

N.Maafaru Health Center  
*SERVICES DRAWINGS*

Client: Ministry of Health

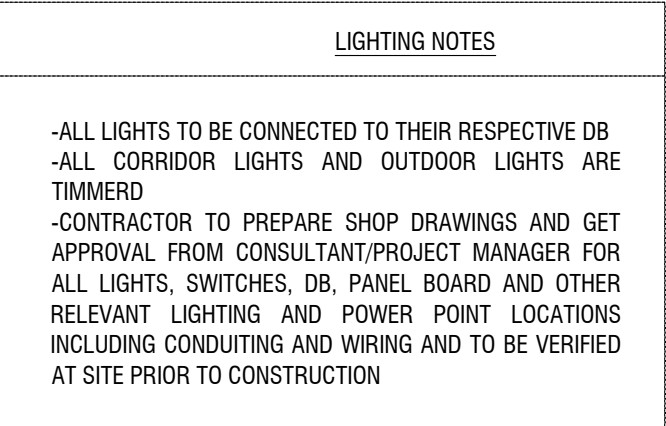



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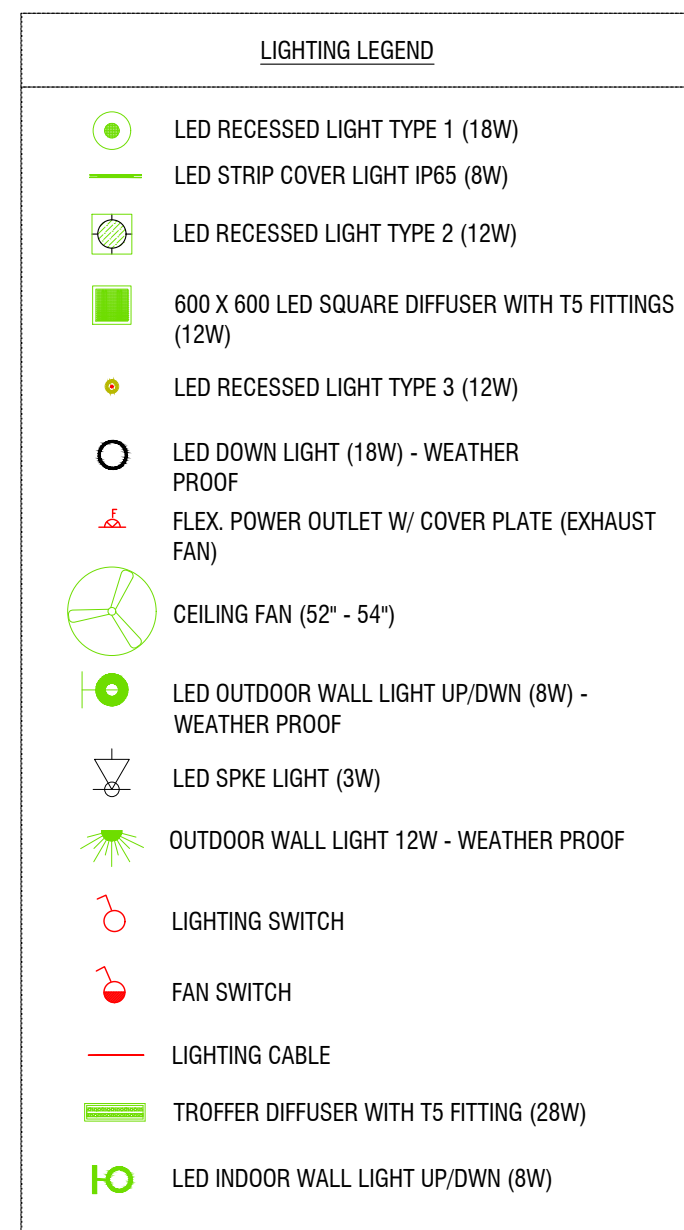
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**N.Maastru Health Center**  
**Client: Ministry of Health**  
*Project Number: B2T12/04H - NM*  
**Architect : Zuzulath Abdul Wajid**  
**Engineer :**  
**Services :** Nilsheeh Karmel Purnajih,  
 Sarwaning, Sundharlingam & Mark Kern Birno  
  
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**Title:** Ground Floor  
**Lighting Layout**  
**Page:** EL-01 / 03



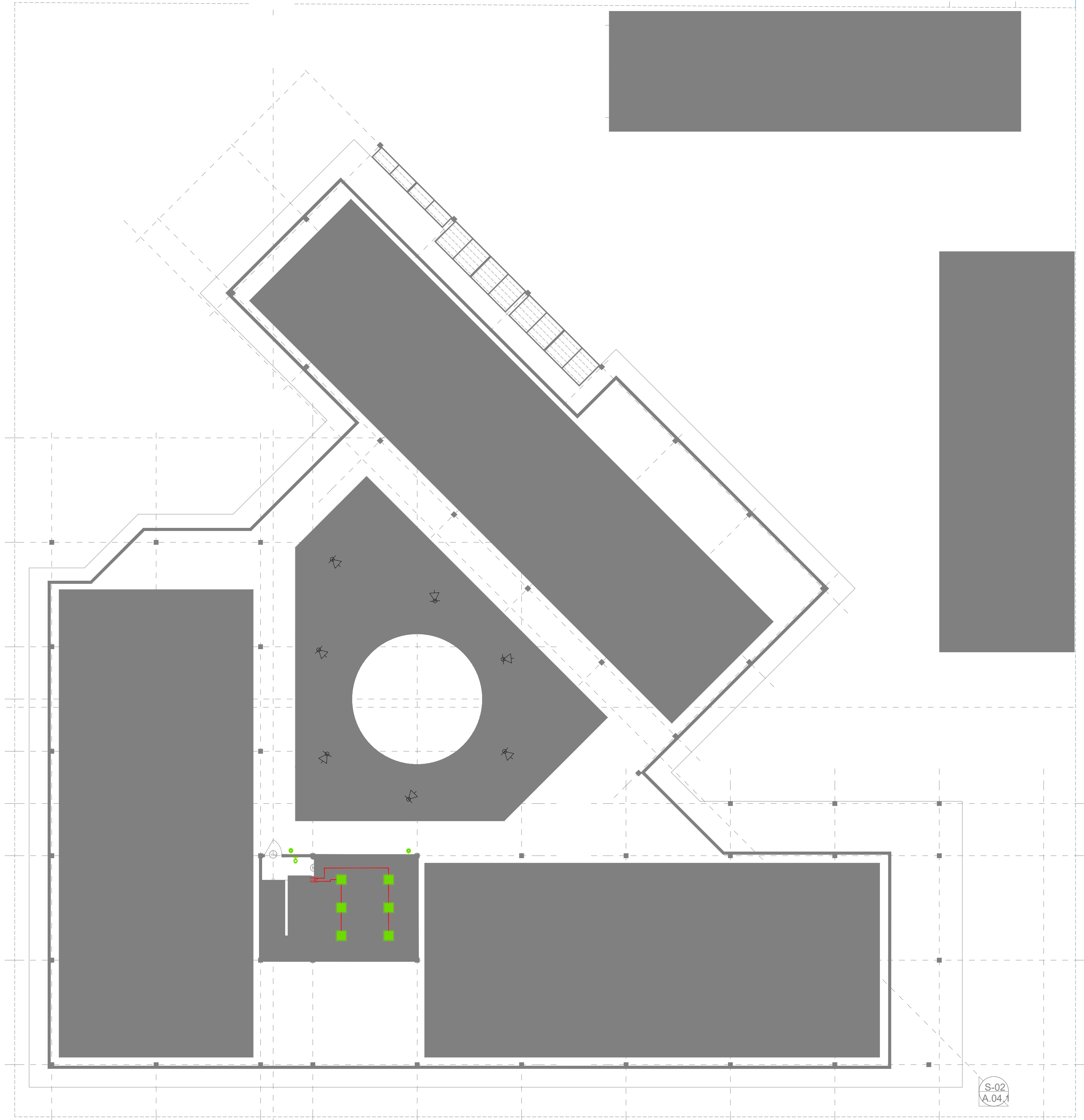


### LIGHTING NOTES

- ALL LIGHTS TO BE CONNECTED TO THEIR RESPECTIVE DB
- ALL CORRIDOR LIGHTS AND OUTDOOR LIGHTS ARE TIMMERD
- CONTRACTOR TO PREPARE SHOP DRAWINGS AND GET APPROVAL FROM CONSULTANT/PROJECT MANAGER FOR ALL LIGHTS, SWITCHES, DB, PANEL BOARD AND OTHER RELEVANT LIGHTING AND POWER POINT LOCATIONS INCLUDING CONDUTING AND WIRING AND TO BE VERIFIED AT SITE PRIOR TO CONSTRUCTION

**FIRST FLOOR LIGHTING PLAN**  
SCALE 1:150





LIGHTING LEGEND	
	LED RECESSED LIGHT TYPE 1 (18W)
	LED STRIP COVER LIGHT IP65 (8W)
	LED RECESSED LIGHT TYPE 2 (12W)
	600 X 600 LED SQUARE DIFFUSER WITH T5 FITTINGS (12W)
	LED RECESSED LIGHT TYPE 3 (12W)
	LED DOWN LIGHT (18W) - WEATHER PROOF
	FLEX. POWER OUTLET W/ COVER PLATE (EXHAUST FAN)
	CEILING FAN (52" - 54")
	LED OUTDOOR WALL LIGHT UP/DWN (8W) - WEATHER PROOF
	LED SPKE LIGHT (3W)
	OUTDOOR WALL LIGHT 12W - WEATHER PROOF
	LIGHTING SWITCH
	FAN SWITCH
	LIGHTING CABLE
	TROFFER DIFFUSER WITH T5 FITTING (28W)
	LED INDOOR WALL LIGHT UP/DWN (8W)

LIGHTING NOTES
-ALL LIGHTS TO BE CONNECTED TO THEIR RESPECTIVE DB -ALL CORRIDOR LIGHTS AND OUTDOOR LIGHTS ARE TIMMERD -CONTRACTOR TO PREPARE SHOP DRAWINGS AND GET APPROVAL FROM CONSULTANT/PROJECT MANAGER FOR ALL LIGHTS, SWITCHES, DB, PANEL BOARD AND OTHER RELEVANT LIGHTING AND POWER POINT LOCATIONS INCLUDING CONDUITING AND WIRING AND TO BE VERIFIED AT SITE PRIOR TO CONSTRUCTION

S-02  
A.04.1

TERRACE FLOOR LIGHTING PLAN  
SCALE 1:150  
0 1 2 3 4

N.Maafaru Health Center  
Client: Ministry of Health

Project Number: R2712/2024 - NM  
Date: April 2024  
Architect: Zunabath Abdul Majid  
Engineer: Nihesh Karmel Puranjan,  
Sriharan Mohamed Ewan,  
Saravananj Sundharalingam & Mark Kern Brito

Rev no  
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Date  
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3rd floor, H. Azam, Ammeenmaga, Malé

Title: Terrace Floor  
Lighting Layout

Page: EL-03 /03

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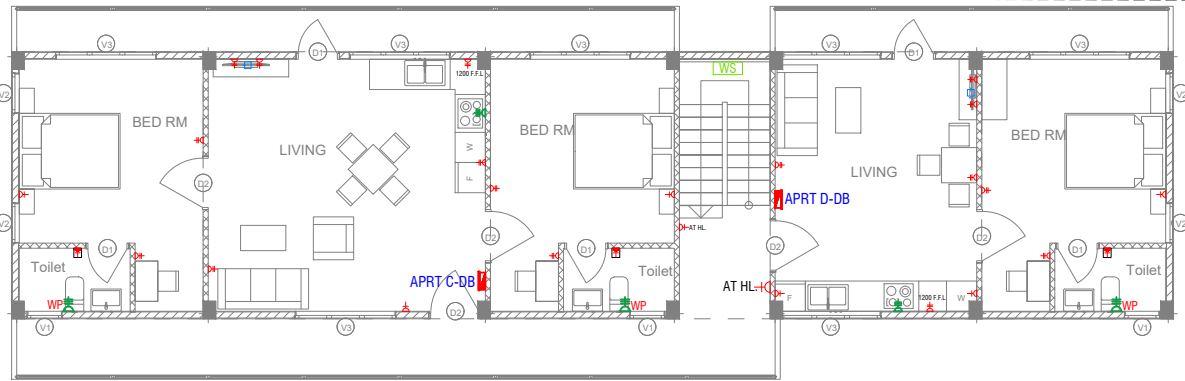


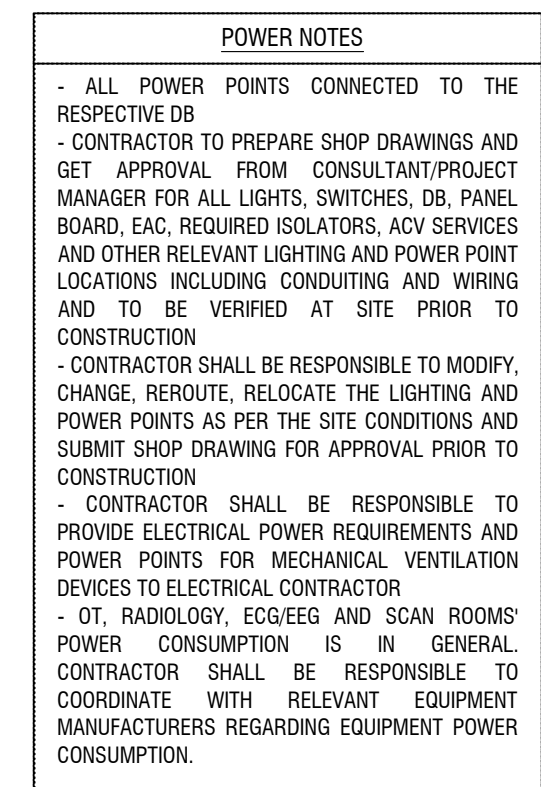
- LIGHTING LEGEND**
- TWO GANG TV SOCKET OUTLET
  - 13A POWER OUTLET (300MM FROM F.F.L) (ABOVE FALSE CEILING FOR TOKEN MONITORS)
  - 13A TWIN SOCKET OUTLET (300MM FROM F.F.L)
  - 13A UPS SOCKET OUTLET (300MM FROM F.F.L)
  - POWER OVER ETHERNET OUTLET
  - 15A POWER OUTLET
  - VGA CABLE FOR PROJECTOR
  - PROXIMITY CARD READER
  - EXIT SWITCH
  - DISTRIBUTION BOX
  - 13A SOCKETS FOR TOILETS (1500 F.F.L)
  - WEATHER PROOF POLYCARBONATE ENCLOSURE
  - PAGING MIC
  - VOLUME CONTROLLER
  - WALL SPEAKERS AT CEILING LEVEL
  - EMERGENCY DOOR RELEASE
  - NURSE STATION PANEL ROOM INDICATOR
  - ELECTROMAGNETIC LOCK
  - DOOR BELL BUTTON
  - DOOR BELL RECEIVER
  - HONE SPEAKER
  - CEILING SPEAKER
  - 8 POWER POINTS ON ENVIROM VERTICAL HEADWALLS CALL POINT TO NURSES STATION: INTEGRATED IN ENVIROM BEDHEAD TRUNK
  - THEATER CONTROL PANEL (INCLUDES TELEPHONE UNIT, FIRE ALARM STROBE, MEDICAL GAS INDICATOR UNIT)
  - T.I TABLE INTEGRATED OR F.F.L OUTLETS
  - C.L CEILING LEVEL OUTLETS
  - H.L HIGH LEVEL OUTLETS ON WALL

- POWER NOTES**
- ALL POWER POINTS CONNECTED TO THE RESPECTIVE DB
  - CONTRACTOR TO PREPARE SHOP DRAWINGS AND GET APPROVAL FROM CONSULTANT/PROJECT MANAGER FOR ALL LIGHTS, SWITCHES, DB, PANEL BOARD, EAC, REQUIRED ISOLATORS, ACV SERVICES AND OTHER RELEVANT LIGHTING AND POWER POINT LOCATIONS INCLUDING CONDUITING AND WIRING AND TO BE VERIFIED AT SITE PRIOR TO CONSTRUCTION
  - CONTRACTOR SHALL BE RESPONSIBLE TO MODIFY, CHANGE, REROUTE, RELOCATE THE LIGHTING AND POWER POINTS AS PER THE SITE CONDITIONS AND SUBMIT SHOP DRAWING FOR APPROVAL PRIOR TO CONSTRUCTION
  - CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ELECTRICAL POWER REQUIREMENTS AND POWER POINTS FOR MECHANICAL VENTILATION DEVICES TO ELECTRICAL CONTRACTOR
  - OT, RADIOLOGY, ECG/EEG AND SCAN ROOMS' POWER CONSUMPTION IS IN GENERAL. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH RELEVANT EQUIPMENT MANUFACTURERS REGARDING EQUIPMENT POWER CONSUMPTION.

GROUND FLOOR POWER PLAN  
SCALE 1:150











ACV LEGEND & ABBREVIATION	
	AIR HANDLING UNIT
	WALL MOUNTED UNIT
	CASSETTE UNIT
	OUTDOOR UNIT (TOP DISCHARGE)
	OUTDOOR UNIT (SIDE DISCHARGE)
	CEILING MOUNTED EXHAUST FAN
	FRESH AIR/EXHAUST AIR FAN (DUCT IN LINE)
	WALL MOUNTED FAN
	REFRIGERANT PIPES WITH INSULATION
	AC DRAIN PIPES WITH INSULATION
	SUPPLY AIR DUCT WITH THERMAL INSULATION
	RETURN AIR DUCT WITH THERMAL INSULATION
	EXHAUST AIR DUCT
	FRESH AIR DUCT
	VOLUME CONTROL DAMPER
	SUPPLY AIR DIFFUSER WITH DAMPER
	RETURN AIR DIFFUSER WITH DAMPER
	EXHAUST AIR GRILL
	150MM WIDTH SUPPLY AND RETURN AIR GRILL
T/B	TO BELOW
T/A	TO ABOVE
F/A	FROM ABOVE
F/B	FROM BELOW
AHU	AIR HANDLING UNIT
TEA	TREATED FRESH AIR HANDLING UNIT
ODU	OUT DOOR UNIT

**SPECIFICATION FOR VREVRV**

**Outdoor Unit**  
Air cooled VRF / VRV system working in R410A / R-407C or equivalent refrigerant. The system shall be suitable to operate on 3 phase, 380-415 V, 50Hz AC power supply & shall comprises with multiple no's of inverter, digital scroll/screw compressors, air cooled condenser fan with motor, microprocessor control panel, starter controls for all scroll compressors and condenser fan motors along with external control and power wiring, cooling coil with internally interlocked refrigerant pipes, charging port and all other required accessories & hardware's. The entire unit shall be with weather resistant powder coating paint for withstanding all ambient conditions for continuous outdoor operation

**Indoor unit**  
Air Conditioning Units suitable for mounting inside false ceiling/wall hang, each comprising of cooling coil, blower with motor, electronic expansion valve, filter, insulated connection of refrigerant circuit, provision for fresh air intake ducting, condensate water drain pump with electronic level sensor, including wireless remote controller etc.

**Air Handling Unit (DX type)**  
AHU having GI double skin (0.6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units complete with, dc coil (copper), motor, SSW/DDDW fan, pre filter (MERV 7/8) and fine filters (MERV 13).

**Air Handling Unit (DX type) for OT, ICU, Labour room, Sterile Areas and Accidents and Emergencies-**  
AHU having GI double skin (0.6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units complete with, dc coil (copper), motor, SSW/DDDW fan, pre filter (MERV 7/8), size filters (MERV 13) and HEPA Filter(H14)

**NOTE**

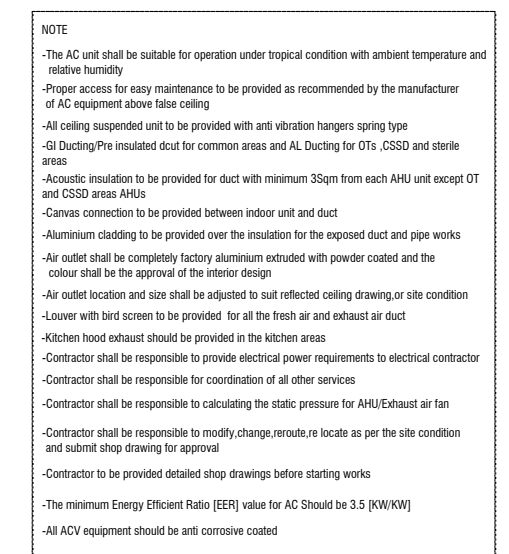
- The AC unit shall be suitable for operation under tropical condition with ambient temperature and relative humidity
- Proper access for easy maintenance to be provided as recommended by the manufacturer of AC equipment above false ceiling
- All ceiling suspended unit to be provided with anti vibration hangers spring type
- All ducting/Pipe insulated duct for common areas and AL Ducting for OTs, CSSD and sterile areas
- Acoustic insulation to be provided for duct with minimum Sqm from each AHU unit except OT and CSSD areas (M40)
- Canvas connection to be provided between indoor unit and duct
- Aluminium cladding to be provided over the insulation for the exposed duct and pipe works
- Air outlet shall be completely factory aluminium extruded with powder coated and the color shall be the approval of the interior design
- Air outlet location and size shall be adjusted to suit reflected ceiling drawing or site condition
- Lower with bird screen to be provided for all the fresh air and exhaust air duct
- Kitchen hood exhaust should be provided in the kitchen areas
- Contractor shall be responsible to provide electrical power requirements to electrical contractor
- Contractor shall be responsible for coordination of all other services
- Contractor shall be responsible for calculating the static pressure for AHU/Exhaust air fan
- Contractor shall be responsible to modify/change/relocate/relocate as per the site condition and submit shop drawing for approval
- Contractor to be provided detailed shop drawings before starting works
- The minimum Energy Efficient Ratio (EER) value for AC Should be 3.5 (kW/kW)
- All ACV equipment should be anti corrosive coated

**GROUND FLOOR AC LAYOUT**  
SCALE 1:150











ACV LEGEND & ABBREVIATION	
	AIR HANDLING UNIT
	WALL MOUNTED UNIT
	CASSETTE UNIT
	OUTDOOR UNIT (TOP DISCHARGE)
	OUTDOOR UNIT (SIDE DISCHARGE)
	CEILING MOUNTED EXHAUST FAN
	FRESH AIR/EXHAUST AIR FAN (DUCT IN LINE)
	WALL MOUNTED FAN
	REFRIGERANT PIPES WITH INSULATION
	AC DRAIN PIPES WITH INSULATION
	SUPPLY AIR DUCT WITH THERMAL INSULATION
	RETURN AIR DUCT WITH THERMAL INSULATION
	EXHAUST AIR DUCT
	FRESH AIR DUCT
	VOLUME CONTROL DAMPER
	SUPPLY AIR DIFFUSER WITH DAMPER
	RETURN AIR DIFFUSER WITH DAMPER
	EXHAUST AIR GRILL
	150MM WIDTH SUPPLY AND RETURN AIR GRILL
T/B	TO BELOW
T/A	TO ABOVE
F/A	FROM ABOVE
F/B	FROM BELOW
AHU	AIR HANDLING UNIT
TFA	TREATED FRESH AIR HANDLING UNIT
ODU	OUT DOOR UNIT

**SPECIFICATION FOR VRF/VRV**

**Outdoor Unit**  
Air cooled VRF / VRV system working in R410A / R-407C or equivalent refrigerant. The system shall be suitable to operate on 3 phase, 380-415 V, 50Hz AC, power supply & shall comprises with multiple no's of inverter, digital scroll/screw compressors, air cooled condenser fan with motor, microprocessor control panel, starter controls for all scroll compressors and condenser fan motors along with internal control and power wiring, cooling coil with internally interconnected refrigerant pipes, charging port and all other required accessories & hardware's. The entire unit shall be with weather resistant powder coating paint for withstanding all ambient conditions for continuous outdoor operation

**Indoor unit**  
Air Conditioning Units suitable for mounting inside false ceiling/wall hang, each comprising of cooling coil, blower with motor, electronic expansion valve, filter, insulated connection of refrigerant circuit, provision for fresh air intake ducting, condensate water drain pump with electronic level sensor, including wireless remote controller etc.

**Air Handling Unit (DX type)**  
AHU having GI double skin (6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units comply with, dx coil (copper), motor, SLOW/DOWN fan, pre filter (MERV 7/8) and fine filters (MERV 13).

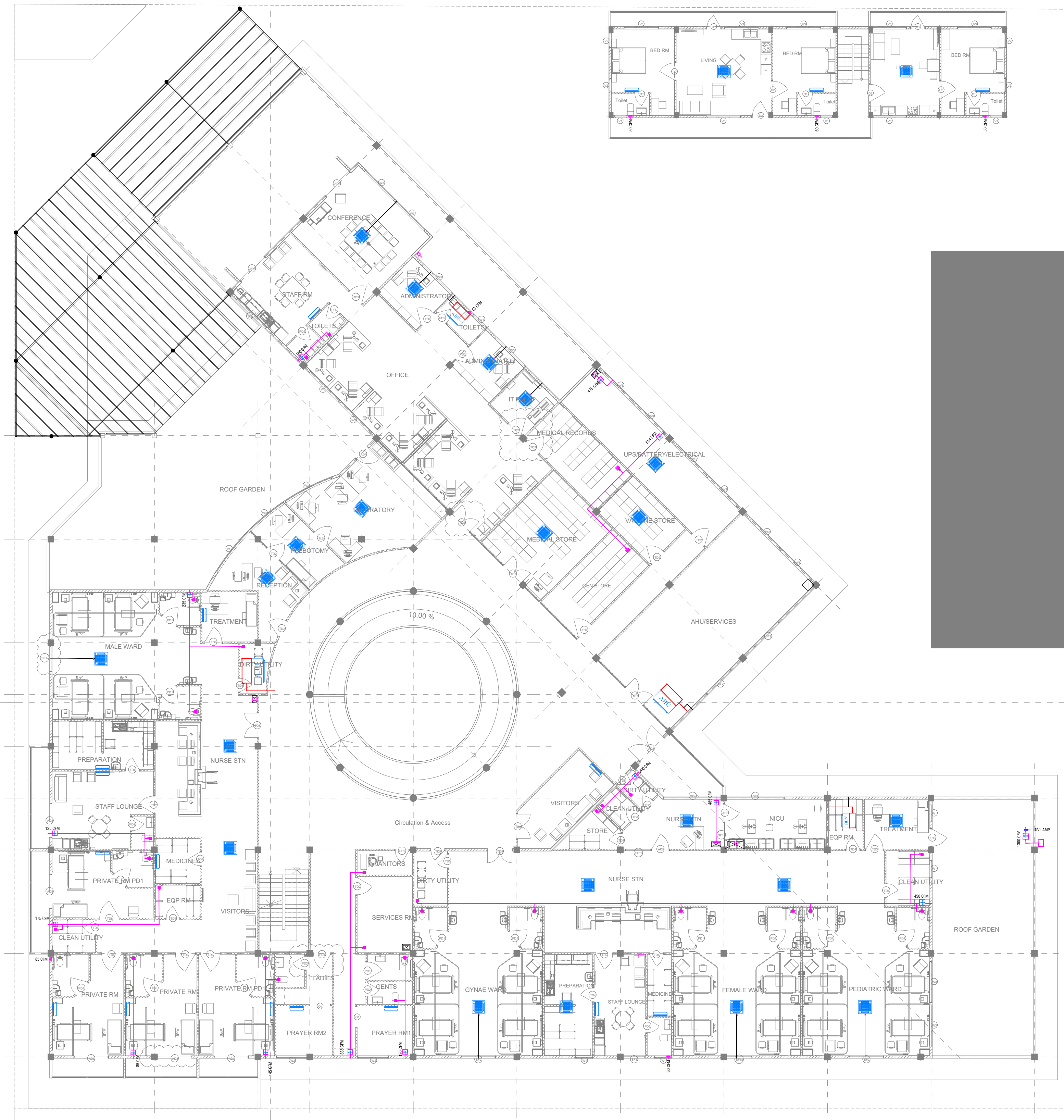
**Air Handling Unit (DX type)**  
AHU having GI double skin (6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units comply with, dx coil (copper), motor, SLOW/DOWN fan, pre filter (MERV 7/8), fine filters (MERV 13) and HEPA filter(H14).

**NOTE**

- The AC unit shall be suitable for operation under tropical condition with ambient temperature and relative humidity
- Proper access for easy maintenance to be provided as recommended by the manufacturer of AC equipment above false ceiling
- All ceiling suspended unit to be provided with anti vibration hangers spring type
- GI Ducting/Pipe insulated duct for common areas and AL Ducting for OTs, CSSD and sterile areas
- Acoustic insulation to be provided for duct with minimum 35gm from each AHU unit except OT and CSSD areas AHUs
- Canvas connection to be provided between indoor unit and duct
- Aluminium cladding to be provided over the insulation for the exposed duct and pipe works
- Air outlet shall be completely factory aluminium extruded with powder coated and the colour shall be to the approval of the interior design
- Air outlet location and size shall be adjusted to suit reflected ceiling drawing or site condition
- Louwer with bird screen to be provided for all the fresh air and exhaust air duct
- Kitchen hood exhaust should be provided in the kitchen areas
- Contractor shall be responsible to provide electrical power requirements to electrical contractor
- Contractor shall be responsible for coordination of all other services
- Contractor shall be responsible to calculating the static pressure for AHU/Exhaust air fan
- Contractor shall be responsible to modify change route/re locate as per the site condition and submit shop drawing for approval
- Contractor to be provided detailed shop drawings before starting works
- The minimum Energy Efficient Ratio (EER) value for AC should be 3.5 (R/NKW)
- All ACV equipment should be anti corrosive coated

**GROUND FLOOR VENTILATION LAYOUT**  
SCALE 1:150





ACV LEGEND & ABBREVIATION	
	AIR HANDLING UNIT
	WALL MOUNTED UNIT
	CASSETTE UNIT
	OUTDOOR UNIT (TOP DISCHARGE)
	OUTDOOR UNIT (SIDE DISCHARGE)
	CEILING MOUNTED EXHAUST FAN
	FRESH AIR/EXHAUST AIR FAN (DUCT IN LINE)
	WALL MOUNTED FAN
	REFRIGERANT PIPES WITH INSULATION
	AC DRAIN PIPES WITH INSULATION
	SUPPLY AIR DUCT WITH THERMAL INSULATION
	RETURN AIR DUCT WITH THERMAL INSULATION
	EXHAUST AIR DUCT
	FRESH AIR DUCT
	VOLUME CONTROL DAMPER
	SUPPLY AIR DIFFUSER WITH DAMPER
	RETURN AIR DIFFUSER WITH DAMPER
	EXHAUST AIR GRILL
	150MM WIDTH SUPPLY AND RETURN AIR GRILL
T/B	TO BELOW
T/A	TO ABOVE
F/A	FROM ABOVE
F/B	FROM BELOW
AHU	AIR HANDLING UNIT
TRA	TREATED FRESH AIR HANDLING UNIT
ODU	OUT DOOR UNIT

**SPECIFICATION FOR VRF/VRV**

**Outdoor Unit**  
Air cooled VRF / VRV system working in R410A / R-407C or equivalent refrigerant. The system shall be suitable to operate on 3 phase, 380-415 V, 50Hz AC power supply & shall comprises with multiple no's of inverter, digital scroll/screw compressors, air cooled condenser fan with motor, microprocessor control panel, starter control for all scroll compressors and condenser fan motors along with internal control and power wiring, cooling coil with internally interconnected refrigerant pipes, charging port and all other required accessories. & hardware's. The entire unit shall be with weather resistant powder coating paint for withstanding all ambient conditions for continuous outdoor operation.

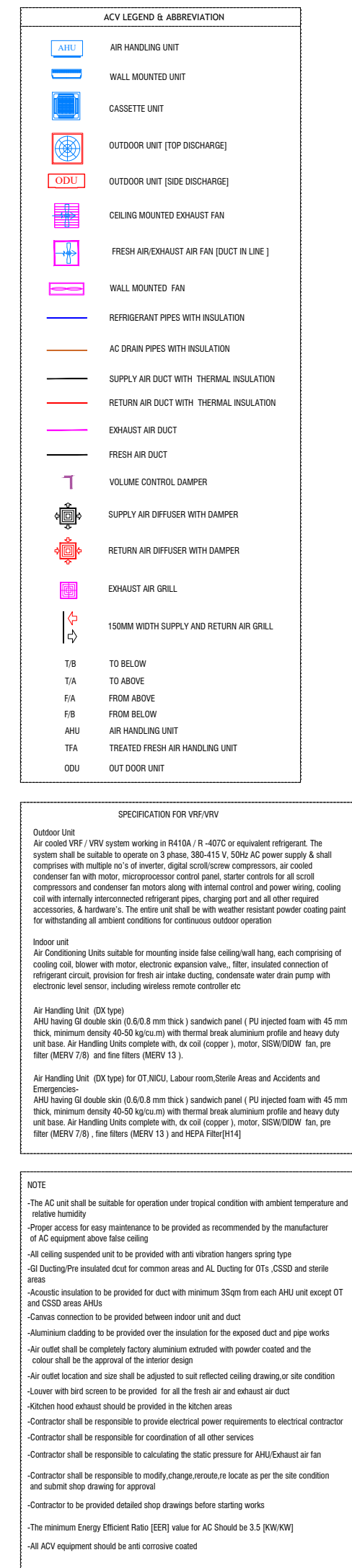
**Indoor unit**  
Air Conditioning Units suitable for mounting inside false ceiling/wall hang, each comprising of cooling coil, blower with motor, electronic expansion valve, filter, insulated connection of refrigerant circuit, provision for fresh air intake ducting, condensate water drain pump with electronic level sensor, including wireless remote controller etc.

**Air Handling Unit (DX type)**  
AHU having 10 double skin (0.6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units complete with, dc coil (copper), motor, SSW/ODW fan, pre filter (MERV 7/8) and fine filters (MERV 13).

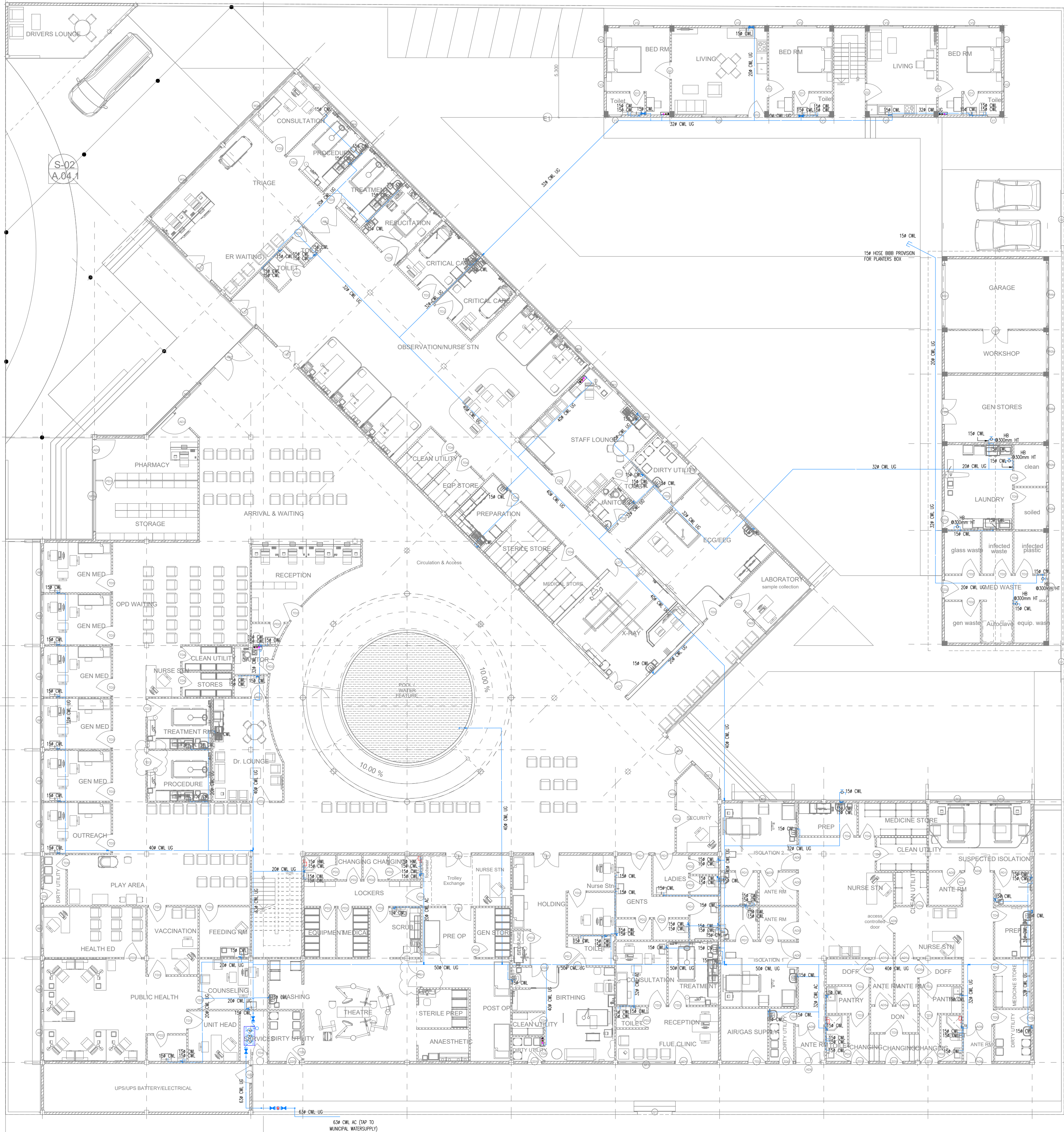
**Air Handling Unit (DX type) for OT, ICU, Labour room, Sterile Areas and Accidents and Emergencies**  
AHU having 10 double skin (0.6/0.8 mm thick) sandwich panel (PU injected foam with 45 mm thick, minimum density 40-50 kg/cu.m) with thermal break aluminium profile and heavy duty unit base. Air Handling Units complete with, dc coil (copper), motor, SSW/ODW fan, pre filter (MERV 7/8), fine filters (MERV 13) and HEPA filter(H14).

**NOTE**

- The AC unit shall be suitable for operation under tropical condition with ambient temperature and relative humidity.
- Proper access for easy maintenance to be provided as recommended by the manufacturer of AC equipment above false ceiling.
- All ceiling suspended unit to be provided with anti vibration hangers spring type.
- All Ducting/Pre insulated duct for common areas and AL Ducting for OTs, CSSD and sterile areas.
- Acoustic insulation to be provided for duct with minimum 35mm from each AHU unit except OT and CSSD areas AHUs.
- Curves connection to be provided between indoor unit and duct.
- Aluminium cladding to be provided over the insulation for the exposed duct and pipe works.
- Air outlet shall be completely factory aluminium extruded with powder coated and the color shall be the approval of the interior design.
- Air outlet location and size shall be adjusted to suit reflected ceiling drawing or site condition.
- Lower with bird screen to be provided, for all the fresh air and exhaust air duct.
- Kitchen hood exhaust should be provided in the kitchen areas.
- Contractor shall be responsible to provide electrical power requirements to electrical contractor.
- Contractor shall be responsible for coordination of all other services.
- Contractor shall be responsible to calculating the static pressure for AHU/Exhaust air fan.
- Contractor shall be responsible to modify/change/re-route locate as per the site condition and submit shop drawing for approval.
- Contractor to be provided detailed shop drawings before starting works.
- The minimum Energy Efficient Ratio (EER) value for AC Should be 3.5 (R/NKW).
- All ACV equipment should be anti corrosive coated.







GROUND FLOOR PLUMBING LAYOUT  
SCALE 1:150  
1 2 3 4 5

N.Maafaru Health Center  
Client: Ministry of Health

Project Number: R27124CH - NM  
Date: April 2022  
Architect: Zuhairah Abdul Majid  
Engineer: Nishesh Kamel Puranjay  
S. Saravanan Sundharalingam & Mark Kern Brito



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Title: Ground Floor  
Plumbing Layout

Page: PL-01/02

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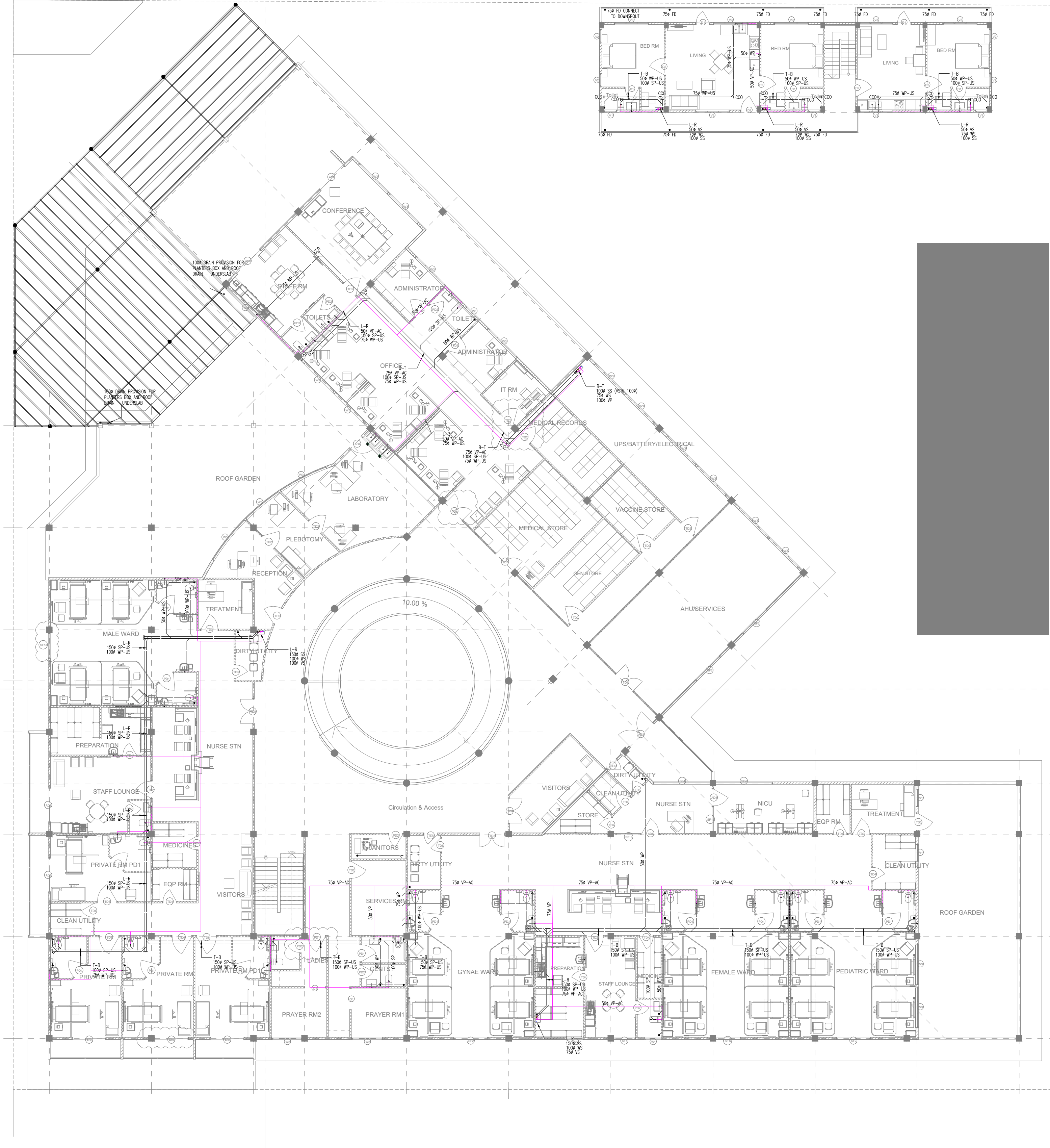












FIRST FLOOR DRAINAGE LAYOUT  
SCALE 1:100

N.Maafaru Health Center  
Client: Ministry of Health

Rev no	Date
1	2023-04-01
2	2023-04-01
3	2023-04-01
4	2023-04-01

Project Number: 82712404 - NM  
Date: April 2023  
Architect: Zuhairah Abdul Majid  
Engineer: Nishesh Kamel Puranjay  
Saraanaj Sundharalingam & Mark Kern Brito

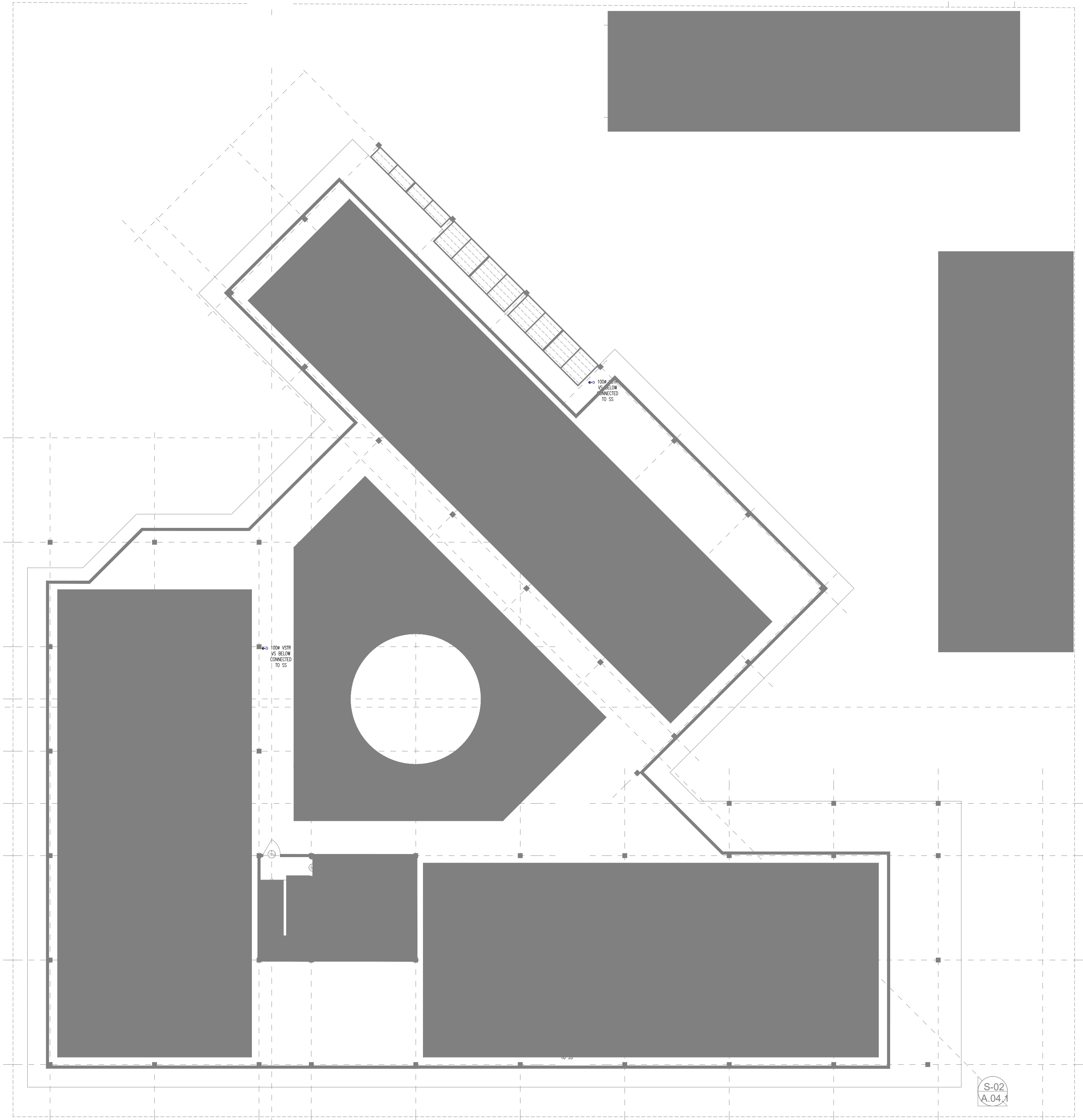


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Title: First Floor  
Drainage Layout  
Page: DR-02 /03

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TERRACE FLOOR DRAINAGE LAYOUT  
SCALE 1:150  
0' 25' 1' 2' 3' 4'

N.Maafaru Health Center  
Client: Ministry of Health

Project Number: R2712/2024 - NM  
Date: April 2024  
Architect: Zuhairah Abdul Majid  
Engineer: Nishesh Karmel Puranjan  
Scribe: Ibrahim Mohamed Ewan  
Savarnanaj Sundharalingam & Mark Kern Brito

Rev no  
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Date  
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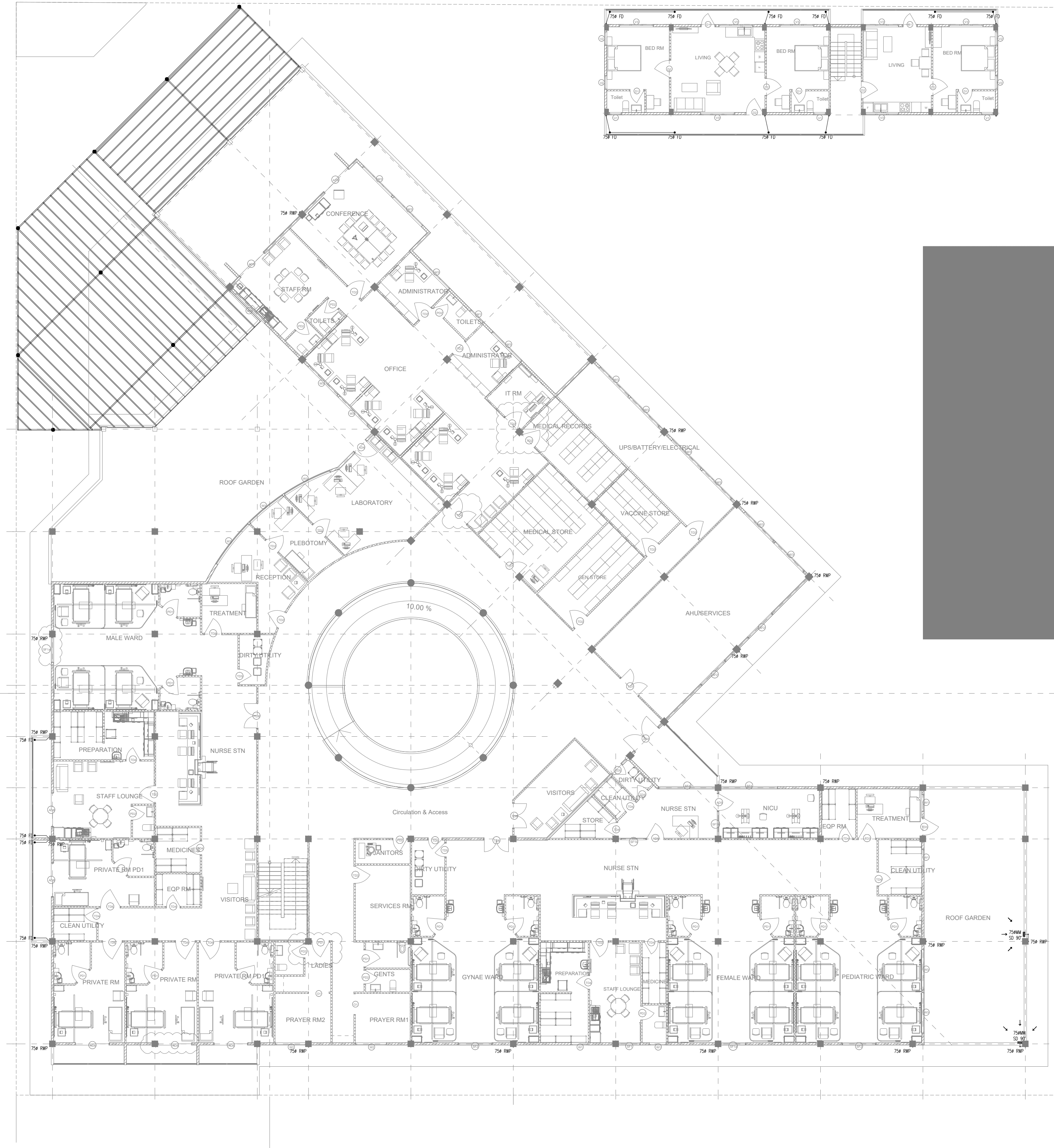
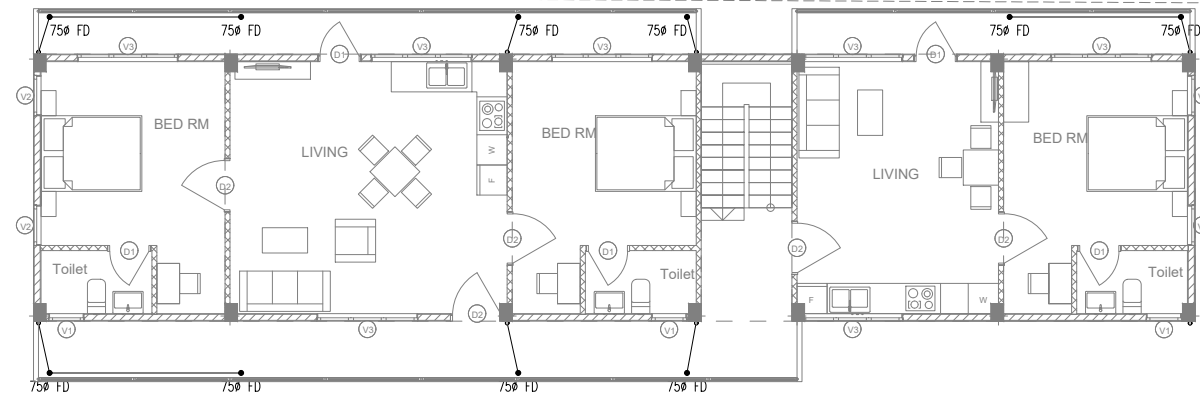
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w: www.ryian.com.mv  
3rd floor, 11, Azim, Ameenemogga, Malé

Title: Terrace Floor  
Drainage Layout  
Page: DR-03 /03

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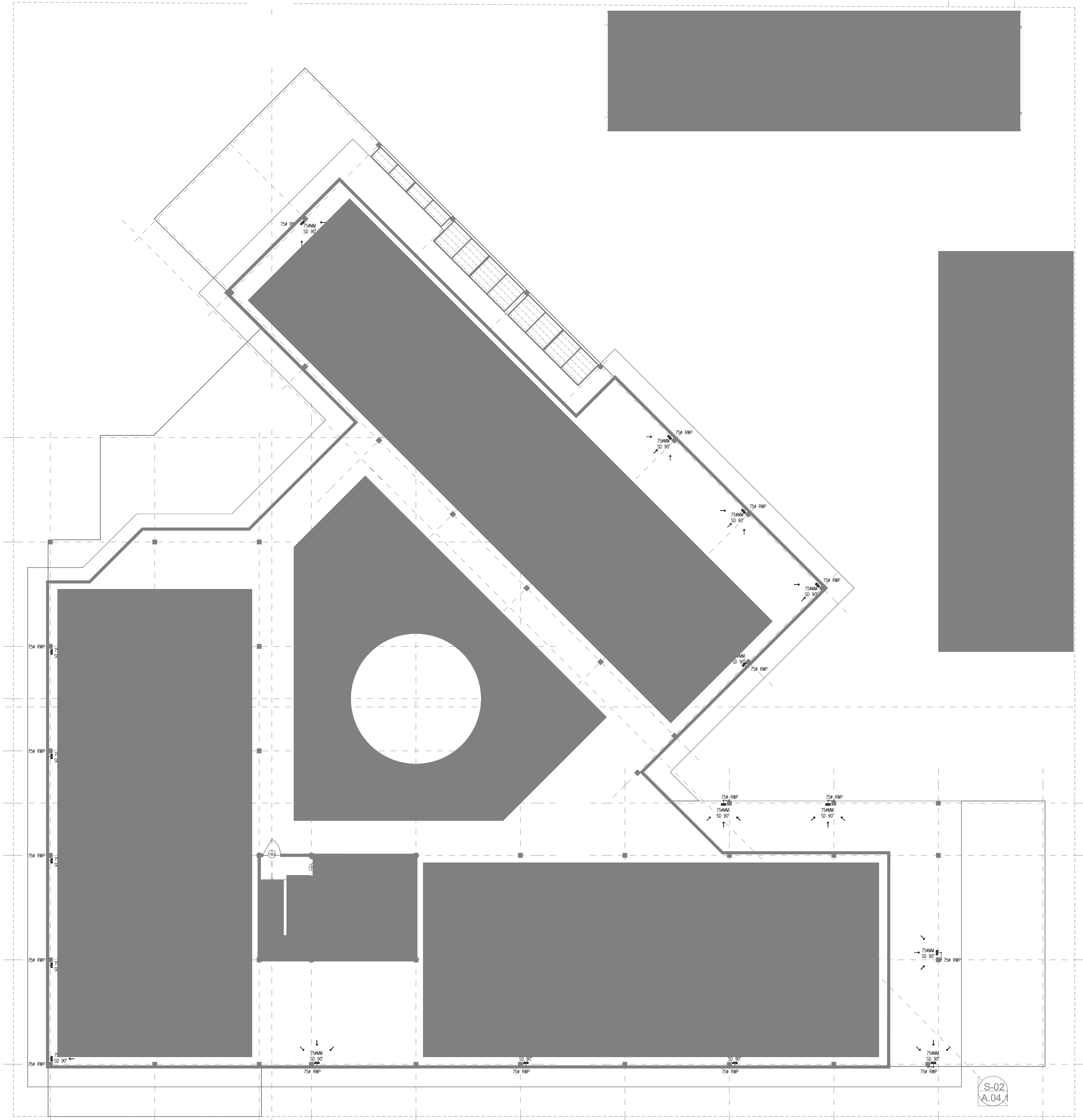






FIRST FLOOR STORM LAYOUT  
SCALE 1:150

Rev no	Date
1	11/04/2022
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TERRACE FLOOR STORM LAYOUT  
SCALE 1:150  
0' 1' 2' 3' 4'

N.Maafaru Health Center  
Client: Ministry of Health

Project Number: R2712/2024 - NM  
Date: April 2024  
Architect: Zuhairah Abdul Majid  
Engineer: Nithesh Karmel Purusajan  
Scribe: Ibrahim Mohamed Ewan  
Saraanaraj Sundharalingam & Mark Kern Brito

Rev no  
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Date  
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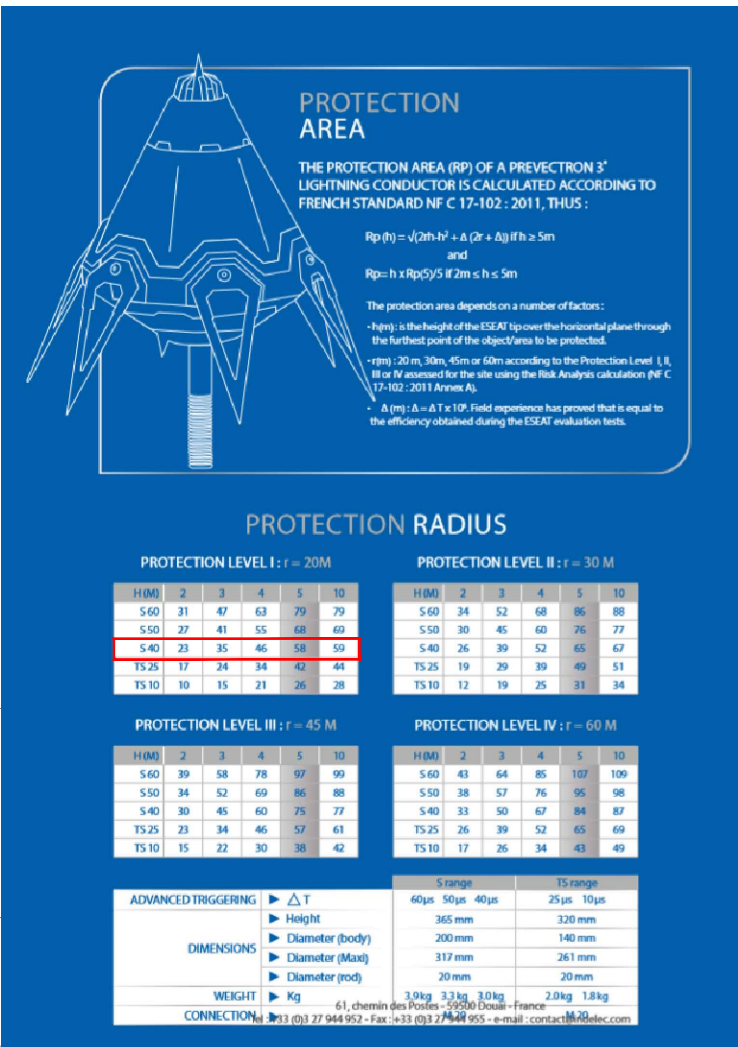
Title: Terrace Floor  
Storm Layout

Page: ST-03 /03

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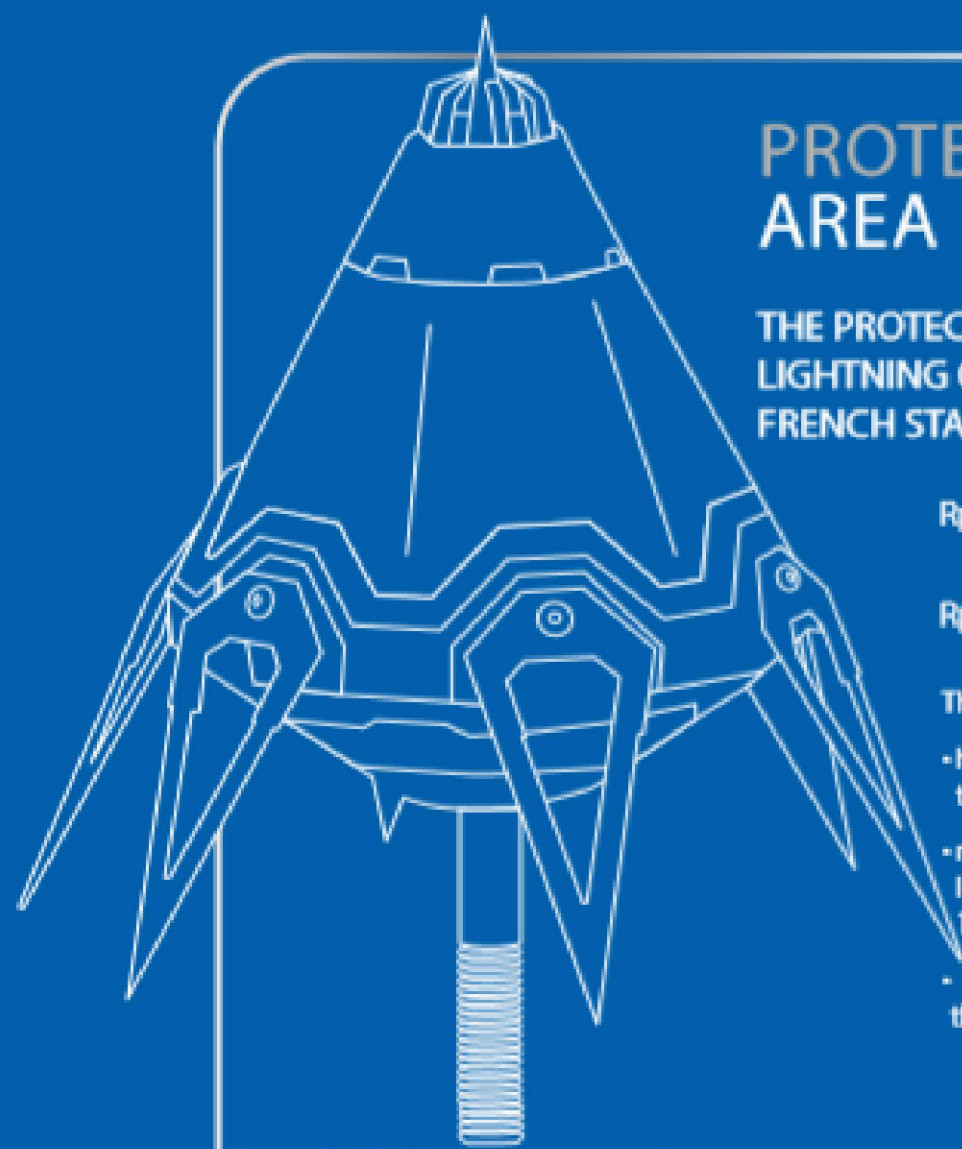






**TERRACE FLOOR LIGHTING PROTECTION LAYOUT**  
SCALE 1:150





# PROTECTION AREA

THE PROTECTION AREA (RP) OF A PREVECTRON 3\* LIGHTNING CONDUCTOR IS CALCULATED ACCORDING TO FRENCH STANDARD NF C 17-102 : 2011, THUS :

$$R_p(h) = \sqrt{(2rh-h^2 + \Delta(2r+\Delta))}$$
 if  $h \geq 5m$   
and  
$$R_p = h \times R_p(5)/5$$
 if  $2m \leq h \leq 5m$

- The protection area depends on a number of factors :
- $h(m)$  : is the height of the ESEAT tip over the horizontal plane through the furthest point of the object/area to be protected.
  - $r(m)$  : 20 m, 30m, 45m or 60m according to the Protection Level I, II, III or IV assessed for the site using the Risk Analysis calculation (NF C 17-102 : 2011 Annex A).
  - $\Delta(m)$  :  $\Delta = \Delta T \times 10^\circ$ . Field experience has proved that is equal to the efficiency obtained during the ESEAT evaluation tests.

# PROTECTION RADIUS

PROTECTION LEVEL I : r = 20M

H (M)	2	3	4	5	10
S 60	31	47	63	79	79
S 50	27	41	55	68	69
S 40	23	35	46	58	59
TS 25	17	24	34	42	44
TS 10	10	15	21	26	28

PROTECTION LEVEL II : r = 30 M

H (M)	2	3	4	5	10
S 60	34	52	68	86	88
S 50	30	45	60	76	77
S 40	26	39	52	65	67
TS 25	19	29	39	49	51
TS 10	12	19	25	31	34

PROTECTION LEVEL III : r = 45 M

H (M)	2	3	4	5	10
S 60	39	58	78	97	99
S 50	34	52	69	86	88
S 40	30	45	60	75	77
TS 25	23	34	46	57	61
TS 10	15	22	30	38	42

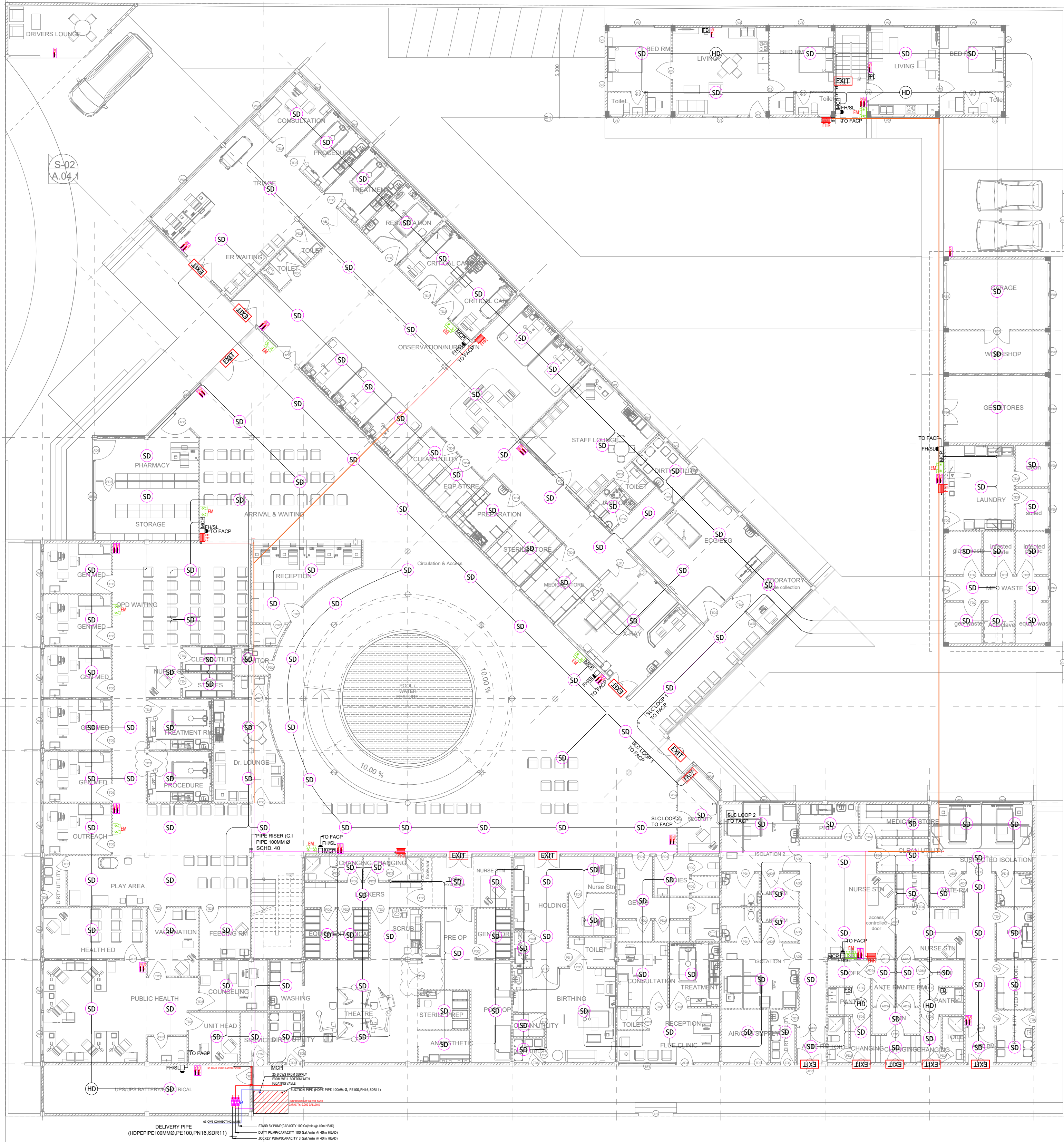
PROTECTION LEVEL IV : r = 60 M

H (M)	2	3	4	5	10
S 60	43	64	85	107	109
S 50	38	57	76	95	98
S 40	33	50	67	84	87
TS 25	26	39	52	65	69
TS 10	17	26	34	43	49

ADVANCED TRIGGERING		S range		TS range	
DIMENSIONS	▶ $\Delta T$	60µs	50µs 40µs	25µs	10µs
	▶ Height	365 mm		320 mm	
	▶ Diameter (body)	200 mm		140 mm	
	▶ Diameter (Maxi)	317 mm		261 mm	
WEIGHT	▶ Diameter (rod)	20 mm		20 mm	
	▶ Kg	3.9kg 3.3 kg 3.0 kg		2.0kg 1.8 kg	
CONNECTION		M20			

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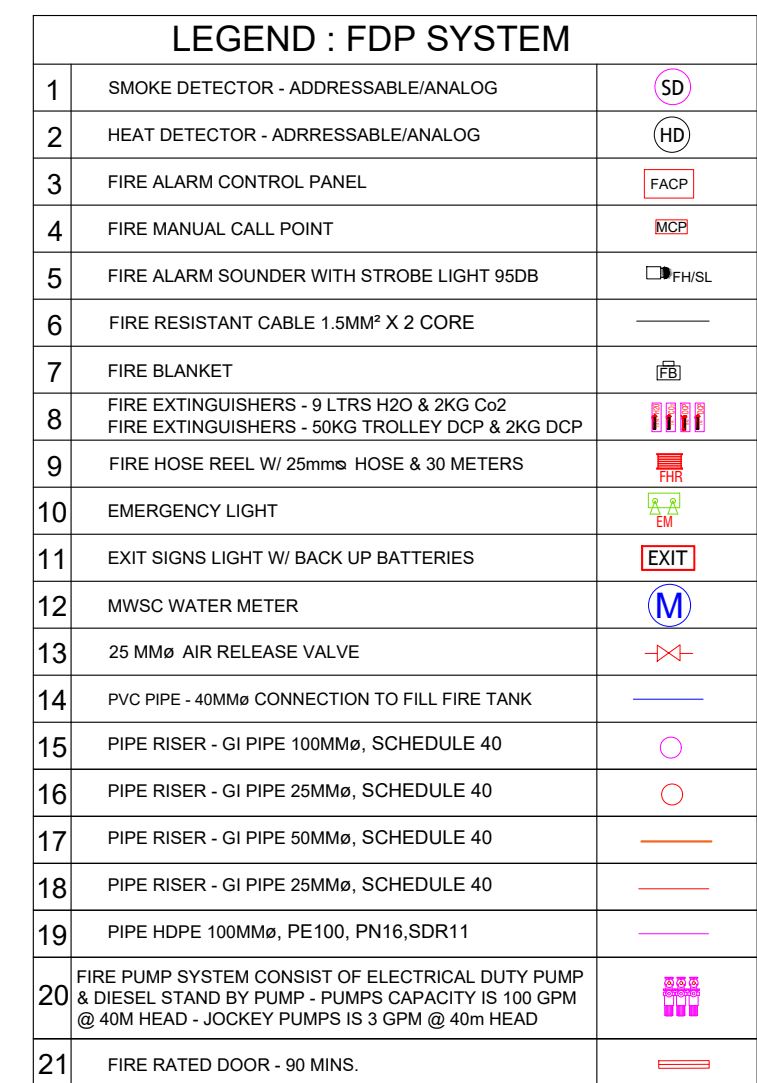


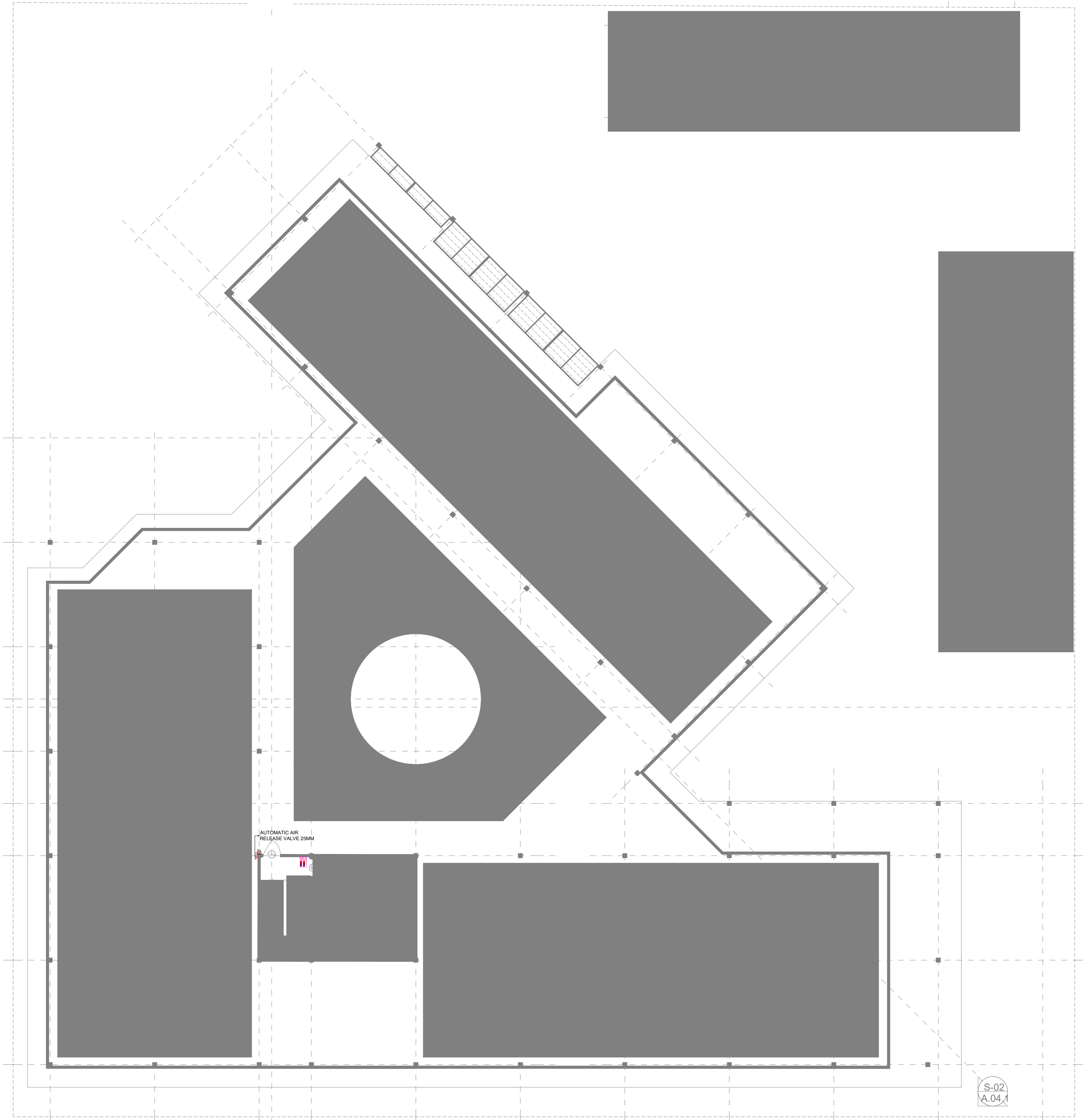


LEGEND : FDP SYSTEM		
1	SMOKE DETECTOR - ADDRESSABLE/ANALOG	SD
2	HEAT DETECTOR - ADDRESSABLE/ANALOG	HD
3	FIRE ALARM CONTROL PANEL	FACP
4	FIRE MANUAL CALL POINT	MCP
5	FIRE ALARM SOUNDER WITH STROBE LIGHT 95DB	FHS
6	FIRE RESISTANT CABLE 1.5MM² X 2 CORE	
7	FIRE BLANKET	FB
8	FIRE EXTINGUISHERS - 9 LTRS H2O & 2KG Co2	FE
9	FIRE EXTINGUISHERS - 50KG TROLLEY DCP & 2KG DCP	FE
10	FIRE HOSE REEL W/ 25mm HOSE & 30 METERS	FHR
11	EMERGENCY LIGHT	EL
12	EXIT SIGNS LIGHT W/ BACK UP BATTERIES	EXIT
13	MWSC WATER METER	M
14	25 MMø AIR RELEASE VALVE	ARV
15	PVC PIPE - 40MMø CONNECTION TO FILL FIRE TANK	
16	PIPE RISER - GI PIPE 100MMø, SCHEDULE 40	PR
17	PIPE RISER - GI PIPE 25MMø, SCHEDULE 40	PR
18	PIPE RISER - GI PIPE 50MMø, SCHEDULE 40	PR
19	PIPE RISER - GI PIPE 25MMø, SCHEDULE 40	PR
20	PIPE HDPE 100MMø, PE100, PN16, SDR11	PR
21	FIRE PUMP SYSTEM CONSIST OF ELECTRICAL DUTY PUMP & DIESEL STAND BY PUMP - PUMPS CAPACITY IS 100 GPM @ 40M HEAD - JOCKEY PUMPS IS 3 GPM @ 40m HEAD	
22	FIRE RATED DOOR - 90 MINS.	FRD

GROUND FLOOR FDP LAYOUT  
SCALE 1:150







N.Maafaru Health Center  
Client: Ministry of Health

Project Number: R2712/2024 - NM  
Date: April 2024  
Architect: Zunabath Abdul Majid  
Engineer: Nihesh Karmel Puranjan,  
Sriharan Mohamed Ewan,  
Sarwaning Sundharalingam & Mark Kern Brito

Rev no  
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Date  
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Title: Terrace Floor  
FDP Layout

Page: FDP-03 /03

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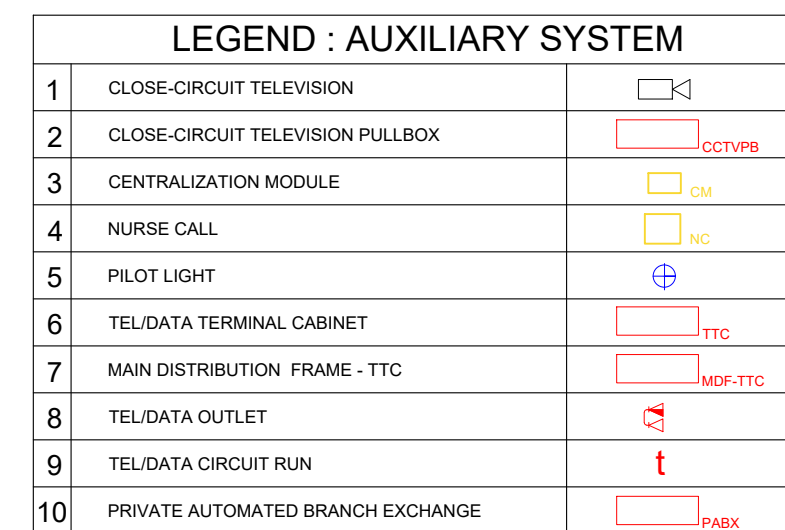




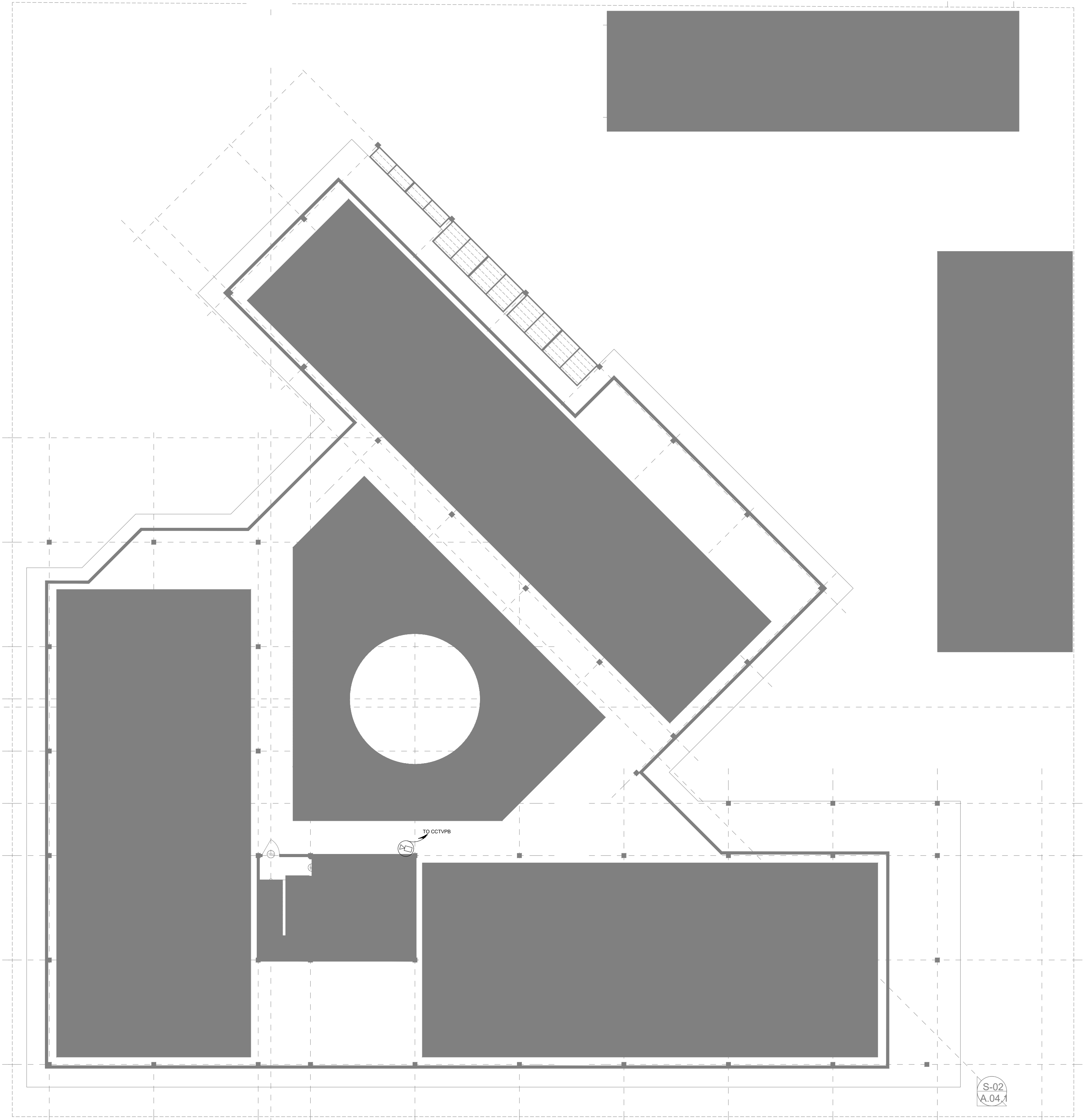
LEGEND : AUXILIARY SYSTEM		
1	CLOSE-CIRCUIT TELEVISION	
2	CLOSE-CIRCUIT TELEVISION PULLBOX	
3	CENTRALIZATION MODULE	
4	NURSE CALL	
5	PILOT LIGHT	
6	TEL/DATA TERMINAL CABINET	
7	MAIN DISTRIBUTION FRAME - TTC	
8	TEL/DATA OUTLET	
9	TEL/DATA CIRCUIT RUN	
10	PRIVATE AUTOMATED BRANCH EXCHANGE	

GROUND FLOOR  
INFORMATION & COMMUNICATION TECHNOLOGY / SECURITY  
SCALE 1:150









LEGEND : AUXILIARY SYSTEM		
1	CLOSE-CIRCUIT TELEVISION	
2	CLOSE-CIRCUIT TELEVISION PULLBOX	
3	CENTRALIZATION MODULE	
4	NURSE CALL	
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9	TEL/DATA CIRCUIT RUN	
10	PRIVATE AUTOMATED BRANCH EXCHANGE	

TERRACE FLOOR  
INFORMATION & COMMUNICATION TECHNOLOGY / SECURITY  
SCALE 1:150

N.Maafaru Health Center  
Client: Ministry of Health  
Project Number: R2712/2024 - NMH  
Date: April 2024  
Architect: Zunabath Abdul Majid  
Engineer: Nihesh Karmel Purusajan  
Scribe: Ibrahim Mohamed Ewan  
Sarwaning Sundharalingam & Mark Kern Brito



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Title: Terrace Floor

ICT- Security Layout

Page: ICT-03 /03

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