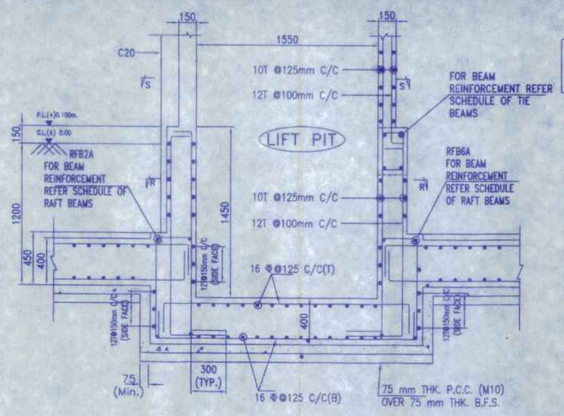
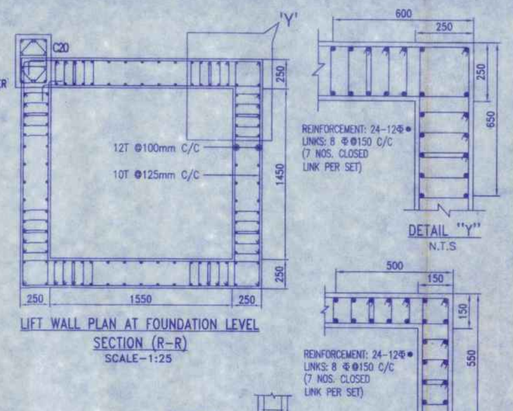
FOUNDATION LAYOUT PLAN
RAFT SLAB(RS) THIKNESS 400mm.
SCALE 1:100

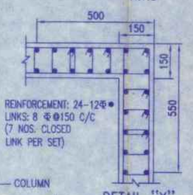


SECTION -E-E
SCALE- 1:25

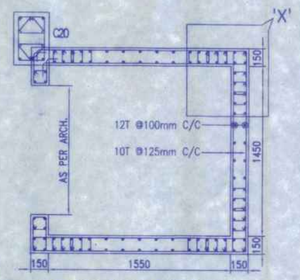


LIFT WALL PLAN AT FOUNDATION LEVEL
SECTION (R-R)
SCALE-1:25

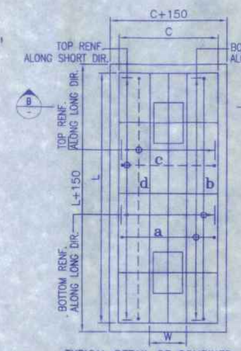
DETAIL "Y"
N.T.S



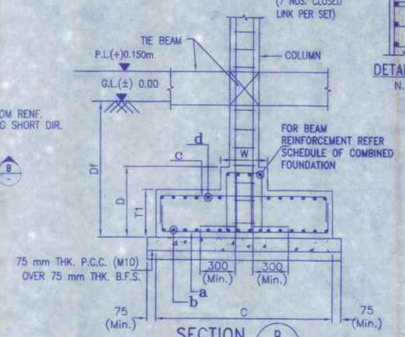
DETAIL "Y"
N.T.S



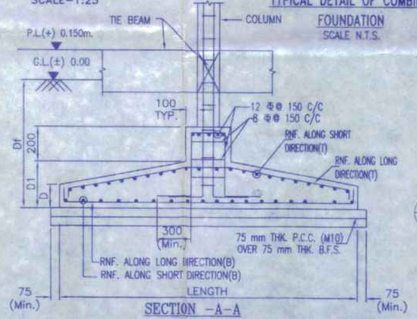
LIFT WALL PLAN AT FLOOR LEVEL
SECTION (S-S)
SCALE-1:25



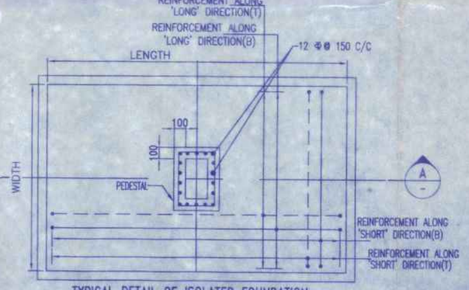
TYPICAL DETAIL OF COMBINED FOUNDATION
SCALE N.T.S.



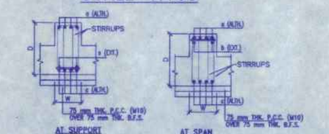
SECTION B
REINFORCEMENT DETAIL OF COMBINED FOUNDATION
SCALE N.T.S.



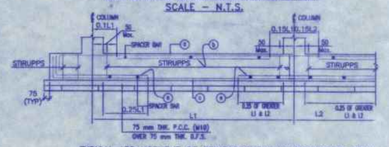
SECTION -A-A
SCALE N.T.S.



TYPICAL DETAIL OF ISOLATED FOUNDATION
SCALE N.T.S.



TYPICAL CROSS SECTION OF FOUNDATION BEAM
SCALE - N.T.S.



TYPICAL ARRANGEMENT OF REINFORCEMENT IN FOUNDATION BEAM
SCALE - N.T.S.
(AS PER IS: 1893)

NET SAFE BEARING CAPACITIES CONSIDERED FOR FOUNDATION

TYPE OF FOUNDATION	SIZE	NET SAFE BEARING CAPACITY (T/M²)
ISOLATED	2.85m. x 2.85m.	13.6
	2.60m. x 2.60m.	13.7
	2.45m. x 2.45m.	13.8
	2.20m. x 2.20m.	13.9
	2.00m. x 2.80m.	13.6
RAFT	AS SHOWN IN DRAWING	10.2
CF1	AS SHOWN IN DRAWING	10.2
CF2	AS SHOWN IN DRAWING	11.04

SPECIAL NOTE:-

THIS DESIGN WILL NOT BE VALID IF THIS BEARING CAPACITIES ARE NOT ENSURED AT SITE UNDER THE SUPERVISION OF A COMPETENT GEO-TECHNICAL ENGINEER.

SPECIAL NOTES:-

1. THIS STRUCTURAL DRAWING IS VALID IF THE CONSTRUCTION IS DONE USING AAC BLOCKS FOLLOWING PROPER DIMENSION OF EXTERNAL AND INTERNAL WALLS AS PER ARCHITECTURAL DRAWING.
2. THE STRUCTURE MUST BE CONSTRUCTED IN PRESENCE OF A COMPETENT STRUCTURAL ENGINEER FOR STRICT SUPERVISION.

SCHEDULE OF RAFT BEAMS

BEAM MARKED	BEAM SIZE WIDTH (W) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINORCEMENT ALTHROUGH (a)	TOP REINORCEMENT EXTRA AT SPAN (b)	BOTTOM REINORCEMENT ALTHROUGH (c)	BOTTOM REINORCEMENT EXTRA AT SUPPORT (e)	STIRRUPS	SIDE FACE
RFB1	750	450	7-16 ⌀	7-16 ⌀	7-16 ⌀	7-20 ⌀	4L-10⌀@150C/C	-
RFB2	500	450	6-20 ⌀	4-12 ⌀	6-20 ⌀	6-20 ⌀	4L-8 ⌀@150 C/C	-
RFB2A	500	575	6-20 ⌀ +4-12 ⌀	-	6-20 ⌀ +6-20 ⌀	-	4L-8 ⌀@200 C/C	12 ⌀@ 150 C/C
RFB3	550	450	6-16 ⌀	-	6-20 ⌀	-	4L-10 ⌀@150 C/C	-
RFB4	550	450	6-16 ⌀	-	6-20 ⌀ +6-20 ⌀	-	4L-8 ⌀@150 C/C	-
RFB5	400	450	4-16 ⌀	-	4-20 ⌀ +4-16 ⌀	-	4L-8 ⌀@150 C/C	-
RFB6	400	450	4-16 ⌀	4-20 ⌀	4-20 ⌀ +4-16 ⌀	4-20 ⌀	4L-8 ⌀@150 C/C	-
RFB6A	400	575	4-16 ⌀ +4-20 ⌀	-	4-20 ⌀ +4-16 ⌀	4-20 ⌀	4L-8 ⌀@150 C/C	12 ⌀@ 150 C/C

SCHEDULE OF RAFT SLAB

SLAB MARKED	SLAB THICKNESS (mm)	REINFORCEMENT ALONG SHORTER DIRECTION BOTTOM	REINFORCEMENT ALONG SHORTER DIRECTION TOP	REINFORCEMENT ALONG LONGER DIRECTION BOTTOM	REINFORCEMENT ALONG LONGER DIRECTION TOP
RS	400	16⌀@ 125 C/C	16⌀@ 125 C/C	16⌀@ 125 C/C	16⌀@ 125 C/C

SCHEDULE FOR COMBINED FOUNDATION

FOUNDATION MARKED	NUMBER	FOUNDATION SIZE. TOTAL LENGTH L (mm)	WIDTH C (mm)	THICKNESS T1 (mm)	DEPTH Df (mm)	FOUNDATION REINFORCEMENT DETAILS BOTTOM REINFORCEMENT ALONG SHORT DIRECTION (a)	BOTTOM REINFORCEMENT ALONG LONG DIRECTION (b)	TOP REINFORCEMENT ALONG SHORT DIRECTION (c)	TOP REINFORCEMENT ALONG LONG DIRECTION (d)	FOUNDATION BEAM SIZE LENGTH L (mm)	WIDTH W (mm)	DEPTH D (mm)	FOUNDATION BEAM REINFORCEMENT DETAIL BOTTOM REINFORCEMENT ALTHROUGH	BOTTOM REINFORCEMENT EXTRA	TOP REINFORCEMENT ALTHROUGH	TOP REINFORCEMENT EXTRA	STIRRUPS SPACING (mm)
CF1	01	5000	3200	400	1200	16 ⌀@ 125 C/C	10 ⌀@ 200 C/C	8 ⌀@ 250 C/C	8 ⌀@ 250 C/C	5000	550	450	4-25 ⌀	4-25 ⌀	4-25 ⌀	4-25 ⌀	4L-10 ⌀@150 C/C
CF2	01	5575	3200	400	1200	16 ⌀@ 125 C/C	10 ⌀@ 200 C/C	8 ⌀@ 250 C/C	8 ⌀@ 250 C/C	5575	550	450	4-20 ⌀	4-20 ⌀	4-20 ⌀	4-16 ⌀	4L-10 ⌀@150 C/C

SCHEDULE FOR SOLATED FOUNDATION

UNDER COLUMNS MARKED	FOUNDATION MARKED	NUMBER	FOUNDATION SIZE WIDTH (m)	LENGTH (m)	THICKNESS D1 (mm)	THICKNESS D (mm)	DEPTH Df (mm)	FOUNDATION REINFORCEMENT DETAILS BOTTOM REINFORCEMENT ALONG SHORT DIRECTION	BOTTOM REINFORCEMENT ALONG LONG DIRECTION	TOP REINFORCEMENT ALONG SHORT DIRECTION	TOP REINFORCEMENT ALONG LONG DIRECTION
C6,C33,C38	F1	03	2.85	2.85	550	350	1200	12 ⌀@ 100 C/C	12 ⌀@ 100 C/C	8 ⌀@ 300 C/C	8 ⌀@ 300 C/C
C28,C35, C39,C40,C41	F2	05	2.6	2.6	500	300	1200	12 ⌀@ 100 C/C	12 ⌀@ 100 C/C	8 ⌀@ 300 C/C	8 ⌀@ 300 C/C
C5,C9,C15,C16, C23,C29,C34,C36	F3	08	2.45	2.45	450	300	1200	12 ⌀@ 100 C/C	12 ⌀@ 100 C/C	8 ⌀@ 300 C/C	8 ⌀@ 300 C/C
C8,C30,C31,C32, C37,C42	F4	06	2.2	2.2	450	300	1200	12 ⌀@ 150 C/C	12 ⌀@ 100 C/C	8 ⌀@ 300 C/C	8 ⌀@ 300 C/C
C7	F5	01	2.0	2.8	600	450	1200	12 ⌀@ 150 C/C	12 ⌀@ 100 C/C	8 ⌀@ 300 C/C	8 ⌀@ 300 C/C

NOTES :

1. UNLESS OTHERWISE STATED ALL CONSTRUCTION ACTIVITIES 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. ALL STRUCTURAL DRAWINGS SHALL BE READ ALONG WITH THIS DRAWING AS WELL AS RELEVANT ARCHITECTURAL DRAWINGS.
4. ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
5. UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE TMT BARS OF GRADE Fe-500/500 D CONFORMING TO IS-1786-2008.
6. ADEQUATE CHAIR BARS TO BE PROVIDED TO KEEP THE TOP REINFORCEMENT IN PROPER POSITION.
7. VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
8. UNLESS OTHERWISE SPECIFIED DISTRIBUTION REINFORCEMENT SHALL BE 8 T @ 250 C/C.
9. CONCRETE CLEAR COVER SHALL BE AS FOLLOWS:
   I) ISOLATED FOUNDATION : 50 mm
   II)RAFT BEAM & SLAB : 50 mm
   III)SHEAR WALL : 20 mm
   IV)COMBINED FOUNDATION : 50 mm
10. GRADE OF CONCRETE FOR SUBSTRUCTURE WILL BE M25 AS PER IS: 456:2000.
11. DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP 34:1987
12. THE NET SAFE BEARING CAPACITIES FOR ALL ISOLATED & COMBINED FOUNDATION AT DEPTH (-)1.2m. FROM G.L. HAS BEEN CONSIDERED AS MENTIONED IN DRAWING IN TUNE WITH THE SOIL REPORT PREPARED BY MR. ASIM SARKAR.
13. THE NET SAFE BEARING CAPACITIES FOR RAFT FOUNDATION AT DEPTH (-)1.2m. FROM G.L. HAS BEEN CONSIDERED AS MENTIONED IN DRAWING IN TUNE WITH THE SOIL REPORT PREPARED BY MR. ASIM SARKAR.
14. THE ABOVE MENTIONED BEARING CAPACITY MUST BE ENSURED AT SITE UNDER THE SUPERVISION OF A COMPETENT GEO-TECHNICAL ENGINEER FOR VALIDITY OF THIS DRAWING.
15. THE N VALUE AS DESCRIBED UNDER NOTES OF TABLE-1 OF IS-1893(PART-1)-2016 SHOULD BE ENSURED TO BE GREATER THAN 15 FOR VALIDITY OF THIS DESIGN AND DRAWING.

TITLE

STRUCTURAL DRAWING OF PROPOSED G+5 STORIED RESIDENTIAL (APARTMENT) BUILDING OF SRI. MAHADEV PAUL, SRI. CHITTARANJAN CHATTERJEE & SMT. SONALI PAUL OVER R.S. PLOT NO.- 1654 , L.R. PLOT NO. - 2354 / 3317, 2354 / 3315, KHATIAN NO.- 4829, 5014, 4920 , MOUZA - ARRAH, J.L. NO- 91, P.S. - KANKSA, DIST- PASCHIM BARDHAMAN.

SIGNATURE OF OWNER

AMRITA BUILDER & DEVELOPERS
Partner

SIGNATURE OF ARCHITECT

Ar. VIJAYA SINGH MAZUMDER
COA REGISTERED
CA/2021/134276

SIGNATURE OF GEO-TECHNICAL ENGINEER

ASIM SARKAR
BCE, ME(SOIL), M.TECH (STRUCTURE), MIGS, MIE
EMPANELLED GEOTECHNICAL ENGINEER
KMC NO.- CLASS I / 2

SIGNATURE OF PANCHAYAT PRADHAN

APPROVED
Vide Memo No. 5280/ES/BZP Dt. 17.12.24
OF PASCHIM BARDHAMAN ZILA PERISHAD
Additional Executive Officer
Pradhan
Malandighi Gram Panchayat

SIGNATURE OF STRUCTURAL ENGINEER

SUSMITA CHOUDHURY
B.TECH (CIVIL)-WBUT
ME (CONSTRUCTION)-JU

SIGNATURE OF VETTING AUTHORITY

CHECKED & VETTED
DR. DIPANKAR CHAKRAVORTY

STRUCTURAL CONSULTANT:

STRUCTCON ENTERPRISE
REGD. ADDRESS: ASHRAY APARTMENT, GROUND FLOOR
968, KALIKAPUR ROAD,
KOLKATA- 700 099
Email-structconenterprise@gmail.com
Mobile-8697517321, 7003201735

DRAWING TITLE

FOUNDATION LAYOUT PLAN WITH REINFORCEMENT DETAILS.

SCALE.-1:100 OR AS SHOWN
DATE.-21.04.23
SHEET NO. -1 OF 3
SHEET SIZE. - A1