

## GENERAL NOTES :

- ALL ELECTRICAL WORKS AND INSTALLATIONS SHALL CONFORM WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, NATIONAL ELECTRICAL CODE RULES AND REGULATIONS OF THE ENFORCING AUTHORITY AND POWER COMPANY.
- SERVICE ENTRANCE SHALL BE SINGLE - PHASE , 60 HZ. SYSTEM
- ALL CONDUITS SHALL BE IN POLYVINYL CHLORIDE (PVC ) EXCEPT FOR MAIN SERVICE ENTRANCE WHICH IS RSC PIPE
- ALL WIRINGS SHALL BE INSTALLED IN CONDUIT PIPES EMBEDDED INSIDE HOLLOW BLOCK STRUCTURES, SLABS, WALLS, COLUMNS, PARTITIONS AND /OR RUN CONCEALED BETWEEN DOUBLE WALL WOODEN PARTITIONS AND INSIDE THE CEILING SPACES WHERE THE USE OF CONCEALED CONDUIT WIRING IS IMPRACTICABLE, SURFACE METAL WIRING MAY BE USED.
- UNLESS OTHERWISE SPECIFIED, THE SMALLEST WIRE AND CONDUIT PIPE TO BE USED SHALL BE NO. 3.5 MM<sup>2</sup> THW AND 20 MM<sup>2</sup> DIA. PVC, RESPECTIVELY.

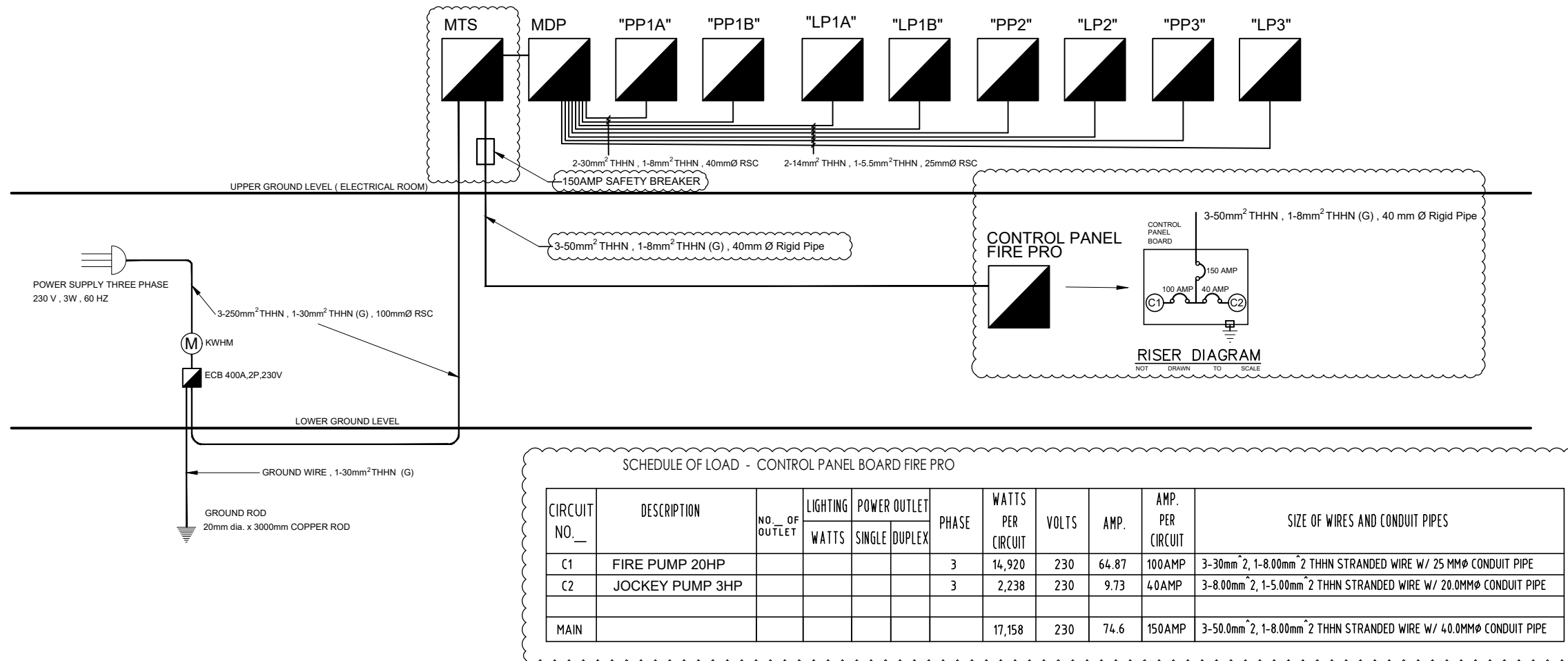
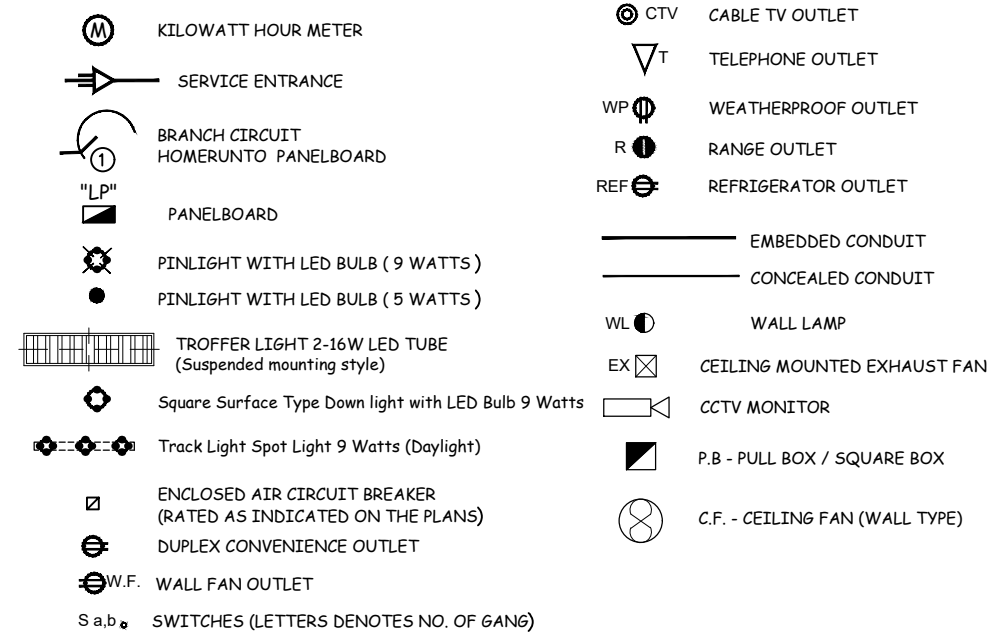
- WHEREVER REQUIRED AND NECESSARY, JUNCTION BOXES AND FULL BOXES OF PROPER SIZES SHALL BE INSTALLED AT CONVENIENT AND INCONSPICUOUS LOCATION, ALTHOUGH SUCH BOXES ARE NOT SHOWN IN THE PLANS NOR MENTIONED IN THE SPECIFICATIONS.

- ALL WALL OUTLETS SHALL BE INSTALLED AT THE FOLLOWING HEIGHTS ABOVE THE FINISHED FLOOR LINE, UNLESS OTHERWISE NOTED :

WALL SWITCHES	1200 MM.
DUPLEX CONVENIENCE OUTLET	300 MM. OR 150 MM ABOVE WORKTABLE
AIRCONDITIONING UNIT OUTLET	AT CONV. HEIGHT NEAR THE EQPT.
TEL. & CABLE TV OUTLET	300 MM. OR 150 MM. ABOVE WORKTABLE
WATERHEATER OUTLET	AT CONV. HEIGHT NEAR THE EQPT.
PANEL BOARD	1800 MM. FROM CENTER OF PANEL TO F.F.L.

- ALL WORKS AND INSTALLATIONS SHALL BE DONE UNDER CLOSE SUPERVISION OF A REGISTERED ELECTRICAL ENGINEER.

## ELECTRICAL SYMBOLS :



SCHEDULE OF LOAD - CONTROL PANEL BOARD FIRE PRO

CIRCUIT NO.	DESCRIPTION	NO. OF OUTLET	LIGHTING		POWER OUTLET		PHASE	WATTS PER CIRCUIT	VOLTS	AMP.	AMP. PER CIRCUIT	SIZE OF WIRES AND CONDUIT PIPES
			WATTS	SINGLE	DUPLEX	SINGLE						
C1	FIRE PUMP 20HP						3	14,920	230	64.87	100AMP	3-30mm <sup>2</sup> 2, 1-8.00mm <sup>2</sup> 2 THHN STRANDED WIRE W/ 25 MM $\phi$ CONDUIT PIPE
C2	JOCKEY PUMP 3HP						3	2,238	230	9.73	40AMP	3-8.00mm <sup>2</sup> 2, 1-5.00mm <sup>2</sup> 2 THHN STRANDED WIRE W/ 20.0MM $\phi$ CONDUIT PIPE
MAIN								17,158	230	74.6	150AMP	3-50.0mm <sup>2</sup> 2, 1-8.00mm <sup>2</sup> 2 THHN STRANDED WIRE W/ 40.0MM $\phi$ CONDUIT PIPE

EXISTING PANEL BOARD  
SCHEDULE OF LOADS : MDP

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	PP1A	15760	230	100	2	100	2 - 30 mm <sup>2</sup> THHN +1-8mm <sup>2</sup> THHN (G) , 40 mm Ø PVC
2	PP1B	18440	230	100	2	100	2 - 30 mm <sup>2</sup> THHN +1-8mm <sup>2</sup> THHN (G) , 40 mm Ø PVC
3	LP1A	9600	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
4	LP1B	10700	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
5	LP2	14800	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
6	LP3	14800	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
7	PP2	10240	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
8	PP3	10240	230	60	2	100	2 - 14 mm <sup>2</sup> THHN +1-5.5mm <sup>2</sup> THHN (G) , 25 mm Ø PVC
TOTAL		104580					

TOTAL CONNECTED LOAD = 104580VA USE : 2 - 250 mm<sup>2</sup>THHN, 1-30 mm<sup>2</sup> THHN (G) IN 75 mmØ RSC.  
I @ 80 % D. F. =  $\frac{104580(.80)}{230}$  = 363.76 AMPS. MCCB : 400AT, 2P, 230V, 400AF Use minimum of 10kAIC for all MCCB

SCHEDULE OF LOADS : LIGHTING "LP1A"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	LIGHTING OUTLET	1700	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1700					
3		1700					
4		1700					
5		1700					
6		1700					
7		1500					
8	SPARE	1000					
TOTAL		12700					

TOTAL CONNECTED LOAD = 9600 VA USE : 2 - 14 mm<sup>2</sup>THHN, 1-5.5 mm<sup>2</sup> THHN (G) IN 32 mmØ RSC.  
I @ 80 % D. F. =  $\frac{12700(.80)}{230}$  = 44.17 AMPS. MCCB : 60AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

EXISTING PANEL BOARD  
SCHEDULE OF LOADS : LIGHTING "LP1B"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	LIGHTING OUTLET	1600	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1600					
3		1400					
4		1700					
5		1400					
6		1500					
7	SPARE	1500					
TOTAL		10700					

TOTAL CONNECTED LOAD = 10700 VA USE : 2 - 14 mm<sup>2</sup>THHN, 1-5.5 mm<sup>2</sup> THHN (G) IN 32 mmØ RSC.  
I @ 80 % D. F. =  $\frac{10700(.80)}{230}$  = 37.22 AMPS. MCCB : 60AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

EXISTING PANEL BOARD "LP2"  
SCHEDULE OF LOADS : TYPICAL LIGHTING "LP2, LP3"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	LIGHTING OUTLET	1600	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1600					
3		1600					
4		1600					
5		1600					
6		1600					
7		1600					
8		1600					
9		1000					
10	SPARE	1000					
TOTAL		14800					

TOTAL CONNECTED LOAD = 14800 VA USE : 2 - 14 mm<sup>2</sup>THHN, 1-5.5 mm<sup>2</sup> THHN (G) IN 32 mmØ RSC.  
I @ 80 % D. F. =  $\frac{14800(.80)}{230}$  = 51.48 AMPS. MCCB : 60AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

SCHEDULE OF LOADS : POWER "PP1A"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	CONVENIENCE OUTLET	1620	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1260					
3		1260					
4	CEILING FAN	900				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
5	CEILING FAN	800				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
6	CEILING FAN	900				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
7	SPLIT TYPE (1.5 TR)	3220				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
8	MOTOR PUMP	3000				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
9	MOTOR PUMP	3000				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
10	SPARE					30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
11	SPARE					30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
TOTAL		15760					

TOTAL CONNECTED LOAD = 15760 VA USE : 2 - 30 mm<sup>2</sup>THHN, 1-8 mm<sup>2</sup> THHN (G) IN 40 mmØ RSC.  
I @ 80 % D. F. =  $\frac{15760(.80)}{230}$  +.25 (14) = 58.32 AMPS. MCCB : 100AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

EXISTING PANEL BOARD  
SCHEDULE OF LOADS : POWER "PP1B"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	CONVENIENCE OUTLET	1620	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1620					
3		1260					
4		1080					
5		1080					
6		720					
7	SPLIT TYPE (1.5 TR)	3220				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
8	SPLIT TYPE (1.5 TR)	3220				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
9	SPLIT TYPE (1.5 TR)	3220				30	2 - 5.5 mm <sup>2</sup> THHN, 1-3.5mm <sup>2</sup> THHN, 25 mm Ø C
10	CEILING FAN	700				20	
11	CEILING FAN	700				20	
12	SPARE						
TOTAL		18440					

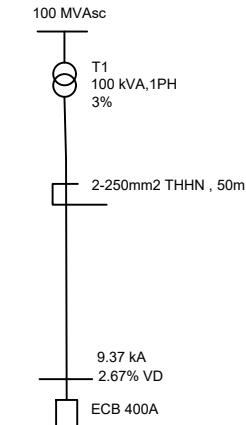
TOTAL CONNECTED LOAD = 18440 VA USE : 2 - 30 mm<sup>2</sup>THHN, 1-8 mm<sup>2</sup> THHN (G) IN 40 mmØ RSC.  
I @ 80 % D. F. =  $\frac{18440(.80)}{230}$  +.25 (14) = 67.64 AMPS. MCCB : 100AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

EXISTING PANEL BOARD "PP2"  
SCHEDULE OF LOADS : TYPICAL POWER "PP2" & "PP3"

CKT. NO.	LOAD DESCRIPTION	VA PER CKT.	VOLTS	BRANCH / CKT. BREAKER			SIZE OF HOMERUN (WIRES & CONDUITS)
				AF	P	AT	
1	8 C.O. - 8 L.O.	1620	230	50	2	20	2 - 3.5 mm <sup>2</sup> THHN, 20 mm Ø PVC
2		1620					
3		1620					
4		1620					
5		1620					
6		1620					
7		1620					
8		1620					
9	CEILING FAN	800					
10	CEILING FAN	800					
11	SPARE	1000					
11	SPARE	1000					
TOTAL		16560					

TOTAL CONNECTED LOAD = 16560VA USE : 2 - 14 mm<sup>2</sup>THHN, 1-5.5 mm<sup>2</sup> THHN (G) IN 32 mmØ RSC.  
I @ 80 % D. F. =  $\frac{16560(.80)}{230}$  +.25 (14) = 61.10 AMPS. MCCB : 60AT, 2P, 230V, 100AF, BOLT ON TYPE Use minimum of 10kAIC for all MCCB

VOLTAGE DROP & SHORT CIRCUIT CALCULATION



SHORT CIRCUIT CALCULATION

MVA<sub>b</sub> = 100

Calculate Short Circuit Fault at ECB:

$$X_u = \frac{MVA_b}{MVA_{sc}} = \frac{100}{100} = 1 \text{ p.u.}$$

$$X_{T1} = \%Z_{T1} \times \frac{MVA_b}{MVA_{T1}} = 0.03 \times \frac{100}{0.10} = 30 \text{ p.u.}$$

$$X_c = Z_c/305m \times L \times \frac{MVA_b}{kV^2} = 0.05/305 \times 50 \times \frac{100}{0.23^2} = 15.4 \text{ p.u.}$$

$$Z_{th} = X_u + X_{T1} + X_c = 1 + 30 + 15.4 = 46.4 \text{ p.u.}$$

$$I_{sc} = \frac{MVA_b \times 10^6}{V \times Z_{th}} = \frac{100 \times 10^6}{230 \times 46.4} = 9,370 \text{ Amps or } 9.37 \text{ kA}$$

Calculate Votage Drop at ECB:

E = IR

I = 363 Amp.

Conductor : 250 mm<sup>2</sup> , Z = 0.050/305m (Table 9.1.1.9 PEC)

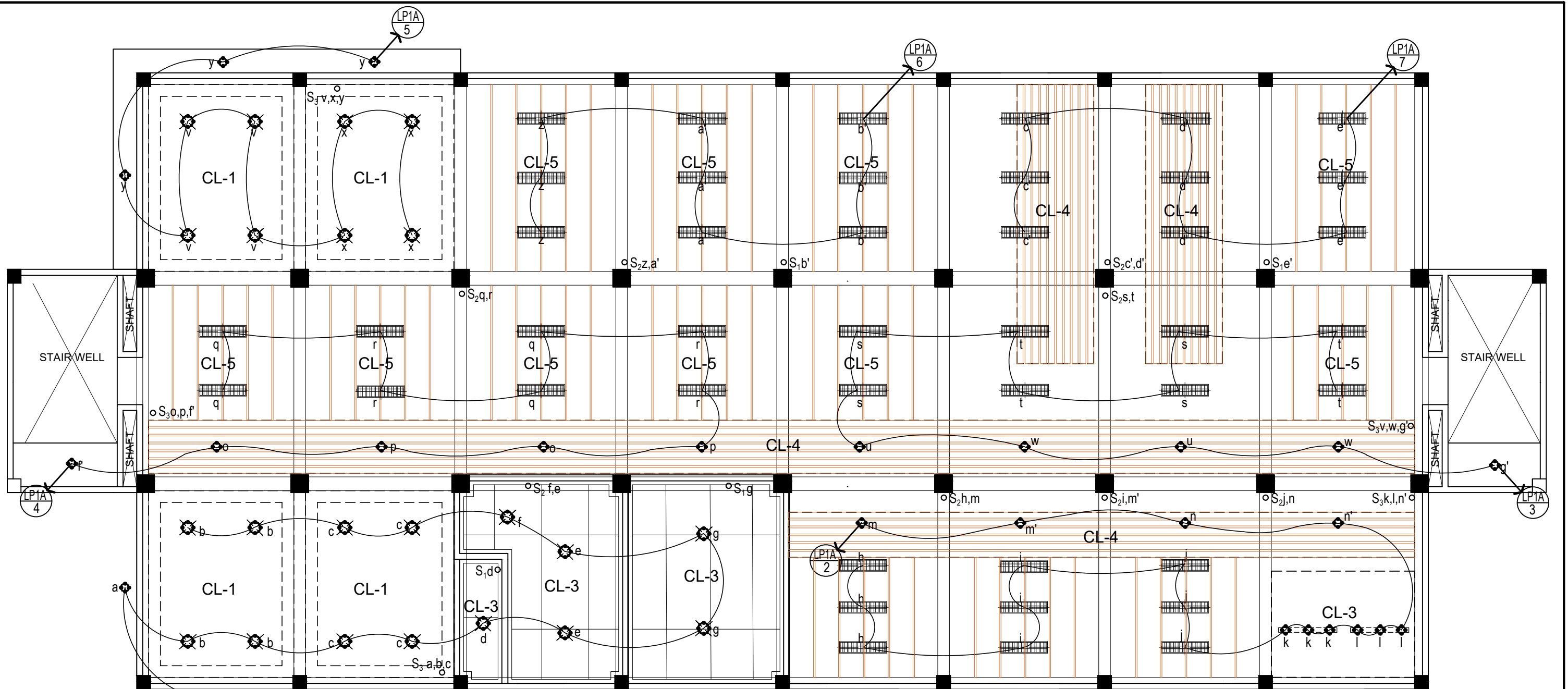
Length - 50 m

$$R = 0.050/305m \times 50m = 0.0082 \text{ ohm}$$

$$VD = 2 IR = 2 \times 374 \times 0.0082 = 6.13 \text{ volts}$$

$$\%VD = \frac{6.13 \times 100}{230} = 2.67\%$$

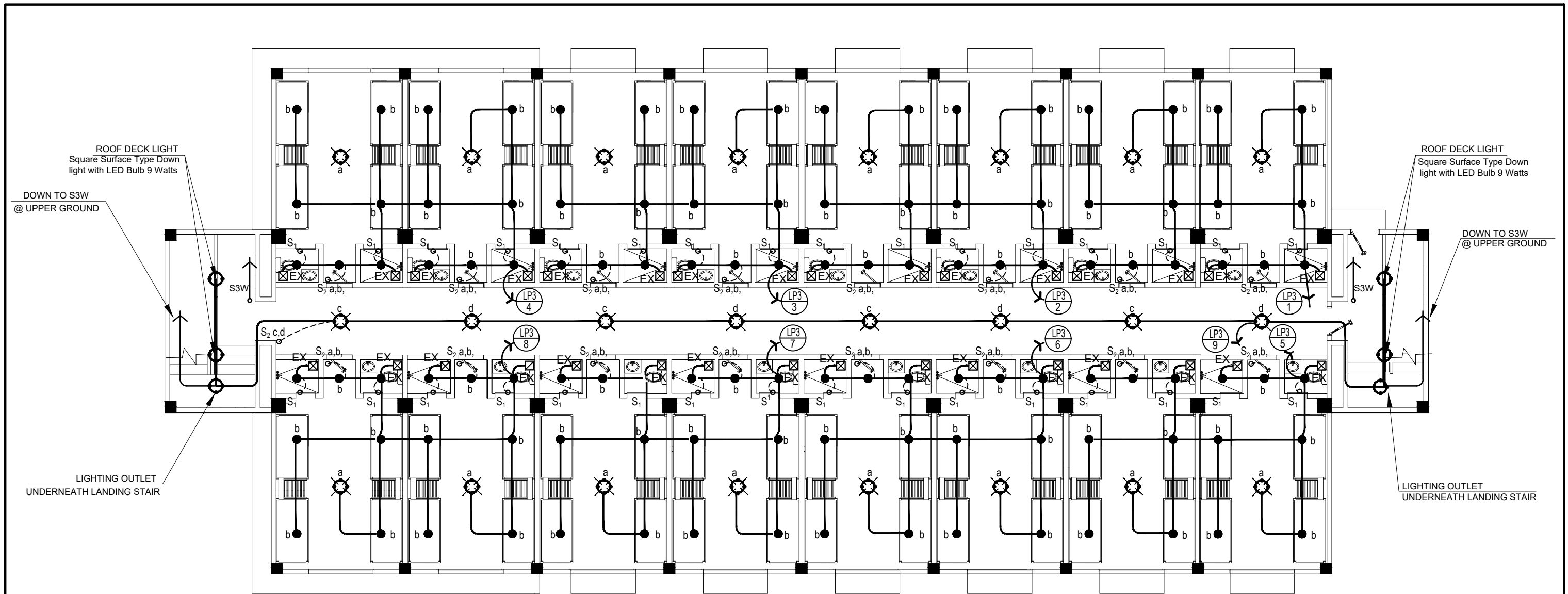
SCHEDULE OF LOADS



1
EE-3
**LOWER GROUND FLOOR LIGHTING LAYOUT**  
 SCALE 1:100 M.

**ELECTRICAL SYMBOLS :**

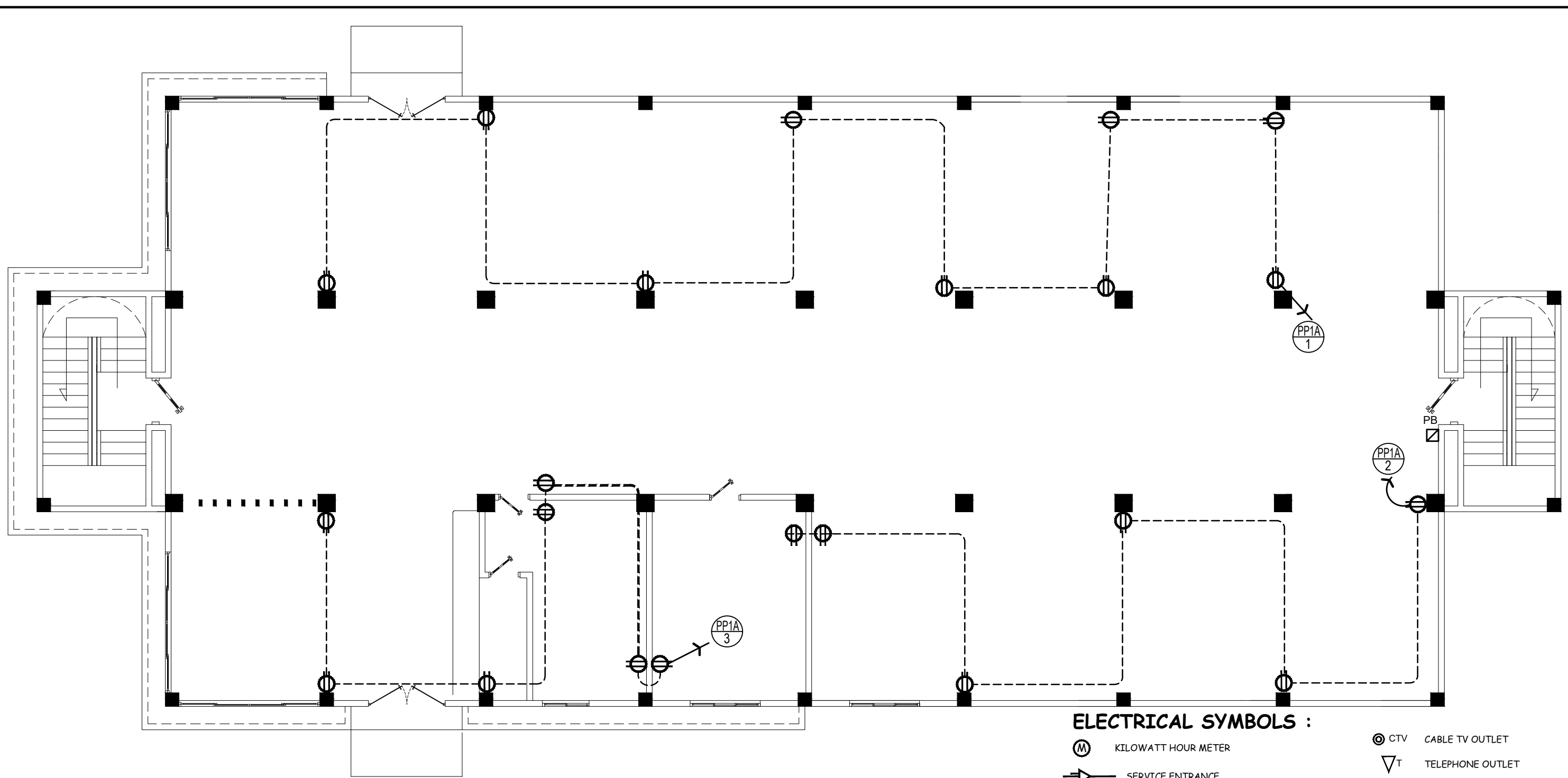
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|--|---------------------------------------|
| KILOWATT HOUR METER  | CABLE TV OUTLET                       |
| SERVICE ENTRANCE   | TELEPHONE OUTLET                      |
| BRANCH CIRCUIT HOMERUNTO PANELBOARD                            | WEATHERPROOF OUTLET                   |
| "LP" PANELBOARD  | RANGE OUTLET                          |
| PINLIGHT WITH LED BULB ( 9 WATTS )                             | REFRIGERATOR OUTLET                   |
| PINLIGHT WITH LED BULB ( 5 WATTS )                             | EMBEDDED CONDUIT<br>CONCEALED CONDUIT |
| TROFFER LIGHT 2-16W LED TUBE (Suspended mounting style)        | WALL LAMP                             |
| Track Light Spot Light 9 Watts (Daylight)                      | CEILING MOUNTED EXHAUST FAN           |
| ENCLOSED AIR CIRCUIT BREAKER (RATED AS INDICATED ON THE PLANS) | CCTV MONITOR                          |
| DUPLEX CONVENIENCE OUTLET                                      | P.B - PULL BOX / SQUARE BOX           |
| W.F. WALL FAN OUTLET   | C.F. - CEILING FAN (WALL TYPE)        |
| S a, b, o SWITCHES (LETTERS DENOTES NO. OF GANG)               |                                       |



2
EE-6
**THIRD FLOOR LIGHTING AND EXHAUST LAYOUT**  
 SCALE 1:100 M.

**ELECTRICAL SYMBOLS :**

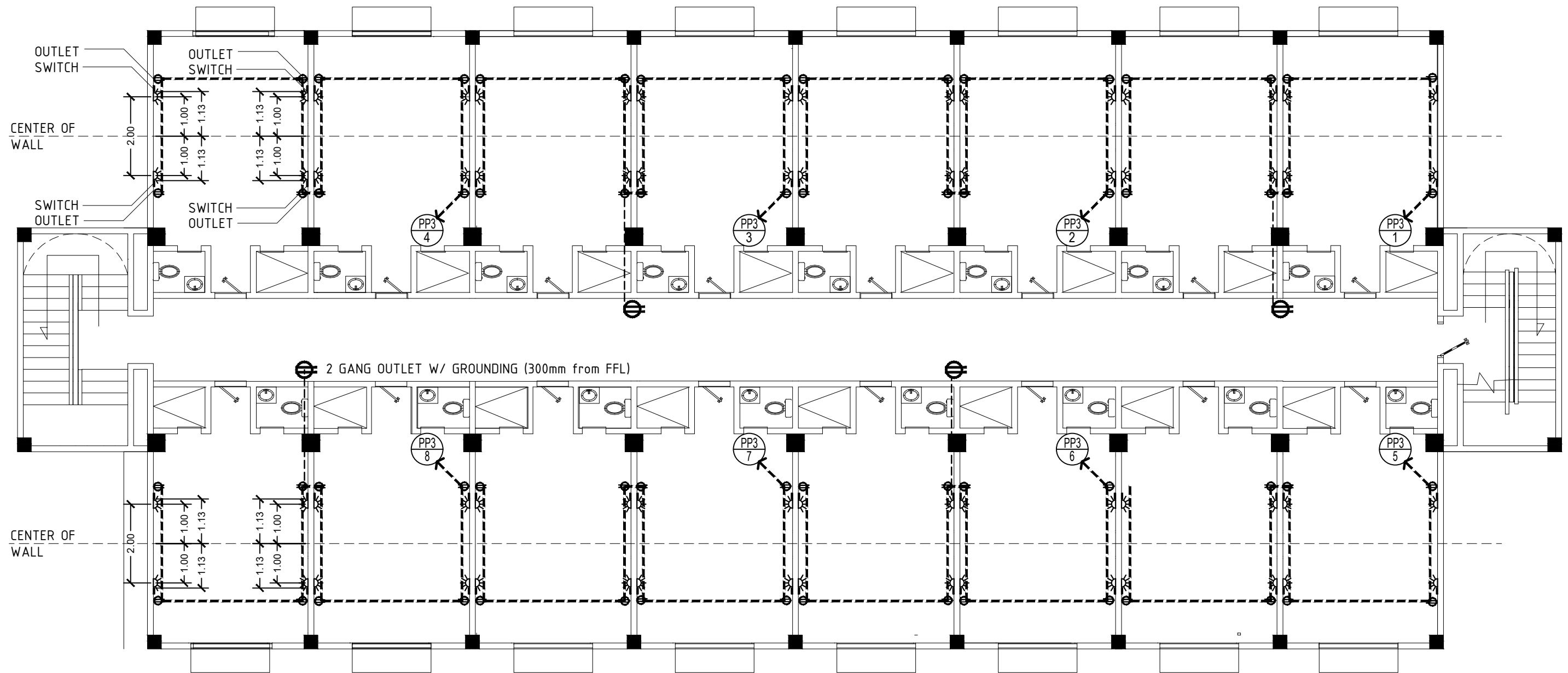
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|--|--|--|--------------------------------|
|  | KILOWATT HOUR METER  |  | CABLE TV OUTLET                |
|  | SERVICE ENTRANCE   |  | TELEPHONE OUTLET               |
|  | BRANCH CIRCUIT HOMERUNTO PANELBOARD                            |  | WEATHERPROOF OUTLET            |
|  | "LP"   |  | RANGE OUTLET                   |
|  | PANELBOARD   |  | REFRIGERATOR OUTLET            |
|  | PINLIGHT WITH LED BULB (9 WATTS)                               |  | EMBEDDED CONDUIT               |
|  | PINLIGHT WITH LED BULB (5 WATTS)                               |  | CONCEALED CONDUIT              |
|  | TROFFER LIGHT 2-16W LED TUBE (Suspended mounting style)        |  | WALL LAMP                      |
|  | Square Surface Type Down light with LED Bulb 9 Watts           |  | CEILING MOUNTED EXHAUST FAN    |
|  | Track Light Spot Light 9 Watts (Daylight)                      |  | CCTV MONITOR                   |
|  | ENCLOSED AIR CIRCUIT BREAKER (RATED AS INDICATED ON THE PLANS) |  | P.B - PULL BOX / SQUARE BOX    |
|  | DUPLEX CONVENIENCE OUTLET                                      |  | C.F. - CEILING FAN (WALL TYPE) |
|  | W.F. WALL FAN OUTLET   |  |                                |
|  | S a, b, c SWITCHES (LETTERS DENOTES NO. OF GANG)               |  |                                |



1 LOWER GROUND FLOOR POWER LAYOUT  
 EE-5 SCALE 1:100 M.

**ELECTRICAL SYMBOLS :**

- |  |                                |
|--|--------------------------------|
| KILOWATT HOUR METER  | CABLE TV OUTLET                |
| SERVICE ENTRANCE   | TELEPHONE OUTLET               |
| BRANCH CIRCUIT HOMERUN TO PANELBOARD                           | WEATHERPROOF OUTLET            |
| "LP" PANELBOARD  | RANGE OUTLET                   |
| PINLIGHT WITH LED BULB ( 9 WATTS )                             | REFRIGERATOR OUTLET            |
| PINLIGHT WITH LED BULB ( 5 WATTS )                             | EMBEDDED CONDUIT               |
| TROFFER LIGHT 2-16W LED TUBE (Suspended mounting style)        | CONCEALED CONDUIT              |
| Square Surface Type Down light with LED Bulb 9 Watts           | WALL LAMP                      |
| Track Light Spot Light 9 Watts (Daylight)                      | CEILING MOUNTED EXHAUST FAN    |
| ENCLOSED AIR CIRCUIT BREAKER (RATED AS INDICATED ON THE PLANS) | CCTV MONITOR                   |
| DUPLEX CONVENIENCE OUTLET                                      | P.B - PULL BOX / SQUARE BOX    |
| W.F. WALL FAN OUTLET   | C.F. - CEILING FAN (WALL TYPE) |
| S a, b. SWITCHES (LETTERS DENOTES NO. OF GANG)                 |                                |



NOTE : SWITCHES AND 2 GANG OUTLET W/ GROUNDING - 900mm from Finished Floor Line for ROOMS  
 WALL LAMP (DAYLIGHT) - 1100mm from Finished Floor Line

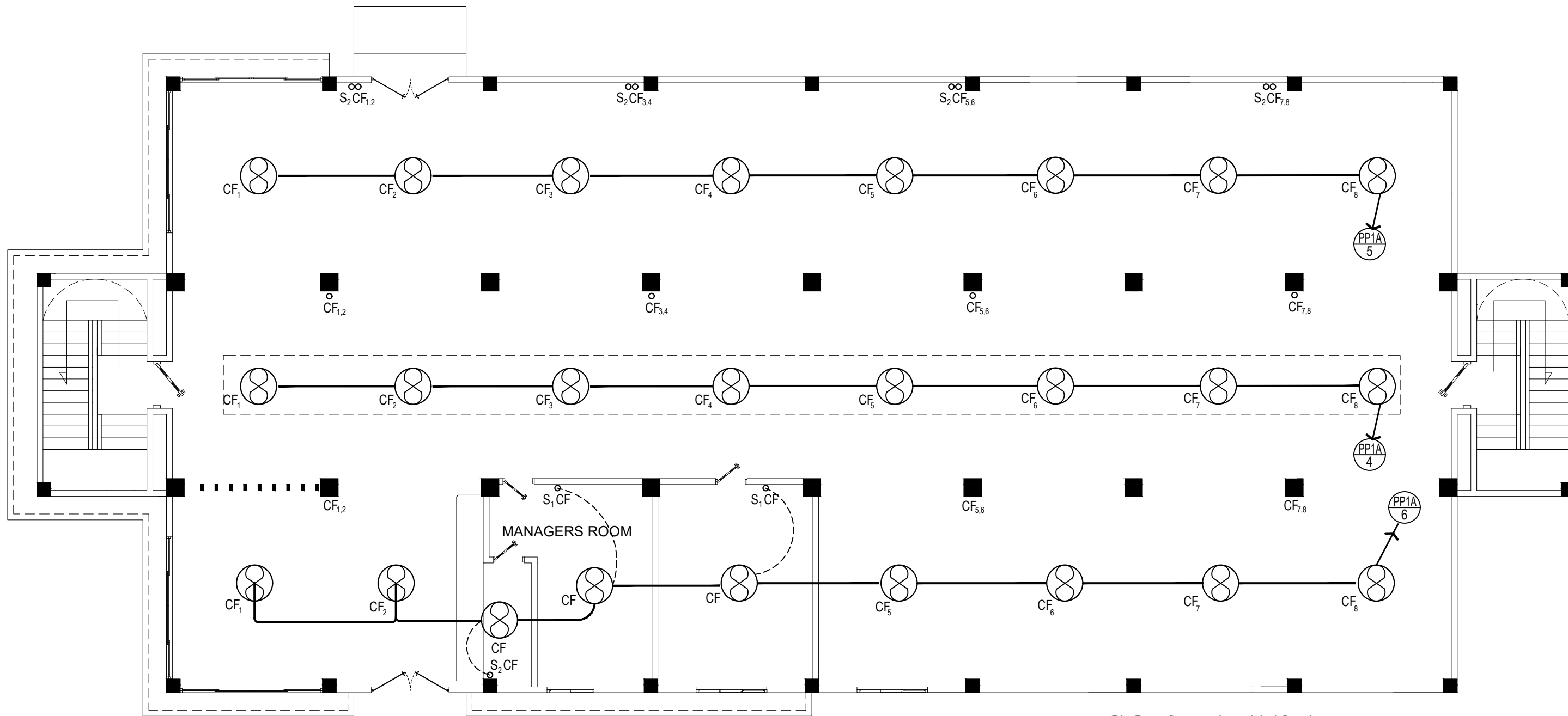
2  
EE-6

## SECOND AND THIRD FLOOR POWER AND WALL LAMPS (LIGHTING) LAYOUT

SCALE 1:100 M.

### ELECTRICAL SYMBOLS :

- |  |                                |
|--|--------------------------------|
| KILOWATT HOUR METER  | CABLE TV OUTLET                |
| SERVICE ENTRANCE   | TELEPHONE OUTLET               |
| BRANCH CIRCUIT HOMERUNTO PANELBOARD                            | WEATHERPROOF OUTLET            |
| "LP" PANELBOARD  | RANGE OUTLET                   |
| PINLIGHT WITH LED BULB ( 9 WATTS )                             | REFRIGERATOR OUTLET            |
| PINLIGHT WITH LED BULB ( 5 WATTS )                             | EMBEDDED CONDUIT               |
| TROFFER LIGHT 2-16W LED TUBE (Suspended mounting style)        | CONCEALED CONDUIT              |
| Square Surface Type Down light with LED Bulb 9 Watts           | WALL LAMP                      |
| Track Light Spot Light 9 Watts (Daylight)                      | CEILING MOUNTED EXHAUST FAN    |
| ENCLOSED AIR CIRCUIT BREAKER (RATED AS INDICATED ON THE PLANS) | CCTV MONITOR                   |
| DUPLEX CONVENIENCE OUTLET                                      | P.B - PULL BOX / SQUARE BOX    |
| W.F. WALL FAN OUTLET   | C.F. - CEILING FAN (WALL TYPE) |
| S a, b SWITCHES (LETTERS DENOTES NO. OF GANG)                  |                                |



2  
EE-8

## LOWER GROUND FLOOR CEILING FAN LAYOUT

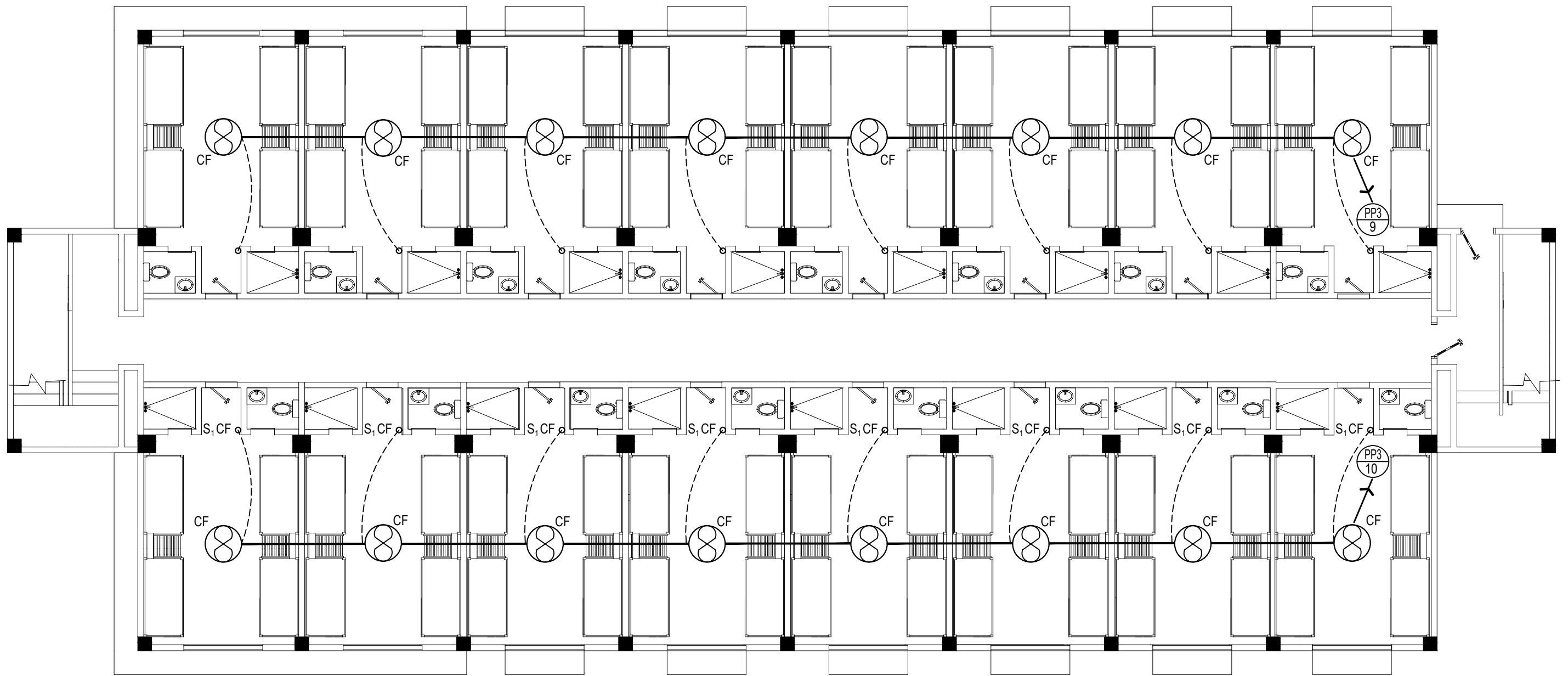
SCALE

1:100

M.


























### ELECTRICAL SYMBOLS :

- |  |   |  |                                |
|--|---|--|--------------------------------|
|  | KILOWATT HOUR METER   |  | CABLE TV OUTLET                |
|  | SERVICE ENTRANCE  |  | TELEPHONE OUTLET               |
|  | BRANCH CIRCUIT HOMERUNTO PANELBOARD                               |  | WEATHERPROOF OUTLET            |
|  | "LP"  |  | RANGE OUTLET                   |
|  | PANELBOARD  |  | REFRIGERATOR OUTLET            |
|  | PINLIGHT WITH LED BULB ( 9 WATTS )                                |  | EMBEDDED CONDUIT               |
|  | PINLIGHT WITH LED BULB ( 5 WATTS )                                |  | CONCEALED CONDUIT              |
|  | TROFFER LIGHT 2-16W LED TUBE<br>(Suspended mounting style)        |  | WALL LAMP                      |
|  | Square Surface Type Down light with LED Bulb 9 Watts              |  | CEILING MOUNTED EXHAUST FAN    |
|  | Track Light Spot Light 9 Watts (Daylight)                         |  | CCTV MONITOR                   |
|  | ENCLOSED AIR CIRCUIT BREAKER<br>(RATED AS INDICATED ON THE PLANS) |  | P.B - PULL BOX / SQUARE BOX    |
|  | DUPLEX CONVENIENCE OUTLET   |  | C.F. - CEILING FAN (WALL TYPE) |
|  | W.F. WALL FAN OUTLET  |  |                                |
|  | S a . b . SWITCHES (LETTERS DENOTES NO. OF GANG)                  |  |                                |

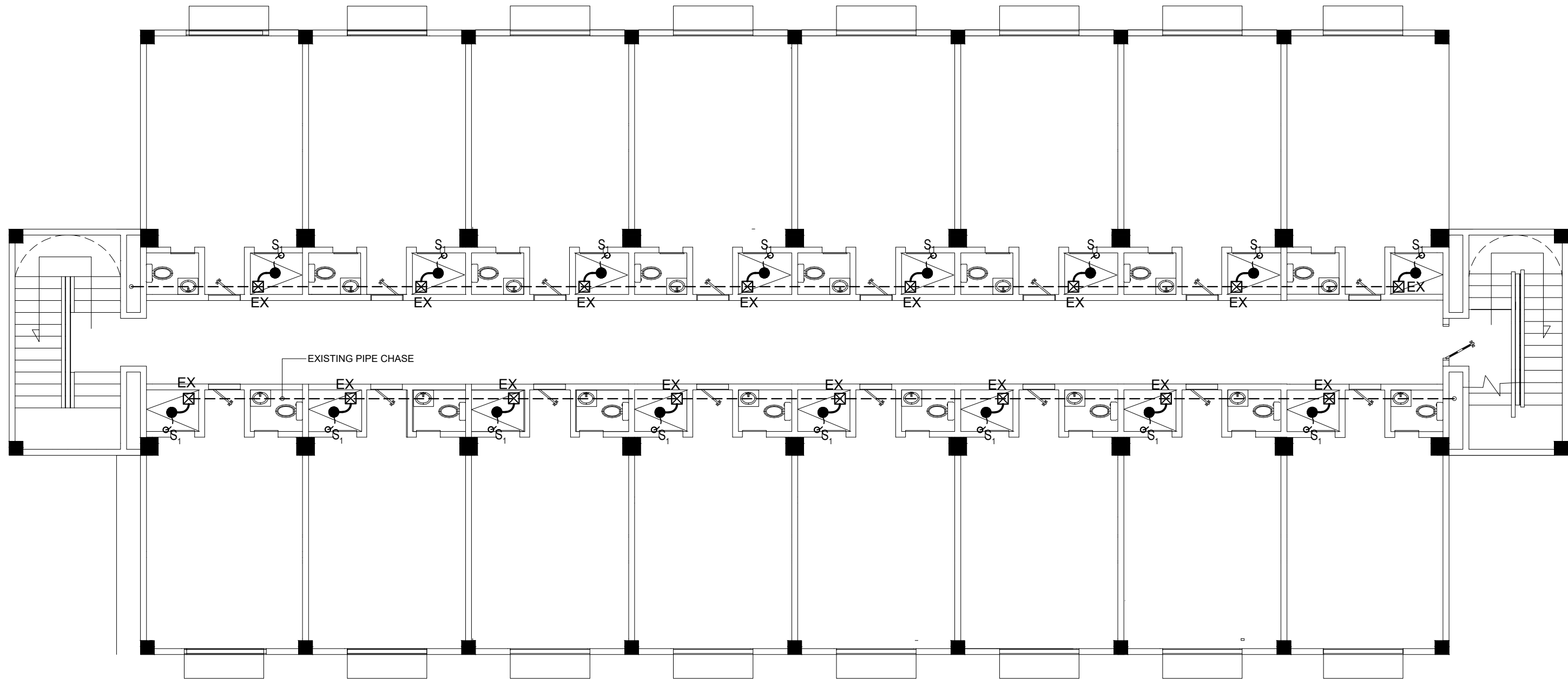


2
EE-8
**THIRD FLOOR CEILING FAN LAYOUT**  
 SCALE 1:100 M.

**ELECTRICAL SYMBOLS :**

- |   |   |   |                                |
|---|---|---|--------------------------------|
|  | KILOWATT HOUR METER   |  | CABLE TV OUTLET                |
|  | SERVICE ENTRANCE  |  | TELEPHONE OUTLET               |
|  | BRANCH CIRCUIT<br>HOMERUNTO PANELBOARD                            |  | WEATHERPROOF OUTLET            |
|  | "LP"<br>PANELBOARD  |  | RANGE OUTLET                   |
|  | PINLIGHT WITH LED BULB ( 9 WATTS )                                |  | REFRIGERATOR OUTLET            |
|  | PINLIGHT WITH LED BULB ( 5 WATTS )                                |  | EMBEDDED CONDUIT               |
|  | TROFFER LIGHT 2-16W LED TUBE<br>(Suspended mounting style)        |  | CONCEALED CONDUIT              |
|  | Square Surface Type Down light with LED Bulb 9 Watts              |  | WALL LAMP                      |
|  | Track Light Spot Light 9 Watts (Daylight)                         |  | CEILING MOUNTED EXHAUST FAN    |
|  | ENCLOSED AIR CIRCUIT BREAKER<br>(RATED AS INDICATED ON THE PLANS) |  | CCTV MONITOR                   |
|  | DUPLEX CONVENIENCE OUTLET   |  | P.B. - PULL BOX / SQUARE BOX   |
|  | W.F. WALL FAN OUTLET  |  | C.F. - CEILING FAN (WALL TYPE) |
|  | S a . b . SWITCHES (LETTERS DENOTES NO. OF GANG)                  |   |                                |





- EXHAUST FAN/VENTILATION FAN CEILING MOUNTED 12"  
 NOTE: TAP TO THE EXISTING VENT PIPE CROSSING ON THE LINE (SEE PLAN)  
 - ELECTRICAL SUPPLY OF THE UNIT SHOULD BE CONNECTED TO THE SWITCH LINE OF THE LIGHT

**2**  
**EE-6**

**SECOND FLOOR EXHAUST FAN LAYOUT**  
 SCALE 1:100 M.

**ELECTRICAL SYMBOLS :**

- |  |  |  |                                |
|--|--|--|--------------------------------|
|  | KILOWATT HOUR METER  |  | CABLE TV OUTLET                |
|  | SERVICE ENTRANCE   |  | TELEPHONE OUTLET               |
|  | BRANCH CIRCUIT HOMERUNTO PANELBOARD                            |  | WEATHERPROOF OUTLET            |
|  | PANELBOARD   |  | RANGE OUTLET                   |
|  | PINLIGHT WITH LED BULB ( 9 WATTS )                             |  | REFRIGERATOR OUTLET            |
|  | PINLIGHT WITH LED BULB ( 5 WATTS )                             |  | EMBEDDED CONDUIT               |
|  | TROFFER LIGHT 2-16W LED TUBE (Suspended mounting style)        |  | CONCEALED CONDUIT              |
|  | Square Surface Type Down light with LED Bulb 9 Watts           |  | WALL LAMP                      |
|  | Track Light Spot Light 9 Watts (Daylight)                      |  | CEILING MOUNTED EXHAUST FAN    |
|  | ENCLOSED AIR CIRCUIT BREAKER (RATED AS INDICATED ON THE PLANS) |  | CCTV MONITOR                   |
|  | DUPLIX CONVENIENCE OUTLET                                      |  | P.B - PULL BOX / SQUARE BOX    |
|  | W.F. WALL FAN OUTLET   |  | C.F. - CEILING FAN (WALL TYPE) |
|  | S a, b. SWITCHES (LETTERS DENOTES NO. OF GANG)                 |  |                                |