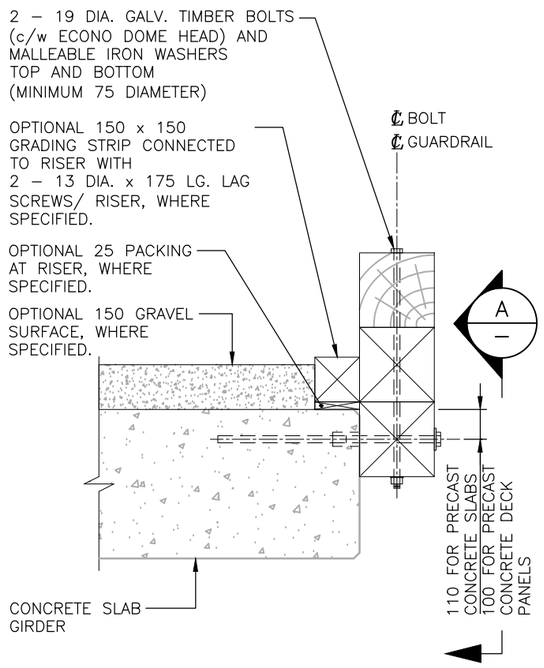
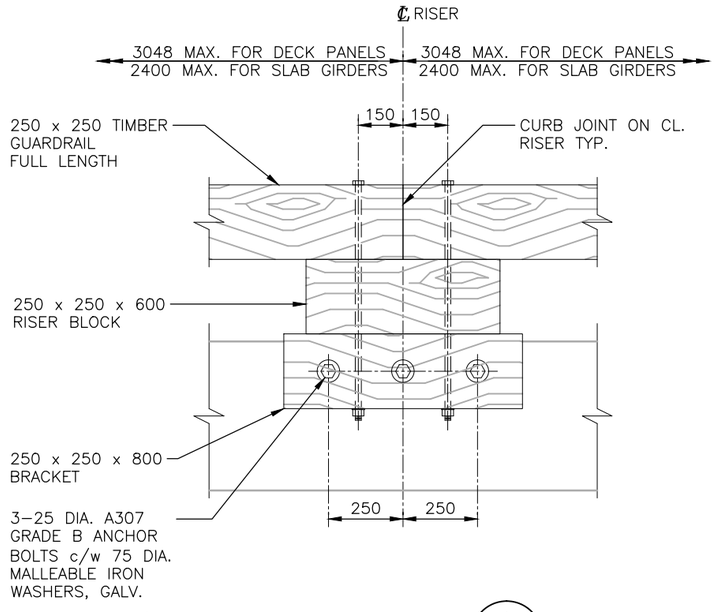
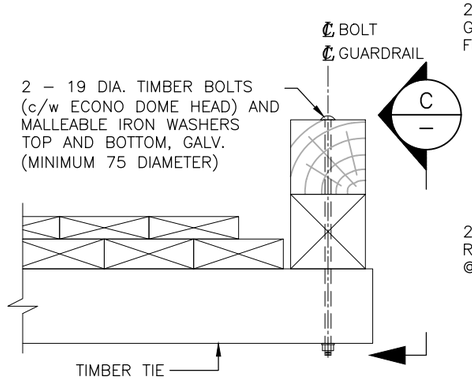


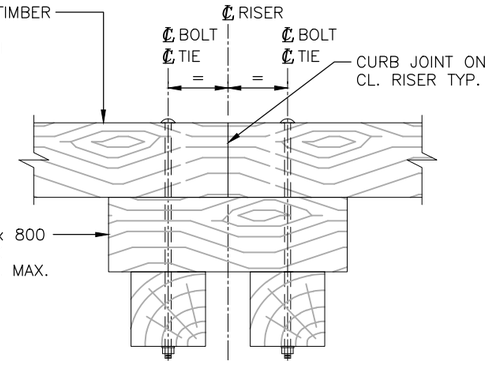


TIMBER GUARDRAIL DETAIL FOR CONCRETE SLAB GIRDER/DECK PANEL
1:20

SECTION A – 1:20



TIMBER GUARDRAIL DETAIL FOR TIMBER DECK
1:20



SECTION C – 1:20

NOTES:

GENERAL

- GUARDRAILS HAVE BEEN DESIGNED TO MEET THE CRITERIA FOR CONTAINMENT LEVEL CL-1 AS DEFINED BY THE MINISTRY. GUARDRAILS HAVE NOT BEEN DESIGNED TO CONTAIN ERRANT VEHICLES.

- MAXIMUM POST SPACING AS SHOWN ON DRAWING.

- FOR GUARDRAIL ANCHOR DETAILS, SEE MINISTRY STANDARD DRAWINGS:
  STD-EC-030-09 - COMPOSITE PRECAST DECK PANEL
  STD-EC-040-08 - NON-COMPOSITE PRECAST DECK PANEL-DETAILS
  STD-EC-070-03 - PRECAST CONCRETE SLAB DETAILS (SHEET 1)

MATERIALS

- TIMBER: ALLOWABLE WOOD SPECIES, LUMBER GRADES, GRADING CRITERIA AS PER MINISTRY: *BRIDGE TIMBER AND LUMBER MATERIAL STANDARD* :

- STEEL:
  POSTS
  - TO CSA G40.21M,
    - GRADE 350W (COATED)
    - GRADE 350A (UNCOATED)
  - OR TO ASTM
    - A500 GRADE C (COATED)
    - A847 (UNCOATED)

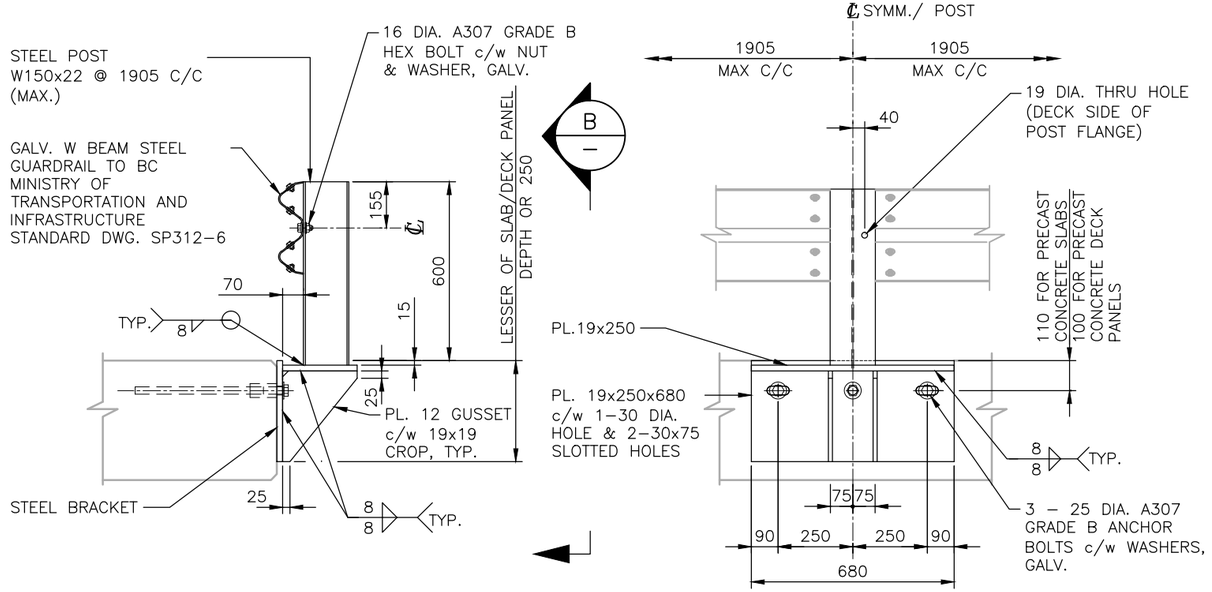
  PLATE TO CSA G40.21M
  - GRADE 350W (COATED)
  - GRADE 350A (UNCOATED)
  - GRADE 350A (UNCOATED)
  - GRADE 300W (COATED)

- STEEL FABRICATION:
  WELDING:
  - SHOP WELDING IN ACCORDANCE WITH CSA W59 FABRICATOR TO BE CERTIFIED FOR DIVISION 1, 2 OR 3 IN ACCORDANCE WITH CSA W47.1.
  - FIELD WELDING BY COMPANY CERTIFIED TO CSA W47.1, DIVISIONS 1, 2 OR 3.
  - MIN. 6mm FILLET WELD UNLESS OTHERWISE NOTED.

  GUARDRAIL BRACKETS AND POST COATING TO BE EITHER:
  - GALVANIZED TO CSA G164 AS NOTED ON DRAWINGS. MINIMUM 610 g/m²; OR
  - PAINTED IN ACCORDANCE WITH MINISTRY STEEL GUARDRAIL COMPONENT PAINT STANDARD.

  GALVANIZING WHERE SPECIFIED, TO CSA G164, MINIMUM 610 g/m².

- HARDWARE:
  - ALL HARDWARE (BOLTS, NUTS, WASHERS) TO BE GALVANIZED TO CSA G164, MINIMUM 610 g/m².
  - BOLTS:
    - ASTM A307 GRADE B GALVANIZED
    - TIMBER BOLTS c/w ECONO HEAD AND MALLEABLE IRON WASHERS TOP AND BOTTOM.



W–BEAM GUARDRAIL DETAIL FOR CONCRETE SLAB GIRDER/DECK PANEL
1:20

SECTION B – 1:20

ASSUME NOT TO SCALE

BRITISH COLUMBIA The Best Place on Earth

MINISTRY OF FORESTS, LANDS & NATURAL RESOURCE OPERATIONS

STANDARD BRIDGE DRAWING

STANDARD BRIDGE GUARDRAIL
CL - 1

SCALE AS SHOWN

Designed J.H. Date 2012/03/30
Checked D.I.H. Date 2012/03/30
Drawn W.R. Date 2012/03/30

Rev	Date	DESCRIPTION	Init	

REVISIONS

ORIGINAL SIGNED and SEALED BY: JULIEN HENLEY
APPROVED BY:
DESIGN ENGINEER
DATE JULIEN HENLEY
MOF ENGINEER
DATE
FILE No.
DRAWING No. STD-EC-010-01 | 0

CANCEL PRINTS BEARING PREVIOUS LETTER