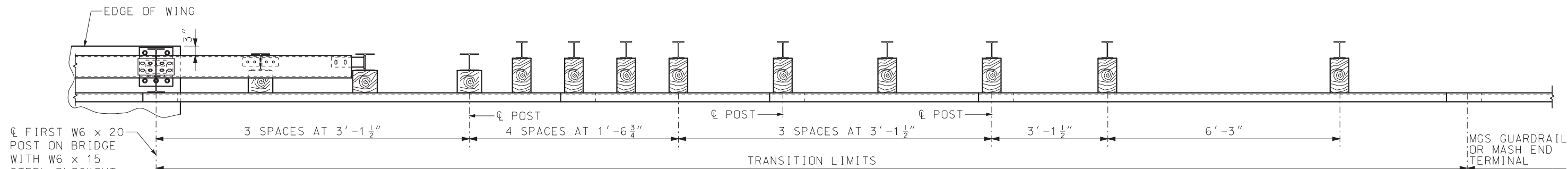
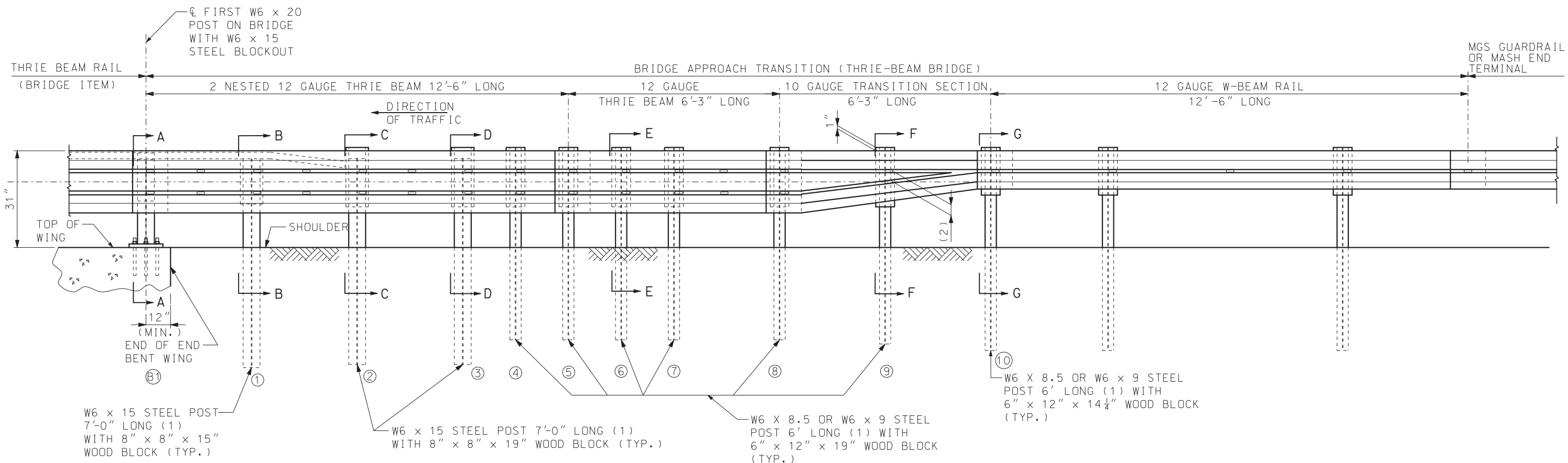


IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PLAN



PART SECTION THROUGH SLAB AT END OF WING

NOTES:

FOR GENERAL NOTES, SEE SHEET 2 OF 5.

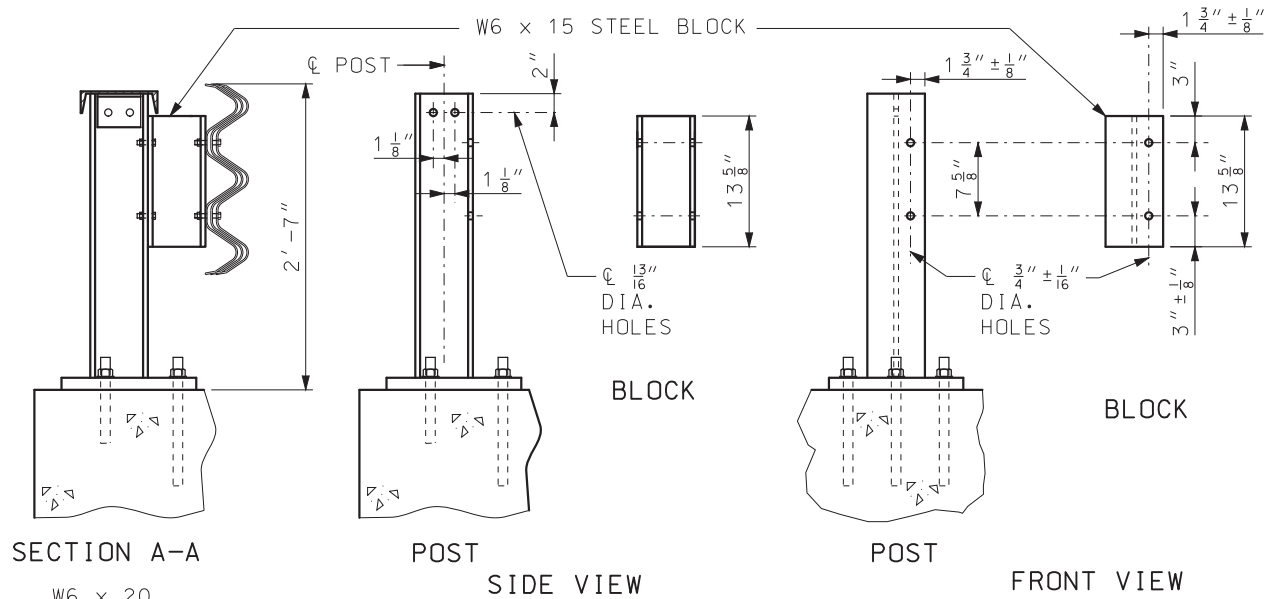
FOR POST DETAILS AND SECTION VIEWS, SEE SHEET 2 AND 3 OF 5.

(1) AT CONTRACTOR'S OPTION, EQUIVALENT SECTIONS MAY BE FABRICATED FROM MATERIAL MEETING AND IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A769 GRADE 36 OR 40. THE SECTIONS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO 111.

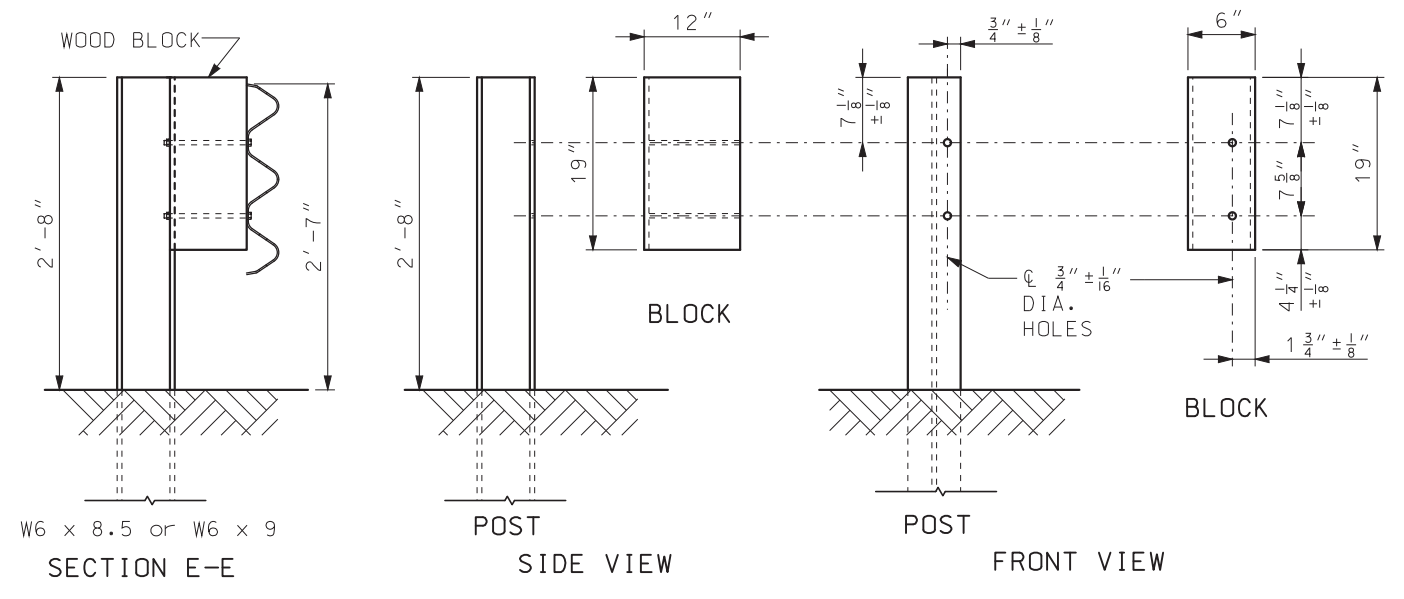
(2) VERIFY BY RAIL TRANSITION PRODUCER.

	<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
		<b>MIDWEST GUARDRAIL SYSTEM (MGS) BRIDGE APPROACH TRANSITION (THRIE BEAM ON BRIDGE)</b>
DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017	606.70B	SHEET NO. 1 OF 5

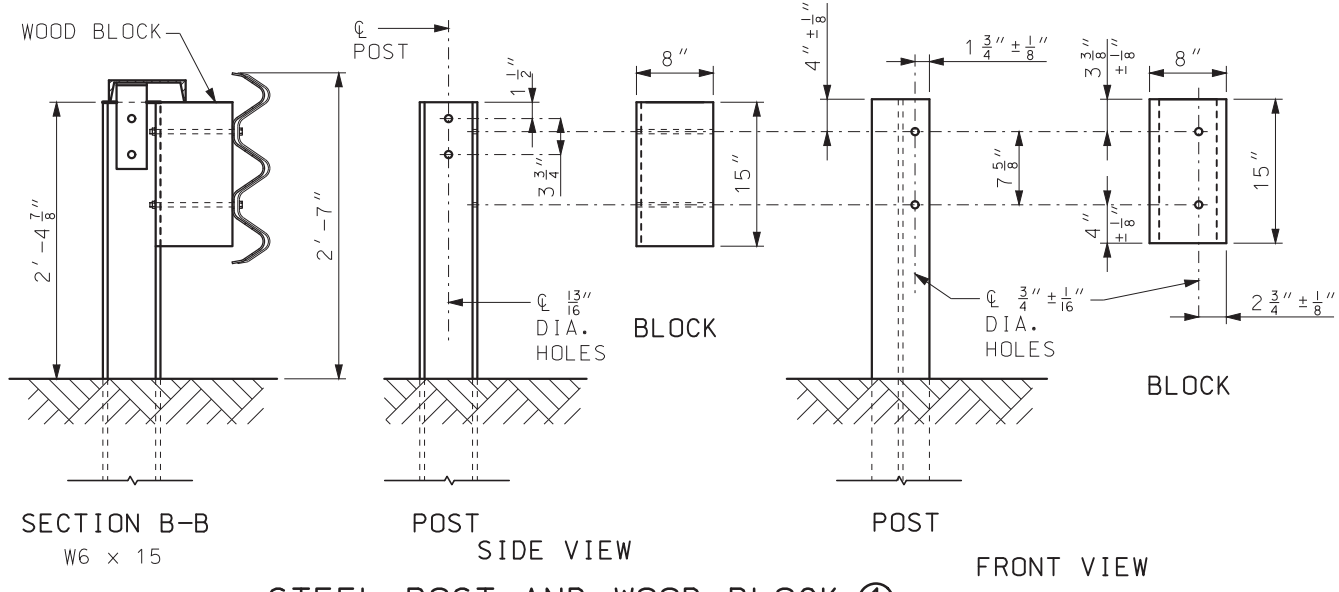
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



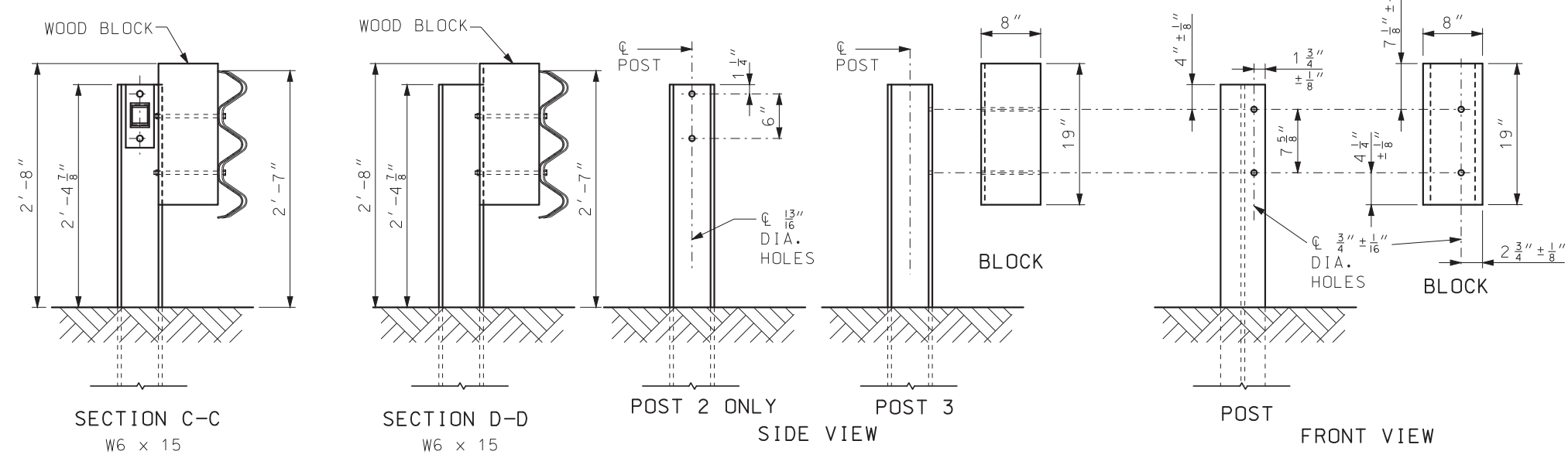
STEEL POST AND STEEL BLOCK (B1)



STEEL POST AND WOOD BLOCK (4) THROUGH (8)



STEEL POST AND WOOD BLOCK (1)

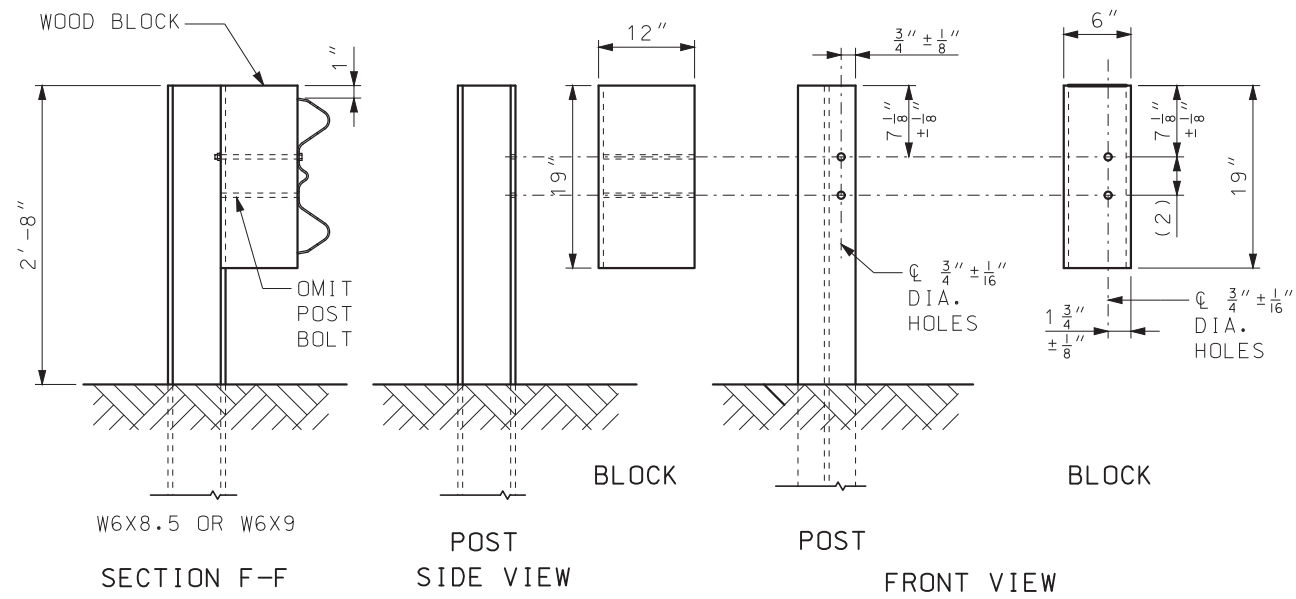


STEEL POST AND WOOD BLOCK (2) and (3)

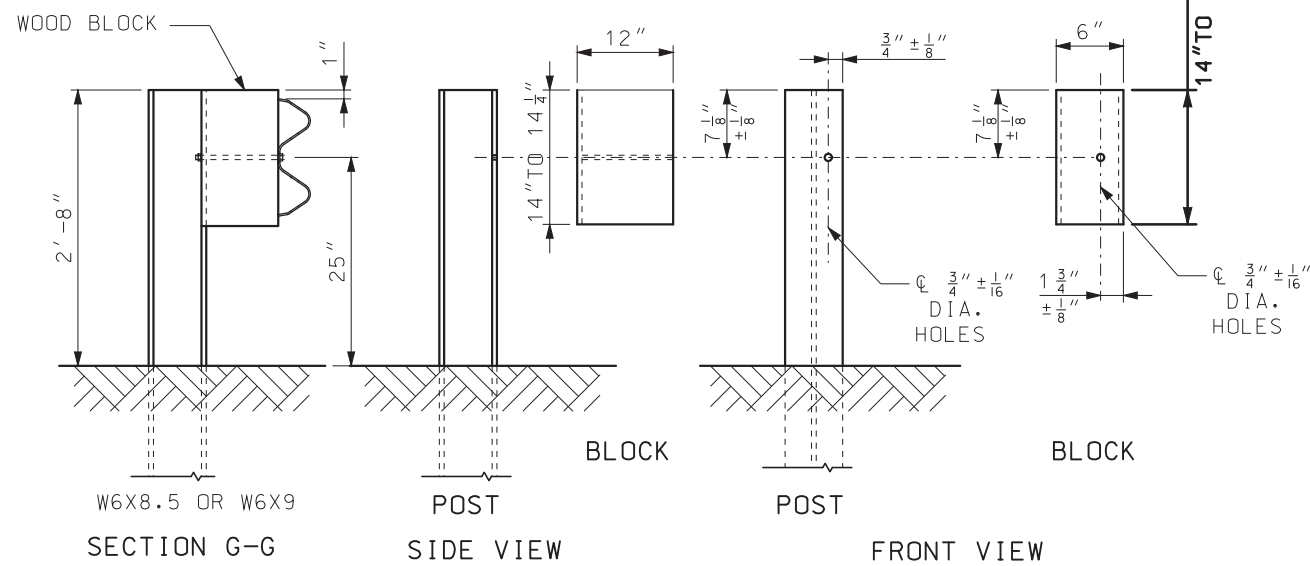
GENERAL NOTES:

- DESIGN BASED UPON MASH TEST LEVEL 3 (TL-3).
- FABRICATED STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.
- FOR PROTECTIVE COATING AND MATERIAL REQUIREMENTS, SEE SEC 1040 OF THE STANDARD SPECIFICATIONS.
- RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.
- USE 5/8" BUTTON-HEAD, OVAL SHOULDER BOLTS WITH HEX NUTS (THICKNESS OF HEX NUTS = 3/8" MIN.) AT ALL SLOTS.
- ALL LAP SPLICES SHALL BE MADE IN THE DIRECTION OF TRAFFIC.
- THE COST OF FURNISHING, FABRICATING AND INSTALLING TRANSITION SECTION, COMPLETE-IN-PLACE, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH.
- THE COST OF FURNISHING, FABRICATING AND INSTALLING BRIDGE ANCHOR SECTION (THRIE BEAM), COMPLETE-IN-PLACE, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH.
- FOR DETAILS NOT SHOWN, SEE BRIDGE THRIE BEAM RAIL SHEET.

<b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b>	
105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<b>MIDWEST GUARDRAIL SYSTEM (MGS)</b> <b>BRIDGE APPROACH TRANSITION</b> <b>(THRIE BEAM ON BRIDGE)</b>
DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017	<b>606.70B</b>
SHEET NO. <b>2 OF 5</b>	

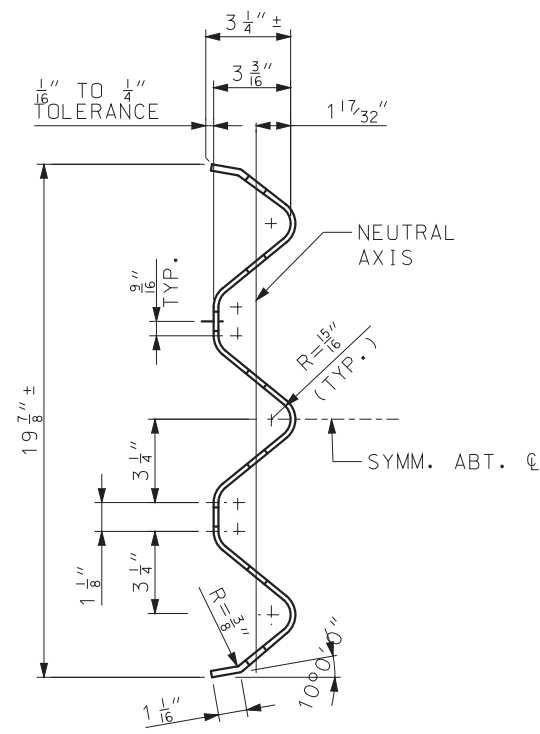


STEEL POST AND WOOD BLOCK (9)

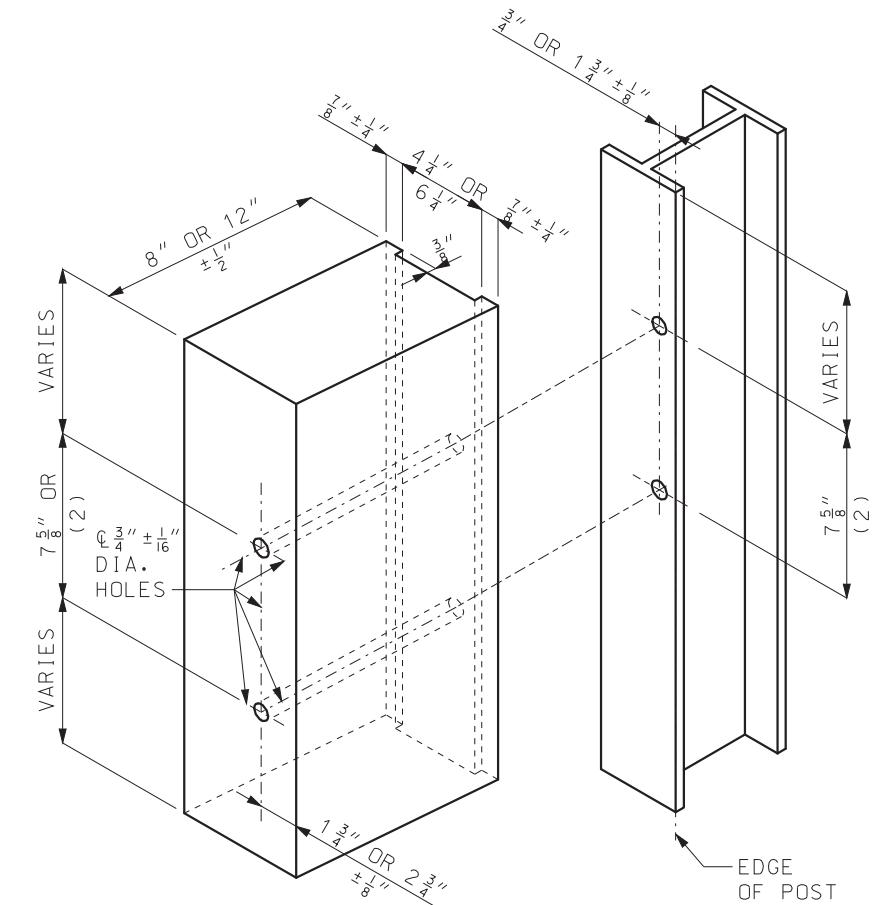


STEEL POST AND WOOD BLOCK (10)

(2) VERIFY BY RAIL TRANSITION PRODUCER.

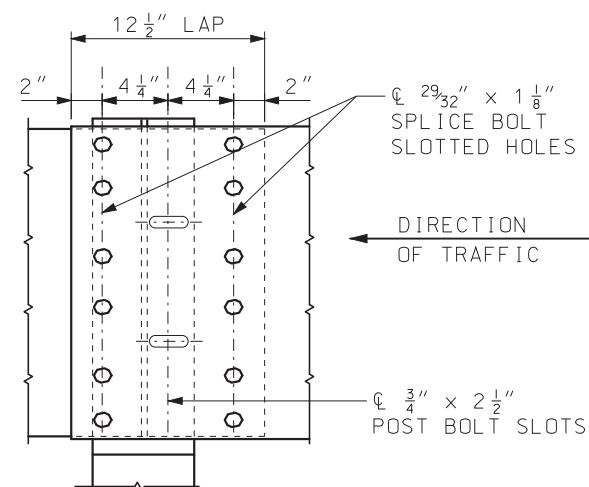


SECTION H-H  
THROUGH THRIE BEAM RAIL

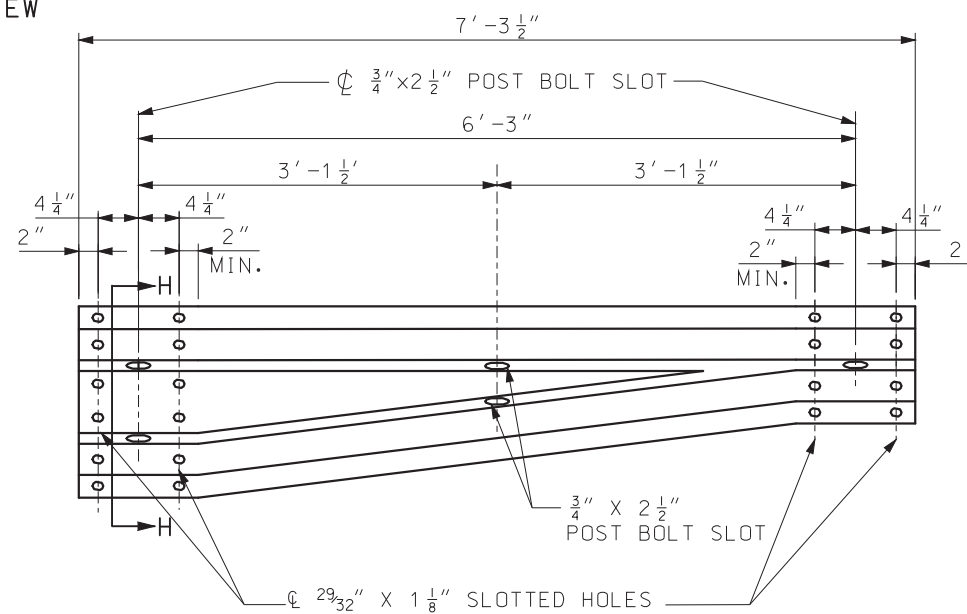


POST (9) - (2) VERIFY BY RAIL TRANSITION PRODUCER (SEE FRONT SHEET)  
 POST (10) - ONLY 1 HOLE REQUIRED  
 ALL HOLES 3/4" ± 1/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL  
FOR STEEL POST & WOOD BLOCKS (6" AND 8")



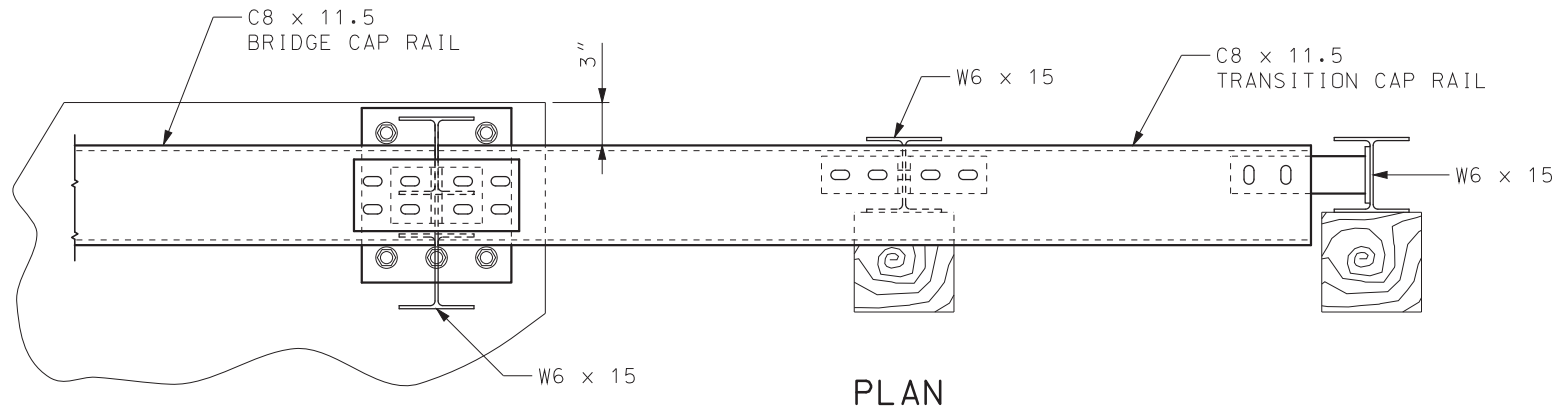
THRIE BEAM RAIL SPLICE AT POST



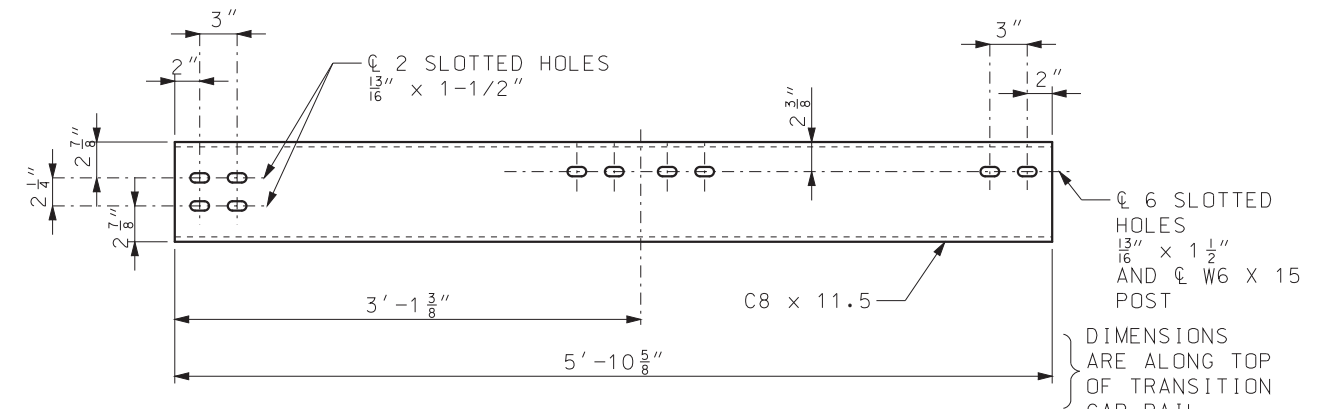
ASYMMETRICAL TRANSITION SECTION

<p><b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b></p> <p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>	
<p>STATE OF MISSOURI ERIC E. SCHROETER NUMBER PE-28411 PROFESSIONAL ENGINEER</p> <p><small>THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.</small></p>	<p><b>MIDWEST GUARDRAIL SYSTEM (MGS)</b></p> <p><b>BRIDGE APPROACH TRANSITION (THRIE BEAM ON BRIDGE)</b></p>
<p>DATE EFFECTIVE: 04/01/2018</p> <p>DATE PREPARED: 2/9/2018</p>	<p>606.70B</p> <p>SHEET NO. 3 OF 5</p>

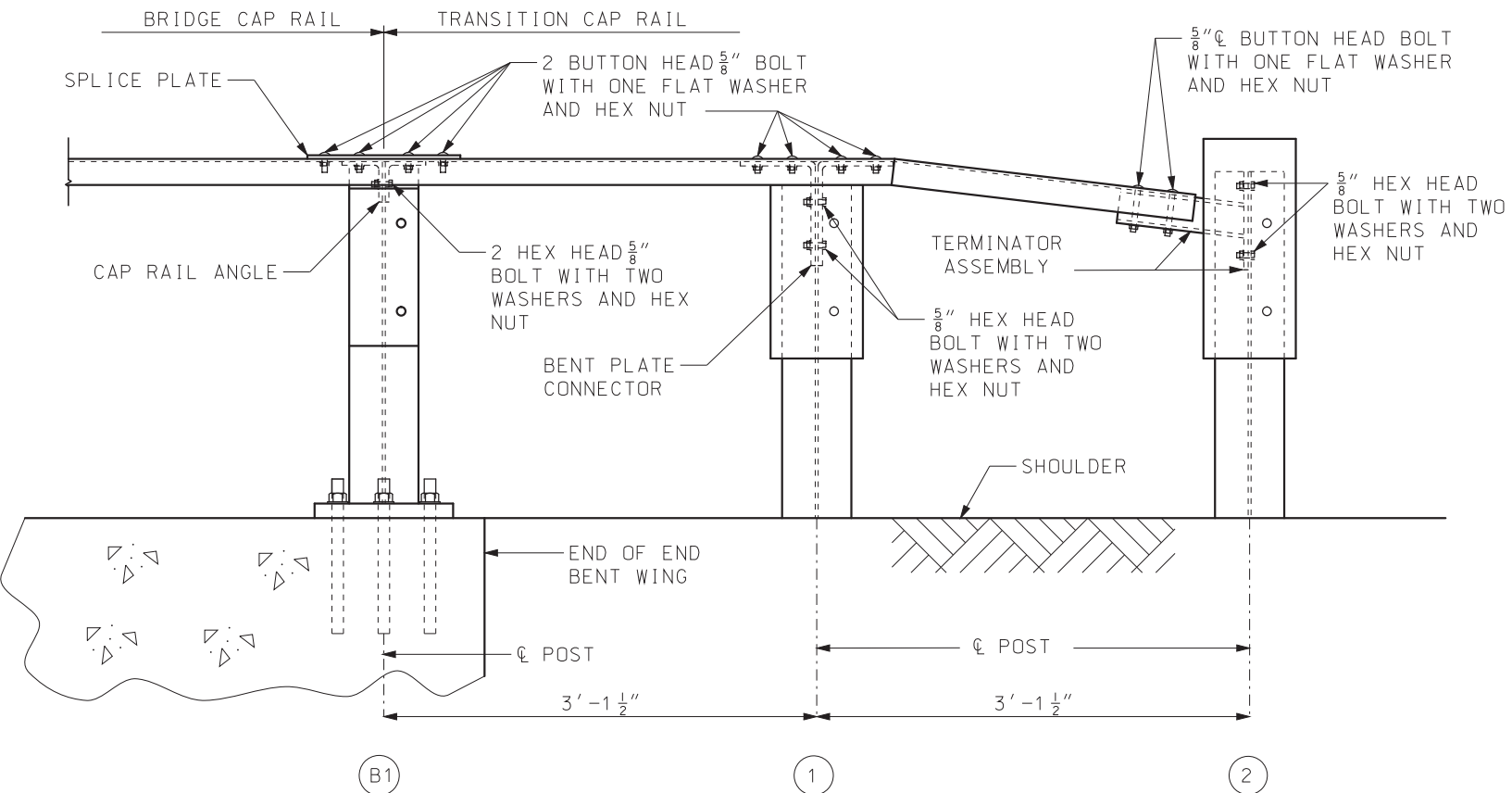
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



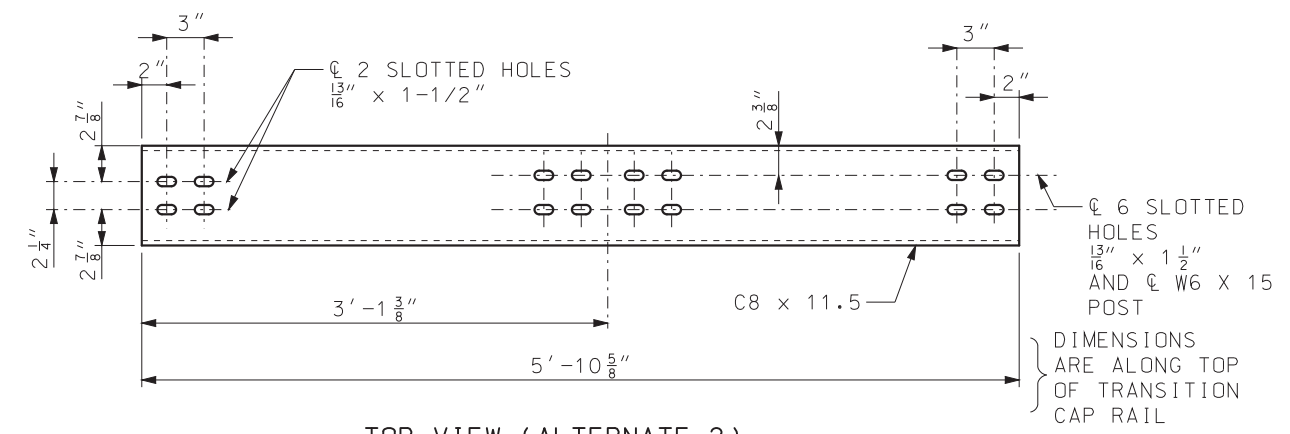
PLAN



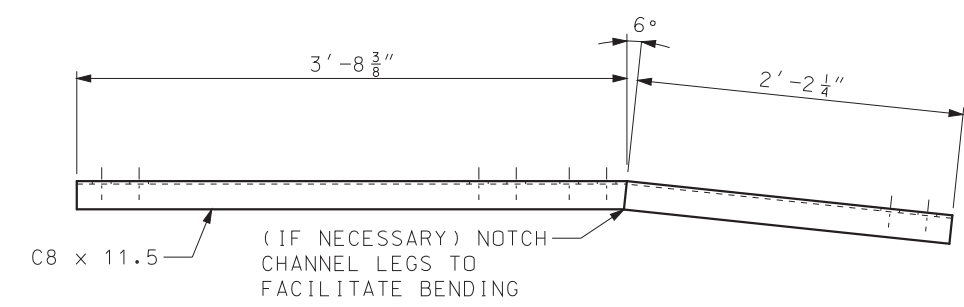
TOP VIEW (ALTERNATE 1)



ELEVATION  
(THRIE BEAM RAIL NOT SHOWN)


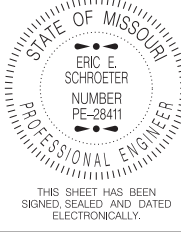


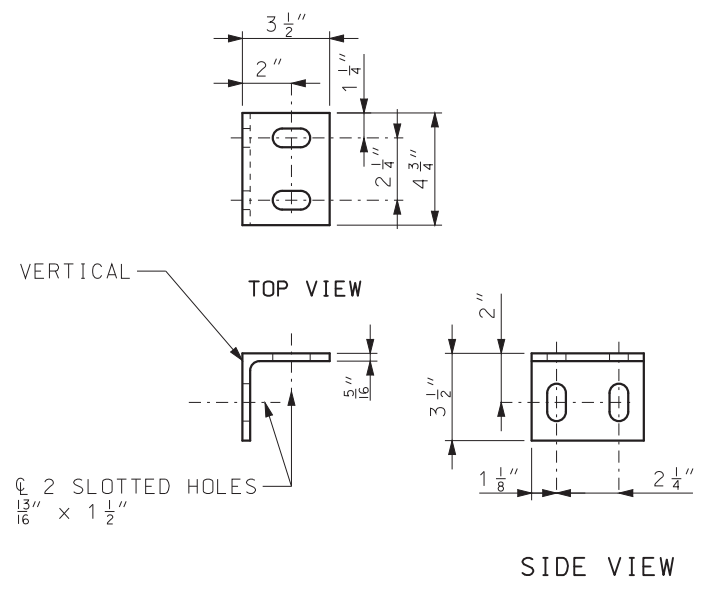
TOP VIEW (ALTERNATE 2)



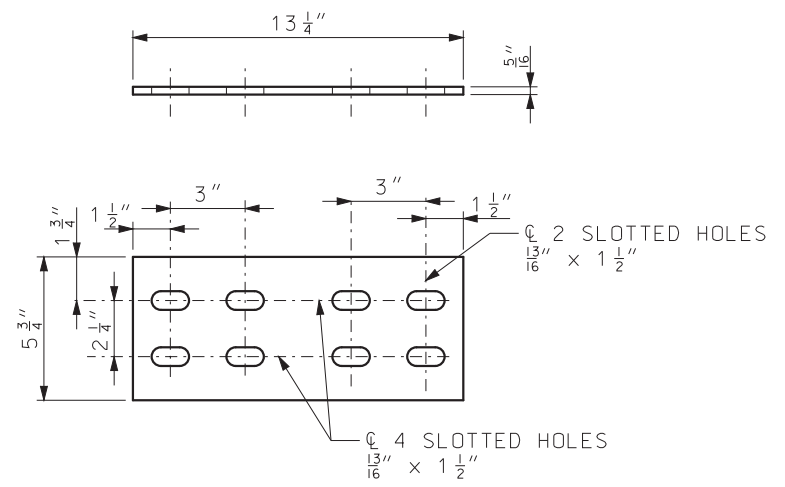
ELEVATION  
TRANSITION CAP RAIL

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

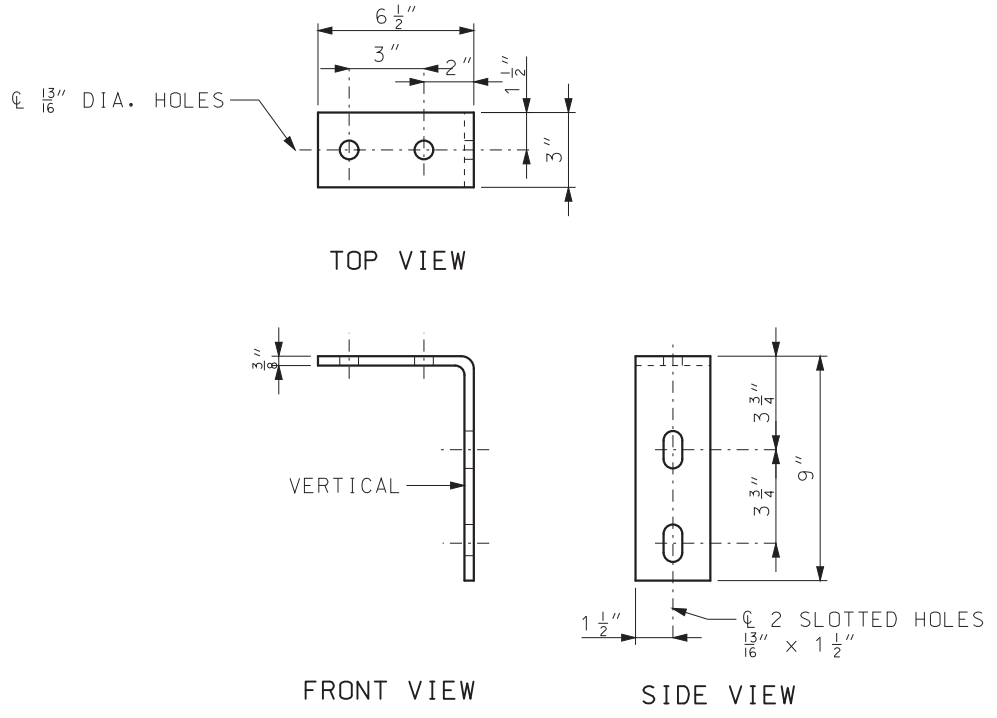
 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<b>MIDWEST GUARDRAIL SYSTEM (MGS)</b> <b>BRIDGE APPROACH TRANSITION</b> <b>(THRIE BEAM ON BRIDGE)</b>
DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017	SHEET NO. <b>606.70B</b> 4 OF 5



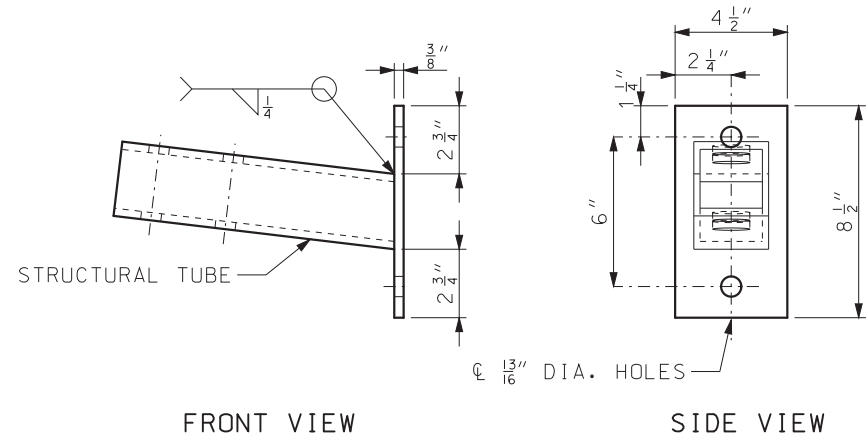
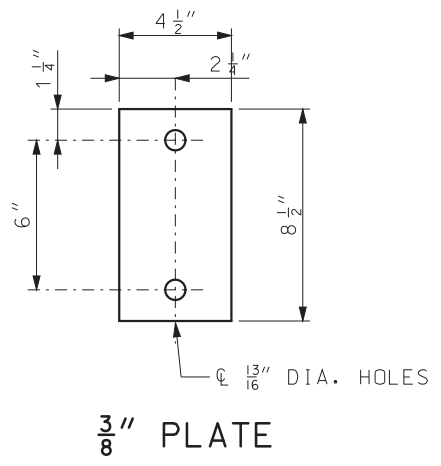
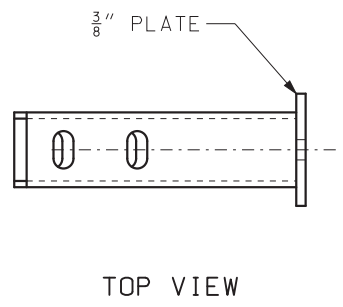
**CAP RAIL ANGLE**  
 ∠ 3 1/2" x 3 1/2" x 5/16"



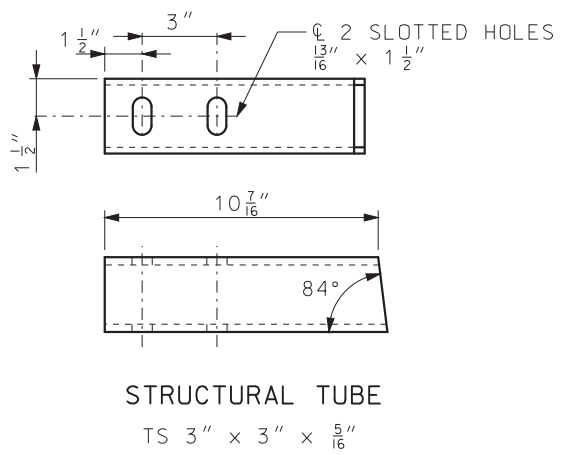
**SPLICE PLATE**


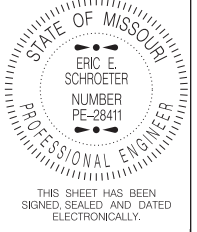


**BENT PLATE CONNECTOR**



**TERMINATOR ASSEMBLY**



 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
 <p>STATE OF MISSOURI          ERIC E. SCHROETER          NUMBER PE-28411          PROFESSIONAL ENGINEER</p> <p>THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.</p>	<b>MIDWEST GUARDRAIL SYSTEM (MGS)</b> <b>BRIDGE APPROACH TRANSITION</b> <b>(THREE BEAM ON BRIDGE)</b>
	DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017

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