

**PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-**

PROJECT:

**PROPOSED SHALLOW
WELLS REHABILITATION
-BULLA GADUUD DISTRICT-**

IMPLEMENTING AGENCY.

DAL★BILE

A NATION IS BUILT BY ITS PEOPLE

SOMALI STABILIZATION INITIATIVES

GOVERNMENT:



JUBBALAND STATE OF SOMALIA

PROPOSED BULLA GADUUD SHALLOW WELL REHABILITATION

DRAWING INDEX

JANUARY 2018

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PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

SCALE		DRAWING TITLE:	SHALLOW WELL
DATE	JANUARY, 2018	LOCATION	
DESIGNED BY:	J. NANDWA	DRAWING N°:	
DRAWN BY:	J. NANDWA	PROJECT N°:	
REVIEWED BY:			
APPROVED BY:			

SHEET N°:
03/22



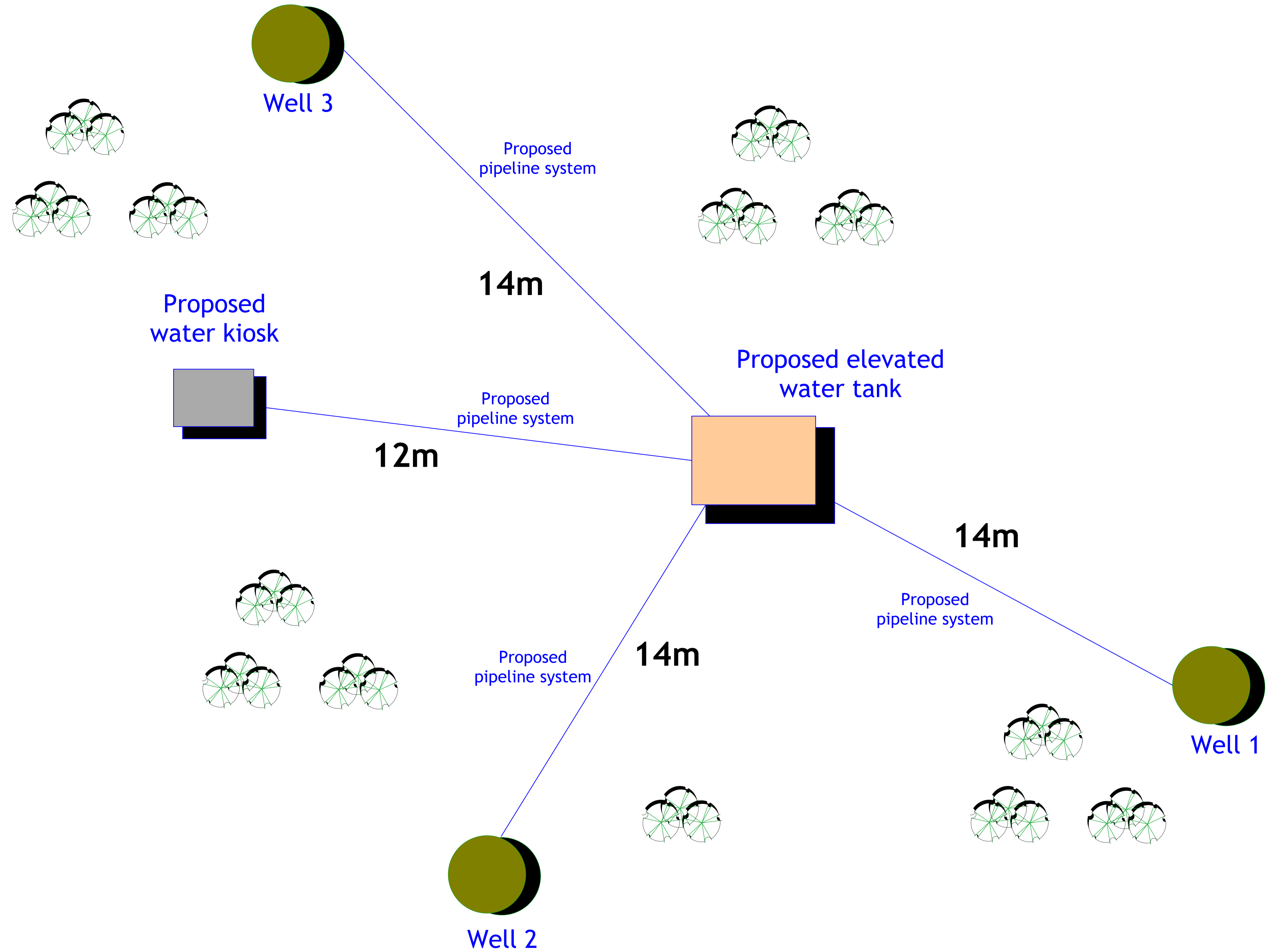
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

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DATE	JANUARY, 2018	SITE PHOTOS
DESIGNED BY:	J. NANDWA	DRAWING N ^o :
DRAWN BY:	J. NANDWA	PROJECT N ^o :
REVIEWED BY:		
APPROVED BY:		

SHALLOW WELL

SHEET N^o:
04/22

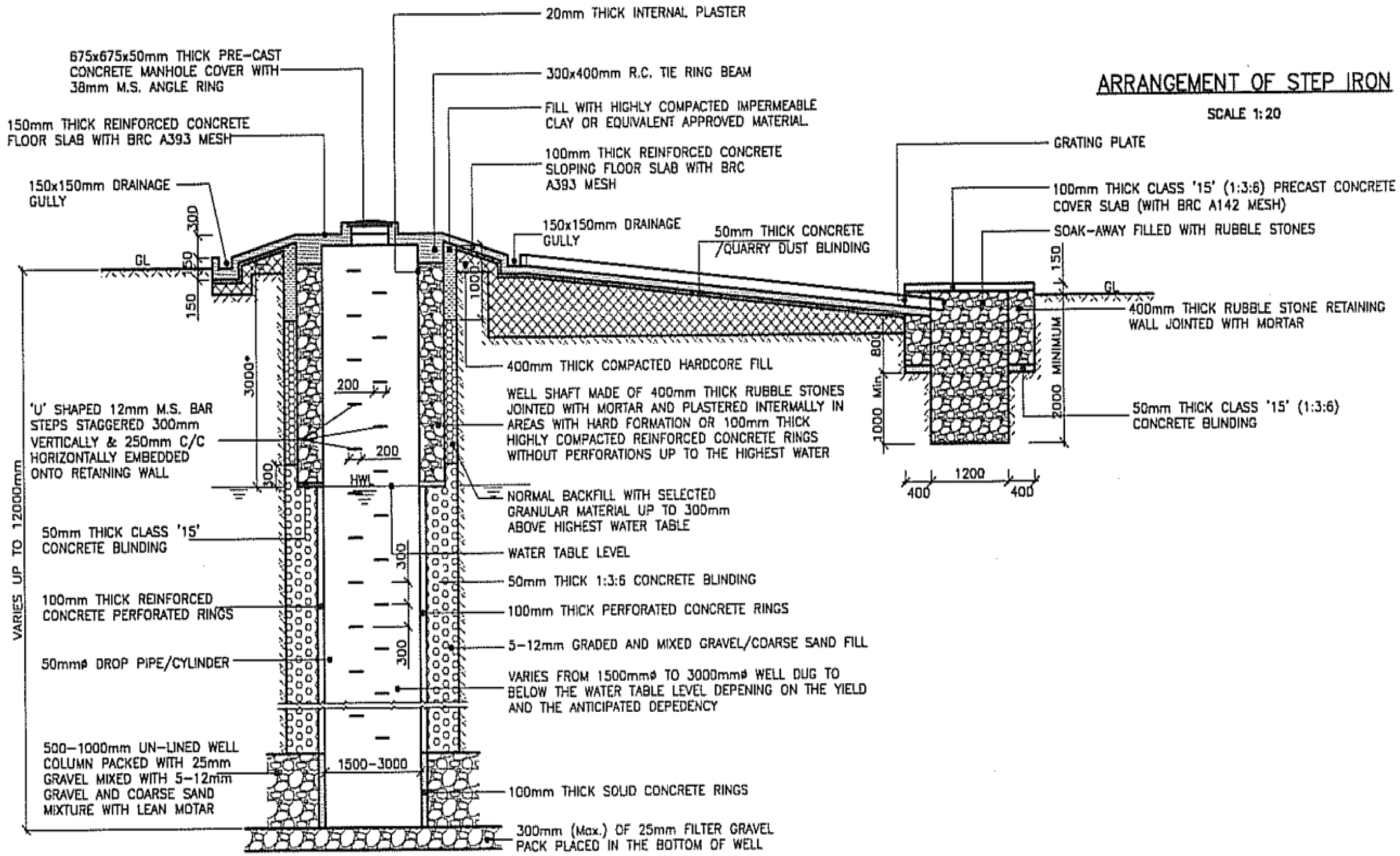


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REHABILITATION
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SHEET TITLE:

SCALE		DRAWING TITLE:	SHALLOW WELL
DATE	JANUARY, 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
DRAWN BY:	J. NANDWA		
REVIEWED BY:			
APPROVED BY:			

SHEET N^o:
05/22



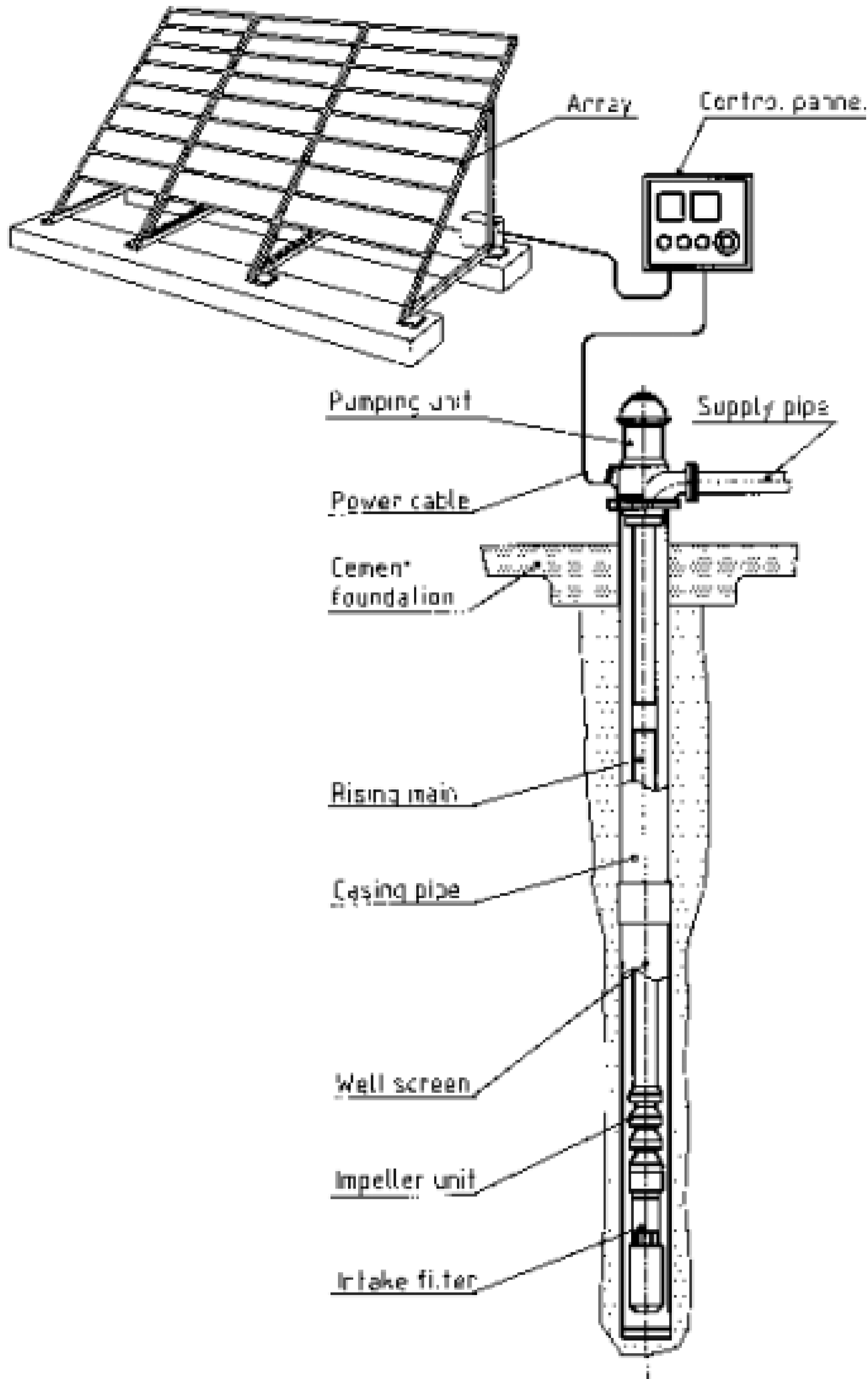
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

SCALE		DRAWING TITLE:	
DATE	JANUARY, 2018	WELL DETAILS	
DESIGNED BY:	J. NANDWA	DRAWING N ^o :	
DRAWN BY:	J. NANDWA	PROJECT N ^o :	
REVIEWED BY:			
APPROVED BY:			

SHALLOW WELL
SHEET N^o:
06/22

MOTORIZED PUMP INSTALLATIONS



- The well should be able to produce a minimum head of 0.5l/s of water to install motorized pump
- The well to be equipped with a low head submersible solar pump for water levels (both static and dynamic) greater than 6m from the top of the well
- A centrifugal pump is recommended for static water levels lower than 6m
- Shock chlorination after works have been completed with at least 50mg/l
- Water quality should comply with WHO guidelines
- Types of pump - Submersible pump for well depth with dynamic water table less than 6m
- Power supply - Solar.

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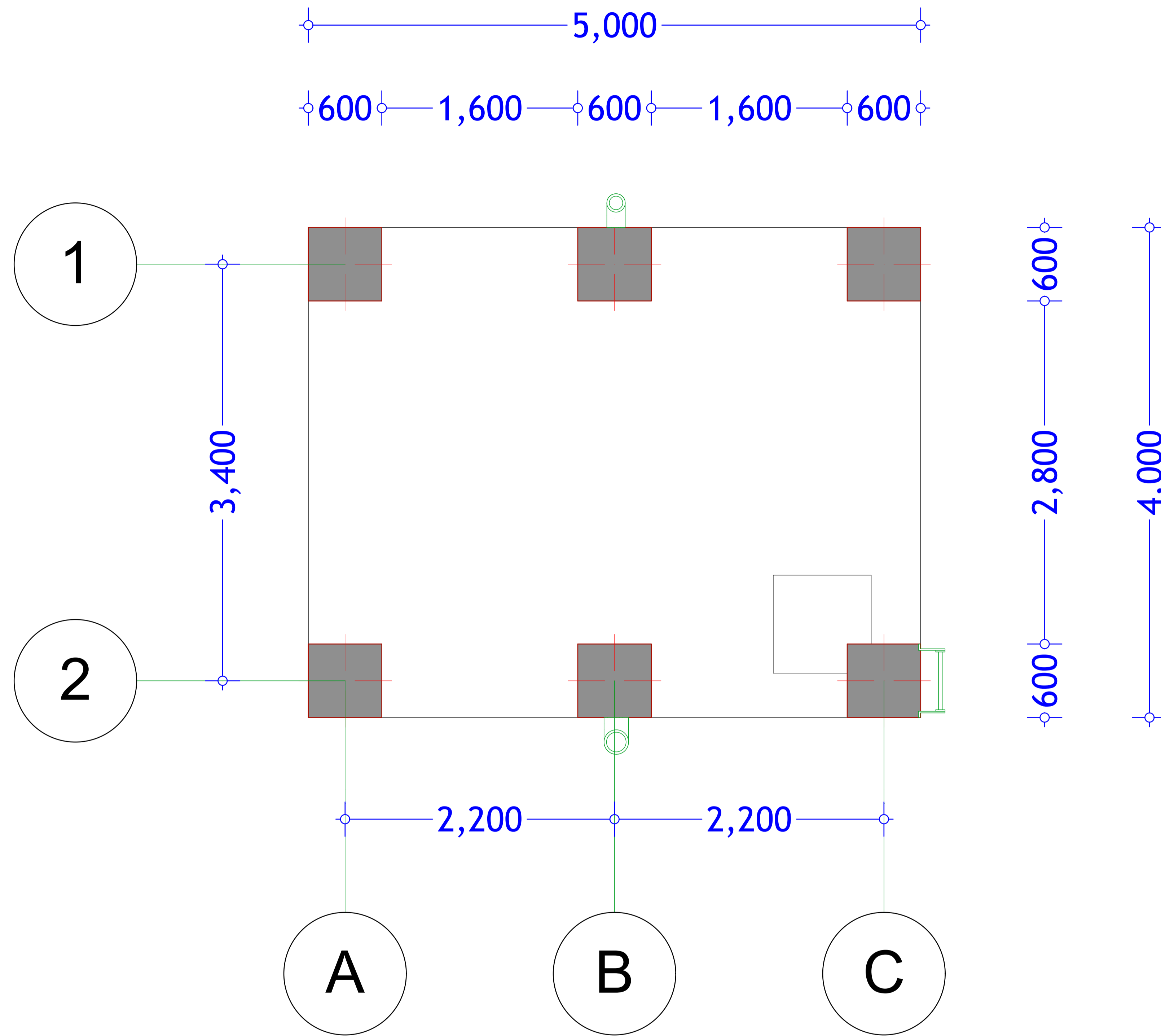
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DATE	JANUARY, 2018	SOLAR DETAILS
DESIGNED BY:	J. NANDWA	DRAWING N ^o :
DRAWN BY:	J. NANDWA	PROJECT N ^o :
REVIEWED BY:		
APPROVED BY:		

SHALLOW WELL

SHEET N^o:

07/22



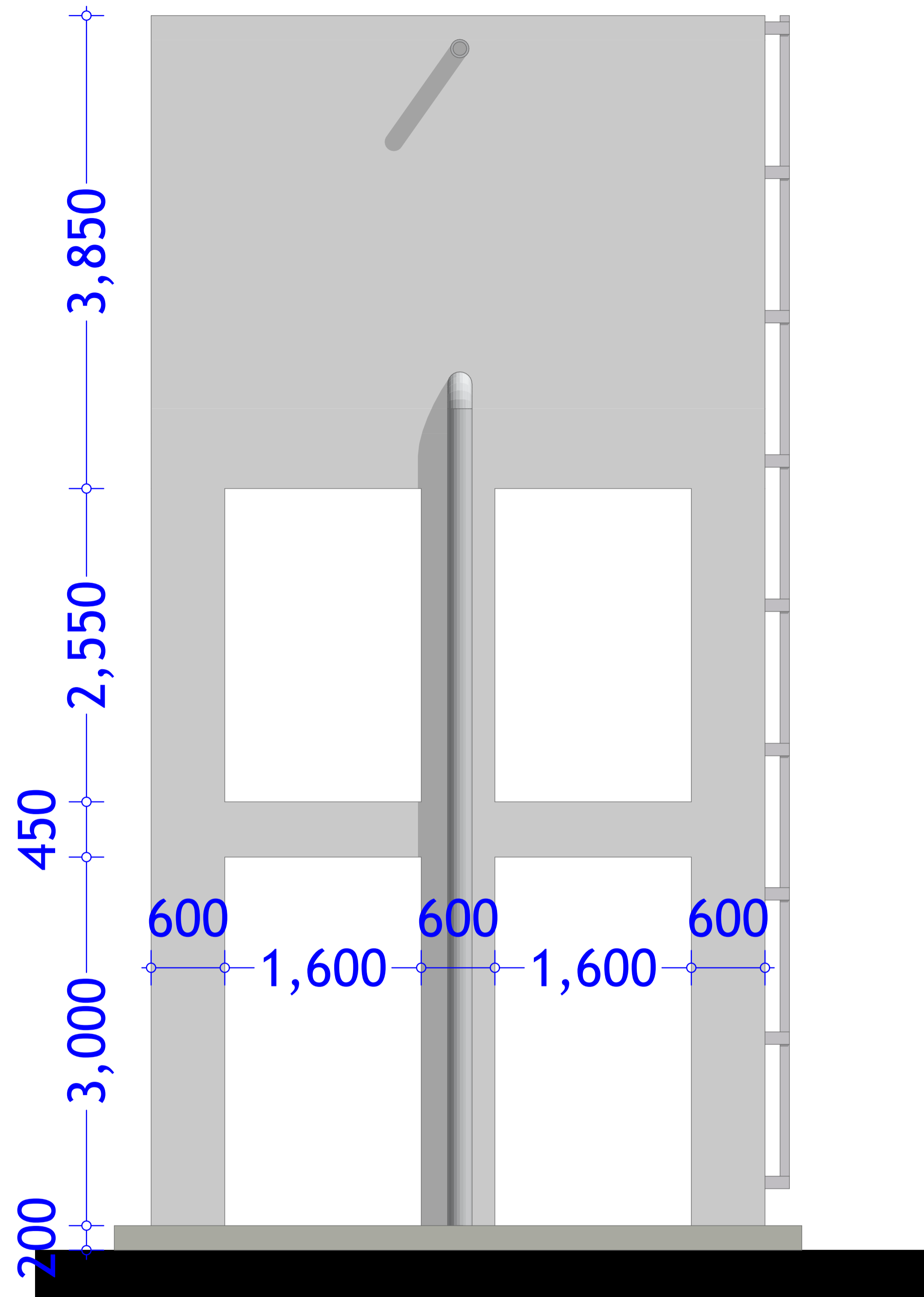
Floor plan

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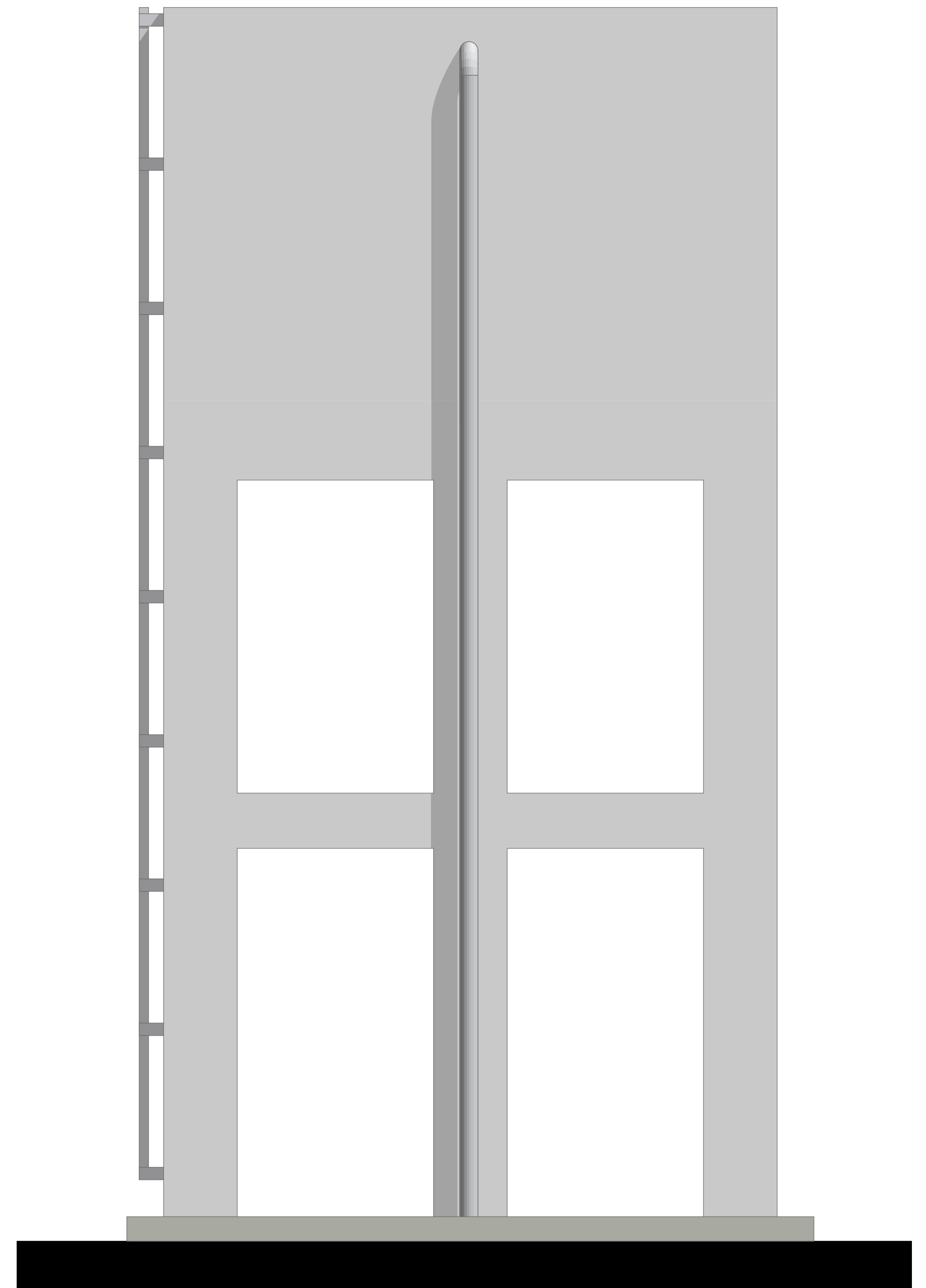
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FLOOR LAYOUT

SCALE		DRAWING TITLE:	
DATE	JANUARY. 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
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WATER TANK
SHEET N^o:
08/22



South Elevation



North Elevation

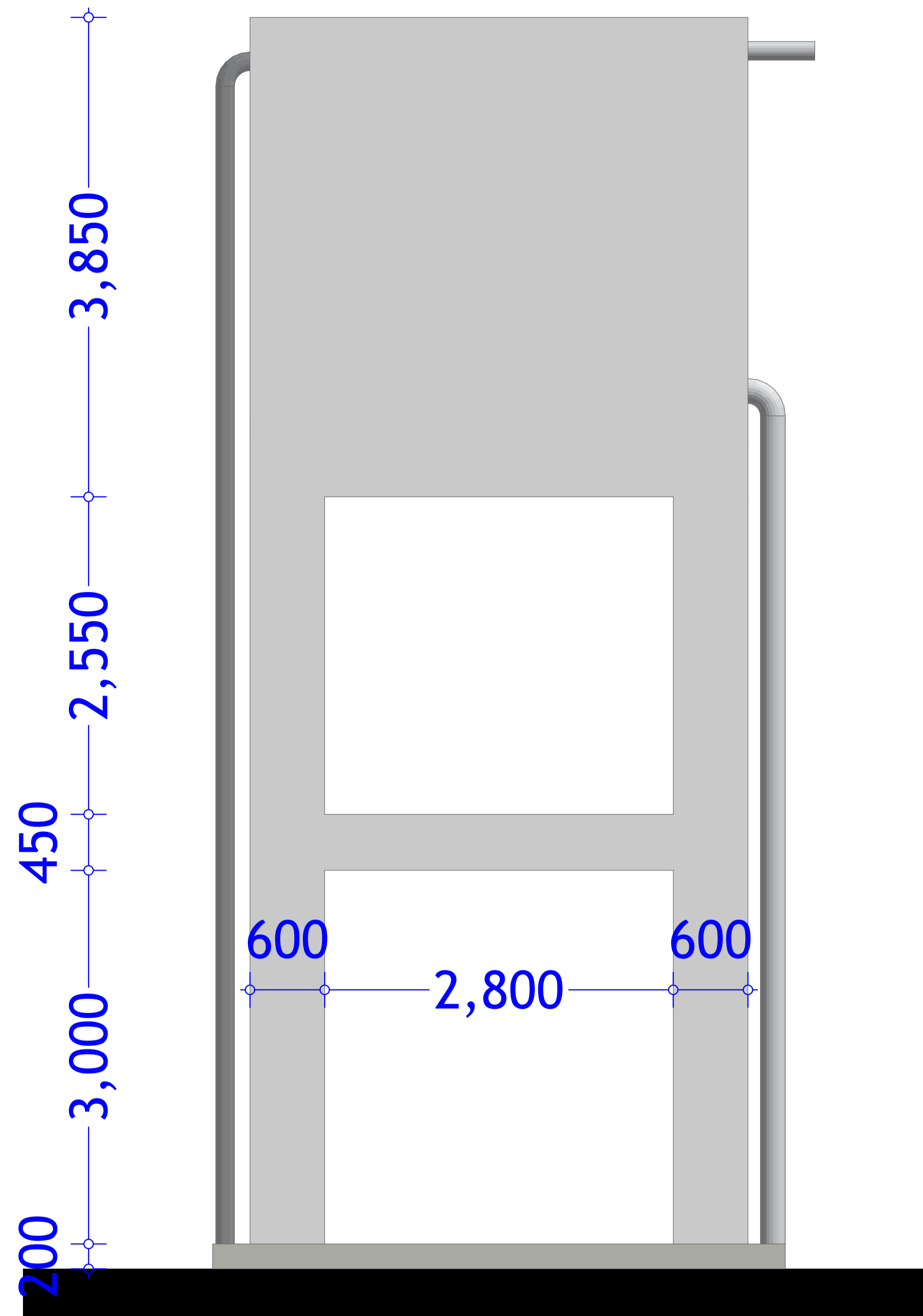
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REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:
ELEVATIONS_1

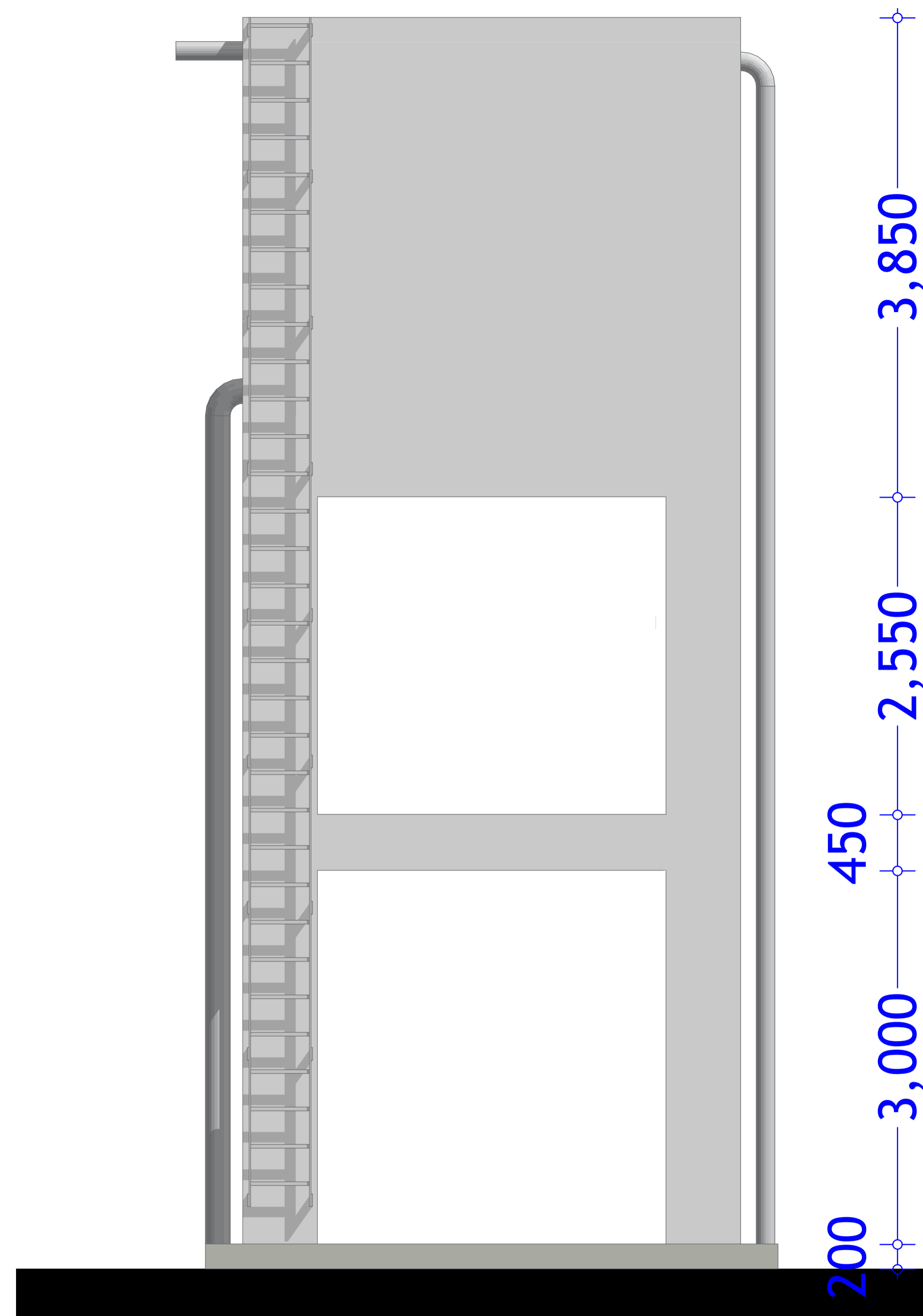
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DRAWN BY:	J. NANDWA
REVIEWED BY:	
APPROVED BY:	

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DRAWING N ^o :	
PROJECT N ^o :	

WATER TANK
SHEET N ^o : 09/22



West Elevation



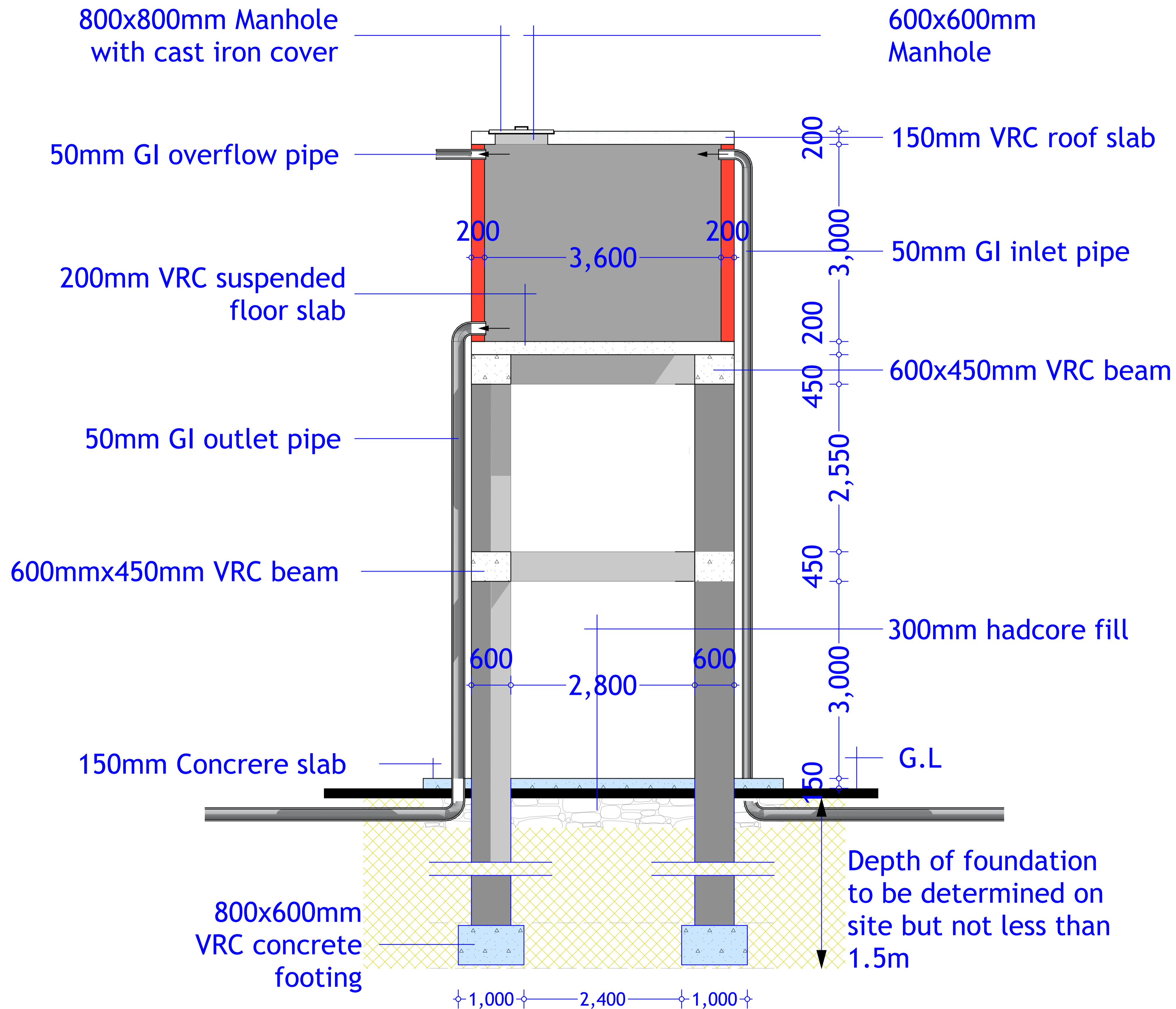
East Elevation

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REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:
ELEVATIONS_2

SCALE		DRAWING TITLE:	
DATE	JANUARY. 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
DRAWN BY:	J. NANDWA		
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APPROVED BY:			

SHEET N^o:
10/22



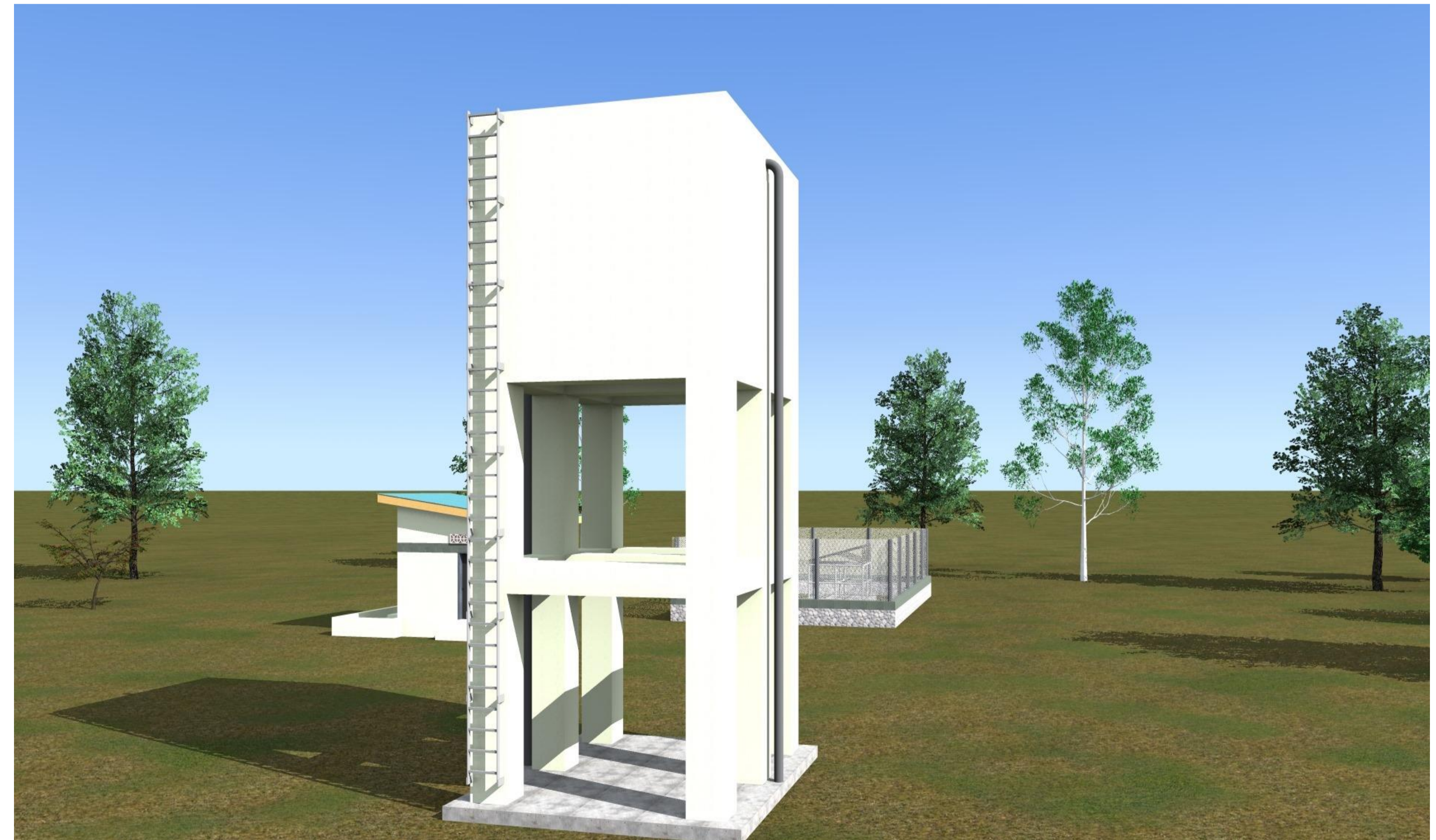
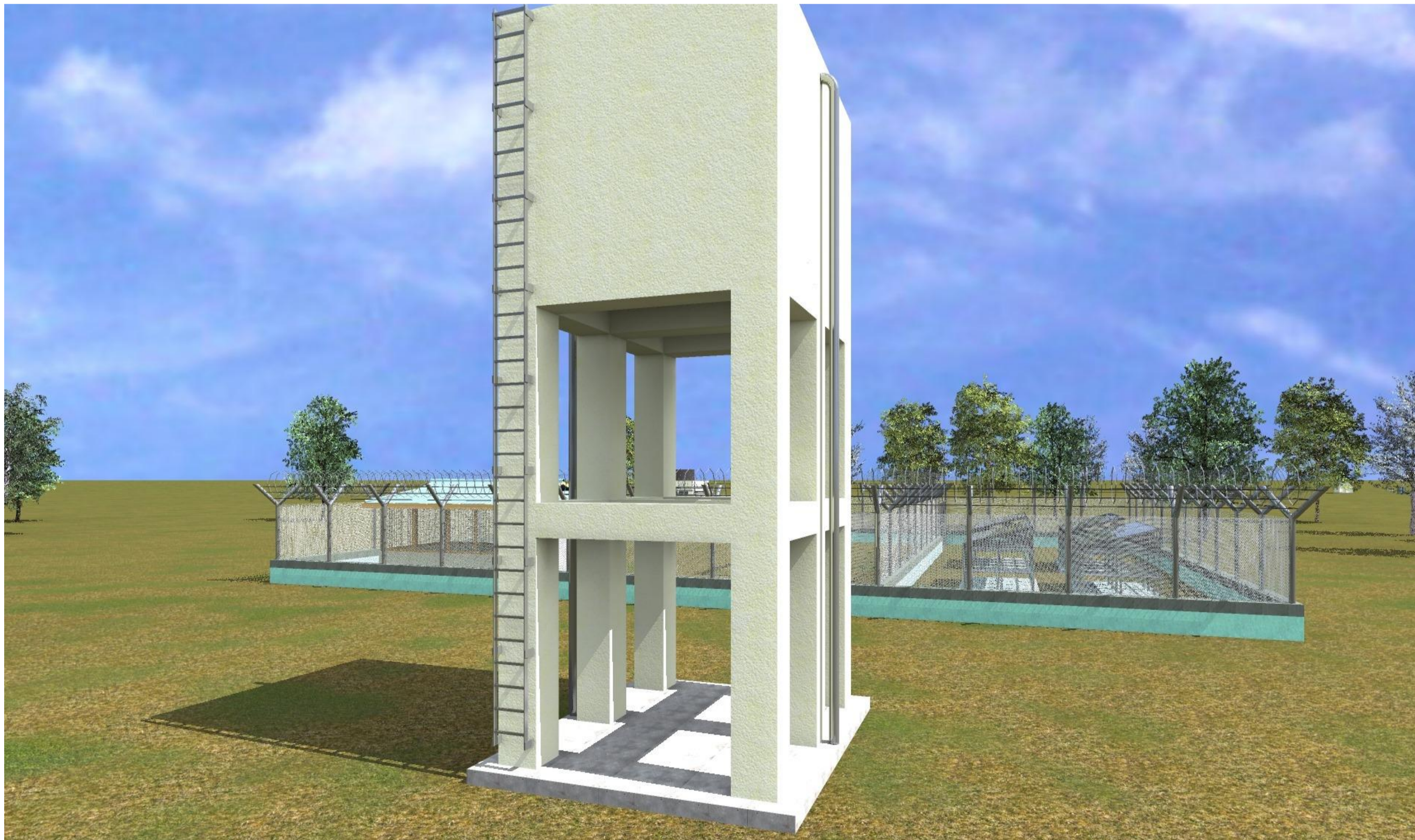
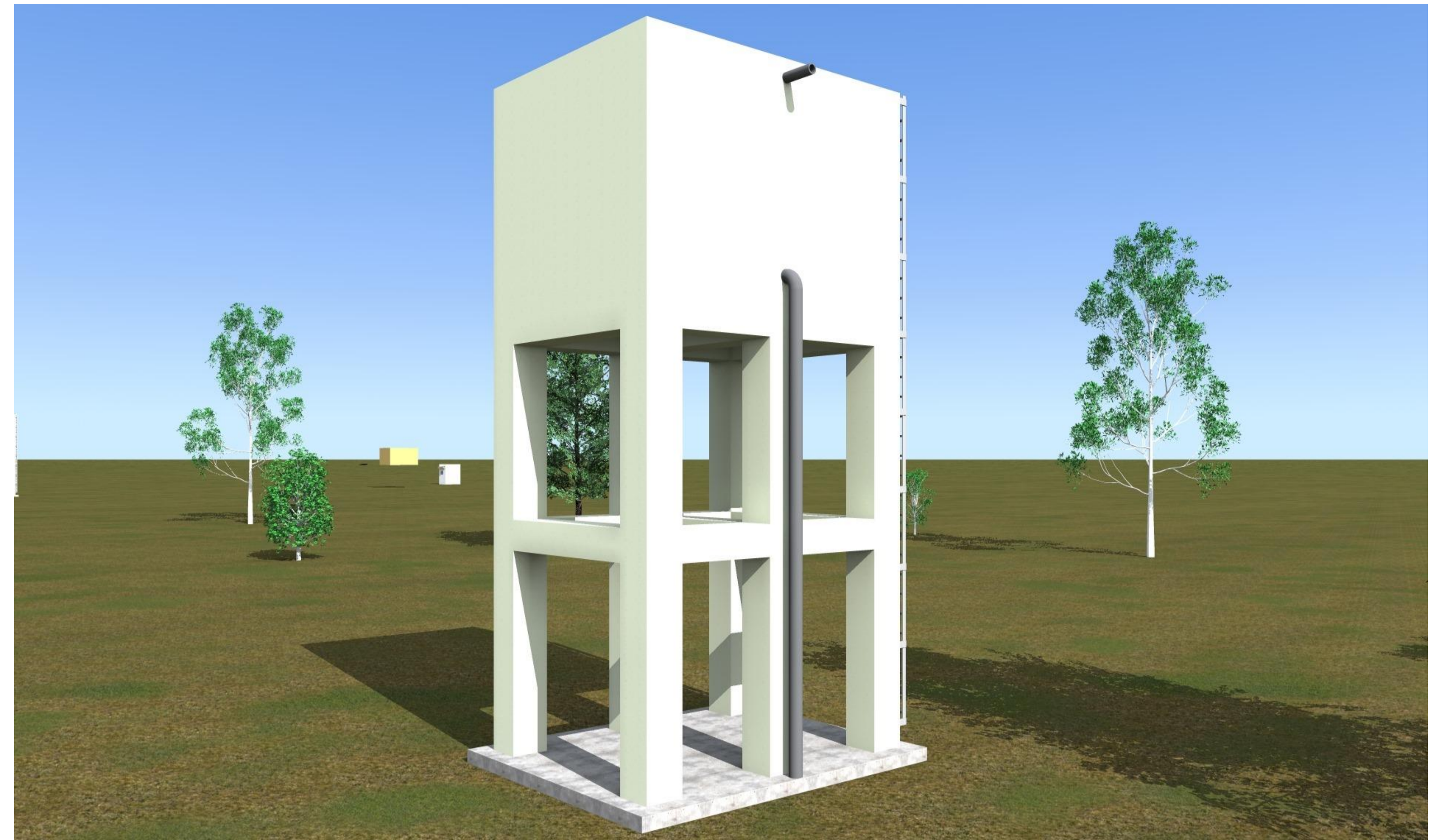
Sectional Elevation

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REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:
SECTIONS

SCALE		DRAWING TITLE:	WATER TANK
DATE	JANUARY. 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
DRAWN BY:	J. NANDWA		
REVIEWED BY:			
APPROVED BY:			

SHEET N^o:
11/22



PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

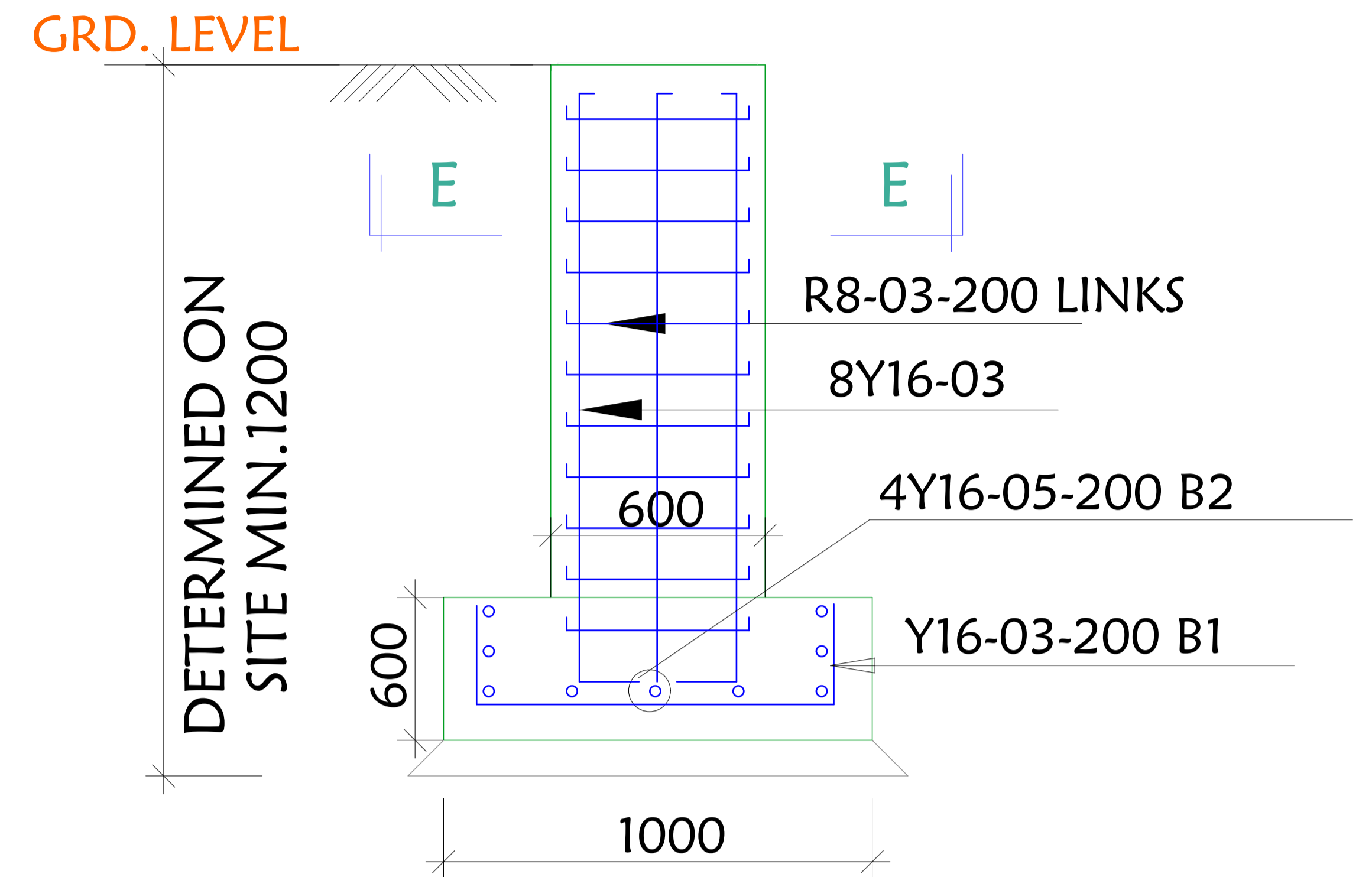
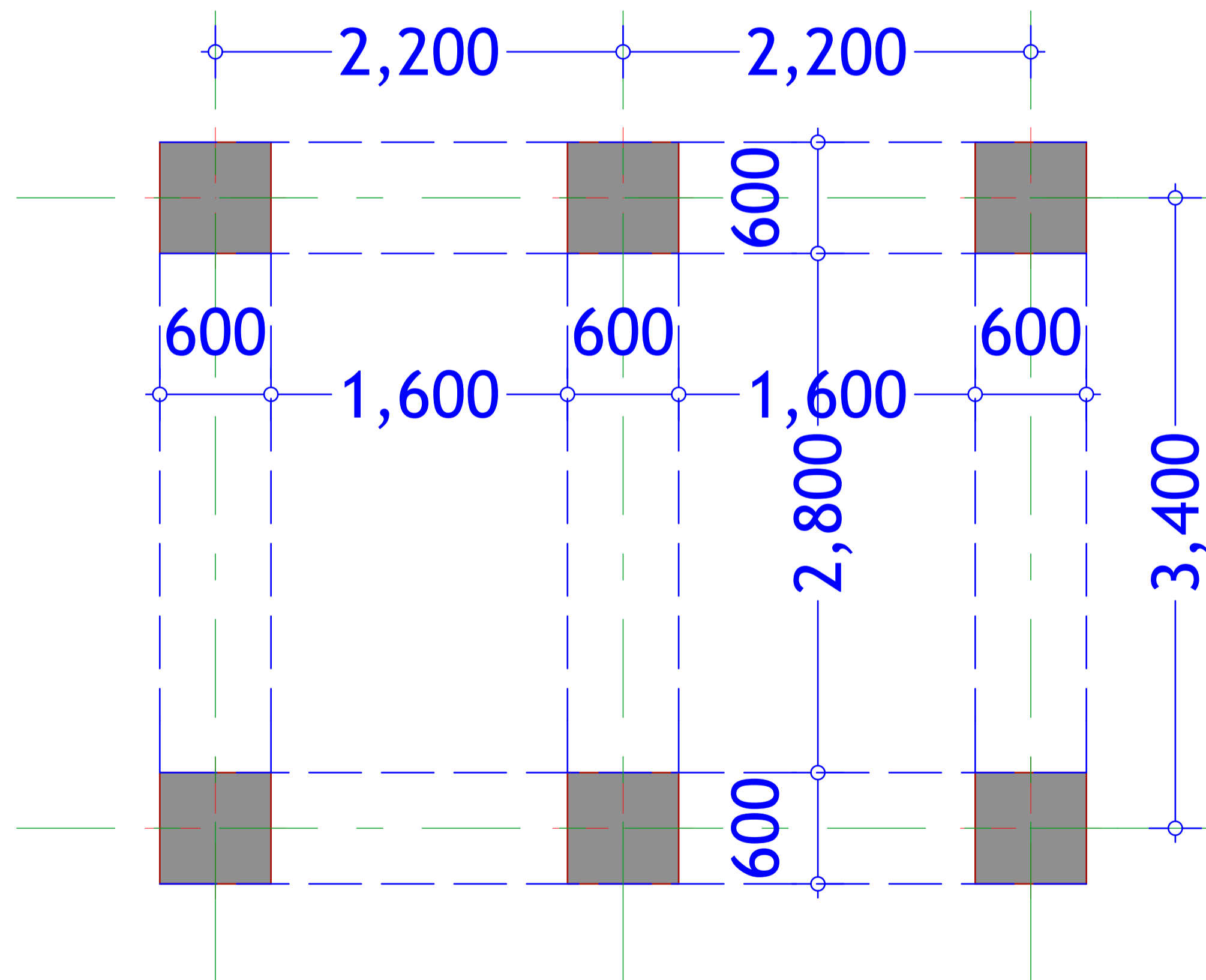
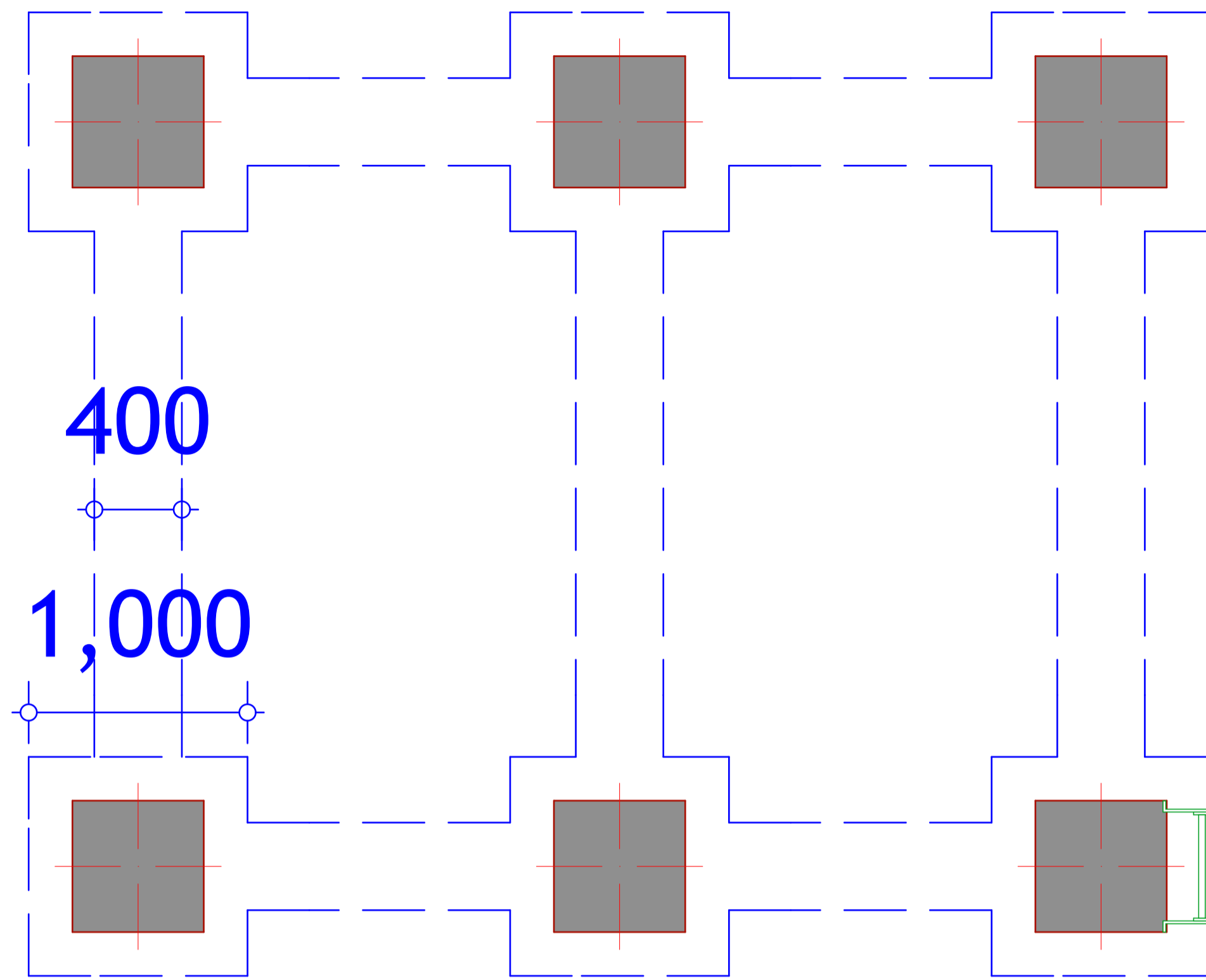
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SCALE	
DATE	JANUARY. 2018
DESIGNED BY:	J. NANDWA
DRAWN BY:	J. NANDWA
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:
3D MODELS
DRAWING N°:
PROJECT N°:

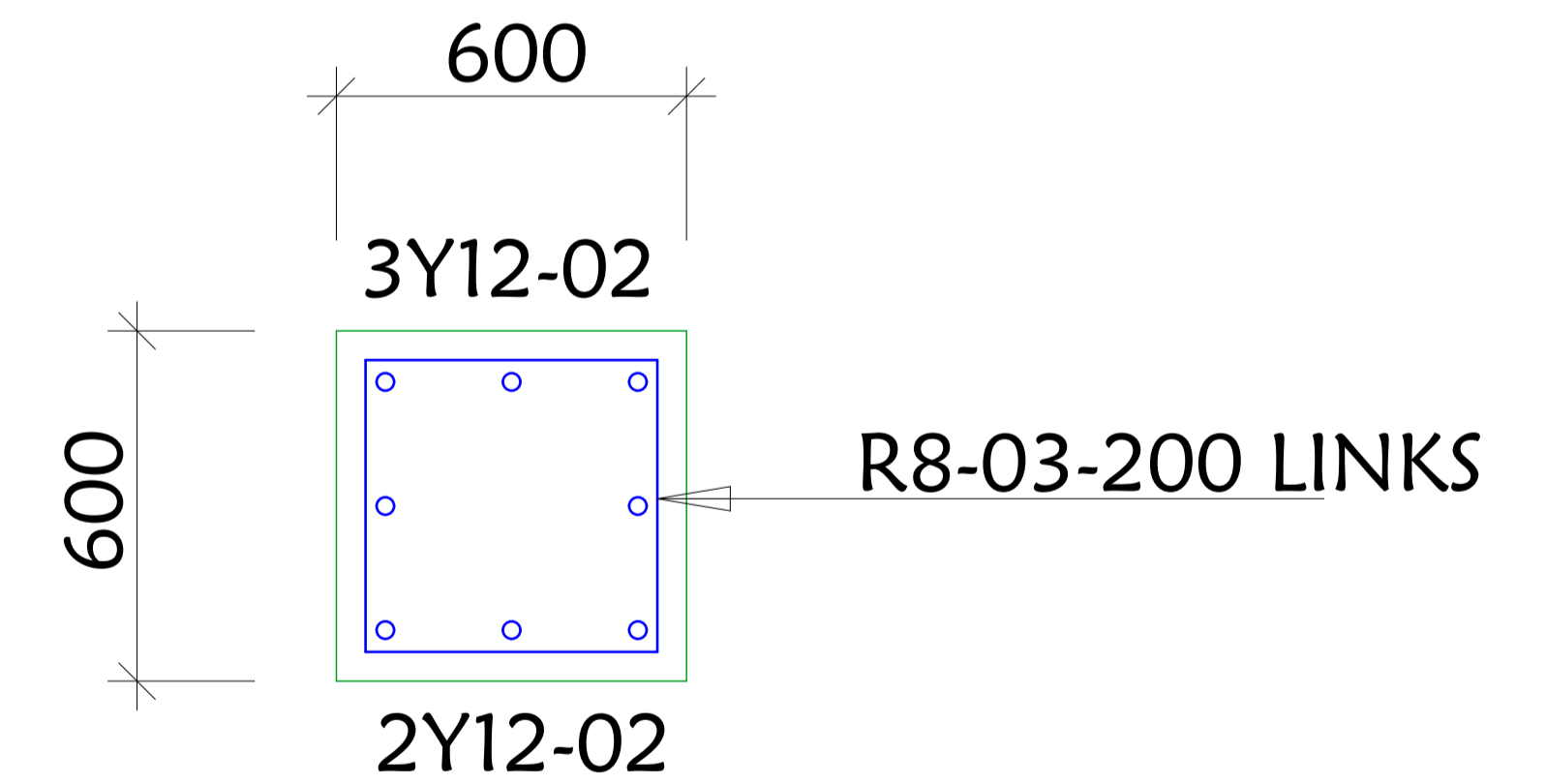
WATER TANK

SHEET N°:
12/22



SECTION D-D

SCALE 1:25



SECTION E-E (Column)

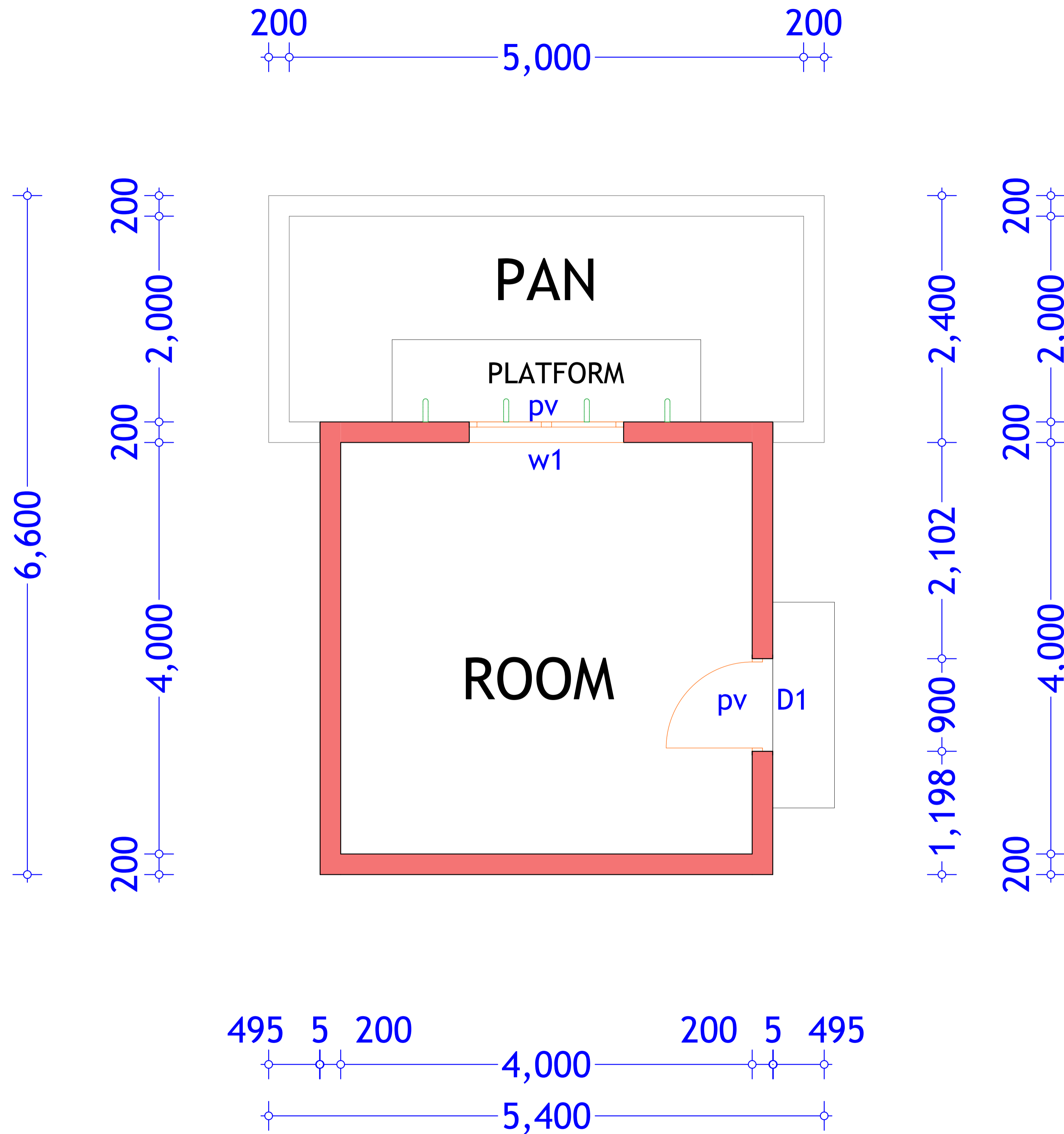
SCALE 1:25

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REHABILITATION
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SHEET TITLE:
STRUCT. DETAIL (Foundation)

SCALE		DRAWING TITLE:	
DATE	JANUARY. 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
DRAWN BY:	J. NANDWA		
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APPROVED BY:			

WATER TANK
SHEET N^o:
13/22

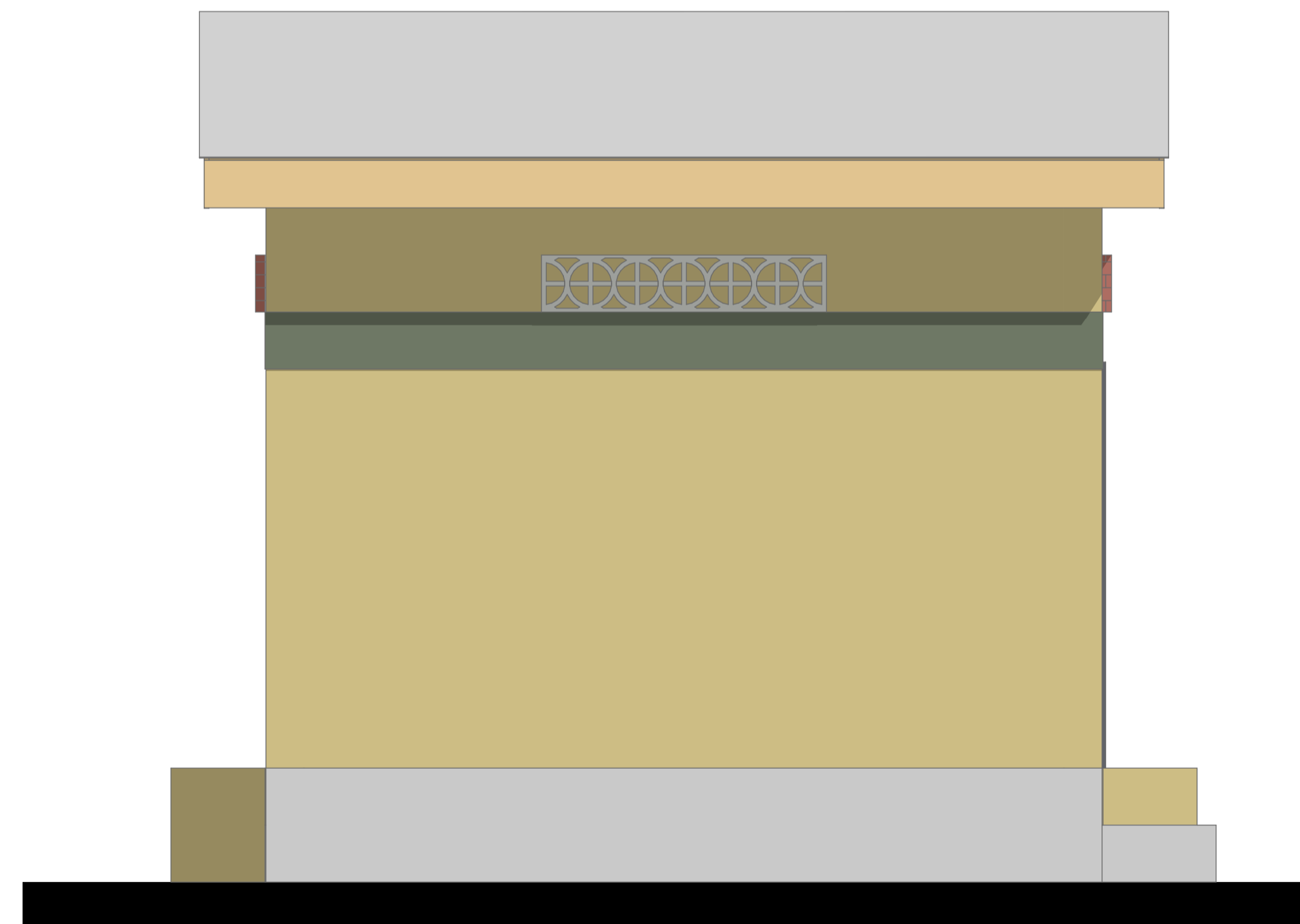
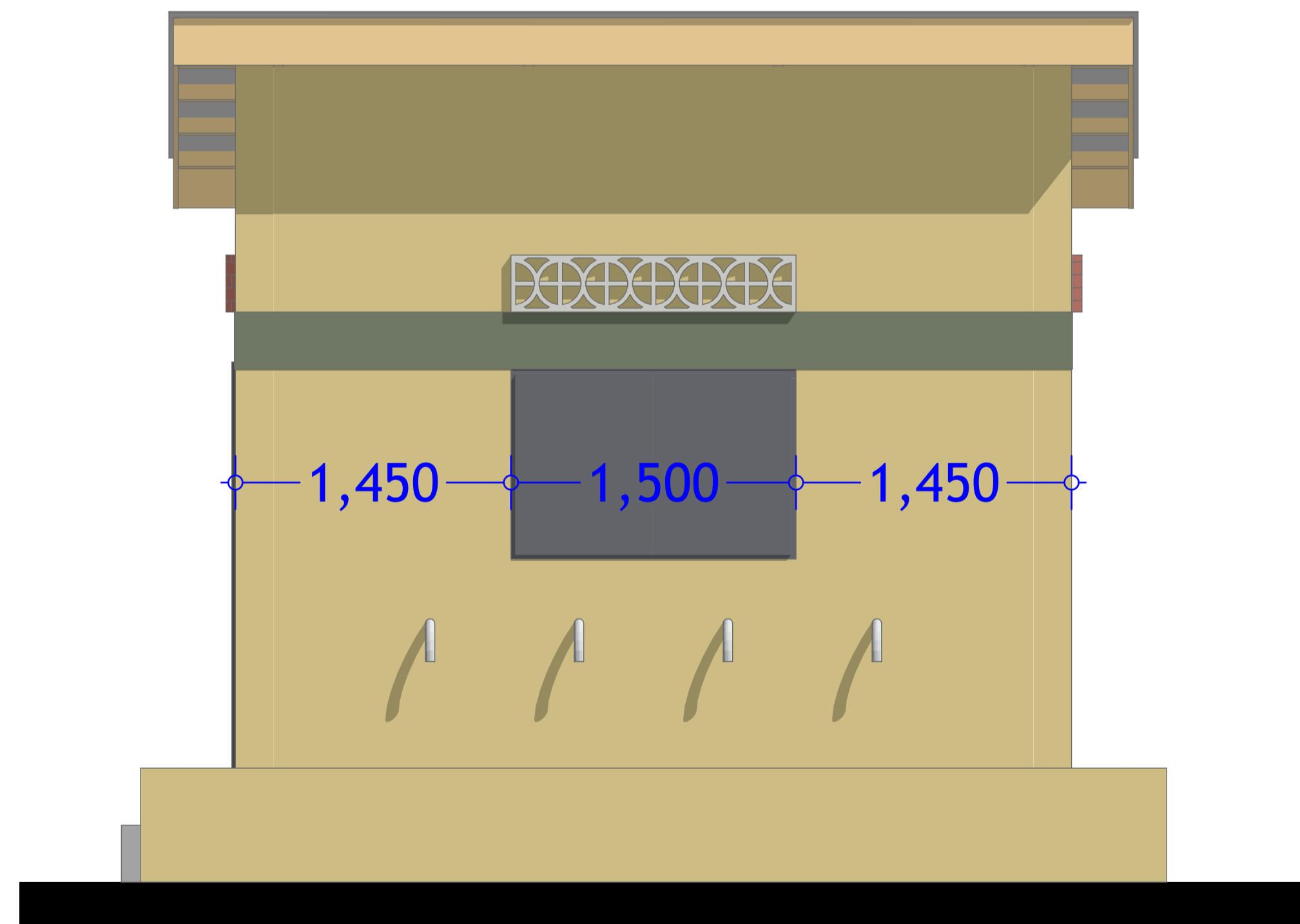
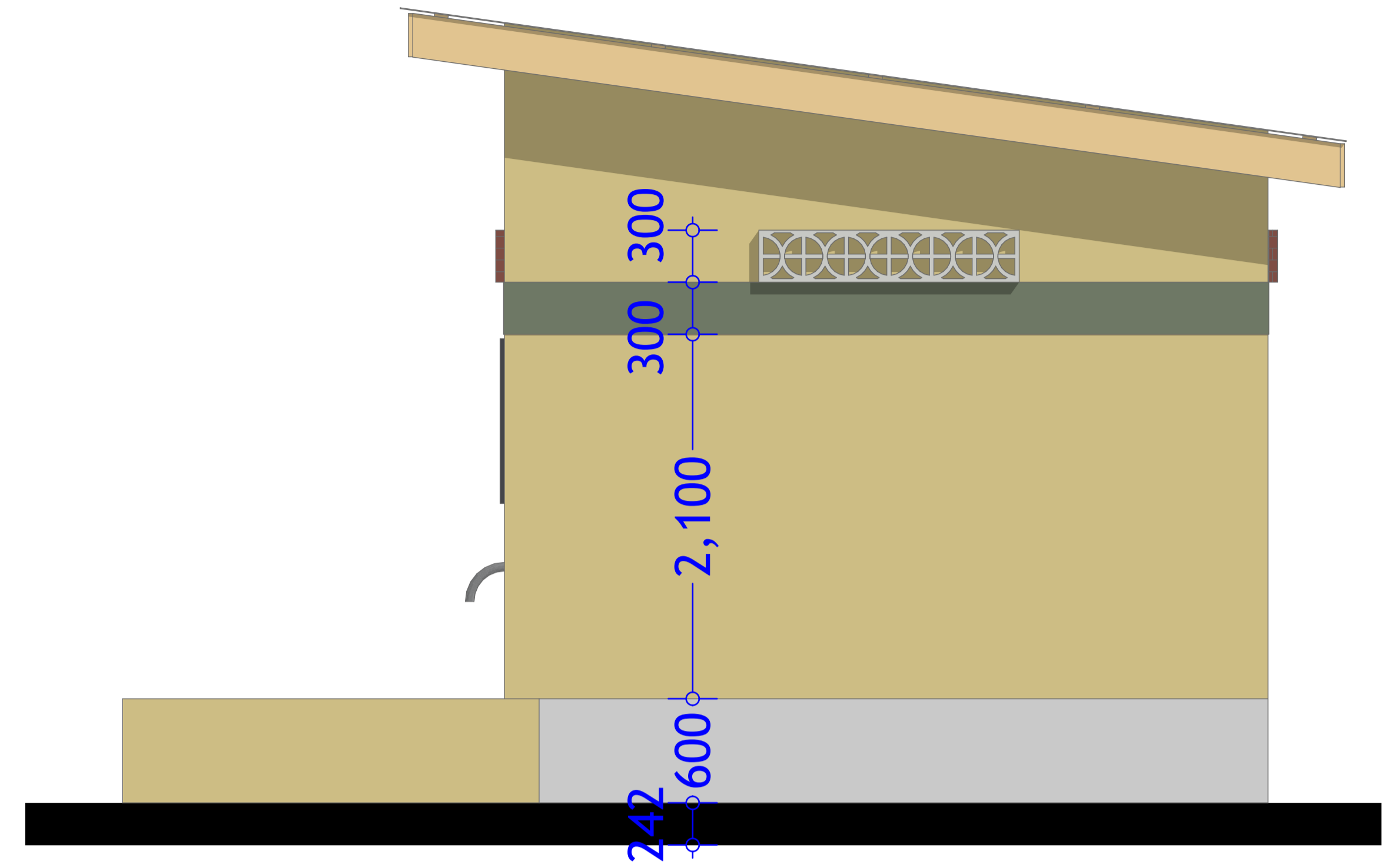


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REHABILITATION
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SHEET TITLE:
FLOOR LAYOUT

SCALE		DRAWING TITLE:
DATE	JANUARY. 2018	DRAWING N ^o :
DESIGNED BY:	J. NANDWA	PROJECT N ^o :
DRAWN BY:	J. NANDWA	
REVIEWED BY:		
APPROVED BY:		

WATER KIOSK
SHEET N^o:
14/22



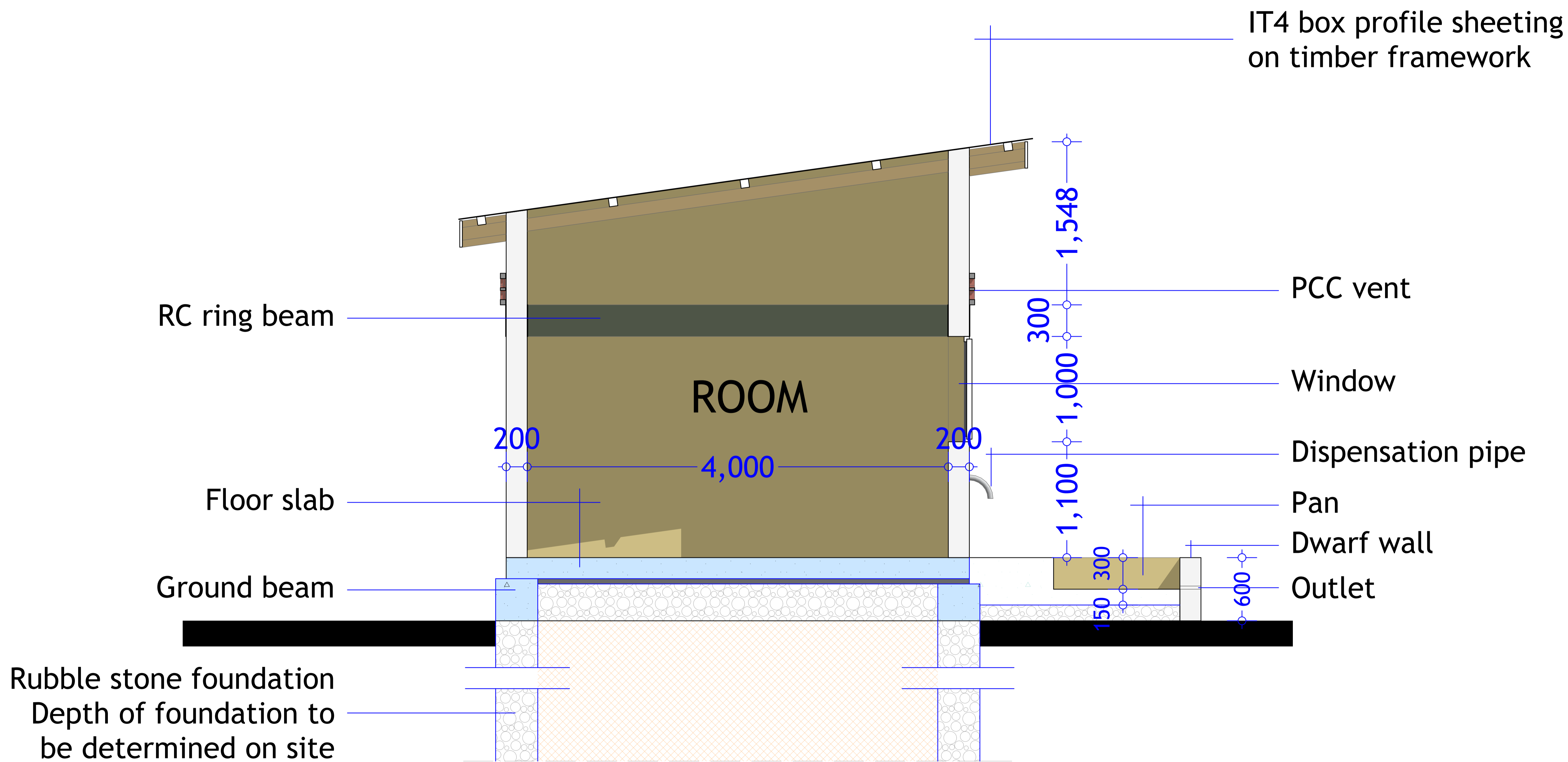
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

SCALE	
DATE	JANUARY. 2018
DESIGNED BY:	J. NANDWA
DRAWN BY:	J. NANDWA
REVIEWED BY:	
APPROVED BY:	

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

WATER KIOSK
SHEET N^o:
15/22



PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:
SECTION

SCALE		DRAWING TITLE:	
DATE	JANUARY, 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
DRAWN BY:	J. NANDWA		
REVIEWED BY:			
APPROVED BY:			

WATER KIOSK
SHEET N^o:
16/22



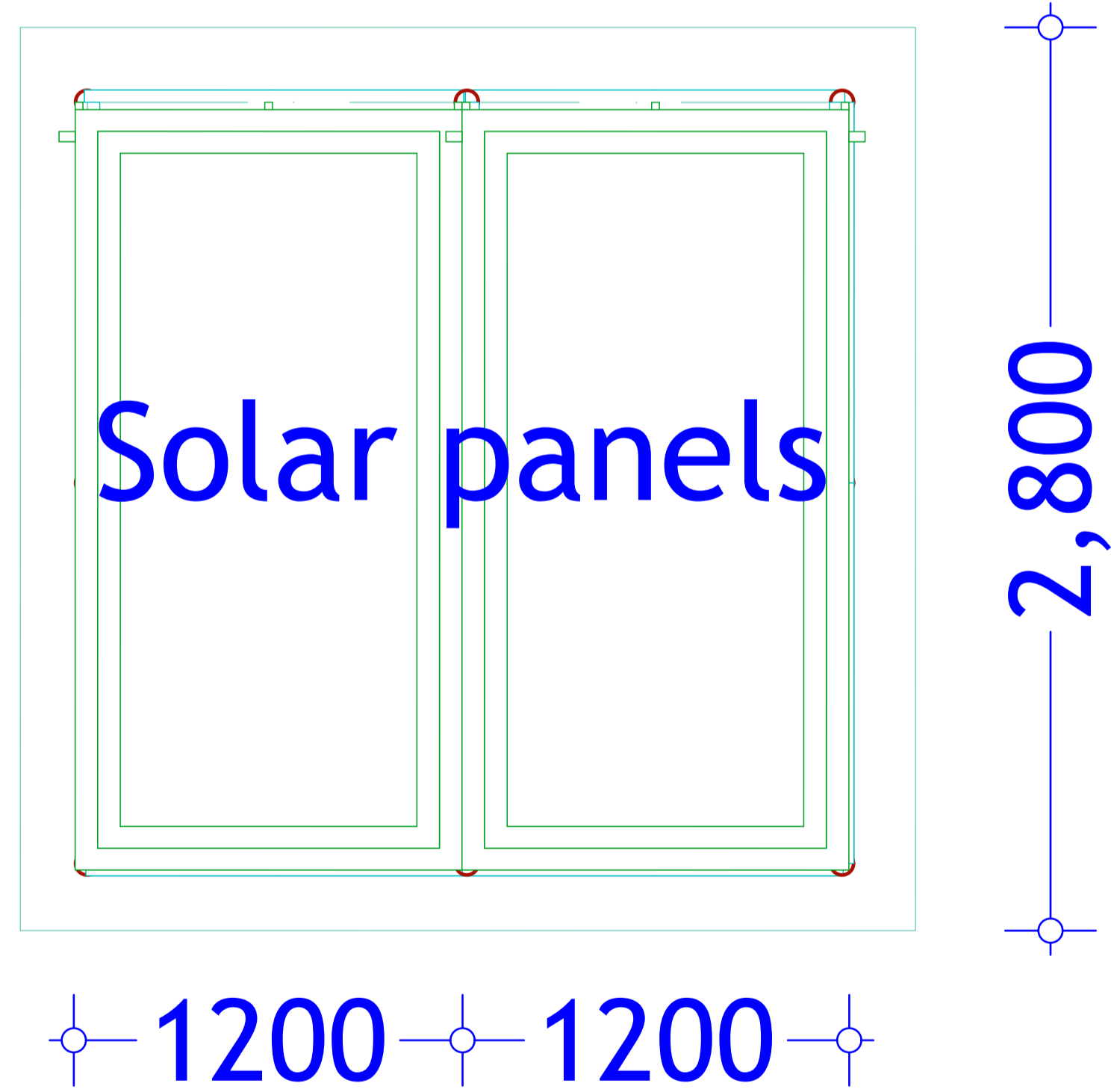
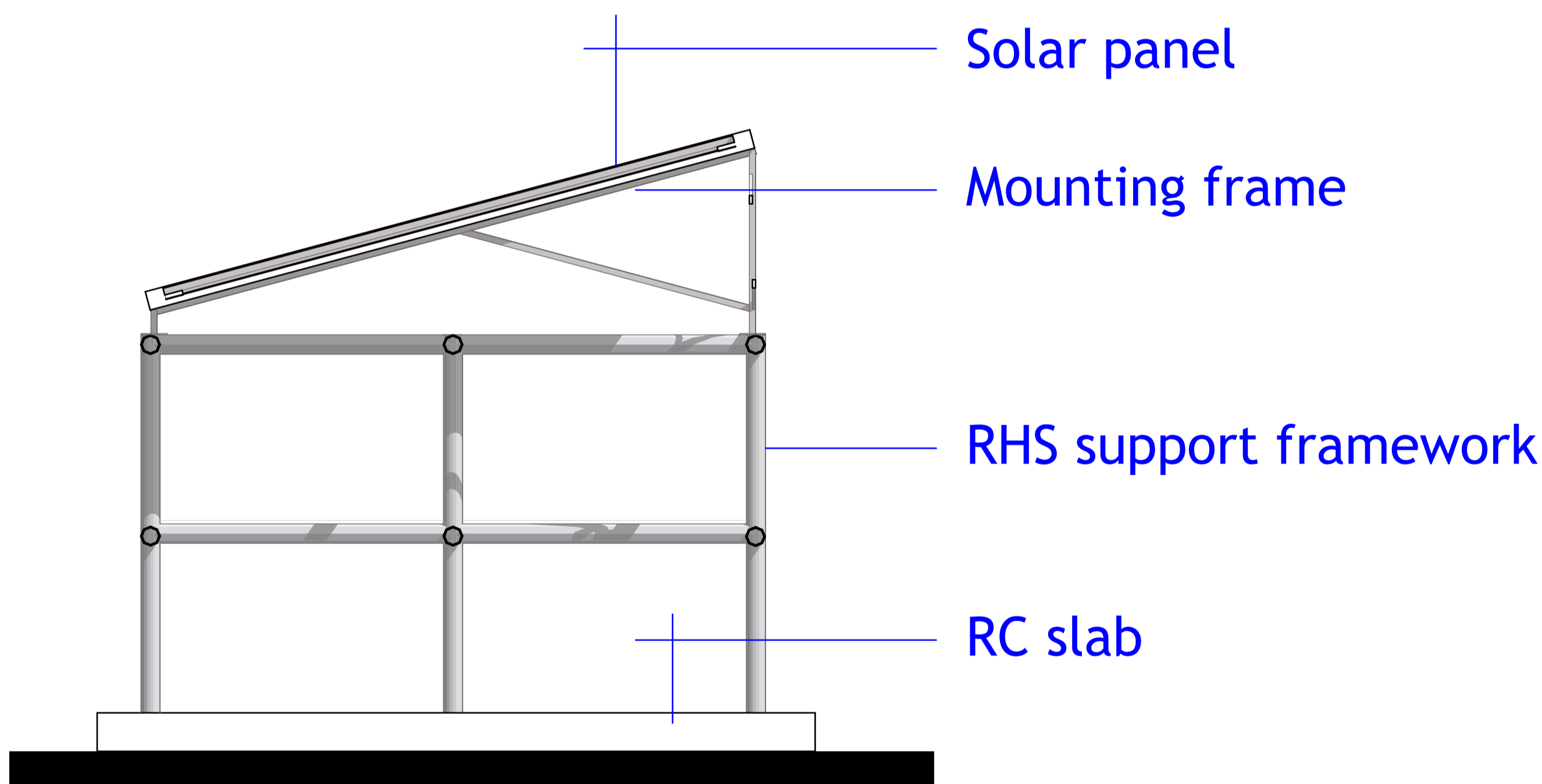
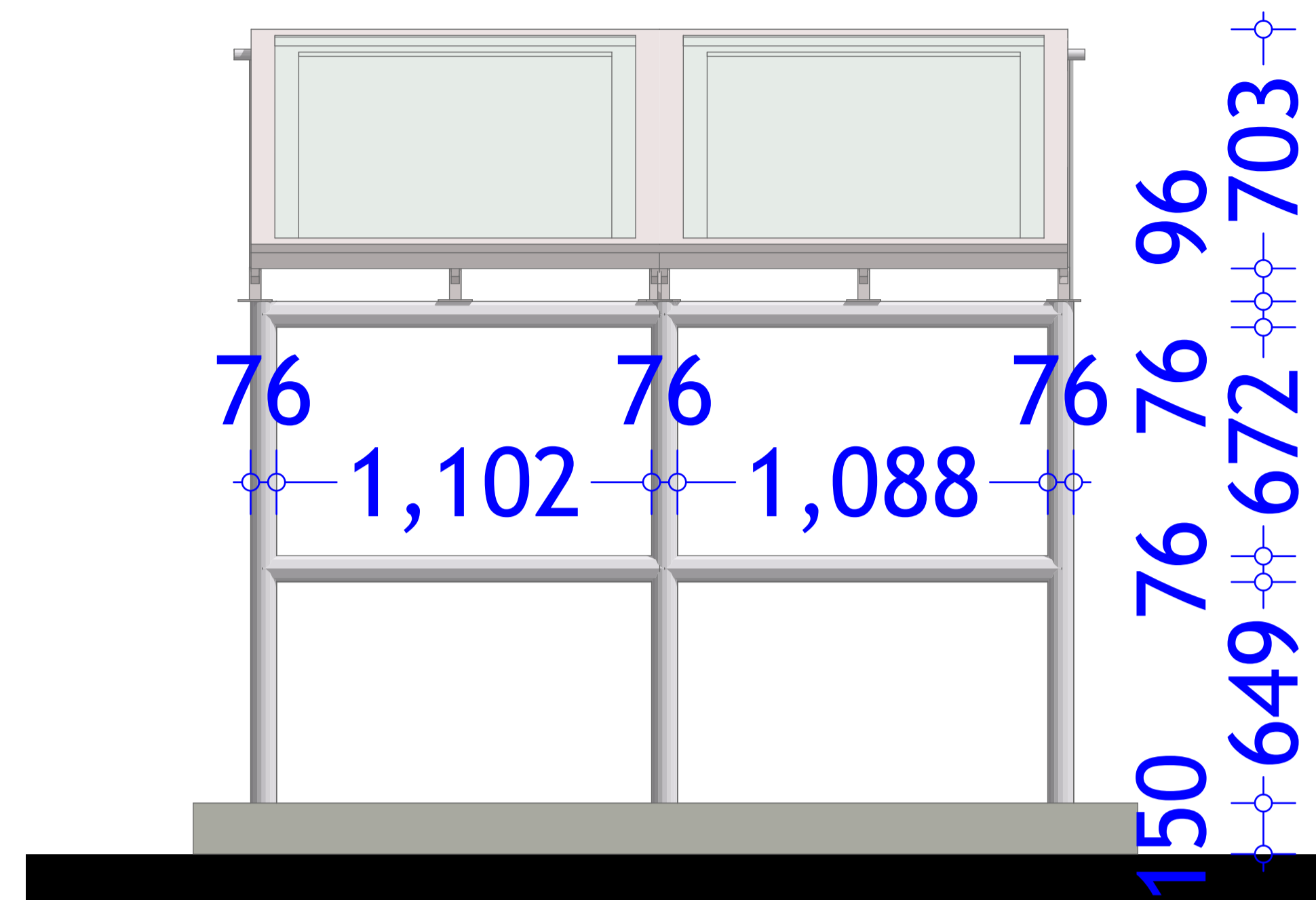
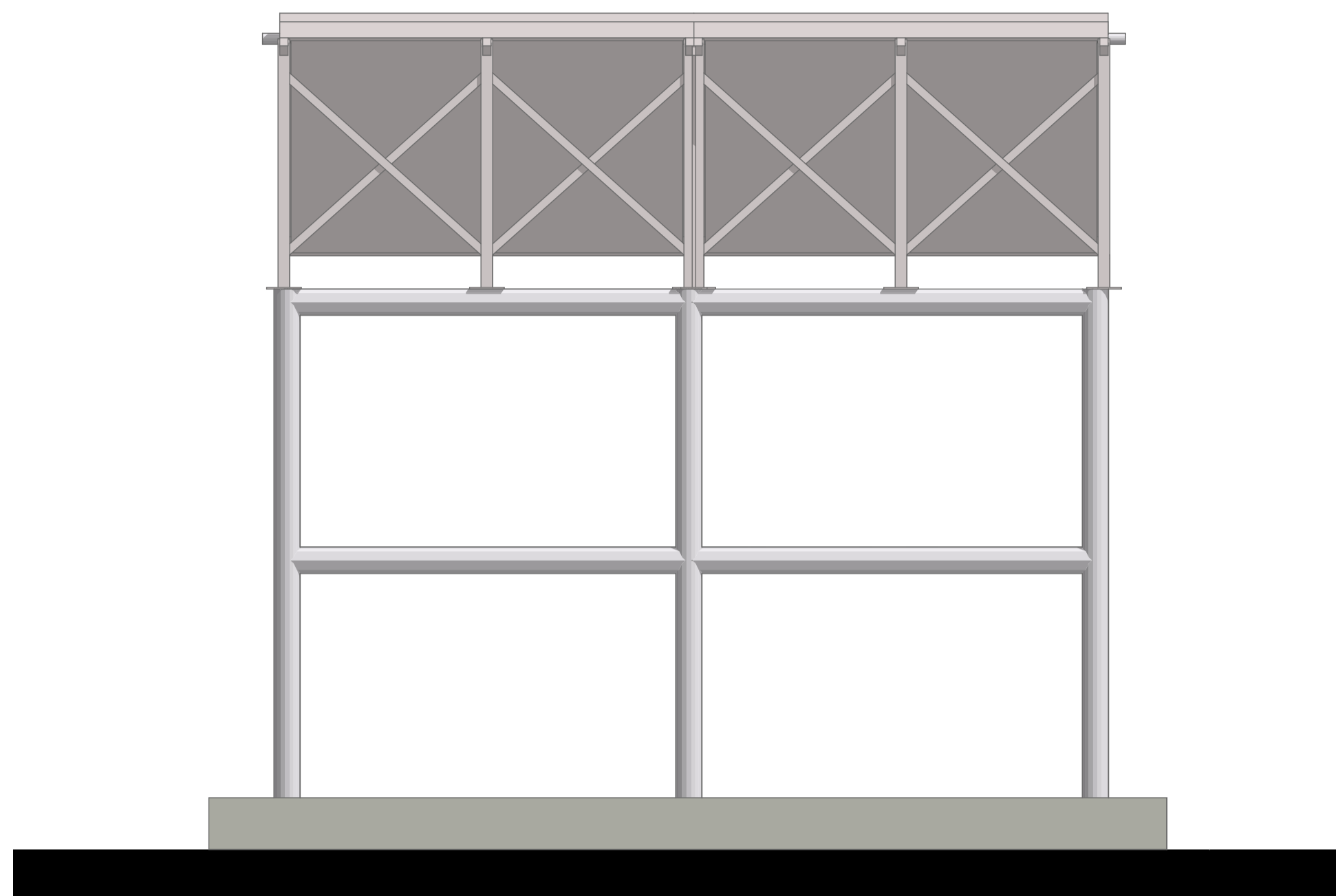
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

SCALE		DRAWING TITLE:	
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DESIGNED BY:	J. NANDWA	DRAWING N ^o :	
DRAWN BY:	J. NANDWA	PROJECT N ^o :	
REVIEWED BY:			
APPROVED BY:			

WATER KIOSK

SHEET N^o:
17/22



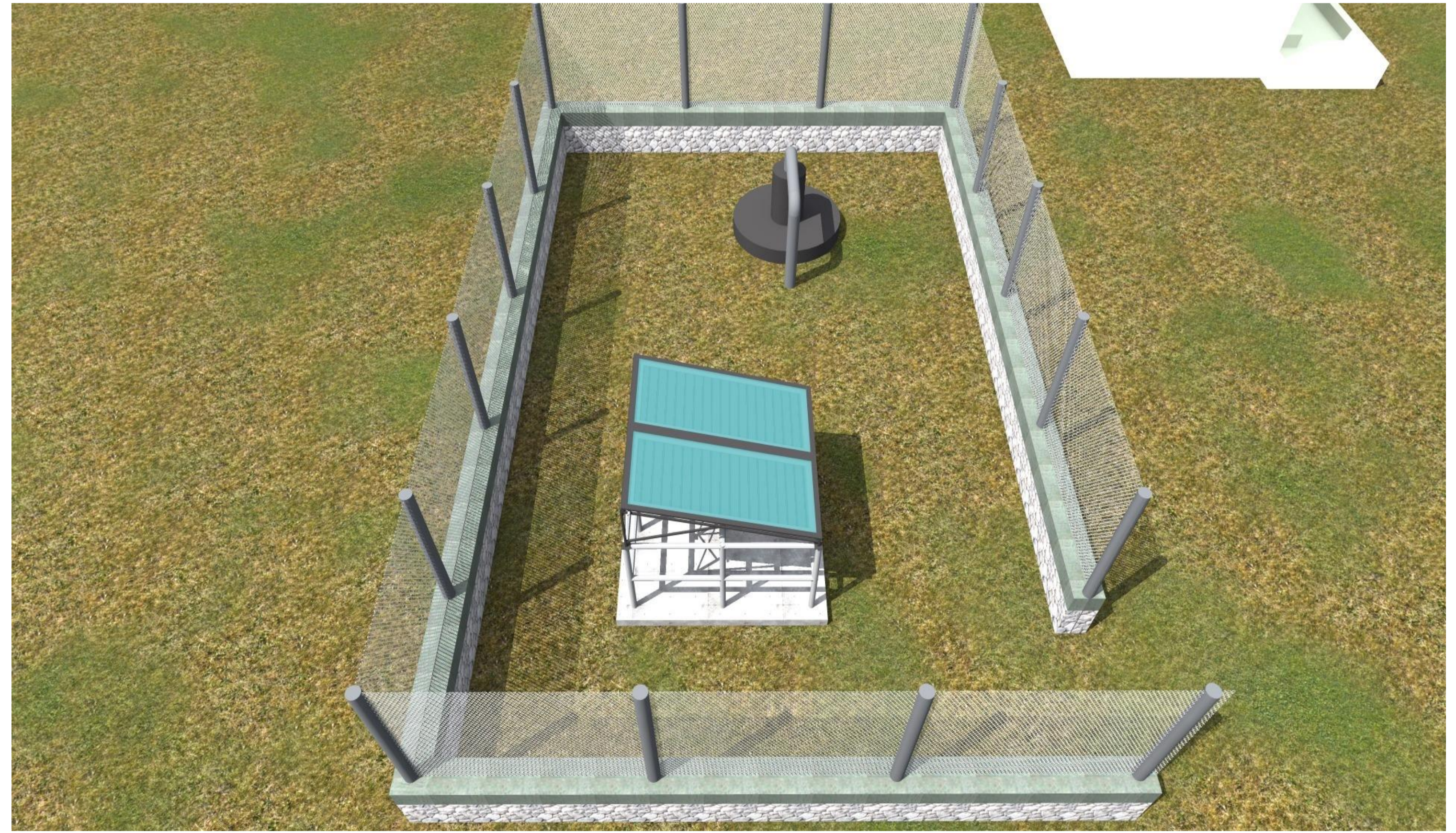
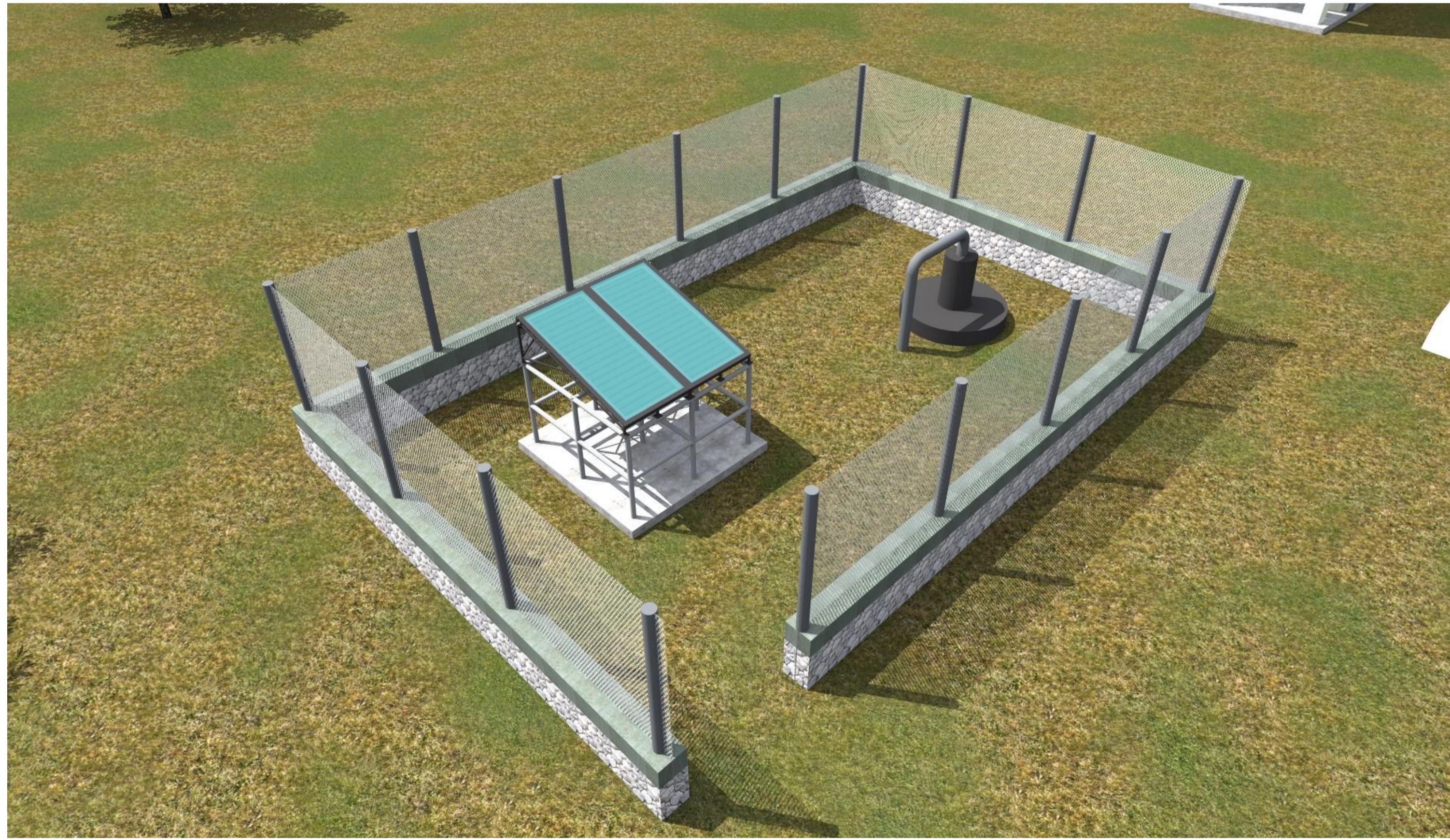
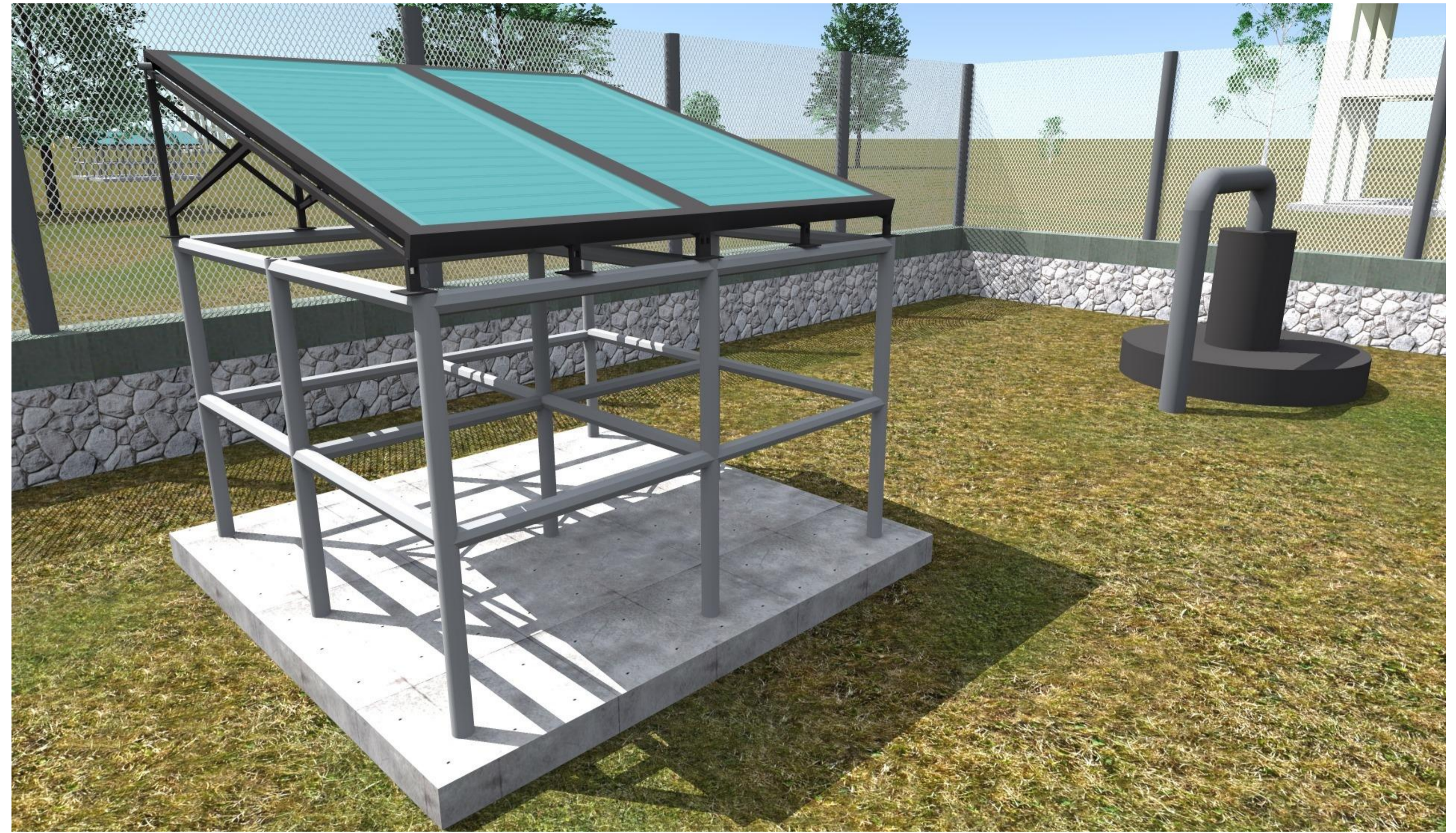
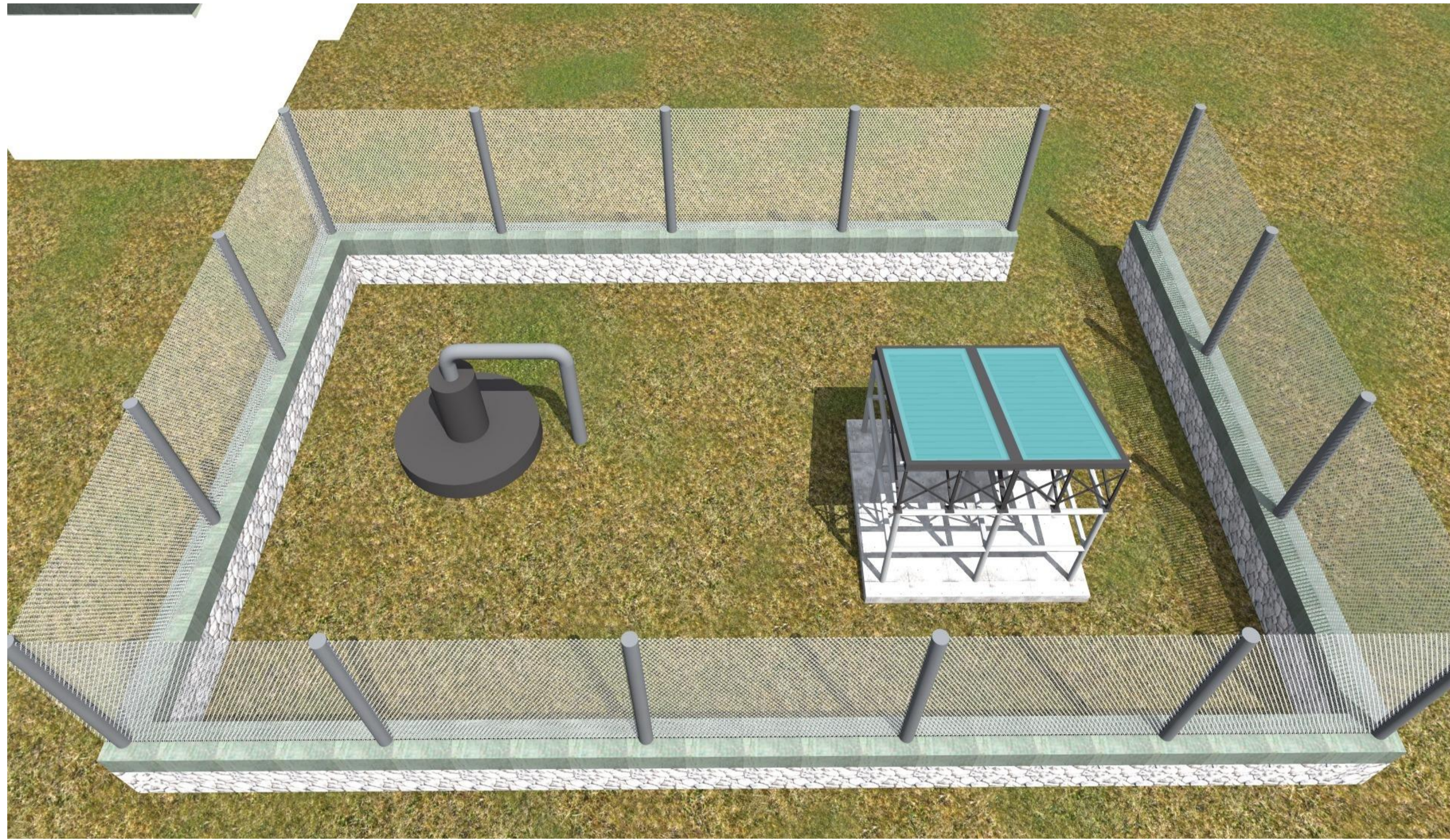
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

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DESIGNED BY:	J. NANDWA
DRAWN BY:	J. NANDWA
REVIEWED BY:	
APPROVED BY:	

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

SOLAR
SHEET N^o:
18/22

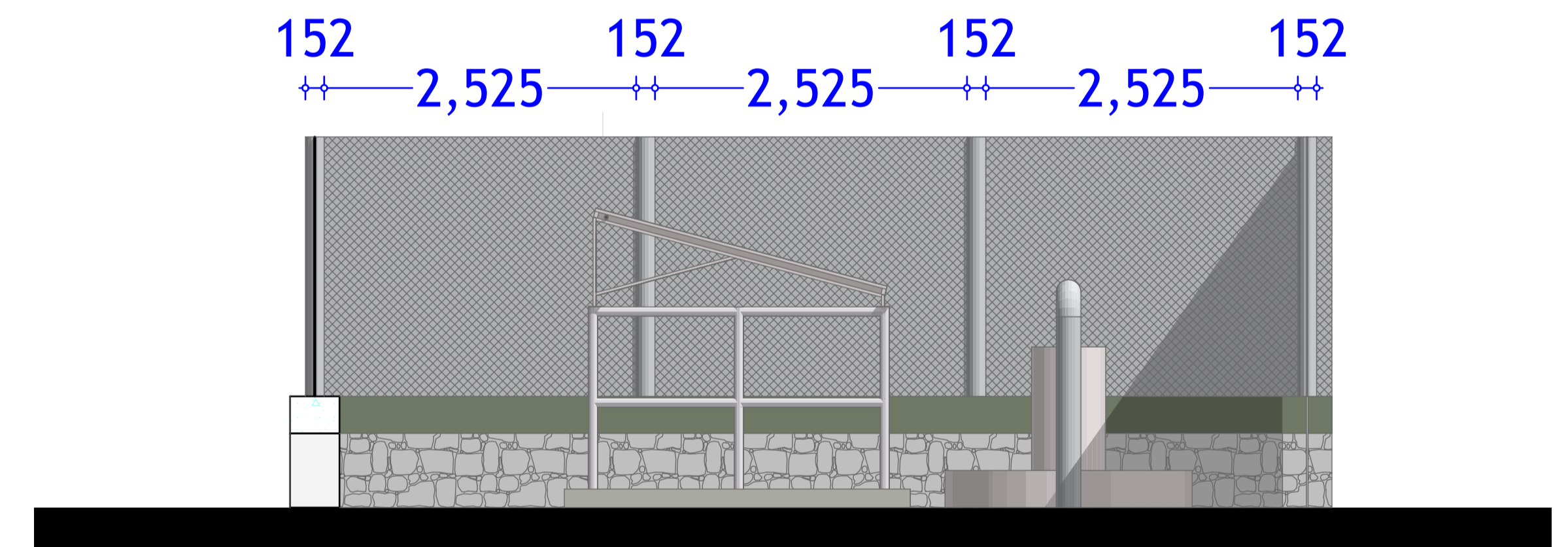
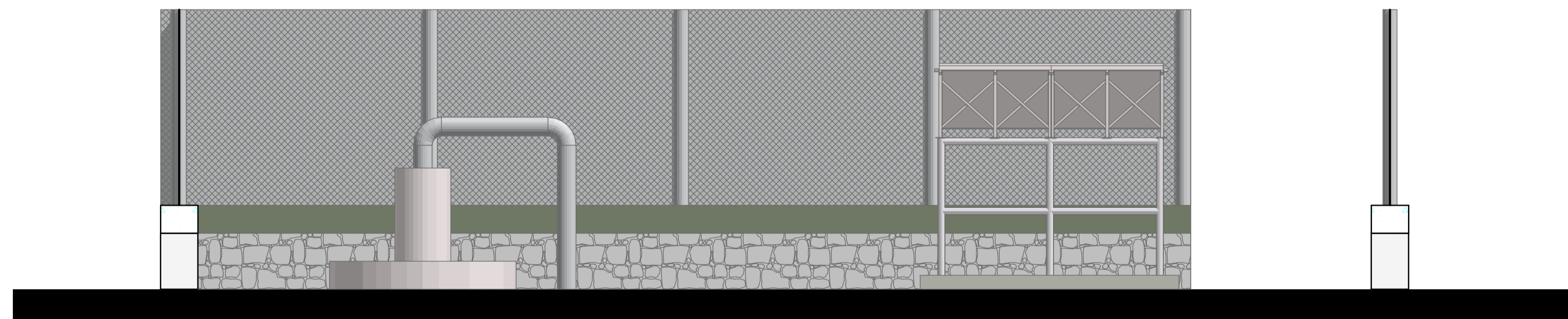
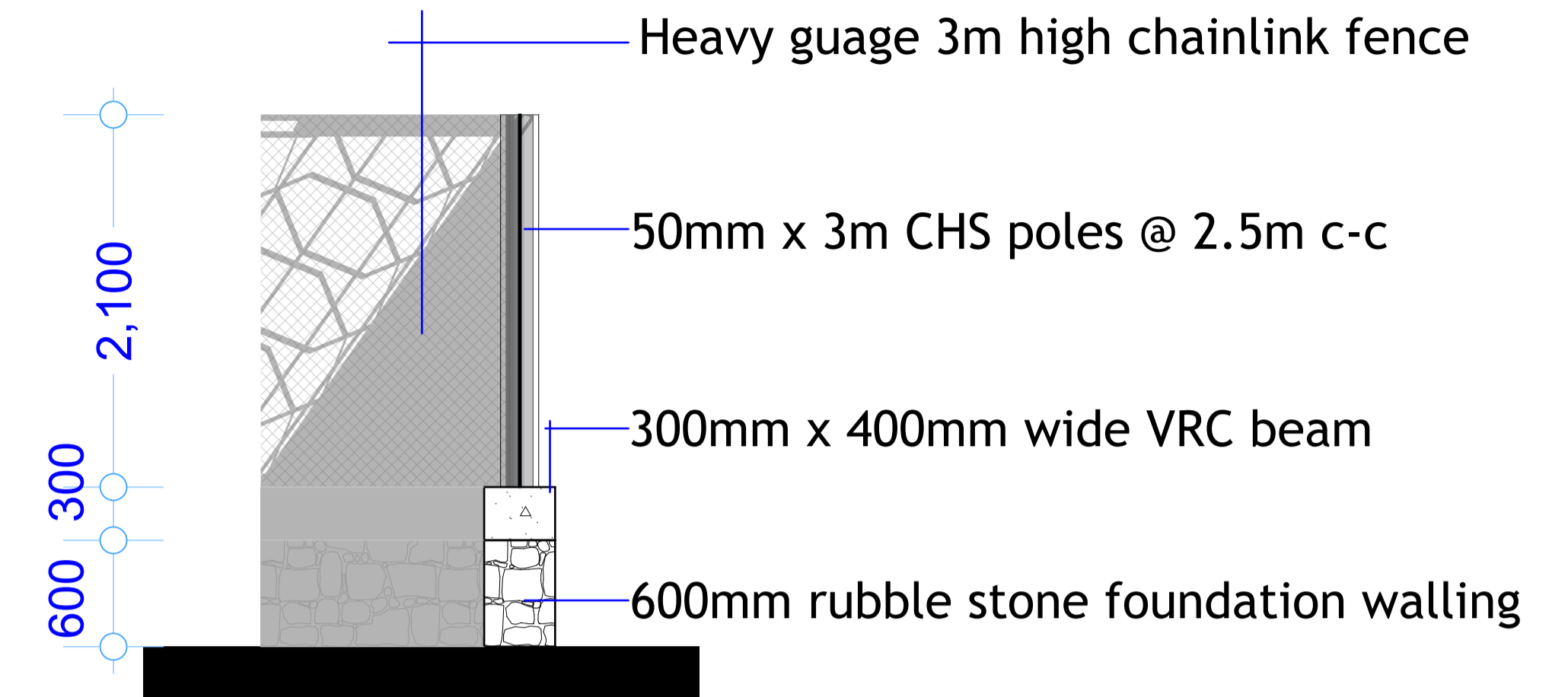
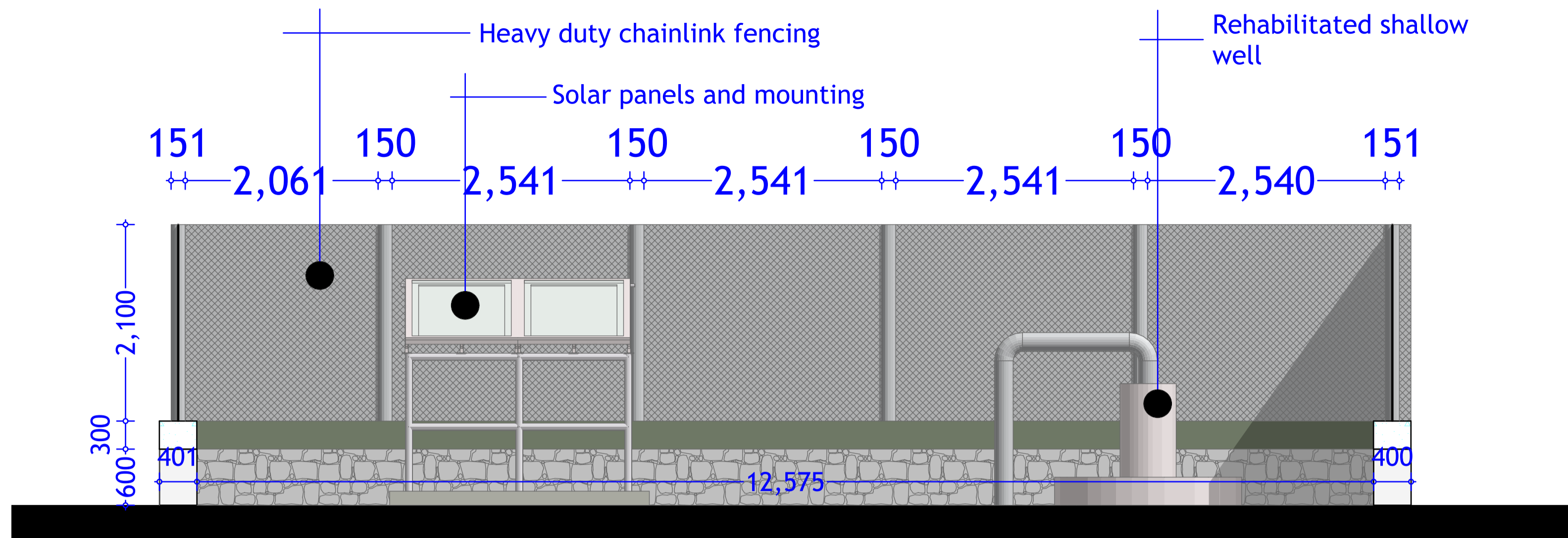


PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

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DATE	JANUARY. 2018	DRAWING N ^o :	
DESIGNED BY:	J. NANDWA	PROJECT N ^o :	
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REVIEWED BY:			
APPROVED BY:			

SHEET N^o:
19/22



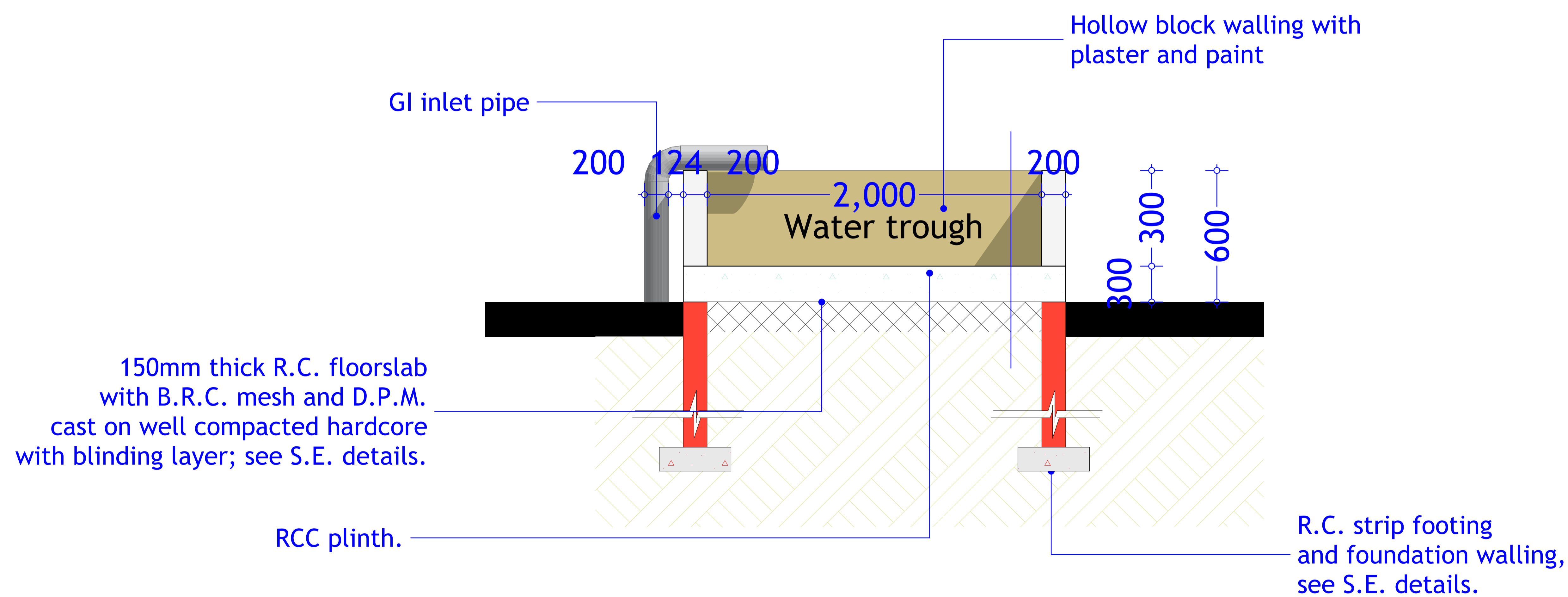
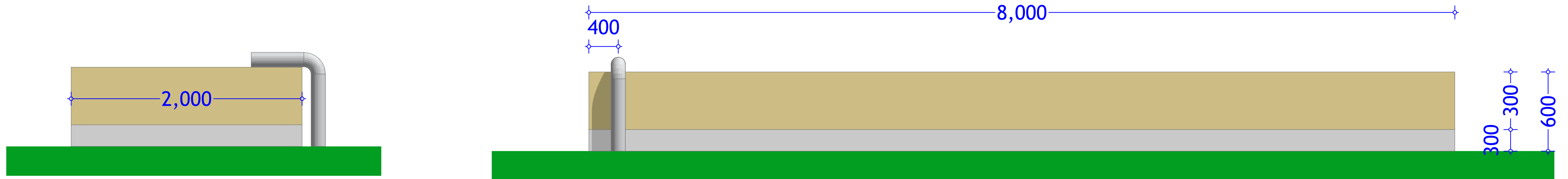
PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
-BULLA GADUUD DISTRICT-

SHEET TITLE:

SCALE		DRAWING TITLE:	
DATE	JANUARY. 2018	FLOOR LAYOUT	
DESIGNED BY:	J. NANDWA	DRAWING N ^o :	
DRAWN BY:	J. NANDWA	PROJECT N ^o :	
REVIEWED BY:			
APPROVED BY:			

SOLAR

SHEET N^o:
20/22



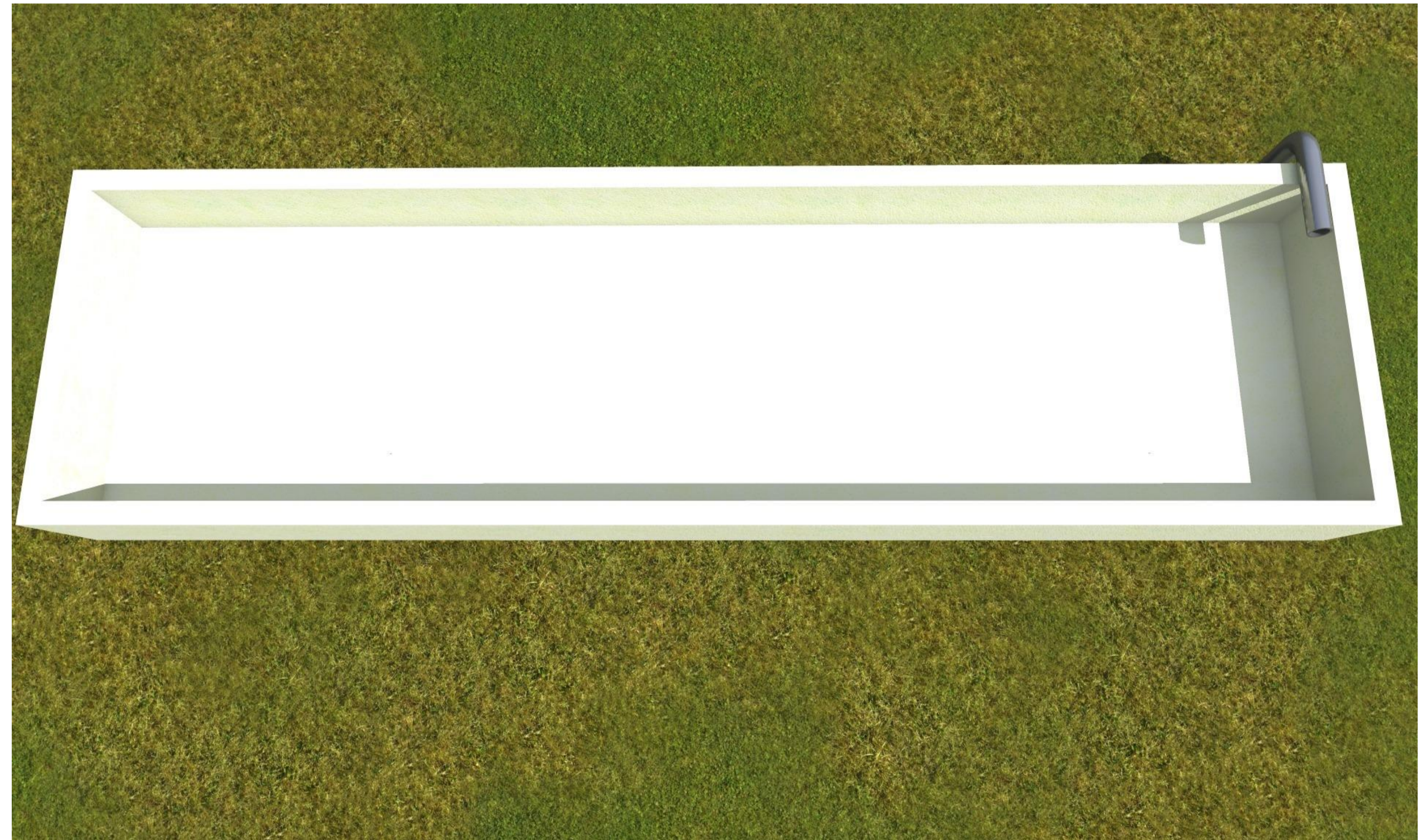
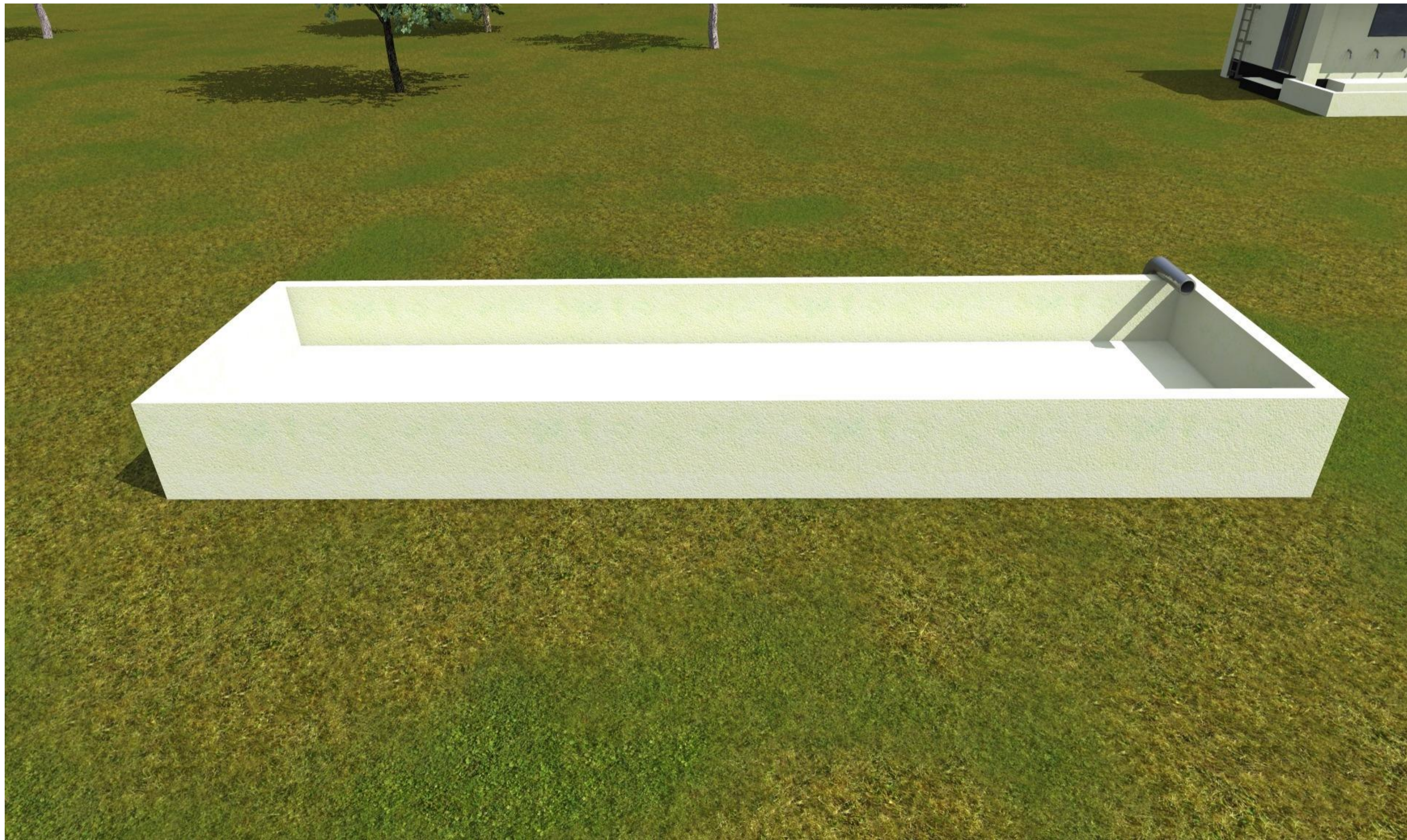
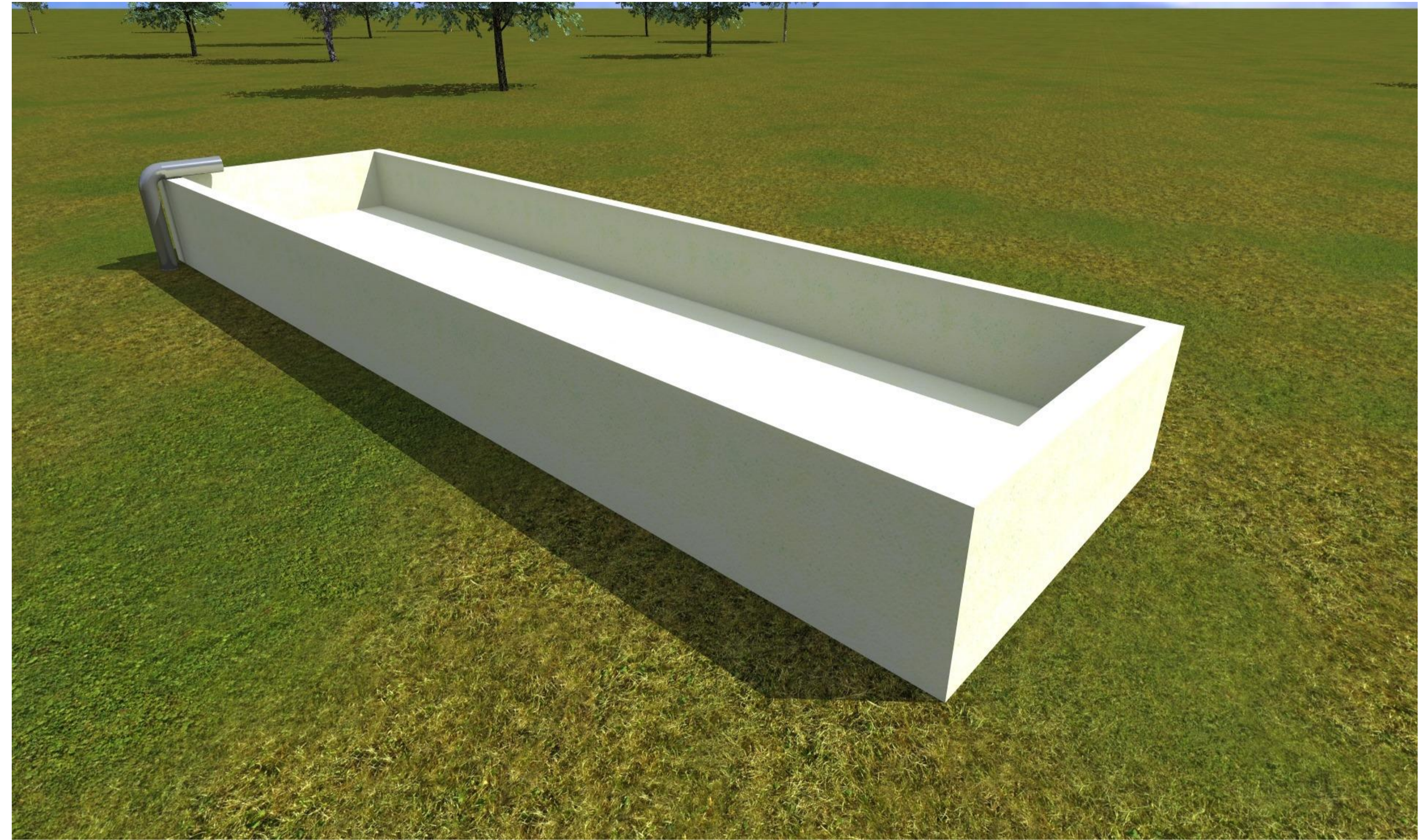
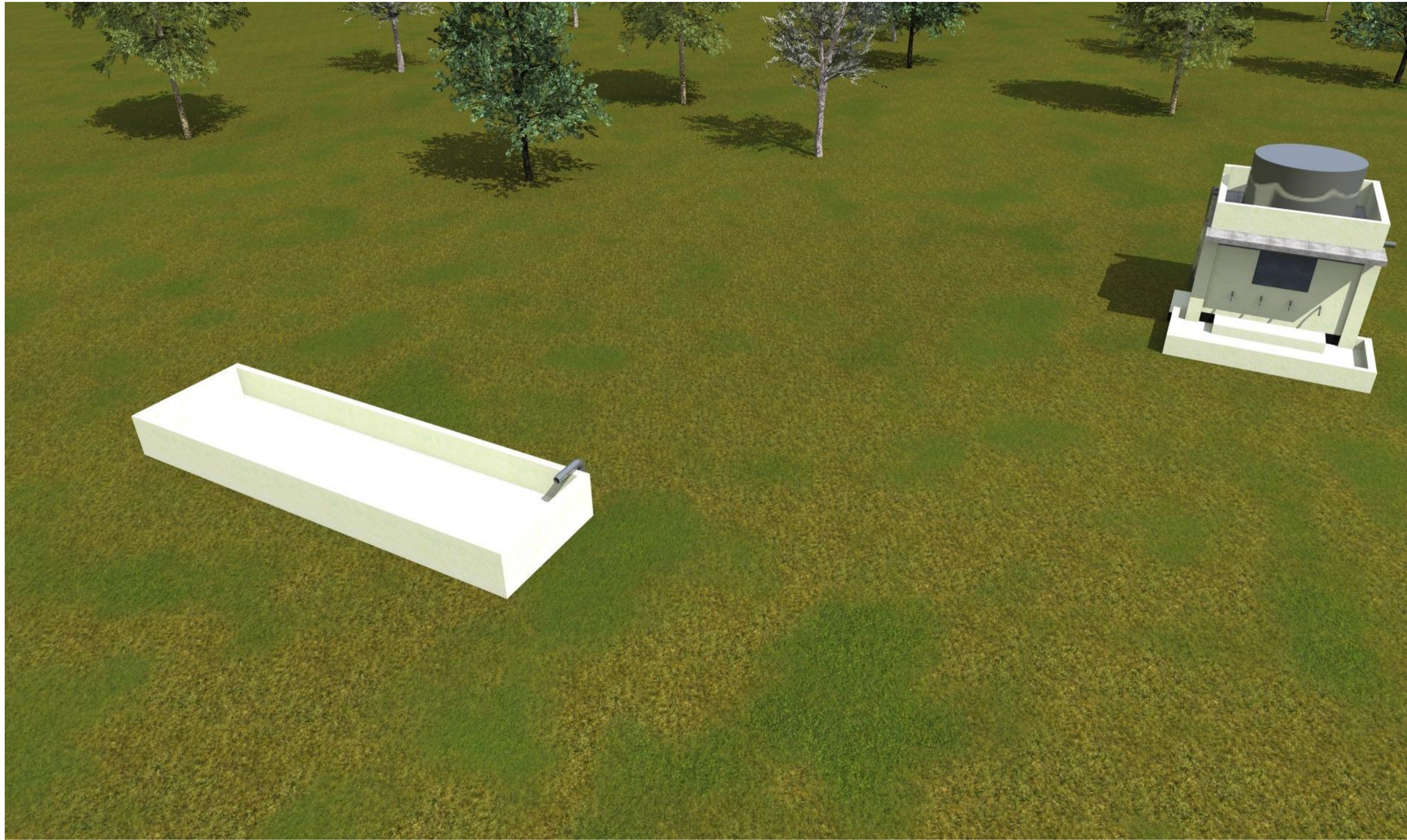
PROJECT. PROPOSED SHALLOW WELL
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-BULLA GADUUD DISTRICT-

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DATE	JANUARY. 2018
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REVIEWED BY:	
APPROVED BY:	

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

WATER TROUGH
SHEET N^o:
21/22



PROJECT. PROPOSED SHALLOW WELL
REHABILITATION
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SHEET TITLE:

SCALE	
DATE	JANUARY. 2018
DESIGNED BY:	J. NANDWA
DRAWN BY:	J. NANDWA
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:
3D Scenes
DRAWING N^o:
PROJECT N^o:

WATER TROUGH

SHEET N^o:
22/22