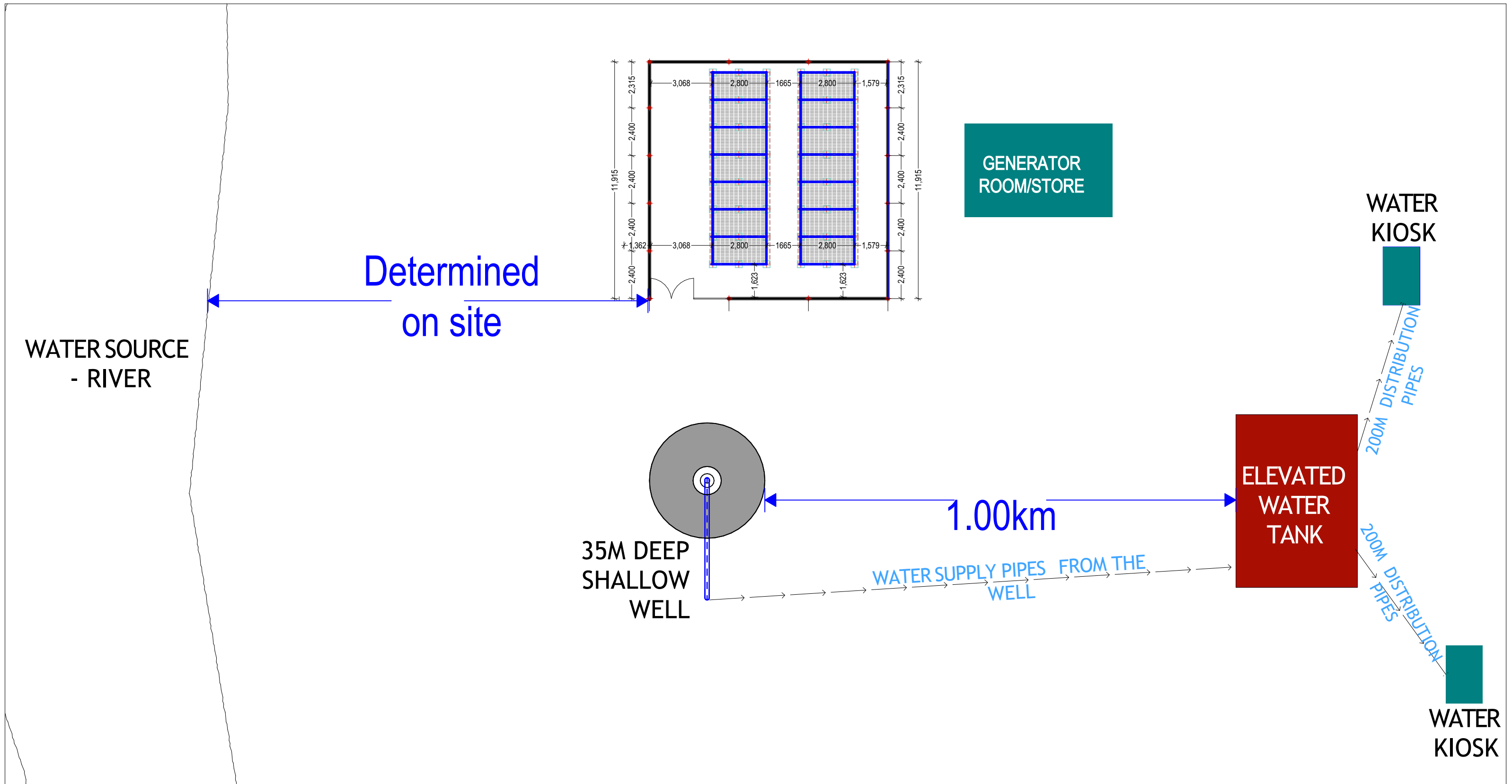


**CONSTRUCTION OF MOTORIZED SHALLOW WELL - RAQAYLE
VILLAGE -JOWHAR DISTRICT- HIRSHABELLE STATE**



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PROJECT

EXCAVATION OF SHALLOW WELLS

IMPLEMENTING AGENCY



DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	NOV 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

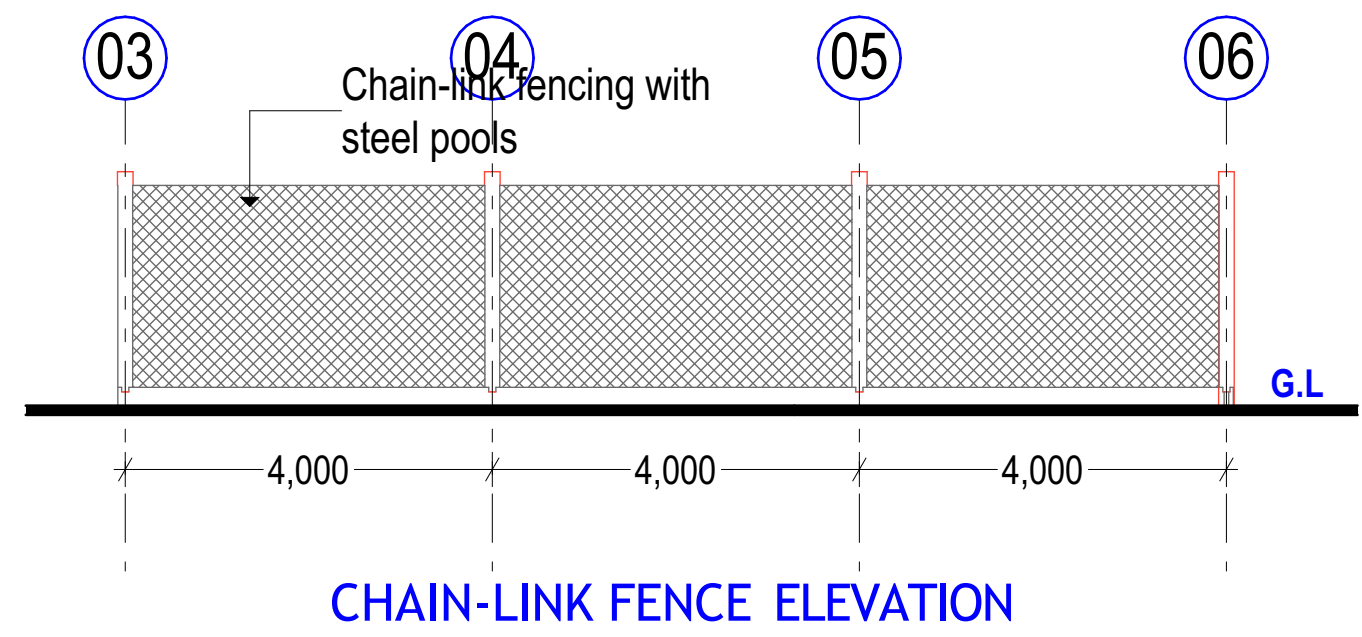
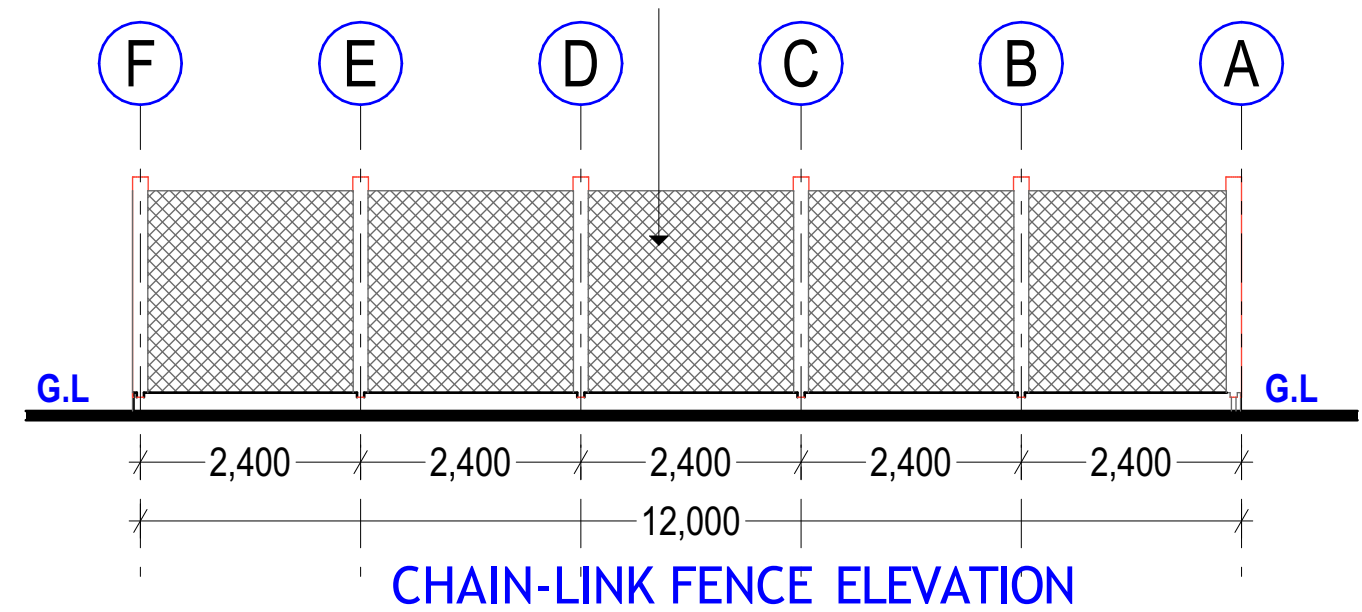
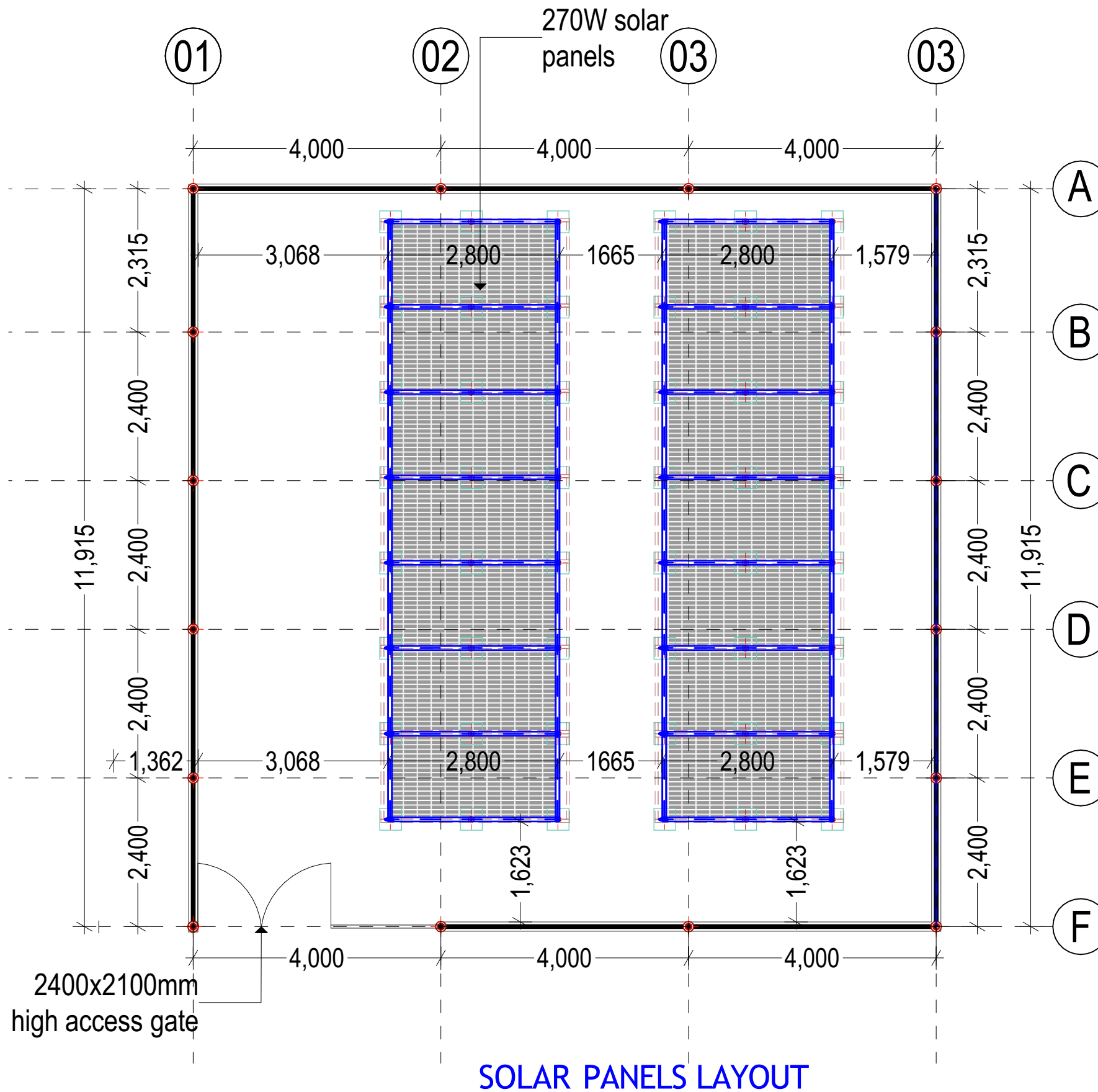
DRAWING TITLE:

DRAWING N^o:

PROJECT N^o:

SITE PLAN

SHEET N^o:



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PROJECT

EXCAVATION OF SHALLOW WELLS



DEPARTMENT

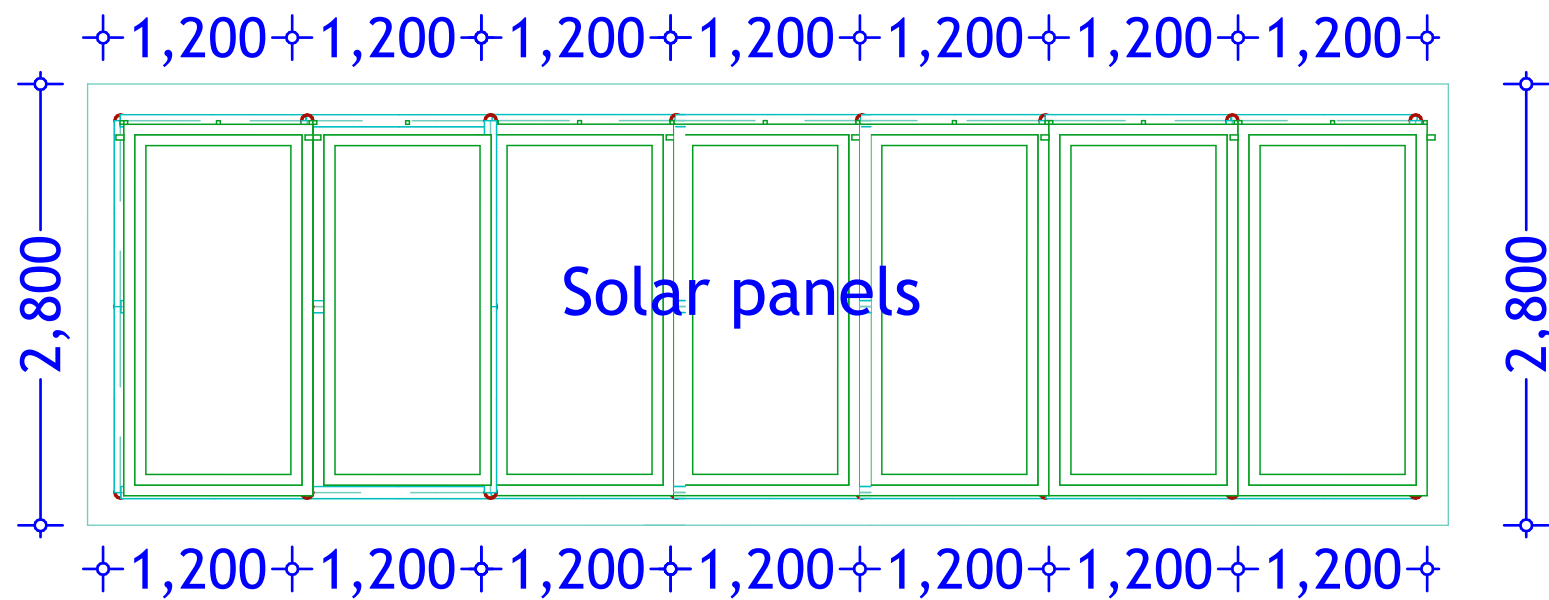
WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

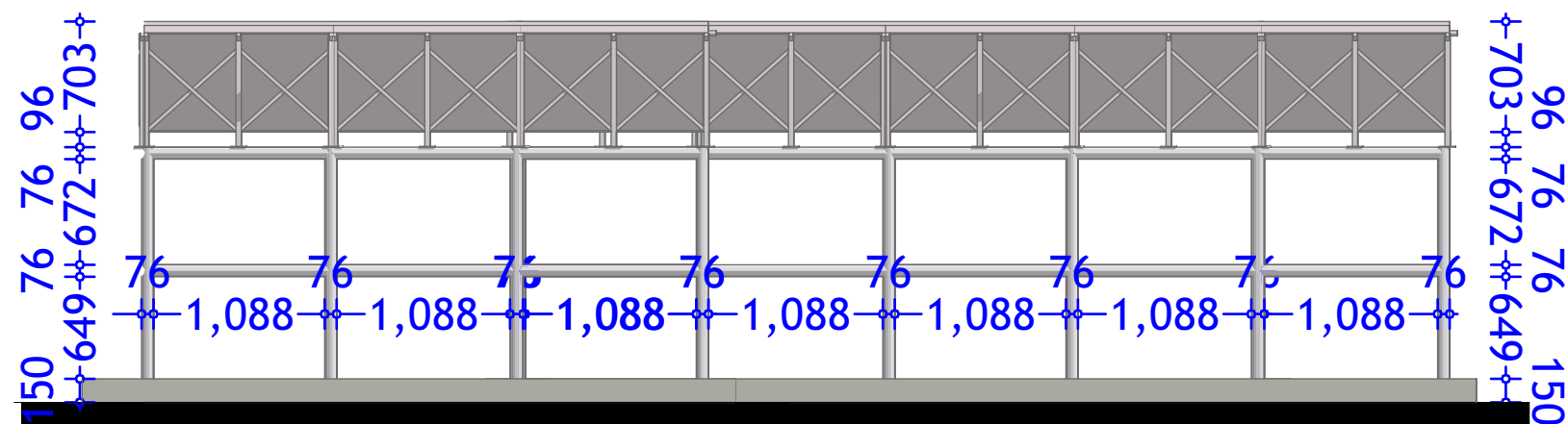
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PROJECT N°:	

SOLAR LAYOUT

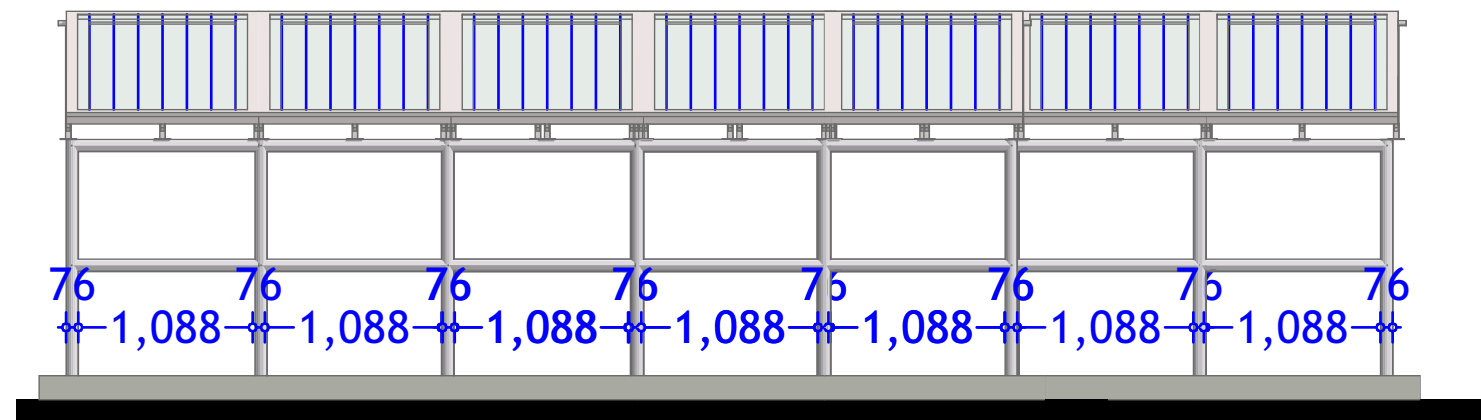
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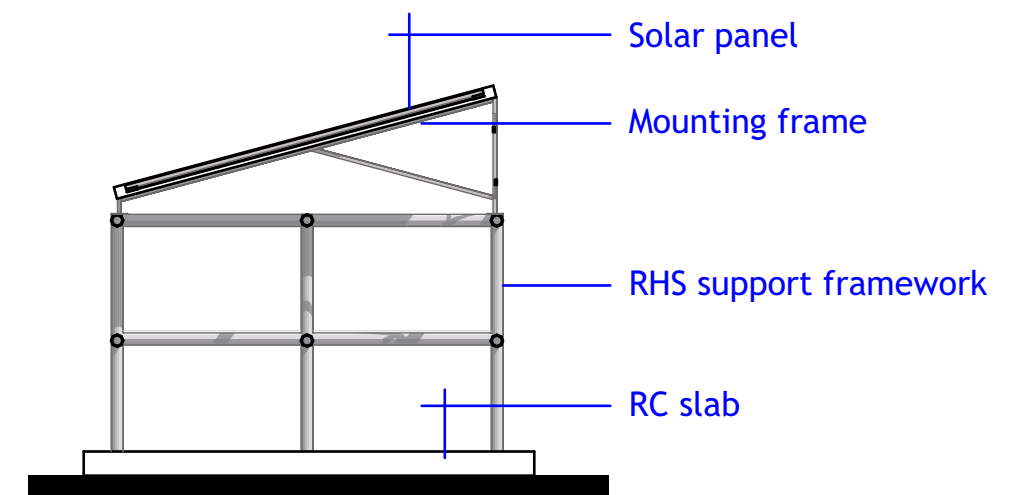
TYPICAL 7 NO. PANEL LAYOUT



SOLAR STRUCTURE ELEVATION



SOLAR STRUCTURE ELEVATION



SOLAR STRUCTURE ELEVATION

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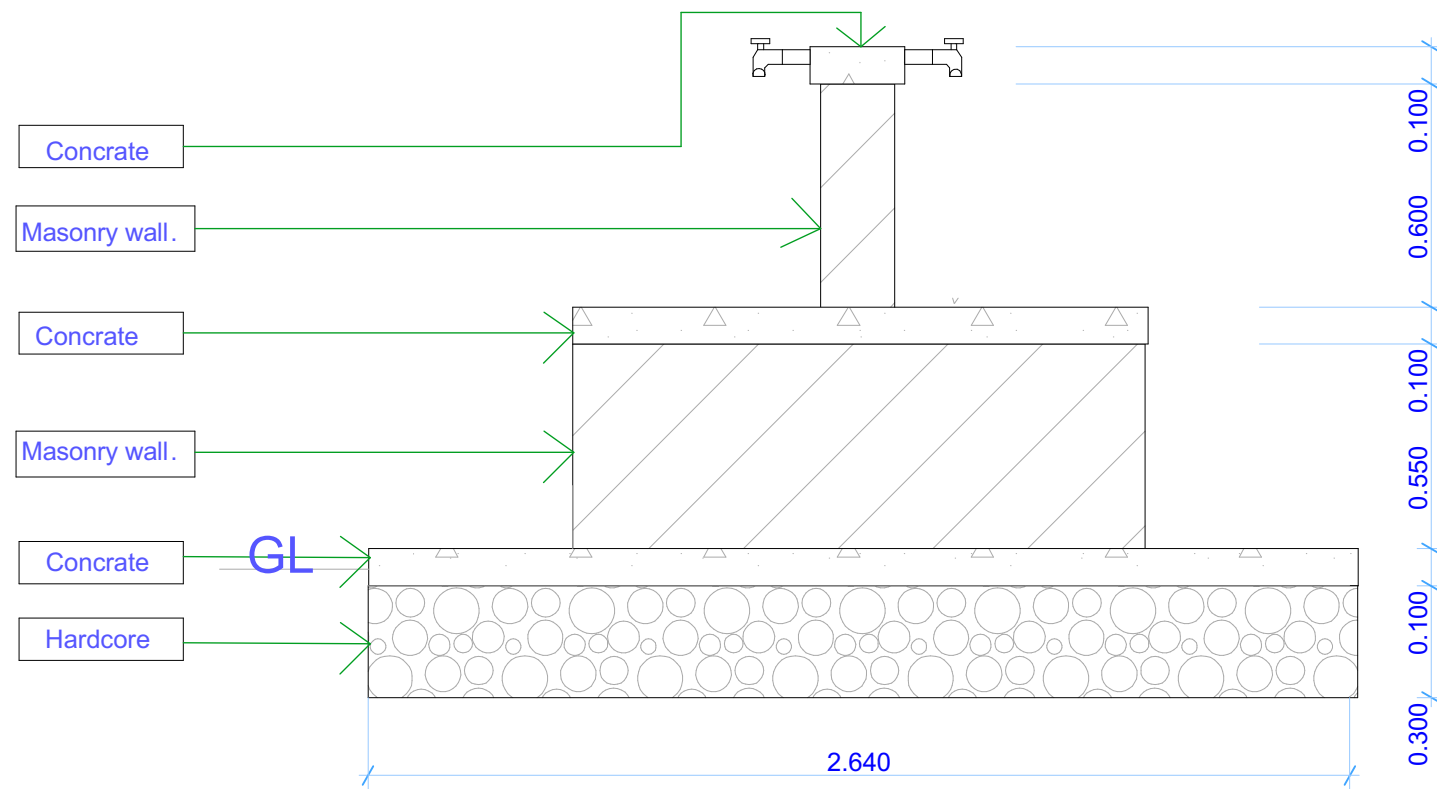
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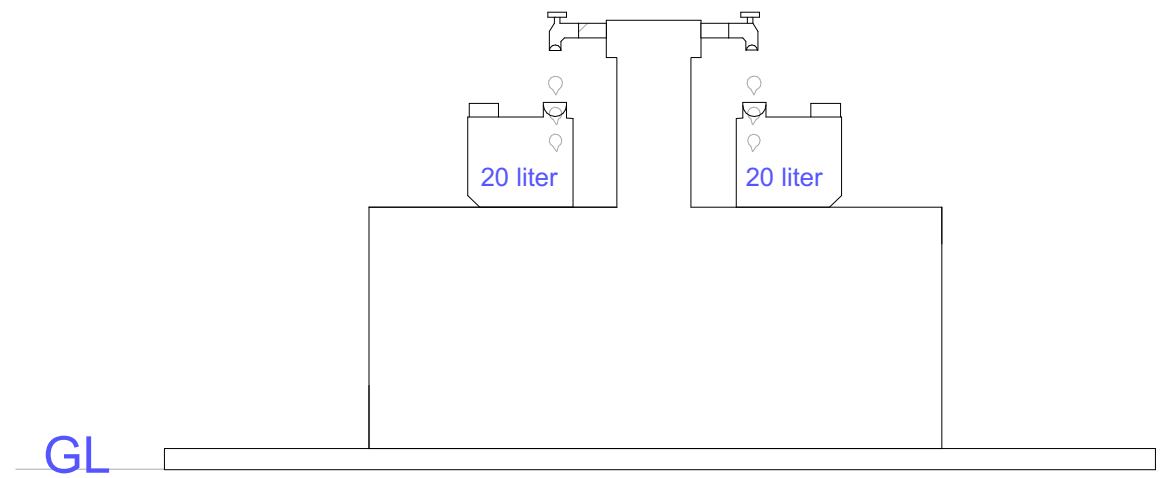
PROJECT N^o:

**S.STRUCTURE
DETAILS**

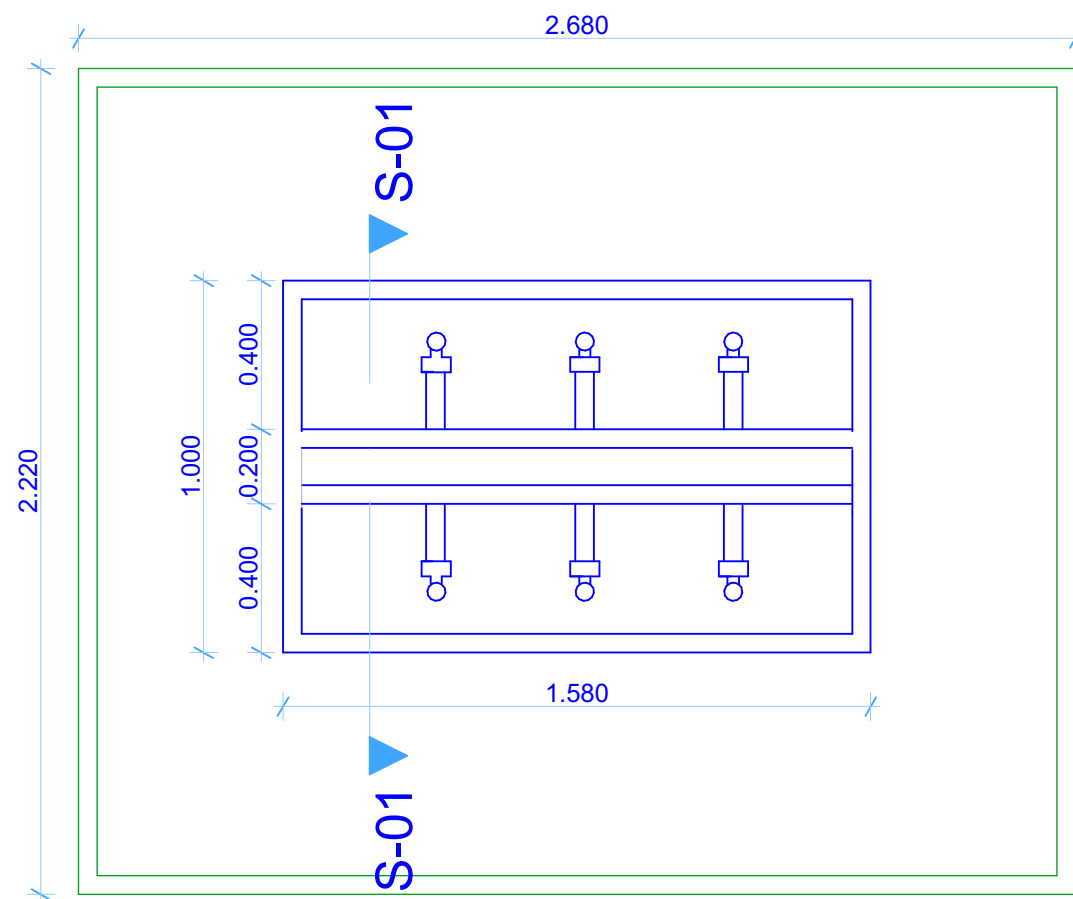
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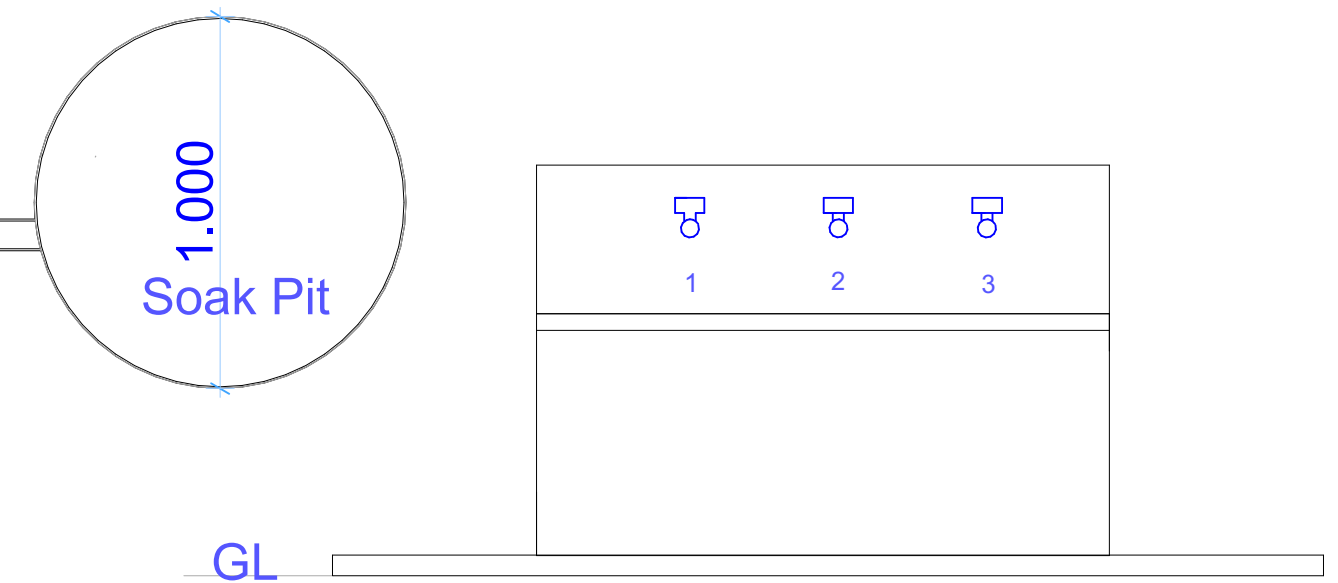
Section S-01



Side Elevation



Floor Plan



Front Elevation

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EXCAVATION OF SHALLOW WELLS

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DEPARTMENT

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SCALE	
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DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

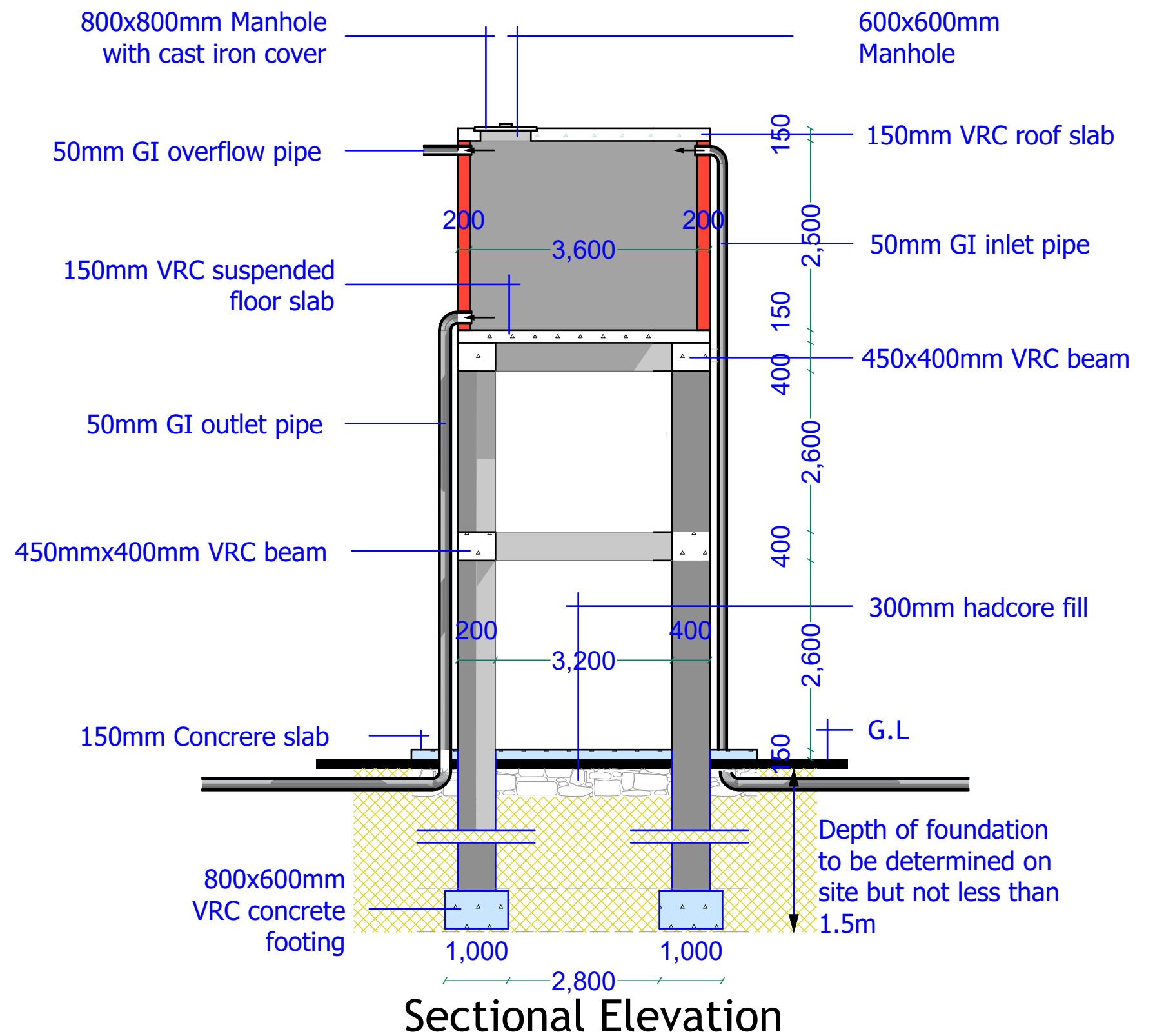
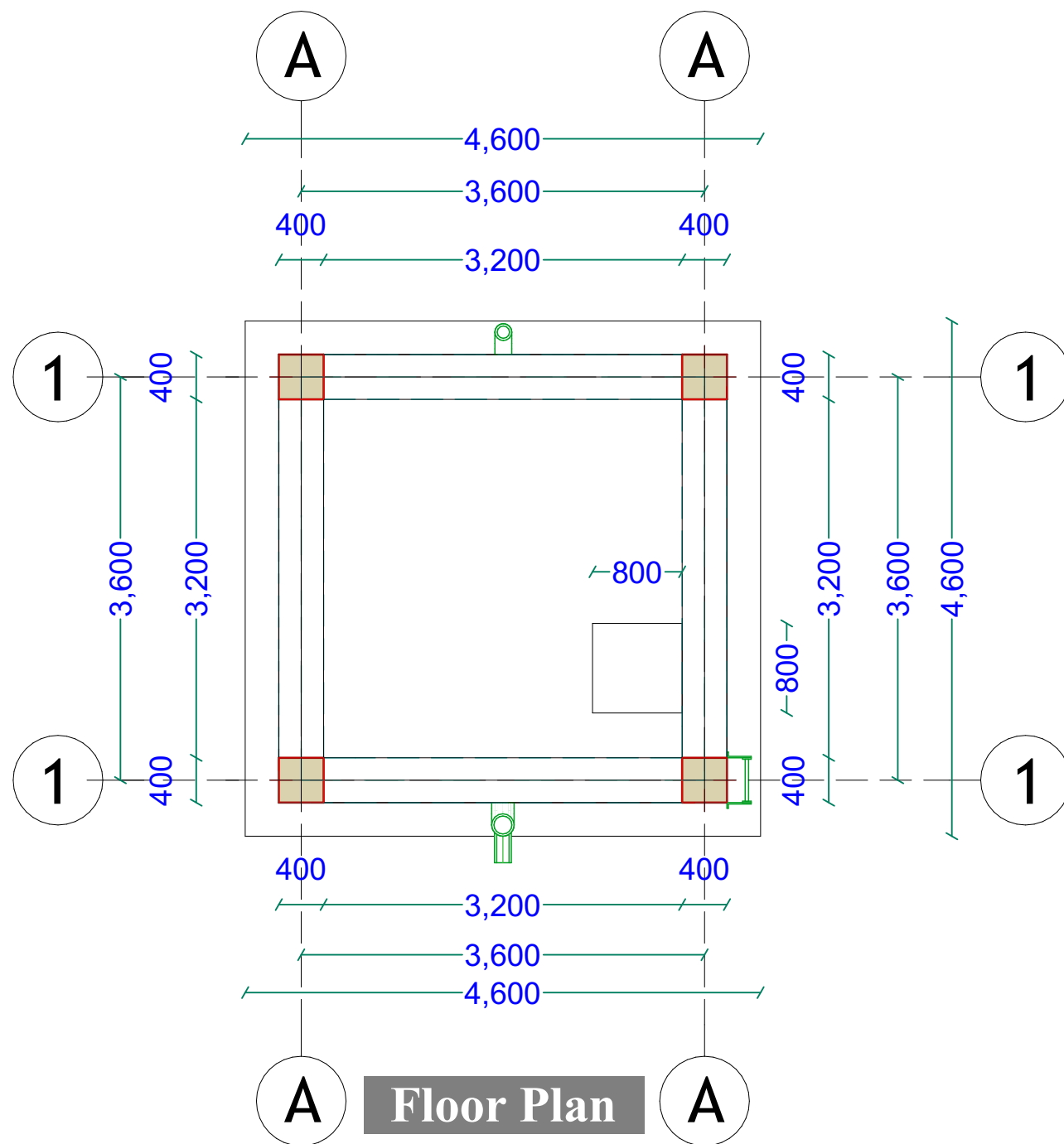
DRAWING TITLE:

DRAWING N^o:

PROJECT N^o:

WATER KIOSK

SHEET N^o:



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EXCAVATION OF SHALLOW WELLS

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DEPARTMENT

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WASH

SCALE	
DATE	JUNE 2020
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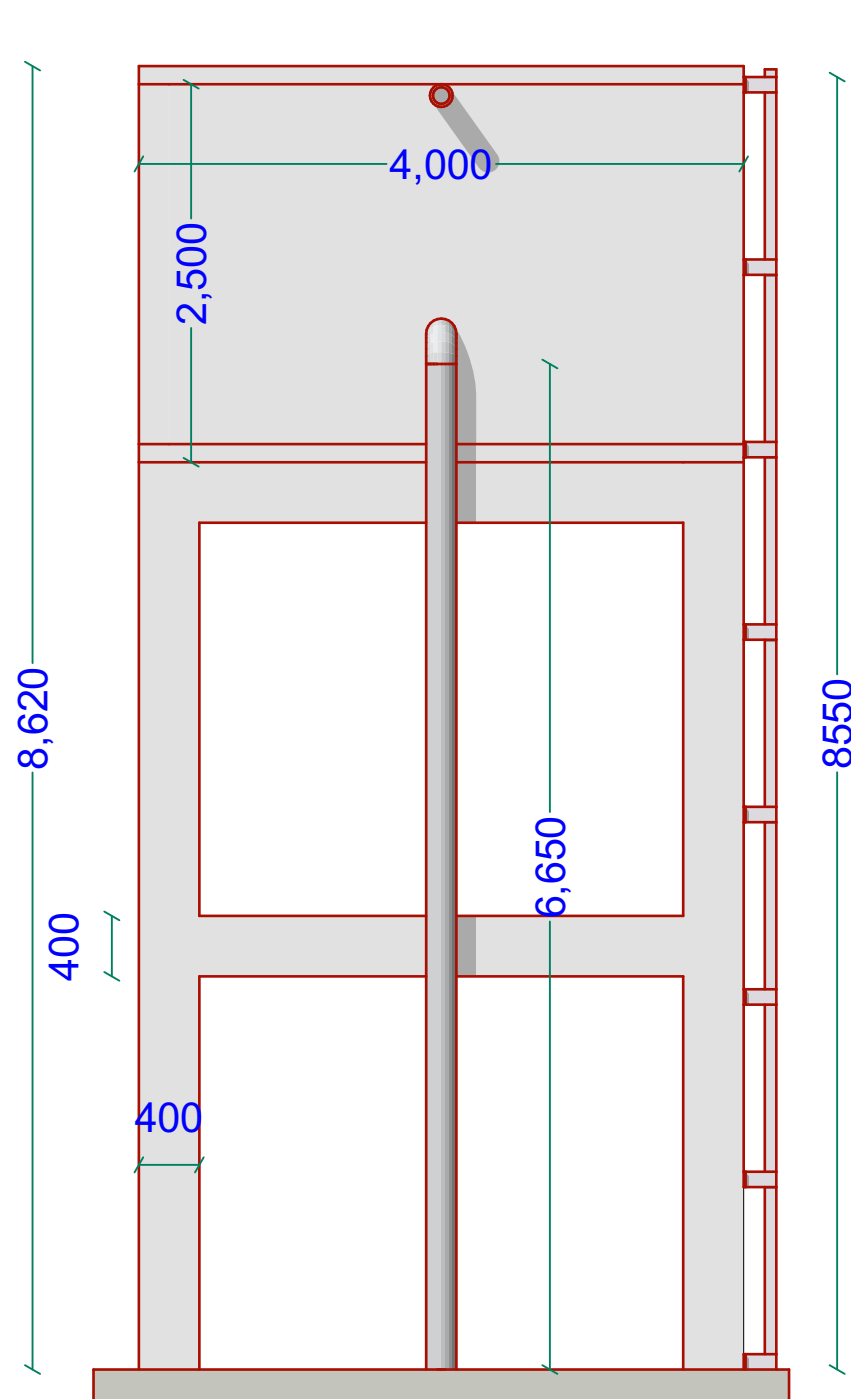
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ELEVATED TANK

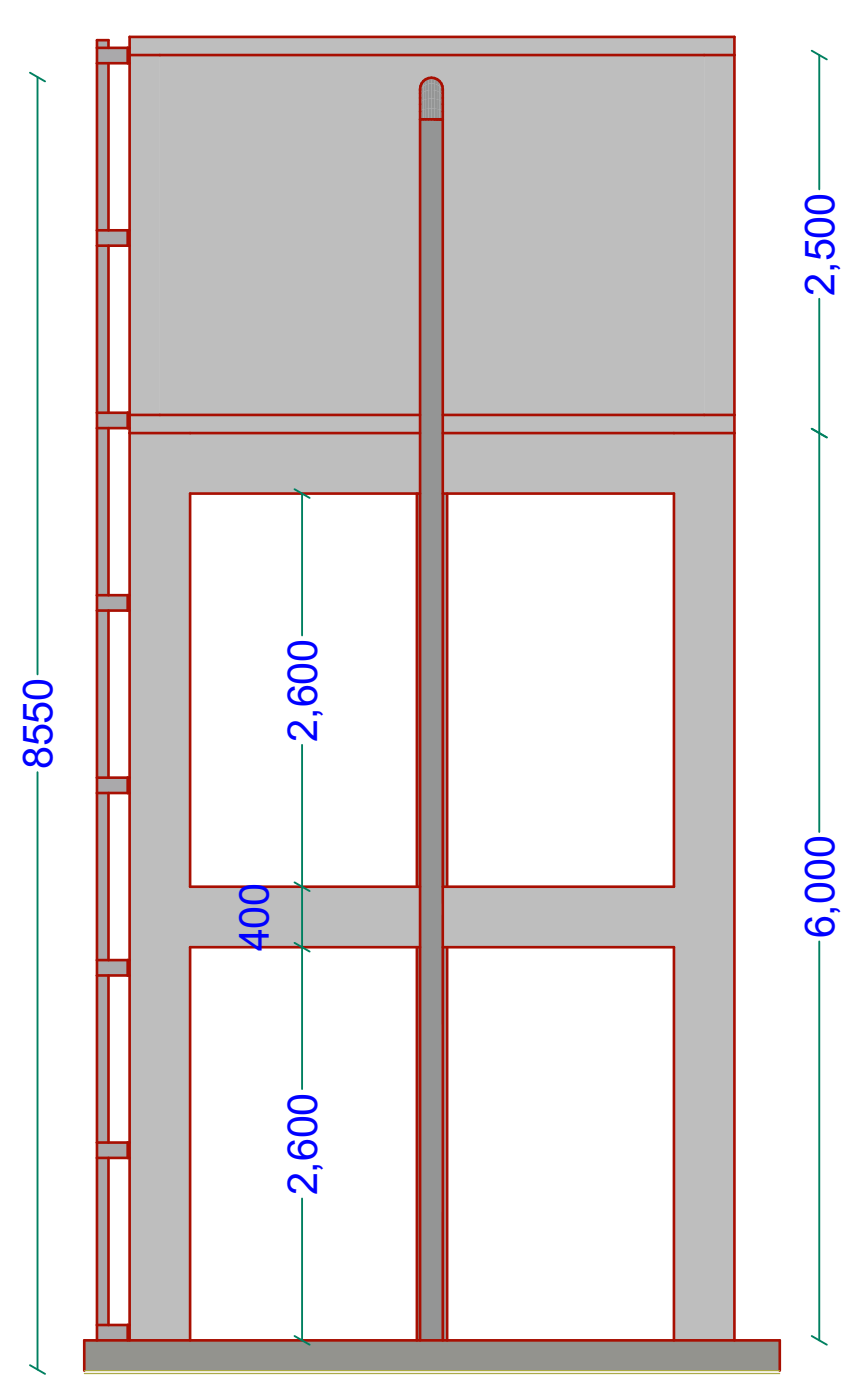
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SHEET N^o:

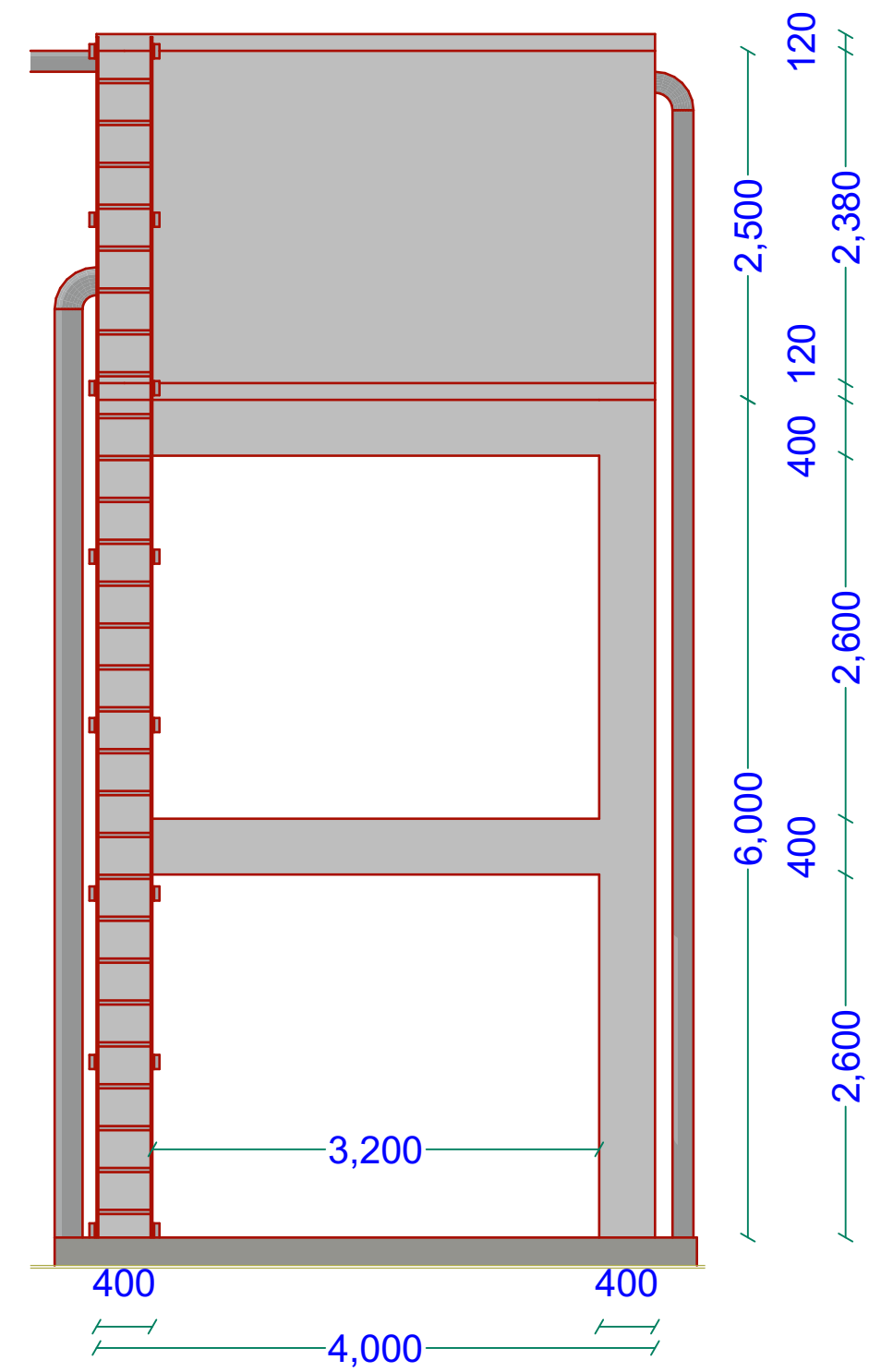
PROJECT N^o:



South Elevation



North Elevation



East Elevation

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DRAWN BY:	ENG. Wanja.D
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APPROVED BY:	

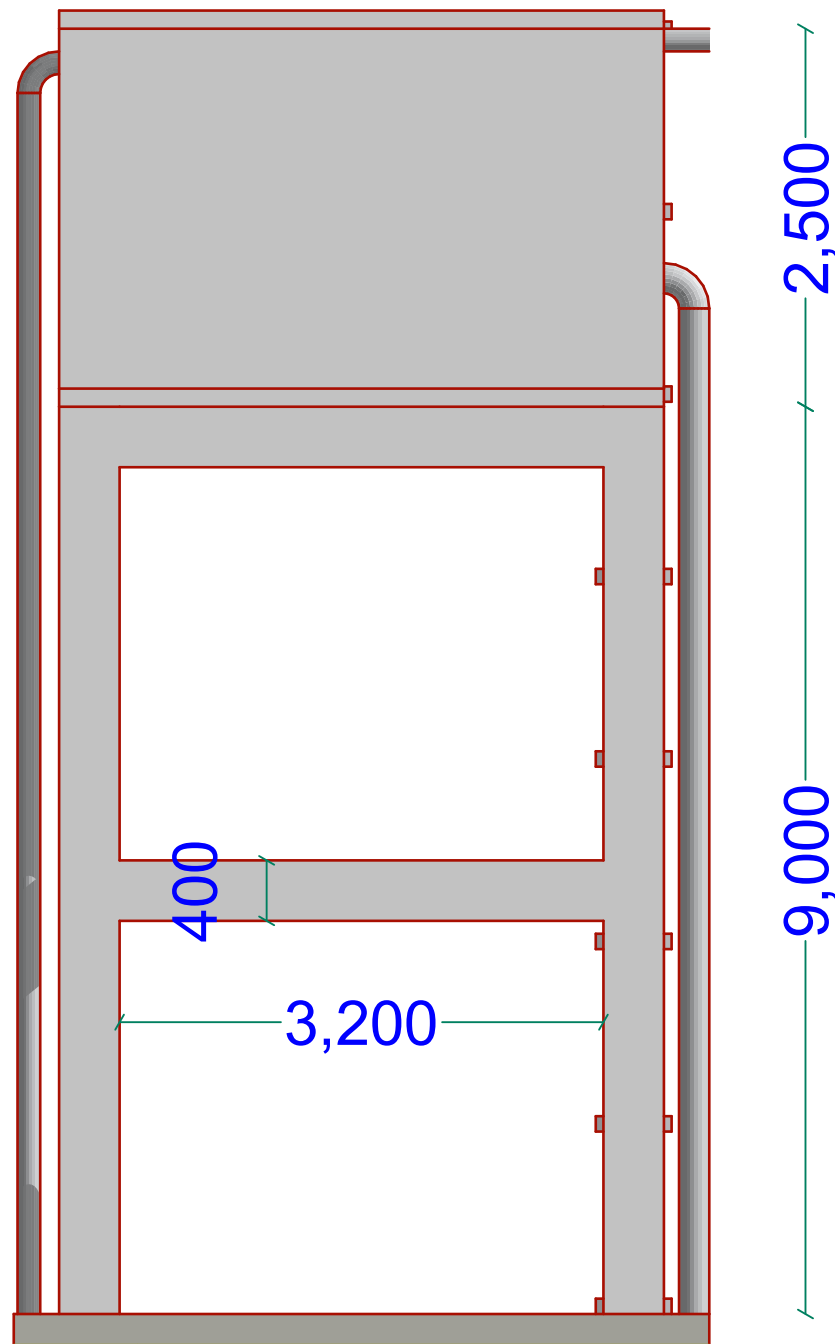
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DRAWING N°:

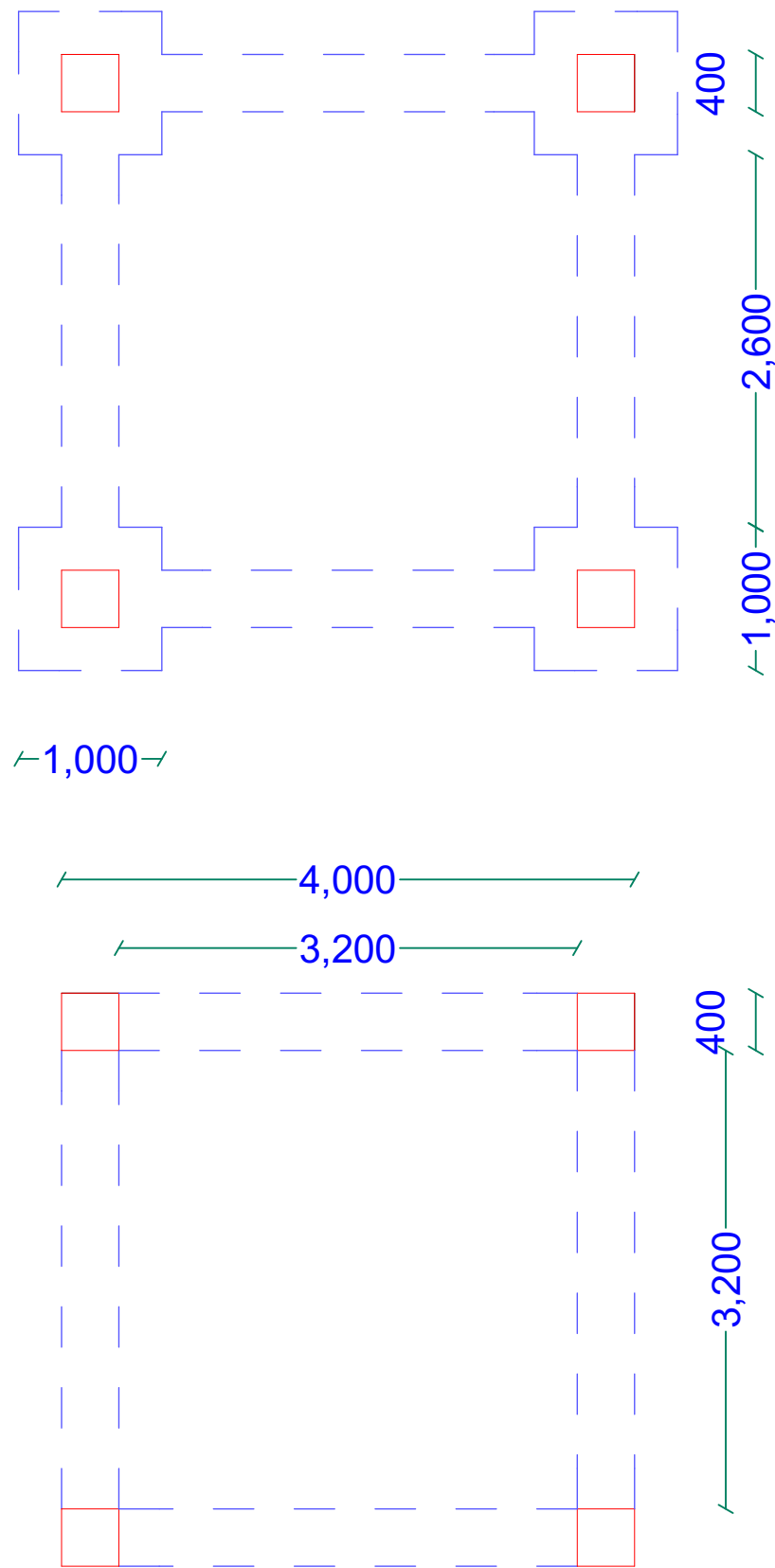
PROJECT N°:

ELEVATED TANK

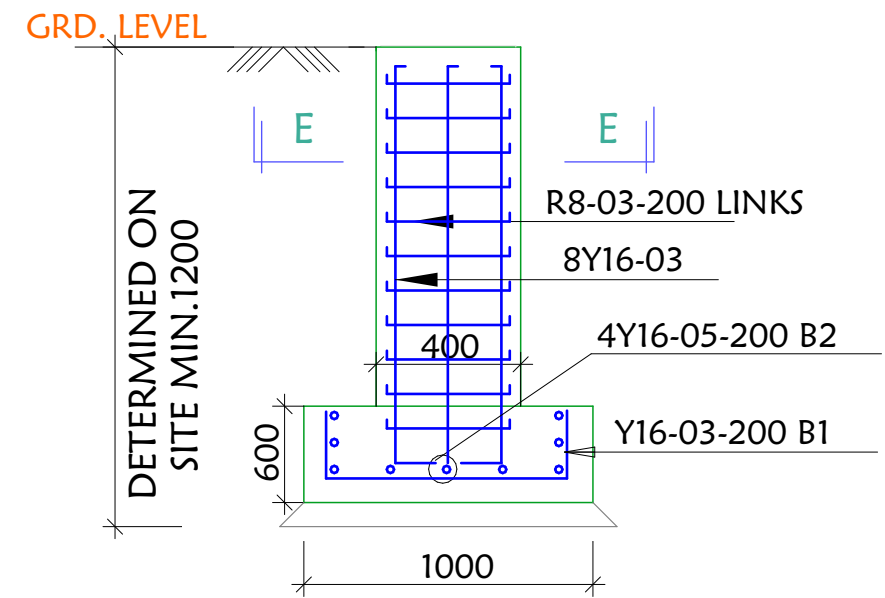
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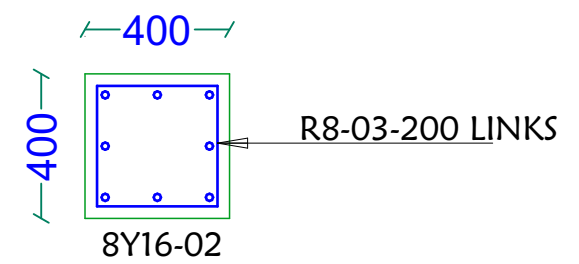
West Elevation




FOUNDATION LAYOUT

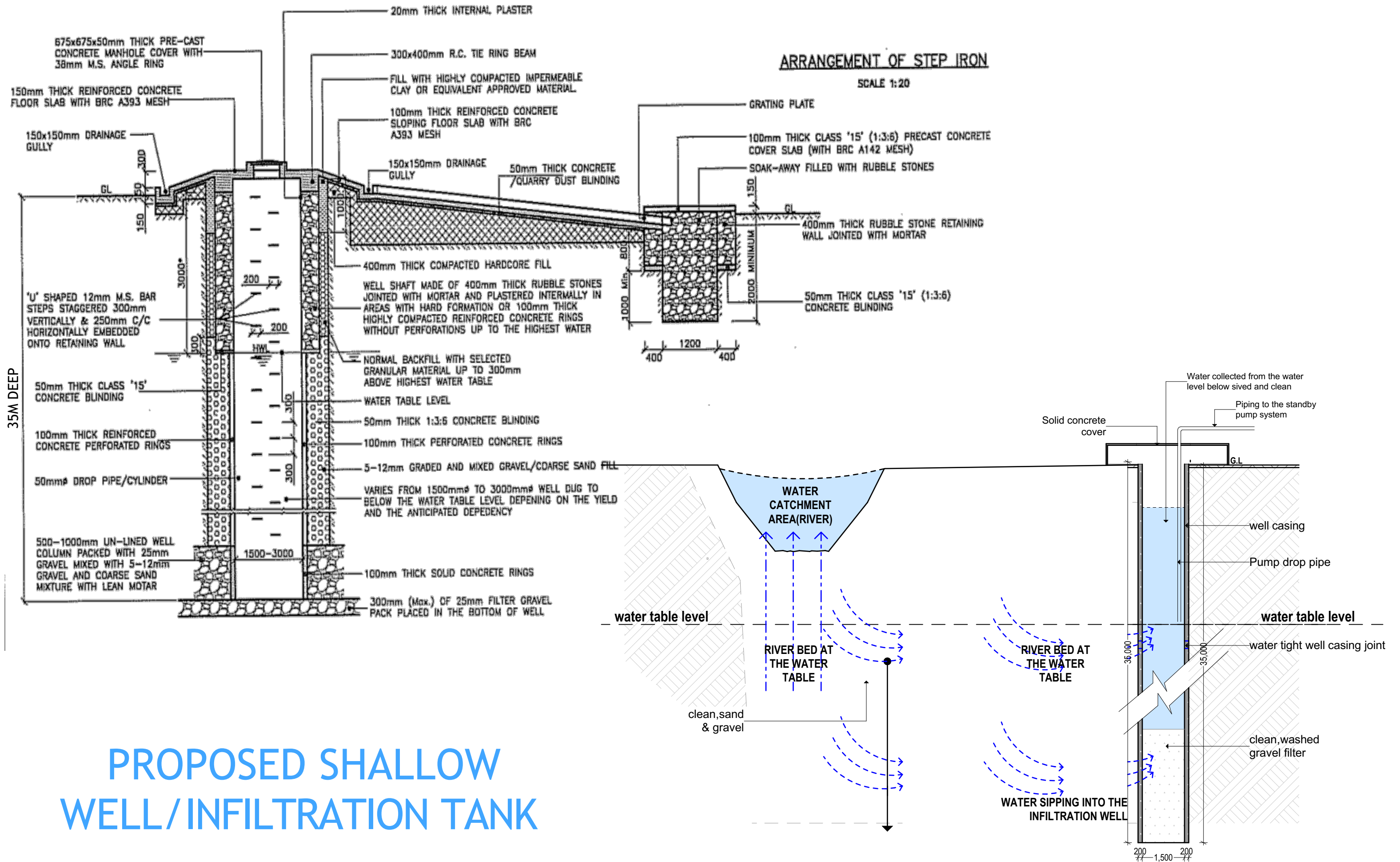


SECTION D-D
SCALE 1:25



SECTION E-E (Column)
SCALE 1:25

<p>GENERAL NOTES</p> <ol style="list-style-type: none"> All dimensions are in mm unless stated. All dimensions to be checked and confirmed on site before commencement of any work. Any discrepancy to be reported to the engineer promptly before proceeding. 	<p>PROJECT</p> <p>EXCAVATION OF SHALLOW WELLS</p>	<p>IMPLEMENTING AGENCY</p>  <p>International Organization for Migration (IOM) The UN Migration Agency</p>	<p>DEPARTMENT</p> <p>WATER SANITATION AND HYGIENE WASH</p>	<table border="1"> <tr><td>SCALE</td><td></td></tr> <tr><td>DATE</td><td>JUNE 2020</td></tr> <tr><td>DESIGNED BY:</td><td>ENG. Wanja.D</td></tr> <tr><td>DRAWN BY:</td><td>ENG. Wanja.D</td></tr> <tr><td>REVIEWED BY:</td><td></td></tr> <tr><td>APPROVED BY:</td><td></td></tr> </table>	SCALE		DATE	JUNE 2020	DESIGNED BY:	ENG. Wanja.D	DRAWN BY:	ENG. Wanja.D	REVIEWED BY:		APPROVED BY:		<p>DRAWING TITLE:</p> <p>DRAWING N^o:</p> <p>PROJECT N^o:</p>	<p>ELEVATED TANK</p> <p>SHEET N^o:</p>
SCALE																		
DATE	JUNE 2020																	
DESIGNED BY:	ENG. Wanja.D																	
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REVIEWED BY:																		
APPROVED BY:																		



PROPOSED SHALLOW WELL/INFILTRATION TANK

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PROJECT

EXCAVATION OF SHALLOW WELLS

IMPLEMENTING AGENCY



DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	JUNE 2020
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DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

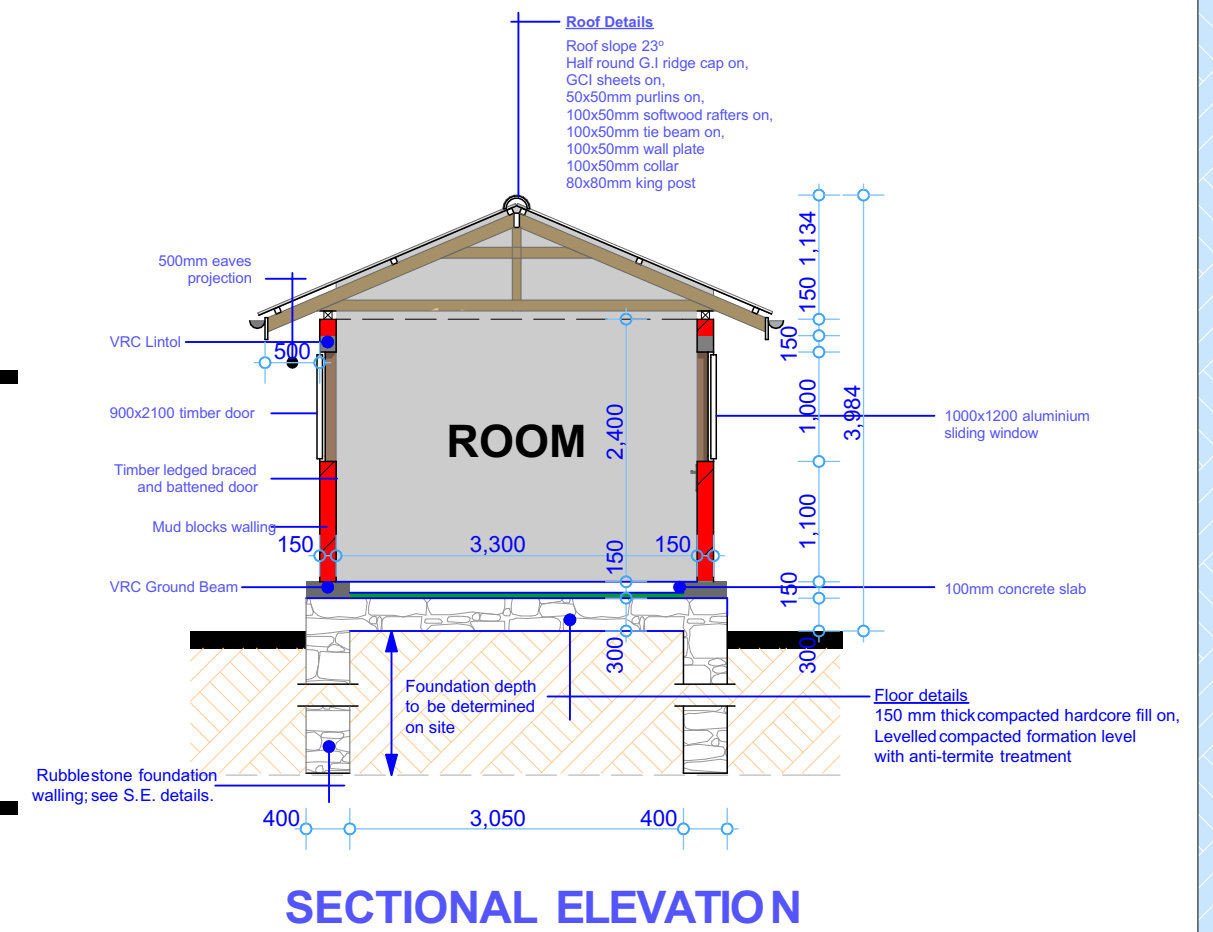
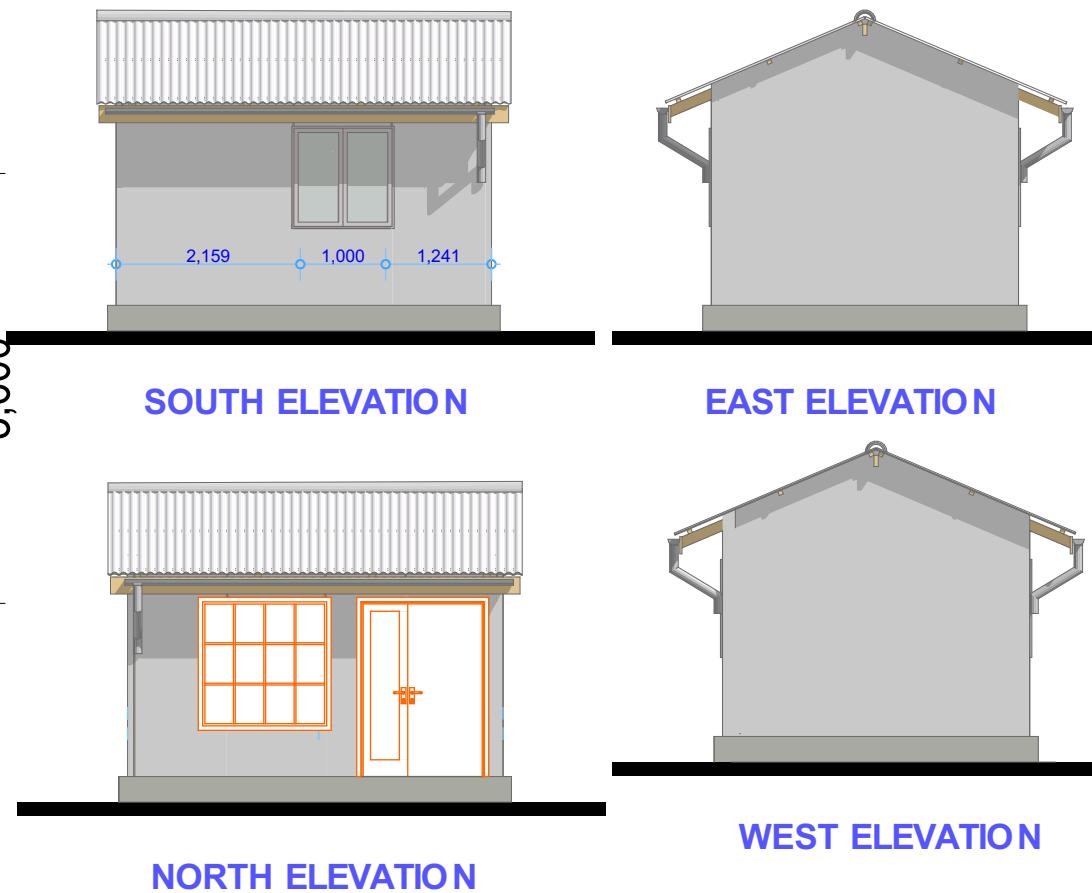
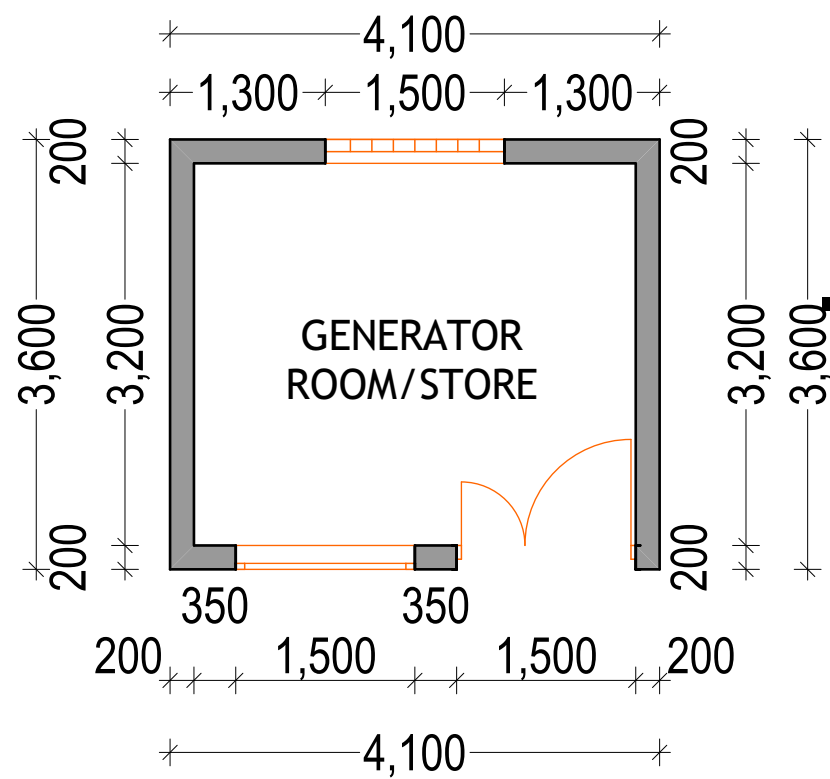
DRAWING TITLE:

DRAWING N^o:

PROJECT N^o:

SHALLOW WELL

SHEET N^o:



PROJECT
 PROPOSED
 REHABILITATION/CONSTRUCTION WORKS



LOCATION
WASH SUPPORTED
 ACTIVITIES IN SOMALIA

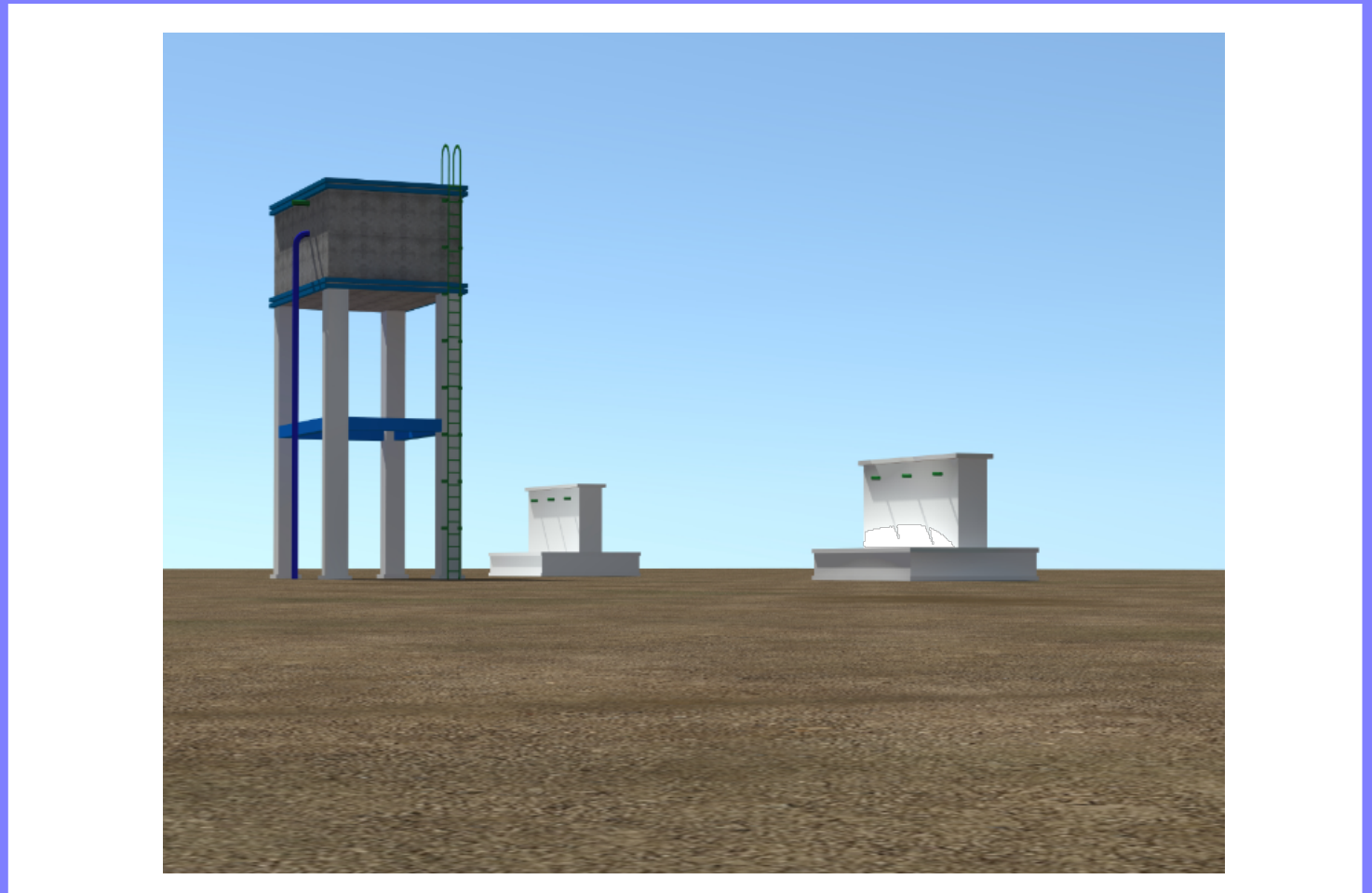
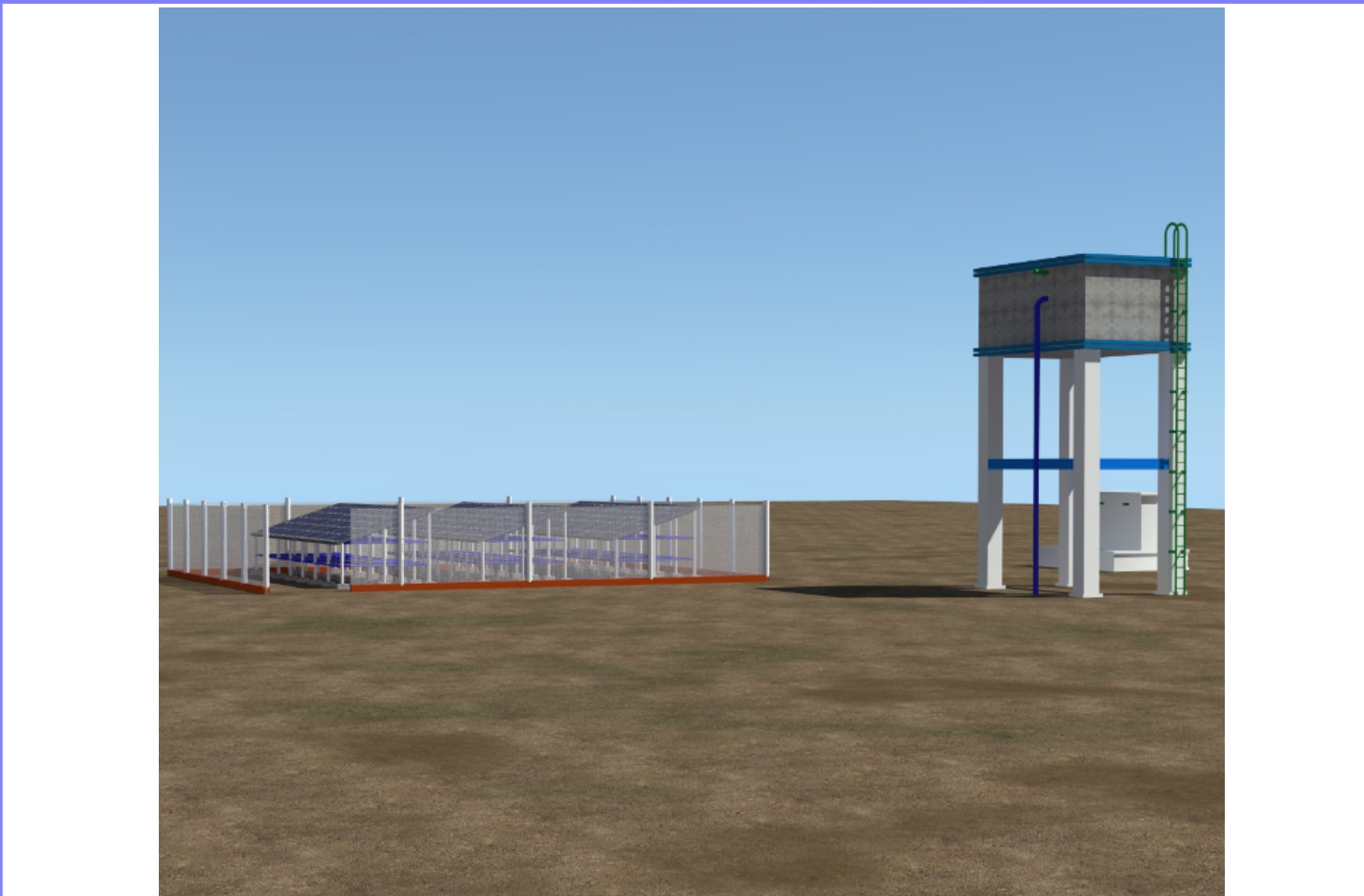
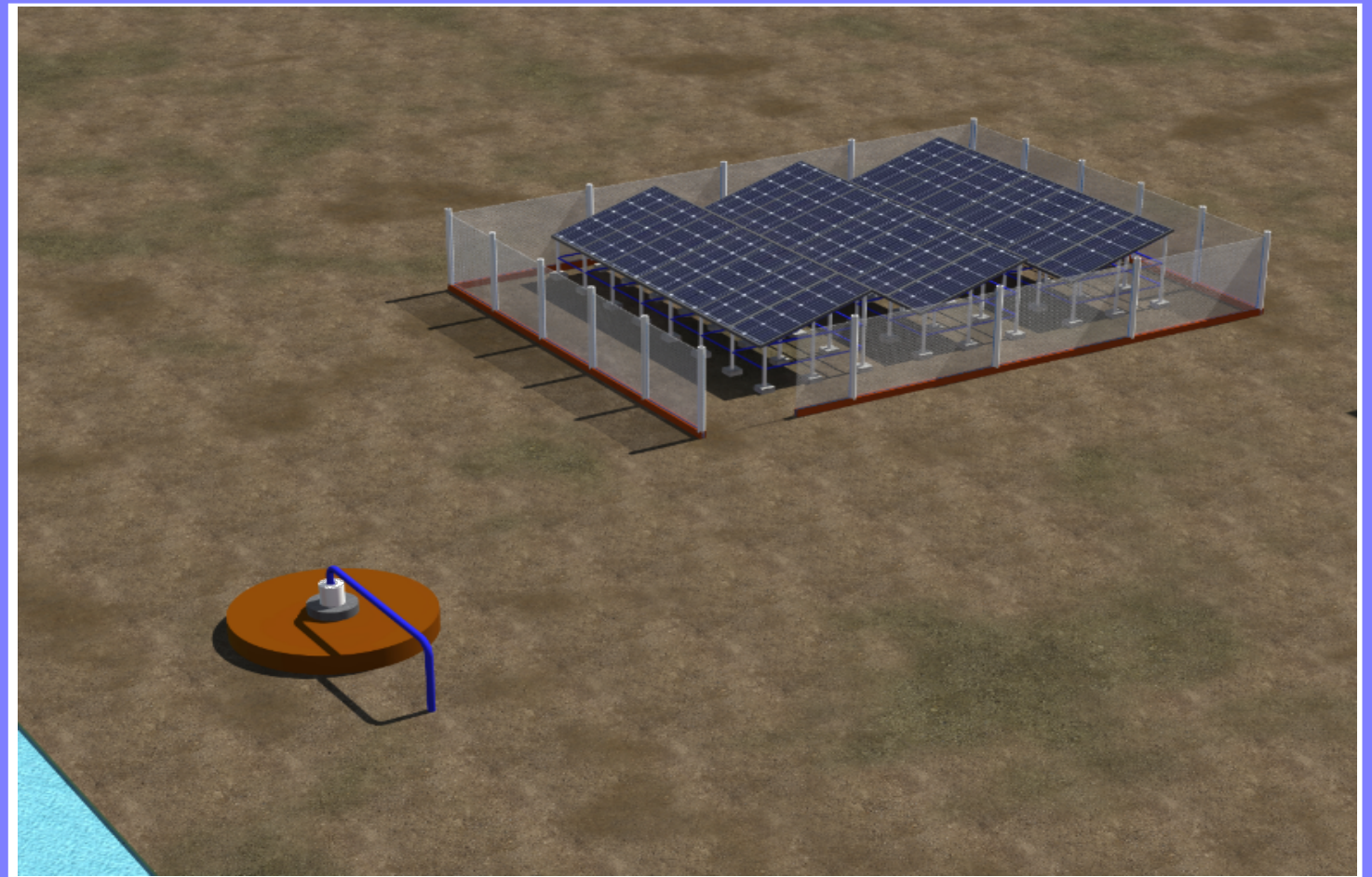
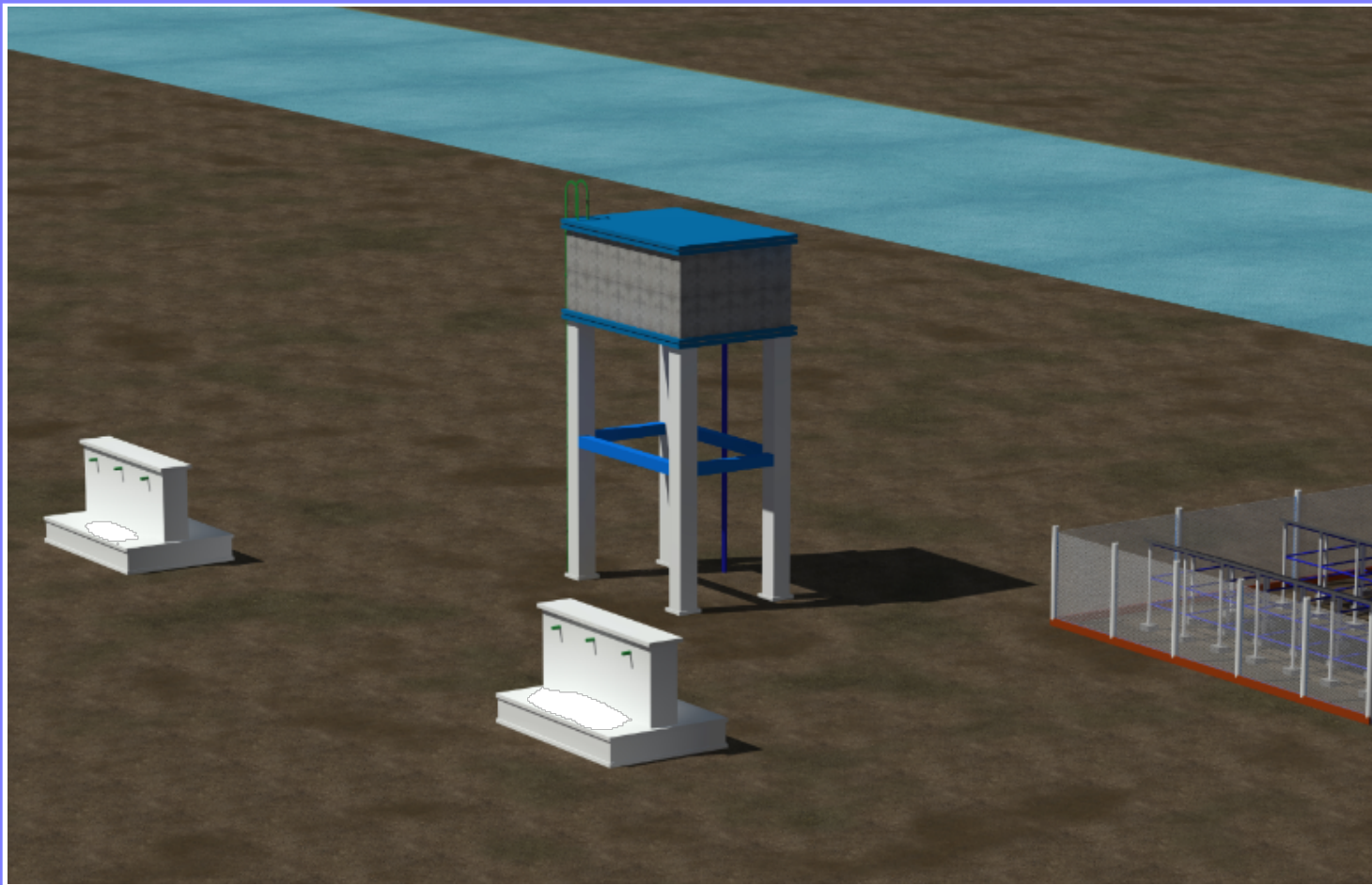
DESCRIPTION

REV.	DESCRIPTION	DATE

STATUS	NEW CONSTRUCTION
DATE	APRIL 2020
DESIGNED BY:	ENG. WANJA D.
DRAWN BY :	ENG. WANJA D.
REVIEWED BY:	
APPROVED BY:	DR. O. KHYARE

DRAWING TITLE:
 Details
DRAWING N°:
PROJECT N°:

SHEET N°:



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PROJECT

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DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
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DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:	
DRAWING N^o:	
PROJECT N^o:	

VIEWS
SHEET N ^o :

PS2-1800 C-SJ8-7

Solar Submersible Pump System for 4" wells

System Overview

Head	max. 40 m
Flow rate	max. 13 m ³ /h

Technical Data

Controller PS2-1800

- Controlling and monitoring
- Control inputs for dry running protection, remote control etc.
- Protected against reverse polarity, overload and overtemperature
- Integrated MPPT (Maximum Power Point Tracking)
- Battery operation: Integrated low voltage disconnect
- Integrated Sun Sensor

Power	max. 1,8 kW
Input voltage	max. 200 V
Optimum Vmp**	> 102 V
Motor current	max. 14 A
Efficiency	max. 98 %
Ambient temp.	-40...50 °C
Enclosure class	IP68

Motor ECDRIVE 1200-C / ECDRIVE 1800-C

- Maintenance-free brushless DC motor
- Water filled
- Premium materials, stainless steel: AISI 304/316
- No electronics in the motor

Rated power	1,7 kW
Efficiency	max. 92 %
Motor speed	900...3 300 rpm
Insulation class	F
Enclosure class	IP68
Submersion	max. 150 m

Pump End PE C-SJ8-7

- Non-return valve
- Premium materials, stainless steel: AISI 304
- Optional: dry running protection
- Centrifugal pump

Pump Unit PU1800 C-SJ8-7 (Motor, Pump End)

Borehole diameter	min. 4,0 in
Water temperature	max. 50 °C

Standards



2006/42/EC, 2004/108/EC, 2006/95/EC

IEC/EN 61702:1995

The logos shown reflect the approvals that have been granted for this product family. Products are ordered and supplied with the approvals specific to the market requirements.

**Vmp: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

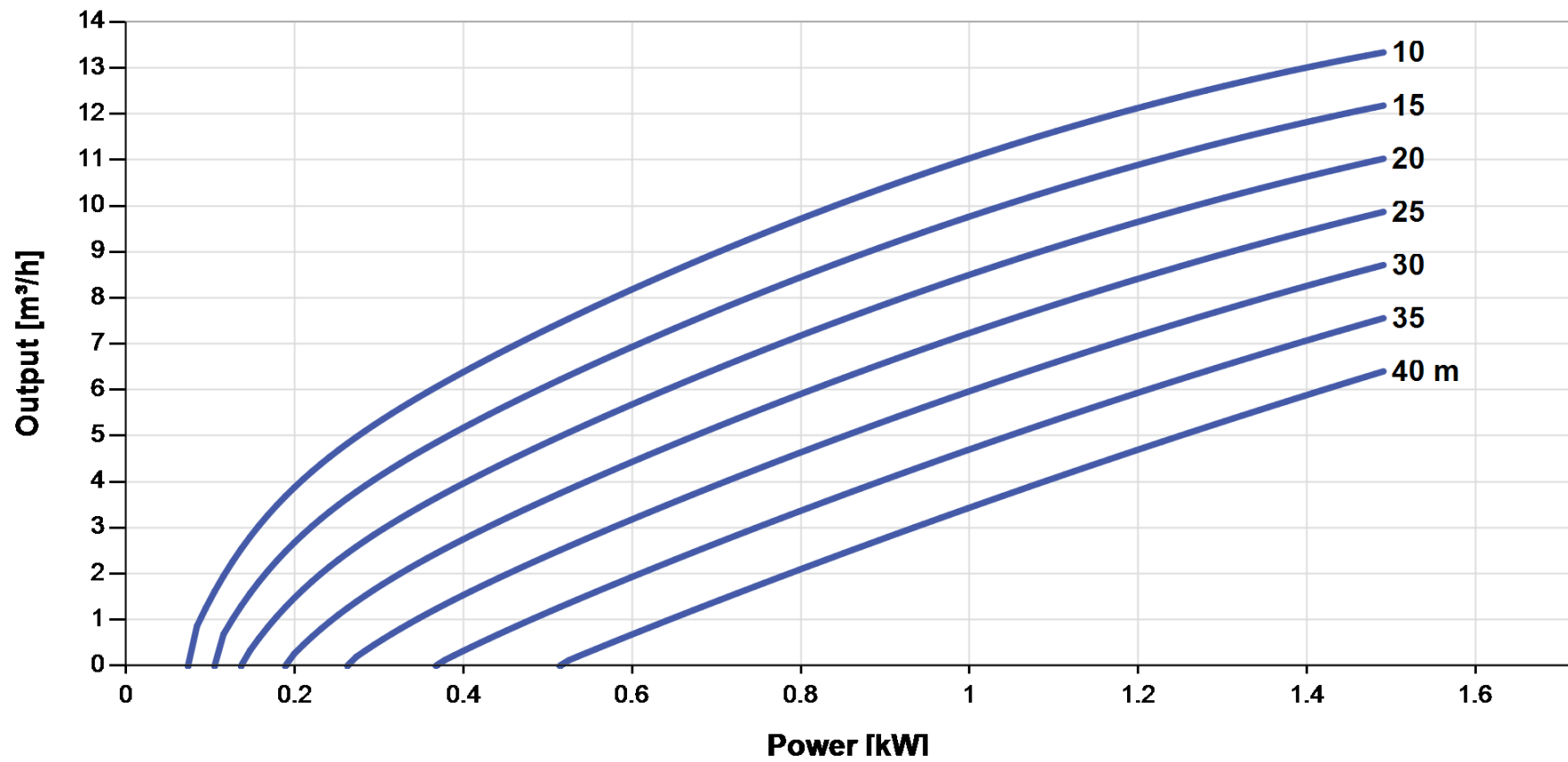


PS2-1800 C-SJ8-7

Solar Submersible Pump System for 4" wells

Pump Chart

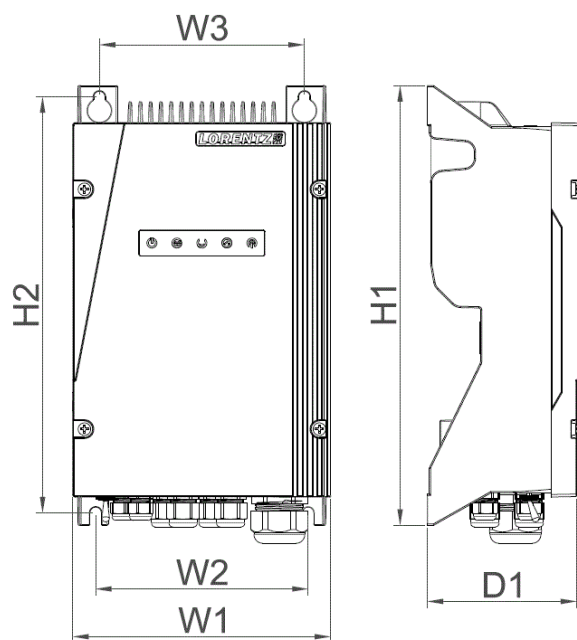
V_{mp}* > 102 V



Dimensions and Weights

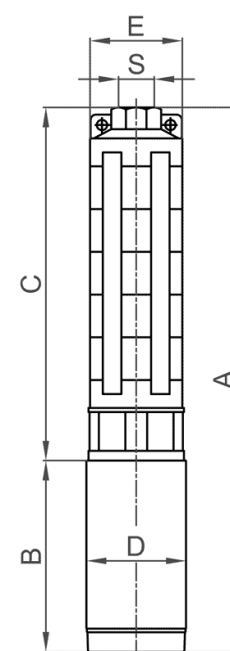
Controller

H1 = 352 mm
 H2 = 333 mm
 W1 = 207 mm
 W2 = 170 mm
 W3 = 164 mm
 D1 = 124 mm



Pump Unit

A = 684 mm
 B = 185 mm
 C = 499 mm
 D = 96 mm
 E = 98 mm
 S = 2 in



	Net weight
Controller	6,0 kg
Pump Unit	14 kg
Motor	7,0 kg
Pump End	6,5 kg

*V_{mp}: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

