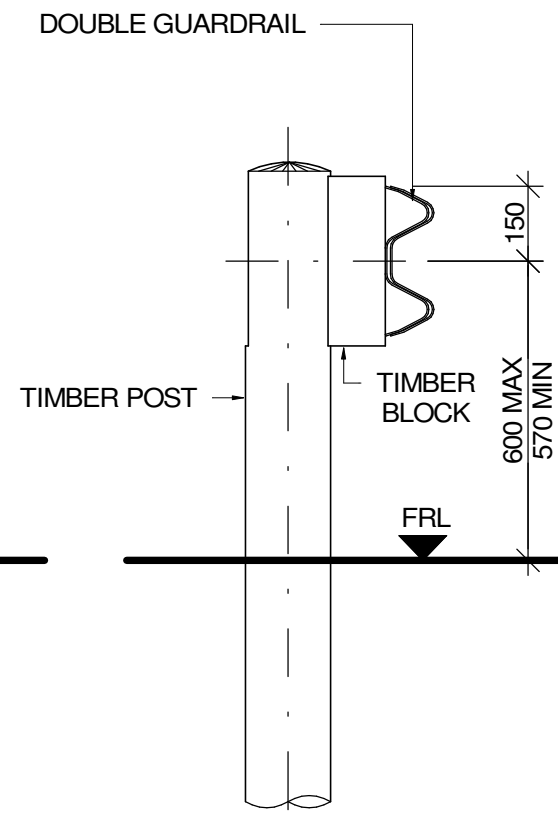
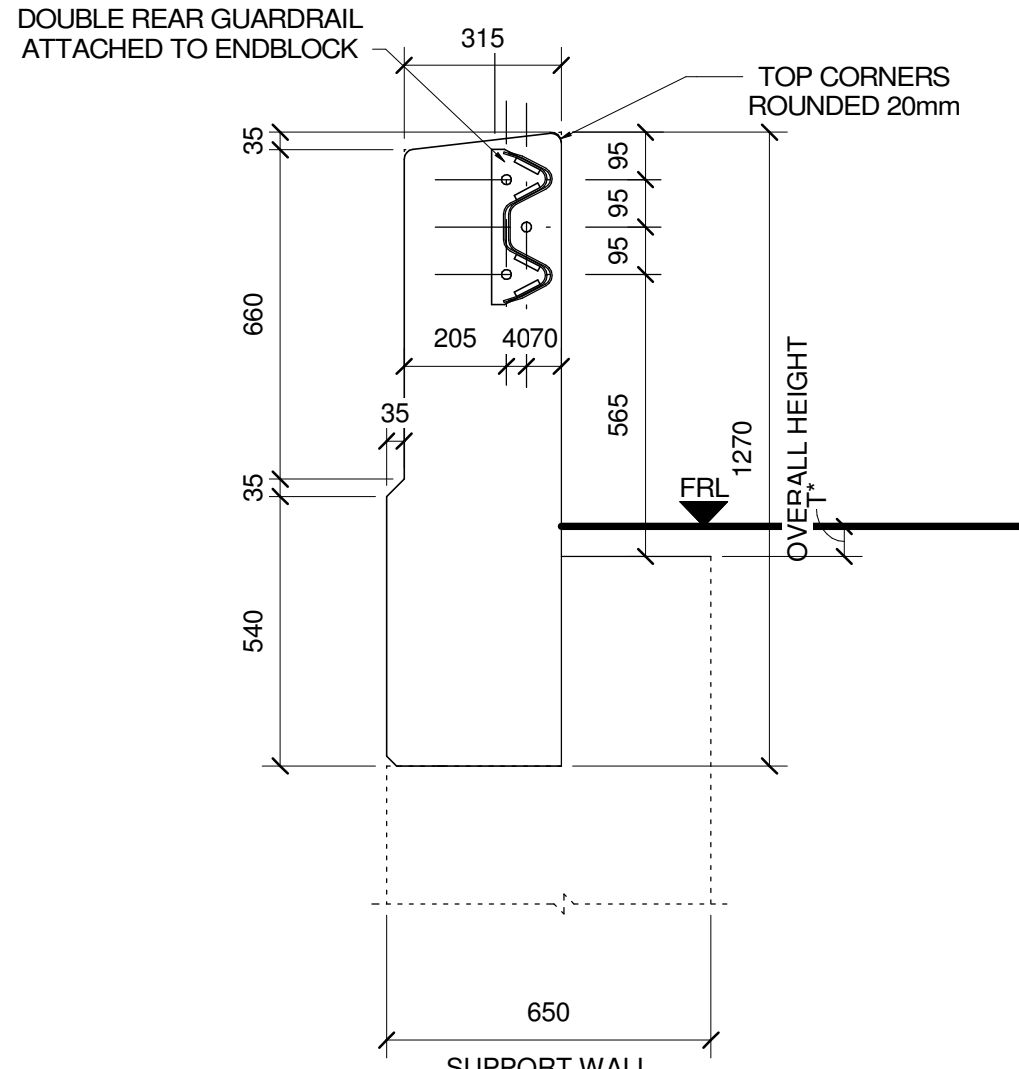


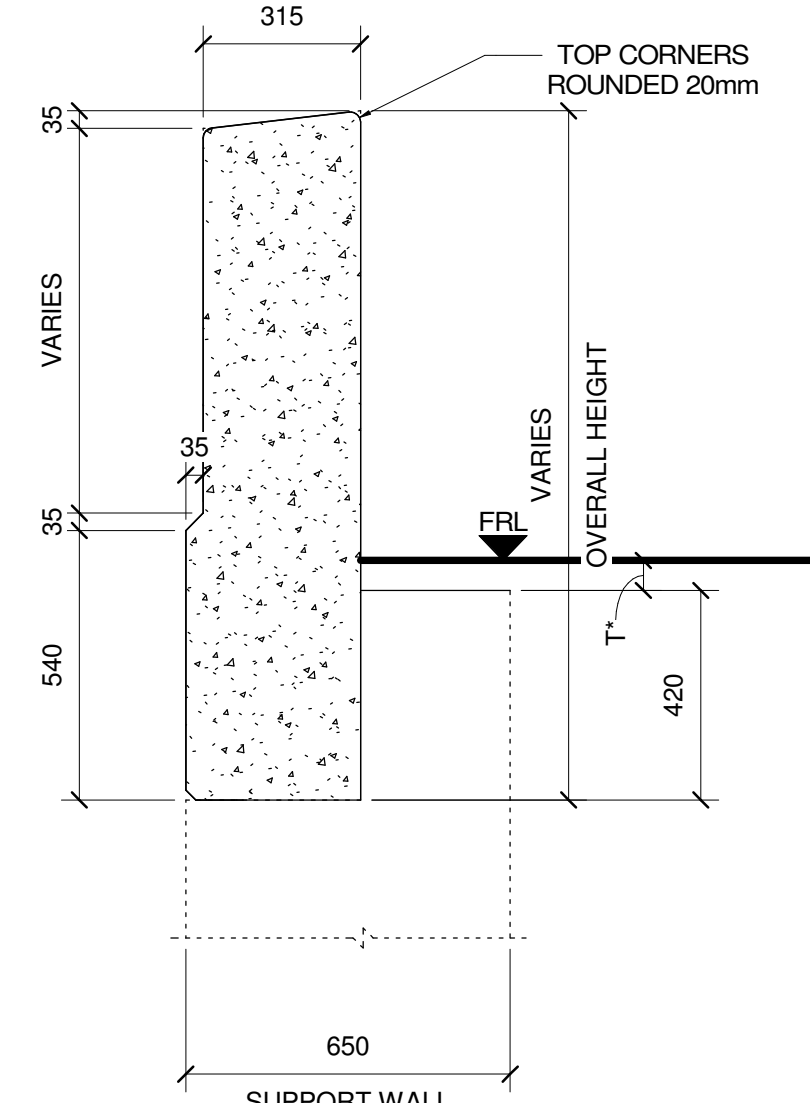
TYPICAL ENDBLOCK INSIDE ELEVATION - ENDBLOCK 03



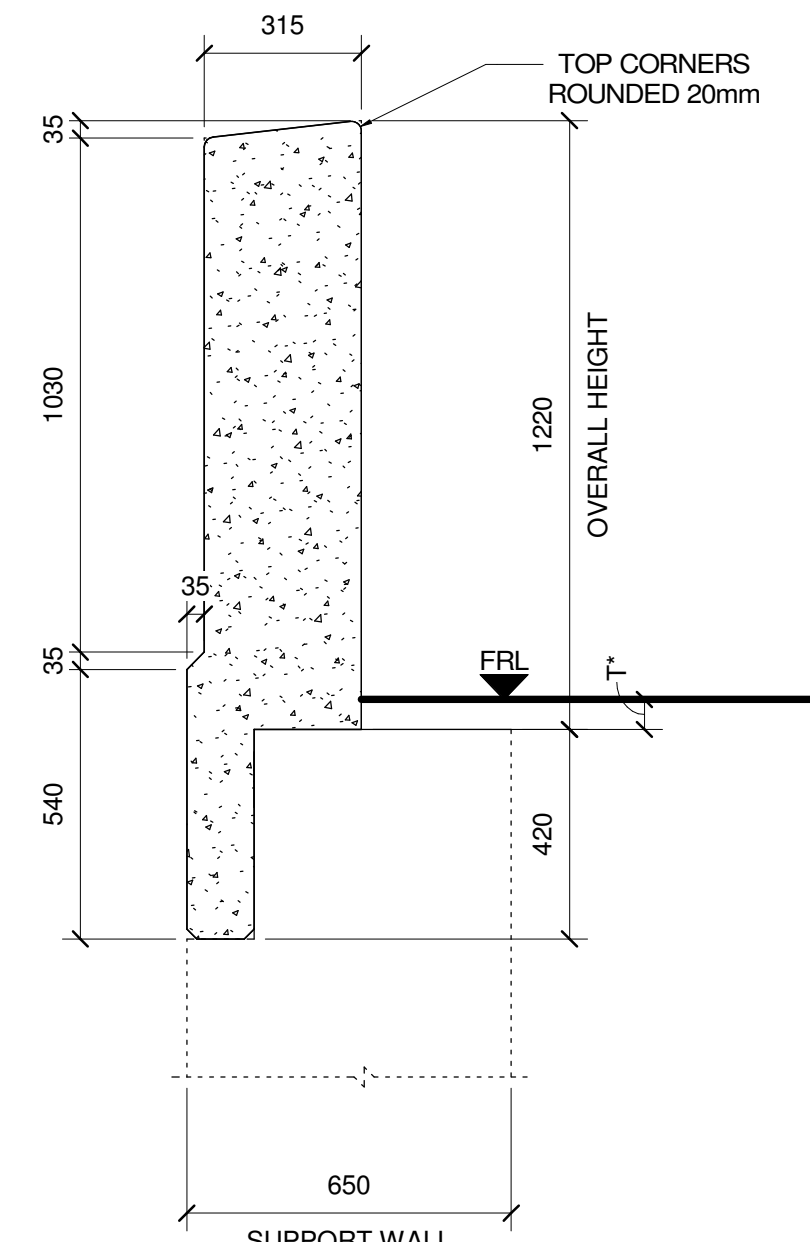
SECTION A-A



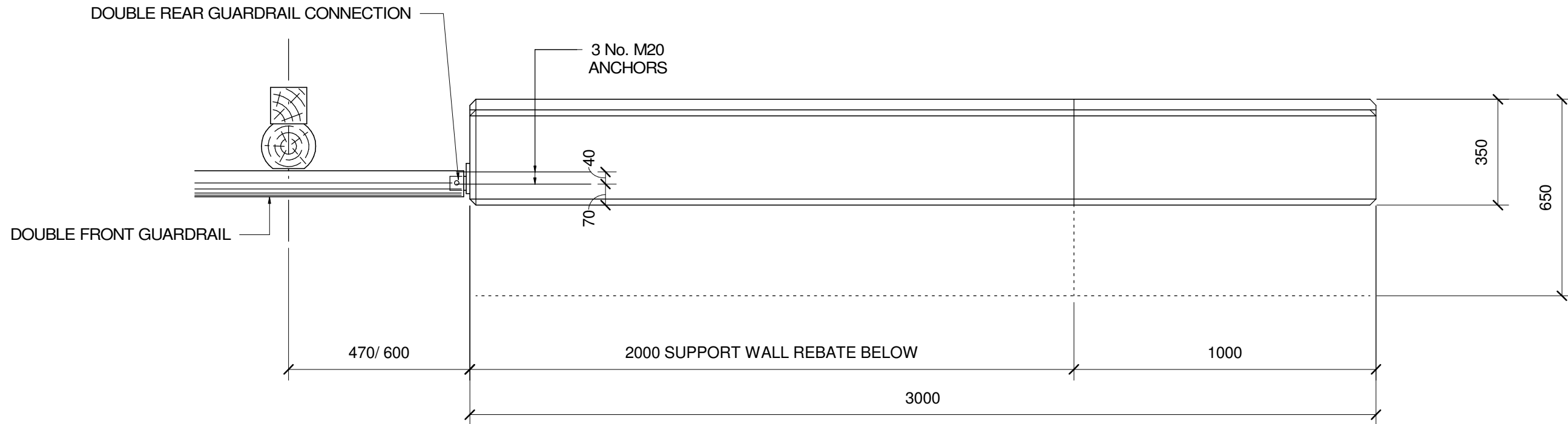
SECTION B-B



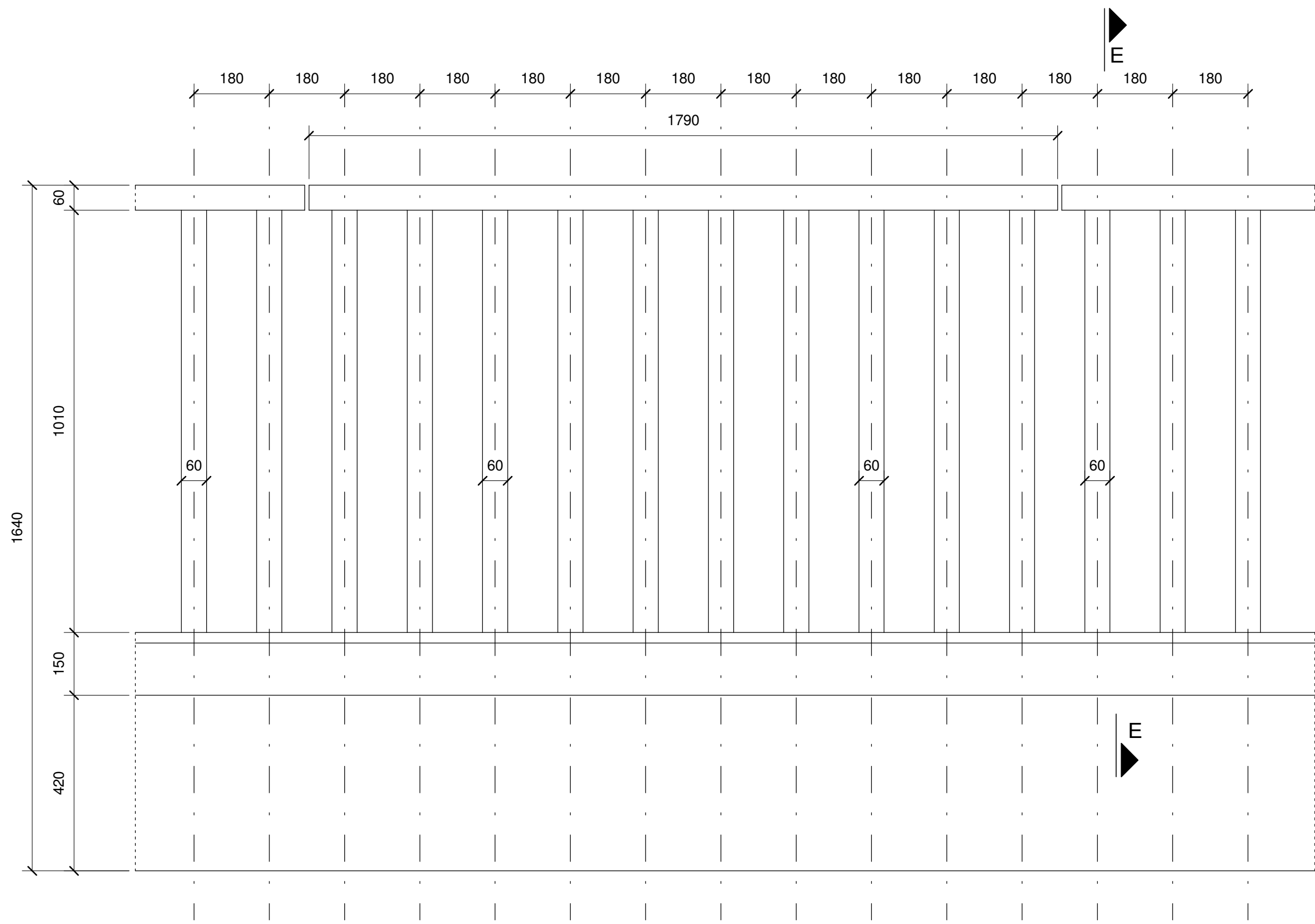
SECTION C-C



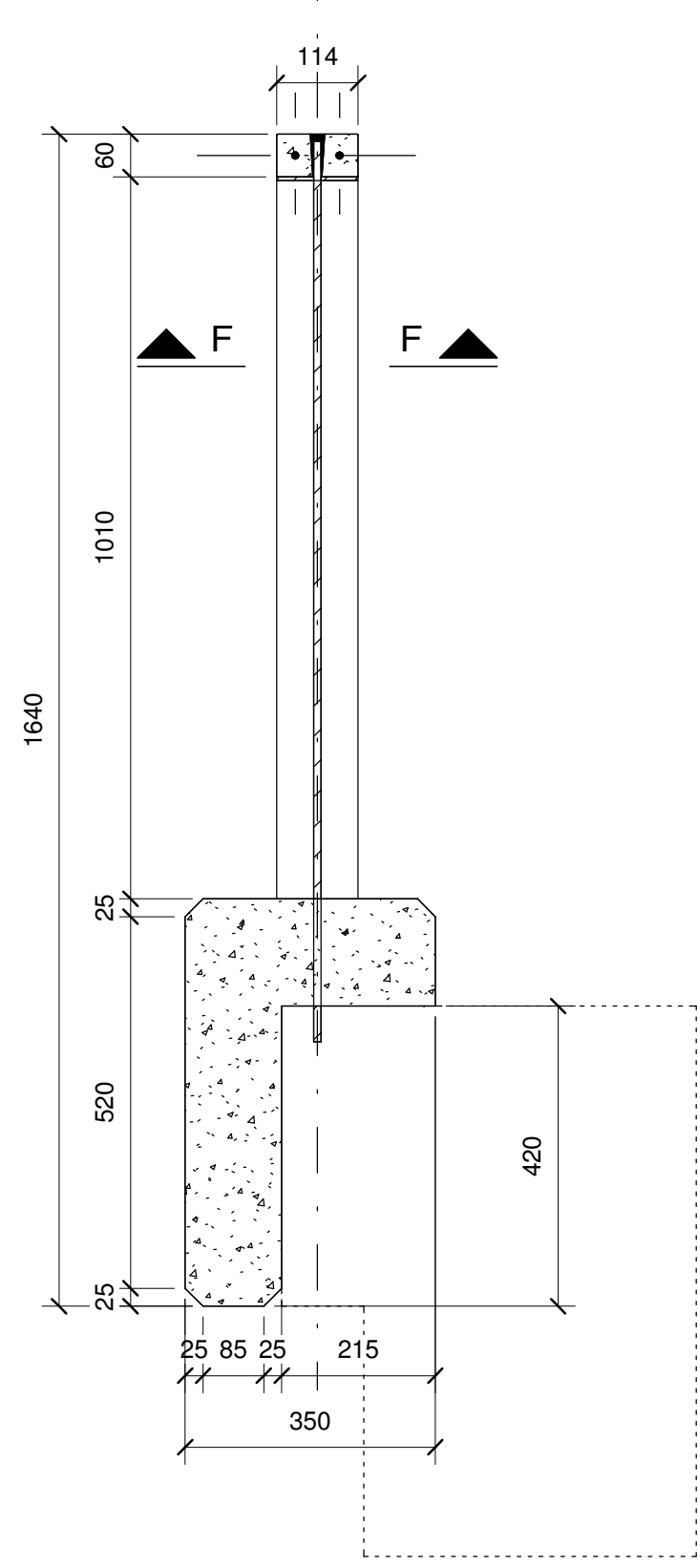
SECTION D-D



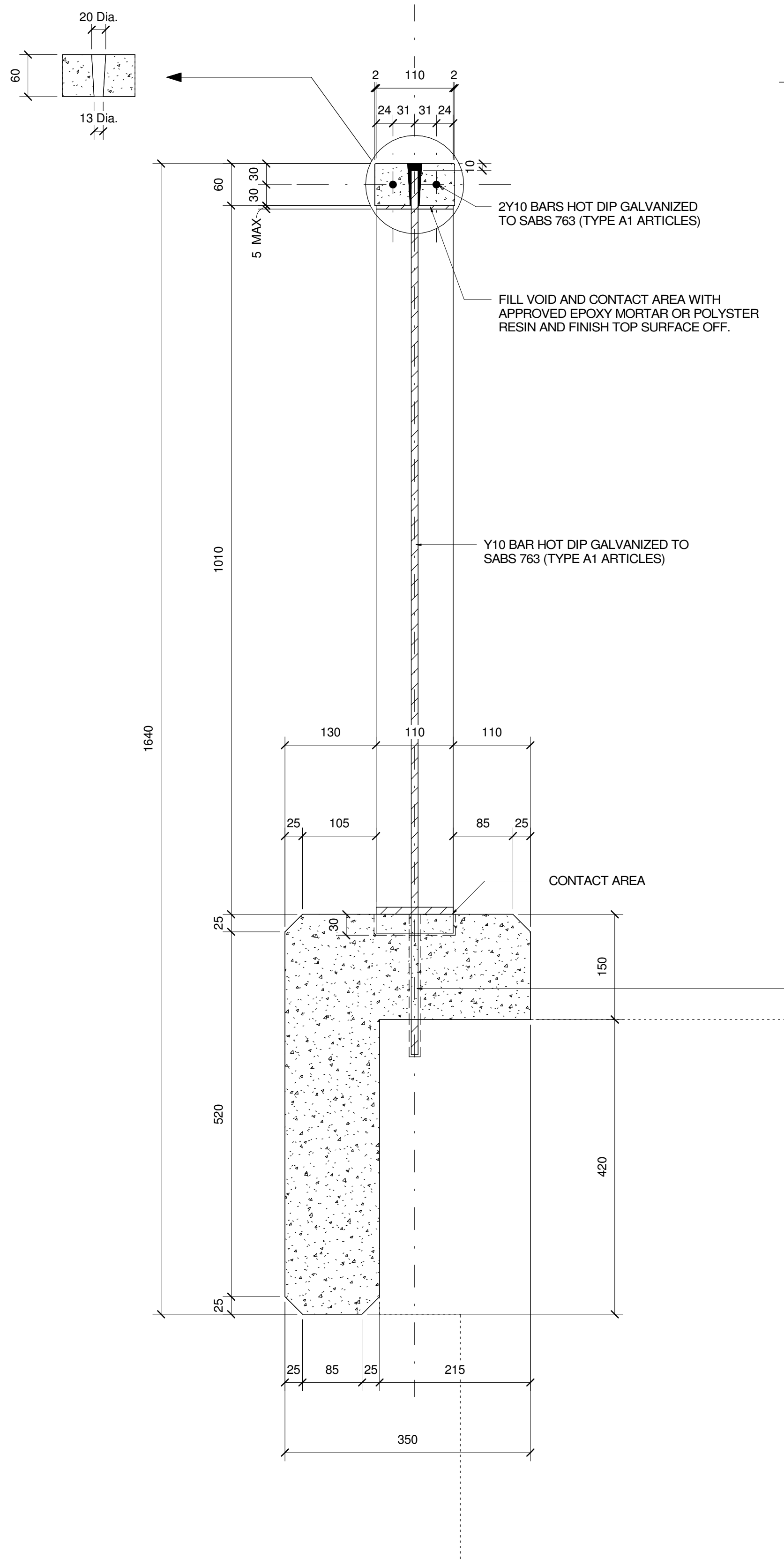
PLAN



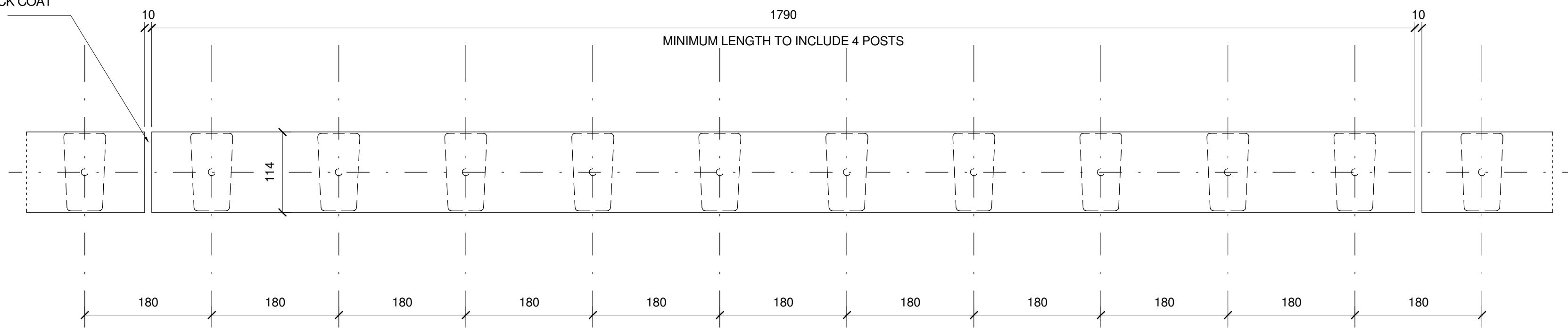
TYPICAL PARAPET INSIDE ELEVATION - PARAPET 05



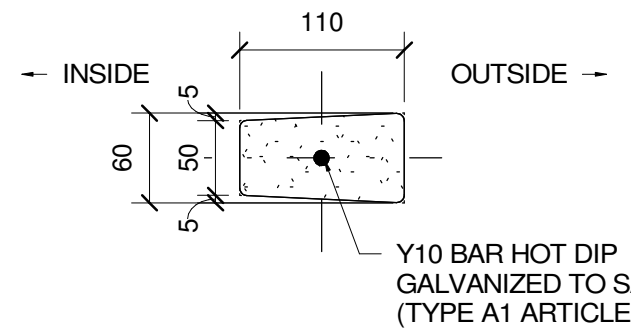
SECTION E-E



FIXING OF POSTS



PLAN OF PRECAST TOP RAIL



SECTION F-F

- NOTES
- GENERAL
 - CONCRETE FOR PRECAST CONCRETE HANDRAIL MEMBERS SHALL BE CLASS 40/14 AND SHALL BE DESIGNED FOR LOW SHRINKAGE VALUES.
 - ALL BONDED CONNECTIONS SHALL BE MADE WITH RESIN WITH A SHEAR AND BOND STRENGTH GREATER THAN THAT OF THE CONCRETE.
 - FINISH TO PRECAST MEMBER SHALL BE CLASS F3 AND U3 (STEEL TROWEL). ALL CORNERS TO BE ROUNDED 3mm.
 - NO SAG WILL BE ALLOWED BETWEEN THE ENDS OF ANY SINGLE TOP RAIL UNIT. MAXIMUM PERMISSIBLE BOWING WILL BE 2mm PER METER OF TOP RAIL.
 - POSTS AND TOP RAILS SHALL BE PROPERLY BRACED UNTIL THE RESIN USED FOR FIXING HAS SET. CURING TIME SHALL BE VERIFIED BY THE ENGINEER.
 - APPROVAL OF INSTALLERS AND MATERIALS.
 - THE CONTRACTOR SHALL SUBMIT SAMPLES OF THE HANDRAIL MEMBERS HE INTENDS USING TO THE ENGINEER FOR APPROVAL. SUCH SAMPLES WILL BE KEPT AND USED BY THE ENGINEER AS A COMPARATIVE STANDARD FOR THE MEMBERS ACTUALLY INSTALLED ON THE BRIDGE.
 - THE ENGINEER MAY ALSO REQUIRE DESTRUCTIVE TESTING OF INDIVIDUAL MEMBERS TO CONFIRM THEIR COMPLIANCE WITH THE SPECIFIED MANUFACTURING PROCEDURES.
 - THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE ENGINEER WITH PROOF OF COMPETENCE OF THE PROPOSED INSTALLERS OF THE HANDRAILS.
 - VERTICAL ALIGNMENT
 - WHERE THE TOP OF THE KERB OR DECK DISPLAYS POOR VERTICAL ALIGNMENT, THE ALIGNMENT SHALL BE IMPROVED BY MEANS OF GRINDING TO THE INSTALLATION OF THE POSTS OR CASTING AN UPSTAND AROUND THE POSTS AFTER INSTALLATION. THIS DECISION WILL BE MADE BY THE ENGINEER.
 - A RECESS SHALL BE FORMED IN THE KERB OR DECK UNDER THE CONTACT AREA UNDER THE POST BY MEANS OF CORING OR PROVIDING A SLOT. THE SLOT OR CORED HOLES SHALL BE FILLED WITH AN APPROVED REPAIR MORTAR AFTER THE POSTS HAVE BEEN INSTALLED. THIS METHOD MAY BE ELIMINATED ONLY THE EXPRESS INSTRUCTION OF THE ENGINEER.

Rev	Date	Description	Checked	Signed
A	28-09-2023	ISSUED FOR APPROVAL	BM	
AMMENDMENTS				

AS BUILT	
Supervising Engineer	Date
Supervising Authority	

Continued from :	Designed by : T. Mkhize
Continued on :	Checked by : B. Manyela
Cross Section No :	Drawn by : S. Maphumulo
Longitudinal Section No :	Checked by : T. Mkhize
Survey Plan No :	Date of approval :



Designed by :	71 Fifth Avenue Morningside Durban 4001 Tel: (031) 324 2200 Fax: (031) 324 2222 email: info@ibhongo.co.za
Director	Date

Structural Design: Chief Engineer	
Head: Transport	

PROVINCIAL ROAD P52/3 - NONGOMA TO PONGOLA S 27 39 47.18 E 31 43 12.14		Staked km distance 27.400	Sheet : 44 of : 51
PROPOSED MKHUZE RIVER BRIDGE PARAPETS CONCRETE DETAILS - SHEET 4 OF 4		Scale : As indicated	Ibhongo Dwg No: 2203-SCD-116 DOT Dwg No: 3801-44