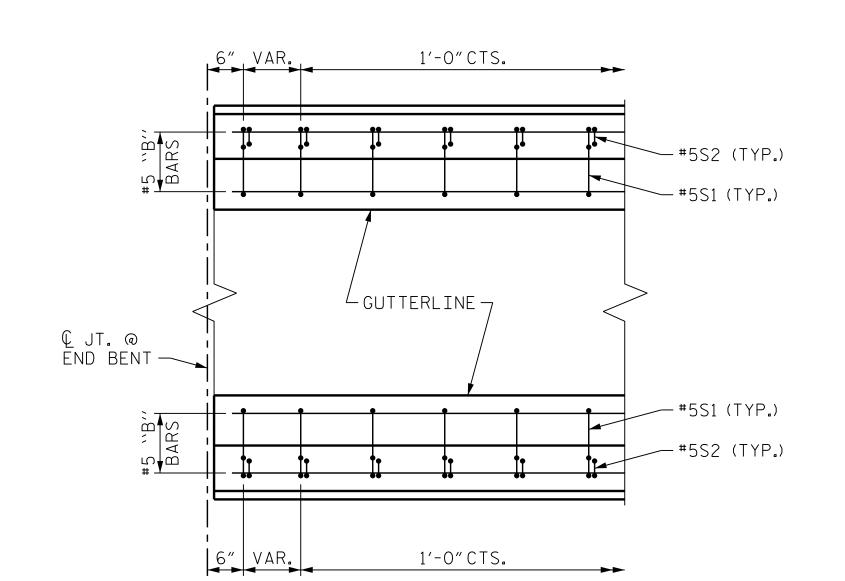
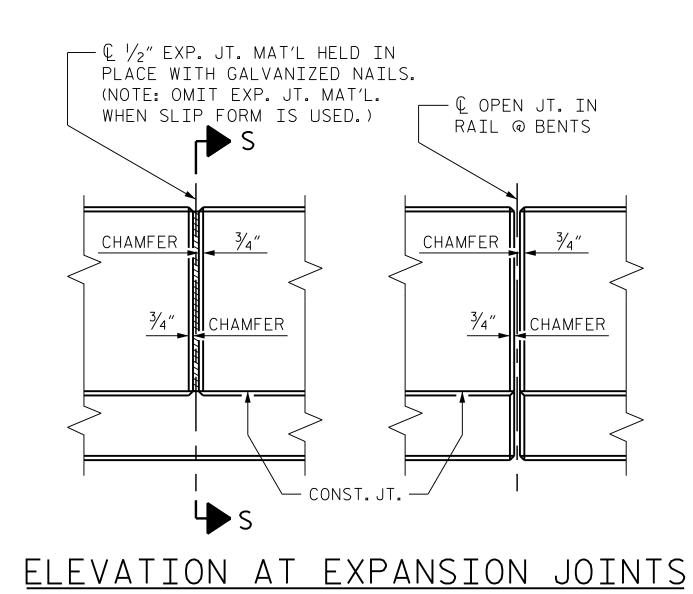
DES BY: L.ZAMPETTI DWG BY: M. SELLS DES CHK: J. ROBERTS CHK BY: S. NIFONG \_ DATE : 07/19



## RAIL DETAILS AT EXPANSION JOINTS

PLAN



\_ DATE : 07/19

\_ DATE : 11/19

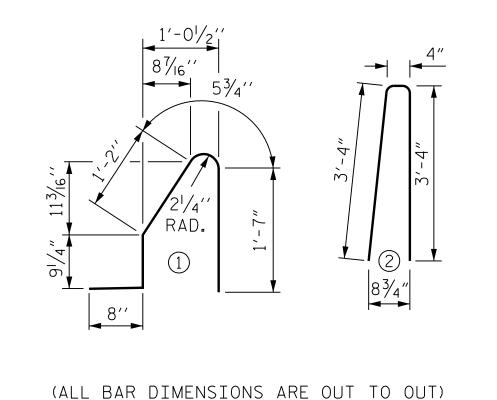
## NOTES

THE BARRIER RAIL IN EACH UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT UNIT 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.

SEE "BRIDGE APPROACH SLAB" SHEETS FOR BARRIER RAIL CONSTRUCTED ON APPROACH SLABS AND END OF RAIL DETAILS.



BAR TYPES

\* EPOXY COATED 30,412 LBS REINFORCING STEEL CLASS AA CONCRETE 175.9 CU. YDS CONCRETE BARRIER RAIL 1,294.5 LIN.FT UNIT 2 BAR | NO. | SIZE | TYPE | LENGTH WEIGHT \*B5 | 11 | # 5 | STR 27′-8″ 318 \*B6 | 11 | # 5 | STR 286 24'-11" | 11 | # 5 | STR 27′-4″ 314 \*B8 | 11 | # 5 | STR 20'-11" 240 \*B26 | 88 | # 5 | STR 2,349 25′-7″ \*B27 | 66 | # 5 | STR 1,830 26′-7″ \*B28 | 121 | # 5 | STR 3,482 27′-7″ 2,624 28′-7″ 1,358 \*B30 44 | # 5 | STR 29′-7″ \* S1 | 1,135 | # 5 | 4′-8″ 5,525 \* S2 | 1,135 | # 5 | 2 7′-0″ 8,287 \* EPOXY COATED 26,613 LBS REINFORCING STEEL CLASS AA CONCRETE 154.0 CU. YDS. CONCRETE BARRIER RAIL 1,132.9 LIN.FT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ON BRIDGE DECK ONLY

UNIT 1

LENGTH

27′-8″

28′-7″

27′-3″

28′-10″

26′-7″

27′-7″

28′-7″

29′-7″

4′-8″

7′-0″

WEIGHT

318

328

313

331

2,745

6,646

3,608

340

6,313

9,470

BAR | NO. | SIZE | TYPE |

\*B1 | 11 | # 5 | STR

\*B2 | 11 | # 5 | STR

\*B3 | 11 | # 5 | STR

\*B28 | 231 | # 5 | STR

\*B29 | 121 | # 5 | STR

\* S1 | 1,297 | # 5 |

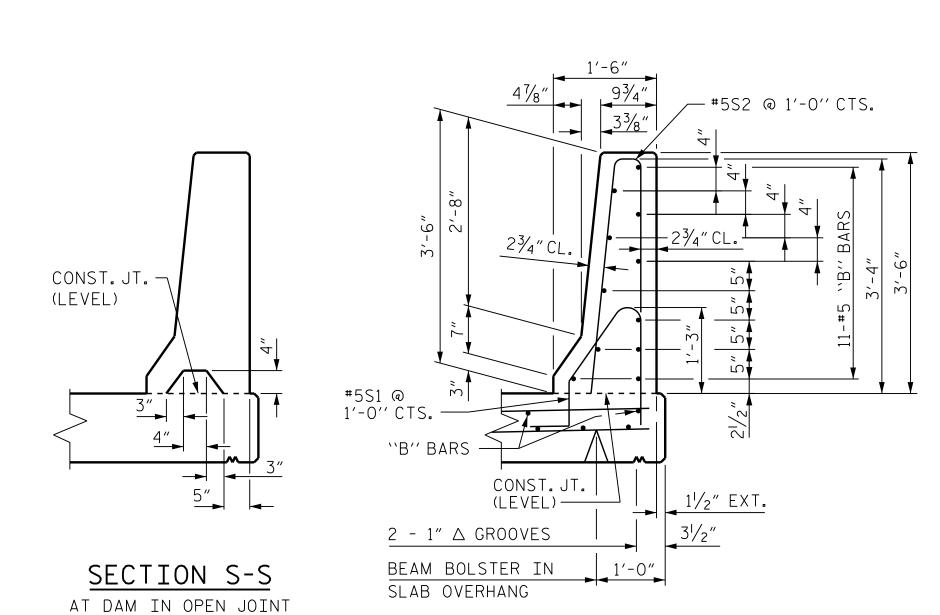
\* S2 | 1,297 | # 5 |

**米** B27│ 99 │

# 5 | STR

# 5 |

STR



(THIS IS TO BE USED ONLY

WHEN SLIP FORM IS USED)

## BARRIER RAIL DETAILS

SECTION THROUGH RAIL

PROJECT NO. U-2579AB FORSYTH COUNTY STATION: 47+63.62 -Y15FLYBD-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE CONCRETE BARRIER RAIL DETAILS

REVISIONS DATE: DATE: S05-066 TOTAL SHEETS 116 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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