



GENERAL NOTES

- A) THIS DRAWING IS TO BE USED FOR CONNECTING GUARDRAIL TO TRAILING ENDS OF BRIDGE PARAPET WALLS ON ALL DIVIDED HIGHWAYS AND UNDIVIDED HIGHWAYS IF ENDS ARE DETERMINED TO BE OUTSIDE OF THE CLEAR ZONE FOR OPPOSING TRAFFIC.
- (B) IF GUARDRAIL IS TO BE CONNECTED USING THIS DRAWING IT WILL REQUIRE W BEAM GUARDRAIL (TYPE 2) (MASH TL-3), AT 13'-6 1/2" OR 26'-0 1/2", ITEM NO. 705-06.01, PER L.F. AND ONE MICHIGAN END SHOE, ITEM NO. 706-10.80, PER EACH.
- C CONNECTION TO BRIDGE RAIL SHOWN; FOR CONNECTION TO CONCRETE BARRIER WALLS, SEE S-SSMB-6.
- D SEE STANDARD DRAWINGS STD-1 SERIES FOR BRIDGE RAILING DETAILS, S-GR31-1 SERIES FOR ALL OTHER GUARDRAIL DETAILS AND MATERIAL PROPERTIES NOT SHOWN AND S-PL-3 FOR MINIMUM LENGTH AND DELINEATOR REQUIREMENTS.
- E ALL COST FOR THE CONNECTION REQUIREMENTS LISTED HERE BUT NOT LIMITED TO THESE ITEMS SHALL BE INCLUDED IN OTHER GUARDRAIL ITEMS. BUTTON HEAD "SPLICE" BOLTS FOR CONNECTING THE W BEAM GUARDRAIL (TYPE 2) WITH THE MICHIGAN END SHOE. THIS WILL REQUIRE 8 (ASTM 307) $\frac{5}{8}$ " DIA. X 2" WITH $\frac{5}{8}$ " DOUBLE RECESSED NUTS. TO CONNECT THE W BEAM GUARDRAIL (TYPE 2) AND THE MICHIGAN END SHOE TO THE BRIDGE RAIL WILL REQUIRE 4 HEX HEAD BOLT AT 7/8" Ø x 2", WASHERS AND NUTS.
- (F) TRANSITION TO 36" MAY BE ELIMINATED WHEN 32" PARAPET WALL DESIGN IS USED.

INSERT ASSEMBLY

CAST IN PLACE THREADED STEEL INSERT

WITH 7/8" x 2" HEX HEAD GALVANIZED BOLTS (A307) HOT DIP ZINC COATING ASTM A153

■ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE STANDARD DRAWING **DEPARTMENT OF TRANSPORTATION**

> **GUARDRAIL** CONNECTION TO BRIDGE ENDS (TRAILING ENDS)

06-28-2019

S-GRC-5

NOT TO SCALE

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