

# SCHEDULE OF LOADS

PANEL : LPP1 (LIGHTING & POWER PANEL 1)										
CABLE: 3 - 38.0 SQMM THHN+ 1 - 8.0 SQMM THW			MAIN: 150AT, 200AF, 3P, 230V, MCCB			ENCLOSURE : NEMA 1				
CONDUIT: IMC, 50 MM DIA.			MOUNTING: SURFACE							
PHASE: 3										
VOLTS: 230										
LOCATION: GROUND FLOOR - ROOM										
CKT NO.	CIRCUIT DESCRIPTION	Volts-Amp	VOLT	LOAD IN RATING			CIRCUIT PROTECTION	Size of Conductor	Size of Conduit In MM <sup>2</sup>	Color Code
				AB	CA	BC				
1	LIGHTING OUTLET	15	1500	230	6.52		15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1R, 1B
2	LIGHTING OUTLET	11	1100	230	4.78		15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1R, 1B
3	LIGHTING OUTLET	12	1200	230		5.22	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1B, 1Y
4	LIGHTING OUTLET	11	1100	230		4.78	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1B, 1Y
5	CONVENIENCE OUTLET	6	1080	230		4.70	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
6	CONVENIENCE OUTLET	6	1080	230		4.70	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
7	CONVENIENCE OUTLET	6	1080	230		4.70	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
8	CONVENIENCE OUTLET	6	1080	230		4.70	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
9	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
10	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
11	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
12	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
13	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
14	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
15	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
16	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
17	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
	SPARE									
	SPARE									
	SPARE									
TOTAL		19291	230	41	50	39	150AT, 3P, 230V, MCCB	3-38.0 + G 8.0	IMC, 50	1R, 1B, 1Y, G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = [(50 \times 1.732) + (25\% \times I_{TL})] / DF = 71.28$  Amperes  
 $I_{CB} = [(50 \times 1.732) + (250\% \times I_{TL})] / DF = 89.28$  Amperes

use: 3 - 38.0 SQMM THHN+ 1 - 8.0 SQMM THW IN 50 MM DIA. IMC  
 use: 150AT, 200AF, 3P, 230V, MCCB

G - Means Ground Wire  
 1R - Color RED  
 1B - Color BLACK  
 1Y - Color YELLOW  
 1G - Color GREEN

This Electrical Design is good only for the above connected loads.  
 Any additional electrical load connection in the future is not allowed,  
 Except redesign of electrical load system will be done.

PANEL : LPP2 (LIGHTING & POWER PANEL 2)										
CABLE: 3 - 38.0 SQMM THHN+ 1 - 8.0 SQMM THW			MAIN: 150AT, 200AF, 3P, 230V, MCCB			ENCLOSURE : NEMA 1				
CONDUIT: IMC, 50 MM DIA.			MOUNTING: SURFACE							
PHASE: 3										
VOLTS: 230										
LOCATION: SECOND FLOOR - ROOM										
CKT NO.	CIRCUIT DESCRIPTION	Volts-Amp	VOLT	LOAD IN RATING			CIRCUIT PROTECTION	Size of Conductor	Size of Conduit In MM <sup>2</sup>	Color Code
				AB	CA	BC				
1	LIGHTING OUTLET	13	1300	230	5.65		15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1R, 1B
2	LIGHTING OUTLET	11	1100	230	4.78		15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1R, 1B
3	LIGHTING OUTLET	11	1100	230		4.78	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1B, 1Y
4	LIGHTING OUTLET	12	1200	230		5.22	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1B, 1Y
5	LIGHTING OUTLET	11	1100	230		4.78	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1Y, 1R
6	CONVENIENCE OUTLET	11	1980	230		8.61	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1Y, 1R, G
7	CONVENIENCE OUTLET	9	1620	230		7.04	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
8	CONVENIENCE OUTLET	10	1800	230		7.83	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
9	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
10	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
11	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
12	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1Y, 1R, G
13	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
14	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
15	ACU 1.5 HP	1	1119	230		10.00	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1B, 1Y, G
	SPARE									
	SPARE									
TOTAL		20152	230	45	40	43	150AT, 3P, 230V, MCCB	3-38.0 + G 8.0	IMC, 50	1R, 1B, 1Y, G

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = [(45 \times 1.732) + (25\% \times I_{TL})] / DF = 64.35$  Amperes  
 $I_{CB} = [(45 \times 1.732) + (250\% \times I_{TL})] / DF = 82.35$  Amperes

use: 3 - 38.0 SQMM THHN+ 1 - 8.0 SQMM THW IN 50 MM DIA. IMC  
 use: 150AT, 200AF, 3P, 230V, MCCB

G - Means Ground Wire  
 1R - Color RED  
 1B - Color BLACK  
 1Y - Color YELLOW  
 1G - Color GREEN

This Electrical Design is good only for the above connected loads.  
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PANEL : MDP (MAIN DISTRIBUTION PANEL)											
CABLE: 3 - 80.0 SQMM THHN+ 1 - 38.0 SQMM THW			MAIN: 200AT, 300AF, 3P, 230V, MCCB			ENCLOSURE : NEMA 1					
CONDUIT: IMC, 63 MM DIA.			MOUNTING: SURFACE								
PHASE: 3											
VOLTS: 230											
LOCATION: GROUND FLOOR - ROOM											
CKT NO.	CIRCUIT DESCRIPTION	Volts-Amp	VOLT	LOAD IN RATING			CIRCUIT PROTECTION	Size of Conductor	Size of Conduit In MM <sup>2</sup>	Color Code	
				AB	CA	BC					
1	LIGHTING AND POWER PANEL 1	LPP1	19291	230	41	50	39	150AT, 3P, 230V, MCCB	3-38.0 + G 8.0	IMC, 50	1R, 1B, 1Y, G
2	LIGHTING AND POWER PANEL 2	LPP2	20152	230	45	40	43	150AT, 3P, 230V, MCCB	3-38.0 + G 8.0	IMC, 50	1R, 1B, 1Y, G
3	WATER PUMP PANEL	WPP	1119	230			10	20AT, 2P, 230V, MCCB	2-3.5 + G 2.0	PVC, 20	1R, 1B, G
	SPARE										
4	FIRE ALARM SYSTEM	FACP	500	230			2	15AT, 2P, 230V, MCCB	2-2.0	PVC, 20	1R, 1B
	SPARE										
TOTAL		41062	230	86	90	93	200AT, 3P, 230V, MCCB	3-80.0 + G 38.0	IMC, 63	1R, 1B, 1Y, G	

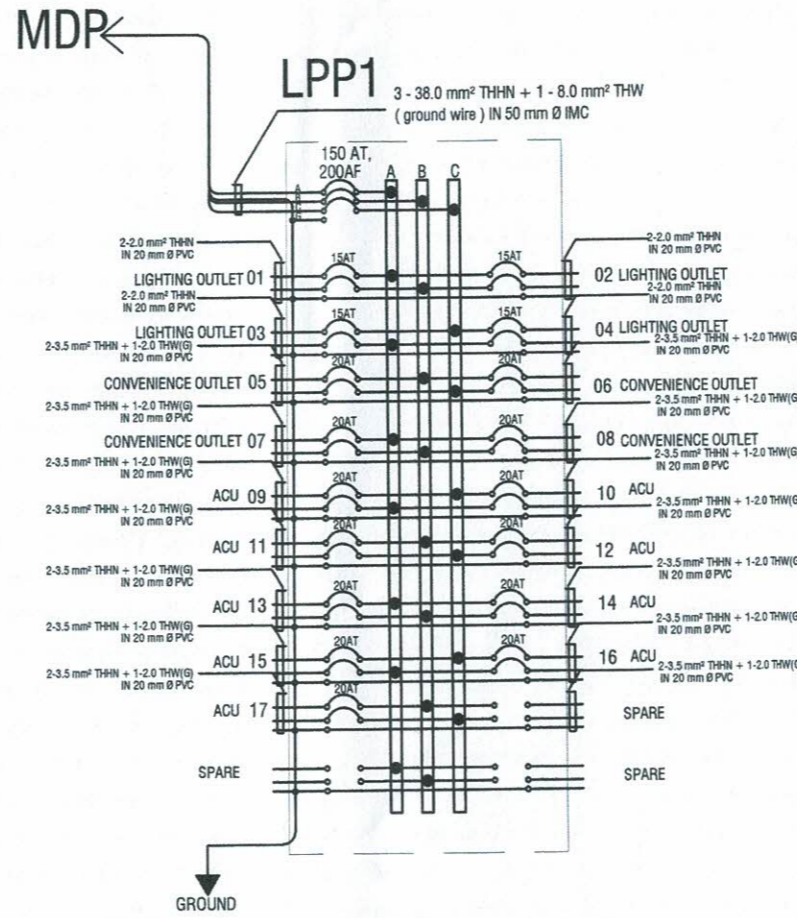
MAIN FEEDER and CURRENT PROTECTION COMPUTATION:

NOTE:  $I_{FL} = [(83 \times 1.732) + (125\% \times I_{TL})] / DF = 138.86$  Amperes  
 $I_{CB} = [(83 \times 1.732) + (250\% \times I_{TL})] / DF = 148.86$  Amperes

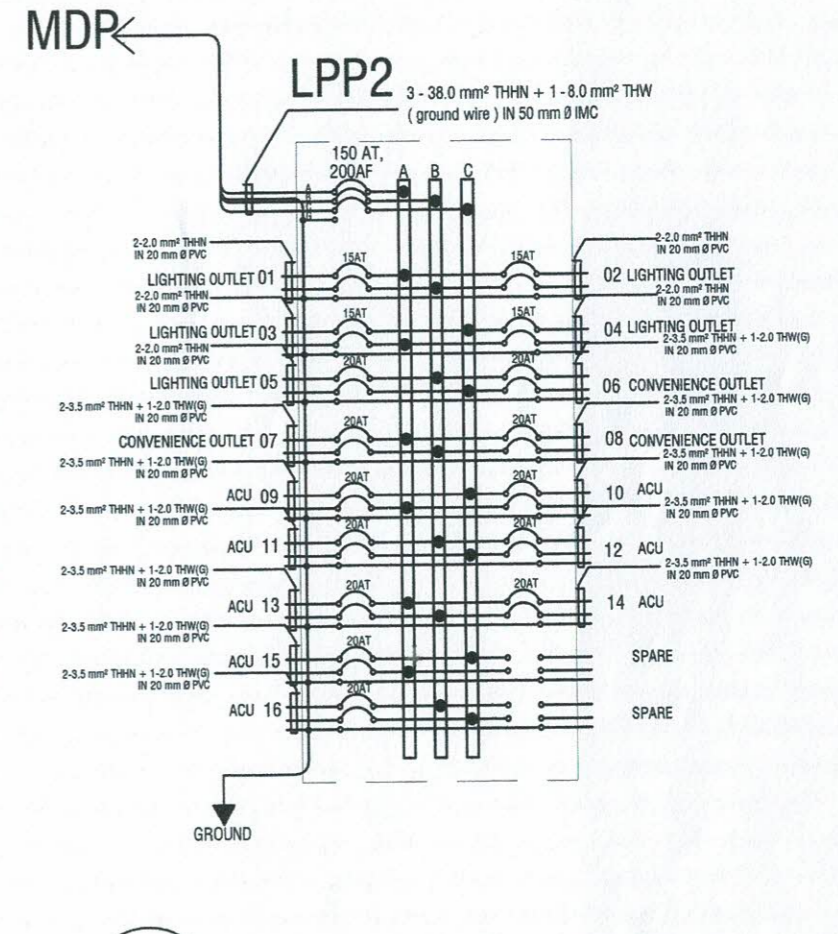
use: 3 - 80.0 SQMM THHN+ 1 - 38.0 SQMM THW IN 63 MM DIA. IMC  
 use: 200AT, 300AF, 3P, 230V, MCCB

G - Means Ground Wire  
 1R - Color RED  
 1B - Color BLACK  
 1Y - Color YELLOW  
 1G - Color GREEN

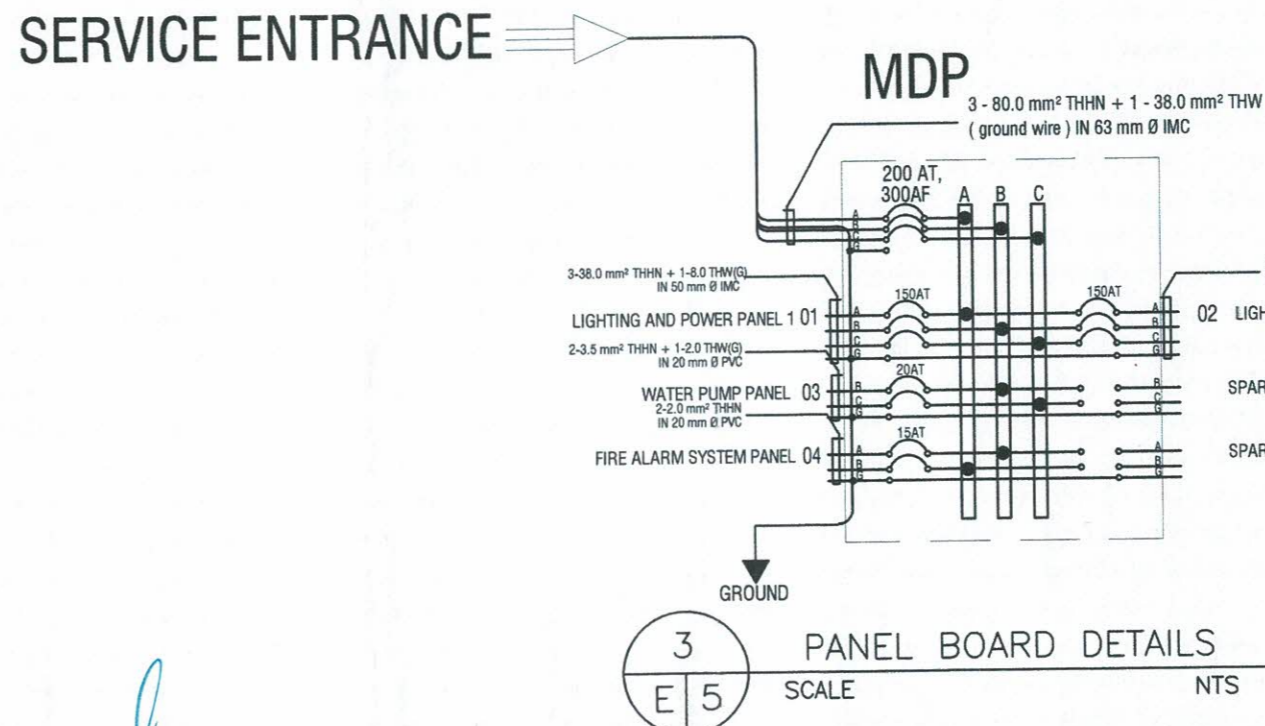
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1 PANEL BOARD DETAILS  
 E 5 SCALE NTS

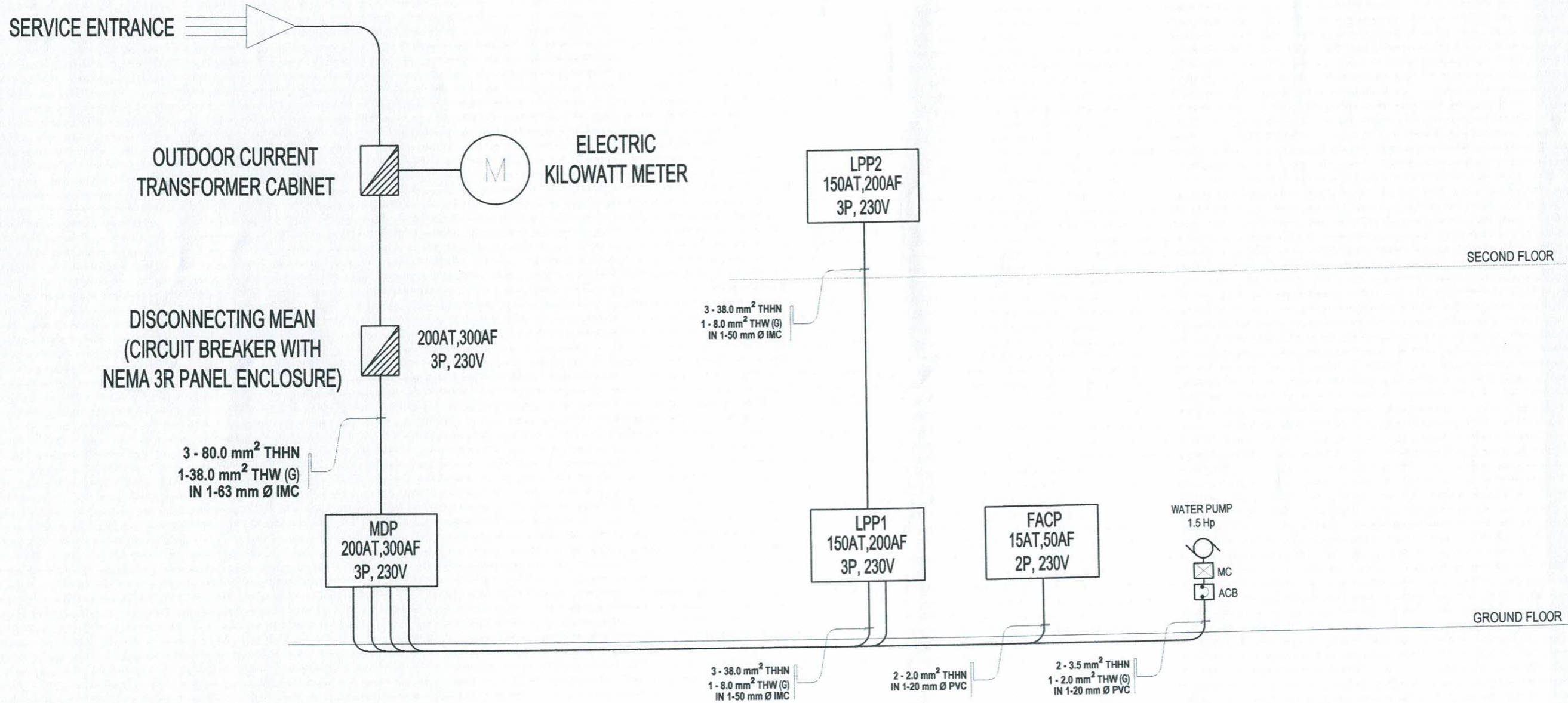


2 PANEL BOARD DETAILS  
 E 5 SCALE NTS



3 PANEL BOARD DETAILS  
 E 5 SCALE NTS

PREPARED BY:	PROF. ELECTRICAL ENGR. :	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:	
R.J. R. SANCHEZ PPU	R. P. PEÑA OVPPD	C. M. SIGNO CAMPUS ADMINISTRATOR	E. N. RODEROS PPU	O. B. DELOS REYES DIRECTOR	M. J. D. TEPORA VPPD	C. A. POLINGA VPASS	H. D. ROBLES PRES	CONSTRUCTION OF ADMINISTRATION BUILDING CAVITE STATE UNIVERSITY CARMONA CAMPUS	CAVITE STATE UNIVERSITY	E - 5



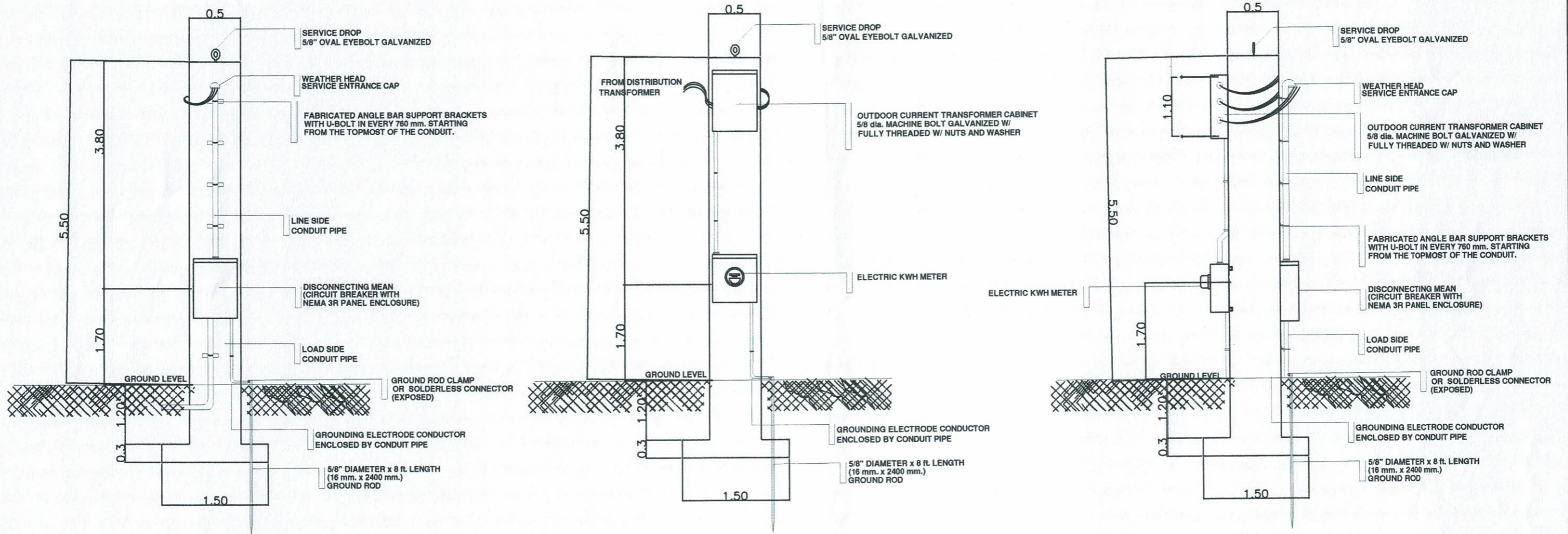
1  
E 6 SCALE NTS  
SINGLE LINE DIAGRAM

	PREPARED BY:	PROF. ELECTRICAL ENGR. :	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	R.J. R. SANCHEZ PPU	R. [Signature] PPU	C. M. SIGNO CAMPUS ADMINISTRATOR CARMONA CAMPUS	E. N. RODEROS PPU	O. B. DELOS REYES DIRECTOR PLANNING OFFICE	M.J. D. TEPEORA VPPD CVSU	C. [Signature] VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ADMINISTRATION BUILDING CAVITE STATE UNIVERSITY CARMONA CAMPUS	CAVITE STATE UNIVERSITY

FRONT VIEW

REAR VIEW

LEFT SIDE VIEW



CONCRETE PEDESTAL DETAILS

SCALE

NTS

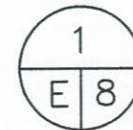
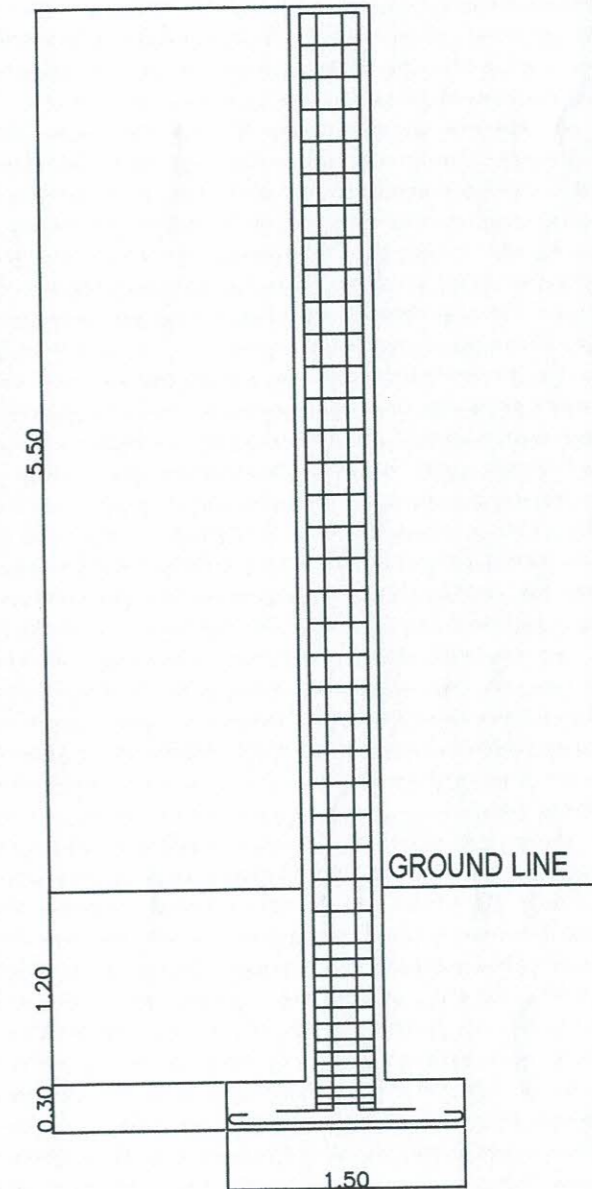
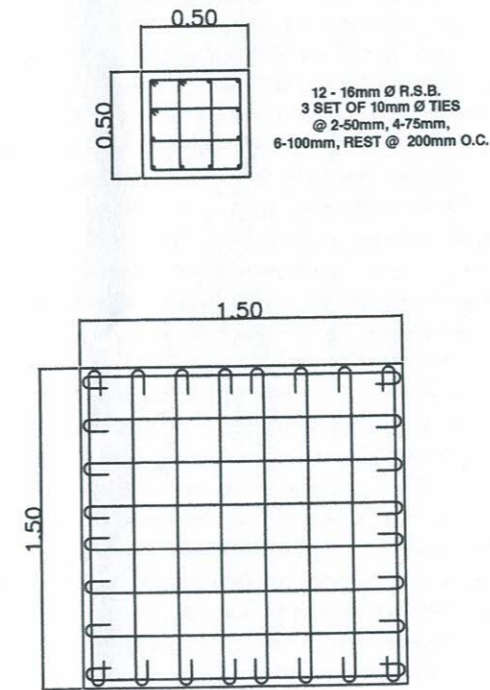
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### SCHEDULE OF FOOTINGS

NAME	TYPE	THICKNESS	SIZE (LxW)	DEPTH	REINFORCEMENT			
					TOP		BOTTOM	
					ALONG L	ALONG W	ALONG L	ALONG W
F1	ISOLATED	300 MM	1500 x 1500 MM	1500 MM	----	----	8-16 MM Ø @ 150 MM	8-16 MM Ø @ 150 MM

COLUMN	DIMENSION	REINFORCEMENT	NO. OF TIES & SPACING
PEDESTAL	200 MM X 500 MM	12 - 16mm Ø R.S.B.	3 SET OF 10mm Ø TIES @ 2-50mm, 4-75mm, 6-100mm, REST @ 200mm O.C.

### COLUMN DETAILS



CONCRETE PEDESTAL DETAILS

SCALE

NTS

	PREPARED BY:	PROF. ELECTRICAL ENGR. :	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO:
	R. J. R. SANCHEZ PPU	R. [Signature] PPU	C. M. SIGNO CAMPUS ADMINISTRATOR CARMONA CAMPUS	E. N. RODEBOS OVPPD	O. B. DELOS REYES DIRECTOR PLANNING OFFICE	M. J. D. TEPORA VPPD CVSU	C. A. POLINGA VPASS CVSU	H. D. ROBLES PRES CVSU	CONSTRUCTION OF ADMINISTRATION BUILDING CAVITE STATE UNIVERSITY CARMONA CAMPUS	CAVITE STATE UNIVERSITY