



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
DESIGN DIVISION  
NASHVILLE, TENNESSEE 37243-0348

**INSTRUCTIONAL BULLETIN NO. 07-16**

**Regarding Standard Drawing for Guardrail Attachment to Bridge Ends for  
Low-Volume (ADT  $\leq$  400) Local Roads**

**Effective immediately**, standard drawing S-GR-23A is approved for use. The standard details the guardrail attachment at bridge ends and the minimum length of installation for low volume (current ADT  $\leq$  400) local roads with speeds of 40 mph or less. This standard is for use on low-volume local road bridge replacement projects. The use of the earth pad as shown on standard drawing S-GR-39 is not required for this installation.

Until the drawing is added to the standard drawings, it is to be printed with the plans. The drawings shall be identified on the lower left side of the index sheet **“To be printed with plans”**.

A copy of the drawing is attached. No metric standard drawing will be developed for this application

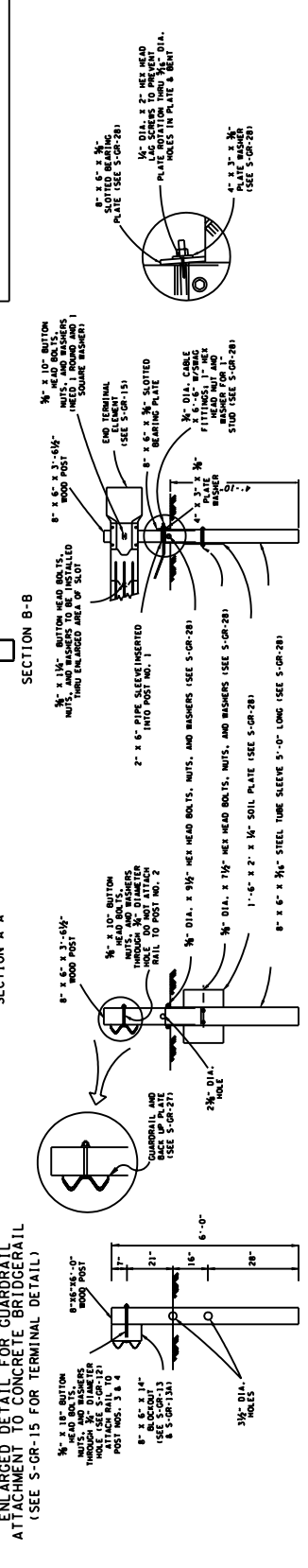
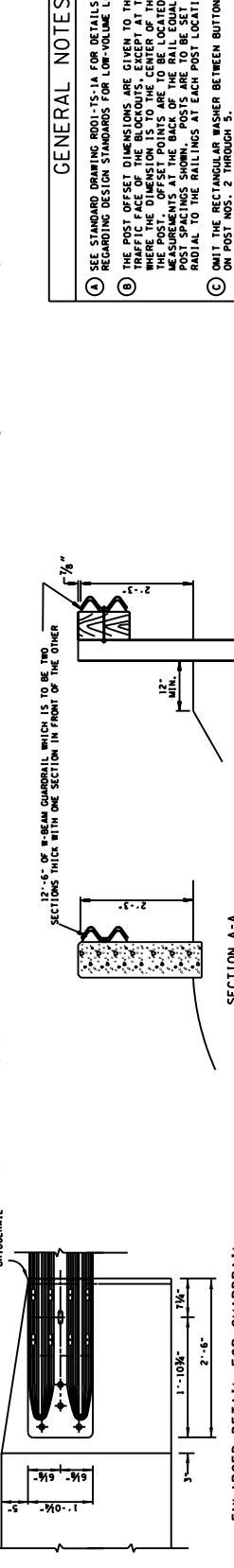
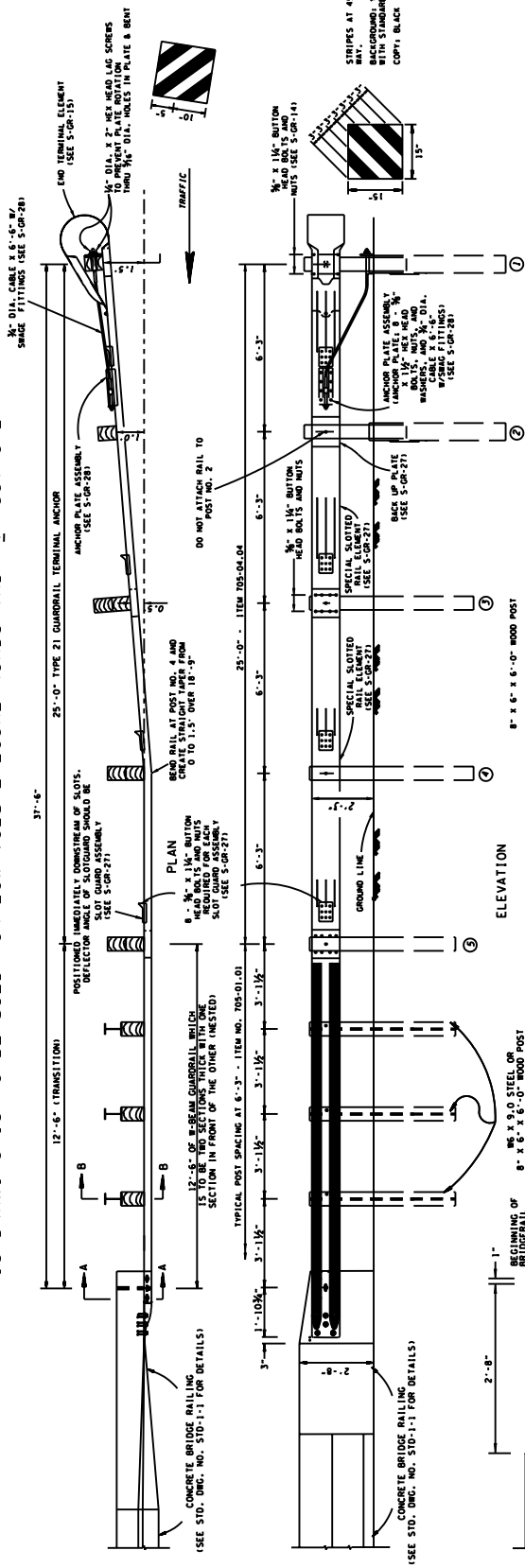
**SAFETY APPURTENANCES AND FENCE – ENGLISH**

<u>Drawing Number</u>	<u>Current Revision Date</u>	<u>Drawing Title</u>
S-GR-23A		GUARDRAIL ATTACHMENT TO BRIDGE END FOR LOW-VOLUME LOCAL ROADS (ADT $\leq$ 400)

Original signed by Jeff C. Jones  
Jeff C. Jones, Civil Engineering Director  
Design Division

April 20, 2007  
JCJ:MJA:mja  
Attachment

THIS DRAWING IS TO BE USED FOR LOW-VOLUME LOCAL ROADS (ADT < 400) ONLY



**GENERAL NOTES**

- SEE STANDARD DRAWING PRO-15-1A FOR DETAILS AND SPECIFICATIONS REGARDING DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS.
- THE POST OFFSET DIMENSIONS ARE GIVEN TO THE CENTER OF THE HEAD BOLT. THE POST OFFSET DIMENSIONS TO THE CENTER OF THE TRAFFIC FACE OF THE POST. OFFSET POINTS ARE TO BE LOCATED BY CHORD MEASUREMENTS AT THE BACK OF THE RAIL EQUAL TO THE NOMINAL RADIAL TO THE RAILINGS AT EACH POST LOCATION.
- OMIT THE RECTANGULAR WASHER BETWEEN BUTTON HEAD BOLT AND RAIL ON POST NOS. 2 THROUGH 5.

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION
GUARDRAIL ATTACHMENT TO BRIDGE END FOR LOW-VOLUME LOCAL ROADS (ADT < 400)
3-15-07   S-GR-23A