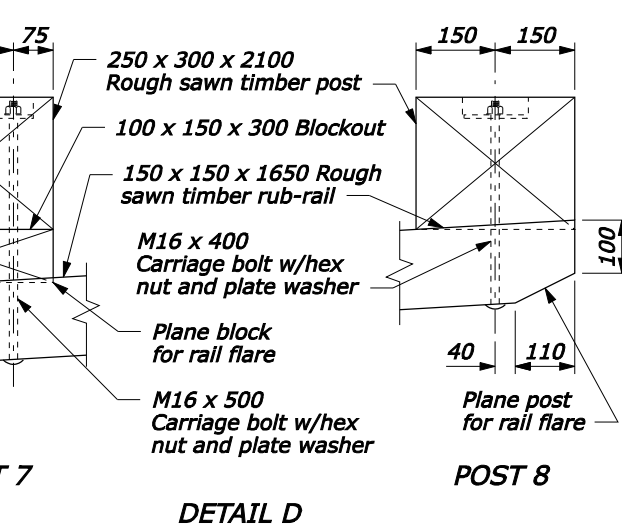
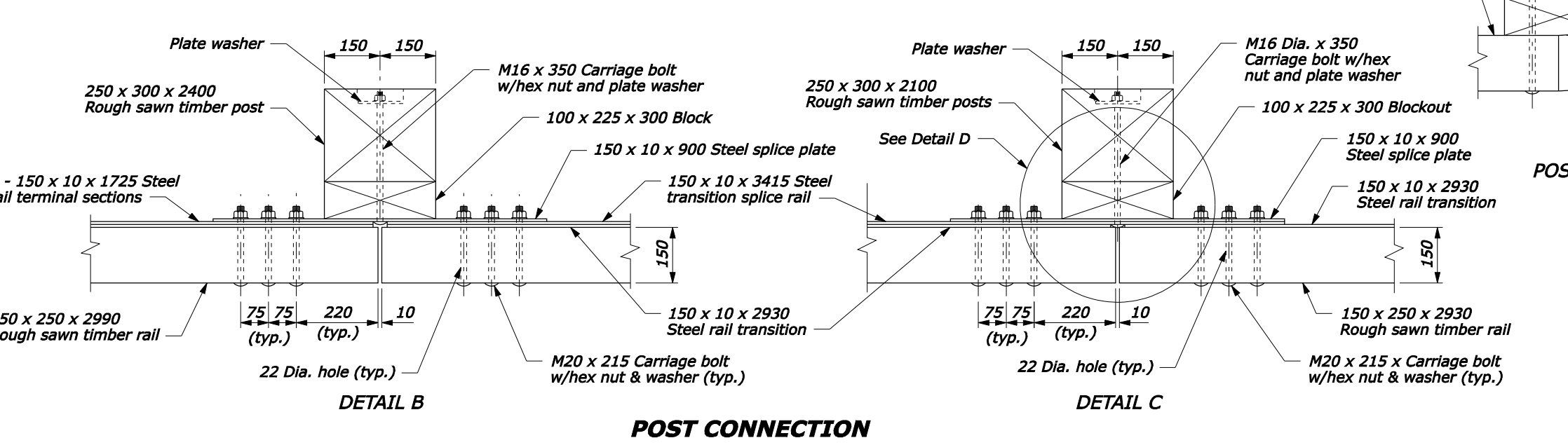
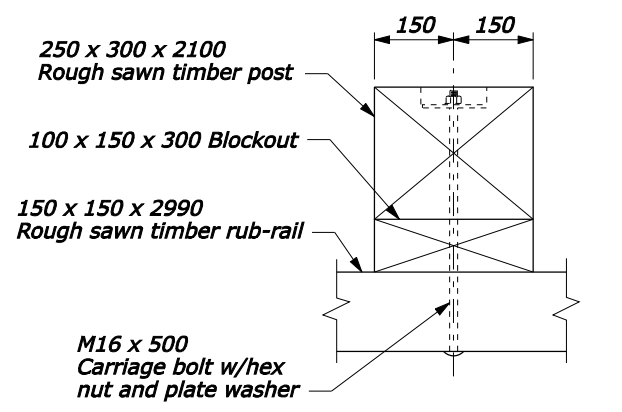
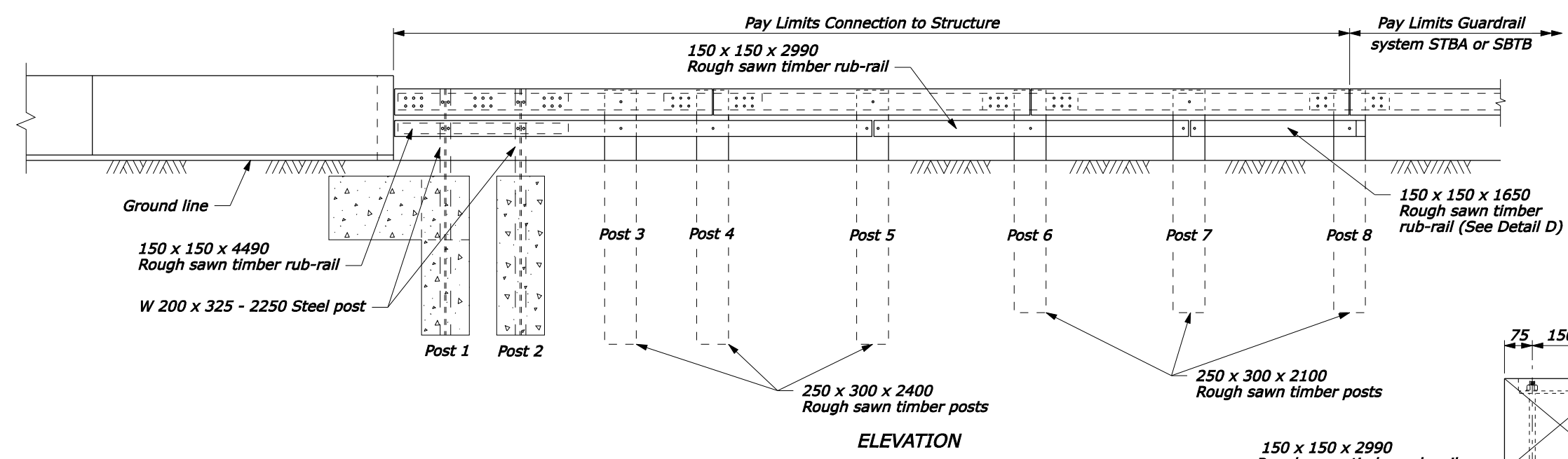


- NOTE:**
1. See the following sheets for Sections A-A through C-C, steel rail layouts, and other details.
 2. Use weathering steel for all structural steel and fastener hardware.
 3. Transition shown for curved end structure. For transition to a straight parapet end, install the timber rail so that the face of the timber rail is offset 25 mm towards the roadway.
 4. Furnish hardware in the metric sizes shown. Equivalent US Customary sizes may be used when metric sizes are not available.
 5. Dimensions without units are millimeters.



RUBRAIL CONNECTION PLAN

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

METRIC STANDARD

**STEEL-BACKED TIMBER GUARDRAIL
TL-2 TRANSITION TO STRAIGHT
OR CURVED-END STRUCTURE**

Sheet 1 of 3

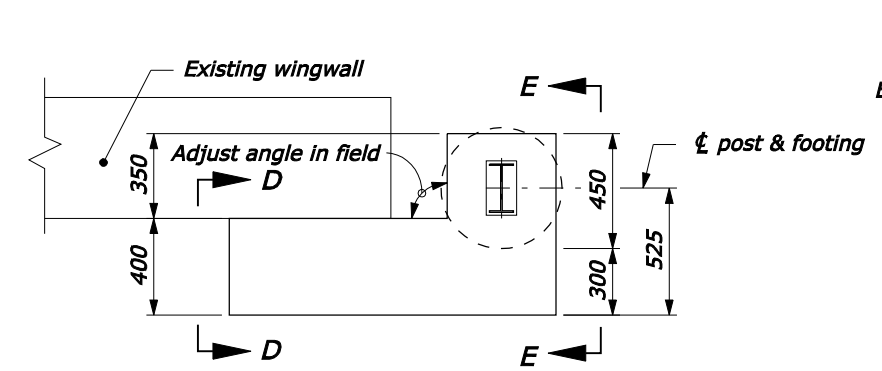
STANDARD APPROVED FOR USE --/----

REVIS: 5/2008

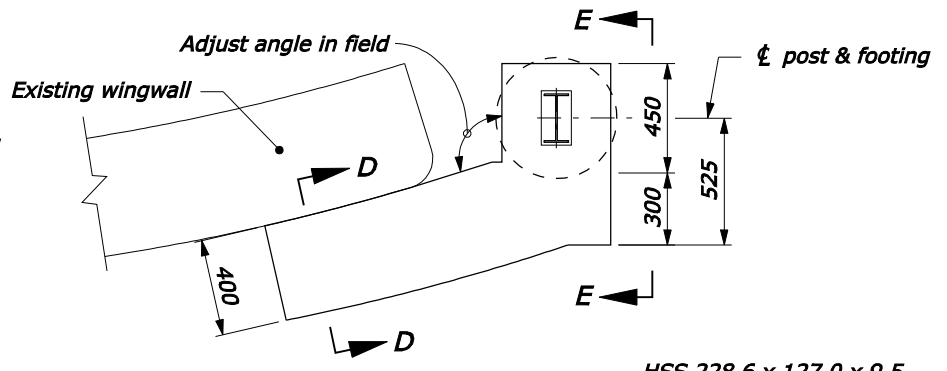
STANDARD M617-67

NO SCALE

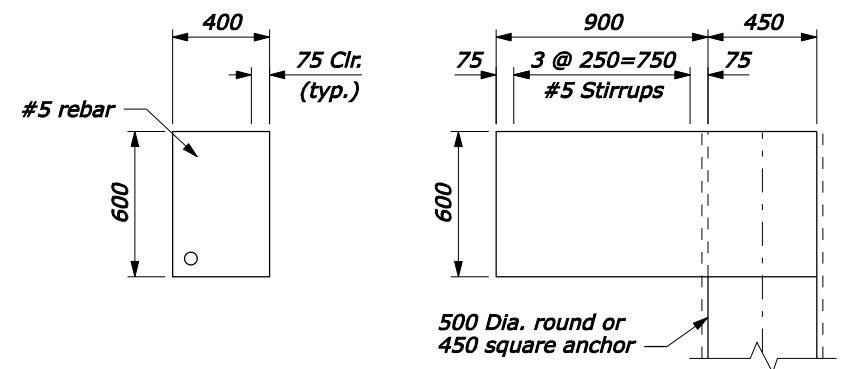
05-May-2008 03:24 PM
 fpp://196.145.188.2/scd_plan/m61767.dgn [Metric]



NON-FLARED WINGWALL

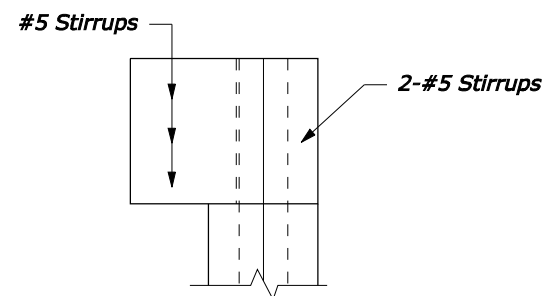


FLARED WINGWALL



SECTION D-D

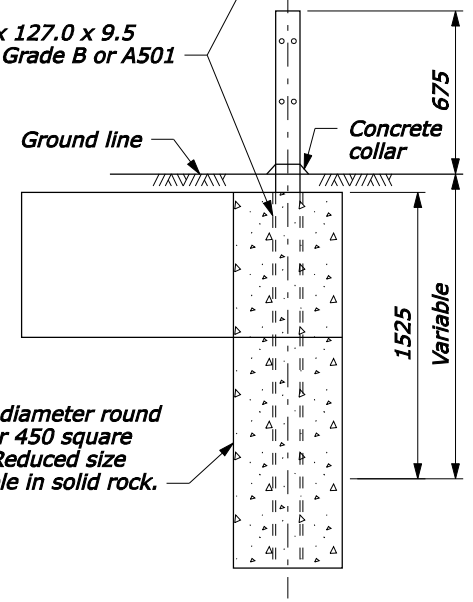
ELEVATION



SECTION E-E

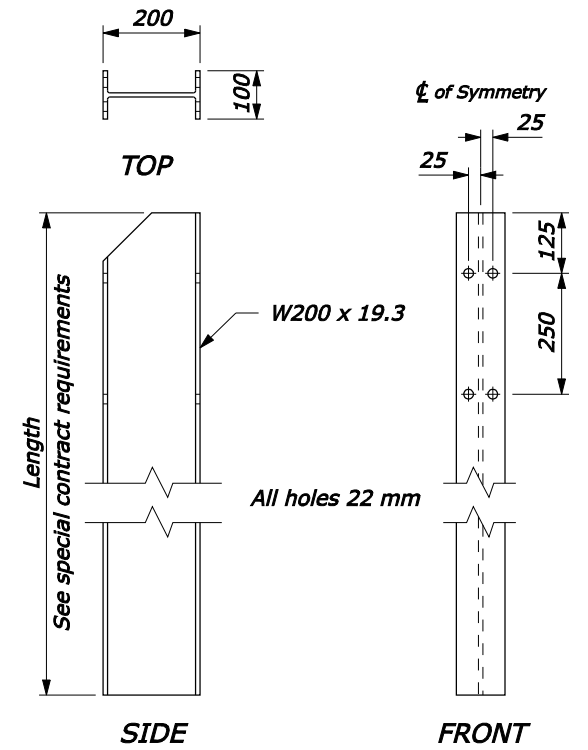
CONNECTION TO CONCRETE ANCHOR

HSS 228.6 x 127.0 x 9.5
ASTM A500 Grade B or A501



Use 500 diameter round anchor or 450 square anchor. Reduced size acceptable in solid rock.

CONCRETE ANCHOR FOR GUARDRAIL POST

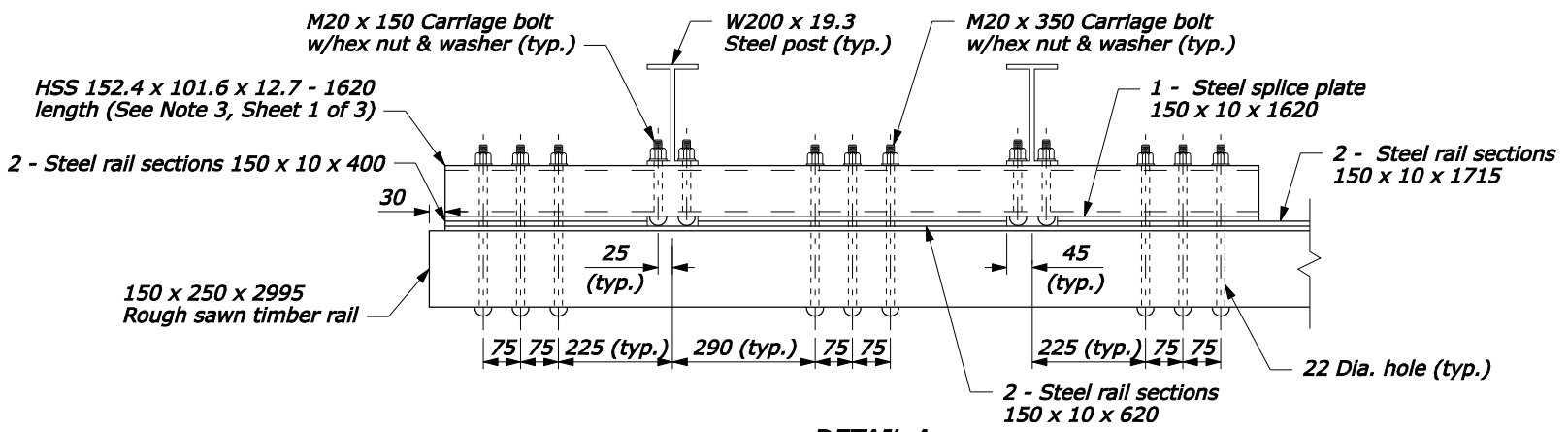


TOP

SIDE

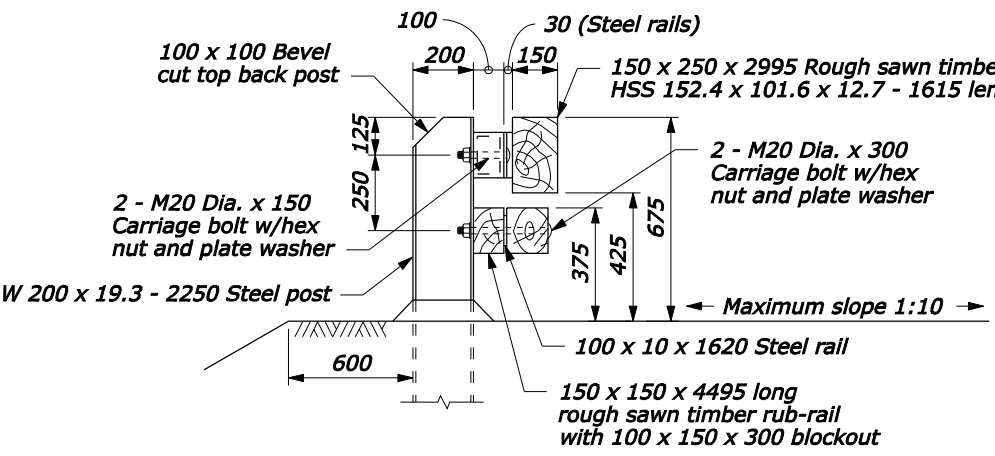
FRONT

STEEL POST

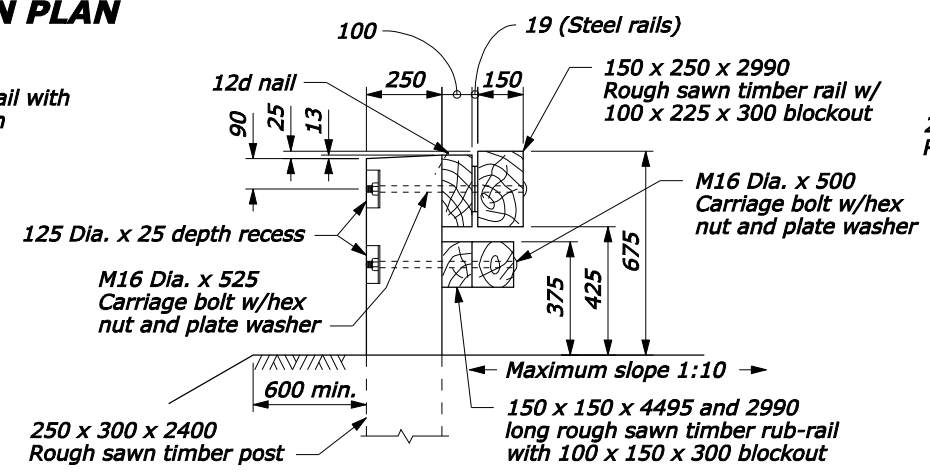


DETAIL A

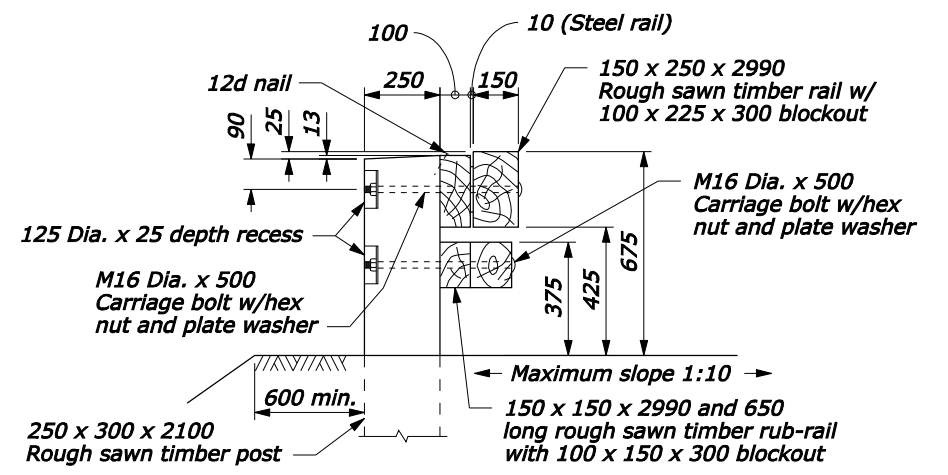
POST CONNECTION PLAN



SECTION A-A



SECTION B-B



SECTION C-C

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

METRIC STANDARD
**STEEL-BACKED TIMBER GUARDRAIL
TL-2 TRANSITION TO STRAIGHT
OR CURVED-END STRUCTURE**
Sheet 2 of 3

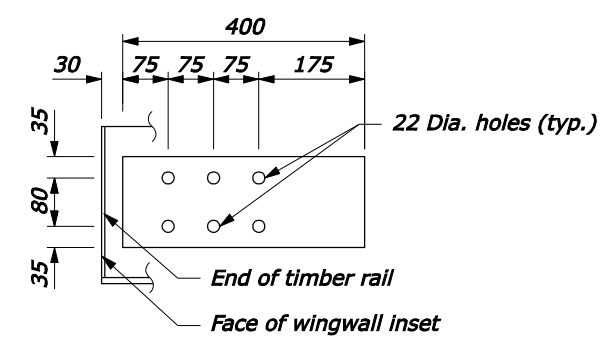
STANDARD APPROVED FOR USE --/----

REVISID: 3/2008
DRAFT: 3/2008

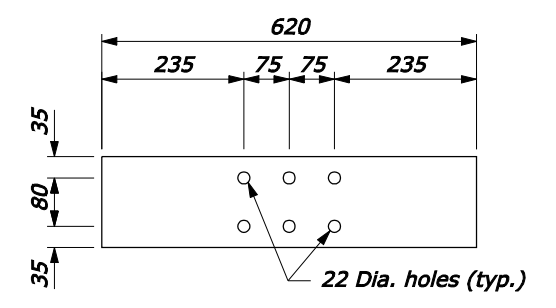
STANDARD
M617-67

NO SCALE

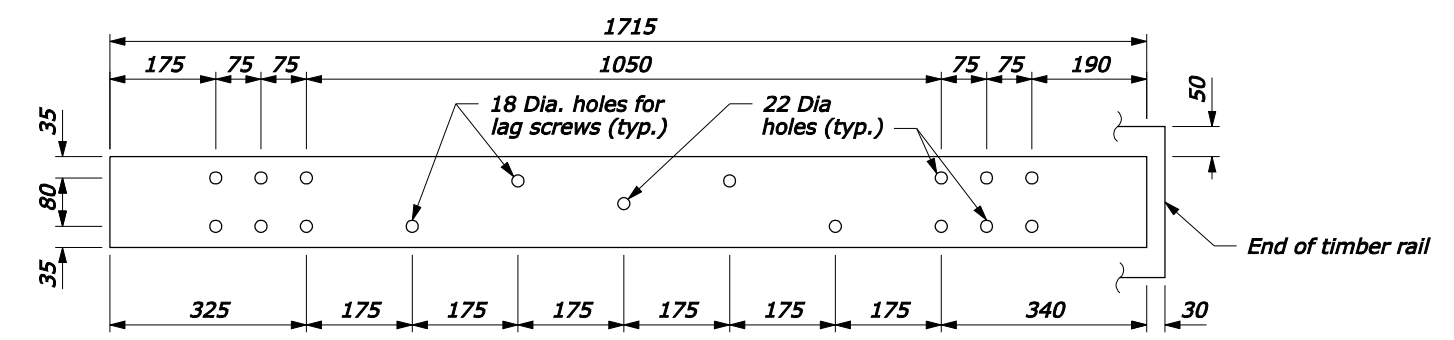
fp://196.145.188.2/scd_plan/s61767.dgn [Metric] 05-May-2008 03:24 PM



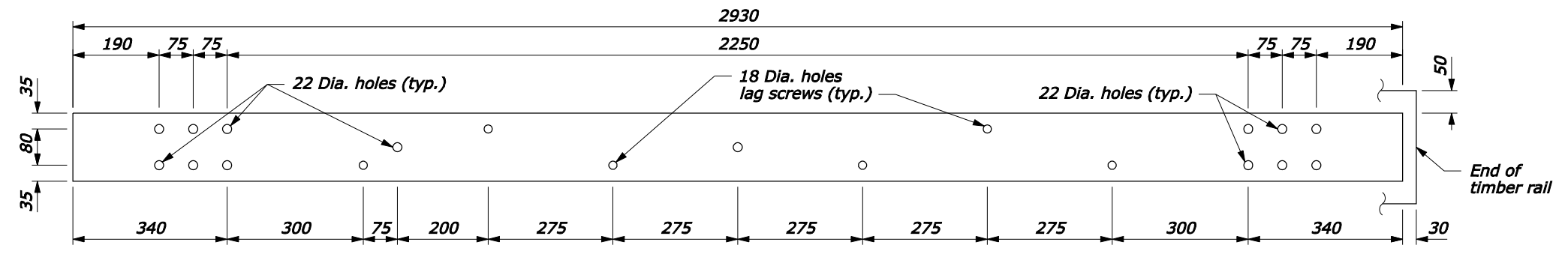
TERMINAL SECTION
150 x 10 x 400



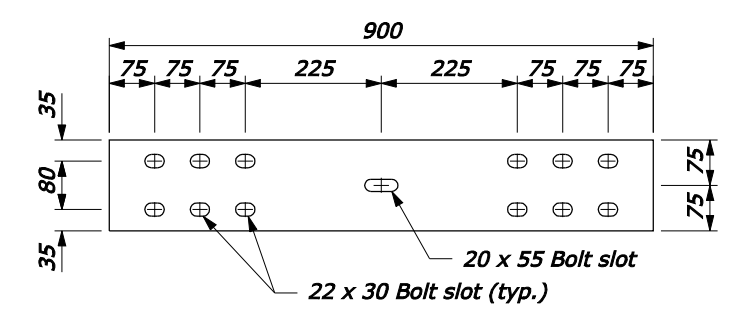
TERMINAL SECTION
150 x 10 x 620



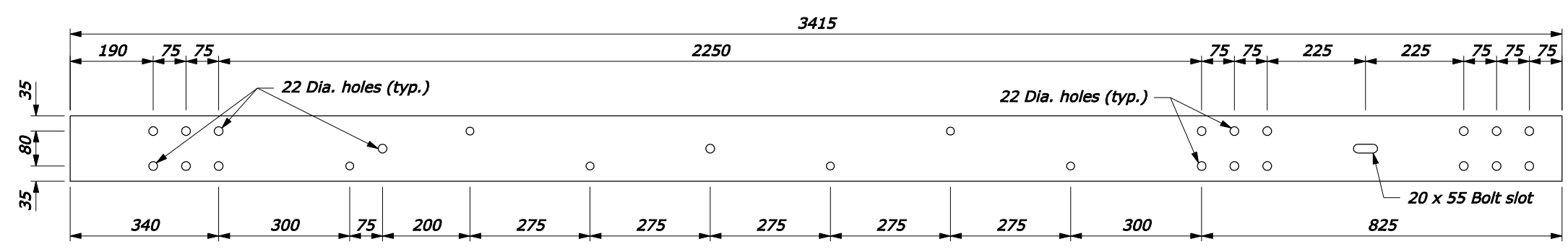
TERMINAL SECTION
150 x 10 x 1715



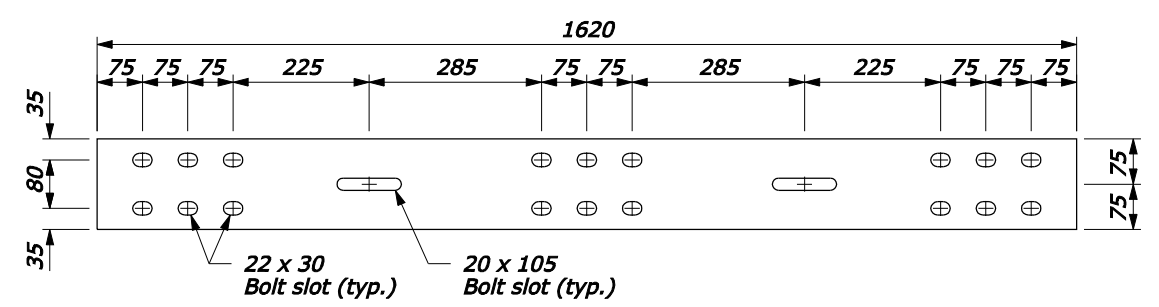
TRANSITION SECTION
150 x 10 x 2930



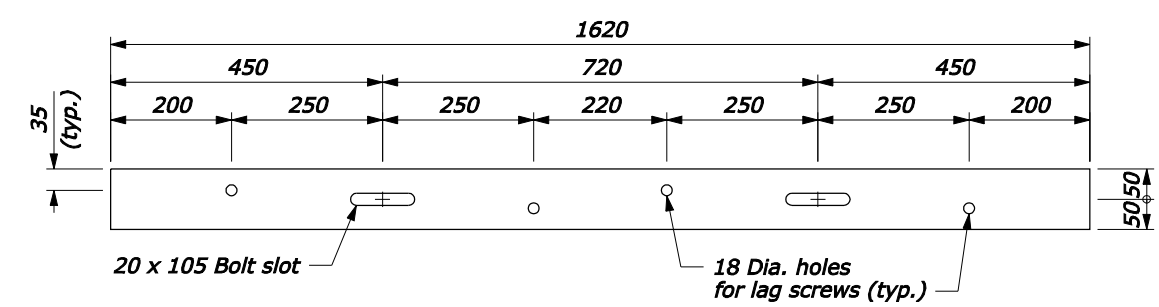
STEEL SPLICE PLATE
150 x 10 x 900



TRANSITION SECTION
150 x 10 x 3415



STEEL SPLICE PLATE
150 x 10 x 1620



RUB-RAIL TRANSITION SECTION
100 x 10 x 1620

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

METRIC STANDARD
**STEEL-BACKED TIMBER GUARDRAIL
TL-2 TRANSITION TO STRAIGHT
OR CURVED-END STRUCTURE**
Sheet 3 of 3

STANDARD APPROVED FOR USE --/----

REVISOR: DRAFT: 3/2008

STANDARD
M617-67

05-May-2008 03:24 PM
 fpp://196.145.188.2/scd_plan/s61767.dgn [Metric]