REVISED TOWER
ALREADY SANCTIONED

LOAD CALCULATION

Sr No.	Tower	Total Floors	Area in SQ Meter	Area in Sq Ft	Load density watt / sq ft	CL (KW)	Div	IMD (KW)
	Load Taken as per UPERC							
	For Domestic -500W/10 Sqmtrs							
	For commercial 1500W/10sq meter							
1	1	2B + G + 19	8782.195	94496.4	0.5	439	0.5	220
2	2	2B + G + 19	8356.380	89914.6	0.5	418	0.5	209
3	3	2B + G + 19	7655.261	82370.6	0.5	383	0.5	191
4	4	2B + G + 19	7400.672	79631.2	0.5	370	0.5	185
5	5	2B + G + 19	7655.261	82370.6	0.5	383	0.5	191
6	6	2B + G + 19	9035.030	97216.9	0.5	452	0.5	226
7	7	2B + G + 19	7614.565	81932.7	0.5	381	0.5	190
8	Commercial	G	507.063	5456.0	1.5	76	0.75	57
9	Community	G	673.012	7241.6	1.5	101	0.75	76
10	Upper Basement	1	10855.840	116808.8	0.6	651	0.8	521
11	Lower Basement	1	10808.364	116298.0	0.6	649	0.8	519
12	Stilt	1	1594.430	17156.1	0.5	80	0.8	64
13	Guard Room		18.000	193.7	0.5	1	0.5	0
	External Lighting					60	0.6	36
	Plumbing Load					70	0.6	42
	Ventilation Load					150	0.7	105
	STP					80	0.8	64
	Fire Fighting					150	-	15
	Lift 14No @12.5 KW					175	1	175
	Miscellaneous					100	1	100
	Grand Total		**80956.073**	871087.3				**3186.35**
	OVERALL DIVERSITY @ 60%			1911.8				
	SELECTION OF SIZE OF TRANSFORMER							
	KVA Rating = K.W./p.f.		=	2124.2				
	Size of Transformer Considering loading @ 85%		=	2499.1				
			Say	2500.0				
HENCE SELECT 2 NOS. 1250 KVA, 11 KV/433V DRY TYPE TRANSFORMERS.								
S. No.	**DESCRIPTION**			TOTAL				
	CONSIDER FLAT 65% loading for DG sets		**SAY**	1242.7				
	KVA Rating = K.W./p.f.		=	1380.8				
	G SET RATING @ 85% LOADING (1452 KVA / 0.85)			1462.0				
			SAY	1462.0				
	HENCE SELECT 2 NOS. 750 KVA, 415 V DG SETS.							

AREA CHART

PLOT AREA	=	13800.00 SQM
PERMISSIBLE F.A.R. @2.75	=	37950.00 SQM
PURCHASABLE FAR @0.7425	=	10246.50 SQM
TOTAL PERMISSABLE+PURCHASABLE FAR (2.75+0.7425)	**=**	**48196.50 SQM**
GREEN FAR @ 5%	=	2409.83 SQM
TOTAL PERMISSABLE+PURCHASABLE+GREEN FAR (2.75+0.7425+0.05)	**=**	**50606.33 SQM**
PERMISSIBLE GROUND COVERAGE@ 35%	=	4830.00 SQM
PERMISSIBLE AREA OF COMMERCIAL @1%of FAR (2.75)	=	**379.50 SQM**
PURCHASABLE COMMERCIAL AREA	=	103.50 SQM
PERMISSABLE AREA OF COMMERCIAL	**=**	**483.00 SQM**
TOTAL PERMISSABLE AREA OF COMMERCIAL	**=**	**483.00 SQM**
PROPOSED F.A.R.	**=**	**50555.63 SQM**
PROPOSED GROUND COVERAGE @ (32.50%)	=	4485.84 SQM
PROPOSED COMMERCIAL AREA @ (0.998%)	=	482.95 SQM
PROPOSED LOWER BASEMENT AREA	=	10808.36 SQM
PROPOSED UPPER BASEMENT AREA	=	10855.84 SQM
PROPOSED STILT AREA	=	1594.43 SQM
TOTAL PERMISSIBLE ANCILLARY AREA	**=**	**7590.95 SQM**
PROPOSED ANCILLARY AREA @(14.52%)	**=**	**7351.01 SQM**

DENSITY/POPULATION

PERMISSIBLE DENSITY (1650+450) = 2100 PPH	
PERM. DUS @ 3.5 FAR = (2100*1.38)/4.5 =644	
TOTAL PERM. DUS = 644	**SAY 644**
TOTAL NO. OF FLATS= 557 FLATSX4.5=2506.5 PERSONS	
TOTAL POPULATION ACHIEVED=2507PERSONS	
PROPOSED DENSITY =2507/1.38 =1816.66 PPH	SAY 1817 PPH

PARKING CALCULATION

PARKING REQUIRED FOR HOUSING = 50207.85/80 SQM	627.8353	ECS
PARKING REQUIRED FOR COMMERCIAL = 507.15/50 SQM	7.59	ECS
PARKING REQUIRED FOR COMMUNITY = 673.012/100 SQM	6.730118	ECS
CAR PARKING REQUIRED=627.598+10.143+6.730=644.471 CARS	SAY 645 CARS	
TOTAL PROPOSED PARKING ON LOWER BASEMENT= 280.930 CARS		
TOTAL PROPOSED PARKING ON UPPER BASEMENT= 268.859 CARS		
TOTAL PROPOSED PARKING ON STILT= 53.148 CARS		
TOTAL PROPOSED PARKING ON SURFACE=46 CARS		
TOTAL PROPOSED PARKING=280.930+268.859+53.148+46=648.937 ECS	SAY 649 CARS	

GREEN AREA DETAIL

TOTAL OPEN AREA OF THE SITE
PLOT AREA - TOTAL GR.COVERAGE
= 13800.00 - 4485.840 = 9314.16 SQM

GREEN AREA REQUIRED

= 50% OF OPEN AREA =9314.16/2 = 4657.08 SQM
PROP. GREEN AREA= 4720.256 SQM

REQUIRMENT OF TREES

ONE TREE PER 100 SQM OF OPEN AREA

=	OPEN AREA/100
=	9314.16/100
=	93.140

REQUIRED NOS OF TREES=94
PROPOSED NOS OF TREES=100
EVERGREEN TREE =50 NOS.
ORNAMENTED TREE=50 NOS.

SERVICE DRAWING

PROJECT :
PROPOSED GROUP HOUSING AT PLOT NO . GH - 16 - D, SECTOR-01, G. NOIDA, U.P.

CLIENT :
ALPINE INFRA PROJECTS PVT.LTD.

SHEET TITLE :
SITE PLAN
ELECTRICAL PLAN

DATE :	DRG.NO :
01-08-22	SD-05
SCALE : 1:400	NORTH:
OWNER'S SIGN	ARCHITECT'S SIGN

ARCHITECTS:
SPACE DESIGN GROUP
W-139, F.F GREATER KAILASH-I, NEW DELHI -48
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