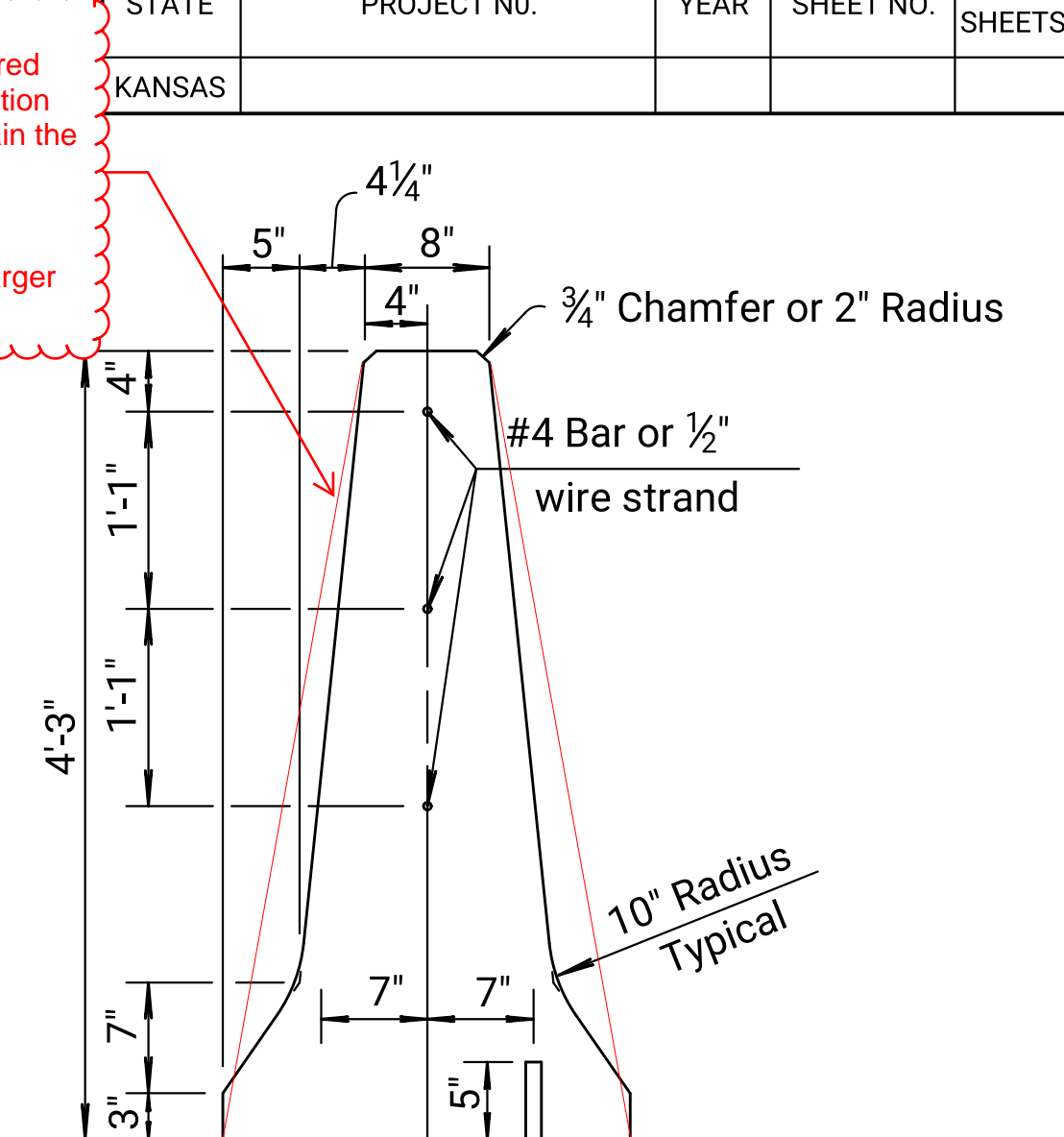
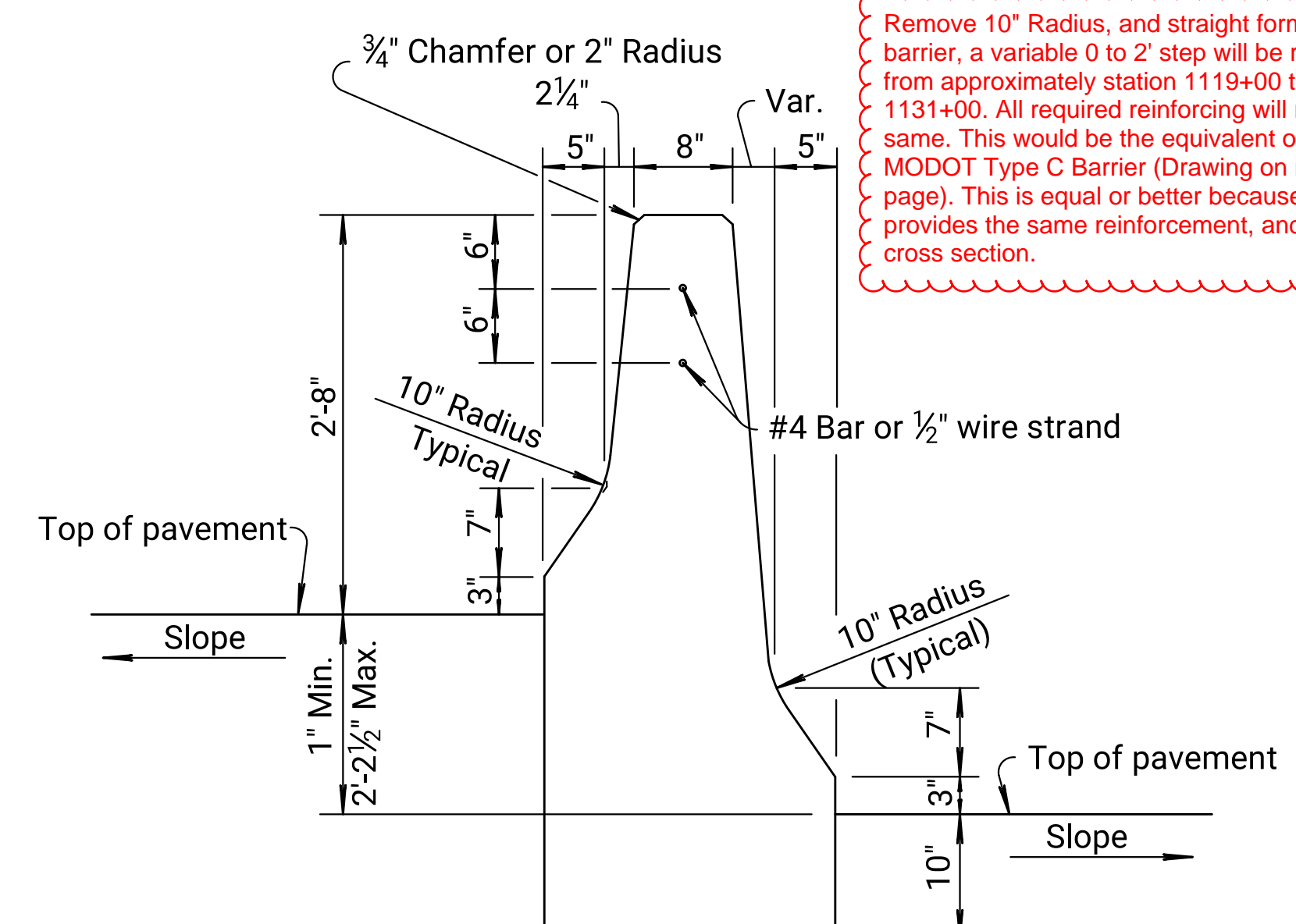
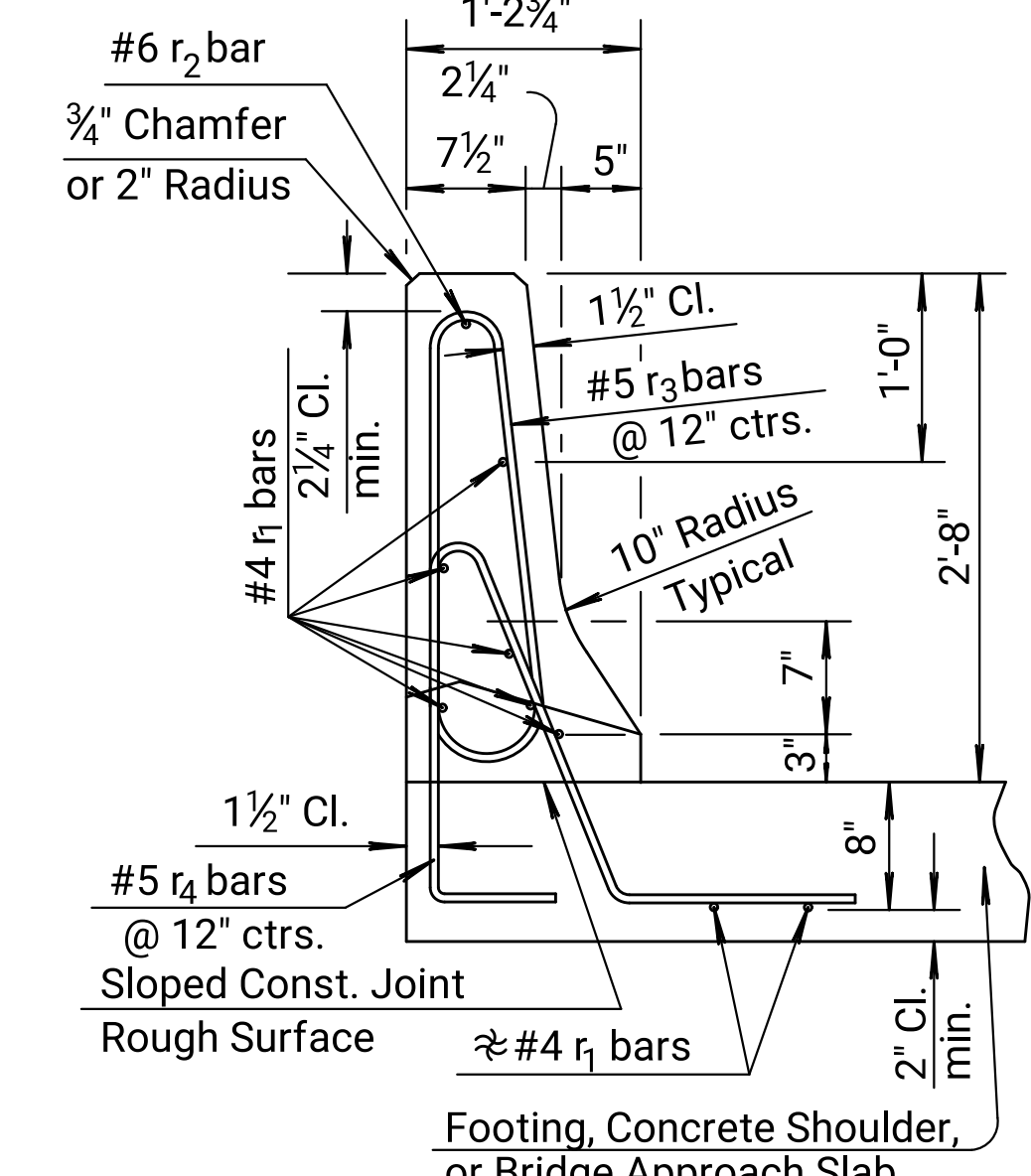
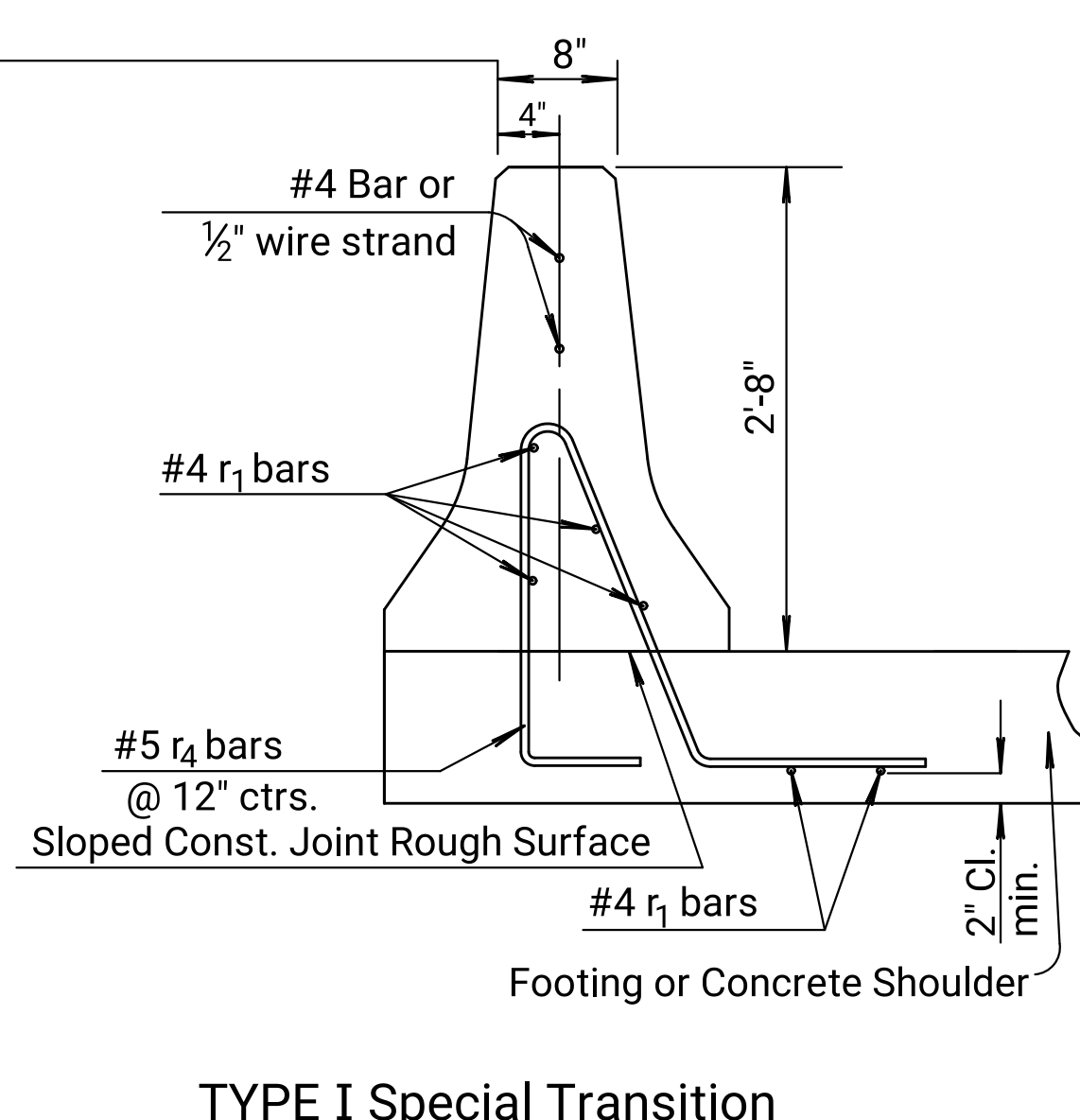
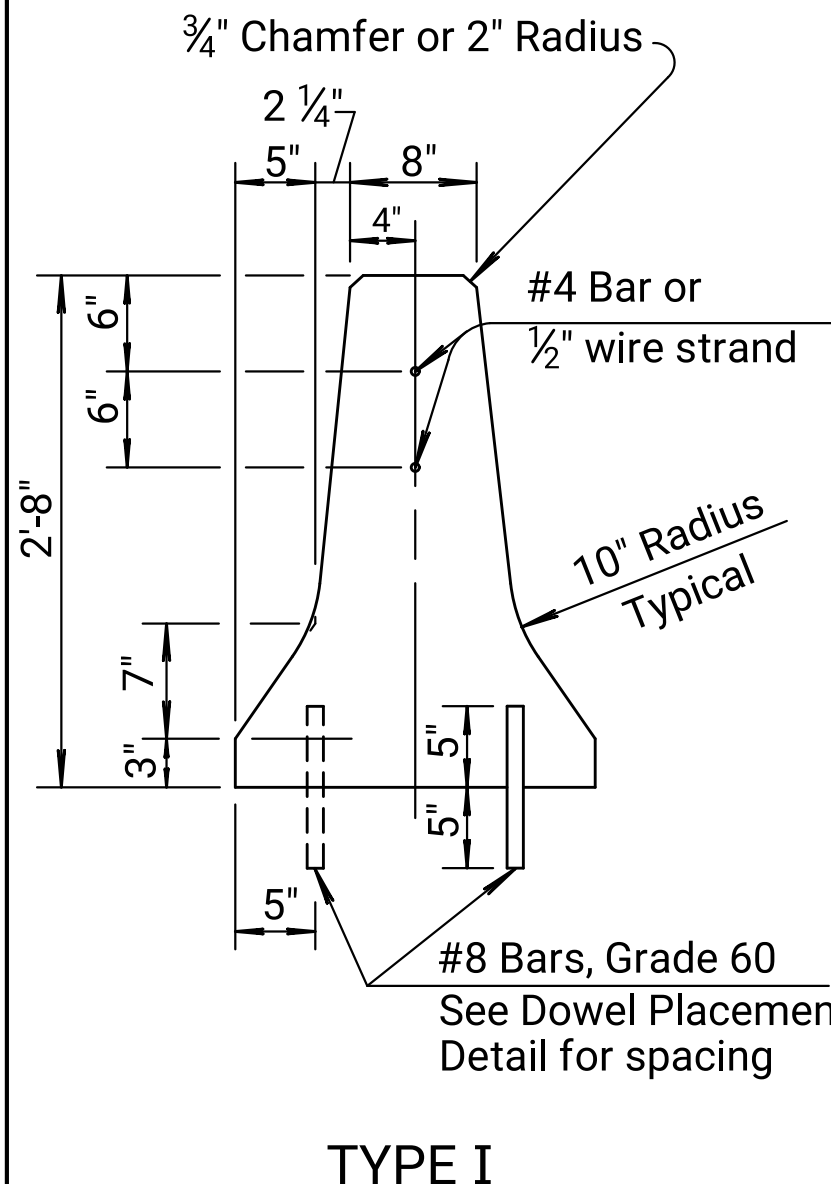


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				

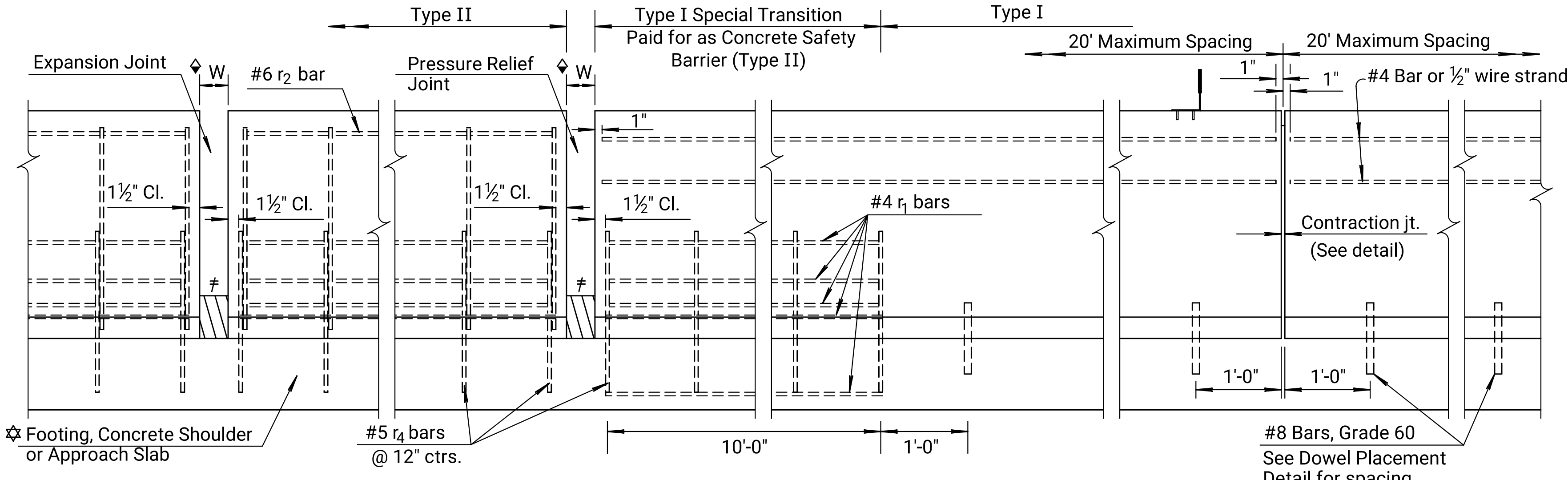
Note to Designer: The scenario depicted is for Type II CSB to Type I CSB, this sheet will need to be modified for other transition scenarios.



Remove 10" Radius, and straight form the barrier, a variable 0 to 2' step will be required from approximately station 1119+00 to station 1131+00. All required reinforcing will remain the same. This would be the equivalent of a MODOT Type C Barrier (Drawing on next page). This is equal or better because it provides the same reinforcement, and a larger cross section.

W = Formed Concrete Opening Size - See "Temperature Expansion/Pressure Relief Joint Width Table", Standard Drawing RD712.

Omit r1 bars in approach slabs. Tie r4 bars to longitudinal reinforcement (#6 f bars) shown in the applicable Bridge Approach Pavement Standard Drawing.



☆ Footing, Concrete Shoulder or Approach Slab

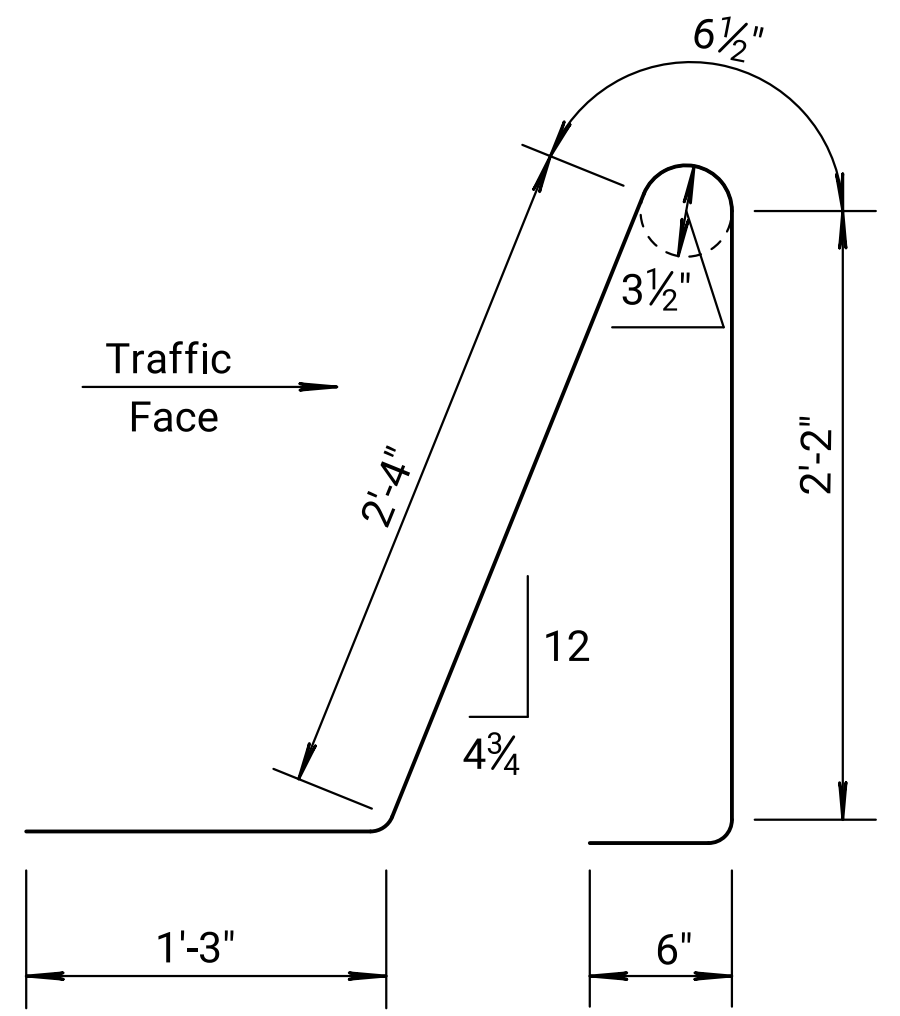
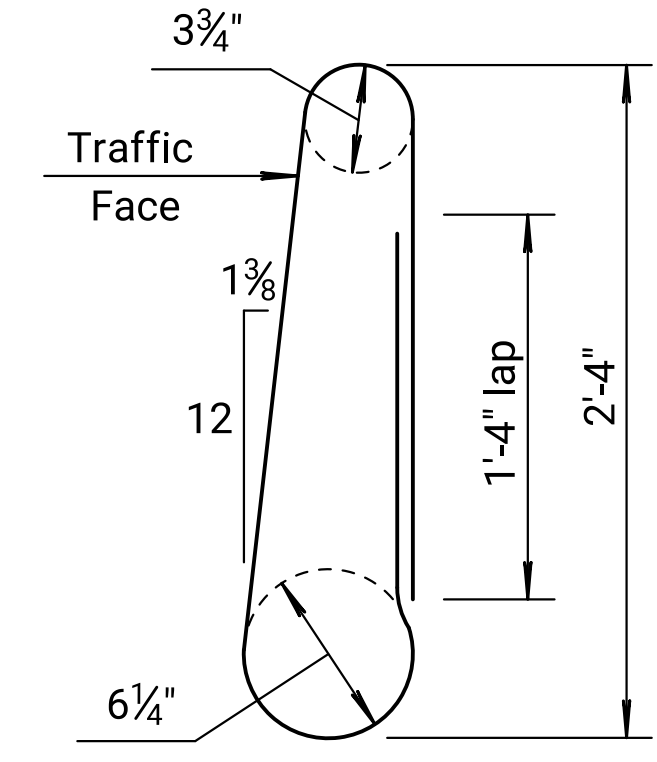
☆ See applicable Bridge Approach Pavement Standard Drawing for reinforcement in approach slab.

≠ Membrane Sealant

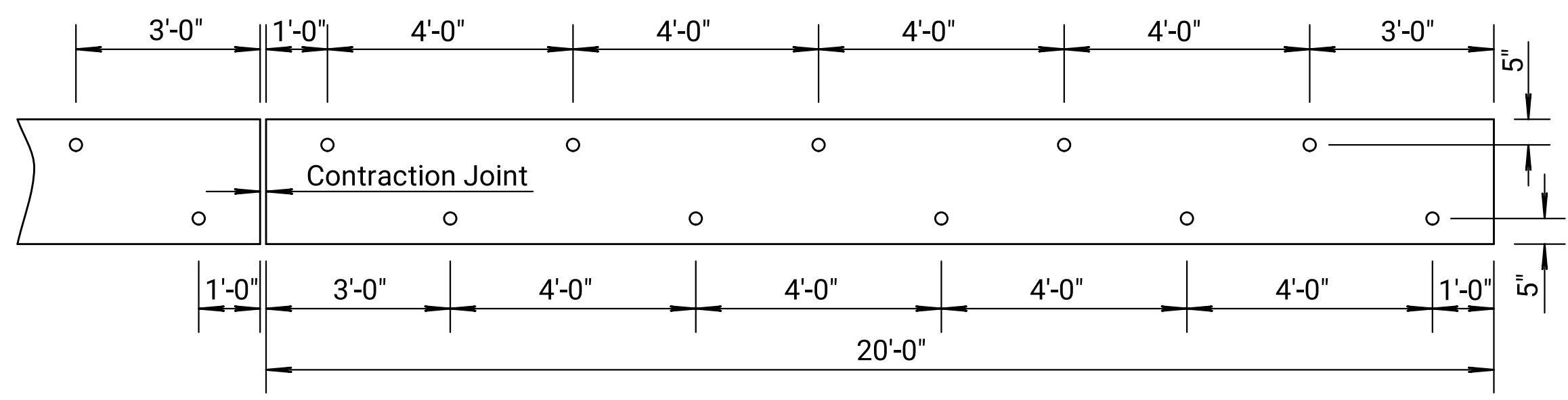
PRESSURE RELIEF/EXPANSION JOINT (Bridge Ends)

Pressure relief joint will match relief joint in bridge approach slab. Joints wider than 4" need a special design.

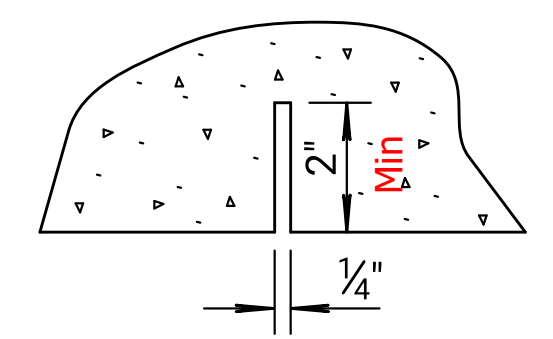
CONTRACTION JOINT



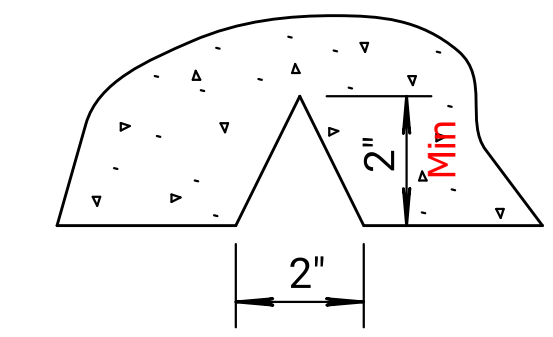
BENDING DIAGRAMS
Note: All dimensions are out to out of bars.



DOWEL PLACEMENT DETAIL (TYPE I & IV)



OPTION A



OPTION B

CONTRACTION JOINT DETAIL

Design-Builder's

Use Concrete Grade 3.0 (AE) or Concrete Pavement Mix (Contractor's Option). Construction drainage slots where specified in the plans, inlet locations or Engineer's direction.

Use epoxy coated reinforcing steel, Grade 60. See details for spacing, keep a minimum reinforcing steel clear distance of 1 1/2".

Payment for all reinforcing bars, joint material, median barrier filler material, reflectors and supporting materials, associated work, etc., is subsidiary to the Department.

The section furnished must generally comply with the dimensions shown. Requests for minor variations in section geometry may be submitted for review.

Permanent concrete barriers are cast in place or slip formed construction only. Precast barriers are not permitted.

CONSTRUCTION JOINTS

Place joint material (Type B or C) where shown for structures and at the end of day construction joint.

CONTRACTION JOINTS

Form or saw contraction joints on 20' centers maximum. Where barrier is on or adjacent to concrete pavement space joints to match contraction joints and definite transverse cracks in the pavement. Contraction joints not to exceed 20' centers.

BARRIER BASE

Where barrier base is not paved full width, place barrier on a 10" x 2'-0" bed of concrete Grade 3.0, or the mix used in concrete pavement or asphalt base course (Contractor's option, Engineer's approval) to assure proper alignment.

APPROACH SLAB EXPANSION/PRESSURE RELIEF JOINT

Install membrane sealant expansion joint material with a lubricant adhesive cut to the shape shown on Standard Drawing RD 625A. Construct joint to match pressure relief joint of concrete pavement approach slabs.

See Standard Drawing RD712 for Expansion/Pressure Relief Joint Details.

Work and materials required for installation of joint material is subsidiary to Concrete Safety Barrier and conforms to standard specifications.

DELINEATION

See Standard Drawing RD610 for details of barrier delineation.

NO.	DATE	REVISIONS	BY	APP'D
6	9-11-17	Added Type I transition	A.L.R.	S.W.K.
5	4-28-11	Rev. I,II,III & IV dimen. & notes	S.W.K.	J.O.B.
4	5-28-09	Revised Type III dimensions	S.W.K.	J.O.B.
3	1-10-07	Changed bituminous to asphalt	S.W.K.	J.O.B.

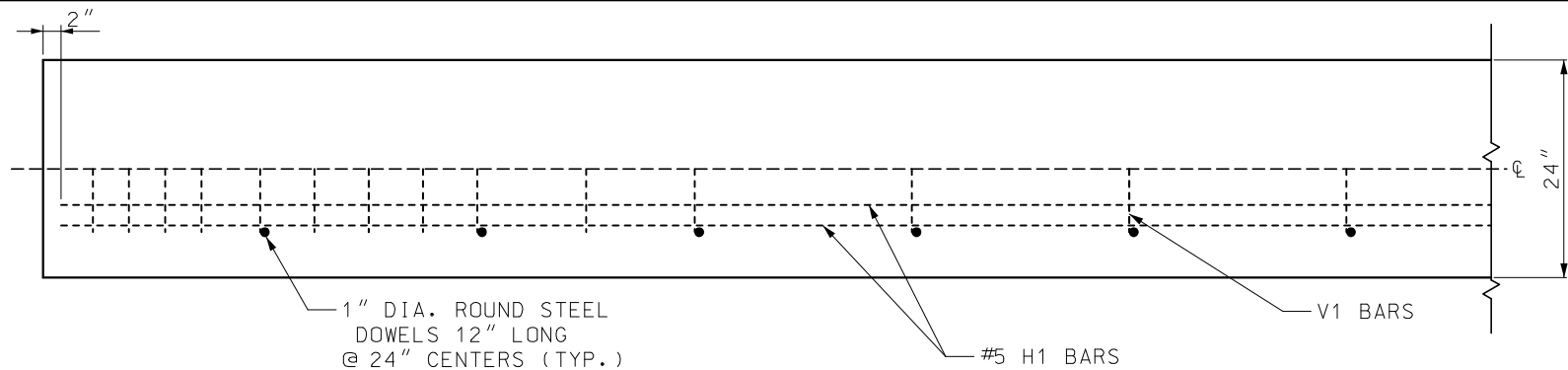
KANSAS DEPARTMENT OF TRANSPORTATION

PERMANENT CONCRETE SAFETY BARRIER TYPE I,II,III & IV (F-SHAPE)

RD625-

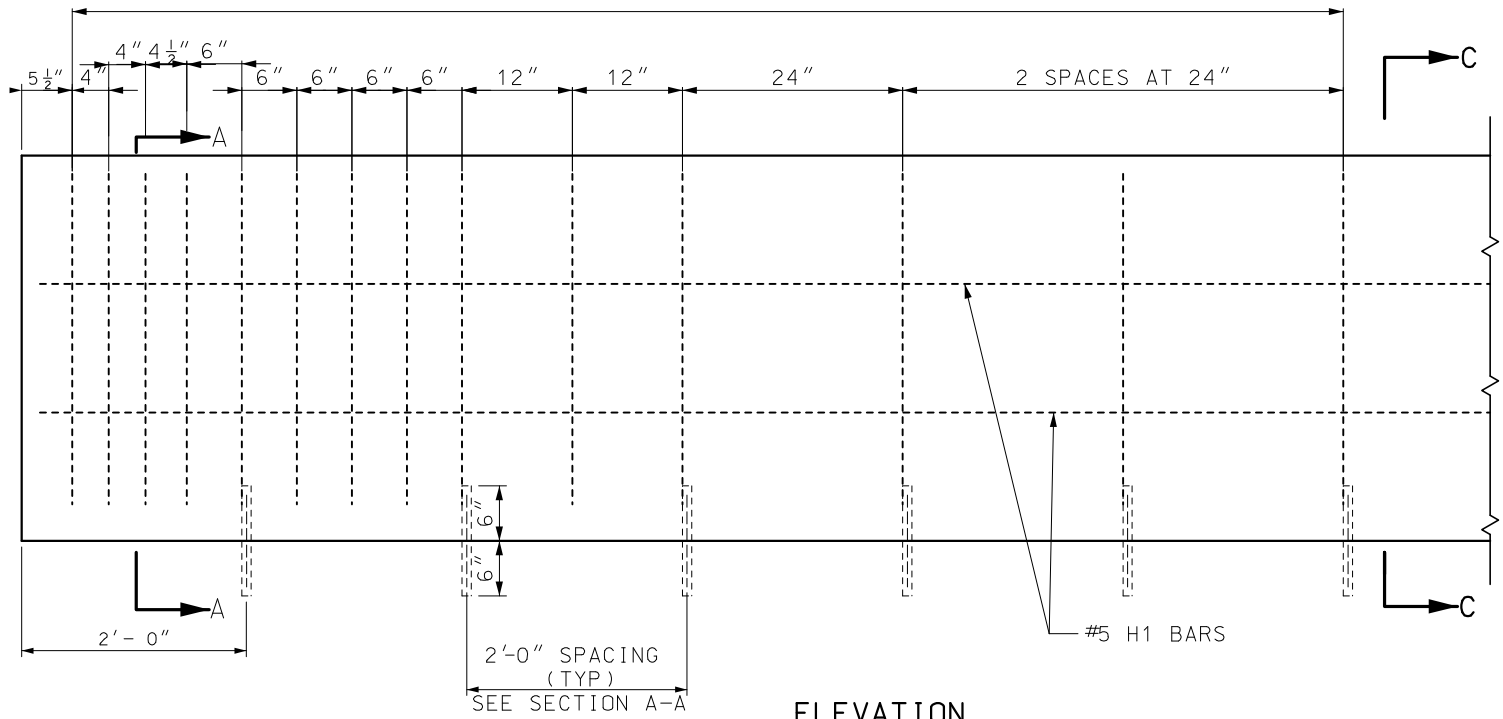
FHWA APPROVAL	3-5-18	APP'D. SCOTT W. KING
DESIGNED	DETAILED	QUANTITIES
DESIGN CK.	DETAIL CK.	QUAN. CK.

TRACED

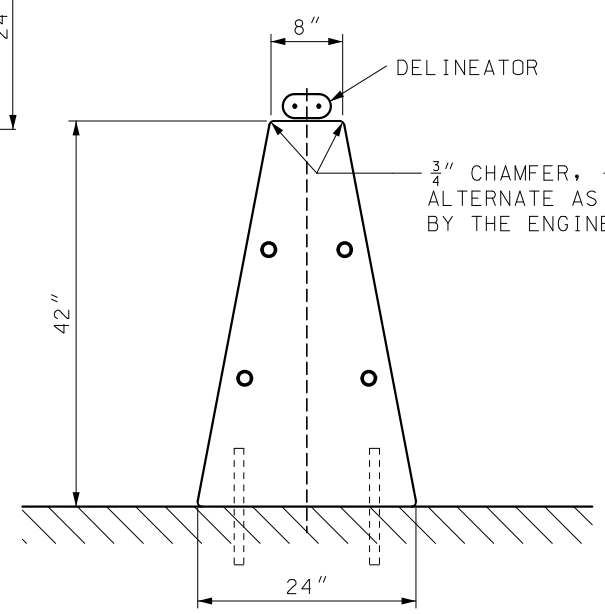


PLAN VIEW
(SYMMETRICAL ABOUT CENTERLINE)

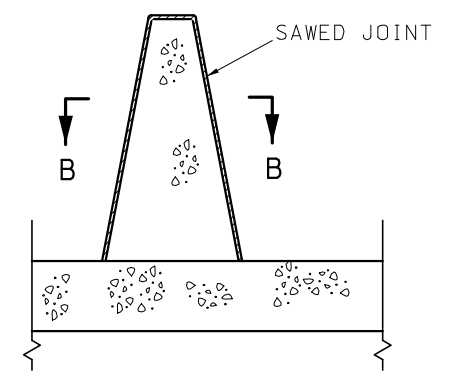
LIMITS OF #4 - V1 SPACED AS SHOWN BELOW
AT TERMINAL ENDS OF BARRIER ONLY



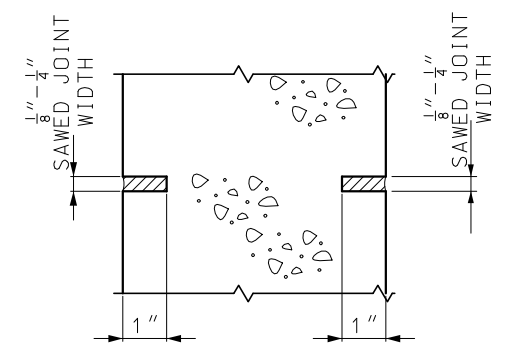
ELEVATION



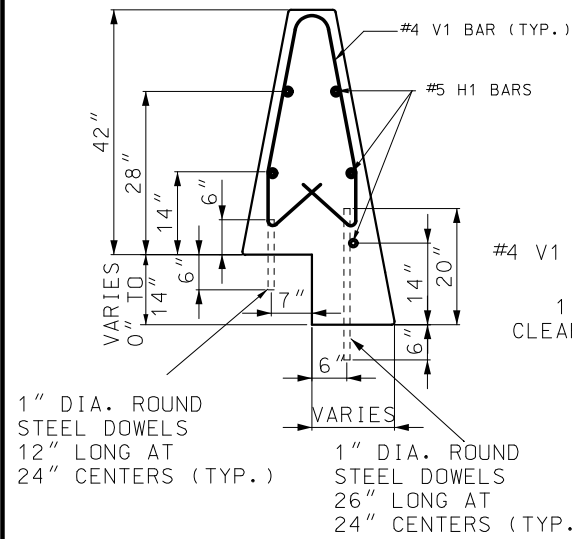
TYPE C
TYPICAL SECTION



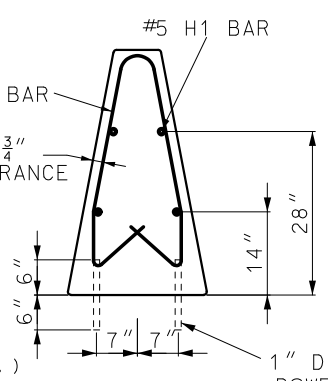
SECTION THROUGH SAWED JOINT



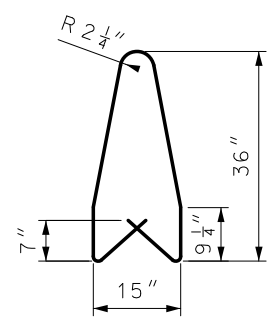
SECTION B-B



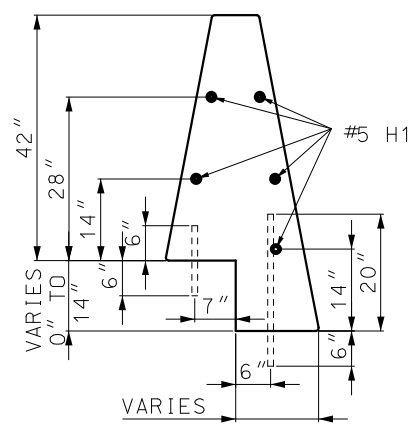
SECTION A-A
(STEPPED PAVEMENT)



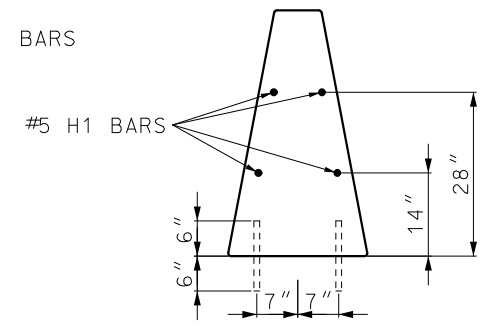
SECTION A-A
(NORMAL PAVEMENT)



V1 BAR (#4)



SECTION C-C
(STEPPED PAVEMENT)



SECTION C-C
(NORMAL PAVEMENT)

NOTES:

- ALL REINFORCEMENT SHALL BE GRADE 60 EPOXY COATED.
- BAR SPLICES SHALL BE A MINIMUM OF 24 TIMES THE NOMINAL DIAMETER OF THE BAR.
- ANY REINFORCING BAR INSTALLATION METHOD DEvised BY THE CONTRACTOR AND APPROVED BY THE ENGINEER THAT WILL ASSURE THE LONGITUDINAL REINFORCING STEEL WILL BE POSITIONED $\pm 1/2$ INCH AS DIMENSIONED WILL BE SATISFACTORY.
- THE CONTRACTOR HAS THE OPTION TO SLIP-FORM THE BARRIER. IN WHICH CASE, ADDITIONAL REINFORCEMENT MAY BE TIED TO THE UPPER TWO-THIRDS OF THE REINFORCING CAGE TO PROVIDE BRACING.
- ANCHORING DOWELS MAY BE OMITTED WHEN THE PLANS SPECIFY A MINIMUM $1 3/4$ " PAVEMENT SURFACE TO BE PLACED ABUTTING BOTH BARRIER FACES.
- SAWED JOINTS SHALL BE LOCATED AT PAVEMENT TRANSVERSE JOINTS.
- #8 REINFORCING BARS WITH AN EPOXY ANCHOR SYSTEM MAY BE SUBSTITUTED FOR SMOOTH 1" DIAMETER ROUND STEEL DOWELS.
- FOR CONCRETE TRAFFIC BARRIER DELINEATION DETAILS SEE STD PLAN 903.03.

1" DIA. ROUND STEEL DOWELS 12" LONG AT 24" CENTERS (TYP.)

1" DIA. ROUND STEEL DOWELS 26" LONG AT 24" CENTERS (TYP.)

REINFORCING DETAILS

<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
	<p>PERMANENT CONCRETE TRAFFIC BARRIER TYPE C</p>
<p>DATE EFFECTIVE: 10/01/2020 DATE PREPARED: 7/21/2020</p>	<p>617.10M</p>
<p>SHEET NO. 4 OF 11</p>	

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