MECHANICAL SERVICES DRAWINGS - 175SQM CLINIC

MECHANICAL LEGEND

SYMBOLS	DESCRIPTION
	COLD WATER SUPPLY PIPE
	SOIL AND WASTE WATER PIPE
	HOT WATER PIPE
	STAND–BY TAP
	BOREHOLE
	SPLIT WALL MOUNTED AIR CONDITIONER WITH OUTDOOR UNIT
	TOILET EXPELAIR EXTRACTOR FAN
	DUPLICATED WATER BOOSTER PUMP
	GATE VALVE
	NON RETURN VALVE
	LOW LEVEL WASHDOWN AMITAGE WC WITH WHITE GLAZED PAN IN P–TRAY, SOLID PLASTIC SEAT AND COVER, 9LITRES CISTERN WITH BALL VALVE, FLUSH MASTER.
	AMITAGE SHANK (WHB) WASH HAND BASIN WHITE GLAZED WITH 13MM HOT & COLD CHROME PLATED WATER PILLAR TAP, 32MM BOTTLE TRAP, BRACKETS, CHAIN AND PLUG.
	FE–ABC, 6Kg

MECHANICAL LEGEND

SYMBOLS	DESCRIPTION
	FE–CO_2 5Kg
	GROUND WATER TANKS
	ELEVATED WATER TANK
	RAW WATER TANK
	WATER TREATMENT PLANT
	FLOAT SWITCH
	BALL VALVE
	600MM X 600MM INSPECTION CHAMBER
MH	900MM X 900MM MANHOLE
	50MMø TRAPPED FLOOR DRAIN
	13MMø CWS WITH HAND HELD BIDET
	SOIL AND WASTE STACK
	COLD WATER SUPPLY RISER PIPE

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	N.T.S
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

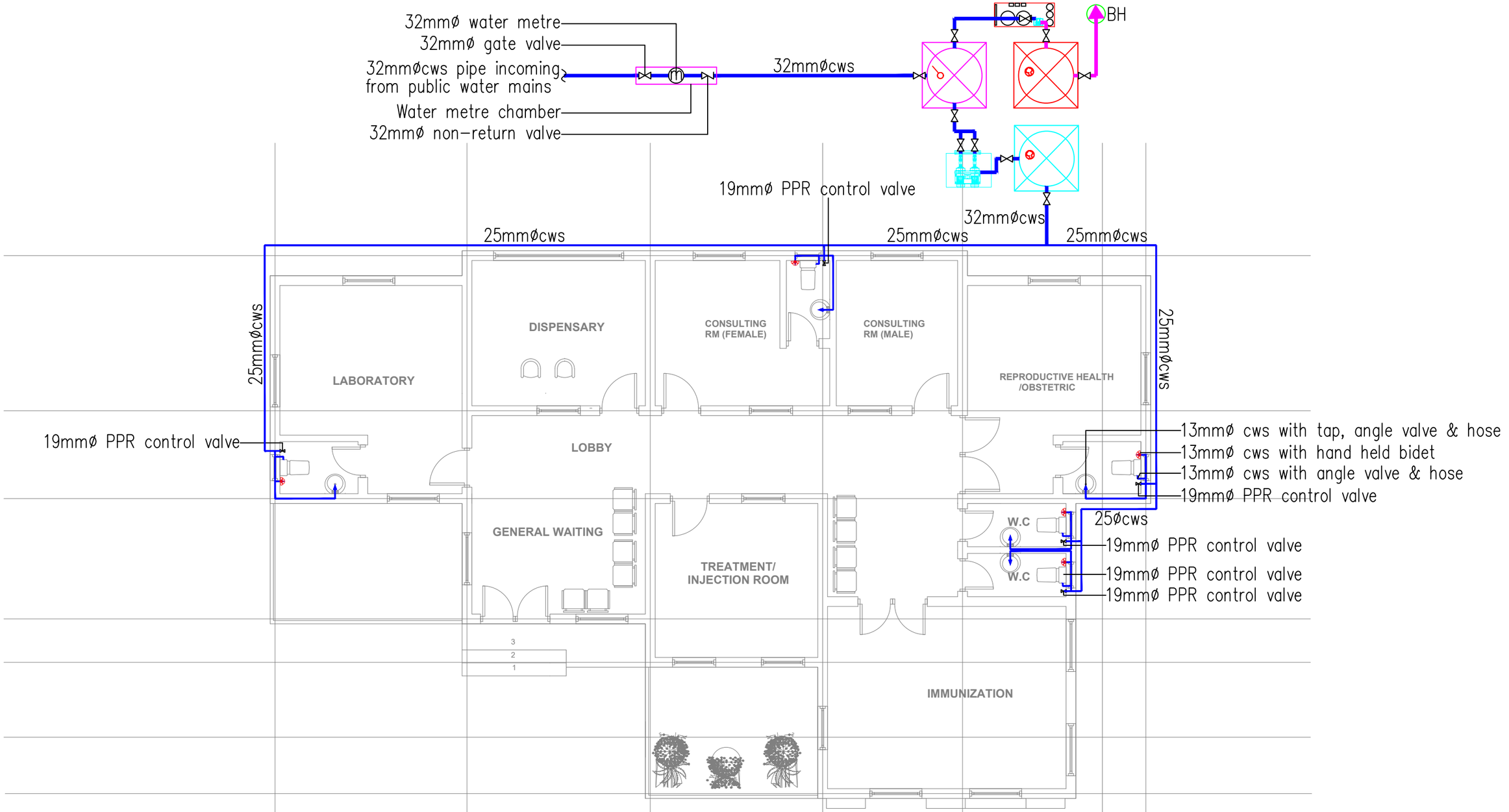
Mechanical Legend

Job no.

sheet no.

M00

Seal



FLOOR PLAN

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	1:100
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

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sheet title

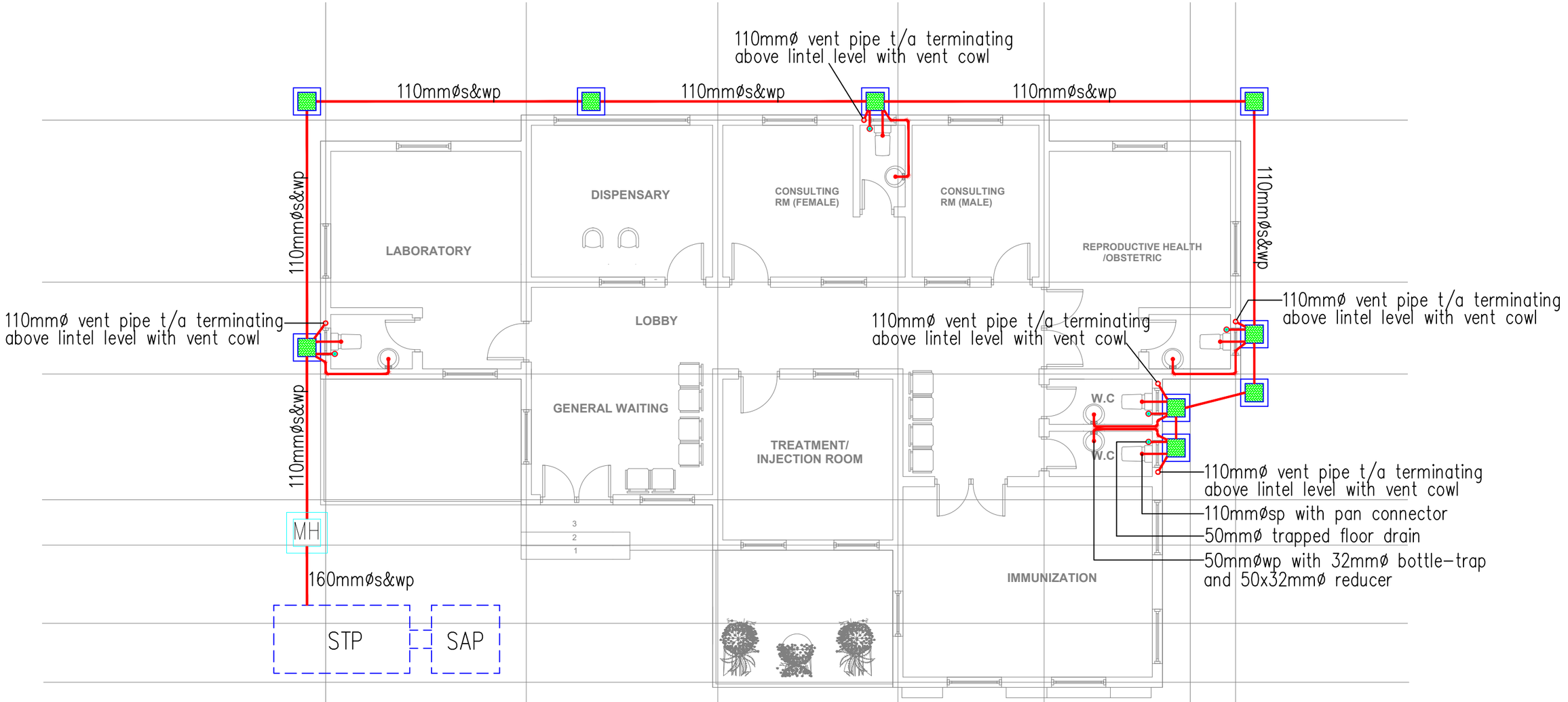
Clinic B:
Ground Floor Plan:
Water Supply System Layout

Job no.

sheet no.

M02

Seal



FLOOR PLAN

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	1:100
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

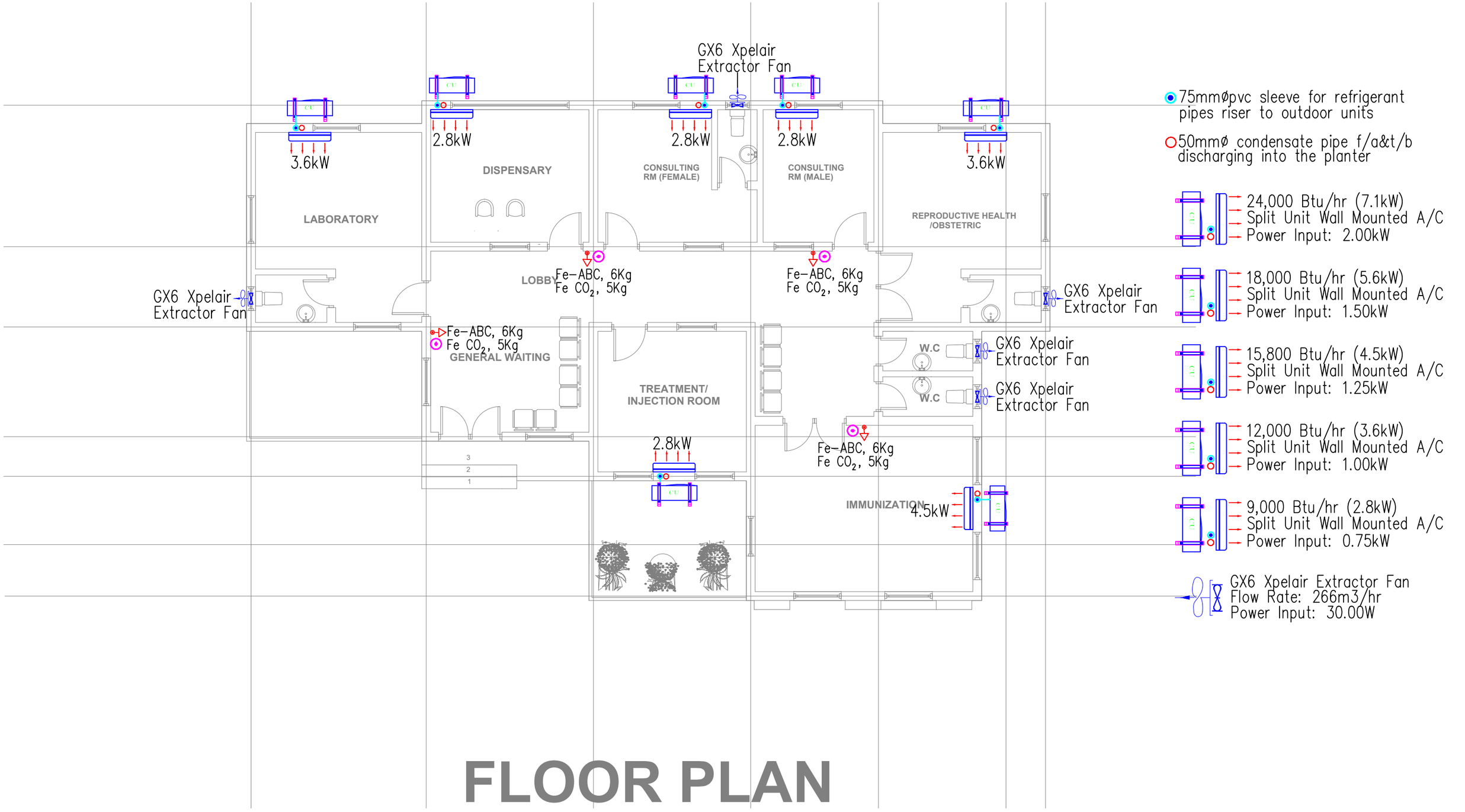
Clinic B:
Ground Floor Plan:
Drainage System Layout

Job no.

sheet no.

M04

Seal



FLOOR PLAN

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	1:100
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

Clinic B:
Ground Floor Plan:
AC & Ventilation & Fire System Layout

Job no.

sheet no.

M06

Seal



O2=12mmø
V=12mmø
N20=12mmø
CA=12mmø
MGAS=12mmø

GENERAL OXYGEN/GAS SUPPLY (GAS TANKS AND PUMPS SHOULD BE PROVIDED BY THE GAS SPECIALIST)

LABORATORY
DISPENSARY
CONSULTING RM (FEMALE)
CONSULTING RM (MALE)
REPRODUCTIVE HEALTH /OBSTETRIC
LOBBY
GENERAL WAITING
TREATMENT/ INJECTION ROOM
W.C
W.C
IMMUNIZATION

3
2
1

CLINIC GAS LEGEND

- MEDICAL GAS CYLINDER
- OXYGEN GAS OUTLET
- VACUUM GAS OUTLET
- NITROGEN GAS OUTLET
- COMPRESSED AIR GAS OUTLET
- MEDICAL GAS OUTLET
- OXYGEN COPPER PIPE (02)
- VACUUM COPPER PIPE (V)
- NITROGEN COPPER PIPE (N20)
- COMPRESSED AIR COPPER PIPE (CA)
- MEDICAL GAS COPPER PIPE (MGAS)

FLOOR PLAN

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	1:100
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

Clinic B:
Ground Floor Plan:
Medical Gas System Layout

Job no.

sheet no.

M08

Seal

ELEVATED WATER TANK

GEEPEE (SHAKTI 1500) elevated tank
to be mounted vertically on
4m high steel stanchion to
to the Structural Enginreer's details
Size: 1.27m dia x 1.55m high
Capacity: 1,500Litres

GROUND/TREATED WATER TANK

GEEPEE (SHAKTI 3000) ground tank
to be mounted on 600mm high
concrete base foundation
to the Structural Enginreer's details
Size: 1.30m dia x 1.90m high
Capacity: 3,000Litres

RAW/UNTREATED WATER TANK

GEEPEE (SHAKTI 3000) raw tank
to be mounted on 600mm high
concrete base foundation
to the Structural Enginreer's details
Size: 1.30m dia x 1.90m high
Capacity: 3,000Litres

BOREHOLE

Proposed Borehole with
1.5Hp submersible pump
subject to Geophysical survey
(Actual position to be determined on site)

WATER TRANSFER PUMP

1 set Water pumps with complete all accessories
1 duty + 1 Stand – by.
PUMP SPECIFICATION :

Hydro 1000 CR2–30 pump
FLOW = 0.55L/s
HEAD = 15m
ELECTRICAL MOTOR RATING = 0.27kW each
Start = Direct on line.
Cut–In Pressure = 1.2bar
Cut–Out Pressure = 2.5bar
Maximum Current = 1.0A
Single Phase (220 – 240V)
Starting = Direct online
SD = Star/Delta

WATER TREATMENT PLANT

Proposed water treatment plant
capable of delivery of $3m^3/h$
completed with activated carbon and sand
filteration system, duplicate transfer pump
for both normal operation and backwash
with auto / manual panel, inlet–outlet
overflow, ultraviolent light with control panel,
associated pipe work and accessories and
chemical dosing units (maximum 2 units
subject to result of water laboratory
analysis) and all necessary installation accessories.

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	N.T.S
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

No.7 Owerri street, War College, Gwarimpa, Abuja.

Adress

Contact 08061278047, 08032913535

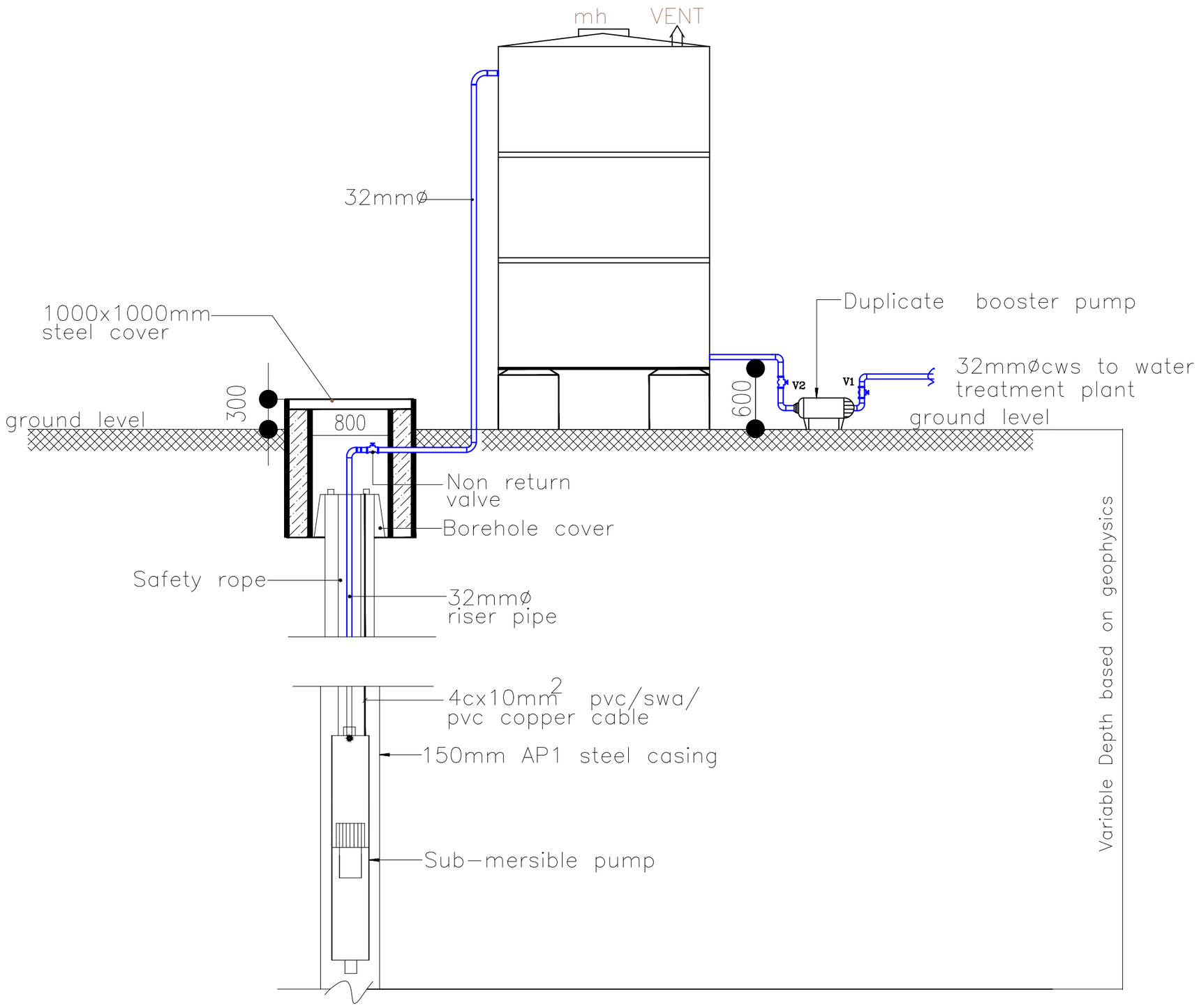
sheet title

Tank and Pump Sizes

Job no.

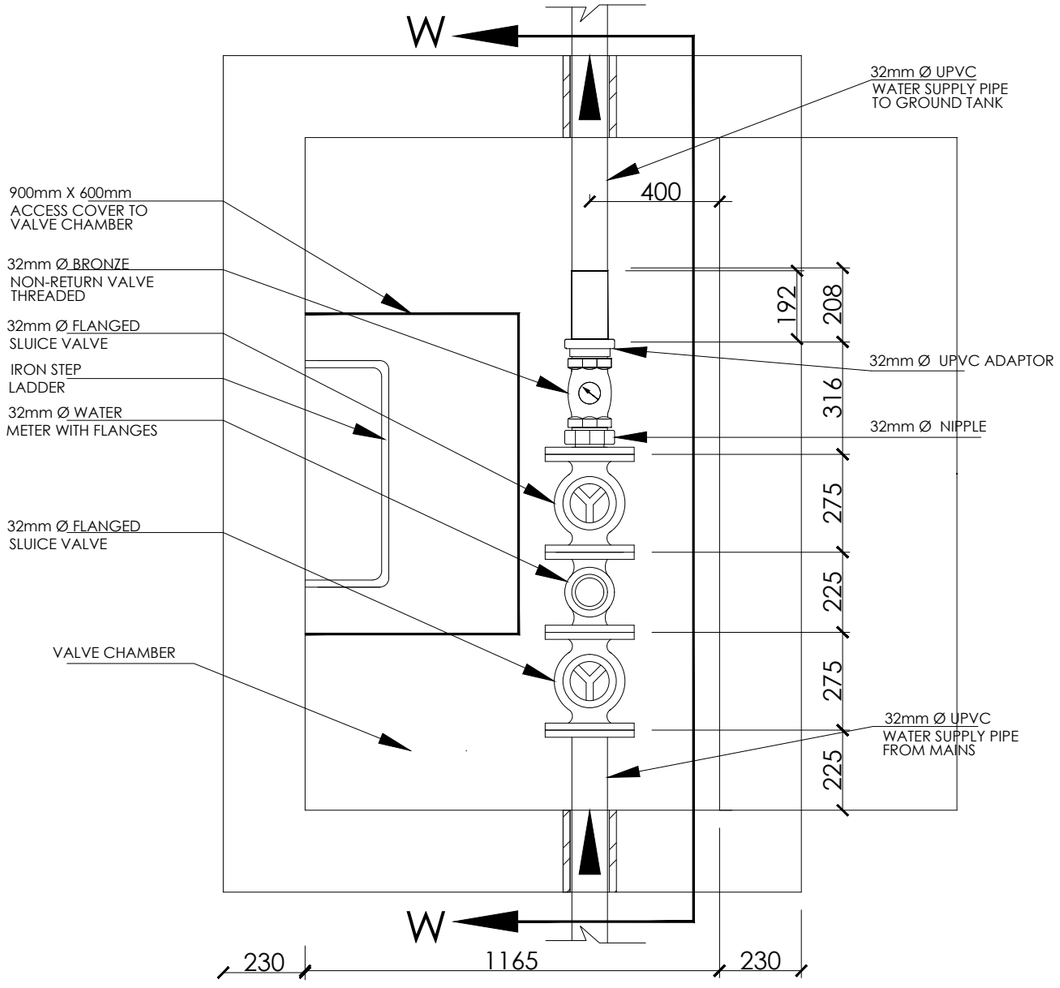
sheet no. **M09**

Seal

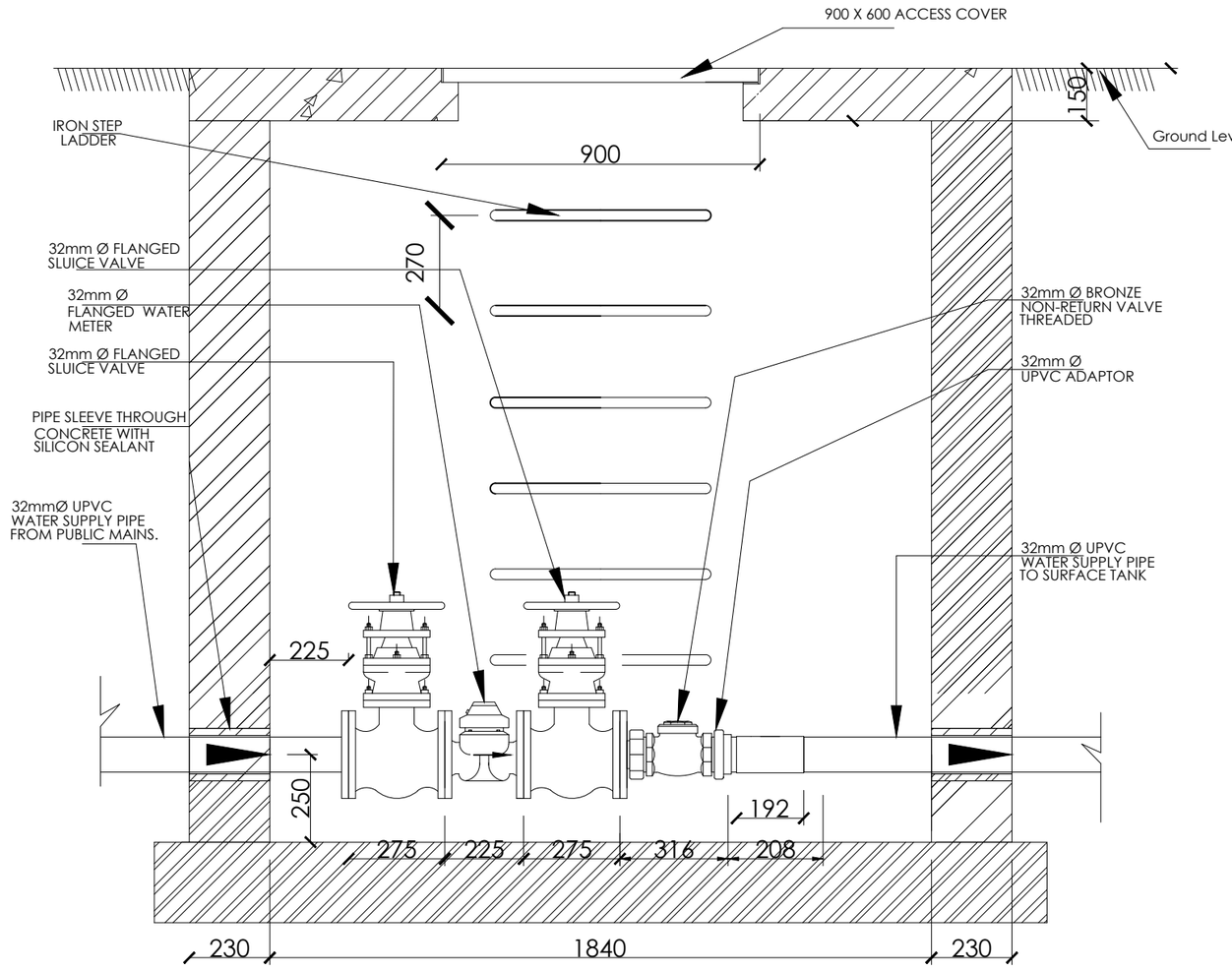


TYPICAL DETAIL OF GROUND WATER TANK

General notes ○ All dimension are in milimetres ○ All Work must be supervised by an Engineer. ○ This drawing is only allowed to be used for its intended purpose. Handing out this to a third party is not permitted nor usage for other purposes permitted without our special permission.	drawn designed checked scale date	Ibrahim Nuhu Engr. Jabiru. Shuaibu N.T.S February 2025	client **QUATAR CHARITY ORGANISATION**	Job tittle Proposed Clinic Development location AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.	consultant Adress Contact	No.7 Owerri street, War College, Gwarimpa, Abuja. 08061278047, 08032913535	sheet title Ground Water Tank Details Job no. sheet no. **M10**	Seal



EXTERNAL WORKS: DETAILS OF WATER MAINS VALVE CHAMBER.



ELEVATION W-W: MAINS VALVE CHAMBER

NOTE:

Depth of Manhole To Be Determined on Site

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	N.T.S
date	February 2025

client: **QUATAR CHARITY ORGANISATION**

Job tittle: Proposed Clinic Development

location: AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

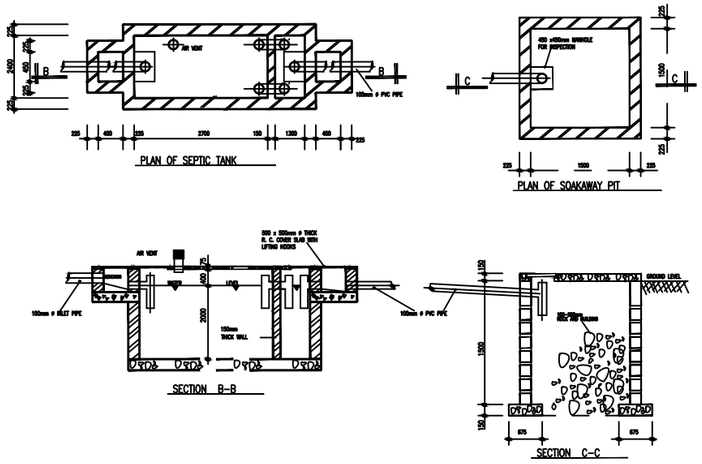
Contact: 08061278047, 08032913535

sheet title: Water Mains Valve Chamber Details

Job no.

sheet no.: **M11**

Seal



SEPTIC TANK & SOAK – AWAY SYSTEM

SEPTIC TANK

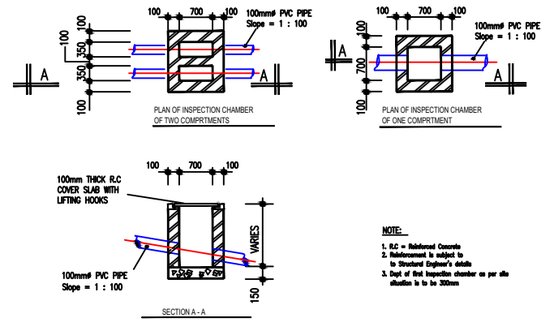
Size = 3.0x1.5x2.5m deep

SOAK AWAY

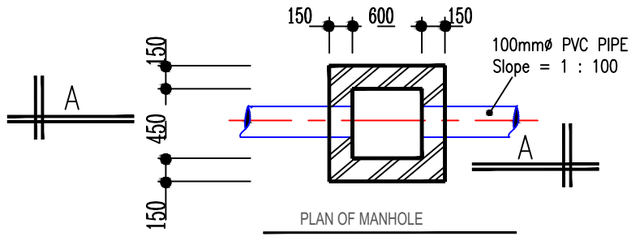
Size = 1.5x1.5x3.0m deep

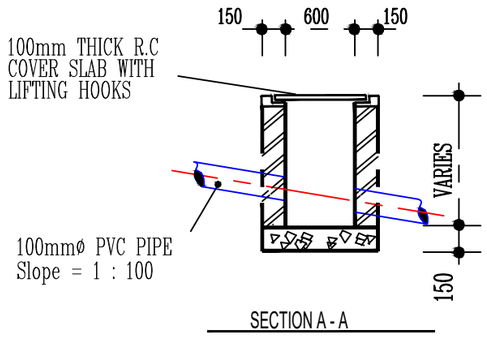
NOTE:

1. R.C = Reinforced Concrete
2. Reinforcement is subject to to Structural Engineer's details
3. Dept of first inspection chamber as per site situation is to be 300mm



INSPECTION CHAMBER



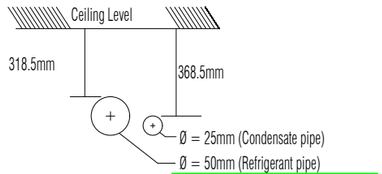


MANHOLE CHAMBER

General notes							
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	designed	Nuhu	QUATAR CHARITY ORGANISATION	Proposed Clinic Development			Septic Tank, Soak Away Pit, Manhole & Inspection Chamber Details	
	checked	Engr. Jabiru. Shuaibu		location				
	scale	N.T.S		AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.	Adress	No.7 Owerri street, War College, Gwarimpa, Abuja.	Job no.	sheet no. M12
	date	February 2025			Contact	08061278047, 08032913535		

NOTE :

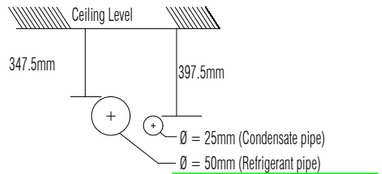
9000 Btu/h Split A/C Indoor Unit Sleeve Installation



Cooling Capacity = 2.8Kw
Power Input = 0.80Kw
1 Phase, 220 - 240 V, 50Hz

NOTE :

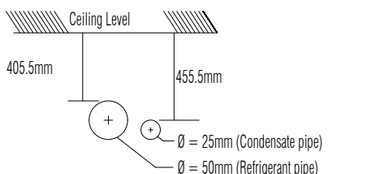
12000 Btu/h Split A/C Indoor Unit Sleeve Installation



Cooling Capacity = 3.6Kw
Power Input = 1.03Kw
1 Phase, 220 - 240 V, 50Hz

NOTE :

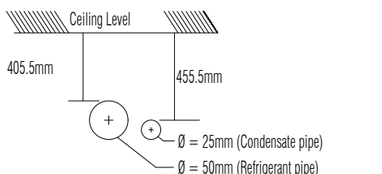
15800 Btu/h Split A/C Indoor Unit Sleeve Installation



Cooling Capacity = 4.5Kw
Power Input = 1.25Kw
1 Phase, 220 - 240 V, 50Hz

NOTE :

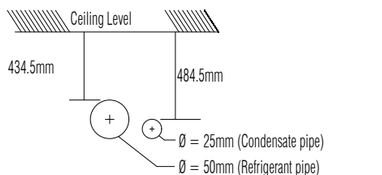
18000 Btu/h Split A/C Indoor Unit Sleeve Installation



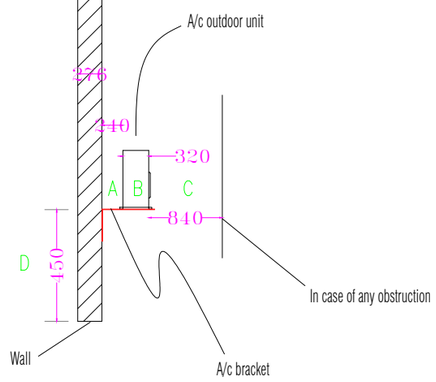
Cooling Capacity = 5.6Kw
Power Input = 1.60Kw
1 Phase, 220 - 240 V, 50Hz

NOTE :

24000 Btu/h Split A/C Indoor Unit Sleeve Installation



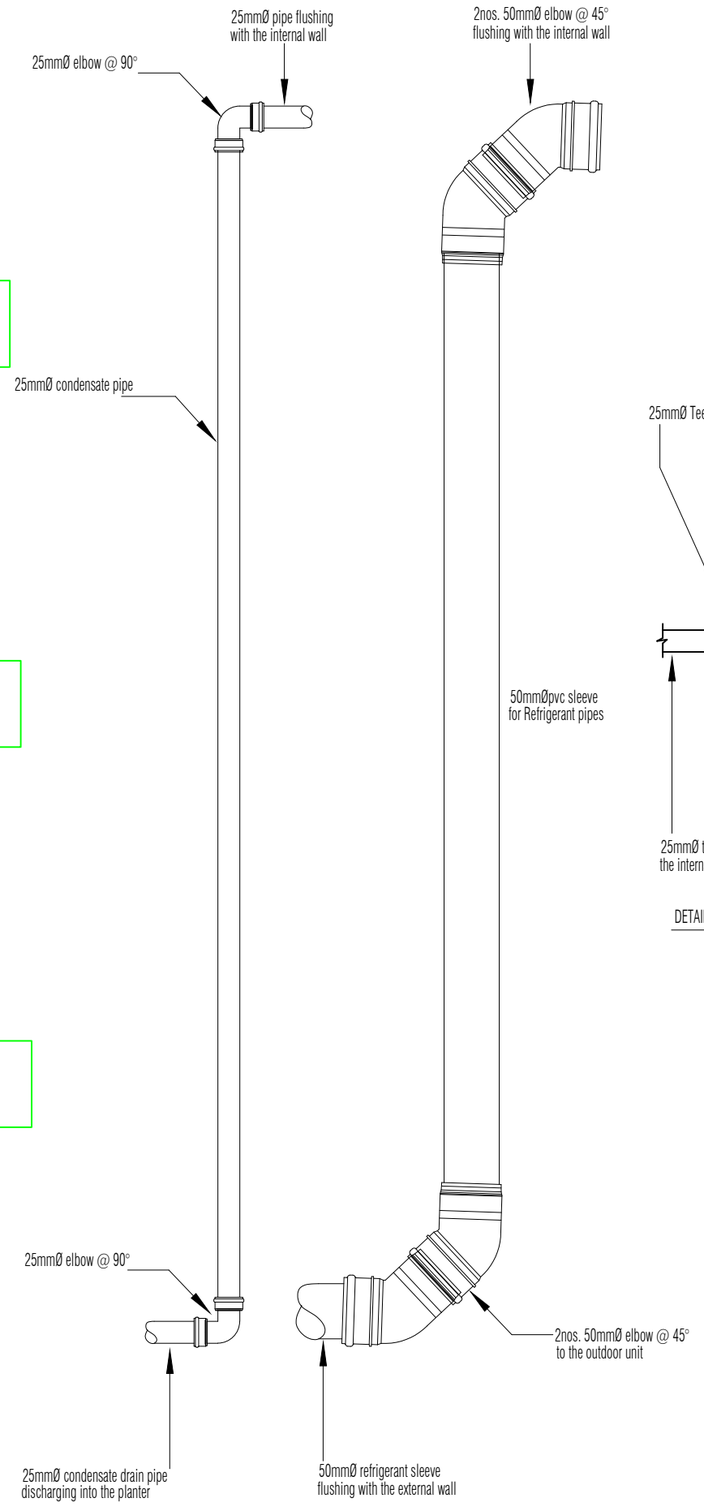
Cooling Capacity = 7.1Kw
Power Input = 2.00Kw
1 Phase, 220 - 240 V, 50Hz

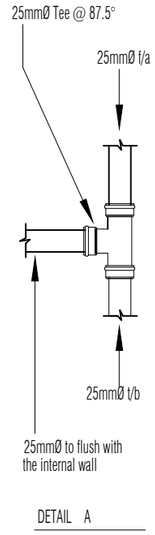


NOTE:

A = 200mm = Minimun distance between the wall and A/c outdoor unit
B = 320mm = A/c outdoor unit (width)
C = 700mm = Minimum distance between A/c outdoor unit and any obstruction
D = 450mm = The distance of A/c outdoor bracket (hanger) at from ground level

MINIMUM MANUFACTURER'S OUTDOOR A/C UNIT INSTALLATION SPACE REQUIREMENT





DETAIL A

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	N.T.S
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

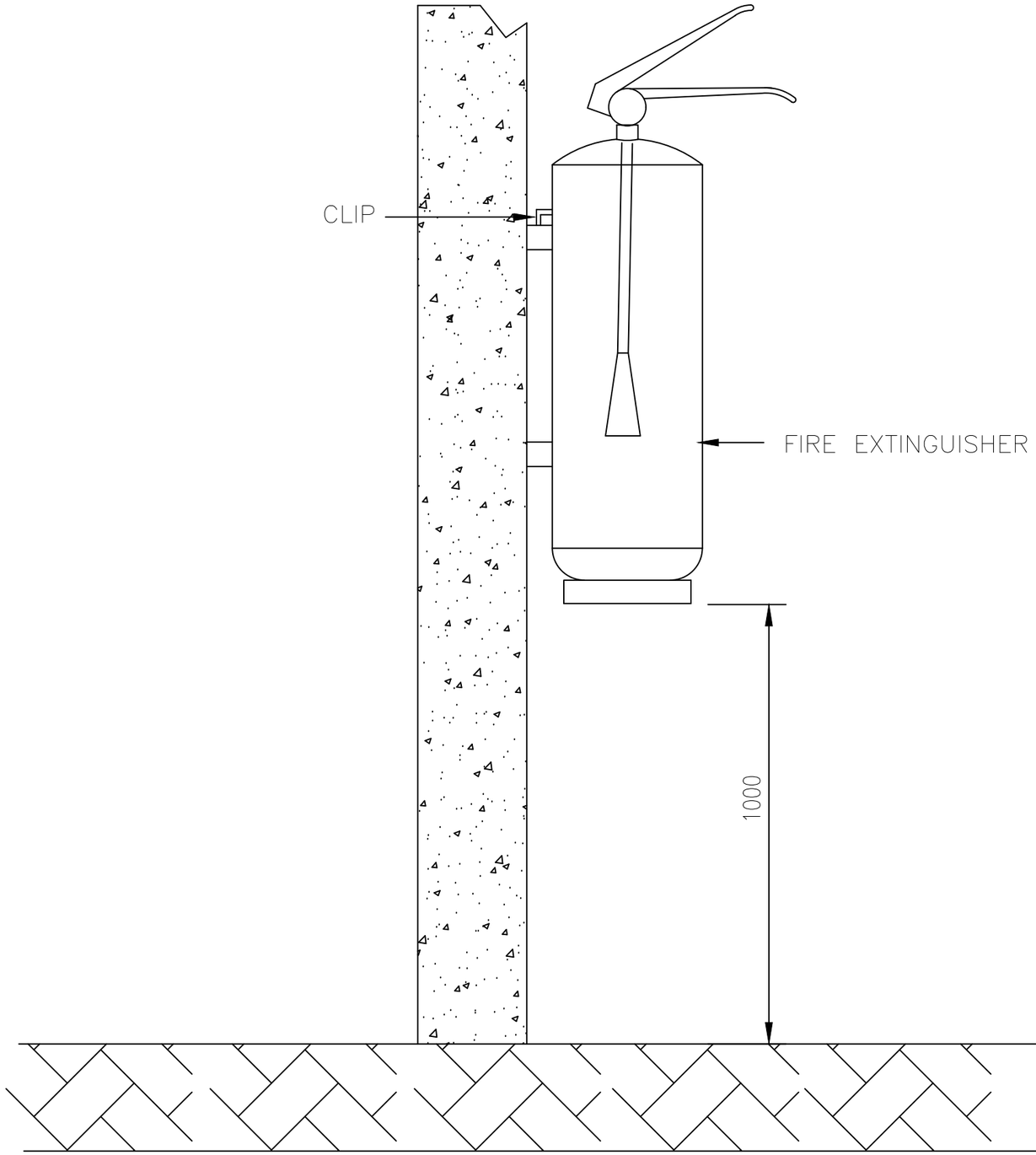
Air-Conditioning Installation Details

Job no.

sheet no.

M13

Seal



PORTABLE FIRE EXTINGUISHER (internal)

General notes

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drawn	Ibrahim
designed	Nuhu
checked	Engr. Jabiru. Shuaibu
scale	N.T.S
date	February 2025

client

QUATAR CHARITY ORGANISATION

Job tittle

Proposed Clinic Development

location

AT RED BRICKS HOUSING ESTATE ALONG MAIDUGURI ROAD, DAMATURU, YOBE STATE.

consultant

Adress: No.7 Owerri street, War College, Gwarimpa, Abuja.

Contact: 08061278047, 08032913535

sheet title

Fire Extinguisher Installation Details

Job no.

sheet no.

M14

Seal