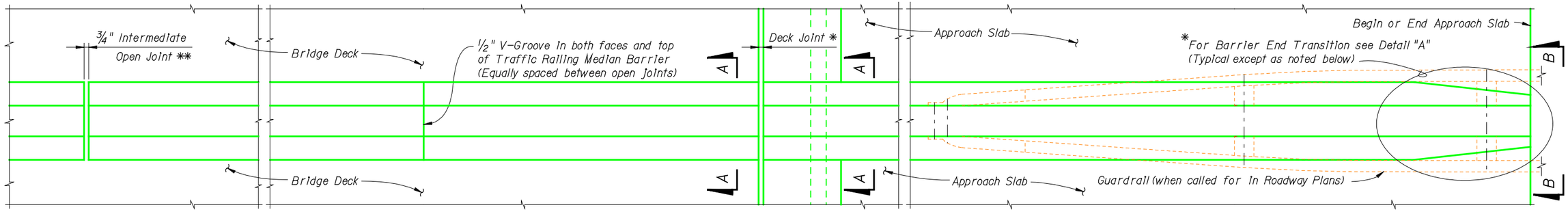
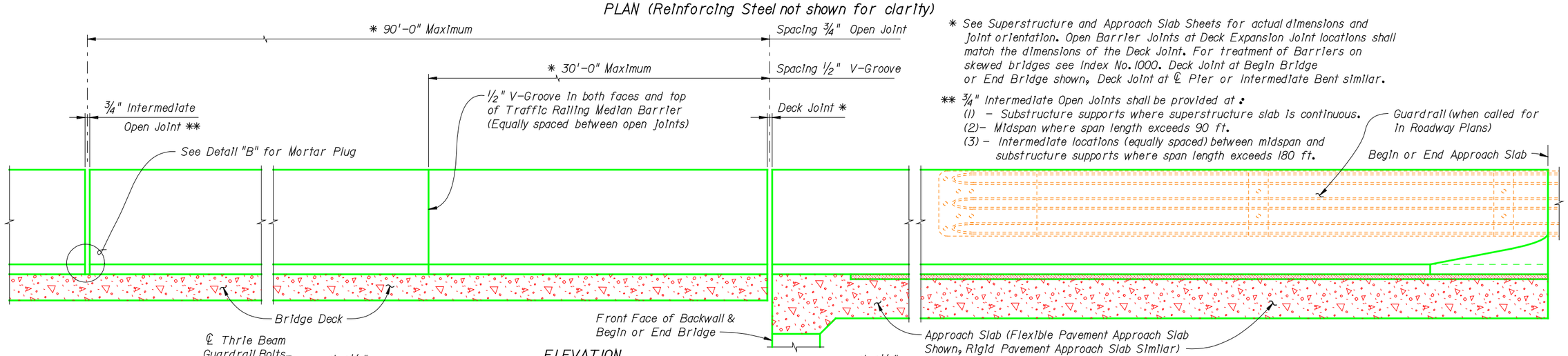


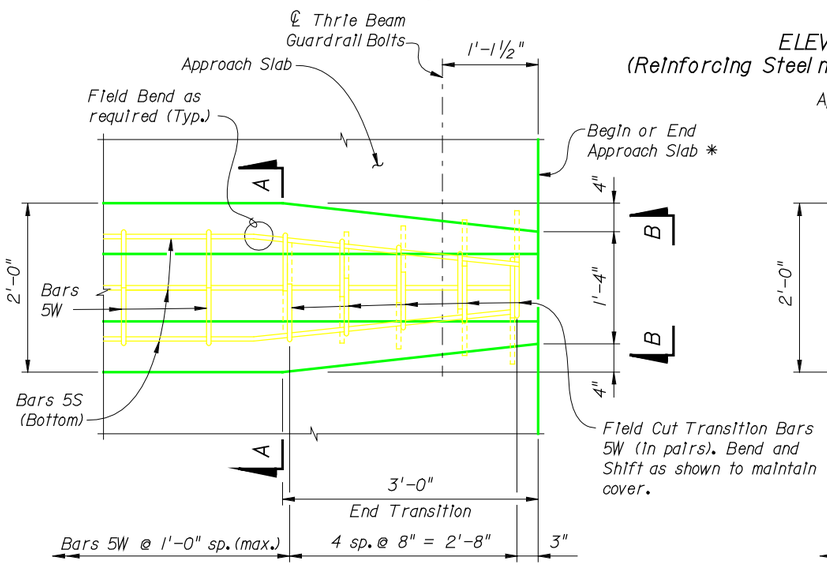

PLAN (Reinforcing Steel not shown for clarity)



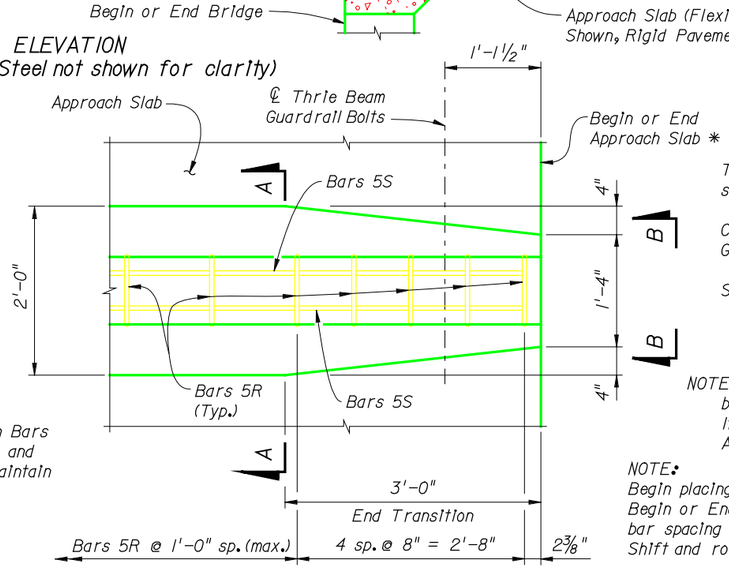

ELEVATION
(Reinforcing Steel not shown for clarity)

* See Superstructure and Approach Slab Sheets for actual dimensions and joint orientation. Open Barrier Joints at Deck Expansion Joint locations shall match the dimensions of the Deck Joint. For treatment of Barriers on skewed bridges see Index No. 1000. Deck Joint at Begin Bridge or End Bridge shown, Deck Joint at ℄ Pier or Intermediate Bent similar.

** 3/4" Intermediate Open Joints shall be provided at :
(1) - Substructure supports where superstructure slab is continuous.
(2)- Midspan where span length exceeds 90 ft.
(3) - Intermediate locations (equally spaced) between midspan and substructure supports where span length exceeds 180 ft.




PLAN - Barrier End Transition
(Showing Bars 5W and 5S)




PLAN - Barrier End Transition
(Showing Bars 5R and 5S)

## TRAFFIC RAILING BARRIER NOTES

This railing has been structurally evaluated to be equivalent or greater in strength to other safety shape railings which have been crash tested to NCHRP Report 350 TL-4 criteria.

CONCRETE AND REINFORCING STEEL : See General Notes.
GUARDRAIL : For Guardrail connection details see Roadway and Traffic Design Standards Index No. 400.
SUPERELEVATED BRIDGES : At the option of the Contractor the Traffic Railing Median Barrier on superelevated bridges may be constructed perpendicular to the roadway surface. The cost of all modifications will be at the Contractor's expense.

NOTE: Omit Barrier End Transition and Guardrail if the Concrete Barrier Wall is used beyond the Approach Slab. See the Plan and Elevation Sheet and the Roadway Plans. If Barrier End Transition is omitted, extend Typical Section to the end of the Approach Slab and space Bars 5R and 5W at 1'-0" (Typ.)

NOTE:
Begin placing Barrier Bars 5R and 5W on Approach Slab at the barrier end and proceed toward Begin or End Bridge to ensure placement of guardrail bolt holes. If required, adjustments to the bar spacing for Bars 5R and 5W shall be made immediately adjacent to Begin or End Bridge. Shift and rotate Bars 5R and 5W as required to maintain cover in Barrier End Transition.

CROSS REFERENCE:
For Section A-A, View B-B and Detail "B", see Index No. 710, Drawing 2 of 2.

DETAIL "A"

BRIDGE NO. XXXXXX

REVISIONS

| DATE | BY | DESCRIPTION |
|---|---|---|
| 6-30-00 | SDO | Standard Drawing Issue Date |

| DATE | BY | DESCRIPTION |
|---|---|---|
| | | |

| | NAMES | DATES |
|---|---|---|
| DRAWN BY | BMK | 5-00 |
| CHECKED BY | CEB | 5-00 |
| DESIGNED BY | CEB | 5-00 |
| CHECKED BY | MDM | 5-00 |
| APPROVED BY | REN | |

ENGINEER OF RECORD:
STRUCTURES DESIGN OFFICE
CENTRAL OFFICE
605 Suwannee Street, MS 33
Tallahassee, Florida 32399-0450

FLORIDA DEPARTMENT OF TRANSPORTATION

| ROAD NO. | COUNTY | FINANCIAL PROJECT ID. |
|---|---|---|
| | | |

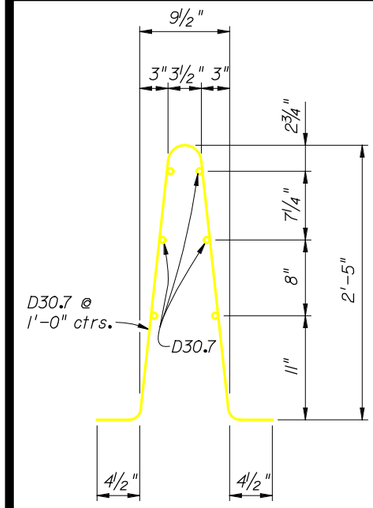
SHEET TITLE: TRAFFIC RAILING MEDIAN BARRIER - (32" F SHAPE)
INDEX NO. 710 (DRAWING 1 OF 2)

PROJECT NAME:

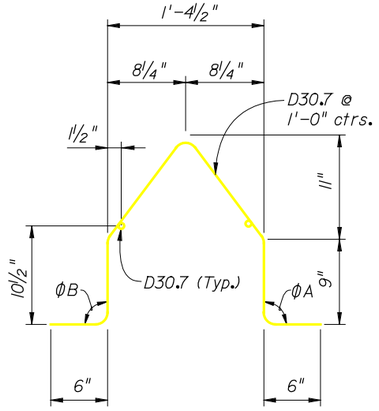
SHEET NO.

$$$$$$$$SYTIME$$$$$$$$ $$$$$$$$DGNSPECIFICATION$$$$$$$$

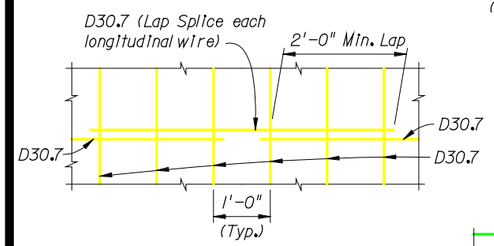
## ALTERNATE REINFORCING STEEL (WELDED WIRE FABRIC) DETAILS



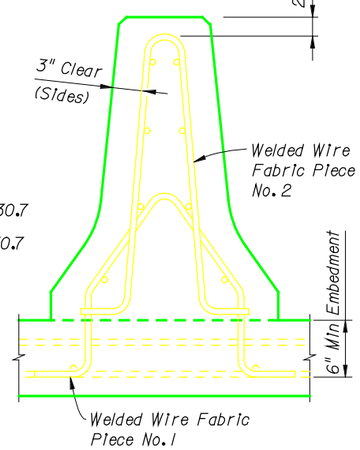

Welded Wire Fabric (WWF) Piece No. 2




Welded Wire Fabric (WWF) Piece No. 1




SPLICE DETAIL (Between WWF Sections)




WELDED WIRE FABRIC NOTES:

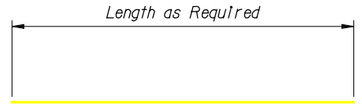
1. At the option of the Contractor Welded Wire Fabric may be utilized in lieu of all Bars 5R, 5S and 5W. Welded Wire Fabric shall conform to ASTM A497.
2. Welded Wire at Barrier End Transition shall be field bent inward as required (Pieces 1 & 2) to maintain cover. The top of Piece 1 shall be cut to allow overlap.
3. Place WWF panels so as to minimize the end overhang of longitudinal wires at Barrier Ends and Open Joints. Overhangs greater than 6" are not permitted.

## CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

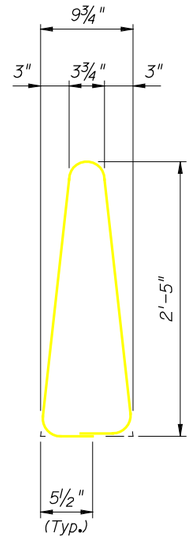
| BILL OF REINFORCING STEEL | | |
|---|---|---|
| MARK | SIZE | LENGTH |
| R | 5 | 6'-1" |
| S | 5 | AS REQ'D |
| W | 5 | 5'-3" |

| ROADWAY CROSS-SLOPE | ON SLOPE | | AT CROWN | |
|---|---|---|---|---|
| | ØA | ØB | ØA | ØB |
| 0% to 2% | 90° | 90° | 90° | 90° |
| 2% to 6% | 93° | 87° | 90° | 90° |
| 6% to 10% | 96° | 84° | 90° | 90° |

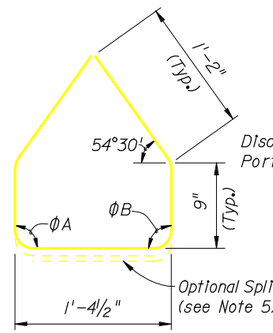
ØA and ØB shall be 90° if Contractor elects to place Barrier Perpendicular to the Deck.



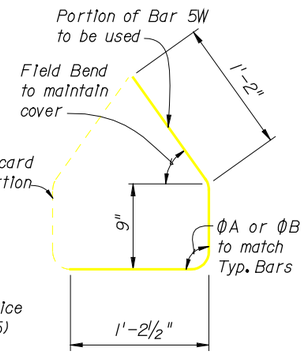

BAR 5S




STIRRUP BAR 5R



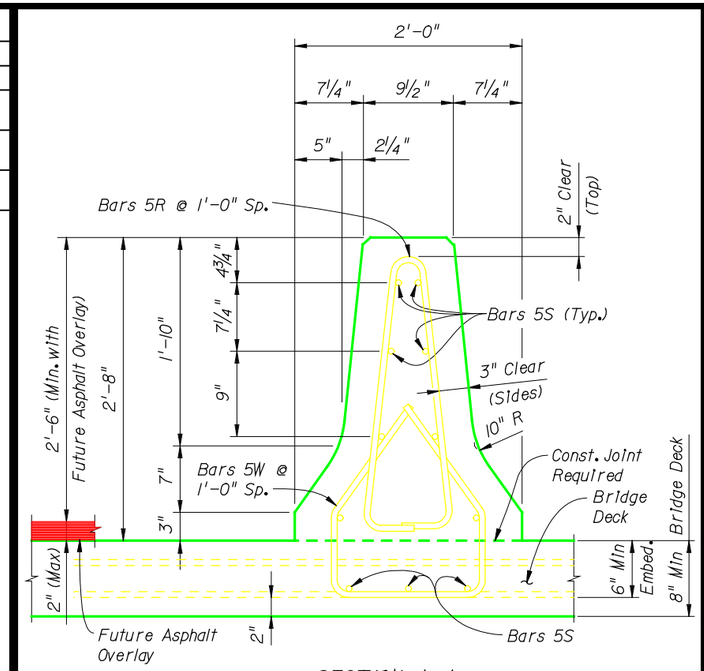

STIRRUP BAR 5W



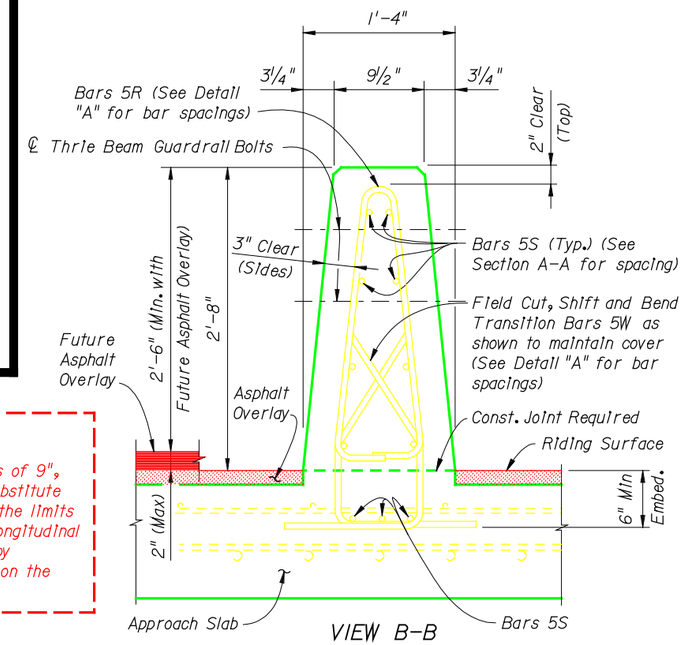

TRANSITION STIRRUP BAR 5W
To Be Field Cut and Bent
(10 required per Barrier End Transition)

REINFORCING STEEL NOTES:

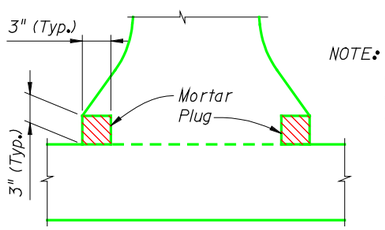
1. All bar dimensions in the bending diagrams are out to out.
2. All reinforcing steel at the open joints shall have a 2" minimum cover.
3. Bars 5S may be continuous or spliced at the construction joints. Bar splices for Bars 5S shall be a minimum of 2'-0".
4. At the Contractors option, Bars 5W may be fabricated as a two piece bar with a 1'-2" lap splice of the bottom legs.




SECTION A-A
TYPICAL SECTION THRU TRAFFIC RAILING MEDIAN BARRIER (SECTION THRU BRIDGE DECK SHOWN - SECTION THRU APPROACH SLAB SIMILAR)




VIEW B-B




DETAIL "B" - SECTION AT INTERMEDIATE OPEN JOINT

NOTE: At intermediate open joints, the lower 3" portion of the open joint shall be plugged by filling it with mortar in accordance with Section 400 of the Specifications.

| ESTIMATED TRAFFIC RAILING MEDIAN BARRIER QUANTITIES | | |
|---|---|---|
| ITEM | UNIT | QUANTITY |
| Concrete | C.Y./FT. | 0.120 |
| Reinforcing Steel | LB./FT. | 23.29 |

(The above quantities are based on a crowned roadway, with a 2% cross slope)

INSTRUCTIONS TO DESIGNER:

For Bridge Decks up to a maximum thickness of 9", the three Bars 5S placed in the deck may substitute for the longitudinal deck steel located within the limits of Bars 5W, provided that the total area of longitudinal deck steel beneath the barrier, as required by calculation, is not reduced. Show these bars on the Superstructure Sheets with the deck steel.

CROSS REFERENCE:
For Detail "A" and locations of Section A-A, View B-B and Detail "B" location, see Index No. 710, Drawing 1 of 2.

BRIDGE NO. XXXXXX

REVISIONS

| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
|---|---|---|---|---|---|
| 6-30-00 | SDO | Standard Drawing Issue Date | | | |

| | NAMES | DATES |
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| DRAWN BY | BMK | 5-00 |
| CHECKED BY | CEB | 5-00 |
| DESIGNED BY | CEB | 5-00 |
| CHECKED BY | MDM | 5-00 |
| APPROVED BY | REN | |

ENGINEER OF RECORD:
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SHEET TITLE: TRAFFIC RAILING MEDIAN BARRIER - (32" F SHAPE) INDEX NO. 710 (DRAWING 2 OF 2)

PROJECT NAME:

SHEET NO.

$$$$$$$$DGNSPECIFICATION$$$$$$$$
$$$$$$$$SYTIME$$$$$$$$