



SPECIAL NOTE:-
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. THE STRUCTURE MUST BE CONSTRUCTED IN PRESENCE OF A COMPETENT STRUCTURAL ENGINEER FOR STRICT SUPERVISION.

NET SAFE BEARING CAPACITIES CONSIDERED FOR FOUNDATION

TYPE OF FOUNDATION	SIZE	NET SAFE BEARING CAPACITY (T/M ²)
ISOLATED	2.65m. x 2.20m.	12.9
	2.45m. x 1.90m.	13.0
	2.75m. x 2.50m.	12.8
	2.70m. x 2.70m.	12.7
RAFT	AS SHOWN IN DRAWING	10.1
CF	AS SHOWN IN DRAWING	10.5

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

SCHEDULE OF RAFT BEAMS

BEAM MARKED	BEAM SIZE		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS	SIDE FACE
	WIDTH (W) (mm)	DEPTH (D) (mm)	ALTHROUGH (a)	EXTRA AT SPAN (b)	ALTHROUGH (c)	EXTRA AT SUPPORT (e)		
RFB1	550	450	5-12 Φ	-	5-12 Φ	5-16 Φ	4L-10 Φ @125 C/C	-
RFB2	800	450	7-12 Φ	7-12 Φ	7-12 Φ	5-16 Φ	4L-12 Φ @150 C/C	-
RFB3	800	450	6-12 Φ	-	6-12 Φ	4-16 Φ	4L-12 Φ @125 C/C	-
RFB4	400	450	3-12 Φ	-	3-12 Φ	3-16 Φ	4L-8 Φ @200 C/C	-
RFB5	400	1100	3-12 Φ	-	3-12 Φ	-	4L-8 Φ @200 C/C	12 Φ @150 C/C

SCHEDULE OF RAFT SLAB

SLAB MARKED	SLAB THICKNESS (mm)	REINFORCEMENT ALONG SHORTER DIRECTION		REINFORCEMENT ALONG LONGER DIRECTION	
		BOTTOM	TOP	BOTTOM	TOP
RS	400	16 Φ @ 100 C/C	16 Φ @ 100 C/C	16 Φ @ 100 C/C	16 Φ @ 100 C/C

SCHEDULE FOR ISOLATED FOUNDATION

UNDER COLUMNS MARKED	FOUNDATION MARKED	NUMBER	FOUNDATION SIZE				FOUNDATION REINFORCEMENT DETAILS					
			WIDTH (m)	LENGTH (m)	THICKNESS		DEPTH		BOTTOM REINFORCEMENT		TOP REINFORCEMENT	
					D1 (mm)	D (mm)	Df (mm)	ALONG SHORT DIRECTION	ALONG LONG DIRECTION	ALONG SHORT DIRECTION	ALONG LONG DIRECTION	
C1,C2,C4,C19	F1	04	2.20	2.65	450	250	1200	12 Φ @ 125 C/C	12 Φ @ 100 C/C	8 Φ @ 300 C/C	8 Φ @ 300 C/C	
C3,C5	F2	02	1.90	2.45	400	250	1200	12 Φ @ 175 C/C	16 Φ @ 125 C/C	8 Φ @ 300 C/C	8 Φ @ 300 C/C	
C8,C12,C13	F3	03	2.50	2.75	450	250	1200	16 Φ @ 100 C/C	16 Φ @ 100 C/C	8 Φ @ 300 C/C	8 Φ @ 300 C/C	
C14	F4	01	2.70	2.70	450	300	1200	16 Φ @ 125 C/C	16 Φ @ 125 C/C	8 Φ @ 300 C/C	8 Φ @ 300 C/C	

SCHEDULE FOR COMBINED FOUNDATION

FOUNDATION MARKED	NUMBER	FOUNDATION SIZE				FOUNDATION REINFORCEMENT DETAILS				FOUNDATION BEAM SIZE			FOUNDATION BEAM REINFORCEMENT DETAIL				
		TOTAL LENGTH L (mm)	WIDTH C (mm)	THICKNESS T1 (mm)	DEPTH Df (mm)	BOTTOM REINFORCEMENT		TOP REINFORCEMENT		LENGTH L (mm)	WIDTH W (mm)	DEPTH D (mm)	BOTTOM REINFORCEMENT		TOP REINFORCEMENT		STIRRUPS SPACING (mm)
						ALONG SHORT DIRECTION (a)	ALONG LONG DIRECTION (b)	ALONG SHORT DIRECTION (c)	ALONG LONG DIRECTION (d)				ALTHROUGH	EXTRA	ALTHROUGH	EXTRA	
CF	01	4255	3060	450	1200	16 Φ @ 150 C/C	10 Φ @ 250 C/C	8 Φ @ 250 C/C	8 Φ @ 250 C/C	4255	750	500	6-12 Φ	3-12 Φ	6-12 Φ	-	4L-8 Φ @200 C/C

- NOTES :**
- UNLESS OTHERWISE STATED ALL CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT CONFORMING TO RELEVANT (INDIAN) STANDARD CODES OF PRACTICE.
 - 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).
 - ALL STRUCTURAL DRAWINGS SHALL BE READ ALONG WITH THIS DRAWING AS WELL AS RELEVANT ARCHITECTURAL DRAWINGS.
 - ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
 - UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE TMT BARS OF GRADE Fe-500/500 D CONFORMING TO IS-1786-2008.
 - ADEQUATE CHAIR BARS TO BE PROVIDED TO KEEP THE TOP REINFORCEMENT IN PROPER POSITION.
 - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
 - UNLESS OTHERWISE SPECIFIED DISTRIBUTION REINFORCEMENT SHALL BE 8 T @ 250 C/C.
 - 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
 - GRADE OF CONCRETE FOR SUBSTRUCTURE WILL BE M25 AS PER IS: 456:2000. DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP 34:1987
 - THE NET SAFE BEARING CAPACITIES FOR ALL ISOLATED, COMBINED & 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.
 - THE ABOVE MENTIONED BEARING CAPACITIES MUST BE ENSURED AT SITE UNDER THE SUPERVISION OF A COMPETENT GEO-TECHNICAL ENGINEER FOR VALIDITY OF THIS DRAWING.
 - 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 FIVE (G+4) STORIED RESIDENTIAL APARTMENT BUILDING OF OWNER:-1.) SMT. SHRABANI SINGH, & 2.) SRI. SANJIT KR. SINGH OVER R.S. PLOT NO:- 747(P), L.R. PLOT:- 1797, 1854 L.R. KHATIAN NO:- 6012,6103 J.L. NO - 56, OF MOUZA - KURURIA, P.S.- DURGAPUR, DIST. - BURDWAN PASCHIM UNDER D.M.C HOLDING NO:- 306/N
CIRCLE / WARD NO:- C/11
I.D NO:- 3309402867332
STREET NO:- SABUJ NAGAR, DGP-03

SIGNATURE OF OWNER
Poojit Kumar Singh
Shrabani Singh

SIGNATURE OF ARCHITECT
For Chatterjee
AR. JUI CHATTERJEE, B.Arch
Registration No: CA/2021/134352
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4/13, Suhatta Commercial Complex, City Centre, Durgapur - 713216

SIGNATURE OF GEOTECHNICAL ENGINEER
Asim Sarkar
ASIM SARKAR
BCE, ME (SOIL), MGS, MIE
EMPANELLED GEOTECHNICAL ENGINEER
MNC No. GTECLASS-42

SIGNATURE OF STRUCTURAL ENGINEER
SUSMITA CHOUDHURY
B.TECH (CIVIL)-WBUTU
ME (CONSTRUCTION)-WBUTU
ESE-1/RJNSOR/130
ESE-11/RMC/66
STER/NKDA/21/00010
CVER/NKDA/10/00175
(M)-8697517321/7003201735

SIGNATURE OF THE VETTING AUTHORITY

STRUCTURAL CONSULTANT:
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DRAWING TITLE
FOUNDATION LAYOUT PLAN & REINFORCEMENT DETAILS.
SCALE:-1:100 OR AS SHOWN
DATE:-23.08.2022
SHEET NO. - 1 OF 3 SHEET SIZE - A1