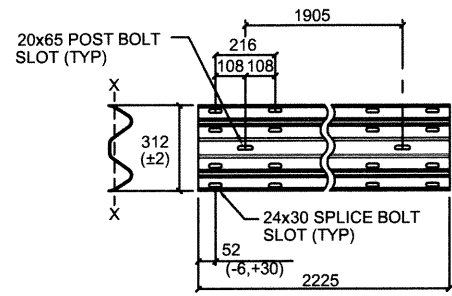
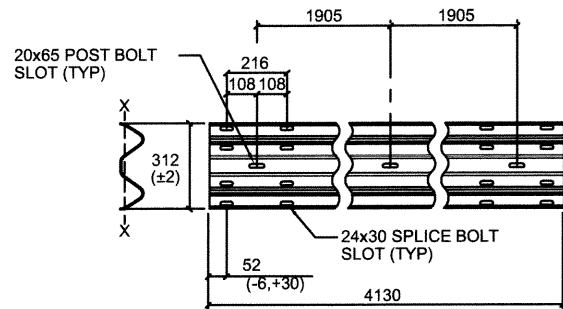


DWG BY: LMARTINEZ 2934

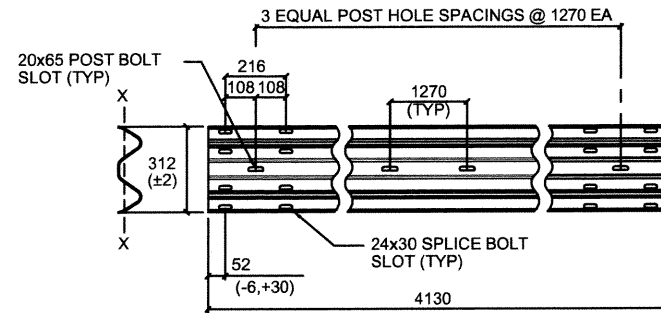
DATE	REVISION	BY	DATE	REVISION	BY
APR 96 <td>ORIGINAL <td></td> <td></td> <td></td> <td></td> </td>	ORIGINAL <td></td> <td></td> <td></td> <td></td>				
FEB 97 <td>GENERAL REVISION <td></td> <td></td> <td></td> <td></td> </td>	GENERAL REVISION <td></td> <td></td> <td></td> <td></td>				
MAY 98 <td>MULTI DELETED <td></td> <td></td> <td></td> <td></td> </td>	MULTI DELETED <td></td> <td></td> <td></td> <td></td>				
DEC 98 <td>ADD NOTE <td></td> <td></td> <td></td> <td></td> </td>	ADD NOTE <td></td> <td></td> <td></td> <td></td>				
SEPT 09 <td>GENERAL REVISION <td></td> <td></td> <td></td> <td></td> </td>	GENERAL REVISION <td></td> <td></td> <td></td> <td></td>				



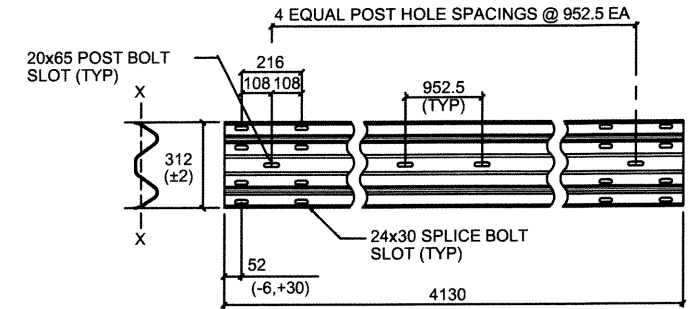
W-BEAM SPACER GUARD RAIL



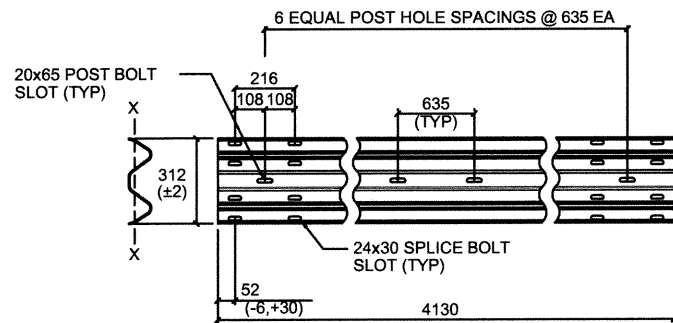
2-SPACE W-BEAM GUARD RAIL



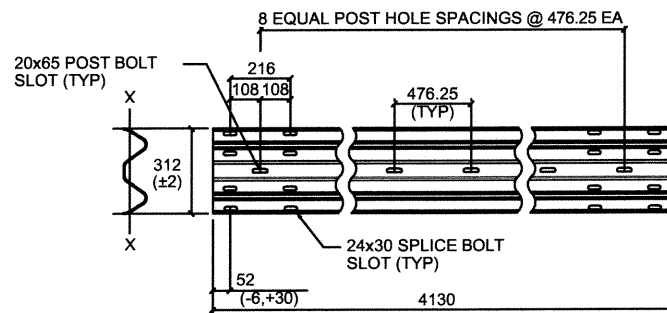
3-SPACE W-BEAM GUARD RAIL



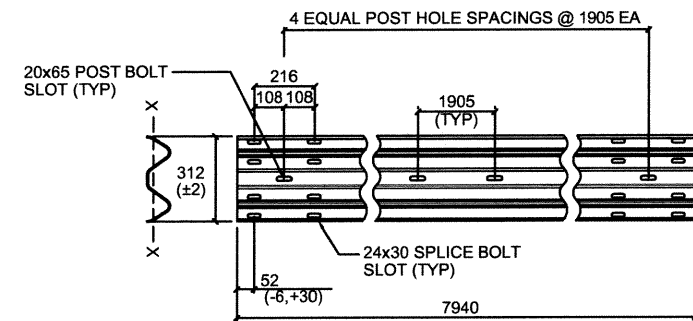
4-SPACE W-BEAM GUARD RAIL



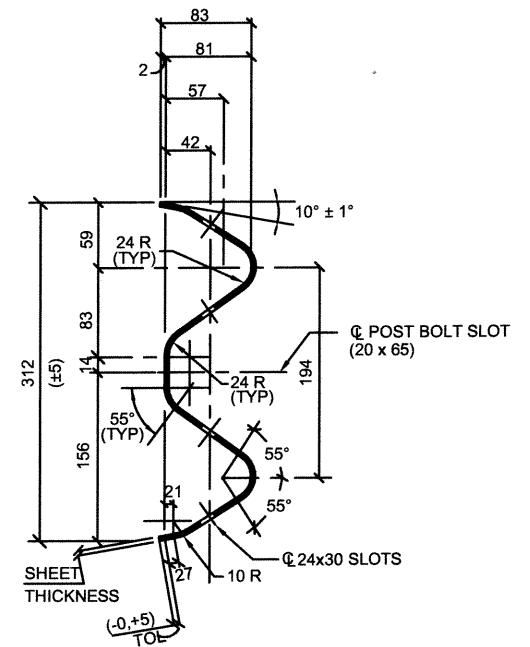
6-SPACE W-BEAM GUARD RAIL



8-SPACE W-BEAM GUARD RAIL



LONG 2-SPACE W-BEAM GUARD RAIL



TYPICAL RAIL ELEMENT

I. SPECIFICATIONS

A. CORRUGATED SHEET STEEL BEAMS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF AASHTO M180 CLASS B TYPE II. THE SECTION SHALL BE MANUFACTURED FROM SHEETS WITH A NOMINAL WIDTH OF 483 mm. CORROSION PROTECTION SHALL BE TYPE II (ZINC-COATED) INERTIAL PROPERTIES ARE CALCULATED FOR THE WHOLE CROSS-SECTION WITHOUT A REDUCTION FOR THE SPLICE BOLT HOLES.

AREA (10 ³ mm) ²	I _x (10 ⁶ mm) ⁴	S _x (10 ³ mm) ³
1.7	1.3	29

B. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES.

C. STEEL BEAMS SHALL HAVE A BASE METAL THICKNESS OF 3.43 mm, EXCEPT WHERE NOTED OTHERWISE.

NOTE APPLICABLE TO ALL METAL BARRIER DRAWINGS:

- DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE NOTED.
- ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO CONSTRUCT THE METAL BARRIERS, CONNECTIONS AND TERMINALS ILLUSTRATED IN THESE DRAWINGS SHALL BE A SUBSIDIARY OBLIGATION.
- NOMINAL THICKNESS FOR FINISHED SHEET OR BEAM CLASS B TYPE II SHALL BE AS FOLLOWS:

THICKNESS		TOLERANCES UNDER SPECIFIED THICKNESS NO LIMIT FOR OVER THICKNESS	
mm	in	mm	in
3.58	0.141	0.25	0.010

- THE USE OF DIFFERENT GUARDRAIL BLOCKOUTS, INDIVIDUALLY APPROVED BY NCHRP 350, IN THE SAME SEGMENT OF GUARDRAIL SHALL NOT BE PERMITTED.
- MATERIALS NOT COMPLYING WITH THE REQUIREMENTS INDICATED IN THE STANDARD DRAWINGS WILL NOT BE ACCEPTED.



COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

DATE: 23/12/09

STANDARD DRAWING APPROVED BY:
[Signature]
DEPUTY EXECUTIVE DIRECTOR
FOR INFRASTRUCTURE

METAL BARRIER
W-BEAM STRONG POST
HARDWARE

MB-1
SEPTEMBER 2009

ENGINEERING SERVICES AREA
ENGINEERING STANDARDS OFFICE