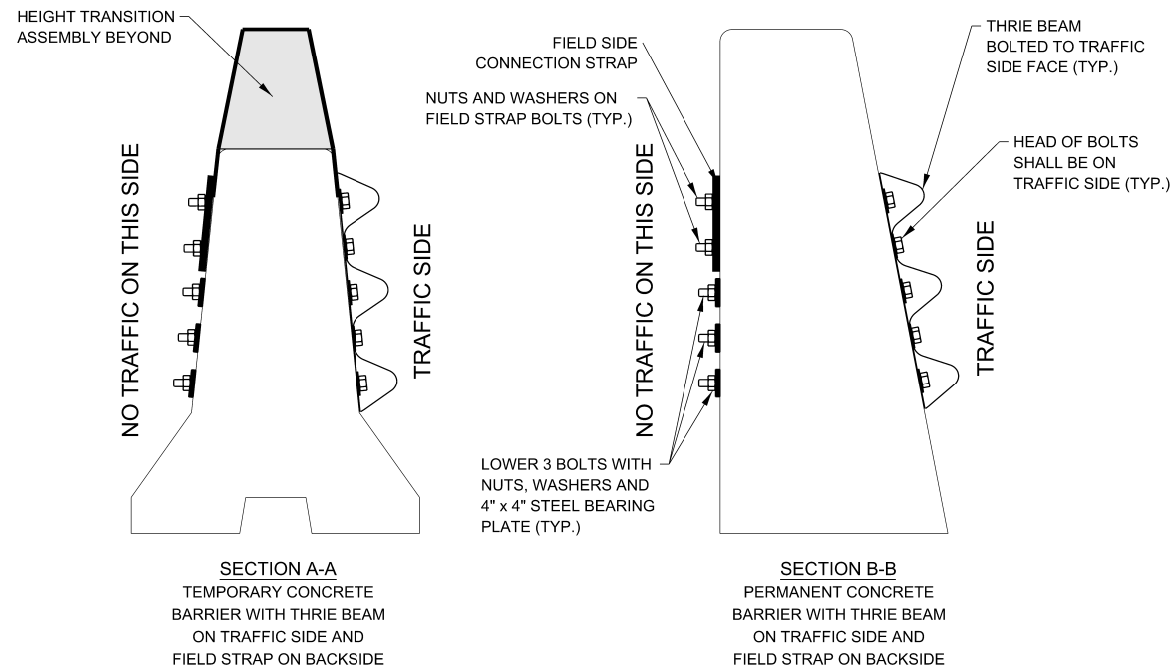
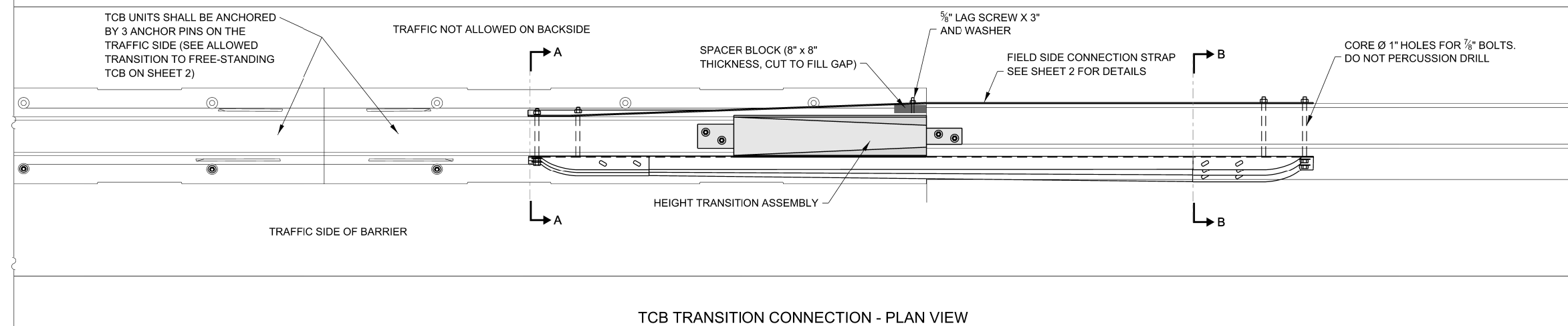
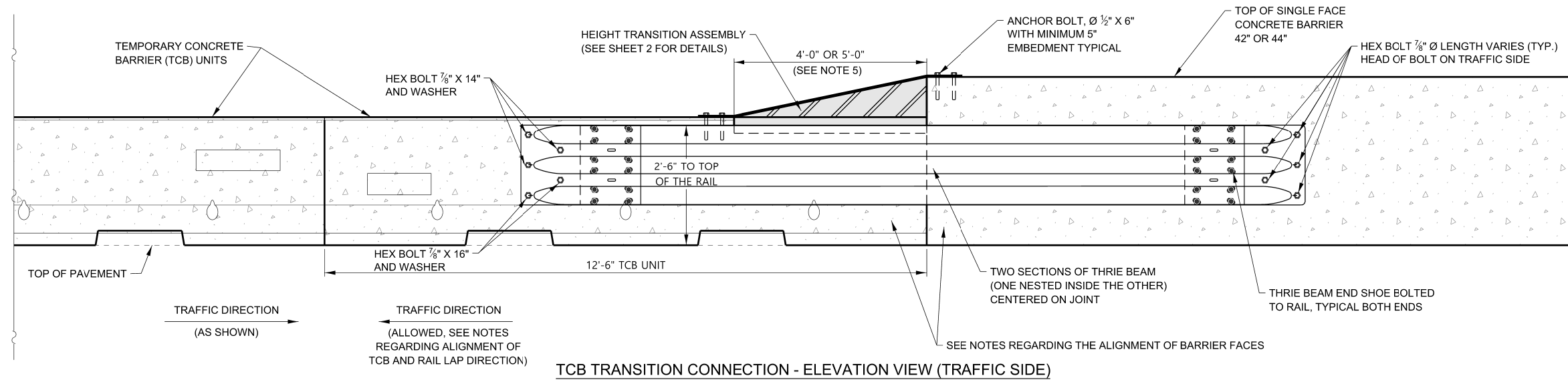


Illinois Tollway Base Sheet Revisions

Section M	Base Sheet Drawings	
Drawing	Modification Summary	Effective: 03-01-2024
	Maintenance of Traffic (MOT)-Series 700	
M-MOT-701	TCB CONNECTION TO SINGLE FACE CONCRETE BARRIER	
	New base sheet added for attaching TCB to permanent single face concrete barrier.	

 New Sheet

 Retired Standard



NOTES:

1. THE TEMPORARY CONCRETE BARRIER (TCB) CONNECTION TO A SINGLE FACE CONCRETE BARRIER (SFCB), EITHER F-SHAPE OR CONSTANT SLOPE, SHALL BE INSTALLED WITH TRAFFIC ON ONE SIDE ONLY AND WHEN THE TRAFFIC DIRECTION IS AS SHOWN ON THIS PLAN. THIS TRANSITION SHALL NOT BE USED WITH A DOUBLE FACE CONCRETE BARRIER OR WHEN TRAFFIC IS ALONG THE BACKSIDE.
2. LAP SPLICES BETWEEN THE NESTED THRIE BEAM RAIL ELEMENTS AND END SHOES SHALL LAP IN THE DIRECTION OF TRAFFIC. WHEN THE TRAFFIC DIRECTION IS FROM THE TCB TO SFCB THEN BARRIER FACES SHALL ALIGN ON THE TRAFFIC SIDE, AT THE TOP OF THE TCB UNIT. WHEN THE TRAFFIC DIRECTION IS FROM THE SFCB TO TCB THEN BARRIER FACES SHALL ALIGN ON THE TRAFFIC SIDE, AT THE BOTTOM OF THE TCB UNIT. THE TCB SHALL BE ALIGNED SUCH THAT THERE ARE NO POTENTIAL SNAG POINTS.
3. THE TWO TCB END UNITS SHALL BE ANCHORED TO THE PAVEMENT. TO AID INSTALLATION, INSTALL THE ANCHOR PINS IN THE END UNIT PRIOR TO INSTALLING THE THRIE BEAM ASSEMBLY.
4. WHEN THIS DETAIL IS USED AT THE END OF AN UNANCHORED RUN OF TCB, A TRANSITION CONSISTING OF FOUR TCB UNITS SHALL BE USED. THE FIRST TWO UNITS, ADJACENT TO THE SFCB, SHALL BE ANCHORED TO THE PAVEMENT (3 PINS IN EACH UNIT ON THE TRAFFIC SIDE), THE THIRD UNIT SHALL BE ANCHORED WITH A PIN AT EACH END OF THE UNIT ON THE TRAFFIC SIDE (2 PINS TOTAL) AND THE FOURTH UNIT SHALL BE ANCHORED WITH 1 PIN AT CORNER, CLOSEST TO UNIT THREE, ON THE TRAFFIC SIDE. THE REMAINING TCB UNITS MAY BE UNANCHORED PROVIDED A MINIMUM UNANCHORED LENGTH OF 100' IS INSTALLED BEYOND THE 4-UNIT TRANSITION.
5. HEIGHT TRANSITION ASSEMBLY SHALL BE A MINIMUM OF 4' LONG FOR A TRANSITION FROM 32" TCB TO 42" TALL SFCB AND SHALL BE A MINIMUM OF 5' LONG FOR A TRANSITION FROM 32" TCB TO 44" TALL SFCB. SEE SHEET 2 FOR FABRICATION DETAILS. WHEN THE TRAFFIC DIRECTION IS FROM THE TALLER BARRIER TOWARD THE SHORTER BARRIER THE HEIGHT TRANSITION IS OPTIONAL.
6. THE HEIGHT TRANSITION ASSEMBLY AND FIELD SIDE CONNECTION STRAP SHALL BE FABRICATED FROM 1/4" THICK ASTM A36 STEEL. THE WIDTH DIMENSIONS FOR THE RIB PLATES ARE TO THE INSIDE OF THE CAPPING PLATE. THE CAPPING PLATE MAY BE EITHER A BENT PLATE OR INDIVIDUAL PLATES CONTINUOUSLY WELDED.

NOTE TO DESIGNER

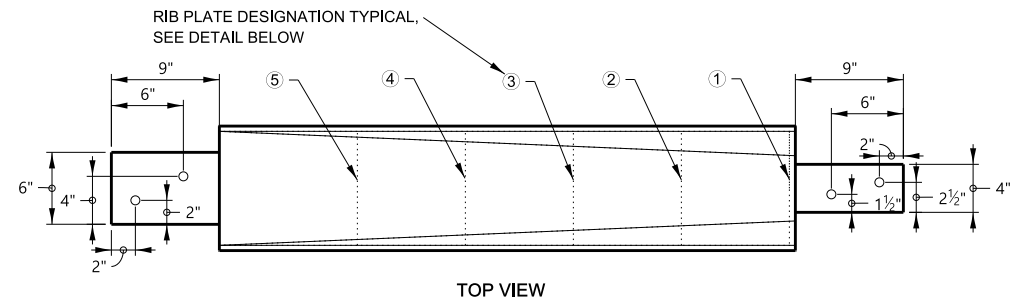
THIS BASE SHEET SHOWS TYPICAL CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

- NOTES TO DESIGNER**
1. THIS CONNECTION DETAIL SHALL ONLY BE USED TO CONNECT TEMPORARY CONCRETE BARRIER (TCB) TO PERMANENT, SINGLE FACE CONCRETE BARRIER (SFCB) OR PARAPET. THE PERMANENT BARRIER MAY BE EITHER CONSTANT-SLOPE OR F-SHAPE AND SHALL BE EITHER 42" OR 44" TALL.
 2. THIS DETAIL SHALL ONLY BE USED WHEN TRAFFIC IS ON ONE SIDE OF THE BARRIER AS INDICATED.
 3. THIS DETAIL MAY BE USED WITH ANCHORED TCB OR UN-ANCHORED TCB PROVIDED THAT THE UNANCHORED LENGTH IS AT LEAST 100' PAST THE 4-UNIT TRANSITION SHOWN ON SHEET 2.
 4. THIS DETAIL SHALL NOT BE USED TO CONNECT A TCB TO A DOUBLE FACE CONCRETE BARRIER (I.E. CONCRETE MEDIAN BARRIER).
 5. IF DESIGNER DETERMINES THAT ONLY ONE HEIGHT SFCB (42" OR 44") IS PRESENT, THEN THE DESIGNER MAY REMOVE THE TRANSITION CAP DETAIL THAT IS NOT NEEDED.

TCB CONNECTION TO SINGLE FACE CONCRETE BARRIER

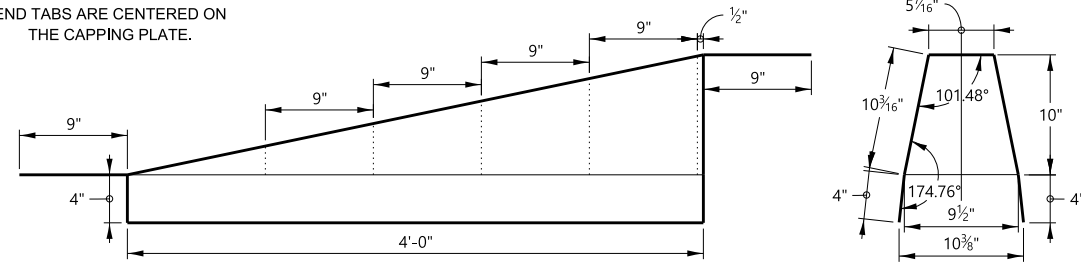


TCB CONNECTION TO SINGLE FACE CONCRETE BARRIER



TOP VIEW

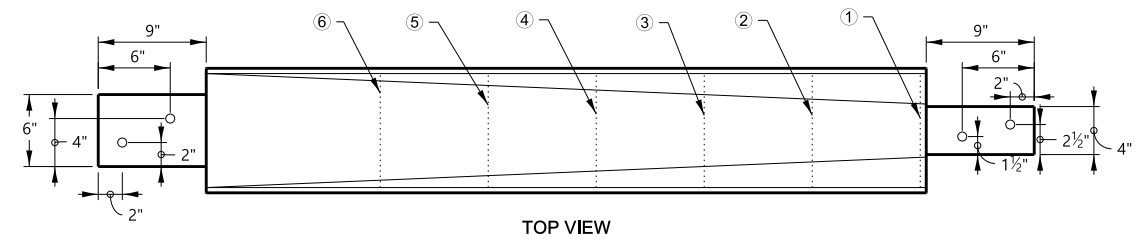
1/4" PLATE STOCK ALL PIECES.
END TABS ARE CENTERED ON
THE CAPPING PLATE.



SIDE VIEW

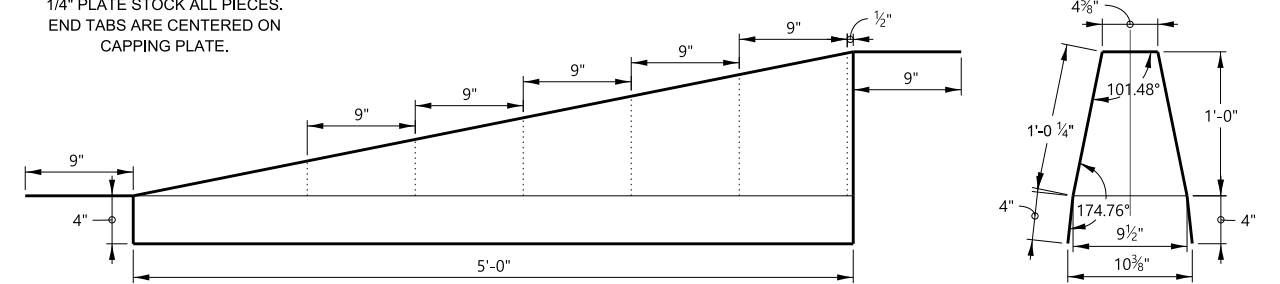
END VIEW

TCB TO 42 INCH SFCB HEIGHT TRANSITION ASSEMBLY



TOP VIEW

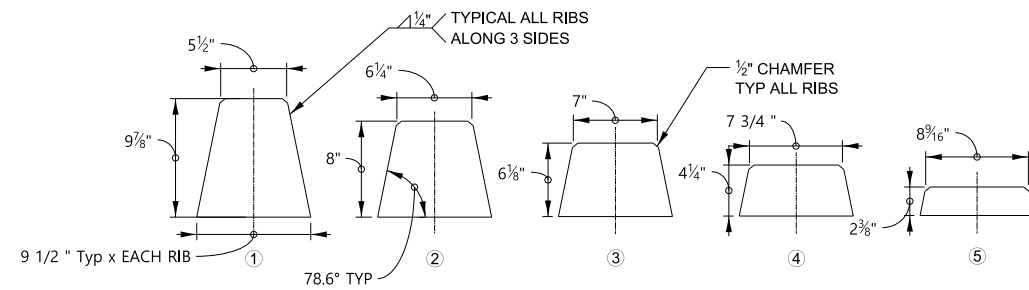
1/4" PLATE STOCK ALL PIECES.
END TABS ARE CENTERED ON
CAPPING PLATE.



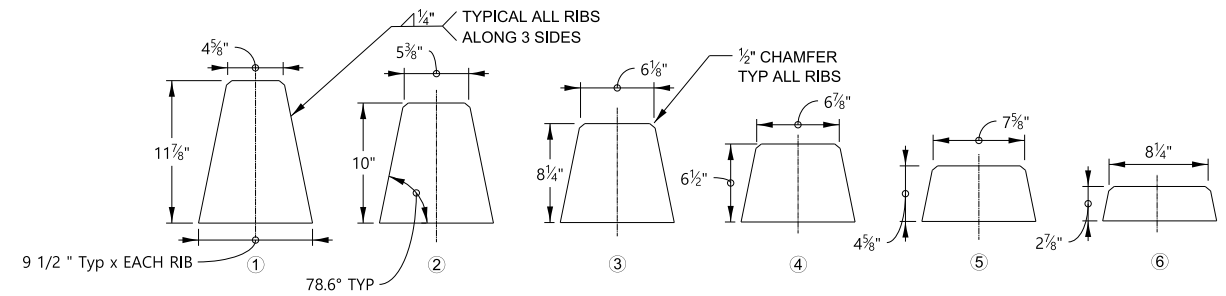
SIDE VIEW

END VIEW

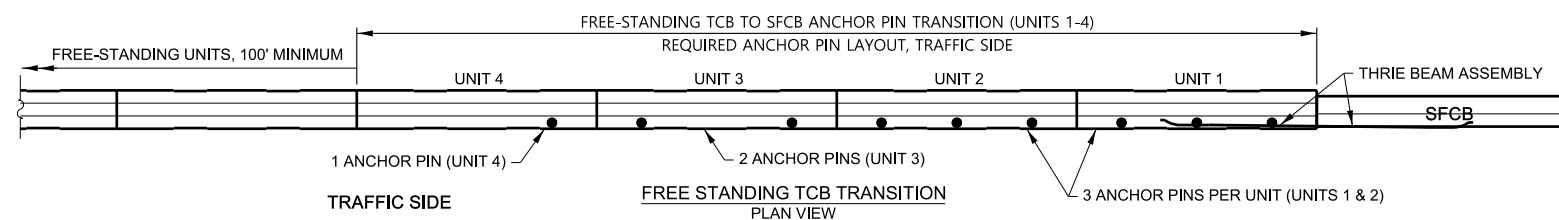
TCB TO 44 INCH SFCB HEIGHT TRANSITION ASSEMBLY



RIB DETAIL FOR 4 FT LONG HEIGHT TRANSITION ASSEMBLY
USE FOR CONNECTION BETWEEN 32" TALL TCB AND 42" TALL
SINGLE FACE CONCRETE BARRIER

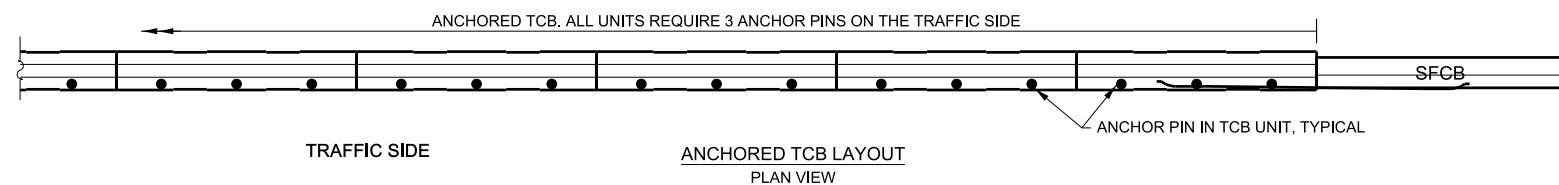


RIB DETAIL FOR 5 FT LONG HEIGHT TRANSITION ASSEMBLY
USE FOR CONNECTION BETWEEN 32" TALL TCB AND 44"
TALL SINGLE FACE CONCRETE BARRIER



TRAFFIC SIDE

FREE STANDING TCB TRANSITION
PLAN VIEW



TRAFFIC SIDE

ANCHORED TCB LAYOUT
PLAN VIEW

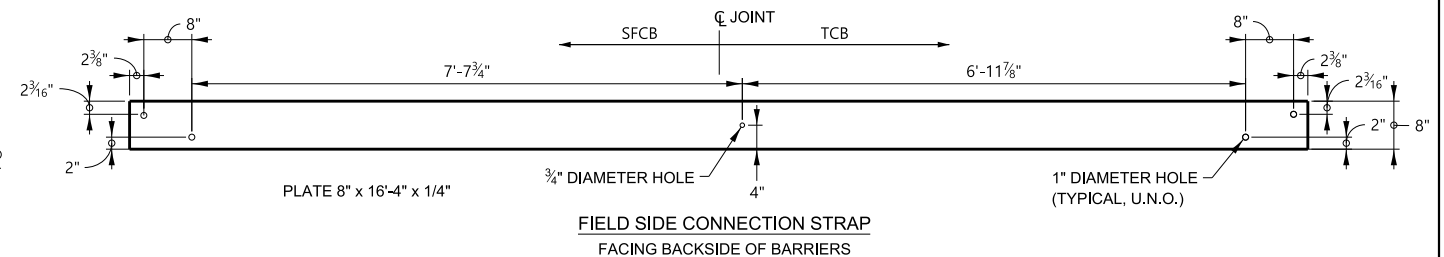


PLATE 8" x 16'-4" x 1/4"

FIELD SIDE CONNECTION STRAP
FACING BACKSIDE OF BARRIERS

NOTE TO DESIGNER
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TCB CONNECTION TO SINGLE
FACE CONCRETE BARRIER