Verified RealEstate™

Your trusted partner for buying, selling, and managing property, ensuring hassle-free service with 100% transparency.

3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai, India

hello@verified.realestate
+91 9996 12 9996

Official Property Record

Digitally Verified Record - Powered by Verified RealEstate™



OFFICE OF THE
EXECUTIVE ENGINEER,
STRUCTURAL QUALITY
CONTROL WING,
TAMILNADU URBAN HABITAT DEVELOPMENT
BOARD,
KAMARAJRAR SALAI, CHENNAI -05

STABILITY CERTIFICATE

The detailed engineering and structure design of the proposed building comprising of S+9 floors at Harbour area scheme Survey no. 3692, 3700 and 3701 in Block no 33 of V.O.C Nagar village, Purasaiwakkam Taluk, Chennai district has been done by me/us based on the report of geotechnical investigation (Soil Test) done by Anna University Report number SM&FE 214/consultancy/2022 dated 09.02.2022 and considering functional requirement of the building.

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

3.I/We further certify that:

(i) The minimum grade of concrete is M30

(ii)The design and analysis has been done using the code of practice for plain and reinforced concrete as per IS 456, design loads as per IS Codes No IS 875 : 1987 Part II , Design of earthquake resistant structure as per IS code no 1893 : 2016 and the Structure is detailed as per IS 13920 : 2016.

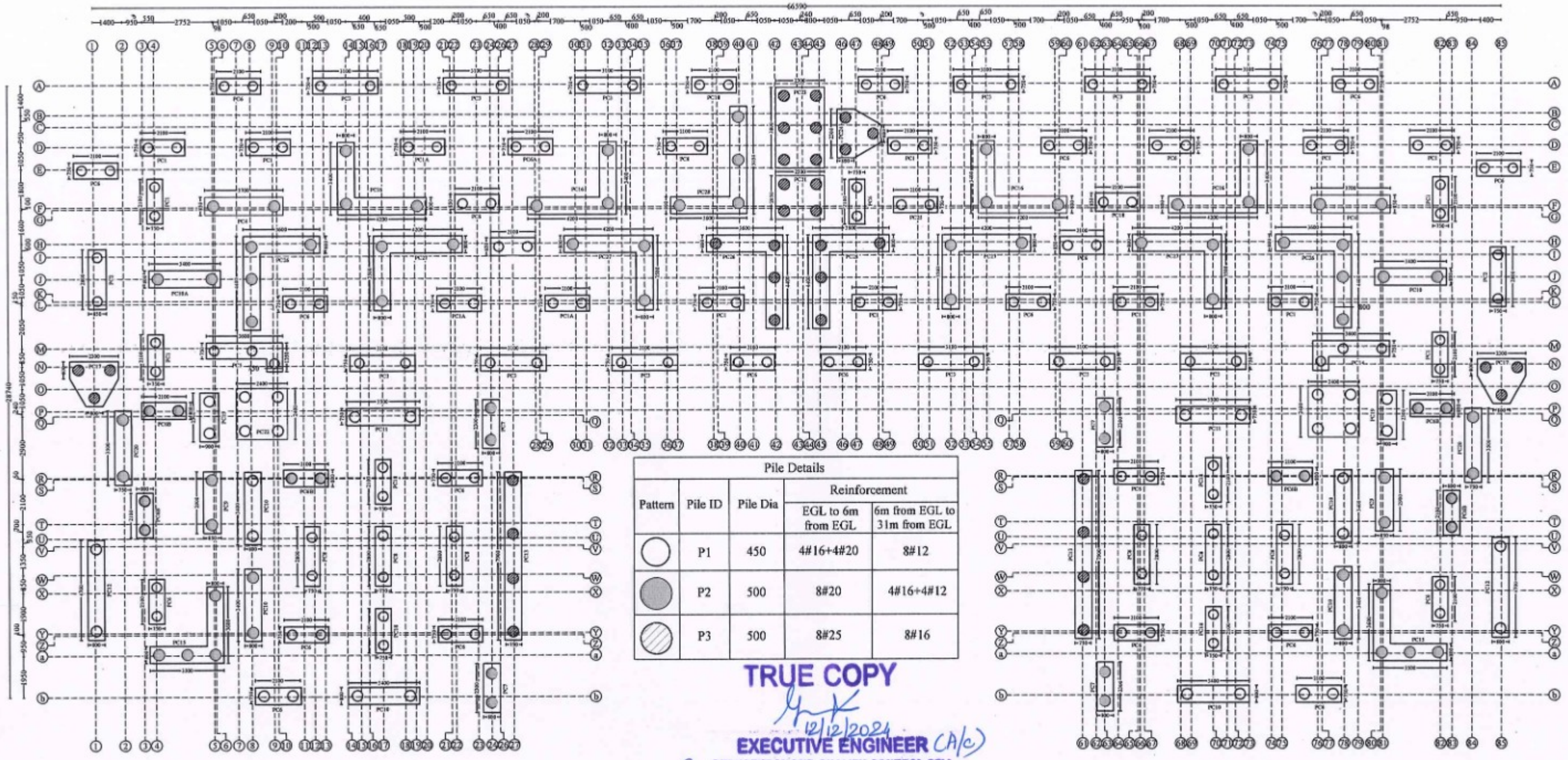
4. The building will be safe and sound when used for the purpose for which it is designed.

10/3/2025
Stamp and Signature

Encl: Structural Design Calculation

G. MAHENDIRAN, M.E.,
ASSISTANT EXECUTIVE ENGINEER
REGISTRATION No: SE/I/2024/4/0071
Registered Structural Engineer Grade-I (SE-I)
Tamil Nadu Urban Habitat Development Board
No. 5, Kamarajar Salai, Chennai-600 005.

PILE & PILE CAP LAYOUT



Pile Details				
Pattern	Pile ID	Pile Dia	Reinforcement	
			EGL to 6m from EGL	6m from EGL to 31m from EGL
○	P1	450	4#16+4#20	8#12
●	P2	500	8#20	4#16+4#12
▨	P3	500	8#25	8#16

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,costing etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PILE & PILE CAP LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 01.

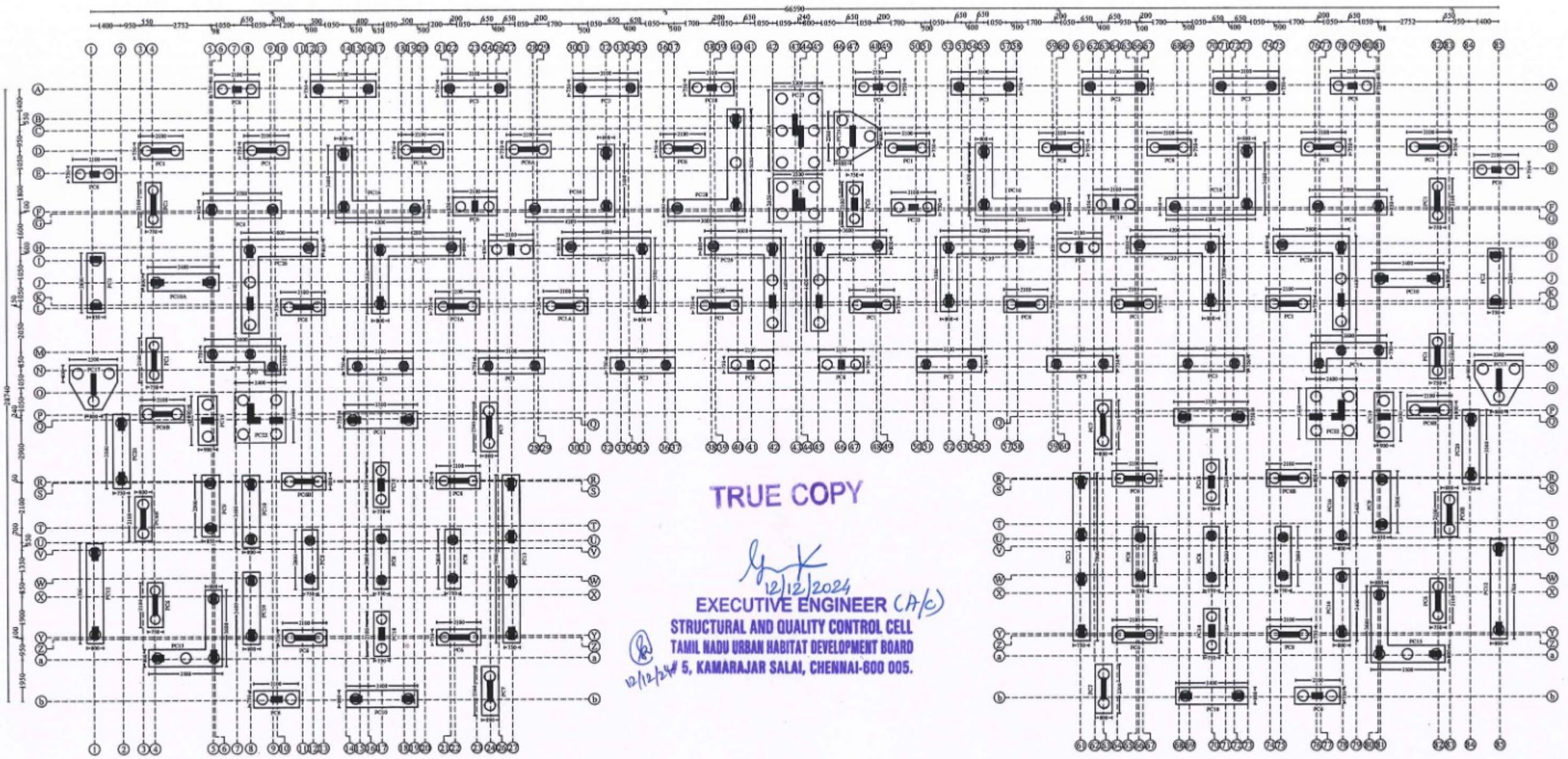
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

PILECAP LAYOUT



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
12/12/24 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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PILECAP LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 02.

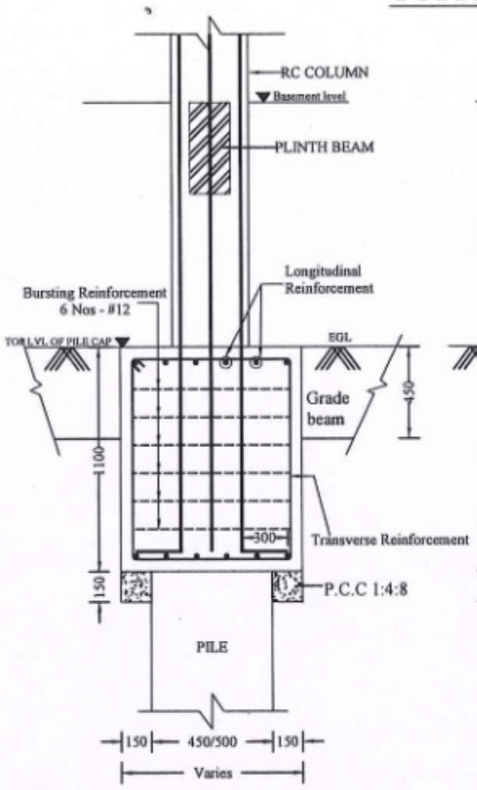
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

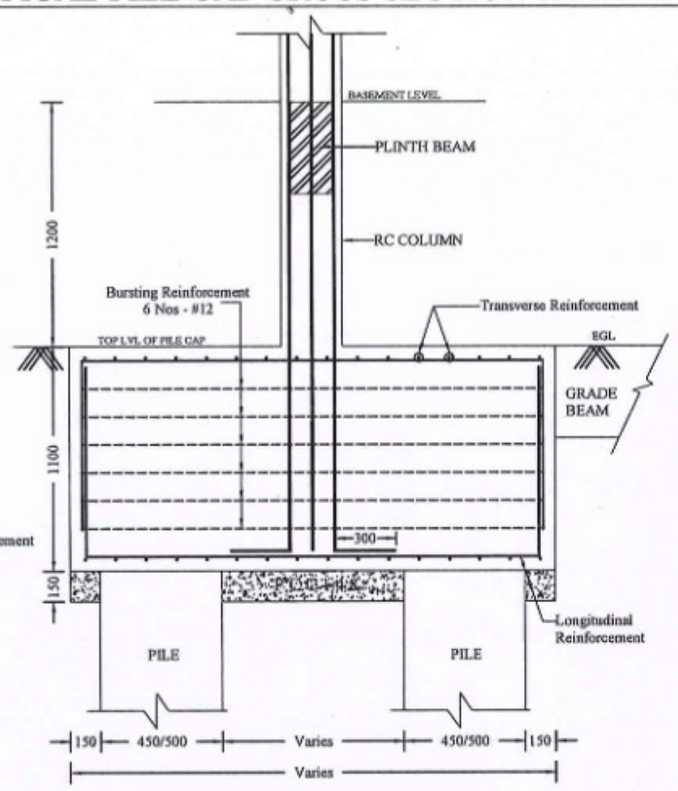
sdxxxx 06/12/24
Chief Engineer-I

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

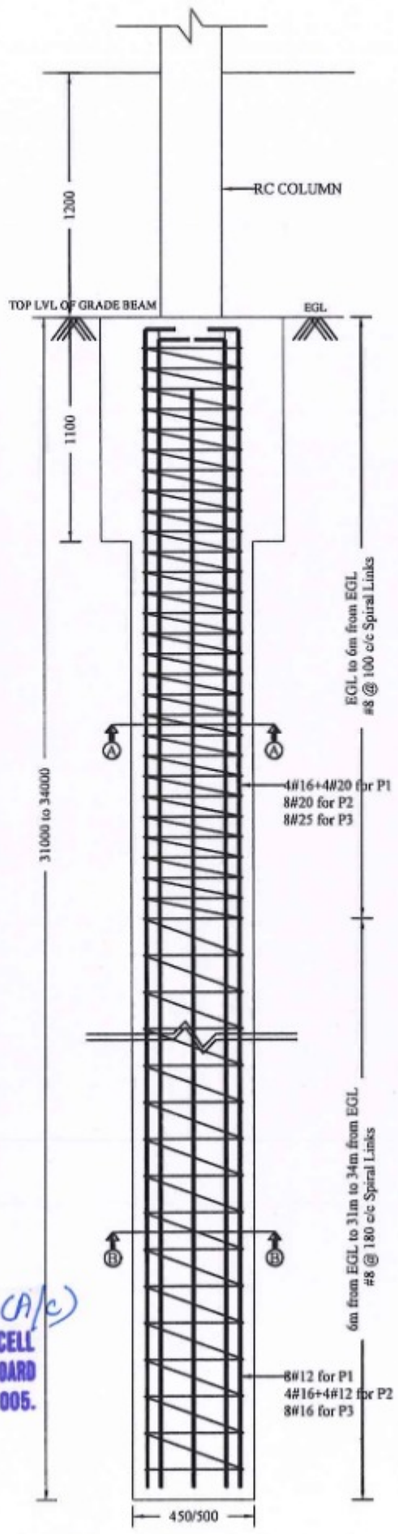
TYPICAL PILE CAP CROSS SECTION & PILE DETAILS.



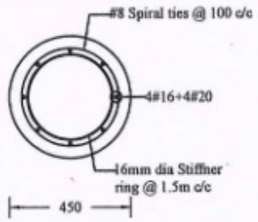
TYPICAL CROSS SECTION



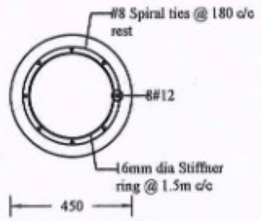
TYPICAL LONGITUDINAL SECTION



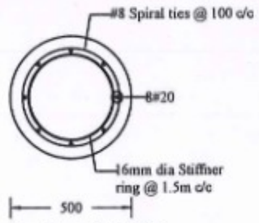
TYPICAL DETAILS OF PILE



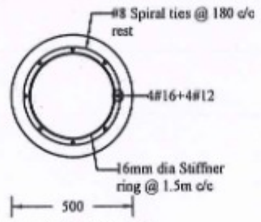
Section @ A-A for P1



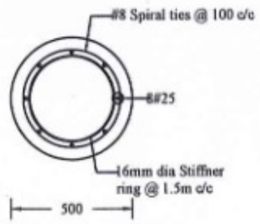
Section @ B-B for P1



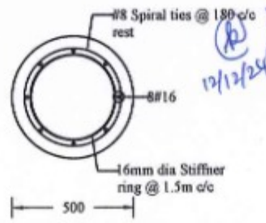
Section @ A-A for P2



Section @ B-B for P2



Section @ A-A for P3



Section @ B-B for P3

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TYPICAL PILE CAP CROSS SECTION & PILE DETAILS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/03

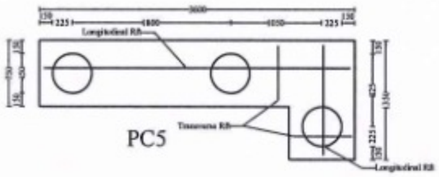
REVISION NO.:

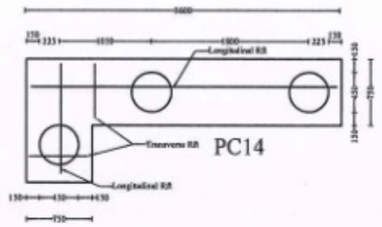
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

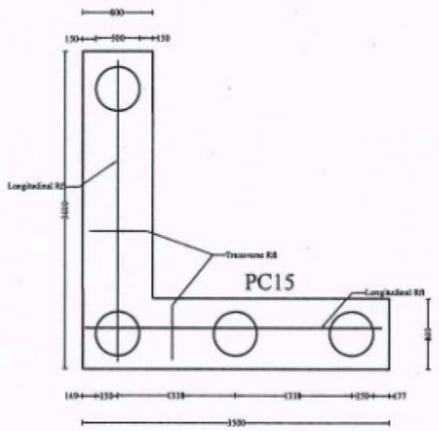
sdxxxx 06/12/2024
Chief Engineer - I

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

PILE CAP DETAILS

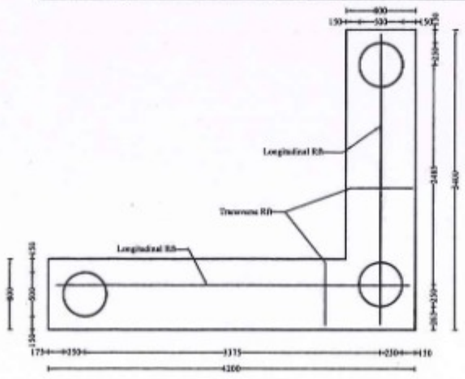


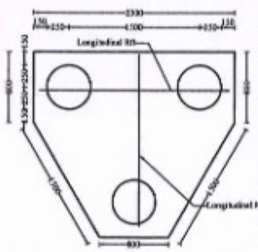


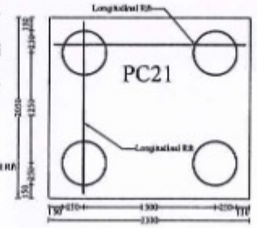


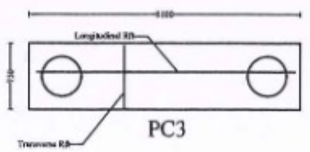


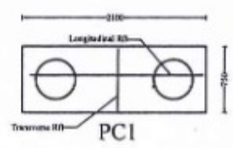
PILE CAP SCHEDULE						
PILE CAP ID	SIZE (mm)	DEPTH (mm)	REINFORCEMENT DETAILS @ TOP LONGITUDINAL	REINFORCEMENT DETAILS @ BOTTOM LONGITUDINAL	REINFORCEMENT DETAILS @ TRANSVERSE	BURSTING REINFORCEMENT
PC1	2100x750	1100	6#16+2#12	6#16+2#12	#12 @150c/c	6 Nos. 12mmØ
PC1A	2100x750	1100	6#16+2#12	6#16+2#12	4L#12 @150c/c	6 Nos. 12mmØ
PC2	2800x750	1100	6#16+2#12	6#16+2#12	#12 @150c/c	6 Nos. 12mmØ
PC3	3100x750	1100	6#16+2#12	6#16+2#12	#12 @150c/c	6 Nos. 12mmØ
PC4	3700x850	1100	6#16+2#12	6#16+2#12	#12 @150c/c	6 Nos. 12mmØ
PC5	Refer Dwg	1100	6#16+2#12	6#16+2#12	#12 @150c/c	6 Nos. 12mmØ
PC6	2100x750	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC6A	2100x750	1100	4#20+4#16	4#20+4#16	4L#12 @150c/c	6 Nos. 12mmØ
PC6B	2100x800	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC7	2300x800	1100	4#20+4#16	4#20+4#16	4L#12 @150c/c	6 Nos. 12mmØ
PC8	2800x750	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC9	2900x850	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC10	3400x800	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC10A	3400x800	1100	4#20+4#16	4#20+4#16	4L#12 @150c/c	6 Nos. 12mmØ
PC11	3500x750	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC12	4700x800	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC13	7900x750	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC14	Refer Dwg	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC15	Refer Dwg	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC16	Refer Dwg	1100	4#20+4#16	4#20+4#16	#12 @150c/c	6 Nos. 12mmØ
PC17	Refer Dwg	1100	16Ø @150 mm c/c bothways	16Ø @150 mm c/c bothways	#12 @150c/c	6 Nos. 12mmØ
PC18	2100x750	1100	4#20+4#16	8#20	#12 @150c/c	6 Nos. 12mmØ
PC19	2300x900	1100	4#20+4#16	8#20	#12 @150c/c	6 Nos. 12mmØ
PC20	3500x750	1100	4#20+4#16	8#20	#12 @150c/c	6 Nos. 12mmØ
PC21	Refer Dwg	1100	16Ø @150 mm c/c bothways	16Ø @150 mm c/c bothways	#12 @150c/c	6 Nos. 12mmØ
PC22	Refer Dwg	1100	16Ø @150 mm c/c bothways	16Ø @150 mm c/c bothways	#12 @150c/c	6 Nos. 12mmØ
PC23	Refer Dwg	1100	4#20+4#16	8#20	4L#12 @150c/c	6 Nos. 12mmØ
PC24	Refer Dwg	1100	16Ø @150 mm c/c bothways	16Ø @150 mm c/c bothways	#12 @150c/c	6 Nos. 12mmØ
PC25	2100x750	1100	4#20+4#16	8#25	4L#12 @150c/c	6 Nos. 12mmØ
PC26	Refer Dwg	1100	16Ø @150 mm c/c bothways	16Ø @150 mm c/c bothways	4L#12 @150c/c	6 Nos. 12mmØ
PC27	Refer Dwg	1100	4#20+4#16	8#25	4L#12 @150c/c	6 Nos. 12mmØ
PC28	Refer Dwg	1100	8#25	2#25+6#20	#12 @150c/c	6 Nos. 12mmØ











TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

NO.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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PILE CAP DETAILS & SCHEDULE.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/04

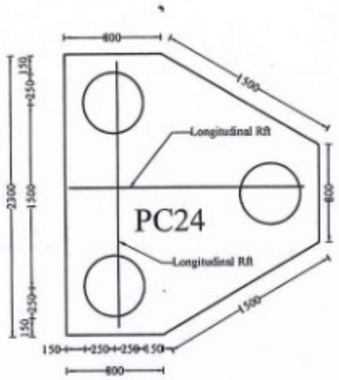
REVISION NO.:

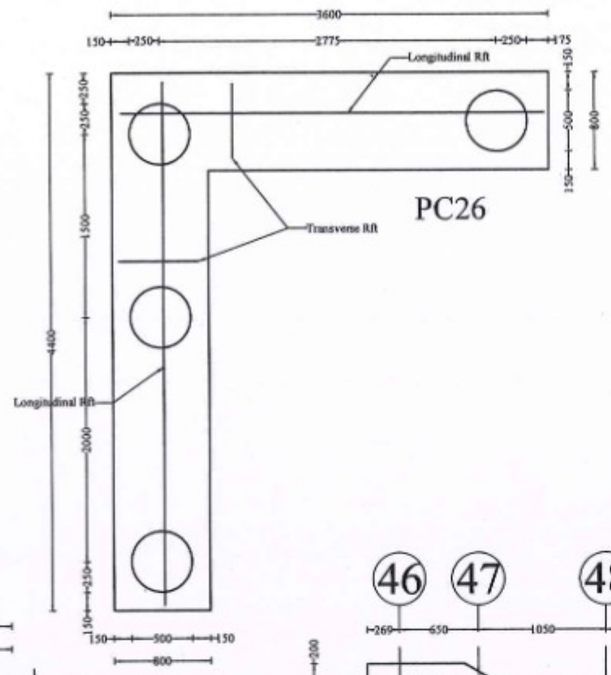
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

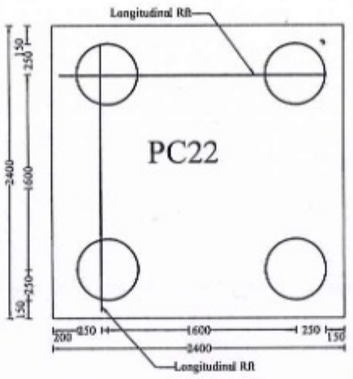
sdxxxx 06/12/2024
Chief Engineer - I

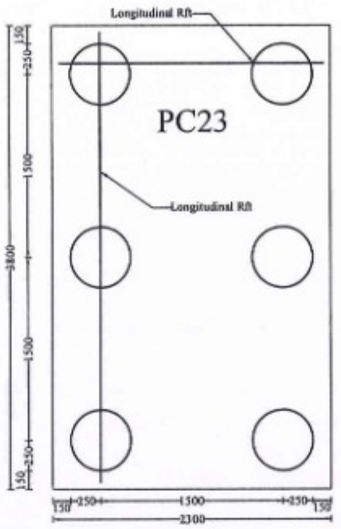
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

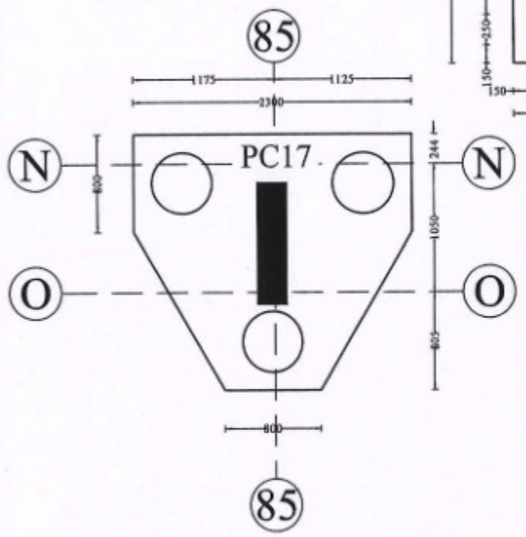
PILE CAP DETAILS

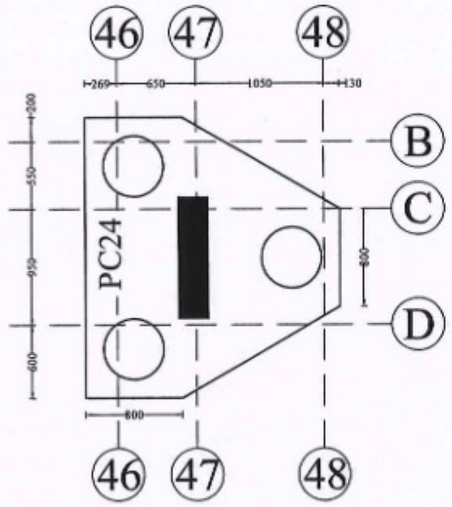


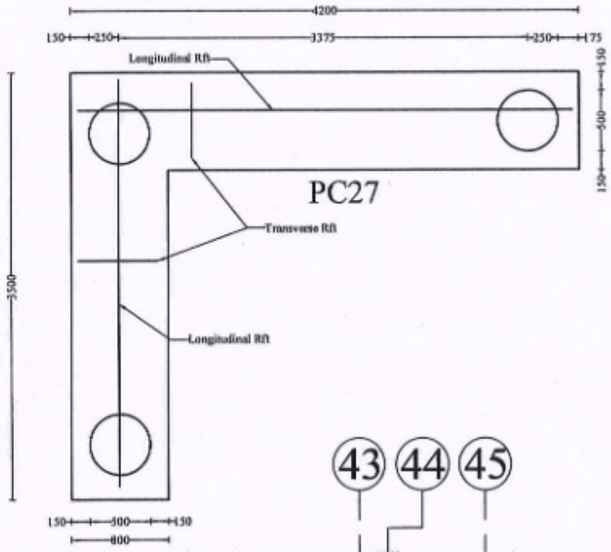


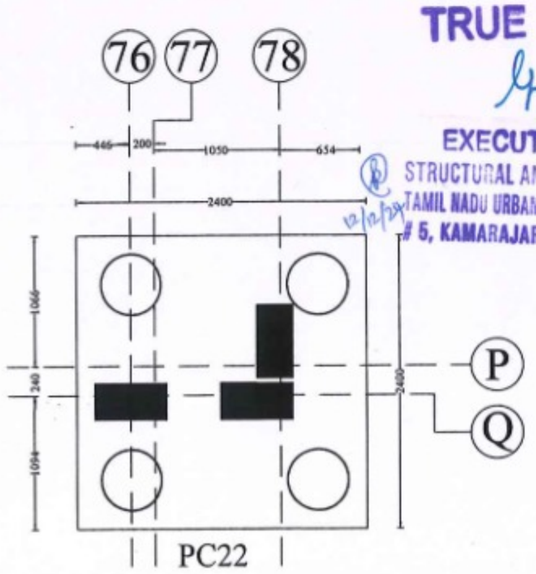


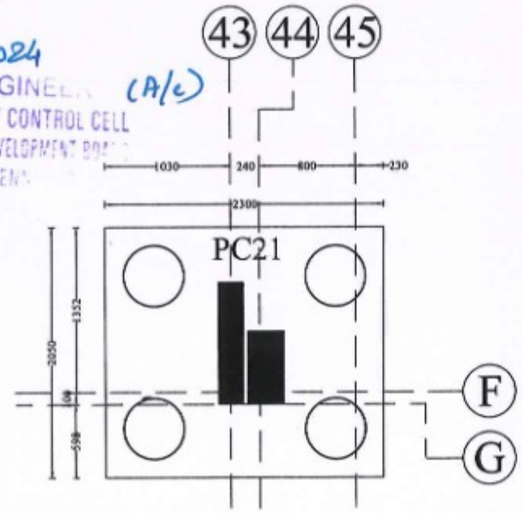


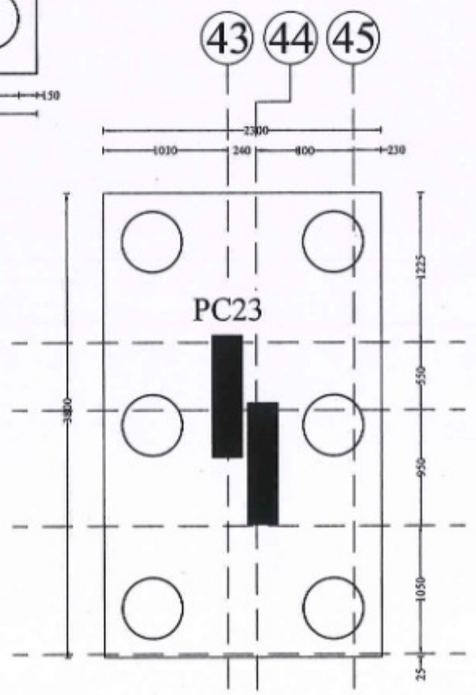












TRUE COPY
12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PILE CAP DETAILS..

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/05

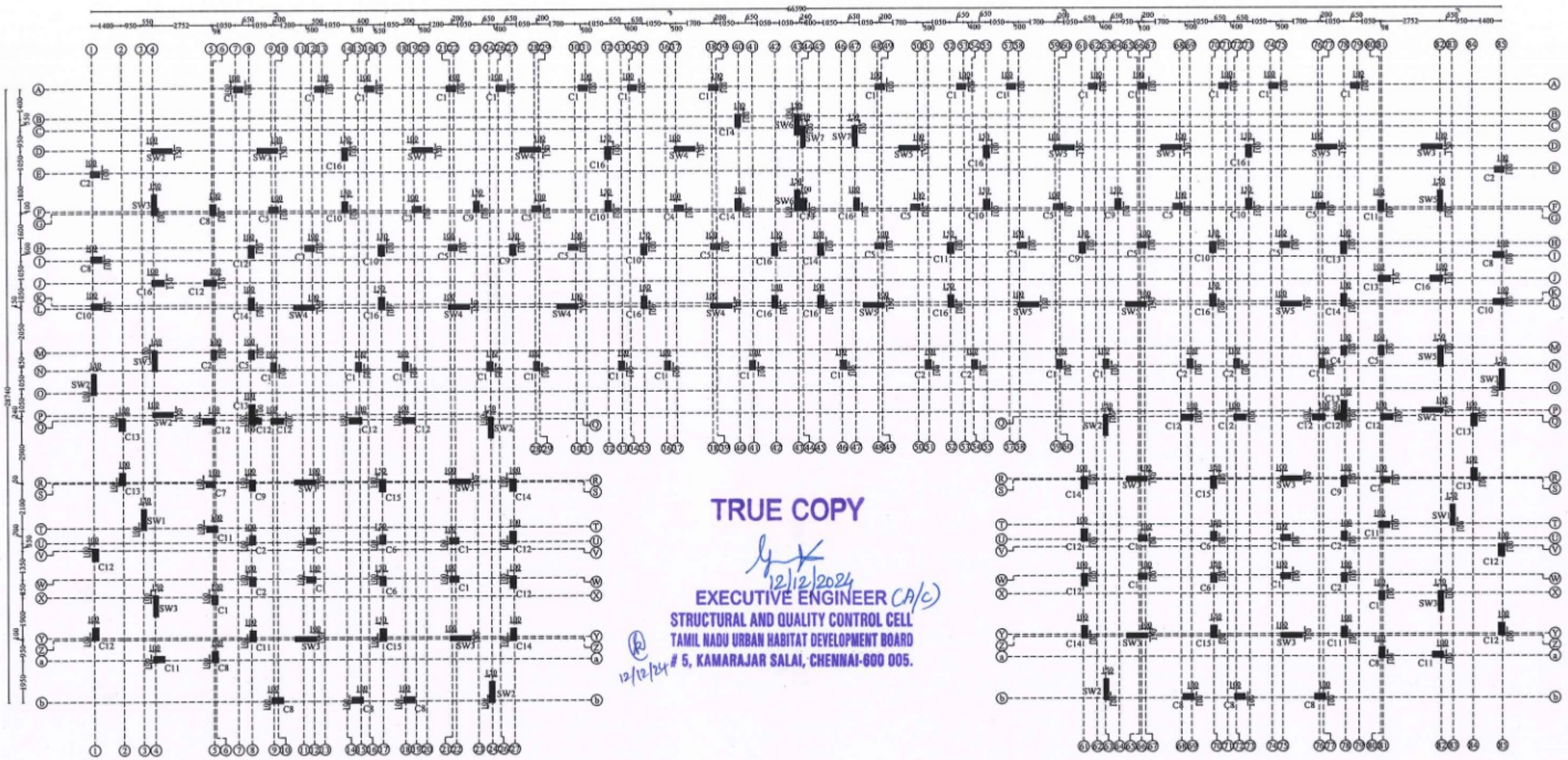
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

COLUMN LAYOUT



TRUE COPY

12/12/2024

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

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with ETABS.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
COLUMN LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 06.

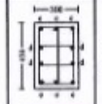
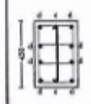
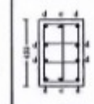
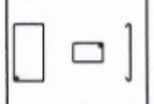
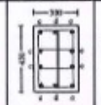
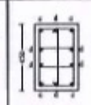
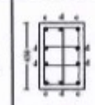
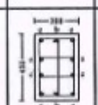
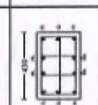
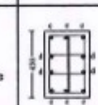
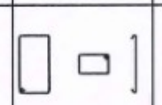
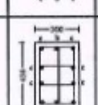
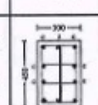
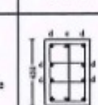
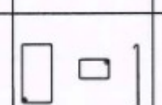
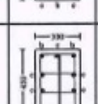
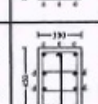
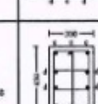
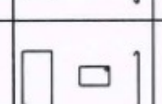
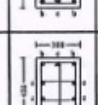
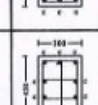
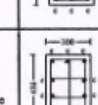
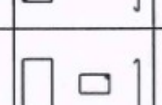
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

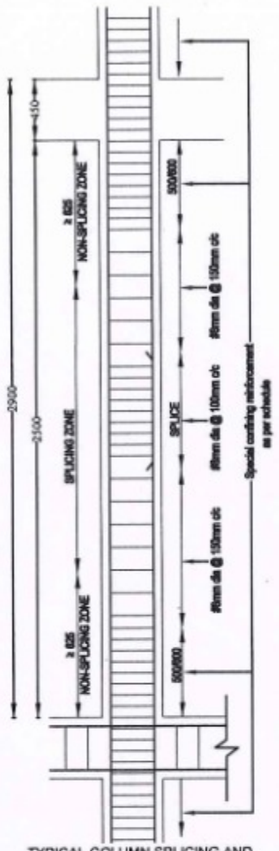
sdxxxx 06/12/24
Chief Engineer-I

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

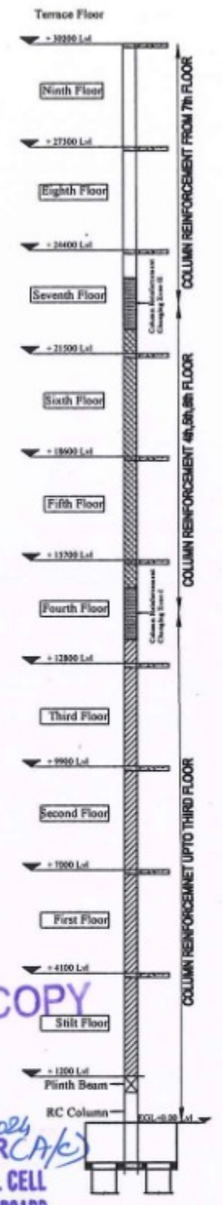
SCHEDULE OF COLUMNS

Sl.No.	Column Marking	No of Columns	Size	E.G.L to 3rd Floor Column Reinforcement Details			4th,5th & 6th Floor Column Reinforcement Details			From 7th Floor Column Reinforcement Details			Ties Profile	Remarks
				Column Verticals	Lateral Ties	Cross Section	Column Verticals	Lateral Ties	Cross Section	Column Verticals	Lateral Ties	Cross Section		
1.	C1	38	300 x 450	# 16 - 6 Nos + #12 - 4 Nos	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Stilt to Third 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		# 16 - 2 Nos + # 12 - 8 Nos	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 2 Nos + # 12 - 8 Nos	Above Seventh floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
2.	C2	11	300 x 450	# 16 - 8 Nos + #12 - 2 Nos	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Stilt to Third 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		# 16 - 4 Nos + #12 - 6 Nos.	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 4 Nos + #12 - 6 Nos.	Above Seventh floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
3.	C3	02	300 x 450	# 20 - 2 Nos + #16 - 8 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third 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		#16 - 6Nos + #12 - 4Nos.	Fourth, Fifth & Sixth floor slab: #8@ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 6Nos + #12 - 4Nos.	Above Seventh floor slab: #8@ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
4.	C4	02	300 x 450	# 20 - 2 Nos + #16 - 8 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third 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		#16 - 10Nos.	Fourth, Fifth & Sixth 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		#16 - 2Nos + #12 - 8Nos.	Above Seventh floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
5.	C5	15	300 x 450	# 20 - 4 Nos + #16 - 6 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third 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		# 16 - 6 Nos + # 12 - 4 Nos	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 6 Nos + # 12 - 4 Nos	Above Seventh floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
6.	C6	04	300 x 450	# 20 - 4 Nos + #16 - 6 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third 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		#16 - 10Nos	Fourth, Fifth & Sixth 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		#16 - 10Nos	Above Seventh 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			Curtailment at 4th & 7th floor
7.	C7	02	300 x 450	# 20 - 10 Nos	1) Upto Stilt floor slab: #10 @ 100 mm c/c 2) Stilt to Third floor slab: #10 @ 100 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 10Nos	Fourth, Fifth & Sixth 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		# 16 - 4 Nos + # 12 - 6 Nos	Above Seventh floor slab: #8 @ 75 mm c/c for 500 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
8.	C8	11	300 x 530	# 16 - 8 Nos + #12 - 2 Nos	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Stilt to Third 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		# 16 - 8 Nos + # 12 - 2 Nos	Fourth, Fifth & Sixth 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		# 16 - 8 Nos + # 12 - 2 Nos	Above Fifth 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			Curtailment at 4th & 7th floor

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



TYPICAL COLUMN SPLICING AND CONFINING REINFORCEMENT DETAILS



TRUE COPY

12/12/2024

EXECUTIVE ENGINEER(A/c)
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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SCHEDULE OF COLUMNS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 07.

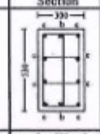
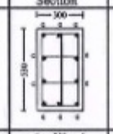
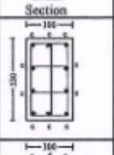
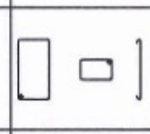
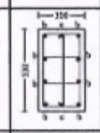
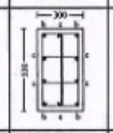
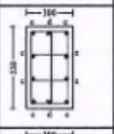
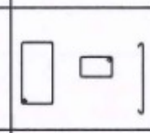
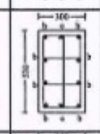
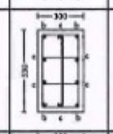
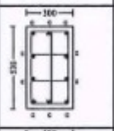
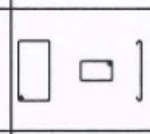
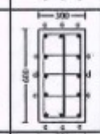
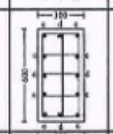
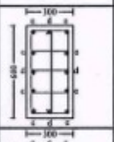
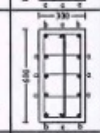
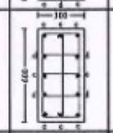
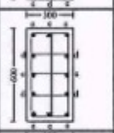
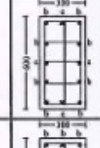
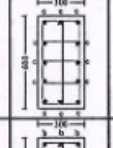
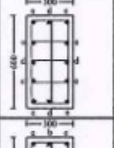
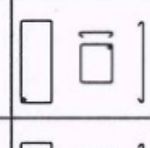
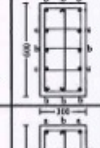
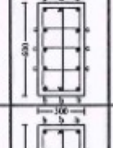
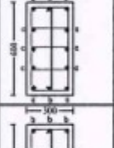
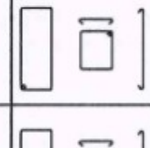
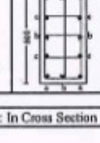
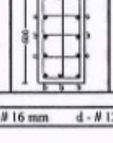
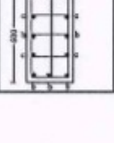
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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	E.G.L to 3rd Floor Column Reinforcement Details			4th,5th& 6th Floor Column Reinforcement Details			From 7th Floor Column Reinforcement Details			Ties Profile	Remarks
				Column Verticals	Lateral Ties	Cross Section	Column Verticals	Lateral Ties	Cross Section	Column Verticals	Lateral Ties	Cross Section		
9.	C9	06	300 x 530	# 20 - 2 Nos + #16 - 8 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 10 Nos	Fourth, Fifth & Sixth floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 10 Nos	Above Seventh floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
10.	C10	09	300 x 530	# 20 - 8 Nos + #16 - 2 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 20 - 4 Nos + #16 - 6 Nos.	Fourth, Fifth & Sixth floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 8 Nos + #12 - 2 Nos.	Above Seventh 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			Curtailment at 4th & 7th floor
11.	C11	08	300 x 530	# 20 - 8 Nos + #16 - 2 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#20 - 4Nos + #16 - 6Nos.	Fourth, Fifth & Sixth floor slab: #10@ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 10Nos	Above Seventh floor slab: #10@ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
12.	C12	20	300 x 600	# 16 - 10 Nos + #12 - 2 Nos	1) Upto Stilt floor slab: #10 @ 75 mm c/c 2) Stilt to Third 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		#16 - 8Nos + #12 - 4Nos.	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 8Nos + #12 - 4Nos.	Above Seventh floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
13.	C13	09	300 x 600	# 20 - 4 Nos + #16 - 8 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 16 - 8 Nos + # 12 - 4 Nos	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 8Nos + #12 - 4Nos.	Above Seventh floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
14.	C14	09	300 x 600	# 20 - 8 Nos + #16 - 4 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 12Nos	Fourth, Fifth & Sixth floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		#16 - 8Nos + #12 - 4Nos.	Above Seventh floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
15.	C15	04	300 x 600	# 20 - 8 Nos + #16 - 4 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 20 - 6 Nos + #16 - 6 Nos	Fourth, Fifth & Sixth floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 20 - 2 Nos + # 16 - 10 Nos	Above Seventh floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor
16.	C16	14	300 x 600	# 25 - 4 Nos + #20 - 4 Nos + #16 - 4 Nos	1) Upto Stilt floor slab: #10 @ 95 mm c/c 2) Stilt to Third floor slab: #10 @ 95 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 20 - 8 Nos + # 16 - 4 Nos	Fourth, Fifth & Sixth floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c		# 20 - 8 Nos + # 16 - 4 Nos	Above Seventh floor slab: #8 @ 75 mm c/c for 600 mm at top and bottom near beam - column junction & lapping zone and the rest #8 @ 150mm c/c			Curtailment at 4th & 7th floor

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

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
12/12/24 # 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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SCHEDULE OF COLUMNS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 08.

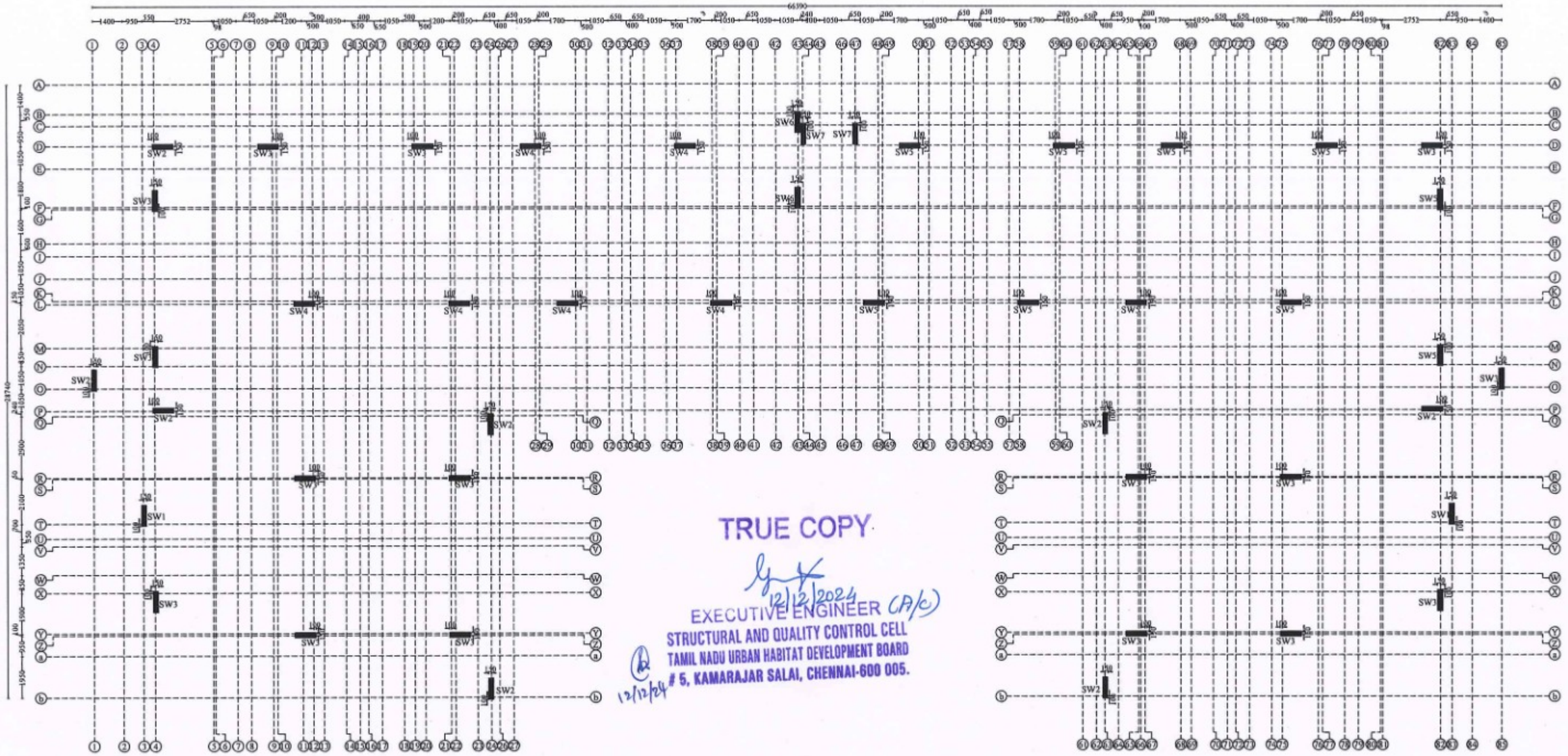
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

SHEAR WALL LAYOUT UPTO STILT FLOOR



TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SHEAR WALL LAYOUT UPTO STILT FLOOR.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 09.

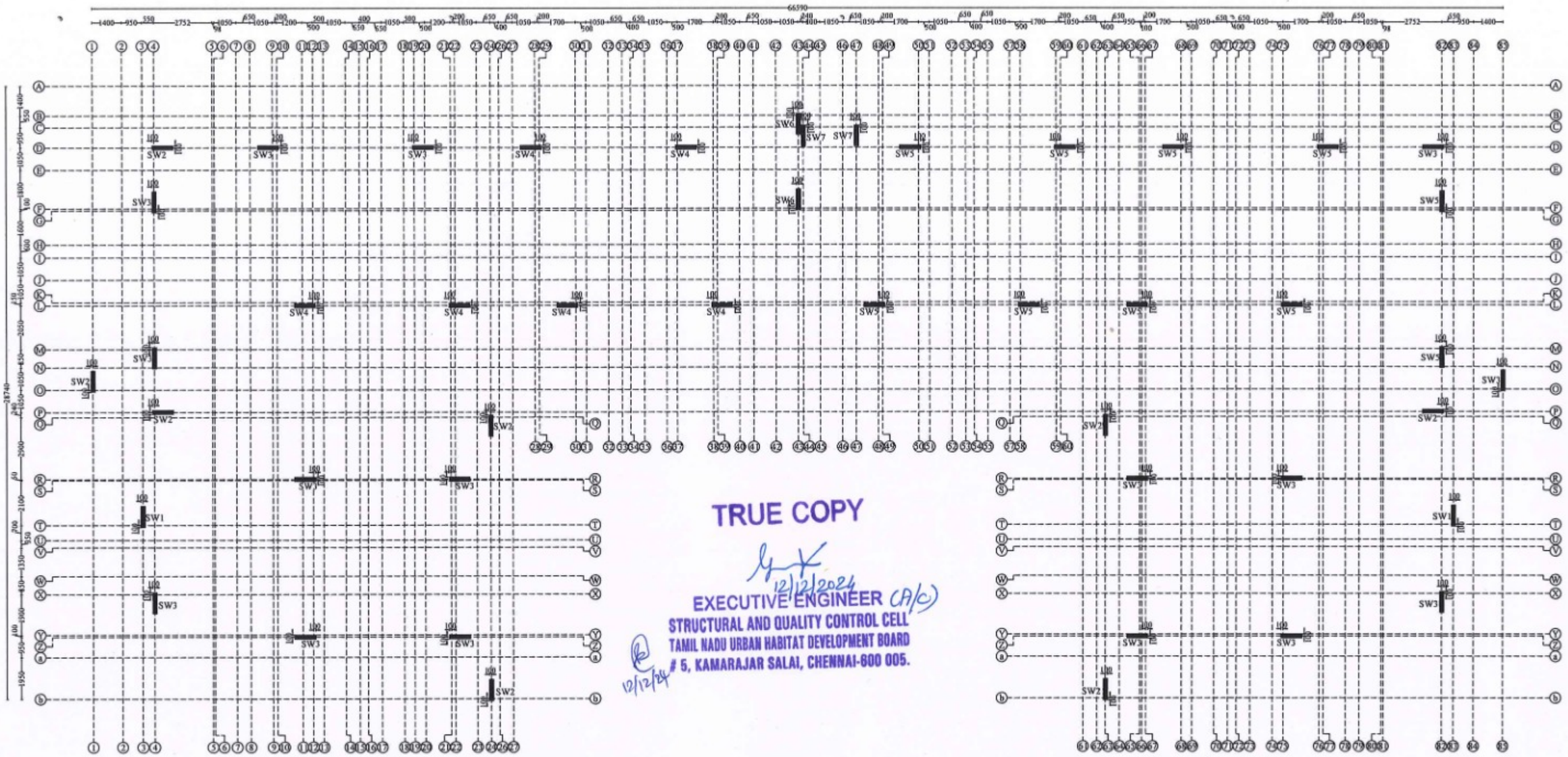
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

SHEAR WALL LAYOUT ABOVE STILT FLOOR



TRUE COPY

12/12/2024

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

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SHEAR WALL LAYOUT ABOVE STILT FLOOR.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 10.

REVISION NO.:

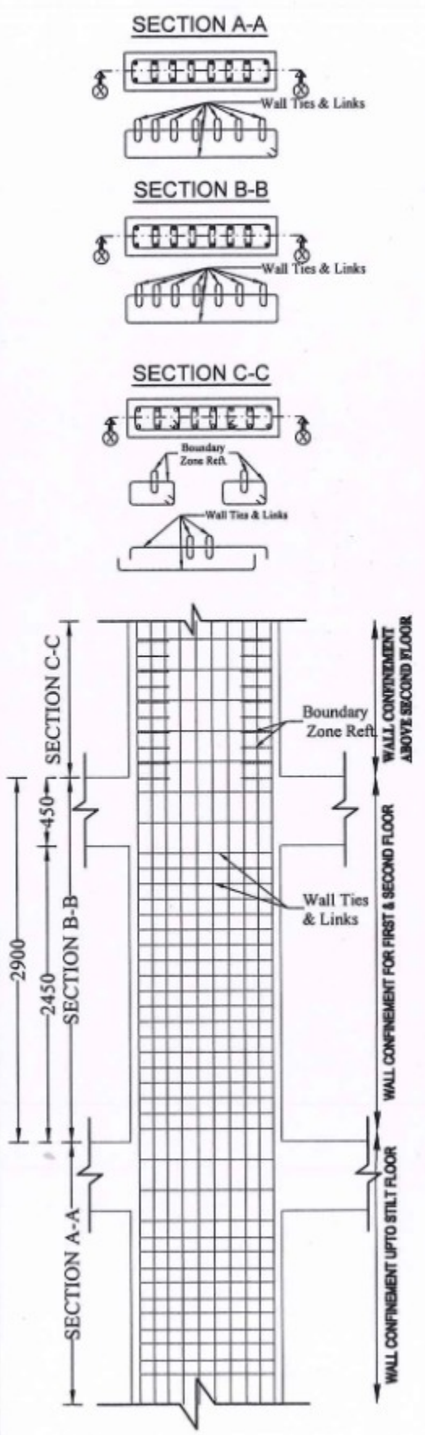
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

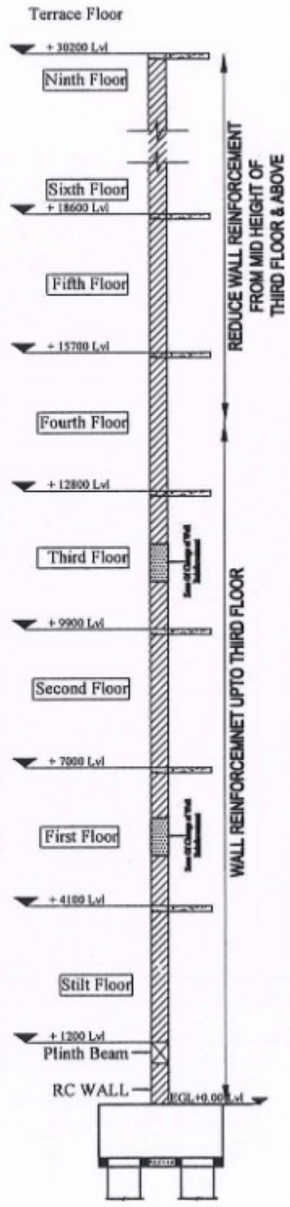
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SHEAR WALL REINFORCEMENT DETAILS

TYPICAL SHEAR WALL CONFINING REINFORCEMENT DETAILS



LOCATION	SW1 (2 No)	SW2 (8 Nos)	SW3 (16 Nos)
Above Second Floor level (Bar Curtailment at mid height of 3rd floor)	1000, 220, 220, 200; • - 12mm (12 Nos) o - 10mm (8 Nos); 8@60 c/c; 8@175 c/c	1000, 220, 220, 200; • - 12mm (12 Nos) o - 10mm (8 Nos); 8@60 c/c; 8@175 c/c	1000, 220, 220, 200; • - 12mm (12 Nos) o - 10mm (8 Nos); 8@60 c/c; 8@175 c/c
1&2 Floor level (Bar Curtailment at mid height of 3rd floor)	1000, 200; o - 12mm (20 Nos); 10@75 c/c	1000, 200; o - 12mm (20 Nos); 10@75 c/c	1000, 200; o - 12mm (20 Nos); 10@75 c/c
Upto Stilt Floor level (Bar Curtailment at mid height of 1st floor)	1000, 250; • - 16mm (16 Nos) o - 12mm (4 Nos); 10@75 c/c	1000, 250; • - 20mm (4 Nos) o - 16mm (16 Nos); 10@95 c/c	1000, 250; • - 20mm (8 Nos) o - 16mm (12 Nos); 10@95 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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

TRUE COPY

12/12/2024

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

12/12/24

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SHEAR WALL REINFORCEMENT DETAILS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/11.

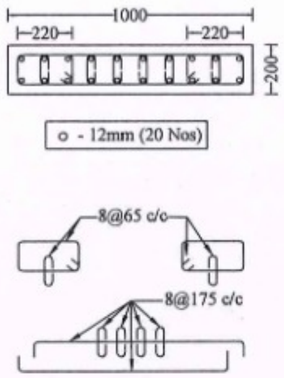
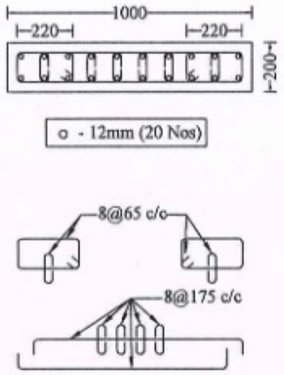
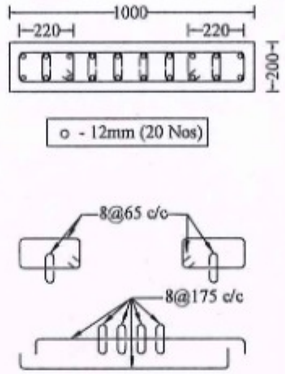
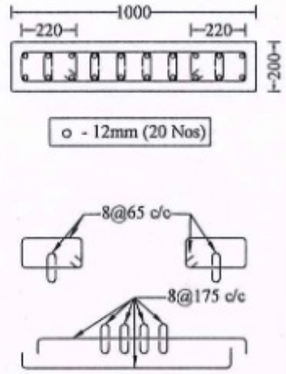
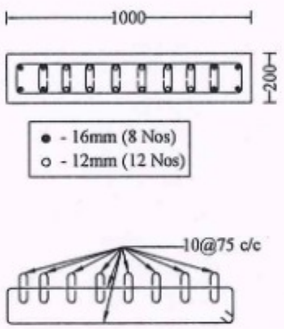
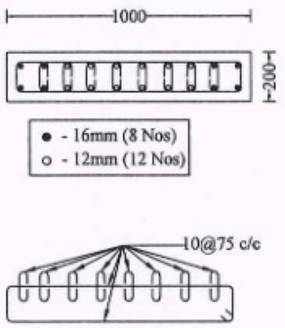
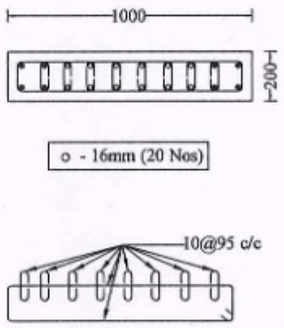
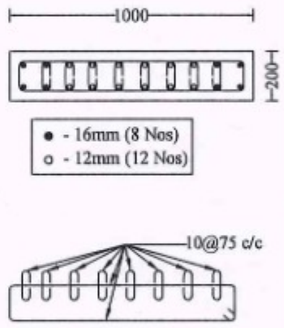
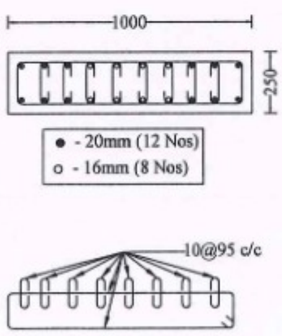
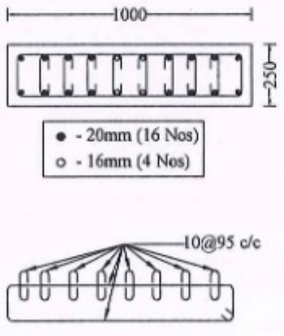
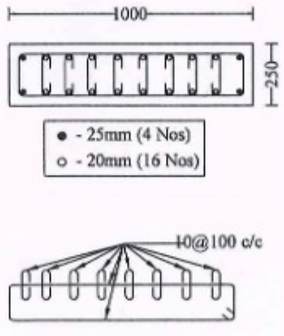
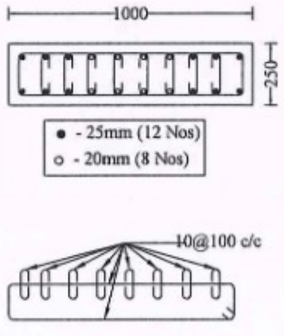
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxx 06/12/2024
Chief Engineer - I

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

SHEAR WALL REINFORCEMENT DETAILS

LOCATION	SW4 (6 Nos)	SW5 (10 Nos)	SW6 (2 Nos)	SW7 (2 Nos)
Above Second Floor level (Bar Curtailment at mid height of 3rd floor)				
1&2 Floor level (Bar Curtailment at mid height of 3rd floor)				
Upto Stilt Floor level (Bar Curtailment at mid height of 1st floor)				

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SHEAR WALL REINFORCEMENT DETAILS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/12.

REVISION NO.:

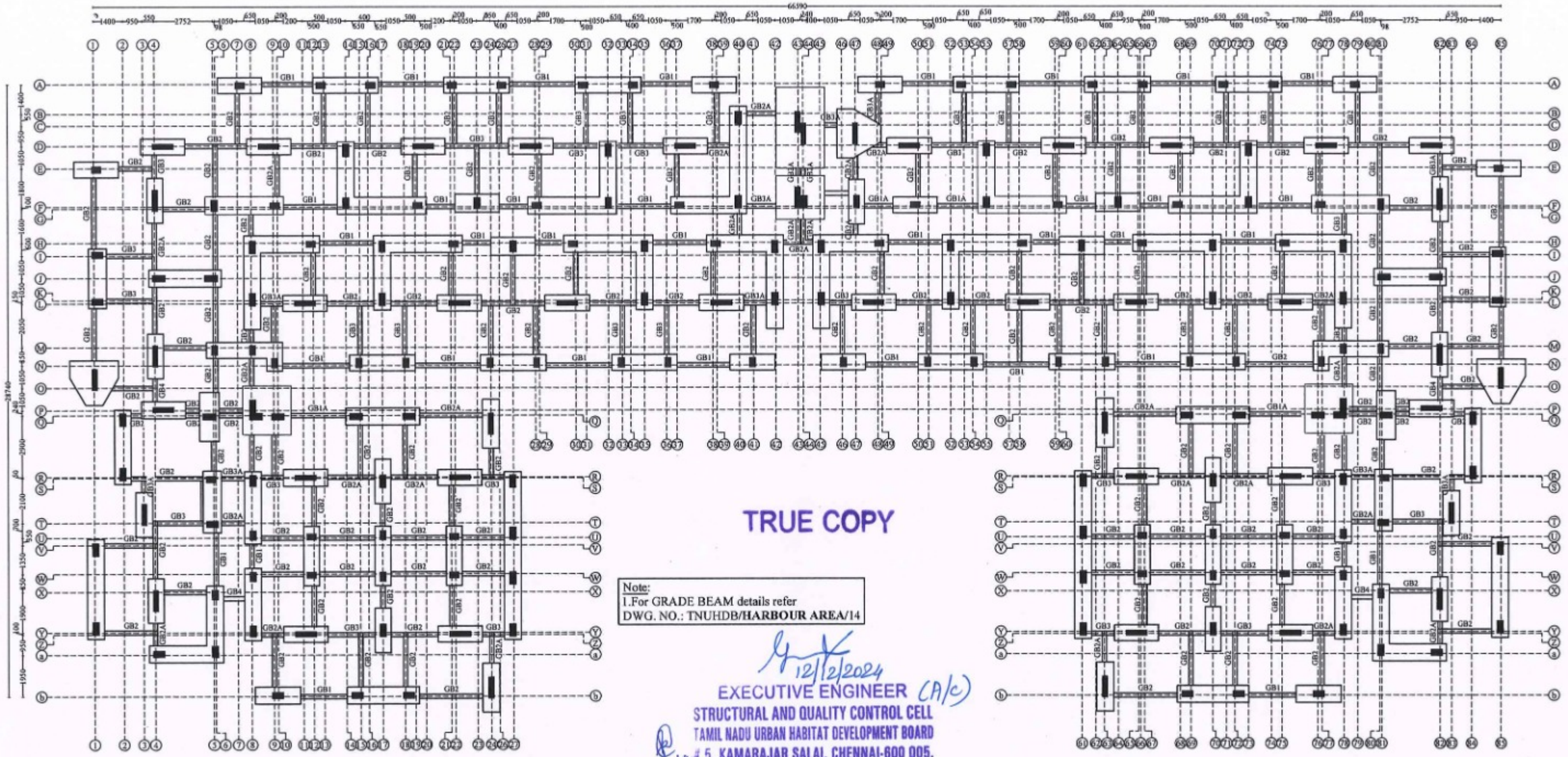
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

TRUE COPY
12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
12/12/24 # 5, KAMARAJAR SALAI, CHENNAI-600 005.

GRADE BEAM LAYOUT



TRUE COPY

Note:
1.For GRADE BEAM details refer
DWG. NO.: TNUHDB/HARBOUR AREA/14

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

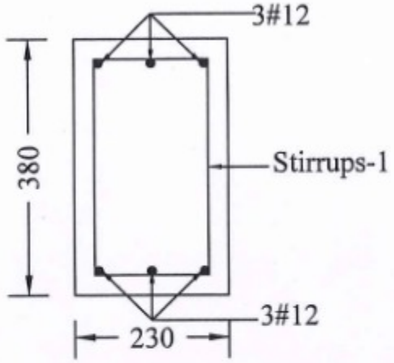
NOTE :

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

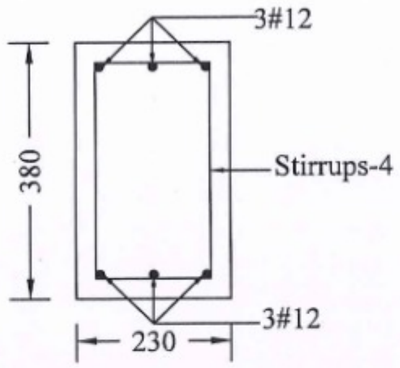
STRUCTURAL DETAILS		
PROJECT: CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.	Assistant Engineer	Asst. Exe. Engineer
TITLE: GRADE BEAM LAYOUT.	Executive Engineer	SE - North II
TYPE DESIGN NO.: 30/2021		
DWG.NO.: TNUHDB / HARBOUR AREA / 13.		
REVISION NO.:	sdxxxx 06/12/24 Chief Engineer-I	
	STRUCTURAL & QUALITY CONTROL CELL TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD NO.5, KAMARAJAR SALAI CHENNAI - 600 005.	

GRADE BEAM DETAILS

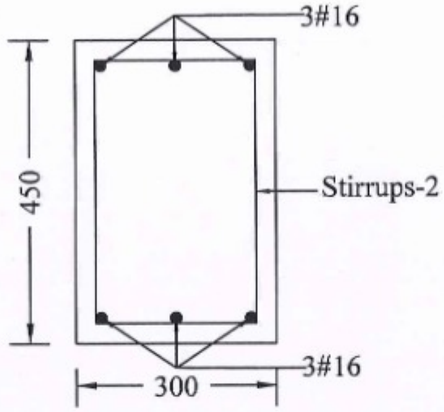
GB1
(230 x 380)



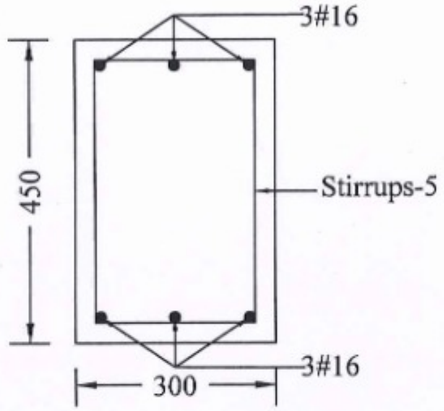
GB1A
(230 x 380)



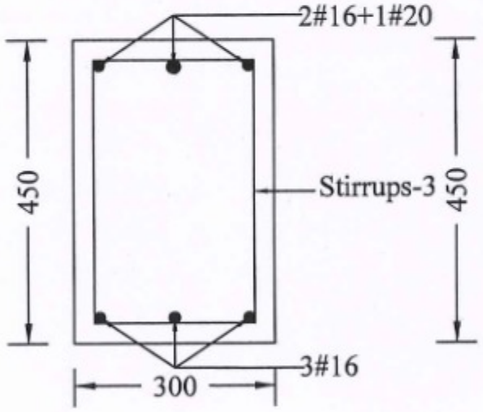
GB2
(300 x 450)



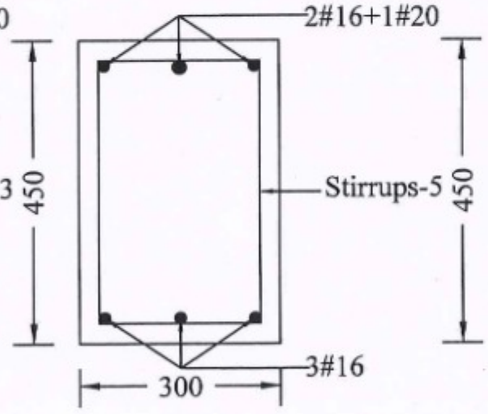
GB2A
(300 x 450)



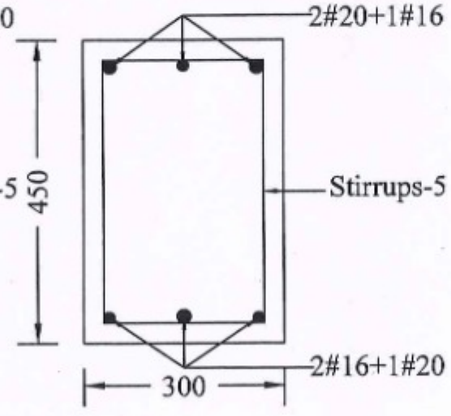
GB3
(300 x 450)



GB3A
(300 x 450)



GB4
(300 x 450)



NOTE:

1. **Stirrups-1 :** 2 Legged # 8 mm stirrups at 75 mm c/c for 700 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.
2. **Stirrups-2 :** 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 140 mm c/c.
3. **Stirrups-3 :** 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 130 mm c/c.
4. **Stirrups-4 :** 2 Legged # 10 mm stirrups at 95 mm c/c throughout.
5. **Stirrups-5 :** 4 Legged # 8 mm stirrups at 70 mm c/c throughout.

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D**-grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
GRADE BEAM DETAILS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/14.

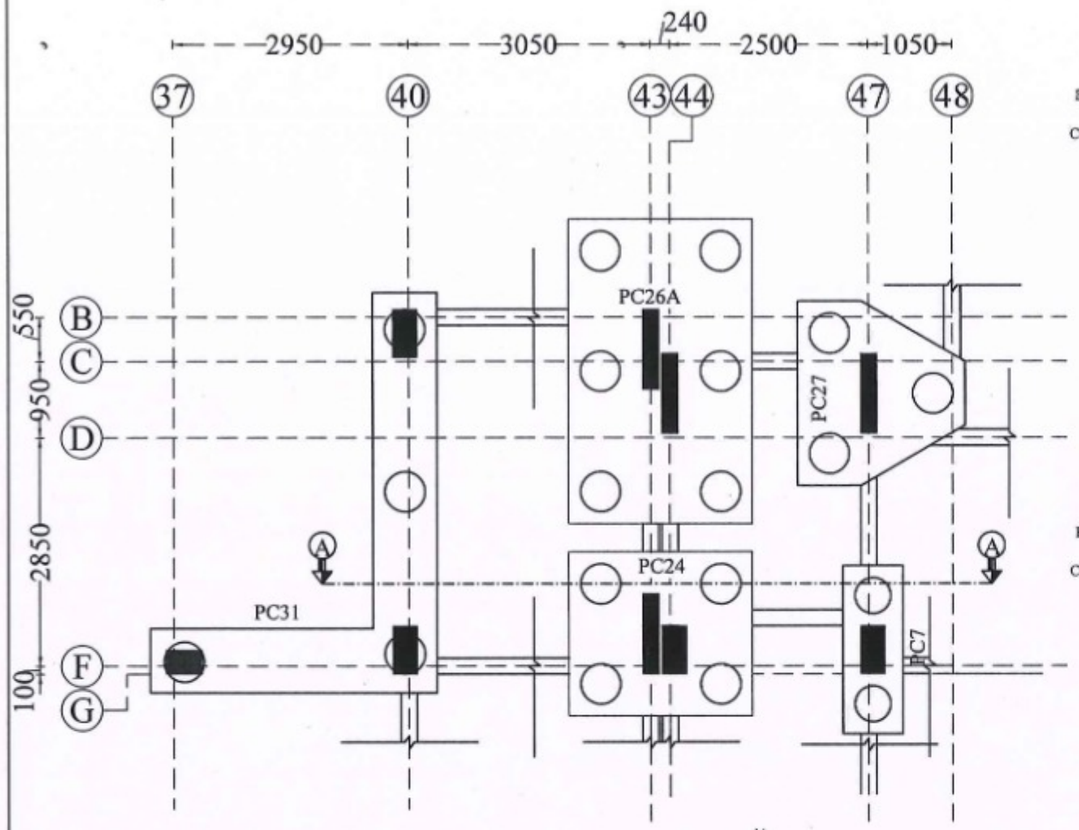
REVISION NO.:

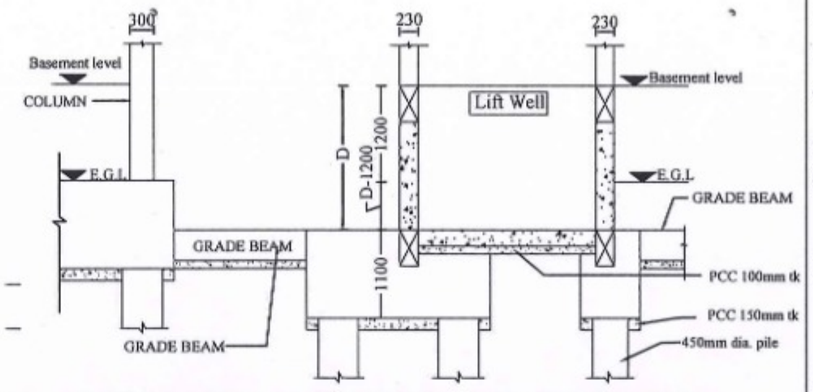
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

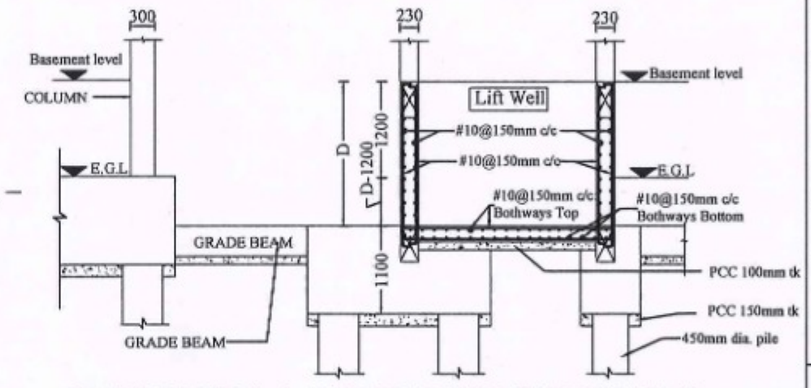
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

LAYOUT AND RC DETAILS OF LIFT WELL.



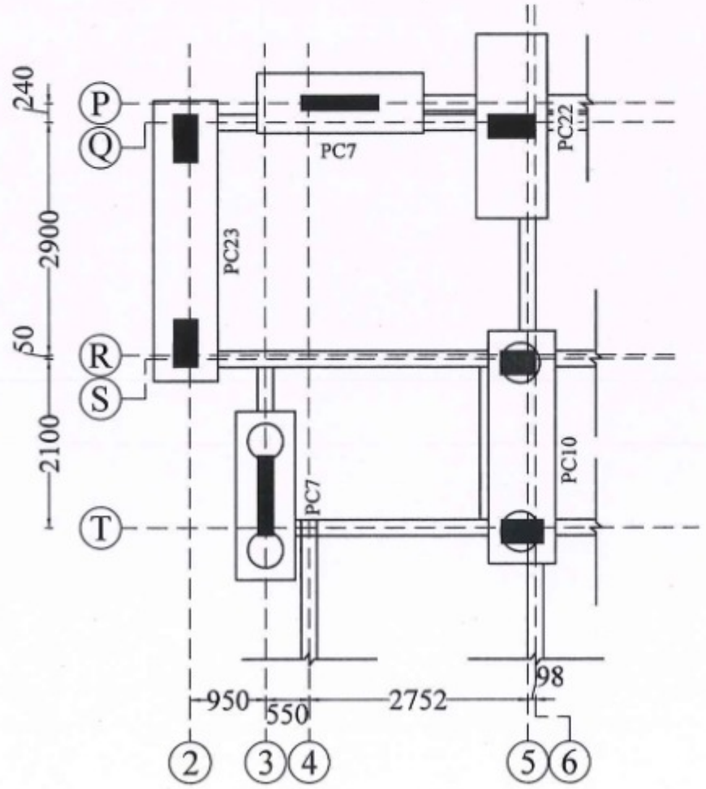


SECTION ON A-A (GENERAL ARRANGEMENT)



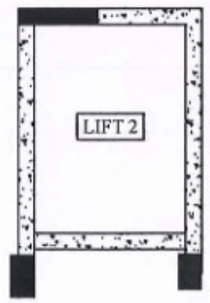
SECTION ON A-A (REINFORCEMENT DETAILS)

NOTE:
* D - If D is such that the grade beam bottom goes below the pile cap bottom,then the drawings should be revised. Any deviation from drawing should be confirmed with structural consultant.





PLAN OF LIFT 1
WELL -TYPICAL



PLAN OF LIFT 2
WELL -TYPICAL

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
LAYOUT AND RC DETAILS OF LIFT WELL.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/15.

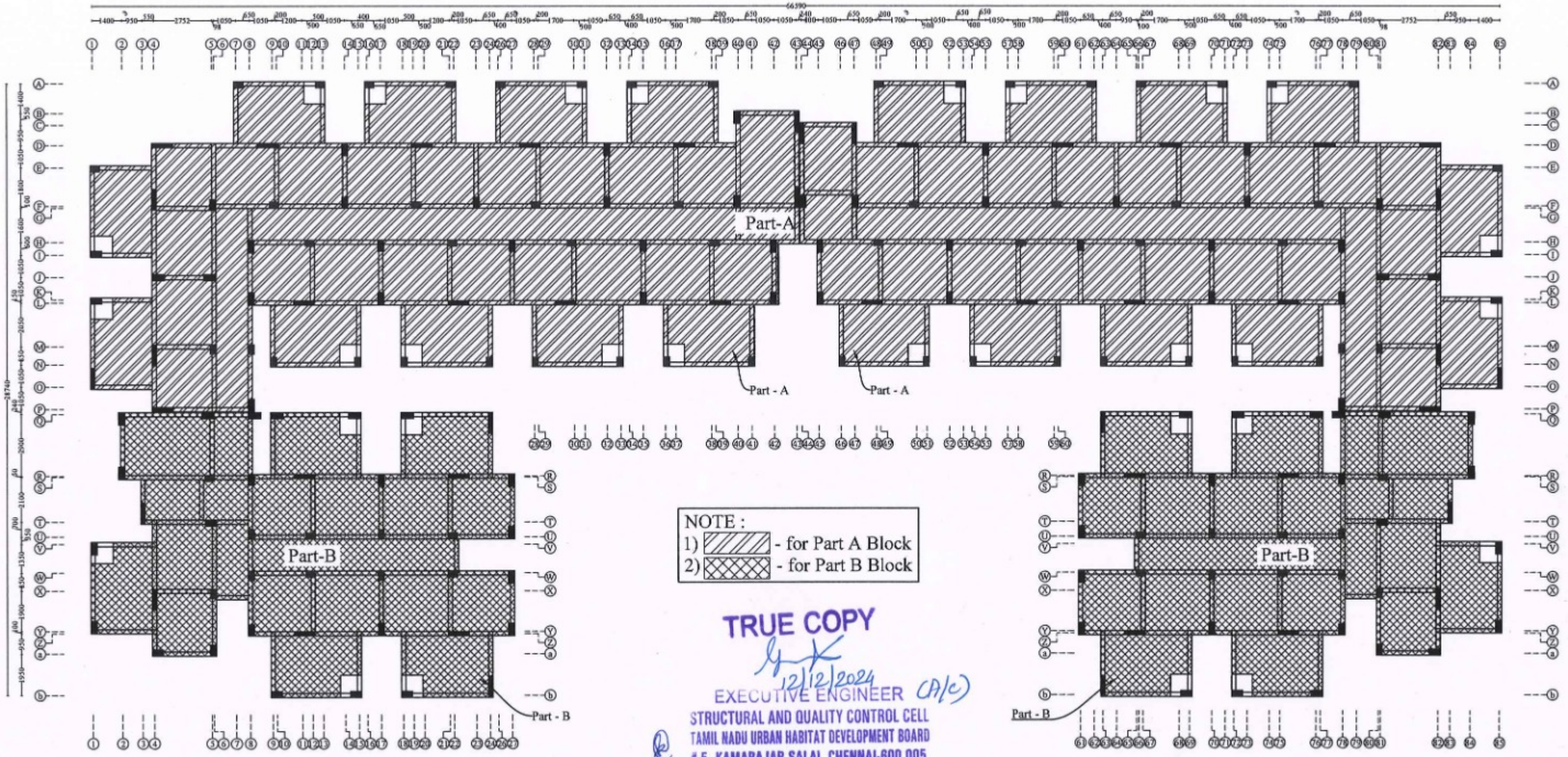
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

BEAM LAYOUT (Part-A & Part-B)



NOTE :
1) ▨ - for Part A Block
2) ▩ - for Part B Block

TRUE COPY
12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
BEAM LAYOUT (Part-A & Part-B).

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 16.

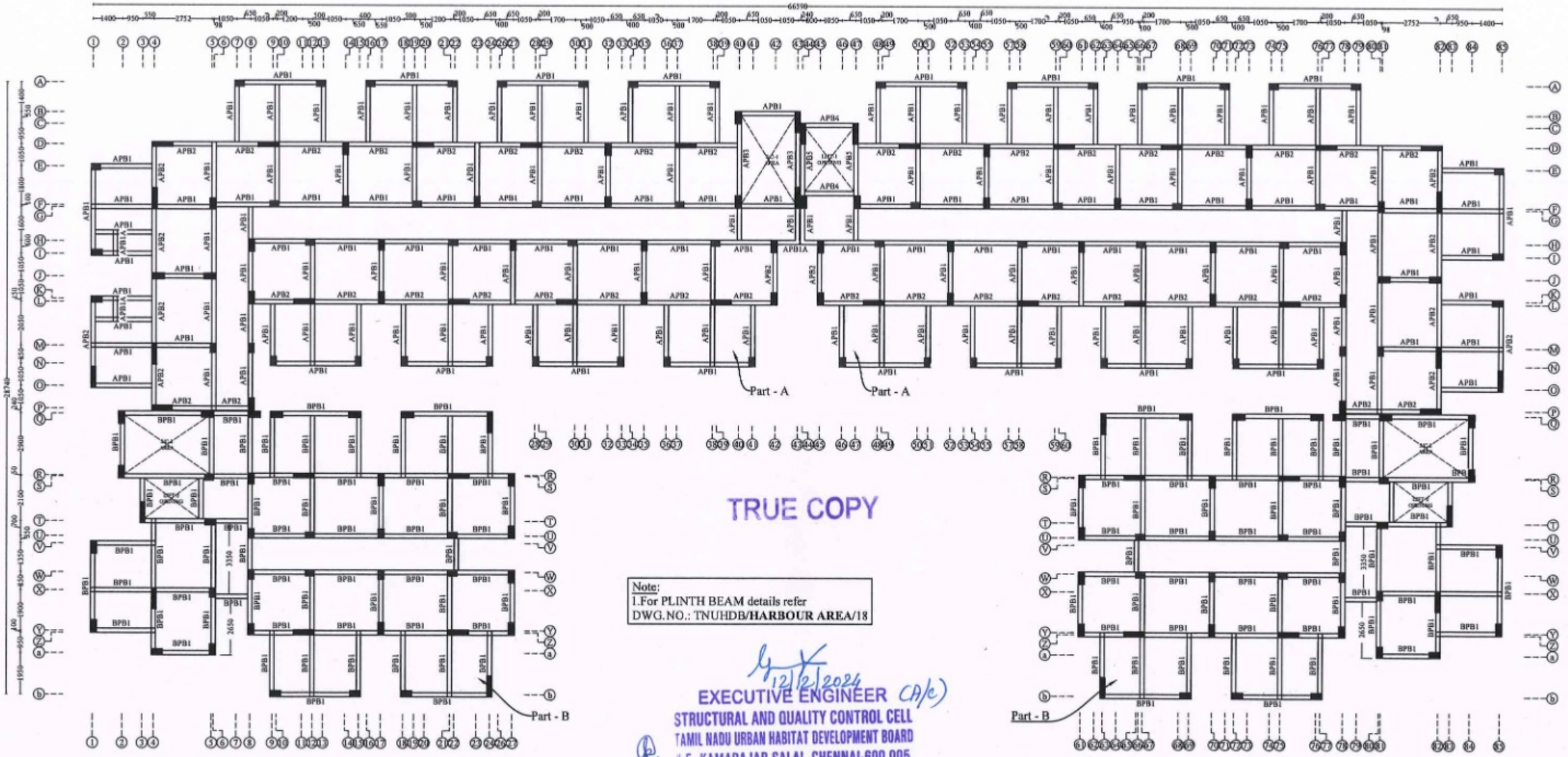
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

PLINTH BEAM LAYOUT



TRUE COPY

Note:
1.For PLINTH BEAM details refer
DWG.NO.: TNUHDB/**HARBOUR AREA/18**

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PLINTH BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 17.

REVISION NO.:

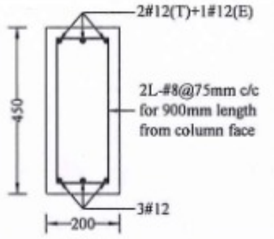
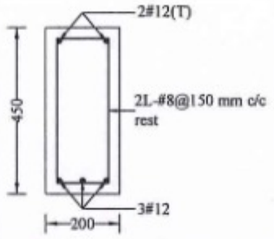
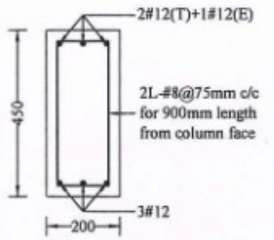
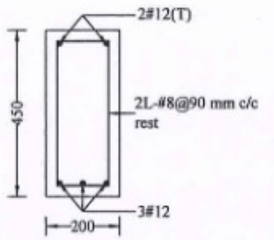
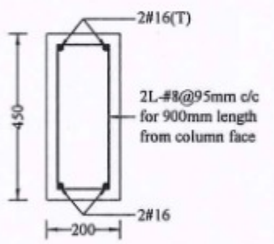
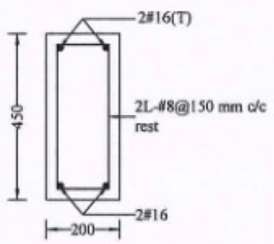
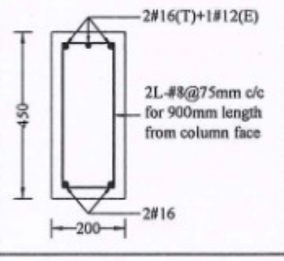
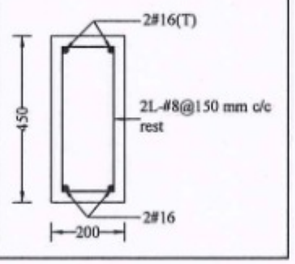
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

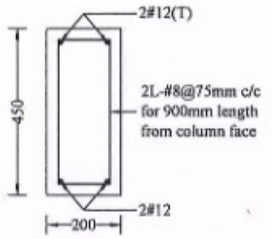
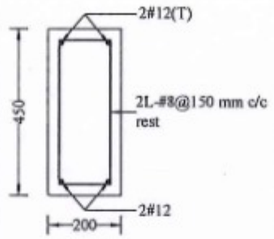
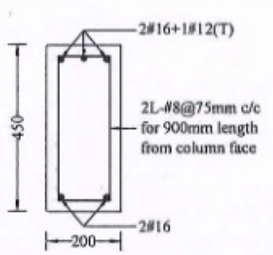
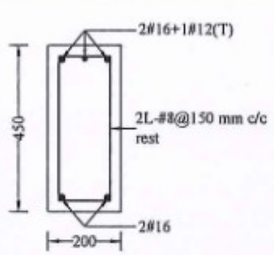
sdxxxx 06/12/24
Chief Engineer-I

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

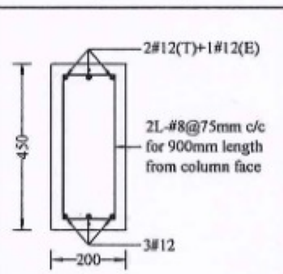
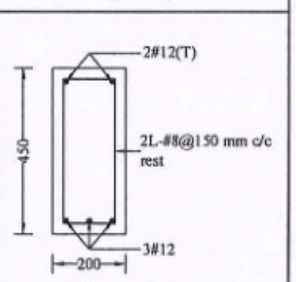
PLINTH BEAM DETAILS PART - A&B

PART - A

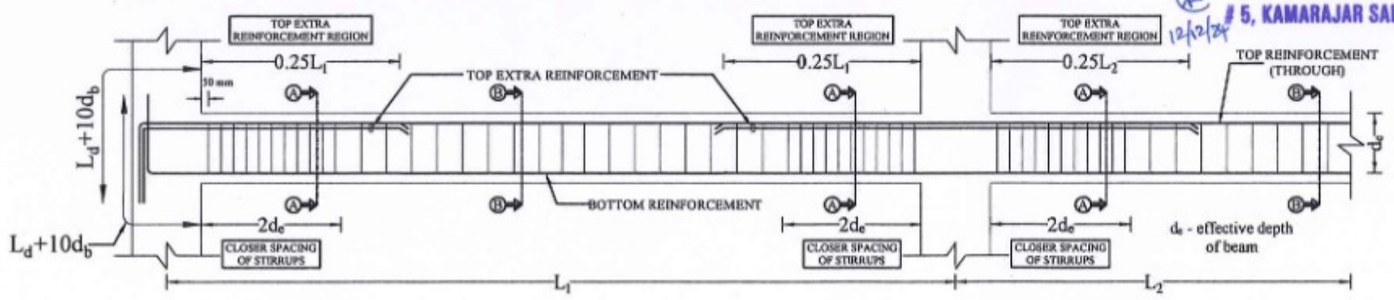
Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	APB1 200 x 450		
2.	APB1A 200 x 450		
3.	APB2 200 x 450		
4.	APB3 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	APB4 200 x 450		
6.	APB5 200 x 450		

PART - B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BPB1 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

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

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
PLINTH BEAM DETAILS PART - A&B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/18.

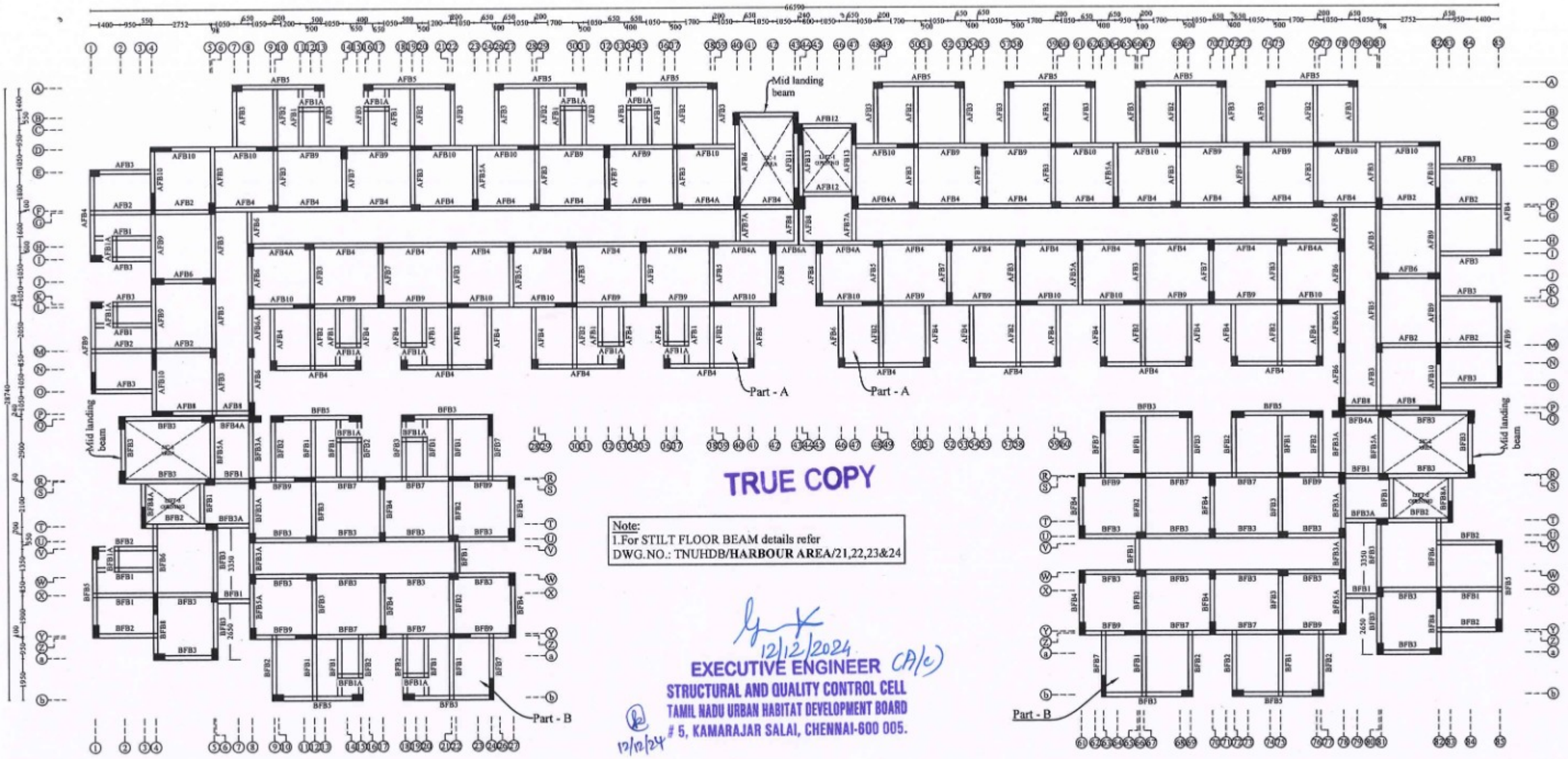
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

STILT FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For STILT FLOOR BEAM details refer
DWG.NO.: TNUHDB/HARBOUR AREA/21,22,23&24

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 19.

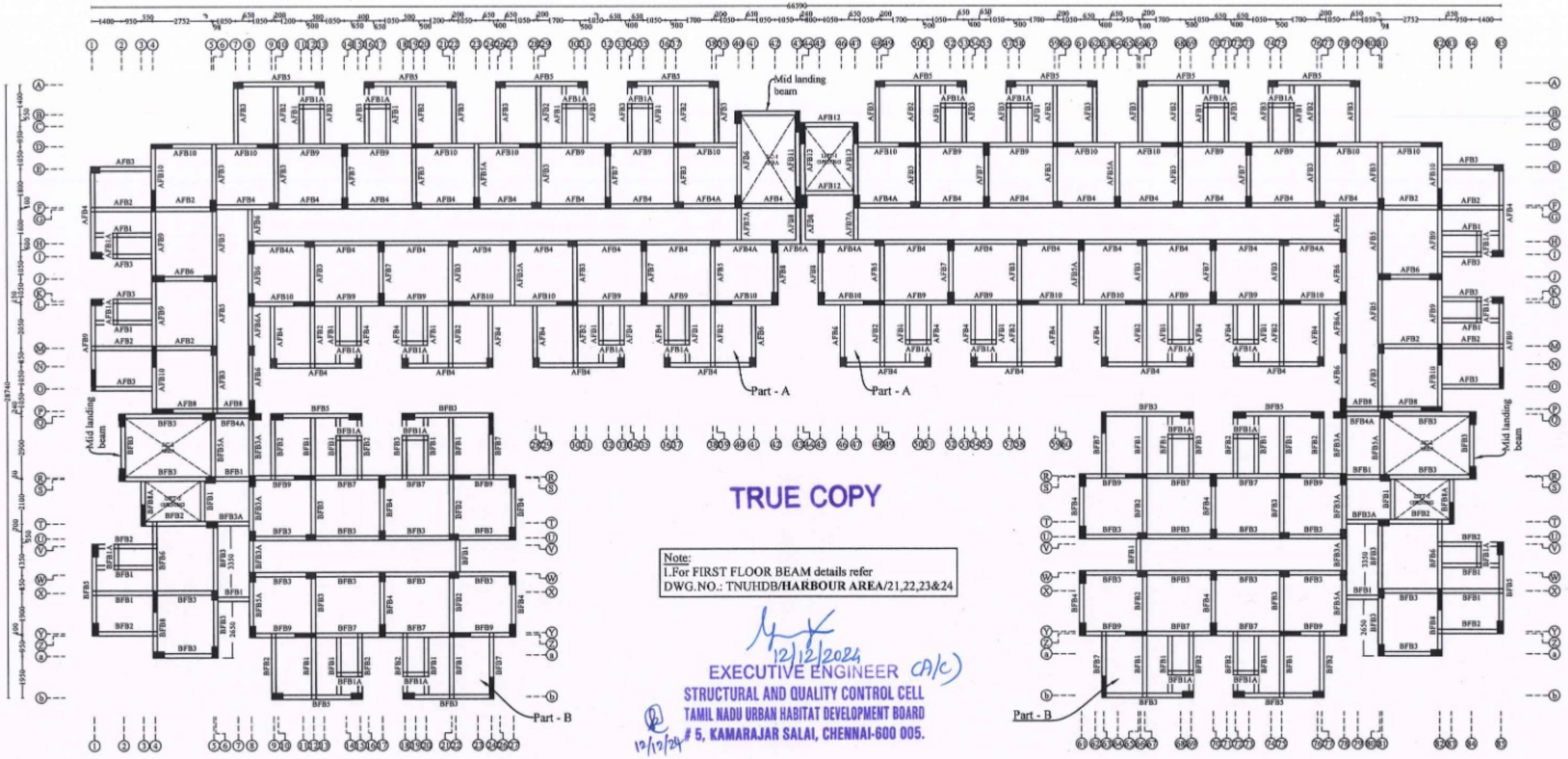
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

FIRST FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For FIRST FLOOR BEAM details refer
DWG.NO.: TNUHDB/**HARBOUR AREA**/21,22,23&24

12/12/2024
EXECUTIVE ENGINEER (A/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
FIRST FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 20.

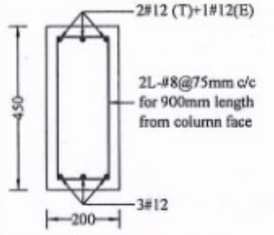
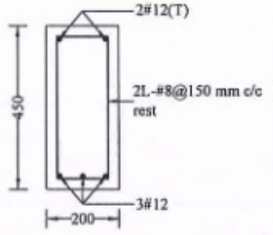
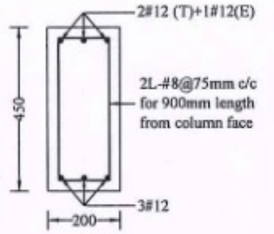
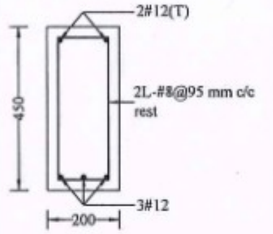
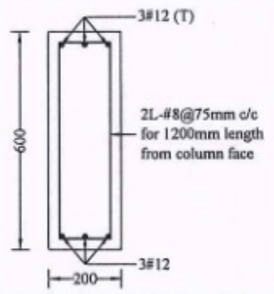
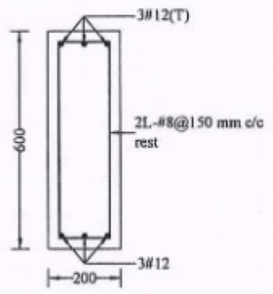
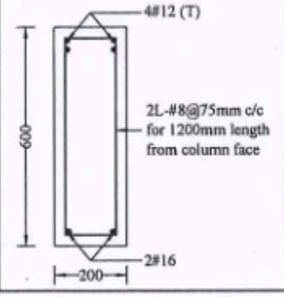
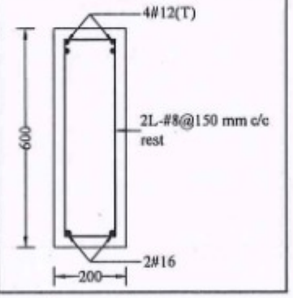
REVISION NO.:

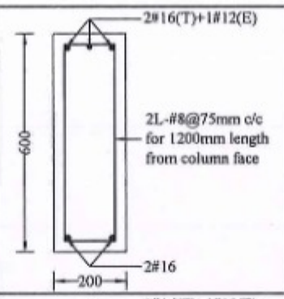
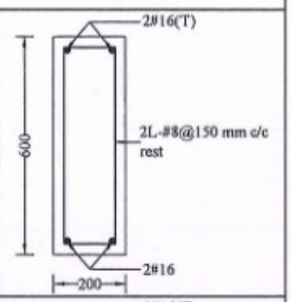
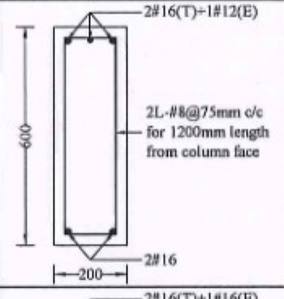
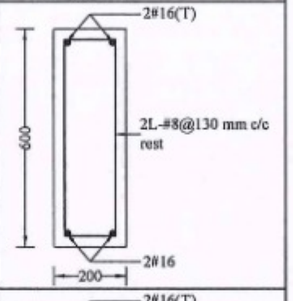
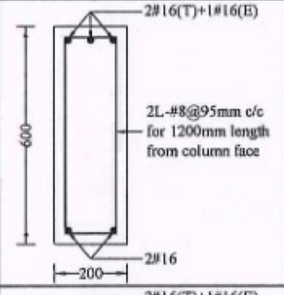
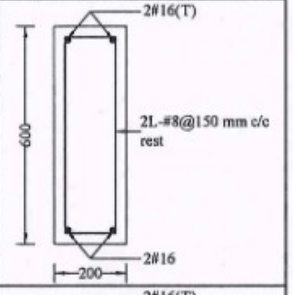
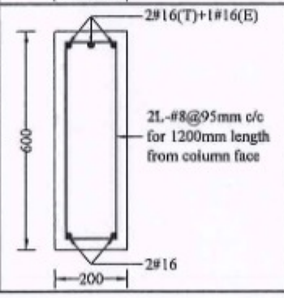
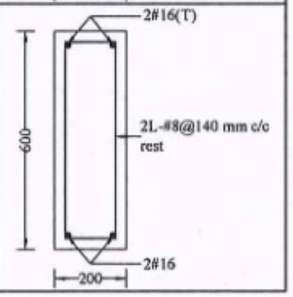
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

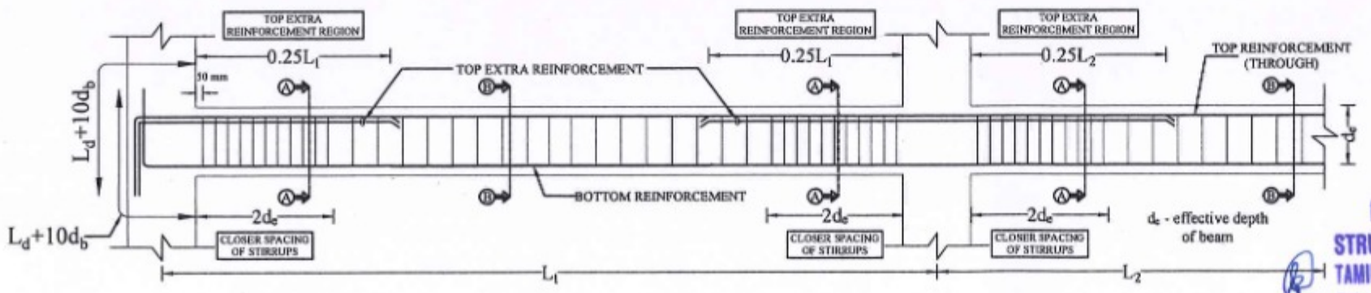
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

STILT & FIRST FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	AFB1 200 x 450		
2.	AFB1A 200 x 450		
3.	AFB2 200 x 600		
4.	AFB3 200 x 600		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	AFB4 200 x 600		
6.	AFB4A 200 x 600		
7.	AFB5 200 x 600		
8.	AFB5A 200 x 600		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (P/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
17/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT & FIRST FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/21

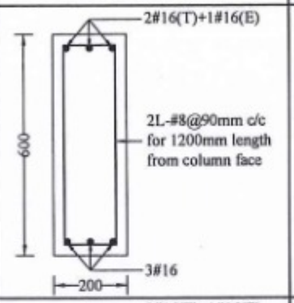
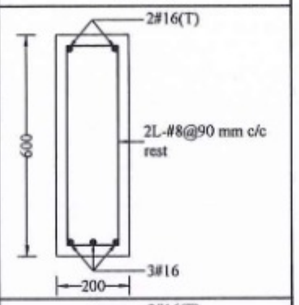
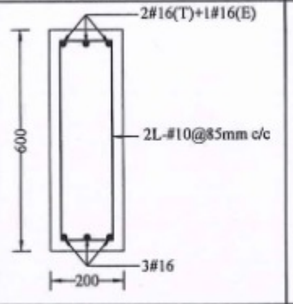
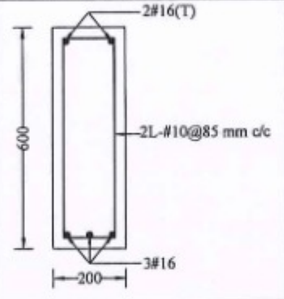
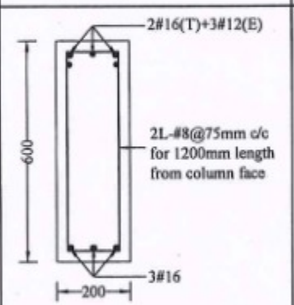
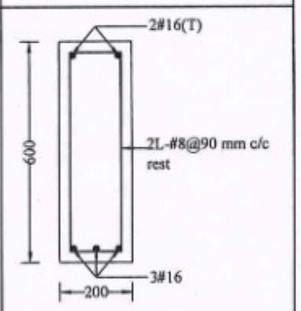
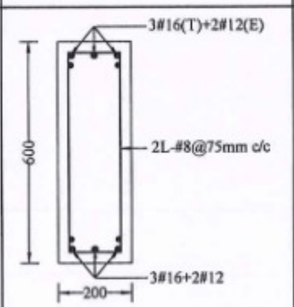
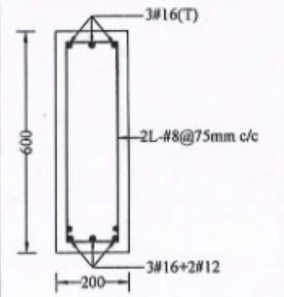
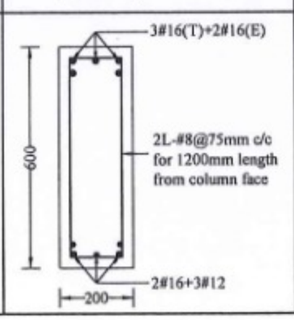
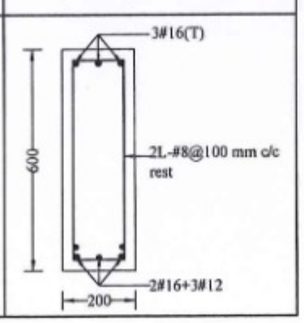
REVISION NO.:

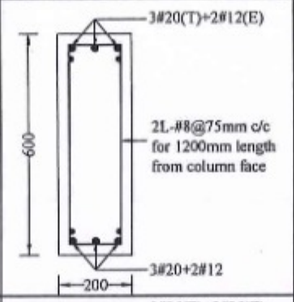
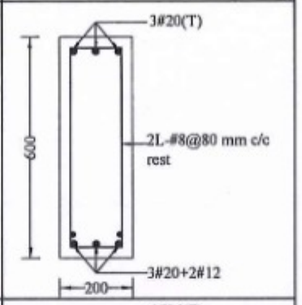
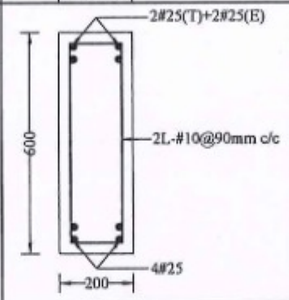
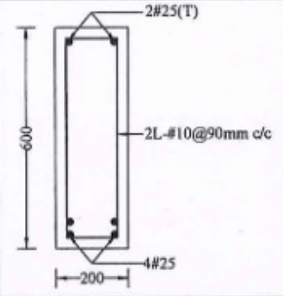
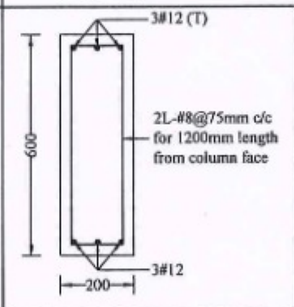
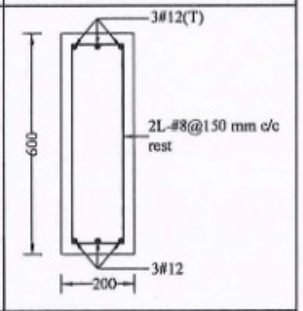
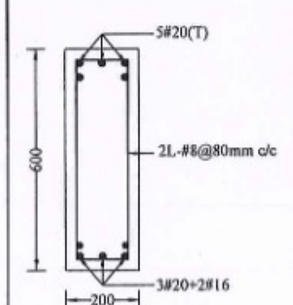
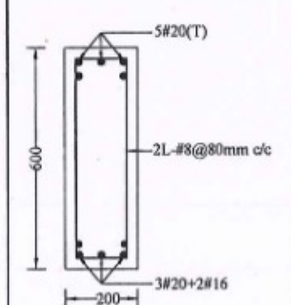
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/2024
Chief Engineer - I

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

STILT & FIRST FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	AFB6 200 x 600		
10.	AFB6A 200 x 600		
11.	AFB7 200 x 600		
12.	AFB8 200 x 600		
13.	AFB9 200 x 600		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
14.	AFB10 200 x 600		
15.	AFB11 200 x 600		
16.	AFB12 200 x 600		
17.	AFB13 200 x 600		

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

12/12/24 # 5, KAMARAJAR SALAI, CHENNAI-600 005.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT & FIRST FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/22

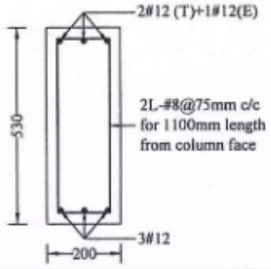
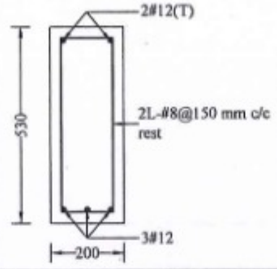
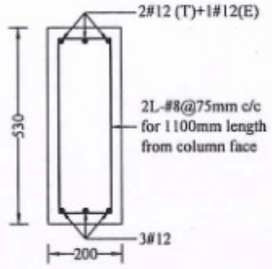
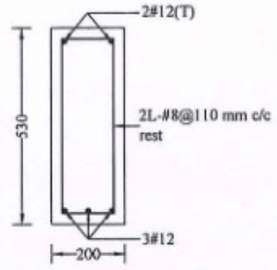
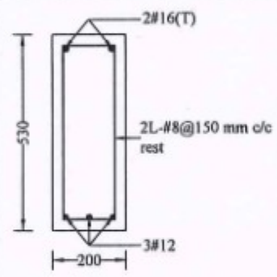
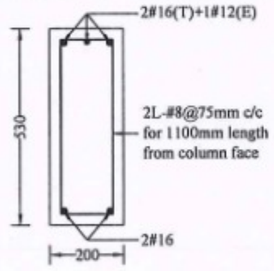
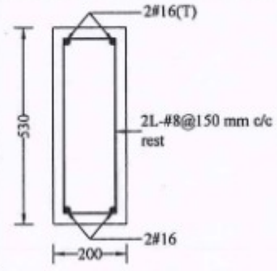
REVISION NO.:

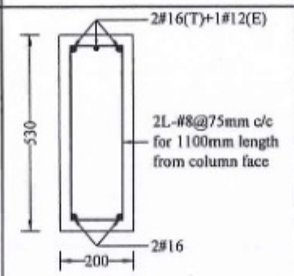
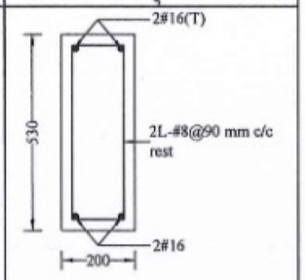
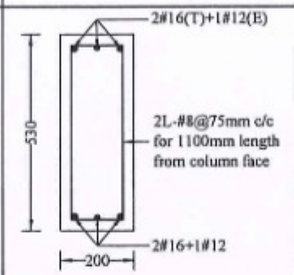
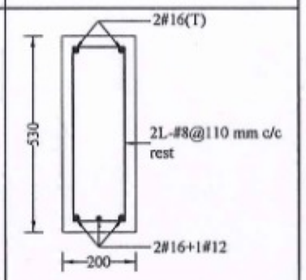
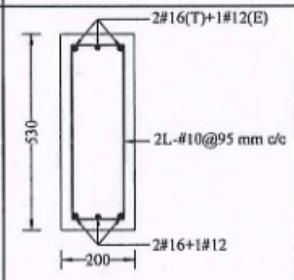
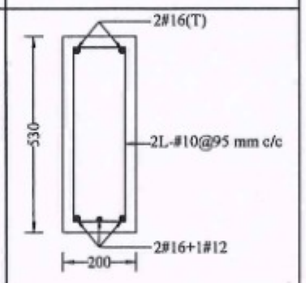
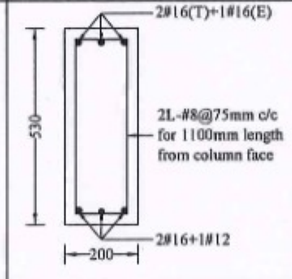
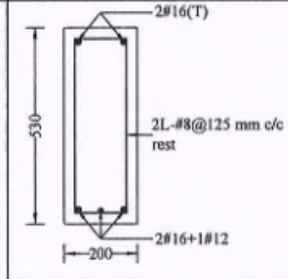
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

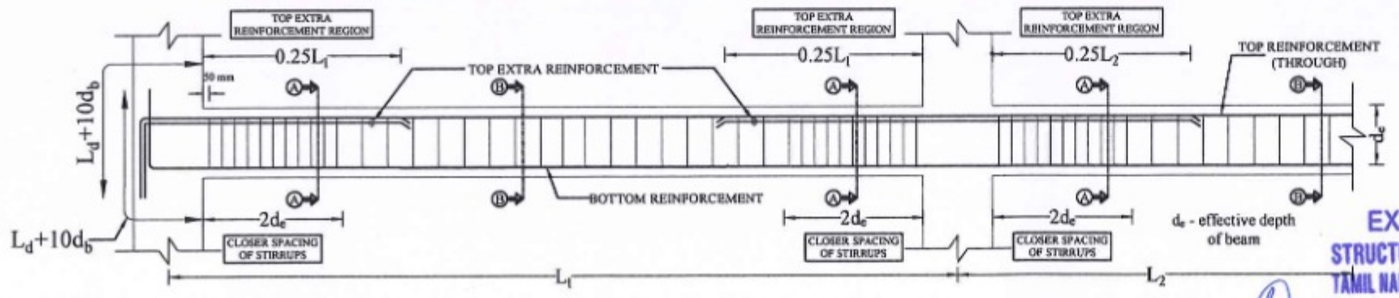
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

STILT & FIRST FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BFB1 200 x 530		
2.	BFB1A 200 x 530		
3.	BFB2 200 x 530		
4.	BFB3 200 x 530		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BFB3A 200 x 530		
6.	BFB4 200 x 530		
7.	BFB4A 200 x 530		
8.	BFB5 200 x 530		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (I/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT & FIRST FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/23

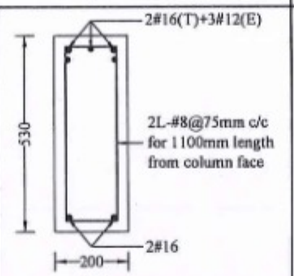
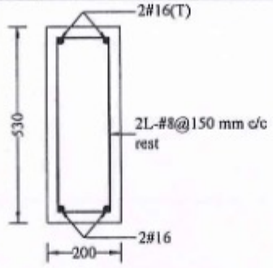
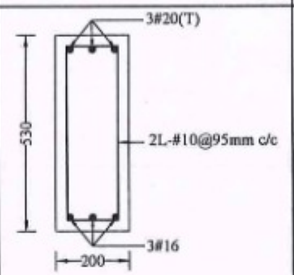
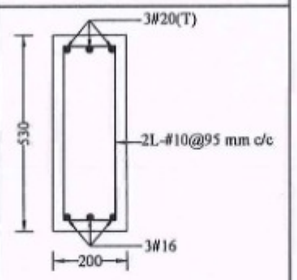
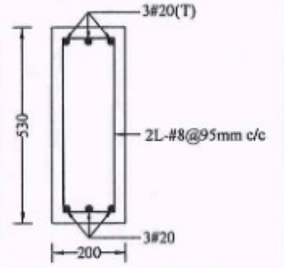
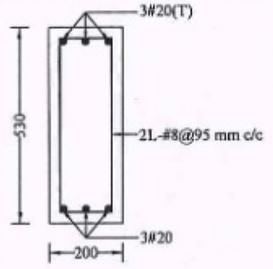
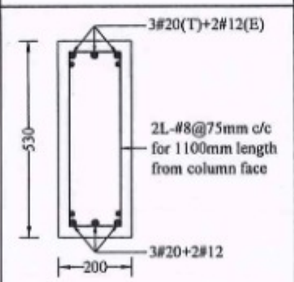
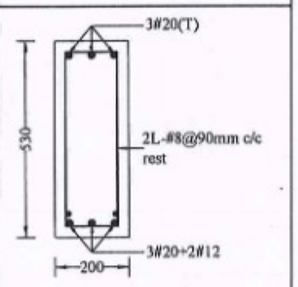
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxx 06/12/2024
Chief Engineer - I

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

STILT & FIRST FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	BFB6 200 x 530		
10.	BFB7 200 x 530		
11.	BFB8 200 x 530		
12.	BFB9 200 x 530		

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT & FIRST FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/24

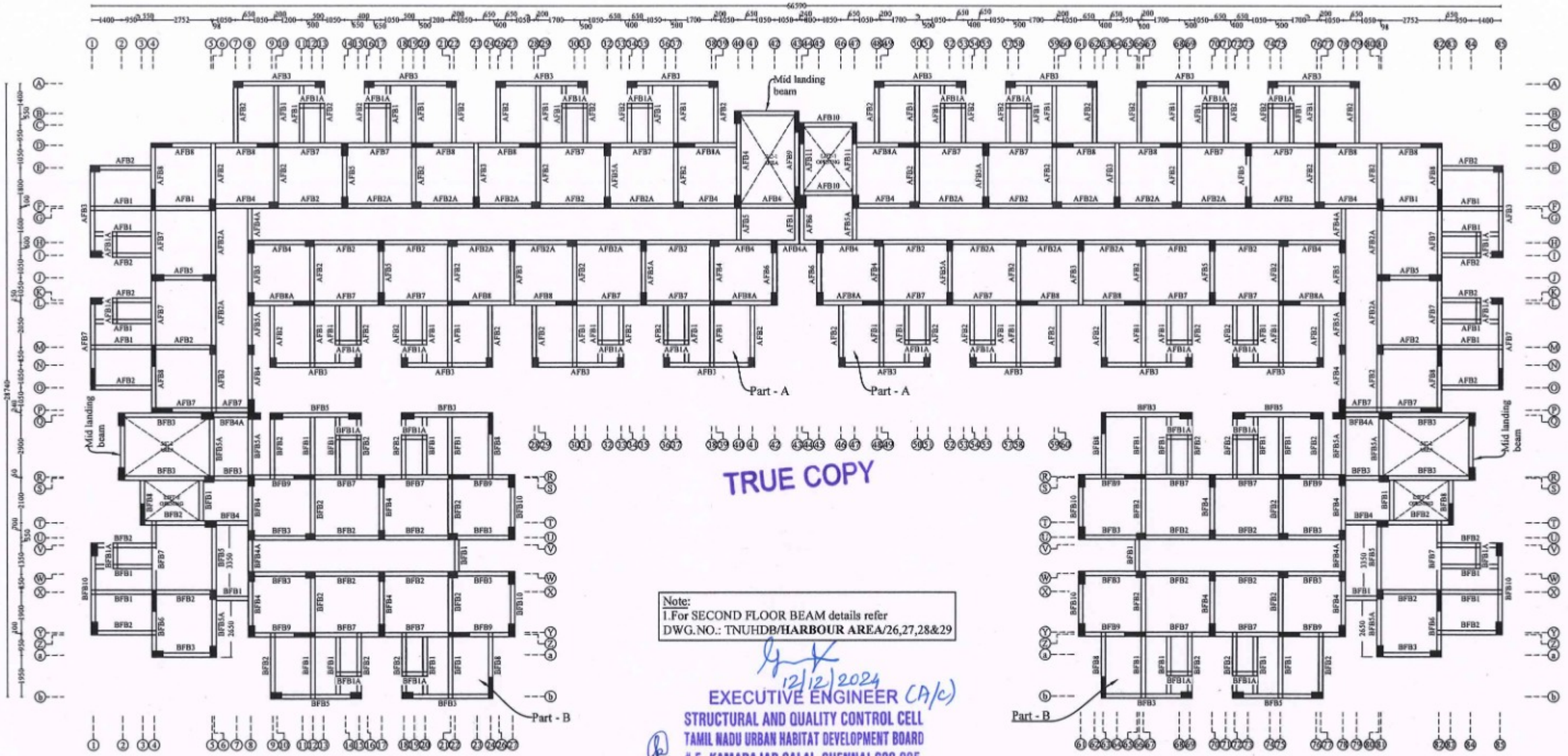
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/2024
Chief Engineer - I

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

SECOND FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For SECOND FLOOR BEAM details refer
DWG.NO.: TNUHDB/HARBOUR AREA/26,27,28&29

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SECOND FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 25.

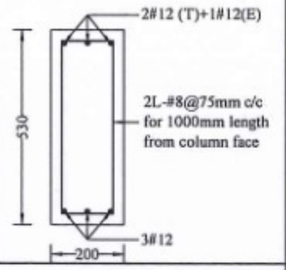
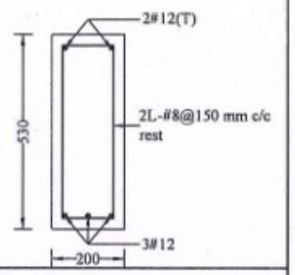
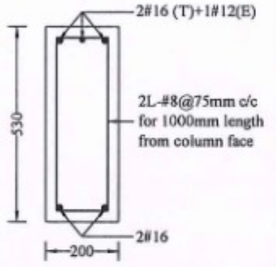
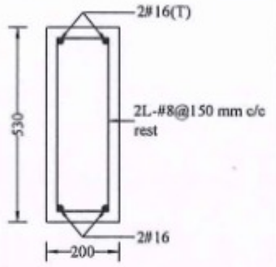
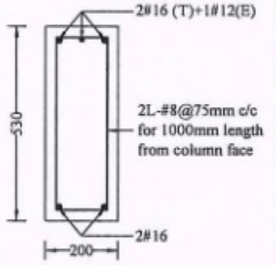
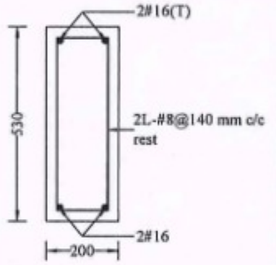
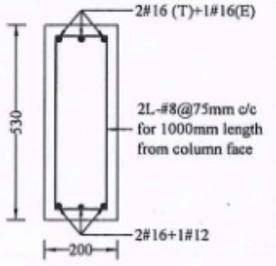
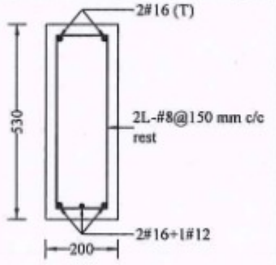
REVISION NO.:

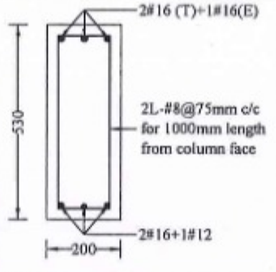
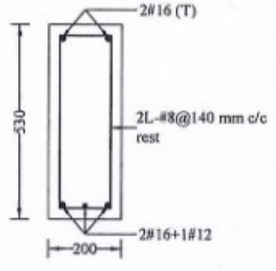
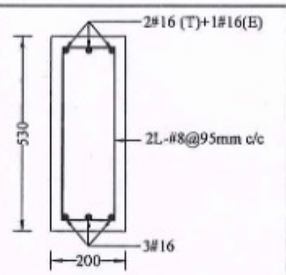
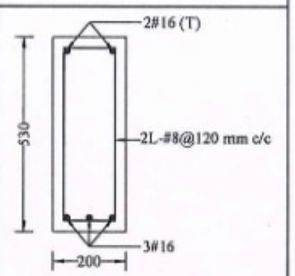
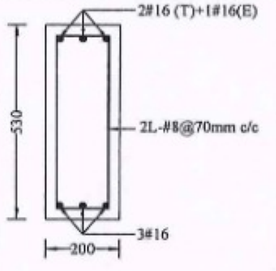
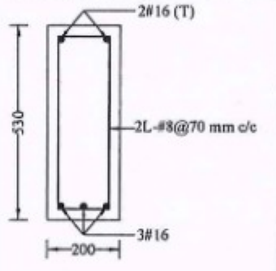
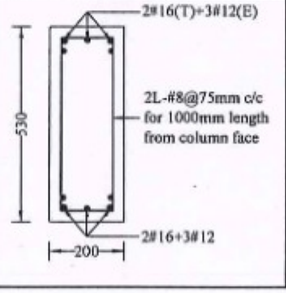
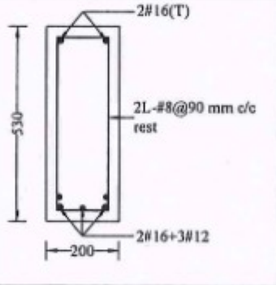
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

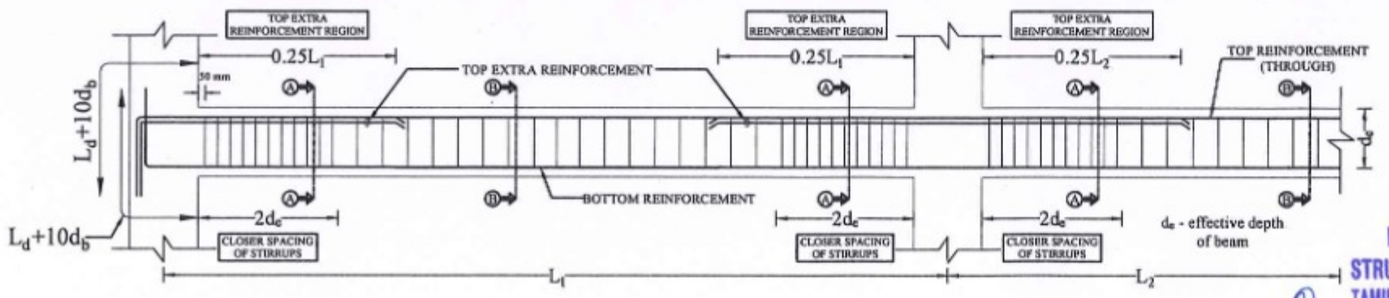
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SECOND FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	AFB1 200 x 530		
2.	AFB 2 200 x 530		
3.	AFB2A 200 x 530		
4.	AFB3 200 x 530		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	AFB3A 200 x 530		
6.	AFB4 200 x 530		
7.	AFB4A 200 x 530		
8.	AFB5 200 x 530		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (I/c)
STRUCTURAL AND QUALITY CONTROL
TAMIL NADU URBAN HABITAT DEVELOPMENT
12/12/24 # 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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (**S+9**) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SECOND FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/26

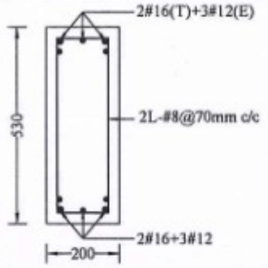
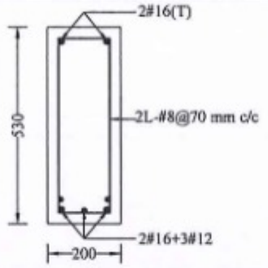
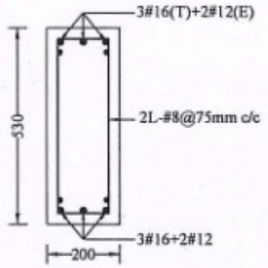
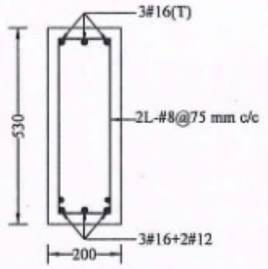
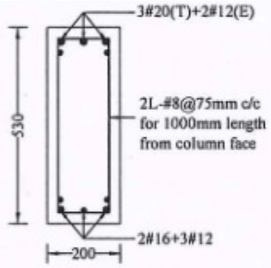
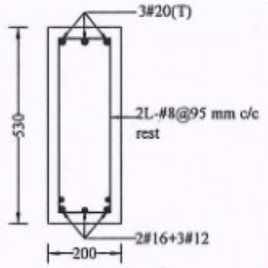
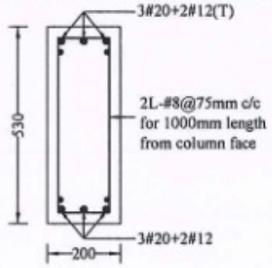
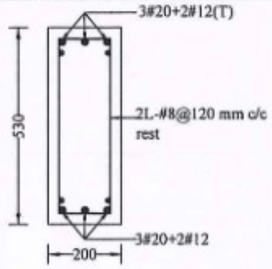
REVISION NO.:

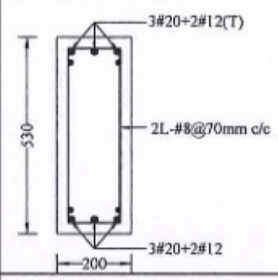
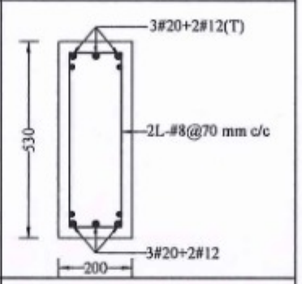
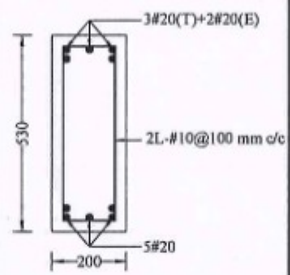
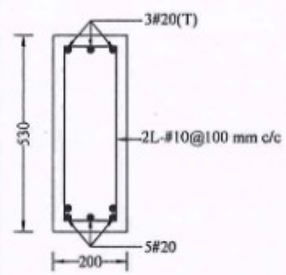
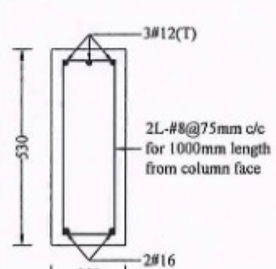
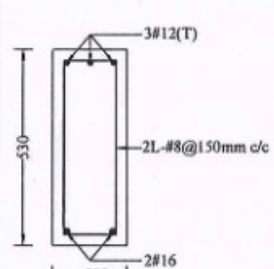
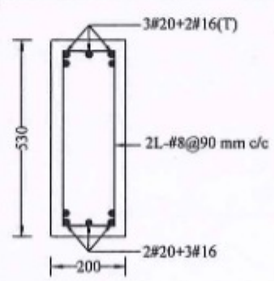
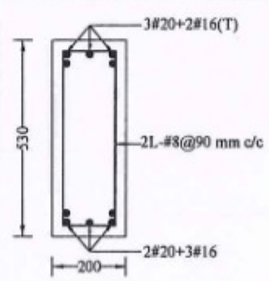
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

SECOND FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	AFB5A 200 x 530		
10.	AFB6 200 x 530		
11.	AFB 7 200 x 530		
12.	AFB 8 200 x 530		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
13.	AFB8A 200 x 530		
14.	AFB9 200 x 530		
15.	AFB10 200 x 530		
16.	AFB11 200 x 530		

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SECOND FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/27

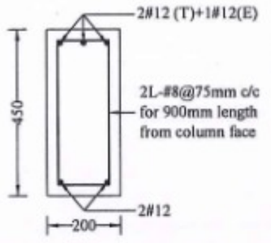
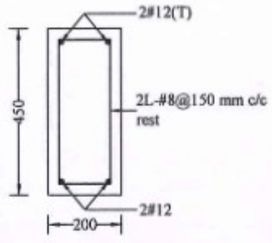
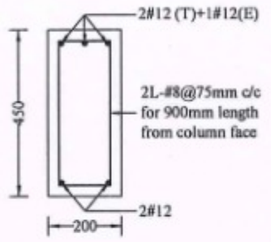
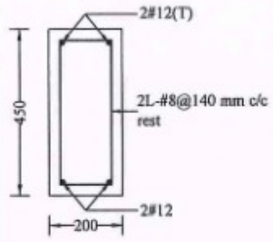
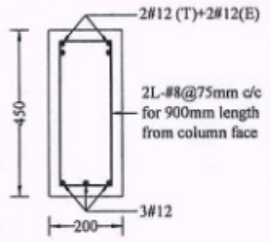
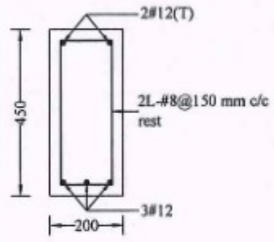
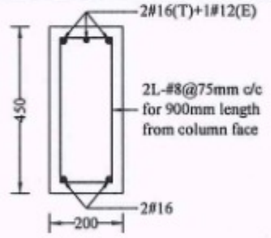
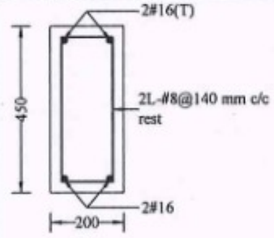
REVISION NO.:

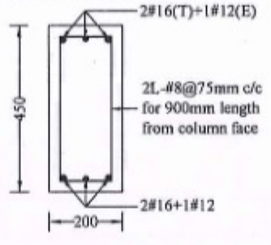
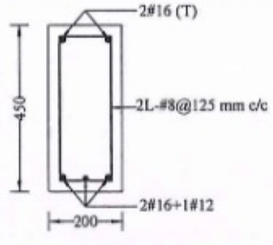
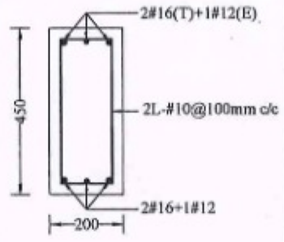
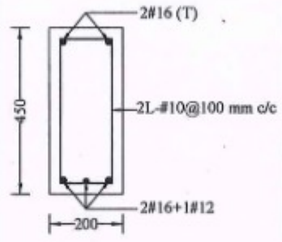
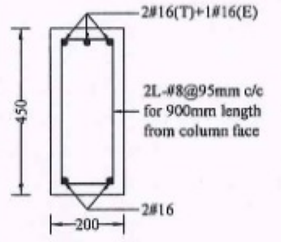
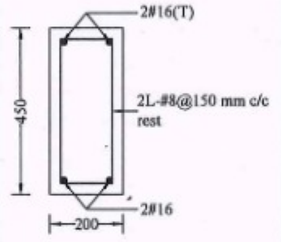
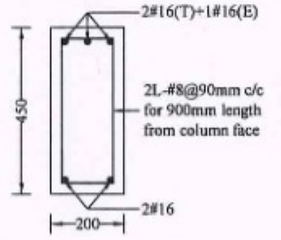
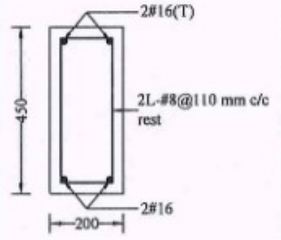
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

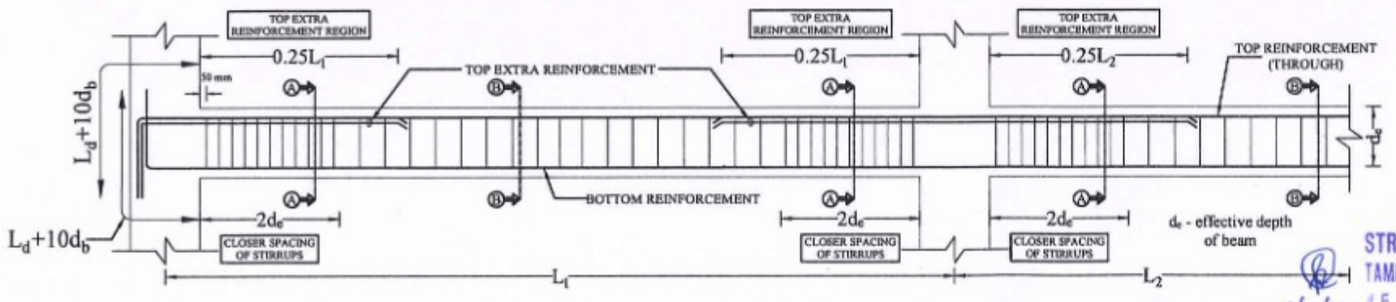
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SECOND FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BFB1 200 x 450		
2.	BFB1A 200 x 450		
3.	BFB2 200 x 450		
4.	BFB3 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BFB4 200 x 450		
6.	BFB4A 200 x 450		
7.	BFB5 200 x 450		
8.	BFB5A 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL
TAMIL NADU URBAN HABITAT DEVELOPMENT B
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SECOND FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/28

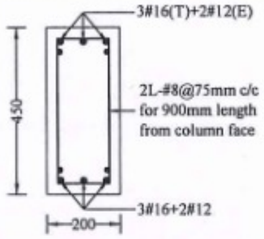
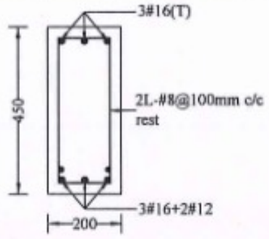
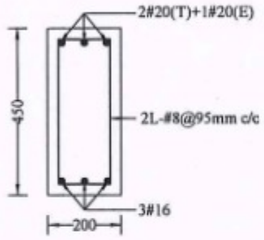
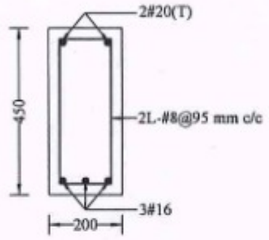
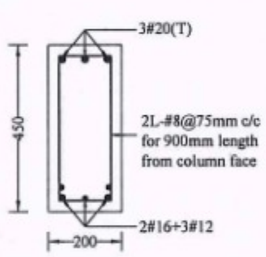
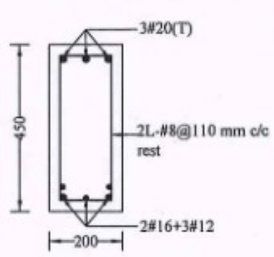
REVISION NO.:

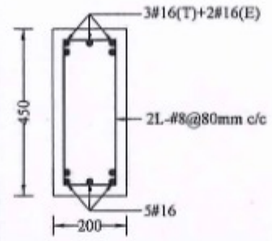
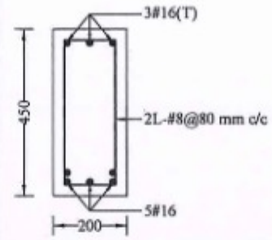
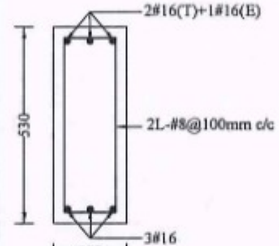
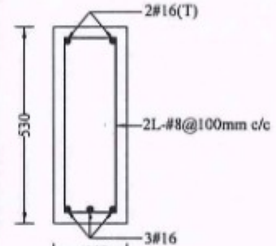
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxx 06/12/2024
Chief Engineer - I

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

SECOND FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	BFB6 200 x 450		
10.	BFB7 200 x 450		
11.	BFB8 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
12.	BFB9 200 x 450		
13.	BFB10 200 x 530		

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 , unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SECOND FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/29

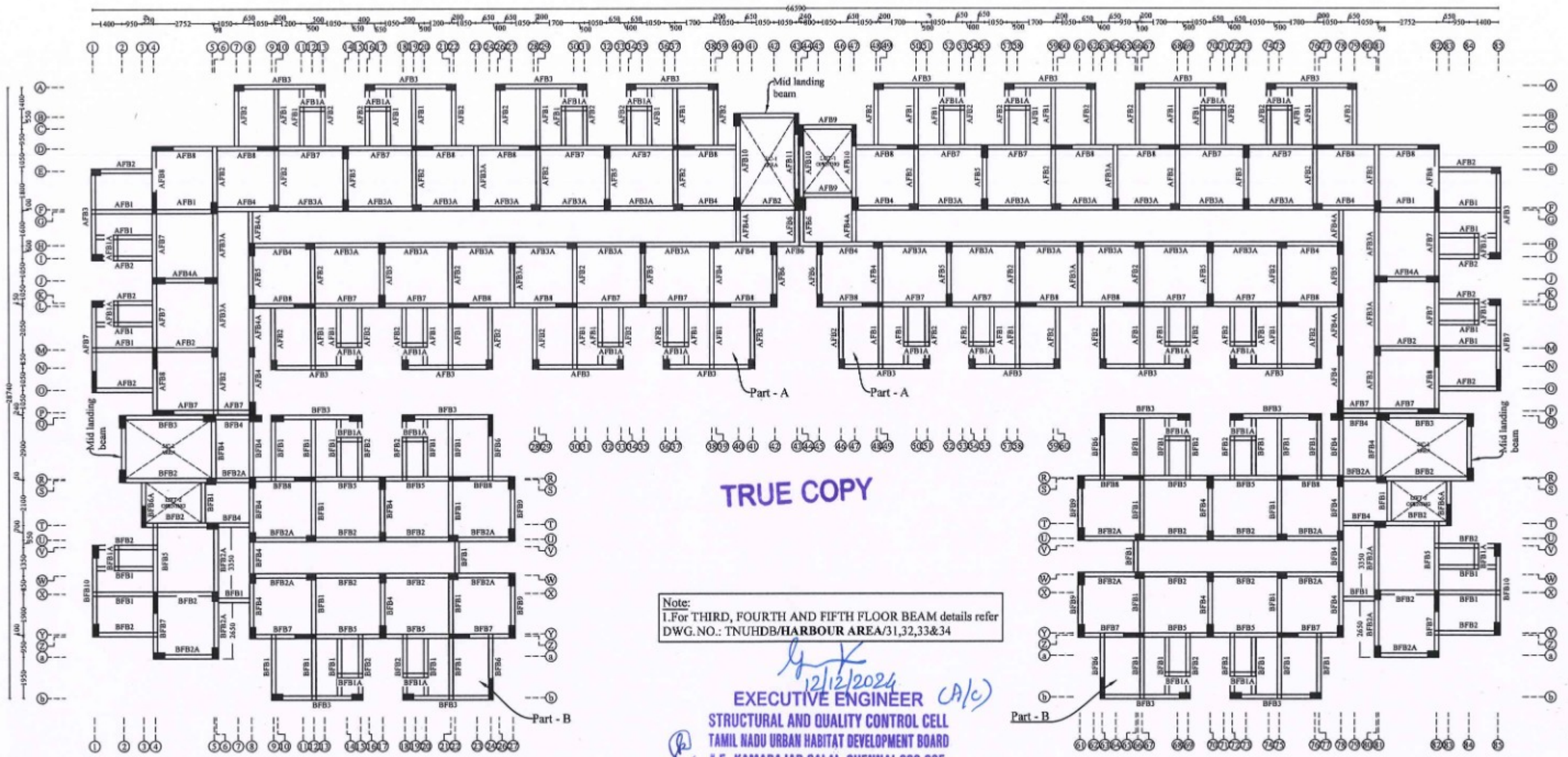
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

THIRD, FOURTH AND FIFTH FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For THIRD, FOURTH AND FIFTH FLOOR BEAM details refer DWG.NO.: TNUHDB/**HARBOUR AREA**/31,32,33&34

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
THIRD, FOURTH AND FIFTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 30.

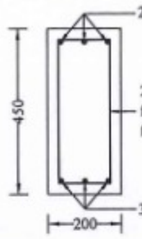
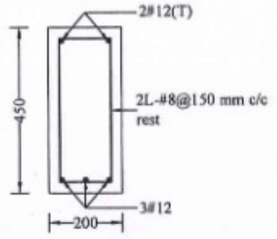
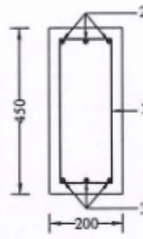
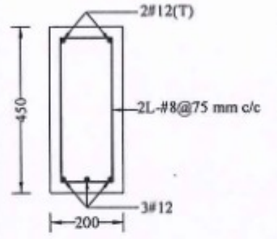
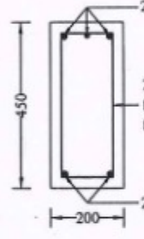
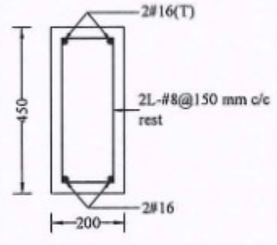
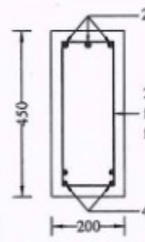
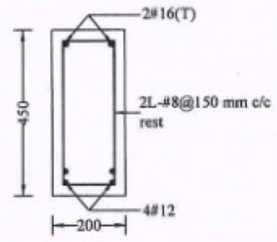
REVISION NO.:

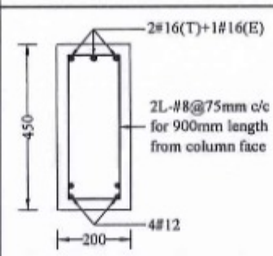
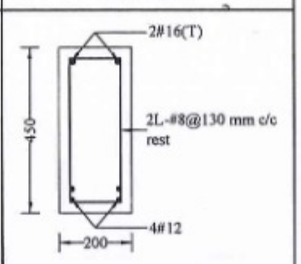
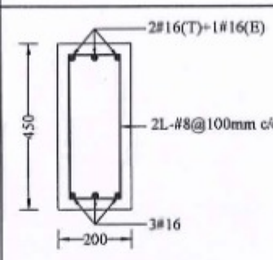
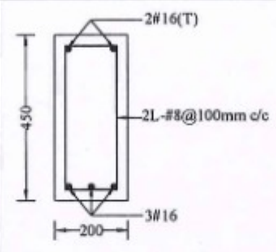
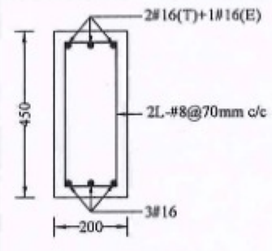
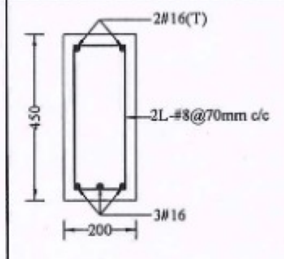
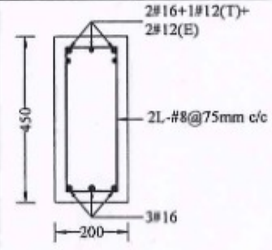
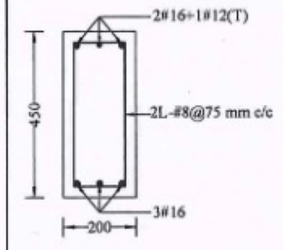
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

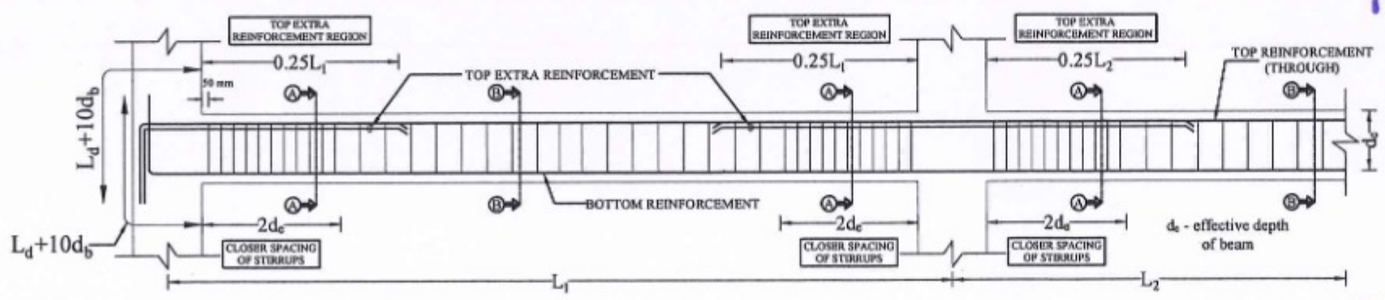
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	AFB1 200 x 450		
2.	AFB1A 200 x 450		
3.	AFB2 200 x 450		
4.	AFB3 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	AFB3A 200 x 450		
6.	AFB4 200 x 450		
7.	AFB4A 200 x 450		
8.	AFB5 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024

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

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade confoming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/31

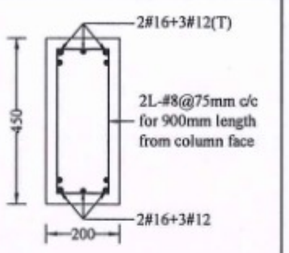
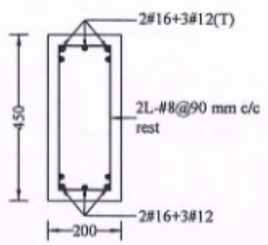
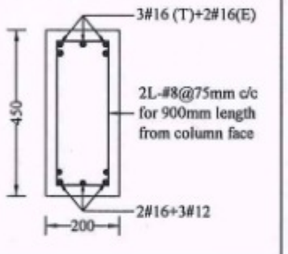
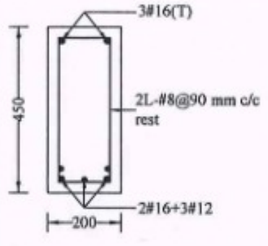
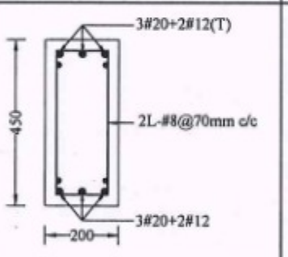
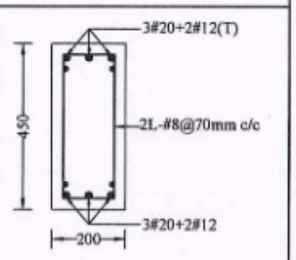
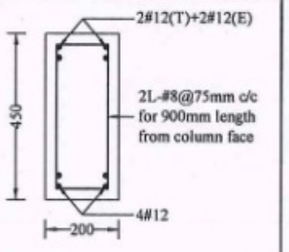
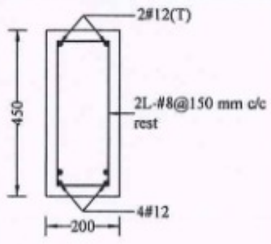
REVISION NO.:

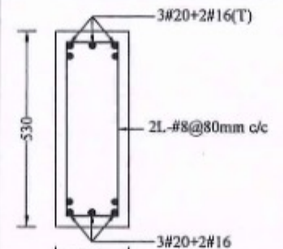
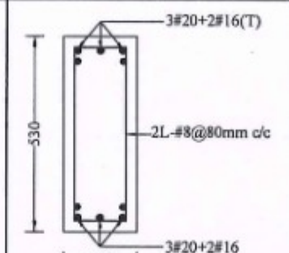
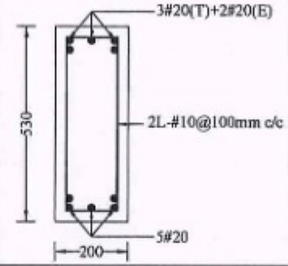
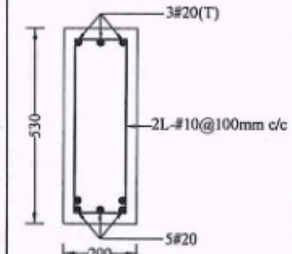
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	AFB6 200 x 450		
10.	AFB7 200 x 450		
11.	AFB8 200 x 450		
12.	AFB9 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
13.	AFB10 200 x 530		
14.	AFB11 200 x 530		

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (I/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/32

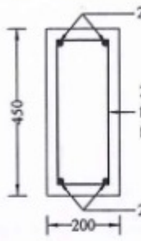
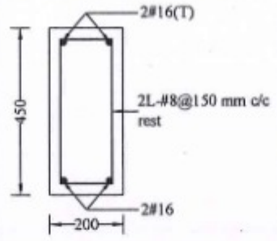
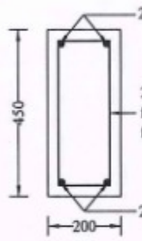
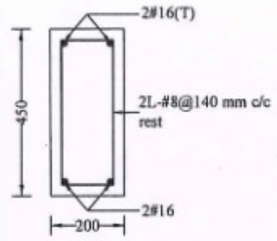
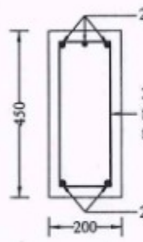
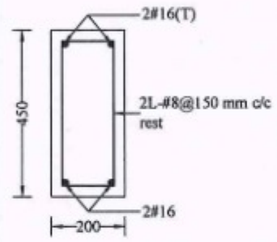
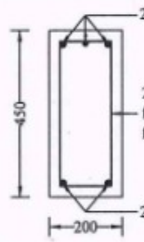
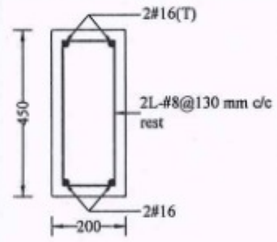
REVISION NO.:

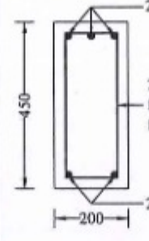
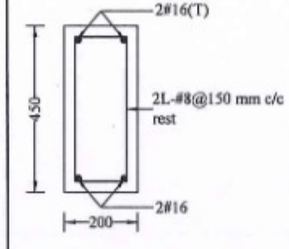
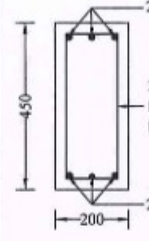
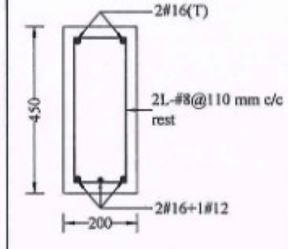
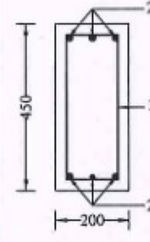
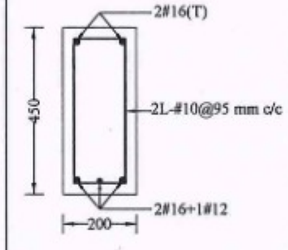
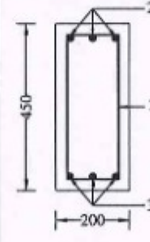
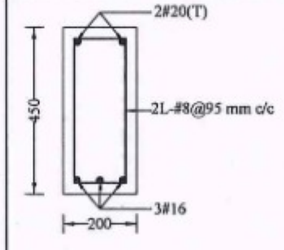
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

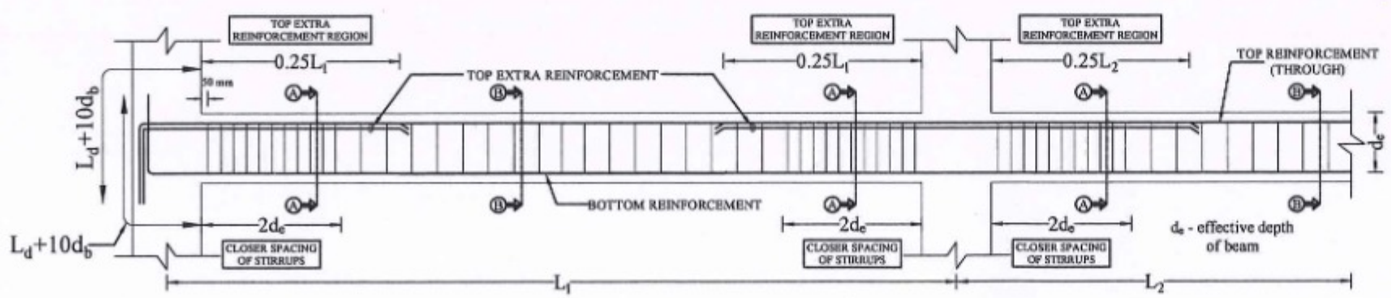
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BFB1 200 x 450		
2.	BFB1A 200 x 450		
3.	BFB2 200 x 450		
4.	BFB2A 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BFB3 200 x 450		
6.	BFB4 200 x 450		
7.	BFB4A 200 x 450		
8.	BFB5 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
12/12/24 # 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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/33

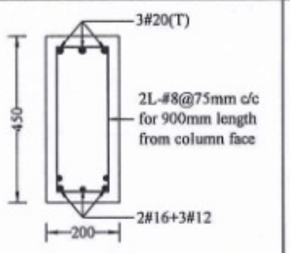
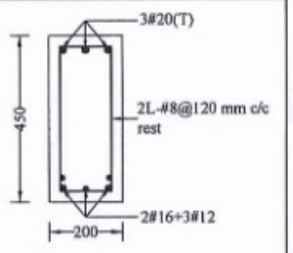
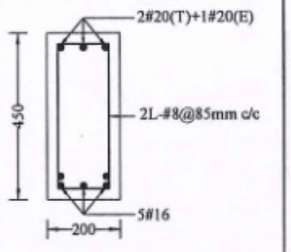
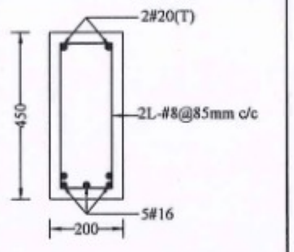
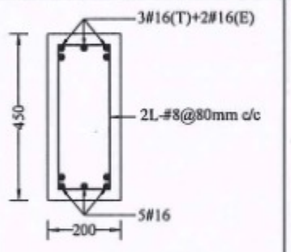
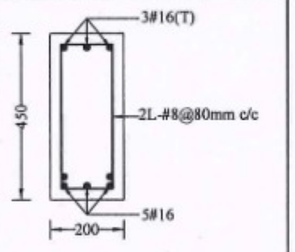
REVISION NO.:

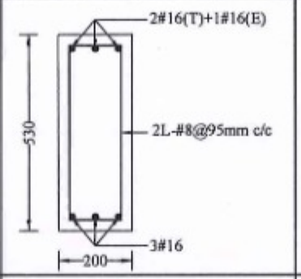
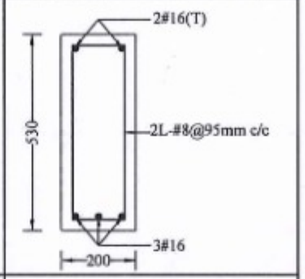
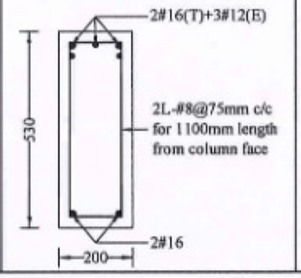
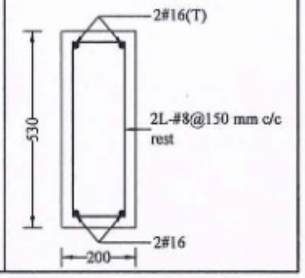
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	BFB6 200 x 450		
10.	BFB7 200 x 450		
11.	BFB8 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
12.	BFB9 200 x 530		
14.	BFB10 200 x 530		

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/C)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
THIRD, FOURTH & FIFTH FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/34

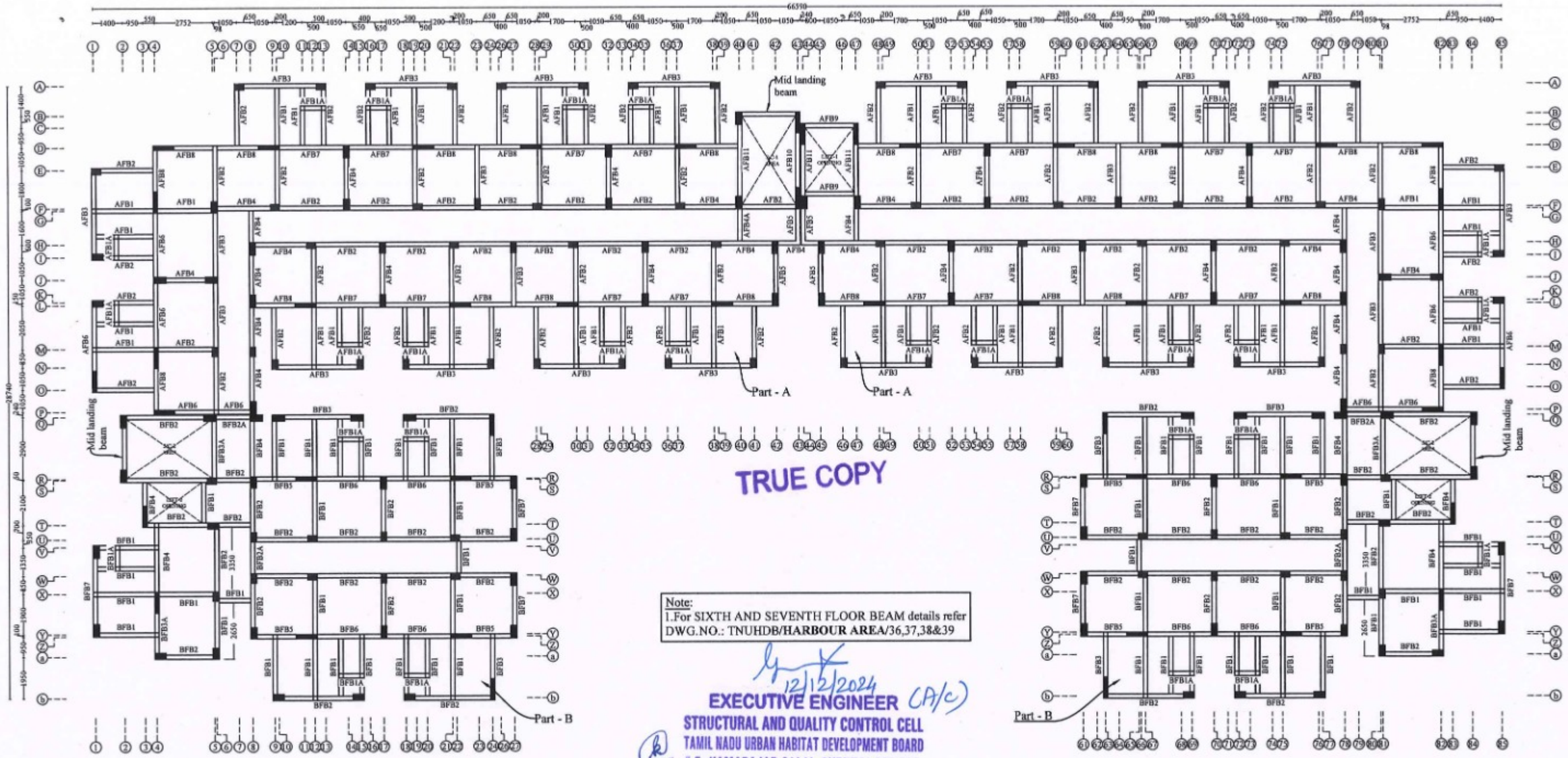
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

SIXTH AND SEVENTH FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For SIXTH AND SEVENTH FLOOR BEAM details refer DWG.NO.: TNUHDB/**HARBOUR AREA**/36,37,38&39

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SIXTH AND SEVENTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 35.

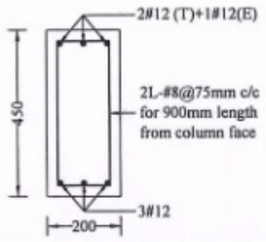
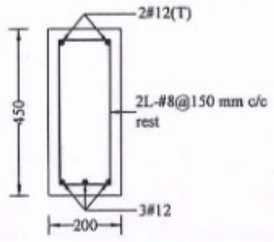
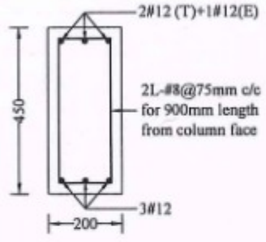
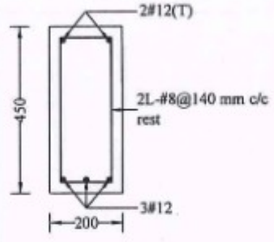
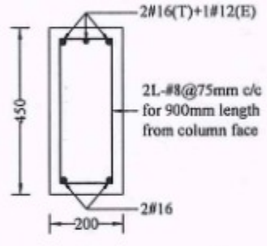
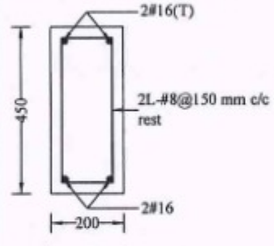
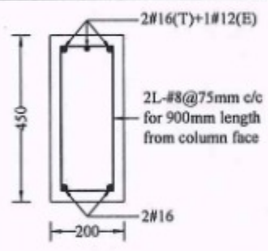
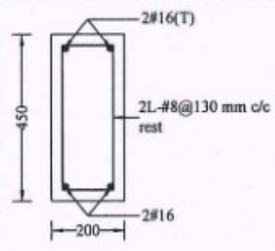
REVISION NO.:

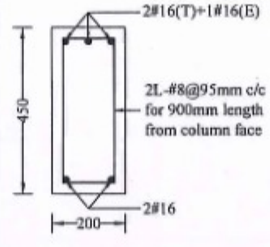
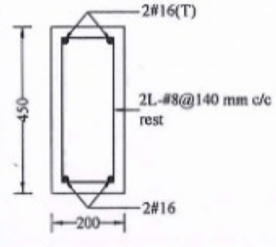
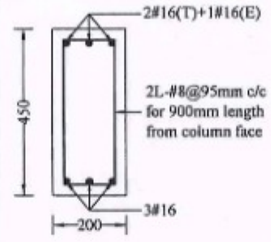
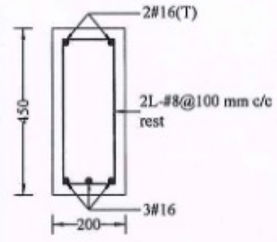
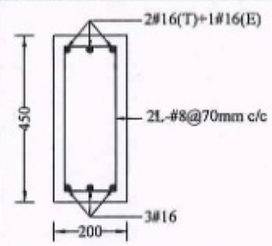
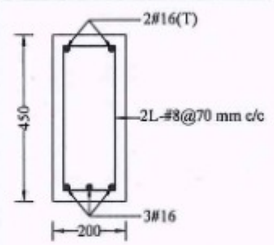
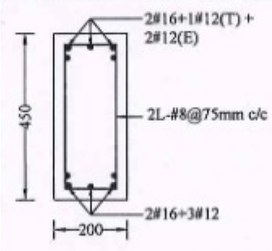
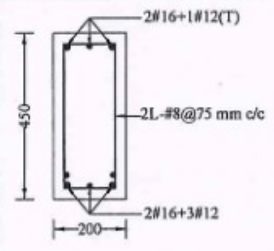
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

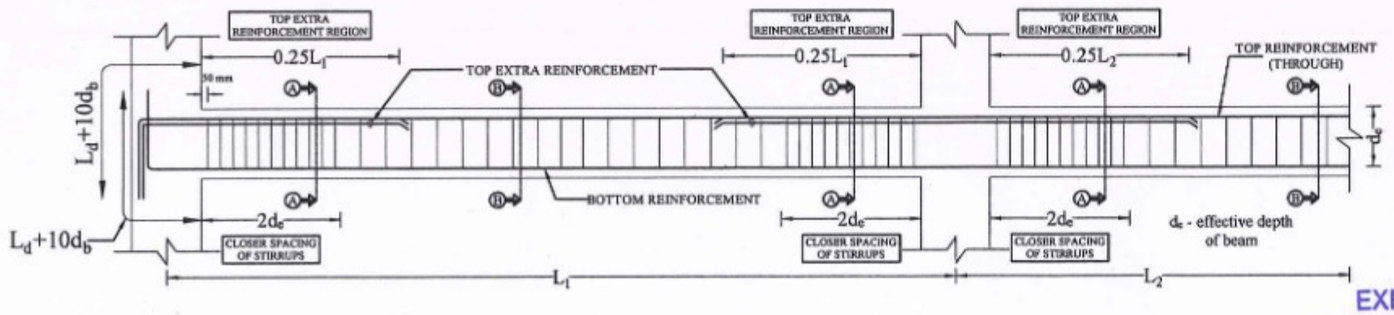
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SIXTH & SEVENTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	AFB1 200 x 450		
2.	AFB1A 200 x 450		
3.	AFB2 200 x 450		
4.	AFB2A 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	AFB3 200 x 450		
6.	AFB4 200 x 450		
7.	AFB4A 200 x 450		
8.	AFB5 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (P/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SIXTH & SEVENTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/36

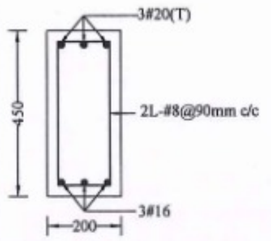
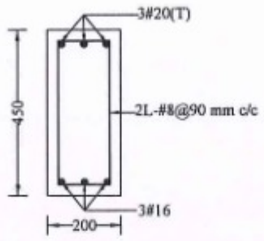
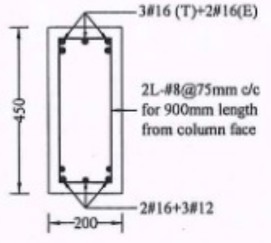
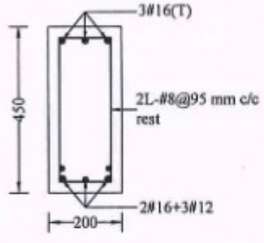
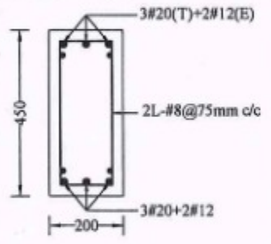
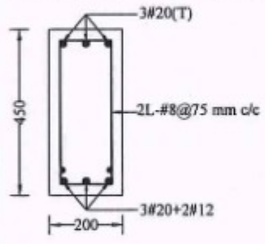
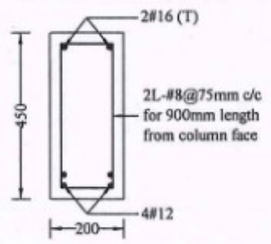
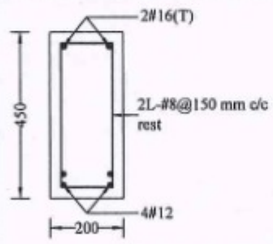
REVISION NO.:

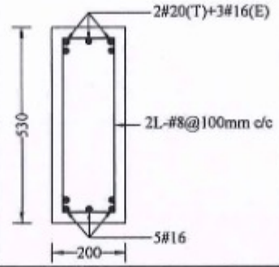
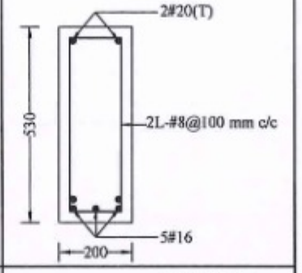
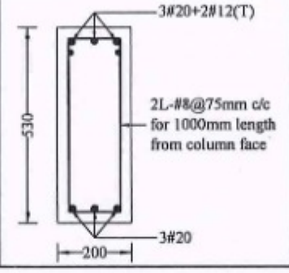
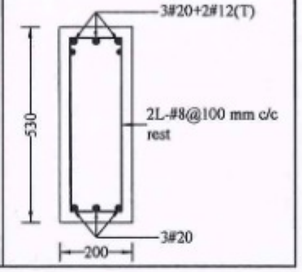
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

SIXTH & SEVENTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	AFB6 200 x 450		
10.	AFB7 200 x 450		
11.	AFB8 200 x 450		
12.	AFB9 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
13.	AFB10 200 x 530		
14.	AFB11 200 x 530		

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SIXTH & SEVENTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/37

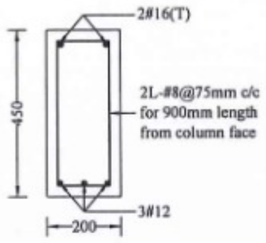
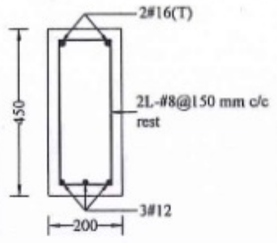
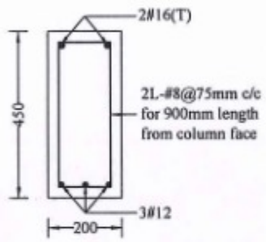
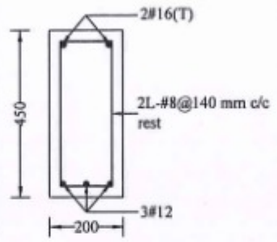
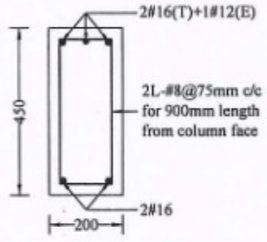
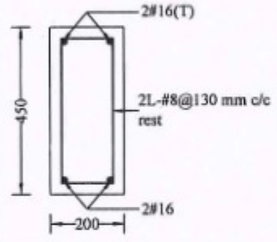
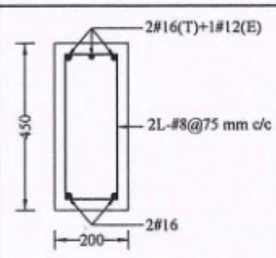
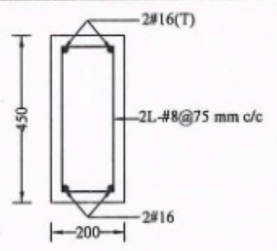
REVISION NO.:

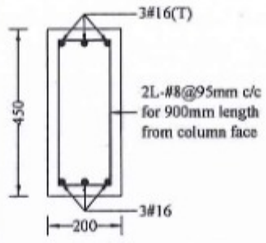
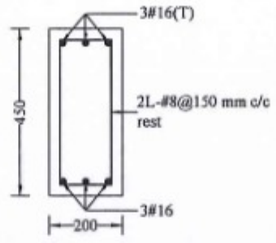
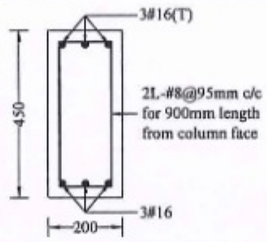
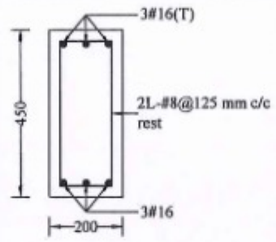
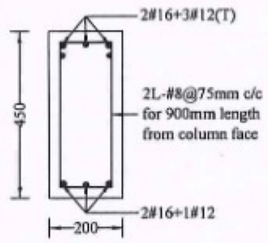
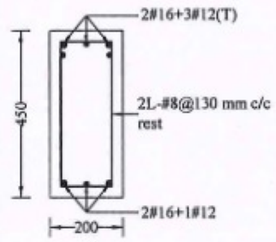
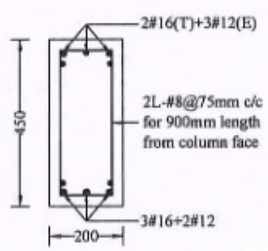
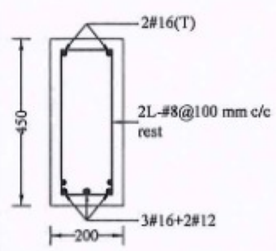
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

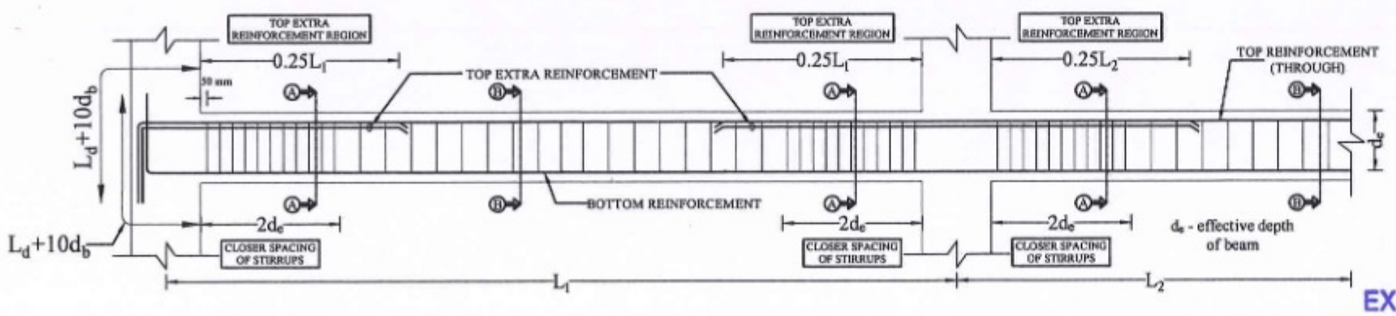
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

SIXTH & SEVENTH FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BFB1 200 x 450		
2.	BFB1A 200 x 450		
3.	BFB2 200 x 450		
4.	BFB2A 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BFB3 200 x 450		
6.	BFB3A 200 x 450		
7.	BFB4 200 x 450		
8.	BFB5 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SIXTH & SEVENTH FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/38

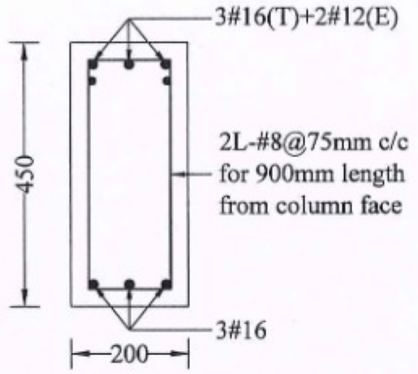
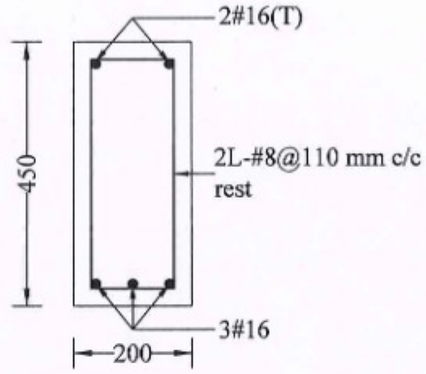
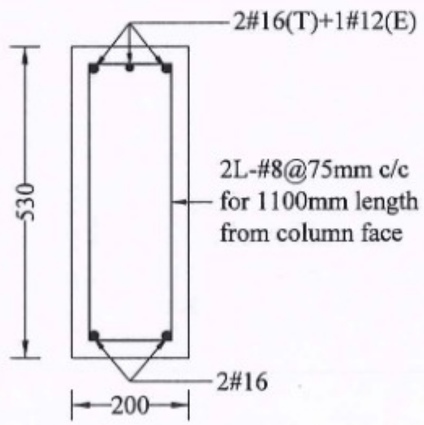
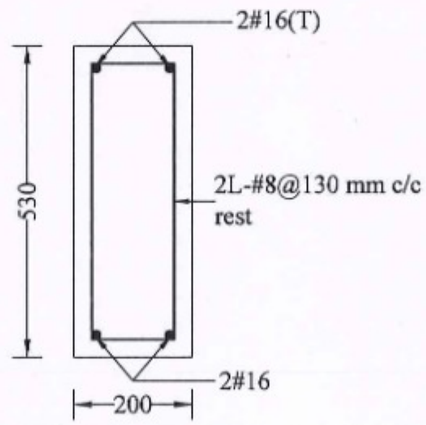
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

SIXTH & SEVENTH FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	BFB6 200 x 450		
10.	BFB7 200 x 530		

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
SIXTH & SEVENTH FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/39

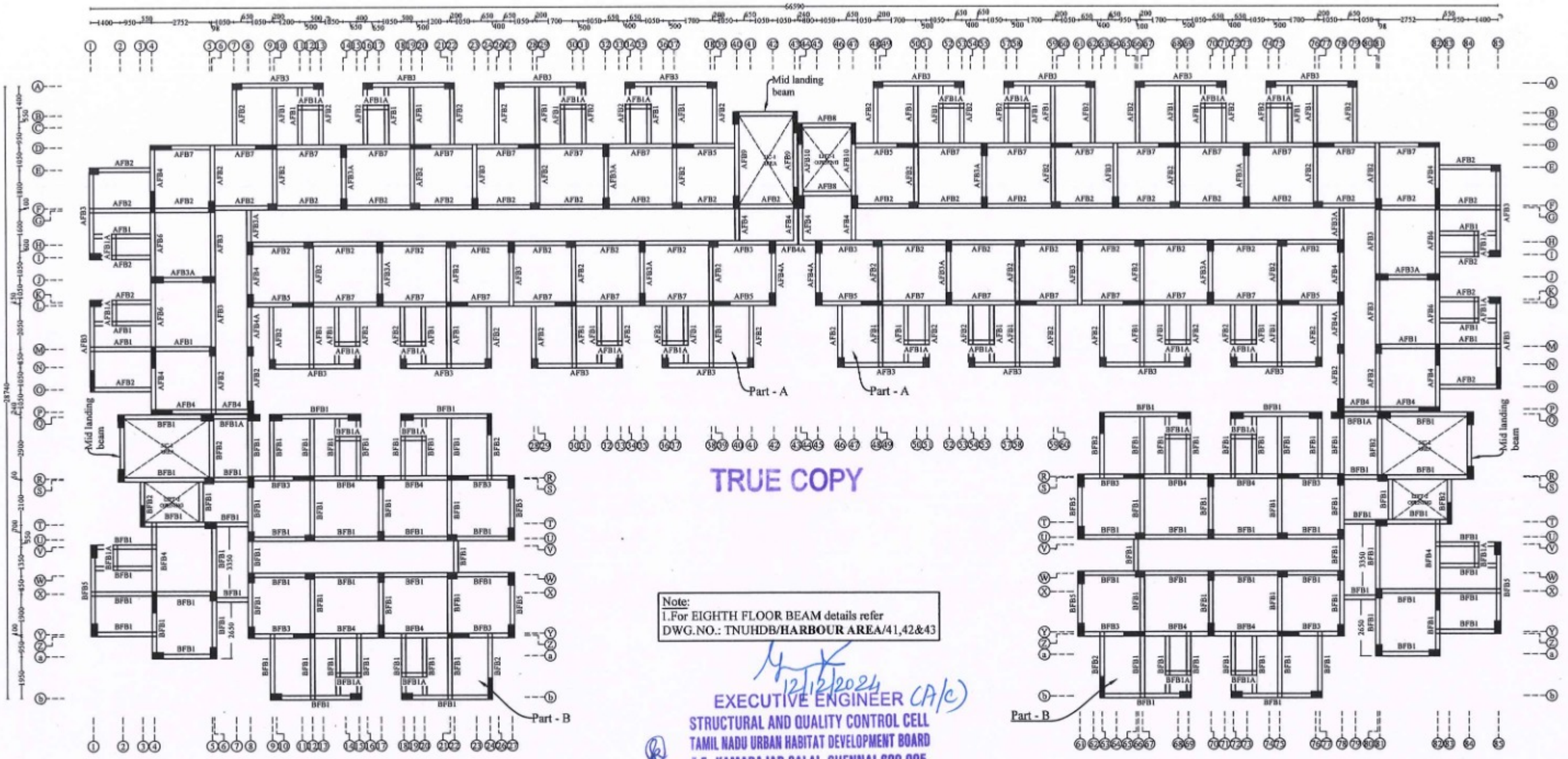
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

EIGHTH FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For EIGHTH FLOOR BEAM details refer
DWG.NO.: TNUHDB/**HARBOUR AREA**/41,42&43

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
EIGHTH FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 40.

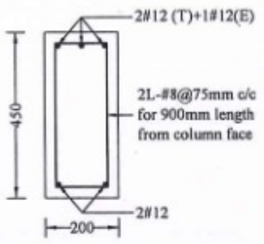
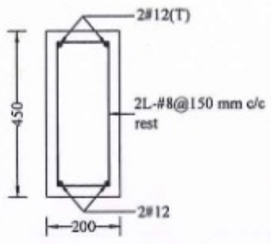
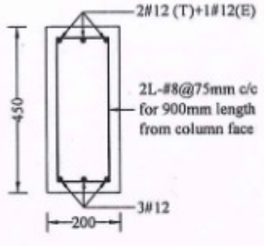
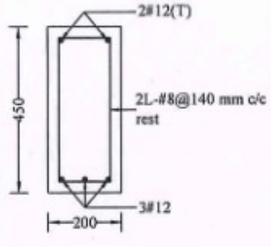
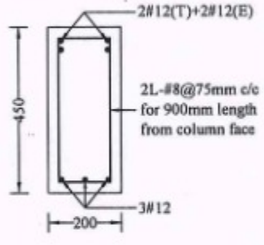
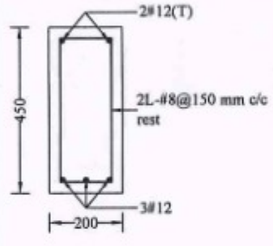
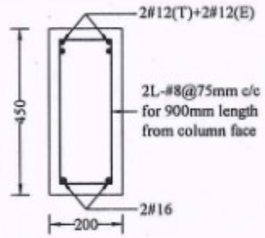
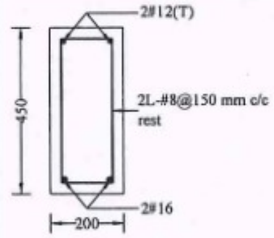
REVISION NO.:

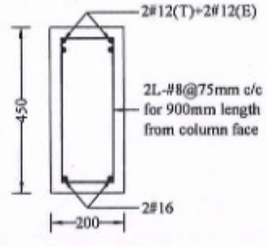
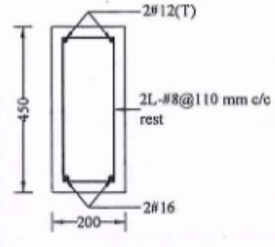
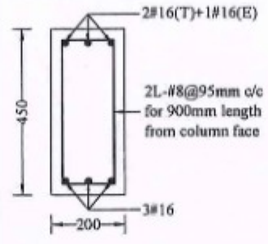
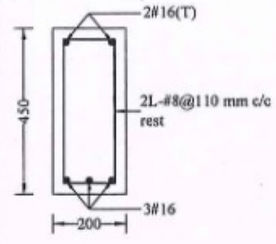
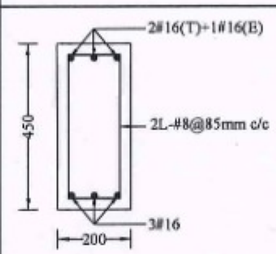
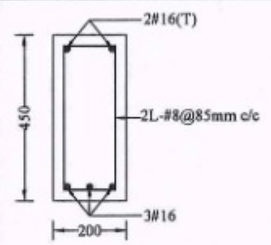
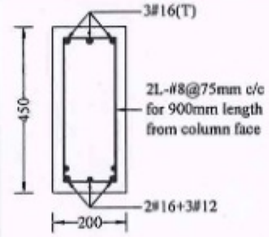
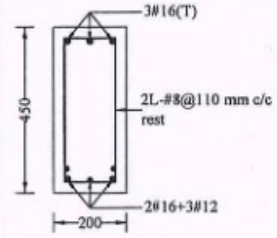
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

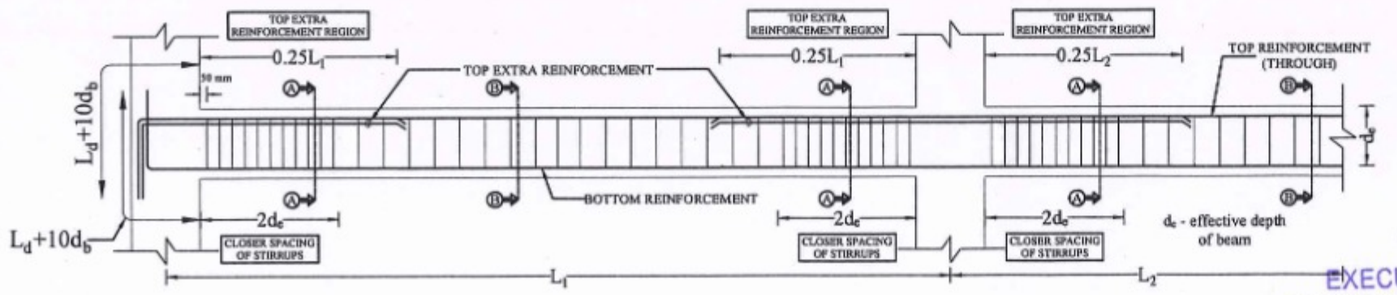
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

EIGHTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	AFB1 200 x 450		
2.	AFB1A 200 x 450		
3.	AFB2 200 x 450		
4.	AFB3 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	AFB3A 200 x 450		
6.	AFB4 200 x 450		
7.	AFB4A 200 x 450		
8.	AFB5 200 x 450		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
EIGHTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/41

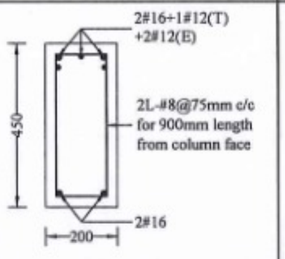
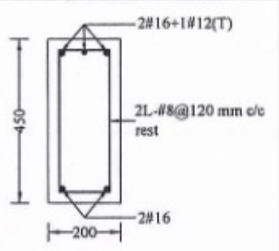
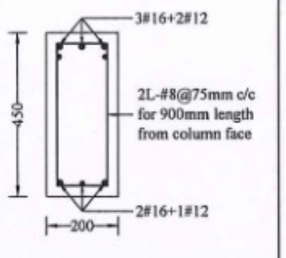
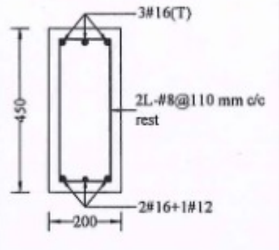
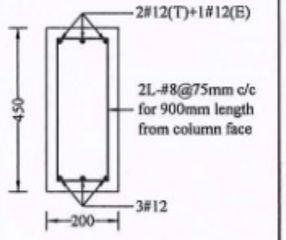
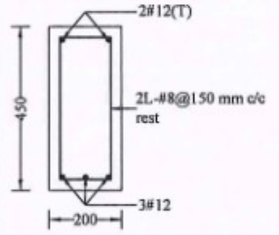
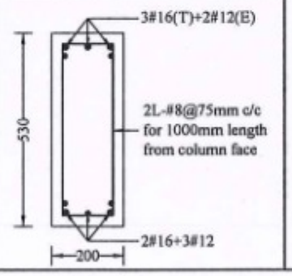
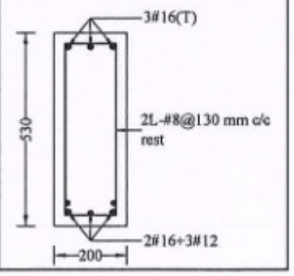
REVISION NO.:

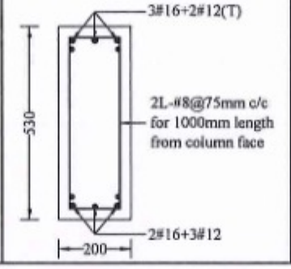
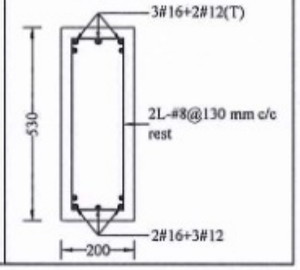
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

EIGHTH FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
9.	AFB6 200 x 450		
10.	AFB7 200 x 450		
11.	AFB8 200 x 450		
12.	AFB9 200 x 530		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
13.	AFB10 200 x 530		

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
EIGHTH FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/42

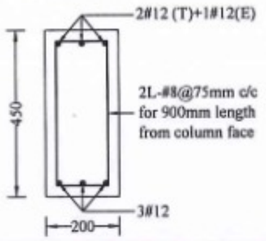
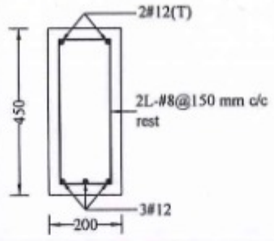
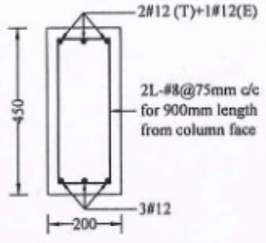
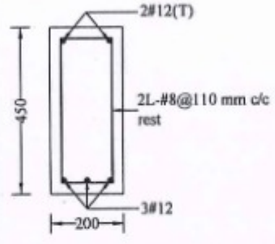
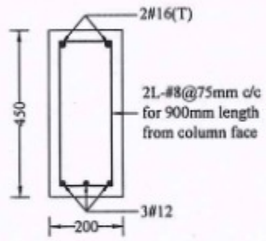
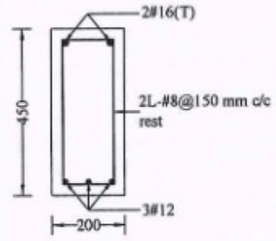
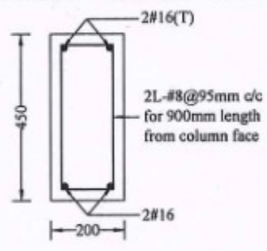
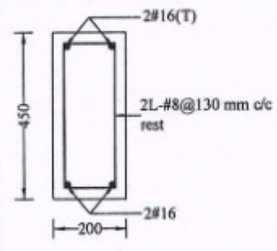
REVISION NO.:

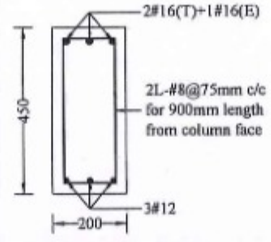
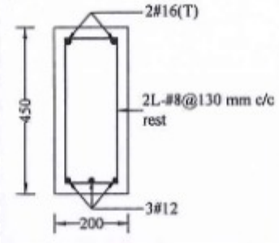
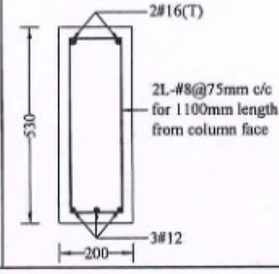
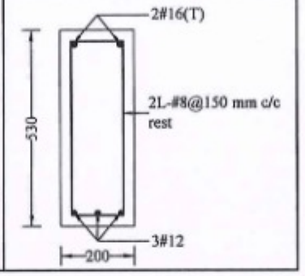
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

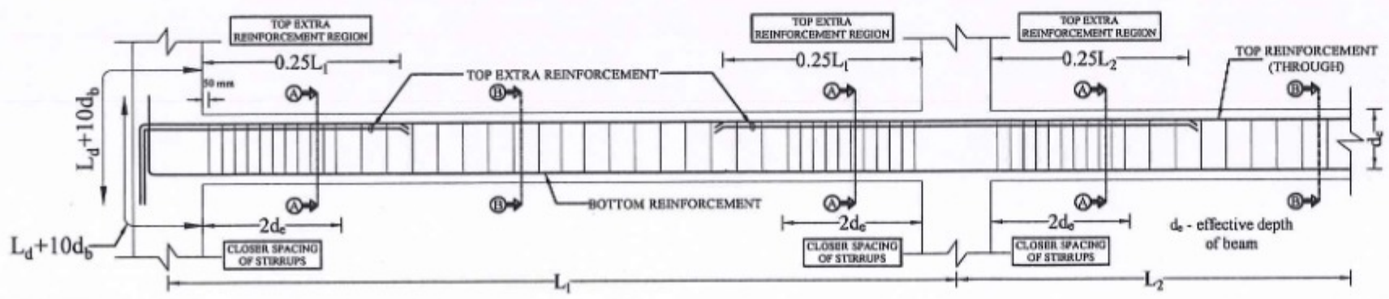
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

EIGHTH FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BFB1 200 x 450		
2.	BFB1A 200 x 450		
3.	BFB2 200 x 450		
4.	BFB3 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BFB4 200 x 450		
6.	BFB5 200 x 530		

TYPICAL CURTAILMENT & STIRRUPS DETAILS



TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/C)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for **(S+9)** floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
EIGHTH FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/43

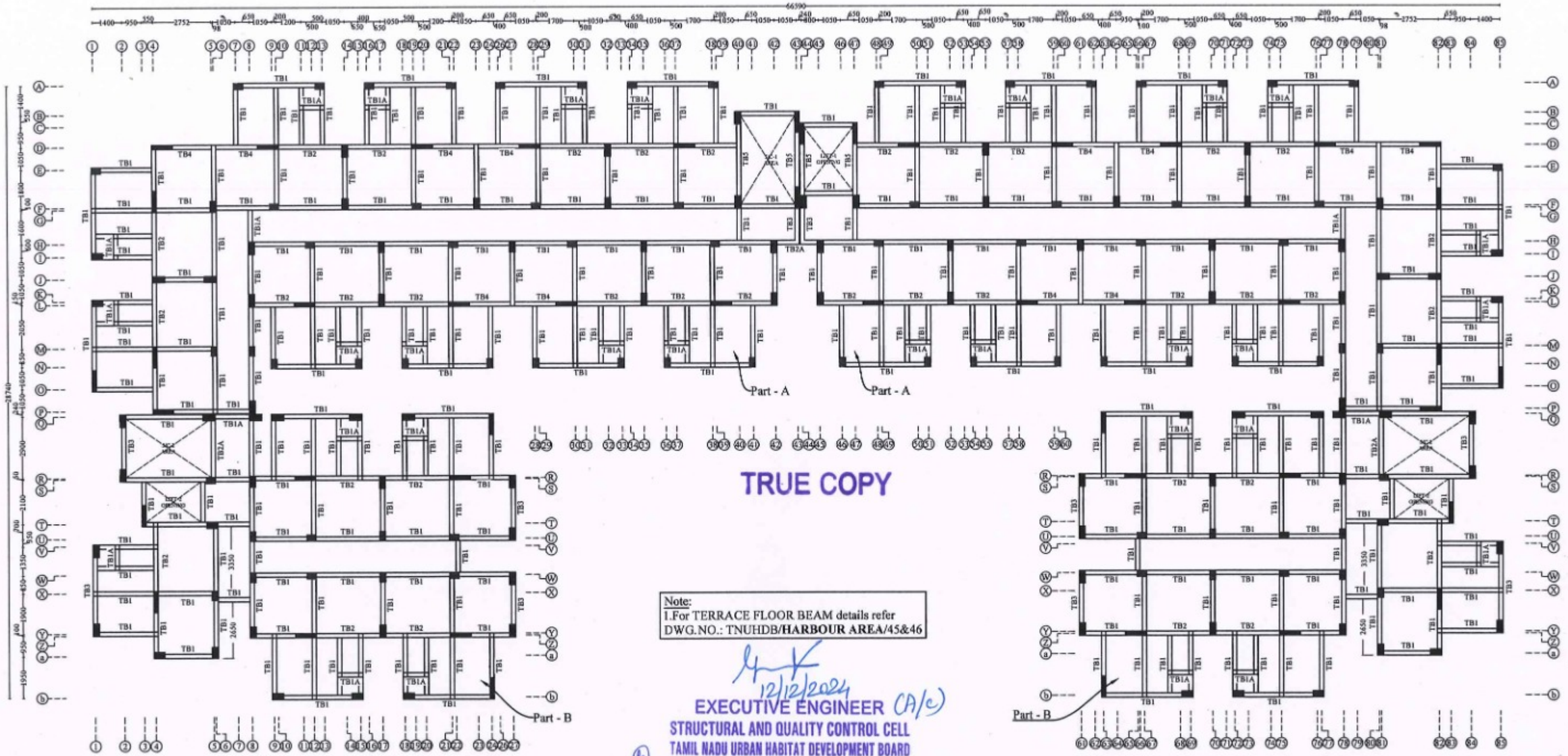
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxx 06/12/2024
Chief Engineer - I

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

TERRACE FLOOR BEAM LAYOUT



TRUE COPY

Note:
1.For TERRACE FLOOR BEAM details refer DWG.NO.: TNUHDB/**HARBOUR AREA/45&46**

12/12/2024
EXECUTIVE ENGINEER (A/c)
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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TERRACE FLOOR BEAM LAYOUT.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 44.

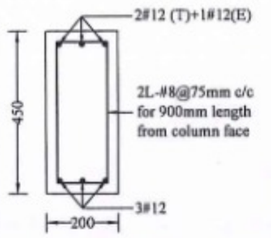
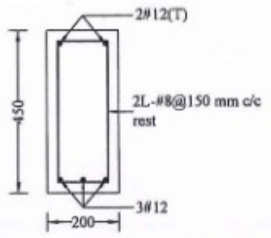
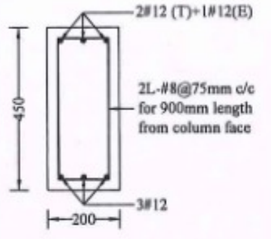
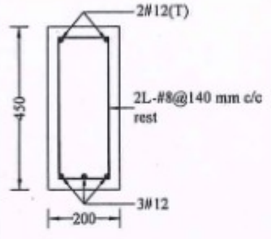
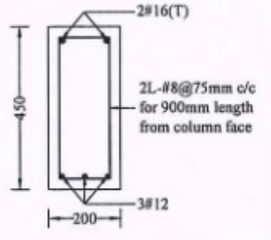
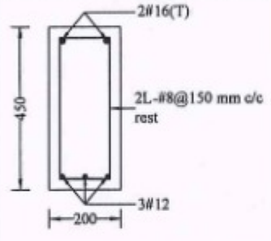
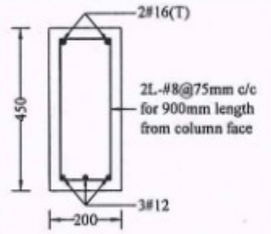
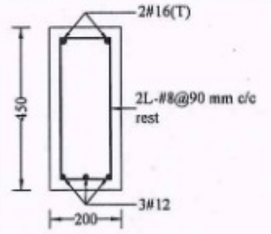
REVISION NO.:

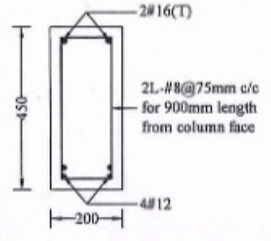
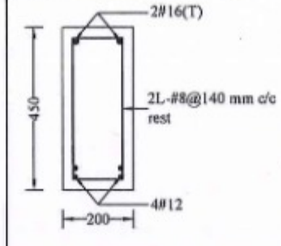
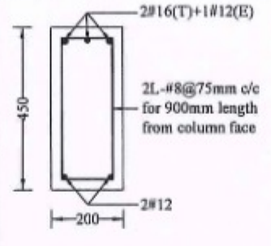
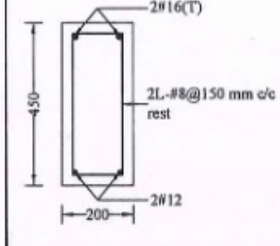
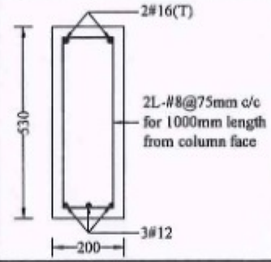
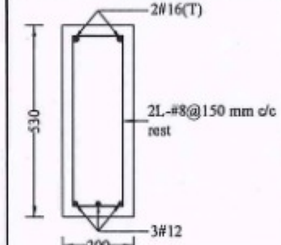
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

TERRACE FLOOR BEAM DETAILS PART-A

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	ATB1 200 x 450		
2.	ATB1A 200 x 450		
3.	ATB2 200 x 450		
4.	ATB2A 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	ATB3 200 x 450		
6.	ATB4 200 x 450		
7.	ATB5 200 x 530		

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

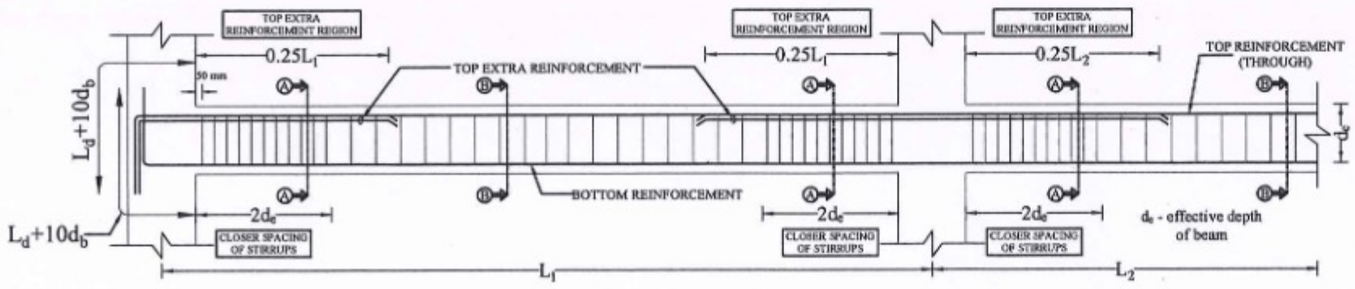
STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

TYPICAL CURTAILMENT & STIRRUPS DETAILS



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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TERRACE FLOOR BEAM DETAILS PART-A.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/45

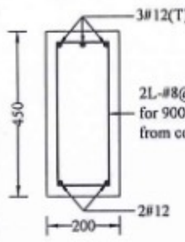
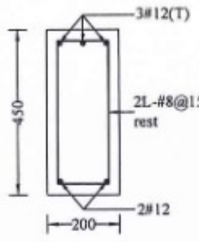
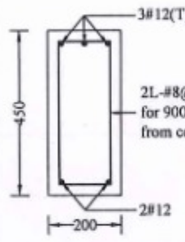
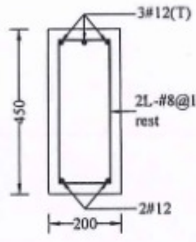
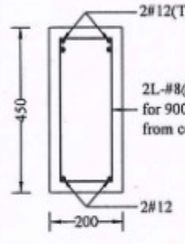
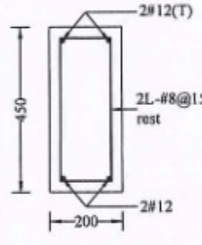
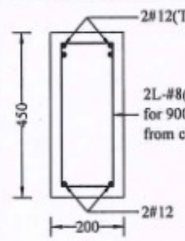
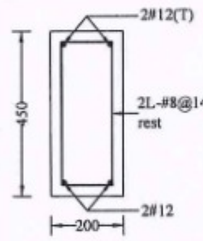
REVISION NO.:

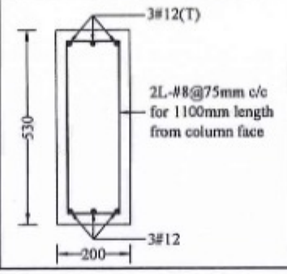
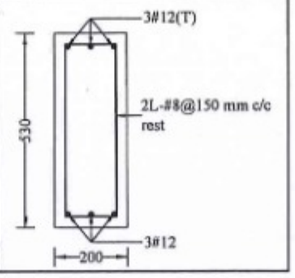
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

TERRACE FLOOR BEAM DETAILS PART-B

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
1.	BTB1 200 x 450		
2.	BTB1A 200 x 450		
3.	BTB2 200 x 450		
4.	BTB2A 200 x 450		

Sl. No	Beam Notation & Size (mm x mm)	SECTION ALONG A-A (SUPPORT)	SECTION ALONG B-B (SPAN)
5.	BTB3 200 x 530		

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

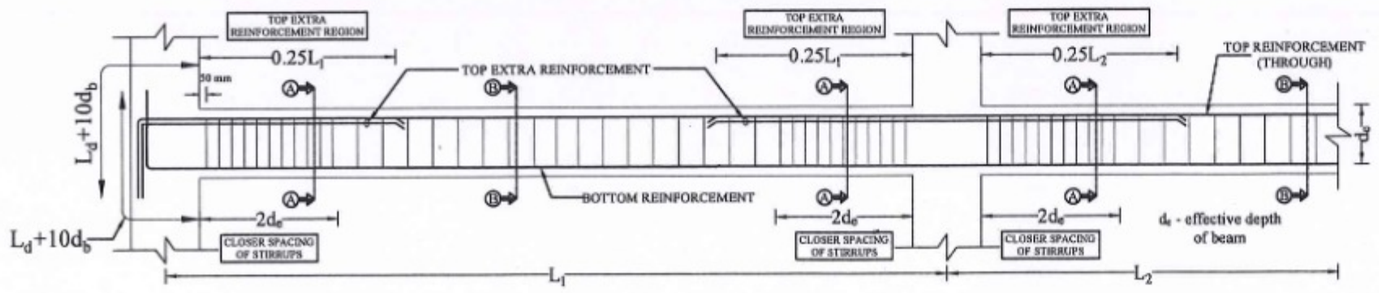
STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

TYPICAL CURTAILMENT & STIRRUPS DETAILS



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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc., unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TERRACE FLOOR BEAM DETAILS PART-B.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/**HARBOUR AREA**/46

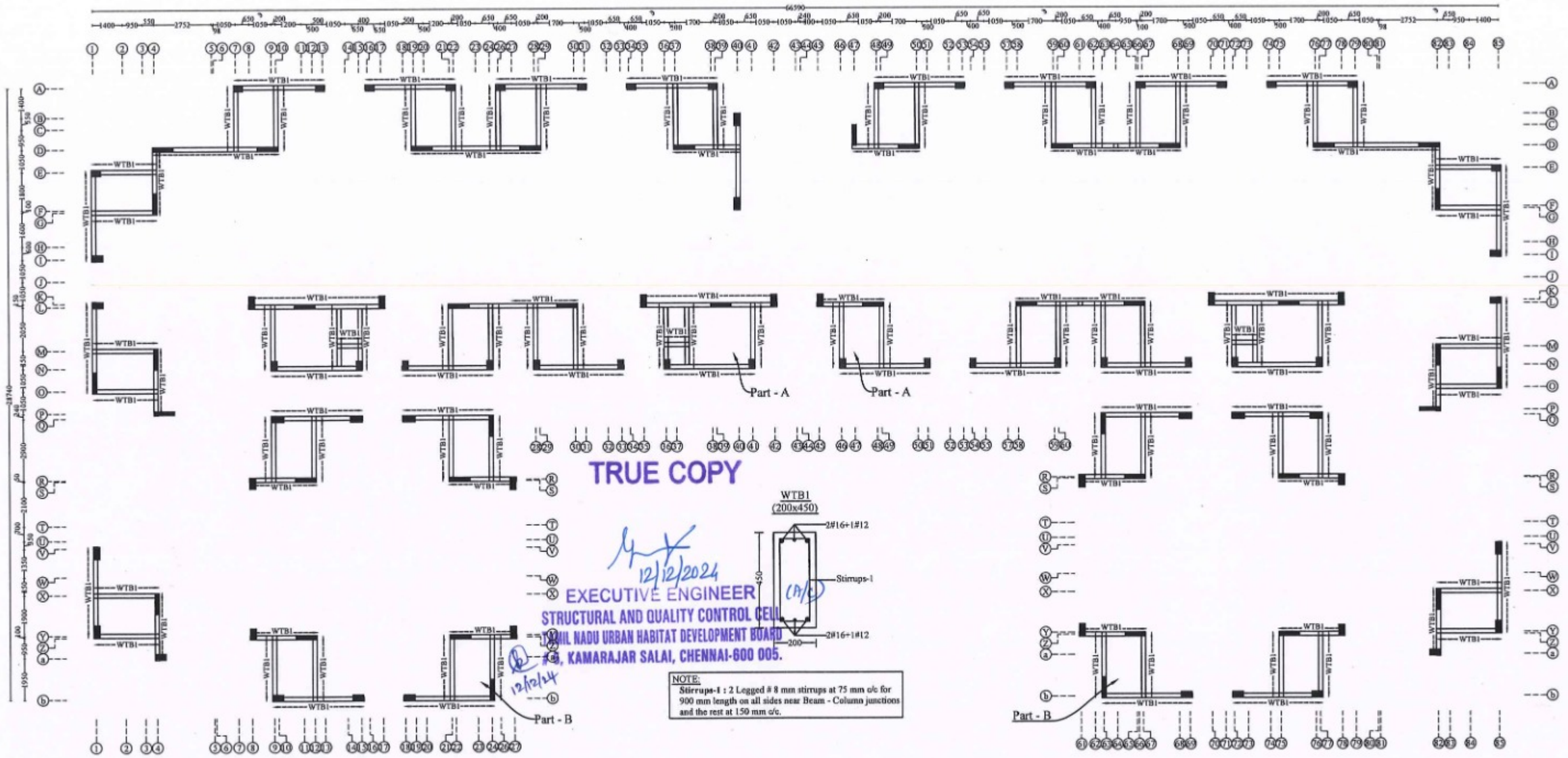
REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

sdxxxx 06/12/2024
Chief Engineer - I

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

WATER TANK BEAM LAYOUT & DETAILS



WTB1
(200x450)

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.

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
WATER TANK BEAM LAYOUT & DETAILS.

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 47.

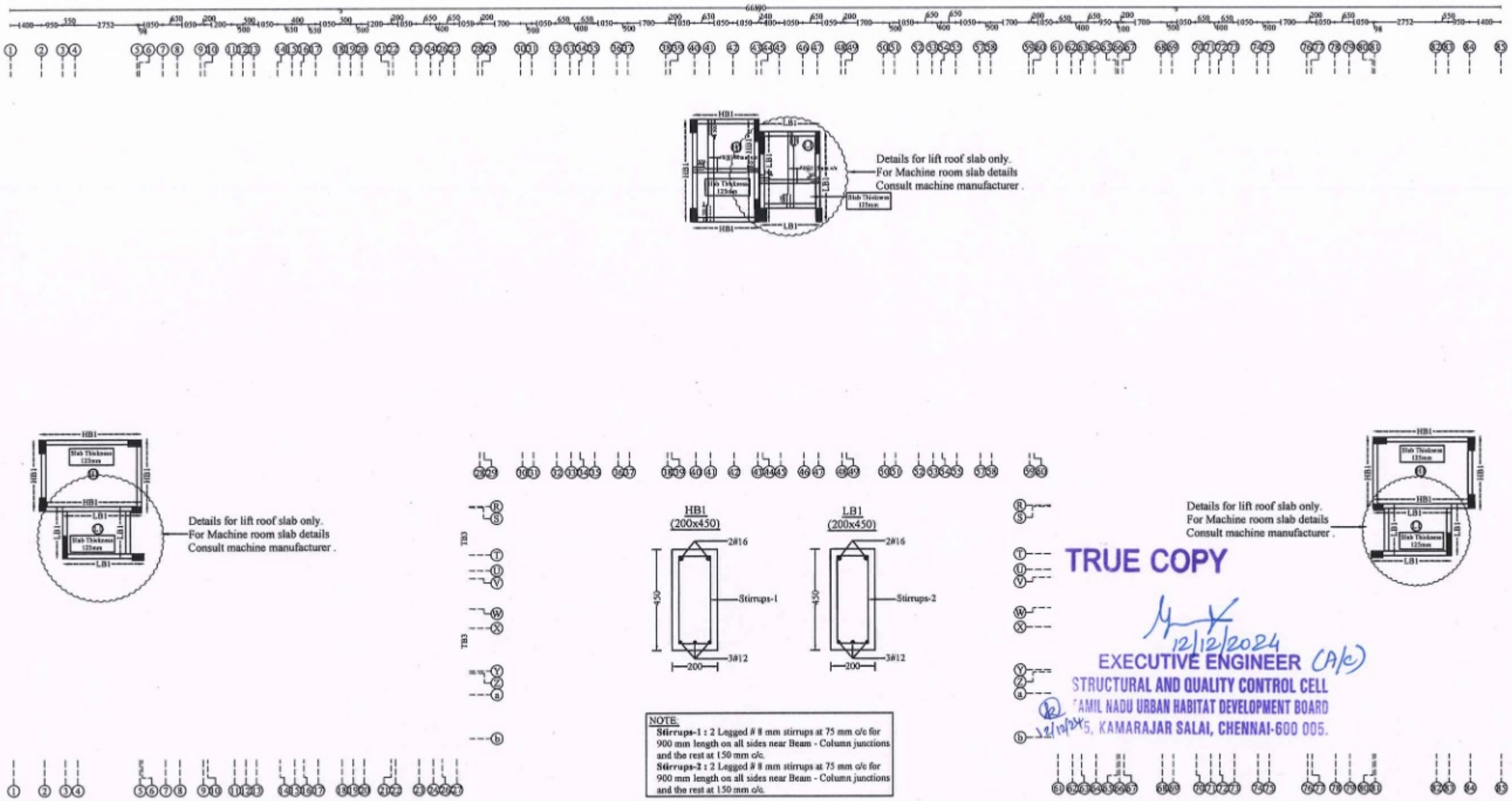
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxxx 06/12/24
Chief Engineer-I

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

HEAD ROOM AND LIFT ROOM BEAM LAYOUT AND 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 75 mm c/c for 900 mm length on all sides near Beam - Column junctions and the rest at 150 mm c/c.

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
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 **M30** grade, conforming to IS: 456 - 2000.
4. All the reinforcement shall be of **Fe550D** grade conforming to IS 1786 - 2008 unless noted otherwise.
5. The structure is designed for seismic zone III as per IS 1893:2016 and detailed as per IS13920:2016.
6. Flyash 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.
7. Structure is designed for (S+9) floors only.
8. Design of the structure carried out with Limit State Method.
9. Bored Cast-in-situ piles of 450 & 500 mm diameter shall be adopted with the minimum length of pile of 31 m to 34 m from the Existing Ground Level (EGL) & The axial capacity of pile 450 & 500 mm is 1200 kN and 1500 kN as recommended in Soil Report.
10. Analysis of the structure done with **ETABS**.
11. Clear cover for reinforcement are as follows:
    (a) Pile & Pile Cap - 60 mm
    (b) Column/Shear wall - 40 mm
    (c) Floor and roof beam - 30 mm
    (d) Slab - 25 mm
    (e) Water Tank Walls & 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. 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.
18. Ground water quality has to be conformed for suitability to construction work.
19. The ground water / soil to be tested for chlorides & sulphate and remedial measures if any should be taken accordingly.
20. Dimensions and levels are to unfinished surface excluding finishes,coating etc,. unless noted otherwise. The dimension should be checked with type design drawing.
21. The Recommendations in the Soil Report ANNA UNIVERSITY Job No: SM&FE214/Consultancy/2022, Dt: 09.02.2022 should be followed scrupulously.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

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

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / 48.

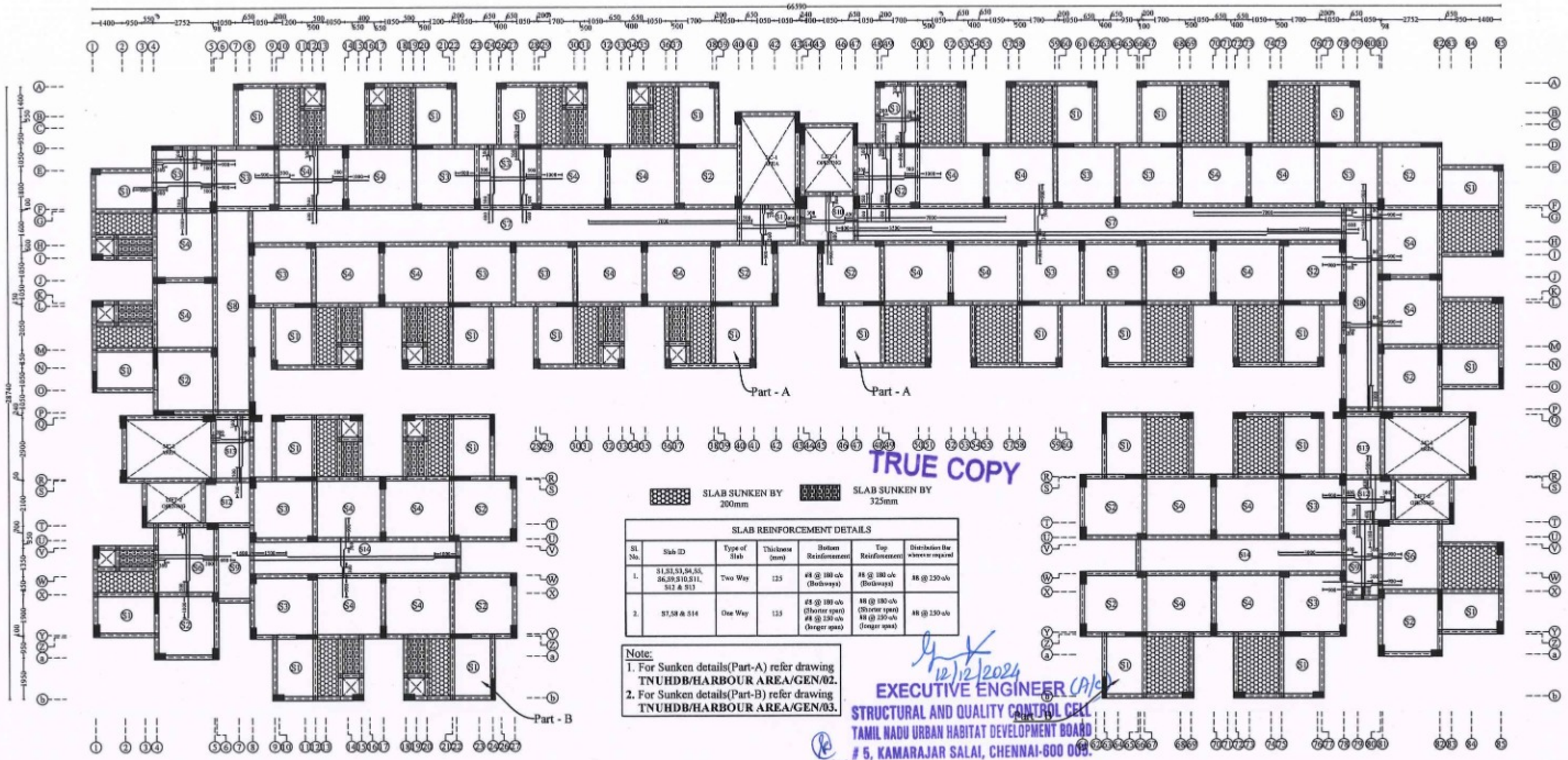
REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

sdxxx 06/12/24
Chief Engineer-I

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

STILT FLOOR SLAB DETAILS



SLAB SUNKEN BY 200mm

SLAB SUNKEN BY 325mm

SLAB REINFORCEMENT DETAILS

Sl. No.	Slab ID	Type of Slab	Thickness (mm)	Bottom Reinforcement	Top Reinforcement	Distribution Bar wherever required
1.	S1,S2,S3,S4,S5, S6,S9,S10,S11, S12 & S13	Two Way	125	#8 @ 180 c/c (Both ways)	#8 @ 180 c/c (Both ways)	#8 @ 250 c/c
2.	S7,S8 & S14	One Way	125	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (longer span)	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (longer span)	#8 @ 250 c/c

Note:
1. For Sunken details(Part-A) refer drawing **TNUHDB/HARBOUR AREA/GEN/02.**
2. For Sunken details(Part-B) refer drawing **TNUHDB/HARBOUR AREA/GEN/03.**

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
STILT FLOOR SLAB DETAILS.

TYPE DESIGN NO.: 30/2021

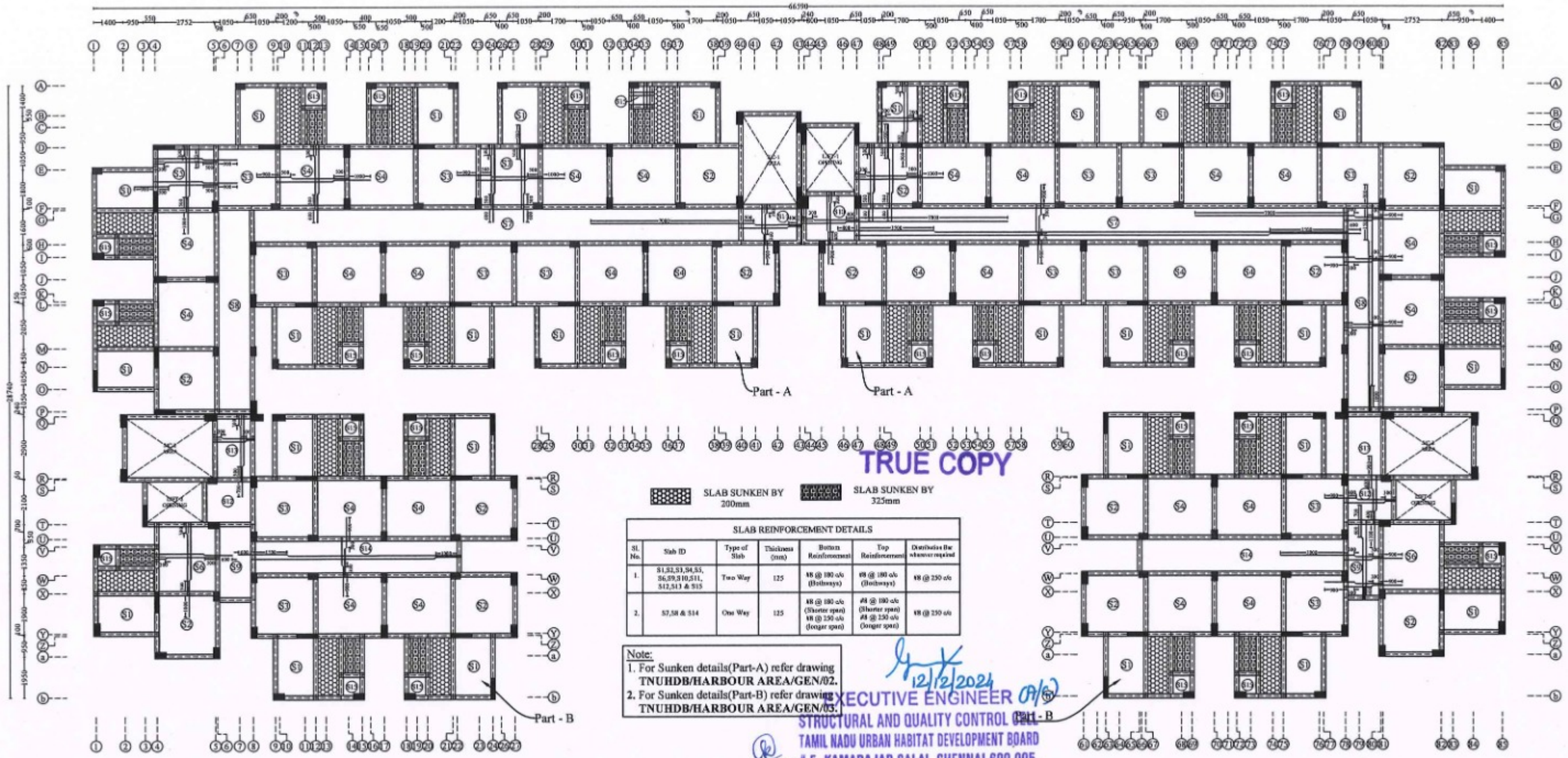
DWG.NO.: TNUHDB / HARBOUR AREA / 49.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

FIRST FLOOR SLAB DETAILS



SLAB SUNKEN BY 200mm

SLAB SUNKEN BY 325mm

SLAB REINFORCEMENT DETAILS

Sl. No.	Slab ID	Type of Slab	Thickness (mm)	Bottom Reinforcement	Top Reinforcement	Distribution Bar wherever required
1.	S1,S2,S3,S4,S5, S6,S9,S10,S11, S12,S13 & S15	Two Way	125	#8 @ 180 c/c (Both ways)	#8 @ 180 c/c (Both ways)	#8 @ 250 c/c
2.	S7,S8 & S14	One Way	125	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (longer span)	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (longer span)	#8 @ 250 c/c

Note:
1. For Sunken details(Part-A) refer drawing **TNUHDB/HARBOUR AREA/GEN/02.**
2. For Sunken details(Part-B) refer drawing **TNUHDB/HARBOUR AREA/GEN/03.**

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER 04/0
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
FIRST FLOOR SLAB DETAILS.

TYPE DESIGN NO.: 30/2021

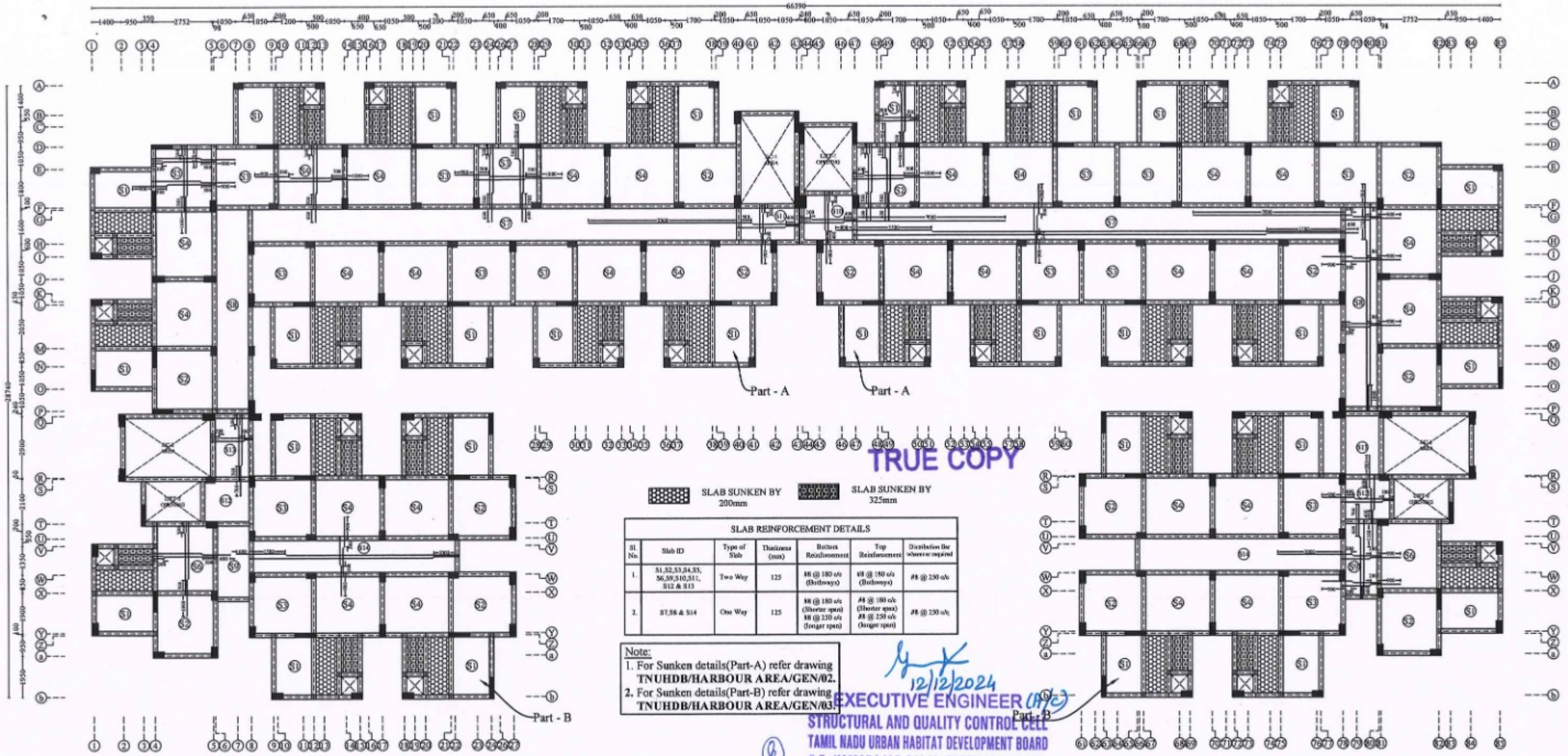
DWG.NO.: TNUHDB / HARBOUR AREA / 50.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

TYPICAL FLOOR SLAB DETAILS



SLAB SUNKEN BY 200mm

SLAB SUNKEN BY 325mm

SLAB REINFORCEMENT DETAILS

Sl. No.	Slab ID	Type of Slab	Thickness (mm)	Bottom Reinforcement	Top Reinforcement	Distribution Bar wherever required
1.	S1,S2,S3,S4,S5, S6,S9,S10,S11, S12 & S13	Two Way	125	#8 @ 180 c/c (Bothways)	#8 @ 180 c/c (Bothways)	#8 @ 250 c/c
2.	S7,S8 & S14	One Way	125	#8 @ 180 c/c (Shorter span) #8 @ 230 c/c (longer span)	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (longer span)	#8 @ 250 c/c

Note:
1. For Sunken details(Part-A) refer drawing **TNUHDB/HARBOUR AREA/GEN/02.**
2. For Sunken details(Part-B) refer drawing **TNUHDB/HARBOUR AREA/GEN/03.**

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TYPICAL FLOOR SLAB DETAILS.

TYPE DESIGN NO.: 30/2021

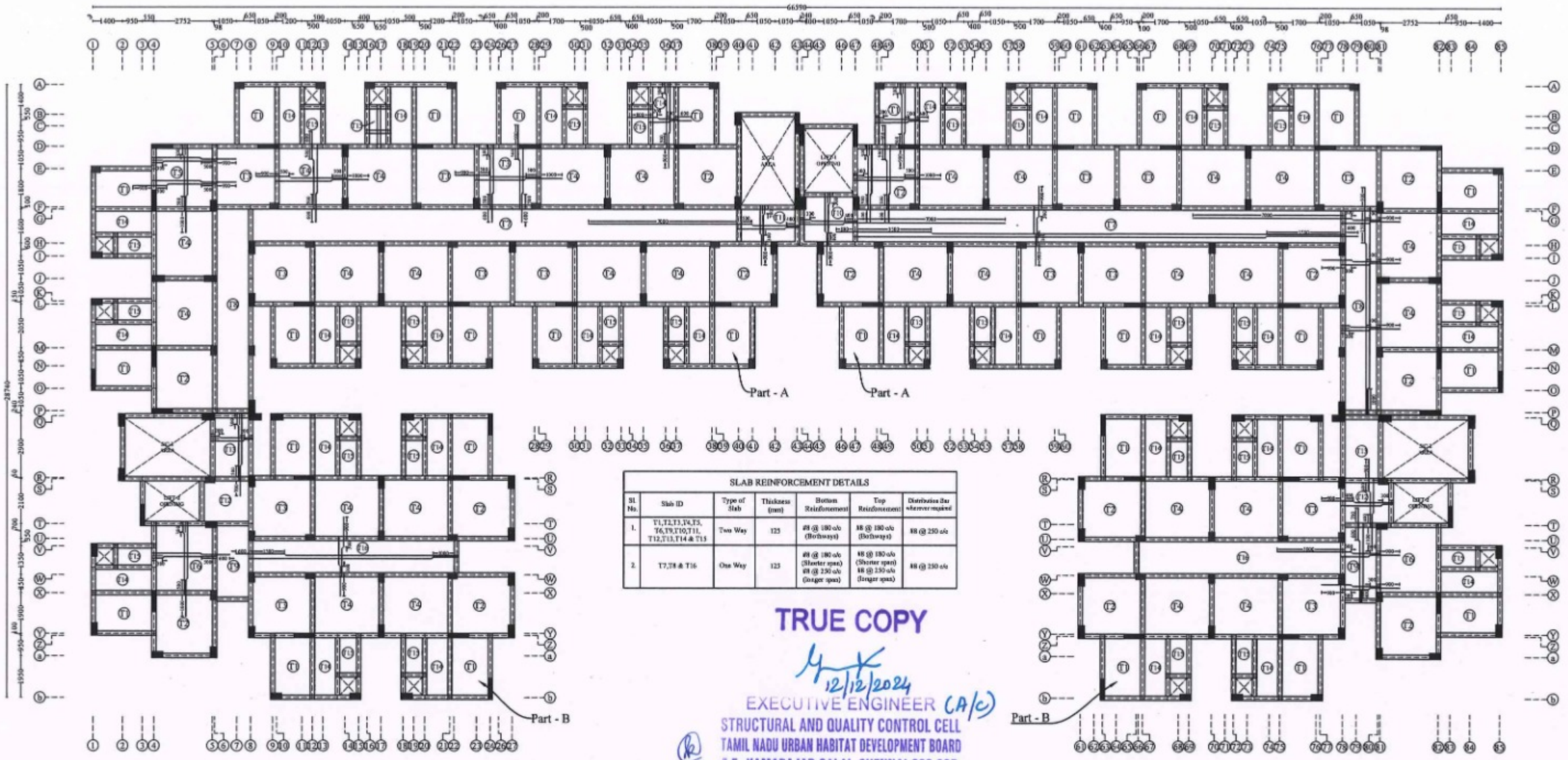
DWG.NO.: TNUHDB / HARBOUR AREA / 51.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

TERRACE FLOOR SLAB DETAILS



SLAB REINFORCEMENT DETAILS

Sl. No.	Slab ID	Type of Slab	Thickness (mm)	Bottom Reinforcement	Top Reinforcement	Distribution Bar wherever required
1.	T1,T2,T3,T4,T5, T6,T9,T10,T11, T12,T13,T14 & T15	Two Way	125	#8 @ 180 c/c (Both ways)	#8 @ 180 c/c (Both ways)	#8 @ 250 c/c
2.	T7,T8 & T16	One Way	125	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (Longer span)	#8 @ 180 c/c (Shorter span) #8 @ 250 c/c (Longer span)	#8 @ 250 c/c

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

5, KAMARAJAR SALAI, CHENNAI-600 005.

12/12/24

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TERRACE FLOOR SLAB DETAILS.

TYPE DESIGN NO.: 30/2021

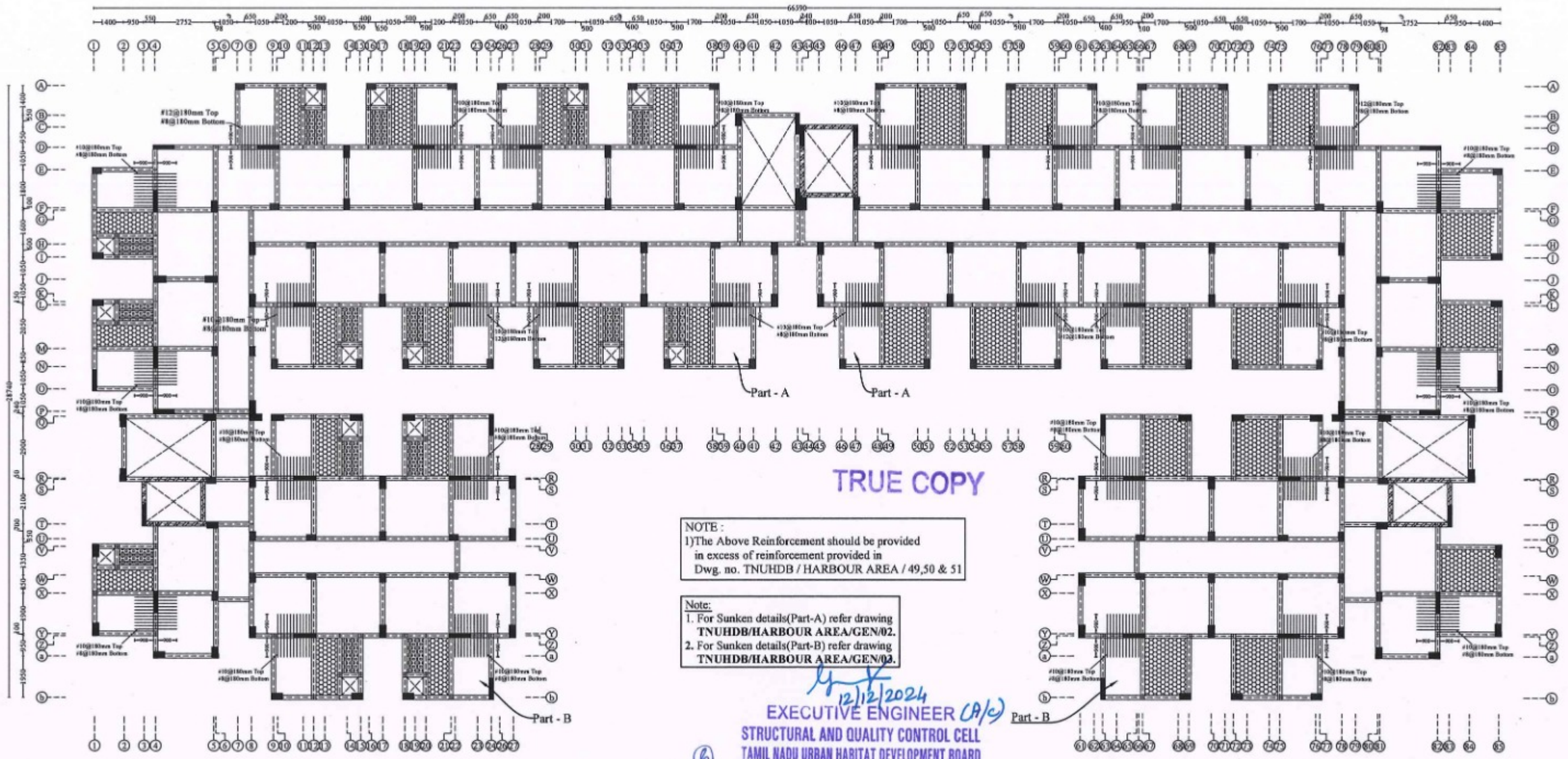
DWG.NO.: TNUHDB / HARBOUR AREA / 52.

REVISION NO.:

Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

ADDITIONAL SLAB REINFORCEMENT NEAR SHEAR WALL (STILT TO EIGHTH FLOOR)



TRUE COPY

NOTE :
1)The Above Reinforcement should be provided in excess of reinforcement provided in Dwg. no. TNUHDB / HARBOUR AREA / 49,50 & 51

Note:
1. For Sunken details(Part-A) refer drawing **TNUHDB/HARBOUR AREA/GEN/02.**
2. For Sunken details(Part-B) refer drawing **TNUHDB/HARBOUR AREA/GEN/03.**

12/12/2024
EXECUTIVE ENGINEER (A/c)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
12/12/24 # 5, KAMARAJAR SALAI, CHENNAI-600 005.

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
ADDITIONAL SLAB REINFORCEMENT NEAR SHEAR WALL (STILT TO EIGHTH FLOOR).

TYPE DESIGN NO.: 30/2021

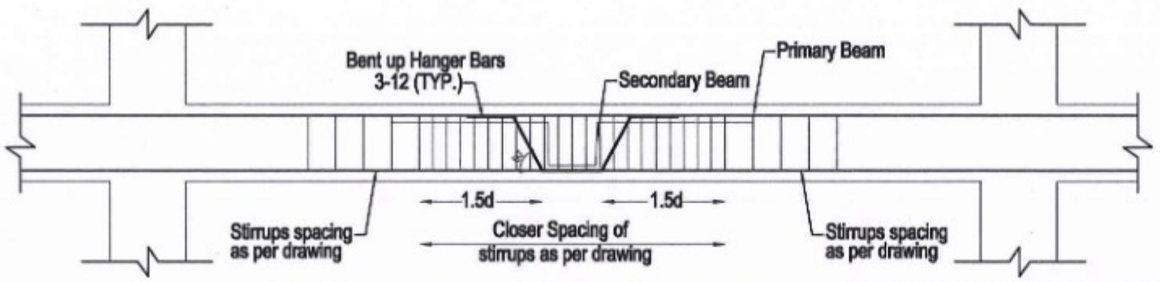
DWG.NO.: TNUHDB / HARBOUR AREA / 53.

REVISION NO.:

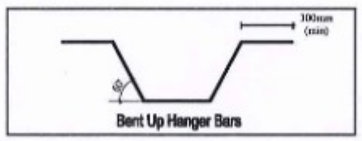
Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**
Chief Engineer-I	

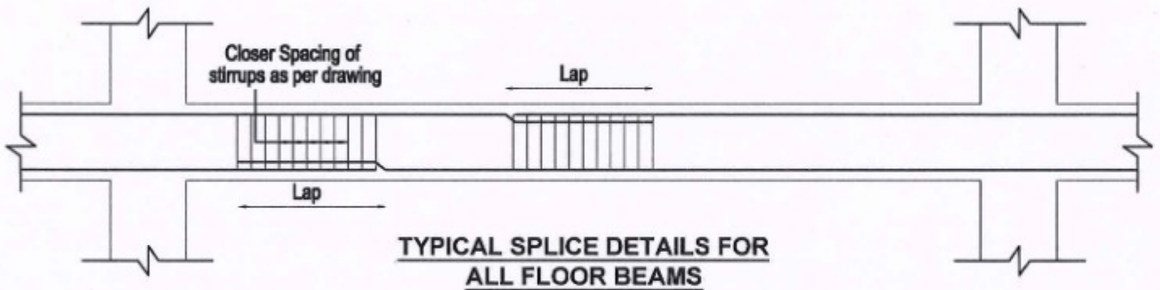
STRUCTURAL & QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
NO.5, KAMARAJAR SALAI
CHENNAI - 600 005.

TYPICAL DETAILS FOR ALL THE FLOOR BEAMS AND FOOTINGS

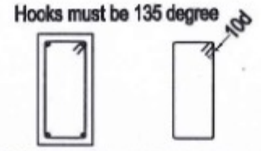


TYPICAL BENT UP HANGER BAR DETAILS AT MAIN AND SECONDARY BEAM JUNCTIONS



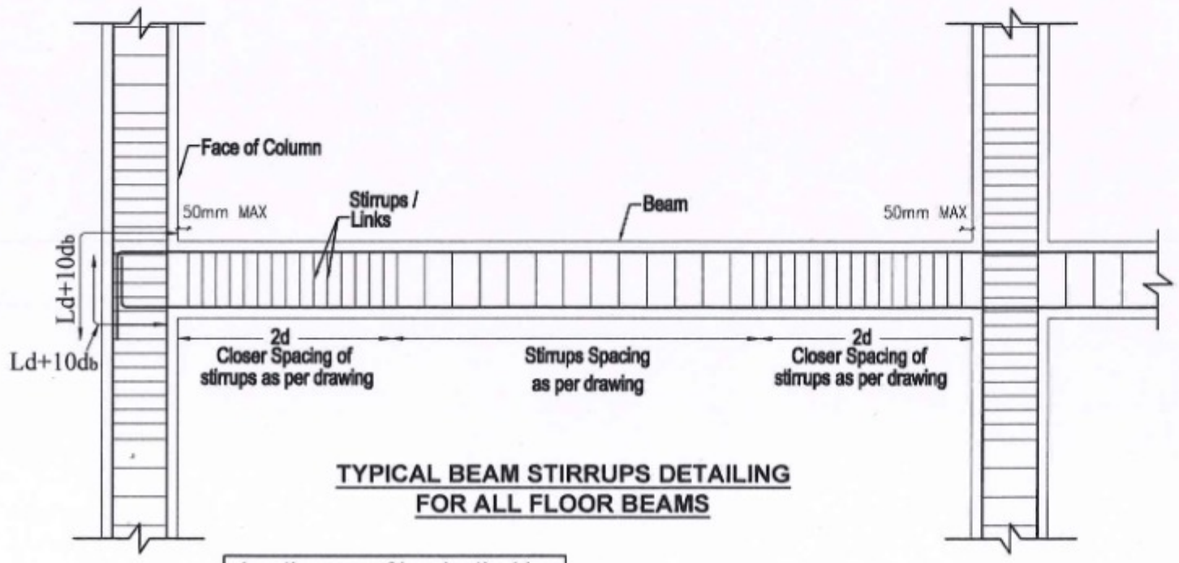


TYPICAL SPLICE DETAILS FOR ALL FLOOR BEAMS



TYPICAL DETAILS OF TRANSVERSE REINFORCEMENT HOOKS IN BEAM.

Development length for Fe500bars in 'mm'				
Dia of bar	Tension bar		Compression bar	
	M25	M30	M25	M30
12	583	544	466	435
16	777	725	621	580
20	971	906	777	725



TYPICAL BEAM STIRRUPS DETAILING FOR ALL FLOOR BEAMS

db - diameter of longitudinal bar
d - depth of beam

TRUE COPY

12/12/2024

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

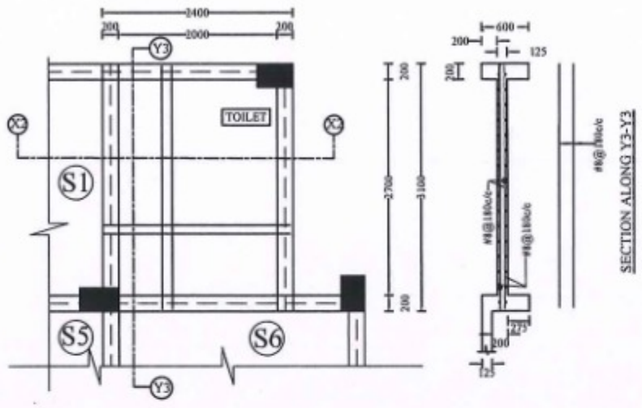
12/12/24

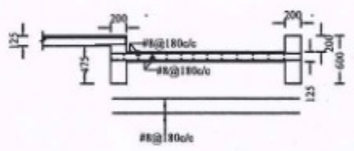
STRUCTURAL DETAILS	
PROJECT: CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION	
TITLE: TYPICAL DETAILS FOR ALL THE FLOOR BEAMS AND FOOTINGS.	
TYPE DESIGN NO.: 30/2021	
DWG.NO.: TNUHDB/HARBOUR AREA/GEN/01	
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

TYPICAL SUNKEN SLAB DETAILS(PART-A BLOCK)

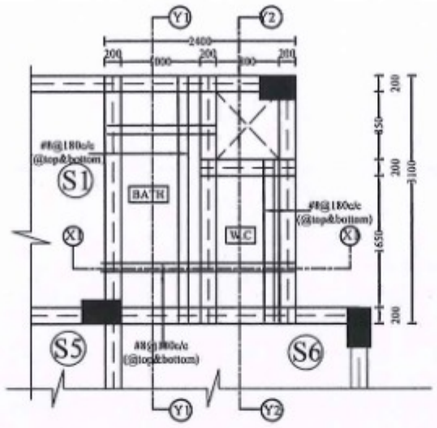
PWD UNIT

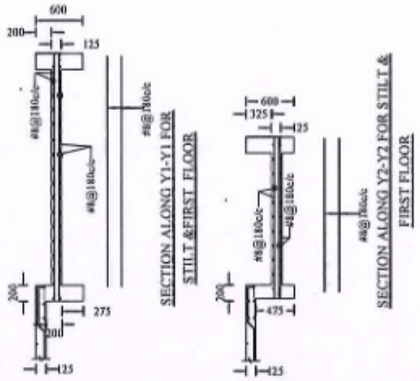


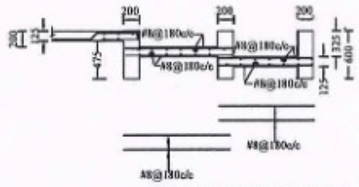


SECTION ALONG X2-X2

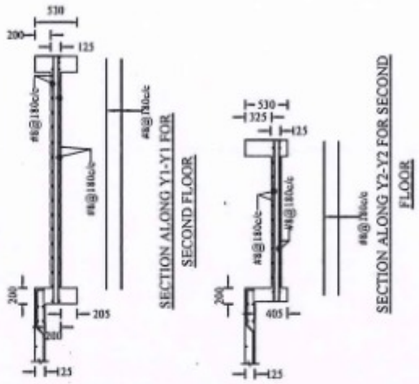
OTHER THAN PWD UNIT

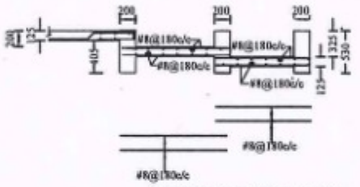




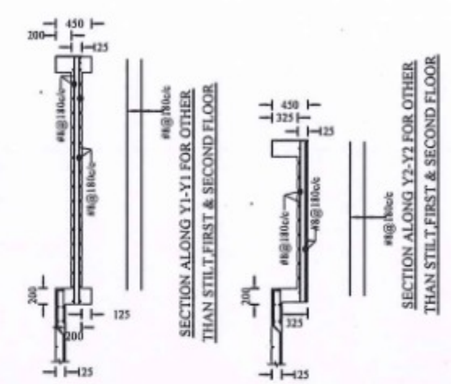


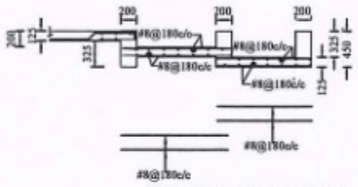
SECTION ALONG X1-X1 FOR
STILT&FIRST FLOOR





SECTION ALONG X1-X1 FOR
SECOND FLOOR





SECTION ALONG X1-X1 FOR
OTHER THAN STILT,FIRST &
SECOND FLOOR

TRUE COPY
12/12/2024
EXECUTIVE ENGINEER (A/C)
STRUCTURAL AND QUALITY CONTROL CELL
TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD
5, KAMARAJAR SALAI, CHENNAI-600 005.
12/12/24

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TYPICAL SUNKEN SLAB DETAILS (PART-A BLOCK).

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB / HARBOUR AREA / GEN /02.

REVISION NO.:

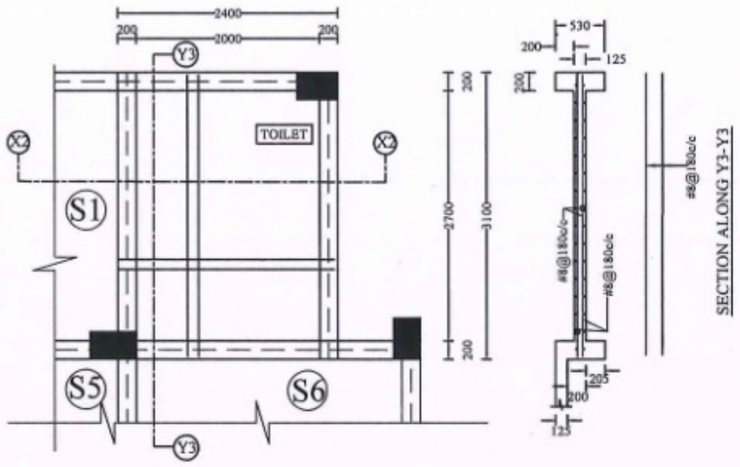
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II

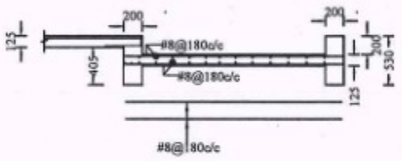
Chief Engineer-I

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

TYPICAL SUNKEN SLAB DETAILS(PART-B BLOCK)

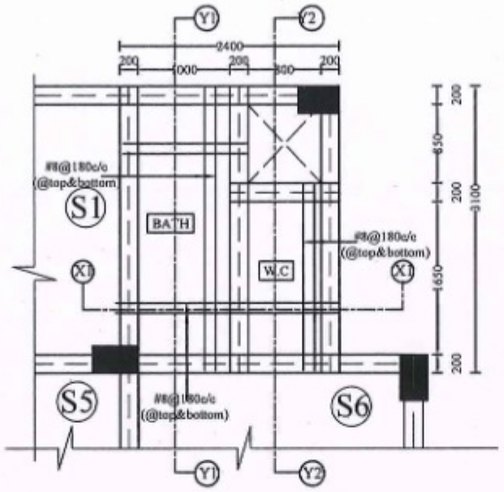
PWD UNIT

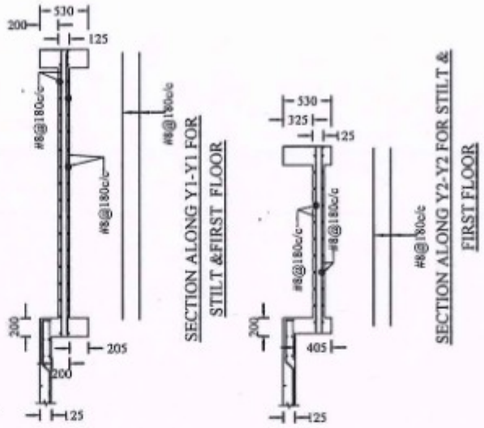




SECTION ALONG X2-X2

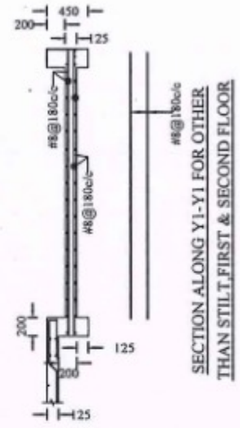
OTHER THAN PWD UNIT



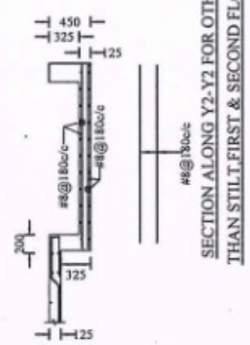


SECTION ALONG Y1-Y1 FOR STILT &FIRST FLOOR

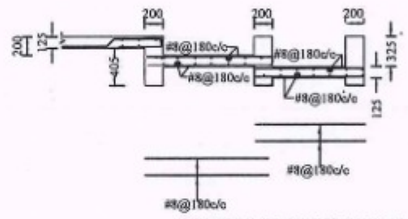
SECTION ALONG Y2-Y2 FOR STILT & FIRST FLOOR



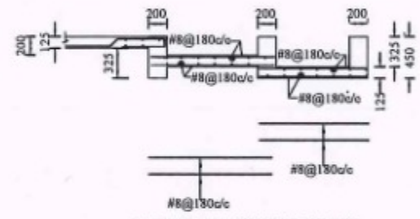
SECTION ALONG Y1-Y1 FOR OTHER THAN STILT,FIRST & SECOND FLOOR



SECTION ALONG Y2-Y2 FOR OTHER THAN STILT,FIRST & SECOND FLOOR



SECTION ALONG X1-X1 FOR STILT&FIRST FLOOR



SECTION ALONG X1-X1 FOR OTHER THAN STILT,FIRST & SECOND FLOOR

TRUE COPY

12/12/2024

EXECUTIVE ENGINEER (A/c)

STRUCTURAL AND QUALITY CONTROL CELL

TAMIL NADU URBAN HABITAT DEVELOPMENT BOARD

12/12/24 5, KAMARAJAR SALAI, CHENNAI-600 005.

NOTE:

1. All the Dimensions are in mm.
2. M30 Concrete and Fe550D 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.
7. Bars in Shorter direction shall be placed below Bars placed in the Longer direction.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TYPICAL SUNKEN SLAB DETAILS (PART-B BLOCK).

TYPE DESIGN NO.: 30/2021

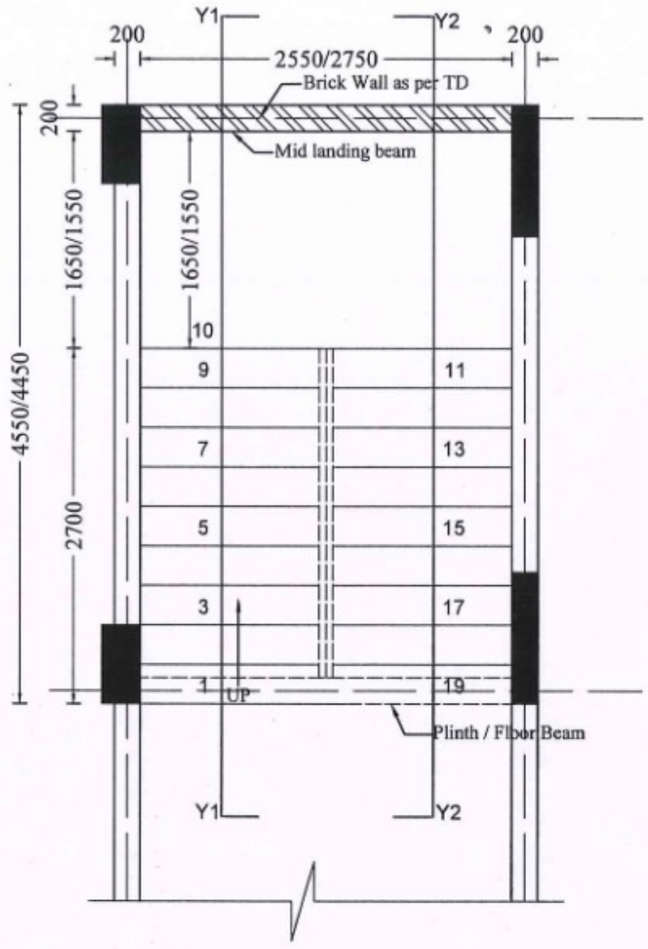
DWG.NO.: TNUHDB / HARBOUR AREA / GEN /03.

REVISION NO.:

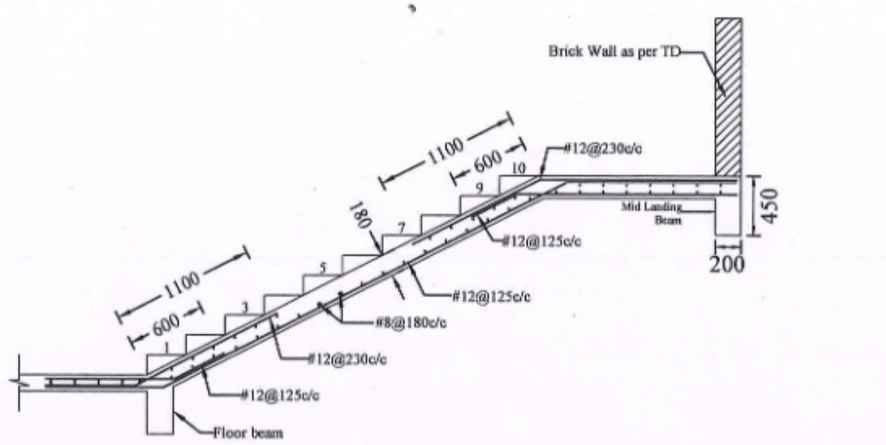
Assistant Engineer	Asst. Exe. Engineer
Executive Engineer	SE - North II
Chief Engineer-I	

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

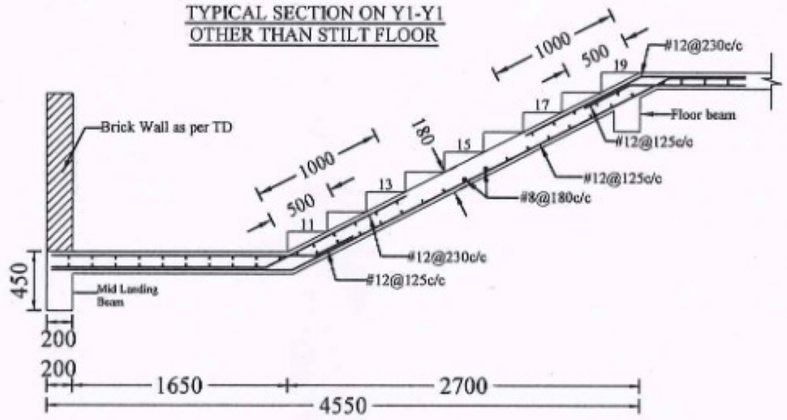
TYPICAL STAIRCASE DETAILS



TYPICAL STAIRCASE PLAN

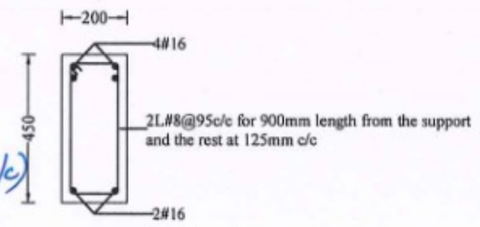


TYPICAL SECTION ON Y1-Y1
OTHER THAN STILT FLOOR

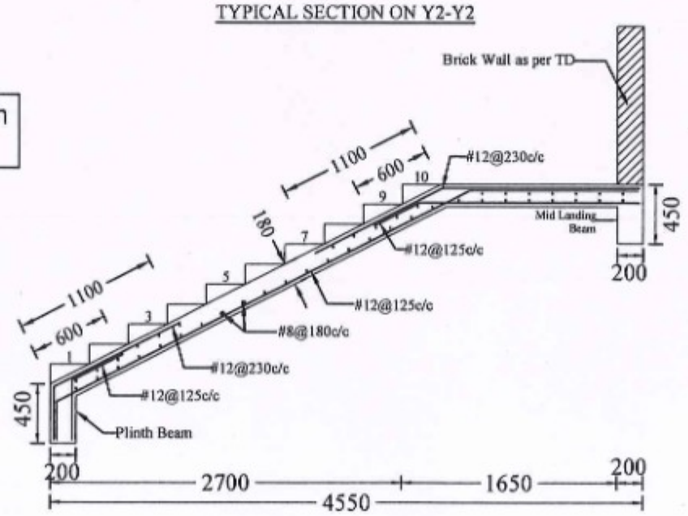


TYPICAL SECTION ON Y2-Y2

TREAD=300mm
RISE=152mm



C/S OF MID
LANDING BEAM



TYPICAL SECTION ON Y1-Y1
STILT FLOOR ONLY

TRUE COPY

12/12/2024
EXECUTIVE ENGINEER (A/c)
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. M30 Concrete and Fe550D grade steel shall be adopted.
3. Waist slab thickness 180mm
4. Clear cover to waist slab is 25mm.
5. Steps over the waist slab are considered made of concrete in analysis.

STRUCTURAL DETAILS

PROJECT:
CONSTRUCTION OF 270 NOS OF (S+9) TENEMENTS AT HARBOUR AREA, TONDIARPET TALUK, GREATER CHENNAI CORPORATION.

TITLE:
TYPICAL STAIRCASE DETAILS

TYPE DESIGN NO.: 30/2021

DWG.NO.: TNUHDB/HARBOUR AREA/GEN/04

REVISION NO.:

Assistant Engineer	**Asst. Exe. Engineer**
Executive Engineer	**SE - North II**

Chief Engineer-I

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



our services doesn't just end there

Buying & Selling Services

Property Buying Assistance, Property Selling Support, Market Price Analysis, Owner Outreach and Negotiation.

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.

NRI & Investment Services

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

Verified RealEstate™

We're honored to be part of your real estate journey

3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai, India

hello@verified.realestate
+91 9996 12 9996
www.verified.realestate