Verified RealEstate™

RE REGULATORY RECORD

RERA Document

The document as the regulator published it, reproduced in full behind this page.

Published for reference. The authority's own register is the operative record.

Verified RealEstate™
3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai 600 097, India

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

DIGITALLY VERIFIED RECORD

SP:24-1983	Explanatory handbook on Indian Standard code of Practice for plain and reinforced concrete
IS:1905-1997	Code of Practice for structural use of unreinforced masonry
SP:22-1982	Explanatory handbook on codes for earthquake engineering (IS:1982-1975 and IS:4326-1976)
SP 7	National Building Code of India
SP 34 -1987	Handbook on Concrete Reinforcement & Detailing
IS 16172-2014	Reinforcement couplers for mechanical splices of bars in concrete
IS: 4923- 1997	Specification for Hollow steel section for structural use
NBC 2016	National Building Code of India 2016

on behalf of DTCP HRD Panel, the detailed structural designs have reviewed and found in order.

17/2/25

Superintending Engineer, P.W.D.,
Planning and Designs Circle
Chepauk, Chennai-5.

P. Senthil

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No:CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

Sree Daksha Property Developers India Pvt. Ltd.,

Director

5. RECOMMENDATION

For the site, "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007." The borehole investigation was conducted and SBC was determined.

- In this site, up to 20.00m, POORLY GRADED GRAVEL is obtained.
- The **ISOLATED FOOTING OR RAFT FOUNDATION** is recommended for this site.
- **Rest the Foundation at 3.00m from the Existing Ground Level as per floor depth level.**
- The **SBC at 3.00m is 28.71 Ton/m²** is determined in All Borehole Locations @ Foundation Level. 27.00 T/m² adopted.

Note : If Water Table is encountered,

- Use Sulphate (So_3) resistant cement for P.C.C, FOOTING, PLINTH BEAM, GRADE BEAM & COLUMN UPTO GROUND LEVEL.
- Use Dewatering method such as Sump Pumping, Well Point Systems, Siphon Draining, Deep Well Systems, Ejector Systems at the time of Earthwork and Footing Concrete.
- The detailed SBC is mentioned in Page No's – 13 – 16.

Er.K.P.VETRISELVAN.,M.E(GEOTECH),MIGS,MISTE.,
GEOTECHNICAL ENGINEER

Er.K.P. VETRISELVAN, M.E(GEOTECH), MIGS, MISTE
GEOTECHNICAL ENGINEER
INDIAN GEOTECHNICAL SOCIETY (LM-3564)

On behalf of Dept Hgn Panel, the detailed Soil investigation report is reviewed and found in order.

Superintending Engineer, P.W.D.
Planning and Designs Circle,
Chepauk, Chennai-5.

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

DESIGN BASIS REPORT

PROPOSED RESIDENTIAL MULTISTORY APARTMENT BUILDING

(BLOCK A - BASEMENT -1 + STILT + 10 FLOORS &

TERRACE WITH SWIMMING POOL AND BLOCK B - AMENITIES)

LOCATED IN SF.NO. 267/1B1B & 267/1B1A2, VEERAKERALAM VILLAGE,

PERUR TALUK, COIMBATORE CORPORATION WEST ZONE,

COIMBATORE DISTRICT.

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No: CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

Sree Daksha Property Developers India Pvt. Ltd.,

Director

TABLE OF CONTENTS

1.0 SCOPE OF WORK 03

1.1 DESCRIPTION OF PROJECT.....03

1.2 DESIGN PHILOSPHY 03

1.2.1 FOUNDATION SYSTEM 03

1.2.2 STRUCTURAL SYSTEM.....03

1.2.3 DESIGN METHODOLOGY 03

2.0 DESIGN LOADS 04

2.1 DEAD LOADS 04

2.2 IMPOSED DEAD LOADS 04

2.3 LIVE LOADS (IMPOSED LOAD) 05

2.4 SEISMIC LOADS 05

2.5 WIND LOAD.....07

2.6 LOAD COMBINATIONS 08

3.0 MATERIALS.....09

3.1 CEMENT 09

3.2 CONCRETE.....09

3.3 REINFORCEMENT 09

3.4 STRUCTURAL STEEL.....09

4.0 COVER TO REINFORCEMENT 09

5.0 INDIAN STANDARDS AND CODE FOR PRACTICE 10

6.0 SOIL REPORT 14

7.0 BEAM, COLUMN & RC WALL DESIGNS 33

Sree Daksha Property Developers India Pvt. Ltd.,

Director

1.0 SCOPE OF WORK

The purpose of the Design Basis Report (DBR) is to describe the structural system, analysis and design criteria for the Proposed Residential Apartment in Coimbatore. The scope of new construction work includes performing structural analysis and design including preparation of structural drawings.

1.1 DESCRIPTION OF PROJECT

The proposed Residential Apartment is located in Coimbatore. The Project is planned as private property of Basement 1 + STILT + 10 FLOORS +TERRACE with Swimming pool.

1.2 DESIGN PHILOSPHY

1.2.1 Foundation System

The foundation system is considered as Raft foundation. The recommended safe bearing capacity of the soil at founding level shall be considered as per the Geo-Technical report.

1.2.2 Structural System

Structural Framing System shall be primarily as Ductile Shear Wall with Special Moment Resisting Frame.

1.2.3 Design Methodology

3-D Analysis of this building structures shall be carried out using the latest version of modern software package and the results of the analysis shall be used for designing various elements.

All RCC Structural elements are designed appropriately as per limit state method as specified in IS 456 and other relevant IS codes using modern software packages such as ETABS, SAFE and in-house design program spread sheets.

(a) Deflection

As per IS 456-2000 Clause 23.2 – Calculation of deflection shall be as per IS 456:2000 Annex C. All structural elements are designed in such a way that final deflection due to all loads including long term effects of creep and shrinkage measured from as cast level of support shall not exceed span/250 and the deflection including the effects of temperature, creep and shrinkage occurring after erection of partitions and the application of finishes should not normally exceed span/350 or 20 mm whichever is minimum. The deflection shall be assessed relative to the support.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

(b) Lateral Sway and Storey Drift

As per IS 456:2000 Clause 20.5 Roof lateral displacement under wind load is limited to H/500, where 'H' is the total height of the building. As per IS 1893 (Part-1) 2016 the storey drift in any storey shall not exceed 0.004 times storey height for seismic case.

(c) Crack width

Calculation of Crack width shall be as per IS 456:2000 Annex F and limits to 0.3 mm for members where cracking is not harmful (Super Structure Structural Elements), 0.2 mm for members where cracking is harmful (Sub Structure Structural Elements) and liquid retaining structure and 0.1 mm for structural elements exposed to aggressive environment.

2.0 DESIGN LOADS

2.1 Dead Loads

2.1.1 Self-weight of Structure

Self-weight of the various structural elements is computed based on its size and respective unit weight of materials as given below,

S.No	Materials	Unit Weight (KN/m^3)
1	Reinforced Concrete	25.00
2	Structural Steel	78.50

2.2 Dead Imposed Loads

The dead imposed load comprises of masonry walls, partition, facade, floor finish, ceiling hung loads, water proofing (Terrace and in other applicable areas), Fixed equipment (if any), load from other structural components such as staircase, duct beams, water tank, steel truss etc. which are not included in the structural model. Unit weight of materials is considered as follows,

S.No	Materials	Unit Weight (KN/m^3)
1	Plain Concrete	24.00
2	Clay brick masonry with plaster	20.00
3	AAC block masonry with plaster	8.00
4	Water	10.00
5	Soil (Dry)	18.00
6	Soil (Submerged)	20.00

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Uniform dead-imposed load considered for certain category are given below,

S.No	Description	UDL (KN/m^3)
1	Floor Finish (75mm tk for Residential floors & Club House)	1.5
2	Floor Finish (150mm tk for parking floors)	3.6
3	False ceiling + MEP Services (including supporting system) – where ever applicable	0.50
4	Sunken portion	Depends on thickness
5	Weatherproof course	3.60 kN/sq.m including 150mm average thickness of screed

2.3 Live loads (Imposed load)

Live load assessed based on the occupancy classifications as per IS 875 (Part 2) is listed below.

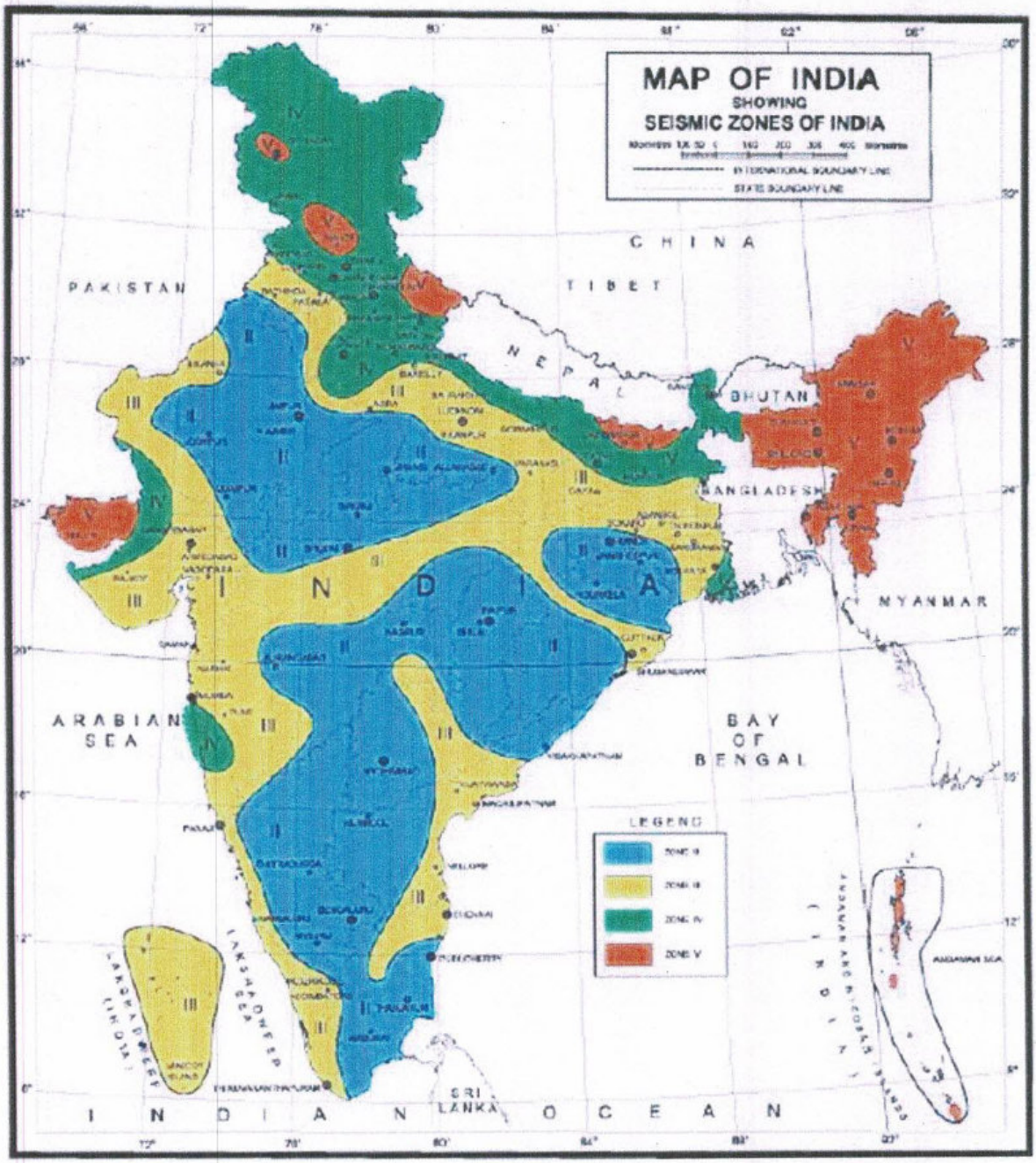
Floor Usage	LL (kN/m^2)
Residential areas (Living, dining and bedroom, kitchen, utility areas)	2.0
Corridors / Balcony	3.0
Staircase	4.0
Toilets	2.0
Terraces	2.0
Store Room	3.0
Parking Area	5.0
Ramps (Without fire truck movement).	5.0
Finishes	1.0
Fire Truck movement in driveway area	10.0

2.4 Seismic Loads

Dynamic analysis for earthquake forces in all three directions (X, Y &Z) is carried our through response spectrum method. Design acceleration coefficient (Sa/g) values are calculated as per CL 6.4.2 and 6.4.6 of IS 1893 (Part-1):2016 for respective time period (T). Coimbatore is regarded as moderate seismicity region and is specified as Zone III in the IS 1893(refer to the seismic zoning map of India)

Sree Daksha Property Developers India Pvt. Ltd.,

Director



Where ever required, base shear obtained from the analysis is enhanced by scale factor of as per clause 7.7.3 of IS 1893 (Part1) 2016. The effect of torsion has been taken into effect using eccentricity overrides in ETABS itself.

Description	Input Parameters	Relevant Clause
Location of Site	Proposed Residential Apartment @Coimbatore	Seismic Map of India

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Seismic Zone	III	Annex E (Page 36/37)
Seismic Zone Factor	0.16	Table 3(Page 10)
Lateral Load Resisting System	Ductile Shear Wall with SMRF System	Table 9(Page 20)
Response Reduction Factor (R)	5.0	Table 9(Page 20)
Soil Type based on N Values	Medium	Table 1 (Page 10)
Percentage of Imposed Load Considered in Seismic Weight (W) Calculations	Up to 3KN/m2 - 25% Above 3KN/m2- 50%	Table 10 (Page 20)
Damping Factor	One for 5% Damping	Clause 7.2.4 (Page 19)
Formulae Considered of Time Period Calculation	Ta = 0.09*H/Sq.rt(d)	Clause 7.6.2 (Page 21) of IS: 1893:2016
Story Drift	< 0.004-time Story Height	Clause 7.11.1 (Page 26)
Design Seismic Base Shear (Vb)	Vb= Ah x W	Clause 7.6.1 (Page21)

2.5 Wind Load

Wind loads are calculated based on the static design wind pressure which is evaluated as per IS 875 (Part 3). The wind pressure varies with building height and hence, at each floor level and in each direction (X&Y) the wind load is calculated based on the tributary area of respective floor and it is applied on corresponding floor diaphragms. Wind load is applied as a line load or joint load where ever diaphragm is not considered.

Description	Input Parameters	Relevant Clause
Location of Site	Proposed Residential Apartment @ Coimbatore.	
Vb – Basic Wind Speed (m/s)	39 m/s	Annex A (Page 51)
Terrain Category	2	6.3.2.1
K1 – Risk Coefficient factor	1	Table 1 (Page 7)

Sree Daksha Property Developers India Pvt. Ltd.,

Director

K2 – Terrain roughness and Height Factor	Category 2	Clause 6.3.2.1 (Page 7)
K3 – Topography Factor	1	Clause 6.3.3
K4 – Importance factor for Cyclonic region	1	Clause 6.3.4

2.6 Load Combinations

Load Combinations to be applied for Analysis and Design of structure as per recommendation of IS 456 & IS 800 for Buildings & Steel Structure.

The various loads shall be combined in accordance with the stipulations in IS: 875 (Part 5) – 1987. Whichever combination produces the most unfavourable effect in the building, foundation or structural member concerned shall be adopted. Values of Partial Safety Factor for Loads

Load Combination	Limit state of Collapse			Limit state of Serviceability		
	DL	LL	WL/EL	DL	LL	WL/EL
DL + LL	1.5	1.5	--	1.0	1.0	--
DL +/- WL	1.5 or 0.9$	--	1.5	1.0	--	1.0
DL + LL +/- WL	1.2	1.2	1.2	1.0	0.8	0.8
DL+/- EL	1.5 or 0.9$	--	1.5	1.0	--	1.0
DL + LL +/- EL	1.2	1.2	1.2	1.0	0.8	0.8

$ - This value is to be considered only when stability against overturning or stress reversal is critical. Wind load and earthquake load shall be considered for both x & y directions.

DL – Dead load
LL – Live load
WL – Wind load
EL – Earthquake load

Whenever imposed load is combined with earthquake load the appropriate part of imposed load as specified in IS: 1893 – 2016 will be used both for evaluating earthquake effect and for combined load effects used in such combination.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

2 MATERIALS

3.1 CEMENT

Ordinary Portland cement of 43 Grade or 53 Grade confirming to IS 8112 and IS 12269 respectively shall be used (fly ash component if added separately shall not be more than 20% of total cementitious content). Portland Pozzolana Cement (PPC) conforming to IS 1489 may also be used (Fly ash shall not be used in case of PPC).

3.2 CONCRETE

Minimum Grade of Concrete in all RCC structural members shall be M30. Concrete of Grade M7.5 or equivalent shall be used in filling, plum concrete, levelling courses and other non-structural items. Minimum cement content, water cement ratio etc. shall conform to Table 5 of IS 456:2000 provisions for durability and strength criteria.

Recommended Minimum Grade of Concrete for various structural elements:

Structural Element	Minimum Concrete Grade to Be Used
Foundation	M30
Column and Shear Wall	M40
Earth Retaining Structures	M30
Grade Slab	M30
Beam/Slab	M30

*The exact grade of concrete to be used shall be referred from the corresponding structural drawing.

3.3 Reinforcement

Only thermo-mechanically treated reinforcement bars of Grade Fe 550D with conforming of IS 1786 – 2008 shall be used. Reinforcement Bars of 8, 10, 12, 16, 20, 25, 32 mm shall be used.

3.4 Structural Steel

Structural Steel Conforming to IS 2062 shall be used with yield strength of 350 MPa.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

4 COVER TO REINFORCEMENT

Exposure condition is considered as "Moderate" for all structural elements of Super Structure and Sub Structure. The nominal cover to reinforcement is considered to satisfy durability and 2 hours fire rating requirement.

S.No	Structural Elements	Nominal Cover
1	Raft	50mm
2	Column	40mm
3	Plinth Beam	40mm
4	Floor/Roof Beam	30mm
5	Shear wall	30mm
6	Slabs	25mm
7	Lintel, Chajja and Loft	15mm
8	Staircase	25mm
9	STP Base slab and walls	45mm (Sewage side) 35mm (Other side)
10	Water tank and UG Sump	30mm
11	Retaining Wall	45mm (Soil Side) 30 mm (Building Side)

In the analysis, design and detailing of the building, the latest editions of the following Indian Standards will be referred.

IS Code	Description
IS 456: 2000	Plain and Reinforced Concrete – Code of Practice
IS 800: 2007	Code of Practice for General Construction in Steel
IS 875 (Part I): 1997	Dead Loads – Unit Weight of Building Material and Stored Material
IS 875 (Part II): 1997	Imposed Loads
IS 875 (Part III): 2015	Wind Loads (Amended 2016)
IS 875 (Part V): 1987	Special Loads and Combinations
IS:8009-1980	Code of Practice for calculation of settlement of foundations (All parts)

Sree Daksha Property Developers India Pvt. Ltd.,

Director

IS:2974-1992	Code of Practice for design and construction of machine foundations (All parts)
IS:2950-1981	Code of Practice for design and construction of raft foundations
IS:1904-2021	Code of Practice for design and construction of foundations in soils general requirement
IS:1080-1985	Code of Practice for design and construction of shallow foundations on soils
IS:1893 -2016	Criteria for earthquake resistant design of structure (Part-1)
IS:458 -2021	Specification for precast concrete pipes
IS:3370-2021	Code of Practice for concrete structures for the storage of liquids: (All parts)
IS 1343: 2012	Code of practice for Prestressed Concrete
IS:4326-2013	Code of Practice for earthquake resistant design and construction of buildings
IS:5525-1969	Recommendation for detailing of reinforced concrete works
IS:1786-2008	Specification for high strength deformed steel bars and wires for concrete reinforcement
IS 1489-2015	Portland-Pozzolana cement Specification – Fly Ash Based
IS 1786: 2008	High Strength deformed steel bars and wires for Concrete Reinforcement
IS: 269 -2015	Specification for Ordinary, rapid hardening and low heat Portland cement.
IS 383: 2016	Coarse and Fine aggregate for Concrete Specification
IS: 455 -2015	Specification for Portland blast furnace slag cement.
IS: 4031-1996	Method of physical tests for Portland cement.
IS: 1199-1959	Method of sampling and analysis of concrete.
IS: 1566-1982	Specification for plain hard drawn steel wire fabric for concrete reinforcement.
IS 516: 2022	Methods for Test for Strength of Concrete
IS 1893: 2016	Criteria for Earthquake Resistance Design of Structure
IS 1904: 1986	Design &Construction foundations in Soil: General Requirements

Sree Daksha Property Developers India Pvt. Ltd.,

Director

IS:1161-2014	Steel Tubes for Structural purposes Specification
IS 1905: 1987	Code of practice for structural use of unreinforced masonry
IS 2062: 2011	Hot Rolled Medium and High Tensile Structural Steel Specification
IS 2645: 2003	Integral Waterproofing Compounds for cement Mortar and Concrete- Spec.
IS 2911: 2010	Code of Practice for design & Construction of pile foundation
IS 2950: 1981	Code of Practice for Design &Construction of Raft Foundation (Part1)
IS:802 -2016	Code of Practice for use of structural steel in overhead transmission line towers: (All parts)
IS:806 -1968	Code of Practice for use of steel tubes in general building construction
IS:808 -2021	Dimensions for hot rolled steel beam, column channel and angle section
IS:816 -1969	Code of Practice for use of metal arc welding for general construction in mild steel
IS:4000-1992	High Strength bolts in steel structures – Code of Practice
IS:7215-1974	Tolerances for fabrication of steel structures
IS: 4990-2024	Specification of Plywood for Concrete Shuttering works
IS:10262-2019	Recommended guidelines for concrete mix design
IS 13920: 2016	Ductile Detailing of R C Structures subjected to Seismic Forces
IS: 432(part 2)-1982	Specification for mild steel and medium tensile steel bars and hard-drawn steel wire for concrete reinforcement
IS: 6313(part II) 2022	Standards for anti-termite treatment
IS:3067-1988	Code of Practice for general design details and preparatory works for damp proofing and water proofing of buildings
SP:6 -1969	Handbook for structural engineers (All parts)
SP:16-1999	Design Aids for reinforced concrete to IS:456-1978

Sree Daksha Property Developers India Pvt. Ltd.,

Director

SP:24-1983	Explanatory handbook on Indian Standard code of Practice for plain and reinforced concrete
IS:1905-1997	Code of Practice for structural use of unreinforced masonry
SP:22-1982	Explanatory handbook on codes for earthquake engineering (IS:1982-1975 and IS:4326-1976)
SP 7	National Building Code of India
SP 34 -1987	Handbook on Concrete Reinforcement & Detailing
IS 16172-2014	Reinforcement couplers for mechanical splices of bars in concrete
IS: 4923- 1997	Specification for Hollow steel section for structural use
NBC 2016	National Building Code of India 2016

on behalf of DTCP HRD Panel, the detailed structural designs have reviewed and found in order.

17/2/25

Superintending Engineer, P.W.D.,
Planning and Designs Circle
Chepauk, Chennai-5.

P. Senthil

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No:CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

Sree Daksha Property Developers India Pvt. Ltd.,

Director

SOIL REPORT

Sree Daksha Property Developers India Pvt. Ltd.,

Director

SOIL EXPLORATION REPORT

For

M/s. SREE DHAKSHA PROPERTY DEVELOPERS INDIA PVT LTD,

Mr. R. RAMANARAYANAN (Director)

Ref: GEO – G - 187 - 2025-26

Date:30.11.2025-04.11.2025

PROJECT NAME

SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED®

(An ISO 9001 : 2015 Certified Company)

Soil Investigations, SPT Test, DTH, Diamond core drilling, & Grouting works

Old no – 40 , New no – 29 , 8th street , K.K.Pudur, Coimbatore - 38

Ph. 0422 4202452 , Mobile : 90433 – 44488

E - mail: geodesign123@gmail.com , Web : www.geodesign.co.in

S.NO.	CONTENTS	PAGE NO.
1.	INTRODUCTION	3
	1.1 PURPOSE AND SCOPE	3
	1.2 THE SITE	3
2.	FIELD INVESTIGATIONS	3
	2.1 ROTARY BORING	3
	2.2 STANDARD PENETRATION TEST	4
	2.3 SAMPLING	4
3.	LABOATORY TEST	4
4.	FOUNDATION ANALYSIS	5
	4.1 SOIL PROFILE	5
	4.2 SAFE BEARING CAPACITY	5
5.	RECOMMENDATION	6 - 7
6.	REFERENCES	8
7.	ANNEXURE	
	7.1 LOG OF BORINGS	9 - 12
	7.2 LABORATORY TEST RESULTS	13 - 16
8.	PHOTOS	17 - 18

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

1. INTRODUCTION

1.1. PURPOSE AND SCOPE

Geotechnical site investigation work for "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007." The primary purpose of our investigation is to obtain data to develop foundation design recommendations for the above work. At, first instance, Four boreholes were bored at site. Client's representatives selected the locations of borings. To accomplish these purposes, the following tasks were performed:

1. Detailed soil borings were done up to stratum to explore the sub surface stratigraphy and obtain soil samples for testing. Field and laboratory tests were conducted to evaluate the index and engineering properties of the soils
2. Engineering analysis was performed to develop foundation design information for proposed structure.

1.2. THE SITE

"SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

2. FIELD INVESTIGATIONS

2.1. ROTARY BORING

Rotary drilling technique was adapted using Calyx machine in this field. In this method, boring is effected by the cutting action of a rotating bit that is kept in firm contact with the bottom of the hole. The bit is attached to the lower end of a hollow drill rod that is rotated by a suitable chuck. Drilling mud (usually Bentonite) is continuously forced down the hollow drill rods. The mud returning upwards through the annular space between the drill rods, and the side of the hold bring the cutting to the surface

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.

Director

2.2. STANDARD PENETRATION TEST

It is now most commonly used in site test. The test measures the penetration resistance of the split spoon sampler, when it is driven into the soil, at the bottom of a borehole in a standard manner. The N-value, which is the number of blow required to achieve 300mm penetration of the soil, indicates the relative density of sand or gravel, the consistency of other soil such as silts or clays and the strength of weak rocks. The test is described in IS 2131 - 1981. The split spoon sampler is attached to stiff drill rod and lowered to the bottom of the bore hold. A standard blow consists of dropping a mass of 63.5kg free fall through 750 mm on to an donut hammer at the top of the rods and ensuing that this amount of dynamic energy is transferred to the sampler as much as possible.

The number of blows required to achieve each 150mm penetration is recorded for a fall penetration of 450mm. The initial 150mm penetration is referred to as seating drive and the blows required for this penetration are not considered as this zone is in disturbed soil. The next 300mm of penetration is referred to as the test drive and the number of blows required to achieve this fully is termed the penetration resistance or N-value.

2.3. SAMPLING

Soil samples were collected through Split spoon and rock core sample were collected through single tube core barrel.

3. LABORATORY TESTS

The operations to be performed in the laboratory depend upon the type of the nature of data required for the problem at hand. In case of cohesionless material, like sand, the laboratory tests are usually minimum and the design parameters are worked out from field test data such as form SPT- N value, Core resistance and plate load test data.

In the case of cohesive soils, the programme of laboratory testing can vary from carrying out simple tests such as unconfined tests to comprehensive study of soil behaviour using triaxial shear tests and consolidation tests.

Following laboratory tests are conducted.

For Cohesion & cohesionless soil

a) Specific gravity
b) Sieve analysis
c) Atterberg's limits
d) Natural moisture content.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

4. FOUNDATION ANALYSIS

4.1 Soil Profile

The profile of the area as observed in the bore hole is given in the chart. The water level is observed far below. The soil layer up to 20.00m depth POORLY GRADED GRAVEL was obtained.

4.2 Safe Bearing Capacity

The bearing capacity of granular soil depends upon the unit weight and angle of internal friction of the soil. These two properties of granular soils are determined by standard penetration tests.

The allowable bearing pressure based on tolerable settlement has been established empirically by Terzaghi and Peck, 1948 and may be expressed by the equation.

Safe bearing capacity (SBC) = $3.5\ (N-3)\ \{(B+0.3)/2B\}^2 \times R_W \times F_D + P$

Where

N = Corrected N value N1

B = Width of Foundation = constant 1

RW = Water Correction = constant 0.5

FD = Depth of Factor = constant 1

P = Over Burden Pressure

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 036

5. RECOMMENDATION

For the site, "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007." The borehole investigation was conducted and SBC was determined.

- In this site, up to 20.00m, POORLY GRADED GRAVEL is obtained.
- The **ISOLATED FOOTING OR RAFT FOUNDATION** is recommended for this site.
- **Rest the Foundation at 3.00m from the Existing Ground Level as per floor depth level.**
- The **SBC at 3.00m is 28.71 Ton/m²** is determined in All Borehole Locations @ Foundation Level. 27.00 T/m² adopted.

Note : If Water Table is encountered,

- Use Sulphate (So_3) resistant cement for P.C.C, FOOTING, PLINTH BEAM, GRADE BEAM & COLUMN UPTO GROUND LEVEL.
- Use Dewatering method such as Sump Pumping, Well Point Systems, Siphon Draining, Deep Well Systems, Ejector Systems at the time of Earthwork and Footing Concrete.
- The detailed SBC is mentioned in Page No's – 13 – 16.

Er.K.P.VETRISELVAN.,M.E(GEOTECH),MIGS,MISTE.,
GEOTECHNICAL ENGINEER

Er.K.P. VETRISELVAN, M.E(GEOTECH), MIGS, MISTE
GEOTECHNICAL ENGINEER
INDIAN GEOTECHNICAL SOCIETY (LM-3564)

On behalf of Dept Hrn Panel, the detailed Soil investigation report is reviewed and found in order.

Superintending Engineer, P.W.D.,
Planning and Designs Circle,
Chepauk, Chennai-5.

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

S.NO	TITLE	ENGINEER'S NAME	SIGNATURE
1	Field Engineer	Er.V.K.Aswin	
2	Lab testing	Er.S.Lingam	
3	Report prepared by	Er.M.Ranjitha	
4	Corrected by	Er.A.Sindhuja	
5	Checked by	Er.D.Ranjini	
6	Approved by	Er.K.P.Vetriselvan	

Copy right :

This report is the property of GEODESIGN INDIA PRIVATE LIMITED and should not be copied or reproduced without the consent of engineer

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

6. REFERENCES

1. **IS: 6403-1981** – Indian Standard Code of Practice for Determination of Bearing Capacity Of Shallow Foundation

2. **IS: 1892-2021** - Indian Standard Code of Practice for Subsurface Investigation for Foundations

3. **IS: 2131-1981** - Indian Standard Method for Standard Penetration Test for Soils

4. **IS: 8009 (Part 1) - 1976** - Indian Standard Code of Practice for Calculation of Settlements of Foundations

5. **IS: 2720 (Part-2) - 1973** - Indian Standard Methods of Test for Soils, Determination of Water Content

6. **IS: 2720 (Part-4) - 1985** - Indian Standard Methods of Test for Soils, Grain Size Analysis

7. **IS: 2720 (Part-5) – 1985** - Indian Standard Method of Test for Soils, Determination of Liquid and Plastic Limit

8. **IS: 2720 (Part-3/Sec-1)1980** - Indian Standard Methods of Test for Soils, Determination of Specific Gravity.

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

1

Bore Log

Ref: *GEO – G - 187 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIA APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WIT TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SC FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATOR CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

Soil Investigation done by: GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38

Type of Drilling: Rotary – Mud Circulation LOCATION – 1

G.W.T-Not met

Bore hole No. : 1

Date of commencement : 30.11.2025
Date of completion : 01.12.2025

Depth below G.L	Soil Profile	Description of Soil	Thickness of layer (m)	Standard penetration test data: Depth at which test is conducted	N – Value- Depth of penetration: 15cm	30cm	45cm	For 30cm	Relative density / Consistency	Graphical representation of penetration resistance
										0 20 40 60 80 1
0.40		**Clay**	**0.40**							
2.80		**Silty Gravel**	**2.40**	1.50	6	8	11	19	Medium	
				3.00	14	18	21	39	Dense	
				4.50	19	22	23	45	Dense	
				6.00	43	50/7	-	>50	V. Dense	
				7.50	50/11	-	-	>50	V. Dense	
				9.00	>50	-	-	>50	V. Dense	
				10.50	>50	-	-	>50	V. Dense	
		Poorly Graded Gravel	**17.20**	12.00	>50	-	-	>50	V. Dense	
				13.50	>50	-	-	>50	V. Dense	
				15.00	>50	-	-	>50	V. Dense	
				16.50	>50	-	-	>50	V. Dense	
				18.00	>50	-	-	>50	V. Dense	
				19.00	>50	-	-	>50	V. Dense	
20.00m		End of Bore hole		20.00	>50			>50	V. Dense	

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE - 641 038

Contd...2

2

Bore Log

Ref: ***GEO – G - 187 – 2025-26***

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIA APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WIT TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SC FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATOR CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

Soil Investigation done by: GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38

Type of Drilling: Rotary – Mud Circulation LOCATION – 2

G.W.T-Not met

Bore hole No. : 2

Date of commencement : 01.12.2025
Date of completion : 02.12.2025

Depth below G.L	Soil Profile	Description of Soil	Thickness of layer (m)	Standard penetration test data: Depth at which test is conducted	N – Value- Depth of penetration: 15cm	30cm	45cm	For 30cm	Relative density / Consistency	Graphical representation of penetration resistance
0.60		**Clay**	**0.60**							
2.60		**Silty Gravel**	**2.00**	1.50	9	19	27	46	Dense	
				3.00	17	19	24	43	Dense	
				4.50	39	44	50/12	>50	V. Dense	
				6.00	50/7	-	-	>50	V. Dense	
				7.50	>50	-	-	>50	V. Dense	
				9.00	>50	-	-	>50	V. Dense	
				10.50	>50	-	-	>50	V. Dense	
		Poorly Graded Gravel	**17.40**	12.00	>50	-	-	>50	V. Dense	
				13.50	>50	-	-	>50	V. Dense	
				15.00	>50	-	-	>50	V. Dense	
				16.50	>50	-	-	>50	V. Dense	
				18.00	>50	-	-	>50	V. Dense	
				19.00	>50	-	-	>50	V. Dense	
20.00m		End of Bore hole		20.00	>50			>50	V. Dense	

Graphical representation of penetration resistance: 0 20 40 60 80 1

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Contd...3

3

Bore Log

Ref: ***GEO – G - 187 – 2025-26***

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIA APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITI TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SC FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATOR CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

Soil Investigation done by: GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38

Type of Drilling: Rotary – Mud Circulation LOCATION – 3

G.W.T-Not met

Bore hole No. : 3

Date of commencement : 02.12.2025
Date of completion : 03.12.2025

Depth below G.L	Soil Profile	Description of Soil	Thickness of layer (m)	Standard penetration test data: Depth at which test is conducted	N – Value- Depth of penetration: 15cm	30cm	45cm	For 30cm	Relative density / Consistency	Graphical representation of penetration resistance
										0 20 40 60 80
0.30		**Poorly Graded Gravel**	**0.30**							
		Silty Gravel	**2.30**	1.50	8	11	12	23	Medium	
2.60				3.00	15	18	23	41	Dense	
				4.50	32	46	50/10	>50	V. Dense	
				6.00	50/7	-	-	>50	V. Dense	
				7.50	>50	-	-	>50	V. Dense	
				9.00	>50	-	-	>50	V. Dense	
				10.50	>50	-	-	>50	V. Dense	
		Poorly Graded Gravel	**17.40**	12.00	>50	-	-	>50	V. Dense	
				13.50	>50	-	-	>50	V. Dense	
				15.00	>50	-	-	>50	V. Dense	
				16.50	>50	-	-	>50	V. Dense	
				18.00	>50	-	-	>50	V. Dense	
				19.00	>50	-	-	>50	V. Dense	
20.00m		End of Bore hole		20.00	>50			>50	V. Dense	

For Sree Daksha Property Developers India Pvt. Ltd.,

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE - 641 038

Contd...4

4

Bore Log

Ref: *GEO – G - 187 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIA APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITI TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SC FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATOR CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

Soil Investigation done by: GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38

Type of Drilling: Rotary – Mud Circulation LOCATION – 4

G.W.T-Not met

Bore hole No. : 4

Date of commencement : 03.12.2025
Date of completion : 04.12.2025

Depth below G.L	Soil Profile	Description of Soil	Thickness of layer (m)	Standard penetration test data: Depth at which test is conducted	N – Value- Depth of penetration: 15cm	30cm	45cm	For 30cm	Relative density / Consistency	Graphical representation of penetration resistance
0.30		Clay	0.30							
2.80		Silty Gravel	2.50	1.50	6	11	19	30	Dense	
				3.00	15	17	22	39	Dense	
				4.50	20	23	24	47	Dense	
				6.00	44	50/11	-	>50	V. Dense	
				7.50	50/6	-	-	>50	V. Dense	
				9.00	>50	-	-	>50	V. Dense	
				10.50	>50	-	-	>50	V. Dense	
		Poorly Graded Gravel	17.20	12.00	>50	-	-	>50	V. Dense	
				13.50	>50	-	-	>50	V. Dense	
				15.00	>50	-	-	>50	V. Dense	
				16.50	>50	-	-	>50	V. Dense	
				18.00	>50	-	-	>50	V. Dense	
				19.00	>50	-	-	>50	V. Dense	
20.00m		End of Bore hole		20.00	>50			>50	V. Dense	

Graphical representation of penetration resistance: 0 20 40 60 80

Sree Daksha Property Developers India Pvt. Ltd.

Director

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 039

Geotechnical Engineer

K.P. VETRISELVAN, GEOTECHNICAL ENGINEER, GEOTECHNICAL SOCIETY (LM-3564)

1

SOIL TEST RESULTS

Ref: *GEO – G - 187 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38	BORE NUMBER - 1	LOCATION : 1	GROUND WATER LEVEL: Not met	COMMENCEMENT OF LAB TESTING 05.12.2025	COMPLETION OF LAB TESTING 08.12.2025

SOIL PROFILE AND DEPTH IN METRES	DEPTH OF SAMPLING (m)	IS SOIL CLASSIFICATION	NATURAL WET DENSITY (kN/m³)	NATURAL MOISTURE CONTENT %	INDEX TEST			SIEVE ANALYSIS % PASSING IS SIEVE ANALYSIS				SPECIFIC GRAVITY	SHEAR TEST		STANDARD PENETRATION TEST				CONSOLIDATION TEST			
					LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% of GRAVEL	% of SAND	% of SILT	% of CLAY		COHESION C (Ton / m²)	ANGLE OF INTERNAL FRICTION °	DEPTH OF TESTING (m)	OBSERVED N VALUE	CORRECTED N VALUE	SAFE BEARING CAPACITY (T/m²)	COMPRESSION INDEX Cc	PRE - CONSOLIDATION PRESSURE (kg/cm²)	INITIAL VOIDS RATIO	CO-EFFECT OF CONSOLIDATION Cv (cm²/sec)
															1.50	19	19	12.88				
		CL	-	-	-	-	-	-	-	-	-	-	-	-	3.00	39	39	28.71	-	-	-	-
	0.40														4.50	45	45	34.20				
		GM	18.49	14.70	-	-	-	36	15	49		2.68	-	29	6.00	>50	50	38.95	-	-	-	-
	2.80														7.50	>50	50	40.00				
															9.00	>50	50	41.05				
			-	-	-	-	-	43	37	20		-	-	35	10.50	>50	50	42.10	-	-	-	-
															12.00	>50	50	43.15				
															13.50	>50	50	44.20				
		GP													15.00	>50	50	45.25				
															16.50	>50	50	46.30				
															18.00	>50	50	47.35				
			-	-				45	33	22		-	-	36	19.00	>50	50	48.05	-	-	-	-
															20.00	>50	50	48.75				
	20.00																					

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

CL – LOW PLASTICITY CLAY, GM – SILTY GRAVEL, GP – POORLY GRADED GRAVEL.

Contd…2

2

SOIL TEST RESULTS

Ref: *GEO – G - 187 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38	BORE NUMBER - 2	LOCATION : 2	GROUND WATER LEVEL: Not met	COMMENCEMENT OF LAB TESTING 05.12.2025	COMPLETION OF LAB TESTING 08.12.2025

SOIL PROFILE AND DEPTH IN METRES	DEPTH OF SAMPLING (m)	IS SOIL CLASSIFICATION	NATURAL WET DENSITY (kN/m³)	NATURAL MOISTURE CONTENT %	INDEX TEST			SIEVE ANALYSIS % PASSING IS SIEVE ANALYSIS				SPECIFIC GRAVITY	SHEAR TEST		STANDARD PENETRATION TEST				CONSOLIDATION TEST			
					LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% of GRAVEL	% of SAND	% of SILT	% of CLAY		COHESION C (Ton / m²)	ANGLE OF INTERNAL FRICTION °	DEPTH OF TESTING (m)	OBSERVED N VALUE	CORRECTED N VALUE	SAFE BEARING CAPACITY (T/m²)	COMPRESSION INDEX C_c	PRE - CONSOLIDATION PRESSURE (kg/cm²)	INITIAL VOIDS RATIO	CO-EFFECT OF CONSOLIDATION C_v (cm²/sec)
															1.50	46	46	32.84				
		CL	-	-	-	-	-	-	-	-	-	-	-	-	3.00	43	43	31.67	-	-	-	-
	0.60														4.50	>50	50	37.90				
		GM	15.03	10.91	-	-	-	32	13	55		2.65	-	33	6.00	>50	50	38.95	-	-	-	-
	2.60														7.50	>50	50	40.00				
															9.00	>50	50	41.05				
			-	-	-	-	-	44	35	21		-	-	36	10.50	>50	50	42.10	-	-	-	-
															12.00	>50	50	43.15				
															13.50	>50	50	44.20				
		GP		–											15.00	>50	50	45.25				
															16.50	>50	50	46.30				
															18.00	>50	50	47.35				
			-	-	-	-	-	41	33	26		-	-	36	19.00	>50	50	48.05	-	-	-	-
															20.00	>50	50	48.75				
	20.00																					

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

CL – LOW PLASTICITY CLAY, GM – SILTY GRAVEL, GP – POORLY GRADED GRAVEL.

Contd…3

3

SOIL TEST RESULTS

Ref: *GEO – G - 137 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38	BORE NUMBER - 3	LOCATION : 3	GROUND WATER LEVEL: Not met	COMMENCEMENT OF LAB TESTING 05.12.2025	COMPLETION OF LAB TESTING 08.12.2025

SOIL PROFILE AND DEPTH IN METRES	DEPTH OF SAMPLING (m)	IS SOIL CLASSIFICATION	NATURAL WET DENSITY (kN/m³)	NATURAL MOISTURE CONTENT %	INDEX TEST			SIEVE ANALYSIS % PASSING IS SIEVE ANALYSIS				SPECIFIC GRAVITY	SHEAR TEST		STANDARD PENETRATION TEST				CONSOLIDATION TEST			
					LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% of GRAVEL	% of SAND	% of SILT	% of CLAY		COHESION C (Ton / m²)	ANGLE OF INTERNAL FRICTION ⁰	DEPTH OF TESTING (m)	OBSERVED N VALUE	CORRECTED N VALUE	SAFE BEARING CAPACITY (T/m²)	COMPRESSION INDEX C_c	PRE - CONSOLIDATION PRESSURE (kg/cm²)	INITIAL VOIDS RATIO	CO-EFFECT OF CONSOLIDATION C_v (cm²/sec)
															1.50	23	23	15.83				
		GP	-	-	-	-	-	-	-	-	-	-	-	-	3.00	41	41	30.19	-	-	-	-
	0.30														4.50	>50	50	37.90				
		GM	17.52	13.86	-	-	-	31	10	59		2.67	-	30	6.00	>50	50	38.95	-	-	-	-
	2.60														7.50	>50	50	40.00				
															9.00	>50	50	41.05				
			-	-	-	-	-	43	34	23		-	-	34	10.50	>50	50	42.10	-	-	-	-
															12.00	>50	50	43.15				
															13.50	>50	50	44.20				
		GP													15.00	>50	50	45.25				
															16.50	>50	50	46.30				
															18.00	>50	50	47.35	-	-	-	-
			-	-	-	-	-	46	37	17		-	-	36	19.00	>50	50	48.05				
															20.00	>50	50	48.75				
	20.00																					

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

GM – SILTY GRAVEL, GP – POORLY GRADED GRAVEL.

Contd…4

4

SOIL TEST RESULTS

Ref: *GEO – G - 187 – 2025-26*

Name of Project: "SOIL INVESTIGATION FOR THE PROPOSED CONSTRUCTION OF RESIDENTIAL APARTMENT MULTISTOREY BUILDING BLOCK - A WITH BASEMENT -1 + STILT + 10 FLOORS WITH TERRACE FLOOR & BLOCK - B WITH G + 1 FLOOR WITH TERRACE FLOOR OF PLINTH AREA 34,671 SQ. FT., @ SF. NO. : 267/1B1B, 267/1B1A2, VEERAKERALAM VILLAGE, PERUR TALUK, COIMBATORE CORPORATION WEST ZONE, COIMBATORE DISTRICT – 641007."

GEODESIGN INDIA PRIVATE LIMITED Soil Exploration Consultant, Coimbatore-38	BORE NUMBER - 4	LOCATION : 4	GROUND WATER LEVEL: Not met	COMMENCEMENT OF LAB TESTING 05.12.2025	COMPLETION OF LAB TESTING 08.12.2025

SOIL PROFILE AND DEPTH IN METRES	DEPTH OF SAMPLING (m)	IS SOIL CLASSIFICATION	NATURAL WET DENSITY (kN/m³)	NATURAL MOISTURE CONTENT %	INDEX TEST			SIEVE ANALYSIS % PASSING IS SIEVE ANALYSIS				SPECIFIC GRAVITY	SHEAR TEST		STANDARD PENETRATION TEST				CONSOLIDATION TEST			
					LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% of GRAVEL	% of SAND	% of SILT	% of CLAY		COHESION C (Ton / m²)	ANGLE OF INTERNAL FRICTION °	DEPTH OF TESTING (m)	OBSERVED N VALUE	CORRECTED N VALUE	SAFE BEARING CAPACITY (T/m²)	COMPRESSION INDEX C_c	PRE - CONSOLIDATION PRESSURE (kg/cm²)	INITIAL VOIDS RATIO	CO-EFFECT OF CONSOLIDATION C_v (cm²/sec)
															1.50	30	30	21.01				
		CL	-	-	-	-	-	-	-	-	-	-	-	-	3.00	39	39	28.71	-	-	-	-
	0.30														4.50	47	47	35.68				
		GM	16.31	12.74	-	-	-	35	12	53		2.66	-	31	6.00	>50	50	38.95	-	-	-	-
	2.80														7.50	>50	50	40.00				
															9.00	>50	50	41.05				
			-	-	-	-	-	42	39	19		-	-	35	10.50	>50	50	42.10	-	-	-	-
															12.00	>50	50	43.15				
															13.50	>50	50	44.20				
		GP													15.00	>50	50	45.25				
															16.50	>50	50	46.30				
															18.00	>50	50	47.35				
			-	-				44	36	20		-	-	33	19.00	>50	50	48.05	-	-	-	-
															20.00	>50	50	48.75				
	20.00																					

CL – LOW PLASTICITY CLAY, GM – SILTY GRAVEL, GP – POORLY GRADED GRAVEL.

GEODESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Dr.K.P. VETRISELVAN, M.E.(GEOTECH), MICS, MISTE,
GEOTECHNICAL ENGINEER
INDIAN GEOTECHNICAL SOCIETY (LM-3564)

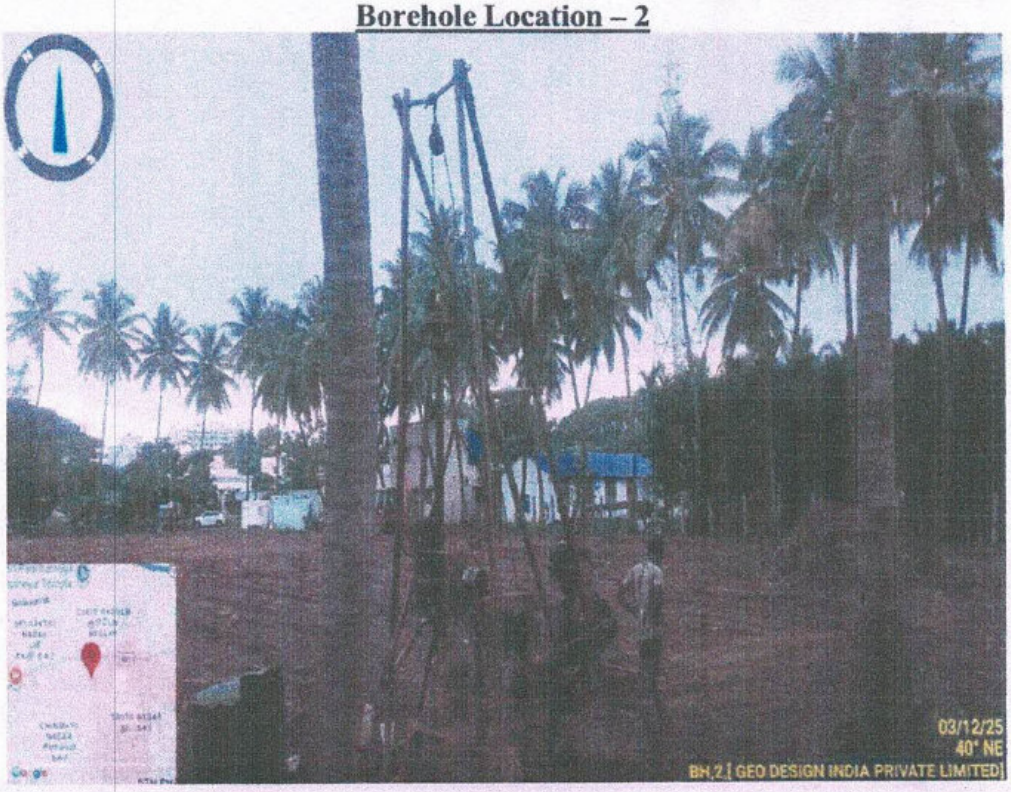
Geotechnical Engineer

8. PHOTOS

Borehole Location – 1



Borehole Location – 2



GEO DESIGN INDIA PRIVATE LIMITED COIMBATORE

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Borehole Location – 3



Borehole Location – 4



Er.K.P.VETRISELVAN.,M.E(GEOTECH),MIGS,MISTE.,
GEOTECHNICAL ENGINEER

Er.K.P. VETRISELVAN, M.E(GEOTECH), MICS, MISTE,
GEOTECHNICAL ENGINEER
INDIAN GEOTECHNICAL SOCIETY (LM-3564)

GEO DESIGN INDIA PRIVATE LIMITED COIMBATORE 641 038

Sree Daksha Property Developers India Pvt. Ltd.,

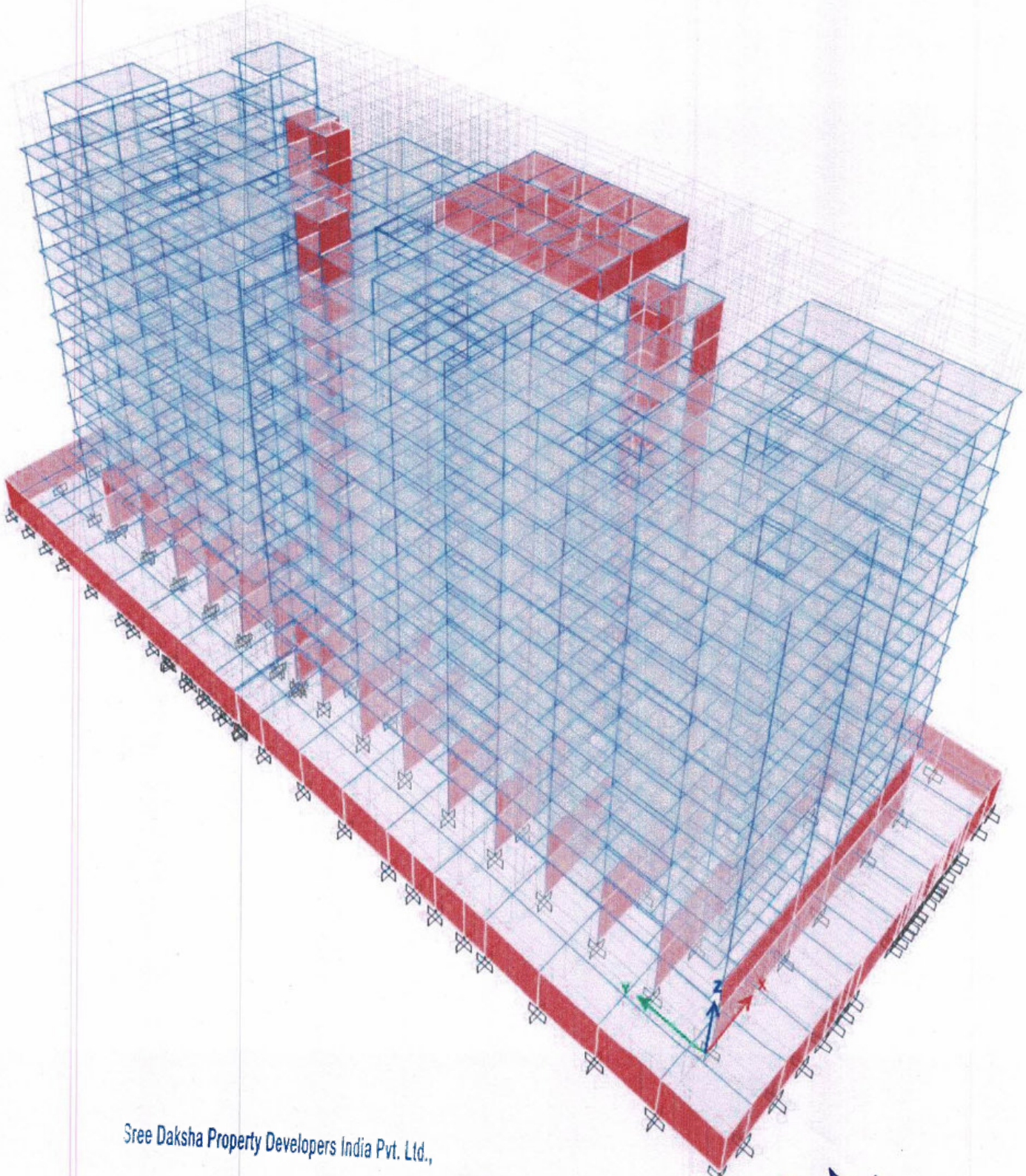
Director

BEAM, COLUMN & SHEAR WALL DESIGNS

Sree Daksha Property Developers India Pvt. Ltd.,

Director

ETABS – STILT + 10 FLOORS + TERRACE WITH SWIMMING POOL



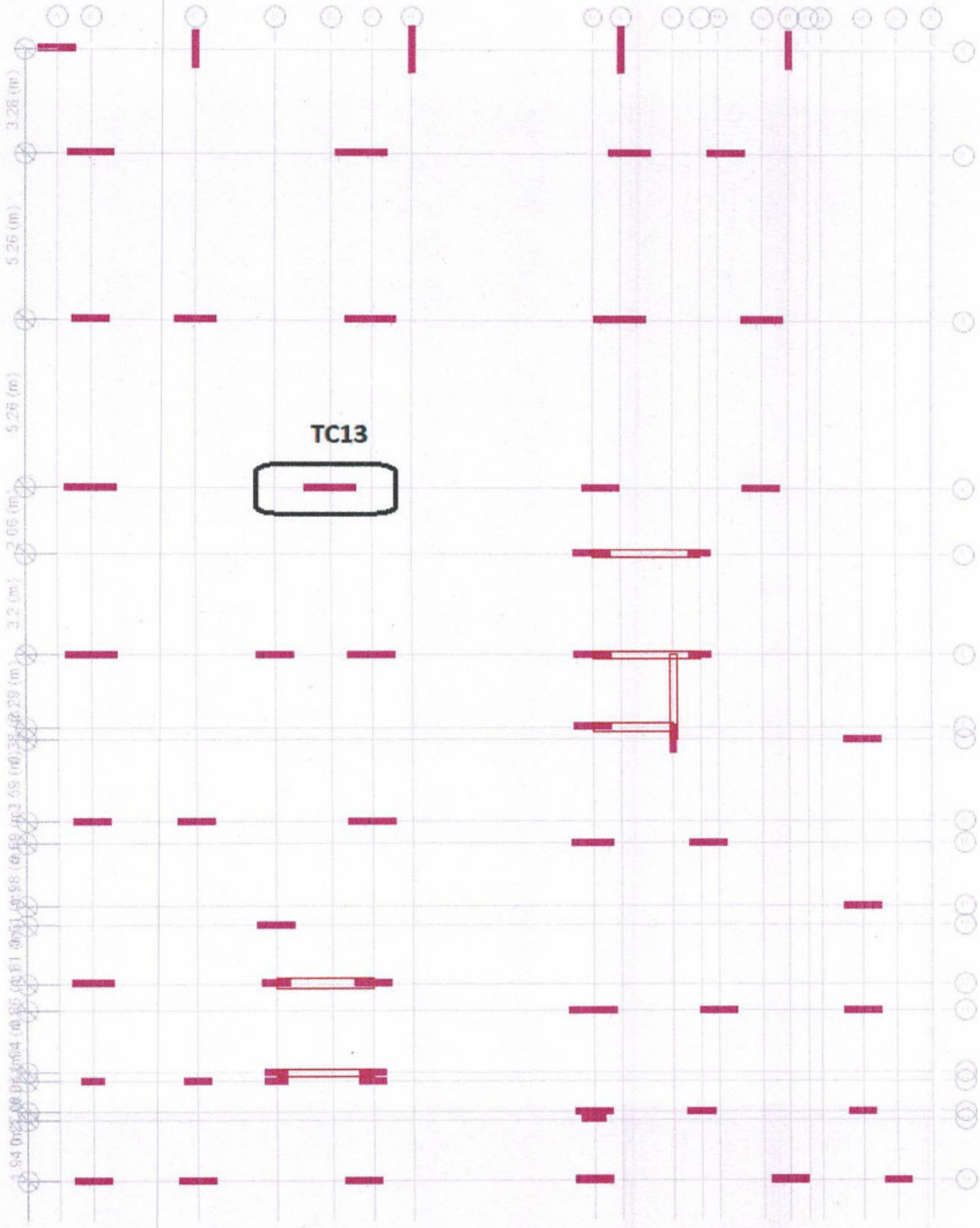
Sree Daksha Property Developers India Pvt. Ltd.,

Director

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No: CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

COLUMN DESIGNS

COLUMN – I -- TOP AREA

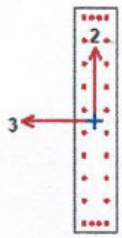


Sree Daksha Property Developers India Pvt. Ltd.,

Director

ETABS Concrete Frame Design

IS 456:2000 + IS 13920:2016 Column Section Design (Summary)



TC13 – 300 X 1650 **Column Element Details**

Level	Element	Unique Name	Section ID	Combo ID	Station Loc	Length (mm)	LLRF	Type
Stilt floor	C84	7596	C-300X1650	1.5 DL+ 1.5 EQX	0	3810	0.475	Ductile Frame

Section Properties

b (mm)	h (mm)	dc (mm)	Cover (Torsion) (mm)
300	1650	68	30

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
31622.78	40	1	500	500

Design Code Parameters

γ_c	γ_s
1.5	1.15

Axial Force and Biaxial Moment Design For P_u , M_{u2} , M_{u3}

Design P_u kN	Design M_{u2} kN-m	Design M_{u3} kN-m	Minimum M_2 kN-m	Minimum M_3 kN-m	Rebar Area mm^2	Rebar % %
1938.2987	-38.766	52.6718	38.766	119.0503	3960	0.8

Axial Force and Biaxial Moment Factors

	K Factor Unitless	Length mm	Initial Moment kN-m	Additional Moment kN-m	Minimum Moment kN-m
Major Bend(M3)	0.691003	3210	32.0817	0	119.0503
Minor Bend(M2)	0.695225	3210	1.1959	0	38.766

Axial Compression Check for Seismic Design per IS 13920:2016 Section 7.1

Limit Compression Factor Unitless	Limit Compression Strength kN	Compression D/C Ratio Unitless	Status
0.4	7920	0.244735	OK

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Shear Design for V_{u2} , V_{u3}

	Shear V_u kN	Shear V_c kN	Shear V_s kN	Shear V_p kN	Rebar A_{sv} /s mm²/m
Major, V_{u2}	90.1666	285.7277	189.84	90.1666	332.53
Minor, V_{u3}	1.7191	253.9158	153.1202	0	1828.92

Joint Shear Check/Design

	Joint Shear Force kN	Shear V_{Top} kN	Shear $V_{u,Tot}$ kN	Shear V_c kN	Joint Area cm²	Shear Ratio Unitless
Major Shear, V_{u2}	N/N	N/N	N/N	N/N	N/N	N/N
Minor Shear, V_{u3}	N/N	N/N	N/N	N/N	N/N	N/N

(1.4) Beam/Column Capacity Ratio

Major Ratio	Minor Ratio
N/N	N/N

Additional Moment Reduction Factor k (IS 39.7.1.1)

A_g cm²	A_{sc} cm²	P_{uz} kN	P_b kN	P_u kN	k Unitless
4950	39.6	10395	4144.1176	1938.2987	1

Additional Moment (IS 39.7.1)

	Consider M_a	Length Factor	Section Depth (mm)	KL/Depth Ratio	KL/Depth Limit	KL/Depth Exceeded	M_a Moment (kN-m)
Major Bending (M_3)	Yes	0.843	1650	1.344	12	No	0
Minor Bending (M_2)	Yes	0.843	300	7.439	12	No	0

Notes:

N/A: Not Applicable

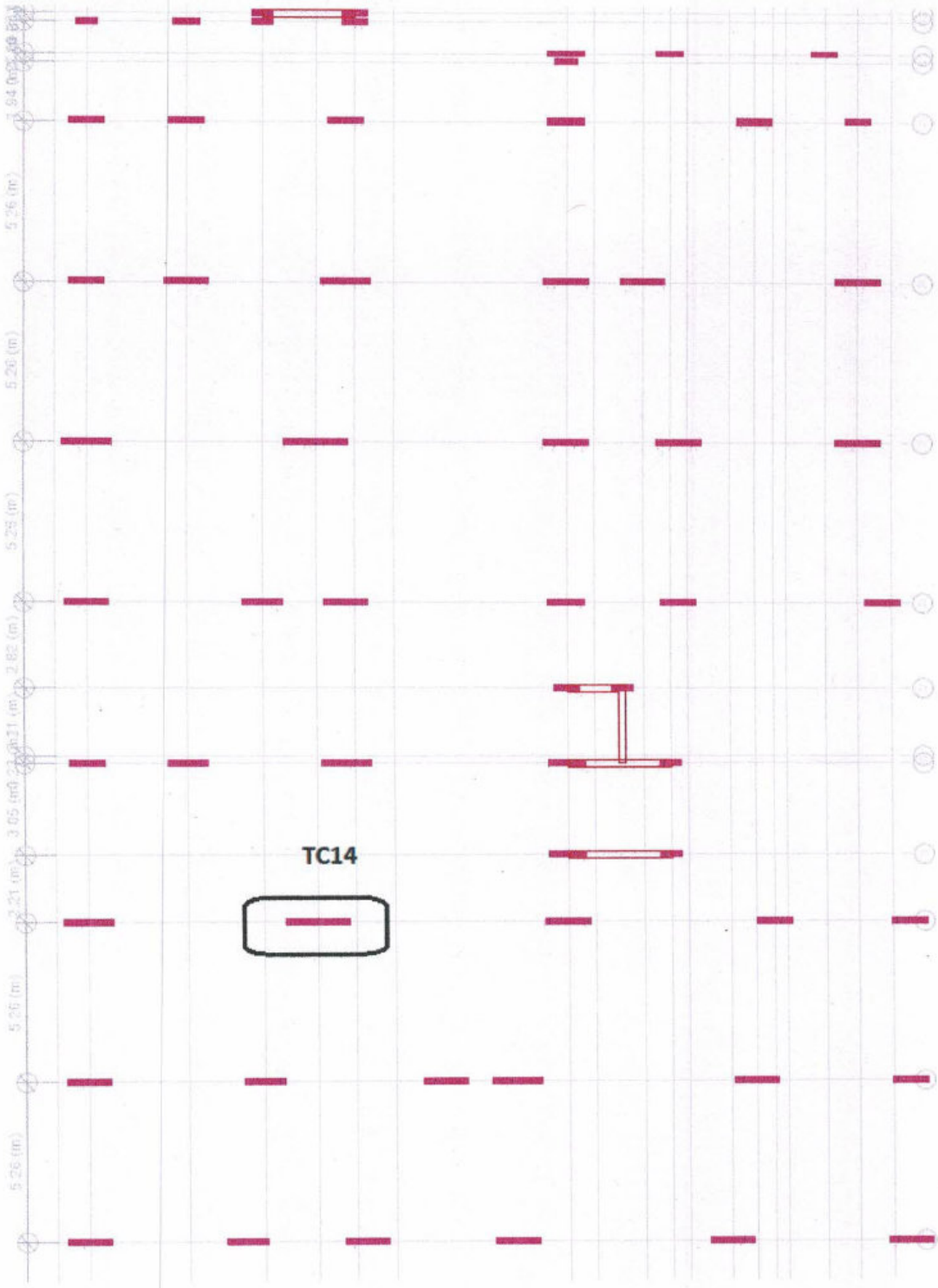
N/C: Not Calculated

N/N: Not Needed

Sree Daksha Property Developers India Pvt. Ltd.,

Director

COLUMN – II -- BOTTOM AREA

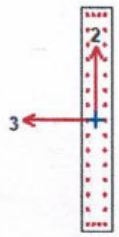


Sree Daksha Property Developers India Pvt. Ltd.,

Director

ETABS Concrete Frame Design

IS 456:2000 + IS 13920:2016 Column Section Design (Summary)



TC14 – 300 X 2100 **Column Element Details**

Level	Element	Unique Name	Section ID	Combo ID	Station Loc	Length (mm)	LLRF	Type
1 st floor	C21	626	C-300X2100	1.5 DL+1.5 EQY	2450	3050	0.458	Ductile Frame

Section Properties

b (mm)	h (mm)	dc (mm)	Cover (Torsion) (mm)
300	2100	68	30

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
31622.78	40	1	500	500

Design Code Parameters

ɣc	ɣs
1.5	1.15

Axial Force and Biaxial Moment Design For P_u , M_{u2} , M_{u3}

Design P_u kN	Design M_{u2} kN-m	Design M_{u3} kN-m	Minimum M_2 kN-m	Minimum M_3 kN-m	Rebar Area mm^2	Rebar % %
1723.0206	-100.0208	-9.6764	34.4604	129.0542	5040	0.8

Axial Force and Biaxial Moment Factors

	K Factor Unitless	Length mm	Initial Moment kN-m	Additional Moment kN-m	Minimum Moment kN-m
Major Bend(M3)	0.994456	2450	-25.3074	0	129.0542
Minor Bend(M2)	1	2450	38.3363	0	34.4604

Axial Compression Check for Seismic Design per IS 13920:2016 Section 7.1

Limit Compression Factor Unitless	Limit Compression Strength kN	Compression D/C Ratio Unitless	Status
0.4	10080	0.170935	OK

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Shear Design for V_{u2} , V_{u3}

	Shear V_u kN	Shear V_c kN	Shear V_s kN	Shear V_p kN	Rebar A_{sv} /s mm²/m
Major, V_{u2}	77.78	341.44	243.84	77.78	332.53
Minor, V_{u3}	65.5874	302.9596	194.8803	65.5874	2327.71

Joint Shear Check/Design

	Joint Shear Force kN	Shear V_{Top} kN	Shear $V_{u,Tot}$ kN	Shear V_c kN	Joint Area cm²	Shear Ratio Unitless
Major Shear, V_{u2}	0	0	436.6508	4781.3638	6300	0.091
Minor Shear, V_{u3}	0	0	598.3724	720.9993	1140	0.83

(1.4) Beam/Column Capacity Ratio

Major Ratio	Minor Ratio
0.04	0.295

Additional Moment Reduction Factor k (IS 39.7.1.1)

A_g cm²	A_{sc} cm²	P_{uz} kN	P_b kN	P_u kN	k Unitless
6300	50.4	13230	5409.3718	1723.0206	1

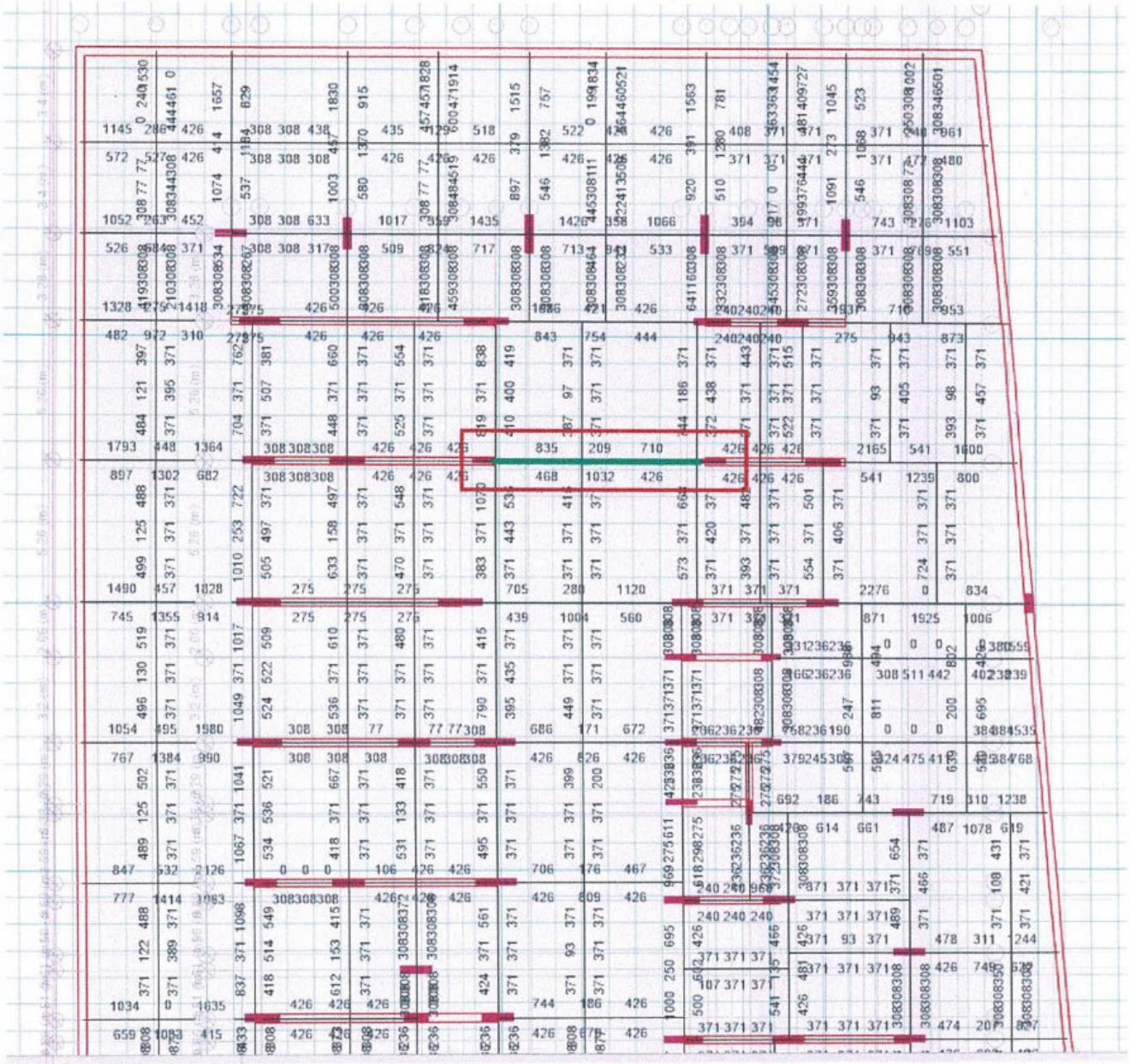
Additional Moment (IS 39.7.1)

	Consider M_a	Length Factor	Section Depth (mm)	KL/Depth Ratio	KL/Depth Limit	KL/Depth Exceeded	M_a Moment (kN-m)
Major Bending (M_3)	Yes	0.803	2100	1.16	12	No	0
Minor Bending (M_2)	Yes	0.803	300	8.167	12	No	0

Sree Daksha Property Developers India Pvt. Ltd.,

Director

STILT ROOF BEAM – I -- RESULTS



ETABS Concrete Frame Design

IS 456:2000 Beam Section Design (Envelope)

Beam Element Details

Level	Element	Unique Name	Section ID	Length (mm)	LLRF
Stilt floor	B354	9250	B-300X600	7830	0.783

Section Properties

b (mm)	h (mm)	b_f (mm)	d_s (mm)	d_{ct} (mm)	d_{cb} (mm)
300	600	300	0	60	60

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

γc	γs
1.5	1.15

Flexural Reinforcement for Major Axis Moment, M_{u3}

	End-I Rebar Area mm²	End-I Rebar %	Middle Rebar Area mm²	Middle Rebar %	End-J Rebar Area mm²	End-J Rebar %
Top (+2 Axis)	835	0.46	209	0.12	710	0.39
Bot (-2 Axis)	468	0.26	1032	0.57	426	0.24

Flexural Design Moment, M_{u3} and Axial Force, P_u

	Station Loc mm	Design M_u kN-m	Design P_u kN	Combo Name
Top (+2 Axis) End-I	825	-179.0307	0	1.5 DL+1.5 LL
Top (+2 Axis) Middle	5385	0	0	0.9 DL - 1.5 WLY
Top (+2 Axis) End-J	7005	-154.2568	0	1.5 DL+1.5 LL
Bot (-2 Axis) End-I	2160	104.6163	0	1.5 DL+1.5 LL
Bot (-2 Axis) Middle	3240	216.2649	0	1.5 DL+1.5 LL
Bot (-2 Axis) End-J	5742.5	78.9656	0	1.5 DL+1.5 LL

Shear Reinforcement for Major Shear, V_{u2}

End-I Rebar A_{sv} /s mm²/m	Middle Rebar A_{sv} /s mm²/m	End-J Rebar A_{sv} /s mm²/m
1464.21	911.08	1117.77

Design Shear Force for Major Shear, V_{u2}

End-I Design V_u kN	End-I Station Loc mm	Middle Design V_u kN	Middle Station Loc mm	End-J Design V_u kN	End-J Station Loc mm
252.519	825	163.8269	5385	213.0241	7005
1.2 DL+1.2 LL+1.2 EQY		1.2 DL+1.2 LL+1.2 EQY		1.2 DL+1.2 LL+1.2 EQY	

Torsion Reinforcement

Shear Rebar A_{svt} /s mm²/m
975.55

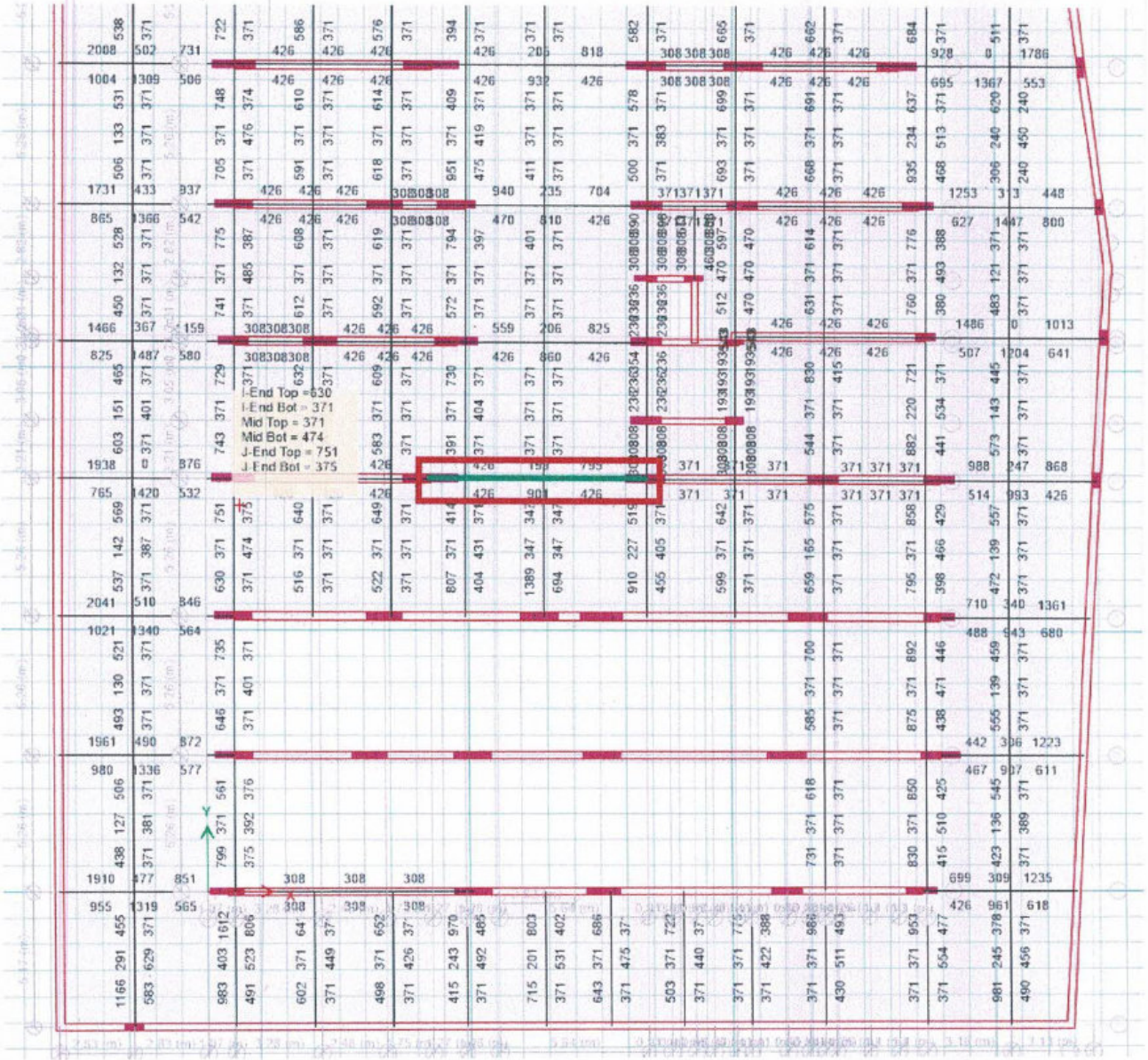
Design Torsion Force

Design T_u kN-m	Station Loc mm	Design T_u kN-m	Station Loc mm
3.3817	1080	6.3628	1080
1.5 DL+1.5 LL		1.5 DL+1.5 EQY	

Sree Daksha Property Developers India Pvt. Ltd.,

Director

STILT ROOF BEAM - II -- RESULTS



ETABS Concrete Frame Design

IS 456:2000 Beam Section Design (Envelope)

Beam Element Details

Level	Element	Unique Name	Section ID	Length (mm)	LLRF
Stilt floor	B134	1616	B-300X600	8190	0.851

Section Properties

b (mm)	h (mm)	b_f (mm)	d_s (mm)	d_{ct} (mm)	d_{cb} (mm)
300	600	300	0	60	60

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

γ_c	γ_s
1.5	1.15

Flexural Reinforcement for Major Axis Moment, M_{u3}

	End-I Rebar Area mm²	End-I Rebar %	Middle Rebar Area mm²	Middle Rebar %	End-J Rebar Area mm²	End-J Rebar %
Top (+2 Axis)	426	0.24	199	0.11	795	0.44
Bot (-2 Axis)	426	0.24	901	0.5	426	0.24

Flexural Design Moment, M_{u3} and Axial Force, P_u

	Station Loc mm	Design M_u kN-m	Design P_u kN	Combo Name
Top (+2 Axis) End-I	1050	-81.9103	0	1.5 DL+1.5 LL
Top (+2 Axis) Middle	5740	0	0	0.9 DL - 1.5 WLY
Top (+2 Axis) End-J	7440	-171.0714	0	1.5 DL+1.5 LL
Bot (-2 Axis) End-I	2270	83.361	0	1.5 DL+1.5 LL
Bot (-2 Axis) Middle	4270	191.6549	0	1.5 DL+1.5 LL
Bot (-2 Axis) End-J	6230	66.0467	0	1.5 DL+1.5 LL

Shear Reinforcement for Major Shear, V_{u2}

End-I Rebar A_{sv} /s mm²/m	Middle Rebar A_{sv} /s mm²/m	End-J Rebar A_{sv} /s mm²/m
1390.77	777.98	1187.81

Design Shear Force for Major Shear, V_{u2}

End-I Design V_u kN	End-I Station Loc mm	Middle Design V_u kN	Middle Station Loc mm	End-J Design V_u kN	End-J Station Loc mm
247.7104	1050	126.4017	5740	207.1563	7440
1.2 DL+1.2 LL+1.2 EQY		1.2 DL+1.2 LL+1.2 EQX		1.2 DL+1.2 LL+1.2 EQY	

Torsion Reinforcement

Shear Rebar A_{svt} /s mm²/m
1012.13

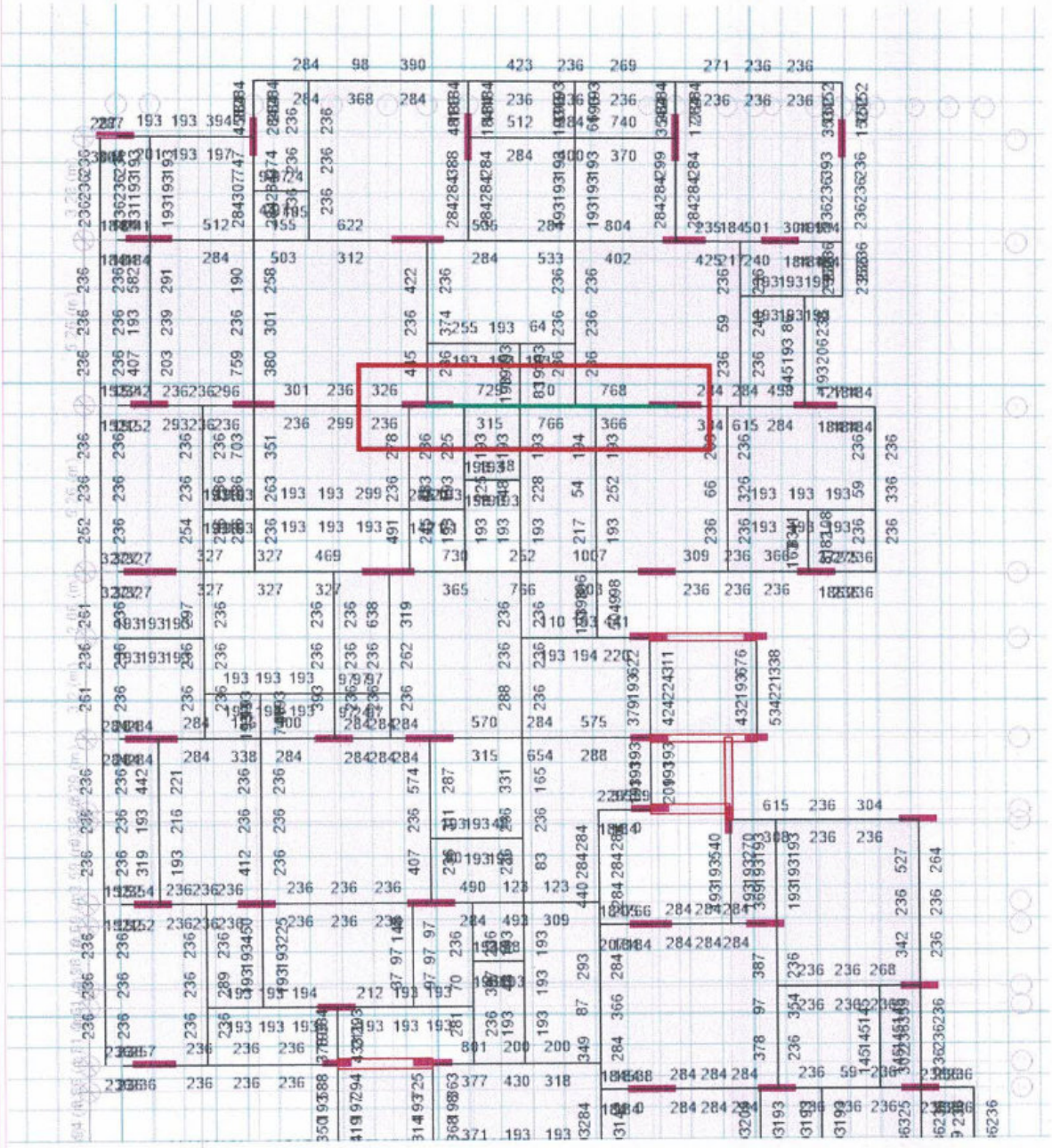
Design Torsion Force

Design T_u kN-m	Station Loc mm	Design T_u kN-m	Station Loc mm
1.7776	1050	6.5489	1270
1.5 DL+1.5 LL		0.9 DL + 1.5 EQY	

Sree Daksha Property Developers India Pvt. Ltd.,

Director

TYPICAL FLOOR ROOF BEAM – I -- RESULTS:



ETABS Concrete Frame Design

IS 456:2000 Beam Section Design (Envelope)

Beam Element Details

Level	Element	Unique Name	Section ID	Length (mm)	LLRF
2 nd floor	B354	8146	B-230X600	7830	0.885

Section Properties

b (mm)	h (mm)	b_f (mm)	d_s (mm)	d_{ct} (mm)	d_{cb} (mm)
230	600	230	0	60	60

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

γ_c	γ_s
1.5	1.15

Flexural Reinforcement for Major Axis Moment, M_{u3}

	End-I Rebar Area mm²	End-I Rebar %	Middle Rebar Area mm²	Middle Rebar %	End-J Rebar Area mm²	End-J Rebar %
Top (+2 Axis)	729	0.53	0	0	768	0.56
Bot (-2 Axis)	315	0.23	766	0.55	366	0.27

Flexural Design Moment, M_{u3} and Axial Force, P_u

	Station Loc mm	Design M_u kN-m	Design P_u kN	Combo Name
Top (+2 Axis) End-I	825	-154.1351	0	1.5 DL+1.5 LL
Top (+2 Axis) Middle	5265	0	0	0.9 DL - 1.5 WLY
Top (+2 Axis) End-J	7005	-161.5468	0	1.5 DL+ 1.5 EQX
Bot (-2 Axis) End-I	2010	70.8745	0	1.5 DL+ 1.5 EQX
Bot (-2 Axis) Middle	4630	161.018	0	1.5 DL+1.5 LL
Bot (-2 Axis) End-J	5692.5	81.5868	0	1.5 DL+1.5 LL

Shear Reinforcement for Major Shear, V_{u2}

End-I Rebar A_{sv} /s mm²/m	Middle Rebar A_{sv} /s mm²/m	End-J Rebar A_{sv} /s mm²/m
1265.24	398.82	998.57

Design Shear Force for Major Shear, V_{u2}

End-I Design V_u kN	End-I Station Loc mm	Middle Design V_u kN	Middle Station Loc mm	End-J Design V_u kN	End-J Station Loc mm
139.1765	1115	42.766	5265	151.7909	6975
1.5 DL+1.5 EQY		1.5 DL+1.5 LL		1.5 DL+1.5 EQY	

Torsion Reinforcement

Shear Rebar A_{svt} /s mm²/m
1304.21

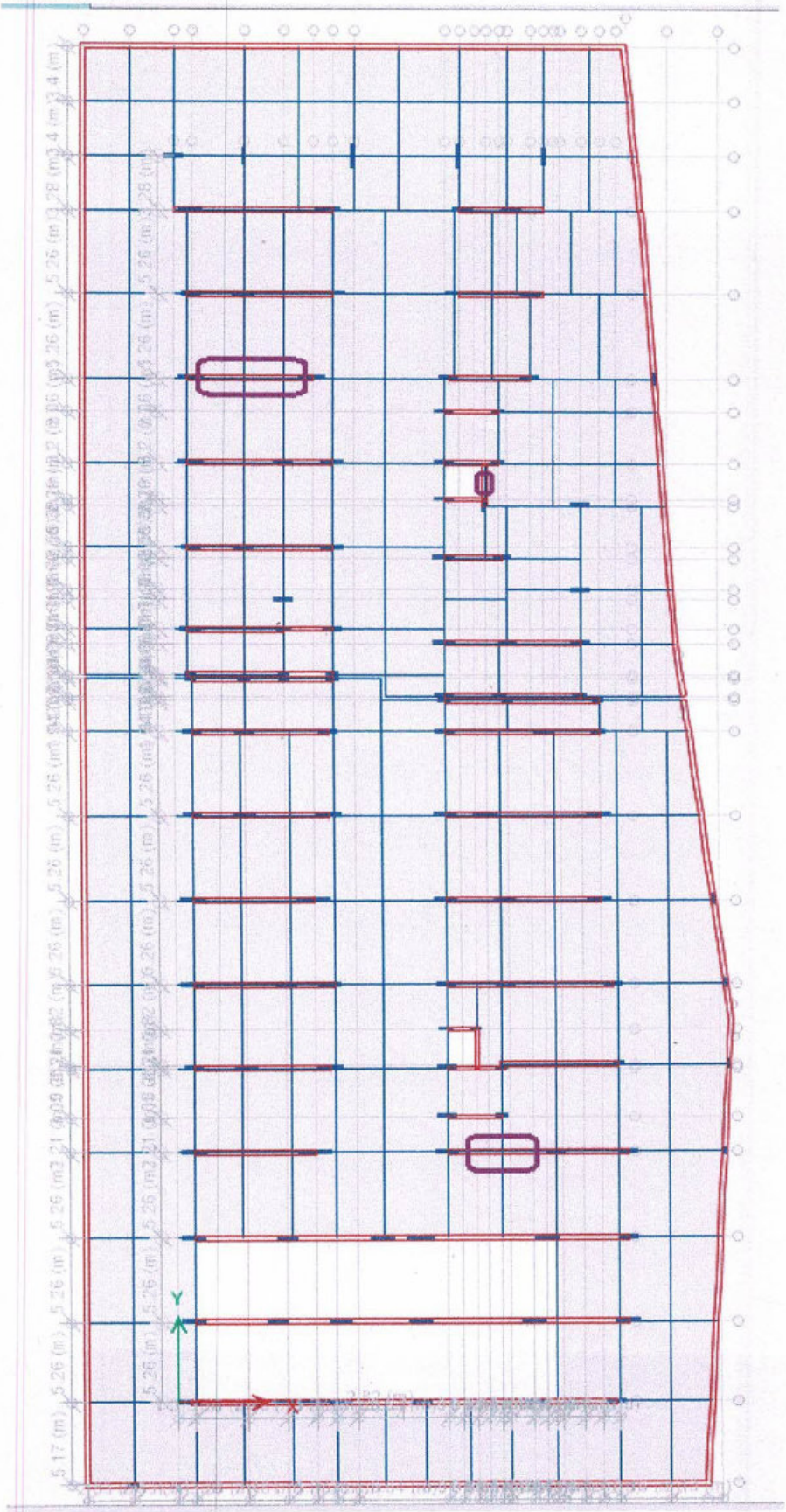
Design Torsion Force

Design T_u kN-m	Station Loc mm	Design T_u kN-m	Station Loc mm
23.4812	825	23.4812	1115
1.5 DL+1.5 EQY		1.5 DL+1.5 EQY	

Sree Daksha Property Developers India Pvt. Ltd.,

Director

SHEAR WALL



Sree Daksha Property Developers India Pvt. Ltd.,

Director

ETABS Shear Wall Design

IS 456:2000 Pier Design

Pier Details

Story ID	Pier ID	Centroid X (mm)	Centroid Y (mm)	Length (mm)	Thickness (mm)	LLRF
1 st floor	PW44	14661.1	26077.1	36820	300	0.5

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

Γ_S	Γ_C	IP_{MAX}	IP_{MIN}	P_{MAX}	MinEcc Major	MinEcc Minor
1.15	1.5	0.04	0.0025	0.8	Yes	Yes

Pier Leg Location, Length and Thickness

Station Location	ID	Left X_1 mm	Left Y_1 mm	Right X_2 mm	Right Y_2 mm	Length mm	Thickness mm
Top	Leg 1	1070	36820	9550	36820	8480	300
Top	Leg 2	1070	15780	8580	15780	7510	300
Top	Leg 3	16770	15780	28060	15780	11290	300
Top	Leg 4	16770	36820	26310	36820	9540	300
Bottom	Leg 1	1070	36820	9550	36820	8480	300
Bottom	Leg 2	1070	15780	8580	15780	7510	300
Bottom	Leg 3	16770	15780	28060	15780	11290	300
Bottom	Leg 4	16770	36820	26310	36820	9540	300

Flexural Design for P_u, M_{u2} and M_{u3}

Station Location	Required Rebar Area (mm^2)	Required Reinf Ratio	Current Reinf Ratio	Flexural Combo	P_u kN	M_{u2} kN-m	M_{u3} kN-m	Pier A_g mm^2
Top	34359	0.0031	0.0031	DWalS44	1825.6459	156616.9078	141343.9425	11046000
Bottom	84647	0.0077	0.0031	DWalS43	6784.7087	67131.9338	394257.2611	11046000

Shear Design

Station Location	ID	Rebar mm^2/m	Shear Combo	P_u kN	M_u kN-m	V_u kN	V_c kN	$V_c + V_s$ kN
Top	Leg 1	OS	DWalS44	1825.6459	141343.9425	-15136.1362	642.2058	2478.3102
Top	Leg 2	OS	DWalS44	1825.6459	141343.9425	-15136.1362	573.6647	2199.7429
Top	Leg 3	OS	DWalS44	1825.6459	141343.9425	-15136.1362	840.7632	3285.2936
Top	Leg 4	OS	DWalS44	1825.6459	141343.9425	-15136.1362	717.1065	2782.7239
Bottom	Leg 1	OS	DWalS43	6784.7087	394257.2611	36208.8328	1132.354	2968.4583
Bottom	Leg 2	OS	DWalS44	3421.7247	289524.5866	6876.8515	911.9257	2538.0039
Bottom	Leg 3	OS	DWalS43	6784.7087	394257.2611	36208.8328	1428.5784	3873.1088
Bottom	Leg 4	OS	DWalS43	6784.7087	394257.2611	36208.8328	1244.097	3309.7144

Number of legs where shear force exceeds max allowed (top, bottom) = 4, 4

Boundary Element Check

Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Top–Left	Leg 1	4240	DWalS42	15639.5518	-156504.1738	49.68	6
Top–Right	Leg 1	4240	DWalS42	15639.5518	137553.8847	44.4	6
Top–Left	Leg 2	3755	DWalS42	15639.5518	-156504.1738	62.44	6
Top–Right	Leg 2	3755	DWalS42	15639.5518	137553.8847	55.72	6

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Top–Left	Leg 3	3600	DWalS42	15639.5518	-156504.1738	29.17	6
Top–Right	Leg 3	3150	DWalS42	15639.5518	137553.8847	26.2	6
Top–Left	Leg 4	4770	DWalS42	15639.5518	-156504.1738	39.86	6
Top–Right	Leg 4	3900	DWalS42	15639.5518	137553.8847	35.69	6
Bottom–Left	Leg 1	4240	DWalS42	30416.5167	-325407.4621	102.46	6
Botttom–Right	Leg 1	4240	DWalS42	30416.5167	280553.8677	89.98	6
Bottom–Left	Leg 2	3755	DWalS42	30416.5167	-325407.4621	128.89	6
Botttom–Right	Leg 2	3755	DWalS42	30416.5167	280553.8677	112.99	6
Bottom–Left	Leg 3	5645	DWalS42	30416.5167	-325407.4621	60.04	6
Botttom–Right	Leg 3	5645	DWalS42	30416.5167	280553.8677	53	6
Bottom–Left	Leg 4	4770	DWalS42	30416.5167	-325407.4621	82.14	6
Botttom–Right	Leg 4	4770	DWalS42	30416.5167	280553.8677	72.28	6

LIFT SHEAR WALL

ETABS Shear Wall Design

IS 456:2000 Pier Design

Pier Details

Story ID	Pier ID	Centroid X (mm)	Centroid Y (mm)	Length (mm)	Thickness (mm)	LLRF
1 st floor	PW42	17204.1	39548.1	23470	230	0.4

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

Γ_S	Γ_C	IP_{MAX}	IP_{MIN}	P_{MAX}	MinEcc Major	MinEcc Minor
1.15	1.5	0.04	0.0025	0.8	Yes	Yes

Pier Leg Location, Length and Thickness

Station Location	ID	Left X_1 mm	Left Y_1 mm	Right X_2 mm	Right Y_2 mm	Length mm	Thickness mm
Top	Leg 1	16770	23480	18590	23480	1820	230
Top	Leg 2	18590	21040	18590	23480	2440	230
Top	Leg 3	16770	21040	20150	21040	3380	230
Top	Leg 4	16770	17990	20150	17990	3380	230
Top	Leg 5	16770	58770	20150	58770	3380	230
Top	Leg 6	16770	61970	20150	61970	3380	230
Top	Leg 7	6830	45620	9850	45620	3020	230
Top	Leg 8	19280	56100	19280	58770	2670	230
Bottom	Leg 1	16770	23480	18590	23480	1820	230
Bottom	Leg 2	18590	21040	18590	23480	2440	230
Bottom	Leg 3	16770	21040	20150	21040	3380	230
Bottom	Leg 4	16770	17990	20150	17990	3380	230
Bottom	Leg 5	16770	58770	20150	58770	3380	230
Bottom	Leg 6	16770	61970	20150	61970	3380	230
Bottom	Leg 7	6830	45620	9850	45620	3020	230
Bottom	Leg 8	19280	56100	19280	58770	2670	230

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Flexural Design for P_u, M_{u2} and M_{u3}

Station Location	Required Rebar Area (mm²)	Required Reinf Ratio	Current Reinf Ratio	Flexural Combo	P_u kN	M_{u2} kN-m	M_{u3} kN-m	Pier A_g mm²
Top	429963	0.0797	0.0011	DWalS42	151670.0093	382787.1646	2712669.2517	5398100
Bottom	428211	0.0793	0.0011	DWalS42	152287.2347	371712.7848	2775213.8063	5398100

Shear Design

Station Location	ID	Rebar mm²/m	Shear Combo	P_u kN	M_u kN-m	V_u kN	V_c kN	$V_c + V_s$ kN
Top	Leg 1	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	321.4848	623.6048
Top	Leg 2	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	431.0016	836.0416
Top	Leg 3	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	597.0432	1158.1232
Top	Leg 4	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	597.0432	1158.1232
Top	Leg 5	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	597.0432	1158.1232
Top	Leg 6	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	597.0432	1158.1232
Top	Leg 7	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	533.4528	1034.7728
Top	Leg 8	OS	DWalS44	-133767.3441	2703424.9422	41782.7801	471.6288	914.8488
Bottom	Leg 1	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	321.4848	623.6048
Bottom	Leg 2	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	431.0016	836.0416
Bottom	Leg 3	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	597.0432	1158.1232
Bottom	Leg 4	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	597.0432	1158.1232
Bottom	Leg 5	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	597.0432	1158.1232
Bottom	Leg 6	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	597.0432	1158.1232
Bottom	Leg 7	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	533.4528	1034.7728
Bottom	Leg 8	OS	DWalS44	-133397.0088	2765895.5603	41782.7801	471.6288	914.8488

Number of legs where shear force exceeds max allowed (top, bottom) = 8, 8

Boundary Element Check

Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Top–Left	Leg 1	910	DWalS42	151670.0093	-2666448	21362.06	6
Top–Right	Leg 1	910	DWalS42	151670.0093	2712669.2517	21726.08	6
Top–Left	Leg 2	1220	DWalS42	151670.0093	-2666448	11953.86	6
Top–Right	Leg 2	1220	DWalS42	151670.0093	2712669.2517	12156.39	6
Top–Left	Leg 3	1690	DWalS42	151670.0093	-2666448	6283.78	6
Top–Right	Leg 3	1690	DWalS42	151670.0093	2712669.2517	6389.32	6
Top–Left	Leg 4	1690	DWalS42	151670.0093	-2666448	6283.78	6
Top–Right	Leg 4	1690	DWalS42	151670.0093	2712669.2517	6389.32	6
Top–Left	Leg 5	1690	DWalS42	151670.0093	-2666448	6283.78	6
Top–Right	Leg 5	1690	DWalS42	151670.0093	2712669.2517	6389.32	6
Top–Left	Leg 6	1690	DWalS42	151670.0093	-2666448	6283.78	6
Top–Right	Leg 6	1690	DWalS42	151670.0093	2712669.2517	6389.32	6
Top–Left	Leg 7	1510	DWalS42	151670.0093	-2666448	7845.16	6
Top–Right	Leg 7	1510	DWalS42	151670.0093	2712669.2517	7977.37	6
Top–Left	Leg 8	1335	DWalS42	151670.0093	-2666448	10004.38	6
Top–Right	Leg 8	1335	DWalS42	151670.0093	2712669.2517	10173.52	6
Bottom–Left	Leg 1	910	DWalS42	152287.2347	-2728623	21853.19	6
Botttom–Right	Leg 1	910	DWalS42	152287.2347	2775213.8063	22220.12	6
Bottom–Left	Leg 2	1220	DWalS42	152287.2347	-2728623	12227.4	6
Botttom–Right	Leg 2	1220	DWalS42	152287.2347	2775213.8063	12431.55	6
Bottom–Left	Leg 3	1690	DWalS42	152287.2347	-2728623	6426.54	6
Botttom–Right	Leg 3	1690	DWalS42	152287.2347	2775213.8063	6532.93	6
Bottom–Left	Leg 4	1690	DWalS42	152287.2347	-2728623	6426.54	6
Botttom–Right	Leg 4	1690	DWalS42	152287.2347	2775213.8063	6532.93	6
Bottom–Left	Leg 5	1690	DWalS42	152287.2347	-2728623	6426.54	6
Botttom–Right	Leg 5	1690	DWalS42	152287.2347	2775213.8063	6532.93	6

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Bottom–Left	Leg 6	1690	DWalS42	152287.2347	-2728623	6426.54	6
Botttom–Right	Leg 6	1690	DWalS42	152287.2347	2775213.8063	6532.93	6
Bottom–Left	Leg 7	1510	DWalS42	152287.2347	-2728623	8023.89	6
Botttom–Right	Leg 7	1510	DWalS42	152287.2347	2775213.8063	8157.15	6
Bottom–Left	Leg 8	1335	DWalS42	152287.2347	-2728623	10232.9	6
Botttom–Right	Leg 8	1335	DWalS42	152287.2347	2775213.8063	10403.39	6

SHEAR WALL BOTTOM

ETABS Shear Wall Design

IS 456:2000 Pier Design

Pier Details

Story ID	Pier ID	Centroid X (mm)	Centroid Y (mm)	Length (mm)	Thickness (mm)	LLRF
Stilt floor	PW45	15499.4	58184.2	71675.6	300	0.4

Material Properties

E_c (MPa)	f_{ck} (MPa)	Lt.Wt Factor (Unitless)	f_y (MPa)	f_{ys} (MPa)
27386.13	30	1	500	500

Design Code Parameters

Γ_s	Γ_c	IP_{MAX}	IP_{MIN}	P_{MAX}	MinEcc Major	MinEcc Minor
1.15	1.5	0.04	0.0025	0.8	Yes	Yes

Pier Leg Location, Length and Thickness

Station Location	ID	Left X_1 mm	Left Y_1 mm	Right X_2 mm	Right Y_2 mm	Length mm	Thickness mm
Top	Leg 1	31604.5	44020	34340	23960	20245.6	300
Top	Leg 2	-5660	77830	-5660	81230	3400	300
Top	Leg 3	0	74550	9850	74550	9850	300
Top	Leg 4	770	69290	9850	69290	9080	300
Top	Leg 5	770	64030	8580	64030	7810	300
Top	Leg 6	770	48420	6830	48420	6060	300
Top	Leg 7	17070	64030	22100	64030	5030	300
Top	Leg 8	17680	69290	22930	69290	5250	300
Top	Leg 9	17980	74550	22930	74550	4950	300
Bottom	Leg 1	31604.5	44020	34340	23960	20245.6	300
Bottom	Leg 2	-5660	77830	-5660	81230	3400	300
Bottom	Leg 3	0	74550	9850	74550	9850	300
Bottom	Leg 4	770	69290	9850	69290	9080	300
Bottom	Leg 5	770	64030	8580	64030	7810	300
Bottom	Leg 6	770	48420	6830	48420	6060	300
Bottom	Leg 7	17070	64030	22100	64030	5030	300
Bottom	Leg 8	17680	69290	22930	69290	5250	300
Bottom	Leg 9	17980	74550	22930	74550	4950	300

Flexural Design for P_u, M_{u2} and M_{u3}

Station Location	Required Rebar Area (mm^2)	Required Reinf Ratio	Current Reinf Ratio	Flexural Combo	P_u kN	M_{u2} kN-m	M_{u3} kN-m	Pier A_g mm^2
Top	212729	0.0099	0.0031	DWalS43	-2907.9788	655358.6056	-412662.6204	21502695
Bottom	199796	0.0093	0.0031	DWalS44	-3425.055	367518.9047	-928532.9683	21502695

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Shear Design

Station Location	ID	Rebar mm²/m	Shear Combo	P_u kN	M_u kN-m	V_u kN	V_c kN	$V_c + V_s$ kN
Top	Leg 1	OS	DWalS44	-7456.8823	449821.1956	55653.0724	2415.9797	6799.6029
Top	Leg 2	OS	DWalS44	-7456.8823	449821.1956	55653.0724	405.7332	1141.9071
Top	Leg 3	OS	DWalS44	-7456.8823	449821.1956	55653.0724	1175.4328	3308.1719
Top	Leg 4	OS	DWalS44	-7456.8823	449821.1956	55653.0724	1083.5462	3049.5636
Top	Leg 5	OS	DWalS44	-7456.8823	449821.1956	55653.0724	931.9929	2623.0277
Top	Leg 6	OS	DWalS44	-7456.8823	449821.1956	55653.0724	723.1597	2035.2814
Top	Leg 7	OS	DWalS44	-7456.8823	449821.1956	55653.0724	600.2464	1689.3507
Top	Leg 8	OS	DWalS44	-7456.8823	449821.1956	55653.0724	626.4997	1763.2388
Top	Leg 9	OS	DWalS44	-7456.8823	449821.1956	55653.0724	590.6997	1662.4823
Bottom	Leg 1	OS	DWalS44	-3425.055	526787.2924	-57794.355	2339.9954	6723.6186
Bottom	Leg 2	OS	DWalS44	-3425.055	526787.2924	-57794.355	392.9726	1129.1465
Bottom	Leg 3	OS	DWalS44	-3425.055	526787.2924	-57794.355	1138.4646	3271.2037
Bottom	Leg 4	OS	DWalS44	-3425.055	526787.2924	-57794.355	1049.4679	3015.4853
Bottom	Leg 5	OS	DWalS44	-3425.055	526787.2924	-57794.355	902.6811	2593.7159
Bottom	Leg 6	OS	DWalS44	-3425.055	526787.2924	-57794.355	700.4158	2012.5375
Bottom	Leg 7	OS	DWalS44	-3425.055	526787.2924	-57794.355	581.3682	1670.4726
Bottom	Leg 8	OS	DWalS44	-3425.055	526787.2924	-57794.355	606.7959	1743.535
Bottom	Leg 9	OS	DWalS44	-3425.055	526787.2924	-57794.355	572.1218	1643.9044

Number of legs where shear force exceeds max allowed (top, bottom) = 9, 9

Boundary Element Check

Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Top–Left	Leg 1	10122.8	DWalS42	61188.8834	-974559.4216	57.63	6
Top–Right	Leg 1	6900	DWalS42	61188.8834	318636.6391	25.62	6
Top–Left	Leg 2	1700	DWalS42	61188.8834	-974559.4216	1746.08	6
Top–Right	Leg 2	1700	DWalS42	61188.8834	318636.6391	611.26	6
Top–Left	Leg 3	4925	DWalS42	61188.8834	-974559.4216	221.6	6
Top–Right	Leg 3	4925	DWalS42	61188.8834	318636.6391	86.39	6
Top–Left	Leg 4	4540	DWalS42	61188.8834	-974559.4216	258.87	6
Top–Right	Leg 4	4540	DWalS42	61188.8834	318636.6391	99.76	6
Top–Left	Leg 5	3905	DWalS42	61188.8834	-974559.4216	345.66	6
Top–Right	Leg 5	3905	DWalS42	61188.8834	318636.6391	130.59	6
Top–Left	Leg 6	3030	DWalS42	61188.8834	-974559.4216	564.41	6
Top–Right	Leg 6	3030	DWalS42	61188.8834	318636.6391	207.19	6
Top–Left	Leg 7	2515	DWalS42	61188.8834	-974559.4216	810.92	6
Top–Right	Leg 7	2515	DWalS42	61188.8834	318636.6391	292.43	6
Top–Left	Leg 8	2625	DWalS42	61188.8834	-974559.4216	746.01	6
Top–Right	Leg 8	2625	DWalS42	61188.8834	318636.6391	270.06	6
Top–Left	Leg 9	2475	DWalS42	61188.8834	-974559.4216	836.68	6
Top–Right	Leg 9	2475	DWalS42	61188.8834	318636.6391	301.29	6
Bottom–Left	Leg 1	10122.8	DWalS42	63987.0095	-1062448	62.38	6
Botttom–Right	Leg 1	7950	DWalS44	48846.5208	526787.2924	33.75	6
Bottom–Left	Leg 2	1700	DWalS42	63987.0095	-1062448	1900.88	6
Botttom–Right	Leg 2	1700	DWalS42	63987.0095	392872.0671	742.44	6
Bottom–Left	Leg 3	4925	DWalS42	63987.0095	-1062448	240.66	6
Botttom–Right	Leg 3	4925	DWalS42	63987.0095	392872.0671	102.64	6
Bottom–Left	Leg 4	4540	DWalS42	63987.0095	-1062448	281.22	6
Botttom–Right	Leg 4	4540	DWalS42	63987.0095	392872.0671	118.79	6
Bottom–Left	Leg 5	3905	DWalS42	63987.0095	-1062448	375.68	6
Botttom–Right	Leg 5	3905	DWalS42	63987.0095	392872.0671	156.13	6
Bottom–Left	Leg 6	3030	DWalS42	63987.0095	-1062448	613.82	6
Botttom–Right	Leg 6	3030	DWalS42	63987.0095	392872.0671	249.16	6
Bottom–Left	Leg 7	2515	DWalS42	63987.0095	-1062448	882.25	6
Botttom–Right	Leg 7	2515	DWalS42	63987.0095	392872.0671	352.96	6

Sree Daksha Property Developers India Pvt. Ltd.,

Director

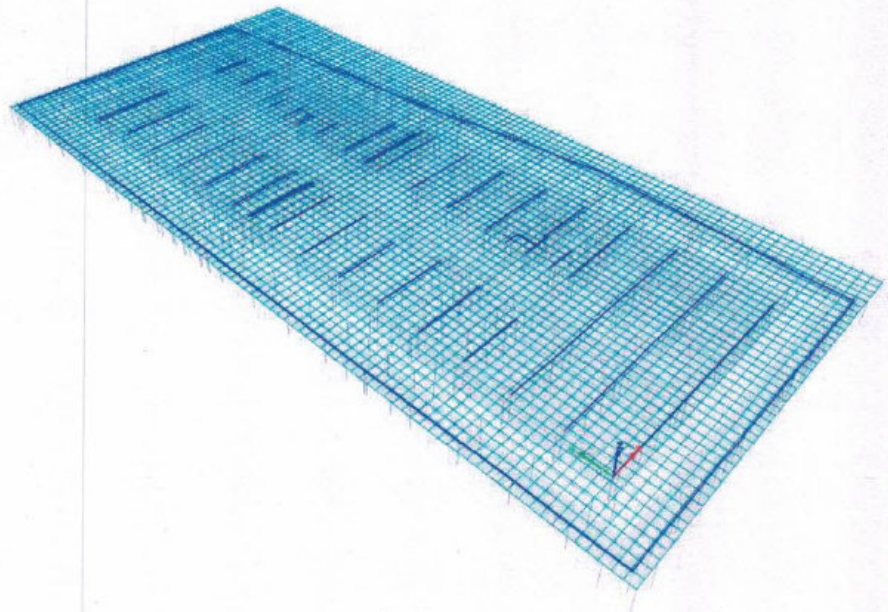
Station Location	ID	Edge Length (mm)	Governing Combo	P_u kN	M_u kN-m	Stress Comp MPa	Stress Limit MPa
Bottom–Left	Leg 8	2625	DWalS42	63987.0095	-1062448	811.56	6
Botttom–Right	Leg 8	2625	DWalS42	63987.0095	392872.0671	325.7	6
Bottom–Left	Leg 9	2475	DWalS42	63987.0095	-1062448	910.31	6
Botttom–Right	Leg 9	2475	DWalS42	63987.0095	392872.0671	363.77	6

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No:CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

Sree Daksha Property Developers India Pvt. Ltd.,

Director

SAFE®



Summary Report

MSB-BASEMENT+STILT+10 FLOORS

Model File: MSB-THONDAMUTHUR-RAFT, Revision

30-01-2026

Sree Daksha Property Developers India Pvt. Ltd.,

Director

1 Loads

This chapter provides loading information as applied to the model.

1.1 Load Patterns

Table 1.1 - Load Pattern Definitions

Name	Is Auto Load	Type	Self Weight Multiplier	Auto Load
~LLRF	No	Other	0	
Dead	No	Dead	1	
$Dead_{ABOVE}$	No	Dead	0	
EQX(1/3)	No	Seismic	0	None
$EQX(1/3)_{ABOVE}$	No	Seismic	0	None
EQX(2/3)	No	Seismic	0	None
$EQX(2/3)_{ABOVE}$	No	Seismic	0	None
EQX(3/3)	No	Seismic	0	None
$EQX(3/3)_{ABOVE}$	No	Seismic	0	None
EQY(1/3)	No	Seismic	0	None
$EQY(1/3)_{ABOVE}$	No	Seismic	0	None
EQY(2/3)	No	Seismic	0	None
$EQY(2/3)_{ABOVE}$	No	Seismic	0	None
EQY(3/3)	No	Seismic	0	None
$EQY(3/3)_{ABOVE}$	No	Seismic	0	None
Live	No	Live	0	
$Live_{ABOVE}$	No	Live	0	
$Modal_{MODE1}$	No	Other	0	
$Modal_{MODE10}$	No	Other	0	
$Modal_{MODE11}$	No	Other	0	
$Modal_{MODE12}$	No	Other	0	
$Modal_{MODE2}$	No	Other	0	
$Modal_{MODE3}$	No	Other	0	
$Modal_{MODE4}$	No	Other	0	
$Modal_{MODE5}$	No	Other	0	
$Modal_{MODE6}$	No	Other	0	
$Modal_{MODE7}$	No	Other	0	
$Modal_{MODE8}$	No	Other	0	
$Modal_{MODE9}$	No	Other	0	
WIND -X	No	Wind	0	None
WIND $-X_{ABOVE}$	No	Wind	0	None
WIND -Y	No	Wind	0	None
WIND $-Y_{ABOVE}$	No	Wind	0	None
WIND X	No	Wind	0	None
WIND X_{ABOVE}	No	Wind	0	None
WIND Y	No	Wind	0	None
WIND Y_{ABOVE}	No	Wind	0	None

Sree Daksha Property Developers India Pvt. Ltd.,

Director

1.2 Load Cases

Table 1.2 - Load Case Definitions - Summary

Name	Type
Dead	Linear Static
Live	Linear Static
EQX(1/3)	Linear Static
EQX(2/3)	Linear Static
EQX(3/3)	Linear Static
EQY(1/3)	Linear Static
EQY(2/3)	Linear Static
EQY(3/3)	Linear Static
WIND X	Linear Static
WIND Y	Linear Static
WIND -X	Linear Static
WIND -Y	Linear Static
Modal	Modal - External
SPECX	Response Spectrum
SPECY	Response Spectrum

2 Analysis Results

This chapter provides analysis results.

2.1 Structure Results

Table 2.1 - Base Reactions (Part 1 of 2)

Output Case	Case Type	Step Type	FX kN	FY kN	FZ kN	MX kN-m
Dead	LinStatic		-0.0004	0.0143	309016.4416	11862789
Live	LinStatic		-0.0006	0.0088	72741.976	2880674.0141
EQX(1/3)	LinStatic		-6703.0513	-0.0637	0.0002	0.7673
EQX(2/3)	LinStatic		-6703.0522	-0.0667	-4.811E-05	0.3641
EQX(3/3)	LinStatic		-6703.0504	-0.0607	-0.0001	1.1387
EQY(1/3)	LinStatic		-0.0002	-3849.028	-0.0001	124748.1315
EQY(2/3)	LinStatic		0.0002	-3849.0266	4.356E-05	124748.2826
EQY(3/3)	LinStatic		-0.0005	-3849.0296	0.0001	124747.9831
WIND X	LinStatic		-3926.8864	-0.0325	-2.896E-06	0.3143
WIND Y	LinStatic		9.594E-06	-2826.3802	-0.0001	73329.3424
WIND -X	LinStatic		3926.8864	0.0325	2.896E-06	-0.3143
WIND -Y	LinStatic		-9.594E-06	2826.3802	0.0001	-73329.3424
SPECX	LinRespSpec	Max	209557.2051	34095.232	109798.7065	4007003.4857
SPECY	LinRespSpec	Max	40794.4811	214682.4922	18645.7479	4620881.9695
1.5 DL+1.5 LL	Combination		-0.0015	0.0346	572637.6264	22115194
1.2 DL+1.2 LL+1.2 EQX(1/3)	Combination		-8043.6628	-0.0487	458110.1014	17692156
1.2 DL+1.2 LL+1.2 EQX(2/3)	Combination		-8043.6638	-0.0523	458110.1011	17692156
1.2 DL+1.2 LL+1.2 EQX(3/3)	Combination		-8043.6617	-0.0452	458110.101	17692157
1.2 DL+1.2 LL+1.2 EQY(1/3)	Combination		-0.0014	-4618.8059	458110.1011	17841853
1.2 DL+1.2 LL+1.2 EQY(2/3)	Combination		-0.0009	-4618.8042	458110.1012	17841853
1.2 DL+1.2 LL+1.2 EQY(3/3)	Combination		-0.0018	-4618.8078	458110.1013	17841853
1.5 DL+ 1.5 EQX(1/3)	Combination		-10054.5775	-0.0741	463524.6628	17794184
1.5 DL+ 1.5 EQX(2/3)	Combination		-10054.5789	-0.0786	463524.6623	17794184
1.5 DL+ 1.5 EQX(3/3)	Combination		-10054.5762	-0.0697	463524.6622	17794185
1.5 DL+1.5 EQY(1/3)	Combination		-0.0008	-5773.5206	463524.6623	17981305
1.5 DL+1.5 EQY(2/3)	Combination		-0.0002	-5773.5184	463524.6625	17981305
1.5 DL+1.5 EQY(3/3)	Combination		-0.0013	-5773.523	463524.6625	17981305
0.9 DL + 1.5 EQX(1/3)	Combination		-10054.5773	-0.0827	278114.7978	10676511
0.9 DL + 1.5 EQX(2/3)	Combination		-10054.5787	-0.0871	278114.7974	10676510
0.9 DL + 1.5 EQX(3/3)	Combination		-10054.576	-0.0783	278114.7972	10676512

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Output Case	Case Type	Step Type	FX kN	FY kN	FZ kN	MX kN-m
0.9 DL + 1.5 EQY(1/3)	Combination		-0.0006	-5773.5292	278114.7974	10863632
0.9 DL + 1.5 EQY(2/3)	Combination		-2.634E-05	-5773.527	278114.7975	10863632
0.9 DL + 1.5 EQY(3/3)	Combination		-0.0011	-5773.5315	278114.7976	10863632
DL+LL	Combination		-0.001	0.0231	381758.4176	14743463
1.2 DL+1.2 LL+1.2 WLX	Combination		-4712.2649	-0.0113	458110.1012	17692156
1.2 DL+1.2 LL+1.2 WLY	Combination		-0.0012	-3391.6285	458110.1011	17780150
1.2 DL+1.2 LL-1.2 WLX	Combination		4712.2625	0.0667	458110.1012	17692155
1.2 DL+1.2 LL-1.2 WLY	Combination		-0.0012	-3391.6285	458110.1011	17780150
1.5 DL+ 1.5WLX	Combination		-5890.3302	-0.0273	463524.6624	17794184
1.5 DL+ 1.5WLY	Combination		-0.0005	-4239.5488	463524.6623	17904177
1.5 DL-1.5WLX	Combination		5890.3291	0.0702	463524.6624	17794183
1.5 DL-1.5 WLY	Combination		-0.0006	4239.5917	463524.6625	17684189
0.9 DL + 1.5 WLX	Combination		-5890.33	-0.0359	278114.7974	10676510
0.9 DL + 1.5 WLY	Combination		-0.0003	-4239.5574	278114.7973	10786504
0.9 DL - 1.5 WLX	Combination		5890.3293	0.0616	278114.7974	10676509
0.9 DL - 1.5 WLY	Combination		-0.0003	-4239.5574	278114.7973	10786504
S1- (DL+LL)	Combination		-0.001	0.0231	381758.4176	14743463
S2- (DL+EQX)(1/3)	Combination		-6703.0517	-0.0494	309016.4418	11862789
S2- (DL+EQX)(2/3)	Combination		-6703.0526	-0.0524	309016.4416	11862789
S2- (DL+EQX)(3/3)	Combination		-6703.0508	-0.0465	309016.4415	11862790
S3- (DL+EQY)(1/3)	Combination		-0.0005	-3849.0138	309016.4415	11987537
S3- (DL+EQY)(2/3)	Combination		-0.0002	-3849.0123	309016.4416	11987537
S3- (DL+EQY)(3/3)	Combination		-0.0009	-3849.0153	309016.4417	11987537
S4- (1 DL + 0.8 LL + 0.8 EQX)(1/3)	Combination		-5362.4419	-0.0296	367210.0226	14167329
S4- (1 DL + 0.8 LL + 0.8 EQX)(2/3)	Combination		-5362.4426	-0.032	367210.0224	14167328
S4- (1 DL + 0.8 LL + 0.8 EQX)(3/3)	Combination		-5362.4412	-0.0273	367210.0223	14167329
S5- (1 DL + 0.8 LL + 0.8 EQY)(1/3)	Combination		-0.001	-3079.2011	367210.0224	14267126
S5- (1 DL + 0.8 LL + 0.8 EQY)(2/3)	Combination		-0.0007	-3079.1999	367210.0225	14267127
S5- (1 DL + 0.8 LL + 0.8 EQY)(3/3)	Combination		-0.0013	-3079.2023	367210.0225	14267126
S6- (1 DL + 0.8 LL + 0.8 WLX)	Combination		-3141.51	-0.0047	367210.0224	14167328
S7- (1 DL + 0.8 LL + 0.8 WLY)	Combination		-0.0009	-2261.0828	367210.0224	14225991
S8- (1 DL + 0.8 LL - 0.8 WLX)	Combination		3141.5083	0.0473	367210.0224	14167328
S9- (1 DL + 0.8 LL - 0.8 WLY)	Combination		-0.0009	2261.1255	367210.0225	14108664
S10- (DL + WLX)	Combination		-3926.8868	-0.0182	309016.4416	11862789
S11- (DL + WLY)	Combination		-0.0004	-2826.3659	309016.4415	11936118
S12- (DL - WLX)	Combination		3926.8861	0.0468	309016.4416	11862788
S13- (DL - WLY)	Combination		-0.0004	2826.3945	309016.4417	11789459
DSlbS1	Combination		-0.0005	0.0214	463524.6624	17794183
DSlbS2	Combination		-0.0015	0.0346	572637.6264	22115194
DSlbS3	Combination		-4712.2649	-0.0113	458110.1012	17692156
DSlbS4	Combination		4712.2625	0.0667	458110.1012	17692155
DSlbS5	Combination		-0.0012	-3391.6285	458110.1011	17780150
DSlbS6	Combination		-0.0012	3391.6839	458110.1012	17604160
DSlbS7	Combination		4712.2625	0.0667	458110.1012	17692155
DSlbS8	Combination		-4712.2649	-0.0113	458110.1012	17692156
DSlbS9	Combination		-0.0012	3391.6839	458110.1012	17604160
DSlbS10	Combination		-0.0012	-3391.6285	458110.1011	17780150
DSlbS11	Combination		-5890.3302	-0.0273	463524.6624	17794184
DSlbS12	Combination		5890.3291	0.0702	463524.6624	17794183
DSlbS13	Combination		-0.0005	-4239.5488	463524.6623	17904177

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Output Case	Case Type	Step Type	FX kN	FY kN	FZ kN	MX kN-m
DSIbS14	Combination		-0.0006	4239.5917	463524.6625	17684189
DSIbS15	Combination		5890.3291	0.0702	463524.6624	17794183
DSIbS16	Combination		-5890.3302	-0.0273	463524.6624	17794184
DSIbS17	Combination		-0.0006	4239.5917	463524.6625	17684189
DSIbS18	Combination		-0.0005	-4239.5488	463524.6623	17904177
DSIbS19	Combination		-5890.33	-0.0359	278114.7974	10676510
DSIbS20	Combination		5890.3293	0.0616	278114.7974	10676509
DSIbS21	Combination		-0.0003	-4239.5574	278114.7973	10786504
DSIbS22	Combination		-0.0003	4239.5831	278114.7975	10566516
DSIbS23	Combination		5890.3293	0.0616	278114.7974	10676509
DSIbS24	Combination		-5890.33	-0.0359	278114.7974	10676510
DSIbS25	Combination		-0.0003	4239.5831	278114.7975	10566516
DSIbS26	Combination		-0.0003	-4239.5574	278114.7973	10786504
DSIbS27(1/3)	Combination		-8043.6628	-0.0487	458110.1014	17692156
DSIbS27(2/3)	Combination		-8043.6638	-0.0523	458110.1011	17692156
DSIbS27(3/3)	Combination		-8043.6617	-0.0452	458110.101	17692157
DSIbS28(1/3)	Combination		8043.6604	0.1041	458110.1009	17692154
DSIbS28(2/3)	Combination		8043.6615	0.1077	458110.1012	17692155
DSIbS28(3/3)	Combination		8043.6593	0.1006	458110.1013	17692154
DSIbS29(1/3)	Combination		-0.0014	-4618.8059	458110.1011	17841853
DSIbS29(2/3)	Combination		-0.0009	-4618.8042	458110.1012	17841853
DSIbS29(3/3)	Combination		-0.0018	-4618.8078	458110.1013	17841853
DSIbS30(1/3)	Combination		-0.001	4618.8614	458110.1012	17542457
DSIbS30(2/3)	Combination		-0.0014	4618.8596	458110.1011	17542457
DSIbS30(3/3)	Combination		-0.0006	4618.8632	458110.1011	17542458
DSIbS31(1/3)	Combination		-10054.5775	-0.0741	463524.6628	17794184
DSIbS31(2/3)	Combination		-10054.5789	-0.0786	463524.6623	17794184
DSIbS31(3/3)	Combination		-10054.5762	-0.0697	463524.6622	17794185
DSIbS32(1/3)	Combination		10054.5764	0.117	463524.662	17794182
DSIbS32(2/3)	Combination		10054.5778	0.1214	463524.6625	17794182
DSIbS32(3/3)	Combination		10054.5751	0.1125	463524.6626	17794181
DSIbS33(1/3)	Combination		-0.0008	-5773.5206	463524.6623	17981305
DSIbS33(2/3)	Combination		-0.0002	-5773.5184	463524.6625	17981305
DSIbS33(3/3)	Combination		-0.0013	-5773.523	463524.6625	17981305
DSIbS34(1/3)	Combination		-0.0003	5773.5635	463524.6625	17607061
DSIbS34(2/3)	Combination		-0.0009	5773.5613	463524.6623	17607061
DSIbS34(3/3)	Combination		0.0002	5773.5658	463524.6623	17607061
DSIbS35(1/3)	Combination		-10054.5773	-0.0827	278114.7978	10676511
DSIbS35(2/3)	Combination		-10054.5787	-0.0871	278114.7974	10676510
DSIbS35(3/3)	Combination		-10054.576	-0.0783	278114.7972	10676512
DSIbS36(1/3)	Combination		10054.5767	0.1084	278114.7971	10676509
DSIbS36(2/3)	Combination		10054.578	0.1129	278114.7975	10676509
DSIbS36(3/3)	Combination		10054.5753	0.104	278114.7976	10676508
DSIbS37(1/3)	Combination		-0.0006	-5773.5292	278114.7974	10863632
DSIbS37(2/3)	Combination		-2.634E-05	-5773.527	278114.7975	10863632
DSIbS37(3/3)	Combination		-0.0011	-5773.5315	278114.7976	10863632
DSIbS38(1/3)	Combination		-0.0001	5773.5549	278114.7975	10489388
DSIbS38(2/3)	Combination		-0.0006	5773.5527	278114.7974	10489387
DSIbS38(3/3)	Combination		0.0005	5773.5572	278114.7973	10489388
DSIbS39	Combination	Max	251468.6449	40914.3061	589868.5489	22500559
DSIbS39	Combination	Min	-251468.6473	-40914.2507	326351.6534	12883751
DSIbS40	Combination	Max	48953.3761	257619.0183	480484.9986	23237214
DSIbS40	Combination	Min	-48953.3785	-257618.9629	435735.2037	12147097
DSIbS41	Combination	Max	314335.8071	51142.8694	628222.7221	23804688
DSIbS41	Combination	Min	-314335.8082	-51142.8266	298826.6027	11783678
DSIbS42	Combination	Max	61191.7211	322023.7597	491493.2842	24725506

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Output Case	Case Type	Step Type	FX kN	FY kN	FZ kN	MX kN-m
DSIbS42	Combination	Min	-61191.7222	-322023.7169	435556.0406	10862860
DSIbS43	Combination	Max	314335.8073	51142.8608	442812.8572	16687015
DSIbS43	Combination	Min	-314335.8079	-51142.8351	113416.7377	4666004.5923
DSIbS44	Combination	Max	61191.7213	322023.7511	306083.4193	17607833
DSIbS44	Combination	Min	-61191.722	-322023.7254	250146.1756	3745186.8665
DCmpD1	Combination		-0.0004	0.0143	309016.4416	11862789
DCmpD2	Combination		-0.001	0.0231	381758.4176	14743463
DCmpC1	Combination		-0.0005	0.02	432623.0182	16607904
DCmpC2	Combination		-0.0004	0.0171	370819.7299	14235346
DCmpS1	Combination		-0.0005	0.02	432623.0182	16607904
DCmpS2	Combination		-0.0014	0.0312	487206.8916	18844425
DWalS1	Combination		-0.0005	0.0214	463524.6624	17794183
DWalS2	Combination		-0.0015	0.0346	572637.6264	22115194
DWalS3	Combination		-4712.2649	-0.0113	458110.1012	17692156
DWalS4	Combination		4712.2625	0.0667	458110.1012	17692155
DWalS5	Combination		-0.0012	-3391.6285	458110.1011	17780150
DWalS6	Combination		-0.0012	3391.6839	458110.1012	17604160
DWalS7	Combination		4712.2625	0.0667	458110.1012	17692155
DWalS8	Combination		-4712.2649	-0.0113	458110.1012	17692156
DWalS9	Combination		-0.0012	3391.6839	458110.1012	17604160
DWalS10	Combination		-0.0012	-3391.6285	458110.1011	17780150
DWalS11	Combination		-5890.3302	-0.0273	463524.6624	17794184
DWalS12	Combination		5890.3291	0.0702	463524.6624	17794183
DWalS13	Combination		-0.0005	-4239.5488	463524.6623	17904177
DWalS14	Combination		-0.0006	4239.5917	463524.6625	17684189
DWalS15	Combination		5890.3291	0.0702	463524.6624	17794183
DWalS16	Combination		-5890.3302	-0.0273	463524.6624	17794184
DWalS17	Combination		-0.0006	4239.5917	463524.6625	17684189
DWalS18	Combination		-0.0005	-4239.5488	463524.6623	17904177
DWalS19	Combination		-5890.33	-0.0359	278114.7974	10676510
DWalS20	Combination		5890.3293	0.0616	278114.7974	10676509
DWalS21	Combination		-0.0003	-4239.5574	278114.7973	10786504
DWalS22	Combination		-0.0003	4239.5831	278114.7975	10566516
DWalS23	Combination		5890.3293	0.0616	278114.7974	10676509
DWalS24	Combination		-5890.33	-0.0359	278114.7974	10676510
DWalS25	Combination		-0.0003	4239.5831	278114.7975	10566516
DWalS26	Combination		-0.0003	-4239.5574	278114.7973	10786504
DWalS27(1/3)	Combination		-8043.6628	-0.0487	458110.1014	17692156
DWalS27(2/3)	Combination		-8043.6638	-0.0523	458110.1011	17692156
DWalS27(3/3)	Combination		-8043.6617	-0.0452	458110.101	17692157
DWalS28(1/3)	Combination		8043.6604	0.1041	458110.1009	17692154
DWalS28(2/3)	Combination		8043.6615	0.1077	458110.1012	17692155
DWalS28(3/3)	Combination		8043.6593	0.1006	458110.1013	17692154
DWalS29(1/3)	Combination		-0.0014	-4618.8059	458110.1011	17841853
DWalS29(2/3)	Combination		-0.0009	-4618.8042	458110.1012	17841853
DWalS29(3/3)	Combination		-0.0018	-4618.8078	458110.1013	17841853
DWalS30(1/3)	Combination		-0.001	4618.8614	458110.1012	17542457
DWalS30(2/3)	Combination		-0.0014	4618.8596	458110.1011	17542457
DWalS30(3/3)	Combination		-0.0006	4618.8632	458110.1011	17542458
DWalS31(1/3)	Combination		-10054.5775	-0.0741	463524.6628	17794184
DWalS31(2/3)	Combination		-10054.5789	-0.0786	463524.6623	17794184
DWalS31(3/3)	Combination		-10054.5762	-0.0697	463524.6622	17794185
DWalS32(1/3)	Combination		10054.5764	0.117	463524.662	17794182
DWalS32(2/3)	Combination		10054.5778	0.1214	463524.6625	17794182
DWalS32(3/3)	Combination		10054.5751	0.1125	463524.6626	17794181
DWalS33(1/3)	Combination		-0.0008	-5773.5206	463524.6623	17981305

Sree Daksha Property Developers India Pvt. Ltd.,

Director

Output Case	Case Type	Step Type	FX kN	FY kN	FZ kN	MX kN-m
DWalS33(2/3)	Combination		-0.0002	-5773.5184	463524.6625	17981305
DWalS33(3/3)	Combination		-0.0013	-5773.523	463524.6625	17981305
DWalS34(1/3)	Combination		-0.0003	5773.5635	463524.6625	17607061
DWalS34(2/3)	Combination		-0.0009	5773.5613	463524.6623	17607061
DWalS34(3/3)	Combination		0.0002	5773.5658	463524.6623	17607061
DWalS35(1/3)	Combination		-10054.5773	-0.0827	278114.7978	10676511
DWalS35(2/3)	Combination		-10054.5787	-0.0871	278114.7974	10676510
DWalS35(3/3)	Combination		-10054.576	-0.0783	278114.7972	10676512
DWalS36(1/3)	Combination		10054.5767	0.1084	278114.7971	10676509
DWalS36(2/3)	Combination		10054.578	0.1129	278114.7975	10676509
DWalS36(3/3)	Combination		10054.5753	0.104	278114.7976	10676508
DWalS37(1/3)	Combination		-0.0006	-5773.5292	278114.7974	10863632
DWalS37(2/3)	Combination		-2.634E-05	-5773.527	278114.7975	10863632
DWalS37(3/3)	Combination		-0.0011	-5773.5315	278114.7976	10863632
DWalS38(1/3)	Combination		-0.0001	5773.5549	278114.7975	10489388
DWalS38(2/3)	Combination		-0.0006	5773.5527	278114.7974	10489387
DWalS38(3/3)	Combination		0.0005	5773.5572	278114.7973	10489388
DWalS39	Combination	Max	251468.6449	40914.3061	589868.5489	22500559
DWalS39	Combination	Min	-251468.6473	-40914.2507	326351.6534	12883751
DWalS40	Combination	Max	48953.3761	257619.0183	480484.9986	23237214
DWalS40	Combination	Min	-48953.3785	-257618.9629	435735.2037	12147097
DWalS41	Combination	Max	314335.8071	51142.8694	628222.7221	23804688
DWalS41	Combination	Min	-314335.8082	-51142.8266	298826.6027	11783678
DWalS42	Combination	Max	61191.7211	322023.7597	491493.2842	24725506
DWalS42	Combination	Min	-61191.7222	-322023.7169	435556.0406	10862860
DWalS43	Combination	Max	314335.8073	51142.8608	442812.8572	16687015
DWalS43	Combination	Min	-314335.8079	-51142.8351	113416.7377	4666004.5923
DWalS44	Combination	Max	61191.7213	322023.7511	306083.4193	17607833
DWalS44	Combination	Min	-61191.722	-322023.7254	250146.1756	3745186.8665

Table 2.1 - Base Reactions (Part 2 of 2)

MY kN-m	MZ kN-m	X m	Y m	Z m
-4004857	0.3166	0	0	-3
-951337.9832	0.2599	0	0	-3
-217222.7663	262153.3861	0	0	-3
-217222.7779	275142.0176	0	0	-3
-217222.7486	249164.7532	0	0	-3
-0.0045	-49632.8906	0	0	-3
0.0002	-54874.4754	0	0	-3
-0.0124	-44391.308	0	0	-3
-101347.0875	157943.3789	0	0	-3
0.0004	-38391.0239	0	0	-3
101347.0875	-157943.3789	0	0	-3
-0.0004	38391.0239	0	0	-3
3749918.2702	7629612.3168	0	0	-3
544286.1693	3183348.5437	0	0	-3
-7434292	0.8648	0	0	-3
-6208101	314584.7551	0	0	-3
-6208101	330171.113	0	0	-3
-6208101	298998.3956	0	0	-3
-5947434	-59558.7769	0	0	-3
-5947434	-65848.6786	0	0	-3
-5947434	-53268.8777	0	0	-3
-6333120	393230.554	0	0	-3

Sree Daksha Property Developers India Pvt. Ltd.,

Director

MY kN-m	MZ kN-m	X m	Y m	Z m
-6333120	412713.5013	0	0	-3
-6333120	373747.6047	0	0	-3
-6007285	-74448.861	0	0	-3
-6007285	-82311.2382	0	0	-3
-6007286	-66586.4871	0	0	-3
-3930205	393230.364	0	0	-3
-3930205	412713.3114	0	0	-3
-3930205	373747.4147	0	0	-3
-3604371	-74449.051	0	0	-3
-3604371	-82311.4281	0	0	-3
-3604371	-66586.677	0	0	-3
-4956195	0.5765	0	0	-3
-6069050	189532.7465	0	0	-3
-5947434	-46068.5368	0	0	-3
-5825817	-189531.3628	0	0	-3
-5947434	-46068.5368	0	0	-3
-6159306	236915.5432	0	0	-3
-6007285	-57586.061	0	0	-3
-5855265	-236914.5934	0	0	-3
-6007285	57587.0108	0	0	-3
-3756392	236915.3533	0	0	-3
-3604371	-57586.2509	0	0	-3
-3452351	-236914.7833	0	0	-3
-3604371	-57586.2509	0	0	-3
-4956195	0.5765	0	0	-3
-4222080	262153.7027	0	0	-3
-4222080	275142.3342	0	0	-3
-4222080	249165.0698	0	0	-3
-4004857	-49632.574	0	0	-3
-4004857	-54874.1588	0	0	-3
-4004857	-44390.9914	0	0	-3
-4939706	209723.2334	0	0	-3
-4939706	220114.1386	0	0	-3
-4939706	199332.3271	0	0	-3
-4765927	-39705.7879	0	0	-3
-4765927	-43899.0558	0	0	-3
-4765927	-35512.5218	0	0	-3
-4847005	126355.2277	0	0	-3
-4765927	-30712.2946	0	0	-3
-4684850	-126354.1785	0	0	-3
-4765927	30713.3437	0	0	-3
-4106204	157943.6955	0	0	-3
-4004857	-38390.7073	0	0	-3
-3903510	-157943.0622	0	0	-3
-4004857	38391.3405	0	0	-3
-6007285	0.4749	0	0	-3
-7434292	0.8648	0	0	-3
-6069050	189532.7465	0	0	-3
-5825817	-189531.3628	0	0	-3
-5947434	-46068.5368	0	0	-3
-5947434	46069.9206	0	0	-3
-5825817	-189531.3628	0	0	-3
-6069050	189532.7465	0	0	-3
-5947434	46069.9206	0	0	-3
-5947434	-46068.5368	0	0	-3
-6159306	236915.5432	0	0	-3

Sree Daksha Property Developers India Pvt. Ltd.,

Director

MY kN-m	MZ kN-m	X m	Y m	Z m
-5855265	-236914.5934	0	0	-3
-6007285	-57586.061	0	0	-3
-6007285	57587.0108	0	0	-3
-5855265	-236914.5934	0	0	-3
-6159306	236915.5432	0	0	-3
-6007285	57587.0108	0	0	-3
-6007285	-57586.061	0	0	-3
-3756392	236915.3533	0	0	-3
-3452351	-236914.7833	0	0	-3
-3604371	-57586.2509	0	0	-3
-3604371	57586.8208	0	0	-3
-3452351	-236914.7833	0	0	-3
-3756392	236915.3533	0	0	-3
-3604371	57586.8208	0	0	-3
-3604371	-57586.2509	0	0	-3
-6208101	314584.7551	0	0	-3
-6208101	330171.113	0	0	-3
-6208101	298998.3956	0	0	-3
-5686767	-314583.3714	0	0	-3
-5686767	-330169.7293	0	0	-3
-5686767	-298997.0119	0	0	-3
-5947434	-59558.7769	0	0	-3
-5947434	-65848.6786	0	0	-3
-5947434	-53268.8777	0	0	-3
-5947434	59560.1606	0	0	-3
-5947434	65850.0623	0	0	-3
-5947434	53270.2614	0	0	-3
-6333120	393230.554	0	0	-3
-6333120	412713.5013	0	0	-3
-6333120	373747.6047	0	0	-3
-5681451	-393229.6042	0	0	-3
-5681451	-412712.5515	0	0	-3
-5681451	-373746.6548	0	0	-3
-6007285	-74448.861	0	0	-3
-6007285	-82311.2382	0	0	-3
-6007286	-66586.4871	0	0	-3
-6007285	74449.8108	0	0	-3
-6007285	82312.188	0	0	-3
-6007285	66587.4369	0	0	-3
-3930205	393230.364	0	0	-3
-3930205	412713.3114	0	0	-3
-3930205	373747.4147	0	0	-3
-3278537	-393229.7941	0	0	-3
-3278537	-412712.7415	0	0	-3
-3278537	-373746.8448	0	0	-3
-3604371	-74449.051	0	0	-3
-3604371	-82311.4281	0	0	-3
-3604371	-66586.677	0	0	-3
-3604371	74449.6209	0	0	-3
-3604371	82311.998	0	0	-3
-3604371	66587.2469	0	0	-3
-1447532	9155535.4721	0	0	-3
-10447336	-9155534	0	0	-3
-5294291	3820018.9443	0	0	-3
-6600577	-3820018	0	0	-3
-382408.0838	11444419	0	0	-3

Sree Daksha Property Developers India Pvt. Ltd.,

Director

MY kN-m	MZ kN-m	X m	Y m	Z m
-11632163	-11444418	0	0	-3
-5190856	4775023.2905	0	0	-3
-6823715	-4775022	0	0	-3
2020506.1118	11444419	0	0	-3
-9229249	-11444418	0	0	-3
-2787942	4775023.1005	0	0	-3
-4420801	-4775023	0	0	-3
-4004857	0.3166	0	0	-3
-4956195	0.5765	0	0	-3
-5606800	0.4433	0	0	-3
-4805828	0.3799	0	0	-3
-5606800	0.4433	0	0	-3
-6327969	0.7958	0	0	-3
-6007285	0.4749	0	0	-3
-7434292	0.8648	0	0	-3
-6069050	189532.7465	0	0	-3
-5825817	-189531.3628	0	0	-3
-5947434	-46068.5368	0	0	-3
-5947434	46069.9206	0	0	-3
-5825817	-189531.3628	0	0	-3
-6069050	189532.7465	0	0	-3
-5947434	46069.9206	0	0	-3
-5947434	-46068.5368	0	0	-3
-6159306	236915.5432	0	0	-3
-5855265	-236914.5934	0	0	-3
-6007285	-57586.061	0	0	-3
-6007285	57587.0108	0	0	-3
-5855265	-236914.5934	0	0	-3
-6159306	236915.5432	0	0	-3
-6007285	57587.0108	0	0	-3
-6007285	-57586.061	0	0	-3
-3756392	236915.3533	0	0	-3
-3452351	-236914.7833	0	0	-3
-3604371	-57586.2509	0	0	-3
-3604371	57586.8208	0	0	-3
-3452351	-236914.7833	0	0	-3
-3756392	236915.3533	0	0	-3
-3604371	57586.8208	0	0	-3
-3604371	-57586.2509	0	0	-3
-6208101	314584.7551	0	0	-3
-6208101	330171.113	0	0	-3
-6208101	298998.3956	0	0	-3
-5686767	-314583.3714	0	0	-3
-5686767	-330169.7293	0	0	-3
-5686767	-298997.0119	0	0	-3
-5947434	-59558.7769	0	0	-3
-5947434	-65848.6786	0	0	-3
-5947434	-53268.8777	0	0	-3
-5947434	59560.1606	0	0	-3
-5947434	65850.0623	0	0	-3
-5947434	53270.2614	0	0	-3
-6333120	393230.554	0	0	-3
-6333120	412713.5013	0	0	-3
-6333120	373747.6047	0	0	-3
-5681451	-393229.6042	0	0	-3
-5681451	-412712.5515	0	0	-3

Sree Daksha Property Developers India Pvt. Ltd.,

Director

MY kN-m	MZ kN-m	X m	Y m	Z m
-5681451	-373746.6548	0	0	-3
-6007285	-74448.861	0	0	-3
-6007285	-82311.2382	0	0	-3
-6007286	-66586.4871	0	0	-3
-6007285	74449.8108	0	0	-3
-6007285	82312.188	0	0	-3
-6007285	66587.4369	0	0	-3
-3930205	393230.364	0	0	-3
-3930205	412713.3114	0	0	-3
-3930205	373747.4147	0	0	-3
-3278537	-393229.7941	0	0	-3
-3278537	-412712.7415	0	0	-3
-3278537	-373746.8448	0	0	-3
-3604371	-74449.051	0	0	-3
-3604371	-82311.4281	0	0	-3
-3604371	-66586.677	0	0	-3
-3604371	74449.6209	0	0	-3
-3604371	82311.998	0	0	-3
-3604371	66587.2469	0	0	-3
-1447532	9155535.4721	0	0	-3
-10447336	-9155534	0	0	-3
-5294291	3820018.9443	0	0	-3
-6600577	-3820018	0	0	-3
-382408.0838	11444419	0	0	-3
-11632163	-11444418	0	0	-3
-5190856	4775023.2905	0	0	-3
-6823715	-4775022	0	0	-3
2020506.1118	11444419	0	0	-3
-9229249	-11444418	0	0	-3
-2787942	4775023.1005	0	0	-3
-4420801	-4775023	0	0	-3

2.2 Modal Results

Table 2.2 - Modal Periods And Frequencies

Case	Mode	Period sec	Frequency cyc/sec	CircFreq rad/sec	Eigenvalue rad2/sec2
Modal	1	2.528	0.396	2.4856	6.1781
Modal	2	2.124	0.471	2.9587	8.7538
Modal	3	1.698	0.589	3.6996	13.6872
Modal	4	1.65	0.606	3.8091	14.5092
Modal	5	1.363	0.734	4.6094	21.2464
Modal	6	1.128	0.886	5.5697	31.022
Modal	7	0.687	1.457	9.1521	83.7602
Modal	8	0.642	1.558	9.7874	95.7931
Modal	9	0.343	2.915	18.3154	335.4523
Modal	10	0.332	3.009	18.9048	357.3896
Modal	11	0.226	4.419	27.7652	770.9063
Modal	12	0.147	6.781	42.6042	1815.1177

Sree Daksha Property Developers India Pvt. Ltd.,

Director

P. SENTHIL KUMAR M.E.(STRUCT),AIV
Reg. No:CBE LPA/SE/GR-I/050/2024
30-A, 1st Floor, Kalidas Street,
Ram Nagar, Coimbatore - 641 009.
Cell: 97866 00478

THE LANDLENS SUITE

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

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

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

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

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

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

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

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

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

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

FREE TOOLS · NO ACCOUNT NEEDED

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

Records and verification

The registers themselves, read for you.

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

Value and duty

What it is worth and what it costs to register.

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

Zoning and land use

What the plan says can happen on this land.

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

Registers and directories

Who holds it, and which office keeps the record.

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

Every free tool
/tools

Services we run for you
/services

The LandLens suite
/landlens/one

Verified RealEstate™

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

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

Verified RealEstate
3/350/2 Mettukuppam,
OMR Thoraipakkam,
Chennai 600 097, India
hello@verified.realestate
+91 9996 12 9996

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