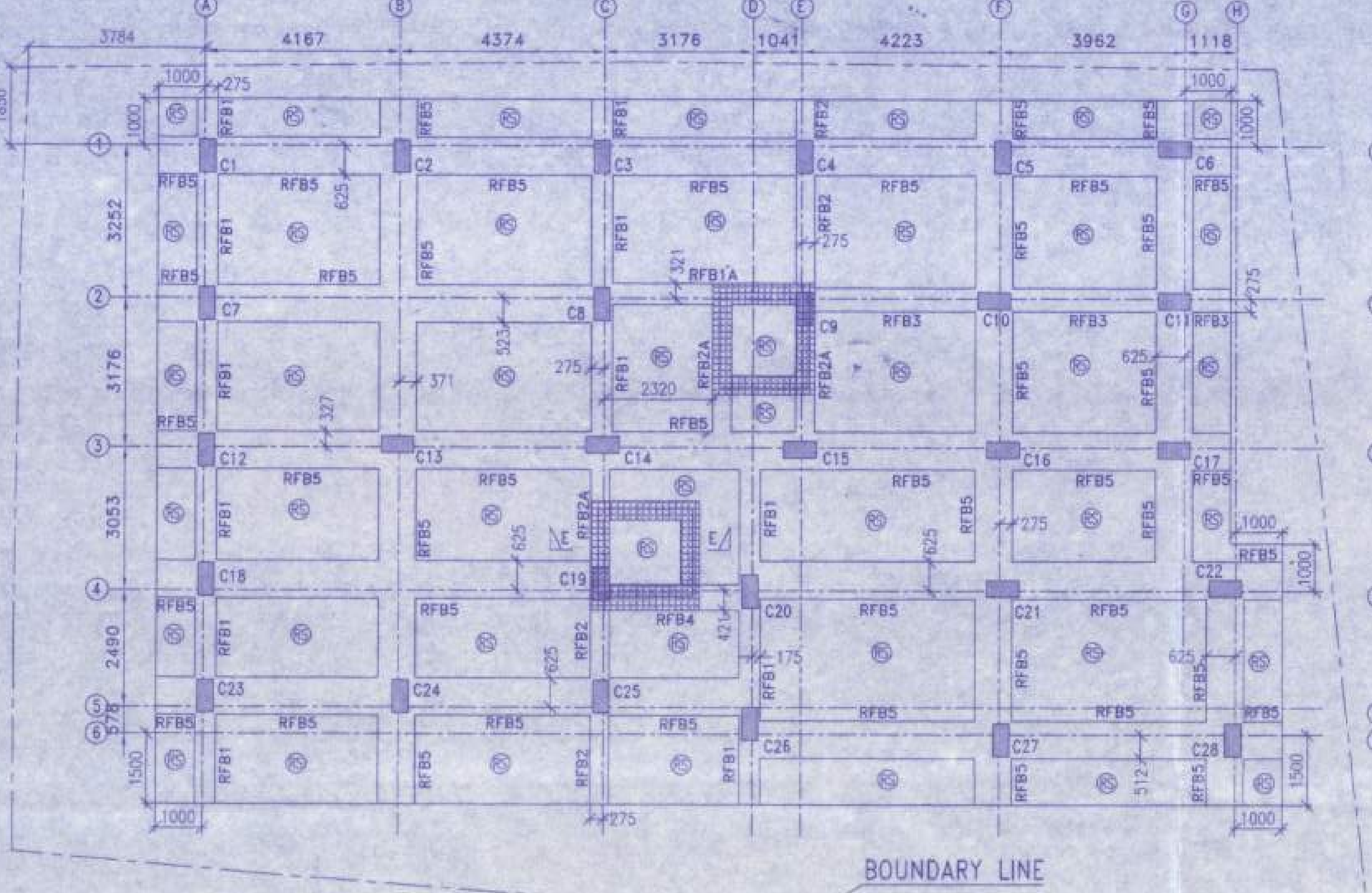
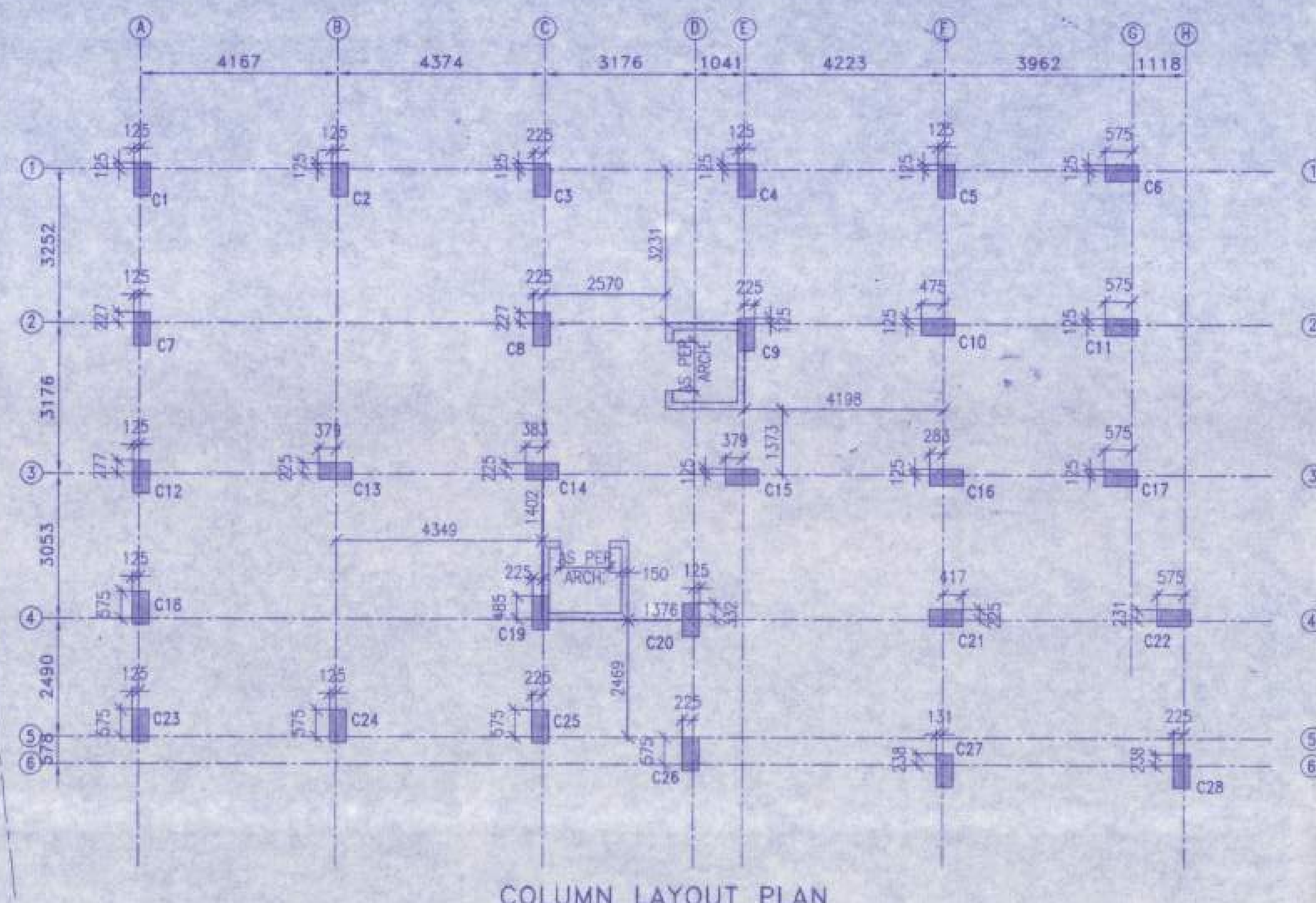
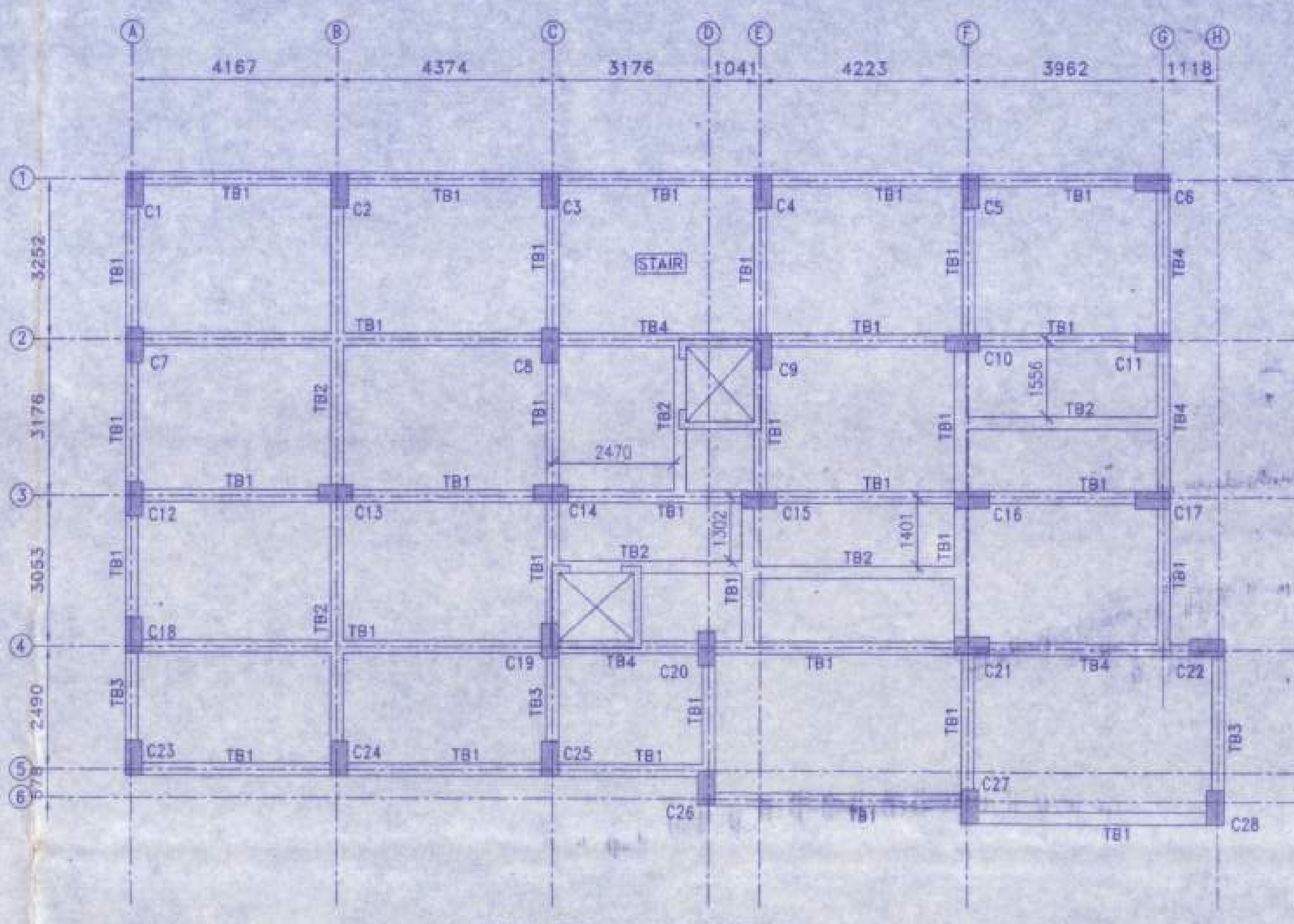


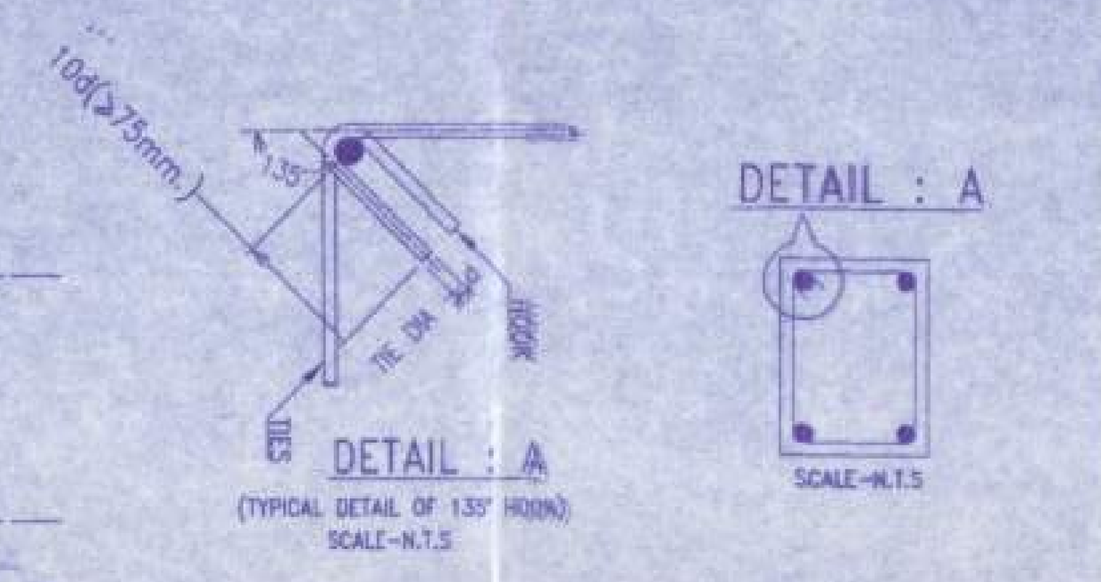
RAFT BEAM AND SLAB LAYOUT PLAN
RS MARKED SLABS ARE 800mm. THICK.
RS REFERS TO FOUNDATION SLAB.
SCALE-1:100



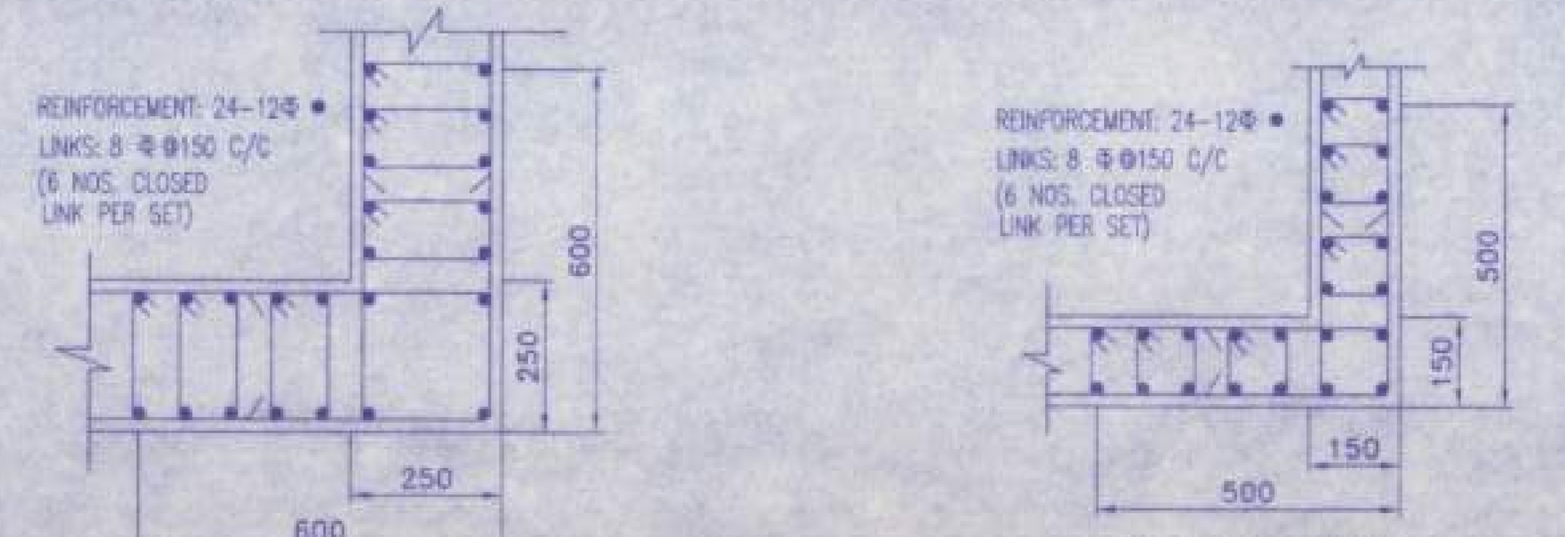
COLUMN LAYOUT PLAN
SCALE 1:100



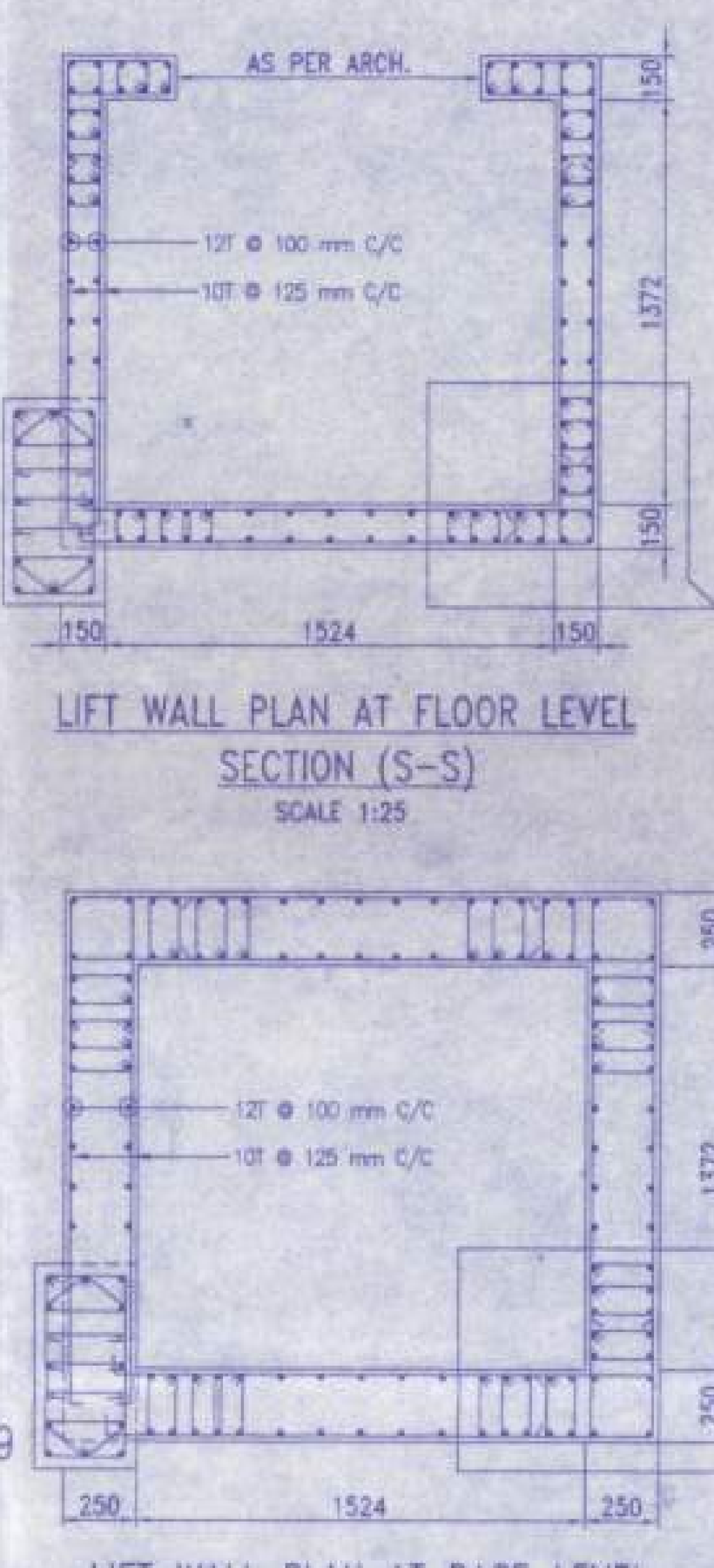
TIE BEAM LAYOUT PLAN
SCALE 1:100



DETAIL : A

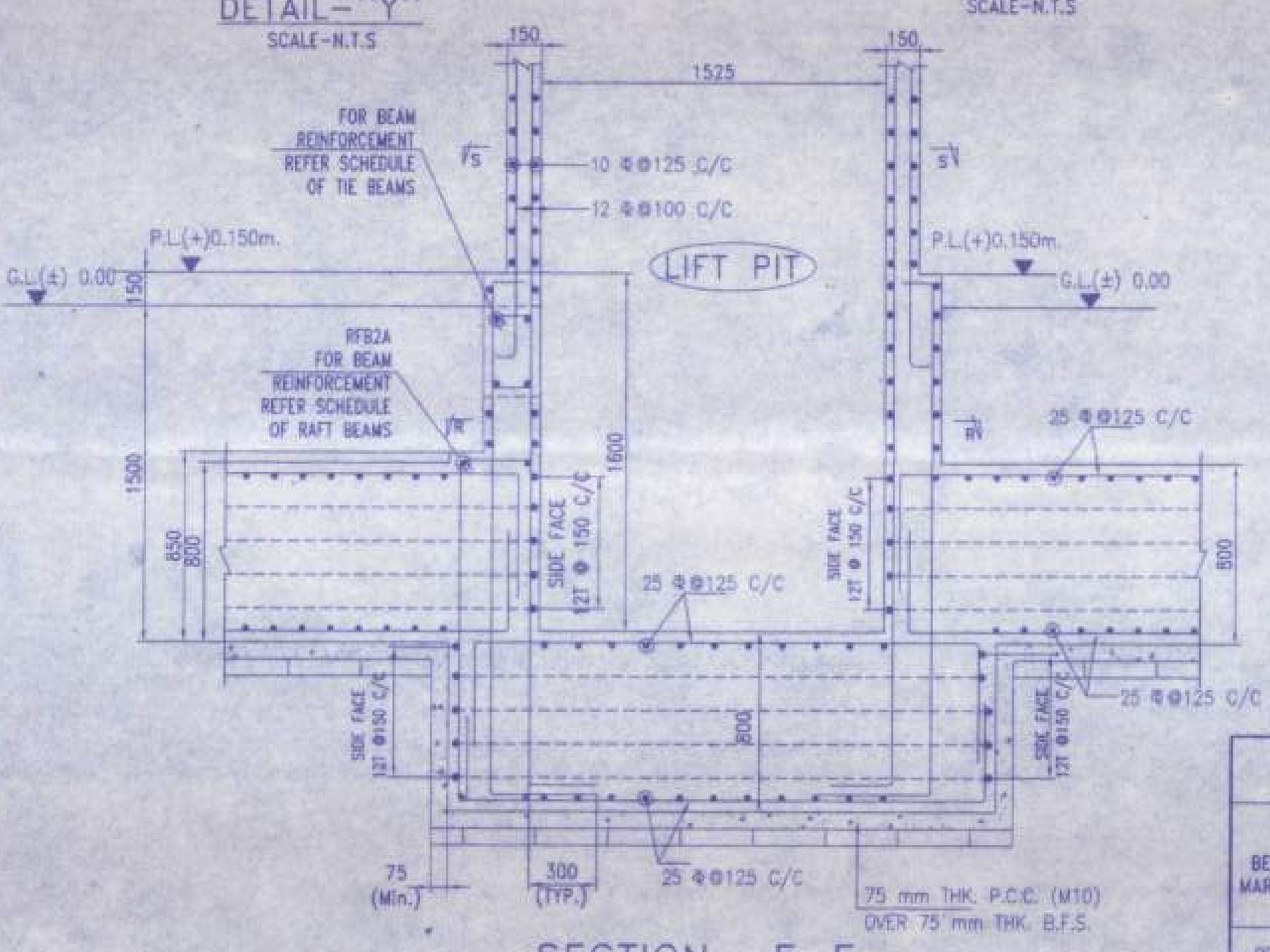


DETAIL-"Y" SCALE-N.T.S
DETAIL-"X" SCALE-N.T.S

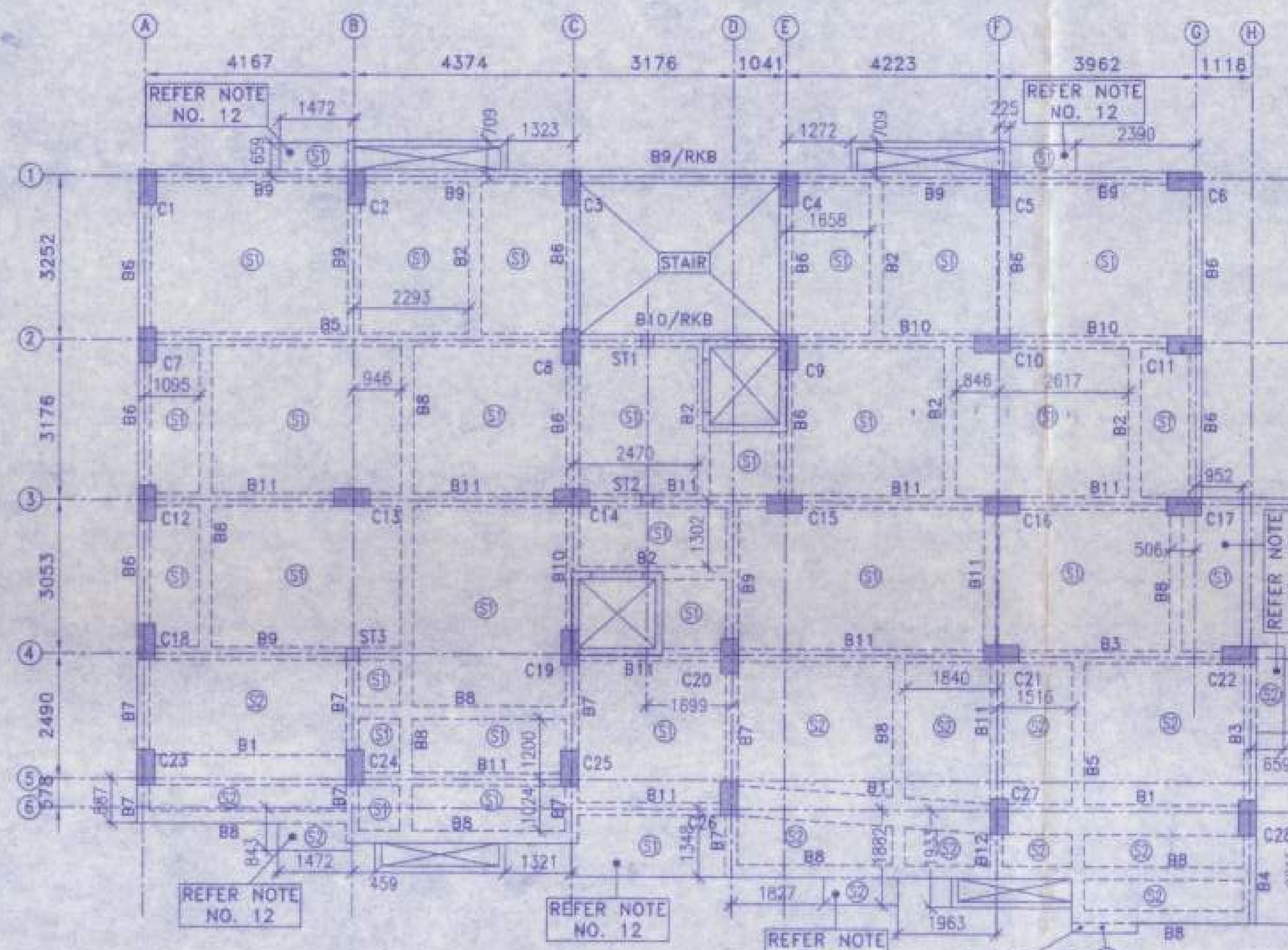


LIFT WALL PLAN AT FLOOR LEVEL
SECTION (S-S)
SCALE 1:25

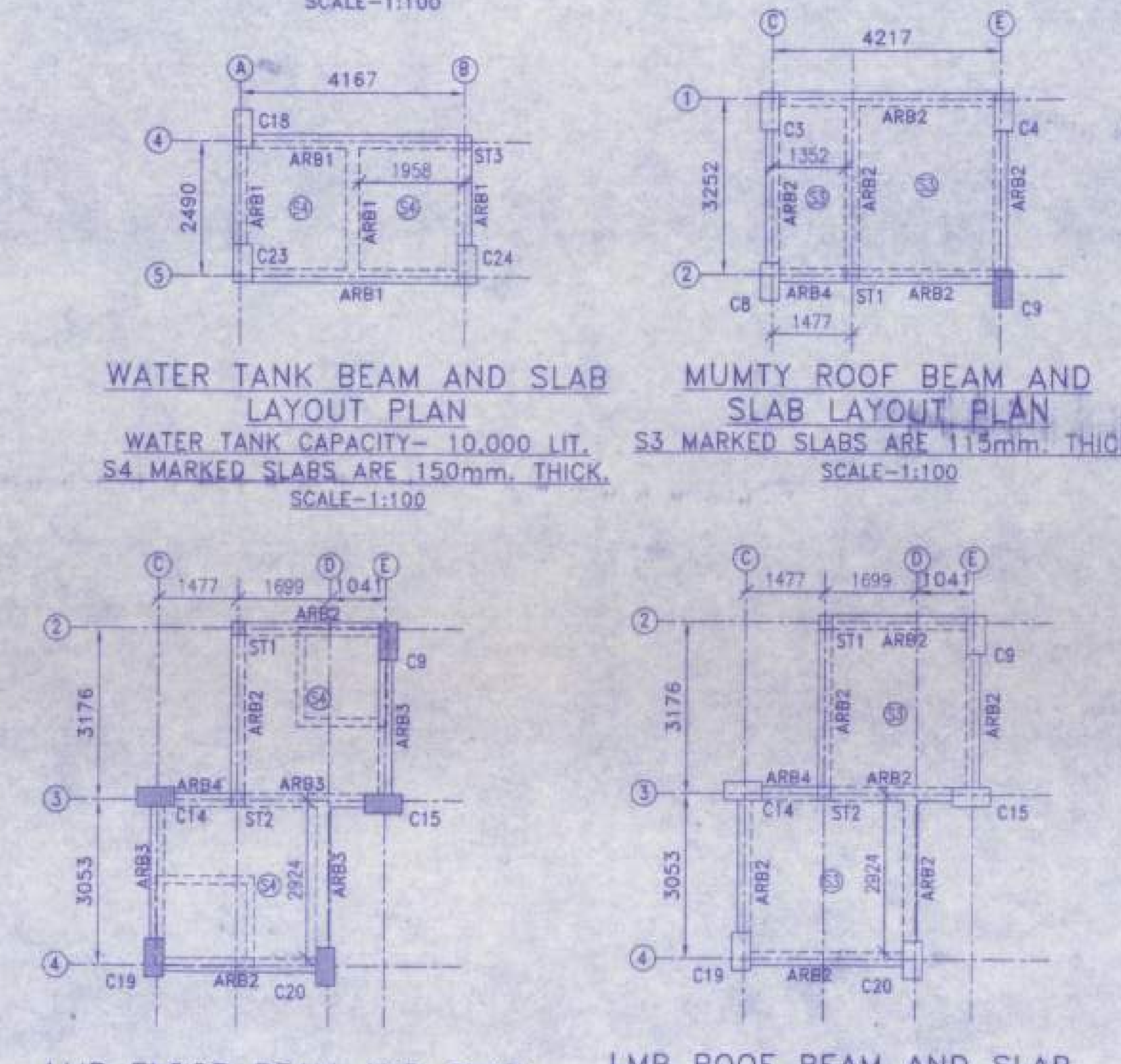
LIFT WALL PLAN AT BASE LEVEL
SECTION (R-R)
SCALE 1:25



SECTION -E-E
SCALE- 1:25



TYPICAL FLOORS & ROOF BEAM AND SLAB LAYOUT PLAN
S1 MARKED SLABS ARE 115mm. THICK.
S2 MARKED SLABS ARE 150mm. THICK.
RKB REFERS TO RAKER BEAM.
SCALE-1:100

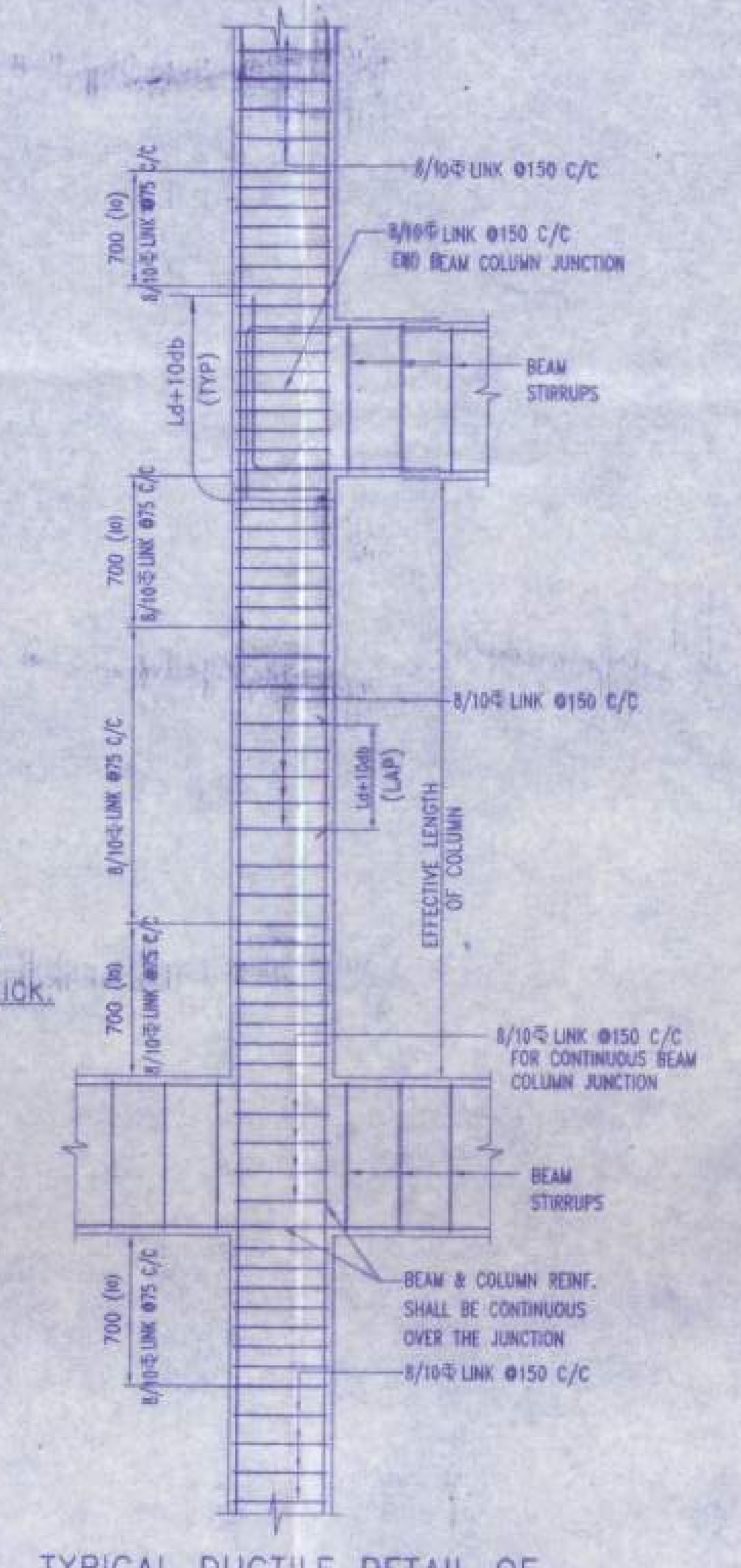


WATER TANK BEAM AND SLAB LAYOUT PLAN
WATER TANK CAPACITY- 10,000 LIT.
S4 MARKED SLABS ARE 150mm. THICK.
SCALE-1:100

MUMTY ROOF BEAM AND SLAB LAYOUT PLAN
S3 MARKED SLABS ARE 115mm. THICK.
SCALE-1:100

LMR FLOOR BEAM AND SLAB LAYOUT PLAN
S4 MARKED SLABS ARE 150mm. THICK.
SCALE-1:100

LMR ROOF BEAM AND SLAB LAYOUT PLAN
S3 MARKED SLABS ARE 115mm. THICK.
SCALE-1:100



TYPICAL DUCTILE DETAIL OF BEAM COLUMN JUNCTION

L_d= DEVELOPMENT LENGTH IN TENSION
d_b= DIAMETER OF LONGITUDINAL BAR

SCALE-N.T.S

SCHEDULE OF RAFT BEAMS

BEAM MARKED	BEAM SIZE WIDTH (W) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINFORCEMENT ALTHROUGH (a)	TOP REINFORCEMENT EXTRA AT SPAN (b)	BOTTOM REINFORCEMENT ALTHROUGH (c)	BOTTOM REINFORCEMENT EXTRA AT SUPPORT (e)	STIRRUPS	SIDE FACE
RFB1	450	850	4-16 Φ	-	4-16 Φ	-	4L-8 Φ@200 C/C	-
RFB1A	450	1600	4-16 Φ +4-16 Φ	-	4-16 Φ +4-16 Φ	-	4L-8 Φ@200 C/C	12 Φ@150 C/C
RFB2	400	850	4-16 Φ	-	4-16 Φ	-	4L-8 Φ@200 C/C	-
RFB2A	400	1600	4-16 Φ +4-16 Φ	-	4-16 Φ +4-16 Φ	-	4L-8 Φ@200 C/C	12 Φ@150 C/C
RFB3	500	850	5-16 Φ	-	5-16 Φ	-	4L-8 Φ@200 C/C	-
RFB4	550	1600	5-16 Φ +5-16 Φ	-	5-16 Φ +5-16 Φ	-	4L-8 Φ@200 C/C	12 Φ@150 C/C
RFB5	800	850	8-16 Φ	-	8-16 Φ	-	4L-8 Φ@200 C/C	-

SCHEDULE OF STOOL COLUMNS

COLUMN MARKED	NOS.OF COLUMNS	COLUMN SIZE (mm x mm)	ROOF TO ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING
ST1,ST2 (ROOF TO LMR ROOF) ST3 (ROOF TO WATER TANK)	03	250x250	MAIN RNF.:- 4-16 Φ	8Φ@150 C/C (1 NO. CLOSED LINK)

SCHEDULE OF ABOVE ROOF BEAMS

BEAM MARKED	BEAM SIZE WIDTH (W) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINFORCEMENT ALTHROUGH (a)	TOP REINFORCEMENT EXTRA AT SUPPORT (b)	BOTTOM REINFORCEMENT ALTHROUGH (c)	BOTTOM REINFORCEMENT EXTRA AT SPAN (e)	STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
ARB1	250	450	3-12 Φ	2-16 Φ	3-12 Φ	3-12 Φ	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
ARB2	250	400	3-12 Φ	-	3-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
ARB3	250	400	3-12 Φ	2-12 Φ	3-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
ARB4	250	400	3-12 Φ +2-12 Φ		3-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C

SCHEDULE OF TIE BEAMS

BEAM MARKED	BEAM SIZE WIDTH (W) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINFORCEMENT ALTHROUGH (a)	TOP REINFORCEMENT EXTRA AT SUPPORT (b)	BOTTOM REINFORCEMENT ALTHROUGH (c)	BOTTOM REINFORCEMENT EXTRA AT SPAN (e)	STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
TB1	250	400	3-16 Φ	-	3-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
TB2	250	400	2-12 Φ +1-16 Φ	-	2-12 Φ +1-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
TB3	250	400	3-16 Φ +2-12 Φ	-	3-16 Φ +2-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
TB4	250	400	3-16 Φ	2-12 Φ	3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C

SCHEDULE OF TYPICAL FLOORS & ROOF BEAMS

BEAM MARKED	BEAM SIZE WIDTH (W) (mm)	BEAM SIZE DEPTH (D) (mm)	TOP REINFORCEMENT ALTHROUGH (a)	TOP REINFORCEMENT EXTRA AT SUPPORT (b)	BOTTOM REINFORCEMENT ALTHROUGH (c)	BOTTOM REINFORCEMENT EXTRA AT SPAN (e)	STIRRUPS (AT SUPPORT) (S1)	STIRRUPS (AT SPAN) (S2)
B1	600	175	6-20 Φ	-	6-20 Φ	-	4L-8 Φ@100 C/C	4L-8 Φ@200 C/C
B2	250	450	3-12 Φ	-	3-12 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B3	250	600	3-20 Φ	3-20 Φ	3-20 Φ +3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B4	250	600	3-20 Φ	-	3-20 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
B5	250	600	3-16 Φ	2-20 Φ	3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B6	250	500	3-16 Φ +3-20 Φ	-	3-16 Φ +3-20 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B7	250	500	3-16 Φ +3-20 Φ	-	3-16 Φ +3-20 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
B8	250	500	3-12 Φ +3-12 Φ	-	3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B9	250	500	3-16 Φ	3-16 Φ	3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B10	250	500	3-16 Φ	3-20 Φ	3-16 Φ +3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B11	250	500	3-20 Φ	3-20 Φ	3-20 Φ +2-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@200 C/C
B12	250	500	3-20 Φ +3-20 Φ	-	3-20 Φ +2-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C
RKB	250	500	3-16 Φ +3-20 Φ	-	3-16 Φ +3-16 Φ	-	2L-8 Φ@100 C/C	2L-8 Φ@100 C/C

SCHEDULE OF S1 & S2 MARKED SLABS (TYPICAL FLOORS & ROOF SLABS THICKNESS-115mm. & 150mm.)

BAR MKD.	REINFORCEMENT	POSITION
A	8# @ 150 mm C/C (ALL THROUGH)	BOT.
B	8# @ 150 mm C/C (ALL THROUGH)	BOT.
C	8# @ 150mm C/C (CURTAILMENT)	TOP
D(BINDER)	8# @ 200 mm C/C (WHEREVER REQUIRED)	TOP

SCHEDULE OF S4 MARKED SLABS (LMR FLOOR & WATER TANK SLAB THICKNESS-150mm.)

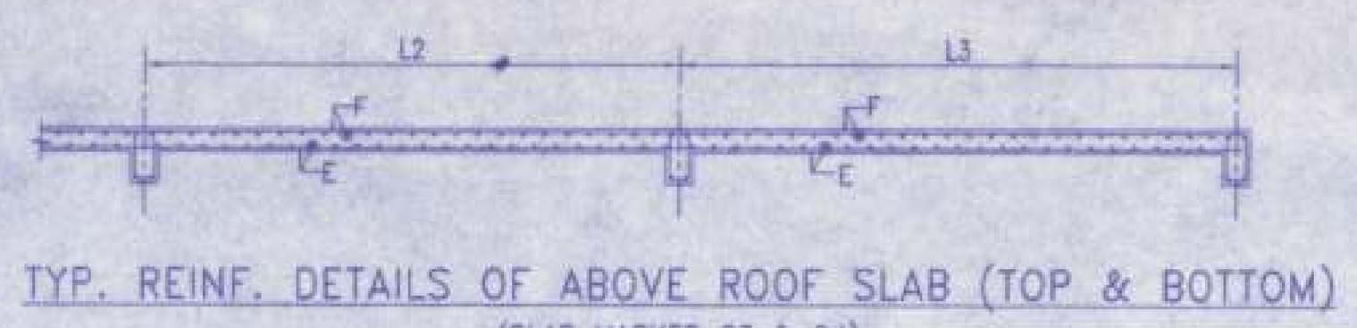
BAR MKD.	REINFORCEMENT	POSITION
E	10T @ 200 mm C/C (ALL THROUGH)	BOT.
F	10T @ 200 mm C/C (ALL THROUGH)	TOP

SCHEDULE OF S3 MARKED SLABS (MUMTY & LMR ROOF SLAB THICKNESS-115mm.)

BAR MKD.	REINFORCEMENT	POSITION
E	8T @ 150 mm C/C (ALL THROUGH)	BOT.
F	8T @ 150 mm C/C (ALL THROUGH)	TOP

May be Approved
16/4/24
Sub Asstt Engineer
Midnapore Municipality
RECOMMENDED

Biplab Bose 18/4/24.
Chairman-in-Council
Department of P.W.D.
Midnapore Municipality



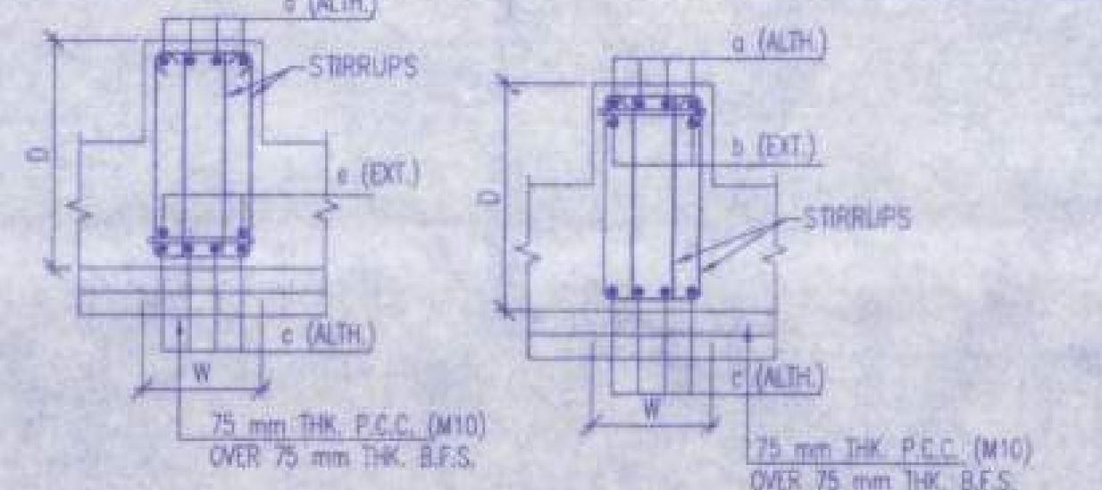
TYP. REINF. DETAILS OF ABOVE ROOF SLAB (TOP & BOTTOM)
(SLAB MARKED S3 & S4)
SCALE-N.T.S

SCHEDULE OF RAFT SLAB

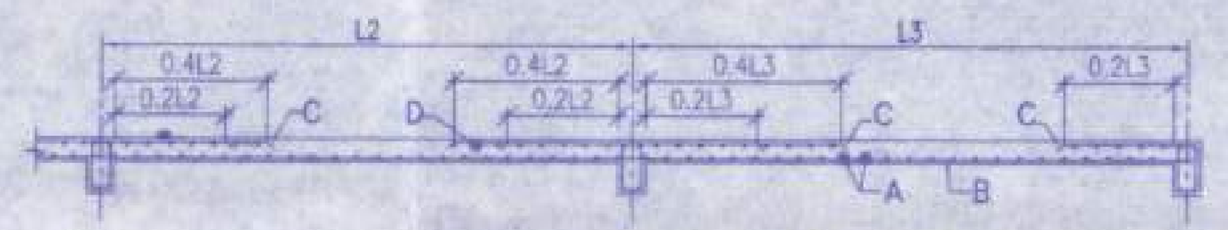
SLAB MARKED	SLAB THICKNESS (mm)	REINFORCEMENT ALONG SHORTER DIRECTION BOTTOM	REINFORCEMENT ALONG SHORTER DIRECTION TOP	REINFORCEMENT ALONG LONGER DIRECTION BOTTOM	REINFORCEMENT ALONG LONGER DIRECTION TOP	SIDE FACE
RS	800	25 Φ@125 C/C	25 Φ@125 C/C	25 Φ@125 C/C	25 Φ@125 C/C	12 Φ@150 C/C

IMPORTANT NOTE:-
THE GENERAL ARRANGEMENT AND REINFORCEMENT DETAILS OF THE EXISTING PORTION HAVE BEEN TAKEN AS CLIENT'S INPUT WITHOUT VERIFICATION MUST BE CHECKED AT SITE BEFORE EXECUTION FOR VALIDITY OF THIS DRAWING

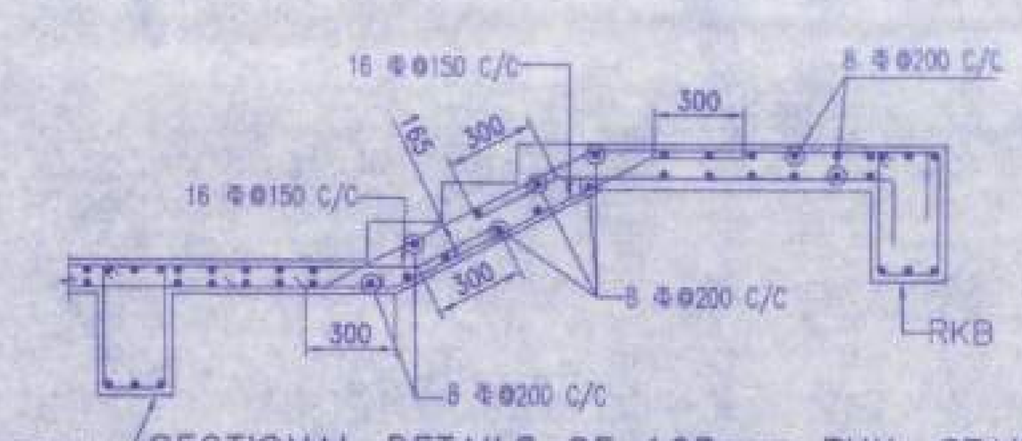
SPECIAL NOTES:-
1. THIS STRUCTURAL DRAWING IS VALID IF THE CONSTRUCTION IS DONE USING AAC BLOCKS FOLLOWING PROPER DIMENSION OF EXTERNAL AND INTERNAL WALLS AS PER ARCHITECTURAL DRAWING.
2. THE STRUCTURE MUST BE CONSTRUCTED IN PRESENCE OF A COMPETENT STRUCTURAL ENGINEER FOR STRICT SUPERVISION.
3. ALL BEAMS SPANNING GREATER THAN 5.0 M FROM 1ST FLOOR TO ROOF SHOULD BE CAST WITH A PRE CAMBER OF 20 MM IN EACH BAY BOTH AT TOP AND BOTTOM.
4. FOR ALL CANTILEVER BEAMS PROVIDE UPWARD PRE-CAMBER OF 20mm AT TIP.



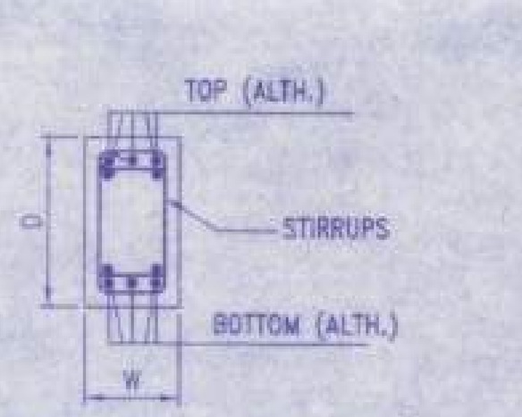
TYPICAL CROSS SECTION OF FOUNDATION BEAM
SCALE - N.T.S.



TYP. REINF. DETAILS OF FLOOR SLAB (TOP & BOTTOM)
(SLAB MARKED S1 & S2)
SCALE - N.T.S.



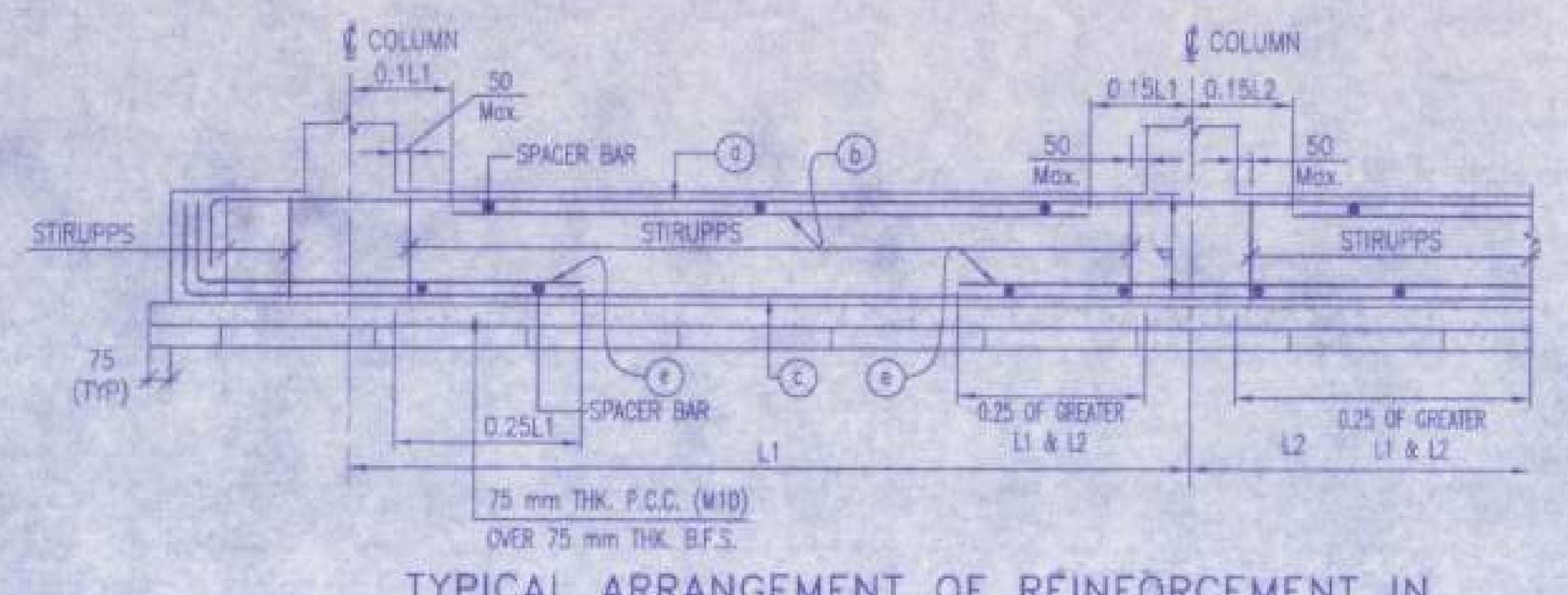
SECTIONAL DETAILS OF 165mm THK. STAIR WAIST SLAB.
SCALE N.T.S.



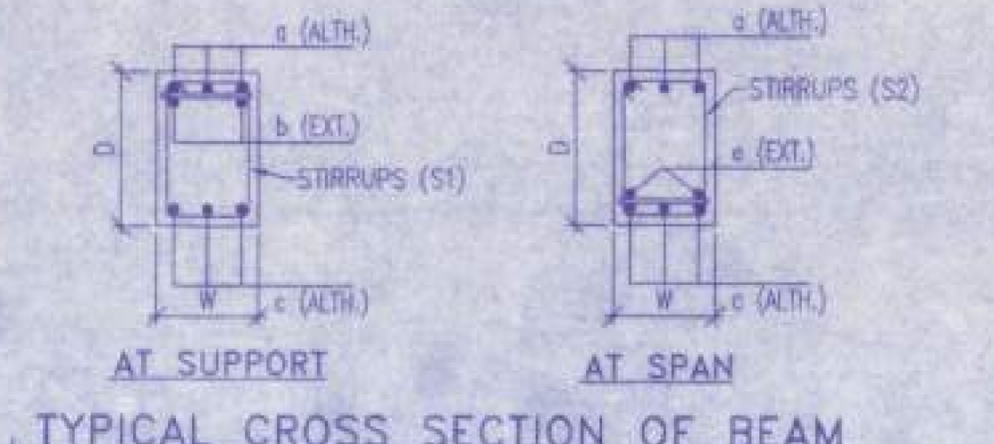
SECTION-X-X
SCALE N.T.S

SCHEDULE OF COLUMNS

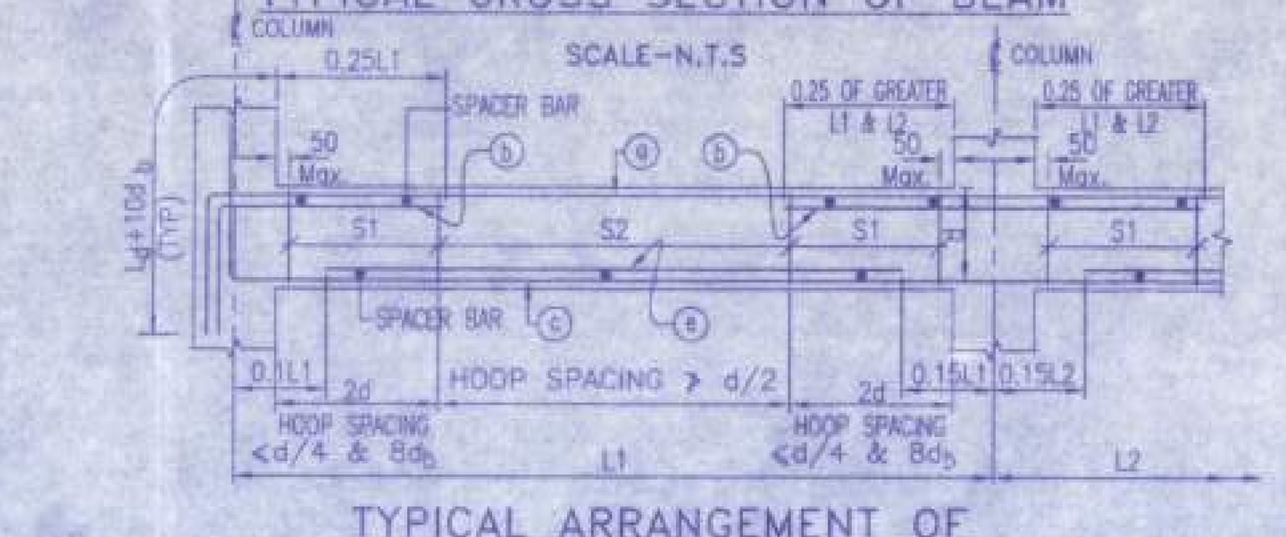
COLUMN MARKED	NOS.OF COLUMNS	COLUMN SIZE (mm x mm)	FOUNDATION TO 4TH FLOOR	4TH FLOOR TO ROOF/ABOVE ROOF	STIRRUP ARRANGEMENT & SPACING NEAR JUNCTION (l0)	STIRRUP ARRANGEMENT & SPACING REST PORTION
C2,C3,C5,C7, C8,C10,C11, C12,C13,C14, C15,C16,C17, C18,C19,C20, C21,C23,C25, C26	20	350X700	MAIN RNF.:-12-20Φ● +4-16Φ○	MAIN RNF.:- 8-20Φ● +8-16Φ○	8Φ@75 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)	8Φ@150 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)
C1,C4,C6,C9, C22,C24,C27, C28	08	350X700	MAIN RNF.:- 8-25Φ● +8-20Φ○	MAIN RNF.:- 6-25Φ● +10-20Φ○	10Φ@75 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)	10Φ@150 C/C (3 NOS. CLOSED LINK) (3 NOS. OPEN LINK)



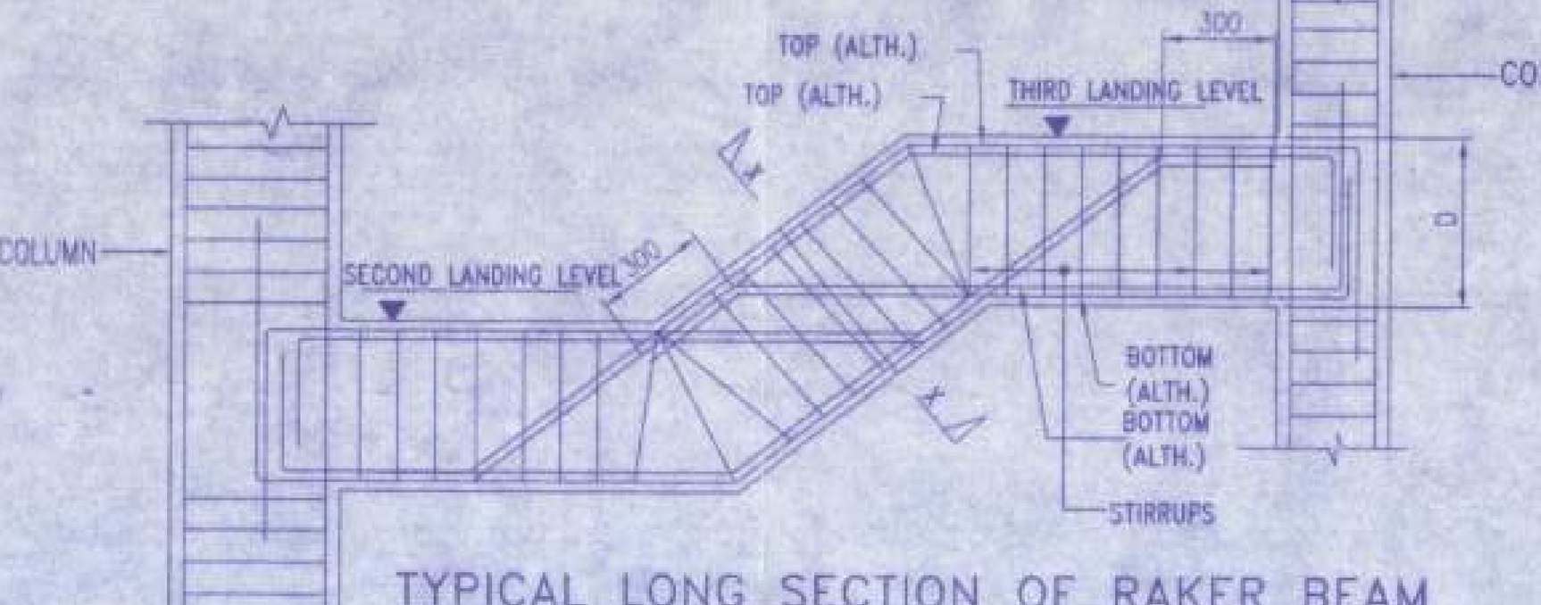
TYPICAL ARRANGEMENT OF REINFORCEMENT IN FOUNDATION BEAM
(AS PER SP 34-1987)
SCALE - N.T.S.



TYPICAL CROSS SECTION OF BEAM
SCALE-N.T.S



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



TYPICAL LONG SECTION OF RAKER BEAM
SCALE N.T.S

NOTES :
1. UNLESS OTHERWISE STATED ALL CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT CONFORMING TO RELEVANT (INDIAN) STANDARD CODES OF PRACTICE.
2. 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).
3. ANY DISCREPANCY IN THE STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL CONSULTANT BEFORE EXECUTION OF WORK.
4. UNLESS OTHERWISE SPECIFIED ALL REINFORCEMENT TO BE USED SHALL BE TMT BARS OF GRADE Fe-500/500D CONFORMING TO IS-1786-2008.
5. UNLESS OTHERWISE STATED LAP LENGTH OF BARS SHALL BE EQUAL TO THE DEVELOPMENT LENGTH = 50xBAR DIA.
6. 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
   - V) RAFT BEAM & SLAB : 50 mm
7. GRADE OF CONCRETE FOR SUPERSTRUCTURE
   (i) SUPER STRUCTURE -UPTO AND INCLUDING 4TH FLOOR WILL BE OF M30 AND ABOVE THAT WILL BE OF M25 AS PER IS: 456:2000.
   (ii) SUBSTRUCTURE - M25 AS PER IS:456:2000
8. VIBRATOR SHALL BE USED FOR PROPER COMPACTION OF CONCRETE AND CURING SHALL BE DONE PROPERLY.
9 DEVELOPMENT LENGTH 50XD FOR LAP & SPLICES SHOULD BE PROVIDED AS PER THE PROVISIONS LAID DOWN IN SP34:1987
10. 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.
11. WHEN TWO BEAMS MEET AT A COLUMN LOCATION ALONG THE SAME LINE THE HIGHER REINFORCEMENT AT THE TOP SHOULD BE CONTINUED AT BOTH SIDE.
12. 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.
13. THE NET SAFE BEARING CAPACITY CONSIDERED 11.9 T/SQ.M FOR RAFT FOUNDATION AT DEPTH (-)1.5m. FROM G.L. HAS BEEN IN TUNE WITH THE SOIL REPORT PREPARED BY ACUMEN GEO CONSULTANTS (DR. SANTOSH KUMAR CHAKRABORTY).
14. THE ABOVE MENTIONED BEARING CAPACITY MUST BE ENSURED AT SITE UNDER SUPERVISION OF A COMPETENT GEOTECHNICAL ENGINEER FOR VALIDITY OF THIS DRAWING.
15. THE N VALUE AS DESCRIBED UNDER NOTES OF TABLE-1 OF IS-1893(PART-1)-2016 SHOULD BE ENSURED TO BE GREATER THAN 15 FOR VALIDITY OF THIS DESIGN AND DRAWING.

TITLE-

STRUCTURAL DRAWING OF PROPOSED FIFTH FLOOR, SIXTH FLOOR, SEVENTH FLOOR AND EIGHTH FLOOR OVER EXISTING & ALREADY SANCTIONED G+4 STORIED RESIDENTIAL BUILDING OF 1) SHARMISTHA PAL, W/O- SOUMITRA BISWAS, 2) SANJUKTA PAL MONDAL, W/O.- SABYASACHI MONDAL, 3) SANGHAMITRA GHOSAL, W/O.- SANKAR PRASAD GHOSAL, 4) SAMADRITA PAL, D/O.- LATE SASANKA SEKHAR PAL, 5) ARATI PAL, W/O.- LATE MRIGANKA SEKHAR PAL, 6) ANIRBAN PAL, S/O.- LATE MRIGANKA SEKHAR PAL, AT MOUZA - KAMARARA, J.L. NO.- 187, R.S. PLOT NO.- 102/906 (PART), L.R. PLOT NO.- 405 (PART), IN HOLDING NO.- 1110, AT STREET- RAJA BAZAR, WARD NO.- 9, P.S.- MEDINIPUR, DIST.- PASCHIM MEDINIPUR, UNDER MIDNAPORE MUNICIPALITY.
LEGAL REPRESENTATIVE EXECUTORS, ADMINISTRATOR & ASSIGN IN FAVOUR OF 'M/S MITRO DEVELOPERS LLP' PROP. 1) SRI ANKUR LODHA, S/O.- LATE KAMAL KISHORE LODHA,
2) SMT. KIRTI LODHA, W/O.- SRI ANKUR LODHA, OF P.O.+P.S.- SALBONI, PIN.- 721147, DIST.- PASCHIM MIDNAPORE.

SIGNATURE OF OWNER

MITRO DEVELOPERS LLP
PARTNER
MITRO DEVELOPERS LLP
PARTNER

SIGNATURE OF ARCHITECT

AR. PATRALI PAL
CA/93/16012
L.B.A.-KMC

SIGNATURE OF GEO-TECHNICAL ENGINEER

DR. SANTOSH KUMAR CHAKRABORTY
Consulting Geotechnical Engineer

SIGNATURE OF STRUCTURAL ENGINEER

SIGNATURE OF THE VETTING AUTHORITY

DR. DIPANKAR CHAKRABORTY
PROFESSOR & FORMER HEAD
CIVIL ENGINEERING DEPARTMENT
JADAVPUR UNIVERSITY
Email : prof.dipankar@gmail.com

DRAWING TITLE

FOUNDATION, BEAM, COLUMN, SLAB LAYOUT PLAN WITH REINF. DETAILS.

SCALE.-1:100 OR AS SHOWN DATE.- 04.03.2024	
SHEET NO.- 1 OF 1	SHEET SIZE- A0

P.W. NO.- 09
DATE - 16/04/2024

The builder or the Owner will not resort to manual scavenging by engaging sanitation workeps for cleaning ofseptic tank of emposed building

Application of...Ankur Lodha & other...

P.W. No....09....Dt.16/04/24...for ...G+6 Storied...

of Building for Residemtial cum Commercial.

(Perpose) Examined the application & with spesiafication also held spot enquiry Sanction to the building plan may be accorded with permission to excute the work

Date:-

Office of the Midnapore Municipality
মেদিনীপুর পৌরসভার মোহর
Midnapore

16/4/24
Sub Asstt Engineer
Midnapore Municipality
Recommended

Chairman-in-Council 18/4/24.
Department of P.W.D.
Midnapore Municipality

Sanction oder No ..... 09 .....
P.W.D. Date .....16/04/2024..... Application
Of .....Ankur Lodha & other.....
Permission for Construction of building
for Residemtial cum Commercial (purpose)
Considered the opinion of S.A.E. / S.I and recom-mendation of the E.O saction is hereby accorded u/s 207(1)(a) of the act resd with rule 20(1)(A) to the building plan with Specificatin duly counter signed The building Plan shall remain valid for three years from the date of sanction and may be renewed for another two) ars on payment of fees u/s 207(2) of the act Permission to execute the work in the prescribed from is being given seperately

19/04/24
Chairman
Midnapore Municipality
Asoban
19/04/24