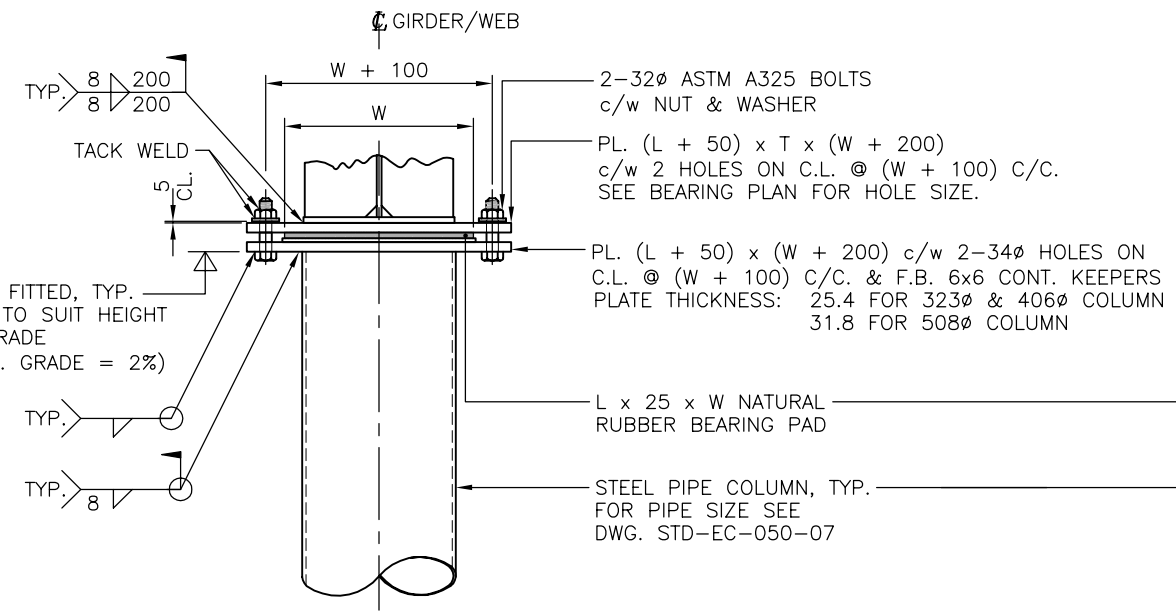
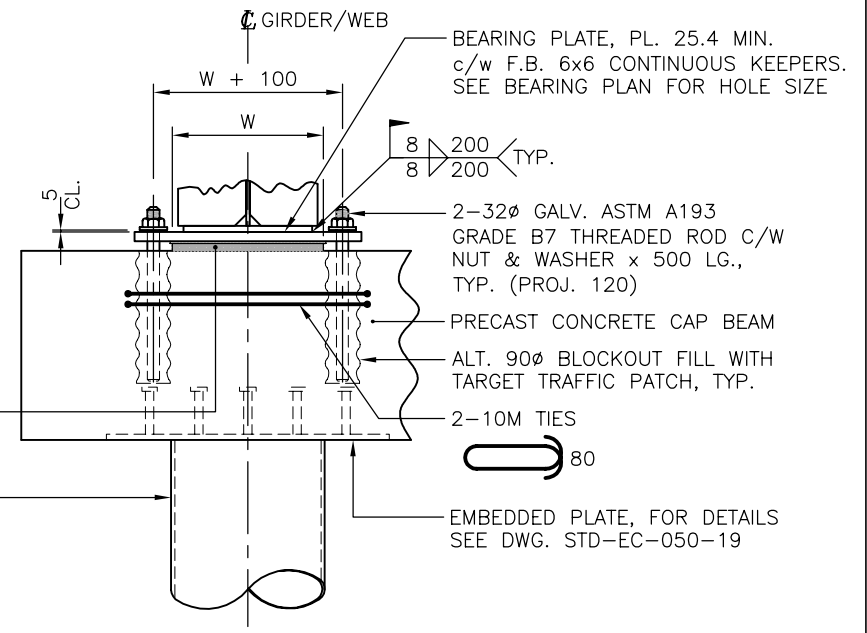


**1/2 ABUTMENT ELEVATION DETAIL**  
1:50

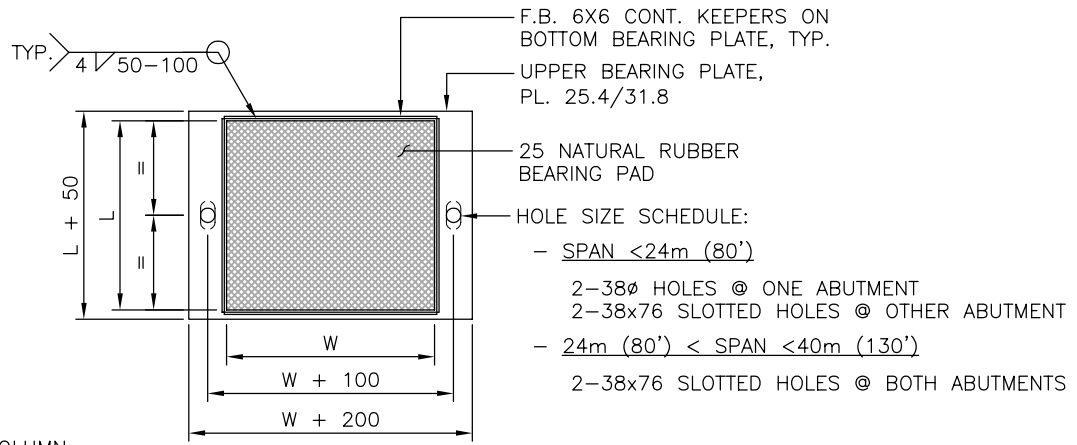


**BEARING DETAIL**  
1:20



**ALT. BEARING ON CONCRETE CAP DETAIL**  
1:20

NOTE:  
OMIT BRACING IF COLUMN HEIGHT IS LESS THAN 1000mm.  
INSTALL SECOND BAY OF BRACING IF COLUMN HEIGHT EXCEEDS 3500mm

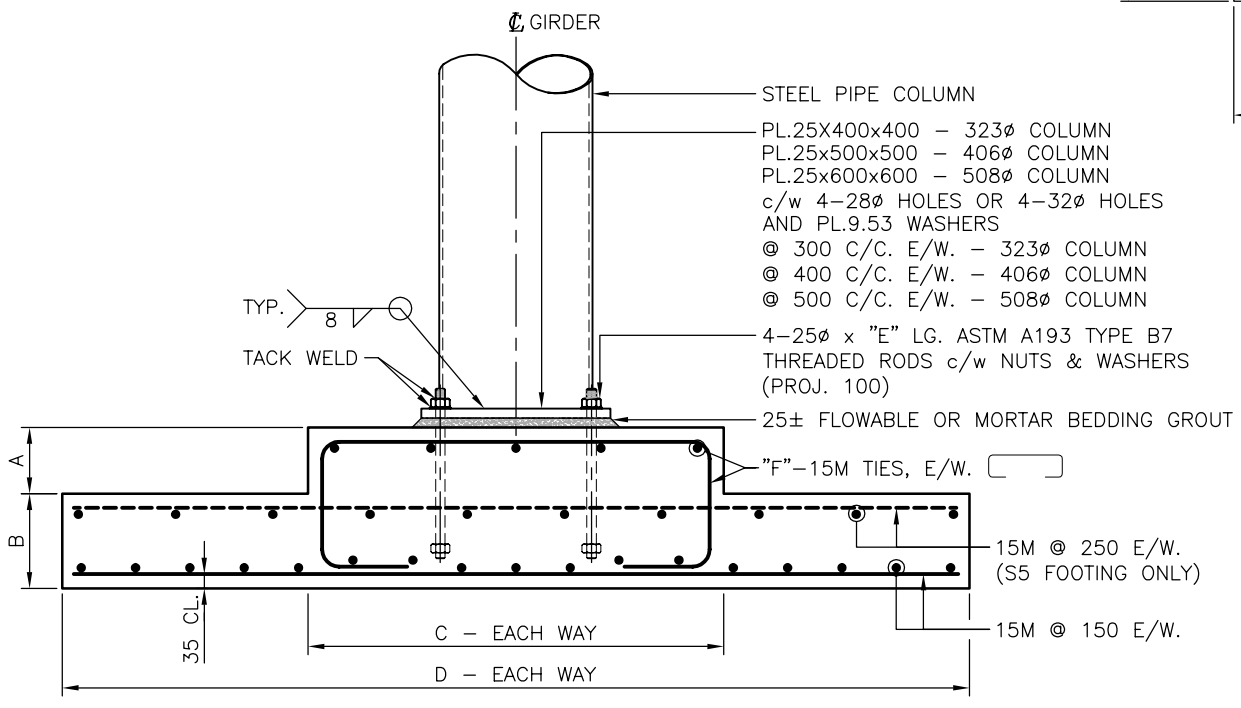


**BEARING PLAN**  
1:20

**NOTES:**

1. FOOTINGS HAVE BEEN SIZED BASED ON THE ASSUMPTION THAT THE UNDERLYING FOUNDATION MATERIAL HAS THE ABILITY TO SUPPORT A MINIMUM 200 KPa SERVICEABILITY LIMIT STATES COMBINATION 1 STRESS IN ACCORDANCE WITH SECTION 3 AND 6 OF THE CANADIAN HIGHWAY BRIDGE DESIGN CODE (CAN/CSA-S6). WHERE THE UNDERLYING MATERIAL IS UNABLE TO SUPPORT THIS APPLIED STRESS, THE ENGINEER SHALL DESIGN THE SUBSTRUCTURE COMPONENTS BASED ON THE ASSESSED STRENGTH OF THE FOUNDATION MATERIALS OR DESIGN FOR AN ALTERNATIVE FOUNDATION SYSTEM SUCH AS DRIVEN PILES.
2. THE DESIGN DRAWINGS SHOULD INCLUDE THE DESIGN MAXIMUM APPLIED SERVICEABILITY LIMIT STATES COMBINATION 1 AND ULTIMATE LIMIT STATE STRESSES FOR PRECAST CONCRETE FOOTINGS AND SERVICEABILITY LIMIT STATES COMBINATION 1 AND ULTIMATE LIMIT STATE LOADS FOR DRIVEN PILES.
3. DESIGN APPLICABLE TO FLEXIBLE FOUNDATION SYSTEM ONLY (STANDARD PRECAST CONCRETE FOOTINGS WITH COLUMNS OR STEEL PIPE PILES). FOR RIGID FOUNDATION, OR WHERE DESIGN NEEDS TO ACCOMMODATE THERMAL MOVEMENT, DESIGN TO BE COMPLETED BY AN ENGINEER.
4. ACCOMMODATE GRADES IN EXCESS OF 2% WITH A BEVEL PLATE OR SLOPED CAP BEAM.

**ASSUME NOT TO SCALE  
NOT FOR CONSTRUCTION**



**PRECAST CONCRETE FOOTING DETAIL**  
1:20

DESIGN ENGINEER	0 2 4 6 8 10 meters	Ministry of Forests, Lands and Natural Resource Operations ENGINEERING BRANCH								
	0 20 40 mm									
PROFESSIONAL SEAL	SCALE AS SHOWN	<b>STANDARD BRIDGE DRAWING</b> DRAWING TITLE: SUBSTRUCTURE DETAILS FOR STEEL BRIDGES - SHEET 1								
	BAR LENGTH IS 40mm ON ORIGINAL.									
	Checked JULIEN HENLEY Date 14/04/01 Drawn ERFUN FARJOO Date 14/04/01									
	<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>DESCRIPTION</th> <th>Init</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15/03/31</td> <td>REVISED NOTES &amp; ADDED SLOTTED HOLES</td> <td></td> </tr> </tbody> </table>	Rev	Date	DESCRIPTION	Init	1	15/03/31	REVISED NOTES & ADDED SLOTTED HOLES		
Rev	Date	DESCRIPTION	Init							
1	15/03/31	REVISED NOTES & ADDED SLOTTED HOLES								
		DESIGNED BY: HELEN DU, P.ENG.	APPROVED BY:							
		COORDINATING REGISTERED PROFESSIONAL:	FLNR ENGINEER:							
		FILE No.	DRAWING No. STD-EC-050-06							
		REVISIONS	1							