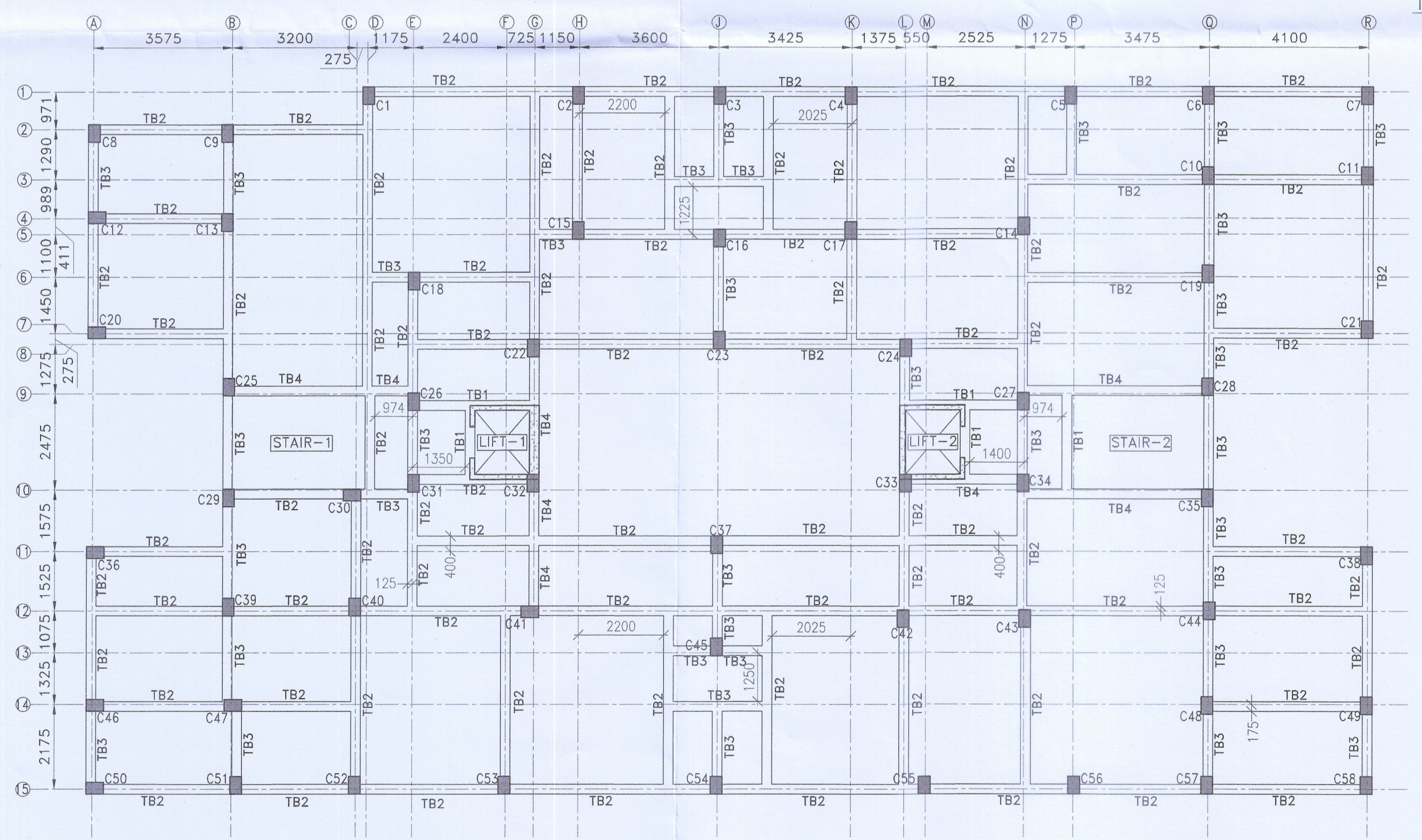
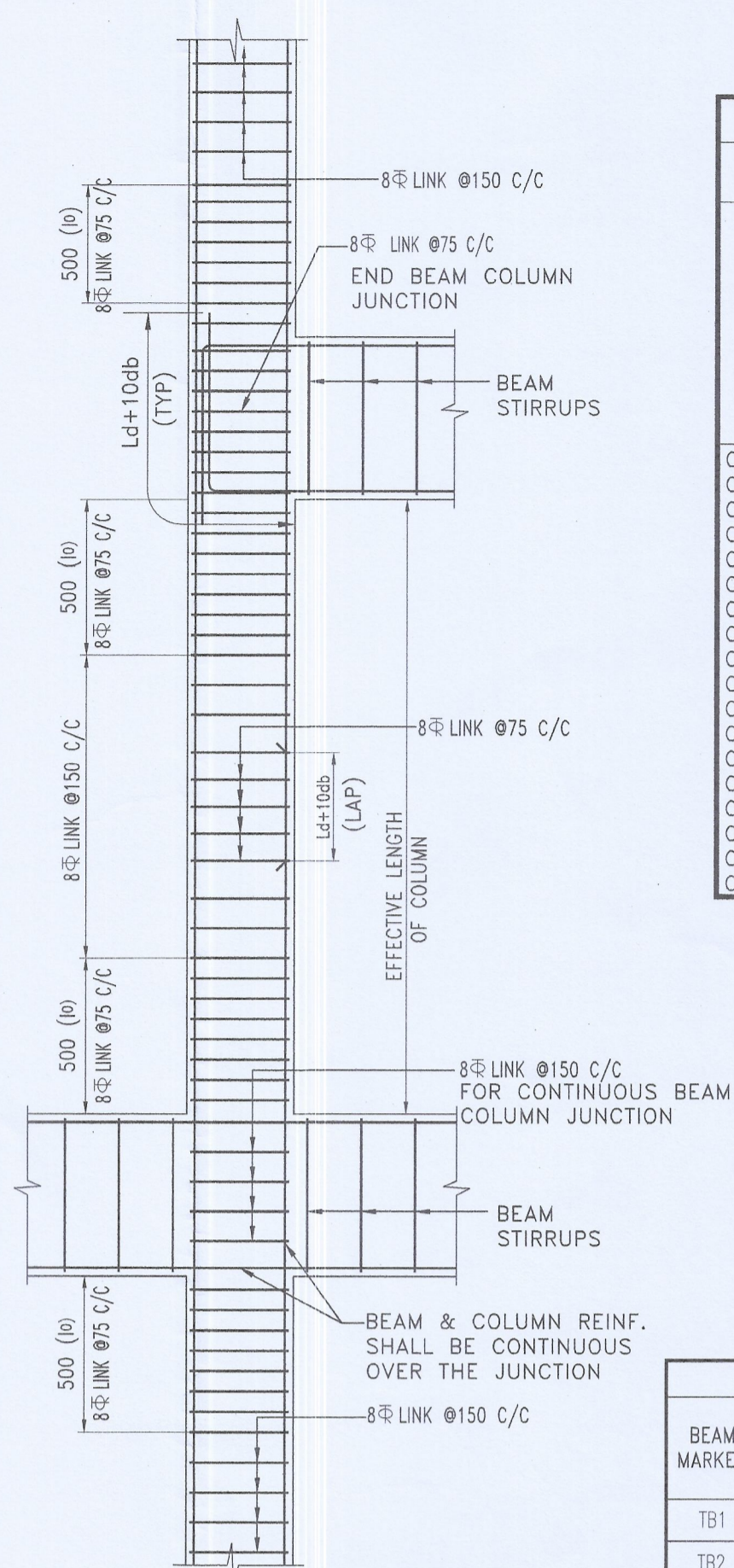


COLUMN LAYOUT PLAN
SCALE 1:100

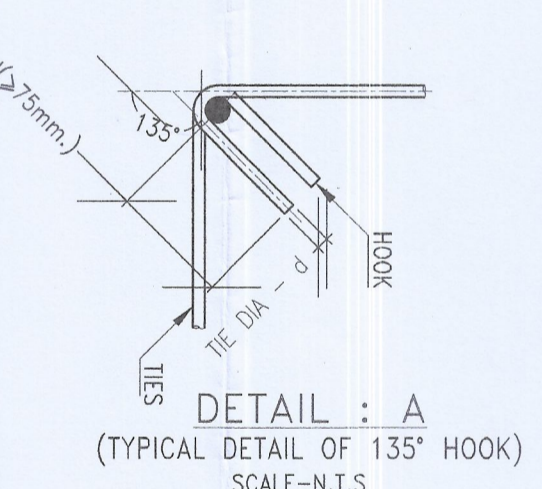


TIE BEAM LAYOUT PLAN
AT LEVEL (±)0.00m.
SCALE 1:100



TYPICAL DUCTILE DETAIL OF
BEAM COLUMN JUNCTION

L_d = DEVELOPMENT LENGTH IN TENSION
d = DIAMETER OF LONGITUDINAL BAR
SCALE-N.T.S.

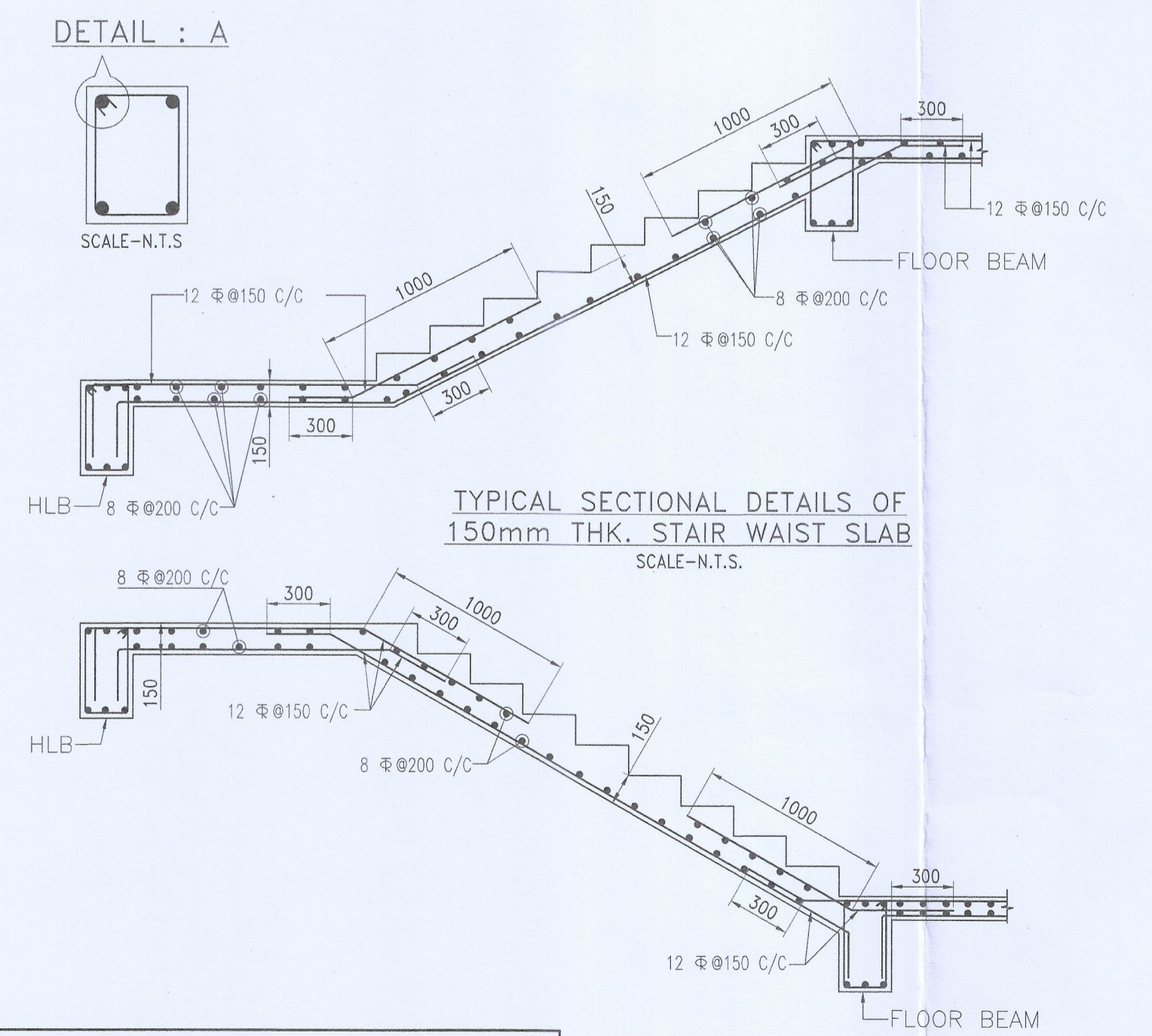


DETAIL : A
(TYPICAL DETAIL OF 135° HOOK)
SCALE-N.T.S.

SCHEDULE OF COLUMNS				
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO ROOF/ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING
C6,C7,C8	03	300X450		8Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C1,C2,C3,C4,C5, C9,C10,C11,C12, C13,C14,C15, C16,C17,C18, C19,C20,C21, C22,C23,C24, C25,C26,C27, C28,C29,C30, C31,C32,C33, C34,C35,C36, C37,C38,C39, C40,C41,C42, C43,C44,C45, C46,C47,C48, C49,C50,C51, C52,C53,C54, C55,C56,C57, C58	55	300X450		8Φ@75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)

SCHEDULE OF STOOL COLUMNS			
COLUMN MARKED	NOS. OF COLUMN	COLUMN SIZE (mm x mm)	STIRRUP ARRANGEMENT & SPACING
ST1,ST2,ST3,ST4,ST5 (ROOF TO WATER TANK)	07	250x250	8Φ@150 C/C (1 NO. CLOSED LINK)
ST6,ST7 (ROOF TO LMR ROOF)			

SCHEDULE OF TIE BEAMS						
BEAM MARKED	BEAM SIZE (mm)	TOP REINFORCEMENT	BOTTOM REINFORCEMENT		STIRRUPS (AT SUPPORT)	STIRRUPS (AT SPAN)
			ALTHROUGH	EXTRA AT SUPPORT		
TB1	250 x 350	3-12Φ	-	3-12Φ	2L-8Φ@100 C/C	2L-8Φ@150 C/C
TB2	250 x 400	3-12Φ	-	3-12Φ	2L-8Φ@100 C/C	2L-8Φ@200 C/C
TB3	250 x 400	3-12Φ	-	3-12Φ	2L-8Φ@100 C/C	2L-8Φ@100 C/C
TB4	250 x 400	3-12Φ	2-12Φ	3-12Φ	2L-8Φ@100 C/C	2L-8Φ@200 C/C



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.

- 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).
 - 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-500/500D CONFORMING TO IS-1786-2008.
 - UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50xBAR DIA.
 - CONCRETE CLEAR COVER SHALL BE AS FOLLOWS:
 - i) COLUMNS : 40 mm
 - ii) BEAMS : 30 mm
 - iii) SLABS : 20 mm
 - iv) WAIST SLAB : 20 mm
 - GRADE OF CONCRETE FOR SUPERSTRUCTURE WILL BE OF M25 AS PER IS:456:2000.
 - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
 - DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP34:1987
 - 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.
 - WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDE.
 - 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.

TITLE - (BLOCK-D&E)
STRUCTURAL DRAWING OF PROPOSED G+IV STORIED RESIDENTIAL CUM COMMERCIAL BUILDING AT MOUZA :- KALIKAPUR, JL NO :- 40, R.S./L.R. DAG NOS:- 437; L.R. KHATIAN NOS:-3782,3995, R.S. NO:-141;TOUZI NO:-10;P.S:-RAJARHAT UNDER PATHARGHATA GRAM PANCHAYET DISTRICT: NORTH 24 PARGANAS.

SIGNATURE OF OWNER
GITANJALI ENTERPRISE
Rinu Chatterborti (Roi) Partner
GITANJALI ENTERPRISE
Partner
GITANJALI ENTERPRISE
Partner

SIGNATURE OF ARCHITECT
SIGNATURE OF GEO-TECHNICAL ENGINEER

SIGNATURE OF STRUCTURAL ENGINEER

SUSMITA CHOUDHURY
B.TECH (CIVIL)-WBUT
ME (CONSTRUCTION)-J
ESE-1/RITSON/150
ESE-1I/KMC/664
STER/NKDA/21/00010
CIVIL ENGINEERING DEPARTMENT
(M)-8697517321/7003201735

SIGNATURE OF THE VETTING AUTHORITY
CHECKED & VETTED
DR. DIPANKAR CHAKRAVORTY
STRUCTURAL ENGINEERING SPECIALIST
PROFESSOR & FORMER HEAD
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DRAWING TITLE
COLUMN AND TIE BEAM LAYOUT PLAN WITH REINF. DETAILS, DETAILS OF STAIR
SCALE:-1:100 OR AS SHOWN
DATE:-07.06.2024
SHEET NO.- 3 OF 5
SHEET SIZE-A1