



1994

**SIDE-MOUNTED THREE-BEAM BRIDGE RAILING**



**SBT01a**

SHEET NO.	REF. NO.
1 of 2	

This is not listed in a TF-13 printout but SBT01b is, I-Beam w/ a tube post.

From NCHRP-Report 239 (Report 230 defined the tests) - 4500lbs Sedan, 60mph @ 25° angle  
 Service Level 1 was for lower volume & low speed bridges

GSR Performance Level, PL-1 - 5400lbs Truck @ 45mph @ 20° angle

**INTENDED USE**

The Service Level 1 bridge railings is an AASHTO Performance Level one system. This system was number 1 in the list of crash tested bridge railings in the 1986 FHWA Memorandum on bridge railings. This system is very similar to a system used by the state of Washington.

This drawing and specification address only the bridge railing and not the design or detailing of the bridge deck. Only reinforcement directly related to the bridge rail is shown. Bridge decks should be designed to develop the full strength of the bridge railing.

TF13 - AASHTO (GSR) SBT01a Nothing, SBT01b PL-2

Task Force

**COMPONENTS**  
 Unit Length = 7620

Component	Designator	Number
FBX08a	Guardrail bolt (180 mm) and nut	2
FBX10a	Post-base plate bolt (25 mm)	2
FBX20b	Post-base plate bolt (180 mm)	2
FPB09	Base plate	2
FRJ24a	Anchor rod (860 mm) and nuts	4
FWC08a	Washer	2
FWR01	Square washer	2
FWR09	Rectangular washer	2
PTF01	Tubular post	2
RTM03a	Thrie-beam guardrail	2

**REFERENCES**

R. D. Morgan, *Bridge Rails*, Memorandum to Regional FHWA Administrators, Federal Highway Administration, Washington, D.C., August 28, 1986.

C. A. Leonin and R. D. Powers, *In-service Evaluation of Experimental Traffic Barriers: An Interim Report*, Federal Highway Administration, Report No. FHWA-DP64-EP7-1, Washington, D.C., April, 1986.

M. E. Bronstad and J. D. Michie, *Multiple Service-Level Highway Bridge Railing Selection Procedures*, National Cooperative Highway Research Program Report 239, Transportation Research Board, Washington, D.C., 1981.

**SIDE-MOUNTED THRIE-BEAM BRIDGE RAILING**

**SBT01a**



SHEET NO.

DATE

2 of 2

04-08-95