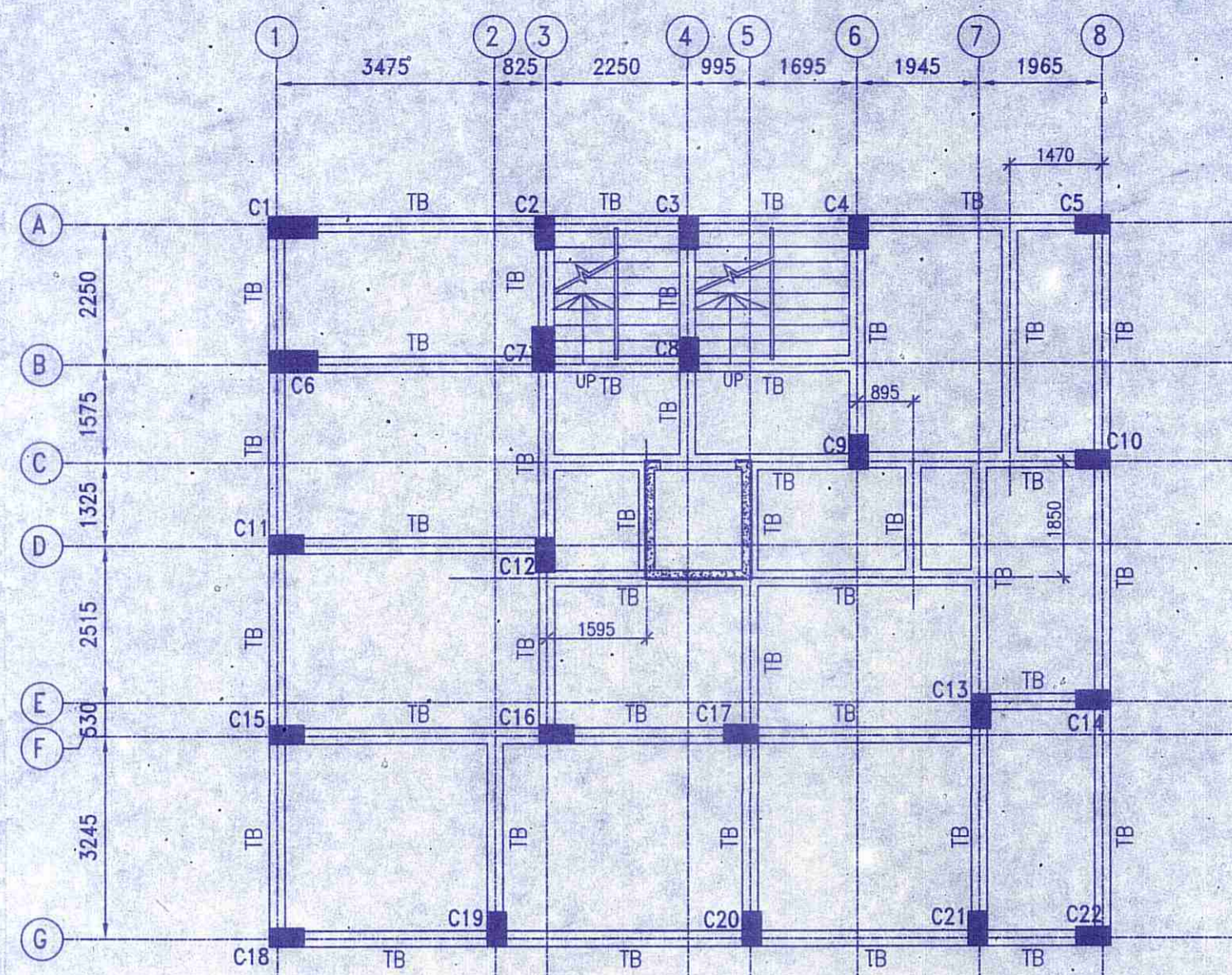
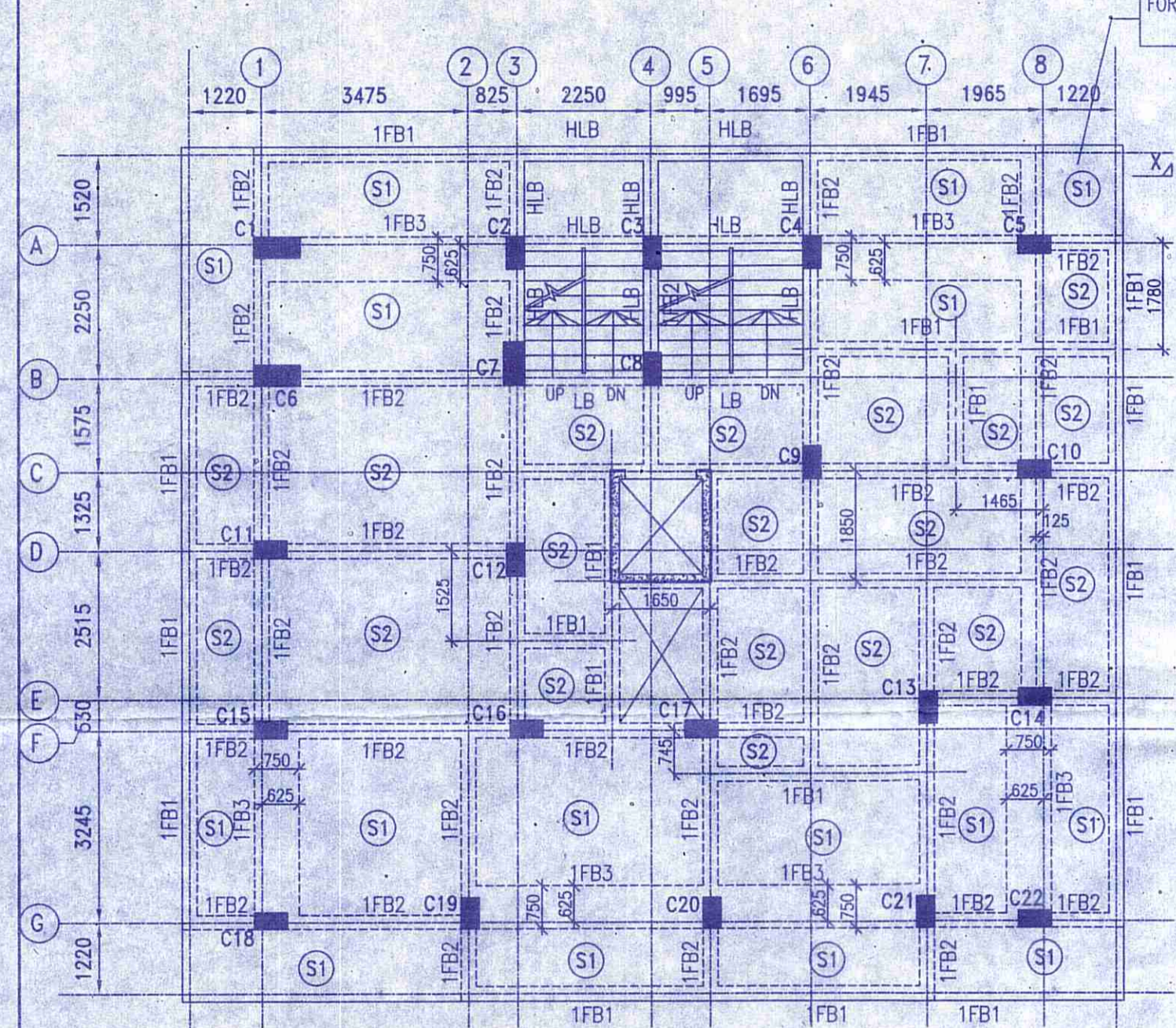


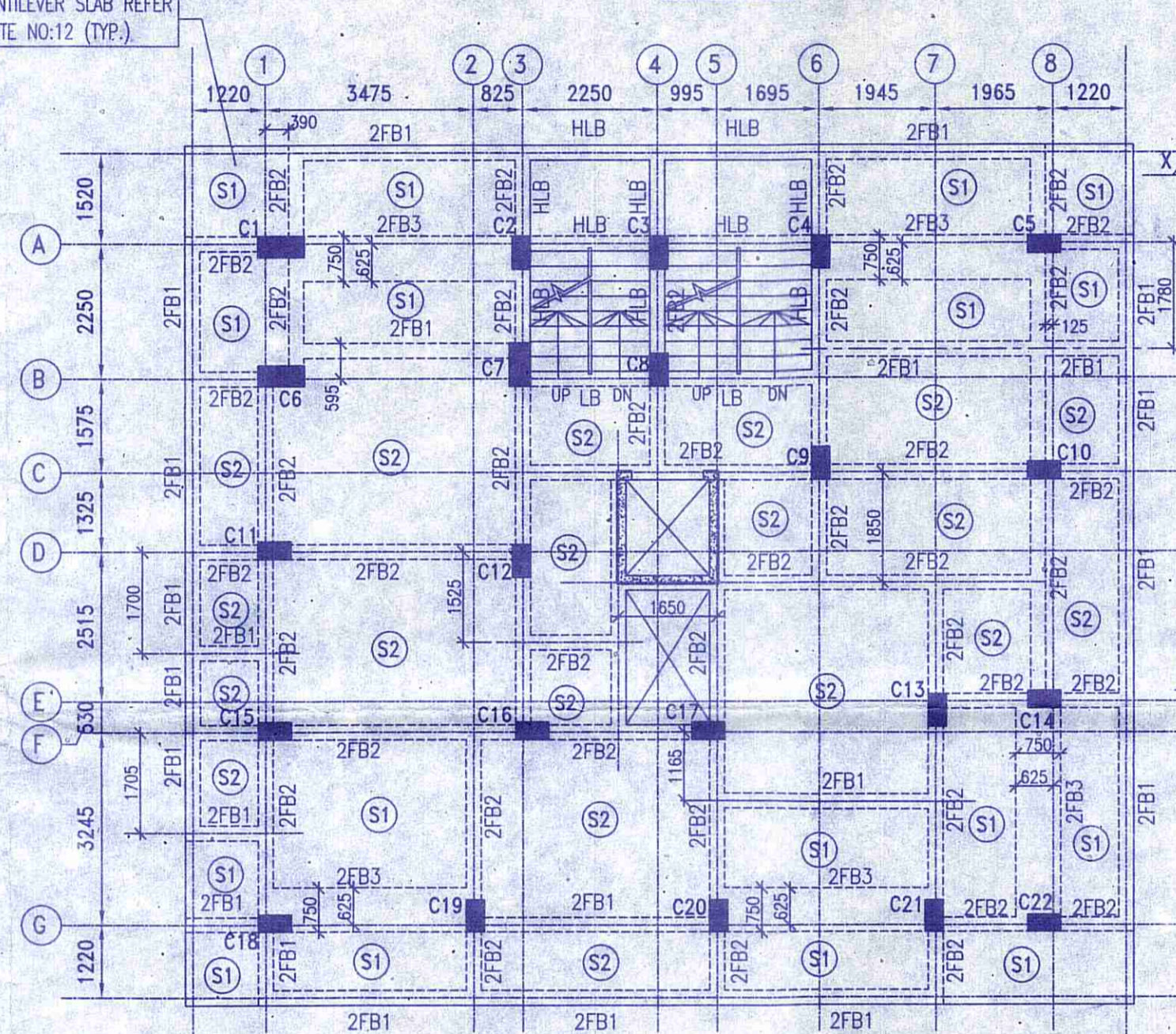
COLUMN LAYOUT PLAN
SCALE-1:100



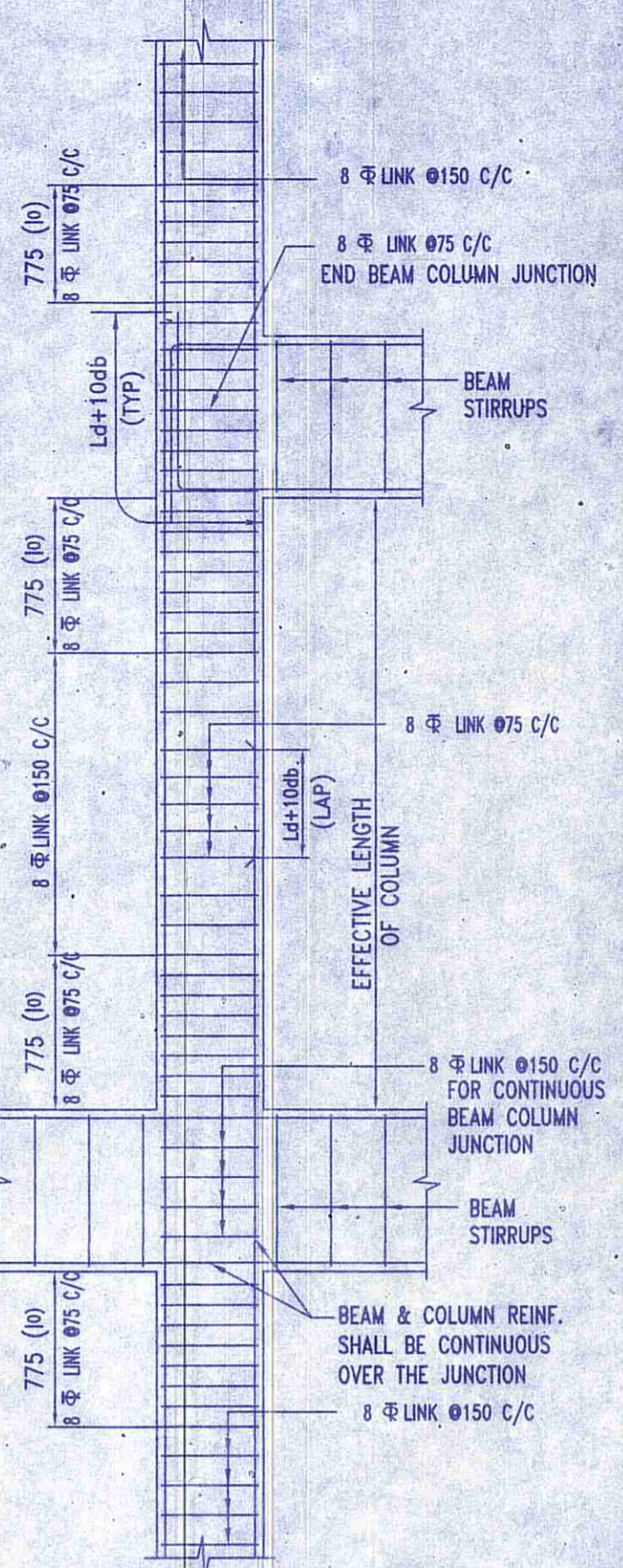
TIE BEAM LAYOUT PLAN AT LEVEL (±)0.00
SCALE-1:100



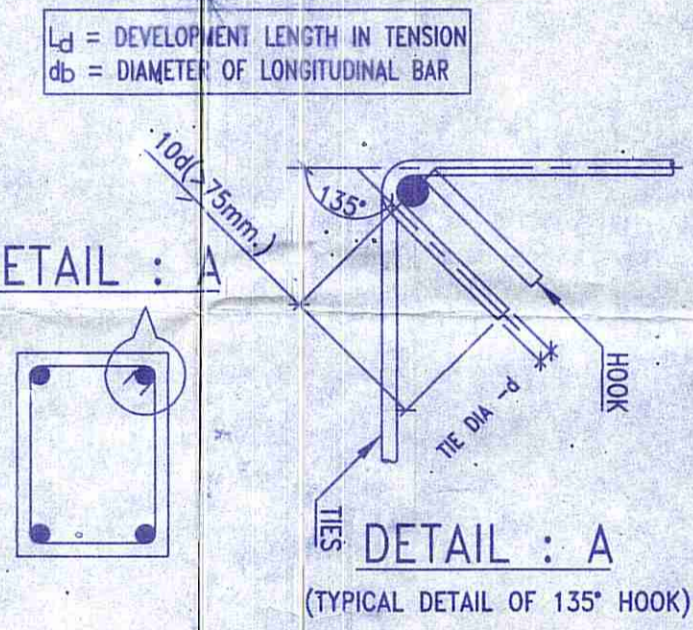
1ST, 2ND & 3RD FLOOR BEAM AND SLAB LAYOUT
PLAN AT LEVEL (+)2.8m, (+)5.6m, (+)8.4m
S1 MARKED SLABS ARE 150 mm THICK
S2 MARKED SLABS ARE 115 mm THICK
HLB REFERS TO HALF LANDING BEAM
SCALE-1:100



4TH, 5TH & 6TH FLOOR BEAM AND SLAB LAYOUT
PLAN AT LEVEL (+)11.2m, (+)14.0m, (+)16.8m
S1 MARKED SLABS ARE 150 mm THICK
S2 MARKED SLABS ARE 115 mm THICK
HLB REFERS TO HALF LANDING BEAM
SCALE-1:100



TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION
SCALE 1:25



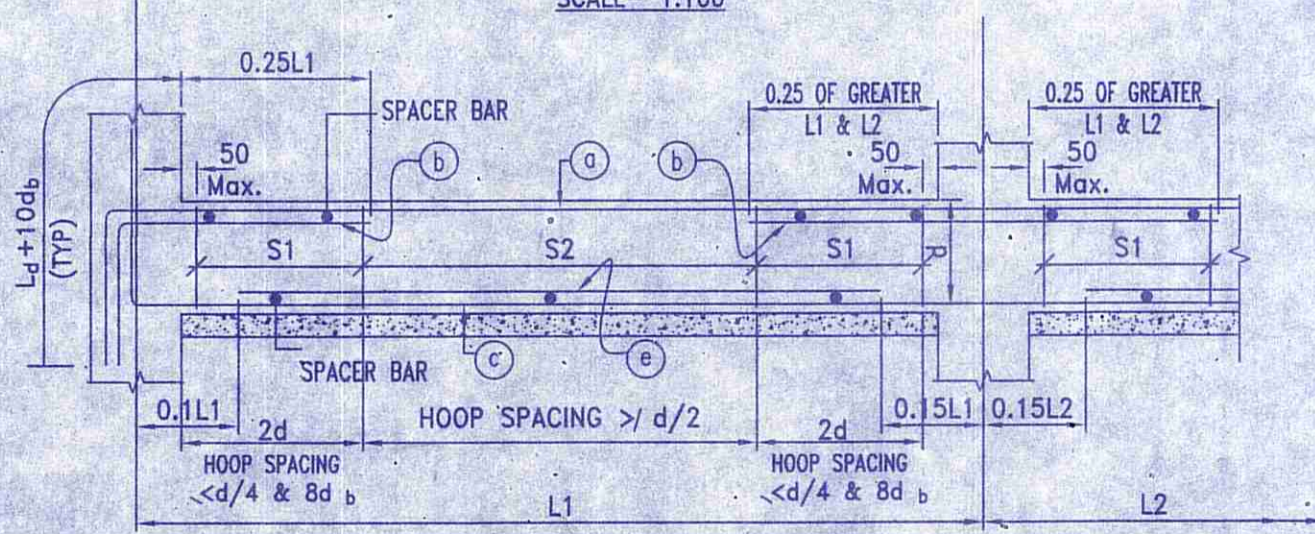
DETAIL : A

| 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 | 02 | 775X350 | | | |
| C2, C3, C4, C8, C9, C12, C13, C19, C20, C21 | 10 | 300X550 | | | |
| C5, C10, C11, C14, C15, C16, C17, C18, C22 | 09 | 300X550 | | | |
| C7 | 01 | 725X350 | | | |
| STOOL COLUMN | | | | | |
| S11, S12, S13 (ROOF TO LMR ROOF SLAB) | | | | | |
| S14, S15, S16, S17, S18 (ROOF TO WATER TANK PLATFORM SLAB) | 08 | 250x250 | | | |

| SCHEDULE OF TIE BEAMS | | | | | | |
|-----------------------|-----------|-------------------|----------------------|----------------------|-------------------|-------------------------|
| BEAM MARKED | BEAM SIZE | TOP REINFORCEMENT | | BOTTOM REINFORCEMENT | | STIRRUPS (AT SPAN) (S2) |
| | | ALTHROUGH (a) | EXTRA AT SUPPORT (b) | ALTHROUGH (c) | EXTRA AT SPAN (e) | |
| TB | 250 450 | 3-16 # | - | 3-16 # | - | 2L-8 # @ 150 C/C |

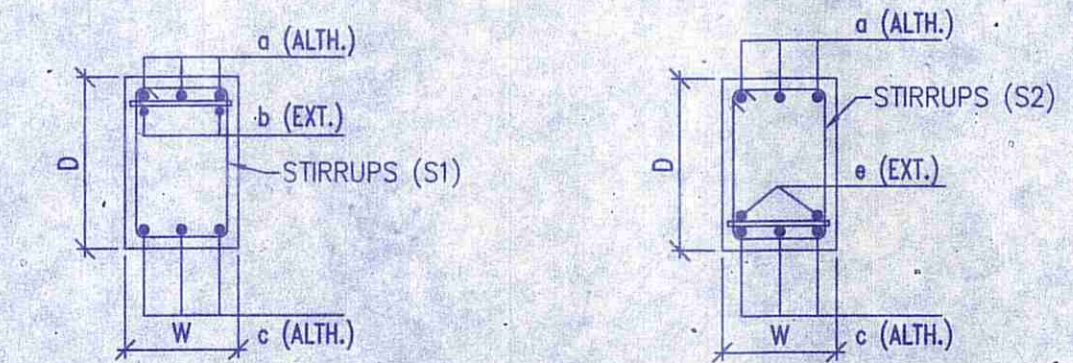
| SCHEDULE OF 1st, 2nd & 3rd FLOOR BEAMS | | | | | | | | |
|--|-----------|-----------|-------------------|----------------------|----------------------|-------------------|----------------------------|-------------------------|
| BEAM MARKED | BEAM SIZE | | TOP REINFORCEMENT | | BOTTOM REINFORCEMENT | | STIRRUPS (AT SUPPORT) (S1) | STIRRUPS (AT SPAN) (S2) |
| | WIDTH (W) | DEPTH (D) | ALTHROUGH (a) | EXTRA AT SUPPORT (b) | ALTHROUGH (c) | EXTRA AT SPAN (e) | | |
| 1FB1 | 250 | 400 | 3-16 # | - | 3-16 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 200 C/C |
| 1FB2 | 250 | 450 | 3-20 # | - | 3-20 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 150 C/C |
| 1FB3 (HIDDEN BEAM) | 750 | 150 | 5-20 # | - | 5-20 # | - | 4L-8 # @ 150 C/C | 4L-8 # @ 200 C/C |
| HLB | 250 | 450 | 3-20 # | 2-12 # | 3-20 # | - | 2L-8 # @ 150 C/C | 1L-8 # @ 200 C/C |
| LB | 250 | 450 | 3-20 # | 2-12 # | 3-20 # | - | 2L-8 # @ 150 C/C | 1L-8 # @ 200 C/C |

| SCHEDULE OF 4th, 5th & 6th FLOOR BEAMS | | | | | | | | |
|--|-----------|-----------|-------------------|----------------------|----------------------|-------------------|----------------------------|-------------------------|
| BEAM MARKED | BEAM SIZE | | TOP REINFORCEMENT | | BOTTOM REINFORCEMENT | | STIRRUPS (AT SUPPORT) (S1) | STIRRUPS (AT SPAN) (S2) |
| | WIDTH (W) | DEPTH (D) | ALTHROUGH (a) | EXTRA AT SUPPORT (b) | ALTHROUGH (c) | EXTRA AT SPAN (e) | | |
| 2FB1 | 250 | 400 | 3-16 # | - | 3-16 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 200 C/C |
| 2FB2 | 250 | 450 | 3-20 # | - | 3-20 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 150 C/C |
| 2FB3 (HIDDEN BEAM) | 750 | 150 | 5-20 # | - | 5-20 # | - | 4L-8 # @ 150 C/C | 4L-8 # @ 200 C/C |
| HLB | 250 | 450 | 3-20 # | 2-12 # | 3-20 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 200 C/C |
| LB | 250 | 450 | 3-20 # | 2-12 # | 3-20 # | - | 2L-8 # @ 150 C/C | 2L-8 # @ 200 C/C |

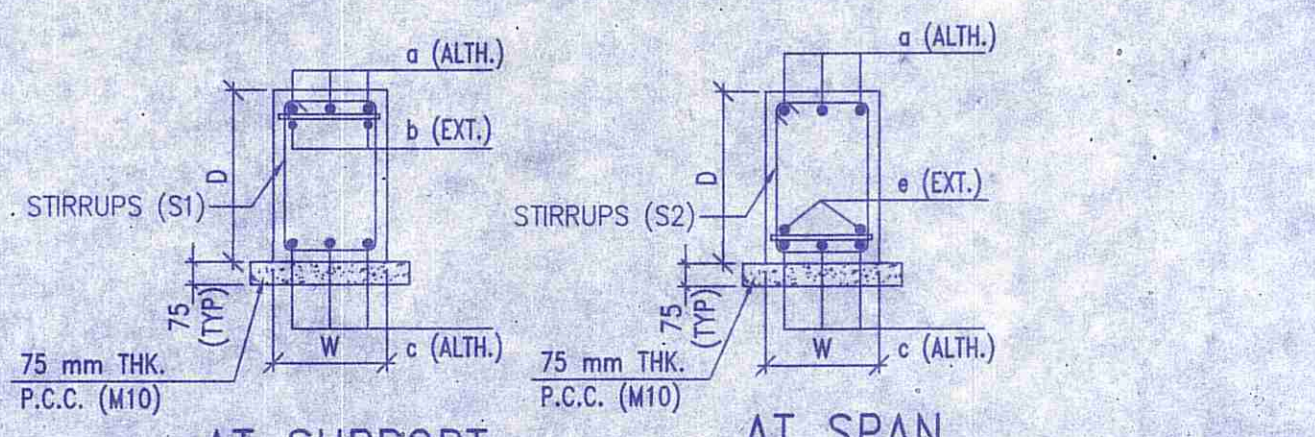


TYPICAL ARRANGEMENT OF REINFORCEMENT IN TIE BEAM
AS PER SP 34-1987 & 13920-1998

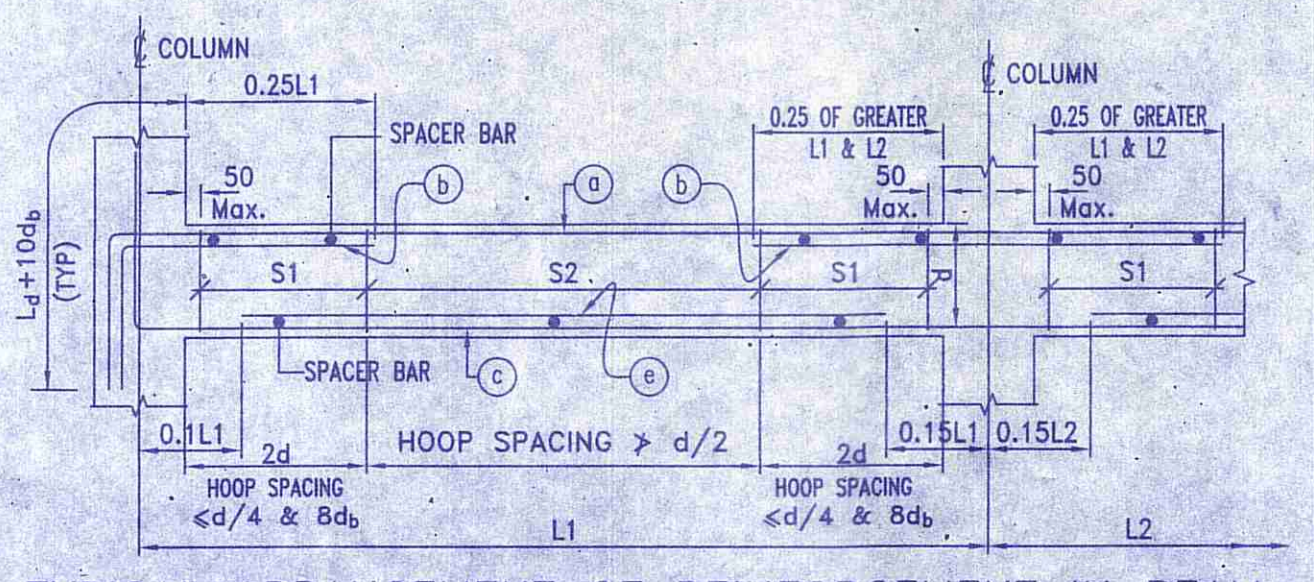
d = EFFECTIVE DEPTH OF BEAM
Ld = DEVELOPMENT LENGTH IN TENSION
db = DIAMETER OF LONGITUDINAL BAR



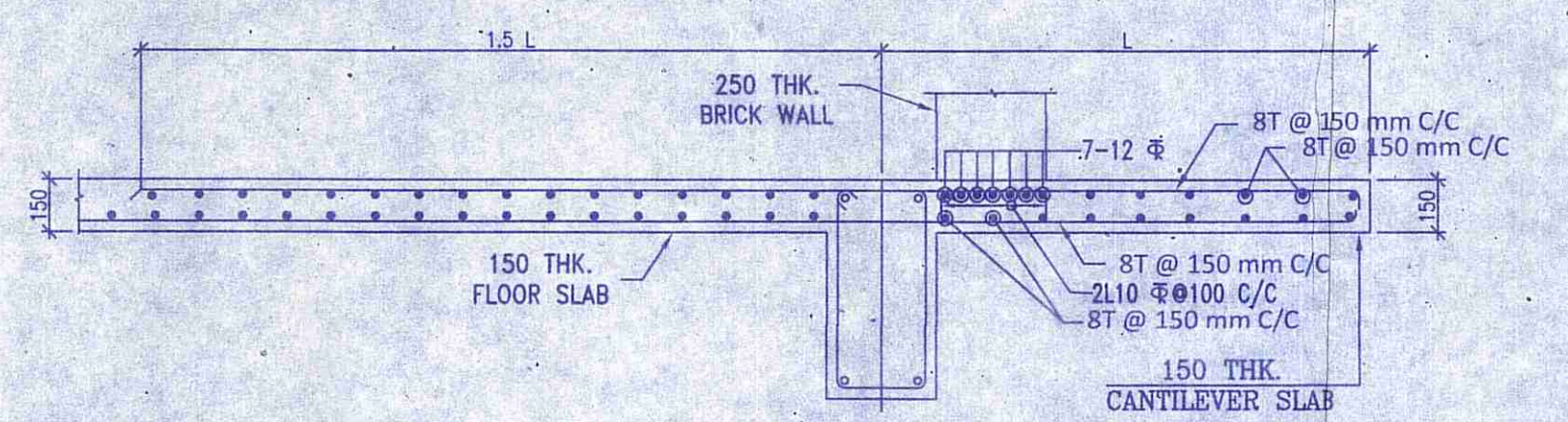
TYPICAL CROSS SECTION OF BEAM
AT SUPPORT AT SPAN



TYPICAL CROSS SECTION OF TIE BEAM
AT SUPPORT AT SPAN



TYPICAL ARRANGEMENT OF REINFORCEMENT IN BEAM



SECTION AT X
REINFORCEMENT DETAILS OF CANTILEVER SLAB

- 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 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 = 60x BAR DIA.
 - CONCRETE NOMINAL COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:
 - COLUMNS : 40 mm
 - BEAMS : 30 mm
 - SLABS : 20 mm
 - GRADE OF CONCRETE FOR SUPERSTRUCTURE & SUBSTRUCTURE 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 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 SIDES.
 - IN 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.

SPECIAL NOTES:
THIS STRUCTURAL DRAWING IS VALID IF THE ARCHITECTURAL DRAWING IS FOLLOWED USING 250 mm THICK AAC BLOCKS IN EXTERNAL WALLS & 125 mm THICK AAC BLOCKS IN INTERNAL WALLS

TITLE
STRUCTURAL DRAWINGS OF PROPOSED G+6 STORIED APARTMENT (RESIDENTIAL) BUILDING BY THE NAME OF "BASUNDHARA RESIDENCY" DEVELOPED BY BASUNDHARA CONSTRUCTION OVER R.S. PLOT NO. - 43 / 67, L.R. PLOT NO. - 194, R.S. KHATIAN NO. - 67, L.R. KHATIAN NO. - 1995, 1996, 1997, UNDER JEMUA GRAM PANCHAYAT, MOUZA - TETIKHOLA, J.L. NO - 111, P.S. - NEWTOWNSHIP, DIST- PASHCHIM BARDHAMAN.

SIGNATURE OF OWNER

SIGNATURE OF L.B.S./ENGINEER/ARCHITECT

VIJAYA SINGH
DMC REGISTERED
LIC NO. - DMC/BPD/60

SIGNATURE OF STRUCTURAL ENGINEER

DR. DIPANKAR CHATTERJEE
Structural Consultant
B. E - Civil (First class, Honors) J U
M. E - Structures (First class) J U
ESE - II (K. M. C), Licence No. ESE/11/018

SIGNATURE OF VETTING AUTHORITY

CHECKED & VETTED
DR. DIPANKAR CHATTERJEE
STRUCTURAL CONSULTANT
PROFESSOR & HEAD OF THE DEPARTMENT OF CIVIL ENGINEERING
JADAVPUR UNIVERSITY
B.L.S. (OLD) GOLD MEDALIST
M.TECH (STRUCTURAL) GOLD MEDALIST
P.H.D. (STRUCTURAL)
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(033) 25318502 & 9830330343
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SIGNATURE OF PANCHAYAT PRADHAN

Approved Plan No. 29... Meeting
No. 01/2021-22... Date 18/05/2021
Valid upto 31/07/2023
Malika Saha
Pradhan 30/09/21
Jemua Gram Panchayat

DRAWING DETAILS
COLUMN LAYOUT PLAN & REINFORCEMENT DETAILS, TIE, 1ST TO 3RD & 4TH TO 6TH FLOOR BEAM AND SLAB LAYOUT PLAN & REINFORCEMENT DETAILS, DUCTILE DETAIL

SCALE-1:100 OR AS SHOWN

DATE- 06.08.2020
SHEET 2 OF 3

