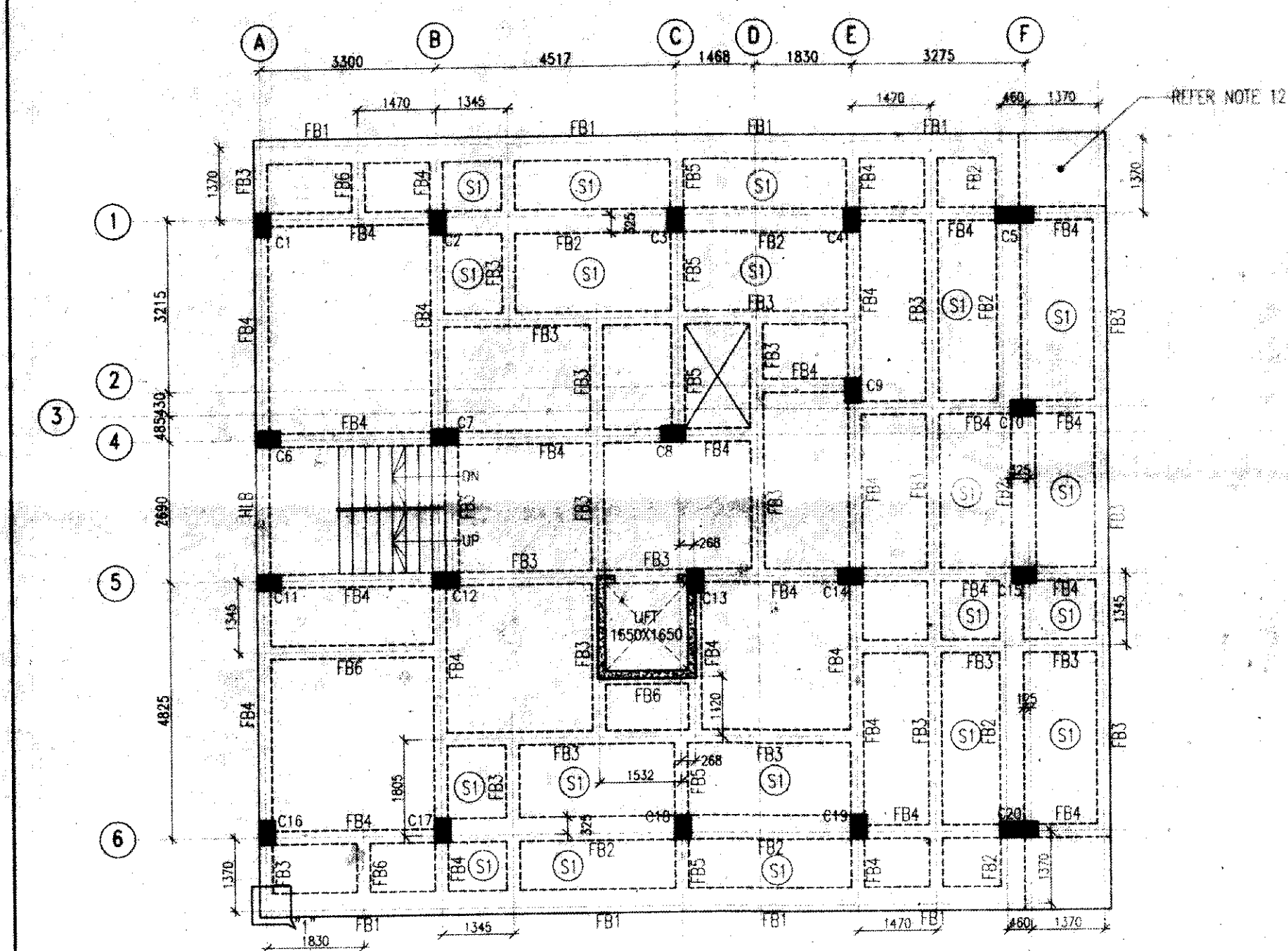
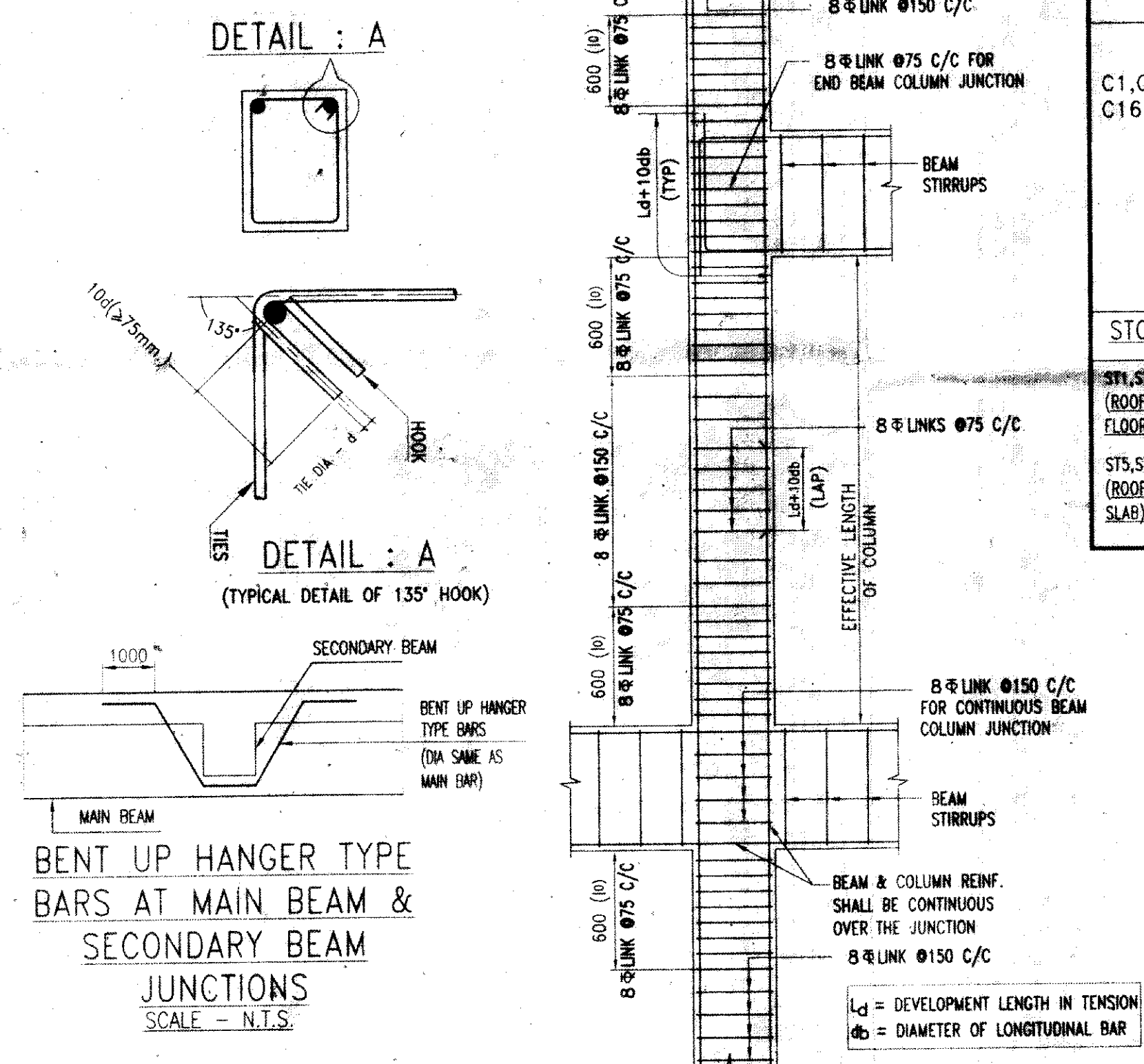


COLUMN LAYOUT PLAN
SCALE- 1:100

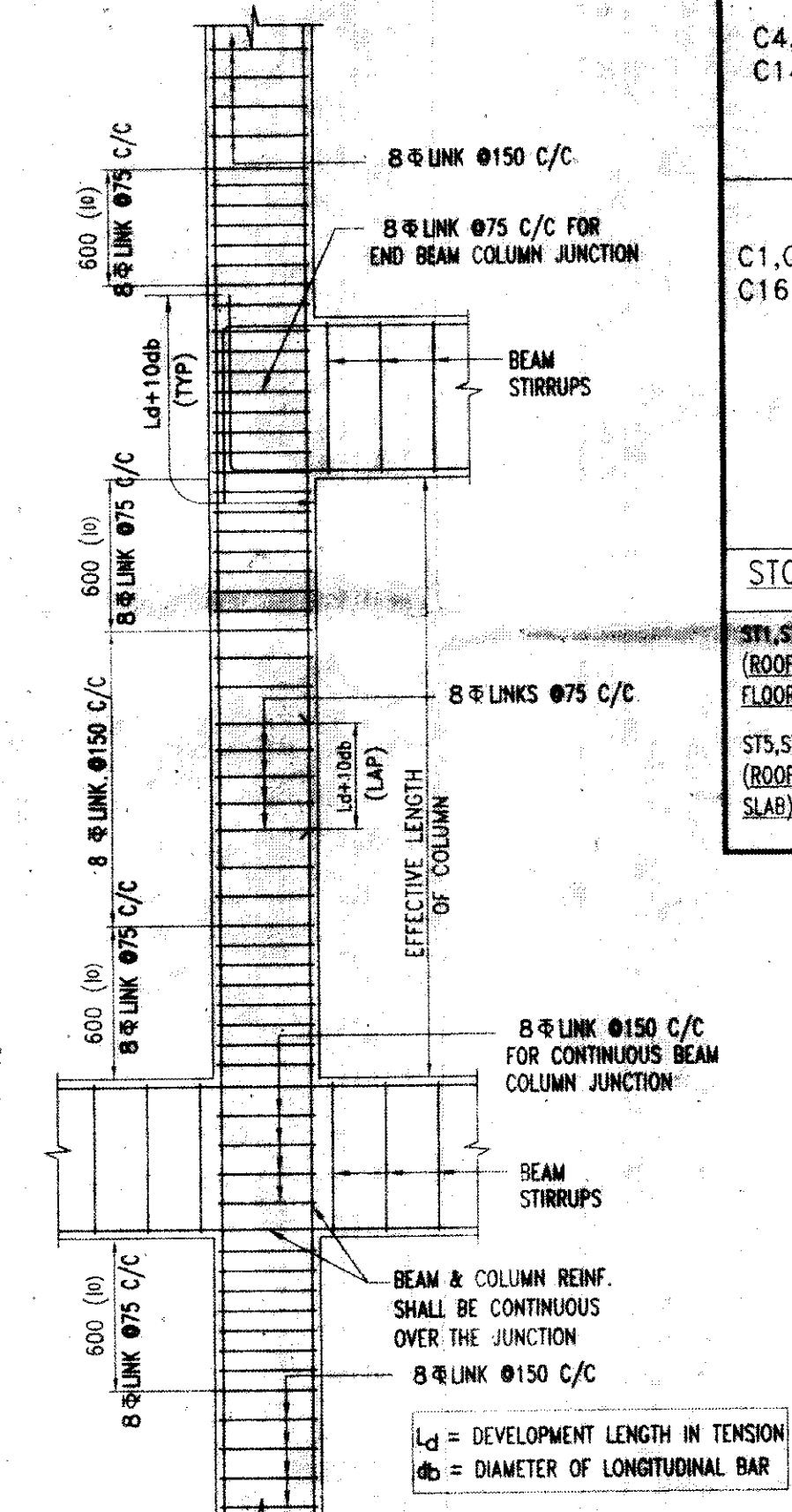
TIE BEAM LAYOUT PLAN AT LEVEL(±)0.00
SCALE- 1:100



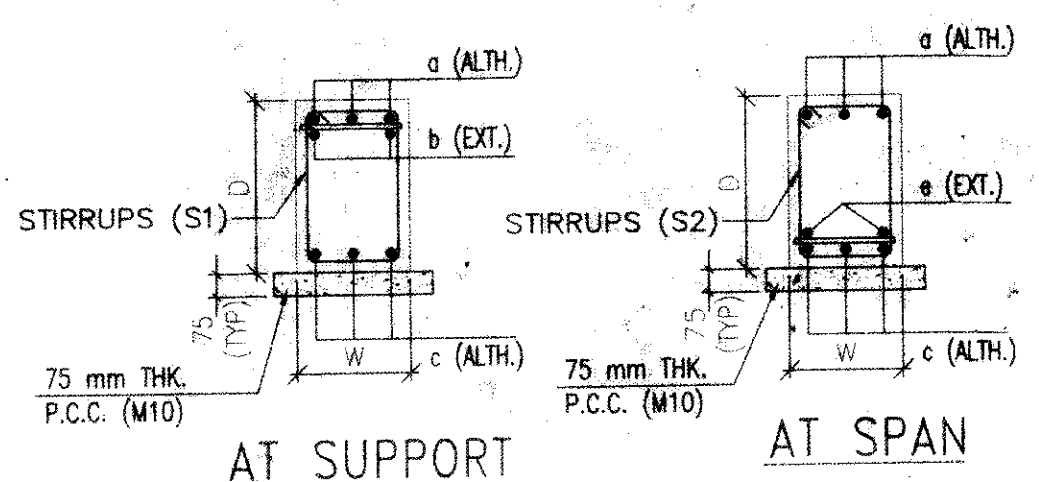
TYPICAL (FIRST TO FOURTH) FLOOR BEAM AND SLAB LAYOUT PLAN AT LEVEL (+)2.9m., (+)5.8m., (+)8.7m., (+)11.6m.
S1 MARKED SLABS ARE 150 mm THICK
ALL OTHER SLABS ARE 110 mm THICK
HLB REFERS TO HALF LANDING BEAMS
SCALE- 1:100



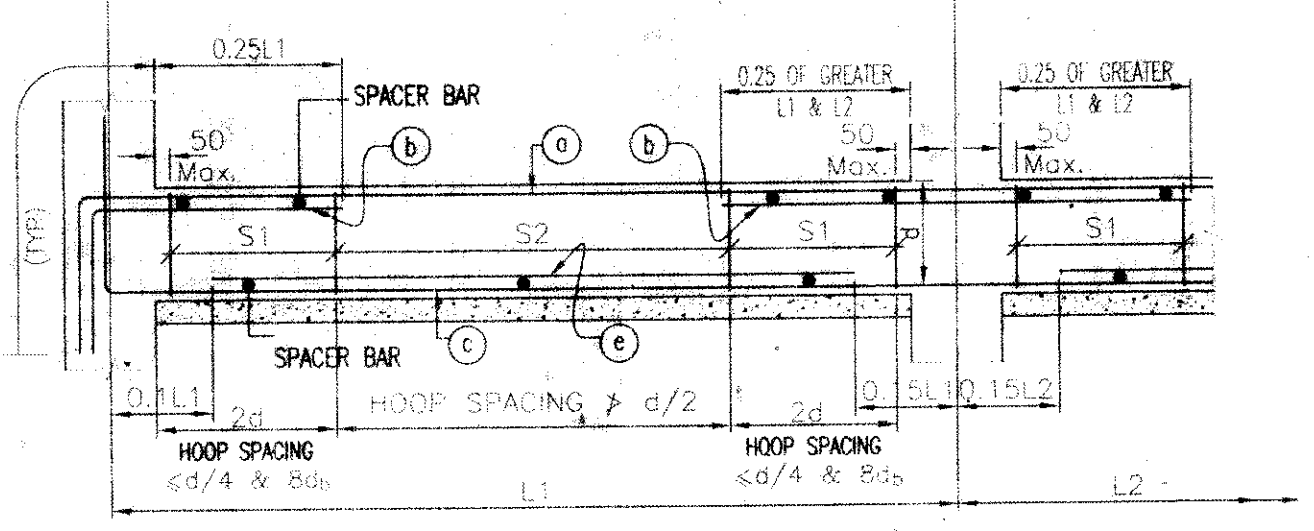
BENT UP HANGER TYPE BARS AT MAIN BEAM & SECONDARY BEAM JUNCTIONS
SCALE - N.T.S.



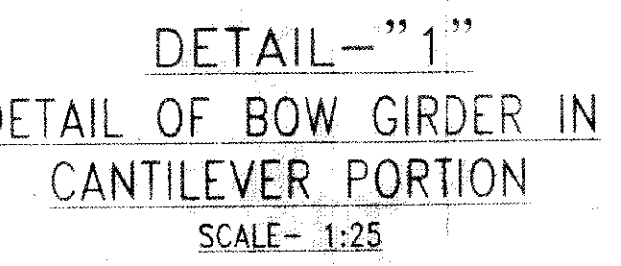
TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION
SCALE 1:25



TYPICAL CROSS SECTION OF TIE BEAM



TYPICAL ARRANGEMENT OF REINFORCEMENT IN TIE BEAM



DETAIL OF BOW GIRDER IN CANTILEVER PORTION
SCALE- 1:25

SCHEDULE OF COLUMNS					
COLUMN MARKED	NOS. OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO ROOF AND ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING	
				NEAR JUNCTION (10)	REST PORTION
C5,C20	02	300x725	 MAIN RNF. :- 6-16 ϕ +8-12 ϕ	 8 ϕ 75 C/C (4 NOS. CLOSED LINK)	 8 ϕ 150 C/C (4 NOS. CLOSED LINK)
C7,C12	02	300x500	 MAIN RNF. :- 6-16 ϕ +4-12 ϕ	 8 ϕ 75 C/C (3 NOS. CLOSED LINK)	 8 ϕ 150 C/C (3 NOS. CLOSED LINK)
C2,C3,C15,C17,C18	05	300x450	 MAIN RNF. :- 12-16 ϕ	 8 ϕ 75 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)	 8 ϕ 150 C/C (3 NOS. CLOSED LINK) (1 NO. OPEN LINK)
C4,C8,C9,C10,C14,C19	06	300x450	 MAIN RNF. :- 10-16 ϕ	 8 ϕ 75 C/C (3 NOS. CLOSED LINK)	 8 ϕ 150 C/C (3 NOS. CLOSED LINK)
C1,C6,C11,C13,C16	05	300x450	 MAIN RNF. :- 4-16 ϕ +4-12 ϕ	 8 ϕ 75 C/C (3 NOS. CLOSED LINK)	 8 ϕ 150 C/C (3 NOS. CLOSED LINK)
STOOL COLUMN					
S11,S12,S13,S14 (ROOF TO WATER TANK FLOOR SLAB) S15,S16,S17,S18 (ROOF TO L.M.R. ROOF SLAB)	08	250x250	 MAIN RNF. :- 4-16 ϕ +4-12 ϕ	 8 ϕ 150 C/C (2 NOS. CLOSED LINK)	

SCHEDULE OF TIE BEAMS							
BEAM MARKED	BEAM SIZE		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (AT SPAN)
	WIDTH (W)	DEPTH (D)	(a)	(b)	(c)	(e)	
FB1	250	450	2-16 ϕ +1-12 ϕ	-	2-16 ϕ +1-12 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
FB2	250	450	3-16 ϕ	-	3-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
FB3	250	400	2-16 ϕ +1-12 ϕ	-	2-16 ϕ +1-12 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C

SCHEDULE OF TYPICAL FLOOR (1st to 4th) & HALF LANDING BEAM							
BEAM MARKED	BEAM SIZE		TOP REINFORCEMENT		BOTTOM REINFORCEMENT		STIRRUPS (AT SPAN)
	WIDTH (W)	DEPTH (D)	(a)	(b)	(c)	(e)	
FB1	450	250	4-16 ϕ	-	4-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 100 C/C
FB2	450	250	4-20 ϕ	-	4-20 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 100 C/C
FB3	250	450	3-16 ϕ	-	3-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
FB4	250	450	3-16 ϕ	2-16 ϕ	3-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
FB5	250	450	3-16 ϕ	3-16 ϕ	3-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
FB6	250	400	3-16 ϕ	-	3-16 ϕ	-	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C
HLB	250	450	3-16 ϕ	2-16 ϕ	3-16 ϕ	2-16 ϕ	2L-8 ϕ 100 C/C 2L-8 ϕ 200 C/C

SPECIAL NOTE :
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.

- 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 NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
i) BEAM : 25 mm
ii) COLUMN : 40 mm
 - GRADE OF CONCRETE FOR SUPERSTRUCTURE & SUBSTRUCTURE WILL BE M25 AS PER IS:456:2000. VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE & CURING SHALL BE DONE PROPERLY.
 - DEVELOPMENT LENGTH 50xD FOR LAP & SPICES 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 50D 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 SLABS WITHOUT PERIPHERAL BEAMS THE TOP REINFORCEMENT PARALLEL TO THE CANTILEVER SPAN SHOULD BE CONTINUED UPTO ATLEAST 1.5TIMES THE CANTILEVER SPAN WITHIN THE ADJACENT SLAB.

TITLE
PROPOSED STRUCTURAL DRAWING OF G+4 STORED, COMMERCIAL CUM APARTMENT (RESIDENTIAL) BUILDING OF SHREE BUILDERS OVER R.S. PLOT NO. - 1596 (PART), MOUZA- ARRAH, J.L. NO.- 91, P.S.- KANKSA, DIST. -PASHCHIM BARDHAMAN.
LAND OWNERS -
1. SUKUMAR CHOWDHURY (KH.NO-4822)
2. PRASENJIT KUNDU (KH.NO-4803)
3. SANATAN JANA (KH.NO-4782)
4. MADHUMITA MONDAL (KH.NO-4811)

CERTIFICATE OF ARCHITECT/ENGINEER
I DO HEREBY CONFIRM AND CERTIFY WITH FULL RESPONSIBILITY THAT THE BUILDING PLAN HAS BEEN PREPARED BY ME KEEPING THE PROVISION OF NBC OF INDIA AND CERTIFY THAT IT IS SAFE & STABLE IN ALL RESPECT.

VIJAYA SINGH CONSULTING ARCHITECT
DMC REGISTERED
LIC NO. - DMC/09/06
SIGNATURE OF GEOTECHNICAL ENGINEER
THIS IS TO CERTIFY THAT THE SOIL TEST HAS BEEN PERFORMED BY ME FOR THIS PROJECT

SIGNATURE OF STRUCTURAL ENGINEER
Sourajit Das 11/10/19
SOURAJIT DUTTA
B.TECH (WBUT)
CIVIL ENGINEER, NKDA
LICENCE NO. - CVER/WKDA/19/0017

SIGNATURE OF VETTING AUTHORITY
CHECKED & VETTED
DR. DIPANKAR CHAKRAVORTY
STRUCTURAL ENGINEERING DIVISION
PROFESSOR & HEAD, CIVIL ENGINEERING DEPARTMENT
FIE, IIT (KGP), STRUCTURAL RESEARCH CENTER
M. TECH (ITKGP) GOLD MEDALIST
FIELD TEST TECH.
(COP) 033-2467 2881
(MO) 9830188502 & 9432993143
EMAIL : prof.dipankar@gmail.com

SIGNATURE OF PANCHAYAT PRADHAN
Approved vide memo no - PB/PSB/P/1786
Dt - 20/10/19 of District Engineer of Pashchim Bardhaman zilla Panchayat
APPROVED
Pradhan
Malandighi Gram Panchayat

CERTIFICATE OF OWNER
THIS IS TO CERTIFY THAT I SHALL NOT ON A LATER DATE, MAKE ANY ADDITION OR ALTERATION TO THIS PLAN. THIS IS CERTIFIED THAT I HAVE GONE THROUGH THE NBC OF INDIA AND ALSO ABIDE BY THOSE RULES DURING AND LATER CONSTRUCTION OF BUILDING.
Sukumar Chowdhury Prasenjit Kundu
Madhumita Mondal Sanatan Jana

DRAWING TITLE
COLUMN LAYOUT PLAN, COLUMN SCHEDULE, TIE BEAM TYPICAL FLOOR BEAM LAYOUT PLAN AND ITS SCHEDULE
SCALE-1:100 OR AS SHOWN
DATE- 01.10.2019
SHEET NO. - 2 OF 3