

THESIS REPORT ON

**“RAMAYANA MUSEUM AND CULTURAL
CENTER, BARABANKI, UTTAR
PRADESH”**

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

BACHELOR OF ARCHITECTURE

BY

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THESIS GUIDE

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SESSION

2021-22

SCHOOL OF ARCHITECTURE AND PLANNING

BABU BANARASI DAS UNIVERSITY

LUCKNOW.

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Last but not the least, I thank my Parents for their forever support and blessings.

IN THE LOVING MEMORY OF MY FATHER

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LUCKNOW (U.P.).**

CERTIFICATE

I hereby recommend that the thesis entitled “RAMAYANA MUSEUM AND CULTURAL CENTER, BARABANKI, UTTAR PRADESH” under the supervision, is the bonafide work of the student 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.

PROF. MOHIT KUMAR
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Dean of Department

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Head of Department

RECOMMENDATION

ACCEPTED

NOT ACCEPTED

EXTERNAL EXAMINER

EXTERNAL EXAMINER

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Certificate of thesis submission for evaluation

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4. Degree for which the thesis is submitted: BACHELORETTE IN ARCHITECTURE
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INTRODUCTION



Uttar Pradesh

U.P. Hata Dekho Yeh India Hata Dekho

UTTAR PRADESH TOURISM

GOVERNMENT OF UTTAR PRADESH

RAMAYAN MUSEUM AND CULTURAL CENTRE

UDBHAW GUPTA | SYNOPSIS 1 | JANUARY 10TH 2022

INTRODUCTION

A museum is a place where everyone, with or without qualification can enter and be inspired by the stories of our past and present. Museum is an institution that cares for a collection of artifacts and other objects of artistic, cultural, historical or scientific importance. Many public museums make these items available for public viewing through exhibits that may be permanent or temporary.

Architecture of any museum tells its own story through circulation, density, lighting, backgrounds, arrangement and labels.

Ramayana museum and cultural center will be one of its kinds, revolving around the natural heritage and ancestry of national idol, Prabhu Ram, bringing satisfactory depth and rejuvenating experience for everybody, making it easier for the world to see.

HISTORY AND BACKGROUND

The Indian sub-continent along with its neighboring countries like Nepal, Sri-Lanka, and Afghanistan, has a lot in together to hold on to. Ramayan- the tale of Prabhu Ram binds us together. For few, Prabhu Ram and his tale is mythological but for the majority it is what the legends have it as our history, with proves and sacred places spread all over, even beyond our borders.

In India, upcoming generations are unaware, how important these codes and values set by Prabhu Ram contributes in developing the society, in growing together. There is no place in India where all the tales of Prabhu Ram are preserved, researched and exhibited on a permanent basis thus providing the need to facilitate a Cultural museum and center where students, historians, tourists and common people can understand, study and analyze these works.

NEED OF THE TOPIC

The Ramayan Museum and Cultural center can provide the inspiration for our understanding and appreciation of Prabhu Ram's legacy in terms of history as well as contemporary reality. This museum will become a center for knowledge for everyone visiting it. It will become an icon that people want to see when they visit the city of Ayodhya-Lucknow. It will become an inclusive public place for people from all backgrounds to gather and talk about set of rules and order which was in place long ago. It will become a place of education for aspiring historians, and everyone visiting it.

This museum and cultural center tends to provide us all with an opportunity to over view the Prabhu Ram's Legacy, all at one place. Thus, making it easier for our elders to relive their legends all at one place.

This, at international level will give boost to the BHARAT-VISHWAGURU CAMPAIGN, thus establishing and carving out our history and our legends on the globe.

AIM AND OBJECTIVES

This is an ancient legend, and the result of its thinking and endeavor provide us with some of the most lasting examples of our culture. It is to bridge this gap in understanding between the age and modern society and that is why Ramayan Museum and Cultural center is needed. The place will empower our legacy, and understanding of our heritage on a broader level

- Enable people to get divine and grand darshan of the entire life of Prabhu Ram in one location instead of flitting from city to city.
- To bring in the puppet performances from across the globe Russia, Indonesia, Thailand, Japan, Malaysia, Sri Lanka, Tibet.
- To operate Kitchen with dishes from Madhubani, Awadh, Sri Lanka, Chattisgarh, Andhra Pradesh, Telangana, Tamil Nadu
- Ramayan research and publication center.



- Ram Lila training center
- Handicraft training and exhibition
- Overall skill development of artisans
- Vocal for Local campaign
- Reforestation of an area, to showcase sacred trees and let our future generations be aware of it and its properties

SCOPE

Ramayan museum and cultural center can provide the matrix for motivation and inspiration to emerge from a deep understanding of the history of our own heritage and its relevance and place in contemporary conditions.

Museum Planning is an opportunity to describe a new museum's vision, the visitor experience and an organizational plan for a new institute. Space integration is the most important part of museum planning and it's the main scope of work which can be exhibited through circulation pattern and zoning on sheets.

Natural and artificial lighting is one of the most important aspects of museum planning that should be implemented deeply with studying the effects and design aspects of it in the museum.

LIMITATIONS

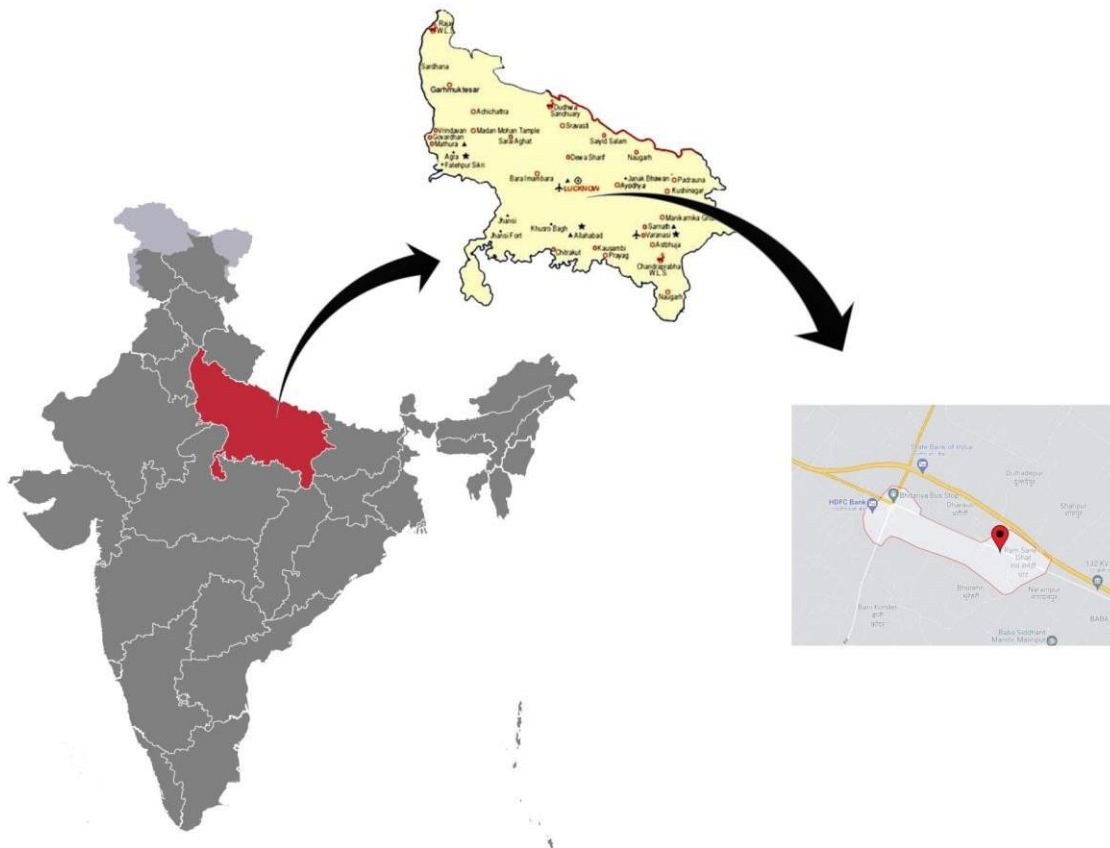
The project will be design oriented and detailing of structural elements with landscaping.

The project also doesn't cater about the costing and estimation of the project as it is an academic project.

SITE DETAILS

Ramayana Museum, Cultural Centre to be established on 10 acres in Ramasnehi Ghat between Ayodhya, Lucknow

54km from Ayodhya and 64km from Lucknow, Gram Bhavaniyapur Khevli, Barabanki, Uttar Pradesh



CLIENT NAME AND BRIEF

Ramayan museum and Cultural center is a project proposed by UPSTDC along with the government of Uttar Pradesh.

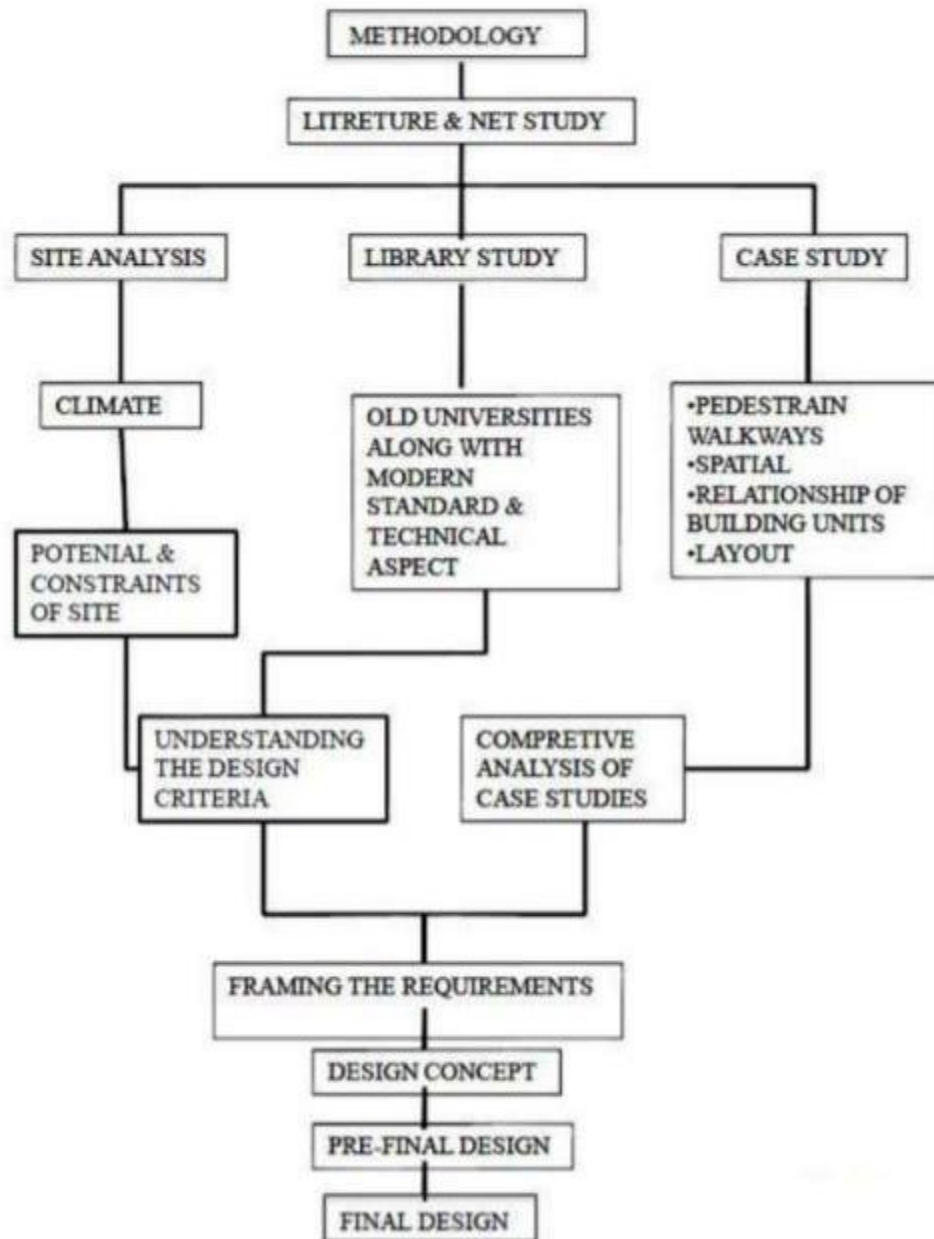


PROJECT REQUIREMENTS

- Art Gallery
- Exhibitions
- Library
- Research center
- Open Air Theatre
- Administrative
- Public Amenities
- Landscape



METHODOLOGY



CLIMATE AND SITE ANALYSIS

INTRODUCTION

A museum is a place where everyone, with or without qualification can enter and be inspired by the stories of our past and present.

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RAMYAN MUSEUM & CULTURAL CENTER

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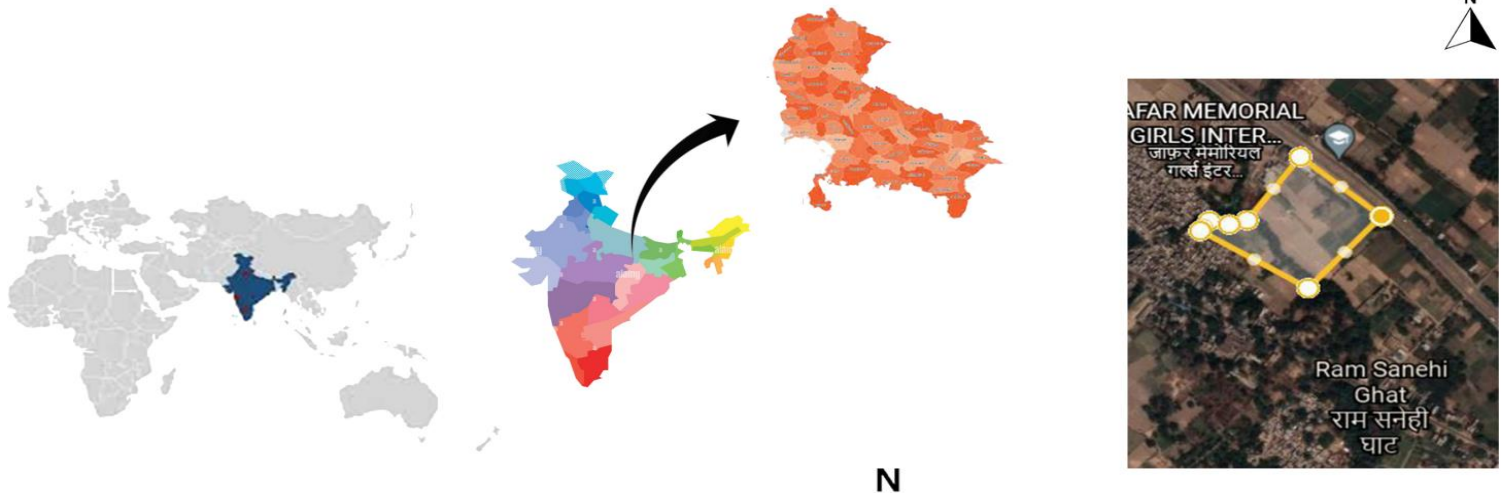
Natural and artificial lighting is one of the most important aspects of museum planning that should be implemented deeply with studying the effects and design aspects of it in the museum.



SITE SPECIFICATION

Site area – 12 acres (48562 sq mt)
Permissible ground coverage – 40 %
F.A.R – 1.5
Floors – 4
Topology – Flat

SITE LOCATION



LANDMARKS

132 KV Power House
.Sumerganj Kabristan
.Jafar Memorial Girls Inter College
.C.H.C. RS Ghat

ACCESS TO THE SITE

- Barabanki Bus Stand (35km)
- CCS Airport (120km)
- Barabanki railway Station (41km)

SITE ANYLYSIS



ROAD NETWORK



LAND USE

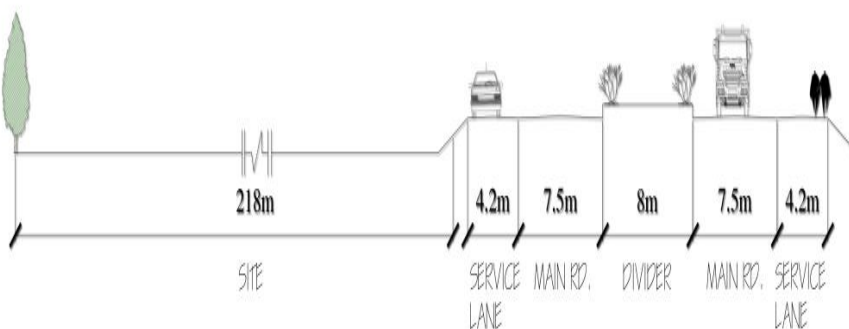


GREEN SPACE

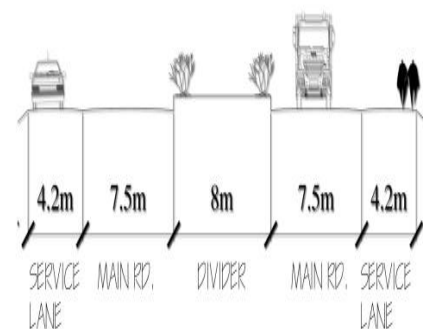
SITE DESCRIPTION

12 acre vacant site, belonging to the Ram Snehi Ghat Gram panchayat-Barabanki Development Authority (BDA) has been identified. This is located in Ram Snehi Ghat, close to the main Lucknow-Ayodhya road.

The site is situated 54km away from state capital, Lucknow and 64km away from Ayodhya, which makes it a perfect site for people from all over the country to come and understand Ramayana and have a grand divine darshan of Prabhu Ram's life, all at one place.



SITE SECTION

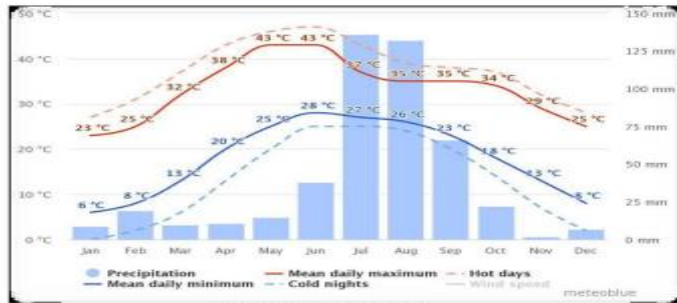


ROAD SECTION

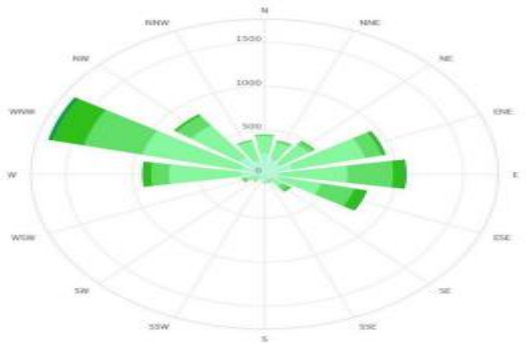
CLIMATE ANALYSIS

MACRO CLIMATE : COMPOSITE

- AVERAGE TEMPERATURE: 25 °C
- MAXIMUM TEMPERATURE :46 °C
- MINIMUM TEMPERATURE :2.2 °C
- ANNUAL PRECIPITATION : 886mm
- PREVAILING WIND DIRECTION :
- WEST-NORTH WEST
- 87% OF THE ANNUAL RAINFALL IS RECEIVED DURING THE MONSOON
- MONTHS JUNE TO SEPTEMBER.



TEMPERATURE

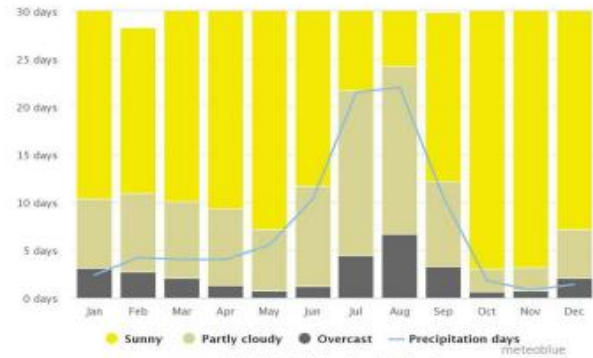


WIND ROSE DIAGRAM

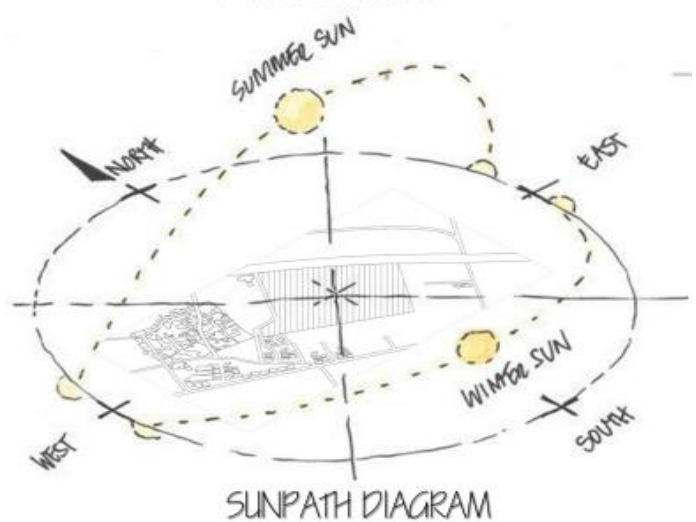
SWOT ANALYSIS

STRENGTH

- Situated near state capital, and city
- of Ayodhya.
- Plenty of land for easy aquisition



PRECIPITATION



SUNPATH DIAGRAM

STRENGTH

- Situated near state capital, and city
- of Ayodhya.
- Plenty of land for easy aquisition

S.W.O.T ANALYSIS

STRENGTH

- Situated near state capital, and city
- of Ayodhya.
- Plenty of land for easy acquisition

OPPORTUNITIES

- Encourage local art and culture and mark its presence on the globe
- Encourage tourism, Vocal for Local.
- Invite artefacts from other countries
- Introduction of multi-cousine food and culture

WEAKNESS

- The shape of the site is not uniform and hence design process will be challenging.
- Ramsnehi Ghat is under-developed.

THREATS

- Lack of skyline in neighbourhood.
- Lack of literate environment.

NATURAL FACTORS

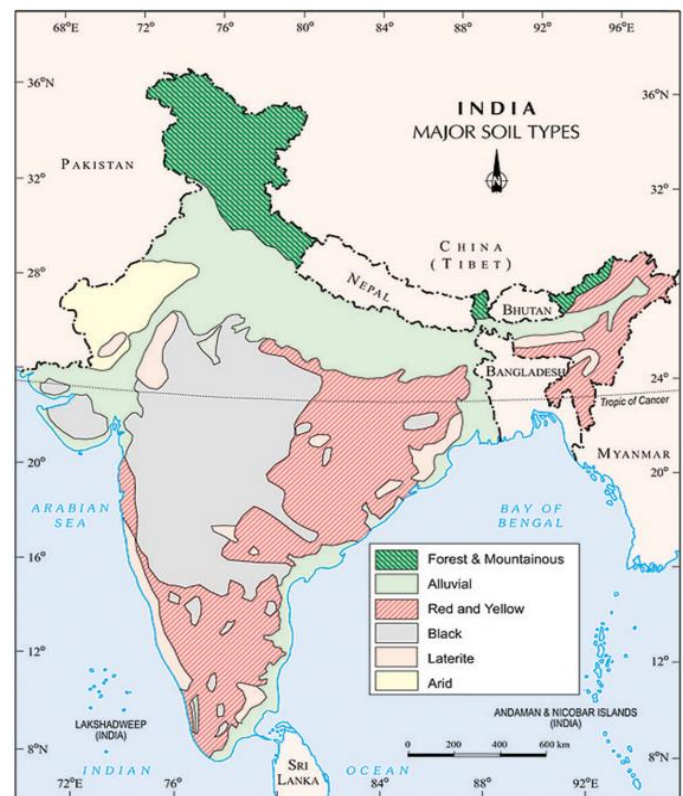
SOIL TYPE

The proposed site has alluvial soil with some undifferentiated soil. The alluvial soil is formed due to the Gomti and Ghaghra river deposition over the long period of time.

The soil particles have a mixture of both coarse and fine loamy soil.

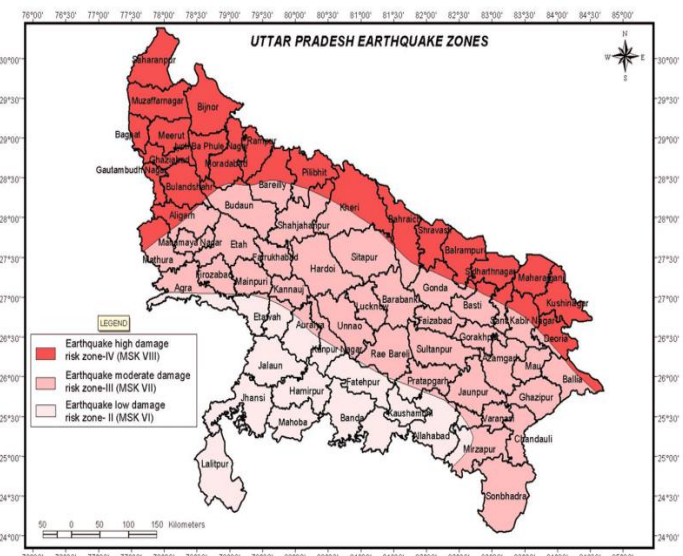
The soil has abundant amount of silt contained in it.

The soil bearing capacity 25T/metre cube.



SEISMIC ZONE

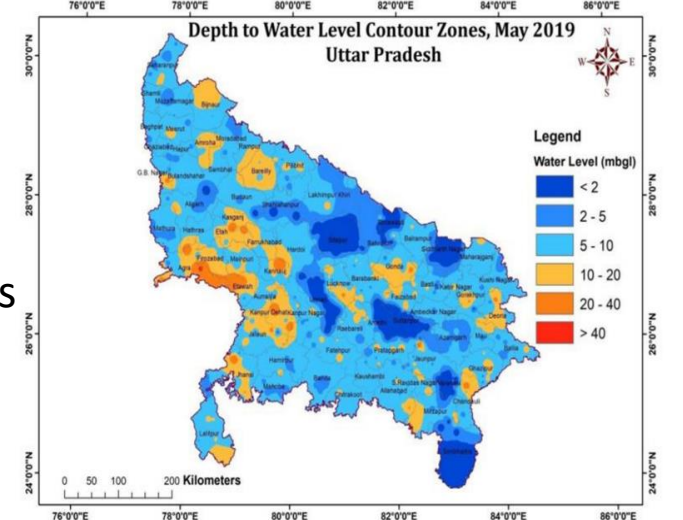
The proposed site is situated on the Gangetic tectonic plate, which makes the site a MSK-VII area with a moderate risk of earthquake.



HYDROLOGY

The proposed site has no surface water resource however, it is situated on gangetic plain, in between Ghaghra River and Gomti river. The depth of the water level recorded ranges from 1.20 to 40 meters below ground level (mbgl) for the state of Uttar Pradesh.

It is observed that 50% wells of Barabanki have shown water level more than 2-5 mbgl



District	No. of Wells Analyzed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0-2	2-5	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40
BARABANKI	20	0.8	11.65	2	12	4	2	0	0
				10.00%	60.00%	20.00%	10.00%		

NATURAL FACTORS

INDEGINIOUS VEGETATION

The natural vegetation consist of trees, herbs, shrubs.

The most common tress are Acacia arabica Wild (Babul),
Ficus bengalensis Linn(Banyan),
Azadirachta indica (Neem),
and weeds like Cenchrus spp (Anjan).



BABUL



NEEM



BANYAN



ANJAN



RAM SNEHI GHAT SITUATED ON STATE HIGHWAY NO. 27, BARABANKI DISTRICT, UTTAR PRADESH

SITE SURROUNDINGS



TEHSIL OFFICE



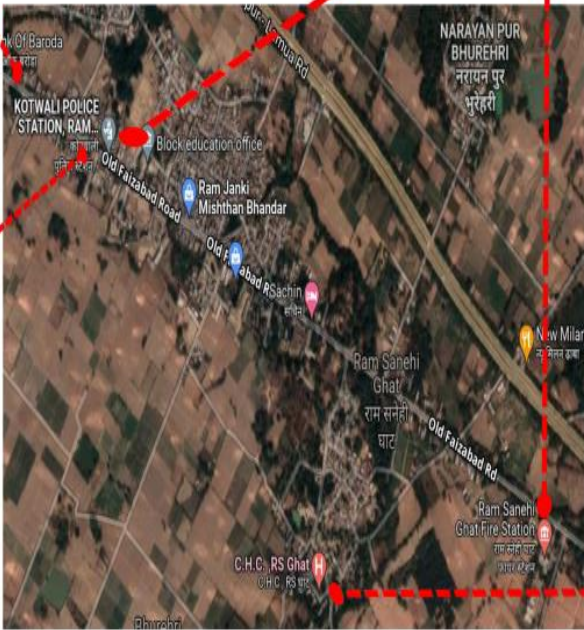
FIRE STATION 1.3KM



BAL VIDYA MANDIR 2.2KM



POLICE STATION 1.6KM



C.H.C RAM SNEHI GHAT 1.8KM

CASE STUDY

CASE STUDY : NATIONAL GALLERY OF MODERN ART, NEW DELHI

INTRODUCTION

Designed by Sir Arthur Bloomfield.
Jaipur House was initially house of Jaipur kings.
The National Gallery of Modern Art, New Delhi, is a repository of more than 17000 most significant works of modern and contemporary art in the country.
The principal aims of NGMA are to acquire and preserve modern art from 1850 onwards.
And to present it to a global audience which will create an understanding and sensitivity towards a time that helped shape contemporary art in India.
The institution is also committed to promote contemporary Indian art in its various forms.
NGMA is the only museum that preserves cultural architecture and fuses all the modern elements all-together.
Develop an education and documentation centre.
Organize seminars and lectures to encourage higher education.
Above all, the National Gallery of Modern Art helps people to look at the works of modern art with greater joy, understanding and knowledge by extending their relationship with our daily life and experiencing them as vital expressions of the human spirit.



HISTORY OF NGMA

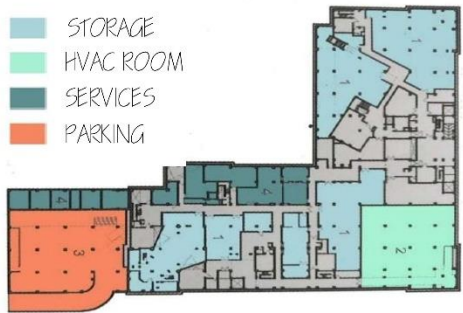
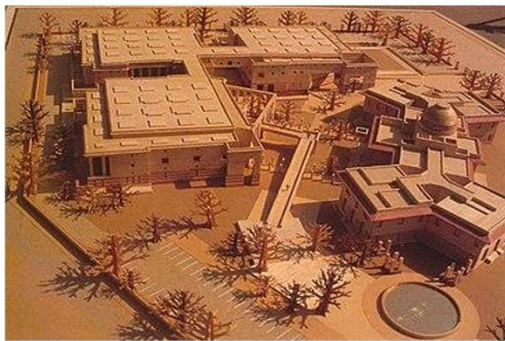
The idea of a National art gallery was first mooted in 1949, and further developed by Prime Minister Jawahar Lal Nehru and Maulana Azad, bureaucrats such as Humayun Kabir and the local art community.
Designed by Sir Arthur Bloomfield, as a residence for the Maharaja of Jaipur, the butterfly-shaped building with a central dome was built in 1936.
It was styled after a concept of the Central Hexagon visualized by Sir Edwin Lutyens.
It was Lutyens, along with Herbert Baker, who visualized and gave shape to the new capital in Delhi.
Along with buildings designed for other princely potentates like Bikaner and Hyderabad, Jaipur House girded the India Gate circle.



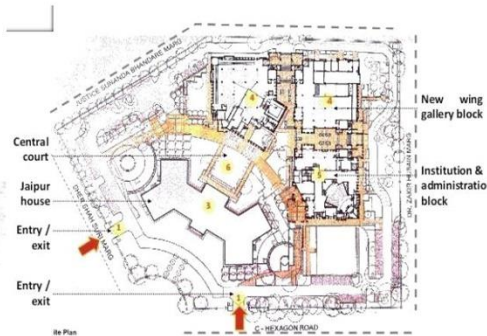
LOCATION

Jaipur House, Shershah Road, Near India Gate, New Delhi.

- Khan Market 1.4km
- NDLS 6km
- Jaipur House 0.5km
- IGIA 14.5km



BASEMENT PLAN



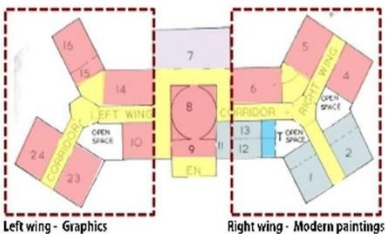
SITE PLAN



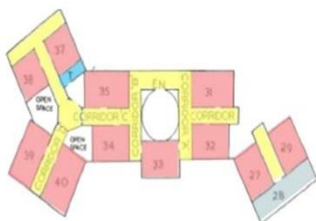
LOWER GROUND FLOOR



GROUND FLOOR



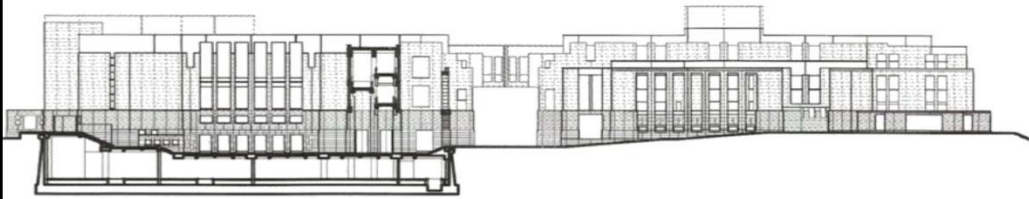
GROUND FLOOR (JAIPUR HOUSE)



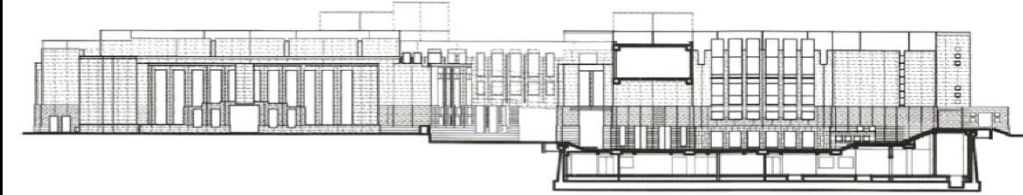
FIRST FLOOR (JAIPUR HOUSE)

CASE STUDY : NATIONAL GALLERY OF MODERN ART, NEW DELHI

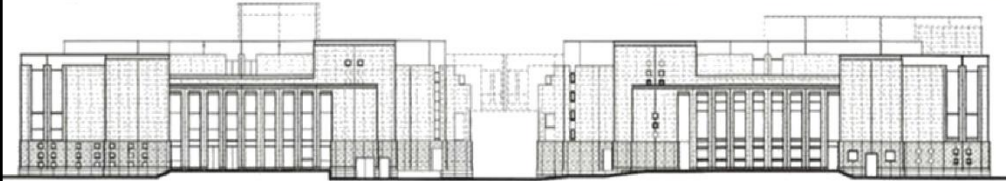
ELEVATION



Elevation of Gallery & Administration Block from Central Court



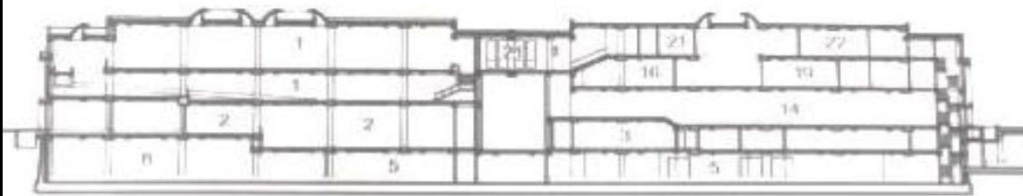
Elevation of Gallery Block from Central Court



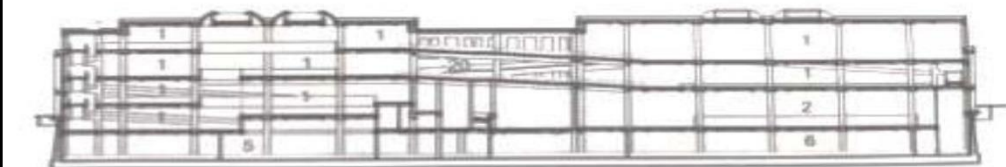
Elevation from Dr. Zakir Husain Marg



Elevation from Justice Sunanda Bhandare Marg



Section through Gallery & Administration Block



Section through Gallery Blocks

MERITS :

- Utilization of space of circulation areas as display areas.
- Niche formations breaks monotony.
- Display floors have flexible display for manipulation to obtain required special effects.
- Use of skylights and celestial windows in library and galleries.
- The interconnecting Ramps function as buffer space between the two blocks.
- Daylight sensors automatically regulate the gallery spaces to an optimum illumination level.
- Old trees preserved and fused with building in a seamless way.
- New wing's appearance is derived from existing Jaipur House by use of Sandstone clad in pattern of red and buff.

INFERENCES:

- Use of Daylights and Celestial Windows to maintain the daylight.
- Creating buffer zone between galleries.
- Provision of central sitting space to let users absorb visuals.

AREA PROGRAMME

Jaipur House

- Site Area 7.84 acres (31674 Sq. M.)
- Built up (4620 Sq. M.)

New Wing

- Display Area 12000 SQ M
- Art Storage 2600 SQ M
- Conservation Lab 600 SQ M
- Library (60 seating) 600 SQ M
- Cafeteria (100 seating) 450 SQ M
- Auditorium (200 seating) 750 SQ M
- Preview Theatre (90 seating) 2600 SQ M
- General Stores 150 SQ M
- Administration, Workshop & Support 4445 SQ M
- Services and Circulation 3000 SQ M
- Underground Parking 1383 SQ M

TOTAL AREA 26926 SQ M

Parking

- Under Ground Parking 15 cars
- Surface Parking 264 Cars

TOTAL PARKING 279 CARS

SERVICES

WATER

- On site Boring

ELECTRICITY

- Supplied by Delhi Vidut Board

DRAINAGE

- Sewer and Rain water is drained in the municipal line

HVAC

- Centrally air conditioned

FIRE FIGHTING

- Active measures on each floor, connected visually

DEMERITS

- No On-Site parking available for visitors.
- No proper signage or floor maps inside the building.
- Administrative block is placed at the back of new wing.
- Service road and pedestrian movement overlap each other.
- No dustbin near the galleries.

MATERIALS

- The external walls of the new wing are clad in red sandstone of a colour similar to that of existing building.
- Red and Buff sandstone bands at the base of the older Jaipur house.



CASE STUDY : INDIA INTERNATIONAL CENTRE, NEW DELHI

INTRODUCTION

The buildings of the Centre are located in an ideal environment. Situated in the heart of New Delhi, the Centre is adjacent to the Lodi gardens overlooking a magnificent landscape of gardens and historic monuments from the sixteenth century.

The site of prestigious complex is situated at Lodhi estate, adjoining the serene surroundings of the Lodhi gardens, famous for their natural splendour.

The site measures 4.6 acres adjoins road on eastern and southern side and provide excellent view of gardens and Lodhi tomb.

The height of the building has been kept below the base of the domes of the nearby tombs in Lodhi garden



HISTORY OF IIC DELHI

The idea of IIC first came up in October 1958, when Dr. S. Radhakrishnan, VP of India and John D. Rockefeller III discussed setting up a centre for the quickening and deepening of true and thoughtful understanding between people of nation.

Mr. Rockefeller suggested that an international house on the idea of Tokyo's International House of Japan.

P. M. Jawaharlal Nehru, then the Prime Minister of India, was so enthused with the idea that he personally took interest in selection of the beautiful 4.76 Acres site adjacent to Lodhi gardens.

YEAR - 1962

SITE AREA - 4.6 ACRES

ARCHITECT - JOSEPH ALLEN STEIN



LOCATION

40, Max Mueller Marg, New Delhi 110003

	Jor Bagh	850m
	NDLS	6.3km
	Lodhi Corner	350m
	IGIA	8km

PLANNING

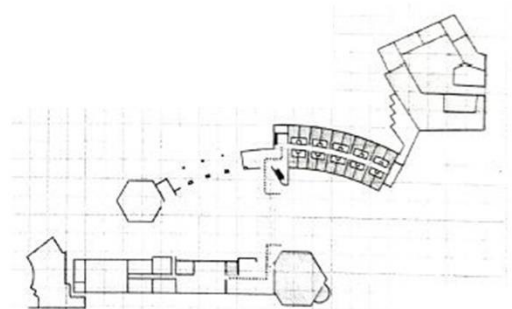
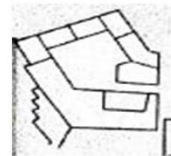
Three separate wings of the IIC complex are designed to reflect the different functional aspects of the Centre.

Residential rooms in the north wing.

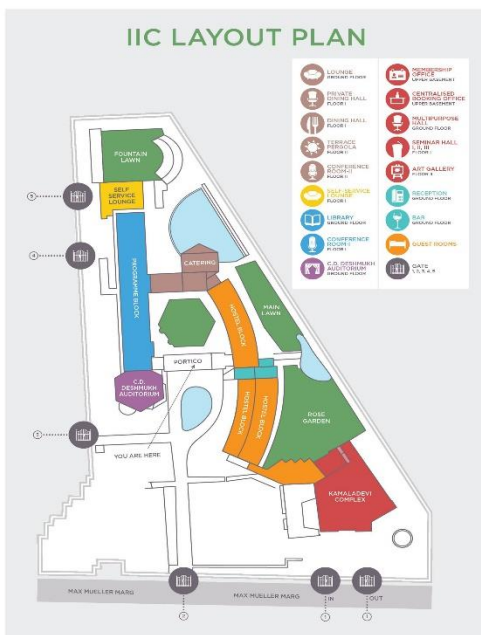
The dining areas in the west

Third complex of the library.

Auditorium and administrative offices in the south wing, are connected to each other by walkways with overhanging eaves in Lodhi.



SITE



CONFERENCE BLOCK

Multipurpose Seminar hall (ground floor) 550 person
Hall 1, 2, 3 (1st floor)
Art Gallery (second floor)

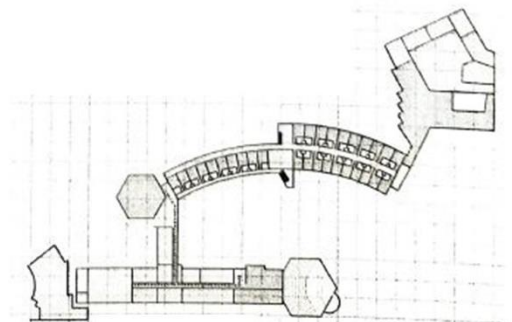
GROUND FLOOR

Conference room
Auditorium
Pantry
Offices
Library
Dining/lounge
Guest room
Toilet
Reception
Circulation

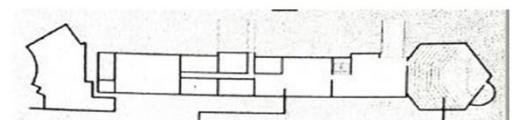
STRUCTURE MATERIALS

Refinement of craft techniques, architect used indigenous elements with the modern use of exposed brick.

The use of local material, such as tened by screened is soft- found jalis in ceramic blue tiles.



FIRST FLOOR



PROGRAMME BLOCK

The Auditorium: 231 person
Library (ground floor)
Conference Hall-1 (1st floor)
50 around the table
Offices (1st floor)

MUSEUMS AND ART GALLERIES

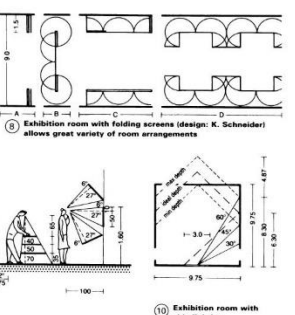
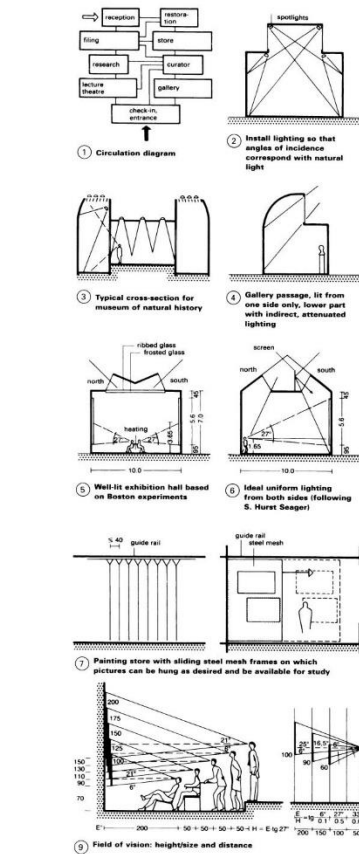
Museums and art galleries tend to have several of the same concerns, and as building types they tend to share many of same features. In general, the main concerns of museums and art galleries are collecting, documenting, preserving, researching, interpreting and exhibiting some form of material evidence. For this purpose, many people with varied skills are required. There are, however, important distinctions not only between museums and art galleries, but also between the different types of museum and art gallery. There are institutions such as heritage centres, exploratoria and some cultural institutes which are considered to be types of museums.

To show works of art and objects of cultural and scientific interest, the institution should provide protection against damage, theft, damp, aridity, sunlight and dust, and also show the works in the best light (in both senses of the term). This is normally achieved by dividing the collection into (a) objects for study, and (b) objects for display. Exhibits should be displayed in a way which allows the public to view them without effort. This calls for a variety of carefully selected, spacious arrangements, in rooms of a suitable shape and, especially in museums, in an interesting and logical sequence.

As far as possible, each group of pictures in an art gallery should have a separate room and each picture a wall to itself, which means small rooms. This option also provides more wall space in relation to floor area than large rooms, which are nevertheless necessary for big pictures. The normal human angle of vision starts 27° up from eye level. For a standing viewer, this means that well-lit pictures should be hung 10m away with the top not more than 430cm above eye level and the bottom about 70cm below eye level. The best hanging position for smaller pictures is with the point of emphasis (the level of the horizon in the picture) at eye level (→ 9). It is necessary to allow 3-5m² hanging surface per picture, 6-10m² ground surface per sculpture, and 1m² cabinet space per 400 coins.

Calculations for museum and art gallery lighting are highly theoretical; the quality of light is decisive. Experiments carried out in America can be useful. Recently there has been a steady increase in the use of artificial lighting instead of daylight, which constantly changes even if north light is used.

According to experiments carried out in Boston, a favourable viewing space is between 30° and 60° up, measured from a point in the middle of the floor. This means a sill height of 2.13m for pictures and a viewing range of 3.00-3.65m for sculpture (→ 9). In art galleries there is generally no continuous circular route, just separate wings. Both museums and art galleries need side rooms for packing, dispatch, administration, a side section, conservation workshops and lecture theatres. Disused castles, palaces and monasteries are usually suitable for housing museums. They are particularly suitable for historical objects, for which they provide a more appropriate setting than some modern museums.



ARTIFICIAL LIGHTING

- Ideal exhibition conditions are attained where every aspect of the display is controllable and the light can be focused, moved, colored and all remains independent of weather.
- Hence these aspects can be controlled to control interest, mood attention and even pleasure.
- It is desirable for an exhibition to have both light and dark areas so that object stand out.
- One should be able to achieve light levels to achieve variation in illumination with moderate levels in brightness to connect spaces dramatic and theatrical effects can be sought out by artificial light.

DIRECT LIGHTING FIXTURES

- Recessed in ceiling or wall
- Surface mounted ceiling or wall
- Suspended from ceiling
- Portable lamps

INDIRECT LIGHTING FIXTURES

- Cove or valance lighting
- Wall track
- Uplight suspended from ceiling

DISPLAY LIGHTING

- For display lighting, incandescent lamps often known as GLS lamps & Halogen lamps are used.

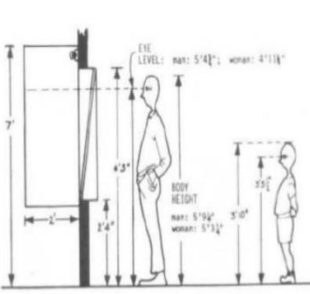
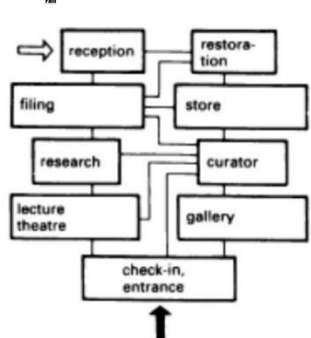
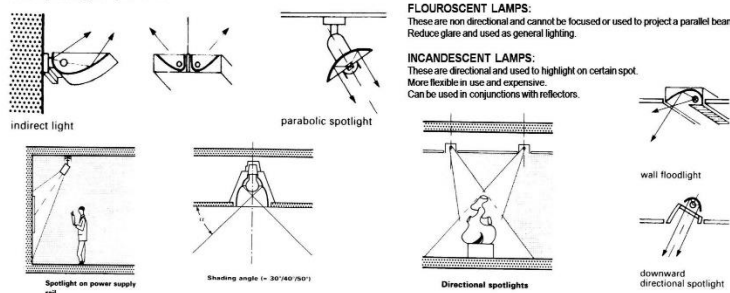


Fig. 2.7 Display Standards

Fig. 2.2 Circulation Diagram

MUSEUMS: EXAMPLES

Nowadays, many museum buildings are also used as culture centres, and this possibility must be included in the planning stage. Spaces must be available for permanent and temporary exhibitions, libraries, media rooms and lecture theatres. There should also be places for relaxation and refreshments, as well as space for transport, storage, conservation, workshops and administration. Technological innovations are having a big effect not only on museum function, but also on the design of exhibits. Two examples are the computerisation of collection records and design documentation, and lamp miniaturisation and fibre optics and their effect on lighting design.

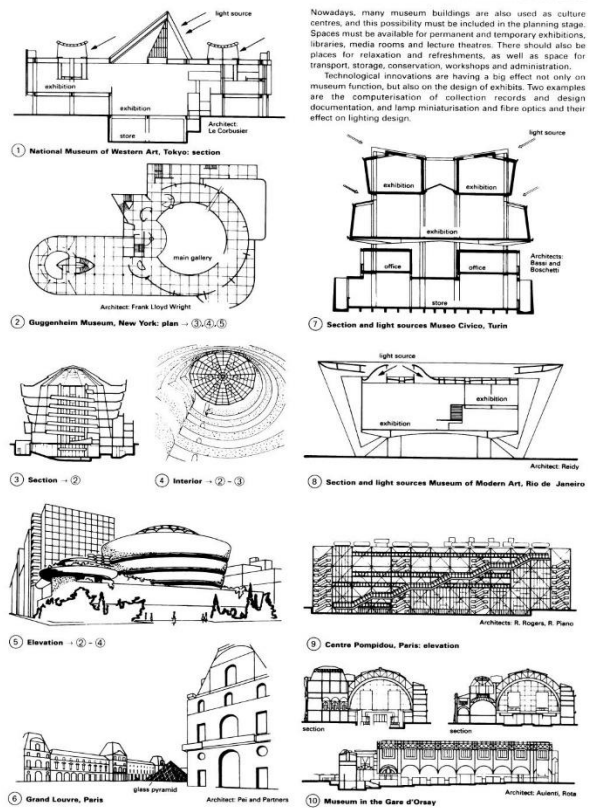


Fig. 2.12 Layout of services

STANDARDS

SPATIAL REQUIREMENT

1. Entry, Lobby, Admission, Store
 - 1.1 Entry Vestibule -150 sqft
 - 1.2 Lobby/Orientation -500 sqft
 - 1.3 Admissions/Tickets -50 sqft
 - 1.4 Museum Store -420 sqft
 - 1.5 Back Storage for Museum Store -80 sqft
2. Activity/Program Areas
 - 2.1 Exhibit Floor -4000 sqft
 - 2.2 Art Space -700 sqft
 - 2.3 Multi-Purpose Room
3. Administrative Areas
 - 3.1 Reception/Waiting -80 sqft
 - 3.2 Executive Director -200 sqft
 - 3.3 Executive Toilet -50 sqft
 - 3.4 Copy/Work Room/Mail -180 sqft
 - 3.5 Small Meeting/Planning Area -100 sqft
 - 3.6 Filing and Storage -80 sqft
4. Exhibit Shop & Warehouse
 - 4.1 Exhibit Shop
 - 4.2 Design Area
 - 4.3 Flammable Storage -60 sqft
 - 4.4 Warehouse -1700 sqft
 - 4.5 Exhibit Floor Supply Storage -160 sqft

Fig. 2.12 Layout of services

REQUIREMENT	LITERATURE STUDY 1	LITERATURE STUDY 2	CASE STUDY 1	STANDARDS
ENTRANCE	175 SQ.M.	345 SQ.M.	500 SQ.M	200 SQ.FT
ADMINISTRATION	241 SQ.M.	490 SQ.M.	1000SQ.M	
EXHIBITION GALLERY	1800 SQ.M.	2400 SQ.M.	1200 SQ.M	4000 SQ.FT
WORKSHOP	100 SQ.M.	450 SQ.M.	800 SQ.M	180 SQ.FT
AMENITIES	250 SQ.M.	550 SQ.M.	900 SQ.M.	1700 SQ.FT
SERVICES	525 SQ.M	800 SQ.M.	1200 SQ.M	100 SQ.FT
PARKING	150 SQ.M.	500 SQ.M.	1383 SQ.M	AS PER AUTHORITY
AUDITORIUM (200 P)	300 SQ.M	480 SQ.M	750 SQ.M	4.5 CU.M/P
LIBRARY (60 P)	290 SQ.M	300 SQ.M	600 SQ.M	1.2 SQ.M/P
CAFETERIA (100 P)	250 SQ.M	280 SQ.M	450 SQ.M	
CONSERVATION LAB	200 SQ.M	400 SQ.M	600 SQ.M	

*FOR THE DATA GIVEN ABOVE, DESIGN CAPACITY OF AN AVERAGE OF 100-150 PEOPLE HAS BEN BEEN CONSIDERED.

*APPLICABLE WHEREEVER THE DATA HAS NOT BEEN PROVIDED.

INFERENCES

CASE STUDY - I

- USE OF DAYLIGHTS AND CELESTIAL WINDOWS TO MAINTAIN THE DAYLIGHT.
- CREATING BUFFER ZONE BETWEEN GALLERIES.
- PROVISION OF CENTRAL SITTING SPACE TO LET USERS ABSORB VISUALS.

CASE STUDY - 2

- WELL DEFINED BLOCKS/ WINGS.
- DOUBLE HEIGHTED CEILING WITH LARGE OPENINGS.
- USE OF SOFT COLOUR.
- VISIBLE BRICKWORK AND USE OF STONE CLADDING WITH RESPECT TO LODHI GARDEN.

LITERATURE STUDY -I

- USE OF ORGANIC STRUCTURE.
- CENTRAL DOME WORK AS SKYLIGHT
- ASCENDING-DESCENDING PATH ALLOWS VISITORS TO HAVE DIFFERENT VIEWS.
- USE OF RIGOROUS RAMP- FIRST OF ITS KIND.
- SLIGHTLY WIDER AT ITS TOP - TTTTTGOOD LIGHTING.

LITERATURE STUDY -2

- WELL INTERCONNECTED LANDSCAPE IN HARMONY WITH LAND.
- EACH WING(4) HAS BEEN GIVEN A DISTINCT/ RECOGNIZABLE FORM.
- THE CIRCULATION PATTERN WAS BASED ON BIHAR HISTORY, BUDDHISM TO JAINISM FOLLOWED BY MAURYAS, GUPTAS, AND BRITISHERS.



LITERATURE STUDY

LITERATURE STUDY : SOLOMON R. GUGGENHEIM MUSEUM, NEW YORK

ELEVATION

Swelling out towards the city of Manhattan, the Solomon R. Guggenheim Museum was the last major project designed and built by Frank Lloyd Wright between 1943 until it opened to the public in 1959, six months after his death, making it one of his longest works in creation along with one of his most popular projects.

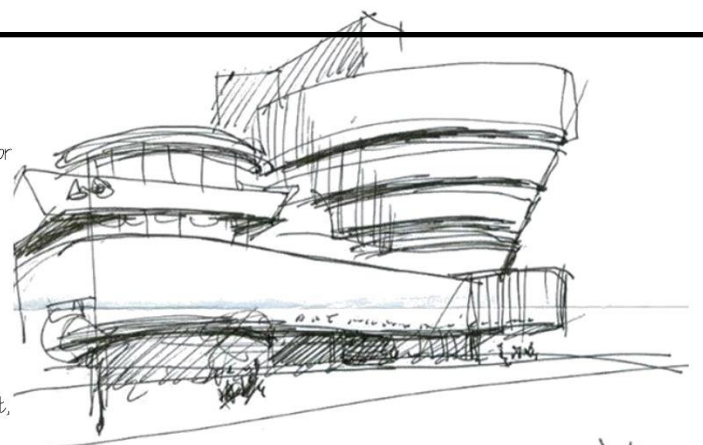
Completely contrasting the strict Manhattan city grid, the organic curves of the museum are a familiar landmark for both art lovers, visitors, and pedestrians alike.

The Solomon R. Guggenheim Museum, often referred to as The Guggenheim, is an art museum located at 1071 Fifth Avenue on the corner of East 89th Street in the Upper East Side neighborhood of Manhattan, New York City.

It is the permanent home of a continuously expanding collection of Impressionist, Post-Impressionist, early Modern and contemporary art and also features special exhibitions throughout the year.

The museum was established by the Solomon R. Guggenheim Foundation in 1939 as the Museum of Non-Objective Painting, under the guidance of its first director, the artist Hilla von Rebau.

It adopted its current name after the death of its founder, Solomon R. Guggenheim, in 1952.



Guggenheim Museum, Fifth Avenue, New York
opened 1959.

SPECIFICATIONS

4740 SQ METRE gallery space.

1395 SQ METRE office, theater and retail space.

28 M tall atrium topped with expansive glass dome.

Main ramp coils upwards 6 floors, more than 400m.

LOCATION-CONNECTIVITY

Side neighborhood of Manhattan, New York City.

Latitude: 40° 46' 58.728" N

Longitude: 73° 57' 32.2956" W

5.1 km away from Grand Central.

6.0 km away from Pennsylvania Station

29.2 km away from J. F. Kennedy International Airport



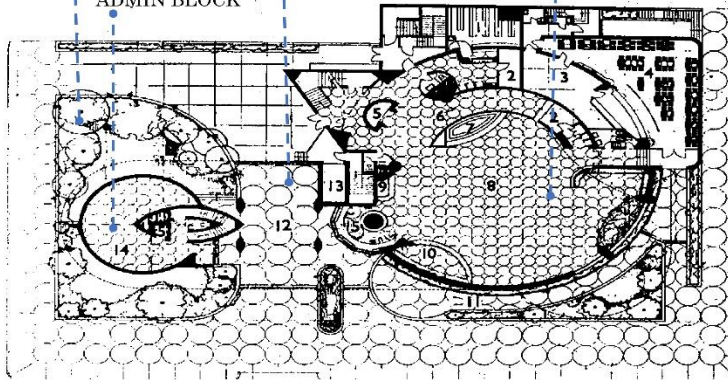
SITE PLAN

SCULPTURED GARDEN

ENTRANCE

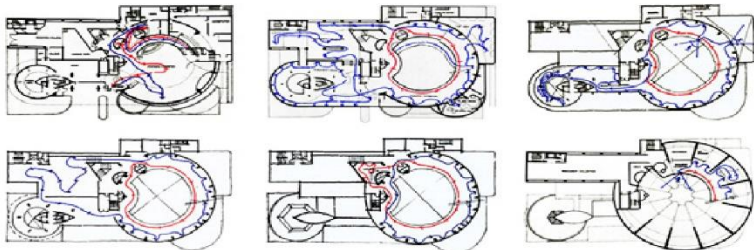
MAIN GALLERY

ADMIN BLOCK



CIRCULATION PLAN

Descending movement / exit
Ascending movement / entry

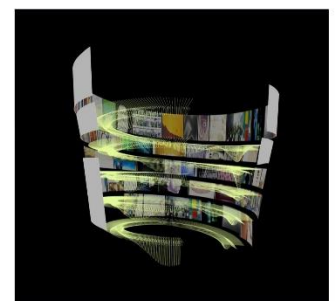
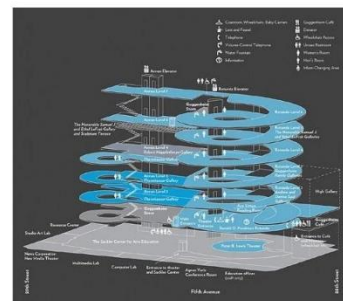
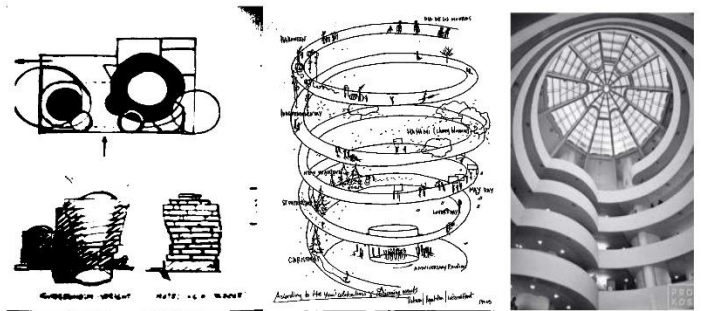


CONCEPT: Wright created the philosophy of 'organic architecture,' which maintains that the building should develop out of its natural surroundings.

Although the word 'organic' usually refers to something that bears the characteristics of plants or animals, for Frank Lloyd Wright the term organic architecture had a separate meaning.

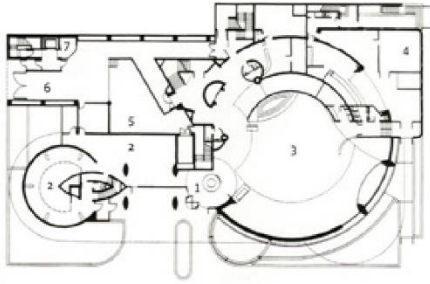
For him organic architecture was an interpretation of nature's principles manifested in buildings that were in harmony with the world around them.

Building inspired by Wright's love for the automobile — Planetarium designed for visitors to drive up the ziggurat-like ramps.

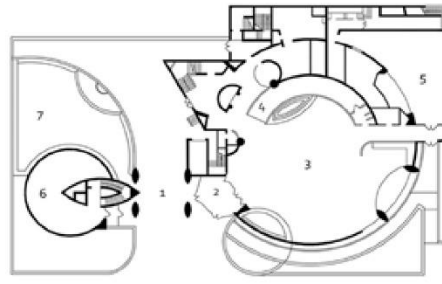


In the Guggenheim, Wright intended to allow visitors to experience the collection paintings by taking an elevator to the top level then view artworks by descending the central spiral ramp. Museum currently designs exhibits to be viewed walking up the ramp rather than walking down.

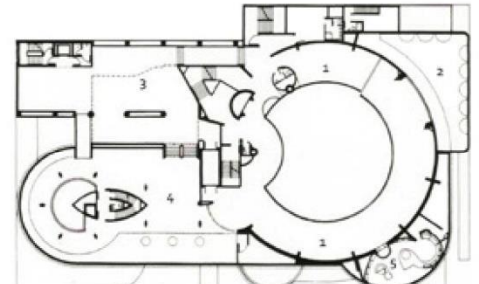
From street, building looks like a white ribbon rolled into a cylindrical shape, slightly wider at the top than at the bottom.



MAIN FLOOR (1984-1992)
 1 ENTRY VESTIBULE
 2 STORE
 3 ATRIUM / EXHIBITIONS
 4 CONSERVATION
 5 LOADING DOCK
 6 RECEIVING
 7 CONTROL



GROUND FLOOR (1959)
 1 ACCESS
 2 ENTRY VESTIBULE
 3 MAIN GALLERY / ATRIUM
 4 RAMP
 5 GALLERY
 6 OFFICES
 7 SCULPTURE GARDEN

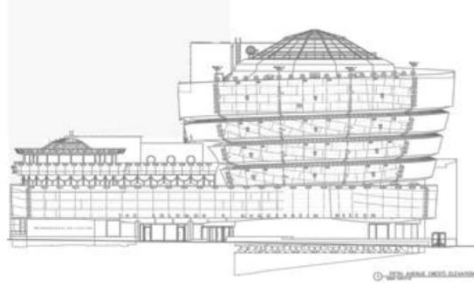
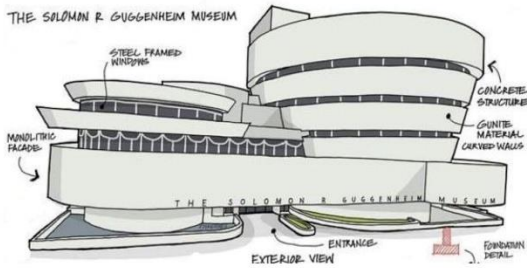


MAIN FLOOR (1984-1992)
 1 RAMP / EXHIBITION
 2 HIGH GALLERY
 3 EXHIBITION
 4 PERMANENT COLLECTION
 5 READING ROOM



FLOOR PLANS

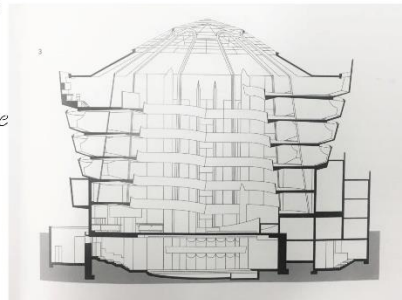
Four floors of exhibition space, three of which are double height, also have office and storage space for mechanical systems.
 Twelve radial web walls divide the gallery into 70 bays for viewing art work,
 A large glass dome covers the entire rotunda, providing natural lighting inside the gallery.
 Skylights line each level of the rotunda, providing natural light along the periphery.
 The gallery walls are 9'6" tall and slope slightly outwards at 97 degrees from the floor.
 Designed to hold paintings, the tilt of the gallery walls was intended to replicate the slope of an easel



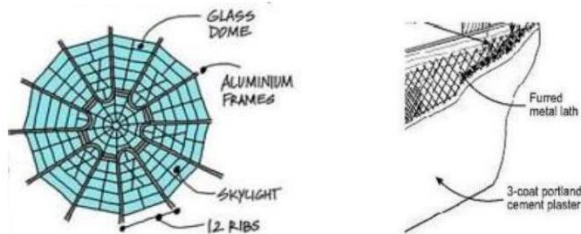
ELEVATIONS

SECTIONS

A giant spiral ramp circulates up to a giant dome with twelve narrow reinforced concrete partitions that pierce the spiral and serve as stiffeners.
 The web walls act as shear walls, transferring force laterally and vertically, while helping resist bending moments.
 12 radial web walls around the rotunda, 8" thick and 25° wide at the top were designed.
 Structural core includes staircase and elevator shaft.
 Acts as structural anchor and provides an alternate circulation to the ramp.



MATERIALS



The Guggenheim is primarily composed of reinforced concrete.
 Normal weight cast in place concrete is the material of the lower levels.
 Light weight concrete is the material of the interior radial walls and the ramps.
 Gunite, or shot Crete, is the material used for the exterior of the spiral curved walls.
 Wright used gunite to achieve a seamless monolithic facade.
 Wright left out expansion joints, which would have created visual vertical breaks.
 He hoped the application of elastomeric paint, known as the cocoon, would fill in the cracks formed during construction.
 The pairing of multiple types of concrete caused visible cracks in the facade.
 Steel framed windows,
 Aluminum skylights were designed.
 Cement plasters soffits on metal lath.

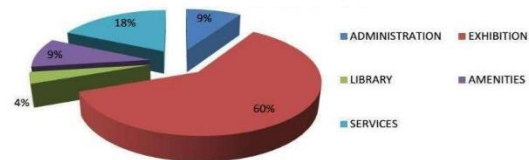


LITERATURE STUDY : SOLOMON R. GUGGENHEIM MUSEUM, NEW YORK

AREA STATEMENT

S.NO	SPACE	NO. OF UNITS	AREA (SQ METRE)	DESIGN CAPACITY
1.	ENTRANCE			100
	Entrance Lobby		300	
	Reception I 30	1	30	
	Back Office I 20	1	20	
2.	ADMINISTRATION			50
	Staff Office	5	60	
	Director General's Chamber	1	20	
	Curator Office	1	12	
	Meeting Room	1	40	
	Staff Rest Room	1	40	
	Security Monitoring Room	1	20	
	Server Room	1	20	
	Staff Toilet (M/F)	5/5	30	
	Restoration Laboratory I	1	200	
	Pantry	1	40	
3.	EXHIBITION GALLERY			700
	Level 1 Gallery 1	1	200	
	Level 2 Gallery 1	1	400	
	Level 3 Gallery 1	1	800	
	Level 4 Gallery 1	1	800	
	Level 5 Gallery I	1	800	
	Level 6 Gallery I	1	400	
	Level 7 Gallery I	1	200	
4.	LIBRARY		150	60
	Librarian's Office	1	20	
	Cyber Room	1	30	
5.	AMENITIES			
	Restaurant	1	200	50
	Museum Shop	1	100	40
	Seminar Hall	1	200	50
	Toilet (M/F)	10/10		
6.	SERVICES			
	Maintenance	1	200	
	Janitor Room	1	50	
	Store	5	200	
	Housekeeping Centre	1	200	
	High Tension Control Room	1	200	
	HVAC Room	1	200	
7.	PARKING		200	40
	Staff Parking		100	
8.	OPEN SPACES			250
	Atrium		900	
9.	TRANSITION AREA(40% of Built Up)		3200	
	TOTAL AREA		11200 SQ METRE	

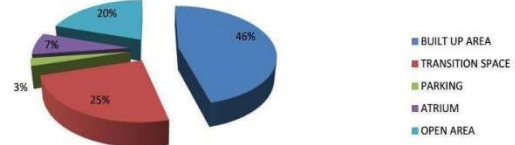
AREA DISTRIBUTION



USER ACTIVITY

USER	ACTIVITY	SPACE
VISITOR	Visual Experience	Level 1 Gallery Level 2 Gallery Level 3 Gallery Level 4 Gallery Level 5 Gallery Level 6 Gallery Level 7 Gallery
	Shopping	Museum Shop
	Reading	Library Cyber Room
	Parking	Parking Area
	Sanitation	Toilet
	Beverage & Food	Restaurant Water Fountain
	Official Work & Monitoring	Office Server Room
ADMINISTRATION & SERVICE STAFF	Services	Maintenance Janitor Room Store Housekeeping Centre High Tension Control Room HVAC Room
	Meeting	Meeting Hall Seminar Hall
	Retiring	Staff Rest Room
	Beverage & Food	Pantry
	Sanitation	Staff Toilet
WORKER STAFF	Restoration	Restoration Lab Store Reserve Collection

SITE DISTRIBUTION



LITERATURE STUDY : BIHAR MUSEUM, PATNA

INTRODUCTION

Patna is a city with a storied past and this land saw the advent of many glorious civilizations. The history of this city unravels like a ball of thread that surprises you with twists and turns as we travel over two millennia.

The Patna Museum established in 1917 will soon turn a century old along with the date of discovery of its most cherished and visited artifact — the world famous Didarganj Yakshi, a statue of monumental Mauryan vision.

In the state of Bihar, the need for a new museum was seriously felt, the Patna Museum having limitations, both in physical space as well as in its design and methods of presentation.

*Bihar Museum is a modern state of the art museum located in Patna.

It was partially opened in August, 2015. 'The children's museum', the main entrance area, and an orientation theatre were the only parts opened to the public in August 2015. Later, in October 2017 remaining galleries were also opened.

It was planned as a history museum for the state of Bihar, and began construction in Bailey Road, Patna in October 2013 with an estimated budget of 498 crore (US\$74 million).

The Museum was planned to bring the region's thousands year history into focus, inspiring local residents and visitors from across the globe to explore Bihar's rich heritage, historic sites and cultural attractions.

CLIMATE

Climate Macro-Climate: Hot & Humid

Average Temperature: 27.1 °C

Maximum Temperature: 46.0 °C

Minimum Temperature: 1.1 °C

Annual Precipitation: 1100 mm

Prevailing Wind Direction: 6km/h North-East

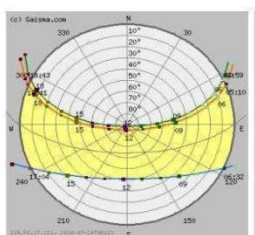
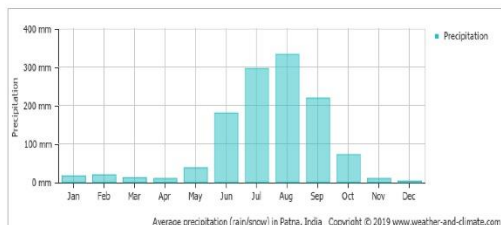
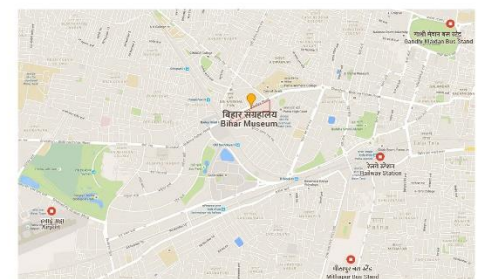


Fig. 1.2 (ii) Sun Path Diagram



Average precipitation (rain/snow) in Patna, India Copyright © 2019 www.weather-and-climate.com



SITE

Department of Art, Culture and Youth, State of Bihar (DACY) proposed a new Museum on Bailey Road on the site west of the Patna Museum.

Latitude: 25° 36' 27.7704" N

Longitude: 85° 7' 12.9036" E

ACCESS TO THE SITE

3.6km away from Patna Junction

4.5km away from Mithapur Bus Stand

4.7km away from Jay Prakash Narayan International Airport

SITE AREA : 13.83 ACRES (56000 SQ METRE)

BUILT UP AREA : 18000 SQ METRE

ARCHITECT: MAKI & ASSOCIATES (JAPAN), OPPOLIS (MUMBAI)

LITERATURE STUDY : BIHAR MUSEUM, PATNA



ZONING

The spaces divide galleries into different specializations, also distinguishing the children's gallery with its own orientation section.
The architecture constantly works to enhance the feeling of wonder and belonging to allow the visitor to explore and discover.
The environment is thus envisioned as a learning landscape, a place that creates a sense of calm that is conducive to education.

CIRCULATION PLAN

The circulation pattern was based on the history of Bihar, starting with Buddhism and Jainism.

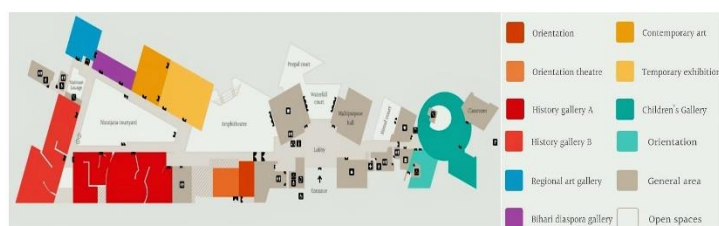
Which was followed by Mauryan and Gupta Empire to Sher Shah Suri and to the Colonial Past to exhibit the great history of Bihar to the Visitors.

SITE PLAN

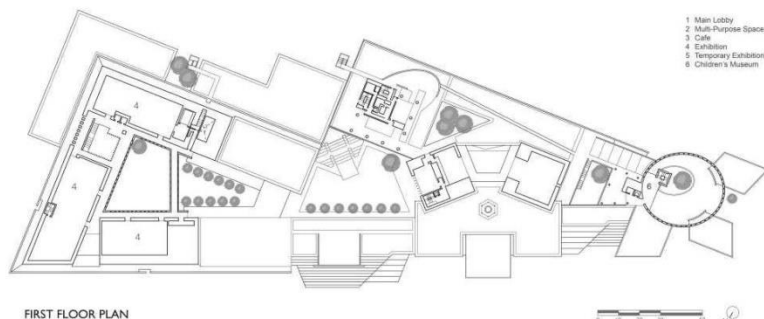
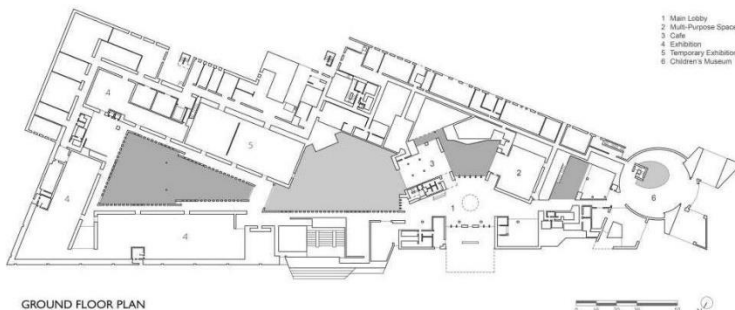
Inspired by the generous site, Fumihiko Maki conceived the Bihar Museum as a campus with interconnected landscape of built-up and open spaces with modest but dynamic profile, in harmony with the land.

The campus incorporates primarily four zones i.e., entrance, education, exhibition and administration.

Each wing has been given a distinct and recognizable form within the complex.



FLOOR PLANS



All independent and smaller-scaled wings are linked together via seven open-to sky courtyards, ensuring that all spaces are connected to the surrounding landscape, while remaining sheltered and comfortable throughout the year.

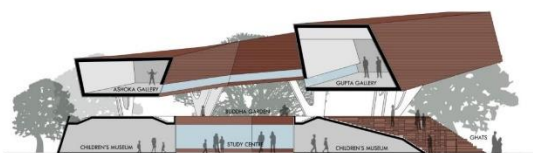
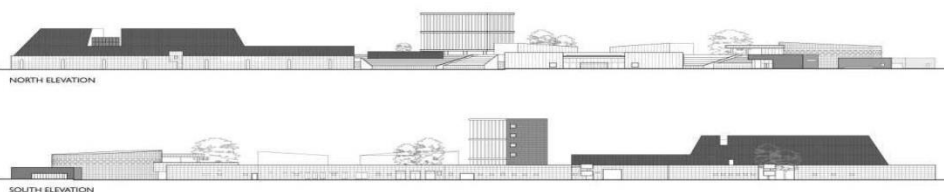
Each courtyard has a unique theme, configuration and spatial quality.

Some of these courtyards have been strategically located to preserve the existing trees on the site.

FLOOR PLANS

Most of the external surfaces of the buildings are clad in zero-maintenance Corten steel, whose earthy brown-red coloration subtly contrasted with the surrounding greenery.

The Corten steel is offset with Indian granite and sandstone, terracotta, and glass finishes - a modern material palette with clear connections to Bihar's past and future.



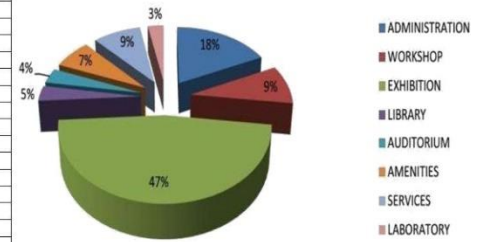
SECTIONS

AREA STATEMENT

Sr. No.	Space	No. of Units	Area (in sq. m)	Design Capacity
1.	ENTRANCE			100
	Entrance Court	-	400	
	Reception	1	30	
	Back Office	1	20	
	Information Help Desk	1	20	
	Ticket Counter	2	20	
	Drop off	1	200	
2.	ADMINISTRATION			50
	Staff Office	10	200	
	Director General's Chamber	1	30	
	Curator Office	2	40	
	Meeting Room	2	200	
	Staff Rest Room	1	100	
	Security Monitoring Room	1	30	
	Server Room	1	30	
	Staff Toilet (M/F)	5/5	50	
	Store	5	1000	
	Staff Canteen	1	200	
3.	WORKSHOP			200
	Wood Workshop	1	200	
	Metal Workshop	1	200	
	Terra-cotta Workshop	1	200	
	Store	1	200	
	Store Props	1	100	
4.	EXHIBITION GALLERY			1500
	Bronze Sculpture Store	1	300	
	Coins Vault	1	200	
	Textile Gallery	1	300	
	Miniature Gallery	1	300	
	Manuscript Gallery	1	100	
	Hindu Art Gallery	1	200	
	Buddhist Art Gallery	1	400	
	Jain Art Gallery	1	200	
	Tribal Art Gallery	1	600	
	Terra-cotta Gallery	1	300	
	Children's Museum	1	600	
	Pre Show Display	1	200	
	Post Show Display	1	100	
	Temporary Exhibition	1	1000	

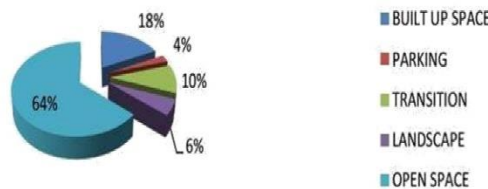
5.	LIBRARY	-	300	100
	Librarian's Office	1	20	
	Cyber Room	1	30	
6.	AUDITORIUM	-	300	100
	Projection Room	1	20	
	Green Room	1	30	
7.	AMENITIES			
	Restaurant	1	250	50
	Museum Shop	2	200	50
	Seminar Hall	1	200	
	Toilet (M/F)	10/10	50	
8.	SERVICES			
	Maintenance	1	100	
	Janitor Room	1	50	
	Store	1	200	
	Housekeeping Centre	1	100	
	High Tension Control Room	1	200	
	HVAC Room	1	200	
9.	LABORATORY	4	200	50
10.	LOADING AREA	-	400	
11.	OPEN SPACES	-	1000	250
12.	PARKING	-	500	100
	VIP Parking	-	100	
	Staff Parking	-	100	
13.	TRANSITION AREA (40% of Total Build up Area)		4800	50
TOTAL AREA			17,000 Sq. M	

AREA DISTRIBUTION



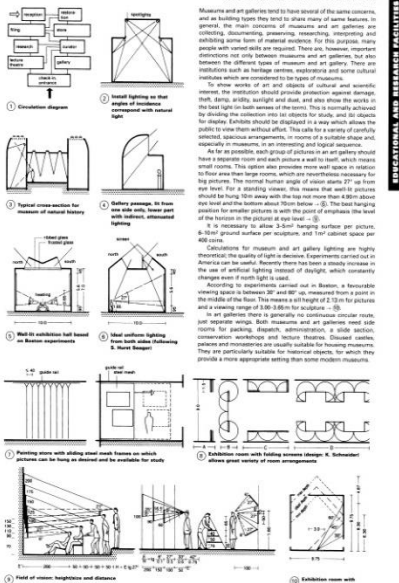
USER	ACTIVITY	SPACE
VISITOR	Visual Experience	Bronze Sculpture Store Coins Vault Textile Gallery Miniature Gallery Manuscript Gallery Hindu Art Gallery Buddhist Art Gallery Jain Art Gallery Tribal Art Gallery Terra-cotta Gallery
	Shopping	Pre Show Display Post Show Display Auditorium Temporary Exhibition
	Reading	Museum Shop
	Toilet	Library Cyber Room
	Parking	Parking Area
	Sanitation	Restaurant Staff Canteen
	Beverage & Food	Office Server Room
ADMINISTRATION & SERVICE STAFF	Official Work & Monitoring	Maintenance Janitor Room Store Housekeeping Centre High Tension Control Room HVAC Room
	Services	Meeting Hall Seminar Hall
	Meeting	Staff Rest Room
	Retiring	Pantry
	Beverage & Food	Staff Toilet
WORKER STAFF	Sanitation	Restoration Laboratory Store
	Restoration	Store Collection

SITE DISTRIBUTION

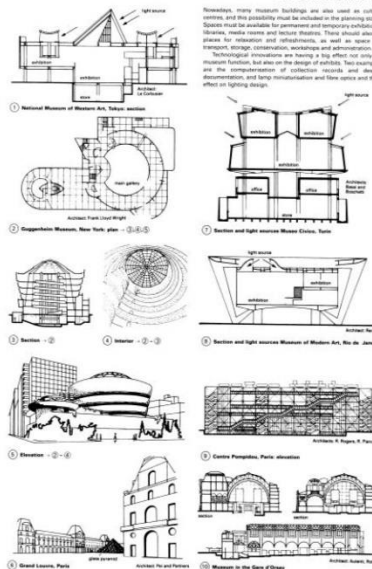


STANDARDS

MUSEUMS AND ART GALLERIES



MUSEUMS: EXAMPLES



ARTIFICIAL LIGHTING

- Ideal exhibition conditions are attained where every aspect of the display is controllable and the light can be focused, moved, colored and all remains independent of weather.
- Hence these aspects can be controlled to control interest, mood attention and even pleasure.
- It is desirable for an exhibition to have both light and dark areas so that object stand out.
- One should be able to achieve light levels to achieve variation in illumination with moderate levels in brightness to connect spaces dramatic and theatrical effects can be sought out by artificial light.

DIRECT LIGHTING FIXTURES

- Recessed in ceiling or wall
- Surface mounted ceiling or wall
- Disguised from ceiling
- Portable lamps

INDIRECT LIGHTING FIXTURES

- Control indirect lighting
- Wall track
- Light suspended from ceiling

DISPLAY LIGHTING

- For display lighting, incandescent lamps often known as C-5 lamps & Halogen lamps are used

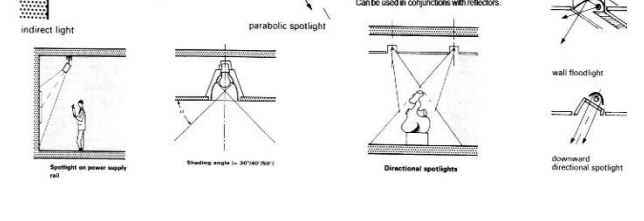
Types of artificial light sources -

FLUORESCENT LAMPS:

These are non directional and cannot be focused or used to project a parallel beam. Fluorescent glow and used as general lighting.

INCANDESCENT LAMPS:

These are directional and used to highlight on certain spot. More flexible in use and expensive. Can be used in conjunction with reflectors.



STANDARDS

SPATIAL REQUIREMENT

1. Entry Lobby, Admission, Store
- 2.1 Entry Vestibule - 150 sqft
- 2.2 Lobby/ Orientation - 400 sqft
3. Admissions/Tickets - 30 sqft
4. Museum Store - 420 sqft
5. Back Storage for Museum Store - 80 sqft

Activity/Program Areas

- 2.1 Exhibit Floor - 4000 sqft
- 2.2 Art Space - 700 sqft
- 2.3 Multi-Purpose Room

Administrative Areas

- 3.1 Reception/Waiting - 40 sqft
- 3.2 Executive Director - 200 sqft
- 3.3 Executive Toilet - 50 sqft
- 3.4 Copy/Work Room/ Mail - 180 sqft
- 3.5 Small Meeting/Planning Area - 100 sqft
- 3.6 Filing and Storage - 80 sqft

Exhibit Shop & Warehouse

- 4.1 Exhibit Shop
- 4.2 Design Area
- 4.3 Flammable Storage - 60 sqft
- 4.4 Warehouse - 1700 sqft
- 4.5 Exhibit Floor/Supply Storage - 180 sqft

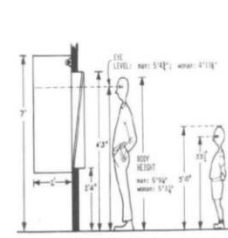
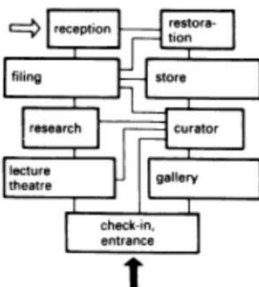
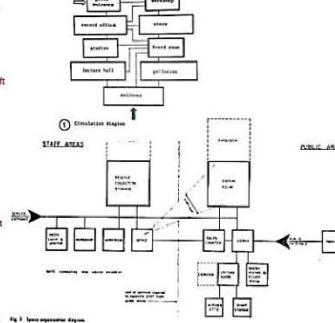


Fig. 2.7 Display Standards

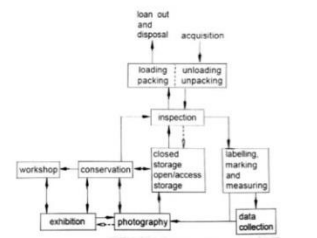


Fig. 2.12 Layout of services

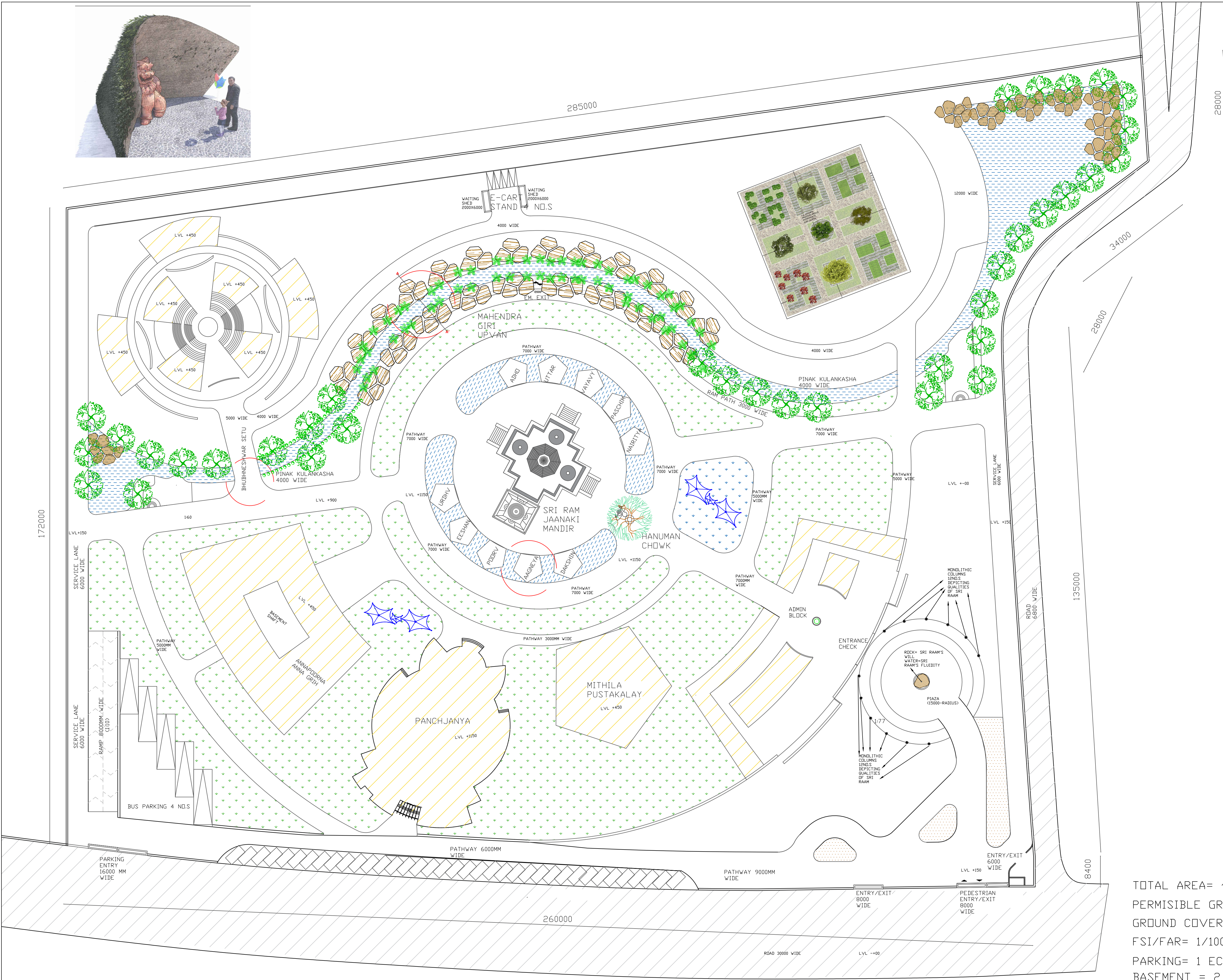
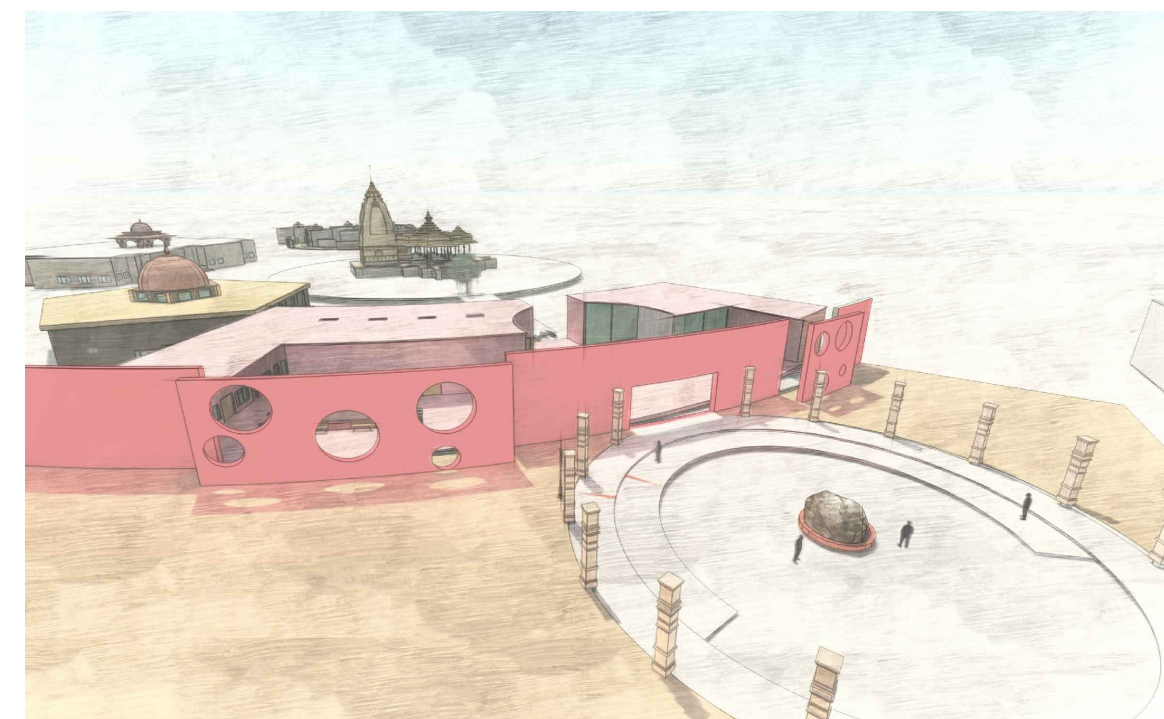
CONCEPT



Bibliography

1. https://en.m.wikipedia.org/wiki/Notional_Gallery_of_modern_art
2. https://sciencedirect.com/fractal_geometry_as_the_synthesis_of_hindu_cosmology_in_kandariya_mahadev_temple_khajuraho
3. Navgrahchetna.co.in
4. St. Joseph Auditorium, Bengaluru
5. Ramayan-The Legend of Ram
6. Tulsi Ramayan – Vani Jairam & Mukesh
7. Tulsi ramayan Book

DRAWINGS



TOTAL AREA= ~41000MTSQ.
 PERMISSIBLE GROUND COVERAGE= 35%
 GROUND COVERAGE ACHIEVED=32%
 FSI/FAR= 1/100
 PARKING= 1 ECS/500 CAR PARKING
 BASEMENT = 2



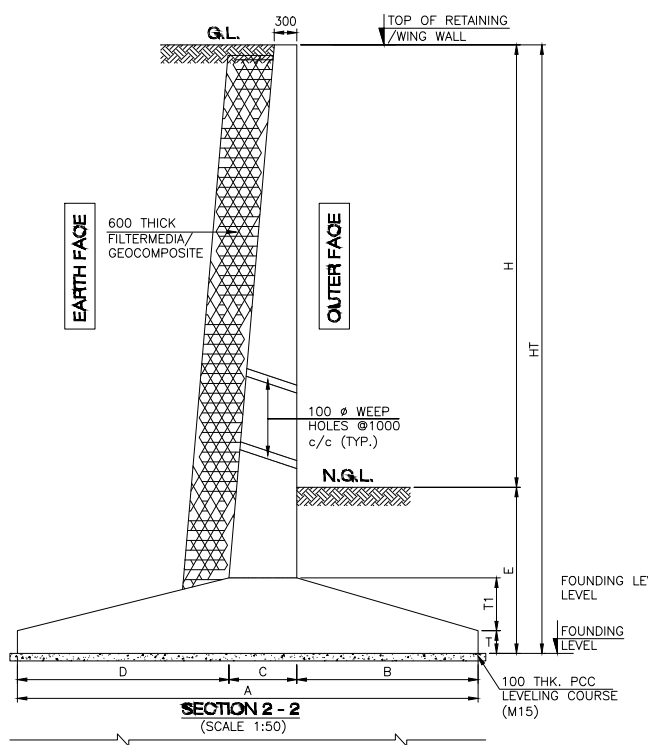
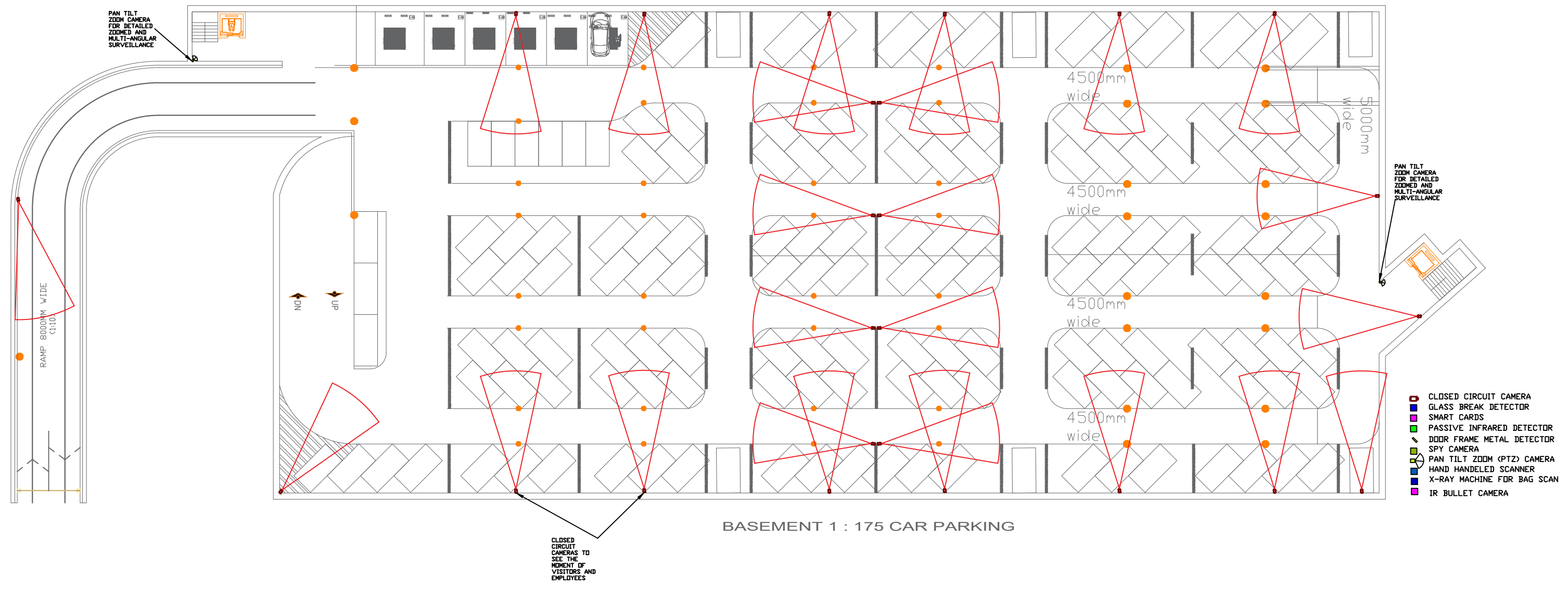
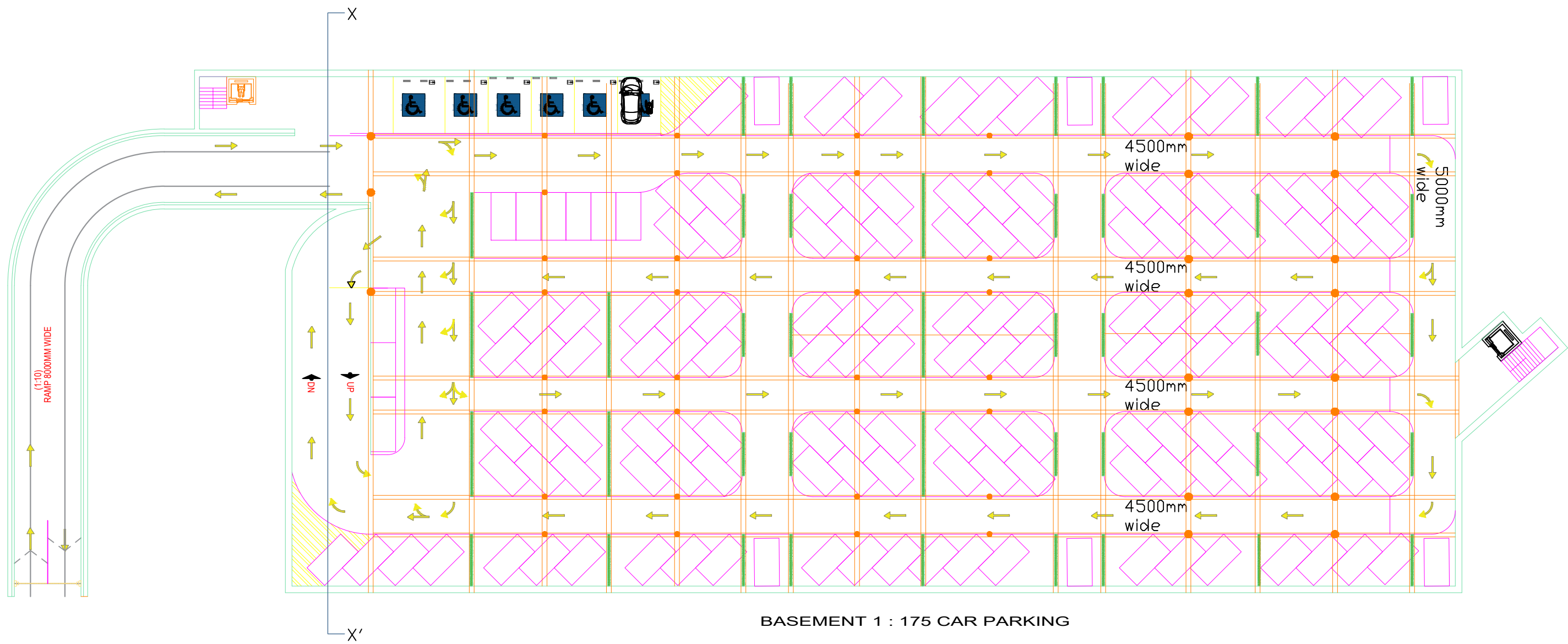
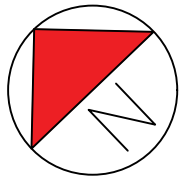
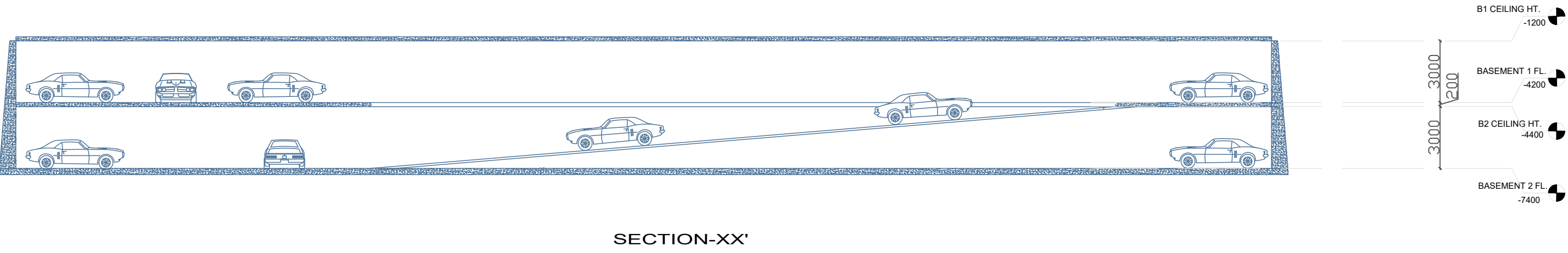
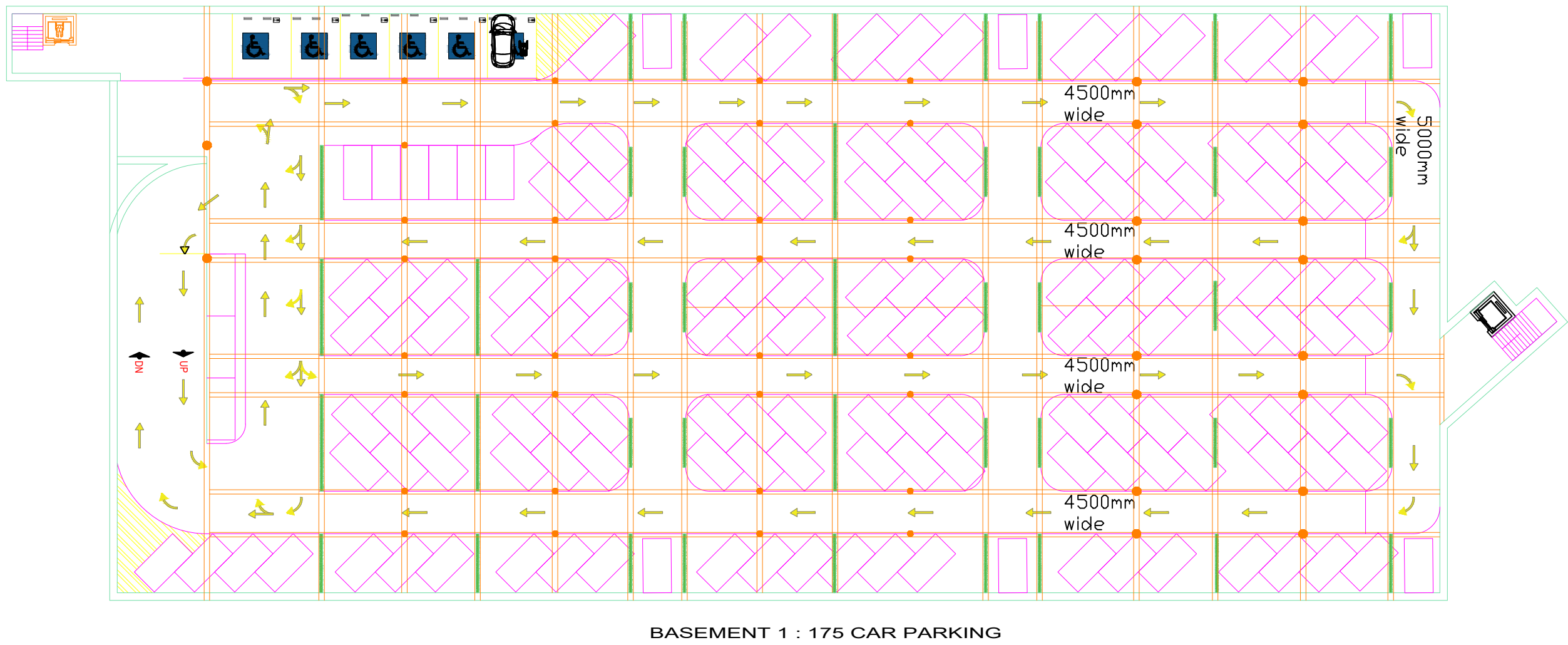


TABLE-1: DIMENSION DETAILS OF RCC RETAINING WALL:-*

S.NO.	TOTAL HEIGHT (M)	6.0 M	6.0 M	7.0 M	8.0 M	9.0 M	10.5 M
1	H	3.00	4.00	5.00	6.00	7.00	7.50
2	A	4.10	5.00	6.00	6.80	7.50	8.50
3	B	1.10	1.60	2.10	2.50	2.70	3.10
4	C	0.60	0.70	0.80	0.90	1.00	1.20
5	D	2.40	2.70	3.10	3.40	3.80	4.20
6	E	2.00	2.00	2.00	2.00	2.00	3.00
7	K	2.50	3.50	4.50	5.30	6.00	7.00
8	T	0.30	0.30	0.30	0.40	0.40	0.50
9	T1	0.30	0.40	0.50	0.60	0.60	0.60
10	WAX. BASE PRESSURE (kN/m²)-AS PER DESIGN	14	14	15	16	17.5	18

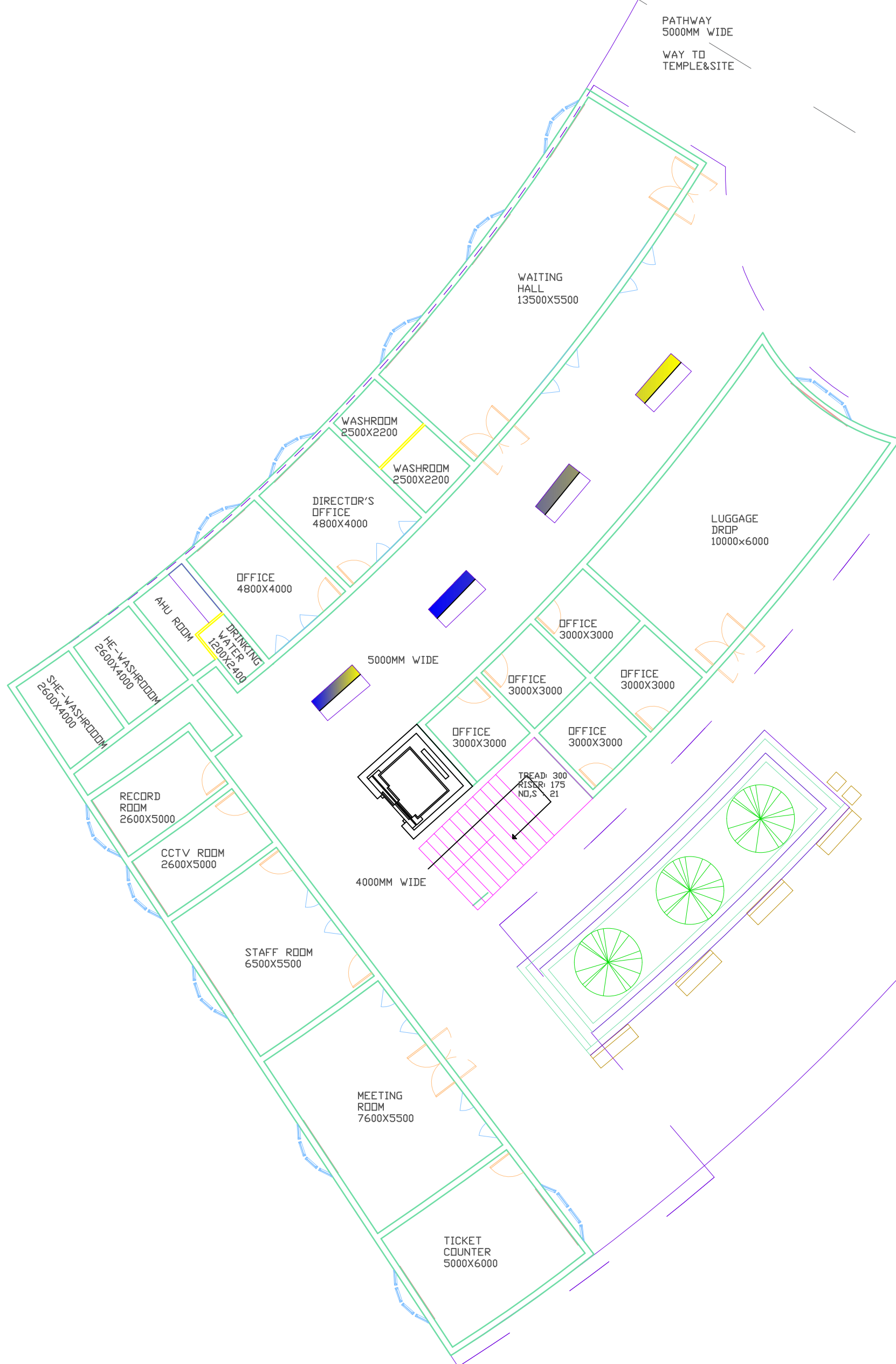
*DIMENSIONS GIVEN IN THE TABLE ARE IN METRES



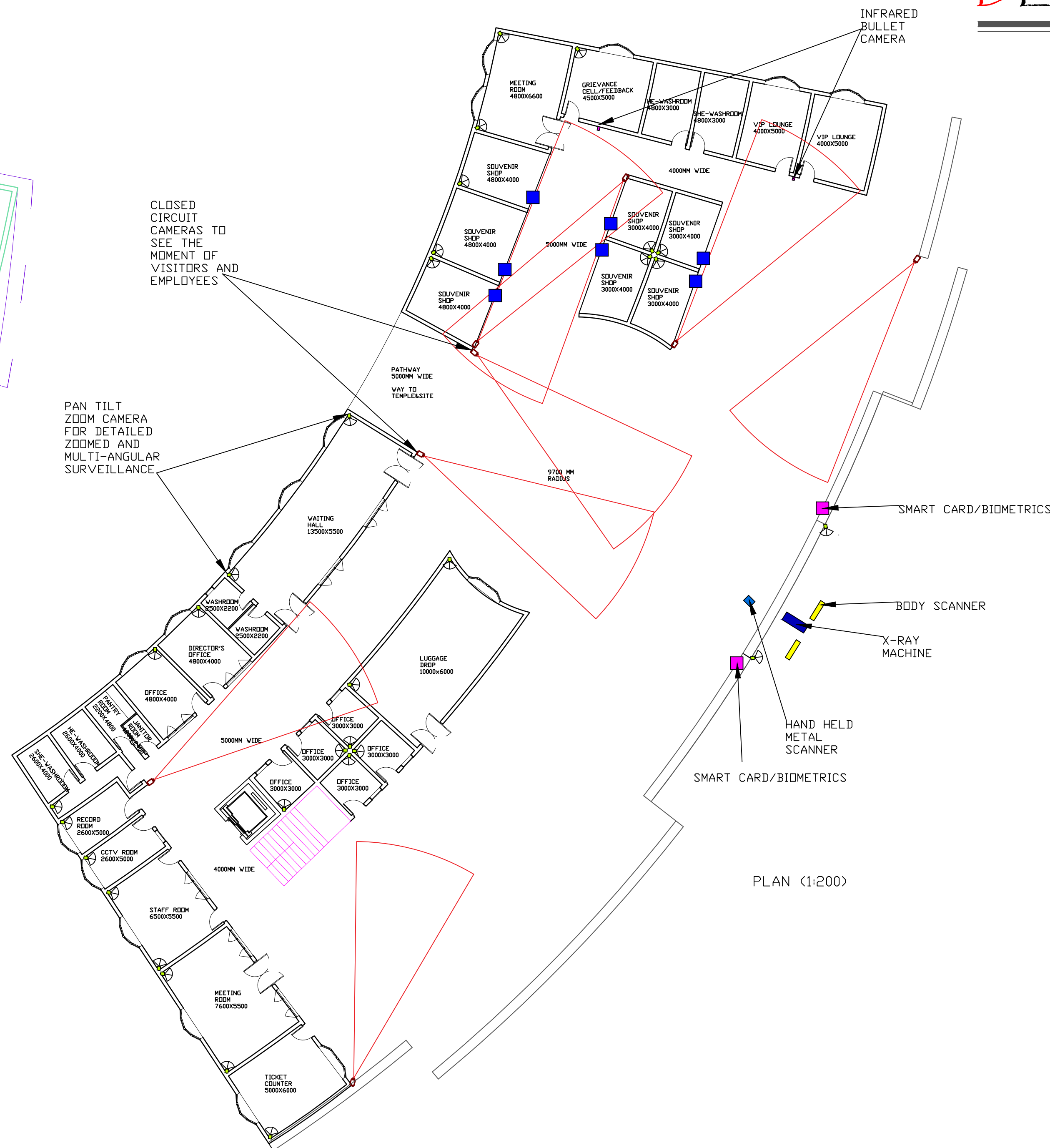


AT A

X

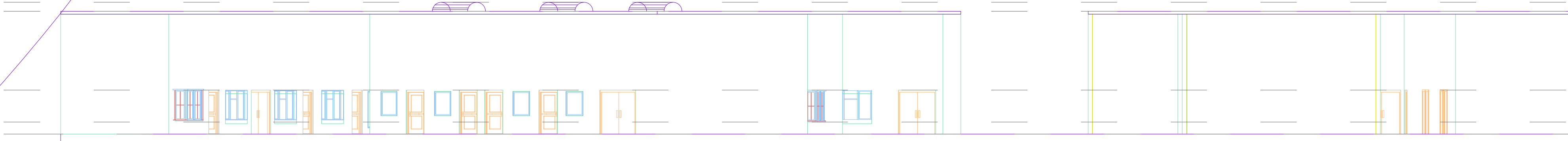


PLAN (1:150)

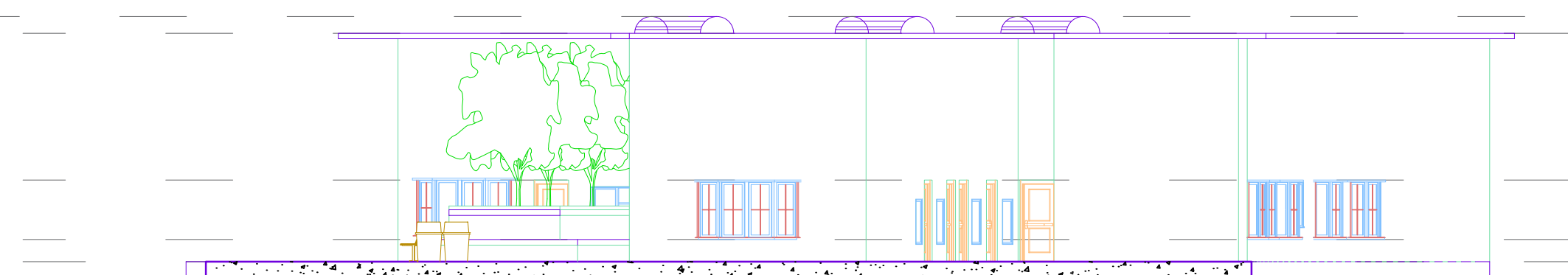


PLAN (1:200)

- CLOSED CIRCUIT CAMERA
- GLASS BREAK DETECTOR
- SMART CARDS
- PASSIVE INFRARED DETECTOR
- DOOR FRAME METAL DETECTOR
- SPY CAMERA
- PAN TILT ZOOM (PTZ) CAMERA
- HAND HELEDED SCANNER
- X-RAY MACHINE FOR BAG SCAN
- IR BULLET CAMERA



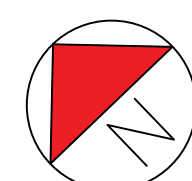
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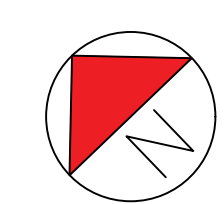
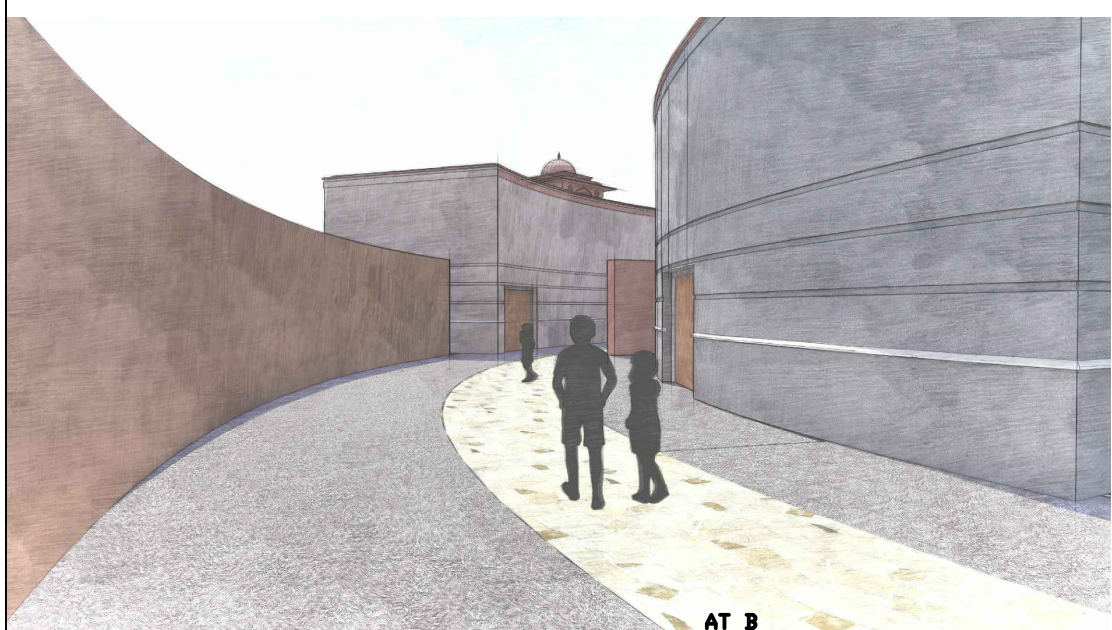
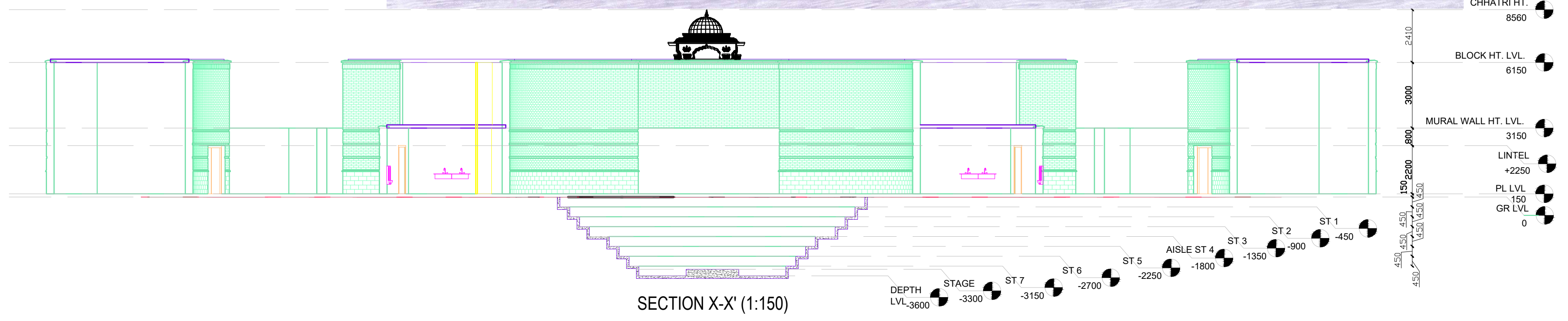
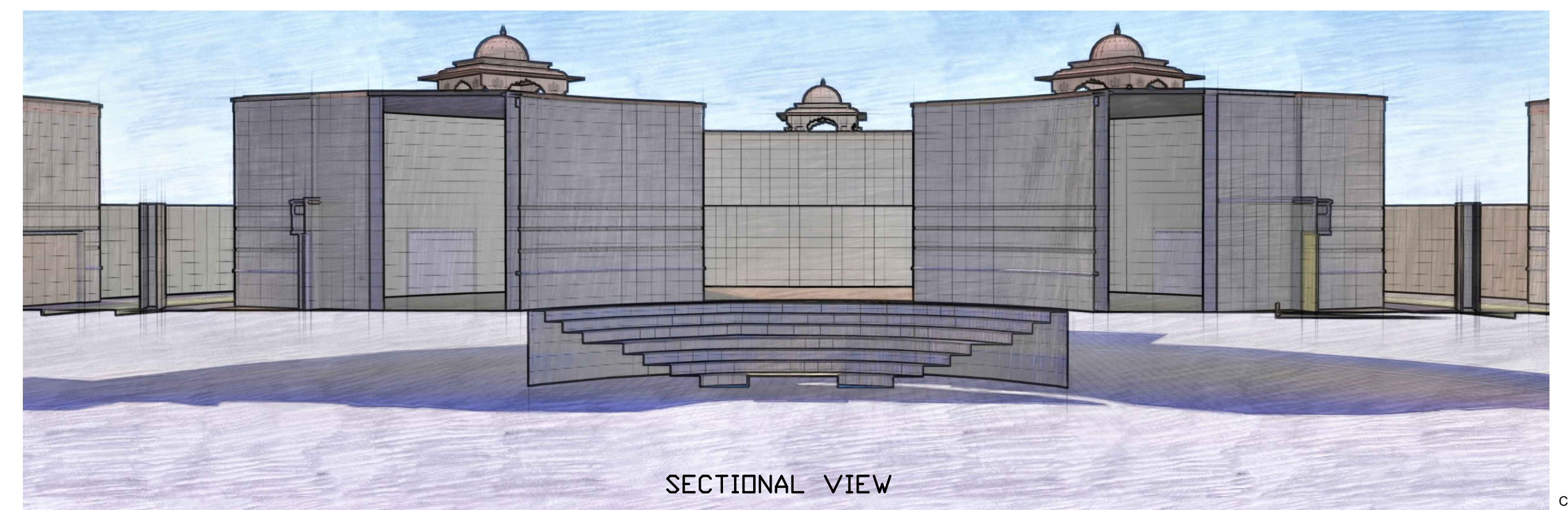
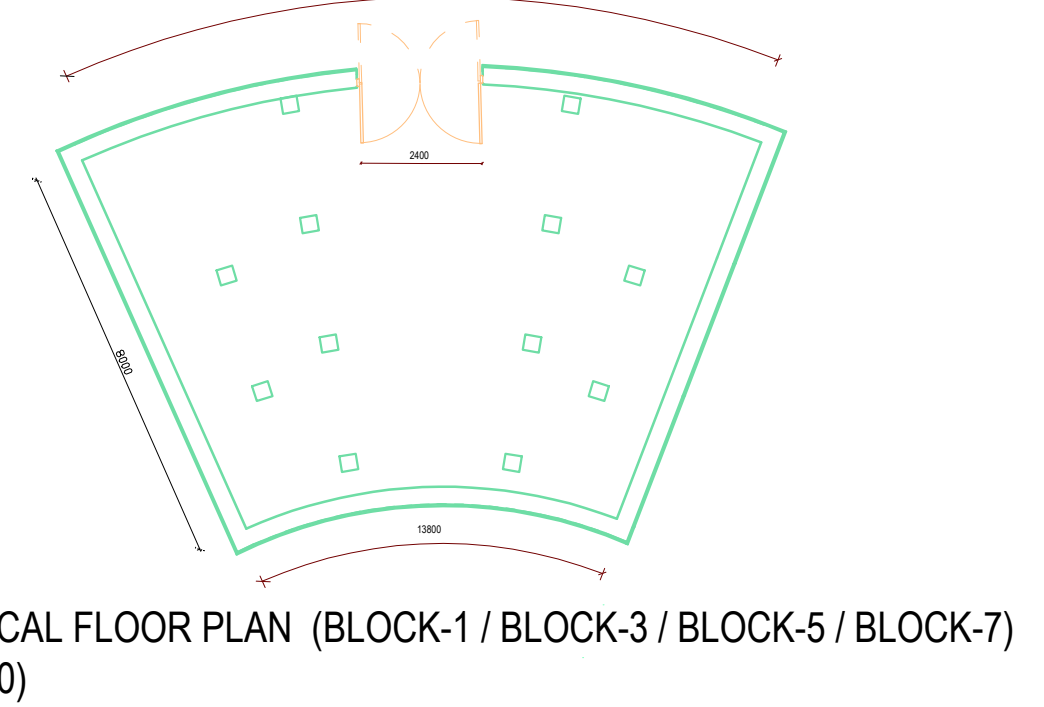
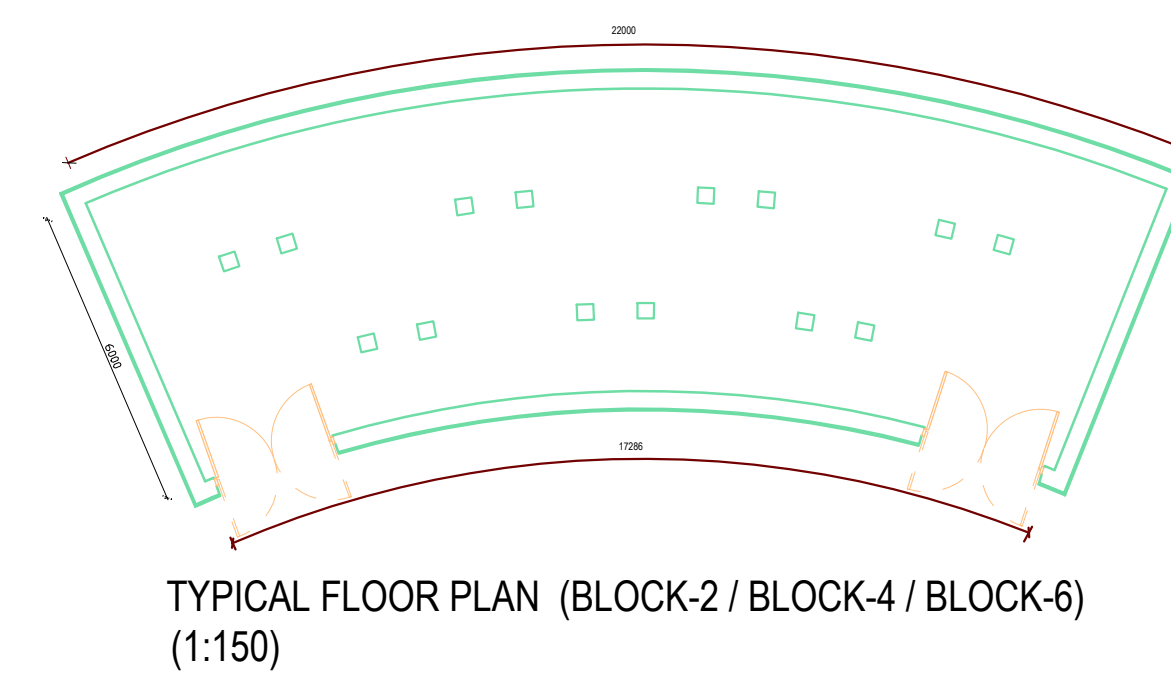
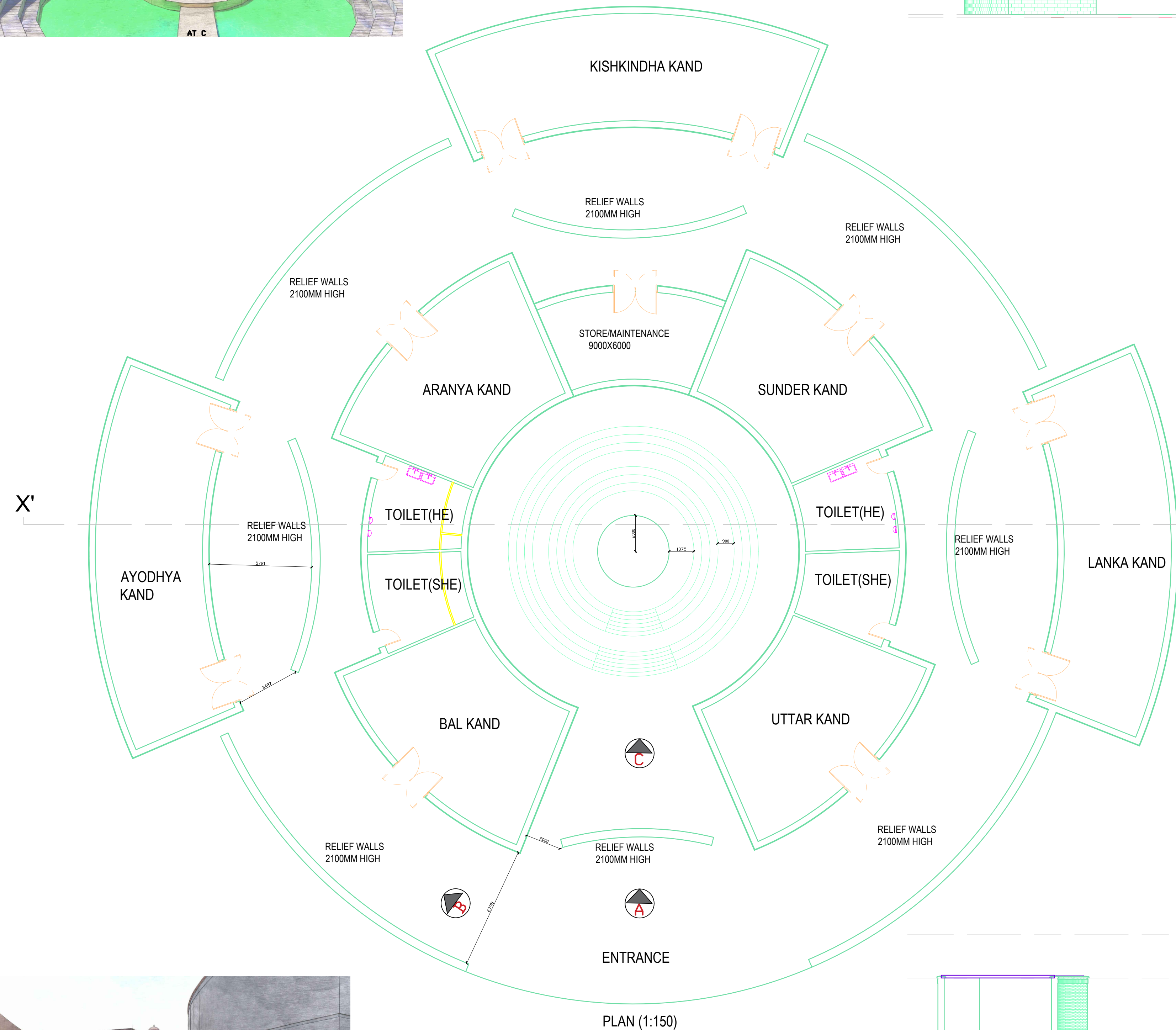
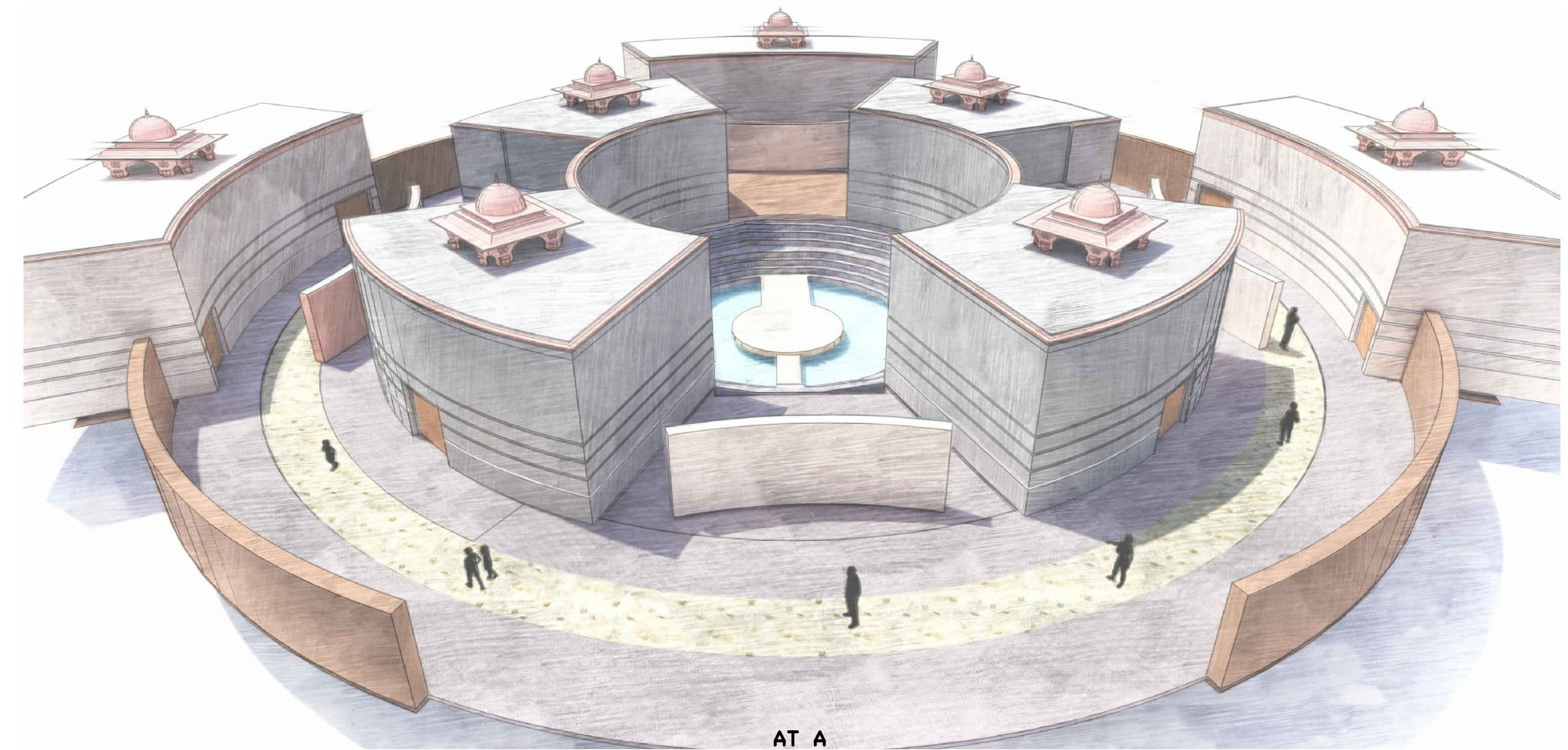
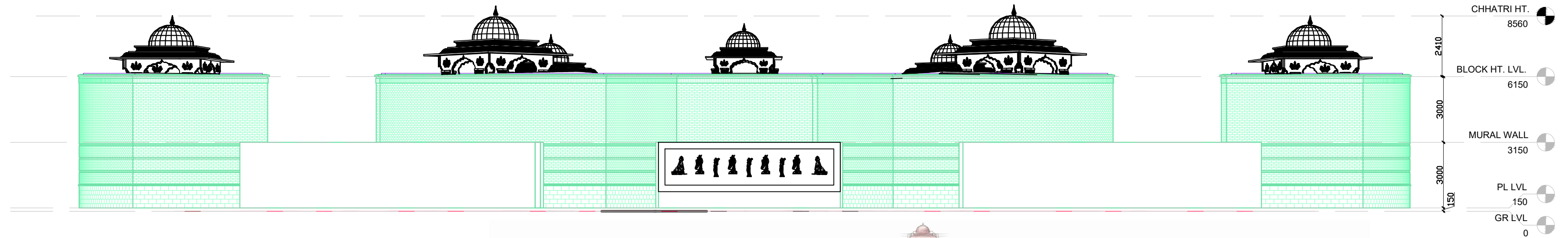
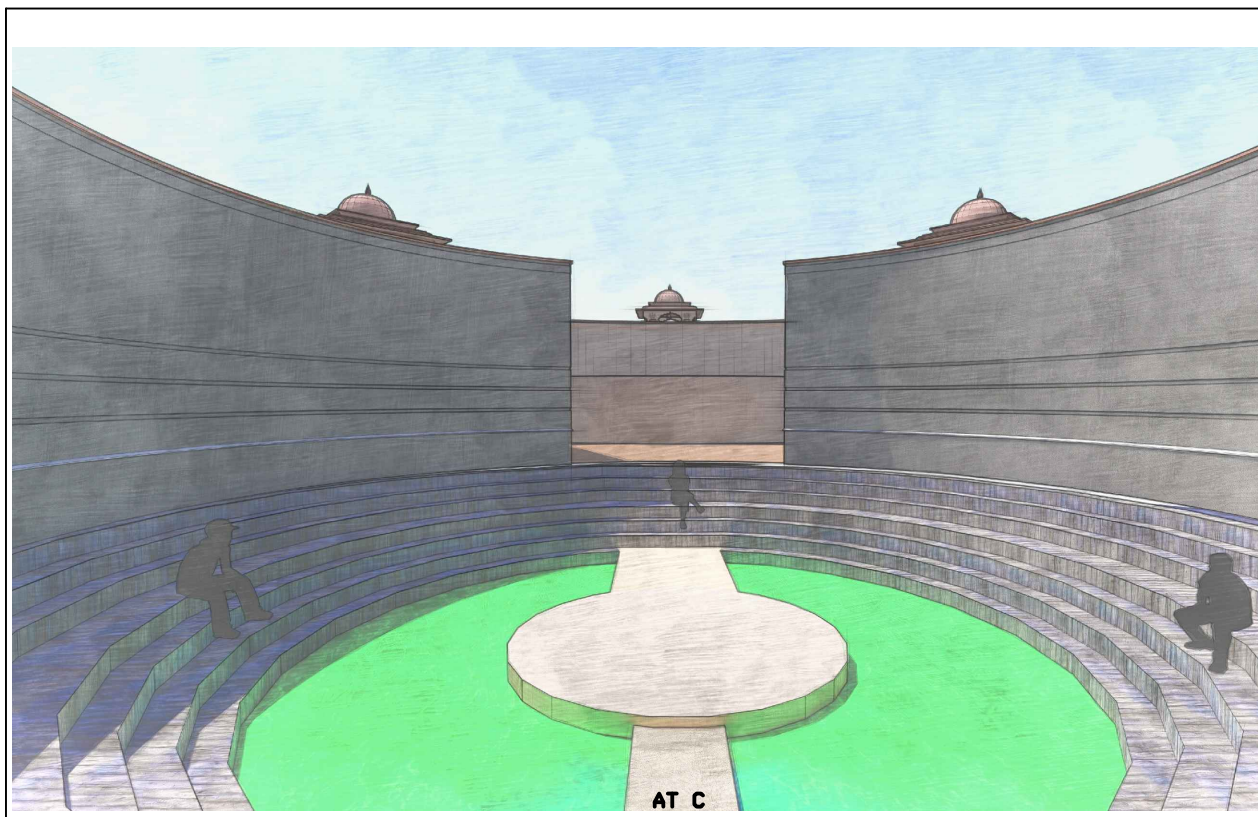


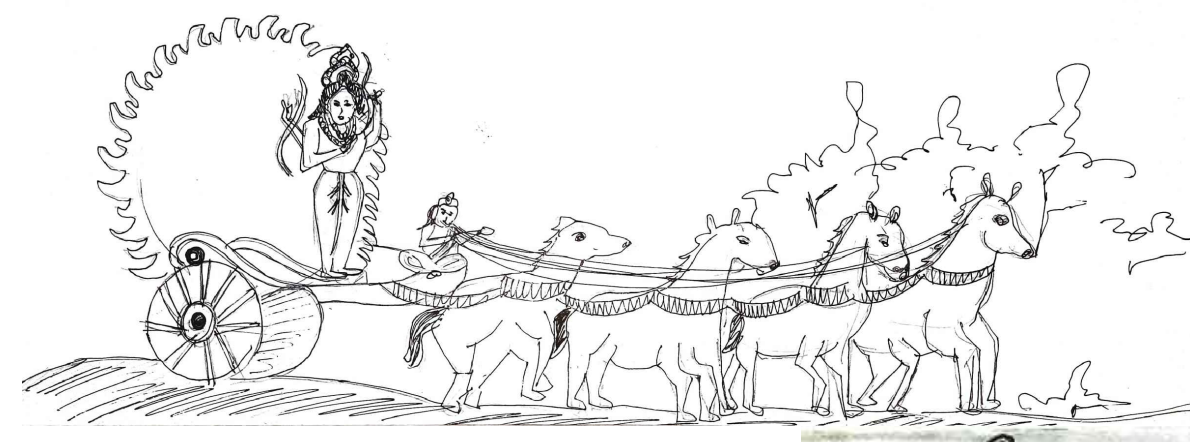
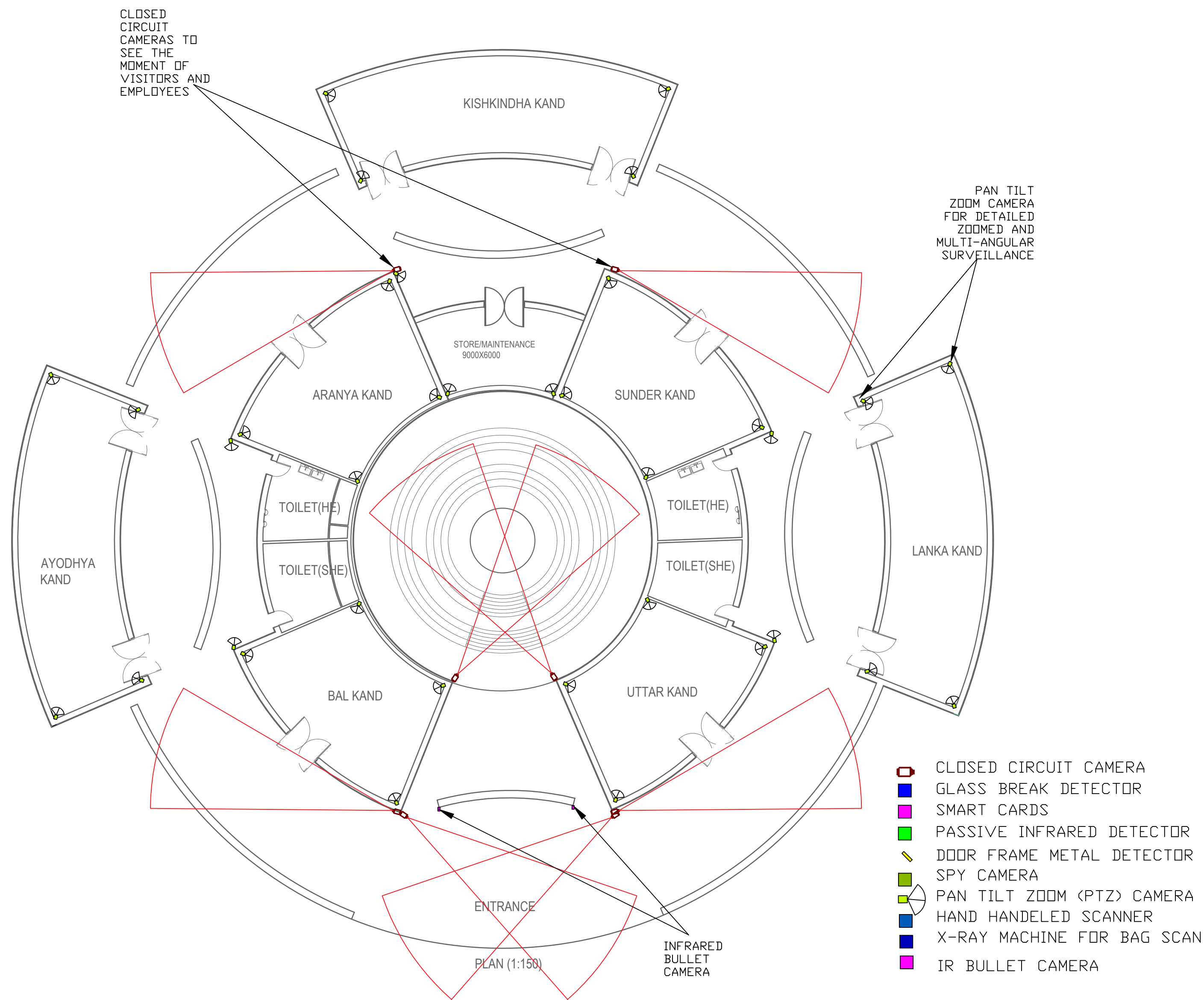
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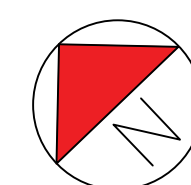
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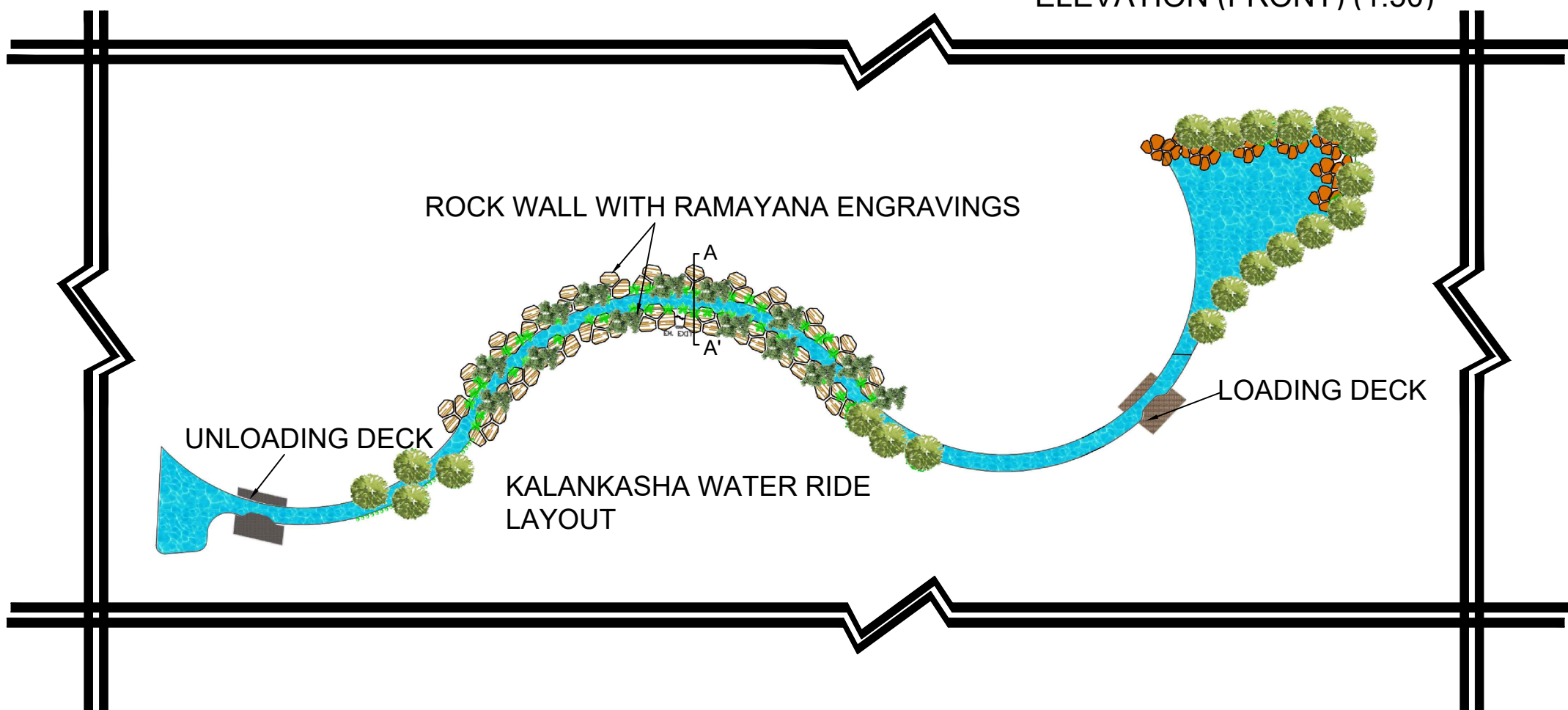
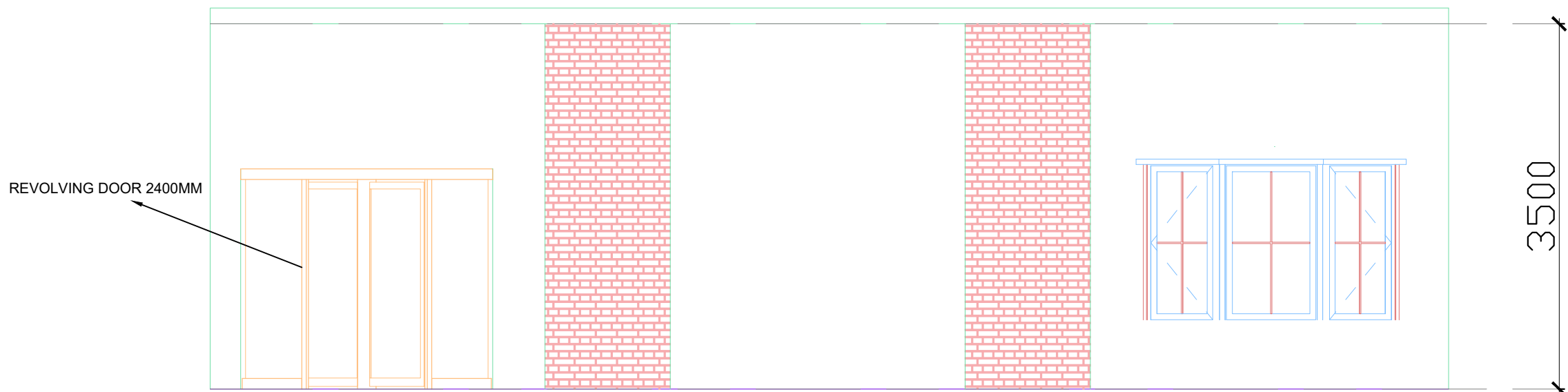
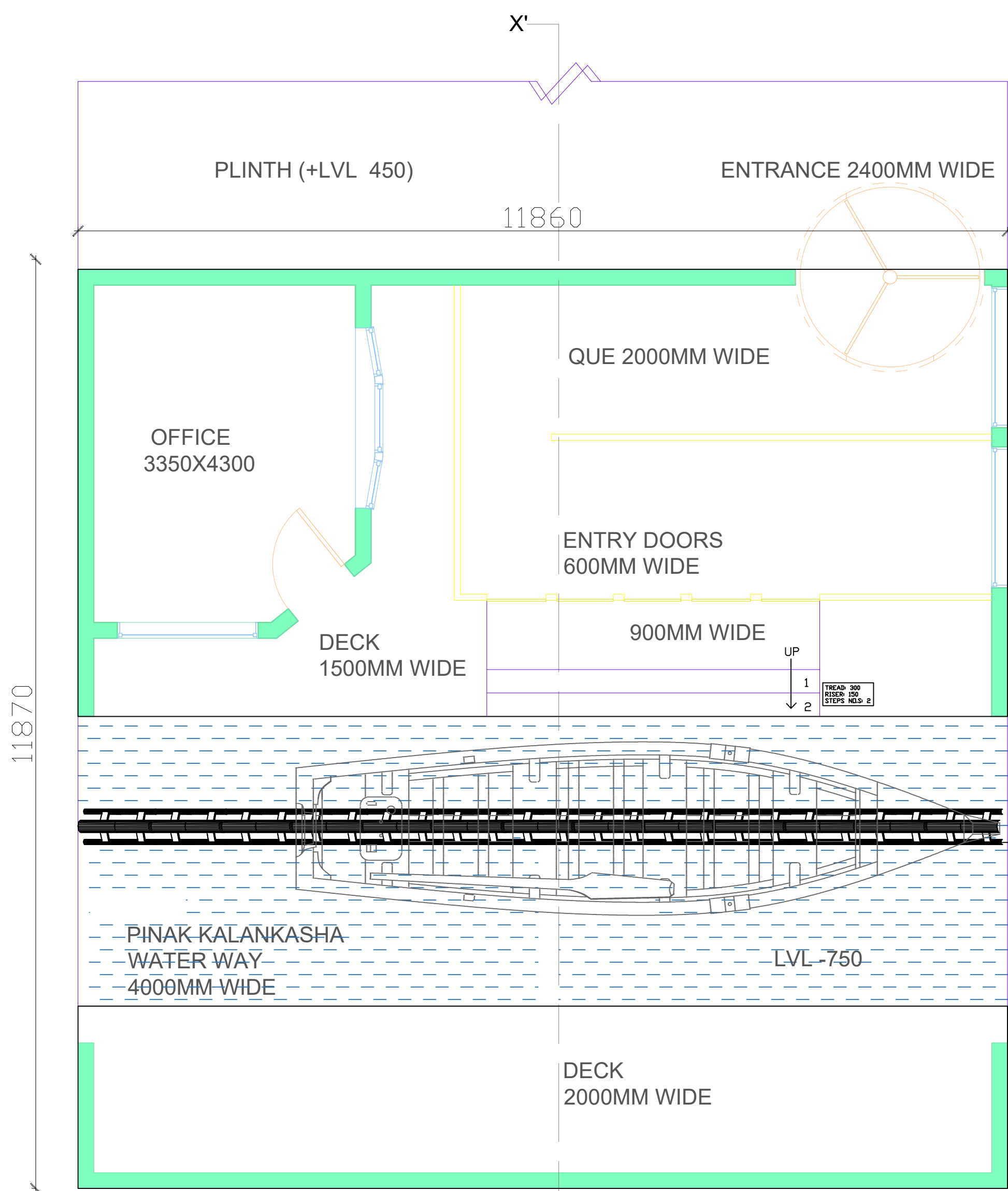




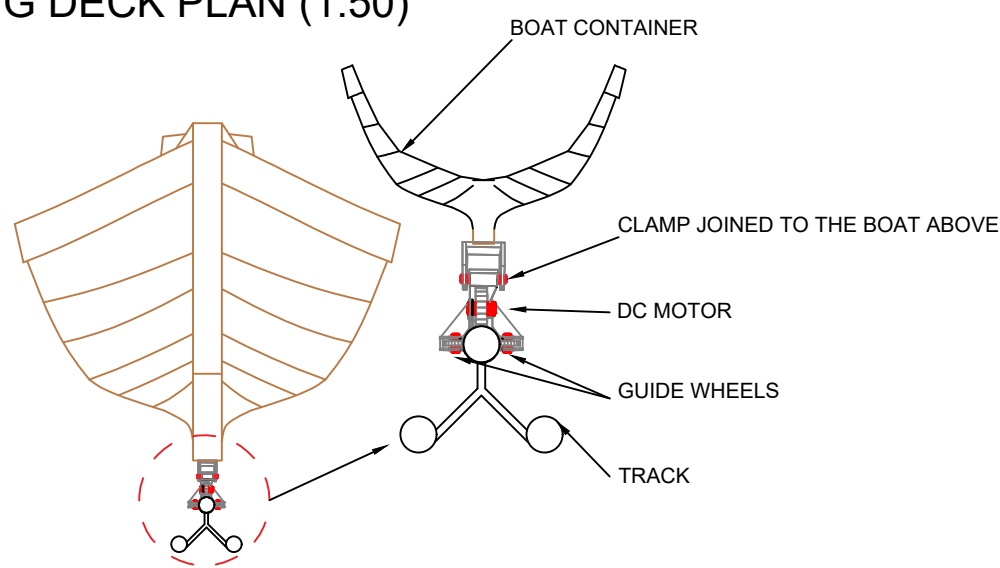


RAMAYAN EVENTS
(FOR GALLERY AND WATER RIDE)

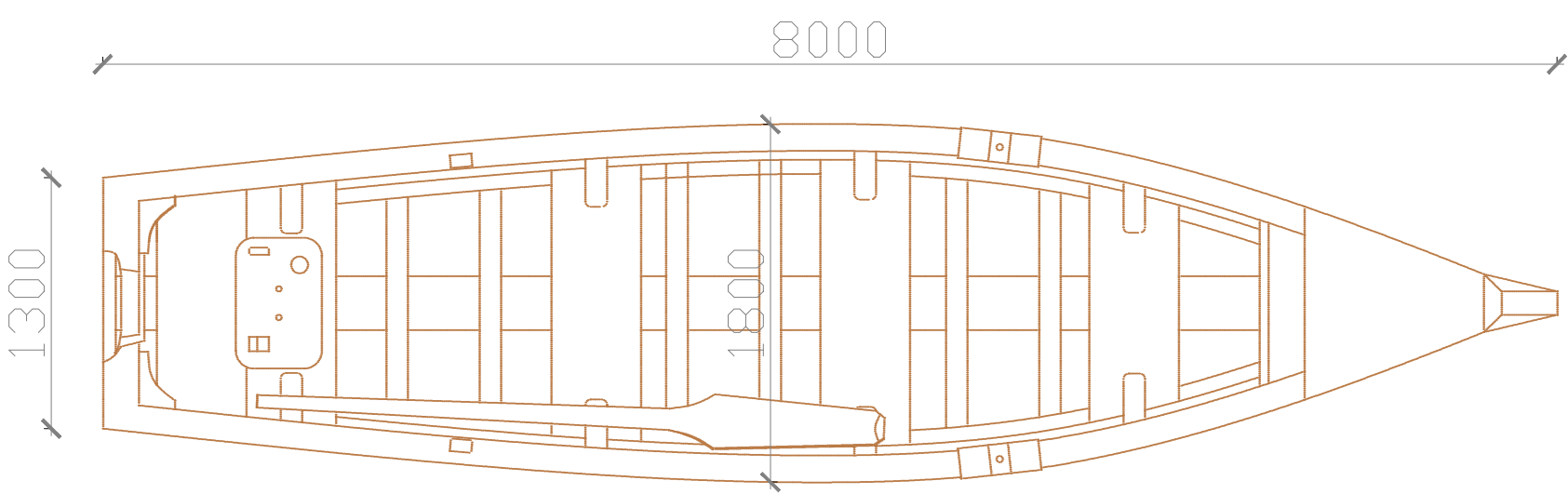




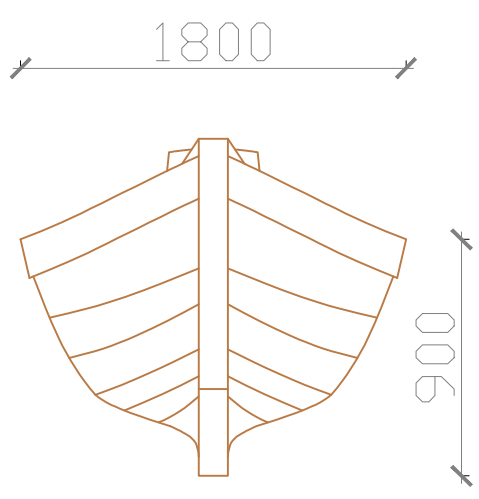
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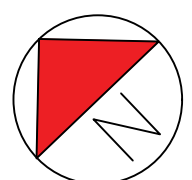
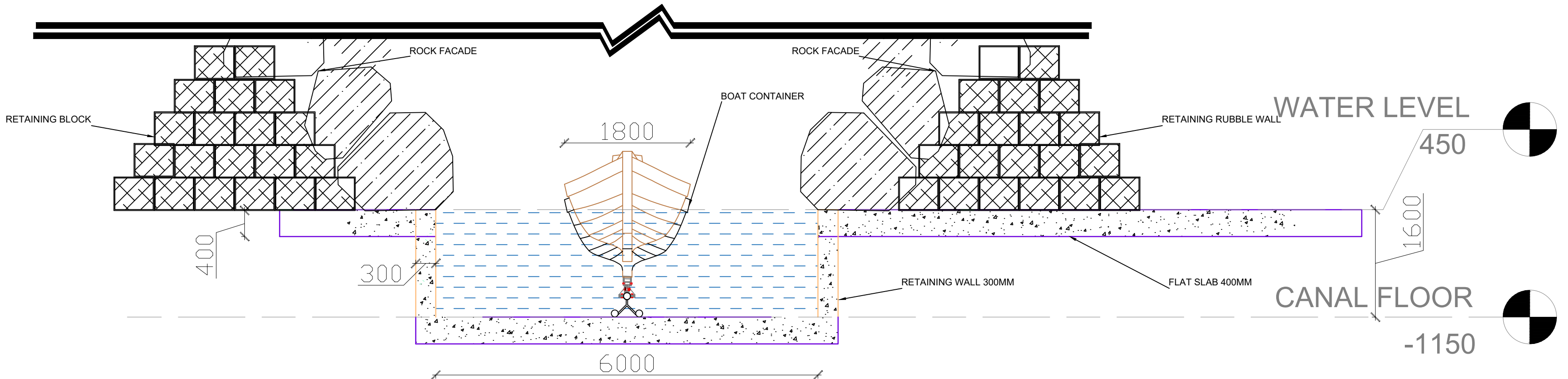
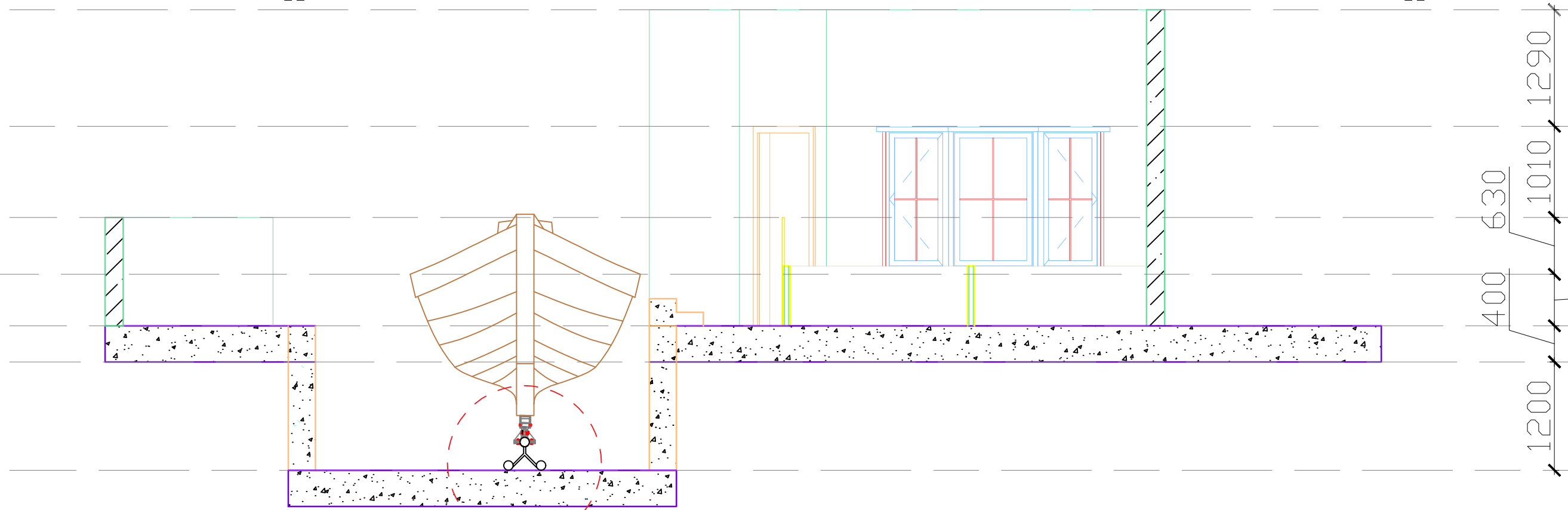
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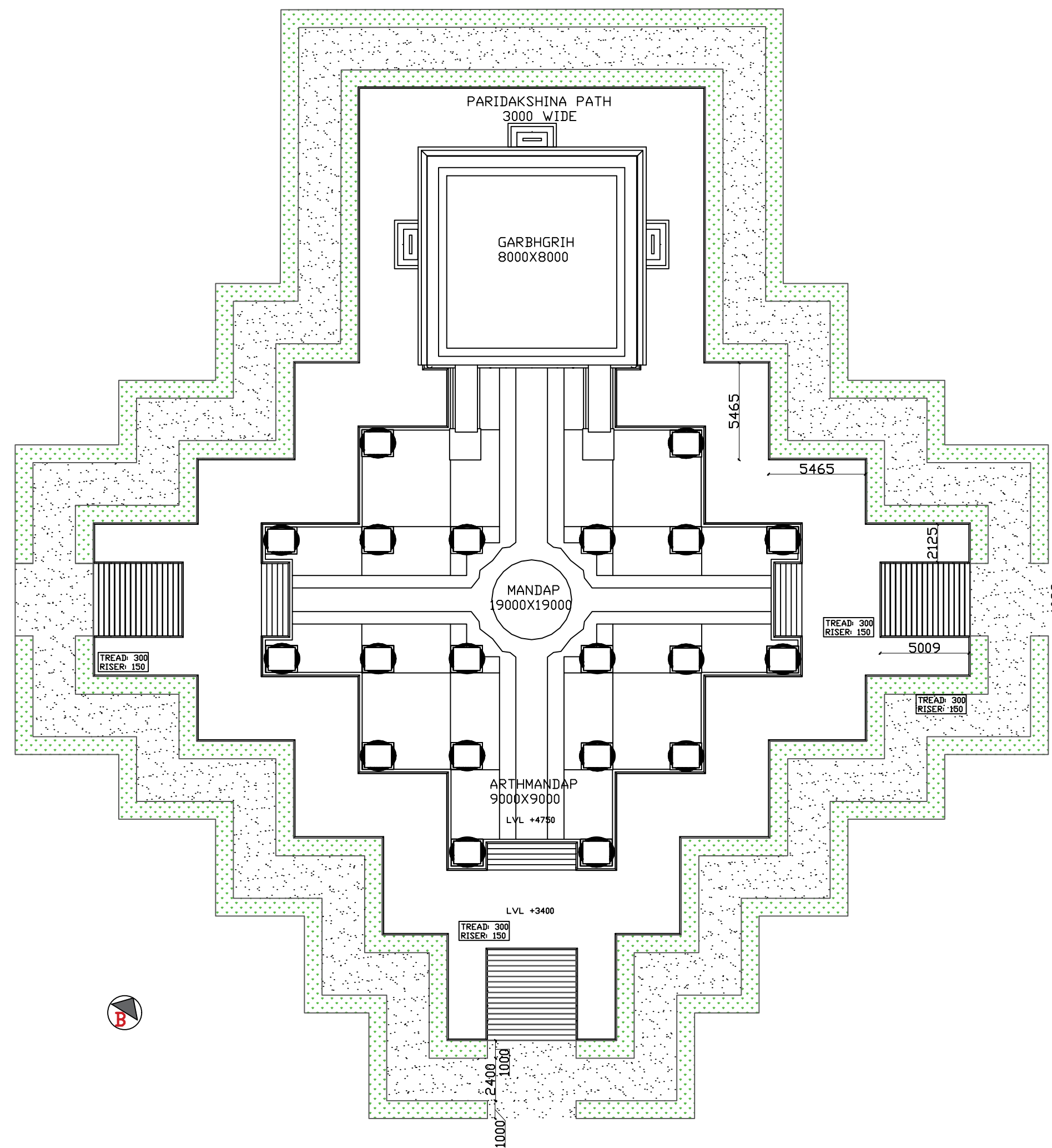


PLAN

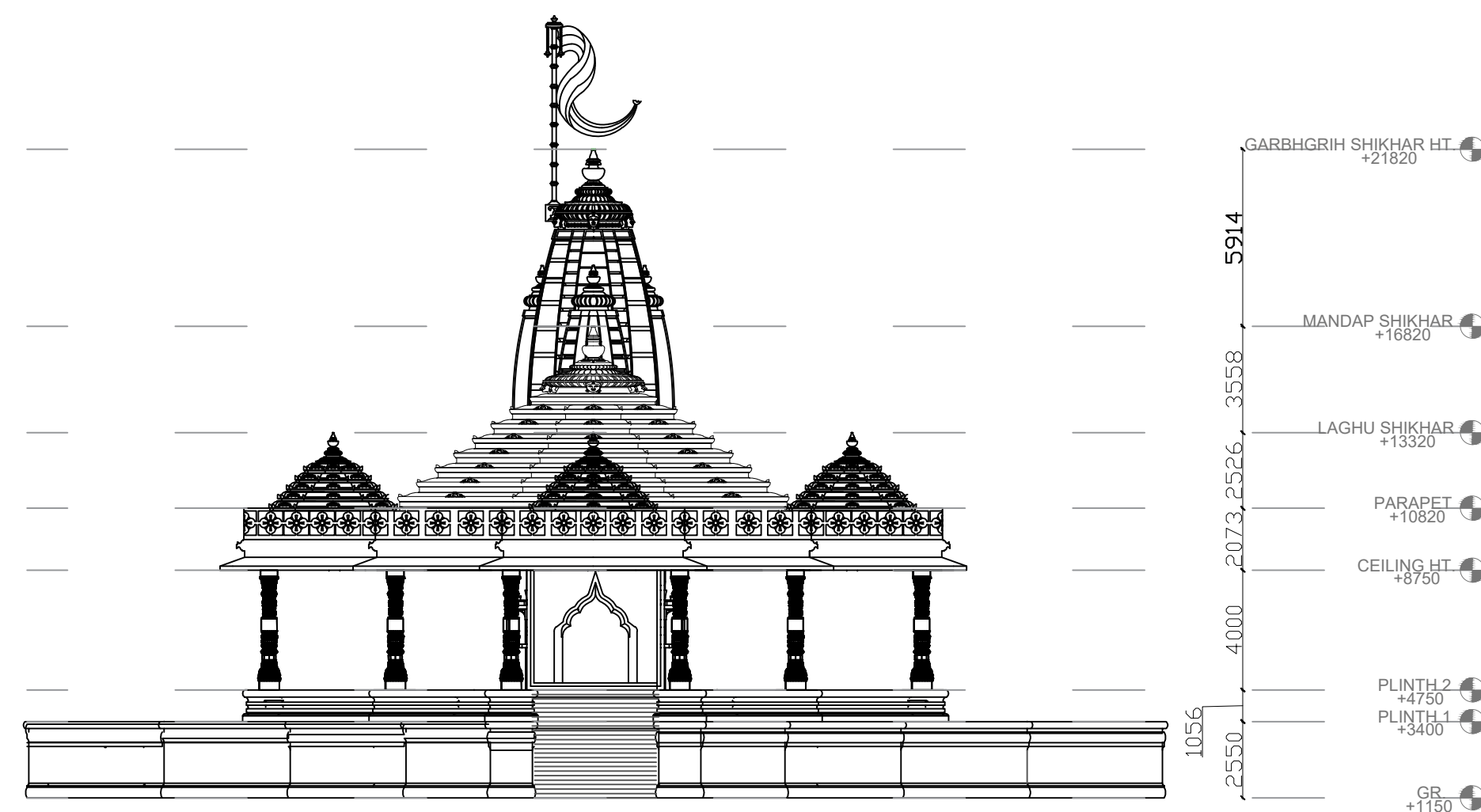


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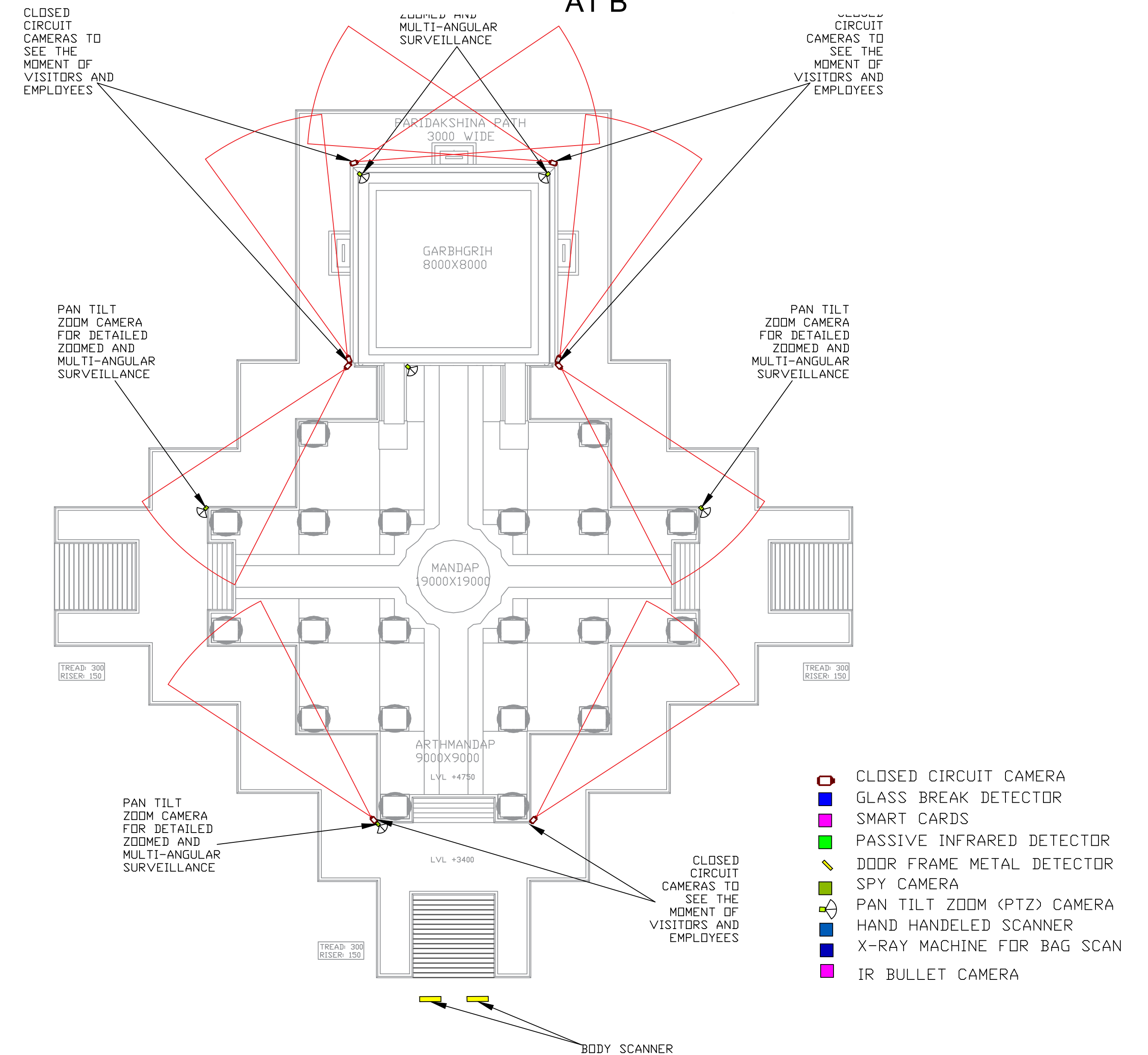
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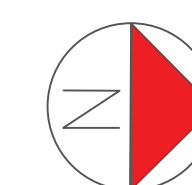
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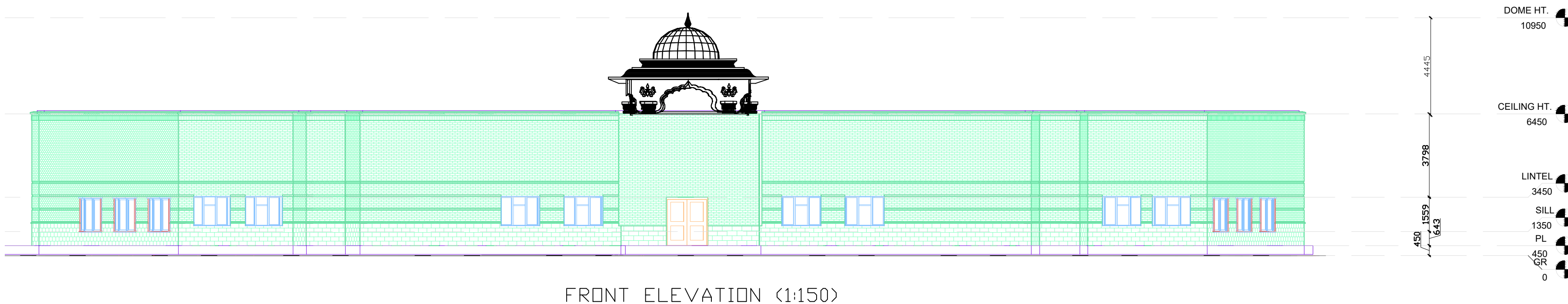
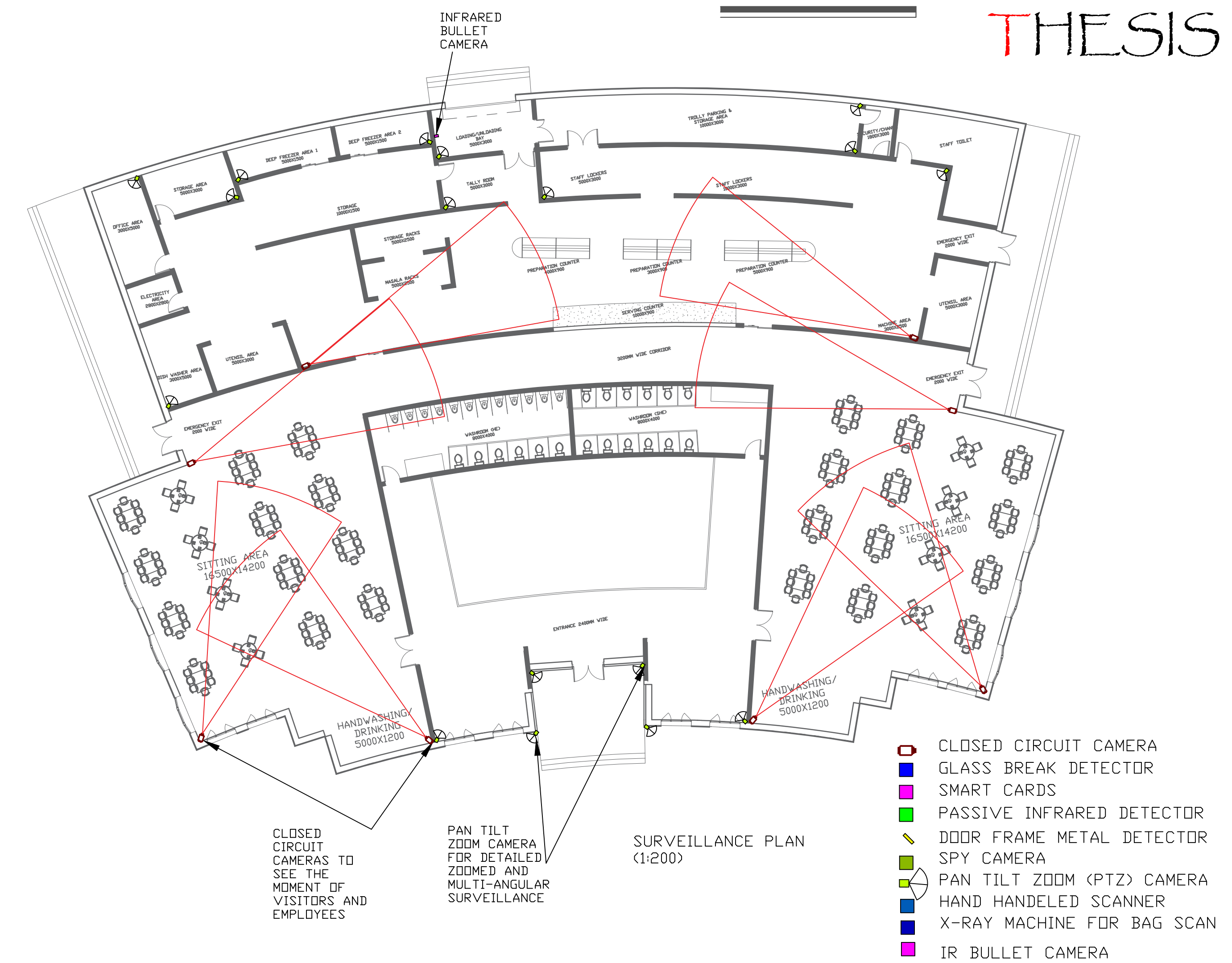
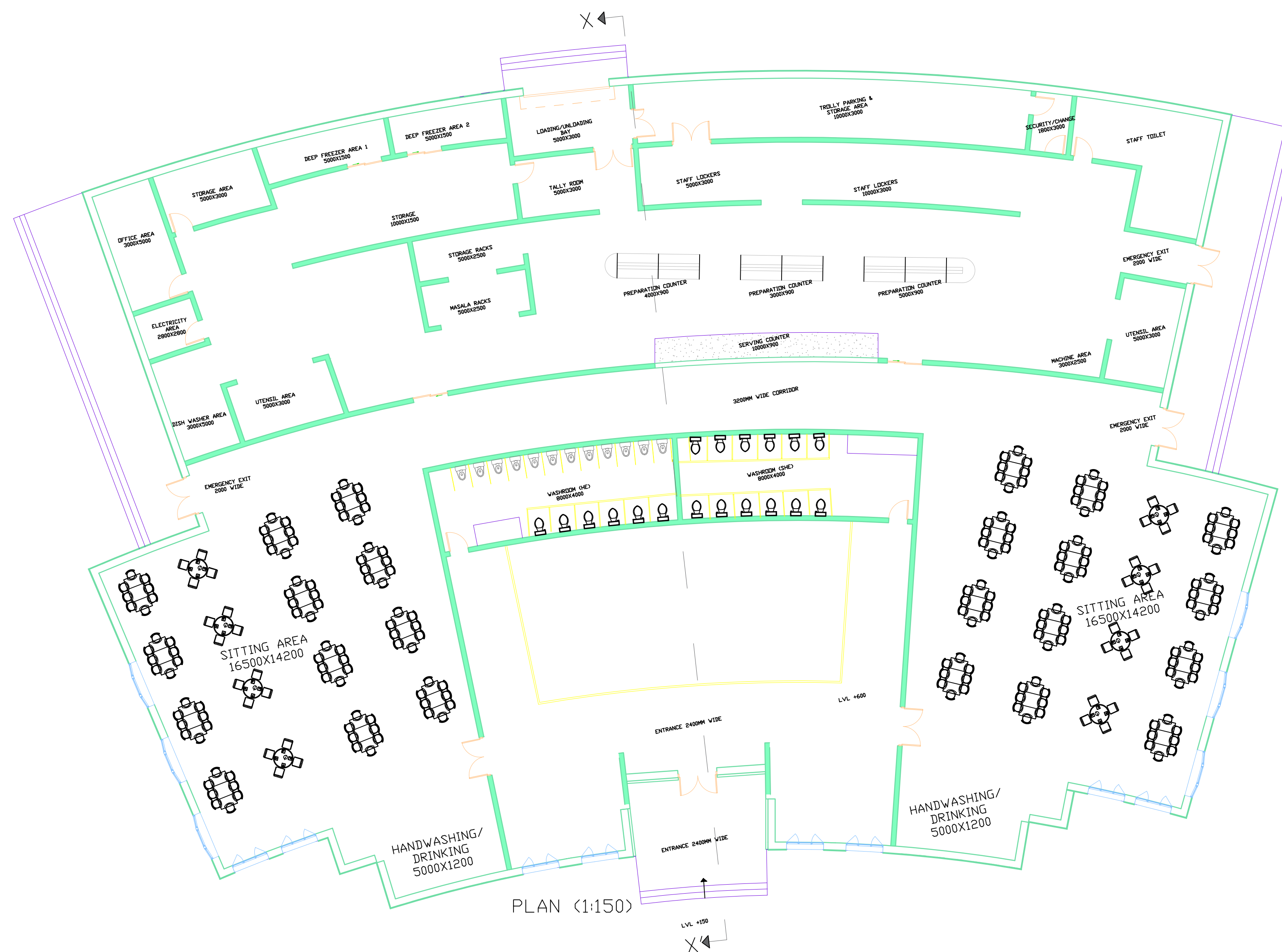
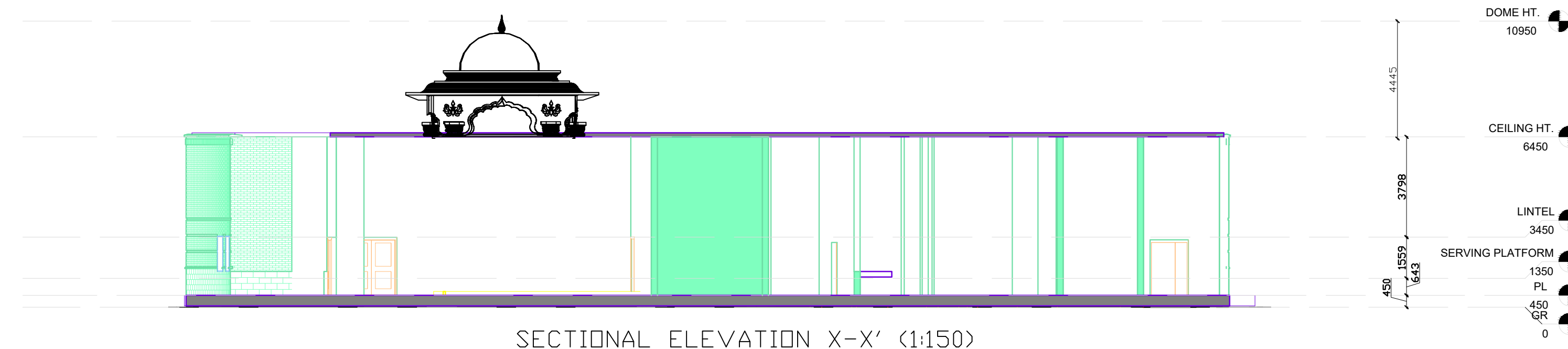


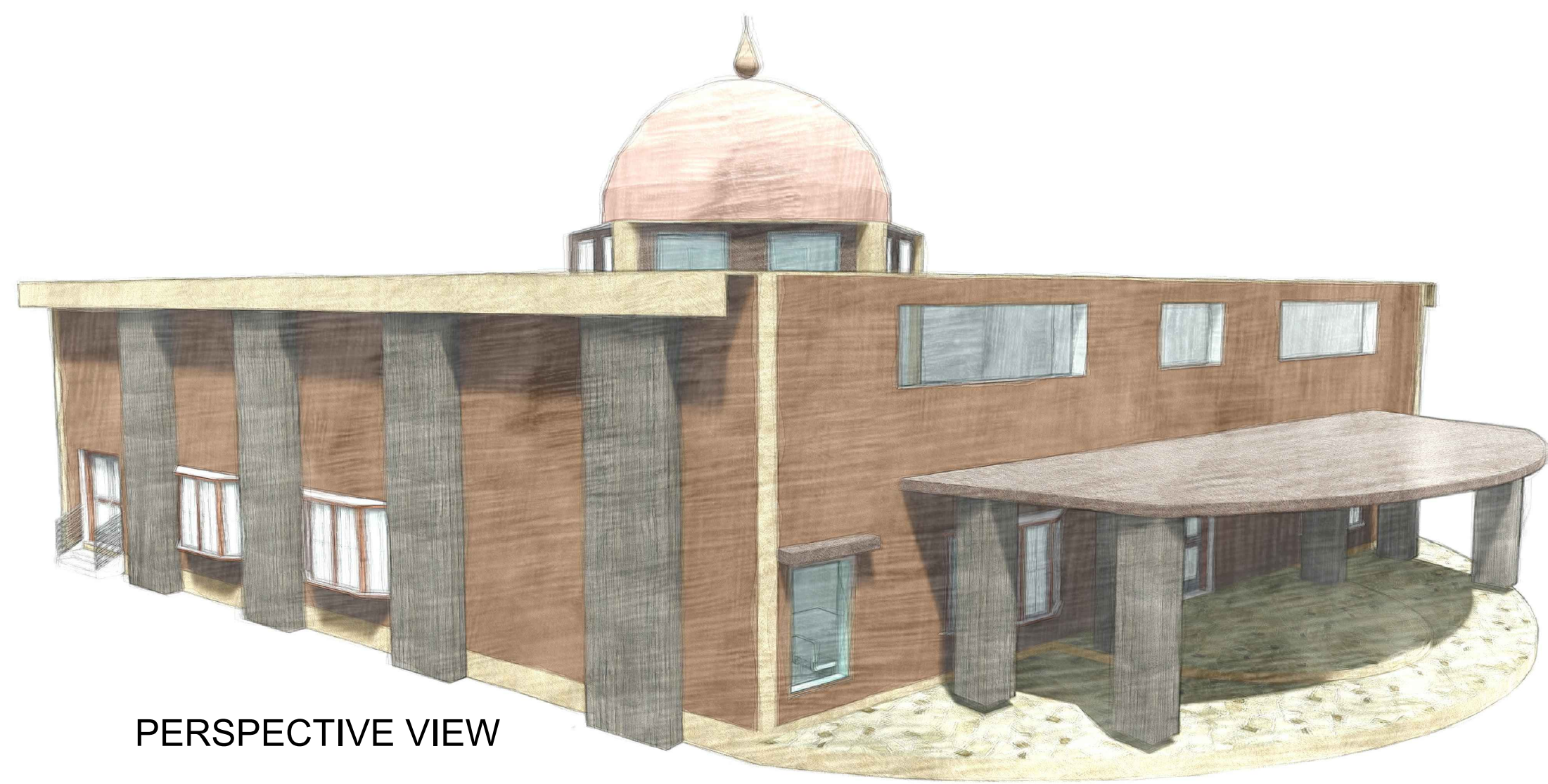
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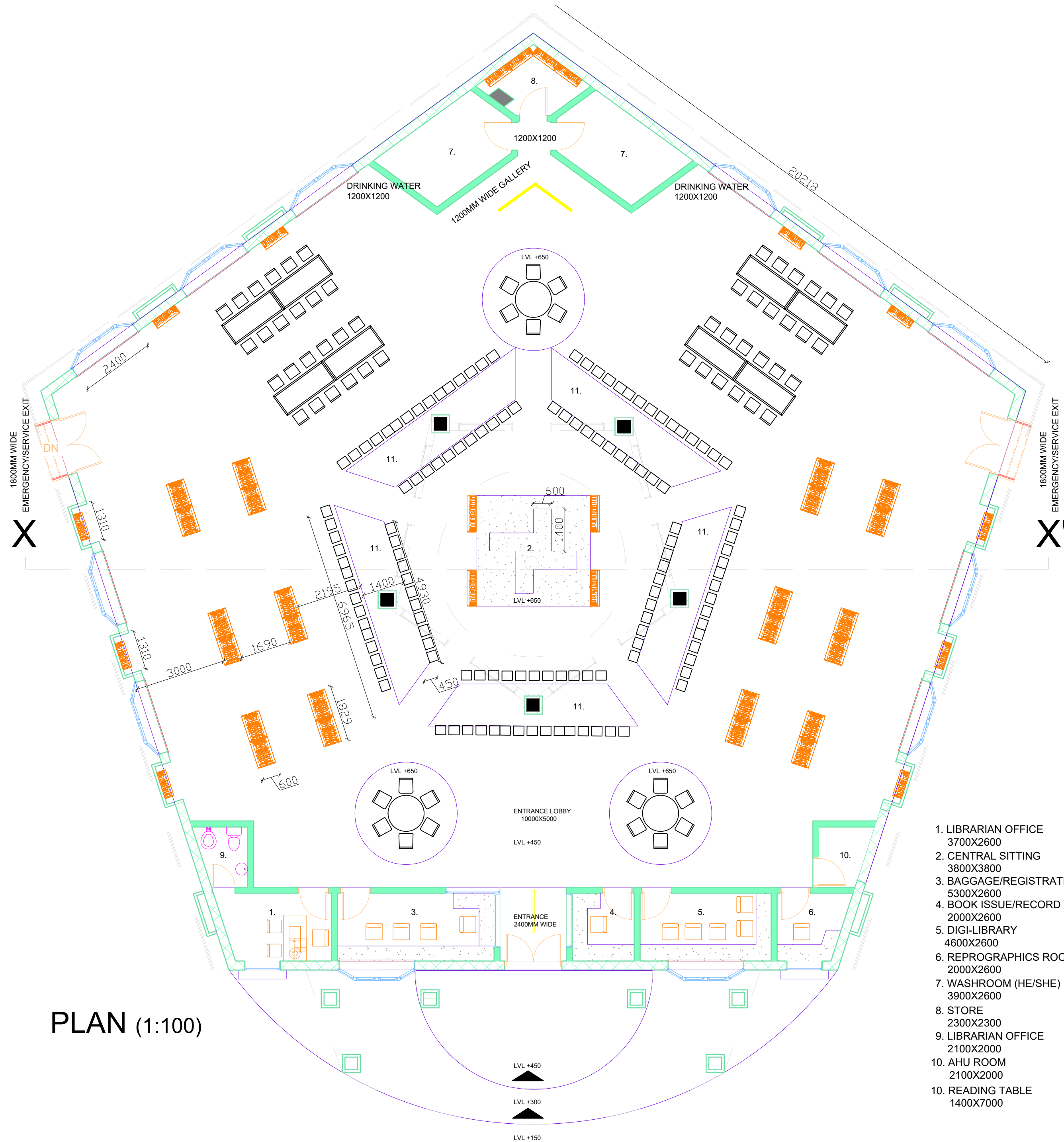
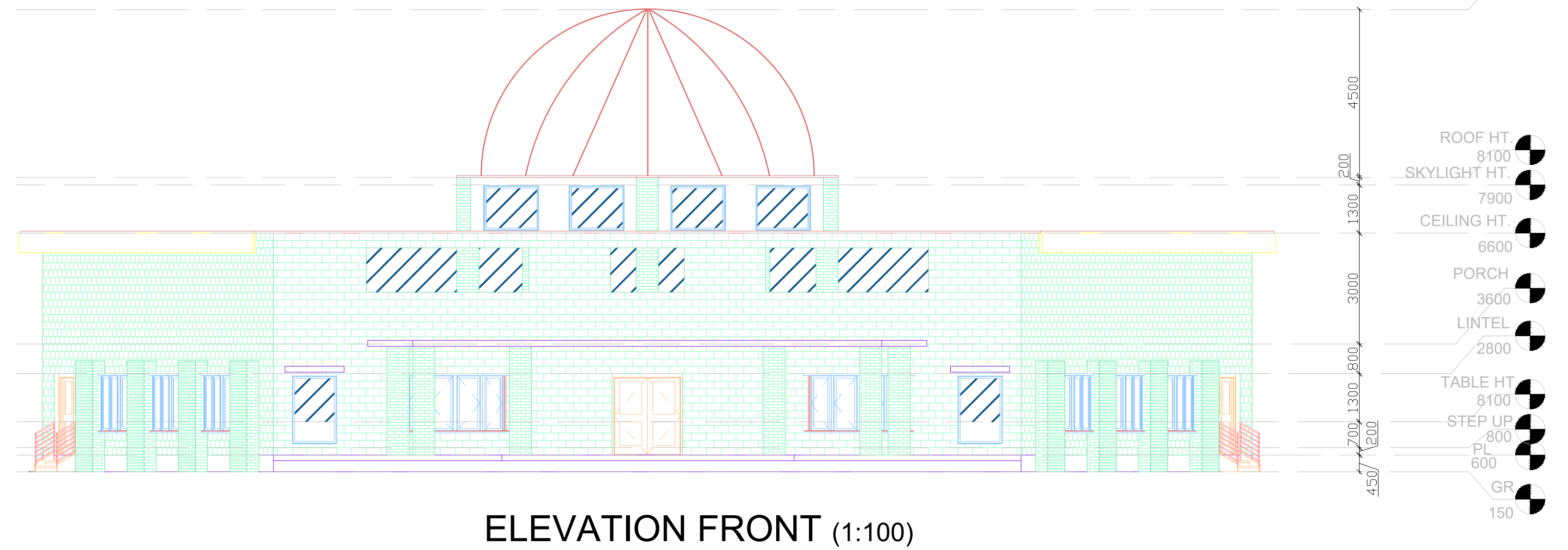
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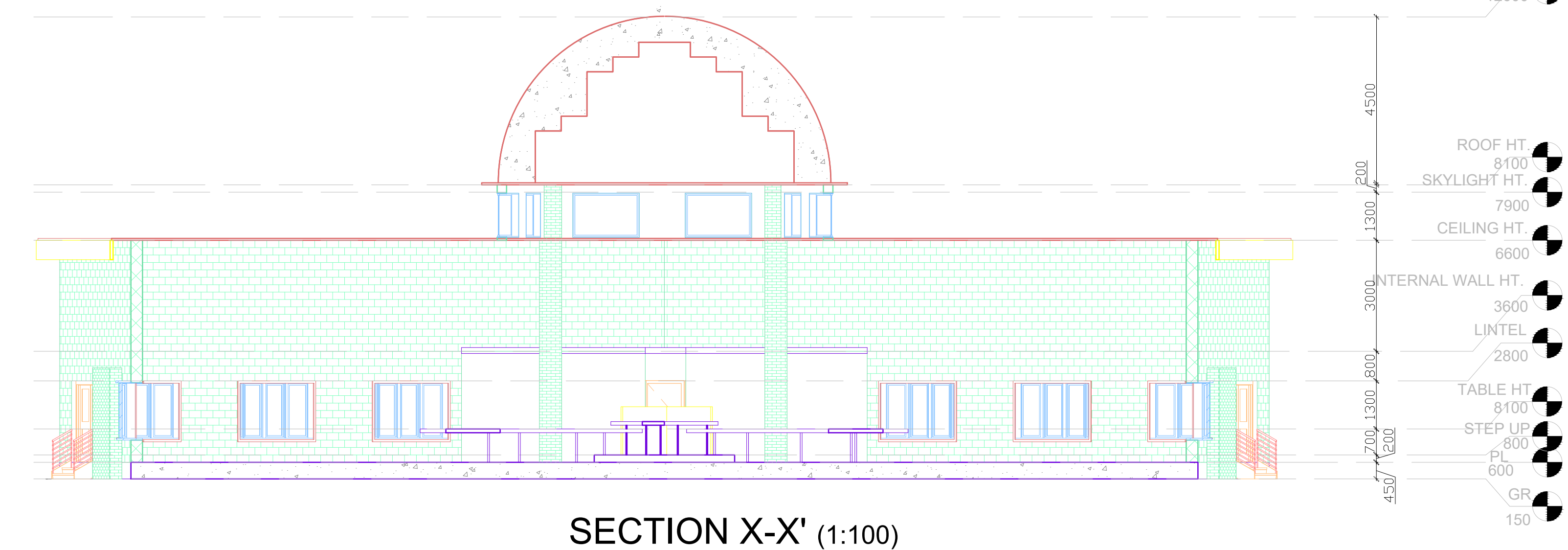
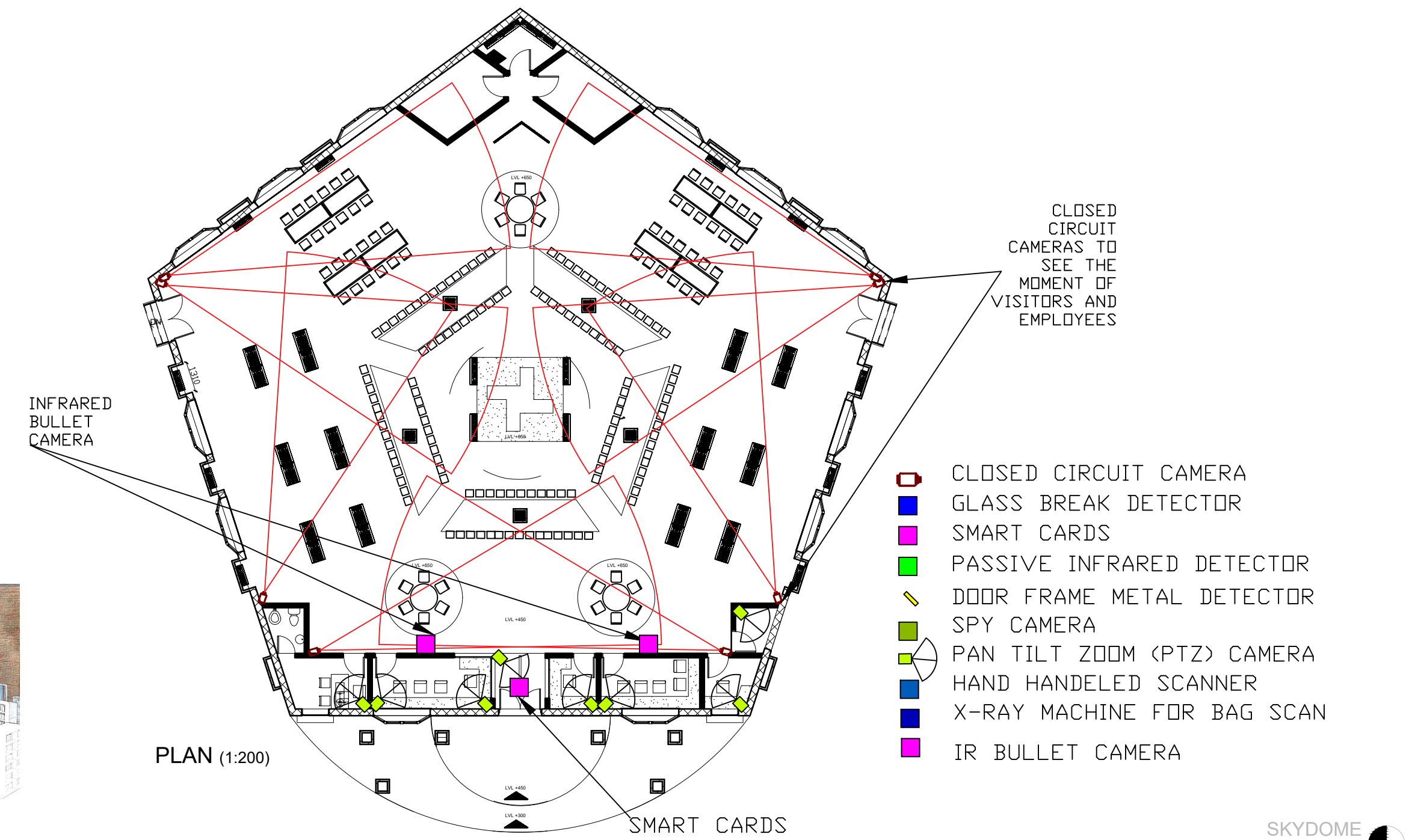
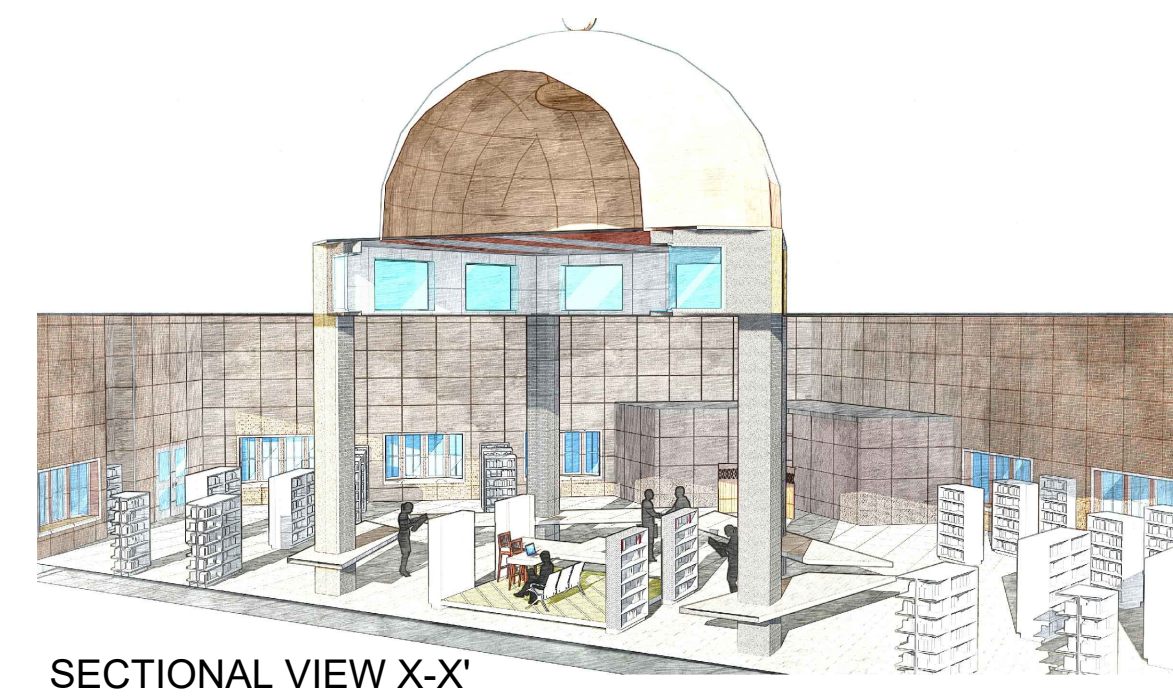


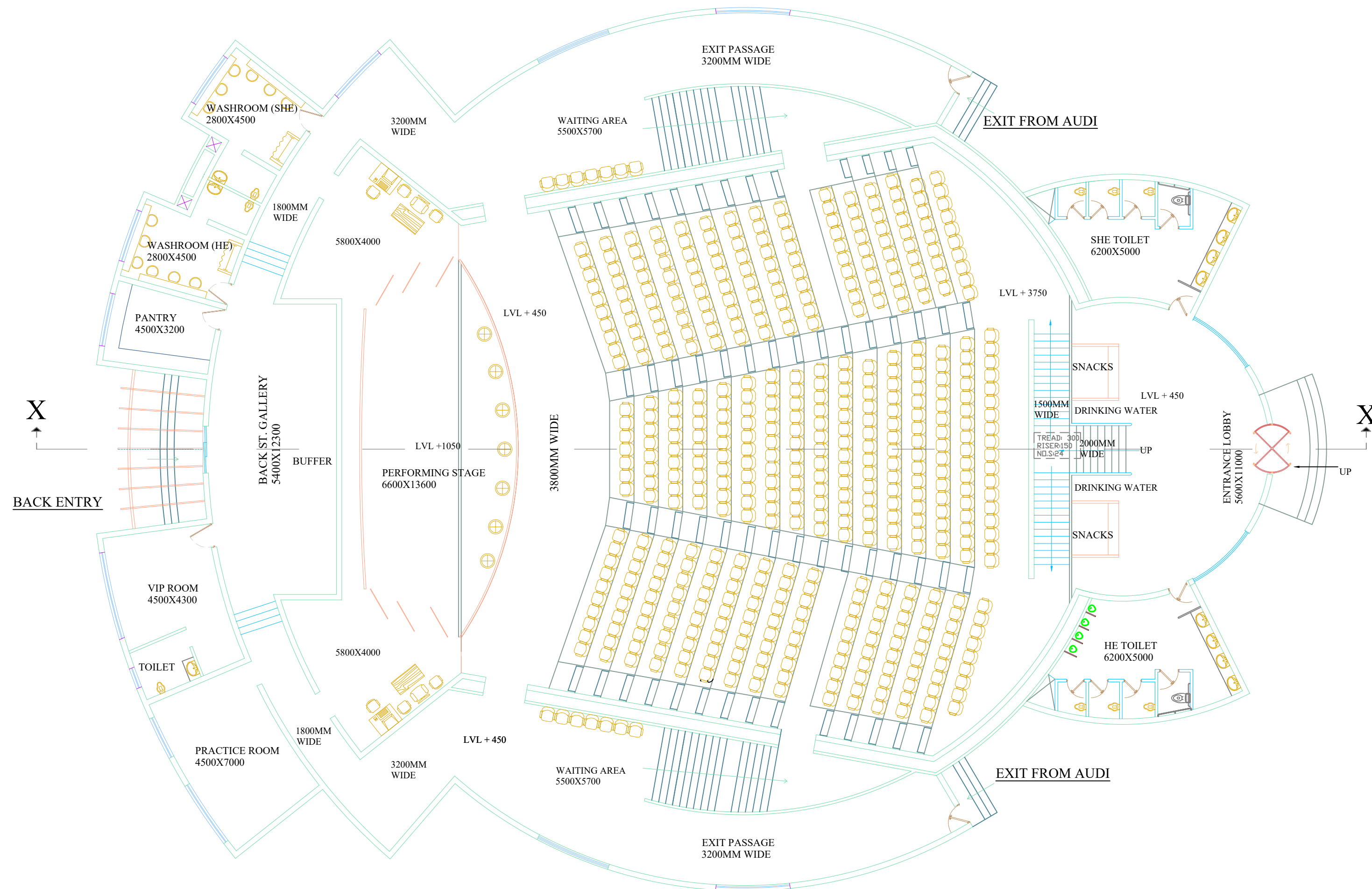
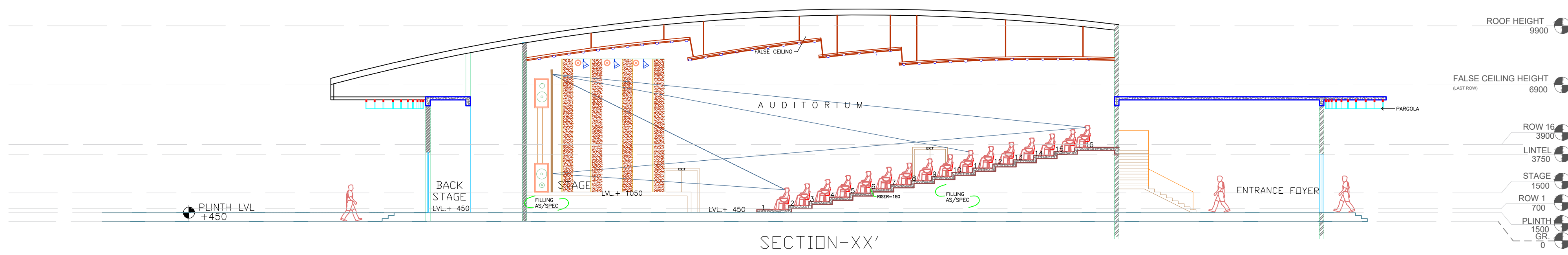


PERSPECTIVE VIEW

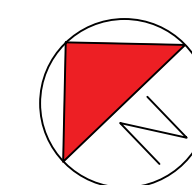
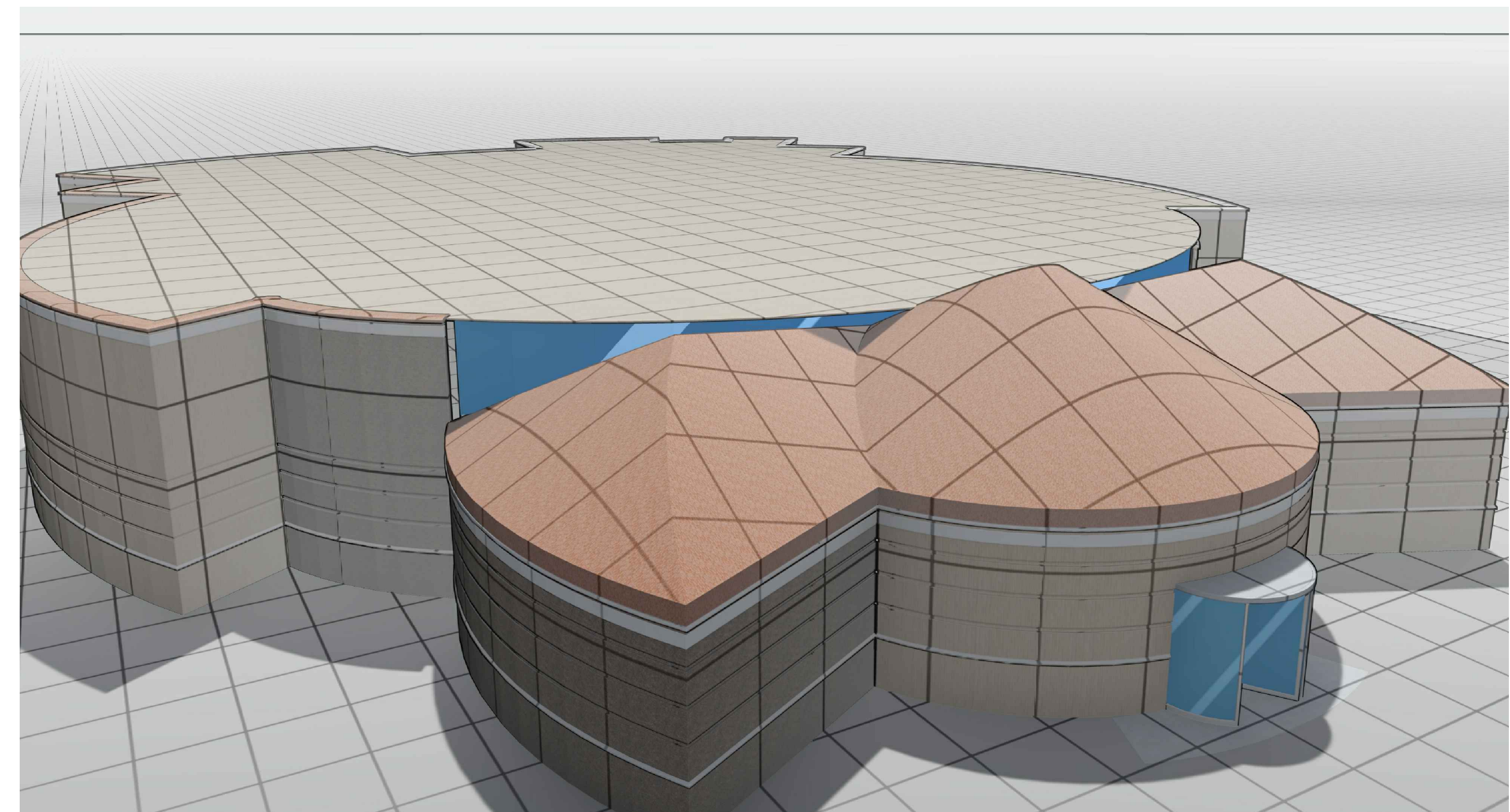
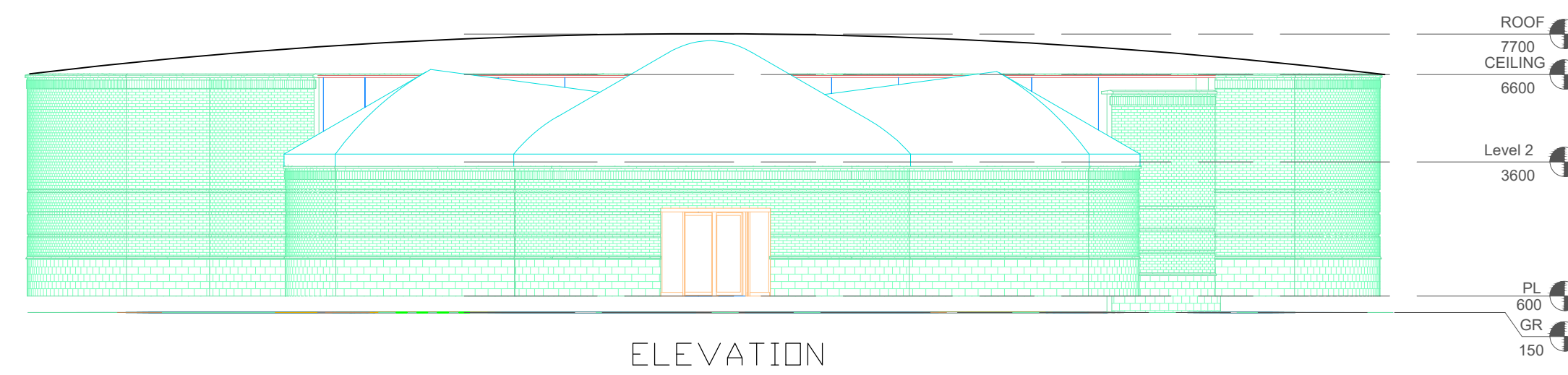


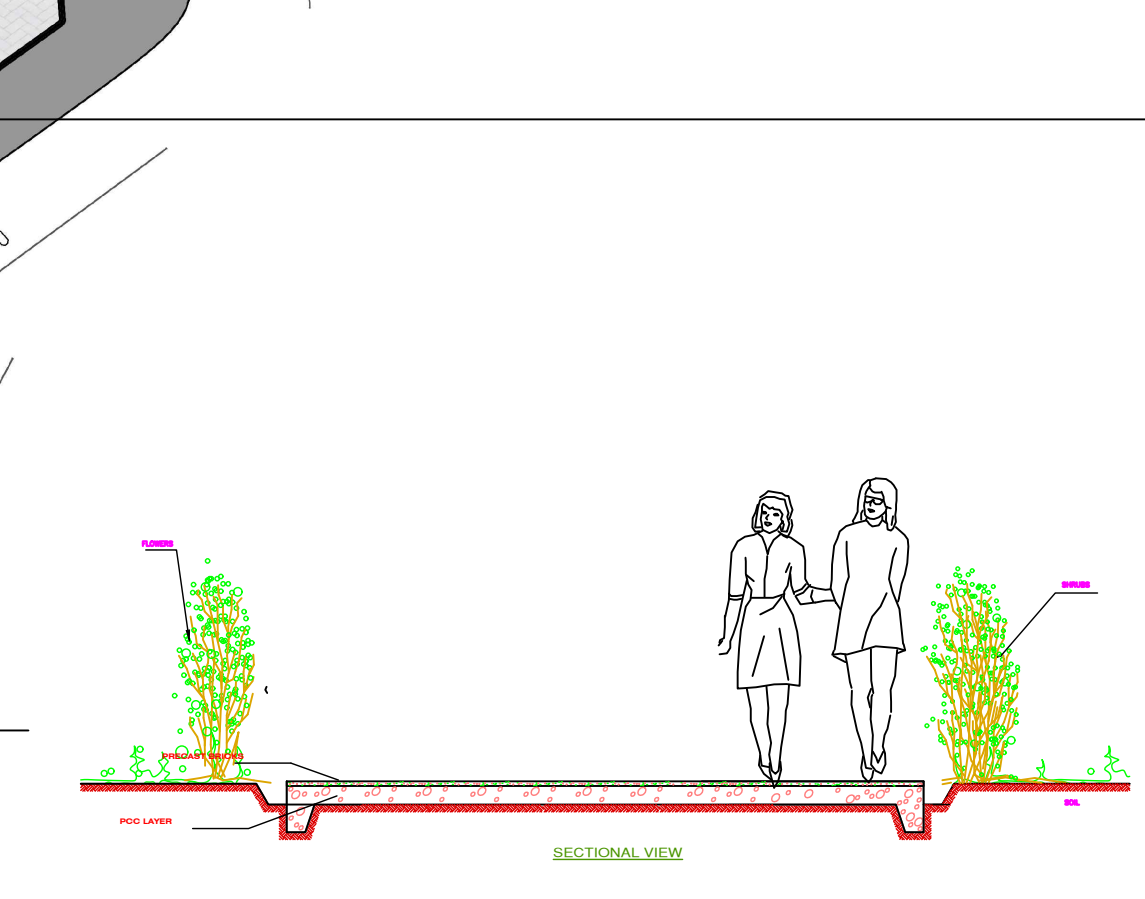
1. LIBRARIAN OFFICE
3700X2600
2. CENTRAL SITTING
3800X3800
3. BAGGAGE/REGISTRATION COUNTER
5300X2600
4. BOOK ISSUE/RECORD ROOM
2000X2600
5. DIGI-LIBRARY
4600X2600
6. REPROGRAPHICS ROOM
2000X2600
7. WASHROOM (HE/SHE)
3900X2600
8. STORE
2300X2300
9. LIBRARIAN OFFICE
2100X2000
10. AHU ROOM
2100X2000
11. READING TABLE
1400X7000



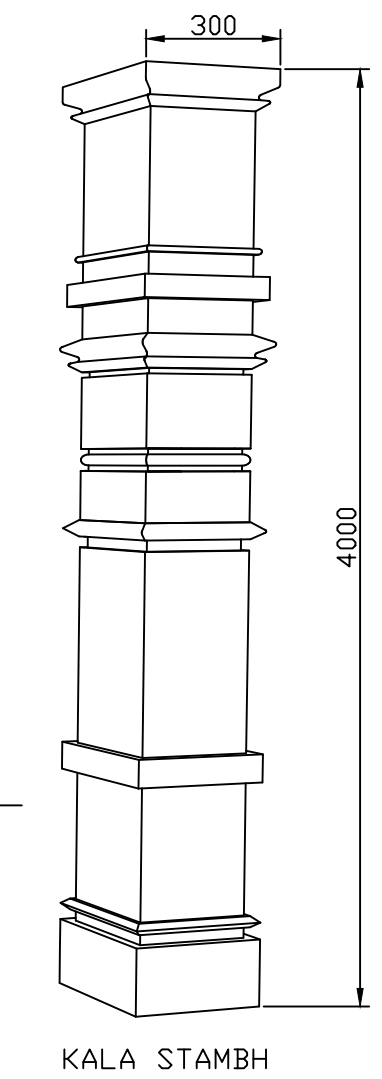
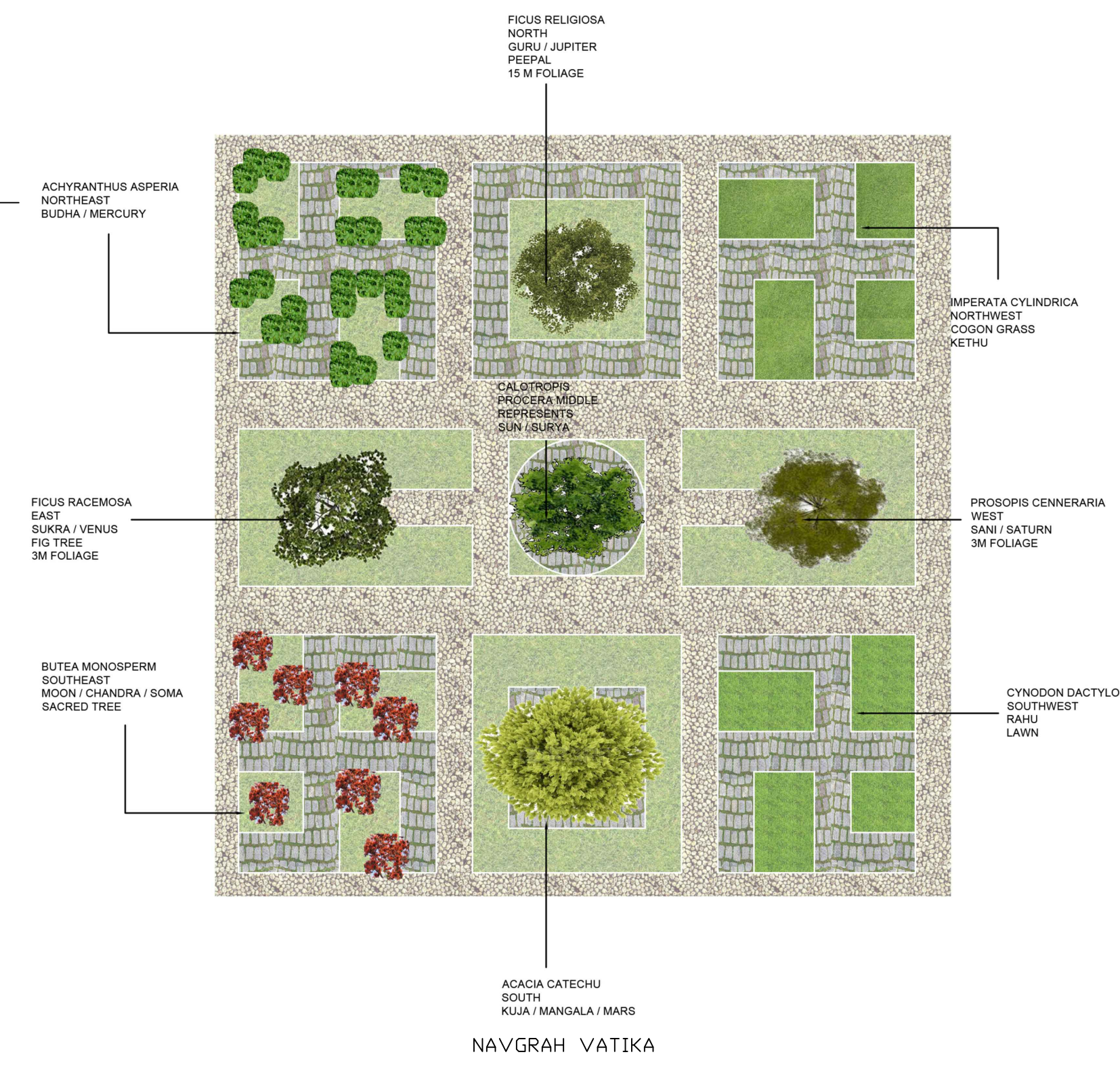
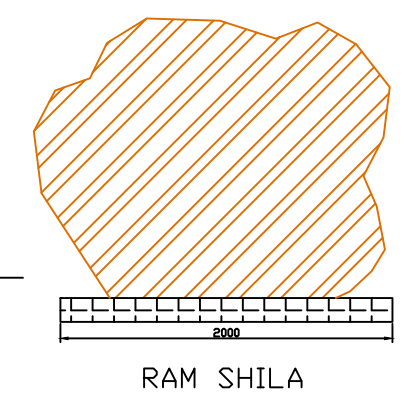


AUDITORIUM PLAN

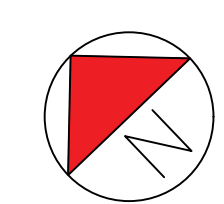
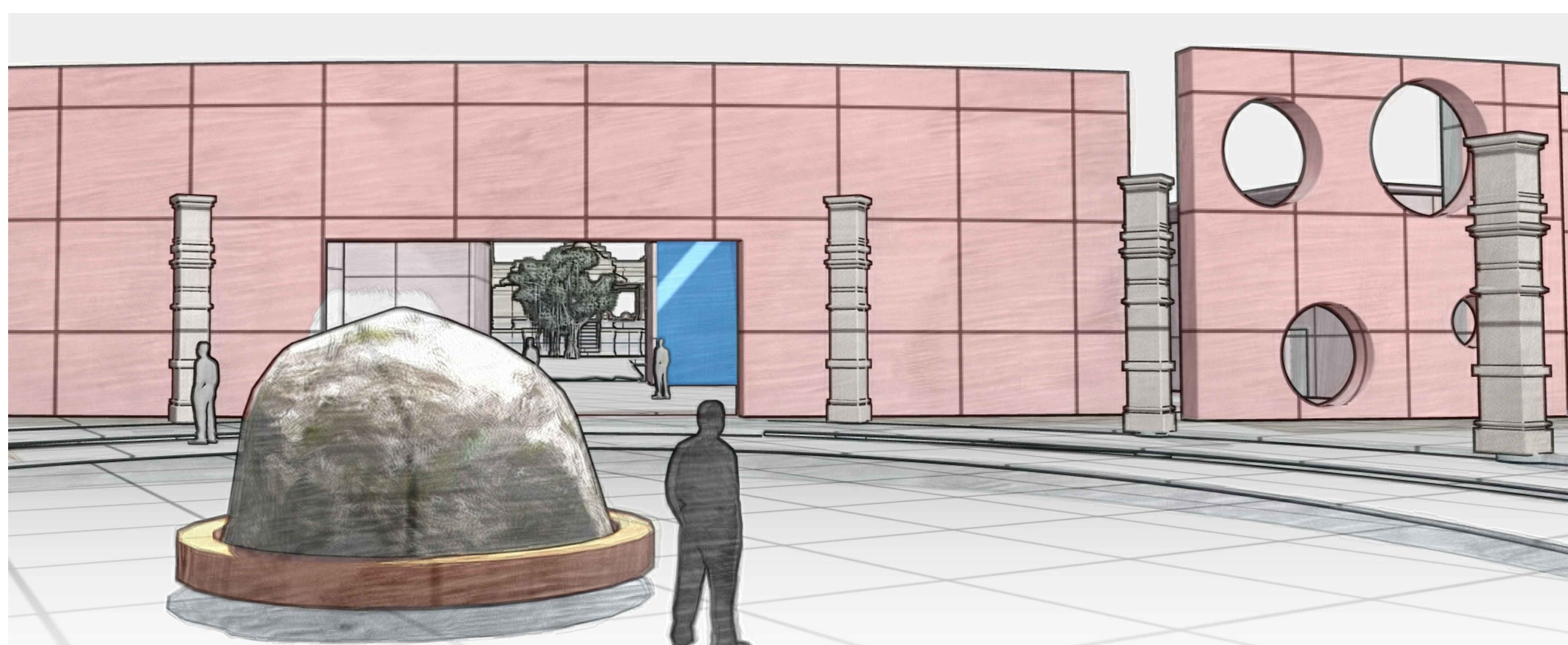


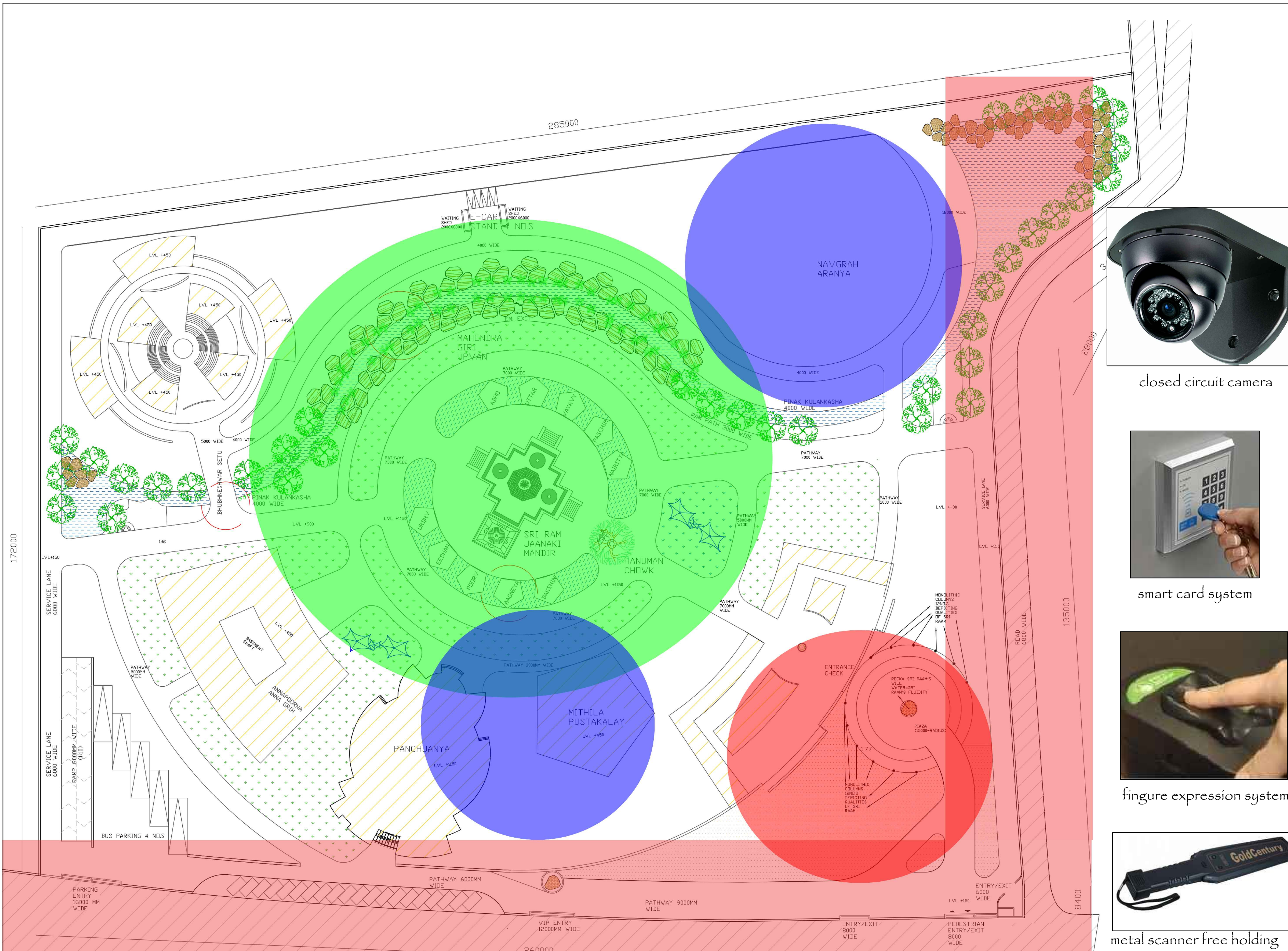


- DELONIX REGIA - DR
- BOUGAINVILLEA GLABRA - BG
- ROSA - RS
- AZADIRACHTA INDICA - AI
- MAGNIFERA INDICA - MI
- HIBISCUS ROSA SINENSIS - HS
- FICUS RELIGIOSA - FR



KALA STAMBH
IT IS SAID THAT SRI RAAM HAD 14 KALAS (QUALITIES) IN HIM, BUT SINCE RAVAN HAD A BODH, ONLY A HUMAN BEING CAN KILL HIM, SO TO BE A HUMAN SRI RAAM DIMINISHED HIS 2 QUALITIES AND LIVED HIS LIFE WITH 12 QUALITIES.
KALA STAMBH IS 12 IN NUMBER REPRESENTING THE 12 QUALITIES OF SRI RAAM





closed circuit camera



smart card system



fingure expression system



metal scanner free holding

INTHE OFFICE BUILDING

CLOSED CIRCUIT CAMERA- closed circuit camaras popularly know as cctv's come in a wide range. these are essentially cameras placed at strategic areas to monitor the office building from a centrally controlled security room. these cameras have two wiring, one with the power supply and other with the live connectivity with the security room. these comes in wireless mode also.

PASSIVE INFRARED DETECTORS- this is the technology which uses unque human physical characteristics like fingerprint, eye retina and irises for authentication and access control and is majorly used in banks and server rooms. these are knows as biometric security system which can even detect the face of the employee and keep the records of his incoming and outgoing in the organization.

GLASSBREAK DETECTORS- glass break detectors are sensors which are fitted to the indirect entry points like glass, windows. it works by being able to detect vibrations. any attempt at unauthorised entry immediately sets of the alarm signal. brands like visonic and satel are popular.

SMART CARDS- smart card technology though is a decade old security technique but still it is hugely popular. smart cards ensure complete data security and enables controlled data access in the organization.

SPECIFICATION

GARRETT MAGNASCANNER- It is used to scan the visitors before entering the building has a sensitivity of 200 level.

HAND HELD METAL DETECTOR- Use manually to check the visitors. Comes in 330mmx110mmx38mm. weighing 300gms.

IR BULLET CAMERAS- Rich with the heritage of the world's finest night vision, the WZ series includes a family of infrared day/night bullet cameras- WZ20, WZ16 an WZ14 are some integrated day/night IR dome cameras.

TYPES OF SECURTY IN THE OFFICE COMPLEX

AUTOMATIC RISING ROAD BLOCKER- a rising road blocker provide a formidable obstacle to on coming traffic widely used at unmanned site and premises.

BARRIER SYSTEM- there are two types of barrier system used in the site entrance, first is the electronic barrier, which scans the car for any explosives. and second is the ground embeded, this type is fully automatic system which scans the vehicles from beneath.

OCCUPIED CAR SCANNERS- This type od scanners scans the whole car from roof height. It detects the presence of any unwanted materials.



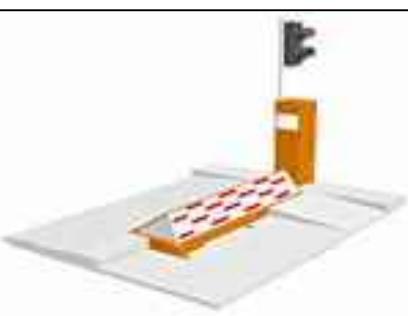
glass break detectors



body scanner



bag scanner



automatic rising raod blocker

RED = HIGH SECURITY
BLUE = MODERATE SECURITY
GREEN = SAFE ZONE

THE PRIMARY OBJECTIVE OF "SECURITY" IS TO SHEILD AN ORGANIZATION FROM UNWANTED EXTERNAL OR INTERNAL INTERFERENCE. BEFORE WE SET OUT TO INSTALL VARIOUS HI-TECH OFFICE SURVILLANCE WE NEED TO UNDERSTAND WHAT WE NEED TO SECURE. INSTALLING SEVERAL GADGETTS DOES NOT NECESSARIALY ENSURES THE SECURTY OF THE OFFICE.

AN INTEGRATED SYSTEM OF SECURITY WHEREBY ALL THE DEVICES ARE CONTROLLED CENTRALLY, IS THE MOST EFFECTIVE AND INTELLIGENT WAY TO A SAFE OFFICE. THIS ALSO ESSENTIALLY MEANS THAT EVERY OFFICE MAY UNDERSTAND ITS UNIQUE SECURITY NEEDS AND PLAN ACCORDINGLY.

