



THESIS REPORT ON
“CONVENTION CENTRE”

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE DEGREE OF:

BACHELOR OF ARCHITECTURE

BY
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(1190101016)

THESIS GUIDE
PROF. SANGEETA SHARMA

SESSION
2023-24

TO THE
SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY
LUCKNOW.

**SCHOOL OF ARCHITECTURE AND PLANNING
BABU BANARASI DAS UNIVERSITY, LUCKNOW (U.P.).**

CERTIFICATE

I hereby recommend that the thesis entitled “CONVENTION CENTRE” under the supervision, is the bonafide work of the students and can be accepted as partial fulfillment of the requirement for the degree of Bachelor’s degree in architecture, school of Architecture and Planning, BBDU, Lucknow.

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Recommendation Accepted

Not Accepted

External Examiner

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ACKNOWLEDGEMENT

The completion of this thesis project has been one of the most significant academic challenges I have ever taken. I would like to acknowledge some people who have helped me throughout in accomplishing the Thesis Project.

At this moment of accomplishment, first of all I would like to thank my Thesis Guide, Prof. Sangeeta Sharma. This work would not have been possible without her guidance, support and encouragement. Under her guidance, I successfully overcame many difficulties and learned a lot. Her valuable suggestions helped me to make my work better.

Heartiest thanks to my favourite class friends and my junior Pranjali, Samarpit, Kirti and Abhishek Kiran for their constant support helped me to improve my work, with their suggestions and encouragement.

I would never have been able to finish my Thesis without the blessings of my Grandparents and my Family for all the support through out this thesis.

Regards
KAUSTUBH
1190101016
B. Arch. V Year.
2023-2024



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CONVENTION CENTRE

INTRODUCTION :-

- A convention is a gathering of individuals who meet at an arranged place and time to discuss or engage in some common interest.
- Conventions are often planned and coordinated by professional meeting and convention planners, generally by staff of the convention's hosting company. Most large cities will have a convention centre dedicated to hosting such events.
- **The term MICE** - Meetings Incentives Conventions and Exhibitions is widely used in Asia as a description of the industry. There are various types of conventions; the most common conventions are based upon industry, profession and fandom. They can be typically described as –



CONVENTION CENTRE, MUMBAI



CONVENTION CENTRE, LONDON



TRADE CONVENTION - It typically lays focus on a particular industry or industry segment, and feature keynote speakers, vendor displays, and other information and activities of interest to the event organizers and attendees.

PROFESSIONAL CONVENTIONS - They focus on issue of concern to the profession and advancements in the profession. Such conventions are generally organized by societies dedicated to promotion of the topic of interest.

FAN CONVENTIONS - They usually feature displays, shows, and sales based on pop cultures and guest celebrities.

SEMINARS - They are meetings organized to celebrate major events and religious ceremonies. Common social events include- anniversaries, weddings and birthdays.

TRADE SHOWS / EXHIBITIONS - They are an opportunity for companies to exhibit some of their latest products.



NEED OF THE TOPIC –

Nowadays the rapid development of megacities and metro cities are the cause of the growth of population, industries and business sectors. There is a need to expose the activities and creativities in front of people across the globe to promote new trends and cultures. As a result a space is required to gather people where this kind of events can be taken place. This is the concept of a convention centre where people can gather to share and earn various experiences. These centres emphasizes both public and private events. Encourages tourism developments, business developments, cultural activities, social gathering and amusements. Convention centre provides an opportunity for mixing, sharing and evolving values, morals, customs and ethics. It helps us in understanding the others feelings, beliefs and expectation.

AIM –The Aim of the project is to do the development of the Convention Centre with concept of Panchtatva in order to design unique spaces to make people visit from different cities and countries to attend conference and exhibitions and to create a landmark through unique architectural design.



BYLAWS



NORMS- BUILDING BYELAWS

TOTAL SITE AREA - 10.23 ACRES

PERMISSIBLE FLOOR AREA RATIO - 1.30

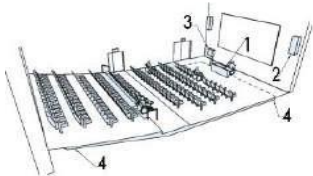
PERMISSIBLE GROUND COVERAGE- 30%

SETBACKS - 15 MTS FRONT SETBACK

9 MTS SIDE AND REAR SETBACK

STANDARDS AND DESIGN GUIDELINES

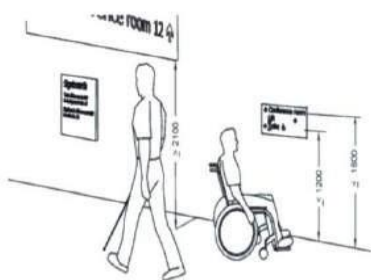
1. STANDARDS FOR INDUCTION LOOP SYSTEMS IN CONFERENCE ROOM



KEY

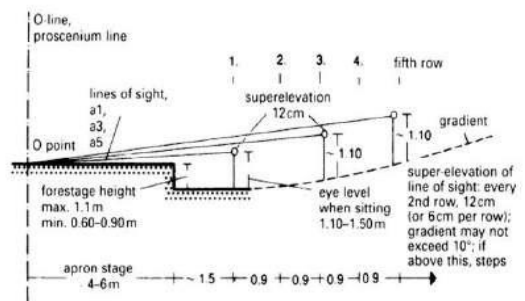
1. microphone
2. loud speakers
3. induction loop amplifiers
4. induction loop

2. STANDARDS FOR HEIGHT OF SIGNS IN CONFERENCE ROOM



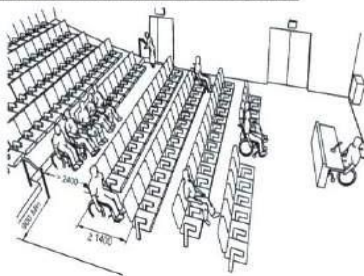
All dimensions in millimetres

3. SUPER ELEVATION OF SEATING



① Super elevation of seating (gradient)

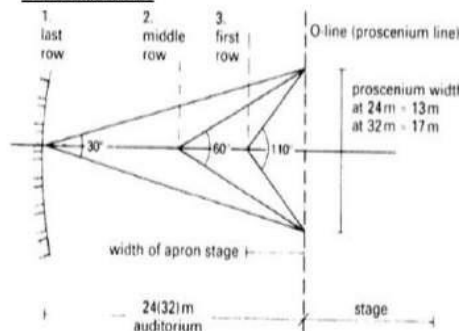
4. STANDARDS FOR VIEWING SPACES FOR WHEELCHAIR USERS



All distances in millimetres.

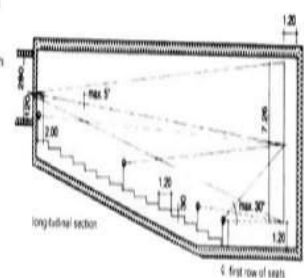
FIG. 92. EXAMPLES OF VIBRATING SPACES FOR WHEELCHAIR USERS

5. PROPORTIONS OF THE TRADITIONAL AUDITORIUMS

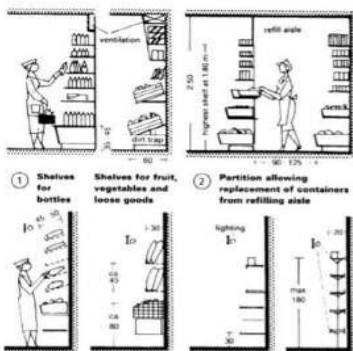


⑦ Proportions of the traditional auditorium (view)

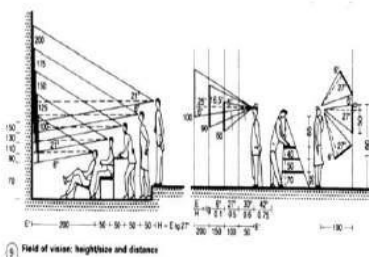
6. STANDARDS FOR HEIGHTS OF AUDITORIUM



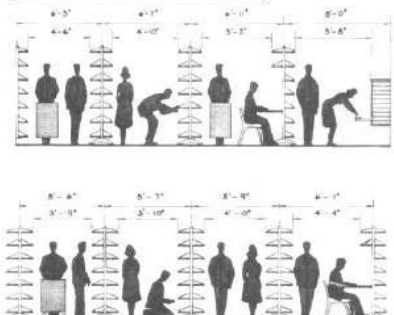
7. STANDARDS FOR BOOK SHELVES



8. STANDARDS FOR HEIGHT OF LECTURE THEATRES



9. STANDARDS FOR LIBRARY



1) Access and Entrance:

- Separate access is required for visitors, staff, goods and service vehicles and emergency requirements. It is usually desirable to provide alternative entry for public which is independent from that used by conference visitors. This not only facilitates management and security, but also enables two or congress events or exhibitions to be run independently in parallel.
- Easily identifiable entrance and exit, and clear external signage, which may need to be illuminated.
- Sufficient unloading/loading space to accommodate multiple events.
- Level ground floor with loading docks of sufficient size for all services including client vehicles.
- Large coach drops off and collection points adjacent to main entrance, with sufficient turning space and height, accessible under cover.
- Doors of sufficient width and height or demountable/retractable walls to permit truck access (trucks delivering exhibit and staging equipment pose particular problems).
- Floor loadings to permit truck access.
- Easily identifiable and weather protected entrance and reception area for attendees.
- Clearly identified disabled access.
- In larger venues, security systems and monitoring at loading docks.
- Separate entry for venue staff.
- Storage space (for several days) for pre-congress consignments including exhibitors' displays materials.

2) Access for the disabled:

- Specific provisions include allocation of parking spaces, identification of routes, provision of ramps, toilets and facilities designed for wheelchair and other disabled users in each main area.

3) Parking:

- Coach parking bays off street.
- Sufficient undercover parking for attendees.
- All parking, including venue staff parking, should be secure.
- Direct access to venue lobby.
- Clear directions for exiting car park.
- Parking requirements for cars and other vehicles will depend on some extent on the proximity and conditions for use of alternative facilities, such as municipal car parks, as well as on the availability of public transport.

Typical provisions to allow flexibility in use are:

<u>Use</u>	<u>Per Car Parking Space</u>
Banquet Places	10 Sq. m.
Congress Hall Places	10 Sq. m.

4) Service Vehicles:

- Plenty of space for parking while unloading/loading goods and equipment with a dedicated car park for vehicles delivering goods or equipment.
- Parking for trucks with sufficient height and turning space where staging, audio visual or other equipment needs to be packed in or out within short period of time.
- Long-term parking for trucks used for transporting production equipment and exhibitors' displays.



5) Horizontal and Vertical Arrangements:

- The single floor organization provides easy access among the rooms and between the conference areas and other functional elements. This plan imposes few structural or mechanical constraints, permits total freedom in the planning of the rooms, allows for access from the refreshment break areas to outdoor terraces and patios.
- Vertical stacking of auditoria and/or main halls is more economical in the use of land, and enables space below tiered floors to be more efficiently used. Unit costs of construction are higher and vertical transportation of people and goods may present difficulties.

6) Circulation:

- Linear arrangement of spaces with beginning, middle and end.
- A loop where the essentially linear storyline leads naturally back to the beginning.
- An arrangement of core and satellites where each theme or detailed treatment of a subject leads back to a central introductory or orientational areas.
- A more complex scheme combining linear, loop and core-satellite arrangement of spaces.
- Comb which refers to a circulation pattern in which there is a main circulation path and optional alcoves which a visitor may enter or bypass.

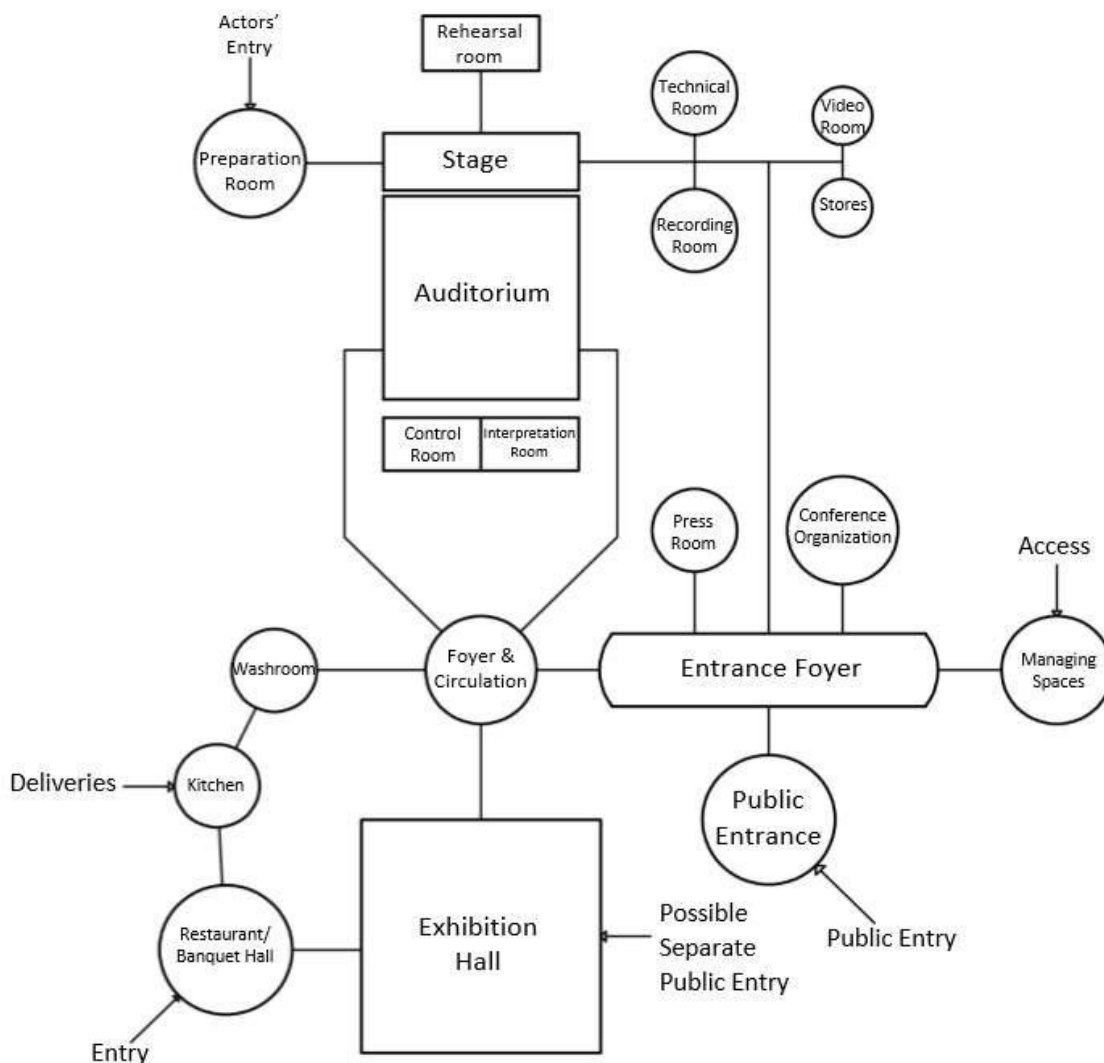


FIG: RELATIONSHIP IN A CONFERENCE HALL.



Exhibition hall

The Exhibition Spaces are intended as a combination of indoor and open-air exhibition space in order to create a strong relation between covered and green open spaces through thematic content. The goal is to create an integrated expositive landscape and a Visitor Experience that immediately establishes a positive relationship between humankind and nature, creating a bridge between the content of the Event and the nature of exhibition spaces.

The exhibition hall provides optimal conditions for

- trade fairs
- exhibits
- conventions
- events and galas

An exhibition hall can be

- Open-air exhibition space
- Covered exhibition space

OPEN-AIR EXHIBITION SPACE

The landscape design shall be developed in keeping with the Theme and with the Participant's approach to it. Like architecture, the landscape shall also help to tell intriguing stories about the pleasures of the table, delightful scents or strange and curious stories related to food cultivation and processing. The landscape has to document the most advanced research in the field of food production and the transformation of agricultural products. Countries will showcase their capabilities in food production, the biodiversity of their products, and their agricultural and food supply chains.

Open spaces

A minimum of 30% of each lot must be dedicated to open areas and greenery. Excluding lot setbacks the Open-air Exhibition Space represents around 50% of each lot, where it is possible to build:

- Structures used for plants ensuring soil permeability (e.g. trellises, pergolas, garden structures, planters).
- Landscaping structure (e.g. structures used to retain soil or other materials, pools, exhibition structures, art works).

COVERED EXHIBITION SPACE

Covered Exhibition Spaces are buildings or enclosed structures containing exhibition areas or other spaces, including all overhanging upper floors or balconies. Participants may decide to build more than one level within the Covered part of the Exhibition Space, based on their individual needs.

Height of Buildings

- The height of the Covered part of Exhibition Space (or Building Height) must be less than 12 meters.
- The height limit for any additional architectural elements (such as skylights, roof elements, vertical connections to the roof, sunscreens, signals, etc.) is 17 meters.



Building Setbacks

- The setback from the main boulevard must be no less than 10 meters, in order to create a small square.
- The distance between buildings and the side street shall be no less than 2 meters; there shall be no building concession directly to squares, greens, streets or public spaces, without the 2 meters' setback.
- The setback from the neighboring lot shall be no less than 3 meters.
- The distance between buildings shall comply with fire control requirements.

AUDITORIUM

The auditorium is the heart of building, where the primary activity of experiencing and presenting performances take place. Audience seating is arranged to view the stage and the stage is a platform from which the performer can be communicate to the audience. The relationship between the two is very crucial for the success of convention centers. Mostly auditorium is designed to fulfill no of purposes. The objective of designer will be to use 100% usage of space. Auditorium should be designed in such a way that every member should be able to see and hear the performance of stage.

1. Form/shape

Shape corrects the defects of sound in auditorium hall i.e. echo's, excessive reverberation, sound foci's, dead spots etc. fan shape <100 degree is ideally best shape for auditorium. In auditorium hall, the wall & ceiling is not perpendicular to each other as in other normal rooms. Mostly less curve Concave shape is also considered. The size of hall is governed by audience requirements, Visual & aural limitations.

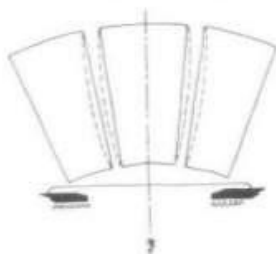
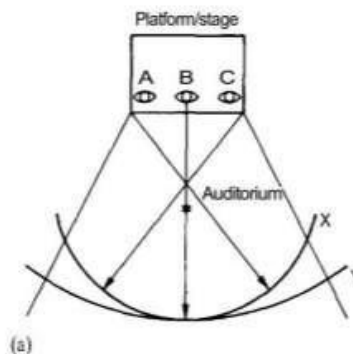
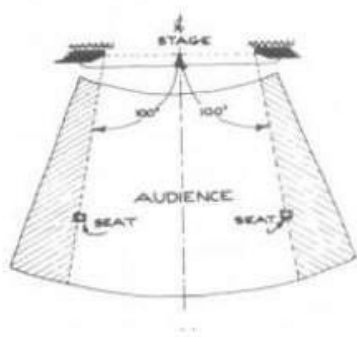
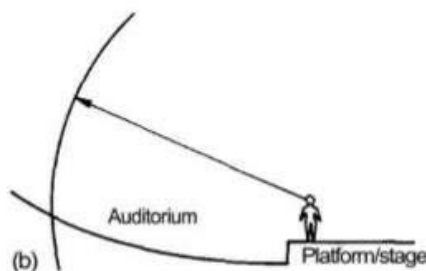


Fig. 17 Straight radial sides are better than sides which curve or bend.



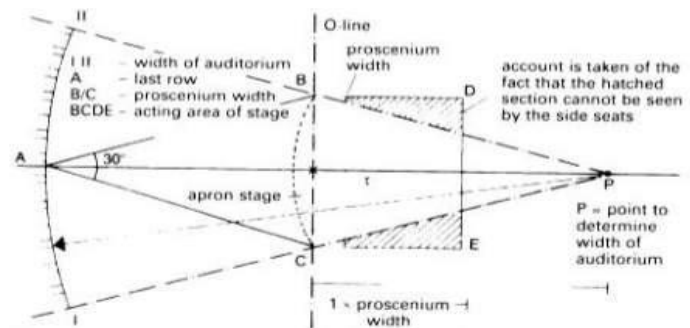
Audience Requirements

Every member of the audience should be able to see and hear clearly

Visual Limitations

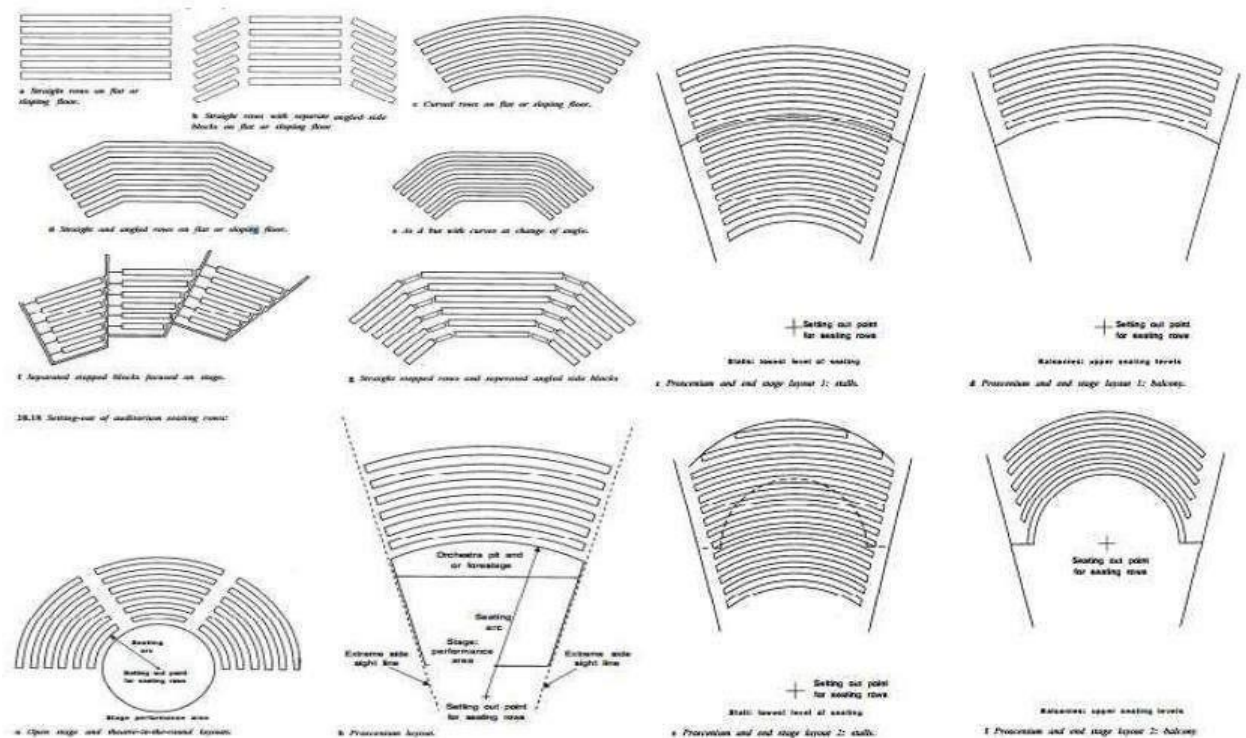
- For drama= 20m
- For Opera= 30m
- For dance= 20m
- For conference = 20m

7 Proportions of the traditional auditorium (view)



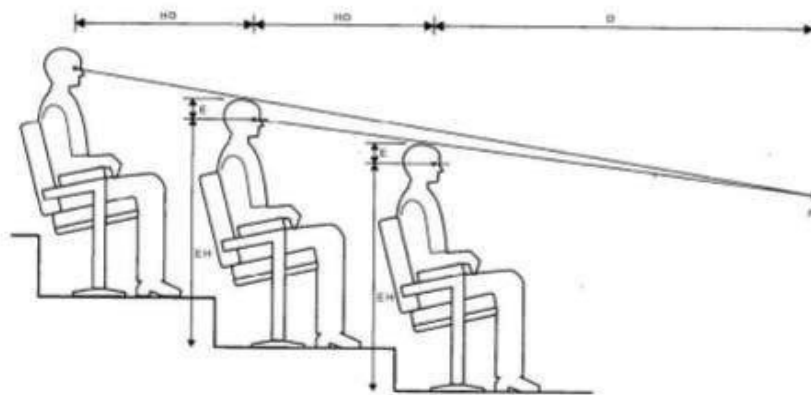
Seating Capacity

- minimum Dimension of seating with arms =500mm Without arms =450mm
- Seat height = 430-450 mm
- Angle of inclination= 7-9 degree with horizontal
- Back Height = 800-850mm
- Angle of inclination = 15-20 degree
- Seat Depth= 600-720 mm, reduced to 425-500mm when the seat is tipped
- Other Factors affecting seating is,
- Acoustics: Upholstery to satisfy the acoustic requirements, usually the level of absorbency when unoccupied
- Ventilation & heating: Air supply or extract under a seat
- Upholstery: Thickness of padding should provide comfort & avoid fatigue, material of padding and finish must satisfy fire regulations

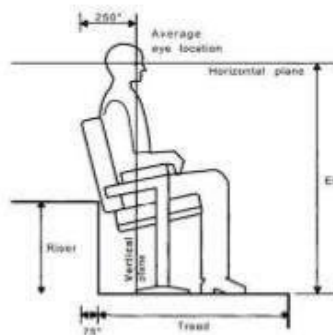


Vertical Sightlines

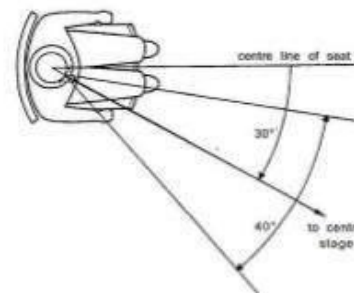
The longitudinal section is a parabolic stepped floor as a theoretical rake produced by the sightline calculation. This gives every member of the audience similar viewing conditions. This may be reduced to a single angle or series of angles when applied as described the rake will also be steep. This is satisfactory for a single tier of seating with no balconies and is especially appropriate for open-stage formats.



20.21 Graphic representation of vertical sightlines. P lowest and nearest point on stage clearly visible by audience. HD horizontal distance between eyes in successive audience rows, EH average audience eye height above floor, E height between eye and top of head, D distance from eye of person in front row to P.



20.22 Position of eye in relation to seat and stepped floor. Dimensions vary according to upholstery thickness, and inclination of both seat and back. Working dimensions are starred *



20.25 * The maximum comfortable amount the head can be turned from the seat centreline is 30°.

Changing Room requirements

- It should have discrete access
- Be equipped with secure hanging space
- Have mirrors with good lighting over vanity tables
- Have separate toilets & showers
- Have audio/video feed from performance areas
- Be equipped with phones and power outlets

Rehearsal Rooms

- Enclosed space without natural light close to the dressing room
- Sound system, Lighting
- There should be at least one stage for the rehearsal of performances



Storage room

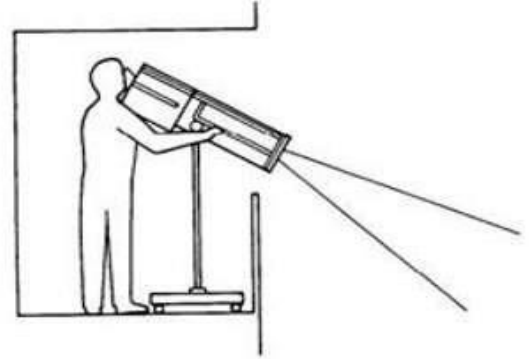
- 20-25% of playing area

Workshops for making scenery

- Should be excluded from main hall due to fire & limited space options
- 4-5 times the area of main stage

Technical utilities

- Transformer room
- Medium & low voltage switch room
- Power batteries
- HVAC plants
- Fire sprinkler system



20.59 Follow spot, minimum size for equipment and operator
1.5 m x 2 m

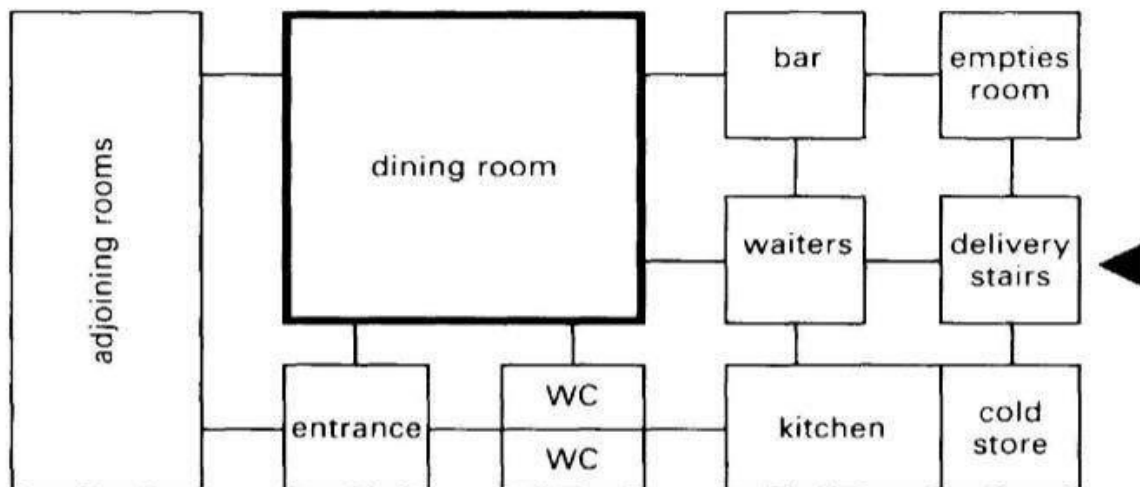
Cloakrooms

- Minimum 4m² per 100 people

RESTAURANTS AND FOOD COURTS

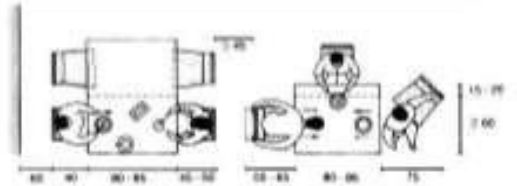
- Should be planned to achieve variety of seating arrangements.
- Provide acoustic lobby between restaurant and kitchen.
- Access should be planned for guest.
- The service aisle should not be less than 0.9-1.35m if it is to be used by both trolleys and guest.
- Waiter station should be located so as not to disturb guest.
- Ambience is an important factor in restaurant design: decoration, lighting should be an integral part.
- Large regular space should be broken up

General Functional Layout of Restaurants:



Dining Areas:

- Calculating the space requirements for dining areas can be difficult because of the many choices available.
- For example, the final space for the dining space is dependent upon the following variables:
 - Types of seating to be provided
 - Tables sizes desired
 - Table shapes desired
 - Pattern of table arrangements
 - Number of service stations needed



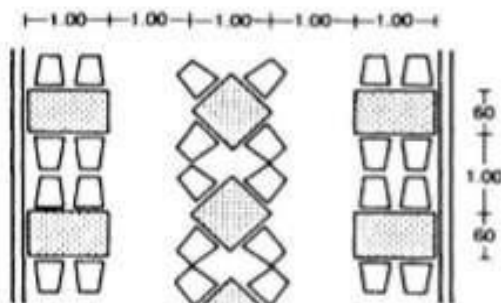
dining floor area	walkway width
up to 100 m ²	≥ 1.10 m
up to 250 m ²	≥ 1.30 m
up to 500 m ²	≥ 1.65 m
up to 1000 m ²	≥ 1.80 m
over 1000 m ²	≥ 2.10 m

Walkaway Width

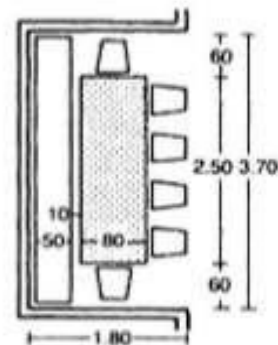
customer places	toilets		unisex bowls	unisex (m)
	men	women		
50	1	1	2	2
50-200	2	2	3	3
200-400	3	4	6	4
400	- determine in individual case -			

Toilet Facilities

Table Arrangement:



① Minimal seating layout



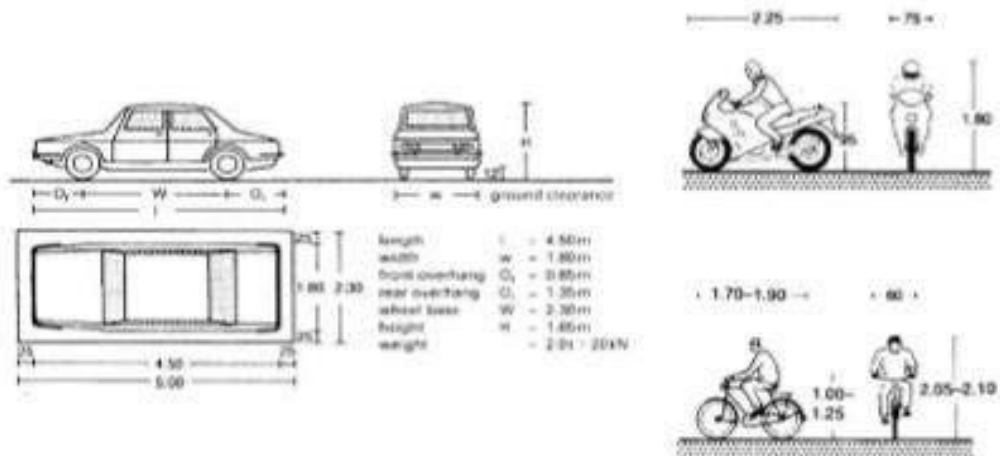
② Alcoves arrangement

PARKING

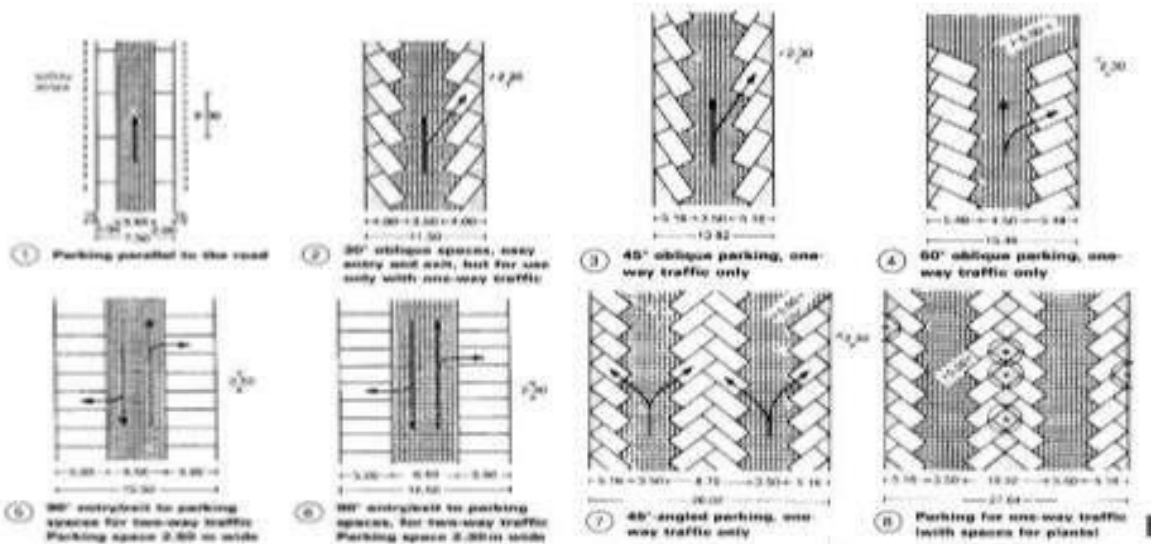
General Design Considerations:

- The parking spaces acts as a place for the ceremonies of **Arrival & Departure**.
- The basic requirements for parking spaces should be taken from the vehicle dimensions whilst driving in a linear path, cornering and entering into and driving out of the parking area.
- Parking can be done in various ways: ***inclined with various angles*** or ***perpendicular***.
- Parking can also be done in ***basement*** or ***on surface outside the complex***.

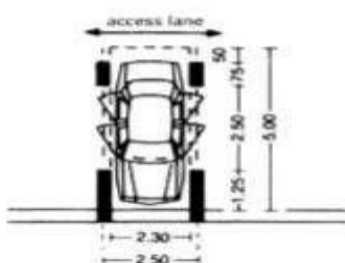




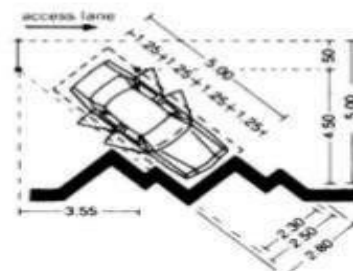
Typical Parking Layouts:



Car Orientation:



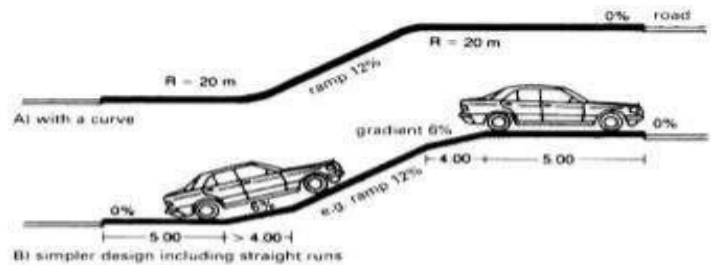
Parking at 90° to access lanes



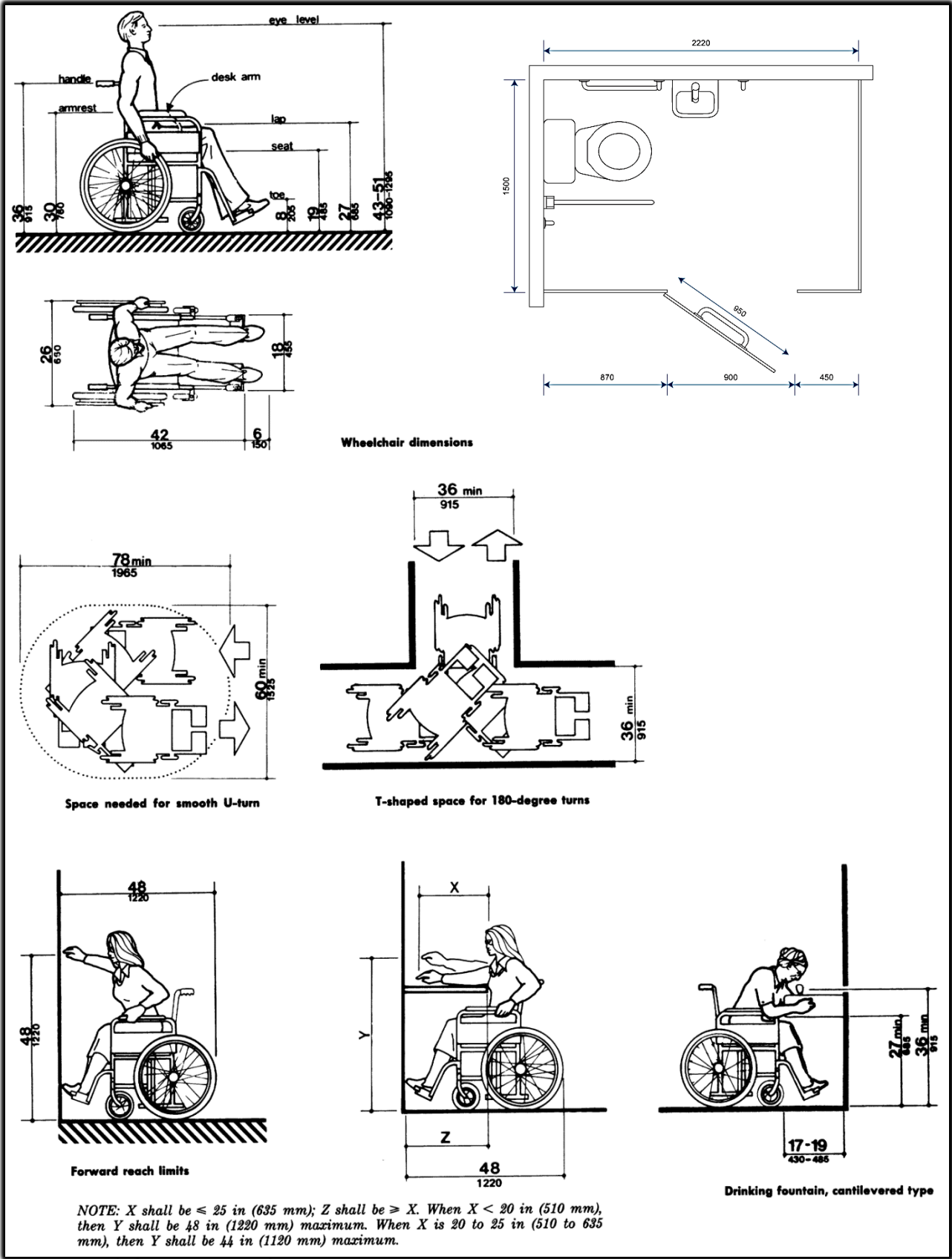
Parking at 45° to access lanes

Ramps for Basement Parking:

- For each car ramp, the run must be more than 5m long, with ramps that can be up to 12% gradient.



For Disabled People



LITERATURE STUDY

DRESDEN MUSEUM OF MILITARY HISTORY

Location	: Germany
Architect	: Ar. Daniel Libeskind
Client	: The Federal Republic of Germany – Ministry of Defence
Build up area	: 22,500 sq.mt
To commemorate	: First World War
Project Year	: 1976 , Renovated in 2011

Objective of study

To learn about form and function of war museum and how it interacted with the existing fabric of the area.

The walls at odd angles give the observer the sense of disorientation that is at the same time calmed by the transition from wider to narrower rooms

EXHIBITS

- Military Technology
- Equipment
- Uniform
- Art and Photography
- Animal Sculptures {That served as the subjects at military experiments}



THROUGH THE TRANSFORMATION , ADDING NEW CHARACTER TO THE BUILDING

- The museum looks like the bow of a ship breaking through an iceberg , pointing in the direction from which the British and American bombers come to attack the city
- Two visitor approaches : thematic sections and a chronological four.
- Visitor circulation in top to bottom as in Guggenheim Museum , New York by Frank Lloyd Wright



LITERATURE STUDY

DRESDEN MUSEUM OF MILITARYHISTORY

INTERIOR



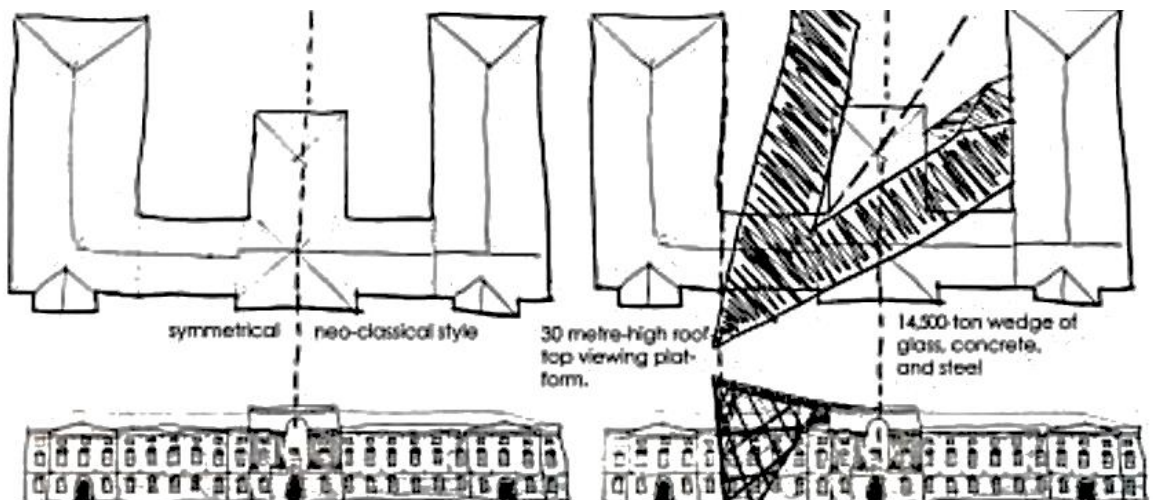
APPROACH

Allows to have a clear vision towards the centre of the city , accompanied by a road axis transversal to the building

INFERENCE

NEGATIVE

- The space feel under population
- Too often visitors fascinate at the forms or spaces rather than looking at the exhibits.
- The exhibits have good lighting and displaying layout but lack signage providing information people don't get the actual meaning of the displays



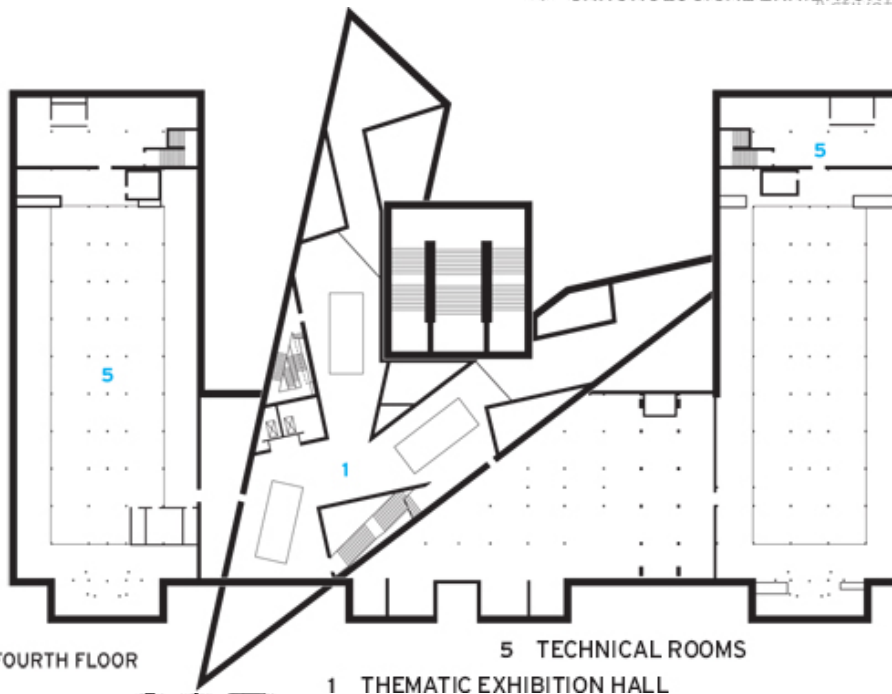
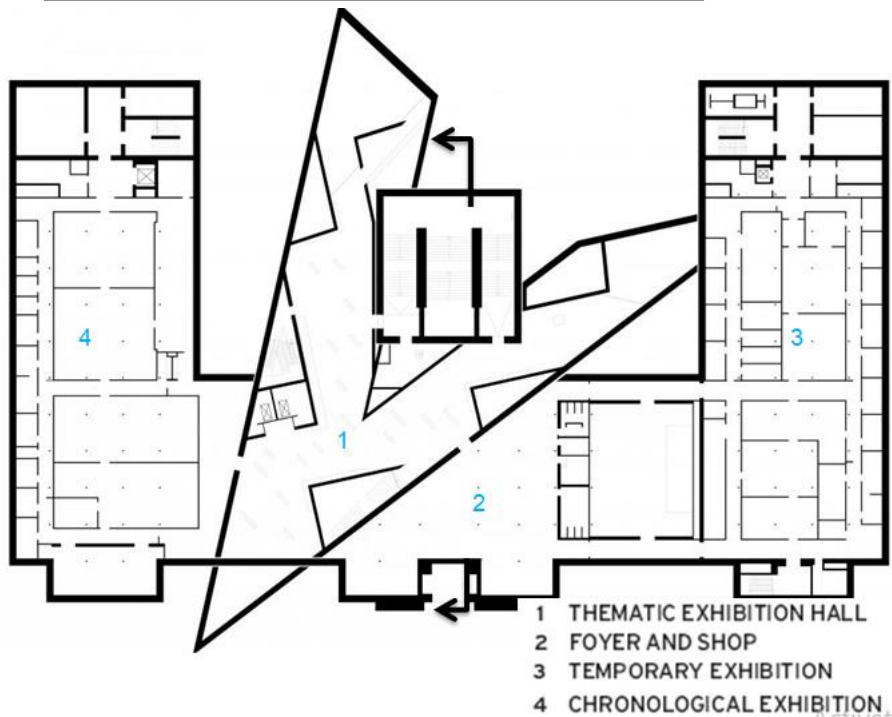
Old museum

New Museum



LITERATURE STUDY

DRESDEN MUSEUM OF MILITARYHISTORY



LITERATURE STUDY

IMPERIAL WAR MUSEUM LONDON

Location : Lambeth Rd. London
Architect : Foster and partners
Interior Design : Caisson Mann
Build up area : 22,500 sq.mt
To commemorate : First World War
Project cost : 40 million pound – 5 billion rs
Project Year : Renovated in 2014 . In 1814 it was Royal hospital converted to museum in 1836

Objective of study

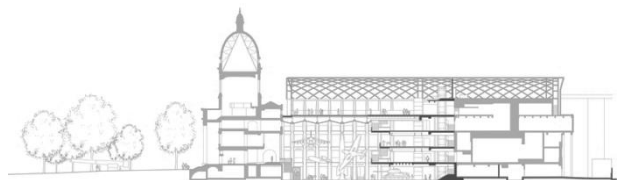
To learn about :

- Spaces of war museums
- Ways to portray the exhibits
- Create an impulse in the visitors
- How to make the museum accessible for all type of visitor differently

CONCEPT OF TRANSFORMATION

Three concept

- Clarity of circulation
- Chronology
- Consolidation



THROUGH THE TRANSFORMATION

- Chronological arrangement : GF First World War Galleries to Top Floor with current conflicts
- Western floor lowered – step – free access
- Case away from gallery can be open even when museum is closed
- Connecting to surrounding – western façade windows opened



LITERATURE STUDY

IMPERIAL WAR MUSEUM LONDON

CONCEPT OF EXHIBITS

- First World War Galleries
- Exhibition
- Secret War
- Witness to War
- Lord Ashcraft Gallery
- Peace and Security 1945-2014
- Visitors see the conflict through the eyes of those who lived and died
- Their voices are presented through letters, diaries and quotations
- Each object will give a voice to the people who created them used them or cared for them

EXHIBITS

- Weapons and ammunition
- Equipment
- Uniforms, Flags, Badges
- Art and Photographs
- Mementoes
- Records
- Vehicles, Aircraft, Ships

INFERENCE

Positive

- Central atrium brings in plenty of natural light.
- Visitors get to experience – visitors are educated rather than just seeing
- Teachers what to do when was comes audio – visual workshop

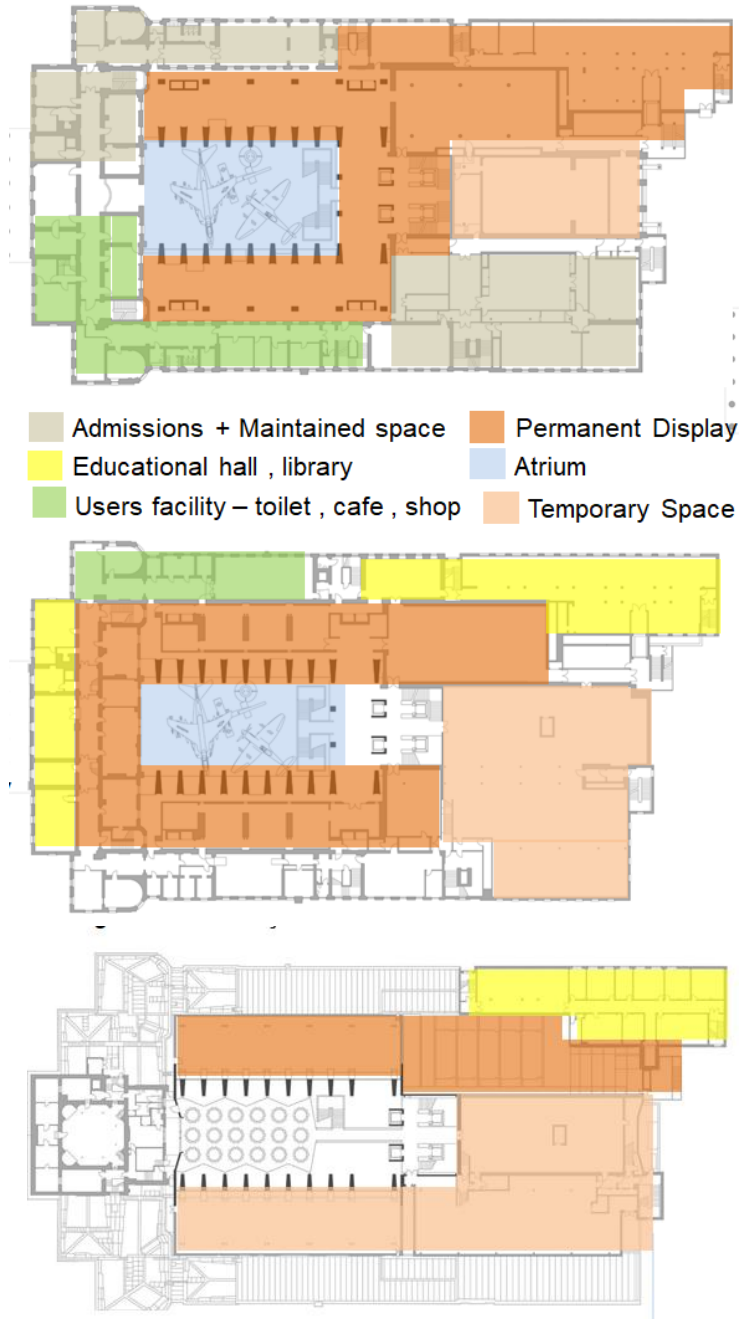
Negative

- The spaces are over – crowded by exhibits different to group up everything
- Frightening for kids – barrier could have been there



LITERATURE STUDY

IMPERIAL WAR MUSEUM LONDON



CASE STUDY

TRADE FACILATION CENTRE AND CRAFT MUSEUM, VARANASI



- Name of Project- Trade Facilitation Centre & Crafts Museum at Varanasi.
- Owner-M inistry of Textiles Govt. of India.
- Site Area/Location 7.93 Acres land near Kendranchal Colony at Bada Lalpur,
- Construction Agency-Tata Projects Limited.
- Construction Started-2014
- Construction completed-2017

SITE SURROUNDINGS

EAST - VIGYAN BHWAN

WEST - JAWAHARLAL NEHRU BHAWAN

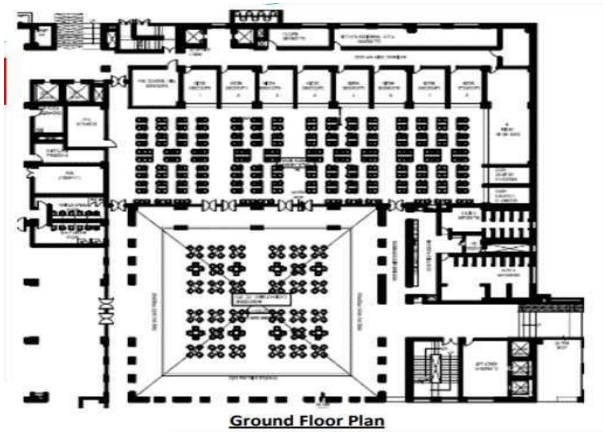
NORTH – RAJPATH ROAD

SOUTH – ARCHAEOLOGICAL SURVEY OF INDIA

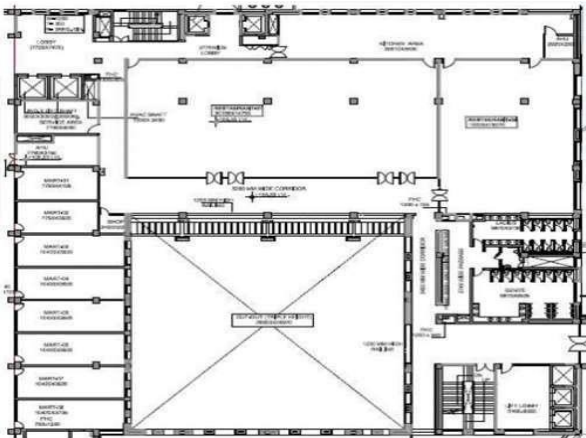
Varanasi, the land of lord Shiva is also land of many ancient and exquisite arts. To boost moral of Such artists by providing a platform to showcase their art, the TFC (Pd. Deendayal Hastkala Sankul) is an art museum with distinct galleries like textile, hand loom, carpet, wood carving and many more.

The TFC & CM project located at Bada Lalpur, Varanasi, being developed by Ministry of Textile on **7.93 acres** land and having constructed area of around 43,450 sqm. The project is expected to be completed by August 2017 and will offer facilities such as Convention hall, Exhibition area, Shops, Marts, Food Court, Restaurants, Guest Houses, Dormitories, Offices, Crafts Museum and Amphitheater along with support infrastructure and amenities focused at providing integrated platform for promotion of Handloom, Handicrafts and Carpet Sector of Varanasi region

Ground Floor The ground floor of the block consists of food court with both indoor and outdoor seating spaces. The courtyard space has been envisaged to be converted to form exhibition space or area for other activities as per requirement.



Description	Total Units	Unit Size (mm)
Kiosk1	7	3920 x 5570
Kiosk2	1	3735 x 5570
Kiosk3	1	4910 x 13640
Cash Counter	2	5140 x 2585
Kitchen Addition Area	1	18045 x 2770
Indoor AC seating area	1	40900 x 13700
Outdoor Seating area	1	26600 x 26970



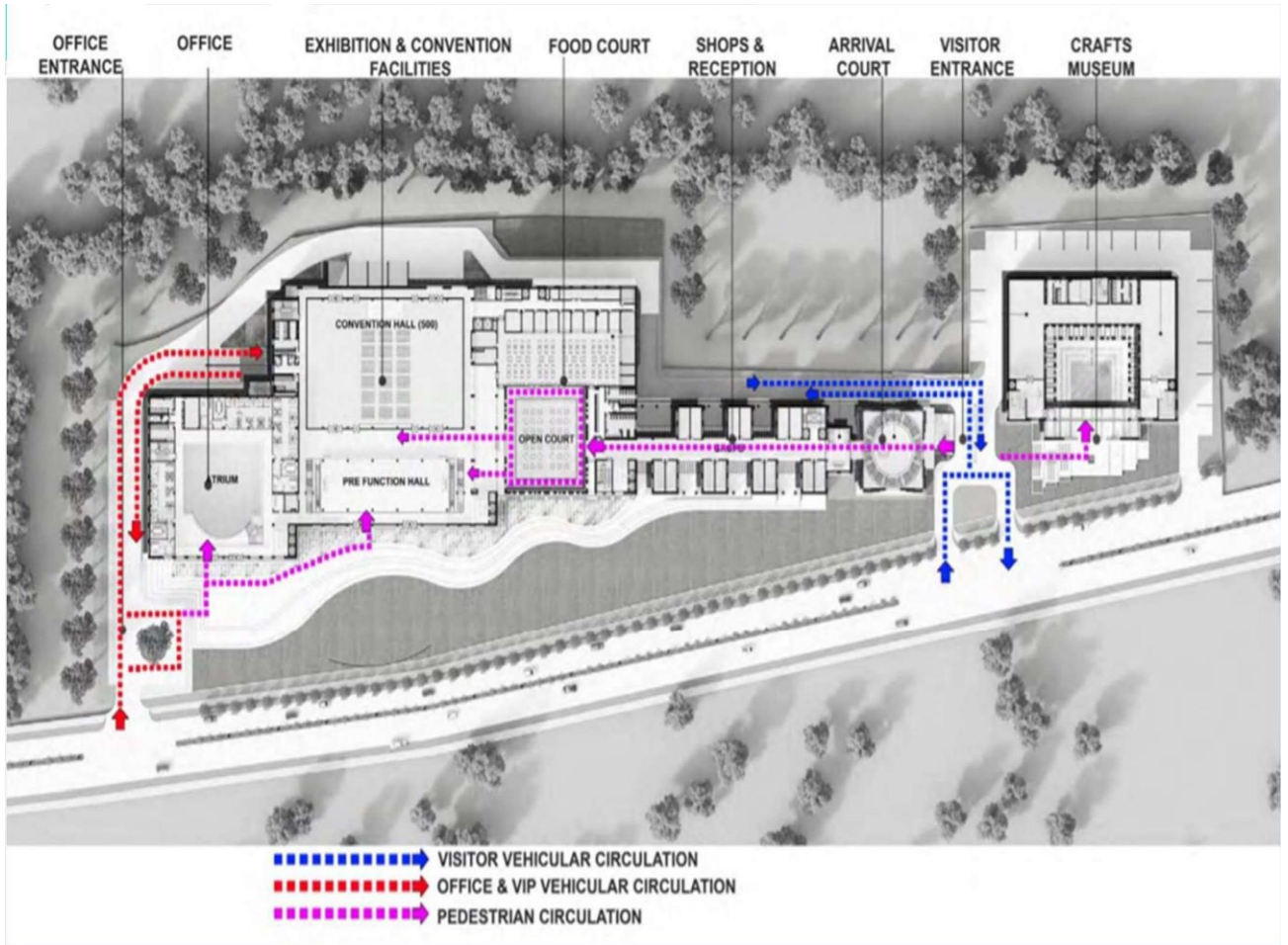
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Indoor AC seating area	1	40900 x 13700
Outdoor Seating area	1	26600 x 26970



Description	Total Units	Unit Size (mm)	Beds
Dormitory (Type 1)	1	10420 x 7700	10 Nos
Dormitory (Type 2)	1	7790 x 5875	6 Nos
Dormitory (Type 3)	2	5255 x 8785	5 Nos Each
Dormitory (Type 4)	4	3920 x 8785	5 Nos Each
Dormitory (Type 5)	2	8220 x 3920	4 Nos Each
Dormitory (Type 6)	1	8220 x 4970	4 Nos
Dormitory (Type 7)	1	10485 x 5685	6 Nos
Dormitory (Type 8)	1	5560 x 11070	6 Nos
Dormitory (Type 9)	1	3905 x 11070	6 Nos
Dormitory (Type 10)	1	4105 x 11070	5 Nos
Office	1	6340 x 11770	-



CASE STUDY



SITE STUDY



ABSTRACT

This research is on **-NEW OKHLA INDUSTRIAL DEVELOPMENT AUTHORITY (NOIDA)** Noida, short for the New Okhla Industrial Development Authority, is a planned city under the management of the New Okhla Industrial Development Authority (also called NOIDA). It is a satellite city of Delhi and is part of the National Capital Region of India.

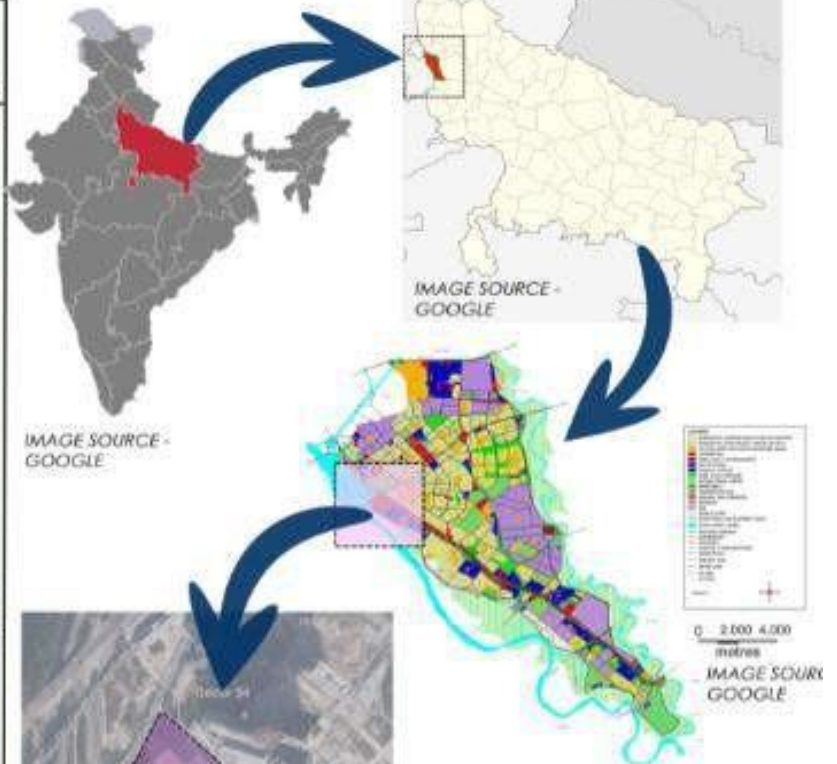
After doing so much study on convention centre and museum. I have implemented my own design along with my own concept. The concept is cubism and my theme is art nouveau. Cubism is an early twentieth century art movement which brought European painting and sculptures. Tried to combine few cubes together to built up the form. Form is centered on the dissolution and reconstitution of three-dimensional form, using simply geometry .angular forms are also thus created to connect the space. In this way design is implemented and planning is done keeping in mind the comfort of the user and also keeping in mind the environmental conditions.



SITE INTRODUCTION -

PROJECT:	NOIDA CONVENTION CENTRE
CLIENT:	NEW OKHLA INDUSTRIAL DEVELOPMENT AUTHORITY
LOCATION:	SECTOR 94, NOIDA
TYPOLOGY:	ASSEMBLY BUILDINGS
COORDINATES:	28°32'55.66"N, 77°19'21.05"E
ELEVATION:	199 MTS.
SEISMIC ZONE :	ZONE IV
SHAPE:	IRREGULAR SHAPE
AREA :	10.23 ACRES (41407.05 SQ.MT)
SOIL CONDITI -ON :	RICH AND LOAMY SOIL PLAIN LAND WITH SLIGHT SLOPE TOWRDS SOUTH
TOPOGRAPHY:	
GREEN COVER:	APPROX 60% OF THE SITE IS COVERED WITH GRASS ETC.
SOIL BEARING CAPACITY:	12.5 KN /M ²
HYDROLOGY:	24 MT BELOW GR. LVL.
SITE SECURITY :	THE SITE IS SURROUNDED BY FENCES ON ALL SIDES
NEAREST NH:	GR.NOIDA- NOIDA EXPRESSWAY

SITE LOCATION -



ABOUT THE SITE -

- >SITE HAS CLOSE PROXIMITY TO THE OKHLA BIRD SANTUARY METRO STATION AND IS VERY WISELY CONNECTED TO THE PUBLIC TRANSPORT FACILITIES .
- >SITE LIES JUST NEXT TO SUPERNOVA BUILDING (MIXED - USE SKY SCRAPER) WHICH IS A HIGH RISE BUILDING .
- > SITE HAS UNDERGROUND ELECTRIC SUPPLY WIRES WHICH IS PROVIDED TO IT BY TATA COMMUNICATIONS.
- > SITE HAS UNDERGROUND DRAINAGE PIPE .
- > SITE SURROUNDINGS INCLUDE CREMATORIUM, FORENSIC DEPT AND COWSHED.



APPROACH TO SITE -

NEAREST RAILWAY STATION -



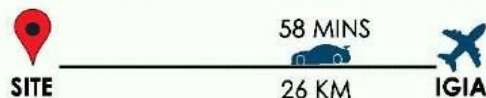
NEAREST METRO STATION -



NEAREST AIRPORT -



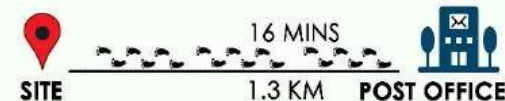
INDIRA GANDHI INTERNATIONAL AIRPORT



NEAREST POST OFFICE -



POST OUT POST



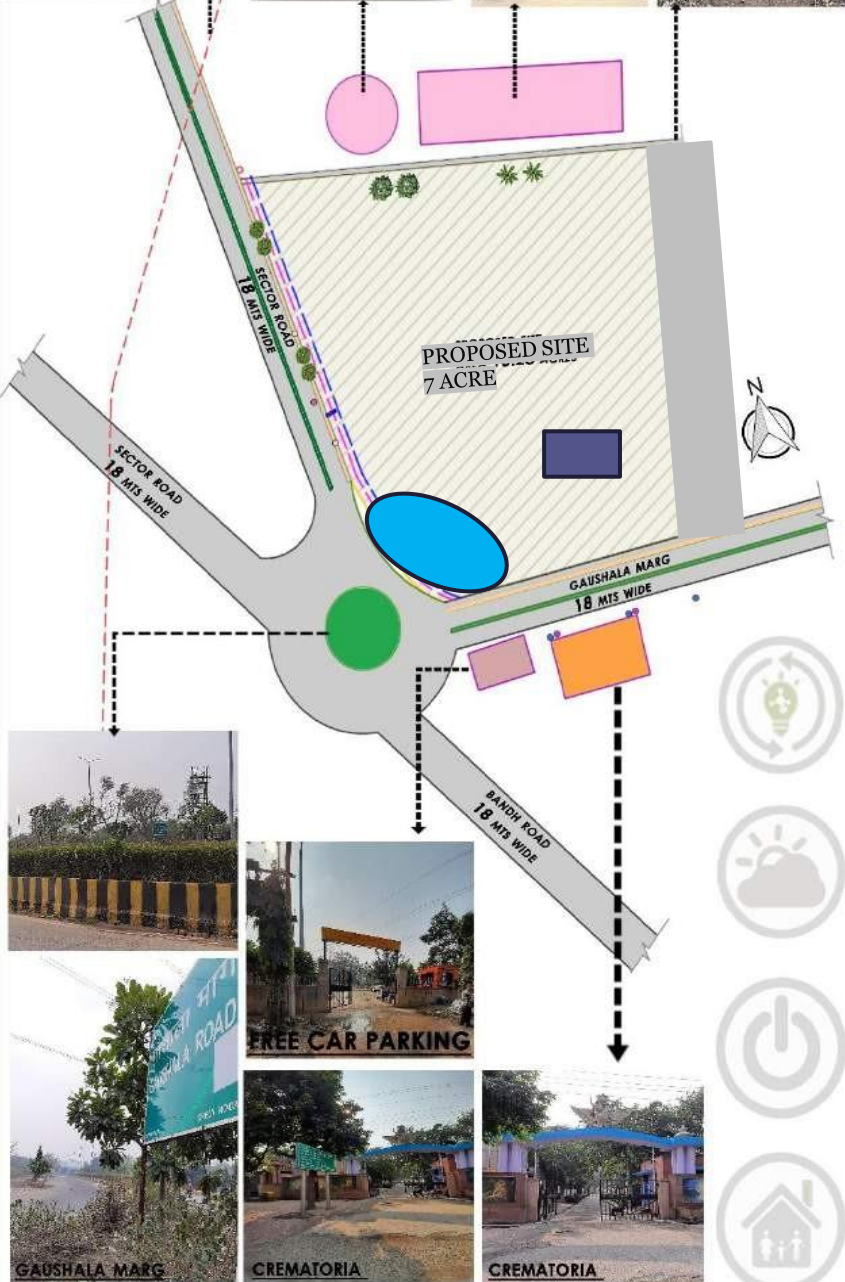
NEAREST HOSPITAL-



FARAZ HOSPITAL



EXISTING SITE CONDITIONS -



LEGENDS -

- UG DRAIN LINE
- UG ELECTRIC WIRE
- DRAIN PIPE
- UG ELECT. LINE OUTPUT UNIT
- FIRE HAZARD SIGNAGE
- DRINKING WATER UNITS
- DUSTBINS
- FOOT PATH 1.5M WIDE
- DIVIDER 1.9 M WIDE
- MAN HOLE

ON SITE AND OFF SITE CONSIDERATIONS -

1. VEGETATION AT SITE -

AS THE SITE IS LOCATED IN NOIDA AND ON THE BANKS OF RIVER YAMUNA, IT HAS SANDY SOIL AND FAVOURABLE FOR THE GROWTH OF DECIDUOUS TREES



BANANA TREE

IMAGE SOURCE SURVEY



EUCALYPTUS TREE

THE SITE IS GREEN AND PLAIN ALSO THE GROWTH OF WHEAT AND RICE WERE AVAILABE AT VARIOUS PARTS



SERVICES AT SITE-



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY

UNDERGROUND ELECTRIC WIRE FACILITIES



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY

UNDERGROUND DRAINAGE PIPES



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY



IMAGE SOURCE SURVEY

SITE CONDITIONS-

SITE IS SOURROUNDED BY FENCES FROM ALL SIDES

LOCAL BUILDING MATERIALS -

MOST OFTEN USED BUILDING MATERIALS WERE REINFORCED STEEL BARS CONCRETE, MASONARY BRICKS, GLASS, STONES , CERAMIC TILES, ETC.

BUILDING BYE LAWS -

TYPE OF BUILDING -	ASSEMBLY BUILDING
F.A.R. -	1.30
PERMISSIBLE GROUND COVERAGE-	30 %
SETBACKS - (FRONT)	15.0 MT.
(REAR)	9.0 MT.
(SIDES)	9.0 MT.
PERMISSIBLE HEIGHT -	NO LIMIT
PARKING -	1 PARKING SPACE FOR 20 SEATS
LANDSCAPING -	PROVISION FOR RAIN WATER HARVESTING IN ALL CATE -GORIES OF PLOTS EXCEEDING 300 SQUARE METRES IN AREA SHALL HAVE TO BE PROVIDED.

IMAGE SOURCE SURVEY

GAS PIPELINE SIGNAGE

TENTATIVE REQUIREMENTS -

1. CONFERENCE & MEETINGS
2. GENERAL PREFUNCTION AREA
3. MULTIPURPOSE HALL
4. VIP PRE FUNCTION AREA
- 5.. VIP LOUNGE
- 6..F&B
- 7 BUISNESS CENTRE
8. EXHIBITION AREAS
- 9.. ART GALLERIES
10. ADMINISTRATION
11. SERVICES
12. LIBRARY
13. LIBRARY LOUNGE
14. OPEN EXHIBITION AREA
15. AUDITORIUMS
16. SEMINAR HALLS
- 17.BANQUET HALLS & STORE

SWOT ANALYSIS -

STRENGTH-	SITE IS LOCATED ONLY AT 500 MTS FROM METRO STATION WHICH ENCOURAGES PUBLIC TRANSPORT .
WEAKNESS	THE SITE IS HIGHLY VEGETATED , HENCE IT SHOULD BE LEVELLED FOR THE CON-STION
OPPORTUNITY	SITE WILL CREATE PLATFORM FOR NATION-ONAL AND INTERNATIONAL CONVENTI-ONS.
THREAT	SOIL IS LOAMY , SO GOOD CONSTRUCT-ION PRACTICE NEEDS TO BE EMPLOYED

CLIMATE ANALYSIS -

CLIMATE : COMPOSITE CLIMATE

COORDINATES : 28°31'29.9"N , 77°24'40" E

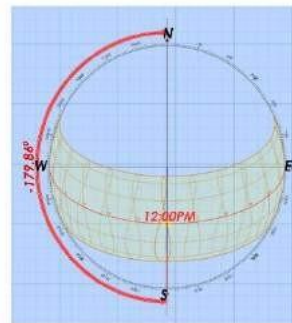
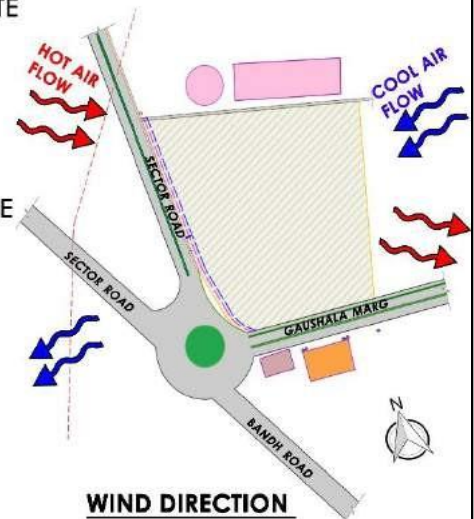
ALTITUDE : 199 MTS

WIND DIRECTION : JAN- MAY : NW- SE
JAN - AUG : S-N
SEP: N-S
NOV- DEC : E-W

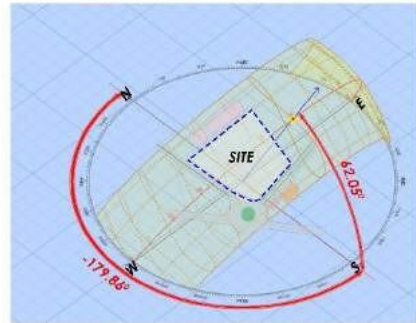
MAX. AVG. TEMPERATURE : 43°C(MAY)

MIN. AVG. TEMPERATURE : 6°C (JAN)

RELATIVE HUMIDITY : 75% AUG- (MAX)
30% APR - (MIN)



NOIDA SUN PATH DIAGRAM AT 12:00 PM ON 14/02/20
(IMAGE SOURCE - 3D SUNPATH.COM)



ALLOCATION OF SITE ON SUN PATH DIAGRAM AT 12:00 PM ON 14/02/20
(IMAGE SOURCE - 3D SUNPATH.COM)

LEGEND -

AVG. TEMP. & PRECIPITATION

- PRECIPITATION
- MEAN DAILY MIN TEMP.
- AVG. TEMP IN COLD NIGHTS
- MEAN DAILY MAX. TEMP.
- AVG. TEMP IN HOT DAYS

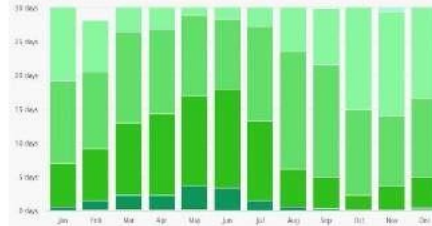
CLOUDY, SUNNY, PRECIPITATION DAYS

- SUNNY
- PARTLY CLOUDY
- OVERCAST
- PRECIPITATION DAYS

MAX. TEMPERATURES

- >40°C
- >35°C
- >30°C
- >25°C
- >20°C
- >15°C
- FROST DAYS

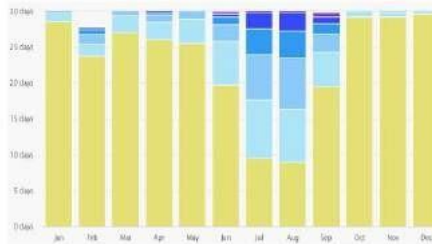
WIND SPEED



(IMAGE SOURCE - CLIMATE NOIDA METEOBLUE)

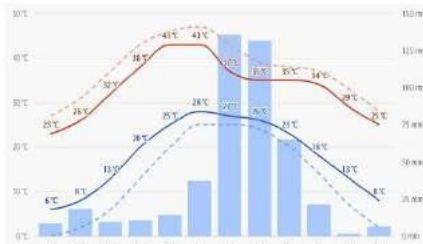
● > 5 KM/HR ● > 12 KM/HR ● > 19 KM/HR
● > 28 KM/HR

PRECIPITATION AMOUNTS

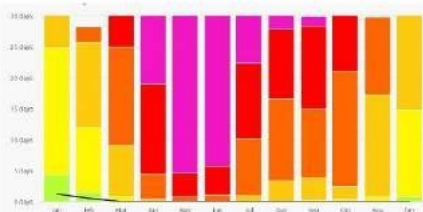
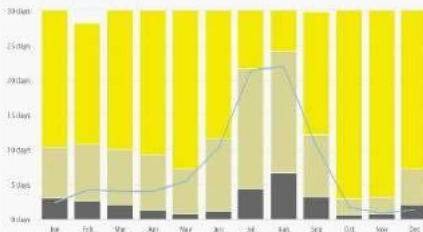


(IMAGE SOURCE - CLIMATE NOIDA METEOBLUE)

● 50-100 MM ● 20-50 MM ● 10-20 MM
● 5-10 MM ● 2-5 MM ● < 2MM ● DRY DAYS



(IMAGE SOURCE - CLIMATE NOIDA METEOBLUE)



METHODOLOGY OF THESIS WORK :-

1. Study of demographics, data collection and literature study
Study of site and analysis of available information. Frame objective, scope and limitation of the project.
2. Collect all the necessary information of the project and its client. Consultancies and reference shall be taken from time to time to established books of standards like NBC, Neuferts, and time savers.
3. Apart from this, a detailed study of the site, it's potential to the rootlevel.
4. A demographic study of the surrounding areas is also imperative as it will influence important decisions regarding the usage pattern of the facility and the level of involvement and contact with the adjoining areas.
5. Study the special configuration of buildings. Study of the activity and movement inside the site. Study of its impact on the city.
6. Area program based on the results from case study reviews. Comparative analysis between the buildings and relevant justification.
7. Literature study. Further study on some more similar topics and making a comparison note for all of them emphasizing on the merits and demerits.
8. Framing of requirements and area analysis Requirements are framed out and area chart finalized which maybe altered as per the design5. Concept design development Literature study, site study and analysis, case study to develop appropriate design language. Centralize the same process spaces to maximize the efficiency.
9. Develop integrated design solution.



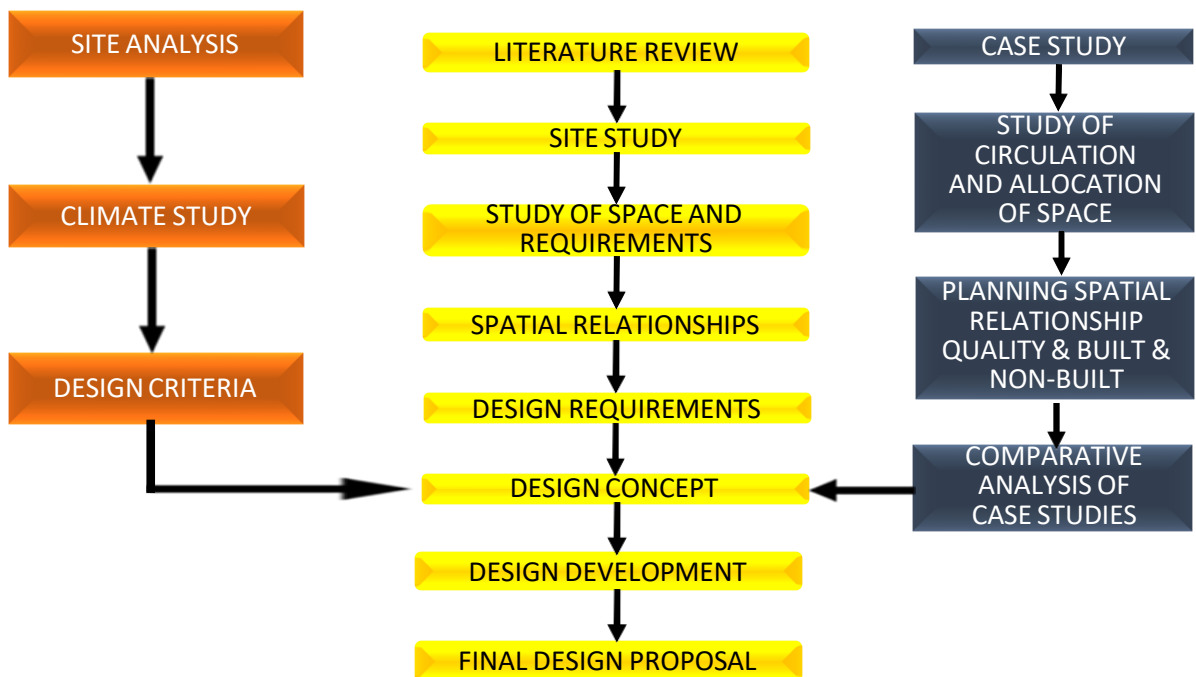


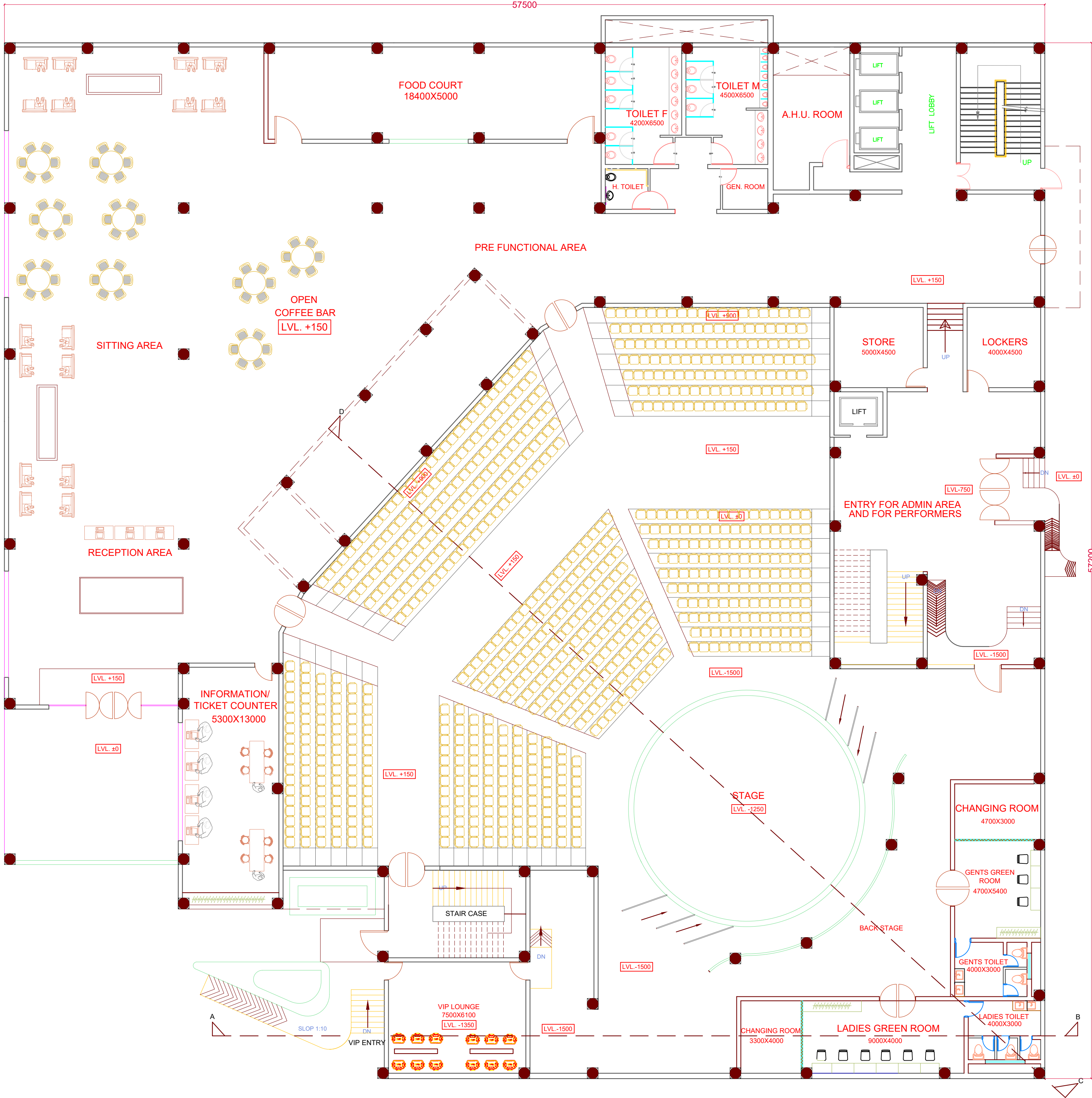
FIG :- FLOW CHART DAIGRAM OF METHADODOLOGY



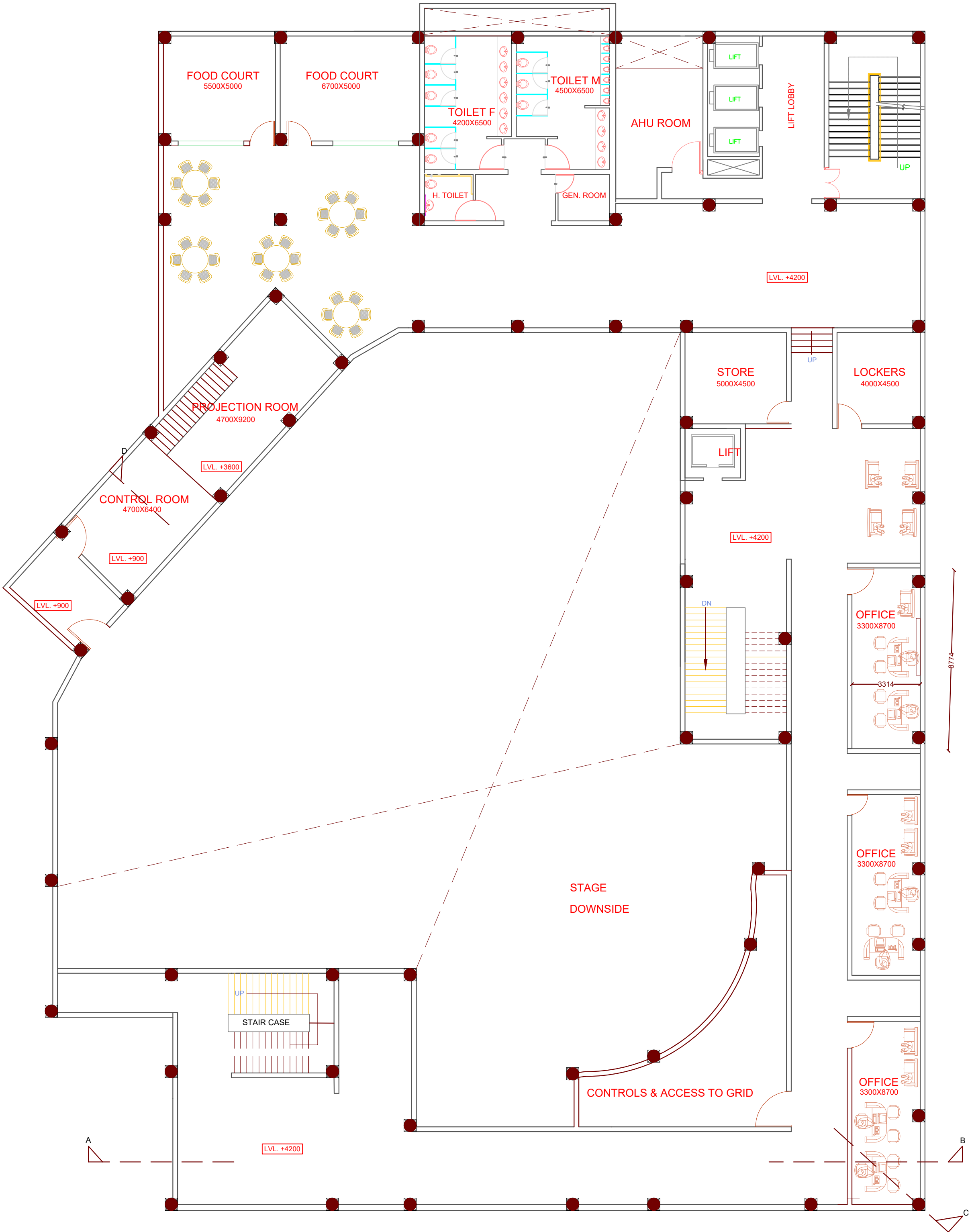
BIBLIOGRAPHY

1. https://en.wikipedia.org/wiki/Convention_center
2. <https://blog.lane-end-conferences.co.uk/blog/the-history-of-conference-centres>
3. GOOGLE
4. REPORTS ON CONVENTION CENTRES, ETC.
5. RESEARCH PAPER
6. LIBRARY





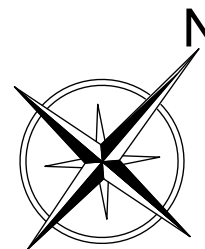
GROUND FLOOR PLAN

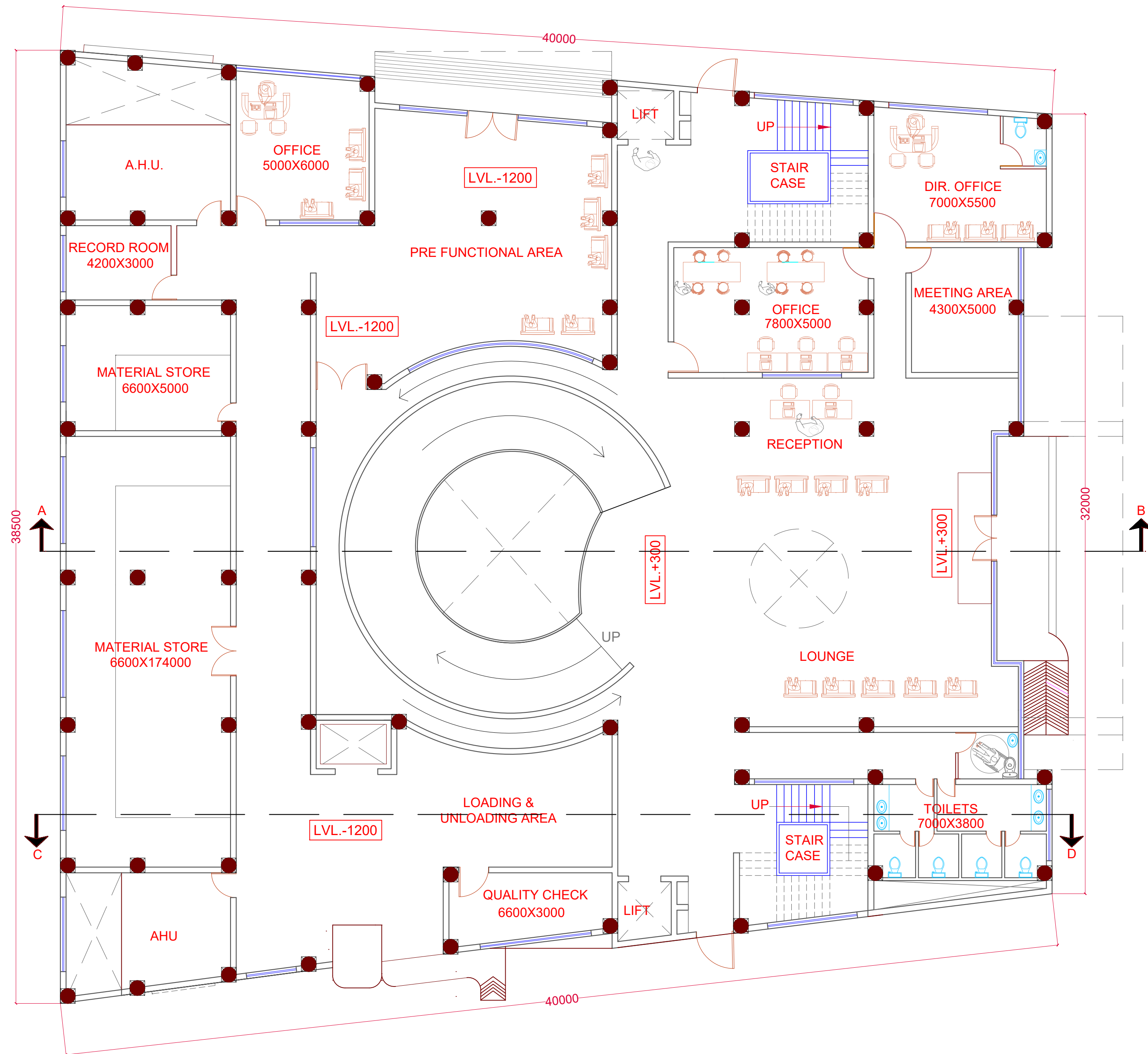


FIRST FLOOR PLAN

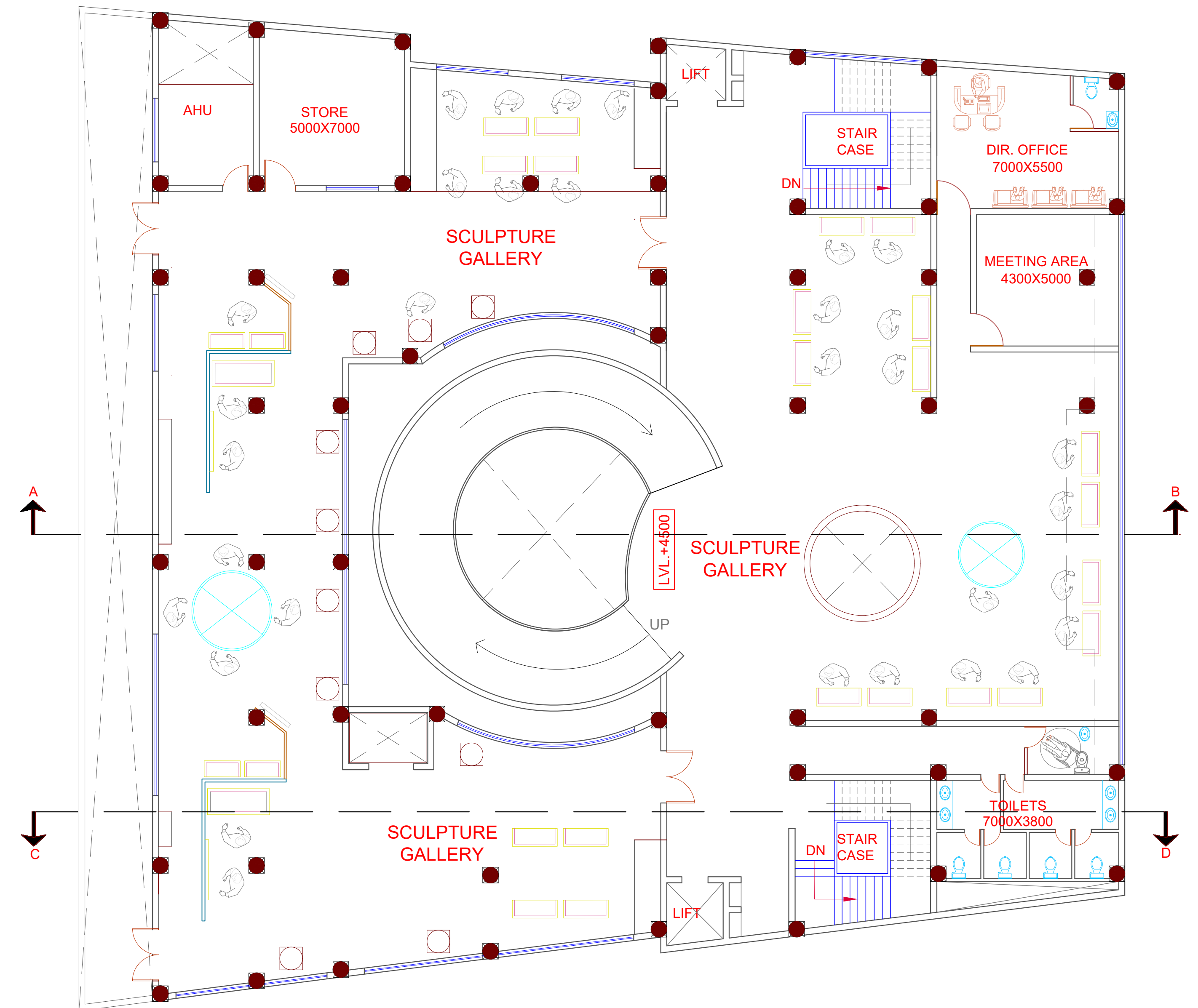
NOTE :

- ALL DIMENSIONS IN MM
- SCALE-





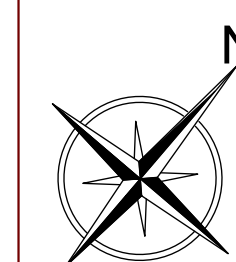
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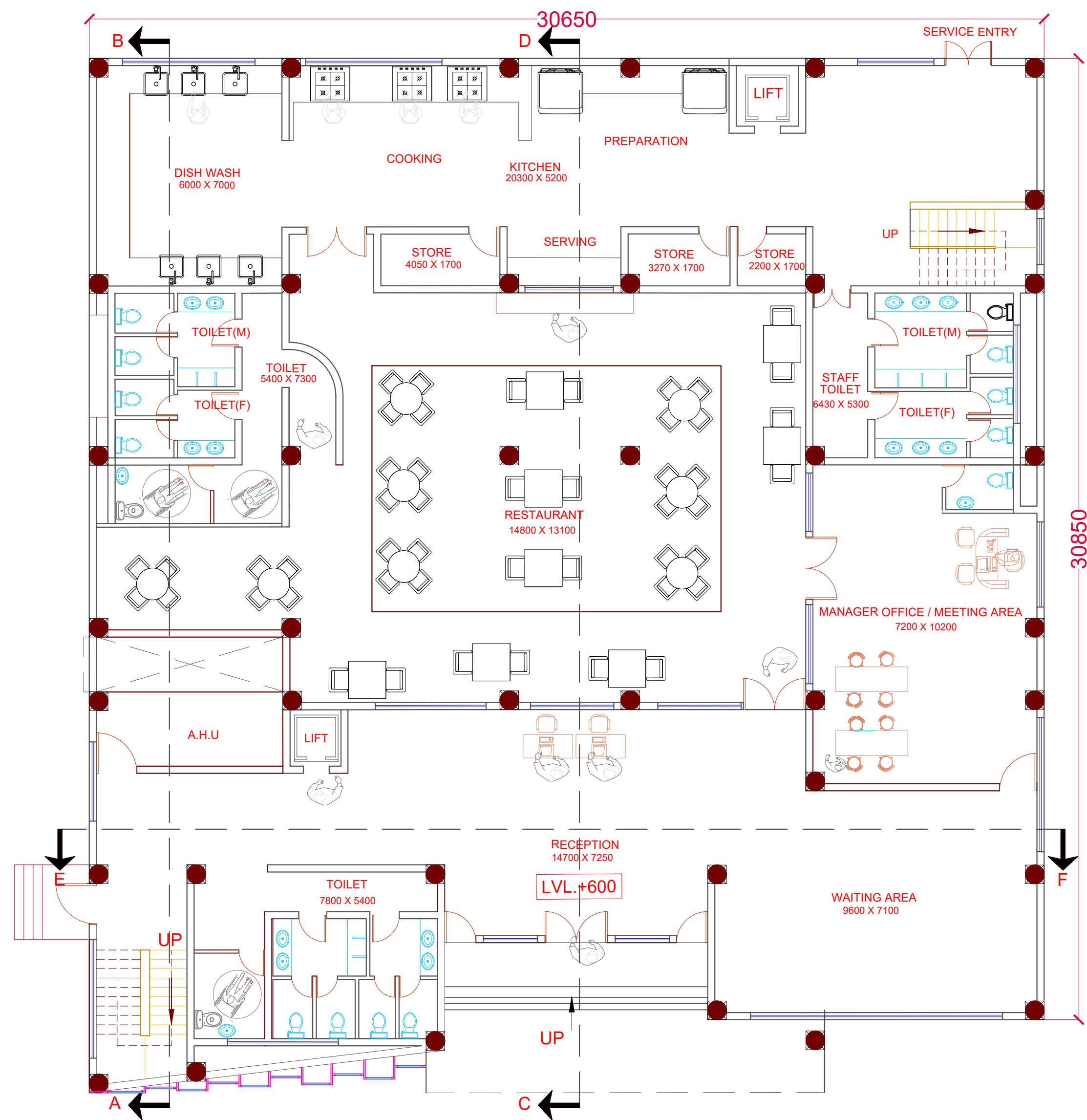


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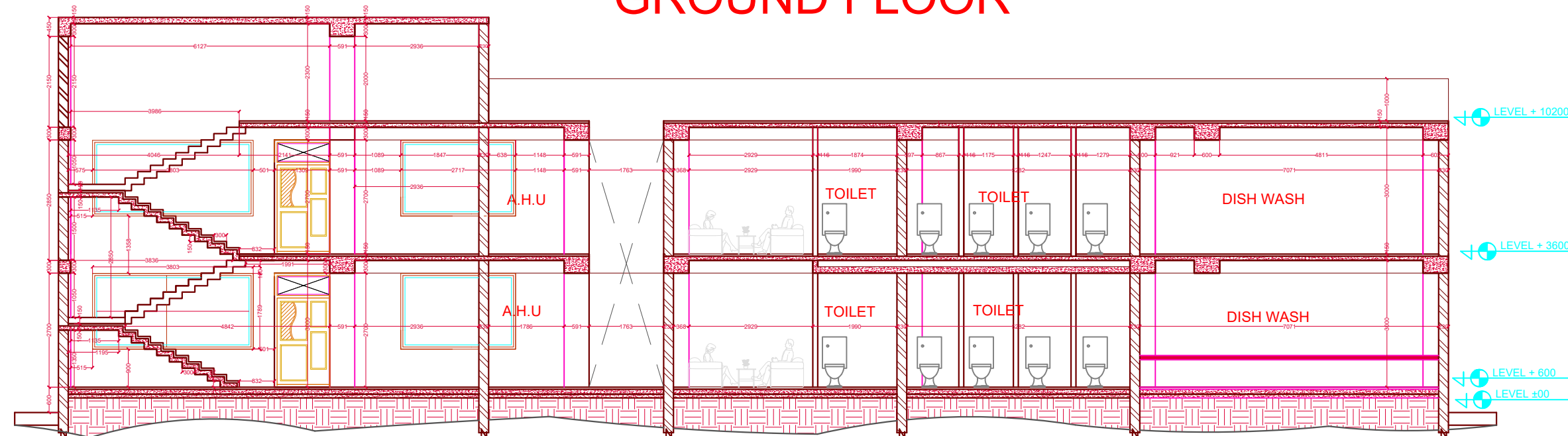
NOTE :

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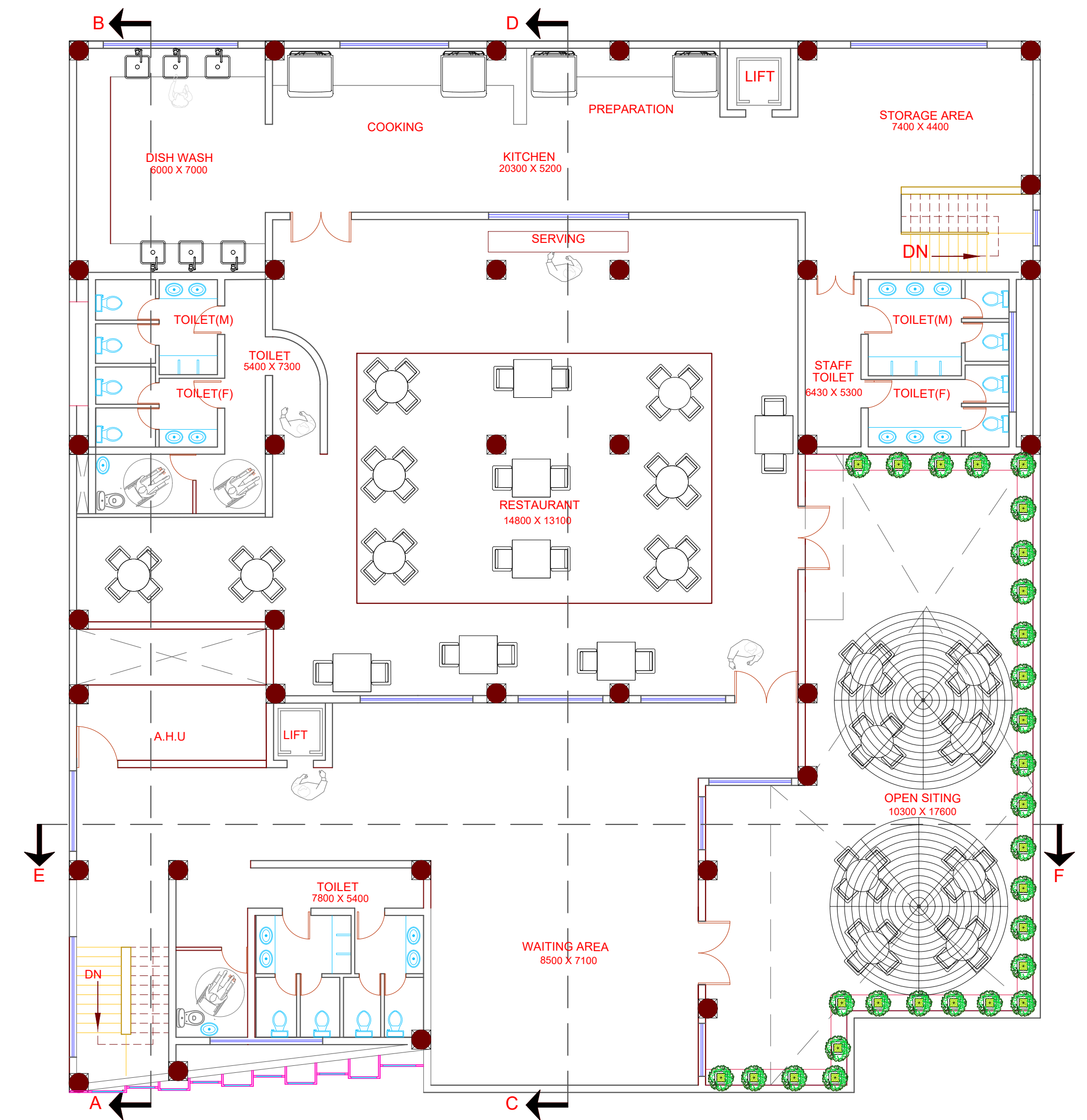
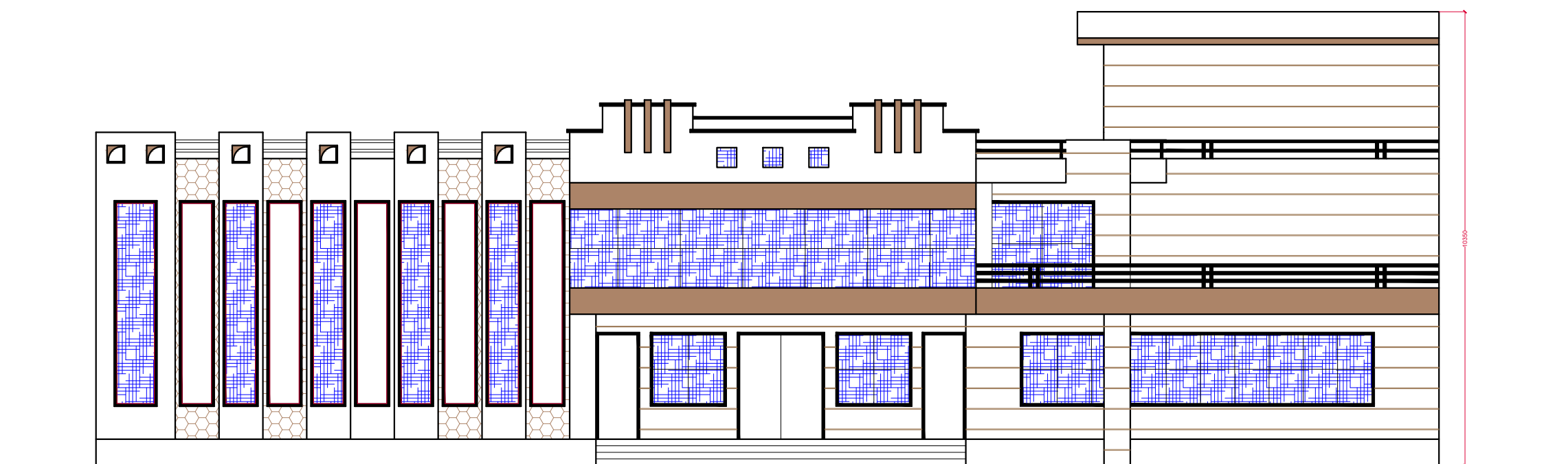




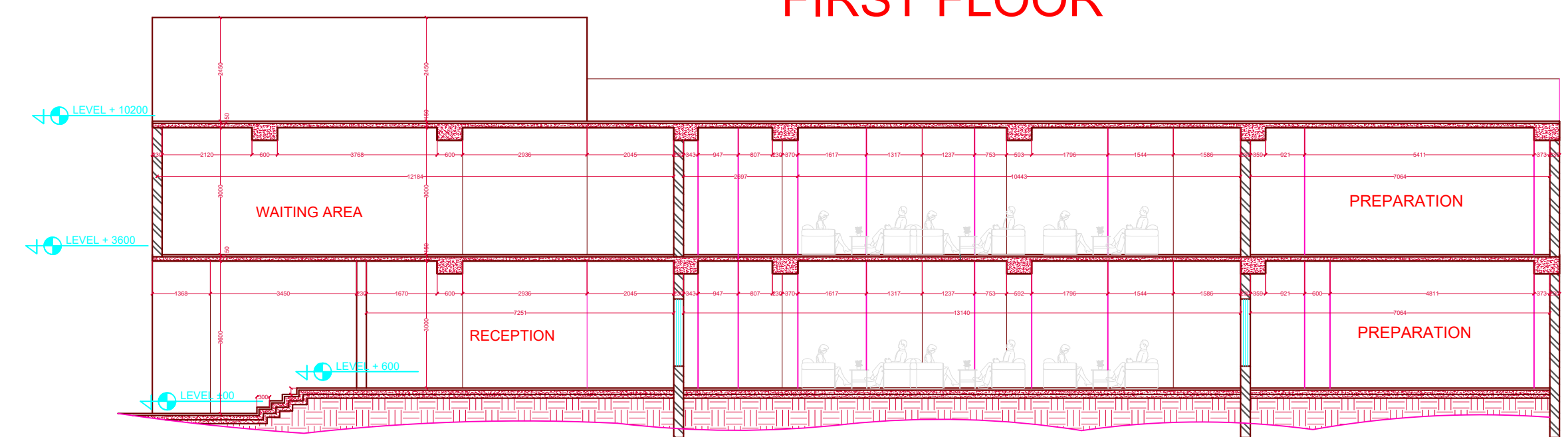
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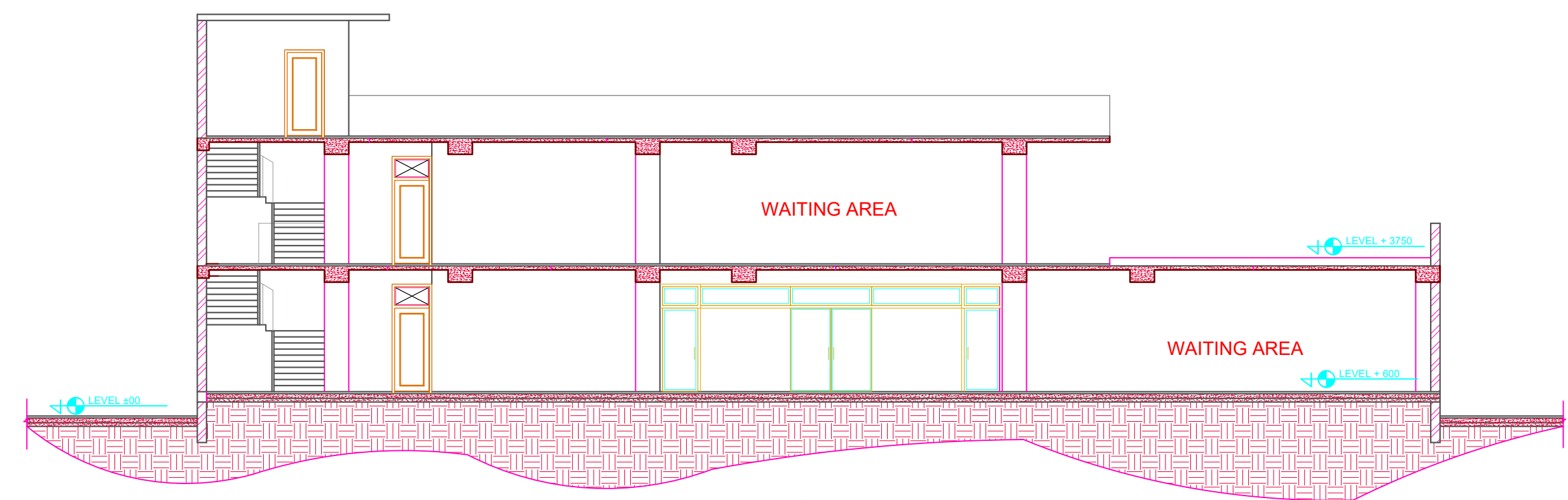
SECTION AT AB



FIRST FLOOR



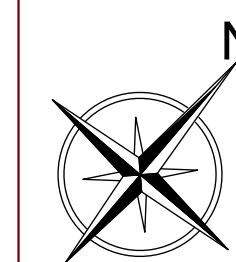
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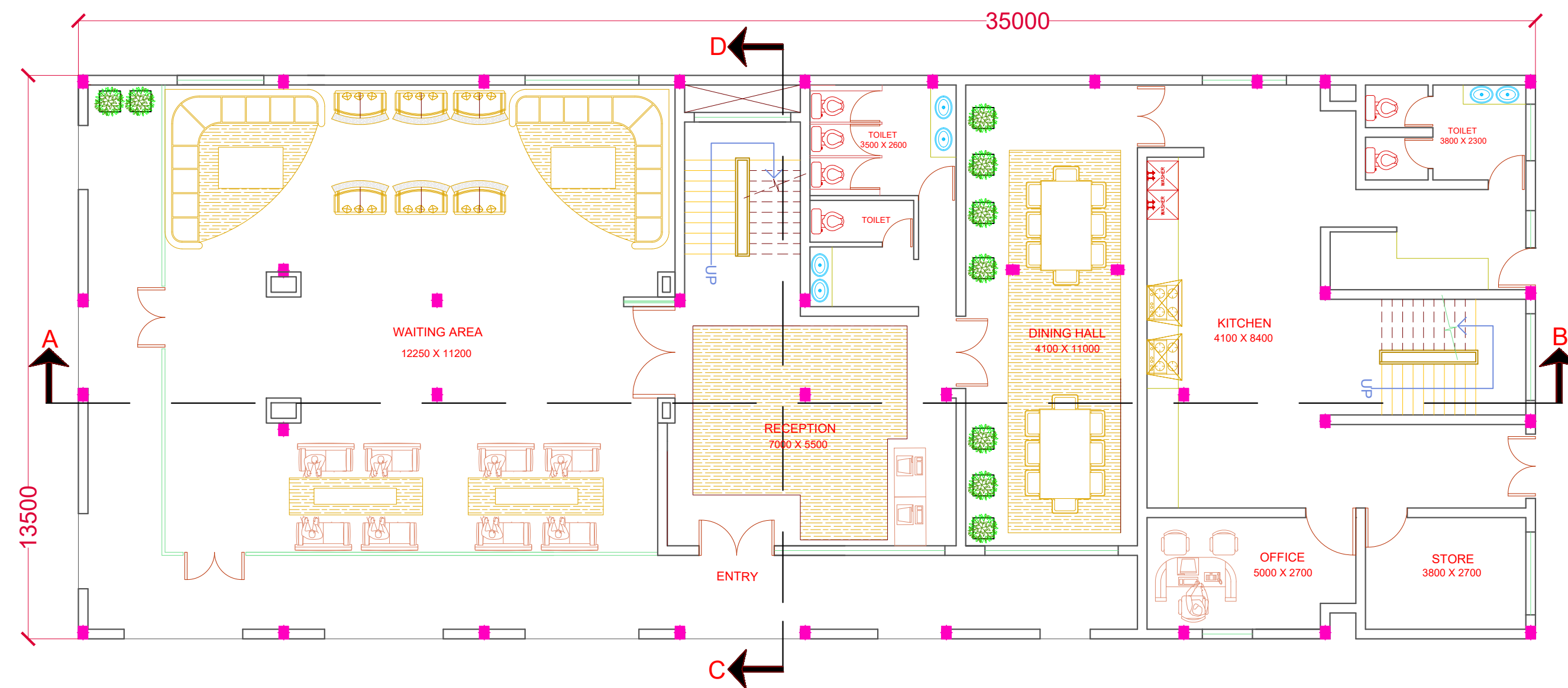


SECTION AT EF

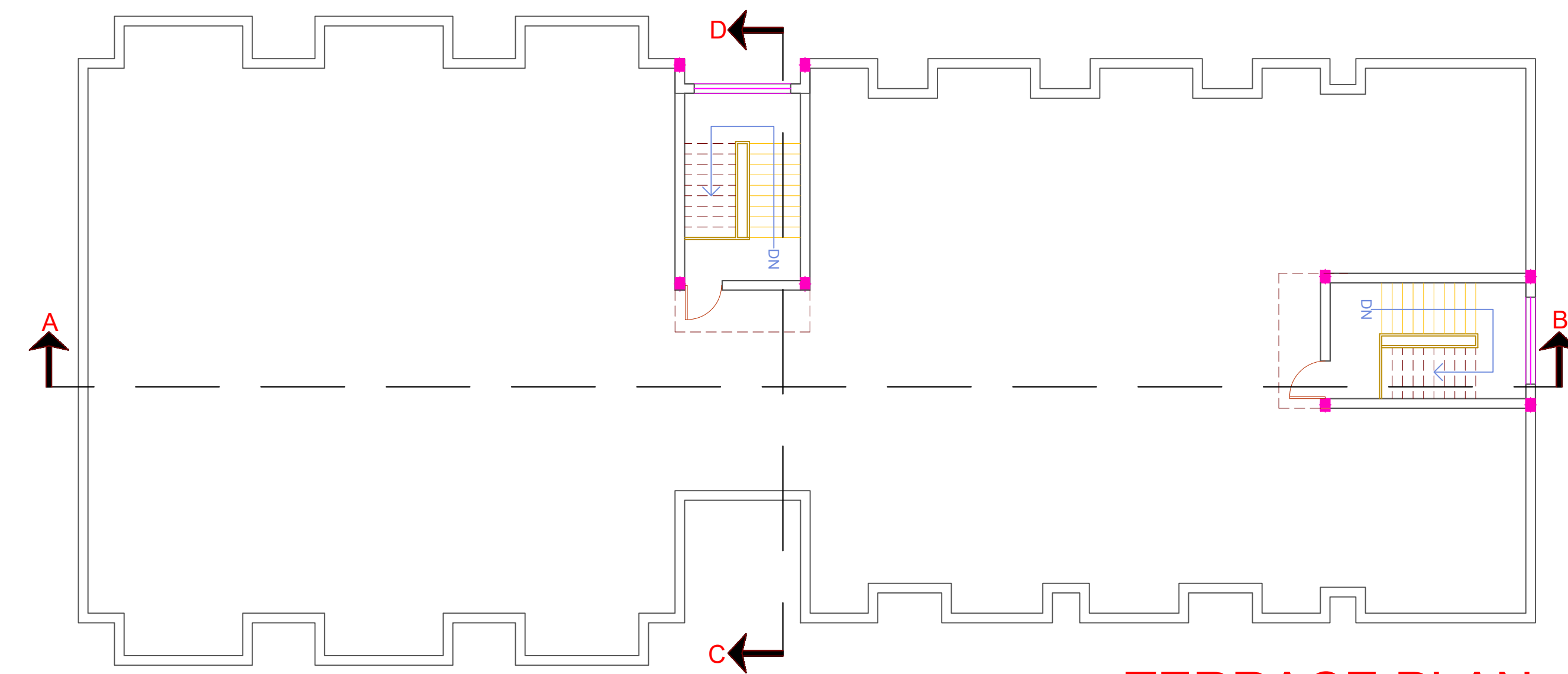
NOTE :

- ALL DIMENSIONS IN MM
- SCALE-

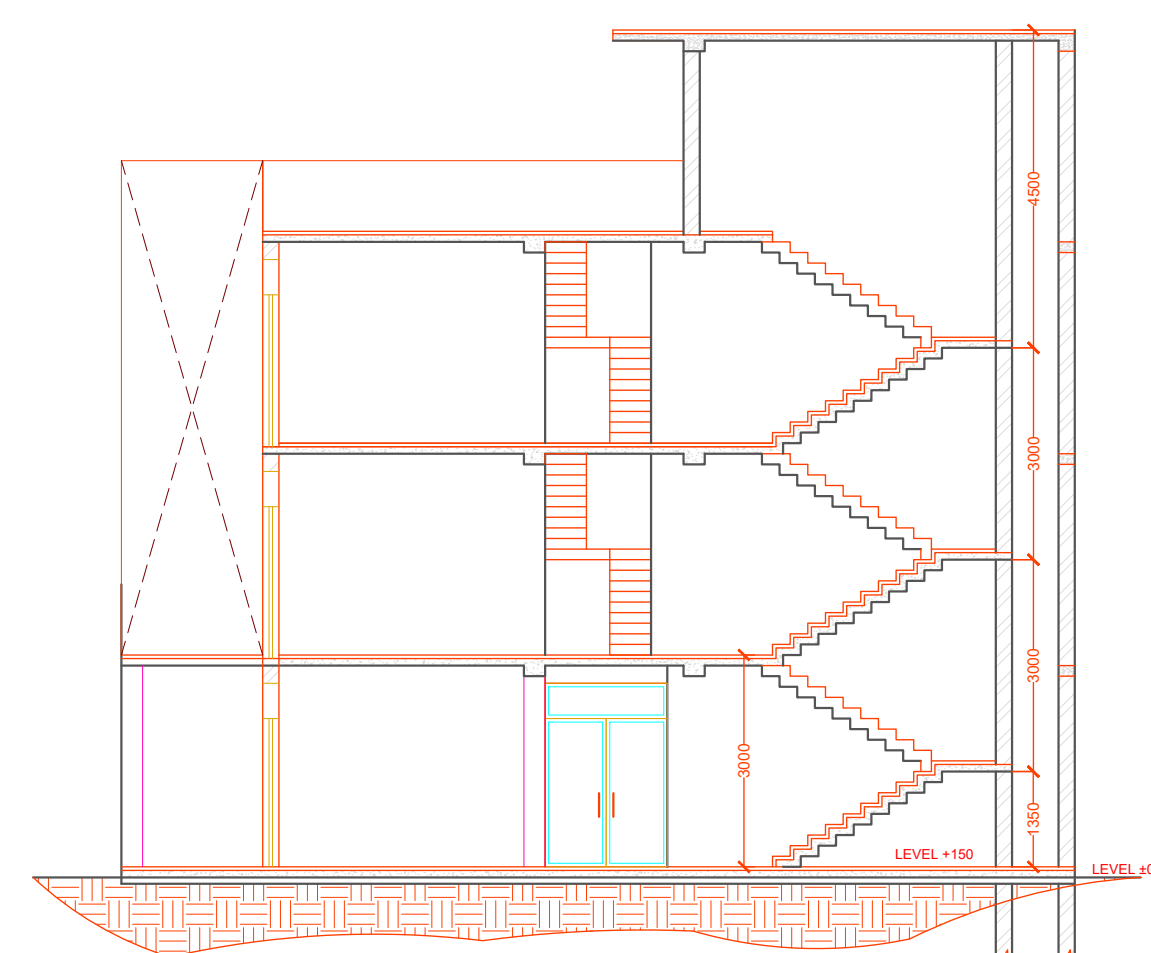




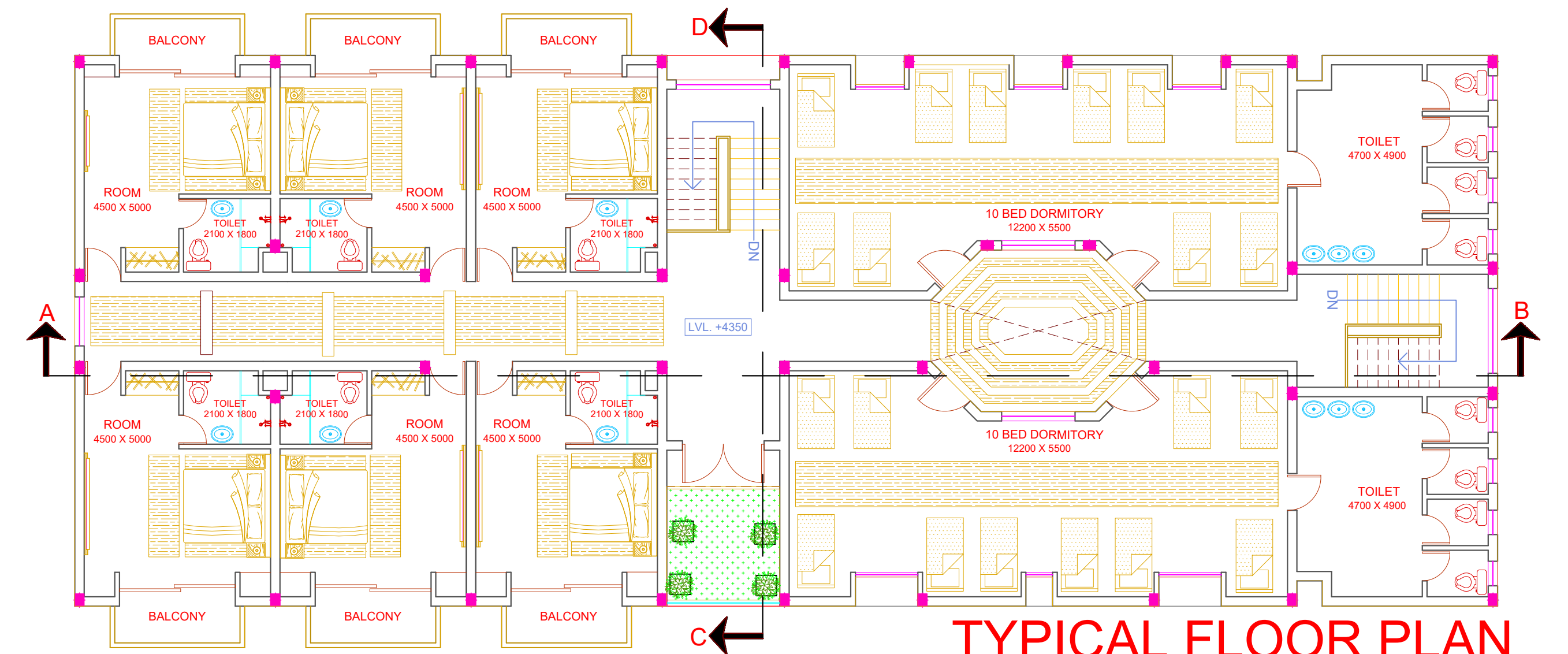
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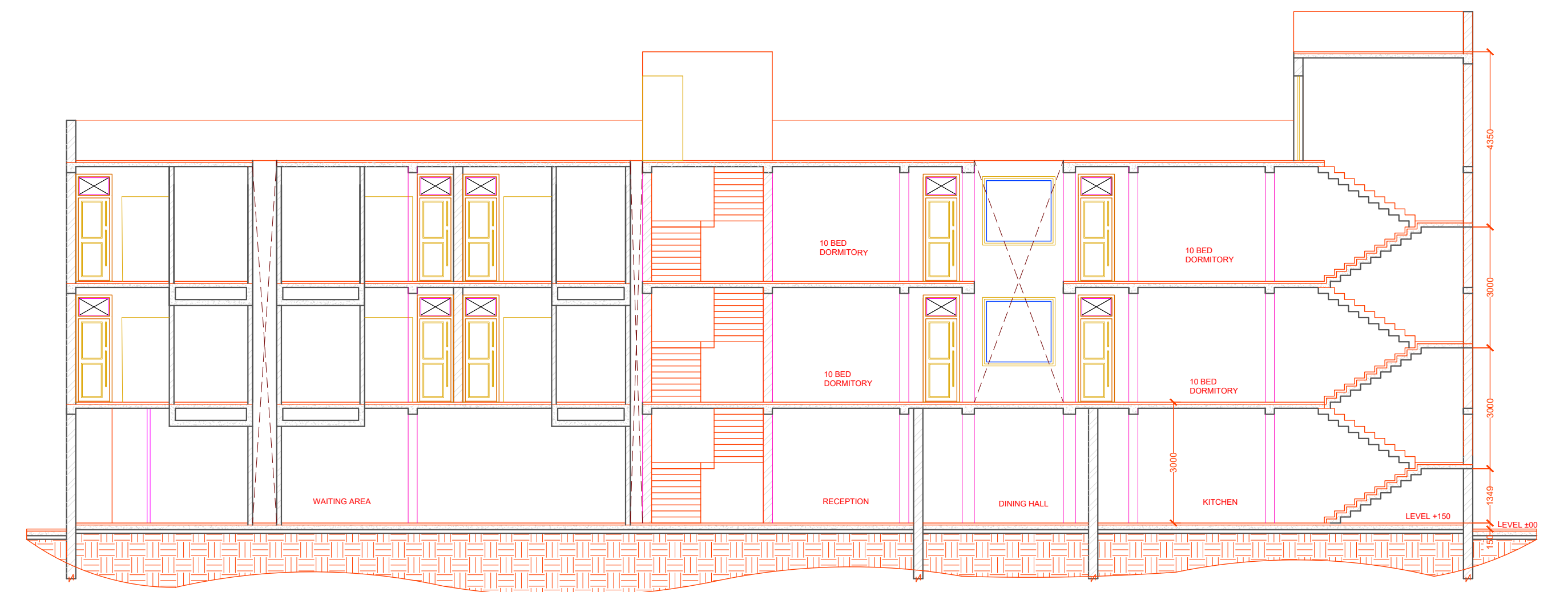
TERRACE PLAN



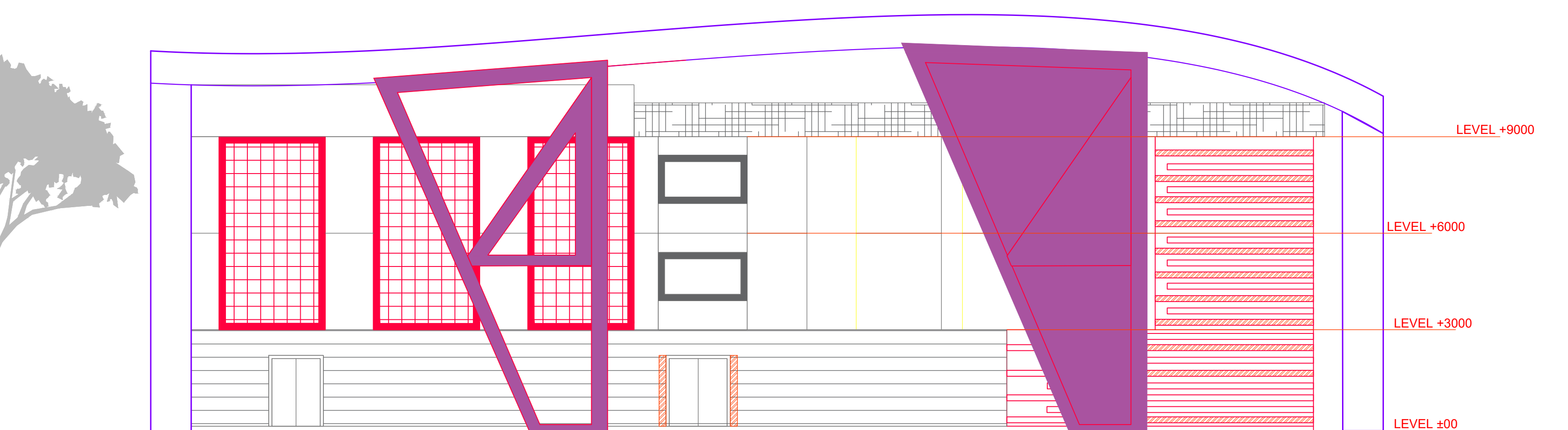
SECTION AT CD



TYPICAL FLOOR PLAN
[FIRST & SECOND FLOOR]



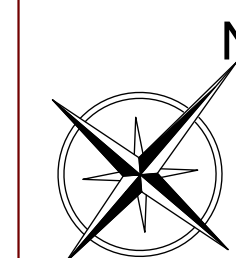
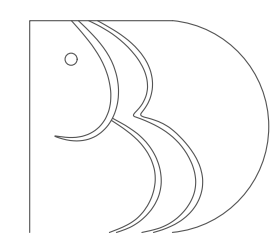
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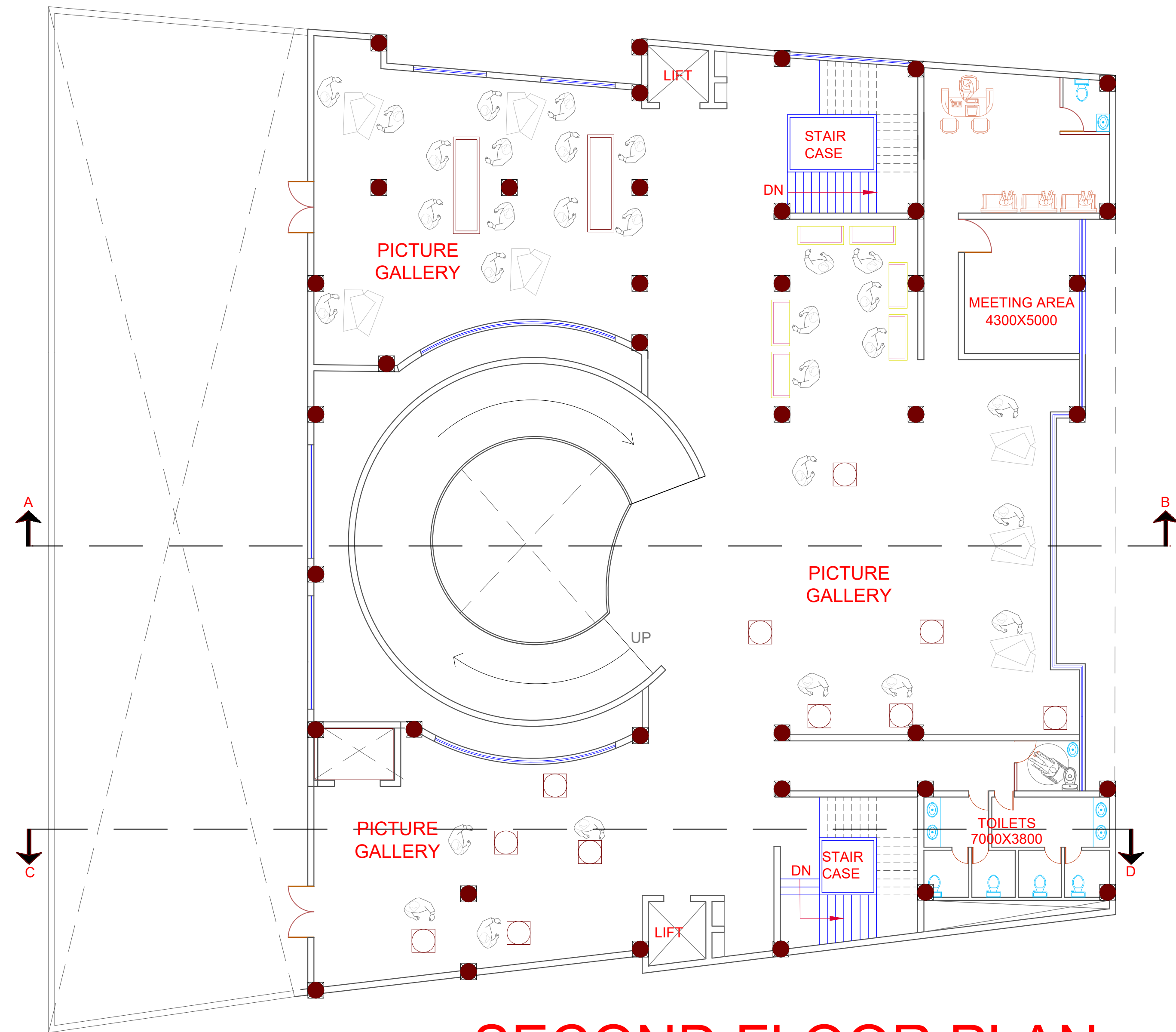


FRONT ELEVATION

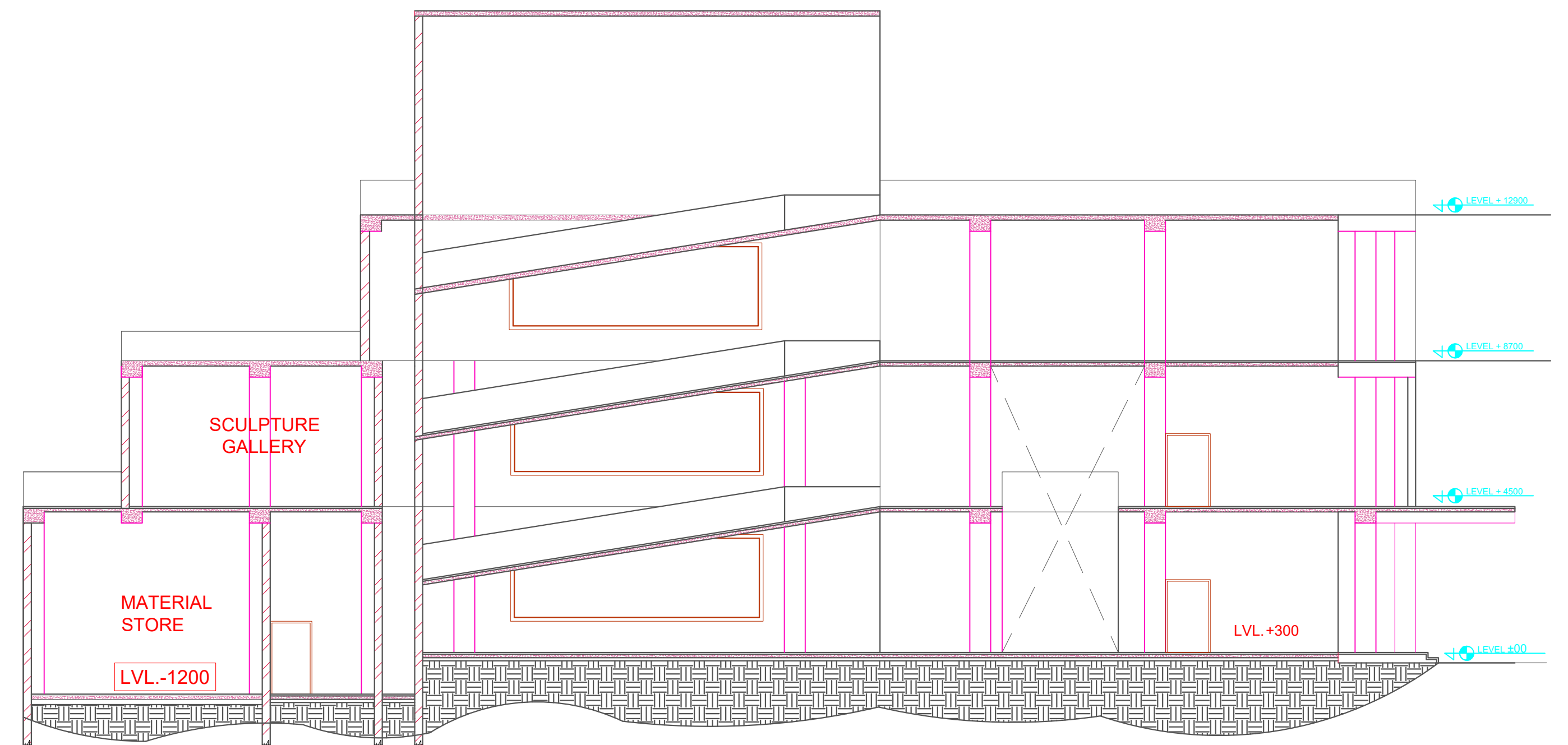
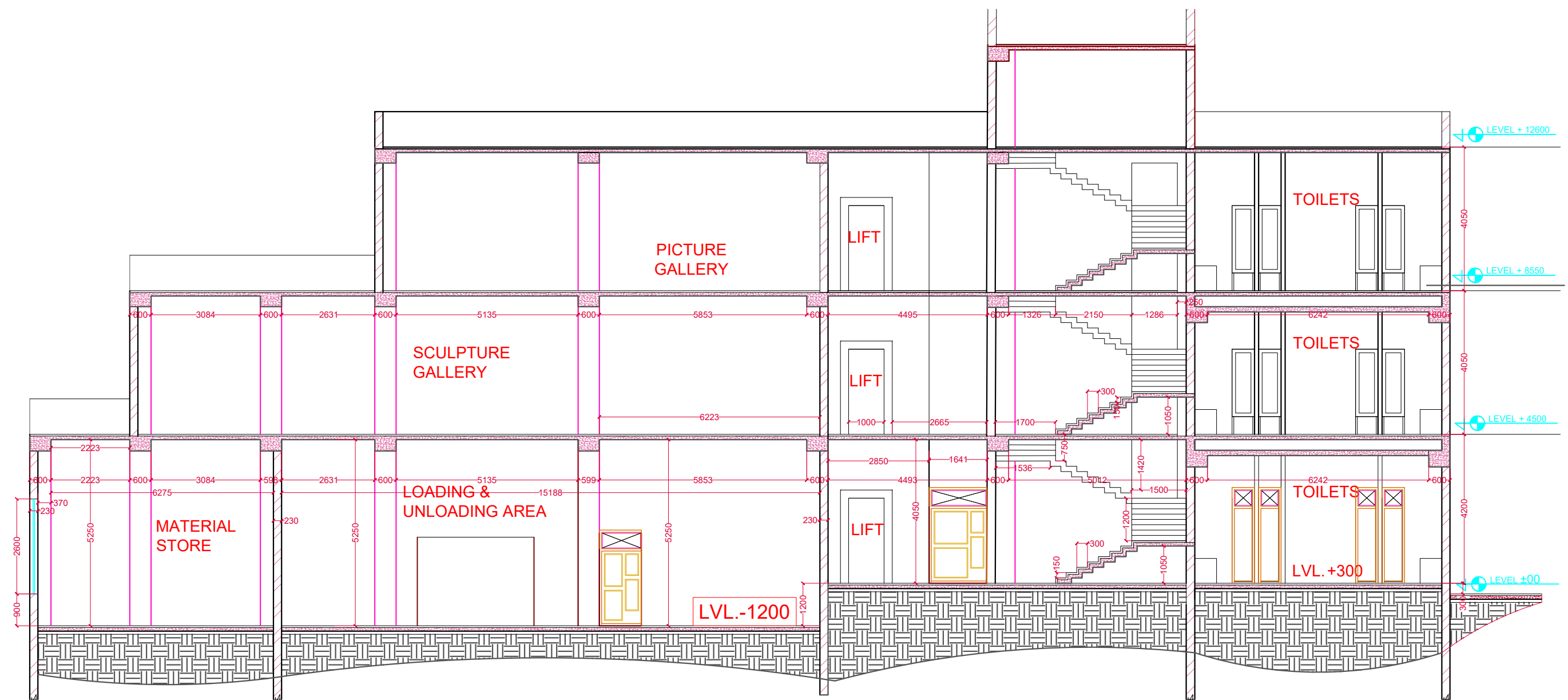
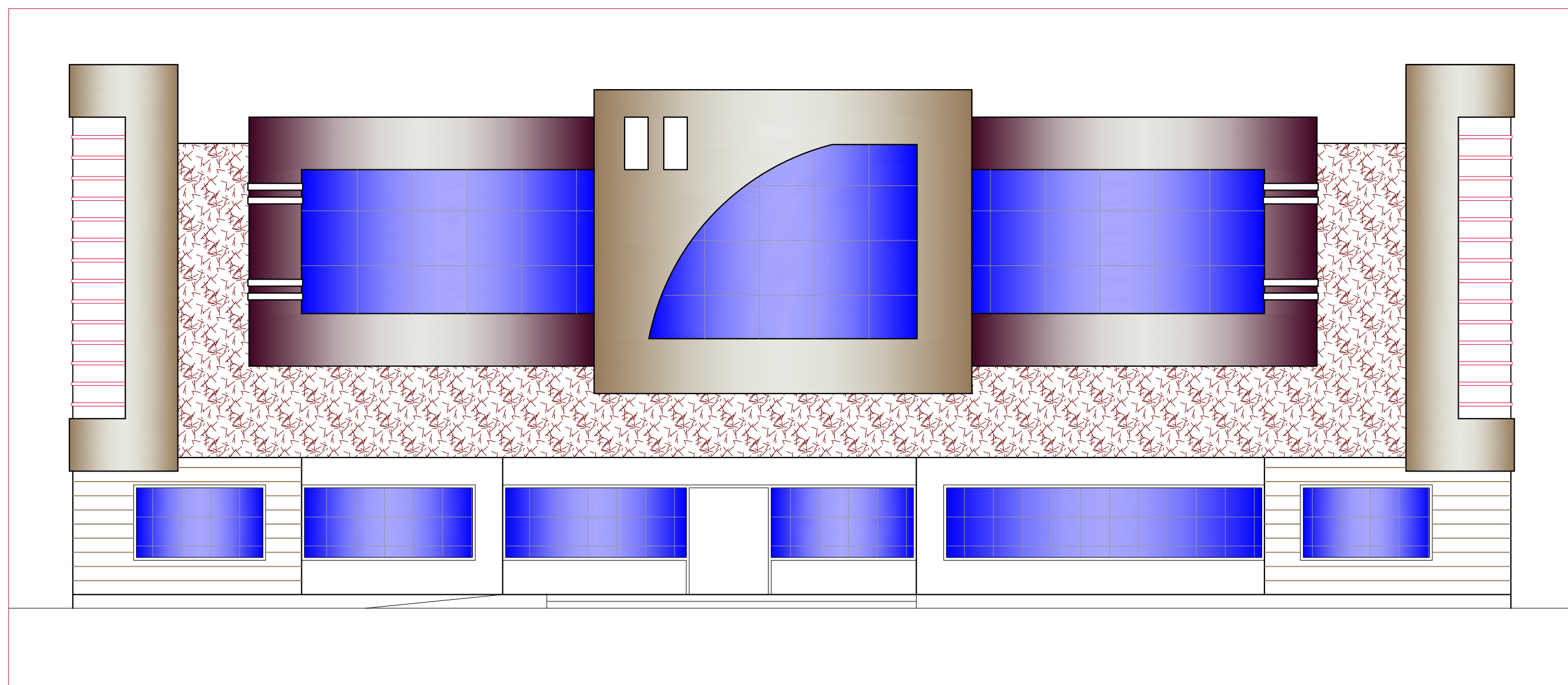
NOTE :

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- SCALE-



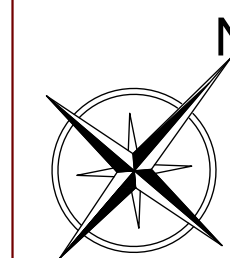
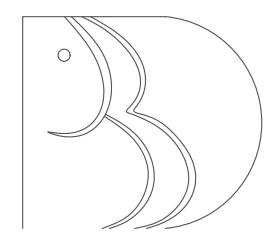


SECOND FLOOR PLAN

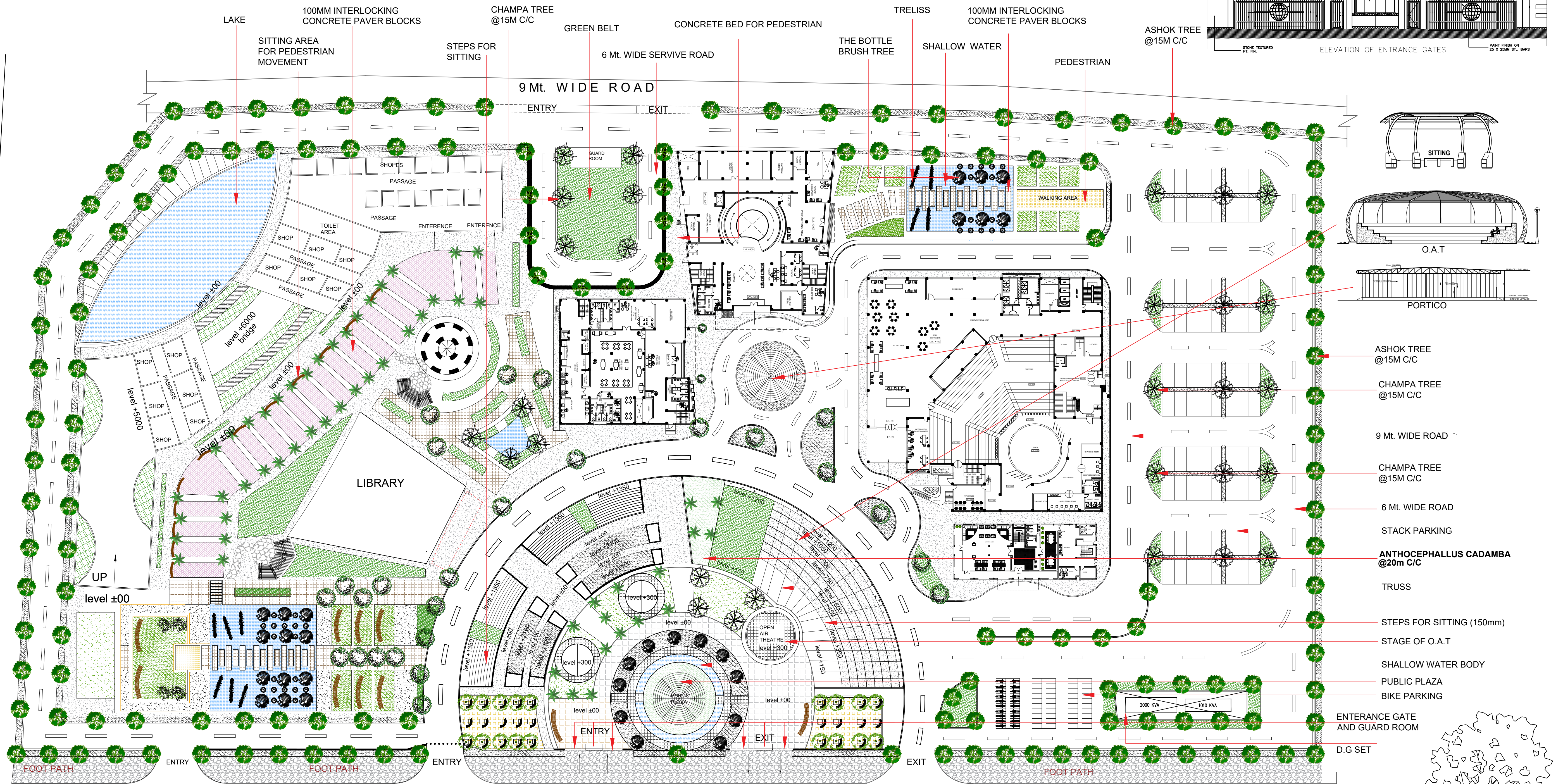



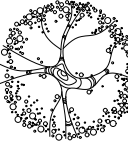


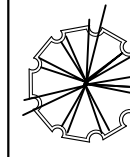
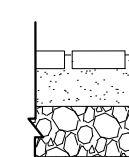
NOTE :

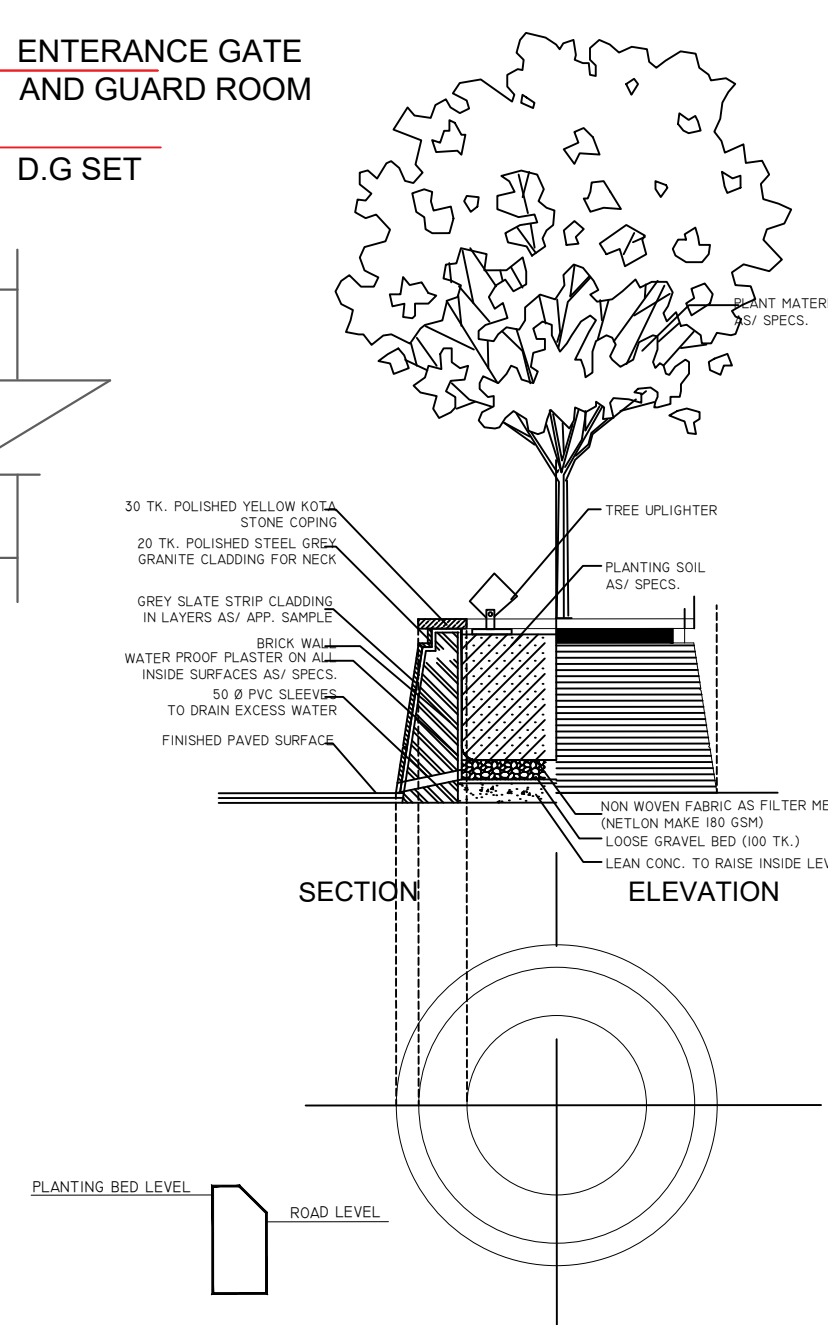
- ALL DIMENSIONS IN MM
- SCALE-



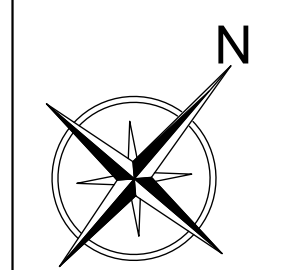
CONVENTION CENTER



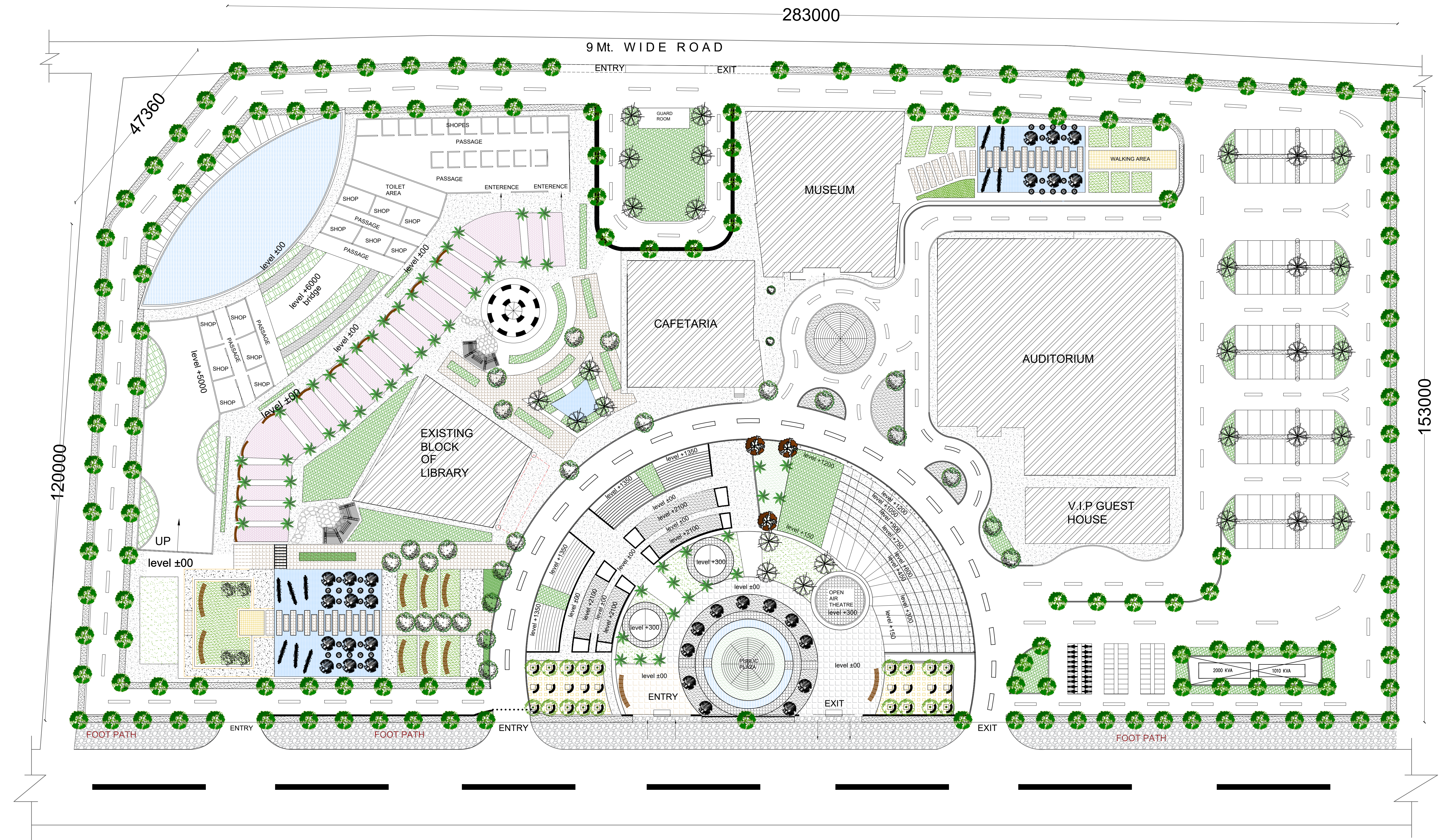
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT TYPE REMARK USAGE</p>	<p><i>Anthocephalus cadamba</i> KADAMB DECIDUOUS / QUICK GROWING 15M-21M 12M-15M AUG-SEP ORANGE YES FULL SUN PREFERS WARM MOIST CLIMATE. IT CAN BE SUCCESSFULLY GROWN IN SUBHUMID CLIMATE. IT REQUIRES DEEP WELL DRAINED LIGHT SOIL. IT'S A BEAUTIFUL TALL TREE WITH DENSE FOLIAGE & CONICAL CROWN. MUCH ADMIRER FOR ITS GOLDEN BALL OF FLOWERS. VERY SUITABLE FOR ROAD SIDE PLANTATION</p>
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT REMARK USAGE</p>	<p><i>Casia toba</i> AMALAKI DECIDUOUS / SMALL TO MED SIZED 10M - 15M 9M - 13M SCENTED FLOWERS APPEAR THROUGHOUT YEAR YELLOW - FULL SUN GROWS IN WIDE RANGE OF CLIMATIC CONDITIONS. IT CAN ALSO WITH STAND EXCESSIVE DROUGHT. IT IS ONE OF THE MOST BEAUTIFUL TREES IN INDIA SO PLANTED IN PARKS IN CLUMPS & ALSO ALONG SMALL CITY ROADS</p>
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT REMARK USAGE</p>	<p><i>ROYAL POINCIANA</i> GULMOHAR TREE EVERGREEN TREE 7 M - 10M FLOWER THROUGHOUT THE YEAR BRIGHT RED - FULL SUN GROWS WELL IN WARM HUMID AND MOIST SOIL PLANTED AT THE BACKGROUND OF SMALL GARDENS, AROUND THE BORDERS OF LAKES, POOLS AND TANKS</p>
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT REMARK USAGE</p>	<p><i>Saraca ashoka</i> ASHOK EVERGREEN 10-15 M 2.5 - 4 M STAR SHAPED YELLOWISH GREEN - MARCH - APRIL FULL SUN GROWS IN ANY TYPE OF SOIL PLANTED TO DEFINE AVENUES</p>
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT REMARK</p>	<p><i>Plumeria alba</i> CHAMPA, FRANGIPANI, PAGODA TREE EVERGREEN 4 M 3 M SCENTED FLOWERS APPEAR THROUGHOUT THE YEAR WHITE WITH YELLOW THROAT YES FULL SUN FLOWERS BETTER IN POOR AND POROUS SOIL</p>
 <p>BOTANICAL NAME LOCAL NAME HEIGHT SPREAD FLOWERING SEASON COLOUR OF FLOWER FRAGRANCE LIGHT REQUIREMENT REMARK</p>	<p><i>GOLDEN DURANTA (VARIGATED ORNAMENTAL HEDGE)</i> -GD DWARF SMALL LEAVES ARALIAS (4'-5') -AR EG. ORNAMENTAL SHINNING GREEN PATCHY LEAVES.</p>



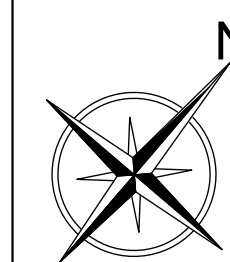
ELECTIVE : LANDSCAPE DESIGN



CONVENTION
CENTER



SITE PLAN



THESIS GUIDE
PROF. SANGEETA SHARMA

KAUSTUBH
1190101016

CASE STUDY-01

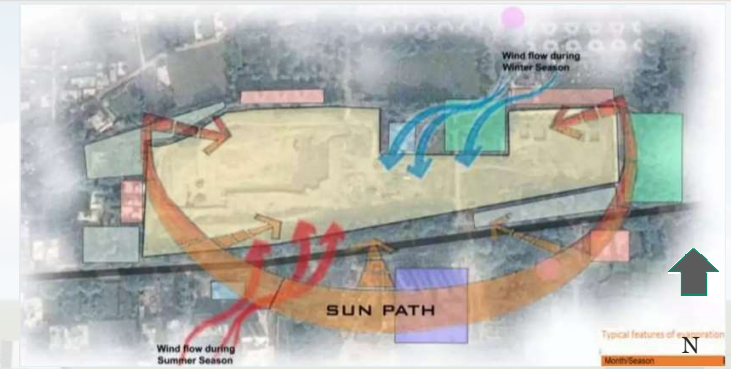
INTRODUCTION :

Varanasi, the land of lord Shiva is also land of many ancient and exquisite arts. To boost moral of Such artists by providing a platform to showcase their art, the TFC (Pd. Deendayal Hastkala Sankul) is an art museum with distinct galleries like textile, hand loom, carpet, wood carving and many more.

The TFC & CM project located at Bada Lalpur, Varanasi, being developed by Ministry of Textile on **7.93 acres** land and having constructed area of around 43,450 sqm. The project is expected to be completed by August 2017 and will offer facilities such as Convention hall, Exhibition area, Shops, Marts, Food Court, Restaurants, Guest Houses, Dormitories, Offices, Crafts Museum and Amphitheater along with support infrastructure and amenities focused at providing integrated platform for promotion of Handloom, Handicrafts and Carpet Sector of Varanasi region.

FACILITIES

- Convention hall
- Exhibition area
- Shops
- Marts
- Food Court
- Restaurants
- Guest Houses
- Dormitories
- Offices
- Crafts Museum
- Amphitheatre
- Basement parking

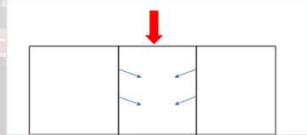


CONCEPT

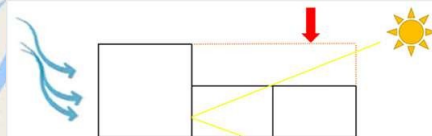


AS SITE DOES'NT OFFER ANY OUTSIDE VIEW

SUN AND WIND PATH



INTROVERTED DESIGN FOR ITS OWN VIEW



TO WELCOME SUNLIGHT AND TO CHECK COLD WINDS DURING WINTER.



The project is strategically located near between NH-29 (Varanasi Gorakhpur Road) and NH-56 (Varanasi Sultanpur which shall reduce travel time to TFC from Varanasi Airport o 30 mins.

- Name of Project- Trade Facilitation Centre & Crafts Museum at Varanasi.
- Owner-M inistry of Textiles Govt. of India.
- Site Area/Location 7.93 Acres land near Kendranchal Colony at Bada Lalpur, Varanasi.
- Construction Agency-Tata Projects Limited.
- Construction Started-2014
- Construction completed-2017

Supporting Facilities provided:

- Surface Parking with Parking capacity (82 no's of cars approx.)
- Stand-by generator Supply and Uninterruptible Power Supply
- Central Air-conditioning and Ventilation System
- Kitchen and Food Kiosks provided with Exhaust System
- Lifts and Escalators
- Fire Detection, Firefighting and Public Address System
- EPABX, Server Room

- Rain Water Harvesting System
- Sewage Treatment Plant (STP)
- Fresh Water and Treated Water Supply
- Internal Electric Substation
- HVAC Plant Room
- Pump Room and Under Ground / Over Head Tanks
- Emergency exits for easy evacuation
- Interestingly landscaped and shaded courtyards with water bodies of international standard



CRAFT MUSEUM ENTRANCE

TRADE FACILITATION CENTRE AND CRAFTS MUSEUM, VARANASI

THESIS GUIDE :
PROF. SANGEETA SHARMA

KAUSTUBH
1190101016

CASE STUDY -01

FACILITY CHART

Floors	BLOCK 1 Marts cum Office	BLOCK 2 Convention Centre cum Exhibition	BLOCK 3 Food Court cum Guest House	BLOCK 4 Shopping Arcade	Entrance Plaza	BLOCK 5 Museum
Basement (2 levels)	Parking capacity (369 no's of cars 434 no's of 2 wheelers approx.)				-	-
Ground Floor	<ul style="list-style-type: none"> • Marts (11 no's) • Exhibition Space (open courtyard) • Public Amenities 	<ul style="list-style-type: none"> • Convention Centre with VIP Lounge and green rooms. • Atrium (Triple height) • Exhibition Gallery • Atrium and convention center can be converted to exhibition space. • Public Amenities 	<ul style="list-style-type: none"> • Food Kiosks (9 no's) • Kitchen Area/ Store • Indoor Seating Area • Courtyard Seating Area • Public Amenities • Courtyard can be converted to multi-purpose exhibition space. 	<ul style="list-style-type: none"> • Enquiry Counter • Shops (14 no's), • Space for Kiosks. 	Entrance Plaza with courtyard surrounded with 18 M high petals	Not applicable in the present scope of work
1st Floor	<ul style="list-style-type: none"> • Marts (13 no's) • ATMs (2nos) • Gallery (1no) • Public Amenities 	<ul style="list-style-type: none"> • Marts (8 Nos) • Exhibition Gallery all around atrium • Public Amenities 	<ul style="list-style-type: none"> • Restaurants (2nos) with Kitchen Areas • Public Amenities 	<ul style="list-style-type: none"> • Shops (14 no's) • Lounge 		
2nd Floor	<ul style="list-style-type: none"> • Marts (15 Nos) • Business Centre • Public Amenities 	<ul style="list-style-type: none"> • Marts (4 Nos) • Exhibition Gallery all around atrium. 	<ul style="list-style-type: none"> • 15 Nos Dormitory Rooms (Total 81 Beds) • Office Space • Lounge Seating • Public Amenities 	NA		
3rd Floor	<ul style="list-style-type: none"> • Marts (13nos) • National Centre for Trade Information 	NA	<ul style="list-style-type: none"> • Double Occupancy Guest Rooms with attached toilets (18 no's). • Common Hall and Pantry Office Space • Public Amenities 	NA		

BLOCK 1: MARTS CUM OFFICE BLOCK:

G+3 structure, having total built-up area of 6,050 sq. mt (excluding basements).

• Lift lobby with 3 passenger elevators.

Ground Floor : The ground floor of the block consists of Marts (11 Nos) and a large central courtyard capable of hosting events and exhibitions

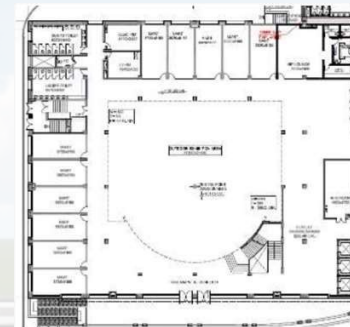
First Floor: The first floor of the block consists of Marts (13 Nos), 2 ATM blocks and exhibition gallery capable of hosting events and exhibitions

Second Floor The second floor of the block consists of Marts (15 Nos) and business center.

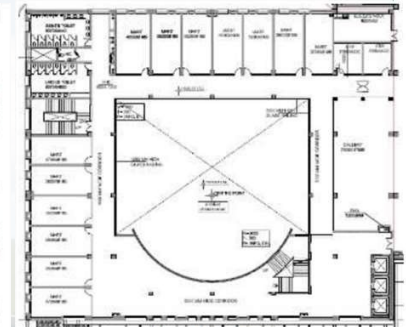
Third Floor The third floor of the block consists of Marts (13 Nos and National Centre for Trade Information.

Description	Total Units	Unit Size (mm)
Mart	3	3735 x 8185
	1	3935 x 8185
	1	3905 x 8185
	6	3920 x 8185
Mart	3	3735 x 8185
	1	3935 x 8185
	1	3905 x 8185
	7	3920 x 8185
	1	4655 x 8185
ATM	2	3780 x 4220
Gallery	1	7535 x 17955
Business center	1	7905 x 17955
Mart	3	3735 x 8185
	1	3935 x 8185
	1	3905 x 8185
	7	3920 x 8185
	1	4840 x 8185
National Centre for Trade Information	1	28720 x 7420

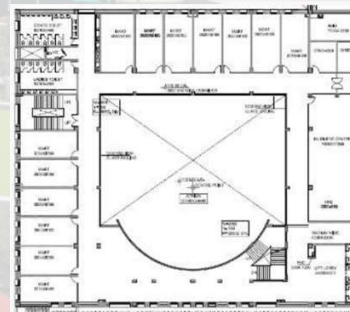
FLOOR PLANS OF BLOCK 1 (MART CUM OFFICE)



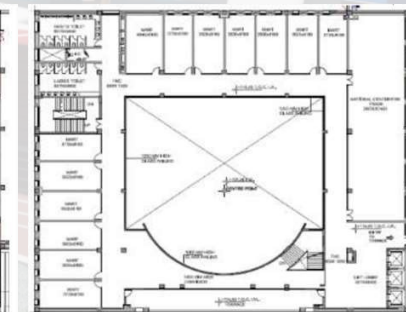
Ground Floor Plan



First Floor Plan



Second Floor Plan



Third Floor Plan

Facilities Available

•Marts are provided as warm shell facility with all basic amenities installed such as flooring, false ceiling, partitions, ambient lighting, central air-conditioning etc. as per the design guidelines for the facility.

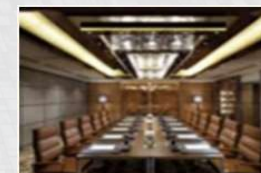
• All core services such as electrical, fire alarm, fire-fighting, air-conditioning, plumbing, power backup etc.

•Business center and National Centre for Trade Information Office are provided as warm shell facility with all basic amenities installed along with office furniture.

• Lift lobby with 3 passenger elevators.

• Public amenities for gents, ladies and physically handicapped.

•Common areas are non-air conditioned and finished with flooring, false ceiling, ambient lighting, firefighting, systems, PA system etc



CASE STUDY -01

BLOCK 2: CONVENTION CUM EXHIBITION HALL:

G+2 structure, having total built-up area of 7560sq. mt (excluding basements).

Ground Floor The ground floor of the block consists of triple height state of the art convention center sizing 52 M x 33 M. The convention hall is accompanied with VIP lounge, green room for both male and female participants along with adequate public amenities. **The triple height atrium** provides a grand entrance to the block and capable of hosting events and exhibitions.

First Floor consists of Marts (8 Nos) along with Exhibition Gallery.

Description	Total Units	Unit Size (mm)
Mart	1	10420 x 3735
	5	10420 x 3920
	1	7790 x 3920
	1	7790 x 4105

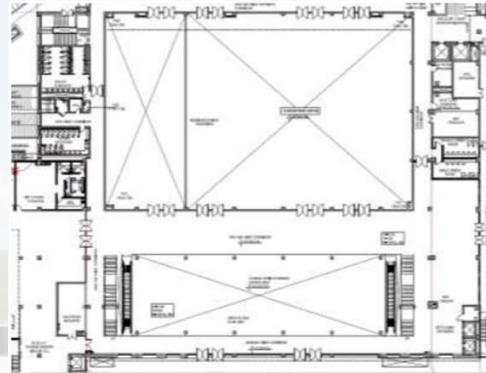
Second Floor consists of Marts (4 Nos) along with Exhibition Gallery.

Description	Total Units	Unit Size (mm)
Mart	1	10420 x 3735
	2	10420 x 3920
	1	10420 x 4105

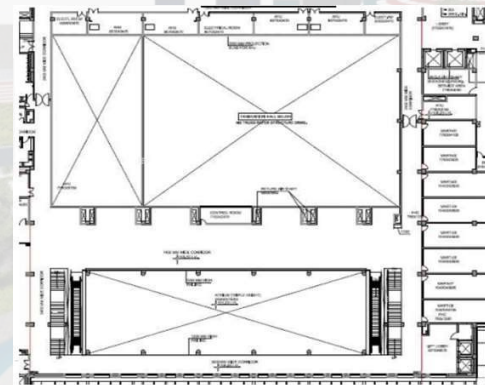
	SIZE (sqft)	AREA(sqft)	NO'S
CONVENTION	172'-9" X 110'-9"	19135	1
PRE FUNCTION	218'-0" X 81'-9"	17820	1

Facilities Available

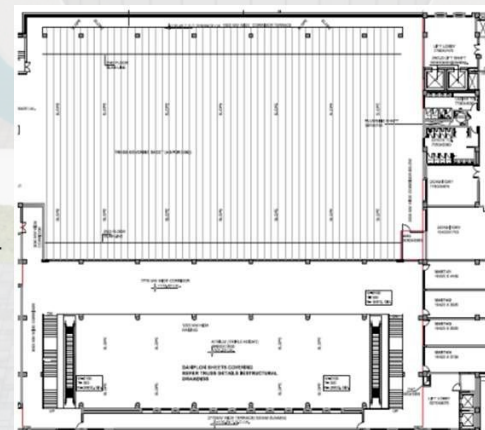
- Convention Hall shall be provided as warm shell facility with flooring, false ceiling, acoustical door, electrical fixtures, central air-conditioning, speakers etc. as per the design guidelines for the facility. Only connectivity facilities are provided for future Audio Visual connectivity.
- Convention hall shall be provided with approx. **600 SEATS** collapsible/retractable theater style seating.
 - VIP lounge shall be provided with toilet, pantry and restroom
 - Marts shall be provided as warm shell facility with flooring, false ceiling, aluminum glazed door, electrical fixtures, central air-conditioning, power points, telephone and data points etc. as per the design guidelines for the facility.
 - Common areas are air conditioned and finished with flooring, false ceiling, ambient lighting, firefighting, systems etc.
 - **Lift lobby with 2 passenger elevators.**
 - All core services such as electrical, fire detection and fire-fighting, PA system, air conditioning, plumbing, power backup etc.
 - **2 sets of escalators** between ground and first floor.



Ground Floor Plan



First Floor Plan



Second Floor Plan

OVERALL PLANNING

- The theatre is a fan shaped typology.
- The auditorium is surrounded by two foyers each of 130 sqm
- Two staircases occupying area of 30 sqm. Each is located in both sides.
- Toilets on both the sides are located adjoining the foyer each with 6 cubicles and an area of 70 sqm.
- At the back stage there is a 6m wide corridor.
- Beside this corridor various spaces such as :
 - 1.lift lobby
 - 2.conference rooms

DETAILS

- Distance between seats and stage : 4.2
- Height of the ceiling: 3.5 M in the last row
- 7.2 M in the first row
- 6.5 M from the stage.



- Distance between each row (seating) is 0.50 M
- Slope angle: 10 deg
- Aisle Width : 1.5 M at the first row.
- Duct spacing: 2.5M
- Speaker spacing: 2M

STRUCTURAL DETAILS

- The auditorium is mainly held by an RCC framed system.
- The two shorter sides contains 7 columns and the longer sides contains 5 columns.
- Centre to Centre column distance is 6M.
- The slab is monolithic and is two way slab surrounded by columns.

AUDITORIUM PLANNING

- Fan shaped form.
- It has 4 Aisles each of varying width from 1.5 to 2.1M.
- The stage has an area of 100.SQM
- It has totally 21 rows.
- Each row contains 30 seats



MATERIALS

- Wood Panels.
- Fabric floor floor.
- Glass wool for insulation.
- Accoustic Panels.
- Steel Doors

FABRIC MOUNTED WALL PANEL DETAIL

CASE STUDY-01

BLOCK 3: FOOD COURT CUM GUEST HOUSE:

G+3 structure, having total built-up area of 7470sq. mt (excluding basements).

Ground Floor The ground floor of the block consists of food court with both indoor and outdoor seating spaces. The courtyard space has been envisaged to be converted to form exhibition space or area for other activities as per requirement. The floor comprises of the following components

Description	Total Units	Unit Size (mm)
Kiosk1	7	3920 x 5570
Kiosk2	1	3735 x 5570
Kiosk3	1	4910 x 13640
Cash Counter	2	5140 x 2585
Kitchen Addition Area	1	18045 x 2770
Indoor AC seating area	1	40900 x 13700
Outdoor Seating area	1	26600 x 26970

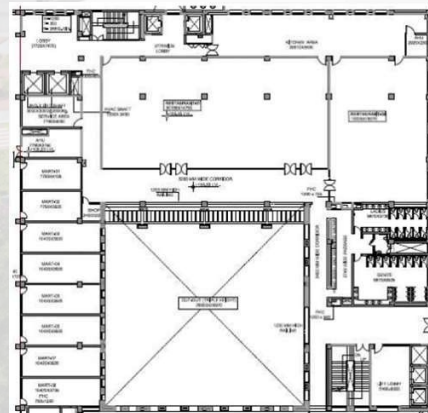
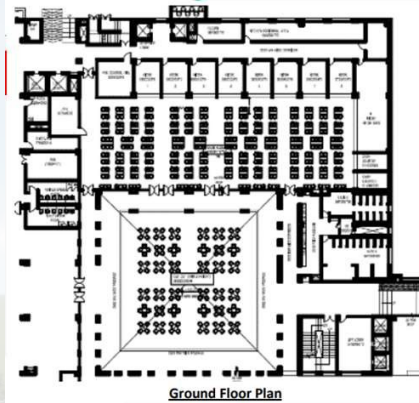
First Floor First floor consists of restaurants as detailed below

Description	Total Units	Unit Size (mm)
Restaurant 1	1	30155 x 14790
Restaurant 2	1	13025 x 19270
Kitchen Space	1	28610 X 5500
Shop	1	2400 x 2255

Second Floor Second Floor consists of dormitories and an office space as detailed below:

Description	Total Units	Unit Size (mm)	Beds
Dormitory (Type 1)	1	10420 x 7700	10 Nos
Dormitory (Type 2)	1	7790 x 5875	6 Nos
Dormitory (Type 3)	2	5255 x 8785	5 Nos Each
Dormitory (Type 4)	4	3920 x 8785	5 Nos Each
Dormitory (Type 5)	2	8220 x 3920	4 Nos Each
Dormitory (Type 6)	1	8220 x 4970	4 Nos
Dormitory (Type 7)	1	10485 x 5685	6 Nos
Dormitory (Type 8)	1	5560 x 11070	6 Nos
Dormitory (Type 9)	1	3905 x 11070	6 Nos
Dormitory (Type 10)	1	4105 x 11070	5 Nos
Office	1	6340 x 11770	-

- 81 single occupancy beds and lockers shall be provided for dormitories.
- Two service lifts and staircase are provided at the service core.
- 2 sets of public utility facility for gents, ladies and physically handicapped for convenient approach from dormitories.
- 2 Lift lobbies with 2 passenger elevators each and one staircase



Third Floor Third Floor consists of total 18 double occupancy guest rooms with attached toilets and an office space.

BLOCK 4: SHOPPING ARCADE

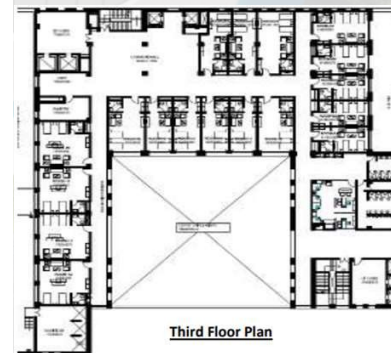
G+1 structure having total built-up area of 2,300 sq. mt. Shopping Arcade has a total of 28 Shops, located on Ground and First floor levels, having aa area of about 320 Sq. ft.



BLOCK 5: CRAFTS MUSEUM

The Museum block, a **G+2 structure** having total built-up area of 3950 sq. mt

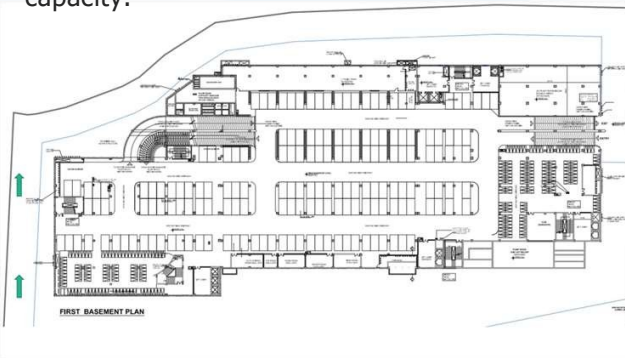
Amphitheater: The open air theatre surrounded by the arms of the Museum Block has been designed to accommodate 250 to 300 guests and shall host multiple cultural events and light and sound shows.



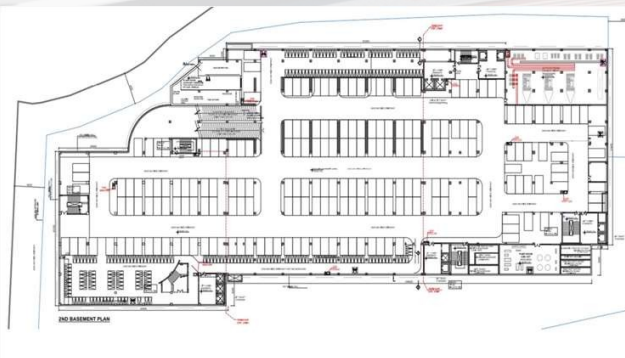
CASE STUDY-01

BASEMENT LEVEL

The basement is of 2 levels consisting total parking of 369 cars and 434 2 wheelers capacity.



BASEMENT PLAN 01



BASEMENT PLAN 02

BUILDING MATERIALS

FLOORING

- Vitrified tiles are used for flooring of Interior space,
- Flooring of common area is of sand stone flooring.
- Flooring of open courtyard is of stone flooring.
- Flooring of convention all is of Granite.

CEILING

- Acoustical Tile Flooring in the interior spaces.
- Gypsum Board False ceiling in the open area.
- Gypsum False Ceiling in the convention hall.

FURNITURE

- Retractable Seating in the convention hall.
- Planters and inbuilt seating's in the open courtyard.

BUILDING INFRASTRUCTURE

1. DETAILS OF WATER TANKS



OVERHEAD TANKS

Fire	Office	Convention	Food	Shop	Museum
	10,000 L	10,000 L	10,000 L	10,000 L	10,000 L
Domestic	9,000 L	14,000 L	32,000 L	-	9,500 L
Flushing	6,000 L	9,000 L	3,000 L	-	6,500 L
HVAC (Water tank)	35,000 L	-	-	-	-

UNDER GROUND TANKS

Number of tanks (Raw / Domestic / Fire)	1,10,000 L (Raw Water Tank)
Capacity	1,10,000 L (Treated Water Tank)
	1,00,000 L X 2 (Fire Tank) = 2,00,000 L



2. DETAILS OF LIFTS AND STAIRCASES

DESCRIPTION	QUANTITY
Staircases in the building	11
Lifts	11 LIFTS (16 PAX EACH)
Good lift	02 Lift (1600 Kg Each)
Escalators	2 Nos

3.Air conditioning is total of 3 each 400 TR.

4.Fire protection system provided with Wet risers, Sprinklers, Gas suppression system, Portable fire extinguishers.

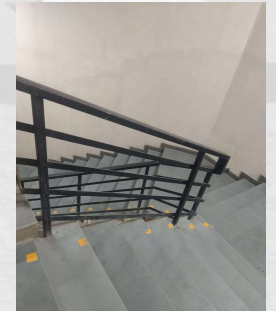
5.Fire Alarm System provided with smoke detectors, total number of is 2076.

6.CCTV system- Total dome cameras is 120, total bullet camera 54, total PTZ camera 40.

7.Landscaping –Area of the lawn is 16000 sqm.
2 fountains, area are 35 sqm and 60sqm respectively.

DESCRIPTION OF AVAILABLE FURNITURE

S No	Description	Size	Qty
Food Court & Dining			
1	Café Table-1	750mm x 750mm x 750mm	11
2	Café Table-2	1200mm x 750mm x 750mm	68
3	Café Table-3	1800mm x 750mm x 750mm	15
4	Café Chair Indoor	-	328
Office Furniture			
1	Workstation-1	1200mm x 1650mm x 1200mm	17
2	Workstation-2	1200mm x 1500mm x 1200mm	27
3	Workstation-3	3200mm x 2700mm x 1200mm	5
4	Workstation-4	3200mm x 2700mm x 1200mm	3
5	Workstation Chair	-	39
6	Manager Chair	-	8
7	Office Visitor Chair	-	16
8	Executive Table with Side Unit	MD-2200mm x 1190mm x 750mm ERU-1380mm x 480mm x 700mm Pedestal- 406mm x 550mm x 640mm	2
9	Executive Back Unit	2410mm x 425mm x 1215mm	2
10	Executive Main Chair	-	2
11	Executive Visitor Chair	-	6
12	Discussion Table -1	1500mm X 600mm X 750mm	3
13	Discussion Table -2	1350mm X 600mm X 750mm	2
14	Discussion Chair	-	24
15	Sofa 3 Seater	-	2
16	Sofa 2 Seater (For VIP Lounge)	-	6
17	Sofa 1 Seater	-	13
18	Side Table	500mm x 500mm x 428mm	14



The site plan illustrates the layout of various facilities and the corresponding circulation routes:

- Facilities:** OFFICE ENTRANCE, OFFICE, EXHIBITION & CONVENTION FACILITIES (including TRIUM, CONVENTION HALL (500), and PRE FUNCTION HALL), FOOD COURT, SHOPS & RECEPTION, ARRIVAL COURT, VISITOR ENTRANCE, and CRAFTS MUSEUM.
- Circulation Legend:**
 - Visitor Vehicular Circulation:** Indicated by blue dashed arrows.
 - Office & VIP Vehicular Circulation:** Indicated by red dashed arrows.
 - Pedestrian Circulation:** Indicated by purple dashed arrows.

CASE STUDY-02

Indira Gandhi Pratishthan which is the largest science and technology centre in

Uttar Pradesh. **Indira Gandhi Pratishthan** situated in **Lucknow**, India which is a perfect venue for all types of events & trade shows.

ABOUT: - The Indra Gandhi Pratishthan is a building is memorial to Smt. Indra Gandhi. - It is visualized as a symbol and institutional monument. The project was designed by Sikka Associates Delhi.

LOCATION AND SURROUNDINGS:

STATE - Uttar Pradesh.

DISTRICT- Lucknow.

AREA - 25 Acre (1,01,171 sqm)–

It is located in Vibhuti Khand Gomti Nagar, lucknow . To its north is the New Lucknow High Court and to its south is the TCS building and

Omex 2onvenient



ELEVATION



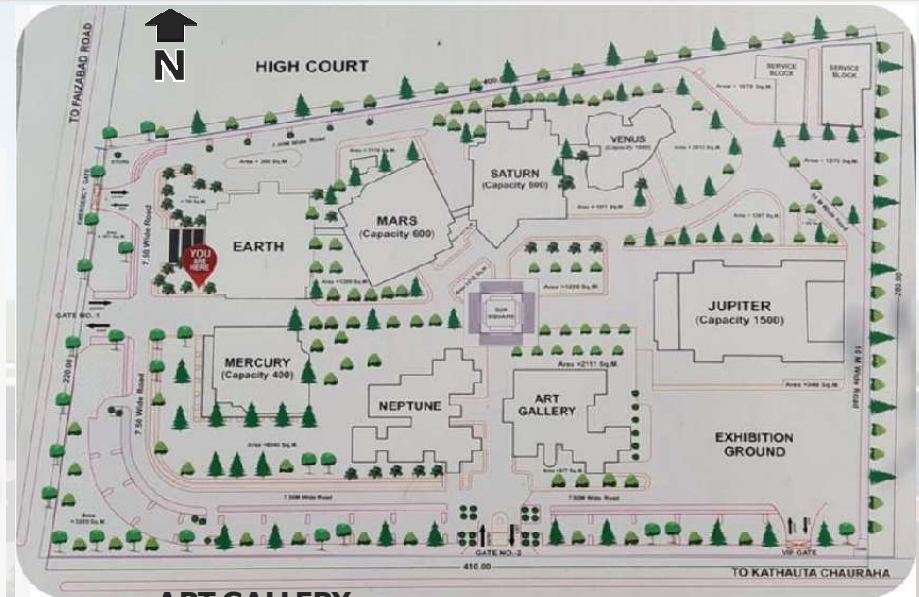
PLANNING CONCEPT: -

In Indra Gandhi Pratishthan , the campus consists of eight blocks. – All the blocks are planned around the Indira Stambh which is the focal point of the campus. - All the blocks are two or three storey high. Indra Gandhi Pratishthan has two entrance gateways from two roads. 1- From the west 2- From the south. Mandi Parishad road, - Use of pink Dhaultpur stone and rough chisled red sandstone on the facade gives a feeling of boldness, which reflects the bold personality of Indra Gandhi.

1. ART GALLERY
2. NEPTUNE
3. JUPITER
4. MERCURY
5. EARTH AND PLUTO
6. MARS
7. SATURN
8. VENUS



Based on the Concept of 'PLANETS OF SOLAR SYSTEM' IN MEMORIAL TO SMT. INDIRA GANDHI.



ART GALLERY

- It is a three story high building.
- A central atrium with staircase and ramp for handicapped connecting floors.
- It is provided with halls for display, painting and sculptors, workshop area and office area for staff.

SITE PLAN



INDIRA GANDHI STUMBH.



TRADE FACILITATION CENTRE AND CRAFTS MUSEUM, VARANASI

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PROF. SANGEETA SHARMA**

**KAUSTUBH
1190101016**

CASE STUDY-02

INDIRA GANDHI PRATISHTHAN, LUCKNOW

MERCURY AND MARS: It is the smallest containing capacity auditorium all the auditorium of IGP.

- No. of Entries/Exits : 5
- V.I.P Entry/Exit : 2
- Audience Entry/Exit : 2
- Main Entry/Exit : 1
- Dimension : 2.0 m

HEIGHT AND WIDTH OF THE CHAIRS

WIDTH - 400 MM

HEIGHT - 900 MM

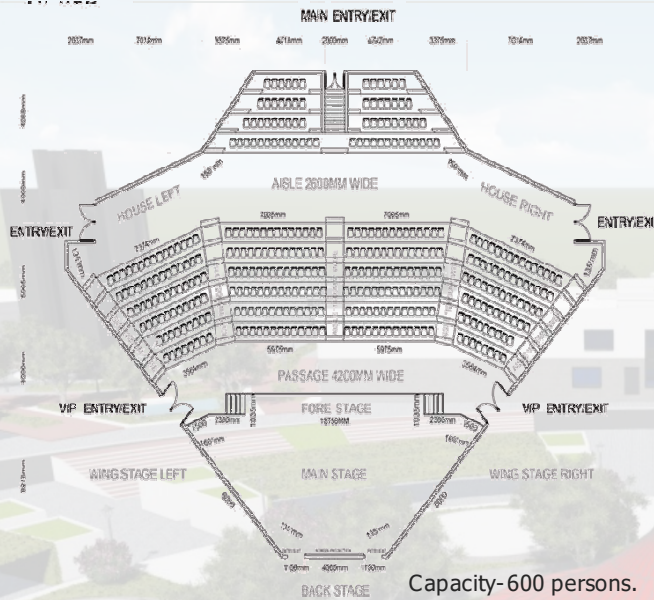


STAGE -



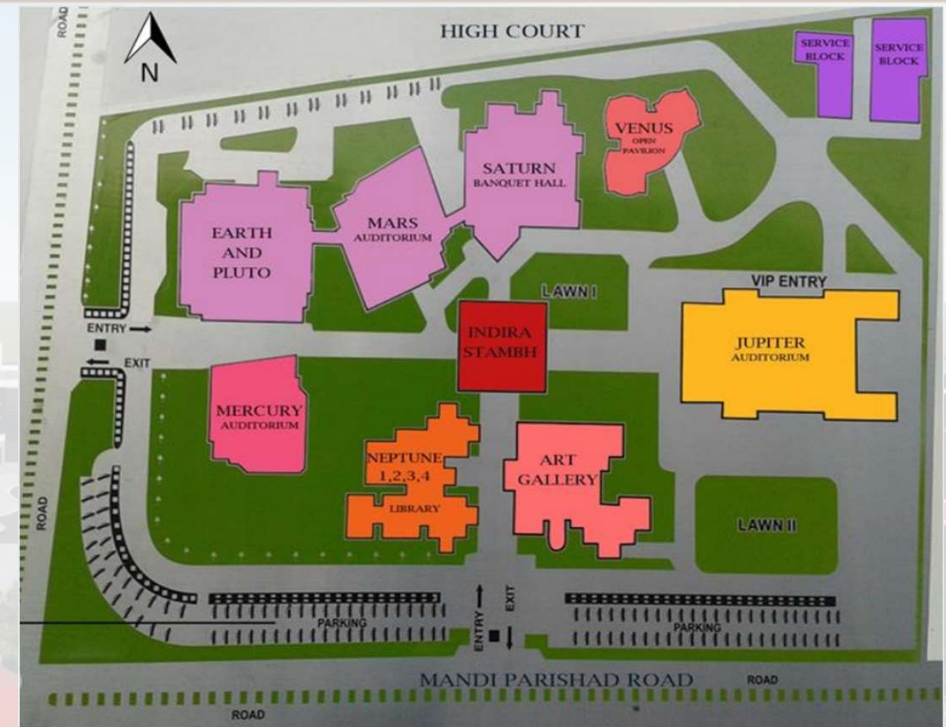
- STAGGERED SEATING
- NUMBER OF SEGMENTS : 4
- NUMBER OF ROWS : 10
- NUMBER OF SEATS : 399

- 2 ENTRIES
- WIDTH: 1100MM
- HEIGHT OF THE STAGE : 900MM
- WOODEN FLOORING
- THE FOCUS LIGHTS WERE OPERATED MANUALLY.
- PERFORATED SHEETS WERE USED TO BALANCE THE ACOUSTICS.
- WOODEN PANNELLING WAS USED FOR BETTER SOUND INSULATION.



Capacity-600 persons.

SITE PLAN



JUPITER: It is the largest containing capacity auditorium among all the auditorium of IGP.

- NO. OF ENTRIES/EXITS (HALL) : 6
- VIP ENTRY/EXIT : 2
- AUDIENCE ENTRY/EXIT : 4
- DIMENSION : 2.0 m.

- STAGGERED SEATING
- NUMBER OF SEGMENTS : 3
- NUMBER OF ROWS : 20
- NUMBER OF SEATS : 1500



CIRCULATION -

- AISLE : 1500MM
- CROSS AISLE : 4000MM
- DISTANCE FROM THE STAGE : 4200MM
- ACRYLIC CARPET

- AUDIENCE ENTRY/EXIT TO THE HALL
- V.I.P. ENTRY/EXIT TO THE AUDITORIUM
- AUDIENCE ENTRY/EXIT TO THE AUDITORIUM
- V.I.P. ENTRY/EXIT TO THE HALL
- PARTICIPANTS ENTRY/EXIT TO THE BACKSTAGE

CASE STUDY-02

CONFERENCE AND COMMITTEE HALL (EARTH)

- This is a three storey building
- It is provided with an entrance foyer, committee halls, conference halls, offices and VIP Suits.

The building has three entrances. - The main entrance is for the guests approached by a flight of steps which lead to the first floor. - The side entry is for the staff leading to the offices on ground floor the other entry is for VIP and leads directly to the VIP lounge.

GROUND FLOOR

- Conference Hall.- Capacity 100 seats. 2 lounges- VIP and VVIP.

FIRST FLOOR

- Conference Hall- capacity 60 seats and 40 seats.

SECOND FLOOR

- Auditorium- Capacity 200 Media Centre

SERVICE BLOCK

The service block consists of

- 3 AC Plants
- 450 TR each.
- Boiler- 300 KW
- 4 Chillers- 60 HP each.

- 4 Condenser- 50 HP each -
- Cooling Tower- 400 TR each.
- Generator- 320 KVA each

FLOOR TREATMENT

Meeting Hall- Carpet.

Committee hall- Carpet

Offices- Tera kota.

Toilet- Vetrified Tiles

Pantry- Vetrified Tiles

Corridors- Vetrified tiles

EXTERNAL FAÇADE

Dhaulpur stone. Red chisled sandstone

BANQUET HALL

- This is a single storey building.

- It has a huge hall which serves for marriage and receptions.

- It is provided with an entrance foyer, a hall (40.95 x 20.81m) and kitchen at the rear end of the building.

LIBRARY

- It has an administration room, stacking room and an audio visual room.
- Reading hall is provided on the ground floor as well as the first floor.
- Rare books section is provided on the second floor.

LANDSCAPING

- Landscaping has been provided along the periphery of the campus and between the building blocks.

- Small trees, hedges and flowering plants are planted in the planter.

- Trees like Gulmohar and Palm are planted along the sides of internal roads.

- Lawns are provided in the campus which are rented out for marriages and parties.

- 60% of the site is dedicated to landscaping and circulation.

LIGHT AND VENTILATION.

- Most part is enlightened by natural lighting.

- Large windows have been provided to give proper lighting in the corridors.

- Central atriums have been provided in the conf. and committee block, art galleries and library block

which provides diffused light. SERVICES SECURITY:

- Security guards are stationed 24 hr on the gates

- A proper record is maintained of everyone who enters the buildings. CCTV cameras monitor the movements on each floor.

FIRE FIGHTING :

- Smoke detectors and sprinklers are installed.

- Fire hoses are provided on each floor along with fire hydrants.

SURFACE TREATMENT –

•The auditorium have floors which are covered by carpets and walls with acoustic panels.

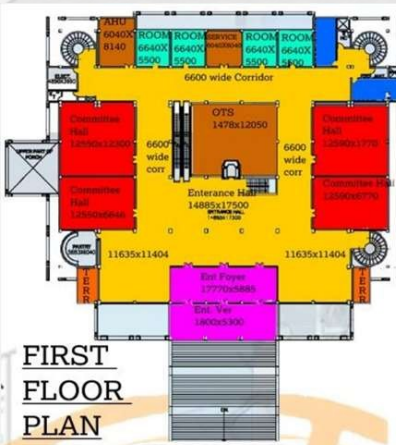
• Stage having wooden flooring and gypsum false ceiling.

• Green rooms have kota stone on floor.

•The entrance foyer, lobbies and corridors have vetrified glazed tiles for flooring and sand stone cladding on walls and gypsum for ceiling



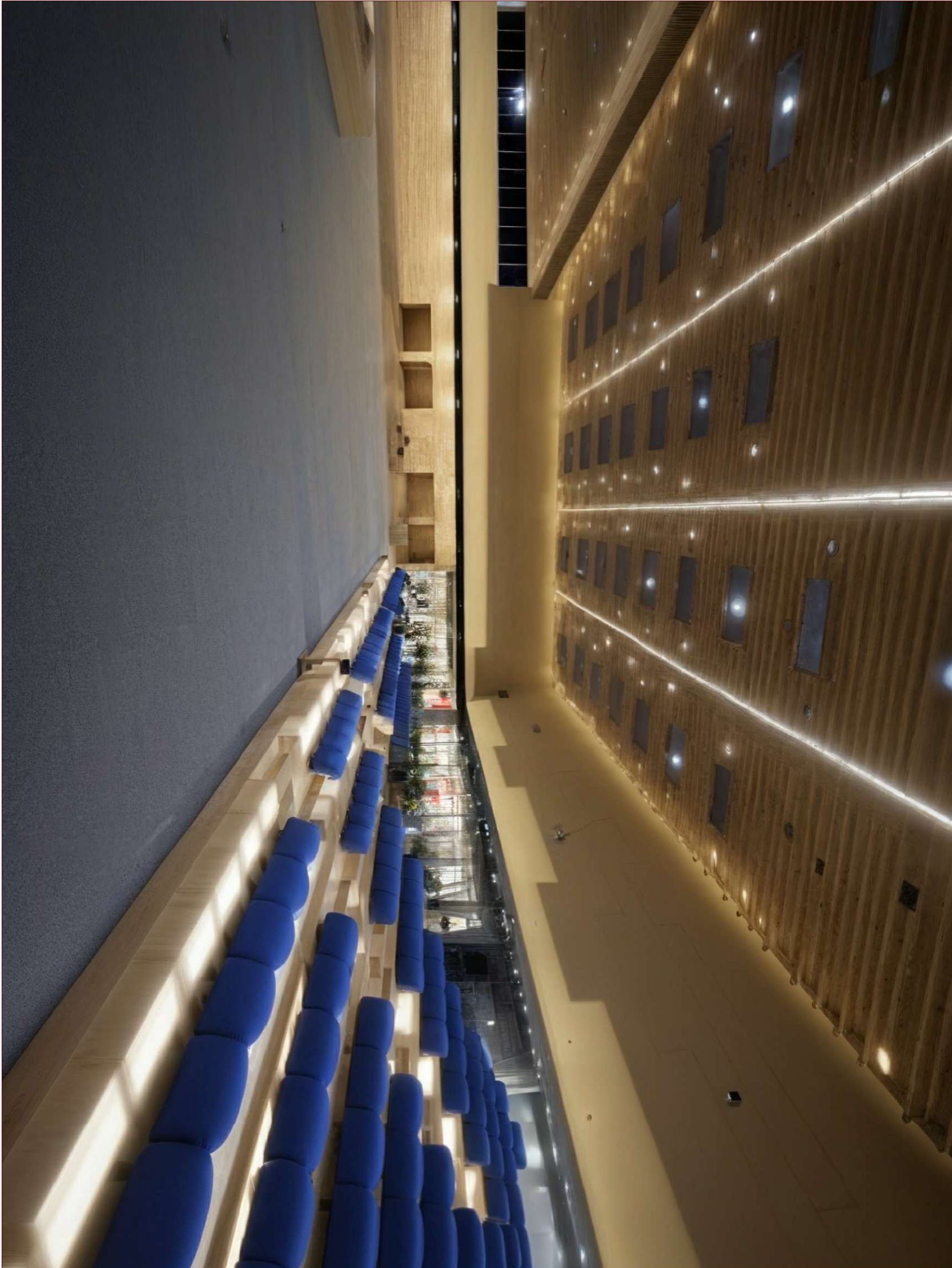
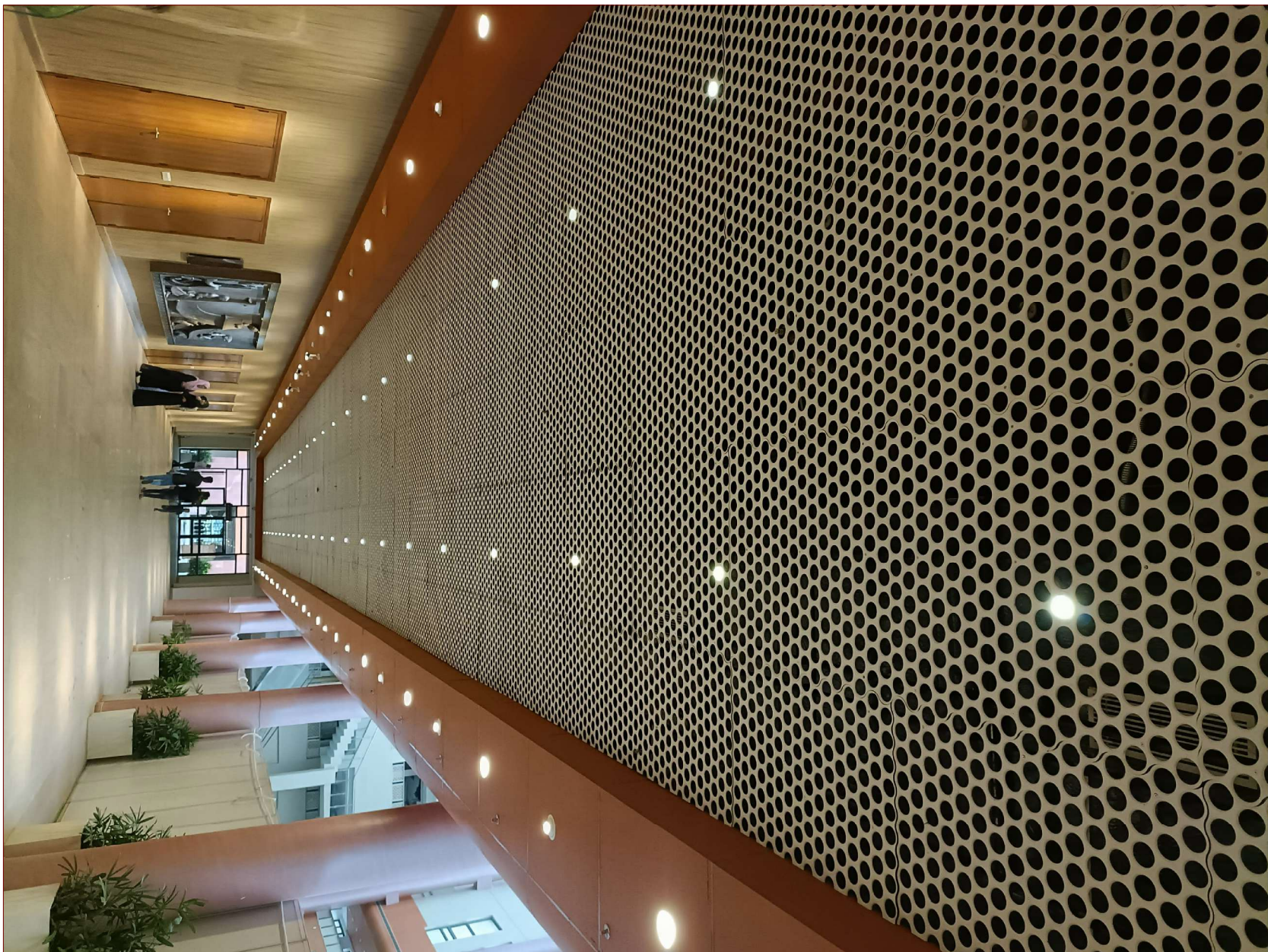
GROUND FLOOR PLAN



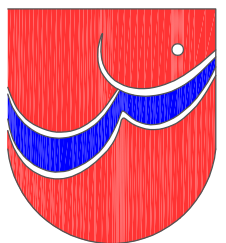
FIRST FLOOR PLAN



SECOND FLOOR PLAN



CONVENTION CENTER

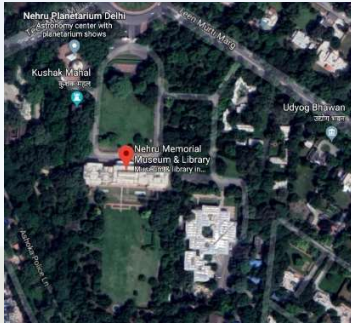


INTERIOR DESIGN

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SITE APPROACH



LIFT

- Total lift : 2
- Passenger Lift
- 6 person at time
- Barrier free movement

NEAREST STOPS

Central secretariat metro station – 4 k.m.
Indira Gandhi international airport – 10.5 k.m.
New Delhi railway station – 6.2 k.m.

Museum Entrance:

- Security and Museum Staff in the room on the left side at the entrance.
- Information Desk in the room on the right side of the entrance. Headphones, etc.

WATER SUPPLY

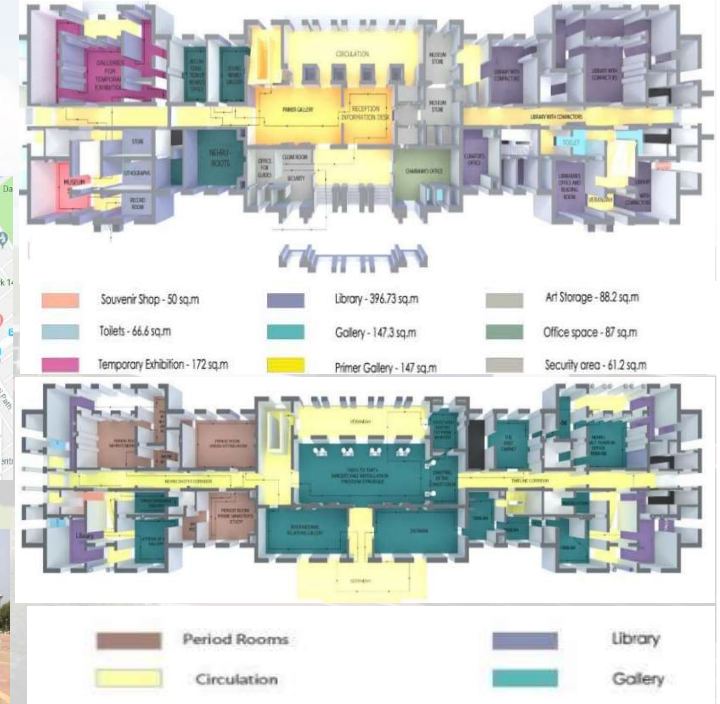
Under ground

- 50,000 L
- Used for Fire Over Head
- 3,00,000 L Used for Drinking Toilet

TOILETS

- 1Male and 1 Female unit on each floor
- 4 WC and 2 Wash Basin

Site Area =11.9 acres (518364 sq.ft.)
Total covered area =282583 sq.ft.
Ground coverage =11 % approx
FAR =0.54



The Nehru Memorial Museum and was established under the following objectives

- To maintain a Museum of Jawaharlal Nehru personalia, memorabilia, mementoes and other objects pertaining to his life and the Indian freedom movement.
- To acquire, maintain and preserve papers of nationalist leaders of Modern India and other eminent Indians who distinguished themselves in any field.
- To establish and maintain a library on the history of Modern India.
- To organize, undertake, conduct, encourage and promote study and research in the field of modern Indian history.
- To institute and award fellowships and to foster academic contacts within India as well as with other countries through exchange of personnel and research materials.

This site measuring 3 acres for the memorial, 8.9 acres (approx.) for the Centre for Performing & Visual Arts and approximately 28.75 acres stretch

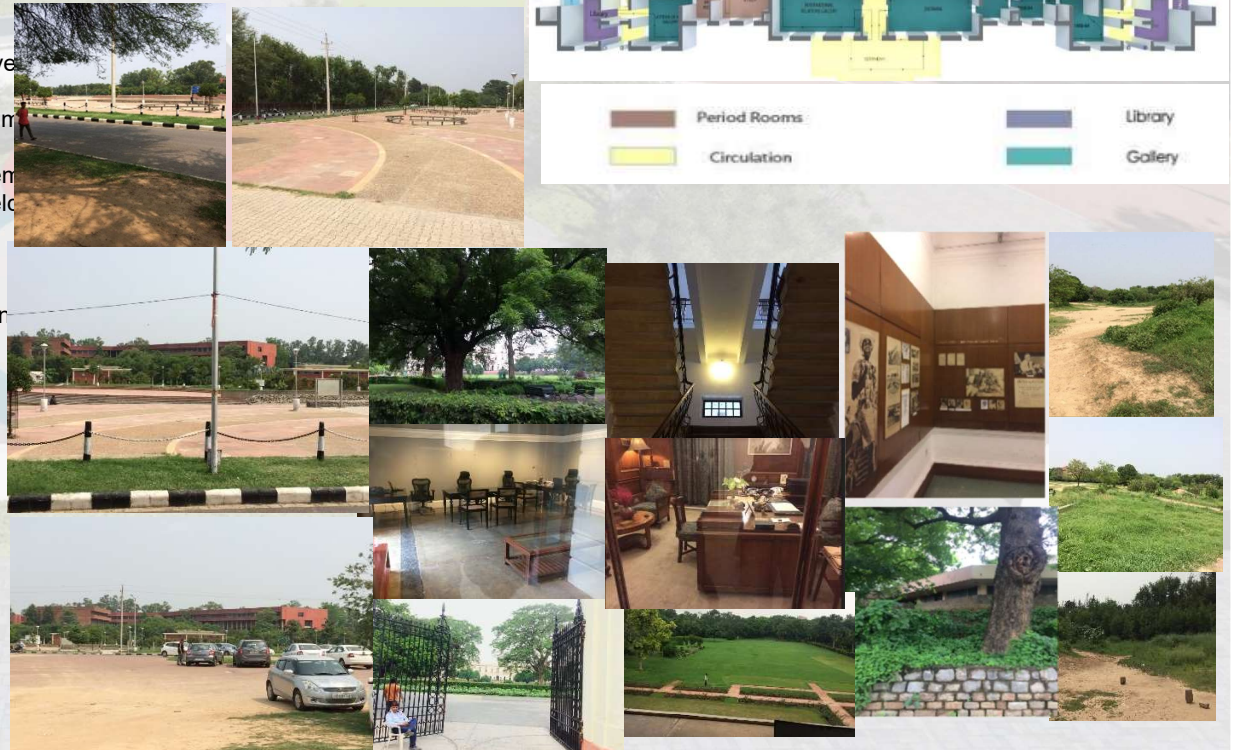
Leisure Valley along Outer Dakshin Marg and Udyan Path in Sector- 42-D, Chandigarh, has been earmarked for the Project. The site is easily accessible.

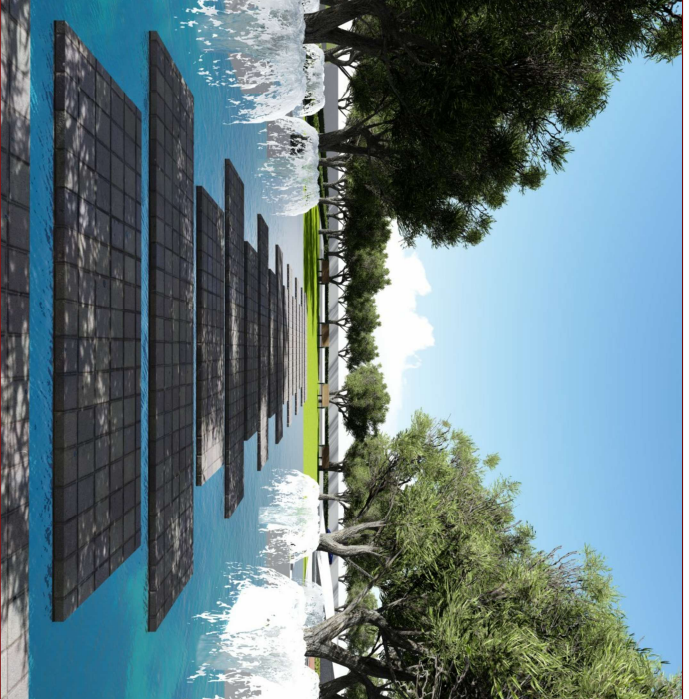
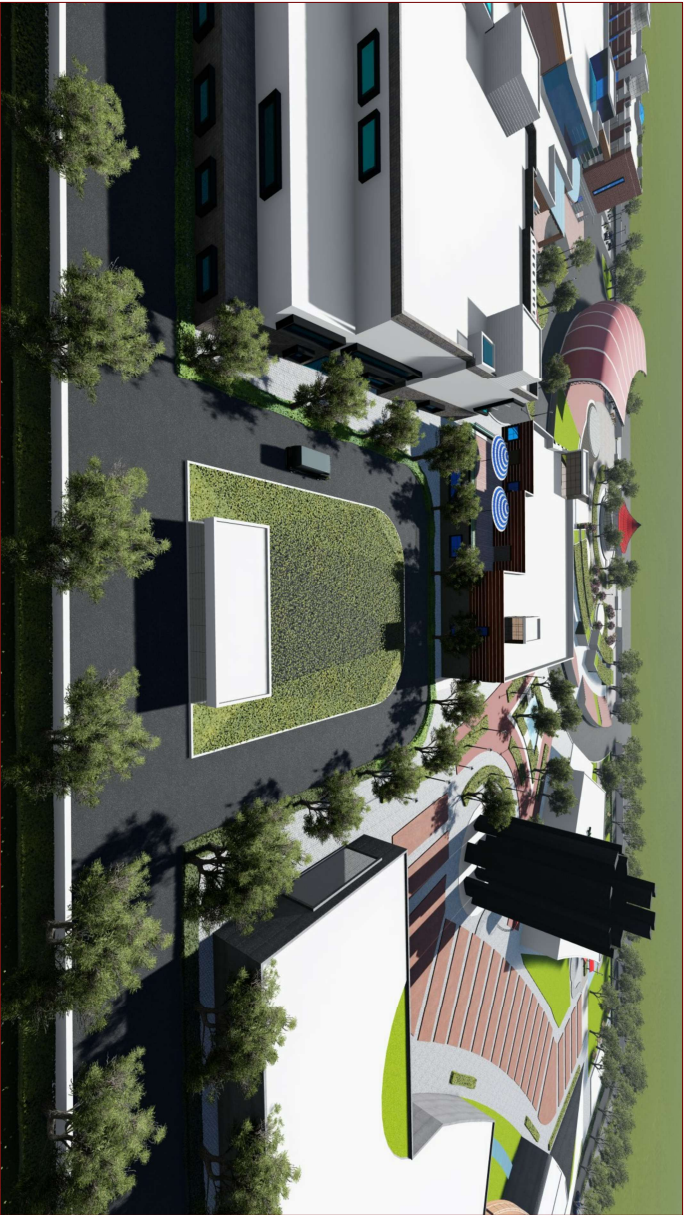
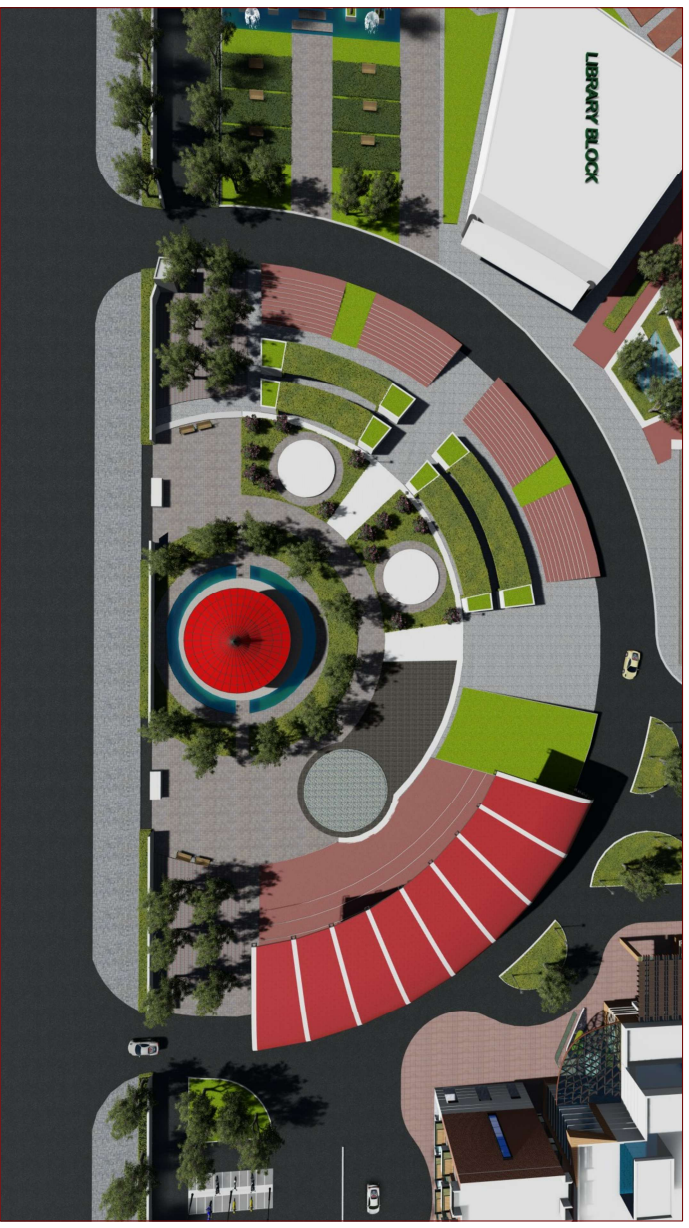
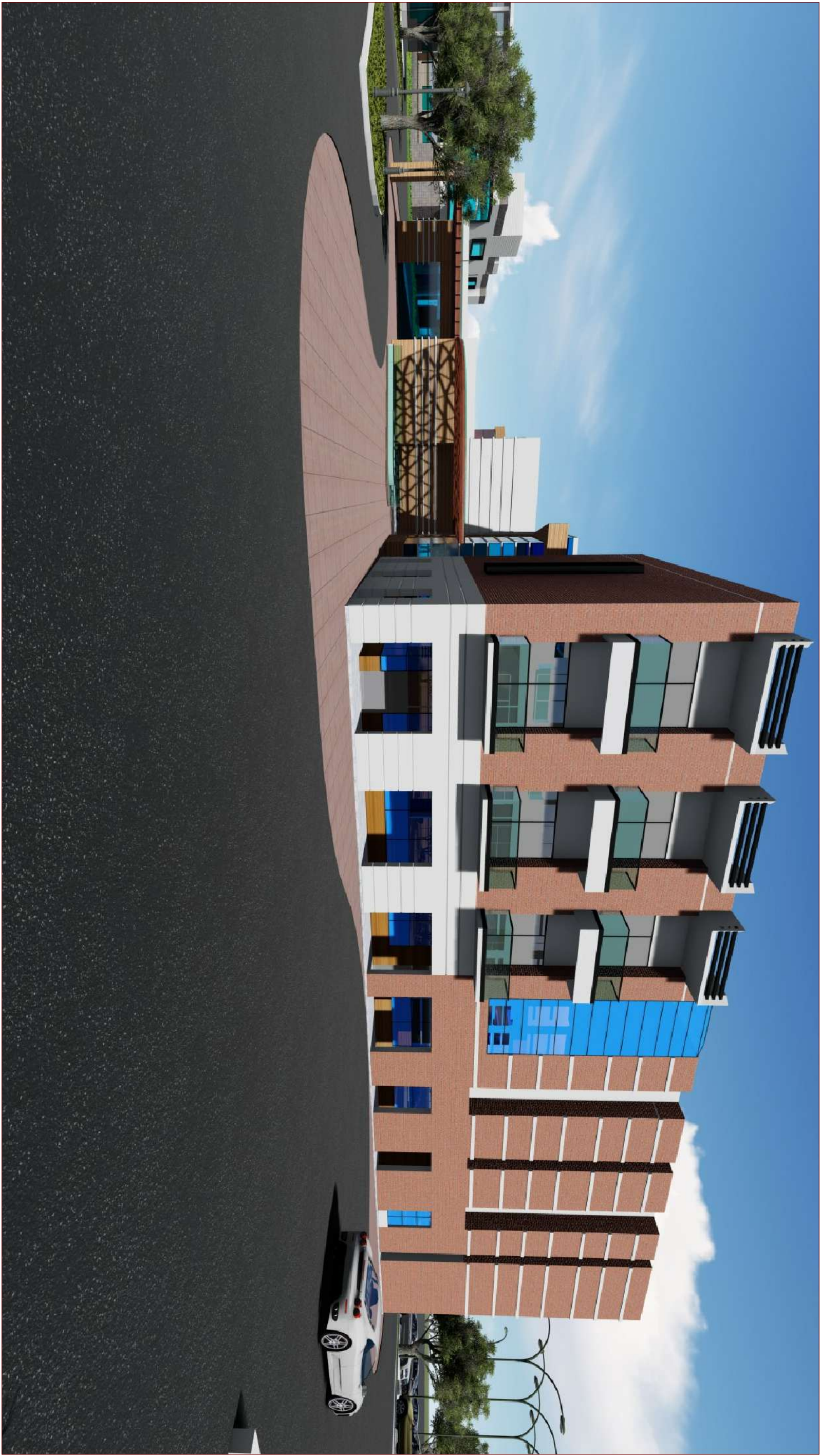
CONCEPT

A Samadhi designed as a unique architectural form embodying the values of fearlessness, valour, secularism, national unity, integration and communal harmony which the Late S. Beant Singh symbolized.

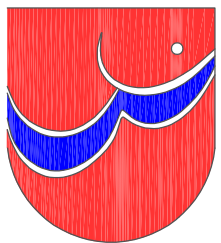
NEAREST STOPS

Airport – 12.8 k.m.
Railway station – 12.8 k.m.
Nearest ISBT Sector 43 :- 1.7 Km





CONVENTION CENTER



VIEWS

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926.96
259.81
140.88
251.61
79.81
202.89
514.65
173.12
173.93
455.65
118.01
200
160.80
200
173
20.08
45.81
213.81
200



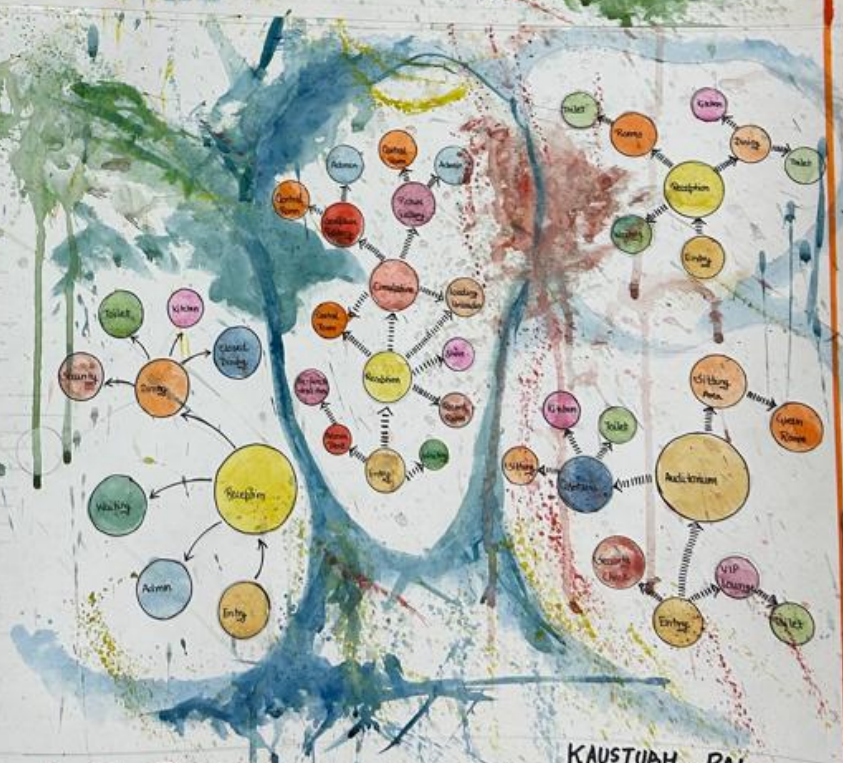
S I T E



SITE LOCATION - SECTOR 94, NOIDA
 AUTHORITY - NEW OKHA INDUSTRIAL DEVELOPMENT AUTHORITY (NOIDA)
 COORDINATES - 28° 02' 55.46"N, 77° 13' 21.05"E
 PLOT AREA (SITE) - 7.4 ACRES
 PERMISSIBLE FMR - 5
 PERMISSIBLE FAR - 35

SINCE THE PROJECT LIES IN NOIDA (NORTH INDIA), IT FACES THE MONOTONY IN LIFESTYLE OF PEOPLE. THE FOLLOWING ARE OBJECTIVES WHICH IS REQUIRED IN THE DESIGNING OF THE CONVENTION CENTRE -
 TO BRING HARMONY IN THE LIFESTYLE OF THE PEOPLE.
 TO CREATE A PLACE FOR SOCIAL & CULTURAL CATHEDRA.
 TO CREATE INTERACTIVE SPACE AND LANDSCAPING TO GENERATE PUBLIC INTEREST.
 TO EXPLORE HOW IT PROVIDES AESTHETICAL FOR URBAN URBANITY.
 TO CREATE A VENUE FOR EXHIBITION AND INTERACTION.
 TO CREATE A LANDMARK THROUGH USE OF FINCHUATVA IN MODERN ARCHITECTURE.
 SCATTERED PLANNING OF A SITE REFER TO AN APPROACH IN WHICH BUILDING OR STRUCTURE ARE SPREAD ACROSS A SCATTERED PROPERTY IN A NON- LINEAR OR NON-CONTIGUOUS MANNER.

181.31
13.18
15
30
30
679
51.61
10.81
59.61
94.02



UTION CENTRE

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Vertical Stacking

LIPE. FIRE CAN BE
TING OR EVEN THE
CREATE DYNAMIC EFFECTS

FOUNTAINS, POOLS OR
SPHERE. WATER FEATURES

ION. IN ARCHITECTURE, IT
E STONE, CLAY & WOOD.

SPACES WITH AMPLE
THE FLOW OF AIR.
EEN SPACES, SUCH

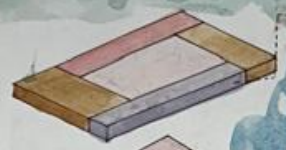
ITECUTURAL DESIGN
EAS FOR INTERACTION.
NTEGRATING VIEWS
OF SPACIOUSNESS



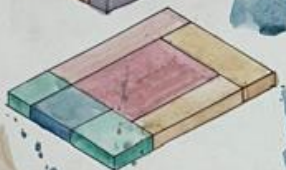
TYPICAL FIRST AND SECOND FLOOR



SECOND FLOOR
WAITING AREA
RECEPTION
DINING
OFFICE



FIRST FLOOR
AUDITORIUM
CAFETERIA
CONTROL ROOM
OFFICE



GROUND FLOOR
AUDITORIUM
CAFETERIA
SERVICES
VIP LOUNGE
GREEN ROOM
ADHUN

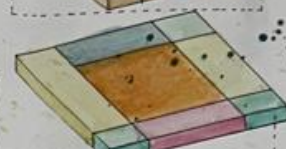
SECOND FLOOR
CONTROL ROOM
CAFETERIA
SERVICES
PICTURE GALLERY



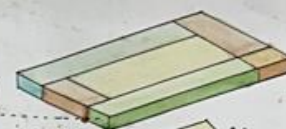
FIRST FLOOR
WAITING
DINING
SERVICES
RECEPTION
OFFICE



SECOND FLOOR
CAFETERIA
DINING
SERVICES
CIRCULATION
PRE-FUNCTIONAL
LOBBY/RECEPTION
STORE
RECEPTION
RECORD



FIRST FLOOR
WAITING
DINING
SERVICES
RECEPTION
OFFICE



GROUND FLOOR
RECEPTION
WAITING
DINING
AUDITORIUM
SERVICES
ADHUN



AREA

- Library
- Basement
- Parking
- Plant Room
- Services
- Ground Floor
- Entrance
- Waiting
- Pre-function
- Hall
- Digital Hall
- Conference Hall
- Cafeteria
- Ground Floor
- Open Air Dining
- Restaurant
- Kitchen
- Auditorium
- Ground Floor
- Market Café
- Library
- Office Area
- Locker
- VIP Lounge
- Waiting Area
- Reception
- Pre-function
- Conference

Horizontal Stacking



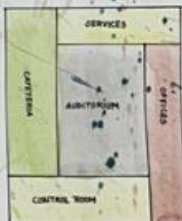
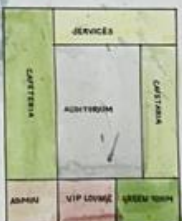
Use of Natural Materials



Fire Pit



Green Roof



- Guest House
- Ground Floor
- Entrance
- Reception
- Office Area
- Kitchen
- Guest Room
- Dormitory
- Museum
- Ground Floor
- Entrance
- Office Area
- Store
- Painting
- Modeling
- Furniture
- Sculpture
- Picture



CONV

Concept

Panch - Tatva



FIRE

FIRE REPRESENTS ENERGY, TRANSFORMATION, AND WARMTH. IN ARCHITECTURE, FIRE CAN BE REPRESENTED THROUGH THE PLAY OF NATURAL LIGHT, ARTIFICIAL LIGHTING, OR EVEN THE PRESENCE OF FIREPLACES, USE OF WINDOWS, SKYLIGHTS, & OTHER LIGHT-EMITTING ELEMENTS CREATE DYNAMIC EFFECTS



WATER

WATER SYMBOLIZES PURITY, FLOW, & TRANQUILITY. INCORPORATING ELEMENTS SUCH AS FOUNTAINS, POOLS OR WATERFALLS IN ARCHITECTURAL DESIGNS CAN CREATE A SERENE & SOOTHING ATMOSPHERE. WATER FEATURES CAN ENHANCE THE AESTHETICS OF A SPACE, PROVIDE A SENSE OF CALMNESS.



EARTH

THE ELEMENTS OF EARTH REPRESENTS STABILITY, STRENGTH, & FOUNDATION. IN ARCHITECTURE, IT CAN BE MANIFESTED THROUGH THE USE OF NATURAL MATERIALS LIKE STONE, CLAY & WOOD. BUILDING STRUCTURES THAT ARE FIRMLY GROUNDED IN THE EARTH.



WIND

AIR SIGNIFIES MOVEMENT, CIRCULATION, & OPENNESS. DESIGNING SPACES WITH AMPLE VENTILATION, LARGE WINDOWS, & OPEN LAYOUTS CAN PROMOTE THE FLOW OF AIR. ENSURING A FRESH & HEALTHY ENVIRONMENT. INCORPORATING GREEN SPACES, SUCH AS GARDENS OR INDOOR PLANTS, ALSO IMPROVE AIR QUALITY.



SPACE

SPACE REPRESENTS OPENNESS, EXPANSION, & CONNECTION. ARCHITECTURAL DESIGN SHOULD CONSIDER THE EFFICIENT USE OF SPACE, CREATING AREAS FOR INTERACTION, RELAXATION, & CONTEMPLATION. UTILIZING NATURAL LIGHT & INTEGRATING VIEWS OF THE SURROUNDING ENVIRONMENT CAN ENHANCE SENSE OF SPACIOUSNESS.



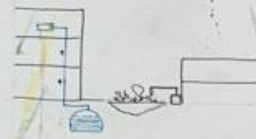
Cross-Ventilation



Natural Lighting



Wind-Catcher



Rain Water Harvesting



Atrium Design



Artificial Lake



Use of Natural Materials



Fire Pits



Green Roof