



- BRIDGERAIL INCLUDING APPROACH RAIL TRANSITION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 12 AND SECTION 14
- ALL STRUCTURAL STEEL PLATE, BARS AND ROLLED SECTIONS SHALL CONFORM TO CSA-G40.21M GRADE 350W UNLESS NOTED OTHERWISE
- STRUCTURAL TUBING SHALL CONFORM TO CSA G40.21M GRADE 350W CLASS C OR ASTM A500C
- ALL GUARDRAIL BOLTS, NUTS AND WASHERS SHALL CONFORM TO AASHTO M180. ALL BOLTS FOR CONNECTING THE STEEL SPACER TO POST SHALL CONFORM TO ASTM A307. ALL OTHER BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325 TYPE I HEAVY HEX TYPE UNLESS NOTED OTHERWISE
- ANCHOR RODS SHALL CONFORM TO ASTM A193 GRADE B7($F_y = 725 \text{ MPa}$, $F_u = 860 \text{ MPa}$). GALVANIZING OF ANCHOR RODS SHALL BE IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE STANDARD SPECIFICATIONS FOR BRIDGE CONSTRUCTION
- ALL NUTS AND WASHERS SHALL CONFORM TO ASTM A563 AND F436 RESPECTIVELY UNLESS NOTED OTHERWISE
- ALL WELDING SHALL CONFORM TO CURRENT AWS SPECIFICATION D1.5
- ALL MATERIALS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123/A123M AND ASTM F2329 UNLESS NOTED OTHERWISE
- THE BOTTOM SURFACE OF THE BASEPLATES SHALL BE COATED WITH AN APPROVED COATING SYSTEM, SUITABLE FOR APPLICATION ON GALVANIZED STEEL, TO PREVENT CONTACT BETWEEN THE ZINC AND THE GROUT. THE COLOUR SHALL BE MEDIUM GREY
- TUBE SECTIONS SHALL BE FABRICATED IN THE CONFIGURATIONS SHOWN IN "TUBE SECTION TYPES"
- IF ROADWAY GRADE EXCEEDS 2% BOTTOM OF POST SHALL BE BEVELLED TO MATCH ROADWAY GRADE (SEE POST BEVEL DETAILS)
- ALL W-BEAM AND THREE BEAM GUARDRAIL (INCLUDING THREE BEAM TERMINAL CONNECTOR AND W-THREE BEAM TRANSITION SECTION) SHALL HAVE A MINIMUM YIELD STRENGTH OF 345 MPa
- TIMBER POSTS AND SPACERS SHALL BE COAST DOUGLAS FIR OR PACIFIC COAST HEMLOCK CONFORMING TO THE STRESS GRADE "SELECT STRUCTURAL POSTS AND TIMBERS" (NLGA PARAGRAPH 131 a)

- ALL NUTS FOR ANCHOR RODS AND FOR ANY CONNECTIONS WITH A325 BOLTS SHALL BE TIGHTENED AN ADDITIONAL 1/2 TURN OF THE NUT PAST THE "SNUG-TIGHT" CONDITION
- ALL POSTS SHALL BE VERTICAL
- ALL DIMENSIONS ARE MEASURED PARALLEL TO TOP OF CONCRETE BARRIER AND ALONG THE CENTRELINE OF ANCHOR ROD ASSEMBLIES
- LINE AND ELEVATION OF RAIL SHALL BE SET BY INSTRUMENT

- WORK THESE DRAWINGS TOGETHER: S-1702, S-1703, S-1704 AND S-1705



* 38 X 60 TEMPORARY POUR STRIP SET
PARALLEL TO FINISHED ROADWAY

** 2-STRUT TYSCRU COUPLER C/W 50
SET BACK CONE OR APPROVED
EQUIVALENT TO FACILITATE VERTICAL
ALIGNMENT OF FORMWORK WITH
ADJACENT CONCRETE



* VARY DIMENSION (MAX 30 MIN 15)
AS REQUIRED TO MEET RAIL HEIGHT
AND ALIGNMENT

						WORK THESE DRAWINGS TOGETHER WITH: S-1702-1, S-1702-2, S-1702-3 AND S-1702-4 DIRECTOR DIRECTOR BRIDGE ENGINEERING				
							APPROVED EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH	TL-5 DOUBLE TUBE TYPE BRIDGERAIL BRIDGERAIL DETAILS		
REV	DATE	REVISION			BY		DATE	SHEET	DRAWING	
DESIGNER	CM	CHECKER	MT		DATE	2021.3.2	2020-09-04	1 OF 4	S-1702-20	