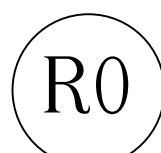
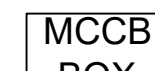


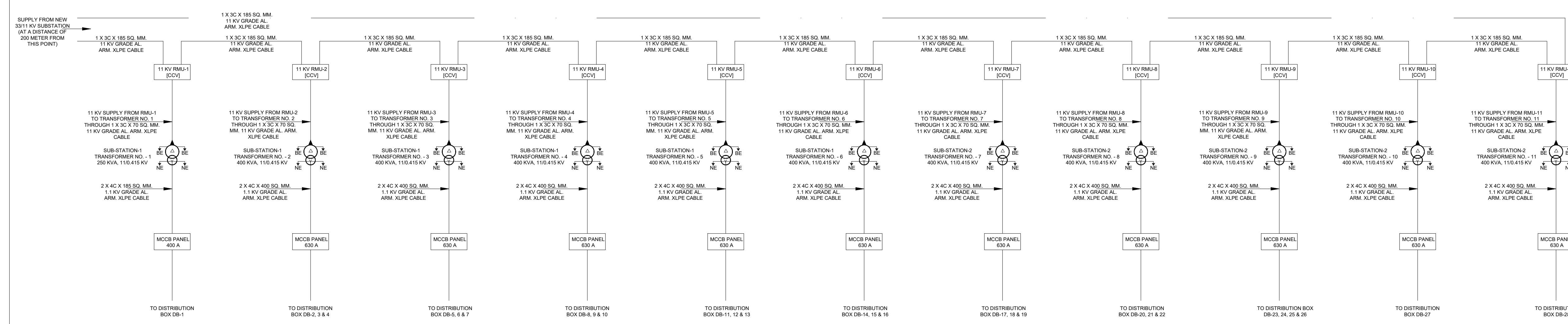
SUPPLY FROM NEW 33/11
KV SUBSTATION (AT A
DISTANCE OF 200 METER
FROM THIS POINT)



S. No.	Plot No.	Property Type	Connection Type	Area of Plot (Sq. Mtr.)	Load for Residential (Commercial P.F. %)	Load for Residential (Commercial P.F. %)	Load on Transformer (KVA) @ 0.9 P.F. %	Transformer No. & Capacity	Load on Cable (KW)	Distribution Box & Feeder No.	Cable No.	Cable Size & Types	Remarks
SUBSTATION-1 (TRANSFORMER-1, 2, 3, 4, & 6)					1376.55	151.72	1914.65	5X 400 KVA 1 X 250 KVA				1 Nos. 3 Core 185 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
TRANSFORMER-1					46.53	51.70	6462	TR-01 : 250 KVA			LTCLB-1	2 Nos. 4 Core 185 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-80	Commercial	Single-Point	413.50	46.53	51.70	6462		46.53	D8-1	LTFCBL-1	1 Nos. 4 Core 185 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
TRANSFORMER-2					236.23	264.70	330.98	TR-02 : 400 KVA			LTCLB-2	2 Nos. 4 Core 400 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-81	Residential	Multi-Point	982.20	16.56	18.40	23.00						
2	H-82	Residential	Multi-Point	920.40	23.01	25.47	31.96						
3	H-83	Residential	Multi-Point	966.78	24.92	27.69	34.61						
4	H-84	Residential	Multi-Point	908.30	24.92	27.69	34.61		160.03	D8-2	LTFCBL-2	2 Nos. 4 Core 120 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
5	H-85	Residential	Multi-Point	1412.50	35.31	39.24	49.05						
6	H-86	Residential	Multi-Point	1412.50	35.31	39.24	49.05						
7	H-70	Residential	Multi-Point	782.00	19.55	21.72	27.15						
8	H-71	Residential	Multi-Point	782.00	19.55	21.72	27.15		78.20	D8-3	LTFCBL-3	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
9	H-72	Residential	Multi-Point	782.00	19.55	21.72	27.15						
10	H-73	Residential	Multi-Point	782.00	19.55	21.72	27.15						
TRANSFORMER-3					243.06	270.97	337.59	TR-03 : 400 KVA			LTCLB-3	2 Nos. 4 Core 400 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-74	Residential	Multi-Point	824.30	20.61	22.90	28.62						
2	H-75	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-4	LTFCBL-4	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
3	H-76	Residential	Multi-Point	824.30	20.61	22.90	28.62						
4	H-77	Residential	Multi-Point	824.30	20.61	22.90	28.62						
5	H-41	Residential	Multi-Point	824.30	20.61	22.90	28.62						
6	H-42	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-5	LTFCBL-5	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
7	H-43	Residential	Multi-Point	824.30	20.61	22.90	28.62						
8	H-44	Residential	Multi-Point	824.30	20.61	22.90	28.62						
9	H-45	Residential	Multi-Point	782.00	19.55	21.72	27.15						
10	H-46	Residential	Multi-Point	782.00	19.55	21.72	27.15		78.20	D8-6	LTFCBL-6	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
11	H-47	Residential	Multi-Point	782.00	19.55	21.72	27.15						
12	H-48	Residential	Multi-Point	782.00	19.55	21.72	27.15						
TRANSFORMER-4					301.71	335.24	419.05	TR-04 : 400 KVA			LTCLB-4	2 Nos. 4 Core 400 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-26	Residential	Multi-Point	782.00	19.55	21.72	27.15						
2	H-27	Residential	Multi-Point	782.00	19.55	21.72	27.15						
3	H-28	Residential	Multi-Point	782.00	19.55	21.72	27.15						
4	H-29	Residential	Multi-Point	782.00	19.55	21.72	27.15		136.85	D8-7	LTFCBL-7	1 Nos. 4 Core 120 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
5	H-30	Residential	Multi-Point	782.00	19.55	21.72	27.15						
6	H-31	Residential	Multi-Point	782.00	19.55	21.72	27.15						
7	H-32	Residential	Multi-Point	782.00	19.55	21.72	27.15						
8	H-33	Residential	Multi-Point	824.30	20.61	22.90	28.62						
9	H-34	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-8	LTFCBL-8	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
10	H-35	Residential	Multi-Point	824.30	20.61	22.90	28.62						
11	H-36	Residential	Multi-Point	824.30	20.61	22.90	28.62						
12	H-16	Residential	Multi-Point	824.30	20.61	22.90	28.62						
13	H-15	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-9	LTFCBL-9	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
14	H-17	Residential	Multi-Point	824.30	20.61	22.90	28.62						
15	H-18	Residential	Multi-Point	824.30	20.61	22.90	28.62						
TRANSFORMER-5					301.71	335.24	419.05	TR-05 : 400 KVA			LTCLB-5	2 Nos. 4 Core 400 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-19	Residential	Multi-Point	782.00	19.55	21.72	27.15						
2	H-20	Residential	Multi-Point	782.00	19.55	21.72	27.15						
3	H-21	Residential	Multi-Point	782.00	19.55	21.72	27.15						
4	H-22	Residential	Multi-Point	782.00	19.55	21.72	27.15		136.85	D8-10	LTFCBL-10	1 Nos. 4 Core 120 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
5	H-23	Residential	Multi-Point	782.00	19.55	21.72	27.15						
6	H-24	Residential	Multi-Point	782.00	19.55	21.72	27.15						
7	H-25	Residential	Multi-Point	782.00	19.55	21.72	27.15						
8	H-7	Residential	Multi-Point	824.30	20.61	22.90	28.62						
9	H-8	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-11	LTFCBL-11	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
10	H-9	Residential	Multi-Point	824.30	20.61	22.90	28.62						
11	H-10	Residential	Multi-Point	824.30	20.61	22.90	28.62						
12	H-3	Residential	Multi-Point	824.30	20.61	22.90	28.62						
13	H-4	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-12	LTFCBL-12	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
14	H-5	Residential	Multi-Point	824.30	20.61	22.90	28.62						
15	H-6	Residential	Multi-Point	824.30	20.61	22.90	28.62						
TRANSFORMER-6					247.30	274.77	343.47	TR-06 : 400 KVA			LTCLB-6	2 Nos. 4 Core 400 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
1	H-38	Residential	Multi-Point	824.30	20.61	22.90	28.62						
2	H-40	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-13	LTFCBL-13	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
3	H-78	Residential	Multi-Point	824.30	20.61	22.90	28.62						
4	H-79	Residential	Multi-Point	824.30	20.61	22.90	28.62						
5	H-13	Residential	Multi-Point	824.30	20.61	22.90	28.62						
6	H-14	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-14	LTFCBL-14	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
7	H-11	Residential	Multi-Point	824.30	20.61	22.90	28.62						
8	H-12	Residential	Multi-Point	824.30	20.61	22.90	28.62						
9	H-31	Residential	Multi-Point	824.30	20.61	22.90	28.62		82.43	D8-15	LTFCBL-15	1 Nos. 4 Core 70 Sq. mm. Al Arm. XLPE Cables [1.1 KV Grade, LT Cable]	
10	H-2	Residential	Multi-Point	824.30	20.61	22.90	28.62						
11	H-11	Residential	Multi-Point	824.30	20.61	22.90	28.62						
12	H-12	Residential	Multi-Point	824.30	20.61	22.90	28.62						

SUBSTATION-2 (TRANSFORMER-7, 8, 9, 10 & 11)				1562.82	1736.45	2170.58	5 X 400 KVA					1 Nos. 3 Core 185 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade HT Cable)	
TRANSFORMER-7				308.20	342.45	428.06	TR-07 : 400 KVA					2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
1	H-52	Residential	Multi-Point	782,000	19.55	21.72	27.15						
2	H-53	Residential	Multi-Point	782,000	19.55	21.72	27.15						
3	H-54	Residential	Multi-Point	782,000	19.55	21.72	27.15	97.75	DB-16	LTFGBL-16		1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
4	H-55	Residential	Multi-Point	782,000	19.55	21.72	27.15						
5	H-56	Residential	Multi-Point	782,000	19.55	21.72	27.15						
6	H-57	Residential	Multi-Point	782,000	19.55	21.72	27.15						
7	H-58	Residential	Multi-Point	826,160	20.65	22.95	28.69					1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
8	H-59	Residential	Multi-Point	999,210	24.98	27.76	34.69	112.70	DB-17	LTFGBL-17			
9	H-60	Residential	Multi-Point	999,210	24.98	27.76	34.69						
10	H-61	Residential	Multi-Point	901,600	22.54	25.04	31.31						
11	H-62	Residential	Multi-Point	782,000	19.55	21.72	27.15					1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
12	H-63	Residential	Multi-Point	782,000	19.55	21.72	27.15						
13	H-64	Residential	Multi-Point	782,000	19.55	21.72	27.15	97.75	DB-18	LTFGBL-18			
14	H-65	Residential	Multi-Point	782,000	19.55	21.72	27.15						
15	H-66	Residential	Multi-Point	782,000	19.55	21.72	27.15						
TRANSFORMER-8				231.13	256.82	321.02	TR-08 : 400 KVA					2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
1	H-49	Residential	Multi-Point	782,000	19.55	21.72	27.15						
2	H-50	Residential	Multi-Point	782,000	19.55	21.72	27.15						
3	H-51	Residential	Multi-Point	782,000	19.55	21.72	27.15	117.30	DB-19	LTFGBL-19		1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
4	H-52	Residential	Multi-Point	782,000	19.55	21.72	27.15						
5	H-53	Residential	Multi-Point	782,000	19.55	21.72	27.15						
6	H-54	Residential	Multi-Point	782,000	19.55	21.72	27.15						
7	H-57	Residential	Multi-Point	955,500	23.89	26.54	33.18						
8	H-58	Residential	Multi-Point	955,500	23.89	26.54	33.18	88.99	DB-20	LTFGBL-20		1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
9	H-59	Residential	Multi-Point	824,320	20.61	22.90	28.62						
10	H-100	Residential	Multi-Point	824,320	20.61	22.90	28.62						
11	EW5 & LG1	Residential	Multi-Point	993,750	24.84	27.60	34.51	24.84	DB-21	LTFGBL-21		1 Nos. 4 Core 35 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
TRANSFORMER-9				319.58	355.08	443.85	TR-09 : 400 KVA					2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
1	H-49	Residential	Multi-Point	838,500	20.96	23.29	29.11						
2	H-50	Residential	Multi-Point	838,500	20.96	23.29	29.11	104.10	DB-22	LTFGBL-22		1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
3	H-51	Residential	Multi-Point	838,500	20.96	23.29	29.11						
4	H-52	Residential	Multi-Point	824,320	20.61	22.90	28.62						
5	H-53	Residential	Multi-Point	824,320	20.61	22.90	28.62						
6	H-54	Residential	Multi-Point	824,320	20.61	22.90	28.62						
7	H-55	Residential	Multi-Point	824,320	20.61	22.90	28.62						
8	H-56	Residential	Multi-Point	824,320	20.61	22.90	28.62	103.04	DB-23	LTFGBL-23		1 Nos. 4 Core 120 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
9	H-57	Residential	Multi-Point	824,320	20.61	22.90	28.62						
10	H-58	Residential	Multi-Point	824,320	20.61	22.90	28.62						
11	H-101	Residential	Multi-Point	824,320	20.61	22.90	28.62						
12	H-102	Residential	Multi-Point	824,320	20.61	22.90	28.62						
13	H-103	Residential	Multi-Point	824,320	20.61	22.90	28.62	82.43	DB-24	LTFGBL-24		1 Nos. 4 Core 70 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
14	H-104	Residential	Multi-Point	824,320	20.61	22.90	28.62						
15	Common Load				30.00	33.33	41.67	30.00	DB-25	LTFGBL-25		1 Nos. 4 Core 70 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
TRANSFORMER-10				419.45	466.06	582.58	TR-10 : 400 KVA					2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
1	Type 2.1	Commercial	Single-Point	3728,480	419.45	466.06	582.58	419.45	DB-26	LTFGBL-26		2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
TRANSFORMER-11				284.45	316.05	395.07	TR-11 : 400 KVA					2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	
1	Type 2.2	Commercial	Single-Point	2528,420	284.45	316.05	395.07	284.45	DB-27	LTFGBL-27		2 Nos. 4 Core 400 Sq. mm. Al. Arm. XLPE Cables (1.1 KV Grade LT Cable)	

S.NO.	SYMBOL	DESCRIPTION	Revision Notes:		
			Rev. No.	Date	Description
1.		300MM(W) x 300MM(L) x 300MM(D) FOR LT CHAMBER			
2.		1500MM(W)X1500MM(L)X1500MM(D) FOR HT CHAMBER			
3.		450MM(W) x 450MM(L) x 600MM(D) FOR LT CHAMBER			
4.		LT DISTRIBUTION BOX			
5.		Ø200MM HT HDPE PIPE			
5.		Ø150MM LT HDPE PIPE	Sheet No.: 1/1		
6.		Ø100MM LT HDPE PIPE	Drawn By: Er. SACHIN GARG		
7.		Ø40MM LT HDPE PIPE	Checked By: Er. ANIL K. GOYAL		
8.		11KV RMU UNIT	Date: 29.05.2021		
9.		11/0.415 KV TRANSFORMER	Rev. No.		NORTH:
10.		MCCB BOX			



<u>ELECTRICAL CONSULTANTS:</u>  CEMG ENGINEERS & CONSULTANTS PVT. LIMITED 1, Ellora Complex, Khandari Crossing, Surya Nagar, Agra-282002. E- mail: ansh13579@gmail.com	
<u>PROJECT:</u> SHRI RADHA GULMOHAR, MATHURA	
<u>DRAWING TITLE:</u> ELECTRICAL LAYOUT	