

**MISSOURI
HIGHWAYS and TRANSPORTATION
COMMISSION**

JEFFERSON CITY, MISSOURI

SUPPLEMENTAL PLANS TO
JULY 2025 MISSOURI STANDARD PLANS
FOR HIGHWAY CONSTRUCTION

EFFECTIVE April 1, 2026

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MISSOURI STANDARD PLANS FOR HIGHWAY CONSTRUCTION
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EFFECTIVE: 04/01/2026

STANDARD NO.	DRAWING TITLE	NO. OF SHEETS	EFFECTIVE DATE
203.00E	EXCAVATION AND EMBANKMENT – TYPICAL DETAILS	1	08/01/1998
203.02F	UNDERGRADING – TYPICAL DETAILS	2	01/01/2004
203.10D	TABULATED EARTHWORK AND SECTION DATA	1	02/01/2009
203.20G	SUPERELEVATION, SPIRALS AND WIDENING (UNDIVIDED HIGHWAY)	4	07/01/2017
203.21K	SUPERELEVATION, SPIRALS AND WIDENING (DIVIDED HIGHWAY)	3	07/01/2017
203.22A	SUPERELEVATION, SPIRALS AND WIDENING	2	04/01/2024
203.35A	MAILBOX TURNOOTS	1	08/01/1981
203.40G	TYPICAL DETAILS ON AND OFF RAMP	2	10/01/2007
203.41F	TYPICAL DETAILS ON AND OFF RAMPS (ROADWAY WITH 6:1 FORESLOPE)	2	01/01/1995
203.50N	TYPICAL MEDIAN OPENINGS (DIVIDED HIGHWAYS)	2	04/01/2016
203.61B	DRIVEWAY – TYPE I	1	07/01/2020
203.62E	DRIVEWAY – TYPE II	2	07/01/2020
203.63C	DRIVEWAY – TYPE III	2	07/01/2020
203.64E	DRIVEWAY – TYPE IV	2	07/01/2020
203.65B	DRIVEWAY – TYPE V	1	07/01/2020
204.00D	EMBANKMENT CONTROL – MEASURING DEVICES	1	04/01/1983
204.30	PORE PRESSURE MEASUREMENT DEVICES	1	03/01/1996
401.00C	TYPE A2 AND A3 SHOULDERS, SAFETY EDGE SM	3	07/01/2018
413.20	SCRUB SEAL BROOM CONFIGURATION	1	07/01/2004
502.05S	CONCRETE PAVEMENT AND BASE APPURTENANCES FOR 15 FT. JOINT SPACING	4	04/01/2023
502.10L	DOWEL SUPPORTING UNITS	2	07/01/2023
504.00L	CONCRETE APPROACH PAVEMENT	3	10/01/2022
506.20	BIG BLOCK UNBONDED CONCRETE OVERLAY	1	07/01/2021
602.00D	RIGHT-OF-WAY AND DRAIN MARKERS	2	01/01/2003
604.05D	PIPE CULVERT HEADWALLS – TYPE S	2	08/01/2006
604.10E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 18" CONCRETE PIPE	1	07/01/2001
604.11E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 24" CONCRETE PIPE	1	07/01/2001
604.12E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 30" CONCRETE PIPE	1	07/01/2001
604.13E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 36" CONCRETE PIPE	1	07/01/2001
604.14E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 42" CONCRETE PIPE	1	07/01/2001
604.15E	PIPE CULVERT HEADWALLS – ENERGY DISSIPATOR FOR 48" CONCRETE PIPE	1	07/01/2001
604.29C	DROP INLET - TYPE X	2	04/01/2018
604.30G	CONCRETE MANHOLES	2	02/01/2009
604.40G	PIPE COLLARS	2	07/01/2021
604.70	SLOTTED DRAIN	2	03/01/1994
605.10I	PAVEMENT UNDERDRAINAGE	4	06/01/2013
606.00AY	GUARDRAIL	7	07/01/2025
606.01F	MEDIAN PIER PROTECTION	9	04/01/2021
606.22V	BRIDGE ANCHOR SECTION - SAFETY BARRIER CURB ON BRIDGE	6	07/01/2025
606.23J	BRIDGE ANCHOR SECTION - THRIE BEAM RAIL ON BRIDGE	5	07/01/2016
606.30L	GUARDRAIL - TERMINAL ANCHOR ENDS	7	04/01/2021
606.31B	CRASHWORTHY END TERMINALS - TYPE A - GRADING LIMITS	1	10/01/2019
606.40D	ONE-STRAND ACCESS RESTRAINT CABLE	2	07/01/2004
606.41N	REPAIR ONLY: LOW-TENSION GUARD CABLE	7	07/01/2025
606.42	HIGH-TENSION GUARD CABLE	2	07/01/2024

STANDARD NO.	DRAWING TITLE	NO. OF SHEETS	EFFECTIVE DATE
606.50F	MIDWEST GUARDRAIL SYSTEM (MGS)	9	07/01/2025
606.51	MIDWEST GUARDRAIL SYSTEM (MGS) - MEDIAN PIER PROTECTION	2	04/01/2021
606.60C	MIDWEST GUARDRAIL SYSTEM (MGS) - VERTICAL BARRIER TRANSITIONS	6	07/01/2025
606.61	MIDWEST GUARDRAIL SYSTEM (MGS) - 38-INCH TWO-TUBE RAIL TRANSITIONS	3	04/01/2024
606.70B	MIDWEST GUARDRAIL SYSTEM (MGS) - THRIE BEAM RAIL ON BRIDGE	5	04/01/2018
606.80C	MIDWEST GUARDRAIL SYSTEM (MGS) - TERMINAL ANCHOR ENDS	7	07/01/2021
606.81B	MASH - CRASHWORTHY END TERMINALS - TYPE A - GRADING LIMITS	1	10/01/2019
607.10W	CHAIN-LINK FENCE	1	04/01/2024
607.11J	CHAIN-LINK FENCE FOR RETAINING WALLS	1	04/01/2024
607.20H	WOVEN WIRE FENCE	2	04/01/2024
608.00L	PAVED APPROACHES	2	01/01/2026
608.10P	CONCRETE SIDEWALK	1	04/01/2015
608.20E	CONCRETE STAIRS	2	04/01/2015
608.30A	CONCRETE MEDIAN STRIP	1	10/01/2020
608.40A	HANDRAILING	4	01/01/2021
608.50A	CURB RAMPS	4	01/01/2023
609.00R	CONCRETE CURB, CURB AND GUTTER, AND GUTTER	2	01/01/2025
609.15D	PAVED DITCHES	1	07/01/2016
609.40U	DRAIN BASIN, SHOULDER PAVING AND FILL SLOPES AT BRIDGE ENDS	3	10/01/2023
609.60D	ROCK DITCH LINER	1	07/01/2023
609.70C	ROCK LINING FOR CULVERT OUTLET	1	10/01/1981
611.60R	CONCRETE SLOPE PROTECTION	1	07/01/2015
612.20F	SAND FILLED IMPACT ATTENUATORS	1	04/01/2024
613.00T	PAVEMENT REPAIR	4	01/01/2020
614.10U	GRATES AND BEARING PLATES	1	10/01/2021
614.11D	CURVED VANE GRATE AND FRAME	1	01/01/2021
614.30E	MANHOLE AND FRAME COVERS	2	07/01/1996
616.10BF	TEMPORARY TRAFFIC CONTROL DEVICES	9	07/01/2025
616.20E	TEMPORARY TRAFFIC CONTROL PLANS - TWO-LANE ROADWAYS	5	07/01/2025
617.10N	PERMANENT CONCRETE TRAFFIC BARRIER	11	07/01/2025
617.20G	TEMPORARY CONCRETE TRAFFIC BARRIER	8	04/01/2026
619.10K	PAVEMENT EDGE TREATMENT	1	01/01/2026
620.00P	PAVEMENT MARKING	6	10/01/2025
620.10G	TEMPORARY PAVEMENT MARKING	5	07/01/2017
625.00	HOLE PATTERN FOR PAVEMENT SLAB STABILIZATION	1	10/01/1998
626.00J	RUMBLE STRIPS	2	10/01/2025

* REVISED OR ADDED SINCE JULY 2025

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MISSOURI STANDARD PLANS FOR HIGHWAY CONSTRUCTION
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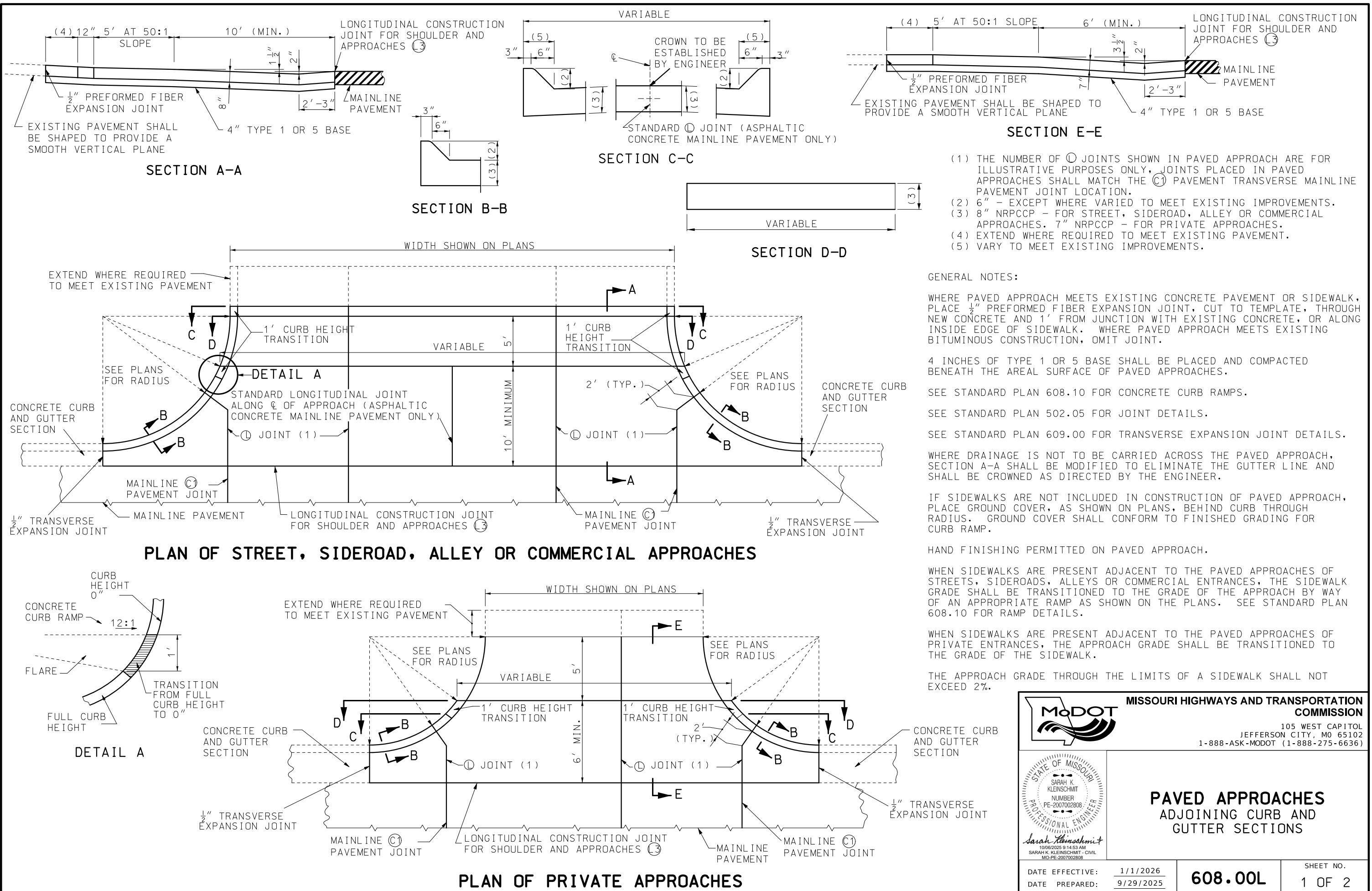
EFFECTIVE: 04/01/2026

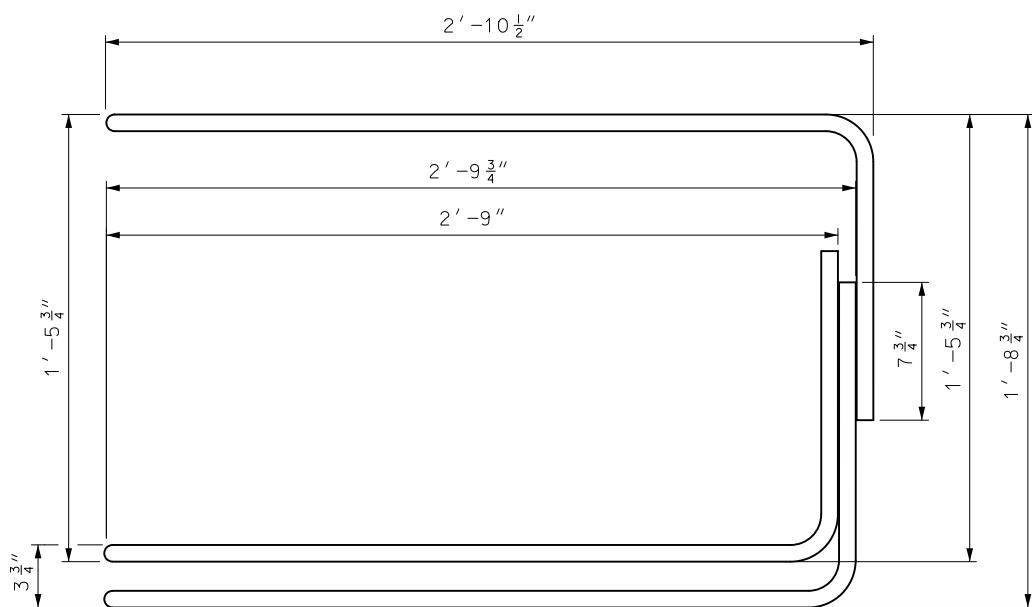
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703.10J	CONCRETE SINGLE BOX CULVERT – STRAIGHT WINGS (SQUARED)	3	01/01/2021	
703.11J	CONCRETE SINGLE BOX CULVERT – FLARED WINGS (SQUARED)	3	01/01/2021	
703.12J	CONCRETE SINGLE BOX CULVERT – STRAIGHT WINGS (LEFT ADVANCE)	3	01/01/2021	
703.13J	CONCRETE SINGLE BOX CULVERT – FLARED WINGS (LEFT ADVANCE)	3	01/01/2021	
703.14J	CONCRETE SINGLE BOX CULVERT – STRAIGHT WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.15E	CONCRETE SINGLE BOX CULVERT – FLARED WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.16	CONCRETE SINGLE BOX CULVERT – CUT SECTIONS	1	01/01/2021	
703.17A	CONCRETE SINGLE BOX CULVERT – MEMBER SIZES AND REINFORCEMENT	14	07/01/2023	
703.37C	CONCRETE BOX CULVERT – EXTERIOR WING REINFORCEMENT	2	04/01/2011	
703.38A	CONCRETE BOX CULVERT – CUTTING DETAILS	2	10/01/2009	
703.40H	CONCRETE DOUBLE BOX CULVERT – STRAIGHT WINGS (SQUARED)	3	01/01/2021	
703.41H	CONCRETE DOUBLE BOX CULVERT – FLARED WINGS (SQUARED)	3	01/01/2021	
703.42H	CONCRETE DOUBLE BOX CULVERT – STRAIGHT WINGS (LEFT ADVANCE)	3	01/01/2021	
703.43H	CONCRETE DOUBLE BOX CULVERT – FLARED WINGS (LEFT ADVANCE)	3	01/01/2021	
703.44H	CONCRETE DOUBLE BOX CULVERT – STRAIGHT WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.45C	CONCRETE DOUBLE BOX CULVERT – FLARED WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.46	CONCRETE DOUBLE BOX CULVERT – CUT SECTION	1	01/01/2021	
703.47A	CONCRETE DOUBLE BOX CULVERT – MEMBER SIZES AND REINFORCEMENT	27	07/01/2023	
703.60E	CONCRETE BOX STRUCTURE – PIPE INLET	1	07/01/2001	
703.80H	CONCRETE TRIPLE BOX CULVERT – STRAIGHT WINGS (SQUARED)	3	01/01/2021	
703.81H	CONCRETE TRIPLE BOX CULVERT – FLARED WINGS (SQUARED)	3	01/01/2021	
703.82H	CONCRETE TRIPLE BOX CULVERT – STRAIGHT WINGS (LEFT ADVANCE)	3	01/01/2021	
703.83H	CONCRETE TRIPLE BOX CULVERT – FLARED WINGS (LEFT ADVANCE)	3	01/01/2021	
703.84H	CONCRETE TRIPLE BOX CULVERT – STRAIGHT WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.85C	CONCRETE TRIPLE BOX CULVERT – FLARED WINGS (RIGHT ADVANCE)	3	01/01/2021	
703.86	CONCRETE TRIPLE BOX CULVERT – CUT SECTIONS	1	01/01/2021	
703.87A	CONCRETE TRIPLE BOX CULVERT – MEMBER SIZES AND REINFORCEMENT	27	07/01/2023	
706.35H	BAR SUPPORTS FOR CONCRETE REINFORCEMENT	1	07/01/2004	
712.40L	STEEL DAMS AT EXPANSION JOINTS	1	10/01/2019	
725.00C	CORRUGATED METAL PIPE INSTALLATION METHODS	5	04/01/2011	
725.31C	METAL CURTAIN WALL AND METAL INLETS	1	07/01/2004	
726.30J	RIGID CULVERT INSTALLATION METHODS	2	04/01/2015	
730.00F	THERMOPLASTIC PIPE INSTALLATION METHODS	*	1	04/01/2026
731.00U	PRECAST MANHOLES	2	07/01/2016	
731.10T	PRECAST DROP INLET	8	01/01/2025	
732.00S	FLARED END SECTION	3	07/01/2021	
732.05D	BEVELED PIPE END TREATMENT	2	01/01/2021	
732.10H	SAFETY SLOPE END SECTION	3	01/01/2021	
733.00	PRECAST CONCRETE BOX CULVERT TIES	1	07/01/2021	
805.00A	SEEDING	1	04/01/2024	
806.10L	TEMPORARY EROSION CONTROL MEASURES	*	6	04/01/2026
808.00	TYPICAL PLANTING ILLUSTRATIONS	3	07/01/2004	

STANDARD NO.	DRAWING TITLE	NO. OF SHEETS	EFFECTIVE DATE	
901.00AB	HIGHWAY LIGHTING – POLES, FOUNDATION & APPURTENCES FOR 30' Mounting Height	4	01/01/2021	
901.01AJ	HIGHWAY LIGHTING – POLES, FOUNDATION & APPURTENCES FOR 45' Mounting Height	6	04/01/2025	
901.02B	HIGHWAY LIGHTING – CABLE, CONDUIT AND TRENCHING	1	04/01/2002	
901.30F	HIGHWAY LIGHTING – BASE MOUNTED CONTROL STATION	2	04/01/2005	
901.80D	HIGHWAY LIGHTING – POWER SUPPLY ASSEMBLY – SECONDARY SERVICE	2	04/01/2002	
901.85B	HIGHWAY LIGHTING SYMBOLS	1	04/01/2018	
902.00Q	TRAFFIC SIGNALS	2	07/01/2023	
902.05	TRAFFIC SIGNALS – ACCESSIBLE PEDESTRIAN SIGNALS	2	04/01/2021	
902.10Q	TRAFFIC SIGNALS – CONTROLLERS CONDUIT LOCATION	1	04/01/2005	
902.15K	TRAFFIC SIGNALS – POWER SUPPLY ASSEMBLY	3	07/01/2004	
902.20G	TRAFFIC SIGNALS – CONCRETE PULL BOXES	3	04/01/2019	
902.21C	TRAFFIC SIGNALS – TELEPHONE INTERCONNECT	1	03/01/1996	
902.30P	TRAFFIC SIGNALS – POST BASES	2	04/01/2024	
902.40R	TRAFFIC SIGNALS – TUBULAR STEEL POSTS	3	04/01/2018	
902.50M	TRAFFIC SIGNALS – INDUCTION LOOP DETECTORS	2	04/01/2020	
902.70Q	TRAFFIC SIGNALS – RIGID SPAN WIRE DETAILS	3	01/01/2022	
902.80L	TRAFFIC SIGNALS – TRAFFIC SIGNAL SYMBOLS	1	04/01/2020	
903.00	DELINEATORS	5	07/01/2025	
903.01J	STANDARD ARROW DETAILS	2	10/01/2016	
903.02AQ	HIGHWAY SIGNING	8	01/01/2025	
903.03BU	POST INSTALLATION AND SIGN MOUNTING DETAILS	*	12	10/01/2025
903.04F	HIGHWAY SIGNING – WEIGH STATION	1	02/01/2012	
903.05L	HIGHWAY SIGNING – TUBULAR SUPPORT STEEL – TYPE S, ONE TUBE	2	10/01/2022	
903.06L	HIGHWAY SIGNING – TUBULAR SUPPORT STEEL – TYPE S, TWO TUBE	2	10/01/2022	
903.07L	HIGHWAY SIGNING – TUBULAR SUPPORT STEEL – TYPE C	2	10/01/2022	
903.08K	HIGHWAY SIGNING – TUBULAR SUPPORT STEEL – TYPE B	2	10/01/2022	
903.10BE	OVERHEAD SIGN TRUSSES – ALUMINUM	6	10/01/2023	
903.12AA	OVERHEAD SIGN TRUSSES – BUTTERFLY AND CANTILEVER STRUCTURAL STEEL	7	01/01/2021	
903.60AC	OVERHEAD SIGN TRUSSES – STRUCTURAL STEEL	5	01/01/2021	

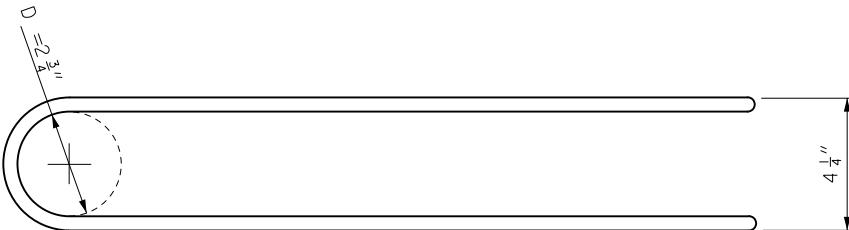
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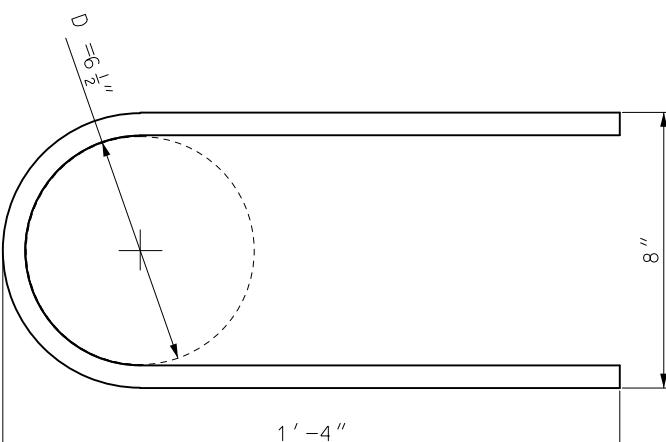




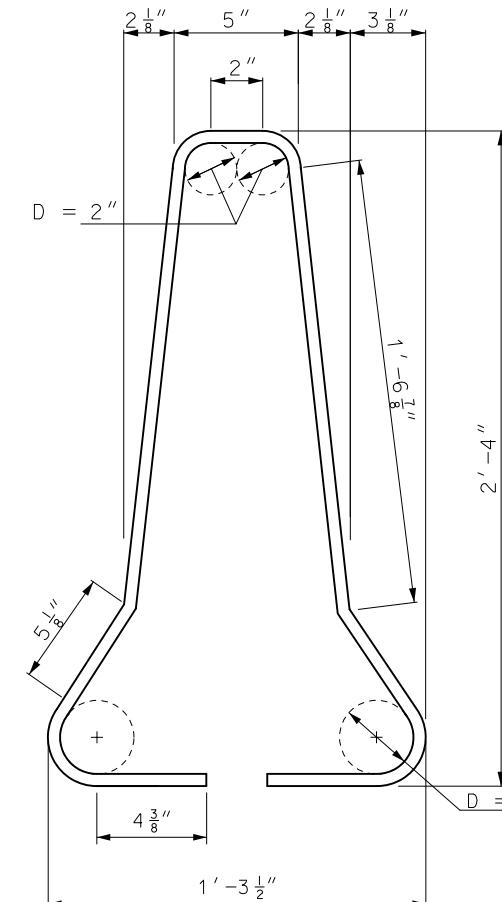
#6 B BAR ELEVATION



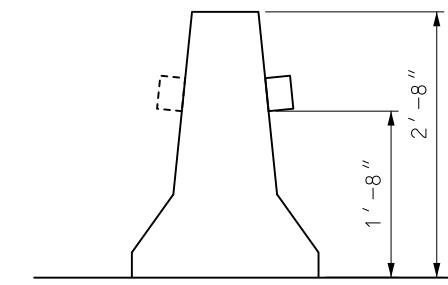
#6 B BAR PLAN



#6 E BAR

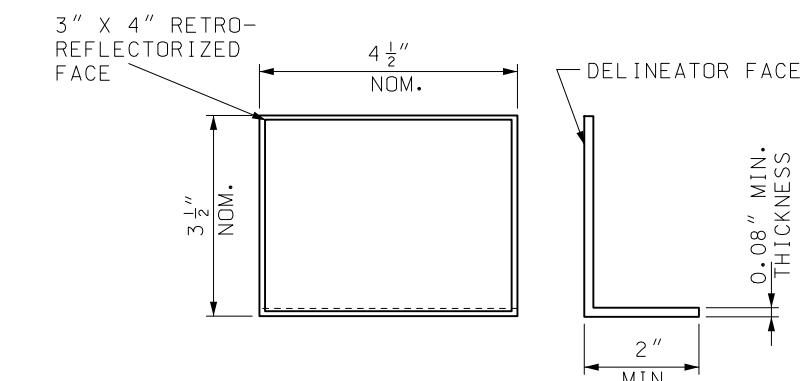


#4 A BARS



TRAFFIC BARRIER DELINEATORS

REFLECTIVE SHEETING APPLIED TO TRAFFIC BARRIER DELINEATORS SHALL BE IN ACCORDANCE WITH SEC 1042.2.7.5.



DELINATEATOR

REINFORCING BARS PER 12'- 6" BARRIER SECTION					
MARK	BAR SIZE	NO. OF BARS	SHAPE OF EACH	LENGTH EACH (NOM.)	WEIGHT
A	4	14		6'-5"	60.8 lbs
C	5	3		12'-2"	38.1 lbs
D	4	2		12'-2"	16.3 lbs
E	6	6		2'-11"	26.3 lbs
LOOP ASSEMBLY					
B	6	6		7'-10"	70.5 lbs

CONCRETE VOLUME 1.3 CU YDS APPROXIMATE WEIGHT 5601 LBS.

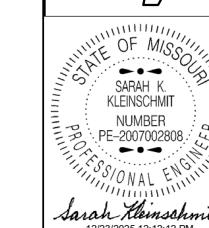
GENERAL NOTE:

BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.



MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

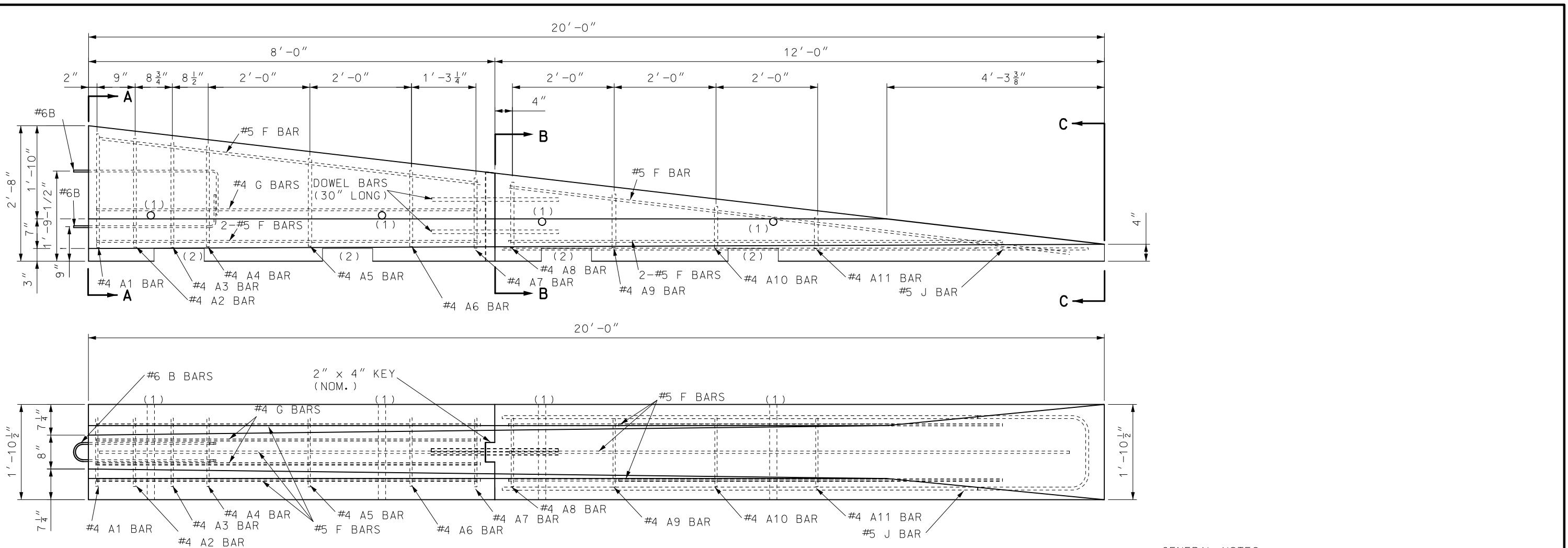


TEMPORARY CONCRETE TRAFFIC BARRIER
TYPE F

DATE EFFECTIVE: 4/1/2026
DATE PREPARED: 12/22/2025

617.20G

SHEET NO.
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PRECAST BARRIER HEIGHT TRANSITION (TEMPORARY INSTALLATIONS ONLY)

(1) OPTIONAL 4 INCH DIAMETER, 11 GAUGE STEEL ROUND MECHANICAL TUBING SLEEVE FOR LIFT HOLE ALLOWED. THE LOCATION OF THE HOLE MAY VARY TO ACCOMMODATE THE DIFFERING WEIGHT DISTRIBUTIONS OF TRANSITION SECTIONS.

(2) 3" X 1'-0" SLOTS FOR LIFTING - TWO PER SECTION. LOCATION TO BE DETERMINED BY CONTRACTOR.

GENERAL NOTES:

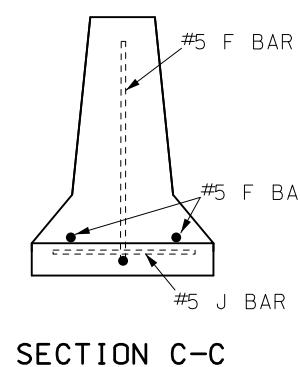
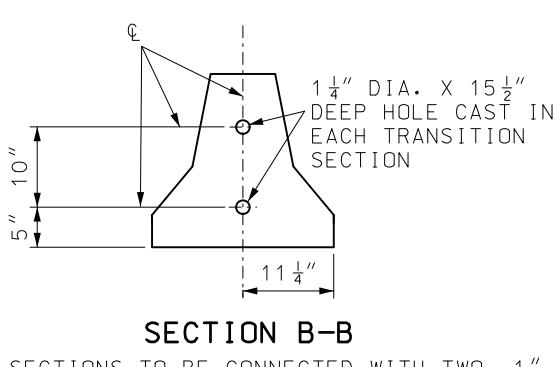
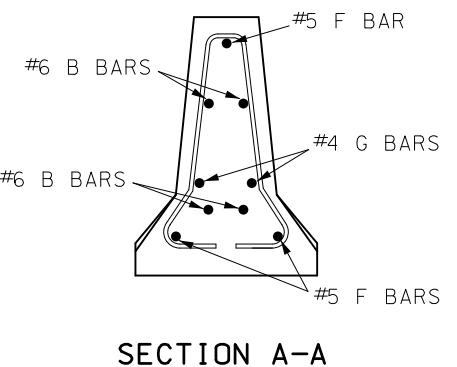
REINFORCING STEEL CLEARANCE TO EDGE OF CONCRETE SHALL BE $1\frac{3}{4}$ " UNLESS OTHERWISE SHOWN.

HEIGHT TRANSITIONS SHALL NOT BE USED ON INTERSTATE ROUTES OR IN LOCATIONS WHERE THE POSTED SPEED PRIOR TO CONSTRUCTION IS GREATER THAN 35 MPH.

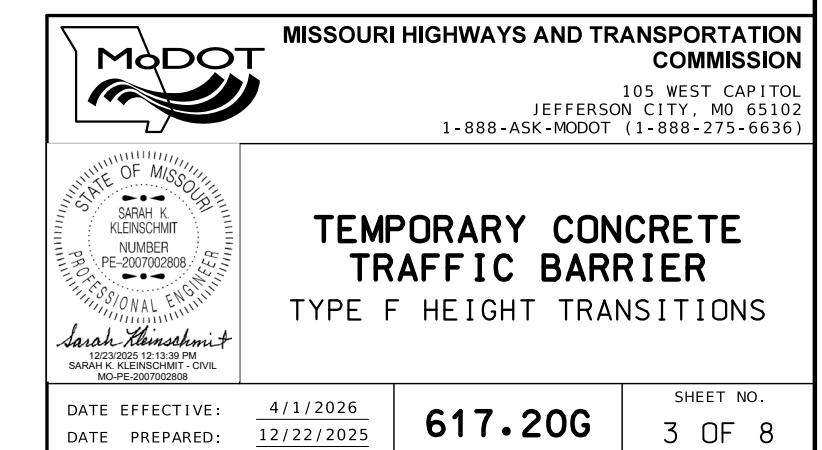
AT NO TIME SHALL THE BARRIERS BE LIFTED OR MOVED BY USE OF THE LOOP BARS.

RETAINER BOLT AND NUT MUST BE USED WITH TRANSITION BARRIER.

AT THE OPTION OF THE CONTRACTOR, HEIGHT TRANSITIONS MAY BE MANUFACTURED IN ONE SECTION. THE PLANS FOR REINFORCEMENT ACROSS JOINT SHALL BE APPROVED BY THE ENGINEER PRIOR TO MANUFACTURE.



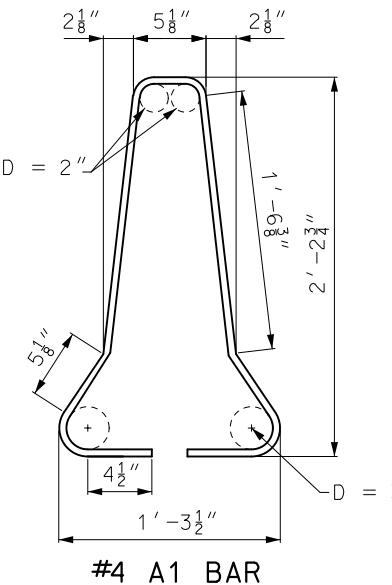
NOTE: SECTIONS TO BE CONNECTED WITH TWO- 1" DIA. BARS OR #8 REINFORCING BARS 30" LONG IN 1 1/4" DIA. HOLES AS SHOWN.



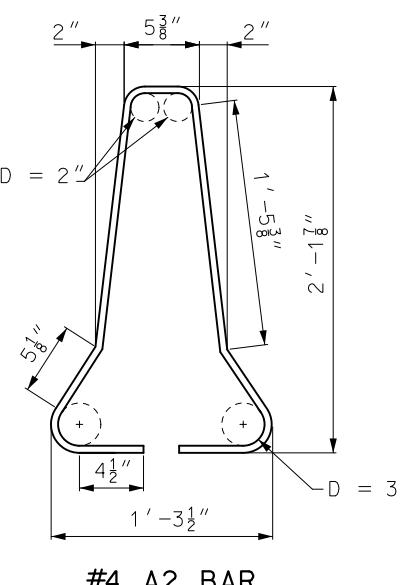
DATE EFFECTIVE: 4/1/2026
DATE PREPARED: 12/22/2025

617.20G

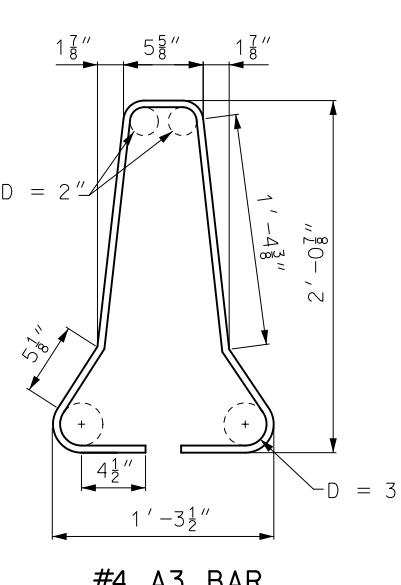
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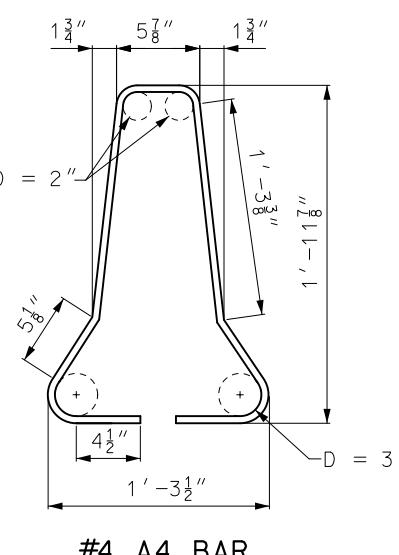
#4 A1 BAR



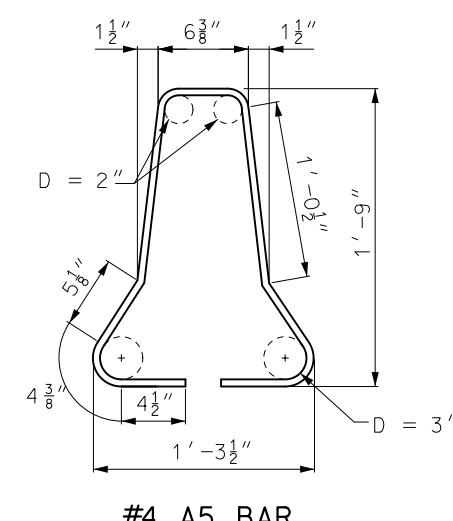
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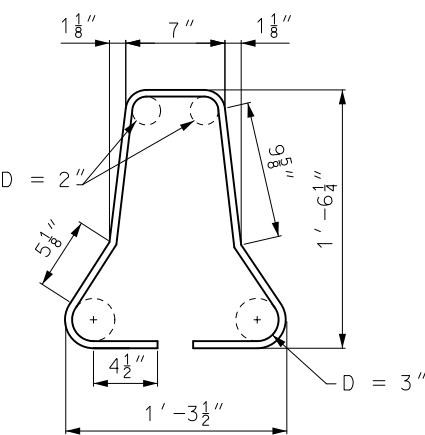
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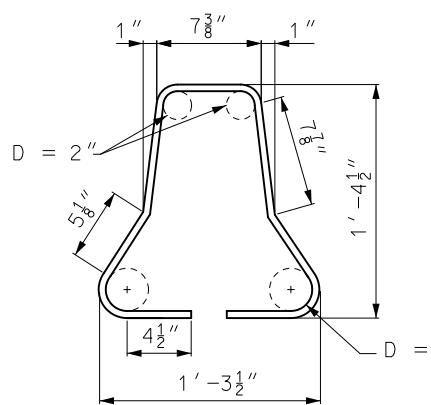
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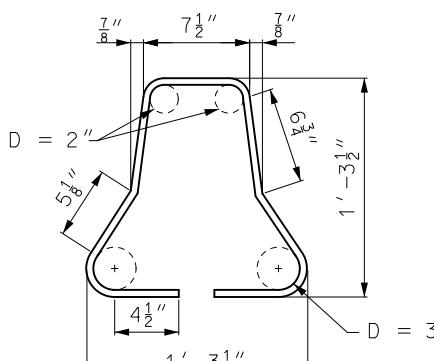
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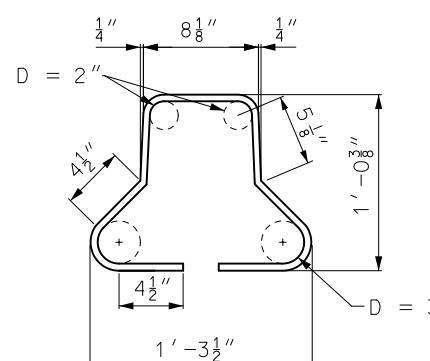
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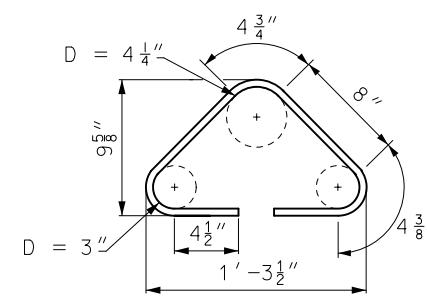
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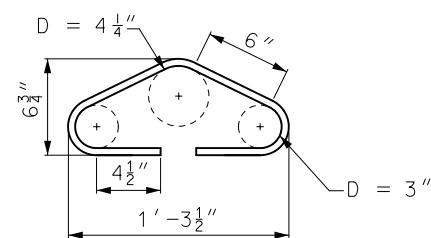
#4 A8 BAR



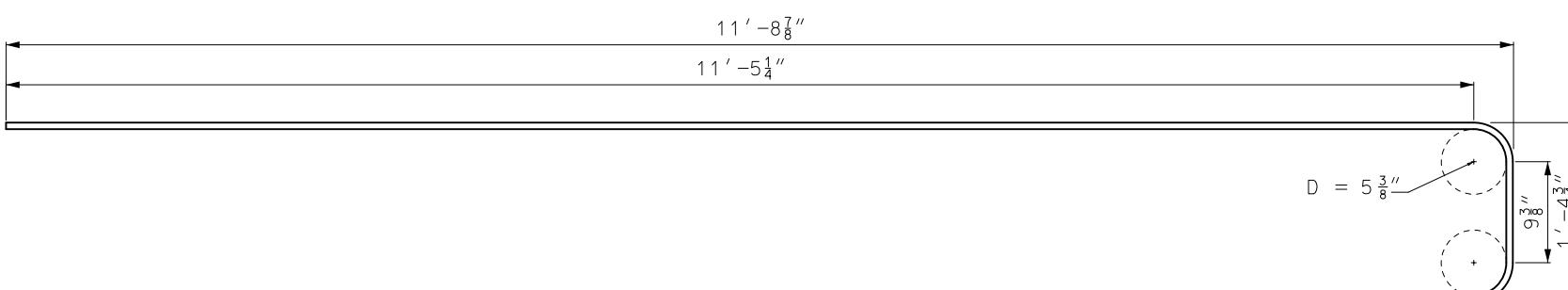
#4 A9 BAR



#4 A10 BAR



#4 A11 BAR



#5 J BAR

NOTE: FOR DETAILS OF B BARS, SEE SHEET 2.

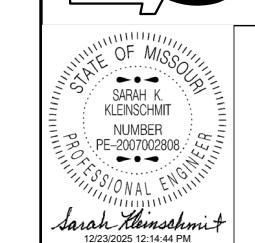
GENERAL NOTES:

BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.



MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



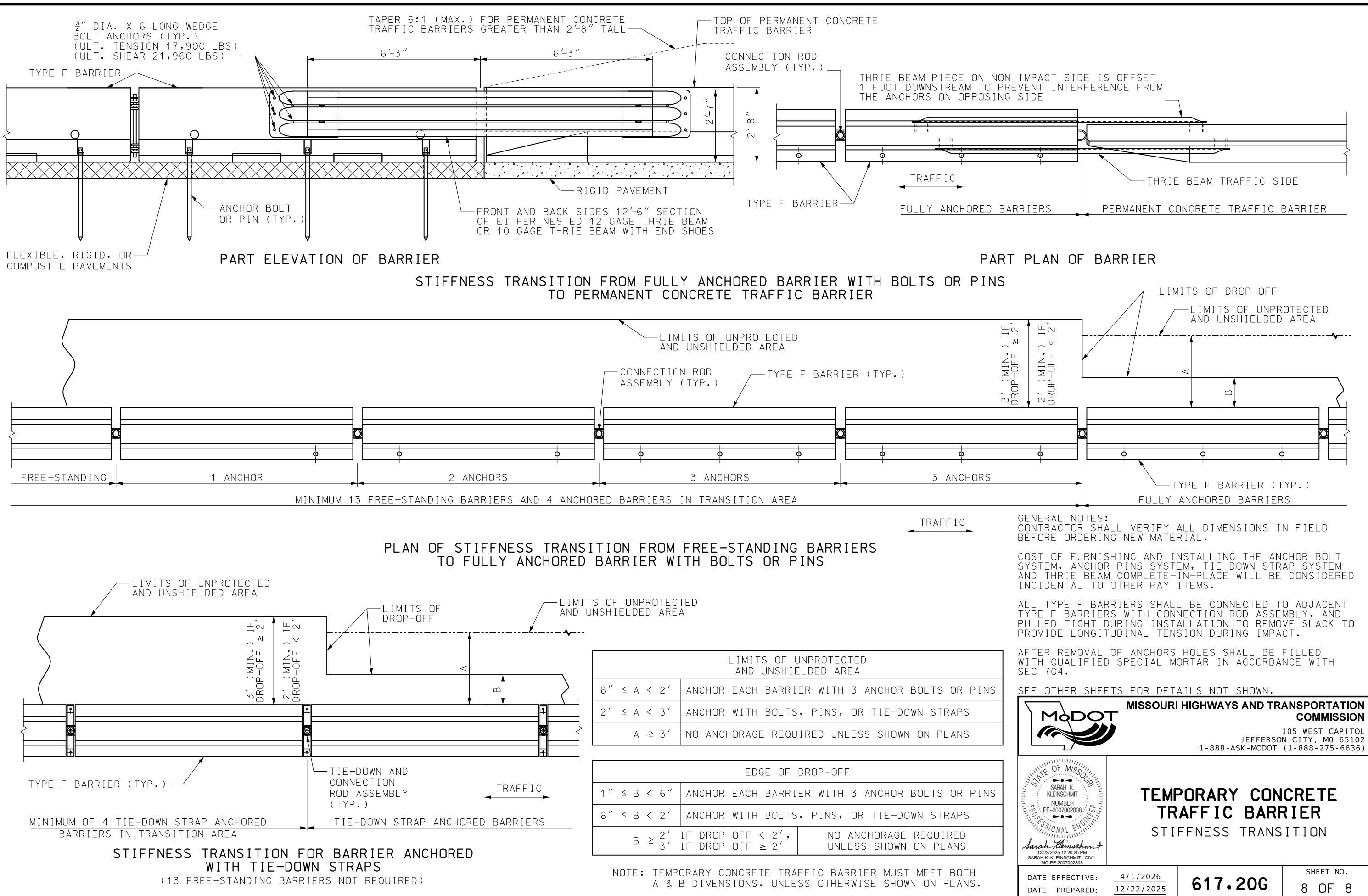
**TEMPORARY CONCRETE
TRAFFIC BARRIER**

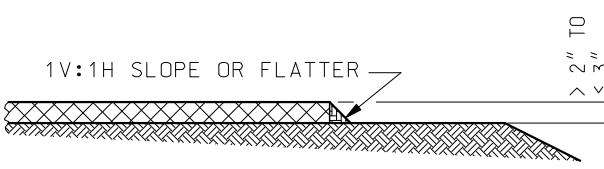
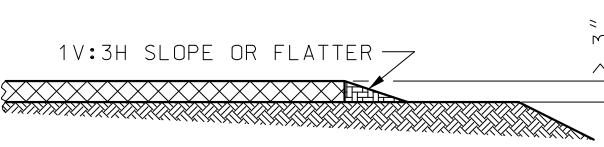
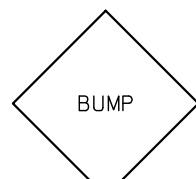
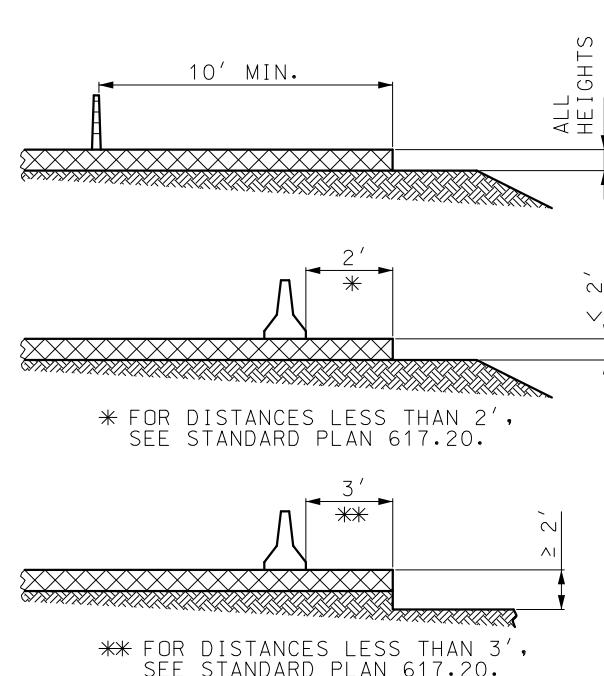
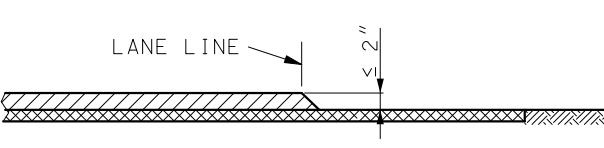
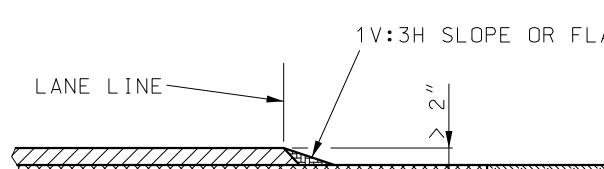
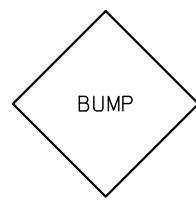
TYPE F HEIGHT TRANSITIONS

DATE EFFECTIVE: 4/1/2026
DATE PREPARED: 12/22/2025

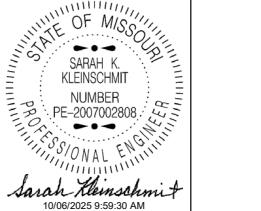
617.20G

SHEET NO.
4 OF 8



CROSS SECTION	CONDITION		TREATMENT	SIGN		
	DIFFERENTIAL	TIME		MAINLINE (1)	SIDE ROAD (2)	
 1V:1H SLOPE OR FLATTER 2" TO 3"	PAVEMENT EDGE DIFFERENTIAL > 2" TO ≤ 3"	NON-WORKING HOURS	WEDGE SLOPE TO 1V:1H OR FLATTER	 W08-17 (3)(4) W08-17p (6)	NO SIGNS REQUIRED	(1) SIGNS SHALL BE SPACED AT APPROXIMATELY ONE-MILE INTERVALS AND LOCATED WITHIN 150 FT. BEYOND ANY STATE ROADS. WHEN A SIGN PLACED AT THE ONE-MILE INTERVAL FALLS WITHIN $\frac{1}{2}$ MILE OF A SIGN PLACED AFTER AN INTERSECTION, THE SIGN PLACED AT THE ONE-MILE INTERVAL MAY BE OMITTED. WHEN SHOULDER DROP-OFF SIGNS WITH UNEVEN LANES ARE BOTH SPECIFIED, ALTERNATING SIGN MESSAGES SHALL BE USED AT ONE-MILE SPACINGS. (2) ON SIDE ROADS WITH POSTED SPEED OF 45 MPH OR GREATER, SIGNS SHALL BE PLACED 150 FT. IN ADVANCE OF INTERSECTION WITH MAINLINE. (3) SIGNS SHALL BE LOCATED ON THE SIDE OF THE ROADWAY WHERE THE PAVEMENT EDGE DIFFERENTIAL EXISTS. (4) SIGNS TO REMAIN VISIBLE UNTIL SHOULDER SHAPING IS COMPLETE. (5) SIGNS SHALL BE LOCATED ON RIGHT SIDE OF NON-DIVIDED HIGHWAYS AND ON BOTH SIDES OF DIVIDED HIGHWAYS WHERE A LANE LINE DIFFERENTIAL EXISTS. (6) WHEN THE SHOULDER DROP-OFF SIGNS ARE IN PLACE FOR GREATER THAN THREE DAYS, THE SHOULDER DROP-OFF PLAQUE SHOULD BE USED IN ADDITION WITH THE SHOULDER DROP-OFF SIGN.
		WORKING HOURS	NO EDGE TREATMENT REQUIRED			
 1V:3H SLOPE OR FLATTER 3"	PAVEMENT EDGE DIFFERENTIAL > 3"	NON-WORKING HOURS	WEDGE SLOPE TO 1V:3H OR FLATTER	 W08-17 (3)(4) W08-17p (6)	 W08-1 (3)	
		WORKING HOURS	DELINATE DIFFERENTIAL WITH CHANNELIZERS			
 10' MIN. ALL HEIGHTS * FOR DISTANCES LESS THAN 2', SEE STANDARD PLAN 617.20. ** FOR DISTANCES LESS THAN 3', SEE STANDARD PLAN 617.20.	ANY PAVEMENT EDGE OR LANE LINE DIFFERENTIAL	NON-WORKING AND WORKING HOURS WHERE PLANS REQUIRE ADJACENT LANE CLOSURE WITH CHANNELIZATION OR PARTIAL LANE CLOSURE WITH BARRIER.	NO EDGE TREATMENT REQUIRED	NO SIGNS REQUIRED	NO SIGNS REQUIRED	
 LANE LINE 2"	LANE LINE DIFFERENTIAL ≤ 2"	NON-WORKING AND WORKING HOURS	NO EDGE TREATMENT REQUIRED	 W08-11 (5)	NO SIGNS REQUIRED	GENERAL NOTES: SIGNS SHALL BE VISIBLE TO TRAFFIC ONLY WHEN AND WHERE CONDITIONS EXIST. FOR ADDITIONAL SIGN SPACING AND DETAILS, SEE STANDARD PLAN 620.10.
 LANE LINE 1V:3H SLOPE OR FLATTER 2"	LANE LINE DIFFERENTIAL > 2"	NON-WORKING AND WORKING HOURS WHERE LANES OPEN TO TRAFFIC	WEDGE SLOPE TO 1V:3H OR FLATTER	 W08-11 (5)	 W08-1	 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)

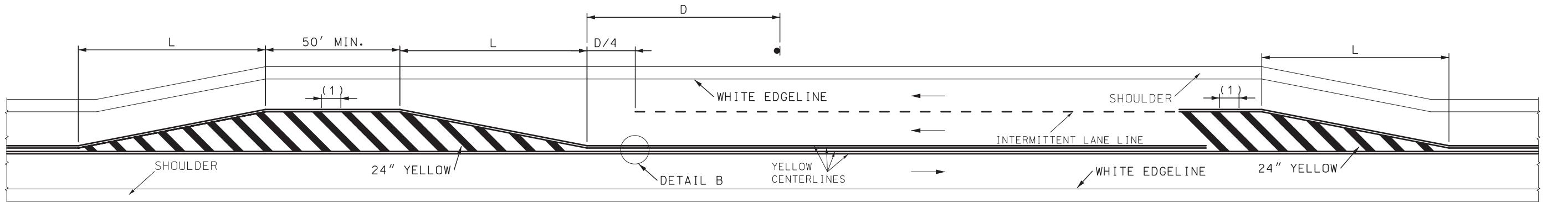
PAVEMENT EDGE TREATMENT



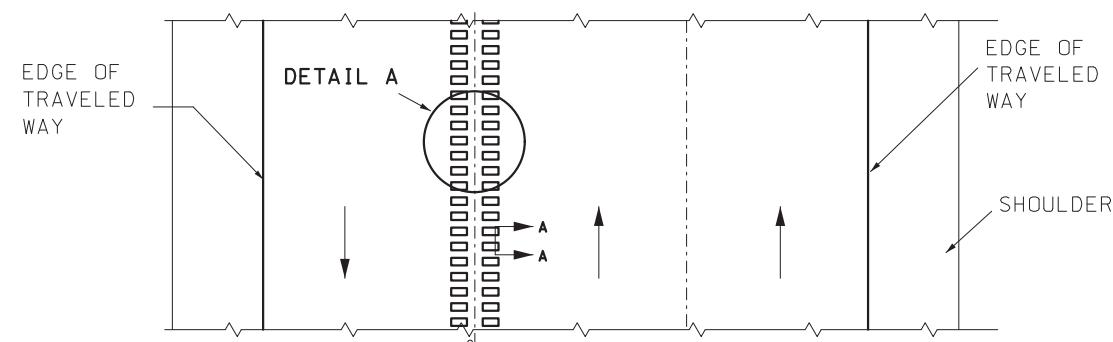
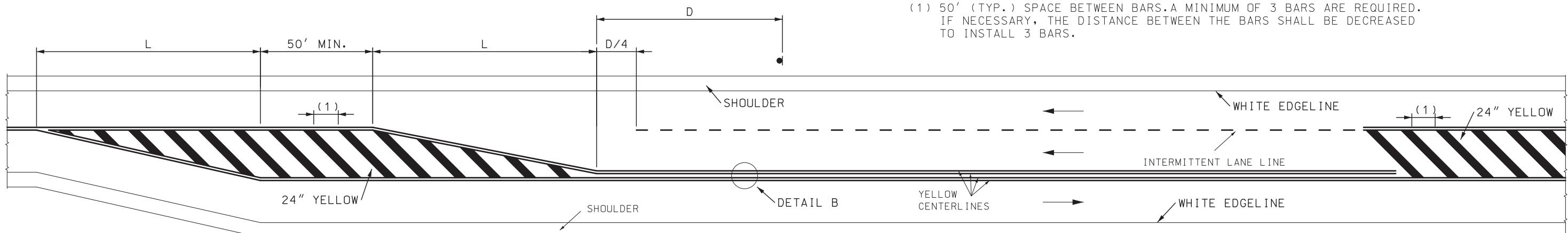
DATE EFFECTIVE: 1/1/2026
 DATE PREPARED: 9/29/2025

619.10K

SHEET NO.
 1 OF 1



(1) 50' (TYP.) SPACE BETWEEN BARS. A MINIMUM OF 3 BARS ARE REQUIRED. IF NECESSARY, THE DISTANCE BETWEEN THE BARS SHALL BE DECREASED TO INSTALL 3 BARS.



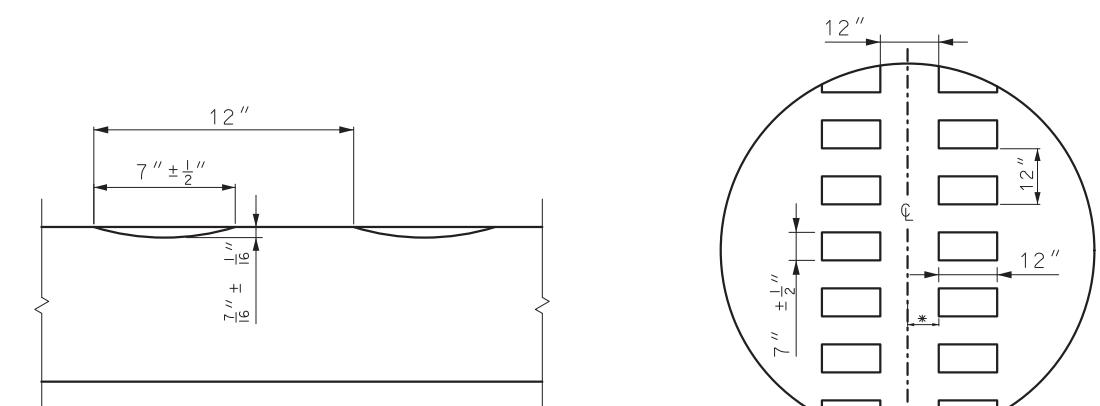
L = $S \times W$ WHEN POSTED SPEED 45 MPH OR GREATER OR $WS^2 / 60$ WHEN POSTED SPEED IS 40 MPH OR LESS. EXTEND DISTANCE (L) AS REQUIRED BY SIGHT DISTANCE CONDITIONS.

L = LENGTH OF TAPER IN FEET.

S = POSTED OR 85 PERCENTILE SPEED IN MPH.

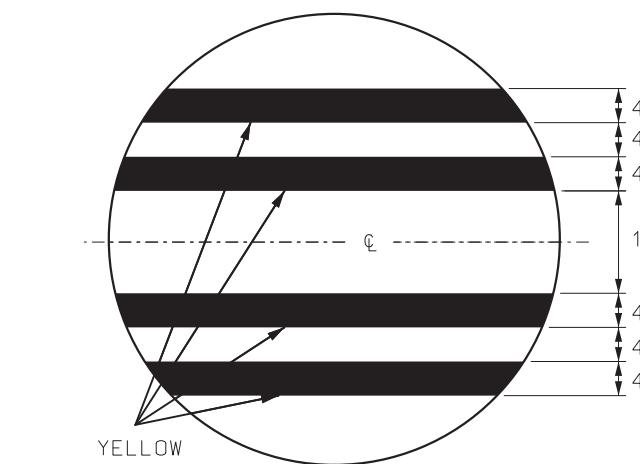
W = OFFSET DISTANCE IN FEET.

D = WARNING SIGN SPACING MEASURED FROM BEGINNING OF THE TAPER TO WARNING SIGN "LANE ENDS MERGE RIGHT"



SECTION A-A

* = LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.



DETAIL B

GENERAL NOTES:

INTERMITTENT LINES SHALL BE 10 FEET IN LENGTH SEPARATED BY 30 FOOT GAPS.

RIGHT SIDE EDDGELINES SHALL BE SOLID WHITE. EDDGELINES SHALL BE CONTINUOUS ACROSS DRIVEWAYS AND MINOR INTERSECTING ROADS.

CENTERLINE RUMBLE STRIPS ON PASSING ROADWAYS SHALL FOLLOW PAVEMENT STRIPING THROUGH TRANSITIONS. SEE CONTRACT PLANS FOR STRIPING DETAILS.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES. INCLUDING ANY LANE TAPER SECTIONS.



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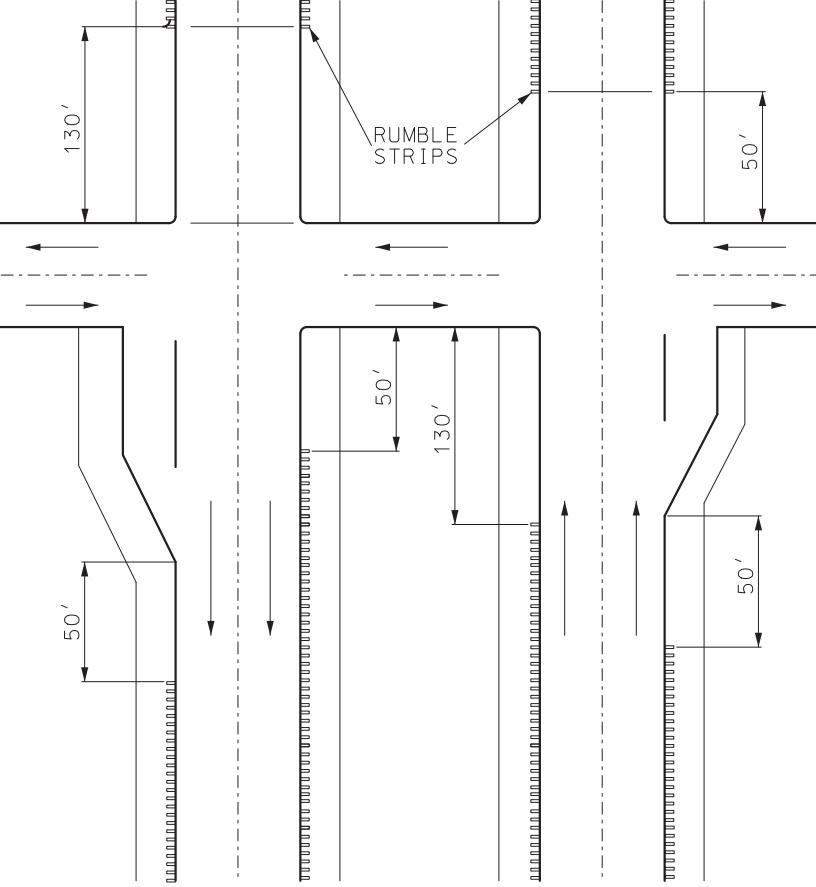
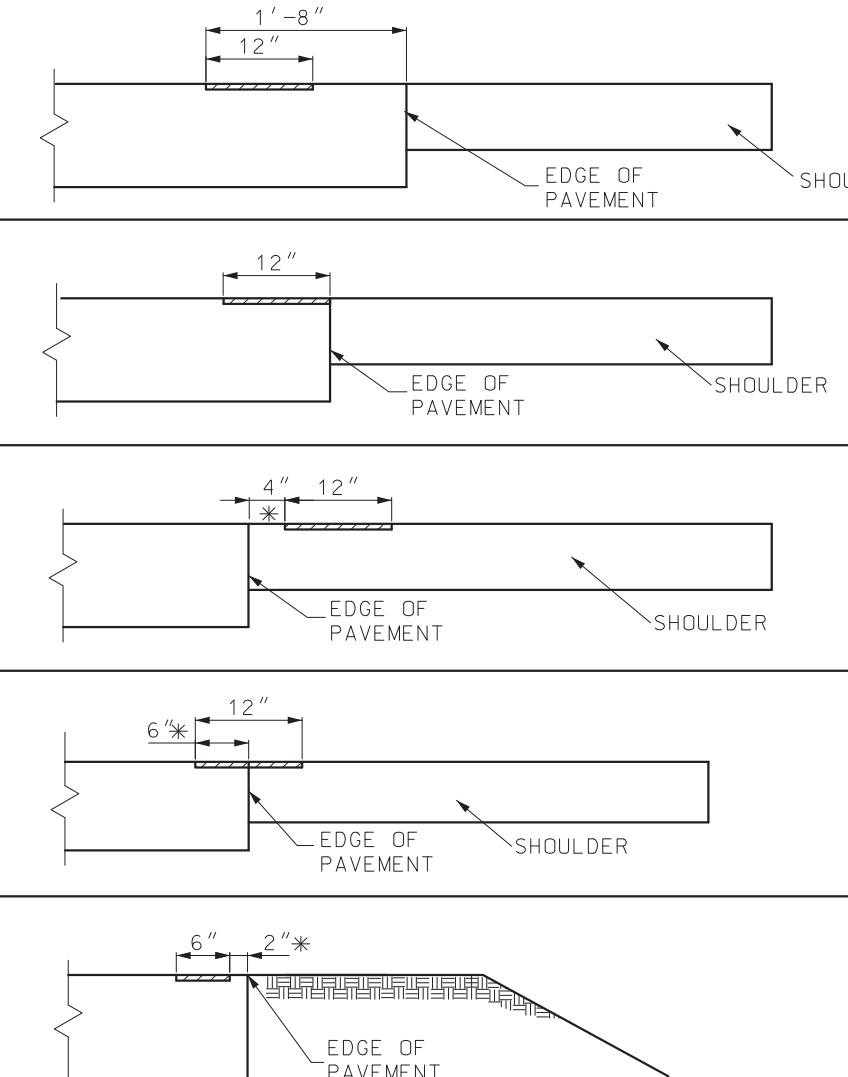
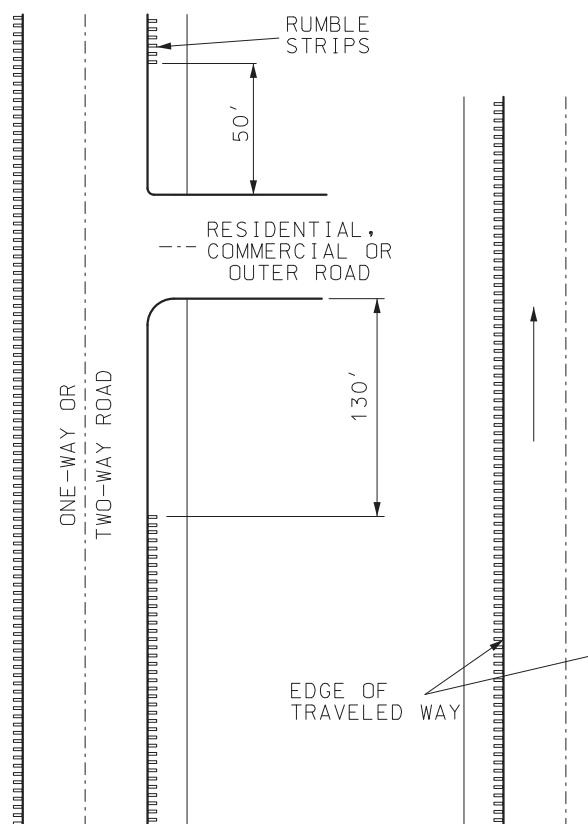
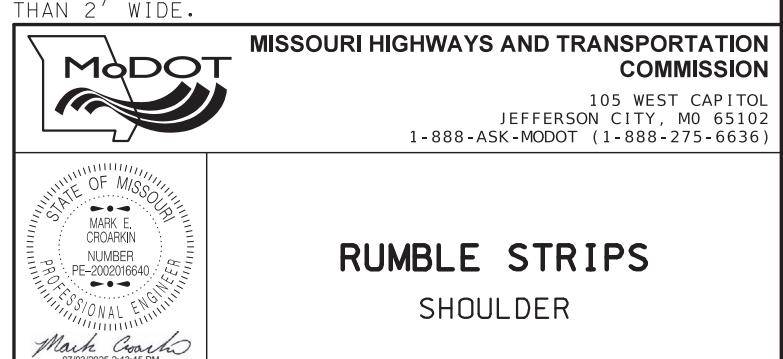
PAVEMENT MARKING

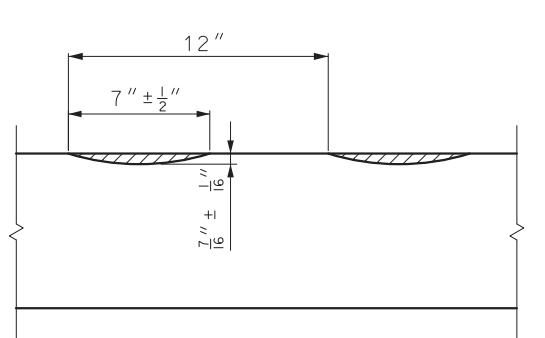
ALTERNATE PASSING LANE

DATE EFFECTIVE: 10/1/2025
DATE PREPARED: 7/2/2025

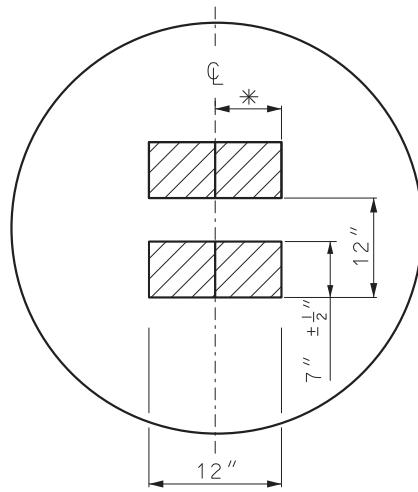
620.00P

SHEET NO.
2 OF 6

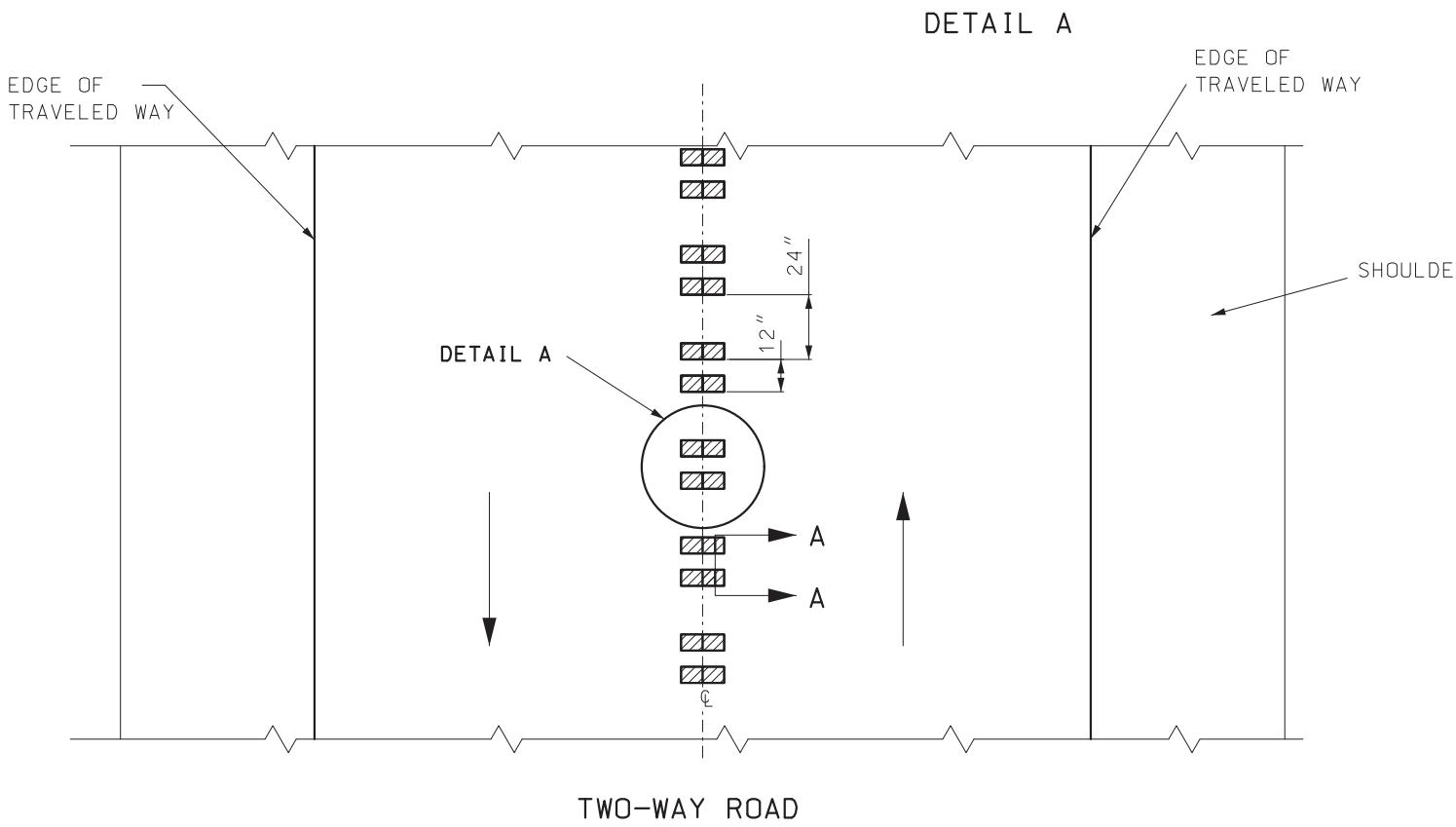
 <p>EXPRESSWAY DIVIDED</p>	<p>14' PAVEMENT STRUCTURES, ALL SHOULDER TYPES</p> <p>13' PAVEMENT STRUCTURES, ALL SHOULDER TYPES</p> <p>PAVEMENT STRUCTURES \leq 12' WITH A2 SHOULDER</p> <p>PAVEMENT STRUCTURES \leq 12' WITH A3 SHOULDER</p> <p>PAVEMENT STRUCTURES \leq 12' WITH EARTH OR AGGREGATE SHOULDER</p>	
 <p>ONE-WAY OR TWO-WAY ROAD</p> <p>RESIDENTIAL, COMMERCIAL OR OUTER ROAD</p> <p>RUMBLE STRIPS</p> <p>RUMBLE STRIPS</p> <p>SHOULDER</p> <p>EDGE OF TRAVELED WAY</p> <p>EDGE OF TRAVELED WAY</p>	<p>* = LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.</p> <p>ACCELERATION LANE SHOWN</p> <p>ACCELERATION OR DECELERATION LANE</p> <p>RUMBLE STRIP PLAN VIEW</p>	<p>GENERAL NOTES:</p> <p>SEE STANDARD PLAN 620.00 FOR PAVEMENT MARKING.</p> <p>RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.</p> <p>ALL RUMBLE STRIPS SHALL BE MILLED.</p> <p>RUMBLE STRIPS SHALL NOT BE MILLED ONTO TRANSVERSE JOINTS.</p> <p>FOR CONCRETE PAVEMENT WITH 15' JOINT SPACING, AT LEAST TWELVE RUMBLE STRIPS SHALL BE MILLED PER PANEL.</p> <p>RUMBLE STRIPS SHALL BE OMITTED IF SHOULDERS ARE LESS THAN 2' WIDE.</p>
<p>INTERSECTIONS</p> <p>RUMBLE STRIP LAYOUTS</p>	<p>RUMBLE STRIP CROSS SECTION VIEW</p>	 <p>RUMBLE STRIPS SHOULDER</p> <p>DATE EFFECTIVE: 10/1/2025 DATE PREPARED: 7/2/2025</p> <p>626.00J</p> <p>SHEET NO. 1 OF 2</p>



SECTION A-A

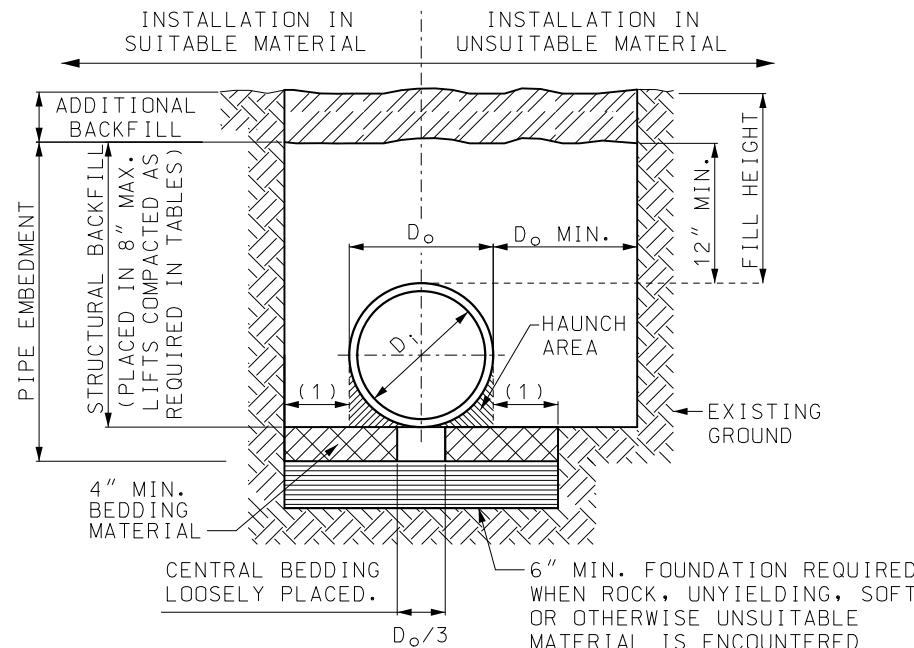


* = LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.



GENERAL NOTES:
SEE STANDARD PLAN 620.00 FOR PAVEMENT MARKING.
RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.
ALL RUMBLE STRIPS SHALL BE MILLED.
CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.
DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.

 	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	RUMBLE STRIPS CENTERLINE	
DATE EFFECTIVE: <u>10/1/2025</u> DATE PREPARED: <u>7/2/2025</u>	626.00J	SHEET NO. 2 OF 2



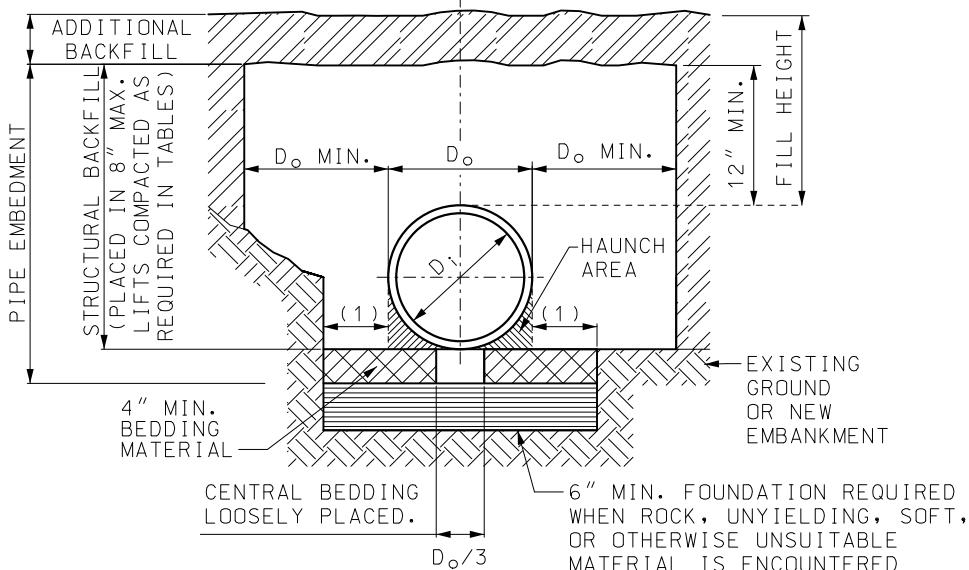
TRENCH INSTALLATION

LEGEND

D_i = INSIDE DIAMETER OF PIPE.
D_o = OUTSIDE DIAMETER OF PIPE.
(1) = (D_o/4)+6" (MIN.).

NOTE:
MULTIPLE PIPE SHALL BE INSTALLED WITH A
MINIMUM CLEARANCE BETWEEN PIPES OF $\frac{1}{2} D_o$
OR 12", WHICHEVER IS GREATER, BUT NOT TO
EXCEED 36".

INSTALLATION PARTIALLY
BELLOW EXISTING GROUND | INSTALLATION ON OR
ABOVE EXISTING GROUND



EMBANKMENT INSTALLATION

CONSTRUCTION SEQUENCE

1. PLACE BEDDING MATERIAL TO GRADE.
2. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
3. INSTALL PIPE TO GRADE.
4. COMPLETE STRUCTURAL BACKFILL ACCORDING TO SPECIFICATIONS.

STRUCTURAL BACKFILL	SPECIFIED NOMINAL DIA OF PIPE (IN.)	DOUBLE WALL POLYETHYLENE				STEEL REINFORCED POLYETHYLENE				POLYVINYL CHLORIDE				DOUBLE WALL POLYPROPYLENE				TRIPLE WALL POLYPROPYLENE			
		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD			
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.		
GRAVEL (AASHTO M145 SOIL TYPE A1 & A3)	12	2'	19'	2'	26'	--	--	2'	32'	2'	61'	2'	21'	2'	29'	--	--	--	--		
	15	2'	19'	2'	27'	--	--	2'	32'	2'	55'	2'	22'	2'	31'	--	--	--	--		
	18	2'	17'	2'	25'	--	--	2'	31'	2'	60'	2'	19'	2'	27'	--	--	--	--		
	24	2'	15'	2'	21'	2'	50'	2'	30'	2'	54'	2'	16'	2'	22'	--	--	--	--		
	30	2'	17'	2'	24'	2'	50'	2'	31'	2'	52'	2'	11'	2'	15'	2'	17'	2'	23'		
	36	2'	13'	2'	19'	2'	50'	2'	30'	2'	53'	--	--	--	--	2'	15'	2'	21'		
	42	2'	13'	2'	19'	2'	50'	--	--	--	--	--	--	--	2'	19'	2'	27'			
	48	2'	12'	2'	18'	2'	30'	--	--	--	--	--	--	--	2'	12'	2'	17'			
	60	2'	13'	2'	20'	2'	30'	--	--	--	--	--	--	--	2'	16'	2'	23'			
COURSE SAND (AASHTO M145 SOIL TYPE A-1-B)	12	2'	17'	2'	23'	--	--	2'	32'	2'	55'	2'	18'	2'	24'	--	--	--	--		
	15	2'	16'	2'	22'	--	--	2'	32'	2'	49'	2'	22'	2'	31'	--	--	--	--		
	18	2'	15'	2'	21'	--	--	2'	31'	2'	53'	2'	16'	2'	21'	--	--	--	--		
	24	2'	14'	2'	20'	2'	50'	2'	30'	2'	48'	2'	13'	2'	17'	--	--	--	--		
	30	2'	13'	2'	19'	2'	50'	2'	31'	2'	46'	2'	7'	2'	10'	2'	17'	2'	23'		
	36	2'	12'	2'	17'	2'	50'	2'	30'	2'	46'	--	--	--	--	2'	15'	2'	21'		
	42	2'	13'	2'	18'	2'	50'	--	--	--	--	--	--	--	2'	19'	2'	27'			
	48	2'	12'	2'	17'	2'	30'	--	--	--	--	--	--	--	2'	12'	2'	17'			
	60	2'	13'	2'	20'	2'	30'	--	--	--	--	--	--	--	2'	16'	2'	23'			
SILTY SAND OR SILTY GRAVEL (AASHTO M145 SOIL TYPES A-2-4 & A-2-5)	12	3.3'	10'	2'	17'	--	--	2.7'	16'	2'	33'	2.8'	11'	2'	19'	--	--	--	--		
	15	3.4'	10'	2'	16'	--	--	2.7'	16'	2'	33'	2.8'	11'	2'	23'	--	--	--	--		
	18	3.6'	10'	2'	15'	--	--	2.7'	15'	2'	32'	3'	11'	2'	16'	--	--	--	--		
	24	3.8'	9'	2'	14'	2'	50'	2.7'	15'	2'	31'	3.3'	10'	2'	13'	--	--	--	--		
	30	3.7'	10'	2'	14'	2'	50'	2.8'	15'	2'	31'	3.4'	6'	2'	7'	3'	10'	2'	17'		
	36	4.2'	7'	2'	12'	2'	50'	2.8'	14'	2'	31'	--	--	--	--	3.3'	10'	2'	15'		
	42	4.2'	7'	2'	13'	2'	50'	--	--	--	--	--	--	--	3.2'	11'	2'	20'			
	48	4.5'	6'	2'	12'	2'	30'	--	--	--	--	--	--	--	3.1'	9'	2'	13'			
	60	3.3'	7'	2'	14'	2'	30'	--	--	--	--	--	--	--	2'	10'	2'	17'			

NOTE:

SPD = STANDARD PROCTOR DENSITY.

FILL HEIGHT MEASURED FROM THE TOP OF PIPE TO SURFACE.

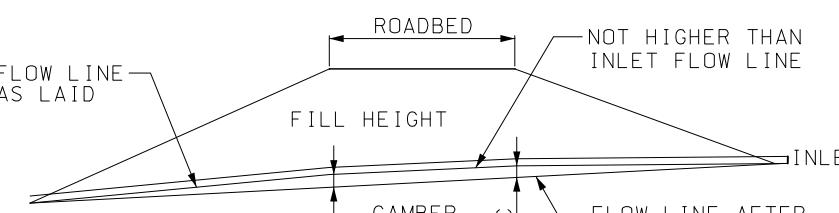
LIMITS ACCOUNT FOR SHORT-TERM TEMPORARY WATER TABLE DEPTHS OF FIVE FEET ABOVE SPRINGLINE. TABLES ARE NOT APPLICABLE FOR LONG-TERM PERMANENT WATER TABLE DEPTHS ABOVE SPRINGLINE.

WHEN PIPES ARE USED AS GROUP A, FILL HEIGHTS ARE LIMITED TO SHADED VALUES.

MINIMUM COVER FOR CONSTRUCTION LOADS

NOMINAL PIPE DIA. (IN.)	MINIMUM COVER (FT) FOR INDICATED AXLE LOADS (THOUSANDS OF POUNDS)			
	18-50	50-75	75-110	110-150
12-36	2.0	2.5	3.0	3.0
42-60	3.0	3.0	3.5	4.0

MINIMUM COVER LIMITS ARE NOT SUFFICIENT FOR SILTY SAND OR SILTY GRAVEL STRUCTURAL BACKFILL COMPACTED TO 90% STANDARD PROCTOR DENSITY. THE CONTRACTOR SHALL PROVIDE MINIMUM COVER PLUS ANY ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. IN UNPAVED SITUATIONS, THE SURFACE MUST BE MAINTAINED TO A LEVEL AND NON-RUTTED CONDITION.

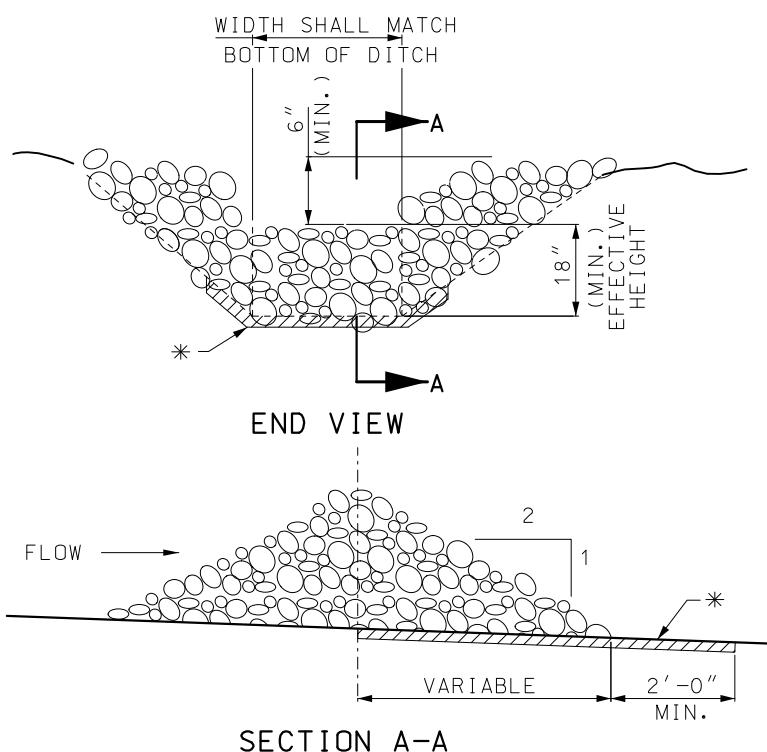


NOTE:
ON YIELDING SOIL, PIPE CULVERTS SHALL BE PLACED ON A CAMBERED FLOW LINE. THE AMOUNT OF CAMBER WILL VARY WITH SOIL CONDITION AND WILL BE SPECIFIED ON THE DESIGN PLANS.

TYPICAL CAMBERED FLOW LINE



ROCK DITCH CHECK



* GEOTEXTILE LINING MAY BE INSTALLED AS REQUIRED BY THE ENGINEER.

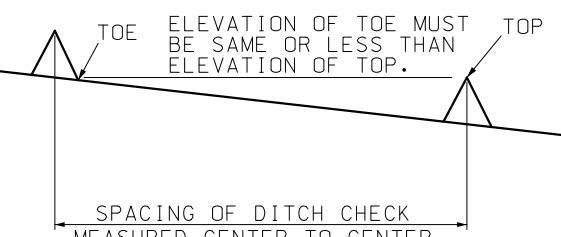
NOTE:

ROCK DITCH CHECK IN THE CLEAR ZONE SHALL BE REMOVED OR LEVELED (IF ALLOWABLE) AFTER THE VEGETATION HAS SUFFICIENTLY MATURED TO PROTECT THE DITCH OR SWALE.

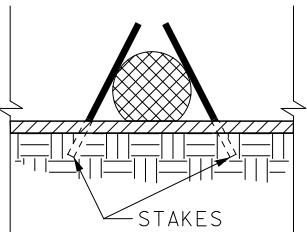
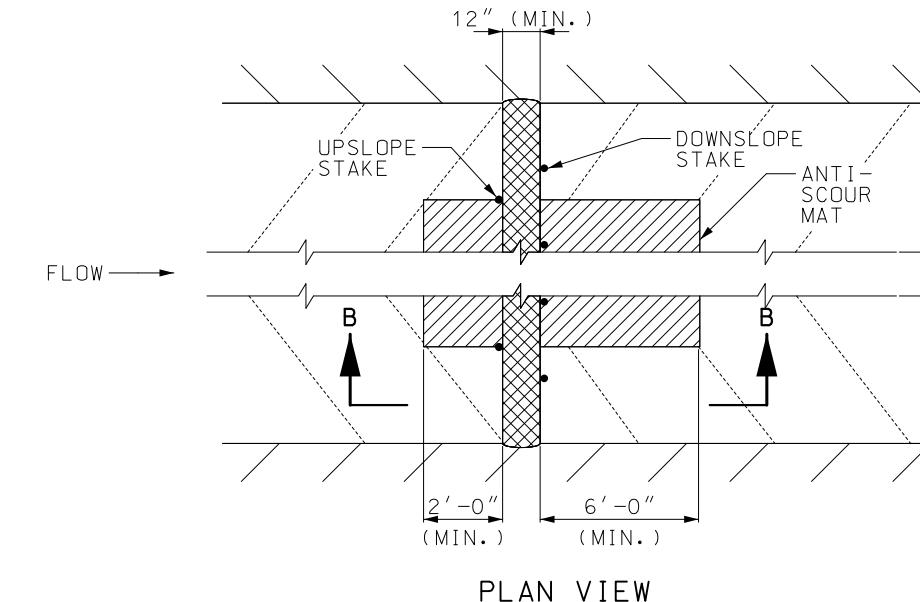
EXAMPLE DITCH CHECK SPACING FOR STANDARD HEIGHTS (FT.)

DITCH % SLOPE %	SPACING FOR 9" EFF. HEIGHT	SPACING FOR 18" EFF. HEIGHT
0.5	150	300
1.0	75	150
1.5	50	100
2.0	37	75
2.5	30	60
3.0	25	50
3.5	21	43
4.0	19	38
4.5	16	33
5.0	15	30
5.5	13	27
6.0	12	25
6.5	11	23
7.0	10	21
7.5	10	20
8.0	9	19
8.5	9	18
9.0	8	17
9.5	8	16
10.0	7	15

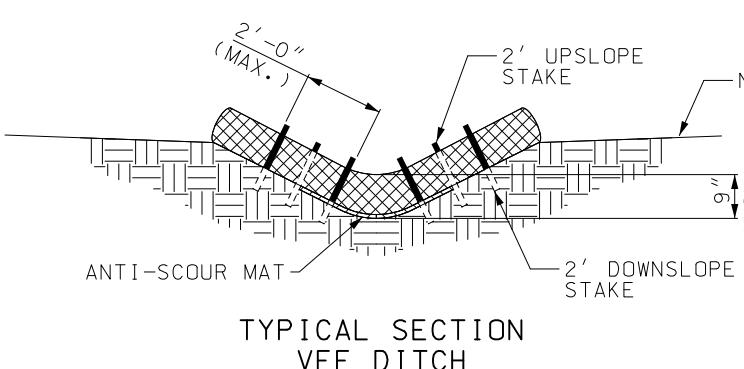
MINIMUM DITCH CHECK SPACING



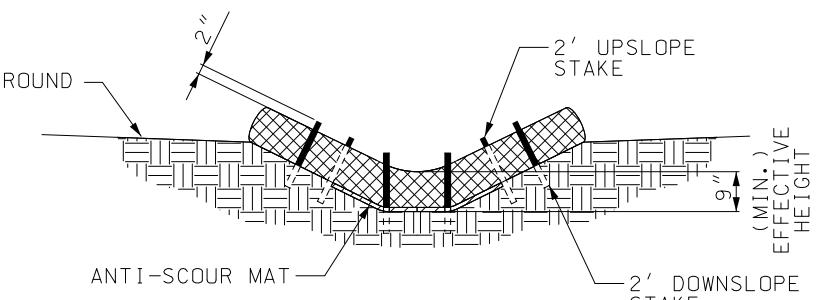
ALTERNATE DITCH CHECK



SECTION B-B



TYPICAL SECTION
VEE DITCH



TYPICAL SECTION
TRAPEZOIDAL DITCH

NOTES:

THE INITIAL HEIGHT OR DIAMETER OF ANY ALTERNATE DITCH CHECK SHALL ACCOUNT FOR SAGGING TO ENSURE THAT THE MINIMUM EFFECTIVE HEIGHT OF 9" IS MAINTAINED THROUGHOUT THE LIFE OF THE DEVICE. ANY DEVICES THAT FALL BELOW THE 9" EFFECTIVE HEIGHT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. LOGS, ROLLS AND SOCKS SHALL HAVE AN INITIAL HEIGHT NO LESS THAN 12" OR AS NEEDED TO MAINTAIN THE MINIMUM REQUIRED EFFECTIVE HEIGHT.

USE 2' WOODEN STAKES WITH A 2" x 2" NOMINAL CROSS SECTION.

INSTALL LOG/SOCK TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND LOG/SOCK AND SCOUR DITCH SLOPES OR AS DIRECTED BY ENGINEER.

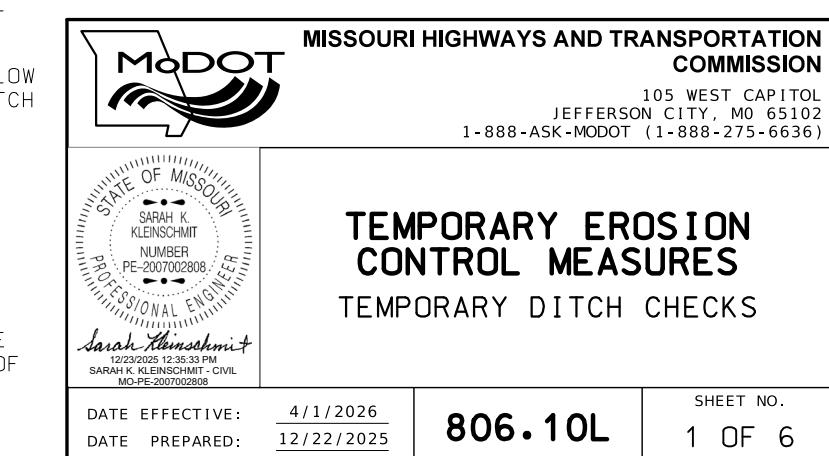
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE LOG/SOCK TO BOTTOM OF DITCH.

ANTI-SCOUR MAT FOR ALTERNATE DITCH CHECKS, WHEN REQUIRED PER THE SWPPP, MAY BE ANY ALLOWABLE TYPE OF EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT. STAKING SHALL BE SUFFICIENT TO HOLD MAT IN PLACE. THE COST OF THE MAT IS CONSIDERED INCIDENTAL TO THE ALTERNATE DITCH CHECK.

GENERAL NOTES:

OTHER PROPRIETARY DITCH CHECKS MAY BE SUBSTITUTED IN ACCORDANCE WITH SEC 806 OR AS DIRECTED BY THE ENGINEER.

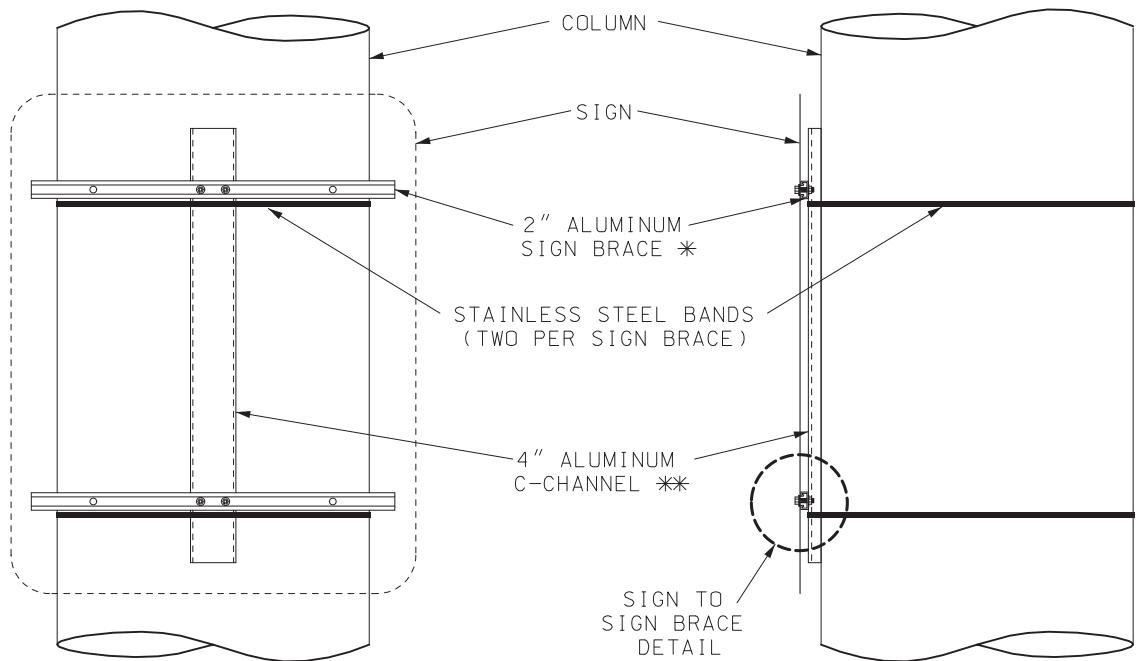
INSTALLATION OF PROPRIETARY DITCH CHECKS SHALL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.



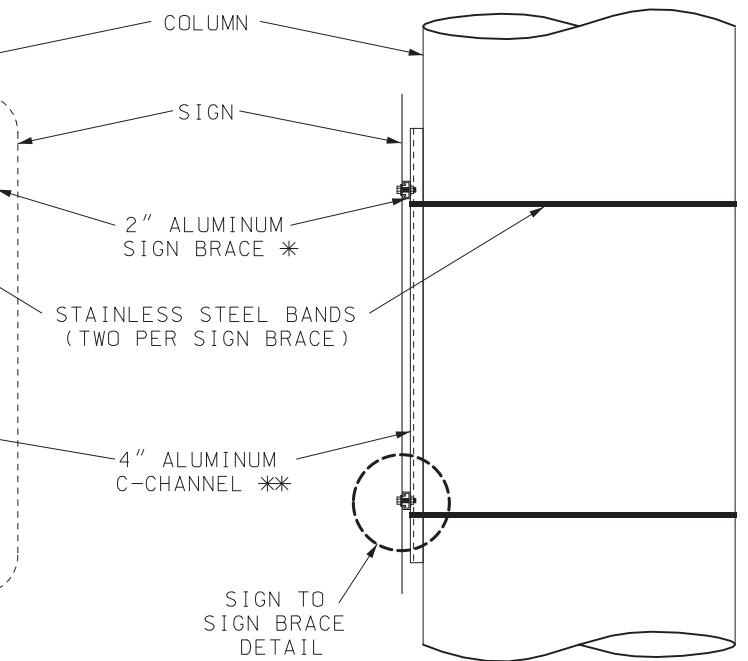
DATE EFFECTIVE: 4/1/2026
DATE PREPARED: 12/22/2025

806.10L

SHEET NO.
1 OF 6

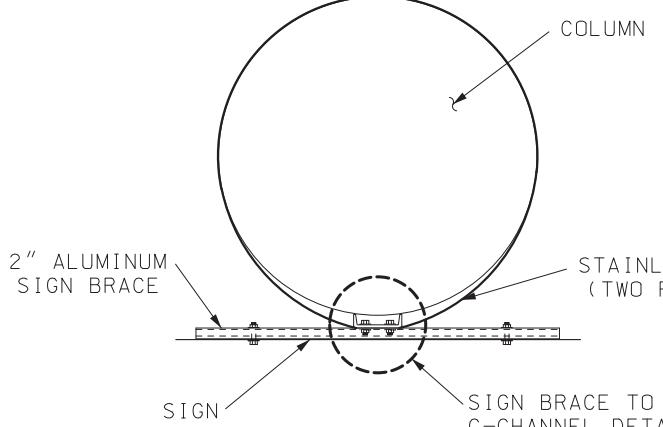


ELEVATION

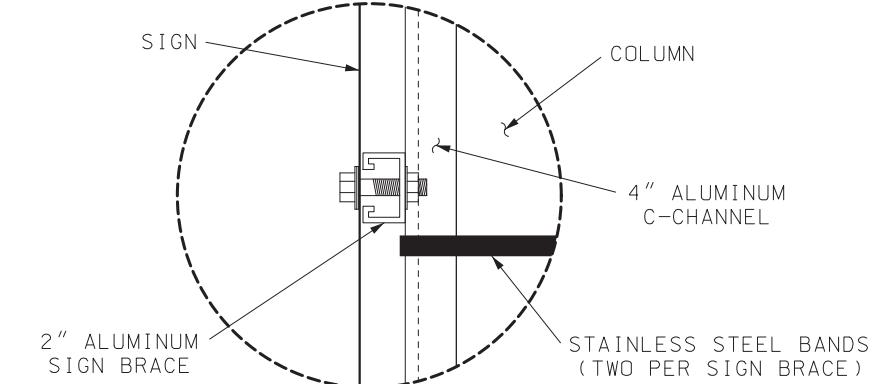


SIDE

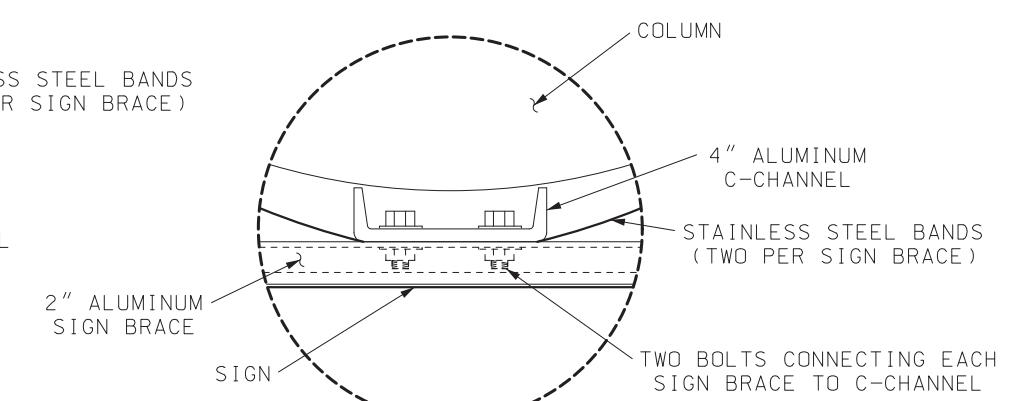
* MAY BE PERFORATED.
NUMBER OF SIGN BRACES DETERMINED BY
HOLE PUNCHING ON STD PLAN 903.02.
** STRUCTURAL 6061T6, MIN. 2.50 LBS/FT



PLAN

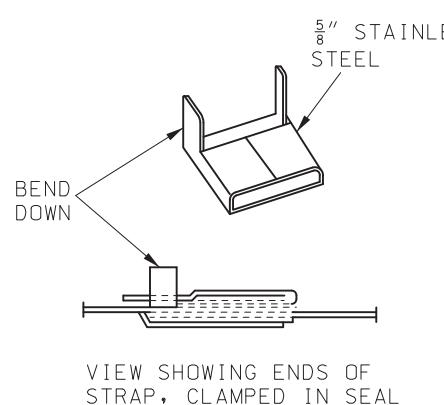


SIGN TO SIGN BRACE DETAIL

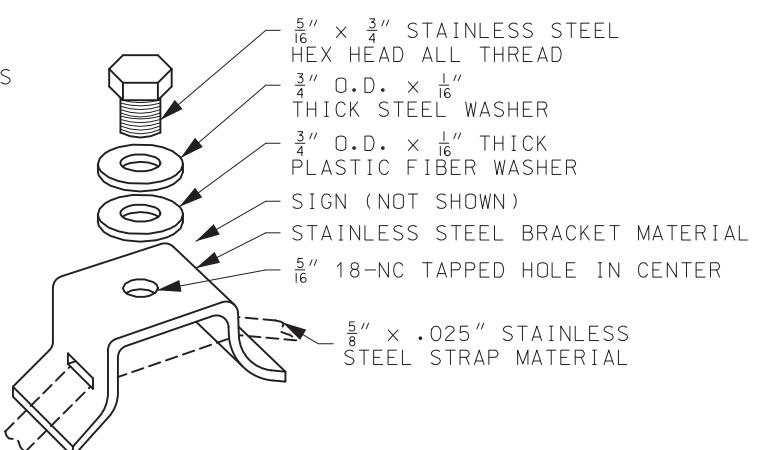


SIGN BRACE TO C-CHANNEL DETAIL

SPECIAL MOUNTING FOR FLAT SHEET \geq 36" WIDE
ON ROUND STRUCTURES LOCATED ON FREEWAYS



STRAP SEAL



FLARED LEG SIGN BRACKET

MOUNTING DETAILS FOR FLAT SHEET
ON ROUND STRUCTURES

NOTES:

FOR GENERAL NOTES, SEE SHEET 1.

FOR MOUNTING HEIGHT AND OFFSET DETAILS,
SEE SHEET 11.

SPECIAL MOUNTING BASED ON SIGN WIDTH
IN CONJUNCTION WITH ROADWAY TYPE.

 	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	SIGN MOUNTING DETAILS ROUND STRUCTURES	
DATE EFFECTIVE: <u>10/1/2025</u> DATE PREPARED: <u>7/7/2025</u>		SHEET NO. 903.03BU 7 OF 12

