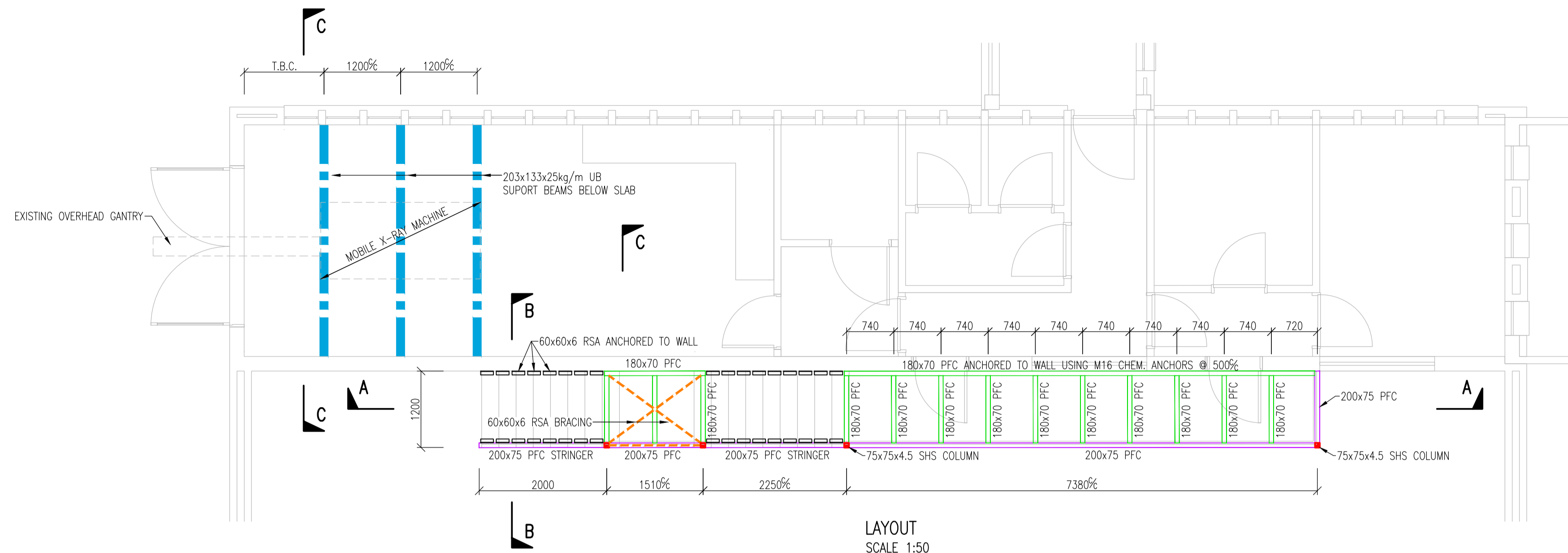
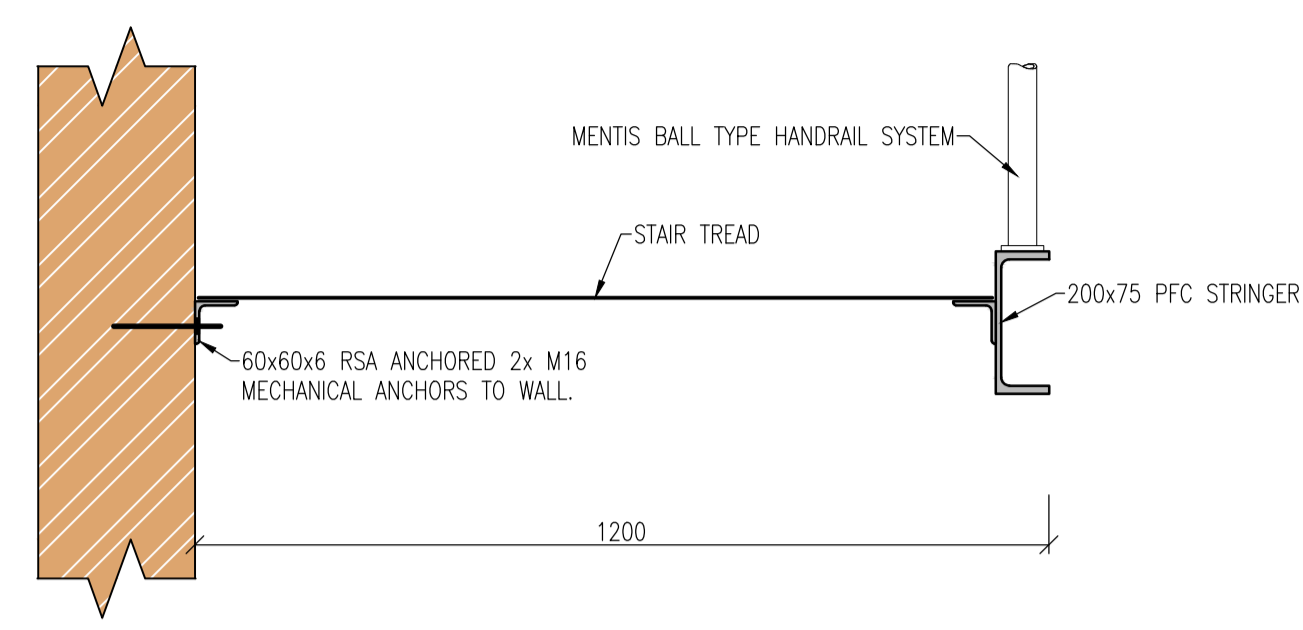




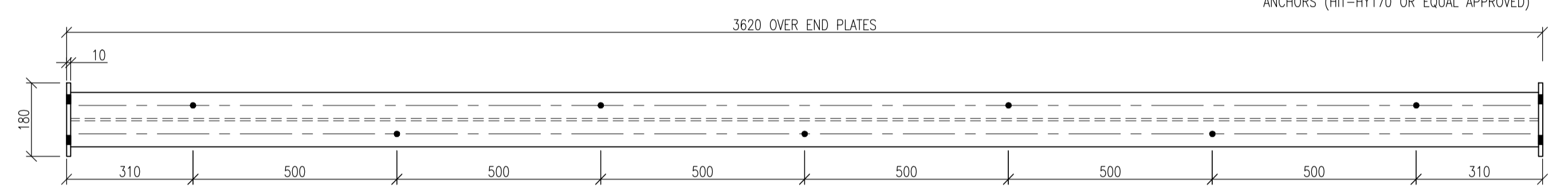
6.2 Annexure B - Civil/ Structural Drawings



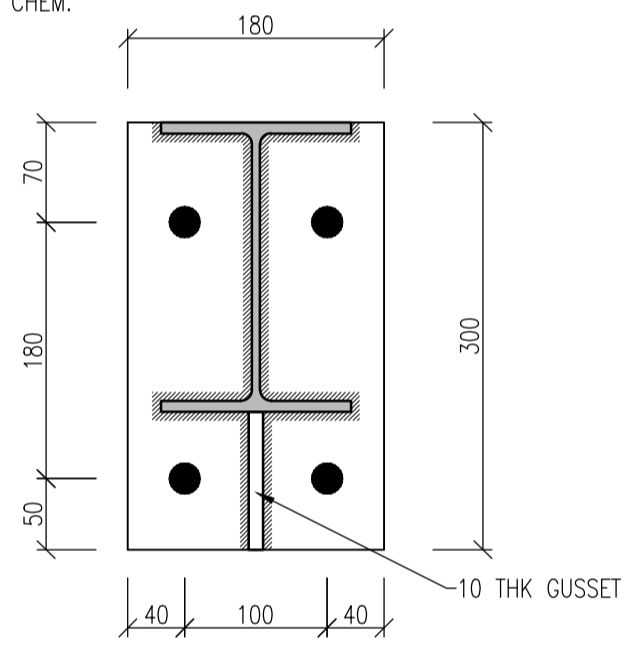
LAYOUT
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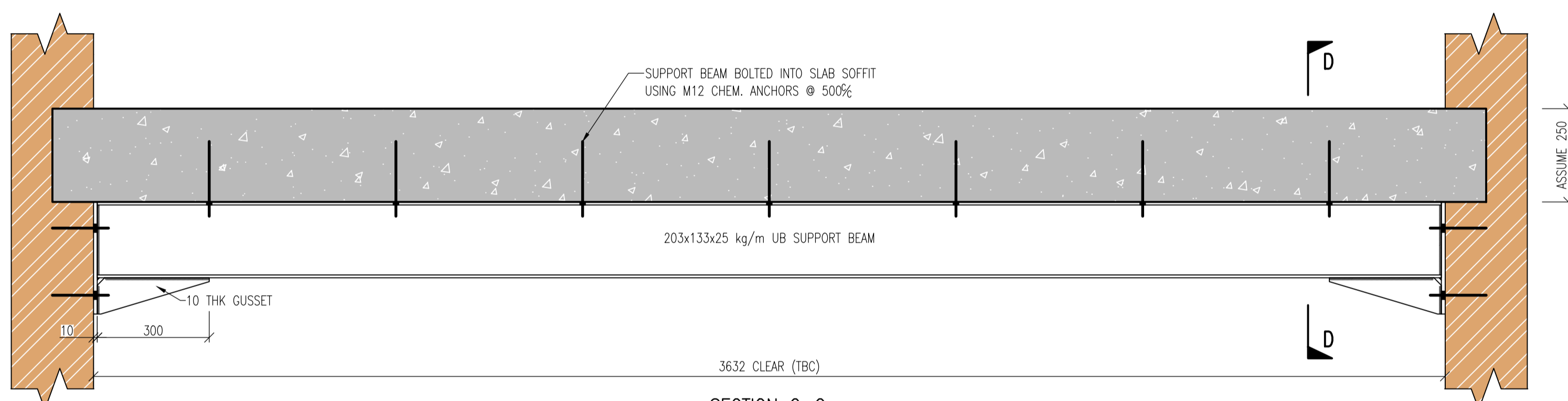
SECTION B-B
SCALE 1:10



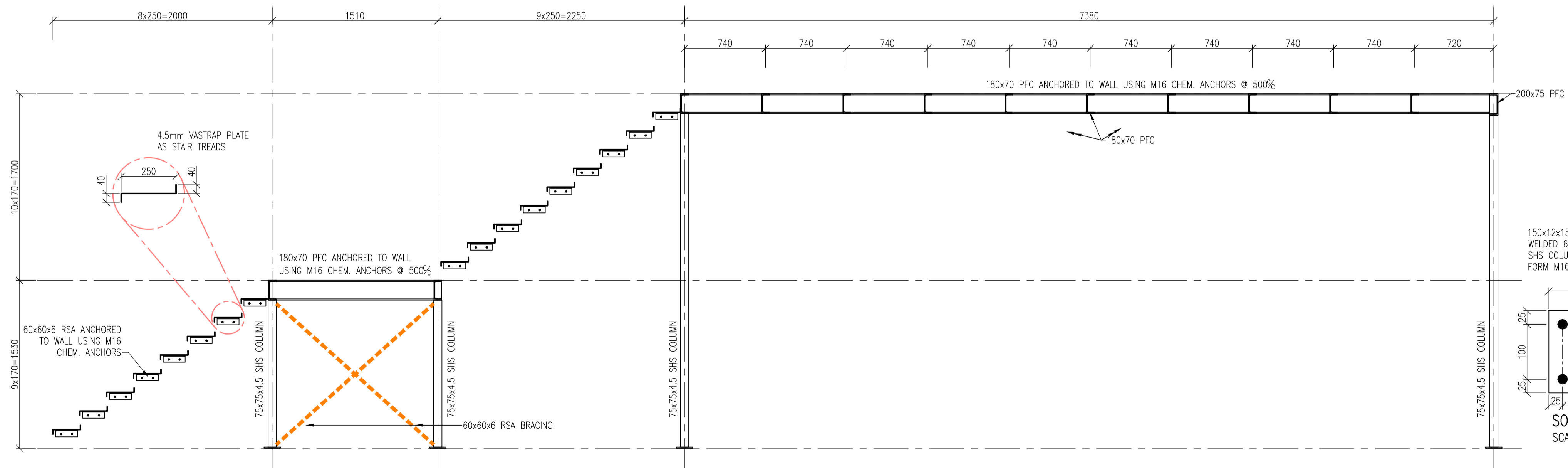
180x10x300 LONG FL. END PLATE.
4x #22 HOLES FOR M20 CHEM.
ANCHORS TO WALL.



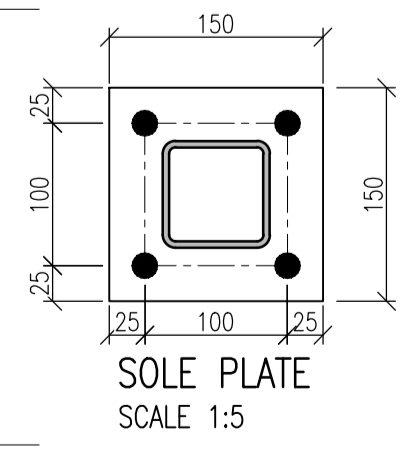
SECTION D-D
SCALE 1:5



SECTION C-C
SCALE 1:10



SECTION A-A
SCALE 1:25



SOLE PLATE
SCALE 1:5

- 1. STRUCTURAL STEEL (SANS 10162)**
- 1.1. ALL STRUCTURAL STEEL TO BE GRADE S355 UNLESS OTHERWISE SHOWN.
 - 1.2. ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS UNLESS SHOWN OTHERWISE AND TO CONFORM TO APPROVED STANDARDS (SABS 044 AND SANS 0167).
 - 1.3. ELECTRODES FOR ELECTRIC WELDING SHALL BE E7018. FOR OTHER WELDING TYPES, ELECTRODES TO BE APPROVED BY THE ENGINEER.
 - 1.4. BUTT WELDS AND SPLICES SHALL DEVELOP THE FULL STRENGTH OF THE JOINED ELEMENTS.
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 - 1.6.1. ALL WELDS TO BE INSPECTED USING VISUAL AIDS
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 - 1.6.4. CRANE / CRAWL BEAMS: 100% ULTRASONIC NDT
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 - 1.9. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO FABRICATION OF STEEL.
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 - 1.12. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ERECTION, MAINTENANCE AND REMOVAL OF ALL TEMPORARY BRACING OR PROPPING.
 - 1.13. WHERE HSFG BOLTS ARE SPECIFIED, THE FOLLOWING SHALL APPLY:
 - 1.14. CONTACT SURFACES SHALL BE FREE FROM GREASE, RUST, PAINT ETC. DURING FASTENING.
 - 1.15. TIGHTENING TO BE DONE IN ACCORDANCE WITH SANS 094 CLAUSE 5.3.1 FOR FRICTION GRIP AND CORONET LOAD INDICATING WASHERS FOR HSFG BOLTS.
 - 1.16. EDGES OF FLAME CUT PLATES TO BE GROUND SMOOTH.
 - 1.17. GALVANISED STEEL MEMBERS AND BOLTS TO BE HOT DIPPED GALVANIZED TO A MEAN COATING THICKNESS OF 85 MICRON.
 - 1.18. ALL CIRCULAR HOLLOW SECTIONS TO BE PROVIDED WITH VENT AND DRAINAGE HOLES.
 - 1.19. ALL HOT DIPPED GALVANIZING TO BE CARRIED OUT IN STRICT ACCORDANCE WITH SANS 121:2000 / ISO 1461:1999 BY AN SABS ACCREDITED GALVANISER.
 - 1.20. STRUCTURAL STEEL TO COMPLY WITH SANS 1200H UNLESS OTHERWISE STATED.

FILE NAME: AFR1145-STR-DET-001-PRE-00.dwg
PLOT STYLE: std-plot.ctb
PLOT SCALE: 1:1
PAPER SIZE: A1

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09				
08				
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04				
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01	JM	PRELIMINARY	00	27/07/2021

PROJECT DIRECTOR: _____ DATE: _____

PROJECT MANAGER: _____ DATE: _____

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 Touching lives through innovation

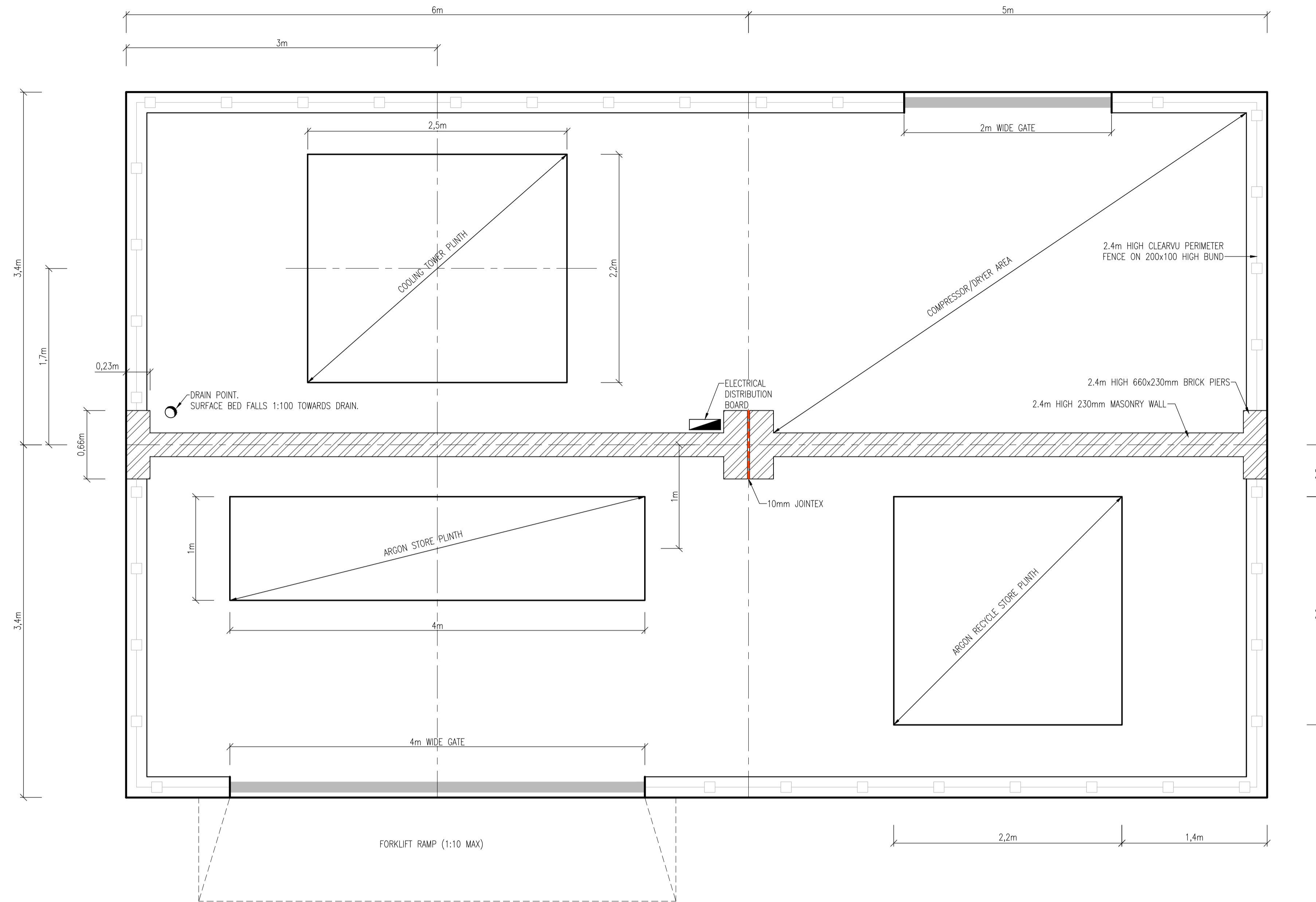
PROJECT: **HOT ISOSTATIC PRESS FACILITY**

TITLE: **STRUCTURAL STEEL DETAILS:
STEEL STAIR AND 1st FLOOR SLAB**

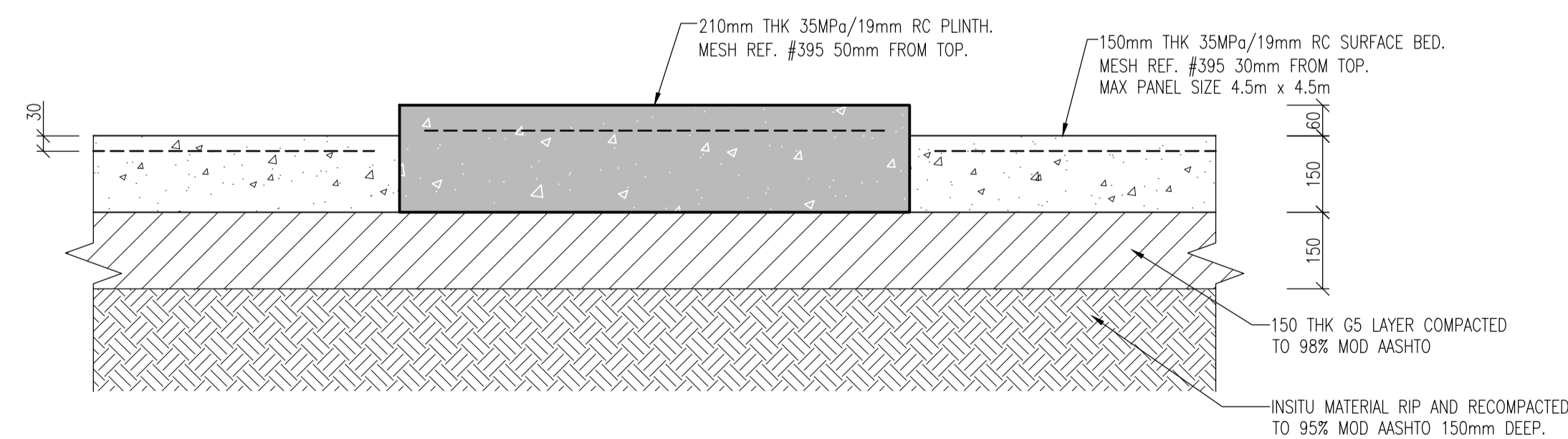
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AFR1145 - STR - DET - 001		AS SHOWN
PROJECT No.	DISCIPLINE	STATUS
		REVISION

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LAYOUT SCALE 1:25



- GENERAL NOTES**
- DRAWINGS TO BE READ IN CONJUNCTION WITH THE MECHANICAL ENGINEERING DRAWINGS
 - IN CASE OF ANY DISCREPANCIES BETWEEN DIFFERENT SPECIFICATIONS THE PRIORITY WILL BE AS FOLLOWS:
 - DRAWINGS
 - PROJECT AND SPECIAL SPECIFICATIONS
 - STANDARD SPECIFICATION (SANS 1200)
 - THE NUMBER, POSITION AND DETAIL OF CONSTRUCTION JOINTS (IF ANY), MUST BE APPROVED BY ENGINEER.
 - ALL LOADS IN ACCORDANCE WITH SANS 10160 PERMISSIBLE SUPERIMPOSED LOADS
 - DIMENSIONS MAY NOT BE SCALED.
 - ANY DISCREPANCY OR DIMENSIONS NOT SHOWN MUST BE POINTED OUT TO THE ENGINEER FOR CLARIFICATION.

- CONCRETE NOTES:**
- ALL CONCRETE TO BE IN ACCORDANCE WITH SANS 1200 G AND CLAUSE PSG OF THE PROJECT SPECIFICATION.
 - CONCRETE TO BE STRENGTH CONCRETE 30/19 MPA.
 - WIRE CONNECTORS THROUGH CONCRETE SHALL NOT BE ALLOWED. ALL FERRULES OR OTHER FASTENING DEVICES SHALL PRESENT A NEAT AND UNIFORM PATTERN.
 - ALL FOUNDATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE ANY CONCRETE IS CAST.
 - ALL EXPOSED CONCRETE SURFACES ARE OFF-SHUTTER FINISHES.
 - ALL EXPOSED CONCRETE CORNERS MUST BE CHAMFERED 20x20mm.
 - CONCRETE CUBES SHALL BE MADE CURED AND TESTED ACCORDING TO SANS 1200G, SECTION 7. A SAMPLE SHALL CONSIST OF 6 CUBES AND SHALL BE TAKEN FOR EACH INDIVIDUAL CONCRETING OPERATIONS AND AT LEAST ONE PER 50m³ CONCRETE OF THE SAME OPERATION CAST. 3 CUBES SHALL BE TESTED AT 7 DAYS AND 3 AT 28 DAYS.

- REINFORCEMENT NOTES:**
- STRENGTH OF REINFORCEMENT:

REFERENCE TYPE	STRENGTH (MPa)
R	A 250
Y	C 450
 - CONCRETE COVER 50mm (UNLESS OTHERWISE INDICATED)
 - ALL REINFORCEMENT TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
 - ALL BENDING OF REINFORCEMENT TO BE IN ACCORDANCE WITH SANS 282
 - ALL PLACING OF REINFORCEMENT TO BE IN ACCORDANCE WITH SANS 1200G
 - MINIMUM SPLICE LENGTHS: 50 x Ø DIA
 - AT LEAST 48 HOURS NOTICE TO BE GIVEN TO THE ENGINEER FOR REINFORCEMENT INSPECTION
 - UNDER NO CIRCUMSTANCES MAY REINFORCING BE WELDED.

FILE NAME: AFR1145-STR-DET-002-PRE-00.dwg
 PLOT STYLE: sld-plot.ctb
 PLOT SCALE: 1:1
 PAPER SIZE: A1

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05				
04				
03				
02				
01	JM	PRELIMINARY	00	27/07/2021

PROJECT DIRECTOR: _____ DATE _____

PROJECT MANAGER: _____ DATE _____

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 Tel: +27 (41) 505-8000
 Fax: +27 (41) 585-3437
 Email: info@afri.co.za



PROJECT: **HOT ISOSTATIC PRESS FACILITY**

TITLE: **PLINTH LAYOUT AND TYPICAL SECTION**

DRAWING NUMBER :		SCALE:
AFR1145 - STR - DET - 002		AS SHOWN
PROJECT No.	DISCIPLINE	STATUS
		REVISION

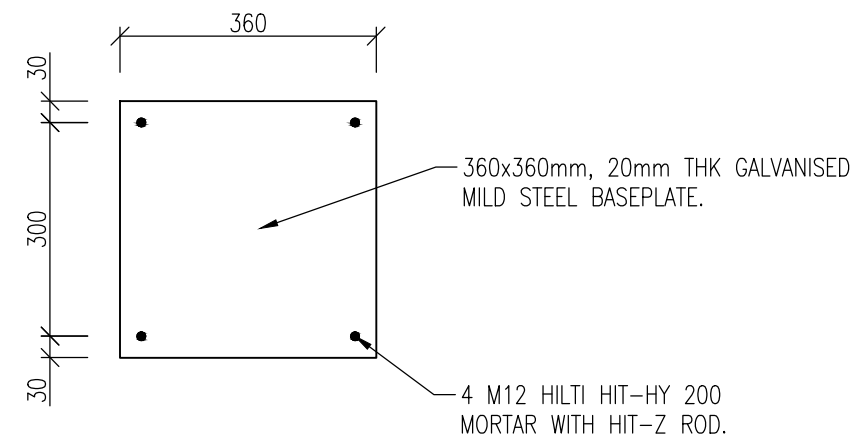
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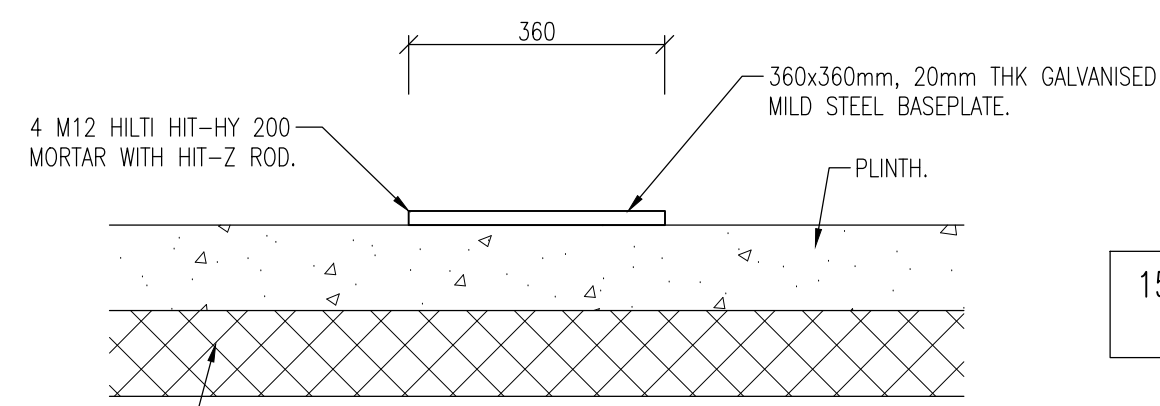
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- 1.20. STRUCTURAL STEEL TO COMPLY WITH SANS 1200H UNLESS OTHERWISE STATED.
- 1.21. IF PLINTH IS SLOPED, GAP BETWEEN BASEPLATE AND PLINTH TO BE GROUTED.
- 1.22. M12 HD BOLTS TO BE USED ON BASEPLATE.
- 1.23. MINIMUM EDGE DISTANCE OF 30mm FOR THE BASE PLATE MUST BE MAINTAINED.



CONTACT DETAIL
SCALE 1:10



CONTACT DETAIL
SCALE 1:10

150KPa BEARING PRESSURE.

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DRG STD CHECKED


DRAWING NUMBER CODES

DISCIPLINE	
WAT	= WATER
SEW	= SEWER
RDS	= ROADS
SW	= STORM WATER
ELE	= ELECTRICAL
STR	= STRUCTURAL
MEC	= MECHANICAL
EW	= EARTHWORKS
TRA	= TRANSPORTATION

SUBDIVISION No.	
LS	= LONGSECTION
XS	= CROSS SECTION
DET	= DETAILS
GA	= GENERAL ARRANGEMENT
SP	= SITE & KEY PLANS

STATUS	
TEN	= TENDER
PRE	= PRELIMINARY
CON	= CONSTRUCTION
ASB	= AS BUILT

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04					W.VOSLOO	
03					CHECKED	
02					W.VOSLOO	
01	SN	PRELIMINARY	00	07/09/2021	DRAWN	
NO.	DRAWN	REVISION	REV	DATE	S.NOWALA	


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PROJECT DIRECTOR

PROJECT MANAGER

CONTACT/BASE PLATE SIZE

DRAWING NUMBER :				SCALE:	
AFR1145 - STR - DET - 003				AS SHOWN	
PROJECT No.	DISCIPLINE	SUB No.	DWG No.	STATUS	REVISION