

SHOPPING MALL

A THESIS

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Architecture degree

By

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**DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY) Accredited**

With Grade “A” by NAAC

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CHENNAI - 600 119**

MAY 2024



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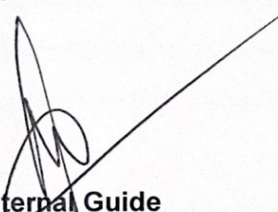
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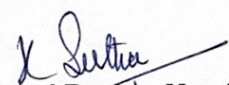
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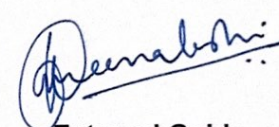
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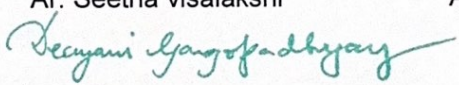
BONAFIDE CERTIFICATE

This is to certify that Thesis Report is the bonafide work of **MANISH JOTHI G (39210045)** who carried out the Thesis entitled "**SHOPPING MALL**" under our supervision from December 2023 to May 2024


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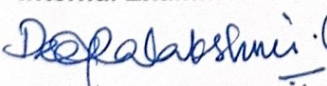

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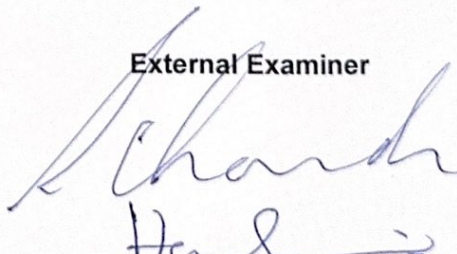
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DECLARATION

I, **MANISH JOTHI G** hereby declare that the Thesis Report entitled "Shopping mall" done by me under the guidance of **Ar.Mohana Gopiraj** (Internal Guide), **Ar.Seetha Visalakshi** (Internal Review Member) and **Ar.Meenakshi** (External Guide) Sathyabama Institute of Science and Technology is submitted in partial fulfillment of the requirements for the award of Bachelor of Architecture Degree.

DATE: 24.05.2024

PLACE: Chennai



SIGNATURE OF THE CANDIDATE

I would like to express my sincere and deep sense of gratitude to my Thesis internal guide **Ar.Mohana Gopiraj**, Internal Review member **Ar.Seetha visalakshi** and External Guide **Ar.Meenakshi** their guidance, suggestions and constant encouragement which paved the way for the successful completion of my Thesis work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the Department of Architecture, all my family members and also juniors **Dinesh** and **Anushree** helpful in many ways for completion of the Thesis.

MANISH JOTHI G

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I would like to express my sincere and deep sense of gratitude to my Thesis Internal guide **Ar.Mohana Gopiraj**, Internal Review member **Ar.Seetha visalakshi** and External Guide **Ar.Meenakshi** their guidance, suggestions and constant encouragement which paved the way for the successful completion of my Thesis work.

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MANISH JOTHI G

THESIS SYNOPSIS

To design a space for public for entertainment and commercial purpose with spacial requirements of multiplex and various tenants and in that location shopping mall having more demand because of less mall in very crowded commercial area and it is going to be integrating of various forms and volumes of good climate responsive and also some fluidity involves. To design to all kind of users without differences of rich and poor. Tenants are provided for fully commercial use of various types such as clothing, electronics, spa ,toy shops etc. Multiplex is provided for entertainment purpose of public with various New movies etc. Play zone is provided for entertainment of public with various games provided such as bowling, video games, box cricket et

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CHAPTER 1

INTRODUCTION

Once a haven for shoppers seeking variety and convenience, shopping malls in Coimbatore, like those across the globe, are facing a crossroads. The rise of e-commerce giants and changing consumer preferences have challenged the traditional mall model. What were once bustling hubs of activity now struggle to compete with the ease and speed of online shopping.

This thesis delves into the evolving landscape of shopping malls in Coimbatore. We begin by examining the current state of the industry, highlighting the challenges faced by existing malls.

However, this isn't a story of decline. It's a story of transformation. This thesis proposes a fresh perspective on what shopping malls can be. We envision a future where malls transcend their role as simply retail spaces, evolving into vibrant community hubs that cater to the holistic desires of today's consumers.

This new vision prioritizes local businesses, fosters a sense of community, and embraces innovative retail experiences. By integrating leisure, entertainment, and social interaction with shopping, we aim to create a destination that entices not just for its products, but for the enriching experiences it offers.

Throughout this thesis, we will explore the possibilities of this reimagined shopping mall concept. We will delve into the specific needs and desires of the Coimbatore community, exploring how the mall can become a space that reflects and caters to their evolving preferences.

1.2 NEED OF THE PROJECT

Coimbatore, a thriving city in Tamil Nadu, India, faces a similar situation to many modern cities – its existing shopping malls might not be meeting the evolving needs of residents. While they offer a convenient way to shop, the rise of e-commerce and changing consumer preferences demand a fresh approach.

This thesis argues for the need for a reimagined shopping mall in Coimbatore, one that goes beyond just retail and caters to the holistic desires of today's consumers.

It is a live project in Coimbatore by globus realtors .

1.3 AIM AND OBJECTIVE

- To create a thriving destination that integrates shopping, entertainment, and community engagement in Coimbatore.

Objectives:

To Attract a Diverse Tenant Mix: Curate a variety of stores catering to different demographics and needs, including established brands, local businesses, and pop-up shops

To Increase Foot Traffic: Implement strategies to attract shoppers, such as loyalty programs, special events, and collaborations with local influencers.

To Boost Tenant Sales: Provide support and resources to tenants to help them optimize their in-store experience and increase sales.

To Offer Engaging Entertainment: Host a variety of events and activities beyond shopping, like art exhibits, live music performances, cooking classes, or children's play areas.

To Foster a Sense of Community: Design open spaces and gathering areas that encourage social interaction and create a sense of belonging.

To Embrace Technology: Integrate digital tools for seamless navigation, personalized recommendations, and interactive shopping experiences.

To Support Local Businesses: Provide opportunities for local artisans and entrepreneurs to showcase their products and connect with customers.

To Promote Sustainability: Incorporate eco-friendly design elements, encourage sustainable shopping practices, and partner with local green businesses.

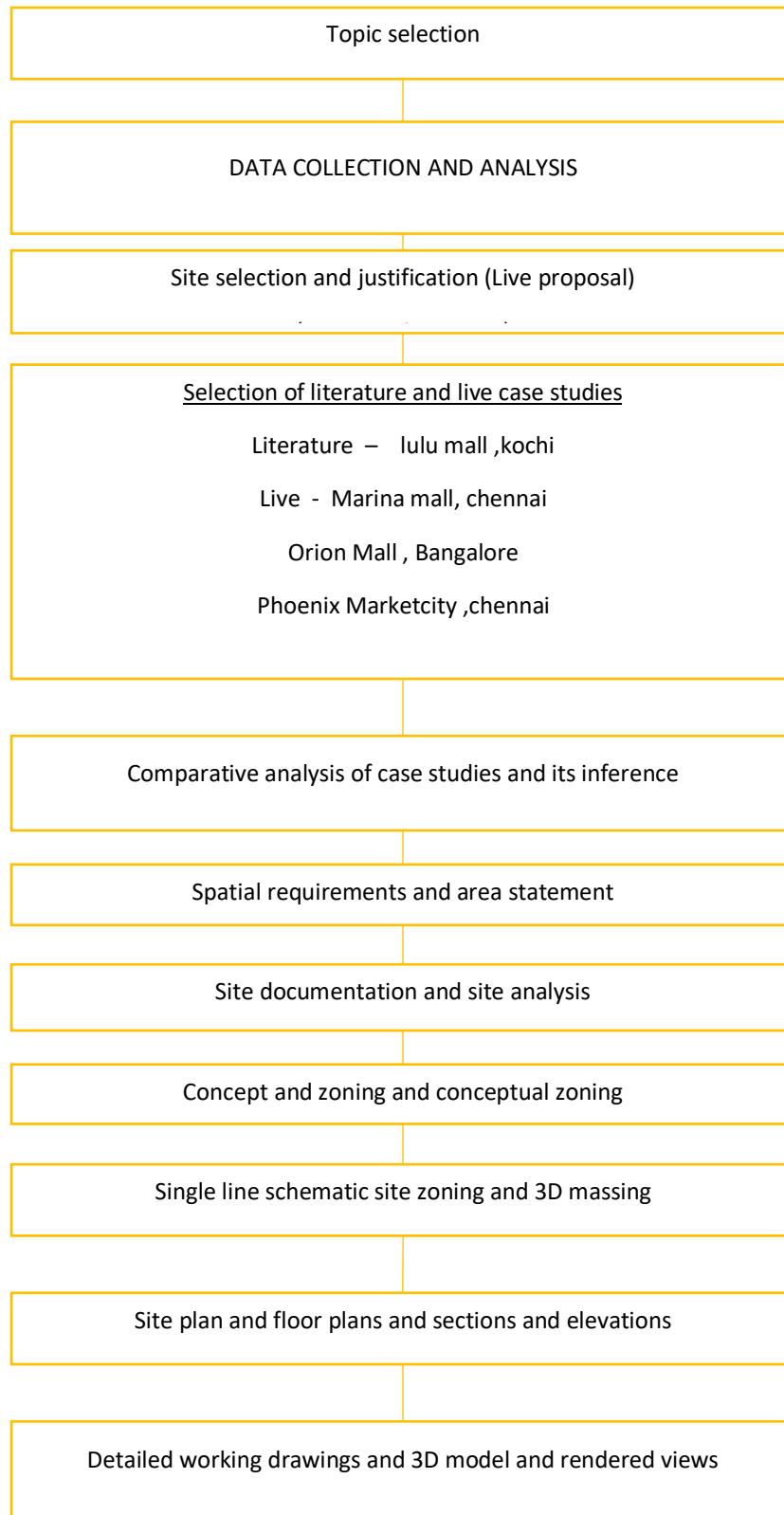
To Become a Cultural Hub: Host events and programs that celebrate Coimbatore's culture and heritage, fostering a sense of pride and identity.

To Accessibility: Ensure the mall is easily accessible for people with disabilities.

To Safety and Security: Implement measures to ensure the safety and security of all visitors.

To Cleanliness and Maintenance: Maintain a clean and well-maintained environment throughout the mall.

1.4 METHODOLOGY



CHAPTER 2

LITERATURE CASE STUDIES

2.1 LULU MALL - KOCHI

Architect : w s atkins

Area of site – 71000 sq.ft 96,600 sq.m)

Established in the year -2013

Location ; Ernakulam , kochi , kerala

Owner lulu group international

2.1.1 FACILITIES

5000 sq ft ice skating rink (South India's largest)

Expansive check-out counters

Ample parking space that can accommodate up to 4800 vehicles

Money exchange centres Bank countersu

Eighteen pairs of escalators, travelators and elevators

Spacious corridors

Large glass central atrium with translucent roof

Facilities for the disabled, baby rooms



Figure 2.1 : Ground floor plan lulu mall



Figure 2.2 : First floor plan lulu mall

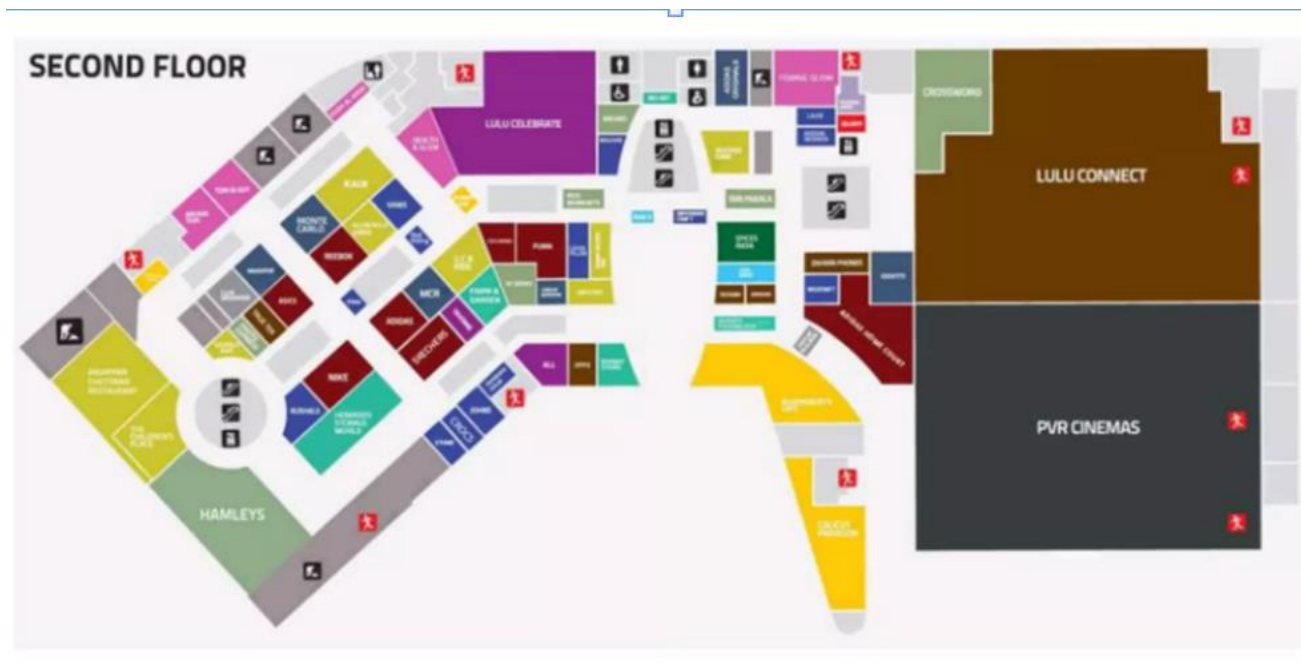


Figure 2.3 : Second floor plan lulu mall



Figure 2.4 : Third floor plan lulu mall

FOOD COURT:

A large food court seats around 4500 people , services by eighteen kitchens , and offers an array of exotic cuisine

Three fine dining restaurants with terrace dining facilities on the third floor

Leisure zone : an amusement area of 7500 square meters (81,000 sq ft) on the third floor comprises indoor climbing wall , ice skating rink , 5d cinema , arcade gaming zone , rides , party hall and a 12 lane bowling alley



Figure 2.5 : different areas of mall

2.1.2 Services Analysis: sixteen pairs of escalators , travellers , stairs and elevators

Sewage pipes are arranged in the fencing

Ac ducts , smoke and heat detectors , fire detectors ,fire sprinkler , electrical lines and water pipe are fixed in the ceiling

Parking : 3500 vehicle

Multiplex: : The mall features a 71000 sq ft (6,600 m²) nine screen pvr cinemas multiplex on the second floor , with exclusive entry

Food court : the second floor features a fine dining restaurant 4,500 square meters 948000 sq ft in area and a coffee shop 1800 square meters(19,000 sq ft)

CHAPTER 3

LIVE CASE STUDY

3.1 MARINA MALL

Project: The Marina Mall

Location: Navalur, Chennai

Total Area : 5.3 lakh sq.ft

Period of construction : 2008-2019

Facilities: Retail, food court, theatre, hotel and apartments

Architect : Cheralathan Associates

3.1.1 INTRODUCTION:

The Marina Mall Chennai is a mixed-use development of 1.4 million sqft consisting of- 540,000 sqft Shopping mall,- 98,000 sqft Hotel, and- 88,000 sqft Residential Apartment and- 600,000 sqft Parking. It is one of the top malls in Chennai City and is best for Shopping, Dine, Entertainment, Games, Movie(INOX), Hotel, and more. The Marina Mall Chennai also sets out to offer a shopping experience at 360 degrees. Within one roof, it puts together an unprecedented array of varied products that suit the needs of a modernizing community, the ultimate mix of traditional and modern shops.

3.1.2 SERVICES:

No. of Customer Lifts: 4

No. of Service Lifts: 3

No. of Escalators: 23

No. of Travellor: 4

No. of Customer / Staff Entry Points: 3

No. of Customer / Staff Exit Points: 2

No Of Vehicle Exit : 1

No. of floors: 4

Type of parking space, (eg: multi-level, open, covered, basement etc.)

Parking Area– 4,50,000 sq. ft;

Basement 1,2,3 Parking & Security Management
4-wheeler parking capacity: 900

Type of Mall: – Space Usage: Retail/ Mixed Use

Total Built Up Area (in Sq. Ft): 5,32,680 sq.ft

Total GLA (in Sq. Ft): 5,32,680 sq.ft.

Total Common Area (in Sq. Ft): 1,59,998 sq.ft.

Total Carpet Area (in Sq. Ft): 3,72,682 sq.ft

Total no of Stores: 118 Total no of Kiosks: 18 Av. Footfalls Weekdays: 20,000 Av.

Footfalls Weekends: 35,000



Figure 3.1 : Atrium of the mall



Figure 3.2 : Foodcourt of the mall



Figure 3.3 : theatre in the mall

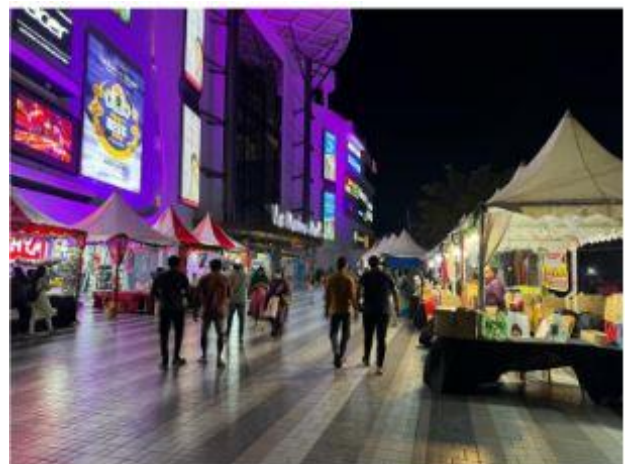


Figure 3.4 : entry of the mall



Figure 3.5 : Atrium of the mall (special event)



Figure 3.6 : view of the atrium from 3rd floor



Figure 3.7 lower basement plan



Figure 3.8 Ground floor plan



Figure 3.9 first floor plan

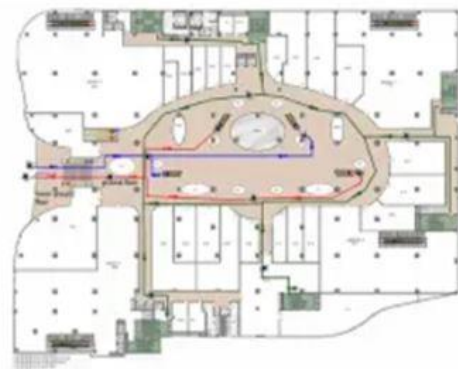


Figure 3.10 Second floor plan



Figure 3.11 3rd floor plan



Figure 3.12 4th floor plan

3.2 BROOKEFIELD MALL - COIMBATORE

Project: Brookefield mall

Location: Coimbatore

Total Area : 4.5 sq.ft

Period of construction : 2009

Facilities: Retail, food court, theatre, hotel

Architect : Cheralathan Associates

Constructed Area- 5,00,000 Sq.ft

Total retailers ;120

Leasable area- 2,50,000 Sq.ft

Located in the prime location of Coimbatore.

Shop: 120 retailers

Theater - 6 screens

3.2.1 VALUE ADDED FACILITY

Security

Wheelchairs

Customer Care centre

First aid

Battery operated cars

A common atrium for brand building ,events and other shows

Shops-to cater the needs of people of all age group.

3 star lodging facility

And much more.



Figure 3.13 Ground floor plan



Figure 3.14 1st floor plan



Figure 3.15 2nd floor plan



Figure 3.16 3rd floor plan



Figure 3.17 4th floor plan



Figure 3.18 view from 3rd floor



Figure 3.19 kiosk between the passage



Figure 3.20 stairs used for seating purpose



Figure 3.21 food court



Figure 3.22 ground floor view



Figure 3.23 exterior view

3.3 PHOENIX MARKETCITY - CHENNAI

ARCHITECT : GORDAN BENOY
LOCATION – CITY CENTRE – VELACHERY
LAND AREA –17 ACRES
RETAIL BUILT UP AREA – 4.36 ACRES
RESIDENCES BUILT UP AREA – 2.98 ACRES
TOTAL BUILT UP AREA – 7.34 ACRES(319730.4 sq.ft)
NUMBER OF STORES- 260 STORES
NO.OF STORIES BASMENT - 5 STORIES

AREA :
HYPER MARKET COVERAGE : 1,00,000 SQ FT
5 ANCHOR SHOPS COVERING: 2,50,000 SQ FT
13 MINI ANCHOR SHOPS COVERING 1,75,000 SQFT
122 SMALL STORES COVERING :3,00,000 SQ FT

3.3.1 SERVICES

Fire sprinkler placed at distance at a distance of 6 m
Smoke detector placed at a distance of 6 m
Distance between sprinkler and smoke detector 1 m
Emergency exits -9

Security room :
Security room located at the site entrance
The security directs the vehicle into the mall
Also helps out them in direction
Lane :

Has four lanes for access from in and out of the mall
Separate for bike and cars
Separate one for pedestrians
The path ways are indicated with arrow sign

Toll booth
The path way leads to the booth where the entry ticket is issued

Circulation

Escalator width -0.9 m
No. of escalator – 5
Staircase width - 2m
Corridor width – 3.6m
Lift capacity -16 person
Lift -2



Figure 3.24 ground floor plan



Figure 3.25 first floor plan



Figure 3.26 2nd floor plan



Figure 3.27 3rd floor plan



Figure 3.28 4th floor plan

3.4 ORION MALL - BANGALORE

Location: Rajaji Nagar Bangalore , Karnataka

Architect : H>O>K

Developer : brigade group)

Built area – 8.5 lac sq.ft

Total retail floor : 1 million sq ft

No of floors – 4

3.4.1 services

Parking 2 levels (1600cars+ mlcp (3600 cars)

The escalators are being opted by the users for vertical circulation rather than lifts/stairs, which makes it fully crowded during afternoon - evening times.

Special feature:

The country's largest multiplex and the largest bowling alley and an electrifying game zone

27 lane cosmic bowling centre in india0*6



Figure 3.29 ground floor plan

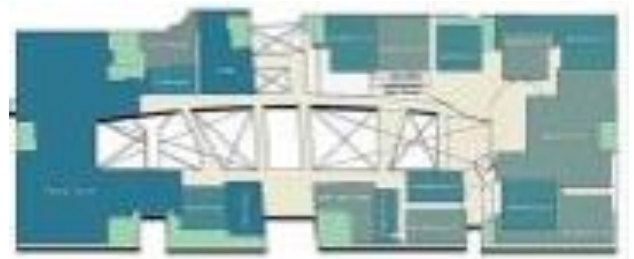


Figure 3.30 first floor plan



Figure 3.31 2nd floor plan



Figure 3.32 3rd floor plan

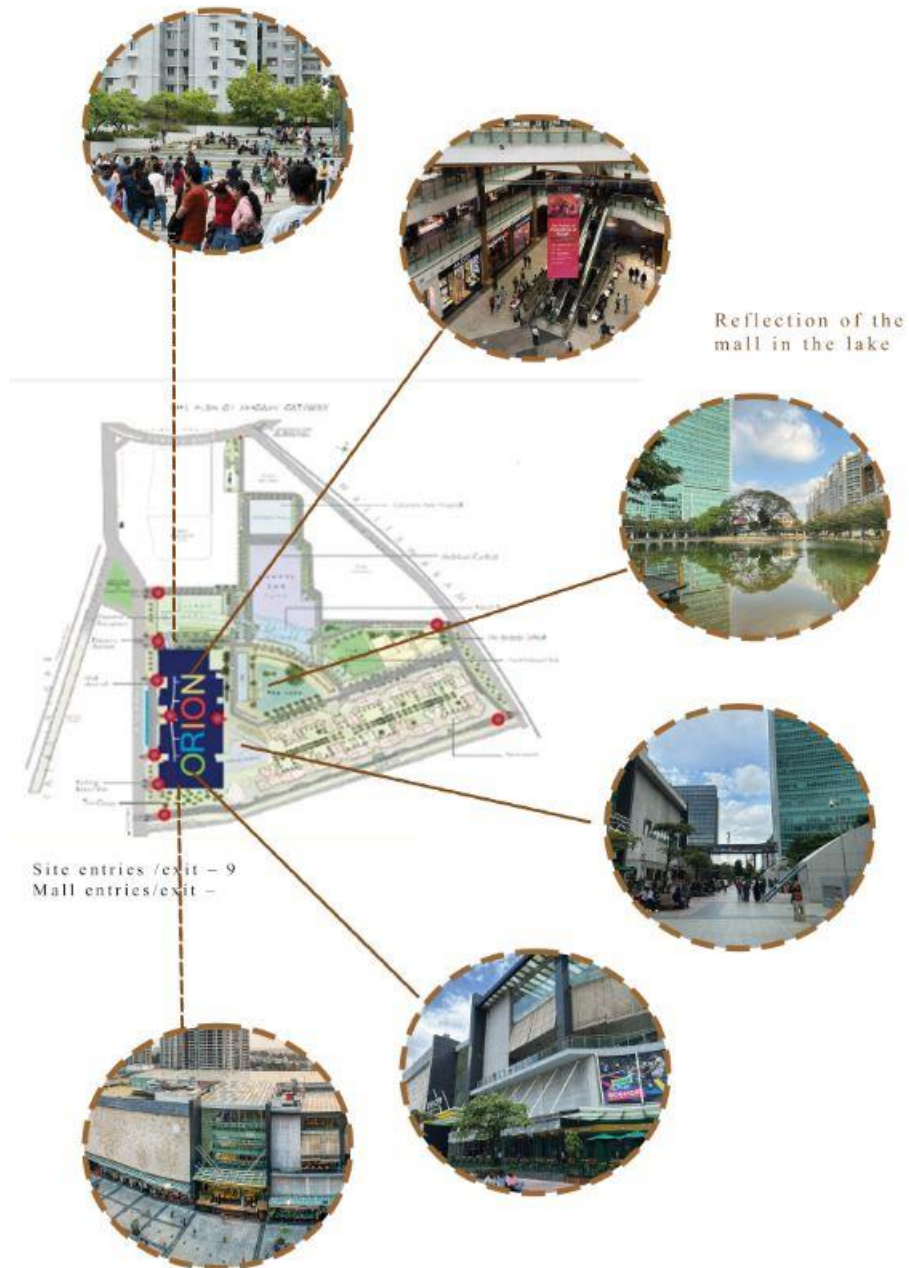


Figure 3.33 details in the site plan

COMPARATIVE ANALYSIS:

S.no	Layout and Circulation Design: (how pathways intersect and connect various zones)					Inference
1	ORIENTATION	west-east	North-east	South-west	west-east	According to the main roadway access, the facades have been oriented
2	FORM	Disintegrated cuboid 	Organic 	Disintegrated cuboid 	Irregular 	NA
3	SPATIAL ORGANISATION - (DUMBELL, CLUSTER, CARTESIAN, BRANCH)	Hybrid 	Cluster  Cluster	Dumbell  Dumbbell	Dumbell  Dumbbell	Dumbell shaped forms are easier to navigate
4	LOBBY DESIGN	Has a large atrium in the ground floor and the skylight provides enough daylight for the mall which conserves energy	The entry corridor takes the users to a large atrium, where there are cafes / shops present.	Has an large scale atrium, where different kinds of events occur	Has a narrow atrium but gives enough daylight	Most of the lobbies lead us to a atrium
5	MAIN ROUTES	Atrium				As all the users first enter into the atrium it is considered as a main route
6	SECONDARY PATHS	Corridors				Mostly all the seating areas are crowded, extra seatings can be proposed
7	SEATINGS	Seatings are given nearer to the lift .	Not enough seatings are given .people tend to wait to engage the seating	Has adequate seating but when it's overcrowded seatings are congested	seatings are given and people use staircase to sit and relax	Proper seating must be provided

Figure 3.34 comparative analysis 1

S.no	Design feature	Marina mall	Phoenix Marketcity	Orion Mall	brookefield mall	Inference
special events and seasonal patterns						
1	special events	Known for its convenient location and a mix of popular brands and local shops	Traditional dance, local theatre, jazz recitals, rock concerts, book reading clubs, TED talks, awards shows	shopping festivals, discover korea , orion fun league	cultural events,festivals and sales promotion	Special events and seasonal trends attracts more users than normal days
2	seasonal trends	Themed decors events,activities	Festivals, such as Diwali, Pongal, and Christmas	Themed decor and activities	Themed decor and activities for fesitvals	

S.no	Security and safety considerations				Inference
1	DOES IT INFLUENCE THE USERS TO CAUSE A SPECIFIC MOVEMENT PATTERN	People tend to move into more lit areas like atrium , corridors with bright light			
2	Technology Intergration	Yes			
3	DIGITAL DISPLAYS / INTERACTIVE SCREENS / MOBILE APPS	yes			
4	ARTIFICIAL VENTILATION	Central Air Conditioning			
		Efficiently used by all users, hence available everywhere			
		Easy to navigate in mall			
		lack of natural ventilation			

Figure 3.35 comparative analysis 2

S.no	Design feature	Marina mall	Phoenix Marketcity	Orion Mall	brookefield mall	Inference
standards						
1	Entrances	1 main entry	3 main entry	6	3	According to the main roadway access, the facades have been oriented
2	Corridor width		3.6 m	3.5m	3.5 m	
3	Travalator	4	yes	no	no	
4	Number of staircase	3	17	1public	11	Less preferred mode of vertical transportation
5	Handrail height		1.25			People lean over the handrails, and view the spaces
6	Number of parking slots	900 cars;1200 bikes	1433 cars; 1266 bikes	1200	500 cars ; 1000 bikes	NA
7	Number of lifts	4passenger+ 3 service =7	PLACED AT THE CENTRE PART OF THE MALL; TWO LIFTS ARE PROVIDED; THE CAPACITY OF THE LIFT =18 person; DIMENSION OF THE LIFT =2.1 x 1.8m	4	7	
8	Number of theatre screen	8	11	11	6	

Figure 3.36 comparative analysis -3



Figure 3.37 phoenix mall circulation



Figure 3.38 marina mall circulation

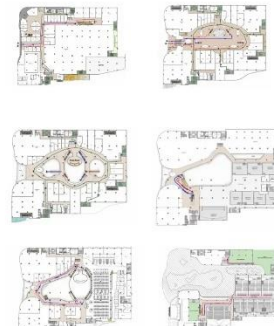


Figure 3.39 orion mall circulation

TO REDUCE THE ENERGY USED IN THE SHOPPING MALL
CREATING A FEEL OF STREET SHOPPING
AND MAKE FEEL THAT PEOPLE ARE NOT IN
USUAL MALL
TO MAKE A VISIBILITY AND VENTILATION
LIKE HOW WE ARE IN THE STREETS



No. of Customer Lifts: 4
No. of Service Lifts: 3
No. of Escalators: 23
No. of Traveller: 4
No. of Customer / Staff Entry Points: 3
No. of Customer / Staff Exit Points: 2
No. Of Vehicle Exit : 1
No. of floors: 4
Type of parking space, (eg: multi-level, open, covered, basement etc.)
Parking Area - 4,50,000 sq. ft;
Basement 1,2,3 Parking & Security Management
4-wheeler parking capacity: 800



PERCENTAGE
Total no. of retail shops

PERCENTAGE
Total no. of retail shops

The four circular photographs show different levels of the shopping mall's interior, highlighting the architectural details and the variety of retail shops. The pie chart shows the percentage distribution of retail shops: 75% (blue), 15% (orange), and 10% (grey).

later width 6.9 m
of escalator 2
races width 2m
later width 3.0m
capacity -16 persons

ance
the mall

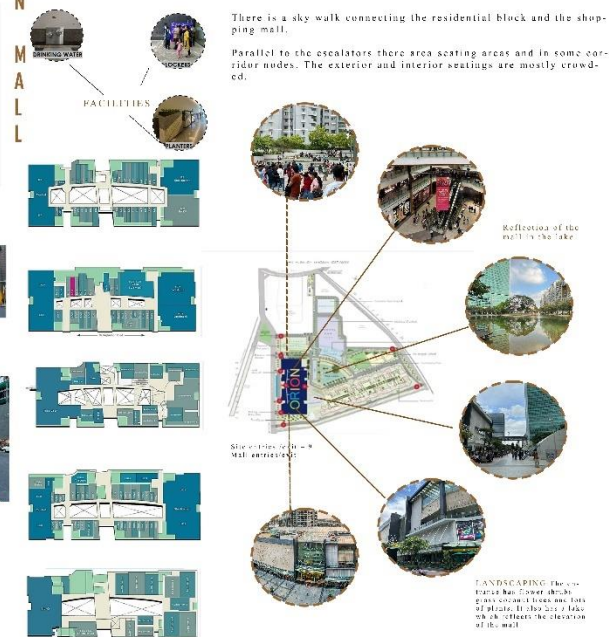
and out of the

Shop the mall

Toll booth
The path way leads to the booth where the entry ticket is issued

Special feature:
The country's largest multiplex and the largest howling alley and an electrifying game zone
27 lane cosmic bowling centre in india

Parallel to the escalators there are seating areas and in some corridor nodes. The exterior and interior seatings are mostly crowded.



LANDSCAPING The courtyard has flower shrubs, grass, concrete fountains and lots of plants. It also has a lake which reflects the elevation of the mall.

25

CASE STUDY AND COMPARATIVE ANALYSIS

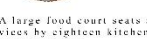
5 LULU MALL

Architect : w + a arkine
Area of site : 71000 sq.ft (96,600 sq.m)
Established in the year : 2013
Location : Ernakulam , kochi , kerala
Owner : lulu group international

Lulu hypermarket in the ground floor is the largest market in india, covering 2 lakh sq ft and it is the first hypermart in India. Everything under one roof

FACILITIES

5000 sq ft ice skating rink (South India's largest)
Expansive check-out counters
Ample parking space that can accommodate up to 4800 vehicles
Money exchange centres/Bank counters
Eighteen pairs of escalators, travelators and elevators
Spacious corridors
Large glass central atrium with translucent roof
Facilities for the disabled, baby rooms



A large food court seats around 4500 people , services by eighteen kitchens , and offers an array of exotic cuisine
Three fine dining restaurants with terrace dining facilities on the third floor

Leisure zone : an amusement area of 7500 square meters (81,000 sq ft) on the third floor comprises indoor climbing wall , ice skating rink , 5d cinema , arcade gaming zone , rides , party hall and a 12 lane bowling alley

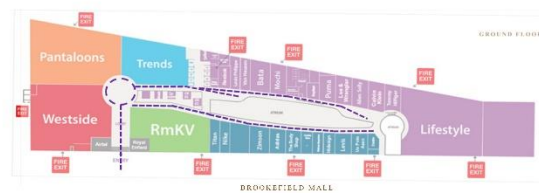


Multiplex : The mall features a 71000 sq ft (6,600 m2) nine screen pvr cinemas multiplex on the second floor , with exclusive entry
Food court : the second floor features a fine dining restaurant 4,500 square meters 948000 sq ft in area and a coffee shop 1800 square meters(19,000 sq ft

Services : sixteen pairs of escalators , travelators , stairs and elevators
Sewage pipes are arranged in the fencing
Ac ducts , smoke and heat detectors , fire detectors , fire sprinkler , electrical lines and water pipe are fixed in the ceiling

Parking : 3500 vehicles

CIRCULATION



S.No	Design feature	Marina Mall	phoenix marketcity	Orion Mall	Brookfield Mall	Inference
1	Location	Chennai	Chennai	Bangalore	Chennai	
2	Year of construction	2019	2013	2011	2009	
3	Built up area	Total BUA- 5.3 lakh sq ft 510,000 sqft Shopping mall- 98,000 sqft/Hotel, and- 88,000 sqft; Residential Apartment and- 600,000 sqft; Parking 6 Acres	retail- 4.36 acres residences- 2.98acres; total BUA- 7.34 acres	8.3 lac square feet	Constructed Area 5,20,000 sq.ft; Leasable area- 2,50,000 sq.ft	NA
4	Site Area	6 Acres	17 acres	40 Acre		
5	No. of Floors	4 floors	4 floors	G+4	4 floors	
6	Basement	3	2	2	3	
7	Number of stores	130+ stores	260	300+	120	
8	Footfall	20k avg footfall (weekday) 35k avg footfall weekend	65k avg footfall (weekend); 23k avg footfall (weekday)	14-15 lakhs of footfall	20k avg footfall (weekday) 40k avg footfall weekend	
9	Timing	10am-10pm	10am-10pm	10am-10pm	10am-10pm	
10	Peak hour	5pm-10pm	5pm-10pm	5pm-10pm	5pm-10pm	Evening times are mostly crowded
11	Mall typology- open enclosed	enclosed	enclosed	enclosed	enclosed	
12	Types of users	couples, friends and family	couples, friends and family	couples, friends and family	couples, friends and family	NA

S.No	Design feature	Marina mall	Phoenix Marketcity	Orion Mall	brookfield mall	Inference
1	Entrances	1 main entry	3 main entry	6	3	According to the main roadway access, the facades have been oriented
2	Corridor width		3.6 m	3.5m	3.5 m	
3	Travelator	4	yes	no	no	NA
4	Number of staircase	3	17	1public	11	Less preferred mode of vertical transportation People lean over the handrails and view the spaces
5	Handrail height		1.25			
6	Number of parking slots	900 cars;1200 bikes	1433 cars; 1266 bikes	1200	500 cars ; 1000 bikes	
7	Number of lifts	4passenger+ 3 service+ 7	PLACED AT THE CENTRE PART OF THE MALL; TWO LIFTS ARE PROVIDED; THE CAPACITY OF THE LIFT +18 persons; DIMENSION OF THE LIFT +2.1 x 5.8m	4	7	NA
8	Number of theatre screens	8	11	11	6	

S.No	Layout and Circulation Design: (how pathways intersect and connect various zones)					Inference
1	ORIENTATION	west-east	North-east	South-west	west-east	According to the main roadway access, the facades have been oriented
2	FORM					NA
3	SPATIAL ORGANISATION (DUMBELL, CLUSTER, CARTESIAN, BRANCH)					Dumbell shaped forms are easier to navigate
4	LOBBY DESIGN	Has a large atrium in the ground floor and the skylight provides enough daylight for the mall which conserves energy	The entry corridor takes the users to a large atrium, where there are cafes / shops present.	Has an large scale atrium, where different kinds of events occur	Has a narrow atrium but gives enough daylight	Most of the lobbies lead us to a atrium
5	MAIN ROUTES	Atrium				As all the users first enter into the atrium it is considered as a main route
6	SECONDARY PATHS	Corridors				Mostly all the seating areas are crowded, extra seating can be provided
7	SEATINGs	Seatings are given nearer to the lift.	Not enough seatings are given, people tend to wait to engage the seating	Has adequate seating but when it's overcrowded seatings are congested	seatings are given and people use staircase to sit and relax	Proper seating must be provided

S.No	Design feature	Marina mall	Phoenix Marketcity	Orion Mall	brookfield mall	Inference
1	special events	Known for its convenient location and a mix of popular brands and local shops	Traditional dances, local theatre, jazz recitals, rock concerts, book reading club, TED talks, awards shows	shopping festivals , discover korea , orion fun league	cultural events, festivals and sales promotion	Special events and seasonal trends attracts more users than normal days
2	seasonal trends	Themed decors events,activities	Festivals, such as Diwali, Pongal, and Christmas	Themed decor and activities	Themed decor and activities for festivals	
1	DOES IT INFLUENCE THE USERS TO CAUSE A SPECIFIC MOVEMENT PATTERN		People tend to move into more lit areas like atrium , corridors with bright light			
2	Technology interpretation		Yes			Efficiently used by all users, hence available everywhere
3	DIGITAL DISPLAYS / INTERACTIVE SCREENS / MOBILE APPS		yes			Easy to navigate in mall
4	ARTIFICIAL VENTILATION		Central Air Conditioning			lack of natural ventilation

NAME: MANISH JOTHI G REG NO 39210045 ROLL NO, 19S215058 BATCH: 2019 -2024

Plate 3.2 : Case Study -2

CHAPTER 4

DATA COLLECTION AND STANDARDS

4.1 STANDARDS:

4.1.1 Set back restrictions:

Height of the Building (in m.)	Minimum front open space (in m.)	Minimum open space on remaining sides (in m.)
(1)	(2)	(3)
Up to 15	12	6
Above 15 & Up to 21 mt.		7
Above 21 mt. & upto 24 mt.		8
Above 24 m & up to 27 m		9
Above 27 m & upto 30 m		10
Above 30 m & up to 35 m		11
Above 35 m & upto 40 m		12
Above 40 m & up to 45 m	13	13
Above 45 m & upto 50 m	14	14
Above 50 m	15	16

Height of building (in meters)		Minimum abutting road width required (in meters)	Minimum all-round open space on remaining sides (in meters) *
above	Up to		
1	2	3	4
-	21	12	7
21	24	12	8
24	27	18	9
27	30	18	10
30	35	24	11
35	40	24	12
40	45	24	13
45	50	30	14
50	55	30	16

After 55m 0.5m additional setback for every 5m of height shall be insisted

Figure 4.1 set back restrictions

Turning radius of physically challenged:

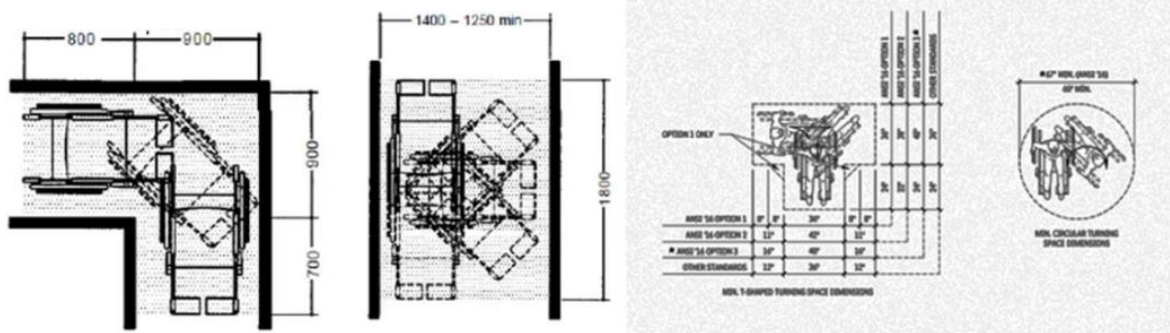


Figure 4.2 turnin radius of physically challenged

4.1.2 PARKING DETAILS:

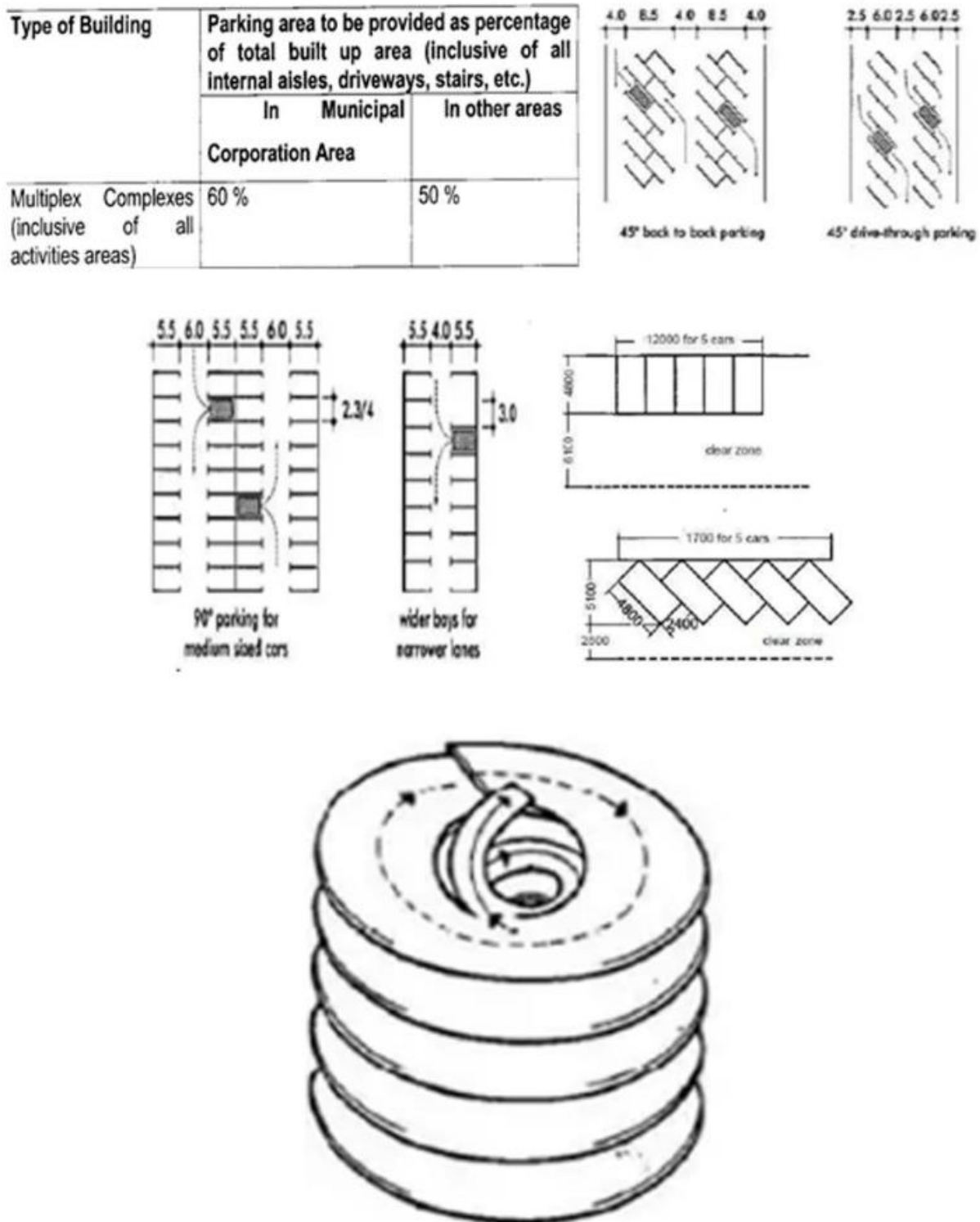


Figure 4.3 Parking and ramp details

4.1.3 SANITARY DETAILS

Sl.No.	Sanitary Unit	For Public		For Staff	
		Male	Female	Male	Female
1	Water Closet	One for 100 persons upto 400 persons. For over 400 persons, add at the rate of 1 per 250 persons or part thereof	Four for 100 persons upto 200 persons. For over 200 persons, add at the rate of 1 per 50 persons or part thereof	One for 15 persons Two for 16-35 persons	Two for 1-12 persons Four for 13-25 persons Add at the rate of 1 per 6 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.	One in each W.C.
3	Urinals	One for 50 persons or part thereof	**	Nil upto 6 persons One for 7-20 persons Two for 21-45 persons	**
4	Wash Basins	One for every 200 persons or part thereof	One for every 200 persons or part thereof	One for 1-15 persons Two for 16-35	One for 1-12 persons Two for 13-25 persons

Figure 4.4 sanitary details

CHAPTER 5

SITE STUDY AND ANALYSIS

5.1 SITE STUDY:

Site is located in Avinashi road opp to bluekart Site is in the corner of the road connecting on the sowripalaysm . Total site is 11.31 acres (45769.946 Sq.m)

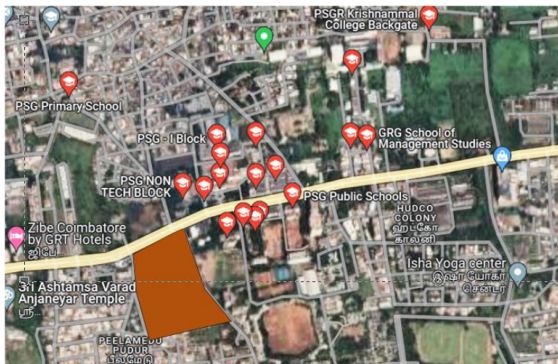


Figure 5.1 site and its neighbouring

5.2 SITE JUSTIFICATION AND FEASIBILITY:

Coimbatore's population is growing or changing preferences, a new mall could cater to specific needs not met by existing ones. It is a live MALL (globus fusion mall) project proposed by GLOBUS REALTORS.

5.3 SITE ANALYSIS:

5.3.1 Neighborhood Context:

Site has three side road axes. One is main highway road and other two are street roads. The site is located opposite to a PSG technology. Opposite to the site there are some commercial shops. In the east there are electrical lines throughout the street road.

5.3.2 SITE AND ZONING:

Setbacks – South (Front) - 6m
East - 6m
West - 6m
North - 6m

Height restriction - 18m

Parking – 1 car for every 100 sq.m
1 bike for every 75 sq.m

5.3.3 CIRCULATION:

Site has three sides road access. Bus stop is opposite to the site at a distance of 50m. Service trucks can be accessed from the east side road.

5.3.4 MAN MADE FEATURES:

There are no man made features in the site. Power poles are throughout the road in the east side. There are residential buildings in the west and south

5.3.5 SITE SURROUNDINGS

School& college

Psg tech-0.2km

Psg public school-0.4km

National model school-1.3km

Grg school-1.5km

Sardar vallabhai patel school-0.8km

Sarvojana school 0.4km

Mall - fun mall -1.0km

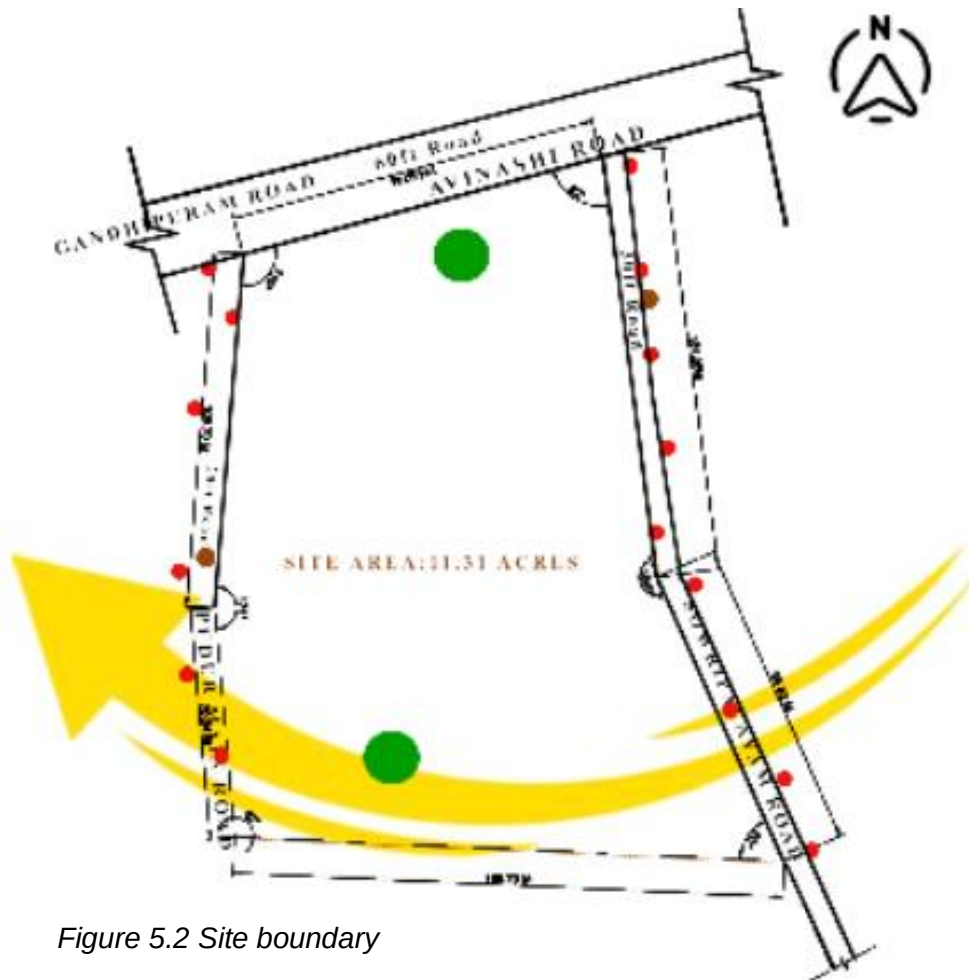


Figure 5.2 Site boundary

5.4 CLIMATE OF COIMBATORE

Coimbatore experiences tropical wet and dry climate



Figure 5.3 climate chart of coimbatore

SITE ANALYSIS



Coordinates : 11°01'21"N

Location : avinashi road , opp to blue-dart courier , Coimbatore , tamil nadu
Site area : 11.31 acres

SITE JUSTIFICATION:
It is a live MALL(globus fusion mall) project
proposed by GLOBUS REALTORS



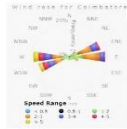
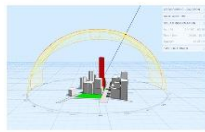
Schools, college

Pag lach - 0.2km
Pag public school - 0.4km
National music school - 0.2km
Grip school - 1.5km
Sarcar valabra patel school - 0.8km
Sareojana school - 0.4km
Mall - for mall - 1.0km



Hotels:

Sma - 0.3km
KFC - 1.5km
Heribarden - 0.8km
Don no's pizza - 0.5km
Ibado ice cream - 0.3km
Cafe coffee day - 0.1km
Hotel vijay elan - 0.2km



Predominant wind is from east to west



Inference:

The site is along north-south direction, to provide large amount of shaded portion the building can be built along east-west direction. Therefore, northern side is the space which is shaded for a maximum span of time. Based on the shade, each space can be utilized like social gathering area, fairs spaces, entertainment space & even external parking areas etc.

The site faces large amount of sun light since it is along north-south direction and also large amount of shade will be produced by the building. The soil type in this site is black cotton soil. The shade provided by the building varies for each solastics, so the mall is to be build can be massive structure that the shade can overlap to create large amount of shade. Even shading devices can be adopted in the design, the mall is to be designed in such a way that wind flows through the corridor. Earthquake zone map.

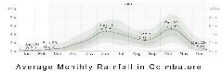
Lighting analysis:

Direct sun glare from east and west side with high intensity from west side. So minimum openings should be kept on west to reduce heat gain. Indirect, heatless light from north. During winter, maximum solar radiation is from south, so openings are preferred for heat in winter. Deciduous trees on south provides shade on summer and sunlight in winter. Evergreen trees on west and east provides shade throughout the year.

coimbatore experiences tropical wet and dry climate



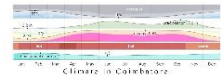
SITE PHOTOS



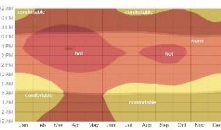
Average Monthly Rainfall in Coimbatore



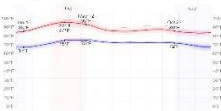
Daily change of P-222a time in Coimbatore



Climate in Coimbatore



Average Daily Temperature in Coimbatore



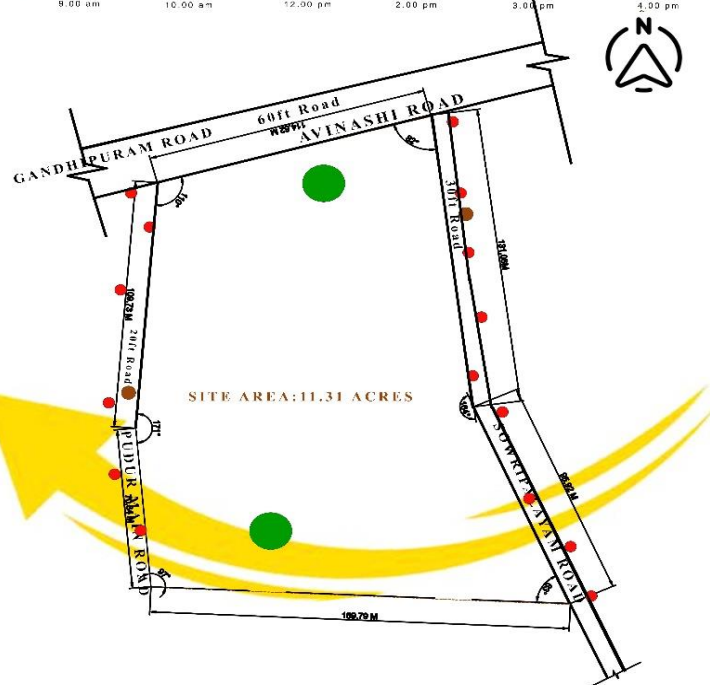
Average High and Low Temperature in Coimbatore



SITE ELEVATION LEVEL NORTH-SOUTH



SITE ELEVATION LEVEL WEST-EAST



Site surroundings:

2 large trees
2 electricity transformers on the west and 1 transformer on the east.
There are 6 electricity poles on the west and 10 poles on the east.
Telephone line box is placed on the west side of the site.
Drainage line is along the north and east of the site.
Garbage containers are placed on the south-west of the site.
All the utilities are available next to the site.



8:00-8:30pm

NAME: MANISH JOTHI O

REG NO 39210045

ROLL NO. 19S215058

BATCH: 2019 -2024

Plate 5.1 : Site analysis

CHAPTER 6

ARCHITECTURAL DESIGN

6.1 SPATIAL REQUIREMENTS

S.no	S.no	S.no	S.no	S.no
	Retail and Shopping:	300 SHOPS		50-300 SQ.M EACH SHOP
1	Retail Stores			
2	Specialty Grocery or Food Stores			
3	Bookstores and Libraries			
4	Technology Stores			
5	Jewelry and Accessories Shops			
6	Sports and Outdoor Gear Stores			
7	Furniture and Home Decor Stores			
8	Antiques and Collectibles Shops			
9	Pet Stores			
10	Music and Entertainment Stores			
11	Eyewear and Optometry Services			
	Dining and Food:		1000-1200 PEOPLE	800-1200 SQM

1	Food Court			
2	Specialty Grocery or Food Stores			
	Recreation and Entertainment:			8000 sq.m
1	Entertainment Zones	1		
2	Cinemas	6SCREENS	4*500: 2*800	1000-2000sq.m EACH
3	Arcades and Game Centers	REQUIRE NO.S		
4	Event Spaces	REQUIRE NO.S		
5	Atriums and Skylights	REQUIRE NO.S		
6	Kiosks and Carts	REQUIRE NO.S		
7	Fitness and Gym Facilities	1		
	Services and Amenities:			
1	Common Areas			1000 sqm
2	Restrooms			
3	Information and Customer Service Desks			
4	Elevators and Escalators			
5	Security and Surveillance			
6	ATMs and Banking Services			
7	Lost and Found			
8	Wheelchair and Stroller Rental			
9	Post Office or Mail Services			
	AHU Room			
	Family and Children:			700 SQ.M

1	Childcare or Play Areas			
2	Pet-Friendly Areas			
				400 sq.m
	Wellness and Beauty:			
3	Beauty and Wellness Centers			

Fig 5.1: Area requirements

6.2 CONCEPT

6.2.1 Strategies can be followed at site level:

(a) Orientation -

The built forms longer facades can be oriented facing the north and south directions.

(b) Built form -

Making in a way it feels like a street and suddenly entering into a bigger building and designing in a way it feels like a street shopping and making bridges so that it has a visual connect to people vertically

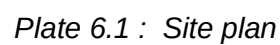
(c) shading -

shading the east portion of the building so that a ample amount of seating spaces is created



Fig 6.1 Exterior view of the building

6.3.1 SITE PLAN:



FLOOR PLANS

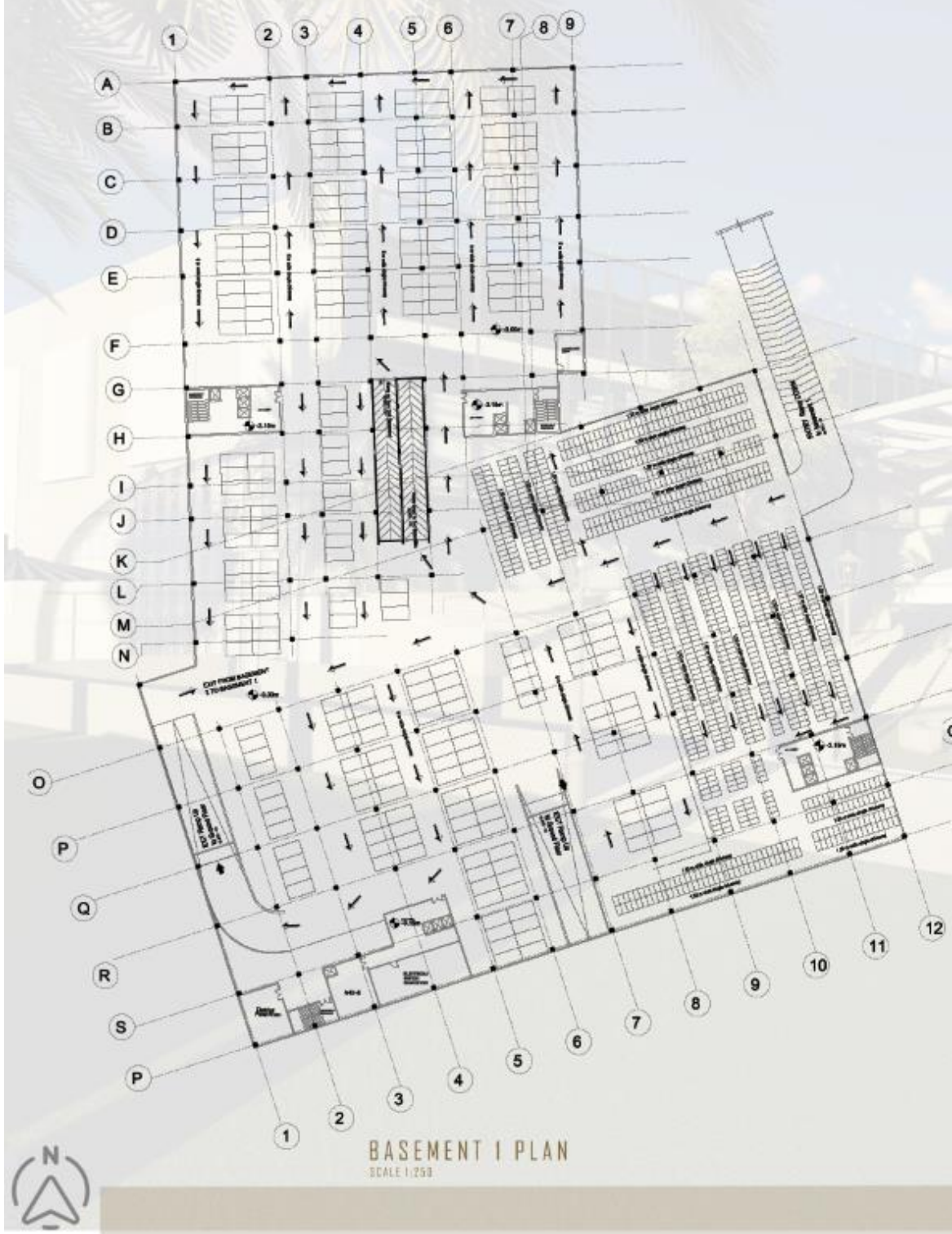


Plate 6.2 : basement plan-1

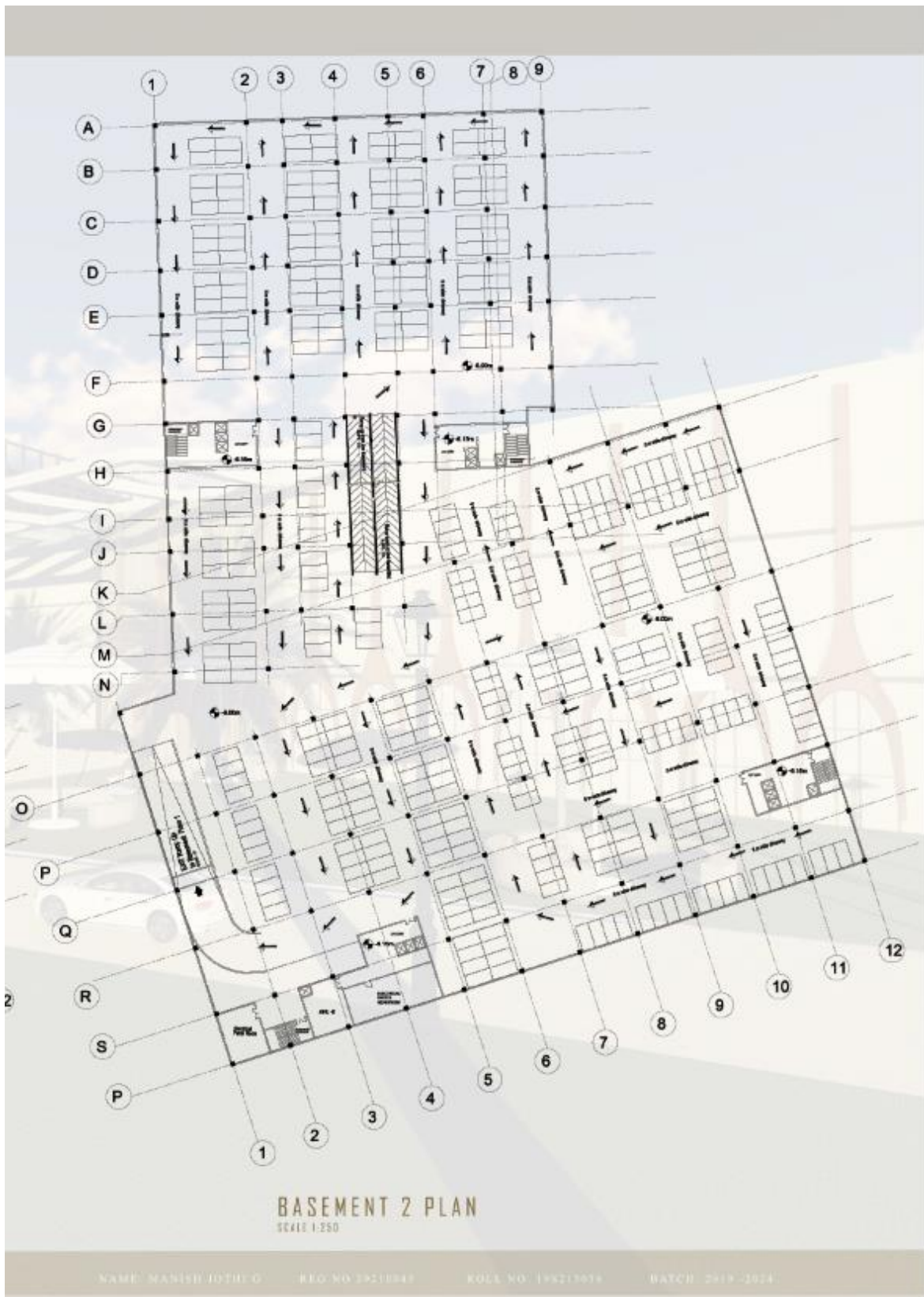


Plate 6.3 : basement plan -2

FLOOR PLANS

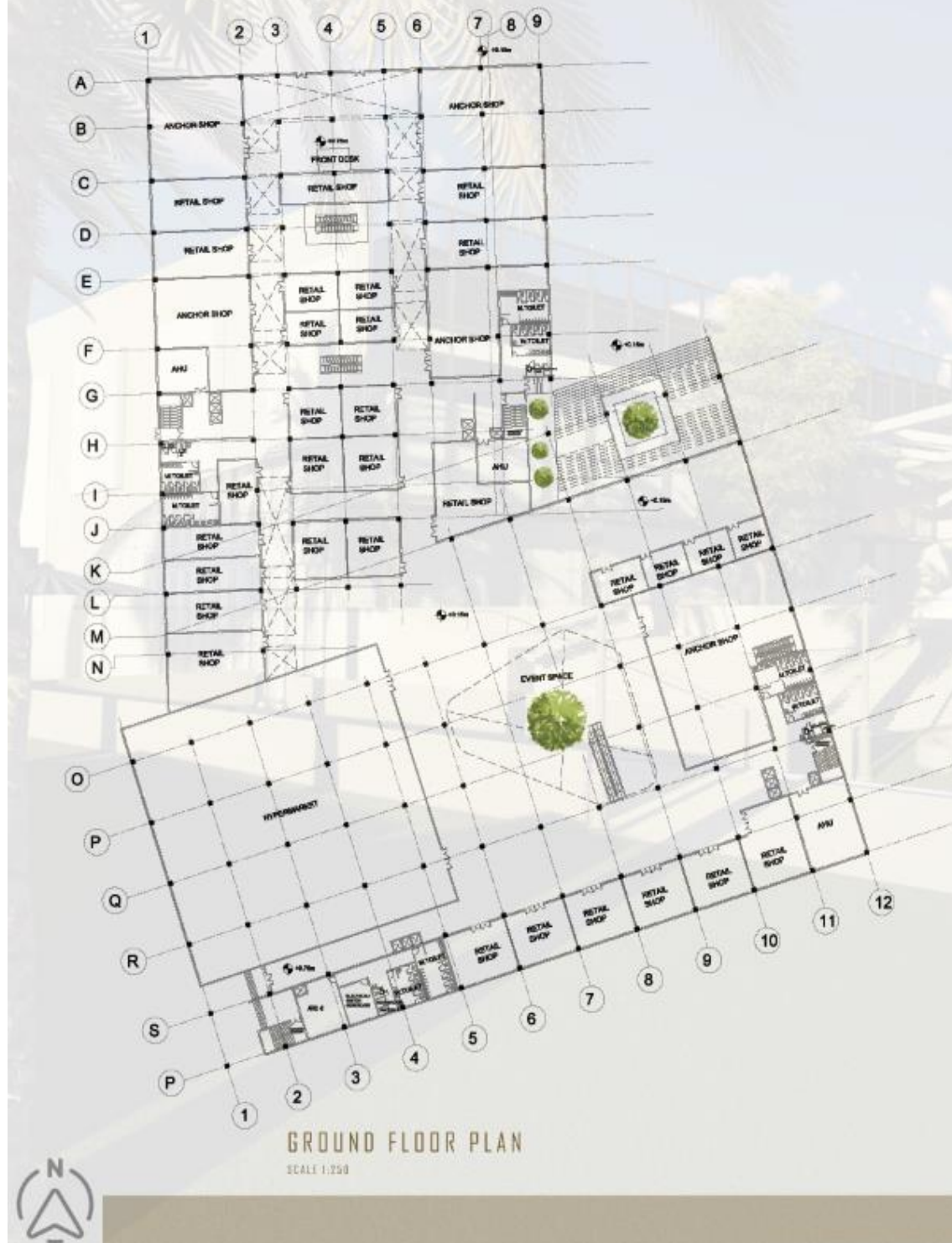


Plate 6.4 : Ground Floor plan



Plate 6.5 : First Floor plan

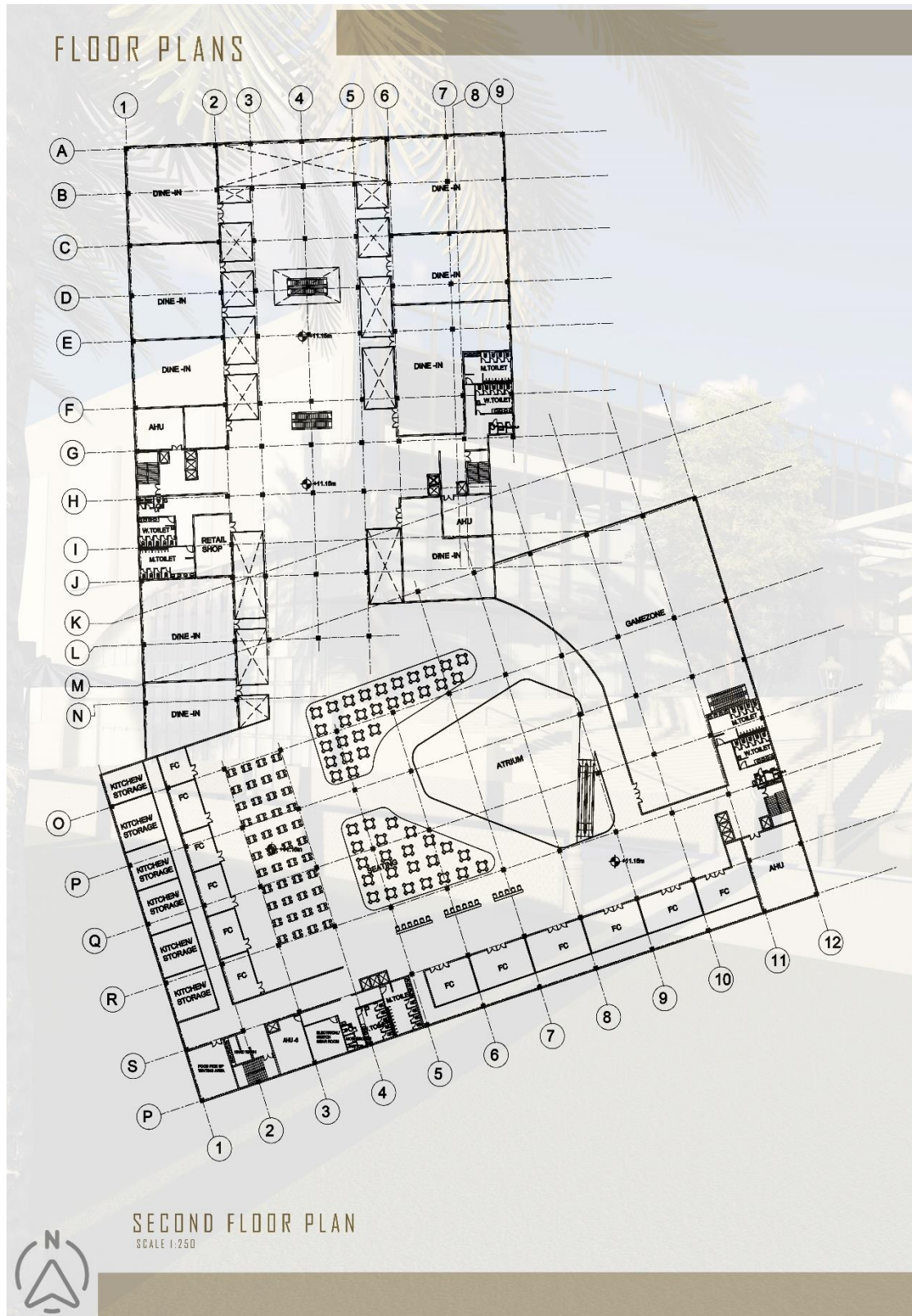


Plate 6.6 : Second Floor plan

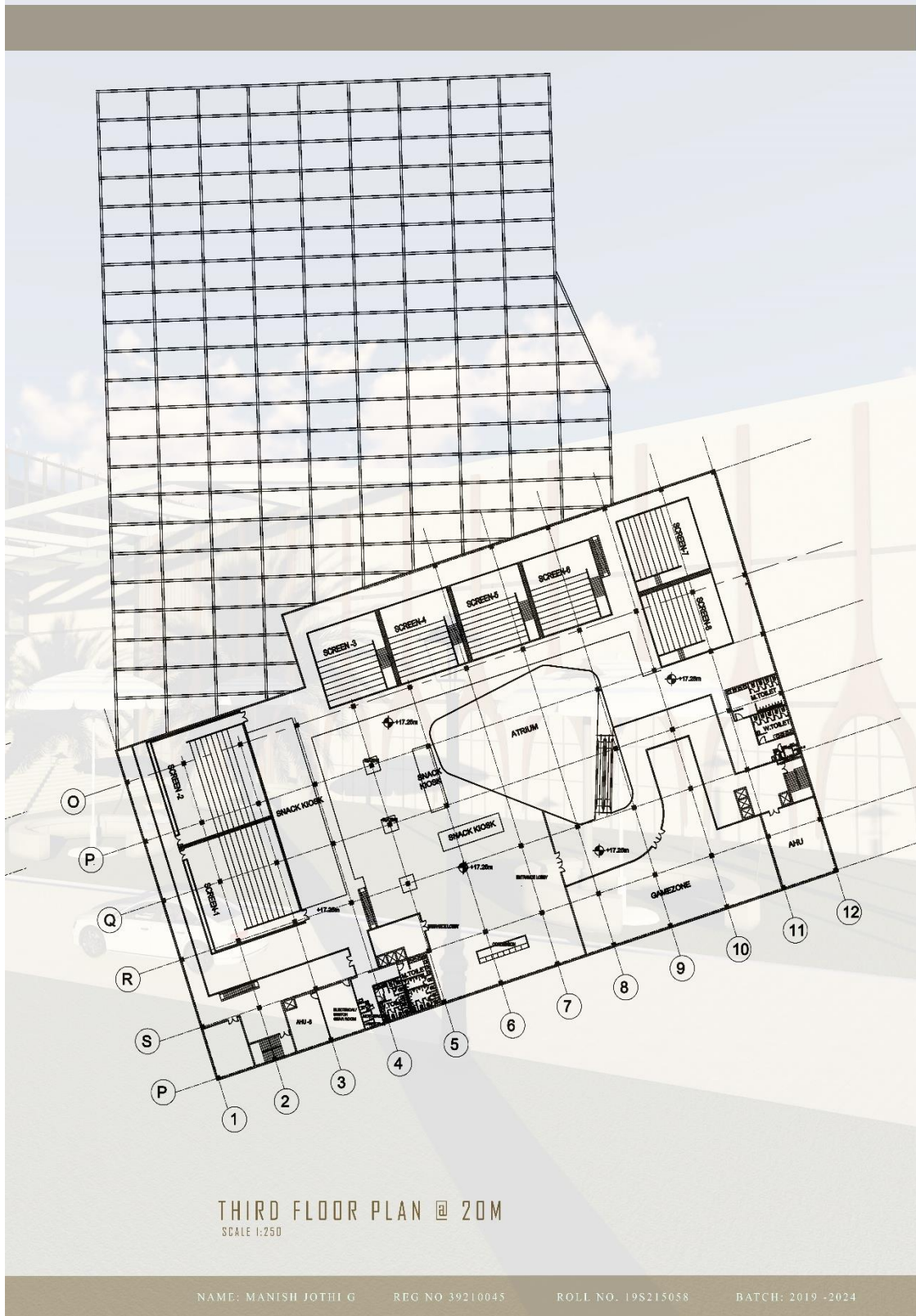


Plate 6.7 : Third Floor plan @ 20m

FLOOR PLANS AND SECTIONS

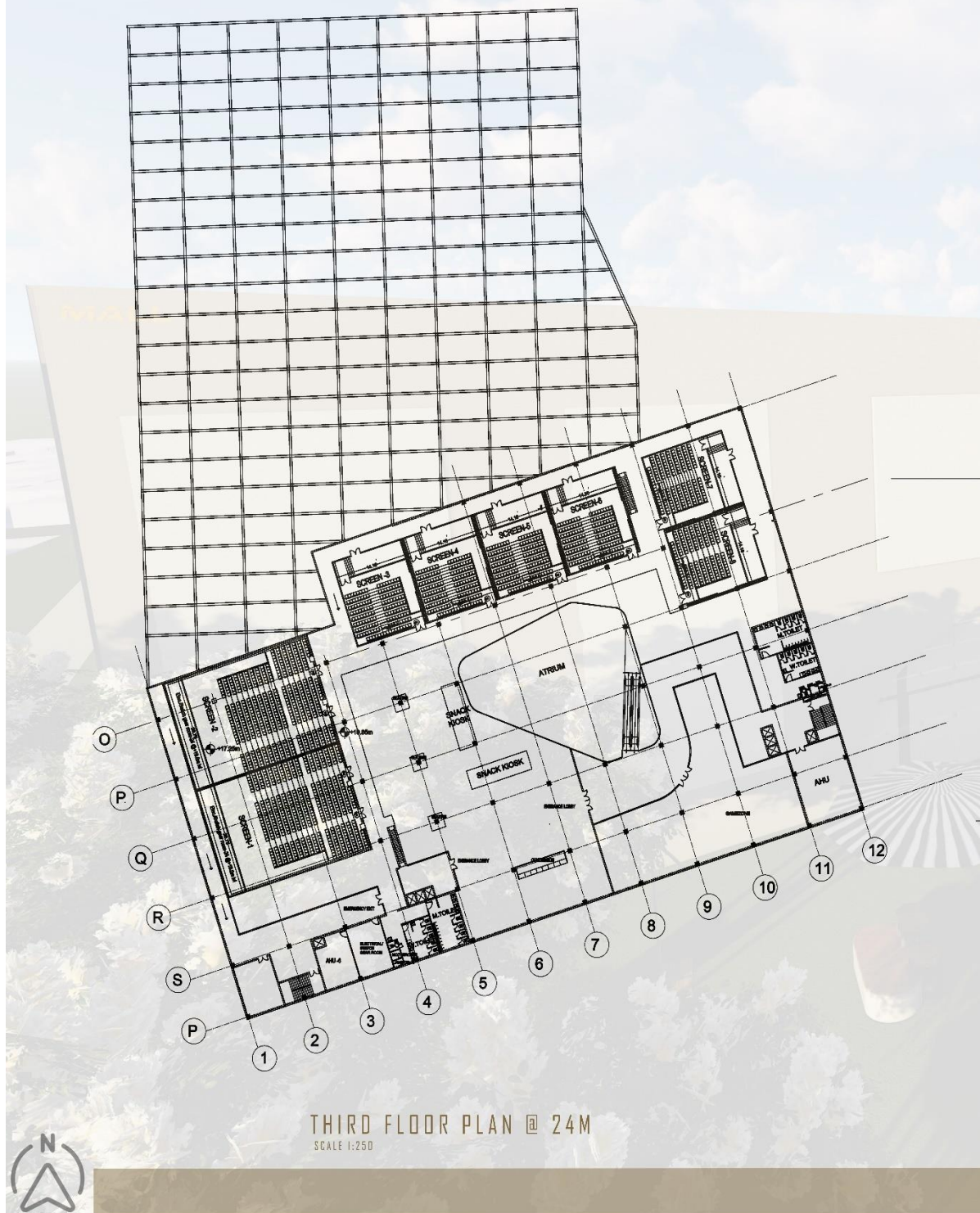
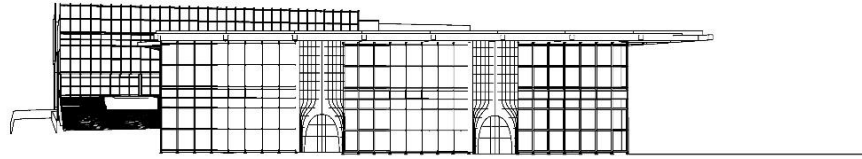
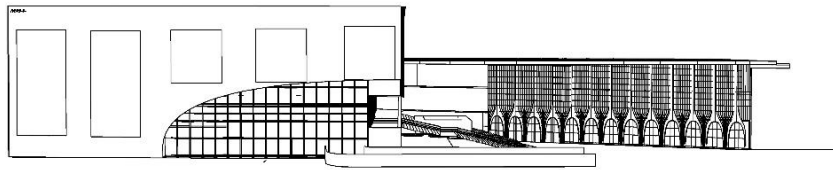


Plate 6.8 : Third Floor plan @24m

ELEVATIONS , SECTIONS AND VIEWS



NORTH SIDE ELEVATION
SCALE 1:100



EAST SIDE ELEVATION
SCALE 1:100



Plate 6.9 : Elevations and views

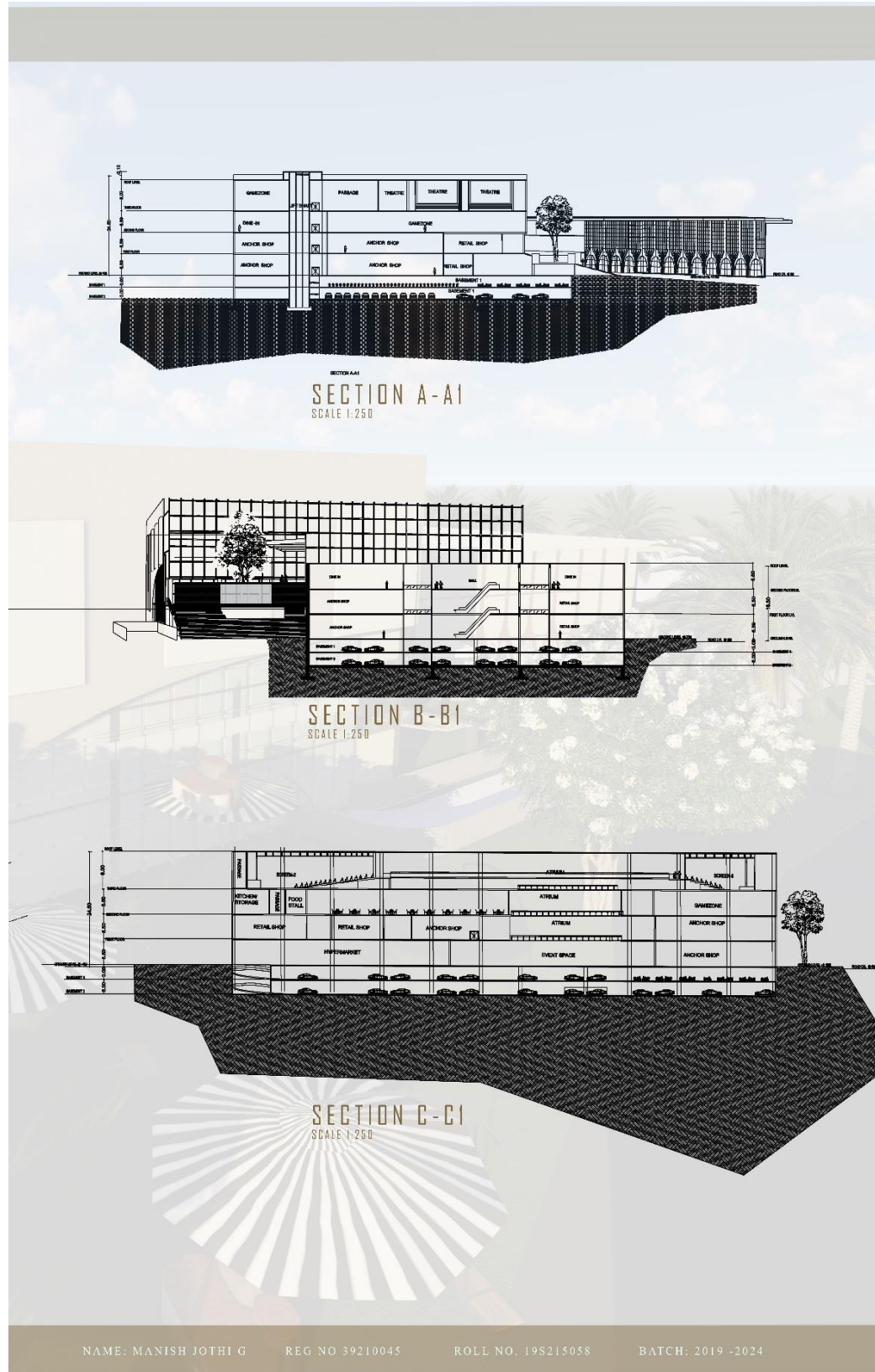


Plate 6.10: Sections



Figure 6.2 entry view of the building



Figure 6.3 entry view of the building



Figure 6.4 front view of the building

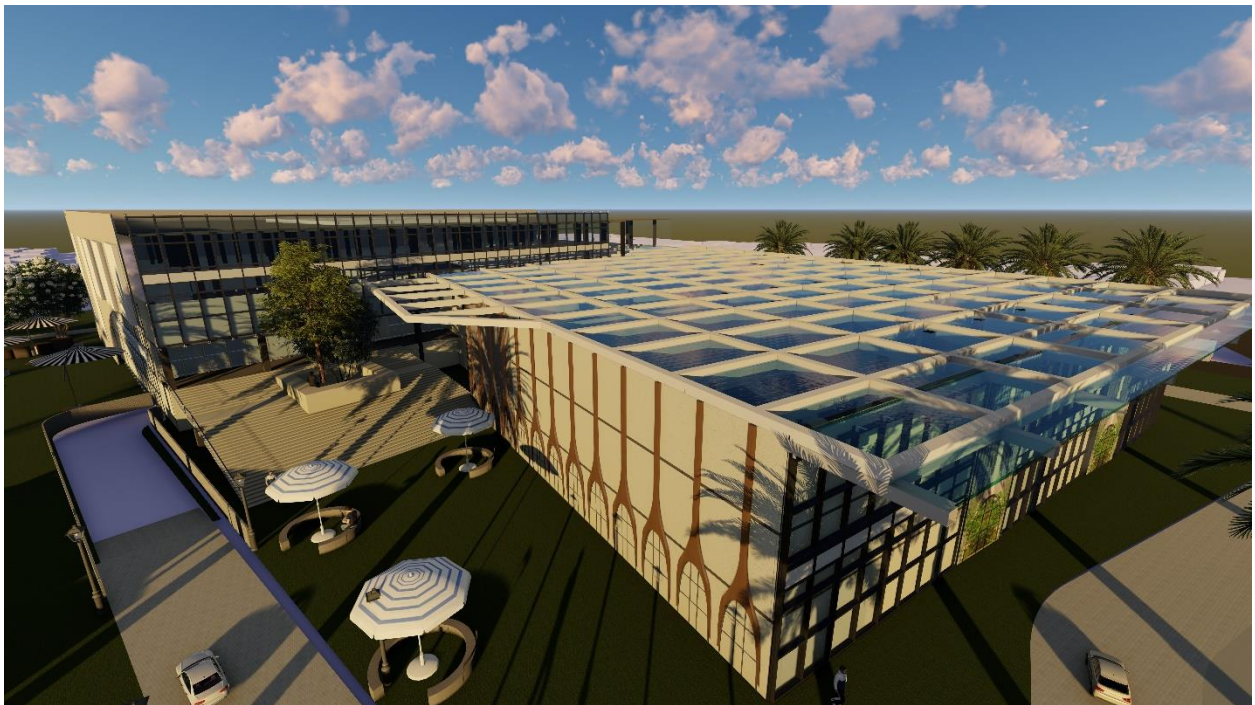


Figure 6.5 top front view pf the building



Figure 6.6 front view of the building



Figure 6.9 view of the stairs

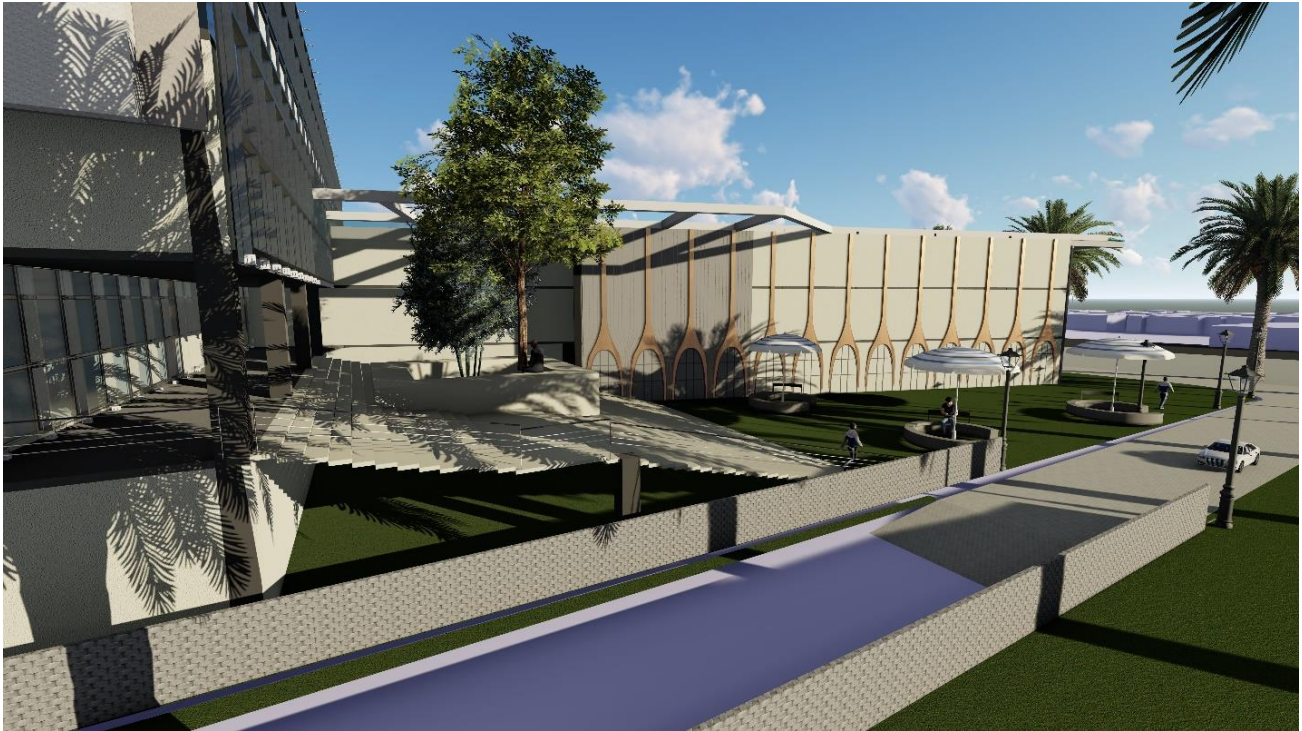


Figure 6.8 east side view of the building



Figure 6.10 view from the back

CHAPTER 7

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