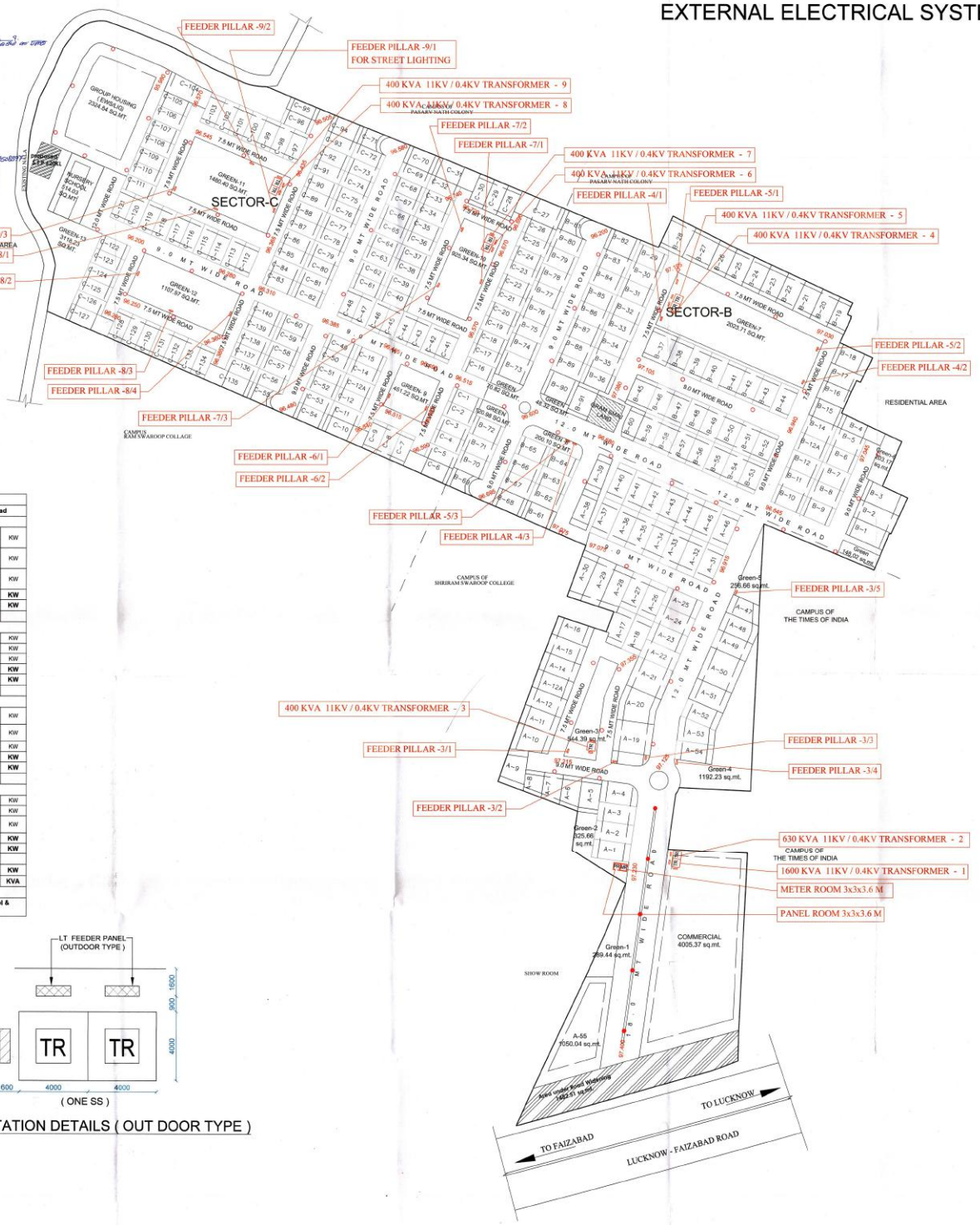
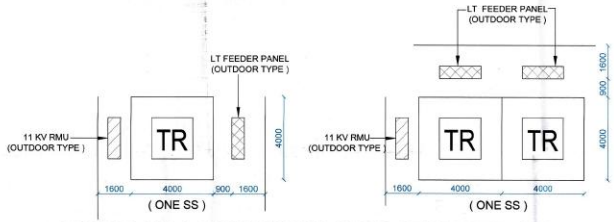
EXTERNAL ELECTRICAL SYSTEM



Electrical load Calculation of Spring Garden at Lucknow											
S.no	Description		No. of unit		Load per Unit					Total Load	
	Sub Head (A) - Plots										
1	Type A (283 sq M @ 50 W/sqM =	14.64 KW)	57	units	@	14.64	KW		=	834	KW
2	Type - B (244 sq M @ 50 W/sqM =	12.20 KW)	92	units	@	12.20	KW		=	1122	KW
3	Type - C (195 sq M @ 50 W/sqM =	9.76 KW)	141	units	@	9.76	KW		=	1376	KW
								Total Load	=	3332	KW
					By taking Diversity factor			50 %	=>	1666	KW
	Electrical Load (A) =					1670	KW				
	Sub Head (B) - EWS / LIG										
4	EWS		36	units	@	2.00	KW		=	72	KW
5	LIG		36	units	@	3.00	KW		=	108	KW
6	Common area light		2	nos	@	0.50	KW		=	1	KW
								Total Load	=	181	KW
					By taking Diversity factor			50 %	=>	91	KW
	Electrical Load (B) =					90	KW				
	Sub Head (C) - Common Facilities										
7	Commercial (9800 sqm @ 150 watt/sqm)		1	units	@	1470.00	KW		=	1470	KW
8	Hotel sqm @ 150 watt/sqm)	(3000	1	units	@	450.00	KW		=	450	KW
9	School / Facilities								=	30	KW
								Total Load	=	1950	KW
					By taking Diversity factor			75 %	=>	1463	KW
	Electrical Load (C) =					1460	KW				
	Sub Head (D) - Common Services										
10	Water Supply Pumps / Tube wells		1	Job	@	60	KW		=	60	KW
11	STP		1	Job	@	50	KW		=	50	KW
12	External / Gate / Landscape lighting		1	Job	@	10	KW		=	10	KW
								Total Load	=	120	KW
					By taking Diversity factor			90 %	=>	108	KW
	Electrical Load (D) =					110	KW				
	Total Electrical Load (A+B+C+D)								=	3330	KW
					By taking Power factor			0.90	=>	3700	KVA
	Total Electrical Load = 3700 KVA										
	Suggested rating of 11 KV / 0.4 KV Transformers - 7 nos 400 KVA (for Plotted area, EWS/LIG, school & Common Services), 1 nos 630 KVA (for Hotel) & 1 nos 1600 KVA (for commercial)										



TYPICAL 11/0.4 CONVENTIONAL SUB STATION DETAILS (OUT DOOR TYPE)

PROPOSED TOWNSHIP (SPRING GARDEN)
AT KHASRA NO.
(374-376,380,381,383-387,404-407,419-422)
VILLAGE UTTARDHAUNA AT
FAIZABAD ROAD,LUCKNOW.

LEGEND :

S. No.	SYMBOL	DESCRIPTION
1.	○	8 METER HIGH POLE WITH 1 x 70 WATT LED STREET LIGHT LUMINARE
2.	●	8 METER HIGH POLE WITH 2 x 70 WATT LED STREET LIGHT LUMINARE
3.	TR	11KV / 0.4KV TRANSFORMER
4.	FP	FEEDER PILLAR
5.	RMU	11KV RING MAIN UNIT (OUTDOOR TYPE)
6.		FORMATION LEVEL (FINISHED ROAD LEVEL)
7.		
8.		
9.		

CLIENT

SPRING GARDEN
B-46 ,VIBHUTI KHAND,
GOMTI NAGAR, LUCKNOW.

SERVICESCONSULTANT

Shiv Sunder Constructions & Consultants (P) Ltd.
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Mob No -9936190952
email : enggimate@gmail.com

ARCHITECT

dimension plus studio
architecture | landscape | interiors | planning
add:Vijay Khand, Gomti Nagar,Lucknow , U.P.

DWGTITLE

EXTERNAL ELECTRICAL SYSTEM

DATE	NORTH
18 nov 2018	
SCALE	DWG NO.
1:650	SPG/LOP-05
CLIENT'S SIGN	ARCHITECT'S SIGN

For SPRING GARDEN
PARTNER