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OFFICE OF THE
EXECUTIVE ENGINEER,
STRUCTURAL QUALITY
CONTROL WING,
TAMILNADU URBAN HABITAT
DEVELOPMENT BOARD,
KAMARAJAR SALAI,
CHENNAI – 05.

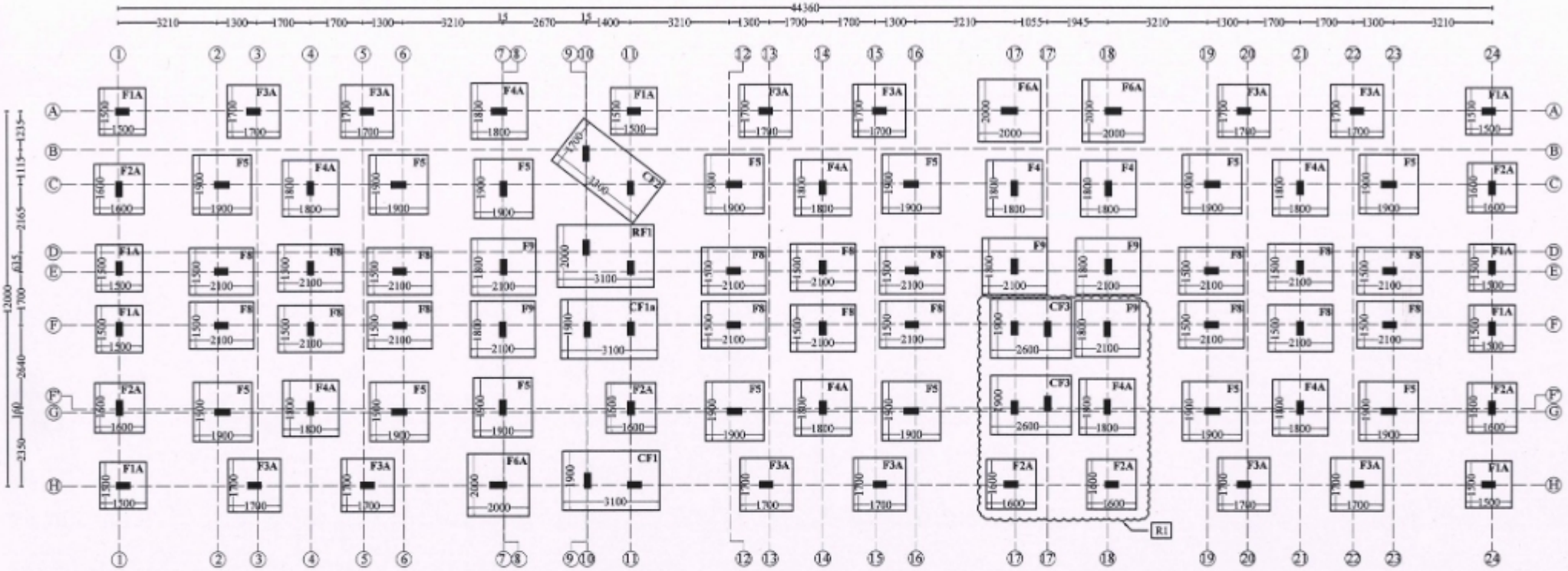
STABILITY CERTIFICATE

The is to Certify that the Construction of 408 (S+6) tenements at Dr. Ambedkar Nagar Scheme in T.S.No 2, Ward BF, Block 2 of Palayamkottai Taluk, Tirunelveli District, Tamil Nadu, which is structurally designed for S+6 Floors assuming the live load of 200 Kg/ Sq.m as par IS 875 are designed as per IS 456 Grade of concrete will be M25 for sub and super structure members. The structure is also designed for the seismic zone as per IS code. The structural design is Safe, Good and sound.

Yours Faithfully,

G. MAHENDIRAN, M.E.,
ASSISTANT EXECUTIVE ENGINEER
REGISTRATION No: SE/I/2021/1/0071
Registered Structural Engineer Grade-I (SE-I)
Tamil Nadu Urban Habitat Development Board
No. 5, Kamarajar Salai, Chennai-600 005.

PLAN AT FOUNDATION LEVEL



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLAN AT FOUNDATION LEVEL.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/01

REVISION NO.: 01

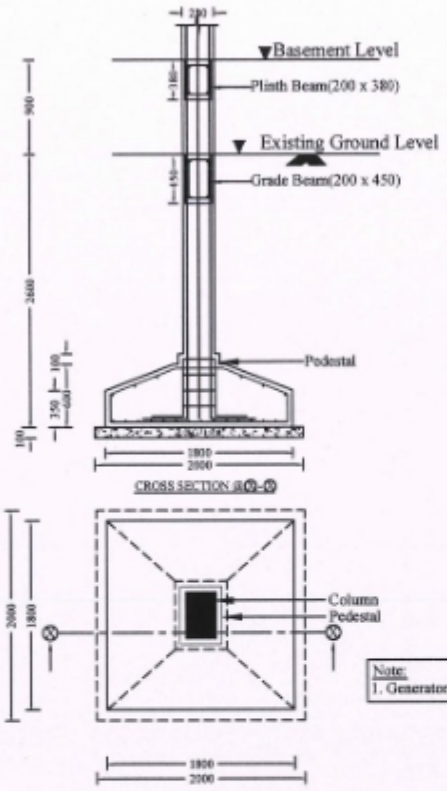
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

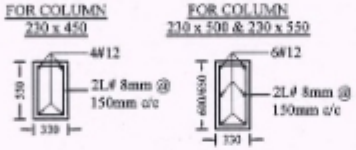
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

TYPICAL CROSS SECTION OF COLUMN FOOTING



TYPICAL PEDESTAL DETAIL



Note:
1. Generator loading is not considered for design since it is located at stilt level.

SCHEDULE OF COLUMN FOOTINGS

Sl.No.	Footing Marking	Numbers of Footing	Pedestal Size (mm x mm x mm)	PCC Mat (mm x mm)	RCC Footing (mm x mm)	Thickness Near Column (mm)	Edge Thickness (mm)	Reinforcement in Footing (mm)
SQUARE FOOTING								
1.	F1A	R1- 09	330 x 550 x 200	1700 x 1700	1500 x 1500	500	300	Bottom : # 12 mm @ 180 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
2.	F2A	07	330 x 550 x 150 & 330 x 600 x 150	1800 x 1800	1600 x 1600	550	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
3.	F3A	12	330 x 550 x 100	1900 x 1900	1700 x 1700	600	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
4.	F4	02	330 x 600 x 100	2000 x 2000	1800 x 1800	600	350	Bottom : # 12 mm @ 150 mm C/C both ways
5.	F4A	R1- 08	330 x 550 x 100 & 330 x 600 x 100	2000 x 2000	1800 x 1800	600	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
6.	F5	14	330 x 600 x 100	2300 x 2100	1900 x 1900	650	400	Bottom : # 12 mm @ 125 mm C/C both ways
7.	F6A	03	330 x 650 x 100	2200 x 2200	2000 x 2000	650	400	Bottom : # 12 mm @ 125 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
RECTANGLE FOOTING								
8.	F8	18	330 x 550 x 100	2300 x 1700	2100 x 1500	650	450	Bottom : # 12 mm @ 125 mm C/C both ways
9.	F9	R1- 05	–	2300 x 2000	2100 x 1800	700	450	Bottom : # 12 mm @ 125 mm C/C both ways

NOTE :

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3. All the RCC works shall be as per design mix of **M25 grade**, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
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10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
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13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TYPICAL CROSS SECTION & SCHEDULE OF COLUMN FOOTINGS

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/02

REVISION NO.: 01

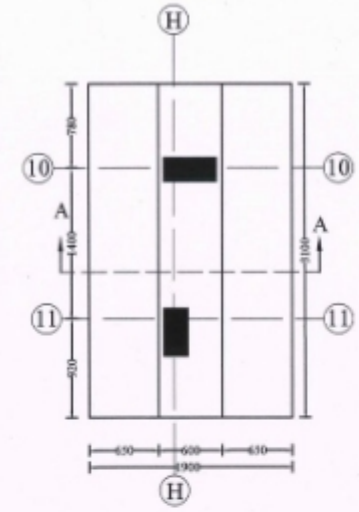
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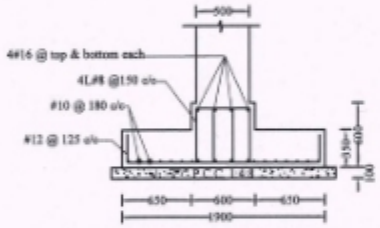
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

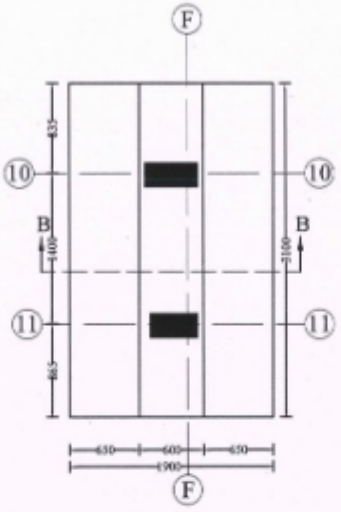
COMBINED FOOTING CF1

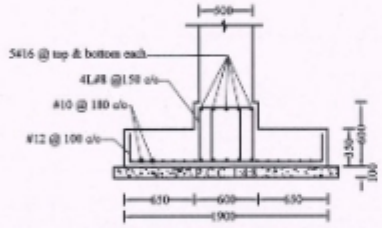




CROSS SECTION @ A - A

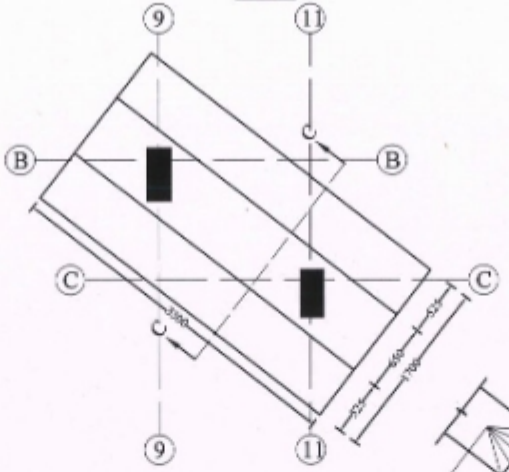
COMBINED FOOTING CF1a

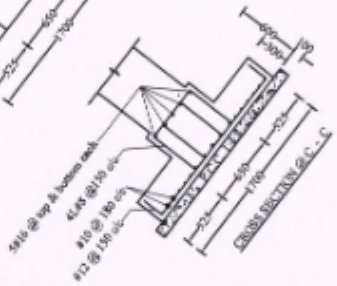




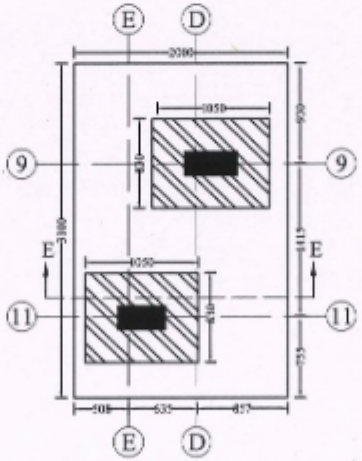
CROSS SECTION @ B - B

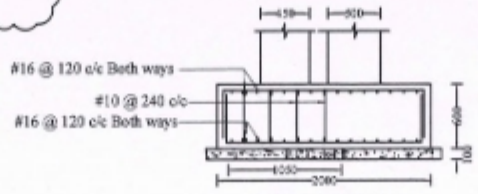
COMBINED FOOTING CF2





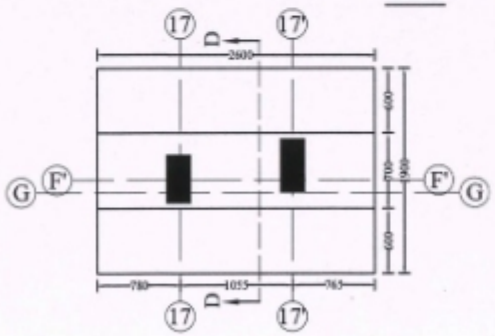
RAFT FOOTING RF1

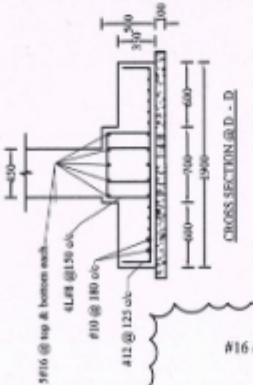




CROSS SECTION @ E - E

COMBINED FOOTING CF3





R1

NOTE :

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10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
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12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
DETAILS OF COMBINED & RAFT FOOTINGS CF1, CF1a, CF2, CF3 & RF1.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/03

REVISION NO.: 01

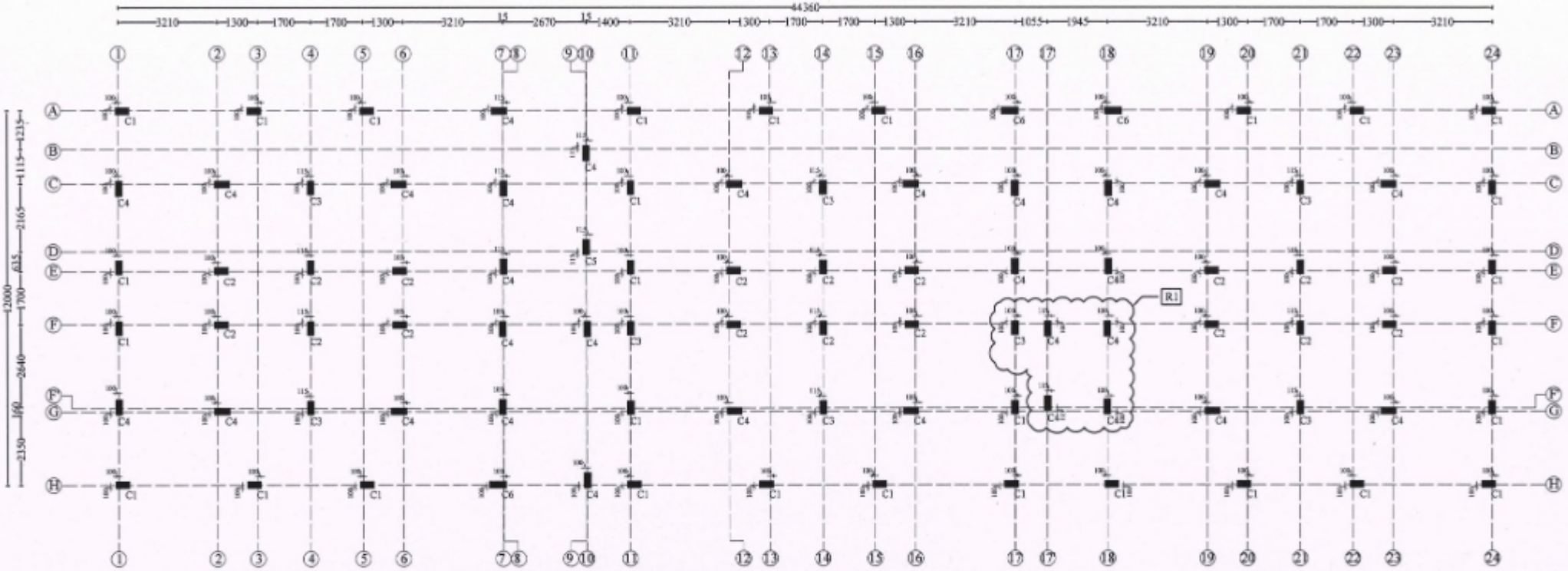
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

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:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
COLUMN LAYOUT.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/04**

REVISION NO.: 01

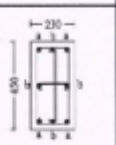
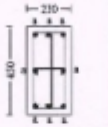
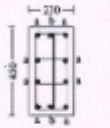
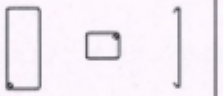
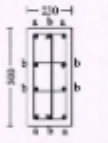
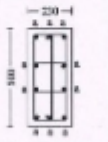
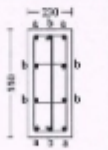
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

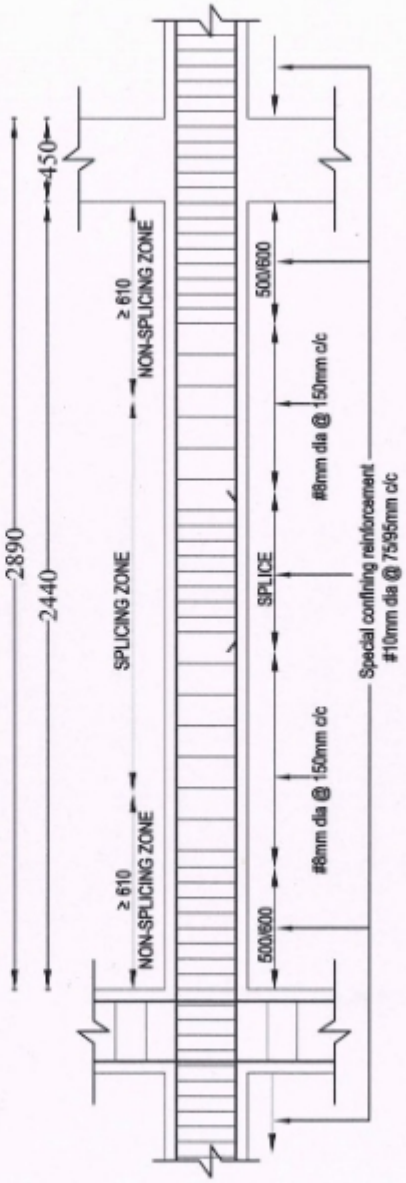
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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	Column Verticals	Lateral Ties	Cross Section	Ties Profile
1.	C1	R1 30	230 x 450	# 16 - 4 Nos + # 12 - 4 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
2.	C2	18	230 x 450	# 16 - 8 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
3.	C3	08	230 x 450	# 16 - 8 Nos + # 12 - 2 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
4.	C4	30	230 x 500	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
5.	C5	01	230 x 500	# 16 - 10 Nos.	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Above Stilt floor slab: #10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
6.	C6	03	230 x 550	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 16 mm b - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS

TRUE COPY

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 structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt. 02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt. 26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
SCHEDULE OF COLUMNS

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

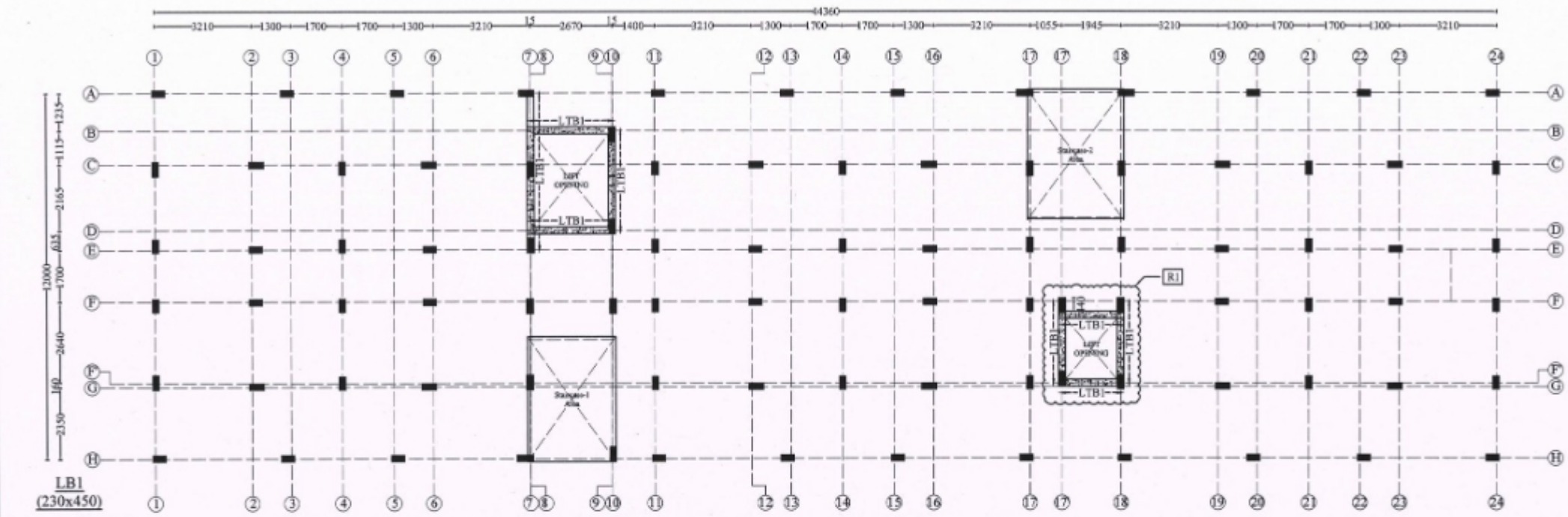
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/05

REVISION NO.: 01

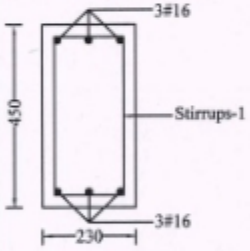
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

LIFT PIT & STAIRCASE LOCATION AND DETAILS



LB1
(230x450)



NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
LIFT PIT & STAIRCASE LOCATION AND DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/06**

REVISION NO.: 01

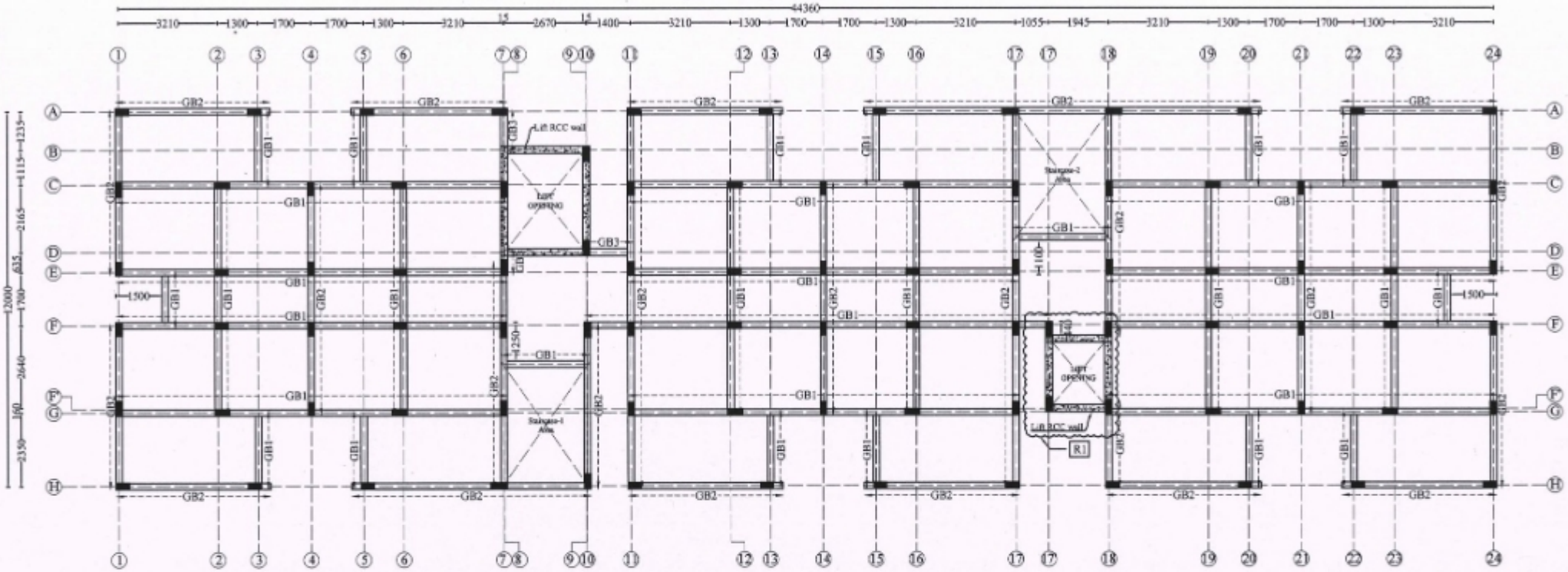
TRUE COPY

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	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

GRADE BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
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7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
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23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
GRADE BEAM LAYOUT.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/07**

REVISION NO.: 01

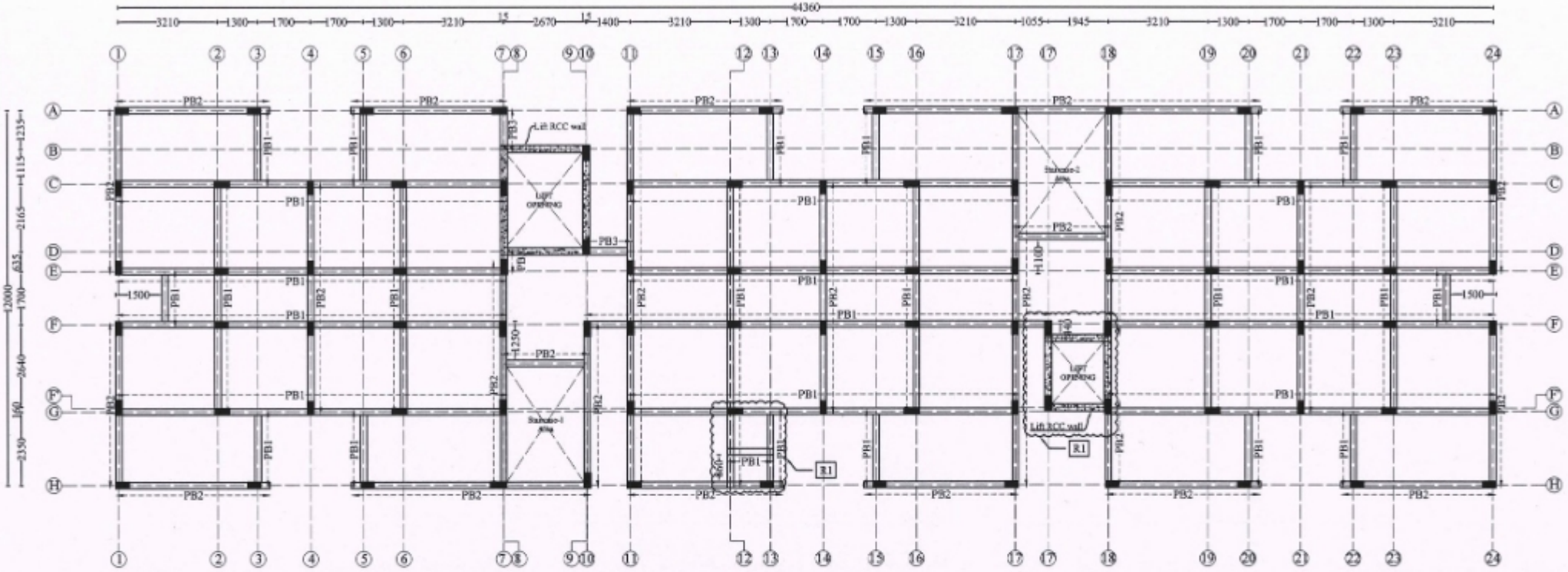
TRUE COPY

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	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

PLINTH BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
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    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/09

REVISION NO.: 01

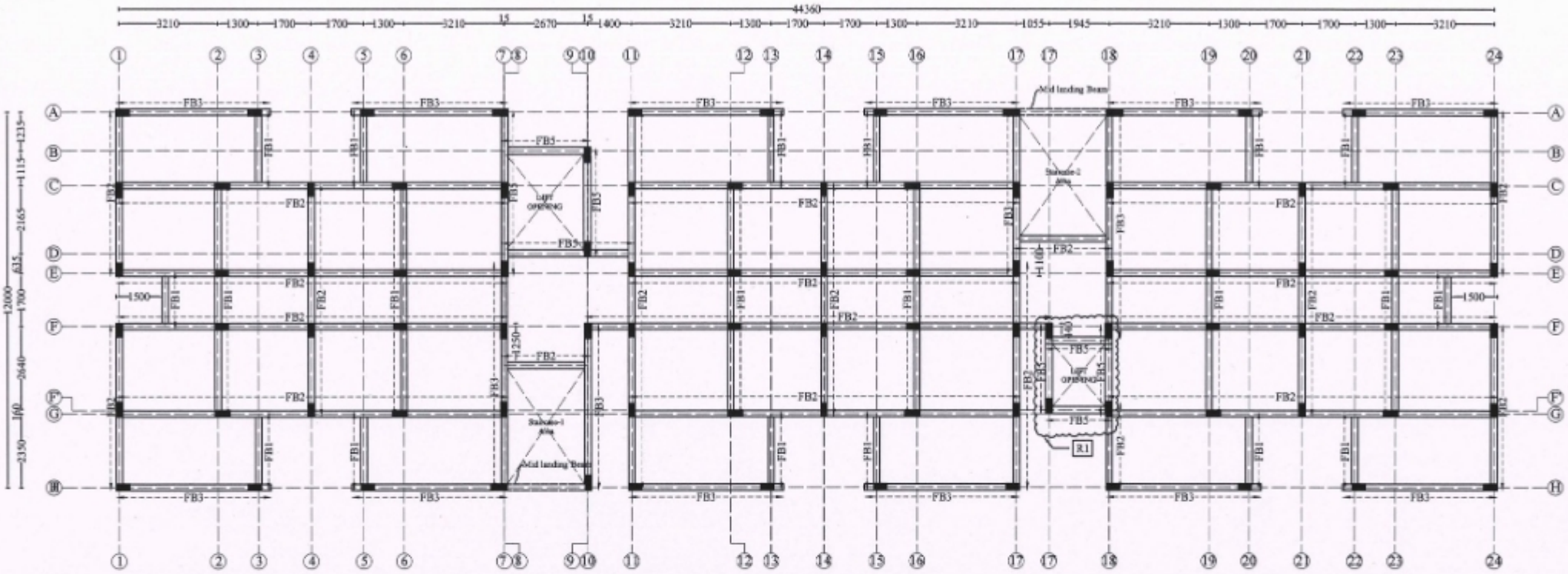
TRUE COPY

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	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

STILT TO SECOND FLOOR BEAM LAYOUT



NOTE :

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2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
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8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
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23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT TO SECOND FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/11

REVISION NO : 01

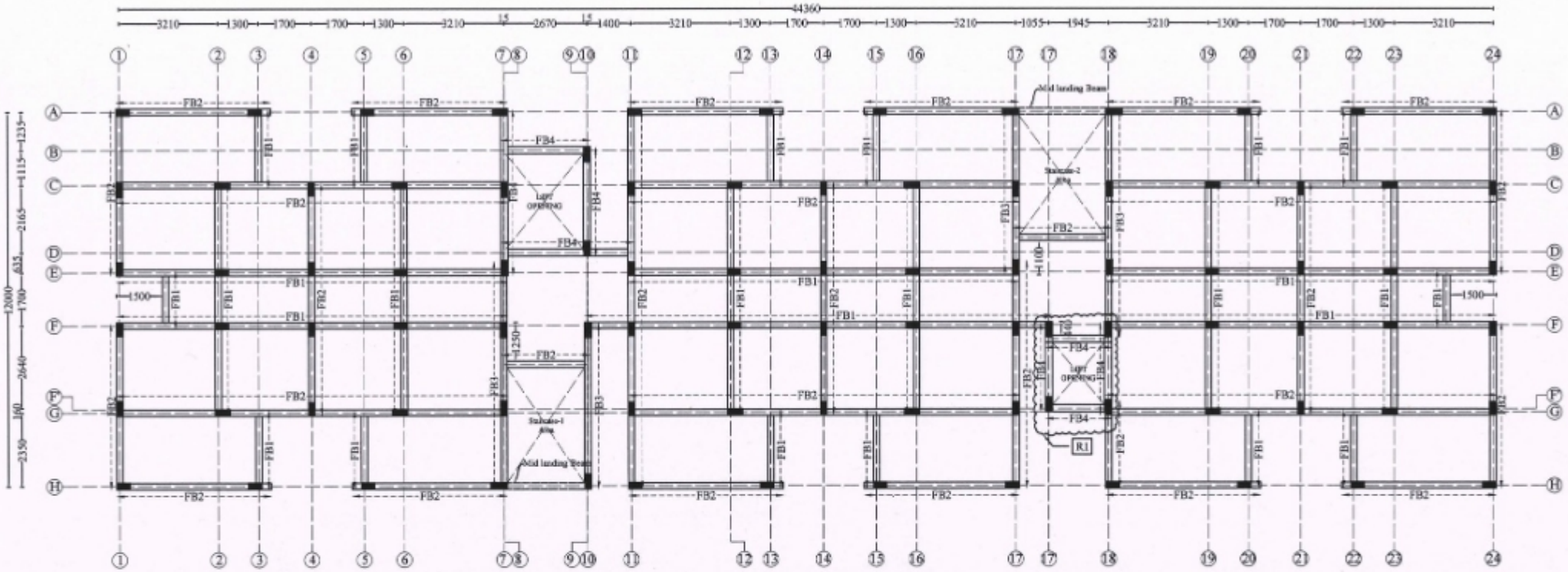
TRUE COPY

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

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

THIRD TO FIFTH FLOOR BEAM LAYOUT



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (**S+6**) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
THIRD TO FIFTH FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/12**

REVISION NO.- 01

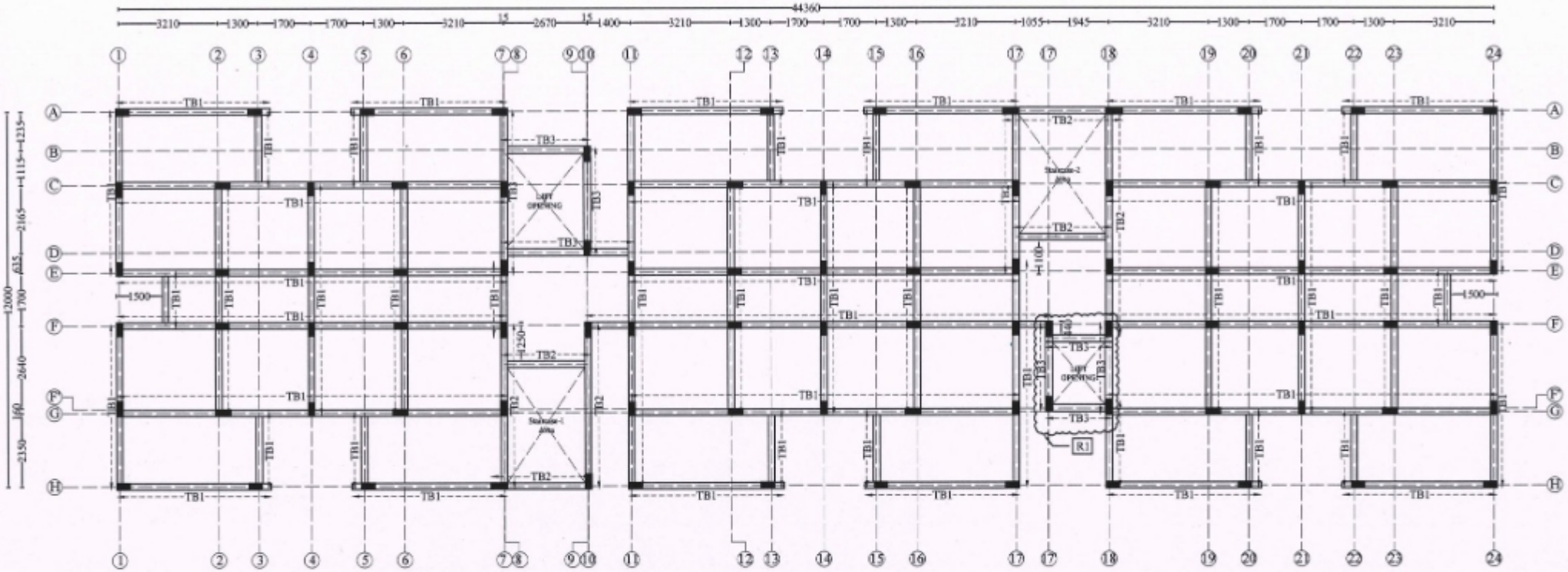
TRUE COPY

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	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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 structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/**14

REVISION NO.: 01

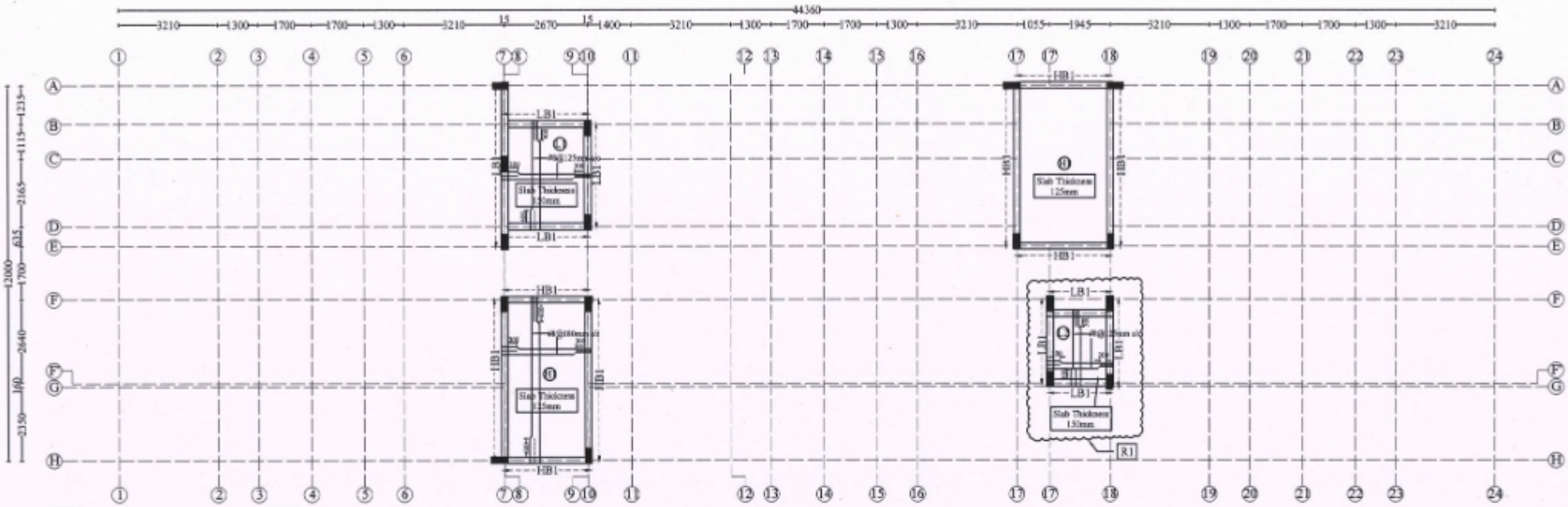
TRUE COPY

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

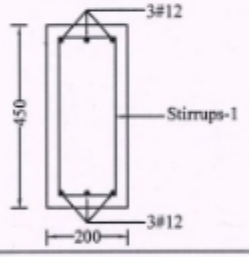
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

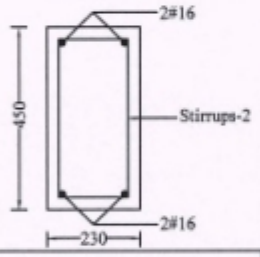
HEAD ROOM, LIFT ROOM BEAM LAYOUT & SLAB DETAILS



HB1 (200x450)



LB1 (230x450)



NOTE:

Stirrups-1 : 2 Legged # 8 mm stirrups at 75 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

Stirrups-2 : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

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

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A**/17

REVISION NO.: 01

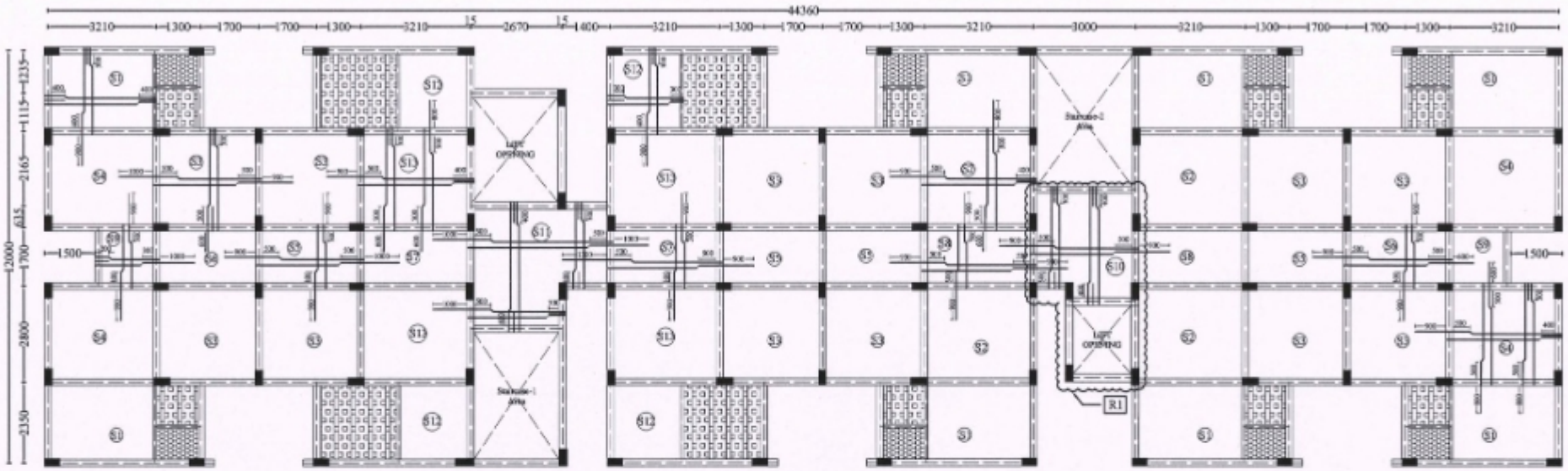
TRUE COPY

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	Sd.xxxx 02.11.2023. SE - PMU
Sd.xxxx. SE - South	Sd.xxxx 02.11.2023. CE - South

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

STILT FLOOR SLAB DETAILS



SLAB SUNKEN BY 325mm

SLAB SUNKEN BY 400mm

Note:
1. SLAB 125mm THICK
2. ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3. For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

TRUE COPY

3.11.23

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

3/11/23

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

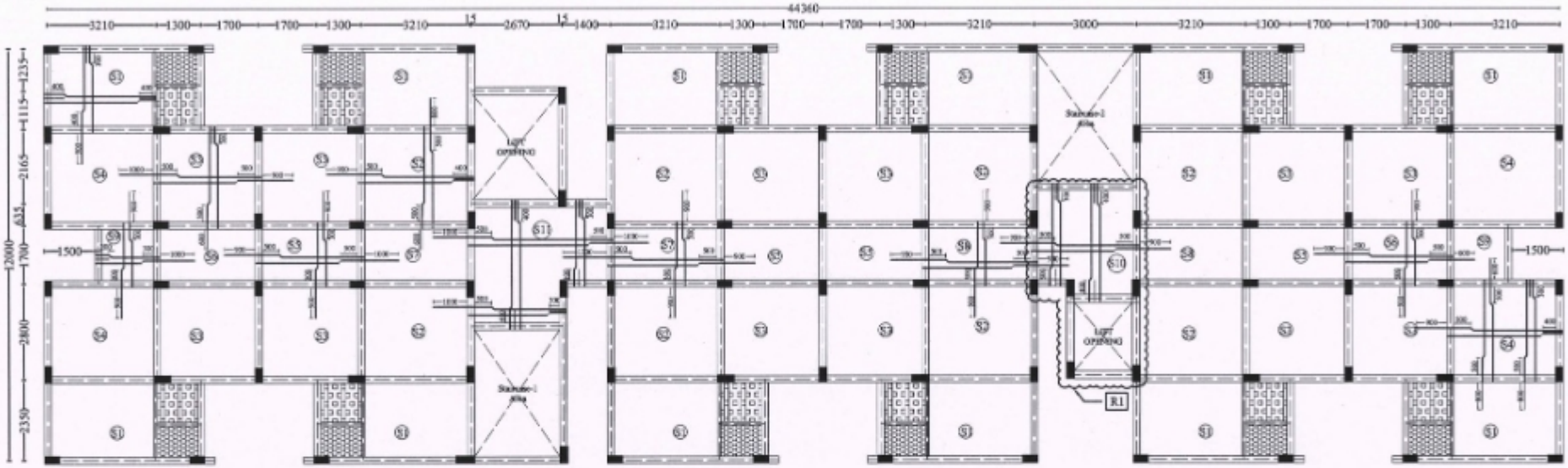
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/18**

REVISION NO.: 01

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

TYPICAL FLOOR SLAB DETAILS



SLAB SUNKEN BY 325mm

SLAB SUNKEN BY 400mm

Note:
1. SLAB 125mm THICK
2. ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3. For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

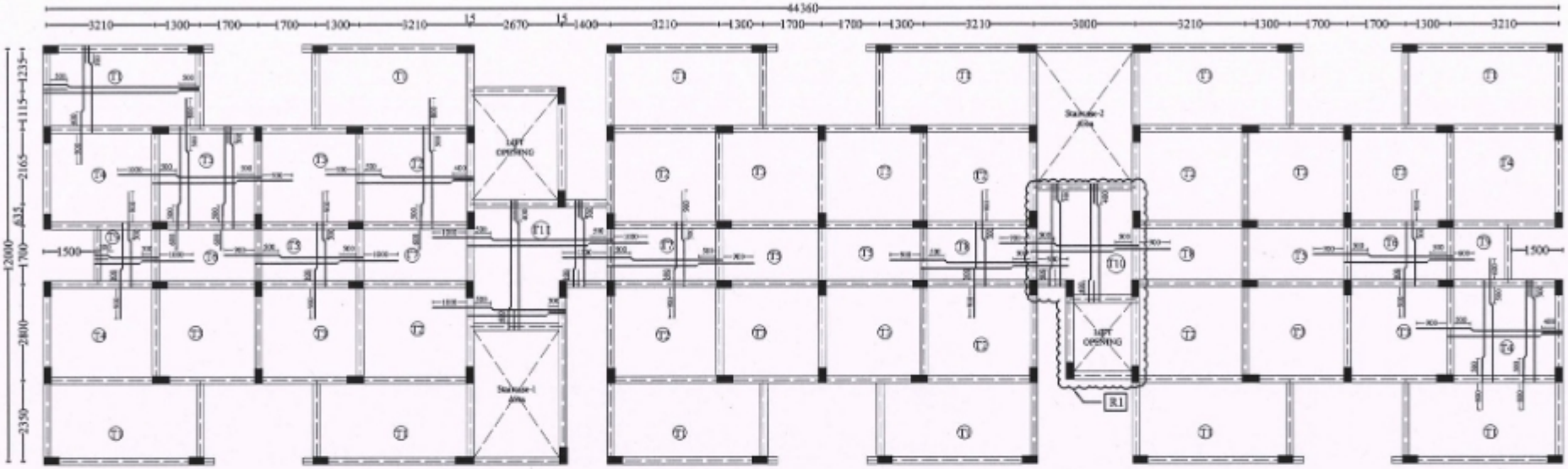
TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
23/11/23

STRUCTURAL DETAILS		
PROJECT: RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT	**Assistant Engineer**	**Asst. Exe. Engineer**
TITLE: TYPICAL FLOOR SLAB DETAILS	**Executive Engineer**	Sd.xxxx 02.11.2023. **SE - PMU**
TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)		
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/**19		
REVISION NO.: 01	Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

TERRACE FLOOR SLAB DETAILS



Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

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

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR SLAB DETAILS.

TYPE DESIGN NO.: 23/2021 [TYPE - A] - (R1)

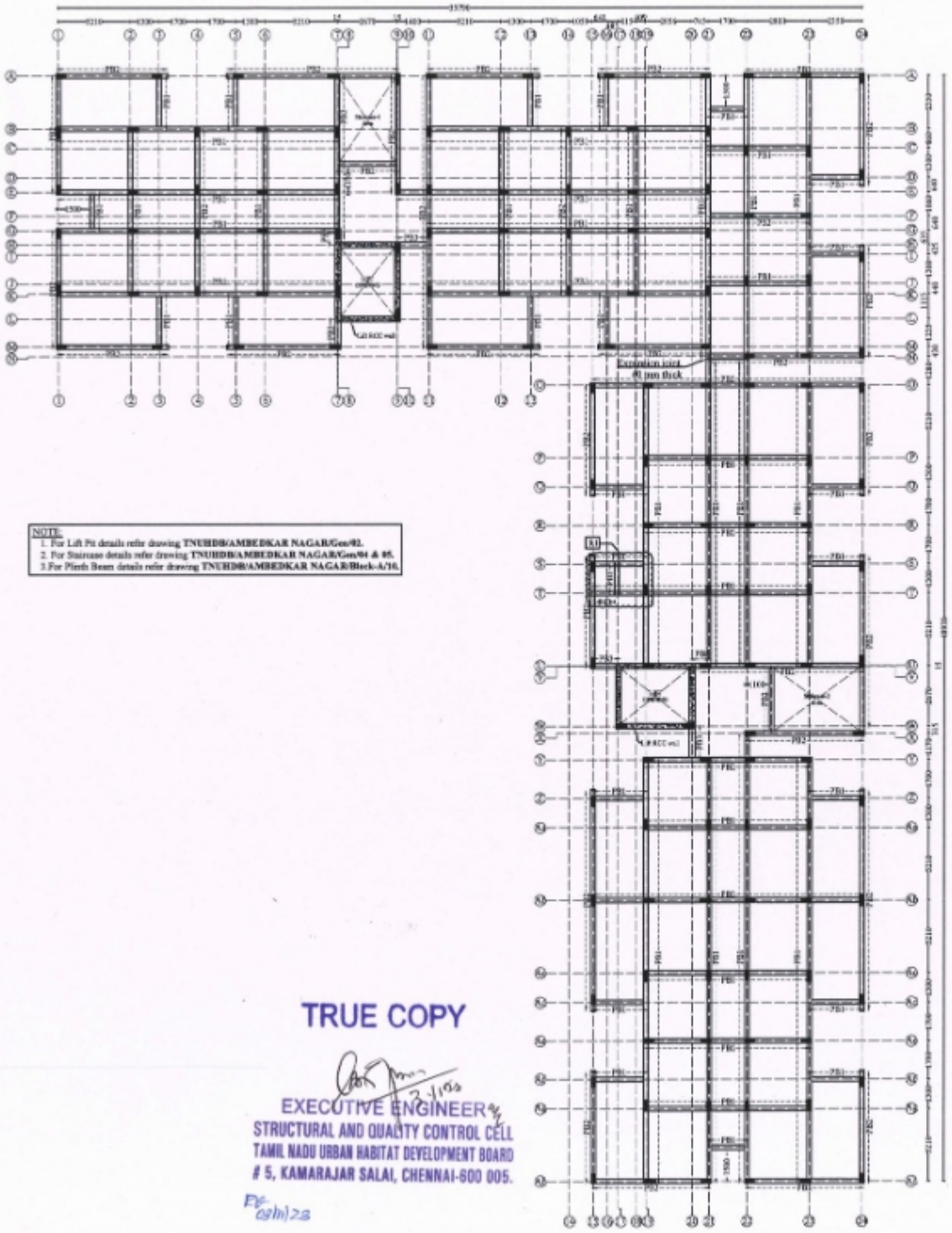
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-A/20**

REVISION NO.: 01

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

PLINTH BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**
3.For Plinth Beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/10.**

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

Dt: 03/11/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows;
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt..02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt..26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLINTH BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B] - (R1)

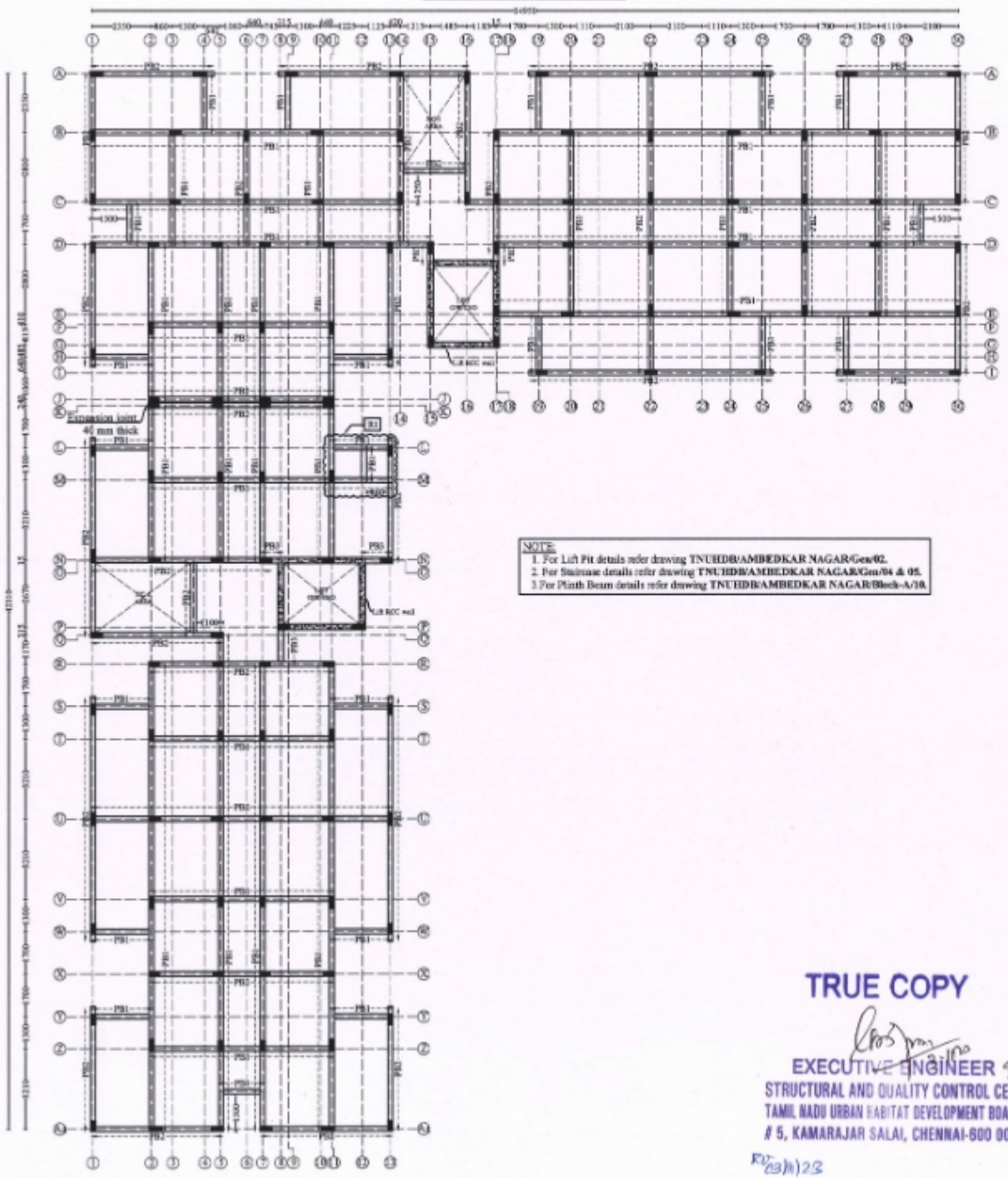
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/09

REVISION NO.: 01

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

PLINTH BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**
3. For Plinth Beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/10.**

TRUE COPY

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

Dt: 03.11.23

NOTE:

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25 grade**, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.
23. The Executive Engineer / Tirunelveli Division letter no.: 1973/AE(P)/2021, Dt.:26.10.2023.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLINTH BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C] - (R1)

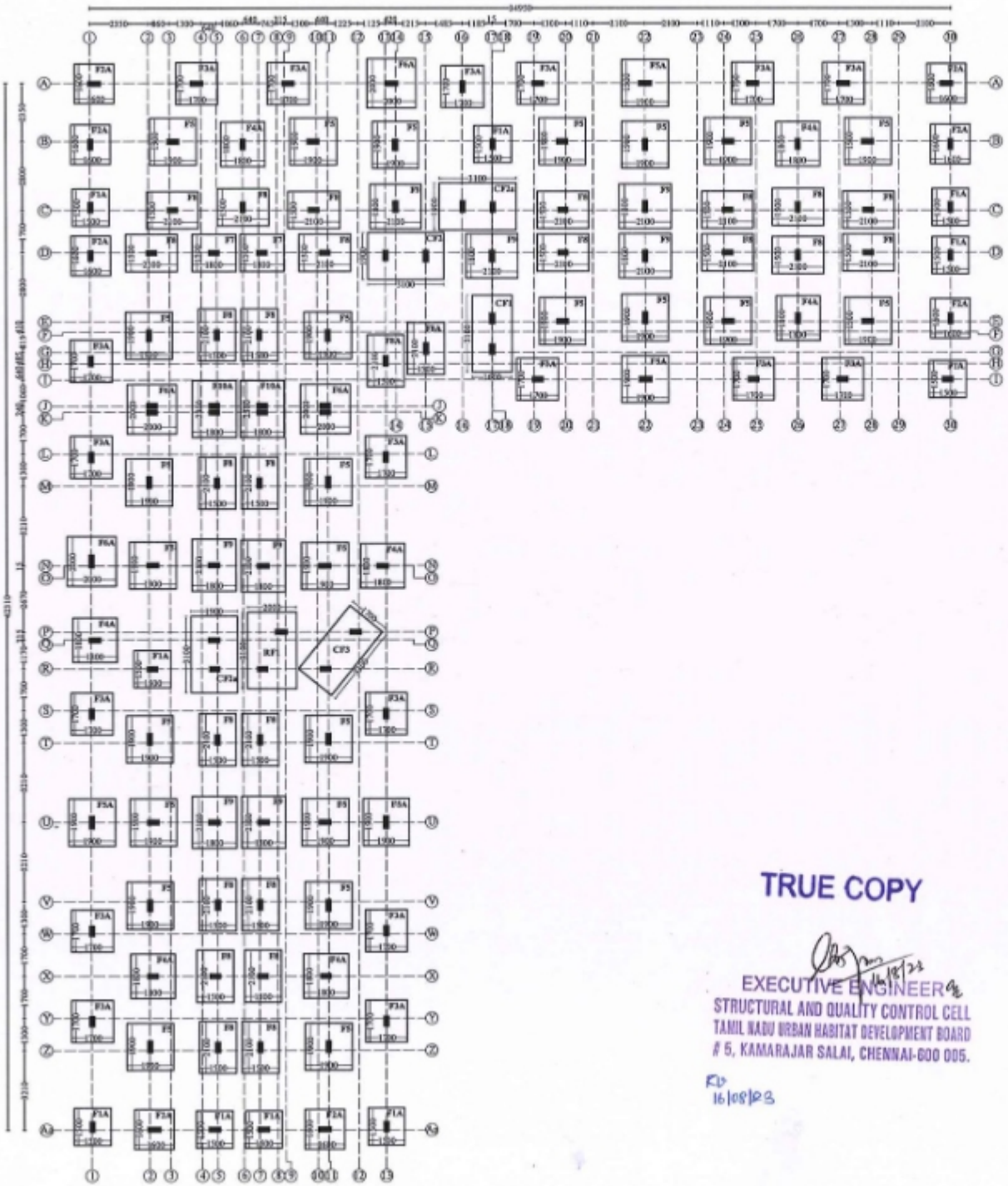
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/08

REVISION NO.: 01

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxx 02.11.2023. **SE - PMU**
Sd.xxxx. **SE - South**	Sd.xxxx 02.11.2023. **CE - South**

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

PLAN AT FOUNDATION LEVEL



TRUE COPY

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

16/08/23

NOTE:

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
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8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt. 02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLAN AT FOUNDATION LEVEL

TYPE DESIGN NO.: 23/2021 [TYPE - C]

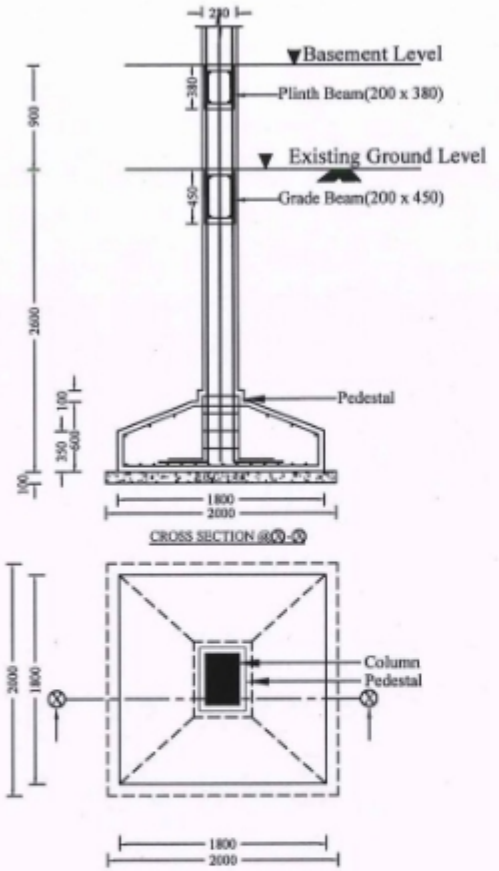
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/01

REVISION NO.:

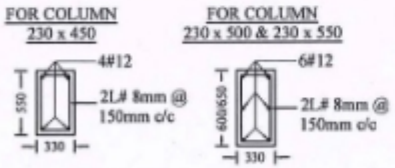
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TYPICAL CROSS SECTION OF COLUMN FOOTING



TYPICAL PEDESTAL DETAIL



Note:
1. Generator loading is not considered for design since it is located at stilt level.

SCHEDULE OF COLUMN FOOTINGS

Sl.No.	Footing Marking	Numbers of Footing	Pedestal Size (mm x mm x mm)	PCC Mat (mm x mm)	RCC Footing (mm x mm)	Thickness Near Column (mm)	Edge Thickness (mm)	Reinforcement in Footing (mm)
SQUARE FOOTING								
1.	F1A	10	330 x 550 x 200 & 330 x 600 x 200	1700 x 1700	1500 x 1500	500	300	Bottom : ∀ 12 mm @ 180 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
2.	F2A	08	330 x 550 x 150 & 330 x 650 x 150	1800 x 1800	1600 x 1600	550	350	Bottom : ∀ 12 mm @ 150 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
3.	F3A	18	330 x 550 x 100, 330 x 600 x 100 & 330 x 650 x 100	1900 x 1900	1700 x 1700	600	350	Bottom : ∀ 12 mm @ 150 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
4.	F4A	07	330 x 550 x 100 & 330 x 600 x 100	2000 x 2000	1800 x 1800	600	350	Bottom : ∀ 12 mm @ 150 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
5.	F5	25	330 x 600 x 100	2100 x 2100	1900 x 1900	650	400	Bottom : ∀ 12 mm @ 125 mm C/C both ways
6.	F5A	04	330 x 650 x 100	2100 x 2100	1900 x 1900	650	400	Bottom : ∀ 12 mm @ 125 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
7.	F6A	04	330 x 650 x 100 & 550 x 600 x 100	2200 x 2200	2000 x 2000	650	400	Bottom : ∀ 12 mm @ 125 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
RECTANGLE FOOTING								
8.	F7	02	330 x 550 x 100	2000 x 1700	1800 x 1500	600	350	Bottom : ∀ 12 mm @ 150 mm C/C both ways
9.	F8	25	330 x 550 x 100	2300 x 1700	2100 x 1500	650	450	Bottom : ∀ 12 mm @ 125 mm C/C both ways
10.	F8A	02	330 x 550 x 100 & 330 x 600 x 100	2300 x 1700	2100 x 1500	650	450	Bottom : ∀ 12 mm @ 125 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways
11.	F9	08	–	2300 x 2000	2100 x 1800	700	450	Bottom : ∀ 12 mm @ 125 mm C/C both ways
12.	F10A	02	550 x 600 x 100	2500 x 2000	2300 x 1800	650	450	Bottom : ∀ 12 mm @ 125 mm C/C both ways Top : ∀ 12 mm @ 230 mm C/C both ways

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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 structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
SCHEDULE OF COLUMN FOOTINGS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

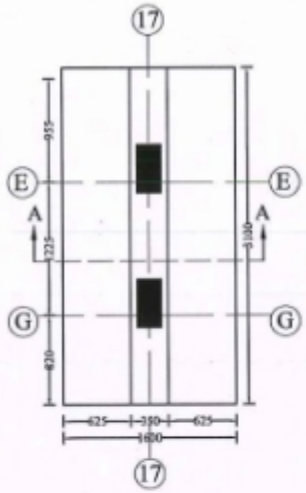
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/02

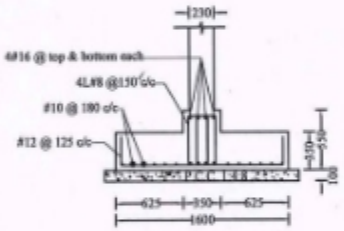
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

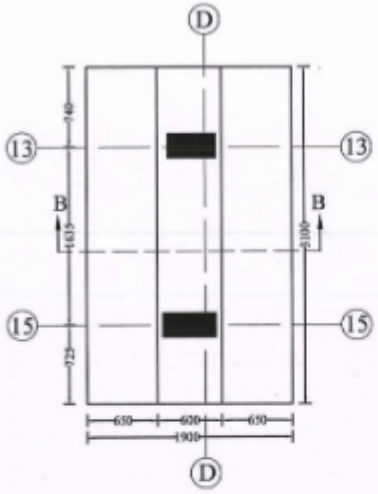
COMBINED FOOTING CF1

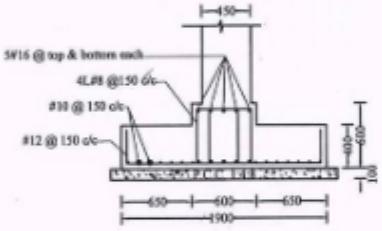




CROSS SECTION @ A - A

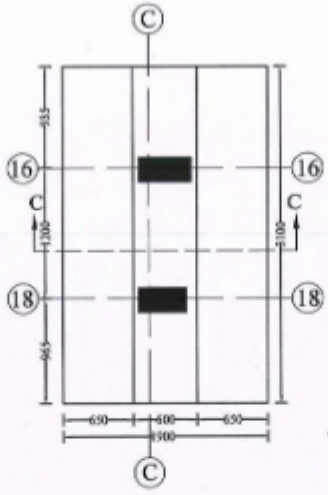
COMBINED FOOTING CF2

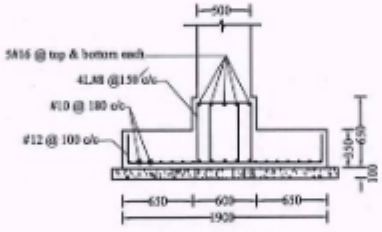




CROSS SECTION @ B - B

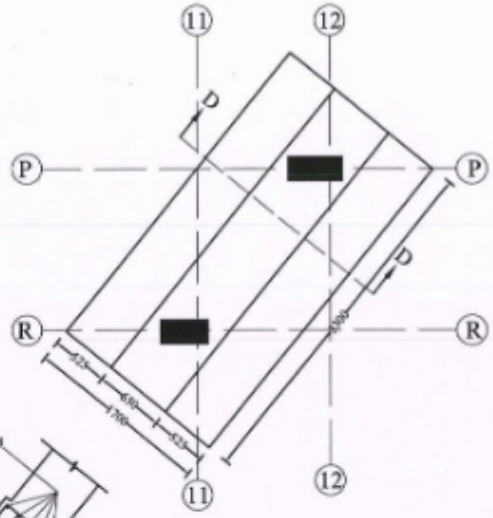
COMBINED FOOTING CF2a

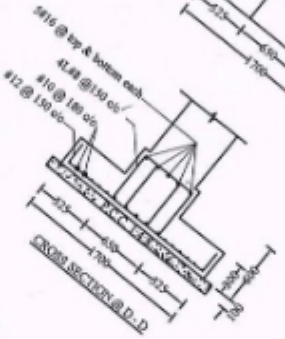




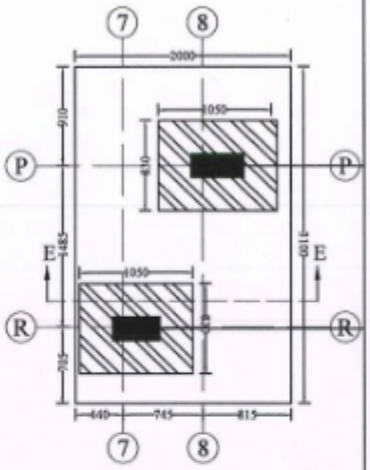
CROSS SECTION @ C - C

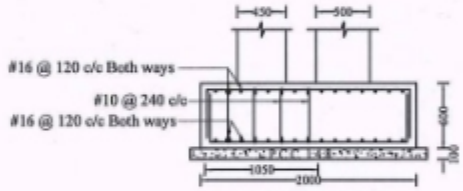
COMBINED FOOTING CF3





RAFT FOOTING RF1





CROSS SECTION @ E - E

NOTE :

1. All the dimensions are in mm unless noted otherwise.
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4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
DETAILS OF COMBINED & RAFT FOOTINGS CF1, CF2, CF2a, CF3 & RF1.

TYPE DESIGN NO.: 23/2021 [TYPE - C]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C/03**

REVISION NO:

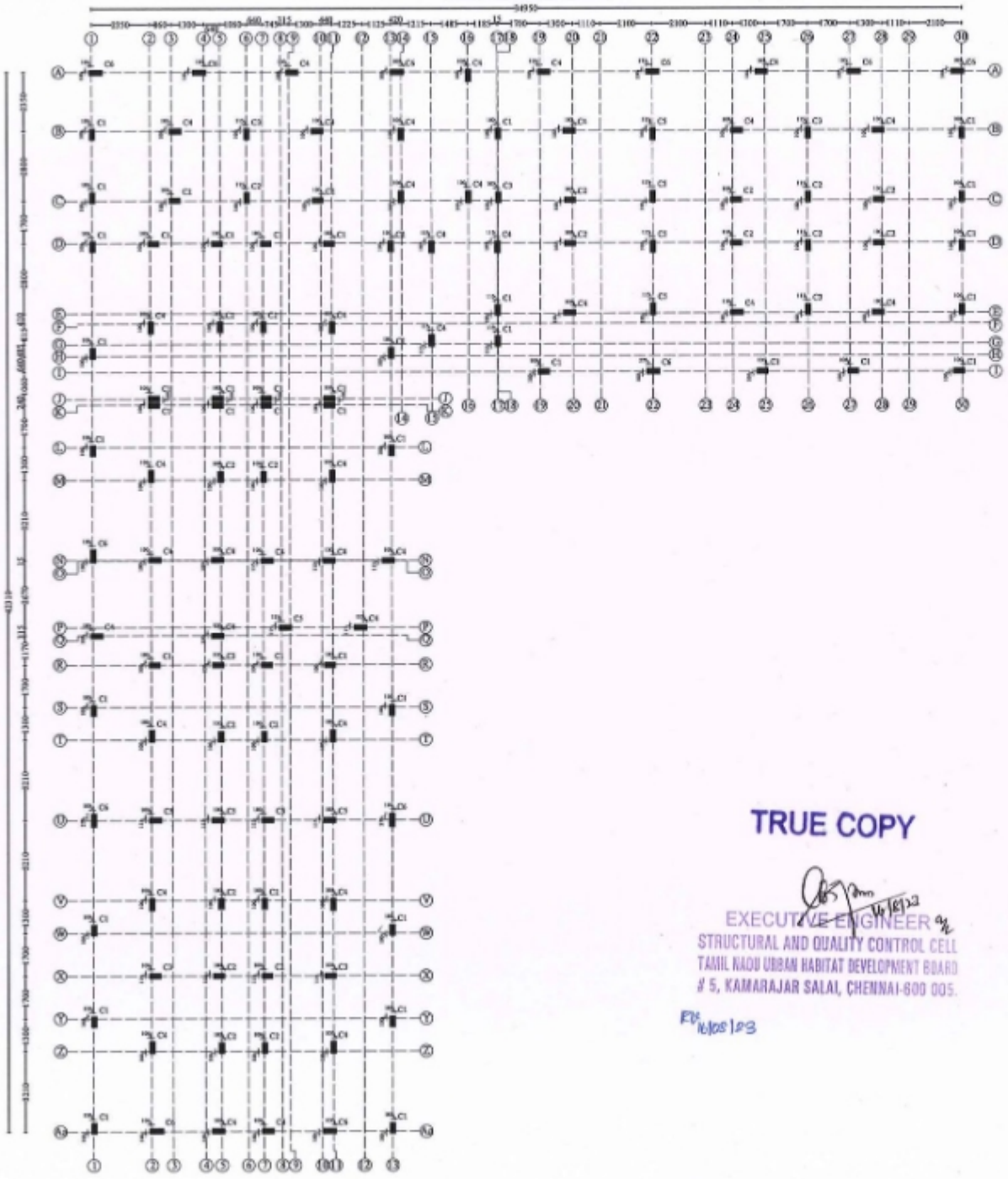
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO 5, KAMARAJAR SALAI, CHENNAI-600 005.

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxxx. SE - PMU
Sd.xxxxx. SE - South	Sd.xxxx 13.08.2023. CE - South

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.
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3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
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EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
COLUMN LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

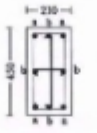
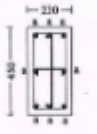
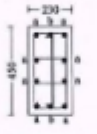
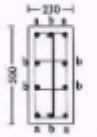
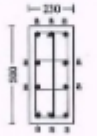
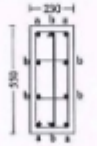
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C/04**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

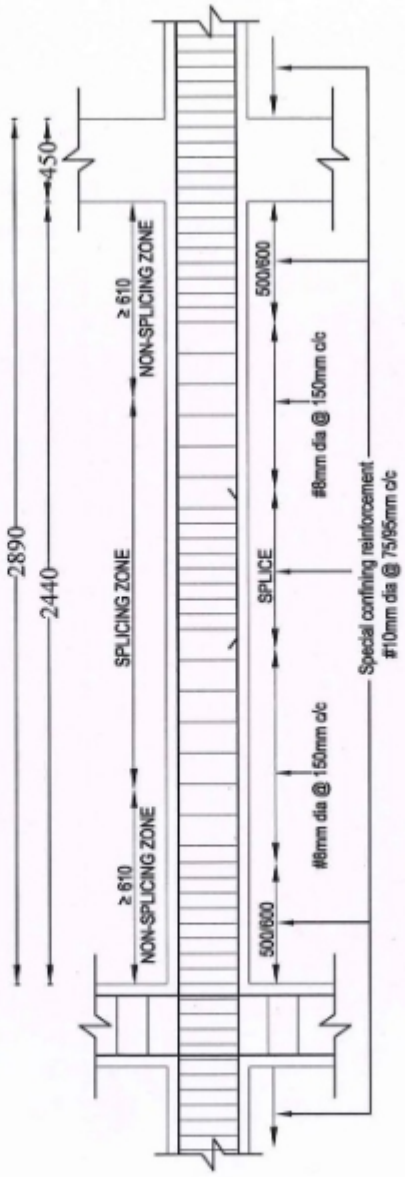
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SCHEDULE OF COLUMNS

Sl.No.	Column Marking	No of Columns	Size	Column Verticals	Lateral Ties	Cross Section	Ties Profile
1.	C1	41	230 x 450	# 16 - 4 Nos + # 12 - 4 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
2.	C2	24	230 x 450	# 16 - 8 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
3.	C3	07	230 x 450	# 16 - 8 Nos + # 12 - 2 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
4.	C4	38	230 x 500	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
5.	C5	09	230 x 500	# 16 - 10 Nos.	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Above Stilt floor slab: #10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
6.	C6	12	230 x 550	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 16 mm b - # 12 mm

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TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS

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

NOTE :

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    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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 stores for review.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
SCHEDULE OF COLUMNS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

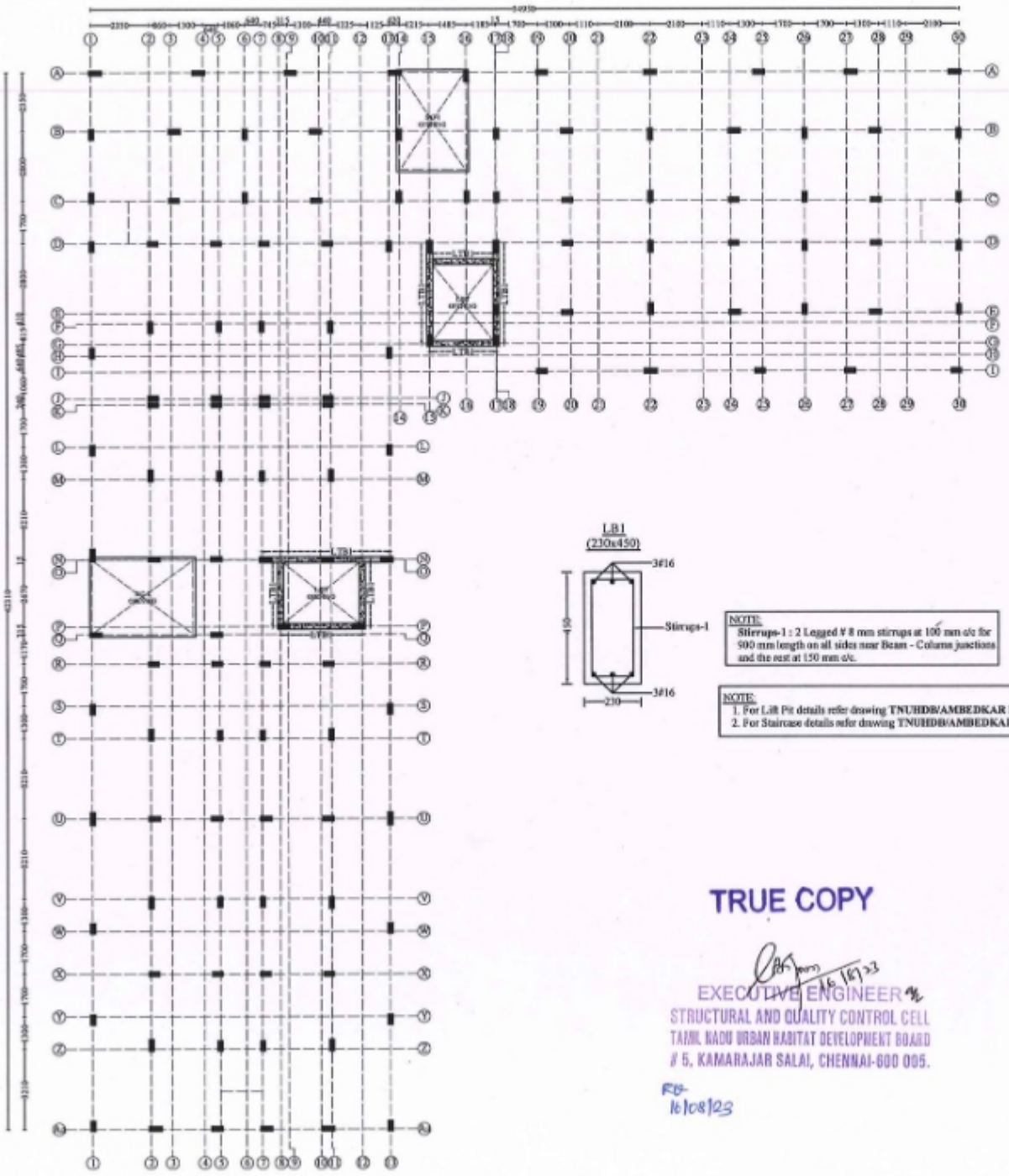
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/05

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxxx. SE - PMU
Sd.xxxxx. SE - South	Sd.xxxx 13.08.2023. CE - South

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

LIFT PIT & STAIRCASE LOCATION AND DETAILS



NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**

TRUE COPY

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for **(S+6)** floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
LIFT PIT & STAIRCASE LOCATION AND DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

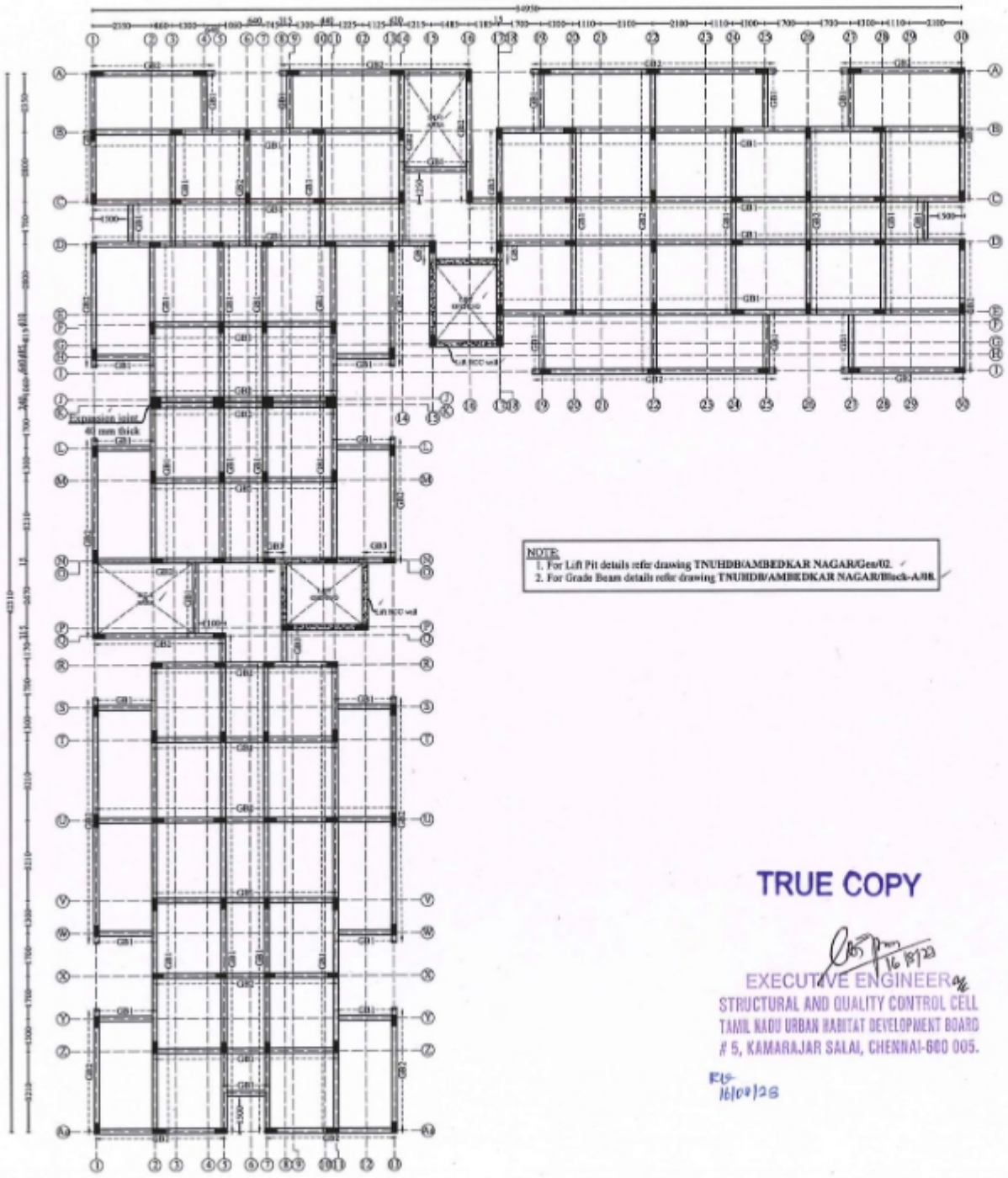
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C/06**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

GRADE BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing TNUHDB/AMBEDKAR NAGAR/Ges/02.
2. For Grade Beam details refer drawing TNUHDB/AMBEDKAR NAGAR/Block-A/08.

TRUE COPY

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

16/8/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
GRADE BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

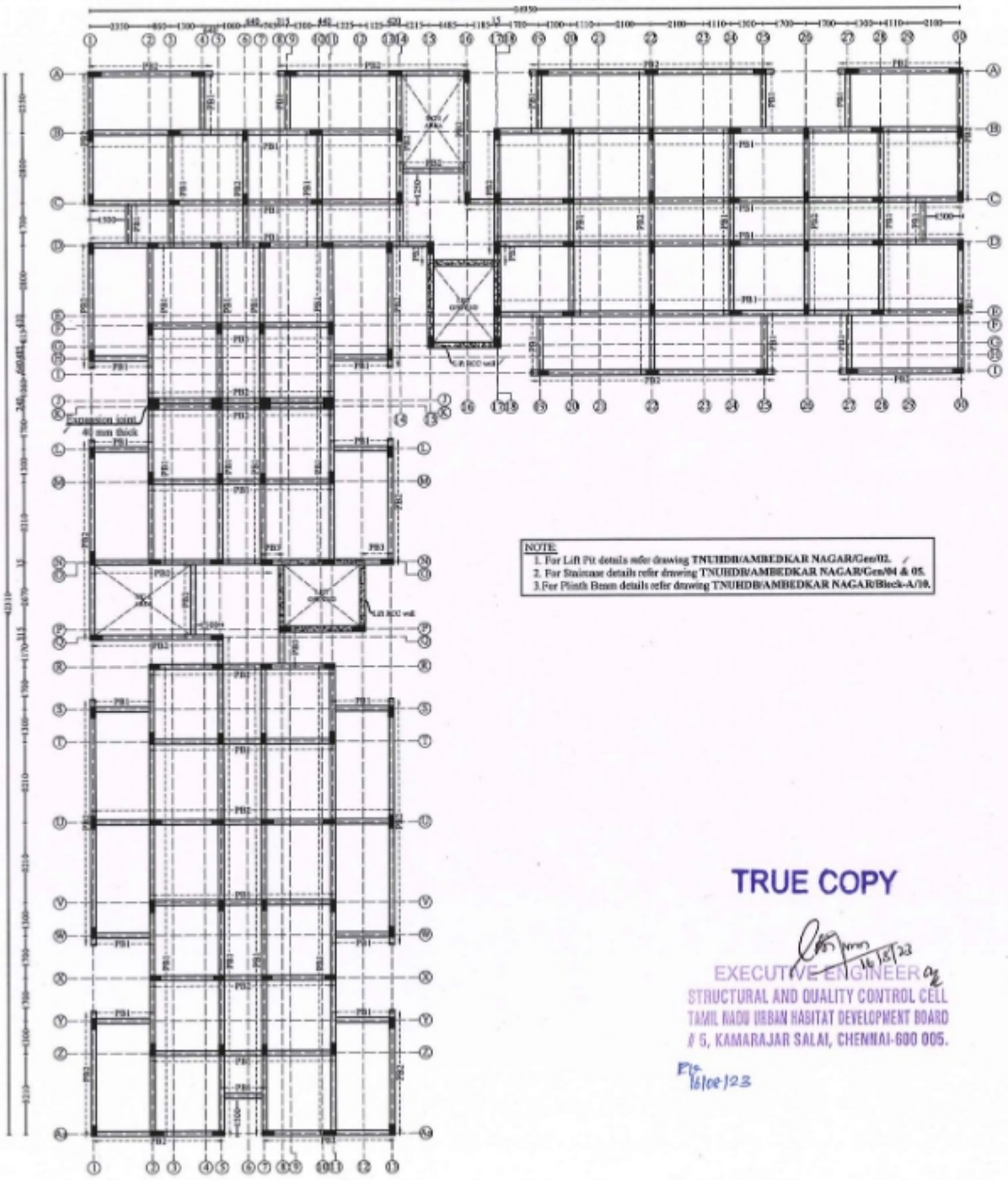
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C/07**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

PLINTH BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/02.**
2. For Staircase details refer drawing **TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.**
3. For Plinth Beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/10.**

TRUE COPY

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLINTH BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

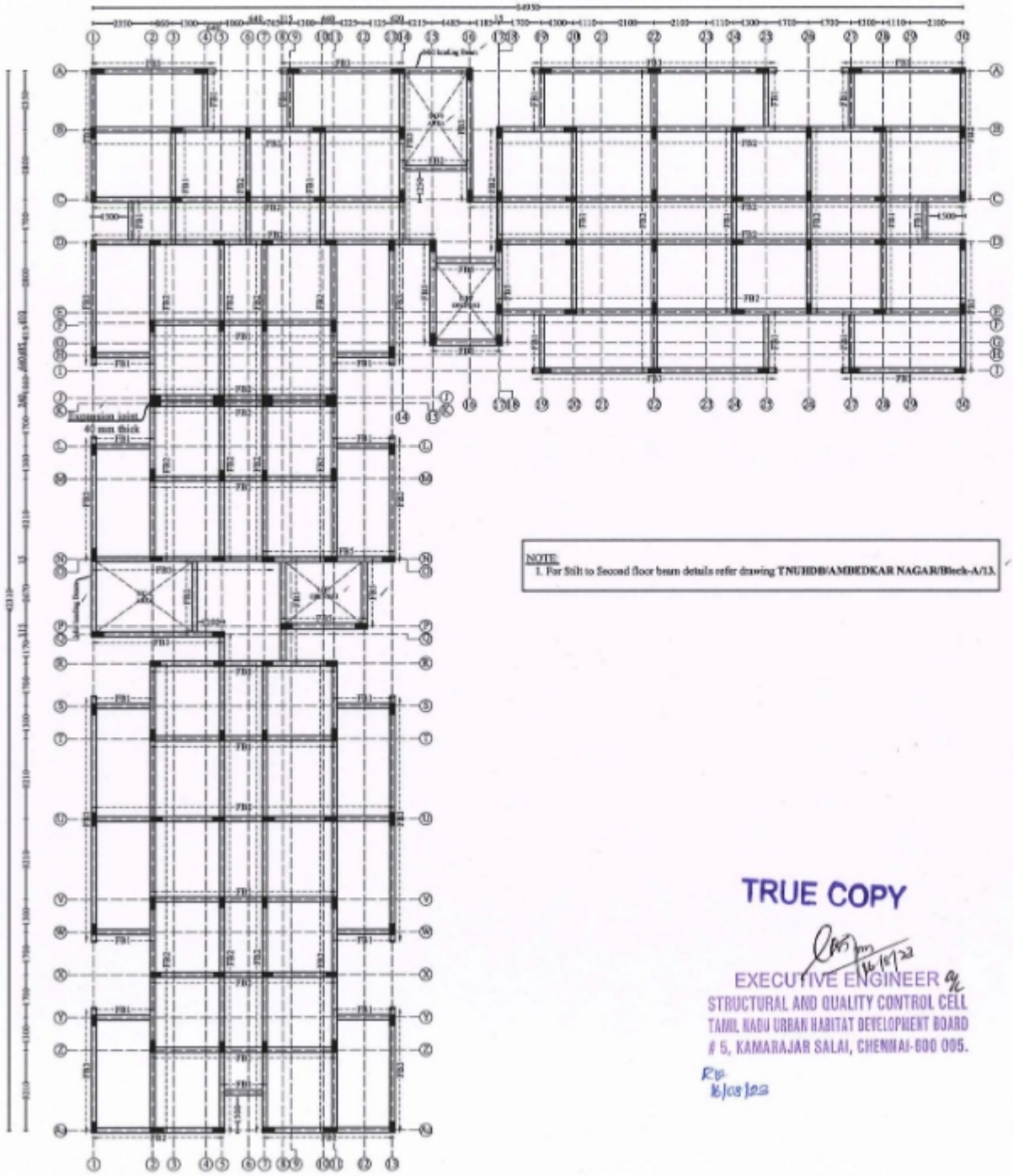
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C/08**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

STILT TO SECOND FLOOR BEAM LAYOUT



NOTE:
1. For Stilt to Second floor beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/13.**

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

TRUE COPY

16/8/23

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

16/08/23

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT TO SECOND FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

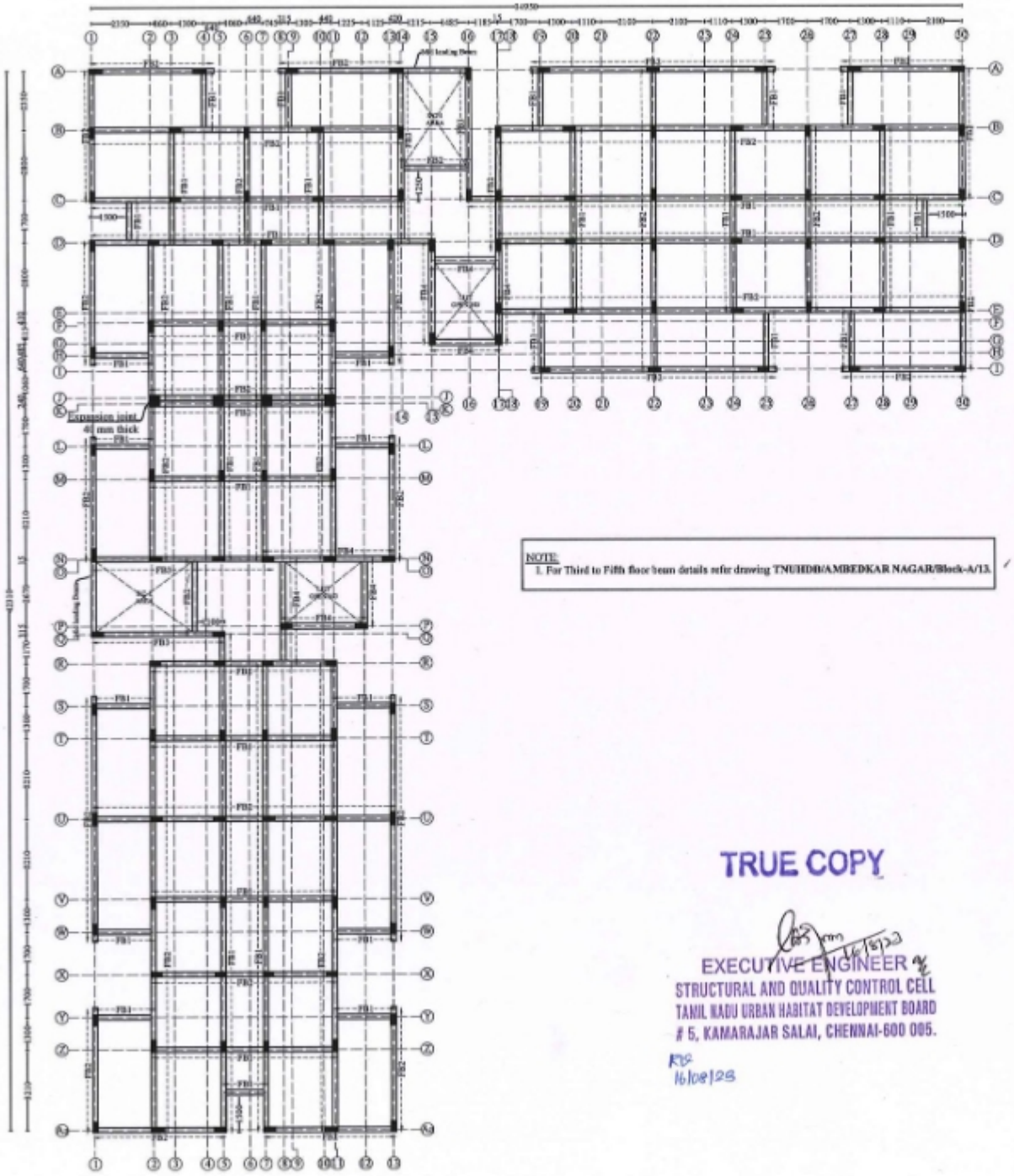
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/09

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

THIRD TO FIFTH FLOOR BEAM LAYOUT



NOTE:
1. For Third to Fifth floor beam details refer drawing TNUHDB/AMBEDKAR NAGAR/Block-A/13.

TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/OCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
THIRD TO FIFTH FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

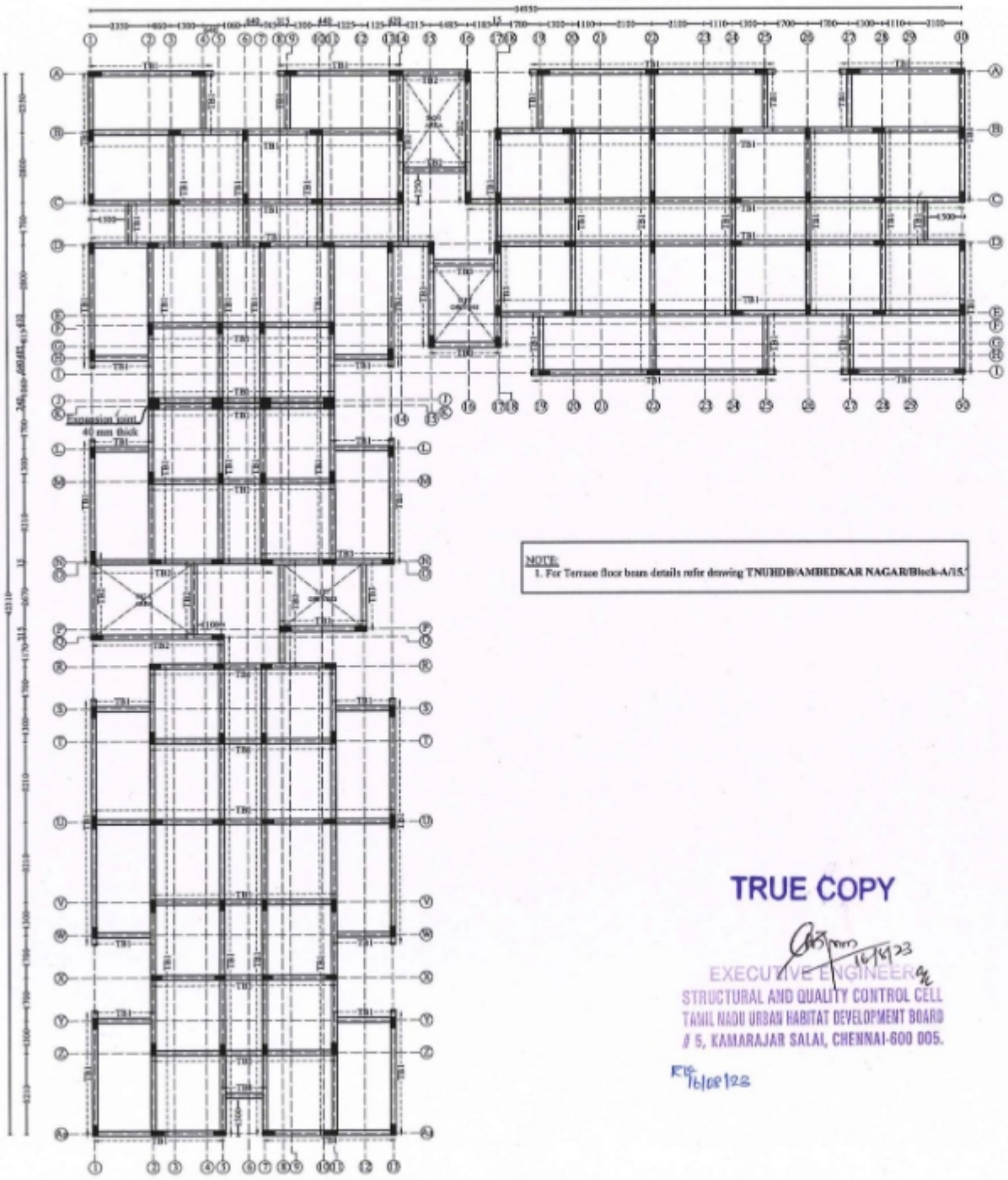
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/10

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TERRACE FLOOR BEAM LAYOUT



NOTE:
1. For Terrace floor beam details refer drawing TNUHDB/AMBEDKAR NAGAR/Block-A/15.

TRUE COPY

16/8/23

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **200 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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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20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt. 02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - C]

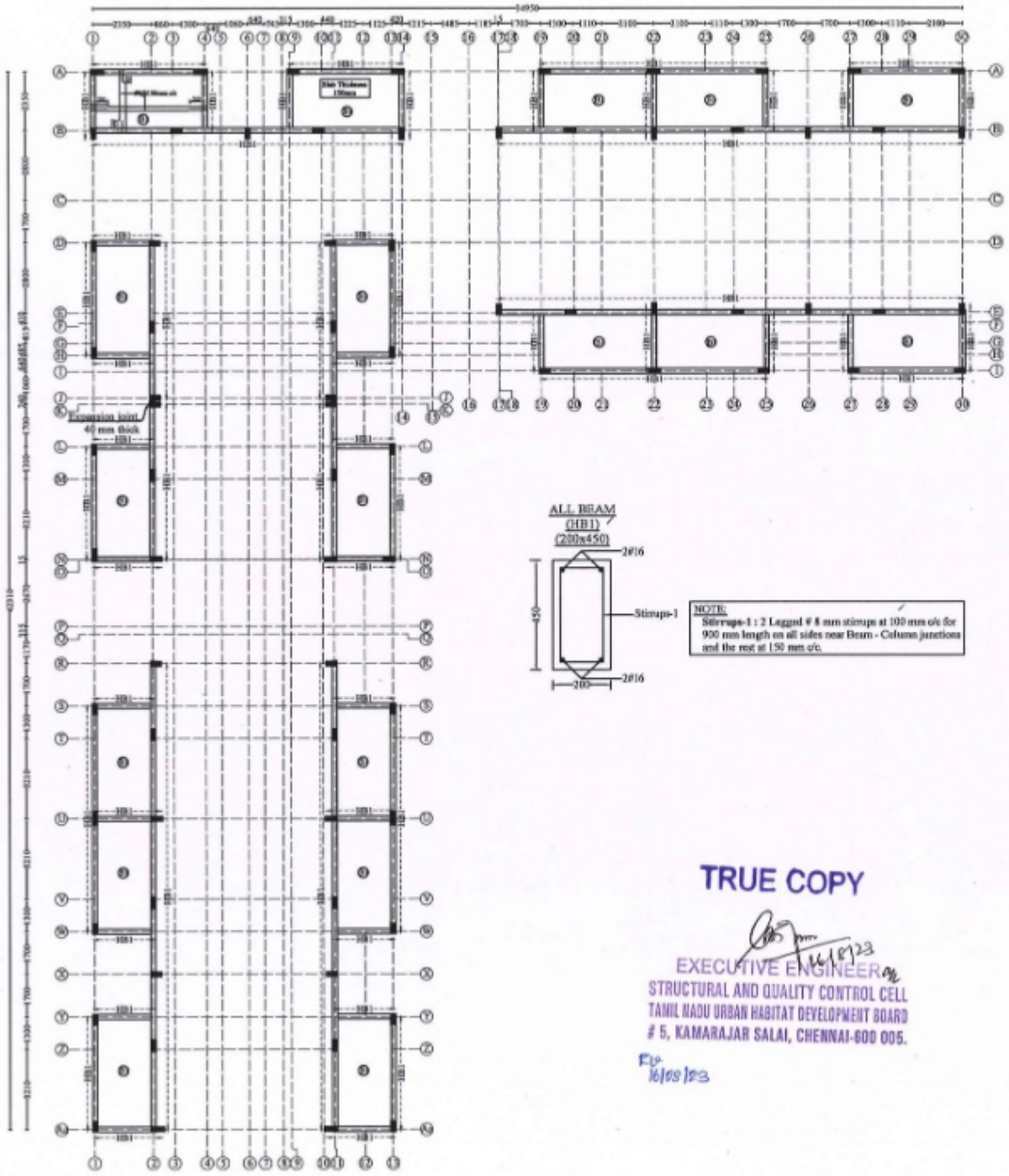
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/11

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

LOCATION OF WATER TANK PLATFORM SLAB, BEAM LAYOUT & SLAB DETAILS



NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

TRUE COPY

16/08/23

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
LOCATION OF WATER TANK PLATFORM SLAB, BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 23/2021 [TYPE - C]

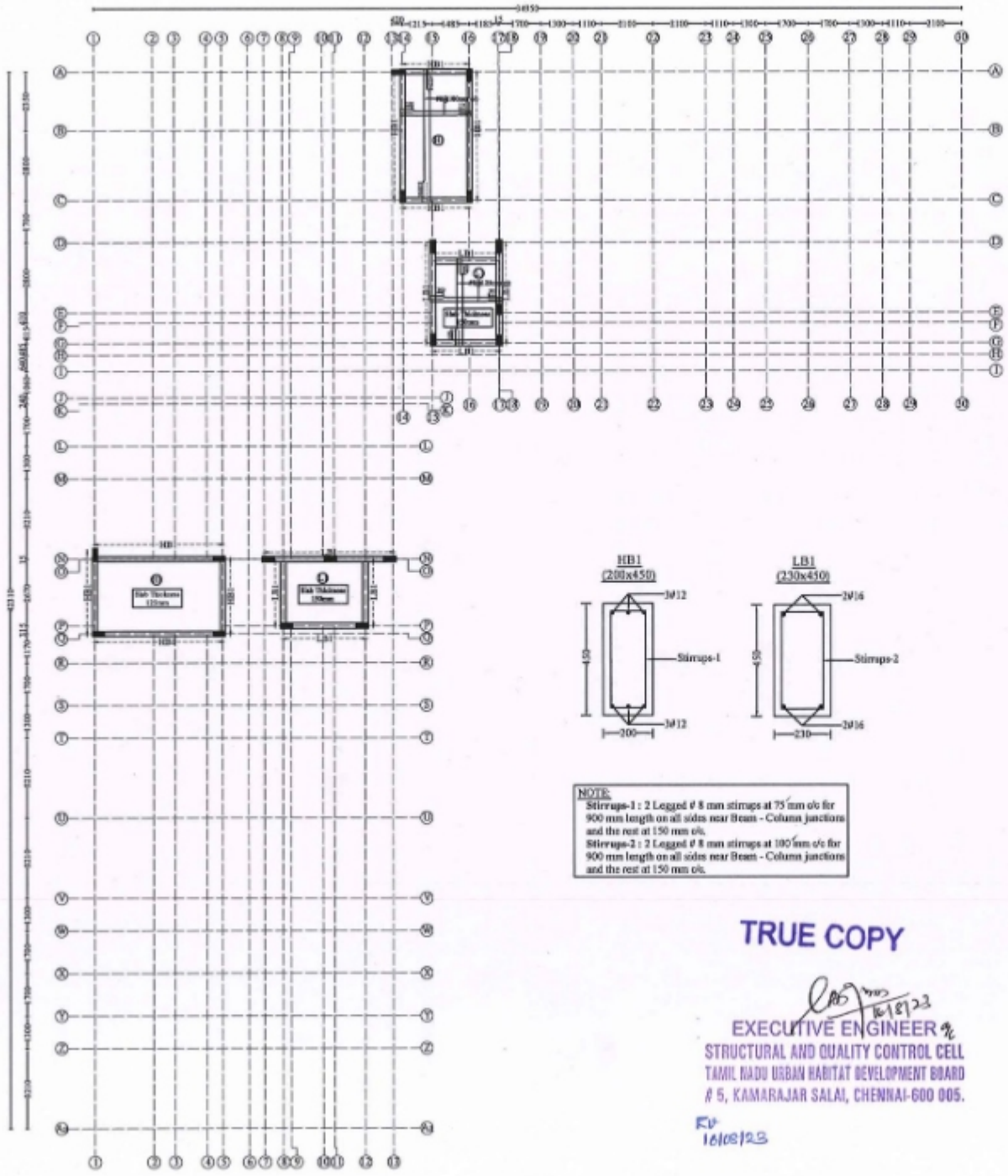
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/12

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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:
Stirrups-1 : 2 Legged Ø 8 mm stirrups at 75 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.
Stirrups-2 : 2 Legged Ø 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

TRUE COPY

16/08/23
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

16/08/23

NOTE :

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2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
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6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
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13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

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

TYPE DESIGN NO.: 23/2021 [TYPE - C]

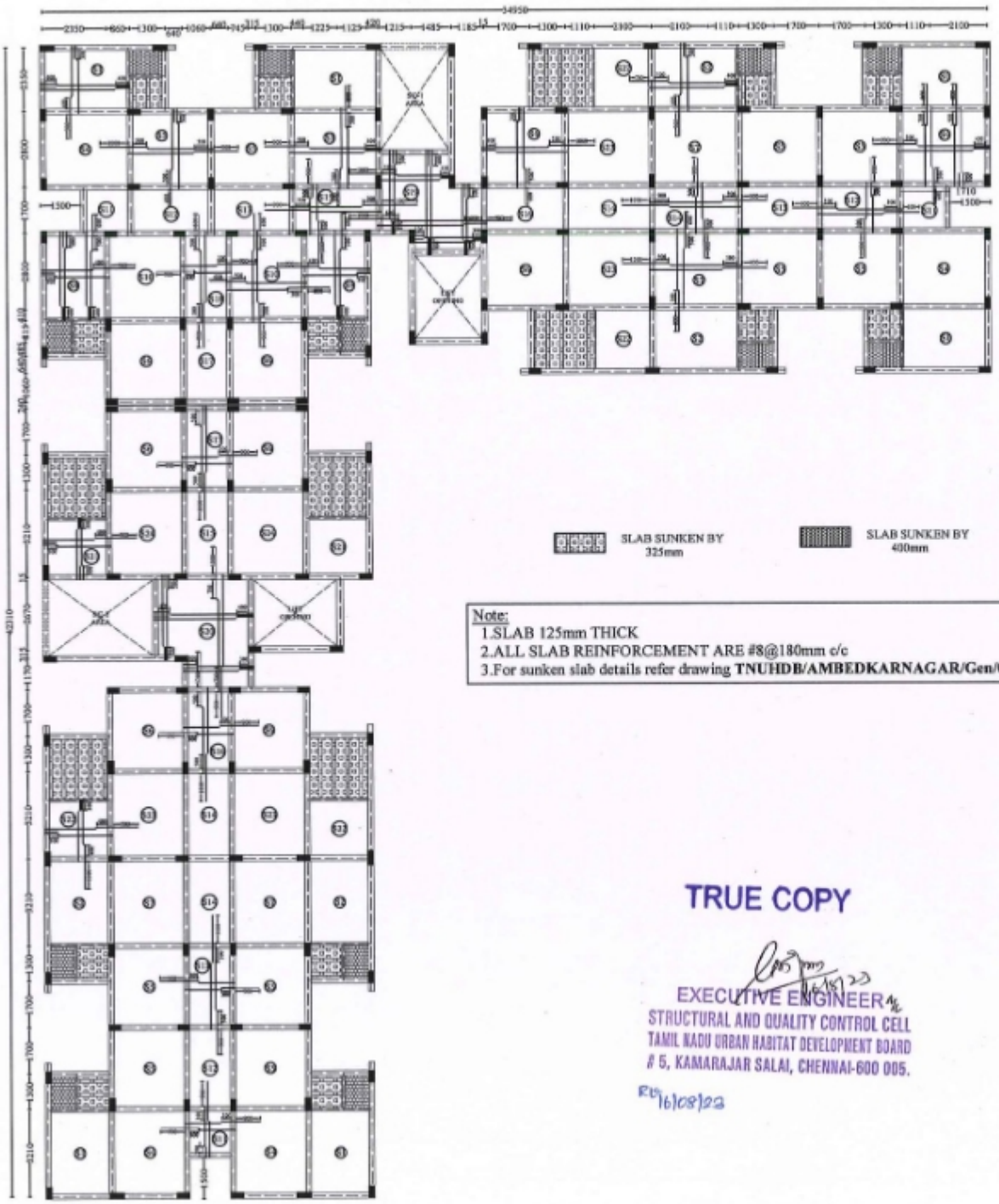
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/13

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

STILT FLOOR SLAB DETAILS



Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3.For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
16/08/23

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

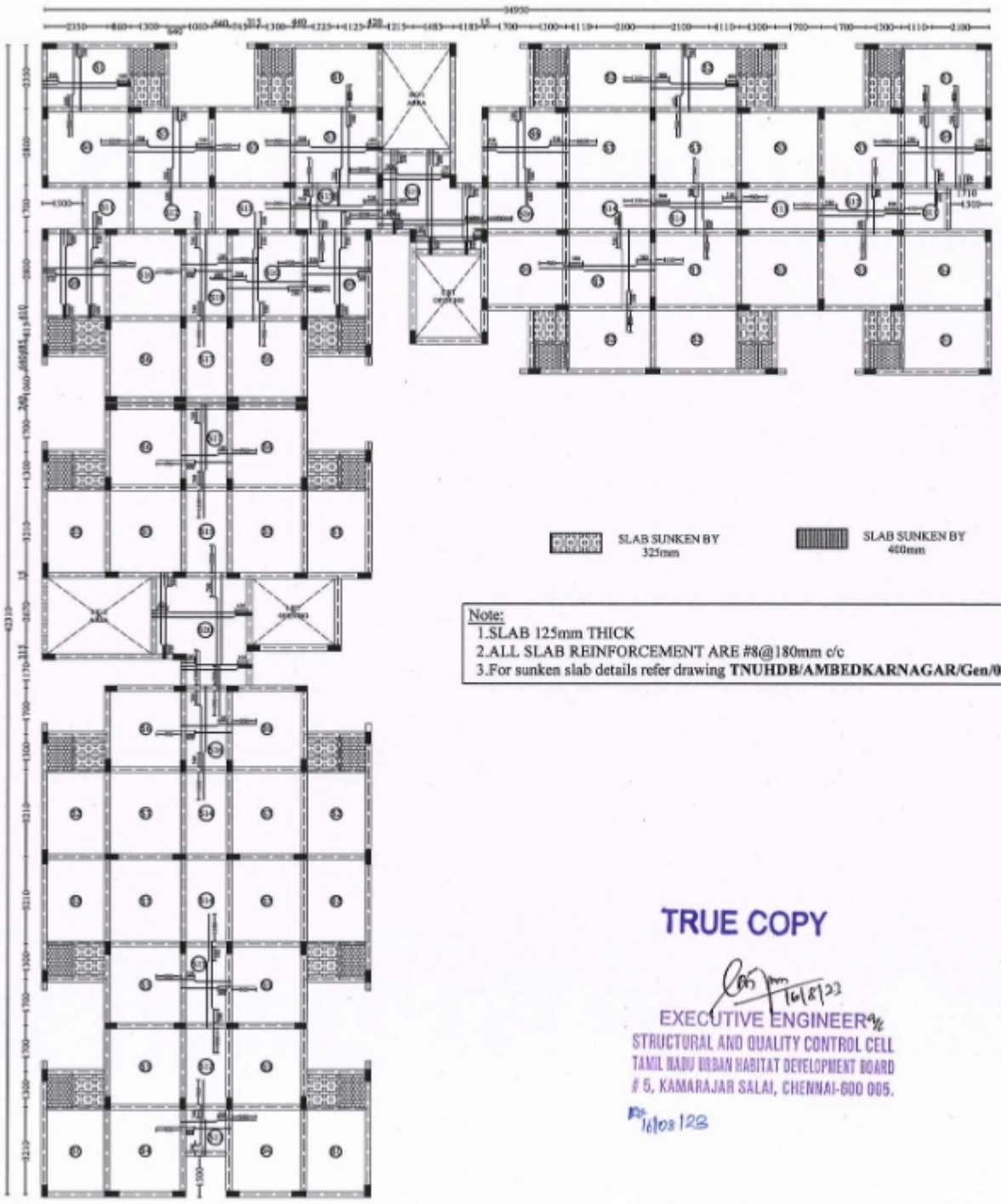
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/14

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TYPICAL FLOOR SLAB DETAILS



SLAB SUNKEN BY 325mm

SLAB SUNKEN BY 460mm

Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3.For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

TRUE COPY

16/8/23

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

16/08/23

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TYPICAL FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

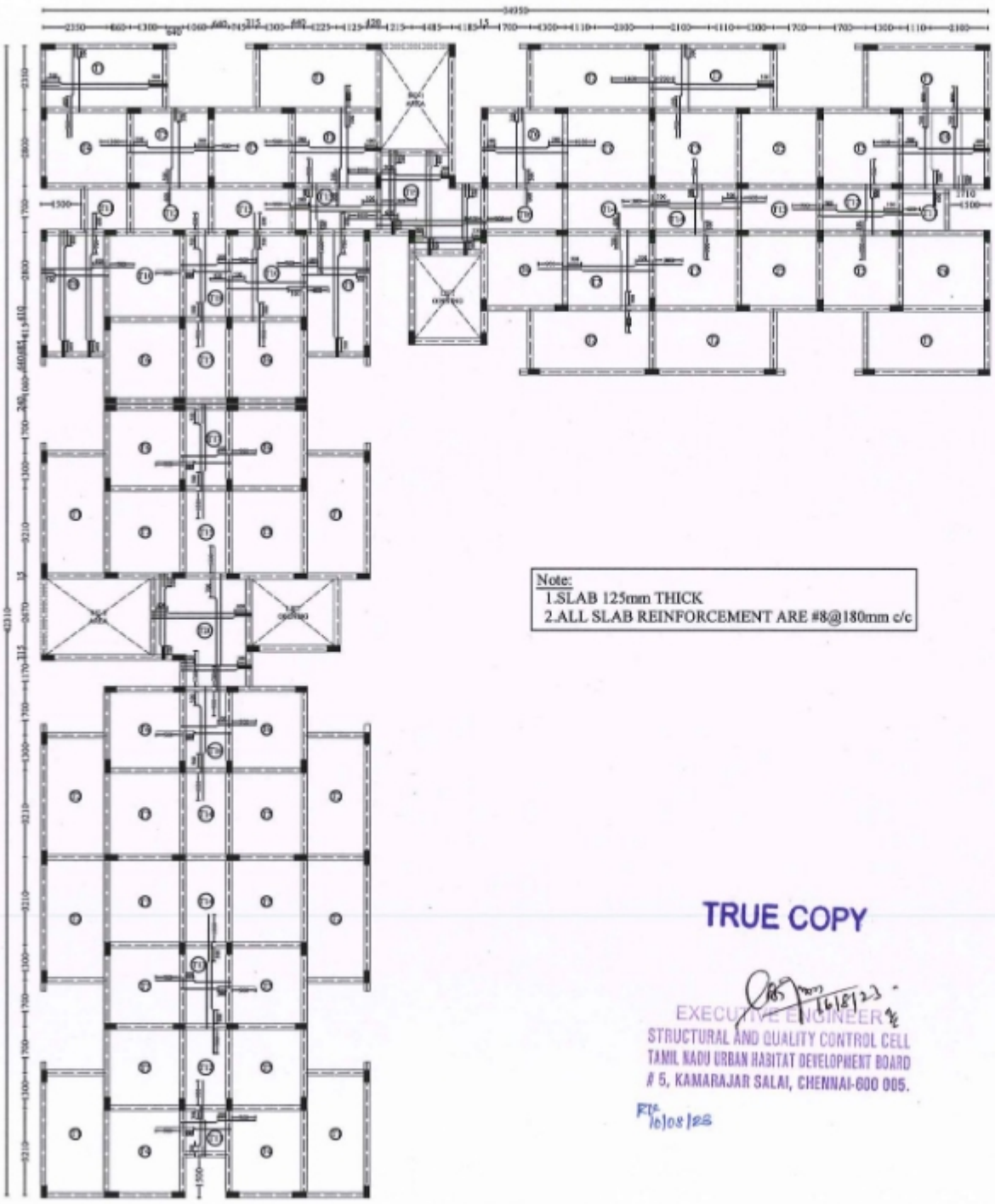
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/15

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TERRACE FLOOR SLAB DETAILS



Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c

TRUE COPY

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

NOTE:

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4. Clear cover to slab is 25mm.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - C]

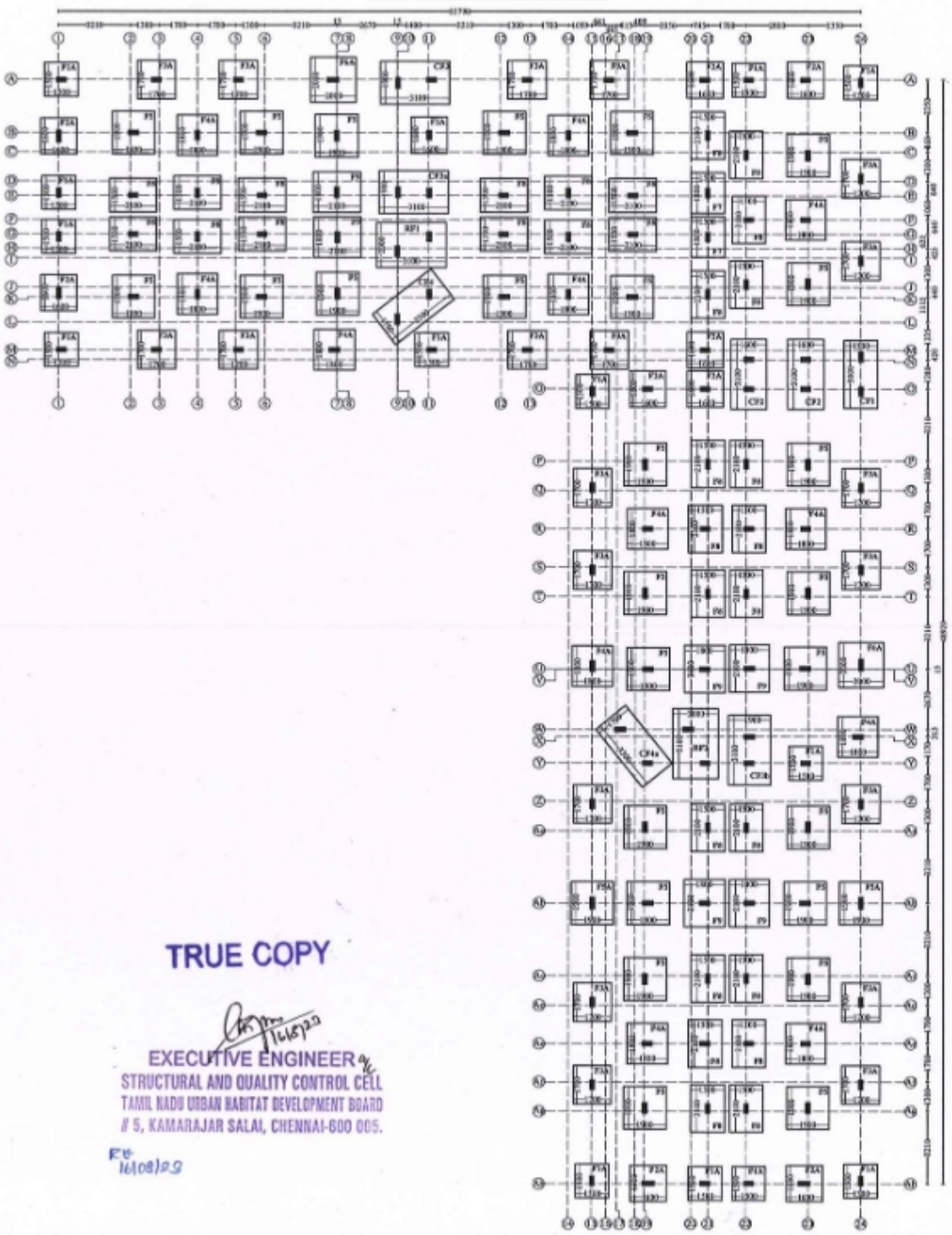
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-C**/16

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

PLAN AT FOUNDATION LEVEL



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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLAN AT FOUNDATION LEVEL

TYPE DESIGN NO.: 23/2021 [TYPE - B]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/01

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

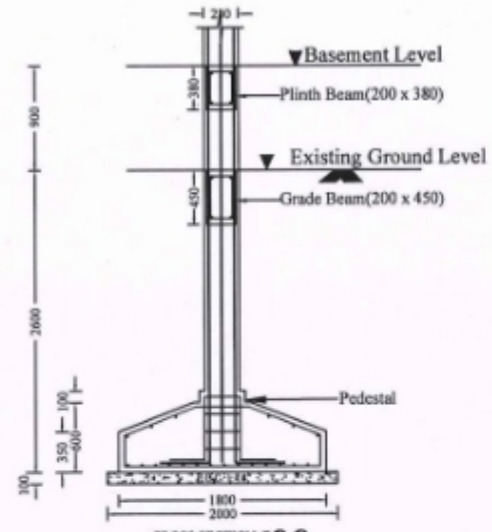
TRUE COPY

16/8/23

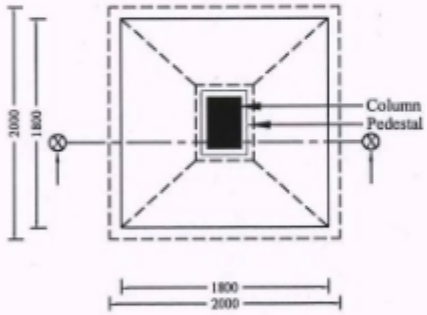
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

16/08/23

TYPICAL CROSS SECTION OF COLUMN FOOTING

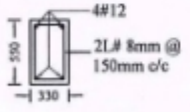


CROSS SECTION @(S)-(S)

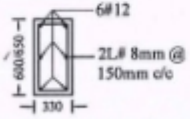


TYPICAL PEDESTAL DETAIL

FOR COLUMN 230 x 450



FOR COLUMN 230 x 500 & 230 x 550



Note:
1. Generator loading is not considered for design since it is located at stilt level.

SCHEDULE OF COLUMN FOOTINGS

Sl.No.	Footing Marking	Numbers of Footing	Pedestal Size (mm x mm x mm)	PCC Mat (mm x mm)	RCC Footing (mm x mm)	Thickness Near Column (mm)	Edge Thickness (mm)	Reinforcement in Footing (mm)
SQUARE FOOTING								
1.	F1A	13	330 x 550 x 200	1700 x 1700	1500 x 1500	500	300	Bottom : # 12 mm @ 180 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
2.	F2A	10	330 x 550 x 150 & 330 x 650 x 150	1800 x 1800	1600 x 1600	550	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
3.	F3A	20	330 x 550 x 100	1900 x 1900	1700 x 1700	600	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
4.	F4A	12	330 x 550 x 100 & 330 x 600 x 100	2000 x 2000	1800 x 1800	600	350	Bottom : # 12 mm @ 150 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
5.	F5	26	330 x 600 x 100	2100 x 2100	1900 x 1900	650	400	Bottom : # 12 mm @ 125 mm C/C both ways
6.	F5A	02	330 x 650 x 100	2100 x 2100	1900 x 1900	650	400	Bottom : # 12 mm @ 125 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
7.	F6A	02	330 x 650 x 100	2200 x 2200	2000 x 2000	650	400	Bottom : # 12 mm @ 125 mm C/C both ways Top : # 12 mm @ 230 mm C/C both ways
RECTANGLE FOOTING								
8.	F7	02	330 x 550 x 100	2000 x 1700	1800 x 1500	600	350	Bottom : # 12 mm @ 150 mm C/C both ways
9.	F8	31	330 x 550 x 100	2300 x 1700	2100 x 1500	650	450	Bottom : # 12 mm @ 125 mm C/C both ways
10.	F9	06	--	2300 x 2000	2100 x 1800	700	450	Bottom : # 12 mm @ 125 mm C/C both ways

TRUE COPY

EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
16/08/23

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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
SCHEDULE OF COLUMN FOOTINGS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

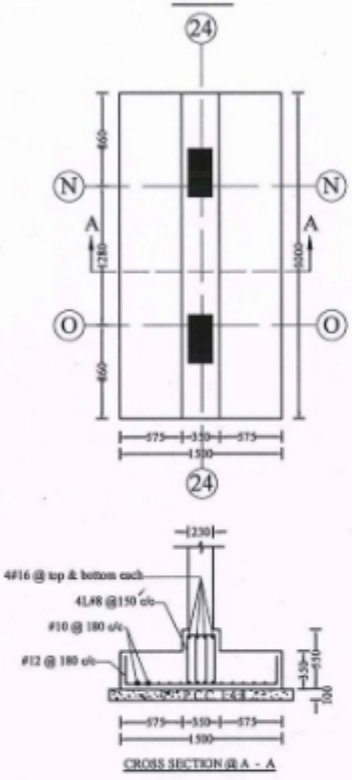
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/02

REVISION NO.:

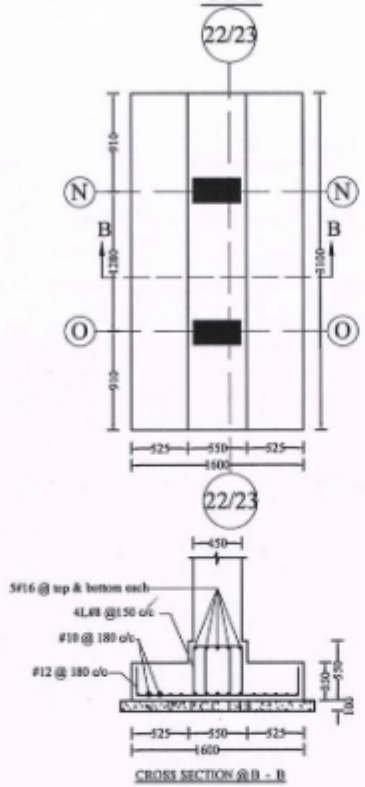
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

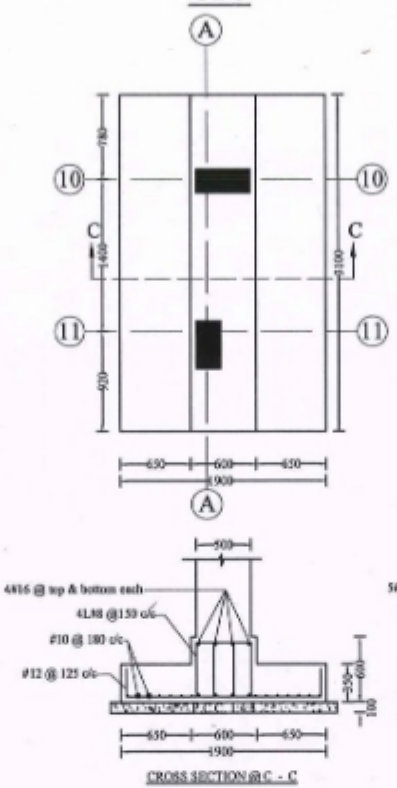
COMBINED FOOTING CF1



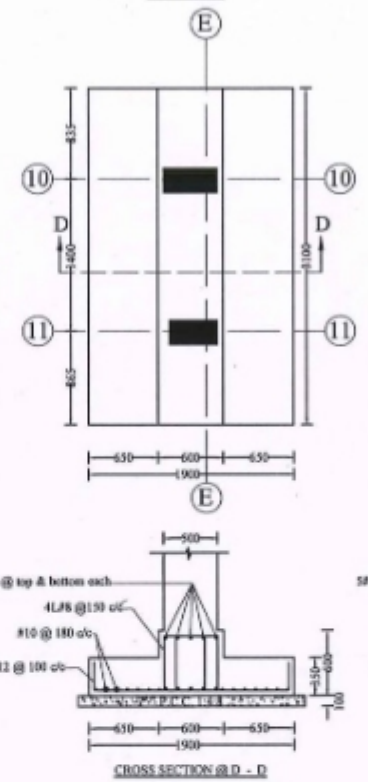
COMBINED FOOTING CF2



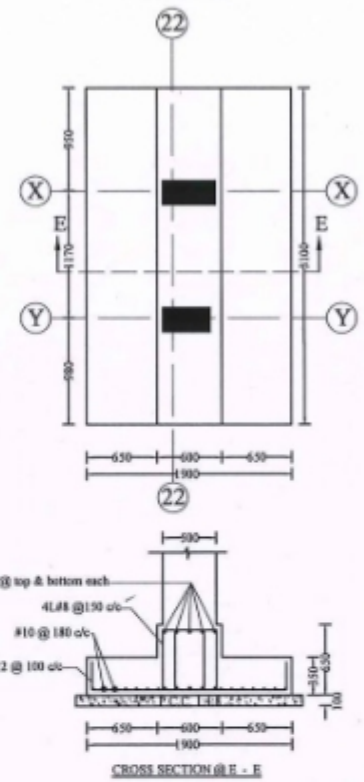
COMBINED FOOTING CF3



COMBINED FOOTING CF3a



COMBINED FOOTING CF3b



NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
DETAILS OF COMBINED CF1, CF2, CF3, CF3a & CF3b.

TYPE DESIGN NO.: 23/2021 [TYPE - B]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/03**

REVISION NO.

TRUE COPY

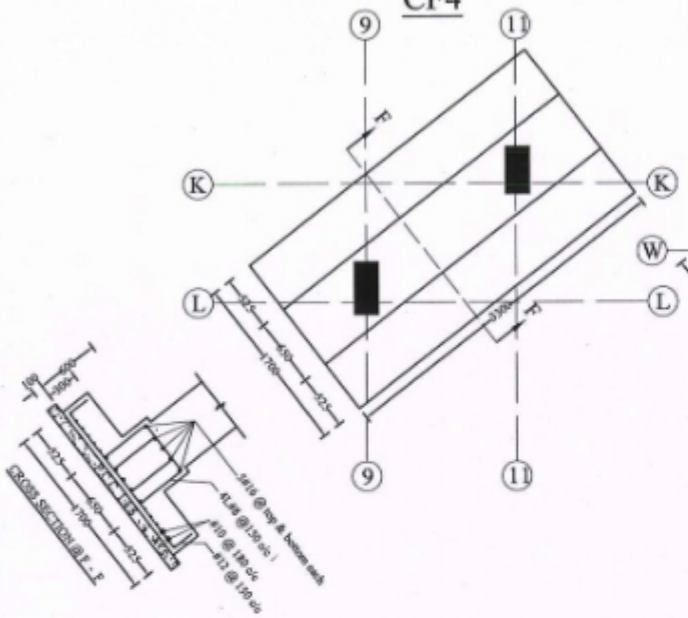
16.8.23

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

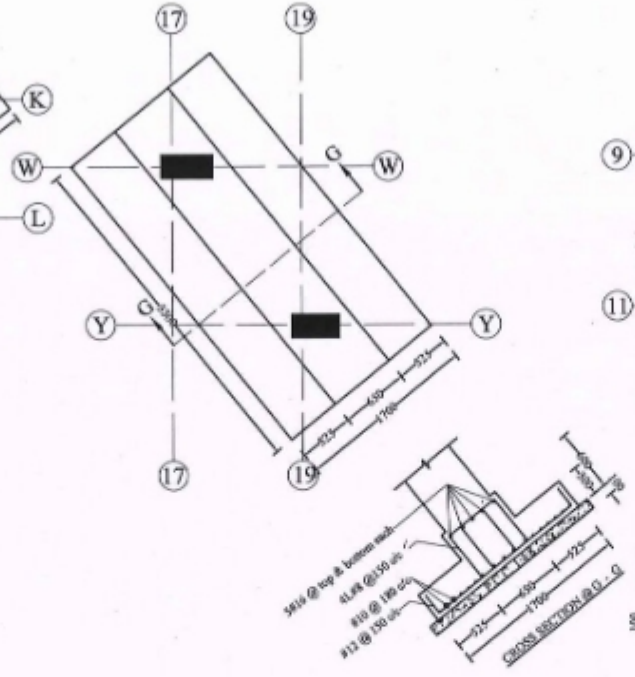
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxxx. SE - PMU
Sd.xxxxx. SE - South	Sd.xxxx 13.08.2023. CE - South

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

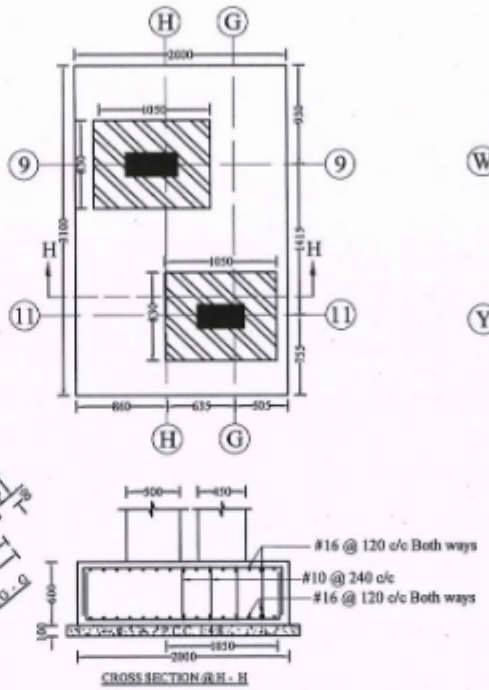
COMBINED FOOTING CF4



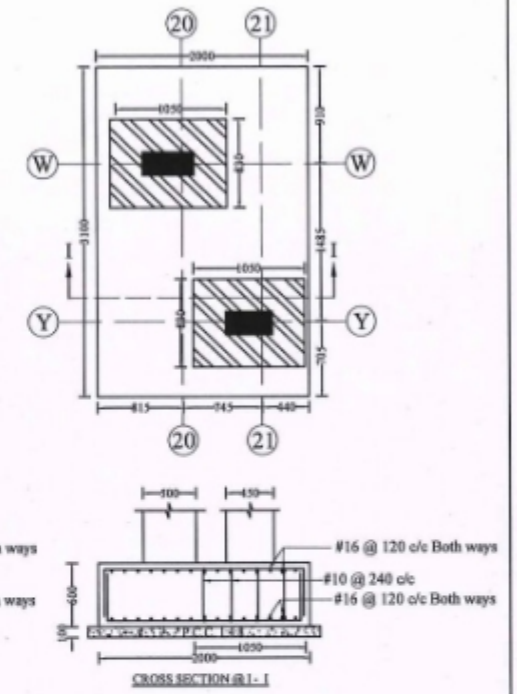
COMBINED FOOTING CF4a



RAFT FOOTING RF1



RAFT FOOTING RF2



NOTE :

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4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
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22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
DETAILS OF COMBINED & RAFT FOOTINGS CF4, CF4a, RF1 & RF2.

TYPE DESIGN NO.: 23/2021 [TYPE - B]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/04**

REVISION NO.:

TRUE COPY

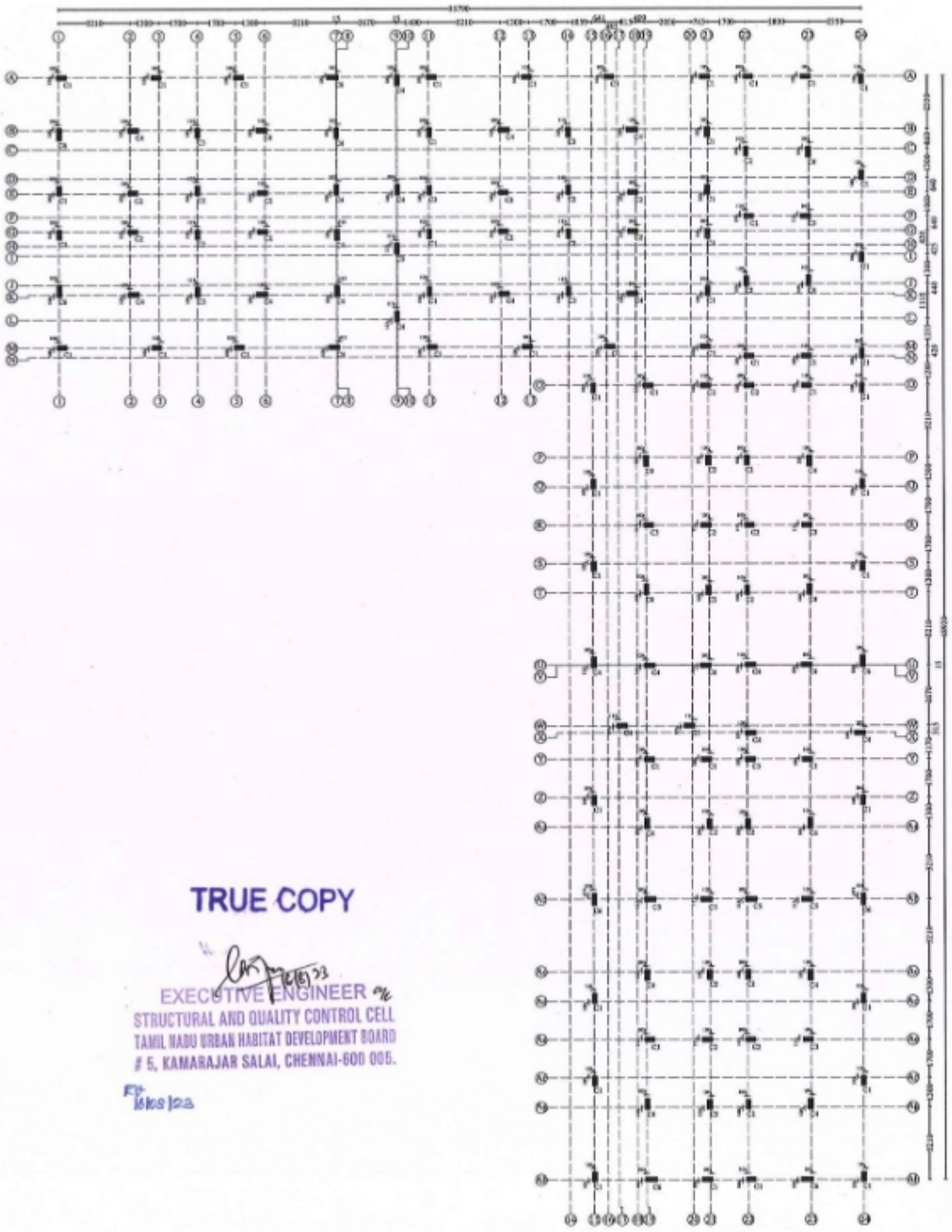
16/8/23

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	Sd.xxxxx. SE - PMU
Sd.xxxxx. SE - South	Sd.xxxx 13.08.2023. CE - South

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

COLUMN LAYOUT



TRUE COPY

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 structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and **AAC** Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure caried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cast lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
COLUMN LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

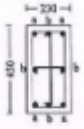
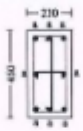
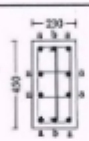
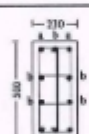
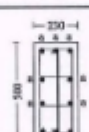
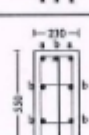
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/05

REVISION NO.:

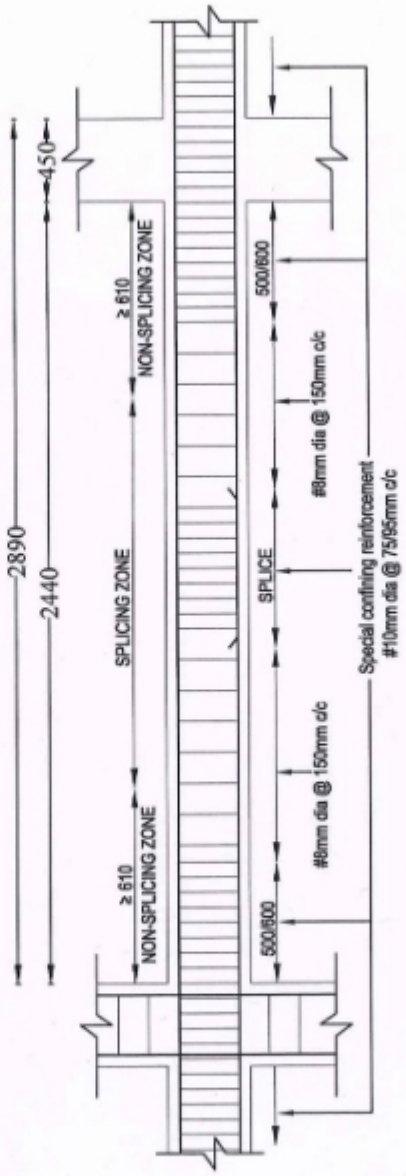
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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	Column Verticals	Lateral Ties	Cross Section	Ties Profile
1.	C1	51	230 x 450	# 16 - 4 Nos + # 12 - 4 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
2.	C2	31	230 x 450	# 16 - 8 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
3.	C3	12	230 x 450	# 16 - 8 Nos + # 12 - 2 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
4.	C4	36	230 x 500	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
5.	C5	06	230 x 500	# 16 - 10 Nos.	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Above Stilt floor slab: #10 @ 95 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		
6.	C6	08	230 x 550	# 16 - 4 Nos + # 12 - 6 Nos.	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Above Stilt floor slab: #10 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		

Notes: In Cross Section a - # 16 mm b - # 12 mm



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS

NOTE :

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4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
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7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
SCHEDULE OF COLUMNS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/06

REVISION NO.:

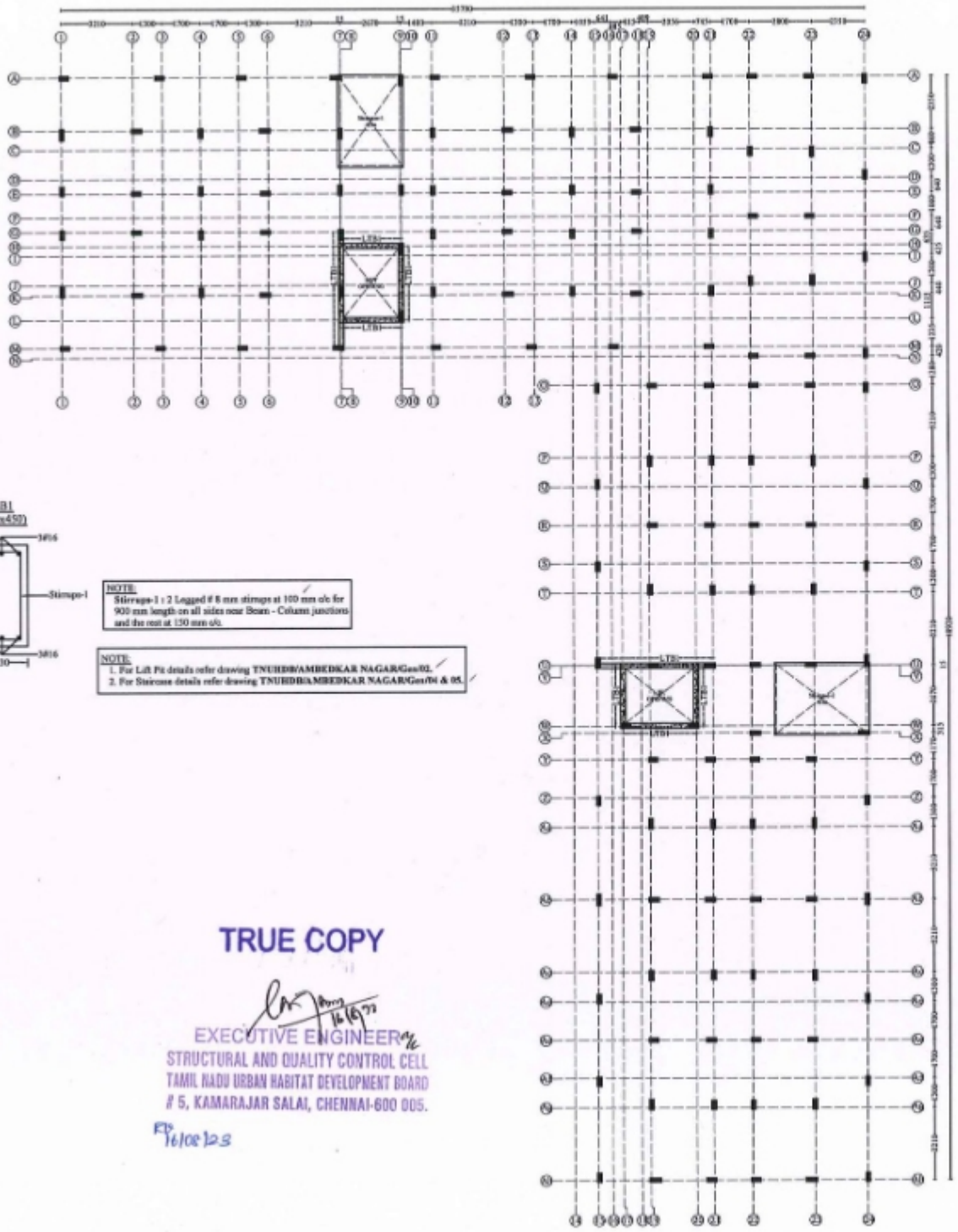
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	Sd.xxxxx. SE - PMU
Sd.xxxxx. SE - South	Sd.xxxx 13.08.2023. CE - South

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

TRUE COPY

16/8/23
EXECUTIVE ENGINEER a/c
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

LIFT PIT & STAIRCASE LOCATION AND DETAILS



NOTE:
Stirrups-1 : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

NOTE:
1. For Lift Pit details refer drawing TNUHDB/AMBEDKAR NAGAR/Geo/02.
2. For Staircase details refer drawing TNUHDB/AMBEDKAR NAGAR/Geo/04 & 05.

TRUE COPY

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

16/08/23

NOTE :

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

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
LIFT PIT & STAIRCASE LOCATION AND DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

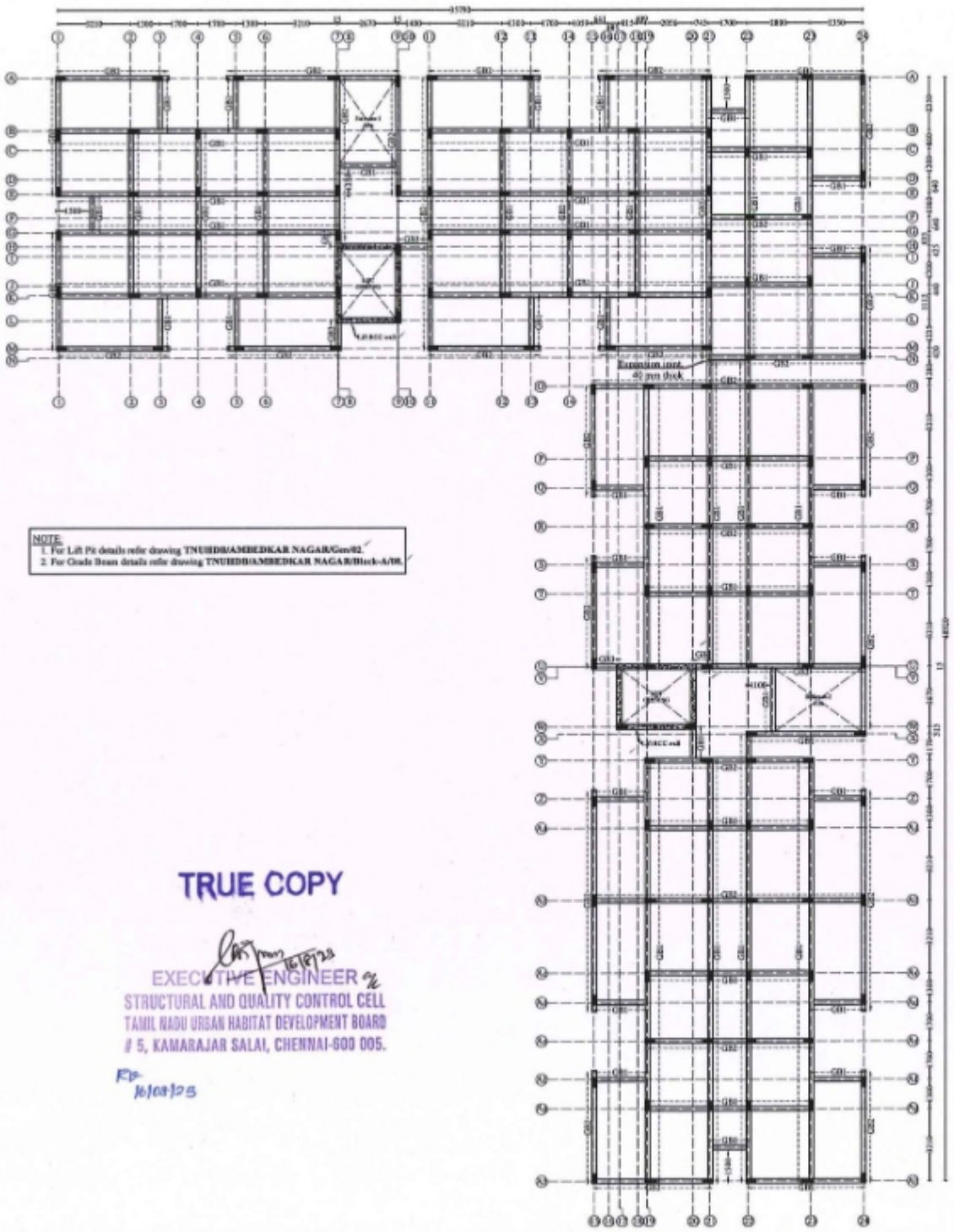
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/07**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

GRADE BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing TNUHDB/AMBEDKAR NAGAR/Gen/02.
2. For Grade Beam details refer drawing TNUHDB/AMBEDKAR NAGAR/Block-A/08.

TRUE COPY

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cul lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc, unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
GRADE BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

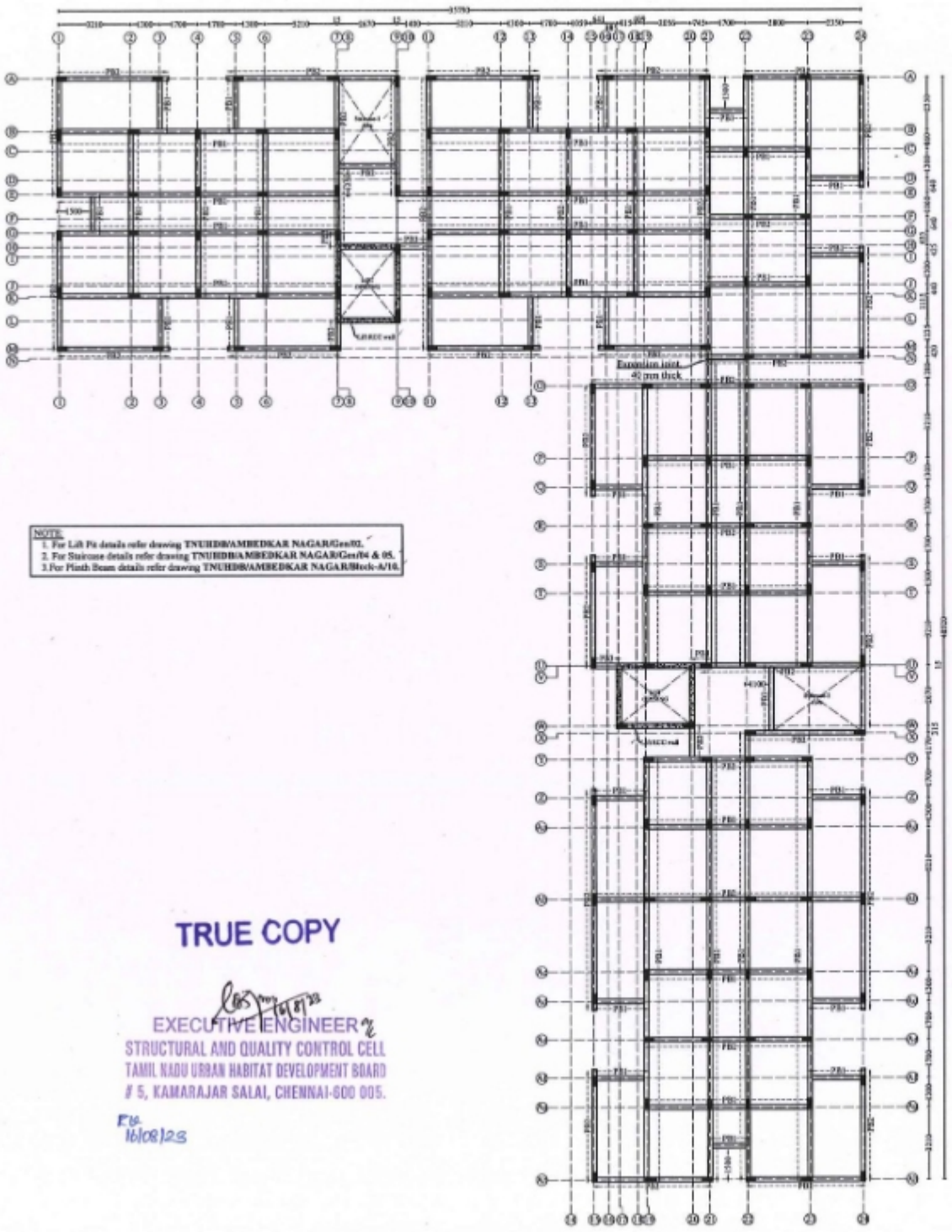
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/08**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

PLINTH BEAM LAYOUT



NOTE:
1. For Lift Pit details refer drawing TNUHDB/AMBEDKAR NAGAR/Gen/01.
2. For Staircase details refer drawing TNUHDB/AMBEDKAR NAGAR/Gen/04 & 05.
3. For Plinth Beam details refer drawing TNUHDB/AMBEDKAR NAGAR/Block-A/10.

TRUE COPY

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone II as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
PLINTH BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

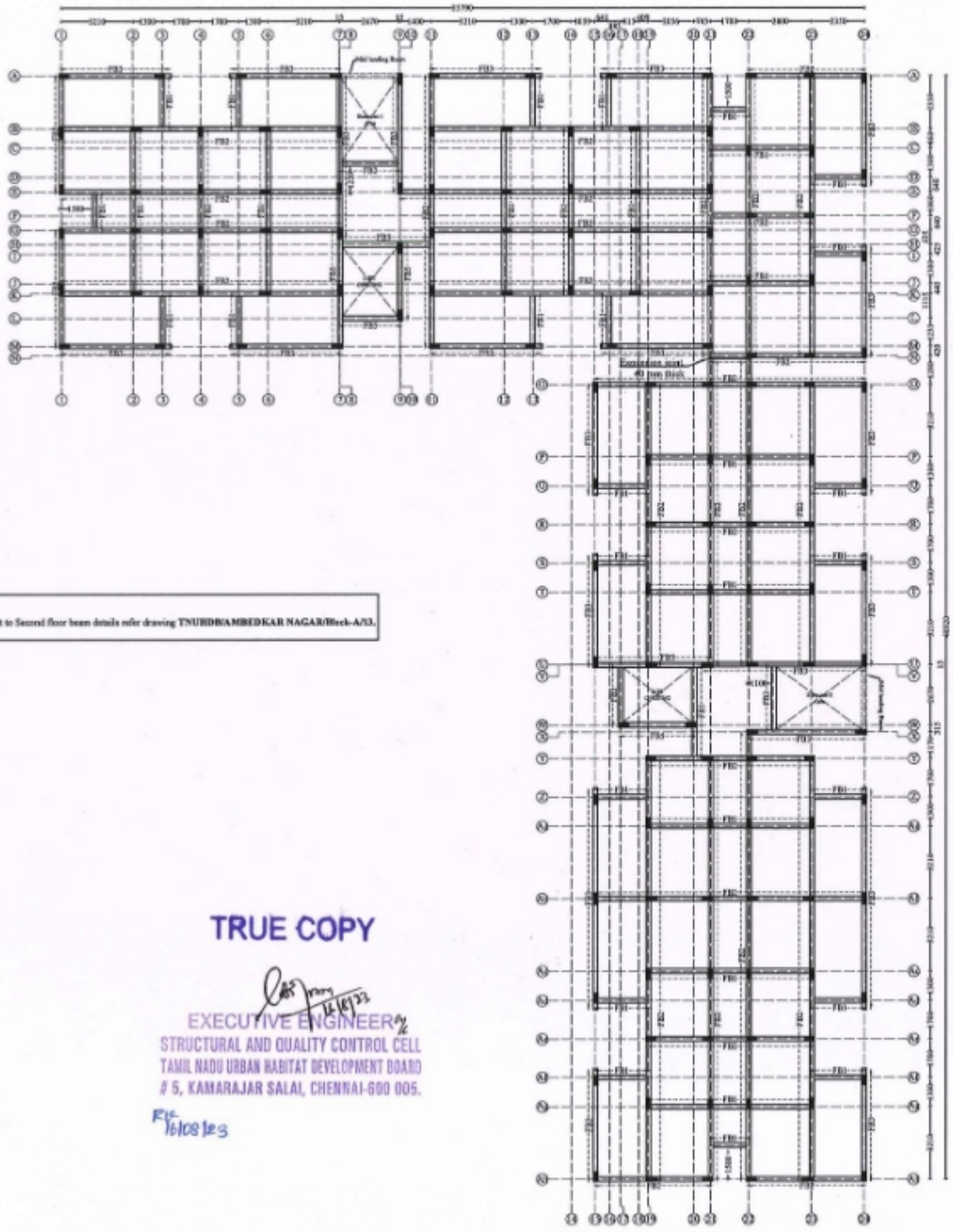
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/09**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

STILT TO SECOND FLOOR BEAM LAYOUT



NOTE:
1. For Stilt to Second floor beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/13.**

TRUE COPY

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 structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    - (a) Foundation - 50 mm
    - (b) Column - 40 mm
    - (c) Floor and roof beam - 30 mm
    - (d) Slab - 25 mm
    - (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOEL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT TO SECOND FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

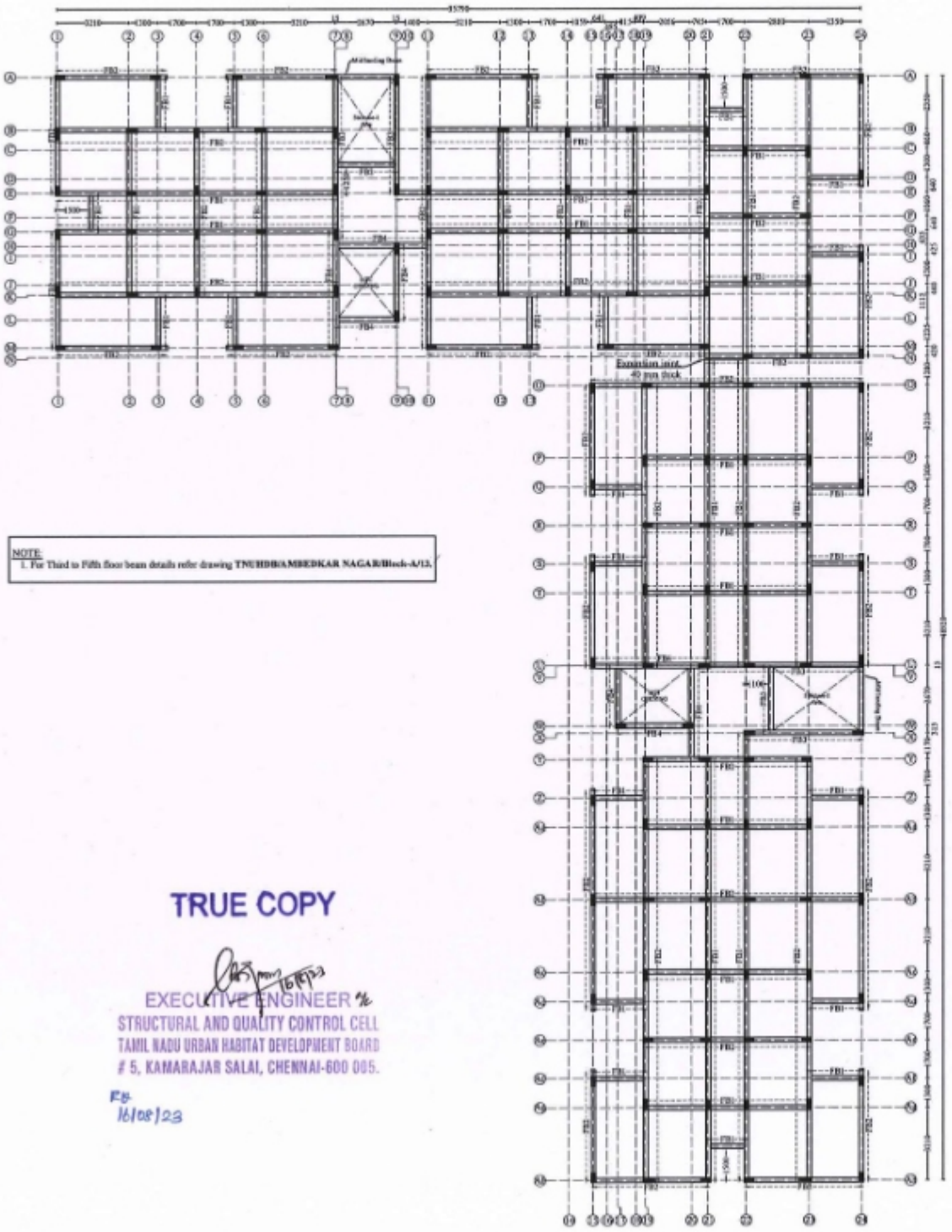
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/**10

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

THIRD TO FIFTH FLOOR BEAM LAYOUT



NOTE:
1. For Third to Fifth floor beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/13.**

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16/08/23

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for **seismic zone II** as per IS 1893:2016 and detailed as per IS13920:2016.
6. Fly ash Bricks has been considered for masonry work in sub structure & Lift area in super structure and AAC Blocks has been considered for masonry work in super structure as recommended by the Executive Engineer.
7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
THIRD TO FIFTH FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

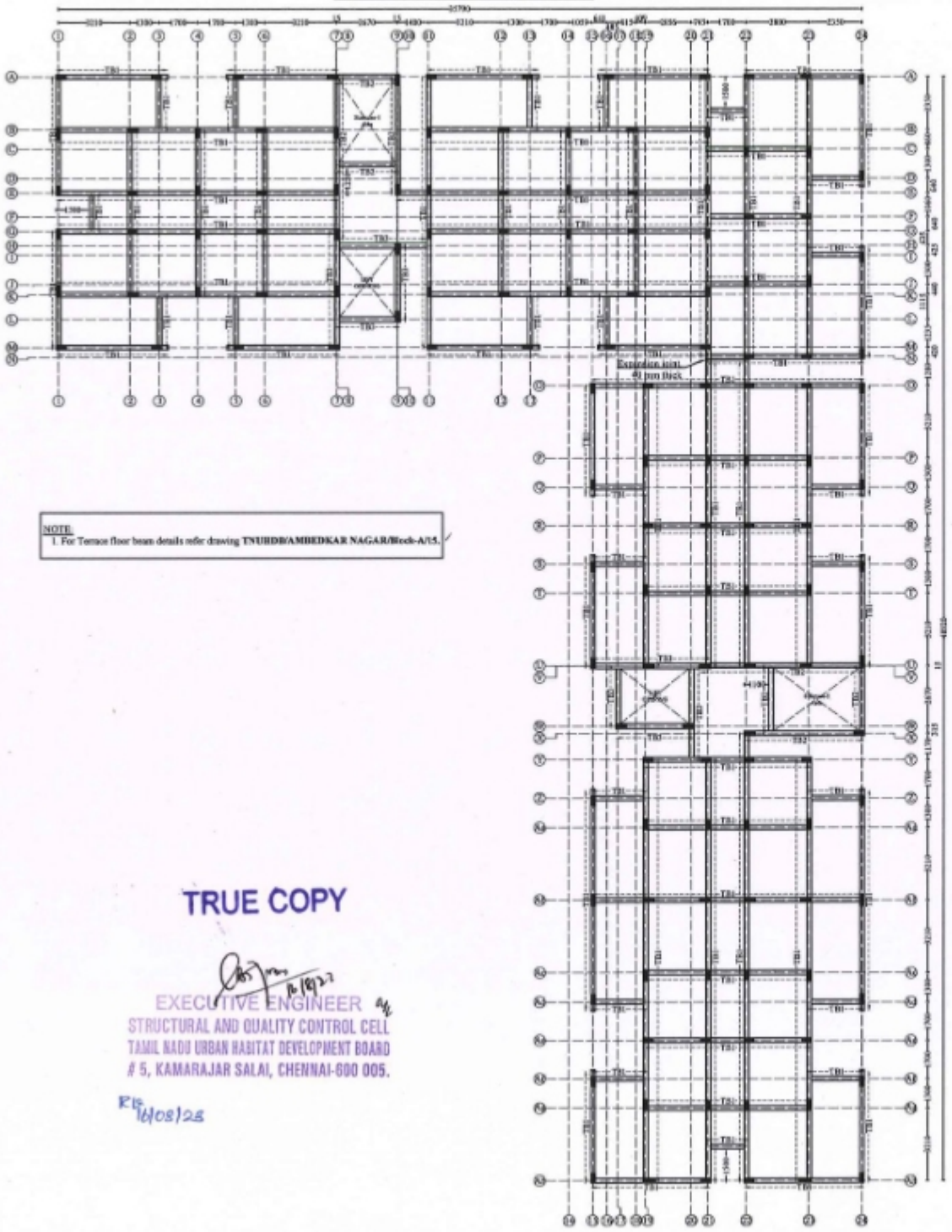
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/**11

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TERRACE FLOOR BEAM LAYOUT



NOTE:
1. For Terrace floor beam details refer drawing **TNUHDB/AMBEDKAR NAGAR/Block-A/15.**

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16/8/23

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

16/08/23

NOTE :

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2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
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7. Structure is designed for (S+6) floors only.
8. Design of the structure carried out with Limit State Method.
9. The depth of foundation(Isolated footing) is **2.6 m** from the existing ground level & bearing capacity at this level is **280 kN/sq.m.** as recommended in Soil Report.
10. Analysis of the structure done with **ETABS.**
11. Clear cover for reinforcement are as follows:
    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut lintels to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
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22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR BEAM LAYOUT

TYPE DESIGN NO.: 23/2021 [TYPE - B]

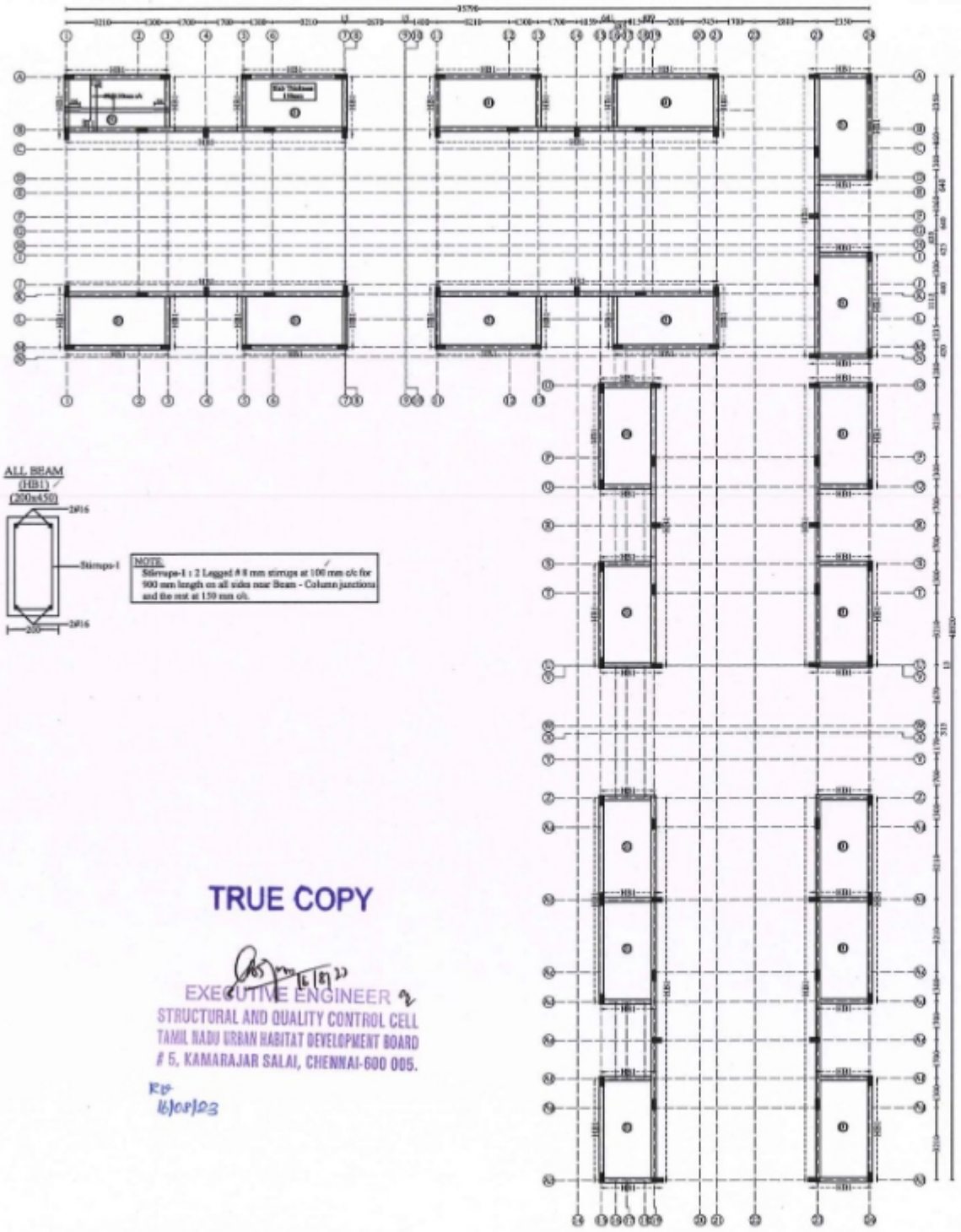
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/12

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

LOCATION OF WATER TANK PLATFORM SLAB BEAM LAYOUT & SLAB DETAILS



NOTE:
Stirrups-I : 2 Legged # 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

TRUE COPY

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

RD
6/09/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
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STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
LOCATION OF WATER TANK PLATFORM SLAB BEAM LAYOUT & SLAB DETAILS.

TYPE DESIGN NO.: 23/2021 [TYPE - B]

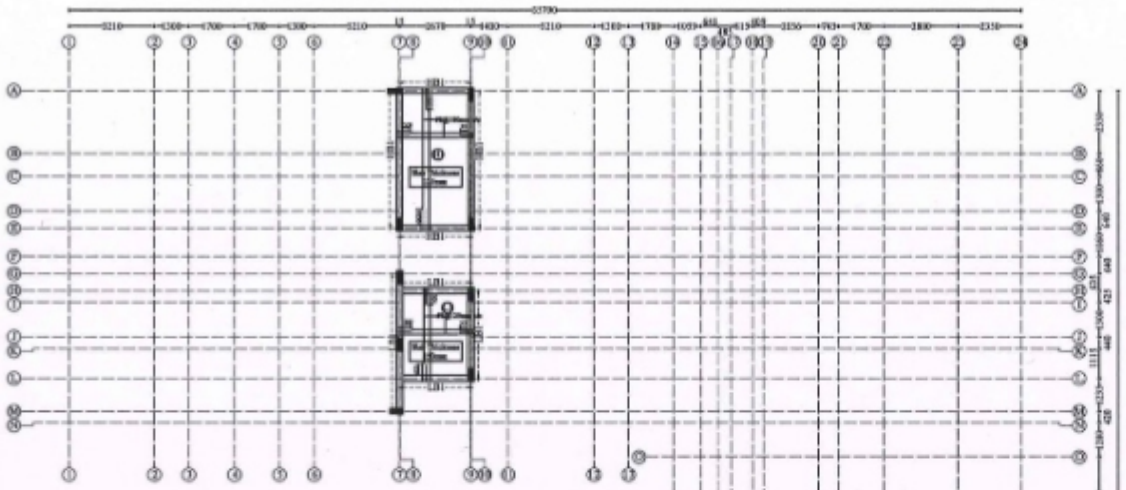
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/13

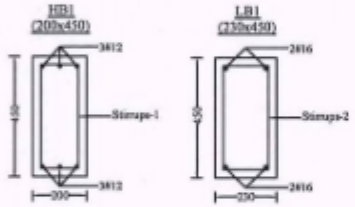
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

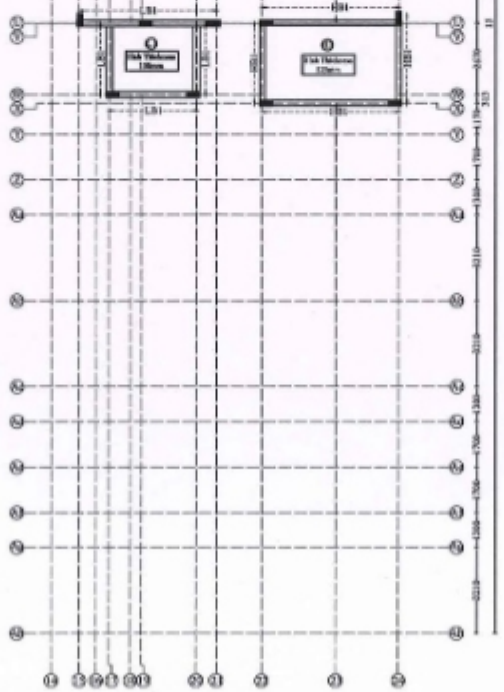
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

HEAD ROOM, LIFT ROOM BEAM LAYOUT & SLAB DETAILS





NOTE:
Stirrups-1 : 2 Legged @ 8 mm stirrups at 75 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.
Stirrups-2 : 2 Legged @ 8 mm stirrups at 100 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.



TRUE COPY

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

16/08/23

NOTE :

1. All the dimensions are in mm unless noted otherwise.
2. All structural drawings shall be read in conjunction with the relevant Architectural drawings.
3. All the RCC works shall be as per design mix of **M25** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe500D** grade conforming to IS 1786 - 2008 unless noted otherwise.
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    (a) Foundation - 50 mm
    (b) Column - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank platform slab - 30 mm
12. Design mix report should be got approved by the Anna University/IIT Madras/PWD.
13. All PCC works should be carried out with PCC 1:4:8 conforming IS: 456 - 2000.
14. Cut limits to be provided in all floors.
15. Lapping of column bars shall be midway between slabs and staggered with lap length not less than 50 Ø.
16. Anchorage of column bars into the footings shall not be less than 50 Ø.
17. Based on the information provided by the EE, the analysis has been done considering the bottom level of footing is same in a block. In case of change in level of the footing during construction, this has to be brought to the knowledge of the undersigned and revision if any needed should be made accordingly.
18. 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.
19. Ground water quality has to be conformed for suitability to construction work.
20. The ground water / soil to be tested for chlorides & sulphates and remedial measures if any should be taken accordingly.
21. Dimensions and levels are to unfinished surface excluding finishes,costing etc,. unless noted otherwise. The dimension should be checked with type design drawing.
22. The Recommendations in the soil report done by Government College of Engineering, Tirunelveli Report No.: 162A/SOIL/21/GCE/Civil/Consultancy/2021 Dt.:02.09.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

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

TYPE DESIGN NO.: 23/2021 [TYPE - B]

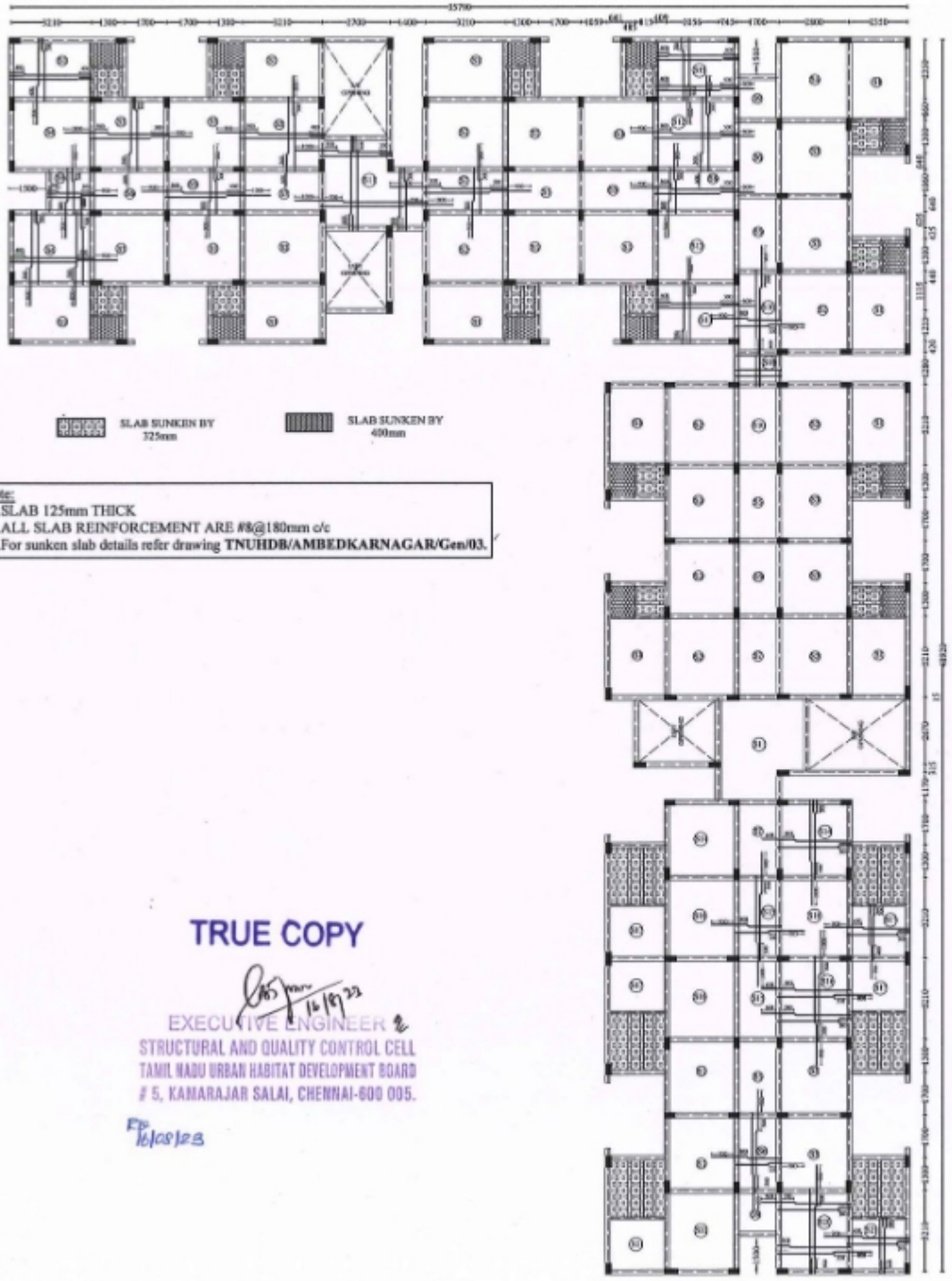
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/14

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

STILT FLOOR SLAB DETAILS



Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3.For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

TRUE COPY

16/08/23

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

16/08/23

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
STILT FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

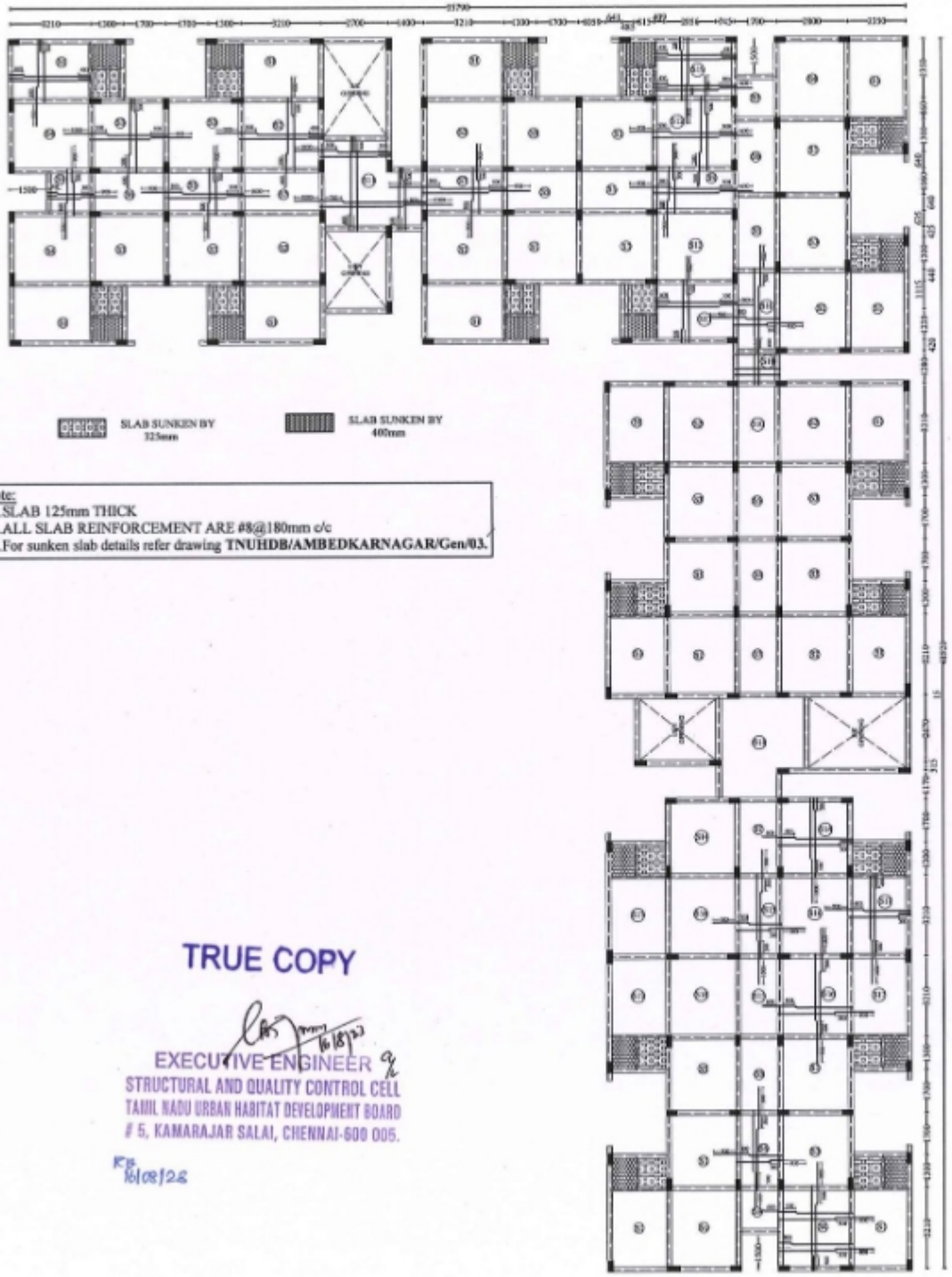
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/**15

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TYPICAL FLOOR SLAB DETAILS



SLAB SUNKEN BY 325mm

SLAB SUNKEN BY 400mm

Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c
3.For sunken slab details refer drawing **TNUHDB/AMBEDKARNAGAR/Gen/03.**

TRUE COPY

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

16/08/23

NOTE:

1. All the Dimensions are in mm.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TYPICAL FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

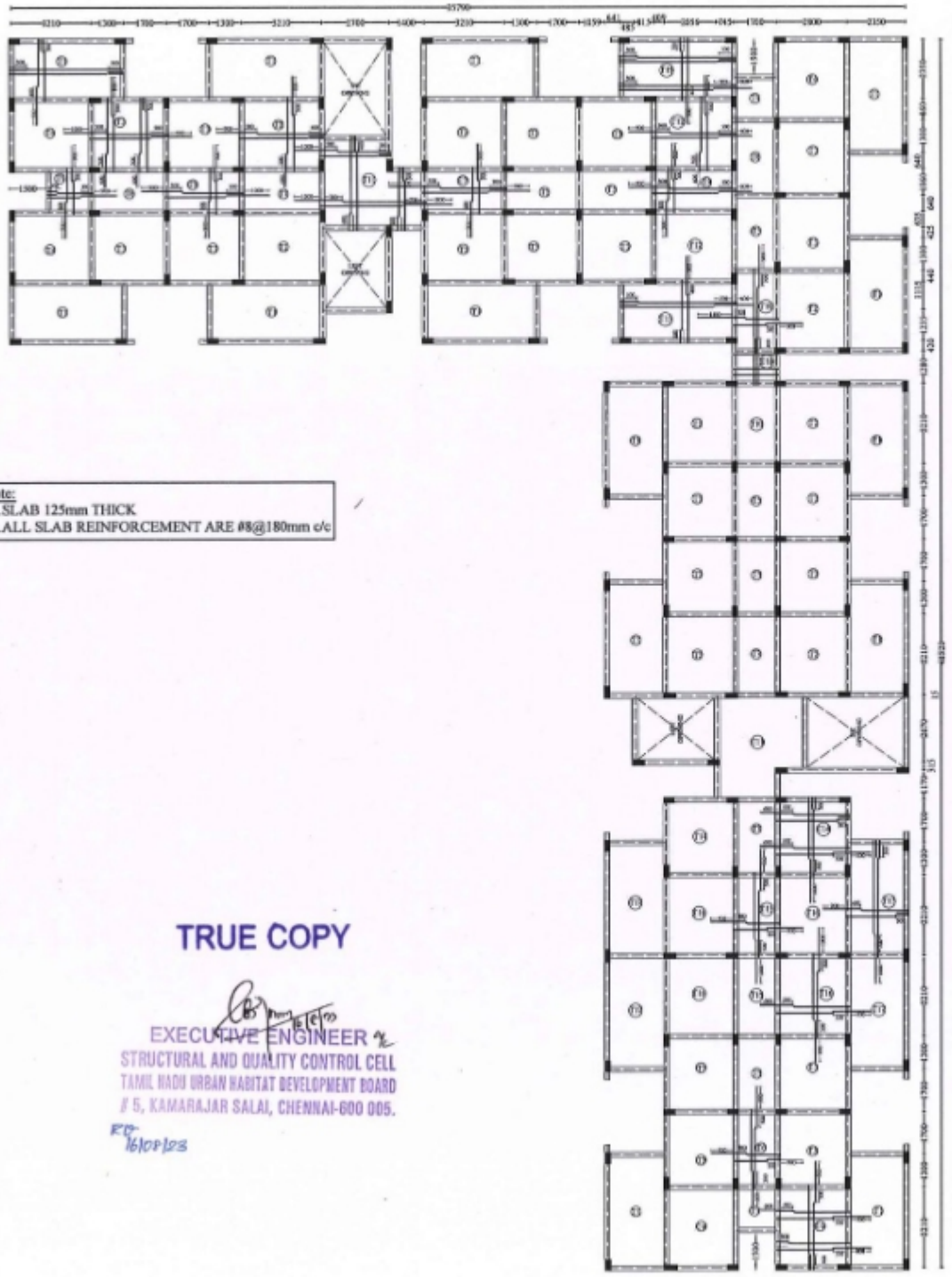
DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B/16**

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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

TERRACE FLOOR SLAB DETAILS



Note:
1.SLAB 125mm THICK
2.ALL SLAB REINFORCEMENT ARE #8@180mm c/c

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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.
2. M25 Concrete and Fe500 grade steel shall be adopted.
3. Slab Thickness is 125mm.
4. Clear cover to slab is 25mm.
5. Crank point distances are as shown.
6. "-------" denotes extra rods to be provided at top.

STRUCTURAL DETAILS

PROJECT:
RECONSTRUCTION OF 408 (S+6) TENEMENTS AT Dr.AMBEDKAR NAGAR IN TIRUNEVELI DISTRICT

TITLE:
TERRACE FLOOR SLAB DETAILS

TYPE DESIGN NO.: 23/2021 [TYPE - B]

DWG.NO.: TNUHDB/**AMBEDKAR NAGAR/Block-B**/17

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	Sd.xxxxx. **SE - PMU**
Sd.xxxxx. **SE - South**	Sd.xxxx 13.08.2023. **CE - South**

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



our services doesn't just end there

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Legal & Documentation Services

Certified EC, Patta, legal opinions, property verification, due diligence, litigation solutions, and legal heir certificates.

Property Development & Approvals

Building plan approvals, construction, layout and sub-division approvals, zone conversion, and occupancy certification.

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Escrow Services, Rentals, Litigation Solutions, Property Valuation and Property Management

Compliance & Special Services

Demolition, Vaasthu checks, regularization of unauthorized buildings, and office space solutions.



empowering your real estate decisions with smart tools

Property Valuation & Cost Estimation

Guideline Value, Apartment Composite Value, Stamp Duty & Registration Fees Calculator, Building Value Calculator, Capital Gains Calculator, Area Unit Converter, Length Unit Converter

Ownership, Compliance & Legal Verification

Encumbrance Certificate (EC) Search, Find Your SRO, Temple Property Check, WAQF Property Check, View Patta/Chitta, View FMB, Patta Analyzer, EC Analyzer

Zoning & Land Use Analysis

Land Use Zone Finder, CRZ Zone Check, Aquifer Zone Check, CBA Check, EWS Check, Road Width Check, Proposed Road Widening Check, FSI Calculator

Property Documentation & Workflow Tools

Forms & Templates, Document Generator, Document Translation, Dictionary

Vastu & Property Management Tools

Home Vastu Shastra, Plot Vastu Shastra, Property Management

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