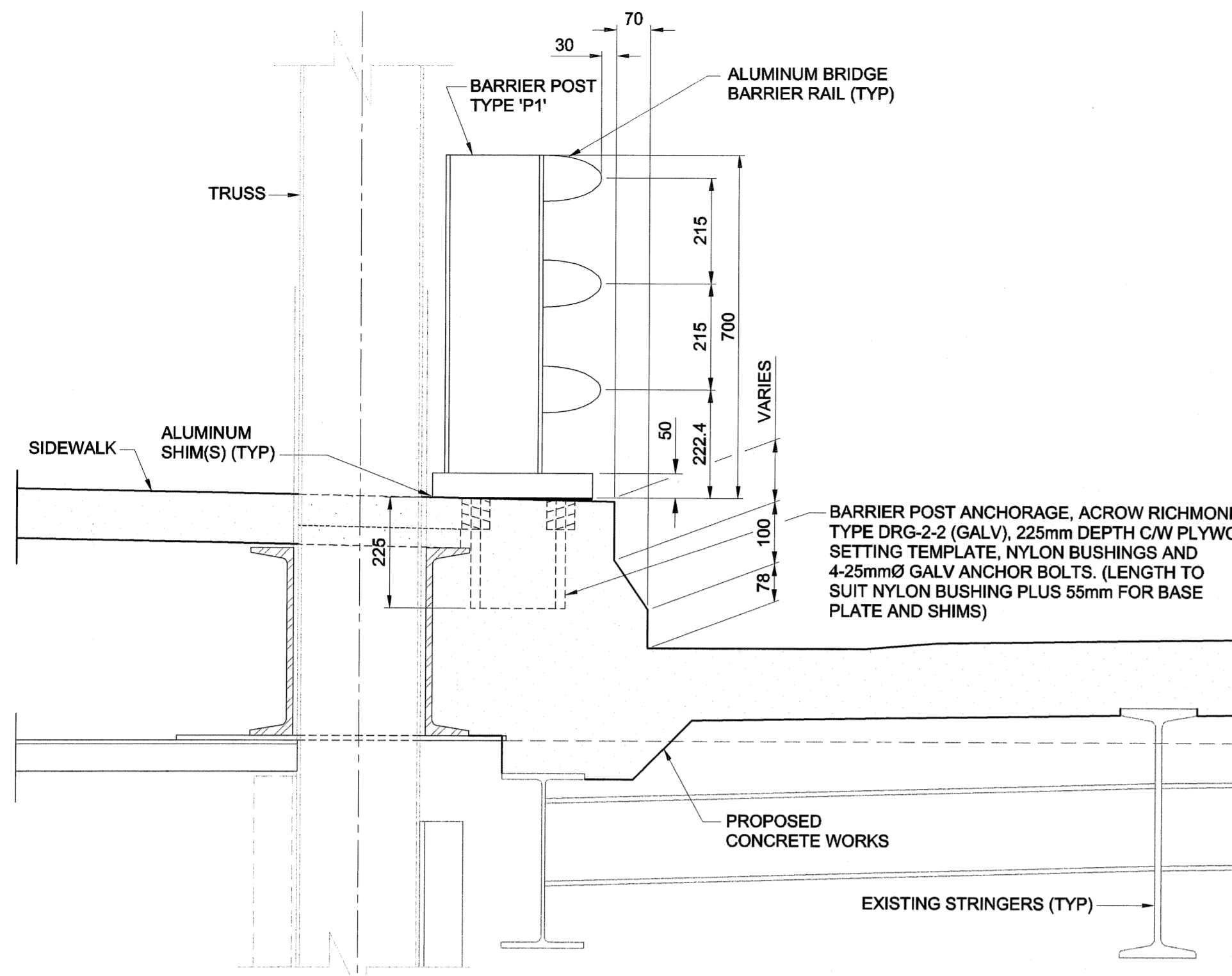
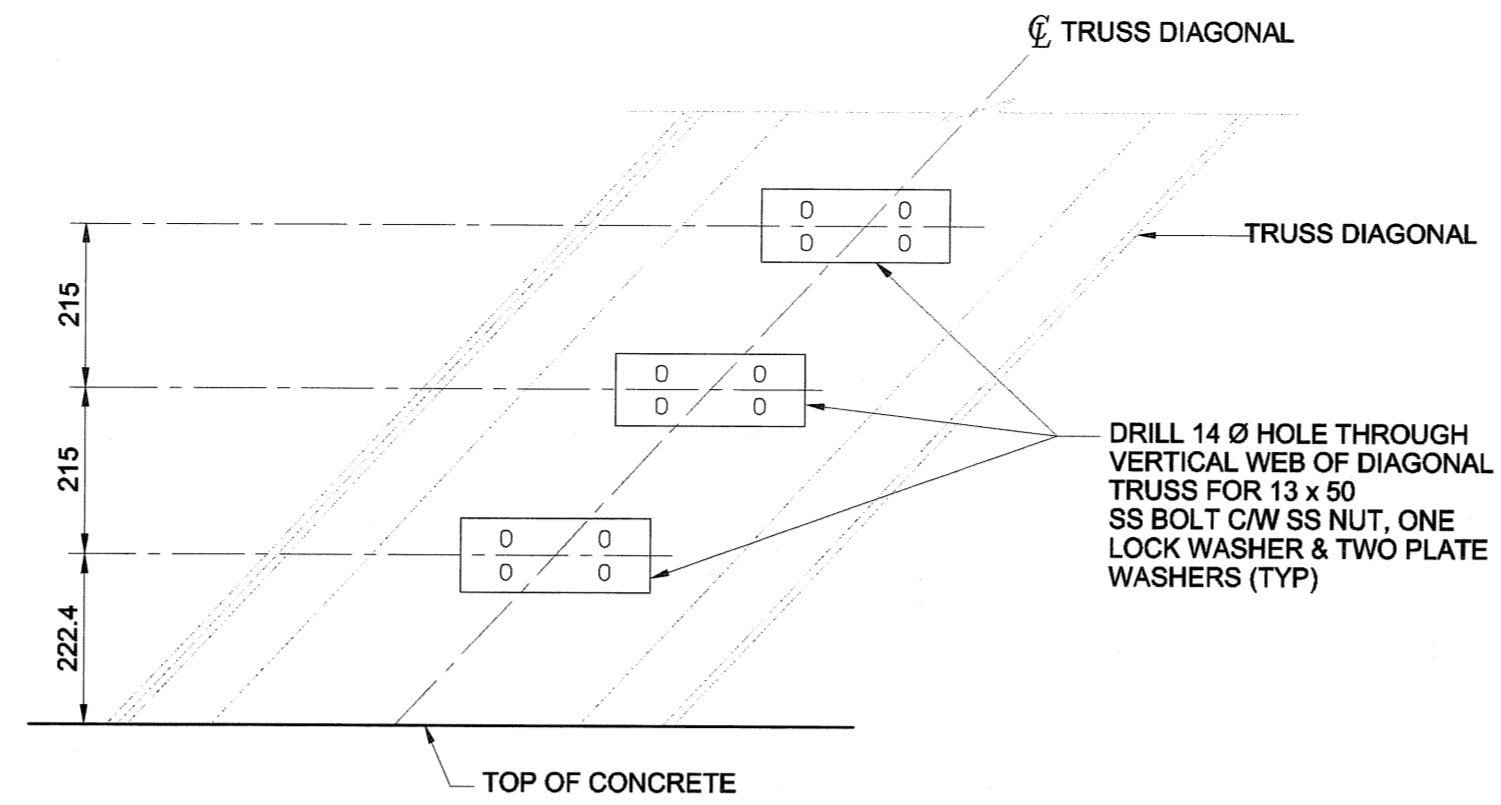


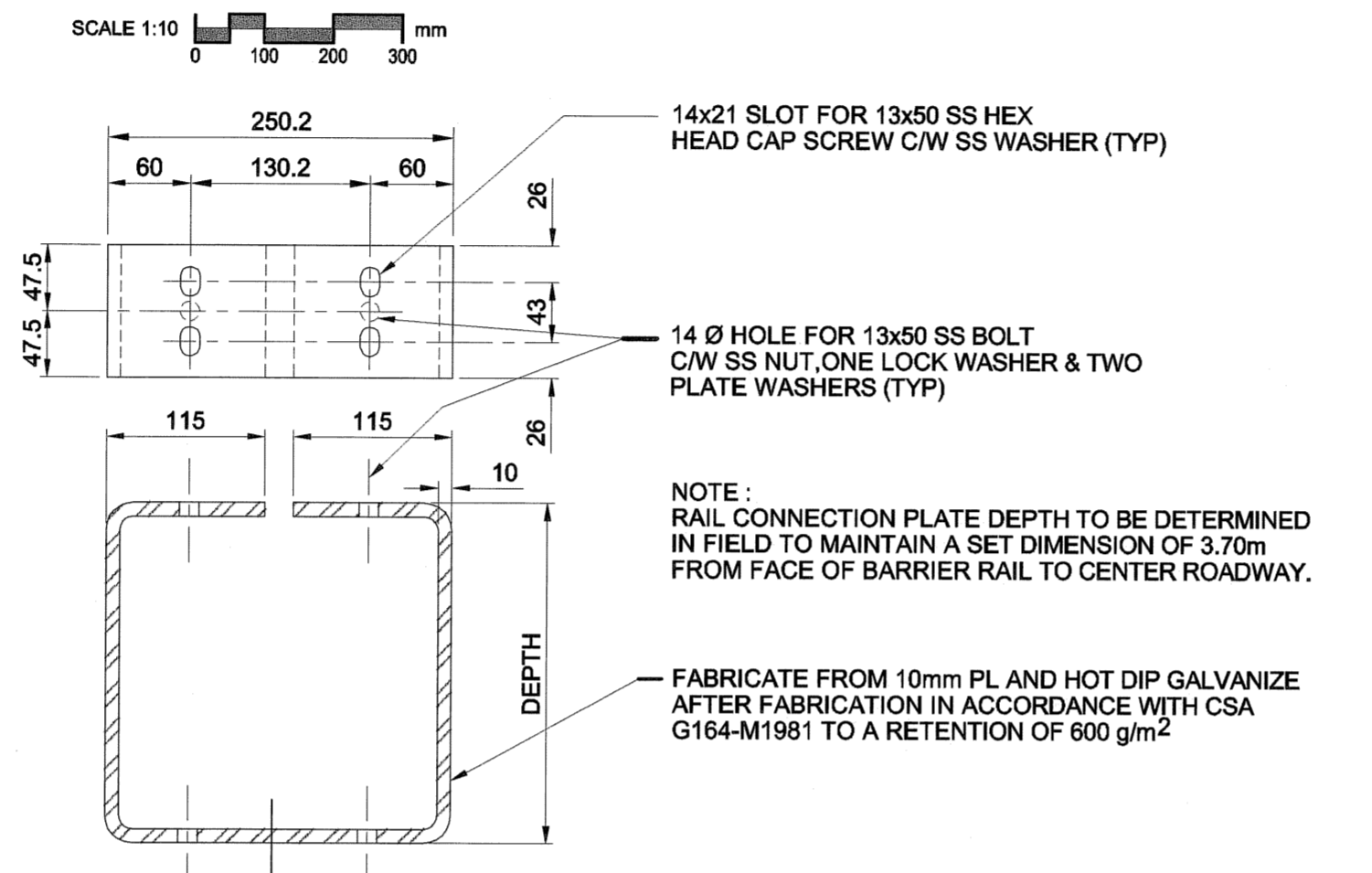
D SIZE 22" x 34" (559mm x 864mm)



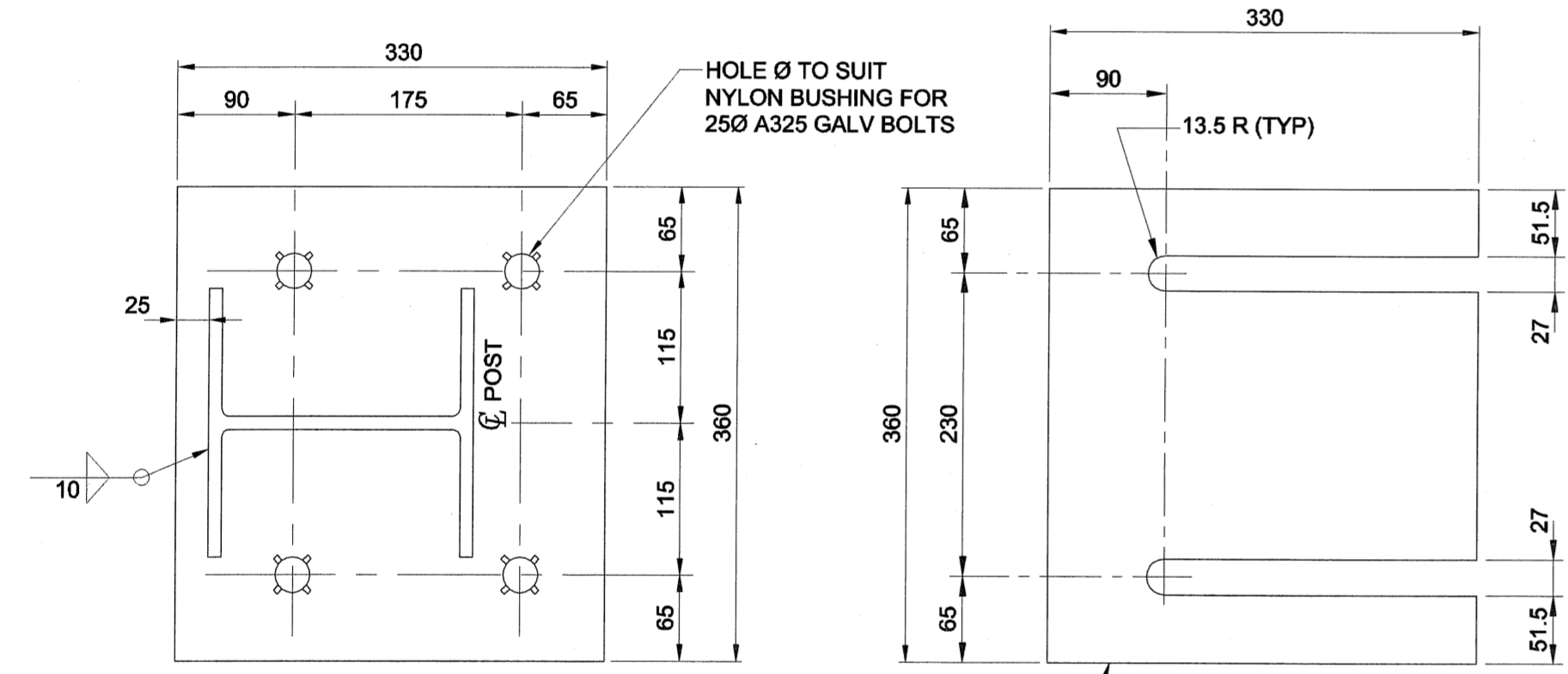
**BARRIER POST 'P1' ASSEMBLY DETAILS**  
SCALE 1:10



**INSTALLATION DETAIL OF RAIL CONNECTION PLATES**  
SCALE 1:10

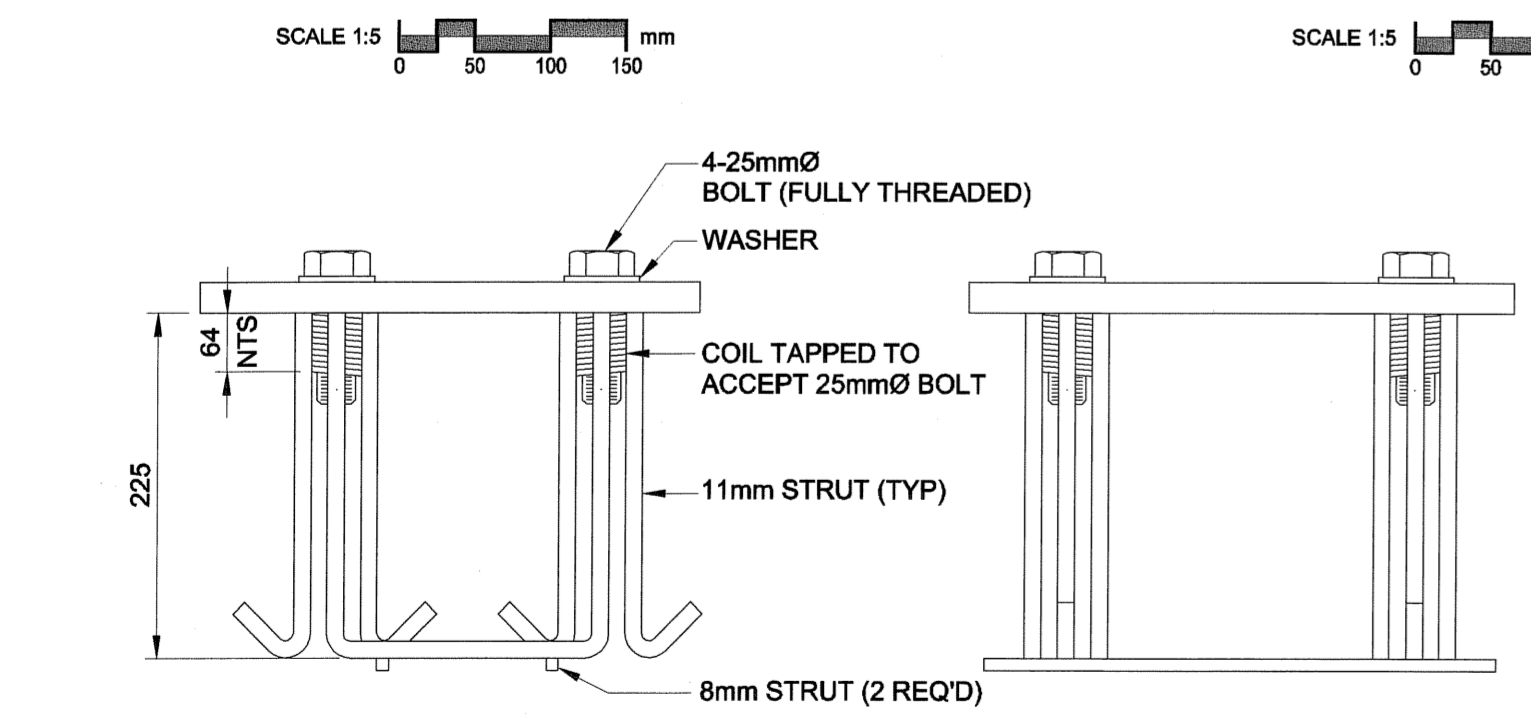


**DETAIL OF RAIL CONNECTION PLATE**  
SCALE 1:5

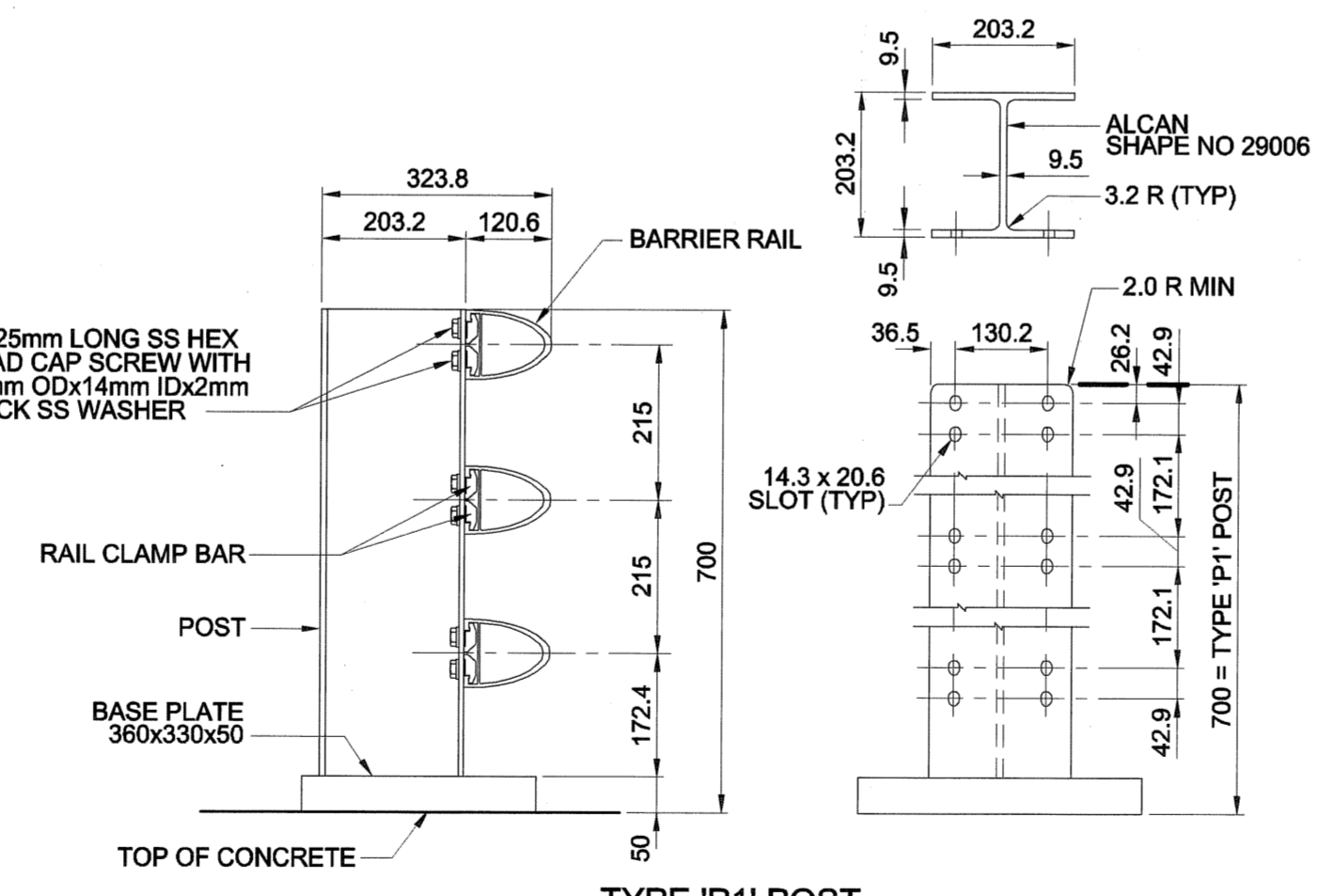


**BASE PLATE DETAILS**  
SCALE 1:5

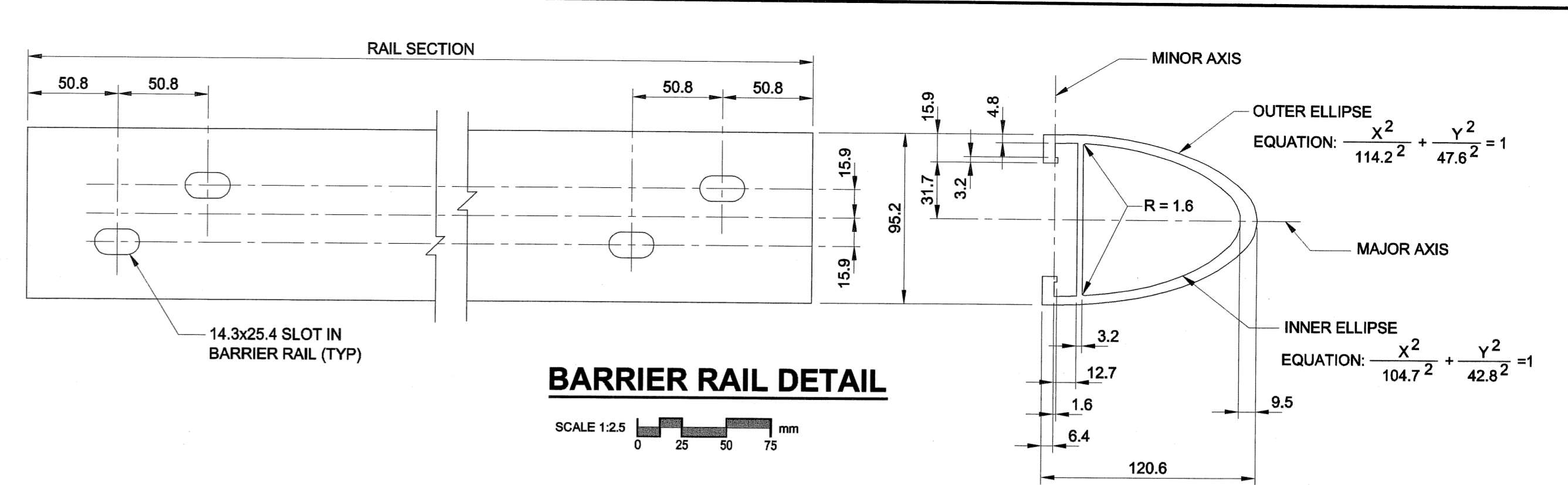
**SHIM DETAILS**  
SCALE 1:5



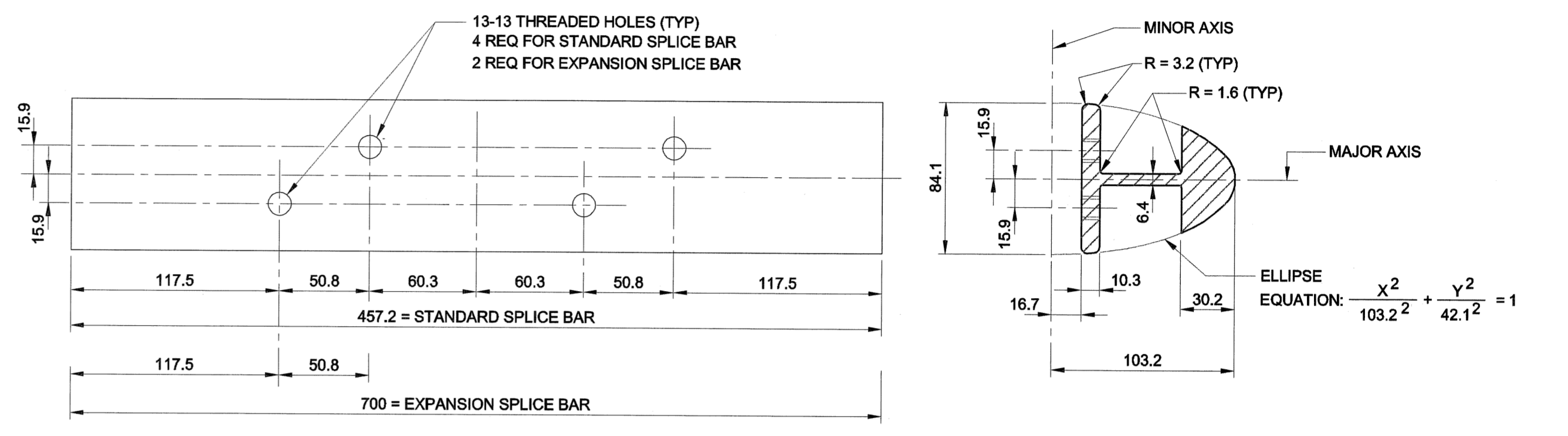
**ELEVATIONS**  
SCALE 1:5



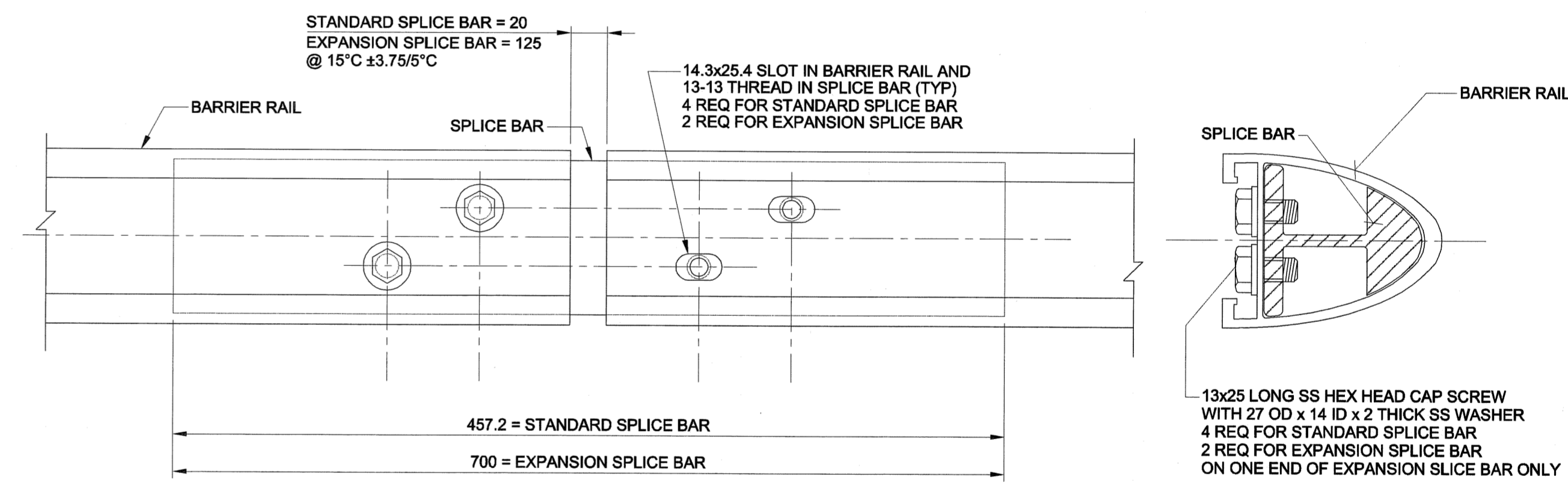
**RAIL TO POST ASSEMBLY DETAILS**  
SCALE 1:10



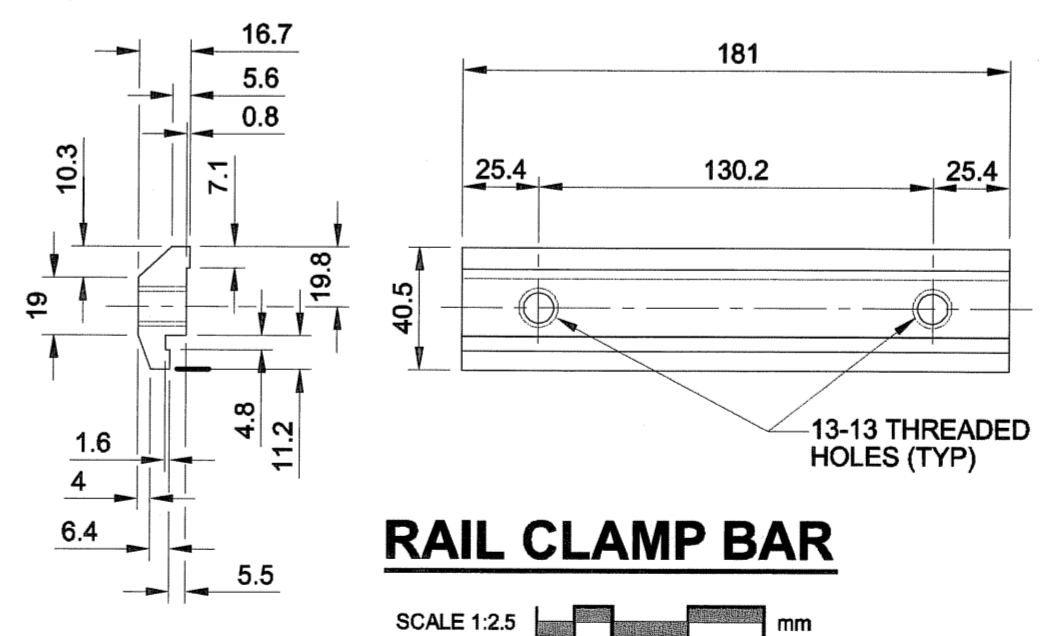
**BARRIER RAIL DETAIL**  
SCALE 1:2.5



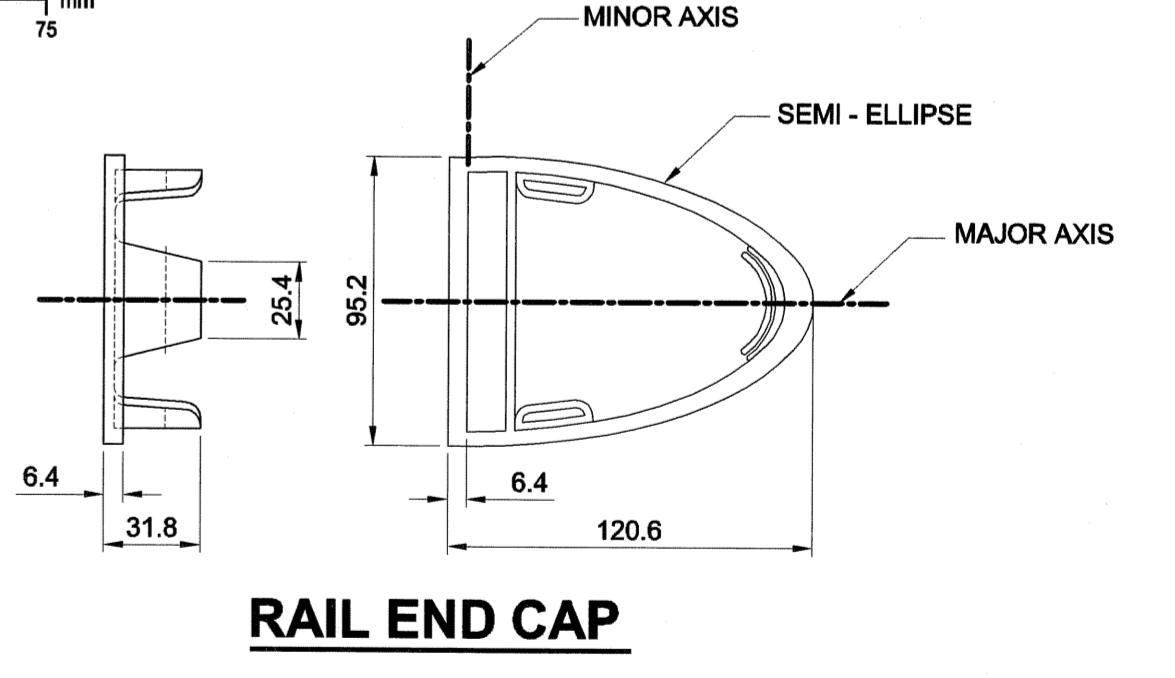
**SPLICE BAR DETAIL**  
SCALE 1:2.5



**SPLICE BAR TO RAIL ASSEMBLY DETAIL**  
SCALE 1:2.5



**RAIL CLAMP BAR**  
SCALE 1:2.5



**RAIL END CAP**  
SCALE 1:2.5

**NOTE:**  
ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE BASED ON AVAILABLE INFORMATION AND RECORD DRAWINGS. THE CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION OR PRIOR TO PREPARATION OF SHOP DRAWINGS. THE CONTRACTOR SHALL MAKE THE APPROPRIATE ADJUSTMENTS TO THE APPLICABLE DETAILS AND DIMENSIONS ACCEPTABLE TO THE CONTRACT ADMINISTRATOR. THE CONTRACTOR SHALL THEN FABRICATE AND CONSTRUCT THE WORKS IN ACCORDANCE WITH THE CORRECTED DIMENSIONS.

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

**APEGM**  
Certificate of Authorization  
UMA Engineering Ltd.  
No. 256 Expiry: April 30, 2006

DESIGNED BY	BLL	CHECKED BY	SBB
DRAWN BY	VK	APPROVED BY	BUS
HOR. SCALE	AS SHOWN	ACCEPTED BY	
VERT. SCALE	AS SHOWN	DATE	2005-07-07
NO. REVISIONS	Y/M/MDD	BY	
0	ISSUED FOR CONSTRUCTION	05/07/05	MP

**UMA Engineering Ltd.**  
Consulting • Engineering • Construction • Management Services

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
REGISTERED PROFESSIONAL ENGINEER  
B.L. LAU  
July 6, 2005  
CONSULTANT DRAWING NO. 52  
0255-376-00

**THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT**

**REDWOOD BRIDGE REHABILITATIVE MAINTENANCE AND RELATED WORKS**

ALUMINUM BRIDGE SHOULDER BARRIER POST AND RAIL DETAILS

CITY DRAWING NUMBER B113-05-52  
SHEET 52 OF 74  
REV 52 0

Bid Opportunity No. 257-2005