#### SHOPPING MALL

Thesis

Submitted in partial fulfillment of the requirements for the award of the degree Of

# **BACHELORS OF ARCHITECTURE**

By

GHAFIR ABBAS 1521101005 5<sup>th</sup> Year- 10<sup>th</sup> Semester

Faculty Guide- AR. KUSUM CHOUDHARY



SCHOOL OF ARCHITECTURE GALGOTIAS UNIVERSITY GREATER NOIDA UTTAR PRADESH

#### **CANDIDATE DECLARATION**

I hereby certify that the work that is being presented in this Thesis, entitled "SHOPPING MALL" in partial fulfillment of the requirements for the award of the Bachelors of Architecture submitted to the School of Architecture of the Galgotias University Greater Noida, India, is an authentic record of my work carried out during the period December 2019 to May 2020, under the guidance of prof. Ar. Kusum Singh, Associate Professor of School of Architecture, Galgotias University, Greater Noida.

The matter embodied in this has not been submitted for the award of any other degree.

Place: Greater Noida Date: 03.06.2020 Ghafir Abbas Enrollment No. 1521101005

#### **CERTIFICATE**

This is to certify that the above mentioned statement made by the candidate is correct to the best of my knowledge.

Thesis Guide

Ar. Kusum Choudhary Associate Professor School of Architecture Galgotias University Greater Noida, U.P India Thesis Co-coordinator

Ar. Ruchi

Dean SOA Prof. Atul Setya

i

## ACKNOWLEDGEMENT

The culmination of this THESIS on the "**SHOPPING MALL**" has brought me one step closer to the completion of the Bachelors of Architecture. The dissertation has led me to the acquisition of specialized and state of the art knowledge, required for the development of my dissertation thesis, and it was also an opportunity to improve my lecture presentation performance and research skills. Therefore, through this I would like to show my appreciation to everyone that made this possible:

To my Dean Prof. Atul Setya, Galgotias School of Architecture, and Prof. Ar. Kusum Choudhary, who provide me invaluable guidance and assistance in the preparation of this report.

I would like to express gratitude to my friends and my family for their constant encouragement and support throughout this B.Arch. Program.

Last but not the least; I want to express my gratitude to all the Professor and nonteaching staff of the School, who has made possible my training as an Architect.

Place: Greater Noida Date: 03.06.2020 Ghafir AbbasEnrollmentNo.1521101005

#### ABSTRACT

Commercial buildings include office buildings, warehouses, and retail buildings (examples-Supermarket stores, shopping centers, and big-box stores). The buildings are industrial buildings. In urban areas, business buildings can combine functions like floors 2-10 offices and 1- story retail.

One or more Shopping Malls are a complex of shops representing merchants that allow visitors to walk from one place to another through connecting paths. Often sometimes include other services, including cinemas and restaurants. When merchants moved into larger stores, high streets grew in the early 19th century, but more rich people, who could afford to travel to centers for fun, began to want to shield themselves from rain. These developed into shopping malls with new innovations such as escalators. A shopping mall can serve as a medium for introducing the development of the city and its value system of the younger generation and also as a facility to aid further research in the detailed field.

It is a proposed project by DLF in Gurugram, Haryana. It is situated in DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector- 24, Gurugram, Haryana 122022.

Globally, retail is evolving and India has emerged as the favored global market for goods and services with its tremendous untapped potential. The project offers a shopping mall, an entertainment mall, multiplexes, and food courts equipped with acclaimed restaurants offering a variety of cuisines.

#### **LIST OF FIGURES**

- Figure 1.3 Key differences in between different types of Malls
- Figure 1.4.2 Site of the Project locatedDLF City Phase 3 Rd, Ambience Island, DLF Phase 3,
- Sector 24, Gurugram, Haryana 122022
- Figure 3.2.1 Shopkeepers
- Figure 3.2.2 Visitors
- Figure 3.2.3 Administration
- Figure 4.1.1 DLF Mall Of India
- Figure 4.1.2 Floor Plans of DLF Mall Of India
- Figure 4.1.3 Area Statement of DLF Mall Of India
- Figure 4.1.4 Circulation of area inDLF Mall Of India
- Figure 4.1.5 Highlights of DLF Mall Of India
- Figure 4.1.6 Fire exits in DLF Mall Of India
- Figure 4.2.1 The Great India Palace
- Figure 4.2.2 Floor Plans of The Great India Palace
- Figure 4.2.3 Shops inside The Great India Palace
- Figure 4.2.4 Fire exists of The Great India Palace
- Figure 4.2.5 Brands in The Great India Palace
- Figure 4.3.1 Wave Mall
- Figure 4.3.2 Floor Plans of Wave Mall
- Figure 4.3.3 Area Statement of Wave Mall
- Figure 4.3.4 Highlights of Wave Mall
- Figure 4.3.5 Comparative study of Wave Mall, The Great India Palace, and DLF Mall Of India
- Figure 5.1 Site location- DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector 24, Gurugram, Haryana 122022
- Figure 5.2 Different routes to reach the site
- Figure 5.3 Orientation of the site
- Figure 5.4 Average Temperature and Perception
- Figure 5.5 Wind speed in Gurugram
- Figure 5.6 Demographic of Gurugram
- Figure 5.7 Area in vicinity of site

Figure 5.8 Traffic on weekdays and weekends

Figure 6.7.1 Section through Typical Fixtures and Aisles

Figure 6.7.2 Typical wall features

Figure 6.7.3 Typical Standards

Figure 7.1 Concepts

Figure 7.2 Area Statement for Mall

Figure 8.1 Site Plan

Figure 8.2 Floor Plans for Shopping Mall

Figure 8.3 Sections

Figure 8.4 Elevations

Figure 9.1 3-D Views

# **CONTENTS**

Торіс	Page No.
Candidates' Declaration	i
Certificate	i
Acknowledgement	ii
Abstract	iii
List of Figures	iv
1. INTRODUCTION	1
1.1 Shopping Malls	
1.2 History	
1.3 Classes of Shopping Malls	
1.4 Validity Of The Project	
1.4.1 Why am I doing this project?	
1.5 Aim Of The Project	
1.6 Objective Of The Project	

- 1.7 Scope Of The Project
- 1.8 Methodology Of The Project
- 1.9 Limitation Of The Project

#### 2. ANALYSIS OF ENVISAGED ACTIVITY

13

- 2.1 Identification of the activities
- 2.2 Level of activities in term of scale
- 2.3 Description of activities at different levels
- 2.4 Nature (inherit qualities) of the activity
- 2.5 Characteristics (physical manifestations) of the activity

## 3. THE ENVISAGED USER PROFILE

18

3.1 Identification of the users

3.2 Classification of users	
3.3 Study of different classes of users	
4. CASE STUDIES	22
4.1 Case study of DLF Mall Of India	
4.2 Case study of The Great India Palace	
4.3 Case study of Wave Mall	
5. <u>SITE STUDY</u>	45
	52
6. <u>STANDARDS</u>	52
7. <u>CONCEPT</u>	55
8. <u>SITE PLANS</u>	57
9. <b>3-D VIEWS</b>	61
9. <u>3-D VIEWS</u>	01
CONCLUSION	62
REFERENCES	63

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Shopping Malls

Shopping mall is a modern word for shopping or mall, primarily North American, in which one or more buildings constitute a complex of businesses with interconnecting walkways, enabling customers to walk from one component to the next.

The new version of the historical marketplace is a shopping center or a shopping plaza. The mall is an independent set of retail, service, and parking facilities, planned, built, and operated as a unit by a separate company. They can also include restaurants, banks, theatres, offices, service areas, etc. They are also available.

A mall or shopping arcade is a building or a series of buildings that contain stores, which allow visitors to walk from shop to store with interconnecting passageways. There are walking routes.

The 'Mall' idea has a long history and has served all parts of society very well, probably covered with numbers of stores in one location. Nevertheless, the advent of large shopping centers from the center has led to improvements, some of which are beneficial. These systems continue to drive people out of the center of the city, leaving the city center without the chaos and business of trade, which often contributes to more violence.

Small business owners who cannot afford the higher rents in a new mall suffer from consumer loss. While consumers find the broad mall convenient, the wealth of products will make them more desirable to spend as much as their budgets allow. With other technical advances, the shopping center can, therefore, be used for good or bad, and the end result is more dependent on the motives than on the physical structure of the participants.

#### 1.2 History

It wasn't just the shopping mall. They're not the product of smart planners determining that suburban people need a place to go, without social life and excitement (Bombeck, 1985). Initially, the mall was conceived as a neighborhood center where people would gather for shopping, cultural activity, and social interaction (Gruen& Smith, 1960). It's fair to say the Mall met those early goals and surpassed them. The Mall is the core location of the world in today's consumer culture.

According to the history of Shopping Malls presented by Consumer Surveys (1986, for other shopping mall stories, see Jacobs, 1985; Kosinski, 1985), shopping malls were born in California in the 1920s, where supermarkets were to anchor and act as a magnet for a strip of smaller stores. Shopping malls began a little earlier, in 1907, in a Baltimore neighborhood where a group of shops set up off-street parking, according to Samuel Feinberg (1960). The Country Club Plaza, a collection of stores only accessible by car, was built in 1922 in the suburban Kansas City.

In 1931, Dallas's Highland Park Shopping Village was the first group of stores to have their own parking lot, with the stores facing off the access road. In 1956 a suburb of Minneapolis built the first enclosed mall. Designed to get the shopper out of the harsh weather, it introduced the world to themselves to shopping complexes as worlds — free from bad weather, life, crime, dirt, and trouble. This is somehow fitting that the largest mall in the US, dubbed "The Mall of America," is now approaching completion outside Minneapolis.

At its source, the exponential growth and development of shopping centers inevitably follows population displacement from cities and, at the same time, the rise in car usage. In 1960, 4500 malls accounted for 14 percent of retail sales. By 1975, 16,400 shopping malls served 33% of retail sales. In 1987, over 50 percent of all retail dollars were spent on 30 000 malls (Approximately US\$ 676 billion, 8% of the labor force and 13% of our gross national product – Keinfield 1986).

Malls now represent their neighborhoods' shopping, social, and cultural centers. In addition, shopping malls form the central rejuvenating sections of cities (e.g. Indianapolis City Center, Faneuil Hall-Boston, New York City South Street Seaport, Baltimore Harbor Place). 'Something is so big that it is societies. The Water Tower Square in Chicago has hotels, resorts, banks, stores, resorts, and apartment buildings. The West Edmonton Mall in Canada, the world's largest mall, has more than 800 stores, ice skates, and 24 films.

Although the country is undefeated (i.e., Turchiana, 1990) it does not seem appropriate (Ballard, 1981, Burstiner 1986), to increase its malls' supremacy. (Ballard, 1981). Many of these malls are going to be smaller shopping centers, but proposals exist for mega malls, modeled after the Edmonton Mall (Martin, 1987).

The business landscape in a mall today varies significantly from those of its early days when their biggest rivalry was in the city center. Many of the best "locations" have passed so that the biggest competitor in a mall is just another store. Shopping malls tend to be at maturity in the retail life cycle where market shares and sales will standardize (Sternlieb&Hughs, 1981). Developers will face difficulties in that context in the sense that they will have to concentrate more on when, when, where, how, where and how the customer is where all the aspects of the "shopping malls" are concerned (see DAWSON, 1982 for a full review of the published shopping mall articles before 1982).

#### **1.3 Classes of Shopping Malls**

#### I. Regional Mall

A regional mall is a shopping mall with general products and facilities in depth and width (a significant percentage of which are clothing). A traditional regional mall is typically enclosed with an internal orientation of the stores linking the external perimeter with a common pathway and parking.

These malls have a unique feature that their items are manufactured in their regions, such as garments, fashion accessories, food, etc. Most of these centers offer information on hotels, restaurants, local events, and municipal services. These are a venue for social and fun during weekends and holidays.

According to the International Council of Shopping Malls every mall, built to accommodate large numbers of people, and which is larger with a surface area from 400 000 sq. ft (37 000 sq.m.) to 800 000 sq. ft (74 000 sq.m). Such centers, although located in holiday areas, proved to be strong tourist attractions.

#### II. Super Regional

As a varying name suggests, a super-regional mall is a retail center which is an extension in terms of scale and product range of regional malls. According to the International Council of Shopping Malls, a mall that is built to serve a broad population base and is greater than 800,000 meters of the ground floor (74,000 m2) and is the dominant shopping center in the city (25 miles).

Typically, a super-regional center is a gated mall with three or more anches, which cater to mass retailers, a larger variety, and a more in-depth variety of items. The bulk of the regional malls are multilevel and represent the area in which they are located as dominant shopping spots.

#### III. Vertical Malls

The idea of a vertical mall came into effect due to the challenges of heavily populated towns and countries with such high land costs that current shopkeepers find it impossible to imagine some kind of horizontal extension to meet the masses of their stores.

Retail stories accessible through elevators or/and escalators linking the different areas and levels of the mall have therefore been designed. Any story or section of the mall was devoted primarily to specific subjects such as beauté and fashion, clothes, decor, foods, kitchen utensils, and so on.

Mafco Group, the former shopping center construction subsidiary of Marshall Field & Co, which pioneered the concept of a vertical mall in 1960, is credited with creating the first vertical center. In 1975 the first indoor mall in Chicago, Illinois opened as the Water Tower Location skyscraper.

It has hotel rooms, luxurious hotels, office space on top of a block-long foundation, and an eight-style atrium center facing the Magnificent Mile. About 100 shops are scattered across 8 separate floors in the already functioning complex. Furthermore, the mall features several bars and shops, a live theater, and glass elevators built around a chromium-glass atrium.

The stores at North Bridge and Av. Atrium (known most popular to be North Michigan Avenue), both featuring higher-bottom shopping mixtures, are connected to the mall along North Michigan Avenue. The entire project is built to adapt to the challenge of having a separate entrance and vertical movement for a regional center, department stores, cinema, schools, hotels, and residences.

The general public requires a great deal of time to conform to malls, as the principal difficulty of these malls resides in overcoming the inherent inclination of shoppers to push horizontally and to enable shoppers to move up and down. While the Vertical Center is a new idea, large conurbations like Bangkok and Hong Kong were witnesses a few decades back in countries such as India or China.

Times Square is regarded as Hong Kong's first vertical mall. Times Square departed from the traditional Western paradigm of the flat mall and converted it into a nine storage mall owing to increasing land values in Hong Kong and higher returns on retail assets. Broad escalators between the building level to the 1st building of the mall linked the center to lifts to the office tower.

Vertical malls are the clearest reasons:

• Strong rates for land

- Cities have a lot of people
- IV. Strip Malls

The strip mall is an enclosed retail area where many shops are usually placed in a row with a sidewalk in front of it (commonly known as a shopping plaza, an arcade, and a mini-mall). Strip malls are commonly constructed as a unit and have large parking facilities. They face major arterial traffic and appear to be independent of the communities with few pedestrian links.

In most affluent parts of the USA and Canada, strip malls are very common. Many of these centers are as high as 5,000 m2 and some are more than 100,500 m2. Such centers usually cater to the local community and deliver a variety of products according to the location and demand.

A large store such as Target, Wal-Mart or Kohl's and a large supermarket on one end of the other is typically connected to the other type of strip mall in the USA and Canada. In the real estate market, strip centers, which draw and host inhabitants of a wide local population district, are also known as power centers. Department stores, bookshops and online retailers may differ in the form of distributors.

While these mall groups are far fewer, they are very common compared to other smaller categories. The number of retailers may vary from four or five to a dozen or more. The number varies between regions.

An open-air shopping mall is a strip mall (which is also known as the Plaza de Retail, Shopping Centre, or Mini-Mall). Usually, strip malls have been built as a unit with large parking lots in front of them.

The idea that they draw and care for people in a growing population area is widely referred to as power centers in immobile growth industry. Retailer types can range greatly, from electronics shops to libraries to household upgrades.

V. Dead Malls

Dead Malls are those centers that originally act like every other center, but are now common because of certain causes and have very few to no footprints. Thus consumers will not frequent these stores despite all services and discount shops. Such malls are pronounced "missing" in the USA, Canada, Australia, Great Britain, and in other parts of the world.

The key reasons that a mall should be pronounced dead are the advantages of the new malls where the modem systems such as automatic parking services, comfort escalators, temperature sensors, capsules lifts, entertainment equipment, and up-to-date leisure conveniences can be located.

Most malls have been demolished in the United States and in many countries, as sales and occupancy have plummeted. Such 'fallen malls,' which have been abandoned for many years before being rebuilt or demolished, have struggled to attract new businesses. Untidy malls were installed and existing outdoor centers were refurbished in an enclosed environment until the mid-1990s. The benefits of these malls were temperature regulation.

The tide has changed since then and the building of open-air malls is once again trendy. Only one new adjacent mall has been developed in the United States since 2006, according to the International Council of Shopping Centers.

A store tends to decline in some situations when the store has a social drop-in the surrounding regions or where there is a gap at a bigger, older mall. Therefore, the viability of these malls is made difficult by technological developments in the department store industry.

A few of the local supermarket stores (Spencer, Wal-Mart) have been replaced (Six to Ten) by a handful of national (Big Bazaar). There are also inadequate urban shops in some cities to cater to the local population. Big-box stores such as Wal-Mart, Carrefour, Tesco, Reliance Fresh, and Big Bazaar tend to be more open-ended rather than center-ended.

Phoenix Market City is the collaborative initiative that has a bold vision of offering the best products, culture, accessibility, and overall thrilling awareness for Indian urban consumers. 'Phoenix Market Area' has become a brand name and delivers the world's best items for a fantastic shopping experience.

#### VI. Outlet Malls

The outlet market (a brick and mortar shop) is a shopping mall, in which a retailer markets his goods directly to the public from his own retail outlets. The area is also called the distribution complex. Whereas other companies in the outlet center sell recycled merchandise and products for discounted rates, usually.

Outlet malls are usually in rural areas or often in sites of tourism. These malls, primarily, consisting of retail outlet shops with suppliers marketing their own brands. Such malls are not anchored traditionally. A strip arrangement is most common, although some are enclosed malls, and others may be grouped in a cluster of "villages."

Harold Alfond, the creator of the Dexter Shoe Company, created the first-ever OC mall in 1936, then opened the first multi-store Vanity Fair center in 1974. In 1979 in Lakeland, TN, in the suburb of Memphis, Belz Enterprises opened the first enclosed factory outlet mall.

• Features of an outlet mall:

The outlet malls were initially situated near assembly malls, where clothing, garments were produced, but after outsourcing has been introduced, most bricks and mortar shops have little role in the strategy.

The major features of a center are

- 1. Prices are relatively small for the products sold.
- 2. The shop is the manufacturer's house.

3. Shops also are situated outside the city for lower rentals and clustered around what is known as the outlet mall alongside a number of other retailers.

4. The outlet store is an ideal place to save on well-known products with price-conscious purposes, but you should be mindful the best brand selection is not necessarily at the outlet.

5. A manufacturer could be able to sell unusual products of minor defects in an outlet shop which would usually not be approved by the consumer if sold in the store.

- In addition to making a profit from unstandard stock, a shop is a great spot for selling offseason stock or even occasionally old-fashioned items that, if sold in other departmental shops, would not respond. Therefore, the retailer will go a step forward to market the product which would either usually be either tossed out or considered a total loser, as consumers are intrigued by the tremendous expense of the manufacturer's name.
- Several businesses have adopted new practices to increase overall competitiveness because of the win-win condition for both consumers and traders. They are now actively manufacturing inexpensive products that look similar to those of their initial brands, but are in reality of lesser quality and are sold in their outlets. It is where cost-conscious consumers and vendors can look after themselves.

Туре	GLA (sft)	No. of Anchors	Type of Anchors	Anchor Area	Primary Trade Area (kms)
Neighbourhood Centre	42,000 to 210,000	t	Supermarket	30-50%	2 to 3 km
Community Centre	140,000 to 490,000	2 or more	Discount Dept Store, Supermarket, Home, Large Speciality, Discount Apparel	40-60%	3 to 5 km
Regional Mall	500,000 to 1,120,000	2 or more	Full/Jr. Dept Store, Discount Dept Store, Hypermarket, Fashion Apparel	50-70%	4 to 12 km
Super Mall	1,120,000+	3 or more	Full/Jr. Dept Store, Discount Dept Store, Hypermarket, Fashion Apparel	50-70%	6 to 25 km
Fashion/ Speciality Mall	110,000 to 350,000	N/A	N/A	N/A	6 to 15 km
Power Centre	350,000 to 840,000	3 or more	Category Killer, Home Improvement, Hypermarket, Discount Dept Store, Off Price Superstores	75-90%	6 to 10 km
Outlet Mall	70,000 to 560,000	N/A	N/A	N/A	15 to 50 km

# Key Differences Between Different Types of Malls

Figure 1.3key differences in between different types of malls

Source:http://www.yourarticlelibrary.com/retailing/shopping-malls-and-its-types-with-statistics/48436

Note: GLA represents the Gross Lettable Area and is the amount of the whole property available for rent. GLA is usually less than BUA of a mall in most of the countries around the world as specific areas such as corridors and washrooms, service areas such as waste disposal rooms, generator spaces are not considered lettable or are not used.

#### 1.4 Validity Of The Project

As a platform to promote the growth of the city and its younger generation's value system, the Shopping Mall will also provide funding for more comprehensive analysis.

The project is feasible in all respects. It is a proposed project by DLF in Gurugram, Haryana. It is situated in DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector- 24, Gurugram, Haryana 122022.

The economy and development of the town are obvious from a massive transformation in its environment, including luxurious villas and bungalows, new apartments, and shopping centers. The fact that Gurugram is hot with luxuriant foliage makes it a real estate destination even more enticing. Gurugram is well linked to Delhi and the majority of major cities in Northern India by train and road.

In Gurgram, Shopping malls will lead to a change in lifestyle. Worldwide, retail is evolving and India is emerging as the worldwide favored destination for global goods and services with its tremendous untapped potential. Gurugram is a constantly developing region and provides a large consumer base for many branded goods. DLF proposes a shopping center, which is just 25 km away, to serve this demand-driven market. From the N.H.- 48 Delhi frontier. This will be one of Gurugram, Haryana's best lifestyle destinations.

Gurugram is an important center for the outsourcing of its facilities by international corporations. Many major consulting firms have offices in town for tech and company processes. Delhi's current business districts are near to saturation rates with minimal land access.

Most improvements in Noida and Gurugram have been identified for possible expansions. This project is beautifully positioned as an iconic center within the NCR area to take advantage of this need void.

The shopping mall imbues the spirit of peace and blends it with new conveniences for shopping. In an air-conditioned interconnected building, the center provides unique retail, recreation, and entertainment facilities.

It provides an incredible fusion of foreign lifestyles to the people of Gurugram. The shoppers are able to understand the distinctive character of numerous dining, grocery, hypermarket, and convenience stores.

The shopping mall is expected to offer the first edge to megabrands, grocery & retail giantswith their top-line specs and conveniences for new generation.

#### 1.4.1 Why am I doing this project?

For the following reasons I do this project:

- Shopping malls, complexes, and markets have in the past a strong social interest. It used to be a gathering spot for the group, where all members of the society can come to connect and just have fun.
- The nominee wants to preserve the common interest of cooperative economies by means of this plan.
- Professional shopping mall value.
- Urgent need for the citizens' wellbeing program.
- The site area and project specifications are beyond my knowledge and capability.

## 1.4.2 Site



Figure 1.4.2 Site of the Project located in DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector 24, Gurugram, Haryana 122022

Location: DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector 24, Gurugram, Haryana 122022 Area: 36.5 Acres FAR: 3.5 Ground Coverage: 60% SEA Level: 217 M above sea level

## 1.5 Aim Of The Project

Developing a shopping mall for the public benefit and showcasing the community's distinctive character by encouraging local businesses and cultivating the best of area cuisine, handicrafts, arts, heritage, and culture.

## 1.6 Objective Of The Project

The key goal for my research is to create a marketplace that serves all the needs of social development and not just as an arcade for shopping for the middle-class community and high-income classes.

- This mall will be a place for potential companies at home.
- This shopping mall also encourages popular culture, food, and music.

#### 1.7 Scope Of The Project

- The shopping mall on a 36.5-acre site is planned.
- The comprehensive plan shall be created with the help of case studies of different spaces expected to be constructed in the middle.
- Plan and design rooms for an adequate working set of criteria and related operation.
- To evaluate the aspects of the site and the environment in order to find a sustainable design approach.
- The concept includes department stores, anchors, hyper-marts, food courts, restaurants, and open-air and semi-open public activities areas.
- To create specific environments that synthesize and harmonize diverse lifestyles, shopping, and recreational experiences under the roof of the shopping mall. The nature of the architecture, the planning, and the layout of the whole complex with some significant architectural specifics may be resumed.
- External completion information.
- Information on the energy conservation requirement in the house.
- Accurate 3d views and layout.
- Architecture specifics include Construction plan, Operation planning, Site landscape, Project Concept, and Description. The concept will be self-sustainable.

## 1.8 MethodologyOf The Project

- I. Identification of the typology.
- II. Valid reasons for the selection of the typology.
- III. Selection of a project from the typology, as per our interest.

- IV. Understanding of the project.
- V. General data collection.
- VI. Identification of the activities in terms of scale and their nature.
- VII. Classification of the different aspects of the user.
- VIII. Anthropometrics related to the project and arrangement of spaces for performing various activities.
  - IX. Case study
  - X. Site visit and analysis
- XI. Concept
- XII. Zoning
- XIII. Design development

## **1.9 LimitationOf The Project**

• Only 40 percent of the site was used.

#### **CHAPTER 2: ANALYSIS OF ENVISAGED ACTIVITY**

#### 2.1 Identification of the activities

As globalization expands, shopping malls in many countries are a part of urban lives, and their number in metropolitan areas is increasingly increasing. Such newly built well-managed shopping centers provide services, which allow people to take part in physical activity and social interaction, in addition to their retail outlets.

Shopping Malls operates and draws its users more than shopping events, particularly young people for their physical attractions, leisure and leisure facilities, and social experiences.

The events and characteristics of the shopping malls that matter to the customer appear to focus on five prevailing factors.

 Attractiveness: scenery and the feel of the storage surroundings add nonetheless to aesthetics in the shopping center. (Lighting setting, seating, and bathrooms, interior decor, tidy and well-kept, air-conditioning and ventilation, parking facilities).

A healthy climate allows customers to live longer and to spend more. A significant factor in decision-making people to frequent the shopping center was found to be Environment.

Many tourists are drawn by safe and new public spaces with a sleek look and sound. It is important to decorate and retain as luminous and spacious spaces as possible.

In specific, ambient factors (e.g., shop lights), which in turn affect the consumer's response or resist actions (e.g. willingness to buy), may impact a consumer's emotional state.

II. Socialization (making friends, visiting and seeing others): shopping malls give their customers the ability to socialize. Though they are owned privately, the public using these spaces. For many residents, the current center of civic and social life is the shopping malls, which are isolated from the city by distance or nature. Malls are considered to be a position where social behavior can be encouraged.

Shopping is the main commercial practice of the modern-day and is often performed in the shopping area.

III. Entertainment and Leisure: the retail landscape has evolved and is now transforming into leisure, entertainment (billiard hall, Bowling alley, market place, bars, pubs, cinemas, fitness centre, art galleries, exhibits, and music concert). Shopping is also a recreational pursuit. When young people spend a great deal of their time in shopping malls. By the early 1990s television quickly became an industry. A number of malls now have play areas for youngsters, sports for augmented reality, live events, movies in multiplex cinemas, food in food courts or themed restaurants, and immersive displays.

Consumers are in the shop for various purposes, for example, amusement, leisure, social contact or mental stimulus that might not be part of some single product and/or service demand.

- IV. Place Importance
- V. State of shopping

## 2.2 Level of the activities in terms of scale

- Shopping
- Administration
- Security
- Management
- Services
- Playing games
- Watching movies
- Waiting in queue
- Loading and unloading of goods
- Sitting
- Window shopping
- Interaction
- Communication
- Horizontal circulation
- Vertical circulation
- Vehicular movement
- Knowledge exchange
- Dining

# 2.3 Description of activities at different levels

• Shopping: Shopping is a consumer practice where one or more vendors search the available products or services in order to purchase an appropriate range of them.

- Window Shopping: Window shopping, also referred to as browsing, refers to experience when a customer browses the merchandise of a store or finds it to be a type of recreation or social behavior. Window shopping may be used as a pastime or for details about the production of a company, market variations, or selling rates, depending on the customer.
- Interaction: The main purpose of the proposal is also to communicate between citizens as the mode of communication is easier and cheaper.
- Sharing of information. Information sharing is an activity carried out on the basis of their expertise by various user classes. The acquiring of awareness from different sources by way of learning.
- Traffic: Traffic is deemed the most critical operation in these building styles because proper movement provides a minimum intersection and stopping in the city. Proper action filters people's activity automatically.
- Administration: The consumer community managing and maintaining facilities is an essential job.
- Dining: There is food in the form of lunch spaces or cafes for the users to dine in or in the form of contact areas, which can be in the window or an open room based on the user's tasks or wants.
- Scheduling: Scheduling is the second main operation because it organizes the activities and schedules the date for visits, ensuring that individuals are not met outside the borders.
- Facilities: We certainly require assistance from resources such as sanitation, professional personnel to better run the regions.
- Health: health is another thing that monitors the system and assures the room works properly.
- Loading and unloading of merchandise: merchandise is carried from the truck to store in a tiny trolley or may be moved manually through the entire complex in order to be brought into the stores.
- Standing at line: people make a line to sign in the door of the house, or buy display tickets or other things to obtain any food from counter window shops, and the flow may be disrupted.

## 2.4 Nature (inherent qualities) of the activity

- Administration:
- > All shops are licensed.
- > The shops' arrangements with multiple applications.

- > Set of shopping center documents.
- Management:
- Repair of construction facilities.
- ➤ Having the consumers' shops stocked.
- Complete building health control.
- Services:
- ➢ Keep the building materials safe.
- > Software arrangements for the users' ease offered in the house.
- Circulation
- This refers to the correct flow of people when entering and inside the building such that the operation conducted by the consumer does not conflict with the behavior of others.
- Canalize the campaign.
- Safety:
- Safety at the broad stage; on-site stage this requires parking facilities and the site entry and other built-in areas.
- For protection inside the room created.
- > Upon all shops for protection.

## 2.5 Characteristics (physical manifestations) of the Activity

- Proper Circulation: -
- In order to ensure the correct operation of these styles of structures, adequate canalized circulation will take place in the house.
- > Together with this, there will always be a midway escape from the towers.
- > There should be no collision point in the system of circulation.
- The connection between various spaces: -
- These buildings are built in separate areas but should be linked by common means of connection.

- > We will do this by combining nature with our architecture.
- Typology of spaces with regard to their usage: -
- We can construct spaces according to their intent of use, as various operations need specific types of spaces to work properly.
- > In order to rest, we need a room that is interconnected or in touch with nature.
- > By integrating nature with our design we can achieve this.

# **CHAPTER 3: THE ENVISAGED USER PROFILE**

#### **3.1 Identification of Users**

The various types of users must be defined at an early level because it is necessary to consider and react to the consequences of their requirements. Some of the typical approaches for carrying out this function include:

- Tests need to be carried out especially for the project by surveys, interviews, questionnaires, or findings e.g. model constraints and coordination with relevant consultants must be taken into account.
- Reports of specific building styles used to obtain input on product requirements. Many of the construction articles presented in architectural journals appear to concentrate on structural design and functional issues, with inadequate details on practical use.
- Visitors
- Shopkeepers
- ➤ Staff
- Care takers
- Centre managers
- Kiosk venders

#### **3.2 Classification of the users**

- Based on the activity:
- Shopping: Tourists, shopkeepers

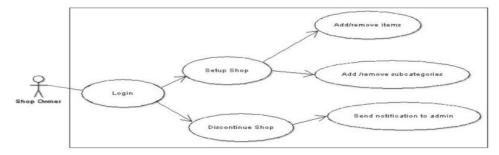


Figure 3.2.1 Shopkeepers

Source:https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910

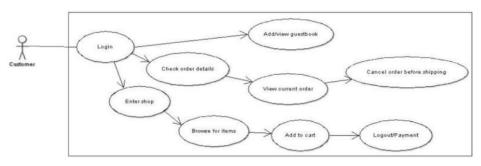


Figure 3.2.2 Visitors

Source:https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910

- Games- Visitors
- Administration: Workers, Staff

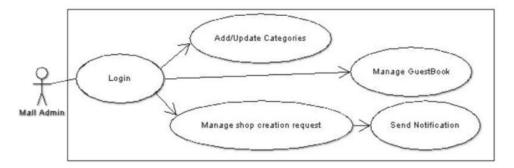


Figure 3.2.3 Administration

Source:https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910

- Maintenance: Swipers, Care takers
- Diners: Waiters, Chefs, Visitors

## 3.3 Study of different classes of users

- Social aspects:
- This initiative would offer diverse social classes the ability to engage actively in numerous public sector activities.
- Shopping malls play an immense role in the worldwide development, selling diverse items through departmental sector shops, retail labels, etc.
- > Which can also offer incentives for jobs in the workplace and for developing companies.

- Psychological aspects: -
- Shopping mall is a public area where most citizens of the community come for a number of reasons, such as main shopping, leisure, or even passive environmental participation.
- Students- the shopping malls of the contemporary day act as hang-out places for students to meet up with buddies and grab a fast bite from fast food cafés.
- Couples- a mall is great for a couple who have a relaxing dinner because they have an endless chance to dine together at a diner, as it can also be a venue for shopping with each other.
- Nearby communities-it will act as a location that meets the specific departmental needs of local people, as well as other purposes such as retail, medical and leisure use.
- People searching for employment-the broad variety of entrepreneurial operations taking place offers a perfect environment for many individuals looking for work.
- Economical Aspects: -
- The economy split the society into three groups or levels: lower class, middle class, and upper class.
- A shopping mall is one of the locations where people with all cultural classes (lower class, middle class, and upper class) interact.
- > This provides an atmosphere in which they can communicate with each other.
- Cultural Aspects: -
- Community and civilization are characterized by the individuals themselves.
- The community comprises of values, attitudes, customs, artifacts or items, and other attributes embraced by the community.
- > People with a given society have similar values, customs, and characteristics.
- A shopping mall is one of the locations that people of various cultures can purchase the things they need or want and show their culture and customs to people of different cultures.
- Gender and Age: -
- It provides a fair opportunity for both males and females to look at the products and to purchase and share their opinions, their point of view, and their results.
- It aims to establish a harmony between the two demographic classes by offering an equal environment and a forum for speech.

- Hormones are produced in the human body by age group and time span, as a result of which there are differences in preferences, the field of preference, desires, moods, emotions, and spatial changes.
- It should allow us to learn more about each other and have a forum to share their points of view and their opinions in front of others.

# **CHAPTER 4: CASE STUDIES**

Case studies are an essential part of architectural design and indeed of some type of design. The case study allows the designer to recognize the main problems that the designer should be mindful of when planning. It helps to acquire an understanding of common design concepts and ideas that have an effect on architecture and help to create a better product.

The research method will be to analyze the technologies implemented in these centers and benefit from the innovative ideas of the introduction of roles into these modern era centers.

The centers selected for the case studies were chosen with close consideration of the following factors:

- Architectural architecture principles and inventions.
- The concept of working and preparation.
- Period or length of operation.

Three Case studies are:

- 1. Mall Of India
- 2. The Great India Palace
- 3. Wave Mall

#### 4.1Case Study of Mall Of India

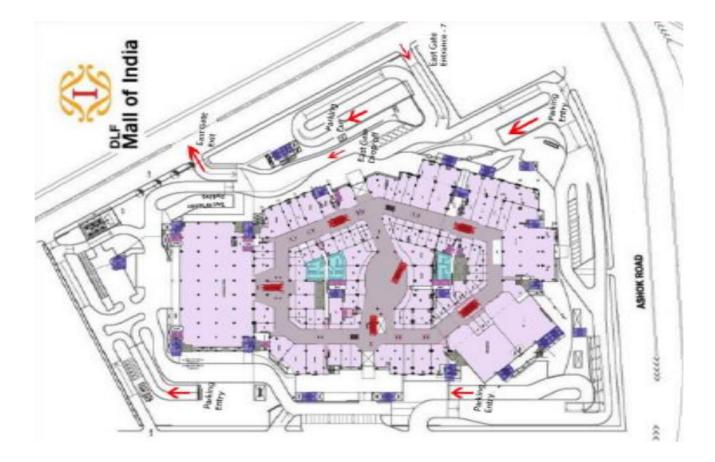


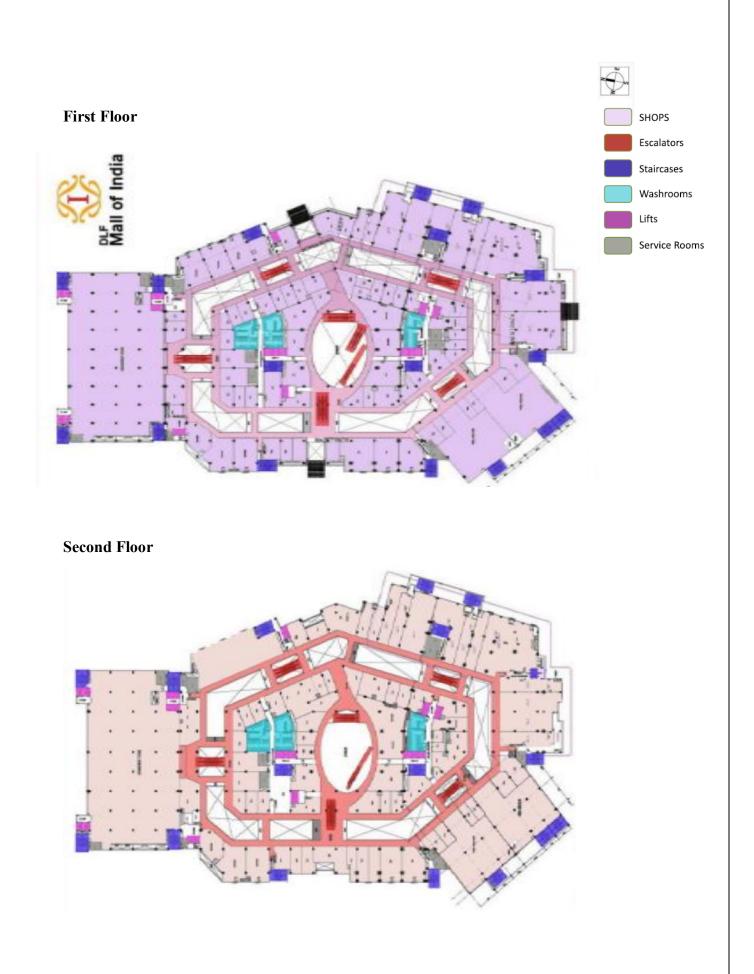
Figure 4.1.1 DLF Mall Of India Source:https://www.dlfmallofindia.com/wp-content/uploads/2017/09/N6.jpg

## **INTRODUCTION**

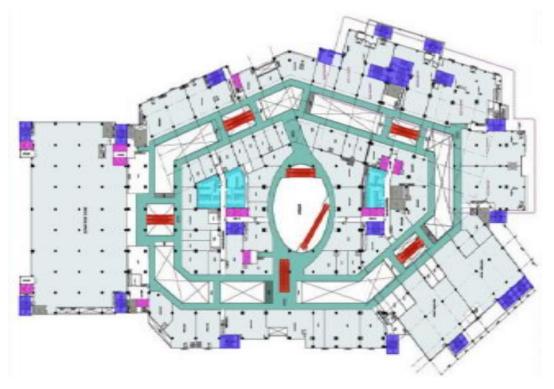
- DLF Mall of India is a shopping mall in India situated in Noida Sec-18, NCR, Uttar Pradesh.
- This is distributed over a shopping area of 2 million (sq.ft. GLA).
- It was planned by Benoy Architects and constructed by Turner International.
- It has a total rented area of 1,800,000m2.
- The center is split into 5 zones distributed across 7 levels.
- The mall was launched on 27 April 2016.

## **Ground Floor**

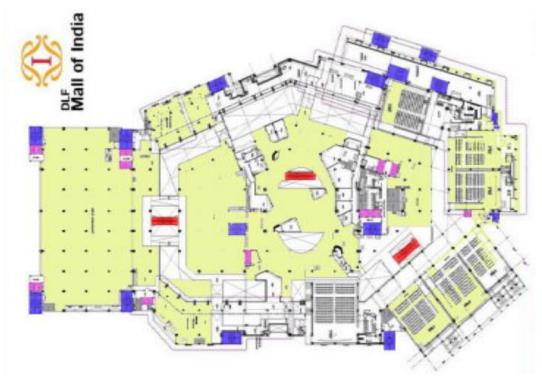




# Third Floor



# **Fourth Floor**



# <image>

Figure 4.1.2 Floor Plans of DLF Mall Of India Source:https://www.dlfmallofindia.com/wp-content/uploads/2017/0093283/N6.jpg

## **AREA STATEMENT**

S.NO	Floors	Zone	Built Up Area
1	Lower Ground Floor	Market Place	2,80,000 ft <sup>2</sup>
2	Ground Floor	International Boulevard	2,80,000 ft <sup>2</sup>
3	First Floor	International Boulevard	2,80,000 ft <sup>2</sup>
4	Second Floor	The High Street	2,80,000 ft <sup>2</sup>
5	Third Floor	Family World	2,80,000 ft <sup>2</sup>
6	Fourth Floor	Leisure Land	
7	Fifth Floor	Leisure Land	4 <sup>th</sup> +5 <sup>th</sup> = 4,00,000 ft <sup>2</sup>

Figure 4.1.3 Area Statement of DLF Mall Of India

Source:https://www.dlfmallofindia.com/wp-content/uploads/2017/985465/N6.jpg

#### CONNECTIVITY

- The DND (Delhi Noida Direct) flyway links the Indian DLF Mall with South Delhi.
- The Greater Noida Expressway links the Indian DLF Mall with Noida and Greater Noida.
- Ashoka Road links the Indian DLF Mall with Noida and MayurVihar.

#### CONCEPT

- The innovative architecture of the Mall of India involves special features such as race-track atriums that pass across the building, ensuring maximum accessibility for all shops, as their facades face the atrium, thereby achieving equal accessibility and prominence.
- Essentially Indian & Foreign in Approach.
- DLF Mall of India presents multinational shopping trends in a way that is fitting for the Indian consumer.
- The idea of categorizing the mall into 'zones' focuses on making the shopping environment more comfortable and fun than ever.
- There are five regions, listed as the Foreign Boulevard, Family Town, High Street, Leisure Ground, and Market place.

## FREQUENCY

- Parking floors-3
- Totals no. car parking -1700
- Totals no scooter parking -600
- Cars come in and out 1000 -1200 (week days) & 4000-5000 (weekends)
- Foot fall
- 30000-50000 /per day (Weekdays)
- 70000-80000 /per day (Weekend)
- Maximum -1.3 lacs on Christmas day

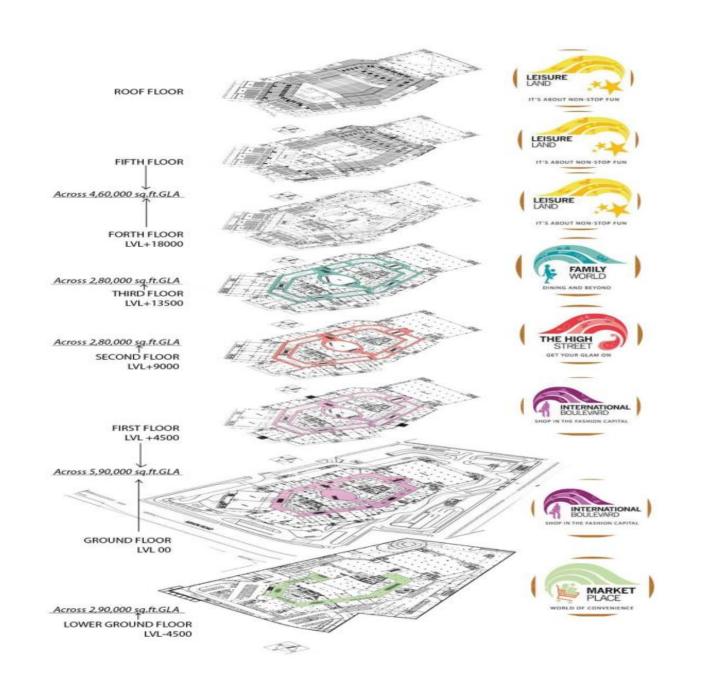


Figure 4.1.4 Circulation of area in DLF Mall Of India Source:https://www.dlfmallofindia.com/wp-content/uploads/2017/656144545/N6.jpg

#### **INFERENCES**

# > POSITIVE

• The mall is indeed the strongest in everything thanks to its regulation, concept, and design, while surrounded by 3 malls around the site.

- Preparation is undertaken to discourage an unexpected opening of the store. You have access to space discovery and catch.
- The mall provides an overview of areas that will satisfy the needs of its clients.
- Built a location where all age ranges enjoy themselves.

# > NEGATIVE

- The mall, which has 9 exits, still reveals the crowd of cars.
- Parking became vague and strangely labyrinthine.

# HIGHLIGHTS OF THE MALL

- Added is the concept of 'India regions.'
- 330 + labels and 82 + model kiosks.
- About 40% of the room is divided by a total of 75 F & Be, including 51 cafés, casual restaurants, and 24 F&B kiosks for F&B, Fast Dining and Indoor Entertainment.
- PVR Cinemas from the popular Mesbur+Smith (with a seating area for 2000 audiences) with the expertise of entertainment architecture.
- The country's first food court with a range of 1200 Varney designers.
- The Racetrack Atrium will be the innovative design feature to guarantee that the security and convenience of shoppers/customers will give outstanding access to all retail fronts together with 73 escalators, one express escalator, and a groundbreakingtraveler.



Figure 4.1.5 Highlights of DLF Mall Of India Source:https://www.dlfmallofindia.com/wp-content/uploads/245s454545454645/N6.jpg

### FIRE PROTECTION SYSTEM

- Fire protection initiatives have been adopted, such as sprinklers, alarm alarms, fire hose, etc.
- After all, 30 meters and at any fire escape, a fire hose was issued.
- The next stage of complexity and convergence of life-saving technologies was accomplished by the mall's causal and impact matrix.
- Efficient integration of the fire alarm systems combined with other building subsystems for continuous, time-line service of life-safety services in the event of an emergency has been achieved.
- Fire may be observed, for example, by identifying fire ranges that work dynamically in the open room of a store. Doors are immediately locked and a secure escape route is given, etc.



Figure 4.1.6 Fire exits in DLF Mall Of India Source:https://www.dlfmallofindia.com/wp-content/uploads/20-29/68541/N6.jpg

### 4.2 Case Study of The Great India Palace



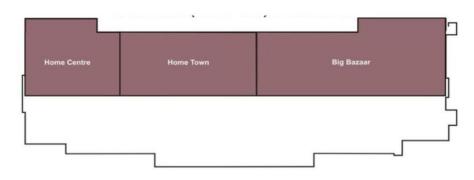
Figure 4.2.1 The Great India Palace Source: https://www.tripadvisor.in/LocationPhotoDirectLink-g644043-d1229308-i173029403 The\_Great\_India\_Place-Noida\_Gautam\_Buddha\_Nagar\_District\_Uttar\_Pradesh.html

### **INTRODUCTION**

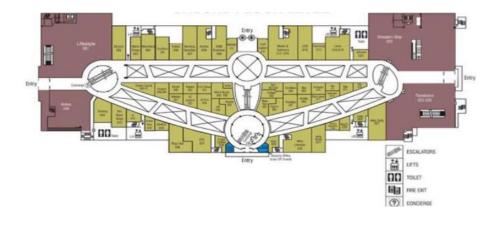
- The Great India Palace (GIP) is a shopping mall in Noida, India.
- It is one of the biggest operating malls in India with an area of 1.500.000 square feet (139.400 m2).
- The GIP, house No.104, sector 38-A, parcel no. A2, Noida (Netherlands), India.
- Total area- 139400 sq. m.
- Architect- AndeBirlokar.
- Developers- Unitech and IRPPL.

### SITE

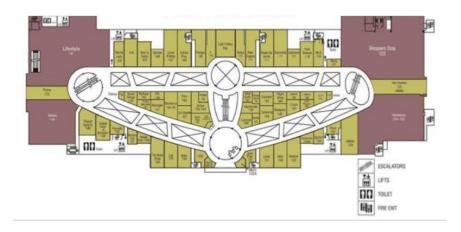
### Basement (minus one) Floor Level



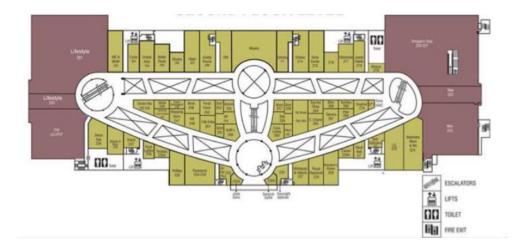
# **Ground Floor**



# **First Floor**



# **Second Floor**



### **Third Floor**

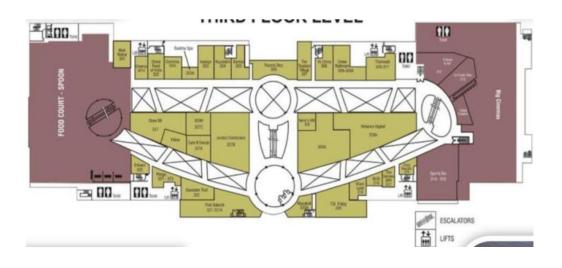


Figure 4.2.2 Floor plans of The Great India Palace Source: https://delhi-ncr.mallsmarket.com/malls/great-india-place-mall-noida

# CONNECTIVITY

- The DND (Delhi Noida Direct) flyway links the Indian DLF Mall with South Delhi.
- The Greater Noida Expressway links the Indian DLF Mall with Noida and Greater Noida.
- Ashoka Road links the Indian DLF Mall with Noida and MayurVihar.

### CONCEPT

Form:

- The expanded form of the building was intentionally identified with three interconnecting circular atriums that serve as the meeting point for long shopping corridors.
- The Escalators and Skywalks at frequent intervals offer both access and rhythm to the widening of the retail corridors.
- Utilizing unusual flooring designs and dynamic lighting on the ground floor, an entertaining experience is generated throughout.

### **HIGHLIGHTS OF THE MALL**

- Sub-floor house and store.
- Women's clothes, men's clothes on one leg.
- Upper floor dining and entertainment area.
- Multiplex 6-screen Large cinemas with a combined capacity of 1220 seats.
- There are already 850 sq.ft. (79 sq.m.) the area devoted to marriage bazaar.
- Potential Community Projects, like home towns, broad bazaars, and pantaloons, occupy a significant portion of the overall region of the mall.



Figure 4.2.3 Shops inside The Great India Palace

Source: https://www.tripadvisor.in/LocationPhotoDirectLink-g644043-d1229308-i173512565656545363 The\_Great\_India\_Place-Noida\_Gautam\_Buddha\_Nagar\_District\_Uttar\_Pradesh.html

### **INFERENCES**

### > POSITIVE

- Stairs to bring the goods to the basement are supplied separately from the building portion.
- Appropriate lift and escalator no at each exit.
- Emergency exits on each floor are provided with ample no.
- Glazing for improved natural lighting is provided on every atrium.

#### > NEGATIVE

- The food court and recreation area are heavily congested.
- The ecosystem did not get adequate attention.

### FIRE PROTECTION SYSTEM

- Active fire safety mechanism comprising of the fire sprinkler system: a water delivery network to ensure proper water management systems push and flow rate.
- An operational fire safety system is a fire extinguisher.
- It was used to extinguish minor fires or to monitor them.
- A small cylindrical pressure tank holding an agent is typically made with the fire extinguisher, which can be emptied so as to extinguish a spark.



Figure 4.2.4 Fire exits of The Great India Palace

Source:https://www.tripadvisor.in/LocationPhotoDirectLink-4v6565565616529663562-i173512565656545363 The\_Great\_India\_Place-Noida\_Gautam\_Buddha\_Nagar\_District\_Uttar\_Pradesh.html

### **TYPOLOGY OF SHOPS**

- 200+ labels
- 25 Kiosks Brand
- 50 Food & Beverages

#### **Departmental Stores**

- Lifestyle
- Globus
- Shopper's Stop
- Pantaloons

# Hypermarket

- Big Bazar
- Home Style Store
- Home Town



Figure 4.2.5 Brand in The Great India Palace

Source: https://www.tripadvisor.in/LocationPhotoDirectLink-g644043454595489617879211636211111565565 The\_Great\_India\_Place-Noida\_Gautam\_Buddha\_Nagar\_District\_Uttar\_Pradesh.html

## FREQUENCY

- Parking floors-2
- Totals no. car parking -1000+
- Totals no scooter parking -200
- Cars come in and out 300 -500 (week days) & 1200-1500 (weekends) Foot fall
- 10000-15000 /per day (Weekdays)
- 30000-35000 /per day (Weekend)

### 4.3 Case Study of Wave Mall



Figure 4.3.1 Wave Mall Source: https://www.99acres.com/wave-mall-sector-18-noida-npxid-c5183

### **INTRODUCTION**

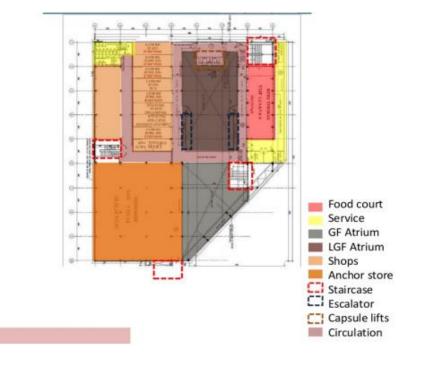
- Situated: 11 nr Radisson blu hotel, pockets j, sector 18, Noida.
- Total area: 8777 sq.m.
- Superficie built up: 20,576 sq.m.
- Developers: Wave Group
- Architect: Sanjay puri

## SITE

#### **Ground Floor**



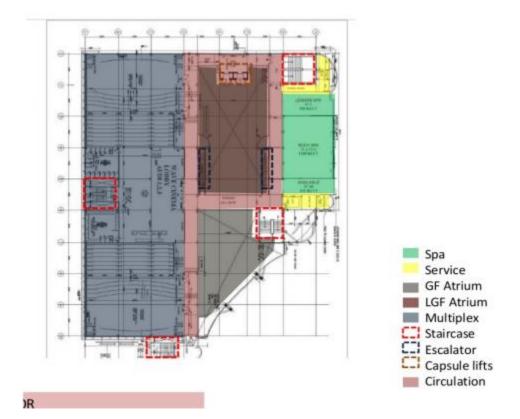
### **First Floor**



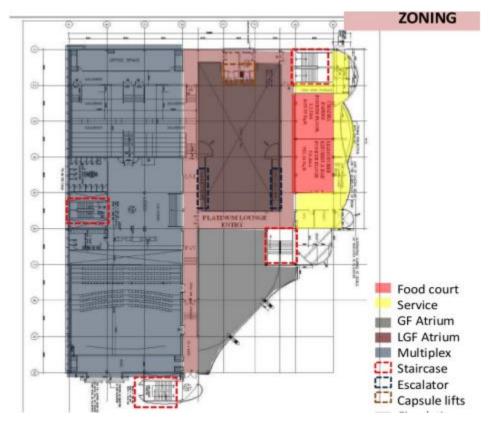
#### **Second Floor**



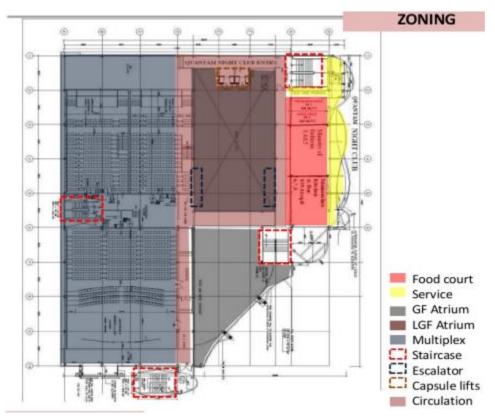
# **Third Floor**



#### **Fourth Floor**

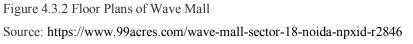


#### **Fifth Floor**



#### **Sixth Floor**





### CONNECTIVITY

- The DND (Delhi Noida Direct) flyway links the Indian DLF Mall with South Delhi.
- The Greater Noida Expressway links the Indian DLF Mall with Noida and Greater Noida.
- Ashoka Road links the Indian DLF Mall with Noida and MayurVihar.

### **AREA STATEMENT**

SL NO	FLOOR	ANCHOR STORES	SMALL SHOPS	FOOD COURT	ENTERTAI NMENT	CIRCULA TION	SERVICES	MULTIPL EX
1	LOWER GROUND	-	390	920	139	750	418	-
2	GROUND	418	953	195	185	1053	204	-
3	FIRST	992	542	278	-	461	223	-
4	SECOND	-	1251	208	-	950	80	-
5	THIRD	-	-	-	213	515	40	1728
6	FOURTH	-	151	92	-	525	40	1728
7	FIFTH	-	130	75	-	371	192	1728
8	SIXTH		2	-	192	296	280	1728

Figure 4.3.3Area Statement of Wave Mall

Source: https://www.99acres.com/wave-mall-sector-18-noida-npxid-584566332p

### **HIGHLIGHTS OF THE MALL**

- Wave Cinemas, Noida's impressive 5 screen multiplex.
- Gold club with the best taste in luxury.

### **TYPOLOGY OF SHOPS**

- 20+ Labels
- 15 Food & Beverages

### FREQUENCY

Parking floors-2 Totals no.car parking -110 Cars come in and out – 40-50 (week days) & 80-100 (weekends) Footfall 1000-1500 /per day (Weekdays) 3000-5000 /per day (Weekend)

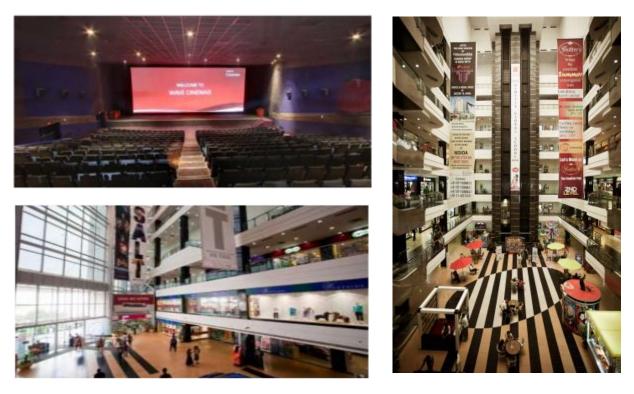


Figure 4.3.4Highlights of Wave Mall Source: https://www.99acres.com/wave-mall-sector-18-noida-npxid-jmfk862147845220

### **INFERENCES**

- In order to ensure seamless traffic flow within a location, architecture should be efficient.
- Optimal productivity in built spaces as full areas for the contract or the occupant should be chalked up.
- Anchor stores will be located in such a manner that they cannot be easily approached but pursued such that smaller shops can thrive.

- A temporary buffer zone is required to prevent all forms of violence or chaos at any mass meeting site.
- Accessible quality multiplexes should be provided and the key sources to footfall in the mall should also be provided. (3 Typical Lobby Screens 1)

PROPERTIES	WAVE MALL	THE GREAT INDIA PALACE	MALL OF INDIA	
TYPOLOGY	Integrated shopping and entertainment hub	Integrated shopping and entertainment hub	Integrated shopping and entertainment hub	
YEAR BUILT	2003	2007	2016	
LOCATION	Noida	Noida	Noida	
SITE AREA	2.2 acres	34.44 acres	45.91 acres	
CONNECTIVITY	Through metro, buses, autos and flyways	Through metro, buses, autos and flyways	Through metro, buses, autos and flyways	
PUBLIC OPEN PLACES	-	-	-	
VEHICULAR MOVEMENT	Movement with periphery of site	Movementalongtheperipheryofsiteincludinginternalroads	Movement around the periphery of site and internal roads	
PEDESTRIAN MOVEMENT	Through the setbacks of site connecting to retail and lobbies on floors	Organized movement through the roads	Free movements along the streets and plazas connecting to retails	
PARKING	Parking floors- 2 Totals no. car parking- 110	Parking floors- 2 Totals no. car parking- 1000+ Totals no. scooter parking- 200	Parking floors- 3 Totals no. car parking- 1700 Totals no. scooter parking- 600	
Footfall	1000-1500/per    day      (weekdays)    3000-5000/per    day      (weekend)    day	10000-15000/per    day      (weekdays)    30000-35000/per    day      (weekend)	30000-50000/per    day      (weekdays)    4000000000000000000000000000000000000	
PLANNING	Vertically integrated planning	Elongated form with circular atriums	Race-track atriums	

Figure 4.3.5 Comparative study of Wave Mall, The Great India palace, and DLF Mall Of India Source: Made by Ghafir Abbas

# **CHAPTER 5: SITE STUDY**



Figure 5.1 Site Location- DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector 24, Gurugram, Haryana 122022

Source:https://earth.google.com/web/search/DLF+City+Phase+3+Rd,+Ambience+Island,+DLF+Phase+3,+Sect or+24,+Gurugram,+Haryana+122022,+India/@28.4938618,77.1038027,246.63715803a,915.07721342d,35y,0h, 45t,0r/data=CsoBGp8BEpgBCiUweDM5MGQxZWQzZGVjNzcxYmI6MHg4NjQ1NjJkMDkzOGNiMjhhGf6 mZsUmgDxAIe82b5wURINAK11ETEYgQ210eSBQaGFzZSAzIFJkLCBBbWJpZW5jZSBJc2xhbmQsIERMRi BQaGFzZSAzLCBTZWN0b3IgMjQsIEd1cnVncmFtLCBIYXJ5YW5hIDEyMjAyMiwgSW5kaWEYAiABIiY KJAmGVQqVvoQ0QBGDVQqVvoQ0wBmPNykbfOIAwCHA1PtuGQBhwCgC

### **INTRODUCTION**

- The site was located at DLF City Phase 3 Rd, Ambience Island, DLF Phase 3, Sector 24, Gurugram, Haryana 122022.
- While having the Area- 36.5 acres and ground coverage of 60%.
- Far- 3.5
- Sea level- 217 M above sea level

### ACCESSIBILITY

In order to reach the site, there are multiple routes available such as:

- Via Gurugram Railway Station- 13.3 km (24 min)
- Via Gurugram Interstate Bus Depot- 11.1 km (34 min)

- Via IGI Airport- 10.3 km (16 min)
- Via Moulsari Avenue Metro Station- 2 min walk



Figure 5.2 Different routes to reach the site

Source:https://www.google.com/maps/place/DLF+City+Phase+3+Rd,+Ambience+Island,+DLF+Phase+ 3,+Sector+24,+Gurugram,+Haryana/@28.5005963,77.0928193,17z/data=!3m1!4b1!4m5!3m4!1s0x3 90d1ed3dec771bb:0x864562d0938cb28a!8m2!3d28.5005916!4d77.095008

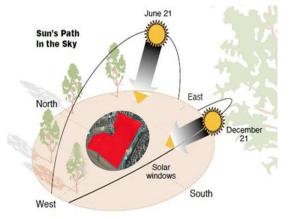






Figure 5.3 Orientation of the site

Source:https://earth.google.com/web/search/DLF+City+Phase+3+Rd,+Ambience+Island,+DLF+Phase+3,+Sect or+24,+Gurugram,+Haryana+122022,+India/@28.4938618,77.1038027,246.63715803a,915.07721342d,35y,0h, 45t,0r/data=CsoBGp8BEpgBCiUweDM5MGQxZWQzZGVjNzcxYmI6MHg4NjQ1NjJkMDkzOGNiMjhhGf6 mZsUmgDxAIe82b5wURINAK11ETEYgQ210eSBQaGFzZSAzIFJkLCBBbWJpZW5jZSBJc2xhbmQsIERMRi BQaGFzZSAzLCBTZWN0b3IgMjQsIEd1cnVncmFtLCBIYXJ5YW5hIDEyMjAyMiwgSW5kaWEYAiABIiY KJAmGVQqVvoQ0QBGDVQqVvoQ0wBmPNykbfOIAwCHA1PtuGQBhwCgC

### **CLIMATE (TEMPERATURE AND PRECIPITATION)**

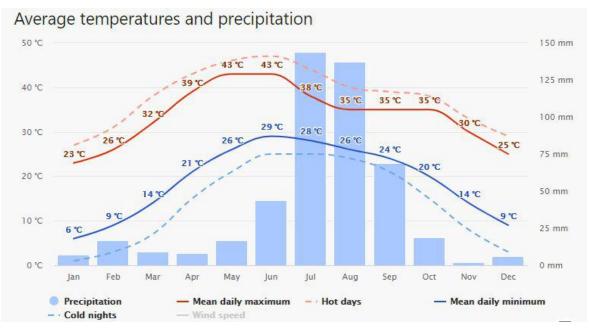


Figure 5.4 Average Temperature and Preception

Source: https://www.weather-ind.com/en/india/gurgaon-climate

### CLIMATE

- Gurugram has a composite climate influenced by the monsoon. Summers, usually hot and humid between the beginning of April and the middle of October.
- Strong temperatures of 40 ° C (104 ° F) on average daily in June.
- Things are easily broken at 43 ° C (109 ° F) during the season.
- With a few sunny days, winters are cold and foggy.
- The annual average RAINFALL is gratitude- 714 mm (28.1 in).

### SOIL

- Soil is almost entirely made of alluvial soil in Gurugram.
- The condition is put in the direction of depression Ganges and Indus Rivers.
- District of Gurugram consists of coastal and coastal dunes Plains, water, low fields, mountains and pedimentation of lakes.

#### WIND CHART

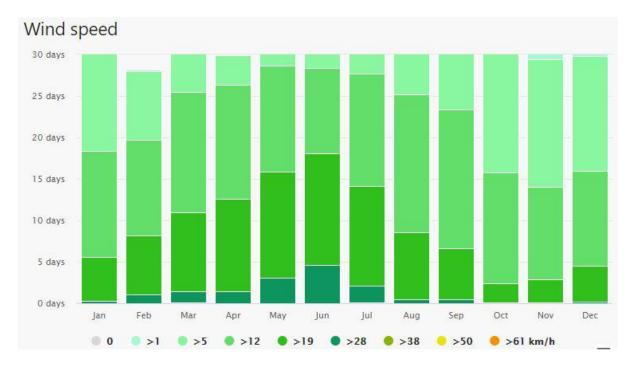


Figure 5.5 Wind speed in Gurugram

Source: https://weather-and-climate.com/average-monthly-Wind-speed,gurgaon,India

Wind Direction:

Summer Wind - South West to North East Winter Wind - North East to South West Monsoon Wind - South East to North West

### **DEMOGRAPHIC OF GURUGRAM**

Description	2011	2001
Population	15.14 Lakhs	8.71 Lakhs
Actual Population	1,514,432	870,539
Male	816,690	470,504
Female	697,742	400,035
Population Growth	73.96%	44.15%

Figure 5.6 Demographic of Gurugram

Source:https://www.census2011.co.in/census/district/225-gurgaon.html

## VICINITY



Figure 5.7 Area in vicinity of Site

Source:Made by Ghafir Abbas

## TRAFFIC

Peak traffic time (Week days)

- In morning 9.00 am- 11:00 am
- In Evening 6:30 pm- 8:00 pm

### **REASONS FOR TRAFFIC**

- Office timing clash
- Unorganised traffic management
- Continue road maintenance work



Figure 5.8Traffic on weekdays and weekends

Source: https://www.google.com/maps/place/DLF+City+Phase+3+Rd, +Ambience+Island, +DLF+Phase+3, +Sect or+24, +Gurugram, +Haryana/@28.5005963, 77.0928193, 17z/data=!3m1!4b1!4m5!3m4!1s0x390d1ed3dec771bb: :0x864562d0938cb28a!8m2!3d28.5005916!4d77.095008

### LEGEND

- National Highways
  - NH- 48
- Arterial/Sub Arteriaal Road
- Shankar Chowk Road
- Ambience Mall Road
- Golf Course Road
- Cyber City Road
- Local Road

## SITE CONDITIONING



Figure 5.9 Site conditioning Source: Clicked by Ghafir Abbas

## **CHAPTER 6: STANDARDS**

#### 6.1 Planning of a shopping mall

Shopping mall is basically a complex made up of various traders and retailers, all in one place, allowing a customer to move through more goods in one place and to provide a greater potential for retailers to thrive. Drop-offs, movement routes, core location, etc. are essential to making the interaction for the user smoother and more enjoyable. The designer is also responsible for rendering spaces usable, comfortable, and public.

### 6.2 Column spacing

- The mall is significantly bigger as it requires the widths, i.e., the façades.
- Spaces are mostly used with widths of 20, 25 and 30 ft.

#### 6.3 Sore Depths

- Buildings usually have a depth of 120 to 140 ft, sometimes larger ones.
- If cellars or mezzanines exist, the deepness can usually be reduced to 20 to 25%.

#### 6.4 Clear Heights

- This is 10 to 14 feet or higher with an average of 12 ft.
- There should be ample space for air-conditioning ducts, recessed lighting, building network, etc. above this simple height.
- Bases 8 to 9 ft high, for stock storage in clear conditions.
- If no interiors are included and mezzanines at least 7 ft 6 inches above floor level should suit most of the fixture heights, the ground floors are ideally roughly 12 ft high.
- Height from floor to cellar in between mezzanines can be 6 ft 6 inches, if used only for use, at a minimum of 7 feet.

#### 6.5 Parking and Traffic

- It is mandatory to have a ratio from 5 to 6 cars per 1000 sqft of leasing land.
- The parking layout can be determined by angles (70 ° to the roads, which can redirect oneway traffic or by stalls to 90 ° to the roads allowing for double-way traffic).

#### 6.6 Shop size and layouts

• 12 to 15 ft wide by 50 to 60 ft long.

### 6.7 Aisle Widths

- Aisle widths (staff) : min= 1 ft 8 inc, desirable = 2 ft
- Main public aisles min = 4 ft 6 inch
  - avg = 5 ft 6 inch to 7 ft



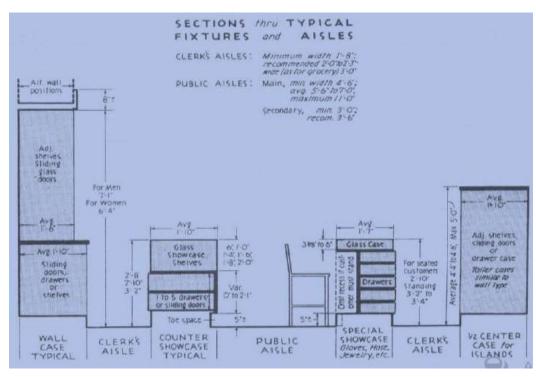


Figure 6.7.1 Section Through Typical Fixtures and Aisles

Source: https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910

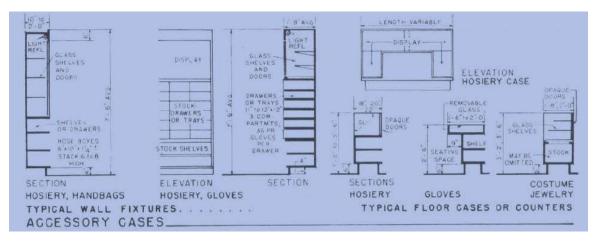


Figure 6.7.2 Typical wall Fixtures

Source: https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910

1.Structural models Width (m)		Notes			5.Goods and service docks	m	Notes					
Small shops 5.		5.3 to 6.0	Mostly 5.4 m									
Large-space users 7.3		7.3 to 9.2	Depending on beam depth. Single-storey buildings –larger spans				Typical provision for large-space user Two 15 m	107	Allowing 1.5 m each side			
2.Clear ceiling <i>Height(m)</i>			To underside of beams			articulated lorries: width	10.7	cach side				
Small shops		3.3 to 3.8		Sales area								
		3.2 to 3.6	Non-sales area				Minimum		Approach			
Large-space user	S	3.6 min.		With floor: floor spacing 4 to 5 m			clearance height	4.7	road – 5.00 m			
3.Car parking		Car spaces per 100 m2 gross retail area		type	s	ale	s area	sales:ancillary are				
				small shops	(less than 2		0 m2 sales area)	45:55				
Supermarkets, superstores		10-12		Department stores	1000	10000-20 000 m2		45:55.				
Shopping		4-5		4-5		4-5		Variety stores	500 to 15 000 m		50:50	
centres			1	Supermarkets			of large-space users 000 to 2500 m2	60:40,				
4.Typical floor loading	kN/I	m2		Superstores	5000 - 10 00	0 n	n2 of selling space.					
Shop sales	5		5 Hypermarkets		at least 2500 m2 sales floor		6	0:40,				
area				Shopping centers 25 000 an			50 000 m2 GLA					
Shop storage	Shop storage 10			Retail parks	at least 4500 m2							
Design load for service yard					m2 to 1: 80 m2	ETRIC HANE - david ald						

Figure 6.7.3 Typical standards

 $Source: \ https://www.slideshare.net/RamanpreetKaur14/shopping-centre-47253910$ 

## **CHAPTER 7: CONCEPT**

The design concept for the Shopping Mall, which aims to become a unique destination full of surprise and exploration, has a multi-faceted facade with various functions, in plan and elevation. This Facade reduces the sides of the building with a strategy to expand the sight lines to the Gurugram Street that attracts visitors with, unlike the straight streets that do not retain and catch the attention of the people in Gurugram.

Color moving panels paired with signs and commercial façade create a continually evolving exterior look. During the night, perforated panels allow light to pass through to produce a "starry night" impact.

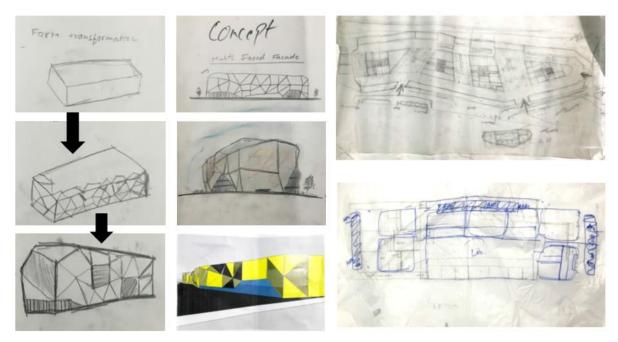


Figure 7.1Concepts Source: Made by Ghafir Abbas

# **AREA STATEMENT**

AREA STATEMENT						
SPACE	NO.	CAPACITY	AREA /PERSON (SQ.M)	AREA (SQ.M)	TOTAL AREA	PUBLIC/PRIVATE
RETAIL SHOPPING						
ANCHOR STORE 1	5			3636	18180	PUBLIC
ANCHOR STORE 2	5			2648	13240	PUBLIC
LARGE SHOPS	40			430	17200	PUBLIC
SMALL SHOPS	35			65	2275	PUBLIC
MEDIUM SHOPS	101			135	13635	PUBLIC
				TOTAL	46350	
FOOD COURT/RESTAURANT						
FOOD COUNTERS 1	11			102	1122	PUBLIC
FOOD COUNTERS 2	4			267	1068	PUBLIC
FOOD COUNTERS 3	3			204	612	PUBLIC
RESTAURANT 1	1			1345	1345	PUBLIC
RESTAURANT 2	1			1410	1410	PUBLIC
RESTAURAN 3	1			1910	1910	PUBLIC
SEATING	1	1200	2		2400	PUBLIC
				TOTAL	9867	
GAMING						
GAMING ZONE 1	1			1450	1450	PUBLIC
GAMING ZONE 2	1			895	895	PUBLIC
				TOTAL	2345	
MULTIPLEX						
LOBBY	1			2000	2000	PUBLIC
BOX OFFICE	1			100	100	PUBLIC
THEATRE 1	10	469		865	8650	PUBLIC
THEATRE 2	2	42		360	720	PUBLIC
CONCESSION COUNTER 1	1			275	275	PUBLIC
CONCESSION COUNTER 2	1			365	364	PUBLIC
				TOTAL	12039	

Figure 7.2 Area Statement for mall

Source: Made by Ghafir Abbas

# **CHAPTER 8: SITE PLANS**

### Site Plan

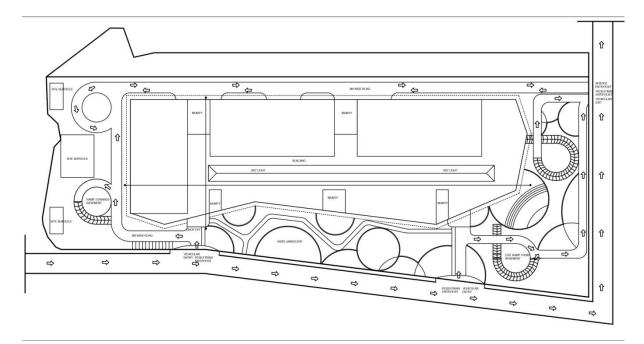
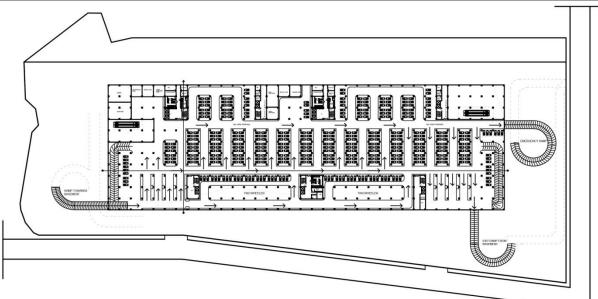
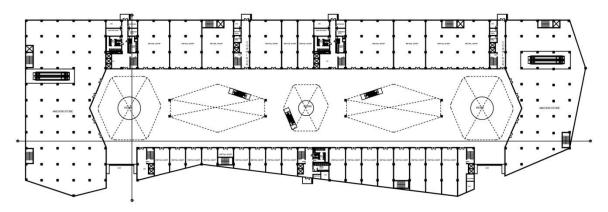


Figure 8.1 Site Plan Source: Made by Ghafir Abbas

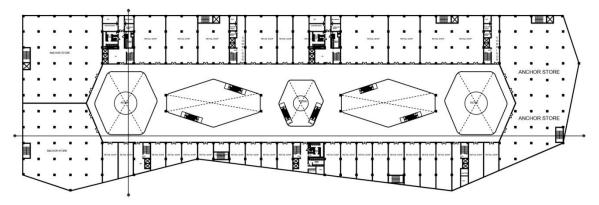
### Basement



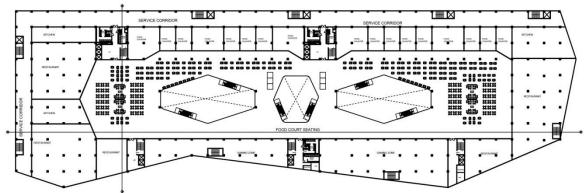
**Ground Floor** 



**First- Fourth Floors** 



Fifth Floor (Food Court)



### Sixth Floor (Multiplex)

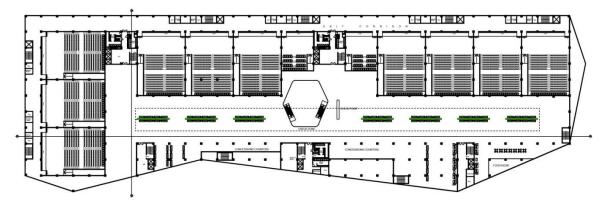
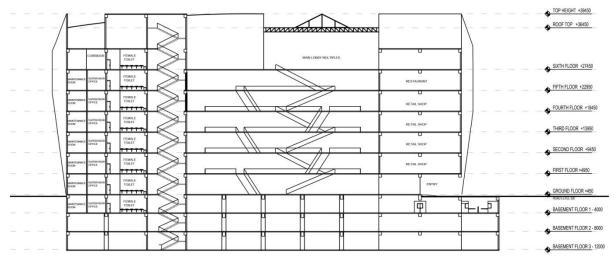


Figure 8.2 Floor Plans for Shopping Mall Source: Made by Ghafir Abbas

### Section AA



SECTION AA'

### Section **BB**

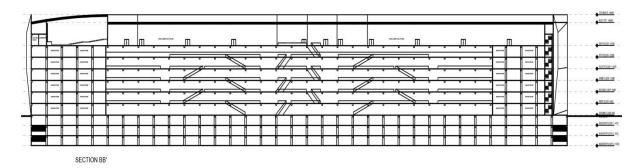
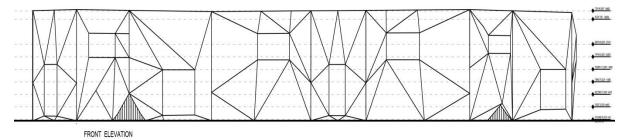
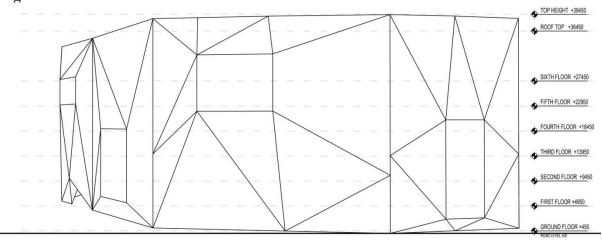


Figure 8.3 Sections Source: Made by Ghafir Abbas

#### **Front Elevation**



**Right-Side Elevation** 



# **RIGHT SIDE ELEVATION**

Figure 8.4 Elevations

Source: Made by Ghafir Abbas

# **CHAPTER 9: 3-D VIEWS**



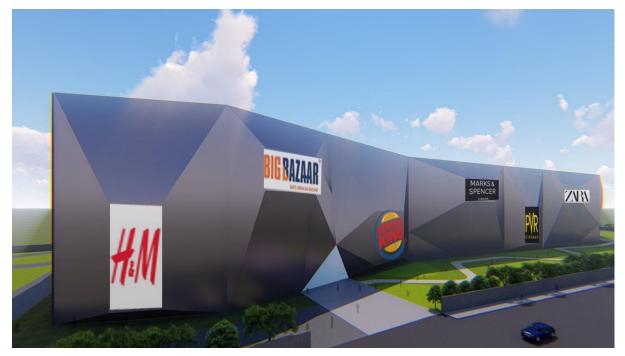


Figure 9.1 3-D Views Source: Made by Ghafir Abbas

### CONCLUSION

This thesis was intended to develop a shopping mall for public benefit and showcasing the distinctive character of Community by encouraging local businesses and cultivating the best of area cuisines, handicrafts, arts, heritage, and culture. In the manner, the work was done attempting to create a place specifically a market place which would serves all the needs of social development and not just as an arcade for shopping for the middle-class community with high income classes.

With an emphasis on the intent, a design for the shopping mall was developed having multifaceted facase with carious functions, in plan and elevation. This This Facade reduces the sides of the building with a strategy to expand the sight lines to the Gurugram Street that attracts visitors with, unlike the straight streets that do not retain and catch the attention of the people in Gurugram.

Color moving panels paired with signs and commercial façade create a continually evolving exterior look. During the night, perforated panels allow light to pass through to produce a "starry night" impact.

#### REFERENCES

- 1. ASHRAE Standard 62.1 Ventilation for Acceptable Indoor Air Quality
- Shelkh, A. I., and Dr. Fatima, K., 2008. Complex Management, 1sted., Himalaya Publishing House
- Linden, 1999: The Fluid Mechanics of Natural Ventilation, Annual Review of Fluid Mechanics, Vol 31, 210-238
- 4. National main Street Center (U.S). 2000. Revitalizing downtown. The Center.
- 5. Jones, J. A., Professional Management of Housekeeping Operations. 5th ed.
- Abchungrybeast., 2011. How Shopping Complexs Make You Buy (HUNGRY BEAST) [Video Online] Available at :< http://www.youtube.com/watch?v=3SuC6FcTfnU> [Accessed 5 January 2012].
- 7. Alexander, A. A. and Muhlebach, F. R., 1992.
- Popular Mechanics. The World's 18 Strangest Shopping Complexs[Online] Availableat:<<a href="http://www.popularmechanics.com/technology/engineering/gonzo/the-worlds-18-strangest-complexs#fbIndex1>">http://www.popularmechanics.com/technology/engineering/gonzo/the-worlds-18-strangest-complexs#fbIndex1></a> [Accessed 4 January 2012].
- Shopping center management. 2<sup>nd</sup> ed., Institute of Real Estate Management of the National Association of Realtors.
- 10. 1985. Practices of space. In On signs, ed. M. Blonsky, pp. 122-45. Cambridge, MA: Blackwell.
- Hariyono, P. (2005). The impact of shopping center development towards the traffic surrounding (a case study in java supermal shopping center in semarang city). Semarang.: Jl. PawiyatanLuhur IV/1, Semarang,
- AmbavaleRiddhi. (2013). A Study on Factors Influencing Failure of Complexs in Major Cities of Gujarat State. India: International Journal of Management and Social Sciences Research (IJMSSR).
- Mullin, J., &Kotval, Z. (1992). When the Complex Comes to a Scomplex Town: How to Shape Development with Carrots and Sticks.Michigan: Landscape Architecture & Regional Planning.
- Salhany, P. (2005). COMPLEXS INTO MAINSTREETS.united states: Congress for the New Urbanism.
- 15. ASIPAC, 2011. Demand & Supply of Mall Space in India. DELHI & NCR. Research Studies on Malls in India, September 2011

- 16. BERRY, B.J.L. and PARR, J.B, 1988. Market Centres and Retail Location. Englewood Cliffs: Prentice-Hall.
- BEYARD, M. & O'MARA, W. (1999). Shopping centre development handbook (3rd Ed.).
  Washington DC: Urban Land Institute.
- 18. DAWSON, J.A. 1983. Shopping Centre Development. New York: Longman.
- 19. DAVIES, R.L. & ROGERS, D.S. (Ed.). 1984. Store Location and Store Assessment Research. New York: John Wiley.
- DARLOW, C. 1972. Introduction. Enclosed Shopping Centres. London Architectural Press. p.11-13.
- GUY, C.M. 1994. The retail development process: location, property and planning. London: Routledge, p221.
- 22. INTERNATIONAL COUNCIL FOR SHOPPING CENTRES. 2000. A brief history of shopping centres. http://www.icsc.org/srch/about/impactofshoppingcenters/briefhistory.html. Date of use: 27 May 2012.
- JONES, C.S. 1969. Regional shopping centres: their location, planning and design. London: Business Books Limited, p220.
- JONES, C.S. 1969. Regional shopping centres: their location, planning and design. London: Business Books Limited, p220.
- 25. WHITE, J.H. and GRAY, K.D. 1966, Shopping Centres and Other Retail Properties. New York: John Wiley & Sons.