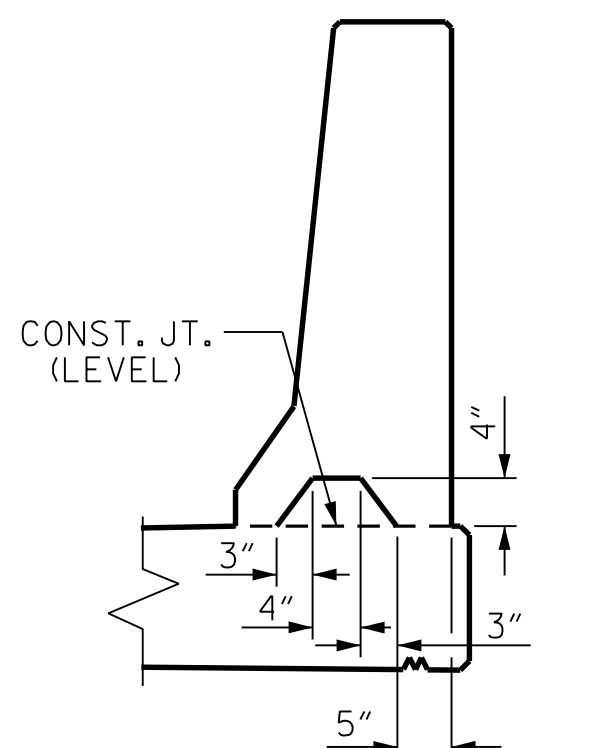
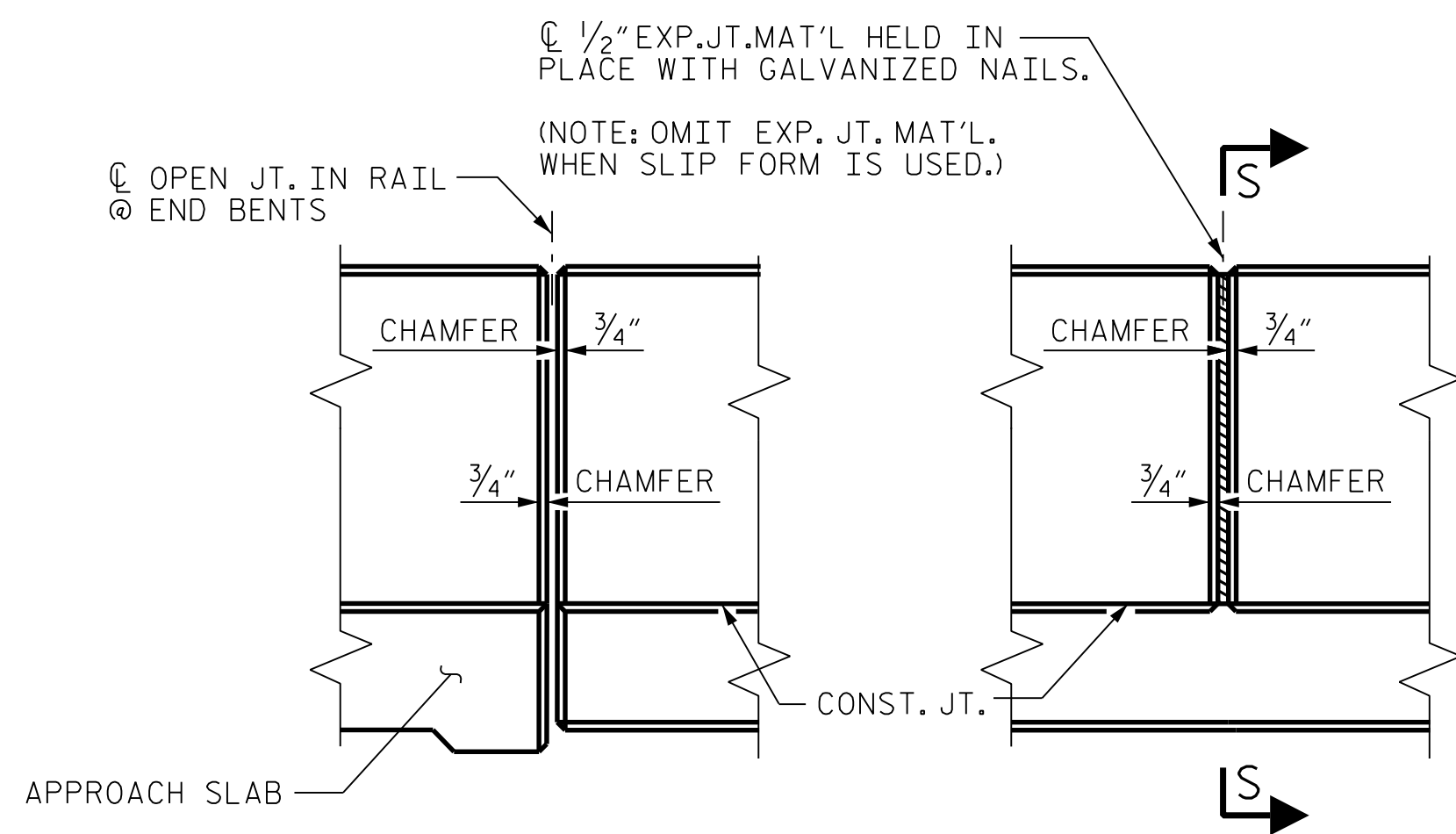


SECTION THRU RAIL



SECTION S-S

AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY
WHEN SLIP FORM IS USED)



ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS

NOTES:

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.

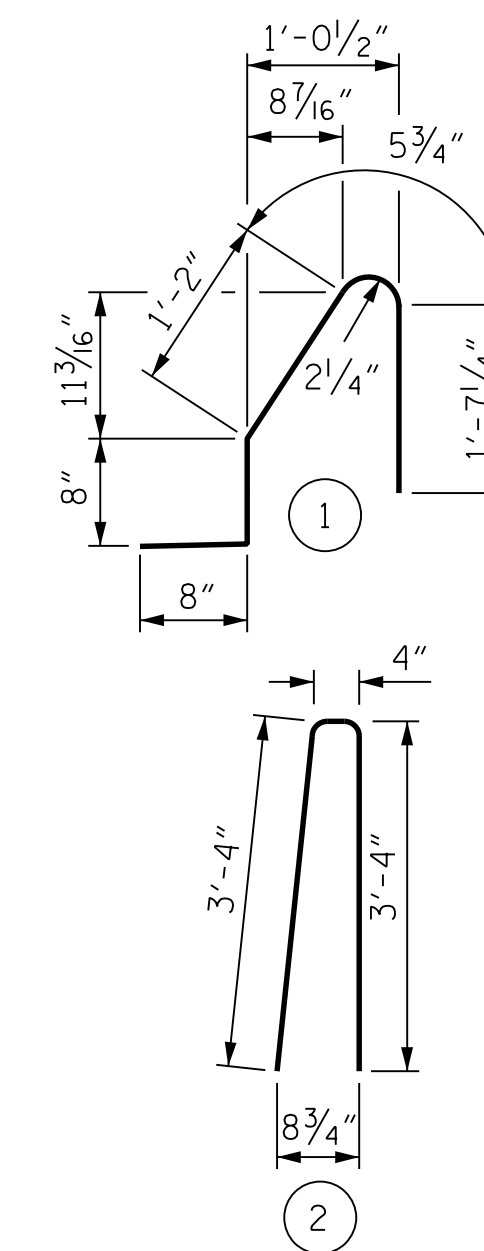
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS 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 RAIL AT THE END BENTS.

SEE "BRIDGE APPROACH SLAB DETAILS" SHEET FOR EPOXY COATED REINFORCING STEEL CLASS AA CONCRETE AND LINEAR FEET QUANTITIES FOR BARRIER RAILS ON THE APPROACH SLABS.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* 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
CLASS AA CONCRETE	29.6 CY
CONCRETE BARRIER RAIL	217.53 LF

* INDICATES EPOXY COATED REINFORCING STEEL

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

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE

CONCRETE BARRIER RAIL

RIGHT LANE

REVISIONS

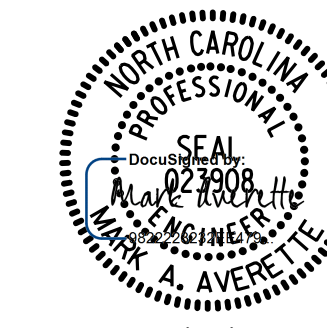
NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S9-18
2			4			TOTAL SHEETS 32

PLANS PREPARED BY:

SE & A
 SIMPSON ENGINEERS & ASSOCIATES

5640 Dillard Drive
 Suite 200
 Cary, NC 27518
 (919) 852-0468
 (919) 852-0538 (Fax)
 www.simpsonengr.com

LICENSURE NO. C-2521



9/13/2017

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

\$DATE\$ \$TIME\$ \$FILE\$

DRAWN BY: <u>S.D. COOPER</u>	DATE: <u>8-17</u>
CHECKED BY: <u>M.A. AVERETTE</u>	DATE: <u>8-17</u>
DESIGN ENGINEER OF RECORD: <u>M.A. AVERETTE</u>	DATE: <u>8-17</u>