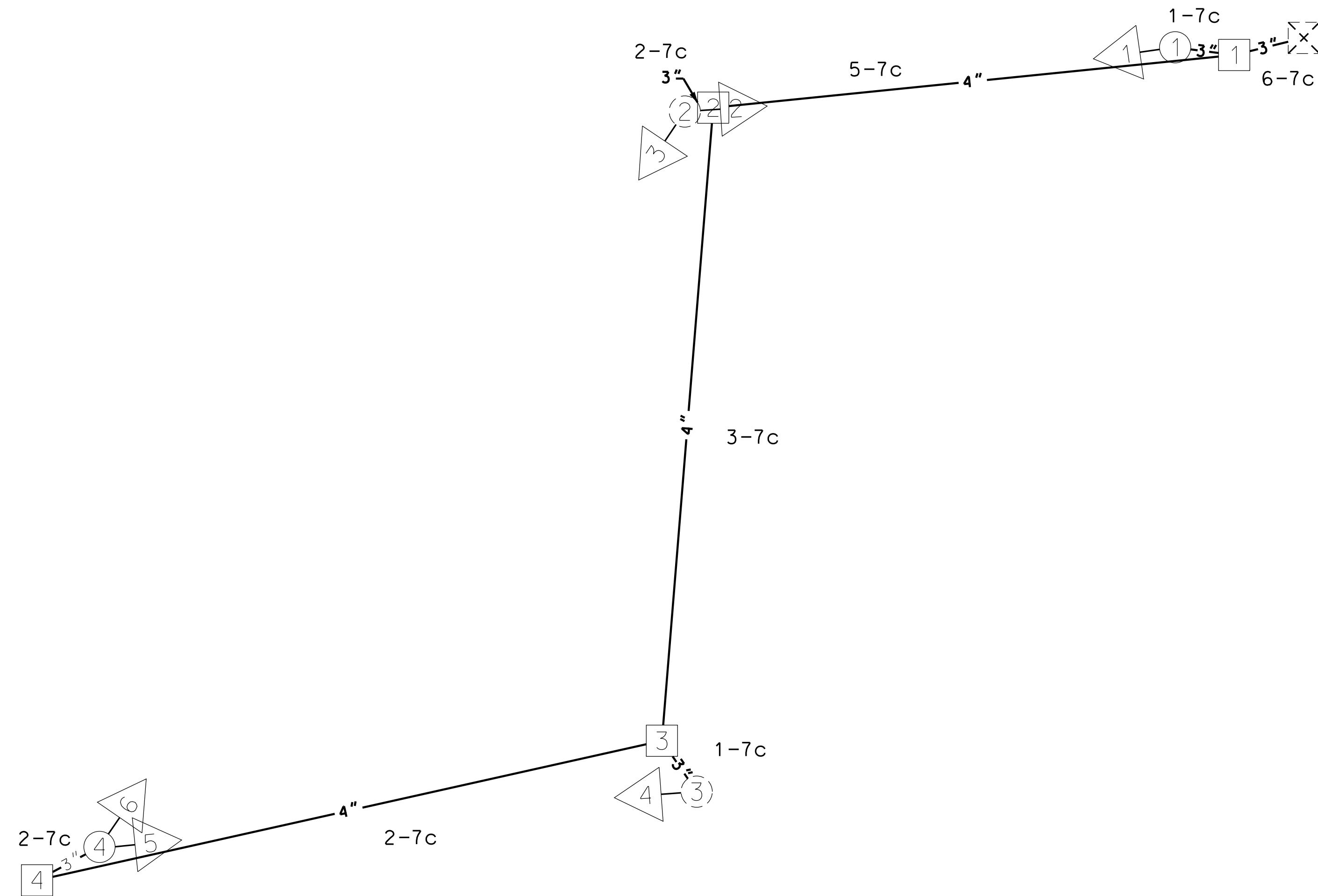
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

WIRING DIAGRAM



LEGEND

— 3" — CONDUIT CONTAINING CABLE WITH SIZE

— CABLE

X-Xc MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)

LIC #14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)

- PULL BOX WITH NUMBER
- POST WITH NUMBER
- POST WITH MAST ARM
- POST WITH MAST ARM AND LUMINAIRE
- DETECTOR WITH NUMBER
- SIGNAL HEAD WITH NUMBER
- SIGNAL CONTROLLER
- POWER SUPPLY
- LIGHTING CONTROLLER

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 1/15/2013	
ROUTE VAR	STATE MO
DISTRICT KC	SHEET NO. 44
COUNTY JACKSON/CLAY	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

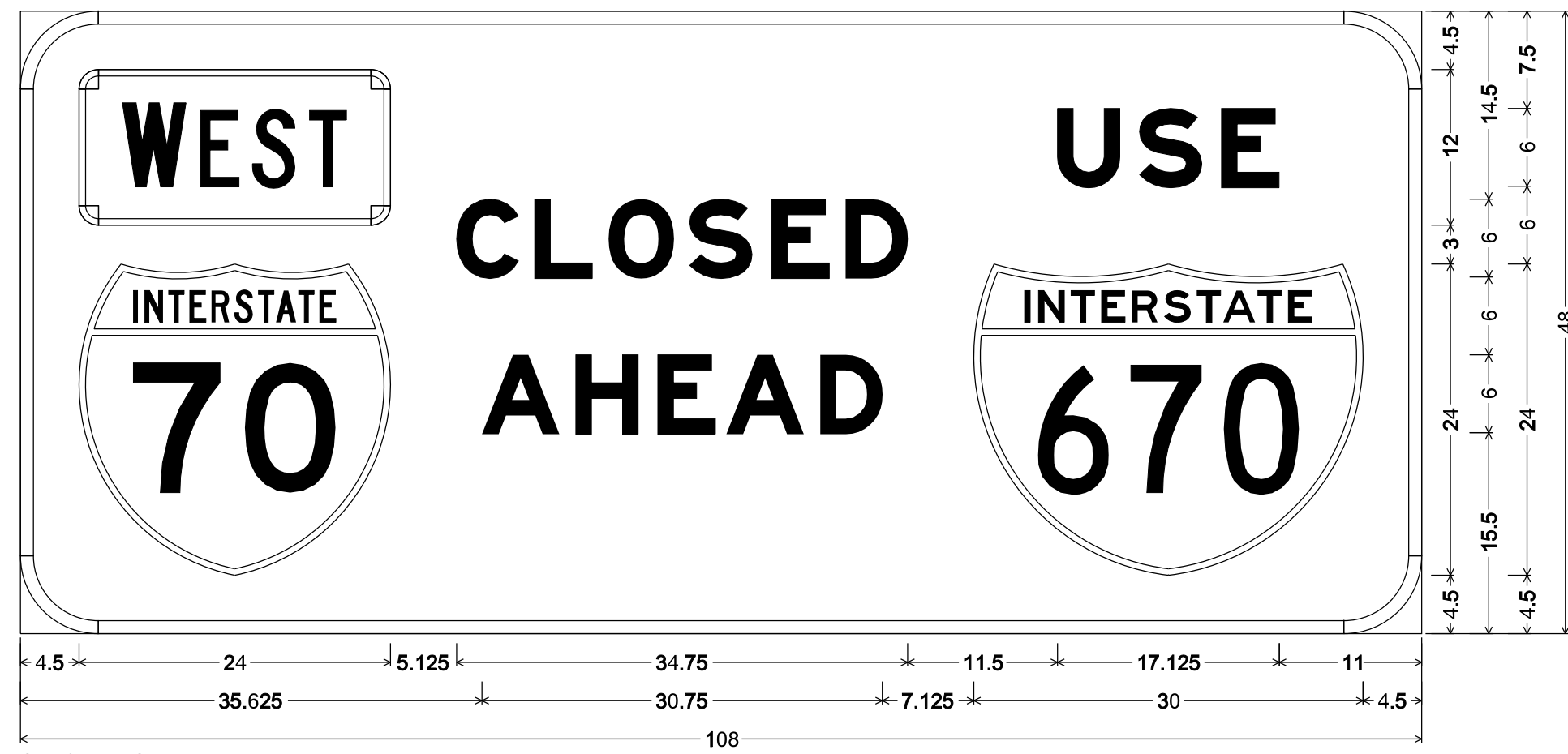
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

ADMIRAL BLVD AT US-71/US-24 RAMPS

INTERSECTION

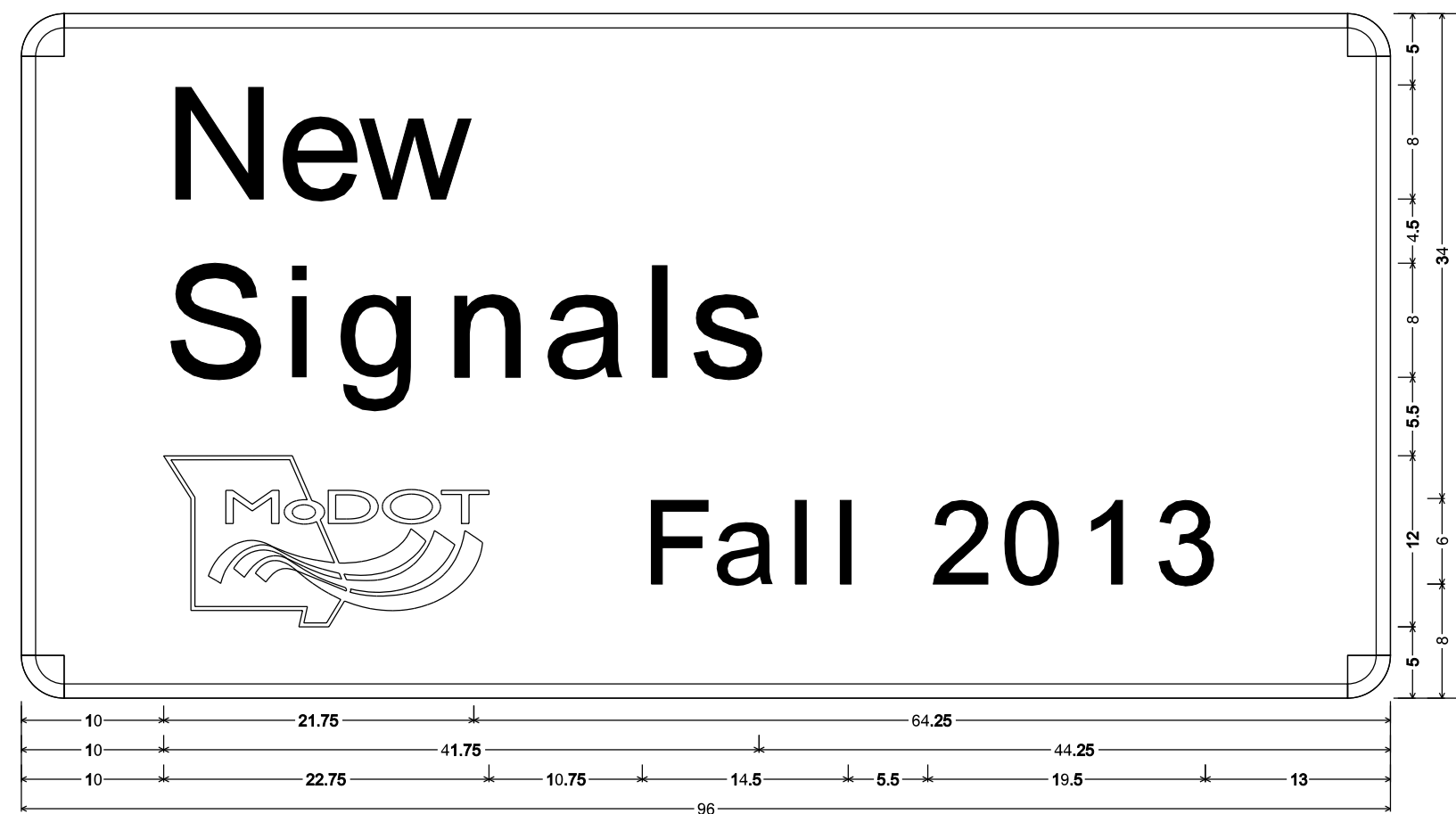
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



SIGN NO.	67
STATION	
ROADWAY	

SPECIAL SIR4L1; 6.000" Radius, 1.000" Border, Black on Orange;
 [CLOSED] E Mod; [AHEAD] E Mod; [USE] E Mod;
 Table of letter and object lefts.

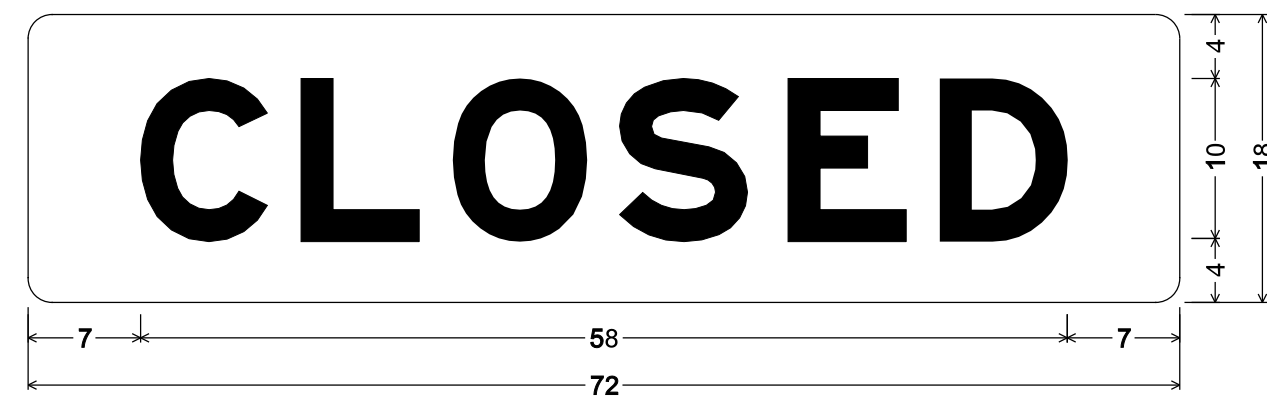
W	C	L	O	S	E	D	U	S	E
4.500	33.625	39.625	45.375	51.625	57.875	63.625	79.875	86.250	92.625
A	H	E	A	D					
4.500	35.625	42.750	49.125	54.375	61.625	73.500			



SIGN NO.	70
STATION	
ROADWAY	

CONST-5-96 SHR2L1; 3.000" Radius, 1.000" Border, White on Blue;
 [New] Arial 200% spacing; [Signals] Arial 200% spacing; [Fall 2013] Arial 200% spacing;
 Table of letter and object lefts.

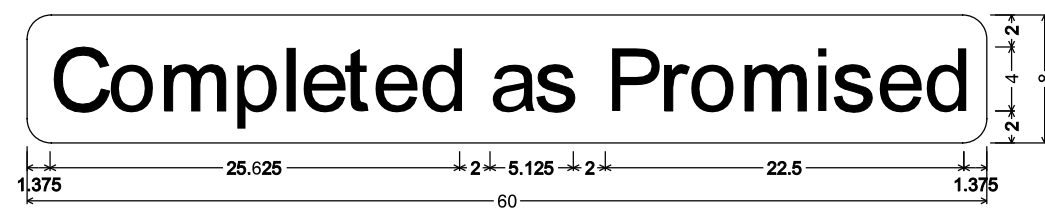
N	O	W						
10.000	18.000	23.750						
S	I	G	N	A	L	S		
10.000	18.250	21.875	29.750	36.500	43.625	46.875		
E	F	A	L	L	2	0	1	3
10.000	43.500	48.500	53.750	56.875	63.500	68.500	74.000	79.375



SIGN NO.	66
STATION	
ROADWAY	

SPECIAL SHR4L1; 1.500" Radius, No border, Orange;
 [CLOSED] Black E Mod;
 Table of letter and object lefts.

C	L	O	S	E	D
7.000	17.125	26.500	37.000	47.500	57.000



SIGN NO.	71
STATION	
ROADWAY	

CONST-6P-60 SHR4L1; 1.500" Radius, No border, Yellow;
 [Completed as Promised] Black Arial;
 Table of letter and object lefts.

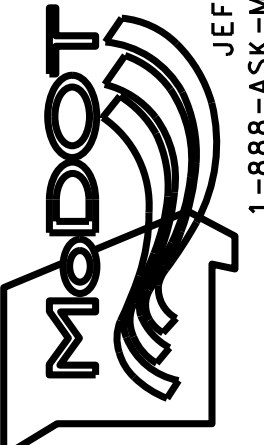
C	O	M	P	L	E	T	E	D	A	S	P	R	O	M	I	S	E
1.375	5.000	8.250	12.750	15.875	17.125	19.875	21.625	24.500	29.000	31.750							
P	R	O	M	I	S	E	D										
36.125	39.500	41.375	44.500	49.125	50.250	53.125	56.000										

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED	12/14/2012		
ROUTE	VAR.	STATE	MO
DISTRICT	KC	SHEET NO.	45
COUNTY	JACKSON/CLAY		
JOB NO.	J413012		
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.			

DATE	DESCRIPTION

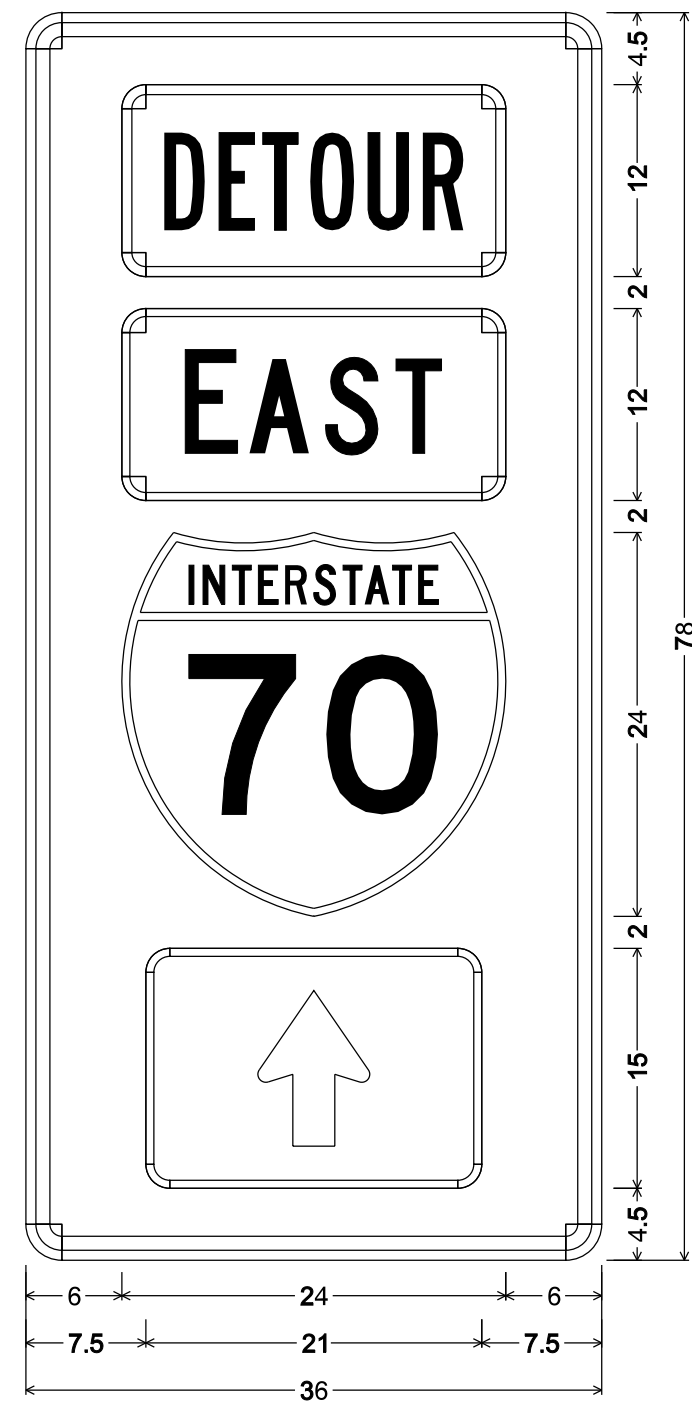
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

SIGNING SHEET
 TEMPORARY TRAFFIC CONTROL
 SHEET 1 OF 4

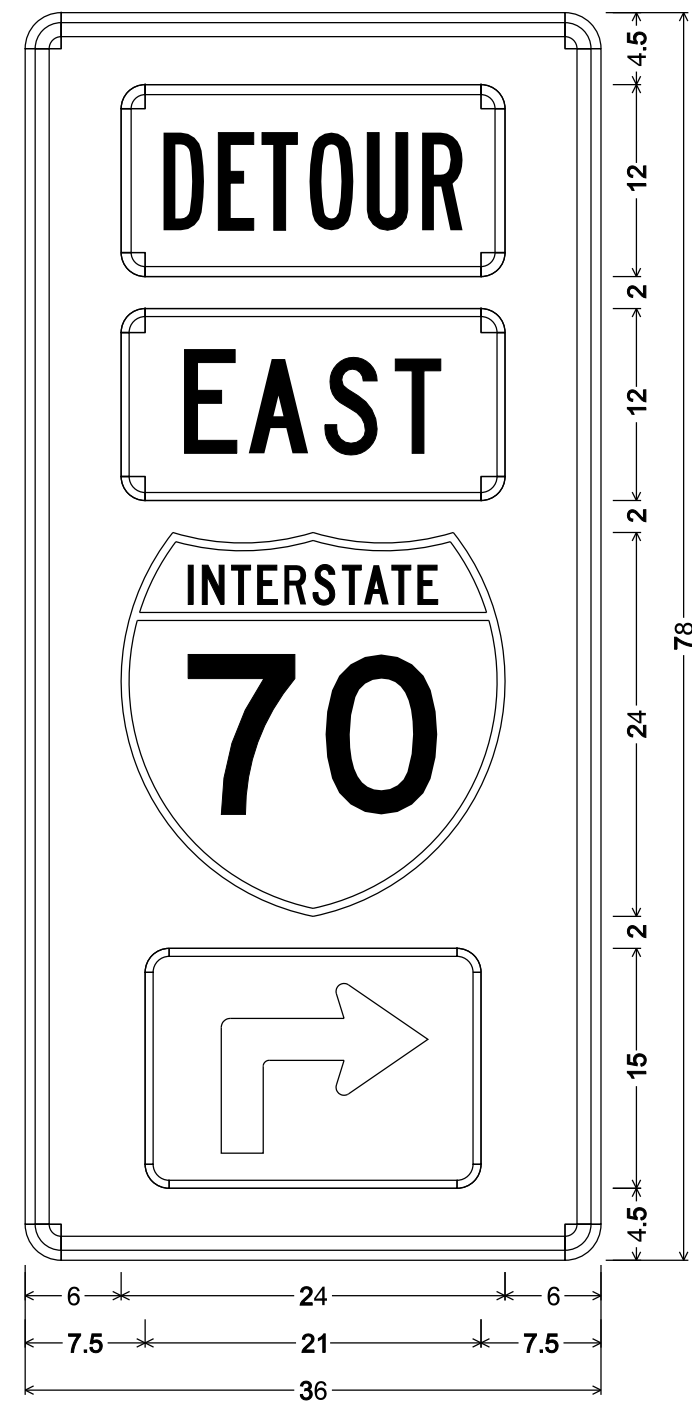
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



SIGN NO.	50A
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

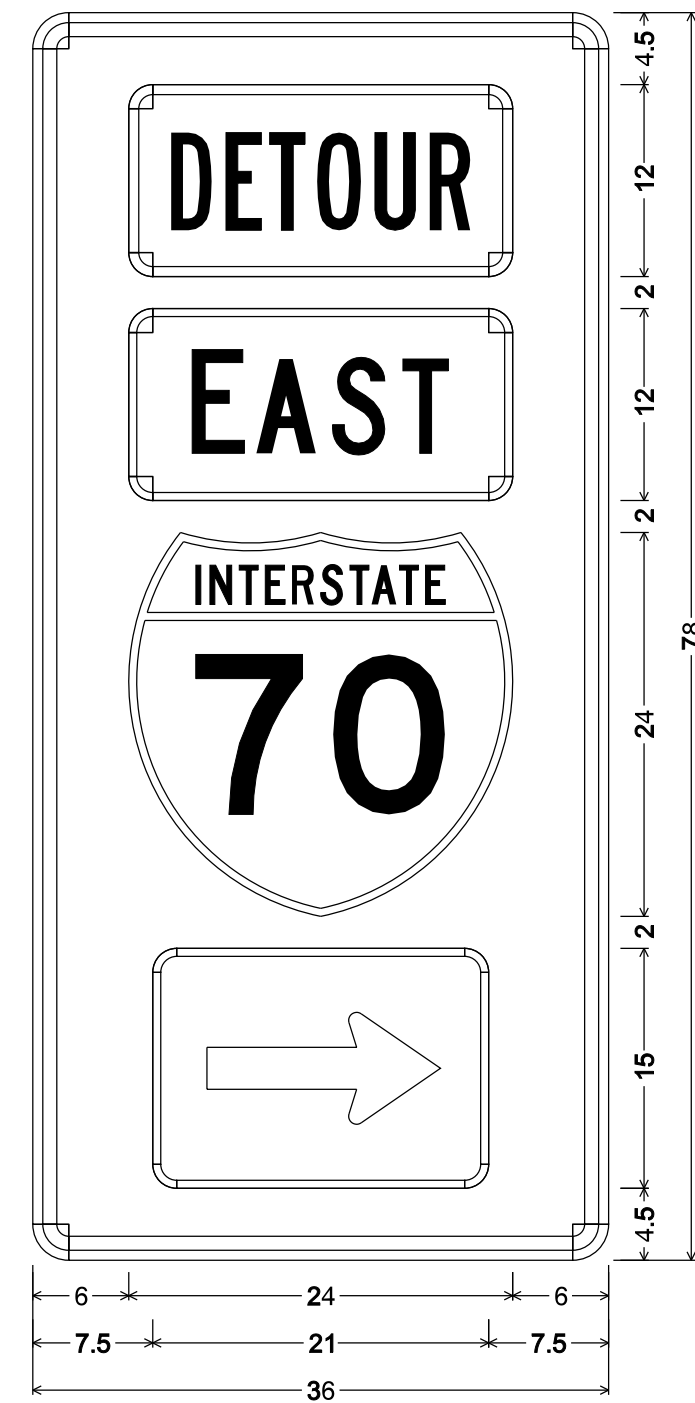
AAA	6.000
AA	6.000
A	6.000
SA	7.500



SIGN NO.	50B
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

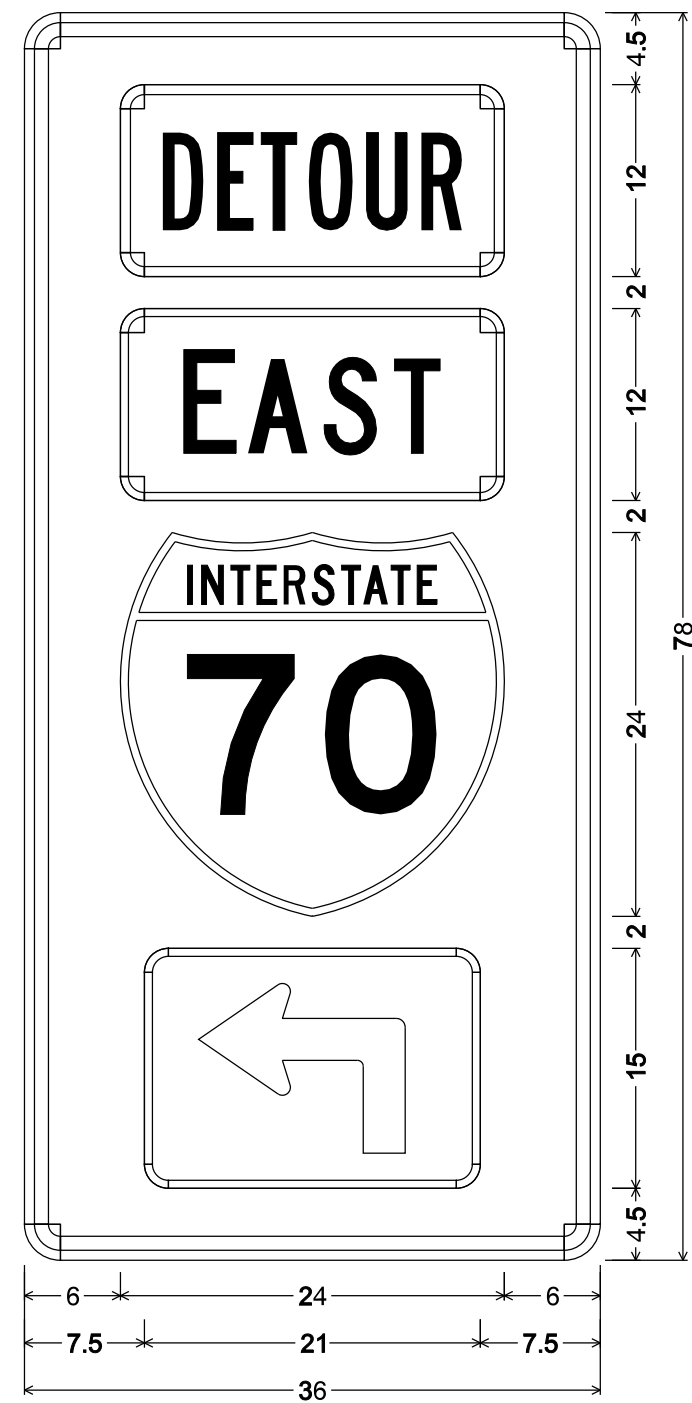
AAA	6.000
AA	6.000
A	6.000
SA	7.500



SIGN NO.	50C
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

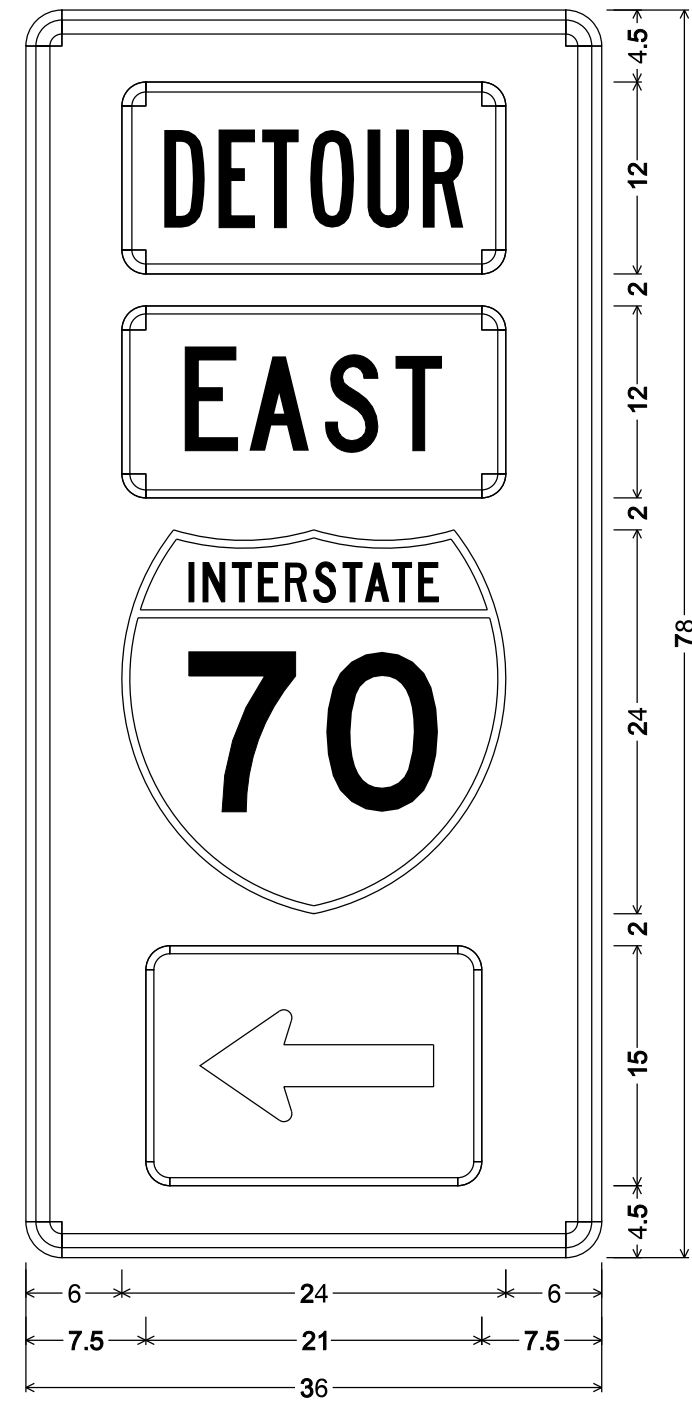
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A	6.000
SA	7.500



SIGN NO.	50D
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

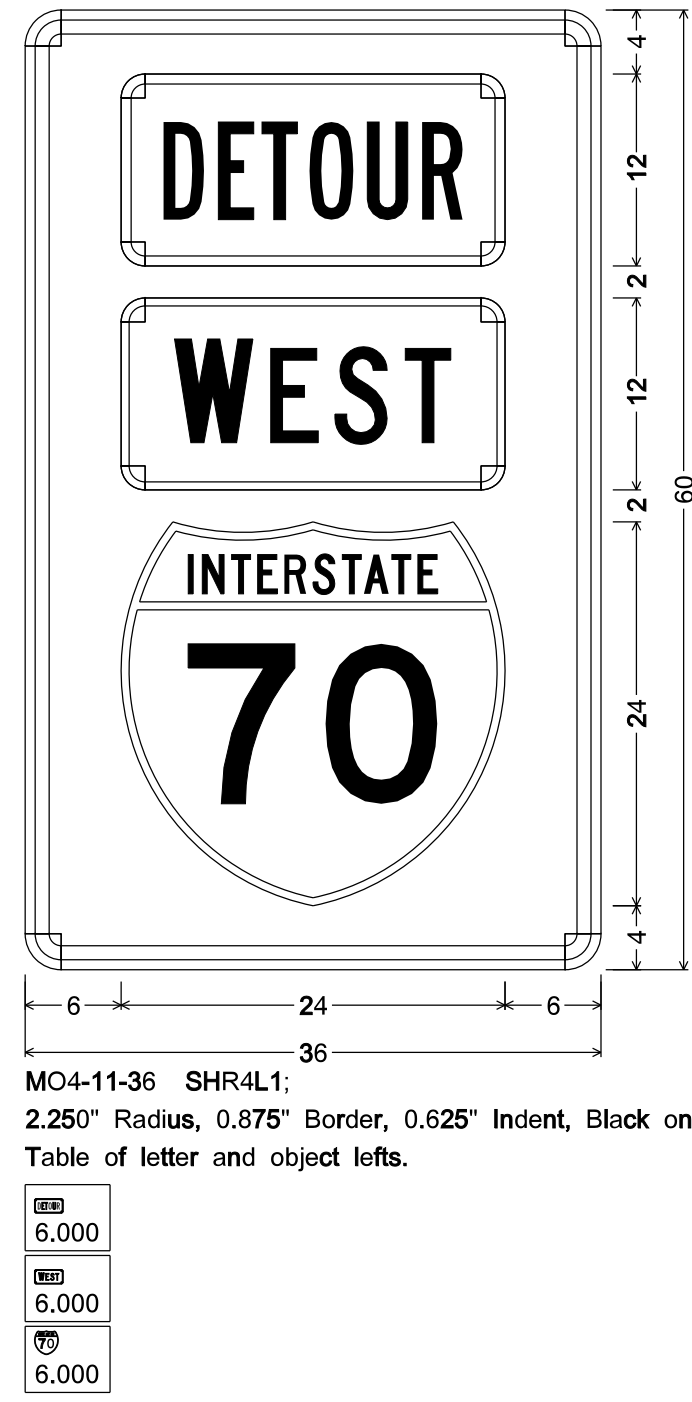
AAA	6.000
AA	6.000
A	6.000
SA	7.500



SIGN NO.	50E
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
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Table of letter and object lefts.

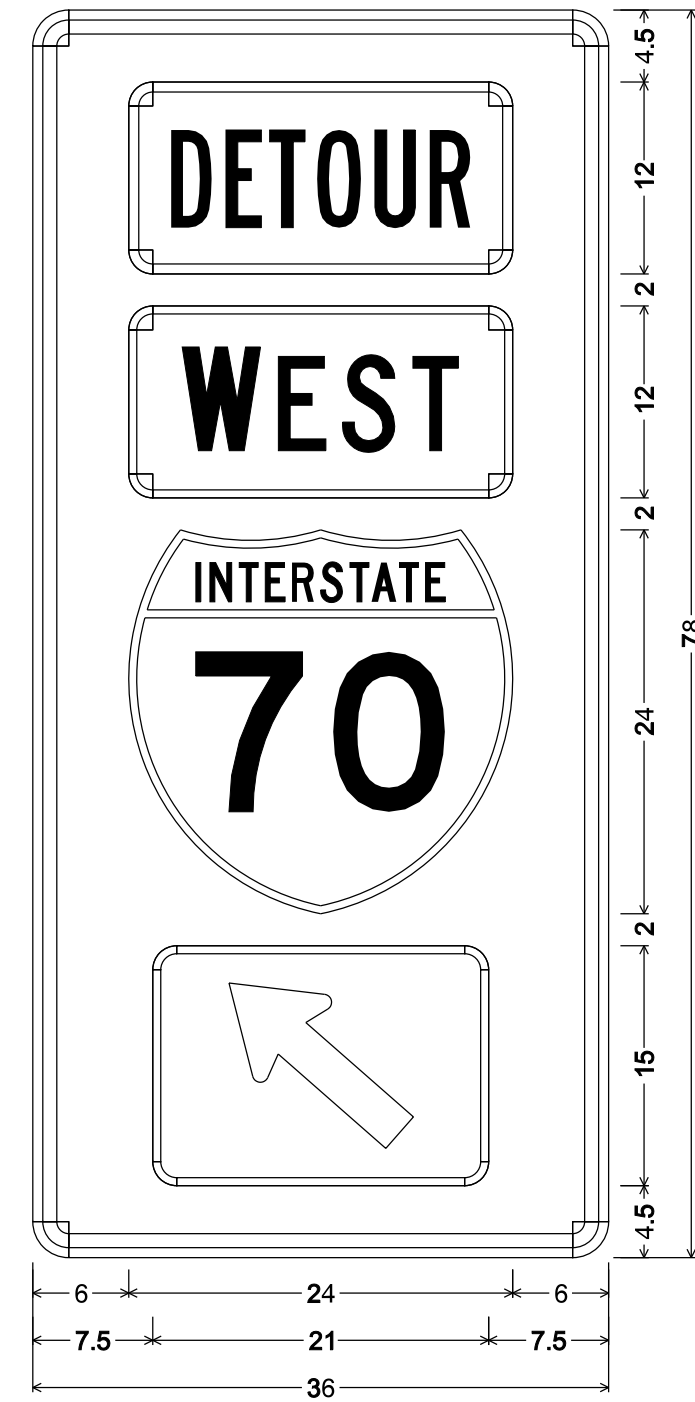
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AA	6.000
A	6.000
SA	7.500



SIGN NO.	51A
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
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Table of letter and object lefts.

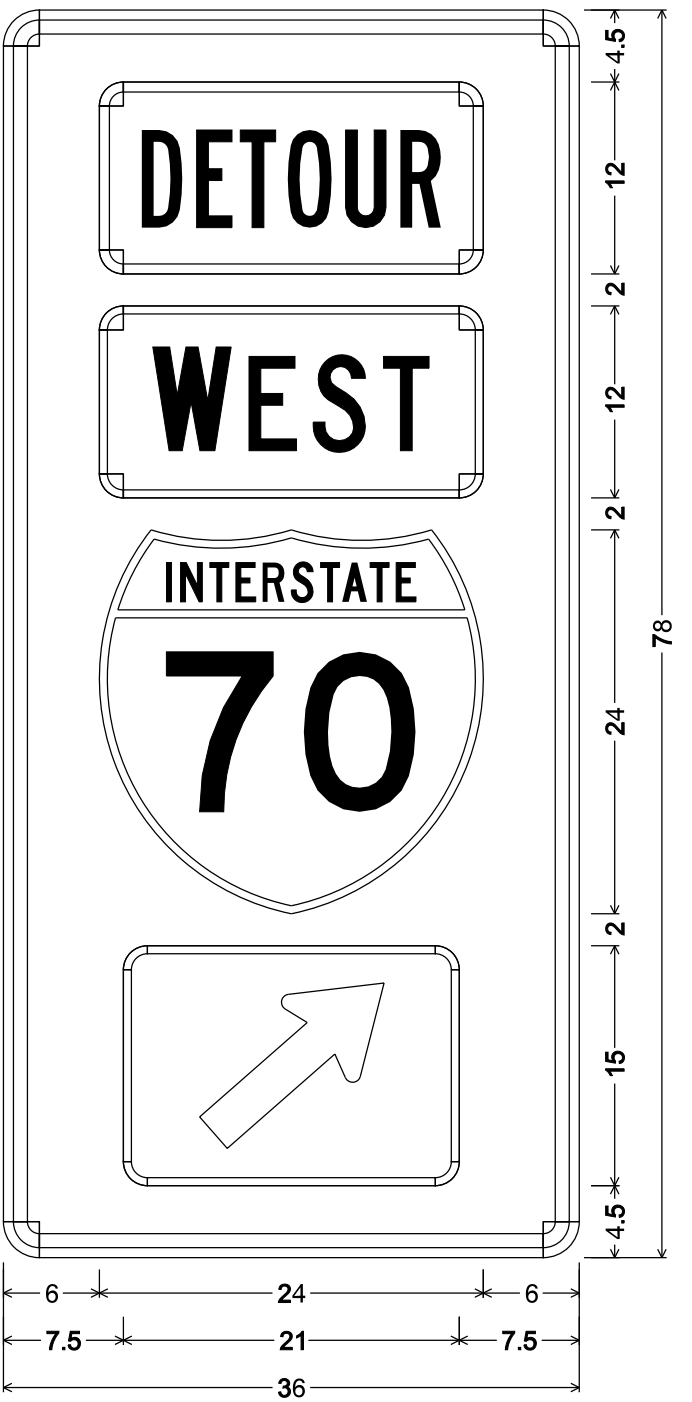
AAA	6.000
AA	6.000
A	6.000
SA	6.000



SIGN NO.	51B
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

AAA	6.000
AA	6.000
A	6.000
SA	7.500



SIGN NO.	51C
STATION	
ROADWAY	

MO4-11-36 SHR4L1:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
Table of letter and object lefts.

AAA	6.000
AA	6.000
A	6.000
SA	7.500

SIGNING SHEET
TEMPORARY TRAFFIC CONTROL
SHEET 2 OF 4

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE	STATE
VAR	MO
DISTRICT	SHEET NO.
KC	46

COUNTY
JACKSON/CLAY
JOB NO.
J413012
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

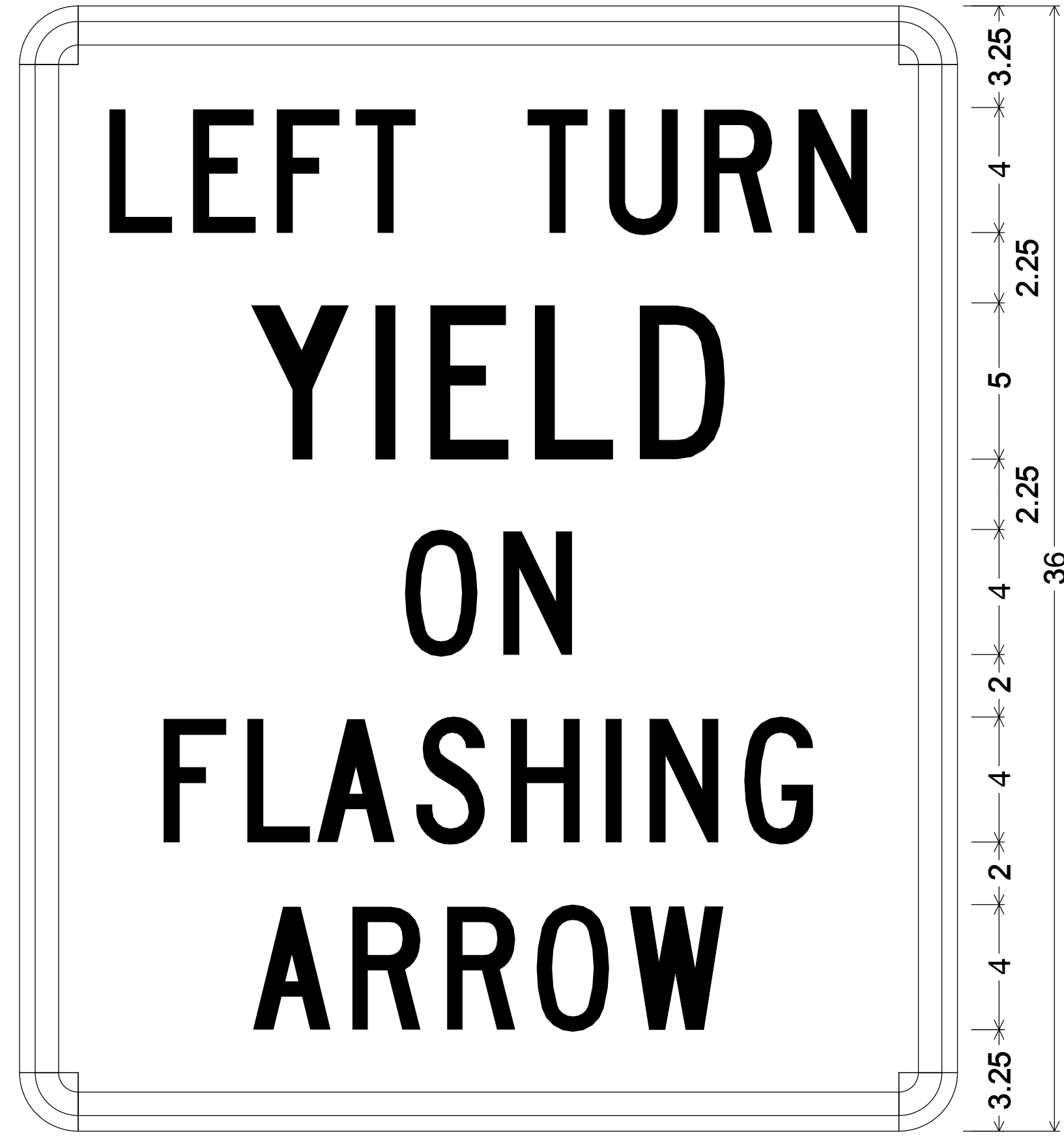
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

 105 WEST CAPITOL JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

**LEFT TURN
YIELD
ON
FLASHING
ARROW**



2.875	9.875	3.5	10.875	2.875
7.375		15.25	7.375	
12.375		5.25	12.375	
4.625	20.75		4.625	
7.5		15	7.5	
30				

SPECIAL SHR2L1;
 1.875" Radius, 0.750" Border, 0.500" Indent, Black on White;
 [LEFT TURN] C; [YIELD] C; [ON] C; [FLASHING] C;
 [ARROW] C;

Table of letter and object lefts.

L	E	F	T	T	U	R	N
2.875	5.500	8.250	10.750	16.250	18.875	21.875	24.875
Y	I	E	L	D			
7.375	11.375	13.125	16.500	19.875			
O	N						
12.375	15.500						
F	L	A	S	H	I	N	G
4.625	7.250	9.500	12.750	15.750	18.750	20.125	23.250
A	R	R	O	W			
7.500	10.625	13.625	16.500	19.500			

SIGN NO. 1

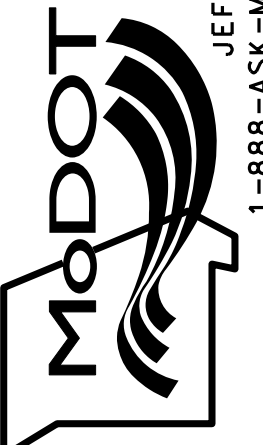
PERMANENT SPECIAL SIGN
 A1496 SIGNAL
 SIGNING SHEET 3 OF 4

THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

DATE PREPARED 12/14/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 47
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

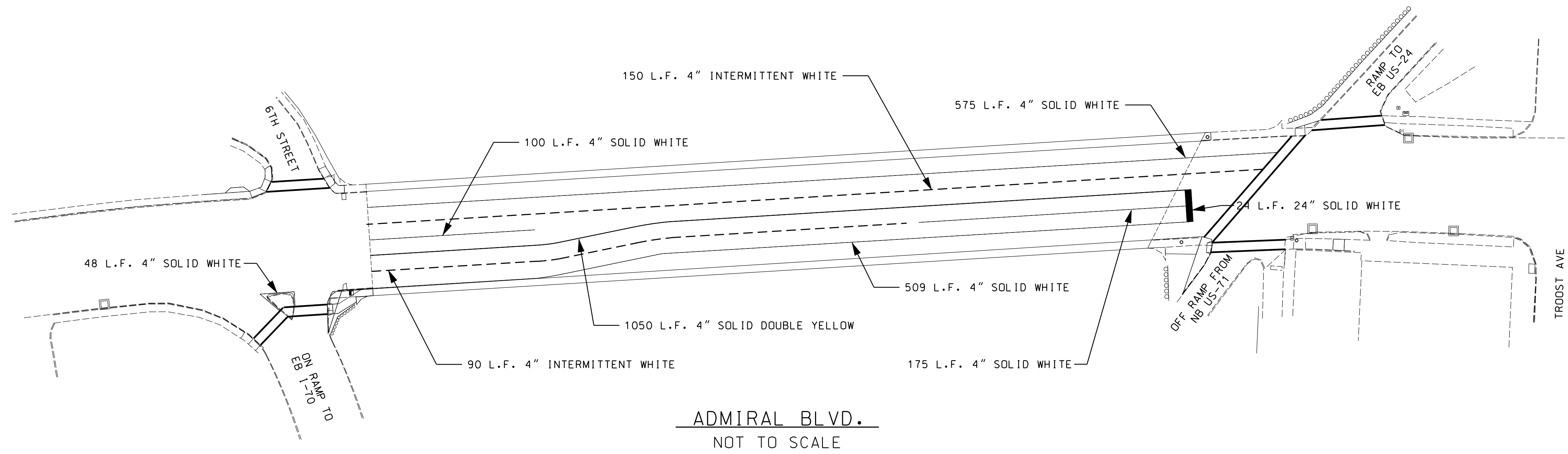
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



NOTE: ALL CROSSWALKS ARE 6" SOLID WHITE

BRIDGE L0936
PAVEMENT MARKING
SHEET 1 OF 4

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 49

COUNTY
JACKSON/CASS

JOB NO.
J413012

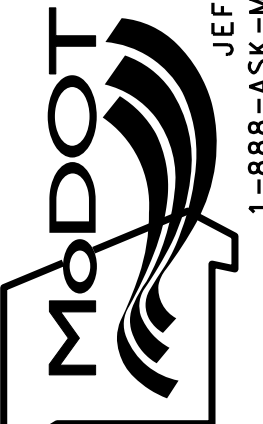
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L0936

DATE	DESCRIPTION

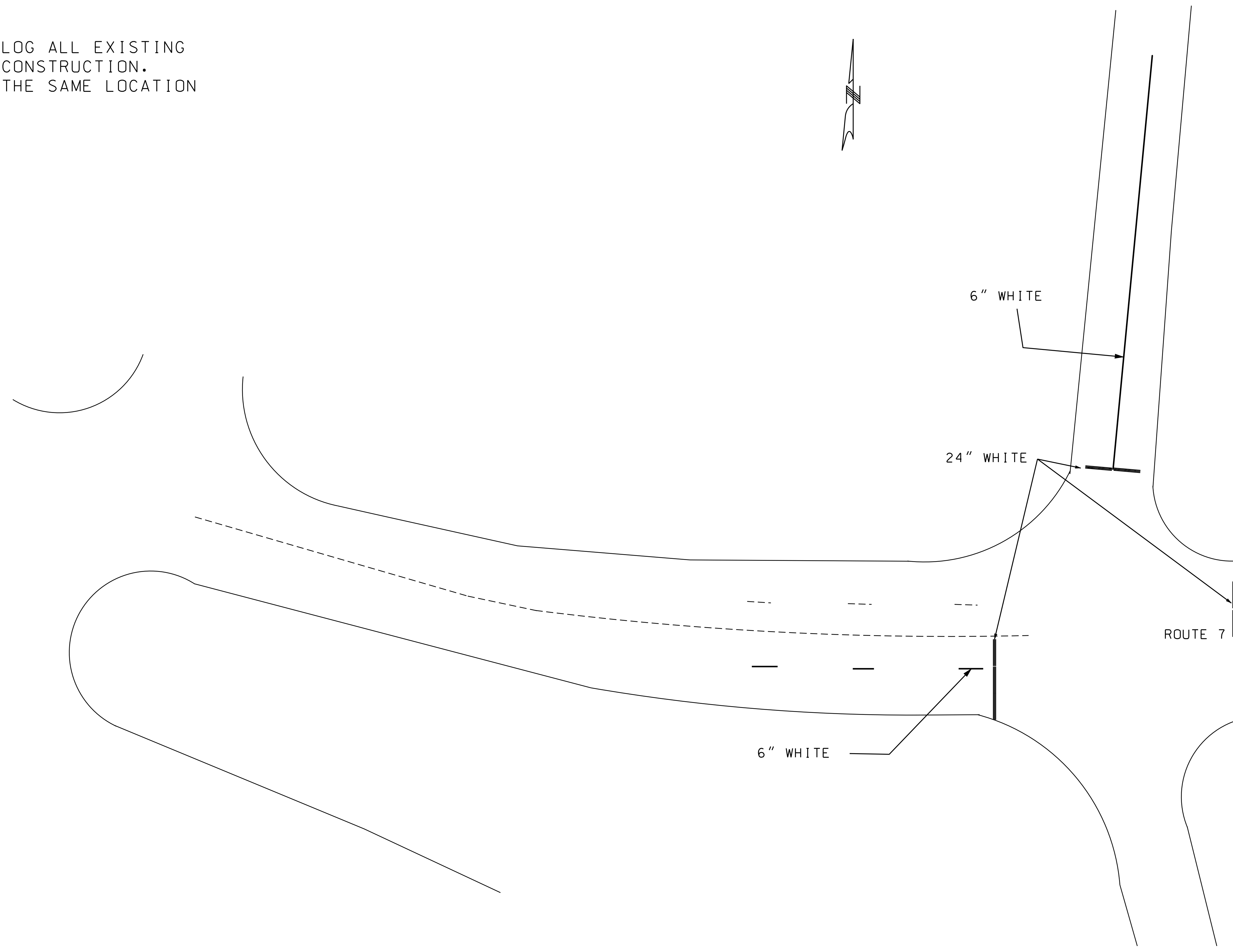
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

NOTE: CONTRACTOR SHALL LOG ALL EXISTING PAVEMENT MARKING BEFORE CONSTRUCTION. NEW MARKINGS WILL BE IN THE SAME LOCATION AS EXISTING.



NOT TO SCALE

BRIDE A1496
PAVEMENT MARKING
SHEET 2 OF 4

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/19/2012	
ROUTE VAR.	STATE MO
DISTRICT KC	SHEET NO. 50
COUNTY JACKSON/CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

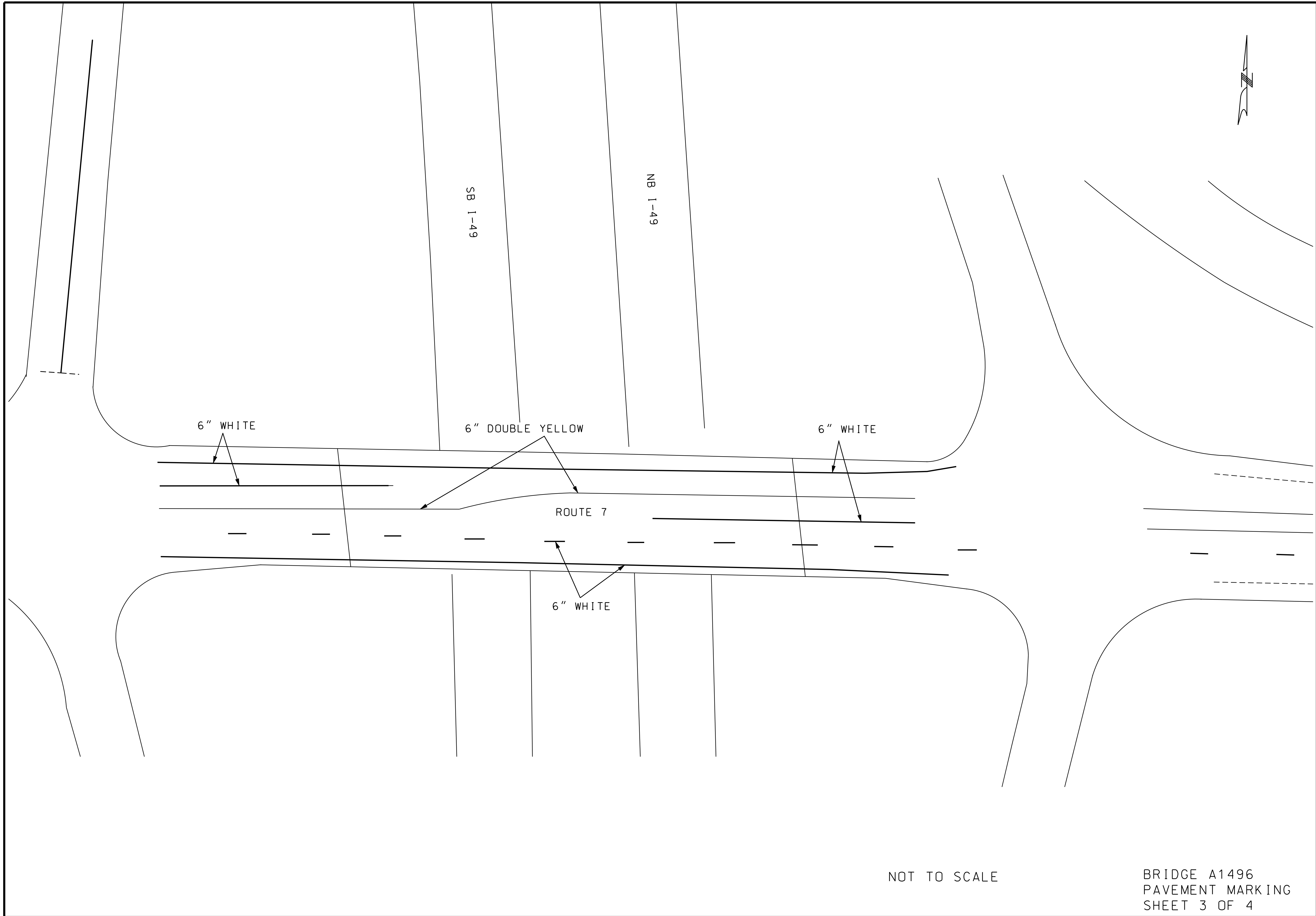
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE VAR.	STATE MO
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DISTRICT KC	SHEET NO. 51
----------------	-----------------

COUNTY
JACKSON/CASS

JOB NO.
J413012


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

BRIDGE A1496
PAVEMENT MARKING
SHEET 3 OF 4

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

NOT TO SCALE



"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/14/2012

ROUTE STATE
VAR. MO

DISTRICT SHEET NO.
KC 52

COUNTY
JACKSON/CASS

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

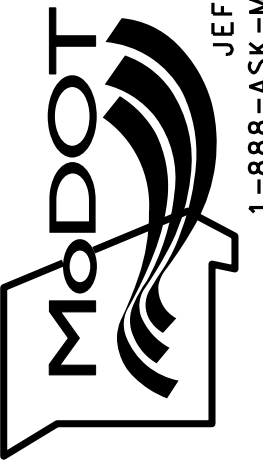
DATE	DESCRIPTION

6" YELLOW

6" WHITE

ROUTE 7

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

NOT TO SCALE

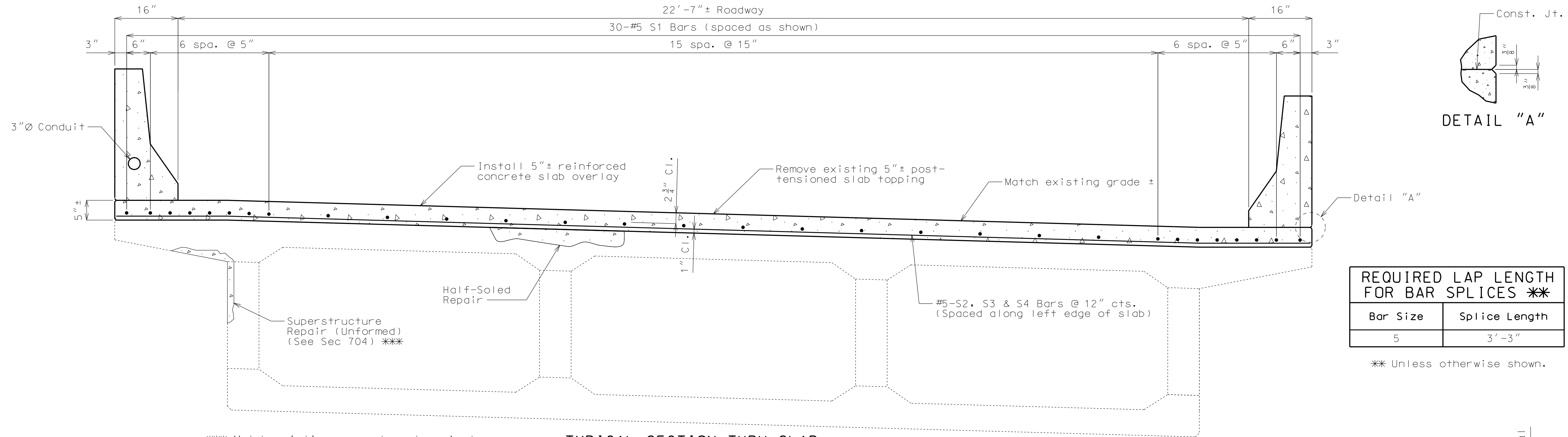
BRIDGE A1496
PAVEMENT MARKING
SHEET 4 OF 4

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
U.I.P. & REHAB EXISTING (42'-66'-46') CONTINUOUS CURVED CONCRETE BOX GIRDER SPANS

SEC/SUR 5 TWP 49N RGE 33W

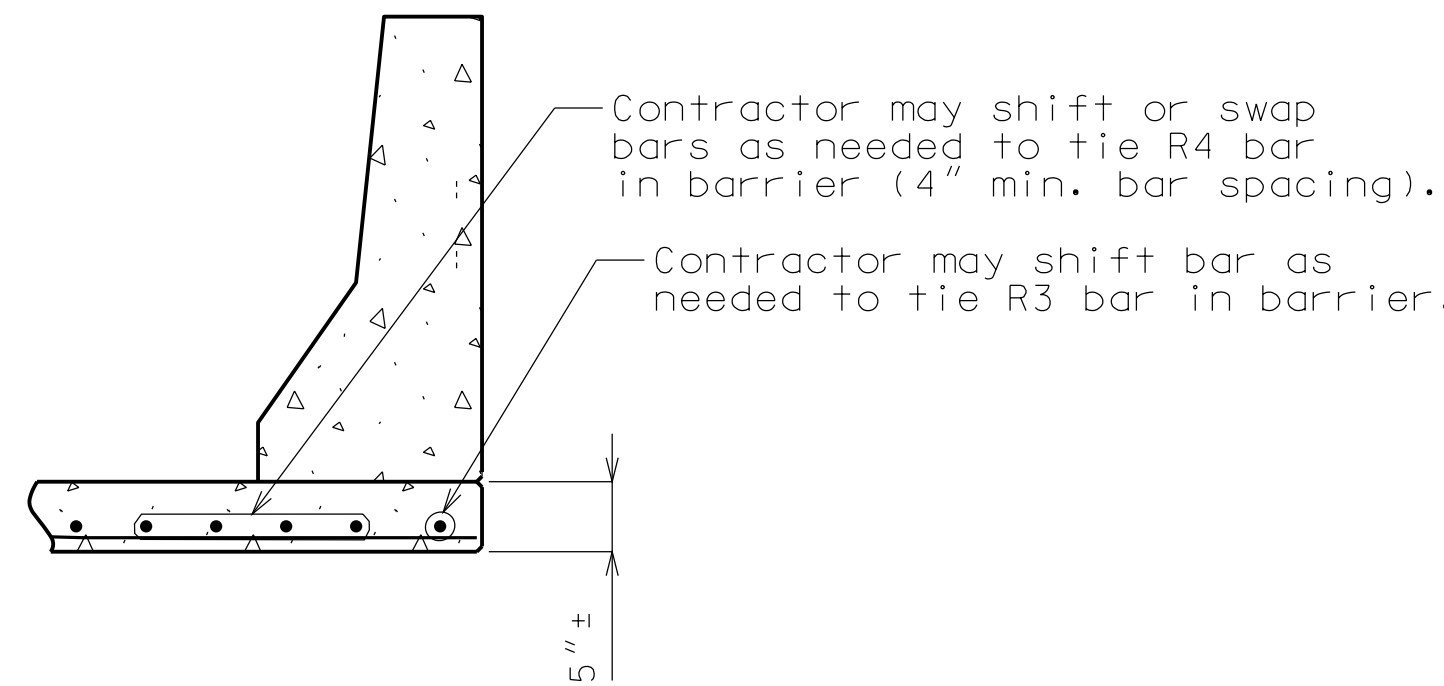
"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."



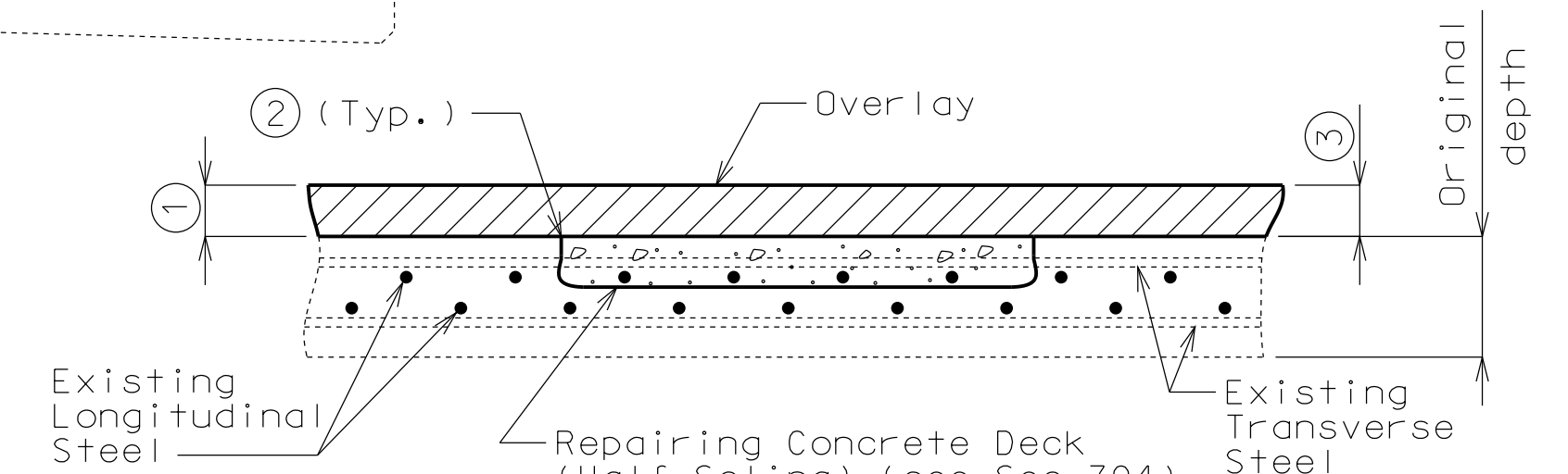
REQUIRED LAP LENGTH FOR BAR SPLICES **	
Bar Size	Splice Length
5	3'-3"

** Unless otherwise shown.

TYPICAL SECTION THRU SLAB



PARTIAL SLAB END CROSS SECTION



- ① Remove existing post-tensioned slab.
- ② One inch vertical side shall be established outside the deteriorated area. See Sec 704.
- ③ 5"± reinforced concrete slab overlay.

Estimated Quantities for Reinforced Concrete Slab Overlay		
Item		Total
Class B-2 Concrete	cu. yard	66.5
Reinforcing Steel (Epoxy Coated)	pound	9930

The table of Estimated Quantities for Reinforced Concrete Slab Overlay represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard from end of slab to end of slab and the overall width shown in the Typical Section Thru Slab. Payment for conventional forms, all concrete and coated reinforcing steel will be considered completely covered by the contract unit price for the slab.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness class SC 4 and a finish type I, II or III.

REPAIRS TO BRIDGE: 14TH ST. OVER I-70 EB

STATE ROAD: I-35 AND I-70 INTERCHANGE
 IN KANSAS CITY
 STA. 4+47.26± (14TH St.) (Match Existing)

STD. 617.10
STD. 706.35

General Notes:

Design Specifications:

2002 - AASHTO 17th Edition
 Load Factor Design
 Seismic Performance Category A
 Bridge Deck Rating = 6

Design Loading:

H20-S16-44 (1953), HS20-44 Modified Alt. Military (1982)
 HS20-44 and Military 24,000# Tandem Axle (New Construction)

Design Unit Stresses:

Class B-1 Concrete (Safety Barrier Curb) f'c = 4,000 psi
 Class B-2 Concrete (Superstructure except Safety Barrier Curb) f'c = 4,000 psi
 Reinforcing Steel (Grade 60) fy = 60,000 psi

Joint Filler:

All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1-1/2", unless otherwise shown.

Miscellaneous:

Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

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

Contractor shall verify all dimensions in field before ordering new material.

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

The contractor shall exercise extreme caution during removal of post-tensioned slab.

Traffic Handling:

Structure to be closed during construction.

Structural Steel Protective Coatings:
 (All bearings)

Protective Coating: System G in accordance with Sec 1081. (See Special Provisions).

Estimated Quantities		
Item		Total
Removal of Existing Expansion Joints & Adjacent Concrete	linear foot	65
Removal of Post-tensioned Slab	sq. foot	3930
* Safety Barrier Curb	linear foot	380
Reinforced Concrete Slab Overlay	sq. yard	437
Superstructure Repair (Unformed)	sq. foot	40
Repairing Concrete Deck (Half-Soling)	sq. foot	550
Conduit System on Structure	lump sum	1
Cleaning and Coating Existing Bearings	each	8
Strip Seal Expansion Joint System	linear foot	65

* Safety barrier curb shall be cast-in-place option or slip-form option.

*** Match existing concrete color. Apply tinted sealer to blend existing and new concrete repairs to existing concrete.

Detailed Nov. 2012
 Checked Nov. 2012

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

Sheet No. 1 of 10

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

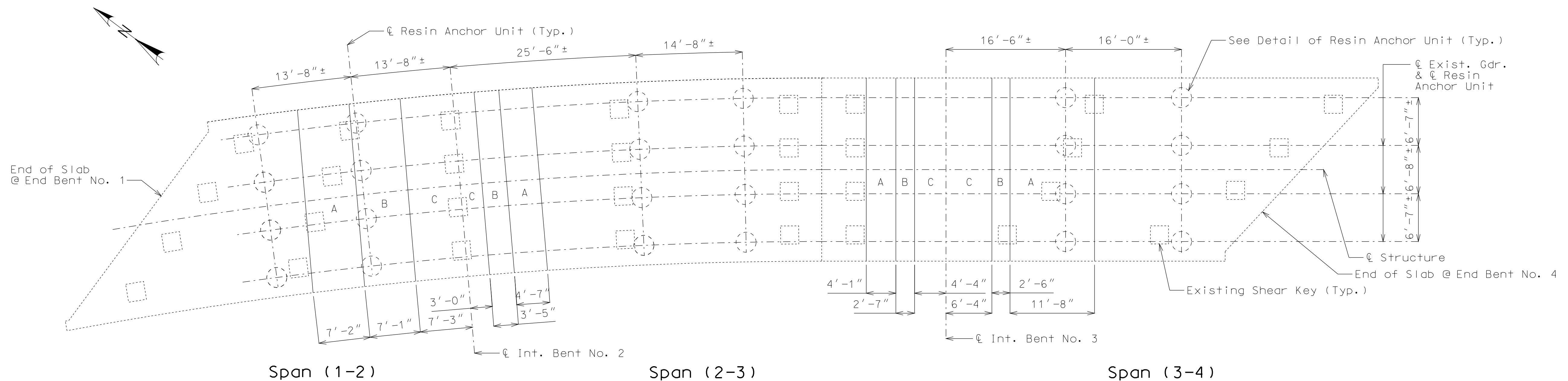
DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 2
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A02482	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

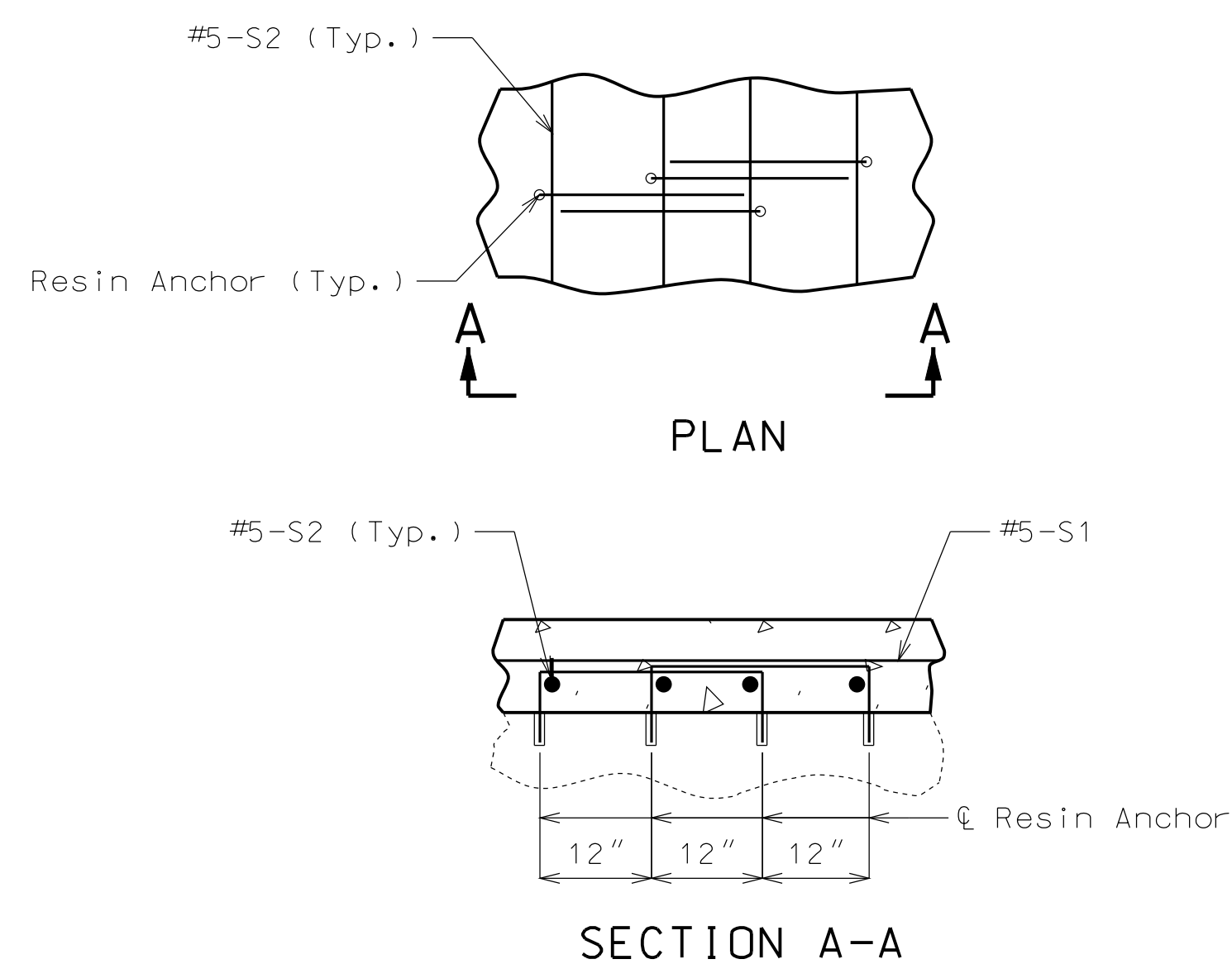
105 WEST CAPITOL JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES AND LOCATIONS OF RESIN ANCHOR UNITS

Note: Dimensions shown are horizontal dimensions along \varnothing Roadway.



DETAIL OF RESIN ANCHOR UNIT

Resin Anchor Notes:

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Reinforced Concrete Slab Overlay.

The minimum embedment depth in concrete with $f'c = 4,000$ psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

An epoxy coated #5 Grade 60 reinforcing bar 2'-0" long shall be substituted for the $\frac{5}{8}$ " \varnothing threaded rod.

Notes:

Any half-soling required in the areas designated as special repair zones shall be completed in alphabetical sequence. Any repair in the remainder of the bridge that is adjacent to Zone A and not designated as a special repair zone shall be completed prior to work in Zone A.

Removal and repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone. Before placing concrete in areas adjacent to areas of subsequent repair, the concrete shall be separated with a material such as polyethylene sheets to aid in removal of old concrete.

Zones with the same letter designation may be repaired at the same time except for the zones directly adjacent to the centerline of bent. If either of the zones adjacent to centerline of bent has a single repair area of over 10 square feet or a total repair area of over 20 square feet, that zone shall be repaired before removing concrete in the other zone of the same designation at that bent.

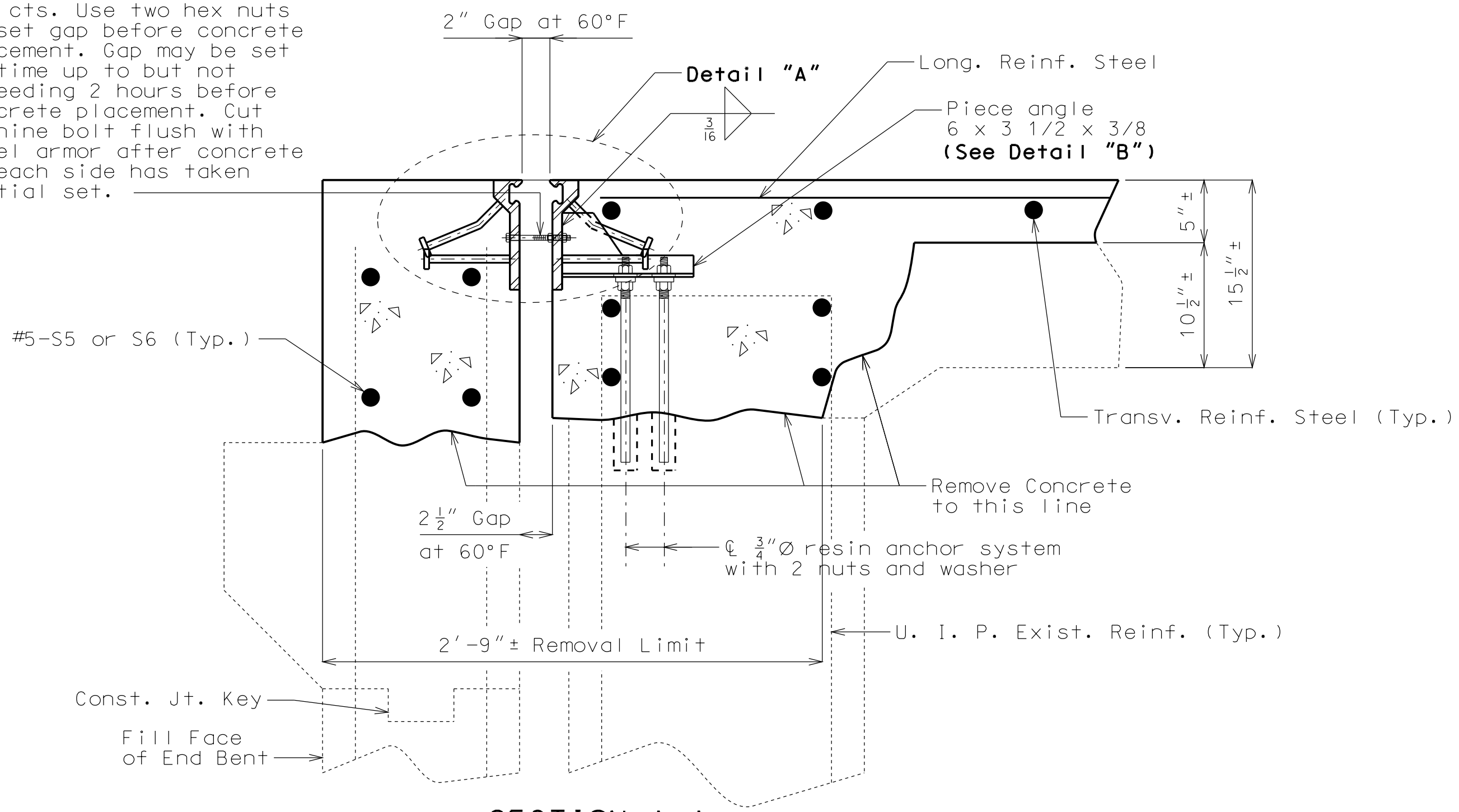
If any single repair area does not exceed 9 square feet in size and the total repair within a special repair zone does not exceed 27 square feet, the special repair zone requirement does not apply for that zone. Half-soling repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

Notes:

Contractor may use-in-place existing anchor bolts and reinforcing steel at existing shear key locations. Anchor bolts and reinforcing steel shall be cleanly stripped and embedded in new concrete. If damaged, anchor bolts and reinforcing steel shall be replaced to the satisfaction of the engineer. No additional payment will be made for this option.

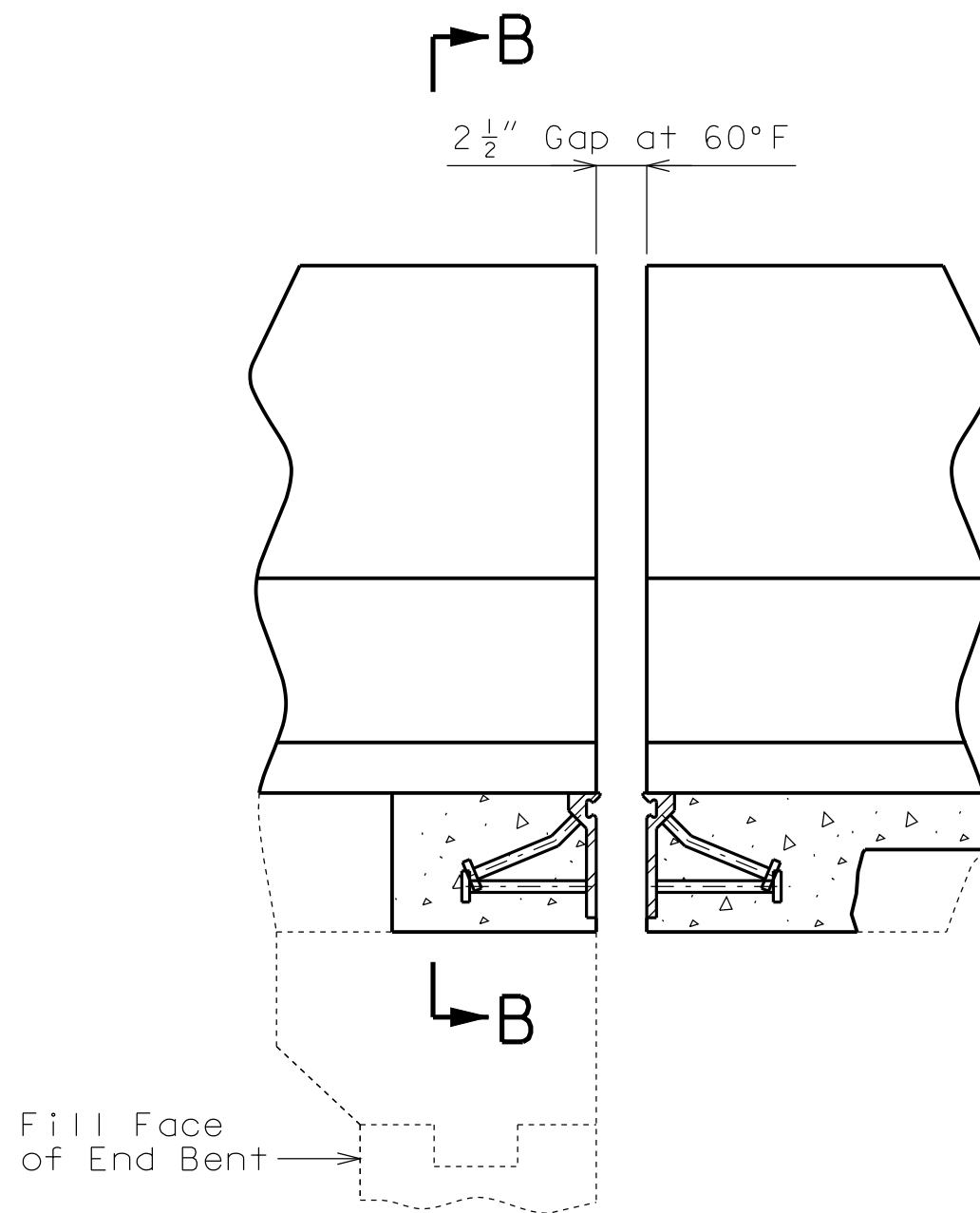
If existing anchor bolts and reinforcing steel are not reused, contractor shall install resin anchor systems at the locations shown. Locations may be shifted to clear reinforcement or other obstructions. The total number of resin anchor systems shall not be changed.

1/2" Machine bolt at abt. 18" cts. Use two hex nuts to set gap before concrete placement. Gap may be set anytime up to but not exceeding 2 hours before concrete placement. Cut machine bolt flush with steel armor after concrete on each side has taken initial set.

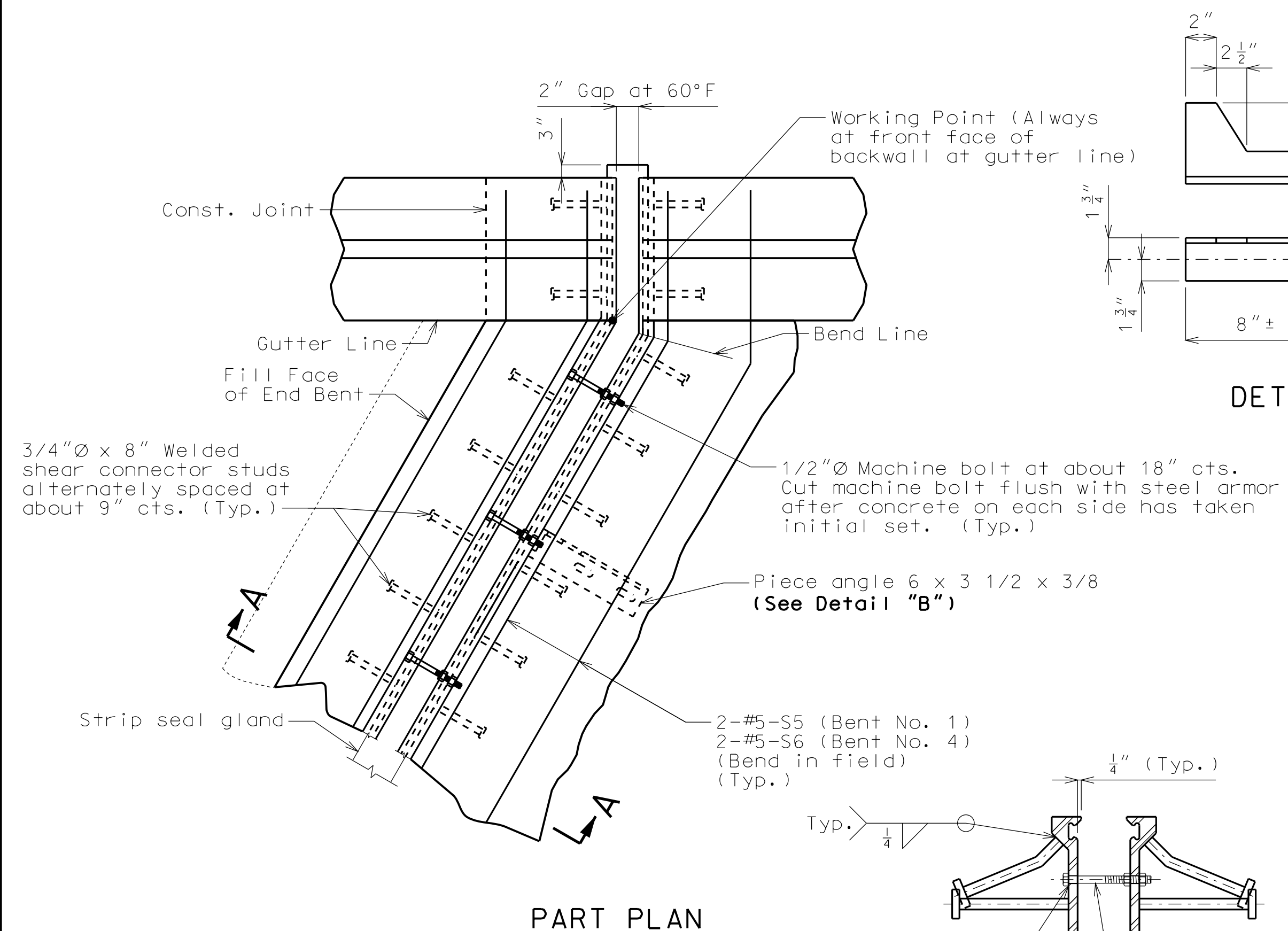


SECTION A-A

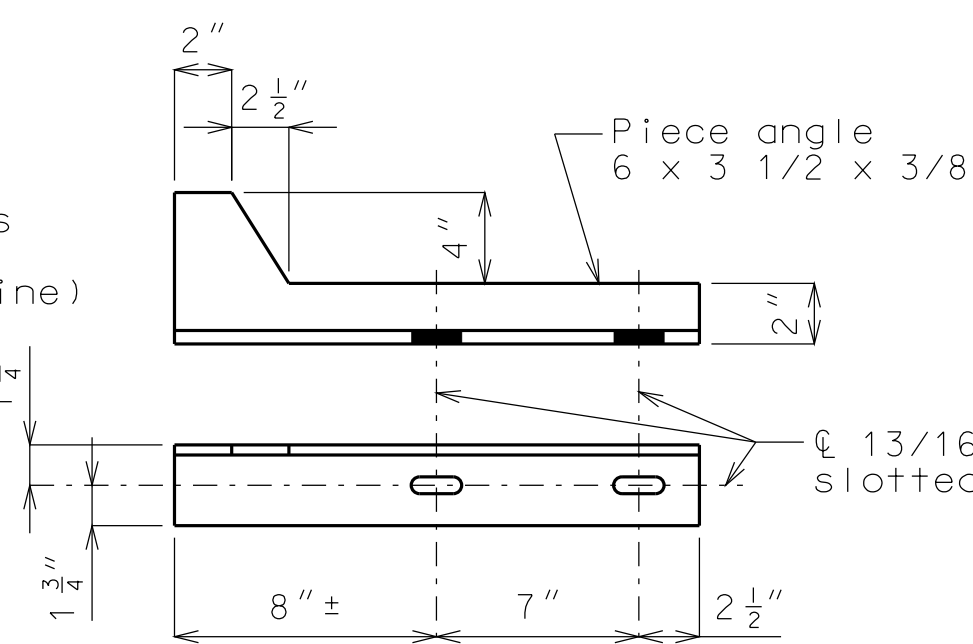
Note: Strip seal gland not shown for clarity.



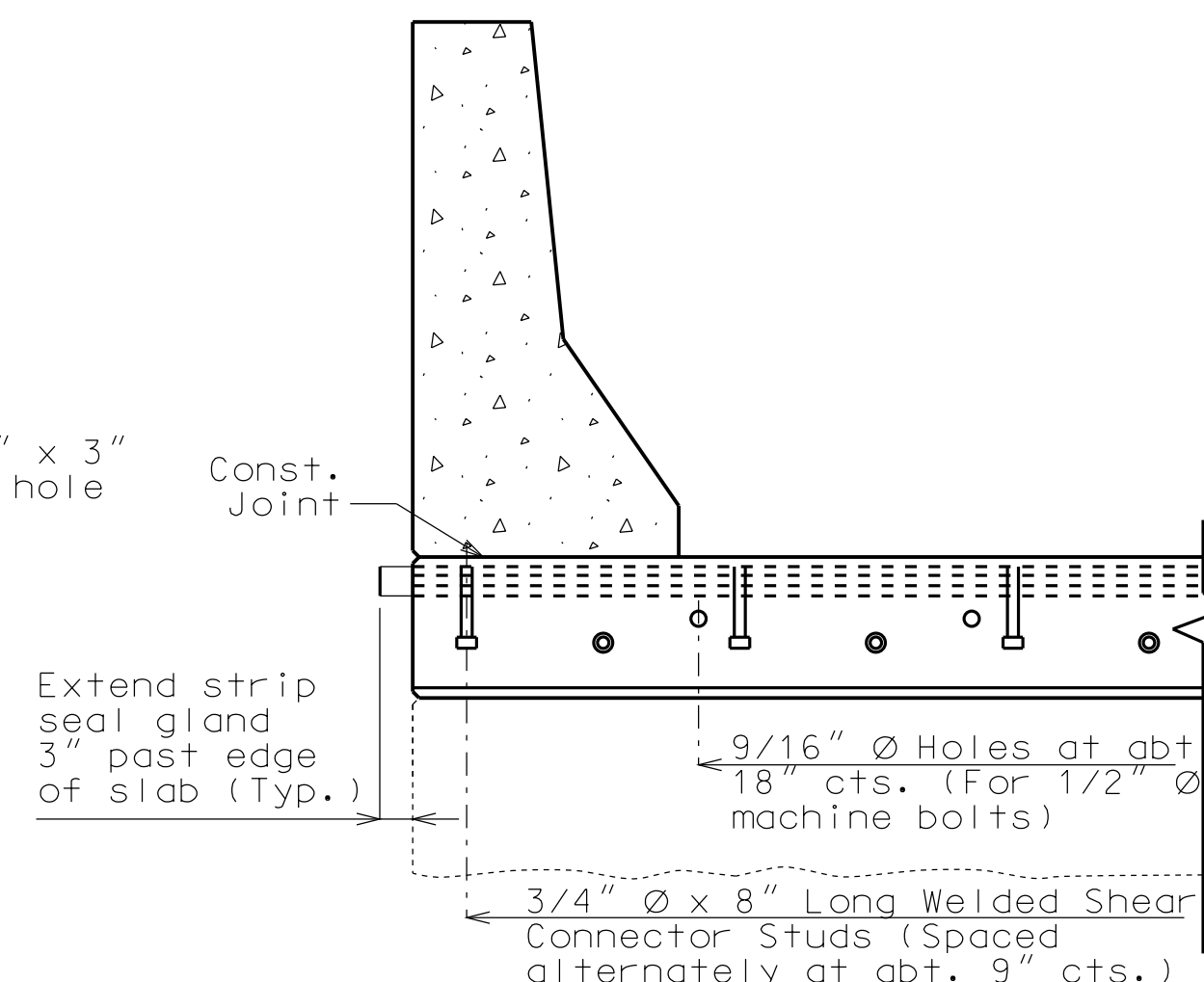
Note: Strip seal gland not shown for clarity.
PART ELEVATION OF BARRIER CURB



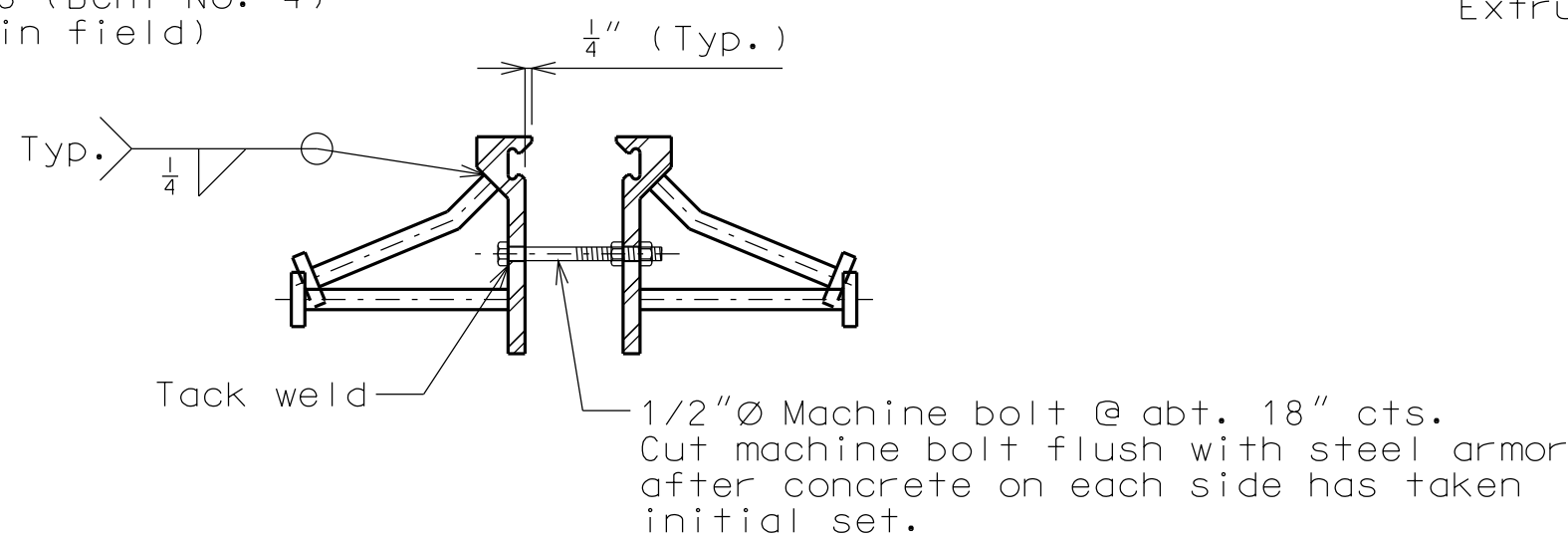
PART PLAN



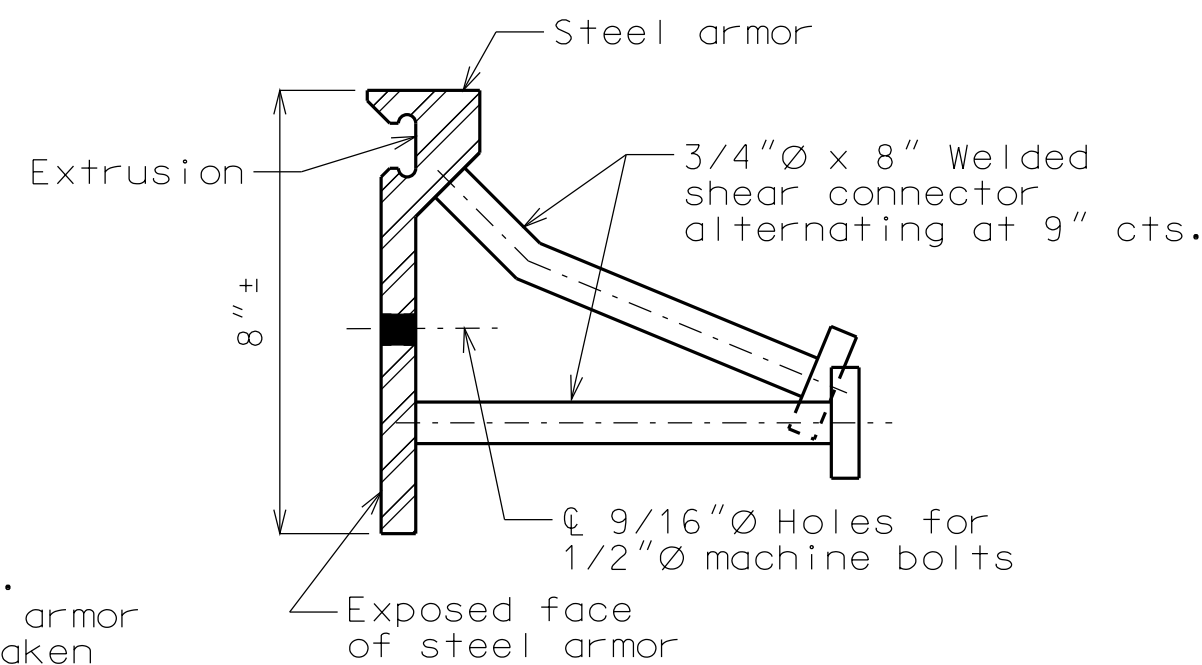
DETAIL "B"



PART SECTION B-B



DETAIL "A"



DETAIL OF JOINT ARMOR

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 1/16" for each 10° fall or rise in temperature at installation.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

Longitudinal reinforcing steel shall be placed so that ends shall not be more than ±1" from vertical leg of the steel armor at the expansion joint system.

Cost of new concrete and Epoxy Coated Reinforcing Steel will be completely covered by the contract unit price for Reinforced Concrete Slab Overlay.

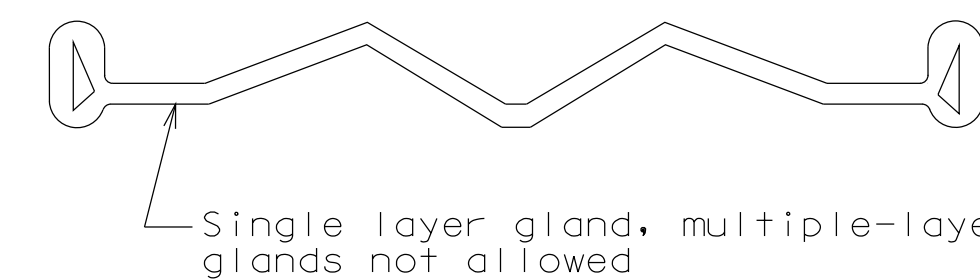
Top of backwall for End Bents No. 1 & No. 4 shall be formed to the crown and grade of the roadway. Backwall above upper construction joint shall not be poured until the superstructure slab has been poured in the adjacent span.

All concrete above the upper construction joint in backwall shall be Class B-2.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Reinforced Concrete Slab Overlay.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".



Strip seal gland size = 4"

DETAIL OF GLAND

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/20/2012

ROUTE
I-70

STATE
MO

DISTRICT
BR

SHEET NO.
3

COUNTY
JACKSON

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A02482

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

DATE

DESCRIPTION

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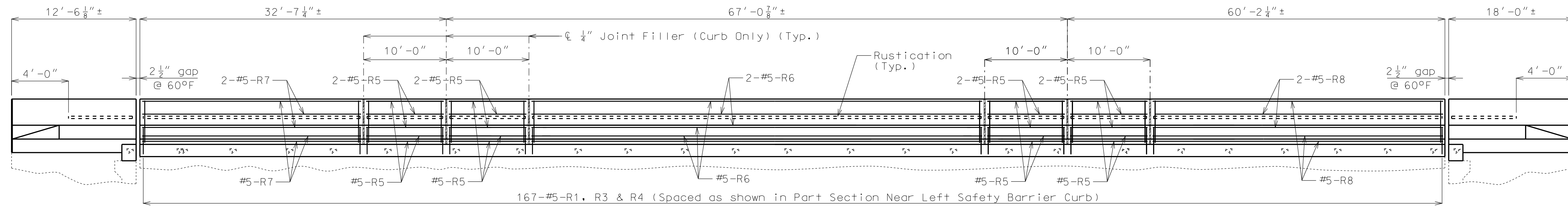
DATE

DESCRIPTION

DATE

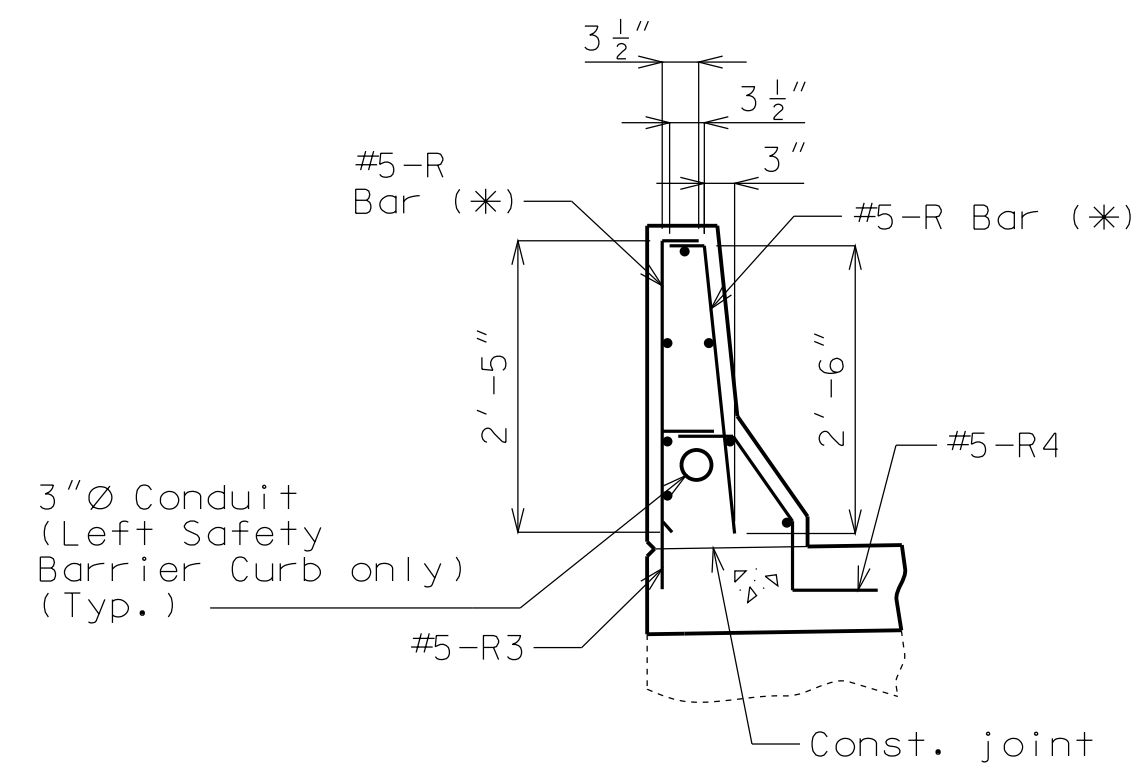
DESCRIPTION

DATE



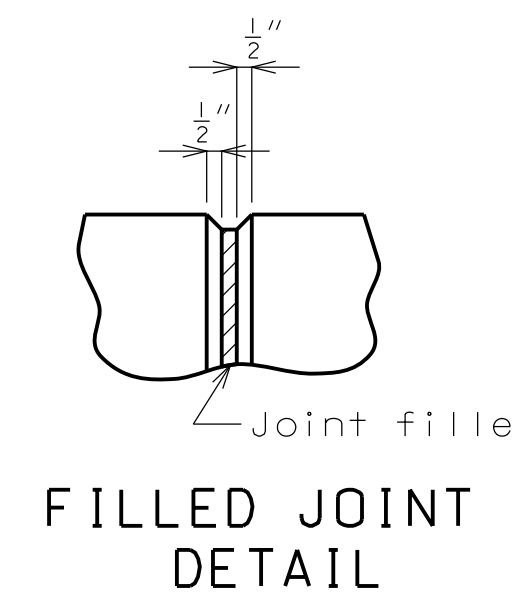
SECTION NEAR LEFT SAFETY BARRIER CURB

Note: Dimensions shown are parallel to grade.

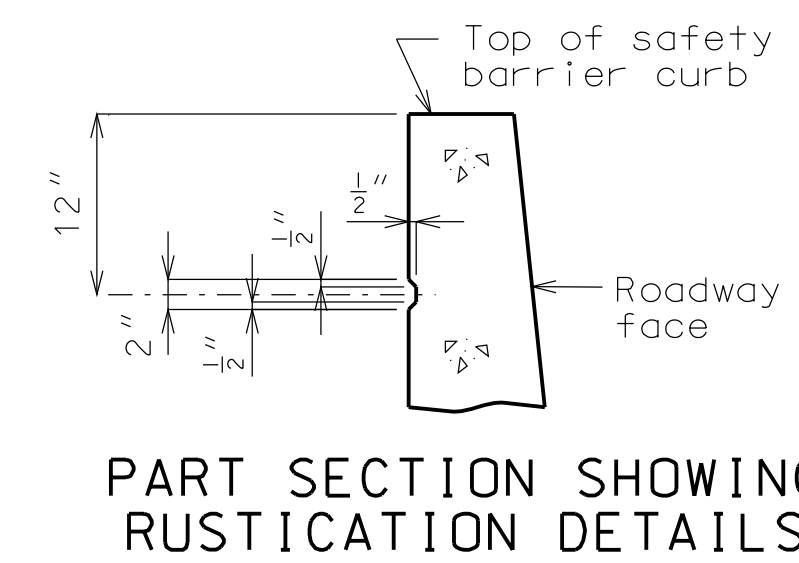


R-BAR PERMISSIBLE ALTERNATE SHAPE

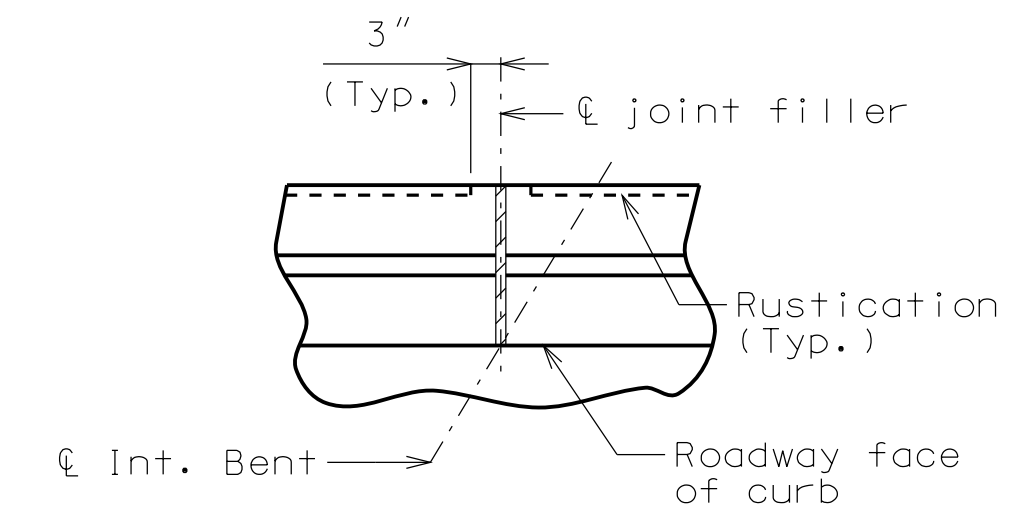
(*) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)



FILLED JOINT DETAIL



PART SECTION SHOWING RUSTICATION DETAILS



PART PLAN SHOWING SAFETY BARRIER CURB JOINT

Notes:

Top of safety barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

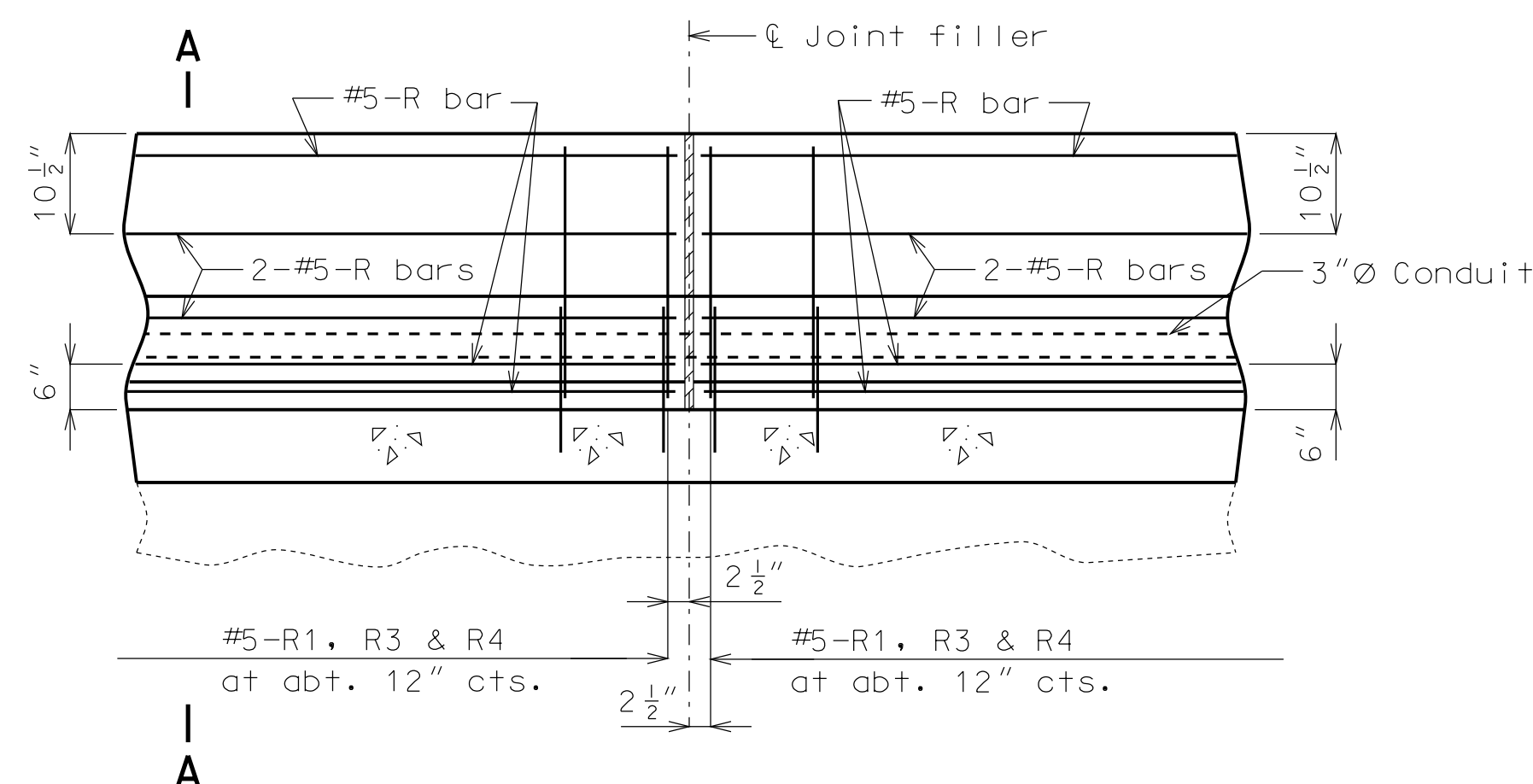
All exposed edges of safety barrier curb shall have either a 1/2" radius or a 3/8" bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for safety barrier curb per linear foot.

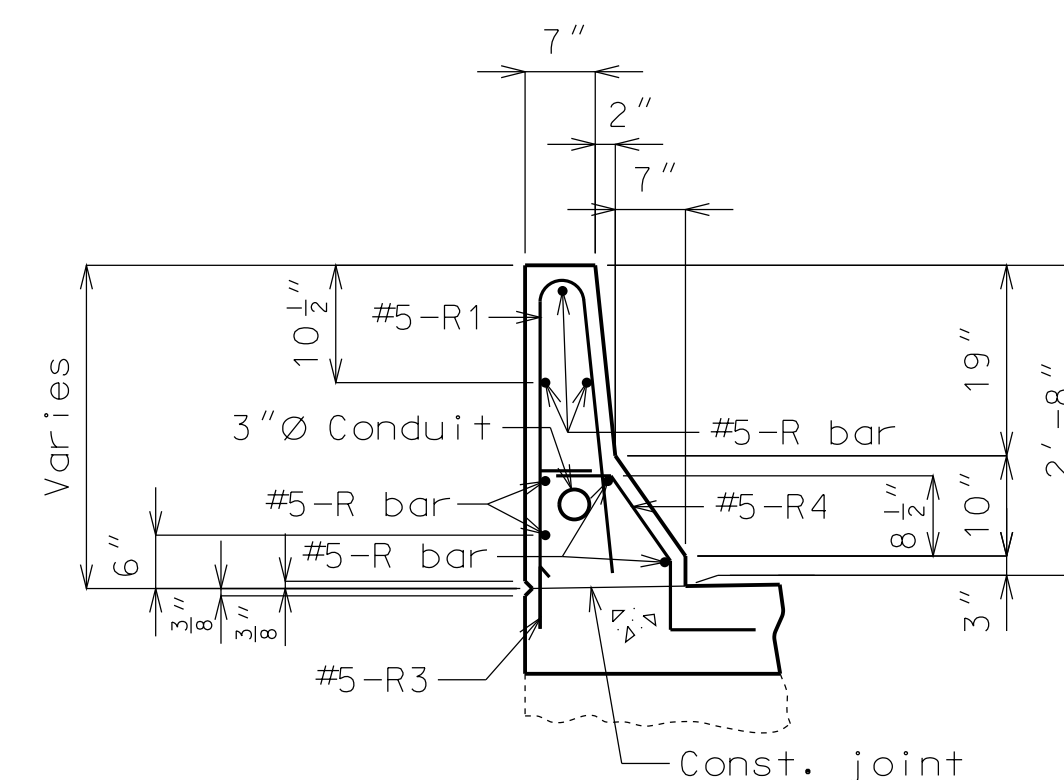
Concrete in the safety barrier curb shall be Class B-1.

Measurement of safety barrier curb is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb".



PART SECTION NEAR LEFT SAFETY BARRIER CURB (CAST-IN-PLACE CONVENTIONAL FORMING OPTION)



PART SECTION A-A

Notes:

Use a minimum lap of 2'-11" for #5 horizontal safety barrier curb bars.

The cross-sectional area above the slab = 2.28 sq. ft.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

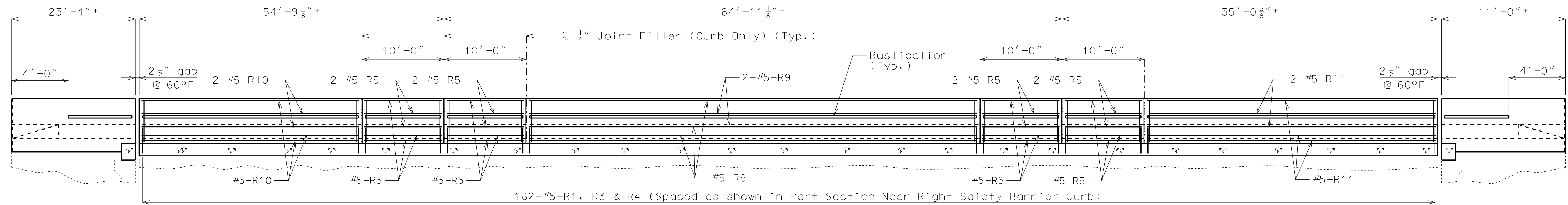
DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 4
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A02482	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

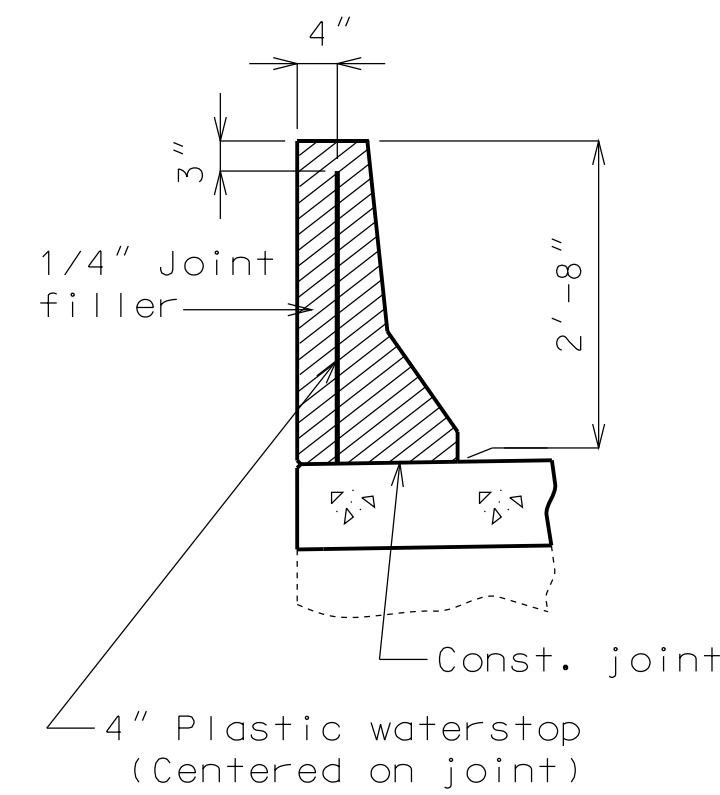
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



ELEVATION NEAR RIGHT SAFETY BARRIER CURB

Note: Dimensions shown are parallel to grade.

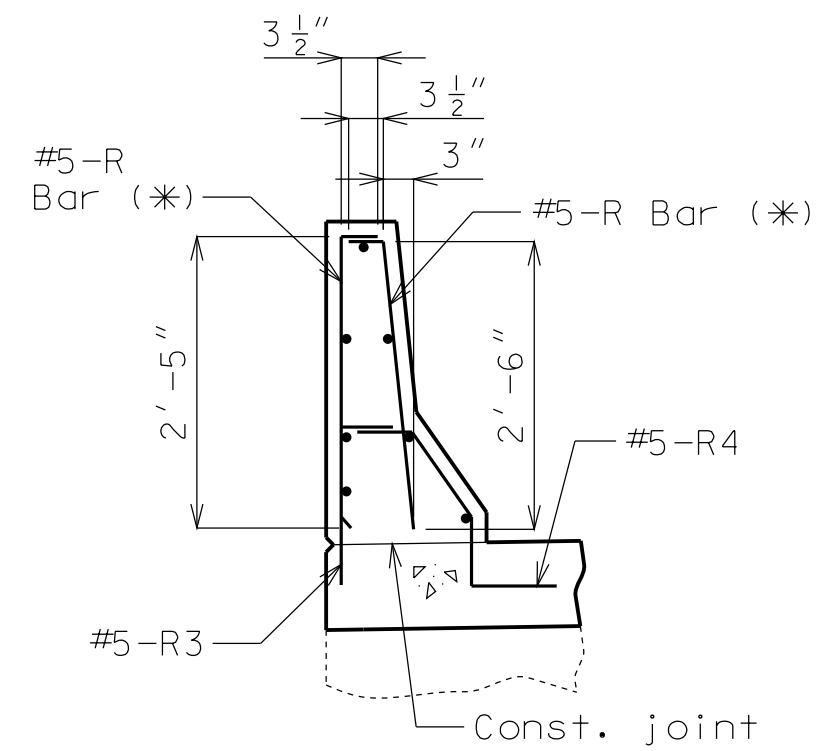


DETAILS OF PLASTIC WATERSTOP

Notes:

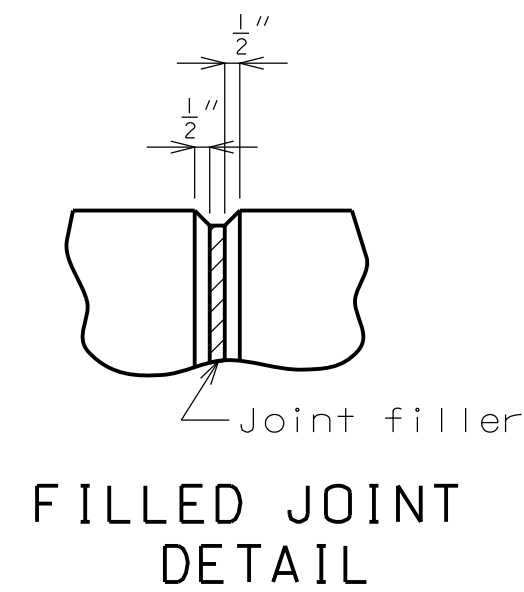
Plastic waterstop shall be placed in all safety barrier curb filled joints, except structures with superelevation, use on all lower safety barrier curb joints only.

Cost of plastic waterstop, complete in place, will be considered completely covered by the contract unit price for Safety Barrier Curb.

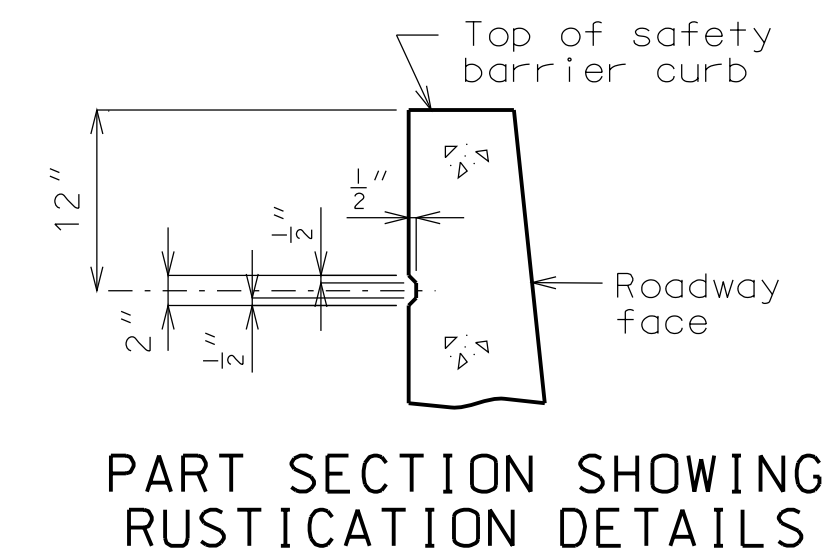


R-BAR PERMISSIBLE ALTERNATE SHAPE

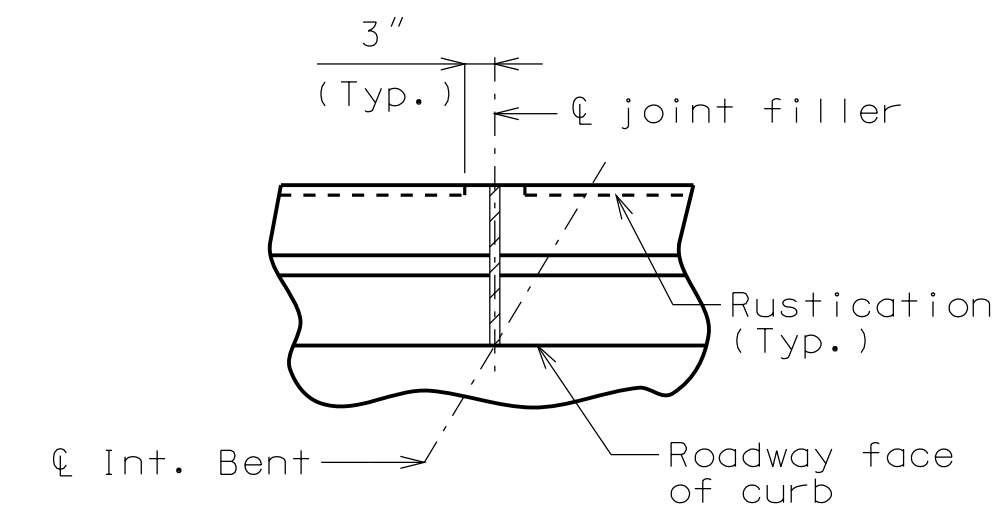
(*) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)



FILLED JOINT DETAIL



PART SECTION SHOWING RUSTICATION DETAILS



PART PLAN SHOWING SAFETY BARRIER CURB JOINT

Notes:

Top of safety barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

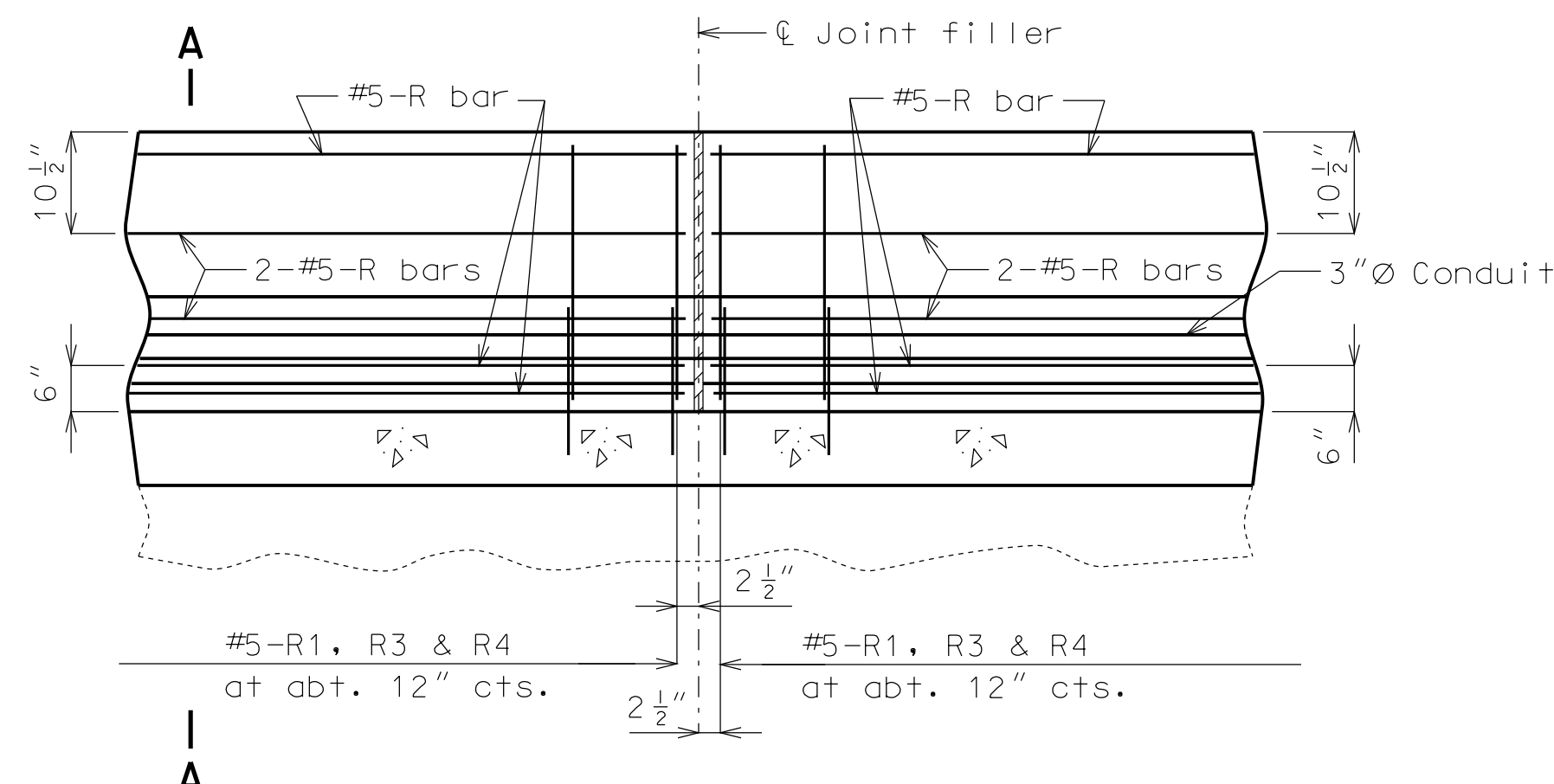
All exposed edges of safety barrier curb shall have either a 1/2" radius or a 3/8" bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for safety barrier curb per linear foot.

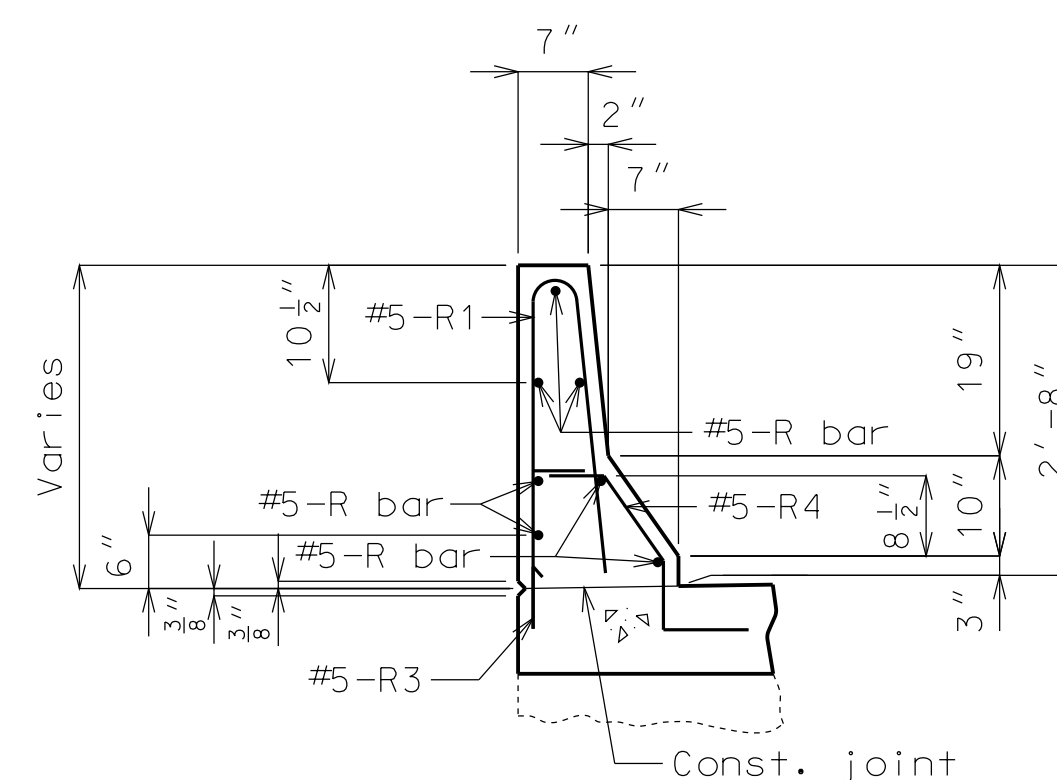
Concrete in the safety barrier curb shall be Class B-1.

Measurement of safety barrier curb is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb".



PART SECTION NEAR RIGHT SAFETY BARRIER CURB (CAST-IN-PLACE CONVENTIONAL FORMING OPTION)



PART SECTION A-A

Notes:

Use a minimum lap of 2'-11" for #5 horizontal safety barrier curb bars.

The cross-sectional area above the slab = 2.28 sq. ft.

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

Sheet No. 5 of 10

Detailed Nov. 2012
Checked Nov. 2012

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DATE PREPARED

12/20/2012

ROUTE STATE

I-70 MO

DISTRICT SHEET NO.

BR 5

COUNTY

JACKSON

JOB NO.

J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A02482

DESCRIPTION

DATE

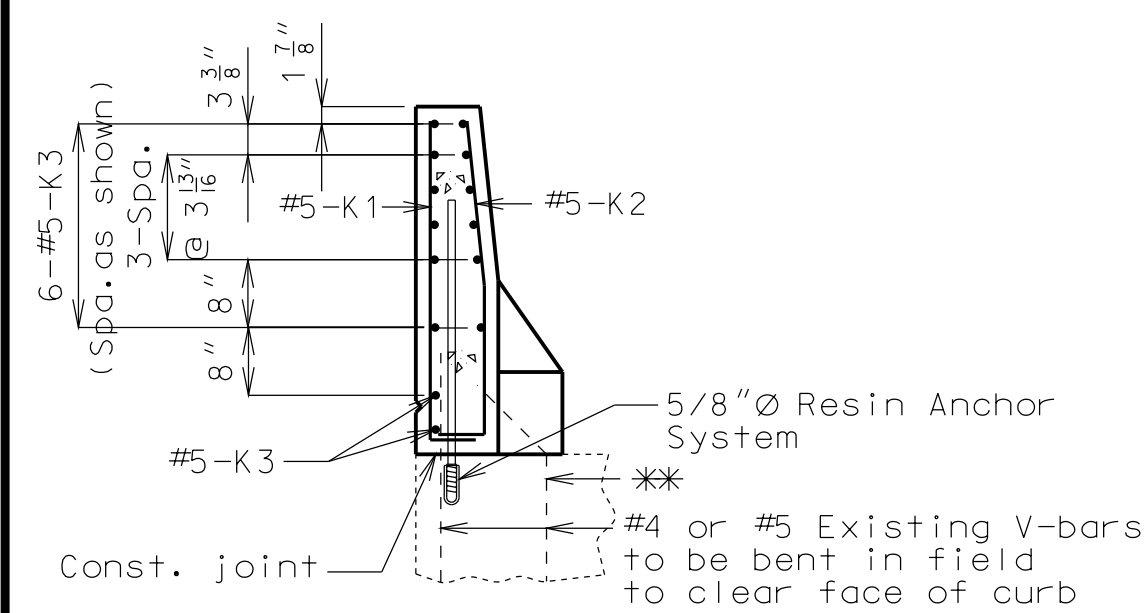
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

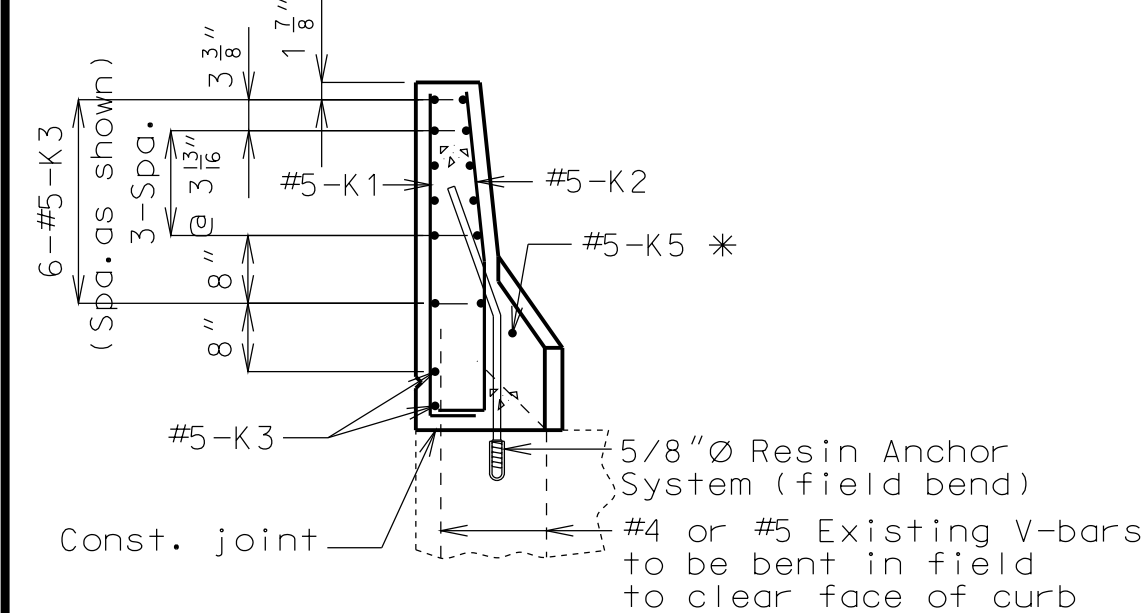
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

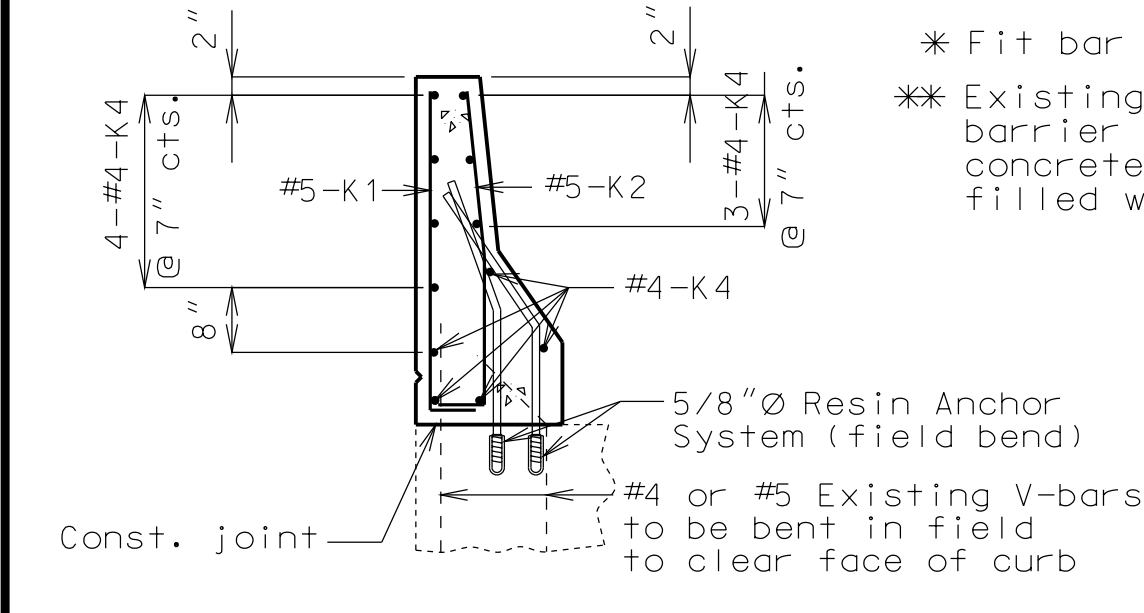
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



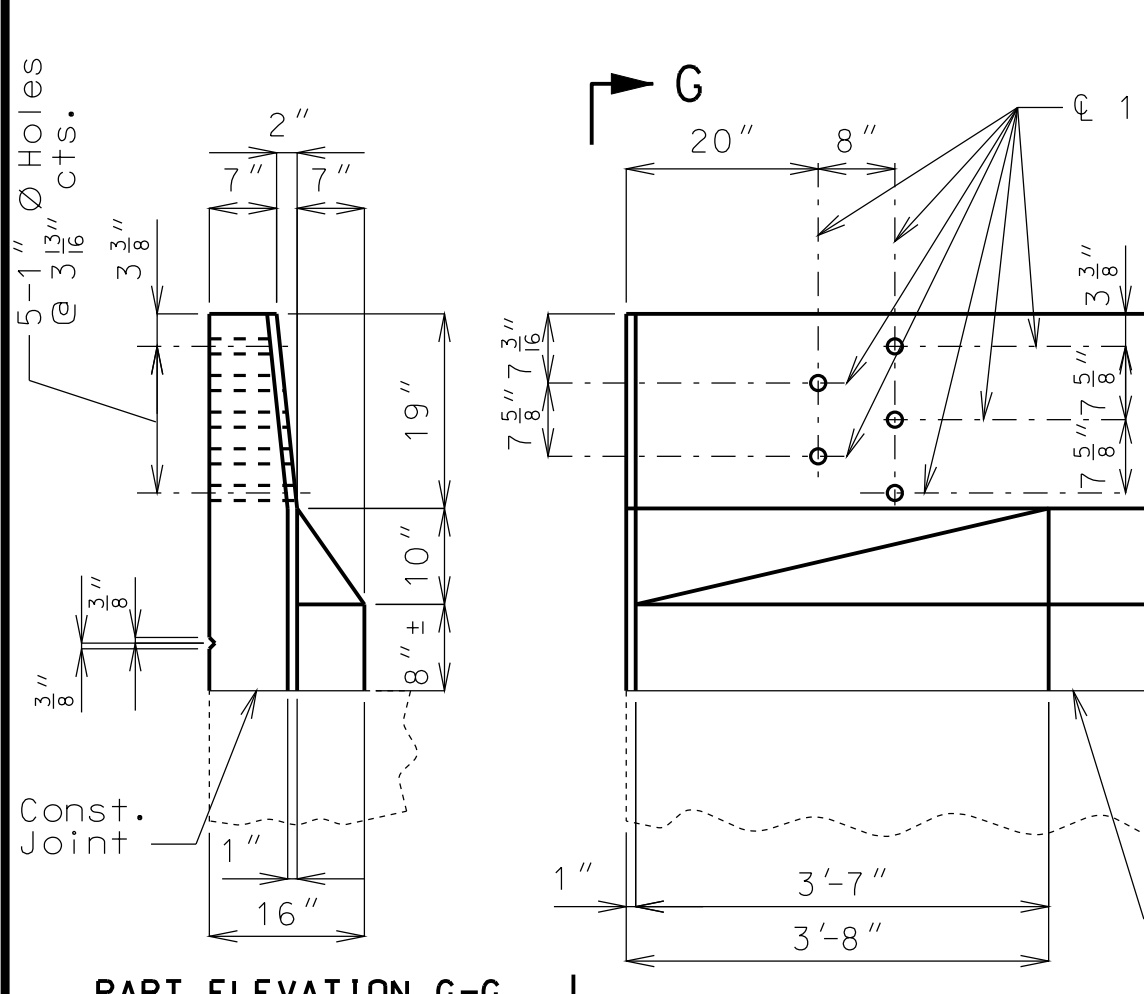
SECTION A-A



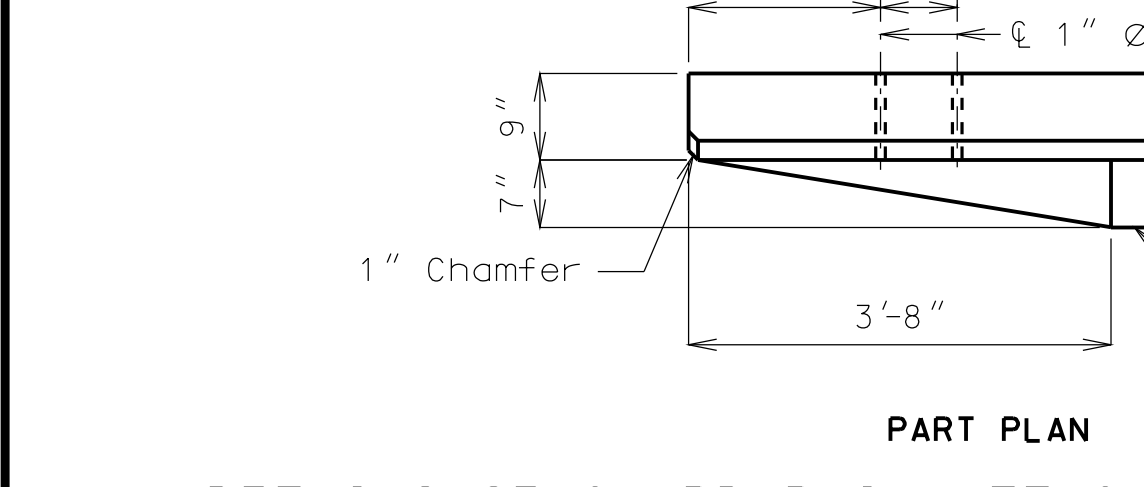
SECTION B-B



SECTION C-C

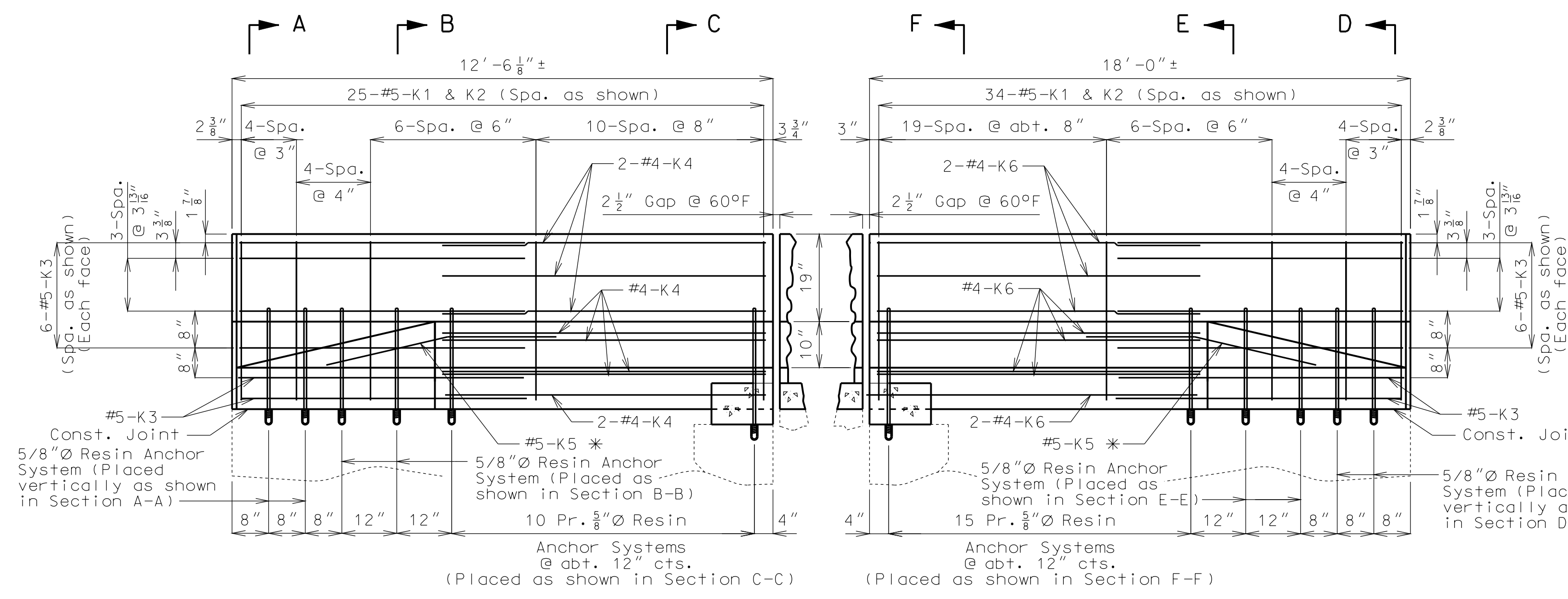


PART ELEVATION G-G

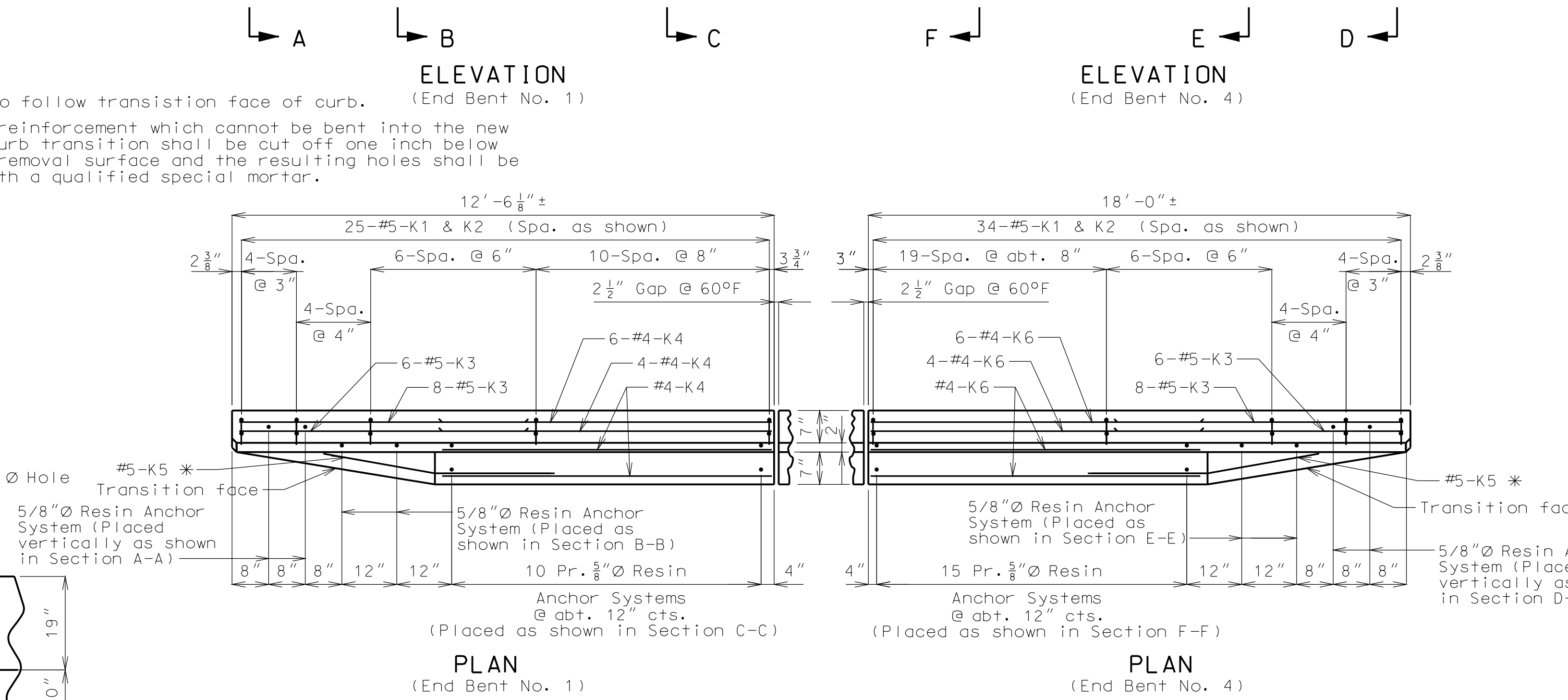


PART PLAN

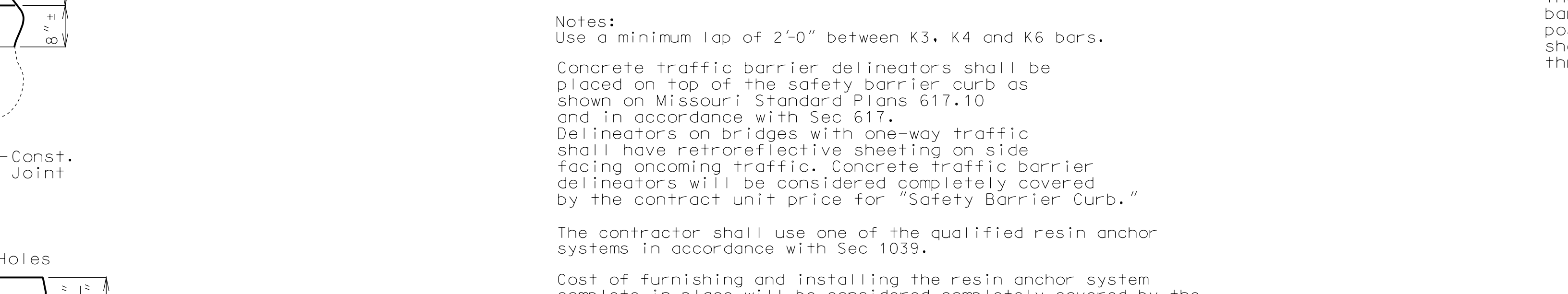
DETAILS OF GUARD RAIL ATTACHMENT



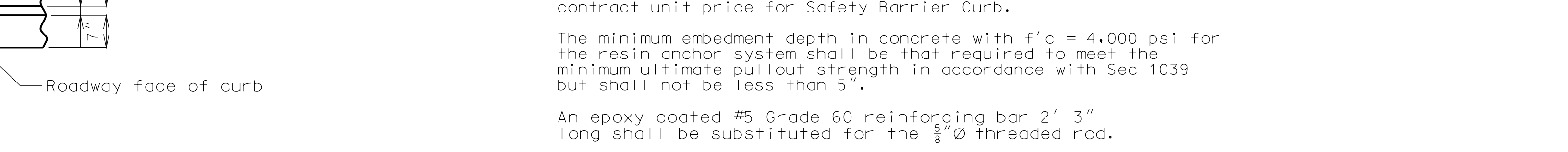
ELEVATION (End Bent No. 1)



ELEVATION (End Bent No. 4)

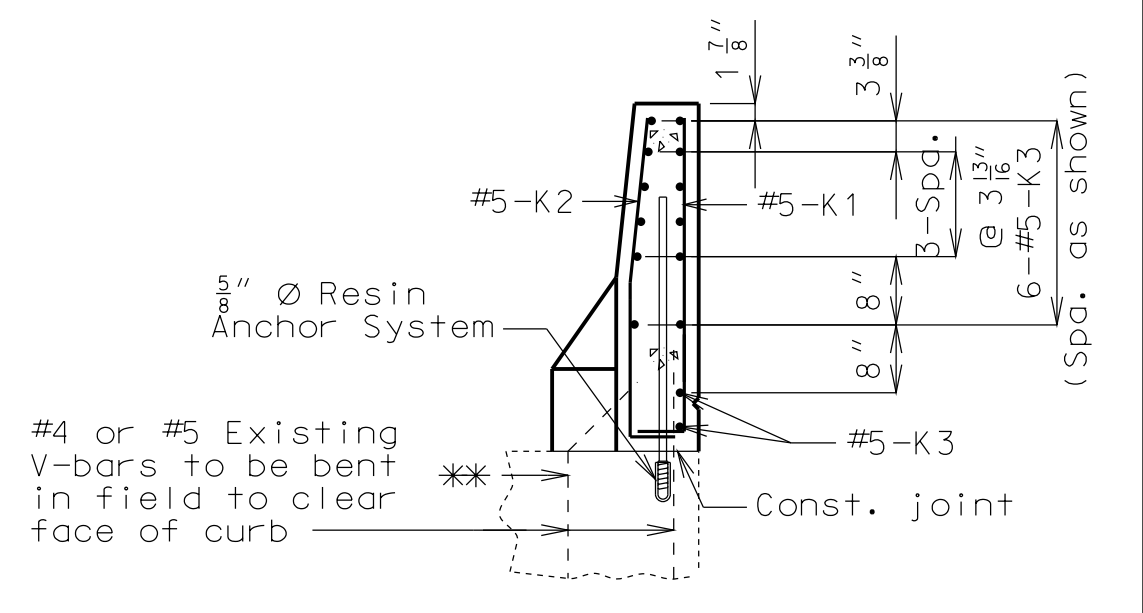


PLAN (End Bent No. 1)

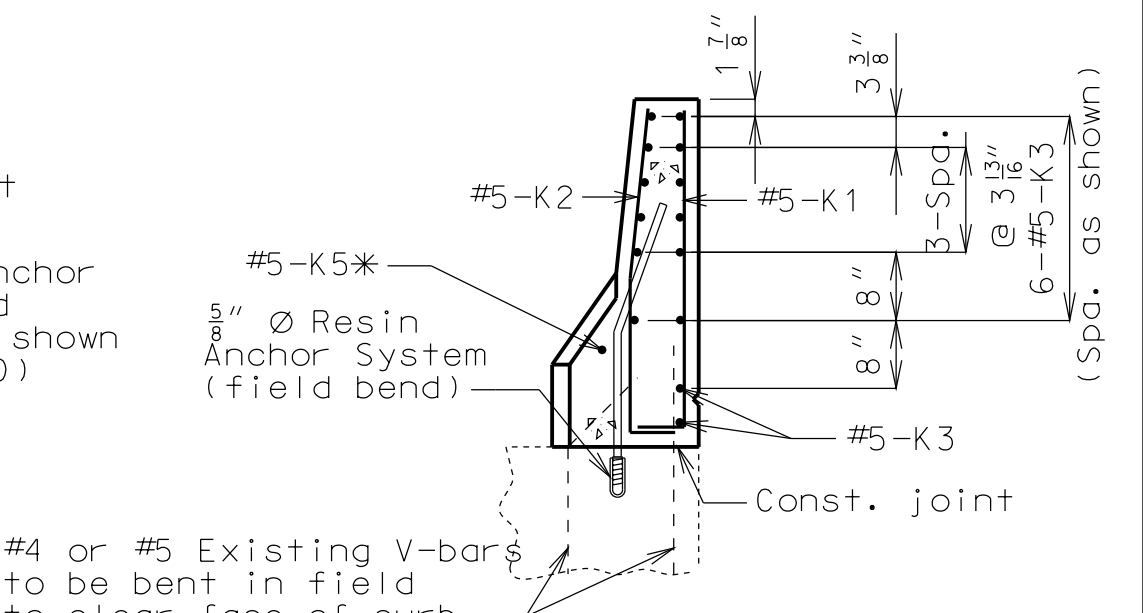


PLAN (End Bent No. 4)

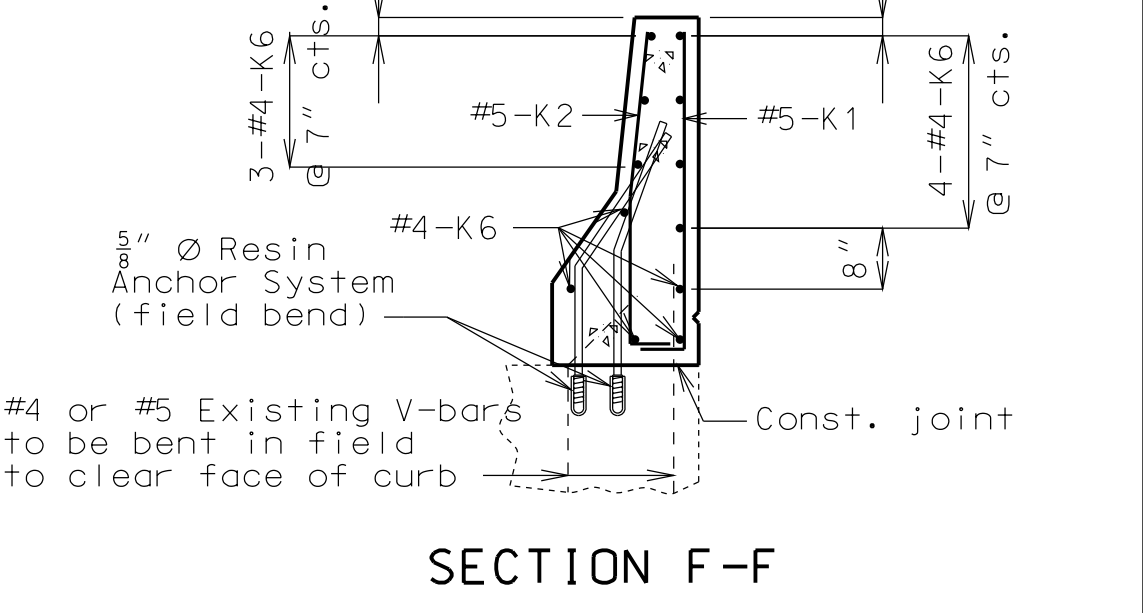
DETAILS OF LEFT SAFETY BARRIER CURB AT END BENTS



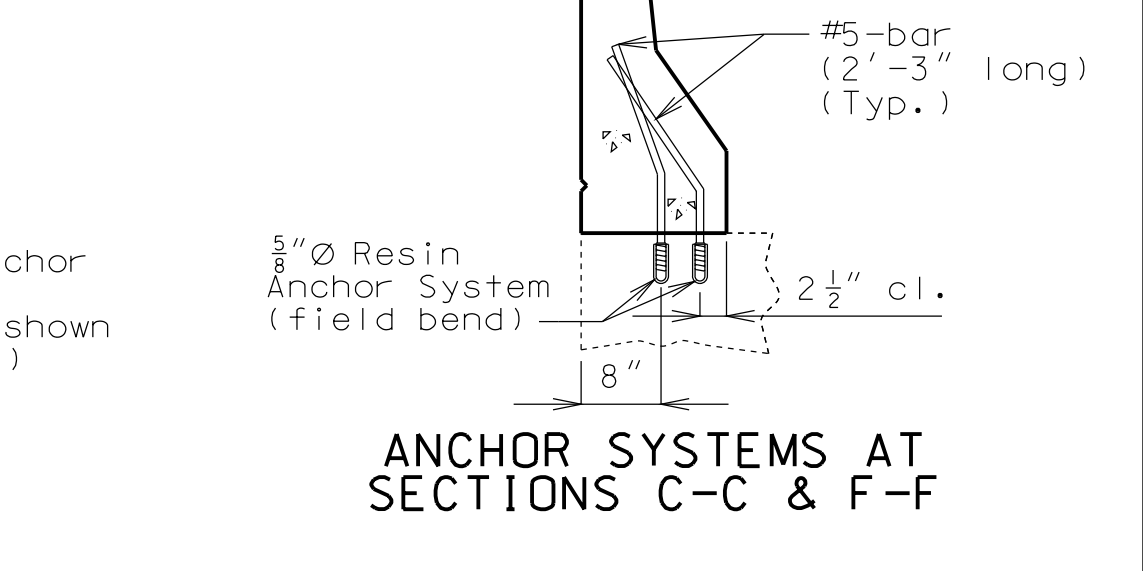
SECTION D-D



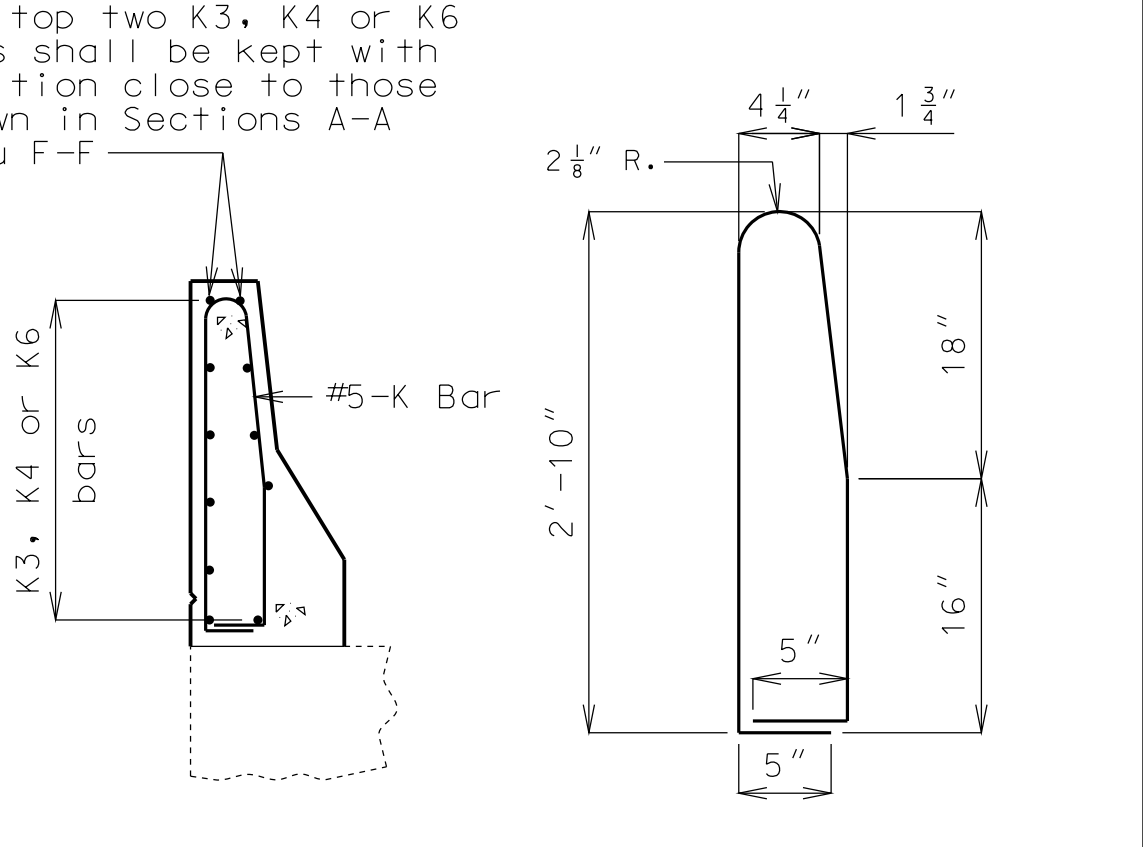
SECTION E-E



SECTION F-F



ANCHOR SYSTEMS AT SECTIONS C-C & F-F



K1-K2 BAR PERMISSIBLE ALTERNATE SHAPE (**)

(***) The K1 and K2 bar combination may be furnished as one bar as shown, at the contractor's option.

Notes:
Use a minimum lap of 2'-0" between K3, K4 and K6 bars.

Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb."

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system complete-in-place will be considered completely covered by the contract unit price for Safety Barrier Curb.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

An epoxy coated #5 Grade 60 reinforcing bar 2'-3" long shall be substituted for the 5/8" diameter threaded rod.

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/20/2012

ROUTE
I-70

STATE
MO

DISTRICT
BR

SHEET NO.
6

COUNTY
JACKSON

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

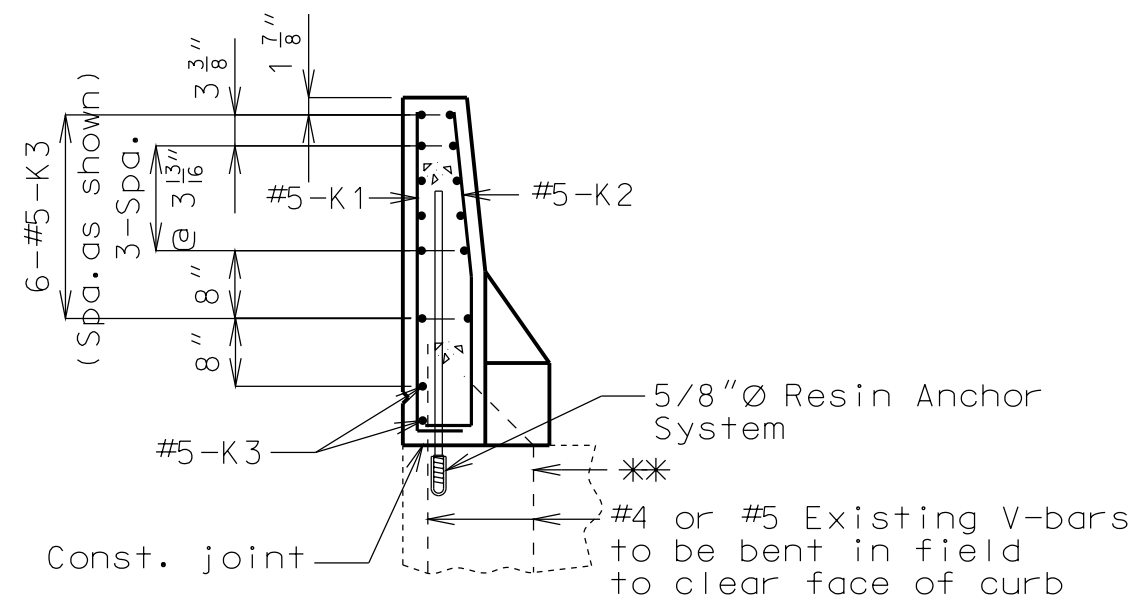
BRIDGE NO.
A02482

DESCRIPTION	DATE

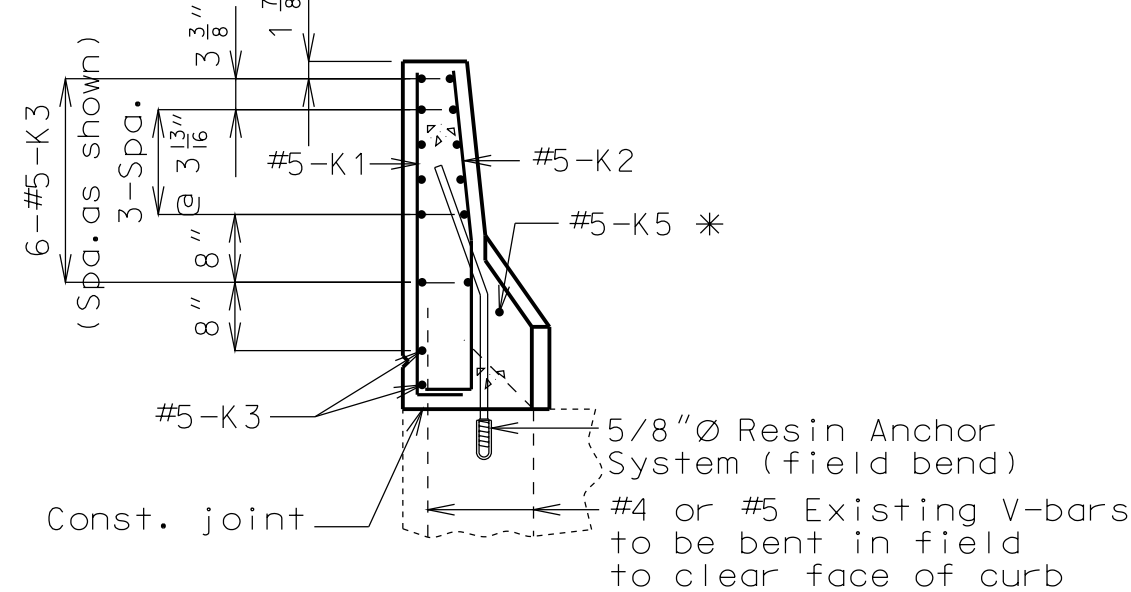
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

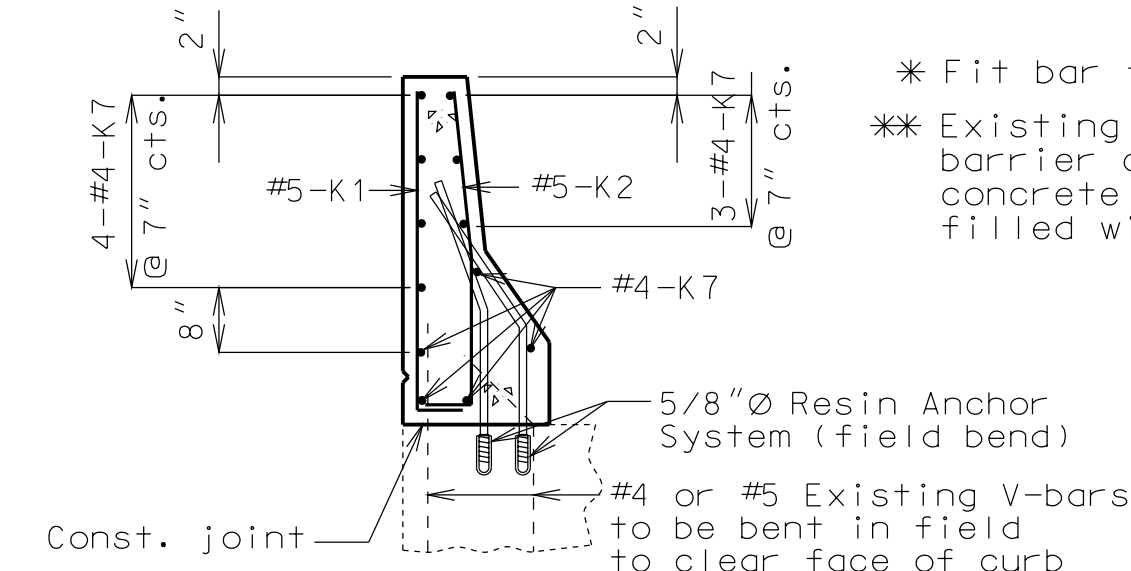
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



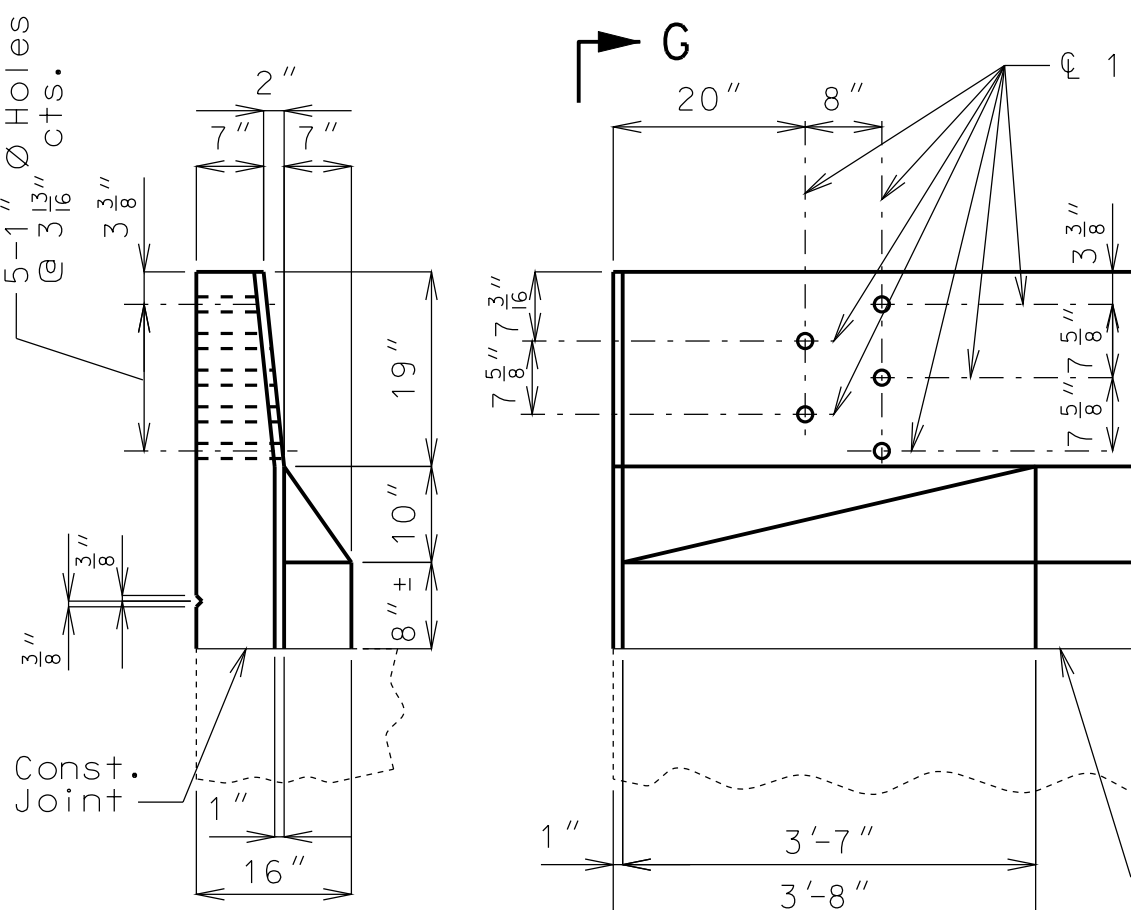
SECTION A-A



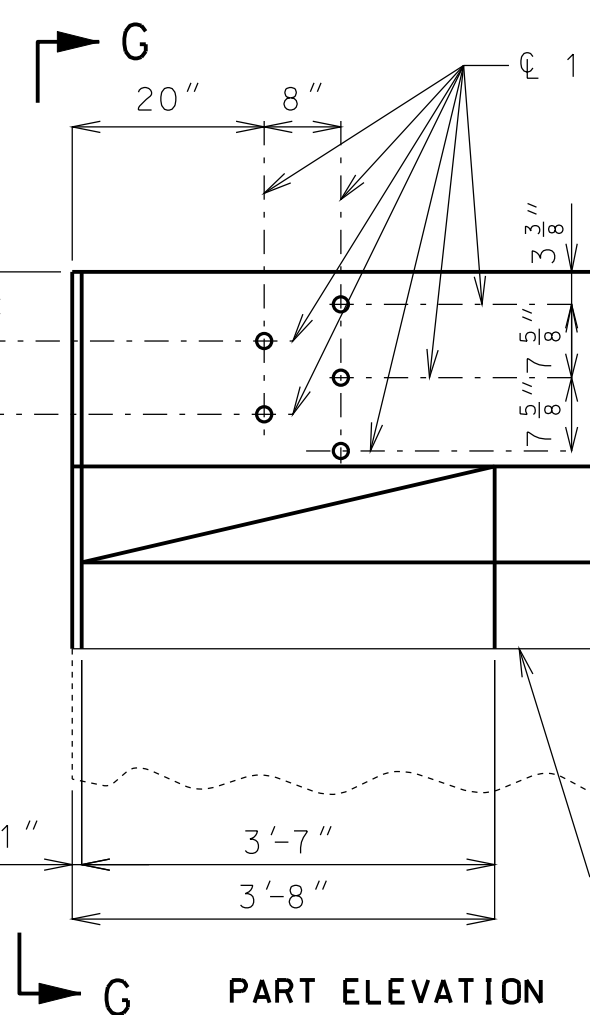
SECTION B-B



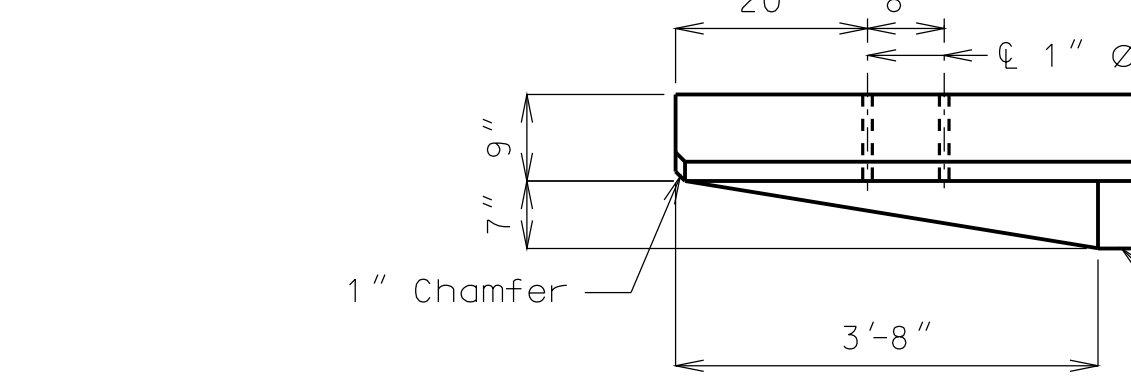
SECTION C-C



PART ELEVATION G-G

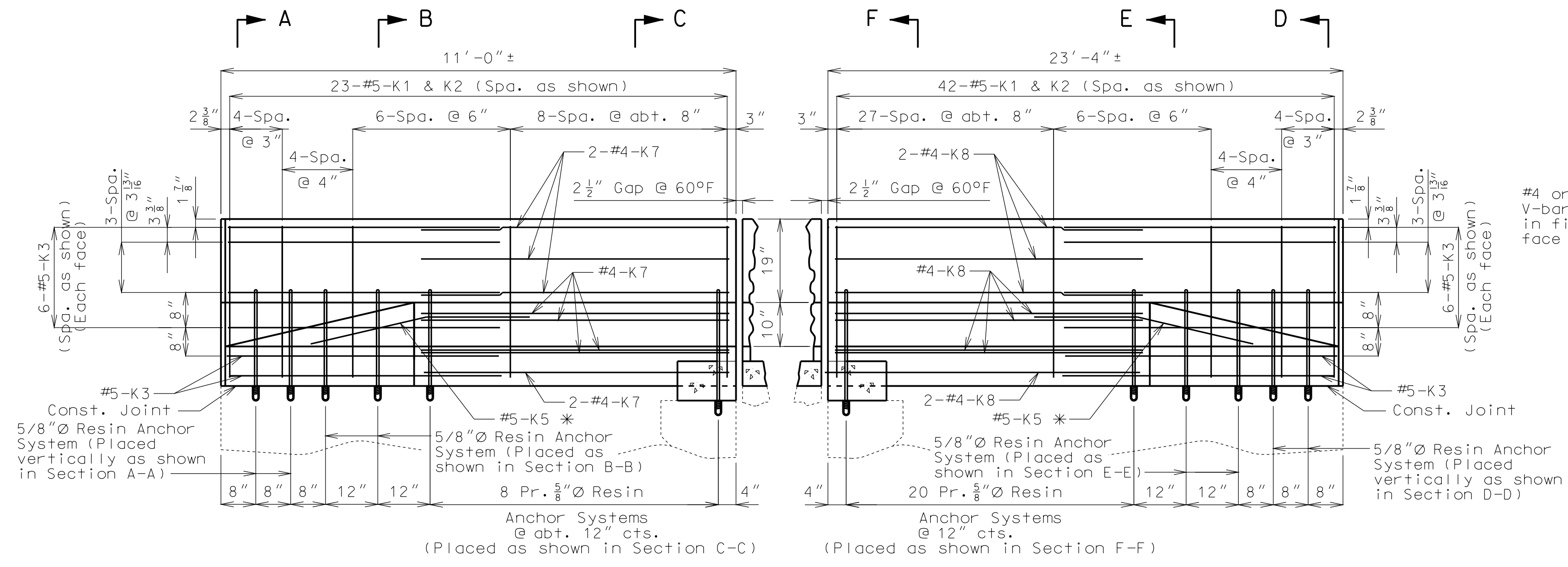


PART ELEVATION



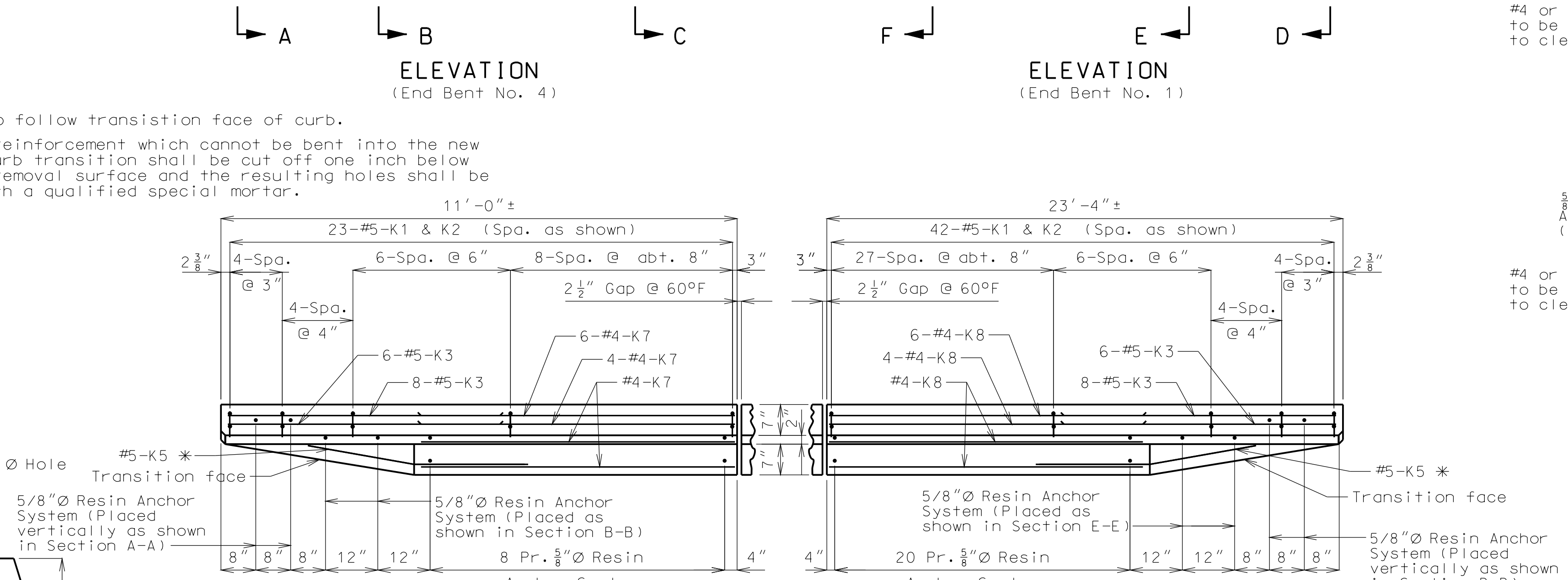
PART PLAN

DETAILS OF GUARD RAIL ATTACHMENT



ELEVATION
(End Bent No. 4)

ELEVATION
(End Bent No. 1)



PLAN
(End Bent No. 4)

PLAN
(End Bent No. 1)

Notes:
Use a minimum lap of 2'-0" between K3, K7 and K8 bars.

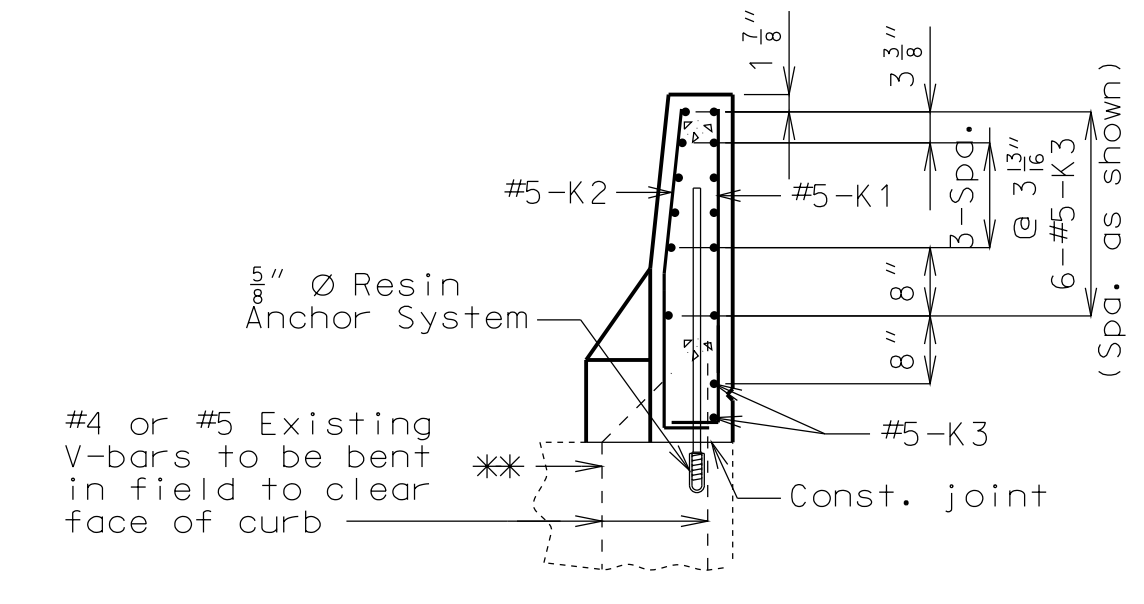
Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb."

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

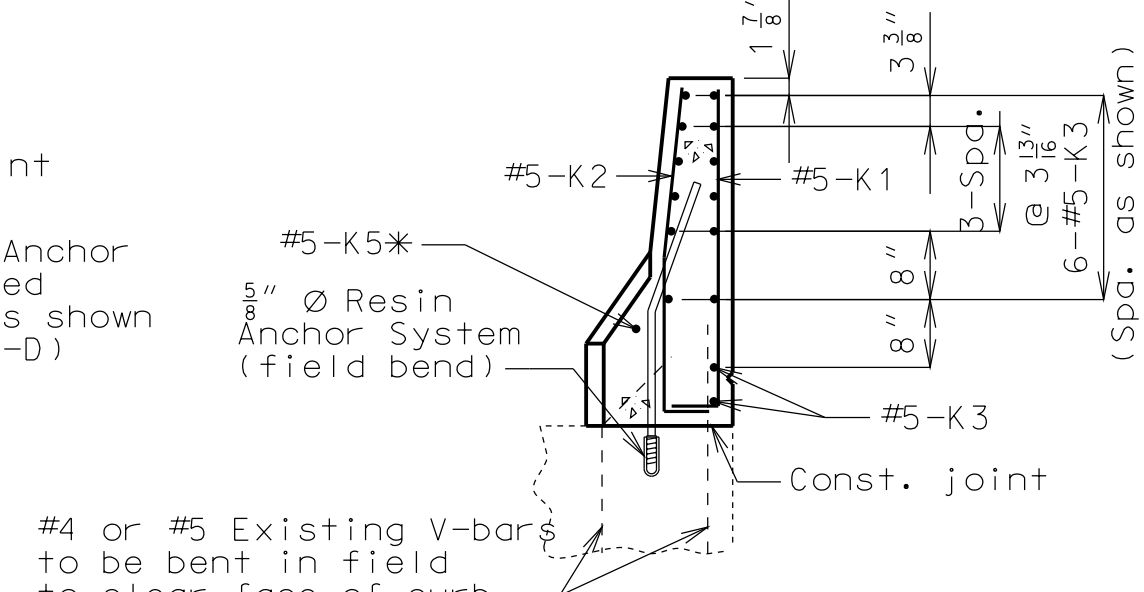
Cost of furnishing and installing the resin anchor system complete-in-place will be considered completely covered by the contract unit price for Safety Barrier Curb.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

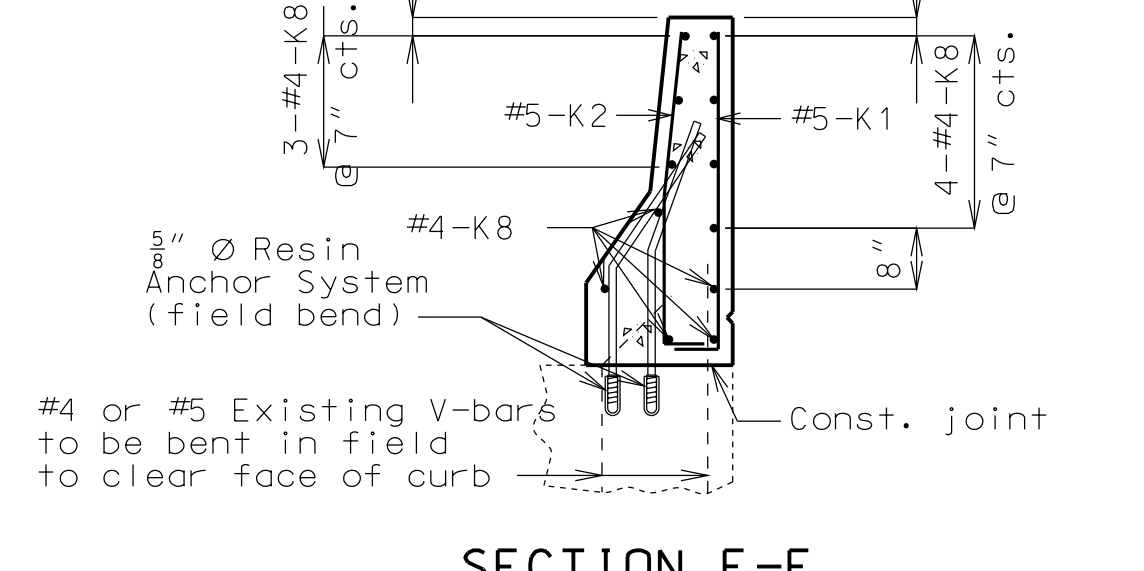
An epoxy coated #5 Grade 60 reinforcing bar 2'-3" long shall be substituted for the 5/8 inch diameter threaded rod.



SECTION D-D



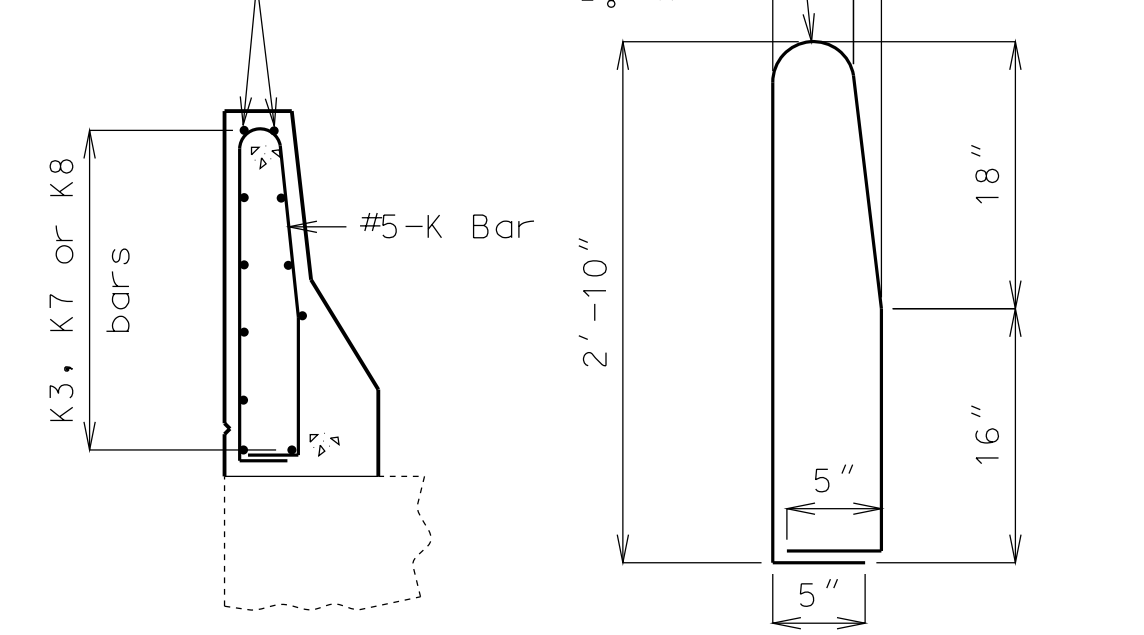
SECTION E-E



SECTION F-F

ANCHOR SYSTEMS AT SECTIONS C-C & F-F

The top two K3, K7 or K8 bars shall be kept with position close to those shown in Sections A-A thru F-F



K1-K2 BAR PERMISSIBLE ALTERNATE SHAPE (***)

(***) The K1 and K2 bar combination may be furnished as one bar as shown, at the contractor's option.

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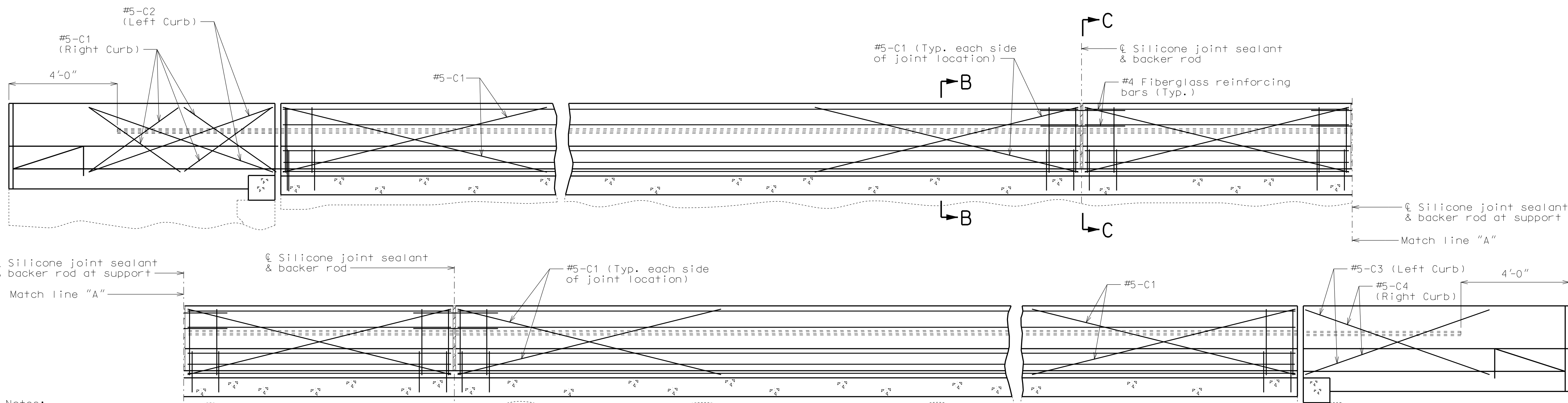
DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 7
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A02482	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

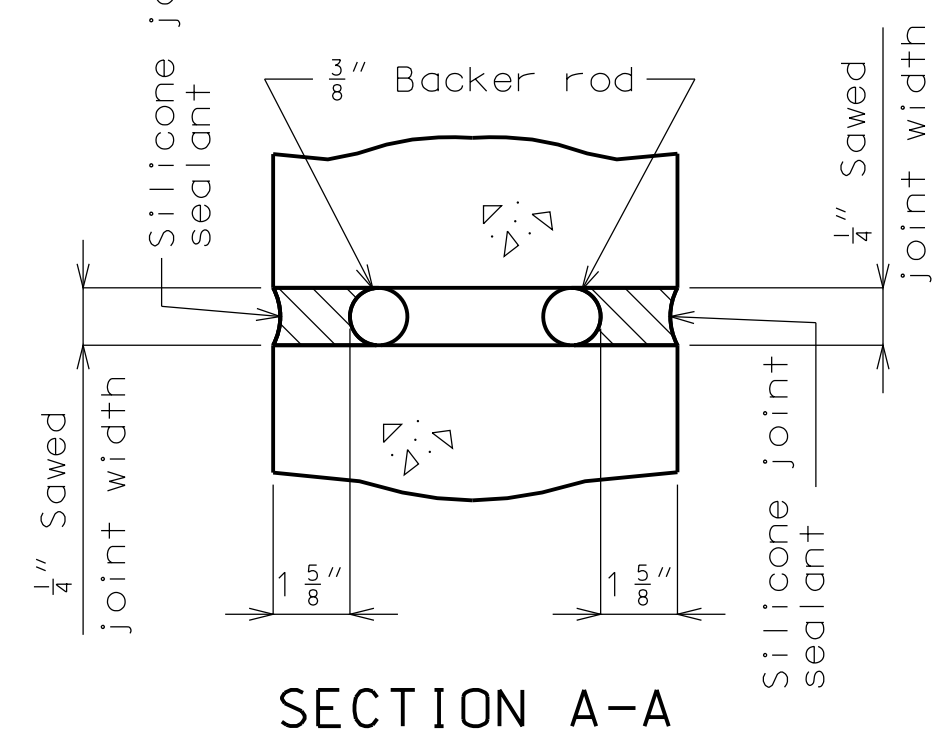
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

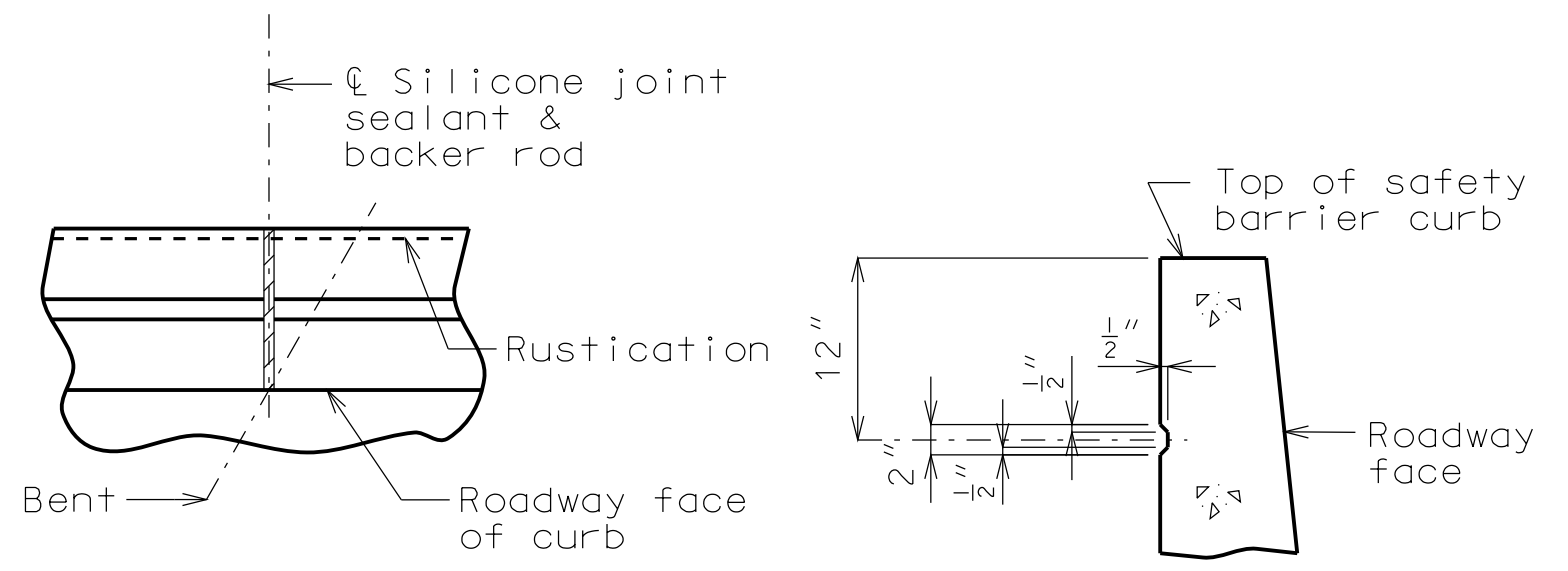


Notes:
 Top of safety barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.
 Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for safety barrier curb per linear foot.
 Concrete in the safety barrier curb shall be Class B-1.
 Measurement of safety barrier curb is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

TYPICAL SECTION NEAR LEFT SAFETY BARRIER CURB AT SUPPORT LOCATIONS (OPTIONAL SLIP-FORM BRIDGE SAFETY BARRIER CURB)

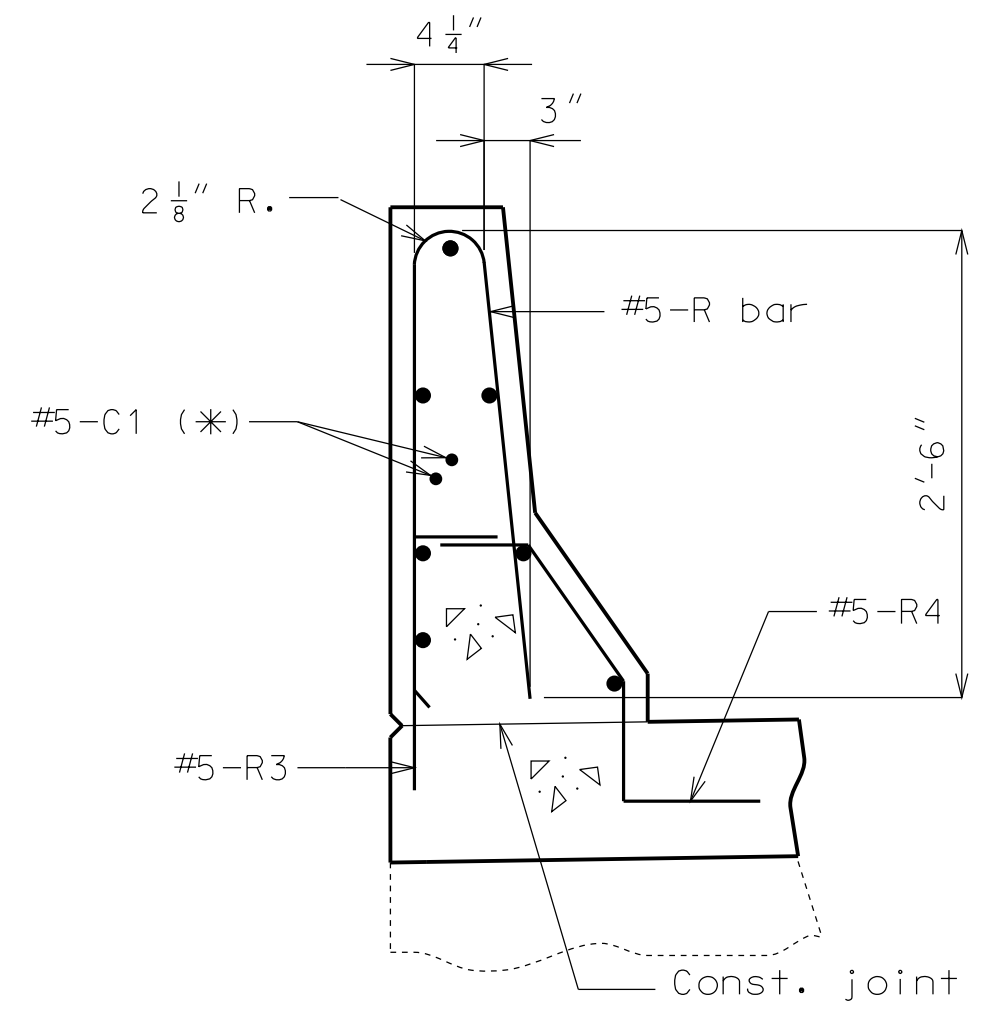


Notes:
 Joint sealant and backer rods shall be used on all slip-form barrier curbs instead of joint filler and shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.
 Plastic waterstop shall not be used with slip-form option.
 C Bars (Slip-form option only) shall be used in addition to cast-in-place conventional forming reinforcement for bridge safety barrier curb.
 For Slip-Form option, all sides of the safety barrier curb shall have a vertically broomed finish and the curb top shall have a transversely broomed finish.



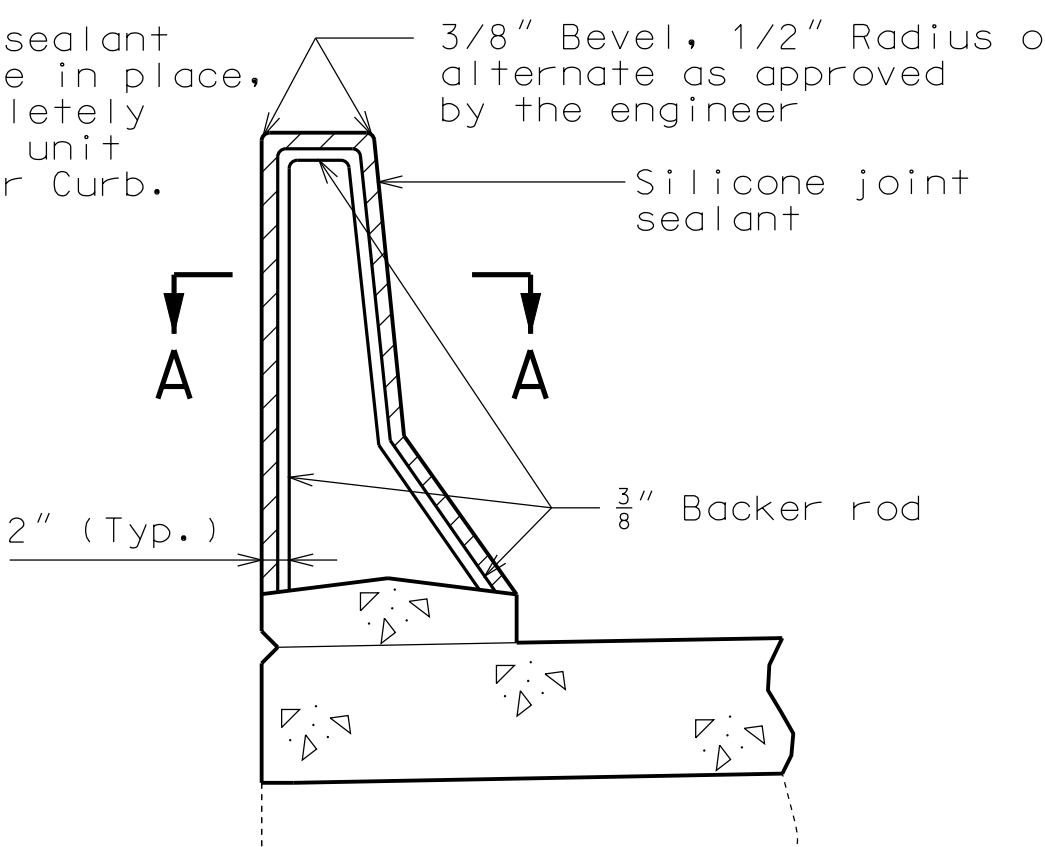
Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb".

PART PLAN SHOWING SAFETY BARRIER CURB JOINT RUSTICATION DETAIL
PART SECTION SHOWING RUSTICATION DETAILS

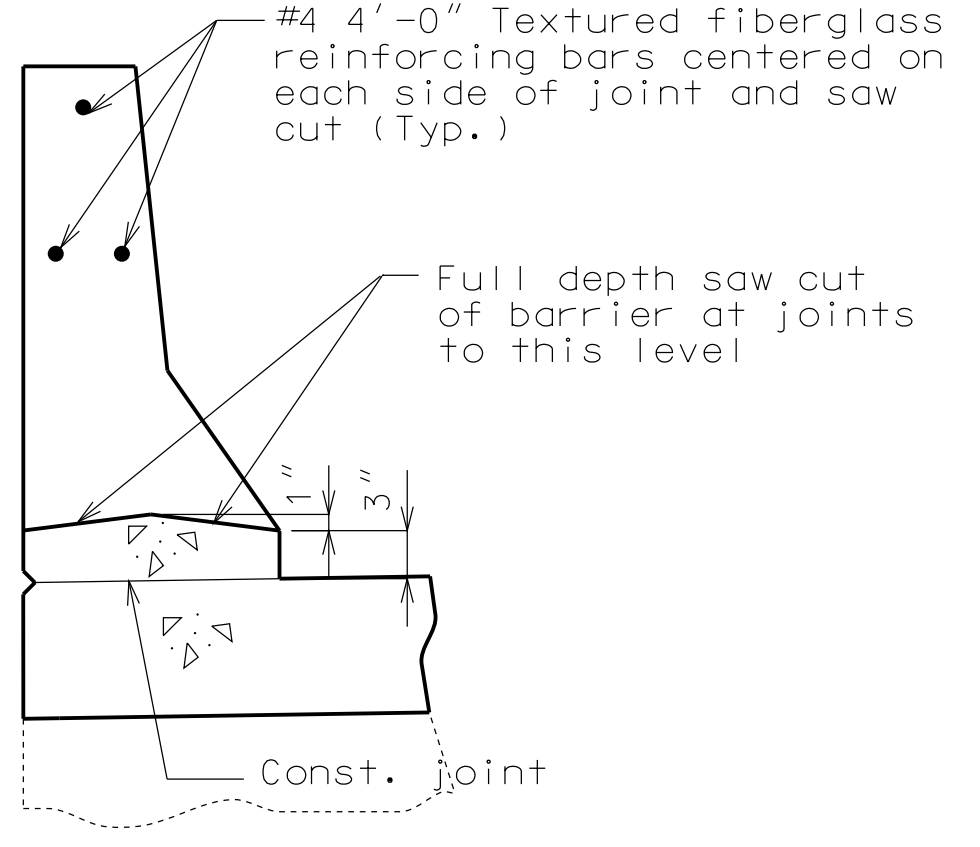


Notes:
 (*) Each side of joint location.

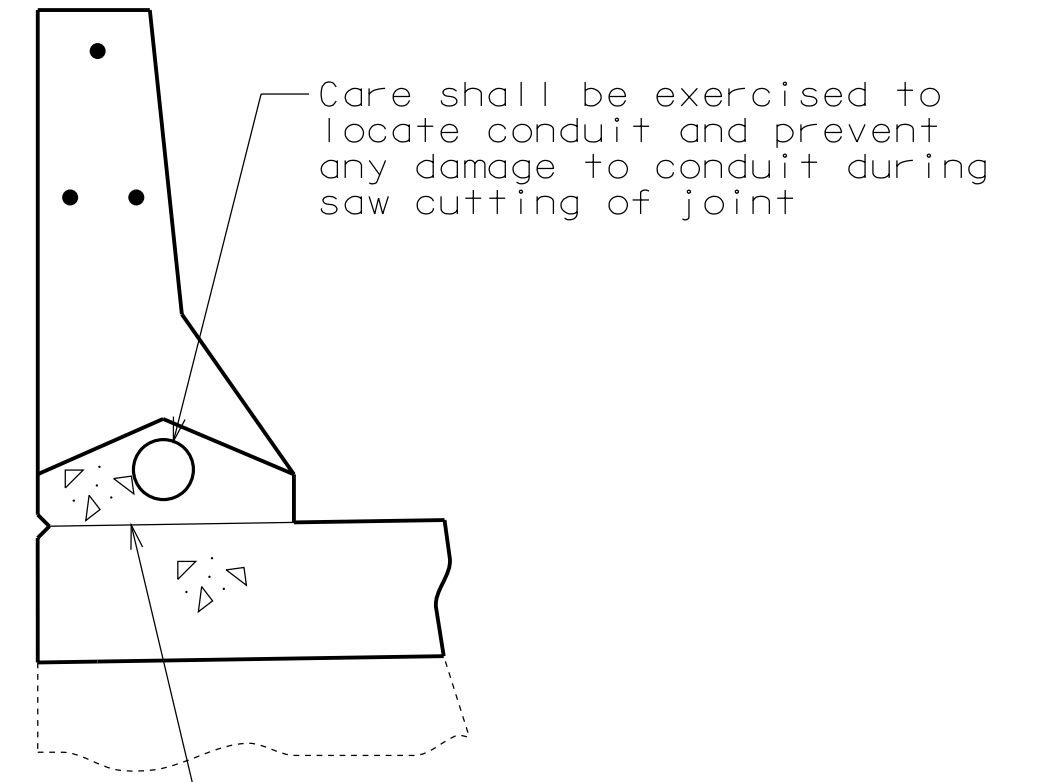
Note:
 Cost of silicone joint sealant and backer rod, complete in place, will be considered completely covered by the contract unit price for Safety Barrier Curb.



SECTION THRU JOINT (Left barrier curb shown, right barrier curb similar.)
OPTIONAL SLIP-FORM BRIDGE SAFETY BARRIER CURB



PART SECTION C-C (Right Barrier Curb only)



PART SECTION C-C (Left Curb only)

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 8
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A02482	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

Notes:

All safety barrier curb junction boxes shall be PVC molded in accordance with Sec 1062 and designed for flush mounting. The conduit terminations shall be permanent or separable. The terminations and covers shall be of watertight construction and shall meet requirements for NEMA 4 enclosure.

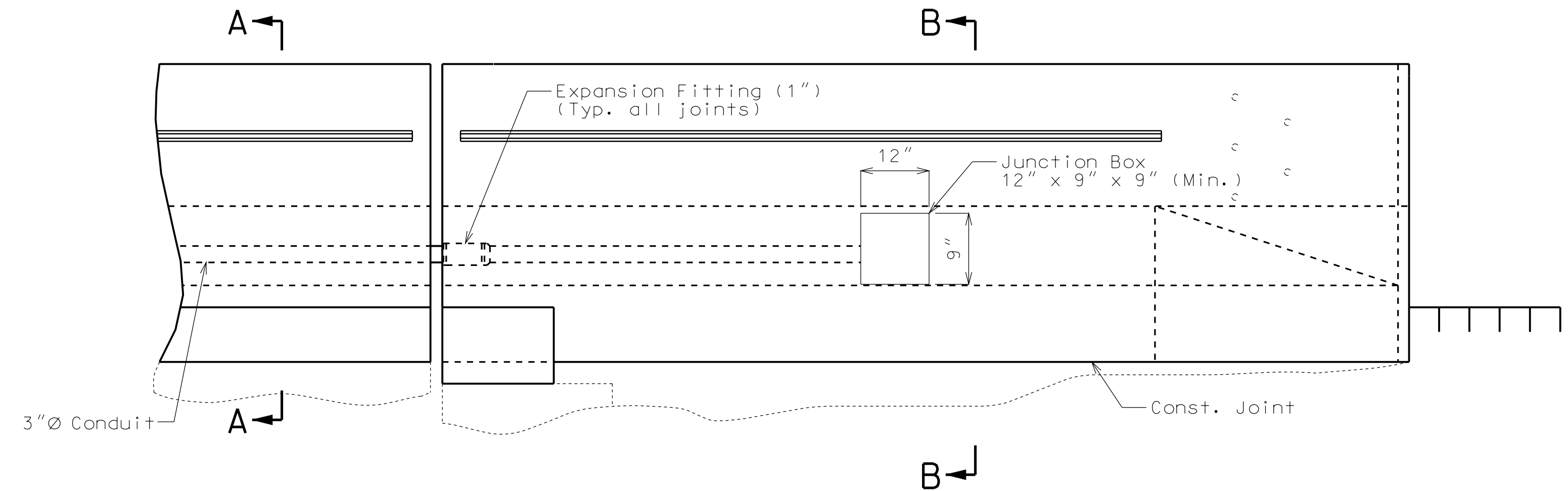
Drainage shall be provided at low points or other critical locations of all conduits and all junction boxes in accordance with Sec 707. All conduits shall be sloped to drain where possible.

Payment for furnishing and installing Conduit System, complete-in-place, will be considered completely covered by the contract lump sum price for Conduit System on Structure.

All conduit shall be rigid non-metallic schedule 40 heavy wall PVC (polyvinyl chloride plastic) with 3" minimum cover in concrete. Each section of conduit shall bear the Underwriters Laboratories, (UL) label.

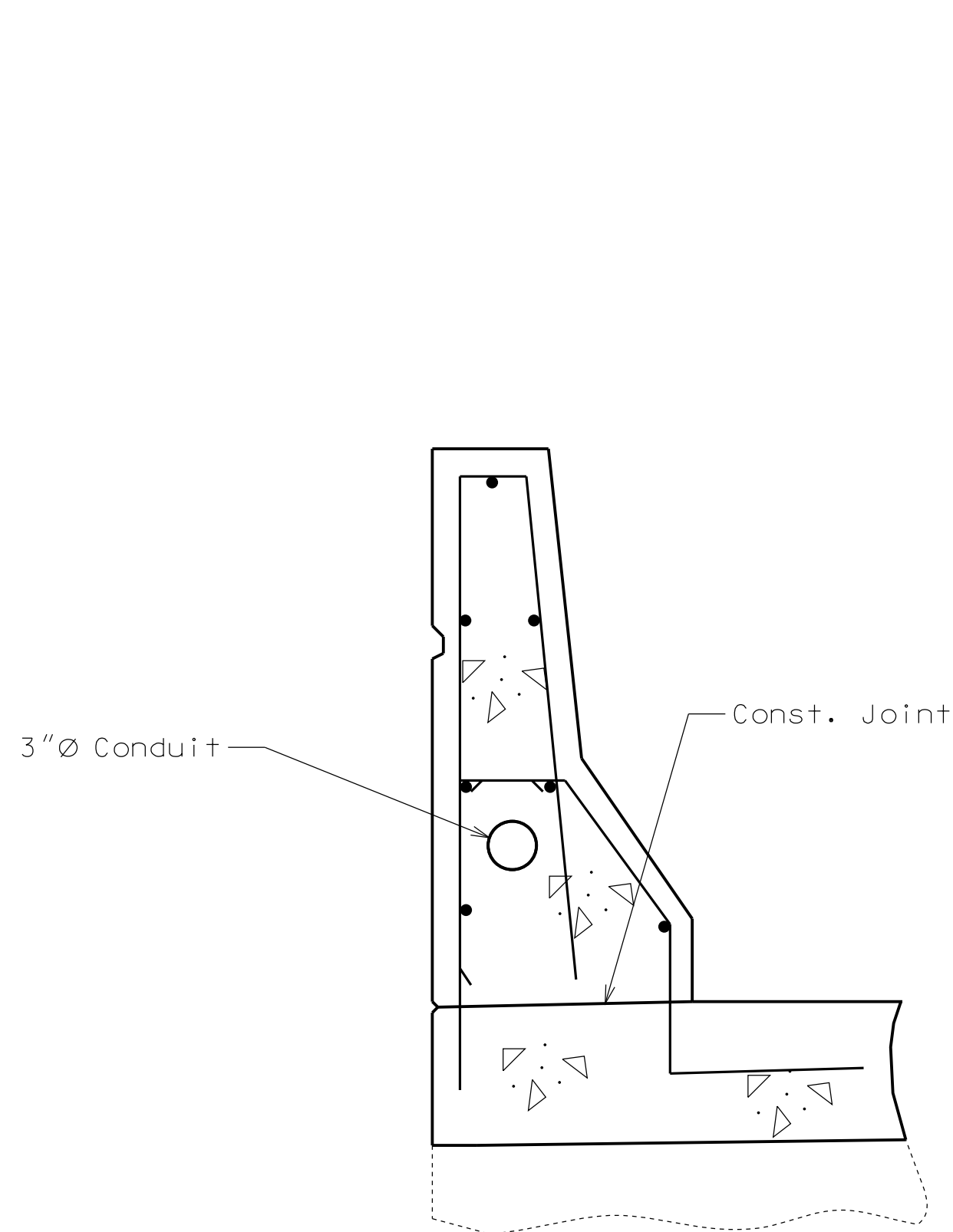
Shift reinforcing steel in field where necessary to clear conduit and junction boxes.

Expansion fittings shall be placed as shown and set in accordance with the manufacturer's requirements and based on the air temperature at the time of setting given an estimated total expansion movement of 1" at open joints and 1" at filled joints using a maximum temperature range of 120° F and a maximum temperature of 110° F.

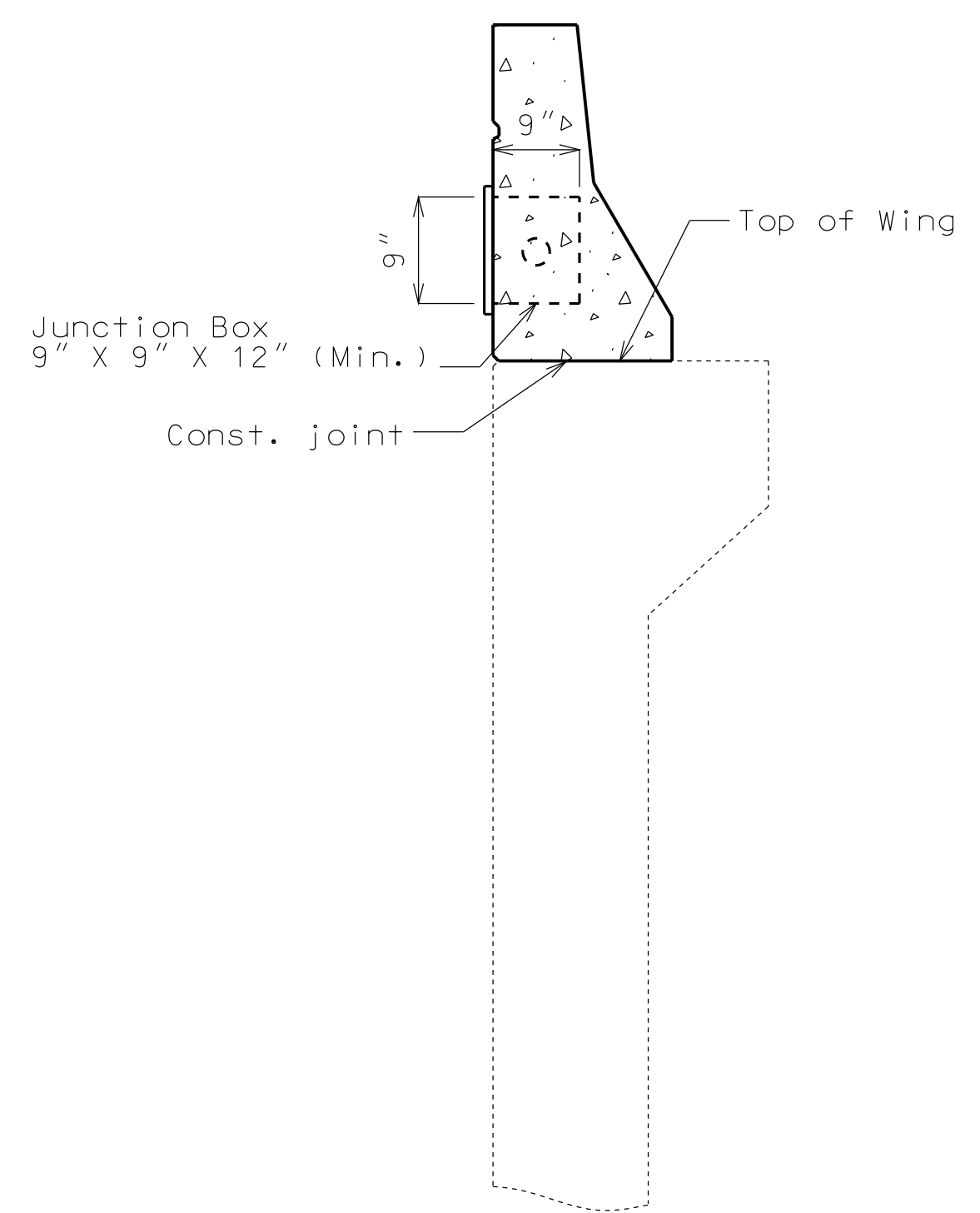


PART ELEVATION NEAR END BENT

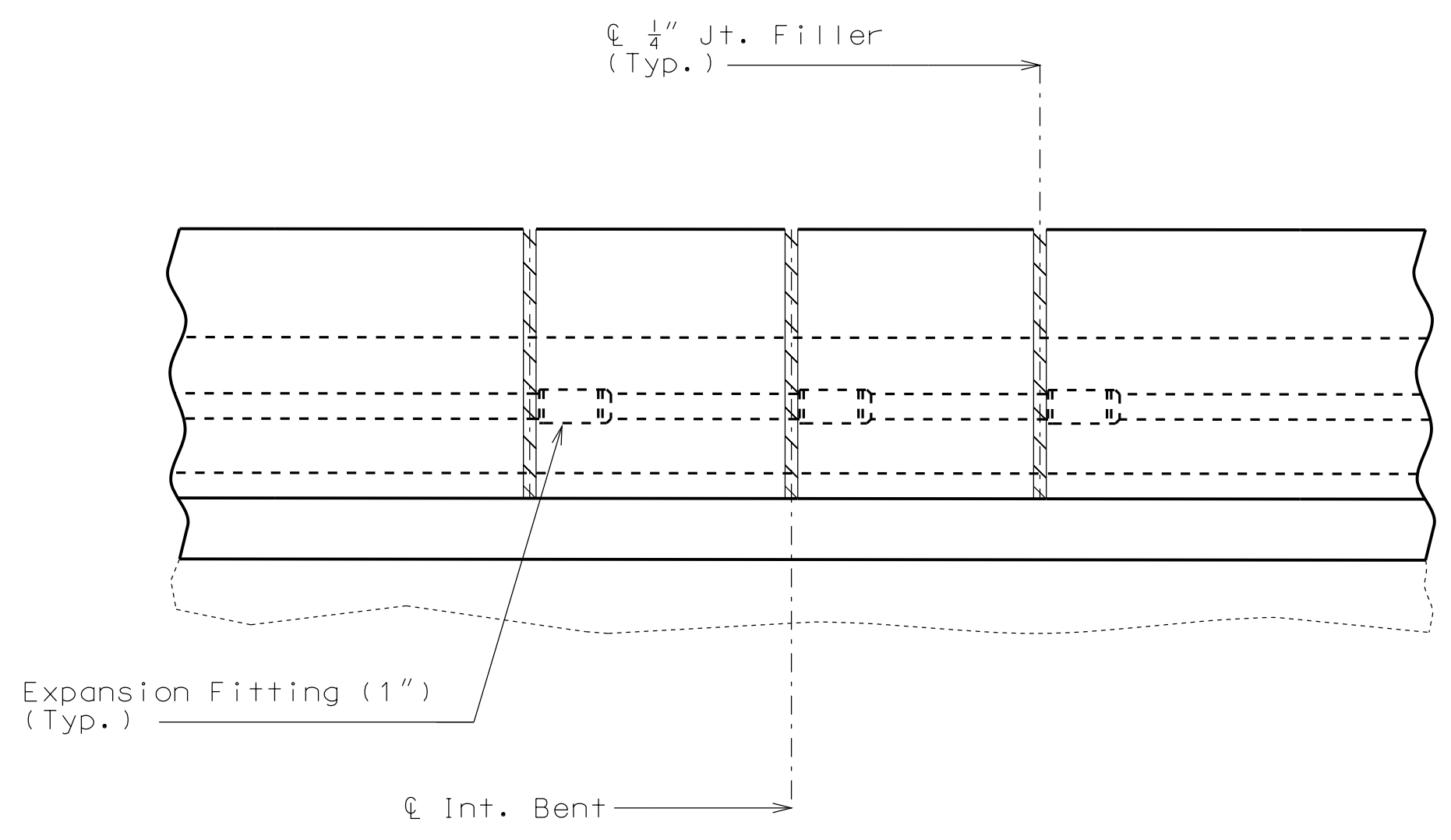
(End Bent No. 1 shown, End Bent No. 4 similar)



PART SECTION A-A



PART SECTION B-B



PART ELEVATION NEAR INT. BENTS

DETAILS OF CONDUIT SYSTEM (LEFT SIDE OF STRUCTURE)

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 9
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A02482	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

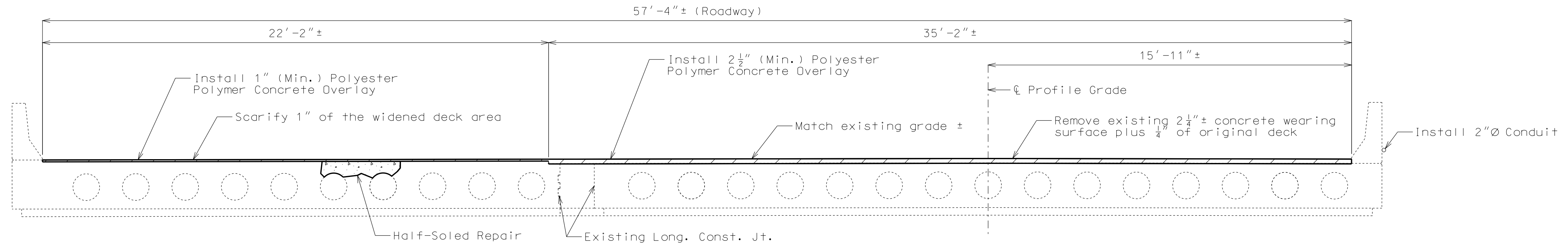
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

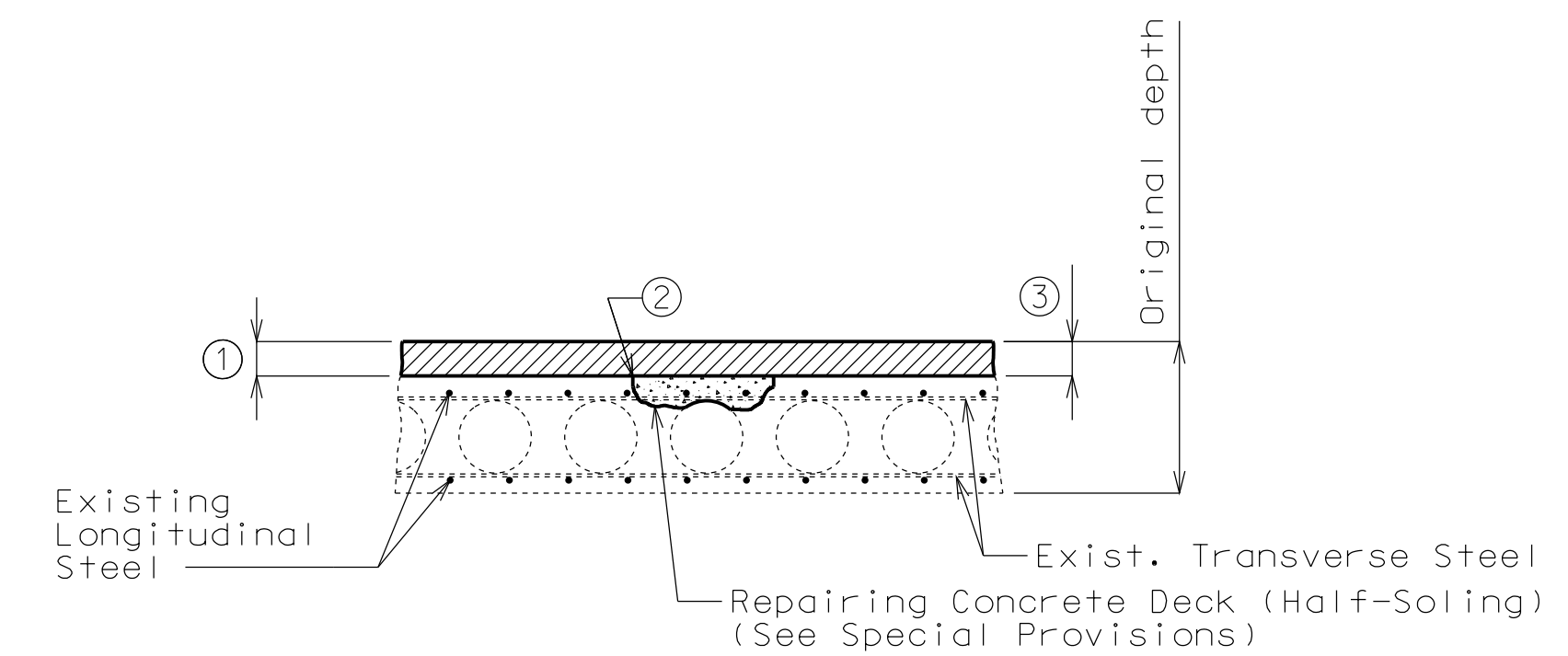
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
U.I.P. AND REHAB EXISTING (42'-67'-67'-42') CONTINUOUS CONCRETE VOIDED SLAB SPANS

SEC/SUR 16 TWP 44N RGE 31W

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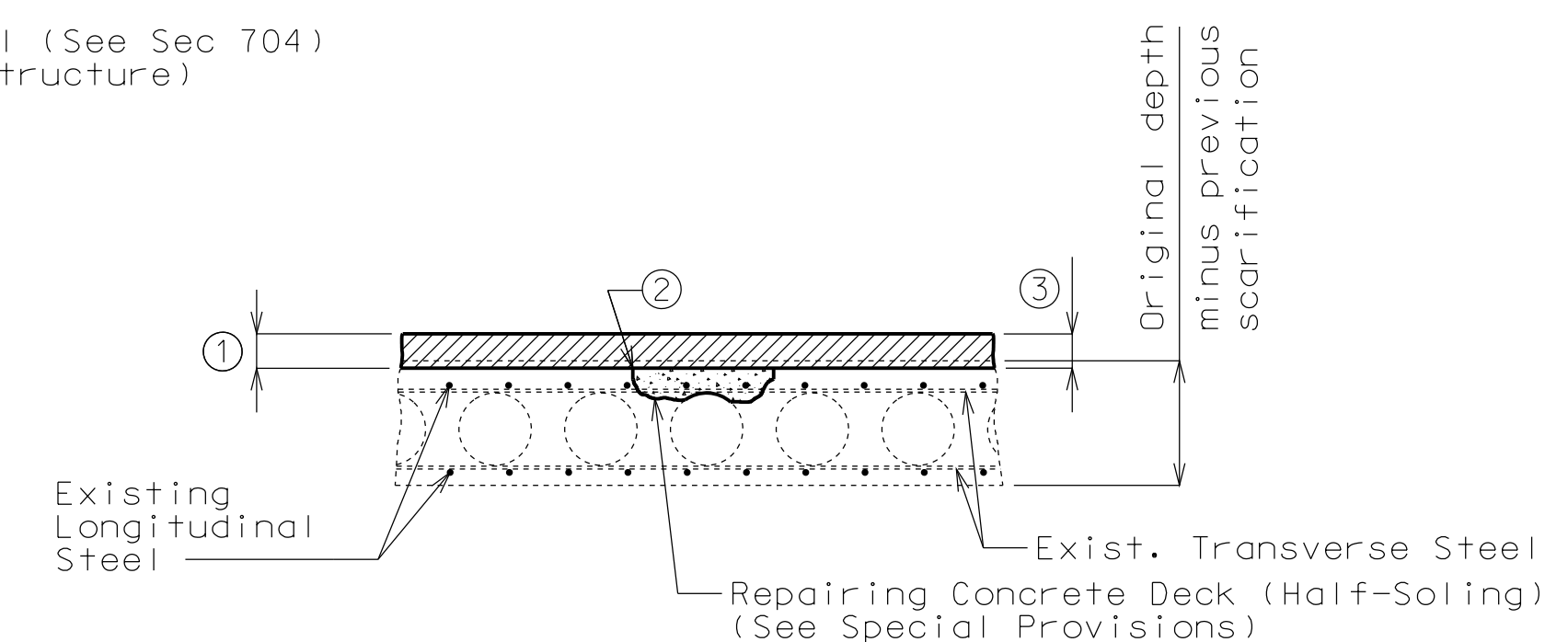


TYPICAL SECTION THRU EXISTING SLAB



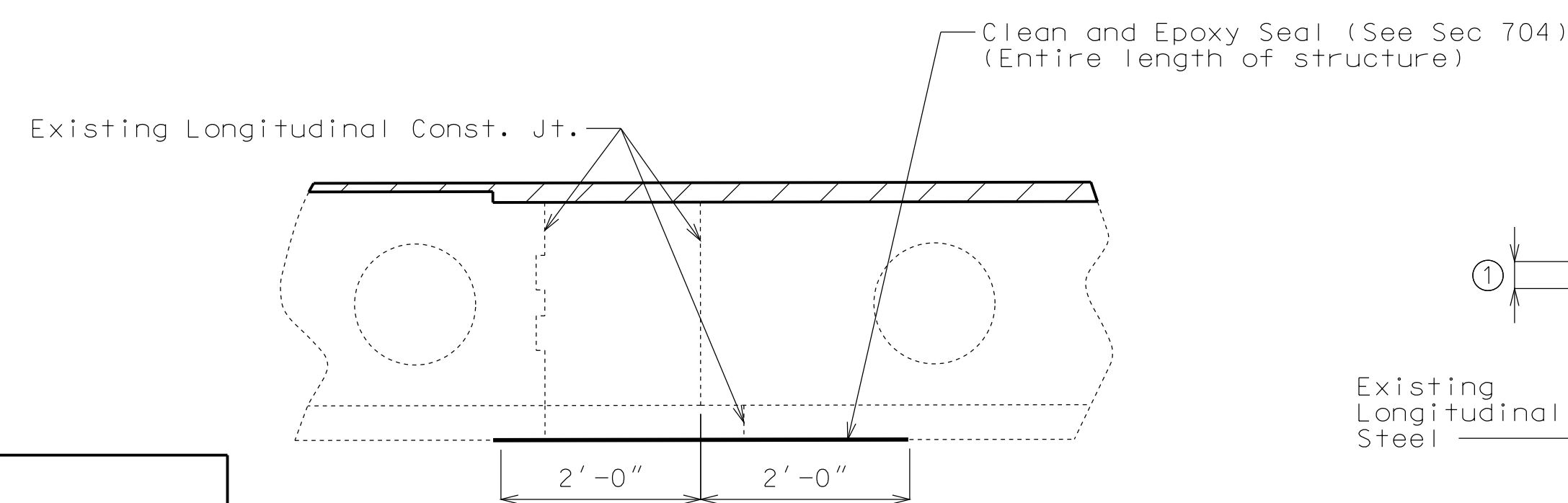
HALF-SOLED REPAIR (WIDENED DECK)

- ① Scarify existing deck 1".
- ② One inch vertical side shall be established outside the deteriorated area. See Sec 704.
- ③ 1" (Min.) Polyester Polymer Concrete Overlay.



HALF-SOLED REPAIR (ORIGINAL DECK)

- ① Remove existing wearing surface plus 1/4" of existing deck.
- ② One inch vertical side shall be established outside the deteriorated area. See Sec 704.
- ③ 2 1/2" (Min.) Polyester Polymer Concrete Overlay.



PART SECTION AT
LONGITUDINAL CONSTRUCTION JOINT
SHOWING LIMITS OF EPOXY SEAL

General Notes:

Design Specifications:

2002 - AASHTO 17th Edition
Load Factor Design
Bridge Deck Rating = 5

Miscellaneous:

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. The cost of furnishing and installing the overlay will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of overlay.

Roadway surfacing adjacent to bridge ends shall match new bridge overlay (Roadway Item).

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

Contractor shall verify all dimensions in field before ordering new material.

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

Traffic Handling:


Traffic to be maintained on structure during construction. See Sheet No. 2 for Details Showing Staged Construction.

Estimated Quantities		
Item		Total
Scarification of Bridge Decks	sq. yard	543
Removal of Concrete Wearing Surface	sq. foot	7754
Polyester Polymer Concrete Overlay	sq. yard	1405
Repairing Concrete Deck (Half-Soling)	sq. foot	1250
Clean and Epoxy Seal	sq. foot	882
Conduit System on Structure	lump sum	1

DATE PREPARED 12/20/2012	
ROUTE 7	STATE MO
DISTRICT BR	SHEET NO. 1
COUNTY CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A14962	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

**REPAIRS TO BRIDGE: RTE. 7 OVER
RTE. 71 (PROPOSED RTE. I-49)
STATE ROAD FROM HARRISONVILLE TO GARDEN CITY
ABOUT 2 MILES SOUTH OF HARRISONVILLE
STA. 13+22.25± (Rte. 7) (Match Existing)**

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12/20/2012

ROUTE 7 STATE MO

DISTRICT BR SHEET NO. 2

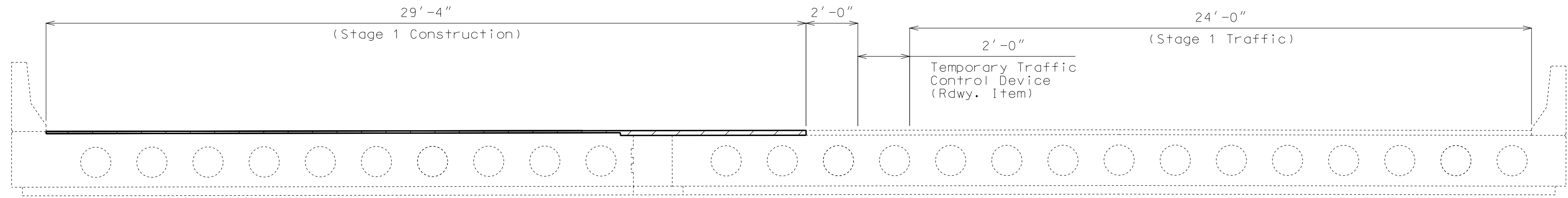
COUNTY CASS

JOB NO. J413012

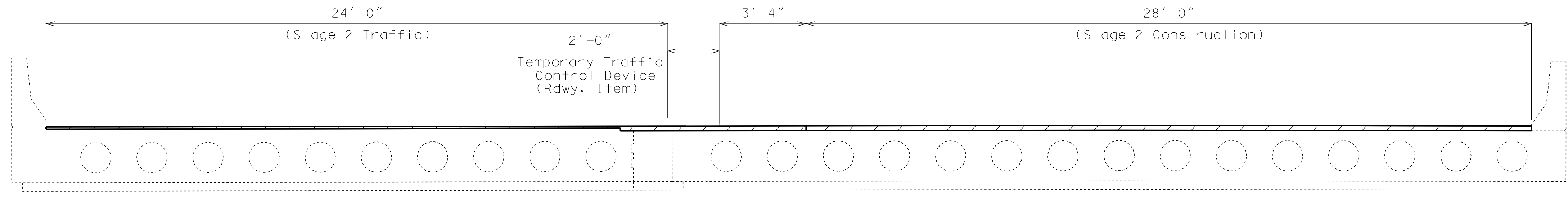
CONTRACT ID.

PROJECT NO.

BRIDGE NO. A14962



STAGE 1 CONSTRUCTION



STAGE 2 CONSTRUCTION

DETAILS SHOWING STAGED CONSTRUCTION

DATE	DESCRIPTION

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DATE PREPARED
12/20/2012

ROUTE 7 STATE MO

DISTRICT BR SHEET NO. 3

COUNTY CASS

JOB NO. J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A14962

DESCRIPTION

DATE

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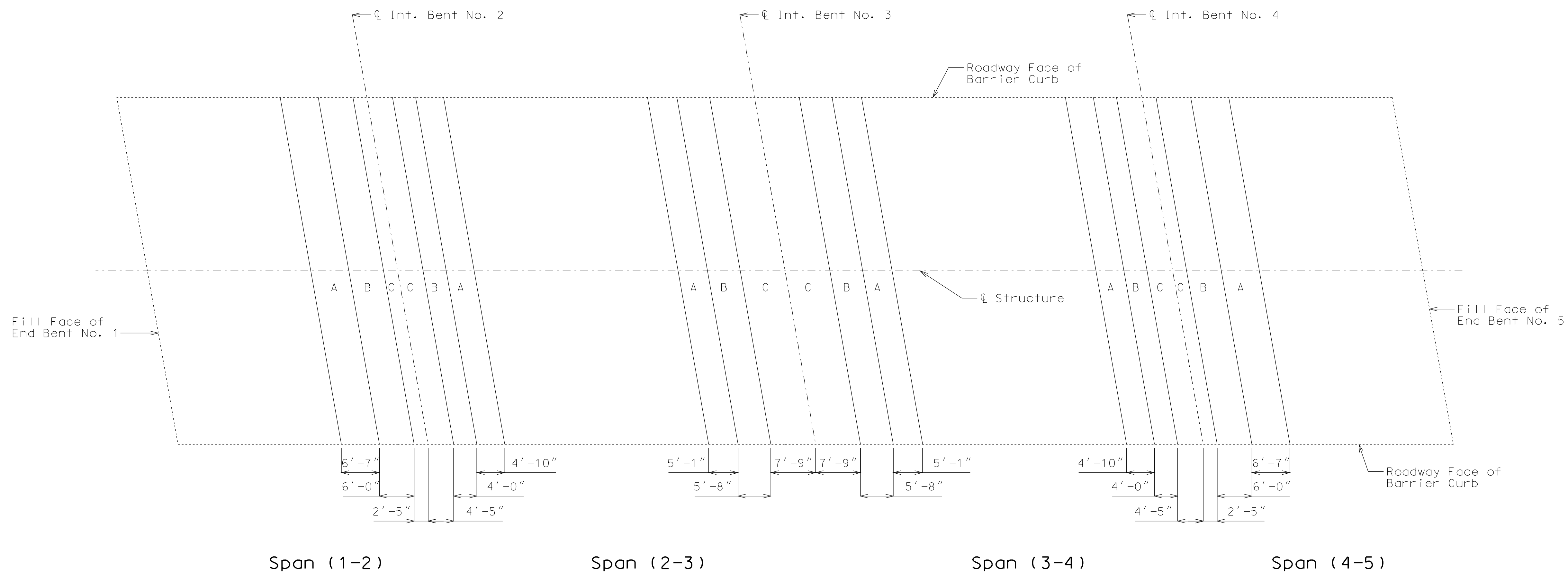
DATE

DATE

DATE

DATE

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PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Notes:

Any half-soling required in the areas designated as special repair zones shall be completed in alphabetical sequence. Any repair in the remainder of the bridge that is adjacent to Zone A and not designated as a special repair zone shall be completed prior to work in Zone A.

Removal and repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone. Before placing concrete in areas adjacent to areas of subsequent repair, the concrete shall be separated with a material such as polyethylene sheets to aid in removal of old concrete.

Zones with the same letter designation may be repaired at the same time.

If any single repair area does not exceed 4 square feet in size and the total repair within a special repair zone does not exceed 12 square feet, the special repair zone requirement does not apply for that zone. Any damage sustained to the void tube as a result of the contractor's operations shall be patched or replaced as required by the engineer at the contractor's expense.

An exposed void in the deck shall be patched as approved by the engineer in a manner that shall maintain the void area completely free of concrete. Cost of patching an exposed void will be considered completely covered by the contract unit price for repairing concrete deck (half-soling).

Notes:

All conduit clamps shall be commercially-available, nonmetallic conduit clamps and approved by the engineer.

Anchor bolts and nuts shall be AASHTO M314-90 Grade 55. Anchor bolts, nuts and washers shall be fully galvanized.

Additional expansion fittings beyond what is specified on the bridge plans shall be provided and placed in accordance with the conduit manufacturer's recommendations.

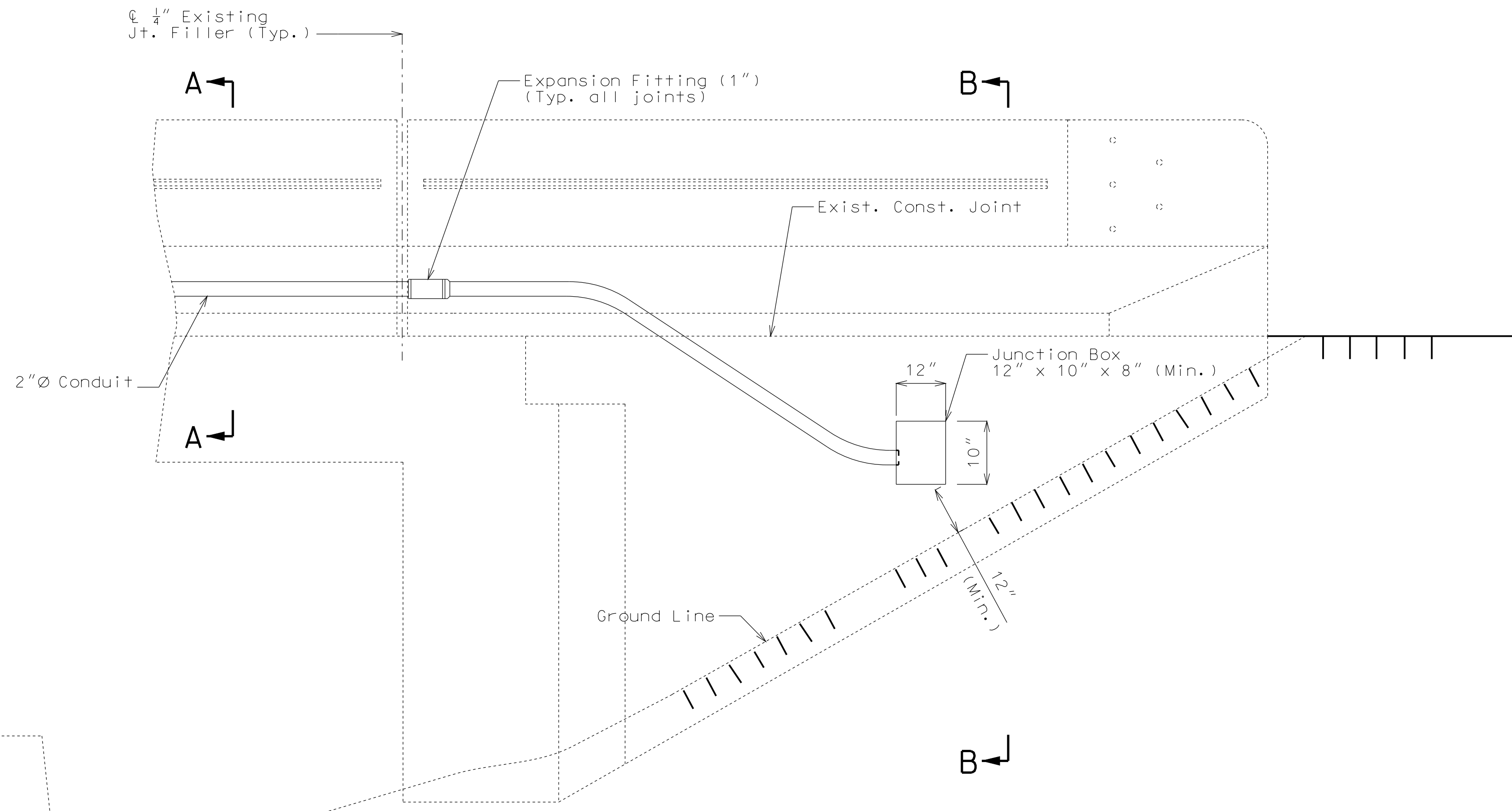
All conduits shall be secured to concrete with nonmetallic clamps at about 5'-0" cts. Concrete anchors for clamps shall be in accordance with Federal Specification FF-S-325, Group II, Type 4, Class I and shall be galvanized in accordance with ASTM A153, B695-91 Class 50 or stainless steel. Minimum embedment in concrete shall be 1 3/4". The supplier shall furnish a manufacturer's certification that the concrete anchors meet the required material and galvanizing specifications.

Expansion fittings shall be placed as shown and set in accordance with the manufacturer's requirements and based on the air temperature at the time of setting given an estimated total expansion movement of 1 inch at closed joints using a maximum temperature range of 110° F. Additional expansion fittings beyond what is specified on the bridge plans shall be provided and placed in accordance with the conduit manufacturer's recommendations.

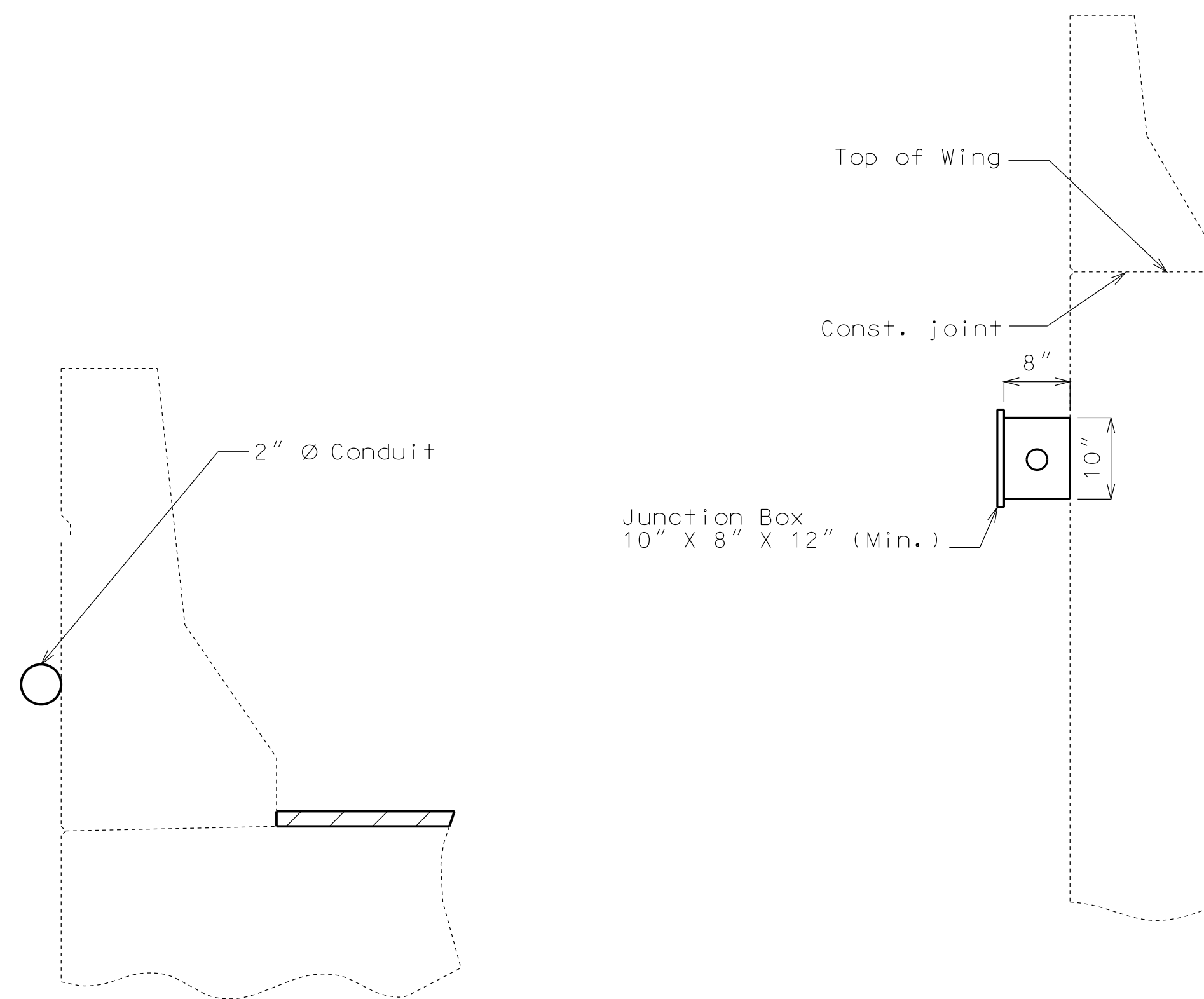
All end bent junction boxes shall be PVC molded in accordance with Sec 1062, and designed for surface mounting. The conduit terminations shall be permanent or separable. The terminations and covers shall be of watertight construction and shall meet requirements for NEMA 4 enclosure.

Weep holes shall be provided at low points or other critical locations to drain any moisture in the conduit system. Conduit shall be sloped to drain.

Payment for furnishing and installing Conduit System, complete-in-place, will be considered completely covered by the contract lump sum price for Conduit System on Structure.

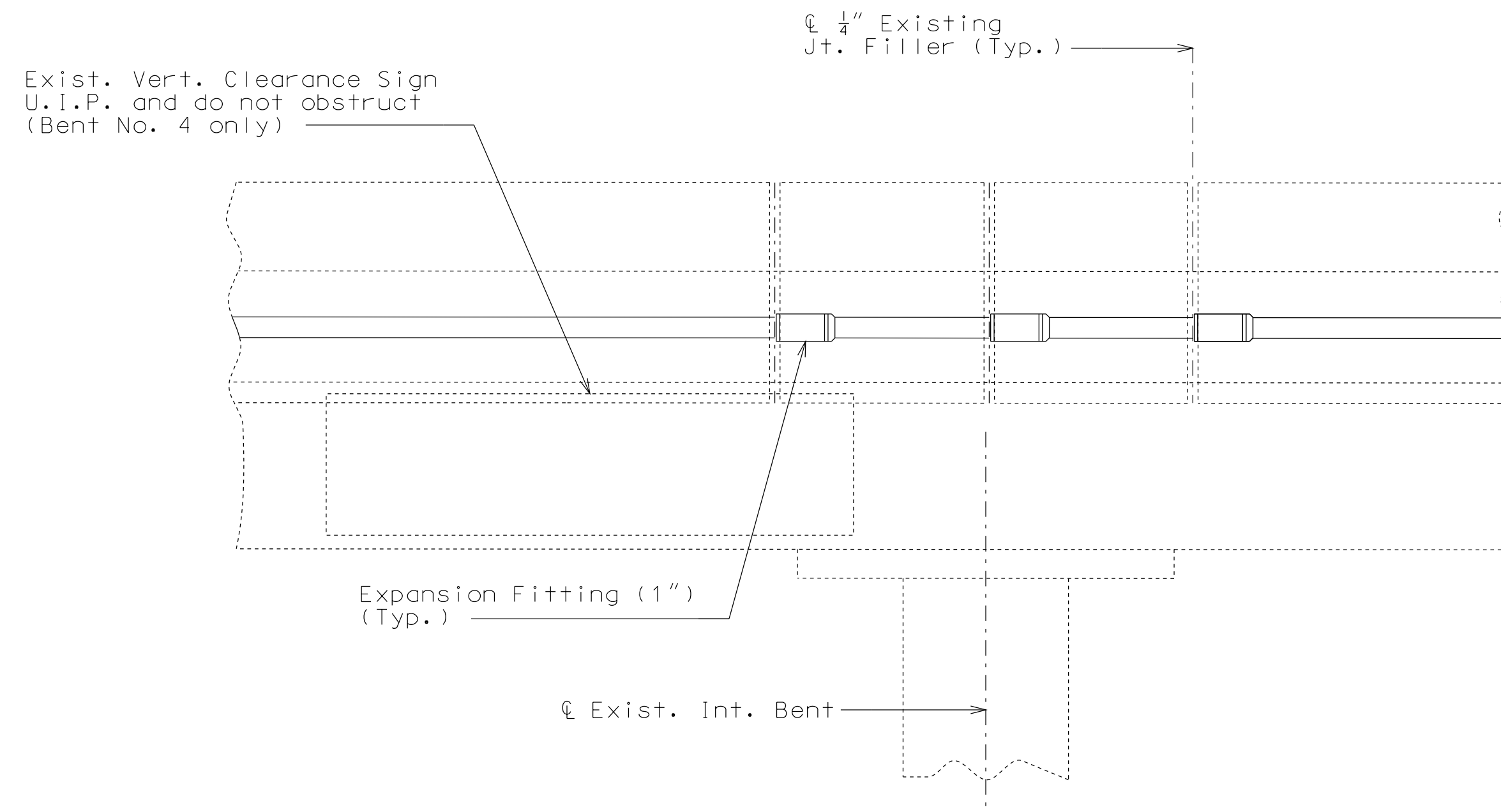


PART ELEVATION NEAR END BENT
(End Bent No. 5 shown, End Bent No. 1 similar)



PART SECTION A-A

PART SECTION B-B



PART ELEVATION NEAR INT. BENTS


DETAILS OF CONDUIT SYSTEM (SOUTH SIDE OF STRUCTURE)

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DATE PREPARED 12/20/2012	
ROUTE 7	STATE MO
DISTRICT BR	SHEET NO. 4
COUNTY CASS	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A14962	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



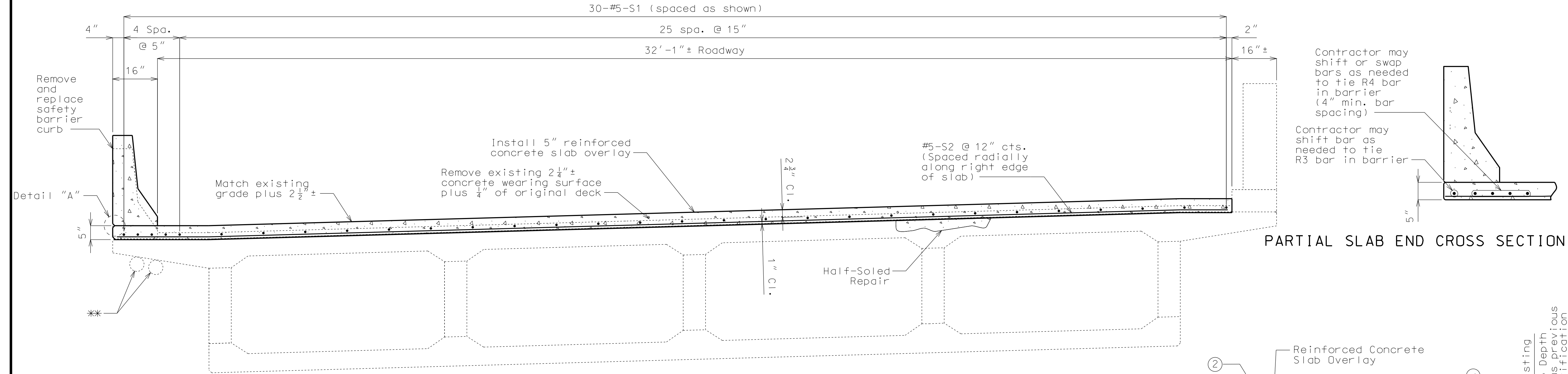
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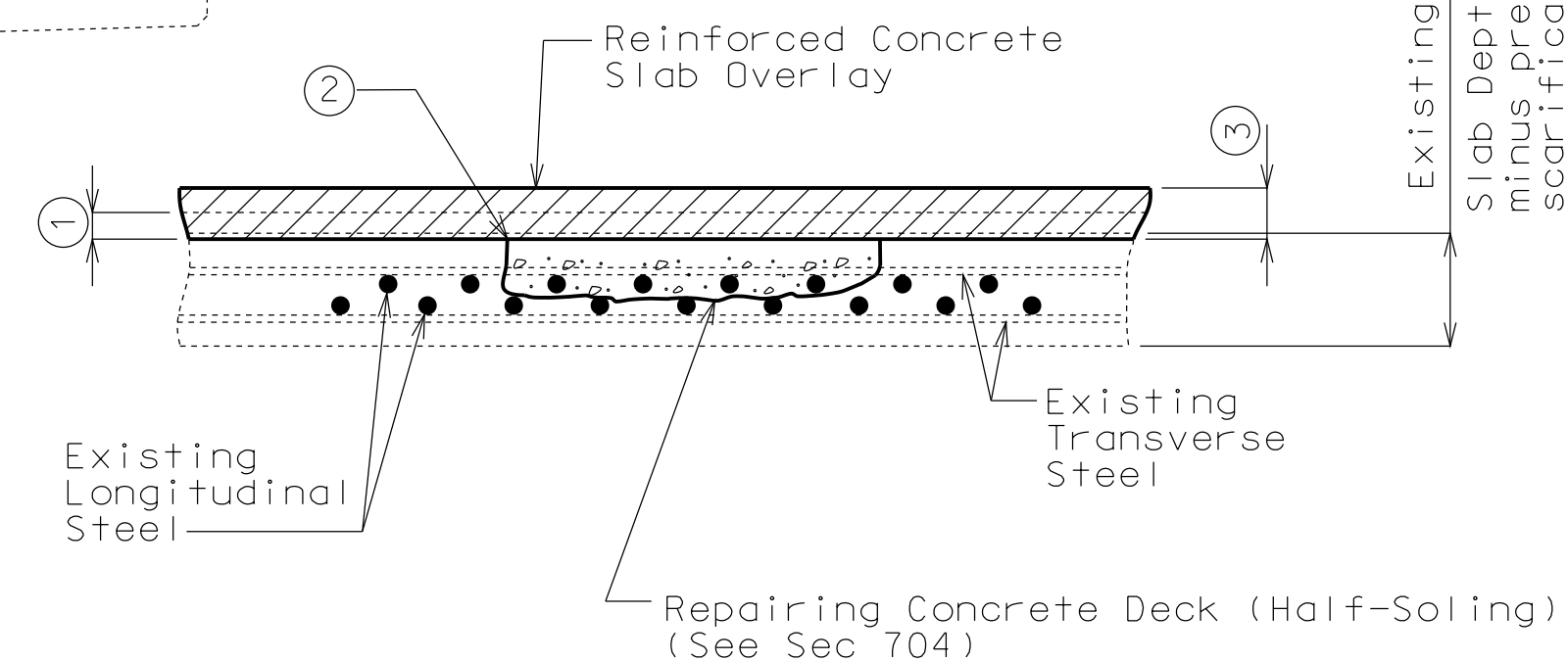
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
U.I.P. & REHAB EXISTING (56'-70'-44') CONTINUOUS CURVED CONCRETE BOX GIRDER SPANS

SEC/SUR 32 TWP 50N RGE 33W

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PARTIAL SLAB END CROSS SECTION



HALF-SOLED REPAIR

- ① Remove existing wearing surface plus 1/4" of original deck.
- ② One inch vertical side shall be established outside the deteriorated area. See Sec 704.
- ③ 5" reinforced concrete slab overlay.

General Notes:

Design Specifications:

2002 - AASHTO 17th Edition
 Load Factor Design
 Seismic Performance Category A
 Bridge Deck Rating = 7

Design Loading:

H20-S16-44 (1953)
 HS20-44 + Military 24,000# Tandem Axle (New Construction)

Design Unit Stresses:

Class B-1 Concrete (Safety Barrier Curb, Curb & Parapet) $f'c = 4,000$ psi
 Class B-2 Concrete (Superstructure except Safety Barrier Curb) $f'c = 4,000$ psi
 Reinforcing Steel (Grade 60) $fy = 60,000$ psi

Joint Filler:

All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1-1/2", unless otherwise shown.

Miscellaneous:

Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface (Roadway Item).

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

Contractor shall verify all dimensions in field before ordering new material.

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Traffic Handling:

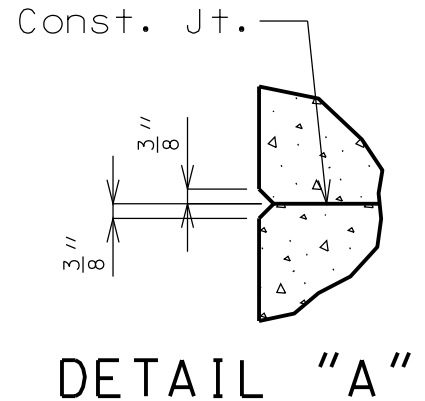
Structure to be closed during construction.

Structural Steel Protective Coatings:

(All bearings)

Protective Coating: System G in accordance with Sec 1081. (See Special Provisions).

** Use in place conduit. Service lines in the conduit must be kept active at all times during construction.



DETAIL "A"

REQUIRED LAP LENGTH FOR BAR SPLICES **

Bar Size	Splice Length
5	3'-3"

** Unless otherwise shown.

Estimated Quantities for Reinforced Concrete Slab Overlay

Item	cu. yard	Total
Class B-2 Concrete	94.0	
Reinforcing Steel (Epoxy Coated)		12,550

The table of Estimated Quantities for Reinforced Concrete Slab Overlay represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard from end of slab to end of slab and the overall width shown in the Typical Section Thru Slab. Payment for conventional forms, all concrete and coated reinforcing steel will be considered completely covered by the contract unit price for the slab.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness class SC 4 and a finish type I, II or III.

Estimated Quantities

Item		Total
Removal of Concrete Wearing Surface	sq. foot	5583
Curb Removal	linear foot	200
Removal of Existing Expansion Joints & Adjacent Concrete	linear foot	64
Remove and Replace Curb & Parapet	linear foot	10
* Safety Barrier Curb	linear foot	200
Reinforced Concrete Slab Overlay	sq. yard	637
Repairing Concrete Deck (Half-Soling)	sq. foot	250
Cleaning and Coating Existing Bearings	each	10
Strip Seal Expansion Joint System	linear foot	64

* Safety barrier curb shall be cast-in-place option or slip-form option.

REPAIRS TO BRIDGE: RTE. I-70 W.B. OVER RTE. I-29

STATE ROAD: I-70 AND I-35 INTERCHANGE

IN KANSAS CITY

STA. 2+66.43 ± @ 6 Bearing (Match Existing)

STD. 617.10
STD. 706.35

Detailed Nov. 2012
 Checked Dec. 2012

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

Sheet No. 1 of 7

DATE PREPARED: 12/20/2012

ROUTE	STATE
I-70	MO
DISTRICT	SHEET NO.
BR	1

COUNTY: JACKSON
 JOB NO.: J413012
 CONTRACT ID.:
 PROJECT NO.:
 BRIDGE NO.: L09352

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 2
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L09352	

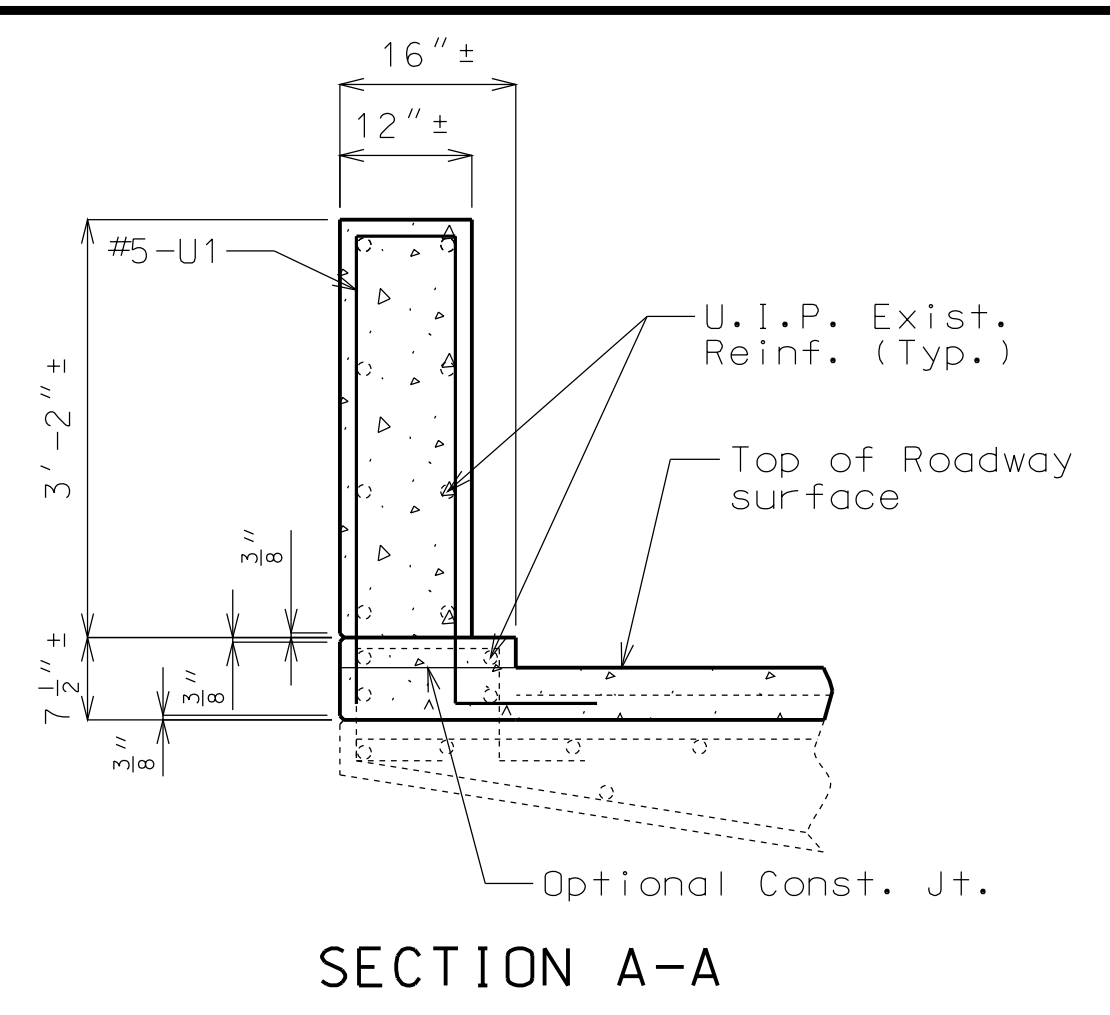
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

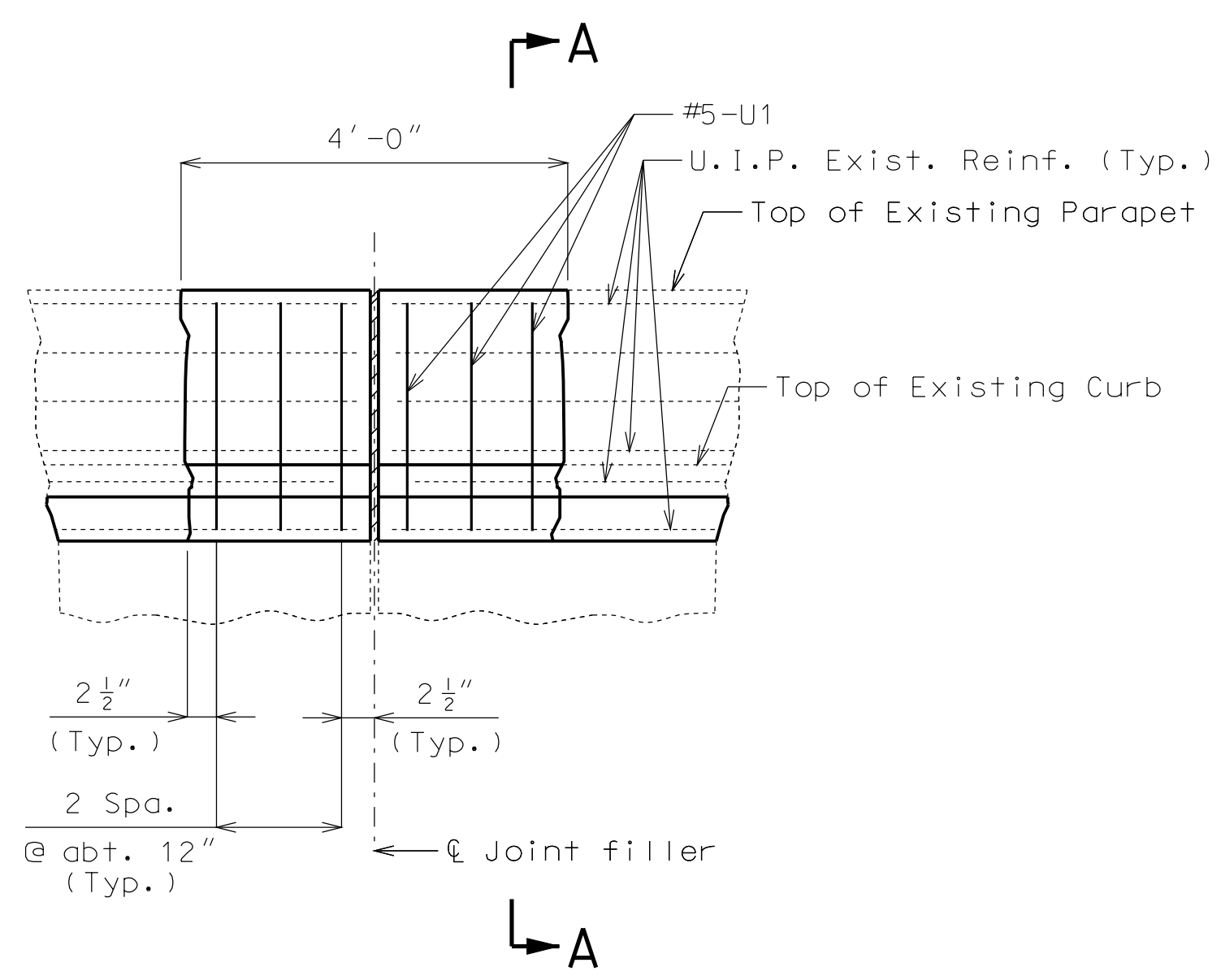


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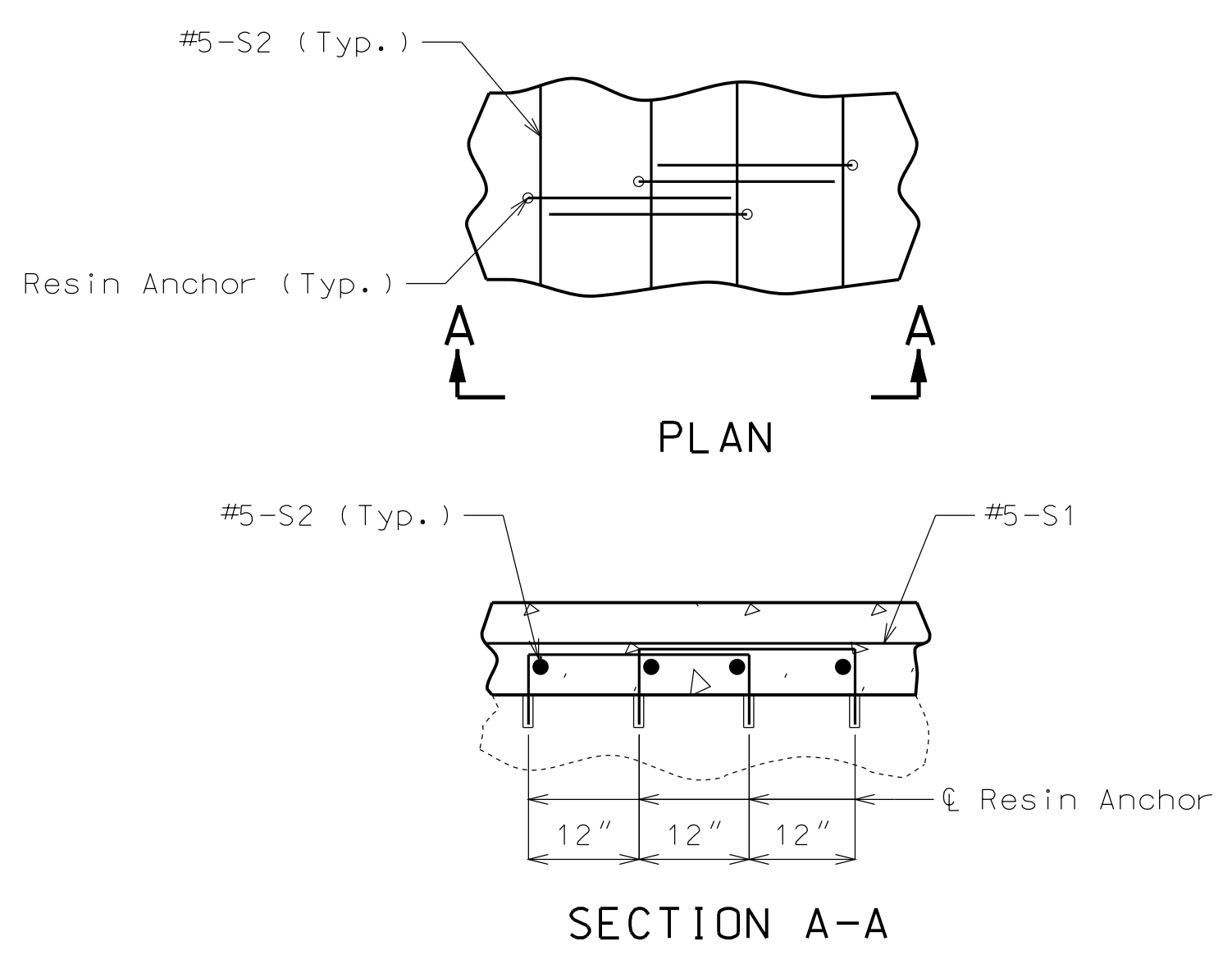


SECTION A-A



PART ELEVATION OF RIGHT CURB AND PARAPET REPAIR NEAR INT. BENT NO. 2

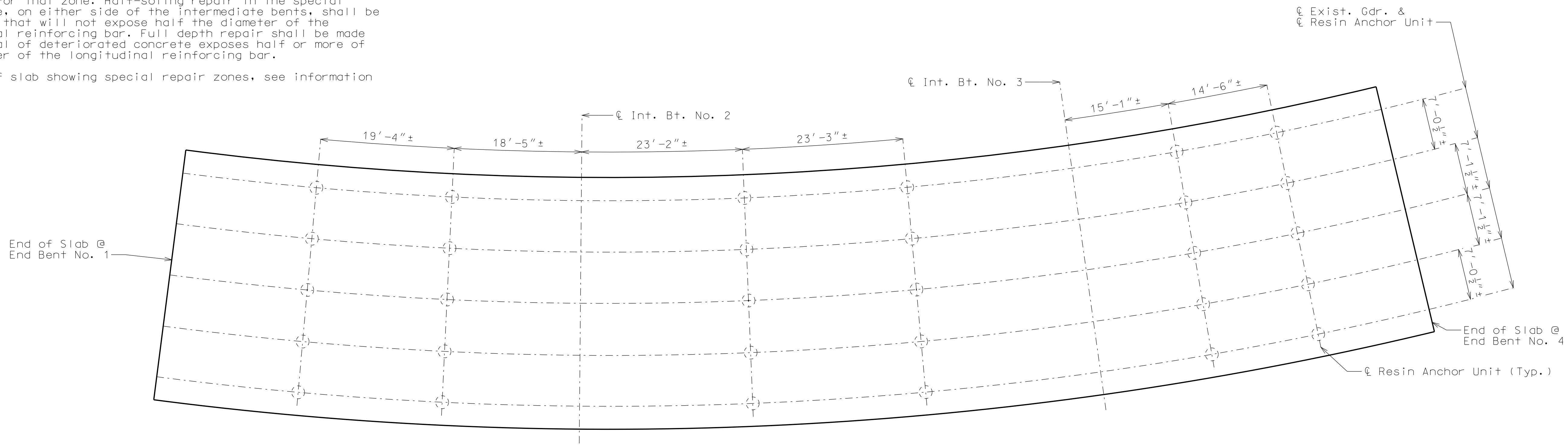
Notes:
 Payment for removing and replacing curb and parapet including all labor and materials including concrete and reinforcement will be considered completely covered by the contract unit price for Remove and Replace Curb and Parapet.
 Match existing dimensions and rustication.



DETAIL OF RESIN ANCHOR UNIT

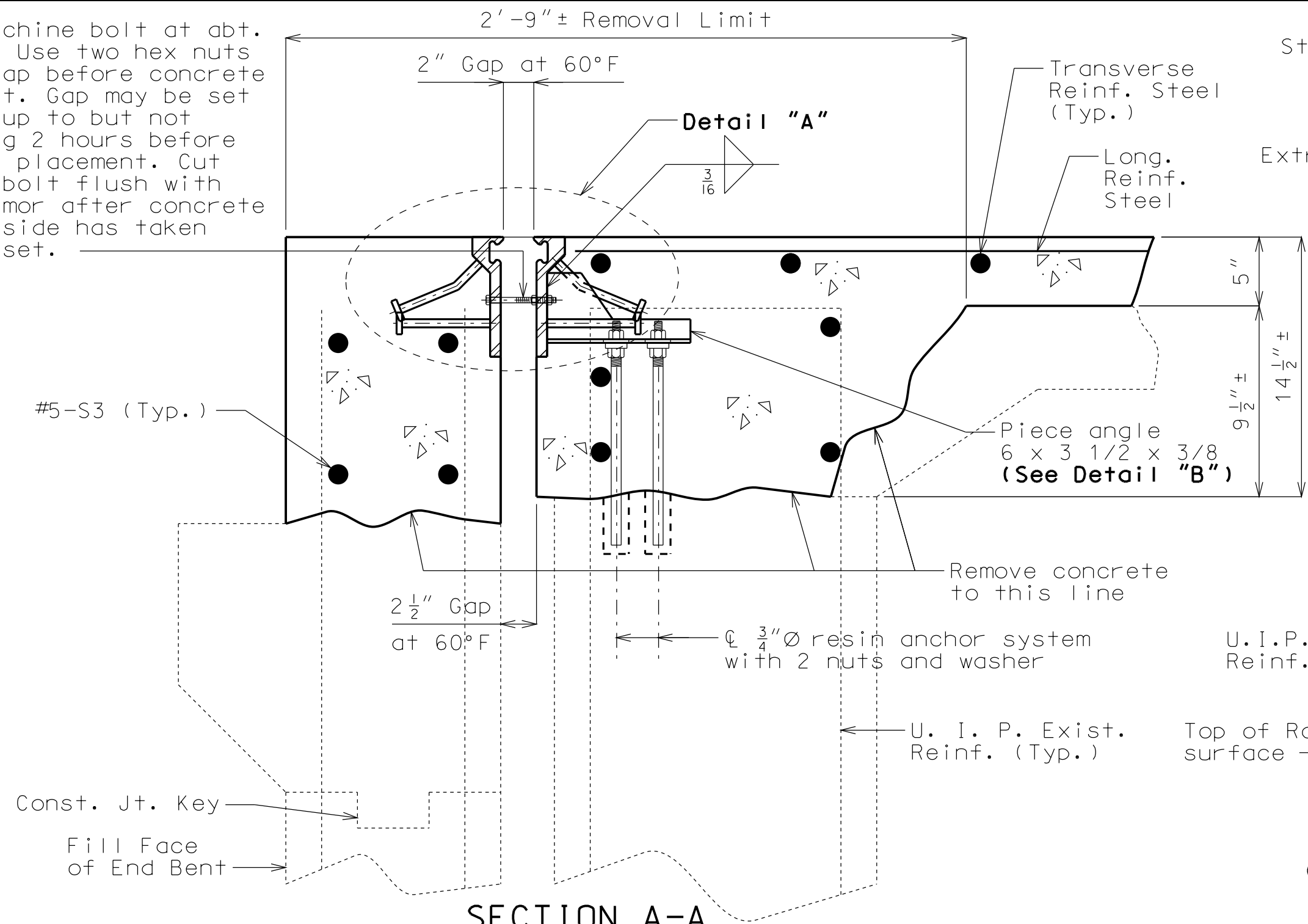
Resin Anchor Notes:
 The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.
 Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Reinforced Concrete Slab Overlay.
 The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".
 An epoxy coated #5 Grade 60 reinforcing bar 2'-0" long shall be substituted for the 3/8" diameter threaded rod.

Special Repair Zone Notes:
 Any half-soling required in the areas designated as special repair zones shall be completed in alphabetical sequence. Any repair in the remainder of the bridge that is adjacent to Zone A and not designated as a special repair zone shall be completed prior to work in Zone A.
 Removal and repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone. Before placing concrete in areas adjacent to areas of subsequent repair, the concrete shall be separated with a material such as polyethylene sheets to aid in removal of old concrete.
 Zones with the same letter designation may be repaired at the same time except for the zones directly adjacent to the centerline of bent. If either of the zones adjacent to centerline of bent has a single repair area of over 10 square feet or a total repair area of over 20 square feet, that zone shall be repaired before removing concrete in the other zone of the same designation at that bent.
 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.
 If any single repair area does not exceed 9 square feet in size and the total repair within a special repair zone does not exceed 27 square feet, the special repair zone requirement does not apply for that zone. Half-soling repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.
 For plan of slab showing special repair zones, see information sheets.

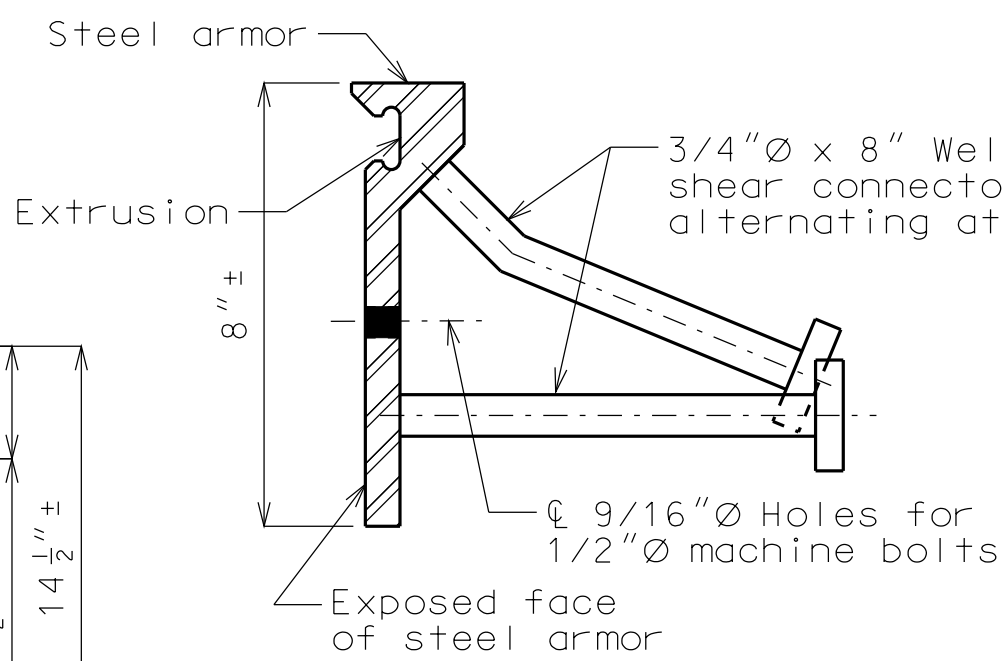


PLAN OF SLAB SHOWING LOCATIONS OF RESIN ANCHOR UNITS
 Note: Longitudinal dimensions shown are horizontal dimensions along Roadway.

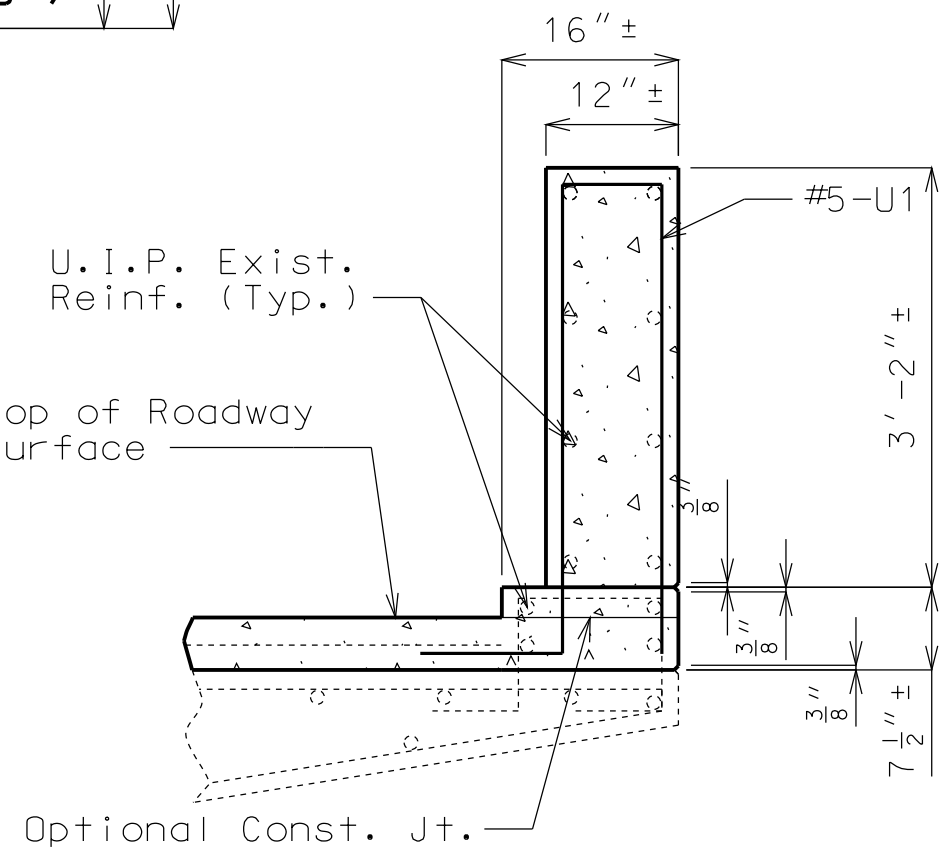
1/2" Machine bolt at abt. 18" cts. Use two hex nuts to set gap before concrete placement. Gap may be set anytime up to but not exceeding 2 hours before concrete placement. Cut machine bolt flush with steel armor after concrete on each side has taken initial set.



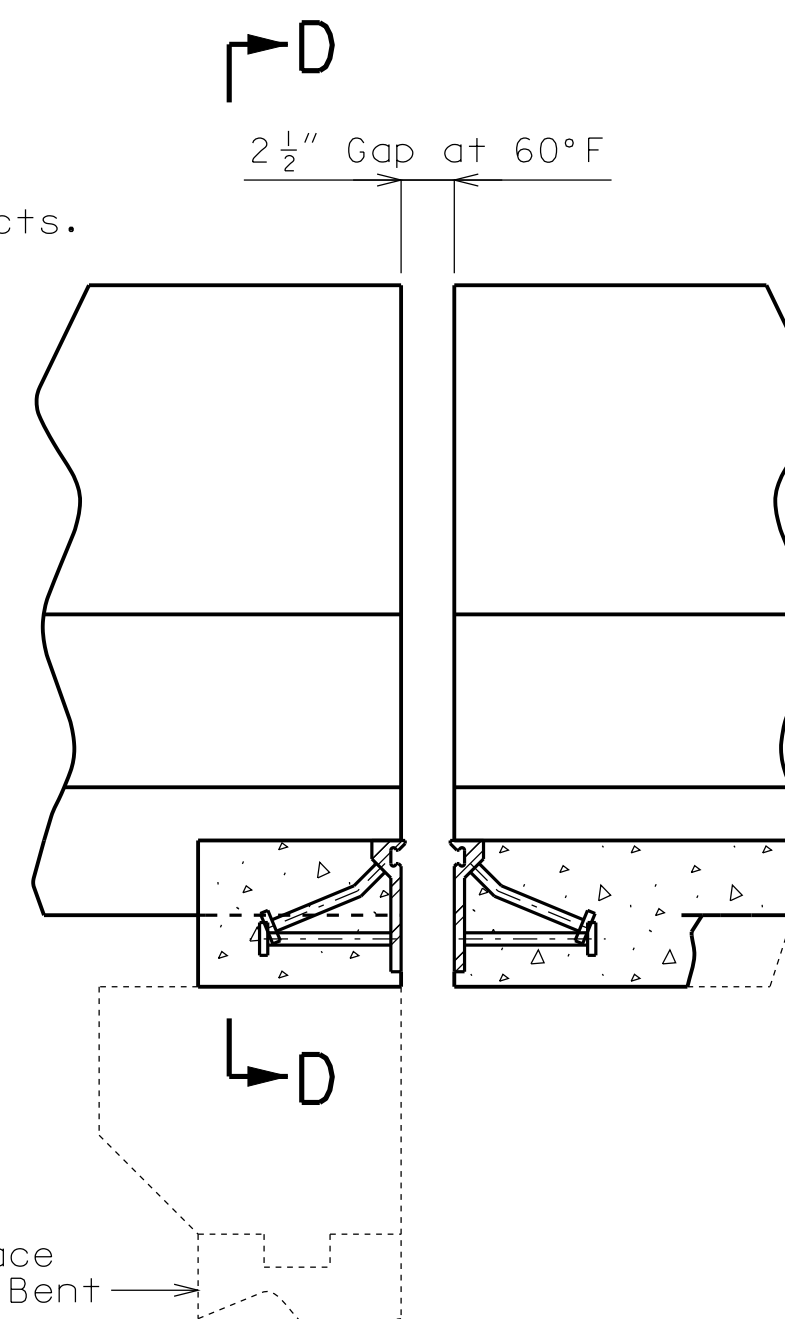
SECTION A-A
Note: Strip seal gland not shown for clarity.



DETAIL OF JOINT ARMOR

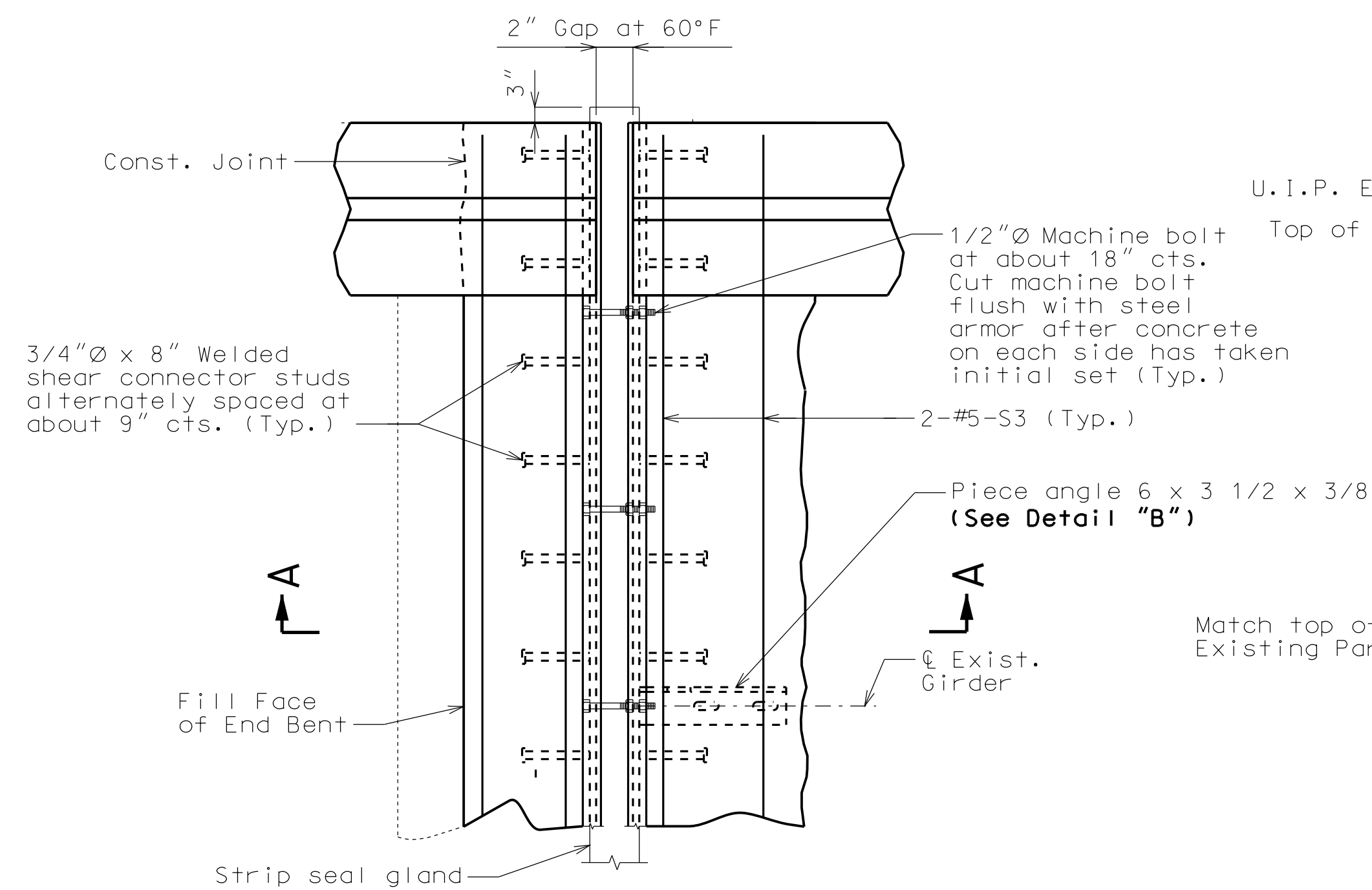


SECTION C-C

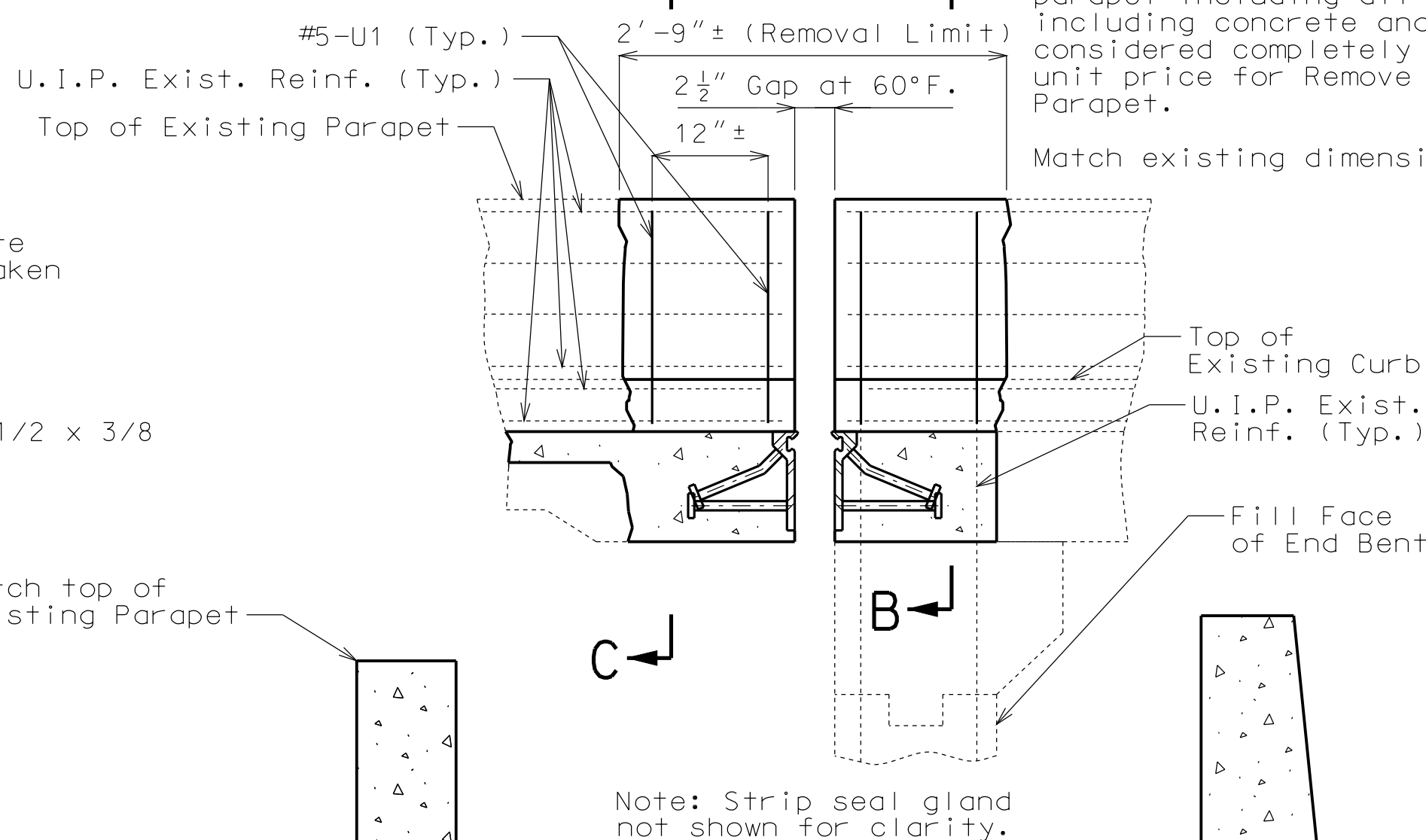


PART ELEVATION OF LEFT BARRIER CURB

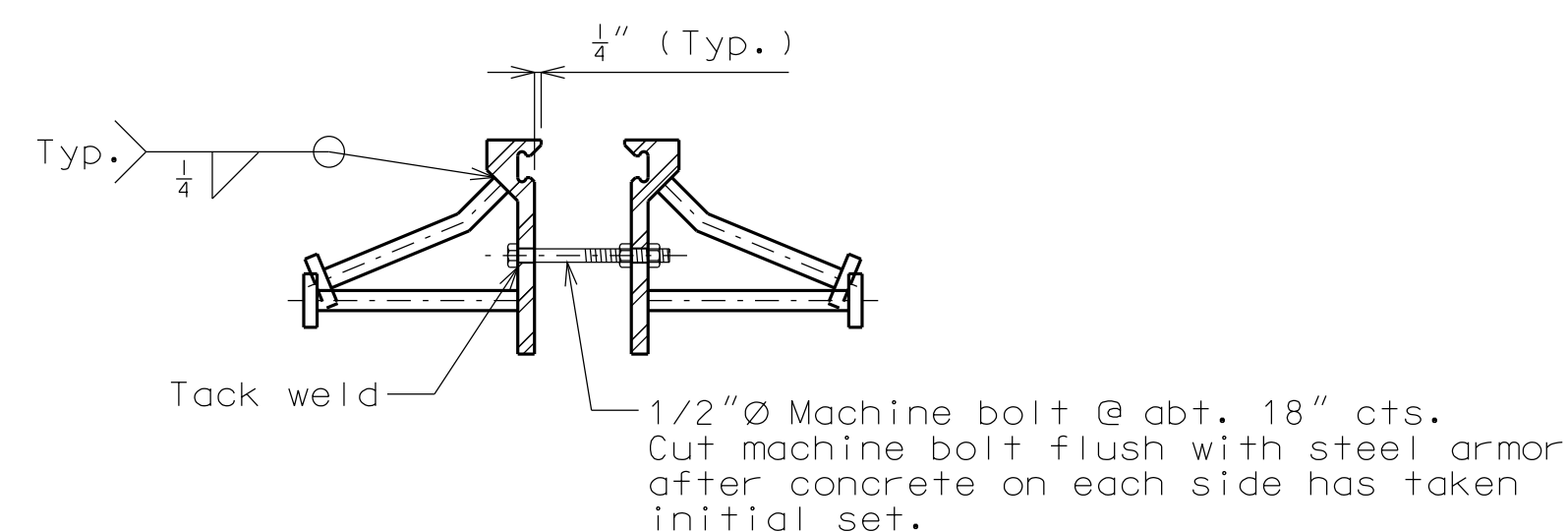
Notes:
Payment for removing and replacing curb and parapet including all labor and materials including concrete and reinforcement will be considered completely covered by the contract unit price for Remove and Replace Curb and Parapet.
Match existing dimensions and rustication.



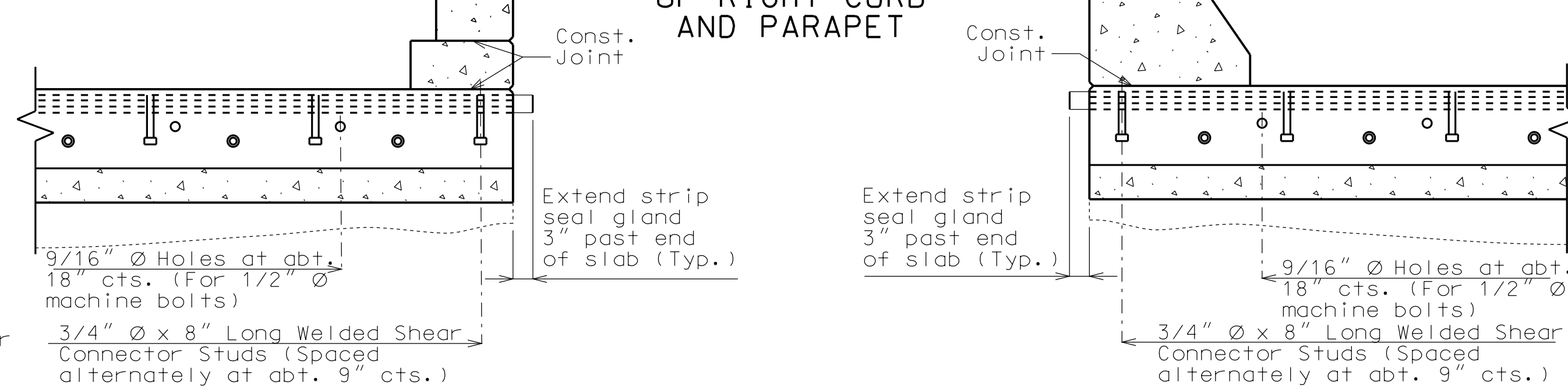
PART PLAN



PART ELEVATION OF RIGHT CURB AND PARAPET



DETAIL "A"



PART SECTION B-B
DETAILS OF STRIP SEAL AT END BENTS NO. 1 & NO. 4

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 1/16" for each 10° fall or rise in temperature at installation.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

Longitudinal reinforcing steel shall be placed so that ends shall not be more than ±1" from vertical leg of the steel armor at the expansion joint system.

Cost of new concrete and Epoxy Coated Reinforcing Steel will be completely covered by the contract unit price for Reinforced Concrete Slab Overlay.

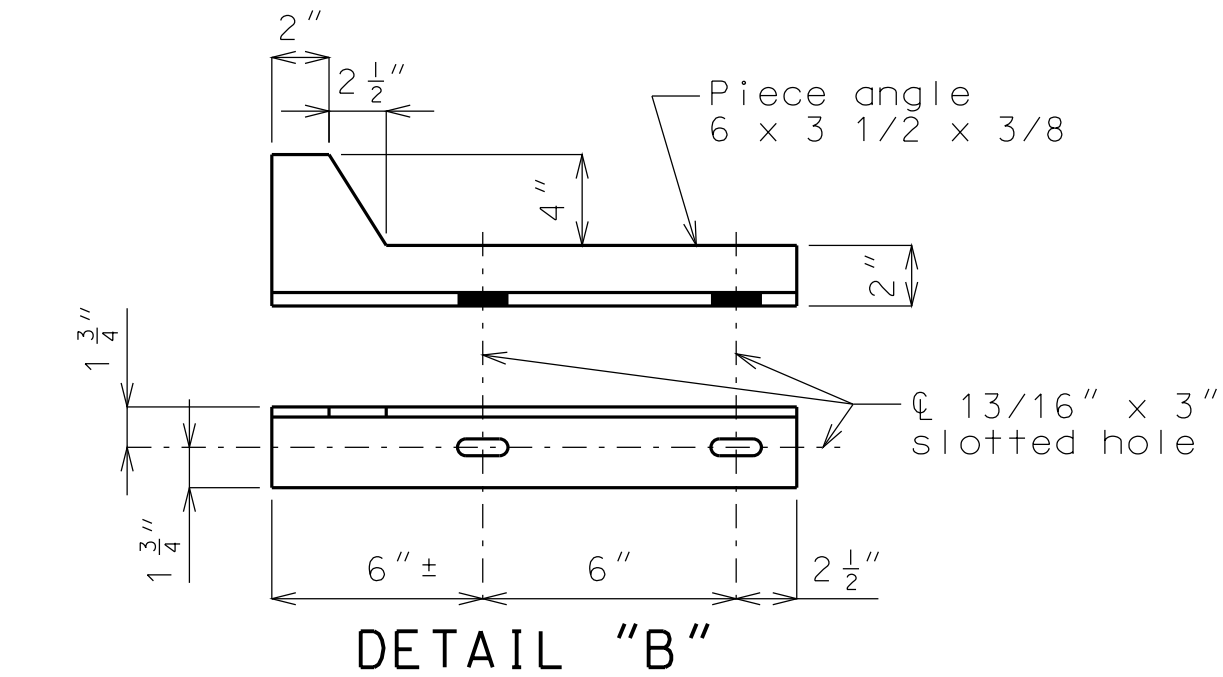
Top of backwall for End Bents No. 1 & No. 4 shall be formed to the crown and grade of the roadway. Backwall above upper construction joint shall not be poured until the superstructure slab has been poured in the adjacent span.

All concrete above the upper construction joint in backwall shall be Class B-2.

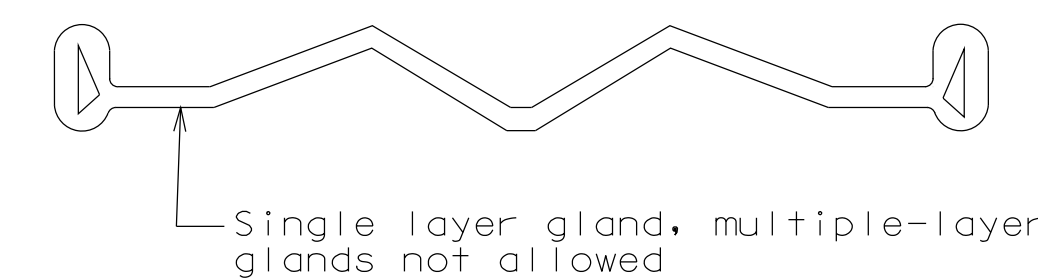
The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Reinforced Concrete Slab Overlay.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".



DETAIL "B"



DETAIL OF GLAND

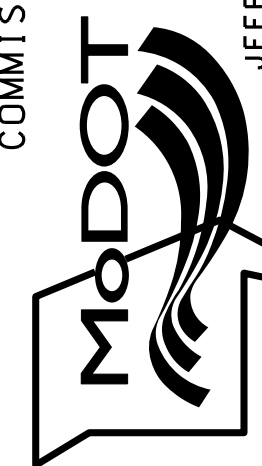
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DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 3
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L09352	

DESCRIPTION

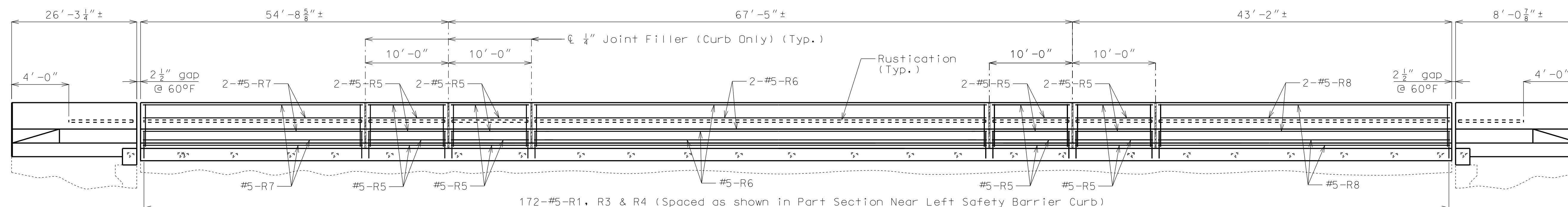
DATE

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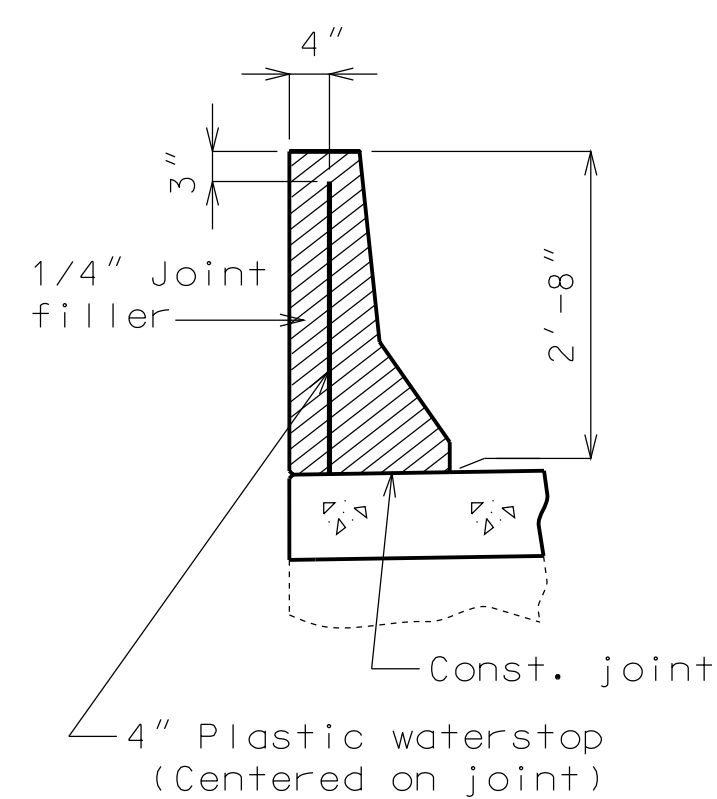
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SECTION NEAR LEFT SAFETY BARRIER CURB

Note: Dimensions shown are parallel to grade.

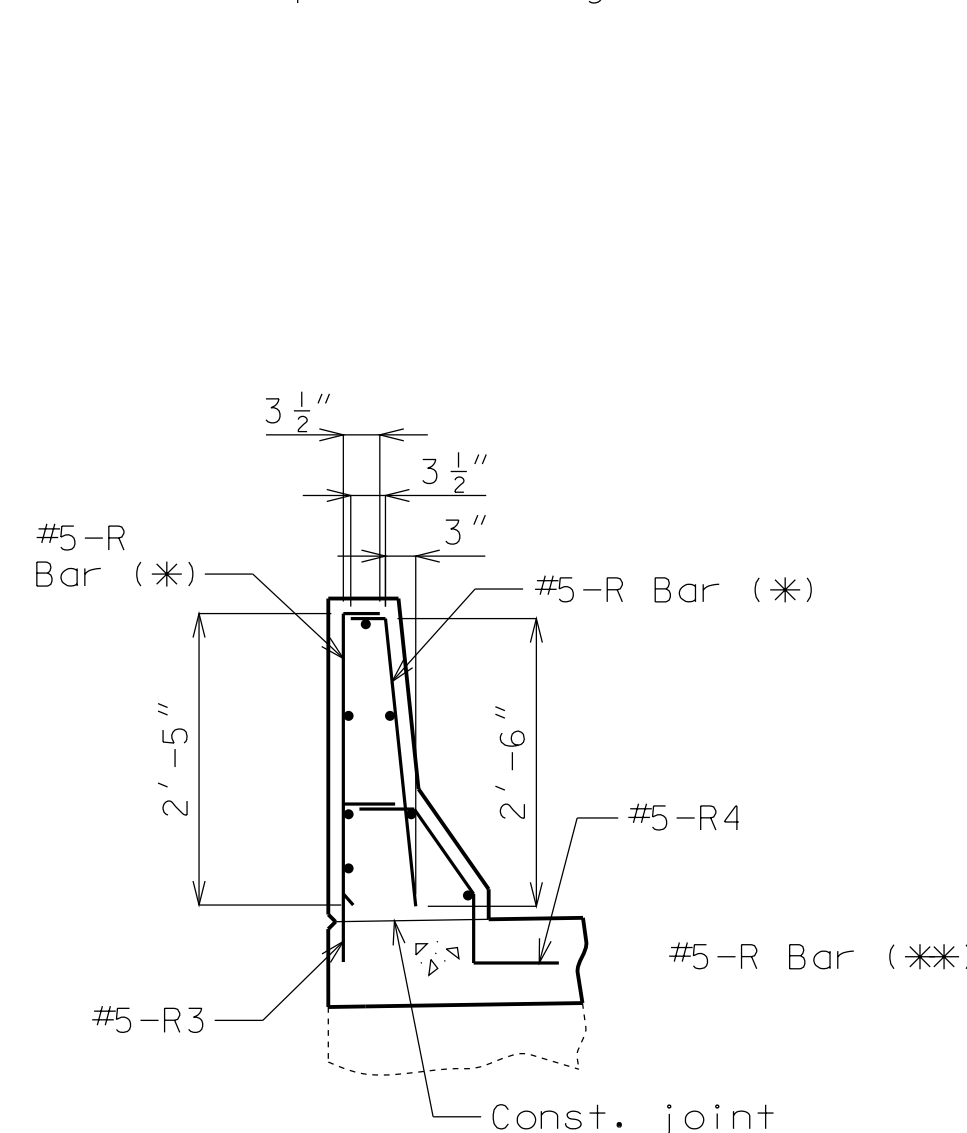


DETAILS OF PLASTIC WATERSTOP

Notes:

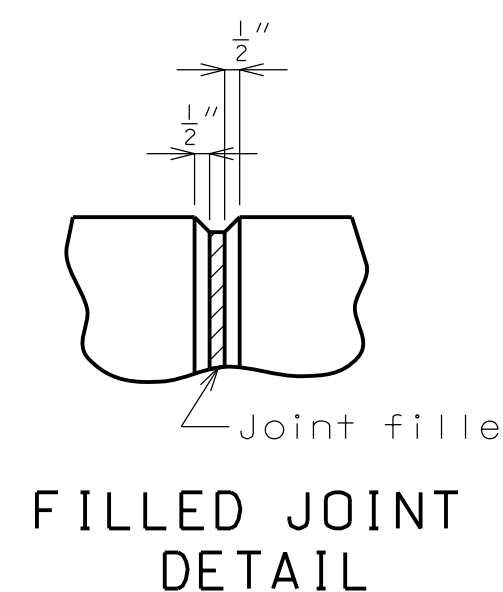
Plastic waterstop shall be placed in all safety barrier curb filled joints, except structures with superelevation, use on all lower safety barrier curb joints only.

Cost of plastic waterstop, complete in place, will be considered completely covered by the contract unit price for Safety Barrier Curb.

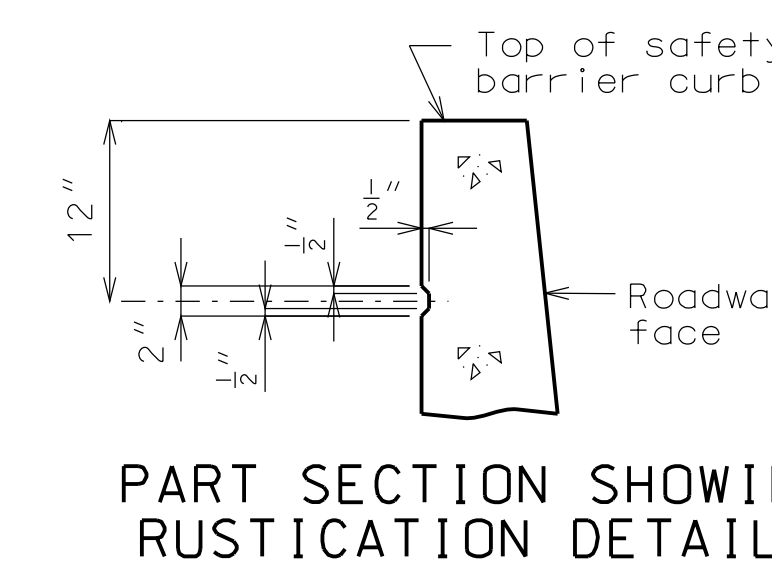


R-BAR PERMISSIBLE ALTERNATE SHAPE

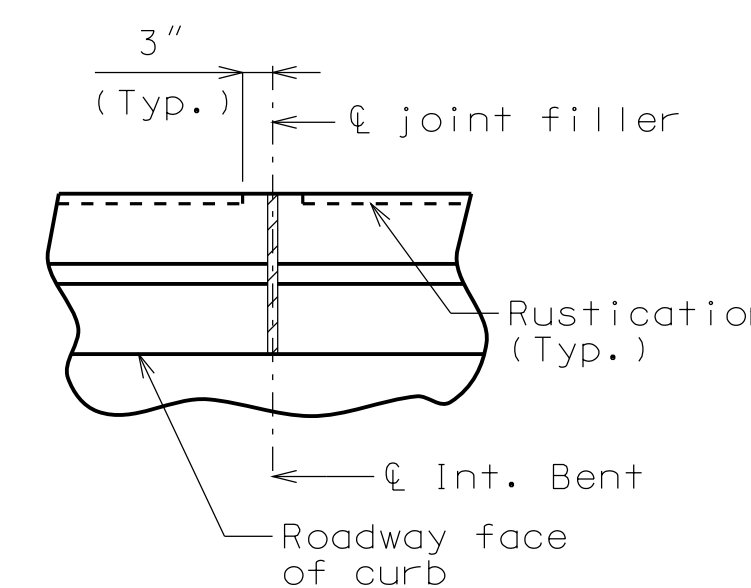
(*) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)



FILLED JOINT DETAIL



PART SECTION SHOWING RUSTICATION DETAILS



PART PLAN SHOWING SAFETY BARRIER CURB JOINT

Notes:

Top of safety barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

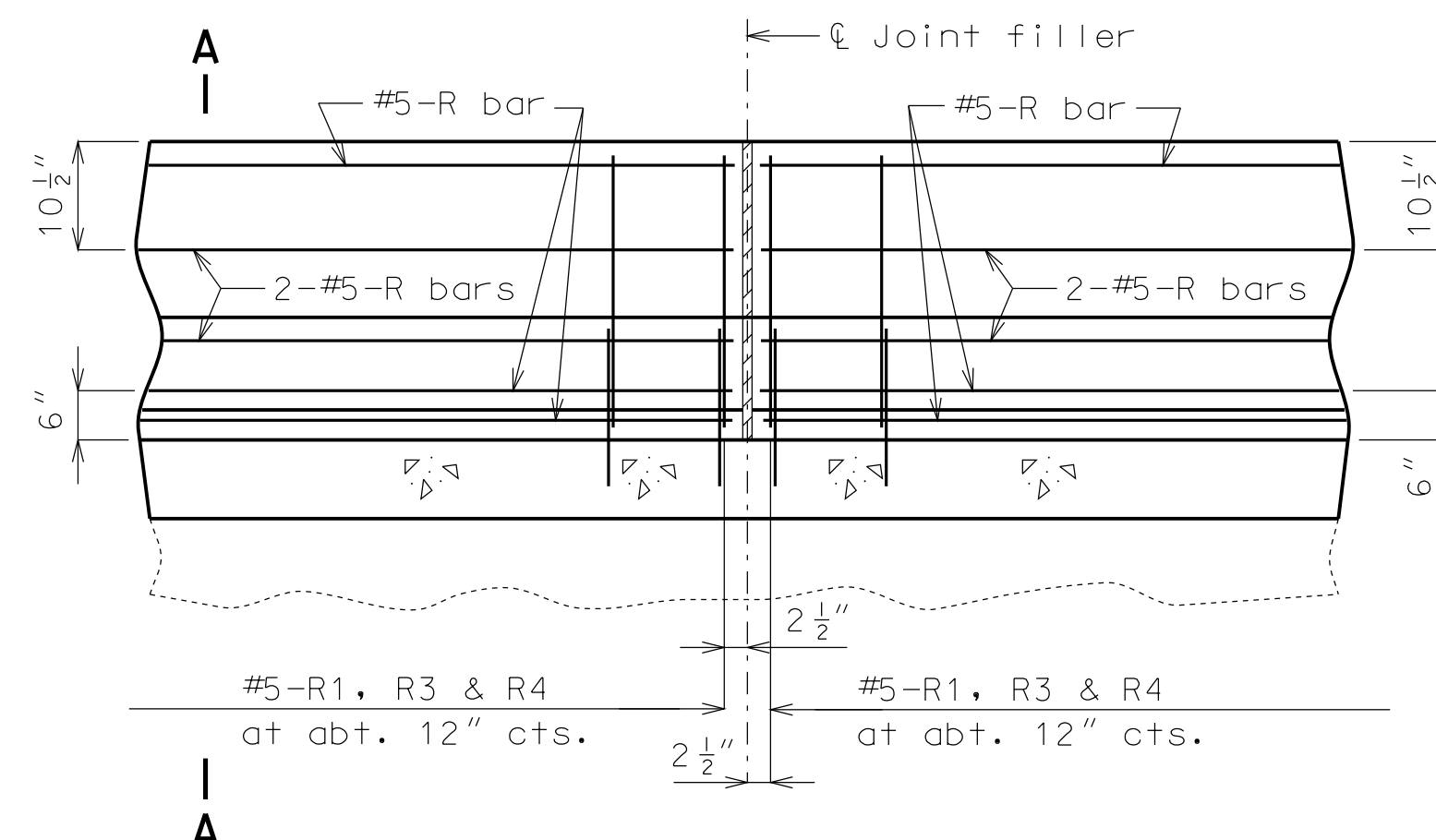
All exposed edges of safety barrier curb shall have either a 1/2" radius or a 3/8" bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for safety barrier curb per linear foot.

Concrete in the safety barrier curb shall be Class B-1.

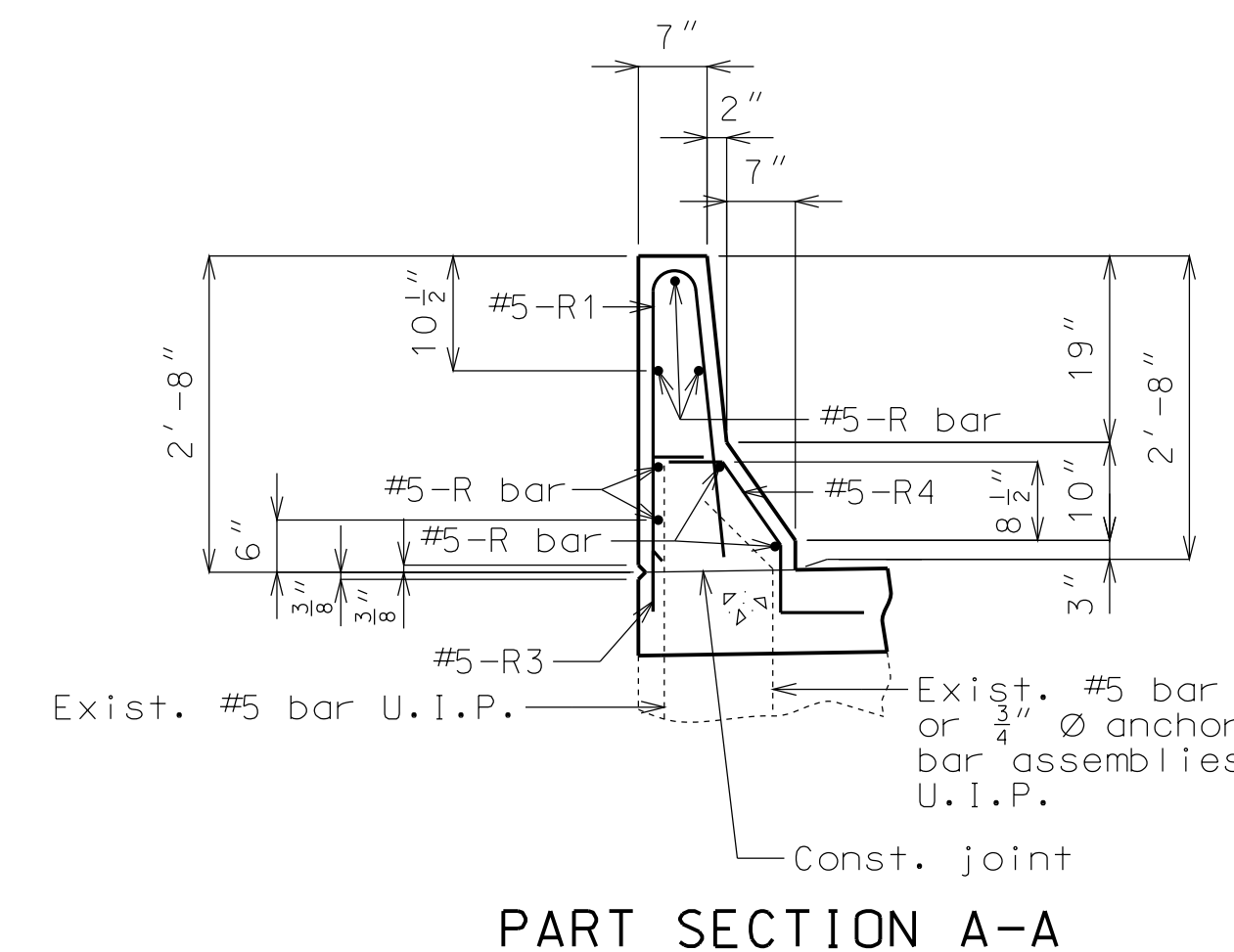
Measurement of safety barrier curb is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617. Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb".



PART SECTION NEAR LEFT SAFETY BARRIER CURB (CAST-IN-PLACE CONVENTIONAL FORMING OPTION)

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



PART SECTION A-A

Notes:

Use a minimum lap of 2'-11" for #5 horizontal safety barrier curb bars.

The cross-sectional area above the slab = 2.28 sq. ft.

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DATE PREPARED

12/20/2012

ROUTE I-70 STATE MO

DISTRICT BR SHEET NO. 4

COUNTY JACKSON

JOB NO. J413012

CONTRACT ID.

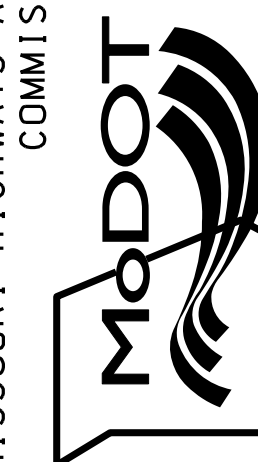
PROJECT NO.

BRIDGE NO. L09352

DESCRIPTION

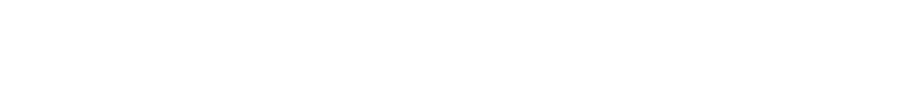
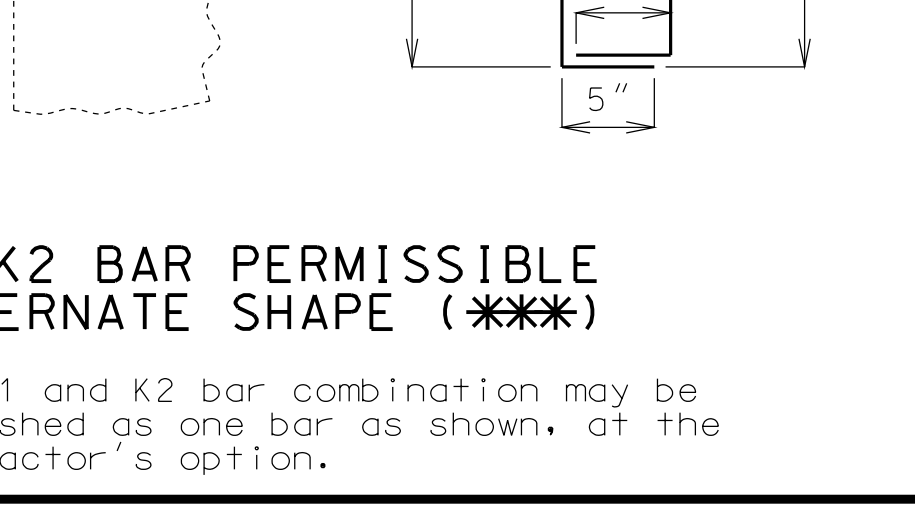
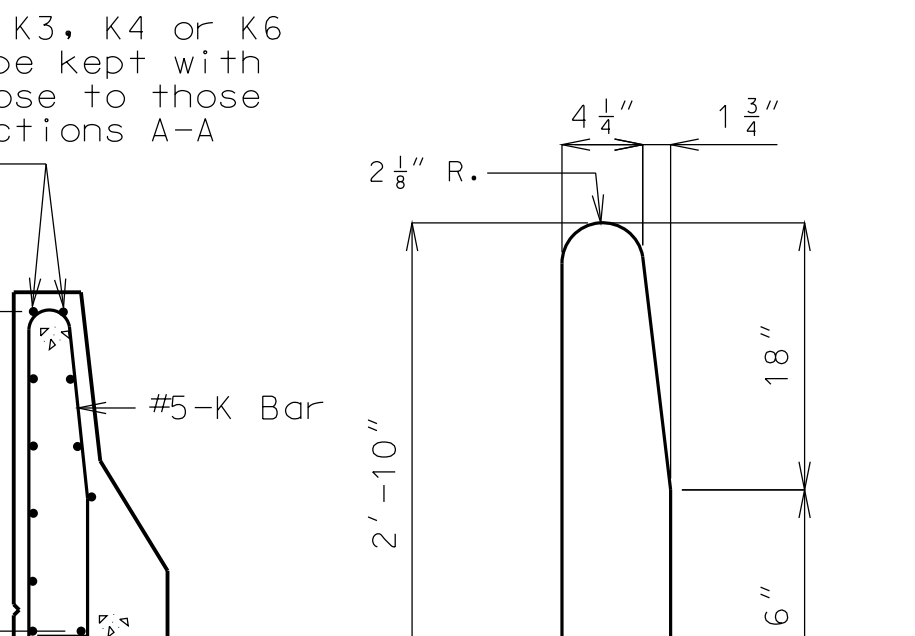
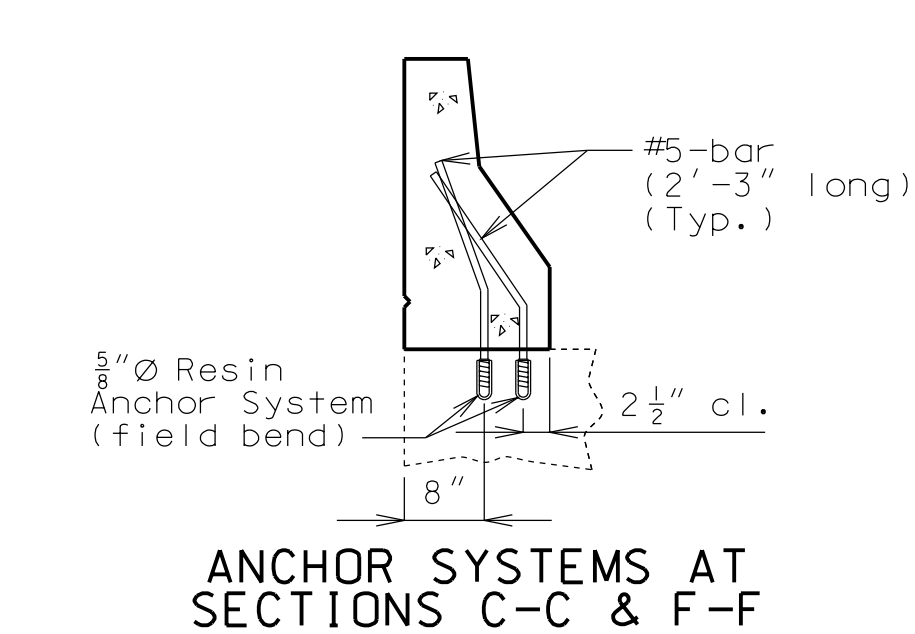
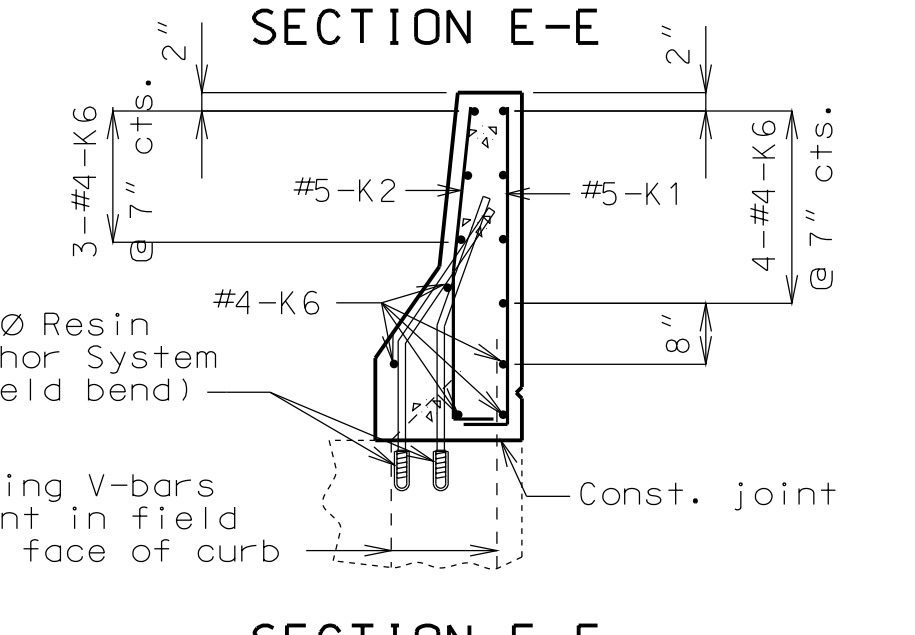
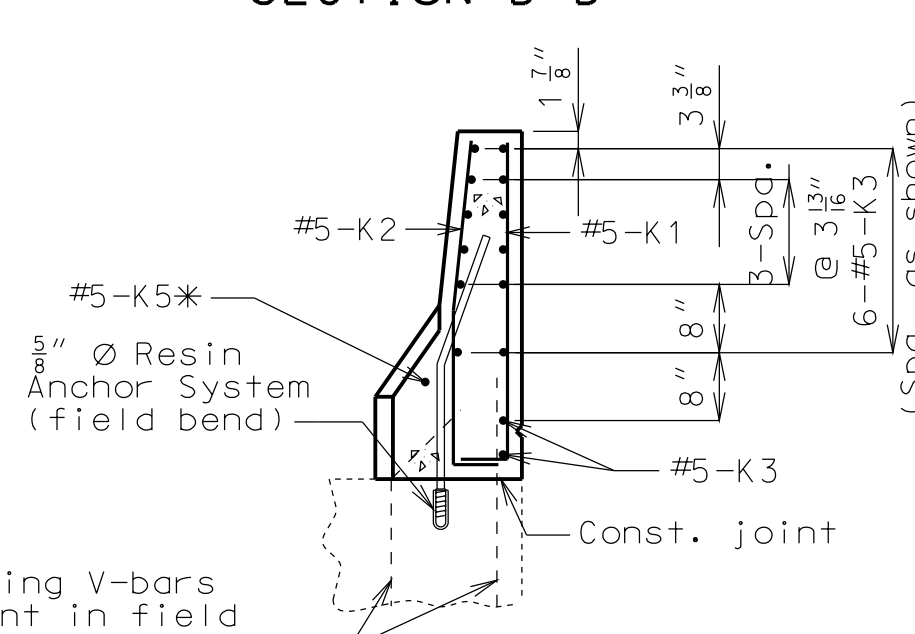
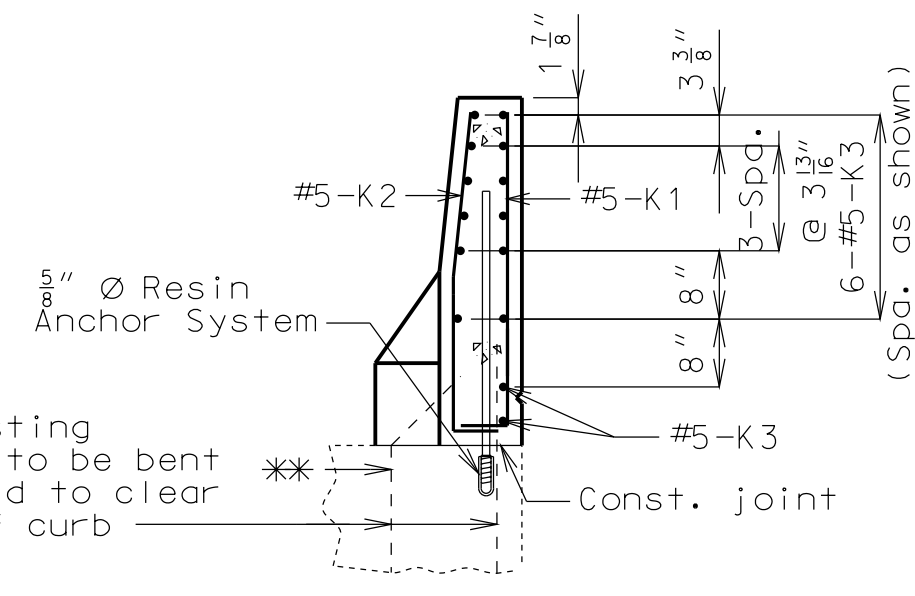
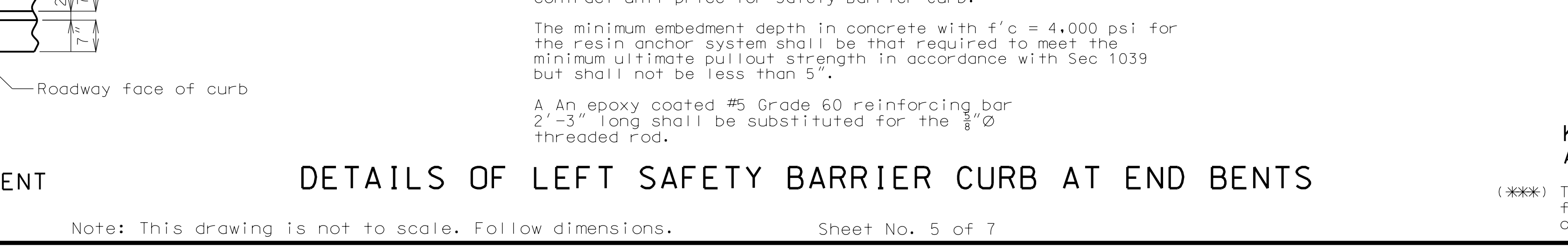
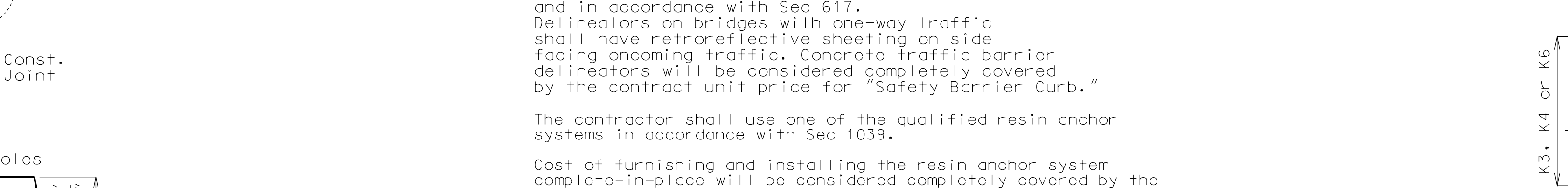
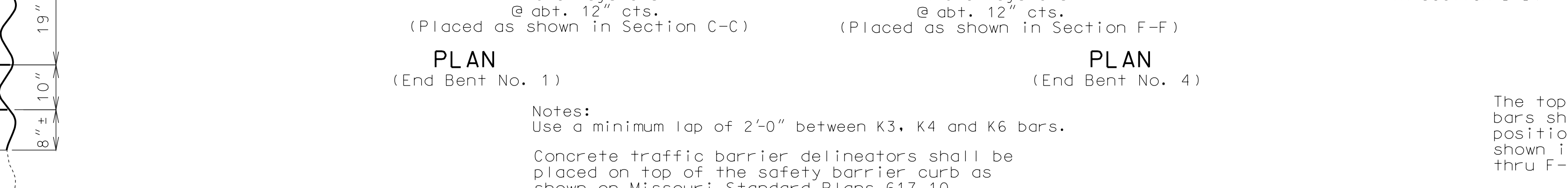
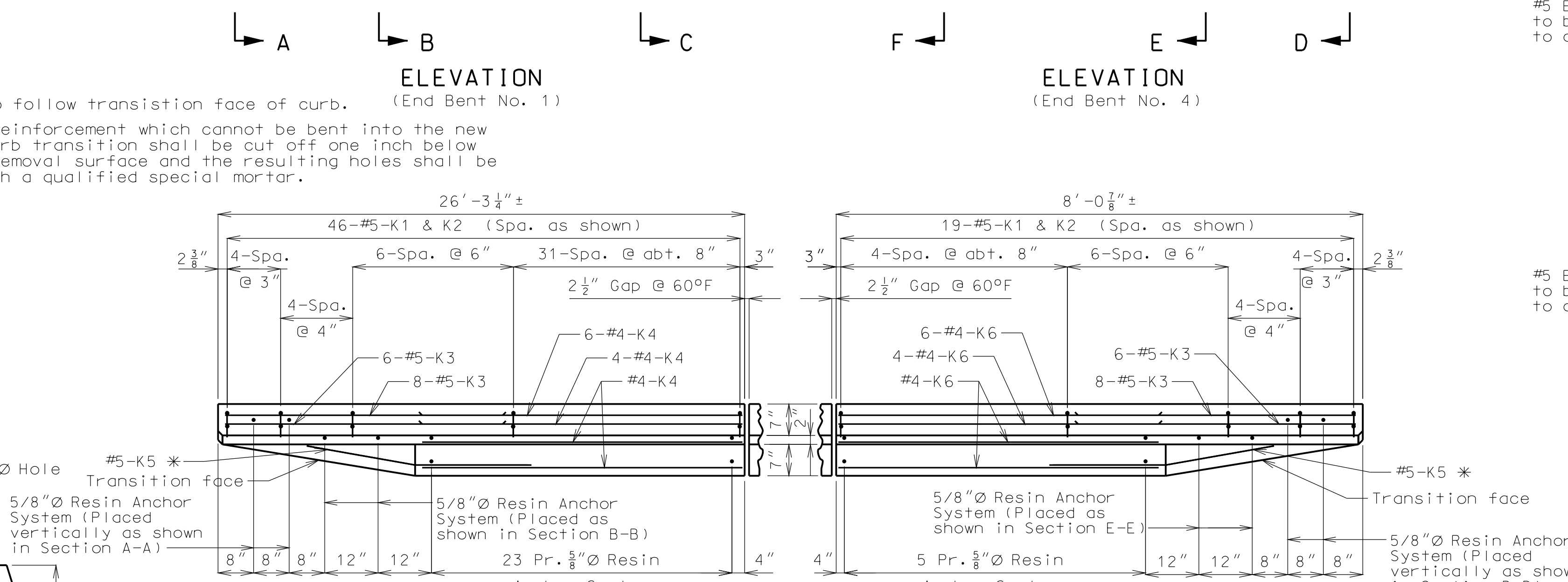
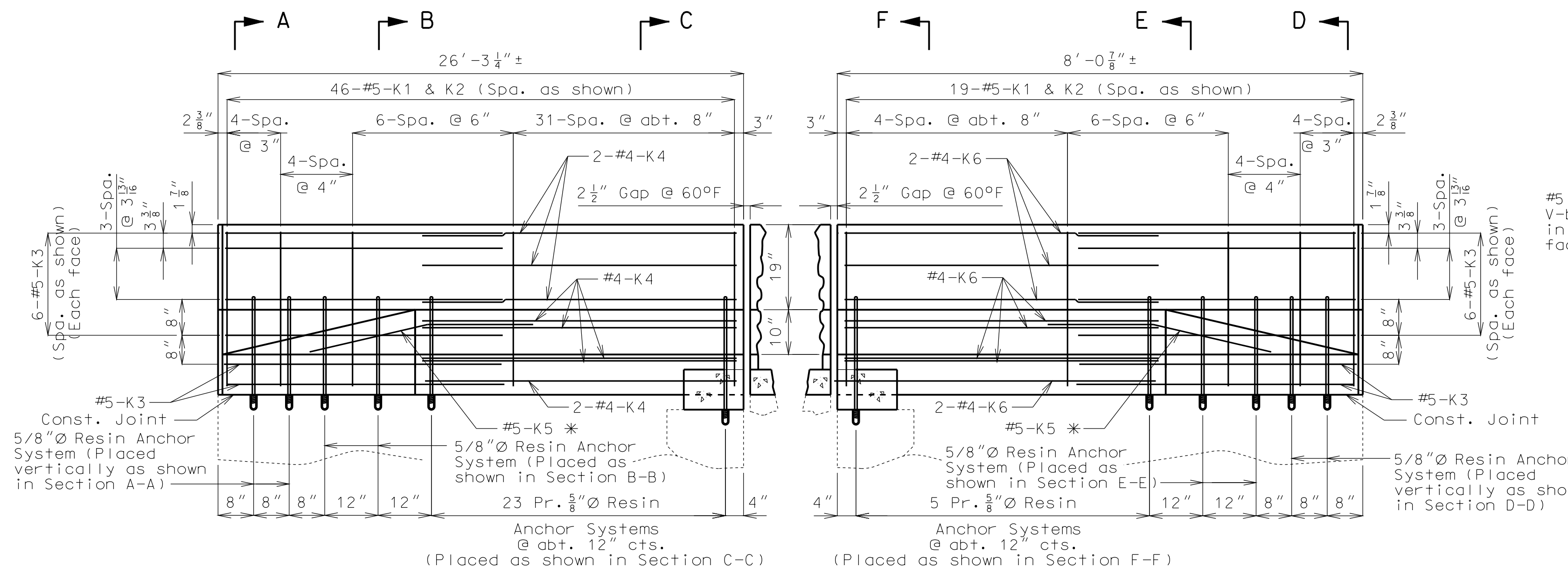
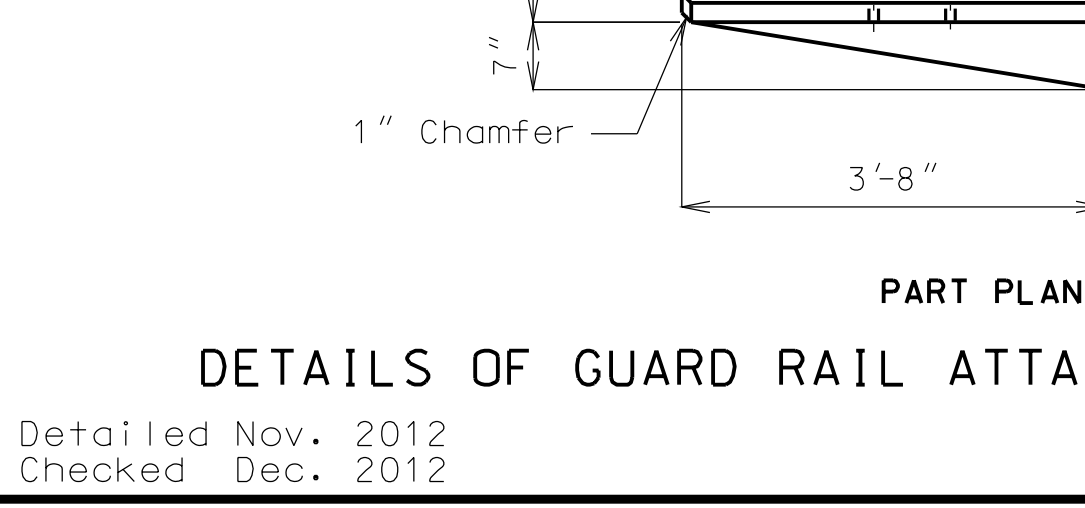
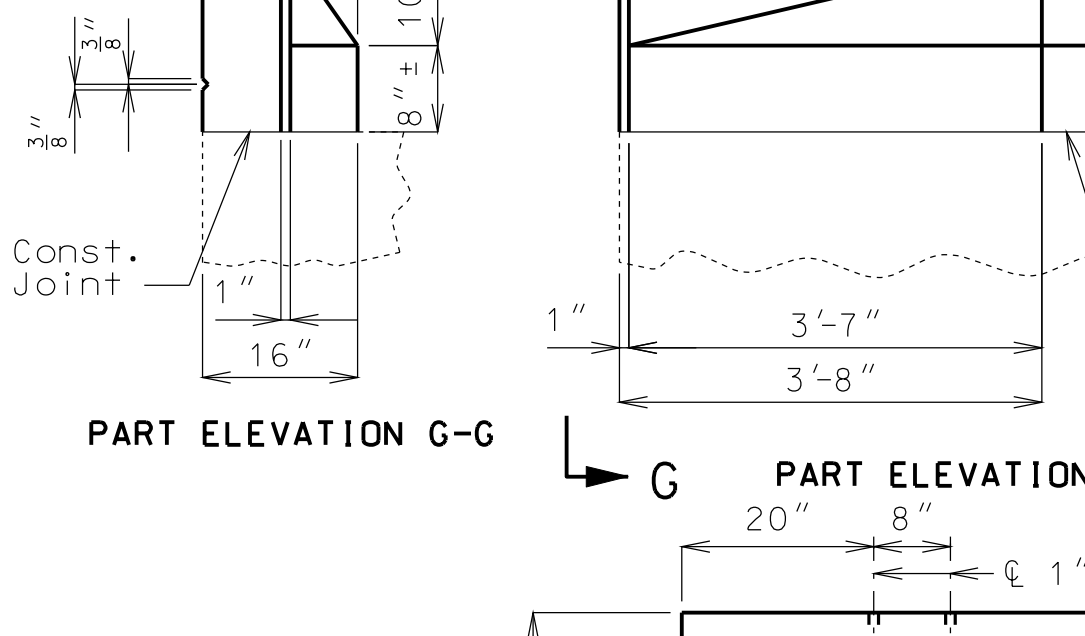
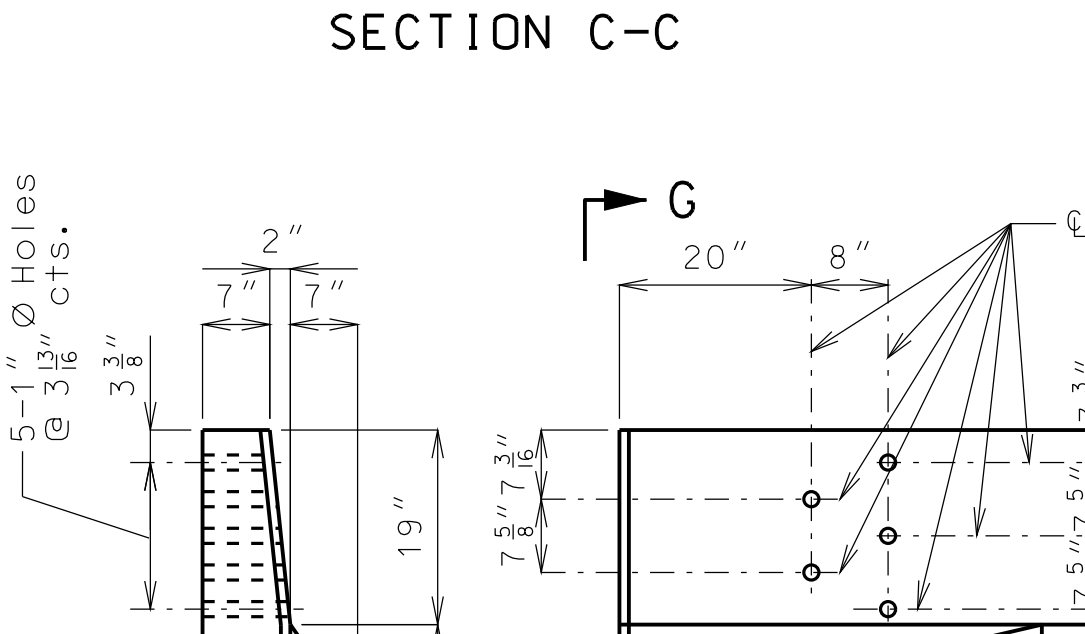
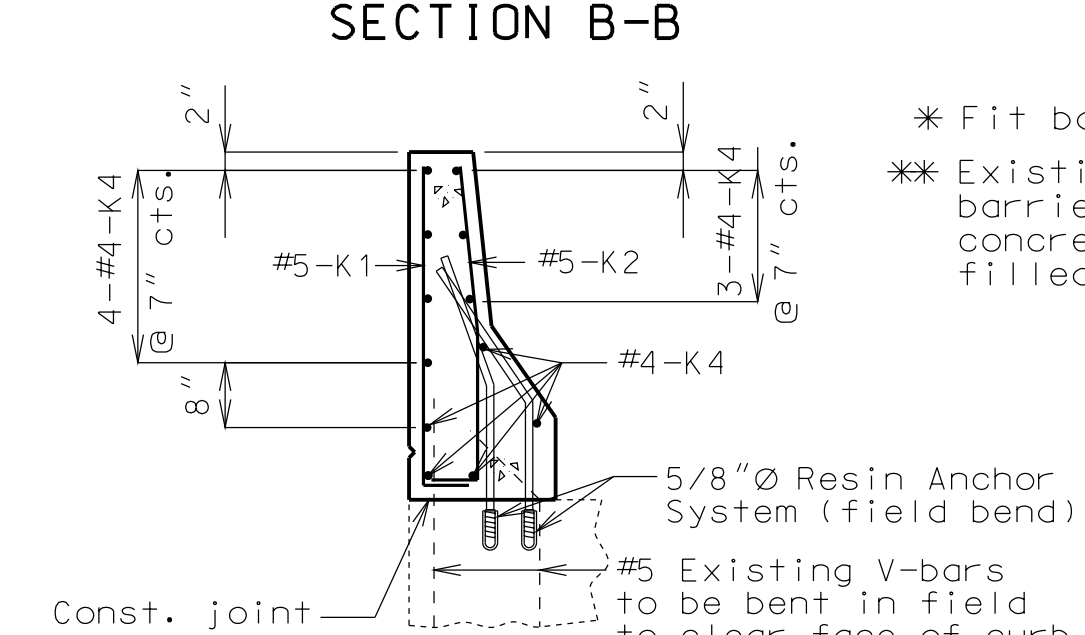
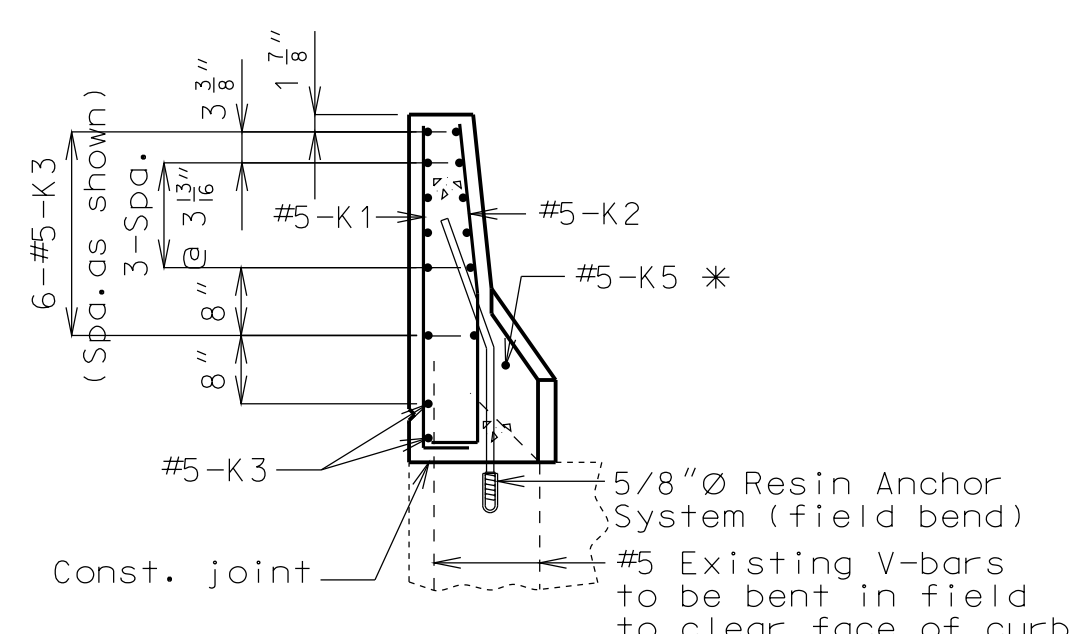
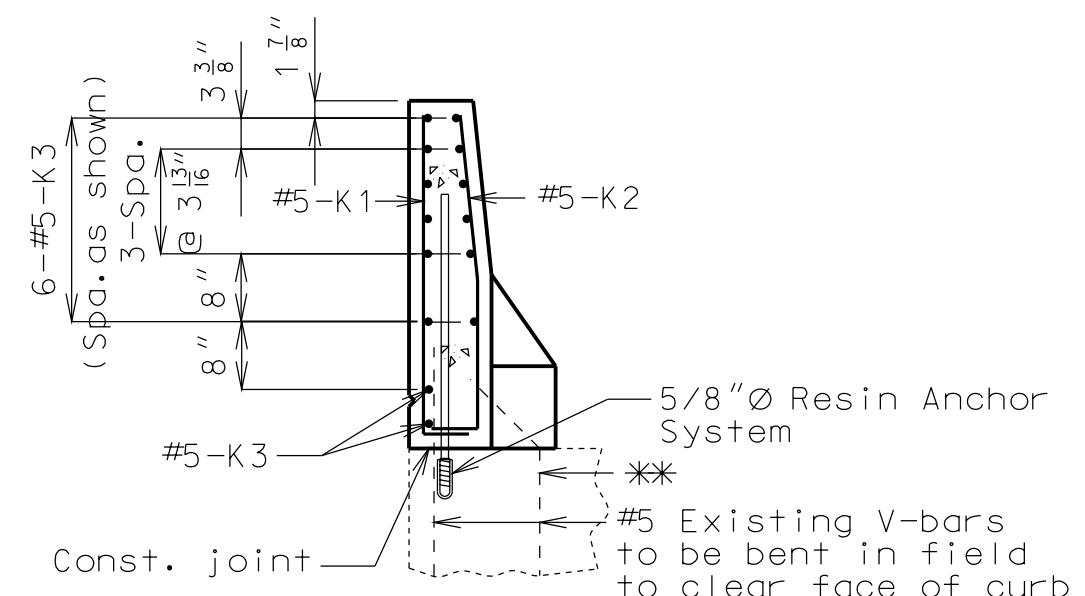
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



* Fit bar to follow transition face of curb.
(End Bent No. 1)
** Existing reinforcement which cannot be bent into the new barrier curb transition shall be cut off one inch below concrete removal surface and the resulting holes shall be filled with a qualified special mortar.

Notes:
Use a minimum lap of 2'-0" between K3, K4 and K6 bars.

Concrete traffic barrier delineators shall be placed on top of the safety barrier curb as shown on Missouri Standard Plans 617.10 and in accordance with Sec 617.
Delineators on bridges with one-way traffic shall have retroreflective sheeting on side facing oncoming traffic. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for "Safety Barrier Curb."

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system complete-in-place will be considered completely covered by the contract unit price for Safety Barrier Curb.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

A An epoxy coated #5 Grade 60 reinforcing bar 2'-3" long shall be substituted for the 5/8" diameter threaded rod.

The top two K3, K4 or K6 bars shall be kept with position close to those shown in Sections A-A thru F-F

(***) The K1 and K2 bar combination may be furnished as one bar as shown, at the contractor's option.

Detailed Nov. 2012
Checked Dec. 2012

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

Sheet No. 5 of 7

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DATE PREPARED 12/20/2012
ROUTE I-70 STATE MO
DISTRICT BR SHEET NO. 5

COUNTY JACKSON
JOB NO. J413012
CONTRACT ID.
PROJECT NO.
BRIDGE NO. L09352

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

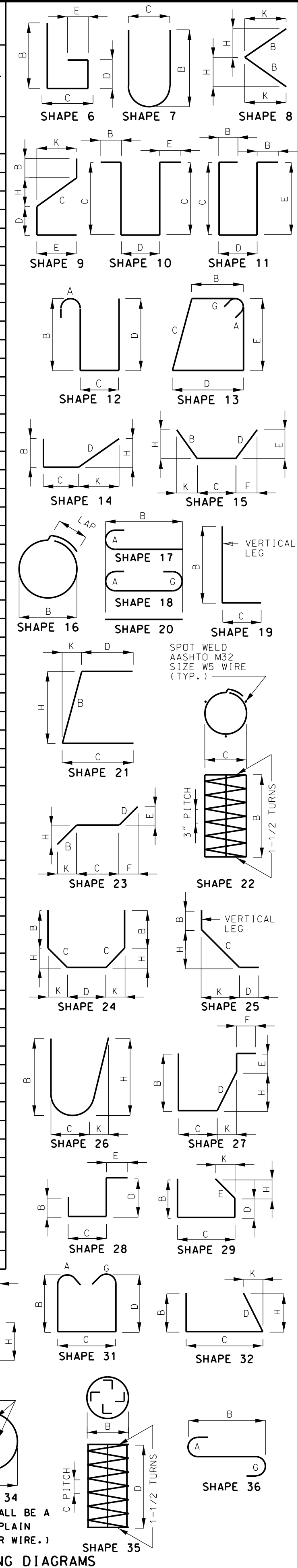
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.
REV.

BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT		
									B	C	D	E	F	H	K						
									FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.						
		SLAB																			
120	5 S1	SLAB	E	20					46	8.000							46 8	46 8	5841		
178	5 S2	SLAB	E	20					33	2.000							33 2	33 2	6158		
16	5 S3	SLAB/BCKWALL	E	20					33	2.000							33 2	33 2	553		
		PARAPET																			
10	5 U1	PARAPET	E	10	S				12	0.000	3	6.000	9.000				8 9	8 5	88		
		BARRIER CURB																			
65	5 K1	BARRIER CURB	E	19	S				2	10.000	5	5.125					3 3	3 2	215		
65	5 K2	BARRIER CURB	E	14	S					5.125	16	12.5	18.000		2.000	17.875	3 3	3 2	215		
28	5 K3	BARRIER CURB	E	20					5	7.000							5 7	5 7	163		
14	4 K4	BARRIER CURB	E	20					22	6.000							22 6	22 6	210		
4	5 K5	BARRIER CURB	E	8					2	2.125				2	2.000	2.375	4 4	4 4	18		
12	4 K6	BARRIER CURB	E	20					4	3.000							4 3	4 3	34		
172	5 R1	BARRIER CURB	E	26					2	5.000	4	4.250	2	6.125		2	6.000	3.000	5 1	5 1	912
172	5 R3	BARRIER CURB	E	19	S					13.875	6.000						0 20	0 19	284		
172	5 R4	BARRIER CURB	E	27	S					6.000	11	250	5.000	12	000	9.250	6.375	2 10	2 8	478	
30	5 R5	BARRIER CURB	E	20					9	9.000							9 9	9 9	305		
7	5 R6	BARRIER CURB	E	20					47	2.000							47 2	47 2	344		
7	5 R7	BARRIER CURB	E	20					44	5.000							44 5	44 5	324		
7	5 R8	BARRIER CURB	E	20					32	11.000							32 11	32 11	240		
16	5 C1	SLIP FORM	E	20					10	0.000							10 0	10 0	167		
2	5 C2	SLIP FORM	E	20					5	0.000							5 0	5 0	10		
		TOTALS																			
4			E																244		
5			E																16315		
		TOTAL																	0		
		TOTAL	E																16559		
		Slab on Girder																			
5			E																12640		
		TOTAL																	12640		
		Safety Barrier Curb																			
4			E																244		
5			E																3498		
		TOTAL																	3742		
		Slip Form Option																			
5			E																177		

BILL OF REINFORCING STEEL

NO. REQ'D.	MARK NO.	LOCATION	EPOXY (E)	SHAPE NO.	STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS								NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT
									B	C	D	E	F	H	K				
									FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.				
		TOTAL																	177



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DATE PREPARED
12/20/2012

ROUTE
I-70

STATE
MO

DISTRICT
BR

SHEET NO.
7

COUNTY
JACKSON

JOB NO.
J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L09352

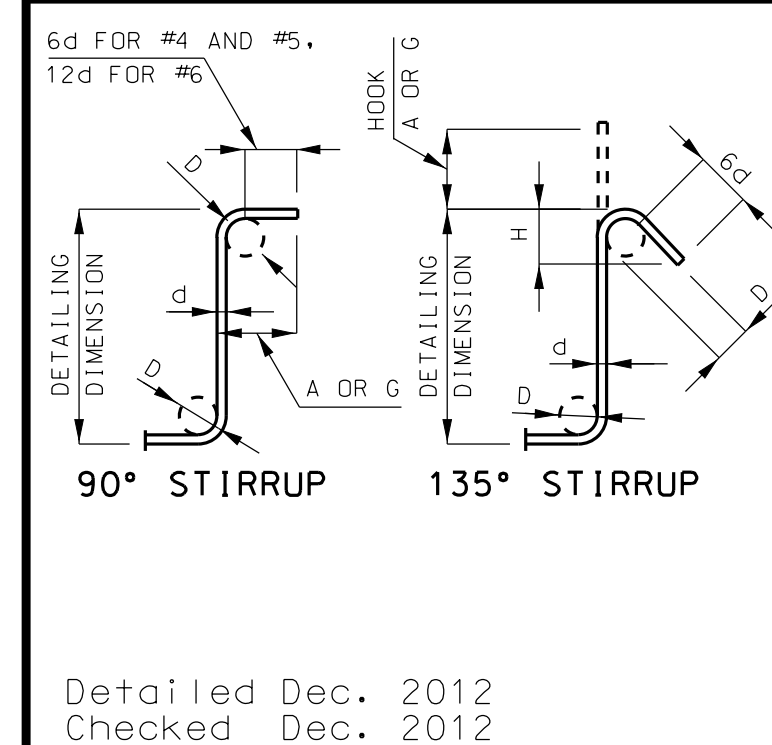
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

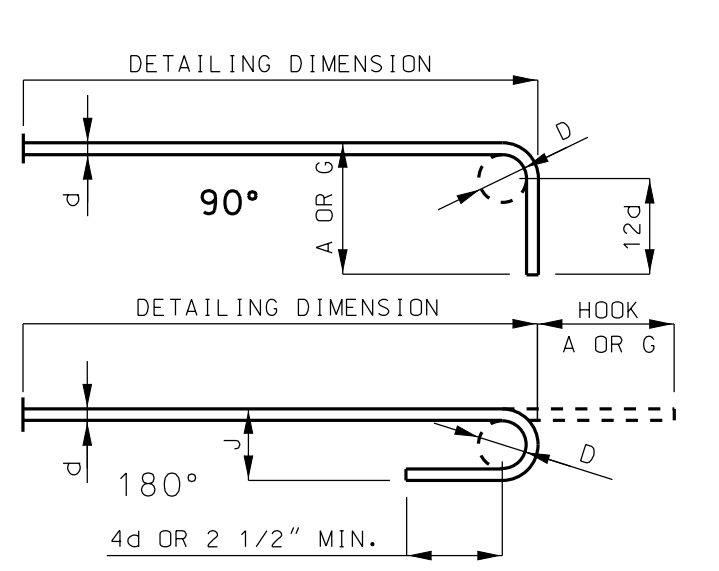
105 WEST CAPITOL JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



STIRRUP HOOK DIMENSIONS				
GRADES 40 - 50 - 60 KSI				
BAR SIZE	D (IN.)	90° HOOK		135° HOOK
		HOK A OR G	HOK A OR G	APPROX. H
#4	2"	4 1/2"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"
#6	4 1/2"	12"	8"	4 1/2"

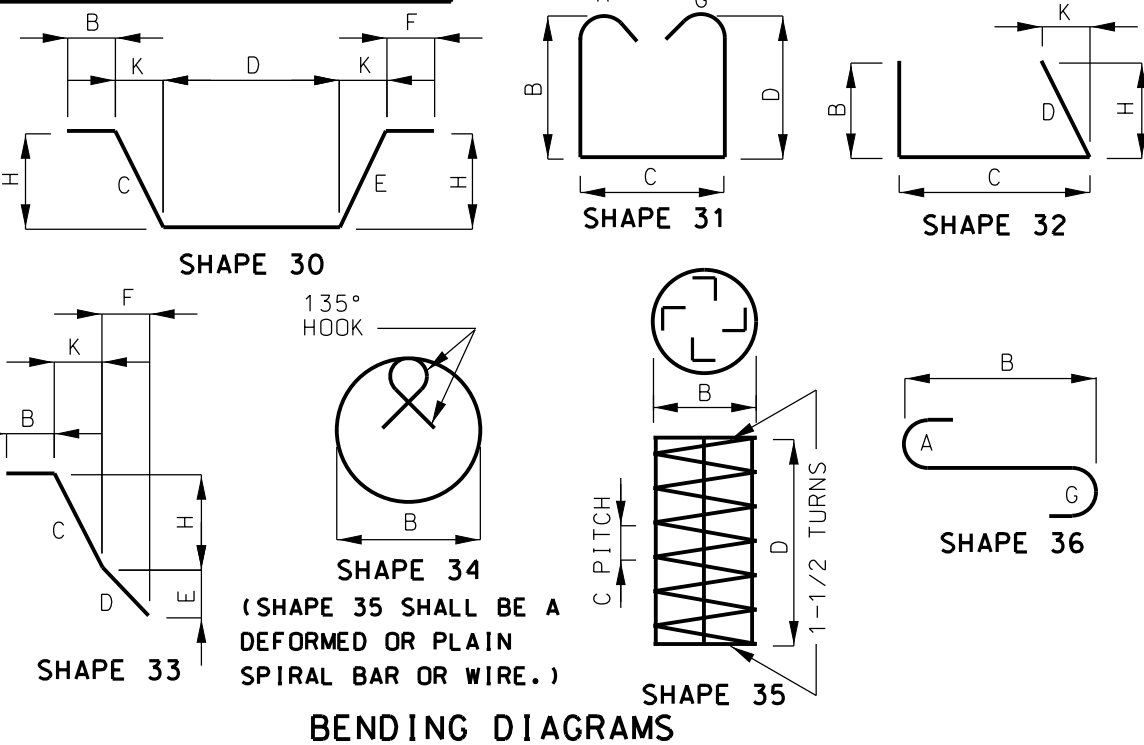
NOTE: UNLESS OTHERWISE NOTED DIAMETER "D" IS THE SAME FOR ALL BENDS AND HOOKS ON A BAR.



END HOOK DIMENSIONS				
BAR SIZE	D (IN.)	ALL GRADES		
		180° HOOKS		90° HOOKS
		A OR C	J	A OR G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	14"
#8	6"	11"	8"	16"
#9	9 1/2"	15"	11 3/4"	19"
#10	10 3/4"	17"	13 1/4"	22"
#11	12"	19"	14 3/4"	2'-0"
#14	18 1/4"	2'-3"	21 3/4"	2'-7"

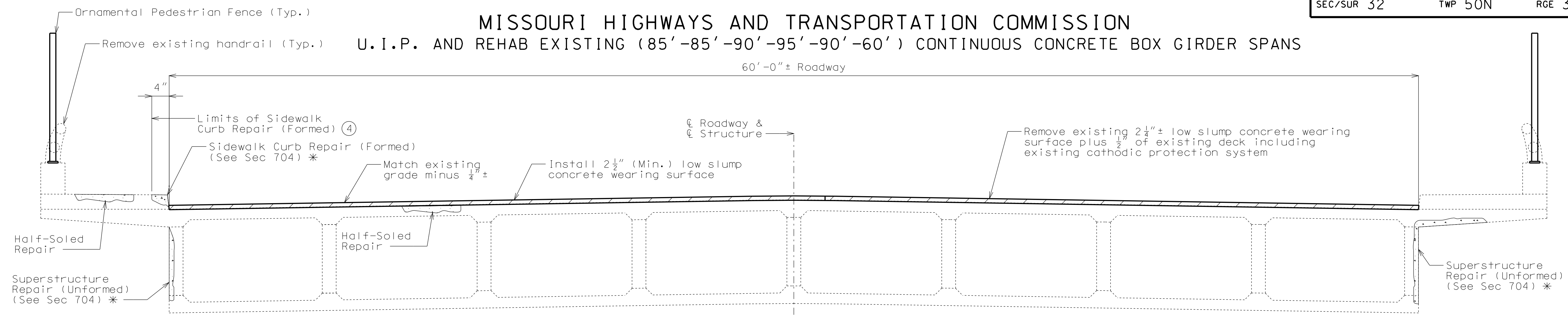
TWO ADDITIONAL #4-K4 & #5-R5 ARE INCLUDED IN THE BAR BILL FOR TESTING.

NOTE:
ALL STANDARD HOOKS AND BENDS OTHER THAN 180 DEGREE ARE TO BE BENT WITH SAME PROCEDURE AS FOR 90 DEGREE STANDARD HOOKS.
HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH THE PROCEDURES AS SHOWN ON THIS SHEET.
E = EPOXY COATED REINFORCEMENT.
S = STIRRUP.
X = BAR IS INCLUDED IN SUBSTRUCTURE QUANTITIES.
Y = BAR DIMENSIONS VARY IN EQUAL INCREMENTS BETWEEN DIMENSIONS SHOWN ON THIS LINE AND THE FOLLOWING LINE.
NO. EA. = NUMBER OF BARS OF EACH LENGTH.
NOMINAL LENGTHS ARE BASED ON OUT TO OUT DIMENSIONS SHOWN IN BENDING DIAGRAMS AND ARE LISTED FOR FABRICATORS USE. (NEAREST INCH)
ACTUAL LENGTHS ARE MEASURED ALONG CENTERLINE BAR TO THE NEAREST INCH.
PAYWEIGHTS ARE BASED ON ACTUAL LENGTHS.
FOUR ANGLE OR CHANNEL SPACERS ARE REQUIRED FOR EACH COLUMN SPIRAL. SPACERS ARE TO BE PLACED ON INSIDE OF SPIRALS. LENGTH AND WEIGHT OF COLUMN SPIRALS DO NOT INCLUDE SPLICES OR SPACERS.
REINFORCING STEEL (GRADE 60) F_y = 60,000 PSI.



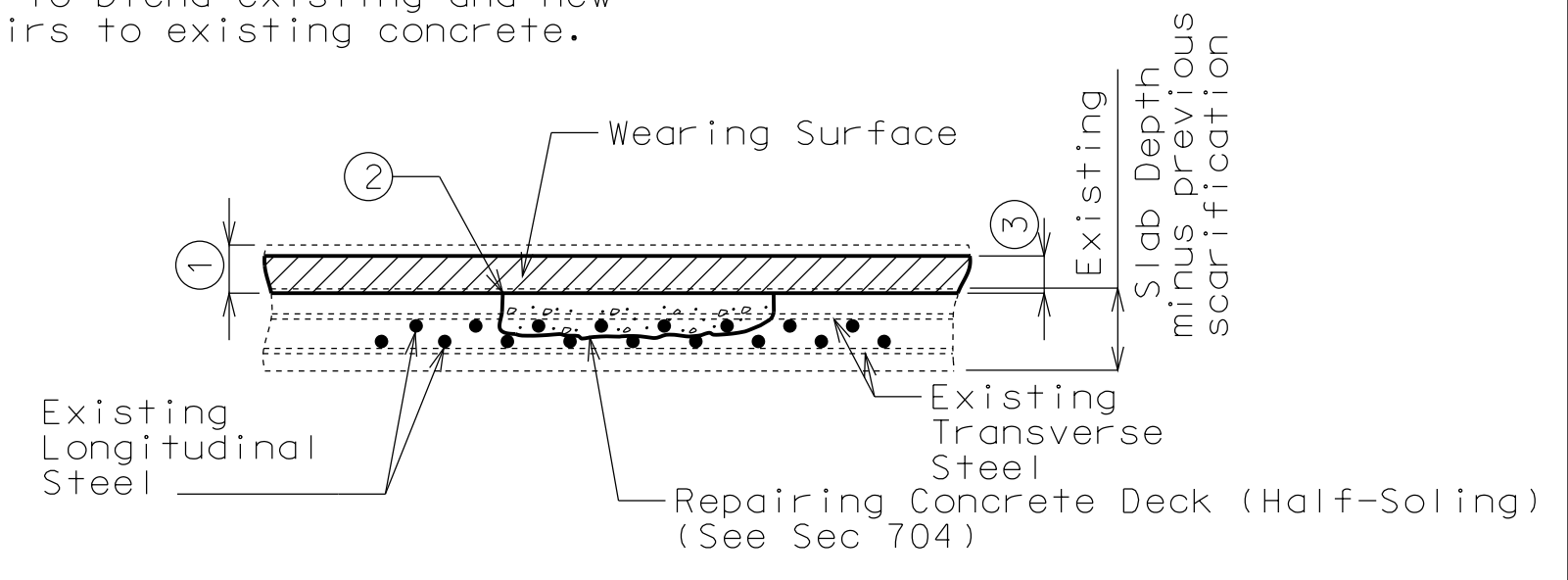
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 U.I.P. AND REHAB EXISTING (85'-85'-90'-95'-90'-60') CONTINUOUS CONCRETE BOX GIRDER SPANS

60'-0"± Roadway



TYPICAL SECTION THRU EXISTING SLAB

* Match existing concrete color. Apply tinted sealer to blend existing and new concrete repairs to existing concrete.



- HALF-SOLED REPAIR**
- Remove existing wearing surface plus 1/2" of existing deck.
 - One inch vertical side shall be established outside the deteriorated area. See Sec 704.
 - 2 1/2" (min.) for Low Slump Concrete Wearing Surface

④ Repair done similar to Slab Edge Repair (See Sec 704).

General Notes:

Design Specifications:

2002 - AASHTO 17th Edition
 Load Factor Design
 Bridge Deck Rating = 6

Design Unit Stresses:

Class B-1 Concrete (Parapet and End Post) f'c = 4,000 psi
 Class B-2 Concrete (Superstructure, except for Parapet and End Post) f'c = 4,000 psi
 Reinforcing Steel (Grade 60) fy = 60,000 psi

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.
 Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

Miscellaneous:

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. The cost of furnishing and installing the overlay will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of overlay

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

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

Contractor shall verify all dimensions in field before ordering new material.

Traffic Handling:

Traffic to be maintained on structure during construction. See Sheet No. 2 for Details Showing Staged Construction.

Structural Steel Protective Coatings (All Bearings):

Protective Coating: System G in accordance with Sec 1081. (See Special Provisions)

Concrete Protective Coatings:

Protective coating for concrete bents and piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Notes:
 Any half-soling required in the areas designated as special repair zones shall be completed in alphabetical sequence. Any repair in the remainder of the bridge that is adjacent to Zone A and not designated as a special repair zone shall be completed prior to work in Zone A.

Removal and repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone. Before placing concrete in areas adjacent to areas of subsequent repair, the concrete shall be separated with a material such as polyethylene sheets to aid in removal of old concrete.

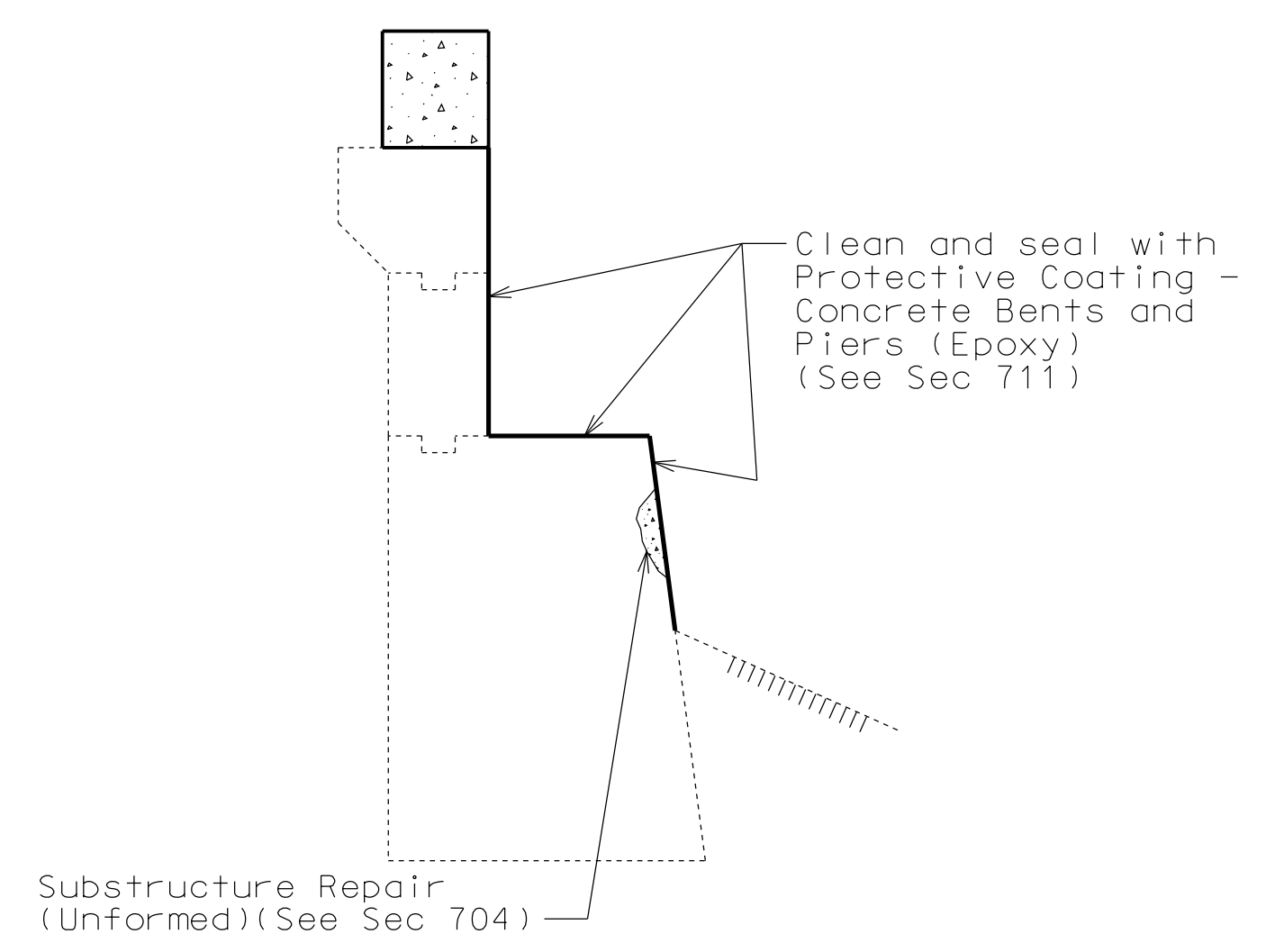
Zones with the same letter designation may be repaired at the same time.

Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

If any single repair area does not exceed 9 square feet in size and the total repair within a special repair zone does not exceed 27 square feet, the special repair zone requirement does not apply for that zone. Half-soling repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

For plan of slab showing special repair zones, see information sheets.

Estimated Quantities		
Item		Total
Removal of Concrete Wearing Surface	sq. foot	30149
Removal of Existing Expansion Joints & Adjacent Concrete	linear foot	129
Removal of Existing Cathodic Protection System	lump sum	1
Removal of Existing Rail	linear foot	1052
Low Slump Concrete Wearing Surface	sq. yard	3357
Ornamental Pedestrian Fence	linear foot	1052
Class B-2 Concrete	cu. yard	15.2
Substructure Repair (Unformed)	sq. foot	50
Superstructure Repair (Unformed)	sq. foot	100
Repairing Concrete Deck (Half-Soling)	sq. foot	1590
Sidewalk Curb Repair (Formed)	linear foot	150
Reinforcing Steel	pound	1110
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Expansion Device (Flat Plate)	linear foot	22
Cleaning and Coating Existing Bearings	each	18
Strip Seal Expansion Joint System	linear foot	129



TYPICAL SECTION THRU END BENTS NO. 1 & 7 SHOWING PROTECTIVE COATING AND SUBSTRUCTURE REPAIR (UNFORMED)
 REPAIRS TO BRIDGE: ADMIRAL BLVD. OVER RTE. I-70 & RTE. I-29

STATE ROAD: I-35 AND I-70 INTERCHANGE
 IN KANSAS CITY
 STA. 4+33.00± (Admiral Blvd.) (Match Existing)

STD. 617.20
STD. 706.35
STD. 902.40

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DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 1
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L09362	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

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DATE PREPARED
12/20/2012

ROUTE	STATE
I-70	MO
DISTRICT	SHEET NO.
BR	2

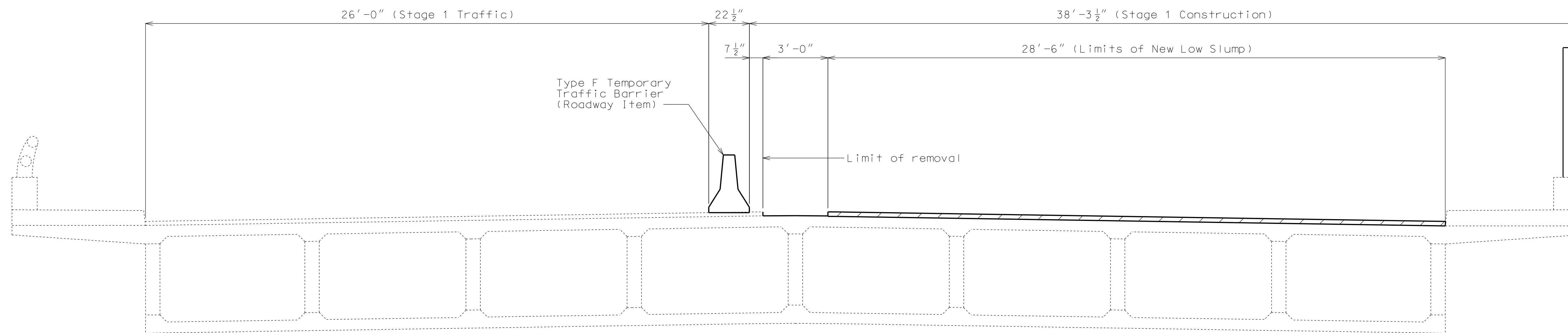
COUNTY
JACKSON

JOB NO.
J413012

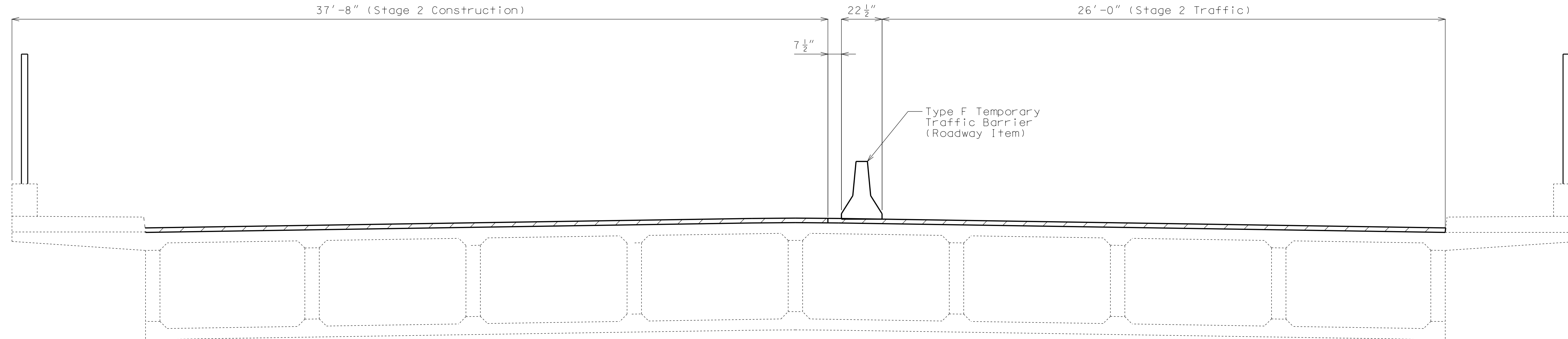
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
L09362



STAGE 1 CONSTRUCTION




STAGE 2 CONSTRUCTION

DETAILS SHOWING STAGED CONSTRUCTION

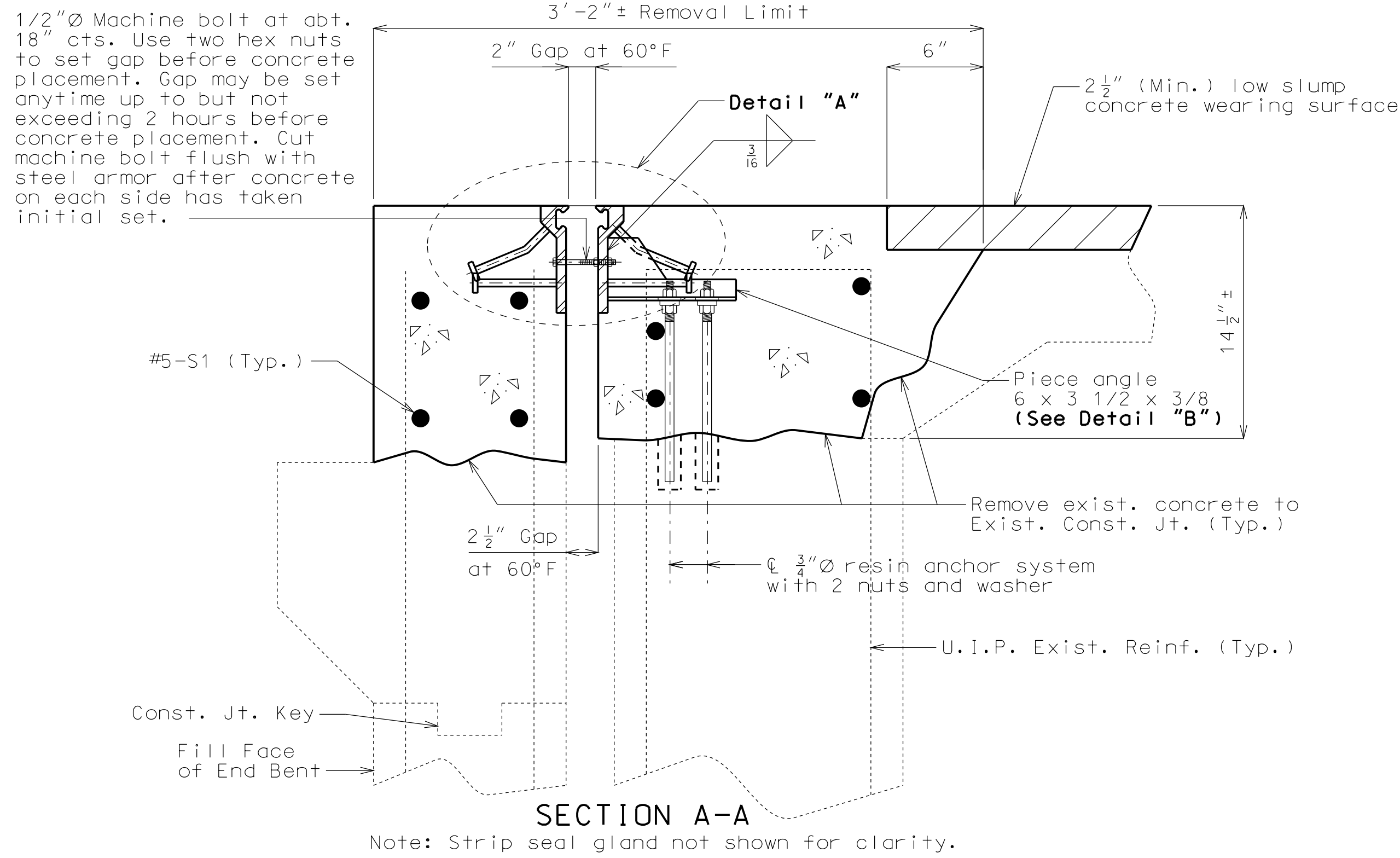
DATE	DESCRIPTION

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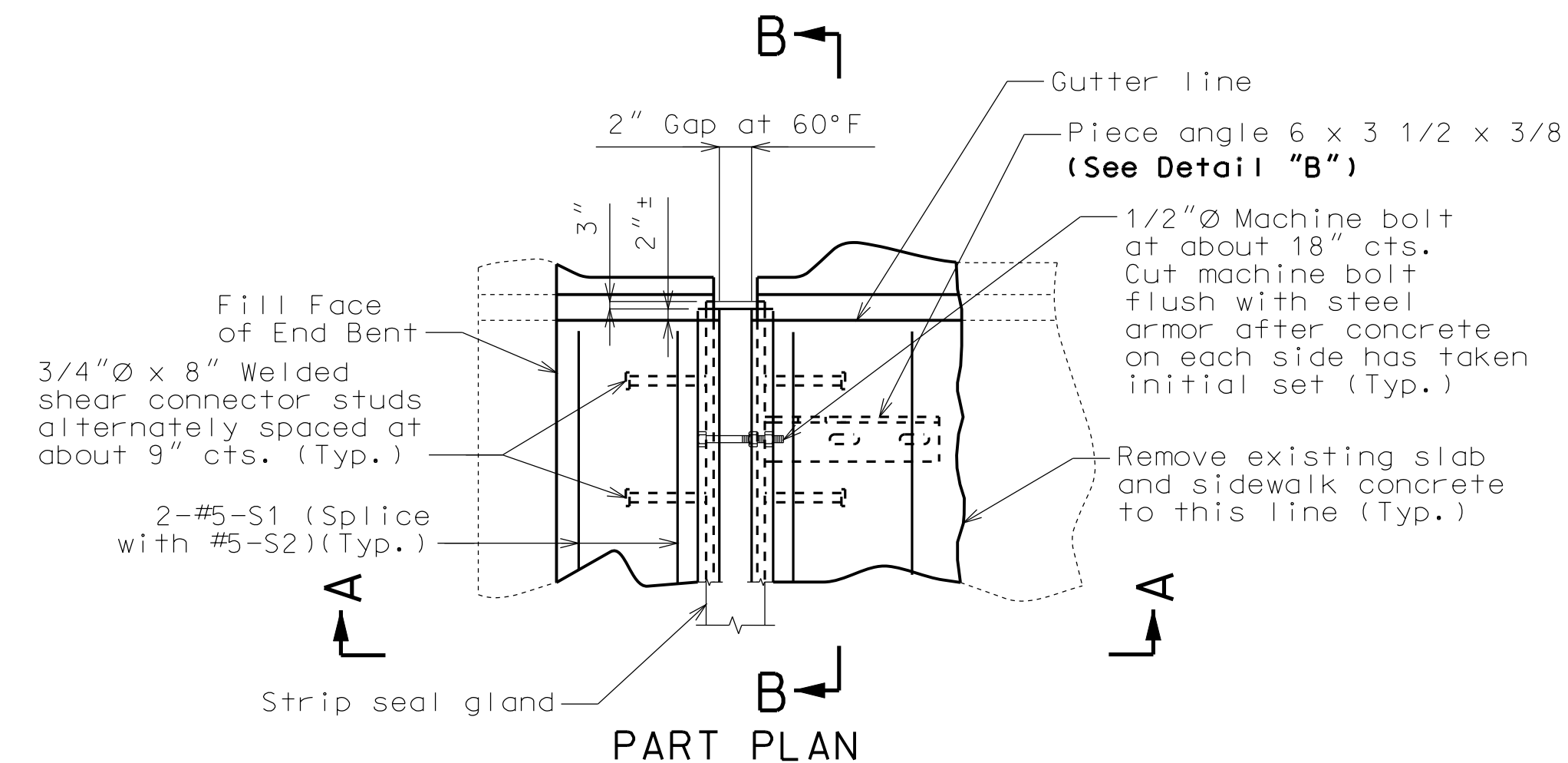


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JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

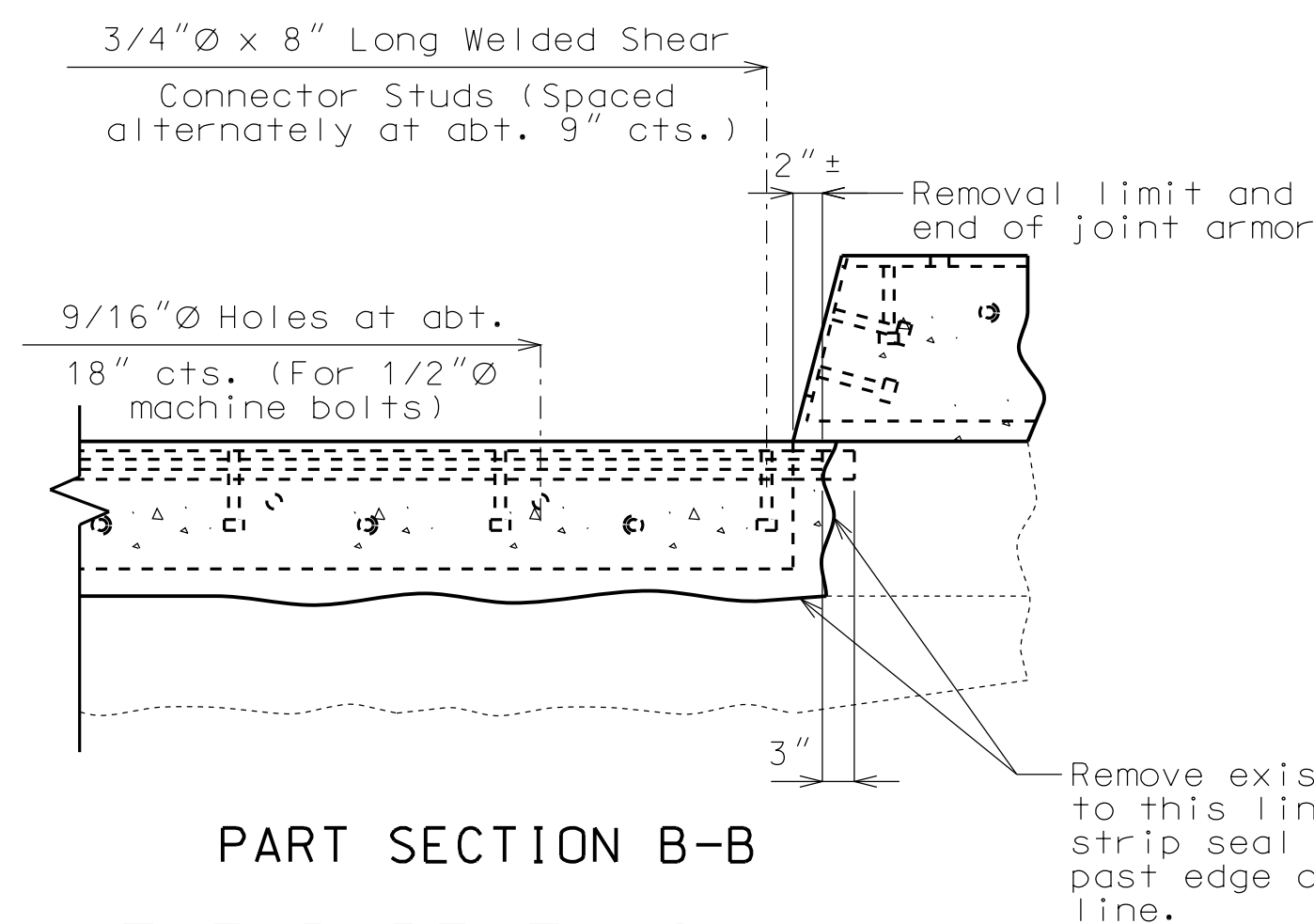
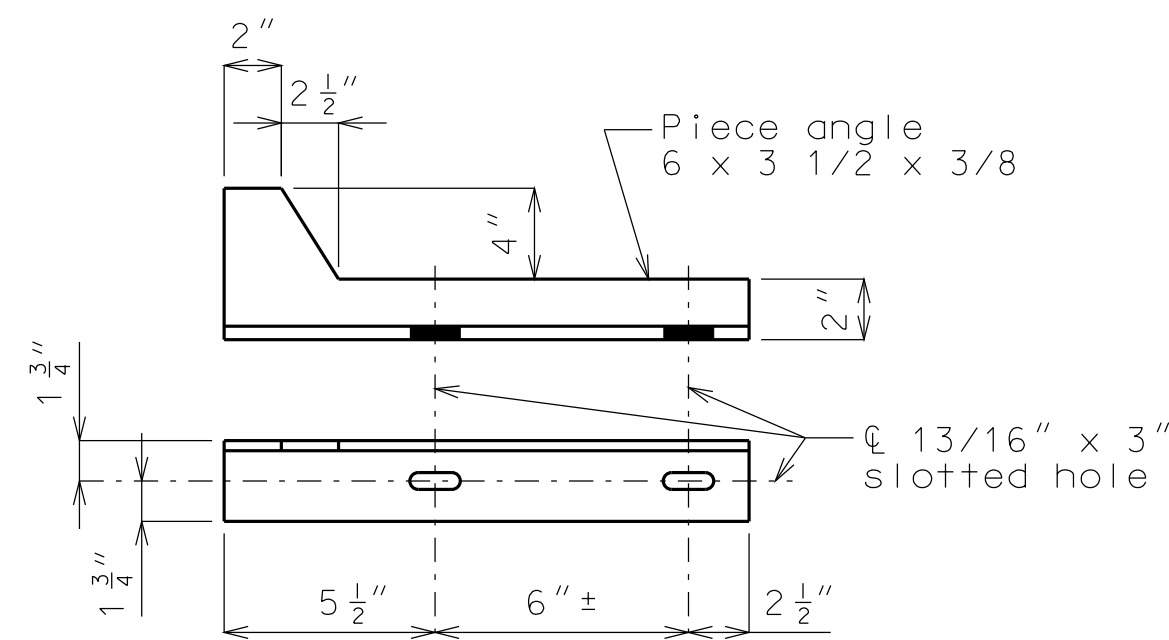
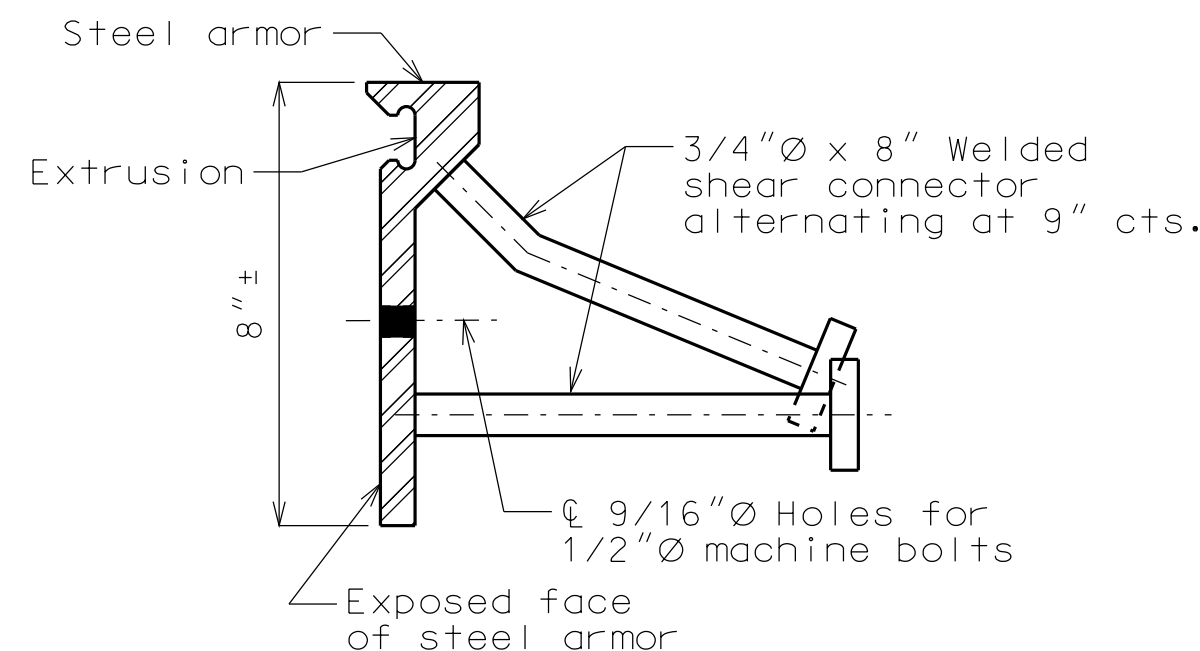
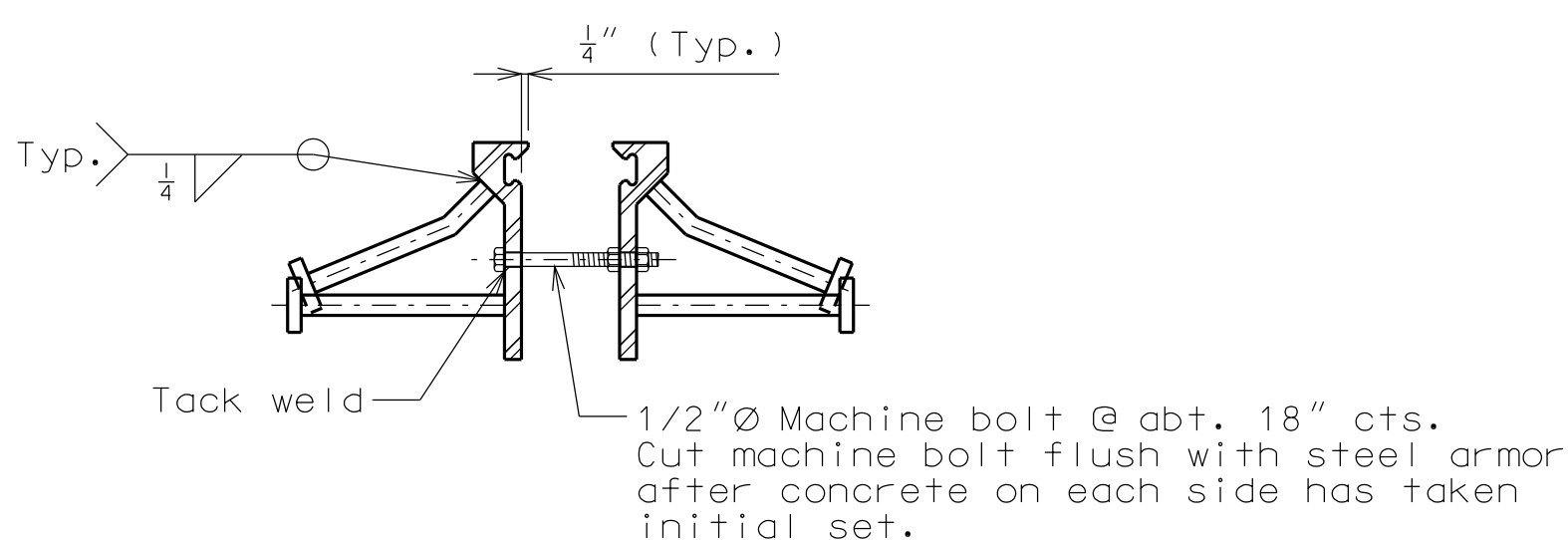
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



Note: S1 Bars - Stage 2 Const.
S2 Bars - Stage 1 Const.
2'-2" Min. Lap



Note: Flat plate expansion device on sidewalk not shown for clarity. For details of flat plate expansion device on sidewalk at End Bent No. 1, see Sheet No. 4.



GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 3/16" for each 10° fall or rise in temperature at installation.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

Longitudinal reinforcing steel shall be cut/bent so that ends shall not be more than ±1" from vertical leg of the steel armor at the expansion joint system.

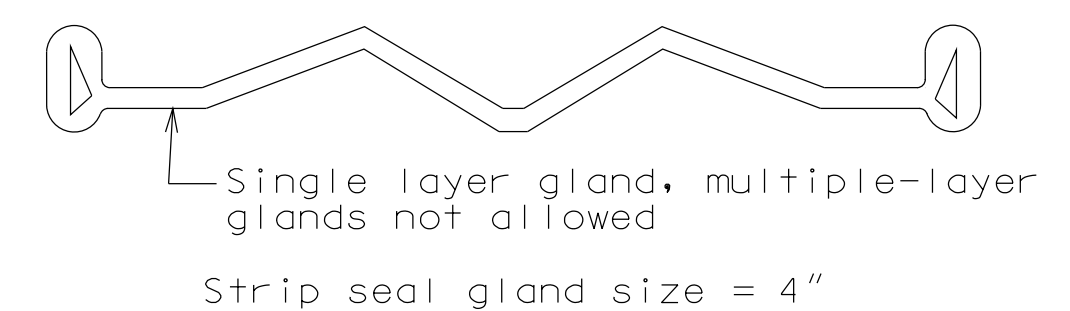
Top of backwall for End Bent No. 1 shall be formed to the crown and grade of the roadway. Backwall above upper construction joint shall not be poured until the superstructure slab has been poured in the adjacent span.

All concrete above the upper construction joint in backwall shall be Class B-2.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Class B-2 Concrete.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".



DETAILS OF STRIP SEAL AT END BENT NO. 1

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DATE PREPARED	
12/20/2012	
ROUTE	STATE
I-70	MO
DISTRICT	SHEET NO.
BR	3
COUNTY	
JACKSON	
JOB NO.	
J413012	
CONTRACT ID.	

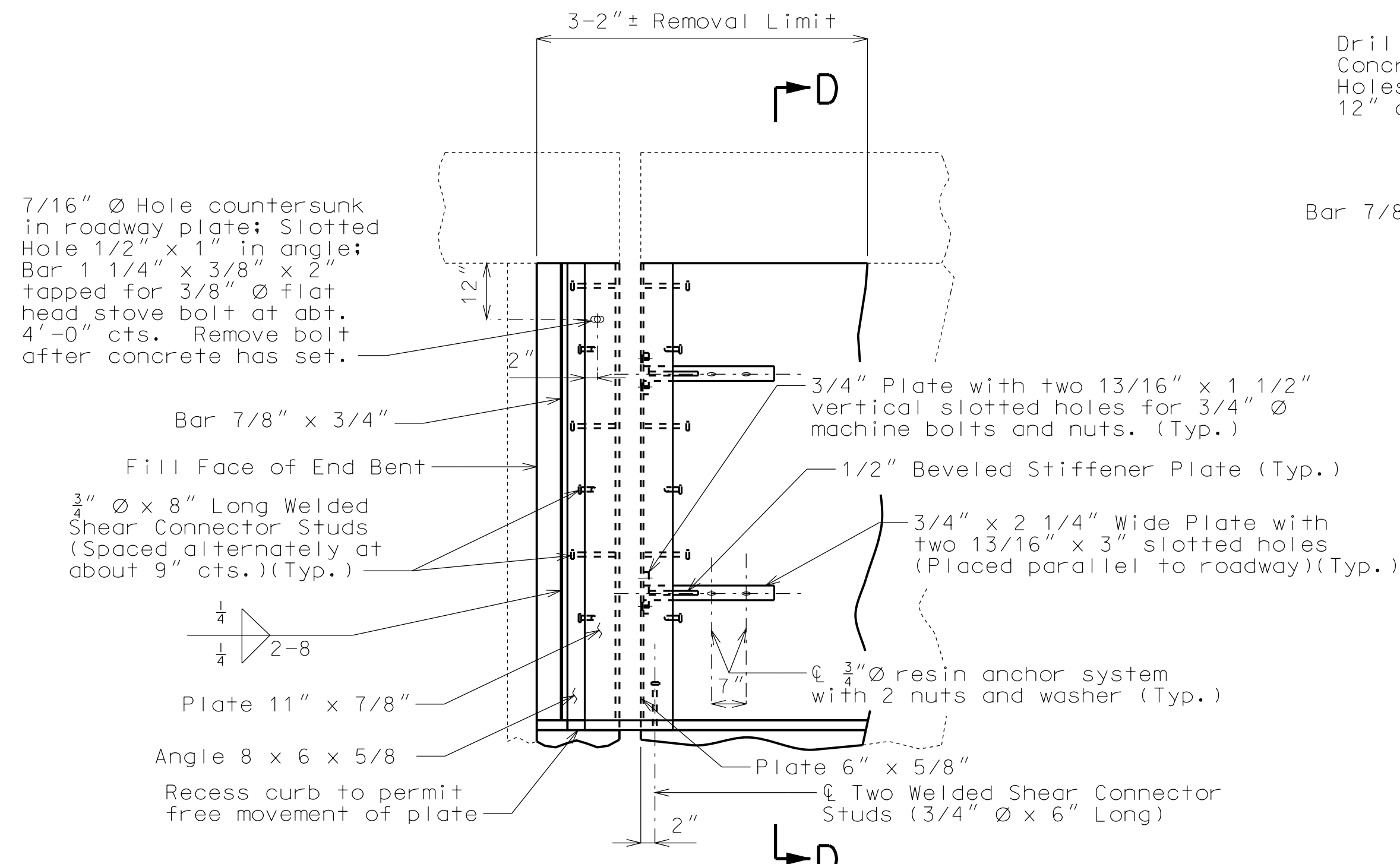
PROJECT NO.	
BRIDGE NO.	
L09362	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

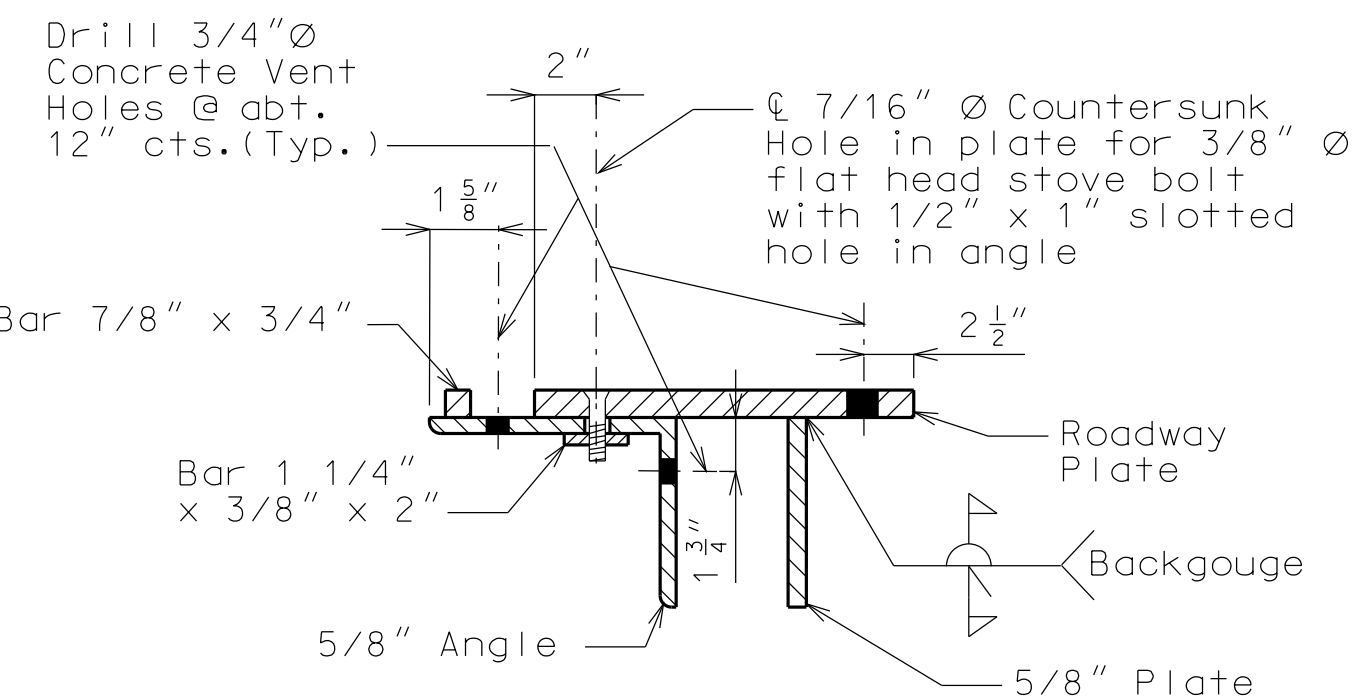
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PART PLAN

Note: Concrete Vent Holes not shown for clarity.



PART SECTION (TYPICAL)

GENERAL NOTES:

Expansion device shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove weld splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion device shall be fabricated and installed to the crown and grade of the sidewalk.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 3/16" for each 10° fall or rise in temperature at installation.

Material for the expansion device shall be ASTM A709 Grade 36 structural steel. Anchors for the expansion device shall be in accordance with Sec 1037.

Structural steel for the expansion device shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

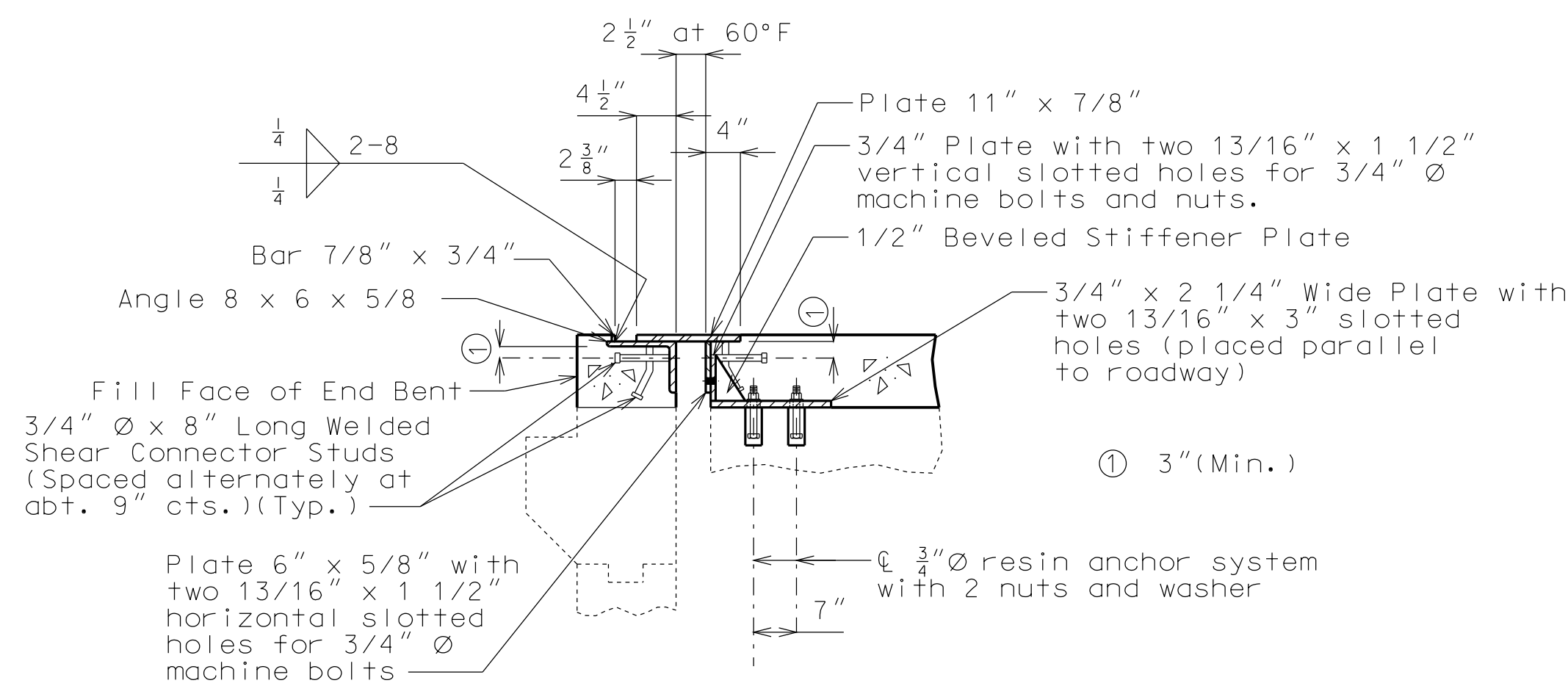
Payment for furnishing, coating or galvanizing and installing the structural steel for the expansion device will be considered completely covered by the contract unit price for Expansion Device (Flat Plate) per linear foot.

Concrete shall be forced under and around flat plate, anchors and angles. Proper consolidation shall be achieved by localized internal vibration. Finishing of the concrete shall be achieved by hand finishing within one foot of the expansion device. The vertical and horizontal concrete vent holes shall be offset from each other. Do not alternate holes at the 12" spacing.

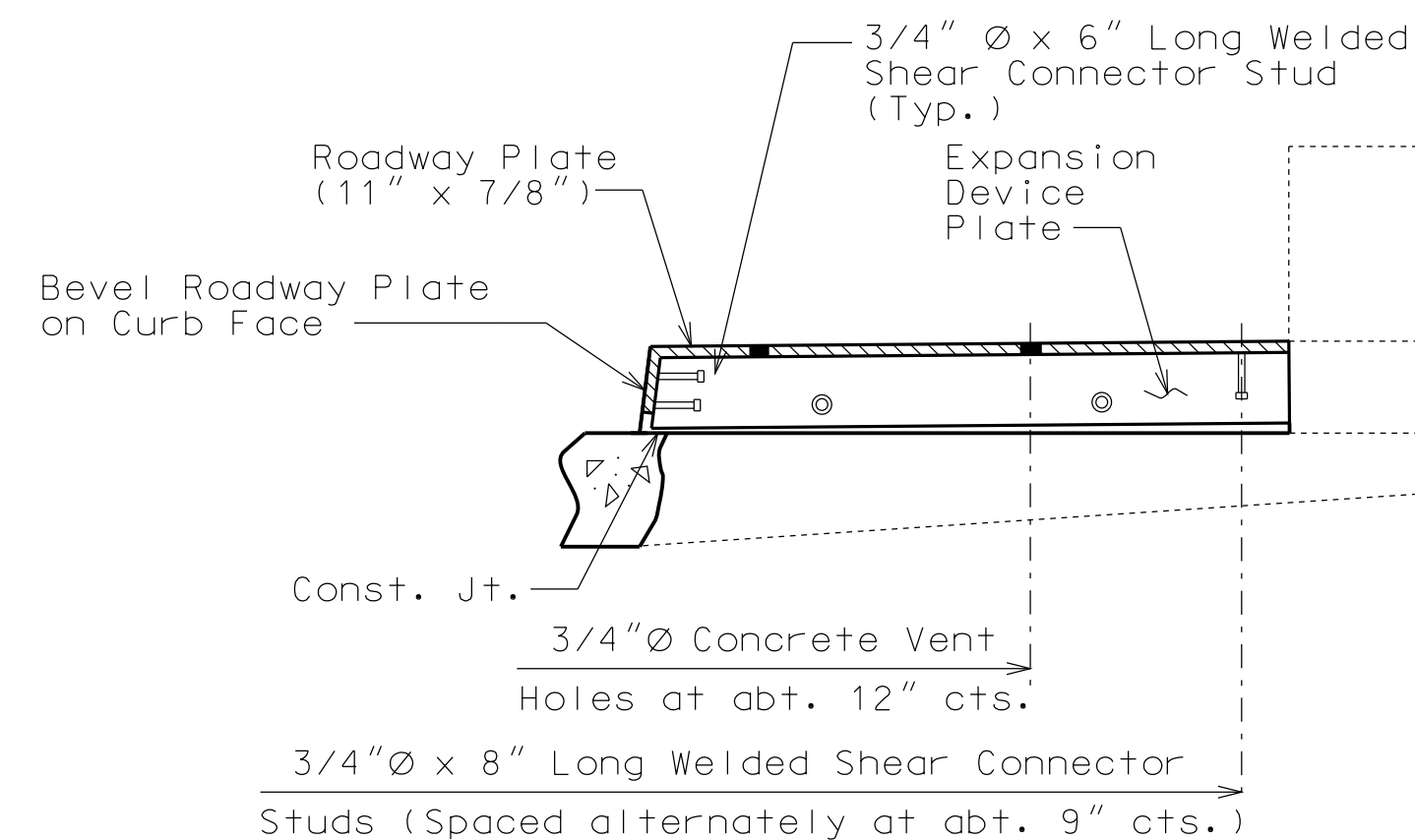
Longitudinal reinforcing steel shall be cut/bent so that ends shall not be more than ±1" from vertical plate at the expansion device.

Complete joint penetration welds utilized in the fabrication of the expansion device shall be nondestructively tested by an approved method.

For resin anchor notes and details of strip seal expansion device, see Sheet No. 3.

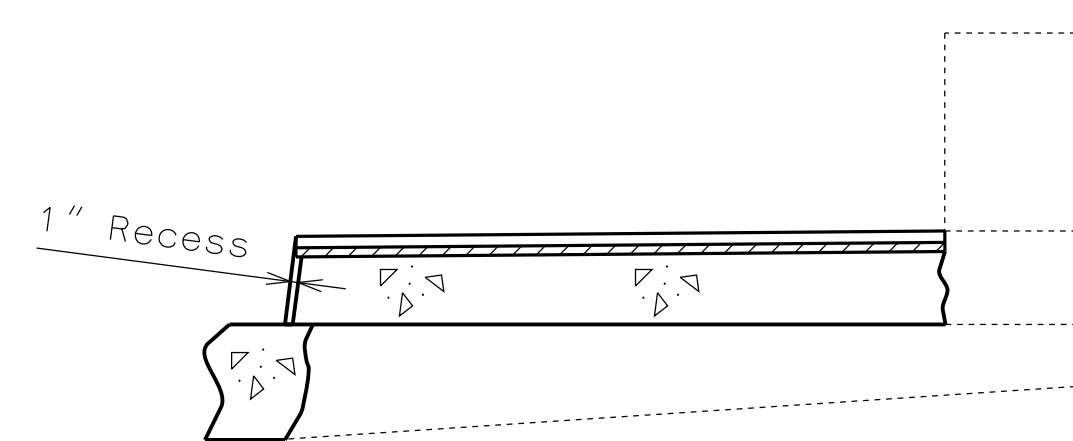


PART SECTION THRU SIDEWALK



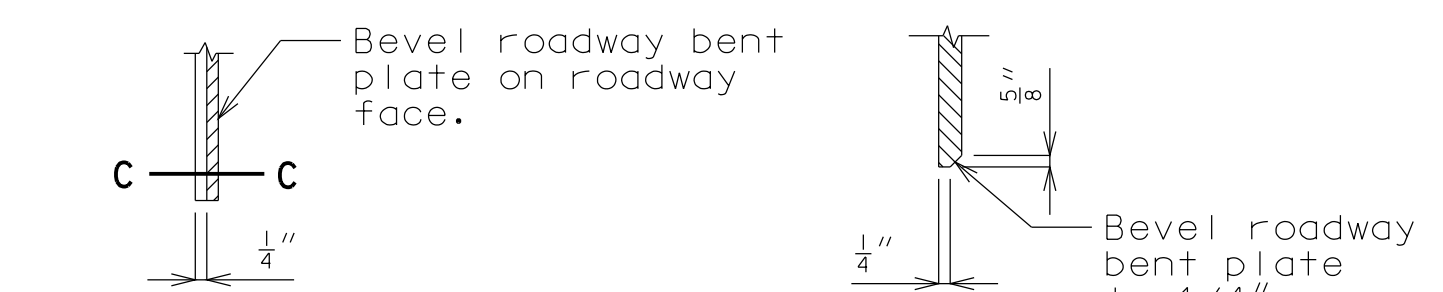
PART SECTION A-A

Note: Strip seal expansion device not shown for clarity.

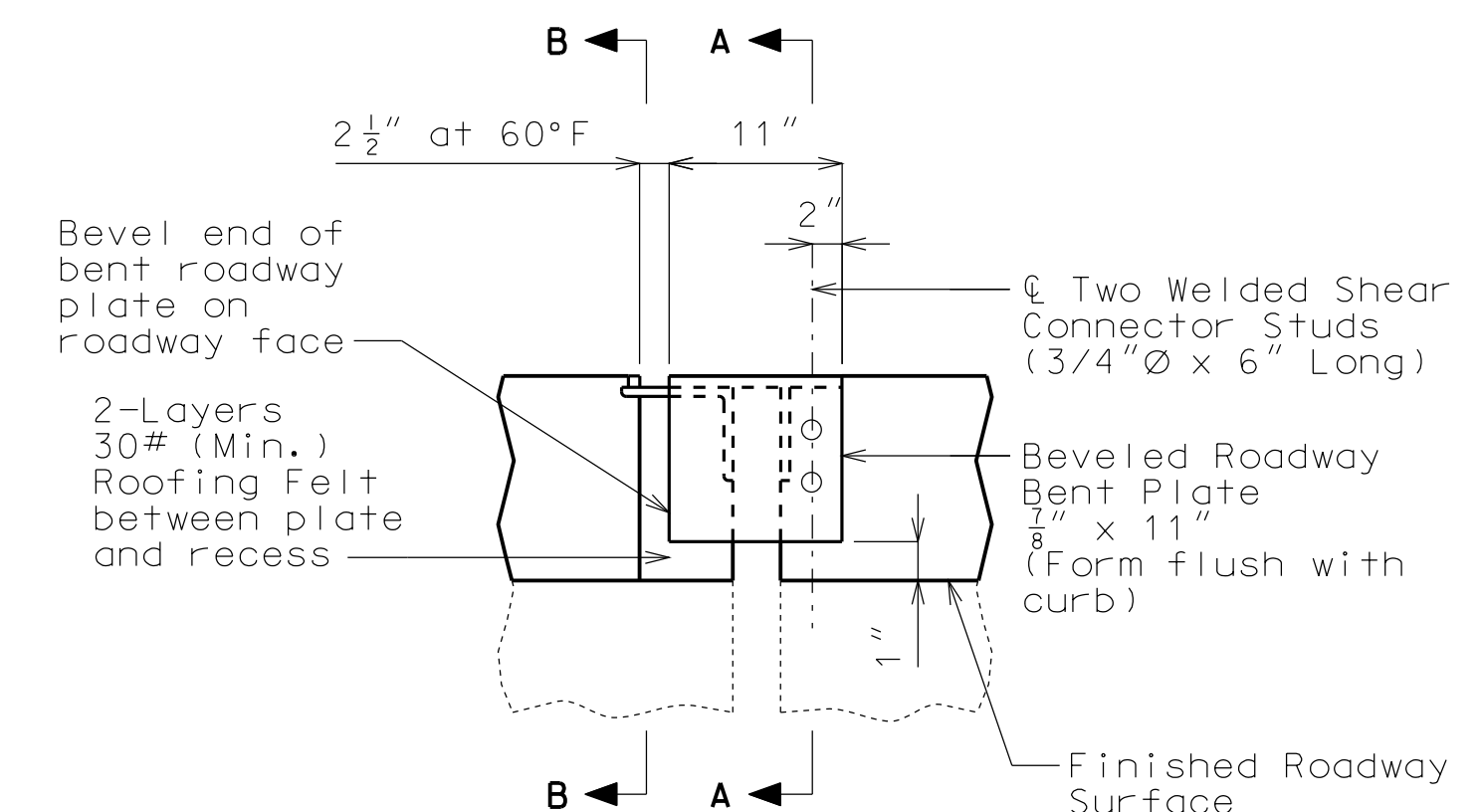


PART SECTION B-B

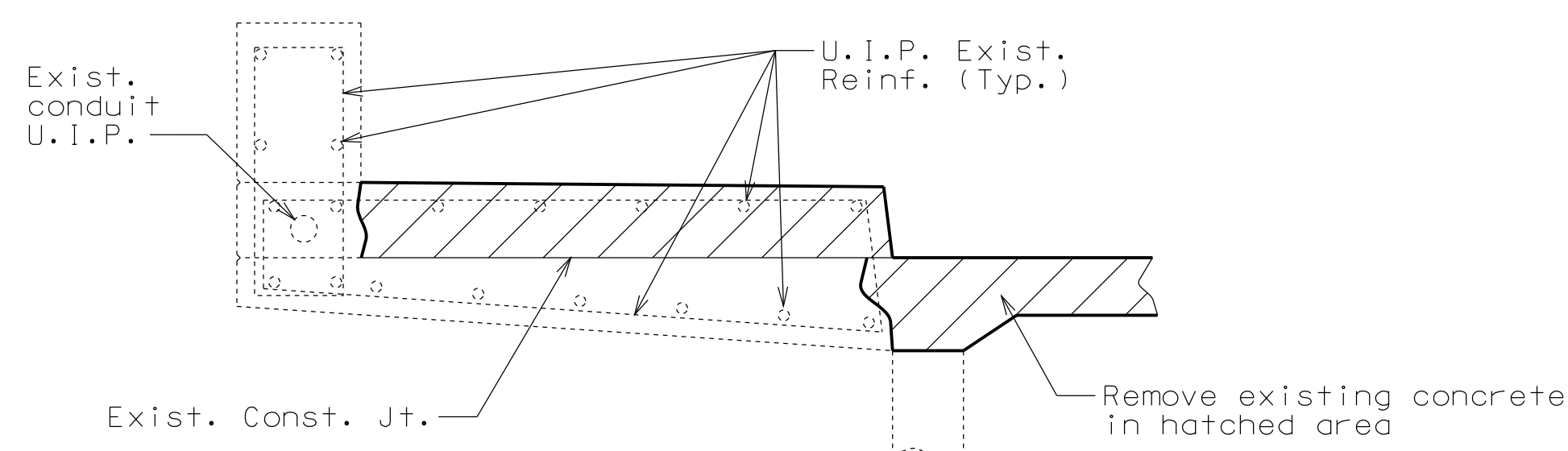
Note: Strip seal expansion device not shown for clarity.



PART ELEVATION AT END OF BEVELED ROADWAY BENT PLATE



ELEVATION OF SIDEWALK CURB



PART SECTION D-D SHOWING REMOVAL

DETAILS OF FLAT PLATE EXPANSION DEVICE ON SIDEWALK AT END BENT NO. 1

"THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT."

DATE PREPARED
12/20/2012

ROUTE I-70 STATE MO

DISTRICT BR SHEET NO. 4

COUNTY JACKSON

JOB NO. J413012

CONTRACT ID.

PROJECT NO.

BRIDGE NO. L09362

DESCRIPTION

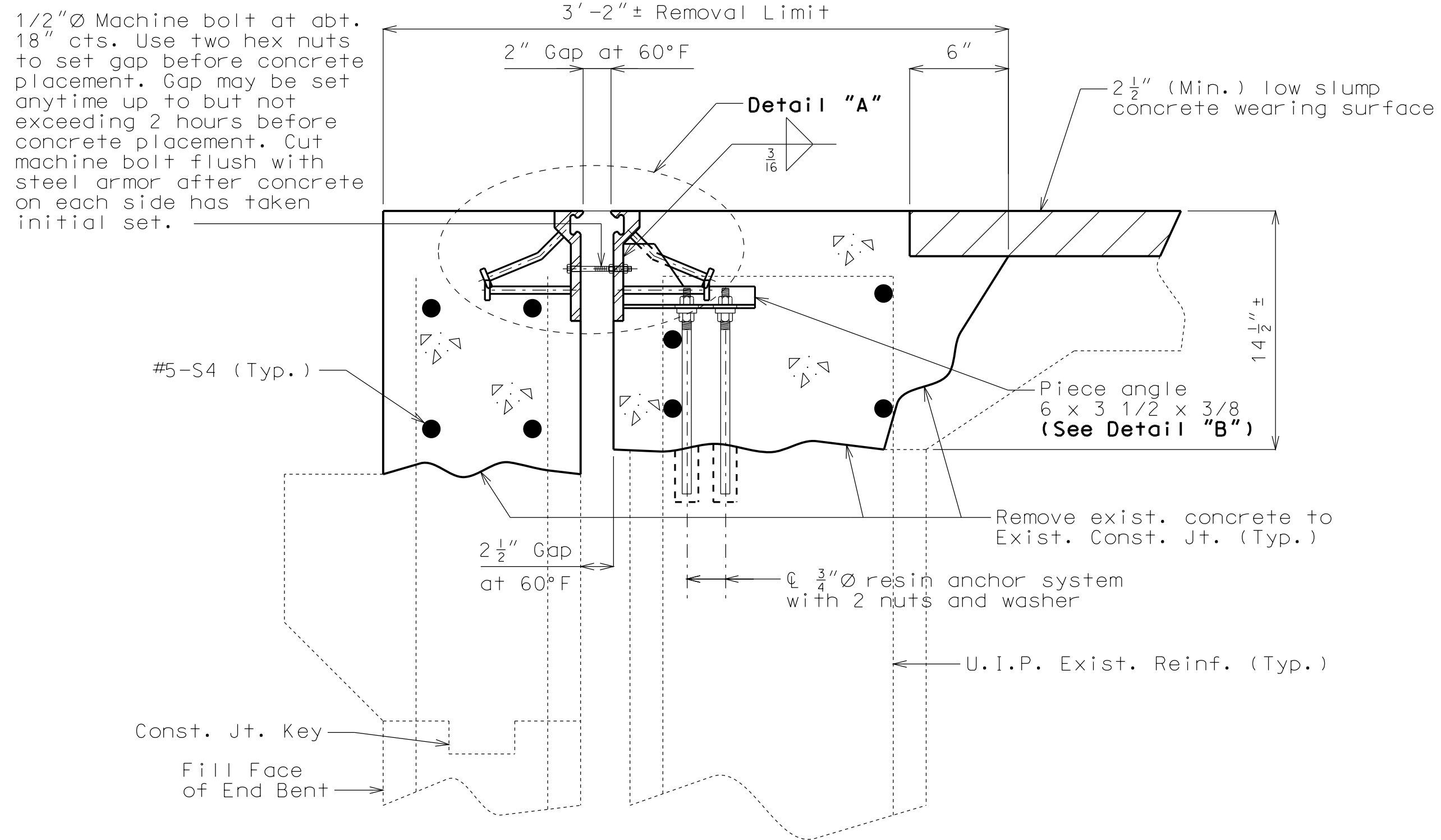
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

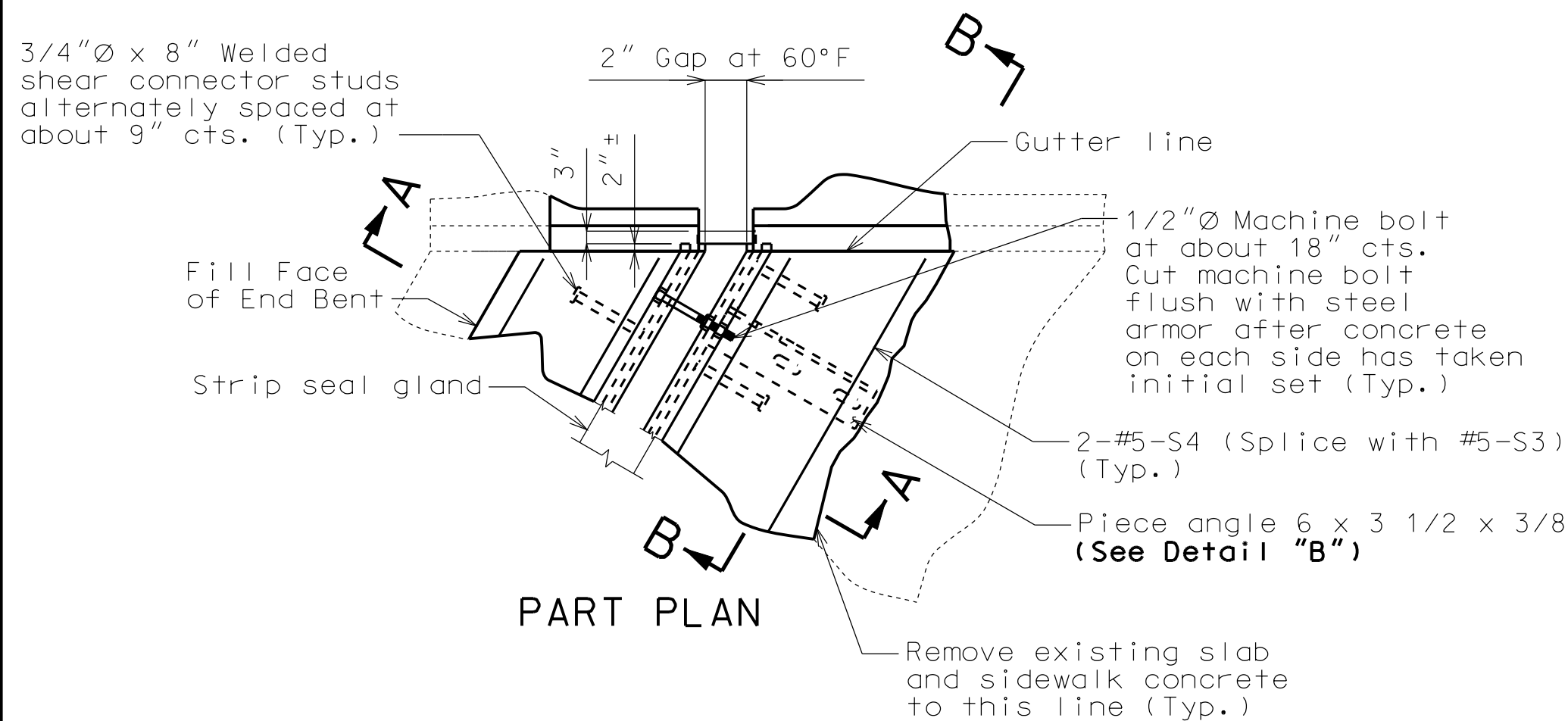
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SECTION A-A

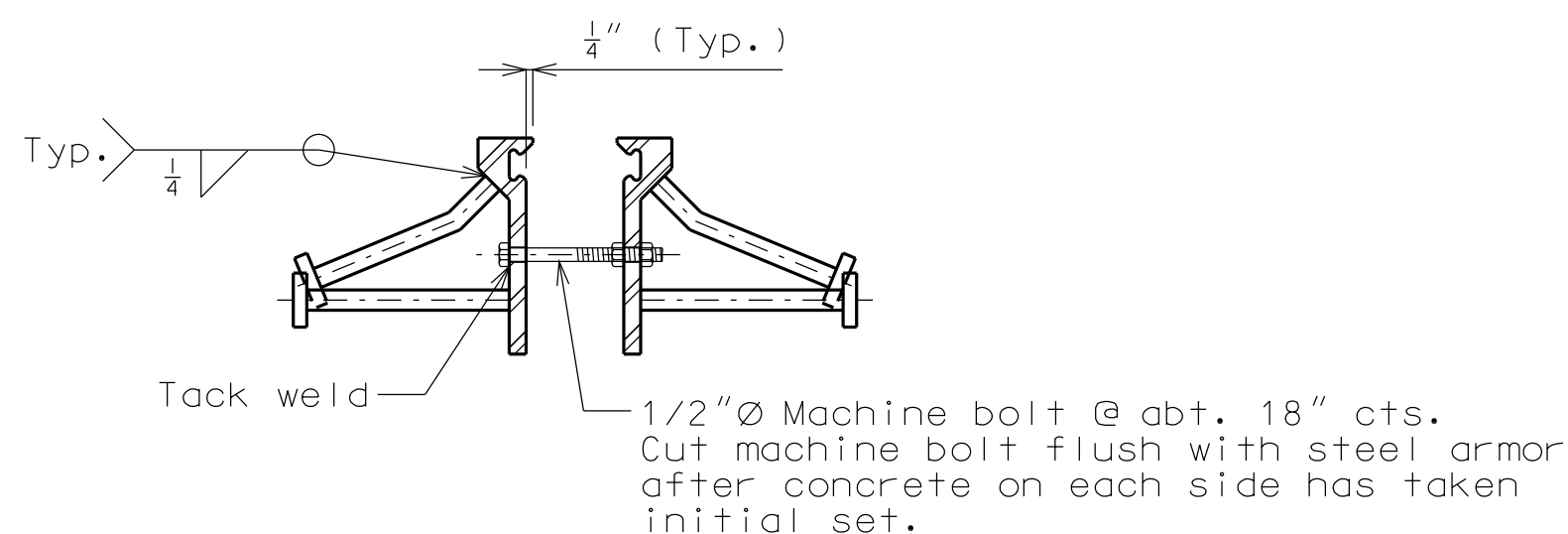
Note: Strip seal gland not shown for clarity.

Note: S4 Bar - Stage 1 Const.
S3 Bar - Stage 2 Const.
2'-2" Min. Lap

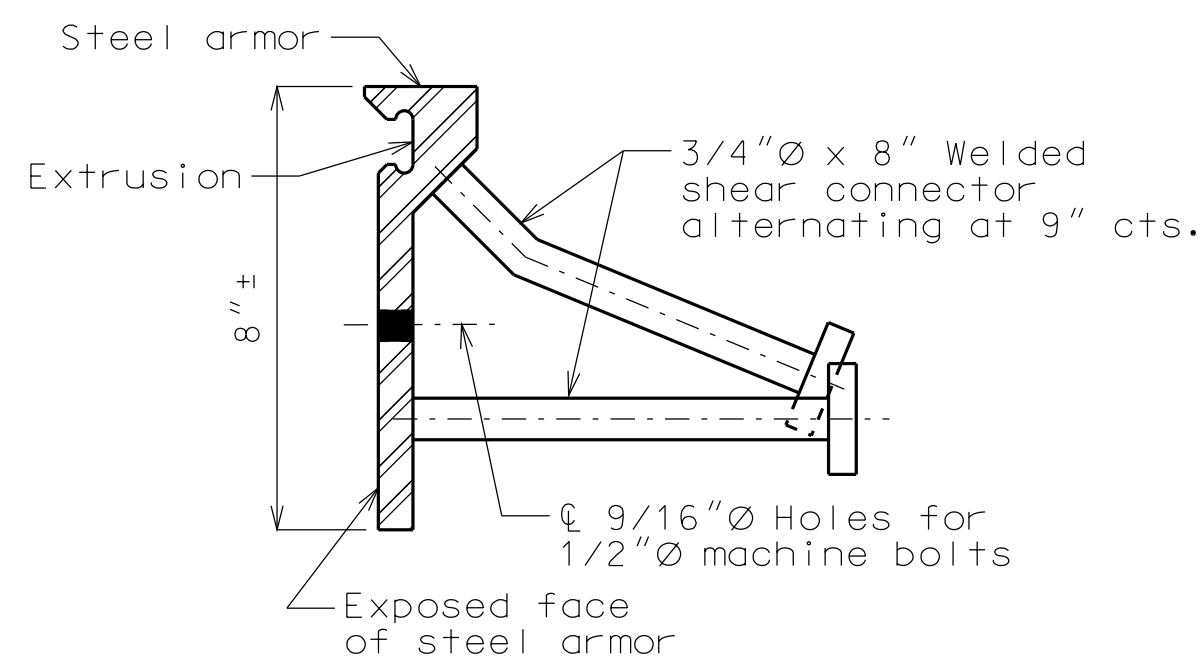


PART PLAN

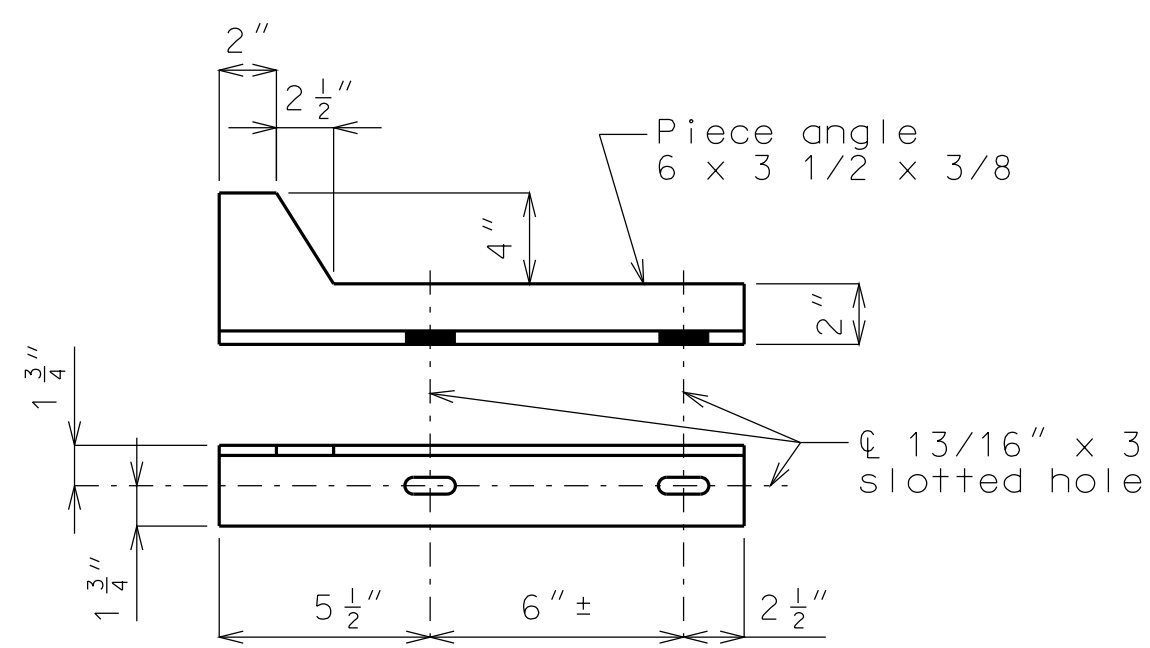
Note:
Flat plate expansion device on sidewalk not shown
for clarity. For details of flat plate expansion
device on sidewalk at End Bent No. 7, see Sheet No. 6.



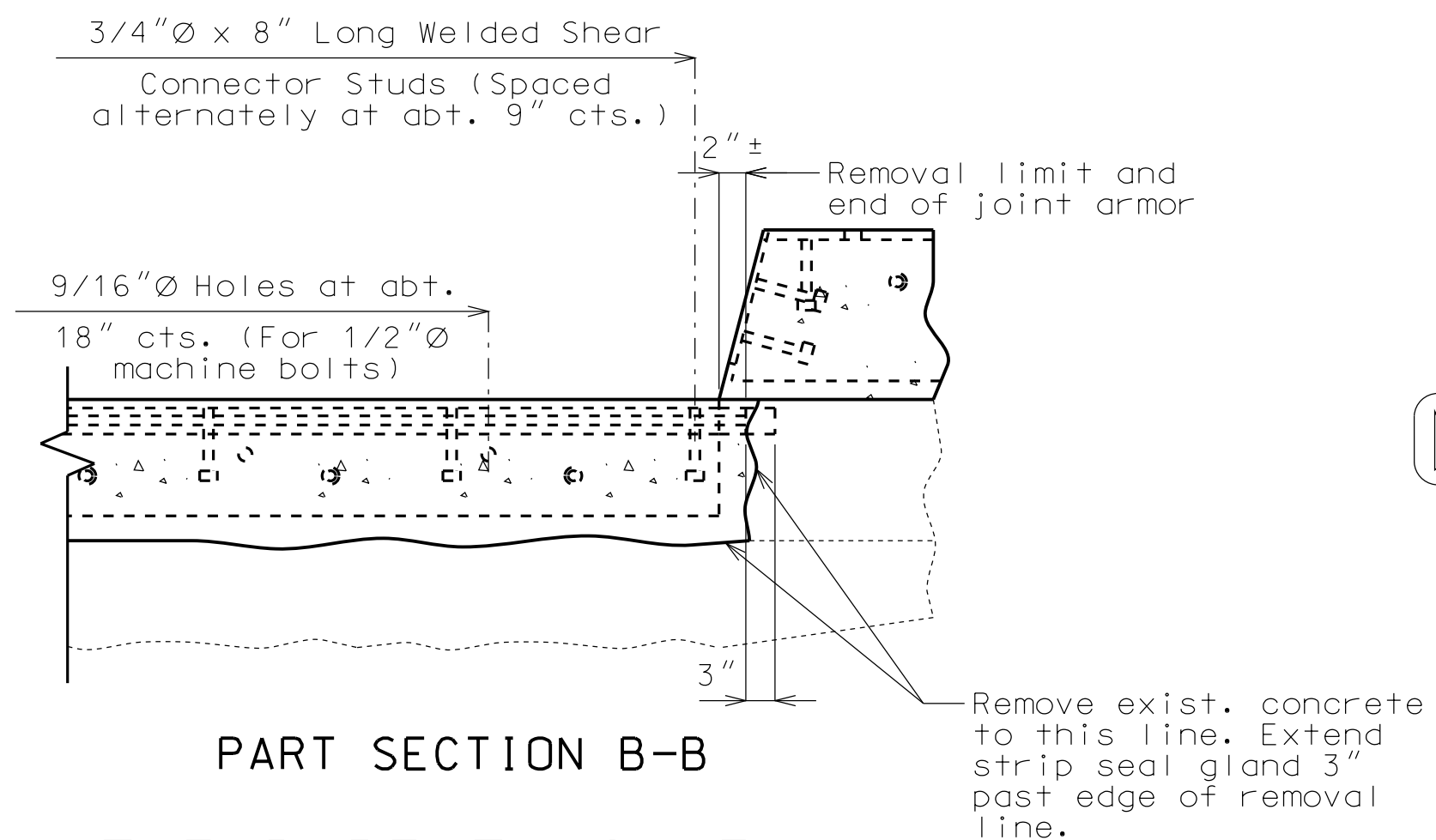
DETAIL "A"



DETAIL OF JOINT ARMOR



DETAIL "B"



PART SECTION B-B

DETAILS OF STRIP SEAL AT END BENT NO. 7

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 3/16 for each 10° fall or rise in temperature at installation.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

Longitudinal reinforcing steel shall be cut/bent so that ends shall not be more than 1/16 from vertical leg of the steel armor at the expansion joint system.

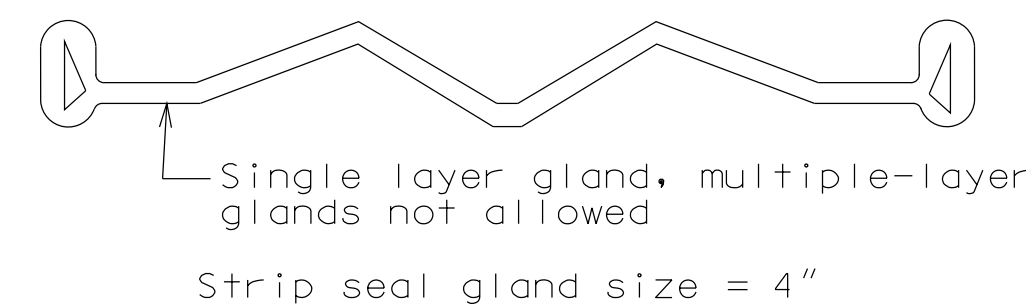
Top of backwall for End Bent No. 7 shall be formed to the crown and grade of the roadway. Backwall above upper construction joint shall not be poured until the superstructure slab has been poured in the adjacent span.

All concrete above the upper construction joint in backwall shall be Class B-2.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Class B-2 Concrete.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".



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DATE PREPARED

12/20/2012

ROUTE STATE

I-70 MO

DISTRICT SHEET NO.

BR 5

COUNTY

JACKSON

JOB NO.

J413012

CONTRACT ID.

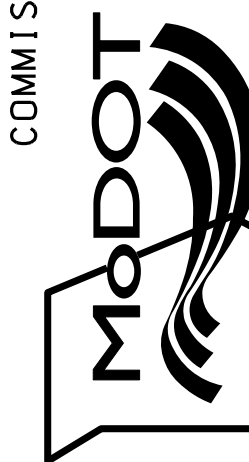
PROJECT NO.

BRIDGE NO.

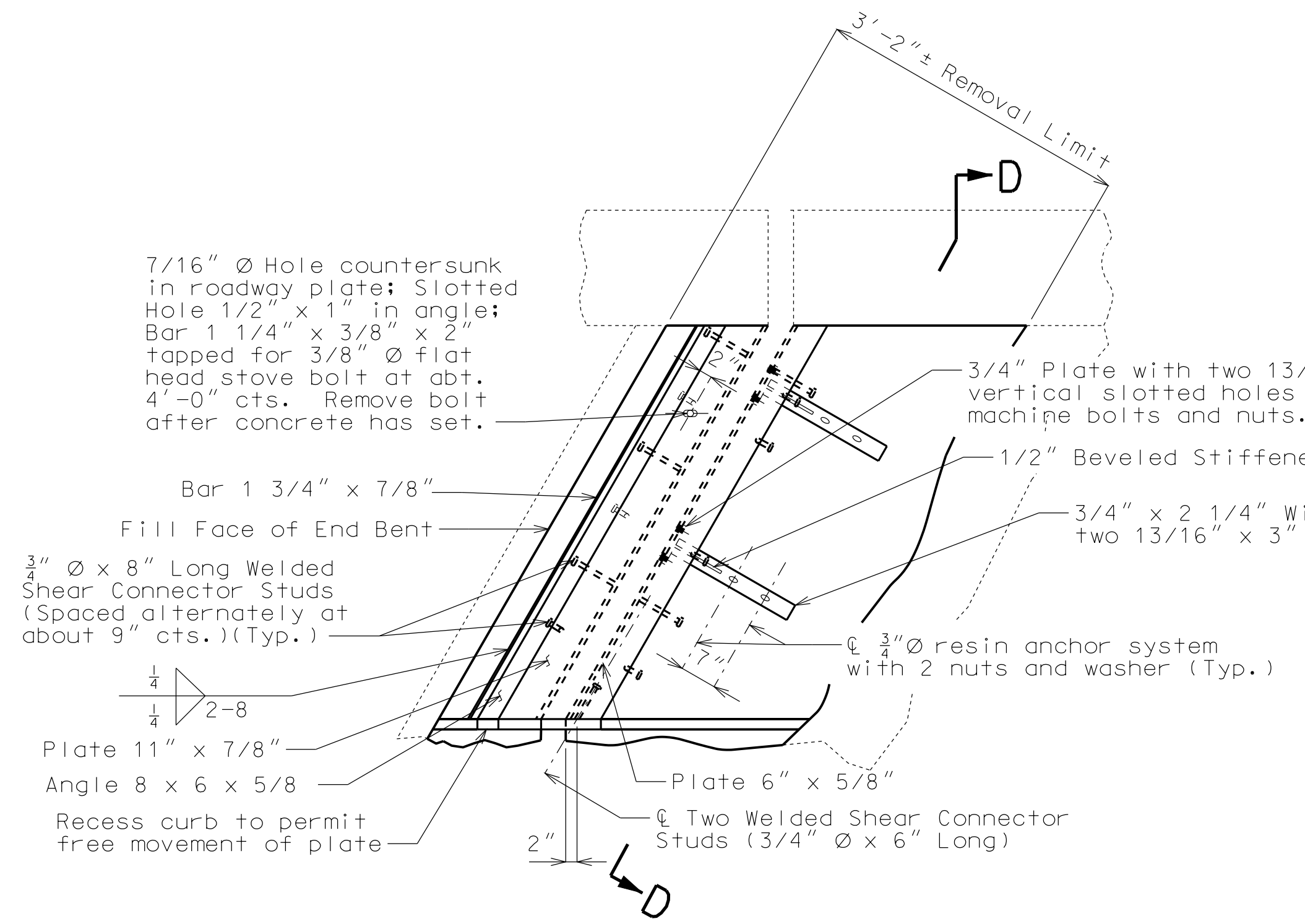
L09362

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

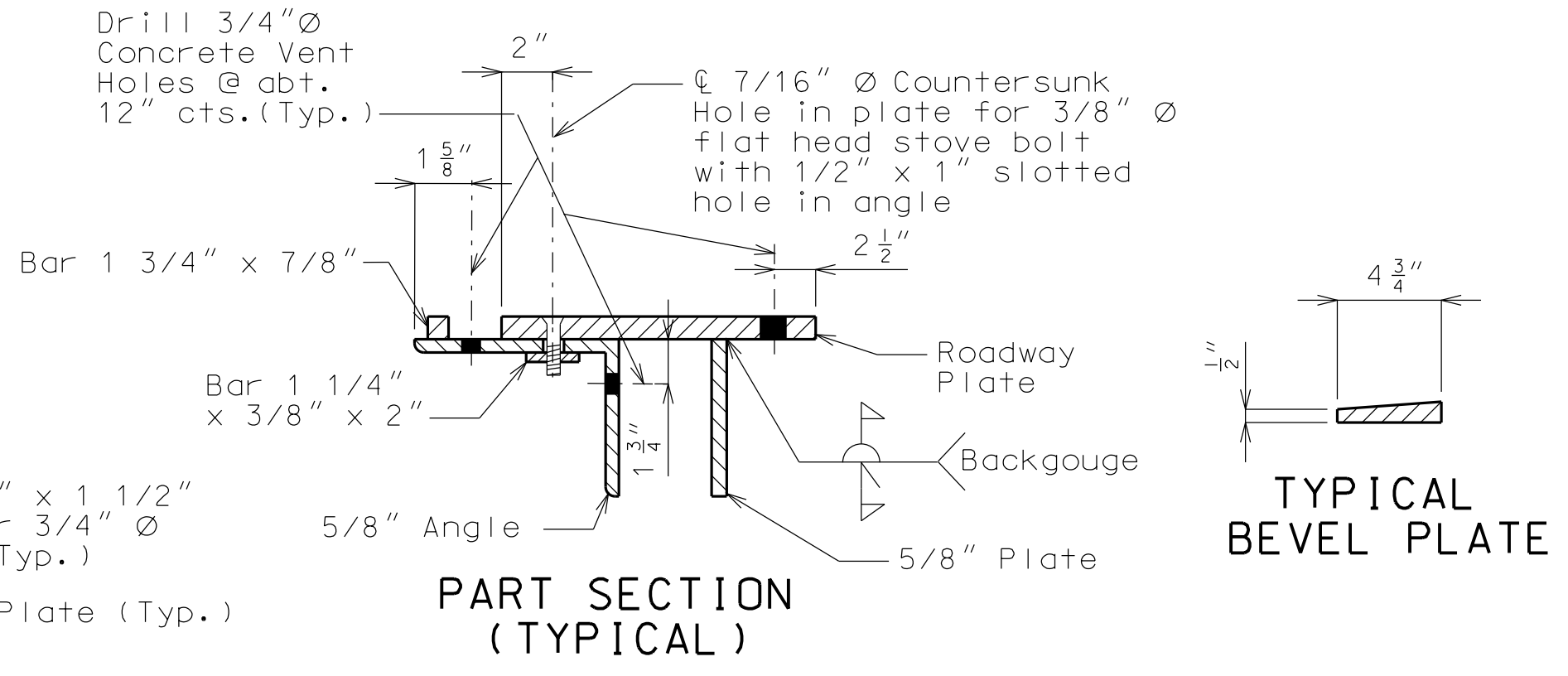


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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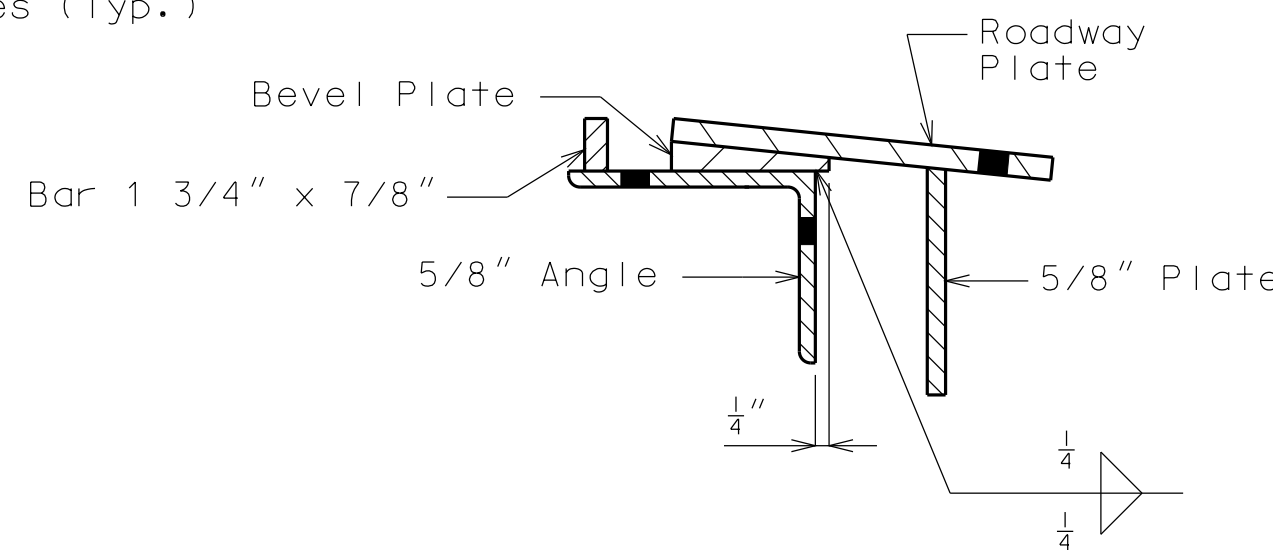


PART PLAN

Note: Concrete Vent Holes not shown for clarity.



PART SECTION (TYPICAL)



PART SECTION THRU BEVEL PLATE

Note: Bevel plates shall be used at end bents when the grade of the sidewalk at expansion device is 3% or more.

GENERAL NOTES:

Expansion device shall be fabricated in one section, except for stage construction and when the length is over 50 feet. A complete joint penetration groove weld splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion device shall be fabricated and installed to the crown and grade of the sidewalk.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 3/16" for each 10° fall or rise in temperature at installation.

Material for the expansion device shall be ASTM A709 Grade 36 structural steel. Anchors for the expansion device shall be in accordance with Sec 1037.

Structural steel for the expansion device shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum) or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

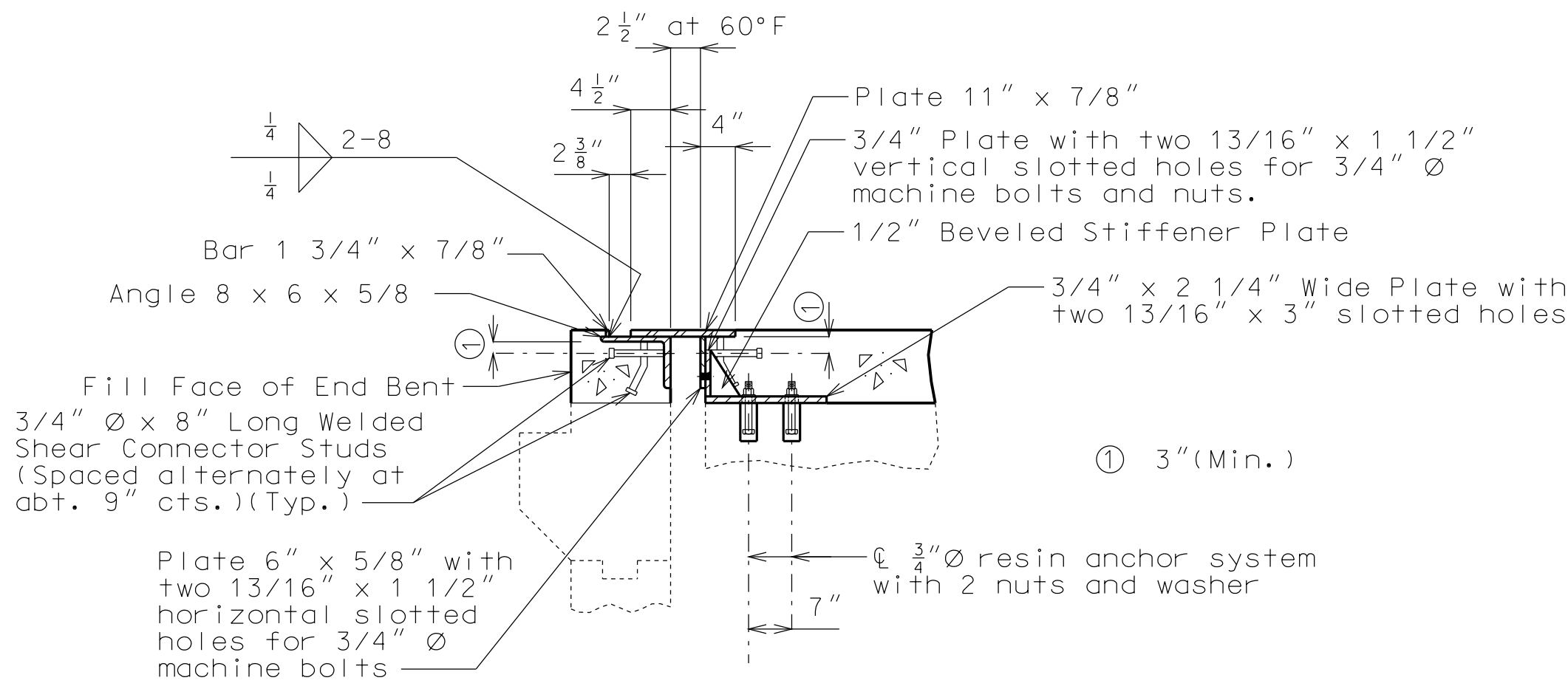
Payment for furnishing, coating or galvanizing and installing the structural steel for the expansion device will be considered completely covered by the contract unit price for Expansion Device (Flat Plate) per linear foot.

Concrete shall be forced under and around flat plate, anchors and angles. Proper consolidation shall be achieved by localized internal vibration. Finishing of the concrete shall be achieved by hand finishing within one foot of the expansion device. The vertical and horizontal concrete vent holes shall be offset from each other. Do not alternate holes at the 12" spacing.

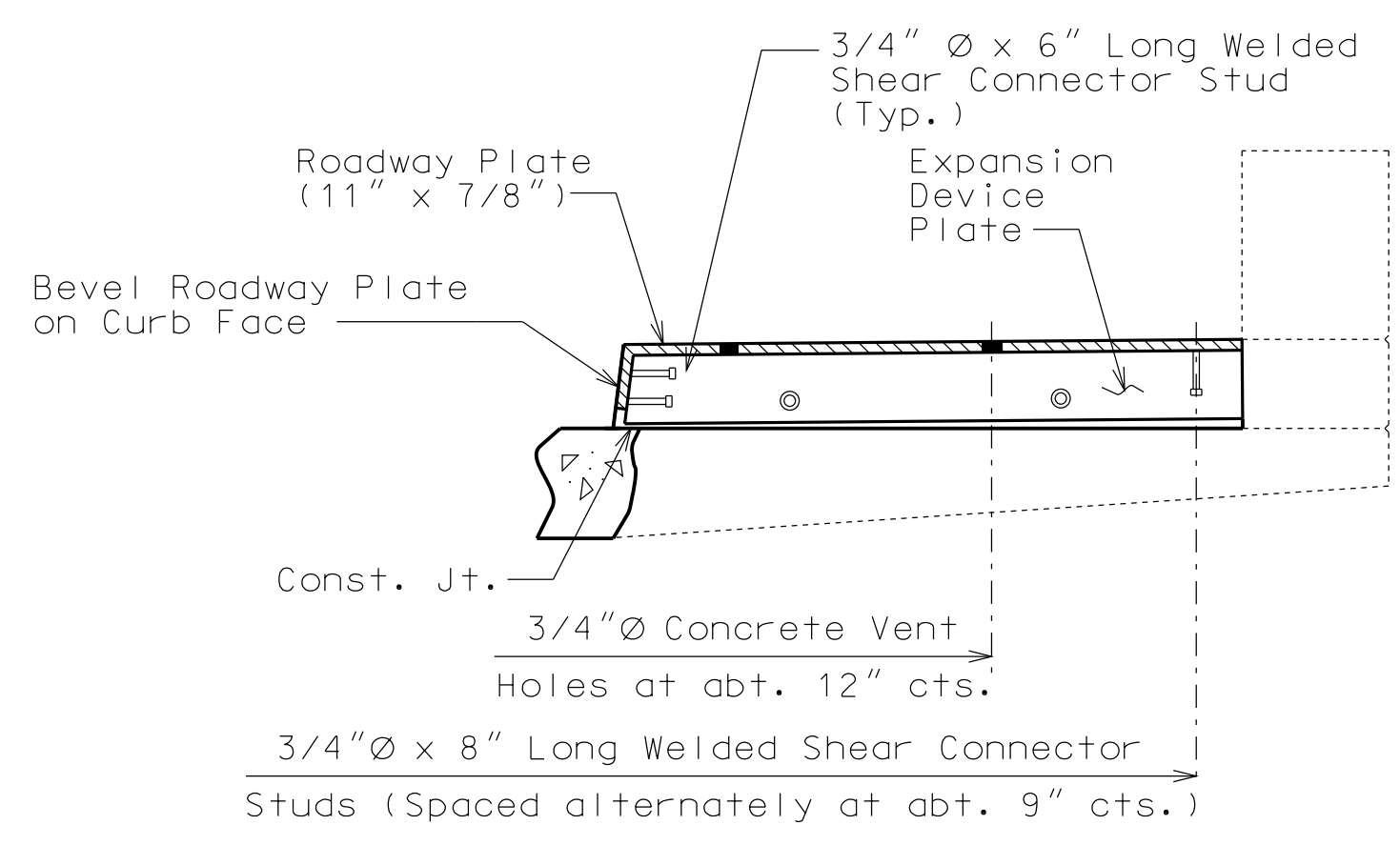
Longitudinal reinforcing steel shall be cut/bent so that ends shall not be more than ±1" from vertical plate at the expansion device.

Complete joint penetration welds utilized in the fabrication of the expansion device shall be nondestructively tested by an approved method.

For resin anchor notes and details of strip seal expansion device, see Sheet No. 3.

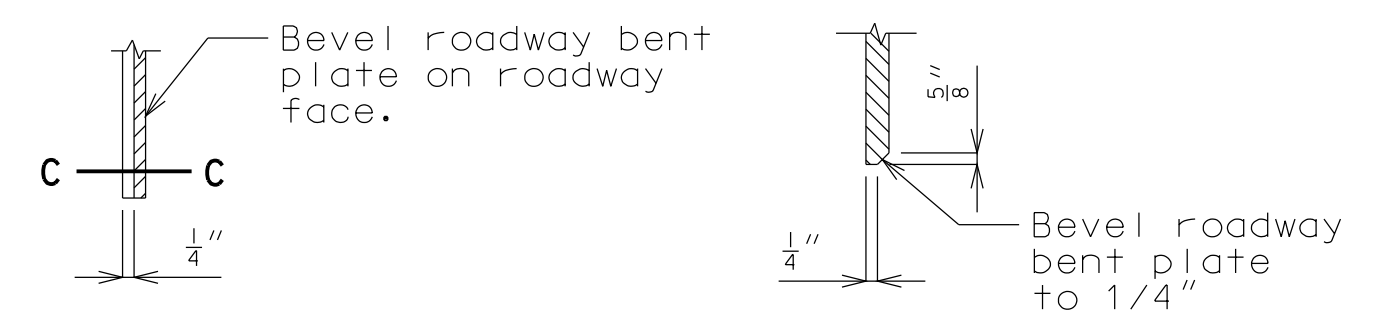


PART SECTION THRU SIDEWALK

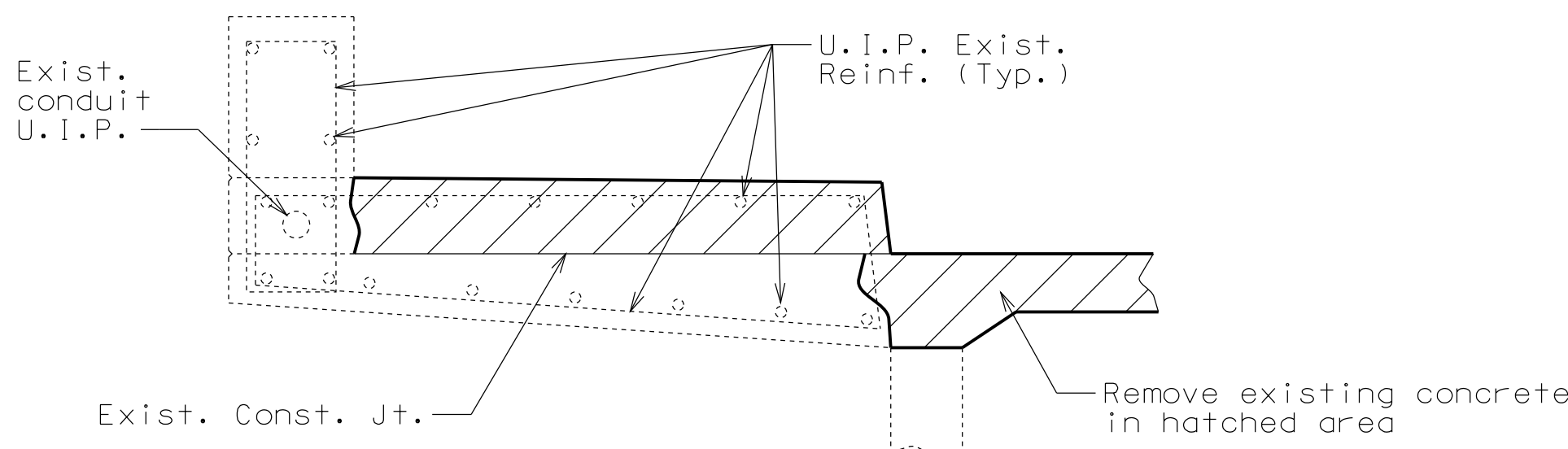


PART SECTION A-A

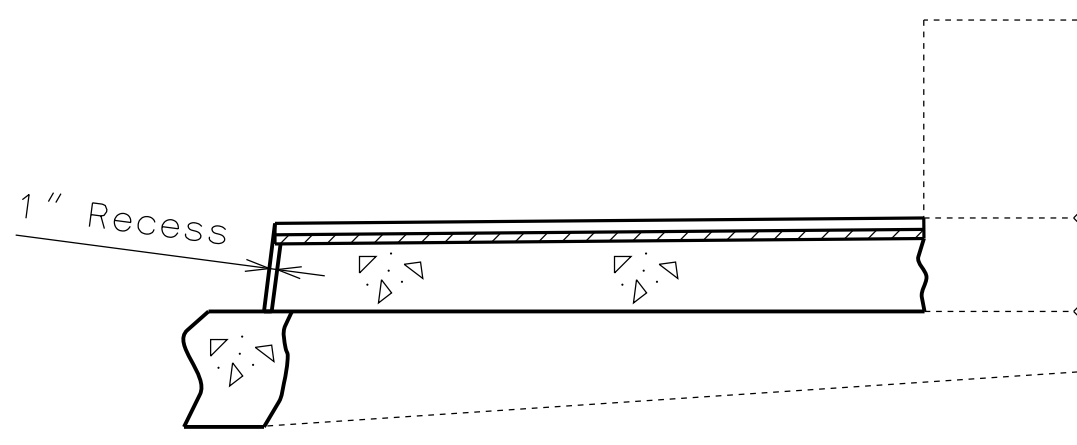
Note: Strip seal expansion device not shown for clarity.



PART ELEVATION AT END OF BEVELED ROADWAY BENT PLATE

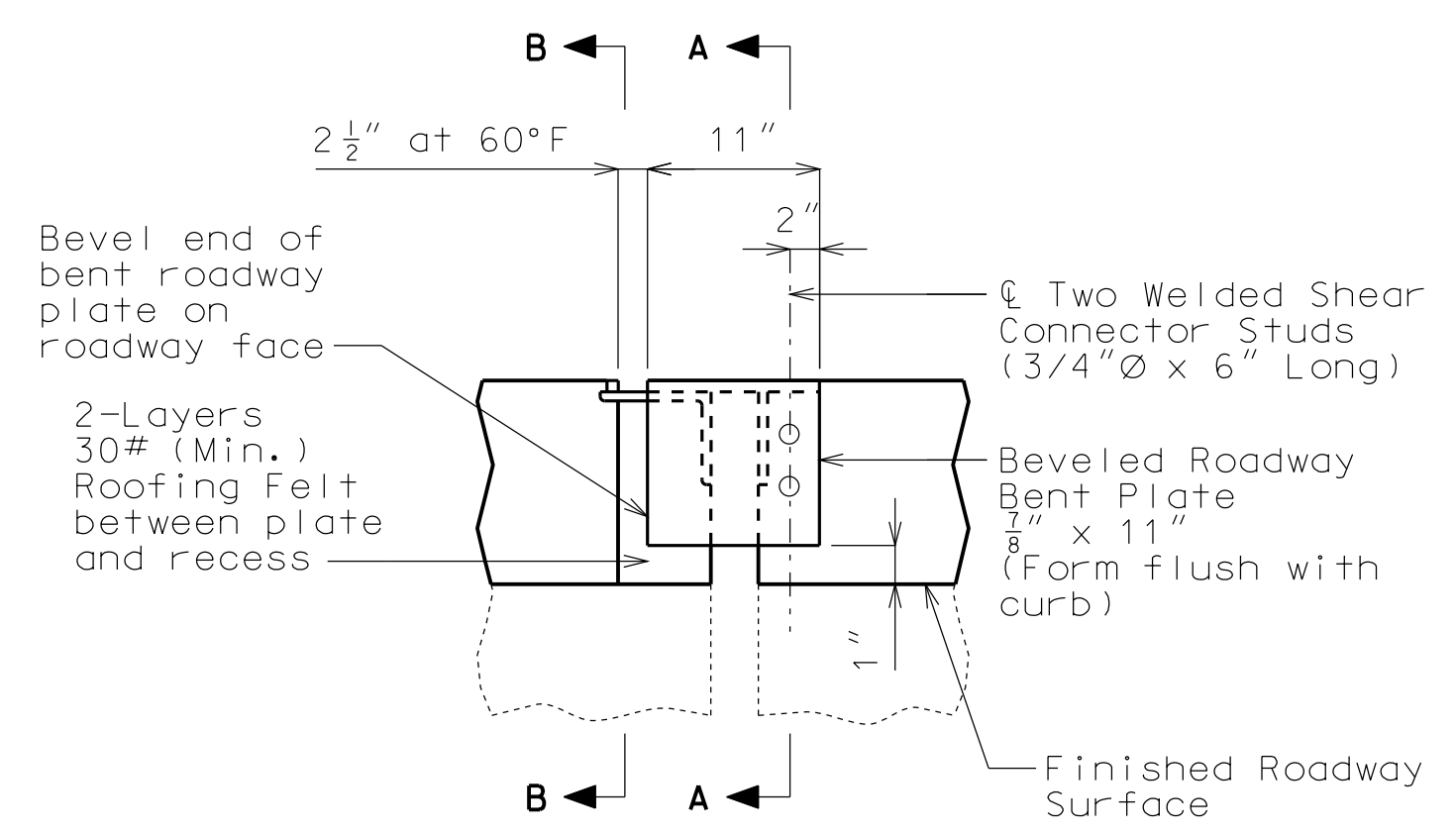


PART SECTION D-D SHOWING REMOVAL



PART SECTION B-B

Note: Strip seal expansion device not shown for clarity.



ELEVATION OF SIDEWALK CURB

DETAILS OF FLAT PLATE EXPANSION DEVICE ON SIDEWALK AT END BENT NO. 7

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

Sheet No. 6 of 8

Detailed Dec. 2012
Checked Dec. 2012

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DATE PREPARED 12/20/2012	
ROUTE I-70	STATE MO
DISTRICT BR	SHEET NO. 6
COUNTY JACKSON	
JOB NO. J413012	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. L09362	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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