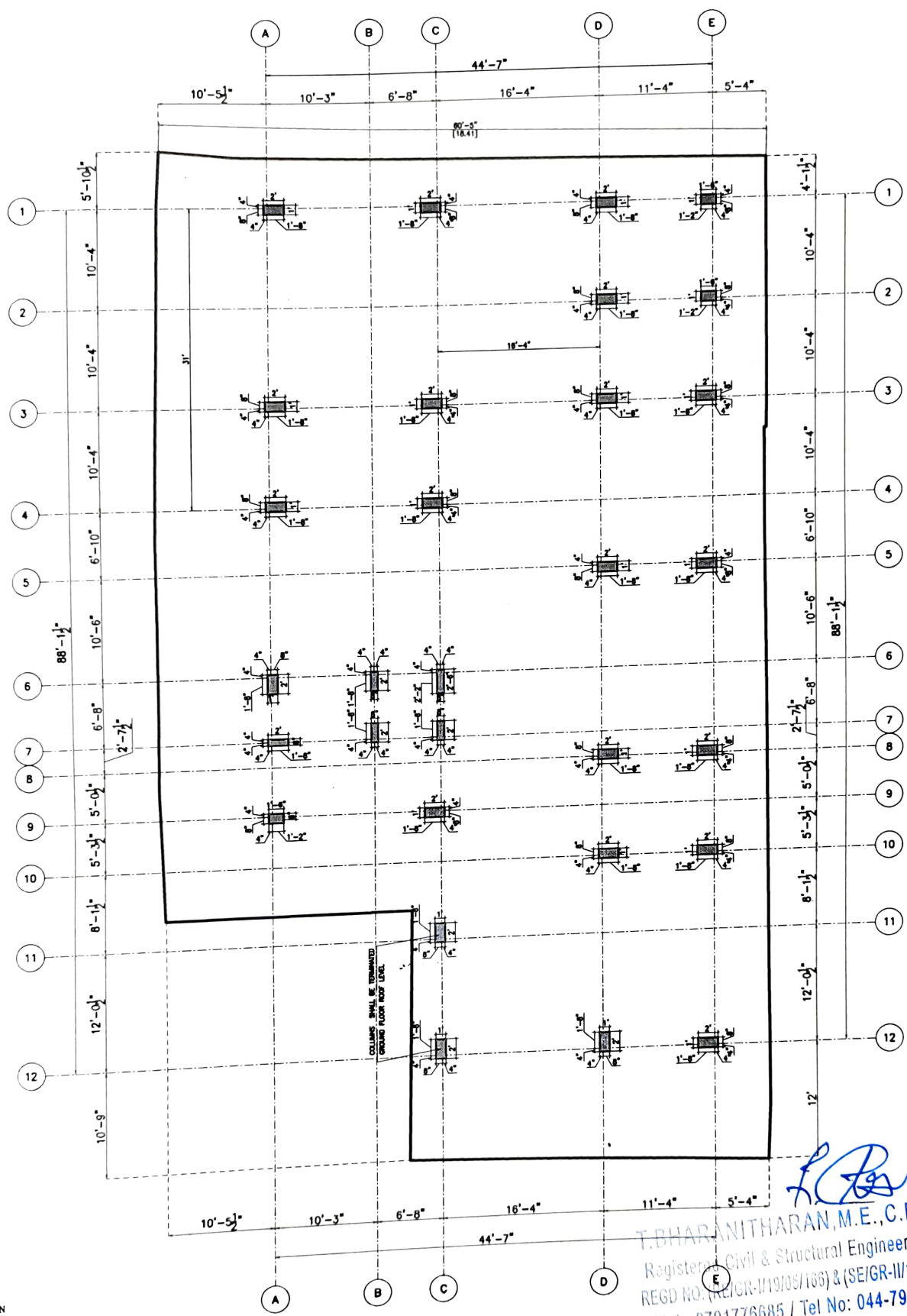


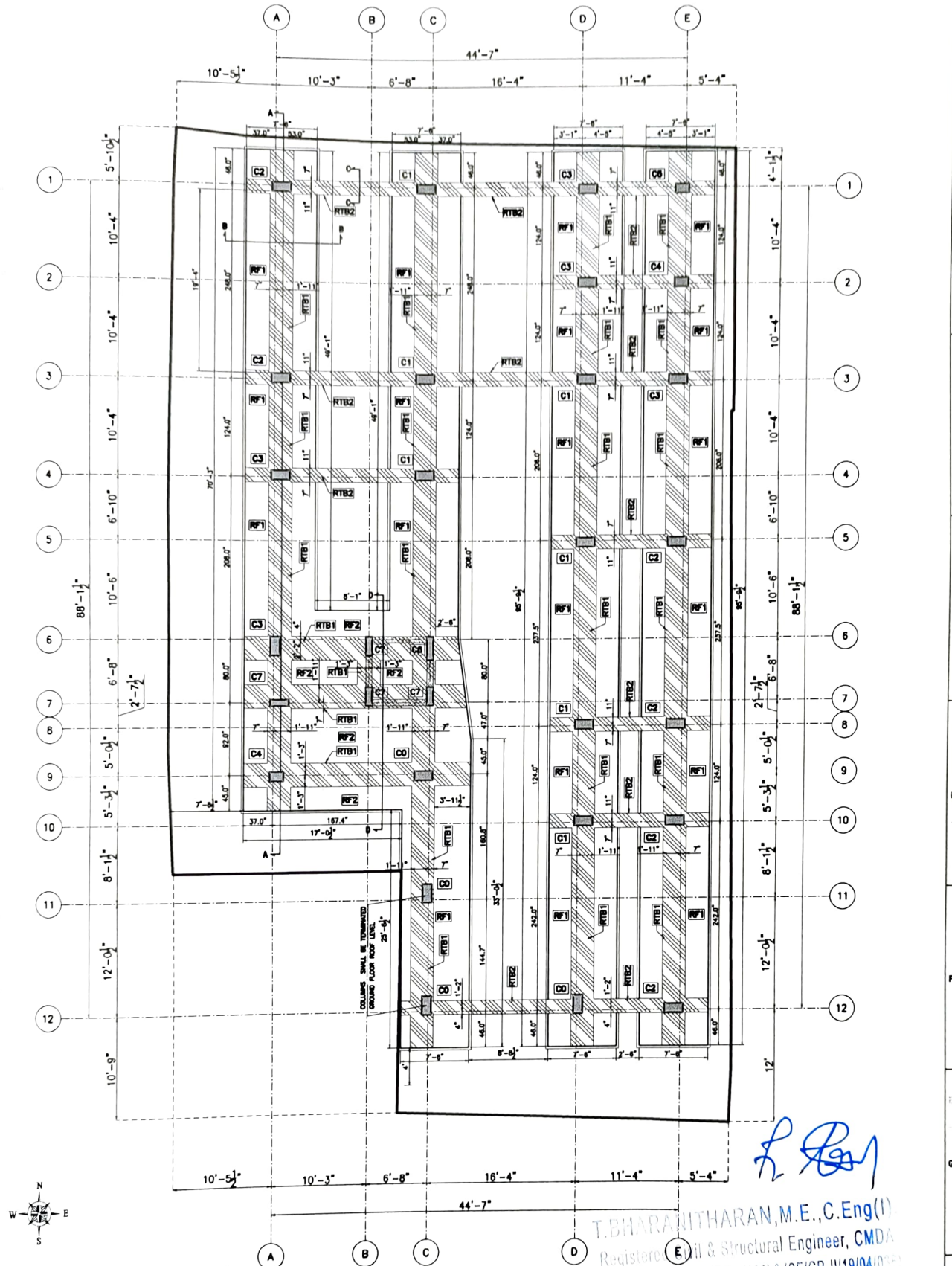


T. DHARANITHARAN, M.E., C.Eng(II)
Registered Civil & Structural Engineer, CMD
REGD NO: (CE/CR-11/19/05/166) & (SE/GR-II/19/04/036)
Mob: 9791776685 / Tel No: 044-79670563

LAYOUT OF COLUMN SETTING OUT PLAN

- LEGENDS**
- - COLUMNS
 - - COLUMN CENTRELINE
 - - SITE BOUNDARY

JOB NO: KAA0001		All dimensions are in Feet and Inches				Sheet: 1 (A3 SHEET)	
Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Revision
TBN		TBN	02-05-2025		TBN	02-05-2025	RO
PROPOSED RESIDENTIAL AT CHOLAIMEDU		CLIENT:		KURAL ASSOCIATES			
LAYOUT OF COLUMN SETTING OUT PLAN		---		KURAL ASSOCIATES Pursuant to Regulation NO.31/117, Mugdhalakam Math Road, Madhanandapuram, Perai, Chennai-125. PH:044-6844312, MOB:9791776685, Email:kuralassociatesengineers@gmail.com			

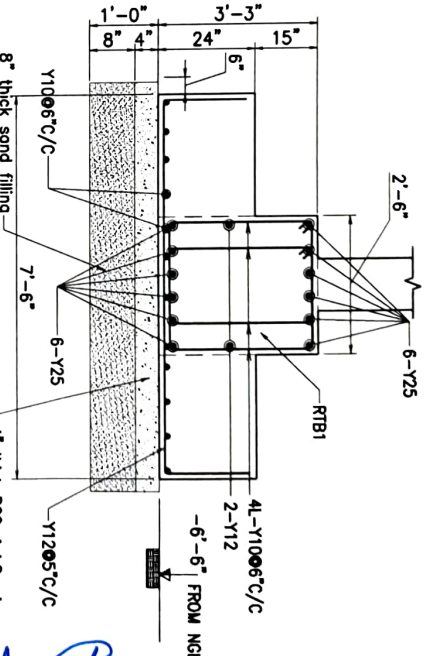
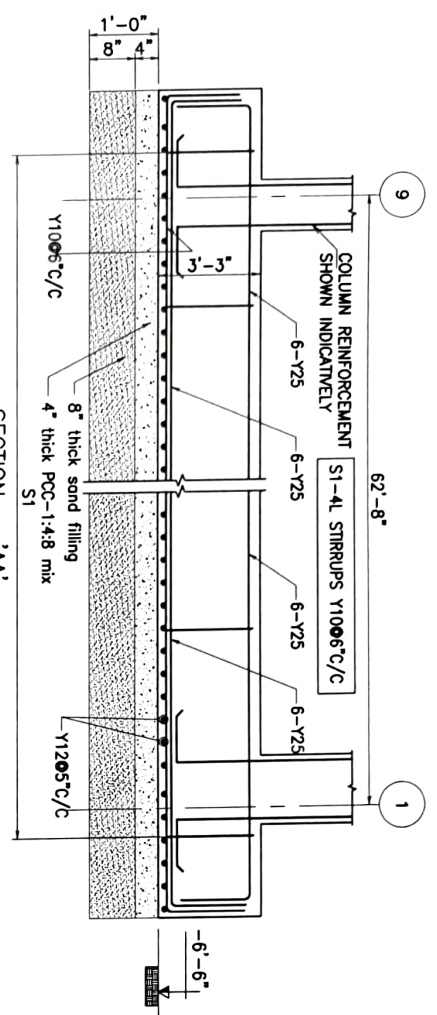


LAYOUT OF RAFT / STRIP FOOTINGS

ALL EXISTING CHAMBER MUST BE REMOVED BEFORE COMMENCING CONSTRUCTION.
IF EXISTING BOREHOLE LIES IN THE FOOTING AREA WHICH INTERCEPTS WITH RAFT BEAMS SHALL BE TERMINATED BEFORE CONSTRUCTION.
IF EXISTING BOREHOLE LIES IN THE FOOTING FLANGE AREA A SUITABLE PVC SLEEVE CAN BE ADOPTED
ALL EXISTING SUBSTRUCTURE OF THE PREVIOUS BUILDING MUST BE EXCAVATED AND REMOVED

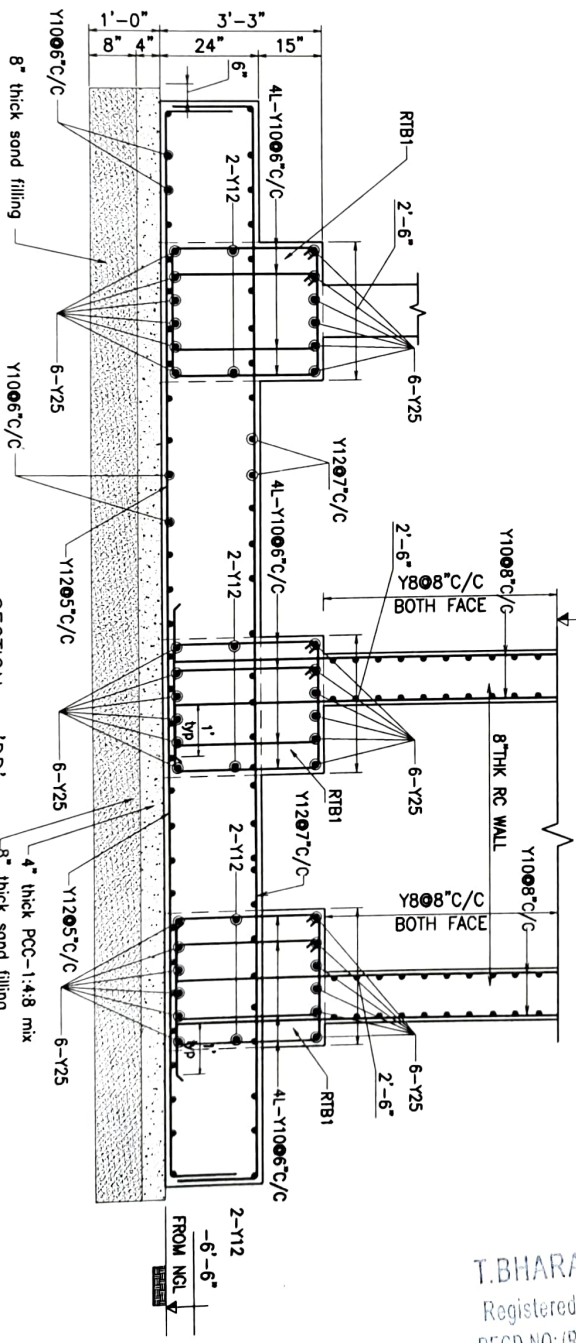
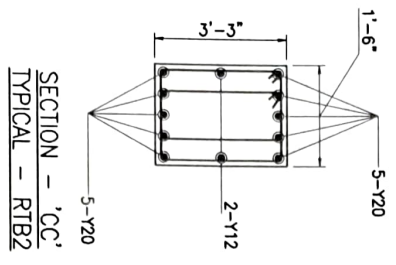
- LEGENDS**
- - COLUMNS
 - - COLUMN CENTRELINE
 - - SITE BOUNDARY

JOB NO: KAF0001		All dimensions are in Feet and Inches				Sheet: 2 (AS SHEET)	
Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Revision
TBN		TBN	02-05-2025		TBN	02-05-2025	RO
PROPOSED RESIDENTIAL AT CHOOLOAMEDU		CLIENT:		CONTRACTANT:			
LAYOUT OF RAFT / STRIP FOOTINGS				KURAL ASSOCIATES			
				NO.3/1517, Mugavakkam High Road, Madhavandapuram, Porur, Chennai-125. Ph:044-42864512, MO:9791777465, Email:kuralassociates.raj@gmail.com			



SECTION - 'AA'

SECTION - 'BB'



SECTION - 'CC'

SECTION - 'DD'

SECTION - 'AA'

SECTION - 'BB'

SECTION - 'CC'

SECTION - 'DD'

SECTION - 'EE'

GENERAL NOTES:-									
1.	All dimensions are in feet & inches.	6.	Sand filling and PCC can be laid	7.	Any descriptions should be produced	8.	Clear cover for	9.	before section.
2.	Structural consultant not responsible	7.	clear to each other but structural	8.	to the Engineer's immediately notice	9.	concrete must be separated by a wooden	10.	formwork.
3.	Location of any structural details for	8.	point/paper joint.	9.	concrete must be separated by a wooden	10.	formwork.	11.	formwork.
4.	All tops should be staggered. (50x50)	9.	formwork.	10.	formwork.	11.	formwork.	12.	formwork.
5.	Clear cover for	10.	formwork.	11.	formwork.	12.	formwork.	13.	formwork.
6.	Clear cover for	11.	formwork.	12.	formwork.	13.	formwork.	14.	formwork.
7.	Clear cover for	12.	formwork.	13.	formwork.	14.	formwork.	15.	formwork.
8.	Clear cover for	13.	formwork.	14.	formwork.	15.	formwork.	16.	formwork.
9.	Clear cover for	14.	formwork.	15.	formwork.	16.	formwork.	17.	formwork.
10.	Clear cover for	15.	formwork.	16.	formwork.	17.	formwork.	18.	formwork.
11.	Clear cover for	16.	formwork.	17.	formwork.	18.	formwork.	19.	formwork.
12.	Clear cover for	17.	formwork.	18.	formwork.	19.	formwork.	20.	formwork.
13.	Clear cover for	18.	formwork.	19.	formwork.	20.	formwork.	21.	formwork.
14.	Clear cover for	19.	formwork.	20.	formwork.	21.	formwork.	22.	formwork.
15.	Clear cover for	20.	formwork.	21.	formwork.	22.	formwork.	23.	formwork.
16.	Clear cover for	21.	formwork.	22.	formwork.	23.	formwork.	24.	formwork.
17.	Clear cover for	22.	formwork.	23.	formwork.	24.	formwork.	25.	formwork.
18.	Clear cover for	23.	formwork.	24.	formwork.	25.	formwork.	26.	formwork.
19.	Clear cover for	24.	formwork.	25.	formwork.	26.	formwork.	27.	formwork.
20.	Clear cover for	25.	formwork.	26.	formwork.	27.	formwork.	28.	formwork.
21.	Clear cover for	26.	formwork.	27.	formwork.	28.	formwork.	29.	formwork.
22.	Clear cover for	27.	formwork.	28.	formwork.	29.	formwork.	30.	formwork.
23.	Clear cover for	28.	formwork.	29.	formwork.	30.	formwork.	31.	formwork.
24.	Clear cover for	29.	formwork.	30.	formwork.	31.	formwork.	32.	formwork.
25.	Clear cover for	30.	formwork.	31.	formwork.	32.	formwork.	33.	formwork.
26.	Clear cover for	31.	formwork.	32.	formwork.	33.	formwork.	34.	formwork.
27.	Clear cover for	32.	formwork.	33.	formwork.	34.	formwork.	35.	formwork.
28.	Clear cover for	33.	formwork.	34.	formwork.	35.	formwork.	36.	formwork.
29.	Clear cover for	34.	formwork.	35.	formwork.	36.	formwork.	37.	formwork.
30.	Clear cover for	35.	formwork.	36.	formwork.	37.	formwork.	38.	formwork.
31.	Clear cover for	36.	formwork.	37.	formwork.	38.	formwork.	39.	formwork.
32.	Clear cover for	37.	formwork.	38.	formwork.	39.	formwork.	40.	formwork.
33.	Clear cover for	38.	formwork.	39.	formwork.	40.	formwork.	41.	formwork.
34.	Clear cover for	39.	formwork.	40.	formwork.	41.	formwork.	42.	formwork.
35.	Clear cover for	40.	formwork.	41.	formwork.	42.	formwork.	43.	formwork.
36.	Clear cover for	41.	formwork.	42.	formwork.	43.	formwork.	44.	formwork.
37.	Clear cover for	42.	formwork.	43.	formwork.	44.	formwork.	45.	formwork.
38.	Clear cover for	43.	formwork.	44.	formwork.	45.	formwork.	46.	formwork.
39.	Clear cover for	44.	formwork.	45.	formwork.	46.	formwork.	47.	formwork.
40.	Clear cover for	45.	formwork.	46.	formwork.	47.	formwork.	48.	formwork.
41.	Clear cover for	46.	formwork.	47.	formwork.	48.	formwork.	49.	formwork.
42.	Clear cover for	47.	formwork.	48.	formwork.	49.	formwork.	50.	formwork.
43.	Clear cover for	48.	formwork.	49.	formwork.	50.	formwork.	51.	formwork.
44.	Clear cover for	49.	formwork.	50.	formwork.	51.	formwork.	52.	formwork.
45.	Clear cover for	50.	formwork.	51.	formwork.	52.	formwork.	53.	formwork.
46.	Clear cover for	51.	formwork.	52.	formwork.	53.	formwork.	54.	formwork.
47.	Clear cover for	52.	formwork.	53.	formwork.	54.	formwork.	55.	formwork.
48.	Clear cover for	53.	formwork.	54.	formwork.	55.	formwork.	56.	formwork.
49.	Clear cover for	54.	formwork.	55.	formwork.	56.	formwork.	57.	formwork.
50.	Clear cover for	55.	formwork.	56.	formwork.	57.	formwork.	58.	formwork.
51.	Clear cover for	56.	formwork.	57.	formwork.	58.	formwork.	59.	formwork.
52.	Clear cover for	57.	formwork.	58.	formwork.	59.	formwork.	60.	formwork.
53.	Clear cover for	58.	formwork.	59.	formwork.	60.	formwork.	61.	formwork.
54.	Clear cover for	59.	formwork.	60.	formwork.	61.	formwork.	62.	formwork.
55.	Clear cover for	60.	formwork.	61.	formwork.	62.	formwork.	63.	formwork.
56.	Clear cover for	61.	formwork.	62.	formwork.	63.	formwork.	64.	formwork.
57.	Clear cover for	62.	formwork.	63.	formwork.	64.	formwork.	65.	formwork.
58.	Clear cover for	63.	formwork.	64.	formwork.	65.	formwork.	66.	formwork.
59.	Clear cover for	64.	formwork.	65.	formwork.	66.	formwork.	67.	formwork.
60.	Clear cover for	65.	formwork.	66.	formwork.	67.	formwork.	68.	formwork.
61.	Clear cover for	66.	formwork.	67.	formwork.	68.	formwork.	69.	formwork.
62.	Clear cover for	67.	formwork.	68.	formwork.	69.	formwork.	70.	formwork.
63.	Clear cover for	68.	formwork.	69.	formwork.	70.	formwork.	71.	formwork.
64.	Clear cover for	69.	formwork.	70.	formwork.	71.	formwork.	72.	formwork.
65.	Clear cover for	70.	formwork.	71.	formwork.	72.	formwork.	73.	formwork.
66.	Clear cover for	71.	formwork.	72.	formwork.	73.	formwork.	74.	formwork.
67.	Clear cover for	72.	formwork.	73.	formwork.	74.	formwork.	75.	formwork.
68.	Clear cover for	73.	formwork.	74.	formwork.	75.	formwork.	76.	formwork.
69.	Clear cover for	74.	formwork.	75.	formwork.	76.	formwork.	77.	formwork.
70.	Clear cover for	75.	formwork.	76.	formwork.	77.	formwork.	78.	formwork.
71.	Clear cover for	76.	formwork.	77.	formwork.	78.	formwork.	79.	formwork.
72.	Clear cover for	77.	formwork.	78.	formwork.	79.	formwork.	80.	formwork.
73.	Clear cover for	78.	formwork.	79.	formwork.	80.	formwork.	81.	formwork.
74.	Clear cover for	79.	formwork.	80.	formwork.	81.	formwork.	82.	formwork.
75.	Clear cover for	80.	formwork.	81.	formwork.	82.	formwork.	83.	formwork.
76.	Clear cover for	81.	formwork.	82.	formwork.	83.	formwork.	84.	formwork.
77.	Clear cover for	82.	formwork.	83.	formwork.	84.	formwork.	85.	formwork.
78.	Clear cover for	83.	formwork.	84.	formwork.	85.	formwork.	86.	formwork.
79.	Clear cover for	84.	formwork.	85.	formwork.	86.	formwork.	87.	formwork.
80.	Clear cover for	85.	formwork.	86.	formwork.	87.	formwork.	88.	formwork.
81.	Clear cover for	86.	formwork.	87.	formwork.	88.	formwork.	89.	formwork.
82.	Clear cover for	87.	formwork.	88.	formwork.	89.	formwork.	90.	formwork.
83.	Clear cover for	88.	formwork.	89.	formwork.	90.	formwork.	91.	formwork.
84.	Clear cover for	89.	formwork.	90.	formwork.	91.	formwork.	92.	formwork.
85.	Clear cover for	90.	formwork.	91.	formwork.	92.	formwork.	93.	formwork.
86.	Clear cover for	91.	formwork.	92.	formwork.	93.	formwork.	94.	formwork.
87.	Clear cover for	92.	formwork.	93.	formwork.	94.	formwork.	95.	formwork.
88.	Clear cover for	93.	formwork.	94.	formwork.	95.	formwork.	96.	formwork.
89.	Clear cover for	94.	formwork.	95.	formwork.	96.	formwork.	97.	formwork.
90.	Clear cover for	95.	formwork.	96.	formwork.	97.	formwork.	98.	formwork.
91.	Clear cover for	96.	formwork.	97.	formwork.	98.	formwork.	99.	formwork.
92.	Clear cover for	97.	formwork.	98.	formwork.	99.	formwork.	100.	formwork.

T.BHARANITHARAN, M.E., C.Eng(I).
 Registered Civil & Structural Engineer, CMDA
 REGD NO: (RE/GR-111905/160) & (SE/GR-1119/04/036)
 Mob: 9791776685 / Tel No: 044-79670563

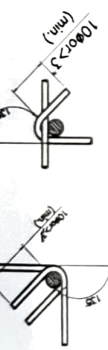
COLUMN NO.	NO.	FROM FINISHING LEVEL TO GROUND FLOOR ROOF LEVEL	FROM GROUND FLOOR ROOF LEVEL TO SECOND FLOOR ROOF LEVEL	FROM SECOND FLOOR ROOF LEVEL TO FOURTH FLOOR ROOF LEVEL	FROM FOURTH FLOOR ROOF LEVEL TO TERRACE FLOOR LEVEL	REMARKS
C0	4					NO. 01 & 02 - COLUMN SHALL BE TERMINATED IN GROUND FLOOR ROOF LEVEL. COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C1	7					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C2	6					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C3	5					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C4	2					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C5	1					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C6	1					COLUMN SHALL BE TERMINATED TERRACE LEVEL.
C7	4					COLUMN SHALL BE TERMINATED TERRACE LEVEL.

GENERAL NOTES:-

4. Clear cover for:
a. Column = 40mm
b. Slab = 20mm
c. Beam = 20mm
5. Any discrepancies should be immediately produced to the Engineer's notice before execution.

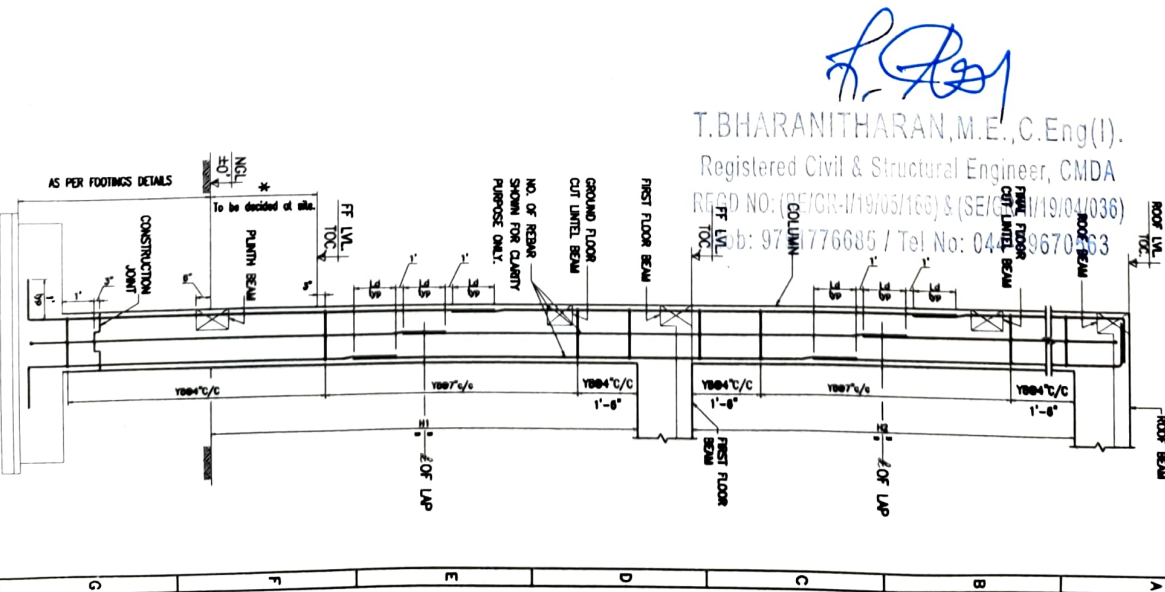
NOTES:
1. REFER TYPICAL COLUMN DETAIL FOR CLASSIFICATIONS ABOUT TIES AND LINKS SPACING.
2. REFERENCE DIMENSIONS:
SHEET-1, SHEET-2, SHEET-3.

MATERIAL STRENGTH
(Grade of concrete = M40)
(Grade of steel = Fe 50)
FOOTINGS ARE DESIGNED ONLY FOR S-45 FLOORS.

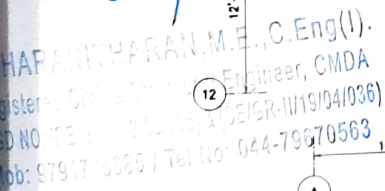


Job No. (000000)	All Dimensions are in feet and inches	Relativational Drawings
Designed by TBN	Checked by TBN	Scale 1/12
Approved by TBN - 02/05/2023	Date 02/05/2023	Scale 1/12
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF COLUMNS		

Typical column details.



T.BHARANITHARAN, M.E., C.Eng(I).
Registered Civil & Structural Engineer, CMDA
REGD NO: (SE/CR-119/05/166) & (SE/CR-119/04/036)
Mob: 977766885 / Tel No: 0439670033



2

JOB NO: KAAF0001

All dimensions are in Feet and Inches

Sheet: 5 (A3 SHEET)

Sign

Checked
by
TBN

Date
-05-20

Sign

Approved by	
TR	

	D
22	22

	510
25	

PROPOSED RESIDENTIAL AT CHOOLAMEDU

CLIENT:

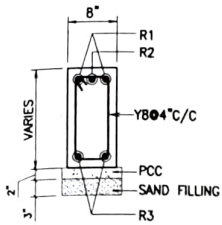
LAYOUT OF REINFORCEMENT DETAILS OF PLINTH BEAMS

CONSULTANT:	
--------------------	--

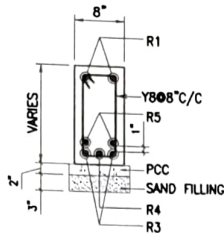
KURAL ASSOCIATES
Formation to Expansion

NO.3/1517, Mugavakkam Main Road, Madhanandhapuram
Porur, Chennai-125. PH:044-42866312, MOB:9791776485
Email:kuratassociates.engineers@gmail.com

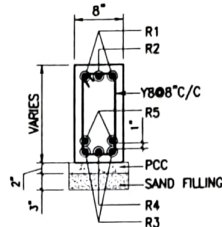
NOTE:
Clear cover = 30mm
All laps shall be 50 ϕ
Top reinforcement shall be lapped at
span and bottom reinforcement at support.
3" thick sand and pcc layers shall be laid
below all beams.



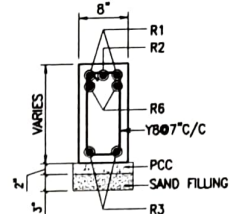
SECTION 1-1



SECTION 2-2

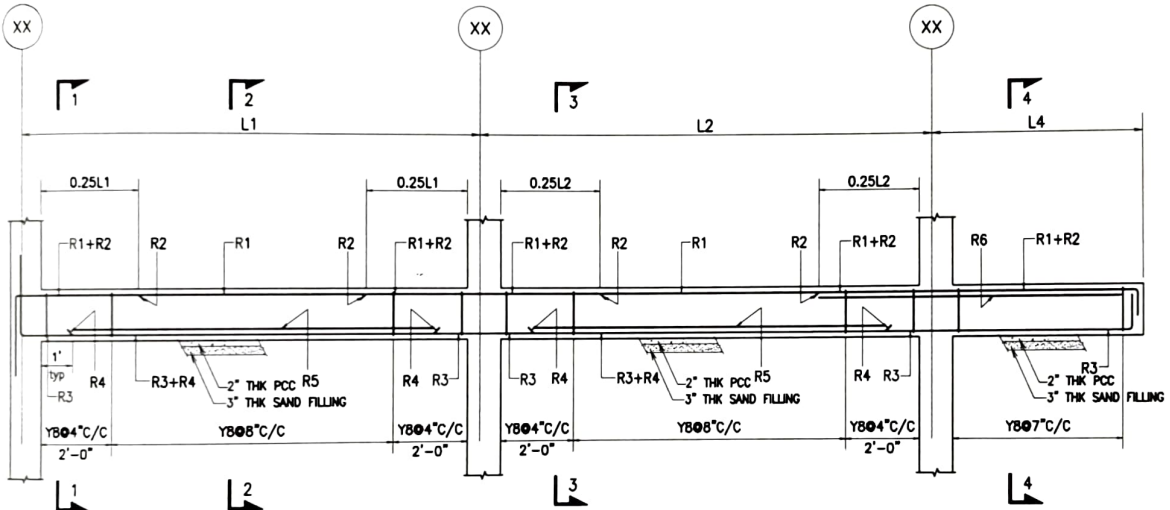


SECTION 3-3

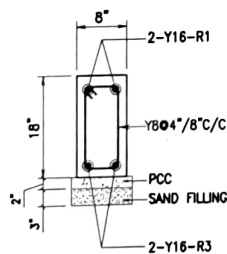
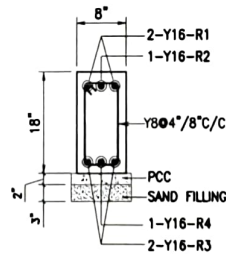


SECTION 4-4

NOTE:
SECTION 1-1, 2-2, 3-3 & 4-4 ARE ONLY FOR
EXPLANATORY PURPOSE.



TYPICAL PLINTH BEAM DETAILS

C.S OF PB1
[8'x1'-6"]C.S OF PB2
[8'x1'-6"]

MATERIAL STRENGTH

Grade of concrete - M30

Grade of steel - fe 500

NOTE:

1. Clear cover = 30mm
2. All laps shall be 50Ø
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. 3" thick sand and pcc layers shall be laid below all beams.

JOB NO: KAAFO001

All dimensions are in Feet and Inches

Sheet: 6 (A3 SHEET)

Designed by

Sign

Checked by

Date

Sign

Approved by

Date

Sign

Revision

TBN

TBN

02/05/2025

TBN

02/05/2025

RO

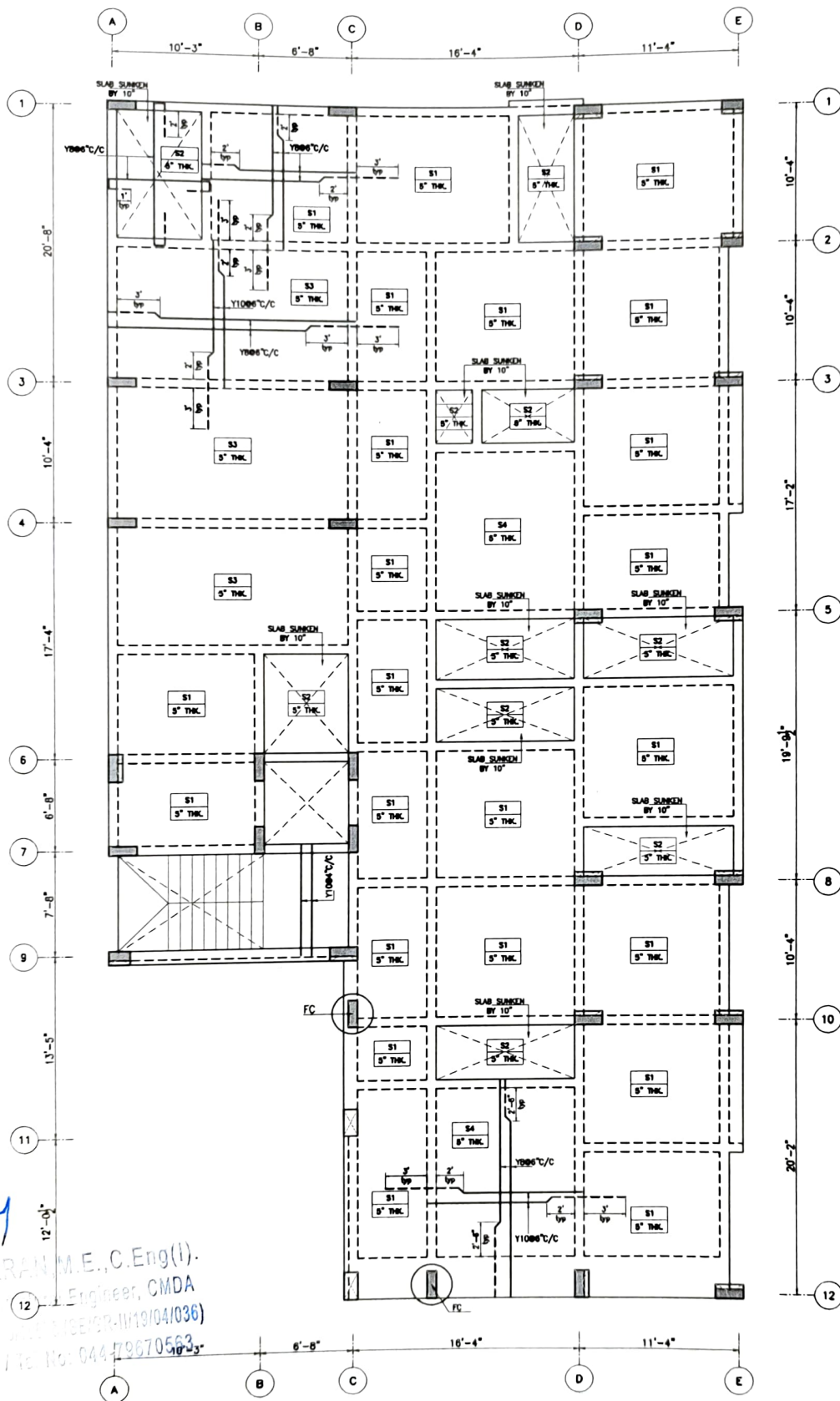
PROPOSED RESIDENTIAL AT CHOLLAIMEDU
LAYOUT OF REINFORCEMENT DETAILS OF
PLINTH BEAMS

CLIENT:

DRAWN BY:

KURAL
ASSOCIATES

NO.3/1517, Mugavallam Main Road, Madhanandapuram,
Patt. Chennai-125. PH:044-4264312. MO:9797776685.
Email:kuralassociatesengineers@gmail.com



LAYOUT OF GROUND FLOOR ROOF SLAB

NOTE:
Crank length for slabs with typical reinforcements shall be made as per the miscellaneous details presented in sheet-14.
Clear cover = 15mm.
— Denotes top reinforcement of slab
— Denotes bottom reinforcement of slab
Lap length=50 ϕ and all laps must be staggered

LEGEND

Δ : CENTRE LINE
NGL : NATURAL GROUND LEVEL
FFL : FINISHED FLOOR LEVEL
TYP. : TYPICAL
■ : COLUMN
— : COLUMN CENTERLINE
— : SITE BOUNDARY

JOB NO: KAF0001

All dimensions are in Feet and Inches

Sheet: 7 (A3 SHEET)

Designed by
TBN

Sign

Checked by
TBN

Date
01-05-2025

Sign

Approved by
TBN

Date
01-05-2025

Sign

Revision
RO

PROPOSED RESIDENTIAL AT CHOOLOAMEDU

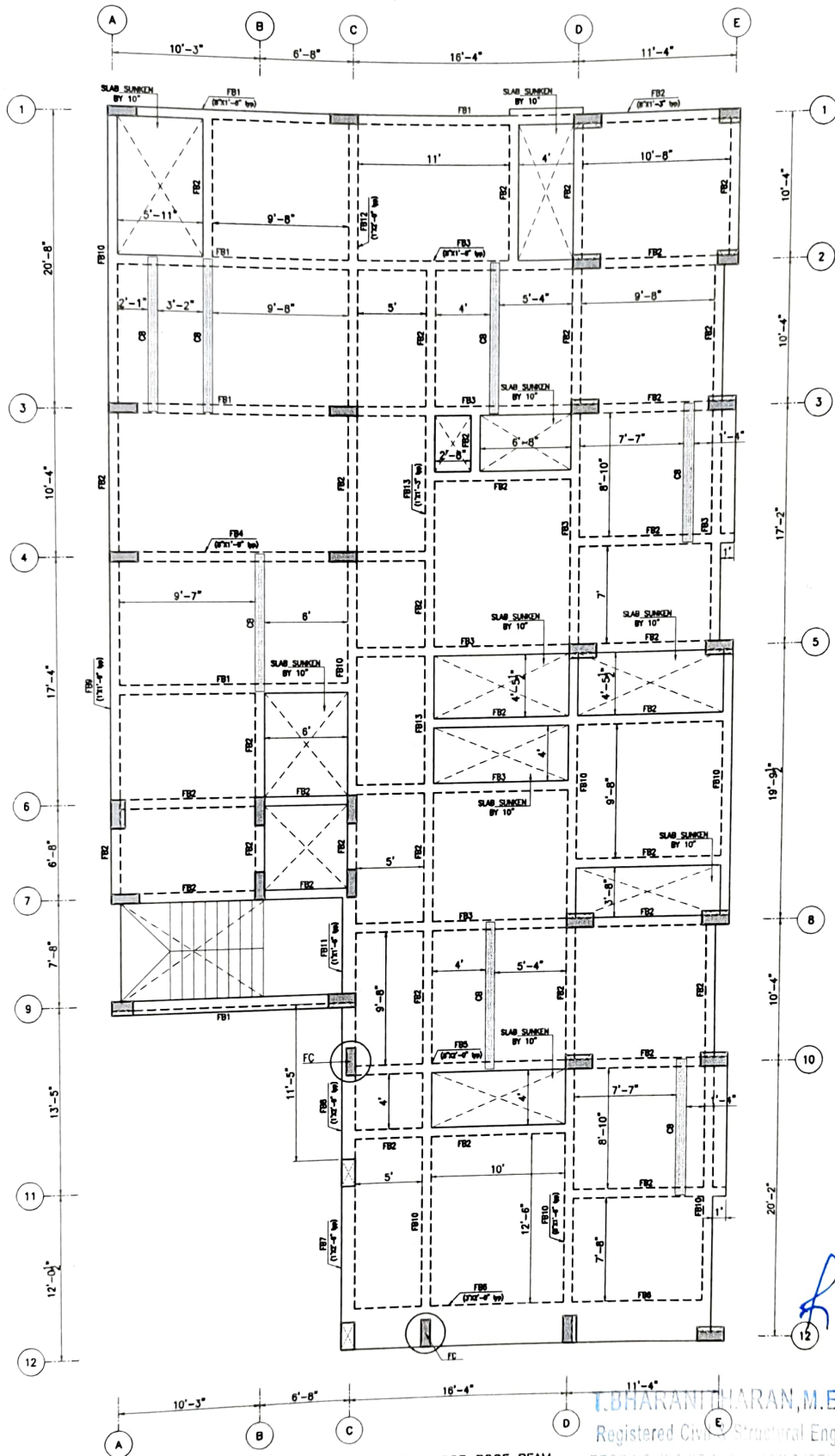
CLIENT:

CONTRACT:

KURAL ASSOCIATES
PAPERWORK BY ARCHITECTS

NQ.3/1517, Mugalakkottam Main Road, Madhavapuram,
Pondicherry-605 004, INDIA. MO: 9779177444.
Email: kuralassociates.engineers@gmail.com

LAYOUT OF DIMENSIONAL AND
REINFORCEMENT DETAILS OF
GROUND FLOOR ROOF SLAB



[Handwritten Signature]

T. BHARANIMARAN, M.E., C.Eng(I).

Registered Civil Structural Engineer, CMDA

REGD NO: (K2)GR-111-111111/19/04/036

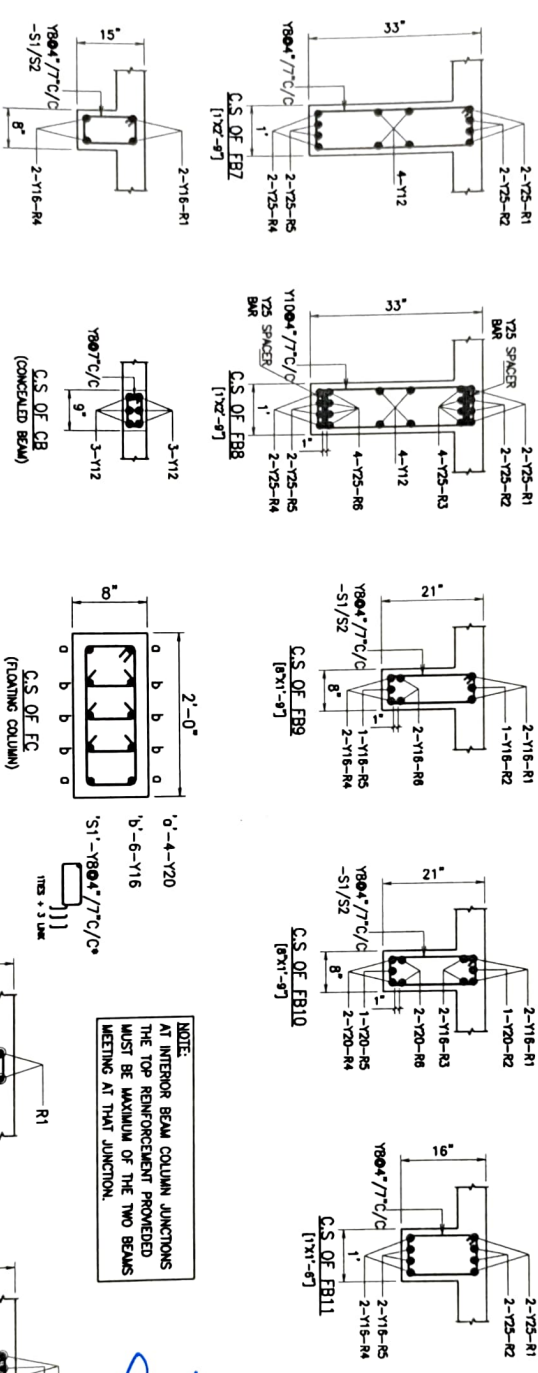
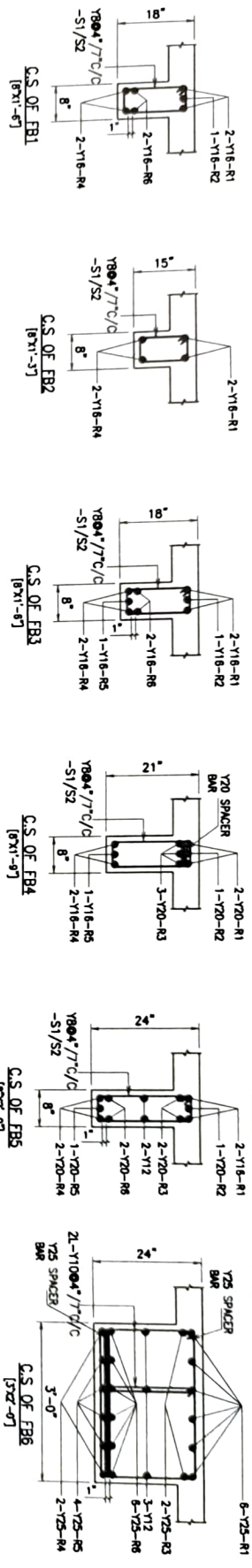
LAYOUT OF GROUND FLOOR ROOF BEAM

Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-14. Clear cover = 25mm. Top reinforcement shall be lapped at midspan and bottom reinforcement at support. Lap length=50φ and all laps must be staggered

LEGEND

—	: CENTRE LINE
—	: NATURAL GROUND LEVEL
—	: FINISHED FLOOR LEVEL
—	: TYPICAL
—	: COLUMN
—	: COLUMN CENTERLINE
—	: SITE BOUNDARY

JOB NO: KAF0001		All dimensions are in Feet and Inches		Sheet: 8 (3 SHEET)	
Designed by	Sign	Checked by	Date	Sign	Approved by
TBN		TBN	01-05-2025		TBN
PROPOSED RESIDENTIAL AT CHOOLAMEDU				CLIENT: ---	
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF GROUND FLOOR ROOF BEAM				REVISION: KURAL ASSOCIATES NO.3/1517, Mugavattam Main Road, Madhanandapuram, Puzh, Chennai-125. Ph:044-4244312, MO:8771774463, Email:kuralassociatesengineers@gmail.com	

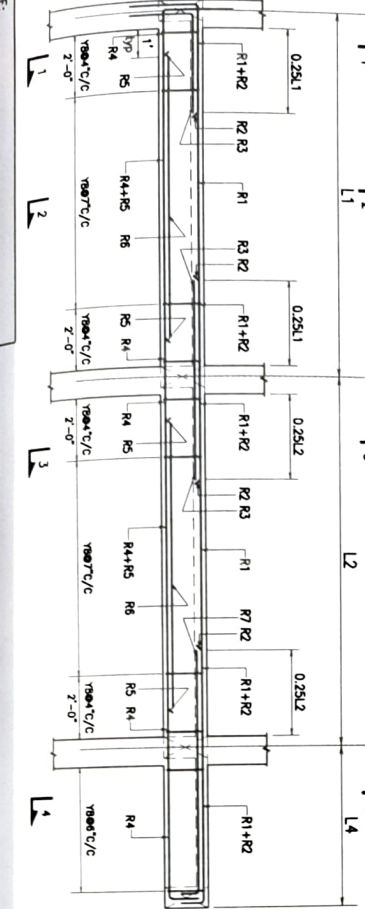


NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

SECTION 2-2

SECTION 3-3

SECTION 4-4



NOTE:
1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.
2. Clear cover = 25mm.
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. Lap length=50e and all laps must be staggered

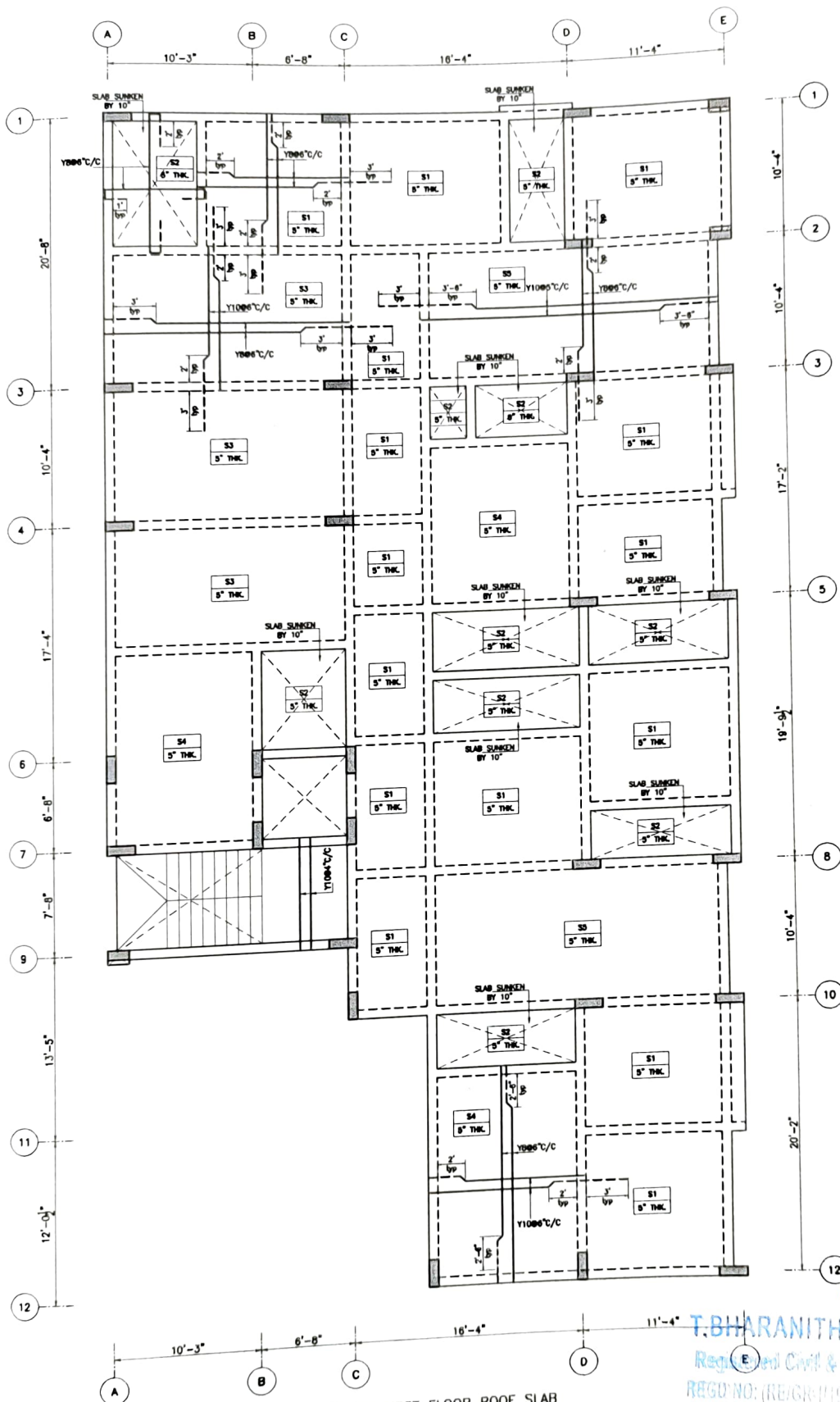
Job No. 1000001
Designed by: TBN
Checked by: TBN
Approved by: TBN
Date: 01/05/2025
Scale: 1:4

Ref/Architectural Drawings
Date: 01/05/2025
Scale: 1:4

LAYOUT OF REINFORCEMENT DETAILS OF
GROUND FLOOR BEAM

T. BHARANITHARAN, M.E.
Registered Civil & Structural Engineer
REGD NO: (RE/CR/119/05/100) & (SE/GR/119/05/100)
Mobile: 9764776655 / Tel No: 044-79670336

RO GOOD FOR CONSTRUCTION



LAYOUT OF FIRST FLOOR ROOF SLAB

NOTE:
 Crank length for slabs with typical reinforcements shall be made as per the miscellaneous details presented in sheet-14.
 Clear cover = 15mm.
 — Denotes top reinforcement of slab
 — Denotes bottom reinforcement of slab
 Lap length=50# and all laps must be staggered

LEGEND

- CL : CENTRE LINE
 NGL : NATURAL GROUND LEVEL
 FFL : FINISHED FLOOR LEVEL
 TYP : TYPICAL
 C : COLUMN
 CL : COLUMN CENTERLINE
 S : SITE BOUNDARY

JOB NO: KAF0001

All dimensions are in Feet and Inches

Sheet: 7 (A3 SHEET)

Designed by

Sign

Checked by

Date

Sign

Approved by

Date

Sign

Revision

PROPOSED RESIDENTIAL AT CHOLLAIMEUDU

LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF FIRST FLOOR ROOF SLAB

CLIENT:

KURAL ASSOCIATES

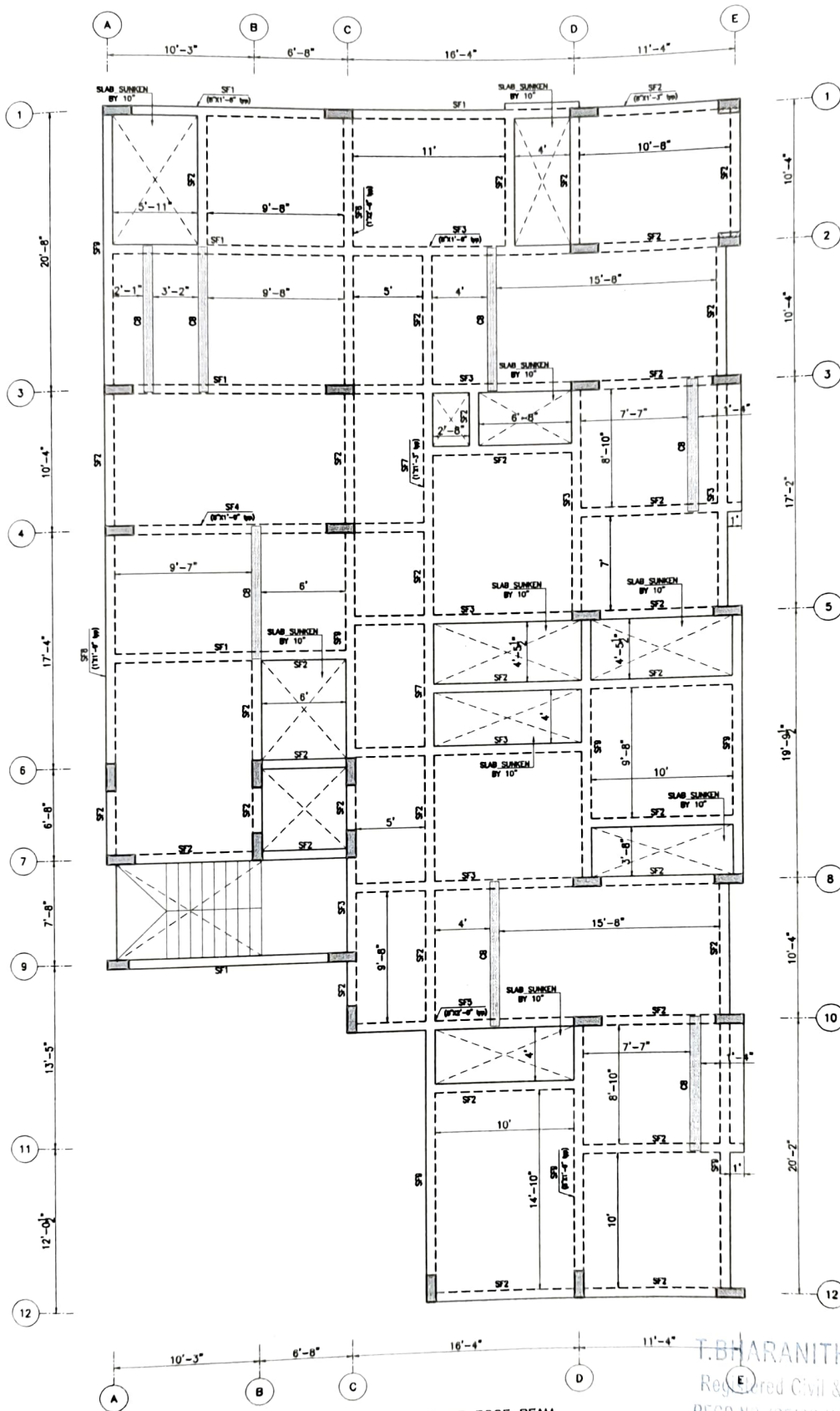
KURAL ASSOCIATES

Perception to Success

NO.3/1517, Mugulvakkam Main Road, Madhavandapuram,

Patt. Chennai-125. Ph:044-6864312, MOB:9791777665.

Email:kuralassociates.engineers@gmail.com



LAYOUT OF FIRST FLOOR ROOF BEAM

NOTE: Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-14. Clear cover = 25mm. Top reinforcement shall be lapped at midspan and bottom reinforcement at support. Lap length=50 ϕ and all laps must be staggered

LEGEND

- L : CENTRE LINE
 NGL : NATURAL GROUND LEVEL
 FFL : FINISHED FLOOR LEVEL
 TYP. : TYPICAL
 C : COLUMN
 CL : COLUMN CENTERLINE
 S : SITE BOUNDARY

JOB NO: KA00001

All dimensions are in Feet and Inches

Designed by TBN

Checked by TBN

Date 01-05-2025

Sign

Approved by TBN

Date 01-05-2025

Sign

Revision RO

PROPOSED RESIDENTIAL AT CHOLAMEDU

LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF FIRST FLOOR ROOF BEAM

CLIENT: ---

SUBMITTANT:

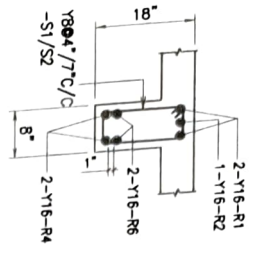
KURAL ASSOCIATES

Particular to Structures

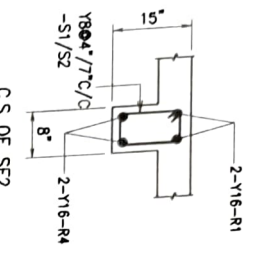
NO.3/1517, Mugulvakkam Main Road, Madhavandhapuram, Porur, Chennai-125. PEO-44-0864312, MOB:9791774685, Email:kuralassociatesengineers@gmail.com

T. BHARANITHARAN, M.E., C. Eng (I).
 Registered Civil & Structural Engineer, CINDA
 REGD NO: (RE/CR 11/05/12) 3 (SE/GR-11/19/04/036)

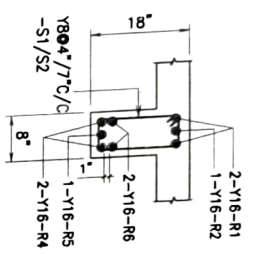
Sheet: 8 (A3 SHEET) 70268



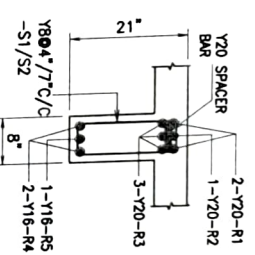
C.S. OF SF1
[8'x1'-6"]



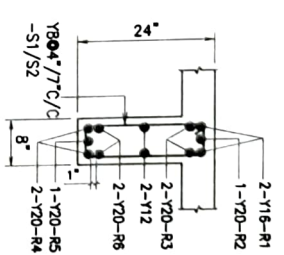
C.S. OF SF2
[8'x1'-3"]



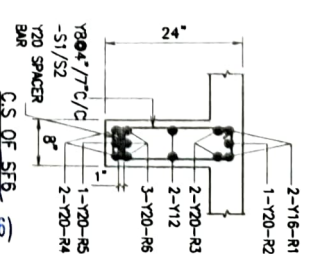
C.S. OF SF3
[8'x1'-6"]



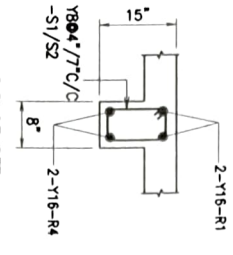
C.S. OF SF4
[8'x1'-9"]



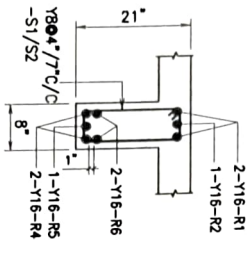
C.S. OF SF5
[8'x2'-0"]



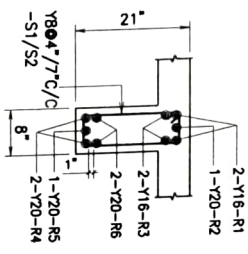
C.S. OF SF6
[8'x2'-0"]



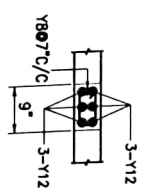
C.S. OF SF7
[8'x1'-3"]



C.S. OF SF8
[8'x1'-9"]



C.S. OF SF9
[8'x1'-9"]

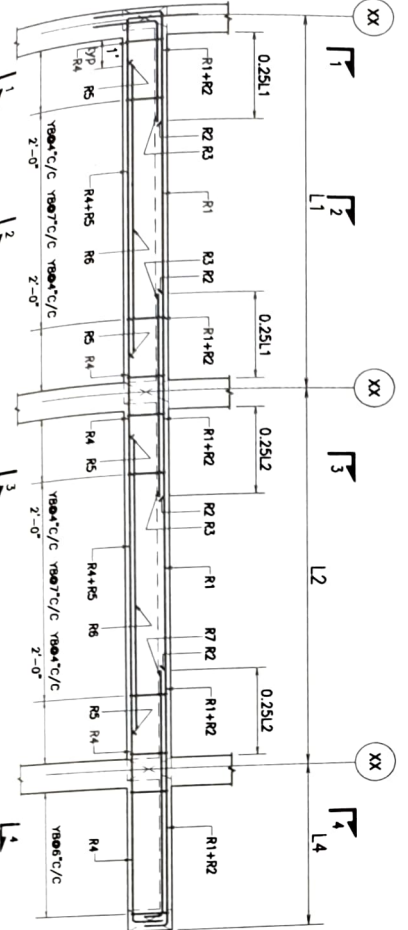


C.S. OF CB
(CONCEALED BEAM)

NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

[Handwritten Signature]

T.BHARANITHARAN, M.E., C.Eng.
Registered Civil & Structural Engineer, CMDA
REGD NO: (RE/GR-11/19/03/166) & (SE/GR-11/19/04/036)
Mob: 9791776685 / Tel No: 044-79670563



NOTE:
SECTION 1-1-2-3-38A-4 ARE ONLY FOR

TYPICAL FLOOR BEAM DETAILS

SECTION 1-1

SECTION 2-2

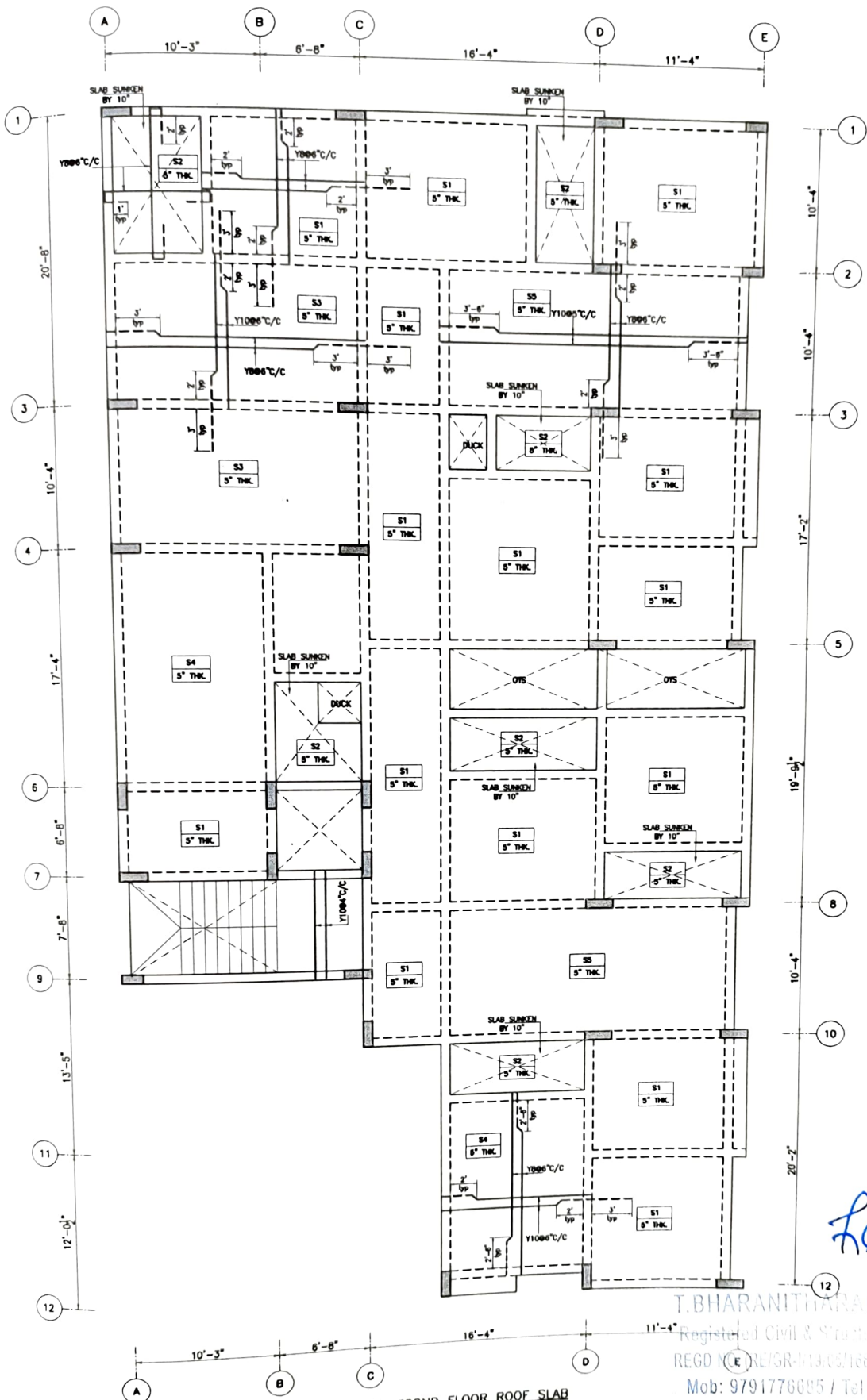
SECTION 3-3

SECTION 4-4

NOTE:

1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.
2. Clear cover = 25mm.
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. Lap length=50 ϕ and all laps must be staggered

Job no. 240001	All Dimensions are in feet and inches	Re/Architectural Drawings
Designed by TBN	Checked by TBN	Date 01/05/2025
Approved by TBN	Approved by TBN	Date 01/05/2025
Scale 1:1.5	Scale 1:1.5	Scale 1:1.5
PROPOSED REINFORCEMENT AT CONSTRUCTION	REINFORCEMENT AT CONSTRUCTION	REINFORCEMENT AT CONSTRUCTION



[Handwritten Signature]

T. BHARANITHARAN, M.E., C. Eng (I)
 Registered Civil & Structural Engineer, CMDA
 REGD NO. (E) 12/5R-11/19/03/188 & (SE) 3R-11/19/04/036
 Mob: 9791776685 / Tel No: 044-79670563

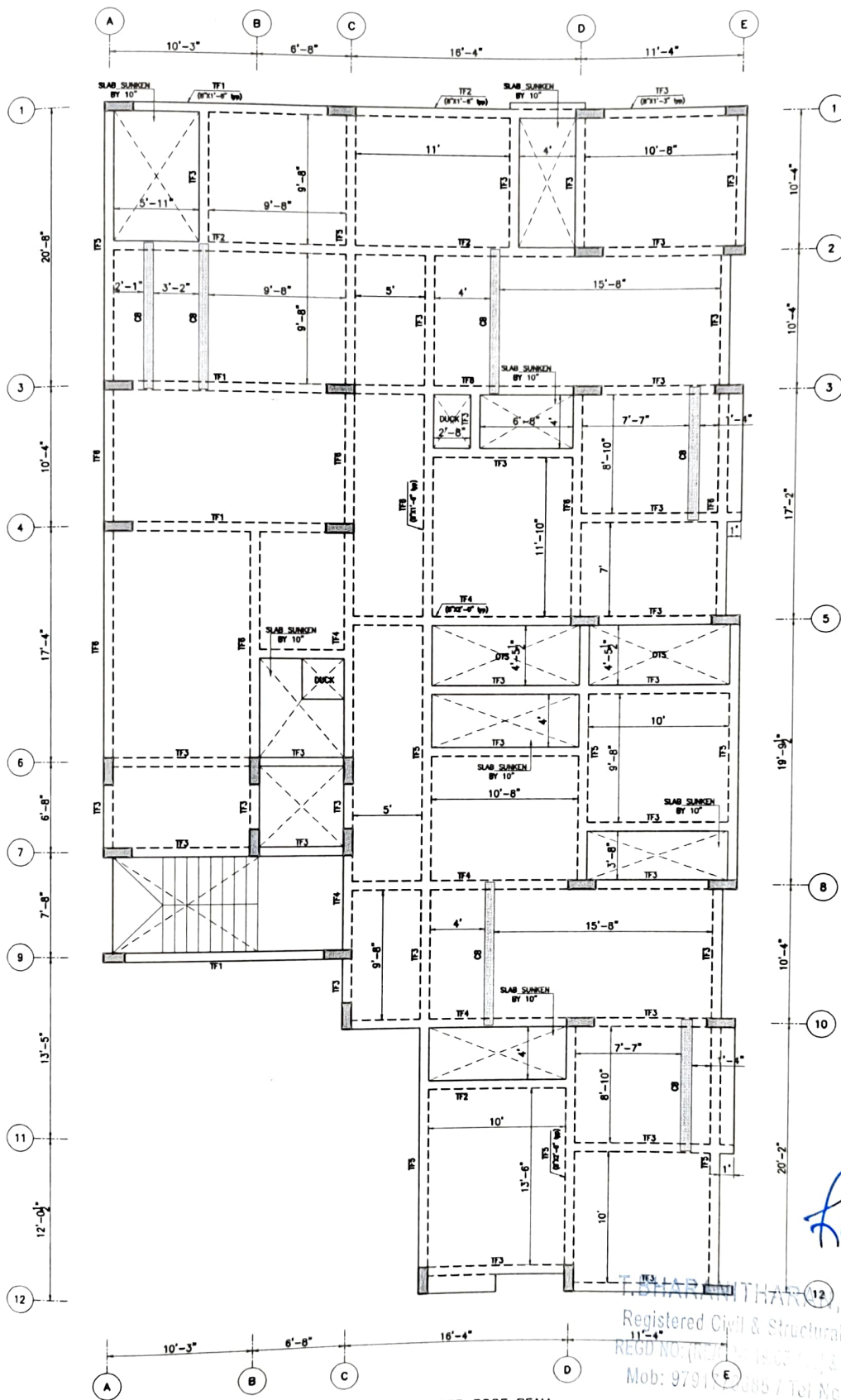
LAYOUT OF SECOND FLOOR ROOF SLAB

NOTE:
 1. Crank length for slabs with typical reinforcements shall be made as per the miscellaneous details presented in sheet-14.
 2. Clear cover = 15mm.
 3. --- Denotes top reinforcement of slab
 4. --- Denotes bottom reinforcement of slab
 5. Lap length=50 ϕ and all laps must be staggered

LEGEND

ϕ	: CENTRE LINE
MGL	: NATURAL GROUND LEVEL
FFL	: FINISHED FLOOR LEVEL
TYP.	: TYPICAL
$\blacksquare$	: COLUMN
---	: COLUMN CENTERLINE
---	: SITE BOUNDARY

JOB NO: KAF0001		All dimensions are in Feet and Inches				Sheet: 13 (A3 SHEET)			
Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Sign	Revision	
TBN		TBN	01-05-2025		TBN	01-05-2025			RO
PROPOSED RESIDENTIAL AT CHOOALAMEDU					CLIENT:		SUBMITTANT:		
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF SECOND FLOOR ROOF SLAB					---		KURAL ASSOCIATES		
							NO.3/1517, Mugavakkam Main Road, Madhavandhapuram, Porur, Chennai-125. P1044-6284312, MOB:9791776685, Email:kuralassociates.engineers@gmail.com		



LAYOUT OF SECOND FLOOR ROOF BEAM

NOTE: Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-14. Clear cover = 25mm. Top reinforcement shall be lapped at midspan and bottom reinforcement at support. Lap length=50 ϕ and all laps must be staggered

LEGEND

- CL : CENTRE LINE
 MGL : NATURAL GROUND LEVEL
 FFL : FINISHED FLOOR LEVEL
 TYP. : TYPICAL
 C : COLUMN
 CL : COLUMN CENTERLINE
 S : SITE BOUNDARY

JOB NO: KAAFD001

All dimensions are in Feet and Inches

Designed by

Sign

Checked by

Date

Sign

Approved by

Date

Sheet: 14 (A3 SHEET)

TBN

TBN

01-05-2025

TBN

01-05-2025

Sign

Revision

PROPOSED RESIDENTIAL AT CHOOALAMEDU

CLIENT:

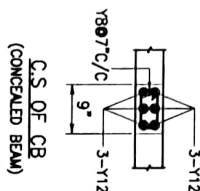
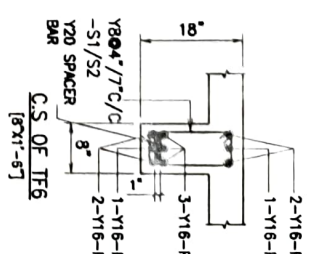
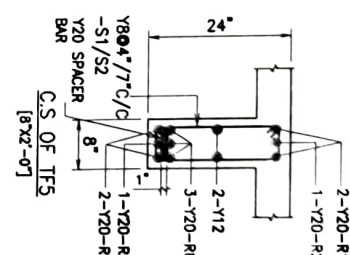
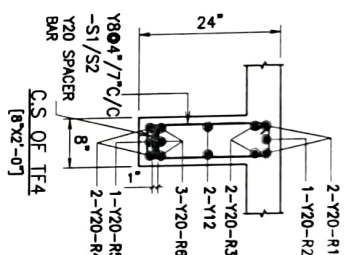
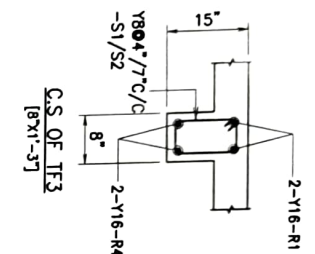
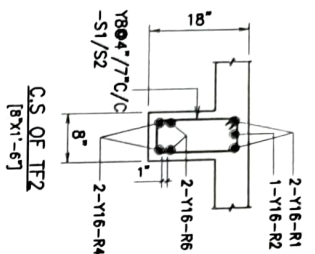
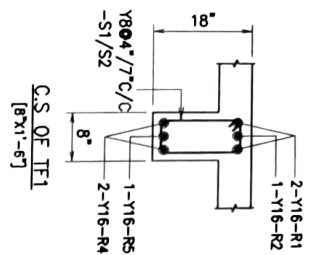
CONSULTANT:

LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF SECOND FLOOR ROOF BEAM

RO

KURAL ASSOCIATES
 K

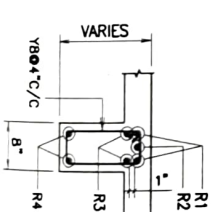
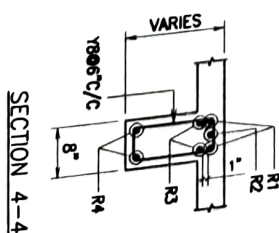
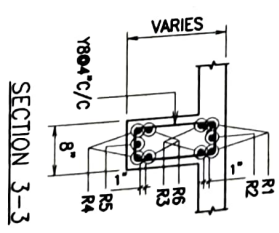
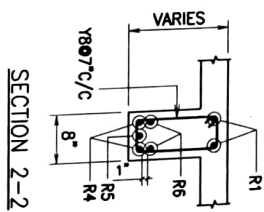
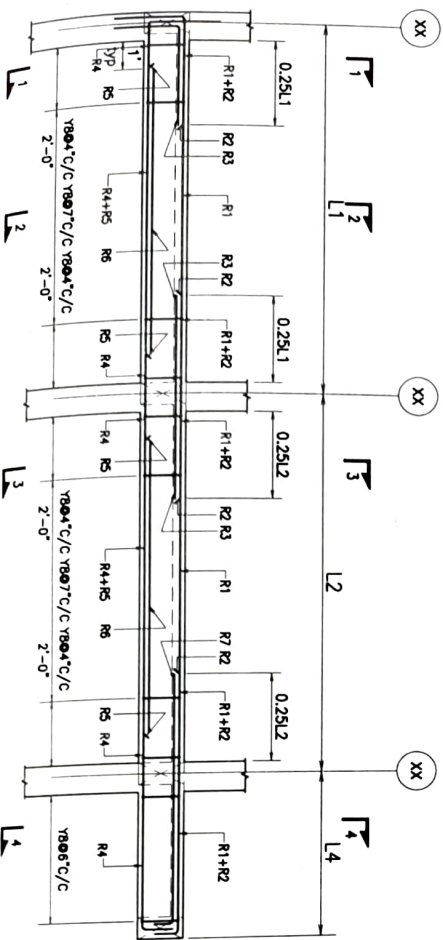
NO.3/1517, Mugavattam Main Road, Mugavattam, Chennai-125, PIN-600043, INDIA. MOBILE: 9791776653. Email: kuralassociates.engineers@gmail.com



NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

[Handwritten signature]

T.BHARANITHARAN, M.E., C.Eng(II).
Registered Civil & Structural Engineer, CMDA
REGD NO: (REGD/1454/2015) & (SP/CR-III/19/04/036)
Mob: 9791776685 / Tel No: 944-79670563



NOTE:
1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.
2. Clear cover = 25mm.
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. Lap length=50 ϕ and all laps must be staggered.

Job no. 1444444	All Dimensions are in feet and inches	Re/Architectural Drawings
Drawn by: TBN	Checked by: - date 01/06/2023	Scale 1:1.5
Reviewed by: TBN	Approved by: - date 01/06/2023	Scale 1:1.5

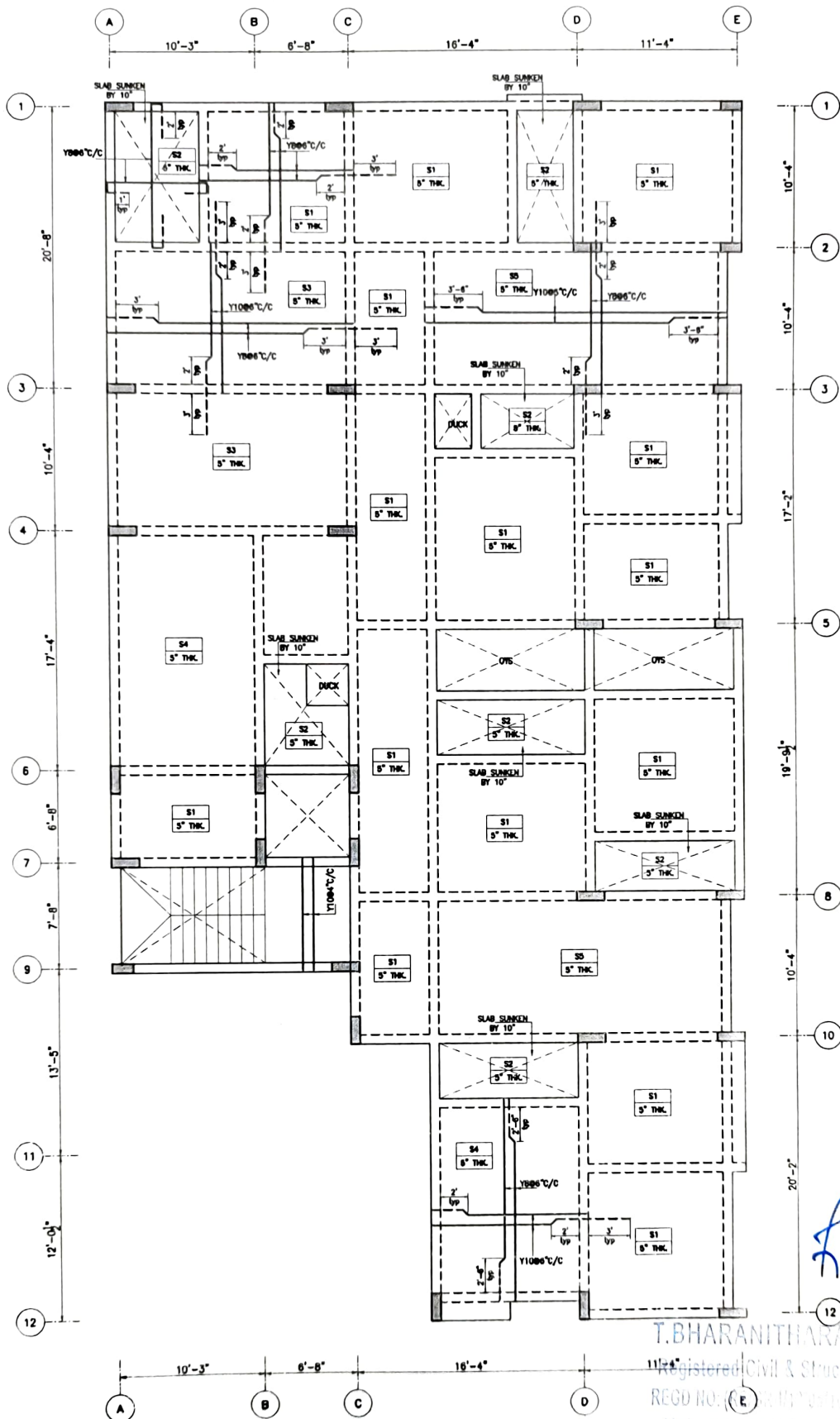
TYPICAL FLOOR BEAM DETAILS

SECTION 1-1

SECTION 2-2

SECTION 3-3

SECTION 4-4



[Handwritten Signature]

T.BHARANITHARAN, M.E., C.Eng(I).
 Registered Civil & Structural Engineer, CMDA
 REGD NO: (E) 101/19/04/036
 Mob: 9791773885 / Tel No: 044-79670563

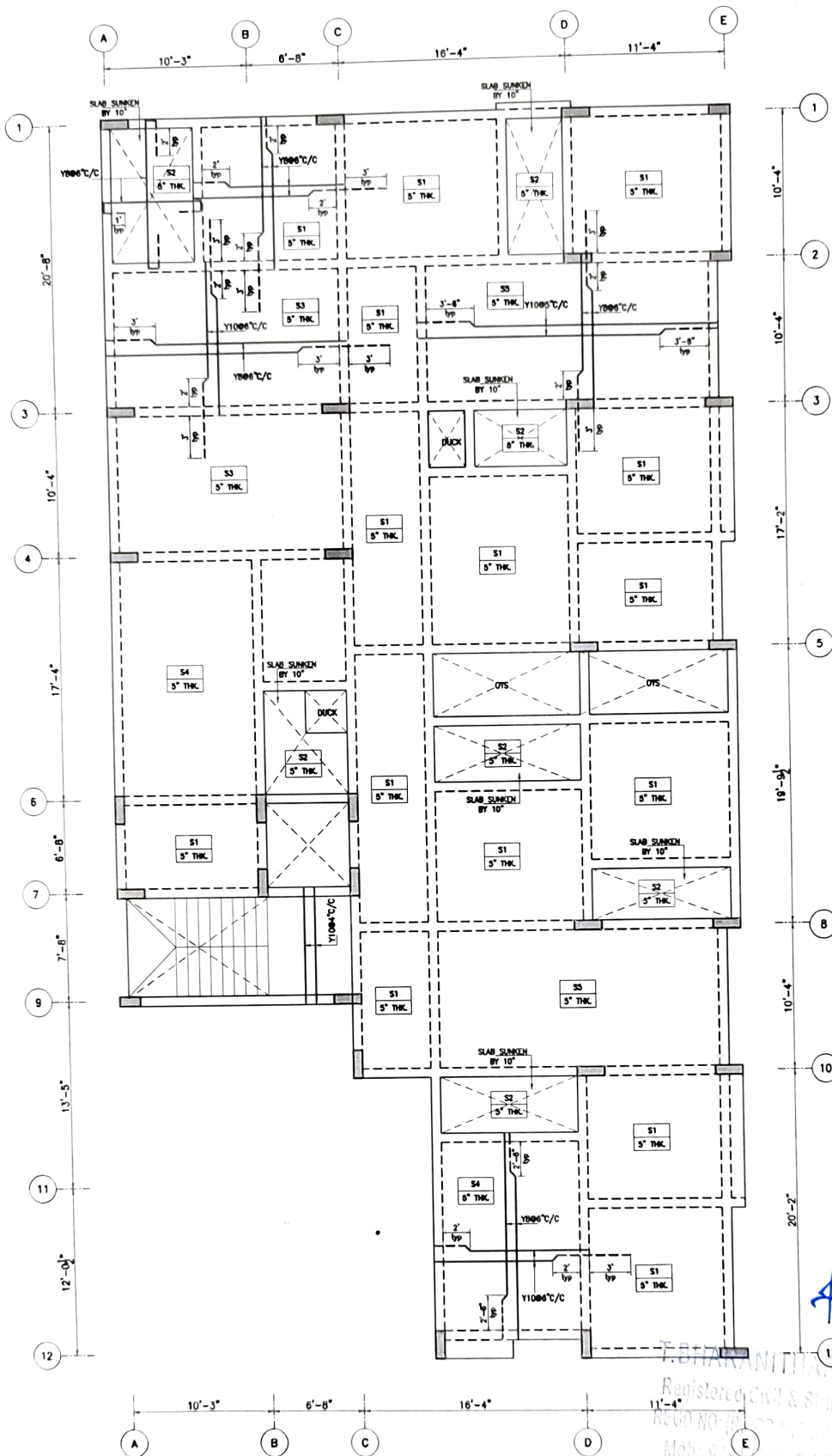
LAYOUT OF THIRD FLOOR ROOF SLAB

NOTE:
 Crank length for slabs with typical reinforcements shall be made as per the miscellaneous details presented in sheet-14.
 Clear cover = 15mm.
 — Denotes top reinforcement of slab
 — Denotes bottom reinforcement of slab
 Lap length=50φ and all laps must be staggered

LEGEND

- ℄ : CENTRE LINE
- NGL : NATURAL GROUND LEVEL
- FFL : FINISHED FLOOR LEVEL
- TYP. : TYPICAL
- : COLUMN
- : COLUMN CENTERLINE
- : SITE BOUNDARY

JOB NO: KAF0001		All dimensions are in Feet and Inches					Sheet: 16 (A) SHEET	
Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Sign	Revision
TBN		TBN	01-05-2025		TBN	01-05-2025		RO
PROPOSED RESIDENTIAL AT CHOOLAIMEDU				CLIENT:		KURAL ASSOCIATES		
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF THIRD FLOOR ROOF SLAB				-----		NO.3/1517, Mugallakulam Main Road, Madhavaram, Chennai-600 032, MOB: 9791773885 Email: kuralassociatesengineers@gmail.com		



LAYOUT OF THIRD FLOOR ROOF SLAB

1. L: Lap length for slabs with typical reinforcements shall be made as per the miscellaneous details presented in sheet-14.
 2. Clear cover = 15mm.
 3. — Denotes top reinforcement of slab
 4. — Denotes bottom reinforcement of slab
 5. Lap length=50φ and all laps must be staggered

LEGEND

CL : CENTRE LINE
 NGL : NATURAL GROUND LEVEL
 FFL : FINISHED FLOOR LEVEL
 TYP. : TYPICAL
 □ : COLUMN
 — : COLUMN CENTERLINE
 — : SITE BOUNDARY

JOB NO: KAAFO001

Designed by

TBN

PROPOSED RESIDENTIAL AT CHOOALAMEDU

LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF THIRD FLOOR ROOF SLAB

All dimensions are in Feet and Inches

Checked by

TBN

01-05-2025

CLIENT:

Sign

TBN

01-05-2025

CONTRACTOR

KURAL ASSOCIATES

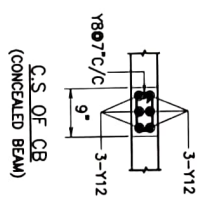
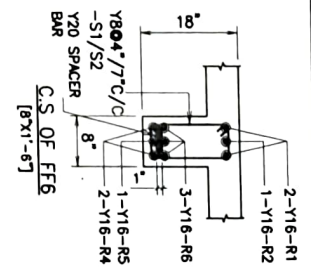
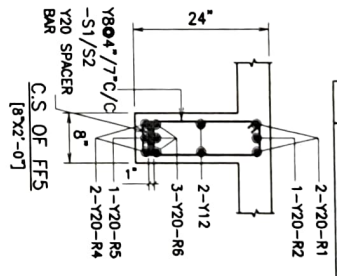
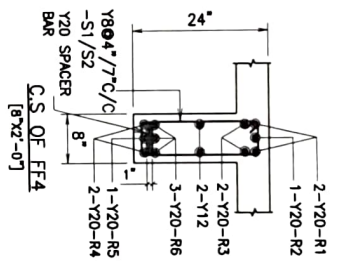
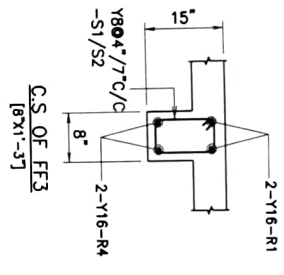
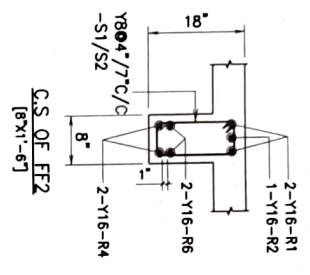
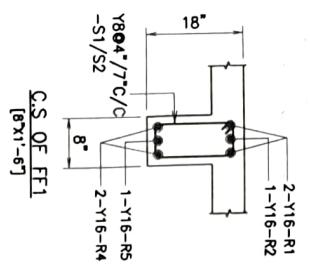
Permit to Construct

NO.3/1517, Mughothalam Main Road, Madhanandhopuram, Ponn. Chennai-133, Pin-604428(MS)12, MO:9791777465, Email:kuralassociates.engineers@gmail.com

Sheet: 16 (A3 SHEET)

Revision

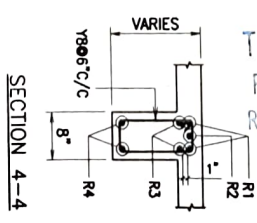
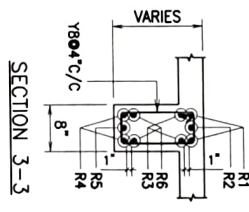
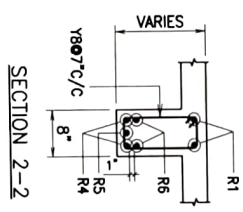
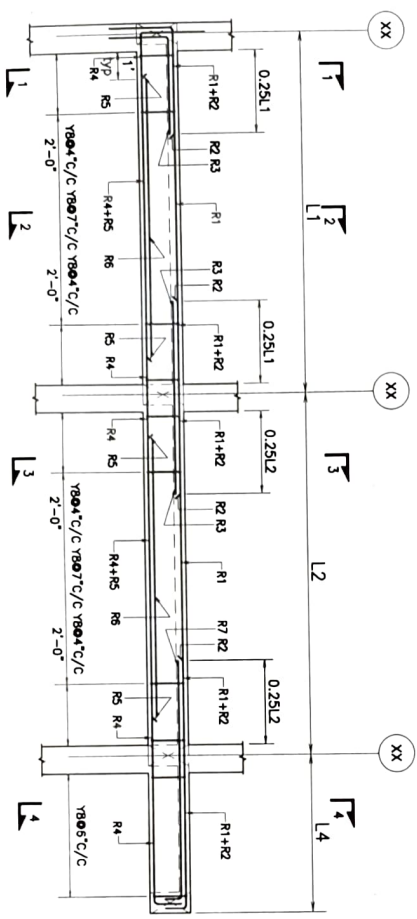
RO



NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

[Handwritten Signature]

T. BHARANITHARAN, M.E., C.Eng(I).
Registered Civil & Structural Engineer, CMDA
REGD NO: (RE/CF-W/320702) & (SE/GR-W/19/04/036)
Mob: 9794770665 / Tel No: 044-73670563



TYPICAL FLOOR BEAM DETAILS

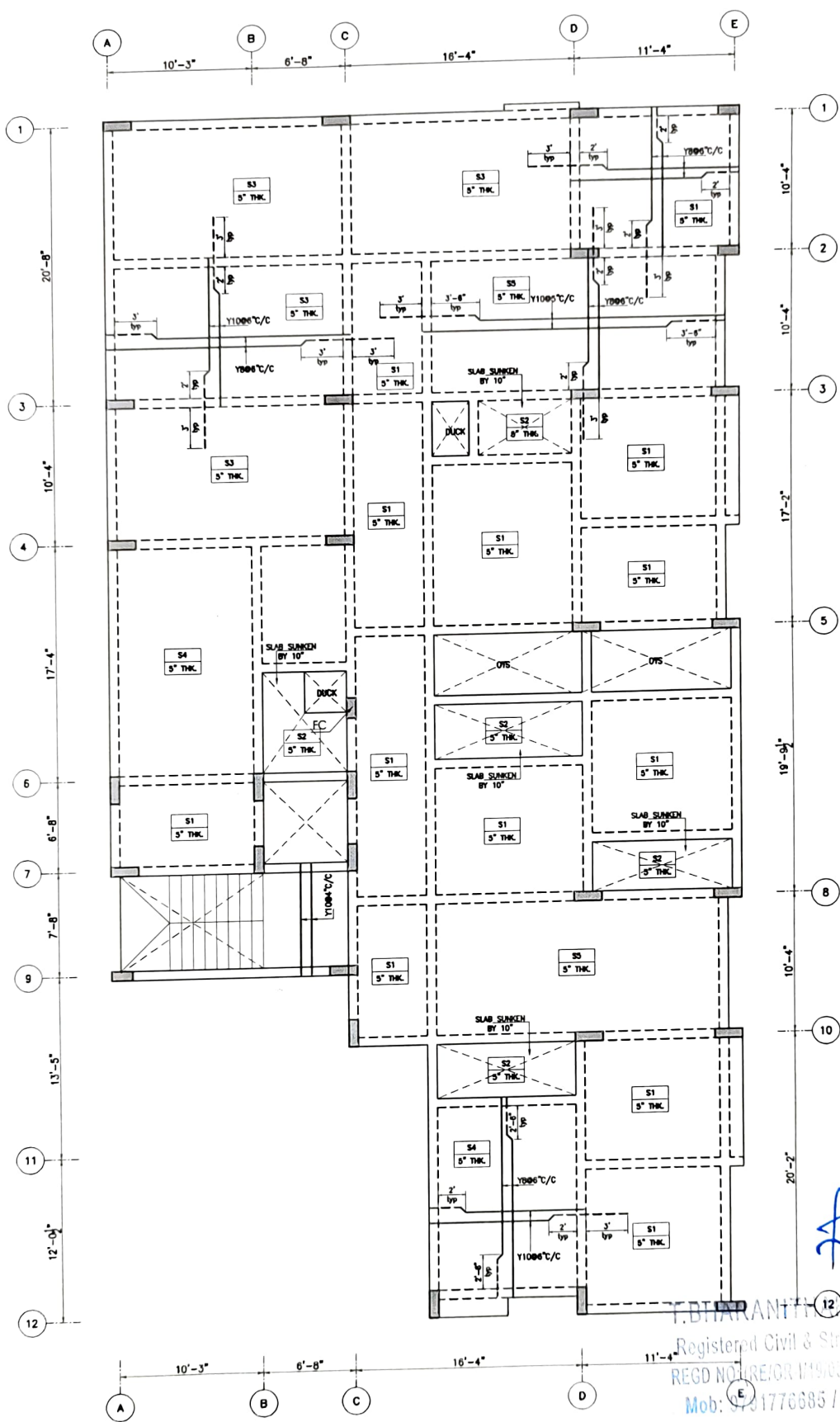
SECTION 1-1

NOTE:

1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.
2. Clear cover = 25mm.
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. Lap length=50 ϕ and all laps must be staggered

DESIGNED BY	ALL DIMENSIONS ARE IN FEET AND INCHES	REINFORCEMENT DRAWINGS
CHECKED BY	APPROVED BY - 01/05/2025	DATE
DATE	01/05/2025	SCALE
1:1		

PROPOSED REINFORCEMENT AT CHOUKALU

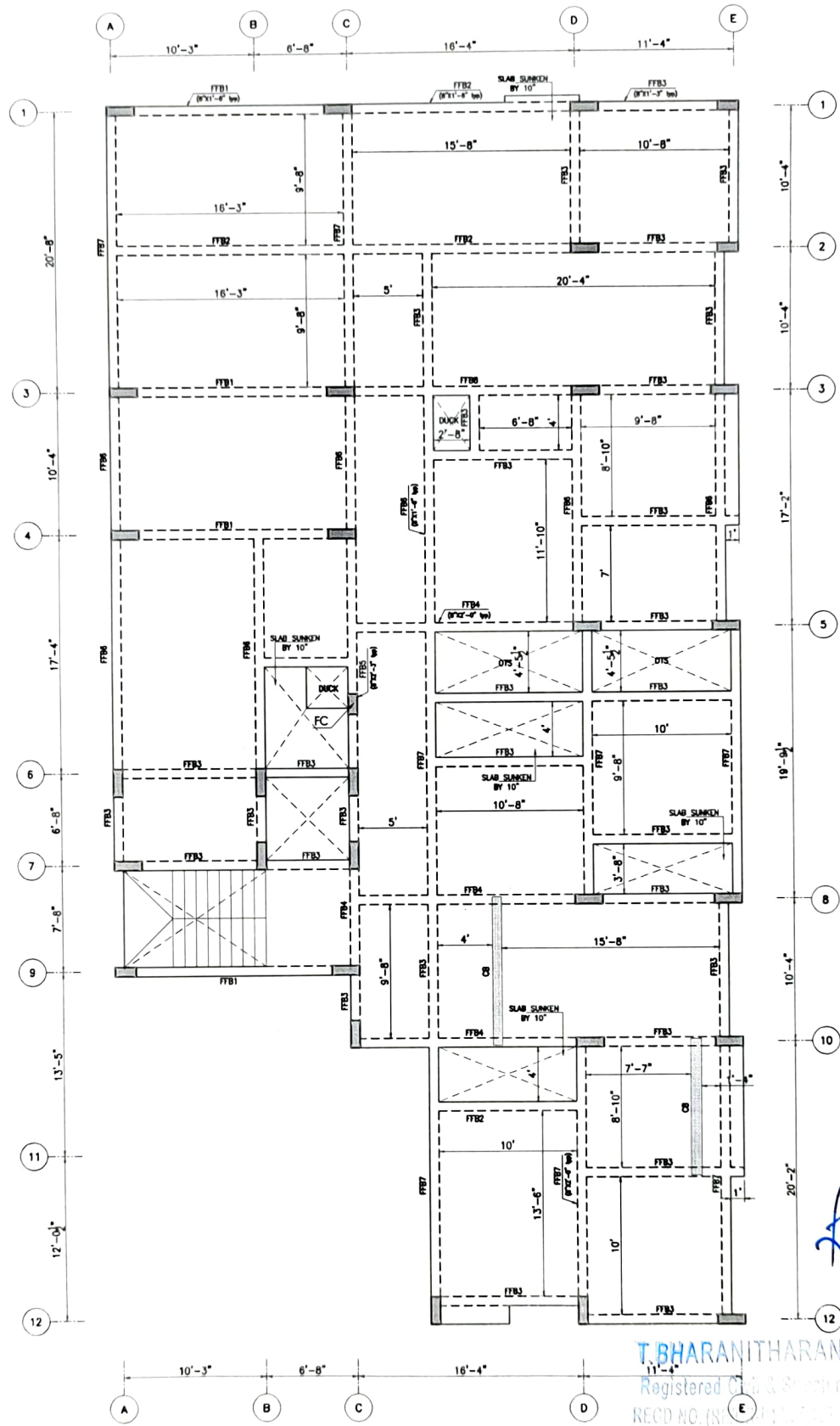


LAYOUT OF FOURTH FLOOR ROOF SLAB

ank length for slabs with typical reinforcements
all be made as per the miscellaneous details
esented in sheet-14.
lear cover = 15mm.
-Denotes top reinforcement of slab
-Denotes bottom reinforcement of slab
ap length=50# and all laps must be staggered

- LEGEND**
- ℄ : CENTRE LINE
 - NGL : NATURAL GROUND LEVEL
 - FFL : FINISHED FLOOR LEVEL
 - TYP. : TYPICAL
 - : COLUMN
 - : COLUMN CENTERLINE
 - : SITE BOUNDARY

JOB NO: KAAF0001				All dimensions are in Feet and Inches				Sheet: 19 (A3 SHEET)	
Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Sign	Revision	
TBN		TBN	01-05-2025		TBN	01-05-2025		RO	
PROPOSED RESIDENTIAL AT CHOOLAMEDU				CLIENT:		CONSULTANT:			
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF FOURTH FLOOR ROOF SLAB				-----		KURAL ASSOCIATES			
						No.3/1517, Mugavakkam Main Road, Mothamangalam, Porur, Chennai-123. Ph:044-42864312, MO:9191774655. Email:kuralassociates,engineers@gmail.com			



LAYOUT OF FOURTH FLOOR ROOF BEAM

Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-14. Clear cover = 25mm. Top reinforcement shall be lapped at midspan and bottom reinforcement at support. length=50# and all laps must be staggered

LEGEND

—

 : CENTRE LINE

NGL

 : NATURAL GROUND LEVEL

FFL

 : FINISHED FLOOR LEVEL

TYP.

 : TYPICAL

■

 : COLUMN

—

 : COLUMN CENTERLINE

—

 : SITE BOUNDARY

JOB NO: KAF0001

All dimensions are in Feet and Inches

Sheet: 20 (A3 SHEET)

Designed by

TBN

Sign

Checked by

TBN

Date

01-05-2025

Sign

Approved by

TBN

Date

01-05-2025

Sign

Revision

RO

PROPOSED RESIDENTIAL AT CHOOLAMEDU

CUSTOMER:

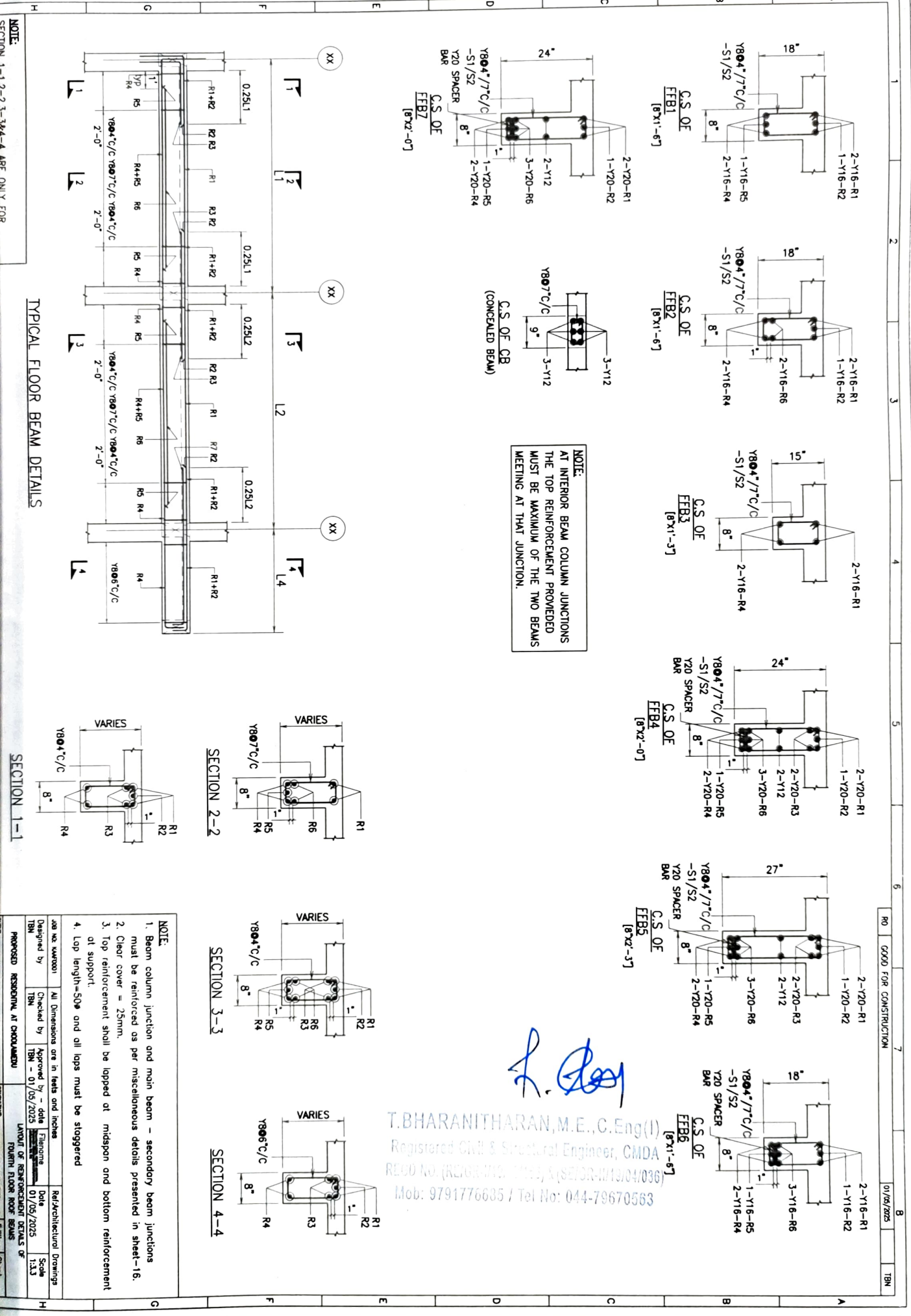
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF FOURTH FLOOR ROOF BEAM

CONSULTANT:

KURAL ASSOCIATES

Perception is Description

NO.3/1317, Mugavolkulam Main Road, Madhavandapuram, Porur, Chennai-123, Ph:044-43663112, Mob:9791777465, Email:kuralassociatesengineers@gmail.com

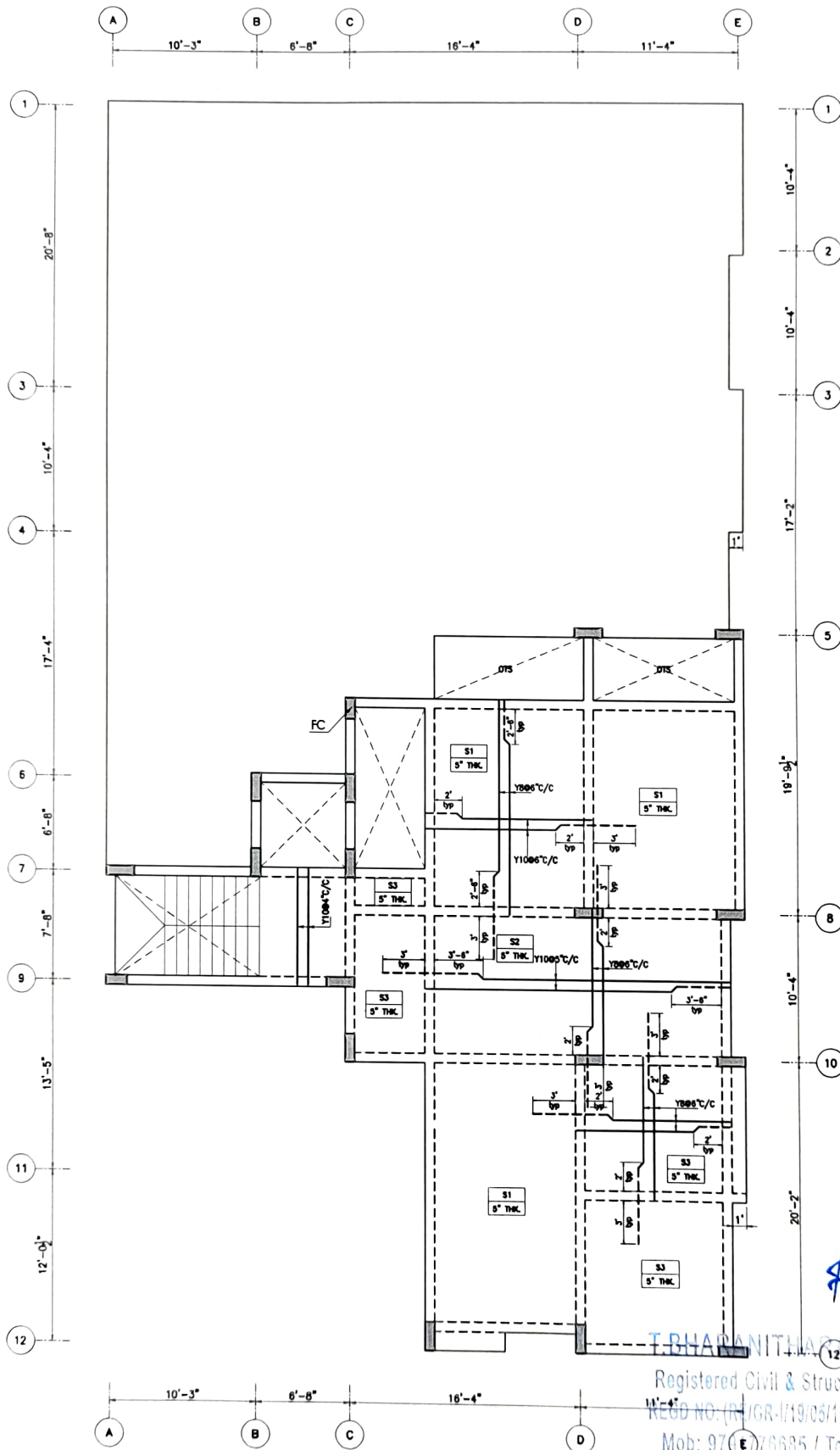


NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

[Handwritten Signature]

T.BHARANITHARAN, M.E., C.Eng (I)
Registered Civil & Structural Engineer, CMDA
REGD No. (REGD CIVIL) 1112, X (SE/32-11/13/04/036)
Mob: 9791776635 / Tel No: 044-79670563

NOTE:			
1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.			
2. Clear cover = 25mm.			
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.			
4. Lap length=50 ϕ and all laps must be staggered			
DESIGNED BY	ALL DIMENSIONS ARE IN FEET AND INCHES	DATE	SCALE
1BN	1BN - 01/05/2025	01/05/2025	1:1.3
PROJECTED RESIDENTIAL AT CHOLAKKUDU			
LAYOUT OF REINFORCEMENT DETAILS OF FOURTH FLOOR ROOF BEAMS			



LAYOUT OF FIFTH FLOOR ROOF SLAB

ank length for slabs with typical reinforcements
all be made as per the miscellaneous details
presented in sheet-14.
clear cover = 15mm.
-Denotes top reinforcement of slab
-Denotes bottom reinforcement of slab
lap length=50# and all laps must be staggered

LEGEND

L : CENTRE LINE
 NGL : NATURAL GROUND LEVEL
 FFL : FINISHED FLOOR LEVEL
 TYP. : TYPICAL
 ■ : COLUMN
 — : COLUMN CENTERLINE
 — : SITE BOUNDARY

JOB NO: KAF0001

All dimensions are in Feet and Inches

Sheet: 22 (A3 SHEET)

Designed by

Sign

Checked by

Date

Sign

Approved by

Date

Sign

Revision

TBN

TBN

01-05-2025

TBN

01-05-2025

RO

PROPOSED RESIDENTIAL AT CHOOLAIMEDU

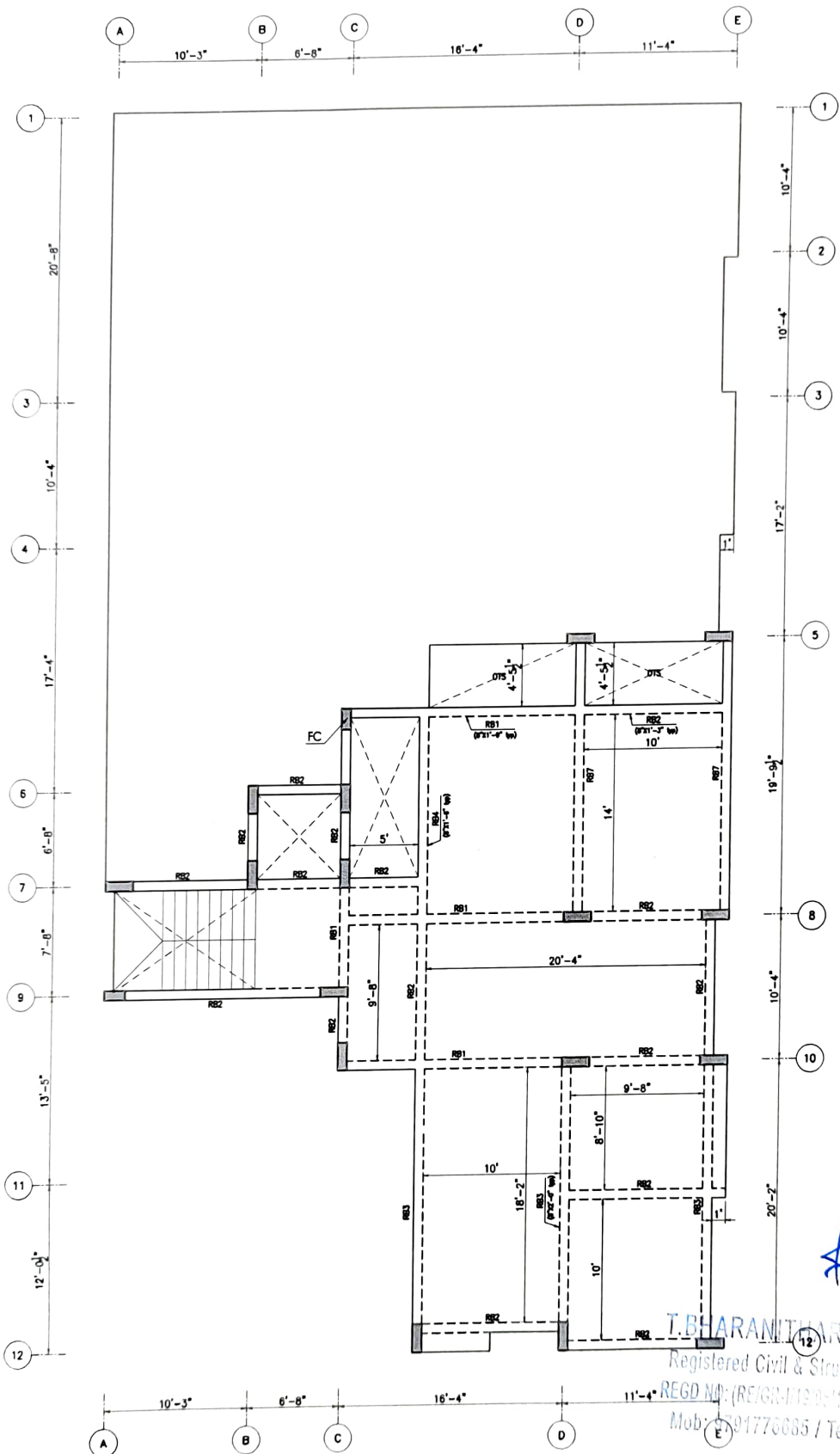
CLIENT:

CONSULTANT:

KURAL ASSOCIATES
Parsippan to Services

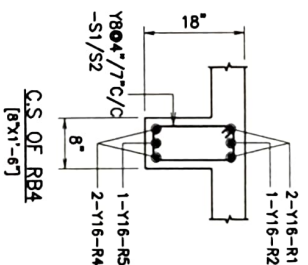
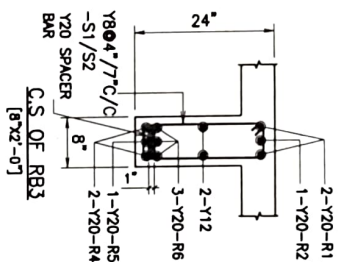
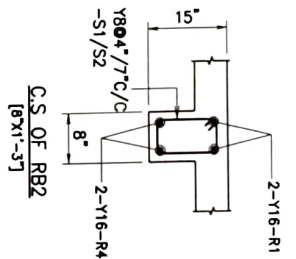
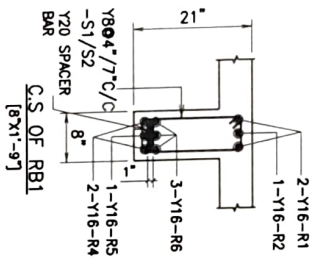
NO.3/1517, Mugalakkam Main Road, Madhanandapuram,
Porur, Chennai-125, Ph:044-4244312, MOB:9791774443,
Email:kuralassociatesengineers@gmail.com

LAYOUT OF DIMENSIONAL AND
REINFORCEMENT DETAILS OF FIFTH
FLOOR ROOF SLAB



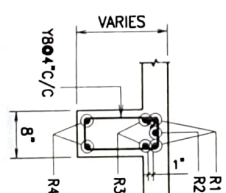
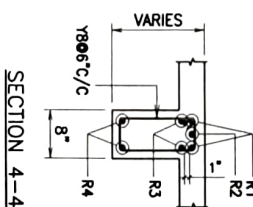
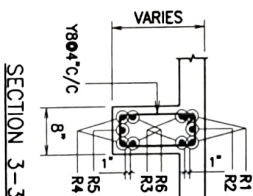
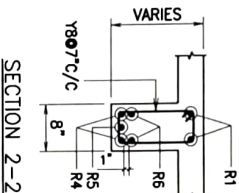
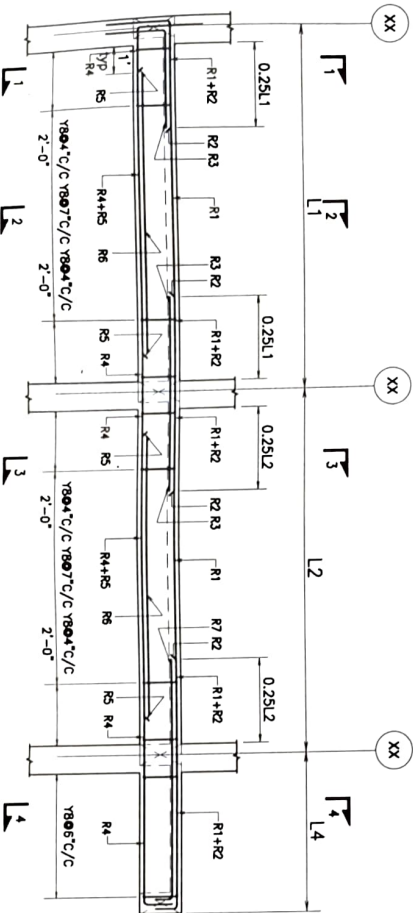
LAYOUT OF FIFTH FLOOR ROOF BEAM

Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-14. Clear cover = 25mm. Top reinforcement shall be lapped at midspan and bottom reinforcement at support. length=50% and all laps must be staggered	LEGEND ⋈ : CENTRE LINE — : NATURAL GROUND LEVEL — : FINISHED FLOOR LEVEL — : TYPICAL ■ : COLUMN — : COLUMN CENTERLINE — : SITE BOUNDARY	JOB NO: KAF0001				All dimensions are in Feet and Inches				Sheet: 23 (A3 SHEET)				
		Designed by	Sign	Checked by	Date	Sign	Approved by	Date	Sign	Revision				
		TBN		TBN	01-05-2025		TBN	01-05-2025		RO				
		PROPOSED RESIDENTIAL AT CHOOALAMEDU						CLIENT:		CONSULTANT:				
LAYOUT OF DIMENSIONAL AND REINFORCEMENT DETAILS OF FIFTH FLOOR ROOF BEAM						----		KURAL ASSOCIATES Engineering & Architecture NO.3/1317, Mugallalam High Road, Madhavandapuram, Porur, Chennai-128. PHONE-6234312, MOB-9791774685 mailto:kuralassociatesengineers@gmail.com						



NOTE:
AT INTERIOR BEAM COLUMN JUNCTIONS
THE TOP REINFORCEMENT PROVIDED
MUST BE MAXIMUM OF THE TWO BEAMS
MEETING AT THAT JUNCTION.

[Handwritten signature]



NOTE:
1. Beam column junction and main beam - secondary beam junctions must be reinforced as per miscellaneous details presented in sheet-16.
2. Clear cover = 25mm.
3. Top reinforcement shall be lapped at midspan and bottom reinforcement at support.
4. Lap length=50φ and all laps must be staggered

DESIGNED BY	ALL DIMENSIONS ARE IN FEET AND INCHES	REV/ARCHITECTURAL DRAWINGS
CHECKED BY	APPROVED BY - DATE	DATE
TBN	TBN - 01/06/2025	01/06/2025
		Scale 1:33

AMOUNT OF REINFORCEMENT DETAILS OF

TYPICAL FLOOR BEAM DETAILS

SECTION 1-1