

ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS

\_\_ DATE: 8-17 \_\_ DATE: 8-17 \_\_ DATE: 8-17 S.D. COOPER CHECKED BY: M.A. AVERETTE DESIGN ENGINEER OF RECORD: M.A. AVERETTE

THE BARRIER RAIL SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THE SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

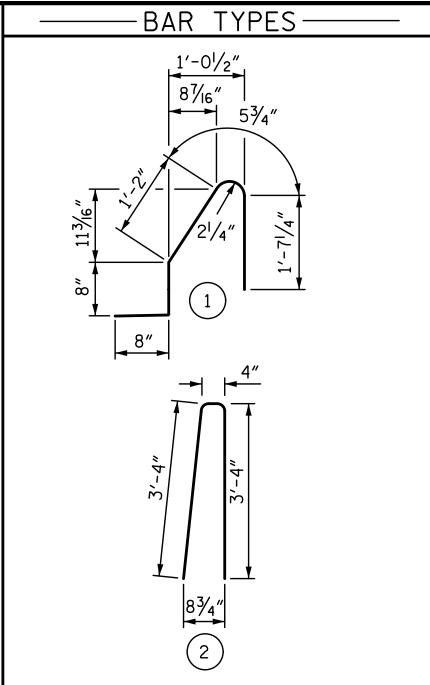
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS,  $\frac{1}{2}$ " IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

THE #5S1 AND S2 BARS MAY BE SHIFTED AS NECESSARY TO MAINTAIN 2"MINIMUM CLEARANCE TO THE 1/2" EXPANSION JOINT MATERIAL.

THE #5S1 BARS MAY BE SHIFTED SLIGHTLY OR FIELD BENT AS NECESSARY IN ORDER TO CLEAR THE EXPANSION JOINT COVER PLATE ASSEMBLY IN THE CONCRETE BARRIER

STEEL CLASS AA CONCRETE AND LINEAR FEET QUANTITIES FOR BARRIER RAILS ON THE APPROACH SLABS.



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL					
FOR CONCRETE BARRIER RAIL ONLY					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
<b>₩</b> B1	88	#5	STR	26′-9″	2455
* S1	240	#5	1	4'-7"	1147
* S2	240	#5	2	7′-0″	1752

EPOXY COATED REINFORCING STEEL 5354 LB

217**.**53 LF

29.6 CY CLASS AA CONCRETE

\* INDICATES EPOXY COATED REINFORCING STEEL

CONCRETE BARRIER RAIL

PROJECT NO. U-2525C GUILFORD \_ COUNTY STATION: 470+43.12 -L-

SHEET 2 OF 2

9/13/2017

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE

CONCRETE BARRIER RAIL

LEFT LANE

**REVISIONS** SHEET NO. S8-18 NO. BY: DATE: DATE: BY: TOTAL SHEETS

NOTES:

RAIL AT THE END BENTS.

SEE "BRIDGE APPROACH SLAB DETAILS" SHEET FOR EPOXY COATED REINFORCING

PLANS PREPARED BY:

SIMPSON NGINEERS ASSOCIATES

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LICENSURE NO. C-2521

**DOCUMENT NOT CONSIDERED FINAL** 

**UNLESS ALL SIGNATURES COMPLETED**