

RING PATTERN FOR COLUMN THROUGHOUT

RING PATTERN	18" x 18"	24" x 24"	18" x 24"	12" x 20"	12" x 12"	TYPICAL HOOK DETAILS
	12 - 16ϕ 8 ϕ @ 6" C/C	20 - 25 ϕ 8 ϕ @ 6" C/C	8 - 20 ϕ + 8 - 16 ϕ 8 ϕ @ 6" C/C	10 - 16 ϕ 8 ϕ @ 6" C/C	8 - 12 ϕ 8 ϕ @ 7" C/C	
	● 12 - 16 ϕ	● 20 - 25 ϕ	⊙ 8 - 20 ϕ ⊙ 8 - 16 ϕ	● 10 - 16 ϕ	⊙ 8 - 12 ϕ	
COLUMN NO	C1	C2	C3	C4	SC UPTO PLINTH LVL.	D = 3 INCHES

SCHEDULE FOR FOOTINGS

COLUMN NO.	EXCAVATION		SIZE		FOOTING DETAILS			
	WIDTH	LENGTH	WIDTH	LENGTH	DEPTH AT EDGE	DEPTH AT PEDESTAL	R/F PARALLEL TO SHORT SIDE	R/F PARALLEL TO LONG SIDE
F1	6' - 8"	6' - 8"	6' - 0"	6' - 0"	24"	24"	12 - 12 ϕ MM	12 - 12 ϕ MM
F2	12' - 8"	12' - 8"	12' - 0"	12' - 0"	36"	36"	21 - 16 ϕ MM	21 - 16 ϕ MM
F3	8' - 8"	9' - 4"	8' - 0"	8' - 8"	28"	28"	20 - 12 ϕ MM	18 - 12 ϕ MM
F4	10' - 0"	10' - 8"	9' - 4"	10' - 0"	32"	32"	26 - 12 ϕ MM	24 - 12 ϕ MM
F5	11' - 0"	11' - 4"	10' - 4"	10' - 8"	36"	36"	19 - 16 ϕ MM	18 - 16 ϕ MM
F6	7' - 0"	7' - 8"	6' - 4"	7' - 0"	24"	24"	14 - 12 ϕ MM	13 - 12 ϕ MM
SC	4' - 8"	4' - 8"	4' - 0"	4' - 0"	14"	14"	8 - 10 ϕ MM	8 - 10 ϕ MM

SCHEDULE FOR RAFT

COLUMN NO.	EXCAVATION		SIZE		FOOTING DETAILS			
	WIDTH	LENGTH	WIDTH	LENGTH	DEPTH AT EDGE	DEPTH AT PEDESTAL	BOTTOM R/F BOTHWAYS	TOP R/F BOTHWAYS
(RAFT) (C4 - C4 - C3 - C4)	13' - 6"	21' - 6"	12' - 10"	20' - 10"	24"	24"	16 ϕ @ 6" C/C	16 ϕ @ 6" C/C

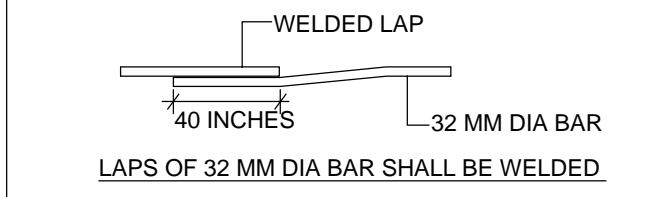
SCHEDULE RCC LIFT WALL

TYPE	THICKNESS (INCHES)	VERTICAL R/F ON EACH FACE	HORIZONTAL R/F ON EACH FACE	REMARKS
RCC WALL	8"	10 ϕ @ 6" C/C	8 ϕ @ 6" C/C	RCC LIFT WALL UPTO GROUND FLOOR SLAB LVL

DEV. LENGTH TABLE OF BARS

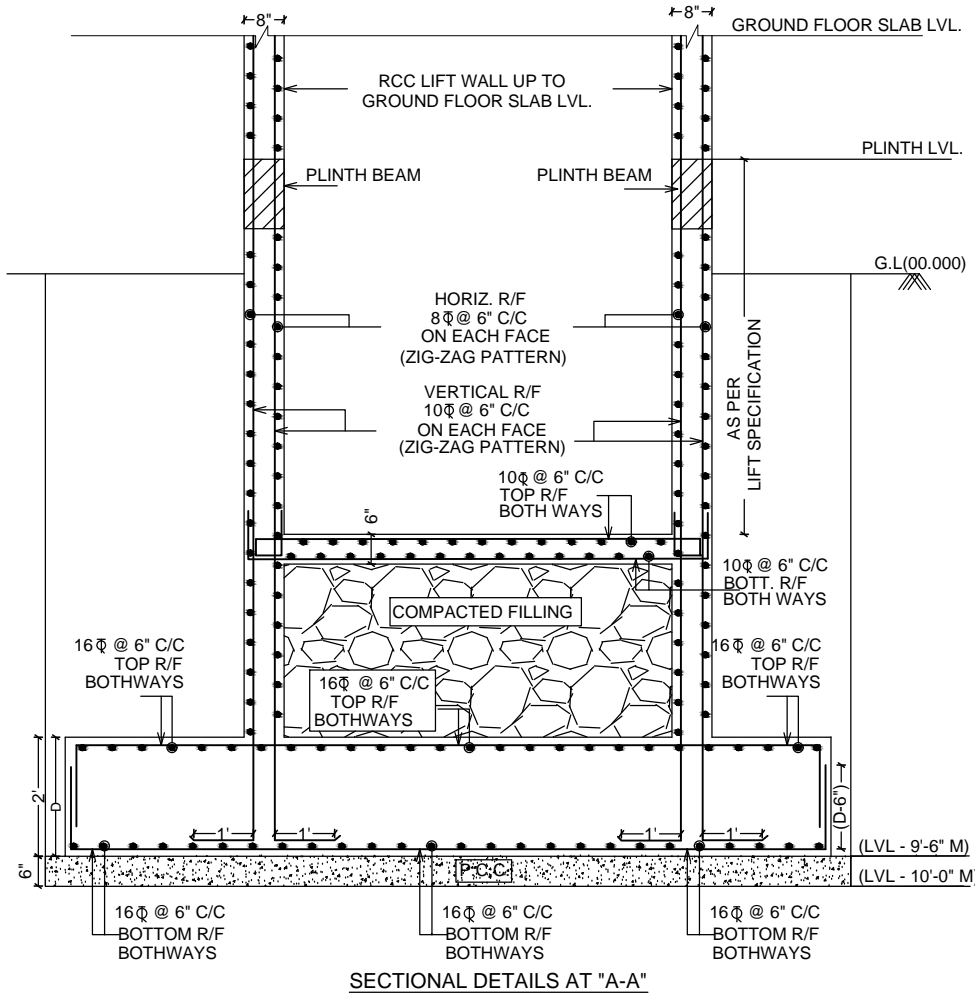
DIA OF BAR	DEV. LENGTH	DIA OF BAR	DEV. LENGTH
6 MM	12 INCHES	12 MM	24 INCHES
8 MM	16 INCHES	16 MM	30 INCHES
10 MM	20 INCHES	20 MM	38 INCHES
25 MM	50 INCHES	32 MM	WELDED

NOTE:- FOR 32 MM DIA BAR IT IS MANDATORY TO WELD THE LAPS

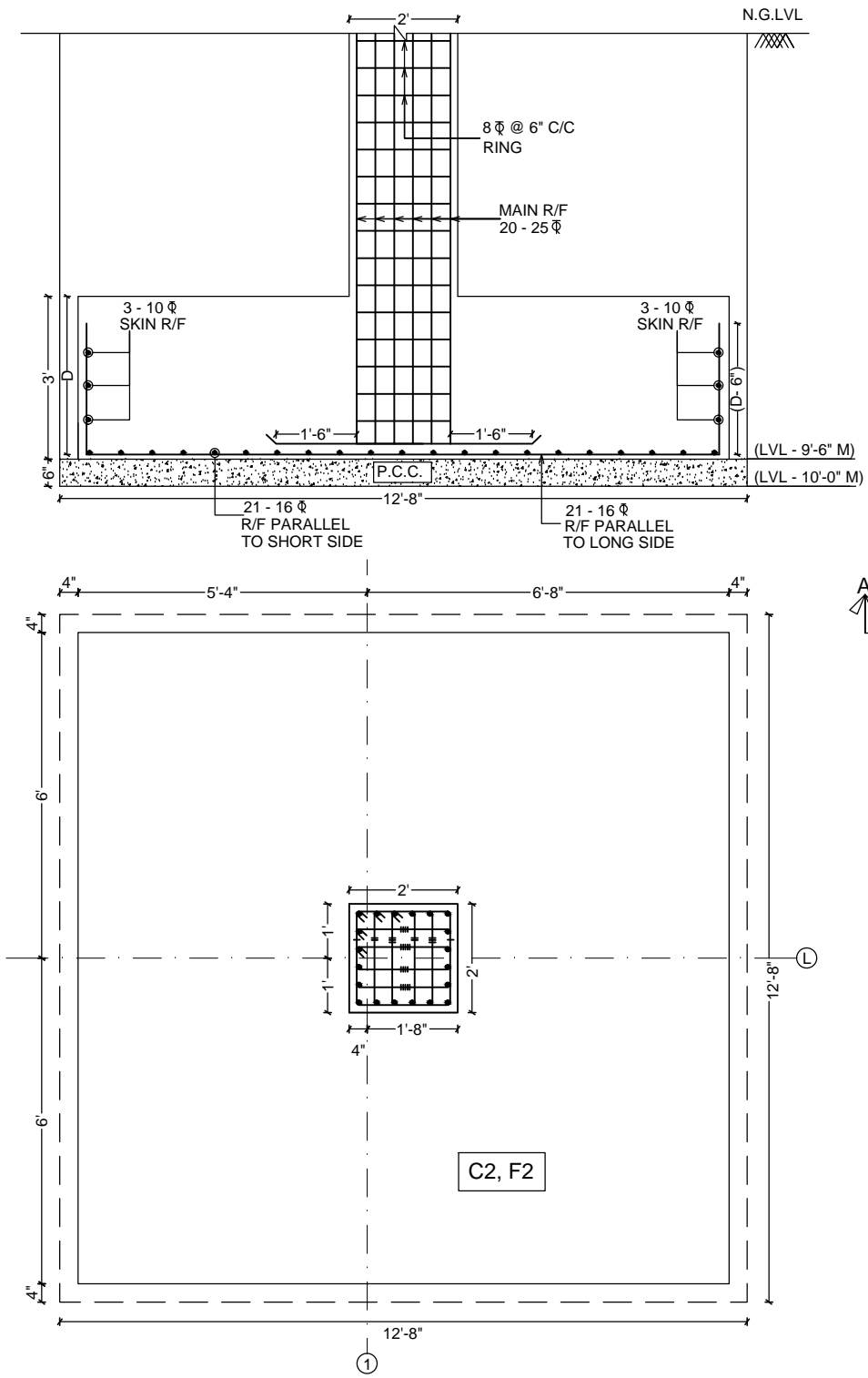


SCHEDULE FOR COLUMNS

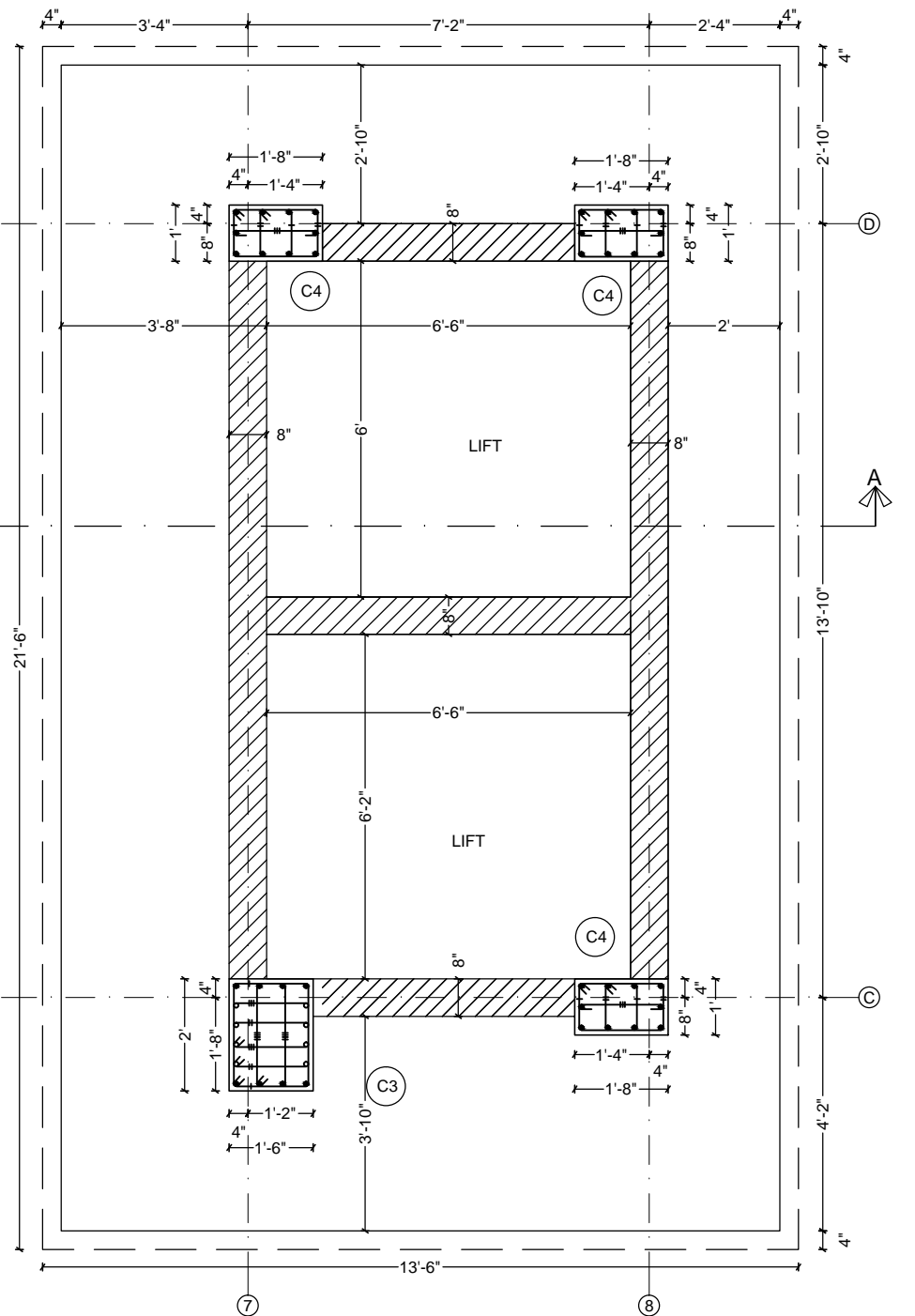
COLUMN NO.	COLUMN DETAILS			
	WIDTH	DEPTH	MAIN BARS	RINGS
C1	18"	18"	12 - 16 ϕ	8 ϕ @ 6" C/C
C2	24"	24"	20 - 25 ϕ	8 ϕ @ 6" C/C
C3	18"	24"	8 - 20 ϕ + 8 - 16 ϕ	8 ϕ @ 6" C/C
C4	12"	20"	10 - 16 ϕ	8 ϕ @ 6" C/C
SC UP TO PLINTH LEVEL	12"	12"	8 - 12 ϕ	8 ϕ @ 7" C/C



SECTIONAL DETAILS AT "A-A"



DETAILS OF FOOTING COLUMN NO.(C2, F2)



KEY PLAN FOR RAFT AND LIFT WALL

BUILDING IS DESIGN FOR G+2 ONLY

GRADE OF CONCRETE - M25

GRADE OF STEEL - FE 500

ICAI
(FOOTING AND COLUMN DETAILS)

CUBE TEST REQUIRED

QUANTITY OF CONCRETE IN CUM.	SET OF SAMPLES FOR 7 DAYS CUBE TEST	SET OF SAMPLES FOR 28 DAYS CUBE TEST
1-5	1	1
6-15	2	2
16-30	3	3
31-50	4	4
51-100	6	6

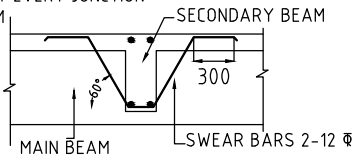
* 7 DAYS & 28 DAYS TEST REPORT SHALL BE SUBMITTED AFTER CASTING OTHER WISE WE WILL NOT BE RESPONSIBLE FOR CONCRETE STRENGTH .

- (1) RCC LIFT WALL UPTO GROUND FLOOR SLAB LVL.
(2) "SC" COLUMN UP TO PLINTH LVL.

FOR DIMENSIONS, LEVELS, CENTERLINE AND GENERAL ARRANGMENT REFER ARCHITECTURAL DRAWING.

- 1] CONSULTANT COPY 2] CLIENT'S COPY 3] SITE COPY 4] OFFICE COPY

- NOTE:-
1] ALL DIMENSIONS ARE IN FEET INCHES.
2] S.B.C. OF THE SOIL IS ASSUMED AS 180kN/SQ.M AND SHALL BE VERIFIED AT SITE BY SITE ENGINEER.
3] MIN DEPTH OF FOUNDATION SHOULD BE 10 FEET BELOW N. G. LEVEL
4] USE M25 GRADE OF CONCRETE.
5] DENSITY OF BRICK ASSUME TO BE 850 KG/M³.
6] ALL STRUCTURAL STEEL REINFORCEMENT SHALL BE HIGH STRENGTH DEFORM BARS OF GRADE FE 500 CONFORMING TO IS 1786-1985 & MILD STEEL GRADE I CONFORMING TO IS-432-1982(PART 1)
7] PROVIDE CLEAR COVER OF 50 mm FOR FOOTING R/F.
8] PROVIDE CLEAR COVER OF 40 mm FOR COLUMN R/F.
9] PROVIDE CLEAR COVER OF 25 mm FOR BEAM R/F AND 20 MM FOR SLAB R/F
10] NOT MORE THAN 50 % BARS SHOULD BE LAPPED AT ONE SECTION.
11] EXECUTION SHALL BE AS PER IS 456-2000.
12] FOR DIMENSIONS, LEVELS, CENTERLINE AND GENERAL ARRANGMENT REFER ARCHITECTURAL DRAWING.
13] ALL BARS SHOULD BE EXTENDED UPTO DEVELOPMENT LENGTH + 10 DIA OF BAR
14] LAP SHOULD BE EQUAL TO DEVELOPMENT LENGTH + 10 DIA OF BAR
15] USE OPC/PPC WITH MINIMUM GRADE 43/53 AND USE MAXIMUM WATER CEMENT RATIO 0.5
16] NO OVERLAPS ARE ALLOWED IN FOOTING
17] ALL AGGREGATE FOR FOOTING 30mm DOWN AND FOR COLUMN 20mm DOWN
18] USE CURED MORTAR COVER BLOCKS OF SAME STRENGTH OF CONCRETE
19] STRIPPING OF TIME FOR SHUTTERING AS PER IS 456-2000
20] TOLERANCES FOR FORMWORK, REINFORCEMENT, COVER AS PER IS 456-2000
21] BACKFILLING IN COLUMN PITS SHALL BE WITH APPROVED SOIL AND COMPACTED PROPERLY TO AVOID SETTLEMENT
22] USE DENSIFIED COATED PLYWOOD FOR SHUTTERING & FORMWORK
23] USE STEEL PROPS & STEEL SUPPORT FOR FORMWORK
24] BURNED OIL NOT PERMITTED FOR SHUTTERING, USE MOULD OIL
25] USE SUPER-PLASTICISER TO MAINTAIN WATER/CEMENT RATIO
26] CURING-EXPOSED SURFACE OF CONCRETE SHALL BE KEPT CONTINUOUSLY IN WET CONDITION MINIMUM FOR 14 DAYS.
27] GHODI OR CHAIR SPACING @ 600 C/C
28] GHODI OR CHAIR HEIGHT = {SLAB THICKNESS - (30MM + (2X DIA BARI))}
29] ALL OUTER PLINTH BEAMS BOTTOMS SHALL BE 100 MM BELOW G.L.
30] ALL INNER BEAMS SHALL BE AT PLINTH LEVEL
31] STUB COLUMN SC ARE ONLY UPTO PLINTH LEVEL
32] BUILDING IS DESIGN FOR G+2 ONLY
33] IN BOX FOOTING 'L' SHALL BE (D-150)
34] IN RAFT, BOX AND ECCENTRIC FOOTING DO NOT PROVIDE PEDESTAL UNTILL & UNLESS SPECIFIED
35] HIGHER DIAMETER OF BAR SHALL BE PLACED AT SHORTER FACE OF COLUMN.
36] SUPERVISION AT OWNER'S RISK.
37] FOR ISOLATED FOOTING LONG BARS SHALL BE KEPT BELOW SHORT BARS.
38] FOR COMBINED & RAFT FOOTING SHORT BARS SHALL BE KEPT BELOW LONG BARS.
39] TYPICAL DETAILS OF SWEAR BARS AT EVERY JUNCTION OF MAIN BEAM AND SECONDARY BEAM



- 40] GRADE OF CONCRETE FOR P.C.C. - 14.8
41] CONCRETE AND STEEL MATERIAL TESTING AT OWNER'S RISK.
42] POSITION OF DRAIN PIPES IN TOILETS MAY VARY AS PER ARCHITECTURAL REQUIREMENT & SHALL BE 250MM AWAY FROM SUPPORT

R.NO.	REVISION	DATE	DESIGN:-	AEC
1.			DEALT :-	SHATRUGHNA
2.			DATE:-	21/04/2018
3.			SCALE:-	VARIABLE
4.				

PROJECT:-	PROPOSED ICAI AT PURENA ,RAIPUR.(C.G.)
TITLE:-	STRUCTURAL DETAILS OF FOOTING AND COLUMN
OWNER:-	-----
ARCHITECT :-	ARCHITECT SANDEEP NEENA + ASSOCIATES

1,2,3 Netaji Stadium, Moti Baug, Raipur . (C. G.) E.mail - architect.sandeep@rediffmail.com Web - www.architectsandeepneena.com	DRG. NO.
STRUCTURAL DESIGNER:- AAJ ENGINEERS AND CONSULTANTS PVT. LTD. SUNRAJ BHASKAR CMPLX, SECOND FLR, PRATAP NAGAR, Ph.NO. 9970066936 e-mail - mail@aaajengineers.in	1B

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