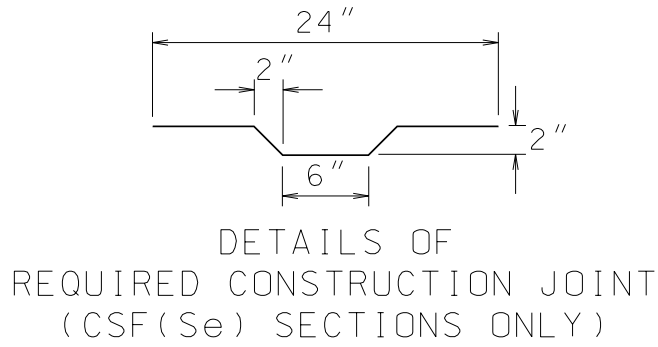


BARRIER PLACEMENT OVER JOINTS	
BARRIER MAY BE CAST OVER A "LONGITUDINAL" JOINT.	
JOINTS (WITH OR WITHOUT TIEBARS): TWO LAYERS OF 30 LB ROOFING FELT OR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.	
BARRIER ANCHORAGE NOTE: ANCHORAGE MUST BE LOCATED AT LEAST 3" FROM A LONGITUDINAL JOINT.	

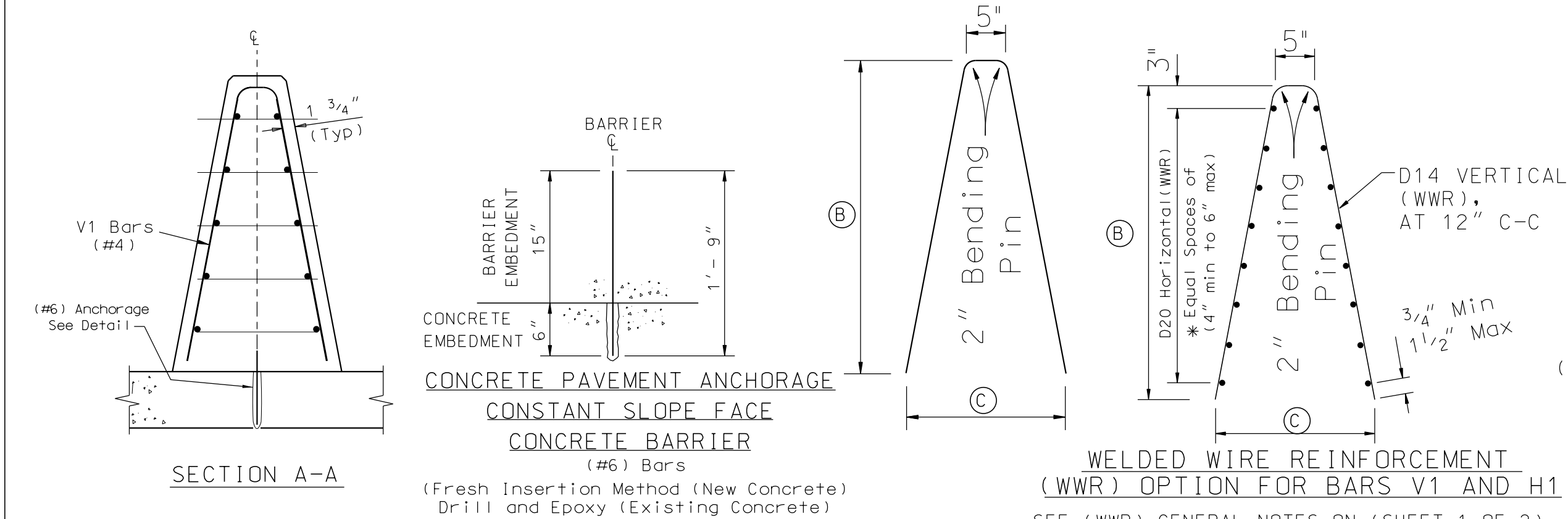
*BARRIER HEIGHT (IN.)	DIMENSIONS (IN)			
	(A)	(B)	(C)	(D)
42	26	50 1/4	25 9/16	24
48	28 1/4	56 1/4	27 11/16	26 1/4
54	30 1/2	62 1/4	29 7/8	28 1/2

* (CSF)(42") BARRIER HEIGHT MAY BE INCREASED TO 48" OR 54". THIS WOULD INCREASE THE BARRIER AND REINFORCEMENT DIMENSIONS ACCORDINGLY.



CONSTANT SLOPE FACE CONCRETE BARRIER
(CSF)(42")
OPTIONAL CONSTRUCTION JOINT

CONSTANT SLOPE FACE CONCRETE BARRIER
(CSF)(42")



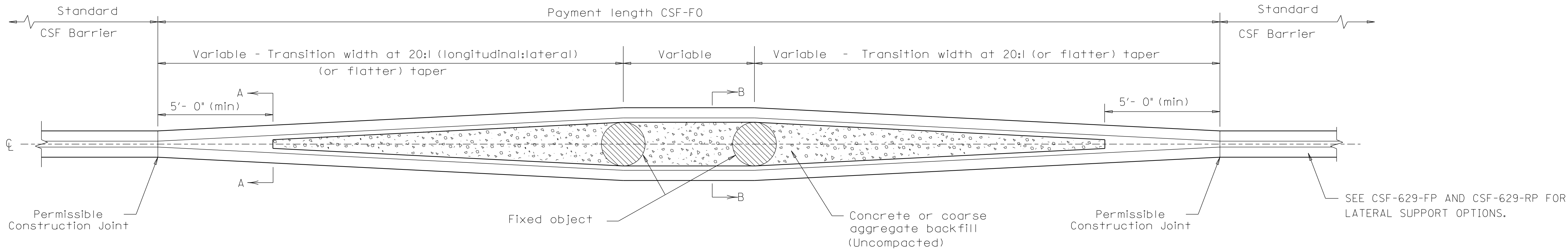
▲ SPECIAL DESIGN REQUIRED IF GRADE SEPARATION EXCEEDS 30"

GENERAL NOTES

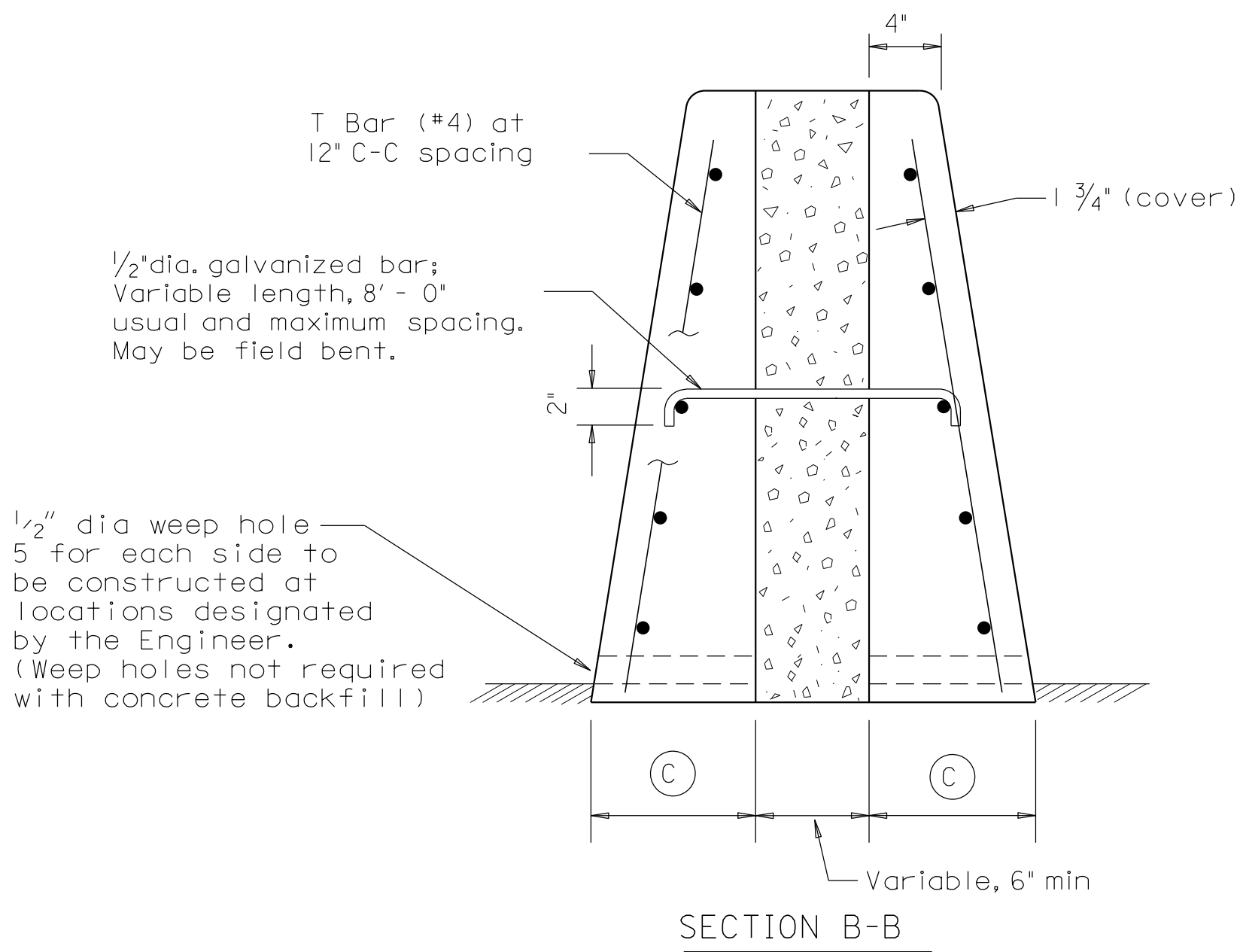
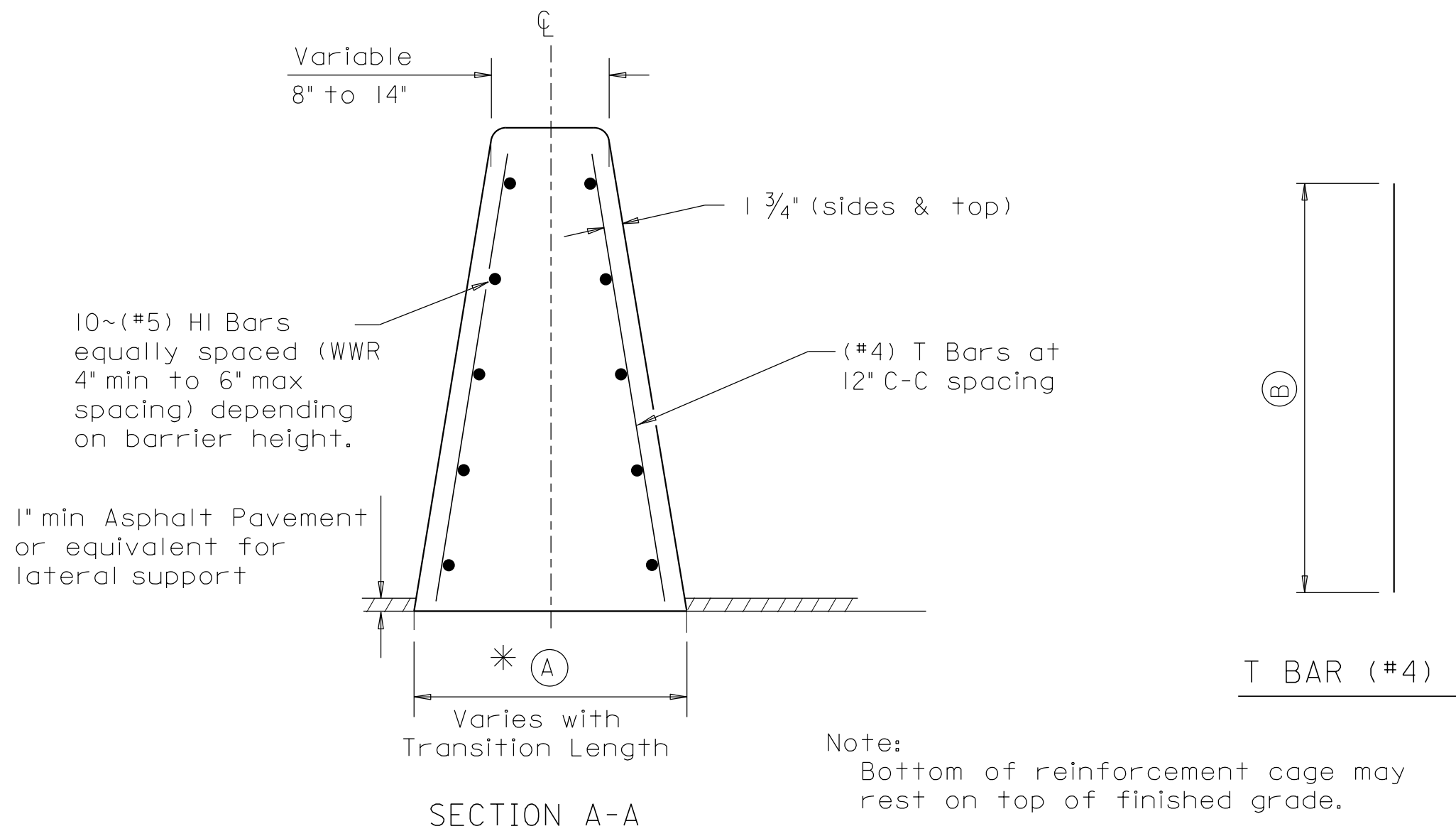
- THE REINFORCING SHALL BE CONTINUOUS. REINFORCING SHALL CONSIST OF CONTINUOUS LONGITUDINAL REINFORCING STEEL AS SHOWN OR WELDED WIRE FABRIC OF EQUIVALENT STEEL AREA.
- EXPANSION JOINTS AT BRIDGE PIER SHALL BE PREFORMED JOINT MATERIAL (BITUMINOUS TYPE) FILLER MEETING AASHTO DESIGNATION M-33. THE COST OF THIS ITEM SHALL BE A SUBSIDIARY OBLIGATION OF THE PRICE BID FOR THE BARRIER WALL.
- SAWED CONTRACTION JOINTS AND BARRIER MOUNTED DELINEATORS REQUIRED 20'-0" O.C. THESE DELINEATORS SHALL BE INSTALLED PRIOR TO SHIFTING TCP TRAFFIC INTO MEDIAN.
- THE PAYMENT FOR THE MEDIAN BARRIER SHALL BE AS CSF UNTIL THERE IS A DIFFERENCE IN THE ELEVATION OF THE TWO ROADWAYS, AT THE BARRIER, GREATER THAN 1.5". THE BARRIER SHALL THEN BE PAID FOR AS CSF (SE) BARRIER.
- THE 10" MIN DEPTH FOOTING AS SHOWN IN SECTION A-A SHALL BE A SUBSIDIARY OBLIGATION OF THE APPLICABLE BARRIER PAY ITEM (629A) AND IS REQUIRED IN THE FOLLOWING SITUATIONS:
 - THE BEGINNING AND ENDING 10 FEET (LONGITUDINAL) OF ANY LENGTH OF RAIL, INCLUDING ANY UN-REINFORCED JOINTS BETWEEN RAIL ELEMENTS.
 - CONTINUOUSLY THROUGHOUT THE LENGTH OF ANY GRADE SEPARATION (SE) BARRIER (AS SHOWN IN THE DETAIL BELOW).
 - CONTINUOUSLY THROUGHOUT THE LENGTH OF ANY CSF 4-A OR CSF 4-A MODIFIED BARRIER.
- DRAINAGE SLOT LOCATIONS (12'-0", O.C. MIN SPACING) IF SHOWN IN THE PLANS, DRAINAGE SLOT HEIGHTS ON THE CSF MAY BE INCREASED TO A MAXIMUM OF 5", WITHOUT GEOMETRIC CHANGES TO THE BARRIER FACE.
- 3/4" EXPANSION JOINT REQUIRED ONLY WHEN BARRIER ABUTS RIGID OBJECTS OR STRUCTURES.

--SPECIFICATIONS-- CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION	
THIS DRAWING REPRESENTS DESIGNS PREPARED FOR USE BY THE ALABAMA DEPARTMENT OF TRANSPORTATION AND IS NOT TO BE COPIED, REPRODUCED, ALTERED, OR USED BY ANYONE, OR ANY ORGANIZATION, WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ALABAMA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE AUTHORIZED TO APPROVE THIS USE. ANYONE MAKING UNAUTHORIZED USE OF THIS DRAWING MAY BE PROSECUTED TO THE FULLEST EXTENT OF THE LAW.	
REVISIONS 1. Created Drawing for MASH approved "Constant Slope Face Concrete Barrier (Rigid Pavement)" on 10/18/17 by LVS 2. Revised Optional Construction Joint Details on 12-4-2018 by D.J.W. 3. Revised Optional Construction Joint Details on 07-09-19 by J.F.T. 4. Modified General Note 5 and added depth call out to Footing of Type 4-A on 7-21-2020 by DJW.	 ALABAMA DEPARTMENT OF TRANSPORTATION 1409 COLISEUM BOULEVARD MONTGOMERY, AL 36130-3050 DESIGN BUREAU SPECIAL DRAWING CONSTANT SLOPE FACE CONCRETE BARRIER (RIGID PAVEMENT)
Bureau Std Engr: D.J.W. DRAWN BY: D.J.W. DATE DRAWN: 10/2017	SPECIAL DRAWING NO CSF-629-RP (SHEET 2 OF 2) INDEX NO 62902

NOT TO SCALE



PLAN CSF-F0 BARRIER



GENERAL NOTES

1. Axis of concrete barrier shall be vertical, except where roadway is superelevated, then axis shall be normal to roadway surface.
2. Bid price per liner foot of CSF-F0, including anchor sections, shall include all of the concrete, reinforcement, and aggregate backfill.
3. Longitudinal and vertical bars for roadway barrier shall conform to ASTM A615 (Grade 60), unless otherwise specified.
4. At construction joints the longitudinal bars shall extend beyond the joint so that bar splices will be a minimum of two feet from the construction joint.
5. Welded wire reinforcement (WWR) may be used as an option to conventional reinforcement and shall meet requirements shown.

Barrier height (IN)	* Dimensions (IN)		
	(A)	(B)	(C)
42	24 Plus	40 1/4	12
48	26 1/4 Plus	46 1/4	13 1/8
54	28 1/2 Plus	52 1/4	14 1/4

*CSF(42") Barrier height may be increased to 48" or 54". This would increase the barrier and reinforcement dimensions accordingly.

Welded Wire Reinforcement (WWR) Option for Bars T and HI Barrier

(WWR) General Notes

1. WWR design required for CSF-F0 barrier: D14 vertical (12" C-C) x D20 horizontal wires spaced (4" min. to 6" max) as height requires.
2. Deformed Welded Wire Reinforcement (WWR) shall conform to ASTM A497.
3. Welded wire cage may be cut and bent to accommodate the drainage slots, as directed by the Engineer.
4. Welded wire splice locations shall have a "minimum" splice lap length of 12".
5. Combinations of reinforcing steel and WWR will be permitted, as directed by the Engineer. The dimension from the end of the barrier section to the first wire shall not exceed 3".

--SPECIFICATIONS--
CURRENT ALABAMA DEPARTMENT OF TRANSPORTATION


THIS DRAWING REPRESENTS DESIGNS PREPARED FOR USE BY THE ALABAMA DEPARTMENT OF TRANSPORTATION AND IS NOT TO BE COPIED, REPRODUCED, ALTERED, OR USED BY ANYONE, OR ANY ORGANIZATION, WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ALABAMA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE AUTHORIZED TO APPROVE THIS USE. ANYONE MAKING UNAUTHORIZED USE OF THIS DRAWING MAY BE PROSECUTED TO THE FULLEST EXTENT OF THE LAW.

REVISIONS

1. Added to CAD and replaced "CONCRETE MEDIAN BARRIER TREATMENT AT UNDERPASS PIERS (TY 1 & TY 5)" on 08-03-17 by J.F.T.

2. Changed drawing to MASH Approved "Constant Slope Face Barrier" at Fixed Objects" on 10/18/17 by LVS

3. Updated lateral support note in top detail to reference appropriate std. dwgs on 7-17-2020 by D.W.

ALABAMA DEPARTMENT OF TRANSPORTATION
1409 COLISEUM BOULEVARD
MONTGOMERY, AL 36130-3050

DESIGN BUREAU SPECIAL DRAWING

CONSTANT SLOPE FACE BARRIER AT FIXED OBJECTS

Bureau Std Engr: D.J.W.
DRAWN BY: J.F.T. DATE DRAWN: 9/2017

SPECIAL DRAWING NO
CSF-629-F0

INDEX NO
62903

NOT TO SCALE

