

**SUPERSEDED BY EI 89-007
EFFECTIVE 9/14/89**

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

**SUBJECT: ALTERNATE BOX BEAM GUIDE RAIL
TERMINALS IN BACKSLOPE AREAS**

Subject Code: 7.27-2-606

Distribution:

Main Office

Regions

Special

Code: EI 81-32

Date: 7/28/81

Supersedes:

APPROVED:

Robert H. Edwards

The last paragraph of Section 10.01.04, Guide Rail Installation of the HDM says:

"Where guide rail terminates near a normal longitudinal drainage ditch in cut, extend the rail into the cut slope and anchor if required for the type of rail. A sloped terminal section would not be required for this condition."

Details regarding this condition were never formally developed leaving the EIC responsibility for working them out on a project by project basis. While this practice has never to our knowledge resulted in an unsatisfactory installation, it has resulted in a variety of construction details from project-to-project creating uncertainty for the bidder.

To resolve this, the attached two (2) sketches should be incorporated in the Contract Documents to cover the case where 6" x 6" guide railing would terminate in the backslope of a ditch or in a cut slope and use of an end assembly would be inappropriate. The details were "lifted" from Standard Sheet 606-4R1, Box Beam Median Barrier and are patterned after the Typical End Treatment - Type B wide Medians. They may be included as part of the normal 70± foot transition outside the points of need, but they do not replace it.

Note the pay factor of two (2) for the last 18LF for rock installations to compensate the contractor for the necessary rock drilling needed to make the installation. Design Engineers should insure that engineers estimates include sufficient pay quantities to account for this. The two sketches will be inserted by the M.O. Final Plan Review Bureau when box beam guide rail items appear in the estimate commencing with the letting of

NOV 5 1981

PREL.	DESIGN
DESIGN	LANDSCAPE
RECEIVED FACILITIES DESIGN DIVISION	
AUG 4 1981	
CIRC.	FILE

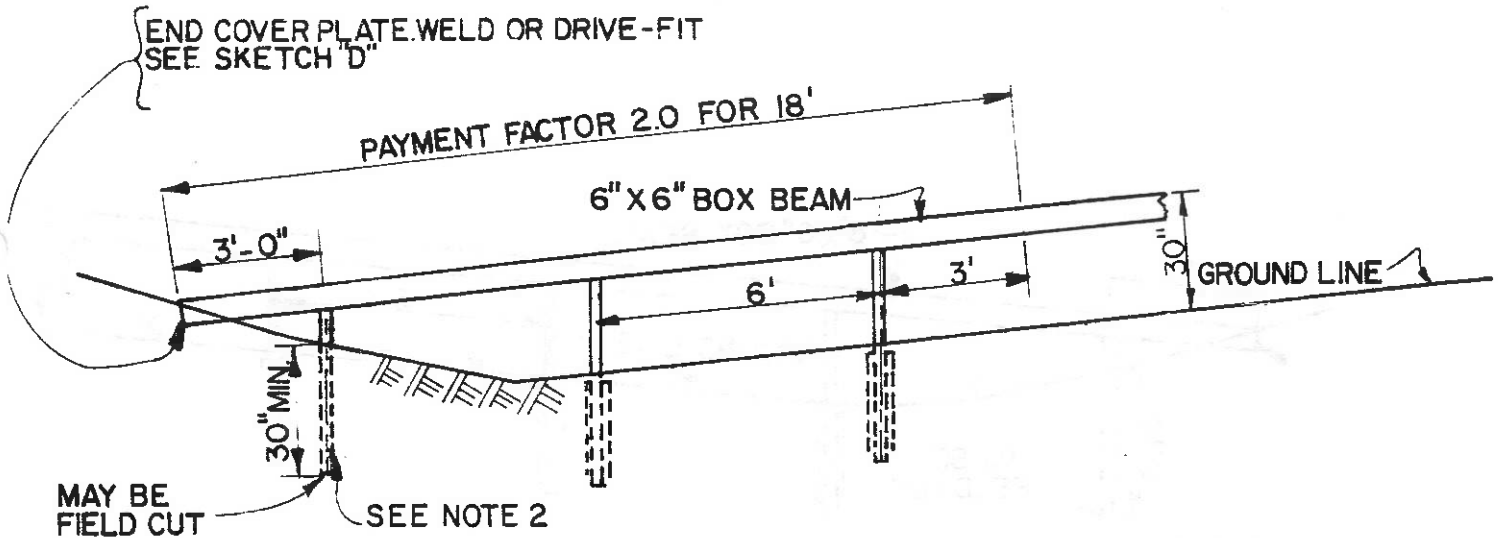
ADD THE FOLLOWING DETAIL TO STANDARD SHEET 606-3R2.
NOTES

1. SHOP CURVED OR STRAIGHT AS DIRECTED BY ENGINEER. PAYMENT UNDER APPROPRIATE ITEM.
2. DRILL 6" MAX. DIAMETER HOLES INTO ROCK. BACKFILL WITH GRANULAR MATERIAL, COMPACT BY HAND OR MACHINE, AND DRIVE POST.

SEE TYPICAL END TREATMENT - TYPE B WIDE MEDIANS ON BOX BEAM MEDIAN BARRIER STANDARD SHEET 606-4R1.
USE 3/8" Ø X 8" LONG BOLT W/ASA WASHER & SINGLE POST. 1/4" X 8" X 24" STEEL PLATE OPTIONAL.



PLAN



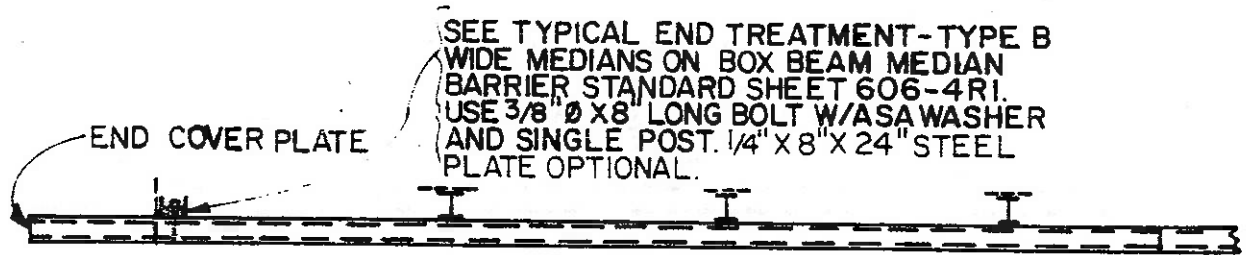
ELEVATION

ALTERNATE BOX BEAM GUIDE RAIL TERMINAL
WHEN RAIL TERMINATES IN BACKSLOPE IN ROCK

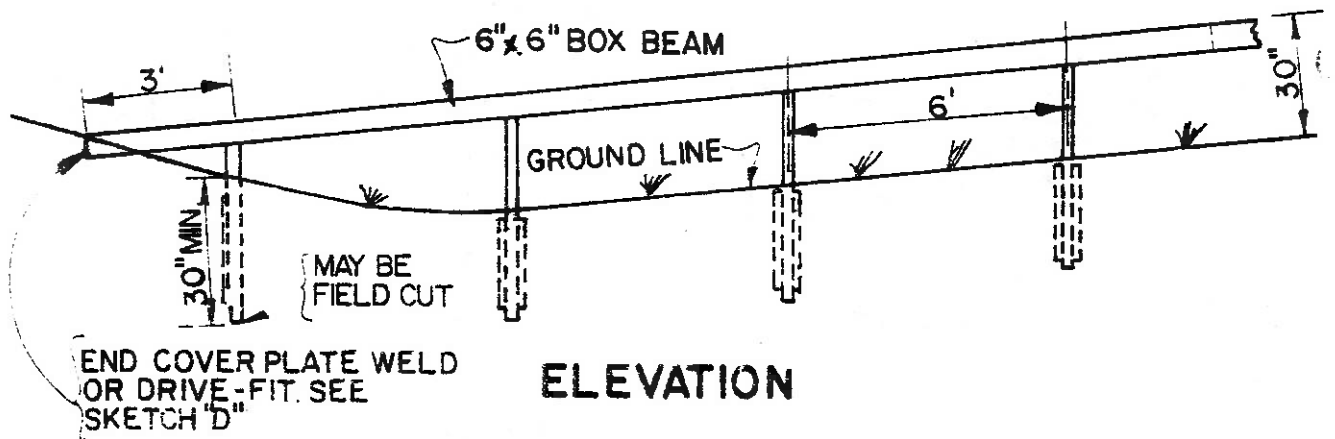
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PLAN



ELEVATION

ALTERNATE BOX BEAM GUIDE RAIL TERMINAL
WHEN RAIL TERMINATES IN BACKSLOPE IN SOIL