

Key Plan

Tp #	House Hold Name	Tap coordinates		
		X (m)	Y (m)	Elev (m)
1	Said Mohammad kh	614,434.00	3,780,801.50	1,430.38
2	Subz Ali	614,394.02	3,780,726.52	1,437.59
3	Abdul Nabi	614,370.00	3,780,698.00	1,439.94
4	Malang	614,352.59	3,780,638.77	1,441.09
5	Lal Zai	614,352.50	3,780,621.50	1,440.20
6	Mohammad Yasee	614,433.00	3,780,600.50	1,419.27
7	Amir ullah	614,348.56	3,780,584.20	1,437.94
8	Mukhtar	614,355.50	3,780,544.00	1,434.74
9	Mohammad Yunas	614,305.50	3,780,549.00	1,448.08
10	Islam Jan	614,410.95	3,780,507.39	1,423.18
11	Jaweed	614,364.50	3,780,463.50	1,432.87
12	kandahar	614,387.00	3,780,462.00	1,427.55
13	Mohammad Jamil	614,427.00	3,780,770.00	1,431.64
14	Mohammad Ali jan	614,406.00	3,780,831.74	1,440.00
15	Naseem	614,400.00	3,780,665.50	1,431.21
16	Imam	614,364.88	3,780,571.18	1,433.46
17	Amad zia	614,457.00	3,780,680.00	1,416.28

Project Name	Naryan Village Water Solar Operated HH Pipe Scheme			BHA/IMC	
Designed by IMC/WASH-TEAM	Checked/Reviewed by ENGLMYSTUP_MAZHAR	Approved by HQ_Syed Yasir Ahmad	Date SEP/2022	Scale AS-SHOWN	
Province	Nangarhar	HORIZONTAL ALIGNMENT			
District	Pachir Agam				
Village/CDC	Naryan				
		DRAWING#1	Edition 1ST_VERSION	Sheet SHEET_3	

DRAWING#1

Edition

The diagram illustrates a cross-section of a pipe trench. At the top, a yellow box labeled "PIPE TRENCH DETAIL" is centered. Below it, a horizontal line represents the "Ground Level". The trench is defined by two vertical lines. The top width of the trench is labeled "70cm". The depth of the trench is labeled "80cm". The bottom of the trench is labeled "20cm" from the bottom of the trench. The bottom of the trench is labeled "Backfilling by excavated Site Soil with proper compaction". The bottom of the trench is labeled "Backfilling with Soft Soil or fine sand". The bottom of the trench is labeled "Water PE Pipe". The bottom of the trench is labeled "Red Warning Plastic Tape". The bottom of the trench is labeled "60cm".

S/N	Feature Name	Easting (M)	Northing (M)	Elevation (m)
1	Water Well	614,331.86	3,780,611.59	1441
2	Water Tank	614,259.16	3,780,646.32	1465

Note:

1. The unit used for length is meter and for diameter is (").
2. HDPE-100E, pipe 16 Bar used for Ø20, Ø25 and Well-Back pipes, and HDPE-PE100, 10 Bars is used for larger sizes of the pipes, from Ø32 and above (As per pipe standard Catalogue).
3. All diameter of PE pipe in drawing considered Outer Diameter.
4. The design/drawing has been prepared based on GPS surveyed data, therefore the flow must be checked in some critical pressure zones and in case of issues should inform the design team further technical guidance and follow ups.
5. The WASHI Site engineer and contractor should adjust the Taps flow to design flow.

The contractor's connections are not allowed, so please avoid extra taps' connection, but in case of need please contact with the design team and then you can take further steps accordingly.

Over flow 3"
GI Pipe

A

1% Slope

1% Slope

Main hole
60x60 cm

Inlet Pipe
1 1/2" GI pipe

A

PLAN

Out let 3"
GI pipe

Drain pipe
GI 2 "

Funded by:	USAID / BHA
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT	

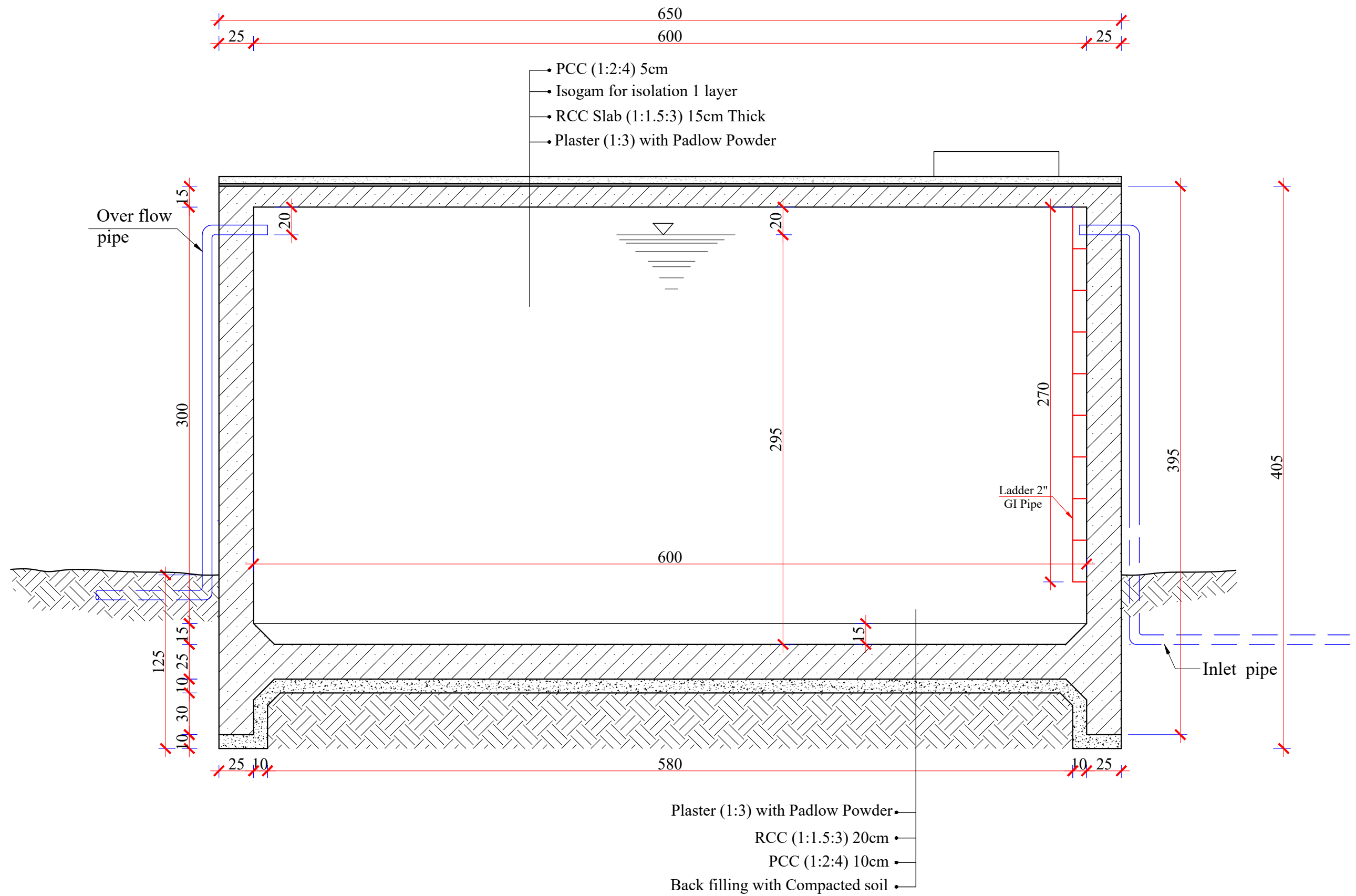
Drafted and Design BY:	IMC/WASH Team
Review and Checked by:	Eng. Yousuf Mazhar
Review and Approved by:	Eng. Mohammad Yasir

Province	Nangarhar
District	Pacher Agam
Village	Naryan

Date	Sep/2022
Scale	A3-shown
Unit	Centimeters

Drawing Title	G.W-50 M3 W.Tank
Sheet Title	Ground Plan
Sheet #	01





SECTION A-A

Funded by: USAID / BHA
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

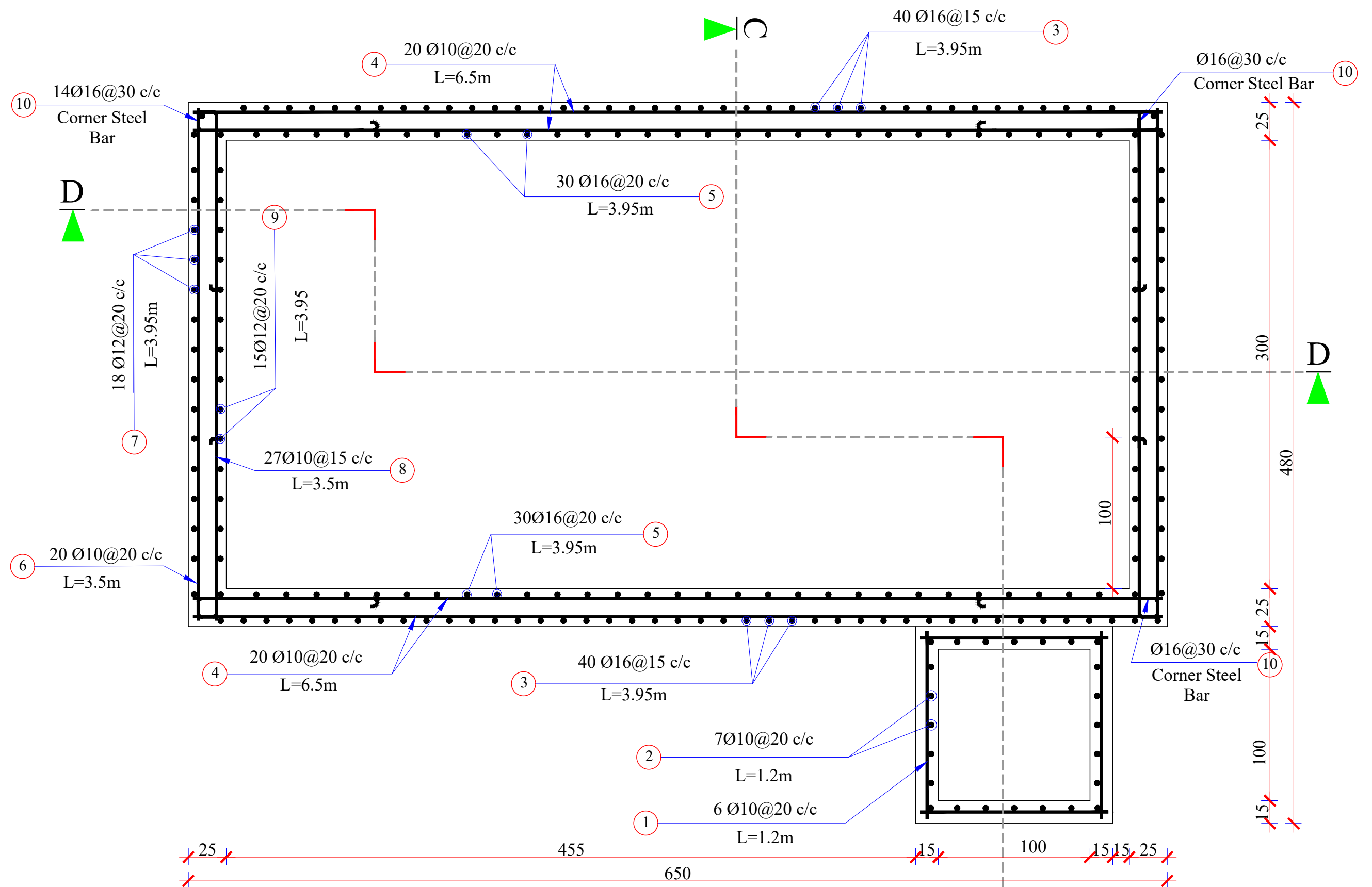
Drafted and Design BY: IMC/WASH Team
Review and Checked by: Eng. Yousuf Mazhar
Review and Approved by: Eng. Mohammad Yasir

Province: Nangarahr
District: Pacher Agam
Village: Naryan

Date: Sep/2022
Scale: A3-Shown
Unit: Centimeters

Drawing Title: G.W-50 M3 W.Tank
Sheet Title: Section (A-A)
Sheet #: -----





Funded by:	USAID / BHA
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT	

Drafted and Design BY:	IMC/WASH Team
Review and Checked by:	Eng. Yousuf Mazhar
Review and Approved by:	Eng. Mohammad Yasir

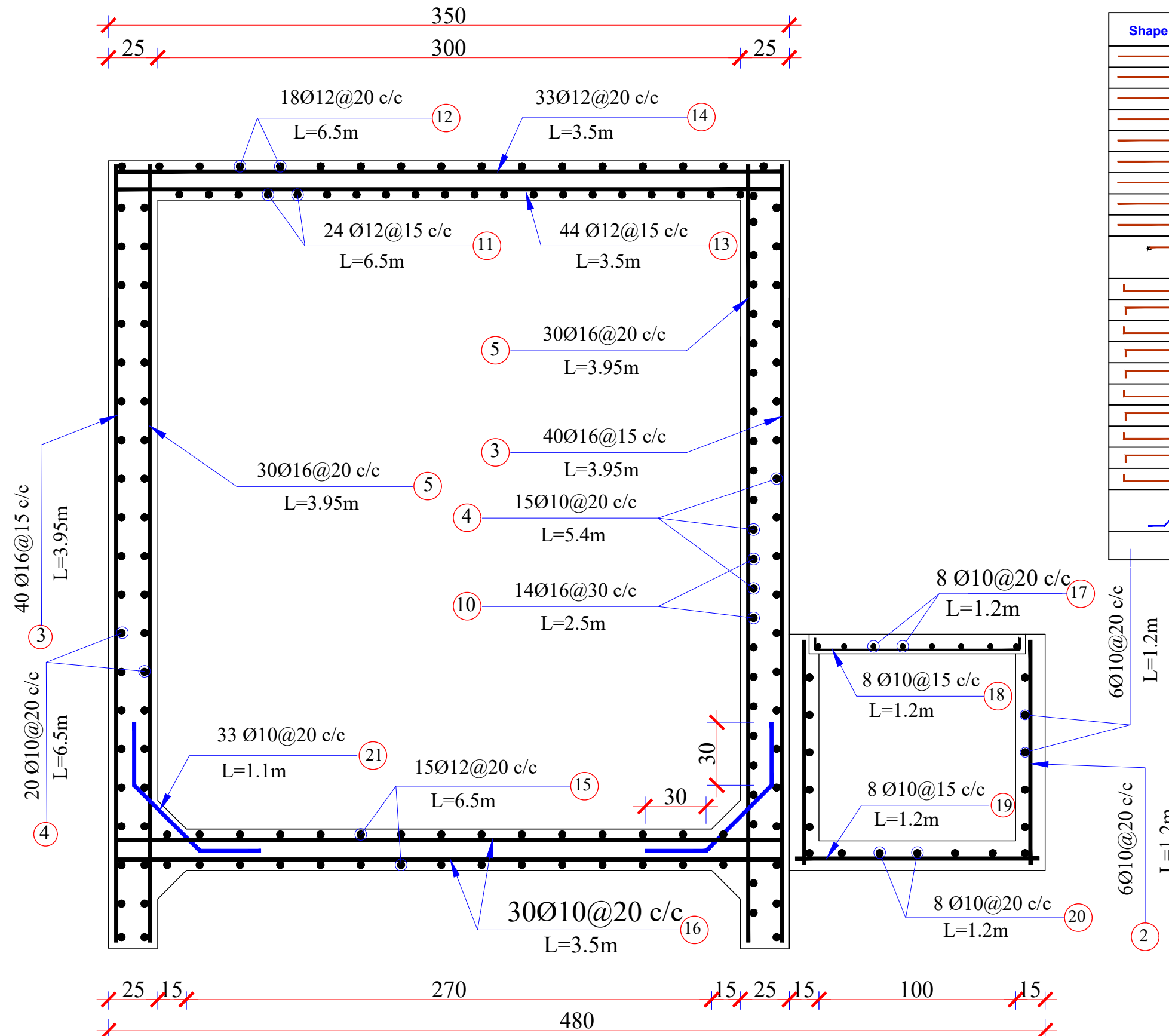
Province	Nangarhar
District	Pacher Agam
Village	Naryan

Date	Sep/2022
Scale	A3-Shown
Unit	Centimeters

Drawing Title	G.W-50 M3 W.Tank
Sheet Title	Renfor. Plan
Sheet #	-----



STEEL BAR SCHEDULE FOR 50 CUBIC METER RCC WATER RESERVOIR



SECTION C-C

Shape of bar	Bar No	Bar Dia (mm)	Number of Bar	Total Number	Length (m)	Total Leng (m)	Weight (kg/m)	Total weight (kg)	Total weight +5% (kg)
	1	10	4x6	24	1.2	28.8	0.6166	17.76	18.65
	2	10	4x7	28	1.2	33.6	0.6166	20.72	21.75
	3	16	2x40	80	3.95	316	1.579	499	523.95
	4	10	2x20	40	6.5	260	0.6166	160.32	168.33
	5	16	2x30	60	3.95	237	1.579	374.22	392.93
	6	10	2x20	40	3.5	140	0.6166	86.32	90.64
	7	12	2x18	36	3.95	142.2	0.888	126.1	132.4
	8	10	2x27	54	3.5	189	0.6166	116.54	122.36
	9	12	2x15	30	3.95	118.5	0.888	104.79	110.
	10	16	14x4	56	2.5	140	1.579	221.06	232.11
	11	12	1x24	24	6.5	156	0.888	138.52	145.45
	12	12	1x18	18	6.5	117	0.888	103.9	109.1
	13	12	1x44	44	3.5	154	0.888	136.75	143.58
	14	12	1x33	33	3.5	115.5	0.888	102.56	107.69
	15	10	2x15	30	6.5	195	0.6166	120.23	126.24
	16	10	2x30	60	3.5	210	0.6166	129.48	135.96
	17	10	8	8	1.2	9.6	0.6166	5.91	6.22
	18	10	8	8	1.2	9.6	0.6166	5.91	6.22
	19	10	8	8	1.2	9.6	0.6166	5.91	6.22
	20	10	8	8	1.2	9.6	0.6166	5.91	6.22
	21	12	100	100	1.1	110	0.888	97.68	102.56
Total Weight Bar +5% (Kg)									2709 kg

Note:

- 1- All dimensions are in cm unless otherwise stated.
- 2- During RCC work vibrator must be used to avoid water leakage from reservoir.
- 3- All PCC works should be with 1:2:4 mortar unless otherwise stated.
- 4- All RCC works should be with 1:1.5:3 mortar.
- 5- Isolation material is glass wool.
- 7- Curing must be continued upto 28 days.
- 8- Clear and Clean water must be used every where.
- 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.

Funded by: USAID / BHA
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

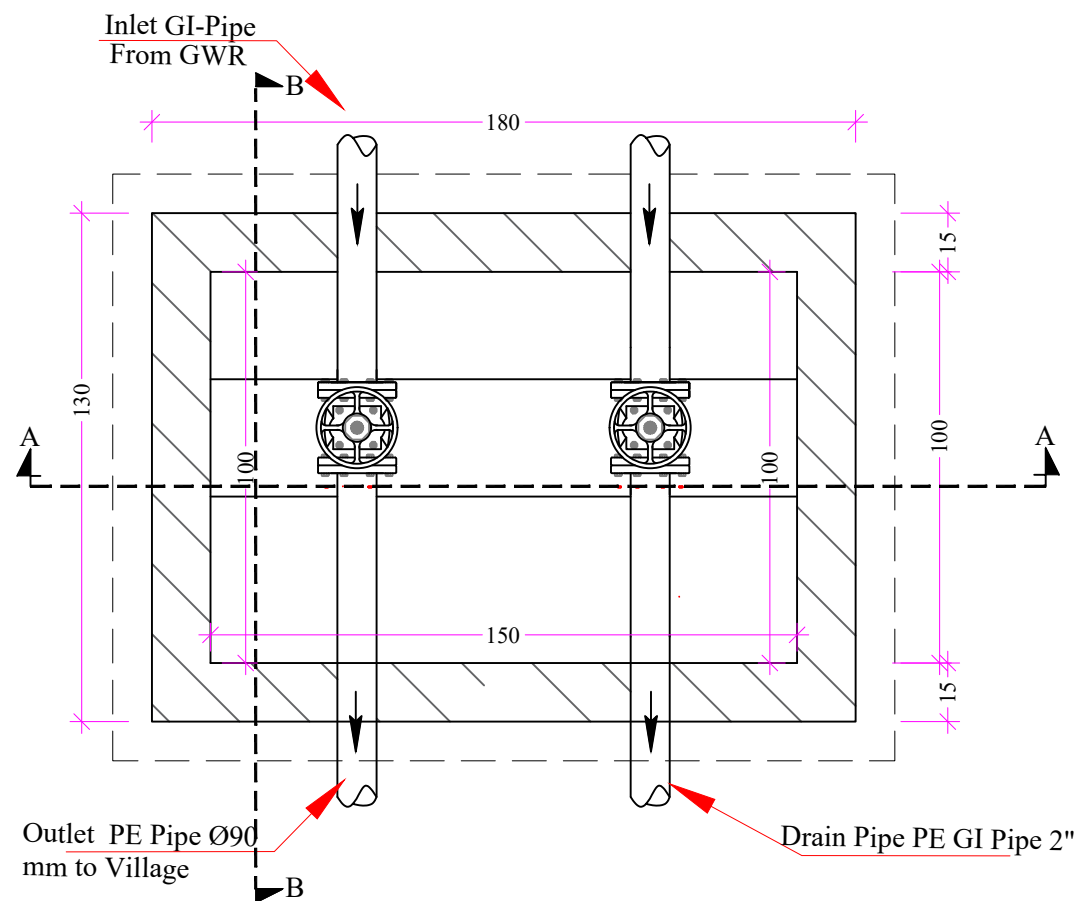
Drafted and Design BY: IMC/WASH Team
Review and Checked by: Eng. Yousuf Mazhar
Review and Approved by: Eng. Mohammad Yasir

Province: Nangarahr
District: Pacher Agam
Village: Naryan

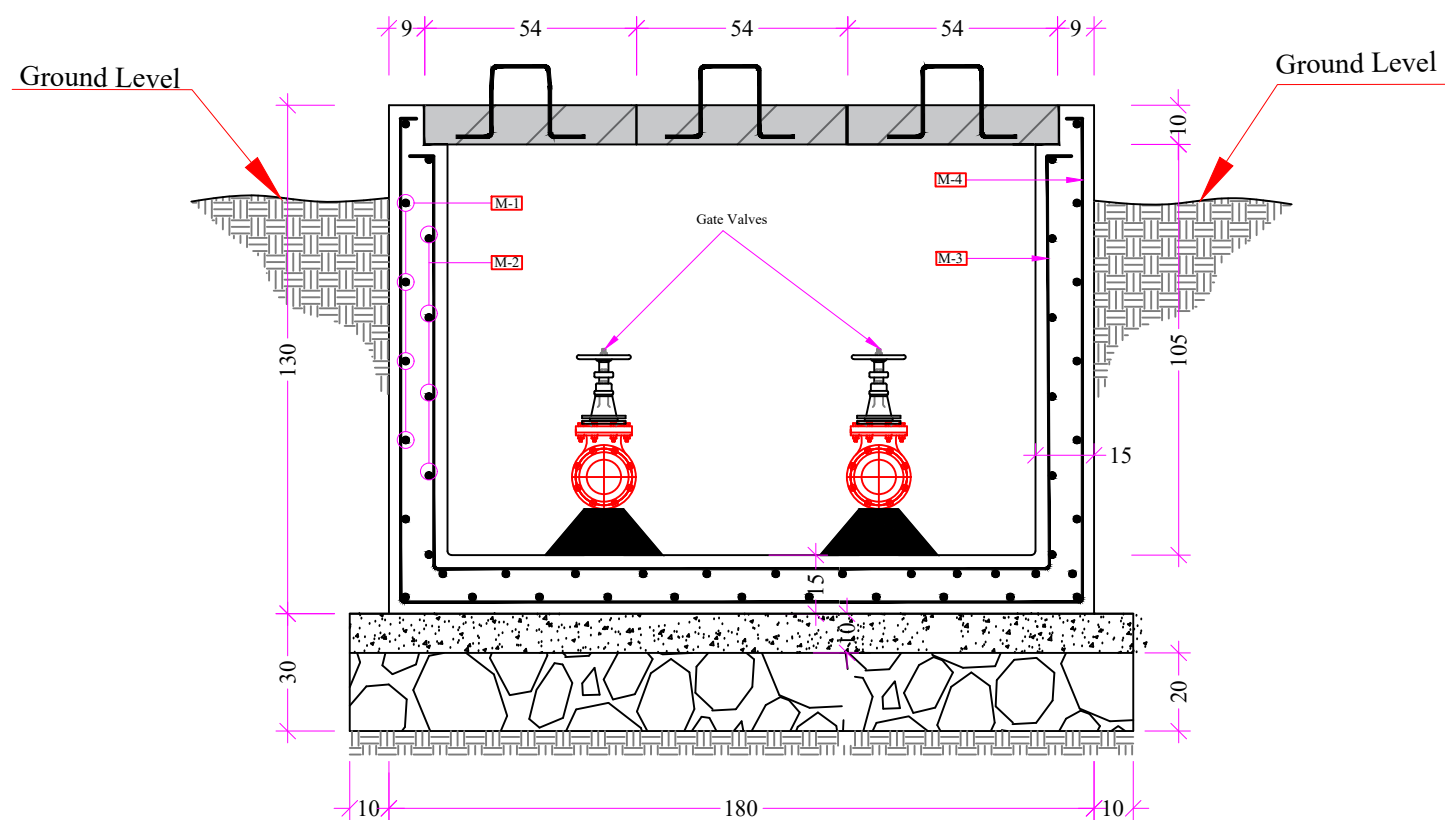
Date: Sep/2022
Scale: A3-Shown
Unit: Centimeters

Drawing Title: G.W-50 M3 W.Tank
Sheet Title: Renfor. Plan
Sheet #: -----

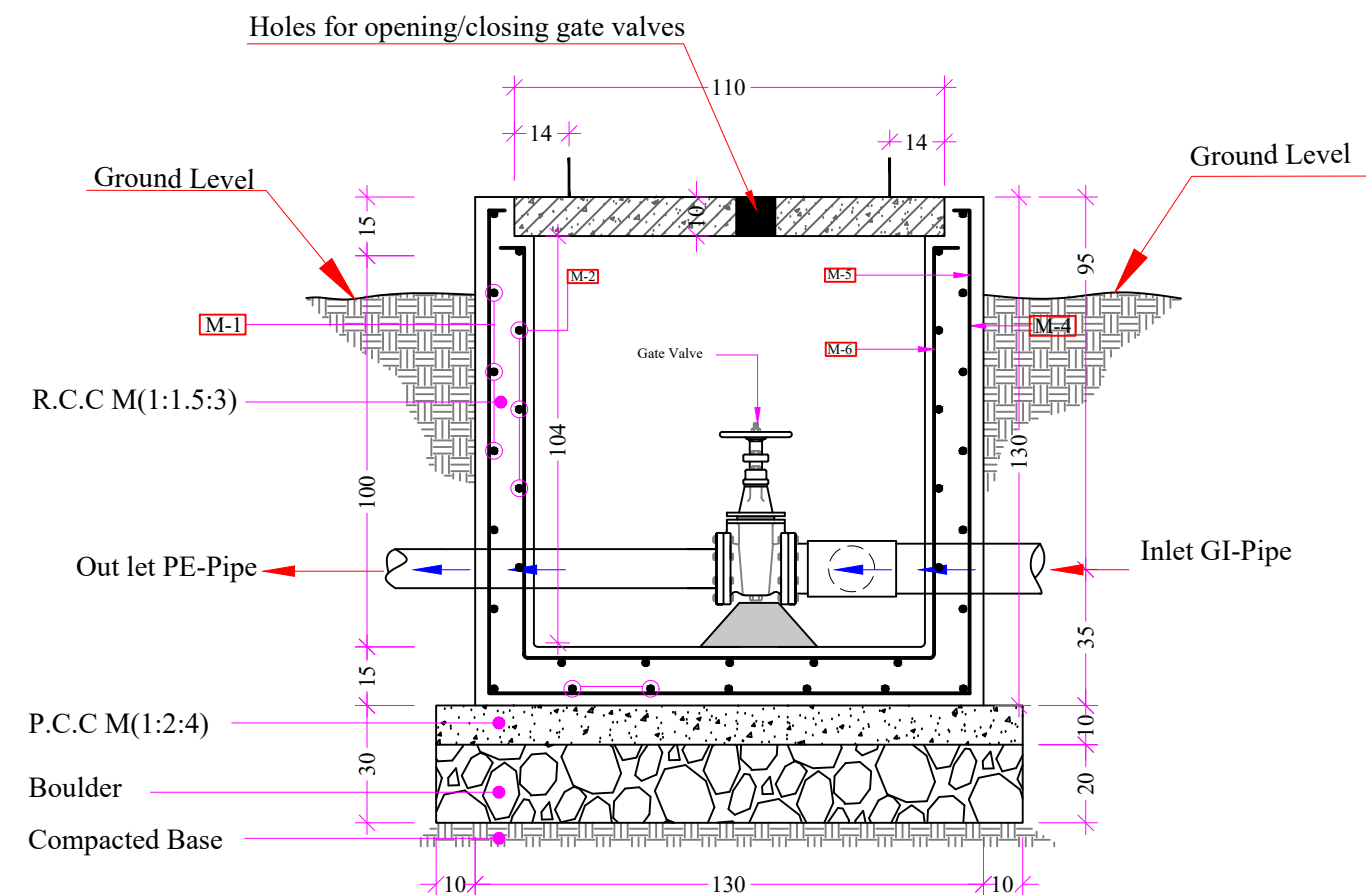




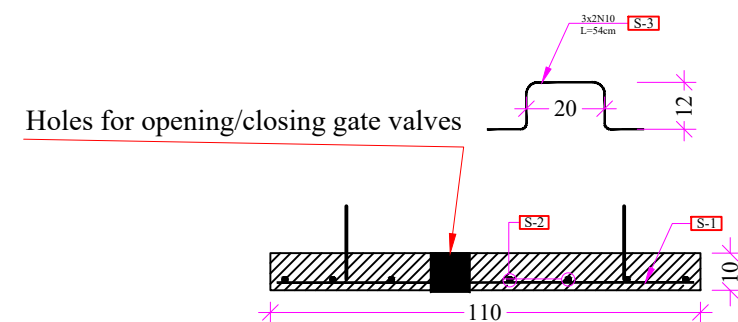
PLAN



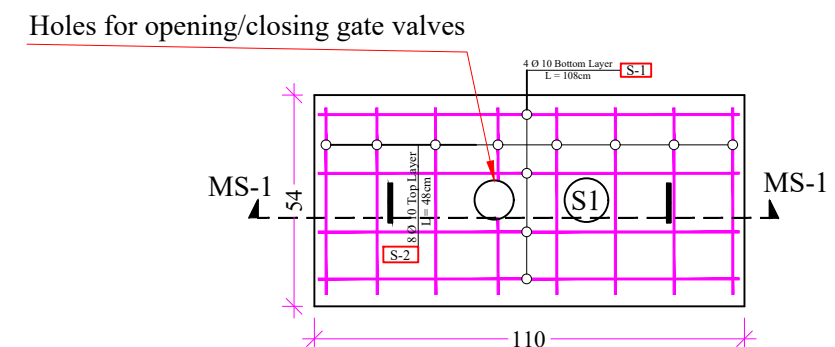
SECTION A-A



SECTION B-B



SECTION MS1-MS1



RCC SLAB PLAN

Funded by: USAID/BHA
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

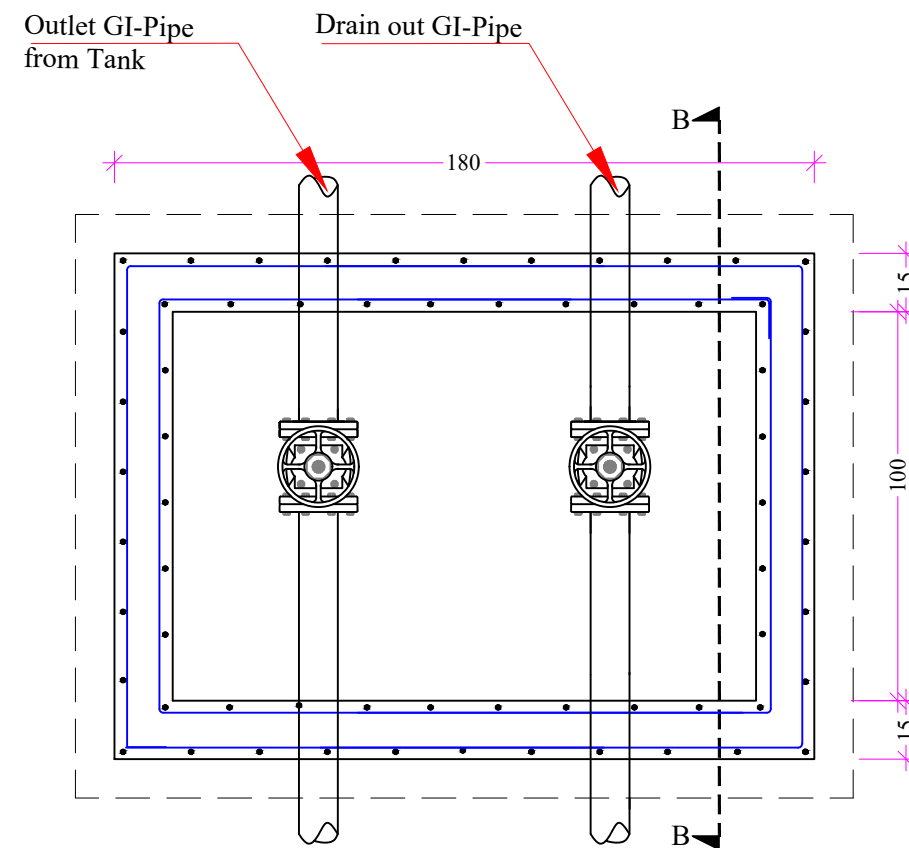
Drafted and Design BY: IMC/WASH Team
Review and Checked by: Eng. Yousuf Mazhar
Review and Approved by: Eng. Mohammad Yasir

Province: Nangarhar
District: Pacher Agam
Village: Naryan

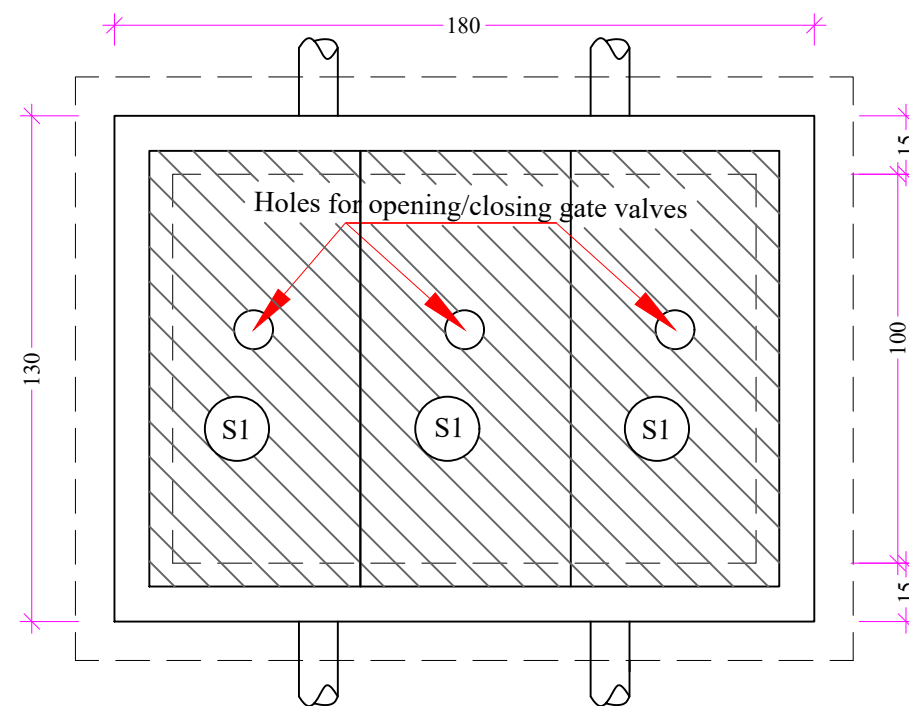
Date:
Scale: A3-Shown
Unit: Centimeters

Drawing Title: Gate Valve
Sheet Title: Renfor. Plan
Sheet #: -----

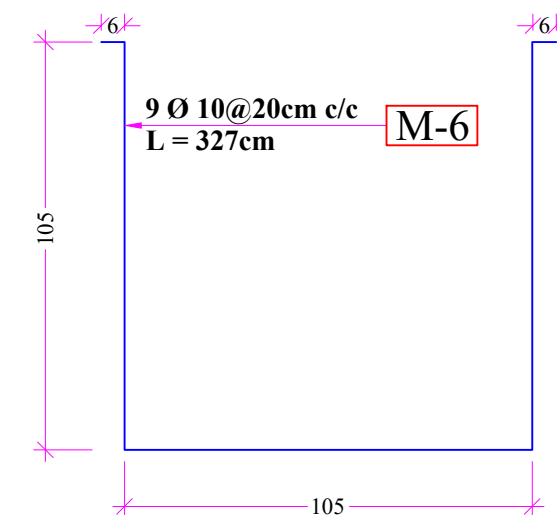
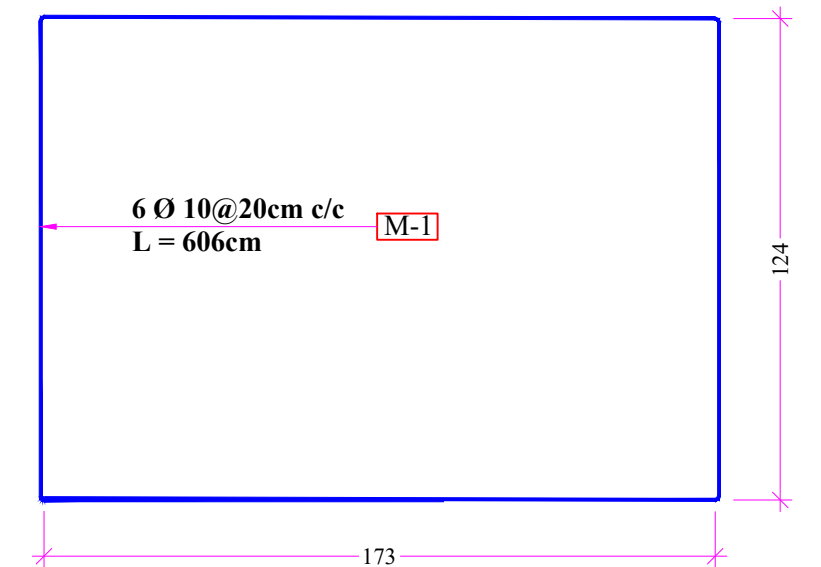
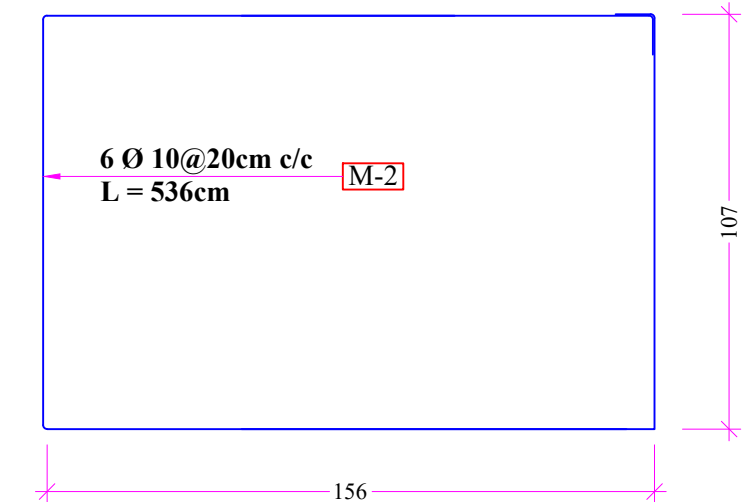
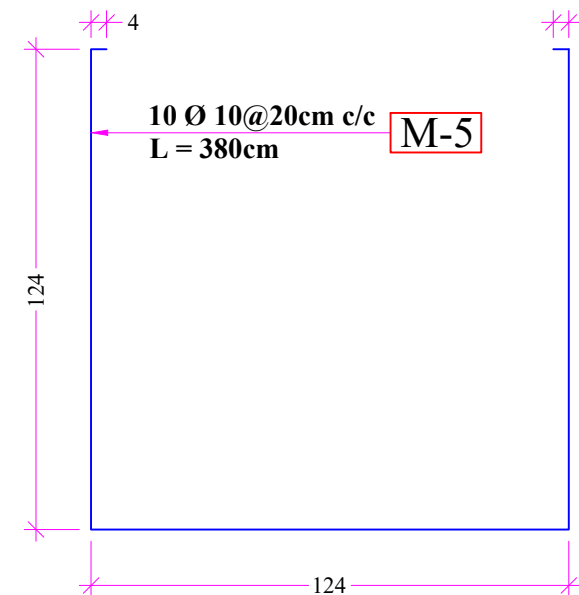
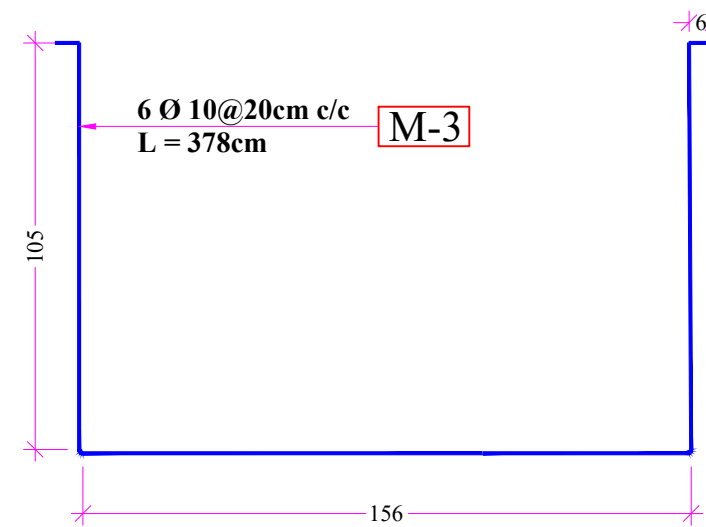
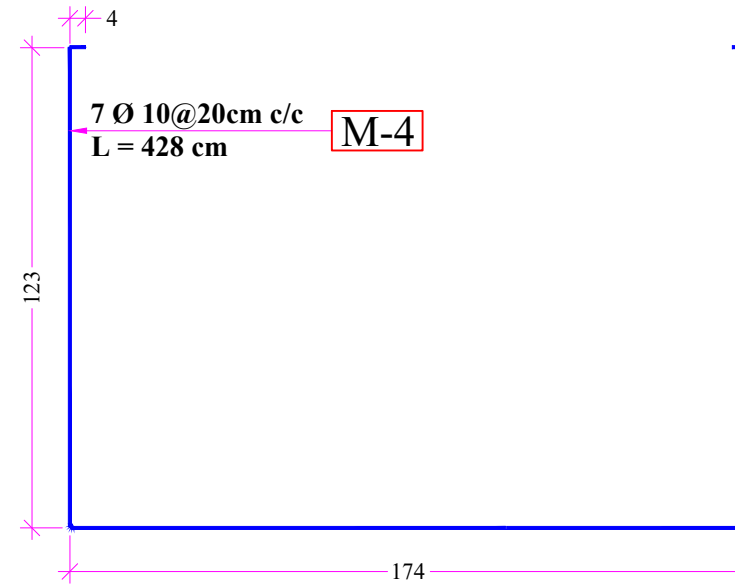




SECTIONAL PLAN OF RCC WALLS



TOP VIEW



Funded by: **USAID/BHA**
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

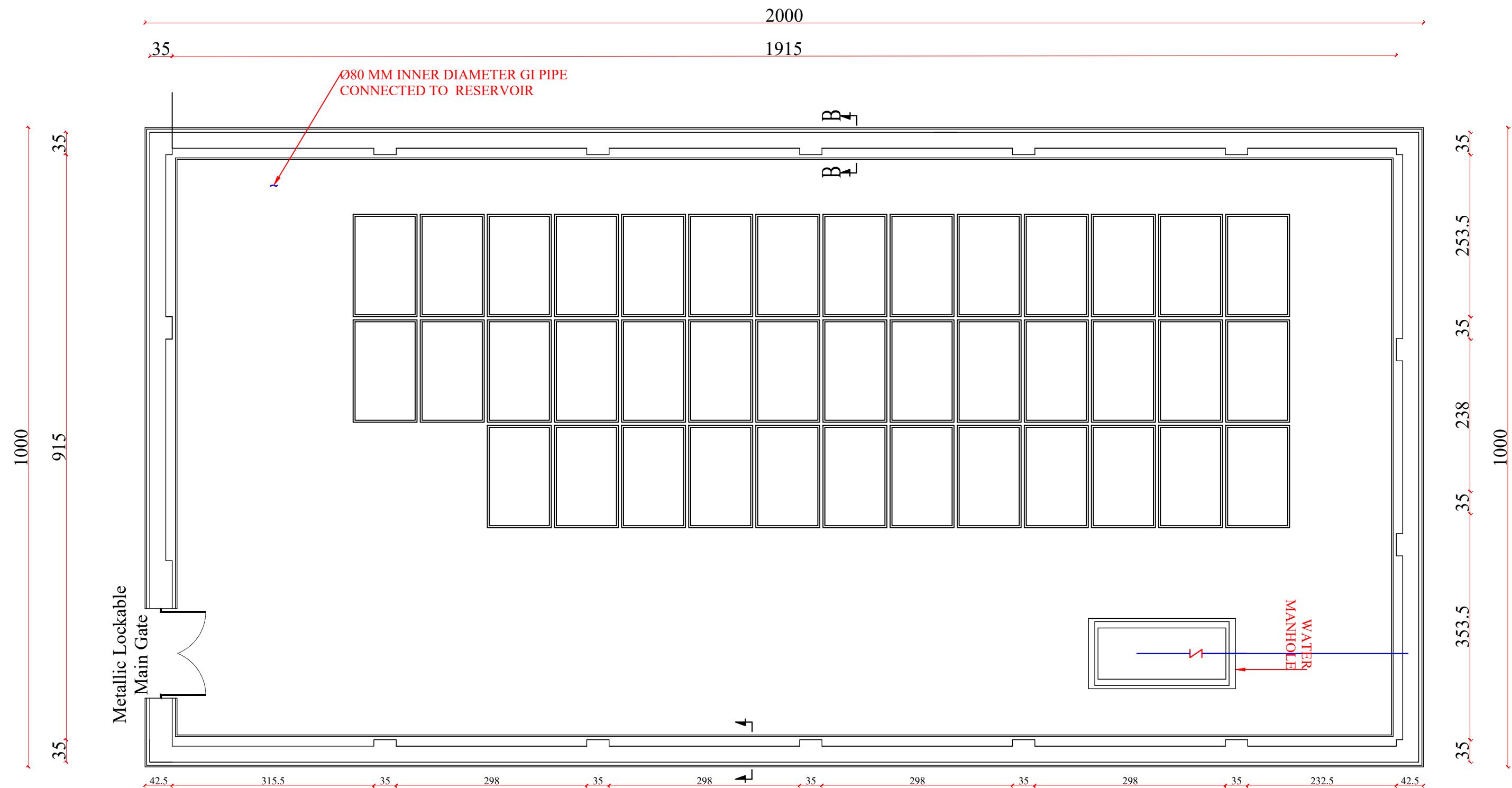
Drafted and Design BY: **IMC/WASH Team**
Review and Checked by: **Eng. Yousuf Mazhar**
Review and Approved by: **Eng. Mohammad Yasir**

Province: **Nangarhar**
District: **Pacher Agam**
Village: **Naryan**

Date:
Scale: **A3-Shown**
Unit: **Centimeters**

Drawing Title: **Gate Valve**
Sheet Title: **Renfor. Plan**
Sheet #: **-----**





- Note:
- 1- All dimensions are in cm unless otherwise stated.
 - 2- During RCC work vibrator must be used to avoid.
 - 3- All PCC works should be with M(1:2:4) mortar unless otherwise stated.
 - 4- All RCC works should be with M(1:1.5:3) mortar unless otherwise stated.
 - 5- Brick masonry (1:4).
 - 6- Curing must be continued upto 28 days.
 - 7- Clear and Clean water must be used every where.

Boundary wall

Funded by: USAID / BHA
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

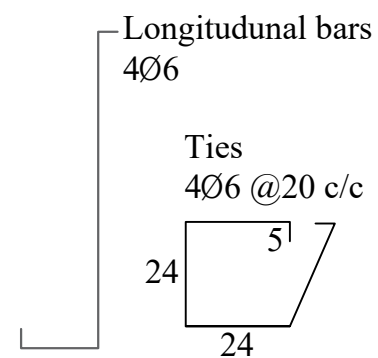
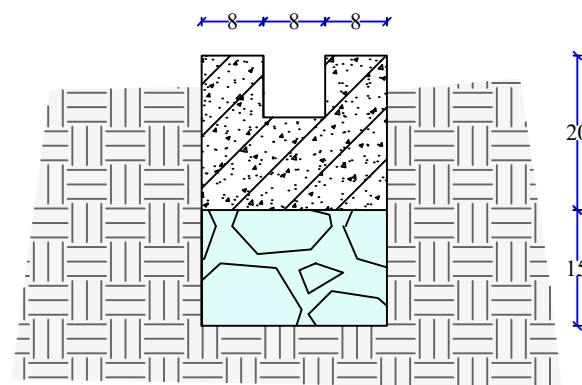
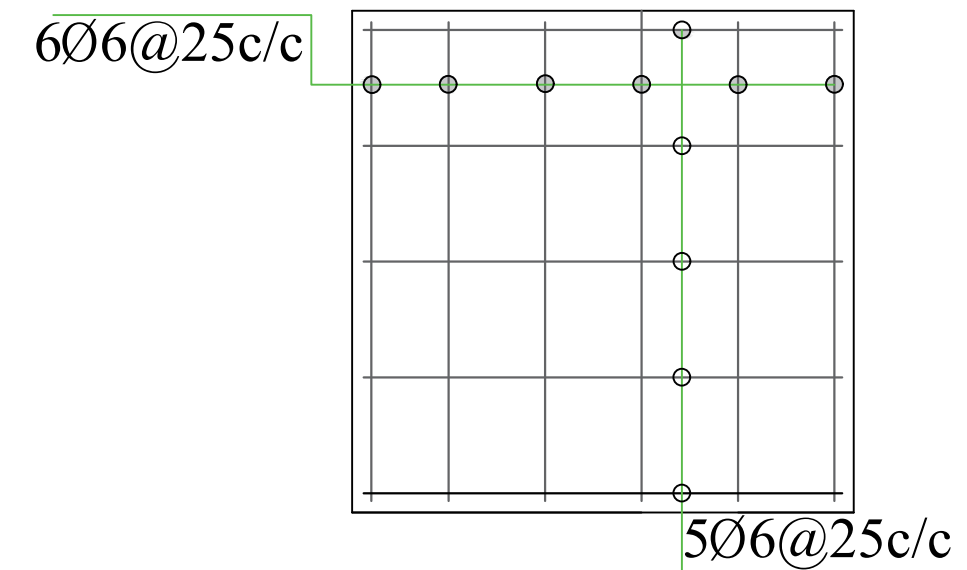
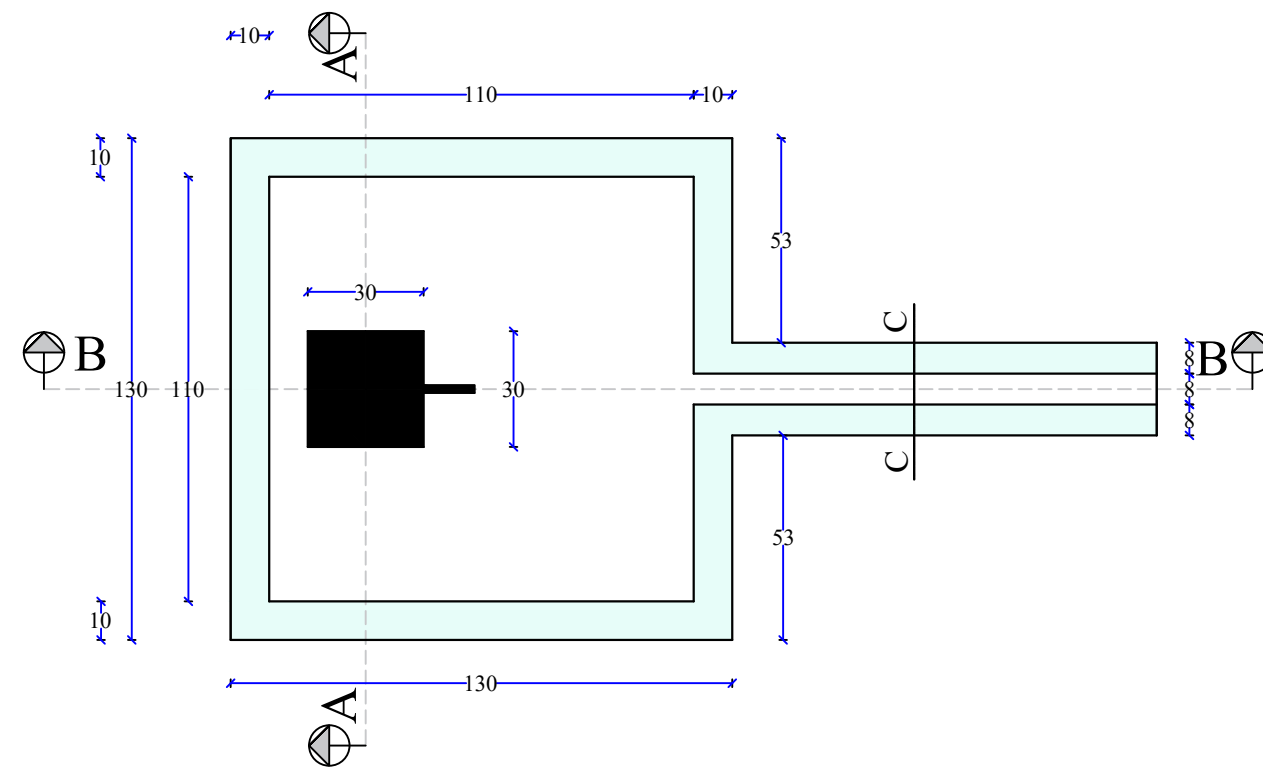
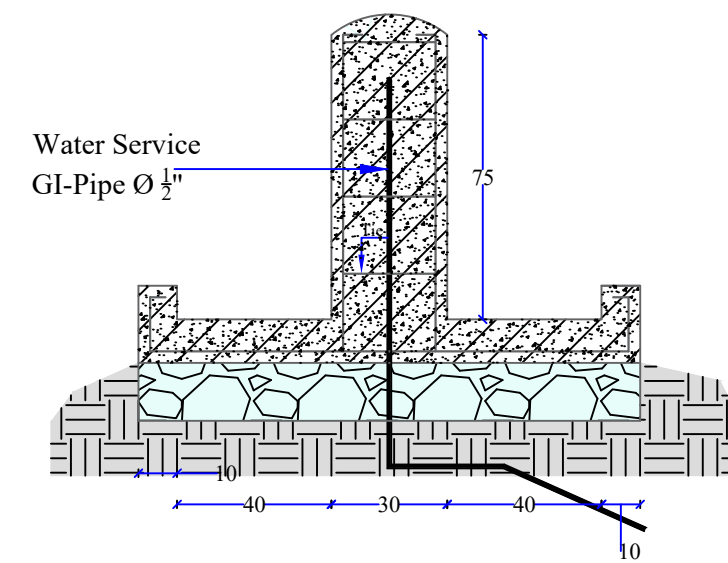
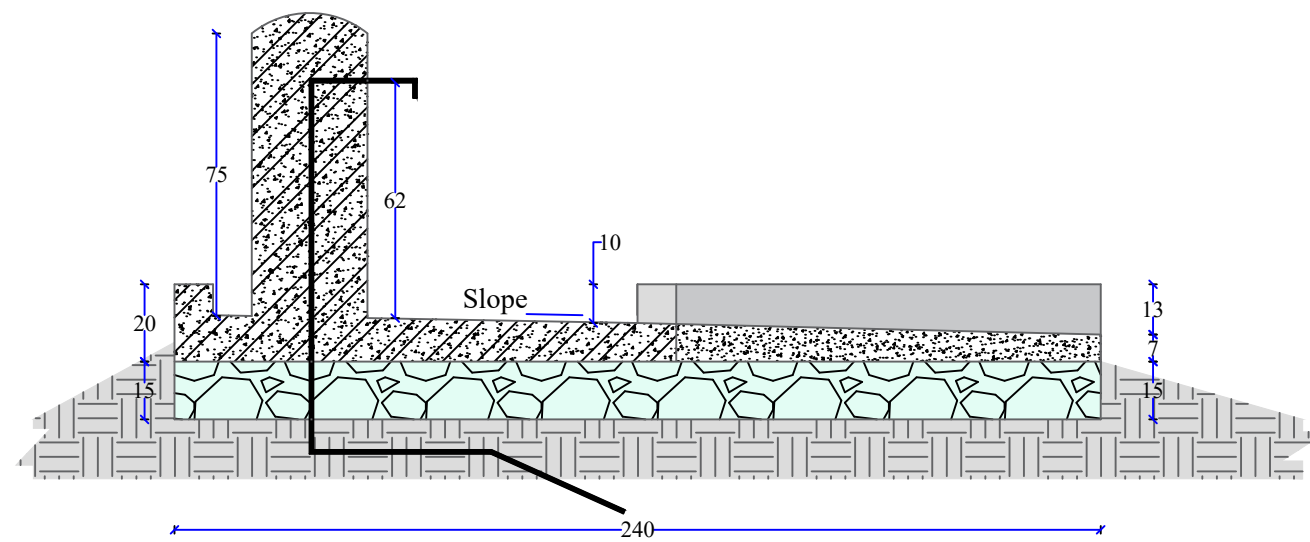
Drafted and Design BY: IMC/WASH Team
Review and Checked by: Eng. Yousuf Mazhar
Review and Approved by: Eng. Mohammad Yasir

Province: Nangarhar
District: Pcher Agam
Village: Naryan

Date: Sep/2022
Scale: A3-Shown
Unit: Centimeters

Drawing Title: Boundry Wall
Sheet Title: Boundry Wall Plan
Sheet #: -----

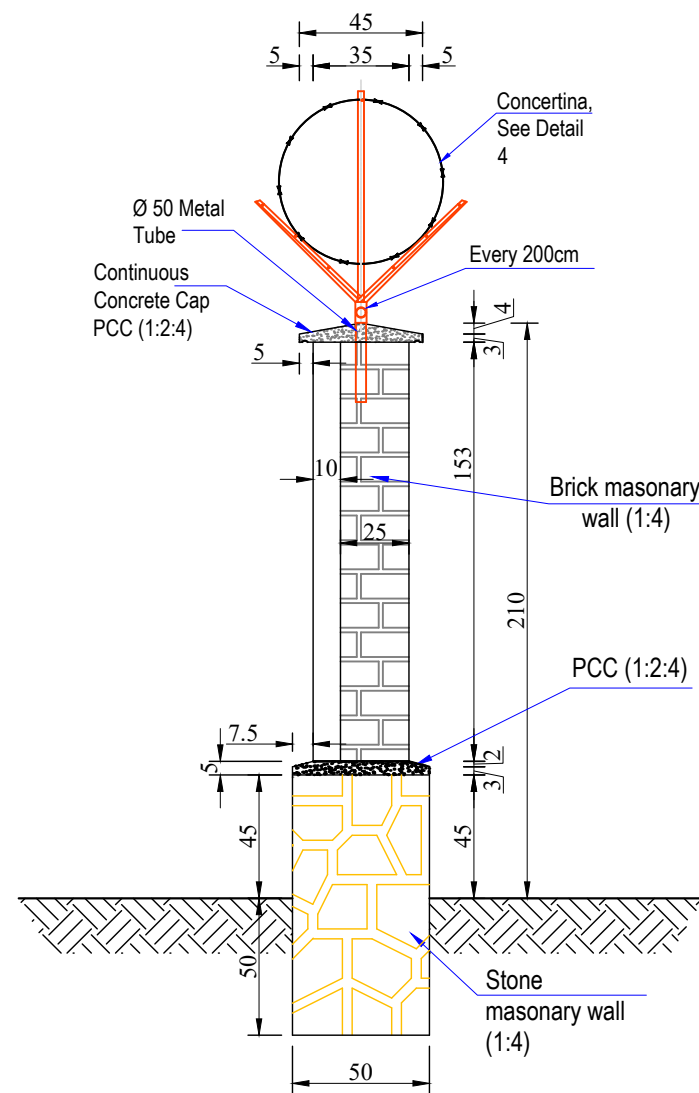




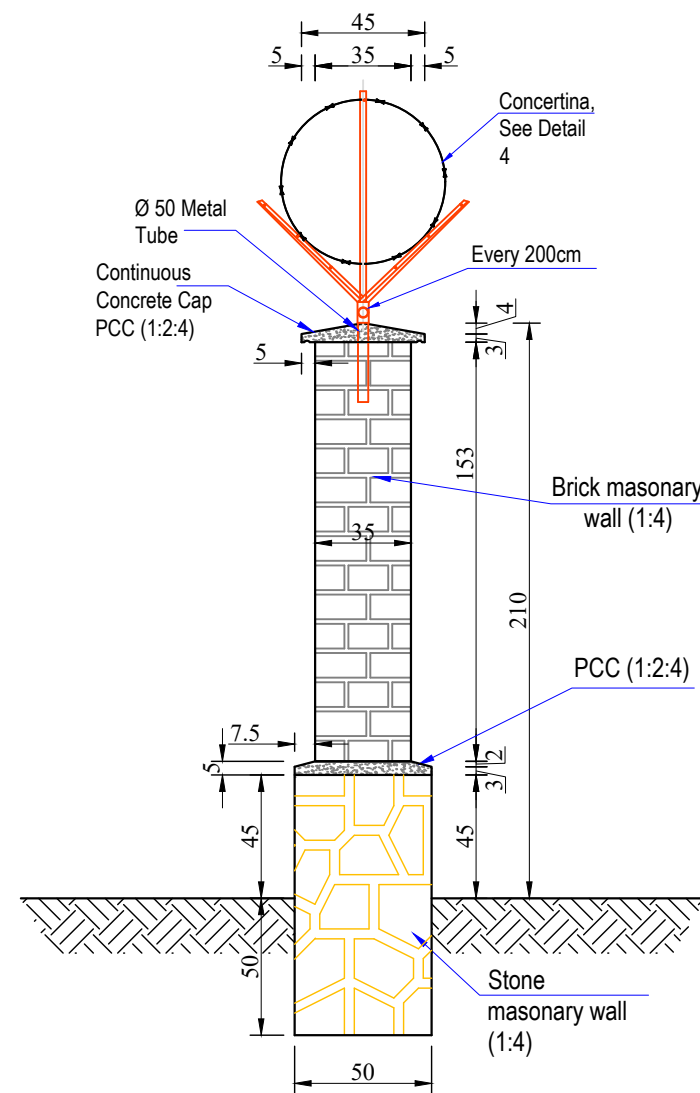
Tap Column reinfor...

Funded by:	USAID/BHA	Drafted and Design BY:	IMC/WASH Team	Province	Nangarhar	Date	Sep/2022	Drawing Title	STP. Drawing
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT		Review and Checked by:	Eng. Yousuf Mazhar	District	Pacher Agam	Scale	A3-As shown	Sheet Title	Stand post
		Review and Approved by:	Eng. Mohammad Yasir	Village	Naryan	Unit	Centimeters	Sheet #	-----

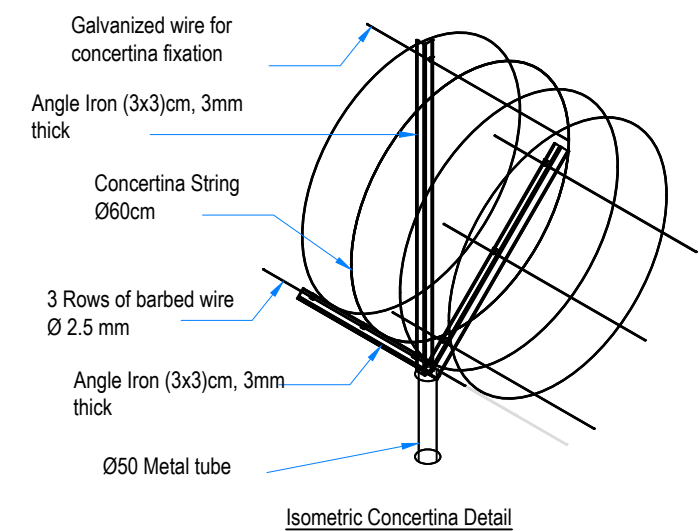
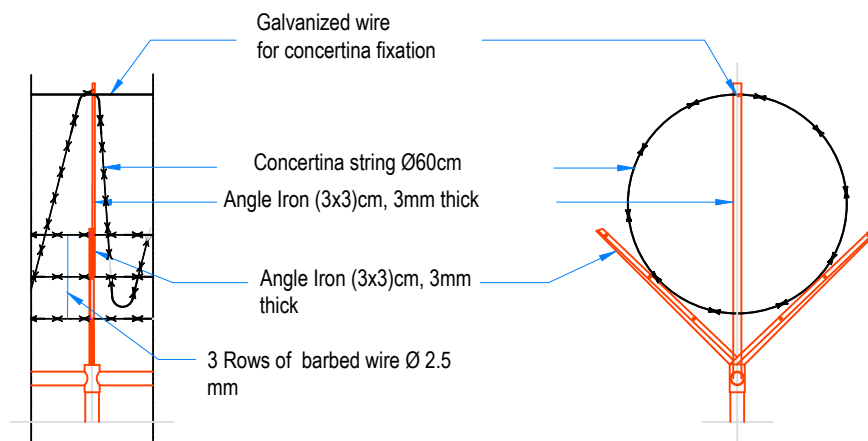
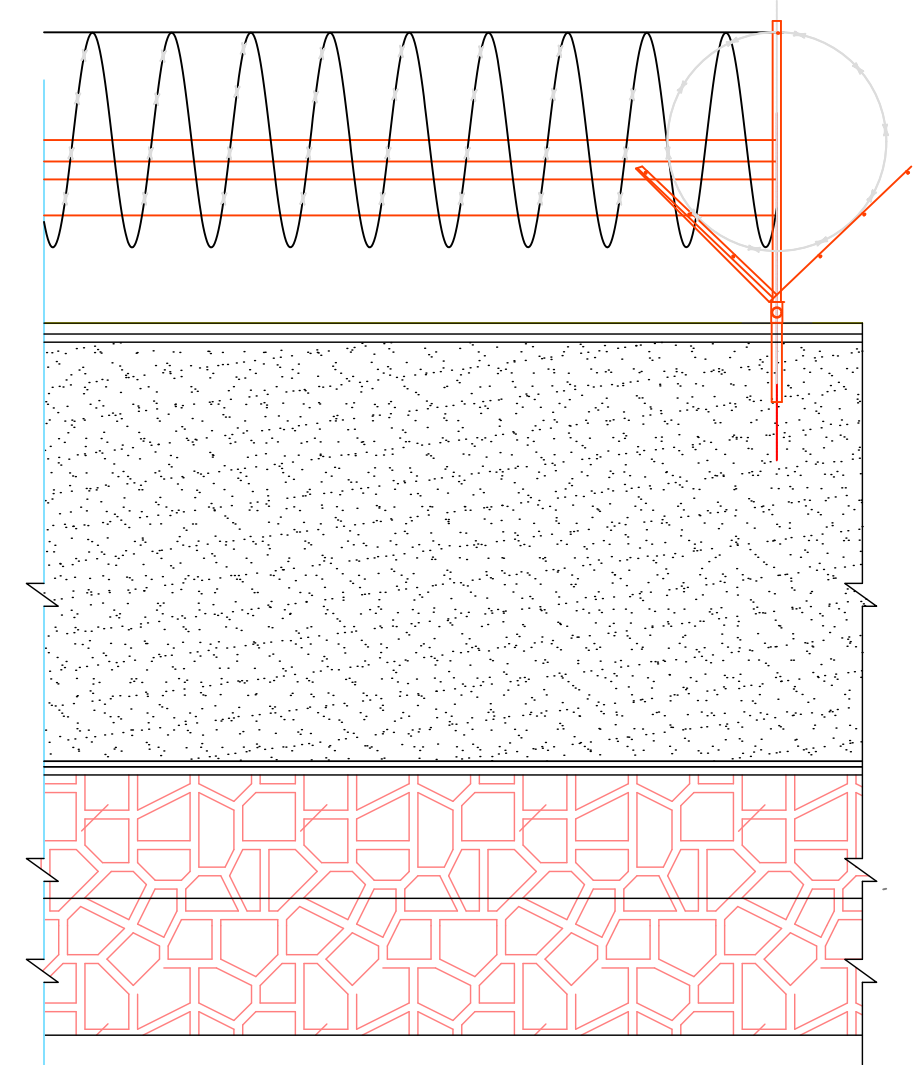




Section B-B



Section A-A



Funded by: **USAID / BHA**
INTERNATIONAL MEDICAL CORPS (IMC)
 PROGRAM DEPARTMENT
 WASH UNIT

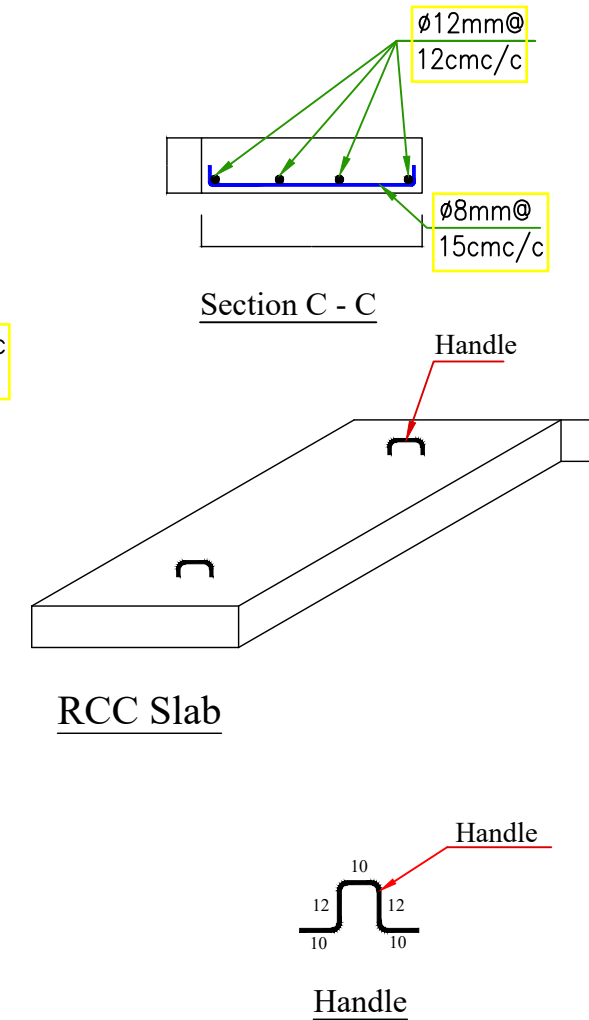
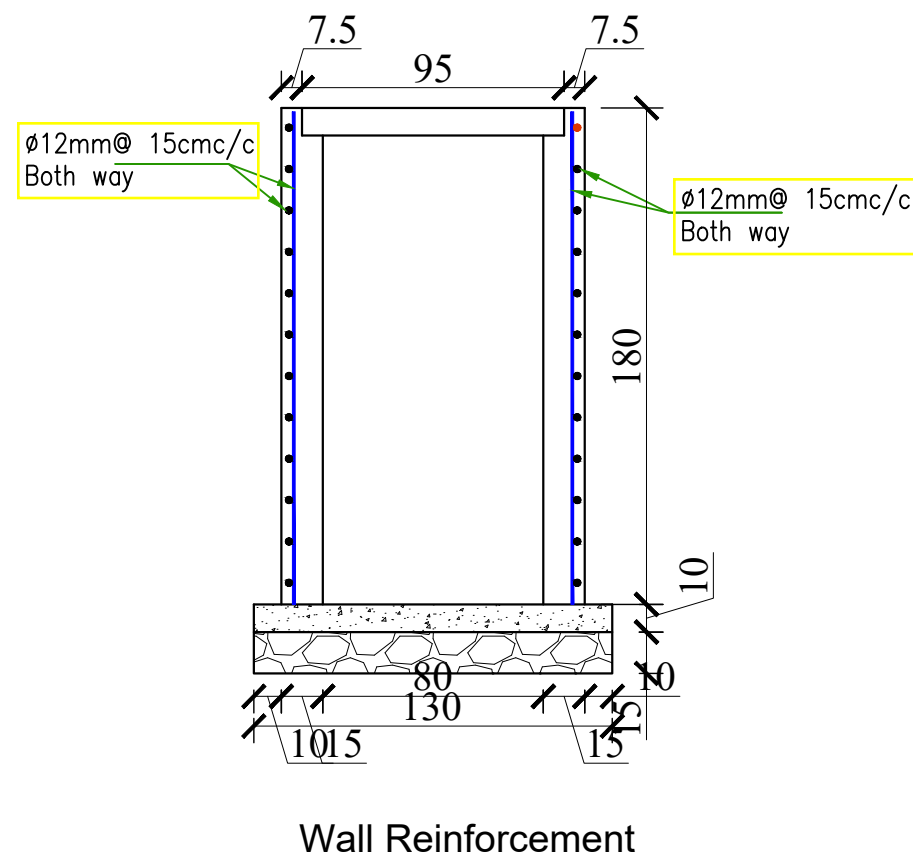
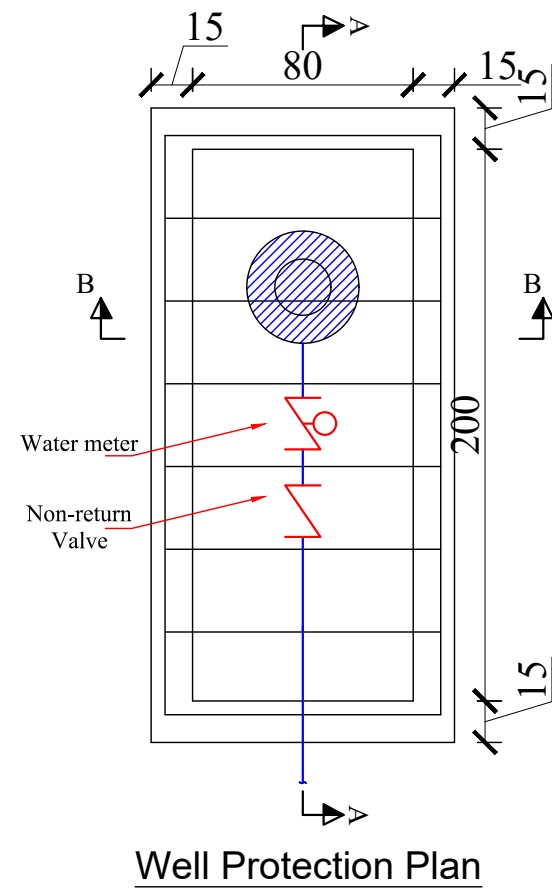
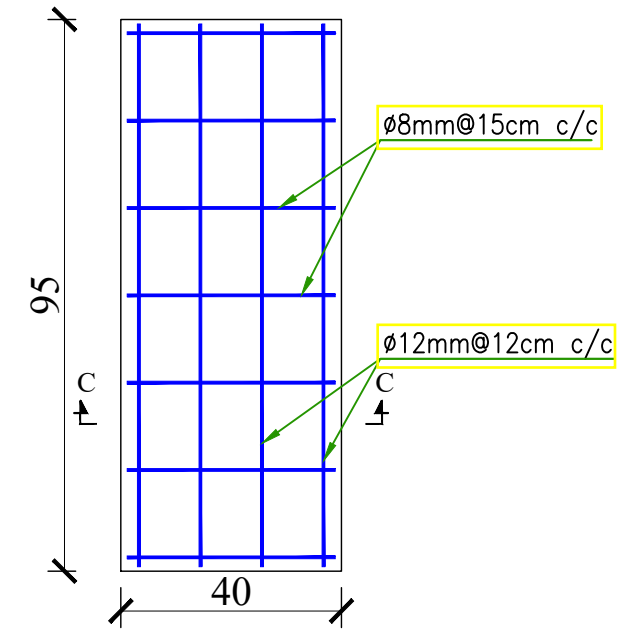
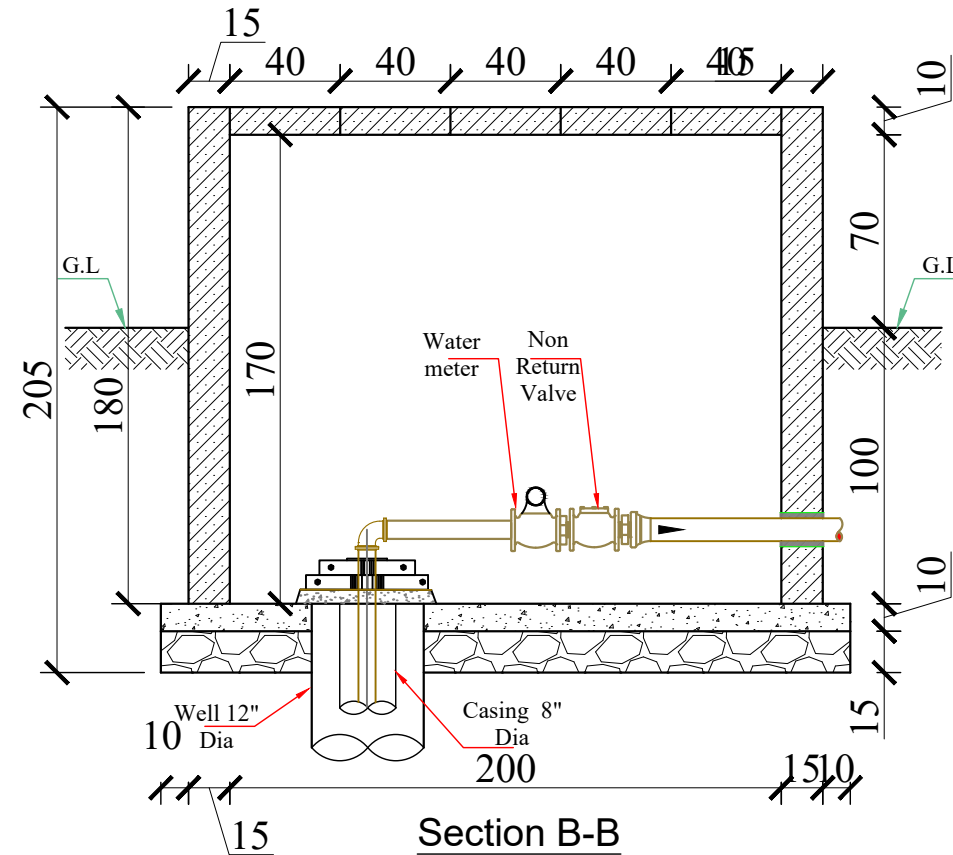
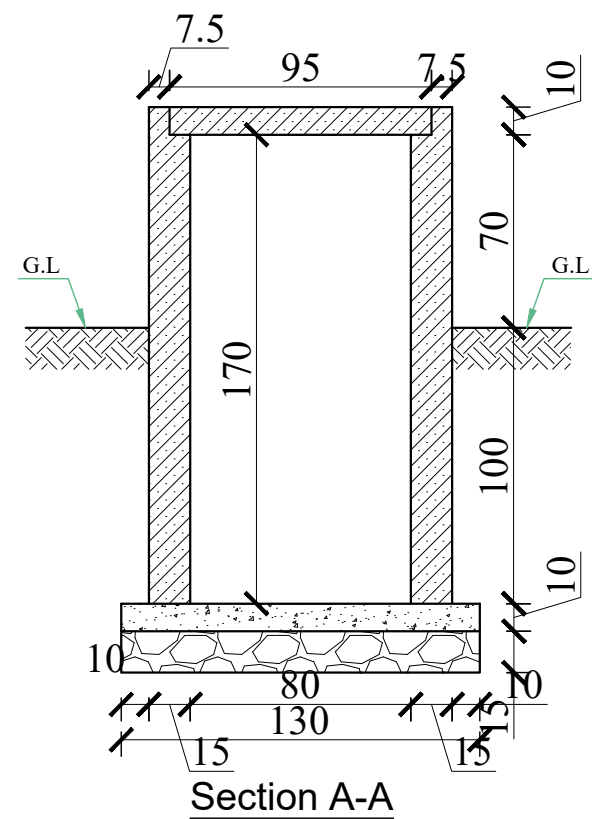
Drafted and Design BY: **IMC/WASH Team**
 Review and Checked by: **Eng. Yousuf Mazhar**
 Review and Approved by: **Eng. Mohammad Yasir**

Province: **Nangarhar**
 District: **Pacher Agam**
 Village: **Naryan**

Date: **Sep/2022**
 Scale: **A3-Shown**
 Unit: **Centimeters**

Drawing Title: **Boundry Wall**
 Sheet Title: **Front View+Section**
 Sheet #: **-----**





Funded by: USAID/BHA

INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

Drafted and Design BY: IMC/WASH Team

Review and Checked by: Eng. Yousuf Mazhar

Review and Approved by: Eng. Mohammad Yasir

Province: Nangarhar

District: Pachir Agam

Village: Naryan

Date: Sep/2022

Scale: A3-Shown

Unit: Centimeters

Drawing Title: Well Development

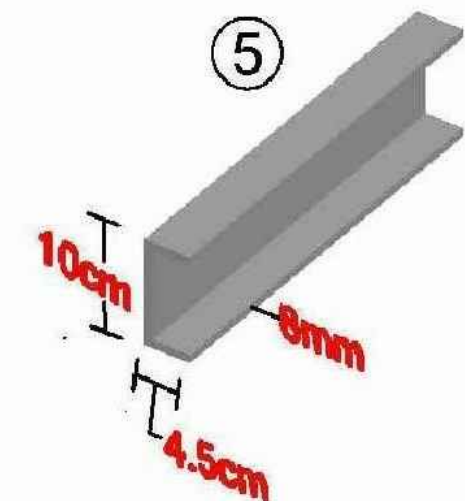
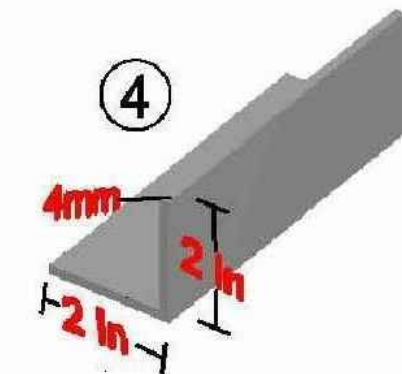
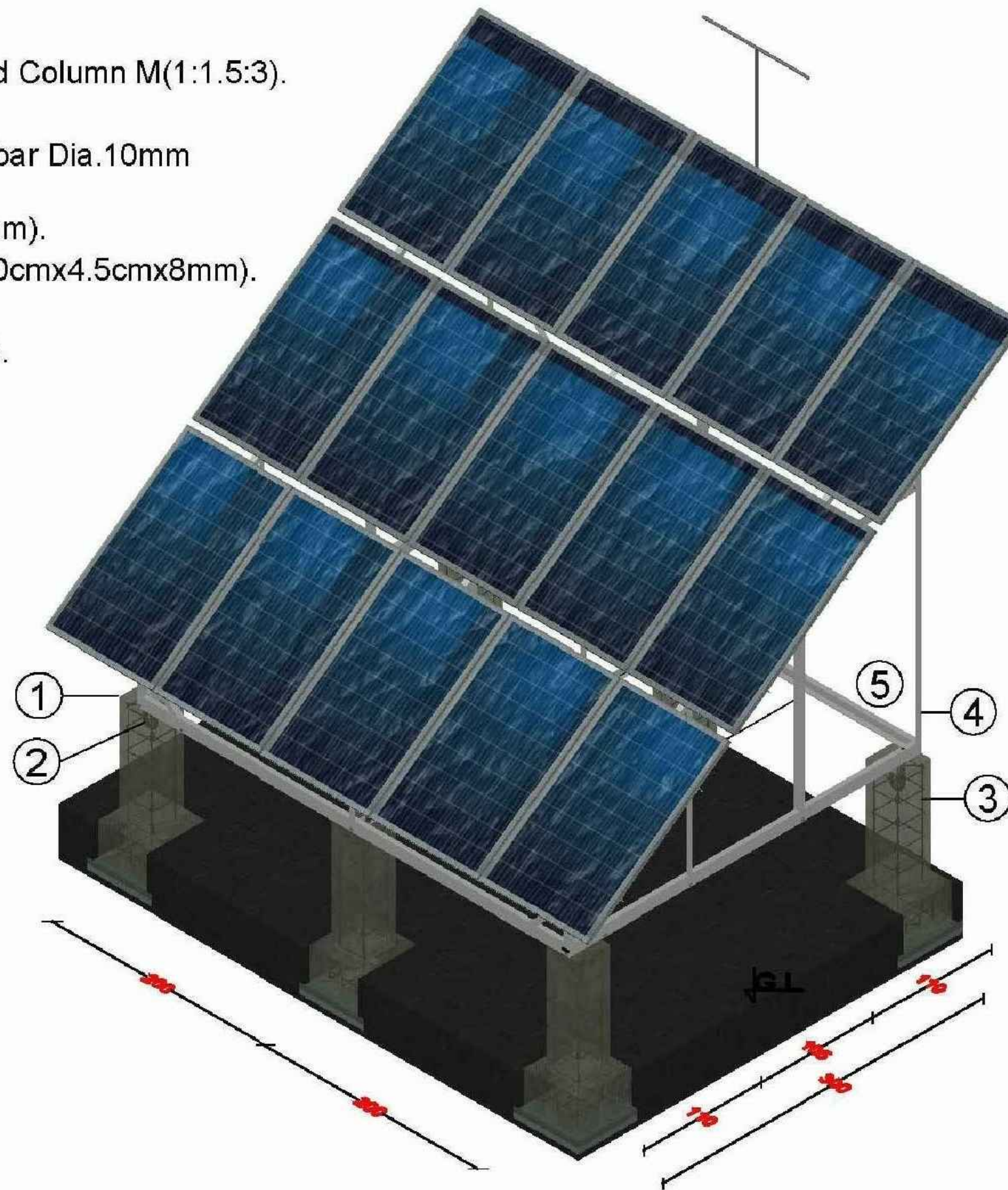
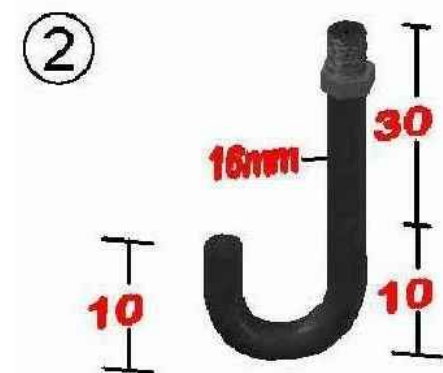
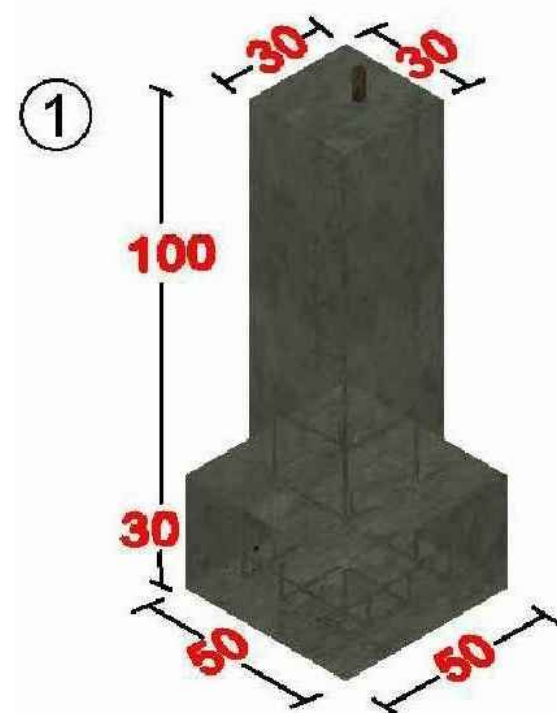
Sheet Title: Sections and details

Sheet #: -----



Note:

- 1-RCC Concrete Footing and Column M(1:1.5:3).
 - 2-J-Anchor Bolt 16mm.
 - 3-Deformed Grade 60 steel bar Dia.10mm according to drawing.
 - 4-Steel angle iron (2"x2"x4mm).
 - 5-Steel girder mini. sizing (10cmx4.5cmx8mm).
- PCC M(1:2:4).
Foundation Compacted 95%.
Potable water used.



Funded by: USAID/BHA
INTERNATIONAL MEDICAL CORPS (IMC)
PROGRAM DEPARTMENT
WASH UNIT

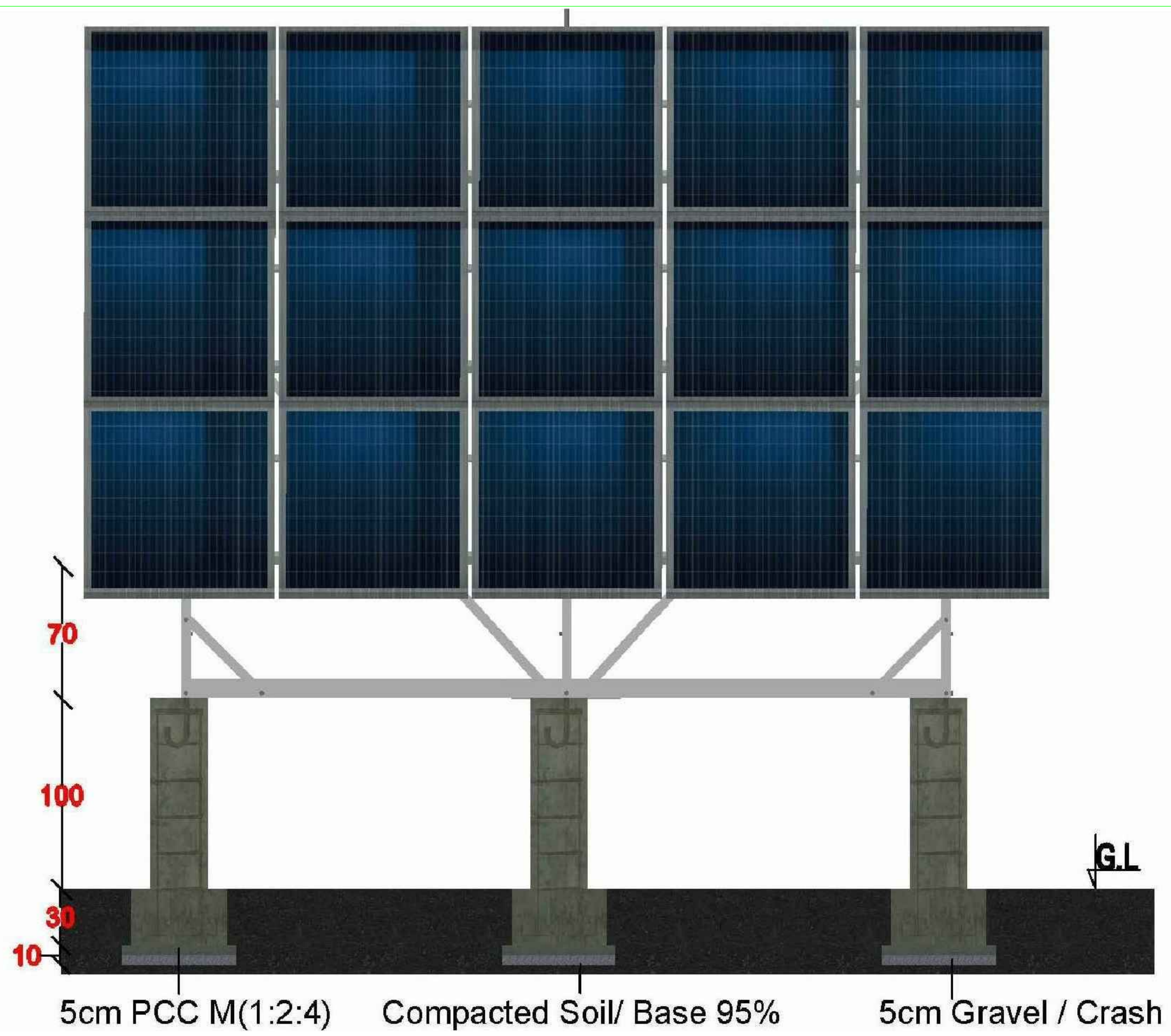
Drafted and Design BY: IMC/WASH Team
Review and Checked by: Eng. Yousuf Mazhar
Review and Approved by: Eng. Mohammad Yasir

Province: Nangarhar
District: Pachir Agam
Village: Naryan

Date: Sep/2022
Scale: A3-Shown
Unit: Centimeters

Drawing Title: Solar Frame
Sheet Title: Frame 3 D
Sheet #: -----





Funded by:	USAID/BHA
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT	

Drafted and Design BY:	IMC/WASH Team
Review and Checked by:	Eng. Yousuf Mazhar
Review and Approved by:	Eng. Mohammad Yasir

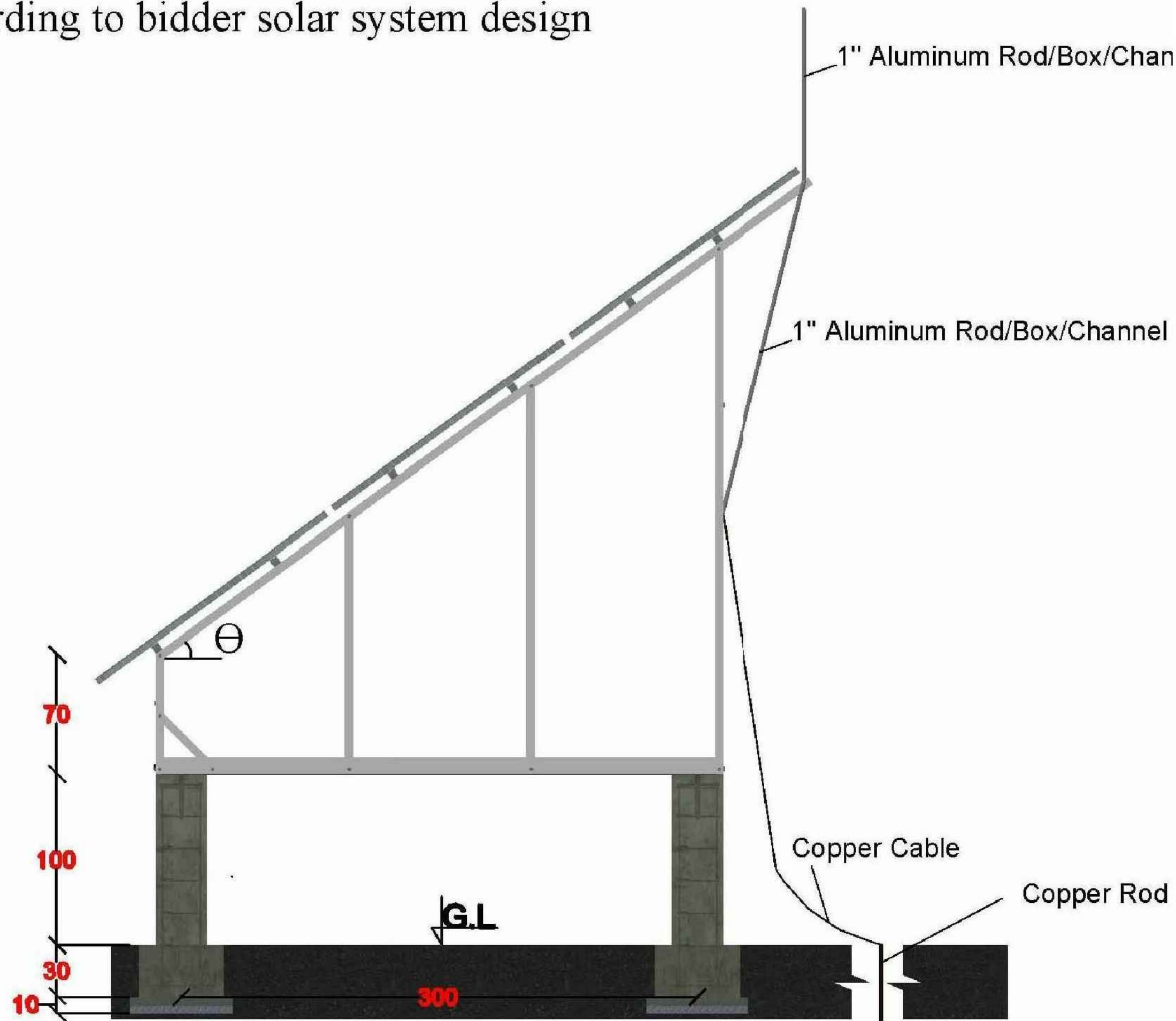
Province	Nangarhar
District	Pachir Agam
Village	Naryan

Date	Sep/2022
Scale	A3-Shown
Unit	Centimeters

Drawing Title	Solar Frame
Sheet Title	Fron View
Sheet #	-----



Angle Θ = According to bidder solar system design



Funded by:	USAID/BHA
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT	

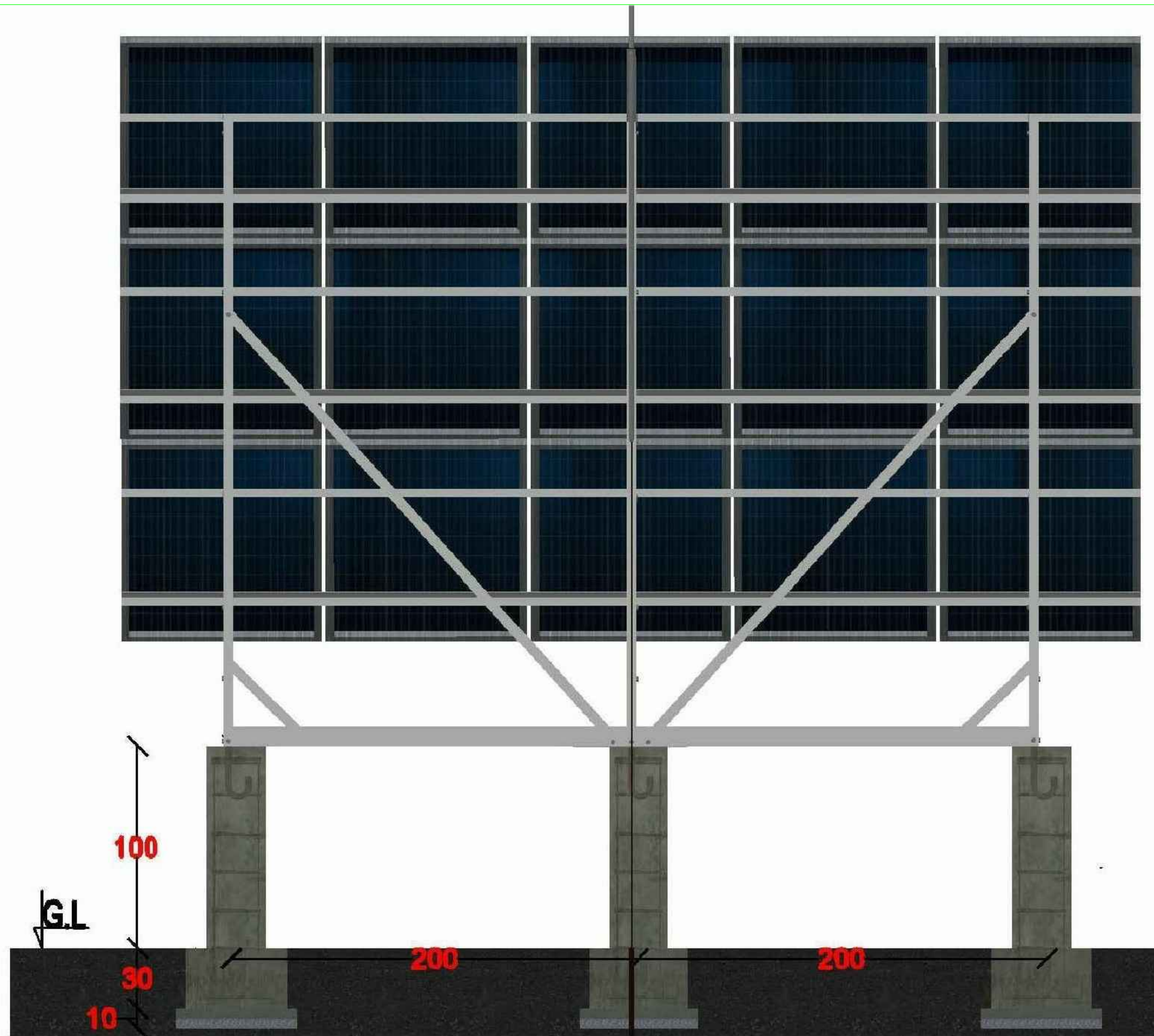
Drafted and Design BY:	IMC/WASH Team
Review and Checked by:	Eng. Yousuf Mazhar
Review and Approved by:	Eng. Mohammad Yasir

Province	Nangarhar
District	Pachir Agam
Village	Naryan

Date	Sep/2022
Scale	A3-Shown
Unit	Centimeters

Drawing Title	Solar Frame
Sheet Title	Side View
Sheet #	-----





Funded by:	USAID/BHA
INTERNATIONAL MEDICAL CORPS (IMC) PROGRAM DEPARTMENT WASH UNIT	

Drafted and Design BY:	IMC/WASH Team
Review and Checked by:	Eng. Yousuf Mazhar
Review and Approved by:	Eng. Mohammad Yasir

Province	Nangarhar
District	Pachir Agam
Village	Naryan

Date	Sep/2022
Scale	A3-Shown
Unit	Centimeters

Drawing Title	Solar Frame
Sheet Title	Back View
Sheet #	-----

