SCHEDULE OF SLAB:–

SLAB MKD.	THICKNESS	REINFORCEMENT: ALONG SHORTER DIRECTION ALTH.	REINFORCEMENT: ALONG LONGER DIRECTION ALTH.	EXTRA: AT SUPPORT ALONG SHORTER DIRECTION	EXTRA: AT SUPPORT ALONG LONGER DIRECTION
S1	125 MM	8 ϕ @ 150 MM. C/C	8 ϕ @ 150 MM. C/C	12 ϕ @ 150MM. C/C	8 ϕ @ 150 MM. C/C
S2	125 MM	8 ϕ @ 110 MM. C/C	8 ϕ @ 110 MM. C/C	12 ϕ @ 110 MM. C/C	8 ϕ @ 110 MM. C/C

SCHEDULE OF ISOLATED FOUNDATION :–

MKD.	UNDER COLS.	SIZE OF FOOTING(MM)	THICKNESS (MM)	SIZE OF PEDESTAL (LXBXH)	REINFORCEMENT ALONG SHRT. DIRC.	REINFORCEMENT ALONG LONG. DIRC.
F1	C1,C3,C14,C17	2750X2750	450	450X650X750 12 –12 MM	12 TOR @115 C/C	12 TOR @115 MM C/C
F2	C2	3650X3050	500	450X650X900 12 –12 MM	16TOR @125 C/C	16 TOR @125 MM C/C
F3	C10,C13	3050X3050	450	450X650X750 12 –12 MM	12 TOR @100 C/C	12 TOR @100 MM C/C

SCHEDULE OF RAFT SLAB UNDER C11–C12–C15–C16 AND LIFT

SLAB MKD.	SLAB THICKNESS (mm)	REINFORCEMENT: BOTTOM	REINFORCEMENT: TOP	REINFORCEMENT ALONG LONGER DIRECTION: BOTTOM	REINFORCEMENT ALONG LONGER DIRECTION: TOP
RS	450	12 ϕ @ 125 C/C	12 ϕ @ 125 C/C	12 ϕ @ 125 C/C	12 ϕ @ 125 C/C

SCHEDULE OF TIE BEAMS

Beam Mkd	Size B	Size D	All Through Top(c)	All Through Bott.(c)	Ext. at End Supp. Top (b)	Ext. at Span. Bott (a)	STIRRUPS Support	STIRRUPS Span
TB–1	250	450	3–16ϕ	3–16ϕ	2–16 ϕ	2–16 ϕ	2L–4ϕ@100C/C	2L–4ϕ @100C/C
TB–2	250	450	3–20ϕ	3–20ϕ	2–16 ϕ	2–16 ϕ	2L–4ϕ@100C/C	2L–4ϕ @100C/C
TB–3	250	450	3–16ϕ	3–16ϕ			2L–4ϕ@100C/C	2L–4ϕ @125C/C

SCHEDULE OF RAFT BEAMS

BEAM MARKED	BEAM SIZE WIDTH (B) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINFORCEMENT (a) ALLTHROUGH	TOP REINFORCEMENT (b) EXTRA AT SPAN	BOTTOM REINFORCEMENT (c) ALLTHROUGH	BOTTOM REINFORCEMENT (c) EXTRA AT SUPPORT (e)	STIRRUPS
RB1	450	450	5 – 16 ϕ	2 – 16 ϕ	5 – 16 ϕ	2 – 16 ϕ	8 ϕ 4L @125 C/C
RB2	450	450	7– 16 ϕ	2 – 16ϕ	7 – 16 ϕ	2 – 16 ϕ	8 ϕ 4L @125 C/C
RB3	450	450	4 – 16 ϕ		4 – 16 ϕ		8 ϕ 4L @125 C/C

SCHEDULE OF FLOOR BEAMS

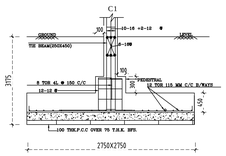
Beam Mkd	B	D	All Through Top(c)	All Through Bott.(c)	Ext. at End Supp. Top (b)	Ext. at Span. Bott (a)	STIRRUPS Support	STIRRUPS Span
B1	250	450	3–16 ϕ	3–16 ϕ	2–16 ϕ	2–16 ϕ	2L–4ϕ@100C/C	2L–4ϕ@125C/C
B2	250	450	3–20 ϕ	3–20 ϕ	2–16 ϕ	2–16 ϕ	4L–4ϕ@100C/C	4L–4ϕ@125C/C
B3	250	400	2–16 ϕ	2–16 ϕ	2–12 ϕ	2–12 ϕ	4L–4 ϕ@100C/C	4–4 ϕ@125C/C
B4	250	400	2–16 ϕ	2–16 ϕ			2L–4ϕ@100C/C	2L–4ϕ@100C/C
HLB	250	450	3–16 ϕ	3–16 ϕ	2–12 ϕ	2–12 ϕ	2L–4ϕ@100C/C	2L–4ϕ@100C/C

SCHEDULE OF COMBINED FOUNDATION :–

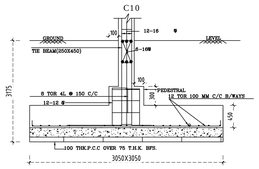
MKD.	UNDER COLS.	SIZE OF FOOTING(MM)	THICKNESS (MM)	SIZE OF RIB BEAM (BXH)	MAIN REINFORCEMENT IN FB: TOP	MAIN REINFORCEMENT IN FB: BOTTOM	EXTRA REINFORCEMENT IN FB: TOP AT SPAN	EXTRA REINFORCEMENT IN FB: BOTTOM AT SUPP.	STIRRUPS IN FB	REINFORCEMENT IN FOOTING SLAB: ALONG SHORT. DIRC.	REINFORCEMENT IN FOOTING SLAB: ALONG LONG. DIRC.
COM – 1	C4–C7 & C6–C9	3050X6075	450	450X750	5–16 ϕ	5–16 ϕ	3–16 ϕ	3–16 ϕ	4L 8M ϕ 125 C/C	12 TOR @115 MM C/C	12 TOR @115 MM C/C
COM – 2	C5–C8	3650X5925	500	450X800	5–20 ϕ	5–20 ϕ	3–20 ϕ	3–20 ϕ	4L 8M ϕ 125 C/C	16 TOR @125MM C/C	16 TOR @125 MM C/C

COLUMN SCHEDULE

COL GROUP MKD. SIZE	NAME OF COLUMN	FOUNDATION LEV. TO 2ND.FL. LEV.	2ND.FL. LEV. TO ROOF LEV.	LATERAL TIES
CG – 1 230 X 450	C1,C3,C4,C6,C15, C16	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	8F @150 C/C (LIMITS)
CG – 2 230 X 450	C7,C9,C11, C12	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	8F @150 C/C (LIMITS)
CG – 3 230 X 500	C2,C5,C8	20 20 20 20 20 20 20 20 20 20 20 20 16 16 16 16	20 20 20 20 20 20 20 20 20 20 20 20 16 16 16 16	8F @150 C/C (LIMITS)
CG –4 250 X 450	C10,C13,C14,C17	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	16 16 16 16 16 16 16 16 16 16 16 16 12 12 12 12	8F @150 C/C (LIMITS)



SECTION ON. = E-E
SCALE-1:25



SECTION ON. = G-G
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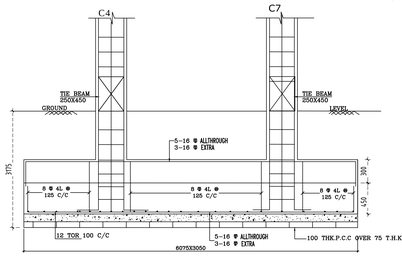

SECTION ON. = C-C
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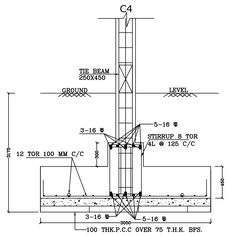

SECTION ON. = B-B
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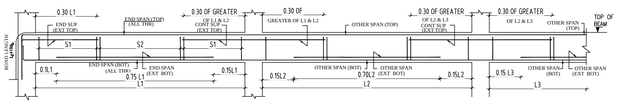
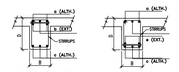
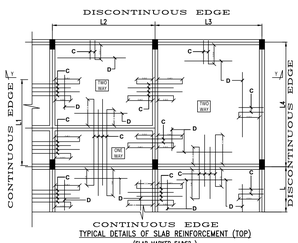


TYP. CURTAILMENT DETAILS FOR FLOOR BEAMS(MULTIPLE SPAN BEAM)
SCALE N.T.S

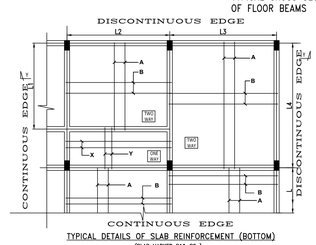


TYPICAL CROSS SECTION OF FLOOR BEAMS

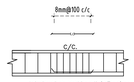
TYPICAL REINFORCEMENT DETAILS OF REST FLIGHT
SCALE-1:25



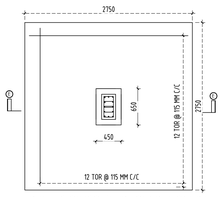
TYPICAL DETAILS OF SLAB REINFORCEMENT (TOP)
(SLAB MARKED S1&S2)
(SCALE – N.T.S.)



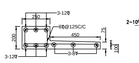
TYPICAL DETAILS OF SLAB REINFORCEMENT (BOTTOM)
(SLAB MARKED S1& S2)
(SCALE – N.T.S.)



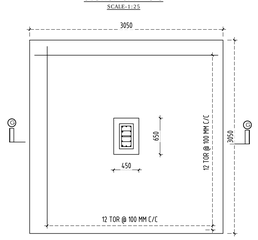
LAP SPLICE IN BEAM



DETAILS OF ISOLATED FOUNDATION(F1)
SCALE - 1:25



DETAIL OF LINTEL WITH CHAJJA
SCALE : N.T.S.



DETAILS OF ISOLATED FOUNDATION(F3)
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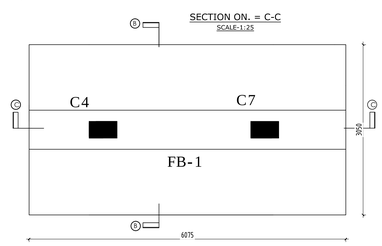
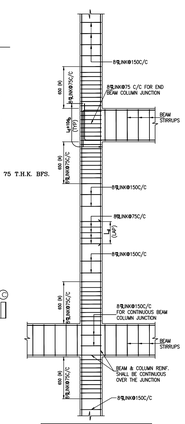
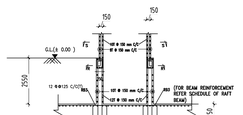


DETAILS OF COMBINED FOUNDATION (COM-1)
SCALE - 1:25

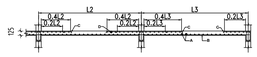


Ld= DEVELOPMENT LENGTH IN TENSION
ϕ= DIAMETER OF LONGITUDINAL BAR

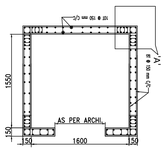
TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION



SECTION AT –X–X
DETAIL OF RAFT FOUNDATION (RAFT)
SCALE-N.T.S



SECTION–Y–Y



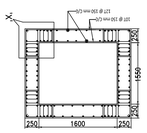
LIFT WALL PLAN AT BASE LEVEL
SECTION (S–S)
SCALE 1:25

SCHEDULE OF S1 MARKED SLABS
(GROUND FLOOR TO TYPICAL FLOOR SLABS THICKNESS–125mm.)

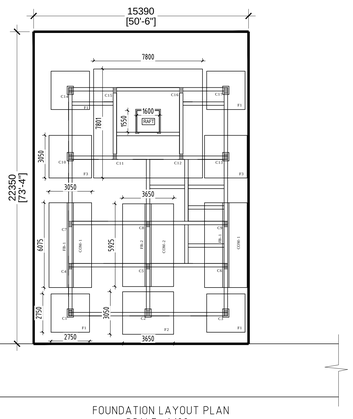
BAR MKD	REINFORCEMENT	POSITION
A	8# @ 150 mm C/C (ALL THROUGH)	BOT.
B	8# @ 150 mm C/C (ALL THROUGH)	BOT.
X	8# @ 150 mm C/C (ALL THROUGH)	BOT.
Y	8# @ 150 mm C/C (ALL THROUGH)	BOT.
C	8# @ 150mm C/C (CURTAILMENT)	TOP
D(BINDER)	8# @ 150 mm C/C (WHEREVER REQUIRED)	TOP

SCHEDULE OF S2 MARKED SLABS
(GROUND FLOOR TO TYPICAL FLOOR SLABS THICKNESS–125mm.)

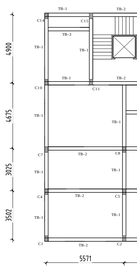
BAR MKD	REINFORCEMENT	POSITION
A	8# @ 110 mm C/C (ALL THROUGH)	BOT.
B	8# @ 110 mm C/C (ALL THROUGH)	BOT.
X	8# @ 110 mm C/C (ALL THROUGH)	BOT.
Y	8# @ 110 mm C/C (ALL THROUGH)	BOT.
C	8# @ 110 mm C/C (CURTAILMENT)	TOP
D(BINDER)	8# @ 150 mm C/C (WHEREVER REQUIRED)	TOP



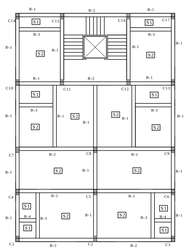
LIFT WALL PLAN AT BASE LEVEL
SECTION (R–R)
SCALE 1:25



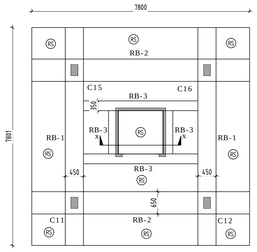
FOUNDATION LAYOUT PLAN
SCALE- 1:100



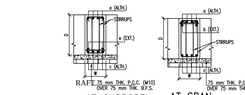
TIE BEAM PLAN
SCALE- 1:100



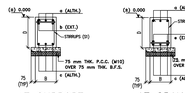
TYPICAL FLOOR BEAM PLAN
SCALE- 1:100



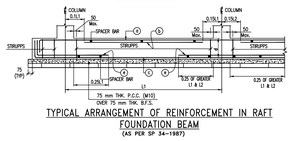
RAFT DETAILS UNDER C11–C12–C15–C16 & LIFT
SCALE–1:50



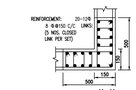
AT SUPPORT AT SPAN
TYPICAL CROSS SECTION OF FOUNDATION BEAM
SCALE – N.T.S.



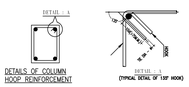
AT SUPPORT AT SPAN
TYPICAL CROSS SECTION OF TIE BEAM



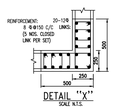
TYPICAL ARRANGEMENT OF REINFORCEMENT IN RAFT FOUNDATION BEAM
(AS PER SP 34–1987)



DETAIL "A"
SCALE N.T.S.



DETAILS OF COLUMN HOOP REINFORCEMENT



DETAIL "X"
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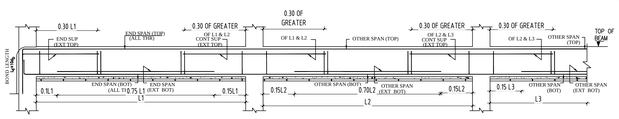

TYP. CURTAILMENT DETAILS FOR TIE BEAMS(MULTIPLE SPAN BEAM)
SCALE N.T.S

TITLE

STRUCTURAL DRAWING OF PROPOSED G+IV STORIED RESIDENTIAL BUILDING AT PLOT NO. – 59, SUB – BLOCK – 07 , BLOCK –B , WARD NO. –10 , UNDER KALYANI MUNICIPALITY, KALYANI , NADIA.

SPECIFICATIONS:–

NOTES :

1. ALL CONSTRUCTION ACTIVITES SHALL BE CARRIED OUT CONFORMING TO RELEVANT INDIAN STANDARD CODES OF PRACTICE.
2. ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METER,EXCEPT OTHERWISE MENTIONED ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED,ALL LEVELS GIVEN IN STRUCTURAL DRAWINGS ARE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND INDICATE STRUCTURAL LEVEL ONLY (WITHOUT FINISH).
3. ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE TMT BARS OF GRADE Fe–500/500D CONFORMING TO IS:1786–2008.
5. UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50×BAR DIA.
6. CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
i) FOUNDATION : 40 mm ii) COLUMNS : 40 mm iii) BEAMS : 25 mm iv) SLABS : 15 mm v) WAIST SLAB : 20mm
7. GRADE OF CONCRETE FOR SUPERSTRUCTURE WILL BE OF M25 AS PER IS:456:2000.
8. VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
9. DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN IS:P34:1987
10. WHEREVER A SUPPORTED MEMBER TERMINATES AT A SUPPORTING MEMBER THE BARS OF THE SUPPORTED MEMBER SHOULD HAVE AN ANCHORAGE OF 60D IN THE SUPPORTING MEMBER.
11. WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDE.
12. IN ALL CANTILEVER SLAB WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UPTO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.
13. BEARING CAPACITY OF SOIL CONSIDERED AS PER SOIL TEST REPORT GIVEN BY GEOTECHNICAL CONSULTANT.
14. 500 MM THICK FILL COARSE YELLOW RIVER SAND FILLING (FULLY COMPACTED) SHOULD BE PROVIDED BELOW OF

THE STRUCTURAL DESIGN & DRAWING OF BOTH FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING HAS BEEN MADE BY ME CONSIDERING ALL POSSIBLE LOADS INCLUDING THE SEISMIC LOAD AS PER W.B.C. OF INDIA & CERTIFIED THAT IT IS SAFE & STABLE IN ALL RESPECT

SUSANTA SAHA
E.S.E.I/I/70
SIG. OF STRUCTURAL ENGINEER

SIG. OF ARCHITECT

SIG. OF GEO-TECHNICAL

SIG. OF OWNER

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