

# 20M<sup>3</sup> WATER YARD (BLACK COTTON SOIL)

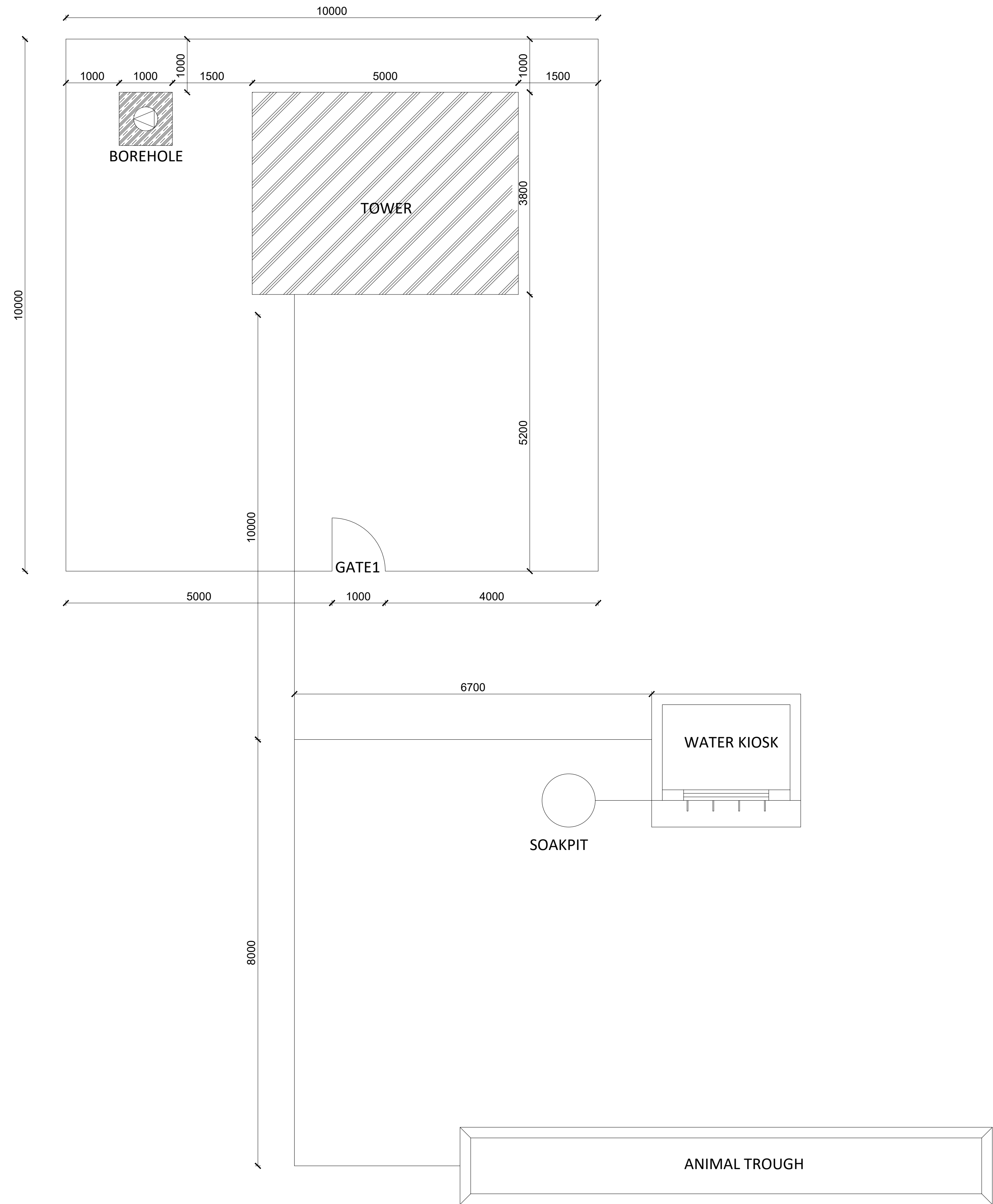
GENERAL NOTES:



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- 3. Written dimensions overrides scaled dimensions.
- 4. Any discrepancy is to be reported to IOM site Engineer/Project manager before proceeding

Rev:	Date	Description:	Approved
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Program	
<div><div>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</div></div>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
<div></div>	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELAVATED TANK	
Drawing Title	
COVER PAGE	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 1/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 0



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Program



Enhancing Community  
Resilience and Local  
Governance Project  
Phase II (ECRP II)

Client:

GOVERNMENT OF SOUTH SUDAN

Implemented By:

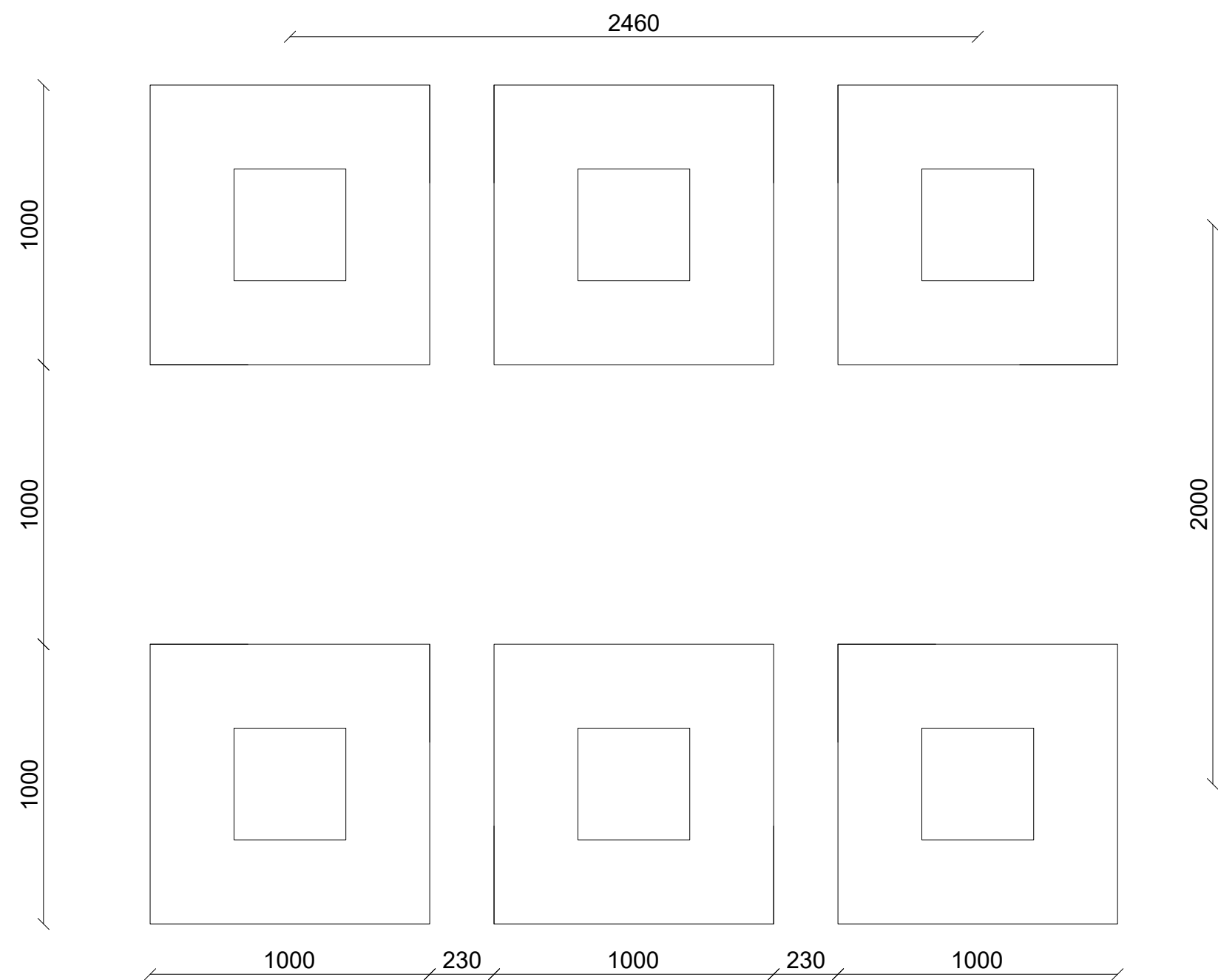


Project:

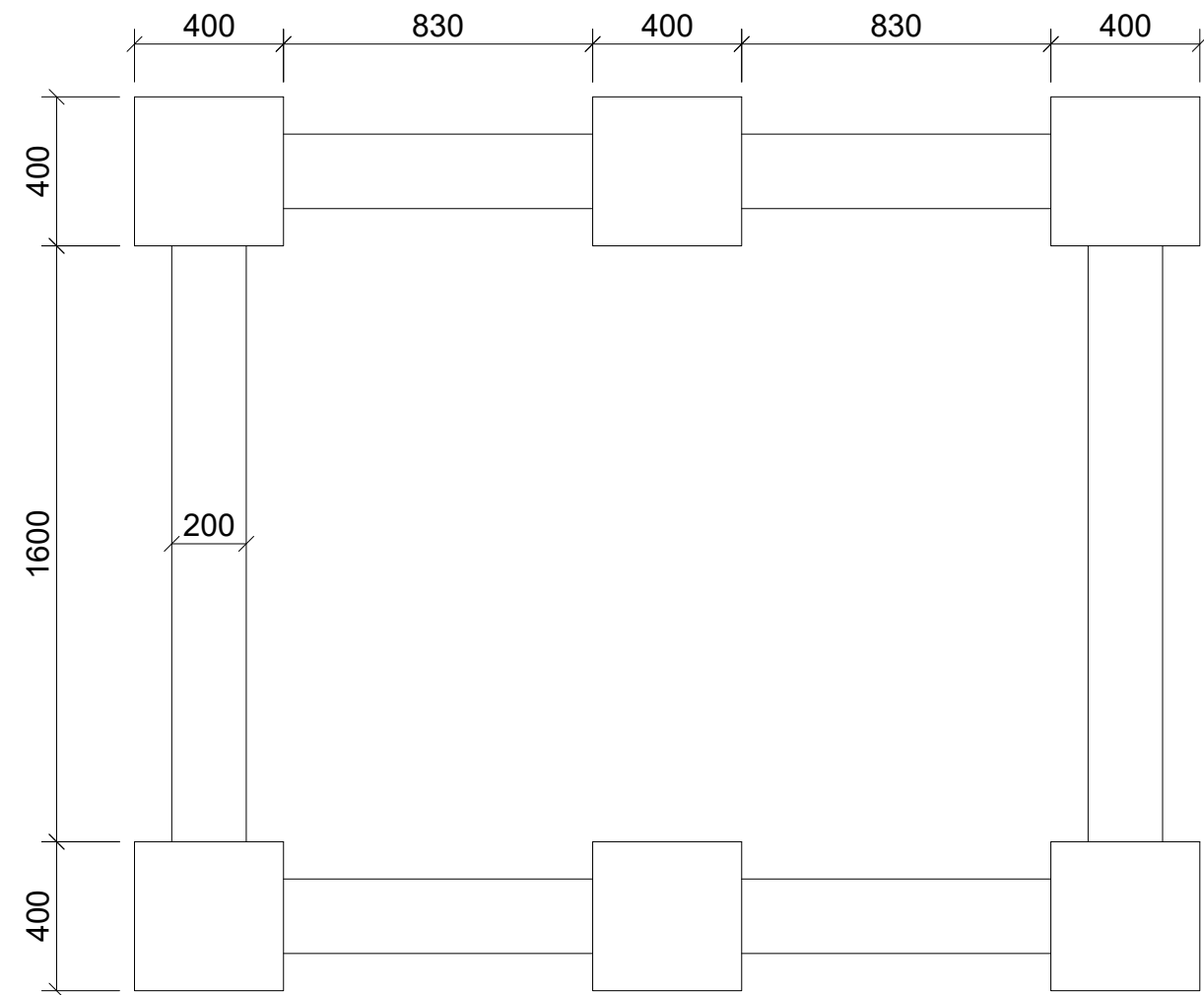
PROPOSED WATER YARD  
20M3 CAPACITY ELEVATED TANK  
Drawing Title

LAYOUT

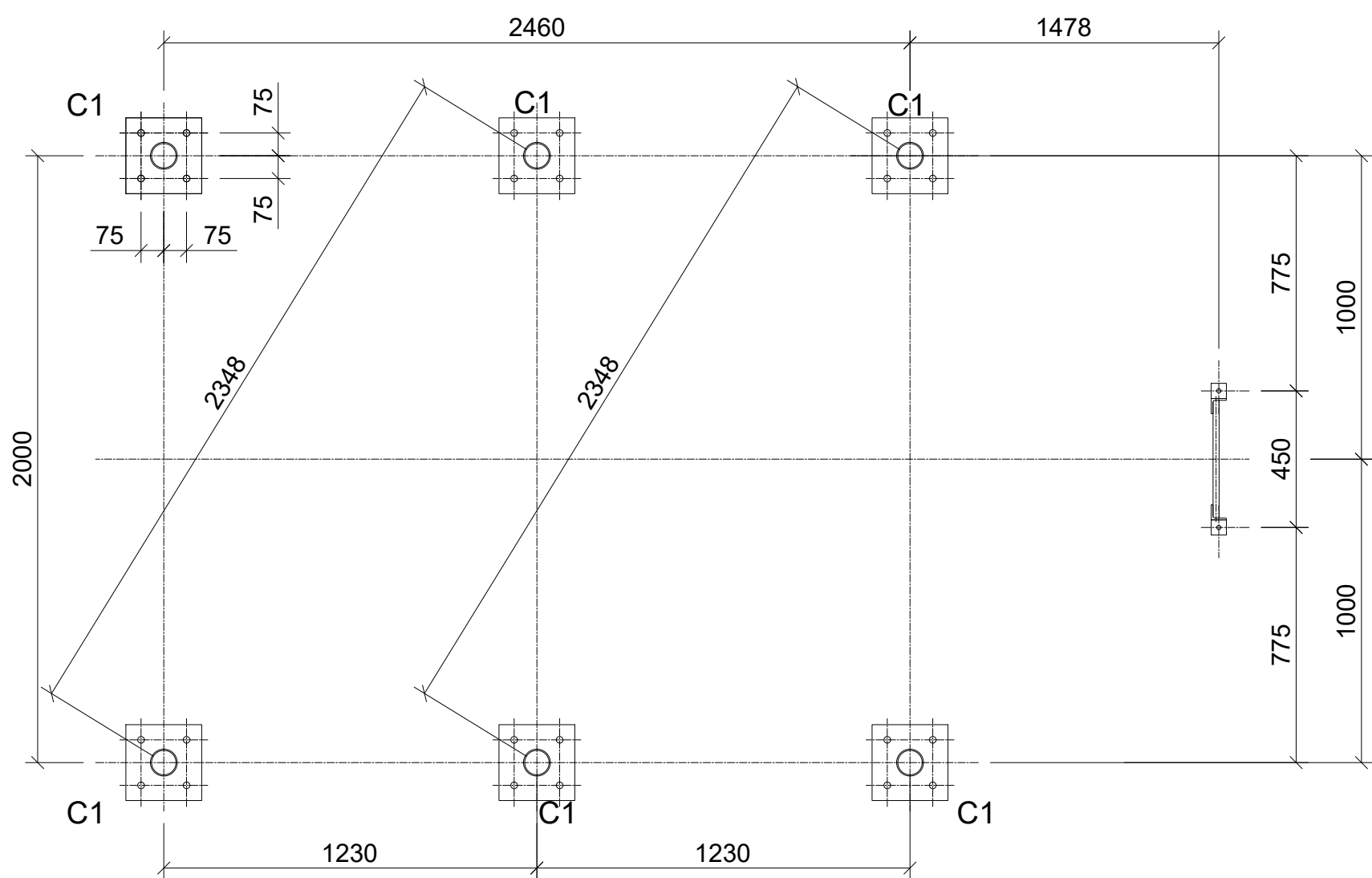
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 2/16	Scale: 1:50
Date: 13 February 2024	Rev: 2



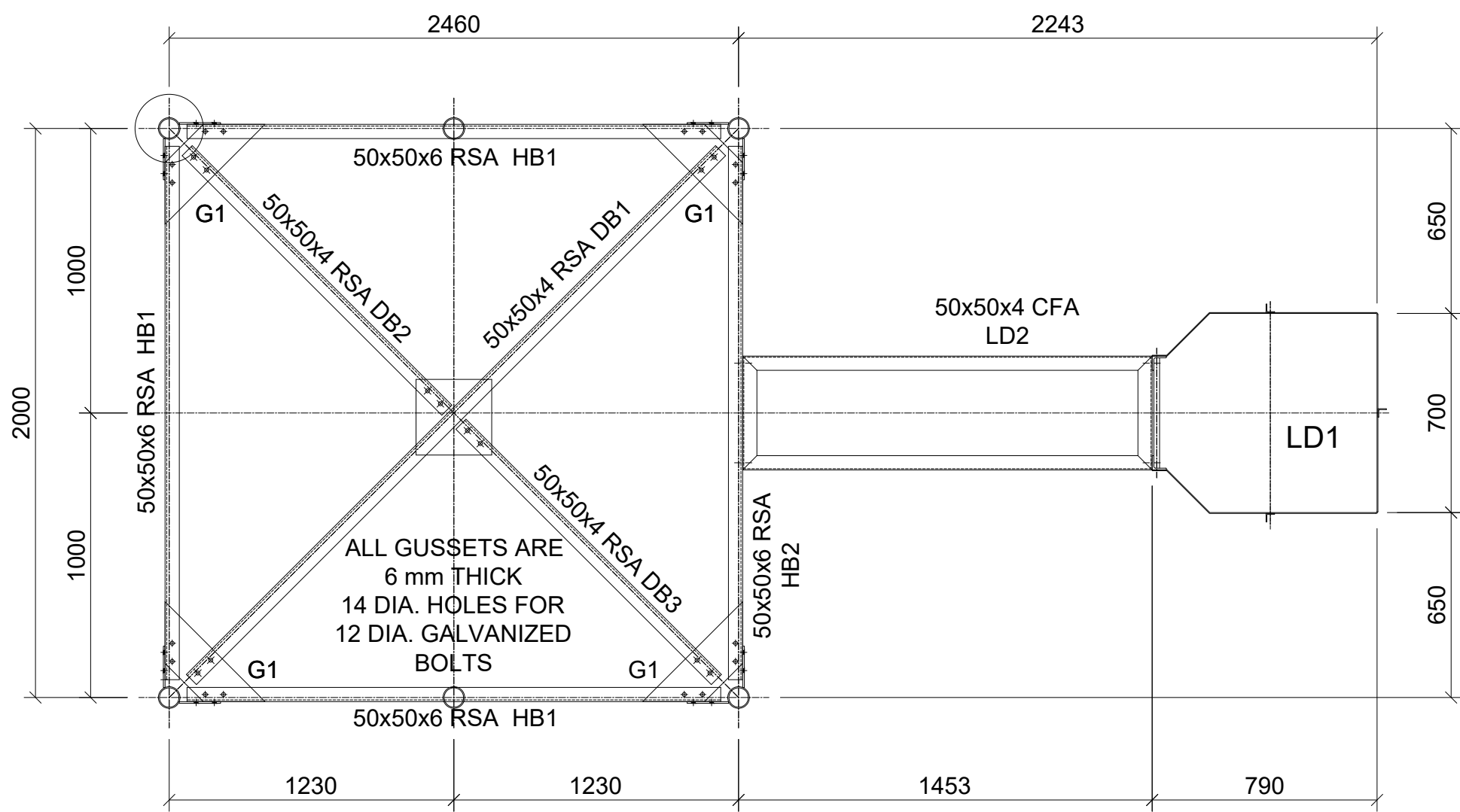
FOUNDATION PLAN  
SCALE: 1:20



COLUMN /GROUND BEAM LAYOUT  
SCALE: 1:20



SECTION 'A-A'



SECTION 'B-B'

GENERAL NOTES:

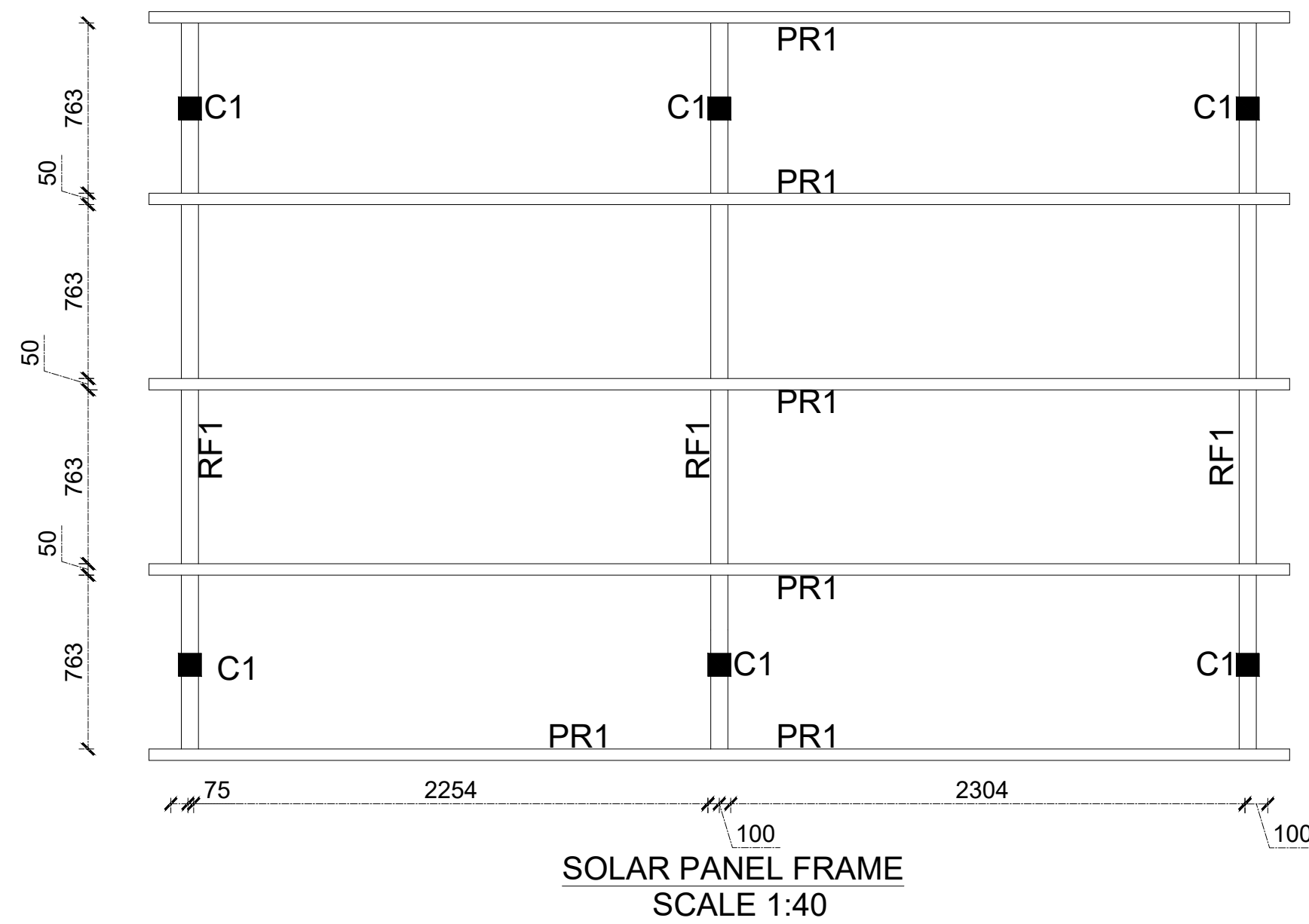
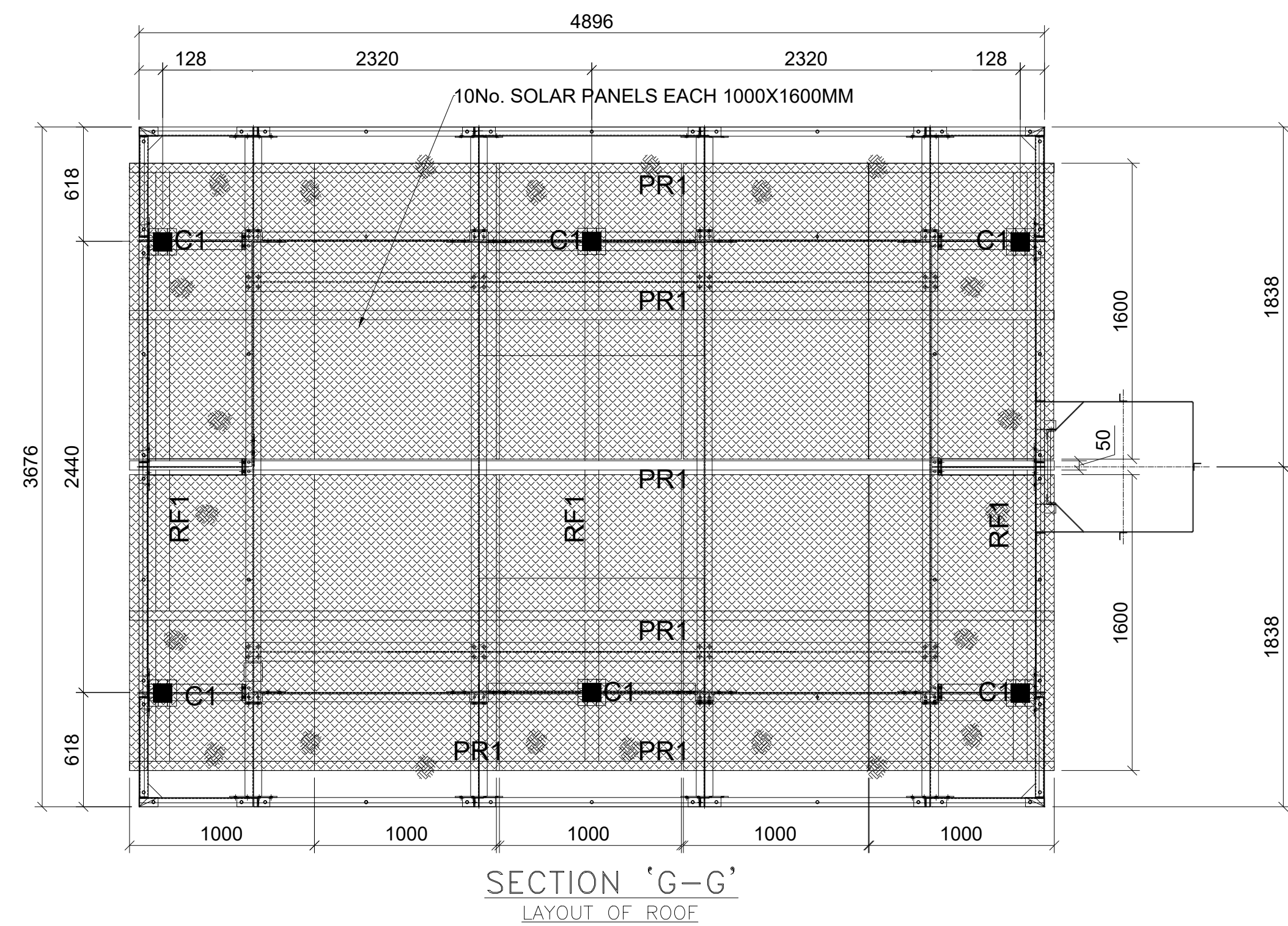
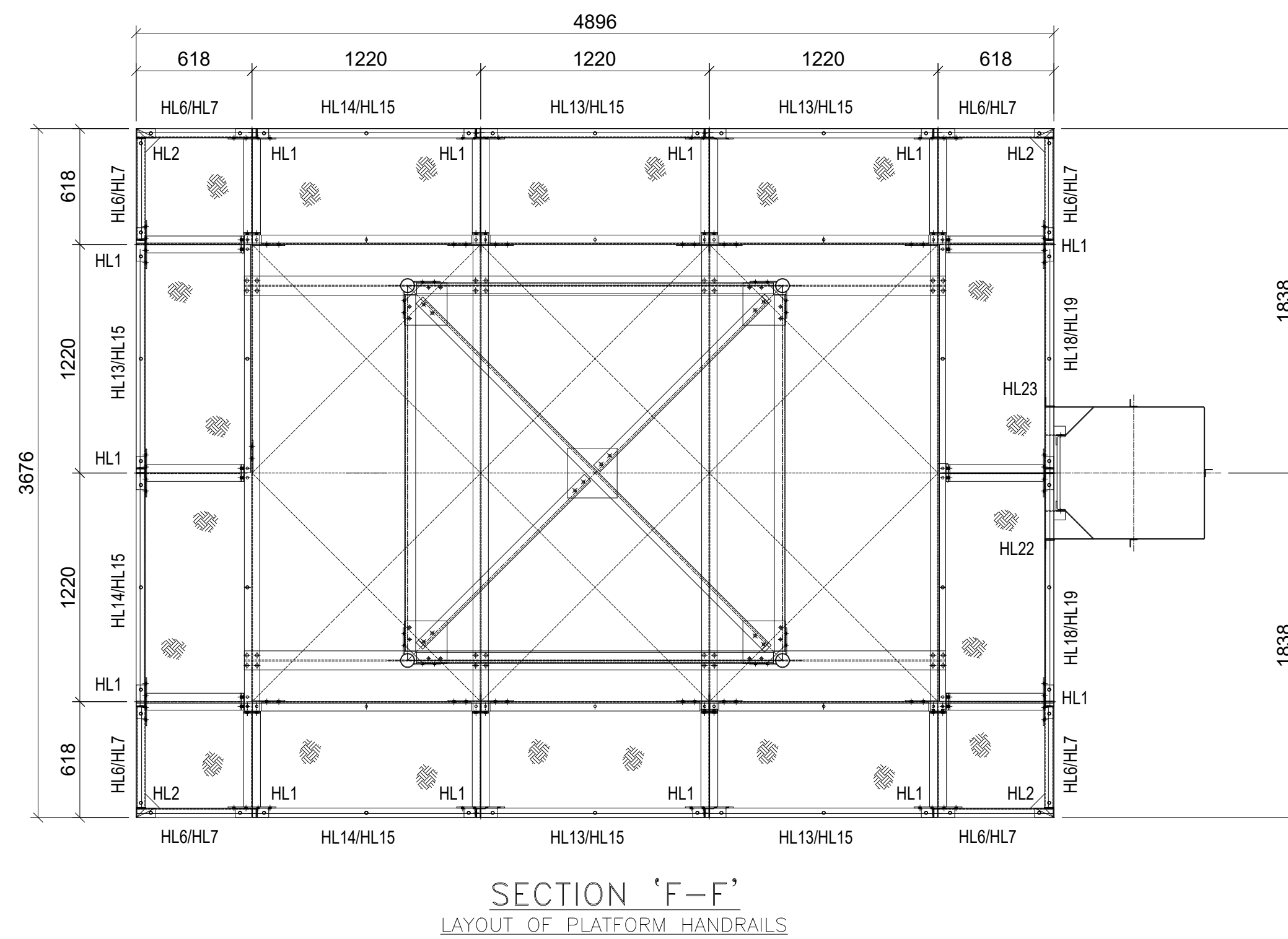
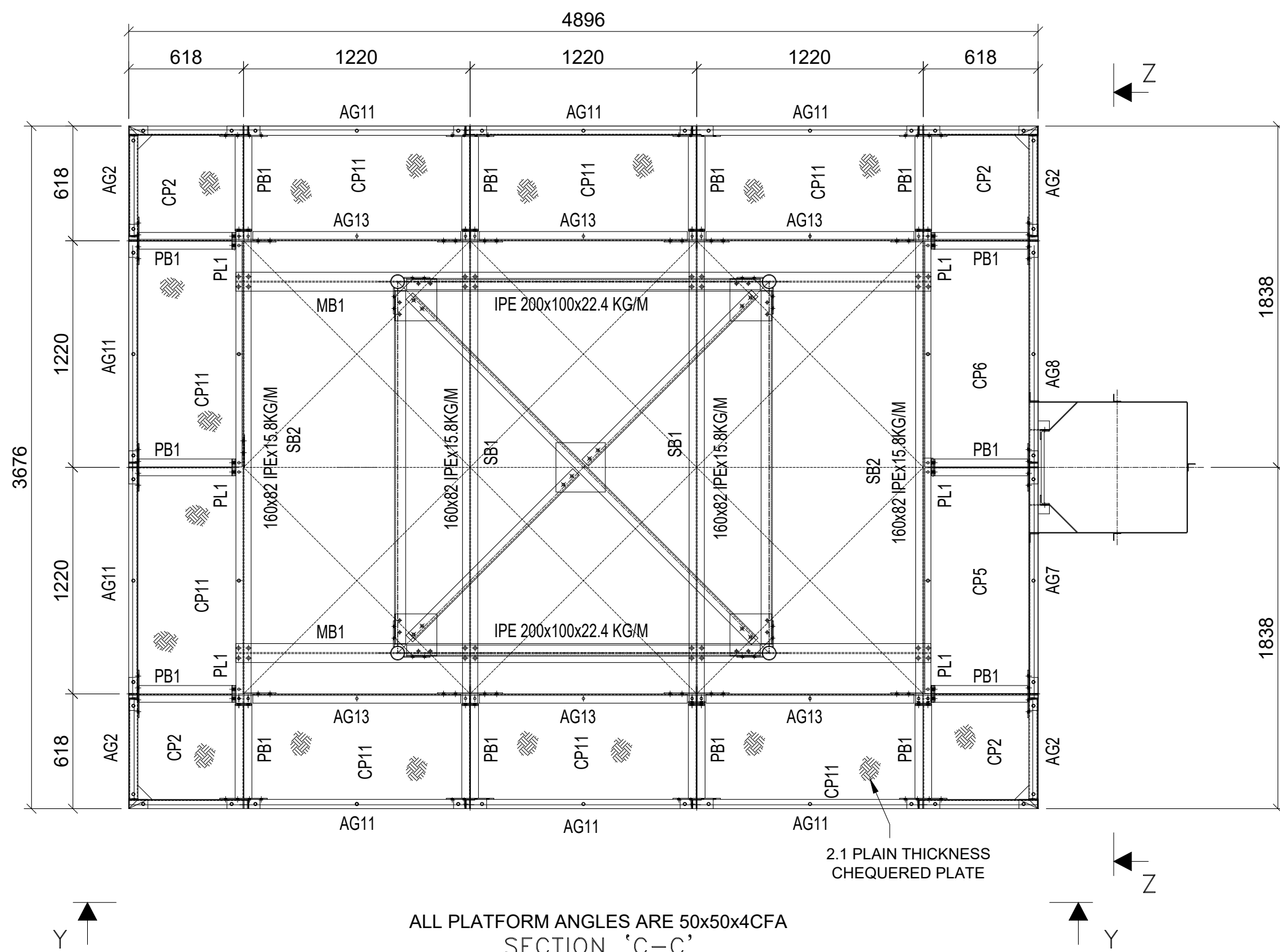


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Program	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
PLANS AND SECTIONS	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: -----
Sheet #: 3/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2







GENERAL NOTES:

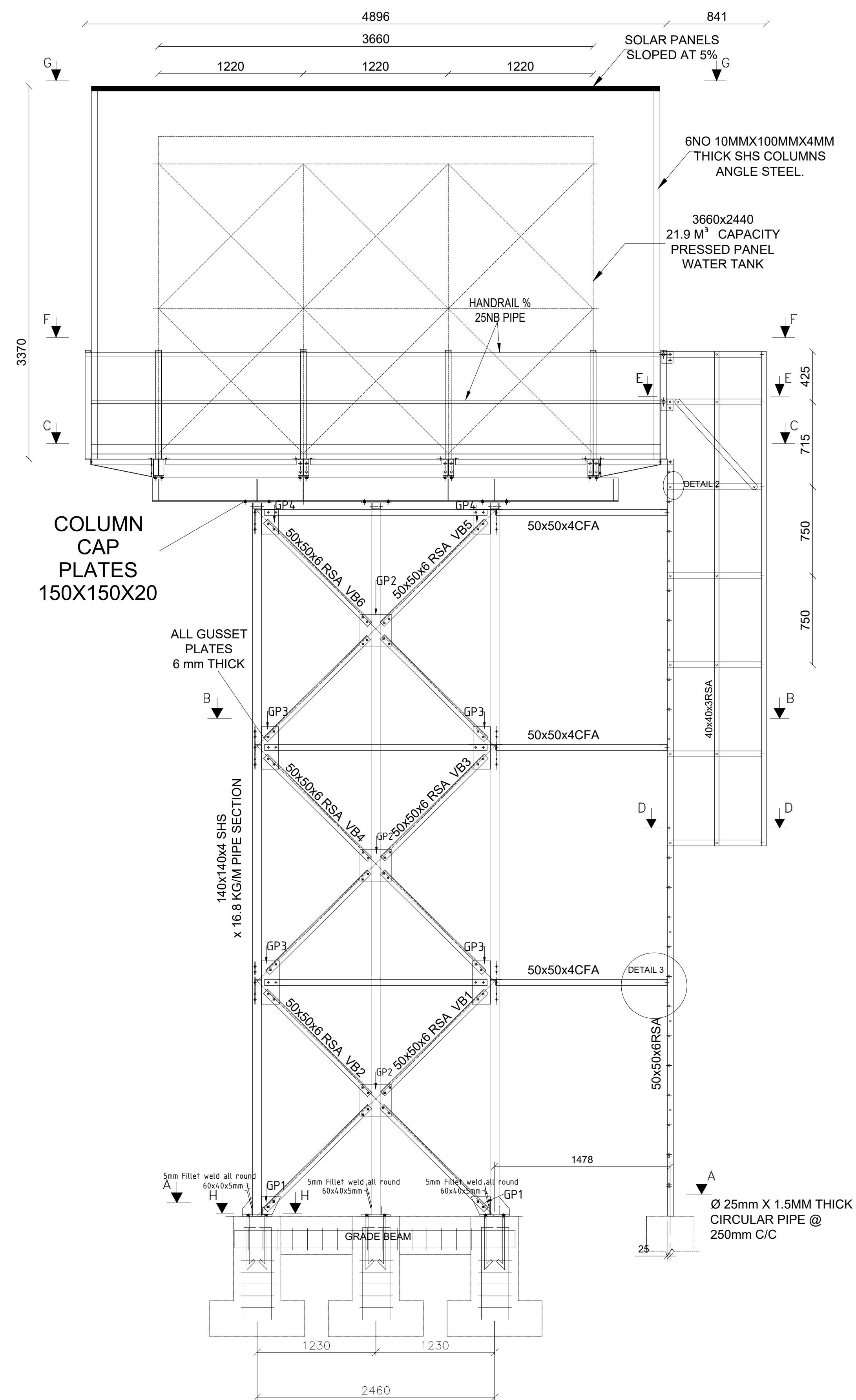
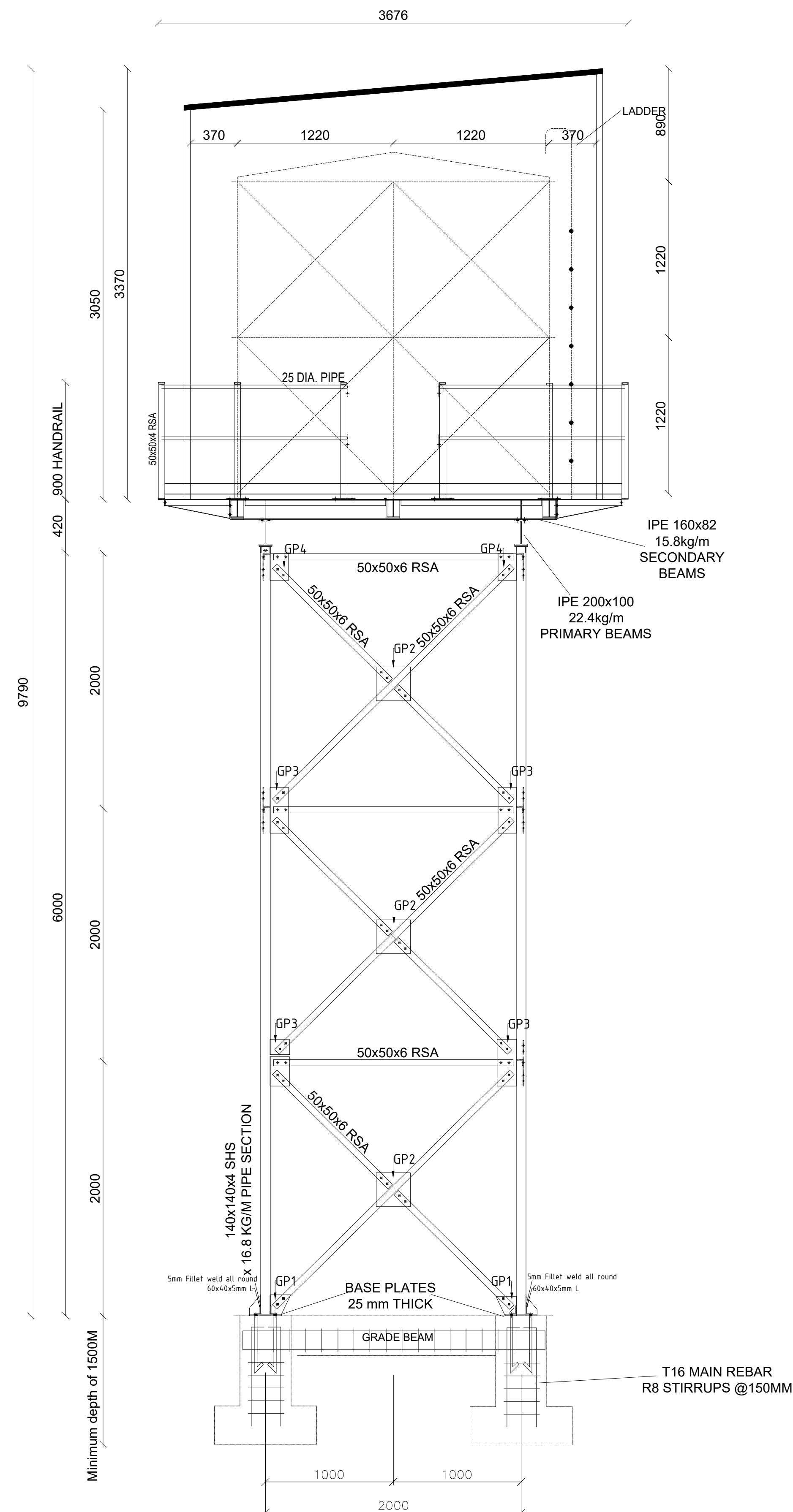


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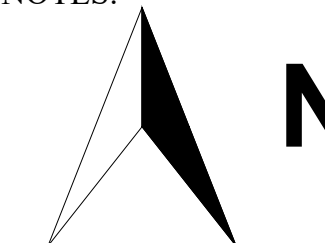
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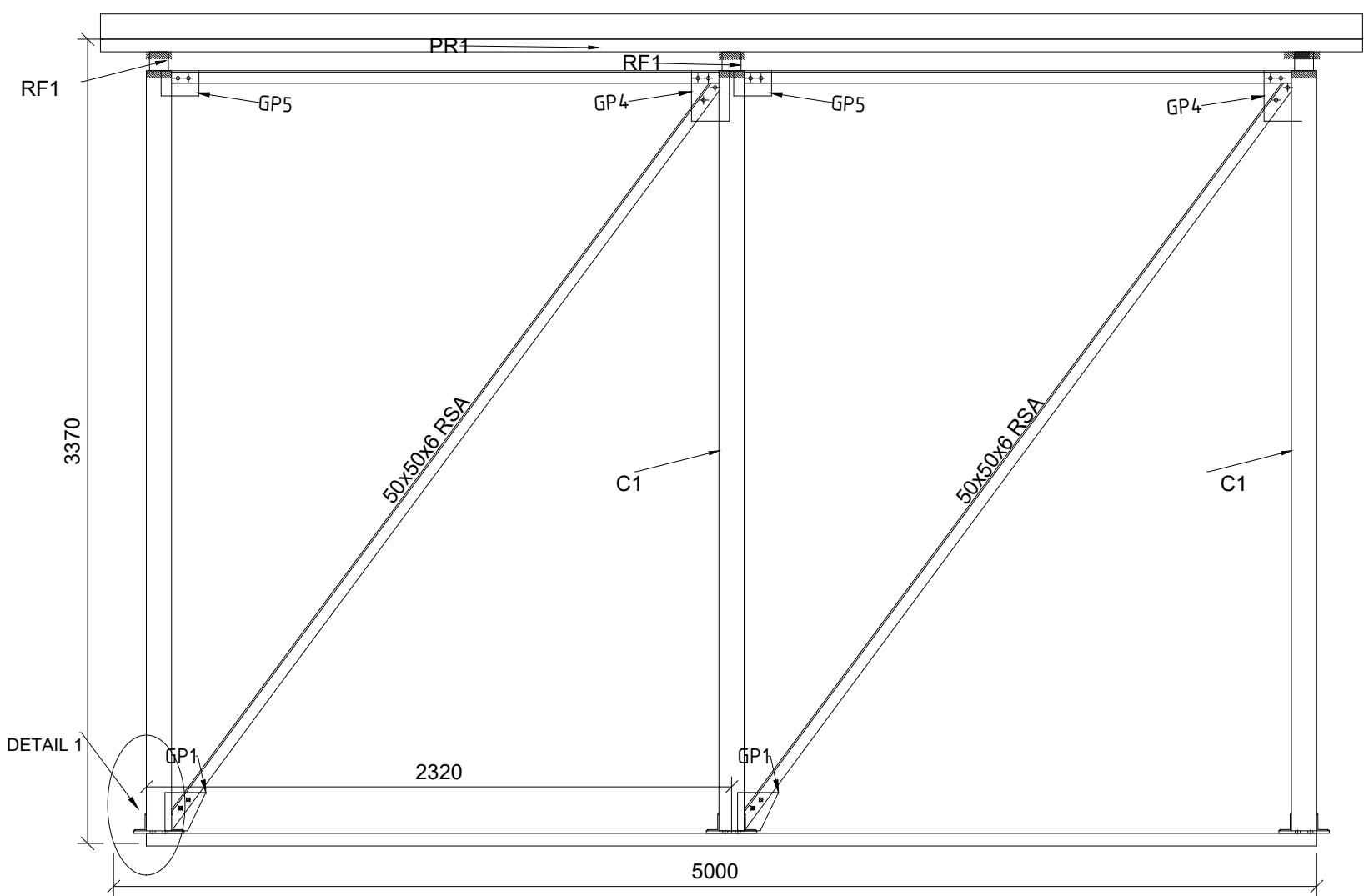
Program	
 <b>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</b>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
	
Project:	
PROPOSED WATER YARD	
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Drawing Title	
PLANS AND SECTIONS	
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Checked: F.E & G.O	Approved: ----
Sheet #: 4/16	Scale: AS SPECIFIED
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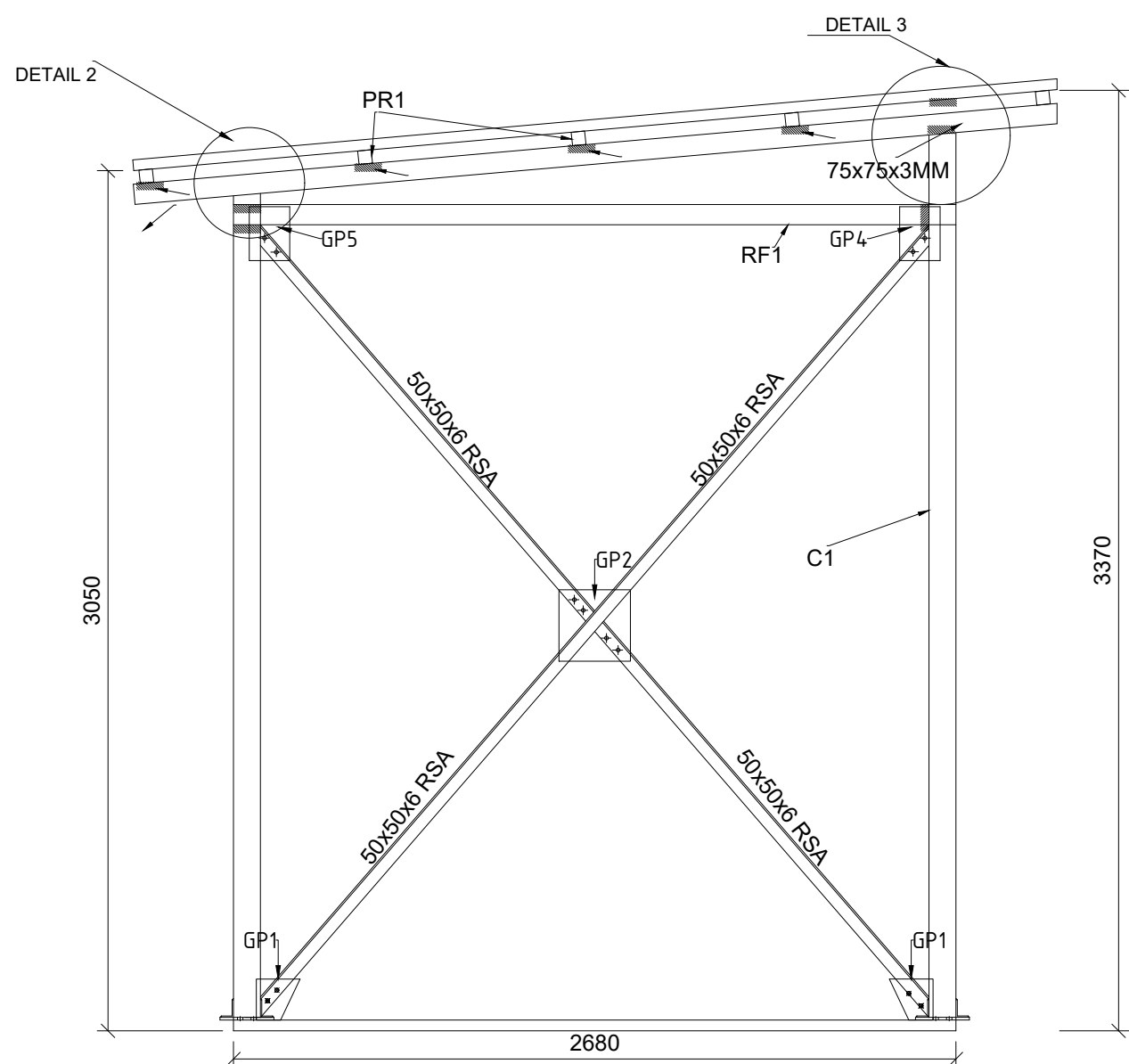


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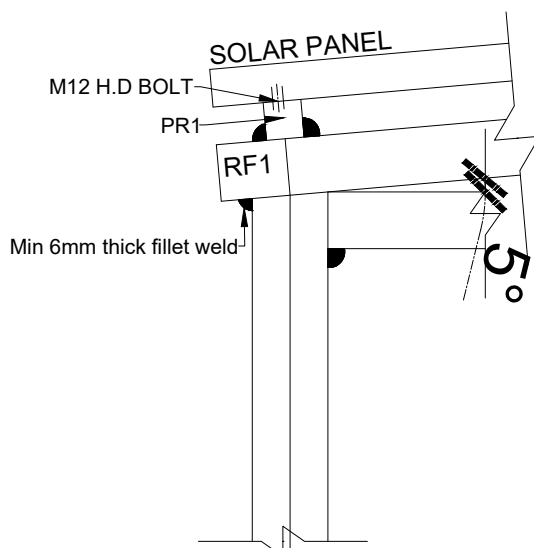
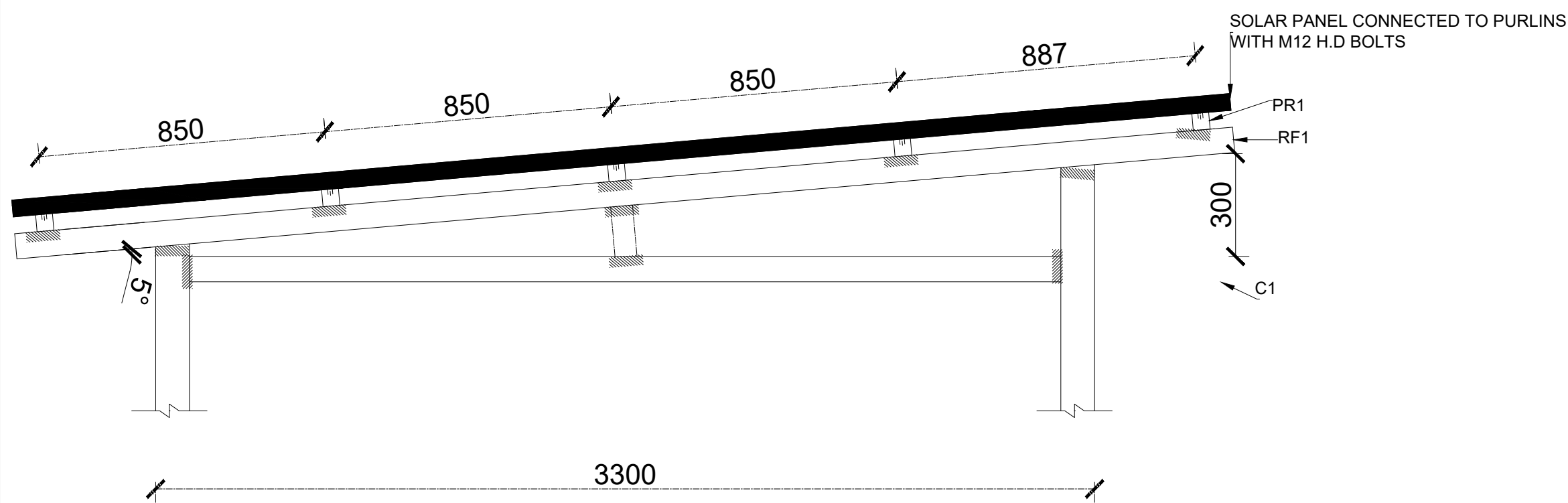




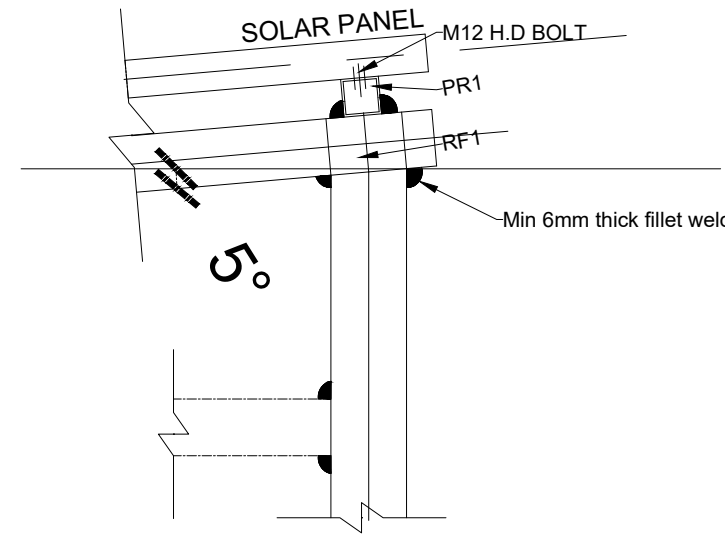
SOLAR PANEL FRAME FRONT VIEW



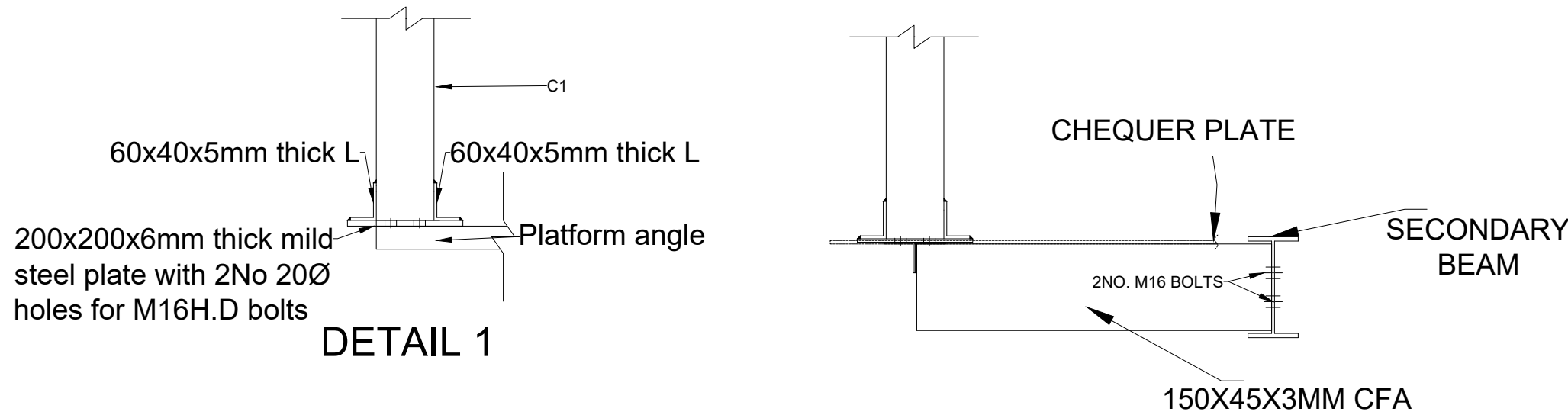
SOLAR PANEL FRAME SIDE VIEW



DETAIL 2



DETAIL 3



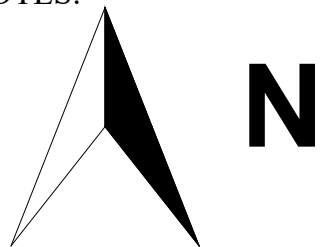
DETAIL 1

STT0551/T/04					CF	CF
STANDARD ITEMS FOR PLATFORM						
SR NO.	SECTION	LENGTH	QTY	WT @	ITEM	STANDARD MARK
1	50x50x4CFA	994	18	4	PLATFORM ANGLE	T/PF/1220/AG11
2	50x50x4CFA	615	8	4	PLATFORM ANGLE	T/PF/AG2
3	50x50x4CFA	900	12	4	PLATFORM ANGLE	T/PF/1220/AG13
4	50x50x4CFA	994	2	5	PLATFORM ANGLE	T/PF/1220/AG12
5	150x45x3CFA	615	28	6	PLATFORM BRACKET	T/PF/PB1
6	610x2.1 'PLAIN THICKNESS'	996	20	13	PLATFORM CHEQUER PLATE	T/PF/1220/CP11
7	610x2.1 'PLAIN THICKNESS'	610	8	6	PLATFORM CHEQUER PLATE	T/PF/CP2
8	90x10 THICK PLATE	150	12	1	PLATFORM PACKING PLATE	T/PF/PL1
			<b>TOTAL</b>	<b>650</b>	<b>KGS</b>	

LEGEND			
No	SYMBOL	MEMBER	MATERIAL AND SIZE
1	GP1	GUSSET PLATE	250X150X6MM THICK MILD STEEL GUSSET PLATE WITH 2No. Ø14 HOLES
2	GP2	GUSSET PLATE	265X265X6MM THICK MILD STEEL GUSSET PLATE WITH 4No. Ø14 HOLES
3	GP3	GUSSET PLATE	300X150X6MM THICK MILD STEEL GUSSET PLATE WITH 6No. Ø14 HOLES
4	GP4	GUSSET PLATE	208X150X6MM THICK MILD STEEL GUSSET PLATE WITH 4No. Ø14 HOLES
5	GP5	GUSSET PLATE	104X150X6MM THICK MILD STEEL GUSSET PLATE WITH 2No. Ø14 HOLES
6	BASE PLATE	BASE PLATE	250X250X25MM THICK MILD STEEL PLATE WITH 22Ø HOLES FOR 20Ø HD BOLTS
7	ALL WELD CONNECTION TO BE MINIMUM OF 6MM FILLET WELDS		


NOTE:  
ALL STRUCTURAL STEEL MEMBERS TO BE FINISHED WITH A COAT OF ANTI-OXIDE PAINT AND FOLLOWED BY ADDITIONAL COAT OF GREY/SILVER PAINT.

GENERAL NOTES:

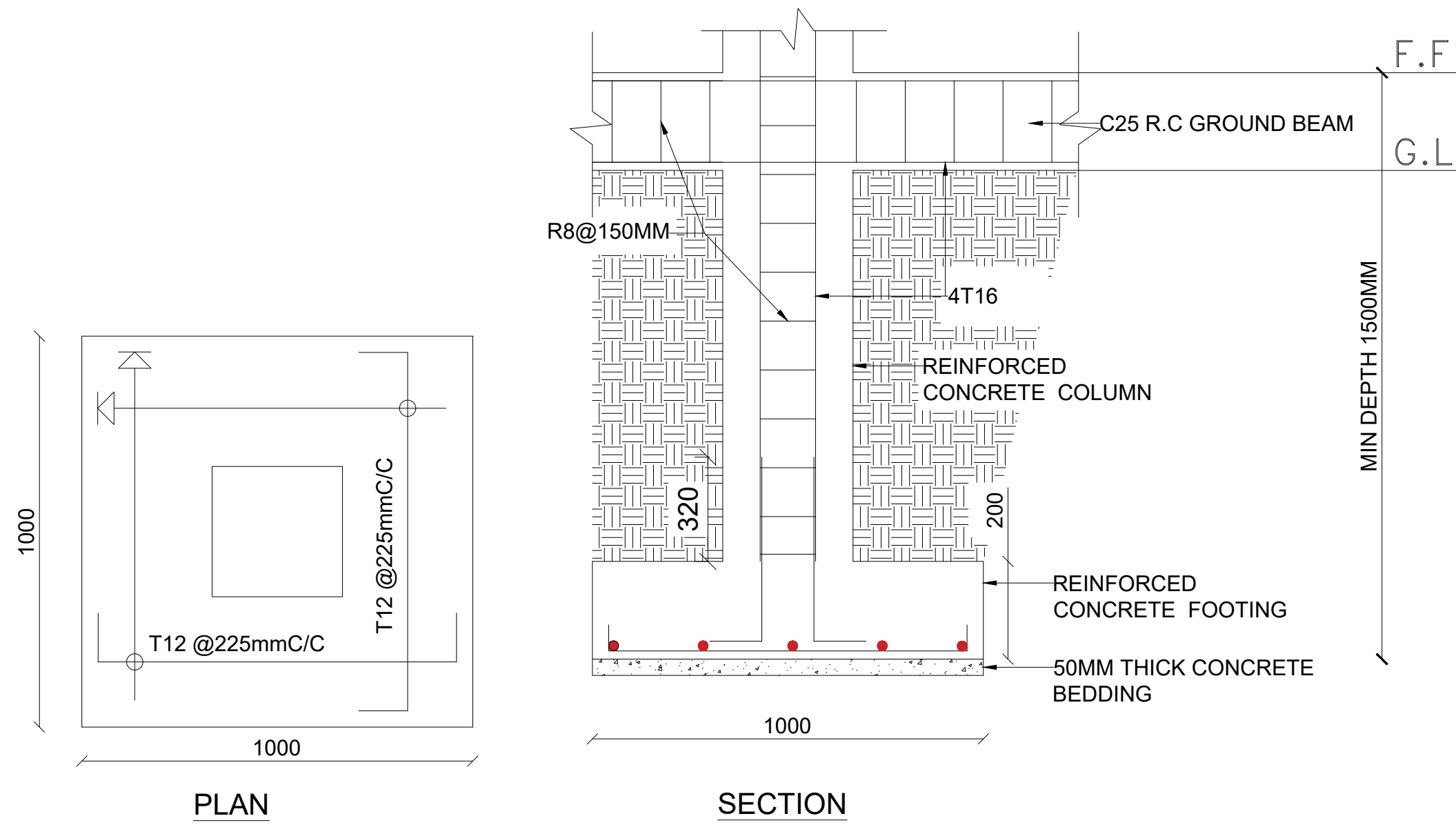


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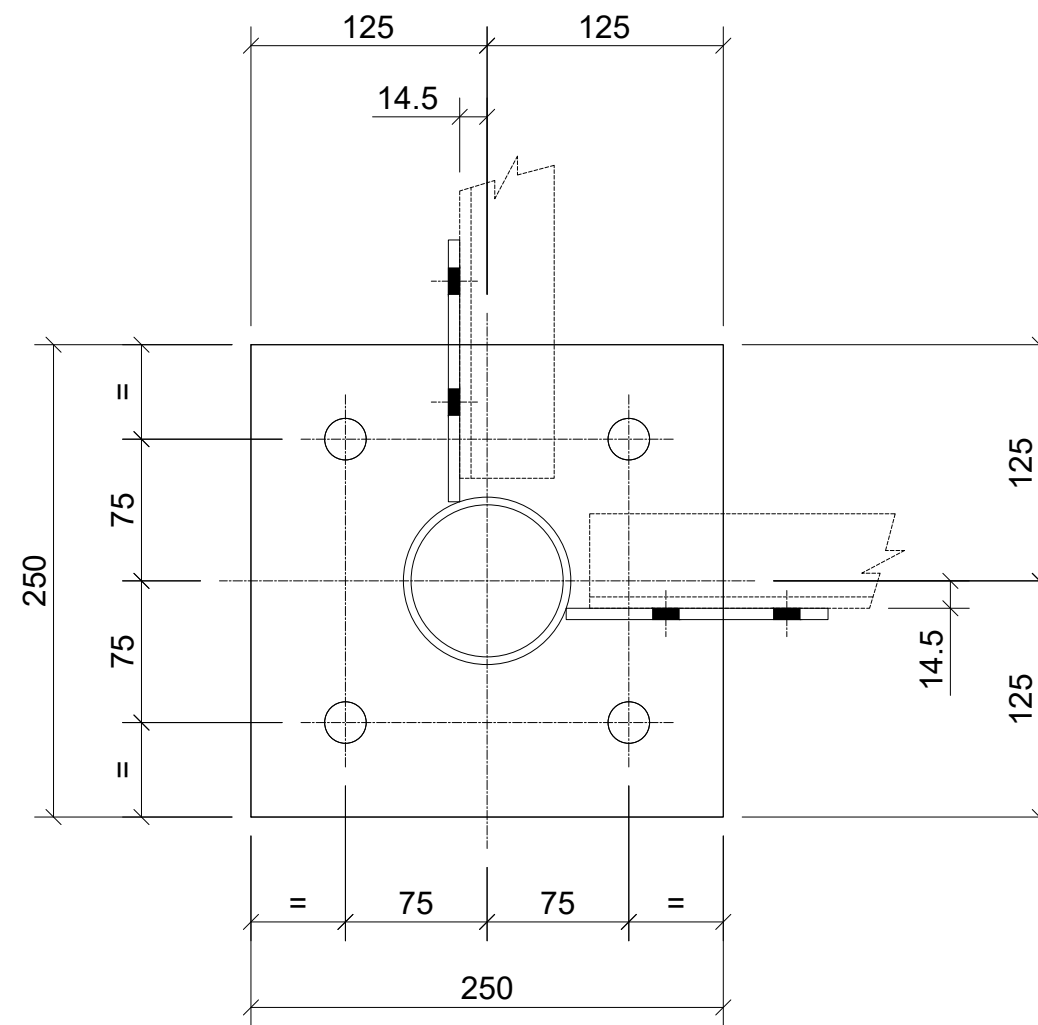
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Program	
 <div>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</div>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
DETAILS	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 6/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2



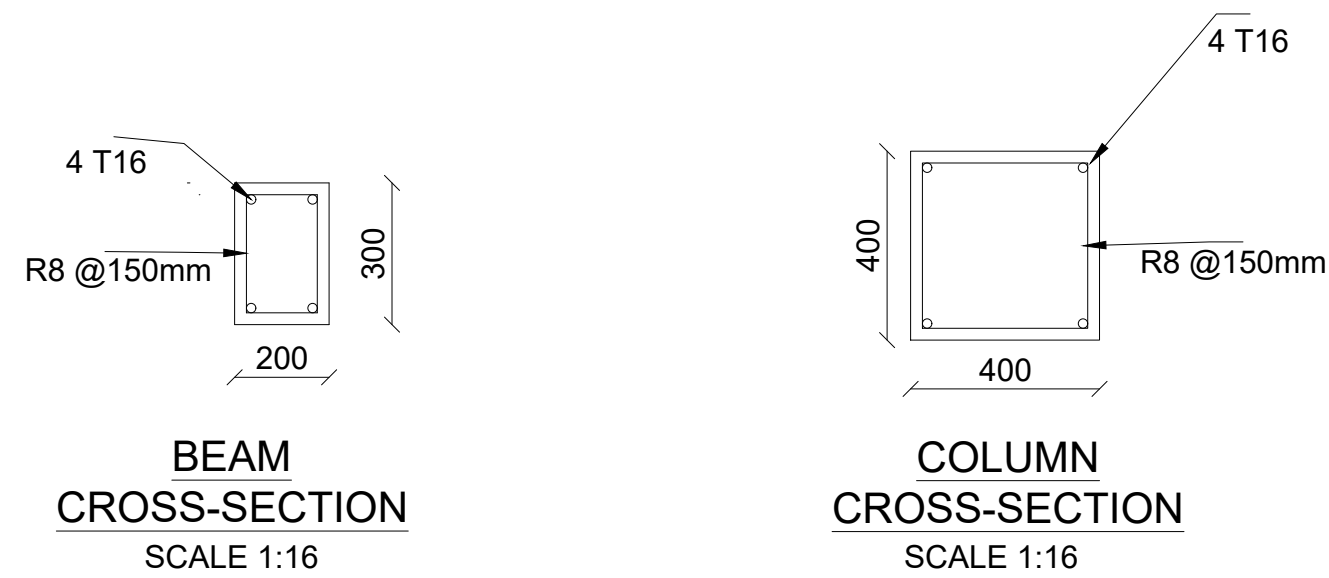


SCALE 1:25



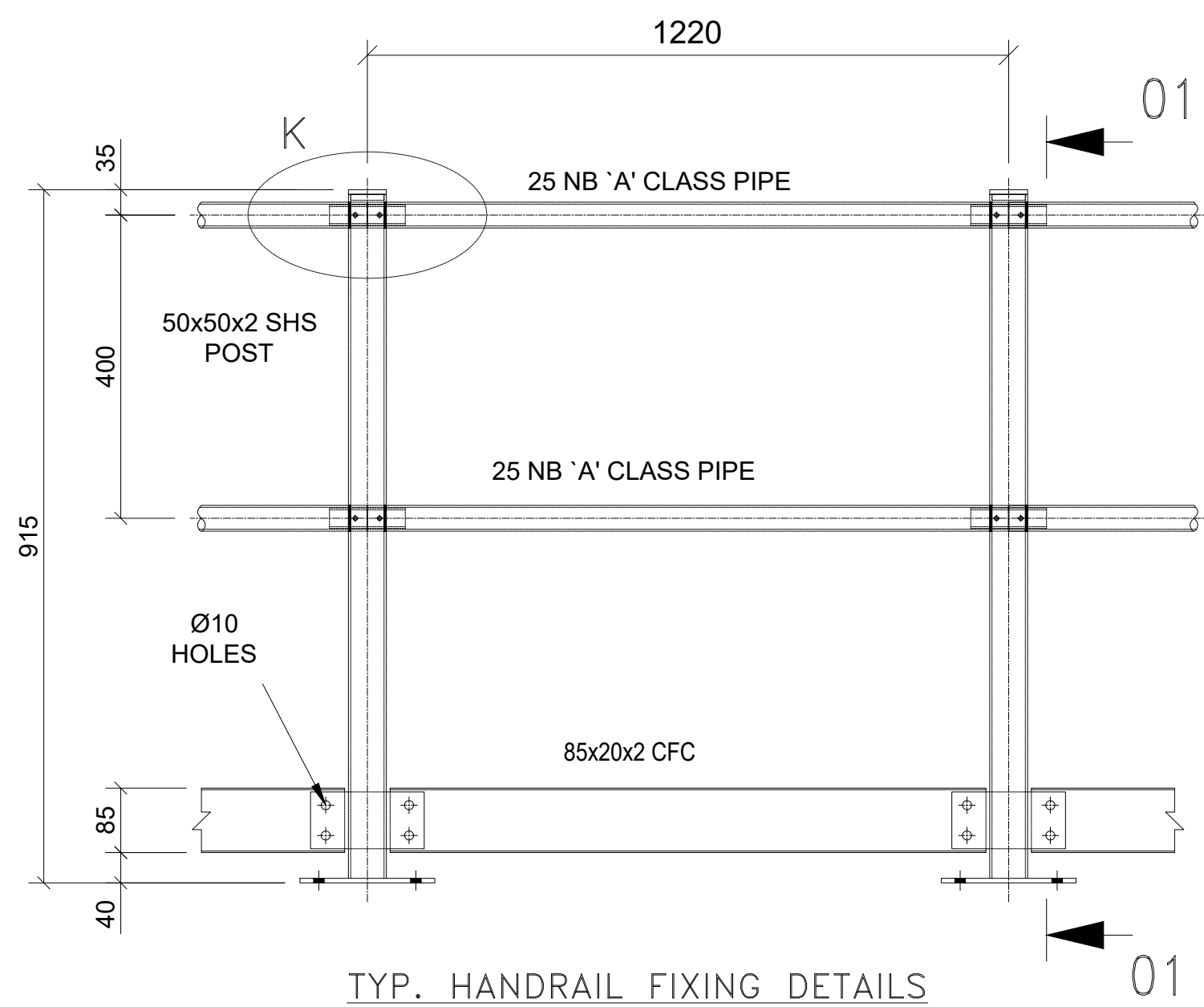
250 x 25 THICK x 250 LONG- BASE PLATE  
WITH 4 HOLES 22 DIA. FOR 20Ø H.D. BOLTS

SECTION 'H-H'  
(TYPICAL COLUMN BASE PLATE DETAILS)

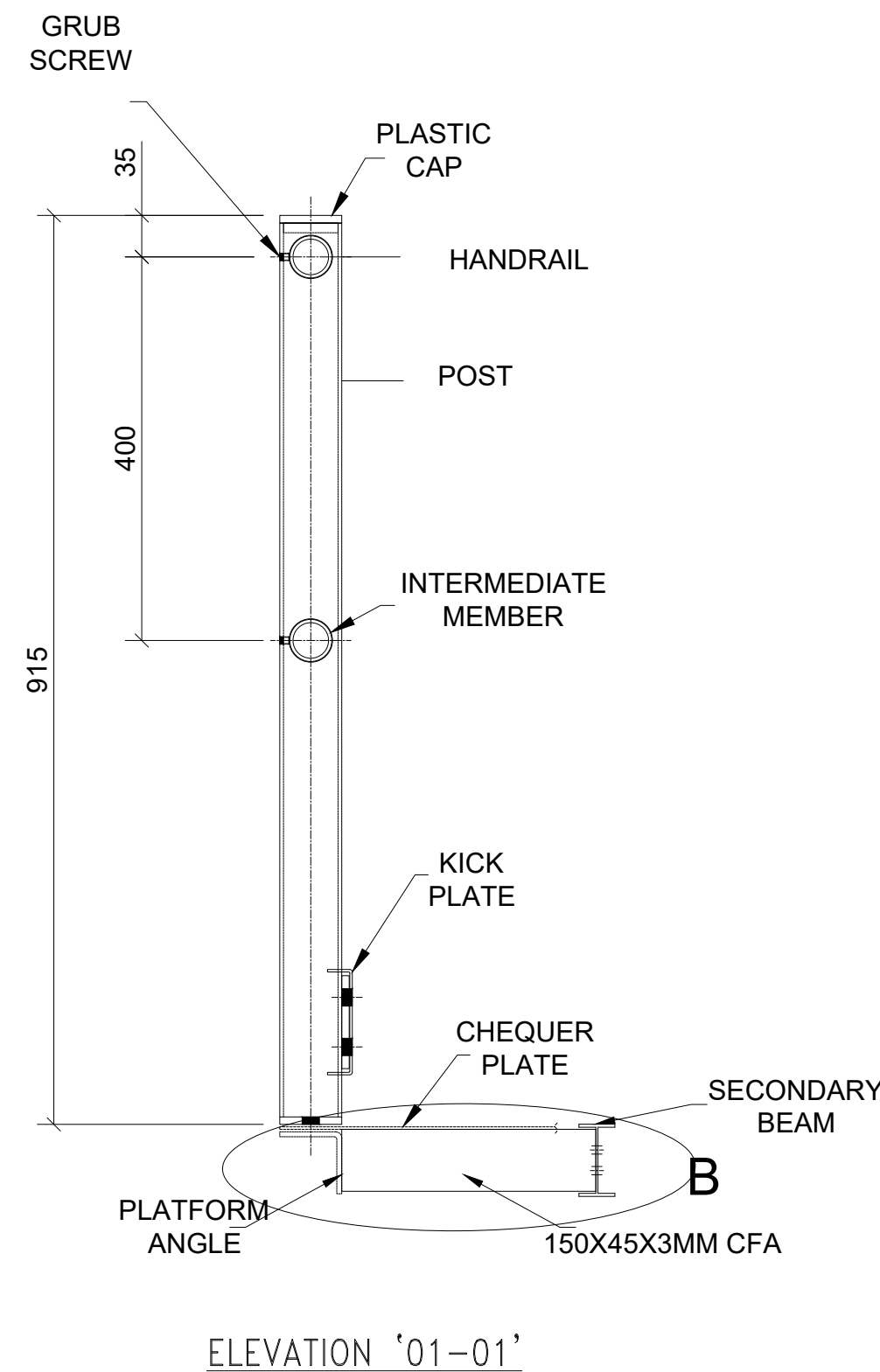


BEAM  
CROSS-SECTION  
SCALE 1:16

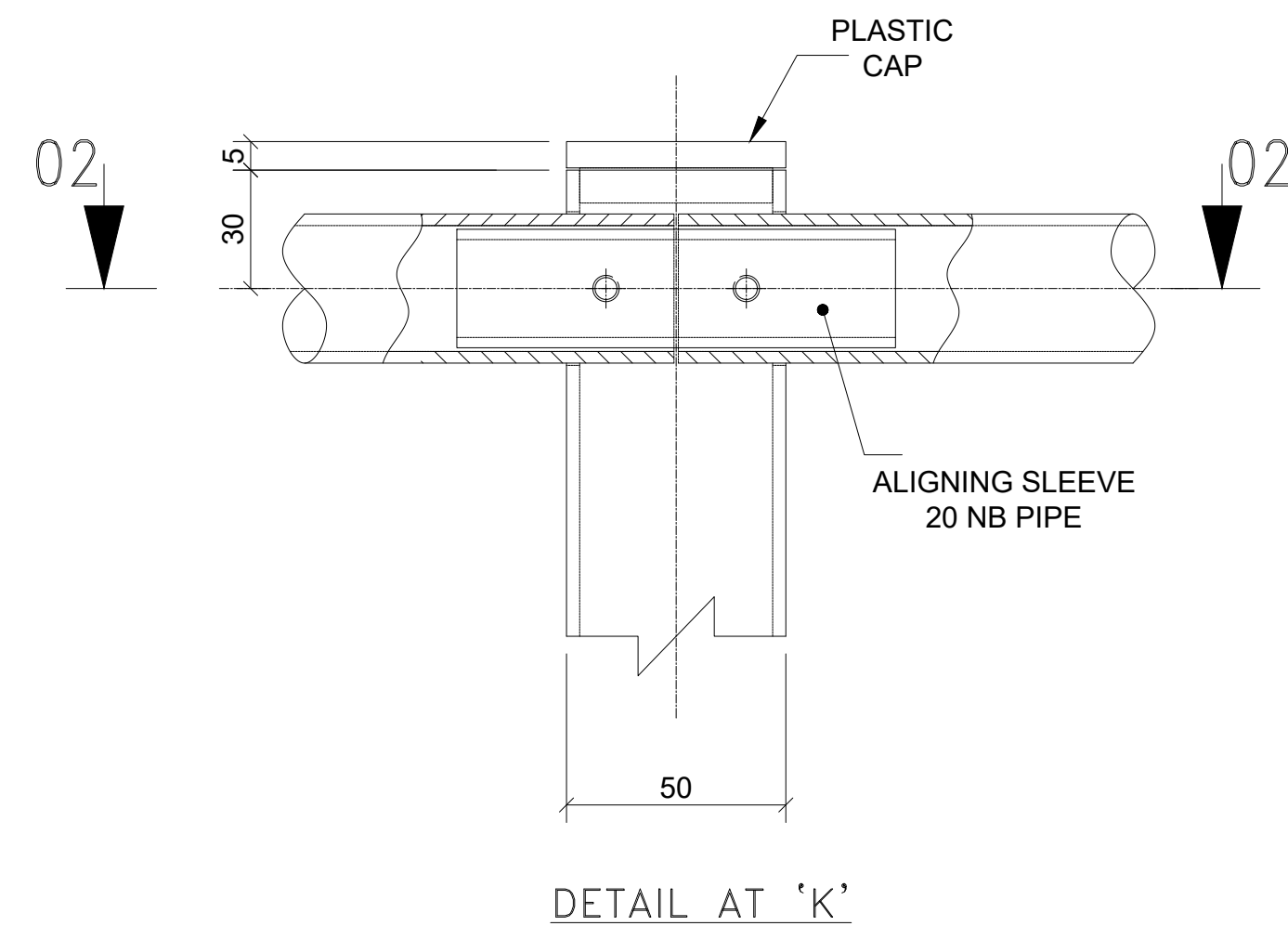
COLUMN  
CROSS-SECTION  
SCALE 1:16



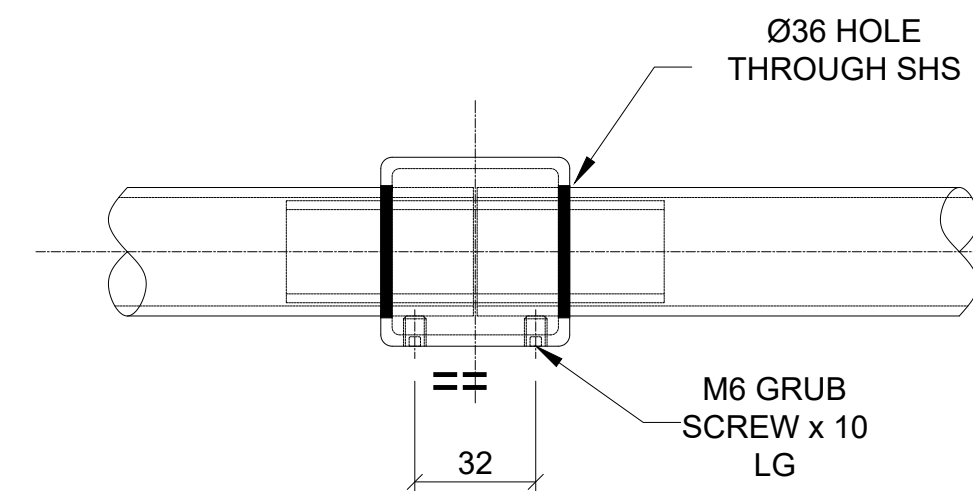
TYP. HANDRAIL FIXING DETAILS



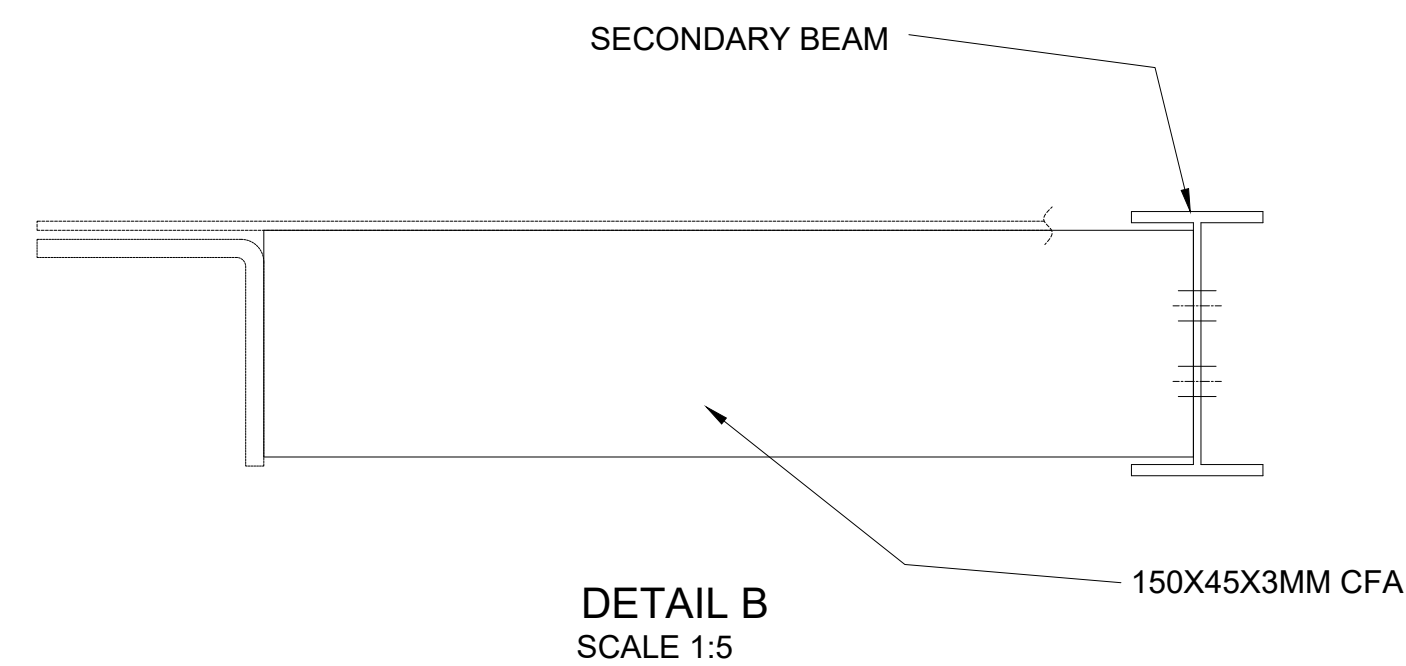
ELEVATION '01-01'



DETAIL AT 'K'

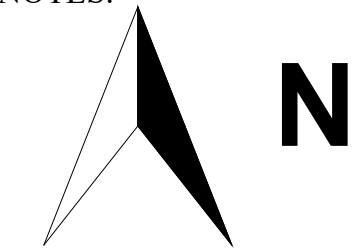


ELEVATION '02-02'





DETAIL B  
SCALE 1:5

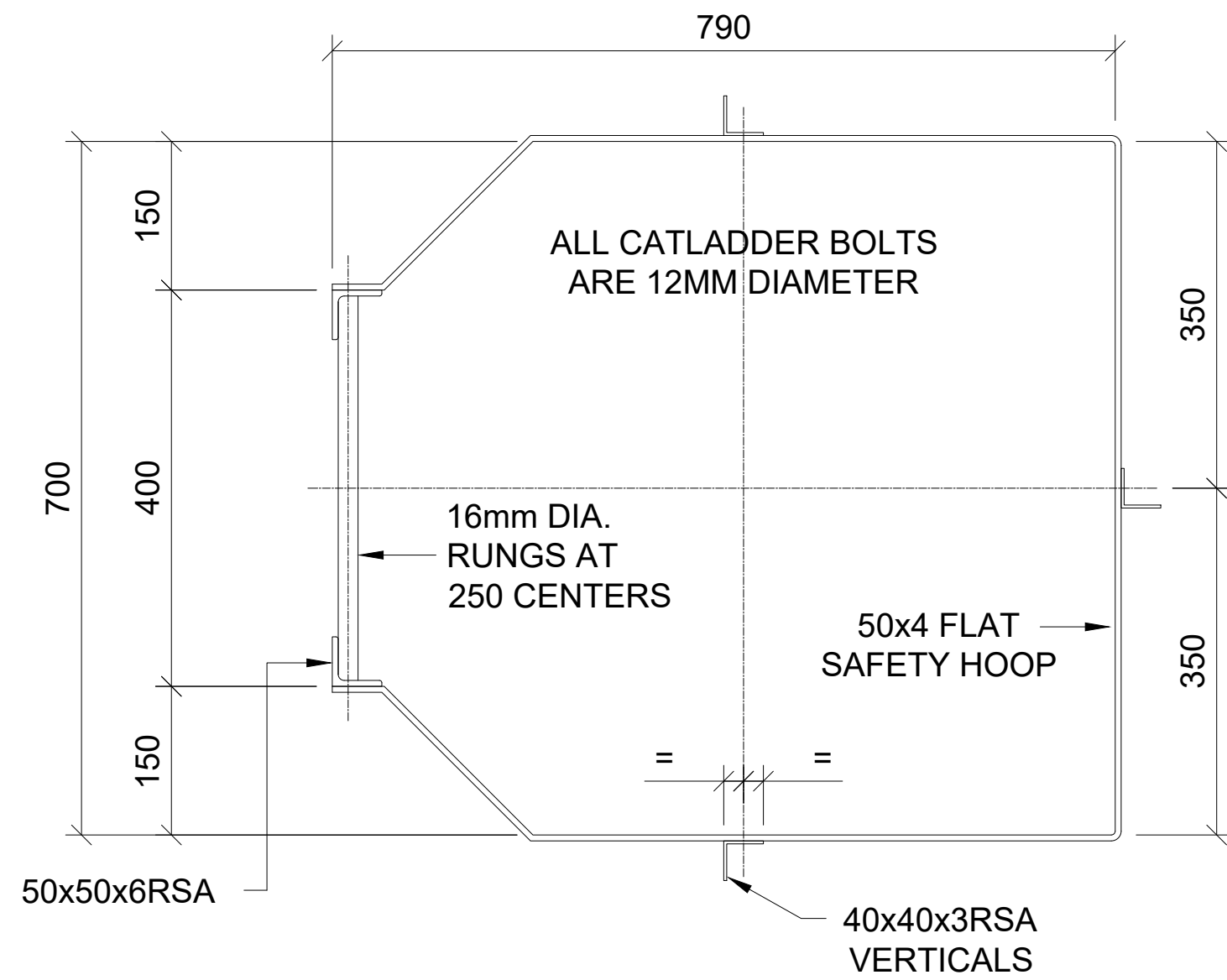
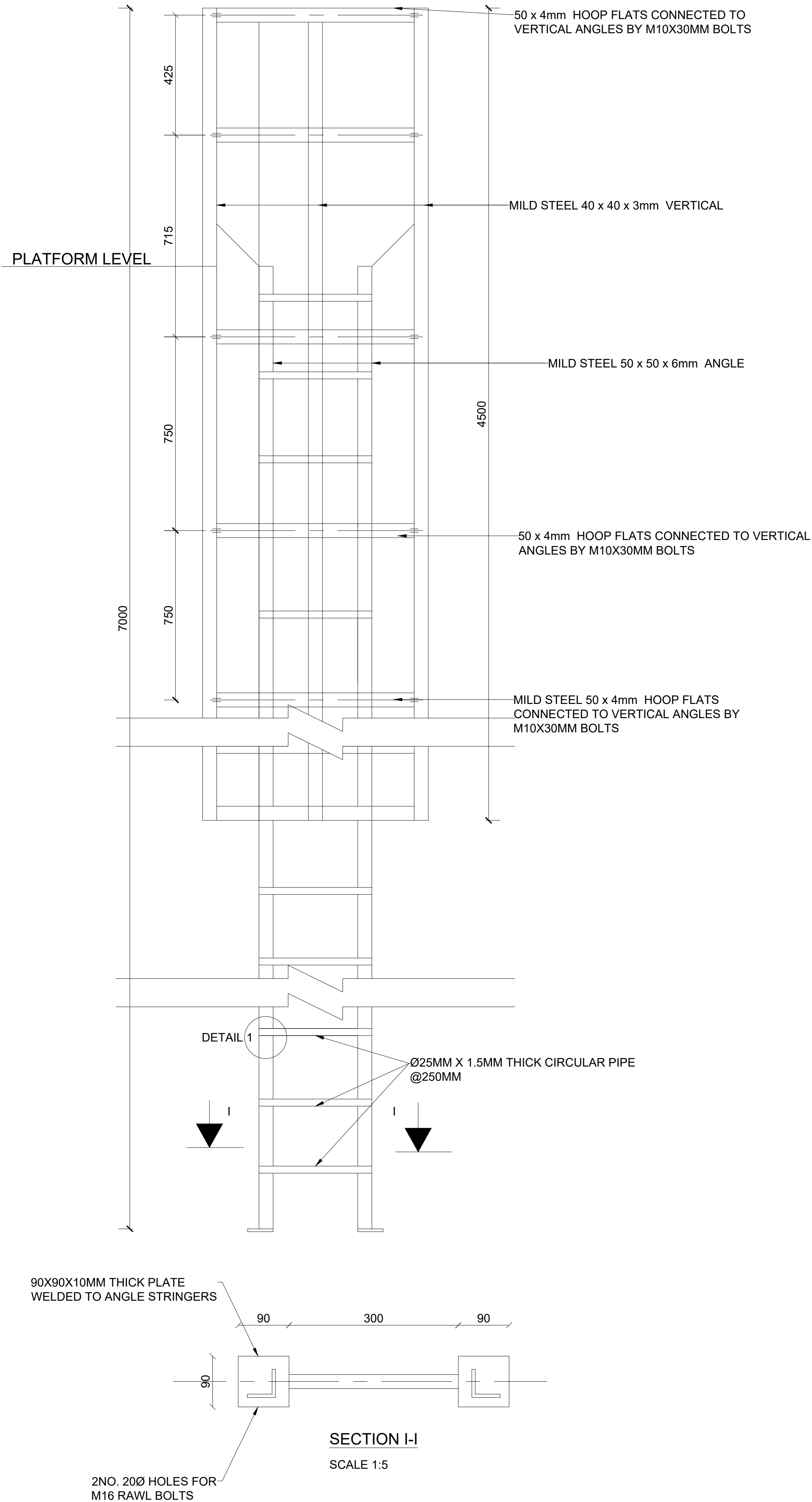
GENERAL NOTES:



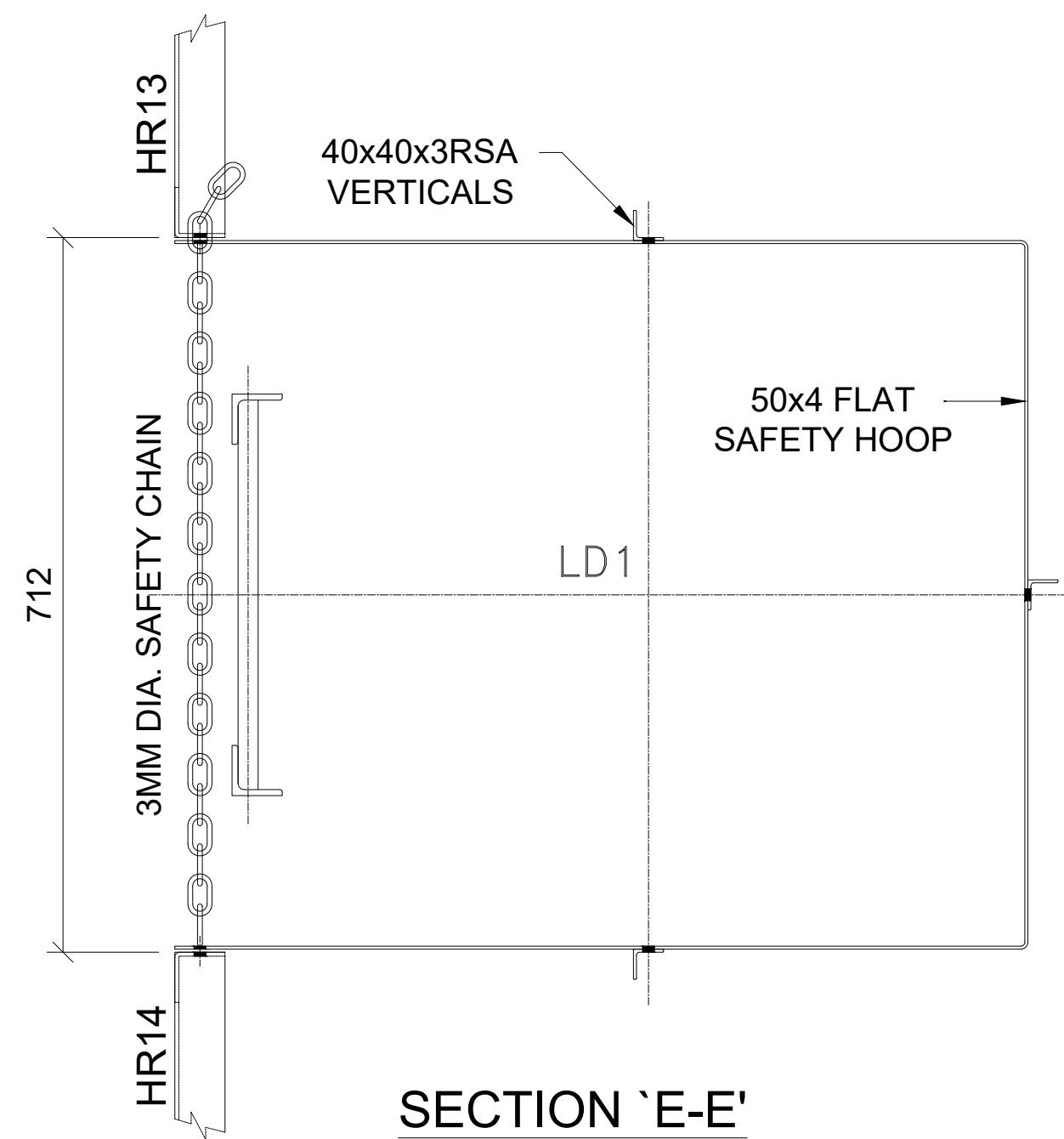
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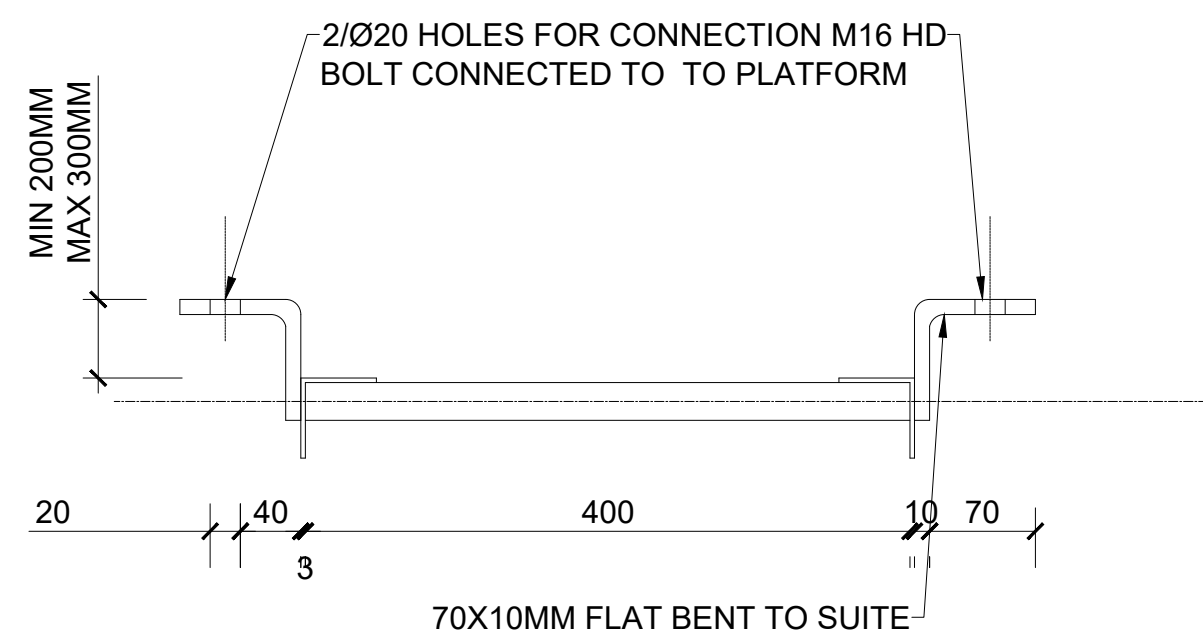
Program	
 <b>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</b>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
STRUCTURAL DETAILS	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 7/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2



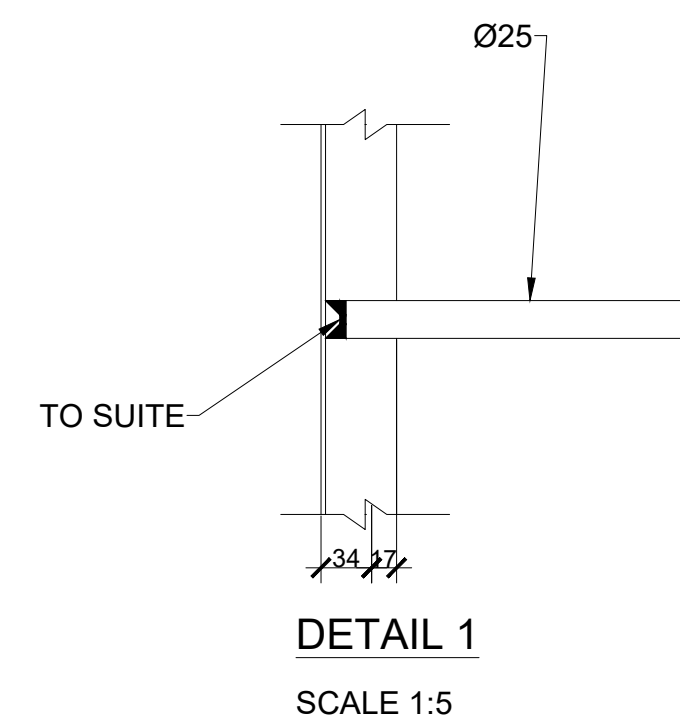
SECTION 'D-D'  
TYPICAL SECTION THRU' CATLADDER



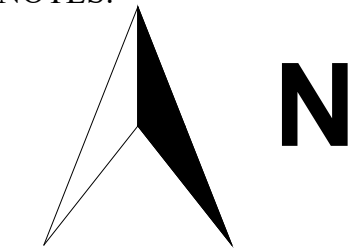
SECTION 'E-E'



DETAIL 2  
SCALE 1:5





GENERAL NOTES:

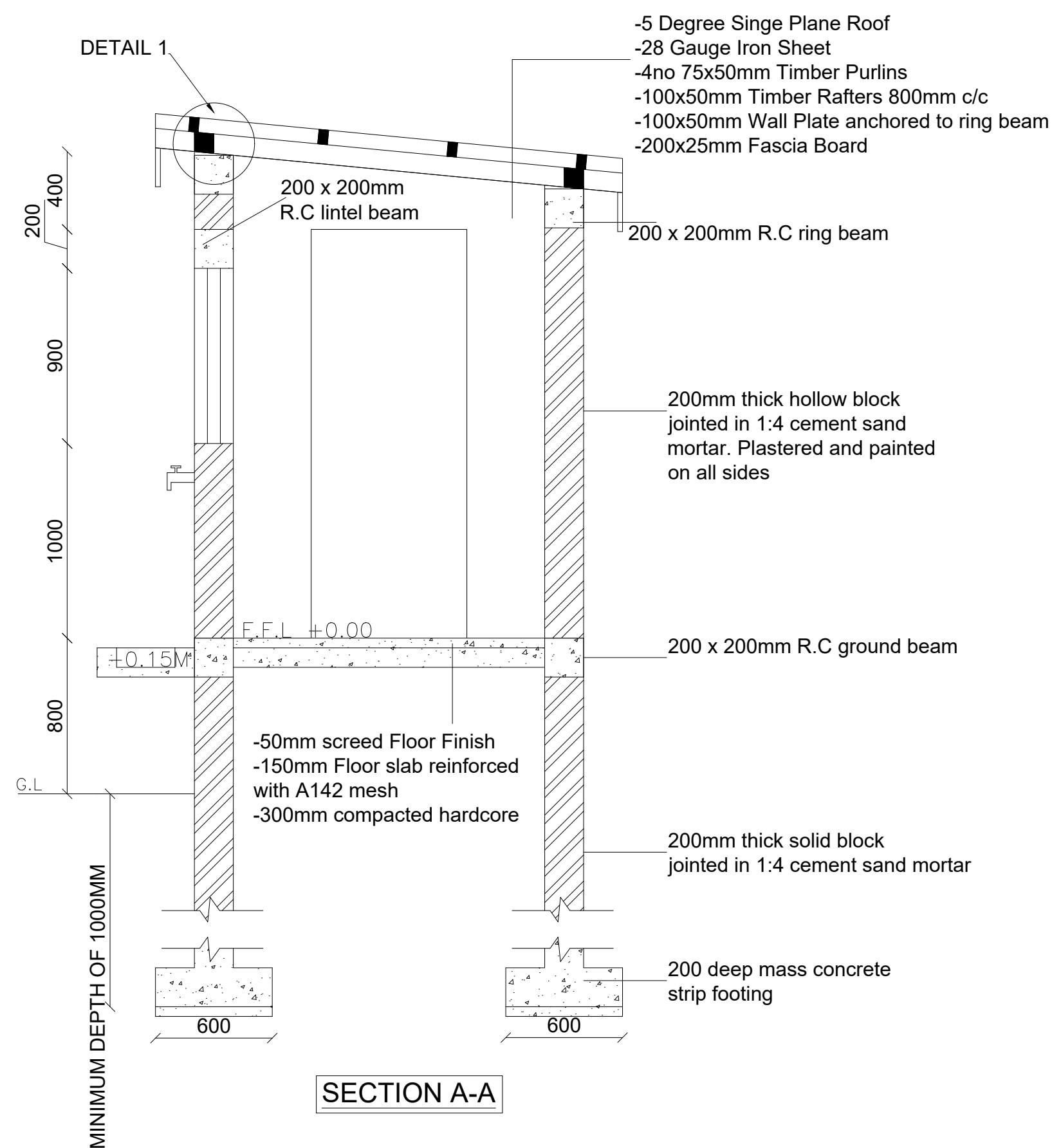
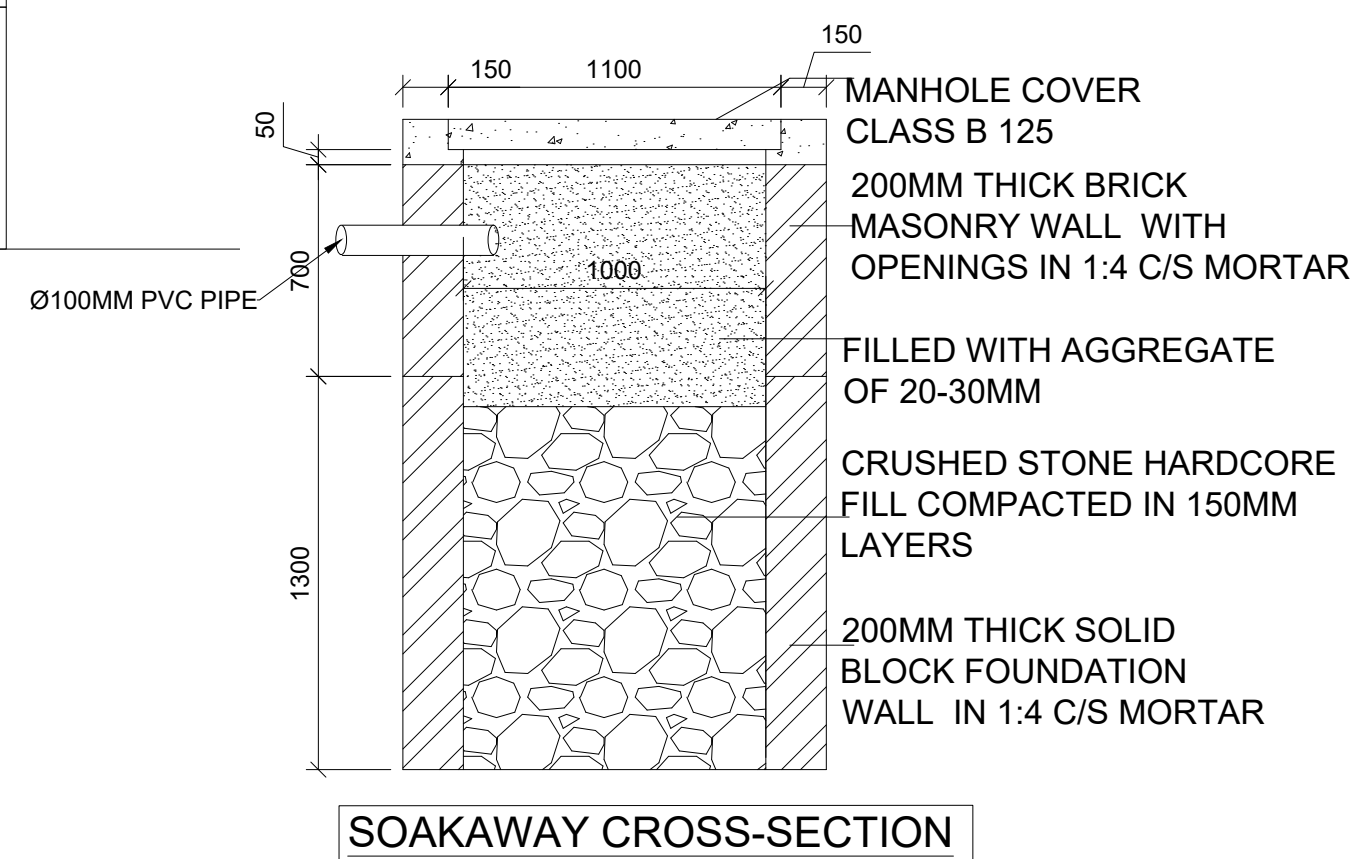
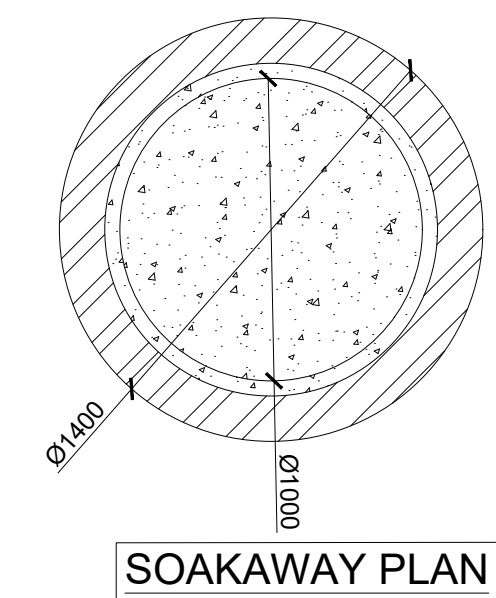
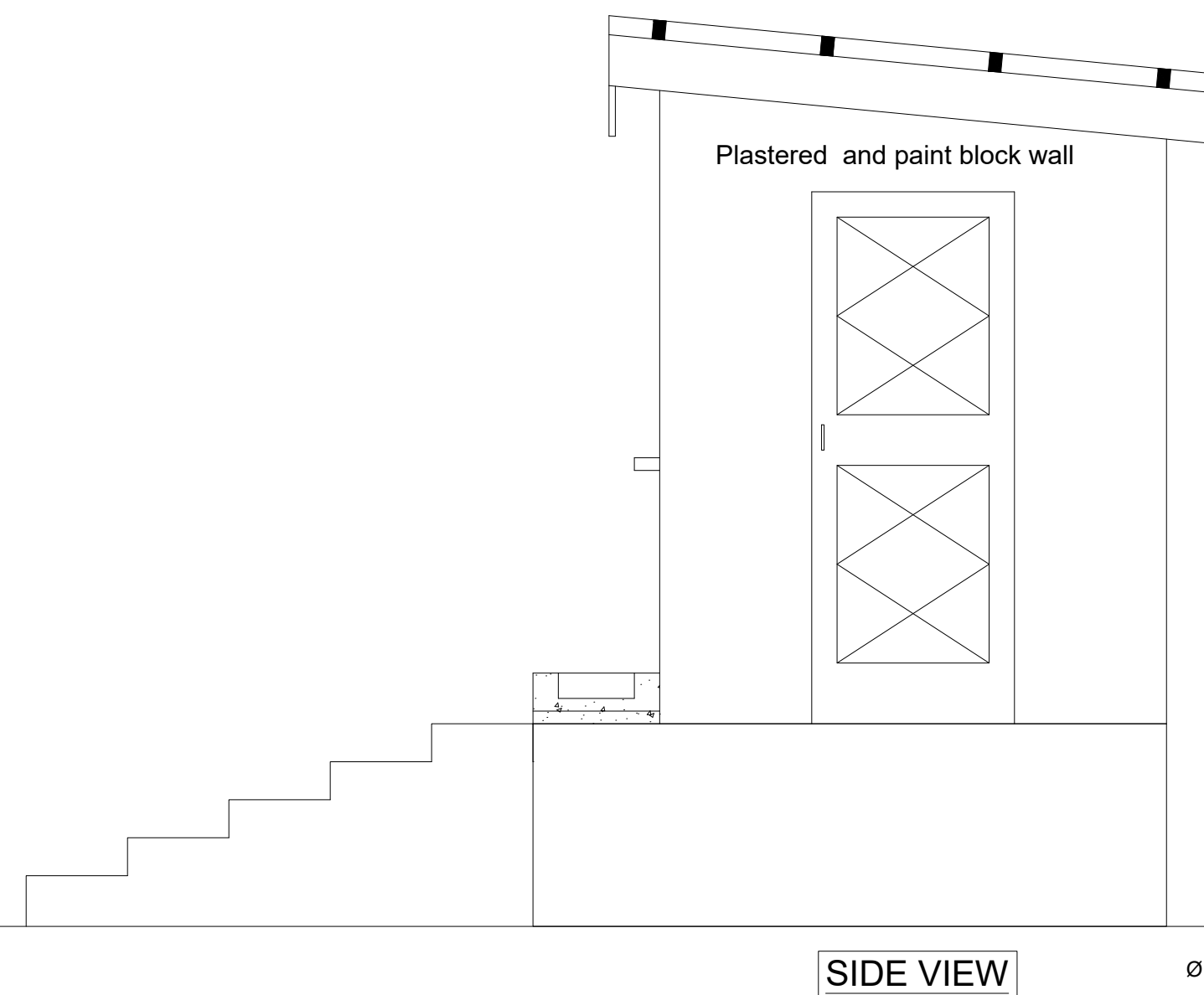
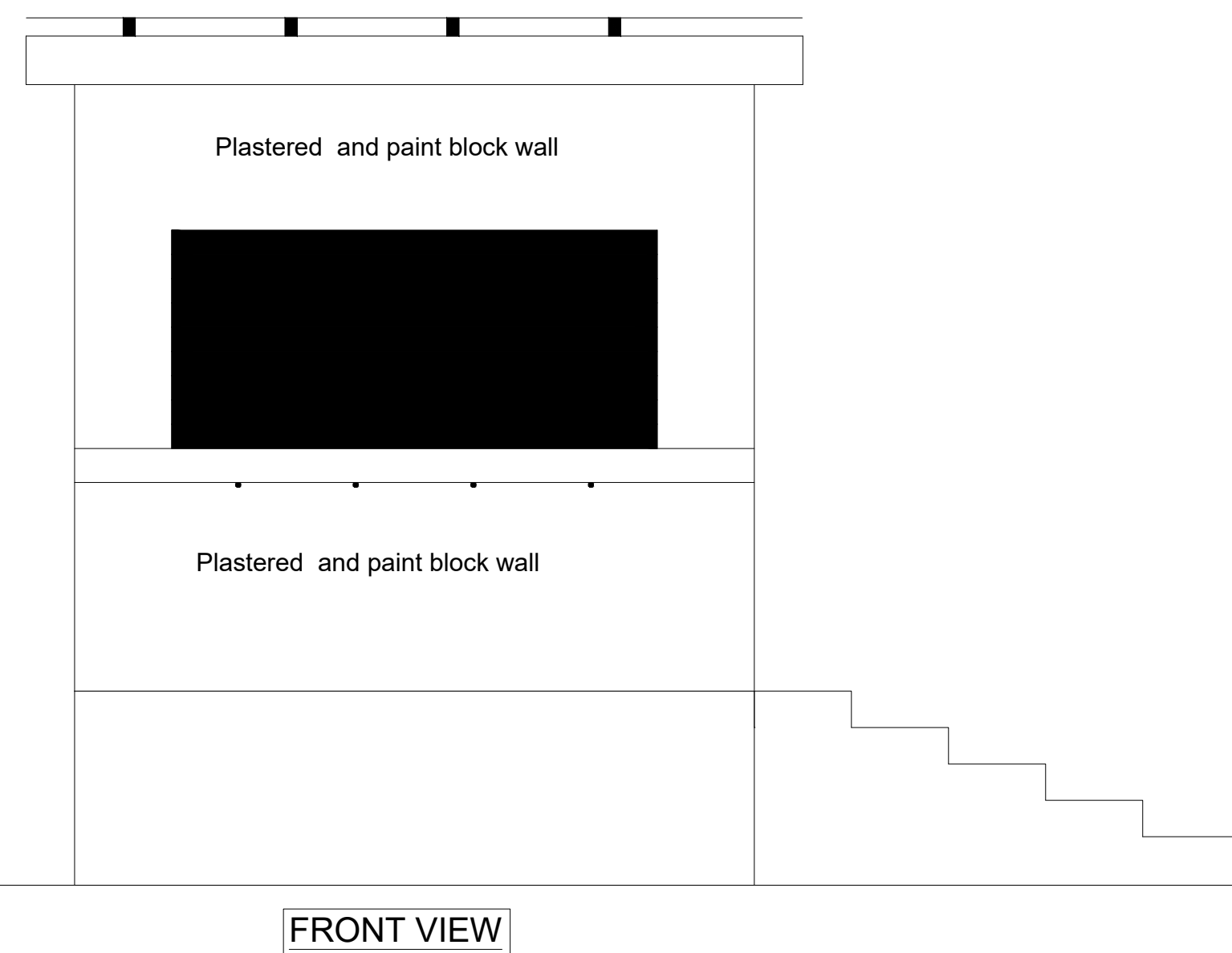
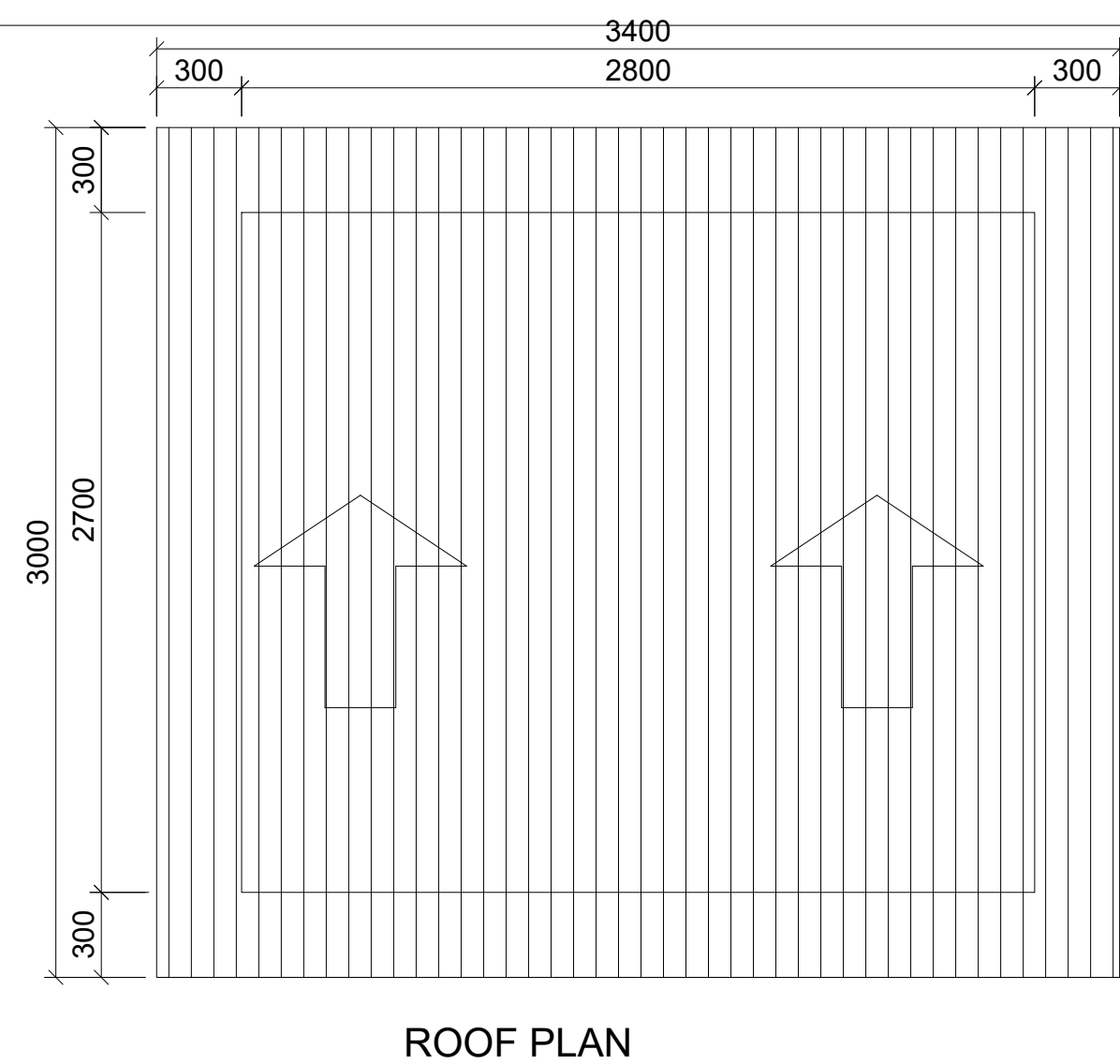
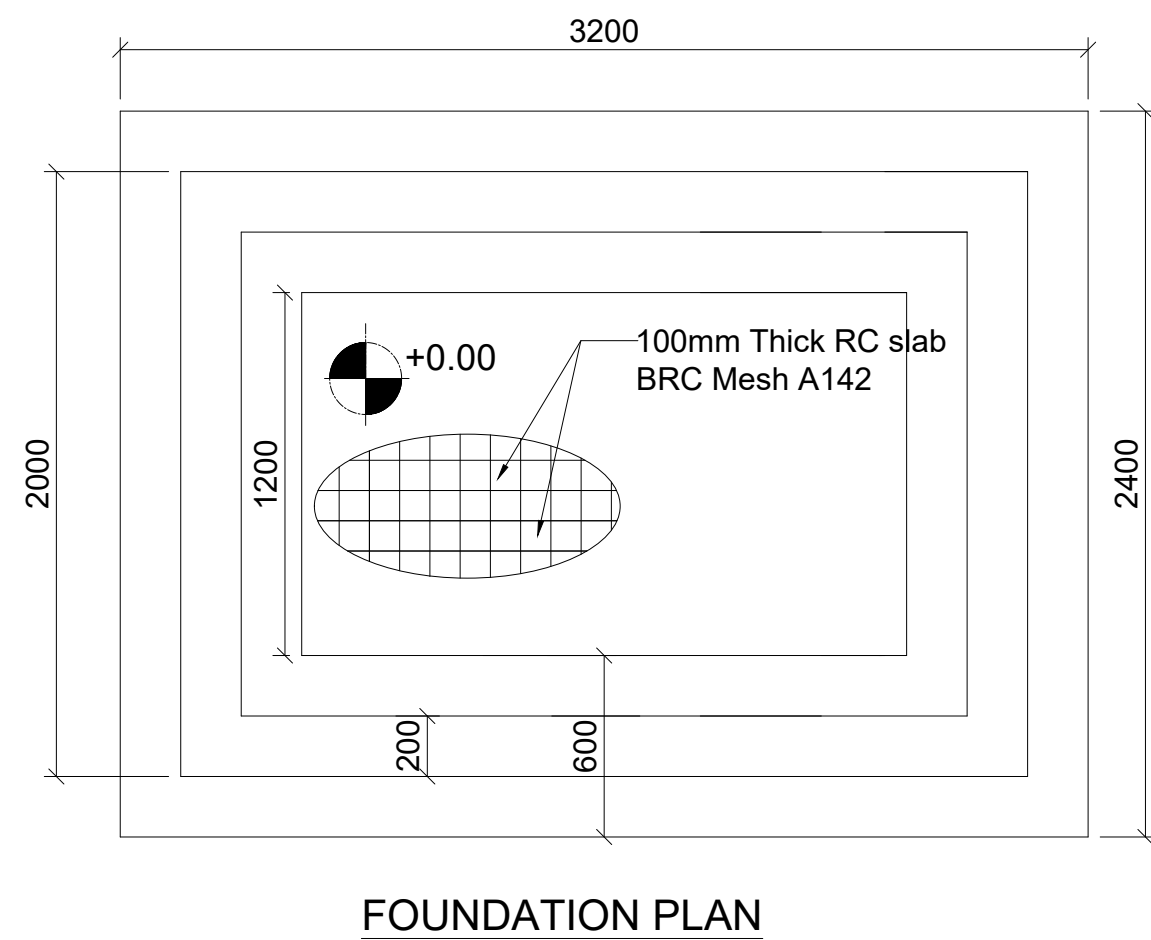
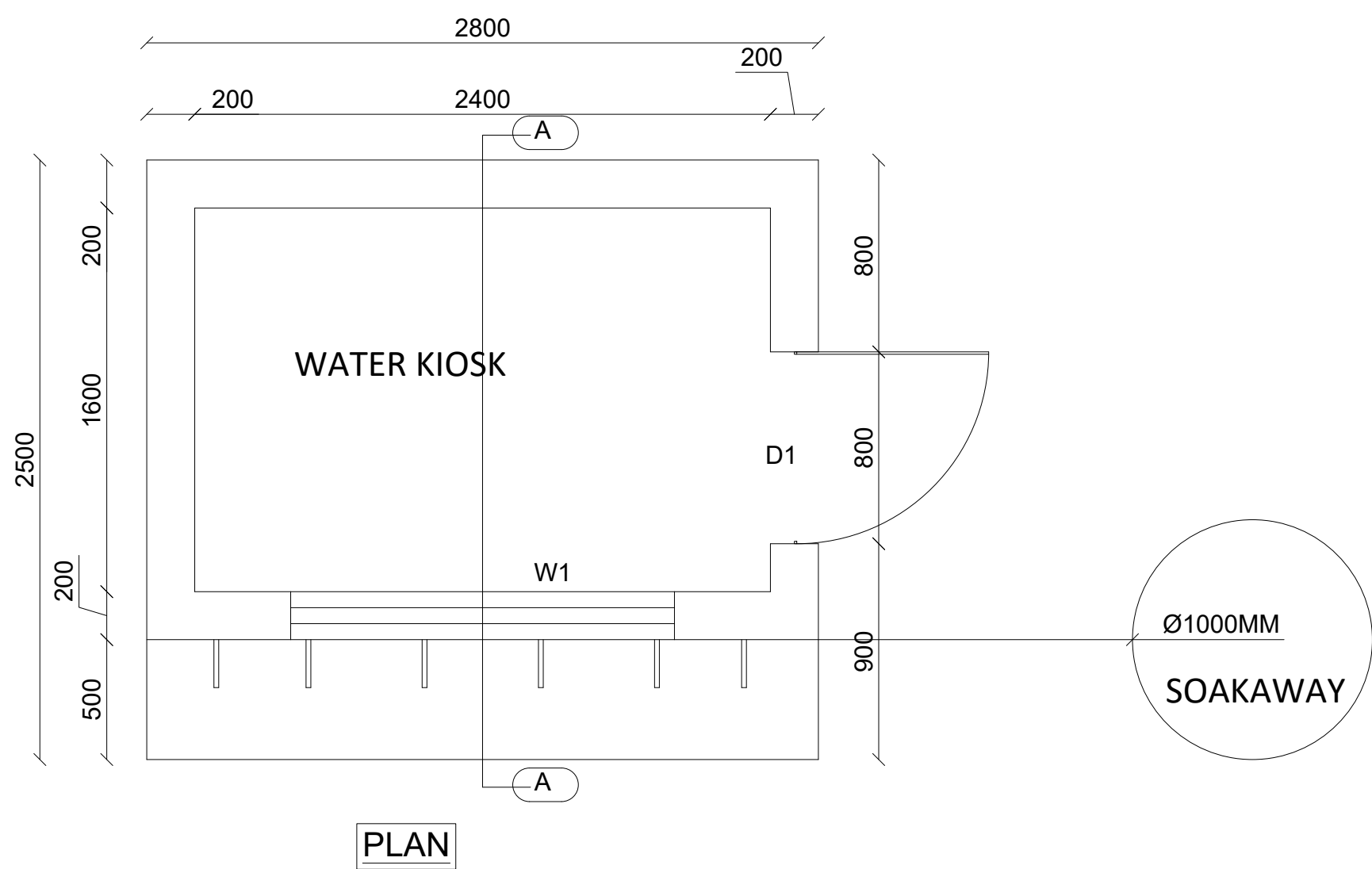


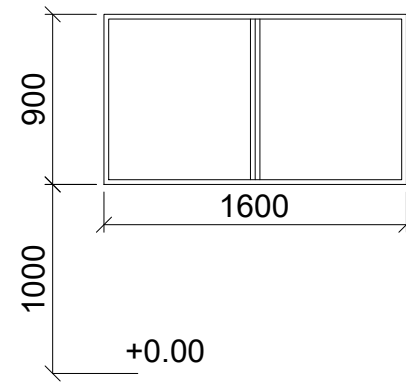
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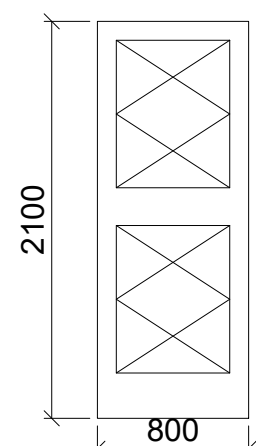
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Program	
 <div>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</div>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
CAT LADDER DETAILS	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 8/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2





W1	
Frame material	40X40X3mm SHS mild steel
Frame finishing	Two coats of anti-oxide paint followed by a coat of enamel paint
Burglar Proofing	25x25x3mm Mild steel angle equally spaced and welded to the anterior
Sheet	5mm thick mild steel sheet
Ironmongery	Stainless steel push/pull bar
Lockable system	Stainless steel 200cm latch slide barrel bolt
	

D1	
Frame material	40X40X3mm SHS mild steel
Frame finishing	Two coats of anti-oxide paint followed by a coat of enamel paint
Burglar Proofing	25x25x3mm Mild steel angle equally spaced and welded to the anterior
Sheet	5mm thick mild steel sheet
Ironmongery	Stainless steel push/pull bar
Lockable system	Stainless steel 200cm latch slide barrel bolt door lock with padlock
	

#### GENERAL NOTES:



N

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#### Program



Enhancing Community  
Resilience and Local  
Governance Project  
Phase II (ECRP II)

#### Client:

GOVERNMENT OF SOUTH SUDAN

#### Implemented By:



#### Project:

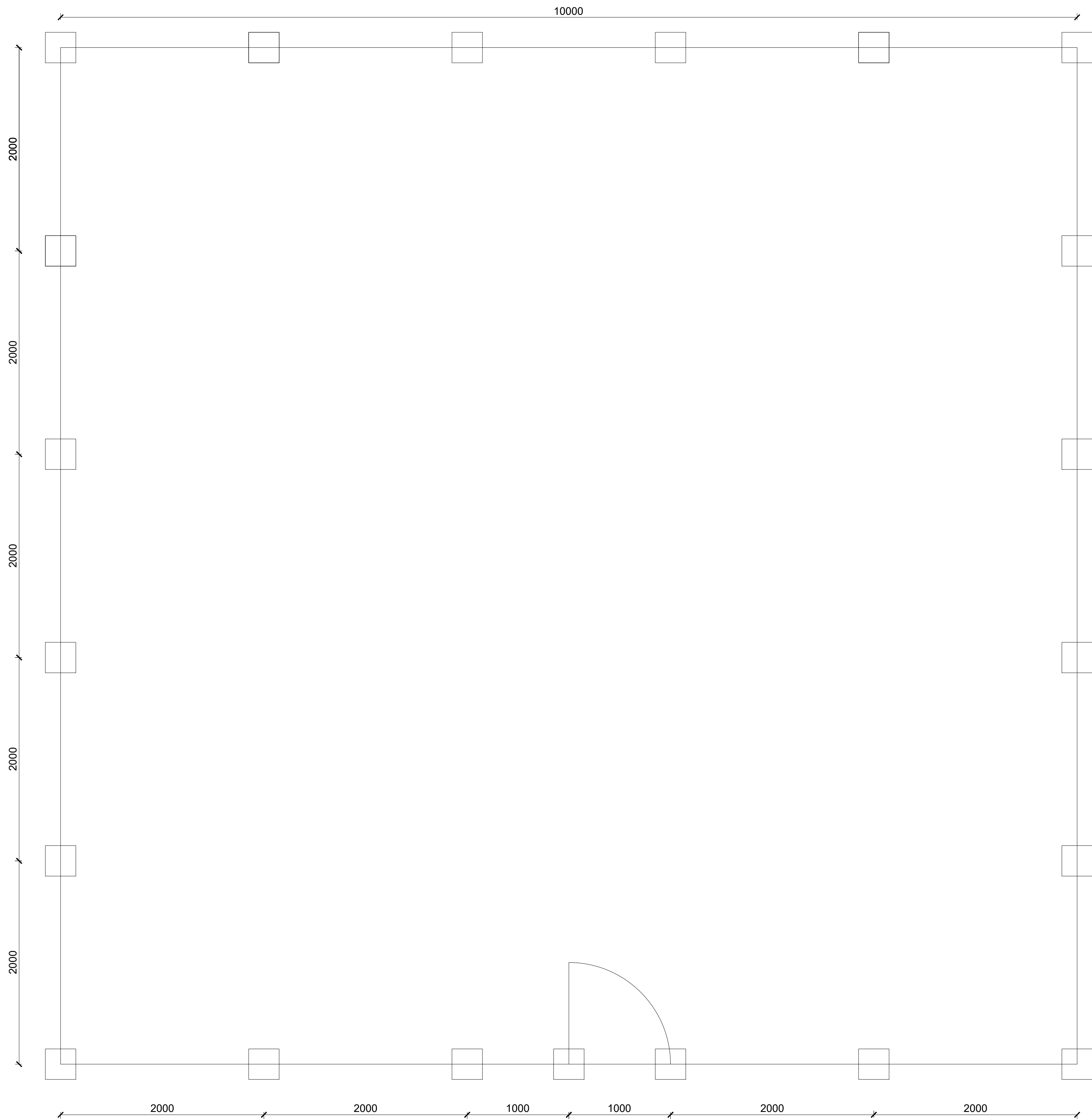
PROPOSED WATER YARD

20M3 CAPACITY ELEVATED TANK

Drawing Title

WATER KIOSK

Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: -----
Sheet #: 9/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2



FENCE POST LAYOUT  
SCALE 1:25

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Program

Enhancing Community  
Resilience and Local  
Governance Project  
Phase II (ECRP II)

Client:

GOVERNMENT OF SOUTH SUDAN

Implemented By:

Project:

PROPOSED WATER YARD  
20M3 CAPACITY ELEVATED TANK

Drawing Title

CHAIN-LINK FENCE PLAN

Designed By: H.A

Drawn by: H.A

Checked: F.E & G.O

Approved: ----

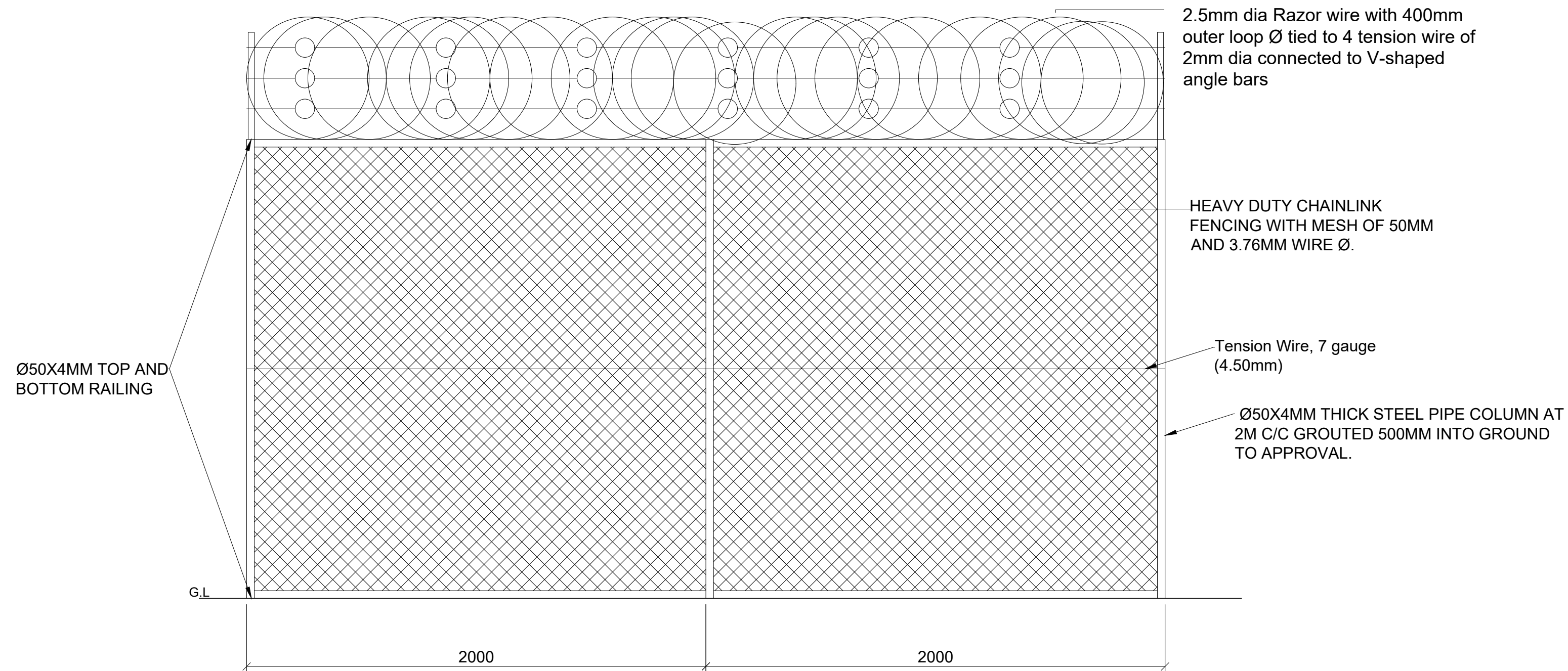
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Scale: AS SPECIFIED

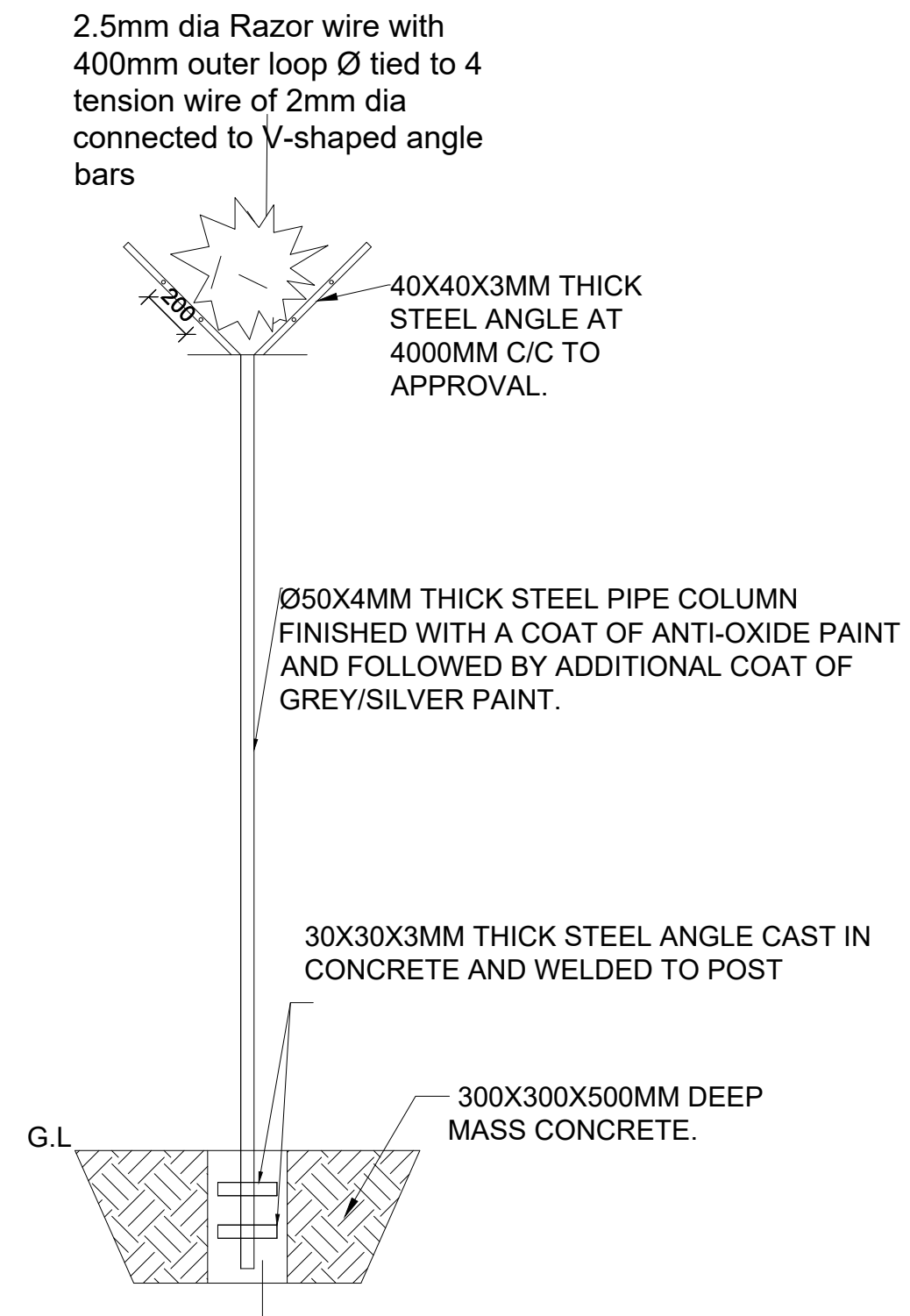
Date: 13 February 2024

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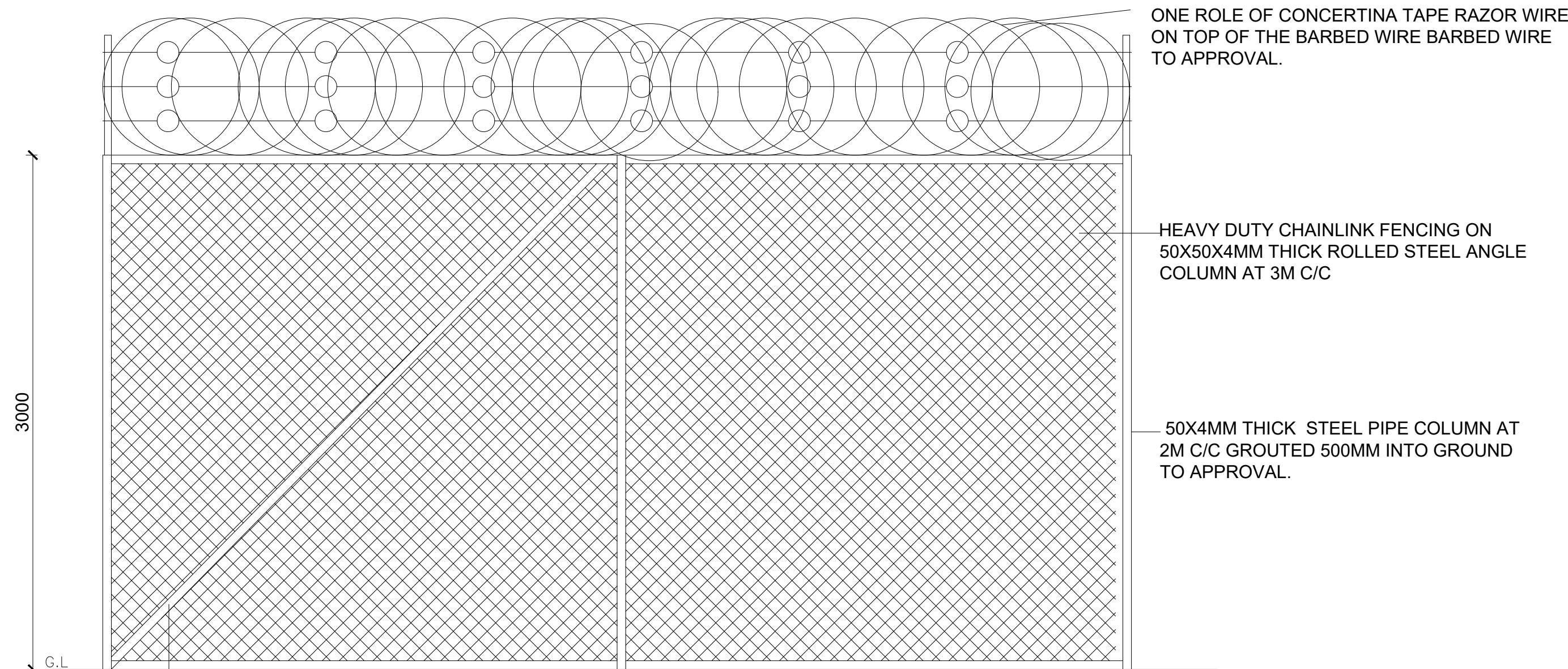




**TYPICAL CHAINLINK FENCE LAYOUT**  
SCALE 1:25

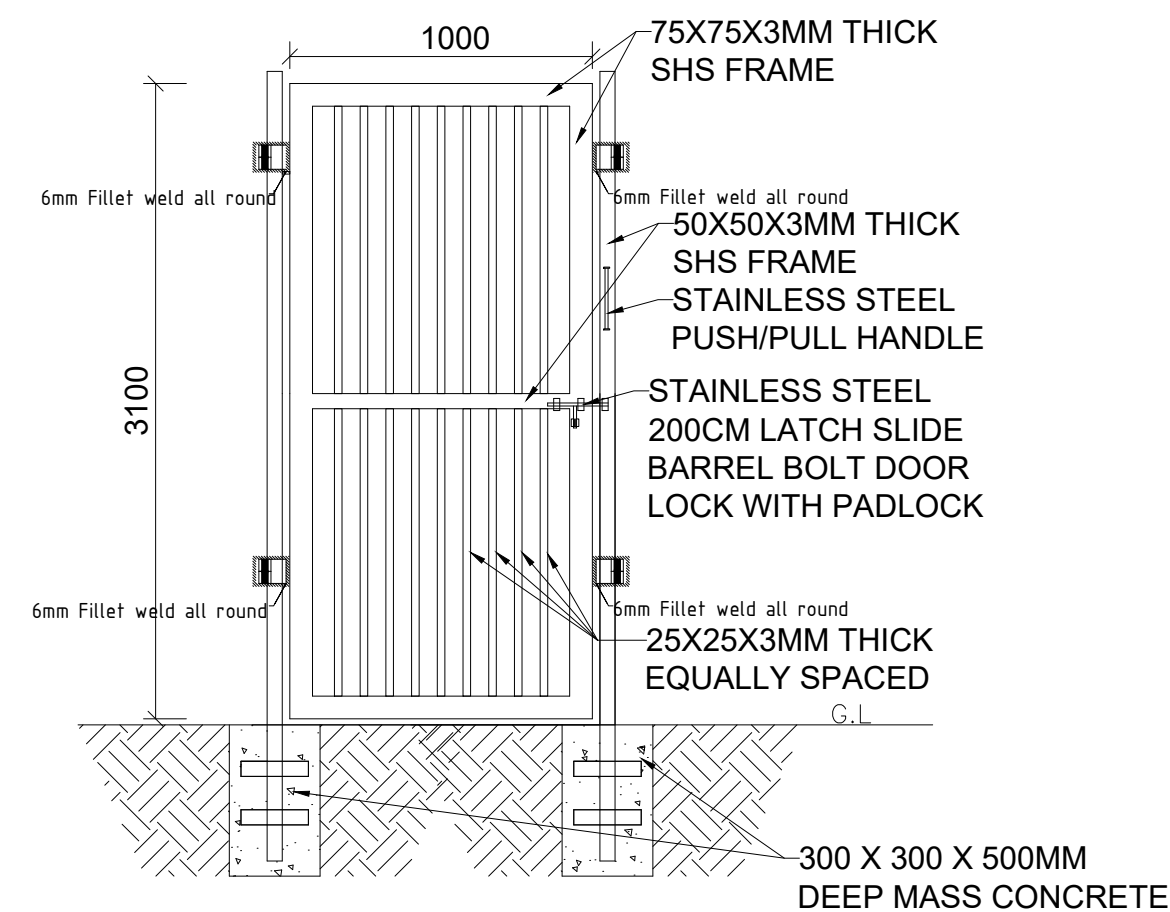


**POST CROSS-SECTION**  
SCALE 1:25



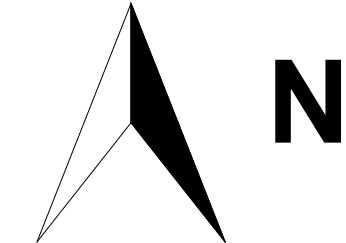
1No. DIAGONAL BRACING USING 10mmØ TRUSS ROD

**CORNER POST/END BRACING PANEL**  
SCALE 1:25



**GATE 1**  
SCALE 1:25

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Program



**Enhancing Community  
Resilience and Local  
Governance Project  
Phase II (ECRP II)**

Client:

GOVERNMENT OF SOUTH SUDAN

Implemented By:



Project:

PROPOSED WATER YARD

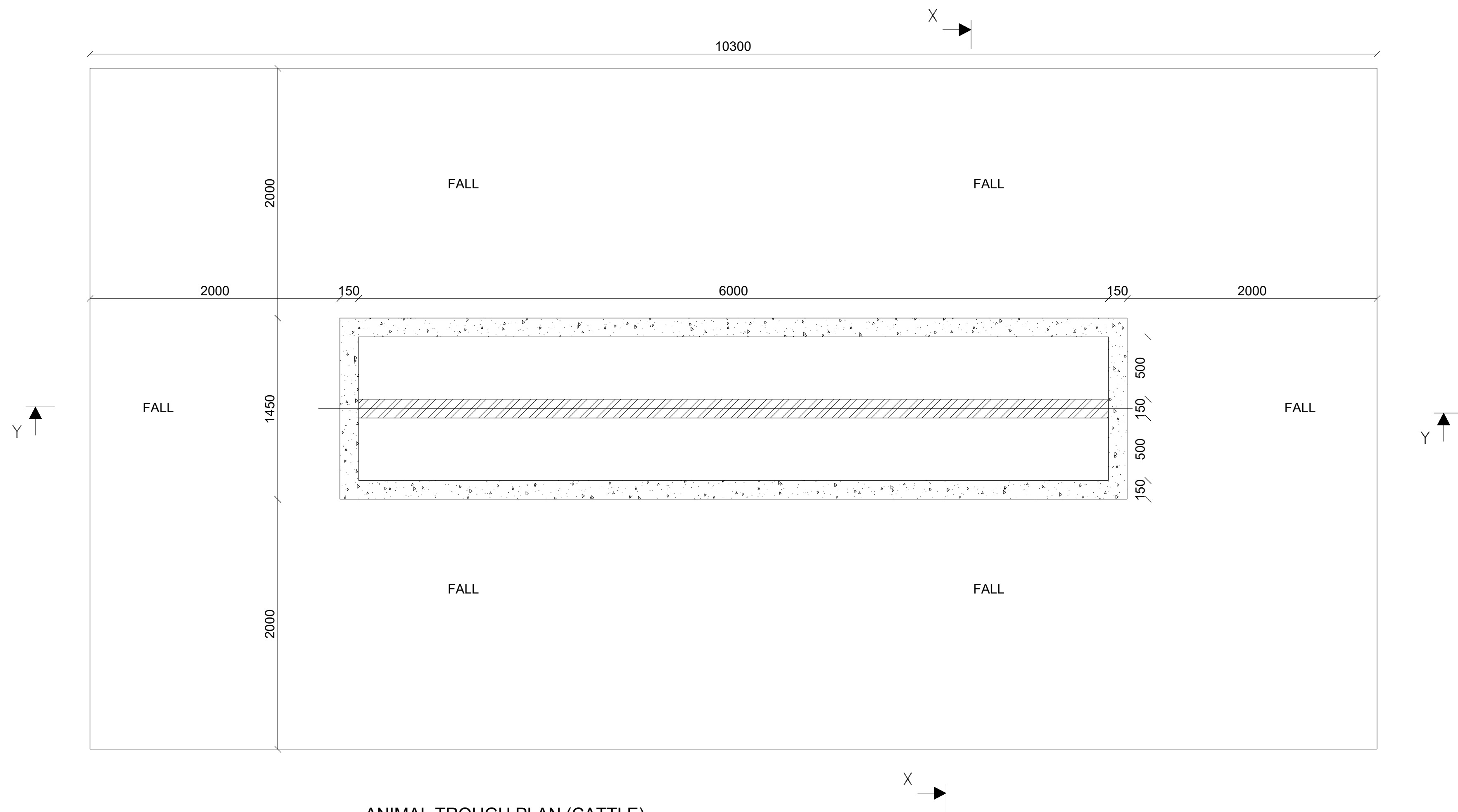
20M3 CAPACITY ELEVATED TANK

Drawing Title

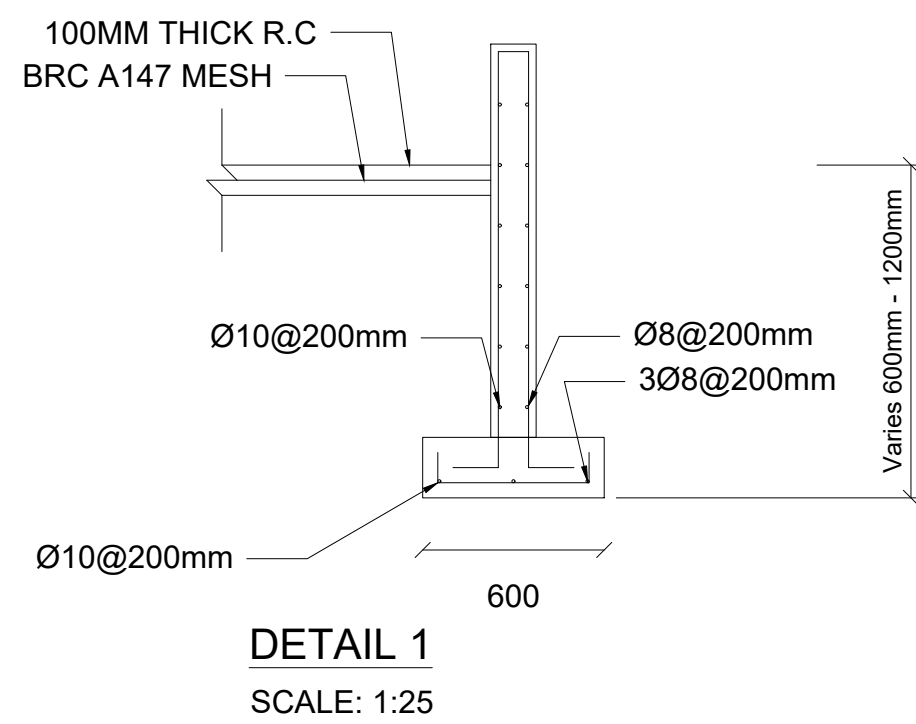
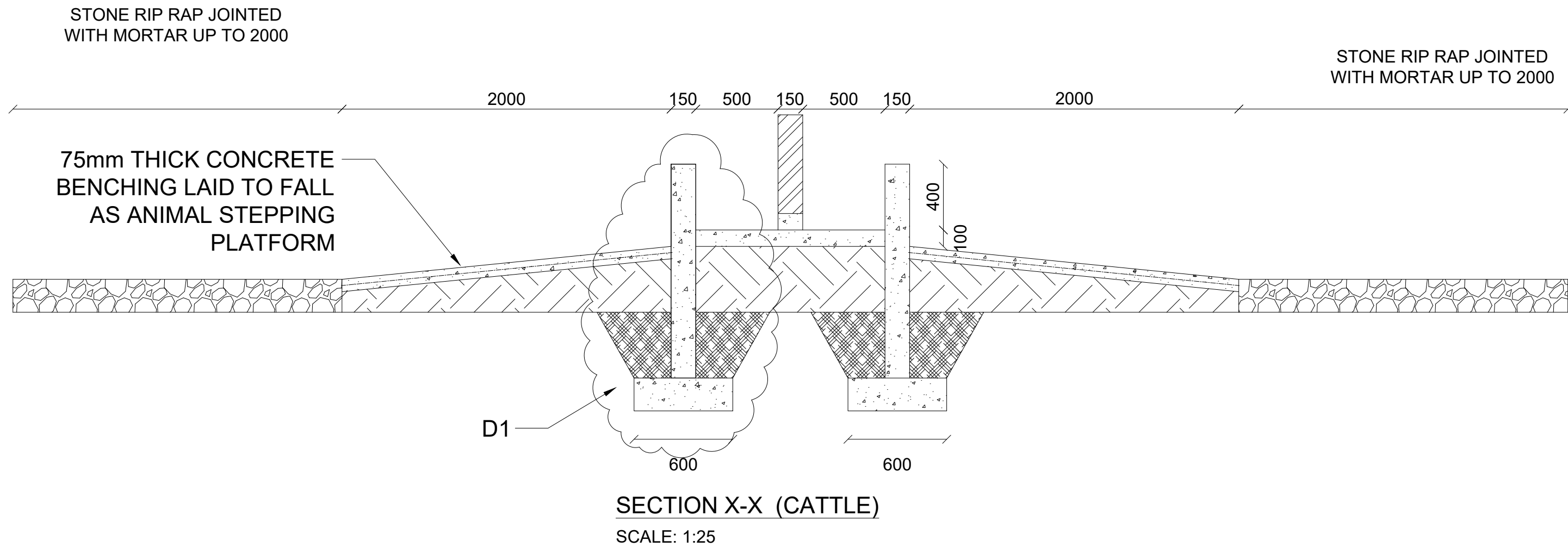
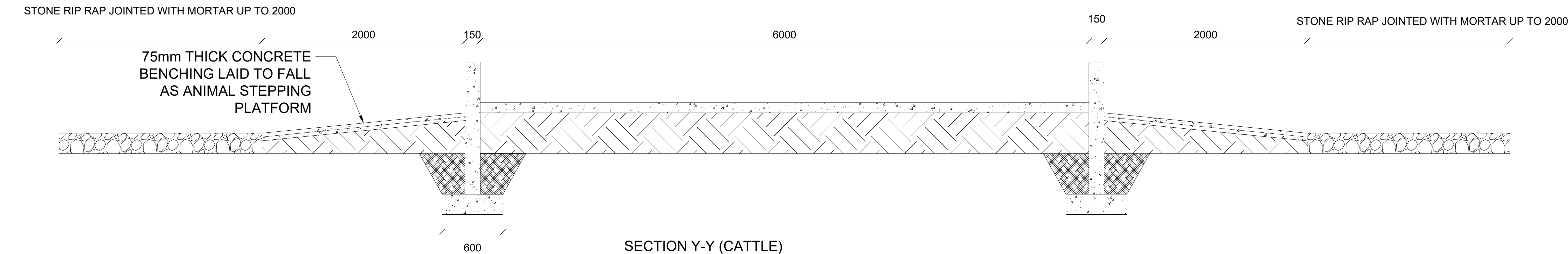
CHAIN-LINK FENCE DETAILS

Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: -----
Sheet #: 11/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2





ANIMAL TROUGH PLAN (CATTLE)  
SCALE: 1:25



GENERAL NOTES:

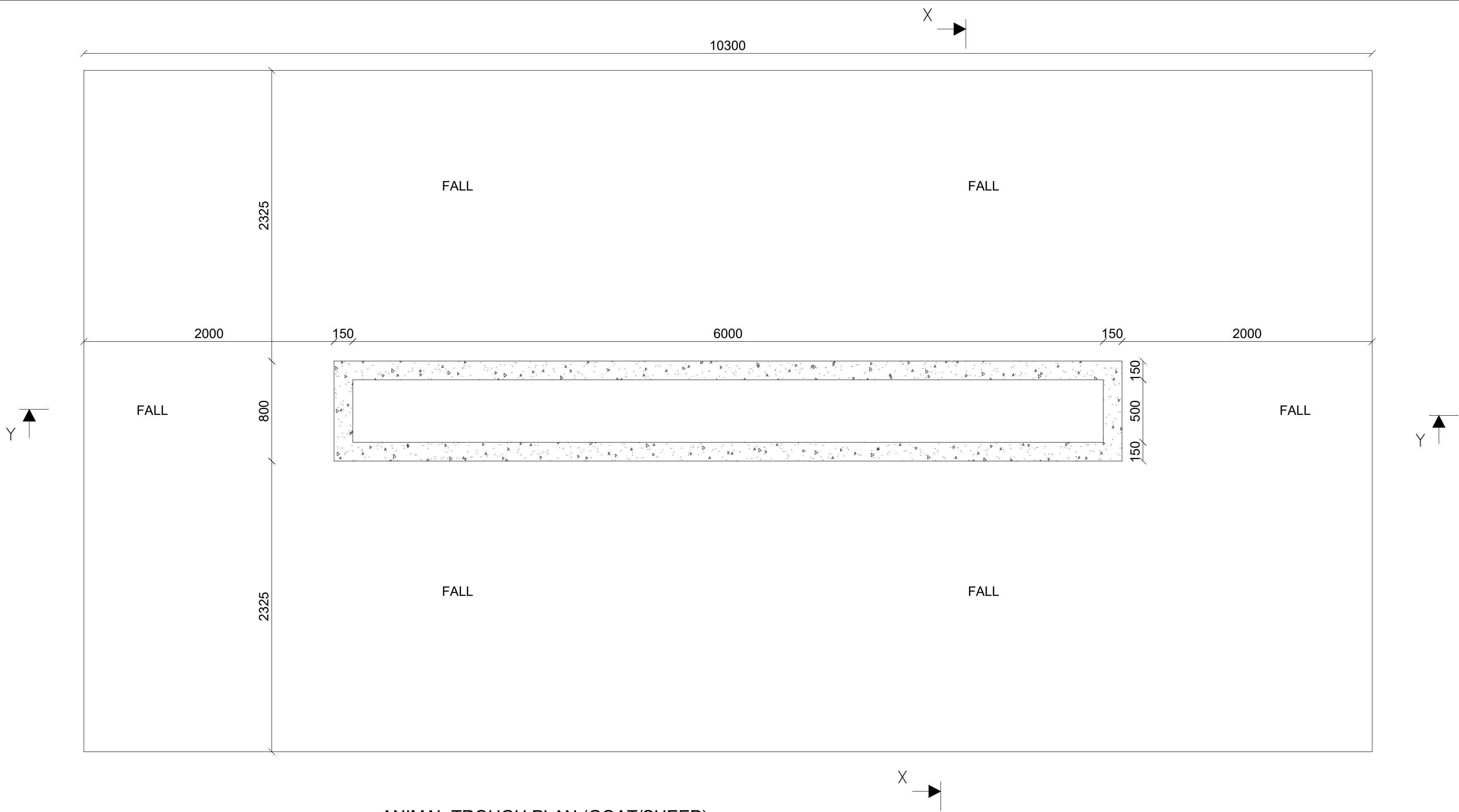


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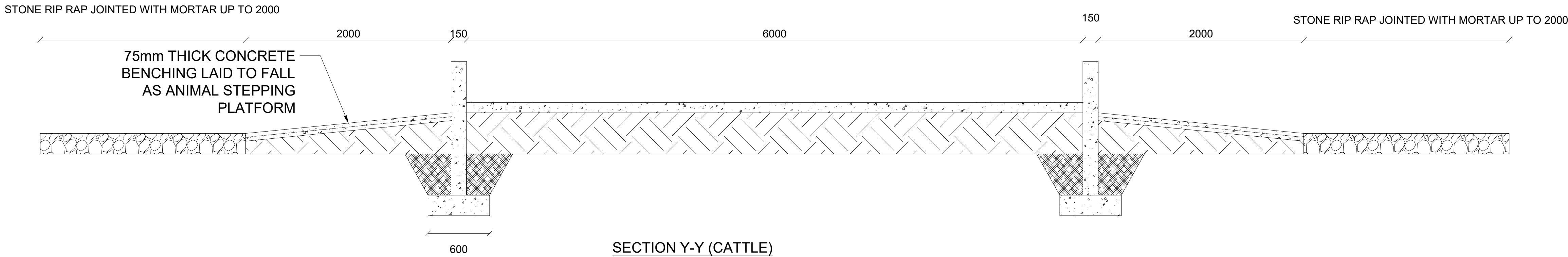
Rev:	Date	Description:	Approved
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Program	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
ANIMAL TROUGH (CATTLE)	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: ----
Sheet #: 12/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2

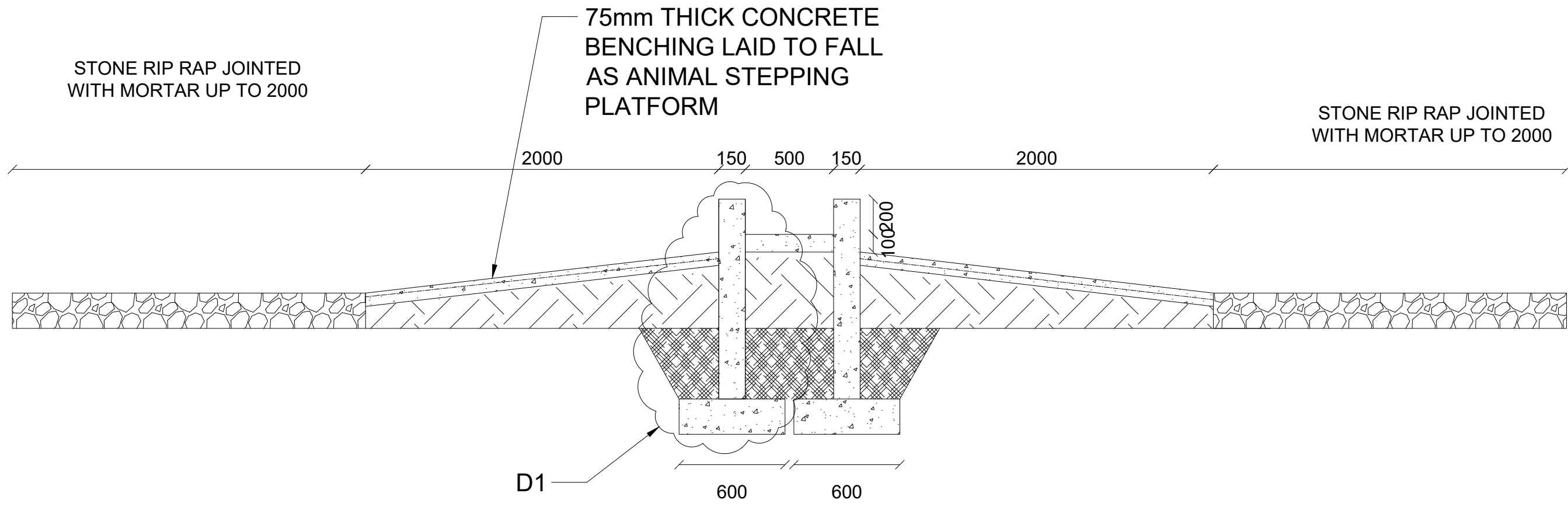




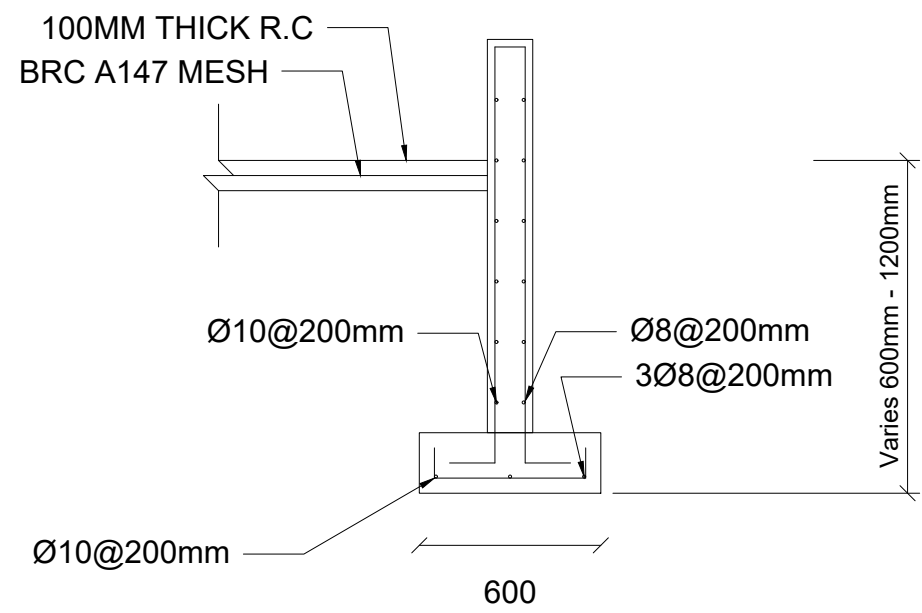
ANIMAL TROUGH PLAN (GOAT/SHEEP)  
SCALE: 1:25



SECTION Y-Y (CATTLE)  
SCALE: 1:25



SECTION X-X (GOAT/SHEEP)  
SCALE: 1:25



DETAIL 1  
SCALE: 1:25

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Program



Client:

GOVERNMENT OF SOUTH SUDAN

Implemented By:

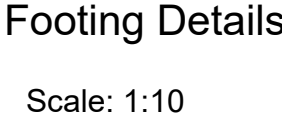


Project:


PROPOSED WATER YARD  
20M3 CAPACITY ELEVATED TANK  
Drawing Title

ANIMAL TROUGH (GOAT/SHEEP)

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Sheet #: 13/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2



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Program	
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Client:

GOVERNMENT OF SOUTH SUDAN

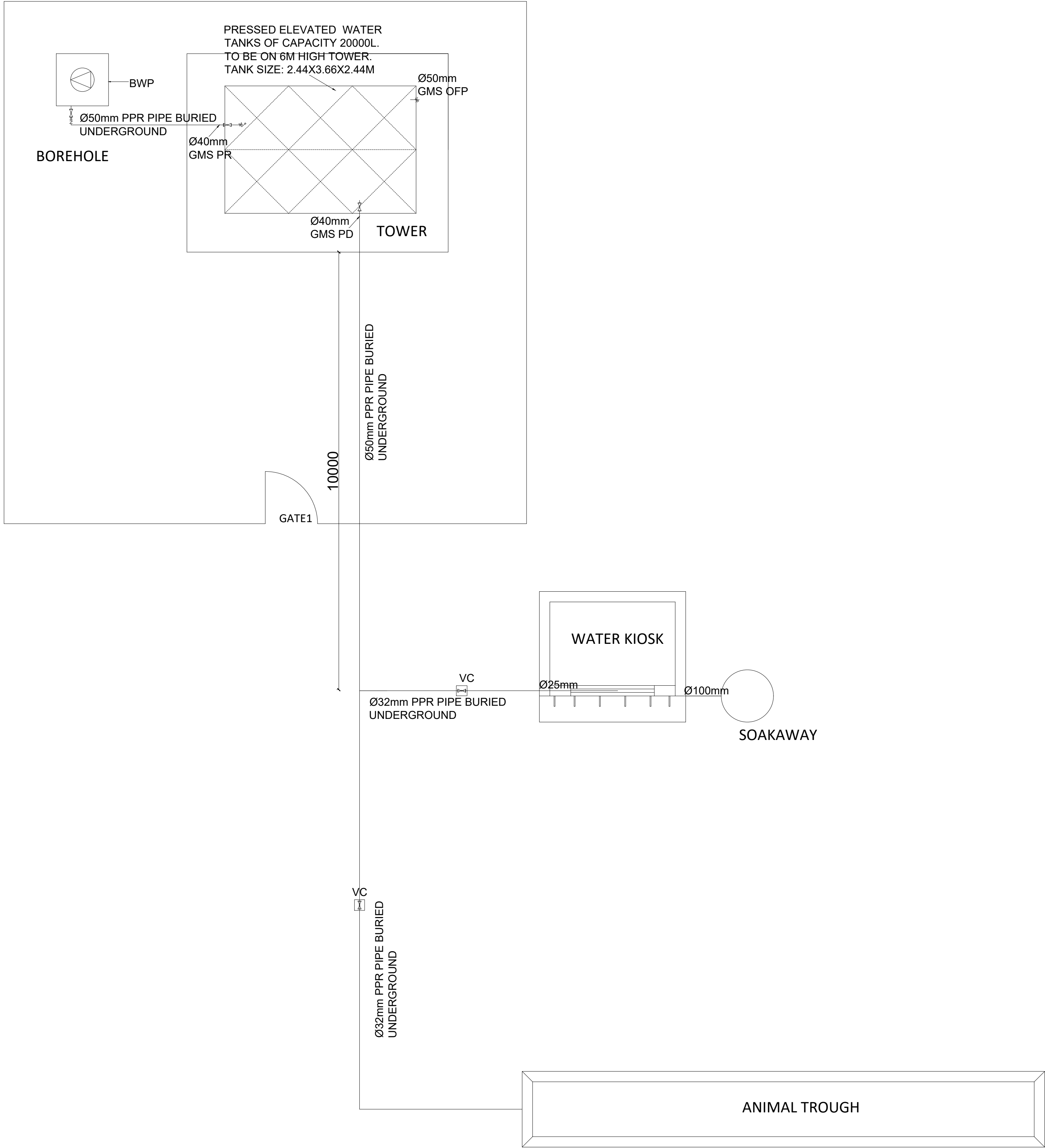
Implemented By:



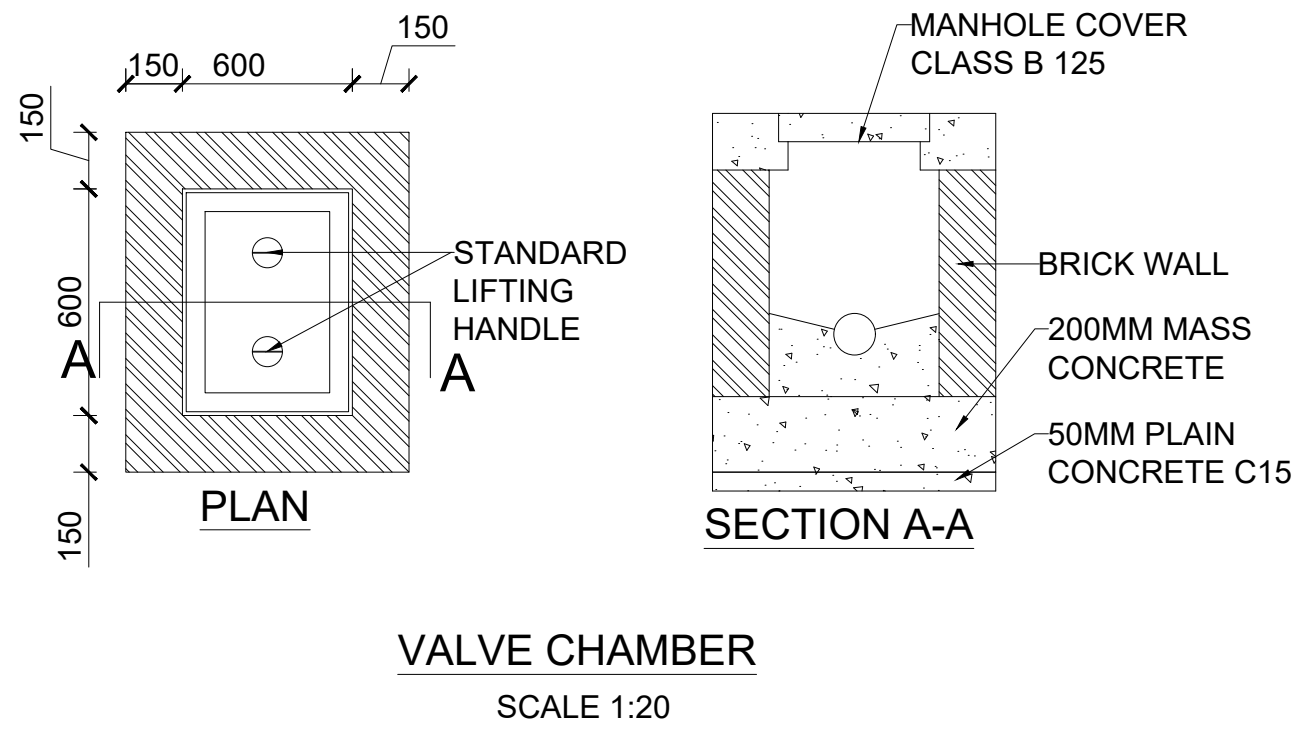
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	

ELEVATED BOREHOLE PLATFORM	
Designed By: H.A	Drawn by: H.A
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Sheet #: 14/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2





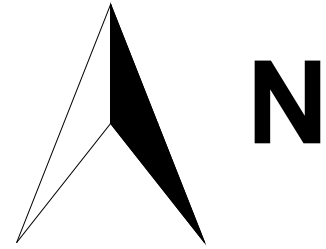
LEGEND		
1	PD	PIPE DROP
2	PR	PIPE RISE
3	H/L	HIGH LEVEL
4	VC	VALVE CHAMBER
5	PPR	POLYPROPYLENE PIPE
6	BWP	BOREHOLE WATER PUMP
7	WM	WATER METER
8		PUMP
9	OFP	OVER FLOW PIPE
10	F/A	FROM ABOVE
11	T/A	TO ABOVE
12	F/B	FROM BELOW
13	T/B	TO BELOW
14		BFV - BALL FLOAT VALVE
15		ISOLATED VALVE
16		NON-RETURN VALVE



PUMP SCHEDULE

ITEM	REF	DESCRIPTION	LOCATION	CAPACITY (M³/HR)	WORKING PRESSURE (BAR)	POWER REQUIRED (KW)	PROPOSED MODEL (OR EQUIV AND APPROVED)	REMARKS
1	BWP1	BOREHOLE WATER PUMP	BOREHOLE (40M DEEP)	2	5	0.5	GRUNDFOS 2.5 - 2, 50HZ	MAXIMUM INSTALLATION DEPTH 40M
2	BWP1	BOREHOLE WATER PUMP	BOREHOLE 80M DEEP)	2	9	0.9	GRUNDFOS 2.5 - 2, 50HZ	MAXIMUM INSTALLATION DEPTH 80M
3	BWP1	BOREHOLE WATER PUMP	BOREHOLE (110M DEEP)	2	12	1.3	GRUNDFOS 2.5 - 2, 50HZ	MAXIMUM INSTALLATION DEPTH 120M

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Program



Client:

GOVERNMENT OF SOUTH SUDAN

Implemented By:



Project:

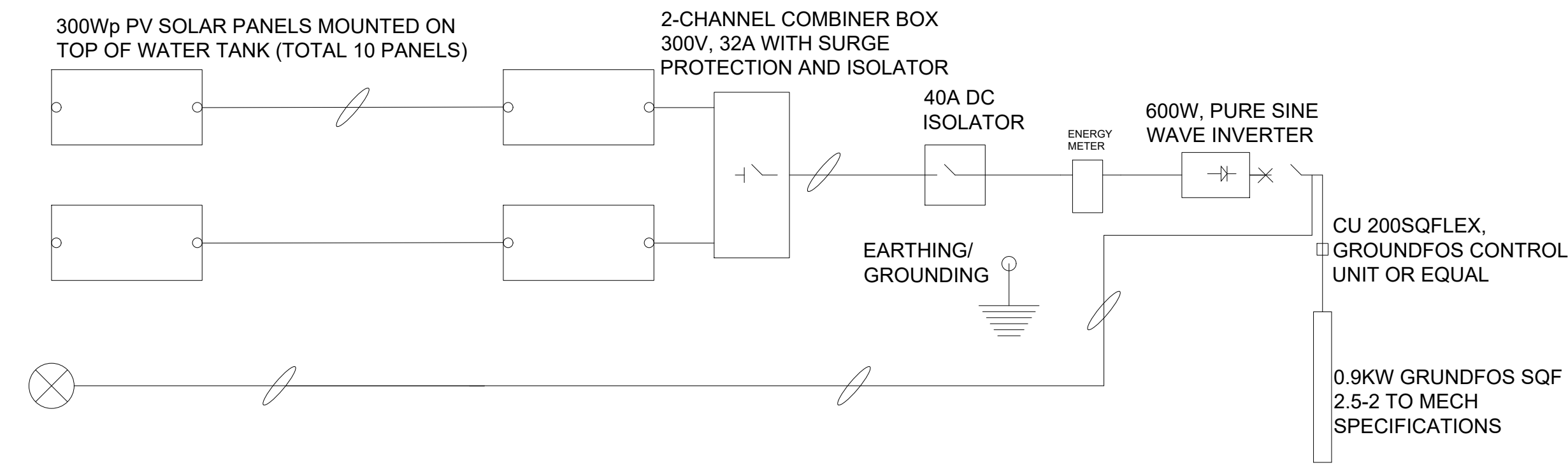
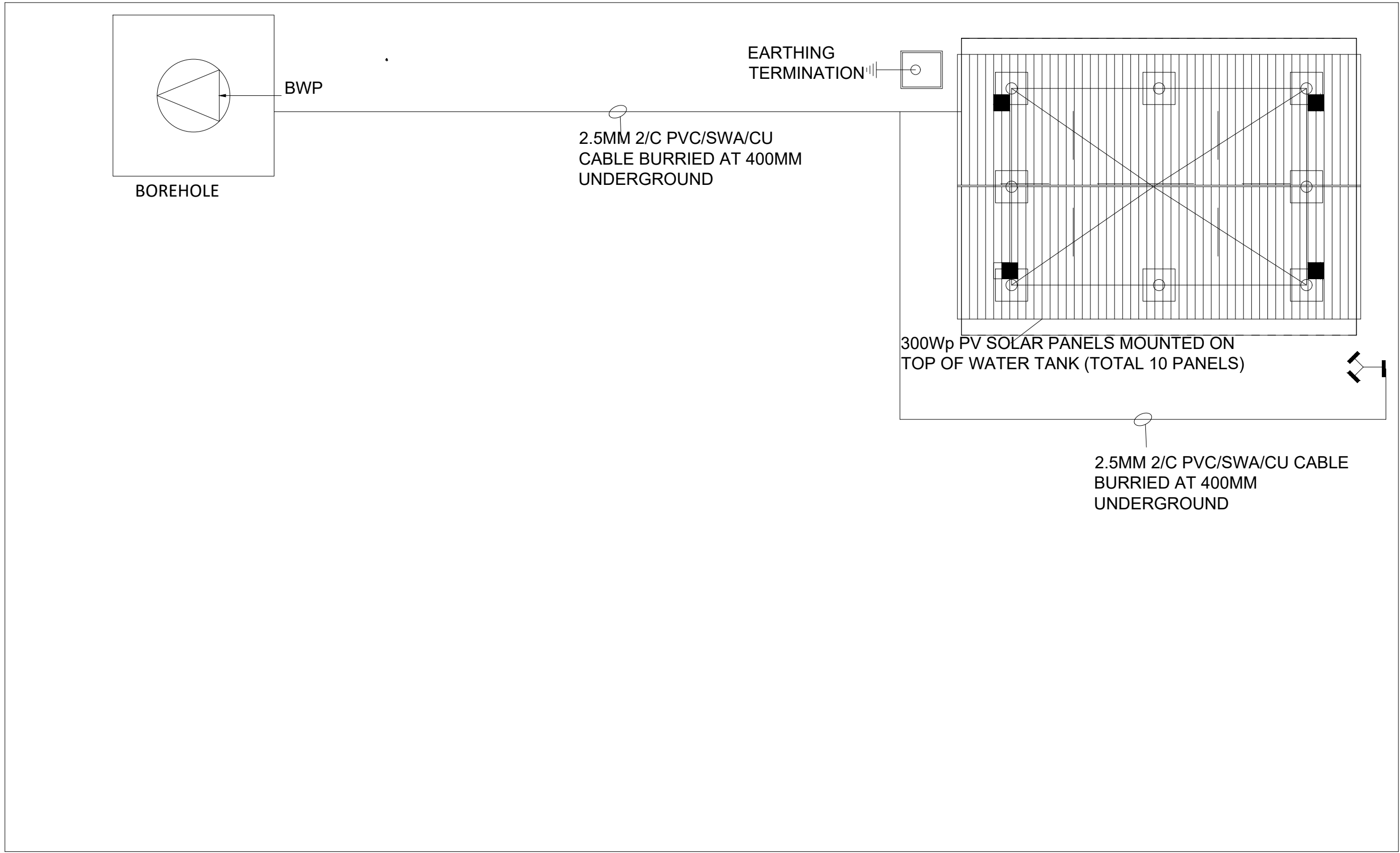
PROPOSED WATER YARD

20M3 CAPACITY ELEVATED TANK

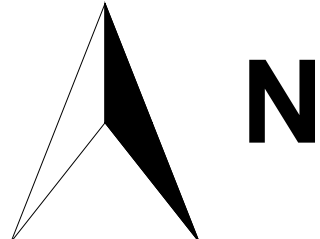
Drawing Title

MECHANICAL



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- CABLES**
- 4SQ.MM SC XLPE/SWA/XLPE/SWA COPPER CABLE
  - 6SQ.MM SC XLPE/SWA/XLPE/SWA COPPER CABLE
  - 6SQ.MM 2C XLPE/SWA/XLPE/SWA COPPER CABLE
- SPACE REQUIREMENT**
- EACH 300WP SOLAR PANEL - 1640MM X 980MM

- GENERAL NOTES:
- 
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Program	
 <div>Enhancing Community Resilience and Local Governance Project Phase II (ECRP II)</div>	
Client:	
GOVERNMENT OF SOUTH SUDAN	
Implemented By:	
	
Project:	
PROPOSED WATER YARD	
20M3 CAPACITY ELEVATED TANK	
Drawing Title	
ELECTRICAL	
Designed By: H.A	Drawn by: H.A
Checked: F.E & G.O	Approved: -----
Sheet #: 16/16	Scale: AS SPECIFIED
Date: 13 February 2024	Rev: 2