

SPECIFICATIONS :-

THE BUILDING STRUCTURAL DESIGN IS BASED ON IS-456-2000, NORMS CONSIDERING SESMIC FORCE INTO ACCOUT.

THE BUILDING IS DESIGNED FOR G +1 STRUCTURE ONLY. NO PROVISION FOR ADDITIONAL FLOOR IS MADE.

CONCRETE GRADE SHALL BE M-25 UNDER SPECIFIED & STEEL USED SHALL BE HIGH YIELD STRENGTH Fe-415 GRADE. (CORROSION RESISTANT STEEL).

NOT MORE THAN 50% BARS WILL BE CURTAILED OR LAPPED AT SIMILAR PLANE FOR ALL FLEXURAL, COMPRESSION MEMBERS & MIN. LAP LENGTH WILL BE 69 D FOR ALL MEMBERS.

MIN CONC. COVERS TO BARS SHALL BE AS UNDER :

- (1) FOOTING 50 mm (BOTTOM & SIDE).
- (2) COLUMN 40 mm (SIDE COVER).
- (3) BEAM 25 mm (BOTTOM & SIDE).
- (4) SLAB 10 mm (BOTTOM).

NO R.C.C. WORK SHALL BE CARRIED OUT WITH OUT PROPER COMPACTION.

MIN. DESHUTTERING TIME FOR R.C.C. MEMBERS SHALL BE AS UNDER :

- (a) COLUMN NOT LESS THAN - 24 HOUS.
- (b) SLAB UPTO 3.00 mt - 7 DAYS.
- (c) SLAB ABOVE 3.00 TO 4.57 mt - 14 DAYS.
- (d) R.C.C. BEAM UPTO 6.00 mt - 14 DAYS.
- (e) R.C.C. BEAM ABOVE 6.00 mt - 21 DAYS.

MINIMUM CRUSHING STRENGTH OF MASONRY UNIT SHOULD NOT BE LESS THAN 50KG/CM2

MINIMUM LAP LENGTH AND BOND LENGTH OF OVERLAPPING BARS SHOULD NOT BE LESS THAN 50D.

STRUCTURAL DRAWING SHOULD BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWING AND SHOULD NOT BE SCALED. FOR DIMENSIONS REFER ARCHITECTURAL DRAWING. ANY DISCREPANCY IN THE STRUCTURAL DRAWING SHOULD BE REPORTED IMMEDIATELY TO Er JAGDISH GANATRA BEFORE EXECUTION.

U LENGTH FOR STIRRUPS SHOULD NOT BE LESS THAN 80MM.

IT SHOULD BE ENSURED THAT AT ALL COLUMN BEAM JUNCTIONS STIRRUPS ARE PLACED PROPERLY AS PER AS CONFINED SPACING MENTIONED. STIRRUPS SPACING IS MOST IMPORTANT FOR EARTHQUAKE ZONE AND SHALL NOT BE TEMPAED WITH.

IT IS ESSENTIAL THAT ARCHITECT SHOULD GET THE FOOTING , PLINTH BEAM, COLUMNS AND SLAB CHECKED BY Er JAGDISH GANATRA THE DRAWING IS COPYRIGHT OF Er JAGDISH GANTRA AND IT CANNOT BE REPRODUCED OR COPIED FOR ANY OTHER STRUTURE OF SIMILAR NATURE.

SPECIFICATIONS :-

GENERAL NOTES :-

- 1. ALL STRUCTURAL DRAWING ARE TO BE READIN CONJUNCTION WITH REVELENT ARCHITECTURAL DRAWINGS OTHER STRUCTURAL DRAWINGS AND THIS DRAWINGS.
- 2. DISCREPANCIES IF ANY IN STRUCTURAL DRAWINGS SHALL IMMEDIATELY BE REPORTED TO THIS OFFICE AND GOT RECONCILED BEFORE ACTUAL EXCUTION OF WORKS.
- 3. ALL DIMENSIONS ARE IN MM OTHERWISE SPECIED.
- 4. ONLY WRITTEN DIMESIONS SHALL BE ADOPTED THE DIMESIONS ARE NOT TO BE SCALED NOR BARS STEPS SHOULD BE COUNTED FROM STRUCTURAL DRAWINGS.
- 5. NOT MORE THAN 1/3 OF TOTAL NUMBERS OF MAIN BARS SHALL BE OVERLAPPED AT ANY SECTION OF COLUMN BEAM ETC.
- 6. THE LAP LANGTH IN CLUDING ANCHORAGE VALUE OF HOOKS (IF ANY) SHALL BE 50 TIMES THE DIMETER OF BAR FOR M 25 GRADE AND FE 415 STEEL.
- 7. THE DEVELOPMENT LENGTH SHALL BE 50 TIMES THE DIAMETER OF BAR FOR M 25 MIX.
- 8. THE DOVEL BARS OF LINTEL OF THOSE DOORS, WINDOW OPENING WHICH ARE ADJACENT TO THE COLUMNS SHALL BE TAKEN OUT FROM THOSE COLUMNS WHILE CASTING THE COLUMNS.
- 9. ALL CONCRETE WORK SHALL BE MACHINE MIXED & VIBRATED & CURED FOR MINIMUM FOR 14 DAY.
- 10. PORTABLE WATER SHALL BE USED FOR CONSTRUCTION AND CURING.
- 11. THE ANCHORAGE OF MAIN BARS BEAM AT BEYOND THE FACE OF COLUMN SHALL NOT BE LESS THAN Ld + 10 DIA.
- 12. ENDS OF COLUMN & BEAMS RINGS SHALL BEAM TO 135 DEGREE AT BOTH THE ENDS WITH 10 DIMETER EXTENSION (NOT LESS THAN 75 mm).
- 13. THE STRUCTURAL DRAWING AND SPECIFICATION OF MATERIAL HAS BEEN PREPARED ACCORDANCE WITH I.S. AND NATIONAL BUILDING CODE AS SPECIFIED IN THE DCRs ISSUED BY THE STATE GOVERNMENT.

NORMAL COVERS :-

- (A) CLEAR COVER FOR FOOTINGS SHALL BE 75 mm.
- (B) CLEAR COVER FOR COLUMNS SHALL NOT BE LESS THAN 40 mm AND DIAMETER OF BAR WHICH EVER IS MORE.
- (C) CLEAR COVER FOR BEAM NOT LESS THEN 30 mm NOT LESS THAN DIAMETER OF BAR FOR LONGITUDINAL REINFORCEMENT.
- (D) CLEAR COVER OF BARS NOT LESS 30 mm NOR LESS THAN TWICE THE DIAMETER OF SUCH BAR AT EACH END.
- (E) CLEAR COVER FOR SLAB NOT LESS 30 mm NOR LESS THAN DIAMETER OF SUCH BAR.

NORMAL COVERS :-

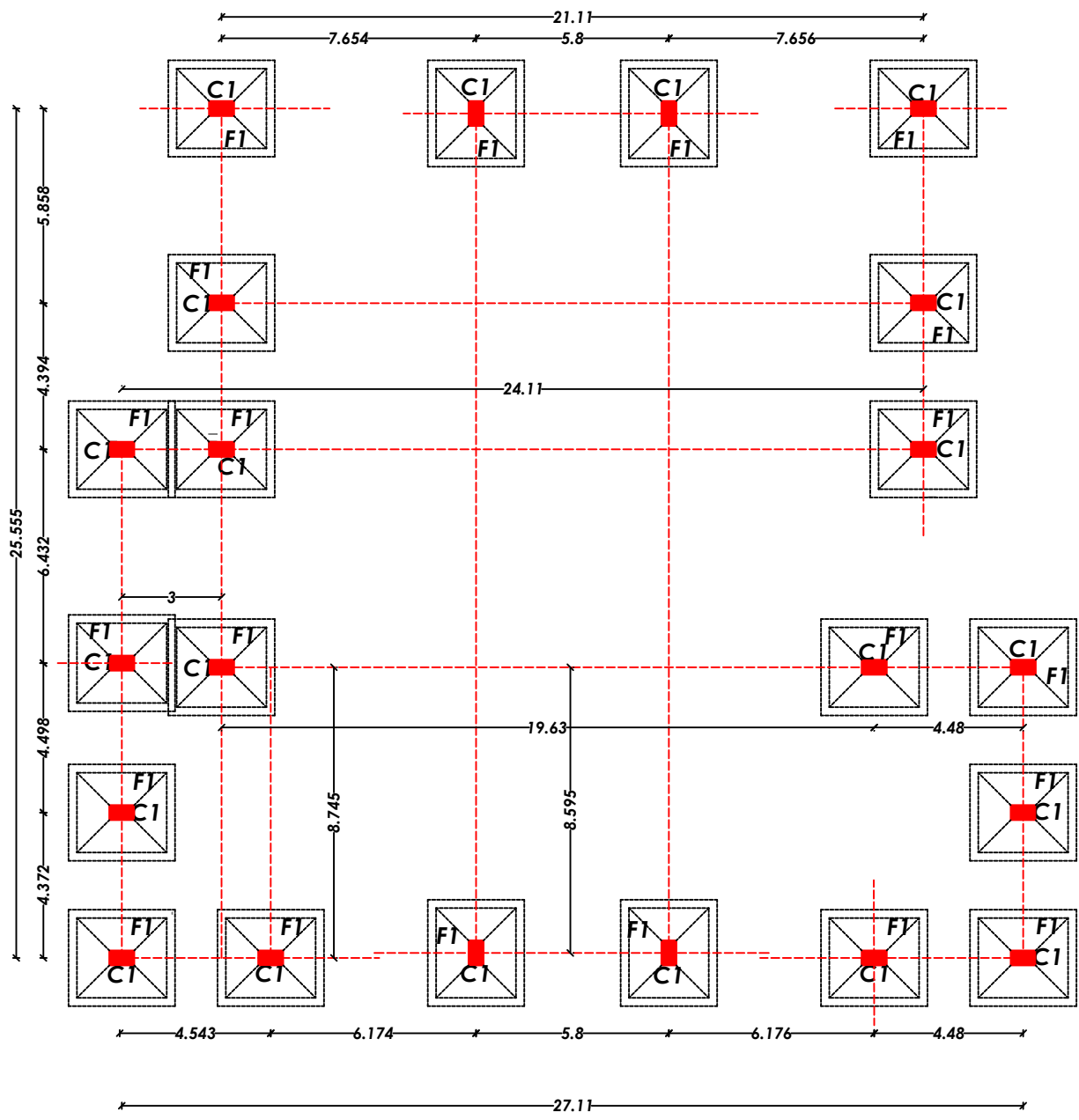
- (A) THE REINFORCEMENT SHALL BE H.Y.S.D. & CONFORMING TO IS 1786 - 1983 WITH YIELD STRESS NOT LESS THAN 415 N/mm2.
- (B) ALL R.C.C. WORK CONCRETE MIX SHALL BE M 25 AS PER IS 456 - 2000 (WITH LATEST AMENDMENTS) UNLESS OTHERWISE SPECIFIED.
- (C) MORTAR FOR R.R. MASONRY WORK (FOR LOAD BEARING STRUCTURE FOUNDATION) 1:4
- (D) MORTAR FOR BRICK SOLID BLOCK MASONRY WORK 1:3.
- (E) MORTAR FOR PLASTERING PF INTERNAL AND EXTERNAL WALL 1:4.
- (F) WALL BURNT BRICK AND SOLID C.C. BLOCK HANING MINIMUM COMPRESIVE STRENGTH 50 kg/cm2 AND 50 kg/cm2 RESPECTIVELY SHAL BE USED.

TITLE :-

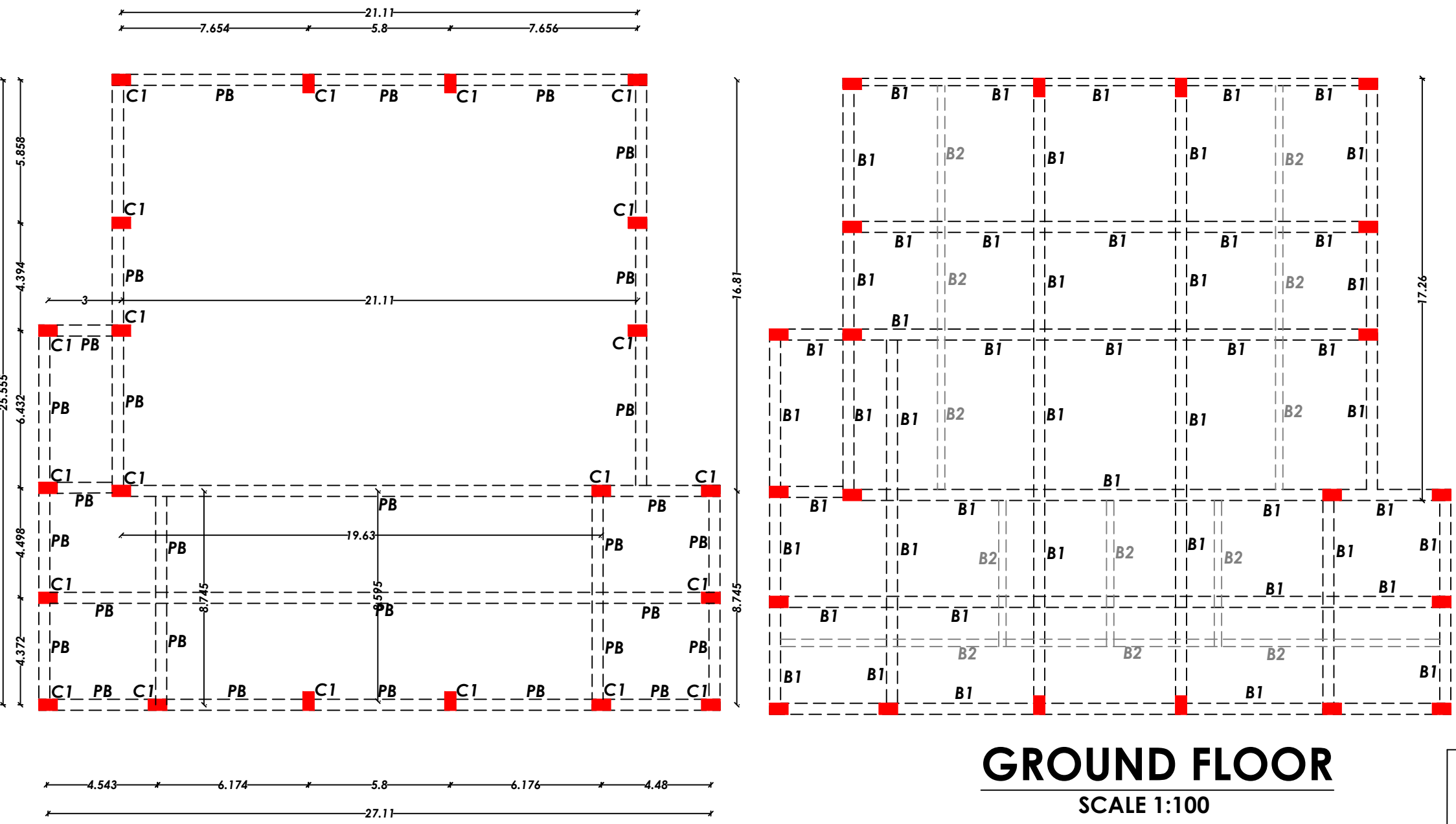
STRUCTURE ENGINEER :-

PLAN SHOWING STRUCTURAL DETAILS FOR PROPOSED CONVENTION CENTER AT SHINAY POLICE QTR. VILLAGE SHINAY TAL. GANDHIDHAM DIST. KUTCH

ER. JAGDISH D. GANATRA

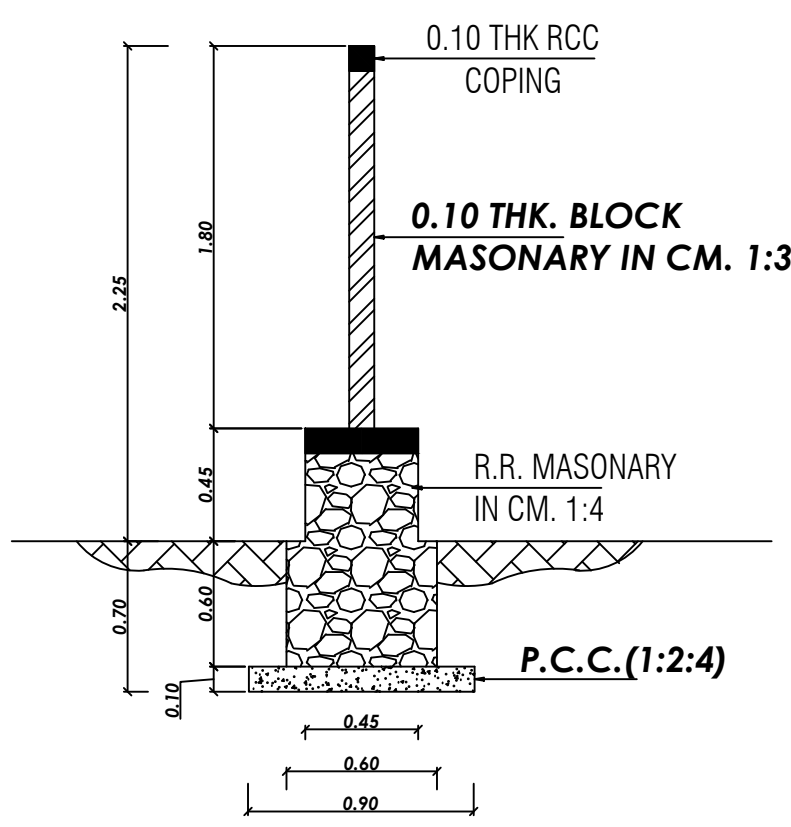


CENTRE LINE PLAN  
SCALE 1:100

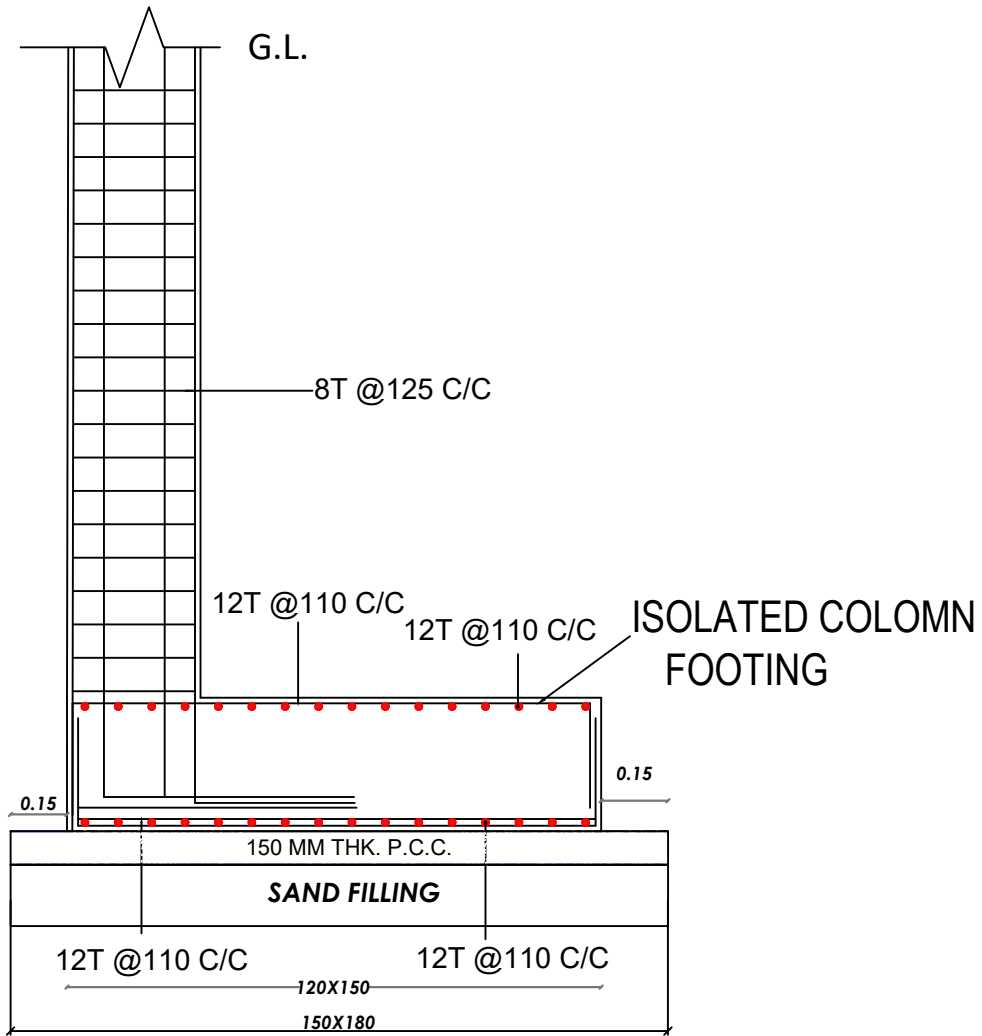


PLINTH BEAM  
LAYOUT PLAN  
SCALE 1:100

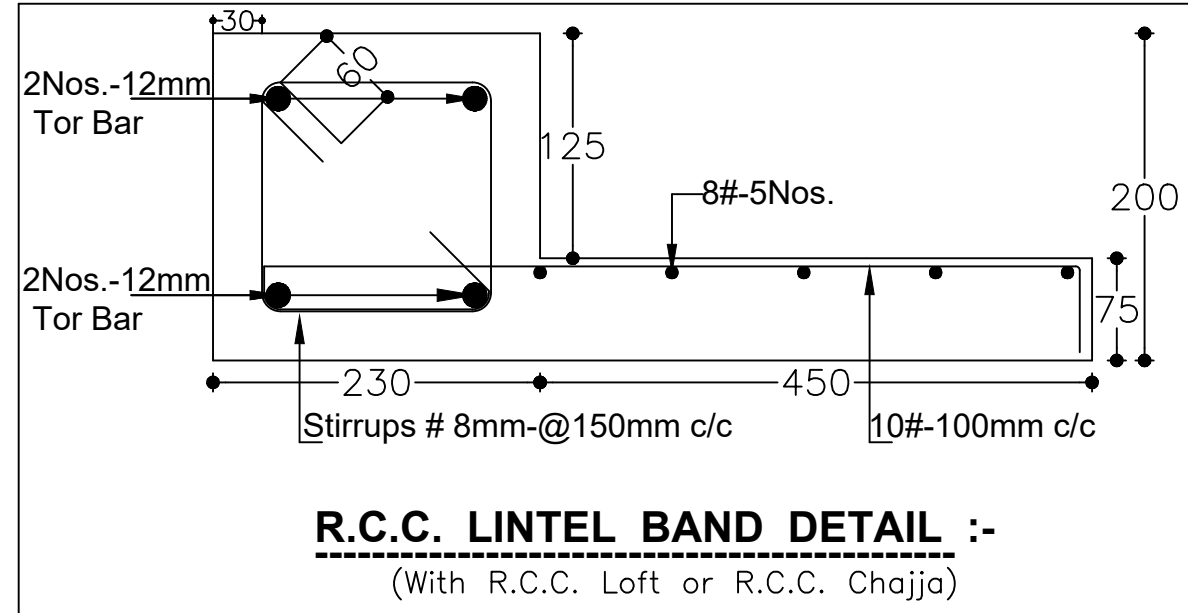
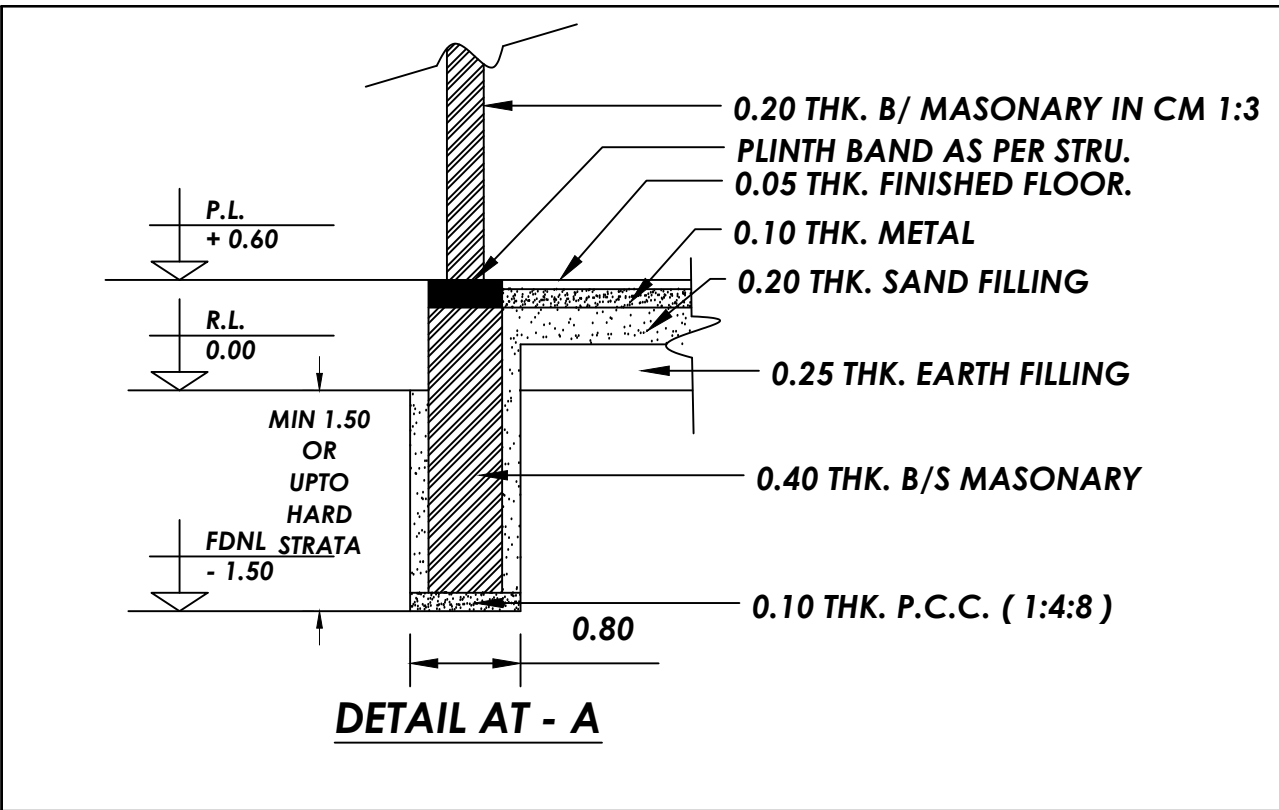
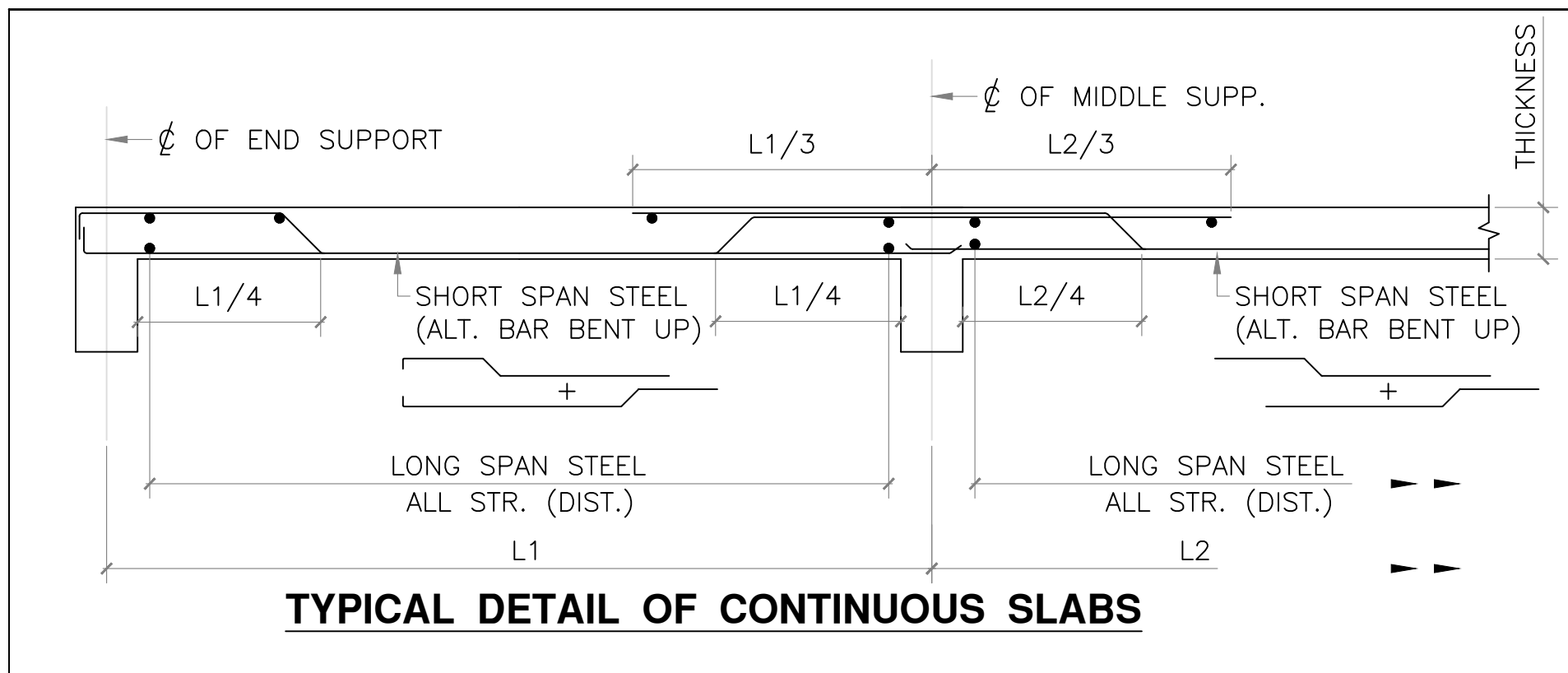
- 1) ALTERNATE BARS TO BENT UP IN SLAB AT L/4 AND EXTRA BARS OF LENGTH L/4 TO BE PROVIDED IN EACH SPAN
- 2)CHAIRS TO BE PROVIDED BENEATH THE TOP MESH.
- 3) DRAINAGE PIPES TO BE TAKEN OUT FROM THE BEAMS BY PROVIDING SLEEVES.
- 4) BRACKET BARS TO BE TAKEN INSDIE ATLEAST TWICE THE LENGTH OF CANTILEVER PROJECTION TOWARDS THE FIXED END
- 5) CHIPIYA BARS TO BE PROVIDED FOR CANTILEVER SLAB WITH DOUBLE MESH.
- 6) RCC WALLS TO BE TAKEN AT THE BALCONY
- 7) ALL CANTILEVER PROJECTIONS FOR ELEVATION TO BE DONE WITH RCC PARDI 75 MM THK AND CHAJJAS AND TO BE CASTED MONOLITHICALLY AND BARS TO BE TAKEN OUT FROM SLAB OR BEAMS.



FOUNDATION DETAIL FOR  
COMPOUND WALL  
SCALE 1:50

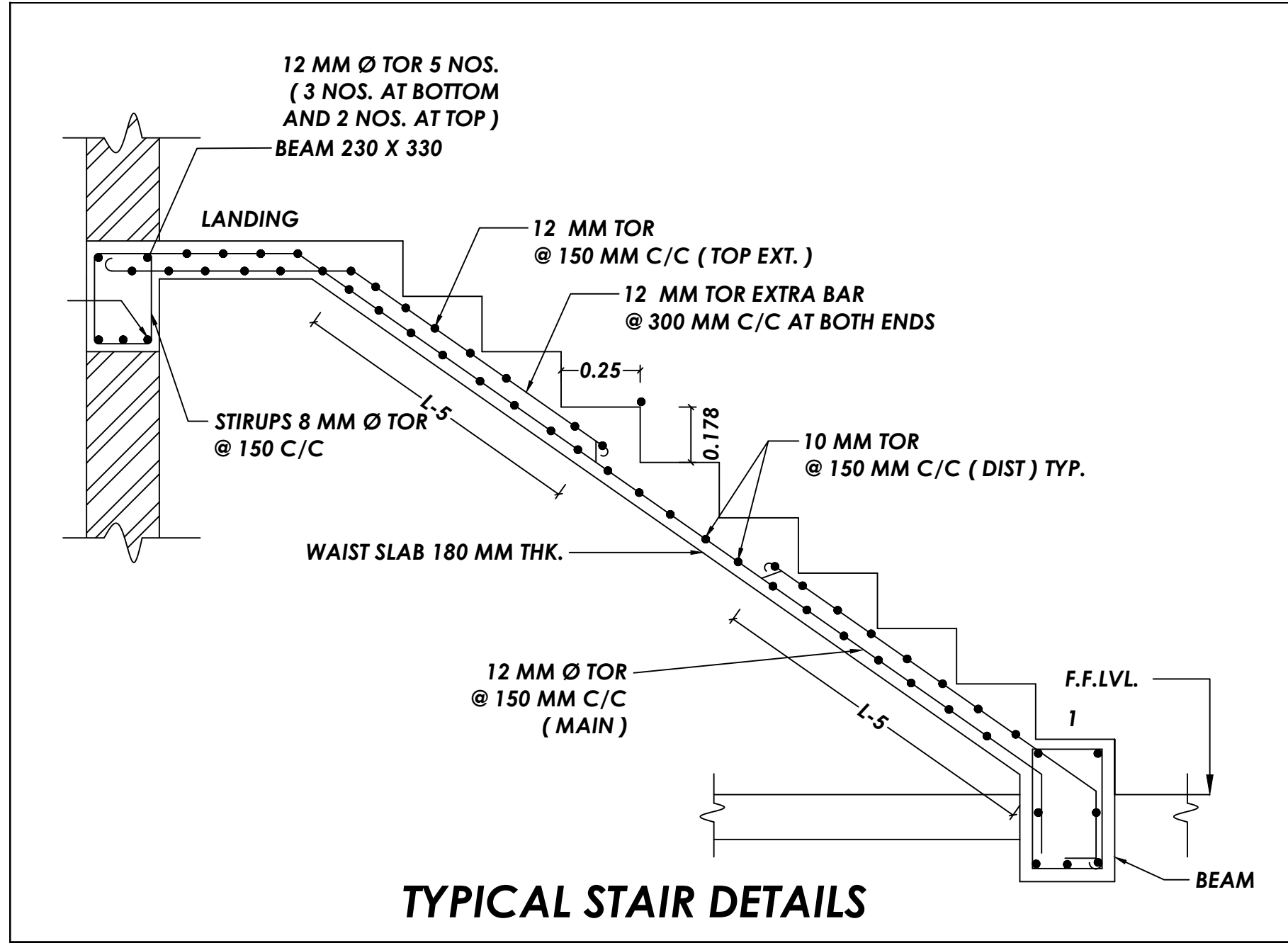


FOOTING DETAIL F1  
TYP. SECTION OF ECCENTRIC COLUMNS  
(C-1 TO C-8)



Schedule for roof beams

TYPE	SIZE	BOTTOM BAR	TOP BAR	SIDE BAR	SECTION	STIRRUPS
B1	450X900	4# 25MM Ø	2# 25MM Ø 2# 20MM Ø	6# 20MM Ø		8 mm TOR @ 150mm c/c
B2	300X600	3 #25 MM Ø	3# 25MM Ø	4# 20MM Ø		8 mm TOR @ 150mm c/c



SCHEDULE FOR PLINTH BEAM

TYPE	SIZE	BOTTOM BAR	TOP BAR	SIDE BAR	SECTION	STIRRUPS
PB	450X750	4 # 25 mm tor	2 # 25 mm tor 2 # 8 mm tor	6 # 25mm tor		Ø 6 #25MM TOR Ø 8 #20MM TOR

RUBBLE SOLING AND SAND FILLING TO BE PROVIDED BENEATH P.C.C AND COMPACTED BY MECHANICAL VIBRATOR

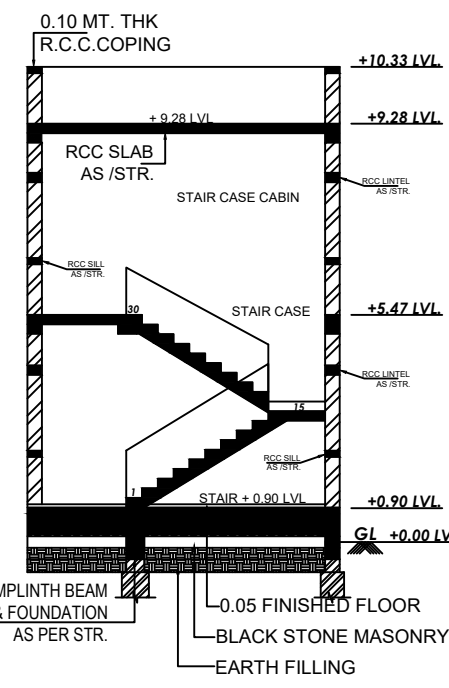
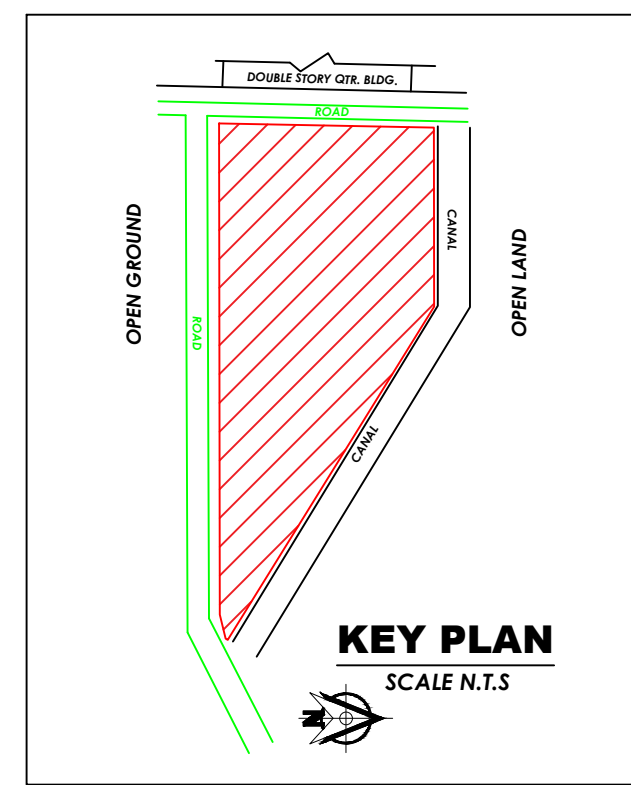
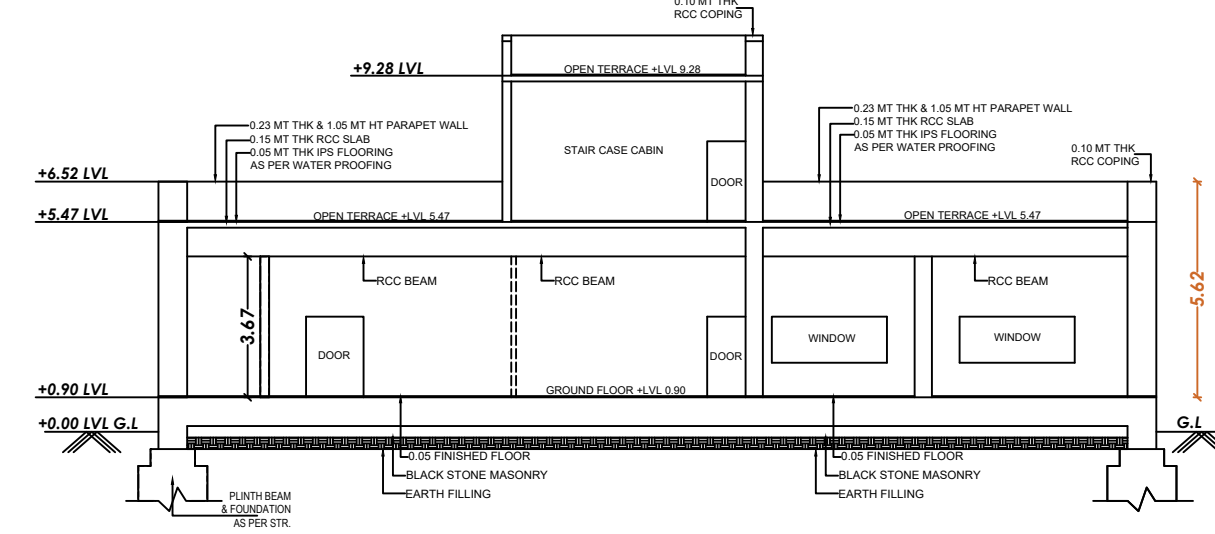
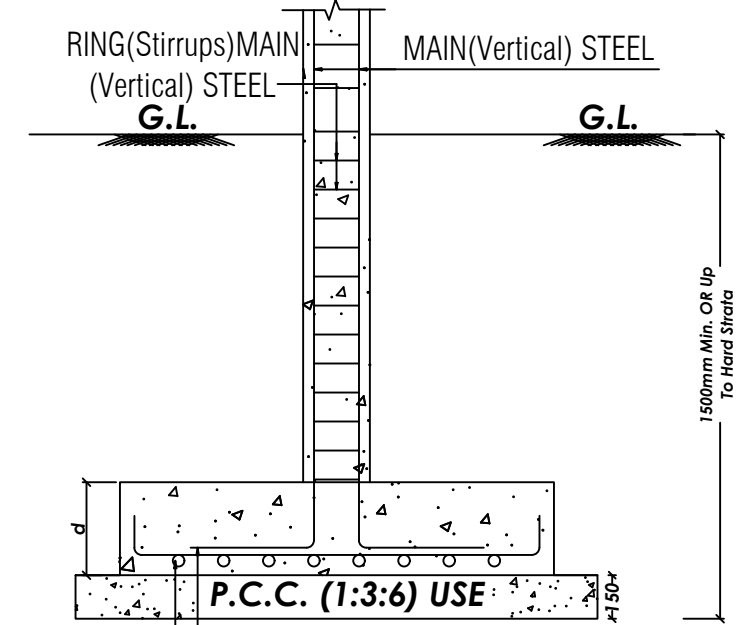
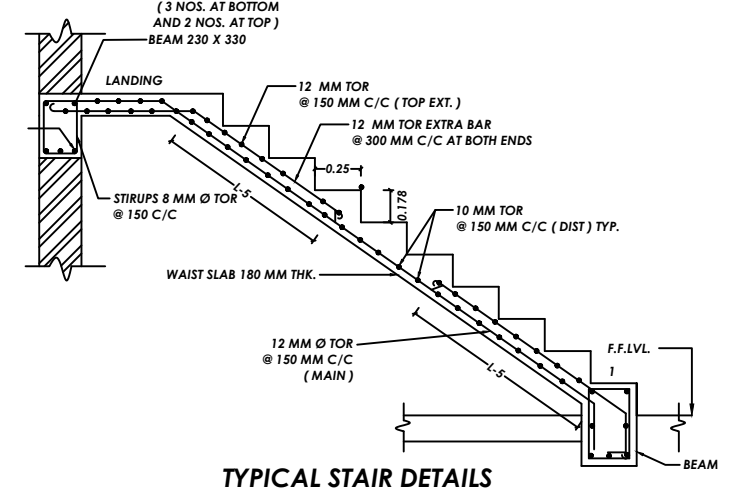
GRADE OF CONCRETE M20 GRADE OF STEEL:- FE 500 :- STEEL FOR FOOTING

PARTICULAR	FOOTING SIZE	t (mm)	d (mm)	SHORT SPAN STEEL	LONG SPAN STEEL	REMARKS:-	DEPTH OF EXCAVATION
F1	1.50X1.50	-	450	10MM Ø@ 125 C/C	10MM Ø@ 125 C/C	SINGLE MESH	1.50 MTR MINM FROM NGL
F2	1.50X 1.50	-	450	10MM Ø@ 125 C/C	10MM Ø@ 125 C/C	SINGLE MESH	1.50 MTR MINM FROM NGL

SCHEDULE OF SLAB

PARTICULAR	SHORT SPAN STEEL	LONG SPAN STEEL	THICKNESS	STATUS
S1	10 mm tor @ 150 mm C/C.	10 mm tor @ 150 mm C/C.	150 mm	TWO WAY SLAB

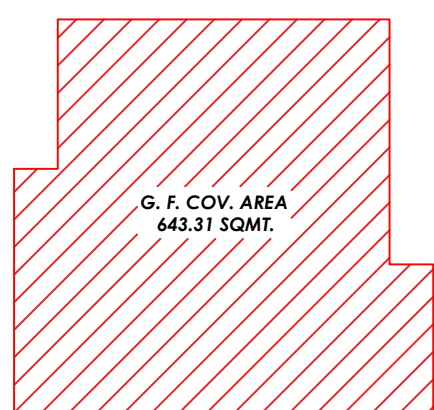


SECTION 'X-X'  
SCALE : 1:100SECTION "AA"  
SCALE 1:100TYPICAL COLUMN  
FOUNDATION DETAIL

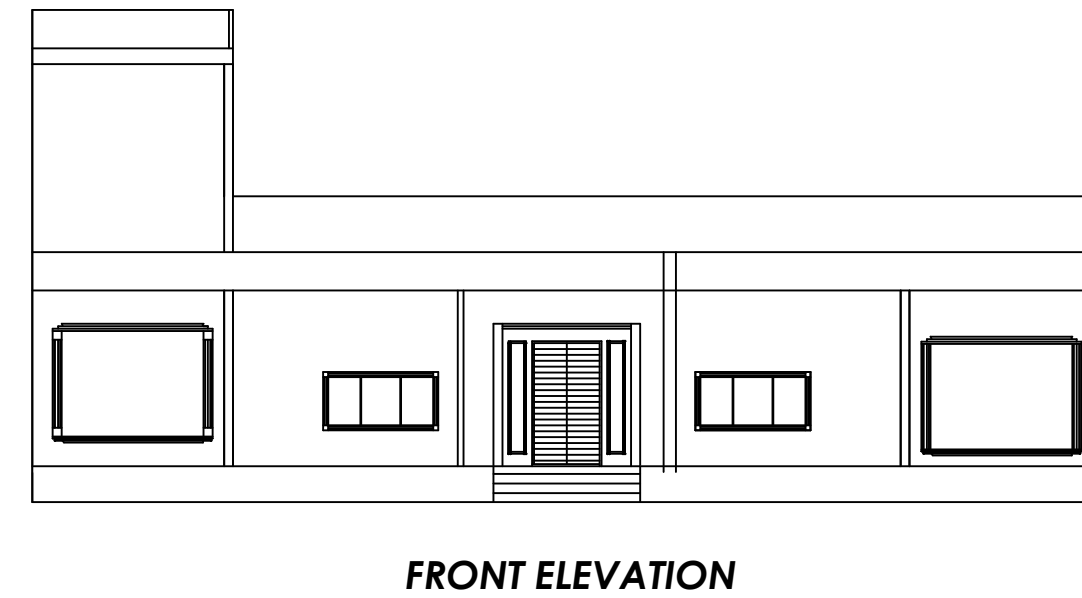
TYPICAL STAIR DETAILS

## GROUND FLOOR LIGHT &amp; VENTILATION CALCULATION

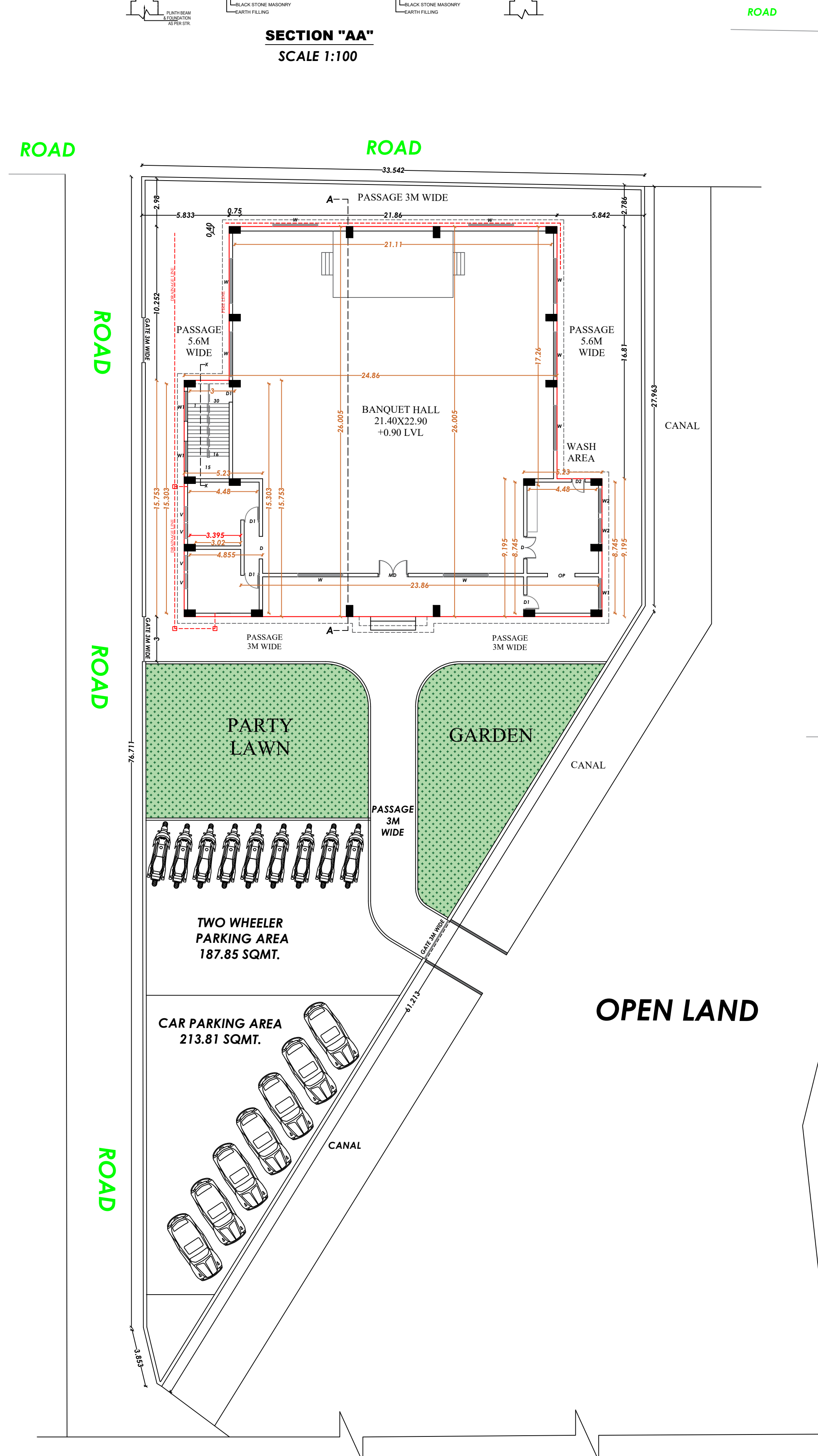
PARTICULAR OF WORK	NO.	L (MT)	B (MT)	QTY. (SQ.MT)
BANQUET HALL CARPET AREA	1	21.40	22.90	490.06 SQ.MT.
LIGHT & VENTILATION REQUIRED 10%	0.10	21.40	22.90	49.00 SQ.MT.
LIGHT & VENTILATION PROVIDED VENTIL. - W	9	3.00	1.20	56.70 SQ.MT.
<b>TOILET</b>				
(A) GENTS TOILET CARPET AREA	1	4.77	2.25	10.73 SQ.MT.
(B) LADIES TOILET CARPET AREA	1	4.77	2.25	10.73 SQ.MT.
(C) LIGHT & VENTILATION REQUIRED 10%	0.10	9.54	2.25	2.15 SQ.MT.
(D) LIGHT & VENTILATION PROVIDED VENTIL. - V	4	1.00	0.60	2.40 SQ.MT.
KITCHEN CARPET AREA	1	4.77	6.08	29.00 SQ.MT.
LIGHT & VENTILATION REQUIRED 10%	0.10	4.77	6.08	2.90 SQ.MT.
LIGHT & VENTILATION PROVIDED VENTIL. - W2	2	1.62	0.90	2.92 SQ.MT.
STORE CARPET AREA	1	4.77	2.42	11.54 SQ.MT.
LIGHT & VENTILATION REQUIRED 10%	0.10	4.77	2.42	1.15 SQ.MT.
LIGHT & VENTILATION PROVIDED VENTIL. - W1	1	2.00	1.20	2.40 SQ.MT.



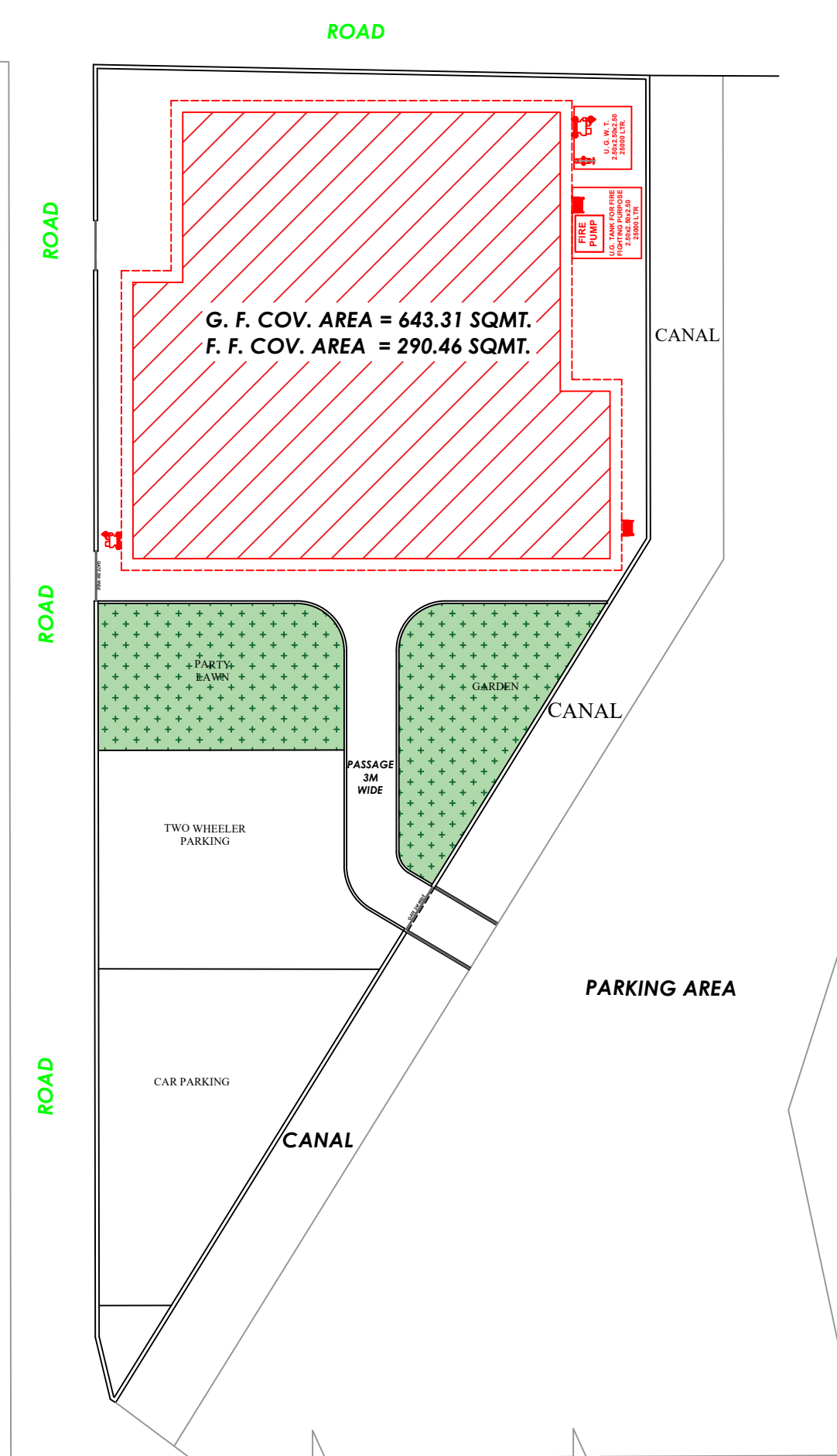
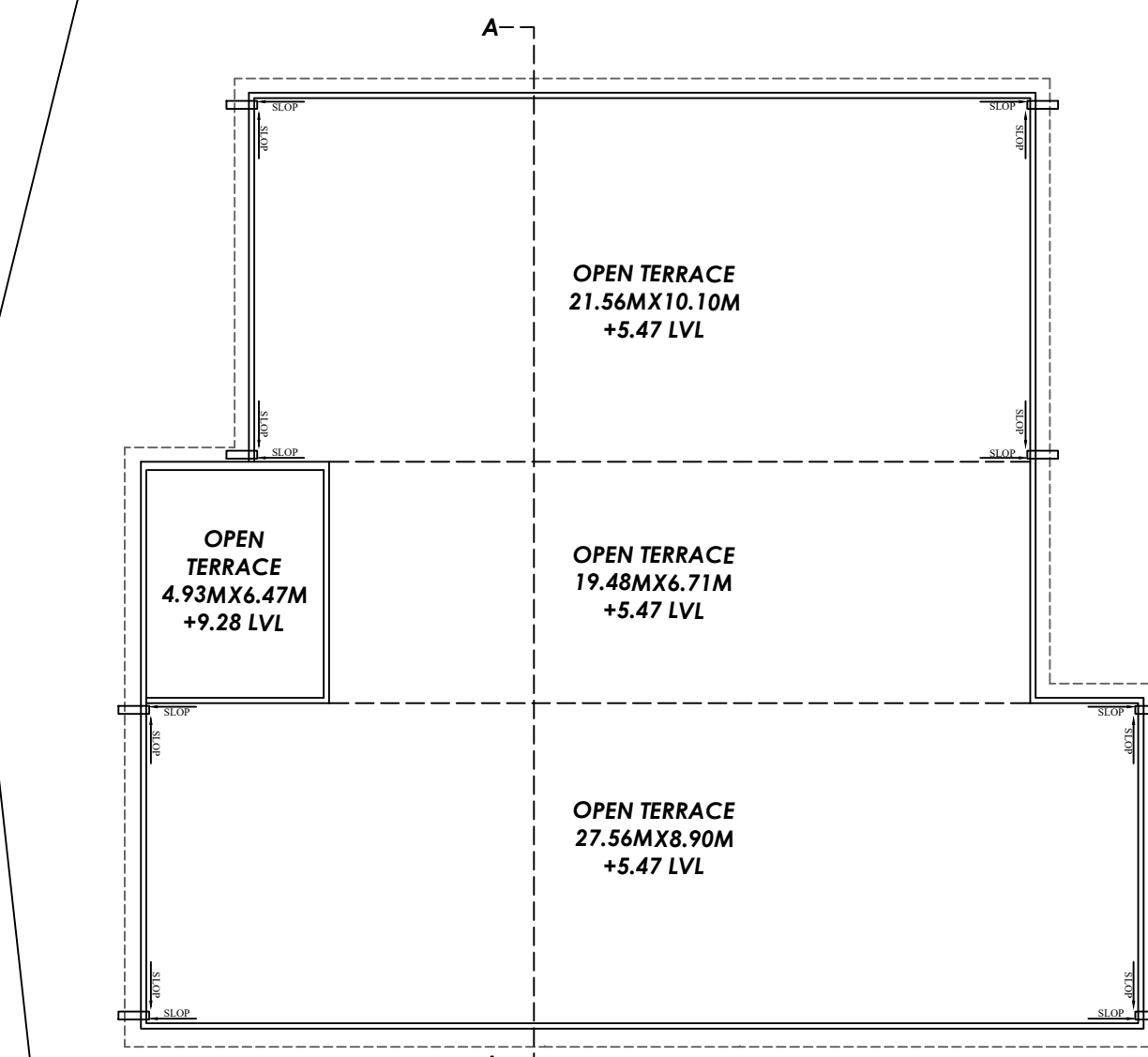
AREA BLOCK PLAN G.F.



FRONT ELEVATION

GROUND FLOOR PLAN  
SCALE 1:100

OPEN LAND

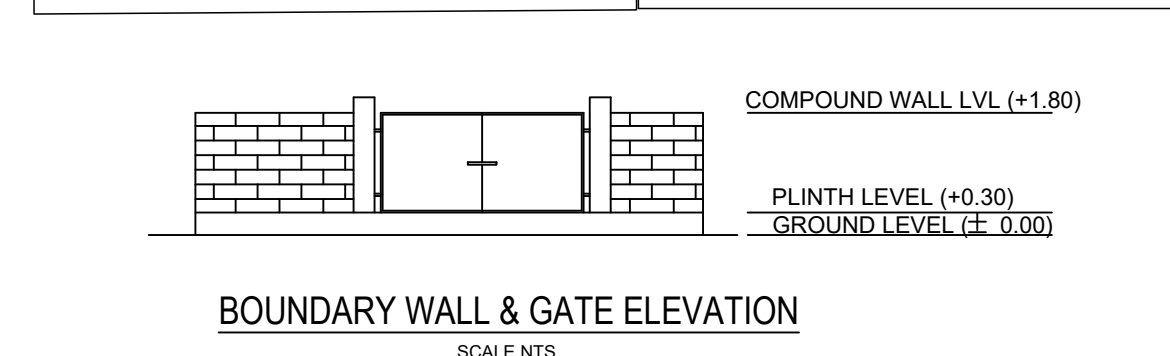
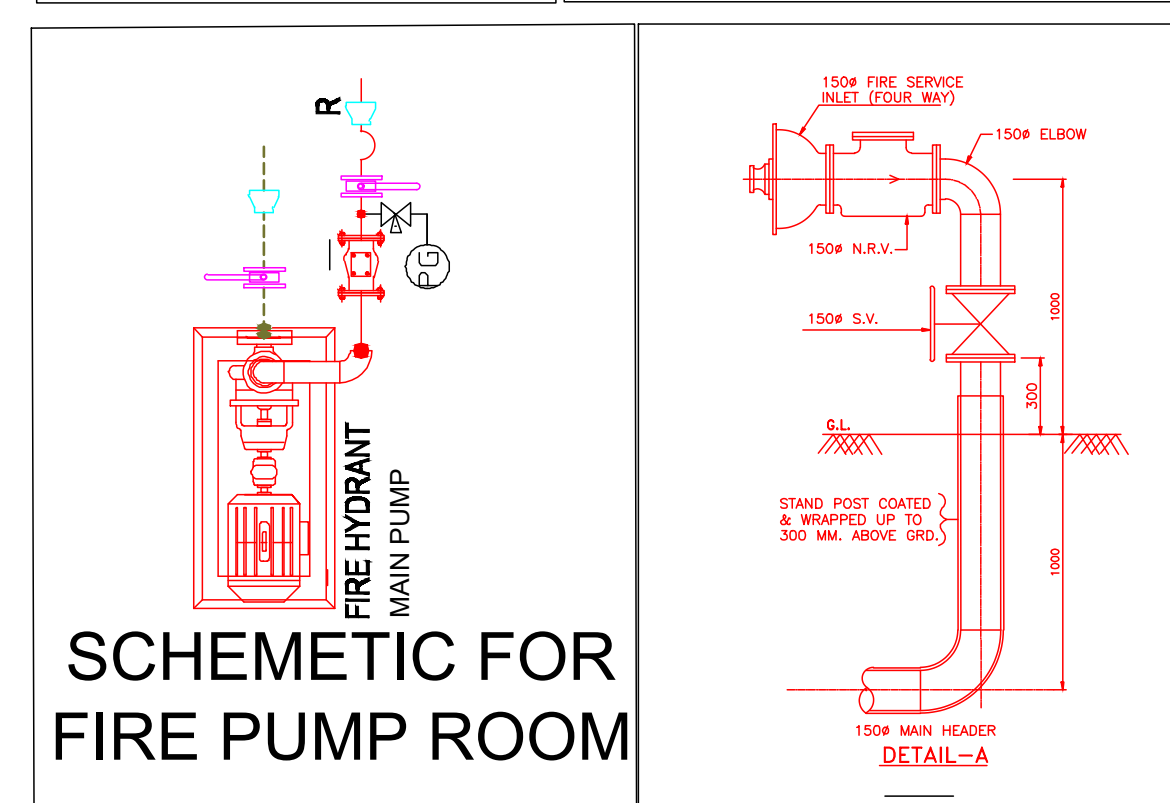
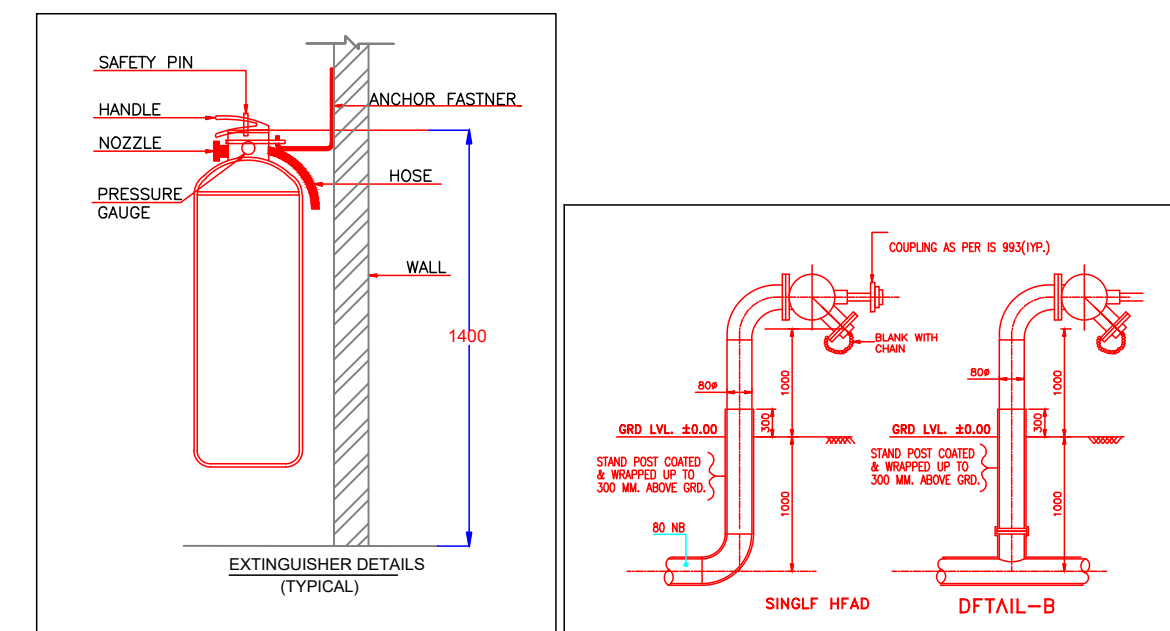
SITE PLAN  
SCALE NTSTERRACE PLAN  
SCALE 1:100

SUB STRUCTURE	BUILDING SPECIFICATION FOR RCC FRAME STRUCTURE	
	FOUNDATION :-	EXCAVATION UP TO HARD STRATA / MIN 1.20 MT P.C.C 0.15 THICK IN C.C. 1:3:6 DEPTH OF FOUNDATION AS PER SOIL TEST REPORT MINI. 2.00 METER
	R.R MASONRY :-	R.R BLACK STONE MASONRY FOUNDATION AS PER STRUCTURE DRAWING
	PLINTH BAND :-	0.15 THICK M 20 R.C.C. BAND AT PLINTH LEVEL AS PER STRUCTURE DRAWING
	GROUND FLOOR :-	FILLING IN PLINTH WITH G.S.B. / QUARRY WASTE / MORMUM ANTI TERMITE AT PLINTH LEVEL BASE CONCRETE P.C.C. 1:3:6 WITH 100 MM THICK
	FLOORING GF & FF :-	VITRIFIED TILES FLOORING IN ENTIRE BUILDING
	MASONRY GF & FF :-	SILL & LINTEL BAND AS PER STRUCTURE DRAWING PROVIDING & LAYING 200 MM THICK C.C. BLOCK MASONRY AT SUPER STRUCTURE LEVEL WITH CM 1:5. 100MM THICK PARTITION MASONRY WITH CM 1:4
	ALL SLAB LEVEL :-	R.C.C SLAB 0.15 THICK IN M 20
	TERRACE LEVEL :-	PARAPET OF 200MM THICK COPING ON PARAPET BALCONY RAILING IN R.C.C. PARADI OR MS AS PER DESIGN WATER PROOFING WITH CHINA MOSAIC / I.P.S FLOOR WITH CHEMICAL ADMIXTURE
	FINISHING PLASTER	IN SIDE :- PROVIDING AND LAYING 12 THICK SINGLE COAT PLASTER WITH 1:4 OUT SIDE :- 18 MM CEMENT PLASTER IN TWO COATS UNDER LAYER 12 MM THICK CEMENT PLASTER 1:5 FINISHED WITH A TOP LAYER 6 MM THICK CEMENT PLASTER 1:6
	COLOR IN SIDE :-	PLASTIC PAINT 2 COAT WITH 2 COAT OF LAPI
	OUT SIDE :-	APEX / ACE EXTERNAL EMULSION PAINT
	DOOR & WINDOW :-	WOODEN DOORS FRAMES & FLUSH DOOR PVC DOOR WITH GRANITE FRAME IN TOILET UPVC / ANODIZED ALUMINUM / WOODEN WINDOW
	M.S.GRILL :-	M.S. GRILL IN WINDOW M.S. GRILL DOOR IN VERANDAH
	PLUMBING :-	UPVC / APVC PIPE OF REQUIRED DIAMETER AS PER DESIGN DETAIL C.P BIB COCK / SHOWER (CONCEAL COCK) / VALVE AS PER REQUIREMENT SANITARY WARE WASHBASIN / EUROPEAN AS PER REQUIREMENT UNDER GROUND TANK 5000 LTRS OVER HEAD TANK 500 LTRS PVC
	ELECTRIFICATION :-	CONCEALED ISI WIRING MODULAR SWITCHES 5 AMP / 15 AMP PLUG POINT 5 AMP / 15 AMP
	STAIRCASE :-	S.S. RAILING / M.S. RAILING IN OPEN STAIR
	COMPOUND WALL :-	ALL FOUR SIDE COMPOUND WALL IN BLOCK / BRICK MASONRY
	COURTYARD :-	C.C. FLOORING

## PARKING AREA CALCULATION

PARKING AREA REQUIRED	
TOTAL PARKING AREA REQUIRED	= 643.31 X 40% = 257.32 SQ.MT.
MIN. CAR PARKING AREA REQUIRED	= 257.32 X 50% = 128.66 SQ.MT.
MIN. TWO WHEELERS PARKING AREA REQUIRED	= 257.32 X 50% = 128.66 SQ.MT.
PARKING AREA PROVIDED	
CAR PARKING AREA PROVIDED	= 213.81 SQ.MT.
TWO WHEELER PARKING AREA PROVIDED	= 187.85 SQ.MT.
TOTAL PARKING AREA PROVIDED ( 213.81+187.85 )	= 401.66 SQ.MT.

6" DIA MS 'C' CLASS PIPE	
HYDRANT VALVE 63 MM DIA ISI MARK	
HOSE REEL DRUM SET 30 M LONG	
HOSE BOX WITH HOSE PIPE	
CO2 TYPE FIRE EXTINGUISHER 4.5 KG	
ABC TYPE FIRE EXTINGUISHER 6 KG	
BUTTERFLY / GATE VALVE	
FOUR WAY FIRE BRIGADE INLET	
AIR RELEASE VALVE 1" DIA	
SMOKE DETECTOR	

BOUNDARY WALL & GATE ELEVATION  
SCALE NTSPLAN SHOWING PROPOSED CONVENTION CENTRE AT  
SHINAY POLICE QTR, VILLAGE SHINAY TALUKA  
GANDHIDHAM - KACHCHH

## AREA STATEMENT

TOTAL AREA OF PLOT	1851.19 SQMT
PERMISSIBLE F.S.I 1.80	3332.14 SQMT
PROPOSED COVERED AREA ON G.F.	643.31 SQMT
TOTAL FSI CONSUMED	0.193
GREEN AREA	271.00 SQMT
PARKING AREA CAR+TWO WHEELER= 213.81+187.85 SQMT	401.66 SQMT

## SCHEDULE OF DOORS &amp; WINDOWS

S R NO	TYPE	SIZE	INTEL	SILL	DESCRIPTION
01	MD	2.00 X 2.10	2.10	-	FULLY T W PANN DOORS
02	D	1.50 X 2.10	2.10	-	FULLY T W PANN DOORS
03	D1	1.00 X 2.10	2.10	-	FULLY T W PANN DOORS
04	D2	0.90 X 2.10	2.10	-	FULLY T W PANN DOORS
05	D3	0.76 X 2.10	2.10	-	FULLY T W PANN DOORS
06	W	3.00 X 1.20	2.10	0.90	FULLY GLASSSED WINDOWS
07	W1	2.00 X 1.20	2.10	0.90	FULLY GLASSSED WINDOWS
08	W2	1.62 X 0.90	2.10	1.20	FULLY GLASSSED WINDOWS
09	V	1.00 X 0.60	2.10	-	LOUVERED GLASS VENTILATOR

## DETAIL OF RCC STAIRCASE

WIDTH OF FLIGHT	1.385 MT
WIDTH OF THREAD	0.25 MT
HEIGHT OF RISER	0.15 MT
HEIGHT OF HAND RAIL	0.90 MT
TOTAL NOS OF STEPS	30 NOS

## LEGEND OF COLORS

PLOT BOUNDARY SHOWN IN BLACK	
FIRE LINE SHOWN IN DARK RED DOTTED	
EXISTING ROAD SHOWN IN GREEN	
PROPOSED COVERED AERA SHOWN IN RED	
DRAINAGE LINE SHOWN IN RED DOTTED	

## V Certificate

EXISTING STRUCTURE AND ADJOINING PROPERTY IS SEEN BY ME AND NECESSARY PRECAUTION WILL BE TAKEN FOR SMOOTH WORKING WITHOUT ANY DAMAGE TO EXISTING WORK MANHOLE CONNECTION IS POSSIBLE AND IS VERIFIED BY ME CERTIFIED THAT PLOT UNDER REFERENCE WAS SURVEYED BY ME ON 01/03/2025 AND THE DIMENSION OF SIDES ETC OF PLOT STATE ON PLAN AREA AS MEASURE ON SITE AND THE AREA SO WORKED OUTALLIES WITH THE AREA STATED IN DOCUMENT OF OWNERSHIP / T.P. RECORD

ARCHITECT / ENGINEER / SURVEYOR SIGNATURE.

OWNER :

ENGINEER:

DEENDAYAL PORT AUTHORITY

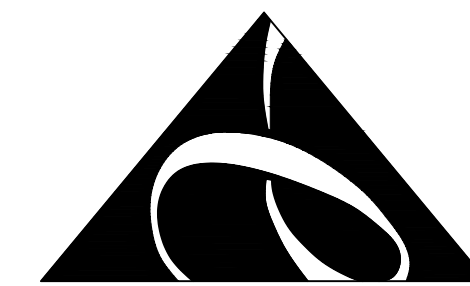
ER JAGDISH D GANATRA

STRUCTURE ENGINEER

SITE SUPERVISOR

ER JAGDISH D GANATRA

ER JAGDISH D GANATRA



**ER JAGDISH D GANATRA BE CIVIL MIE**  
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CLIENT	DEENDAYAL PORT AUTHORITY	
JOB	PROPOSED CONVENTION CENTRE BLDG.	
SITE	AT SHINAY POLICE QTR, VILLAGE SHINAY TALUKA GANDHIDHAM - KACHCHH	
DATE	28/04/2025	SCALE:- 1:100
DRN. BY	Er Kiran Vora	
CHKD. BY	Er Jagdish Ganatra	DRG. NO.:- PCE/BENHALL/SHINAY/52024082/01

AUTHORITY :