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DIGITALLY VERIFIED RECORD

Office of Executive Engineer,
Structural & Quality Control Cell,
Tamil Nadu Urban Habitat
Development Board,
No.5, Kamarajar Salai, Chennai – 5.

STABILITY CERTIFICATE

The detailed engineering and structure design of the proposed construction of building comprising 8 Blocks (A1, A2, A3, B1, B2, C1, C2 & D1) with 504 (G+5 floor) tenements at Periyar Nagar Scheme in S.No 1677/6 & 1691/5 of Vadakku Valliyur Part-1 Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu has been done by me/us based on the report of geotechnical investigation (soil test) done by Government College of Engineering, Tirunelveli Report No. 178 & 178A/SOIL/21/GCE/CIVIL/ Consultancy/2021 Dated 30.12.2021 & 21.07.2022 and considering the functional requirement of the building.

2. It is certified that among other factors, the proposed building has been designed to resist earthquake. I/We have checked various parameters and found that the proposed building would be safe.

3. I/We further certify that:

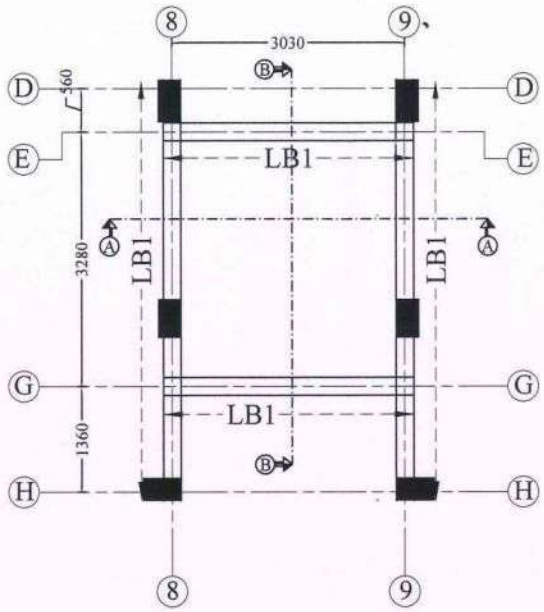
(i) The minimum grade of concrete is M25.

(ii) The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456:2000, live load 2 KN/m^2 as per IS 875 Part II and designed for earthquake resistant structure as per IS Code 1893 (Part 1):2016.

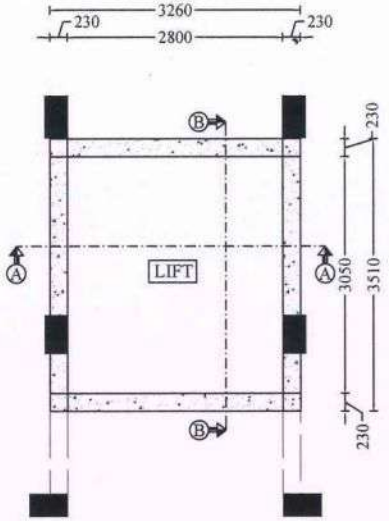
4. The building will be safe and sound when used for the purpose for which it is designed.

R. VENKATESAN, M.E.,
Assistant Engineer
Registered Structural Engineer Grade-I (SE)
Registration No: SE/I/2024/4/0073
Tamil Nadu Urban Habitat Development Board
No. 5, Kamarajar Salai, Chennai-600 005.

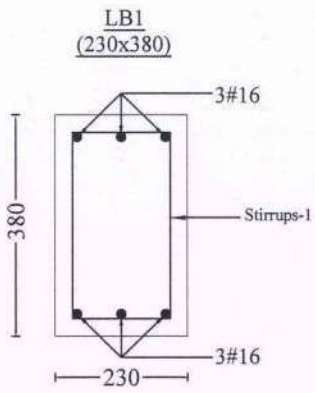
LAYOUT AND RC DETAILS OF LIFT WELL



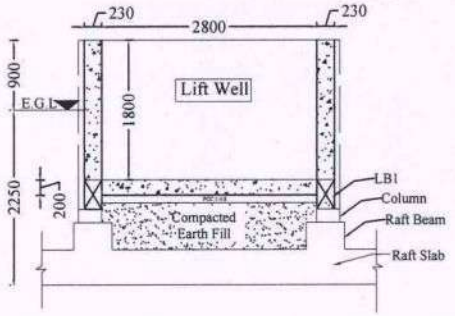
LIFT BEAM LAYOUT
BELOW THE LIFT PIT AREA



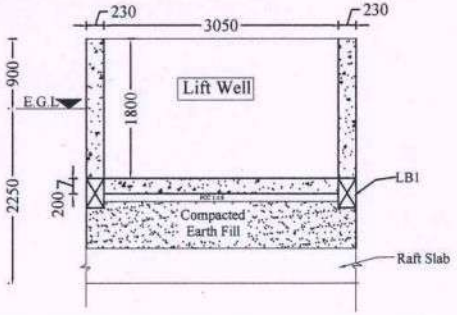
PLAN OF LIFT WELL-TYPICAL



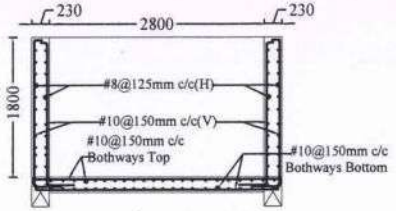
NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 700 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.



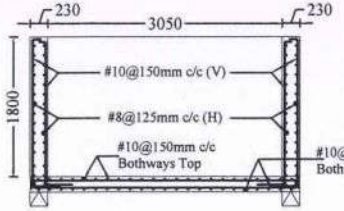
SECTION ON A-A (GENERAL ARRANGEMENT)



SECTION ON B-B (GENERAL ARRANGEMENT)



SECTION ON A-A (REINFORCEMENT DETAILS)



SECTION ON B-B (REINFORCEMENT DETAILS)

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
LAYOUT & RC DETAILS OF LIFT WELL.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/06.

REVISION NO.:

TRUE COPY
08/04/25

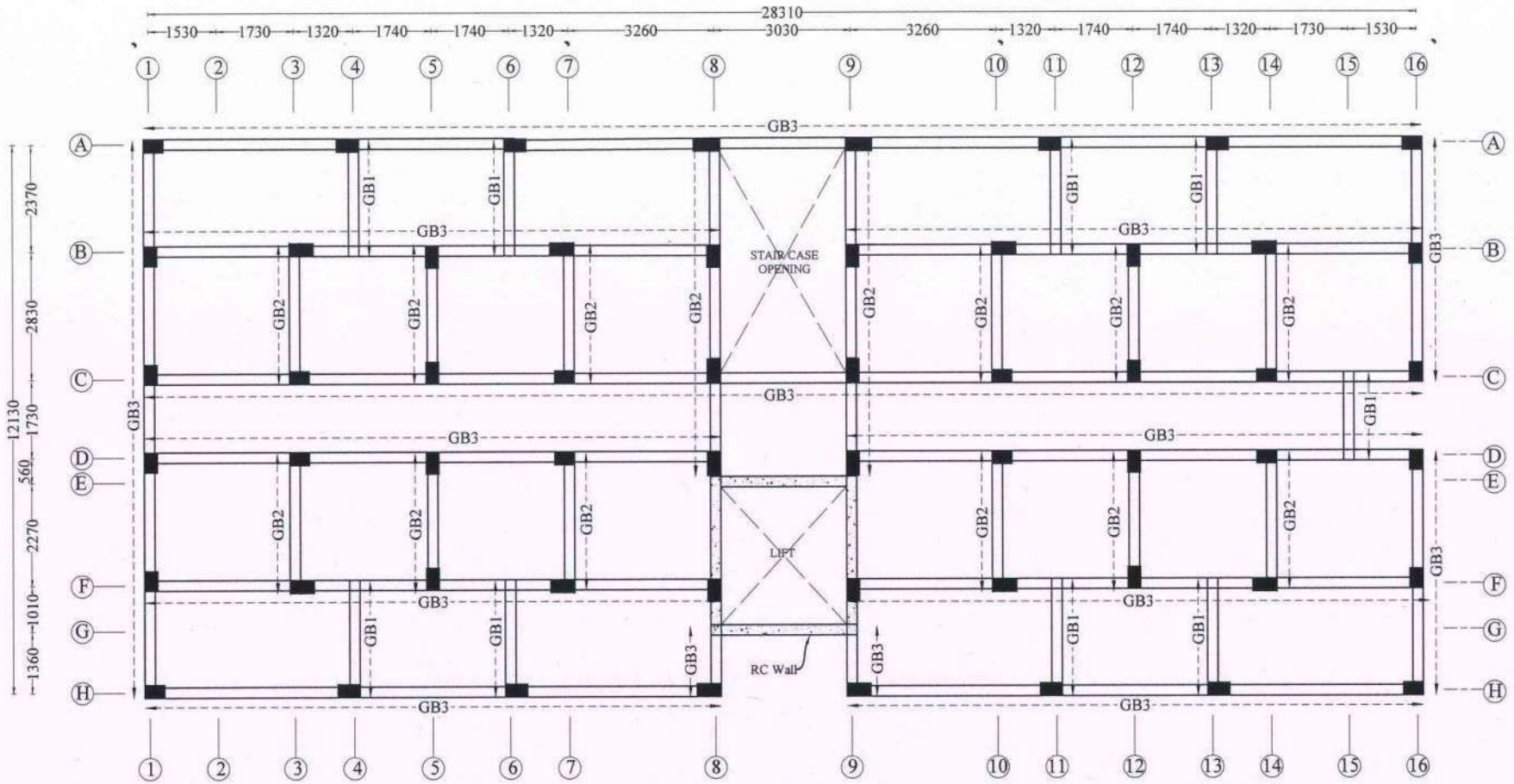
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
08/04/25

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GRADE BEAM LAYOUT



NOTE :

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(d)	Slab	- 25 mm

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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/07.

REVISION NO.:

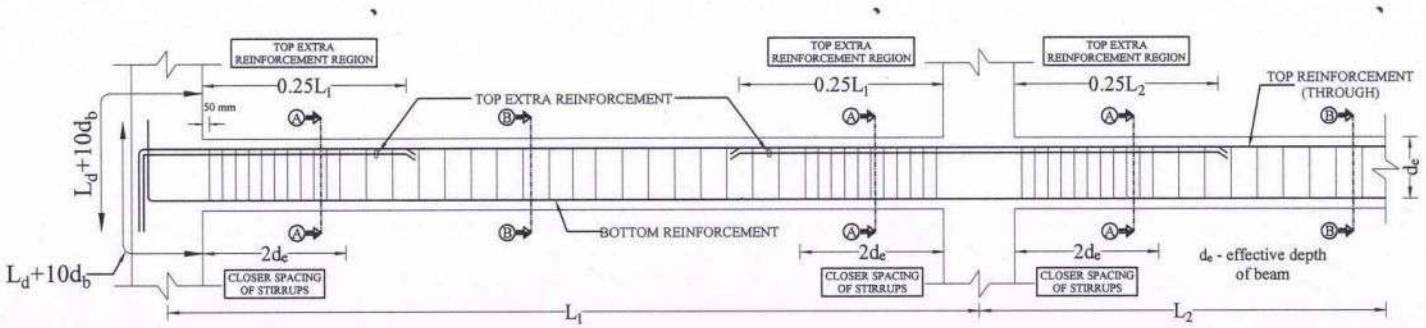
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GRADE BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	GB1 230 x 380	2#12(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 3#12 230	2#12(T) 380 2L-#8@175 mm c/c rest 3#12 230
2.	GB2 230 x 380	2#12(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 230	2#12(T) 380 2L-#8@150 mm c/c rest 2#12+1#16 230
3.	GB3 230 x 380	2#12(T)+1#16(E) 380 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 230	2#12(T) 380 2L-#8@150 mm c/c rest 2#12+1#16 230

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05/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/08.

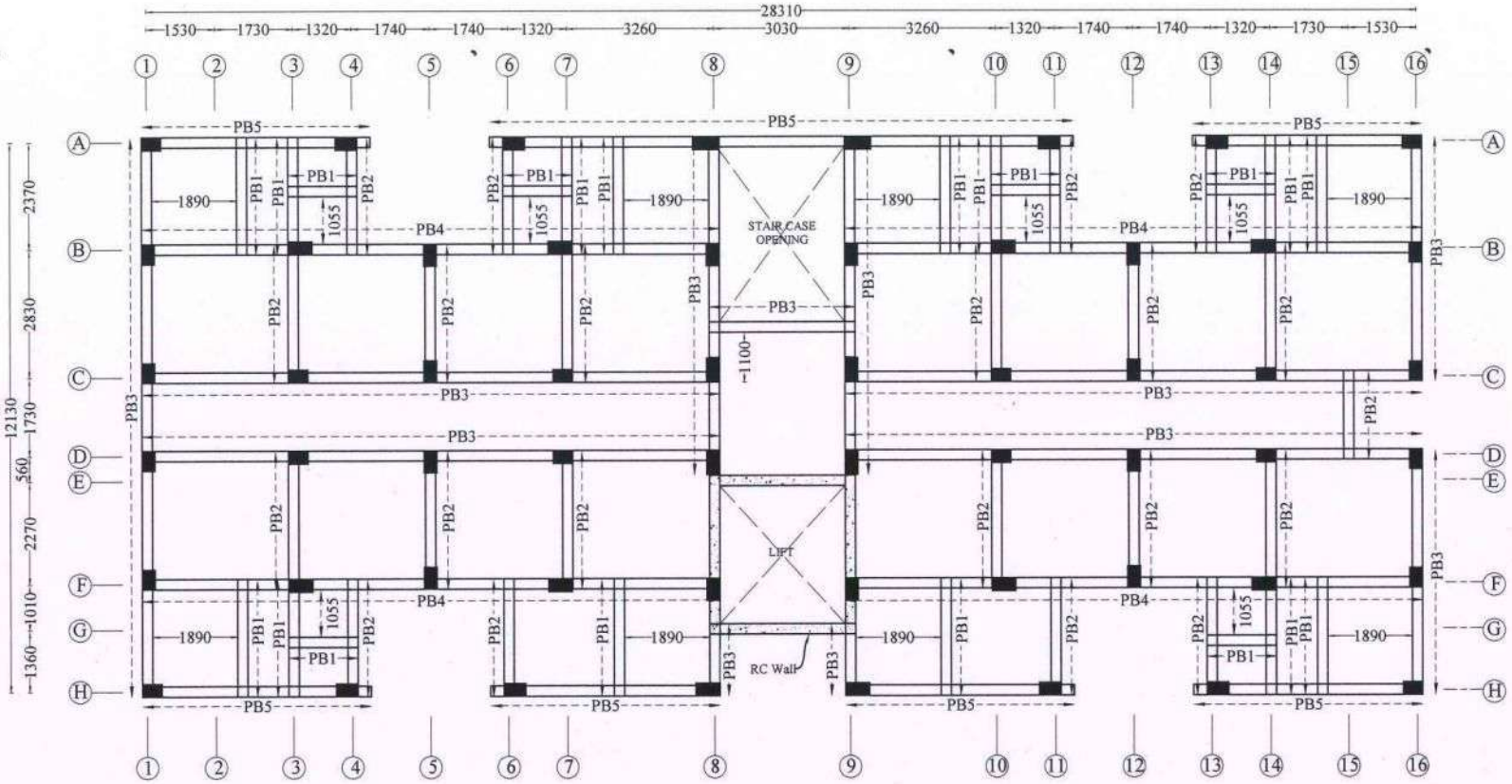
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLINTH BEAM LAYOUT



NOTE:
1. For Staircase details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/02.**

NOTE :

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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/09.

REVISION NO.:

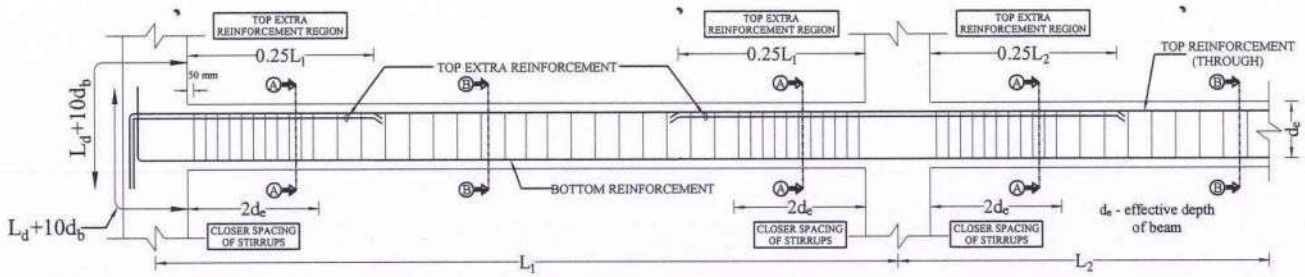
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



PLINTH BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	PB1 230 x 300	2#12(T)+1#12(E) 2L-#8@75mm c/c for 600mm length from column face 2#12 300 230	2#12(T) 2L-#8@175 mm c/c rest 2#12 300 230
2.	PB2 230 x 380	2#12(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230
3.	PB3 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
4.	PB4 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
5.	PB5 230 x 380	2#16(T)+1#20(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV 07/04/25

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STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/10.

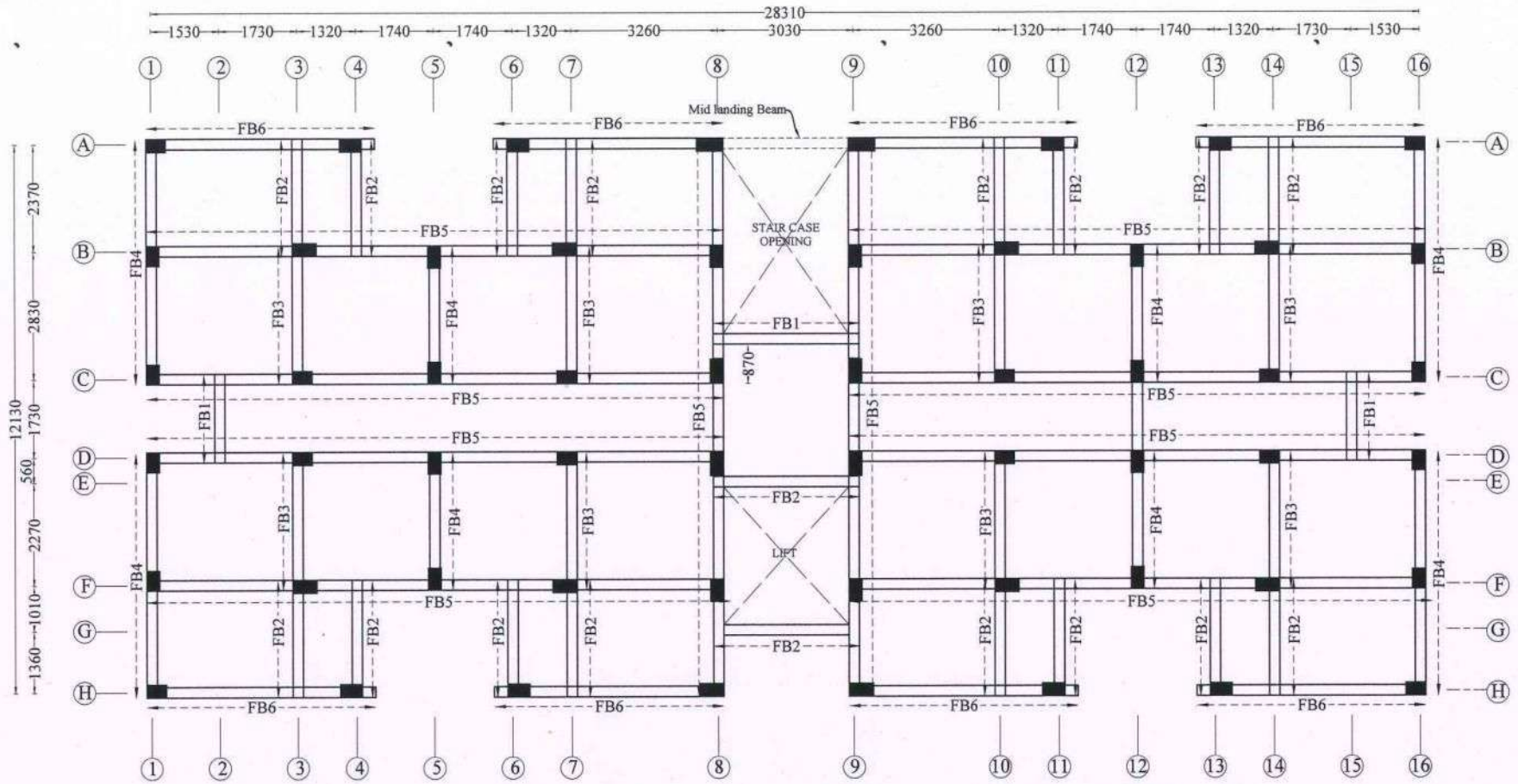
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GROUND FLOOR BEAM LAYOUT



NOTE :

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8. Analysis of the structure done with E tabs.
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12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/11.

REVISION NO.:

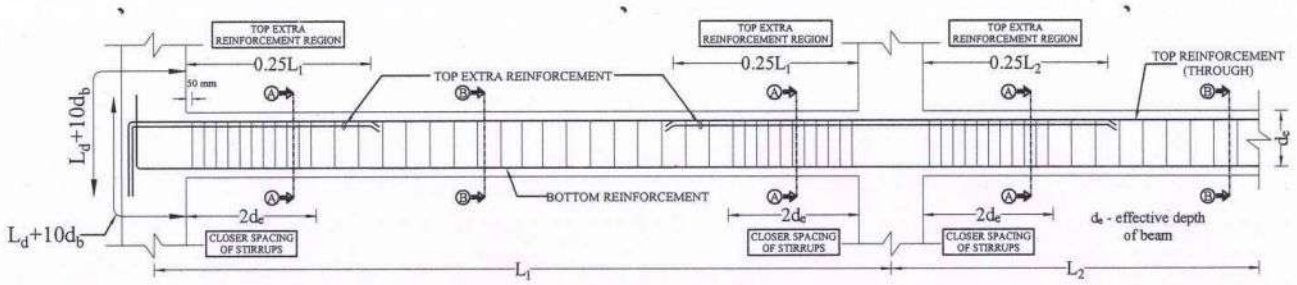
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GROUND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 2#16 230	2#16(T) 380 2L-#8@175 mm c/c rest 2#16 230
2.	FB2 230 x 500	2#16(T)+1#12(E) 500 2L-#8@75mm c/c for 1000mm length from column face 2#16 230	2#16(T) 500 2L-#8@125 mm c/c rest 2#16 230
3.	FB3 230 x 500	2#16(T)+1#16(E) 500 2L-#8@75mm c/c for 1000mm length from column face 2#16+1#12 230	2#16(T) 500 2L-#8@125 mm c/c rest 2#16+1#12 230
4.	FB4 230 x 500	2#16(T)+1#20(E) 500 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 230	2#16(T) 500 2L-#10@125 mm c/c rest 2#16+1#20 230
5.	FB5 230 x 500	2#20(T)+1#16(E) 500 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 230	2#20(T) 500 2L-#10@125 mm c/c rest 2#16+1#20 230
6.	FB6 230 x 500	3#16(T)+2#16(E) 500 2L-#10@100mm c/c for 1000mm length from column face 3#16 230	3#16(T) 500 2L-#10@150 mm c/c rest 3#16 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth, Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes, coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/12.

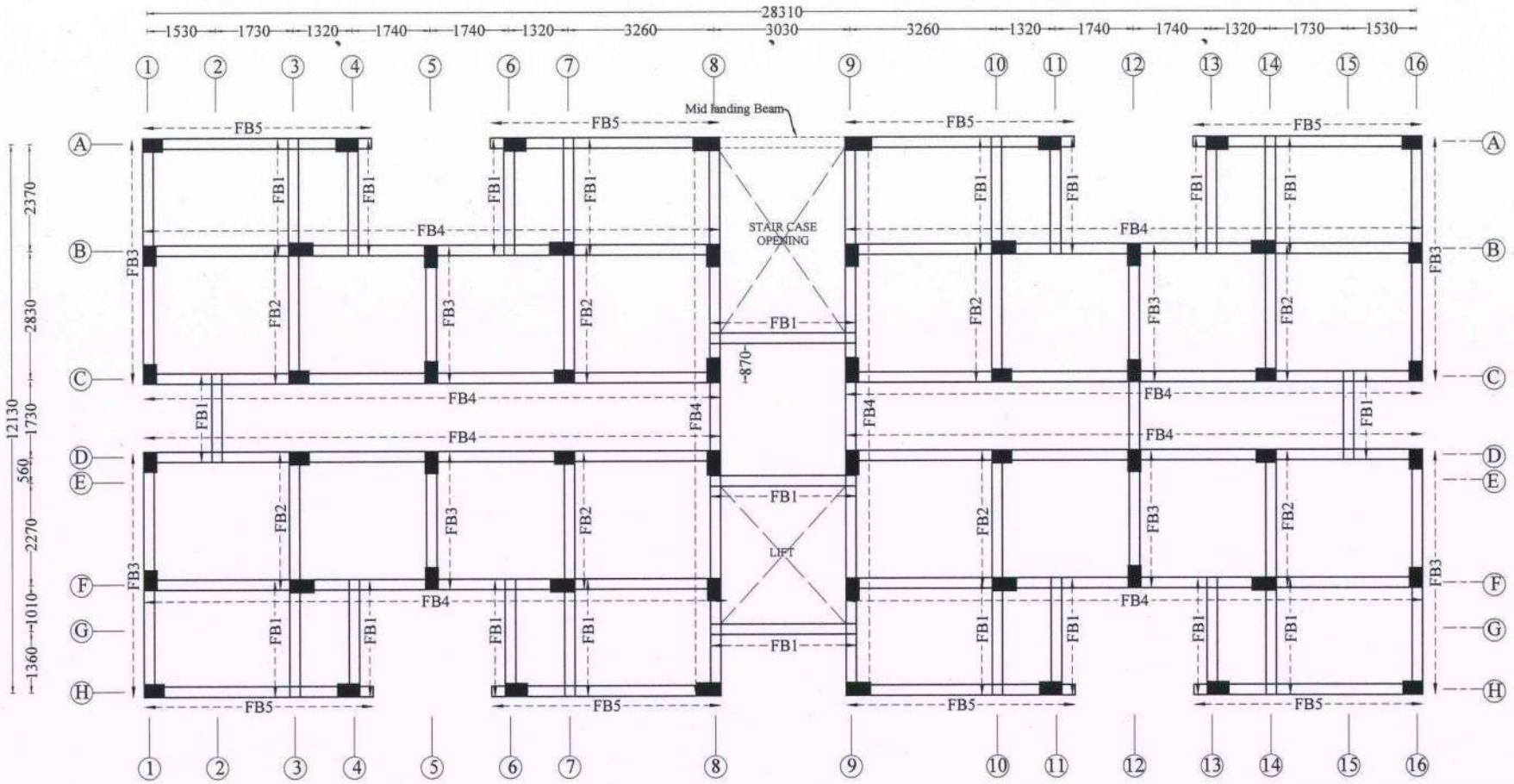
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

FIRST & SECOND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/13.

REVISION NO.:

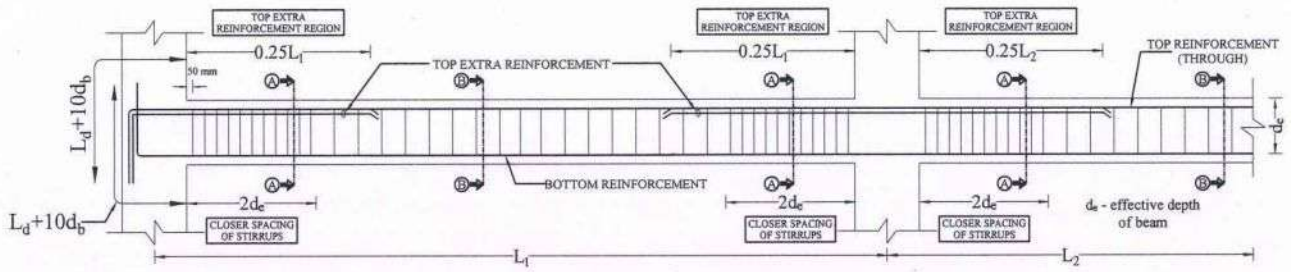
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



FIRST & SECOND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 380 230
2.	FB2 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230
3.	FB3 230 x 380	2#16(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#16(T) 2L-#10@125 mm c/c rest 3#16 380 230
4.	FB4 230 x 380	2#20(T)+1#16(E) 2L-#10@100mm c/c for 700mm length from column face 2#16+1#20 380 230	2#20(T) 2L-#10@125 mm c/c rest 2#16+1#20 380 230
5.	FB5 230 x 380	2#20(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#20(T) 2L-#10@150 mm c/c rest 3#16 380 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/14.

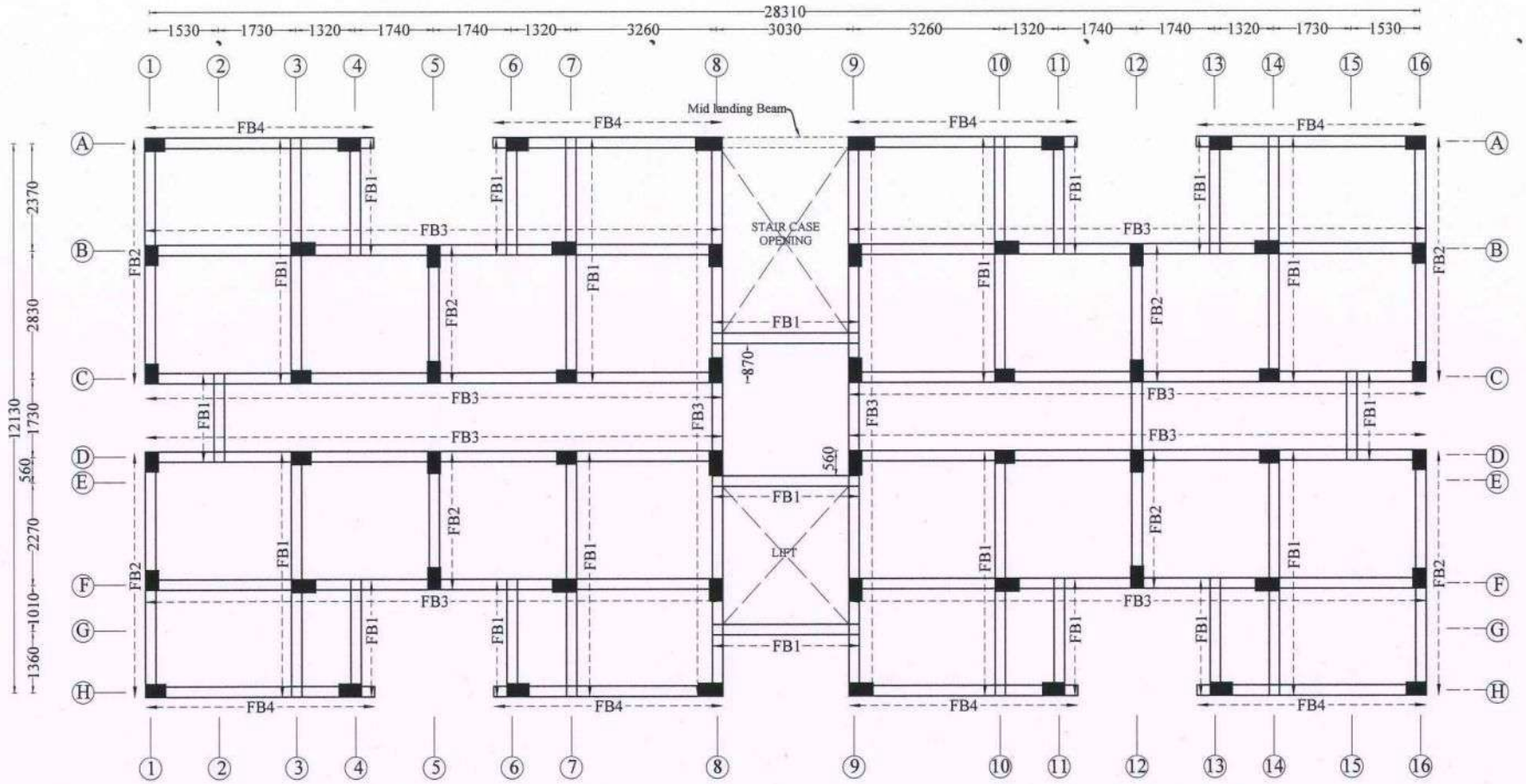
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

THIRD & FOURTH FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/15.

REVISION NO.:

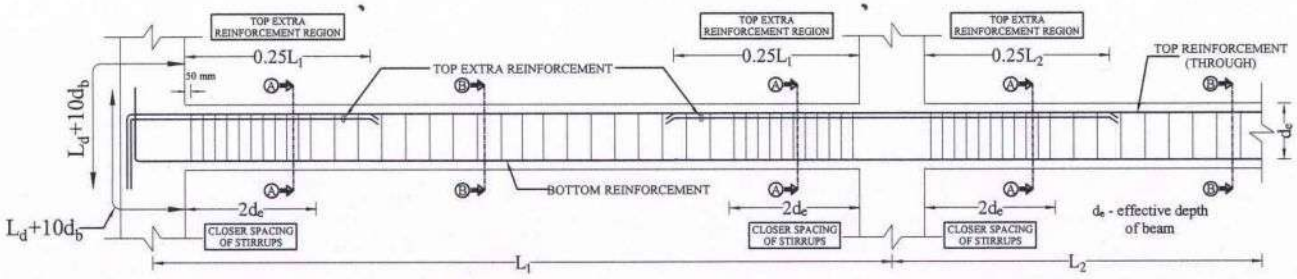
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RD 07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

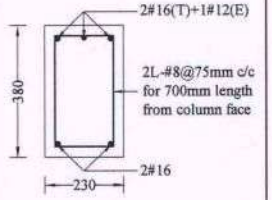
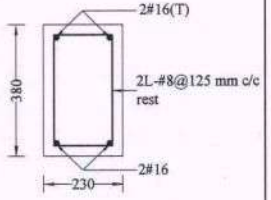
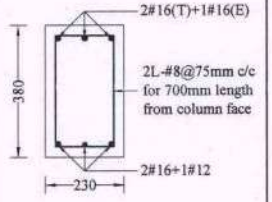
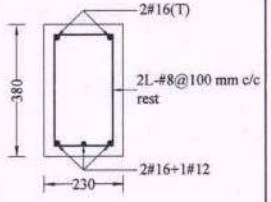
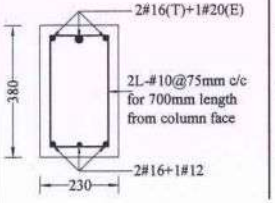
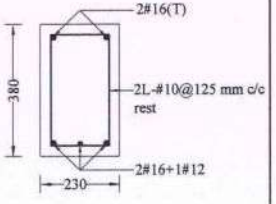
sd.xxxx 05.04.2025
Chief Engineer

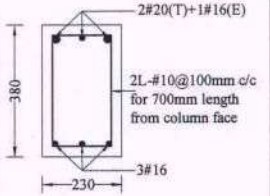
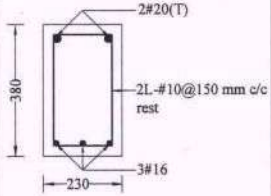
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



THIRD & FOURTH FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380		
2.	FB2 230 x 380		
3.	FB3 230 x 380		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	FB4 230 x 380		

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/16.

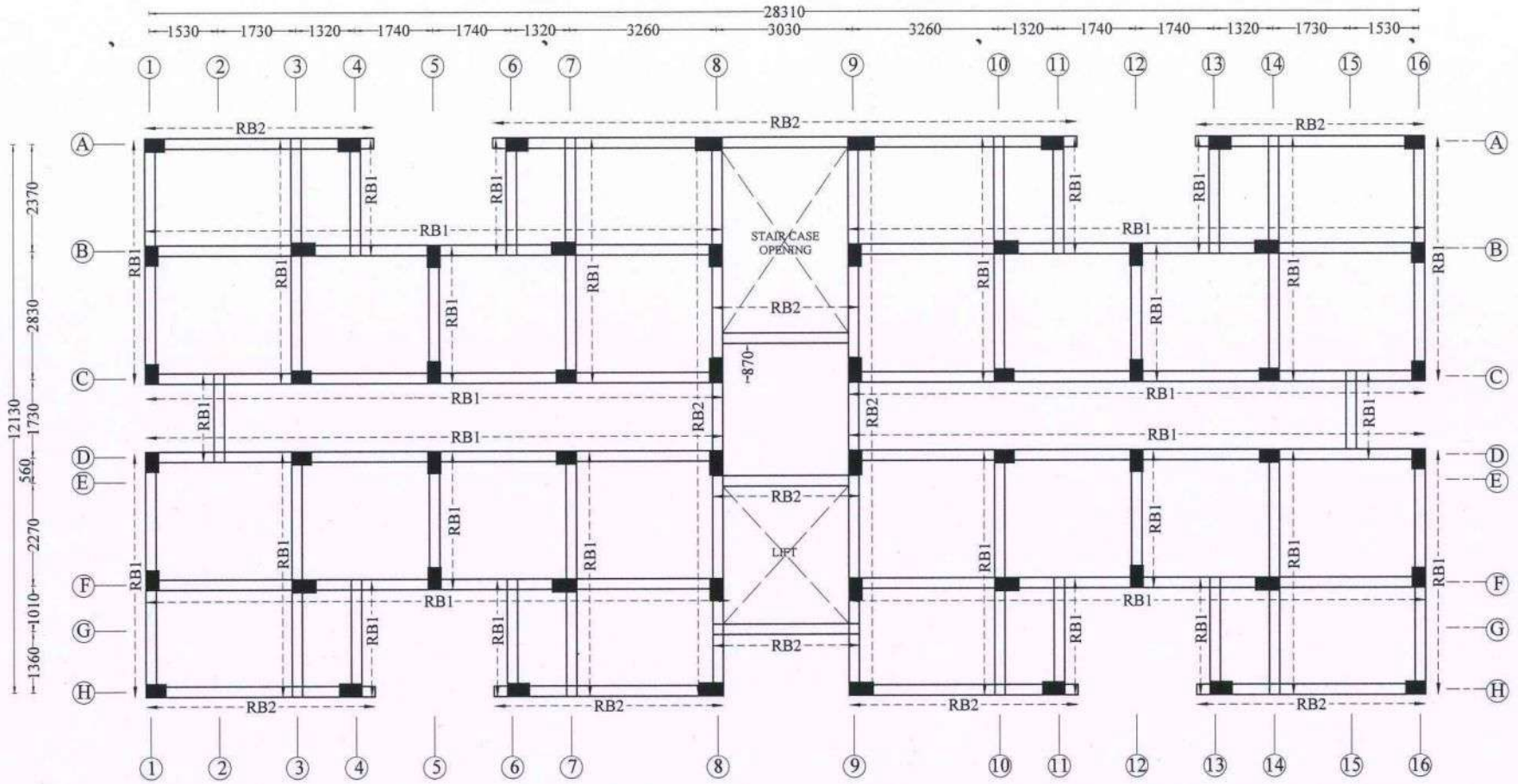
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/17.

REVISION NO.:

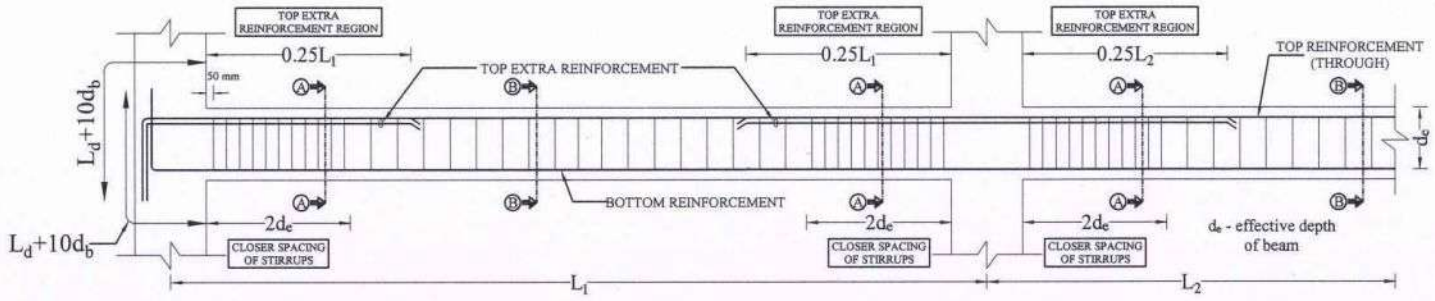
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

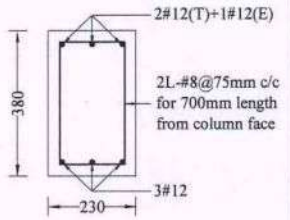
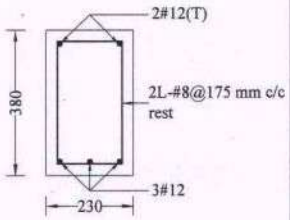
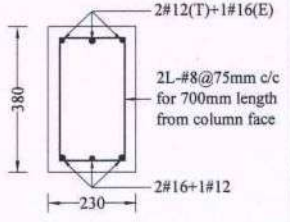
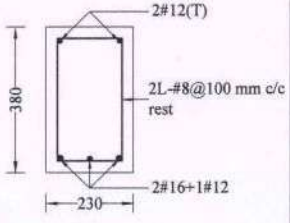
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TERRACE FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	RB1 230 x 380		
2.	RB2 230 x 380		

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
EE 07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/18.

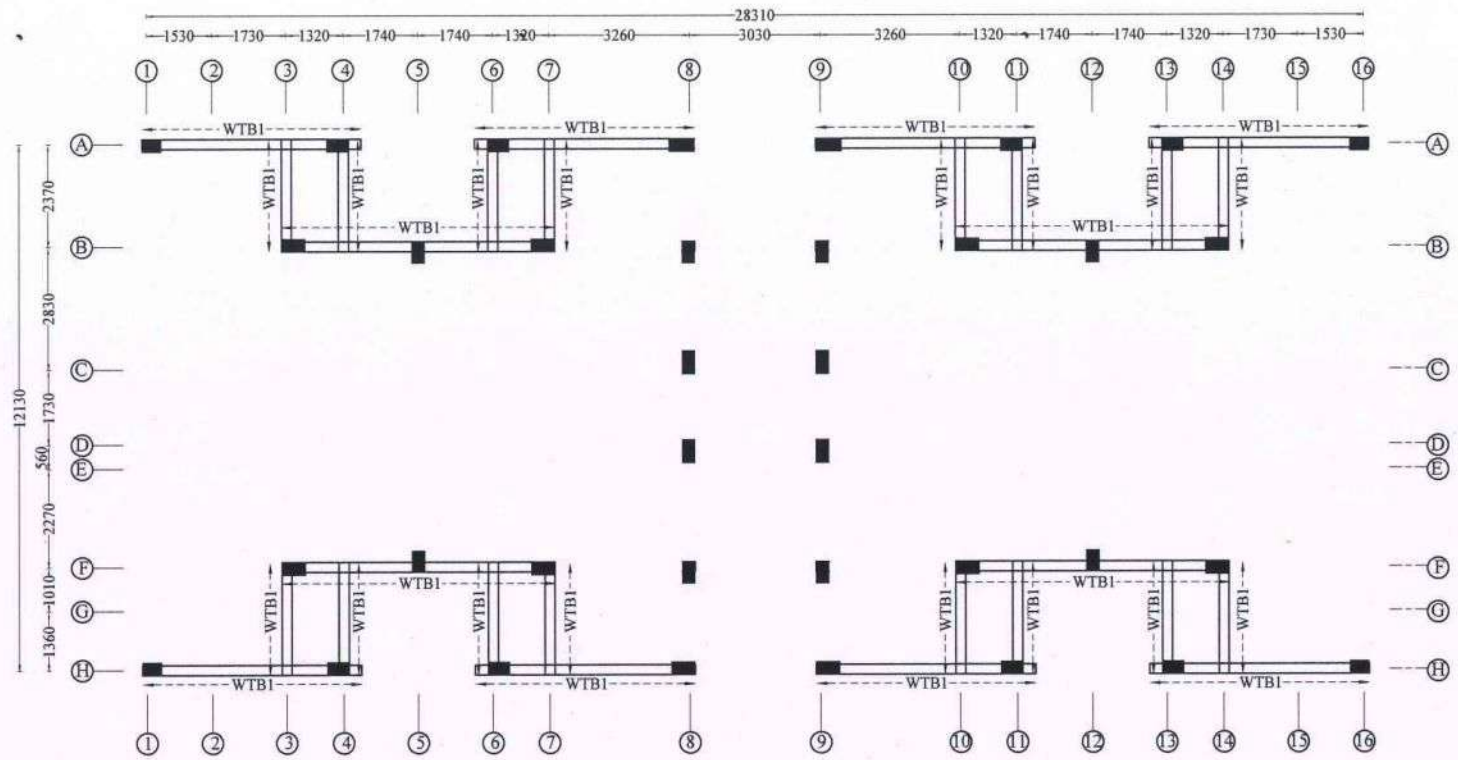
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

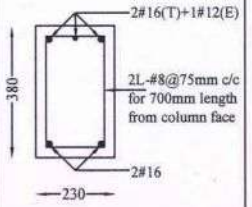
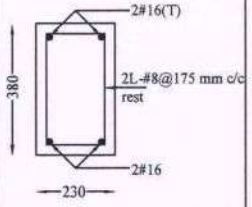
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

WATER TANK BEAM LAYOUT & DETAILS



NOTE:
1. For Water tank details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/04.**

WATER TANK BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SUPPORT
1.	WTB1 230 X 380	
		SPAN
		

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
WATER TANK BEAM LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/19.

REVISION NO.:

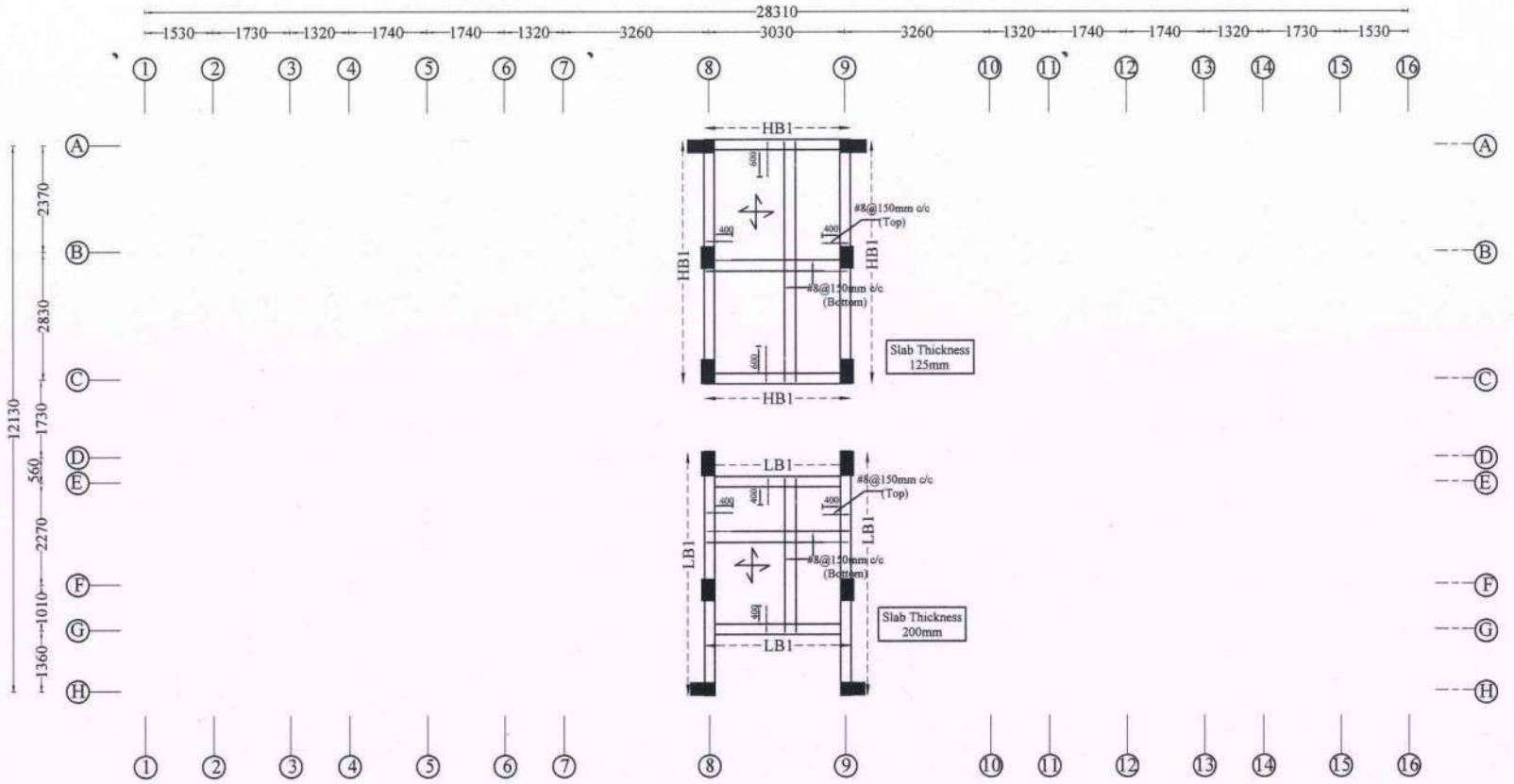
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
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15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/20.

REVISION NO.:

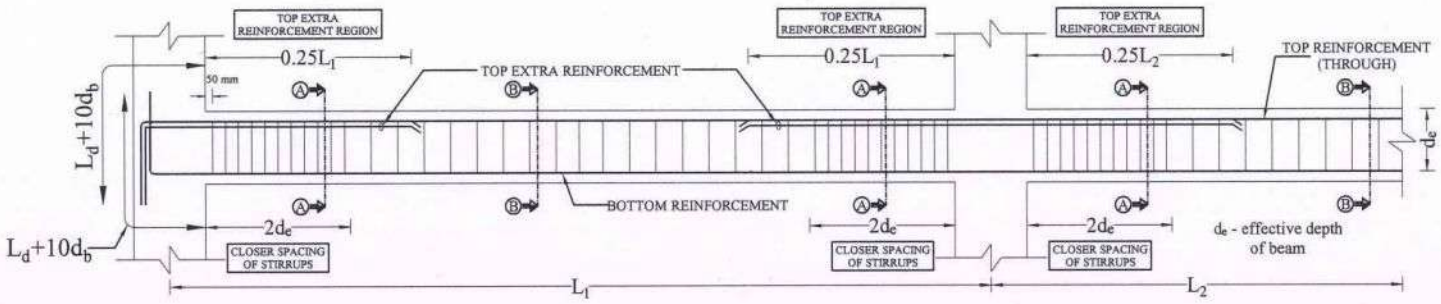
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV 07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

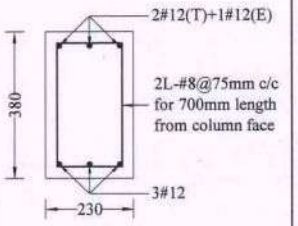
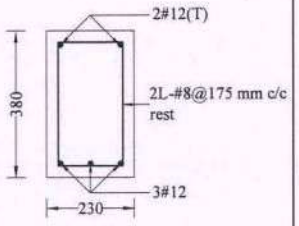
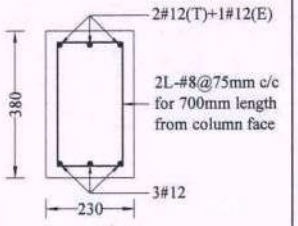
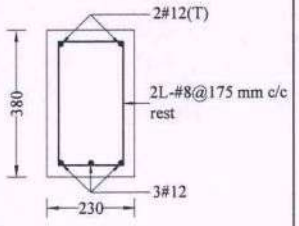
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



HEAD ROOM & LIFT ROOM BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	HB1 230 x 380		
2.	LB1 230 x 380		

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/21.

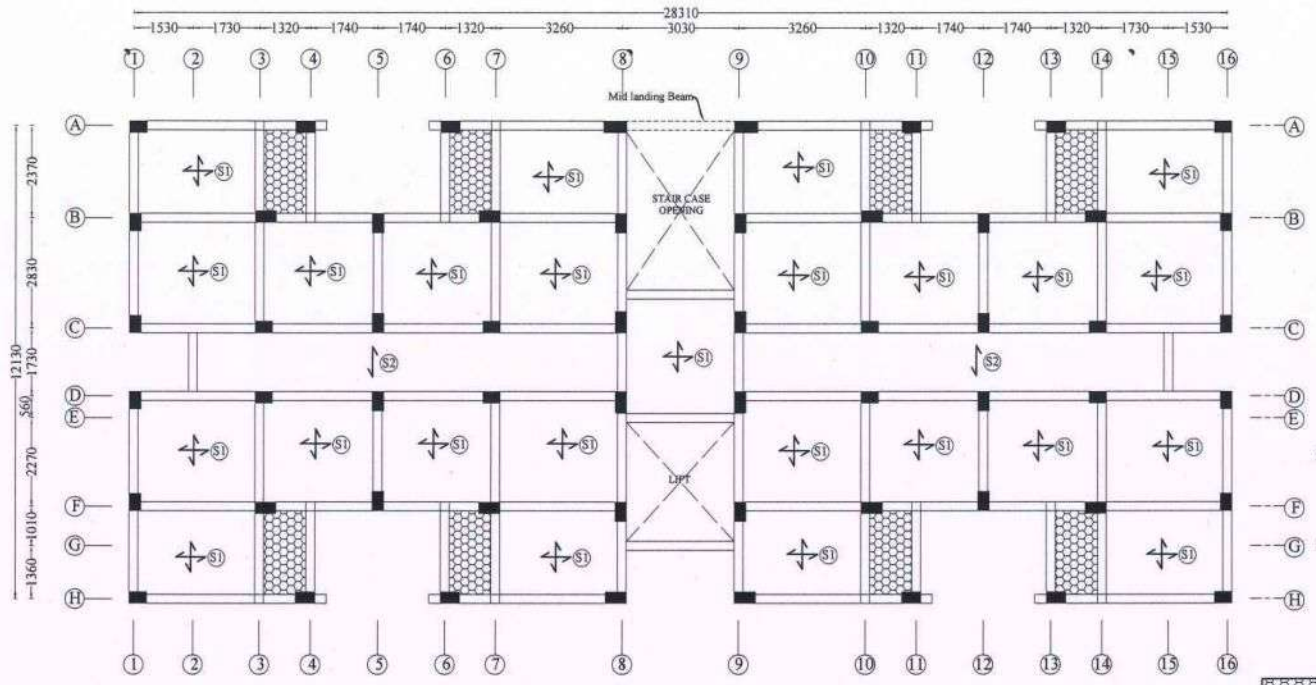
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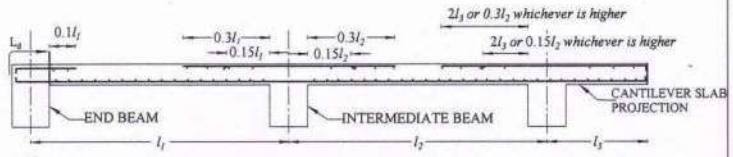
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

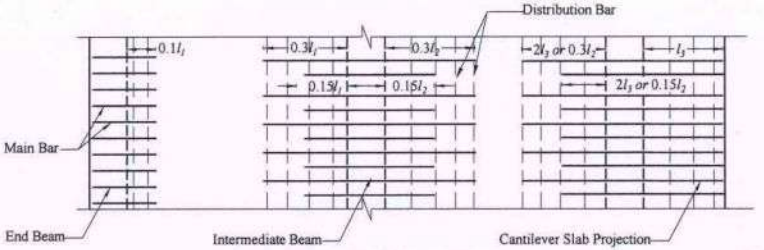
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB SUNKEN BY 300mm

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	S1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	S2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	S3		Mat	--	--	--	--	--	--

NOTE:
1. For Sunken Slab details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/22.

REVISION NO.:

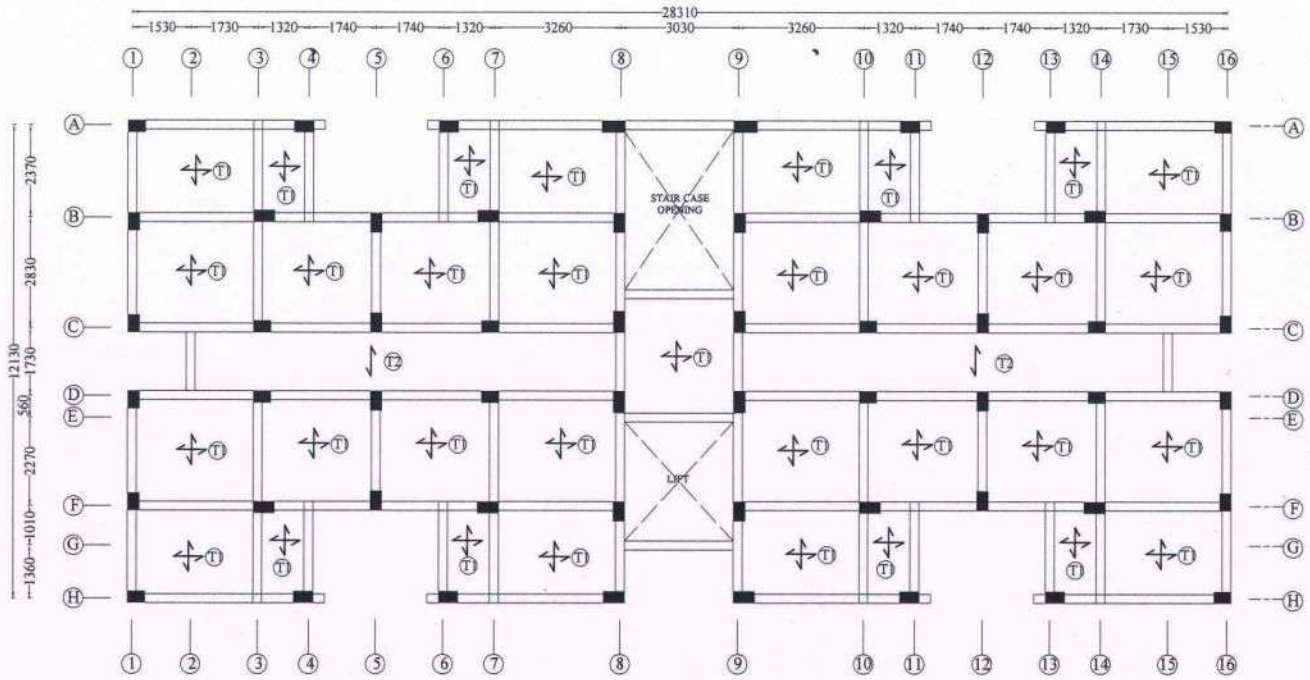
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

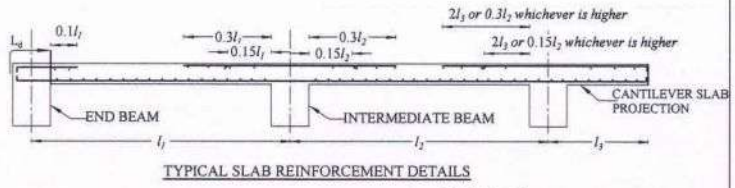
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

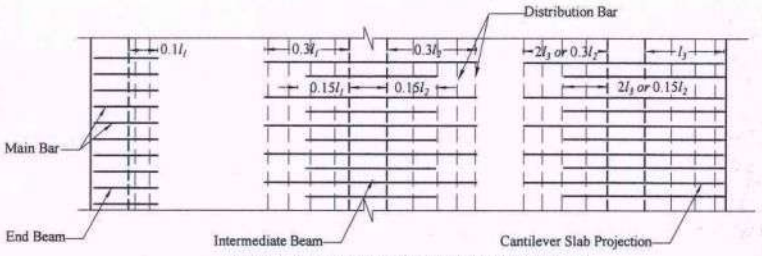
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	T1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	T2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	T3		Mat	--	--	--	--	--	--

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/23.

REVISION NO.:

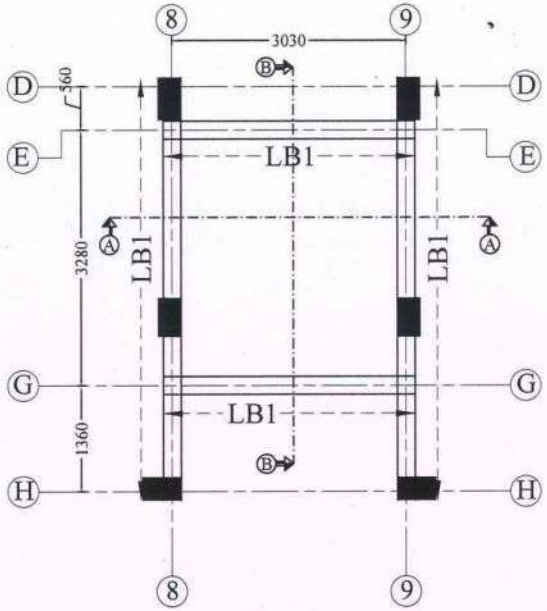
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5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

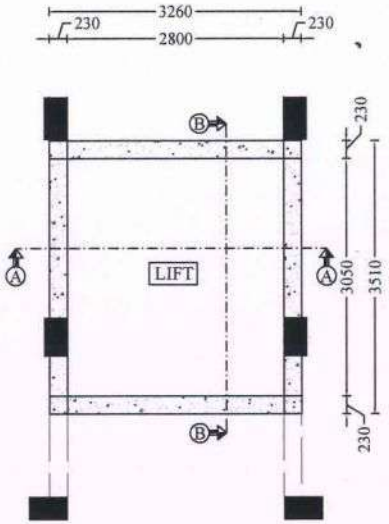
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

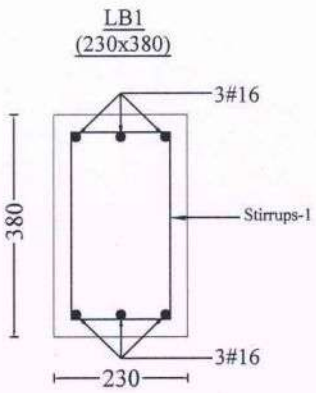
LAYOUT AND RC DETAILS OF LIFT WELL



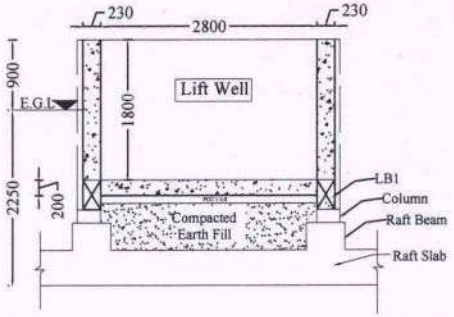
LIFT BEAM LAYOUT
BELOW THE LIFT PIT AREA



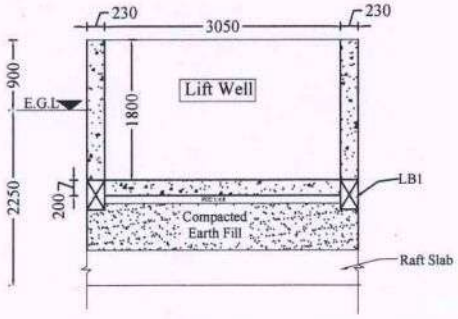
PLAN OF LIFT WELL-TYPICAL



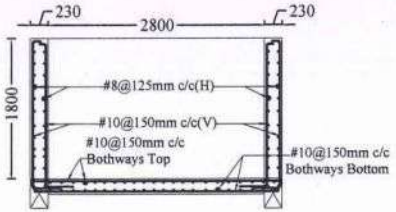
NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 700 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.



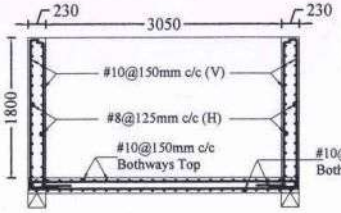
SECTION ON A-A (GENERAL ARRANGEMENT)



SECTION ON B-B (GENERAL ARRANGEMENT)



SECTION ON A-A (REINFORCEMENT DETAILS)



SECTION ON B-B (REINFORCEMENT DETAILS)

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STRUCTURAL AND QUALITY CONTROL CELL
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5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
LAYOUT & RC DETAILS OF LIFT WELL.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/05.

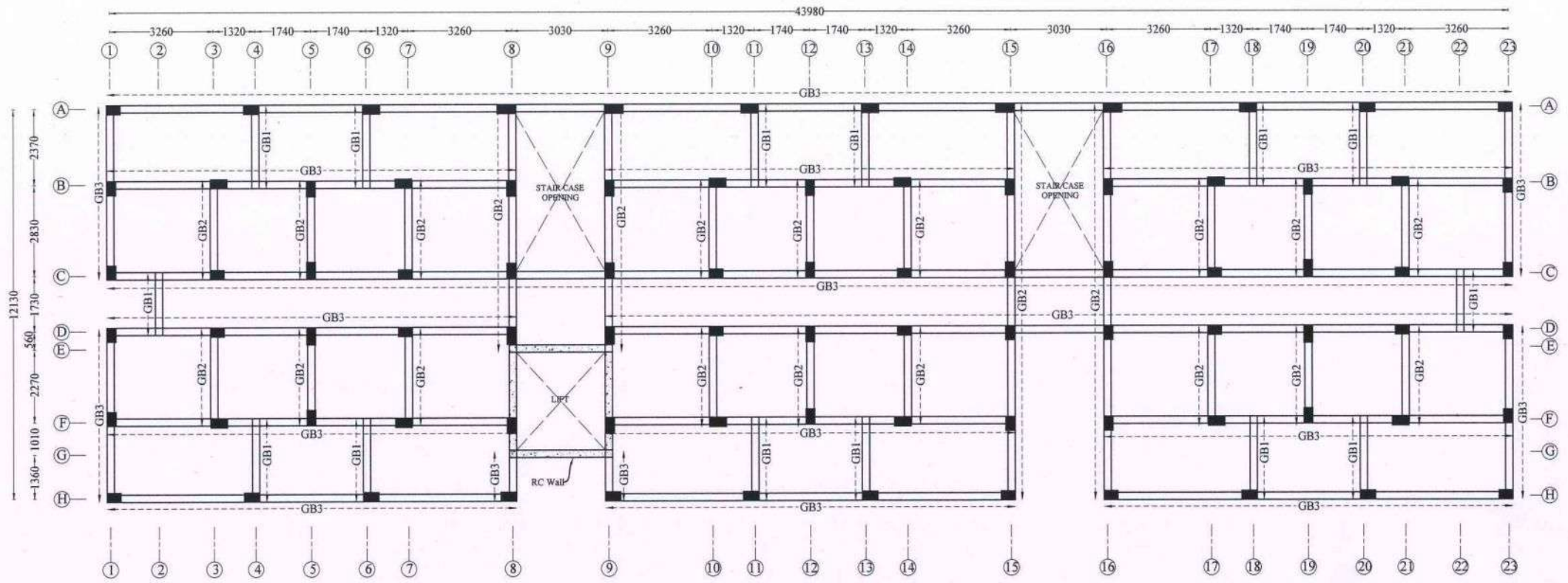
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GRADE BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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12. The recommended bearing capacity at this level is 290 kN / sq.m.
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15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/06.

REVISION NO.:

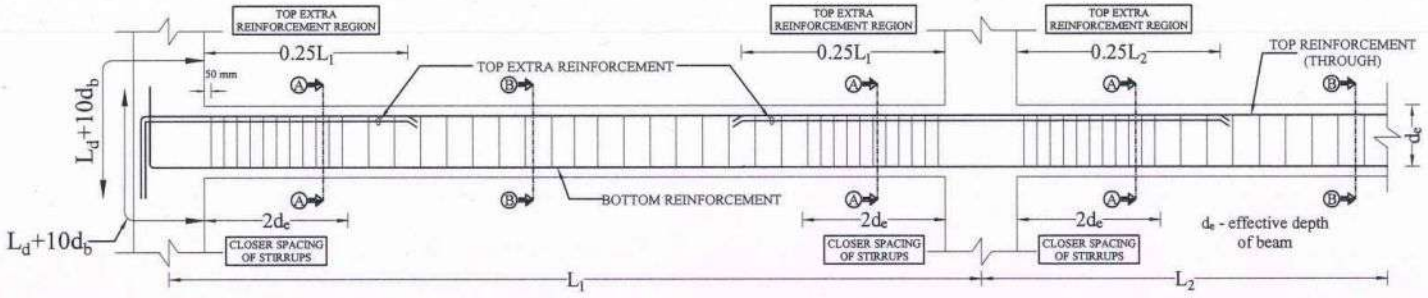
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STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GRADE BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	GB1 230 x 380	2#12(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 3#12 380 230	2#12(T) 2L-#8@175 mm c/c rest 3#12 380 230
2.	GB2 230 x 380	2#12(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230
3.	GB3 230 x 380	2#12(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230

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STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV 07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
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   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/07.

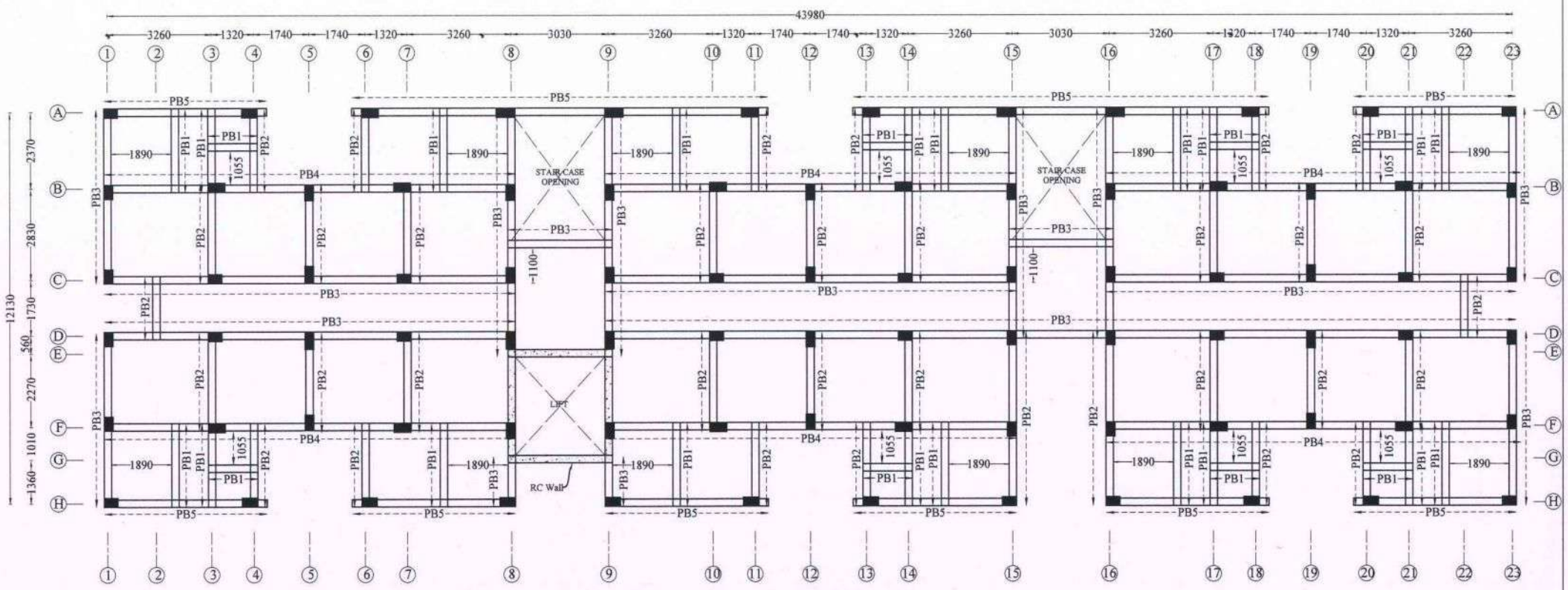
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLINTH BEAM LAYOUT



NOTE:
1. For Staircase details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/02.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/08.

REVISION NO.:

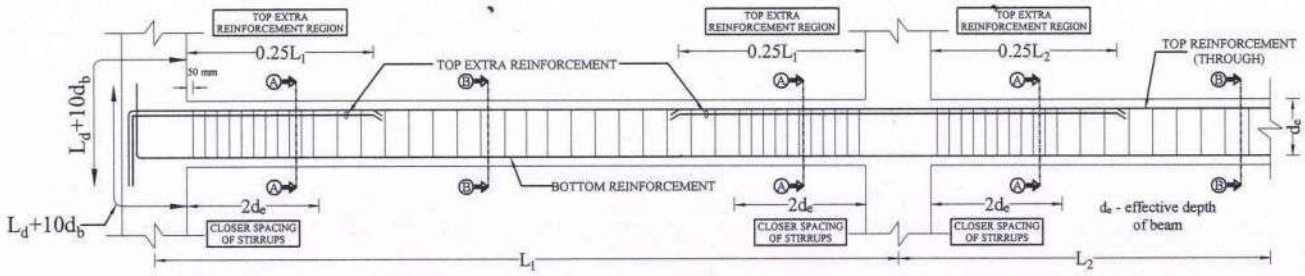
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07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

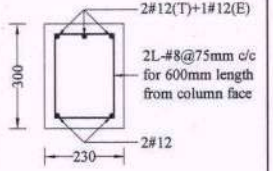
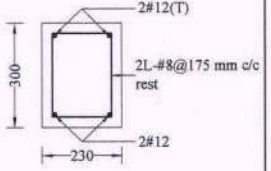
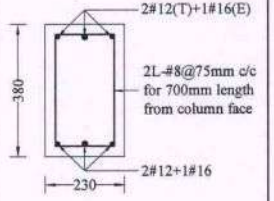
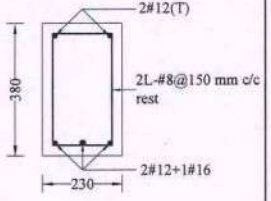
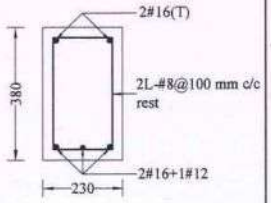
sd.xxxx 05.04.2025
Chief Engineer

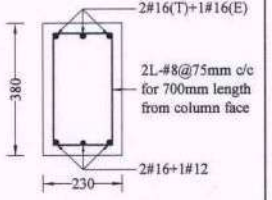
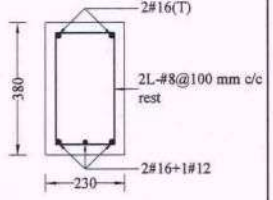
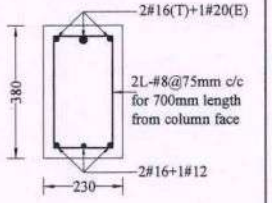
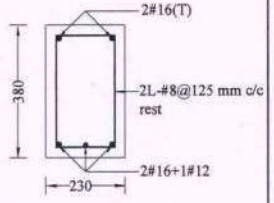
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



PLINTH BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	PB1 230 x 300		
2.	PB2 230 x 380		
3.	PB3 230 x 380		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	PB4 230 x 380		
5.	PB5 230 x 380		

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RD
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/09.

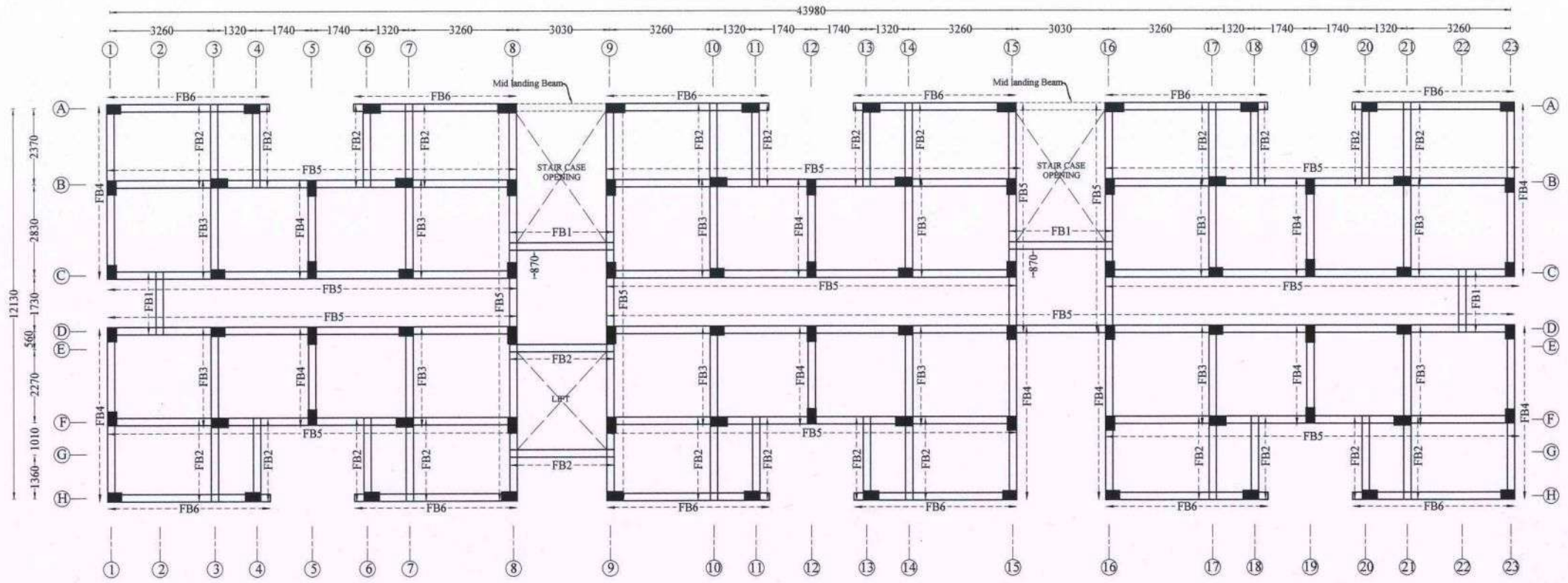
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GROUND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/10.

REVISION NO.:

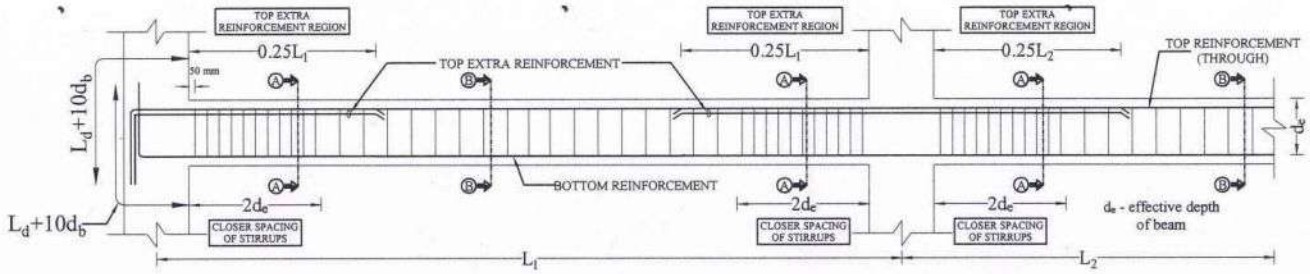
TRUE COPY
07/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 008.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

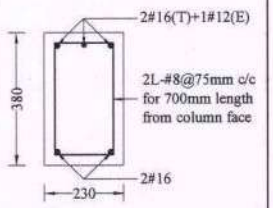
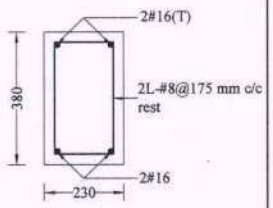
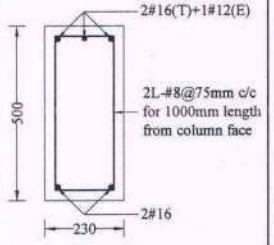
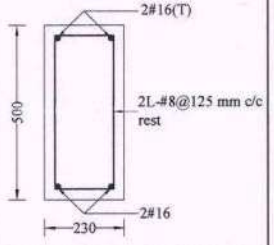
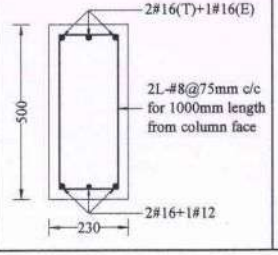
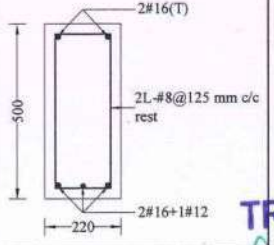
sd.xxxx 05.04.2025
Chief Engineer

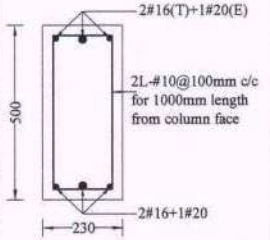
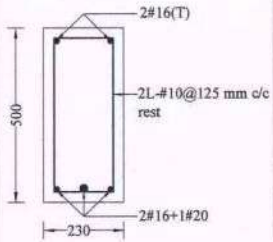
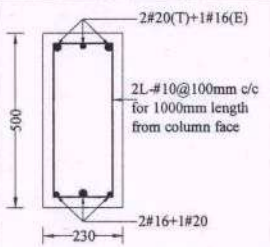
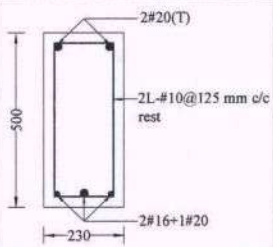
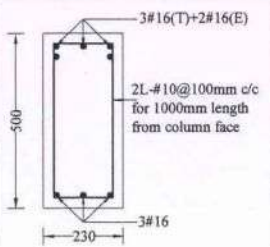
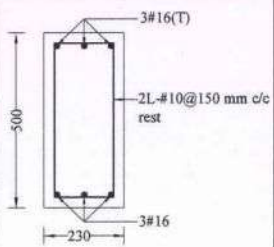
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GROUND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380		
2.	FB2 230 x 500		
3.	FB3 230 x 500		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	FB4 230 x 500		
5.	FB5 230 x 500		
6.	FB6 230 x 500		

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   - (a) Foundation - 75 mm
   - (b) Column - 40 mm
   - (c) Grade, Plinth,Floor and roof beam - 30 mm
   - (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/11.

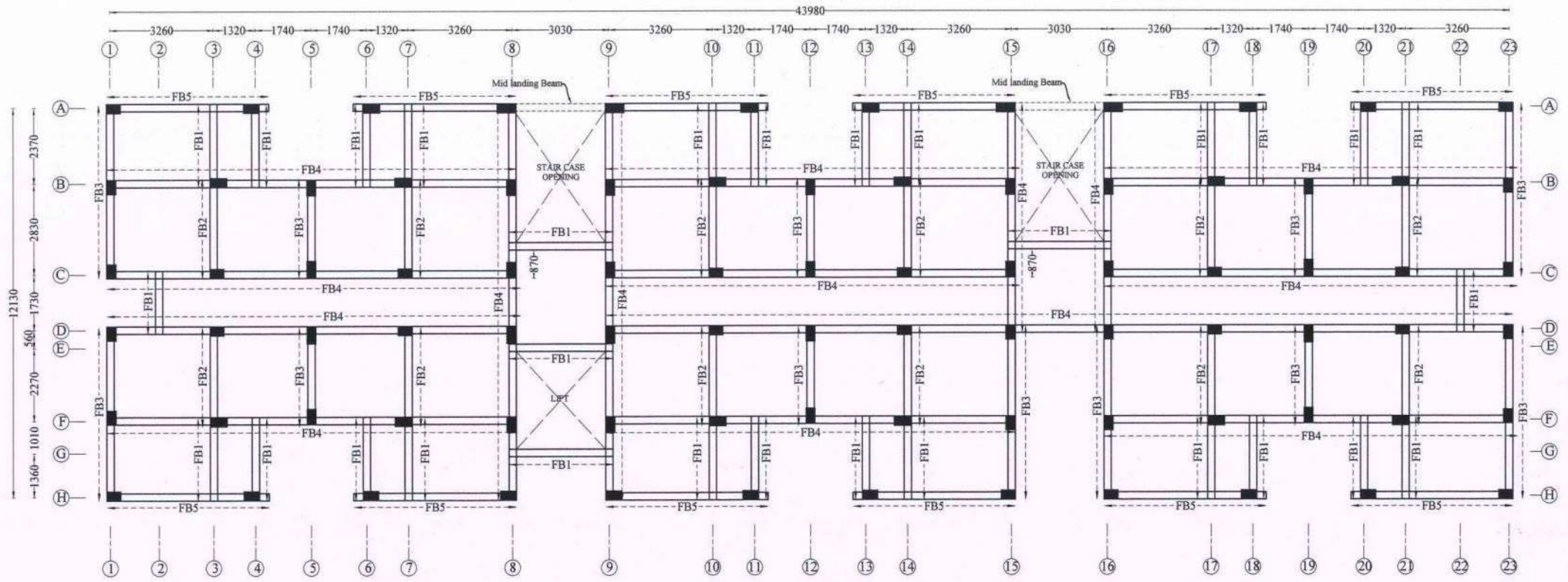
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

FIRST & SECOND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/12.

REVISION NO.:

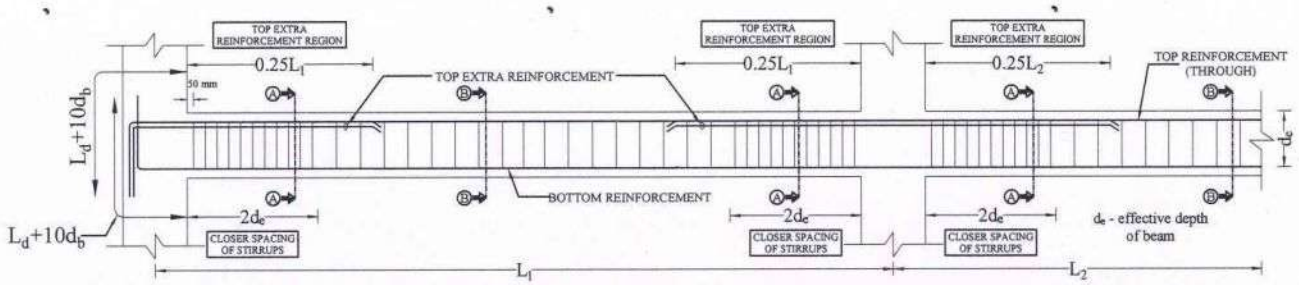
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8/4/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



FIRST & SECOND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 2#16 230	2#16(T) 380 2L-#8@125 mm c/c rest 2#16 230
2.	FB2 230 x 380	2#16(T)+1#16(E) 380 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 230	2#16(T) 380 2L-#8@125 mm c/c rest 2#16+1#12 230
3.	FB3 230 x 380	2#16(T)+1#20(E) 380 2L-#10@100mm c/c for 700mm length from column face 3#16 230	2#16(T) 380 2L-#10@125 mm c/c rest 3#16 230

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	FB4 230 x 380	2#20(T)+1#16(E) 380 2L-#10@100mm c/c for 700mm length from column face 2#16+1#20 230	2#20(T) 380 2L-#10@125 mm c/c rest 2#16+1#20 230
5.	FB5 230 x 380	2#20(T)+1#20(E) 380 2L-#10@100mm c/c for 700mm length from column face 3#16 230	2#20(T) 380 2L-#10@150 mm c/c rest 3#16 230

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RE 07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of M25 grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth, Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes, coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/13.

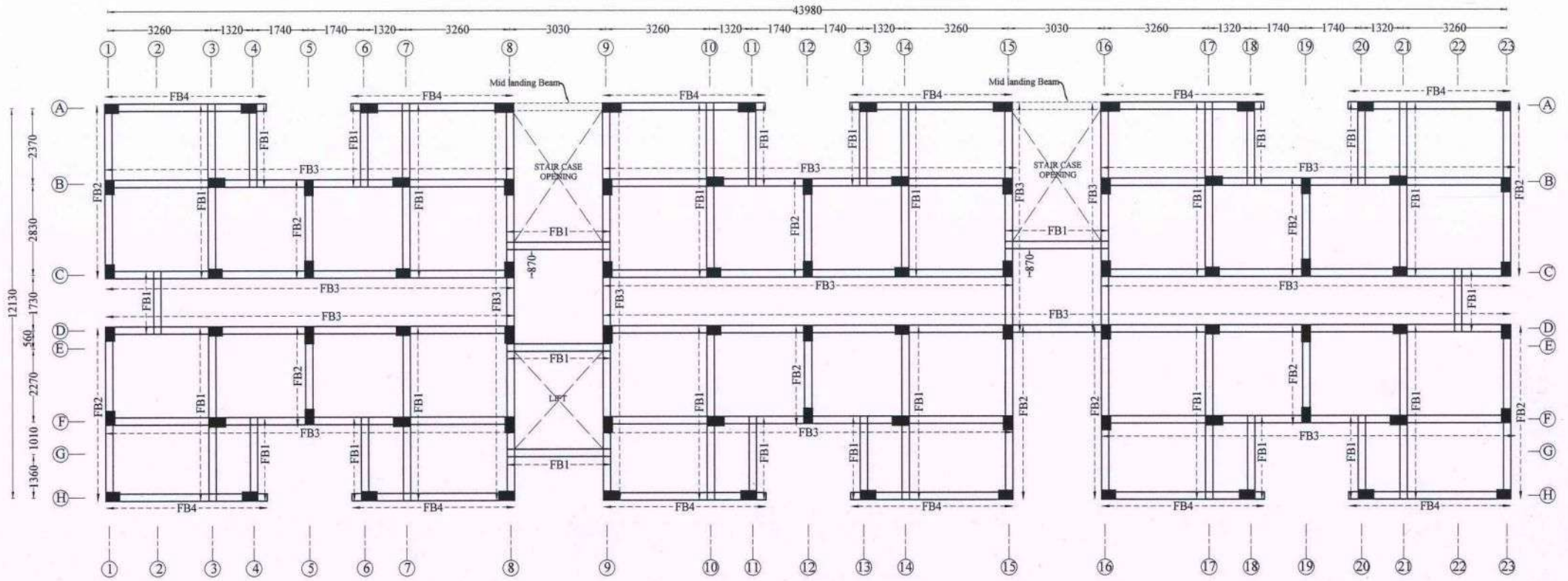
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

THIRD & FOURTH FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/14.

REVISION NO.:

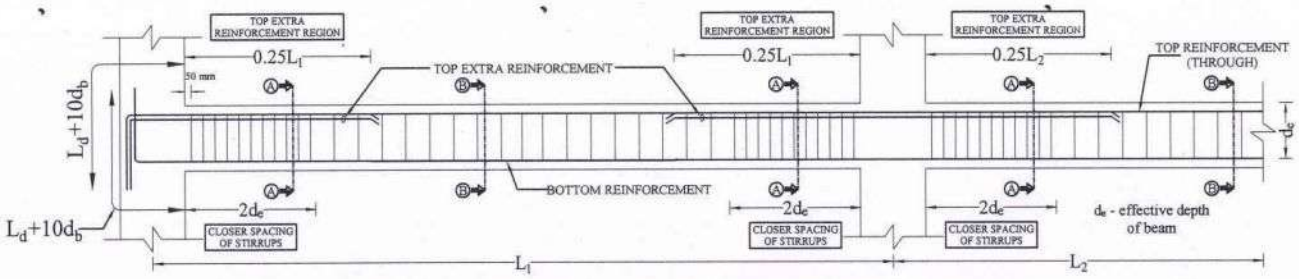
TRUE COPY
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

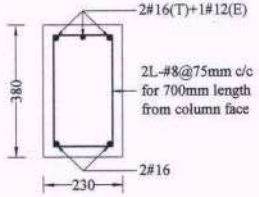
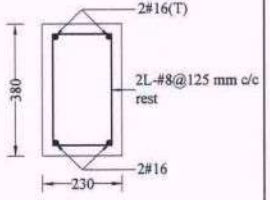
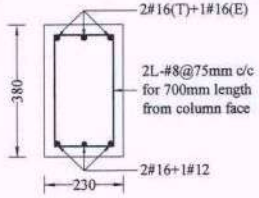
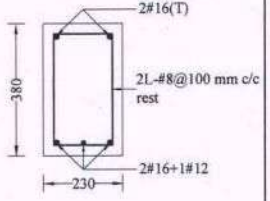
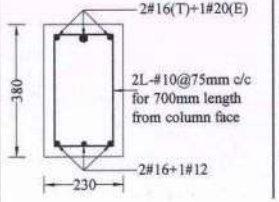
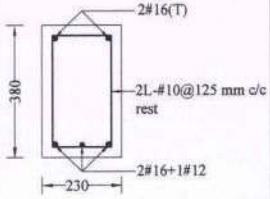
sd.xxxx 05.04.2025
Chief Engineer

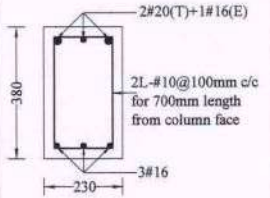
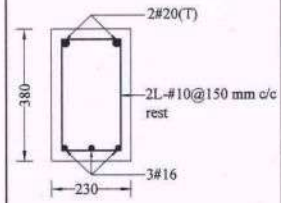
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



THIRD & FOURTH FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380		
2.	FB2 230 x 380		
3.	FB3 230 x 380		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	FB4 230 x 380		

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS.456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/15.

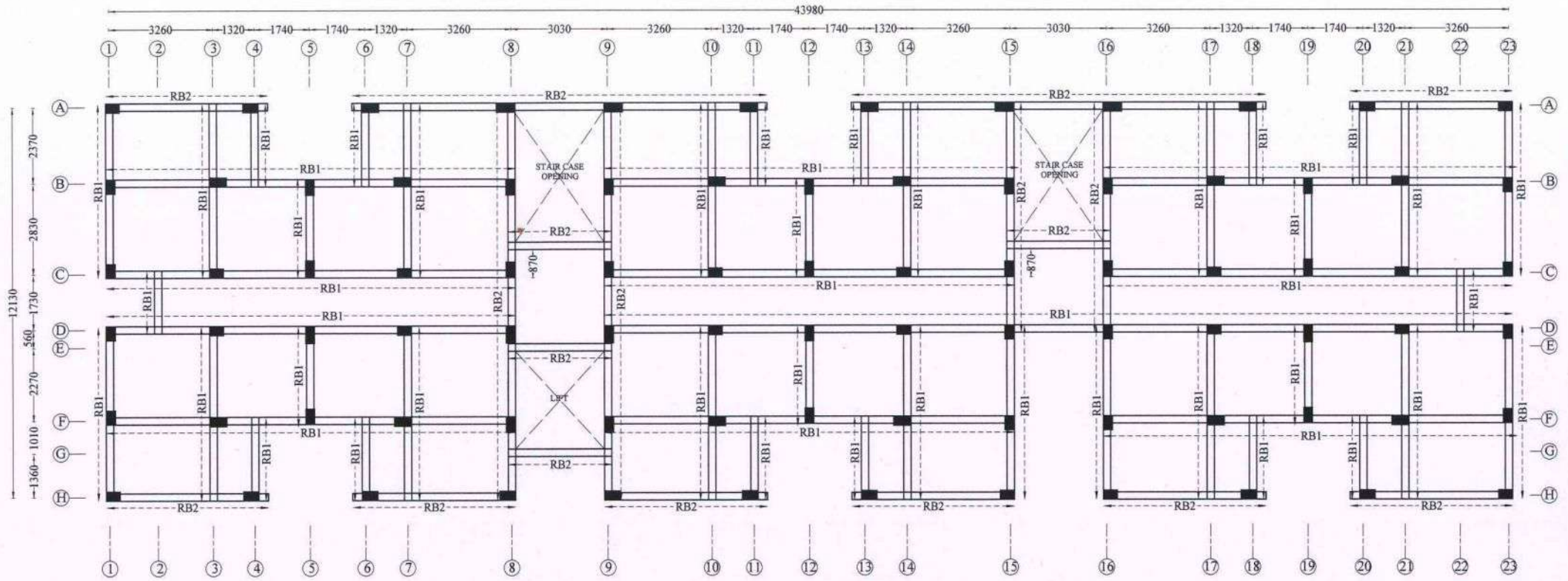
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/16.

REVISION NO.:

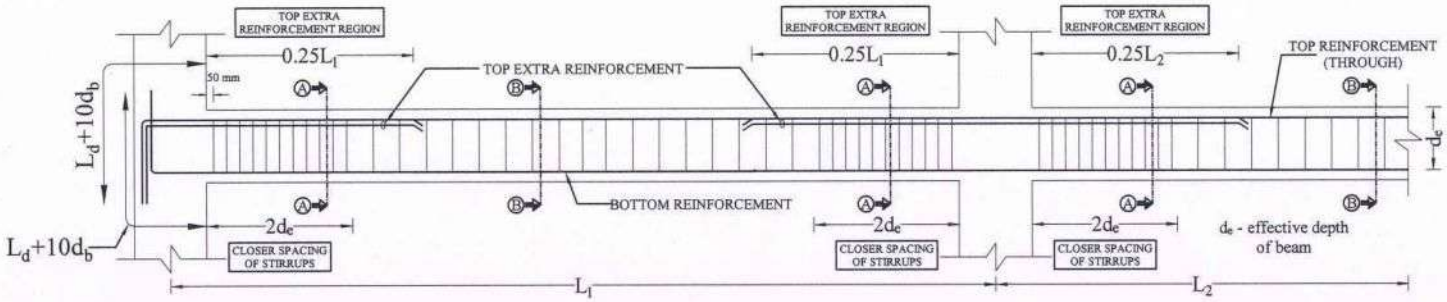
TRUE COPY
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

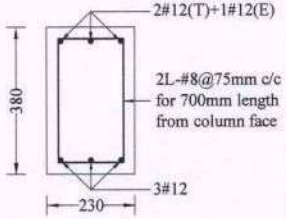
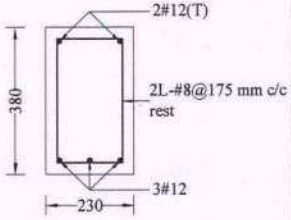
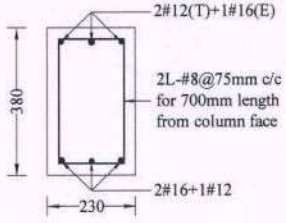
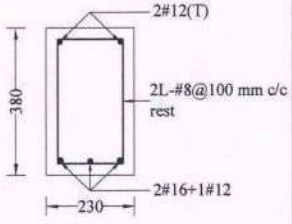
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TERRACE FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	RB1 230 x 380		
2.	RB2 230 x 380		

TRUE COPY
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
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   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/17.

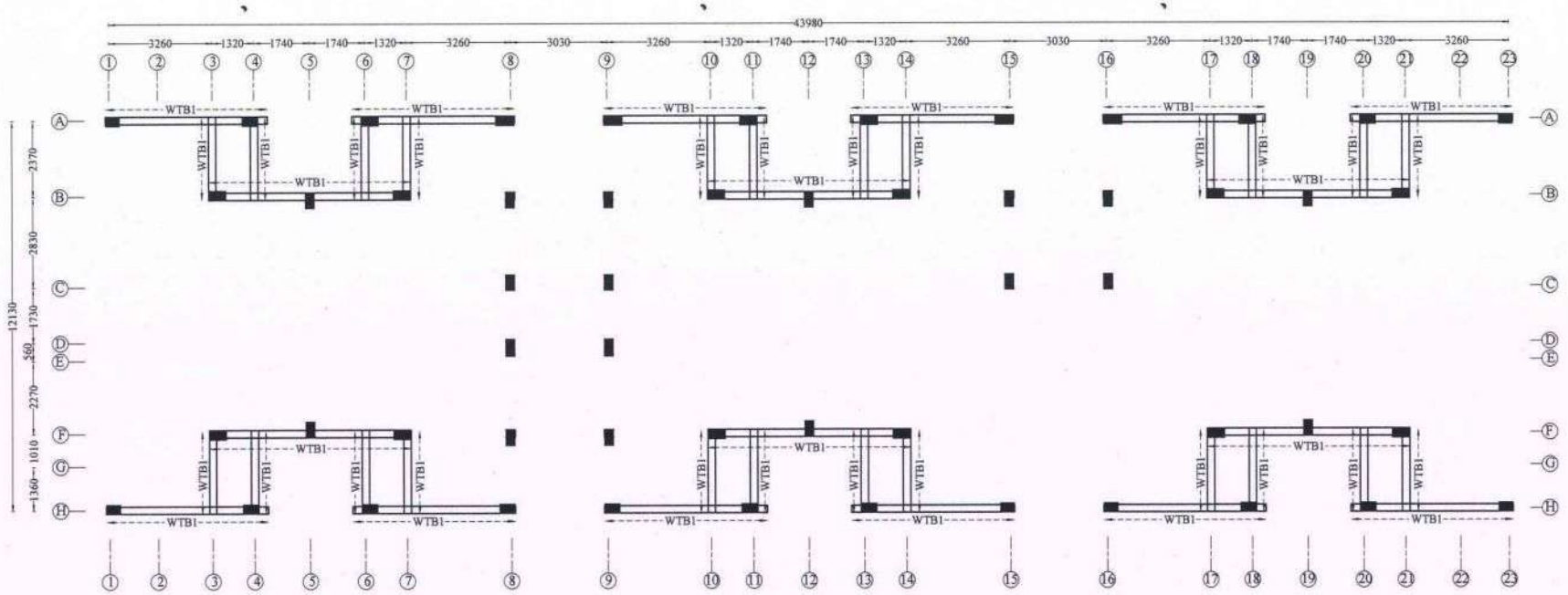
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

WATER TANK BEAM LAYOUT & DETAILS



WATER TANK BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SUPPORT
1.	WTB1 230 X 380	2#16(T)+1#12(E); 2L-#8@75mm c/c for 700mm length from column face; 380; 230; 2#16
		SPAN: 2#16(T); 2L-#8@175 mm c/c rest; 380; 230; 2#16

NOTE:
1. For Water tank details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/04.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
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   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
WATER TANK BEAM LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/18.

REVISION NO.:

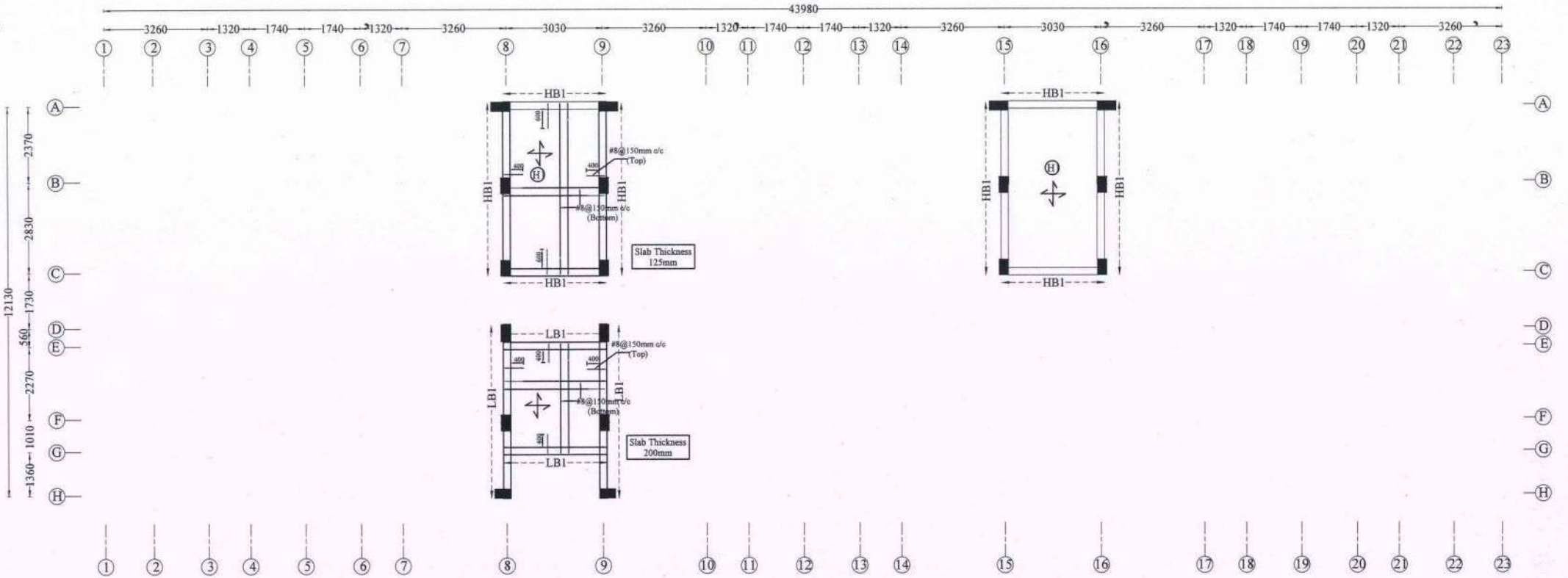
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09/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 33/2021 - TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/19.

REVISION NO.:

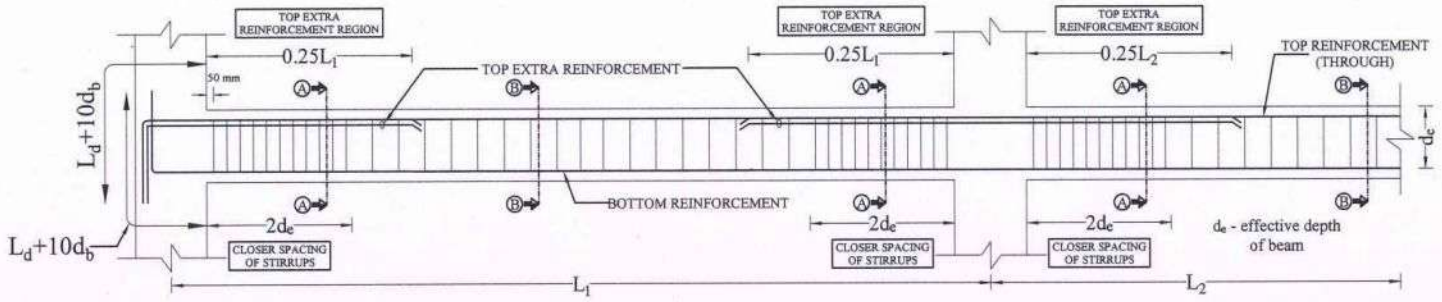
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

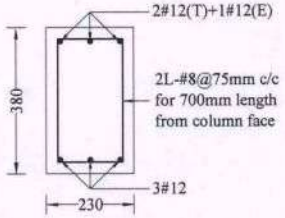
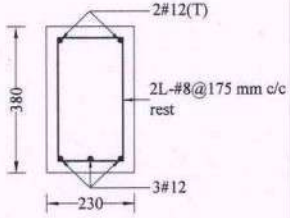
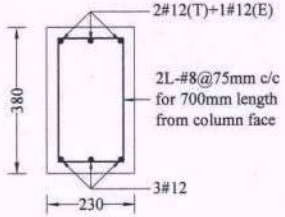
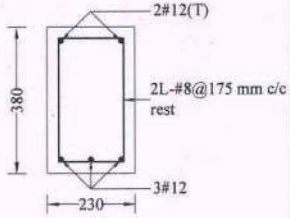
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



HEAD ROOM & LIFT ROOM BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	HB1 230 x 380		
2.	LB1 230 x 380		

TRUE COPY

08/04/25

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE C

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE C/20.

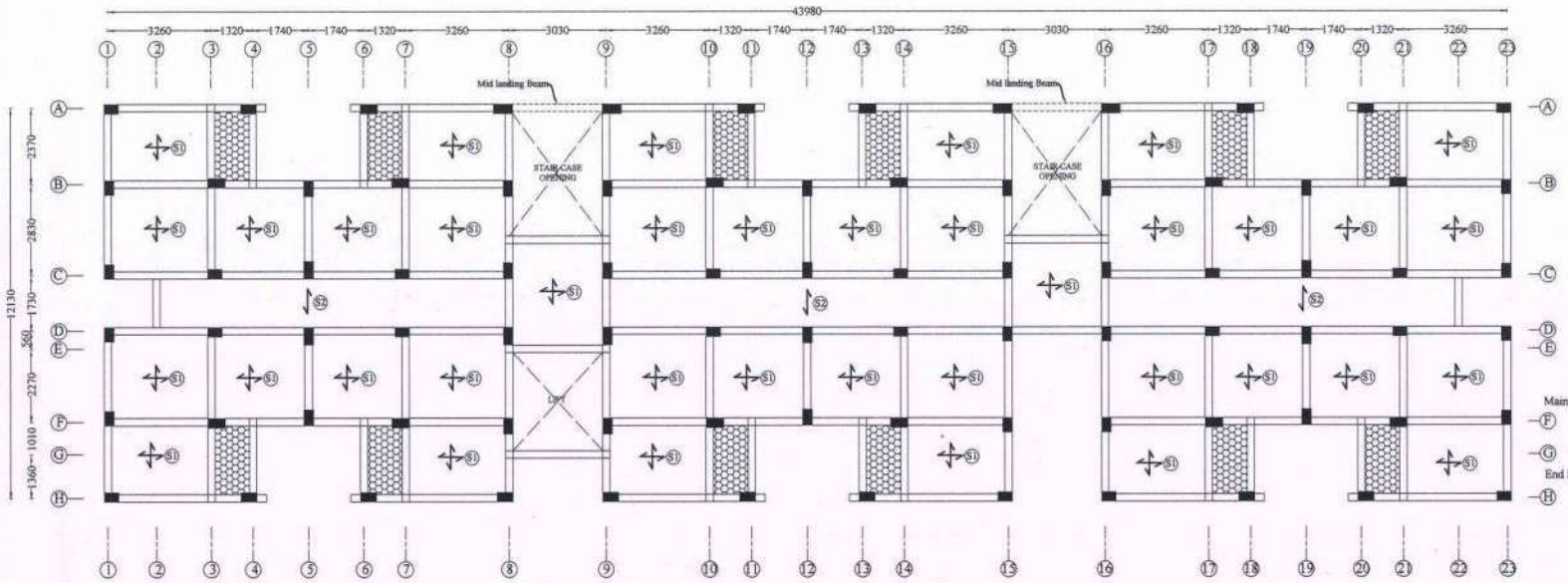
REVISION NO.:

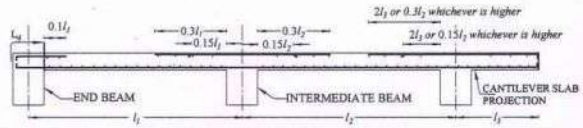
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

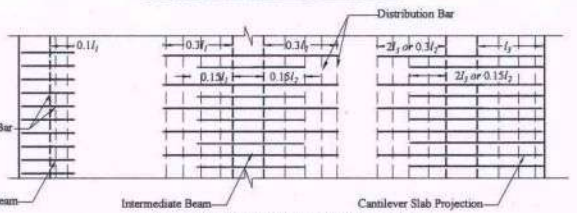
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	S1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	S2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	S3		Mat	--	--	--	--	--	--

SLAB SUNKEN BY 300mm

NOTE:
1. For Sunken Slab details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/21.

REVISION NO.:

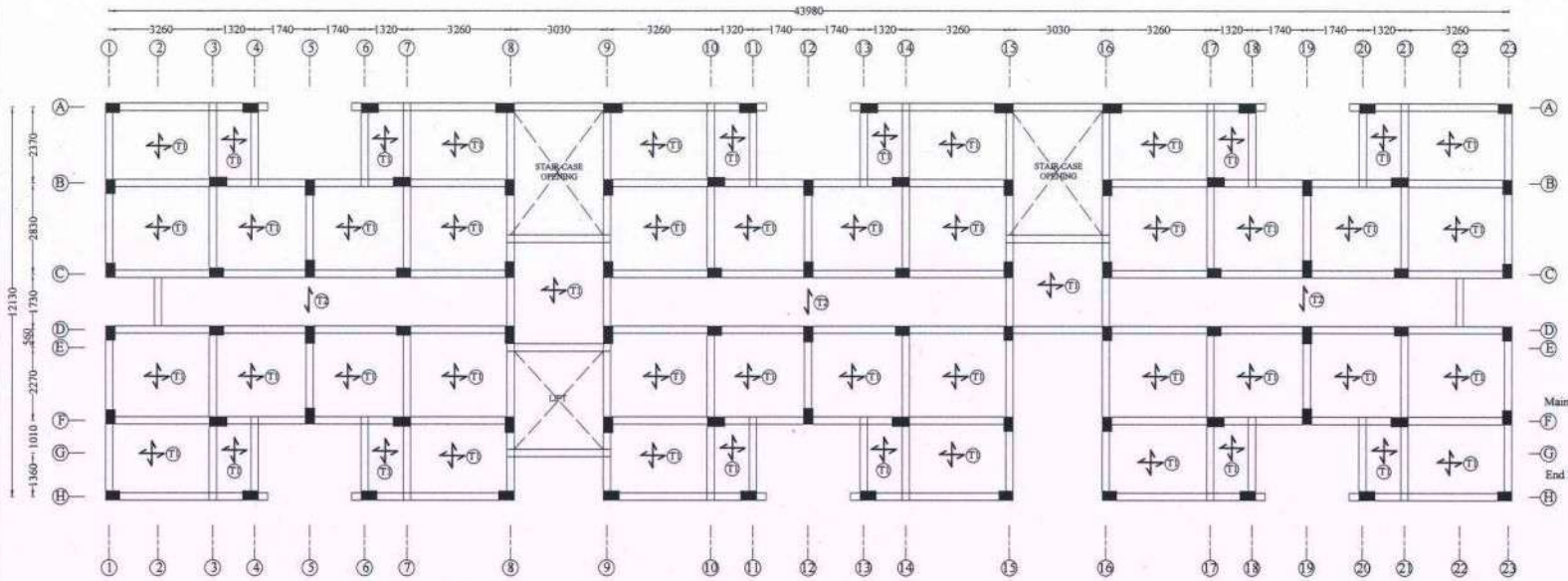
TRUE COPY
08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

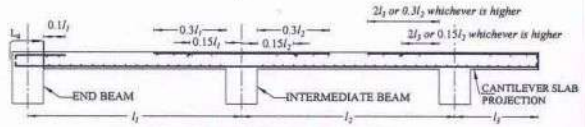
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

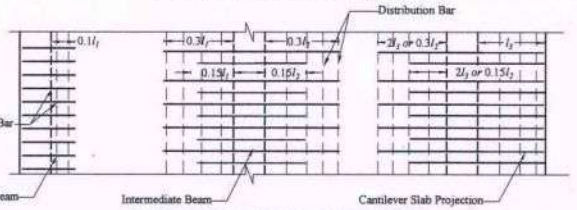
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	T1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	T2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	T3		Mat	--	--	--	--	--	--

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE C

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE C/22.

REVISION NO.:

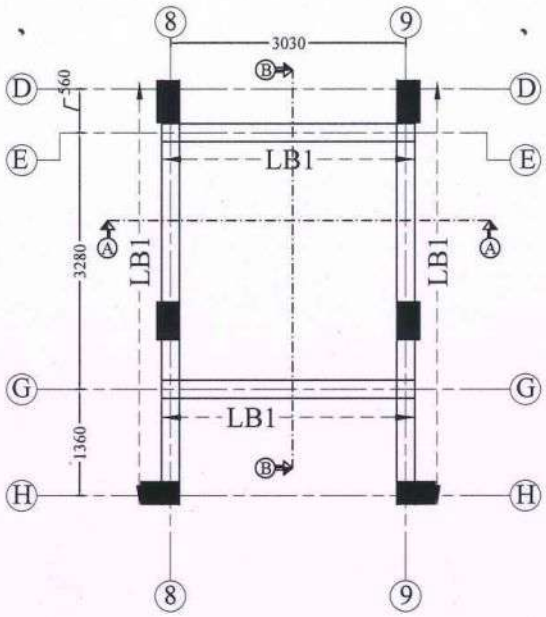
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

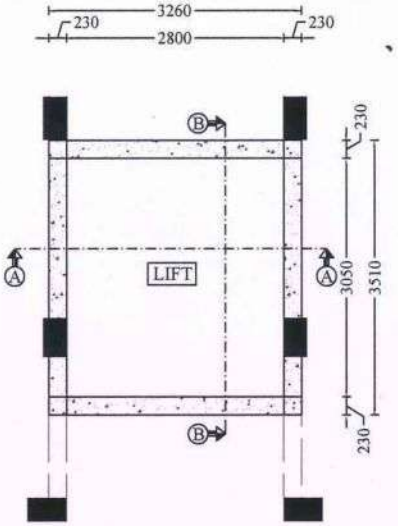
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

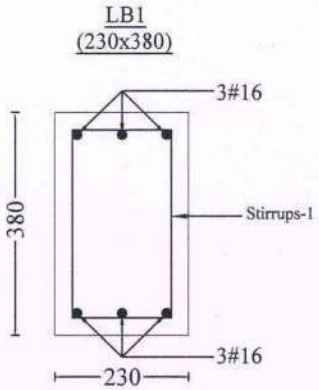
LAYOUT AND RC DETAILS OF LIFT WELL



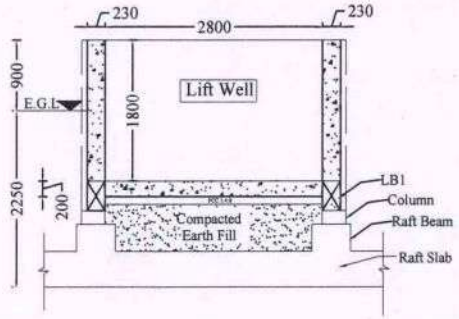
LIFT BEAM LAYOUT
BELOW THE LIFT PIT AREA



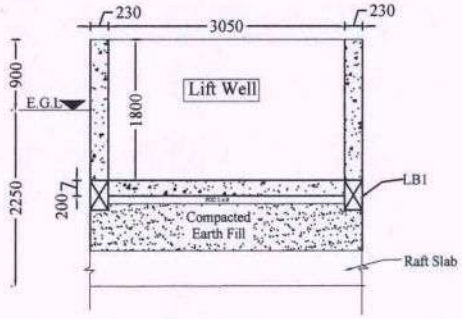
PLAN OF LIFT WELL-TYPICAL



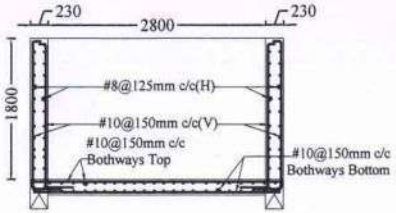
NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 700 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.



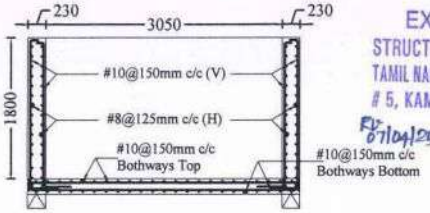
SECTION ON A-A (GENERAL ARRANGEMENT)



SECTION ON B-B (GENERAL ARRANGEMENT)



SECTION ON A-A (REINFORCEMENT DETAILS)



SECTION ON B-B (REINFORCEMENT DETAILS)

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
LAYOUT & RC DETAILS OF LIFT WELL.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/06.

REVISION NO.:

TRUE COPY

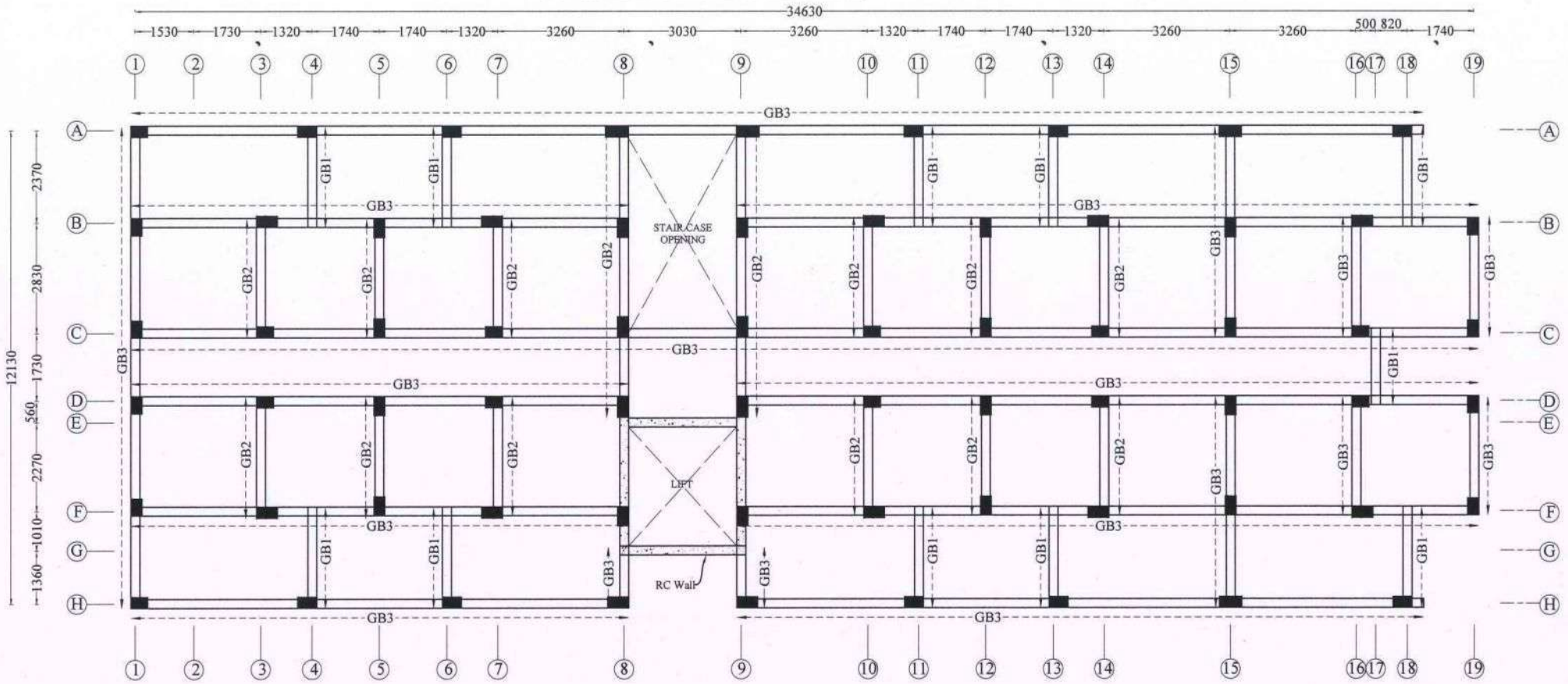
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GRADE BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/07.

REVISION NO.:

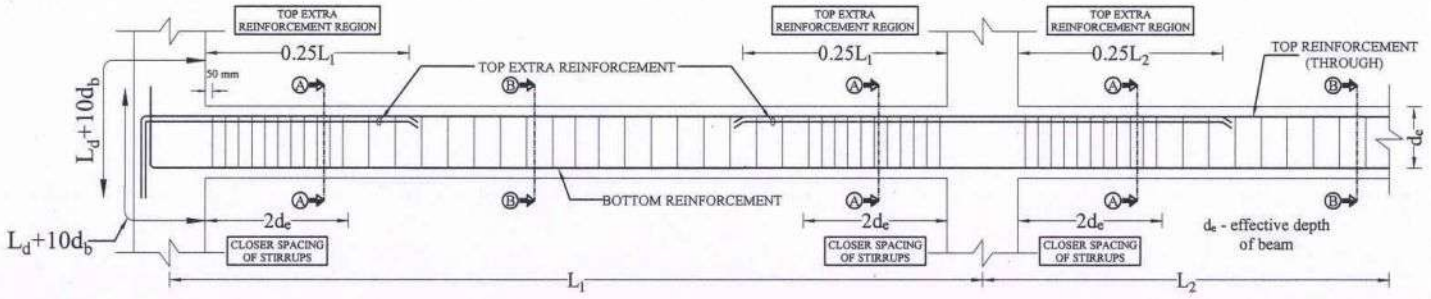
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07/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV 07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GRADE BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	GB1 230 x 380	2#12(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 3#12 380 230	2#12(T) 2L-#8@175 mm c/c rest 3#12 380 230
2.	GB2 230 x 380	2#12(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230
3.	GB3 230 x 380	2#12(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
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18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/08.

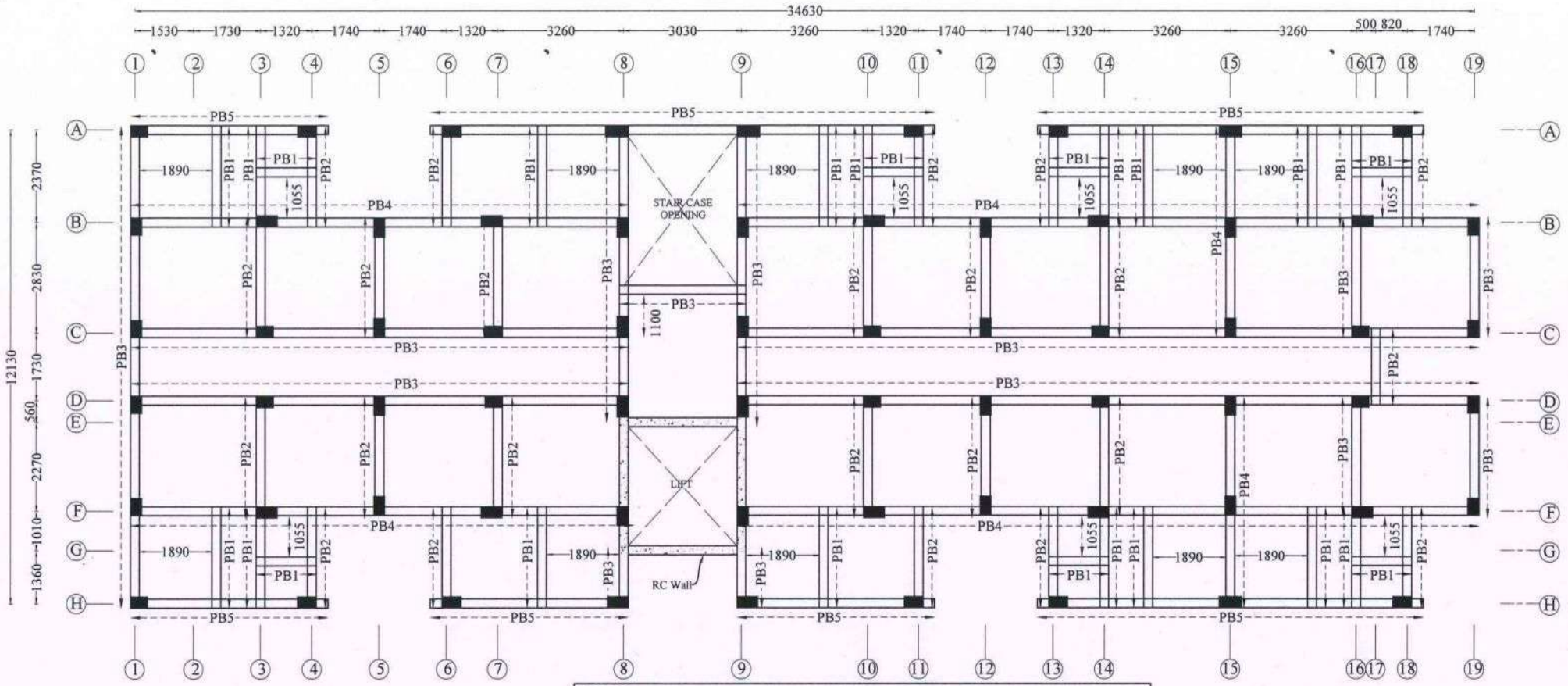
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLINTH BEAM LAYOUT



NOTE:
1. For Staircase details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/02.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/09.

REVISION NO.:

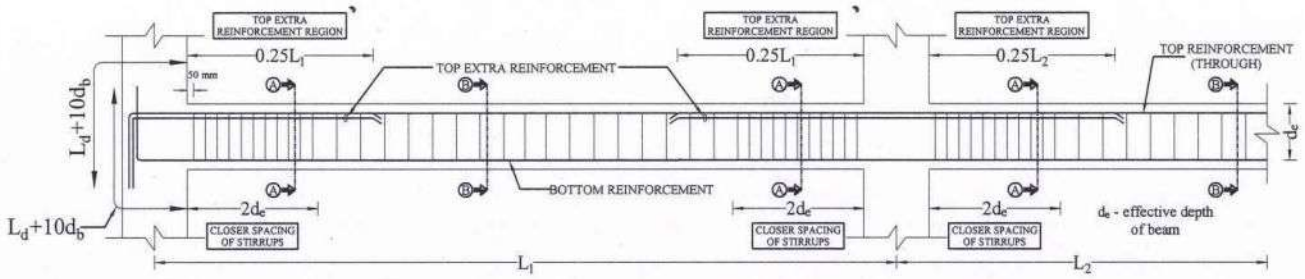
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
EE 07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



PLINTH BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	PB1 230 x 300	2#12(T)+1#12(E) 2L-#8@75mm c/c for 600mm length from column face 2#12 300 230	2#12(T) 2L-#8@175 mm c/c rest 2#12 300 230
2.	PB2 230 x 380	2#12(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230
3.	PB3 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	PB4 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
5.	PB5 230 x 380	2#16(T)+1#20(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230

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STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/10.

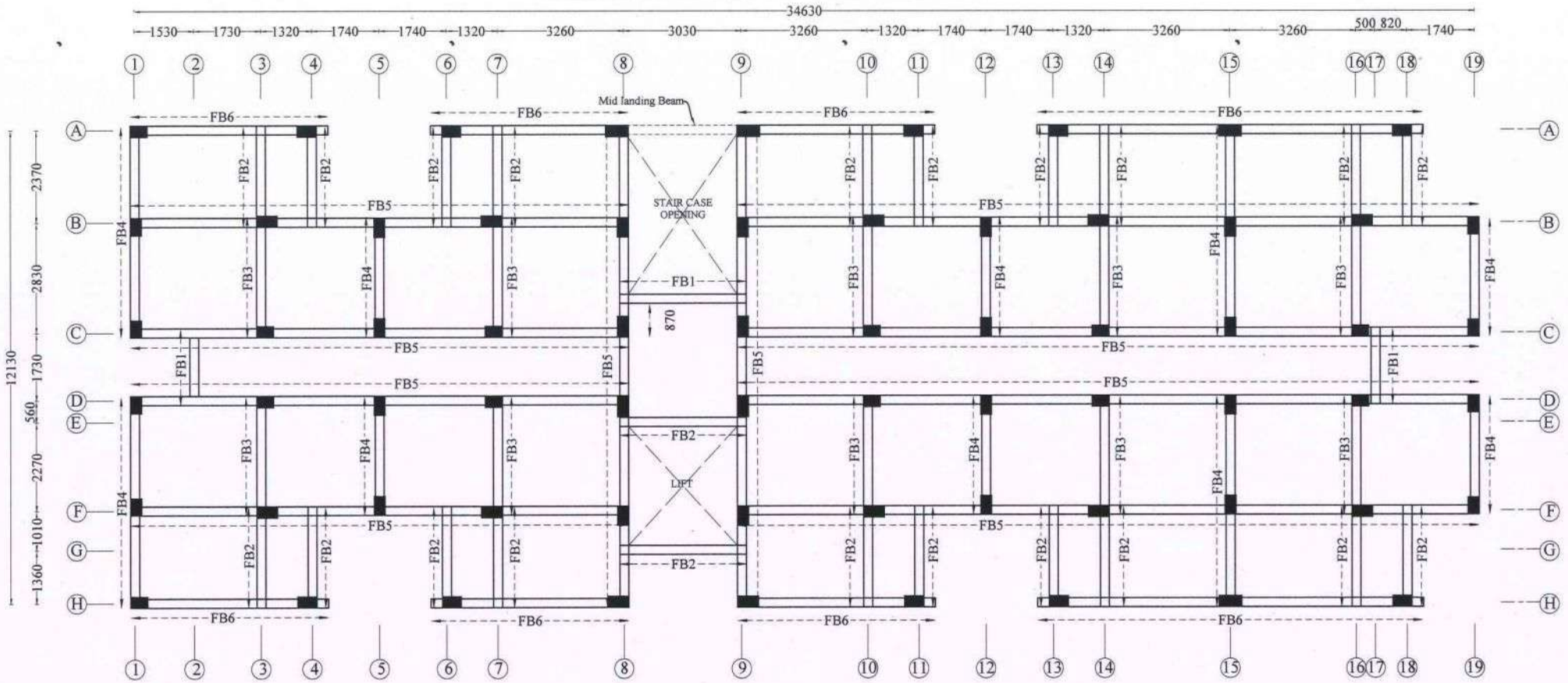
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GROUND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/11.

REVISION NO.:

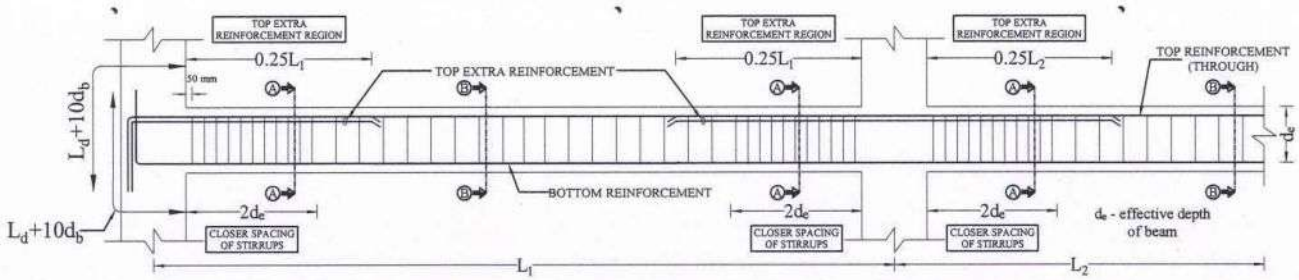
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GROUND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@175 mm c/c rest 2#16 380 230
2.	FB2 230 x 500	2#16(T)+1#12(E) 2L-#8@75mm c/c for 1000mm length from column face 2#16 500 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 500 230
3.	FB3 230 x 500	2#16(T)+1#16(E) 2L-#8@75mm c/c for 1000mm length from column face 2#16+1#12 500 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 500 230
4.	FB4 230 x 500	2#16(T)+1#20(E) 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 500 230	2#16(T) 2L-#10@125 mm c/c rest 2#16+1#20 500 230
5.	FB5 230 x 500	2#20(T)+1#16(E) 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 500 230	2#20(T) 2L-#10@125 mm c/c rest 2#16+1#20 500 230
6.	FB6 230 x 500	3#16(T)+2#16(E) 2L-#10@100mm c/c for 1000mm length from column face 3#16 500 230	3#16(T) 2L-#10@150 mm c/c rest 3#16 500 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of M25 grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth, Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/12.

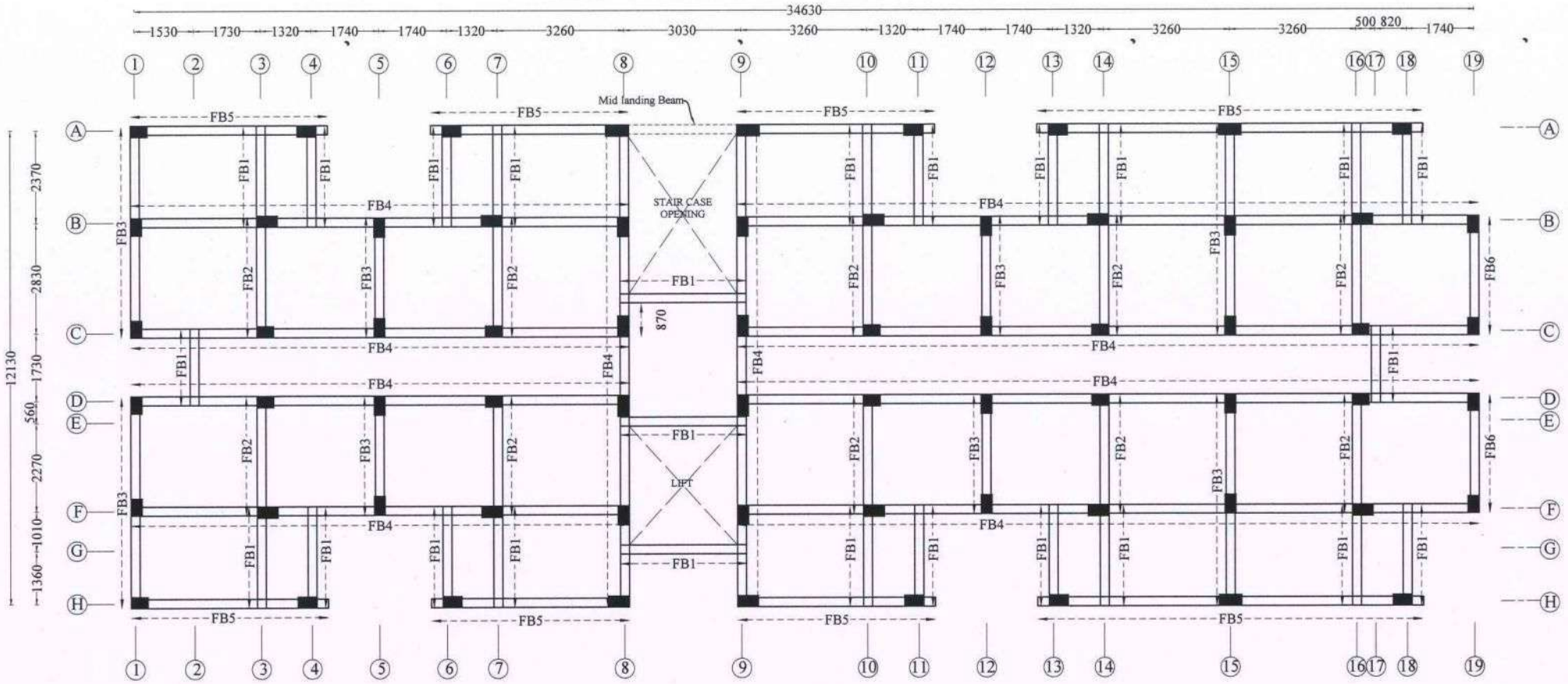
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

FIRST & SECOND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/13.

REVISION NO.:

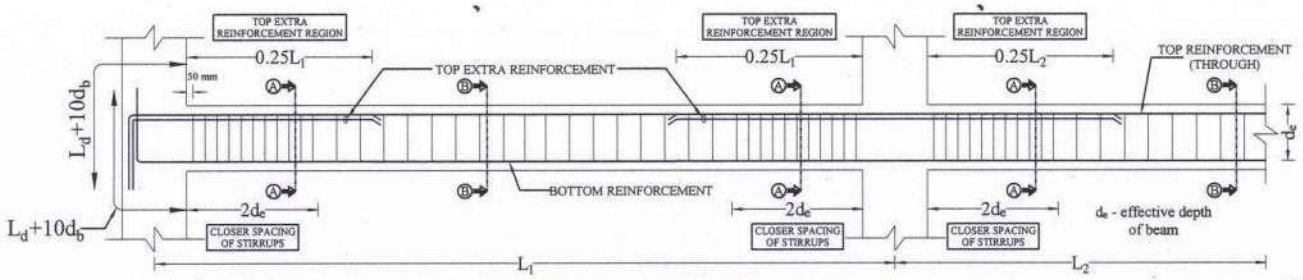
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
08/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



FIRST & SECOND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 380 230
2.	FB2 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230
3.	FB3 230 x 380	2#16(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#16(T) 2L-#10@125 mm c/c rest 3#16 380 230
4.	FB4 230 x 380	2#20(T)+1#16(E) 2L-#10@100mm c/c for 700mm length from column face 2#16+1#20 380 230	2#20(T) 2L-#10@125 mm c/c rest 2#16+1#20 380 230
5.	FB5 230 x 380	2#20(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#20(T) 2L-#10@150 mm c/c rest 3#16 380 230
6.	FB6 230 x 500	2#16(T)+1#20(E) 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 500 230	2#16(T) 2L-#10@150 mm c/c rest 2#16+1#20 500 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV-07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
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7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/14.

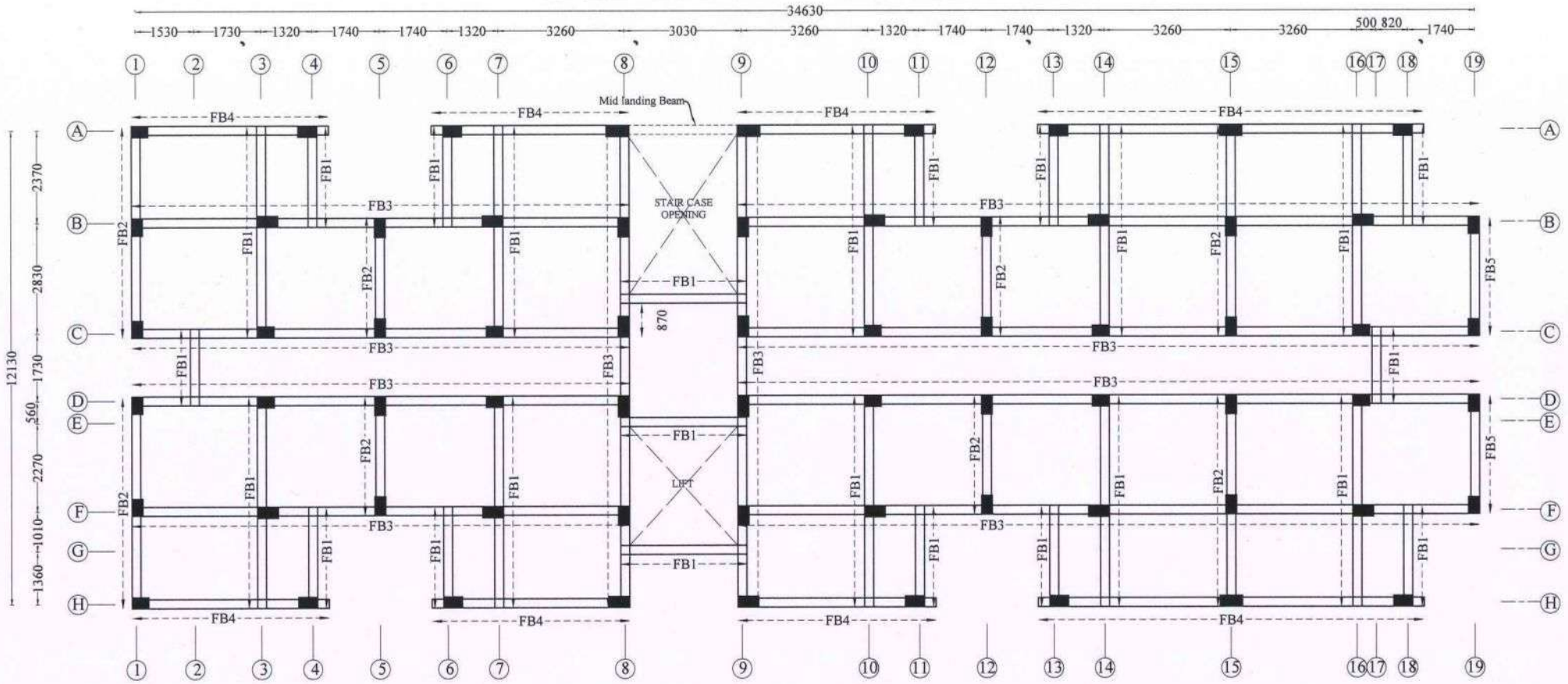
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

THIRD & FOURTH FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/15.

REVISION NO.:

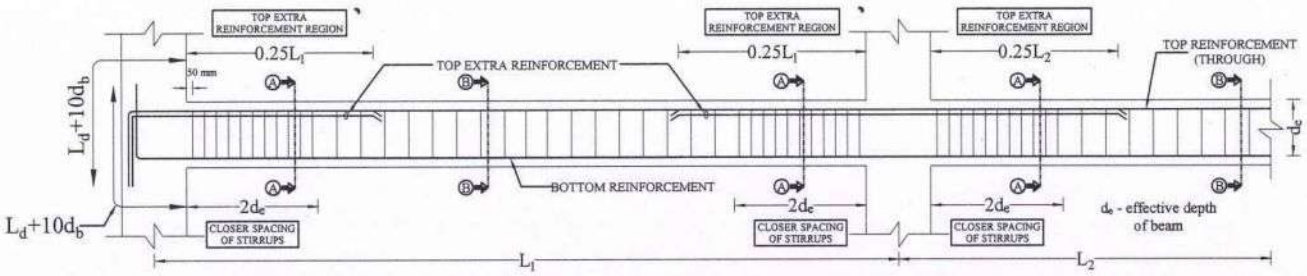
TRUE COPY
08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



THIRD & FOURTH FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 380 230
2.	FB2 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
3.	FB3 230 x 380	2#16(T)+1#20(E) 2L-#10@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#10@125 mm c/c rest 2#16+1#12 380 230
4.	FB4 230 x 380	2#20(T)+1#16(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#20(T) 2L-#10@150 mm c/c rest 3#16 380 230
5.	FB5 230 x 500	2#16(T)+1#16(E) 2L-#8@75mm c/c for 1000mm length from column face 2#16+1#12 500 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 500 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/16.

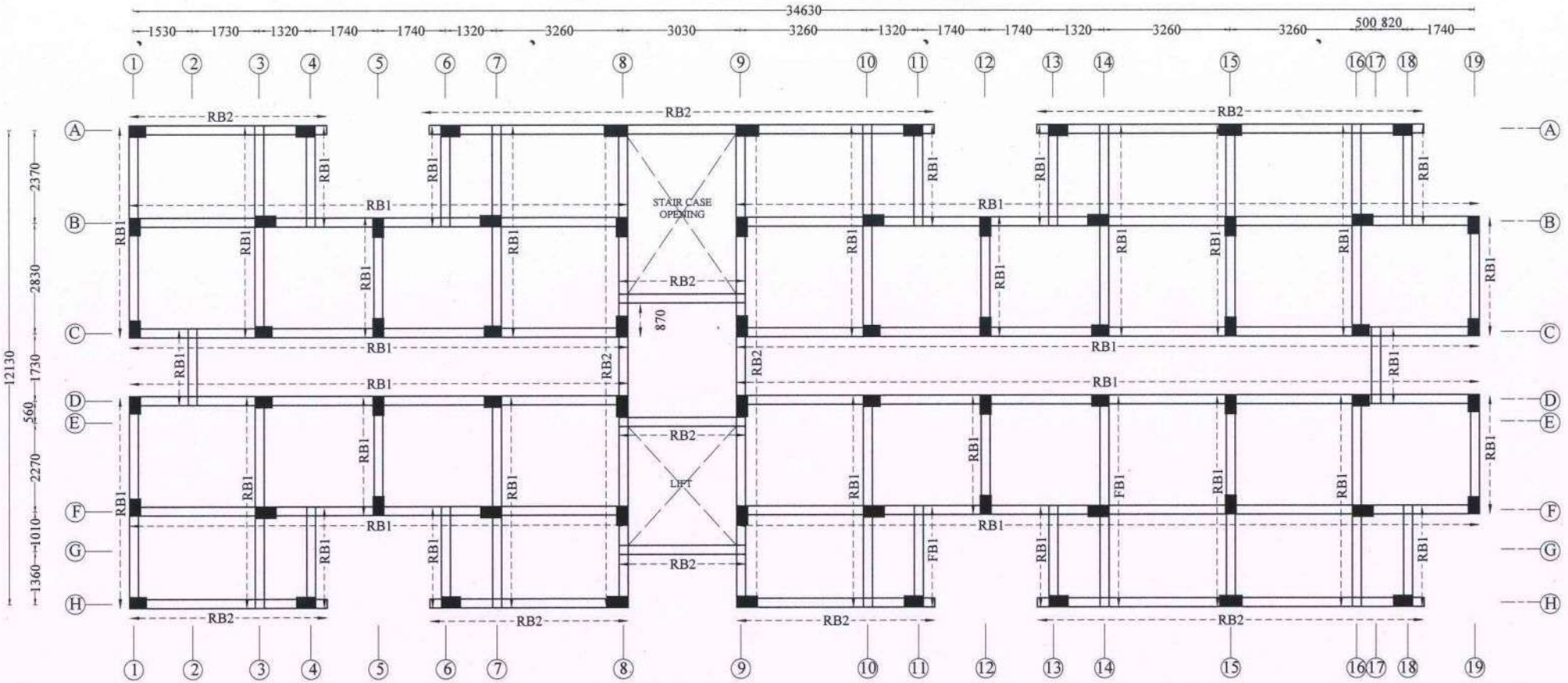
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/17.

REVISION NO.:

TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

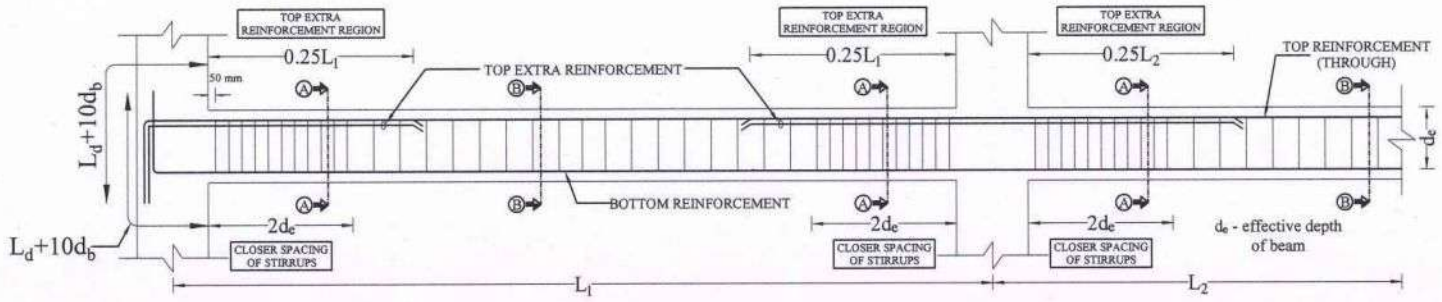
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

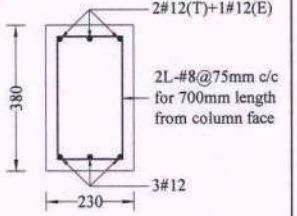
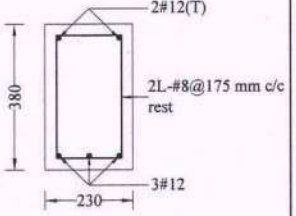
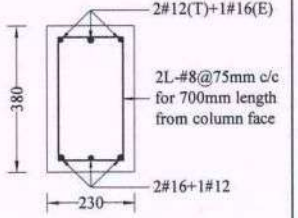
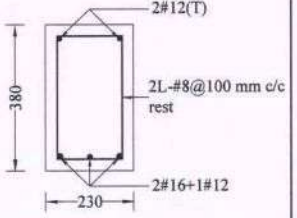
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TERRACE FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	RB1 230 x 380		
2.	RB2 230 x 380		

TRUE COPY
05/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS.13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/18.

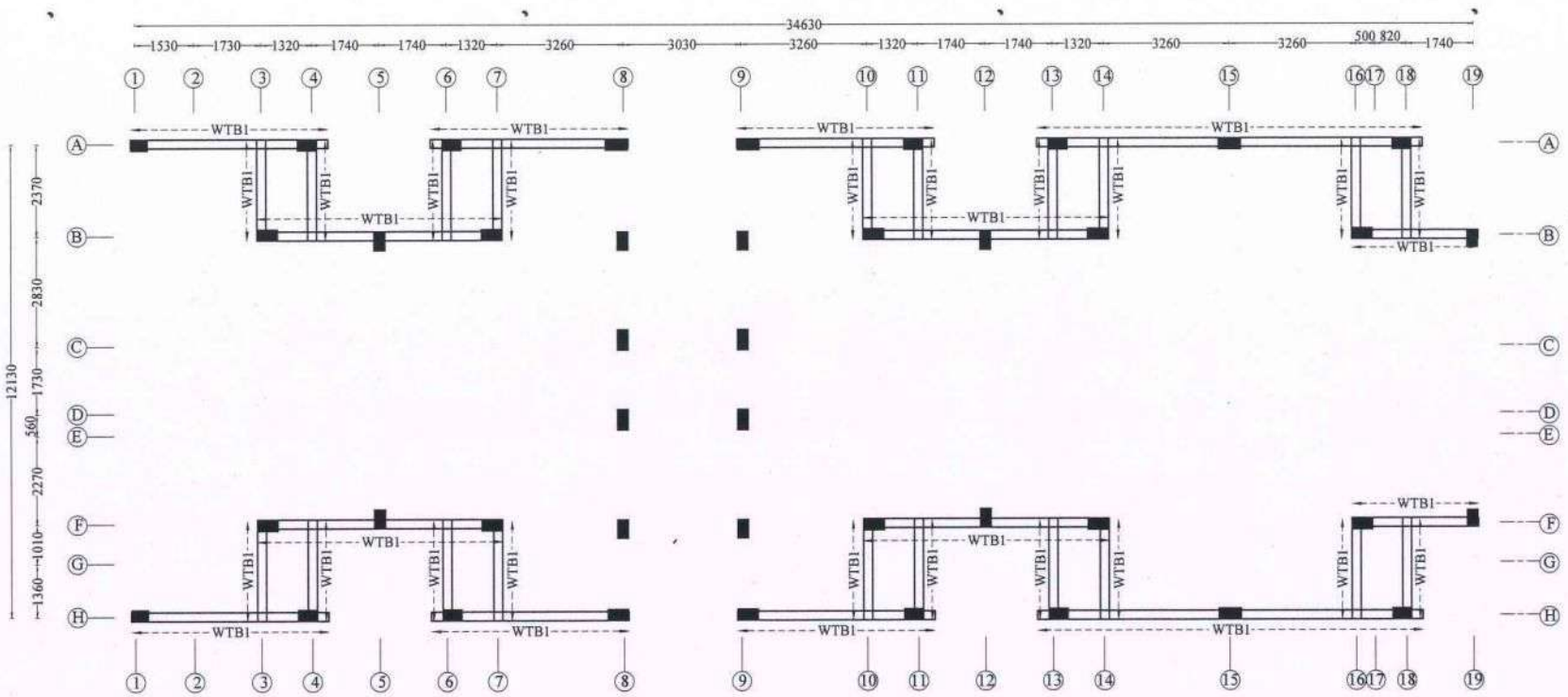
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

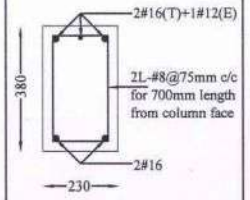
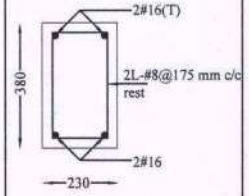
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

WATER TANK BEAM LAYOUT & DETAILS



WATER TANK BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SUPPORT
1.	WTB1 230 X 380	
		SPAN
		

NOTE:
1. For Water tank details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/04.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
WATER TANK BEAM LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/19.

REVISION NO.:

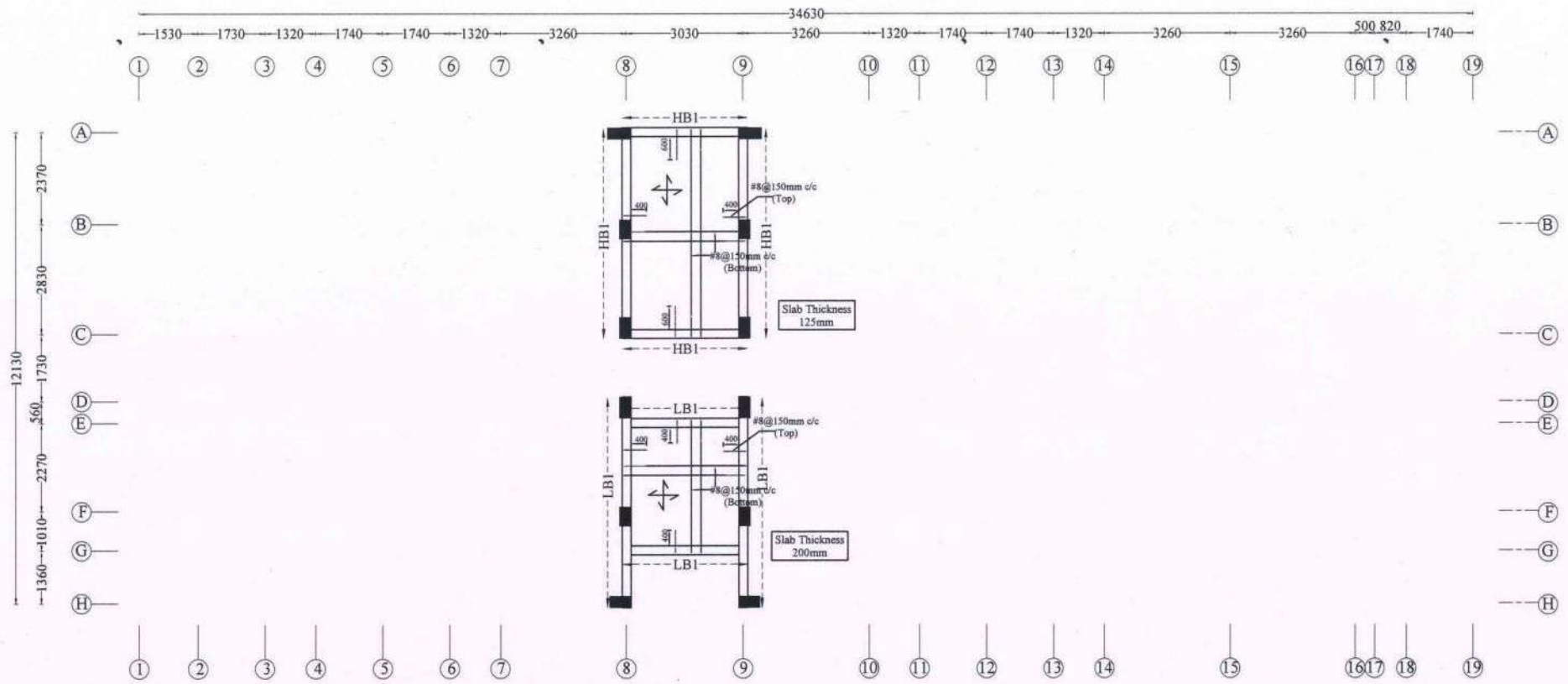
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05/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/20.

REVISION NO.:

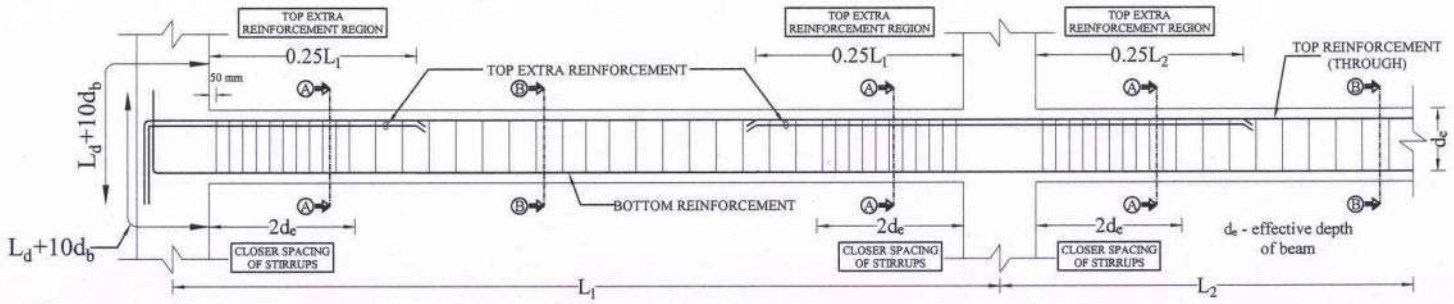
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05/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RV 07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

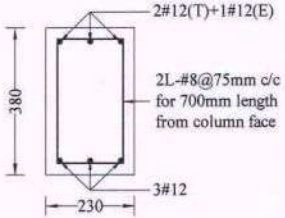
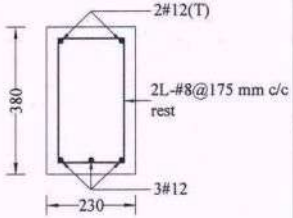
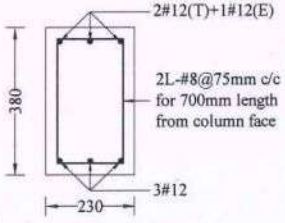
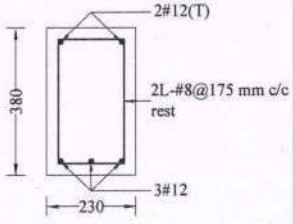
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



HEAD ROOM & LIFT ROOM BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	HB1 230 x 380		
2.	LB1 230 x 380		

TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

RV 07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/21.

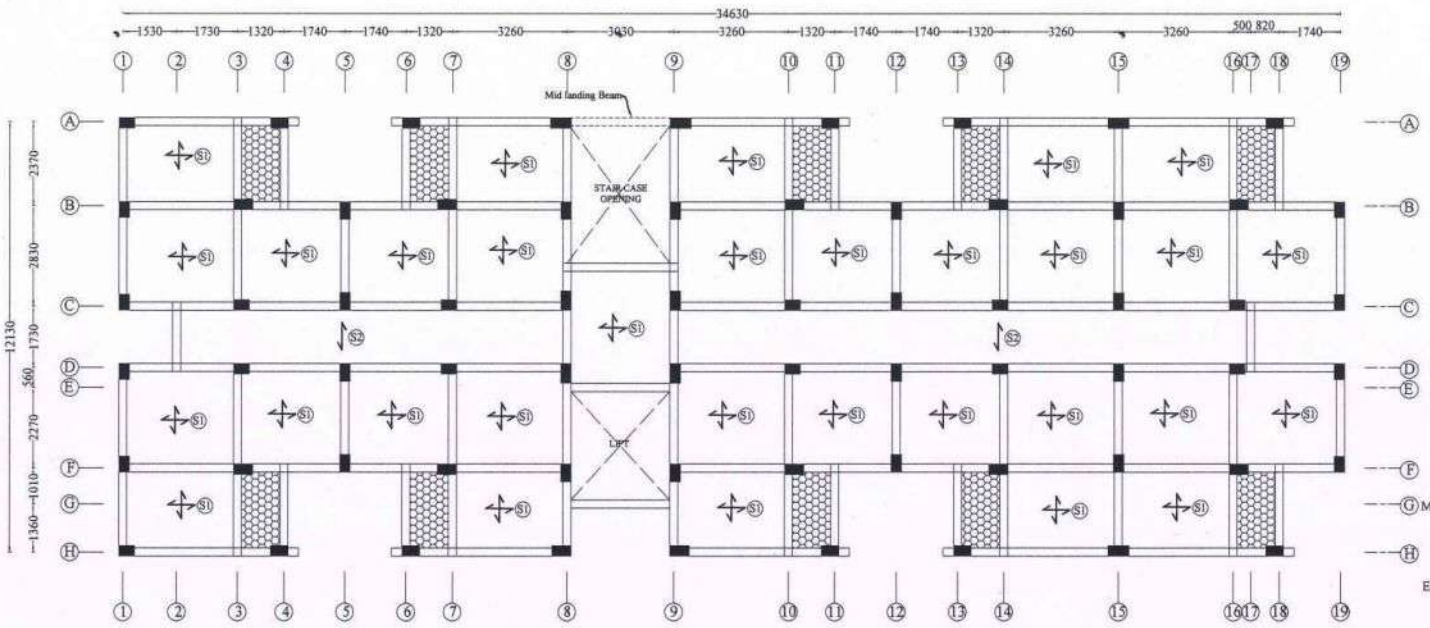
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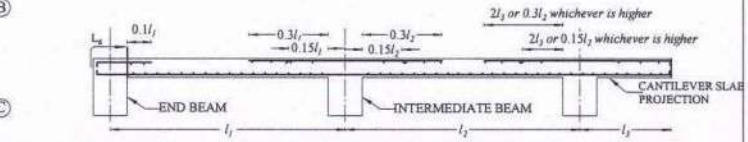
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

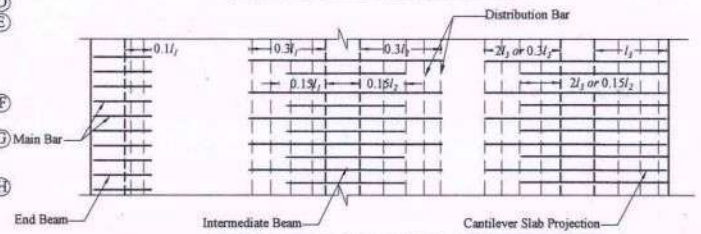
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	S1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	S2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	S3		Mat	--	--	--	--	--	--

SLAB SUNKEN BY 300mm

NOTE:
1. For Sunken Slab details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/22.

REVISION NO.:

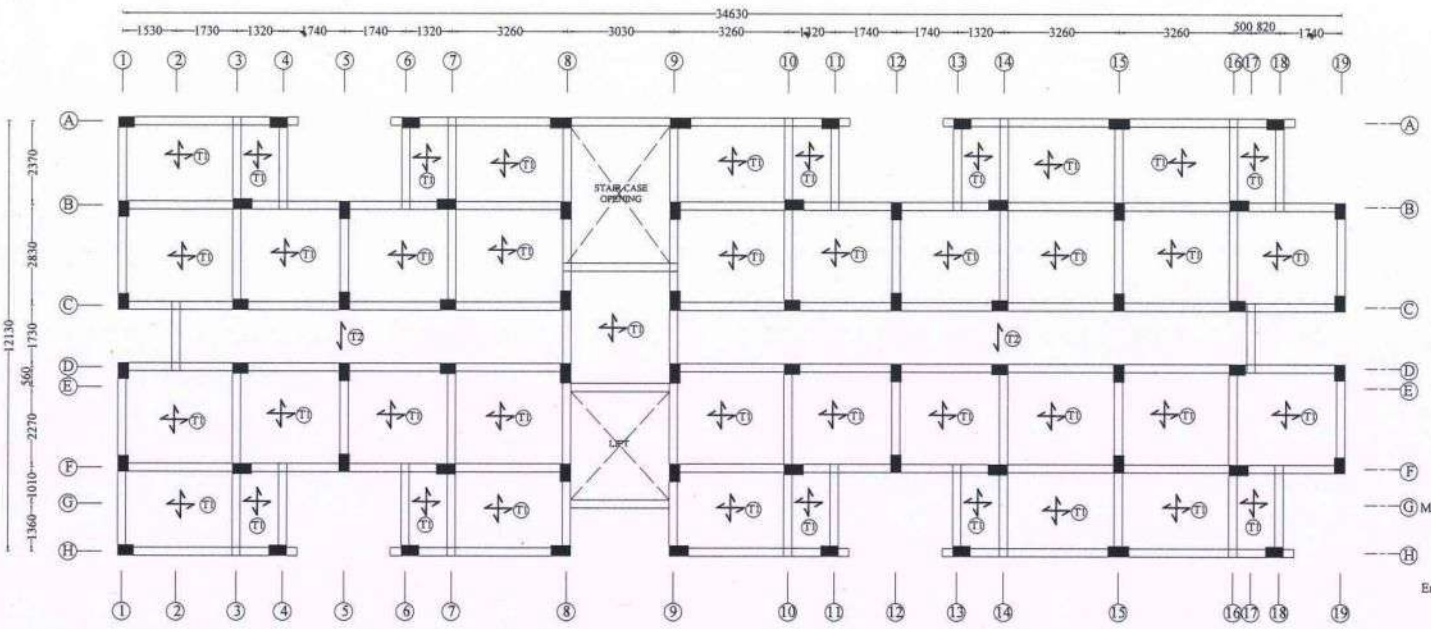
TRUE COPY
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

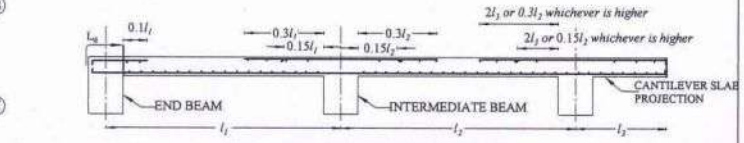
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

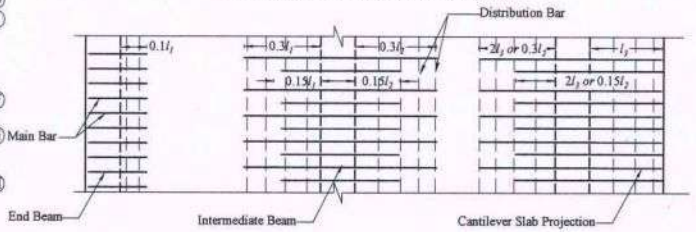
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	T1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	T2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	T3		Mat	--	--	--	--	--	--

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/23.

REVISION NO.:

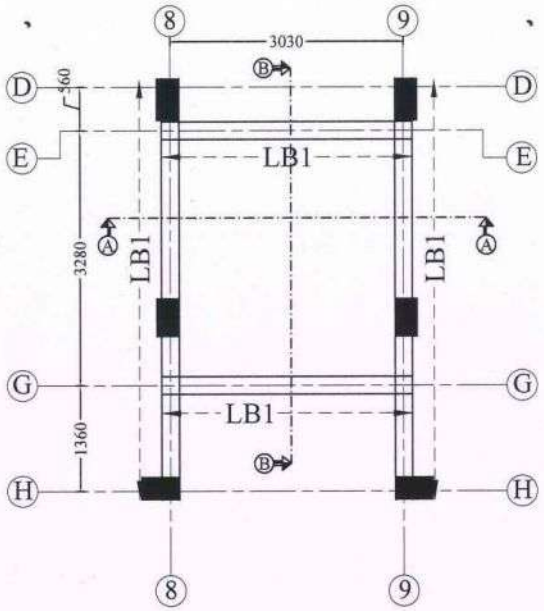
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

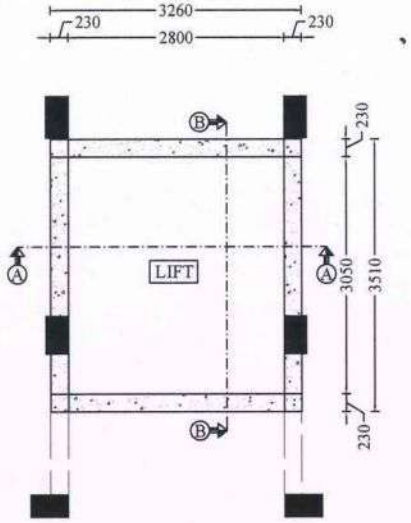
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

LAYOUT AND RC DETAILS OF LIFT WELL

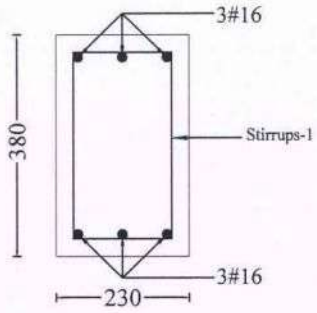


LIFT BEAM LAYOUT
BELOW THE LIFT PIT AREA

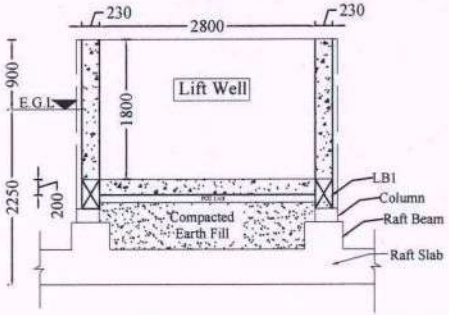


PLAN OF LIFT WELL-TYPICAL

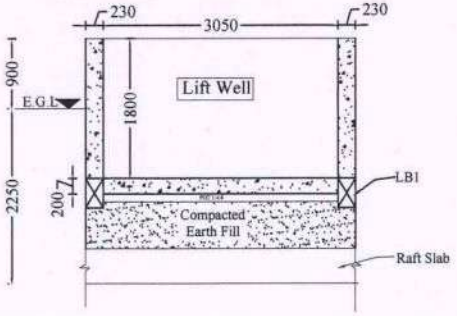
LB1
(230x380)



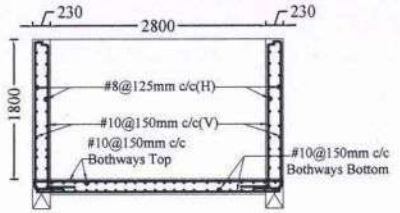
NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 700 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.



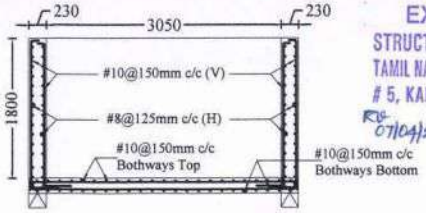
SECTION ON A-A (GENERAL ARRANGEMENT)



SECTION ON B-B (GENERAL ARRANGEMENT)



SECTION ON A-A (REINFORCEMENT DETAILS)



SECTION ON B-B (REINFORCEMENT DETAILS)

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT,Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
LAYOUT & RC DETAILS OF LIFT WELL.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/06.

REVISION NO.:

TRUE COPY
05/04/25

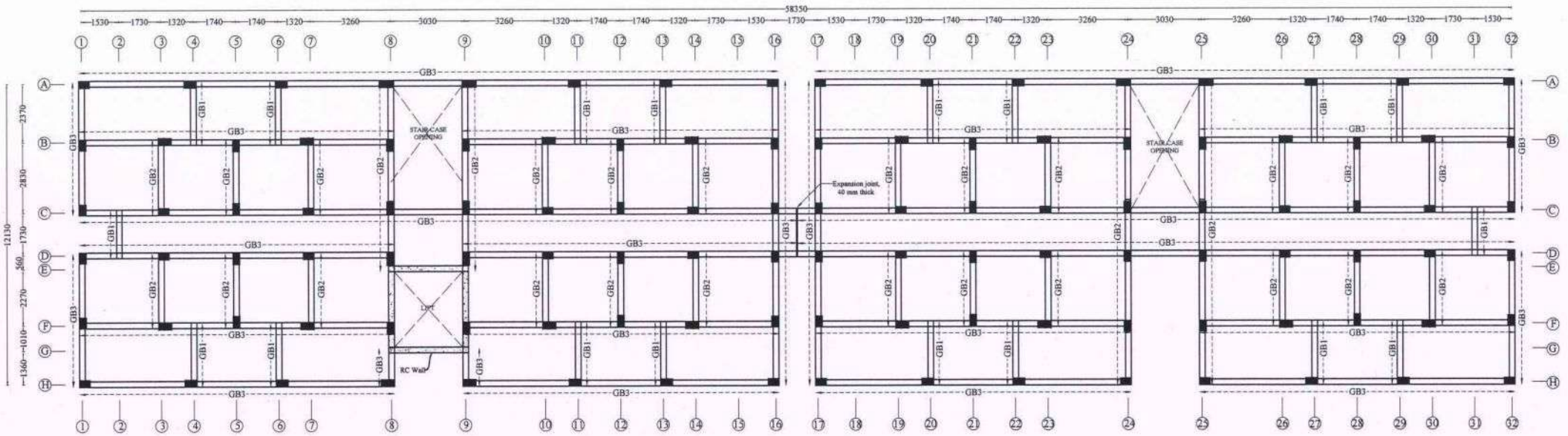
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GRADE BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
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16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/07.

REVISION NO.:

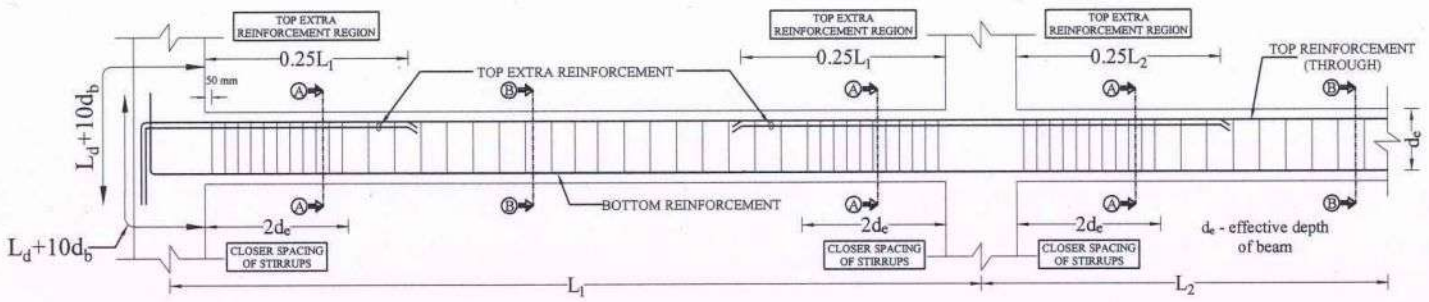
TRUE COPY
03/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

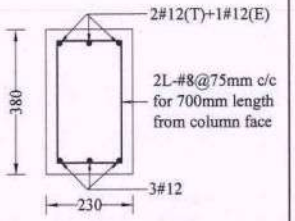
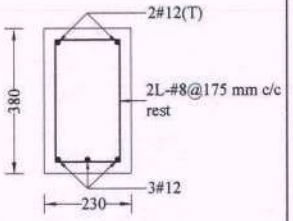
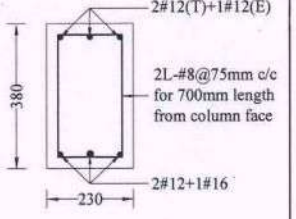
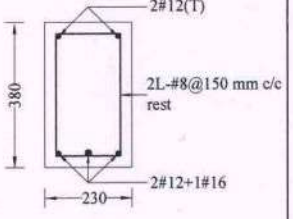
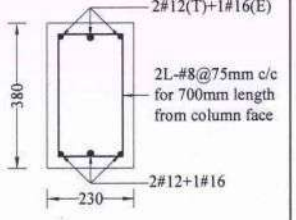
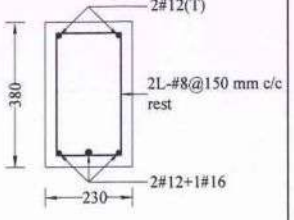
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GRADE BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	GB1 230 x 380		
2.	GB2 230 x 380		
3.	GB3 230 x 380		

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth, Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

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07/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GRADE BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/08.

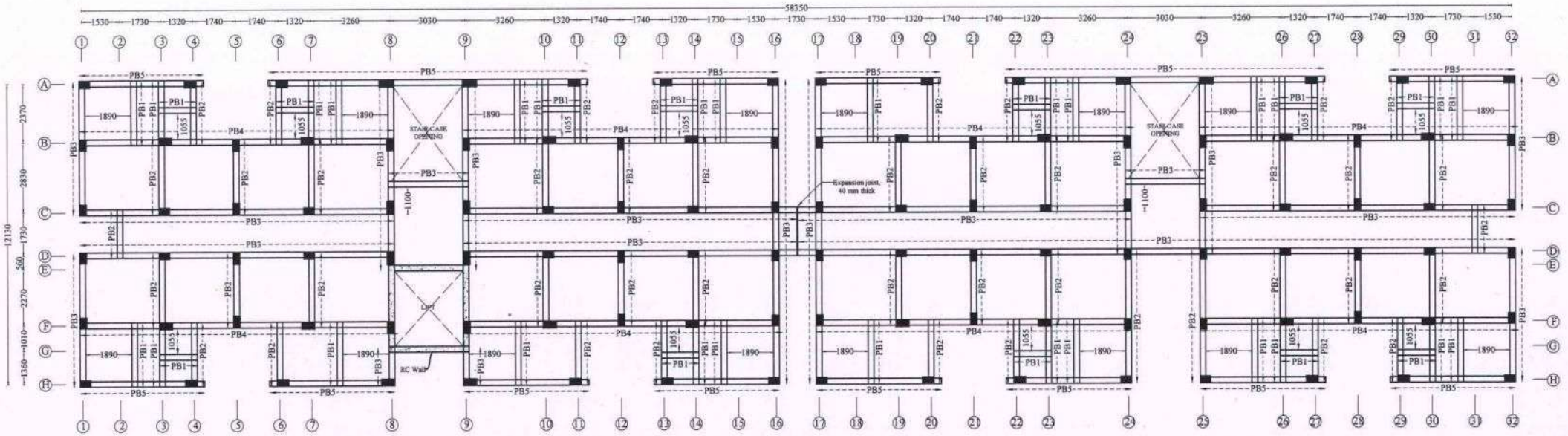
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLINTH BEAM LAYOUT



NOTE:
1. For Staircase details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/02.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
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16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/09.

REVISION NO.:

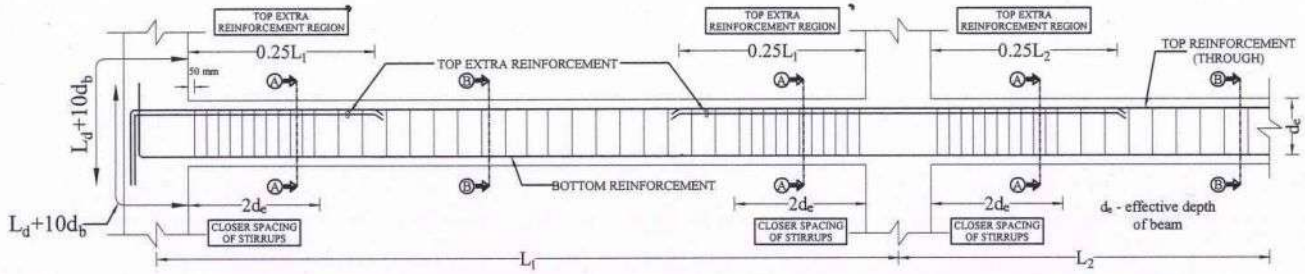
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



PLINTH BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	PB1 230 x 300	2#12(T)+1#12(E) 2L-#8@75mm c/c for 600mm length from column face 2#12 300 230	2#12(T) 2L-#8@175 mm c/c rest 2#12 300 230
2.	PB2 230 x 380	2#12(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#12+1#16 380 230	2#12(T) 2L-#8@150 mm c/c rest 2#12+1#16 380 230
3.	PB3 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
4.	PB4 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@100 mm c/c rest 2#16+1#12 380 230
5.	PB5 230 x 380	2#16(T)+1#20(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLINTH BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/10.

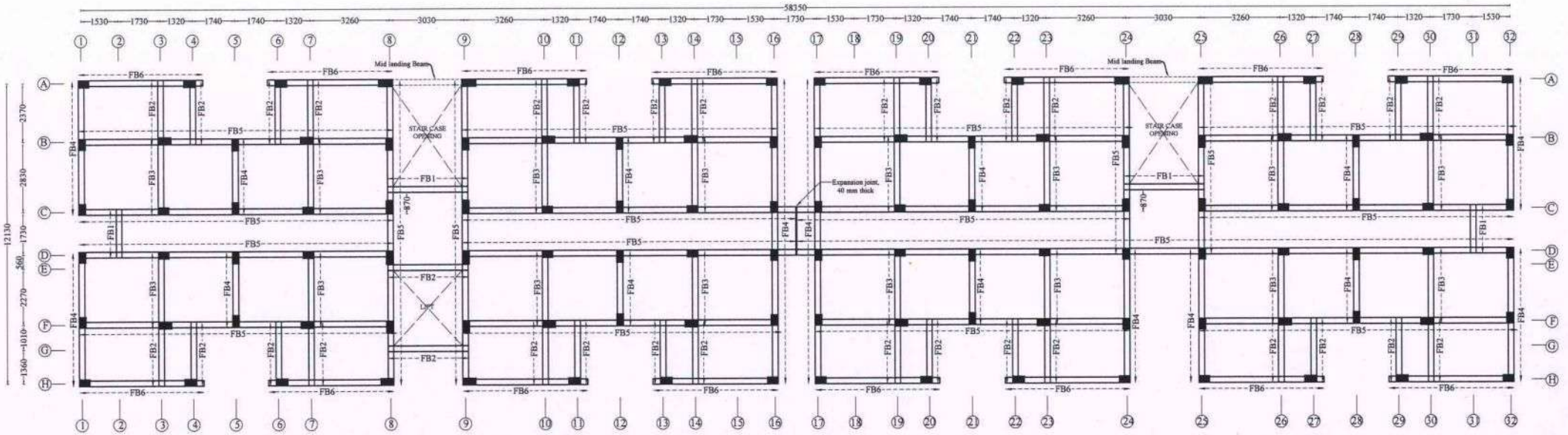
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

GROUND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
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4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
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(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
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13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
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16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/11.

REVISION NO.:

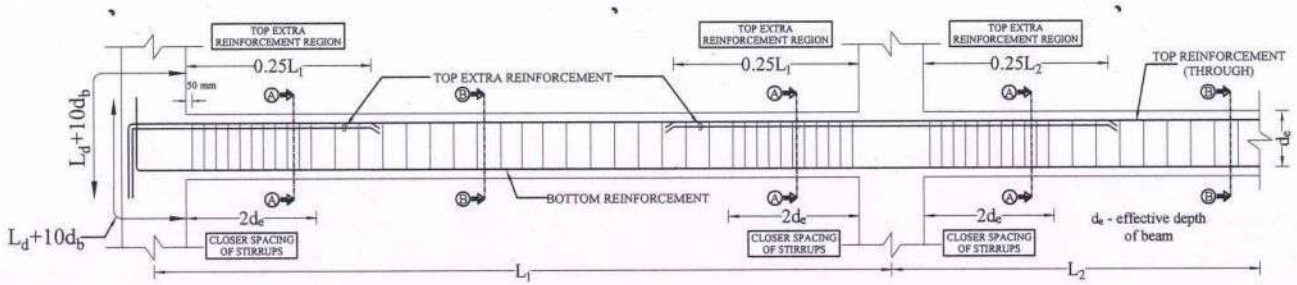
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
EE 07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



GROUND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@175 mm c/c rest 2#16 380 230
2.	FB2 230 x 500	2#16(T)+1#12(E) 2L-#8@75mm c/c for 1000mm length from column face 2#16 500 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 500 230
3.	FB3 230 x 500	2#16(T)+1#16(E) 2L-#8@75mm c/c for 1000mm length from column face 2#16+1#12 500 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 500 230
4.	FB4 230 x 500	2#16(T)+1#20(E) 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 500 230	2#16(T) 2L-#10@125 mm c/c rest 2#16+1#20 500 230
5.	FB5 230 x 500	2#20(T)+1#16(E) 2L-#10@100mm c/c for 1000mm length from column face 2#16+1#20 500 230	2#20(T) 2L-#10@125 mm c/c rest 2#16+1#20 500 230
6.	FB6 230 x 500	3#16(T)+2#16(E) 2L-#10@100mm c/c for 1000mm length from column face 3#16 500 230	3#16(T) 2L-#10@150 mm c/c rest 3#16 500 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
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   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
GROUND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/12.

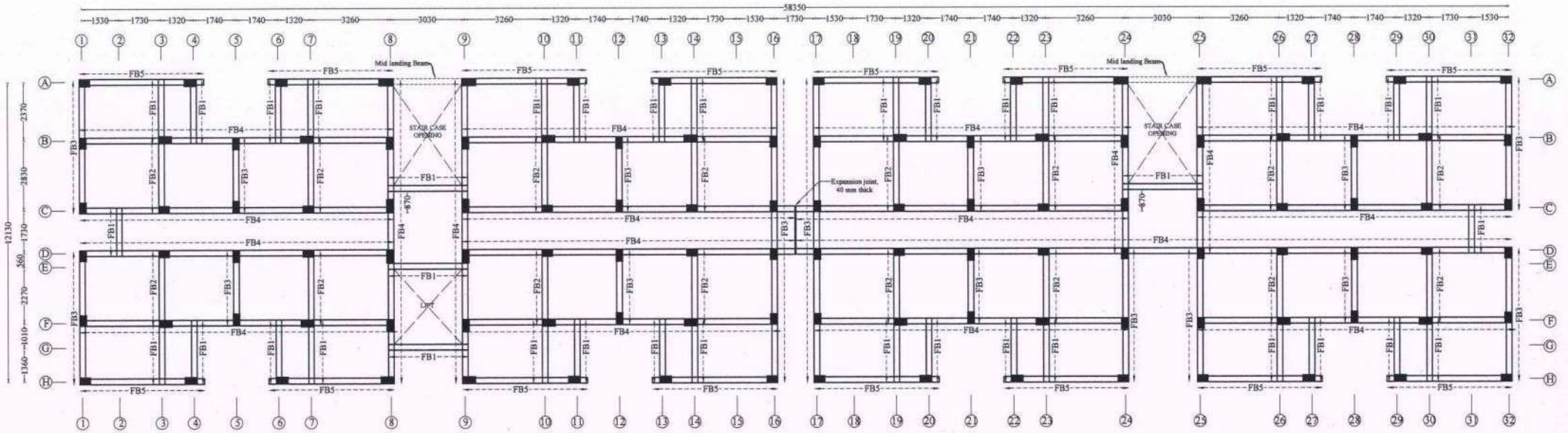
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

FIRST & SECOND FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
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6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
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7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
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14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/13.

REVISION NO.:

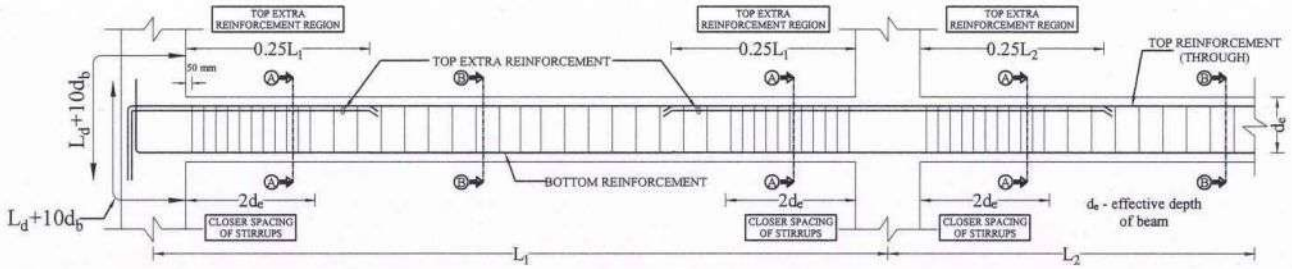
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005
07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



FIRST & SECOND FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380	2#16(T)+1#12(E) 2L-#8@75mm c/c for 700mm length from column face 2#16 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16 380 230
2.	FB2 230 x 380	2#16(T)+1#16(E) 2L-#8@75mm c/c for 700mm length from column face 2#16+1#12 380 230	2#16(T) 2L-#8@125 mm c/c rest 2#16+1#12 380 230
3.	FB3 230 x 380	2#16(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#16(T) 2L-#10@125 mm c/c rest 3#16 380 230
4.	FB4 230 x 380	2#20(T)+1#16(E) 2L-#10@100mm c/c for 700mm length from column face 2#16+1#20 380 230	2#20(T) 2L-#10@125 mm c/c rest 2#16+1#20 380 230
5.	FB5 230 x 380	2#20(T)+1#20(E) 2L-#10@100mm c/c for 700mm length from column face 3#16 380 230	2#20(T) 2L-#10@150 mm c/c rest 3#16 380 230

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
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19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
FIRST & SECOND FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/14.

REVISION NO.:

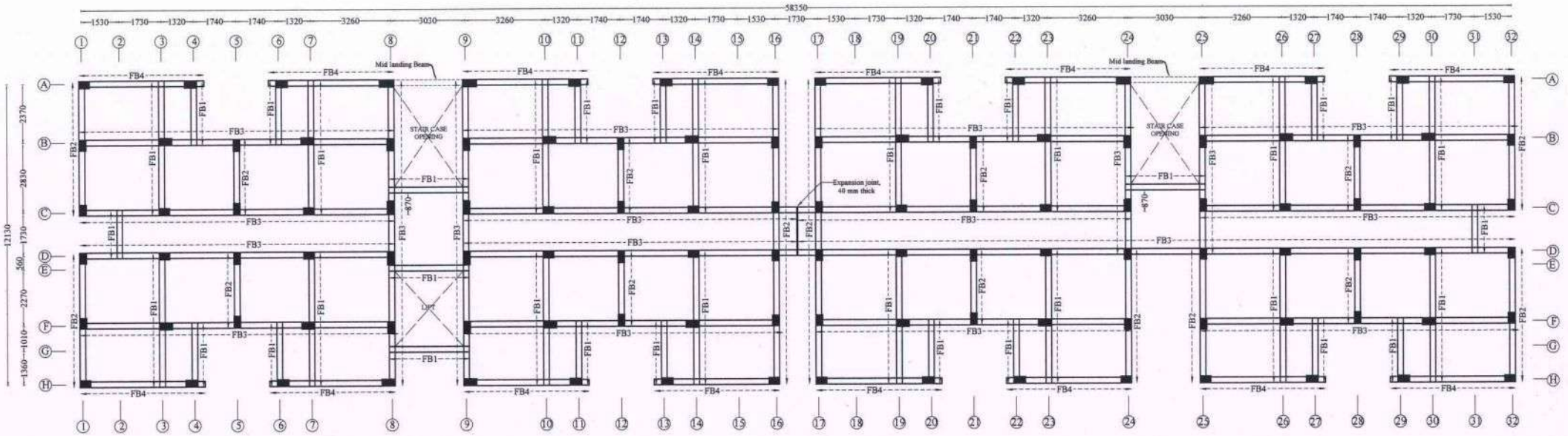
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

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STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

THIRD & FOURTH FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/15.

REVISION NO.:

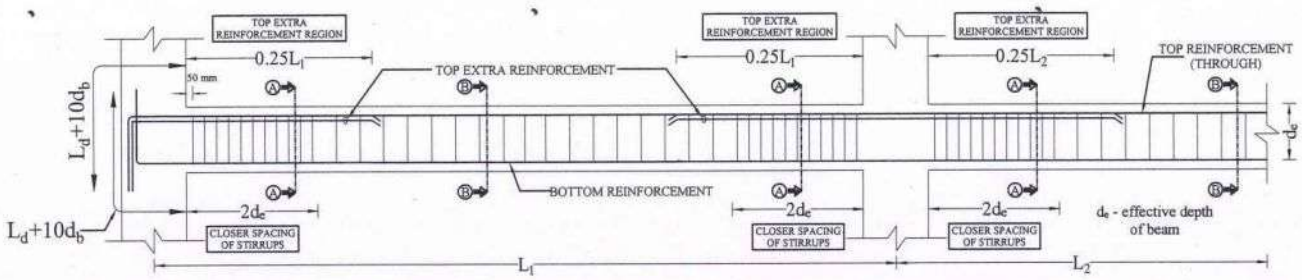
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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
08/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

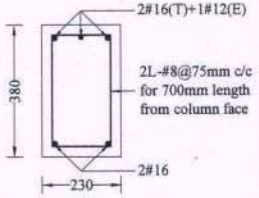
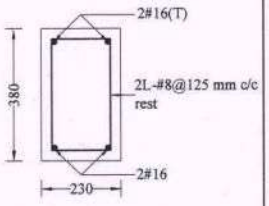
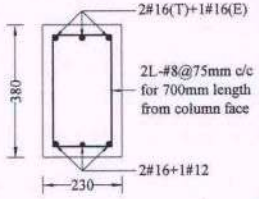
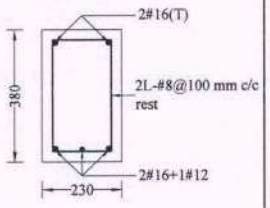
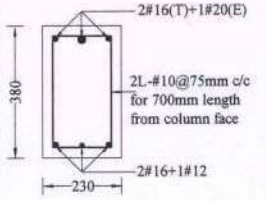
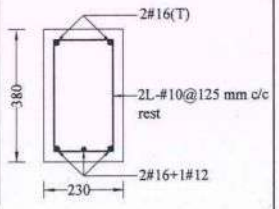
sd.xxxx 05.04.2025
Chief Engineer

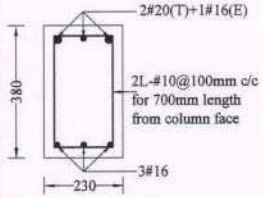
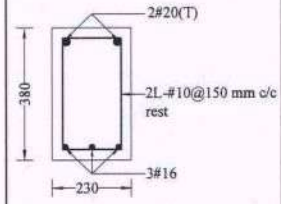
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



THIRD & FOURTH FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	FB1 230 x 380		
2.	FB2 230 x 380		
3.	FB3 230 x 380		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
4.	FB4 230 x 380		

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
THIRD & FOURTH FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/16.

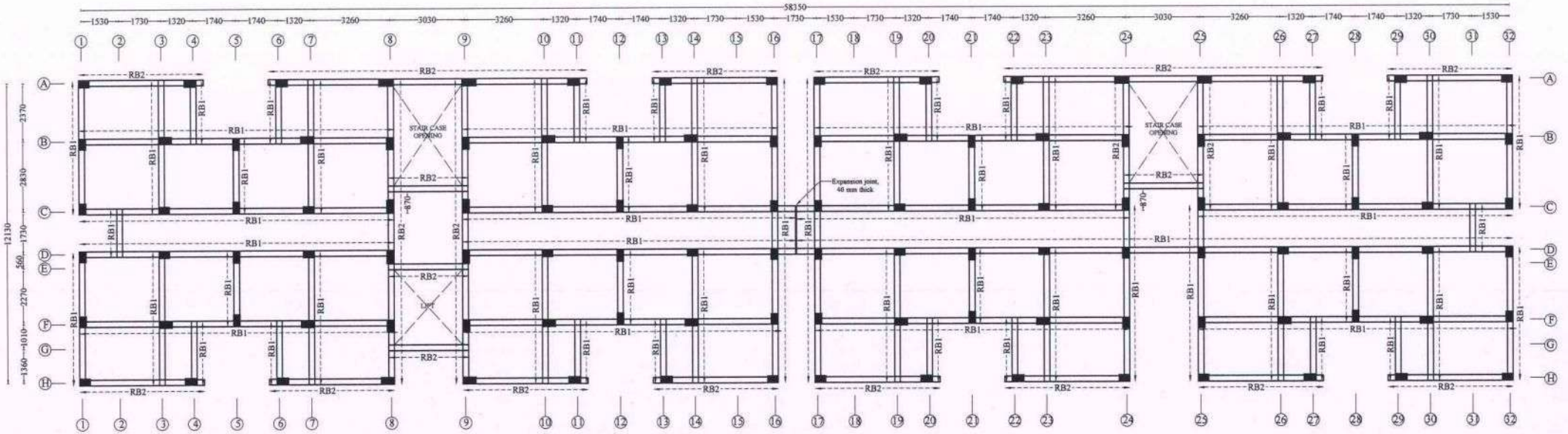
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
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(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/17.

REVISION NO.:

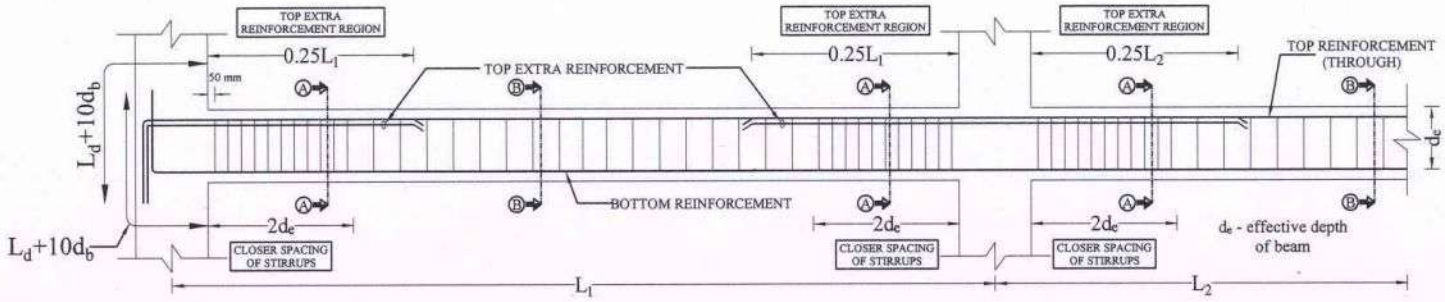
TRUE COPY
08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
R 07/04/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

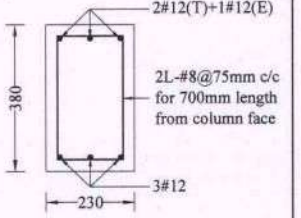
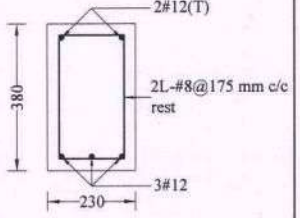
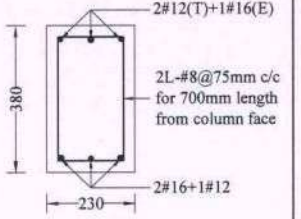
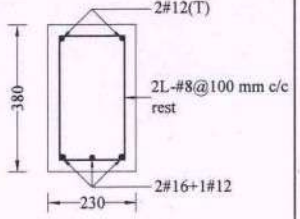
sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TERRACE FLOOR BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	RB1 230 x 380		
2.	RB2 230 x 380		

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08/04/25

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

NOTE :

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4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/18.

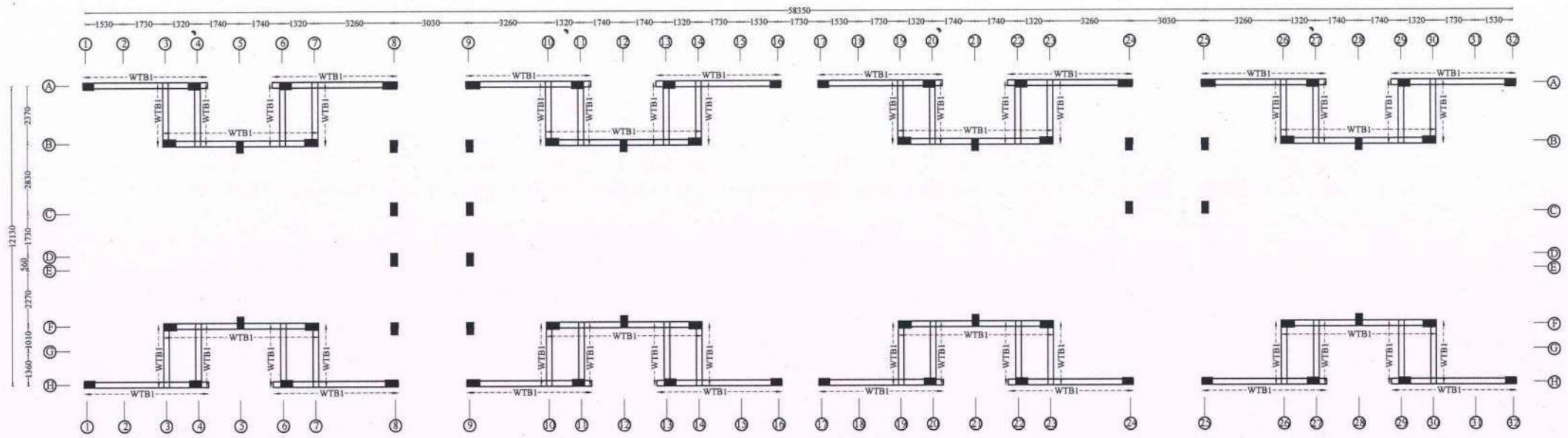
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

WATER TANK BEAM LAYOUT & DETAILS



WATER TANK BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SUPPORT	SPAN
1.	WTB1 230 X 380	2#16(T)+1#12(E); 2L-#8@75mm c/c for 700mm length from column face; 2#16; 380; 230	2#16(T); 2L-#8@175 mm c/c rest; 2#16; 380; 230

NOTE:
1. For Water tank details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/04.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
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   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
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14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
WATER TANK BEAM LAYOUT & DETAILS

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/19.

REVISION NO.:

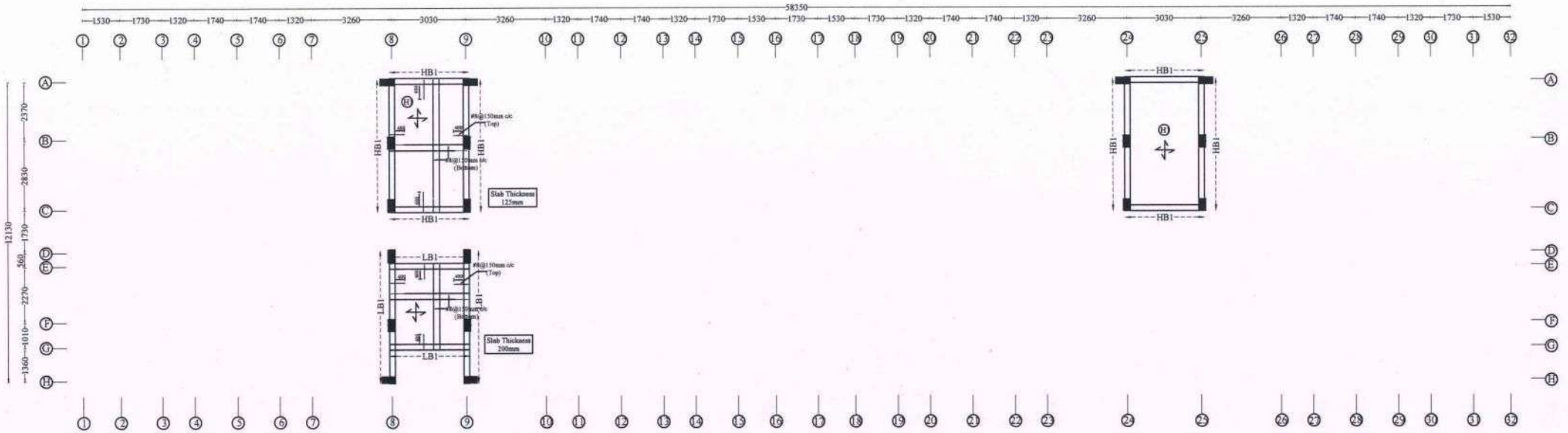
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06/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
07/04/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/20.

REVISION NO.:

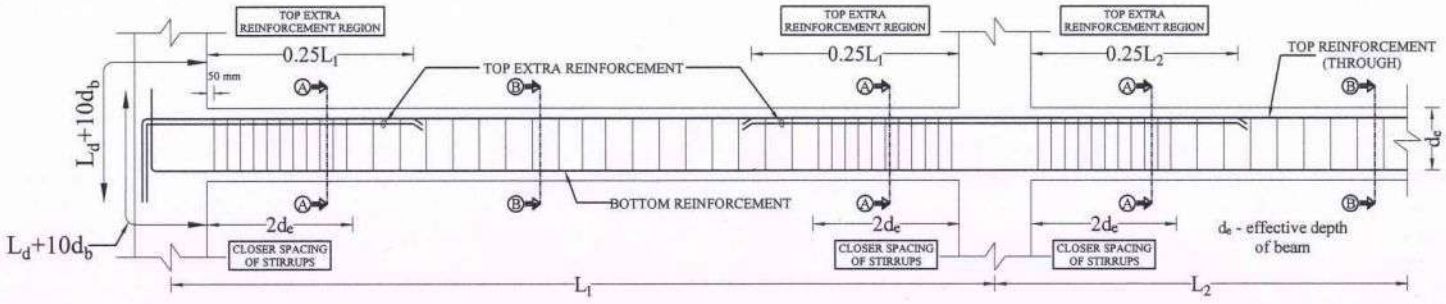
TRUE COPY
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL CURTAILMENT & STIRRUPS DETAILS



HEAD ROOM & LIFT ROOM BEAM DETAILS

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	HB1 230 x 380	2#12(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 3#12 230	2#12(T) 380 2L-#8@175 mm c/c rest 3#12 230
2.	LB1 230 x 380	2#12(T)+1#12(E) 380 2L-#8@75mm c/c for 700mm length from column face 3#12 230	2#12(T) 380 2L-#8@175 mm c/c rest 3#12 230

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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

08/04/25

07/04/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
HEAD ROOM & LIFT ROOM BEAM DETAILS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/21.

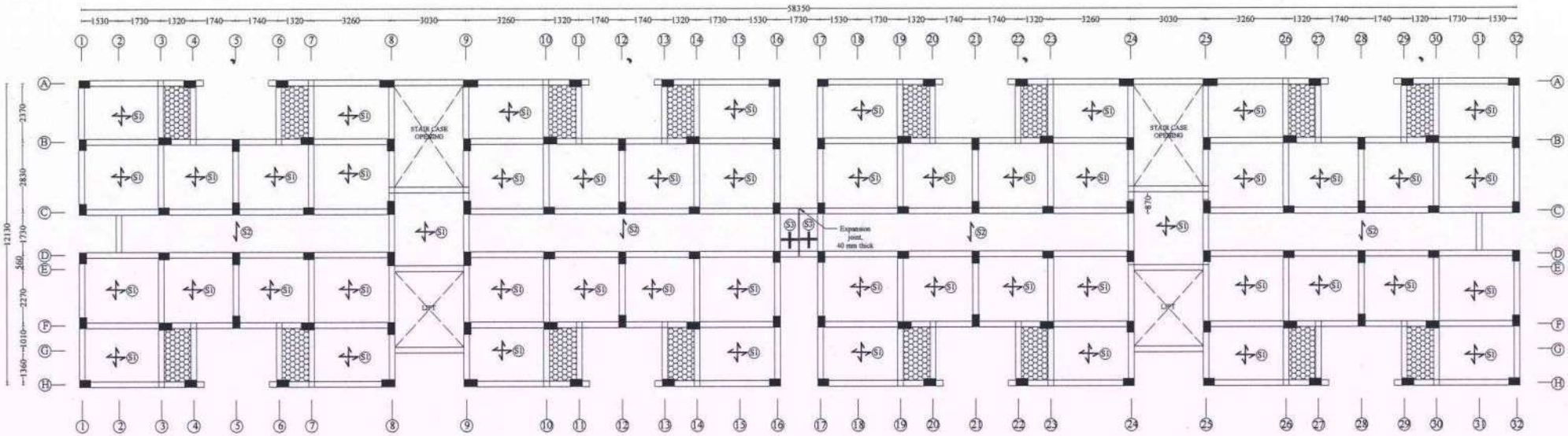
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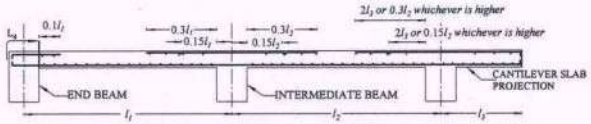
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

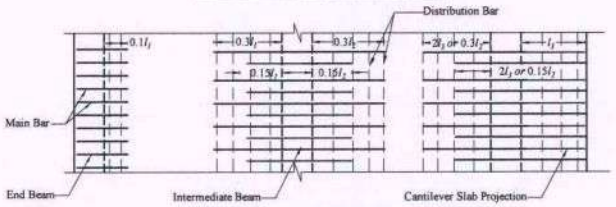
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	S1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	S2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	S3		Mat	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	--

SLAB SUNKEN BY 300mm

NOTE:
1. For Sunken Slab details refer drawing **TNUHDB/PERIYAR NAGAR/GEN/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

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08/04/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
RVS 07/04/25

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/22.

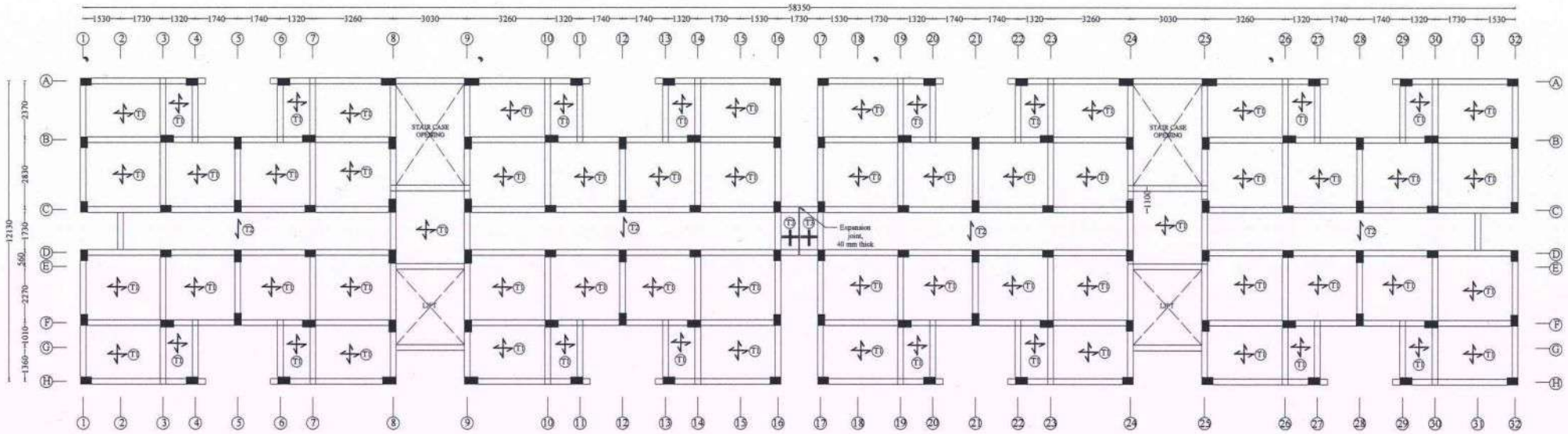
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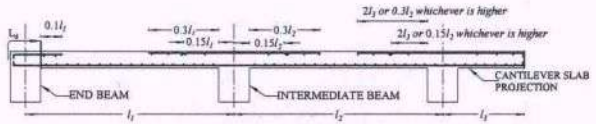
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

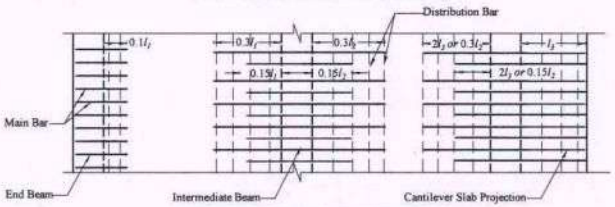
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TERRACE FLOOR SLAB LAYOUT & DETAILS





TYPICAL SLAB REINFORCEMENT DETAILS



TYPICAL TOP REINFORCEMENT DETAILS OF SLAB

SLAB REINFORCEMENT DETAILS

Sl. No.	SLAB ID	LEGEND	TYPE OF SLAB	THICKNESS (mm)	Bottom Reinforcement		Top Reinforcement		
					Shorter Span	Longer Span	Shorter Span	Longer Span	Distribution bar wherever required
1.	T1		Two Way	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 230 c/c
2.	T2		One Way	125	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 150 c/c	#8 @ 230 c/c	#8 @ 230 c/c
3.	T3		Mat	125	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	#8 @ 150 c/c	–

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500D grade steel shall be adopted.
3. Clear cover to slab is 25mm.
4. The bottom shorter direction bar / main bars should be placed at bottom most of layer & Top main bar should be placed at top most of layer.

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08/04/25

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

07/04/25

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TERRACE FLOOR SLAB LAYOUT & DETAILS.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/23.

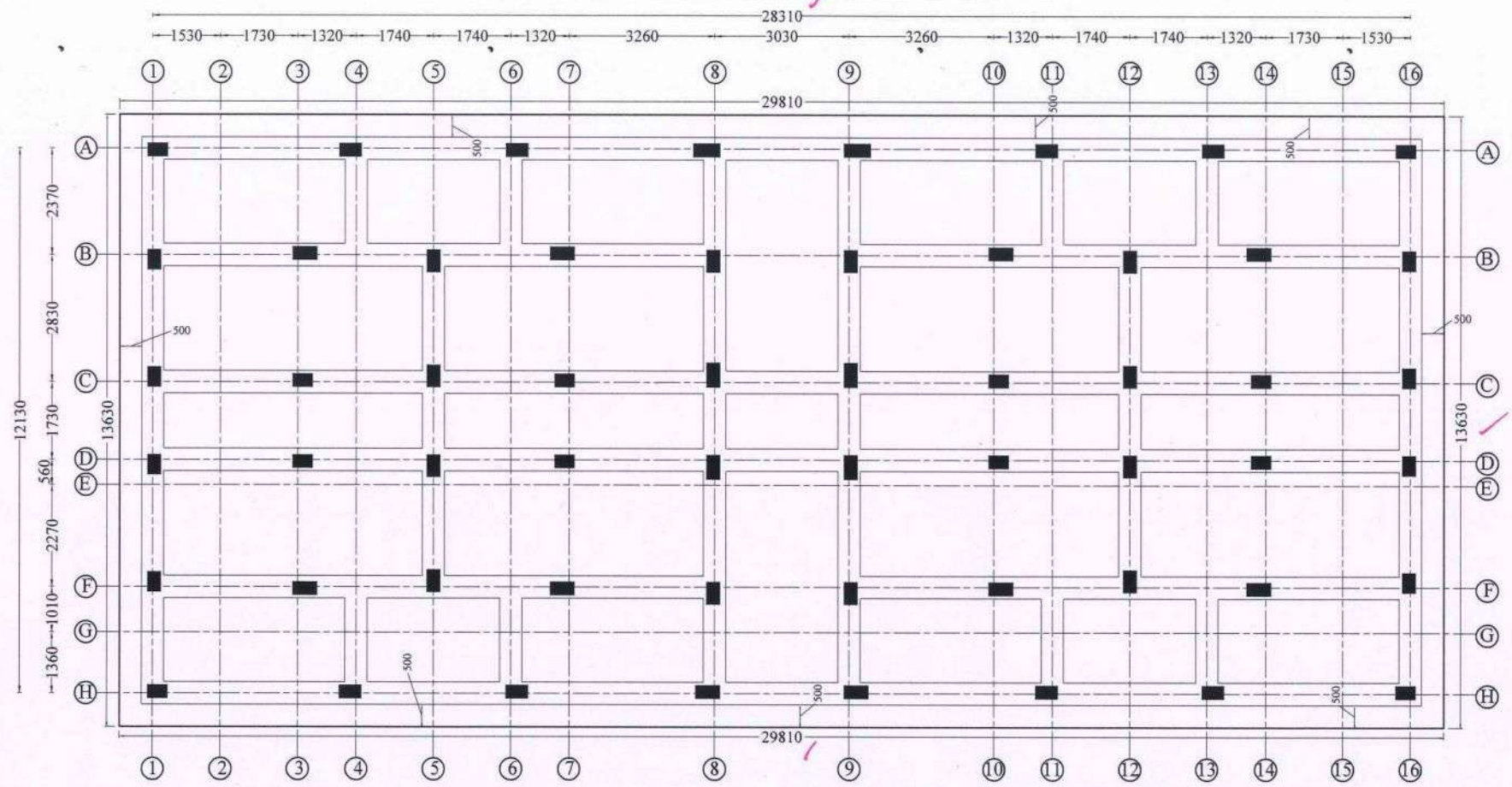
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 05.04.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLAN AT RAFT FOUNDATION LEVEL



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLAN AT RAFT FOUNDATION LEVEL.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/01.

REVISION NO.:

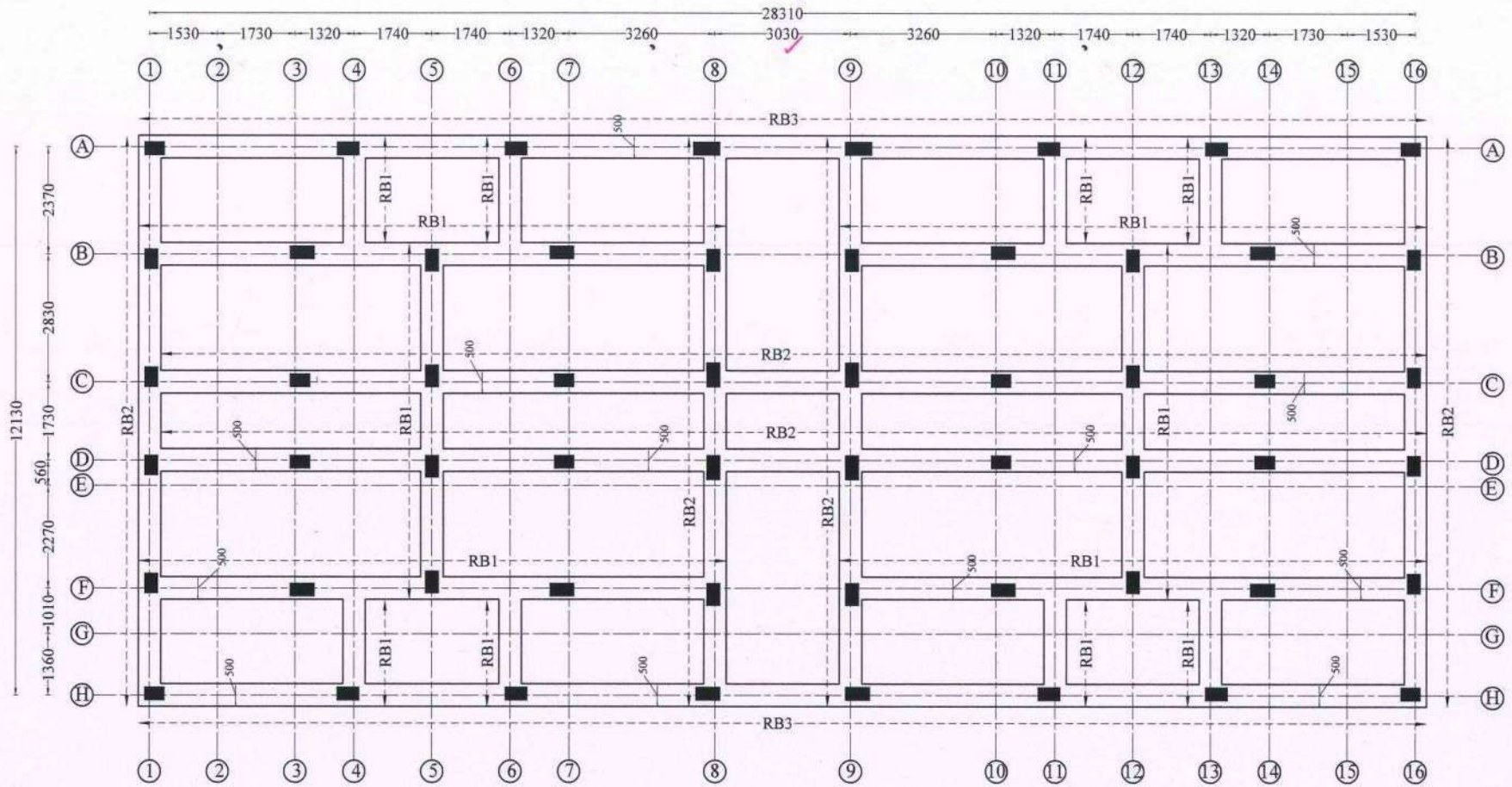
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for 14/3/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

RAFT BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
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STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
RAFT BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/02.

REVISION NO.:

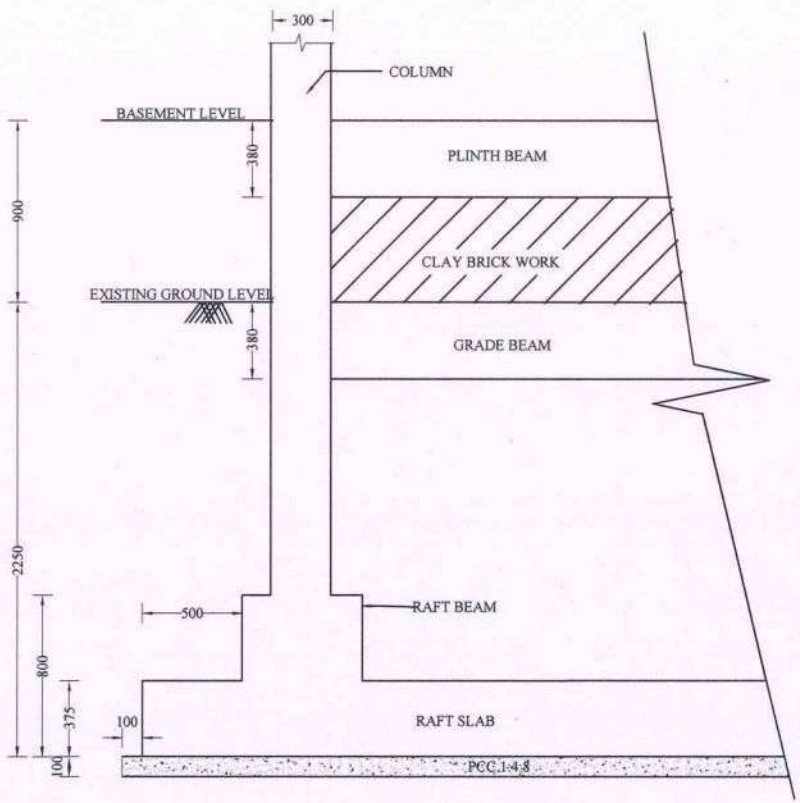
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16/3/25
for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

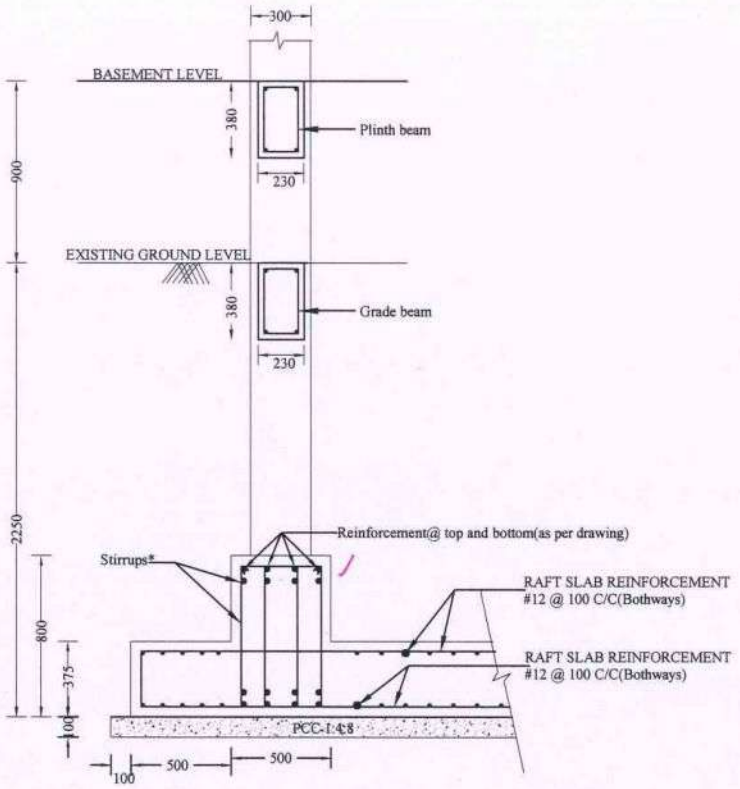
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

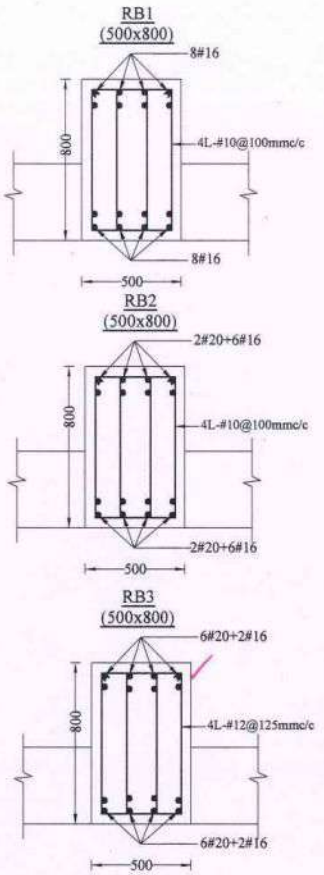
TYPICAL CROSS SECTION OF RAFT FOUNDATION.



TYPICAL REINFORCEMENT DETAILS OF RAFT FOUNDATION.



RAFT BEAM DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
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STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL CROSS SECTION & REINFORCEMENT DETAILS OF RAFT FOUNDATION & RAFT BEAM DETAILS

TYPE DESIGN NO.: 33/2021 - TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/03.

REVISION NO.:

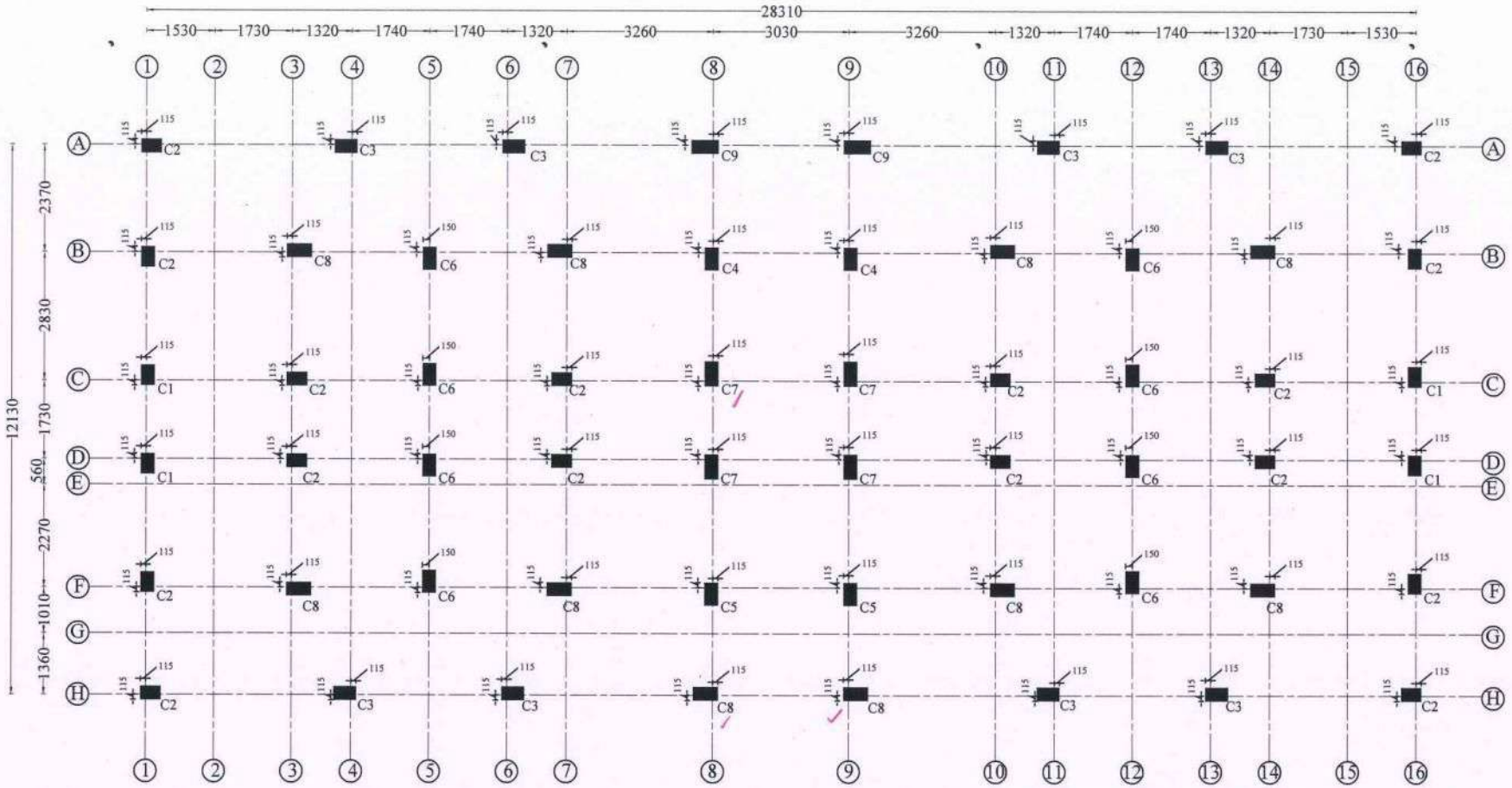
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for
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/3/25
14/03/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

COLUMN LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
COLUMN LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE A

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE A/04.

REVISION NO.:

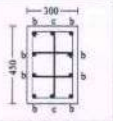
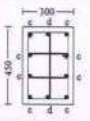
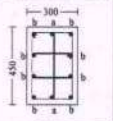
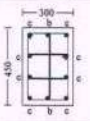
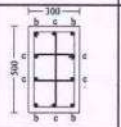
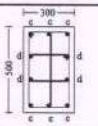
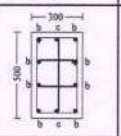
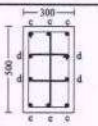
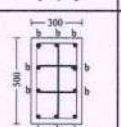
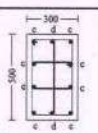
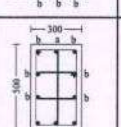
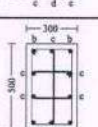
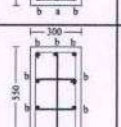
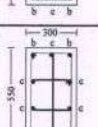
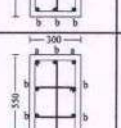
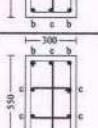
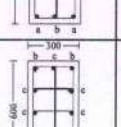
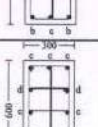
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for 14/3/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

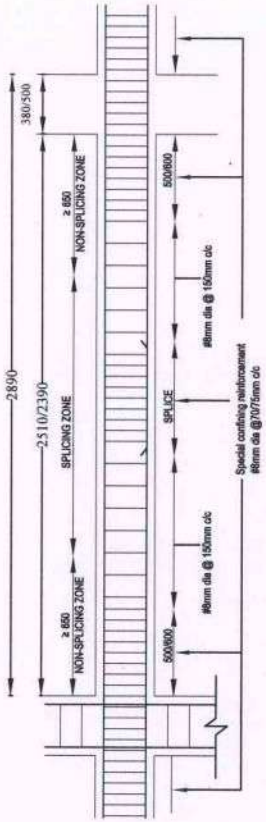
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

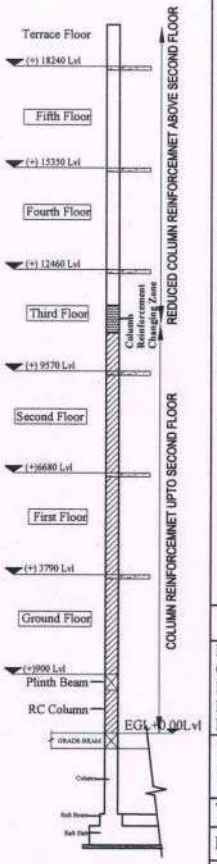
SCHEDULE OF COLUMNS

Sl. No.	Column Marking	No. of Columns	Size (mm x mm)	Upto Second Floor		Above Second Floor		Lateral Ties	Ties Profile	
				Column Verticals	Cross Section	Column Verticals	Cross Section			
1.	C1	04	300 x 450	#20 - 8 Nos + #16 - 2 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
2.	C2	16	300 x 450	#25 - 2 Nos + #20 - 8 Nos		#20 - 2 Nos + #16 - 8 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
3.	C3	08	300 x 500	#20 - 4 Nos + #16 - 6 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
4.	C4	02	300 x 500	#20 - 8 Nos + #16 - 2 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
5.	C5	02	300 x 500	#20 - 10 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
6.	C6	08	300 x 500	#25 - 2 Nos + #20 - 8 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
7.	C7	04	300 x 550	#20 - 10 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
8.	C8	10	300 x 550	#25 - 4 Nos + #20 - 6 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
9.	C9	02	300 x 600	#20 - 4 Nos + #16 - 8 Nos		#16 - 8 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 25 mm b - # 20 mm c - # 16 mm d - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
SCHEDULE OF COLUMNS.

TYPE DESIGN NO.:33/2021-TYPE A

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE A/05.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

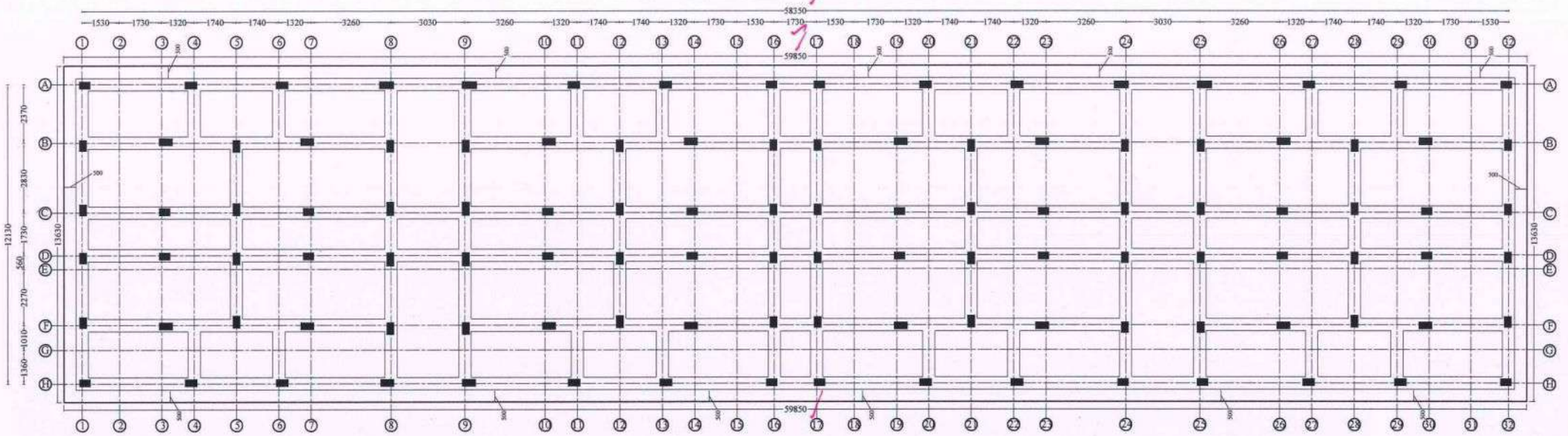
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

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for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

PLAN AT RAFT FOUNDATION LEVEL



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLAN AT RAFT FOUNDATION LEVEL.

TYPE DESIGN NO.: 33/2021 - TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/01.

REVISION NO.:

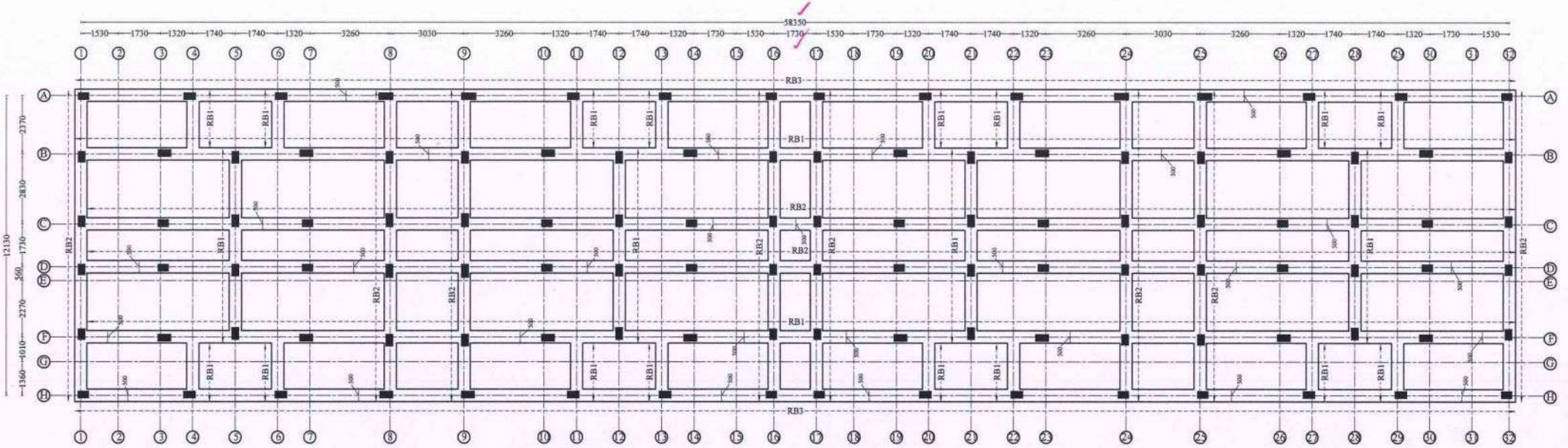
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for 14/03/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

RAFT BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
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7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
RAFT BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/02.

REVISION NO.:

TRUE COPY

for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

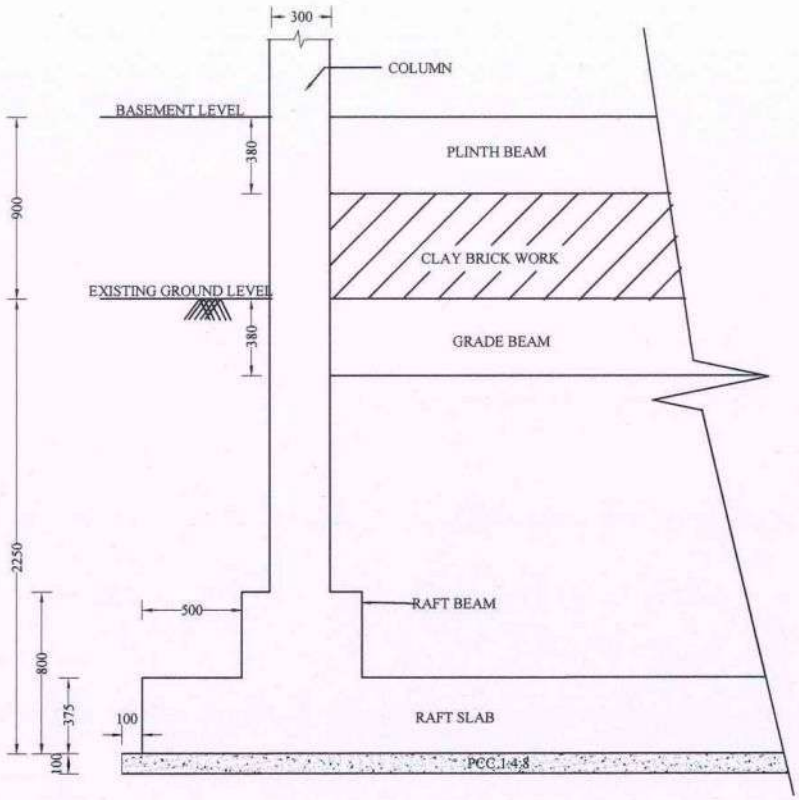
14/08/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

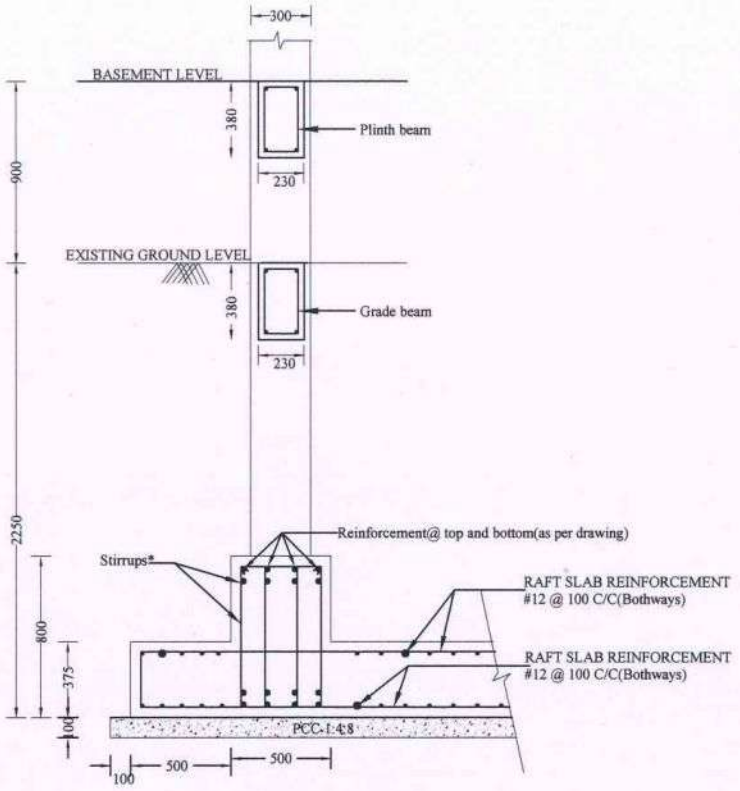
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
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NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

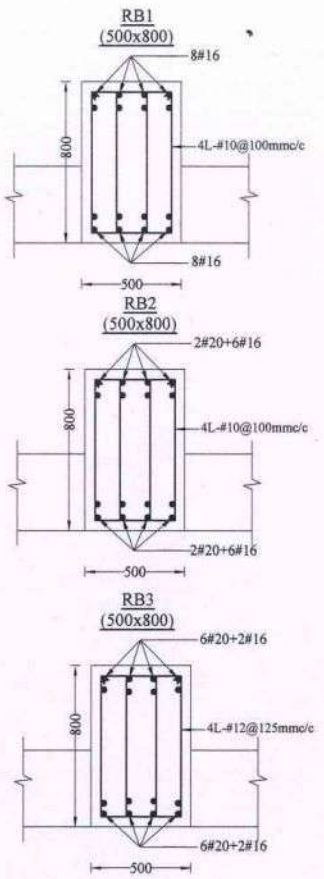
TYPICAL CROSS SECTION OF RAFT FOUNDATION.



TYPICAL REINFORCEMENT DETAILS OF RAFT FOUNDATION.



RAFT BEAM DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
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8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL CROSS SECTION & REINFORCEMENT DETAILS OF RAFT FOUNDATION & RAFT BEAM DETAILS

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/03.

REVISION NO.:

TRUE COPY

for 19/03/25

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

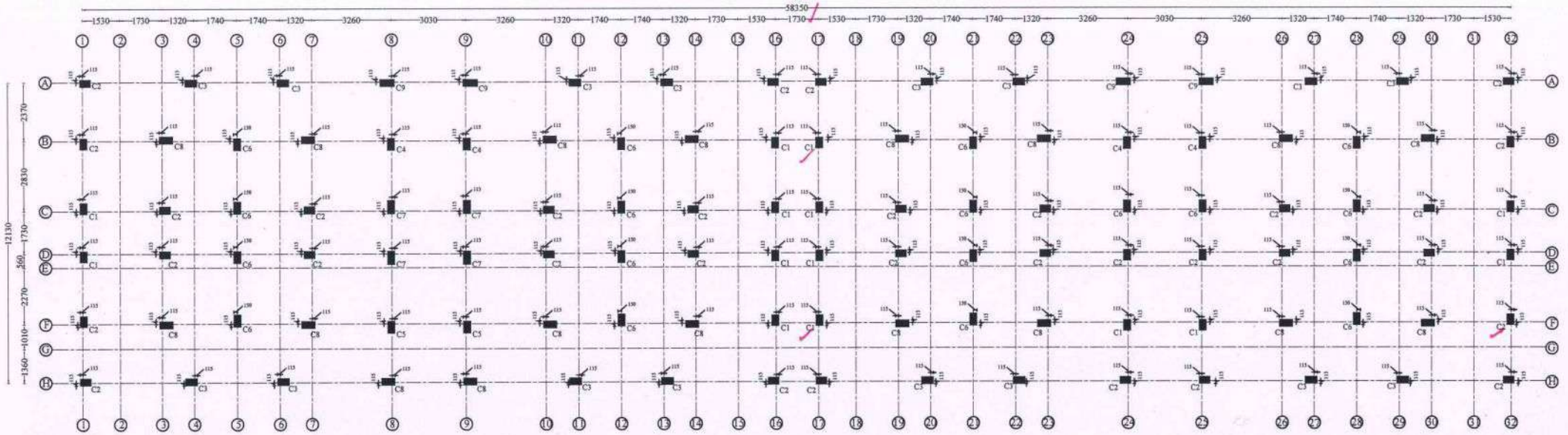
14/03/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

COLUMN LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
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13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
COLUMN LAYOUT.

TYPE DESIGN NO.: 33/2021- TYPE D

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE D/04.

REVISION NO.:

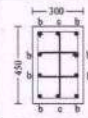
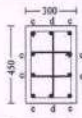
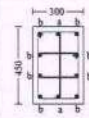
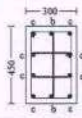
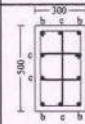
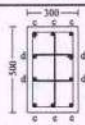
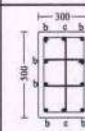
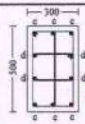
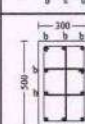
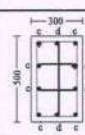
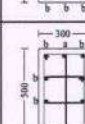
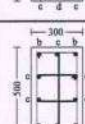
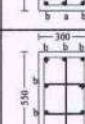
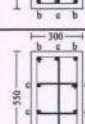
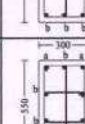
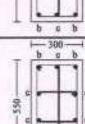
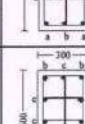
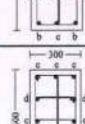
TRUE COPY
for
14/08/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/08/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

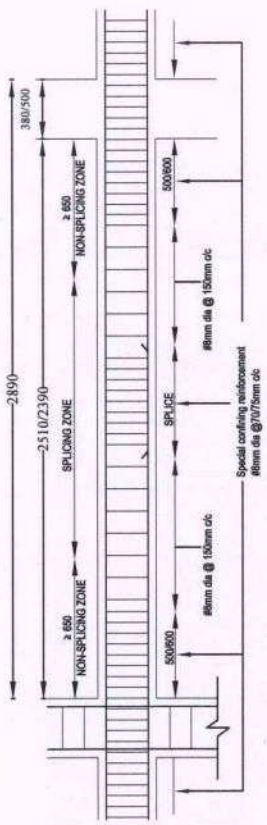
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

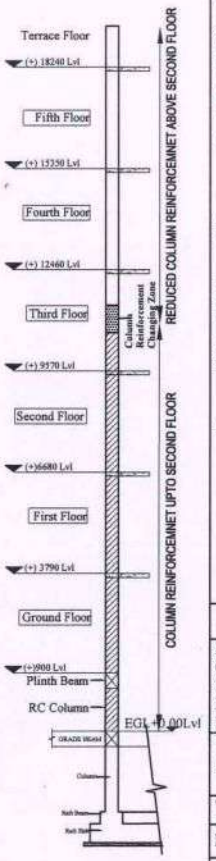
SCHEDULE OF COLUMNS

Sl. No.	Column Marking	No. of Columns	Size (mm x mm)	Upto Second Floor		Above Second Floor		Lateral Ties	Ties Profile	
				Column Verticals	Cross Section	Column Verticals	Cross Section			
1.	C1	14	300 x 450	#20 - 8 Nos + #16 - 2 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
2.	C2	32	300 x 450	#25 - 2 Nos + #20 - 8 Nos		#20 - 2 Nos + #16 - 8 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
3.	C3	16	300 x 500	#20 - 4 Nos + #16 - 6 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
4.	C4	04	300 x 500	#20 - 8 Nos + #16 - 2 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
5.	C5	02	300 x 500	#20 - 10 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
6.	C6	18	300 x 500	#25 - 2 Nos + #20 - 8 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
7.	C7	04	300 x 550	#20 - 10 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
8.	C8	18	300 x 550	#25 - 4 Nos + #20 - 6 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
9.	C9	04	300 x 600	#20 - 4 Nos + #16 - 8 Nos		#16 - 8 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 25 mm b - # 20 mm c - # 16 mm d - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
SCHEDULE OF COLUMNS.

TYPE DESIGN NO.:33/2021-TYPE D

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE D/05.

REVISION NO.:

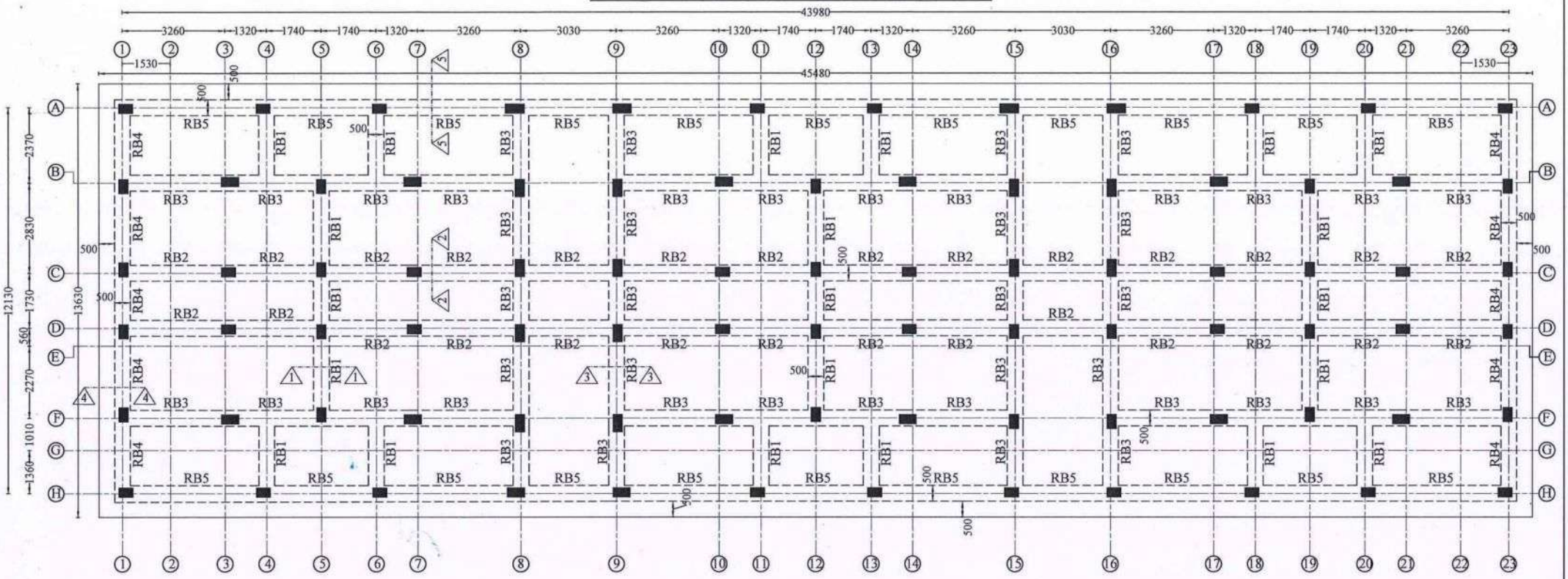
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TRUE COPY
14/03/25
for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

PLAN AT RAFT FOUNDATION LEVEL



Note:
1. For Raft Beam Details refer Drawing no.: TNUHDB/PERIYAR NAGAR/Type-C/02

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS: 456 - 2000.
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4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLAN AT RAFT FOUNDATION LEVEL

TYPE DESIGN NO.:

DWG.NO.: TNUHDB/PERIYAR NAGAR/Type-C/01

REVISION NO.:

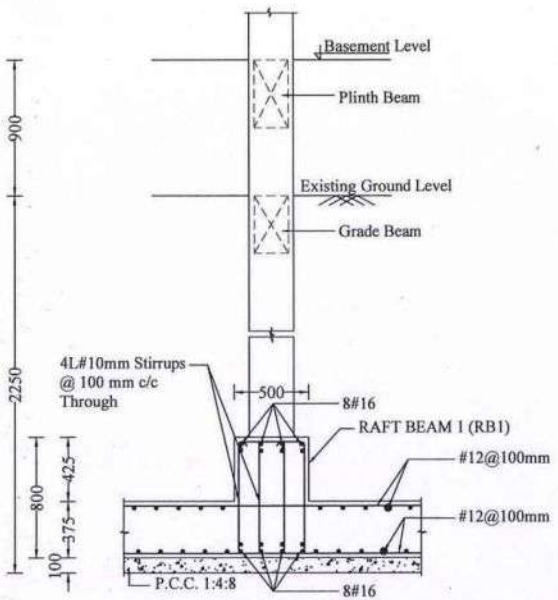
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14/2/2025
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005
14/02/25

Assistant Enginner	Asst. Exe. Engineer
Executive Engineer	SE - South

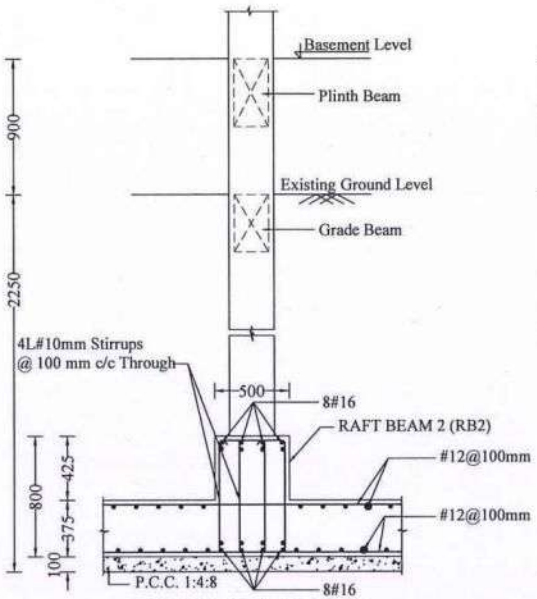
sd.xxxx 13.02.2025
Chief Engineer - I

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

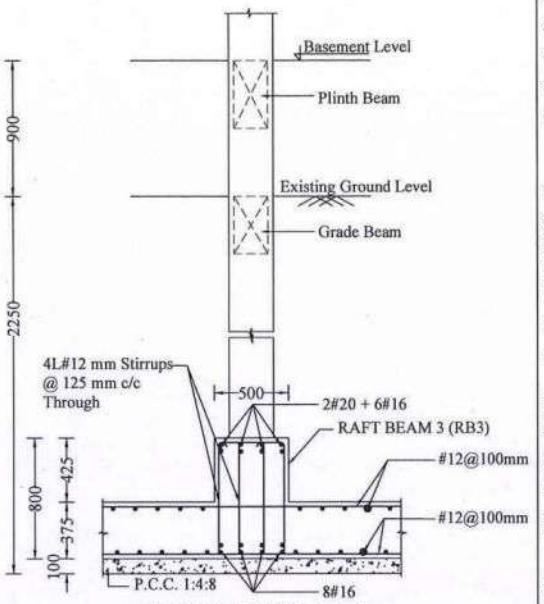
RAFT BEAM DETAILS



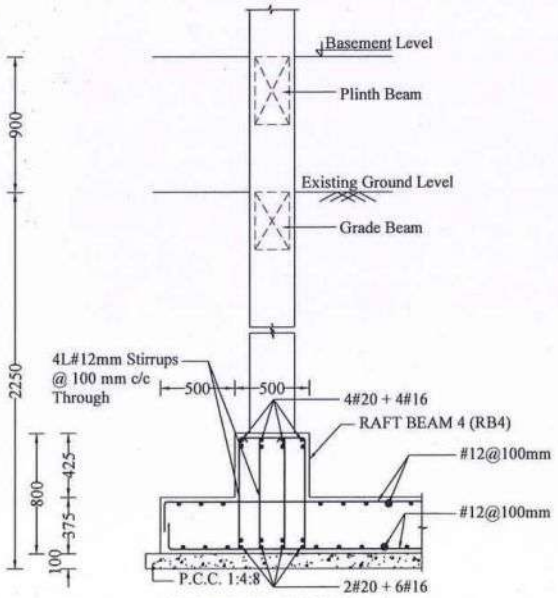
CROSS SECTION 1 - 1



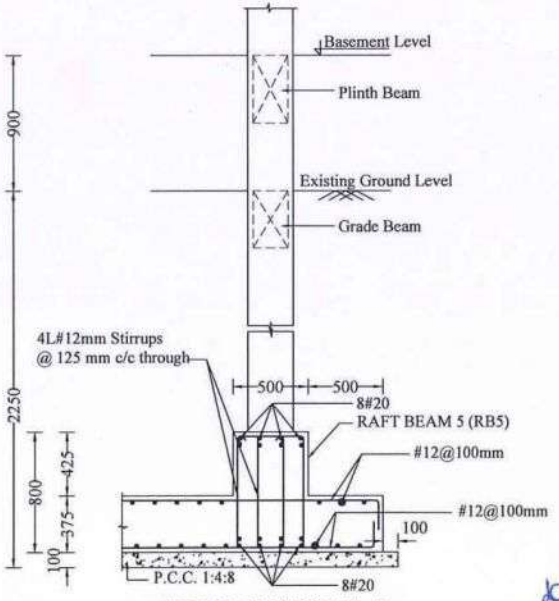
CROSS SECTION 2 - 2



CROSS SECTION 3 - 3



CROSS SECTION 4 - 4



CROSS SECTION 5 - 5

Note:
1. For Plan at raft foundation level refer Drawing no.: TNUHDB/PERIYAR NAGAR/Type-C/01

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14/2/2025
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

14/02/25

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of M25 grade conforming to IS: 456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS: 13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 & 21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
RAFT BEAM DETAILS

TYPE DESIGN NO.:

DWG.NO.: TNUHDB/PERIYAR NAGAR/Type-C/02

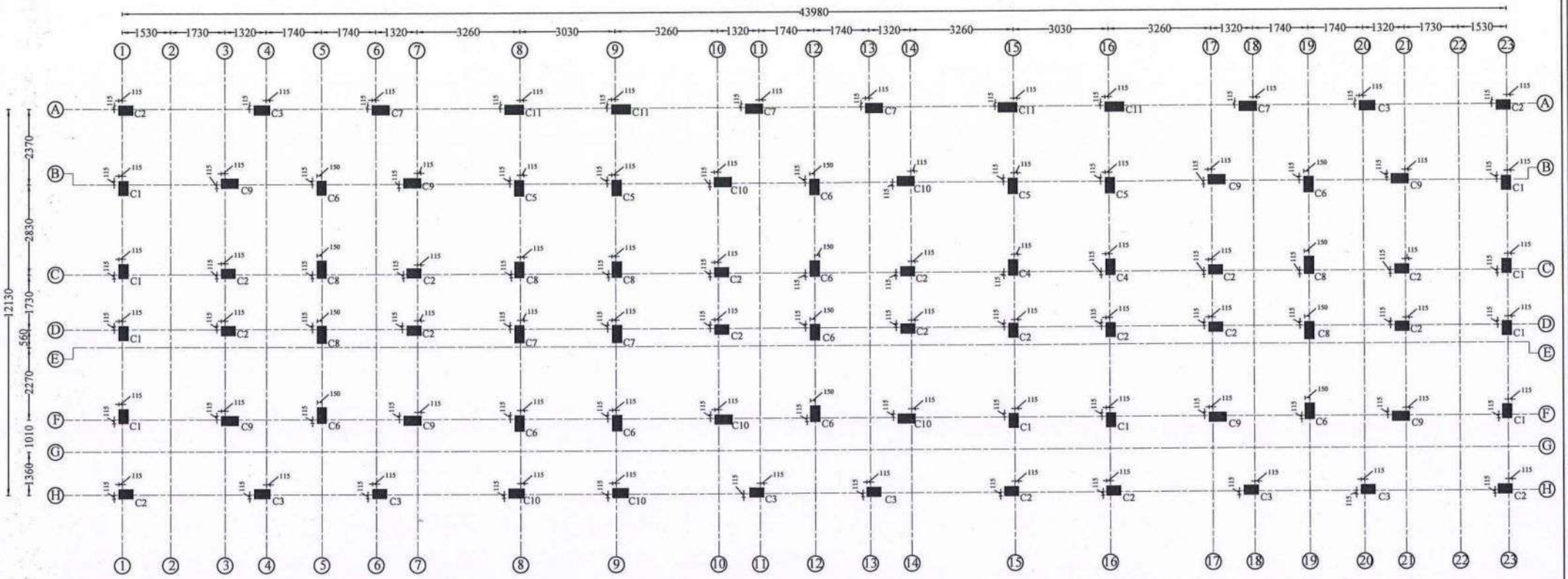
REVISION NO.:

Assistant Enginner	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 13.02.2025
Chief Engineer - I

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

COLUMN LAYOUT



Note:
1. For Schedule of columns refer Drawing no.: TNUHDB/PERIYAR NAGAR/Type-C/04

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS: 456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS: 13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
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17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 & 21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
COLUMN LAYOUT

TYPE DESIGN NO.:

DWG.NO.: TNUHDB/PERIYAR NAGAR/Type-C/03

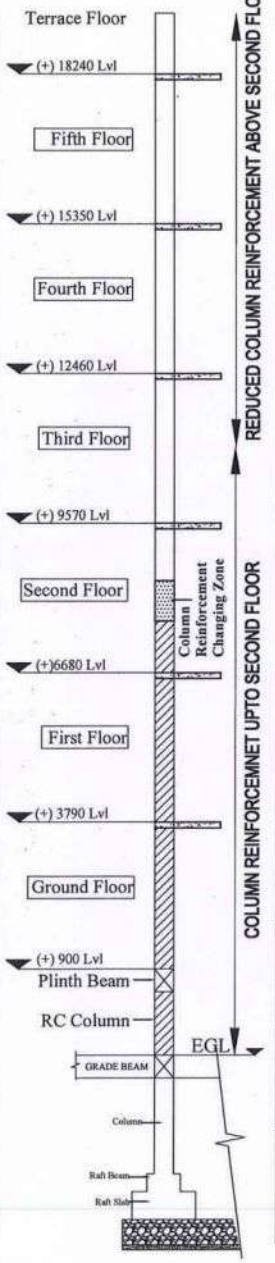
REVISION NO.:

TRUE COPY
14/2/2025
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/02/25

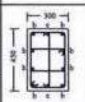
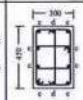
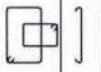
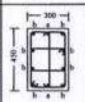
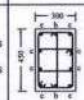
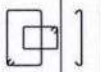
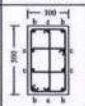
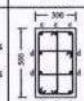
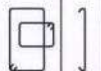
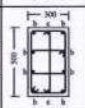
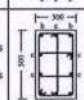
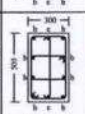
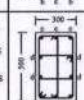
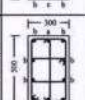
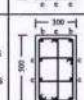
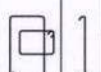
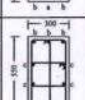
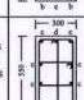
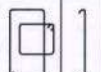
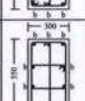
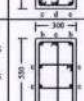
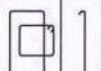
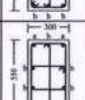
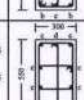
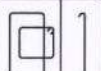
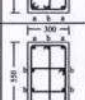
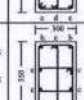
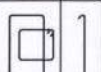
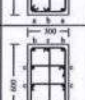
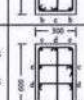
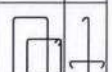
Assistant Enginner	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 13.02.2025
Chief Engineer - 1

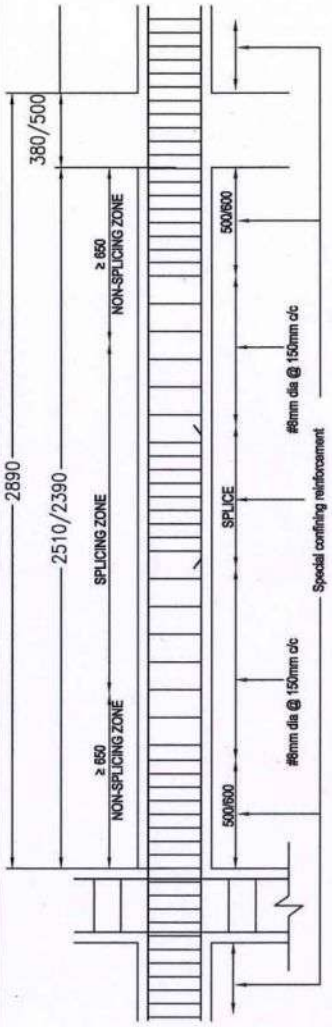
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT
DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.



SCHEDULE OF COLUMNS

Sl. No.	Column Marking	No. of Columns	Size (mm x mm)	Upto Second Floor: Column Verticals	Upto Second Floor: Cross Section	Lateral Ties	Above Second Floor: Column Verticals	Above Second Floor: Cross Section	Lateral Ties	Ties Profile
1.	C1	10	300 x 450	#20 - 8 Nos + #16 - 2 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16 - 8 Nos + #12 - 2 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
2.	C2	20	300 x 450	#25 - 2 Nos + #20 - 8 Nos		1) Upto Plinth Beam: # 10 @ 120 mm c/c 2) Above Plinth Beam: # 10 @ 120 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#20 - 2 Nos + #16 - 8 Nos		1) Above Second Floor: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
3.	C3	8	300 x 500	#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16 - 6 Nos + #12 - 4 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
4.	C4	2	300 x 500	#20 - 8 Nos + #16 - 2 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#20 - 4 Nos + #16 - 6 Nos		1) Above Second Floor: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
5.	C5	4	300 x 500	#20 - 8 Nos + #16 - 2 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16- 6 Nos + #12 - 4 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
6.	C6	10	300 x 500	#25 - 2 Nos + #20 - 8 Nos		1) Upto Plinth Beam: # 10 @ 120 mm c/c 2) Above Plinth Beam: # 10 @ 120 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#20- 4 Nos + #16 - 6 Nos		1) Above Second Floor: # 10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
7.	C7	6	300 x 550	#20 - 6 Nos + #16 - 4 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16- 8 Nos + #12 - 2 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
8.	C8	6	300 x 550	#20 - 10 Nos		1) Upto Plinth Beam: # 10 @ 110 mm c/c 2) Above Plinth Beam: # 10 @ 110 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#20- 4 Nos + #16- 6 Nos		1) Above Second Floor: # 10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
9.	C9	8	300 x 550	#25 - 4 Nos + #20 - 6 Nos		1) Upto Plinth Beam: # 10 @ 110 mm c/c 2) Above Plinth Beam: # 10 @ 110 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16- 8 Nos + #12- 2 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
10.	C10	6	300 x 550	#25 - 4 Nos + #20 - 6 Nos		1) Upto Plinth Beam: # 10 @ 110 mm c/c 2) Above Plinth Beam: # 10 @ 110 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#20- 4 Nos + #16- 6 Nos		1) Above Second Floor: # 10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	
11.	C11	4	300 x 600	#20 - 4 Nos + #16 - 8 Nos		1) Upto Plinth Beam: # 10 @ 95 mm c/c 2) Above Plinth Beam: # 10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	#16- 8 Nos + #12- 4 Nos		1) Above Second Floor: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction and the rest #8 @ 150mm c/c	

Notes: In Cross Section a - # 25 mm b - # 20 mm c - # 16 mm d - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS

Note:
1. For Column Layout refer Drawing no.: TNUHDB/PERIYAR NAGAR/Type-C/03

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS: 456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS: 13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report. If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 & 21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
SCHEDULE OF COLUMNS

TYPE DESIGN NO.:

DWG.NO.: TNUHDB/PERIYAR NAGAR/Type-C/04

REVISION NO.:

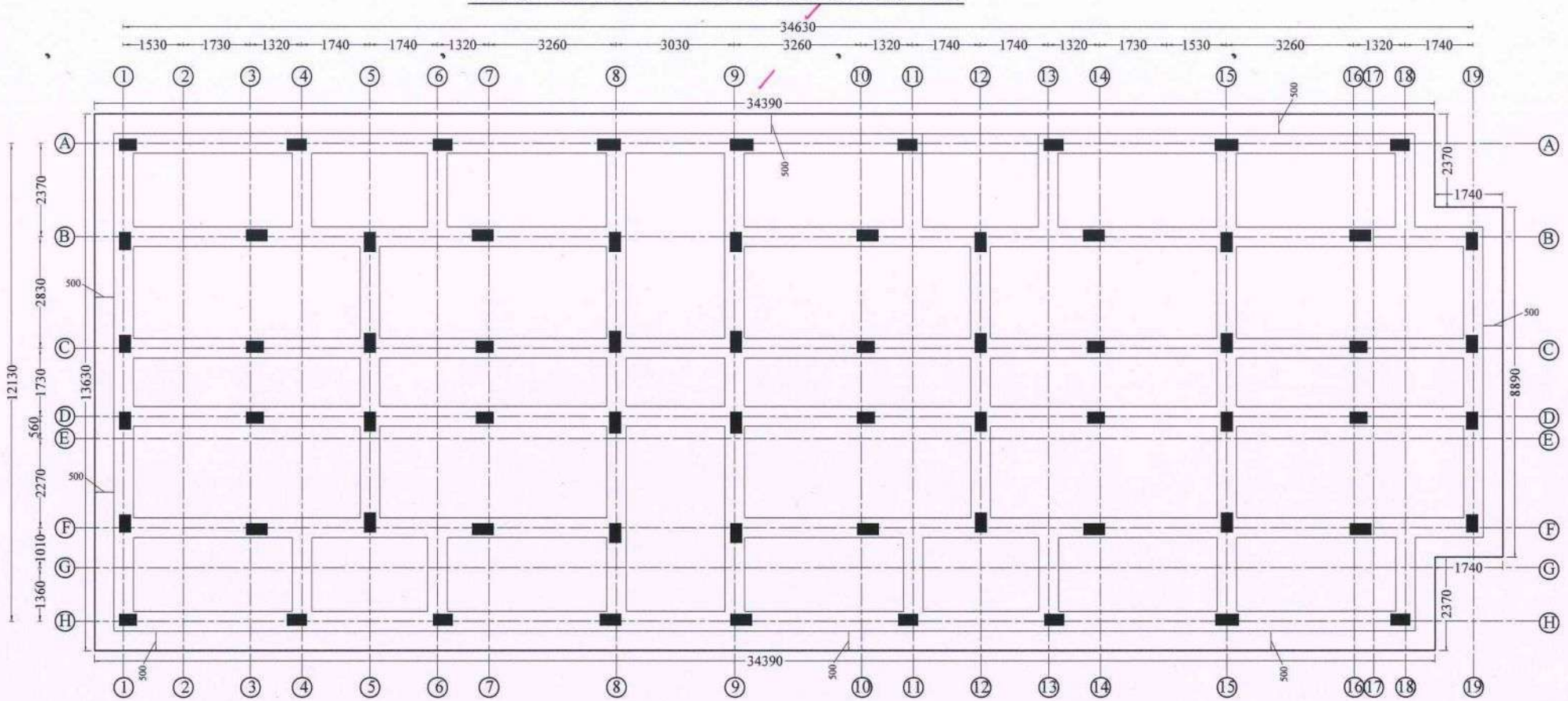
Assistant Enginner	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

TRUE COPY
14/2/2025
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

sd.xxxx 13.02.2025
Chief Engineer - I

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT
DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

PLAN AT RAFT FOUNDATION LEVEL



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:

(a)	Foundation	- 75 mm
(b)	Column	- 40 mm
(c)	Grade, Plinth,Floor and roof beam	- 30 mm
(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021&21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
PLAN AT RAFT FOUNDATION LEVEL.

TYPE DESIGN NO.: 33/2021- TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/01.

REVISION NO.:

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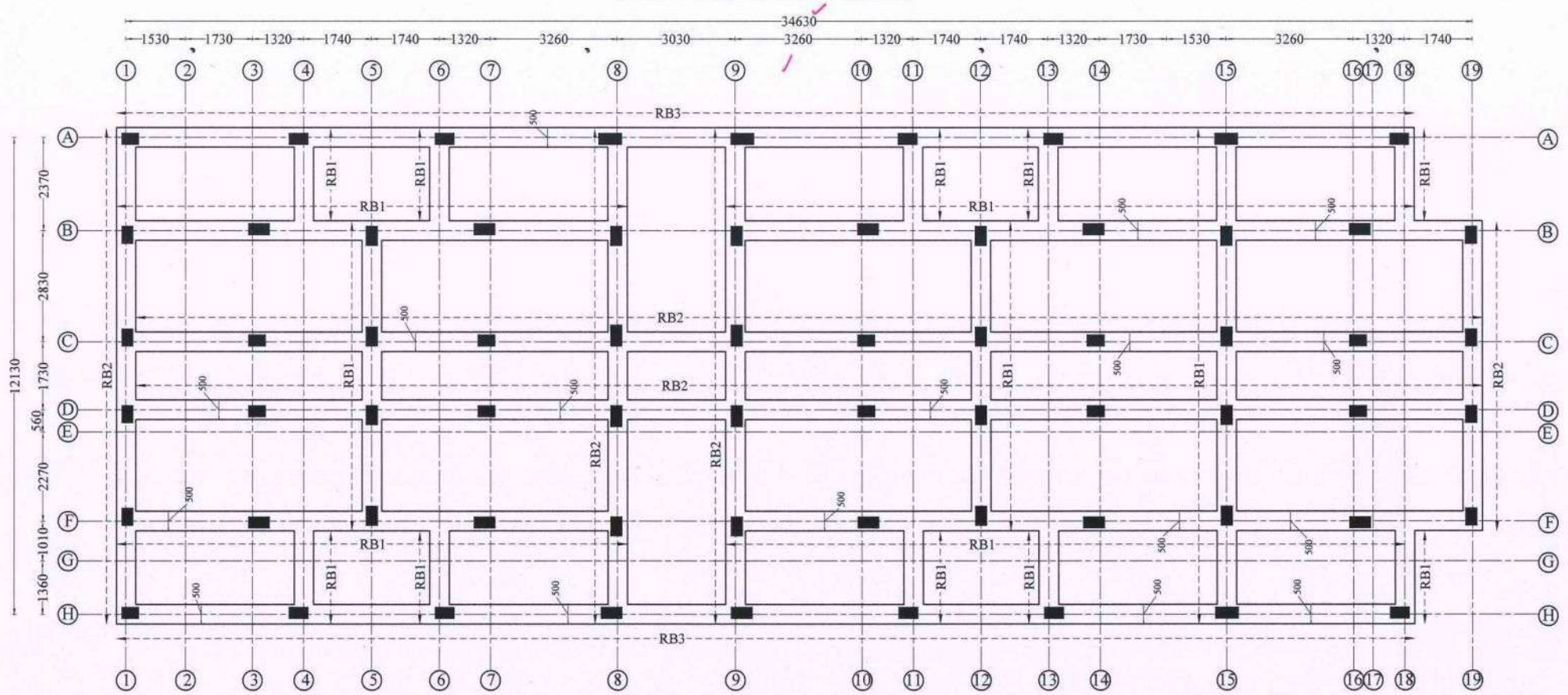
for 14/03/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

RAFT BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
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(d)	Slab	- 25 mm

7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
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22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.**

TITLE:
RAFT BEAM LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/02

REVISION NO.:

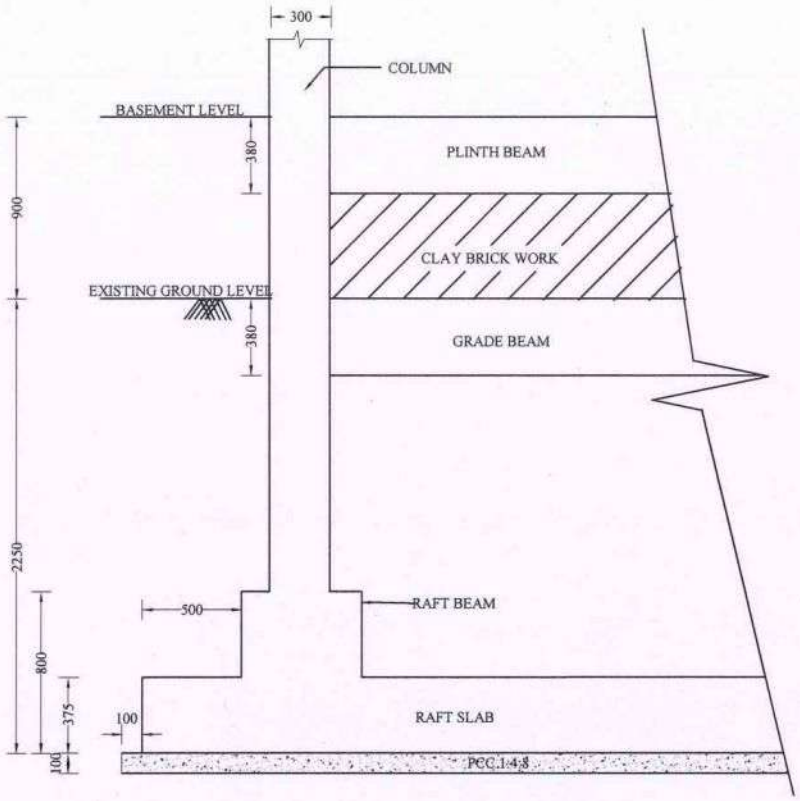
TRUE COPY
for
14/03/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

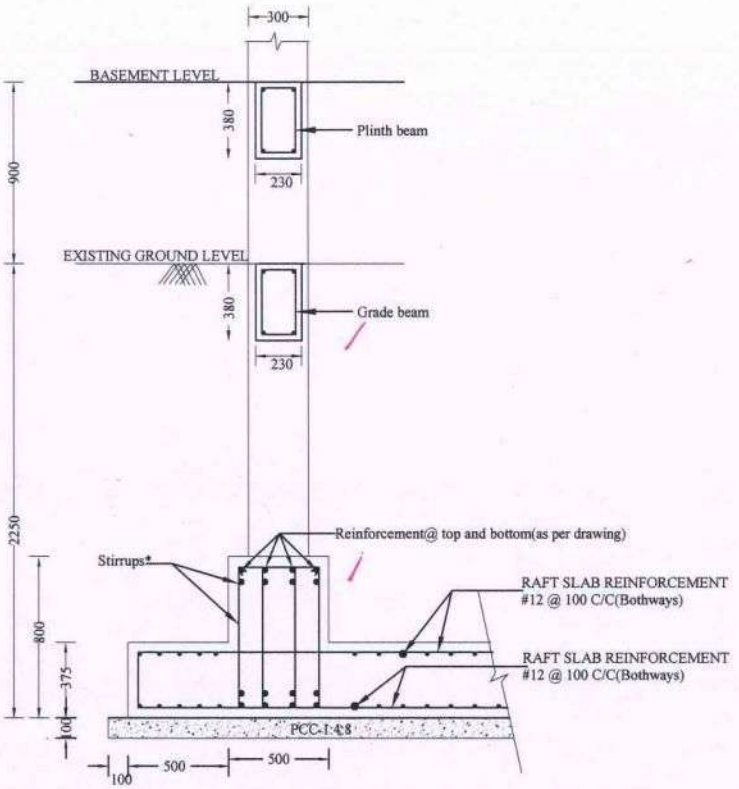
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

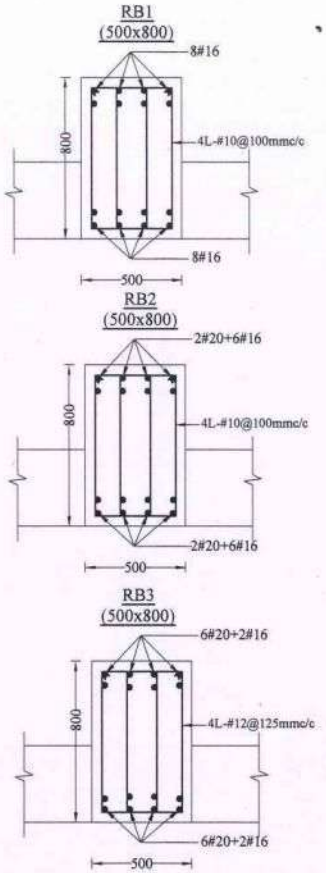
TYPICAL CROSS SECTION OF RAFT FOUNDATION.



TYPICAL REINFORCEMENT DETAILS OF RAFT FOUNDATION.



RAFT BEAM DETAILS



NOTE :

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STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
TYPICAL CROSS SECTION & REINFORCEMENT DETAILS OF RAFT FOUNDATION & RAFT BEAM DETAILS

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/03.

REVISION NO.:

TRUE COPY

for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

14/03/25

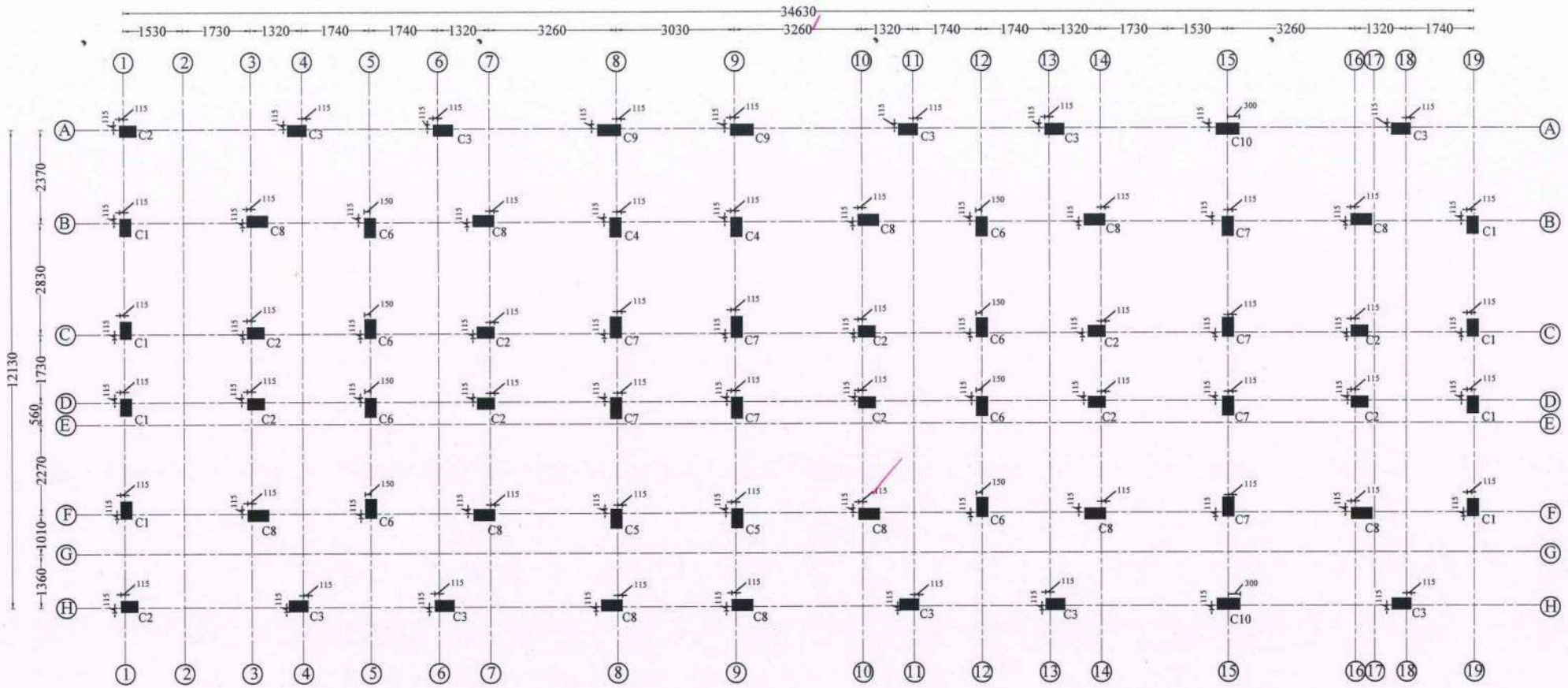
14/03/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

COLUMN LAYOUT



NOTE :

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STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
COLUMN LAYOUT.

TYPE DESIGN NO.: 33/2021 - TYPE B

DWG.NO.: TNUHDB/PERIYAR NAGAR/TYPE B/04

REVISION NO.:

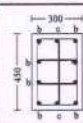
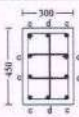
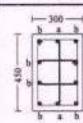
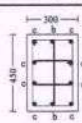
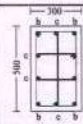
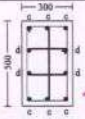
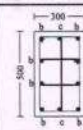
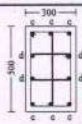
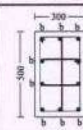
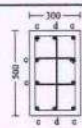
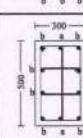
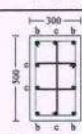
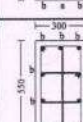
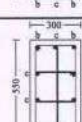
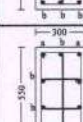
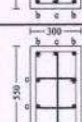
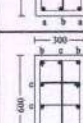
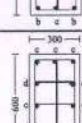
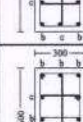
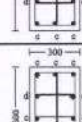
TRUE COPY
for EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/03/25
14/03/25

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - South**

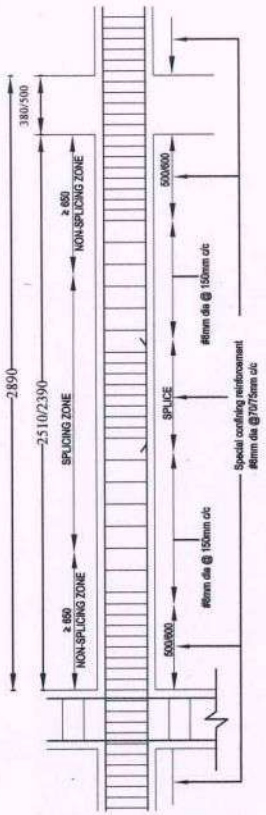
sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

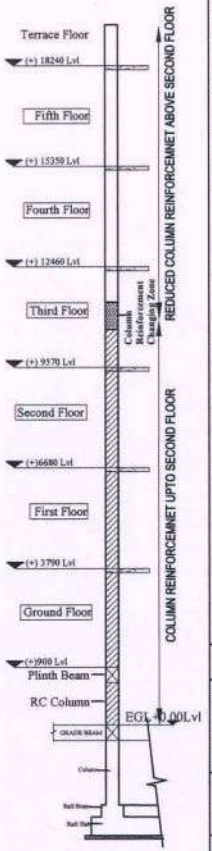
SCHEDULE OF COLUMNS

Sl. No.	Column Marking	No. of Columns	Size (mm x mm)	Upto Second Floor		Above Second Floor		Lateral Ties	Ties Profile	
				Column Verticals	Cross Section	Column Verticals	Cross Section			
1.	C1	08	300 x 450	#20 - 8 Nos + #16 - 2 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
2.	C2	12	300 x 450	#25 - 2 Nos + #20 - 8 Nos		#20 - 2 Nos + #16 - 8 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
3.	C3	10	300 x 500	#20 - 4 Nos + #16 - 6 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
4.	C4	02	300 x 500	#20 - 8 Nos + #16 - 2 Nos		#16 - 6 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
5.	C5	02	300 x 500	#20 - 10 Nos		#16 - 8 Nos + #12 - 2 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
6.	C6	08	300 x 500	#25 - 2 Nos + #20 - 8 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 500 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
7.	C7	08	300 x 550	#20 - 10 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
8.	C8	12	300 x 550	#25 - 4 Nos + #20 - 6 Nos		#20 - 4 Nos + #16 - 6 Nos		1) Upto Plinth Beam: # 8 @ 70 mm c/c 2) Above Plinth Beam: # 8 @ 70 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
9.	C9	02	300 x 600	#20 - 4 Nos + #16 - 8 Nos		#16 - 8 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		
10.	C10	02	300 x 600	#20 - 8 Nos + #16 - 4 Nos		#16 - 8 Nos + #12 - 4 Nos		1) Upto Plinth Beam: # 8 @ 75 mm c/c 2) Above Plinth Beam: # 8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction at Splice and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 25 mm b - # 20 mm c - # 16 mm d - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All the RCC works shall be as per design mix of **M25** grade conforming to IS:456 - 2000.
3. Design mix report should be got approved by the Anna University / IIT Madras / PWD.
4. All the reinforcement shall be of Fe 500D grade conforming to IS 1786 - 2008 unless noted.
5. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
6. Clear cover for reinforcement are as follows:
   (a) Foundation - 75 mm
   (b) Column - 40 mm
   (c) Grade, Plinth,Floor and roof beam - 30 mm
   (d) Slab - 25 mm
7. Ductile detailing of the reinforced concrete members as stipulated in IS:13920 - 2016 should be scrupulously followed.
8. Analysis of the structure done with E tabs.
9. Design of the structure carried out with Limit State Method.
10. Structure is designed for (G + 5) floors only.
11. The depth of foundation shall be 2.25 m from the existing ground level.
12. The recommended bearing capacity at this level is 290 kN / sq.m.
13. Clay Bricks Masonry has been considered for masonry work as recommended by EE/Thirunelveli Dn.
14. Field Engineers should ensure that the soil at the recommended founding depth is in conformity to the soil characteristic detailed in the soil test report.If any variation in soil strata is encountered at the recommended foundation depth, then the same should be informed to the Chief Engineer atonce for review.
15. Ground water quality has to be conformed for suitability to construction work.
16. Dimensions and levels are to unfinished surface excluding finishes,coating etc.,unless noted otherwise. The dimension should be checked with type design drawing.
17. Cut lintels to be provided in all floors.
18. All PCC works should be carried out with PCC 1:4:8 conforming IS 456-2000.
19. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
20. Anchorage of column bars into the footings shall not be less than 50 Ø.
21. The Recommendations detailed in the soil investigation report of Department of Civil Engineering, Government College of Engineering, Tirunelveli-7 Report No.: 178&178A/SOIL/21/GCE/CIVIL/Consultancy/2021 Dt.:30.12.2021 &21.07.2022 should be followed scrupulously.
22. The EE/Tirunelveli Dn. is instructed to submit the settlement calculation for raft foundation.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 504 (G+5) FLOORS TENEMENTS AT **PERIYAR NAGAR WEST IN VADAKKU VALLIYUR** PART-I VILLAGE, RADHAPURAM TALUK, TIRUNELVELI DISTRICT.

TITLE:
SCHEDULE OF COLUMNS.

TYPE DESIGN NO.:33/2021-TYPE B

DWG.NO.: TNUHDB / PERIYAR NAGAR/TYPE B/05.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - South

sd.xxxx 14.03.2025
Chief Engineer

STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TRUE COPY

for 16/1/25
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
14/08/25

CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY
Thalamuthu Natarajan Building, No.1, Gandhi Irwin Road, Egmore,
Chennai - 600 008
Phone : 28414855 Fax: 91-044-28548416
E-mail: mscmda@tn.gov.in
Web site: www.cmdachennai.gov.in.

PROFESSIONAL REGISTRATION CERTIFICATE

This is to certify that the Thiru / Tmt. / M/s. **R.VENKATESAN** has enrolled as **Registered Structural Engineer Grade-I (SE)** with Chennai Metropolitan Development Authority (CMDA) who has the qualification of **M.E Structures** and experience in the relevant field for 6 years.

He/She has been given the Registration No. **SE/I/2024/4/0073** on **23-Apr-2024** He/She shall be required to comply with the duties and responsibilities prescribed by the Government of Tamil Nadu in Part V, "Registration of Professionals", Tamil Nadu Combined Development and Building Rules, 2019 approved vide G.O.(ms) No.18 MAWS (MA1) Dept. Dated. 04.02.2019.

This Registration is valid upto **22-Apr-2029**.

Signature Not Verified
Name :A Meganathan
Designation :Superintendent
Date :04/23/2024 3:01:43 PM



A Meganathan

Superintendent

THE LANDLENS SUITE

Eight ways to know a piece of land before you pay for it.

This report covers one part of the picture. These cover the rest, drawn from the same government records, for any property in Tamil Nadu.

LandLens One
Ask anything about a property and get an answer grounded in live government records, with the sources shown.
/landlens/one

Verify My Land
Every record check run on one property and returned as a single report.
/landlens/verify-my-land

Legal Opinion
An advocate's written opinion on the title, built on the records we pull for it.
/landlens

One Map
Every layer on one map: the parcel, its boundary, zoning, water bodies and what sits around it.
/landlens/one/map

PriceMap
What land actually changed hands for around this plot, taken from the registered deeds.
/landlens/pricemap

Build Scope
What you are allowed to build here: floor space, height, coverage and setbacks.
/landlens/build-scope

Property Tracker
Watch a property and hear about it when something new is registered against it.
/landlens/property-tracker

Deal Room
Run the transaction in one place: documents, stamping, signatures and the parties.
/landlens/deal-room

FREE TOOLS · NO ACCOUNT NEEDED

Twenty-four checks you can run yourself, at no cost.

Records and verification

The registers themselves, read for you.

- Encumbrance Certificate
- Patta and Chitta
- Field Measurement Sketch
- EC Analyzer
- Bank charge check
- Court case search
- Seller background check
- Approval check by survey

Value and duty

What it is worth and what it costs to register.

- Guideline value by street
- Guideline value by survey
- Stamp duty and registration fees
- Capital gains
- Floor space index
- Area unit converter

Zoning and land use

What the plan says can happen on this land.

- Land use zone finder
- CMDA land use check
- Coastal regulation zone
- Master plan check
- Water bodies finder
- Airport height clearance

Registers and directories

Who holds it, and which office keeps the record.

- Find your registering office
- Temple property check
- Waqf property check
- RERA register

Every free tool
/tools

Services we run for you
/services

The LandLens suite
/landlens/one

Verified RealEstate™

Every claim in this document traces back to a government record.

- Legal opinions, due diligence and title verification
- Building plan, layout and sub-division approvals
- Completion and occupancy certificates, regularisation
- Escrow, negotiation and NRI property management
- Land survey, soil testing, architecture and construction

Verified RealEstate
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OMR Thoraipakkam,
Chennai 600 097, India
hello@verified.realestate
+91 9996 12 9996

Prepared from the registers named on the page each finding sits on. Where a register could not be read, this document says so in its place rather than leaving the gap to be read as a clean result.