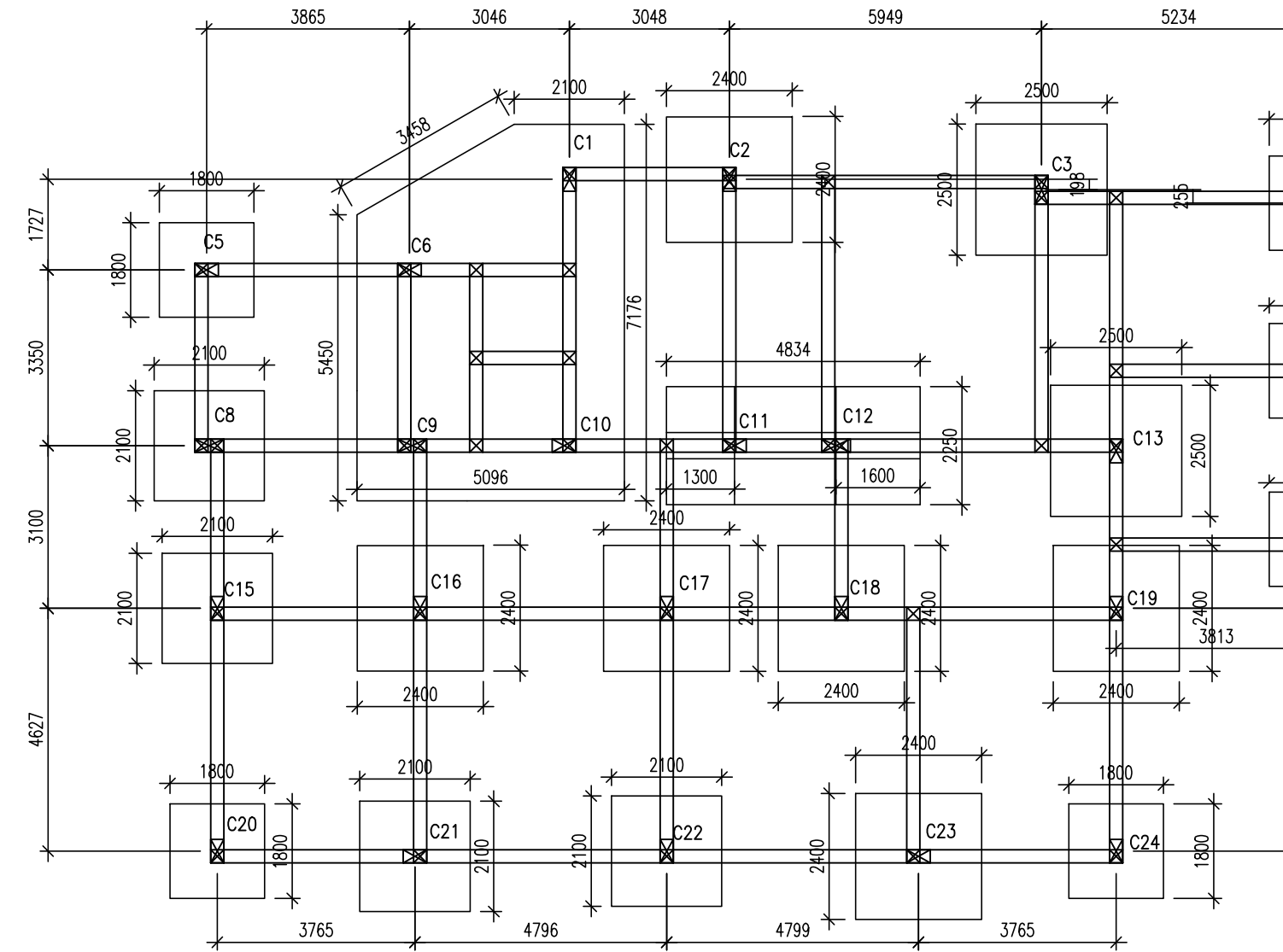
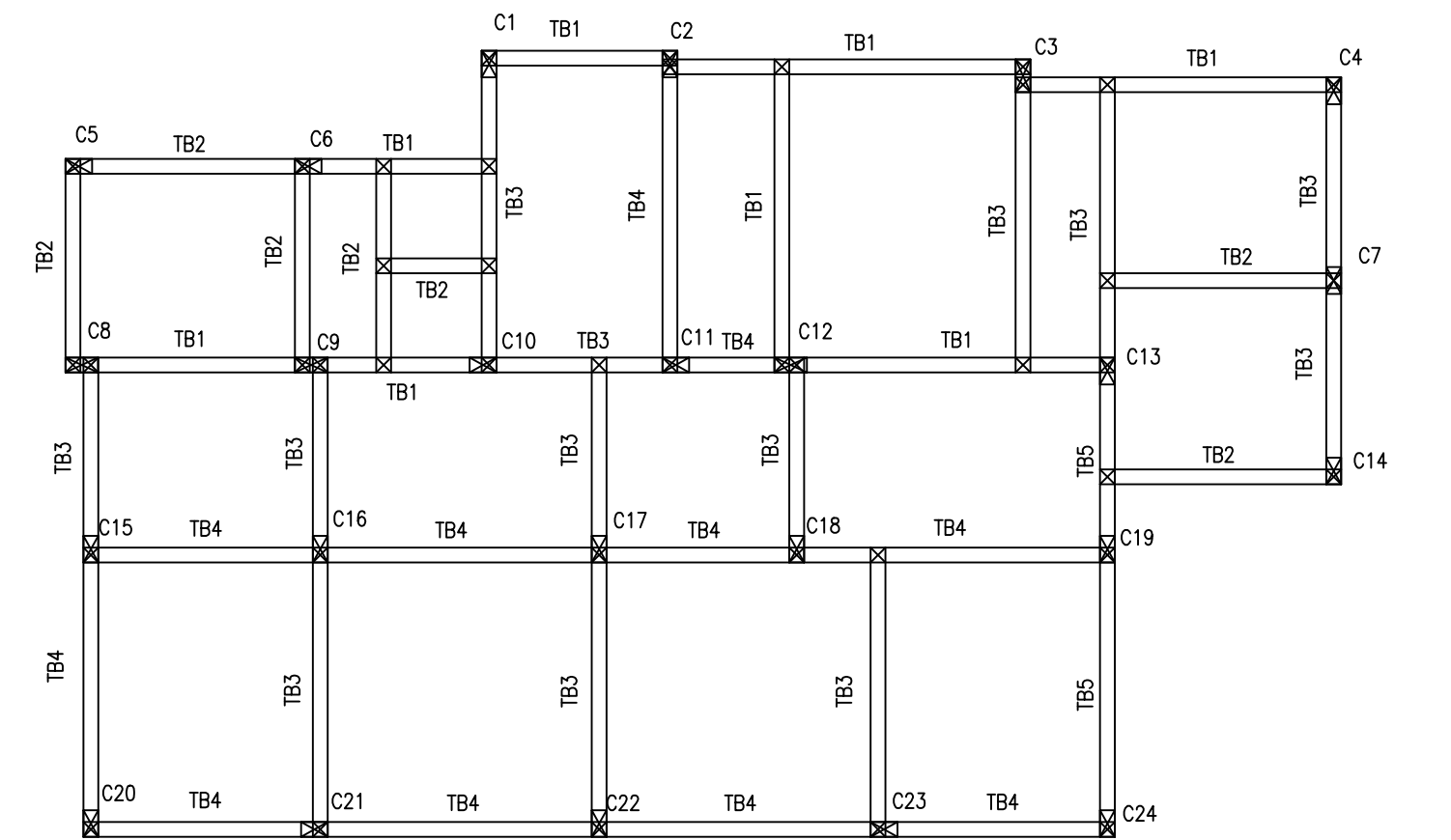
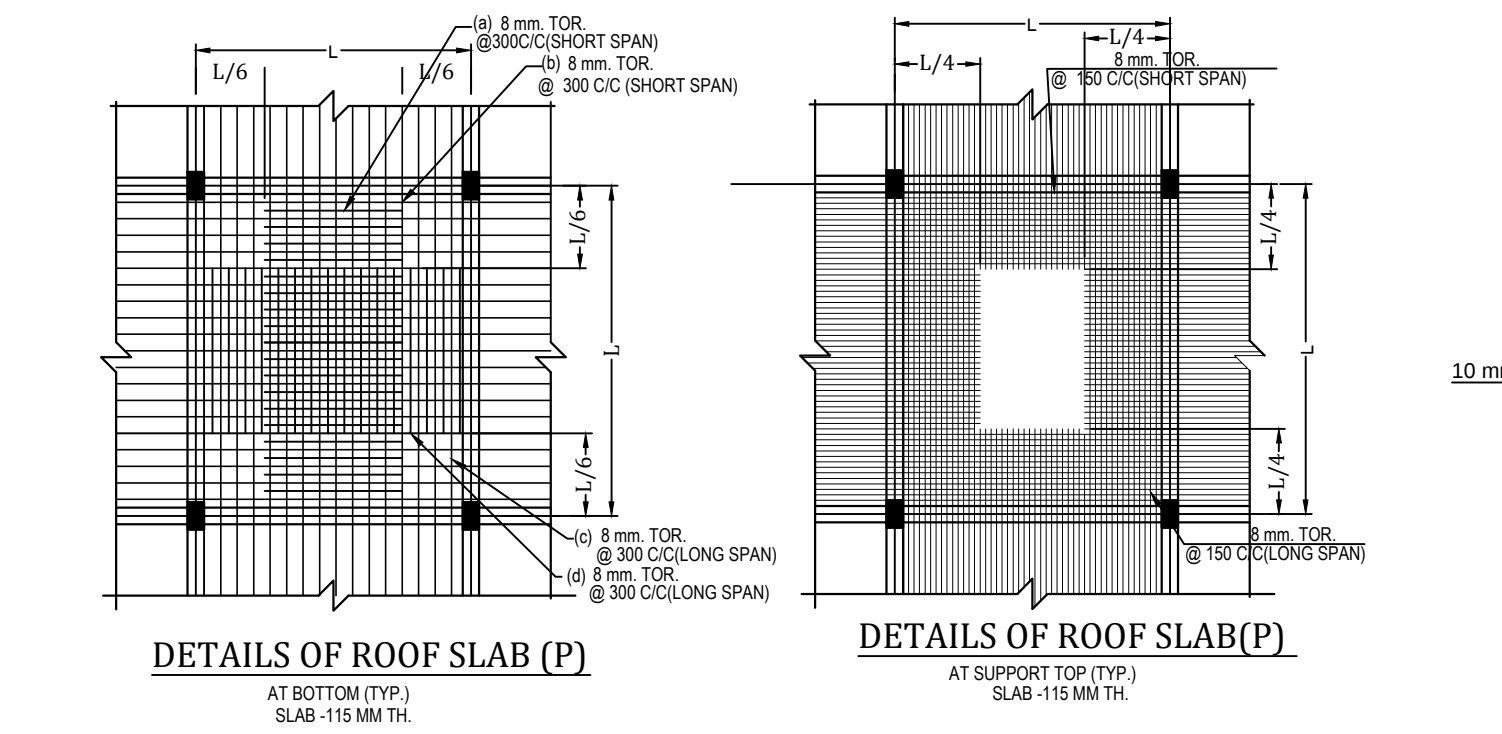
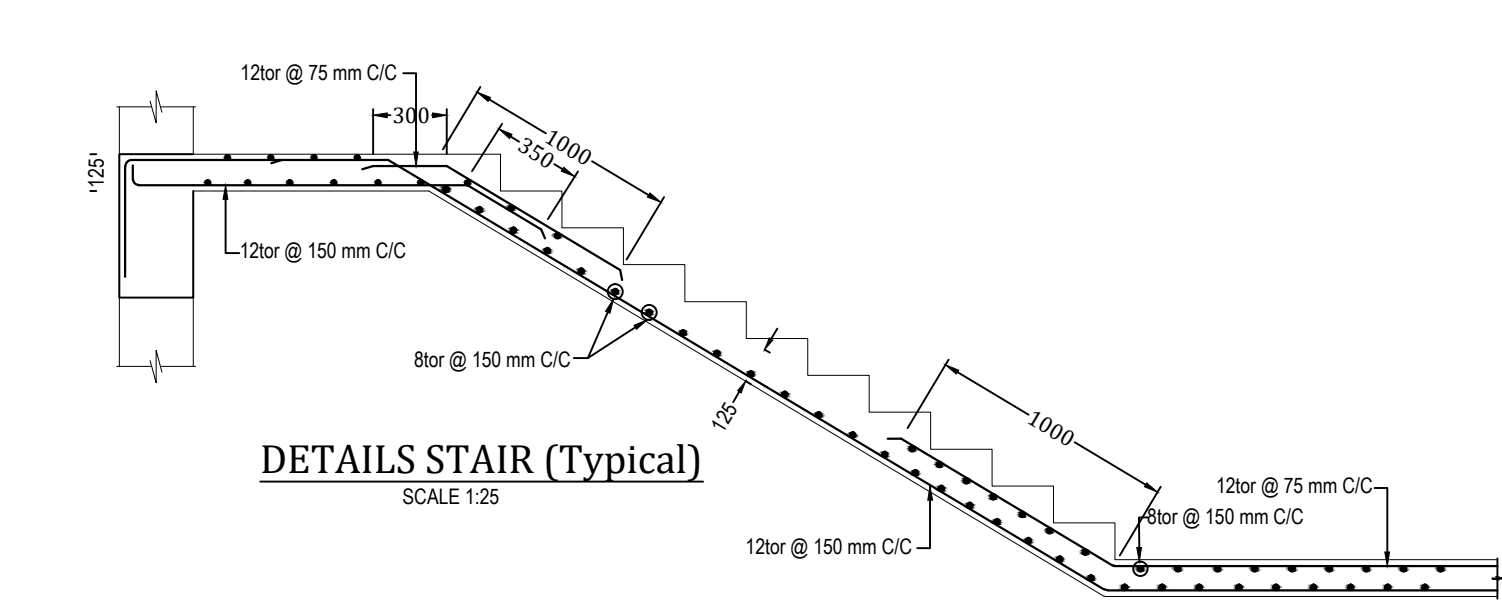
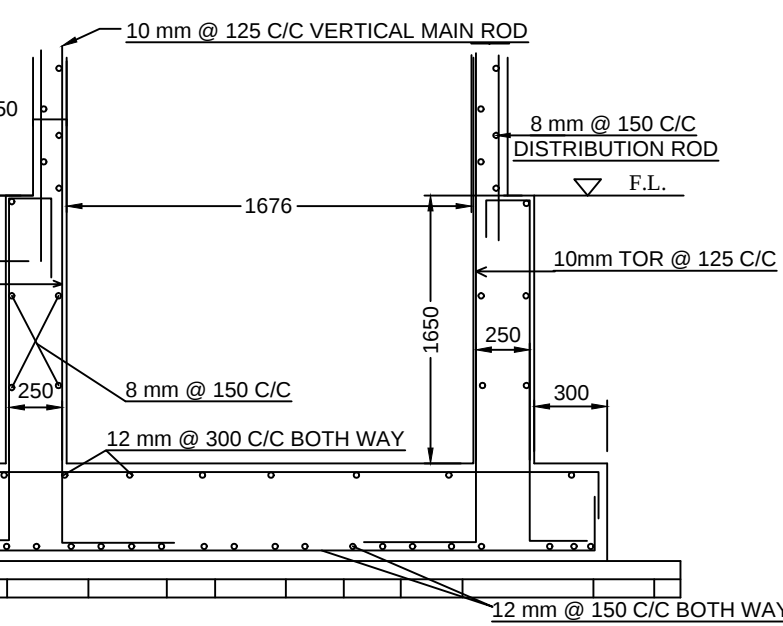
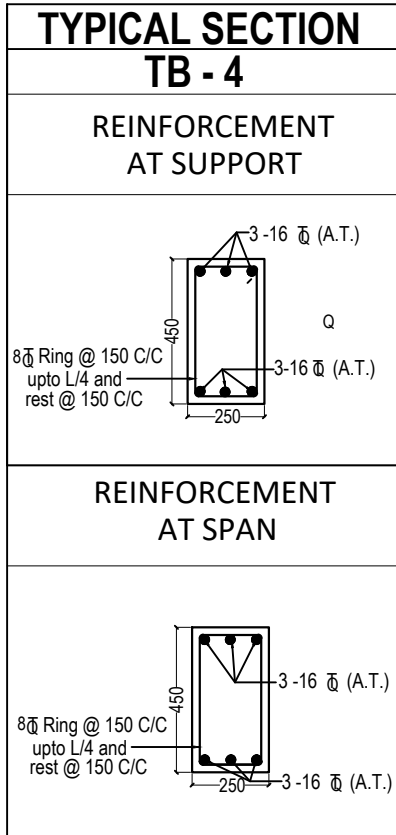


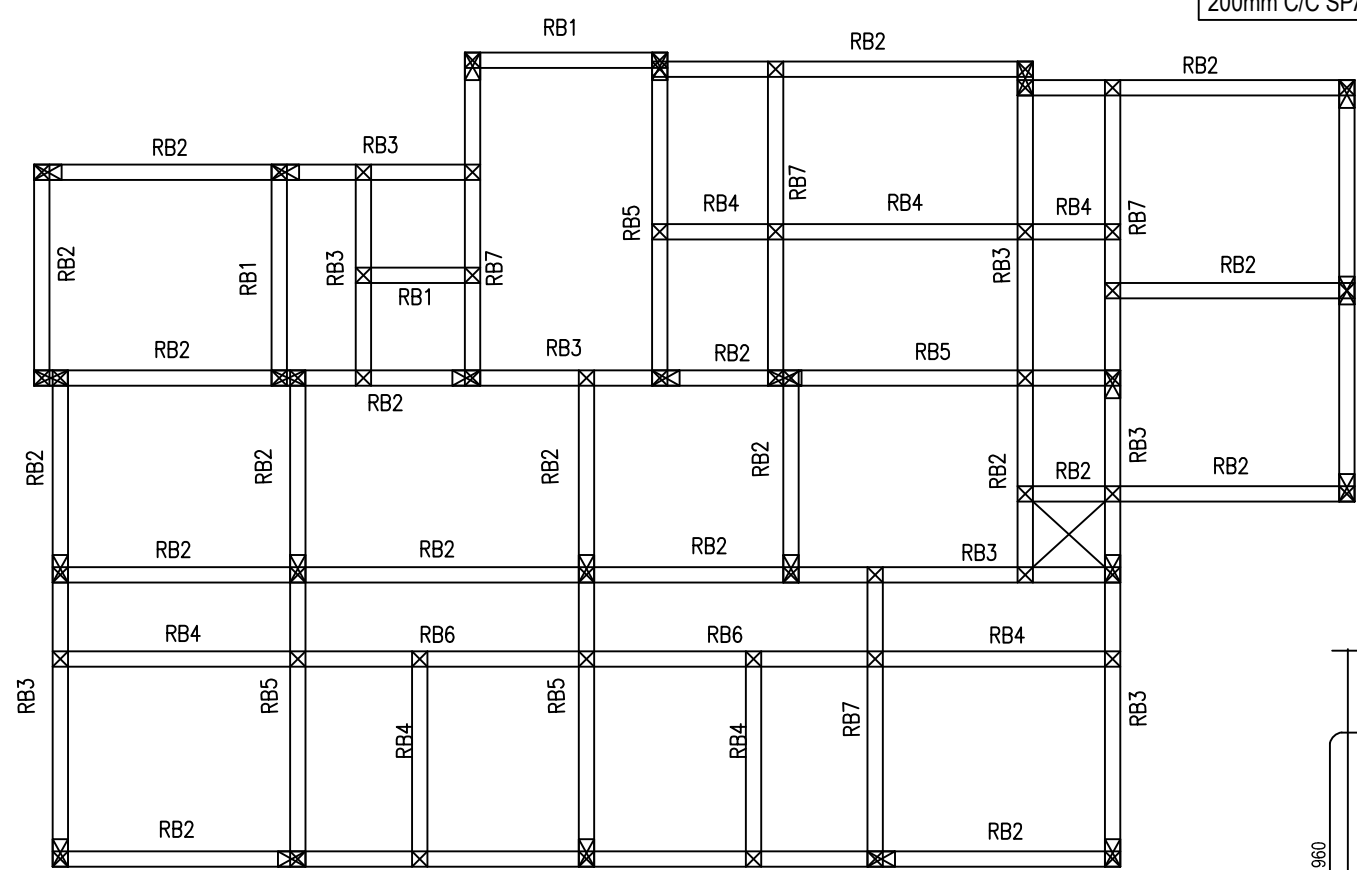
PLAN SHOWING THE STRUCTURAL DRAWING FOR PROPOSED G+3 STORIED COMMERCIAL HOUSING (APARTMENT TYPE G+3,) AT RANIGANJ, ON R.S, PLOT 1795(P), 1798(P), L.R. PLOT NO.- 2462, 2465, L.R. KH. NO.- 5090, 9915, 9927 MOUZA- SEARSOLE, J.L. - 17, P.O- SEARSOLE RAJ BARI, P.S. RANIGANJ, DIST PASCHIM BARDHAMAN, UNDER ASANSOL MUNICIPAL CORPORATION LAND OWNER 1) SRI SUSHIL KUMAR GANERIWALA, 2) SRI PARESH CHANDRA CHATTERJEE 3) SRI KALYAN CHATTERJEE



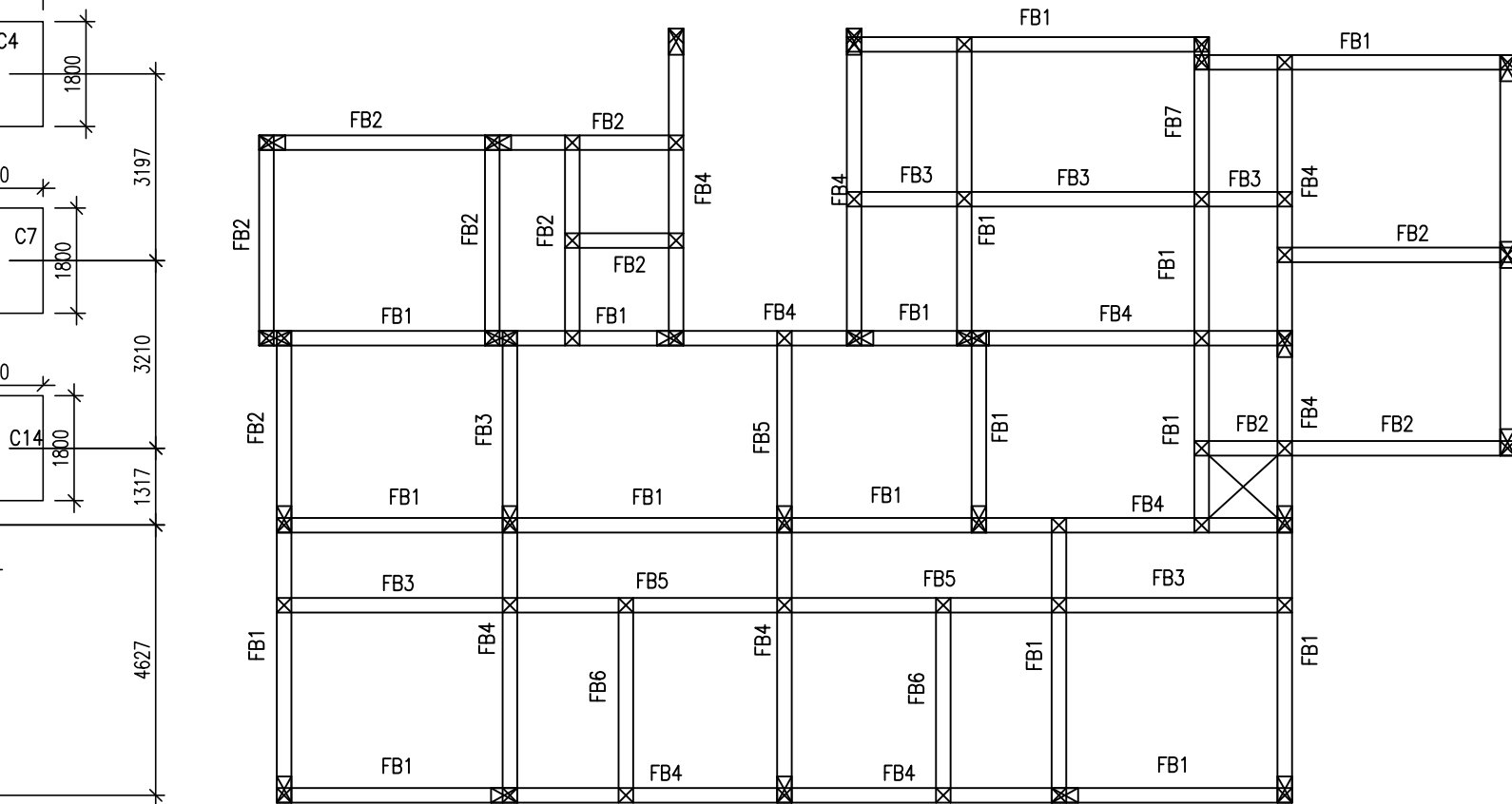
FOUNDATION LAYOUT



TYPICAL SECTION OF LIFT



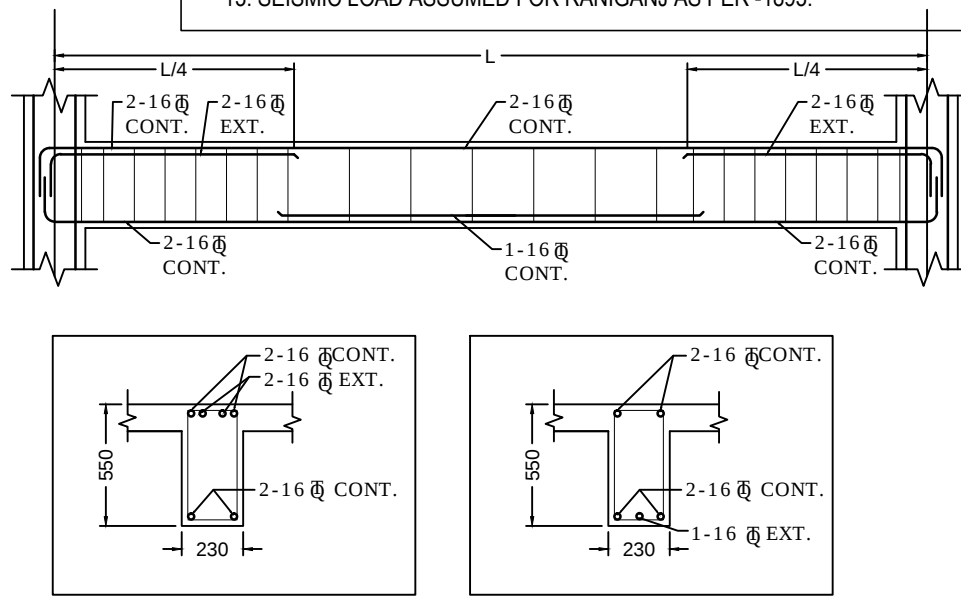
ROOF BEAM LAYOUT



FLOOR BEAM LAYOUT

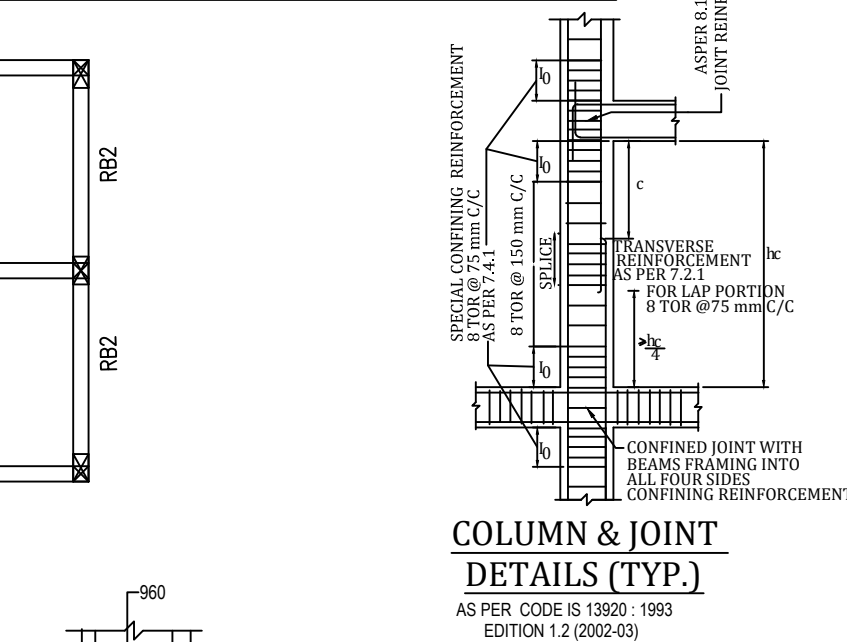
SPECIFICATION :-

1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
2. THIS DRAWING IS TO BE READ ALONG WITH ALL RELEVANT ARCHITECTURAL DRAWINGS.
3. ALL MATERIALS SHALL CONFORM TO RELEVANT IS CODES.
4. GRADE OF CONCRETE M-25 (IN SLAB, BEAM & COLUMNS) & M25 (IN FOUNDATIONS)
5. FOR STEEL GRADE FE-500 AS PER IS. 1786 - 1979
6. ALL DISTRIBUTION BARS ARE 8TOR @ 200 C/C AND TO BE PROVIDED WHEREVER REQUIRED
7. ALL CHAIRS ARE OF 10 TOR TO BE PROVIDED WHEREVER REQUIRED
8. ALL SPACER BARS ARE 25 TOR @ 900 C/C AND TO BE PROVIDED WHEREVER REQUIRED
9. LAPS SPLICES & BOND LENGTH SHOULD BE 50 D WHERE D IS THE SMALLEST BAR DIA
10. MINIMUM CLEAR COVER TO MAIN REINFORCEMENT IS AS FOLLOWS
 - a) FOUNDATION..... 50
 - b) COLUMN..... 50
 - c) FLOOR BEAM..... 25
 - d) SLAB..... 20
11. TOP & BOTTOM RODS OF BEAM & SLAB WILL ENTER INTO THE
12. L-LENGTH = (50 d + 200mm), WHERE d IS THE DIA OF THE BAR
- END COLUMNS & BEAMS IN L-SHAPE RESPECTIVELY
13. SEISMIC LOAD ASSUMED FOR RANIGANJ AS PER -1893.

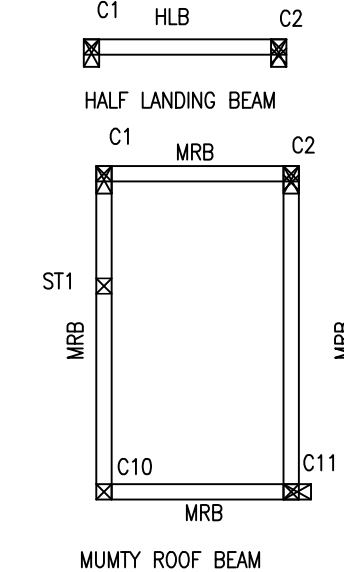
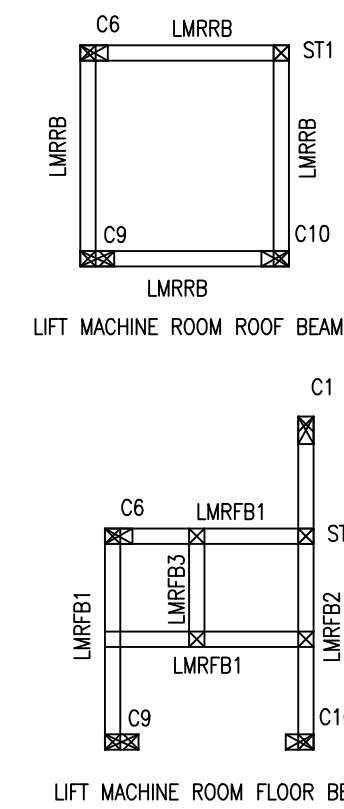
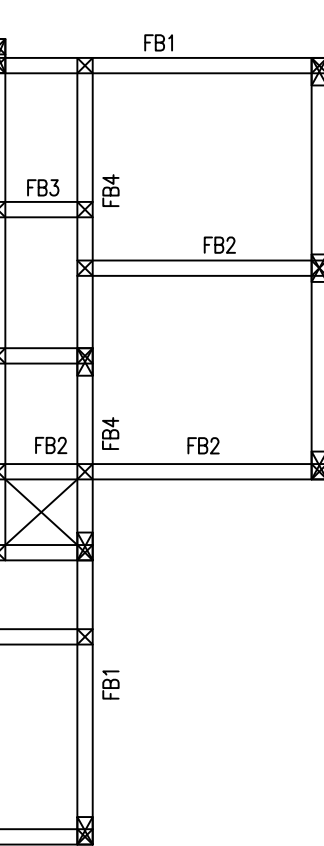


DETAILS OF R.C.C. ROOF BEAM MKD. RB4 (TYPICAL)

REINFORCEMENT 8MM TOR 100 mm C/C FOR SUPPORT L/4 & 200mm C/C SPAN.



ANCHORAGE OF BEAM BARS IN AN EXTERNAL JOINT



Sl. No.	BEAM MKD	SIZE		REINFORCEMENT					STIRRUP			
				TOP		BOTTOM			S1		S2	
		B	D	t0	t1	t2	b0	b1	LEGS	DIA & SPAC (MM)	LEGS	DIA & SPAC (MM)
1	TB1	250	450	2-16 + 1-12	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
2	TB2	250	450	3-12	-	-	3-12	-	2	8 @ 150	2	8 @ 150
3	TB3	250	450	3-16	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
4	TB4	250	450	3-16	-	-	3-16	-	2	8 @ 150	2	8 @ 150
5	TB5	250	450	3-16	2-12	2-12	3-16	1-12	2	8 @ 150	2	8 @ 150

Sl. No.	BEAM MKD	SIZE		REINFORCEMENT					STIRRUP			
				TOP		BOTTOM			S1		S2	
		B	D	t0	t1	t2	b0	b1	LEGS	DIA & SPAC (MM)	LEGS	DIA & SPAC (MM)
1	FB1	250	450	3-20	-	-	3-16	1-12	2	8 @ 150	2	8 @ 150
2	FB2	250	450	3-16	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
3	FB3	250	400	3-16	-	-	3-16	-	2	8 @ 150	2	8 @ 150
4	FB4	250	450	3-20	2-12	2-12	3-16	2-12	2	8 @ 150	2	8 @ 150
5	FB5	250	400	3-16	2-12	2-12	3-16	1-12	2	8 @ 150	2	8 @ 150
6	FB6	250	400	3-12	-	-	3-12	1-12	2	8 @ 150	2	8 @ 150
7	FB7	250	450	3-20	3-16	-	3-16	1-12	2	8 @ 150	2	8 @ 150

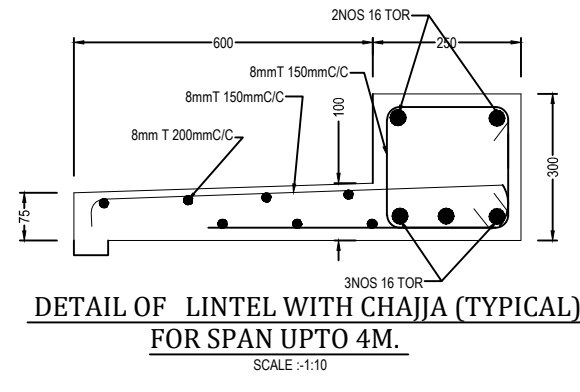
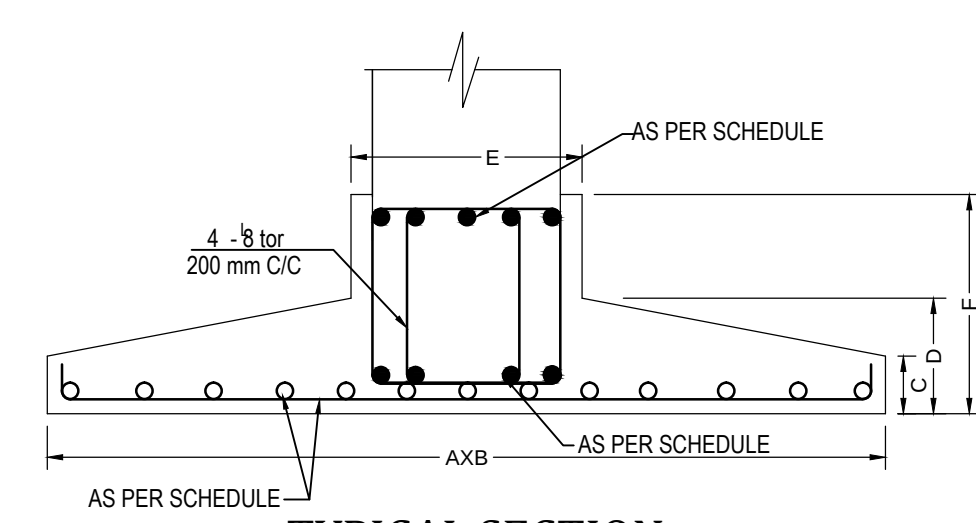
Sl. No.	BEAM MKD	SIZE		REINFORCEMENT					STIRRUP			
				TOP		BOTTOM			S1		S2	
		B	D	t0	t1	t2	b0	b1	LEGS	DIA & SPAC (MM)	LEGS	DIA & SPAC (MM)
1	RB1	250	400	3-12	-	-	3-12	-	2	8 @ 150	2	8 @ 150
2	RB2	250	400	2-16 + 1-12	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
3	RB3	250	400	3-16	-	-	3-16	-	2	8 @ 150	2	8 @ 150
4	RB4	250	350	3-12	-	-	3-12	-	2	8 @ 150	2	8 @ 150
5	RB5	250	400	3-16	2-12	2-12	3-16	-	2	8 @ 150	2	8 @ 150
6	RB6	250	350	3-12	2-12	1-12	3-12	1-12	2	8 @ 150	2	8 @ 150
7	RB7	250	400	3-16	2-12	2-12	3-16	2-12	2	8 @ 150	2	8 @ 150

Sl. No.	BEAM MKD	SIZE		REINFORCEMENT					STIRRUP			
				TOP		BOTTOM			S1		S2	
		B	D	t0	t1	t2	b0	b1	LEGS	DIA & SPAC (MM)	LEGS	DIA & SPAC (MM)
1	HLB	250	450	3-20	-	-	3-16	1-12	2	8 @ 150	2	8 @ 150
2	MRB	250	450	2-16 + 1-12	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
3	LMRFB1	250	400	2-16 + 1-12	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
4	LMRFB2	250	400	3-16	-	-	2-16 + 1-12	-	2	8 @ 150	2	8 @ 150
5	LMRFB3	250	400	3-12	-	-	3-12	-	2	8 @ 150	2	8 @ 150
6	LMRRB	250	300	3-12	-	-	3-12	-	2	8 @ 150	2	8 @ 150

Lift Mko.	Wall Thickness	ayres of Reinf	Bottom- Midspan			
			Vertical		Horizontal	
Lift-1	150 mm	2	10 mm dia @ 150 mm c/c		8 mm dia @ 150 mm c/c	

Col Mkd.	Fdn Mkd.	Fdn Size Reqd.				DEPTH OF Raft Slab	Along Z-Dir (mm) Main Bar	Along X-Dir (mm) Distribution Bar	Along Z-Dir (mm)	Along X-Dir (mm)	Beam Mkd.	Beam Size		Reinforcement		Stirrup	Beam Side Face									
L1(m)Column L2(m)B(m)																		(bottom)		(top)		WidthDepth		Bottom	Top	Each Side
C1-C6-C9-C10 & LIFT		RF	Mention in Autocad DWG				350	12tor/ 150x/c	12tor/ 150x/c	12tor/ 150x/c	12tor/ 150x/c	RFB	450	800	3-16 @ 2-16 @ 150 + 2-16 @ 150	200x/c	3	10tor								
Col Mkd.	Fdn Mkd.	Fdn Size Reqd.				DEPTH OF Raft Slab	Along Z-Dir (mm) Main Bar	Along X-Dir (mm) Distribution Bar	Beam Size		Reinforcement		Stirrup		Beam Side Face											
L1(m) L(m) L2(m) B(m) at face of Beam at edge (bottom)																		Width	Depth	Bottom	Top	Each Side				
C11-C12		CF-1	1.300	1.900	1.600	2.250	0.450	0.250	12 1/2	125c/c	12 1/2	200c/c	0.500	0.800	7-20 5-20 4L-8	200c/c	3	10 1/2								

Col Mkd.	Fdn Mkd.	Pedestal Size			Fdn Size Reqd.		DEPTH OF FOUNDATION		Along Z-Dir (Bar Reqd) (mm)		Along X-Dir (Bar Reqd) (mm)		Pedestal reinforcement	
		x dire	z dire	Height	L(m)	B(m)	at face	at edge	(bottom)	(bottom)	(bottom)	(bottom)	Main	Tie
C2	F1	0.550	0.900	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C16	F1	0.550	0.750	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C17	F1	0.550	0.750	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C18	F1	0.550	0.750	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C19	F1	0.550	0.750	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C23	F1	0.900	0.550	0.400	2.40	2.40	400.00	250.00	16Tor	175c/c	16Tor	175c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C3	F2	0.550	0.900	0.350	2.50	2.50	450.00	250.00	16Tor	175c/c	16Tor	175c/c	14 - 8 1/2	2L-8 1/2 150 c/c
C13	F2	0.550	0.900	0.350	2.50	2.50	450.00	250.00	16Tor	175c/c	16Tor	175c/c	14 - 8 1/2	2L-8 1/2 150 c/c
C4	F3	0.550	0.750	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C5	F3	0.750	0.550	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C7	F3	0.550	0.750	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C14	F3	0.550	0.750	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C20	F3	0.550	0.750	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C24	F3	0.550	0.750	0.500	1.80	1.80	300.00	200.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C8	F4	0.900	0.550	0.400	2.10	2.10	400.00	250.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C15	F4	0.550	0.750	0.400	2.10	2.10	400.00	250.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C21	F4	0.750	0.550	0.400	2.10	2.10	400.00	250.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c
C22	F4	0.550	0.750	0.400	2.10	2.10	400.00	250.00	12Tor	150c/c	12Tor	150c/c	12 - 8 1/2	2L-8 1/2 150 c/c



AREA CHART	
TOTAL AREA OF LAND	537.93 SQ.M.
LAND LEFT FOR ROAD AREA	69.83 SQ.M.
EFFICATED LAND AREA	3.12 SQ.M.
COVD. AREA OF G.F.	241.77 SQ.M.
COVD. AREA OF F. F.	241.77 SQ.M.
COVD. AREA OF S. F.	241.77 SQ.M.
VACANT AREA	296.16 SQ.M.
% OF COVD. AREA (G.F.)	44.94 %

SIGNATURE OF OWNER

SIGNATURE OF STRUCTURAL ENGINEER

TITLE	STRUCTURAL DRAWING
DATE	27.12.2023
DRG.NO	STRU/2023/12
DEALT	KES
CHECKED	SAJ
SHEET.NO	1 OF 1