

*PROPOSED RESIDENTIAL
DEVELOPMENT*

*ELECTRICAL SERVICES
DRAWINGS*

LIGHTING

SYMBOL	DESCRIPTION
◎	12W WARM WHITE LED CYLINDRICAL DIE-CAST SURFACE MOUNTED DOWNLIGHT (IP65).
⊛	17W RECESSED CIRCULAR WARM WHITE LED LIGHT WITH WHITE TRIM
○	7W RECESSED CIRCULAR WARM WHITE LED LIGHT WITH WHITE TRIM
●	25W LED WARM WHITE DECORATIVE DINING PENDANT LIGHT FITTING.
—	18W LED 1200MM WHITE SURFACE MOUNTED LINEAR NON-CORROSIVE LUMINAIRE
—	WARM WHITE LED STRIP LIGHT FOR COVE LIGHTING.
●	15W WARM WHITE LED CEILING MOUNTED BULHEAD.
○	EXTRACTOR FAN
●	21W WARM WHITE LED DECORATIVE UP & DOWN WALL MOUNTED LIGHTFITTING.
●	24W WARM WHITE LED DECORATIVE SURFACE MOUNTED LIGHT FITTING
○○	2X7W RECESSED RECTANGULAR WARM WHITE LED LIGHT .
●○	50W WARM WHITE LED DECORATIVE LIVING ROOM PENDANT LIGHT FITTING.
●○	120W WARM WHITE LED LAMP FLOOD LIGHT WITH DIE - CAST HOUSING. IP65
△	21W WARM WHITE LED AQUA SUBMERSIBLE ADJUSTABLE SPOT LIGHT FITTING. IP68
(M)	10A PIR MOTION SENSOR
—	30W WARM WHITE E27 LAMP UP & DOWN GRAPHITE GREY FENCE MOUNTED IP65 LIGHT FITTING WITH DIE CAST HOUSING.
—	8W WARM WHITE LED MIRROR LIGHT
—	3W WARM WHITE RECESSED LIGHT FITTING 3000K FOR STAIRHALL
● ^N	10A N-GANG 1-WAY SWITCH
● ^N	10A N-GANG 2-WAY SWITCH
● [*]	10A INTERMEDIATE SWITCH
—	10W WARM WHITE LED WALL MOUNTED UP AND DOWN LIGHTER
○○	3 X 9W WARM WHITE LED DECORATIVE KITCHEN CLUSTER PENDANT LIGHT
□	13W WARM WHITE LED DIE CAST IP65 RATED DECORATIVE BOLLARD

POWER

SYMBOL	DESCRIPTION
D-	13A RAW POWER SINGLE SWITCHED SOCKET OUTLET
B-	13A RAW POWER TWIN SWITCHED SOCKET OUTLET
B-	13A RAW POWER TWIN SWITCHED SOCKET OUTLET(WEATHERPROOF)
D-	32A DOUBLE POLE AC SWITCH + INDICATOR LIGHT
D-	20A DOUBLE POLE AC SWITCH + INDICATOR LIGHT
D-	15A SINGLE SWITCHED SOCKET OUTLET
CCT	COOKER CONTROL UNIT
WHA	20A DOUBLE POLE WATER HEATER SWITCH
DB	DISTRIBUTION BOARD
W	WATER HEATER OUTLET

FIRE ALARM

SYMBOL	DESCRIPTION
S	SMOKE DETECTOR
H	HEAT DETECTOR
●	BREAK GLASS(MANUAL CALL POINT)
AB	ALARM BELL
BS	BATTERY OPERATED SMOKE DETECTOR
BH	BATTERY OPERATED HEAT DETECTOR
FAP	FIRE ALARM PANEL
SF	SIREN FLASHER

CCTV SYSTEM

SYMBOL	DESCRIPTION
CCTV	BULLET CAMERA
NVR	NETWORK VIDEO RECORDER
M	MONITOR
DC	DOME CAMERA

AUDIO SYSTEM

SYMBOL	DESCRIPTION
SP	CEILING RECESSED SPEAKER
—	MUSIC WALL MOUNTED KEYPAD
—	MULTI-ZONE MUSIC POWER AMPLIFIER
SP	WALL/FLOOR OUTDOOR SPEAKER

SIGNAL

SYMBOL	DESCRIPTION
TV	TELEVISION OUTLET
DT	SINGLE RJ45 TELEPHONE OUTLET
DV	DUAL RJ45 VOICE & DATA OUTLET
DR	SINGLE RJ45 DATA OUTLET
PABX	PRIVATE AUTOMATED BOX EXCHANGE
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
WAP	CEILING MOUNTED WIRELESS ACCESS POINT

GENERAL NOTES

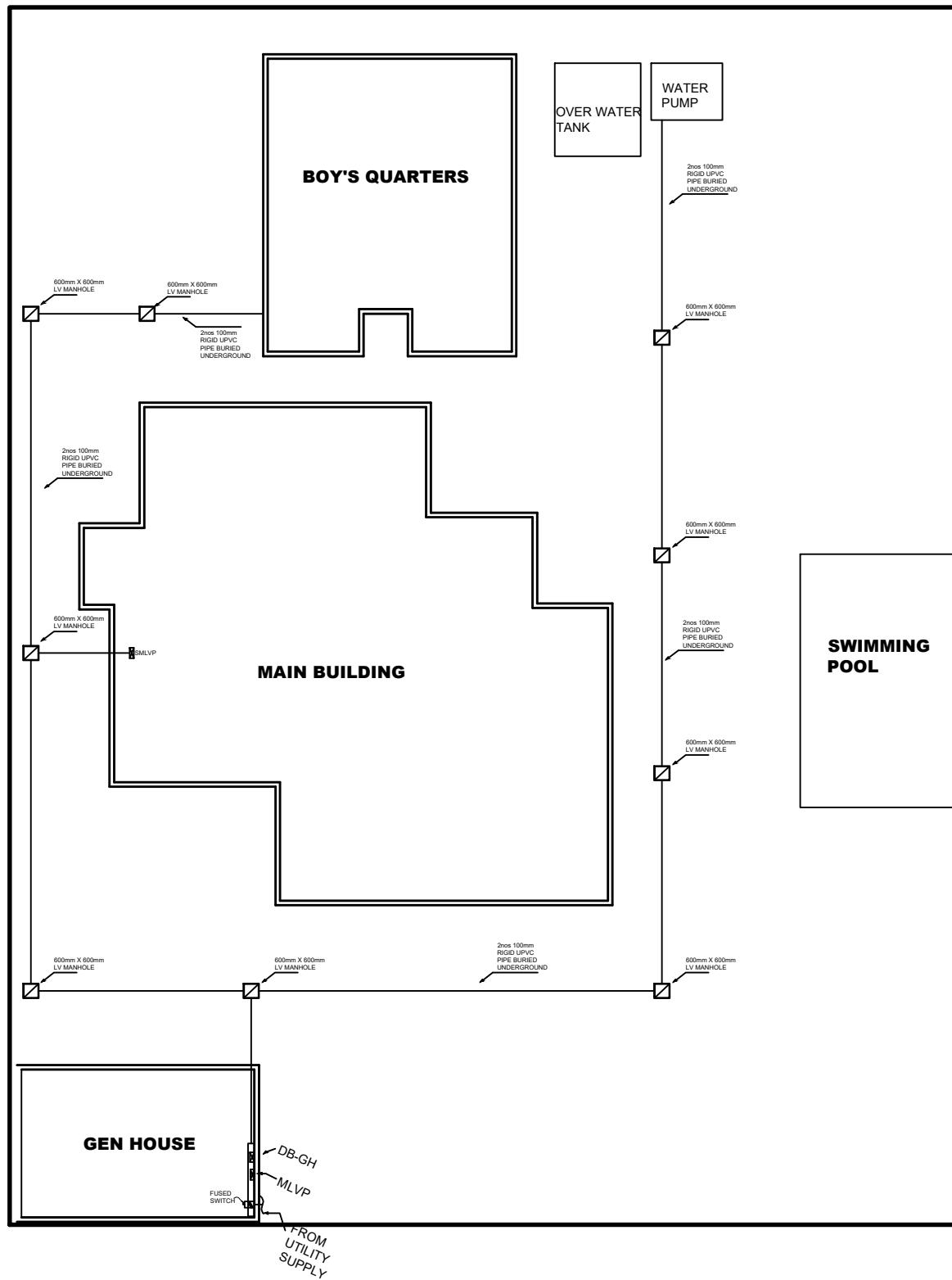
- 1-THE DESIGN OF THE FIRE ALARM AND EXTINGUISHING SYSTEM IS IN ACCORDANCE WITH NFPA 72 AND BS-5839.
- 2-ALL CONDUITS ARE CONFORMING WITH EMT CONDUIT
- 3-FIRE ALARM CABLES ARE THERMOPLASTIC COVERED STRANDED WIRE 1.5 SQ.MM - FIRE ALARM DETECTORS, MANUAL STATIONS, PRESSURE SWITCH
- 4-ALL ELECTRIC MANUAL RELEASE STATIONS WERE MOUNTED NOT LESS THAN 1.10 METERS AND NOT MORE THAN 1.40 METERS ABOVE THE FINISH FLOOR LEVEL WITH REFERENCE TO THE BOTTOM OF THE EQUIPMENT.
- 5-EXTINGUISHING CONTROL PANEL IS MOUNTED NOT LESS THAN 1.40 METERS ABOVE THE FINISH FLOOR LEVEL WITH REFERENCE TO THE BOTTOM OF THE EQUIPMENT.
- 6-LOCATION OF DETECTORS AND OTHER FIRE ALARM DEVICES ARE AS PER SITE CONDITIONS IN REFERENCE TO THE DESIGN SCHEMATICS.
- 7-CONTACT THE OFFICE FOR CLARIFICATIONS ON ANY DETAILS NOT WELL DEFINED ON DRAWINGS.

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

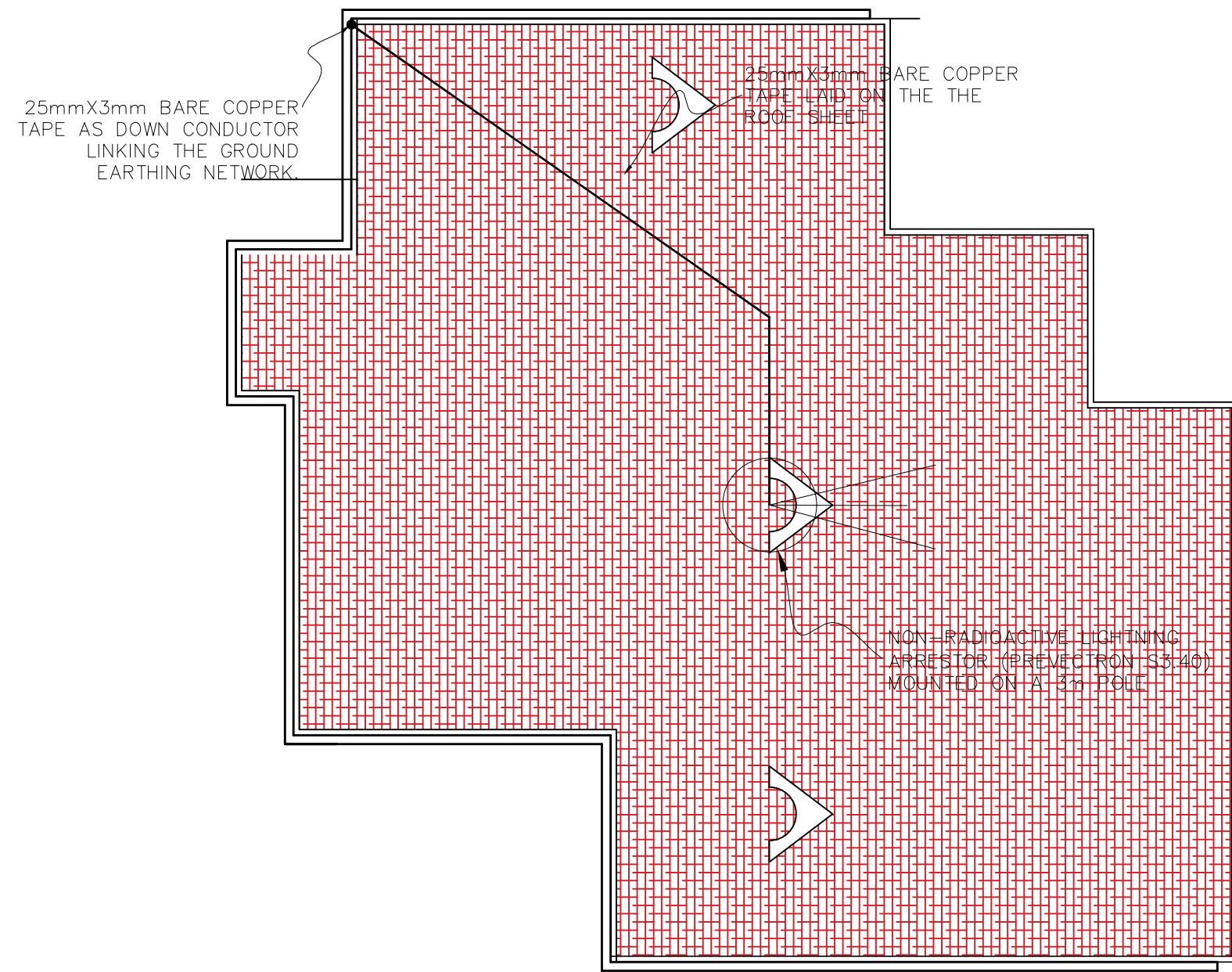
ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
LEGENDS
DRAWING SCALE:
N.T.S.
DRAWING NO:
E01



SEAL

PROJECT TITLE PROPOSED 6 B/ROOM DUPLEX	ARCHITECT	FASEMI A.	DRAWING TITLE: LV CABLE ROUTE SITE LAYOUT
	DRAWN BY	IWEIBO S.E	
CLIENT MRS. ASIMMA E. OKON	CHECKED BY		DRAWING SCALE: N.T.S.
	APPROVED BY		
LOCATION AKWA IBOM	DATE	AUGUST, 2022.	DRAWINNG NO: E02



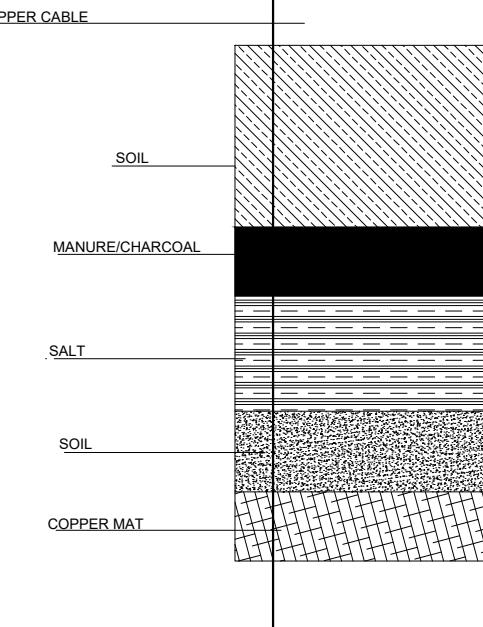
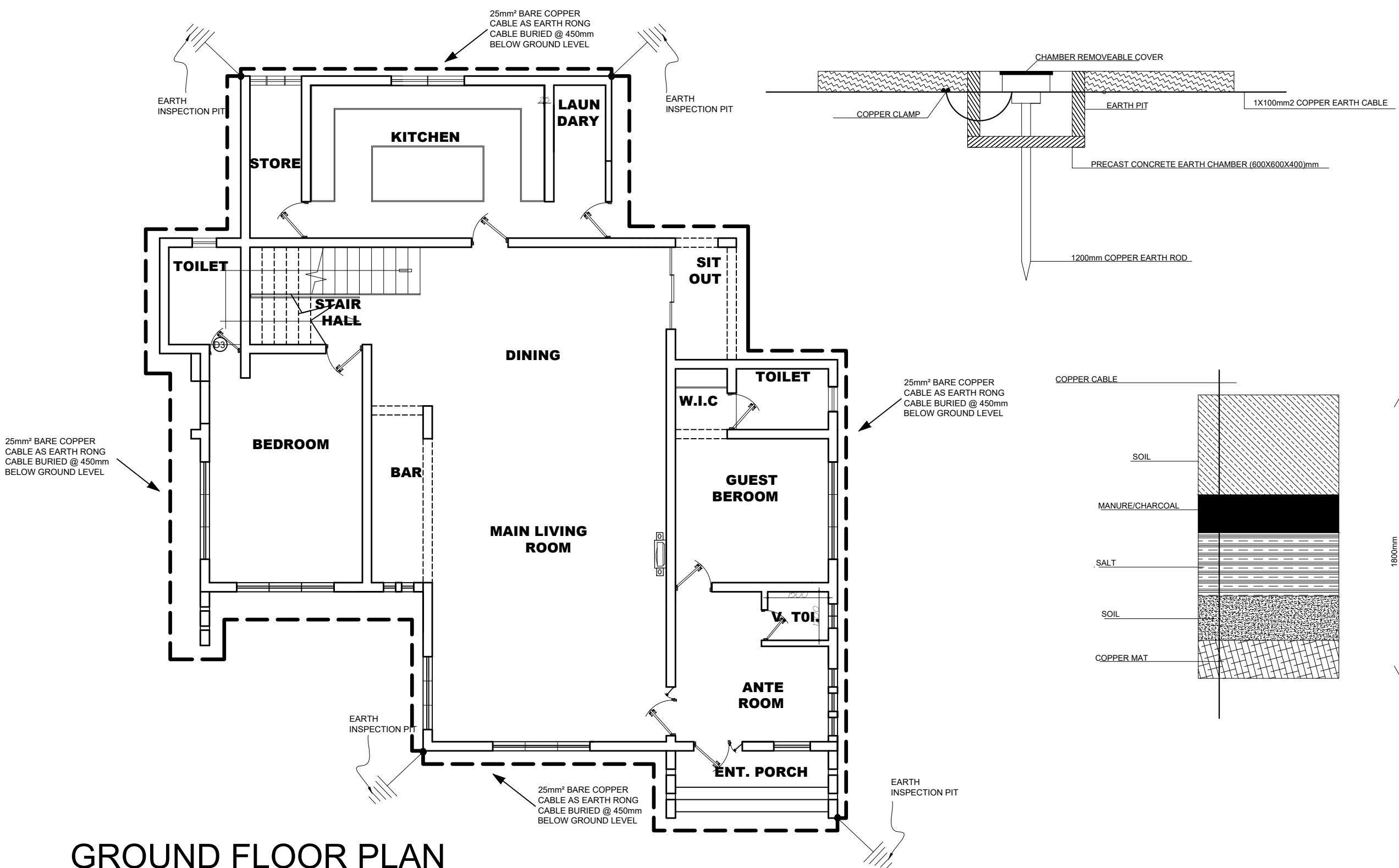
ROOF PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E.
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
LIGHTNING PROTECTION
LAYOUT
DRAWING SCALE:
N.T.S.
DRAWINNG NO:
E03

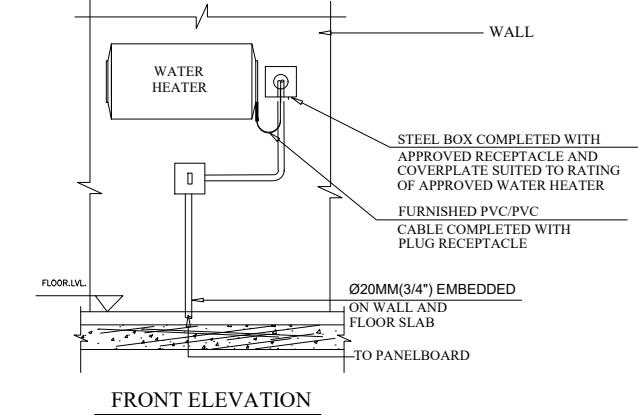
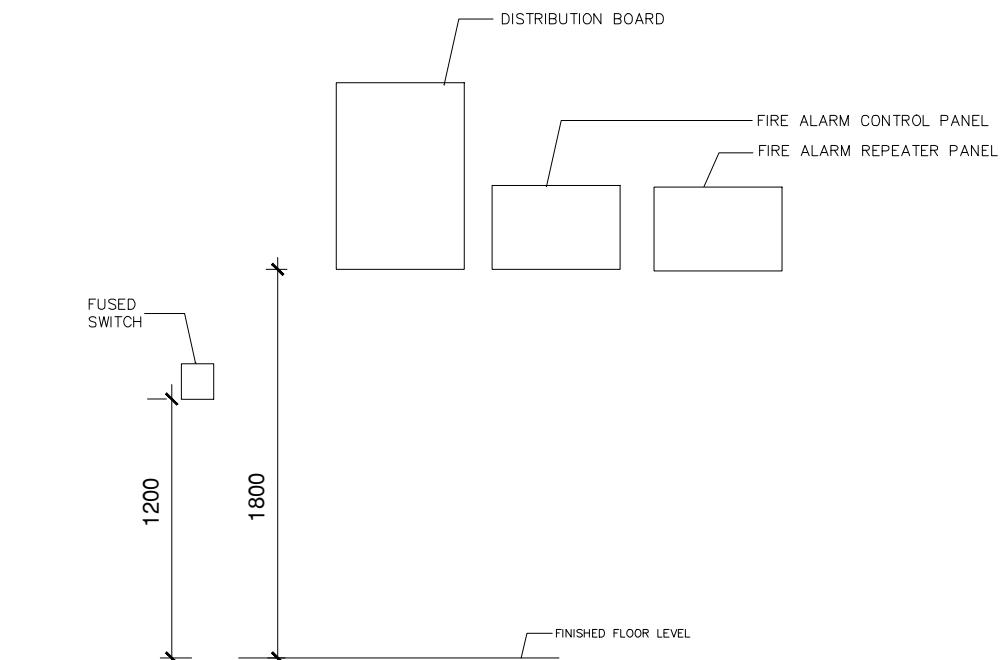
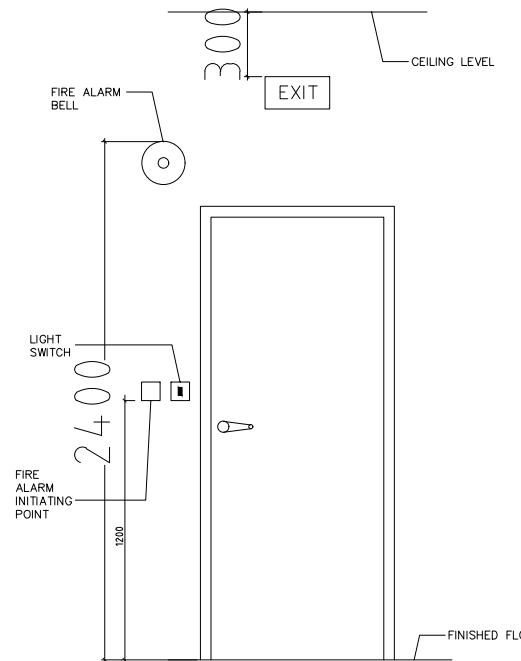


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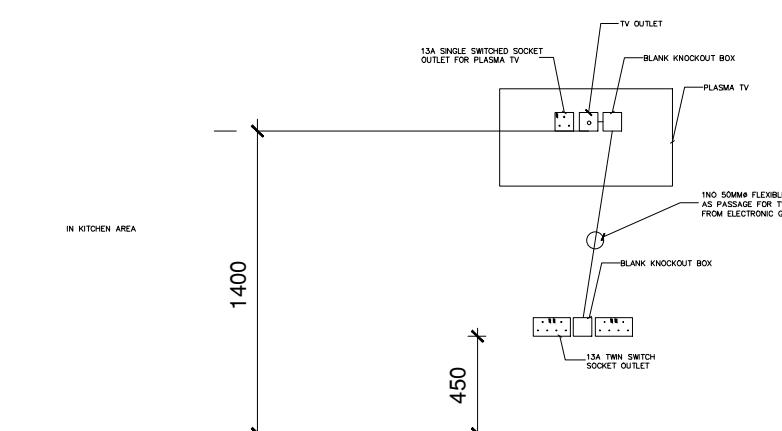
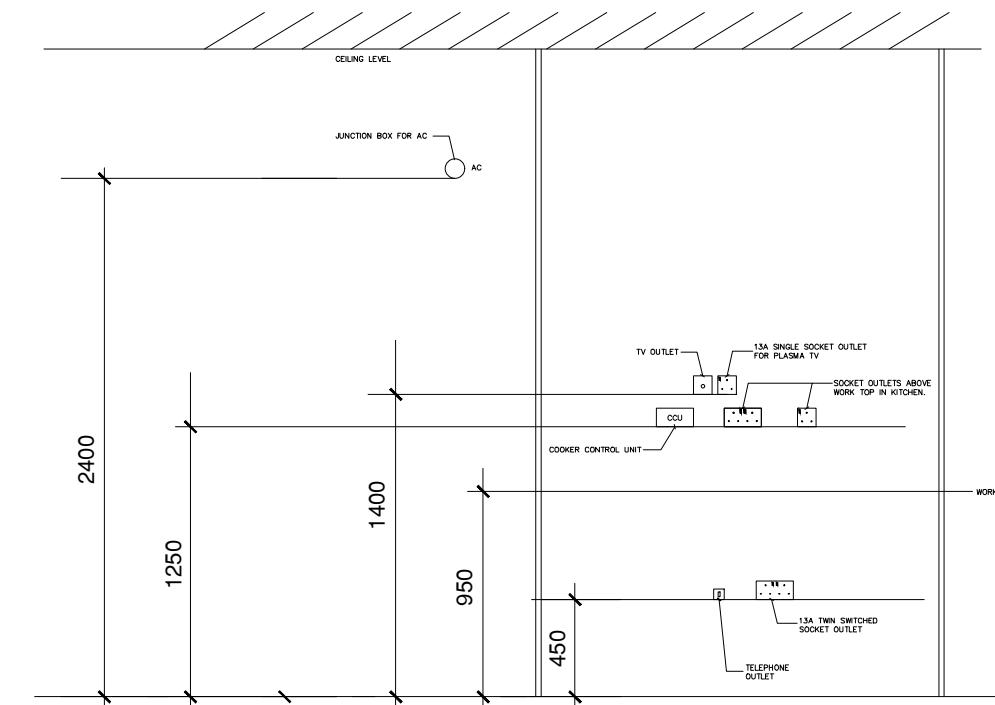
PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E.
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
EARTHING AND BONDING
PROTECTION LAYOUT
DRAWING SCALE:
N.T.S.
DRAWINNG NO:
E04



ELECTRIC WATER HEATER, POWER INSTALLATION DETAILS

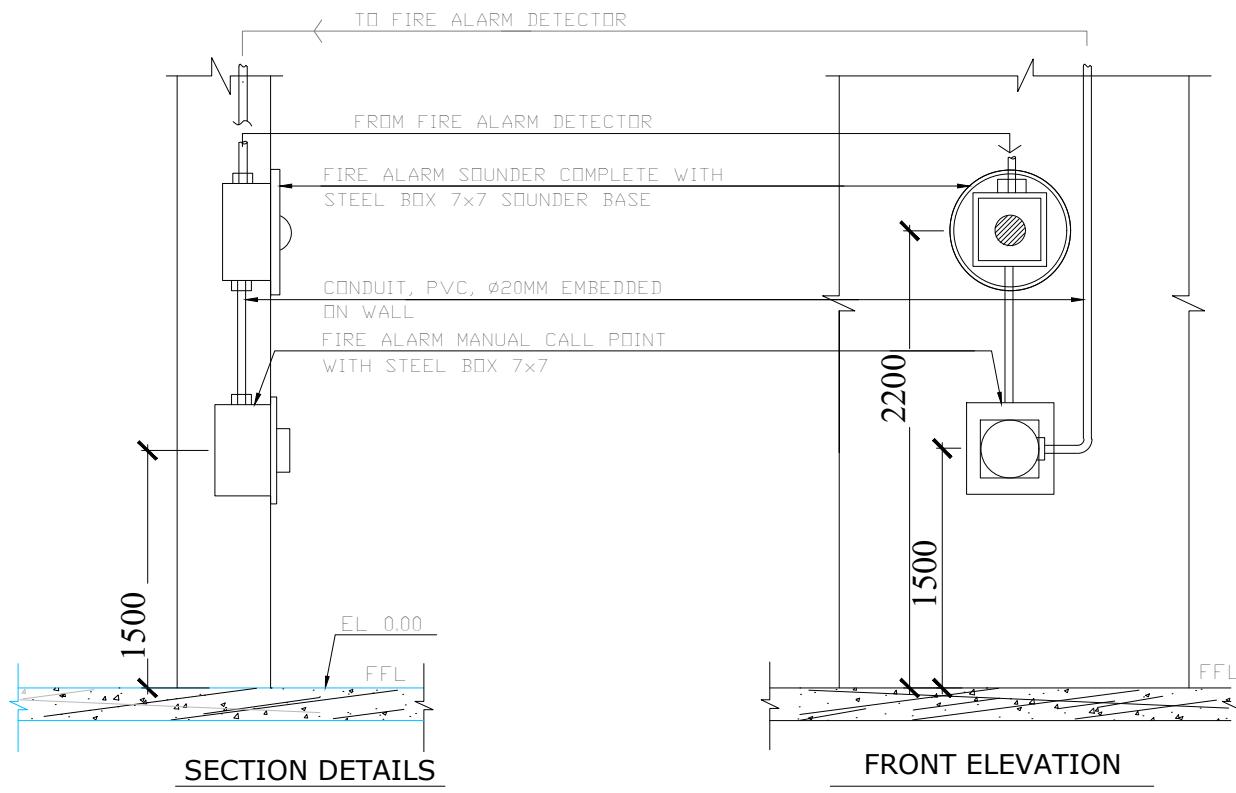


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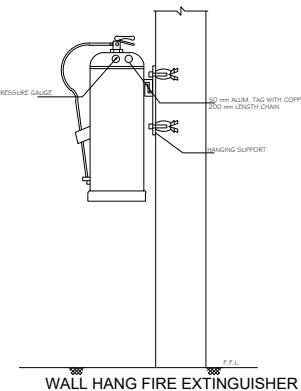
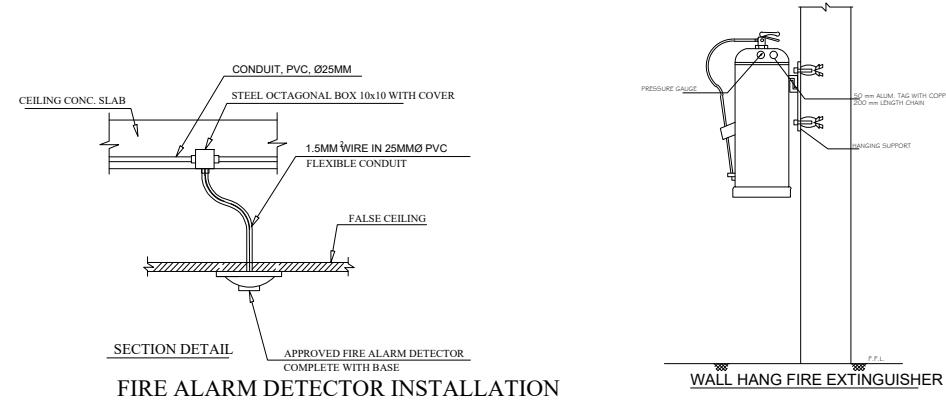
PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
ELECTRICAL FITTINGS & FIXTURES
MOUNTING HEIGHT DETAILS
DRAWING SCALE:
N.T.S.
DRAWING NO:
E05



**FIRE ALARM SOUNDER AND MANUAL CALL POINT
INSTALLATION DETAILS**

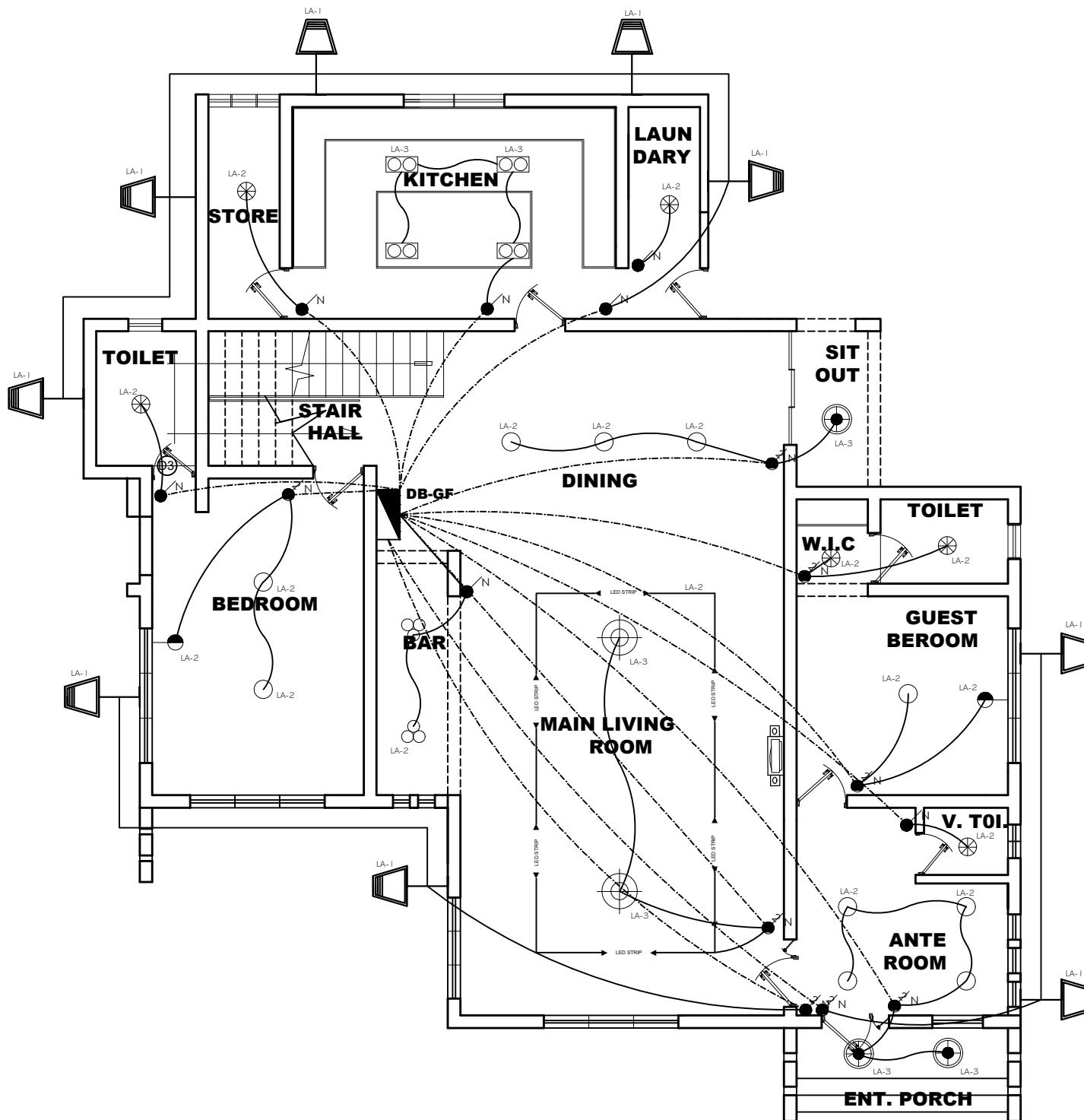


SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
FIRE SERVICE FITTINGS &
FIXTURES MOUNTING HEIGHT
DETAILS
DRAWING SCALE:
N.T.S.
DRAWING NO:
E06



GROUND FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX

ARCHITECT
FASEMI A.

DRAWING TITLE:
LIGHTING PLAN

CLIENT
MRS. ASIMMA E. OKON

DRAWN BY
IWEIBO S.E

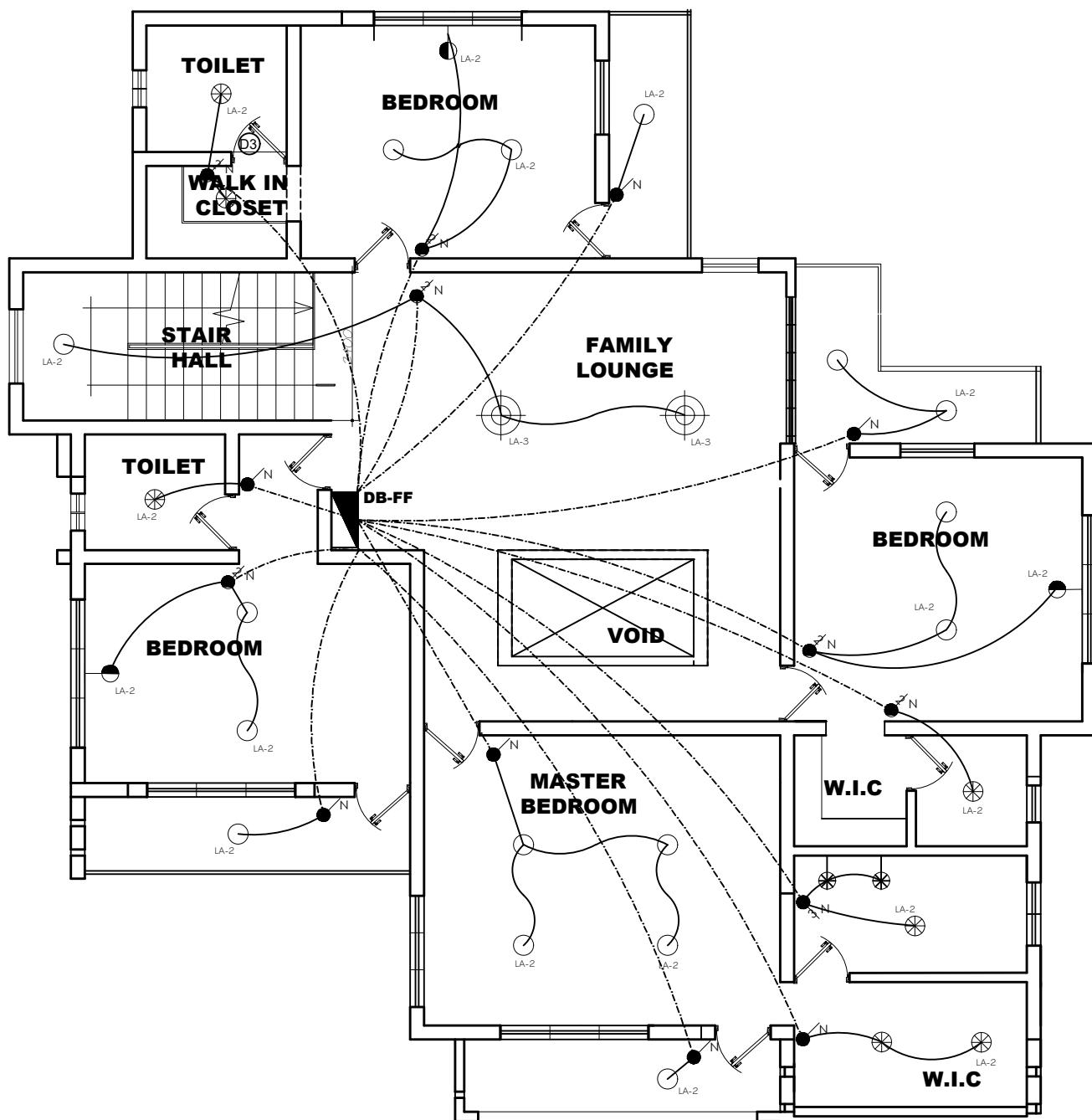
DRAWING SCALE:
N.T.S.

LOCATION
AKWA IBOM

CHECKED BY
APPROVED BY

DRAWING NO:
E07

DATE
AUGUST, 2022.



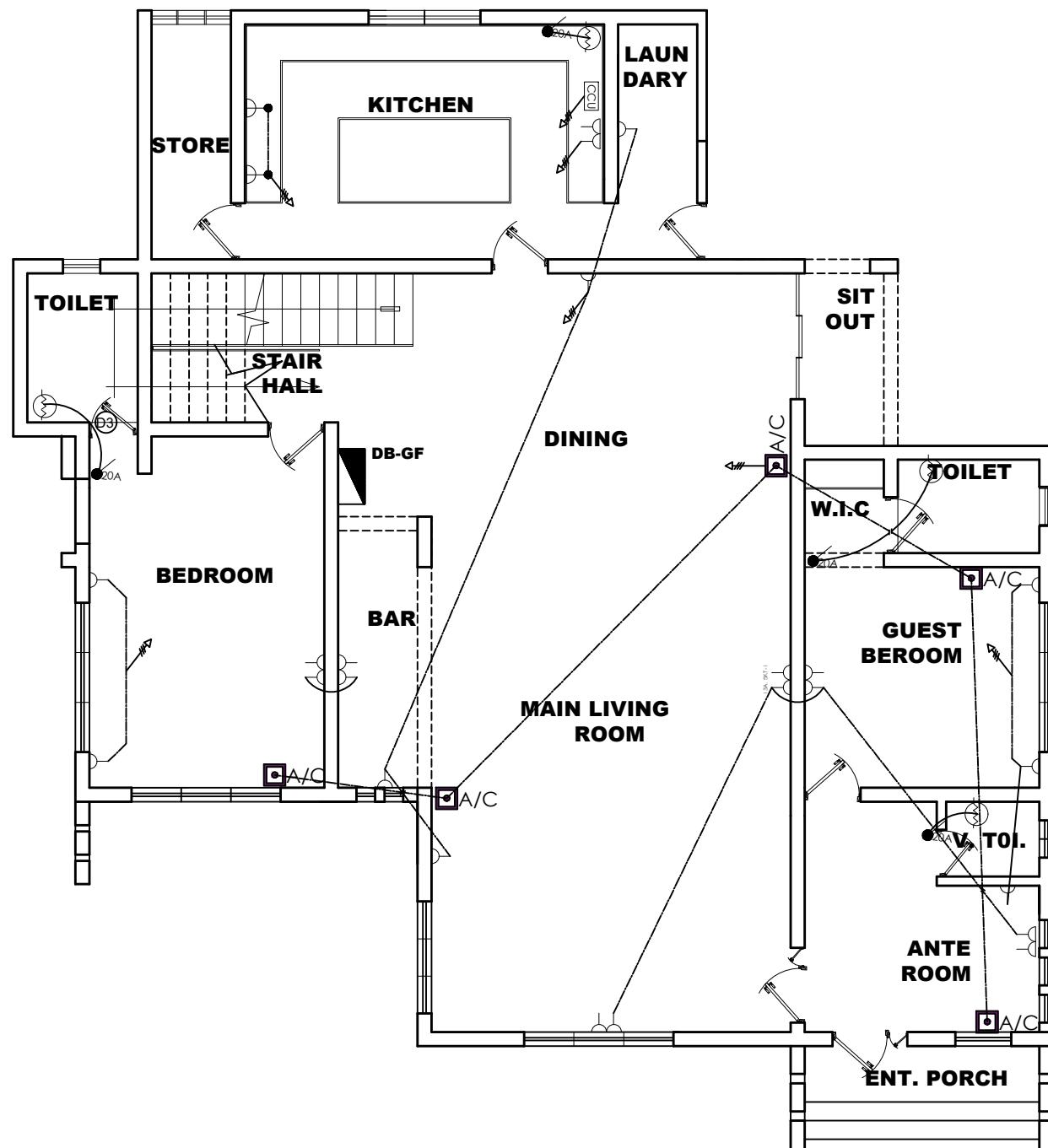
FIRST FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E.
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
LIGHTING PLAN
DRAWING SCALE:
N.T.S.
DRAWING NO:
E08



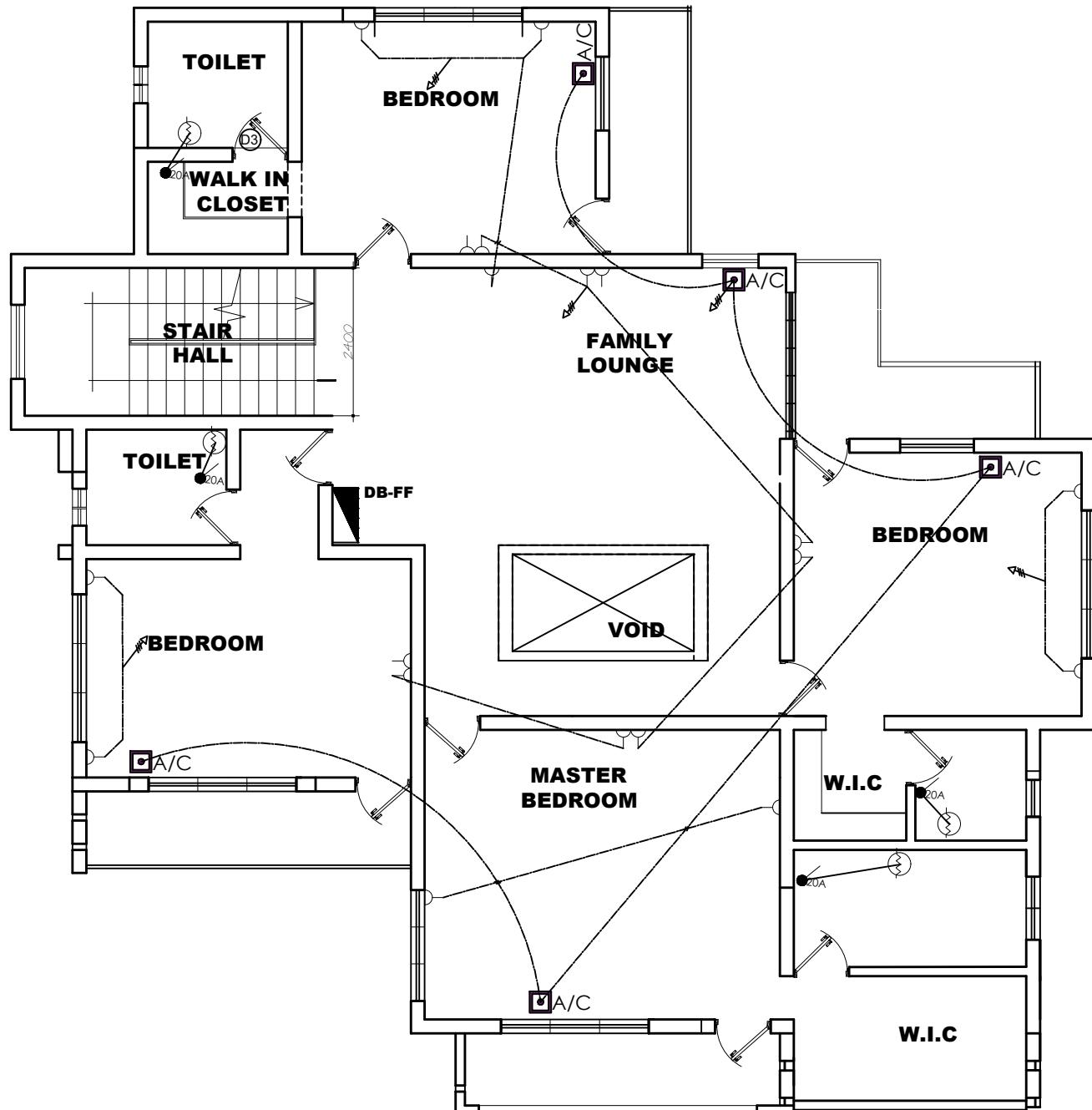
GROUND FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT	FASEMI A.
DRAWN BY	IWEIBO S.E.
CHECKED BY	
APPROVED BY	
DATE	AUGUST, 2022.

DRAWING TITLE: POWER PLAN	
DRAWING SCALE:	DRAWINNG NO:
N.T.S.	E09



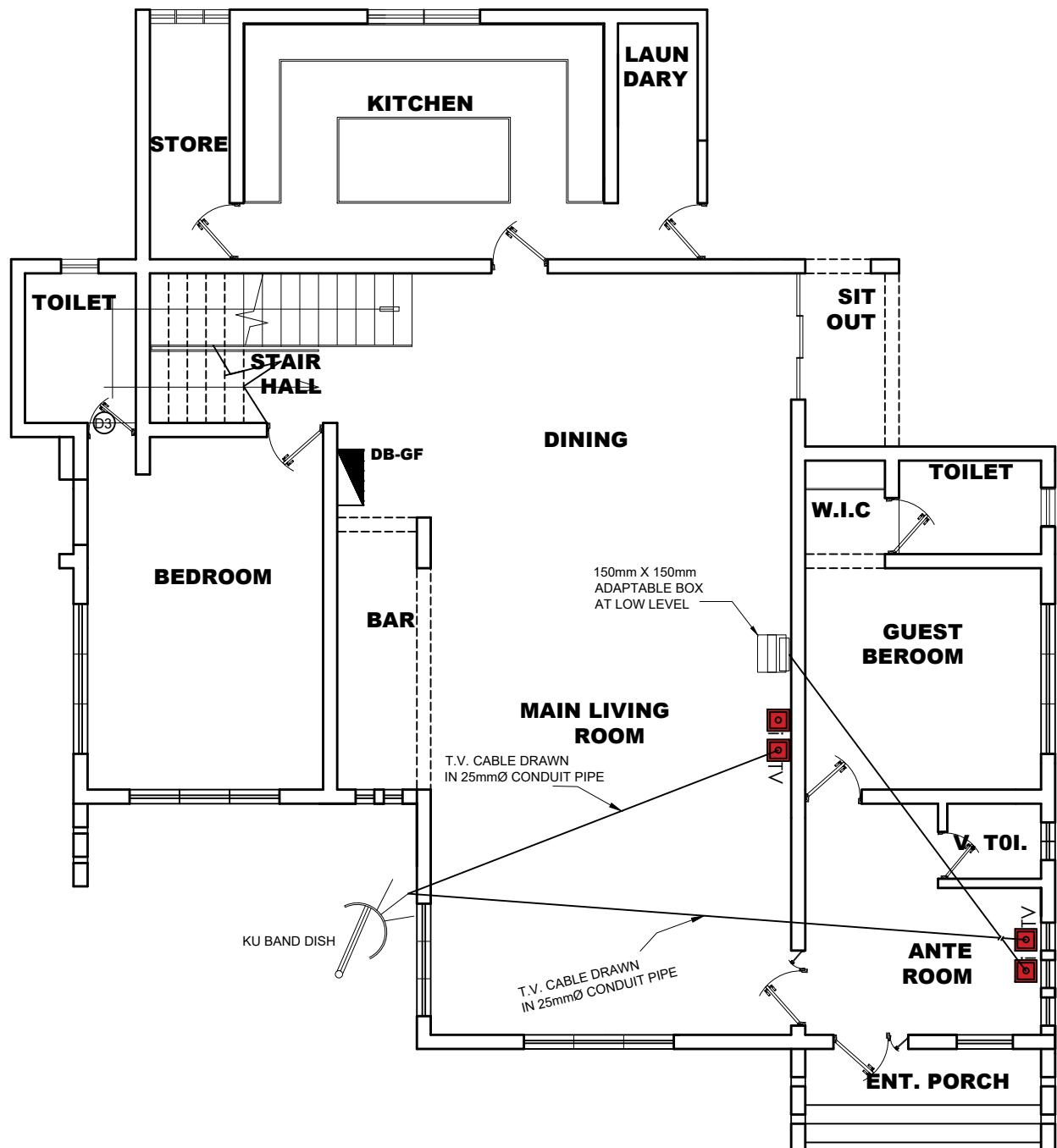
FIRST FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
POWER PLAN
DRAWING SCALE:
N.T.S.
DRAWINNG NO:
E10



GROUND FLOOR PLAN

SEAL

PROJECT TITLE

PROPOSED 6 B/ROOM DUPLEX

ARCHITECT

FASEMI A.

DRAWING TITLE:

SIGNAL LAYOUT

DRAWN BY

IWEIBO S.E

DRAWING SCALE:

N.T.S.

CLIENT

MRS. ASIMMA E. OKON

CHECKED BY

DRAWINNG NO:

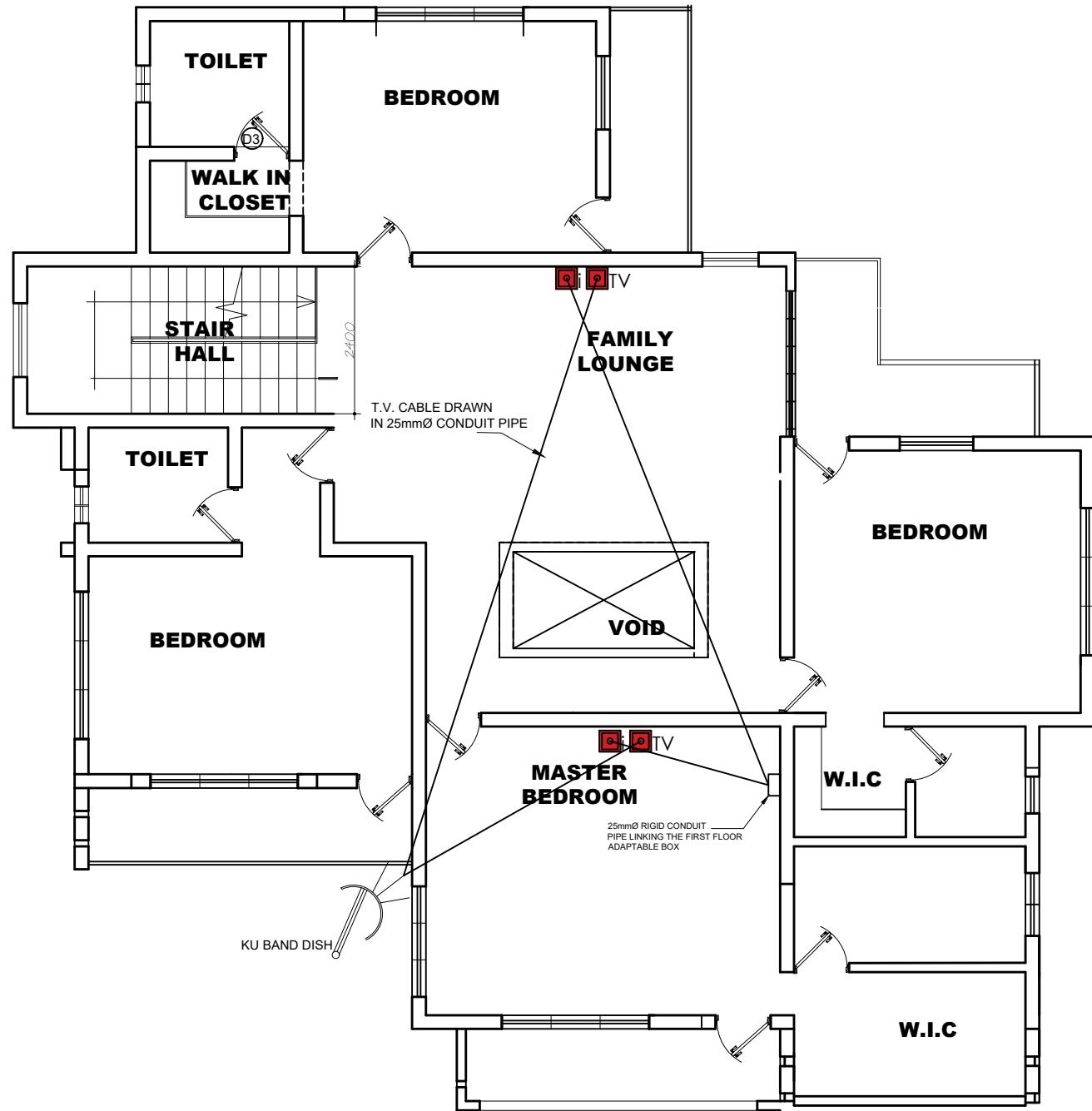
E11

LOCATION

AKWA IBOM

APPROVED BY

AUGUST, 2022.



FIRST FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX

ARCHITECT
FASEMI A.

DRAWING TITLE:
SIGNAL LAYOUT

DRAWN BY
IWEIBO S.E

DRAWING SCALE:
N.T.S.

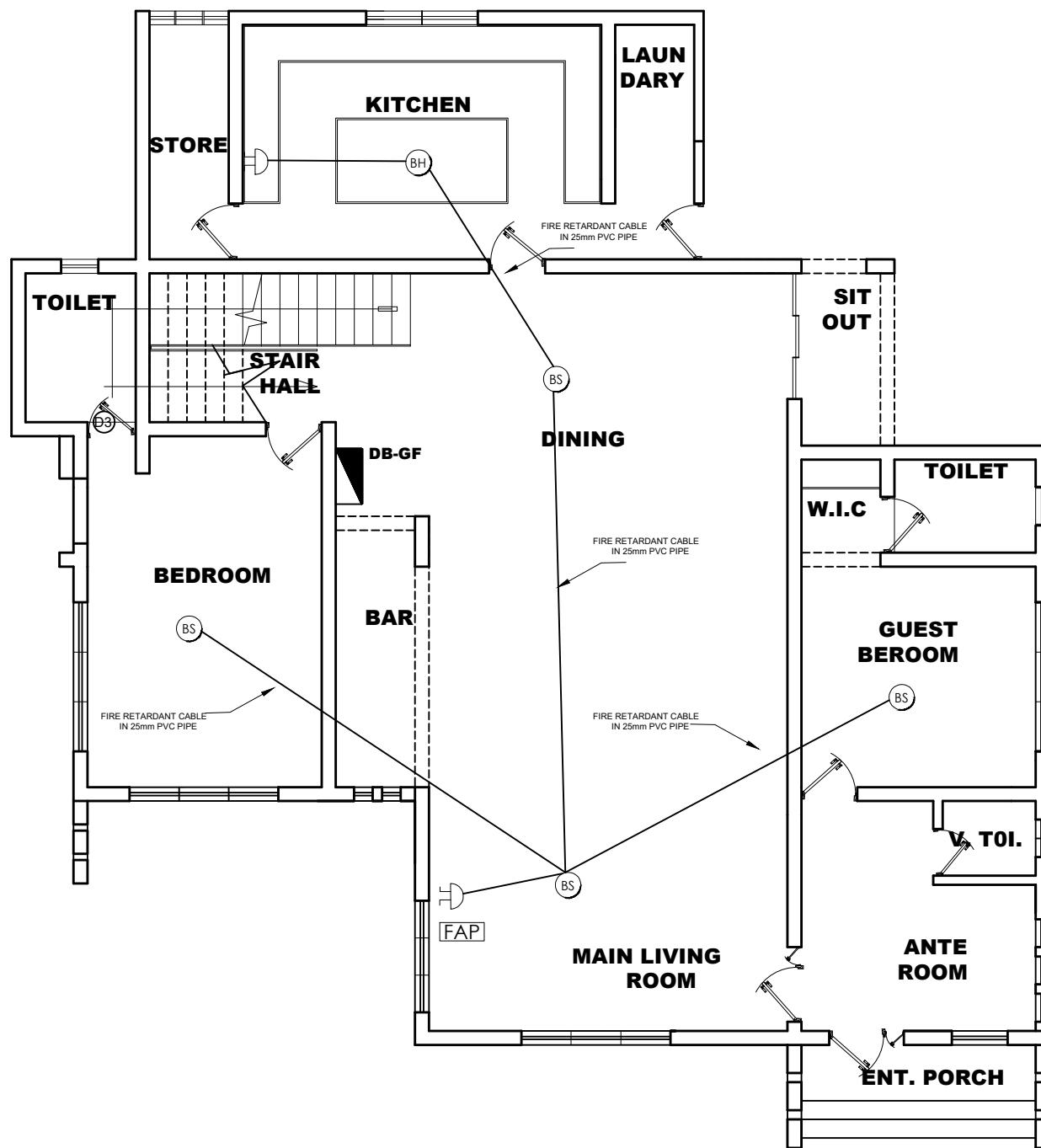
CLIENT
MRS. ASIMMA E. OKON

CHECKED BY

DRAWINNG NO:
E12

LOCATION
AKWA IBOM

APPROVED BY
DATE
AUGUST, 2022.



GROUND FLOOR PLAN

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX

ARCHITECT
FASEMI A.

DRAWING TITLE:
FIRE DETECTION LAYOUT

DRAWN BY
IWEIBO S.E

DRAWING SCALE:
N.T.S.

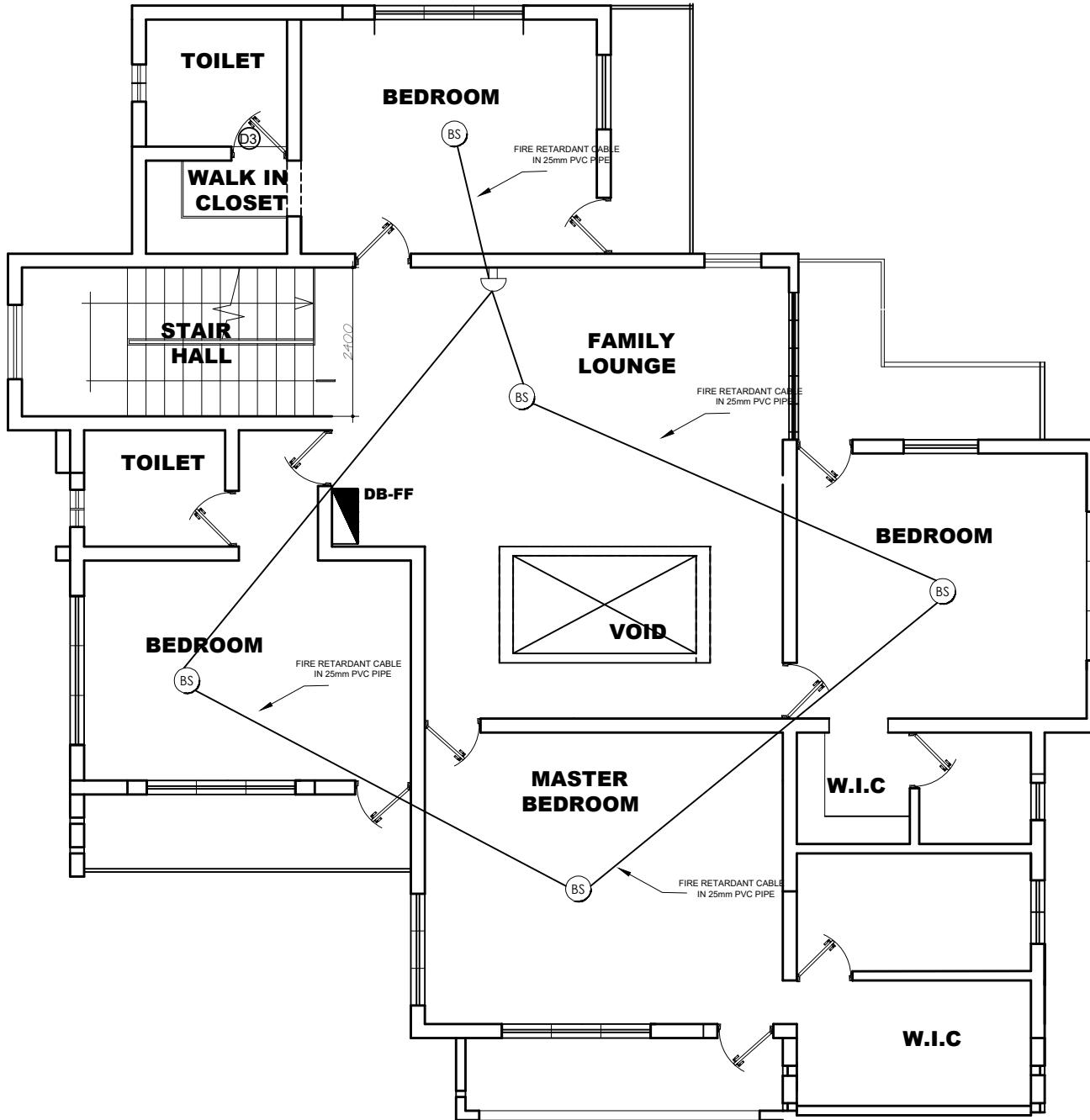
CLIENT
MRS. ASIMMA E. OKON

CHECKED BY

DRAWINNG NO:
E13

LOCATION
AKWA IBOM

APPROVED BY
DATE
AUGUST, 2022.



FIRST FLOOR PLAN

SEAL

PROJECT TITLE

PROPOSED 6 B/ROOM DUPLEX

ARCHITECT

FASEMI A.

DRAWING TITLE:

FIRE DETECTION LAYOUT

DRAWN BY

IWEIBO S.E

DRAWING SCALE:

N.T.S.

CLIENT

MRS. ASIMMA E. OKON

CHECKED BY

DRAWING NO:

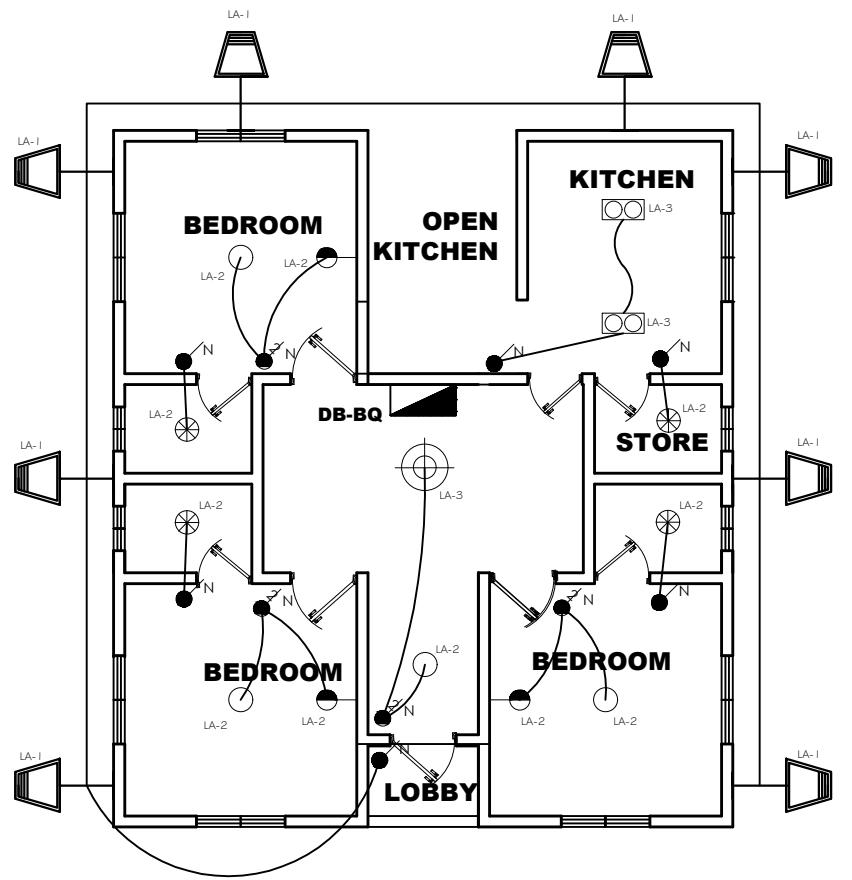
E14

LOCATION

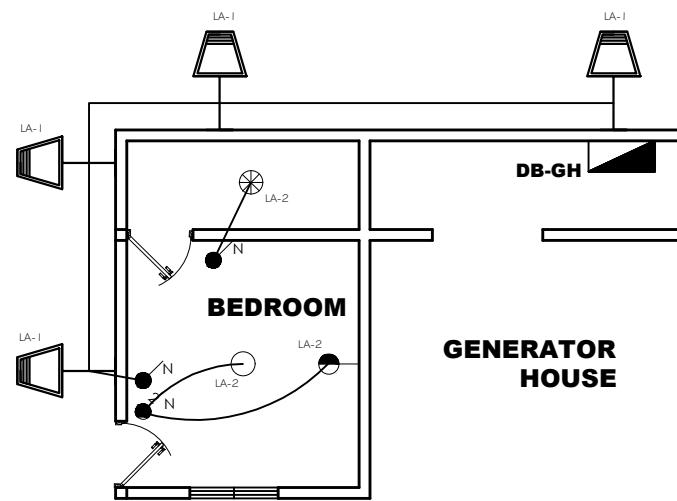
AKWA IBOM

APPROVED BY

AUGUST, 2022.



BOYS QUARTERS



**GATE HOUSE/
SERVICE BUILDING**

SEAL

PROJECT TITLE

PROPOSED 6 B/ROOM DUPLEX

ARCHITECT

FASEMI A.

DRAWING TITLE:

LIGHTING PLAN

DRAWN BY

IWEIBO S.E

DRAWING SCALE:

N.T.S.

CLIENT

MRS. ASIMMA E. OKON

CHECKED BY

DRAWINNG NO:

E15

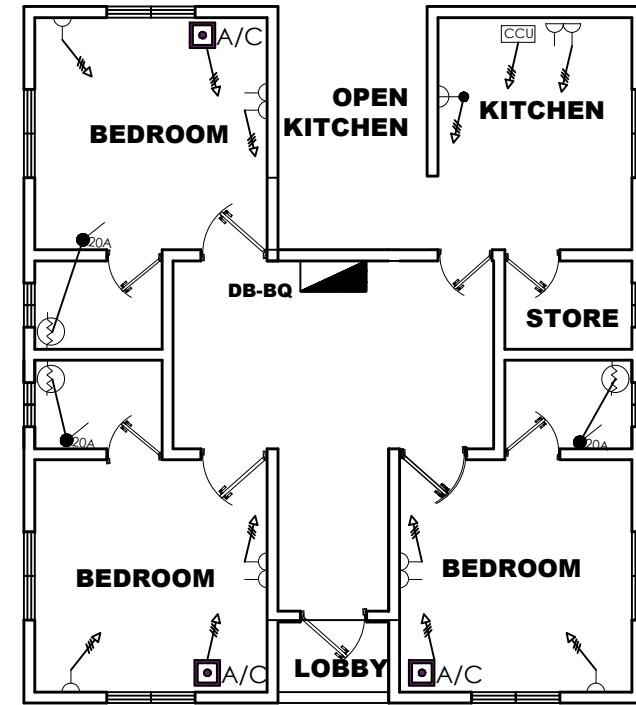
LOCATION

AKWA IBOM

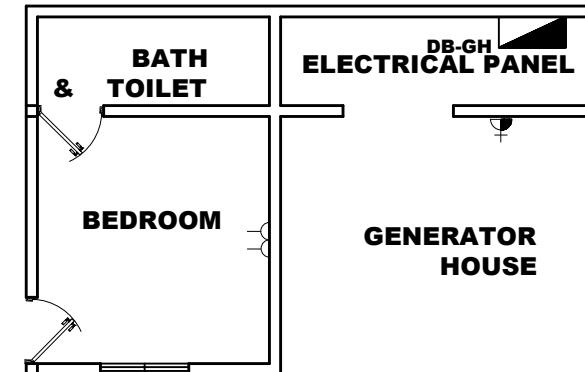
APPROVED BY

AUGUST, 2022.

DATE



BOYS QUARTERS



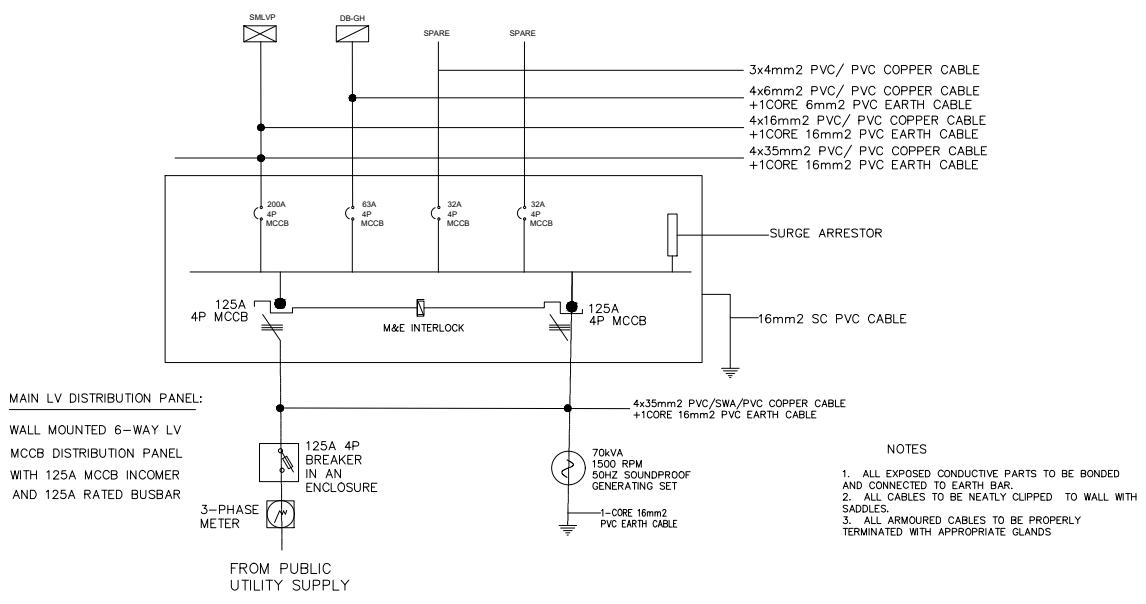
**GATE HOUSE/
SERVICE BUILDING**

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT	FASEMI A.
DRAWN BY	IWEIBO S.E.
CHECKED BY	
APPROVED BY	
DATE	AUGUST, 2022.

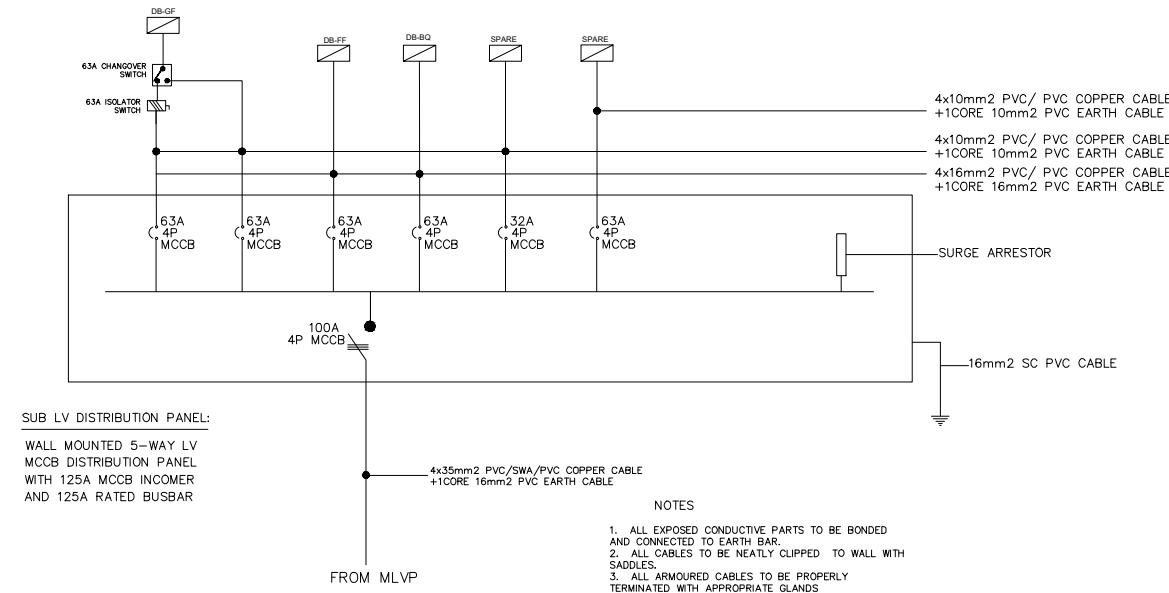
DRAWING TITLE: POWER PLAN	
DRAWING SCALE:	DRAWINNG NO:
N.T.S.	E16



MAIN PANEL (MLVP) ELECTRICAL POWER SCHEMATIC

MAIN LOW VOLTAGE PANEL (MLVP)							
SERVICES	LOCATION	BREAKER	RATING	RED(VA)	YELLOW(VA)	BLUE(VA)	TOTAL LAOD(VA)
SMLVP	MAIN BUILDING	MCCB		28260	27850	29440	85550
DB-GH	GEN HOUSE	MCB		670	300	270	1240
TOTAL CONNECTED LOAD				28930	28150	29710	86790
MAXIMUM DEMAND LOAD (VA @0.8)				23144	22520	23768	69432
MAXIMUM DEMAND CURRENT IN AMPERE							120.75
TOTAL MAXIMUM DEMAND LOAD KVA @ A DIVERSITY FACTOR OF 0.8(80%) = 69.432							
CURRENT RATING = 225A (THREE PHASE) MCCB							
CABLE SIZE:							

SEAL	PROJECT TITLE PROPOSED 6 B/ROOM DUPLEX	ARCHITECT	FASEMI A.	DRAWING TITLE: SCHEDULE AND SCHEMATICS MAIN LOW VOLTAGE PANEL
		DRAWN BY	IWEIBO S.E	
CLIENT MRS. ASIMMA E. OKON	LOCATION AKWA IBOM	CHECKED BY		DRAWING SCALE: N.T.S.
		APPROVED BY		
LOCATION AKWA IBOM	DATE AUGUST, 2022.	DATE	AUGUST, 2022.	DRAWINNG NO: E17



SUB-MAIN PANEL (SMLVP) ELECTRICAL POWER SCHEMATIC

SUB-MAIN LOW VOLTAGE PANEL (SMLVP)							
SERVICES	LOCATION	BREAKER	RATING	RED(VA)	YELLOW(VA)	BLUE(VA)	TOTAL LAOD(VA)
DB-GF	GROUND FLOOR	MCCB		10750	11420	12040	34210
DB-FF	FIRST FLOOR	MCCB		10280	8900	9800	28980
DB-BQ	BOY'S QUARTER	MCCB		7230	7530	7600	22360
SPARE		MCCB					
SPARE		MCCB					
TOTAL CONNECTED LOAD				28260	27850	29440	85550
MAXIMUM DEMAND LOAD (VA @0.8)				22600	22280	23552	68440
MAXIMUM DEMAND CURRENT IN AMPERE							119.02
TOTAL MAXIMUM DEMAND LOAD KVA @ A DIVERSITY FACTOR OF 0.8(80%) = 68.44							
CURRENT RATING = 200A (THREE PHASE) MCCB							
CABLE SIZE:							

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT
MRS. ASIMMA E. OKON
LOCATION
AKWA IBOM

ARCHITECT
FASEMI A.
DRAWN BY
IWEIBO S.E.
CHECKED BY
APPROVED BY
DATE
AUGUST, 2022.

DRAWING TITLE:
SCHEDULE AND SCHEMATICS
SUB-MAIN LOW VOLTAGE PANEL
DRAWING SCALE:
N.T.S. DRAWINNG NO:
E18

DB NAME: DB-GF
LOCATION: GROUND FLOOR

CCT CODE	MCB RATING (A)	CABLE SIZE (mm²)	LOAD POINT (W)	DIVERSITY FACTOR	LOAD PER PHASE			DESCRIPTION	LOAD PER PHASE			DIVERSITY FACTOR	LOAD POINT (W)	CABLE SIZE (mm²)	MCB RATING (A)	CCT CODE
					RED	YELLOW	BLUE		RED	BLUE	RED					
A-1	10	1.5	100	1.0	900			LIGHTING POINT			2800	1.0	100	1.5	10	B-1
A-2	10	1.5	100	1.0		2100		LIGHTING POINT			200	1.0	100	1.5	10	B-2
A-3	10	1.5	100	1.0			800	LIGHTING POINT	500			1.0	100	1.5	10	B-3
A-4	10	1.5	100	1.0	500			SMOKE DETECTOR			2430	1.0	100	1.5	10	B-4
A-5	30	2.5	300	0.9		2870		13A/15A FLOOR SOCKET			1350	0.9	300	2.5	30	B-5
A-6	30	2.5	300	0.9			1890	13A/15A FLOOR SOCKET	2000			0.9	300	2.5	30	B-6
A-7	45	6.0	2000	1.0	2000			COOKER UNIT								B-7
A-8	20	4.0	2000	1.0		2000		A.C SOCKET			2000	1.0	2000	4.0	20	B-8
A-9	20	4.0	2000	1.0			2000	A.C SOCKET			2000	1.0	2000	4.0	20	B-9
A-10	20	4.0	2000	1.0	2000			A.C SOCKET	2000			1.0	2000	4.0	20	B-10
A-11	20	4.0	2000	1.0		2000		A.C SOCKET			2000	1.0	2000	4.0	20	B-11
A-12	20	4.0	2000	1.0			2000	A.C SOCKET			2000	1.0	2000	4.0	20	B-12
A-13	20	4.0	2000	1.0	2000			A.C SOCKET	2000			1.0	2000	4.0	20	B-13
A-14	20	4.0	2000	1.0		2000		WATER HEATER			2000	1.0	2000	4.0	20	B-14
A-15	20	4.0	2000	1.0			2000	WATER HEATER	2000			1.0	2000	4.0	20	B-15
A-16	20	4.0	2000	1.0	2000			WATER HEATER				1.0	2000	4.0	20	B-16
A-17	20	4.0	2000	1.0		2000		WATER HEATER				1.0	2000	4.0	20	B-17
A-18	30	2.5	1500	0.9	1350			SPARE			1350	0.9	1500	2.5	30	B-18
A-19	30	2.5	1500	0.9		1350		SPARE			1350	0.9	1500	2.5	30	B-19
A-20	30	2.5	1500	0.9			1350	SPARE	1350			0.9	1500	2.5	30	B-20

TOTAL LOAD (W)	10750	11420	12040
<hr/>			
TOTAL CONNECTED LOAD (KW)			

10280	8900	9800	TOTAL LOAD (W)
<hr/>			
28.98 TOTAL CONNECTED LOAD (KW)			

50.39 TOTAL CURRENT (AMPS)

DB NAME: DB-BQ
LOCATION: FIRST FLOOR

CCT CODE	MCB RATING (A)	CABLE SIZE (mm²)	LOAD POINT (W)	DIVERSITY FACTOR	LOAD PER PHASE			DESCRIPTION
					RED	YELLOW	BLUE	
C-1	10	1.5	100	1.0	800			LIGHTING POINT
C-2	10	1.5	100	1.0		1100		LIGHTING POINT
C-3	10	1.5	100	1.0			300	LIGHTING POINT
C-4	30	2.5	300	0.9	1080			13A/15A FLOOR SOCKET
C-5	30	2.5	300	0.9		1080		13A/15A FLOOR SOCKET
C-6	45	6.0	2000	1.0			2000	COOKER UNIT
C-7	20	4.0	2000	1.0	2000			A.C SOCKET
C-8	20	4.0	2000	1.0		2000		A.C SOCKET
C-9	20	4.0	2000	1.0			2000	A.C SOCKET
C-10	20	4.0	2000	1.0	2000			WATER HEATER
C-11	20	4.0	2000	1.0		2000		WATER HEATER
C-12	20	4.0	2000	1.0			2000	WATER HEATER
C-13	30	2.5	1500	0.9	1350			SPARE
C-14	30	2.5	1500	0.9		1350		SPARE
C-15	30	2.5	1500	0.9			1350	SPARE

DB NAME: DB-GH
LOCATION: GEN HOUSE

CCT CODE	MCB RATING (A)	CABLE SIZE (mm²)	LOAD POINT (W)	DIVERSITY FACTOR	LOAD PER PHASE			DESCRIPTION
					RED	YELLOW	BLUE	
D-1	10	1.5	100	1.0	400			LIGHTING POINT
D-2	10	1.5	100	1.0		300		LIGHTING POINT
D-3	30	2.5	300	0.9			270	13A/15A FLOOR SOCKET
D-4	30	2.5	300	0.9	270			13A/15A FLOOR SOCKET
D-5								SPARE
D-6								SPARE

TOTAL LOAD (W)	670	300	270
<hr/>			
TOTAL CONNECTED LOAD (KW)			

1.24

TOTAL CURRENT (AMPS) 5.16

TOTAL LOAD (W)	7230	7530	7600
<hr/>			
22.36			

38.88

SEAL

PROJECT TITLE
PROPOSED 6 B/ROOM DUPLEX
CLIENT MRS. ASIMMA E. OKON
LOCATION AKWA IBOM

ARCHITECT FASEMI A.
DRAWN BY IWEIBO S.E.
CHECKED BY
APPROVED BY
DATE AUGUST, 2022.

DRAWING TITLE:
DISTRIBUTION BOARD SCHEDULES
DRAWING SCALE:
N.T.S.
DRAWING NO:
E19