STRUCTURAL DRAWING OF G+3 STORIED RESIDENTIAL FLAT BUILDING OF RAJARSHI GHOSAL ON L.R. DAG NO.- 2045, L.R. KHATIAN NO.- 15445, MOUZA - UDAYRAJPUR, J.L. NO.- 43, R.S. NO.-06, HOLDING NO.- 17/2, SCHOOL ROAD (UTTAR PARA), (ID- 25706), WARD NO.- 12, P.S.- MADHYAMGRAM, DIST.- NORTH 24 PARGANAS, UNDER MADHYAMGRAM MUNICIPALITY.

SCHEDULE OF BEAMS

BEAM MKD	SIZE	AT SUPPORT TOP	AT SUPPORT BOTTOM	AT SPAN TOP	AT SPAN BOTTOM	STIRRUP SUPPORT	STIRRUP SPAN
B1	250 x 400	2-16 Ø + 2-16 Ø	2-16 Ø	2-16 Ø	2-16 Ø + 2-16 Ø	8 Ø @ 150	175 c/c (2L)
B2	250 x 450	3-16 Ø + 2-16 Ø	2-16 Ø	3-16 Ø	2-16 Ø + 2-16 Ø	8 Ø @ 150	175 c/c (2L)
B3	250 x 450	3-16 Ø + 2-16 Ø	3-16 Ø	3-16 Ø	3-16 Ø + 2-16 Ø	8 Ø @ 150	175 c/c (2L)
B4	250 x 450	4-16 Ø	3-16 Ø			8 Ø @ 150	175 c/c (2L)
B5	250 x 400	3-16 Ø	3-16 Ø	3-16 Ø	3-16 Ø + 2-16 Ø	8 Ø @ 175	200 c/c (2L)
TB1	250 x 400	2-16 Ø + 2-16 Ø	2-16 Ø	2-16 Ø	2-16 Ø + 2-16 Ø	8 Ø @ 150	175 c/c (2L)
TB2	250 x 400	2-16 Ø + 3-16 Ø	2-16 Ø	2-16 Ø	2-16 Ø + 2-16 Ø	8 Ø @ 150	175 c/c (2L)
FB1	550 x 600	4-16 Ø	4-16 Ø + 4-16 Ø	4-16 Ø + 4-16 Ø	4-16 Ø	10 Ø @ 150	125 c/c (4L)
FB2	300 x 600	4-16 Ø	3-16 Ø	3-16 Ø	3-16 Ø	10 Ø @ 150	125 c/c (4L)

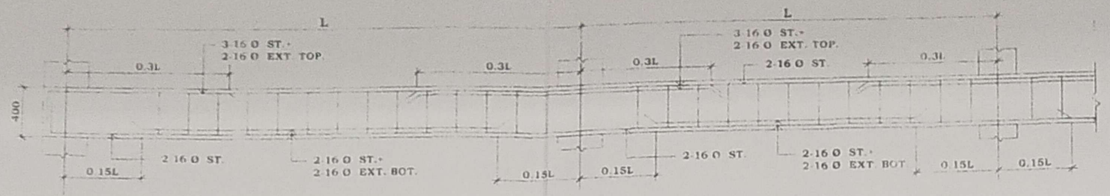
SCHEDULE OF SLAB

SLAB MKD	THICKNESS (mm)	REINFORCEMENT SHORT DIRECTION SUPPORT	SHORT DIRECTION SPAN	LONG DIRECTION SUPPORT	LONG DIRECTION SPAN
S1	110	8 Ø @ 150 c/c	8 Ø @ 150 c/c	8 Ø @ 175 c/c	8 Ø @ 175 c/c
S2	120	8 Ø @ 150 c/c	8 Ø @ 150 c/c	8 Ø @ 175 c/c	8 Ø @ 175 c/c
S3	100	8 Ø @ 175 c/c	8 Ø @ 175 c/c	8 Ø @ 200 c/c	8 Ø @ 200 c/c
S4	135	8 Ø @ 150 c/c	8 Ø @ 150 c/c	8 Ø @ 175 c/c	8 Ø @ 175 c/c
S5	120	8 Ø @ 150 c/c	8 Ø @ 150 c/c	8 Ø @ 200 c/c	8 Ø @ 200 c/c

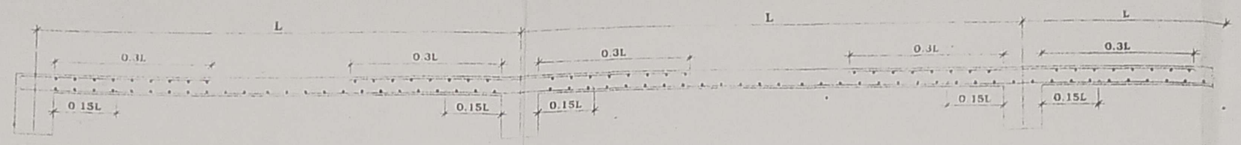
NOTE: EXTRA TOP REINFORCEMENT TO BE PROVIDED UP TO 0.3L FROM SUPPORT

SCHEDULE OF COLUMNS

COLUMN MKD	SIZE	REINFORCEMENT GROUND & FIRST	SECOND & THIRD	FORTH & ROOF	STIRRUP
C1,C16,C17	250X350	4-16 Ø + 4-12 Ø	8-12Ø	8-12 Ø	
C2,C3,C4,C6,C9,C12,C13,C18	250X400	8-16 Ø	4-16 Ø + 4-12 Ø	8-12 Ø	8 Ø @ 150 c/c
C5,C7,C8,C10,C11,C14,C15	250X450	10-16 Ø	4-16 Ø + 6-12 Ø	10-12 Ø	



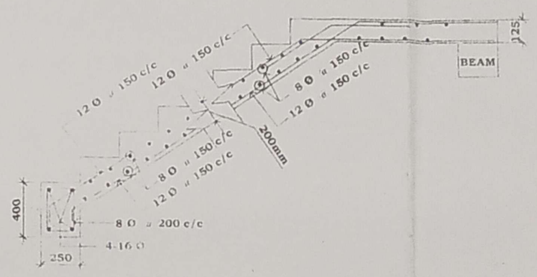
TYPICAL LONG SECTION OF BEAM
SCALE 1:25



TYPICAL SECTION OF SLAB
SCALE 1:25

SCHEDULE OF FOOTING

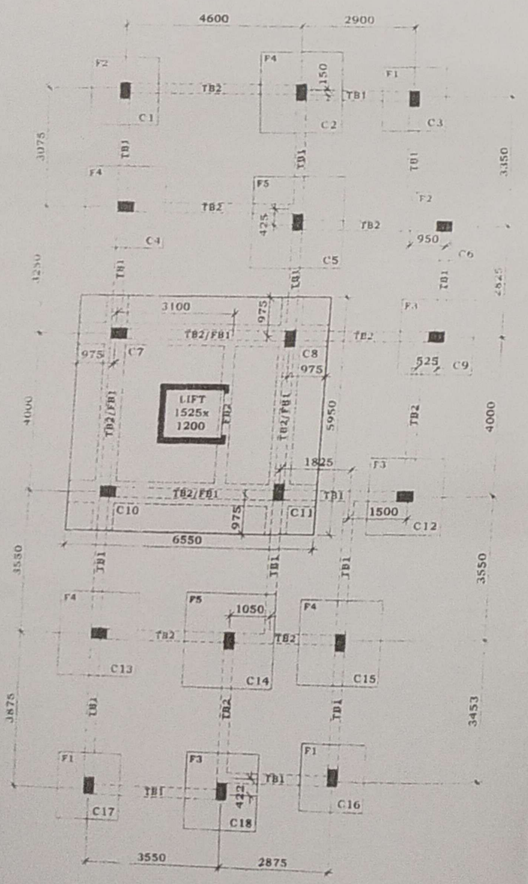
FOOTING MKD	COLUMN MKD	L	B	D1	D2	REINFORCEMENT
F1	C3,C16,C17	1650	1650	125	100	BOT : 12 Ø 150 c/c, (Both way)
F2	C1,C6	1750	1750	125	100	BOT : 12 Ø 150 c/c, (Both way)
F3	C9,C12,C18	1900	1900	150	100	BOT : 12 Ø 150 c/c, (Both way)
F4	C2,C4,C13,C15	2100	2100	175	125	BOT : 12 Ø 150 c/c, (Both way)
F5	C5,C14	2350	2350	200	150	BOT : 12 Ø 150 c/c, (Both way) TOP : 10 Ø 150 c/c, (Both way)
RAFT	C7,C8,C10,C11 & LIFT	AS SHOWN		400		BOT : 12 Ø 125 c/c, (Both way) TOP : 12 Ø 150 c/c, (Both way)



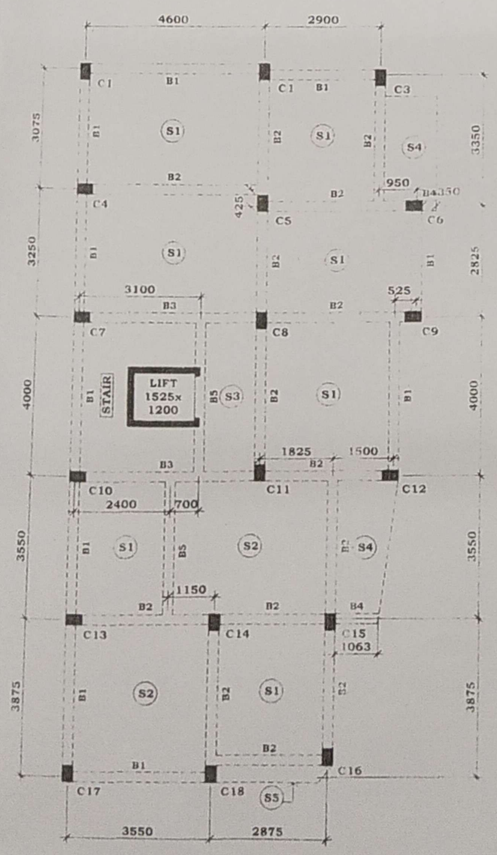
TYPICAL SECTION OF STAIR
SCALE 1:25

SPACE FOR OFFICIAL USE

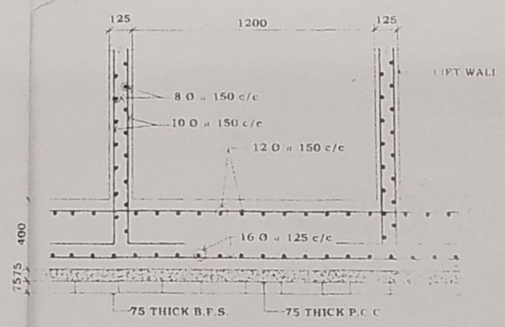
NOTE:-
1. ALL DIMENSION ARE IN MM UNLESS OTHERWISE STATED
2. ALL EXTERNAL WALLS ARE 200 TH. & ALL INTERNAL WALLS ARE 125/75 TH. AS MENTIONED.
3. MIX OF CONCRETE OF ALL R.C.C. MEMBERS ARE M-20 GRADE.
4. ALL REINFORCEMENT SHALL BE Fe-500 CONFORMING TO I.S. CODE.
5. CLEAR COVER FOR a) FOUNDATION - 50 MM. b) COLUMN - 40 MM. c) BEAM - 25 MM. d) SLAB - 15 MM.
6. FIGURED DIMENSIONS SHOULD BE FOLLOWED.
7. NET SAFE BEARING CAPACITY OF SOIL HAS BEEN CONSIDERED FROM THE SOIL INVESTIGATION REPORT, AS PREPARED BY ASSOCIATED FOUNDATION ENGINEERS
8. THIS STRUCTURAL DESIGN CALCULATION IS VALID ONLY FOR THE GRID LAY OUT, AS SHOWN IN THE STRUCTURAL DRAWING.
9. ALL OTHERS WORKS AS PER I.S. CODE.



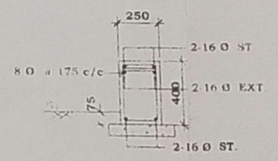
FOUNDATION & TIE BEAM LAYOUT PLAN
SCALE 1:100



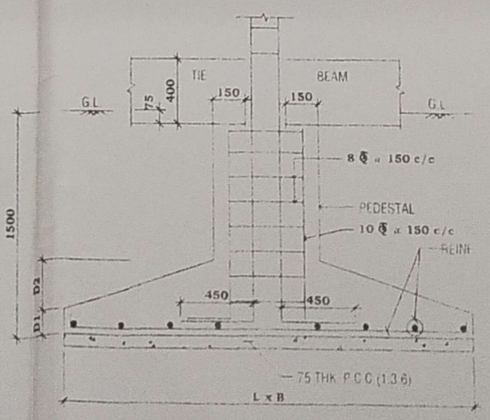
TYPICAL FLOOR BEAM AND SLAB LAYOUT PLAN
SCALE 1:100



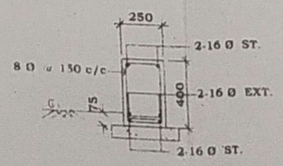
SECTION OF RAFT WITH LIFT WALL
SCALE 1:25



SUPP. SEC. OF TB1
SCALE 1:25



TYPICAL SECTION OF ISOLATED FOOTING
SCALE 1:25



MID. SEC. OF TB1
SCALE 1:25

N

CERTIFICATE OF STRUCTURAL ENGINEER & GEOTECHNICAL ENGINEER

WE HEREBY CERTIFY THAT THE FOUNDATION AND SUPER STRUCTURE OF THE G+3 STORIED BUILDING PROPOSED FOR CONSTRUCTION ON ABOVE SCHEDULED LAND HAS BEEN PERSONALLY INSPECTED AND SO DESIGNED BY US. WILL MAKE SUCH FOUNDATION AND SUPER STRUCTURE SAFE IN ALL RESPECT INCLUDING THE CONSIDERATION OF BEARING CAPACITY AND SETTLEMENT OF SOIL AND OTHER CONDITIONS, IF ANY CONFORMING TO ALL STIPULATIONS OF RELEVANT I.S. CODE OF PRACTICE AND N.B. CODES

Dipika Majumder
B.Tech. (Civil)
MM/ Struc/009/2019-20
Class-II
SIGNATURE OF STRUCTURAL ENGINEER

ASIM SARKAR
BCE, ME(SOIL), M.TECH (STRUCTURE),
EMPANELLED GEOTECHNICAL ENG
KMC NO.- CLASS I /
SIGNATURE OF GEOTECHNICAL ENGINE

CERTIFICATE OF THE OWNER

CERTIFIED THAT I SHALL NOT ON A LATER DATE MAKE ANY ADDITION OR ALTERATION TO THIS PLAN. CERTIFIED THAT I HAVE GONE THROUGH THE BUILDING RULES FOR M.M. AND ALSO ABIDE BY THOSE RULES DURING AND AFTE CONSTRUCTION OF THE BUILDING. AND ALSO DECLARE TH I SHALL BE RESPONSIBLE TO INFORM THE ABOVE SIGNED ENGINEER BEFORE STARTING OF THE SAID CONSTRUCTIO FOR SUPERVISING THE BUILDING.

1. Sabuj Kumar Roy
2. Bilal Halder
3. Sanwar Sarkar

Constituted Power of attorney by ;
RAJARSHI GHOSAL
SIGNATURE OF OWNER

ARCH. VIEW
ARCHITECTS, PLANNERS & ENGINEERS
97/A, MUNICIPALITY MARKET (1ST. FLOOR), MADHYAMGRAM, KOLKATA- 700129.
MOB: 9903347265, 8017574759

DRAWN BY : MOUMITA MAJUMDER