# *PROPOSED RESIDENTIAL DEVELOPMENT*

# *ELECTRICAL SERVICES DRAWINGS*

# LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | SINGLE GANG SWITCH |
| | DOUBLE GANG SWITCH |
| | TRIPLE GANG SWITCH |
| | SINGLE TWO-WAY SWITCH |
| | DOUBLE TWO-WAY SWITCH |
| | TRIPLE TWO-WAY SWITCH |
| | |
| | LED POLE LIGHT |
| | LED PANEL LIGHT |
| | LED RECESSED LIGHT |
| | LED TUBE LIGHT |
| | FLOOR FIXED SINGLE 13A SOCKET OUTLET |
| | FLOOR FIXED SINGLE DATA 13A SOCKET OUTLET |
| | FLOOR FIXED DOUBLE 13A SOCKET OUTLET |

# LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | CEILING PADDLE FAN SWITCH |
| | CEILING PADDLE FAN |
| | DISTRIBUTION BOX |
| | MAIN PANEL BOARD |
| | SMOKE DETECTOR |
| | CCTV CAMERA |

# LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | INDOOR UNIT A.C. (WALL MOUNTED) |
| | OUTDOOR UNIT CONDENSER |
| | INDOOR UNIT A.C. (STANDING) |
| | OUTDOOR UNIT CONDENSER |

NOTE :

| | | | |
|---|---|---|---|
| PROJECT TITLE: PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: LEGENDS |
| | | | |
| | DRAWN BY | IWEIBO S.E | |
| CLIENT: MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: N.T.S. / DRAWINNG NO: E01 |
| LOCATION: ALAGBAKA, AKURE, ONDO STATE. | APPROVED BY | | |
| | DATE | MARCH, 2022. | |

# GENERAL NOTES

1) LIGHTING CIRCUITS SHALL BE WIRED USING 3X1.5mmsq. SC PVS CABLES AND PROTECTED IIN CIRCUIT WITH 6A MCB.

2) 13A SOCKETS SHALL BE WIRED USING 3X2.5mmsq. SC PVC CABLE AND PROTECTED IN 30A MCB EXCEPT STATED OTHERWISE

3) A/C AND 15A SOCKET SHALL BE WIRED USING 3X2.5mmsq.PVC CABLE AND PROTECTED IN 20A MCB.

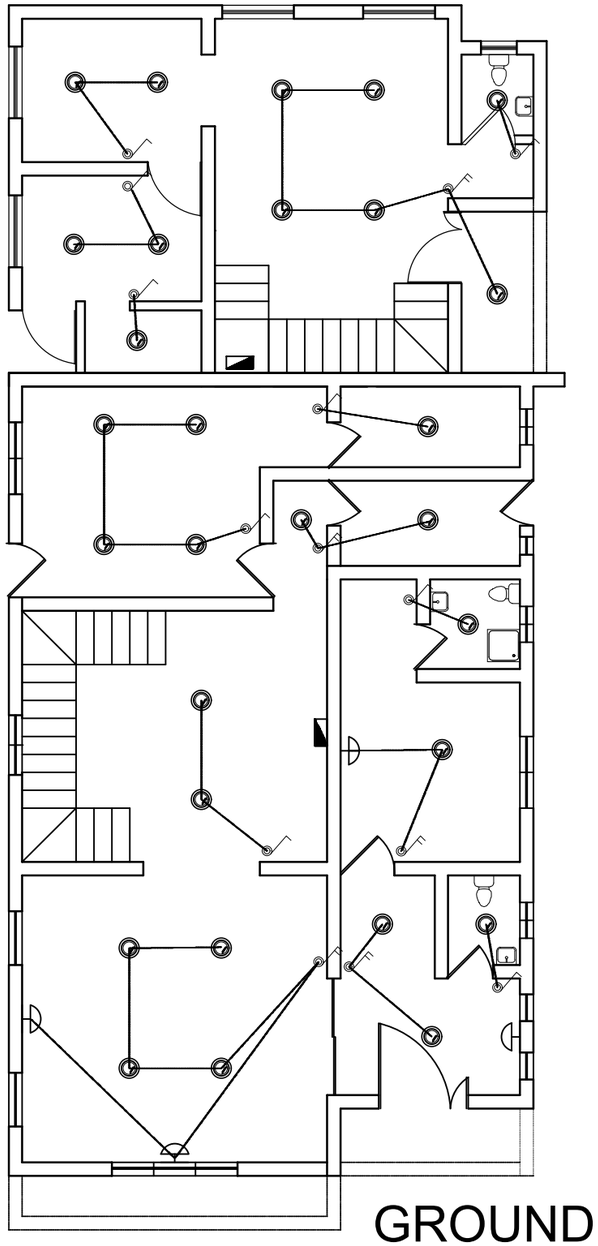
4) C.C.U AND SHALL BE WIRED USING 3X2.5mmsq.PVC CABLE AND PROTECTED IN 20A MCB.

5) WATER HEATER SHALL BE WIRED IN RADIAL USING 3X2.5mmsq.PVC CABLE AND PROTECTED IN 20A MCB.

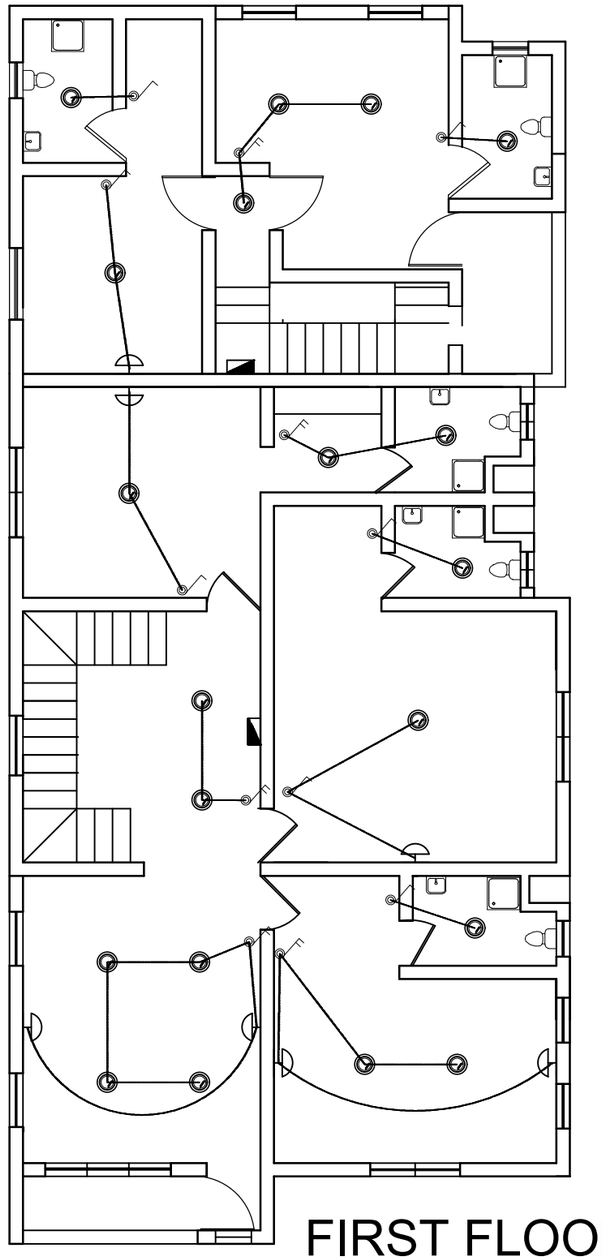
6) ALL KITCHEN SOCKETS ARE TO BE INSTALLED AT +1100mm ABOVE FLOOR LEVEL

NOTE :

| | | | | | |
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | GENERAL NOTES |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| | | APPROVED BY | | | |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | N.T.S. | E02 |



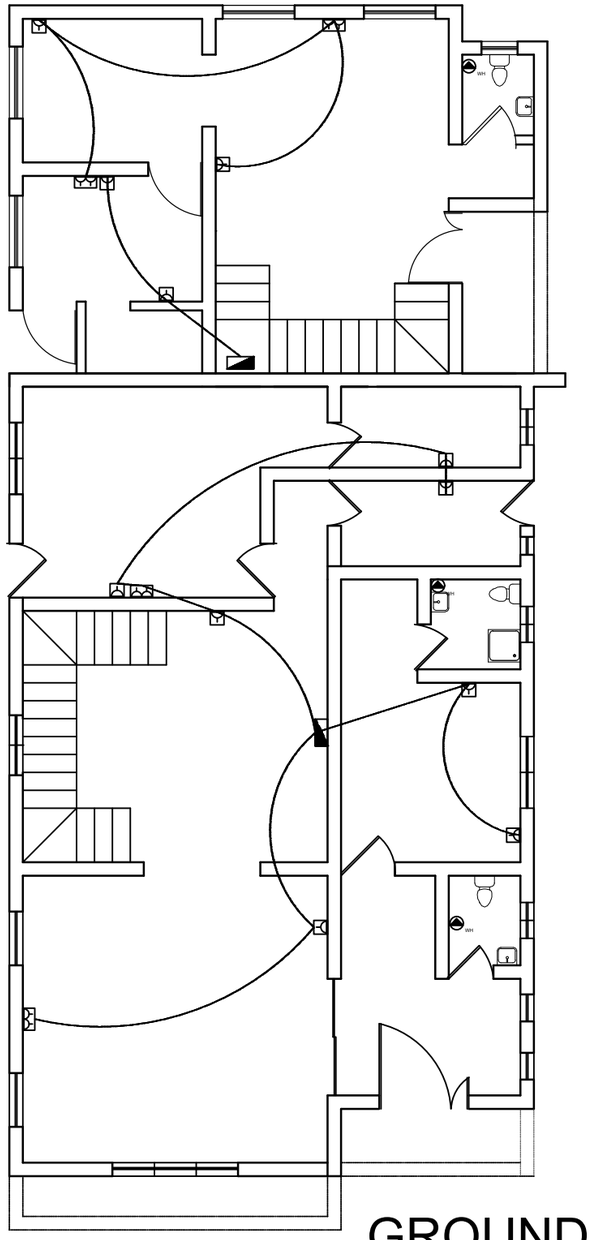
GROUND FLOOR



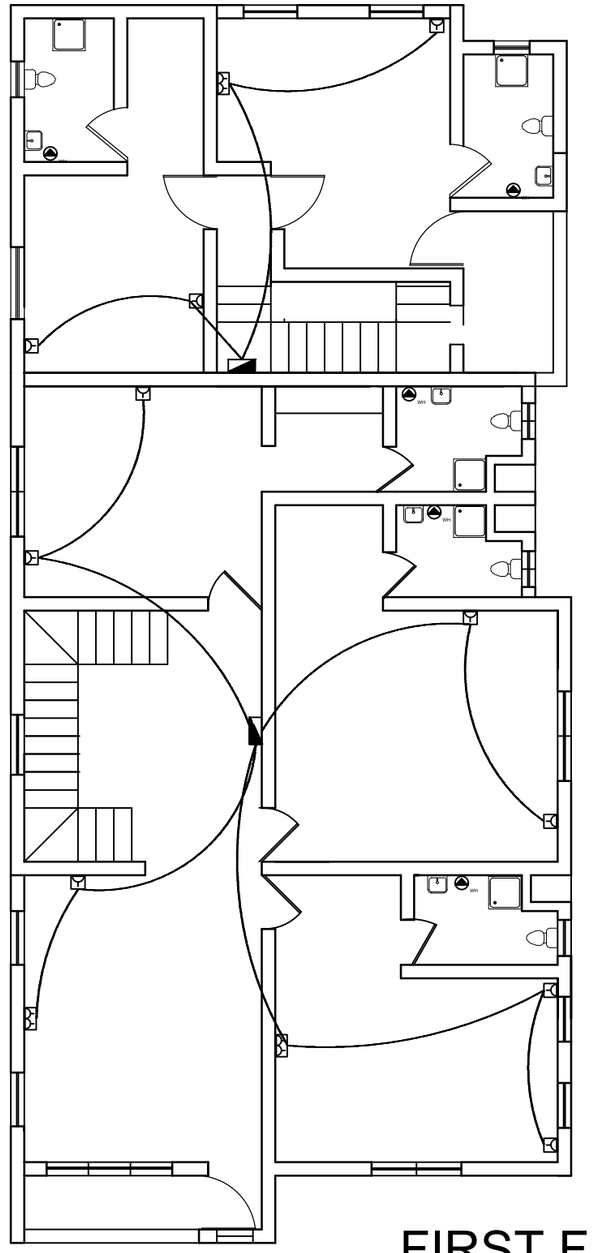
FIRST FLOOR

NOTE :

| | | | | | |
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | LIGHTING LAYOUT |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| | | APPROVED BY | | | |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | N.T.S. | E03 |



GROUND FLOOR

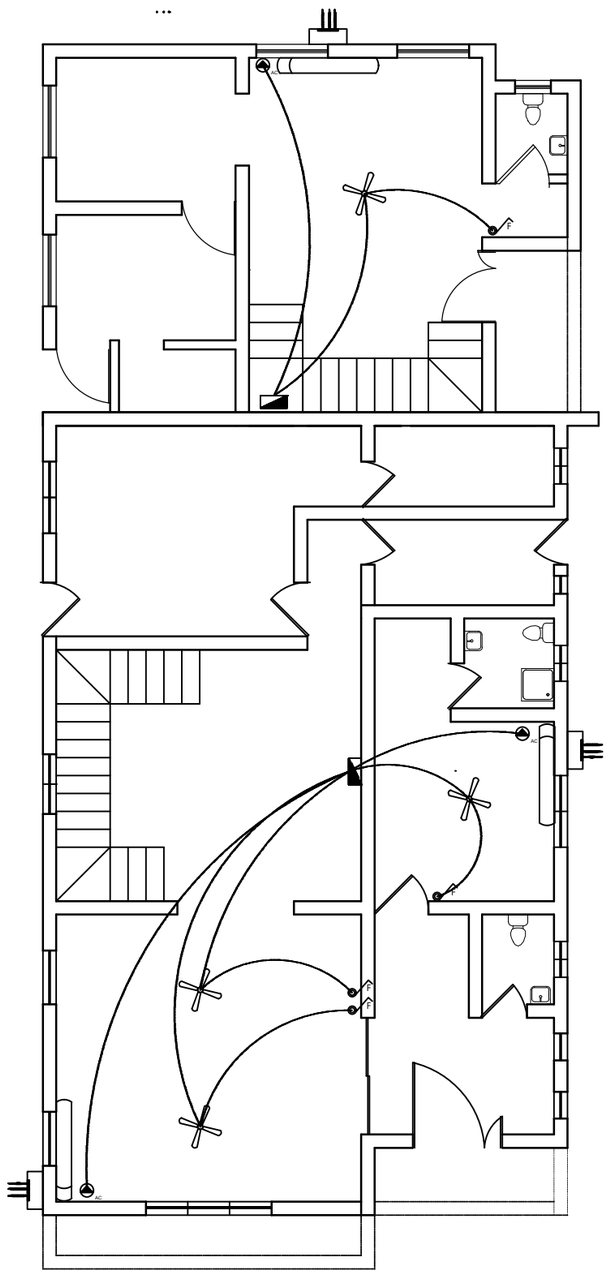


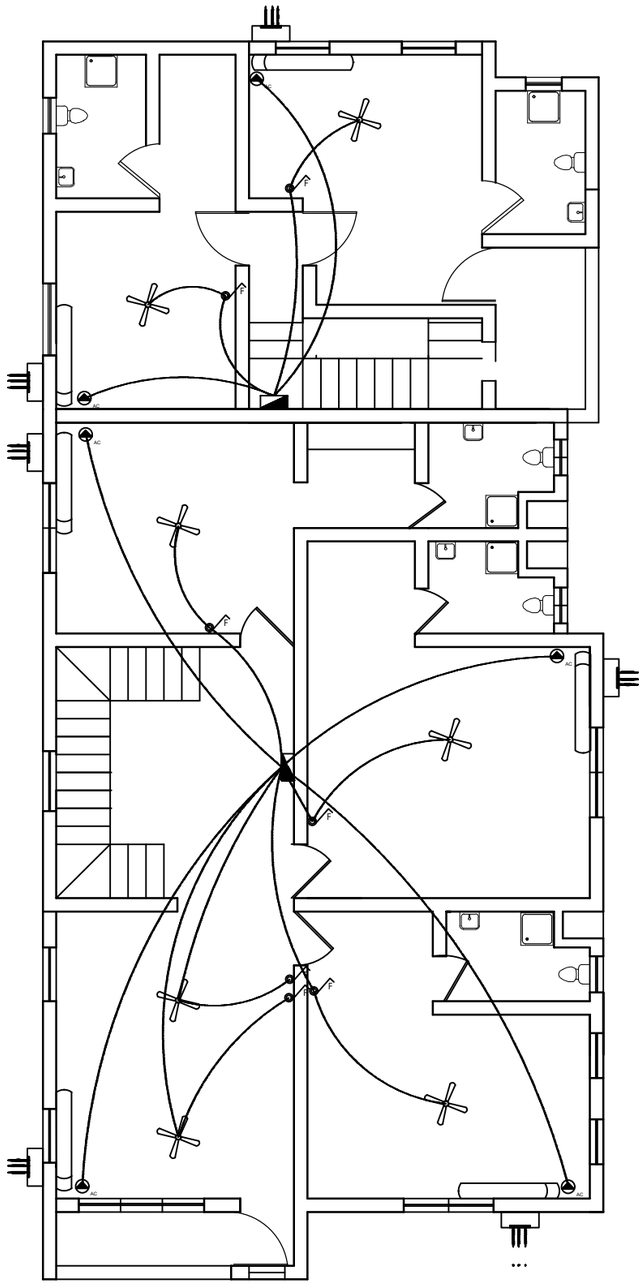
FIRST FLOOR

NOTE :

MR. ADEWALE ALFRED AFOLABI

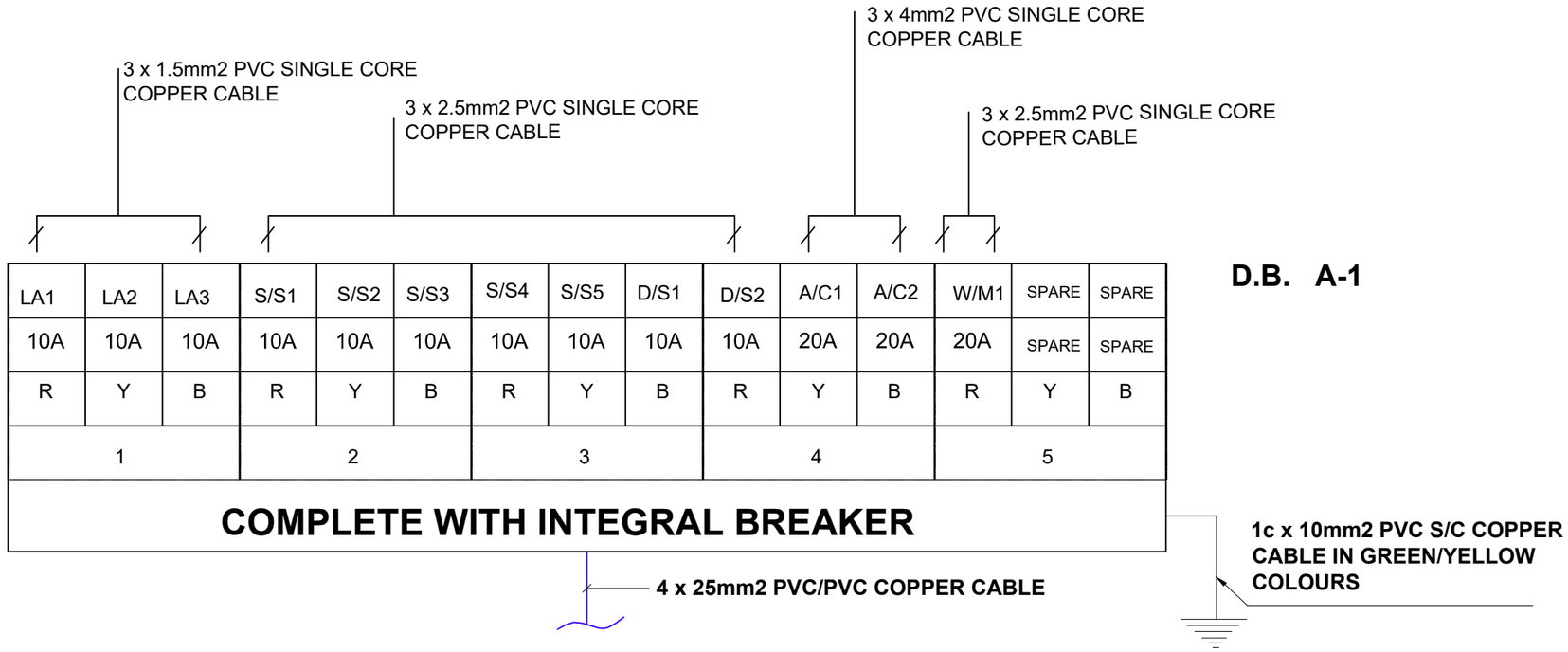
| | | | | | |
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | POWER LAYOUT |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| | | APPROVED BY | | | |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | N.T.S. | E04 |



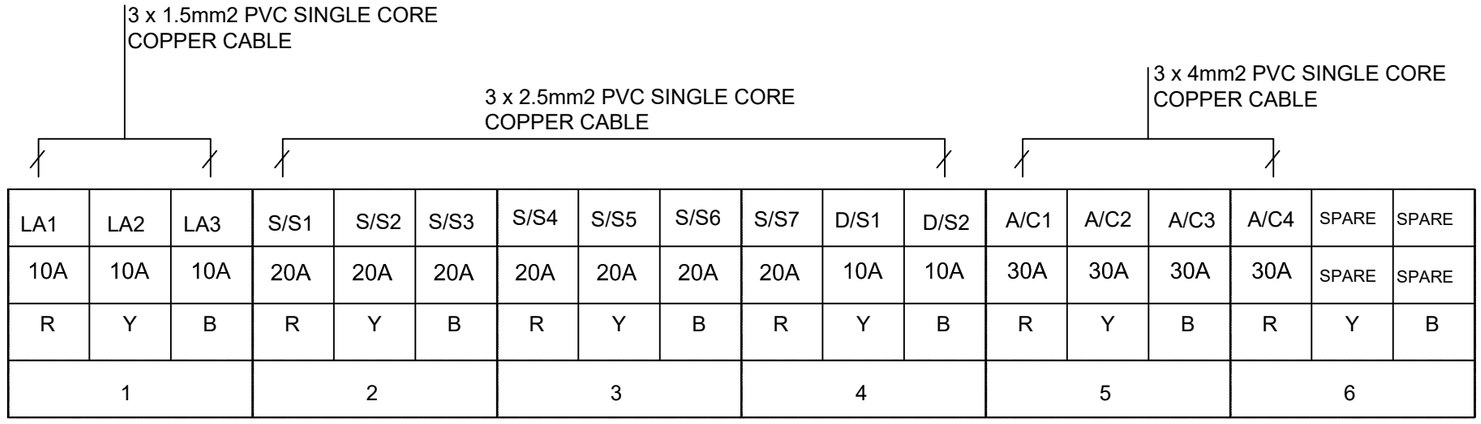


NOTE :

| | | | |
|---|---|---|---|
| PROJECT TITLE: PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: FAN AND A/C POWER LAYOUT |
| | | | |
| | DRAWN BY | IWEIBO S.E | |
| CLIENT: MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: N.T.S. / DRAWINNG NO: E05 |
| | APPROVED BY | | |
| LOCATION: ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | |



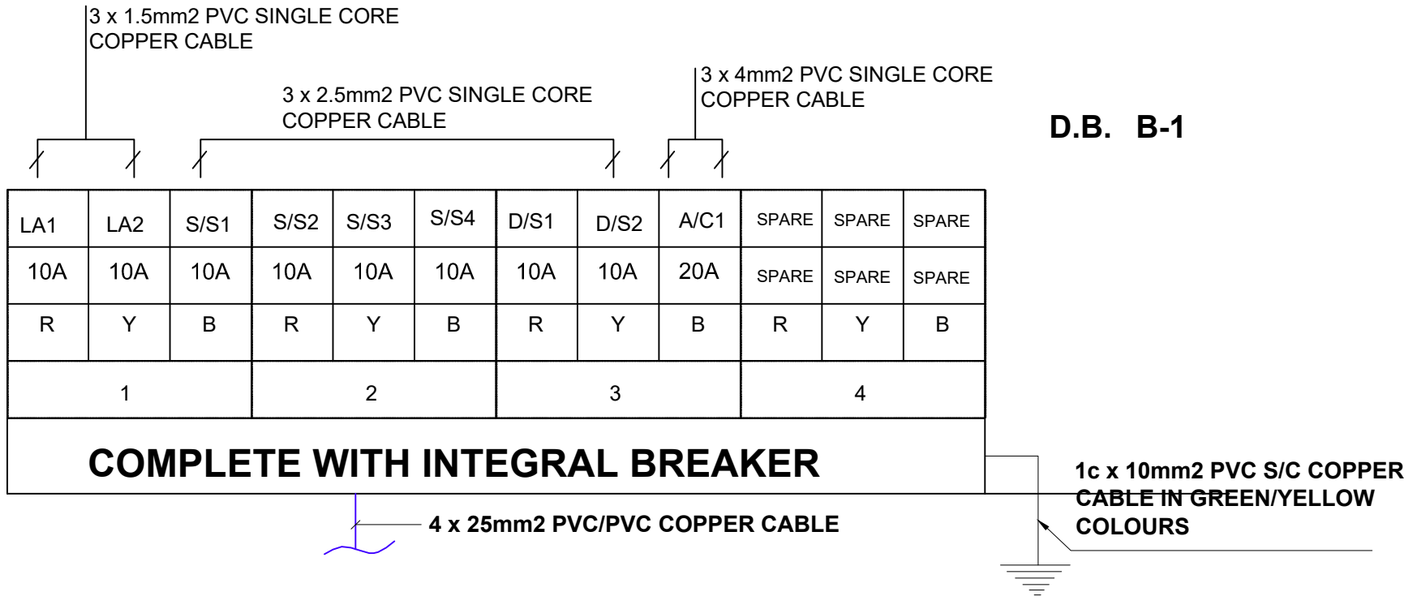

**D.B. A-1**



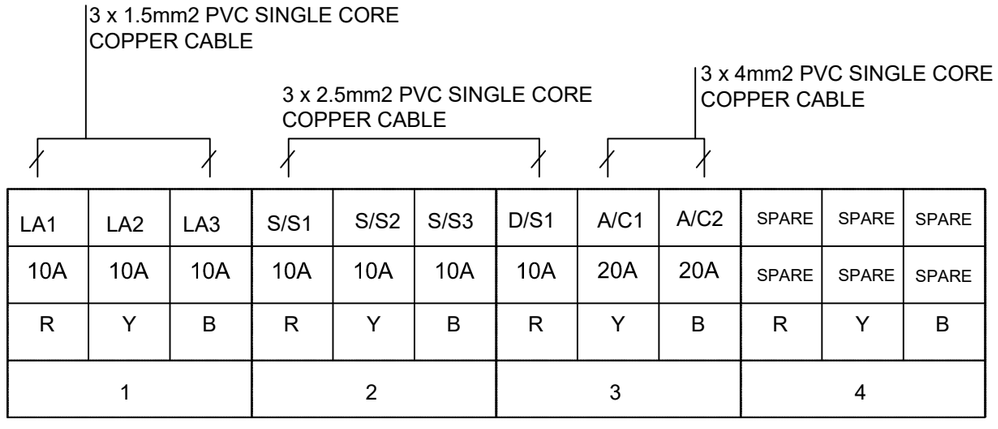

**D.B. A-2**

NOTE :

| | | | |
|---|---|---|---|
| PROJECT TITLE: PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: DISTRIBUTION BOARD 1 |
| | | | |
| | DRAWN BY | IWEIBO S.E | |
| CLIENT: MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: N.T.S. / DRAWINNG NO: E06 |
| | APPROVED BY | | |
| LOCATION: ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | |




**D.B. B-1**




**D.B. B-2**

NOTE :

| | | | |
|---|---|---|---|
| PROJECT TITLE: PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: DISTRIBUTION BOARD 2 |
| | | | |
| | DRAWN BY | IWEIBO S.E | |
| CLIENT: MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: N.T.S. / DRAWINNG NO: E07 |
| | APPROVED BY | | |
| LOCATION: ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | |

| | MAIN PANEL BOARD | |
|---|---|---|
| | D.B. A-1 | D.B. A-2 |
| TOTAL LOAD (W) | 8,890 | 10,450 |
| KVA RATING | 11.11 | 13.06 |
| LOAD CURRENT (A) | 37.11 | 45.54 |
| MCB RATING | 100A | 100A |
| LOAD CABLE | 6.0mm2 PVC COPPER CABLE + 2.5mm2 EARTH CABLE | |

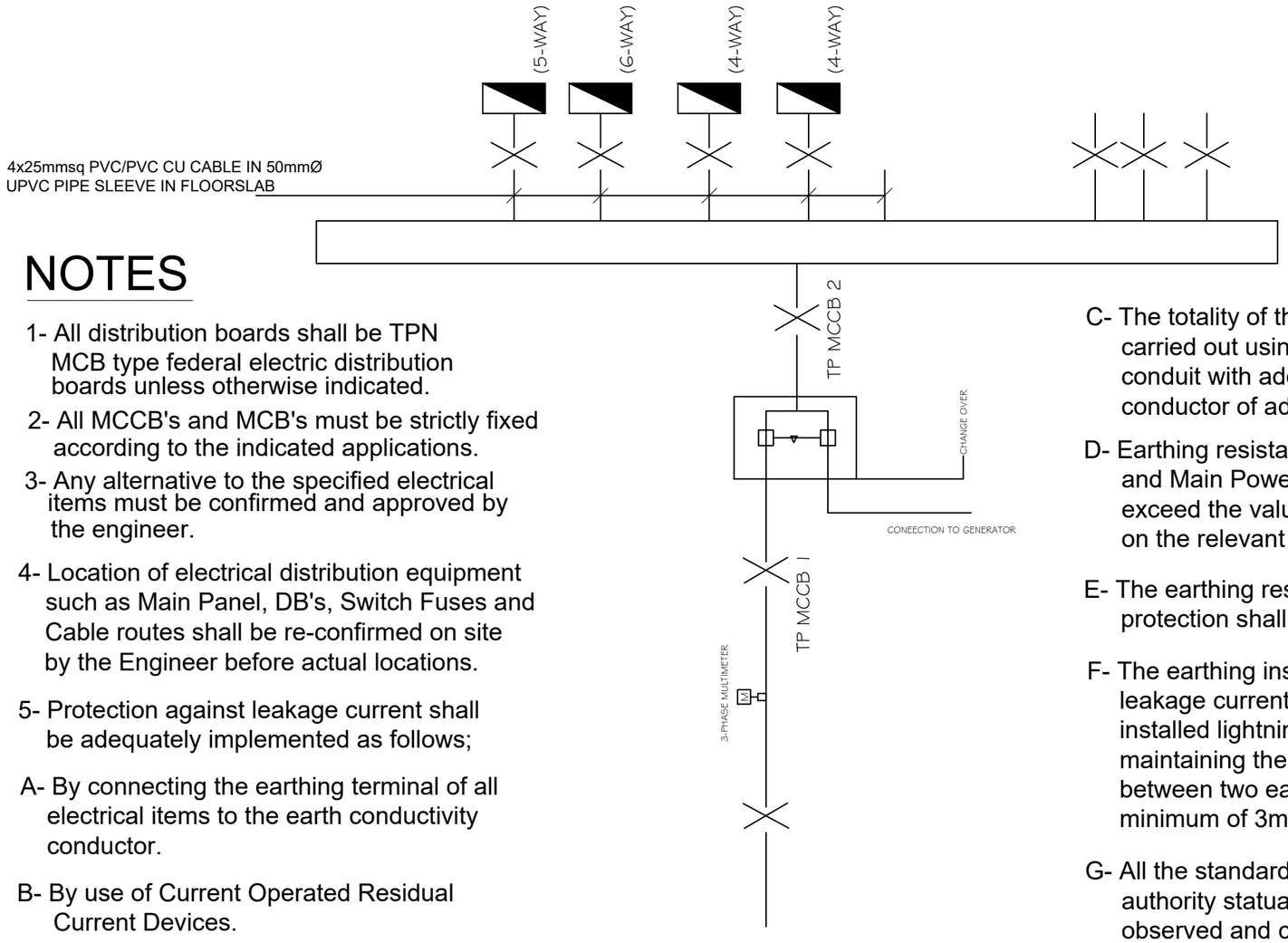
NOTE :

| | | | | | |
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | LOAD SUMMARY AND RATINGS FOR DISTRIBUTION BOARDS (A1 AND A2) |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| | | APPROVED BY | | | |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | N.T.S. | E08 |

| | MAIN PANEL BOARD | |
|---|---|---|
| | D.B. B-1 | D.B. B-2 |
| TOTAL LOAD (W) | 4,305 | 4,865 |
| KVA RATING | 5.38 | 6.08 |
| LOAD CURRENT (A) | 17.94 | 20.27 |
| MCB RATING | 100A | 100A |
| LOAD CABLE | 6.0mm2 PVC COPPER CABLE + 2.5mm2 EARTH CABLE | |

NOTE :

| | | | | | |
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | LOAD SUMMARY AND RATINGS FOR DISTRIBUTION BOARDS (B1 AND B2) |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| | | APPROVED BY | | | |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | DATE | MARCH, 2022. | N.T.S. | E09 |




# NOTES

1- All distribution boards shall be TPN MCB type federal electric distribution boards unless otherwise indicated.

2- All MCCB's and MCB's must be strictly fixed according to the indicated applications.

3- Any alternative to the specified electrical items must be confirmed and approved by the engineer.

4- Location of electrical distribution equipment such as Main Panel, DB's, Switch Fuses and Cable routes shall be re-confirmed on site by the Engineer before actual locations.

5- Protection against leakage current shall be adequately implemented as follows;

A- By connecting the earthing terminal of all electrical items to the earth conductivity conductor.

B- By use of Current Operated Residual Current Devices.

C- The totality of the installation shall be carried out using a high grade PVC conduit with additional earth continuity conductor of adequate size.

D- Earthing resistance at the Generating Set and Main Power entry point, shall not exceed the value required and indicated on the relevant drawings.

E- The earthing resistance for the lightning protection shall not exceed 1.0 Ohms.

F- The earthing installation against earth leakage current shall be properly installed lightning protection systems by maintaining the necessary distance between two earthing system i.e. A minimum of 3m in ground.

G- All the standard requirements and local authority statuary regulations must be observed and compelled with.

NOTE :

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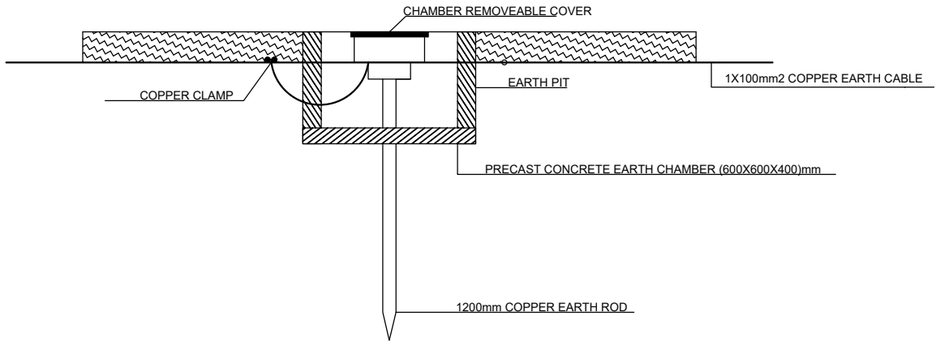
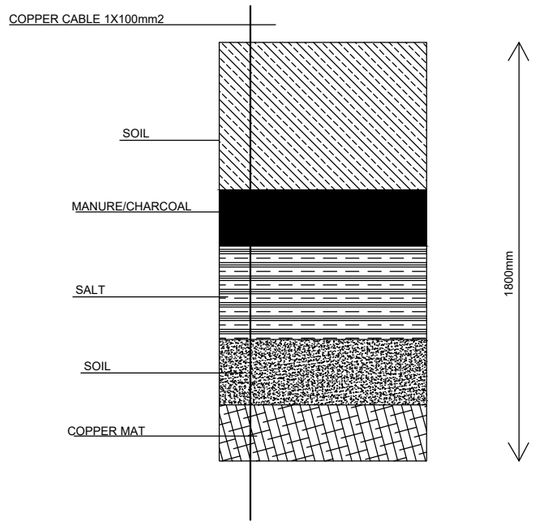
|---|---|---|---|---|---|
| PROJECT TITLE | PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: | DISTRIBUTION RETICULATION |
| | | | | | |
| | | DRAWN BY | IWEIBO S.E | | |
| CLIENT | MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: | DRAWINNG NO: |
| LOCATION | ALAGBAKA, AKURE, ONDO STATE. | APPROVED BY | | N.T.S. | E10 |
| | | DATE | MARCH, 2022. | | |




NOTE :

| | | | |
|---|---|---|---|
| PROJECT TITLE: PROPOSED RESIDENTIAL DEVELOPMENT | ARCHITECT | FASEMI A. | DRAWING TITLE: LIGHTNING PROTECTION DESIGN |
| | | | |
| | DRAWN BY | IWEIBO S.E | |
| CLIENT: MR. ADEWALE ALFRED AFOLABI | CHECKED BY | | DRAWING SCALE: N.T.S. / DRAWINNG NO: E11 |
| LOCATION: ALAGBAKA, AKURE, ONDO STATE. | APPROVED BY | | |
| | DATE | MARCH, 2022. | |