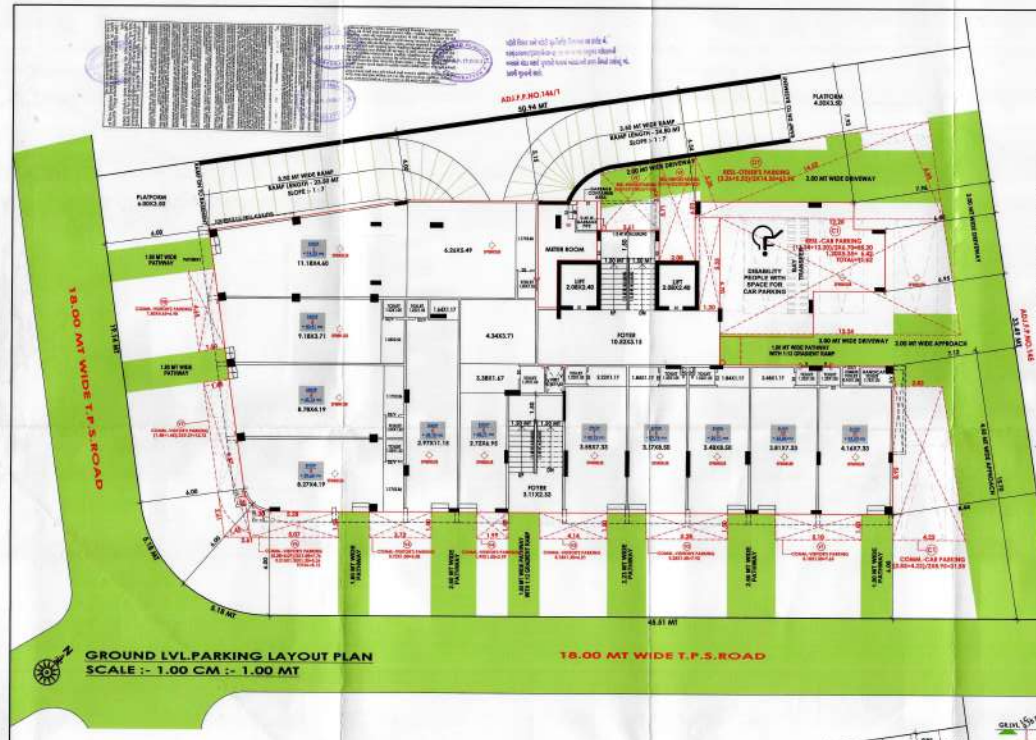

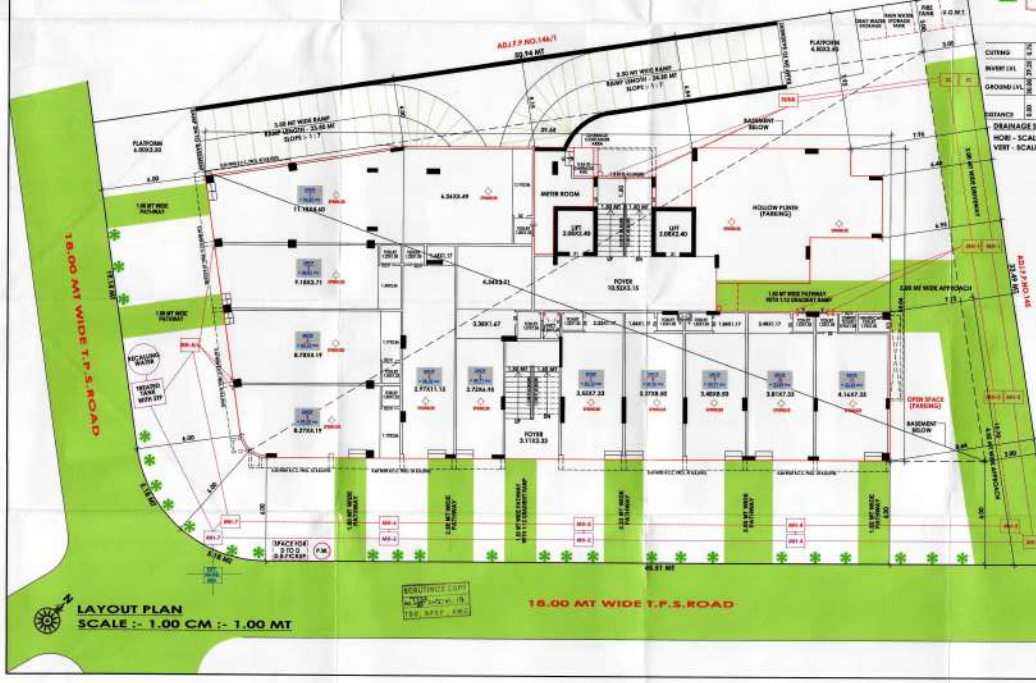

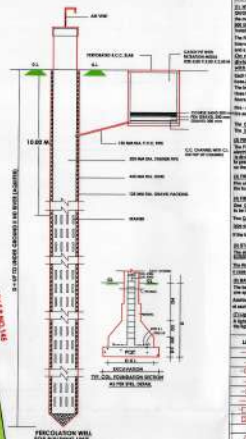

The Basic Requirements For Fire Protection Of High - Rise Building In A.M.C and AUDA Area

(1) HYDRANT SYSTEM :-

(2) SPRINKLER SYSTEM :-

(3) FIRE ALARM :-

(4) FIRE EXTINGUISHERS :-

(5) STAIRCASE :-

(6) BASEMENT :-

(7) Engineering Amenities :-

LEGEND	DESCRIPTION
	FIRE HYDRANT SYSTEM PIPE MAIN
	WALL MOUNTED HYDRANT VALVE
	SLUICE VALVE
	TWO WAY SIAMESE CONNECTION
	RISER OR DROP
	NON RETURN VALVE
	REDUCER
	FIRE HOSE BOX
	HOSE REEL HOUSE
	BGP & GSS

GENERAL NOTES

- ENGINEER IS FULLY RESPONSIBLE FOR LEAVING OPEN SPACE AND MARGIN.
- THE DEPTH AND POSITION OF EXISTING MUNICIPAL MAIN TO BE IS VERIFIED BY ME ON SITE AND PREMISES CAN GIVE DRAINAGE CONNECTION.
- IT IS CERTIFY THAT ACCORDING TO GDCR 2021 ALL REQUIREMENTS OF THE BUILDING ARE CHECKED AND NECESSARY ACTIONS ARE TAKEN.
- IT IS CERTIFY THAT ACCORDING TO THE CLAUSE NO. 4.5.0 OF THE GDCR-2021, THE STRUCTURE OF THE BUILDING IS DESIGN AS PER THE NORMS OF THE INDIAN STANDARDS.
- DESIGN OF STAIRCASE AND RAILING IS PROVIDED AS PER THE PROVISION OF THE CLAUSE NO. 05.1.12 AND 23.14 AND 24.6 OF GDCR-2021.
- LIFT IS PROVIDED AS PER THE PROVISION OF THE CLAUSE NO. 23.12 AND 24.7 OF GDCR-2021.
- WATER TANK IS PROVIDED AS PER THE PROVISION OF FIRE CLAUSE NO. 23.6 OF GDCR-2021.
- SEPARATE LIFTER BOX IS PROVIDED AT GROUND LEVEL FOR EACH UNIT.
- WATER TANK FOR FIRE SAFETY REQUIREMENT PROVIDED AS PER CHAPTER NO. 24 OF GDCR-2021.
- ELECTRICAL APPARATUS/ITEMS SHALL BE PROVIDED AS PER CLAUSE NO. 23.11 OF THE GDCR-2021.
- ADEQUATE LIGHTING ARRANGEMENT IS PROVIDED AS PER THE GDCR-2021.
- DRAINAGE FACILITY IS PROVIDED AS PER THE CLAUSE NO. 23.15 OF THE GDCR-2021.
- DESIGNING OF PARKING PLACE IS AS PER THE CLAUSE NO. 23.7 OF THE GDCR-2021.
- ENTRANCE OF THE BUILDING IS PROVIDED AS PER THE CLAUSE NO. 23.1.7 OF GDCR-2021.
- THE DIRECTOR OF THE BUILDING IS AS PER THE NORMS OF THE SPECIFIED IN THE INDIAN STANDARDS AND TAKE NECESSARY ACTION FOR THE STRUCTRAL SAFETY DURING THE CONSTRUCTION.
- RAIN WATER HARVESTING TANK AND RAIN WATER HARVESTING SYSTEM IS PROVIDED AS PER THE CLAUSE NO. 23.1.10 OF GDCR-2021.
- CELLAR IS PROVIDED AS PER THE PROVISION OF FIRE CLAUSE NO. 37.3 OF GDCR-2021.
- TOTO PLANTATION IS PROVIDED AS PER THE CLAUSE NO. 23.3 OF GDCR-2021.
- POSITIVE PRESSURE VENTILATION PROVIDED AS PER FIRE OFFICER.
- GARBAGE CHUTE SHALL BE PROVIDED AS PER INDIAN STANDARD SPECIFICATION.
- DUAL PLUMBING SYSTEM SHALL BE PROVIDED AS PER INDIAN STANDARD SPECIFICATION.

KEY PLAN
(AS PER T.P.O. OPINION)
SCALE :- 1.00 CM :- 20.00 MT

PARKING AREA TABLE (FOR COMMERCIAL)

PLOT AREA < 2000.00 SQ.MT
TOTAL UTILIZED P.S.I. AREA (COMM.USE)= 940.63 SQ.MT
REQ PARKING AREA @ 940.63 X 40 % = 376.25 SQ.MT

VEHICAL	REQ PARKING AREA FOR COMMERCIAL		PROVI PARKING AREA		
			H.P.&MARGIN	BASEMENT	TOTAL
CAR PARKING	@ 90 % OF REQ PARK	189.13 SQ.MT	31.50	177.63	209.18
OTHER'S PARKING	@ 30 % OF REQ PARK	113.47 SQ.MT	-----	136.60	136.60
VISITOR'S PARKING	@ 20 % OF REQ PARK	75.65 SQ.MT	87.72	18.90	76.67
TOTAL		378.25 SQ.MT	89.27	333.18	424.45

PROVIDED PARKING AREA CALC.

H.P. & MARGIN

CAR PARKING

C1. (2.63+4.20)/2X8.98=31.66 SQ.MT

VISITOR'S PARKING

V1. 8.10X1.85= 7.65 SQ.MT
V2. 4.28X1.85= 7.92 SQ.MT
V3. 4.14X1.85= 4.21 SQ.MT
V4. 1.99X1.85= 3.99 SQ.MT
V5. 5.27X1.85= 5.00 SQ.MT
V6. (5.28+8.07)/2X1.85= 7.76 SQ.MT
0.91X51.30= 0.56 SQ.MT
V7. (1.48+1.45)/2X3.27=13.73 SQ.MT
V8. 1.80X6.65= 6.98 SQ.MT
TOTAL=91.18 SQ.MT
LESS:- 0.21X52.74X2.67= 1.46 SQ.MT
NET VISITOR'S PARK.=97.72 SQ.MT

PARKING AREA TABLE (FOR RESIDENCE)

PLOT AREA < 2000.00 SQ.MT
TOTAL UTILIZED P.S.I. AREA (RES.USE)= 1757.46 SQ.MT
REQ PARKING AREA @ 1757.46 X 20 % = 351.49 SQ.MT

VEHICAL	REQ PARKING AREA FOR RESIDENCE		PROVI PARKING AREA		
			H.P.&MARGIN	BASEMENT	TOTAL
CAR PARKING	@ 50 % OF REQ PARK	175.72 SQ.MT	91.62	120.50	212.20
OTHER'S PARKING	@ 40 % OF REQ PARK	140.60 SQ.MT	43.90	204.50	248.18
VISITOR'S PARKING	@ 10 % OF REQ PARK	35.14 SQ.MT	35.34	34.90	69.16
TOTAL		351.46 SQ.MT	180.81	359.71	540.52

PROVIDED PARKING AREA CALC.

H.P. & MARGIN

CAR PARKING

C1. (13.26+12.20)/2X6.75=86.20 SQ.MT
1.20X3.20= 4.42 SQ.MT
TOTAL=91.62 SQ.MT

OTHER'S PARKING

O1. (3.26+5.83)/2X14.69=65.99 SQ.MT

VISITOR'S PARKING

V4. (5.71+6.03)/2X2.08=12.21 SQ.MT
V5. (3.39+5.97)/2X5.61=13.83 SQ.MT
TOTAL=26.04 SQ.MT

LAYOUT & GROUND LVL.PARKING LAYOUT PLAN — SHEET NO : 1/6

LAYOUT PLAN PROPOSED SHOWING COMMERCIAL + RESIDENCE BUILDING ON F.P NO :- 146/2,R.S. NO.326/6/p+326/2/3+327/2,DRAFT T.P.S. NO. 43/A.(SOLA)
AT VILLAGE : SOLA ; TALUKA : GHATLODIYA ; DISTRICT : AHMEDABAD

SCALE :- 1.00 CM = 1.00 MT

ZONE :- RESIDENCE-II (WITHING S.P.RING ROAD)

USE OF THE CONSTRUCTION :- COMMERCIAL + RESIDENCE

AREA TABLE

	IN SQMTS
PLOT AREA OF F.P.NO :- 146/2 (AS PER T.P.O.OPINION)	1552.00
PROP.U.P.AREA ON GROUND FLOOR	637.27
OPEN PLOT AREA ON GROUND FLOOR	864.73

F.S.I. AREA TABLE	COMM.	RESI.	TOTAL
PLOT AREA OF F.P.NO :- 146/2 (AS PER T.P.O.OPINION)	----	----	1552.00
PERMI.REGULAR F.S.I. AREA @ 1 : 1.2	----	----	1552.40
PERMI.CHARGEABLE F.S.I. AREA @ 0.60	----	----	931.00
TOTAL PERMI. F.S.I. AREA @ W.P. 1.8	----	----	2793.60
PROP. F.S.I. AREA ON GROUND FLOOR	467.39	----	467.39
PROP. F.S.I. AREA ON 1st. FLOOR	478.34	68.67	547.01
PROP. F.S.I. AREA ON 2nd. FLOOR	----	346.84	346.84
PROP. F.S.I. AREA ON 3rd. FLOOR	----	342.40	342.40
PROP. F.S.I. AREA ON 4th. FLOOR	----	342.40	342.40
PROP. F.S.I. AREA ON 5th. FLOOR	----	342.40	342.40
PROP. F.S.I. AREA ON 6th. FLOOR	----	314.60	314.60
TOTAL UTILIZED F.S.I. AREA	945.63	1757.46	3703.09
PROP.CHARGEABLE F.S.I. AREA			708.49

TENAMENT AND FLOOR AREA TABLE

FLOOR	USE	UNIT		FLOOR AREA		
	COMM.	RESI.	COMM.	RESI.	COMM.	RESI.	TOTAL
BASEMENT	----	PARKING	----	----	----	----	----
GROUND	SHOP	PARKING	11	----	467.39	----	467.39
1st. FLOOR	SHOP	RESI.	07	01	478.34	68.67	547.01
2nd. FLOOR	----	RESI.	----	04	----	346.84	346.84
3rd. FLOOR	----	RESI.	----	04	----	342.40	342.40
4th. FLOOR	----	RESI.	----	04	----	342.40	342.40
5th. FLOOR	----	RESI.	----	04	----	342.40	342.40
6th. FLOOR	----	RESI.	----	04	----	314.60	314.60
TOTAL	COMM.	RESI.	18	21	945.63	1757.46	2703.09

B.UP AREA TABLE	COMM.	RESI.	TOTAL
PROP. B.UP AREA ON BASEMENT	----	848.62	848.62
PROP. B.UP AREA ON GROUND FLOOR	467.39	169.88	637.27
PROP. B.UP AREA ON 1st. FLOOR	502.99	126.78	629.77
PROP. B.UP AREA ON 2nd. FLOOR	----	414.22	414.22
PROP. B.UP AREA ON 3rd. FLOOR	----	409.93	409.93
PROP. B.UP AREA ON 4th. FLOOR	----	409.93	409.93
PROP. B.UP AREA ON 5th. FLOOR	----	409.93	409.93
PROP. B.UP AREA ON 6th. FLOOR	----	384.79	384.79
PROP. B.UP AREA ON STAIR CABIN	----	69.99	69.99
PROP. B.UP AREA ON L.M.ROOM + O.H.W.T	----	62.32	62.32
TOTAL PROP. B.UP AREA	970.38	3256.39	4266.77

SANITARY CALCULATION

TOTAL FLOOR AREA OF THE BUILDING COMM. USE = 945.63 SQ.MT
TOTAL PERSON = 945.63/4 = 236.91 SAY 236 PERSON

107-100 PERSON
1 W.C. FOR 25 PERSON REQ. PER GENDER & 1 URINAL PER 50 PERSON
REQUIRED 3 W.C. FOR MALE AND FEMALE , REQUIRED 4 URINAL FOR MALE
PROVIDED 14 W.C. IN EACH SHOP

REQ.COMMON TOILET
20 % OF TOTAL REQ.
REQ. : 1.00 SAY 2 W.C. FOR EACH GENDER & 2 URINAL FOR MALE
PROV. : 2 W.C. FOR EACH GENDER & 2 URINAL FOR MALE

GENERAL NOTES

- ALL OUTER WALL THICKNESS AS / N.B.C & I.S CODE.
- 0.10 M.M C.I.P WITH VP SHALL BE PROVI FOR W.C & TOILET.
- 0.07 M.M C.I.P WITH VP SHALL BE PROVI FOR BATH
- ALL BALCONY & TERRACE PARAPAT WALL AREA 1.10 MT.IN HT & 0.11 MT TH R.C.C WALL
- 0.46 P. PROVI. EACH BLOCK FROM TERRACE TO GROUND LVL.

R.C.C STAIR DETAIL (COMM.) / COLOR NOTE

WIDTH : 1.50 MT
TREAD : 0.30 MT
RISER : 0.16 MT

R.C.C STAIR DETAIL (RESI.)

WIDTH : 1.00 MT
TREAD : 0.30 MT
RISER : 0.16 MT

PLOT BOUNDARY — PROP.WORK — DUST MIN
ROAD — PROP.DRAINAGE — P.W
PARKING — TREE
SPRINKLER

TREE PLANTATION :-
TOT AREA = 1552.00 SQ.MT
REQUIRED : 3 NOS TREE (300.00 SQ.MT = 22.03 SAY 23 NOS REQ
PROVIDED : 23 NOS TREE

PERCOLATION WELL :-
TOT AREA = 1552.00 SQ.MT
REQUIRED : 1 NOS P.W. (1000.00 TO 4000.00 SQ.MT = 0.39 SAY 1 NOS REQ
PROVIDED : 1 NOS P.W.

C.G. REQUIRED CALCULATION (COMM.)

DUST BIN REQUIRED 20 LTS (100 SQMTS
REQ : TOTAL FLOOR AREA 945.69 X 20 / 100 = 188.54 SAY 189 LTS
PROVI : 2.36 SAY 3 NOS BIN EACH BIN LT CAPACITY

C.G. REQUIRED CALCULATION (RESIDENCE)

DUST BIN REQUIRED 10 LTS. / 1 RES UNIT
REQ : TOTAL UNIT 21 X 10 = 210 LTS (2.63 SAY 3 DUST BIN)
PROVI : 3 NOS BIN EACH BIN LT CAPACITY

OWNER.

RAMESH M. PRABHAKAR
(B.E.Civil)
M.E.(Civil)-Structural
Engineer
ROOPAL Prabhakar Nivas,
B/h. Vikram Park, Gurukul,
AHMEDABAD - 380 052.

JIGAR G. SHAH
DIRECTOR(PARTNER)
B.E.(CIVIL)
M.I.E.
B/212, SHANTI ARCADE,
132 FT. ROAD, KANKARIA,
AHMEDABAD-380 022.

C.O.W.

ST-ENGINEER.

FOR, VIKRANT DEVELOPERS
License No. CEV 09122128
(PARTNER)
102, Dhaben Mall, Science City Road,
Sola, (PARTNER)

KRUNAL K. MISTRY (B.E. CIVIL)
CONSULTING CIVIL ENGINEER
1ST DEVPATH, B/H LAL BUNGLOW
C.G.ROAD , NAVARANGPURA
REG. LIC. NO. :- 09099010255/1992

DEVELOPER.

ENGINEER.

AUTHORITY.