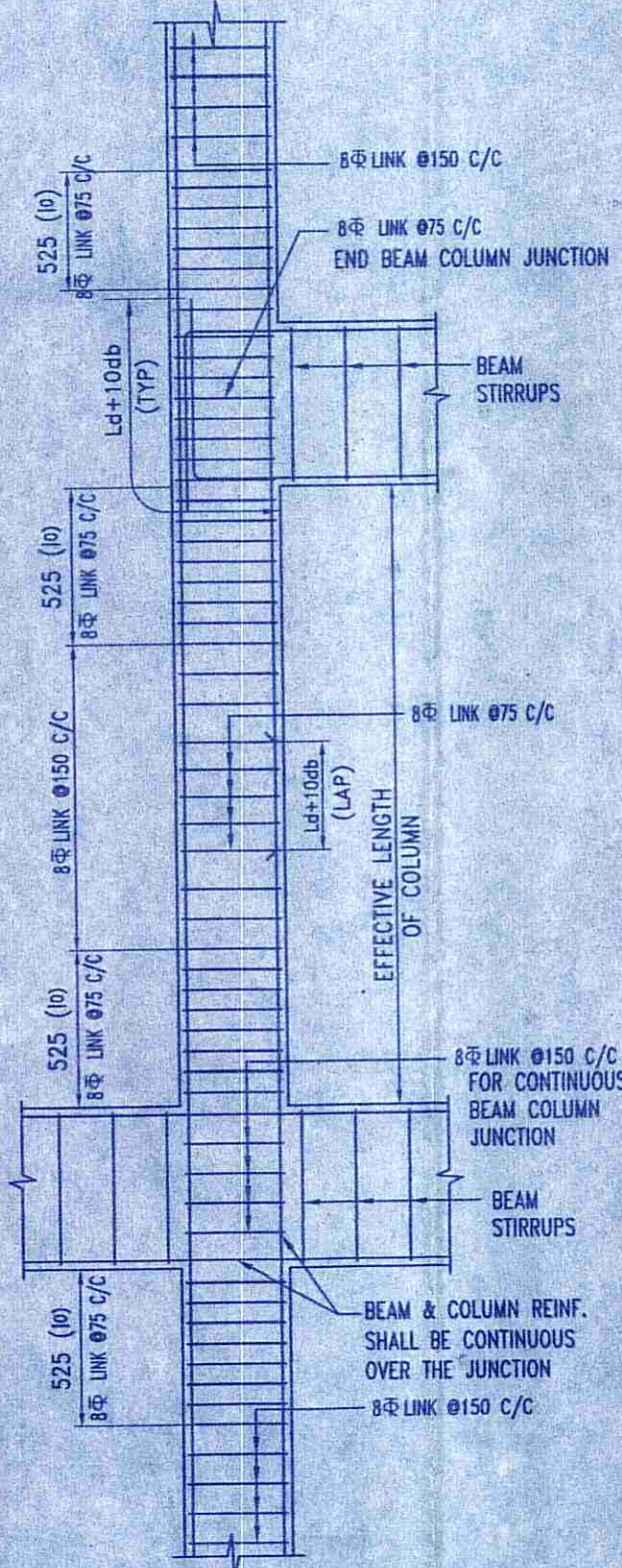
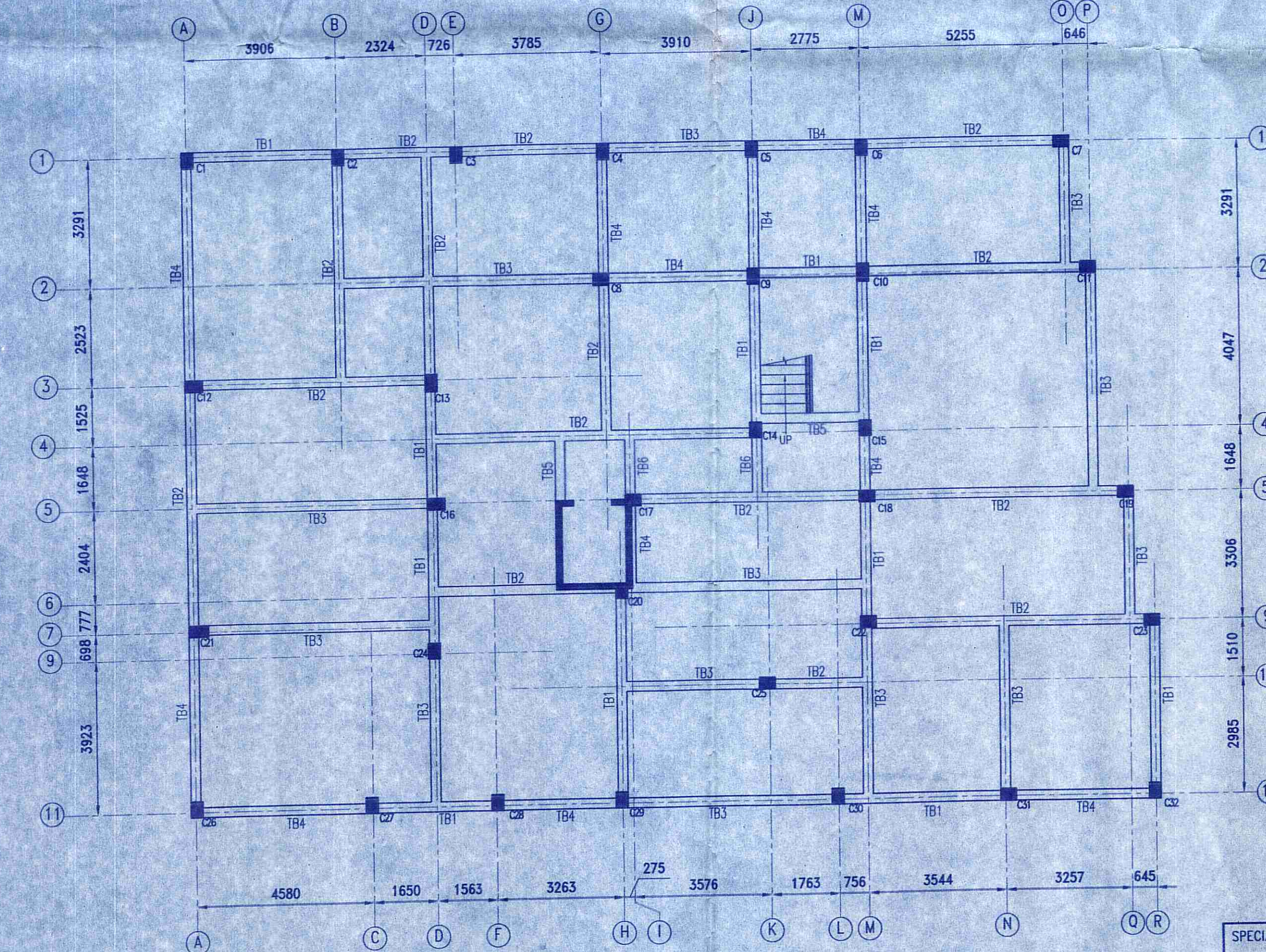


COLUMN LAYOUT PLAN
SCALE 1:100



TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION
L_d = DEVELOPMENT LENGTH IN TENSION
Ø = DIAMETER OF LONGITUDINAL BAR
SCALE - N.T.S.



TIE BEAM LAYOUT PLAN
AT LEVEL (+)0.150m.
SCALE - 1:100

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 COLUMNS					
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO ROOF ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING	
				NEAR JUNCTION (10)	REST PORTION
C1,C6,C17, C22,C26,C31	06	300X400	300 400 MAIN RNF.: - 8-16 Ø + 2-20 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C2,C9,C14, C23,C30	05	300X400	300 400 MAIN RNF.: - 10-16 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C3,C5,C20,C25	04	300X400	300 400 MAIN RNF.: - 4-16 Ø + 6-12 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C4,C18,C19, C28,C32	05	300X400	300 400 MAIN RNF.: - 6-16 Ø + 4-12 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C7,C8,C11, C24,C27	05	300X400	300 400 MAIN RNF.: - 4-20 Ø + 6-16 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C10,C12	02	300X450	300 450 MAIN RNF.: - 10-20 Ø + 2-16 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK) (1 NOS. OPEN LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK) (1 NOS. OPEN LINK)
C13,C16	02	300X450	300 450 MAIN RNF.: - 10-20 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C15,C29	02	300X400	300 400 MAIN RNF.: - 6-20 Ø + 4-16 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK)
C21	01	300X500	300 500 MAIN RNF.: - 12-20 Ø	8 Ø 75 C/C (3 NOS. CLOSED LINK) (1 NOS. OPEN LINK)	8 Ø 150 C/C (3 NOS. CLOSED LINK) (1 NOS. OPEN LINK)

SCHEDULE OF STOOL COLUMNS				
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	ROOF TO ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING
ST1 (ROOF TO LMR ROOF)	01	250x250	250 250 MAIN RNF.: - 8-16 Ø	8 Ø 150 C/C (2 NOS. CLOSED LINK)
ST2,ST3(ROOF TO LMR ROOF) ST4,ST5(ROOF TO WATER TANK)	04	250x350	250 350 MAIN RNF.: - 4-16 Ø	8 Ø 150 C/C (1 NOS. CLOSED LINK)

SCHEDULE OF TIE BEAMS							
BEAM MARKED	BEAM SIZE (W x D) (mm)	TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
		ALTHROUGH (a)	EXTRA AT SUPPORT (b)	ALTHROUGH (c)	EXTRA AT SPAN (e)		
TB1	250 400	3-12 Ø	2-12 Ø	3-12 Ø + 2-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø200 C/C
TB2	250 400	3-12 Ø	3-12 Ø	3-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø200 C/C
TB3	250 400	3-12 Ø	-	3-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø200 C/C
TB4	250 400	3-12 Ø + 3-12 Ø	-	3-12 Ø + 3-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø200 C/C
TB5	250 350	3-12 Ø	-	3-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø200 C/C
TB6	250 400	3-12 Ø + 3-12 Ø	-	3-12 Ø	-	2L-8 Ø100 C/C	2L-8 Ø100 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 ANY 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 = 50ØBAR 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 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.
 - IN ALL CANTILEVER SLAB WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UP TO ATLEAST 1.5 TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.

TITLE
STRUCTURAL DRAWING OF PROPOSED G+4 STORIED APARTMENT HOUSING COMPLEX BUILDING OF SRI BIDYUT BARAN MONDAL OVER L.R. PLOT NO. - 2802, KHATIAN NO. - 3405, MOUZA - ANDAL, J.L. NO- 52, P.S. - ANDAL, DIST- PASCHIM BARDHAMAN.

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Ar. VIJAYA SINGH MAZUMDER
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CA/2021/194276
9332802166 / 9476426106

SIGNATURE OF OWNER
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SIGNATURE OF GEO-TECHNICAL ENGINEER
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M.E (CONSTRUCTION) - JU
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ESE-11/KMCO/684
STER/NKDA/21/00010
OVER/NKDA/10/00175
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DRAWING TITLE
1. COLUMN LAYOUT PLAN & REINFORCEMENT DETAILS.
2. TIE BEAM LAYOUT PLAN WITH REINFORCEMENT DETAILS.
SCALE - 1:100 OR AS SHOWN
DATE - 20.07.2022
SHEET NO. - 2 OF 4 SHEET SIZE. - A1