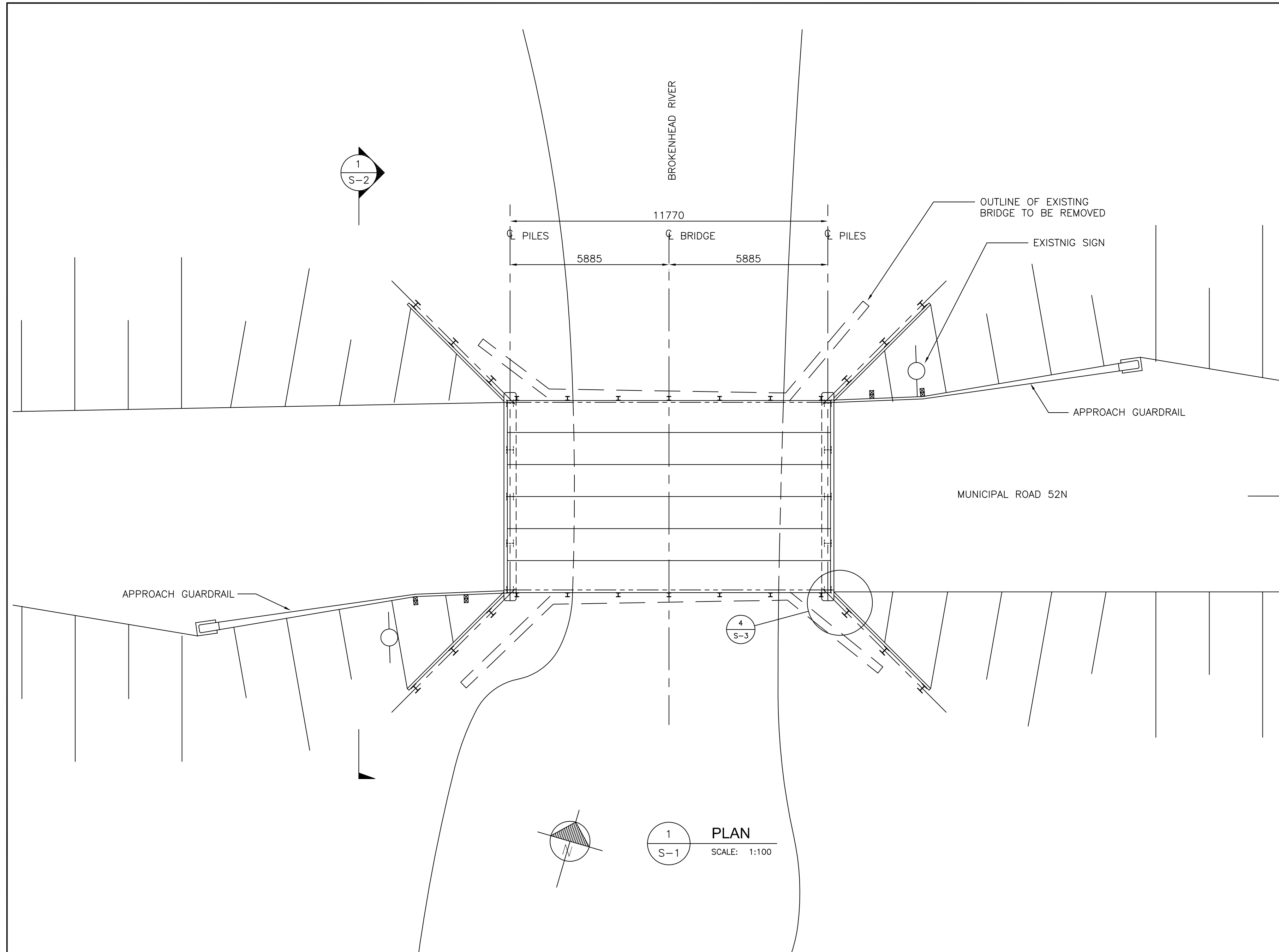
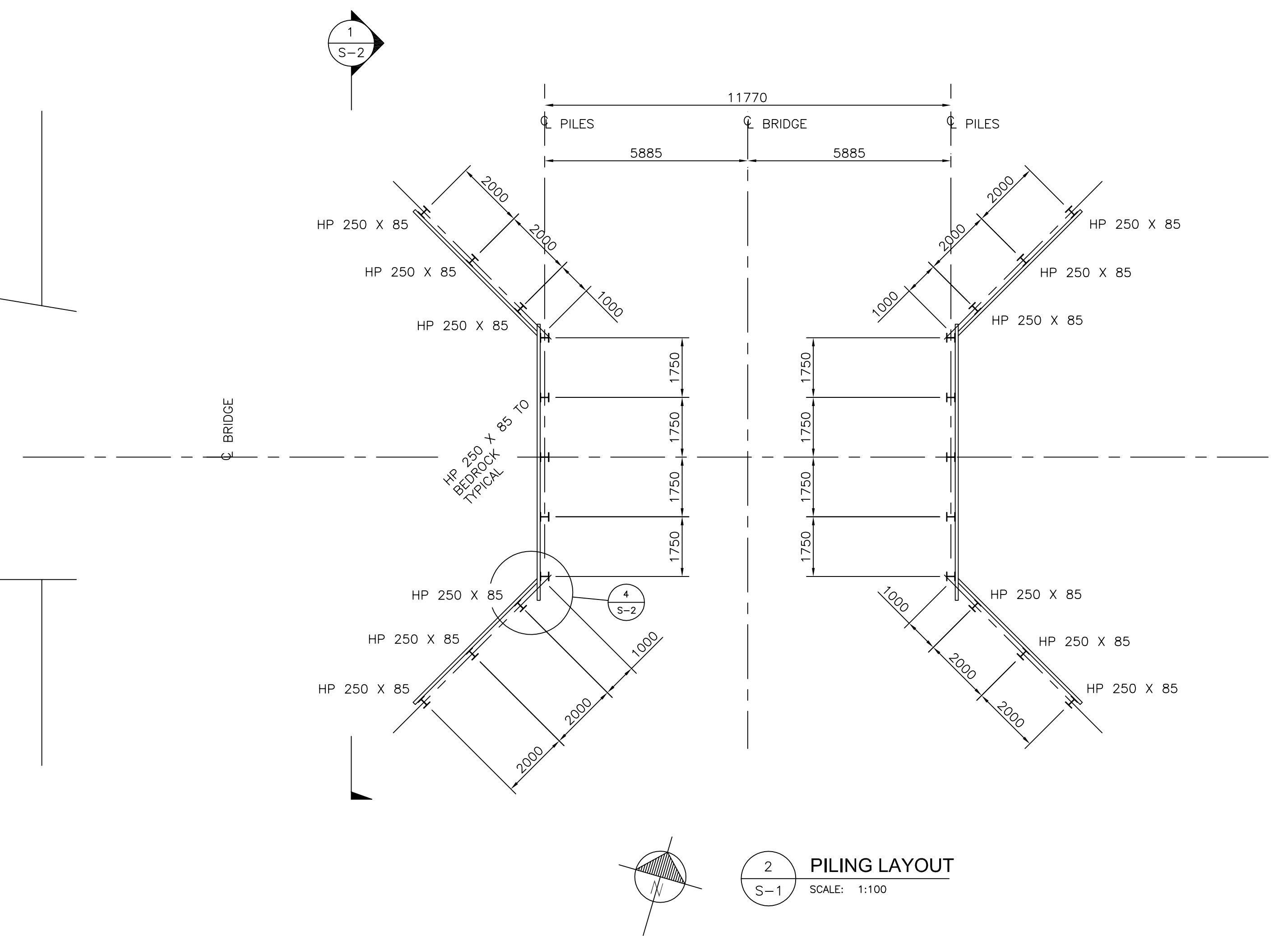


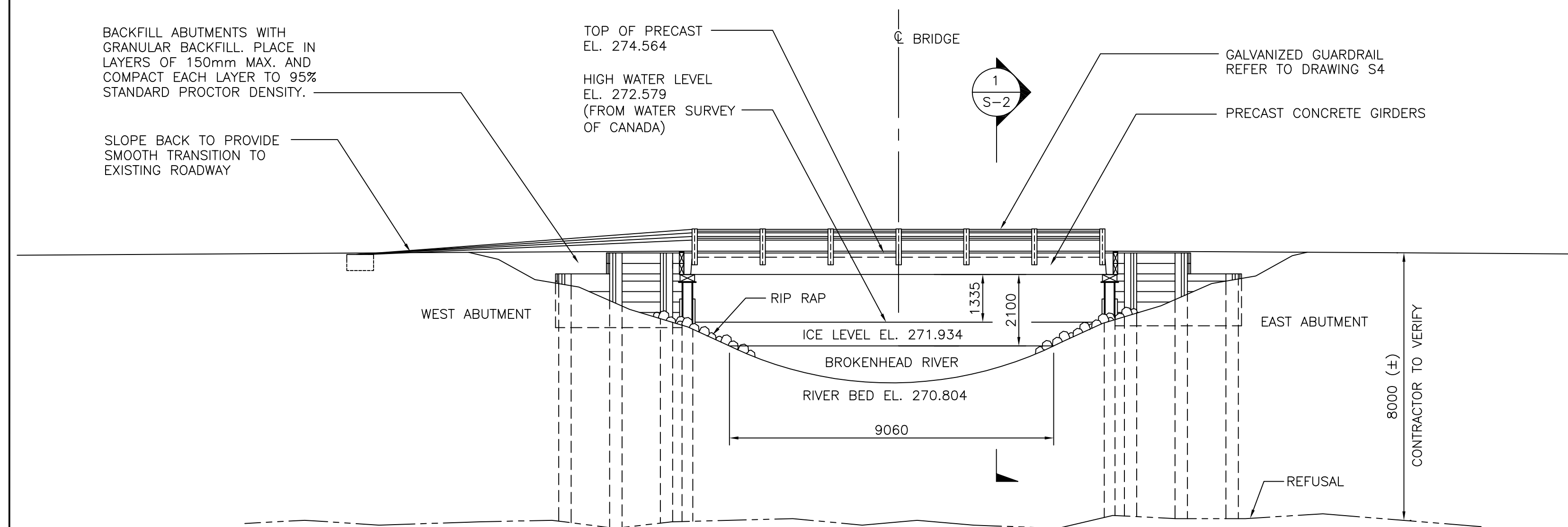
Appendix D – Brokenhead River Bridge on Municipal Road 52N Design Drawings



1 PLAN
S-1 SCALE: 1:100



2 PILING LAYOUT
S-1 SCALE: 1:100



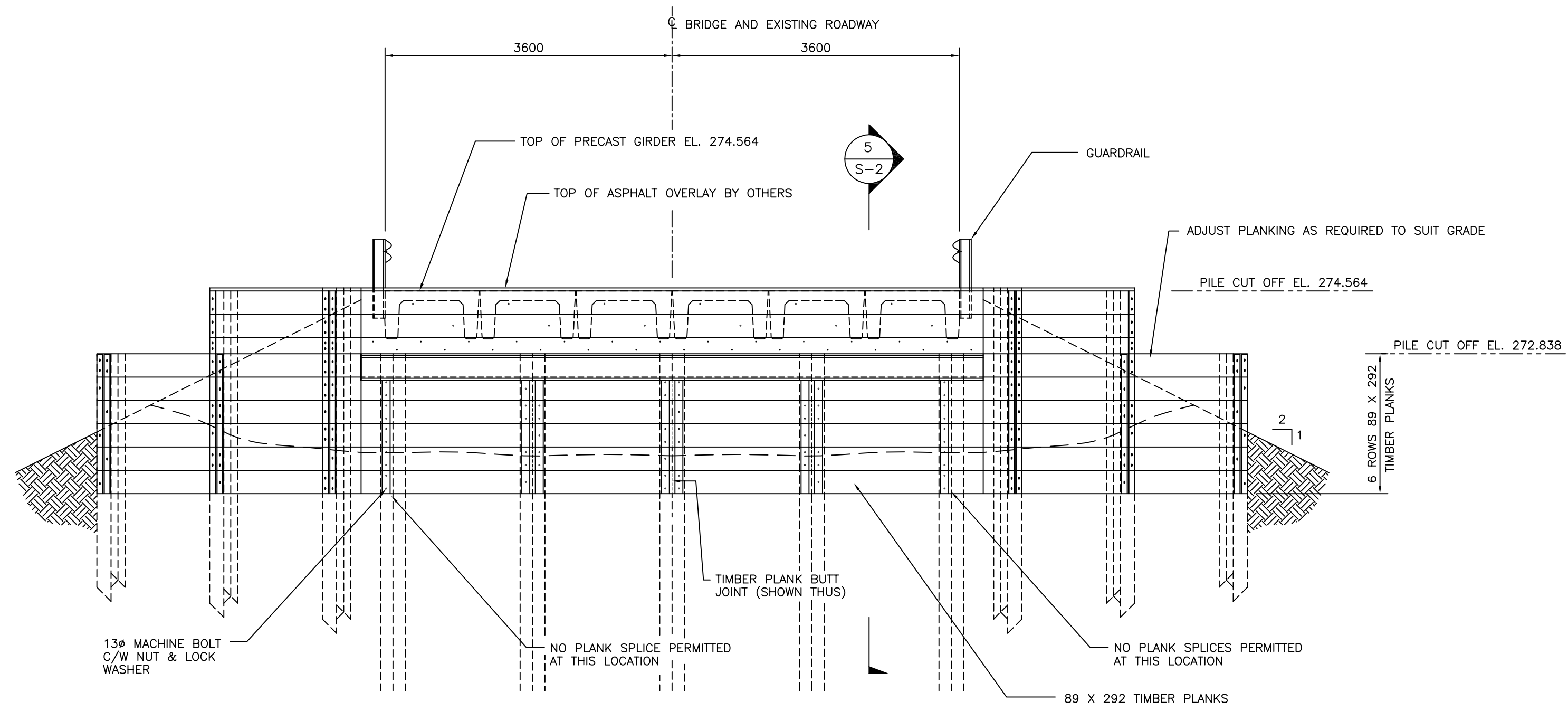
3 SOUTH ELEVATION
S-1 SCALE: 1:100

GENERAL NOTES

- SPECIFICATIONS** CSA STANDARD CAN/CSA-S6-00 "CANADIAN HIGHWAY BRIDGE DESIGN CODE"
- LIVE LOAD** HS 25
- DYNAMIC LOAD ALLOWANCE** = 30%.
- PILES:**
 - ALL PILES SHALL BE DRIVEN TO REFUSAL
 - MAX. COMPRESSIVE LOAD PER ABUTMENT STEEL PILE = 204 KN (UNFACTORED)
 - PILES SHALL BE FITTED WITH PRUYN POINTS 75600 DRIVE SHOES OR APPROVED EQUIVALENT.
- MATERIALS:**
 - PRECAST PRESTRESSED CONCRETE : f_{ci} = 30 MPa AT TRANSFER
 - f_c = 40 MPa AT 28 DAYS
 - REINFORCING STEEL : G30.18-M GRADE 400
 - STRESSING STRAND : G279 GRADE 1860
 - STRUCTURAL STEEL : G40.21-M GRADE 300W.
 - TIMBER : DOUGLAS FIR GRADE No. 1
 - ANCHOR BOLT AND CONNECTION BOLT : ASTM A325 UNLESS NOTED
- GALVANIZING:** ALL MISCELLANEOUS METAL TO BE HOT DIPPED GALVANIZED TO CSA G164 AFTER FABRICATION.

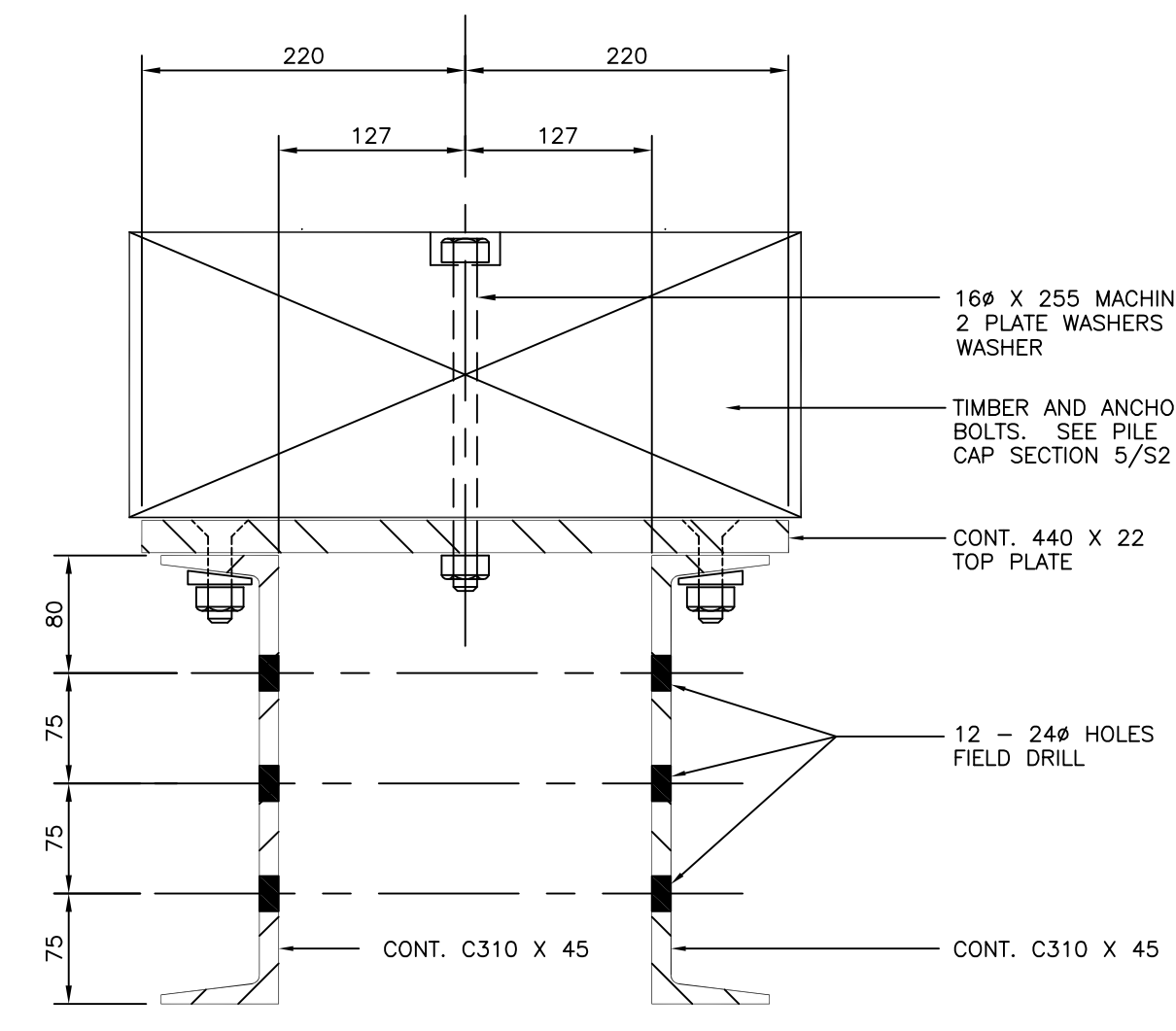
NOTE: ELEVATIONS SHOWN ARE GEODETIC

AS BUILT	03.07.15		
ISSUED FOR TENDER	02.12.10		
NO.	DESCRIPTION	DATE	BY
REVISIONS			
CLIENT			
R.M. of Reynolds HADASHVILLE, MANITOBA			
PROJECT			
BROKENHEAD RIVER BRIDGE LOCATED BETWEEN SECTIONS 19 & 30-9-9E			
DRAWING TITLE			
BRIDGE PLAN, PILING LAYOUT, ELEVATION & GENERAL NOTES			
SEAL	DESIGN BY	DRAWN BY	CHECKED BY
	DHR	DLL	
	APPROVED BY		
SCALE	DATE		
AS NOTED	NOV. 2002		
DRAWING NO.	REV.		
02445-01-S1	0		

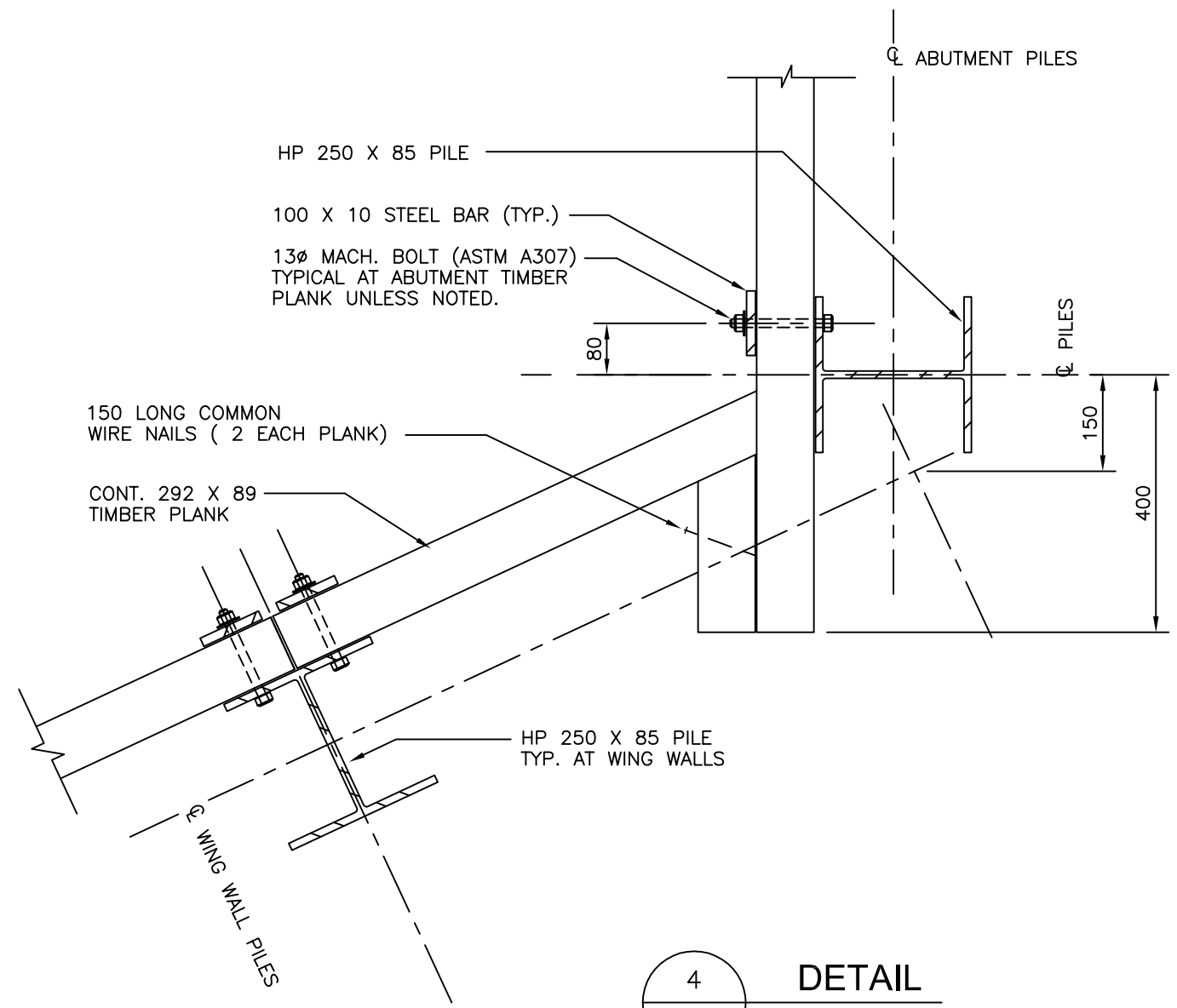


1 ABUTMENT ELEVATION
S-2 SCALE: 1:50

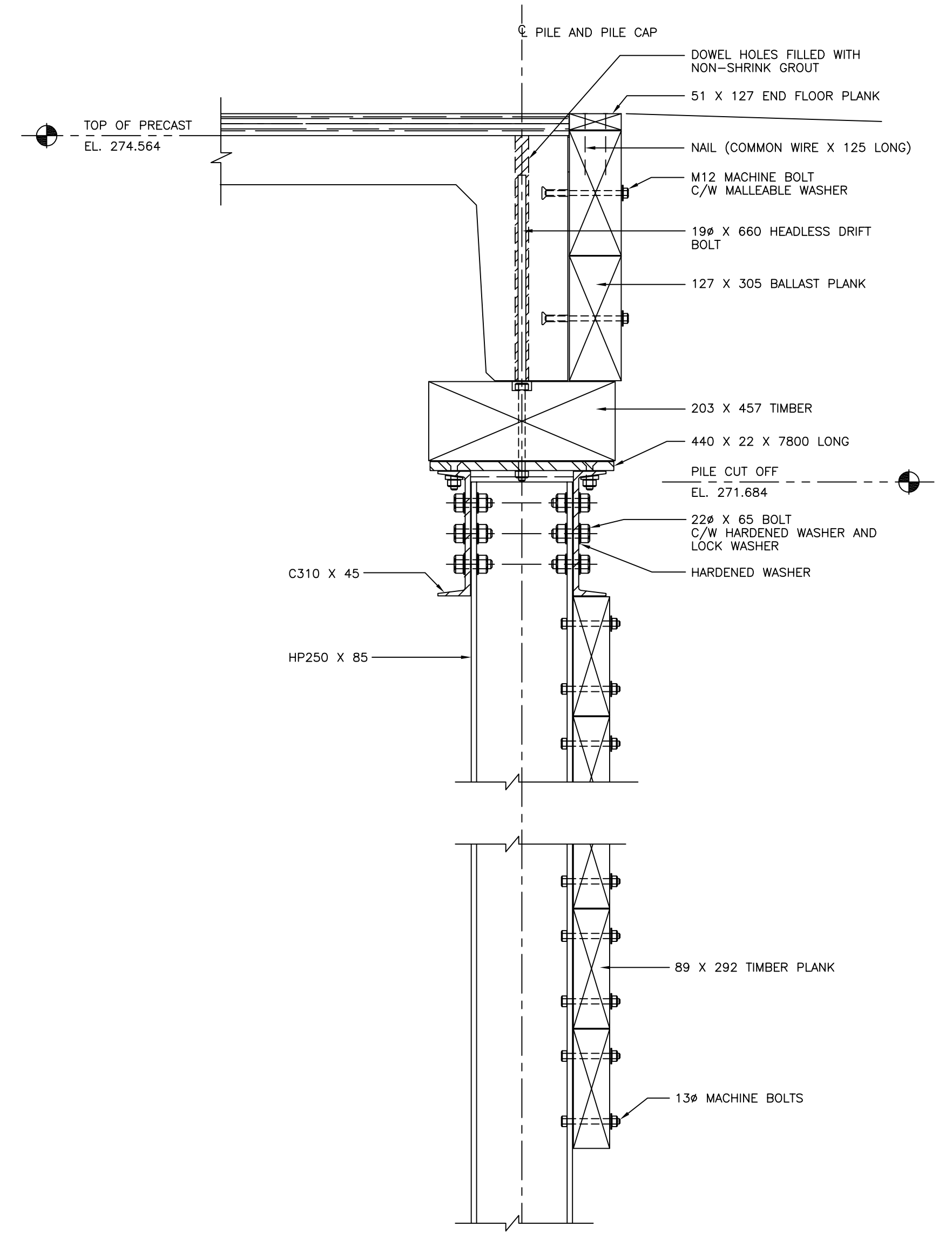
NOTES:
 PLANKING SHALL BE BOLTED TO PILES WITH 13# BOLTS C/W NUT AND LOCK WASHERS AS FOLLOWS:
 1. 2 BOLTS AT EACH END OF PLANK
 2. 1 BOLT AT ALL OTHER LOCATIONS
 PLANK SPLICES ARE PERMITTED ONLY AT PILE LOCATIONS EXCEPT AS NOTED. PLANK SPLICES MUST BE STAGGERED.



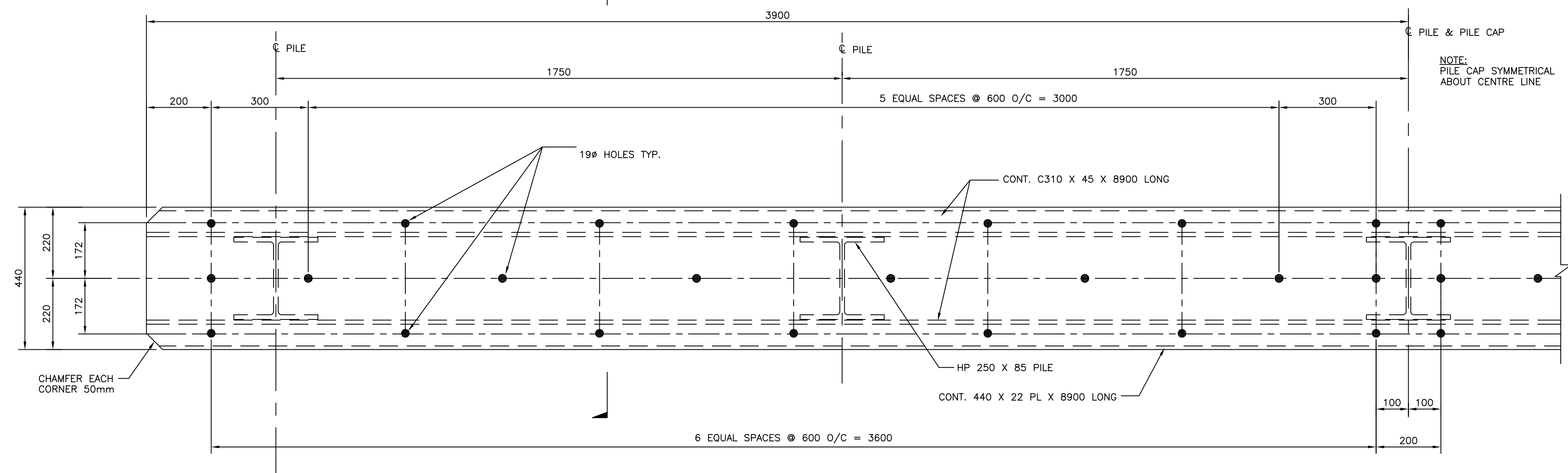
3 SECTION
S-2 SCALE: 1:5



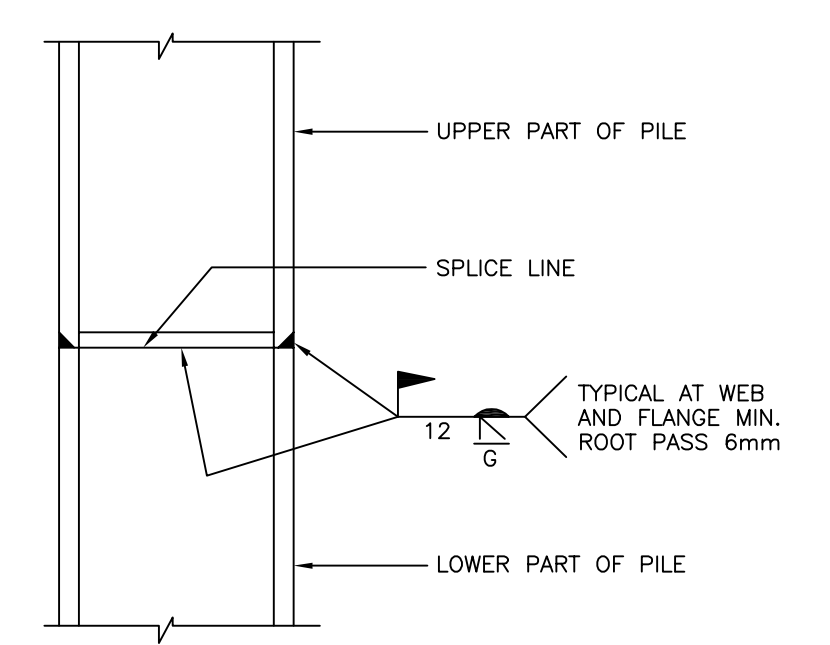
4 DETAIL
S-2 SCALE: 1:10



5 SECTION AT PILE CAP
S-2 SCALE: 1:10

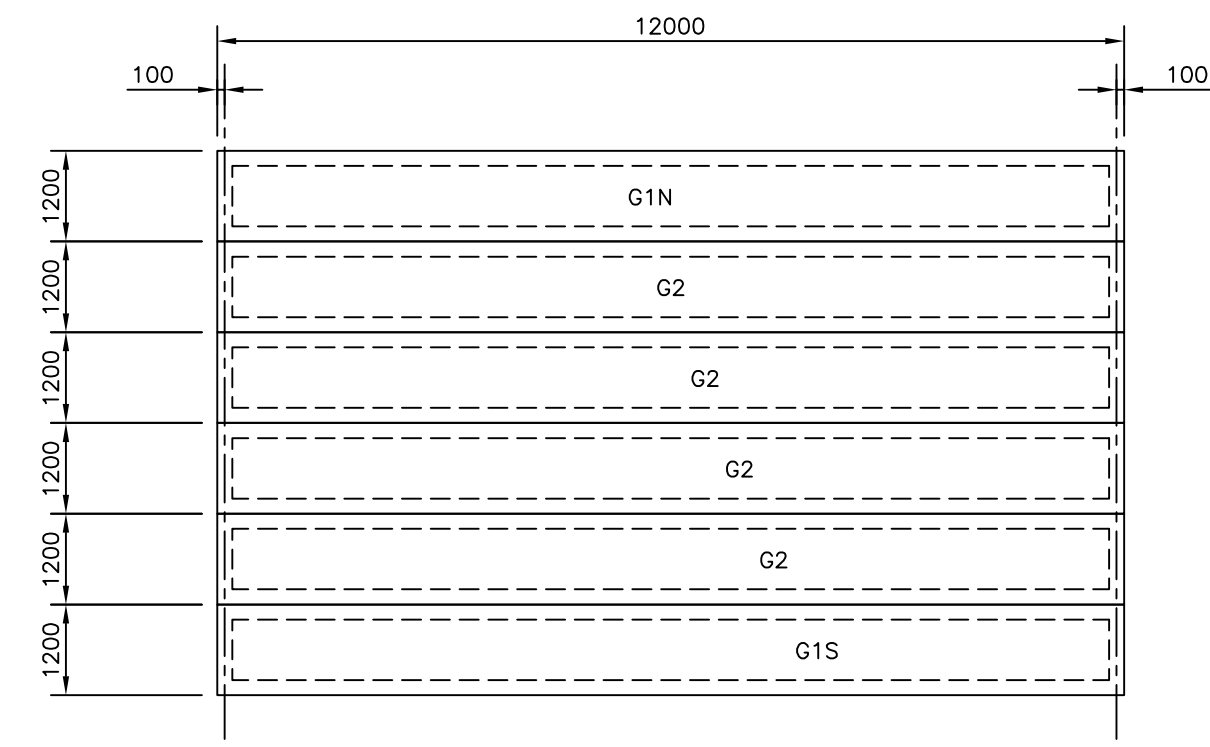


2 TYPICAL STEEL PILE CAP
S-2 SCALE: 1:10

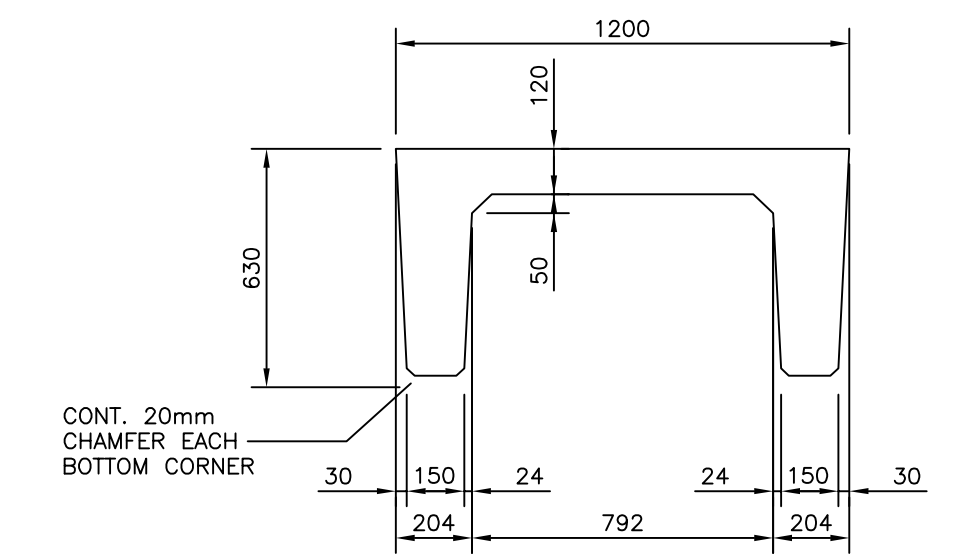


6 STEEL PILE SPLICE DETAIL (IF REQ'D)
S-2 SCALE: 1:10

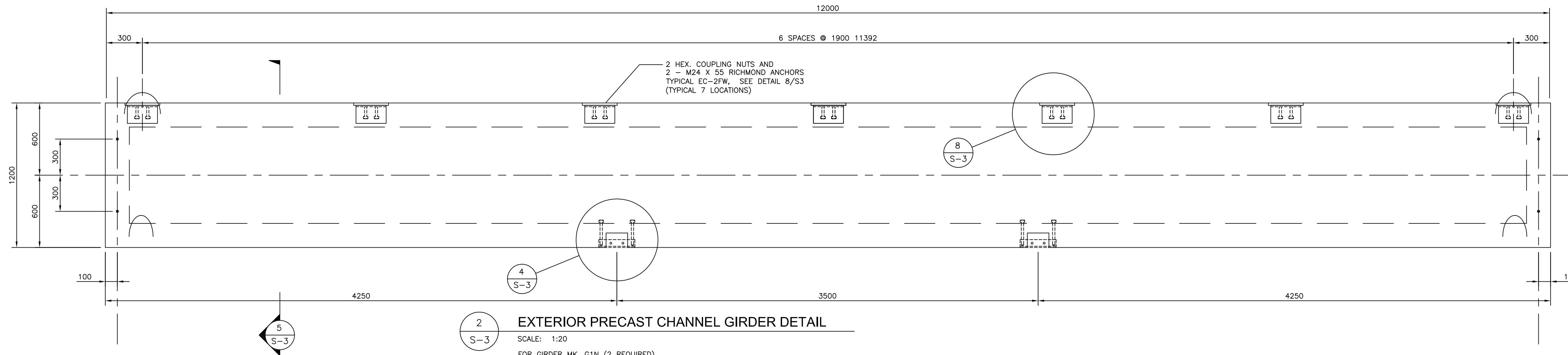
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PROJECT			
BROKENHEAD RIVER BRIDGE LOCATED BETWEEN SECTIONS 19 & 30-9-9E			
DRAWING TITLE			
ABUTMENT DETAILS			
SEAL	DESIGN BY	DRAWN BY	CHECKED BY
	DHR	DLL	
	APPROVED BY		
SCALE	AS NOTED	DATE	NOV. 2002
DRAWING NO.	02445-01-S2	REV.	0



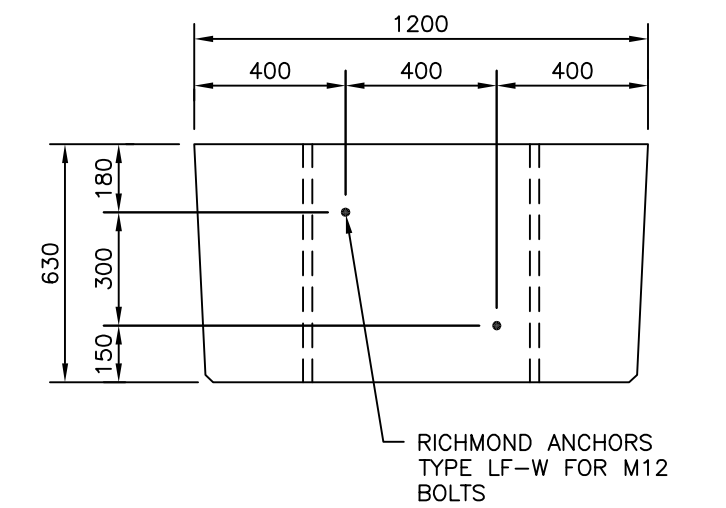
1 CONCRETE CHANNEL GIRDER LAYOUT PLAN
SCALE: 1:100



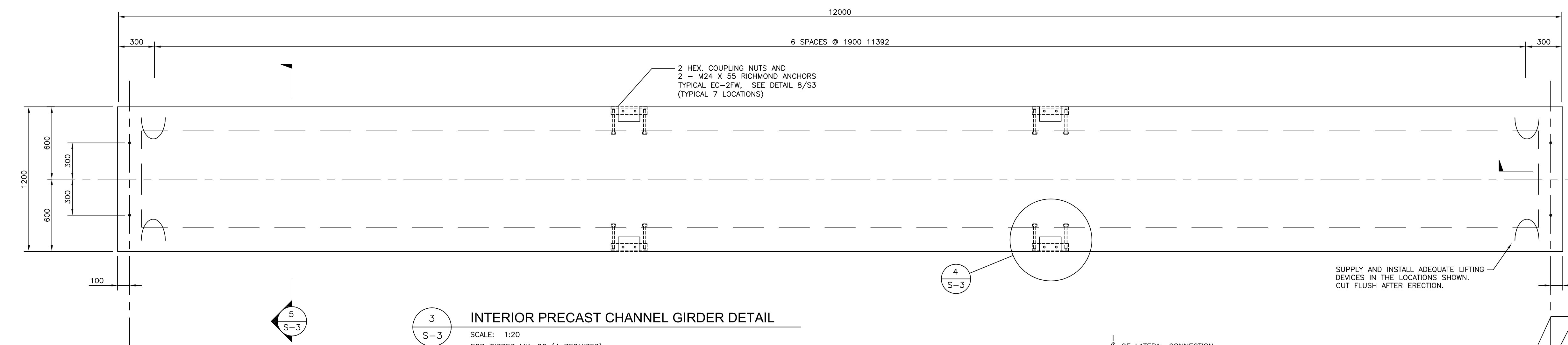
5 SECTION
SCALE: 1:20



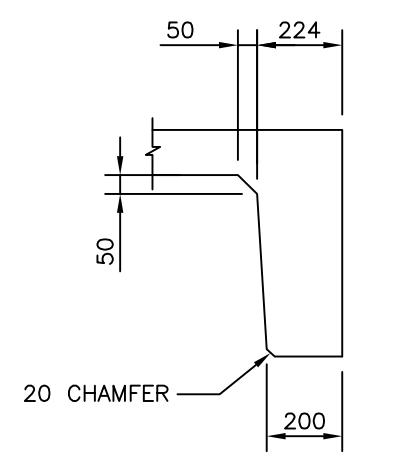
2 EXTERIOR PRECAST CHANNEL GIRDER DETAIL
SCALE: 1:20
FOR GIRDER MK. G1N (2 REQUIRED)



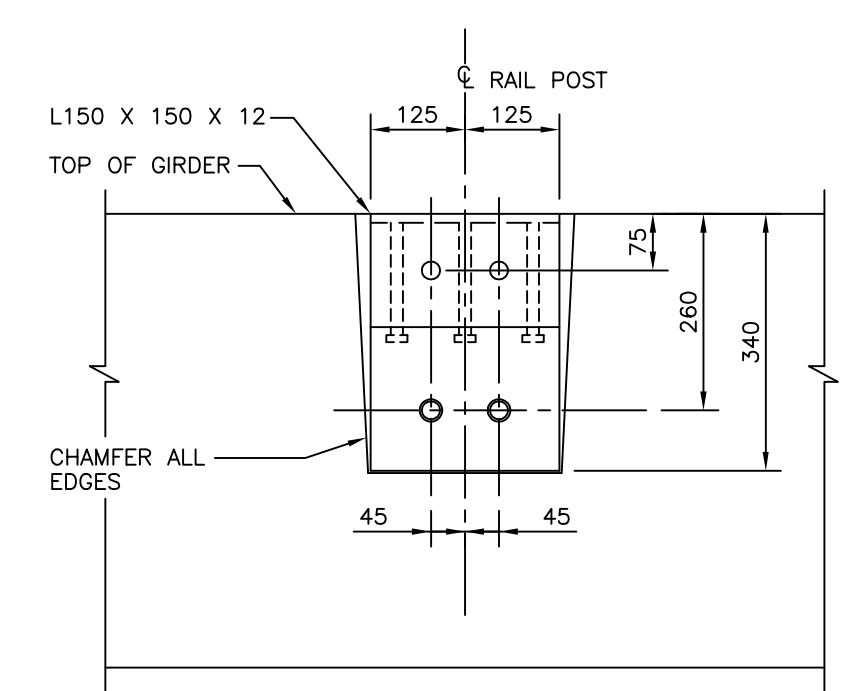
6 END ELEVATION
SCALE: 1:20



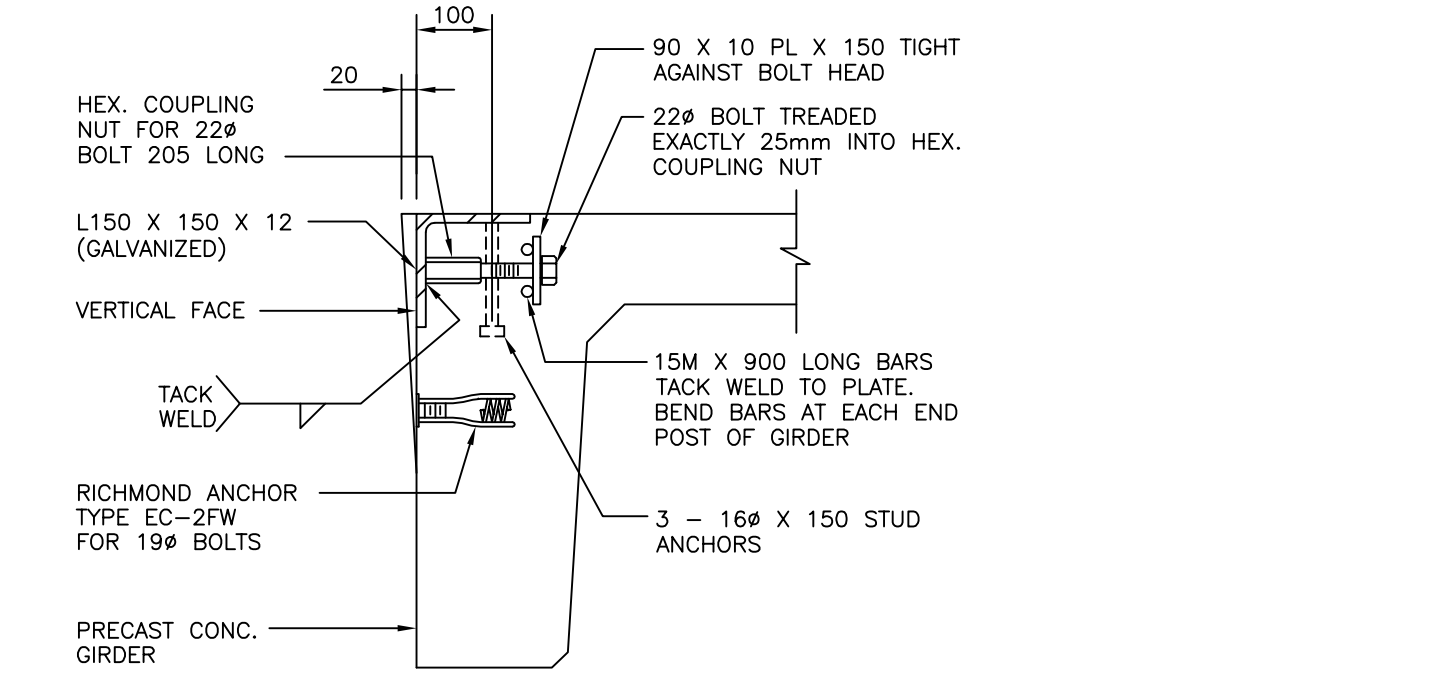
3 INTERIOR PRECAST CHANNEL GIRDER DETAIL
SCALE: 1:20
FOR GIRDER MK. G2 (4 REQUIRED)



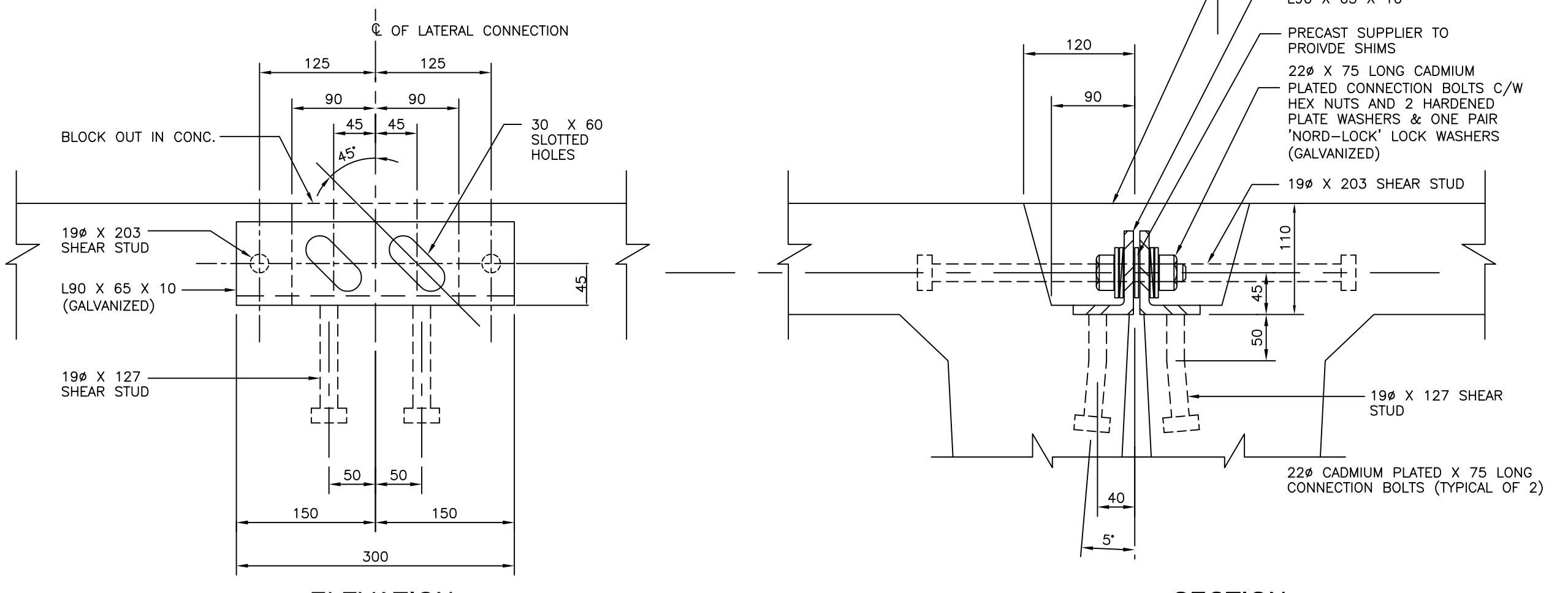
7 SECTION
SCALE: 1:20



8 GUARDRAIL POST INSERT DETAIL
SCALE: 1:10



4 LATERAL CONNECTION ANGLE DETAIL
SCALE: 1:5



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PROJECT			
BROKENHEAD RIVER BRIDGE LOCATED BETWEEN SECTIONS 19 & 30-9-9E			
DRAWING TITLE			
CONCRETE CHANNEL GIRDER PLAN AND DETAILS			
DESIGN BY	DHR	DRAWN BY	DLL
APPROVED BY			
SCALE			
DRAWING NO.	02445-01-S3	REV.	0

SUPPLY AND INSTALL ADEQUATE LIFTING DEVICES IN THE LOCATIONS SHOWN. CUT FLUSH AFTER ERECTION.

