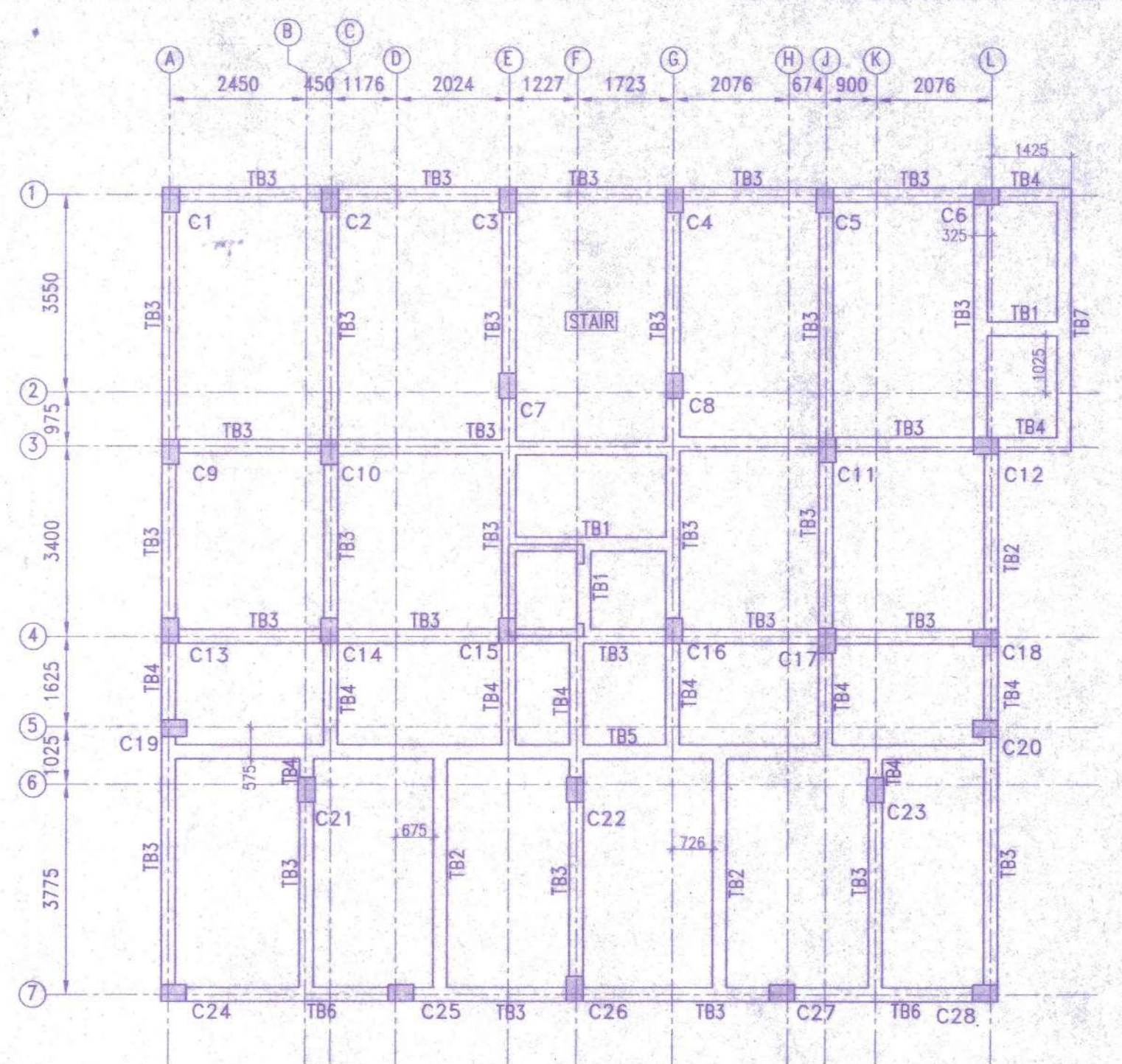
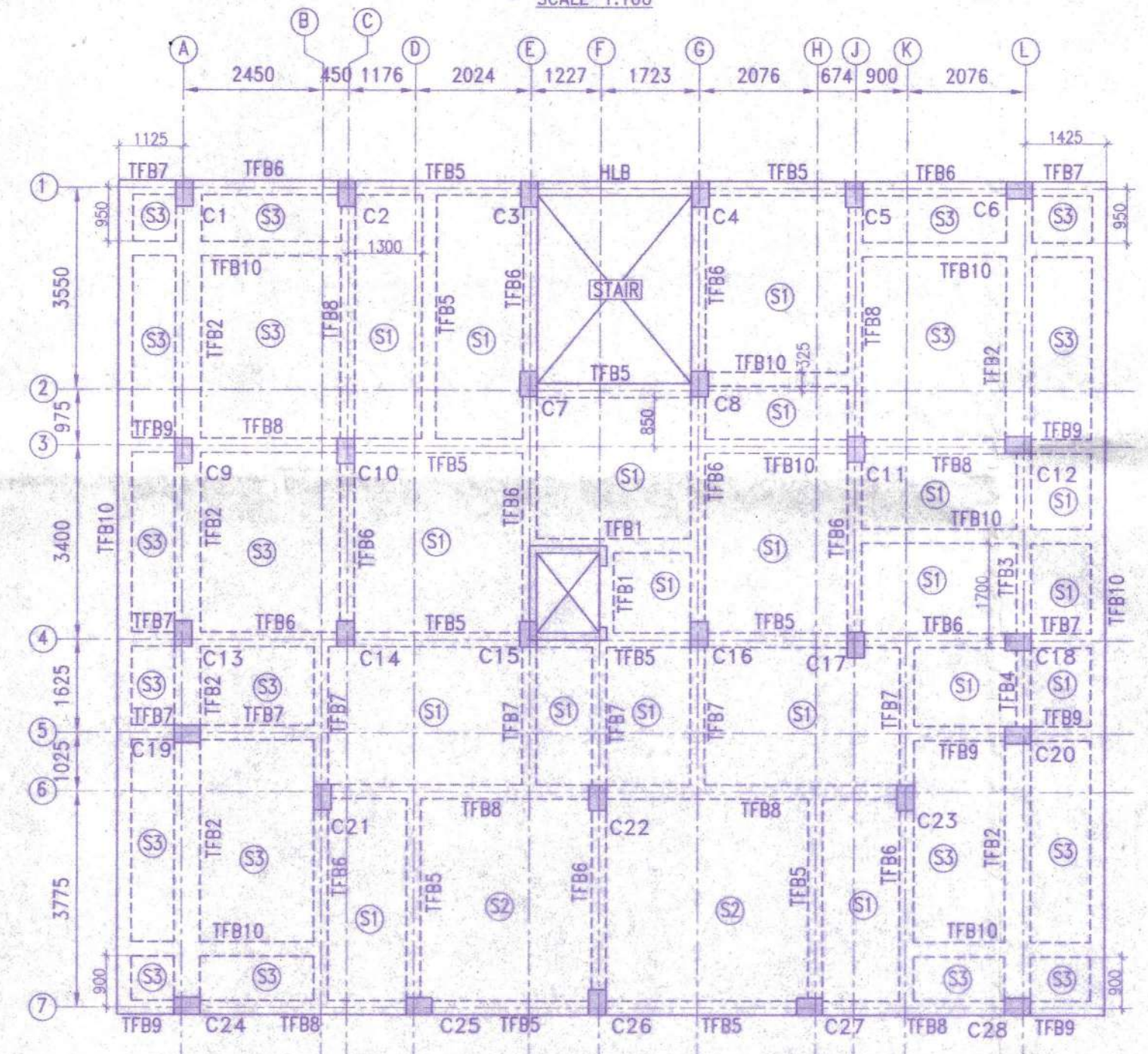


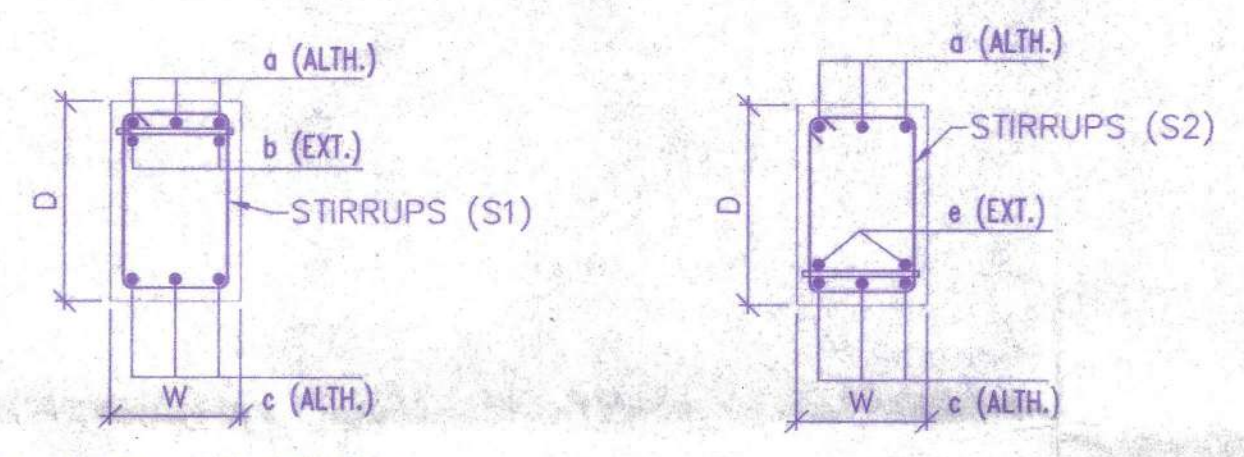
COLUMN LAYOUT PLAN  
SCALE-1:100



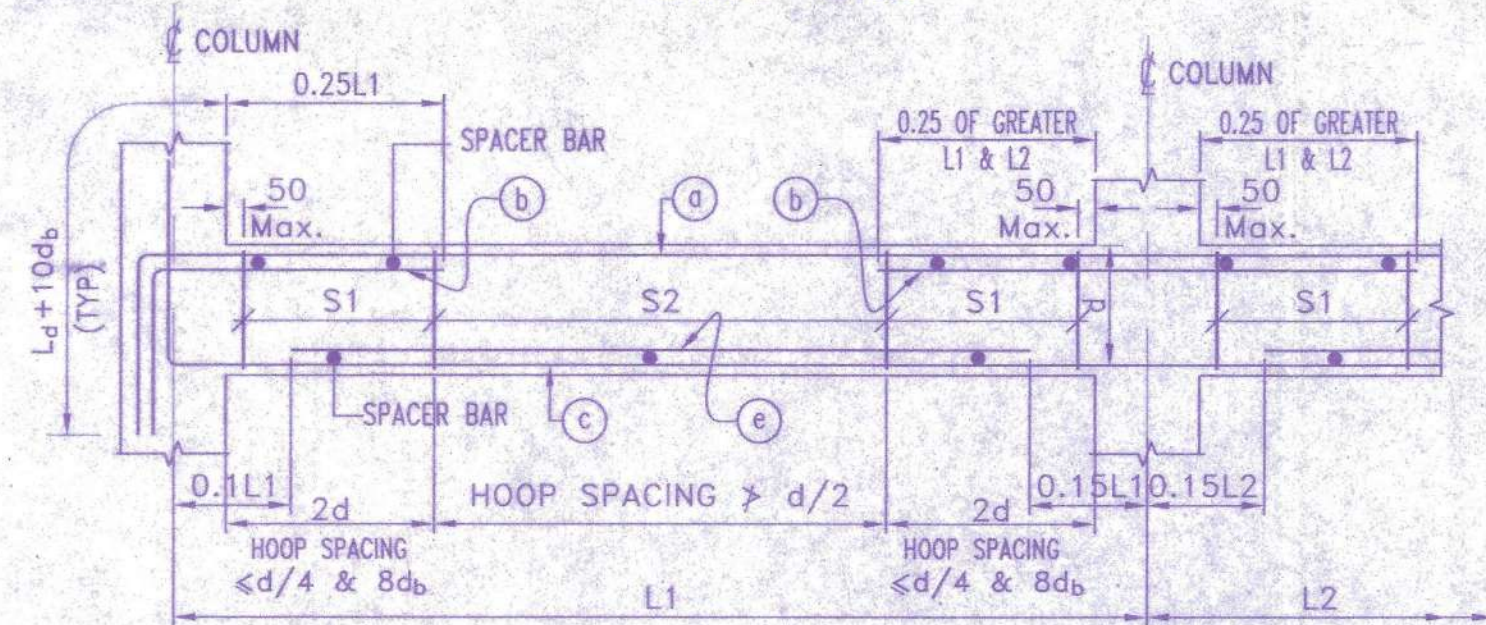
TIE BEAM LAYOUT PLAN AT LEVEL ±0.00m.  
SCALE 1:100



1ST & 2ND FLOOR BEAM AND SLAB LAYOUT PLAN  
AT LEVELS (+)2.9m, (+)5.8m.  
S1 MARKED SLABS ARE 115 mm THICK.  
S2 MARKED SLABS ARE 125 mm THICK.  
S3 MARKED SLABS ARE 150 mm THICK.  
SCALE-1:100

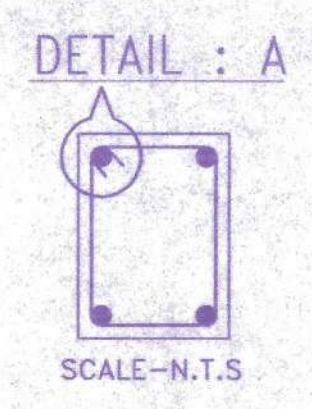


AT SUPPORT AT SPAN  
TYPICAL CROSS SECTION OF BEAM  
SCALE-N.T.S.

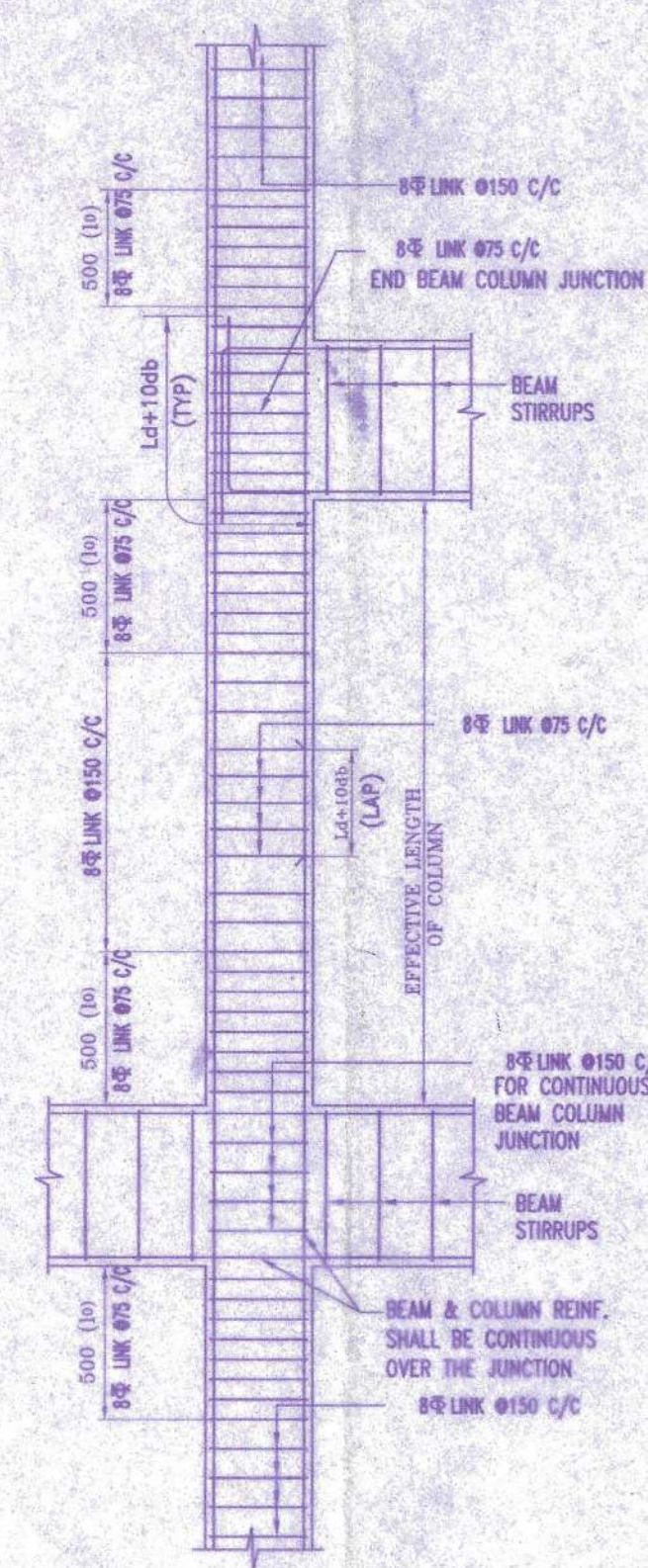


TYPICAL ARRANGEMENT OF REINFORCEMENT IN BEAM  
SCALE-N.T.S.

SCHEDULE OF STOOl COLUMNS			
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	STIRRUP ARRANGEMENT & SPACING
ST1,ST2 (WOTY TO WATER TANK)	02	250x250	ROOF TO ABOVE ROOF: 250x250 MAIN RNF.: -4-12 # 8 # 150 C/C (1 NO. CLOSED LINK)
ST3,ST4 (ROOF TO LMR ROOF)	02	250x250	250x250 MAIN RNF.: -4-16 # 8 # 150 C/C (1 NO. CLOSED LINK)



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



TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION  
SCALE-N.T.S.

- 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 METRE 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 = 50x BAR DIA. CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT 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 M25 AS PER IS-456:2000.
  - VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
  - DEVELOPMENT LENGTH 50D FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP-4:1987.
  - 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  
STRUCTURAL DRAWING OF PROPOSED G+IV STORIED RESIDENTIAL BUILDING AT MOUZA- UDAYAMPUR, J.L NO-74,R.S & L.R DAG NO-942/1356(P),L.R KH. NO-3283, UNDER CHAK ENAYET NAGAR GRAM PANCHAYET,P.S- BISHNUPUR, DIST -24 PGS (S), WEST BENGAL.

DECLARATION OF OWNER  
I DO HEREBY DECLARE WITH FULL RESPONSIBILITY THAT, I SHALL ENGAGE LBS & ESE DURING CONSTRUCTION OF THE BUILDING (AS PER PLAN) K.M.C AUTHORITY WILL NOT BE RESPONSIBLE FOR STRUCTURAL STABILITY OF THE BUILDING & ADJOINING STRUCTURE. IF ANY SUBMITTED DOCUMENT ARE FAKE, THE K.M.C AUTHORITY WILL REVOKE THE SANCTION PLAN. THE CONSTRUCTION OF S.U.G.W.R TAKEN UNDER THE GUIDANCE OF L.B.S / ESE BEFORE STARTING OF BUILDING FOUNDATION.

MANAFULI INFRASTRUCTURES LLP  
Designated Partner  
MANAFULI INFRASTRUCTURES LLP  
Designated Partner  
MANAFULI INFRASTRUCTURES LLP  
Designated Partner

SIGNATURE OF OWNER

DECLARATION OF L.B.S./ ARCHITECT

CERTIFIED WITH FULL RESPONSIBILITY THAT THE BUILDING PLAN HAS BEEN DRAWN UP AS PER PROVISION OF KMC BUILDING RULES 2009 AS AMENDED FROM TIME TO TIME & THAT THE SITE CONDITION INCLUDING THE ABUTTING K.M.C MAINTAINED ROAD CONFORMS WITH THE PLAN, WHICH HAS BEEN MEASURED AND VERIFIED BY ME. IT IS A BUILDABLE SITE & NOT A TANK OR FILLED UP TANK. THE LAND IS DEMARCATED BY BOUNDARY WALL. THE CONSTRUCTION OF U.G. WATER TANK AND SEPTIC TANK WILL BE COMPLETED BEFORE STARTING OF BUILDING.

SIGNATURE OF L.B.S./ ARCHITECT

SIGNATURE OF GEO-TECHNICAL ENGINEER

UNDERSIGNED HAS INSPECTED THE SITE CARRIED OUT THE SOIL INVESTIGATION THEREIN. IT IS CERTIFIED THAT THE EXISTING SOIL OF THE SITE IS ABLE TO CARRY THE LOAD COMING FROM THE PROPOSED CONSTRUCTION & THE FOUNDATION SYSTEM PROPOSED THEREIN IS SAFE & STABLE IN ALL RESPECT FROM GEO TECHNICAL POINT OF VIEW.

DR. SUJIT KUMAR BOSE  
PH.D, M.C.E.(Soil), B.C.E.(Hons.)  
MIGS, MIRC  
Empanelled Geotechnical Engineer Under KMC  
License No.-G.T./1/12

SIGNATURE OF GEO-TECHNICAL ENGINEER

CERTIFICATE OF STRUCTURAL ENGINEER

THE STRUCTURAL DESIGN & DRAWINGS OF BOTH FOUNDATION & SUPERSTRUCTURE OF THE BUILDING HAS BEEN PREPARED BY ME CONSIDERING ALL POSSIBLE LOADS INCLUDING THE SEISMIC LOAD AS PER NATIONAL BUILDING CODE OF INDIA & THE FOUNDATION IS CAPABLE OF TAKING THE LOAD. CERTIFIED THAT IT IS SAFE & STABLE IN ALL RESPECTS. STRUCTURE DESIGN CALCULATION HAS BEEN CONSIDERING SOIL REPORT AND ARCHITECTURAL DRAWING AS INPUT.

SUSMITA CHOUHURY  
B.TECH (CIVIL)-WRIIT  
M.E. CONSTRUCTION, JU  
IASE-1/12/1990/172  
ESE-H/MC/664  
STER/ANKDA/21/00010  
CIVIL ENGRG. REG. NO. 10190172  
(M)-8697617321/7003201735

SIGNATURE OF STRUCTURAL ENGINEER

STRUCTURAL CONSULTANT:

STRUCTCON ENTERPRISE  
REGD. ADDRESS: ASHRAY APARTMENT,  
GROUND FLOOR  
90B, KALIKATUR ROAD,  
KOLKATA- 700 099  
Email-structconenterprise@gmail.com  
PH.-9087714478, 7003201735

DRAWING TITLE

COLUMN, TIE BEAM, 1ST AND 2ND FLOOR BEAM AND SLAB LAYOUT PLAN WITH REINF. DETAILS AND DETAILS OF STAIR.  
SCALE-1:100 OR AS SHOWN  
DATE-03.08.2023

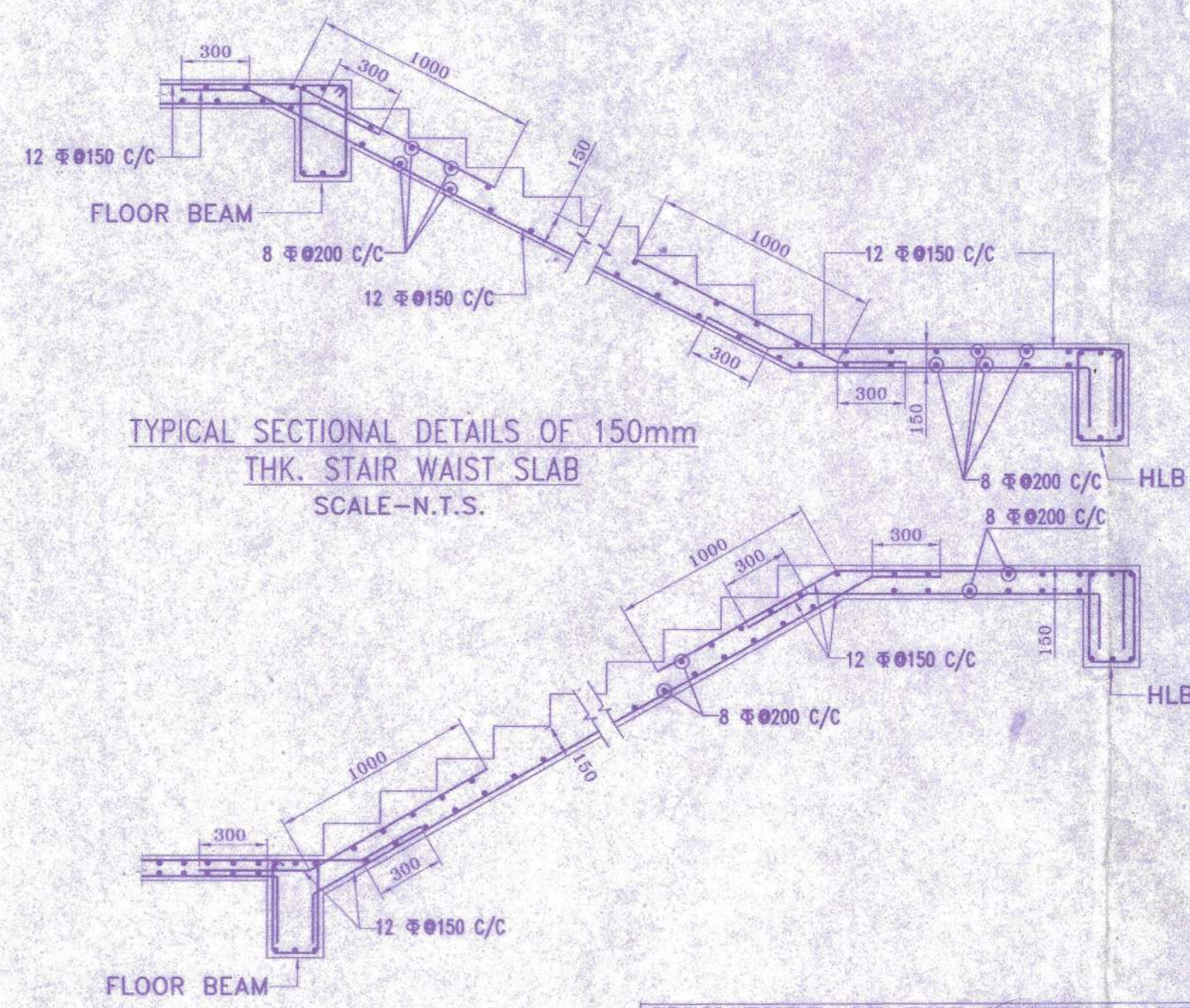
SHEET NO. - 2 OF 3 SHEET SIZE - A1

SCHEDULE OF COLUMNS			
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO ROOF / ABOVE ROOF
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28	28	300X450	300x450

SCHEDULE OF TIE BEAMS						
BEAM MARKED	BEAM SIZE (W x D) (mm)	TOP REINFORCEMENT	EXTRA AT SUPPORT	BOTTOM REINFORCEMENT	EXTRA AT SPAN	STIRRUPS (AT SUPPORT) (S1)
TB1	250 350	3-12 #	-	3-12 #	-	2L-8 # 100 C/C
TB2	250 400	3-12 #	-	3-12 #	-	2L-8 # 100 C/C
TB3	250 400	3-16 #	2-12 #	3-12 #	-	2L-8 # 100 C/C
TB4	250 400	3-16 #	-	3-12 #	-	2L-8 # 100 C/C
TB5	250 400	3-16 #	-	3-12 #	-	2L-8 # 100 C/C
TB6	250 400	3-16 #	3-12 #	3-12 #	2-12 #	2L-8 # 100 C/C
TB7	250 400	3-12 #	-	3-12 #	2-12 #	2L-8 # 100 C/C

SCHEDULE OF 1ST & 2ND FLOOR BEAMS						
BEAM MARKED	BEAM SIZE (W x D) (mm)	TOP REINFORCEMENT	EXTRA AT SUPPORT	BOTTOM REINFORCEMENT	EXTRA AT SPAN	STIRRUPS (AT SUPPORT) (S1)
TFB1	250 350	3-12 #	-	3-12 #	-	2L-8 # 100 C/C
TFB2	450 175	4-16 #	-	4-16 #	-	4L-8 # 100 C/C
TFB3	250 400	3-16 #	2-16 #	3-16 #	-	2L-8 # 100 C/C
TFB4	250 400	3-16 #	-	3-16 #	-	2L-8 # 100 C/C
TFB5	250 400	2-16 #	2-16 #	2-16 #	2-12 #	2L-8 # 100 C/C
TFB6	250 400	2-16 #	-	2-16 #	-	2L-8 # 100 C/C
TFB7	250 400	2-16 #	-	2-16 #	-	2L-8 # 100 C/C
TFB8	250 400	2-16 #	3-16 #	2-16 #	2-12 #	2L-8 # 100 C/C
TFB9	250 400	2-16 #	-	2-16 #	-	2L-8 # 100 C/C
TFB10	250 400	2-16 #	-	2-16 #	-	2L-8 # 100 C/C
HLB	250 400	3-16 #	-	3-16 #	-	2L-8 # 100 C/C

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



TYPICAL SECTIONAL DETAILS OF 150mm THK. STAIR WAIST SLAB  
SCALE-N.T.S.

SIGNATURE OF THE VETTING AUTHORITY

DR. DIPANKAR CHAKRAVORTY  
STRUCTURAL ENGINEER DIVISION  
PROFESSOR IN CHARGE  
CIVIL ENGINEERING DEPARTMENT  
JADAVPUR UNIVERSITY  
B.B. (L3) 69/Model No. 22, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100  
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