



World Vision International
World Vision Afghanistan
Badghis Zonal Office



WASH Sector
DAWAM WASH Project

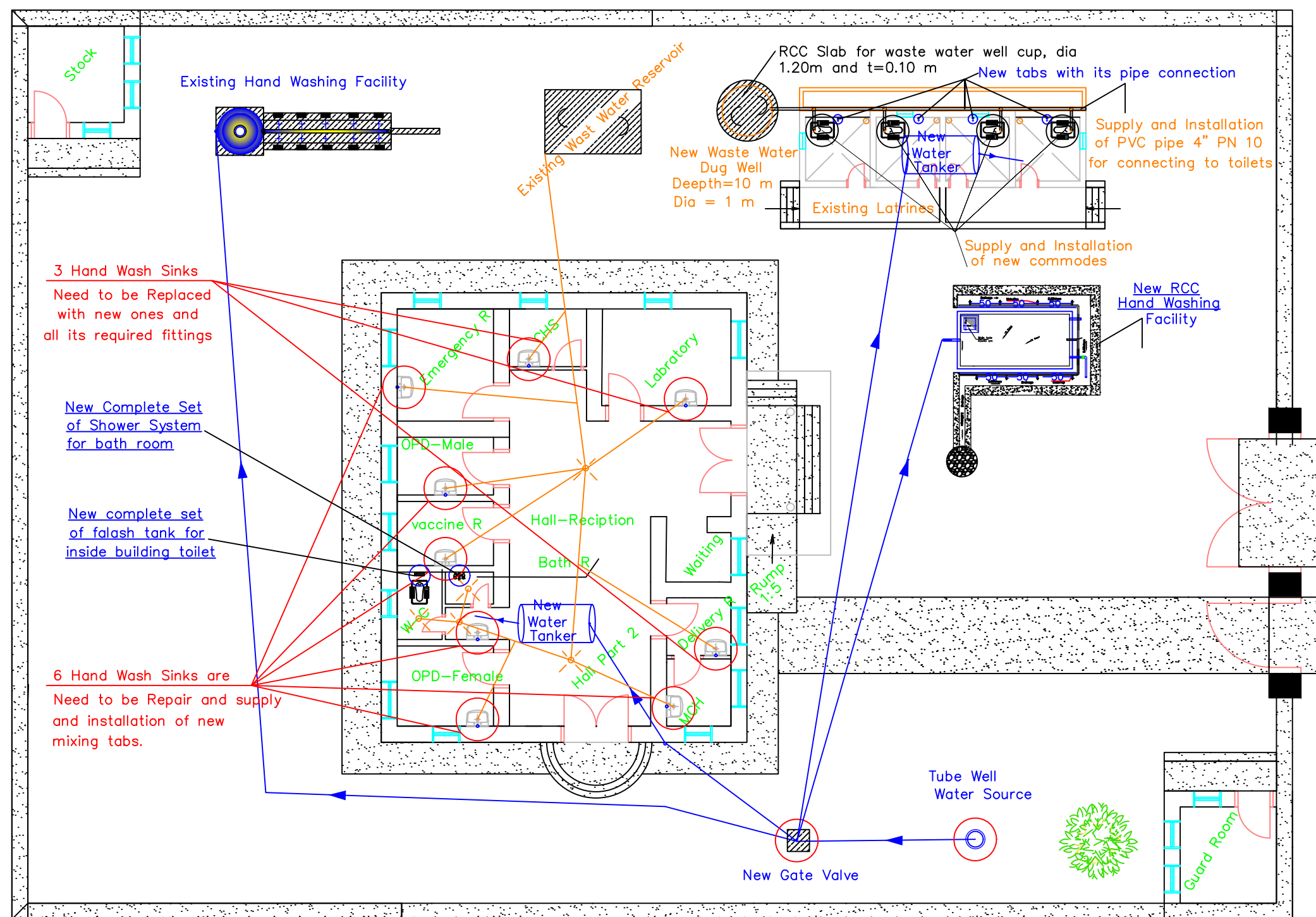
Design and Drawing for Solar Powered Water Supply System

Project Name: Water Supply System in Healthcare Facility

Location and Type: Panirak Community Health Center (CHC)

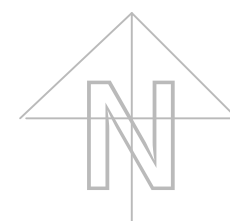
Location: Panirak CHC
District: Bala Murghab
Province: Badghis
Number of Users: 200 Patients
Number of Staff : 21

Project Information	
Number of Users/day	110
Number of Personnel	10
Source Discharge Required	8.84 m ³ /day
Water Source	Tube Well
Number of Solar Panels 270 Watt	6 Panels
Work Days	60 days
Water Tanker for building	3 M ³
Hand Wash Facility	New RCC



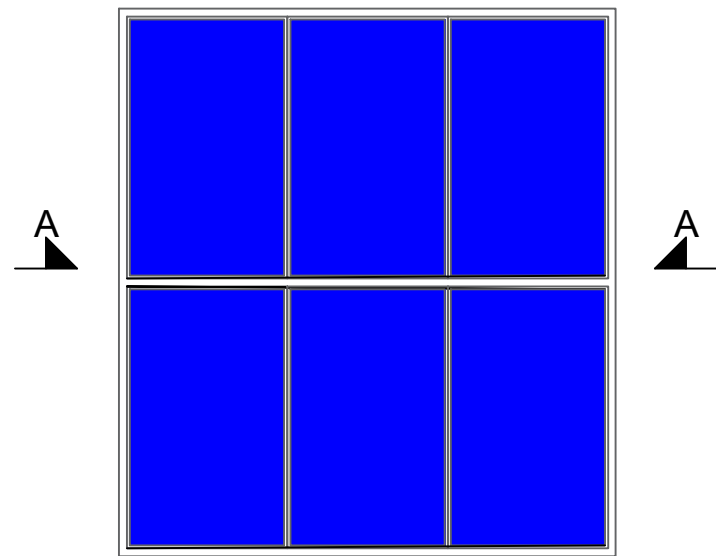
- Note:
- 1-New tube well is needed as water source.
 - 2-Piping system from well to gate valve and connecting to building's new water tanker (3Cub m) and existing hand wash facility, new hand wash facility and existing latrines.
 - 3-New dug well for waste water in needed.
 - 4-Need to construction of one gate valve box for water distribution to all parts of water supply systems.
 - 5-Three new hand washing sinks are needed to replace and 9 mixing tabs for the existing sinks in the building with all its required fittings and connectors.
 - 6-Existing waste water reservoir need to remove/clean to be empty.
 - 7-New water system and waste system in existing latrines is needed.
 - 8-One Tanker 3000 L and one 500 L (Plastic, 3 layer, high quality) for CHC's building and latrines.

PANIRAK CHC-SITE PLAN BALA MURGHAB DISTRICT

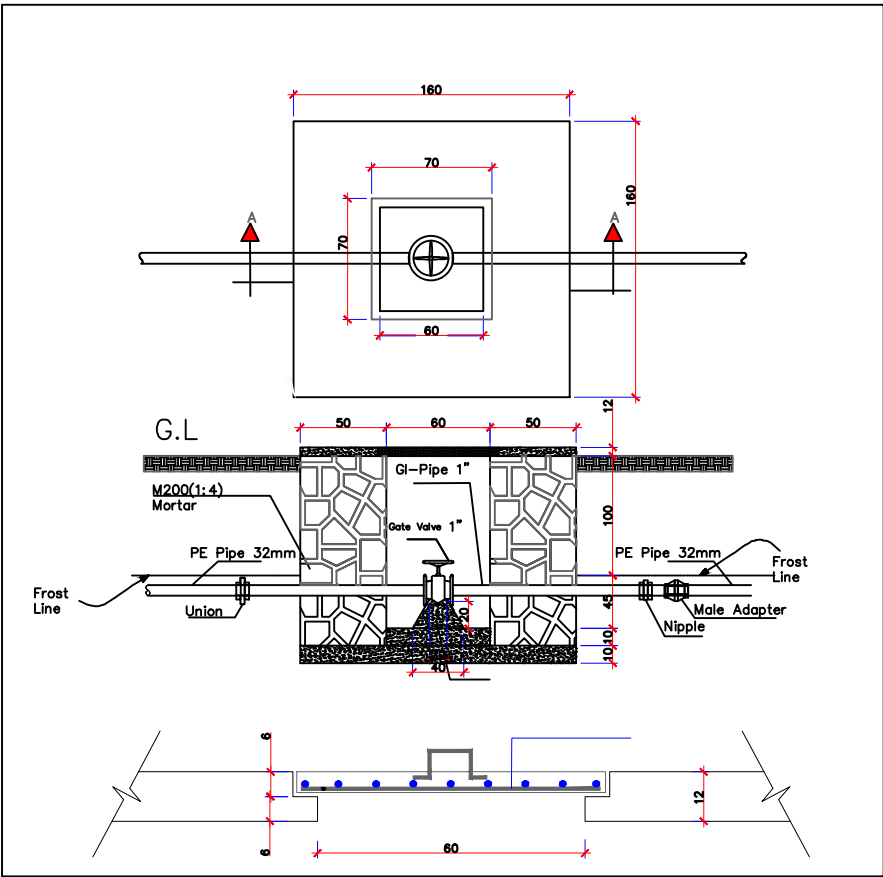


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DAWAM WASH PROJECT				
Province Badghis	District Bala Murghab	Village Panirak CHC	Project ID Number: A221873	
Designed by:	Reviewd by:	Approved by:	File Name:	Drawing. dwg
WASH Engineer	WASH Advisor	Operation & Response Director	Map Size:	A3
Panirak Healthcare Facility Site Plan			Plot Date: Jun13, 2024	Plot Scale: NTS

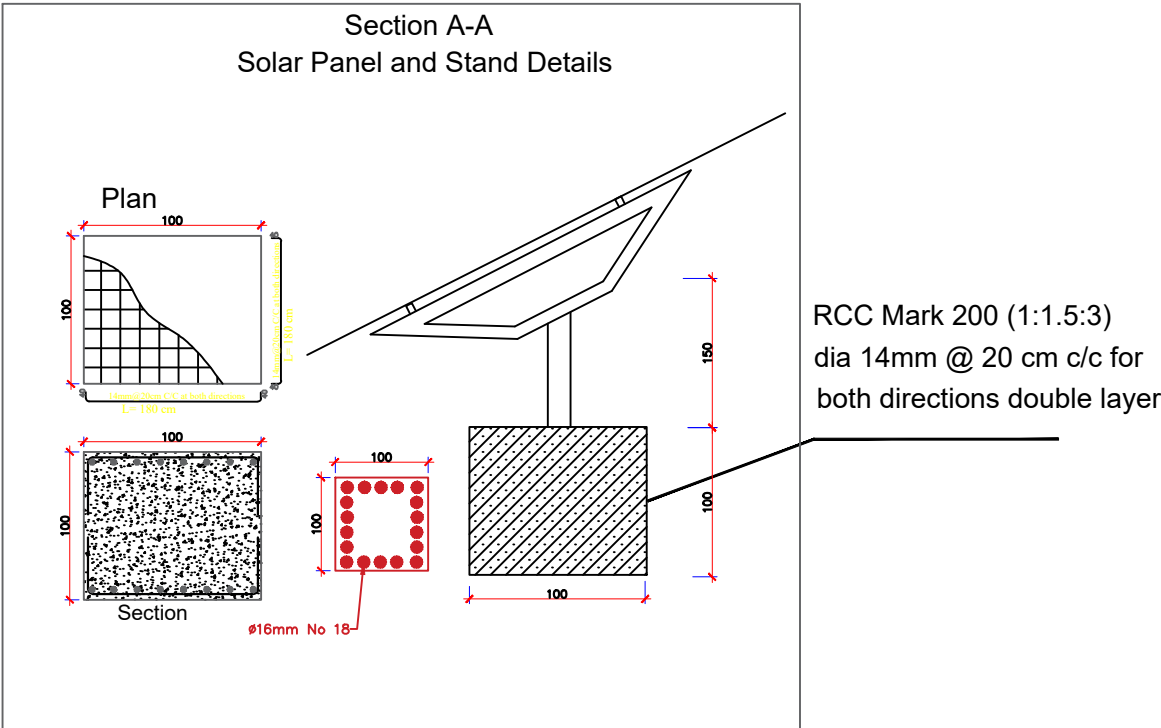
SOLAR PANEL



Gate Valve Box-1 Details

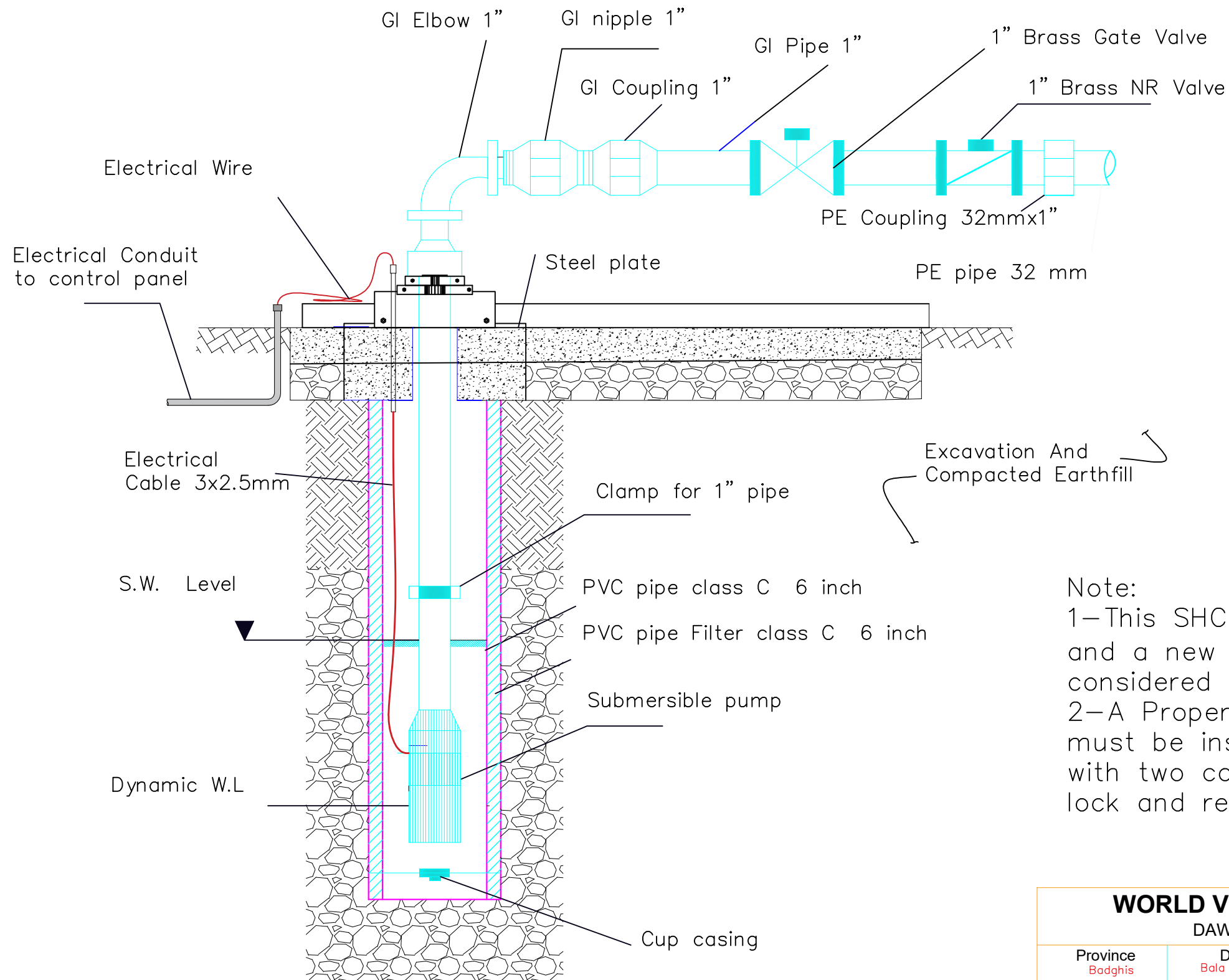


Section A-A
Solar Panel and Stand Details



Note:
1-One Valve Box structure with GI-Gate valves and its all required fittings and connectors is needed near to bore well to manage and distribute water to SHC on the building's water tanker and Hand washing facility's water tanker.
2-The solar panels and solar stand must be installed on the roof of SHC building with stable and proper GI frame and 1 cubic m RCC for its firm and foundation.

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Designed by: WASH Engineer	Reviewed by: WASH Advisor	Approved by: Operation & Response Director	File Name: Drawing.dwg
Solar Tand & Valve Box Details			Map Size: A3
			Plot Date: Jun13,2024 Plot Scale: NTS



Well Details

Note:
 1—This SHC needs to one water source and a new tube/bore well in 12" dia considered for its water supply system.
 2—A Proper GI Cover Box as well cup must be installed at the top of well with two coat anti rust color and its lock and requirements.

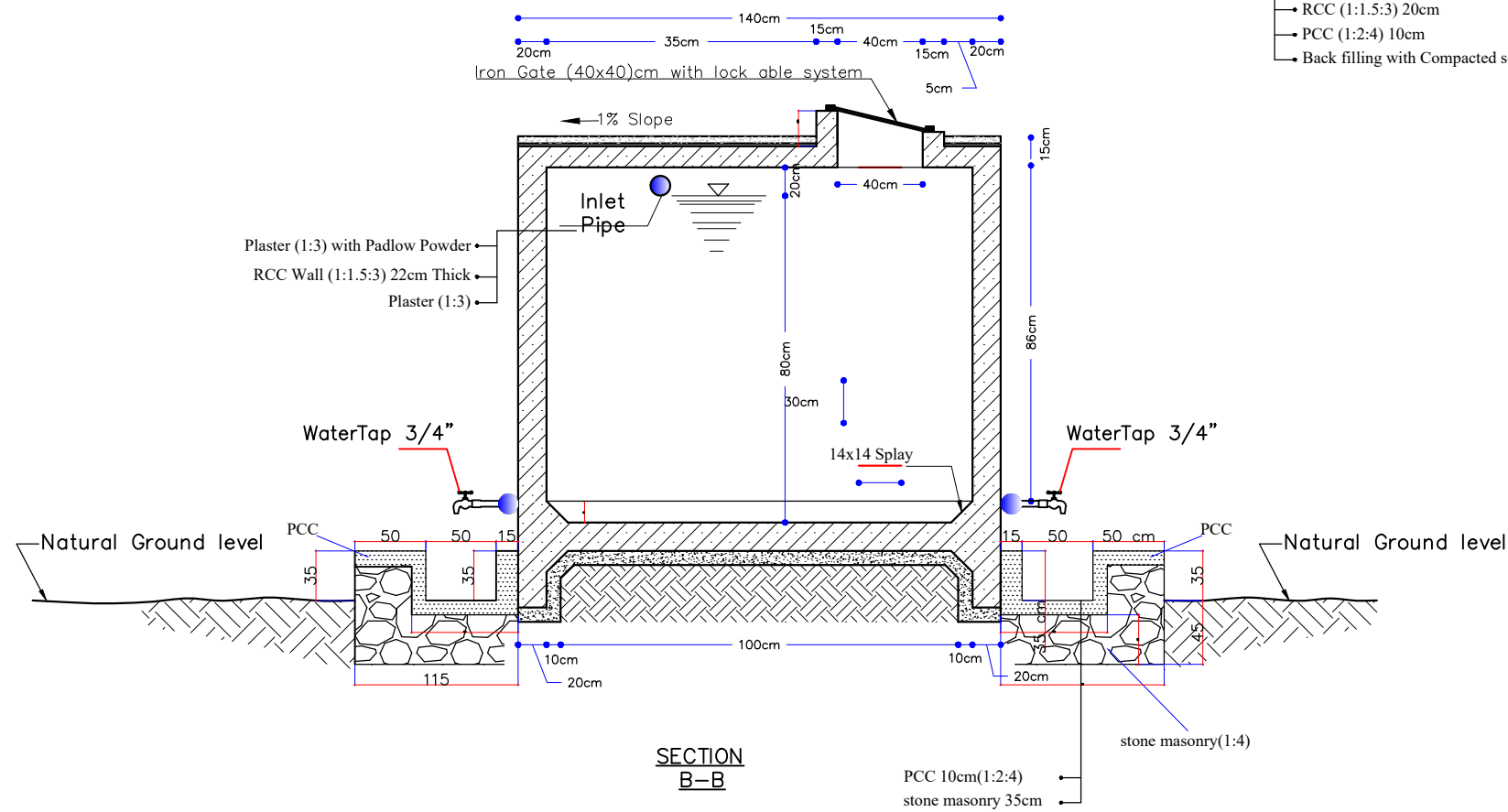
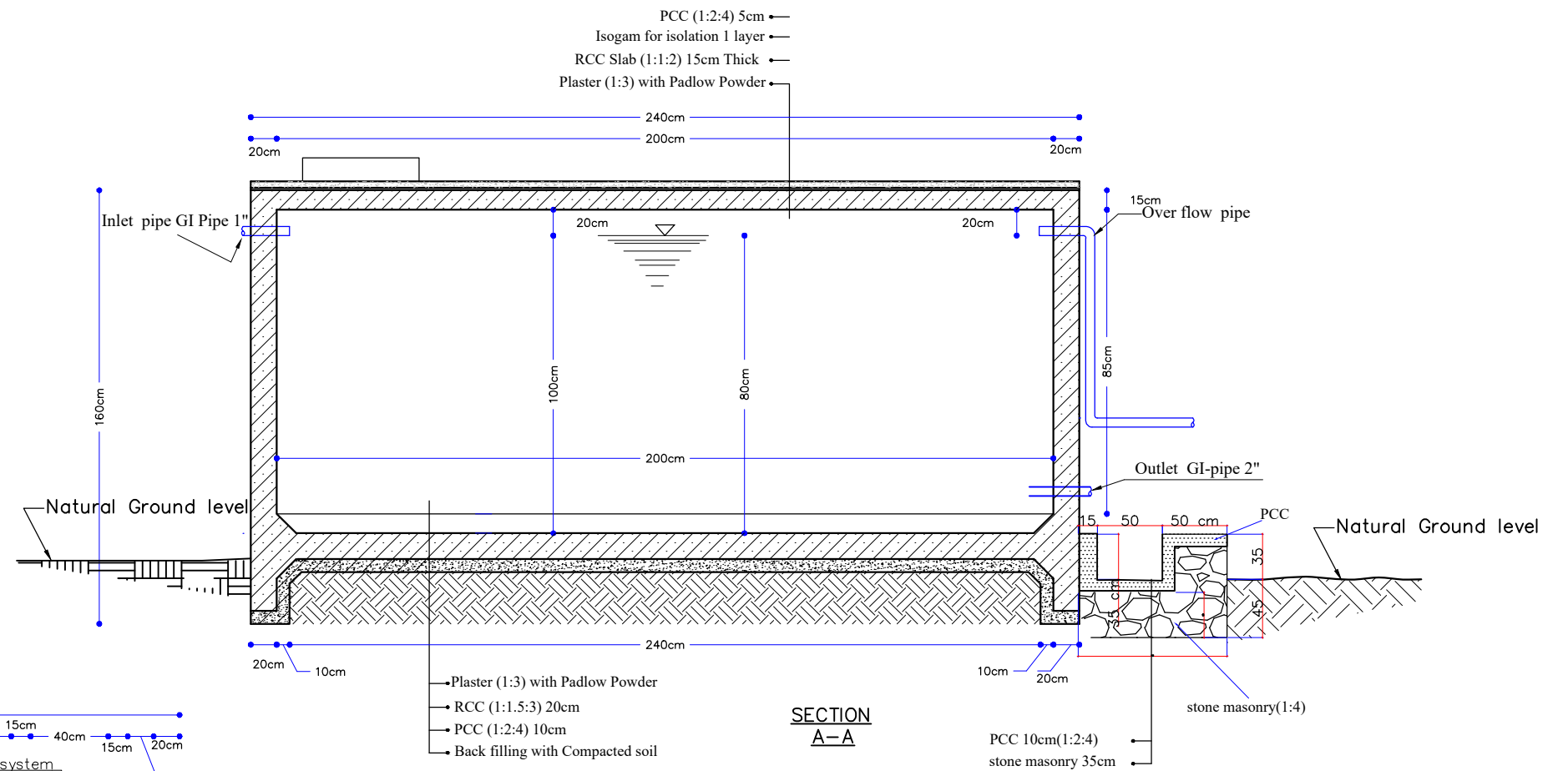
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Well Details			Map Size: A3
			Plot Date: Jun13,2024 Plot Scale: NTS



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



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Hand Washing Facility			Map Size:	A3
			Plot Date: Jun13, 2024	Plot Scale: NTS



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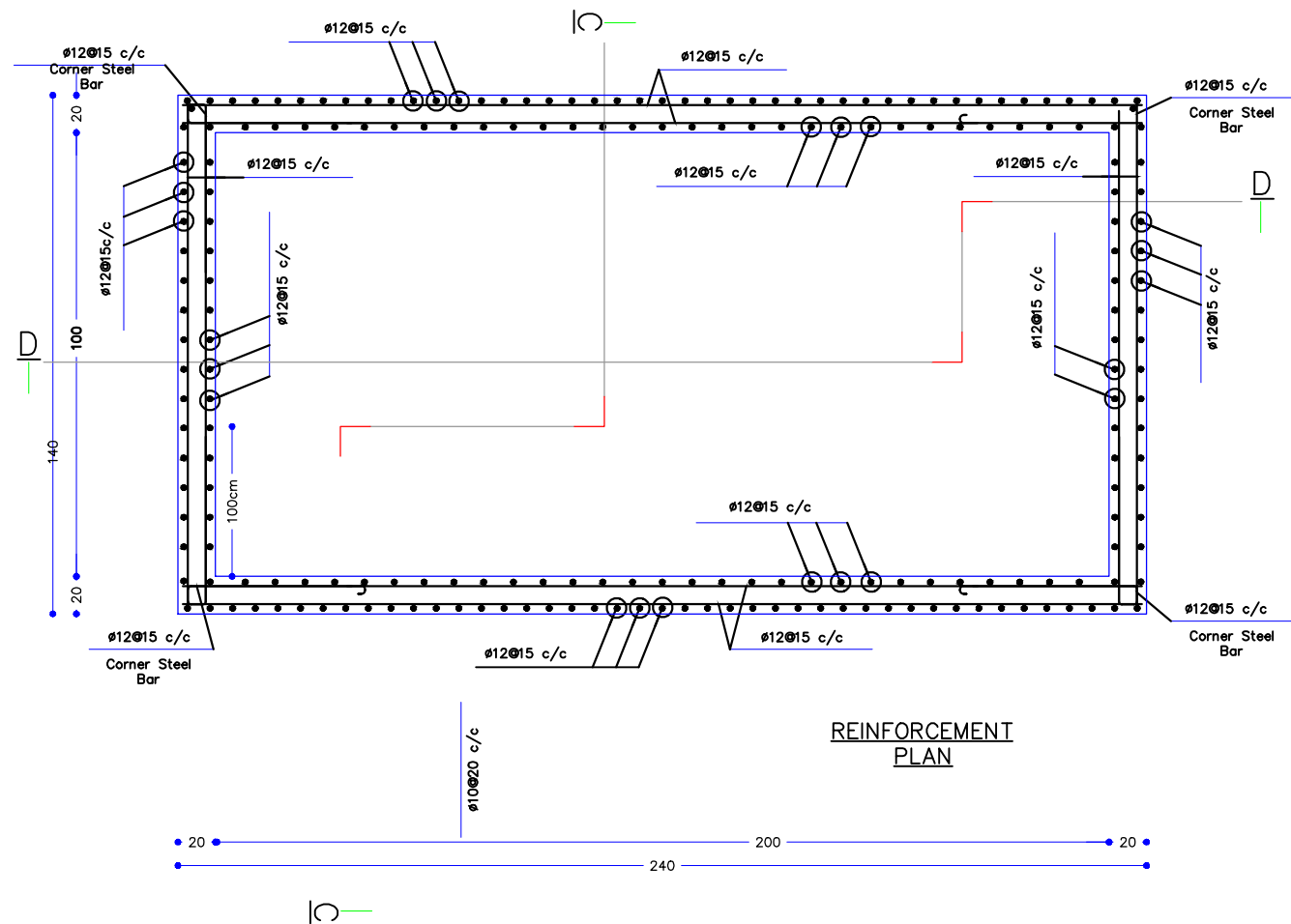
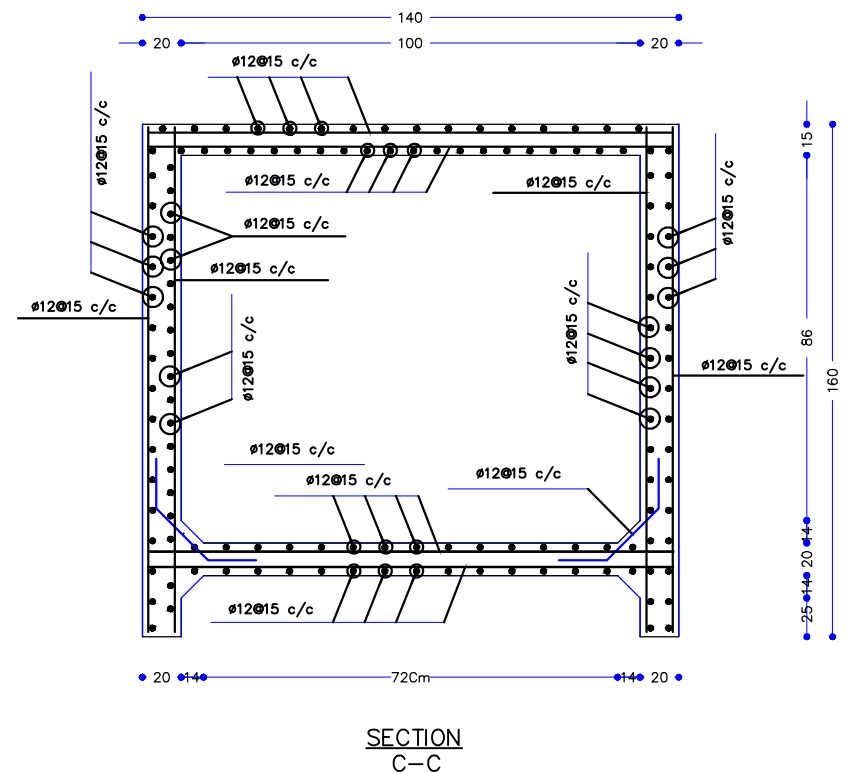
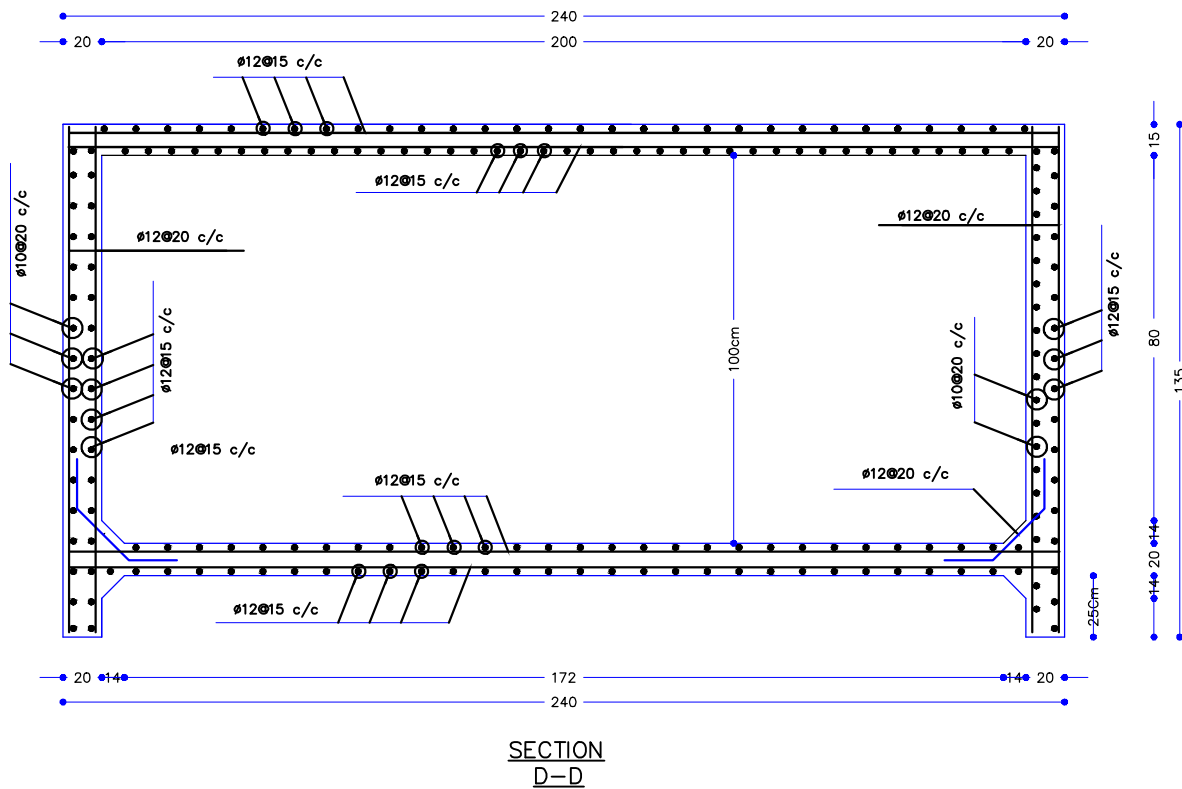
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Hand Washing Facility

Map Size: **A3**
Plot Date: Jun13,2024
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STEEL BAR SCHEDULE FOR 2 CUBIC METER RCC WATER RESERVOIR

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	12	4x17	68	1.35	91.8	0.888	81.52	85.59
	2	12	4x11	44	1.35	59.4	0.888	52.75	55.38
	3	12	4x17	68	1.40	95.2	0.888	84.53	88.76
	4	12	4x11	44	2.40	105.6	0.888	93.77	98.46
	5	12	2x10	20	8	160	0.888	142.08	149.18
	6	12	2x10	20	7.20	144	0.888	127.87	134.26
	7	12	2x18	36	1.1	39.6	0.888	35.16	36.92
Total Weight of Steel Bar +5% (Kg)									648.55 kg

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