THESIS REPORT ON

"ART HERITAGE CENTER, AGRA"

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

BACHELOR OF ARCHITECTURE

BY

(MOHD. ADNAN)

(1160101032)

THESIS GUIDE

(Ar.MOHIT SACHAN)

SESSION

2022-23

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"**ART HERITAGE CENTER, AGRA**" 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.

Prof. Mohit Kumar Agarwal Dean of Department	Prof. Sangeeta Sharma 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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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, Ar. MOHIT SACHAN. 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 Ar. Mohit Agarwal Dean AND AR. SANGEETA SHARMA HOD, School of Architecture BBD UNIVERSITY , Lucknow for giving me the opportunity to do the thesis on this topic. Their constant guidance and support helped us to improve our work, with their suggestions and encouragement.

I would never have been able to finish my Thesis without the support of my mates SIDDHARTH, SAEED ,AZHER,HEMANT, ADRARSH , ADNAN, NAVEEN,EHTISHAM,TARA, or all the support through out this thesis.

Regards
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DEDICATION

This research endeavour is dedicated to my family who have graciously supported me all the way through this entire process. Without their motivation, support and sustained help, this effort would not have been achievable. I would like to dedicate this to my parents who laid the foundation by inculcating in me the principles, ethics and discipline that have served me well in all aspects of life.

I proffer a special thank you to each.

CONTENTS

ART HERITAGE CENTER AGRA

INTRODUCTION

What are Arts, Culture and Heritage?

Arts refers to individually or collectively created products of value, the expression or application of creative skill and imagination in the various branches of creative activity such as painting, sculpture, music, dance, theatre, films, graphic arts etc.

Culture refers to the cumulative deposit of knowledge, experience, beliefs, values, attitudes, meanings, hierarchies, religion, notions of time, roles, spatial relations, concepts of the universe, and material objects and possessions acquired by a group of people in the course of generations through individual and group striving.

Heritage refers to valued property such as historic buildings, artwork, books and manuscripts and other artefacts that have been passed down from previous generations. They are of special value and are worthy of preservation.

CONCEPT OF ART HERITAGE CENTRE ?

Heritage is the legacy of cultural resources and intangible attributes of a group or society that is inherited from past generations. The deliberate act of keeping cultural and heritage from the present for the future is known as preservation or conservation. The cultural and historical ethnic museums and cultural centers promote, though these terms may have more specific or technical meaning in the same contexts in the other dialect. Preserved heritage has become an anchor of the global tourism industry, a major contributor economic value to local communities

INTRODUCTION

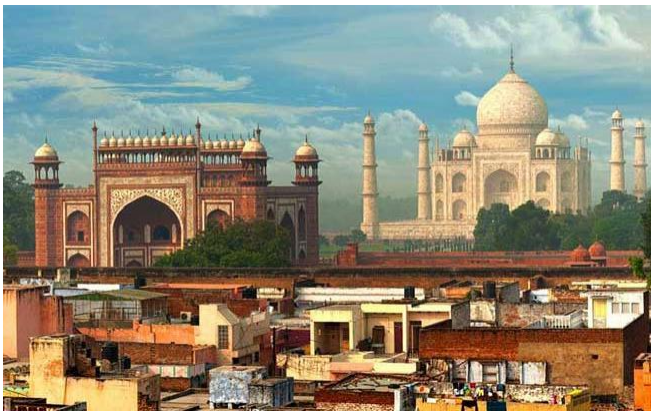
HISTORY OF AGRA ?

The city itself was established well before the Mughals ever came to India. Agra has been mentioned as 'Agraban' in Vyasa's Sanskrit epic, Mahabharata. It is believed that Agra City was built by Badal Singh, in the year 1475. Sultan Sikandar Lodi made it his capital, during his reign of Delhi Sultanate.
It was they who transformed this city, adorning it with beautiful monuments and colourful gardens. The foundations for the modern city of Agra as we see it today, was laid by the Emperor Akbar. He had made the city a centre for art, culture, commerce and learning

TOURIST ATTRACTION ?

1. **TAJ MAHEL**
2. **2. AGRA FORT**

AND MANY MORE



DEMOGRAPHY OF CITY:-

_Agra 's 2021 population 2,261,561

_TOURIST PER YEAR:- 7M

_SEX RATIO:- 868/1000MEN

_LITERACY RATE:- 71.58%

_DENSITY :- 1084PER/ KM^2

SITE ANALYSIS

GENERAL INTRODUCTION:-

PROJECT :- ART HERITAGE CENTER

CLIENT:- AGRA SMART CITY LTD.

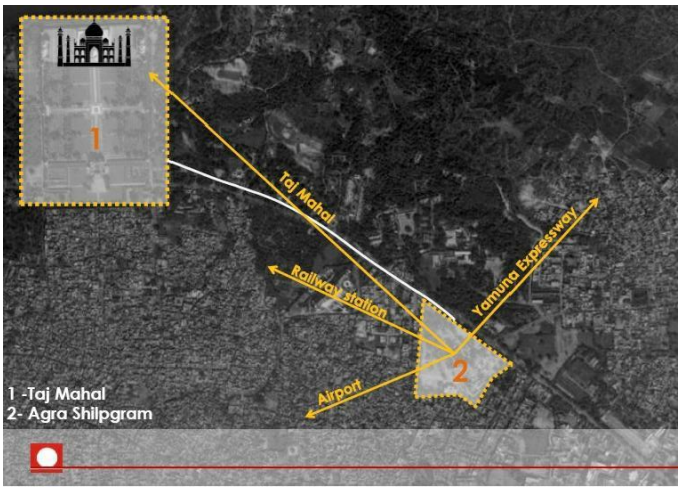
LOCATION:- SHILPGRAM AGRA UTTER PRADESH INDIA

COORDINATES :- 27°09'56"N 78°03'08"E

SHAPE:- IRREGULAR SHAPE

AREA:- 46579.31 (11.51 ACRE)

SITE LOCATION:-



9.5 Km from Agra Airport

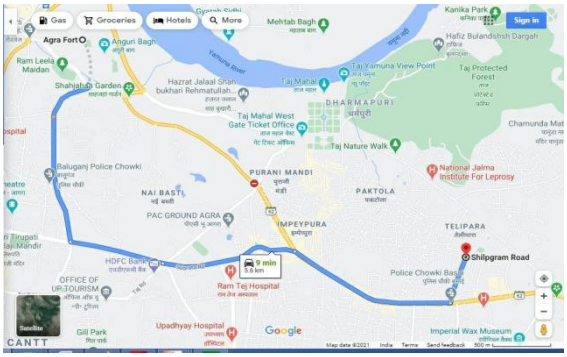
- **0.8 km from East Gate of Taj Mahal**
- **4.7 km from Agra Fort railway Station**
- **9.4 km from Yamuna Expressway**

SITE ANALYSIS

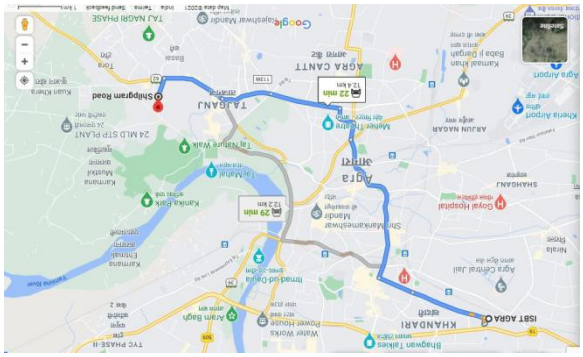
LANDMARK :-

TAJ MAHAL ONE OF THE SEVEN WONDERS OF WORLD FOLLOWED BY AGRA FORT

REACH TO THE SITE



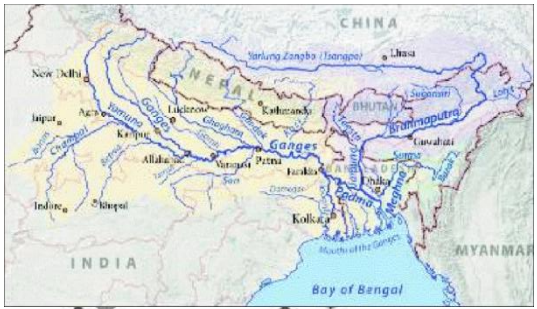
FROM AGRA FORT RAILWAY STATION TO THE SITE

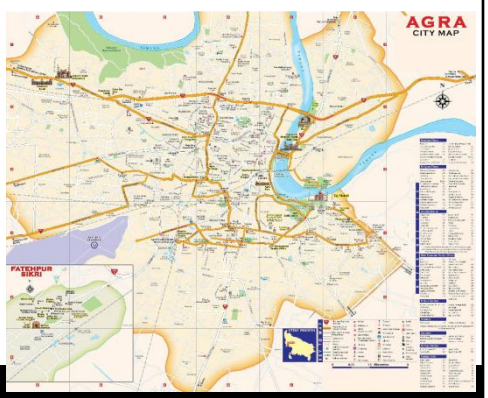


FROM ISBT AGRA TO THE SITE

PHYSIOGRAPHY :

Agra is a city on the banks of the Yamuna river in the Agra district of the Indian state of Uttar Pradesh. It is 206 kilometres (128 mi) south of the national capital New Delhi. Agra is the fourth-most populous city in Uttar Pradesh and 24th in India. The region around Agra consists almost , entirely of a level plain, with hills in the extreme , southwest. The rivers in the region include Yamuna and Chambal. The region is also watered by the Agra Canal. Millet, barley, wheat and cotton are among the crops grown.Both Rabi and Kharif crops are cultivate





SITE ANALYSIS

ROAD NETWORK:

Agra is easily accessible from the main cities of India. Delhi is the major city that can be connected to Agra by bus, train, or airplane. While travelling in Agra, it will benefit tourists to carry a map of Agra with them to know more about the city and reach their destination quickly The National Highway No. 2, 3 and 11 run from Agra and help to connect to various cities in the country.

DIS. ROAD NET.

NATIONAL ROAD NET.

THINGS PROPOSED NEAR IT

1.AGRA METRO
2. CHATRAPATI SHIVAJI MUSEUM
3. IT PARK
4. LEELA PLACE HOTEL AND RESORT

METRO LINES

WATER:-

THERE IS NO WATER RESOURCE ON THE SITE THE ADA ALLOW TO DIG A WATER RESOURCE IN FROM OF BOREWELL SO THE SITE WATER REQUIREMENT WIL BE FULFIL BY THE BOREWELL .

SITE ANALYSIS

MEANS OF TRANSPORT:-

IN THE THERE IS AUTO AND HORSE CART AND CAR AS TAXI AND PERSONAL CAR AND BIKES AND THERE IS PROPOSED METRO IN FUTURE (WORK ALREADY STARTED)

HYDROLOGY :-

AGRA IS 169M ABOVE SEE LEVEL ON BANK OF YAMUNA
GROUND WATER LEVEL IS AVERAGE FOUND IS 10.51M
THERE IS REQUIREMENT OF WATER HARVESTING AS THINKING OF POPULATION GROWTH

SLOPE :-

AGRA IS ON THE BANK OF YAMUNA RIVER WHICH FLOWS ON THE NORTH EAST SITE OF THE CITY SO THE SLOP IS CURVED TO THE NORTH EAST

SOIL:-

The Agra series consists of very deep, moderately well drained soils that formed in material weathered from shale or clay, of Pennsylvanian age. These soils are on convex interfluves and side slopes of hillslopes on low hills in the Central Rolling Red Prairies (MLRA 80A). Slopes range from 1 to 5 percent

SITE ANALYSIS

ON SITE CONDITION

SLOPE ON THE SITE:-

THE SITE HAVE THE SLOPE TOWARDS THE ROAD THERE IS PROPOSED DRAIN LINE ON BOTH SIDE OF ROAD THE ROAD IS ON NORTH EAST SIDE OF THE SITE IN DIRECTION OF YAMUNA RIVE

VEGETATION:-

THERE IS THE TREE OF NEEM ,CHIRDH AND MANGO ON THE SITE , THE TREES WILL BE MOVED TO NATURE WALK NEAR TAJ MAHAL AS PER FOREST DEPARTMENT GUIDELINE .

ROAD:-

THERE IS 4 LANE PASSING ALONG THE SITE . EACH SIDE IS 50FT WIDE WITH 12 FEET PEDESTRIAN ON THE BOTH SIDE IT IS ON THE NORTH EAST SIDE OF THE PLOT

PANORAMIC VIEW

EXISTING STRUCTURE :-

THERE IS NO EXISTING STRUCTURE ON THE SITE

SITE ANALYSIS

TOPOGRAPHY :-

THE SITE HAVE MILD SLOPE TOWARD LAND. THE SITE HAVE MILD PITS IN LAND WHICH IS NOT AN ISSUE
MOSTLY FLAT LAND WATER FLOW IS ON THE NORTH EAST SIDE OF THE ROAD

NEAR BY UTILITY :-

THERE ARE MANY HOTEL NEAR BY THE NIRMAN NIGAM OFICE IS
WITH IN 2KM AND TAJ IS NEAR IT WITH IN 2KM
PROPOSED METRO STATION 800M AWAY RAILWAY STATION IS WITH IN 3KM

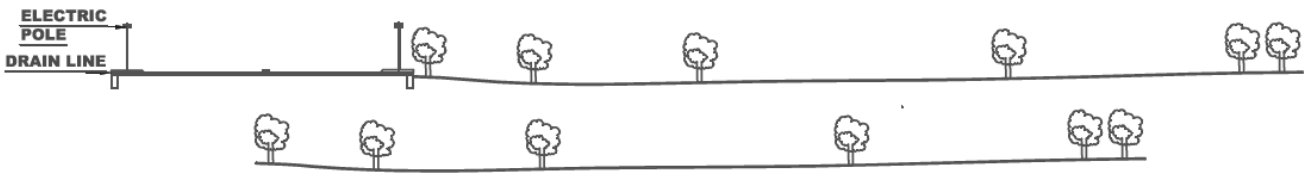
ELECTRICITY :

THERE IS NO H.T.L. OR L.T.L ARE GOING ACROSS THE SITE
THE ELECTRICAL LINE ARE PASSING ALONG THE SIDE OF
THE FRONT SIDE OF PLOT.

SEWER LINE :

SEWER LINE IS N.A. ON THE SITE
THE DRAIN LINE ARE UNDER CONSTRUCTION

SECTION OF SITE :

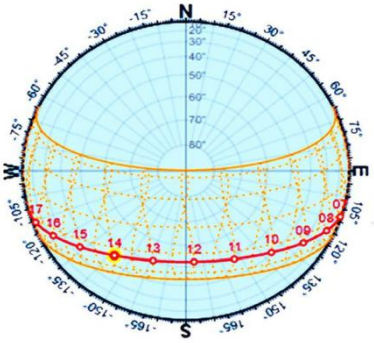


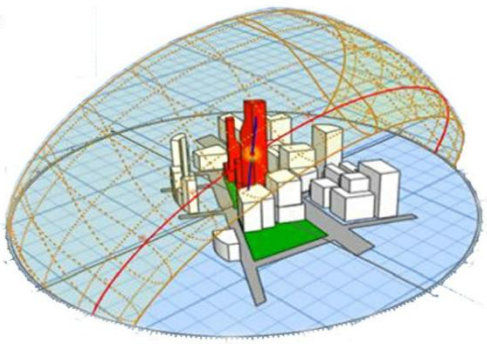
SITE ANALYSIS

CLIMATE :

The city features mild winters, hot and dry summers and a monsoon season. The Agra district, from its proximity to the sandy Thar desert to the west, is relatively dry, and has greater extremes of temperature than districts further east.

SUN PATH DIAGRAM:-



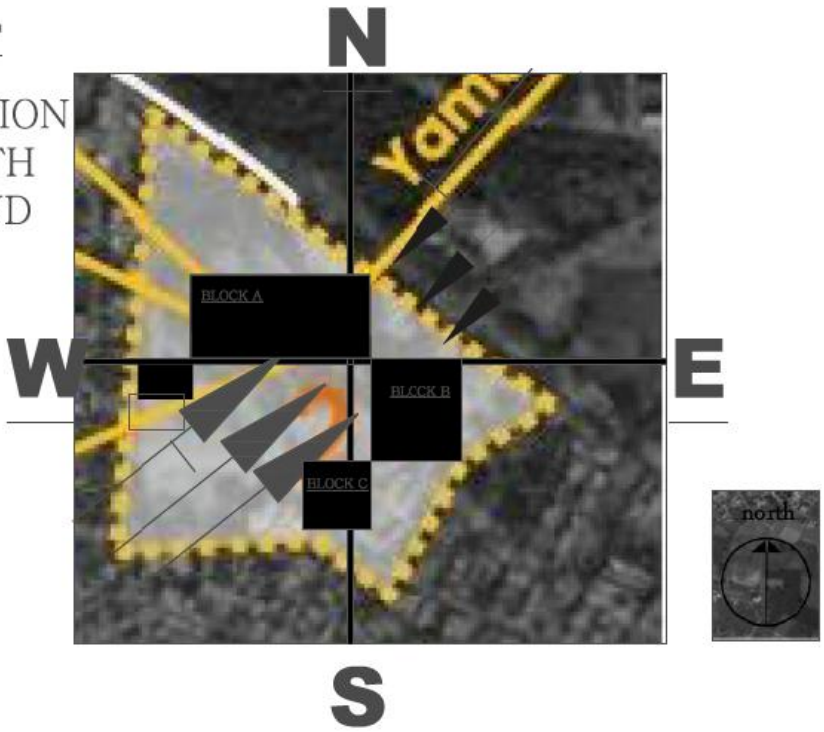


WIND DIRECTION :-

PREVAILING WIND DIRECTION IN SUMMER IS FROM NORTH EAST TO SOUTH WEST AND VISE VERSA

SUMMER WIND

WINTER WIND



SITE ANALYSIS

TEMPERATURE GRAPH :-

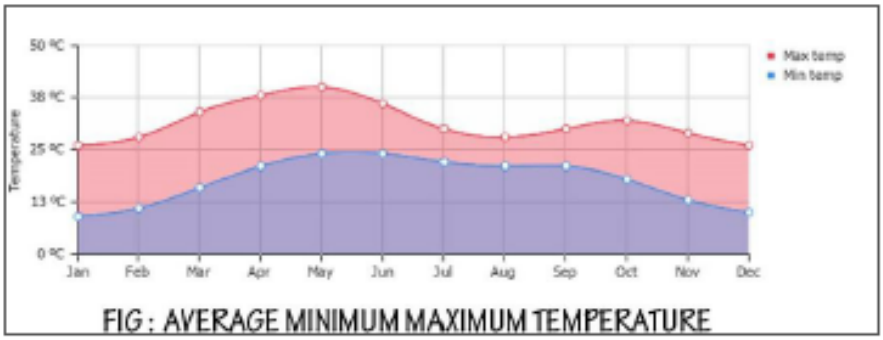
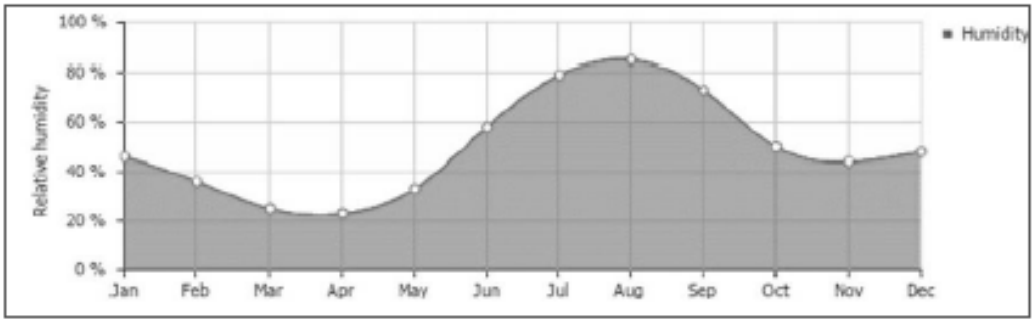


FIG : AVERAGE MINIMUM MAXIMUM TEMPERATURE

RELATIVE HUMIDITY GRAPH :-



SUN HOUR GRAPH :-

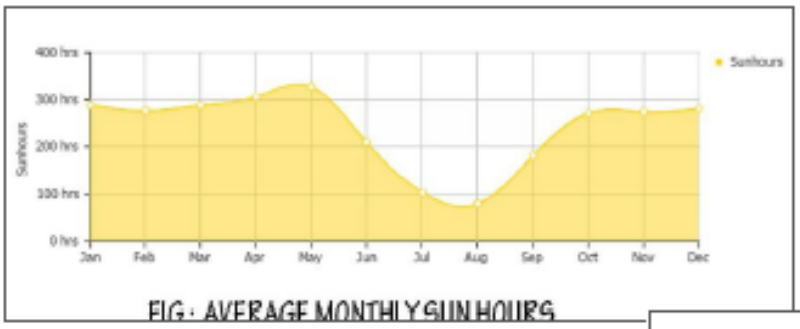
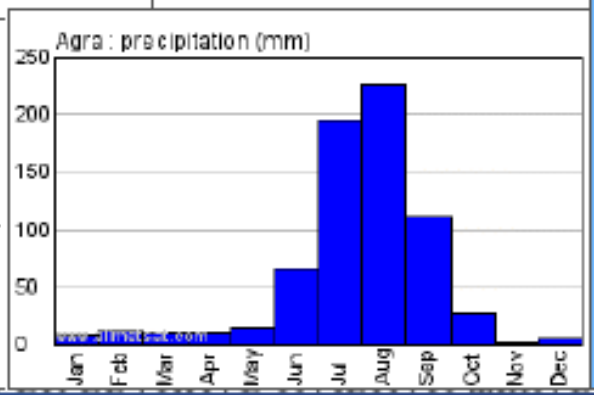


FIG : AVERAGE MONTHLY SUN HOURS

RAINFALL GRAPH :-



SITE ANALYSIS

WIND SPEED GRAPH :-

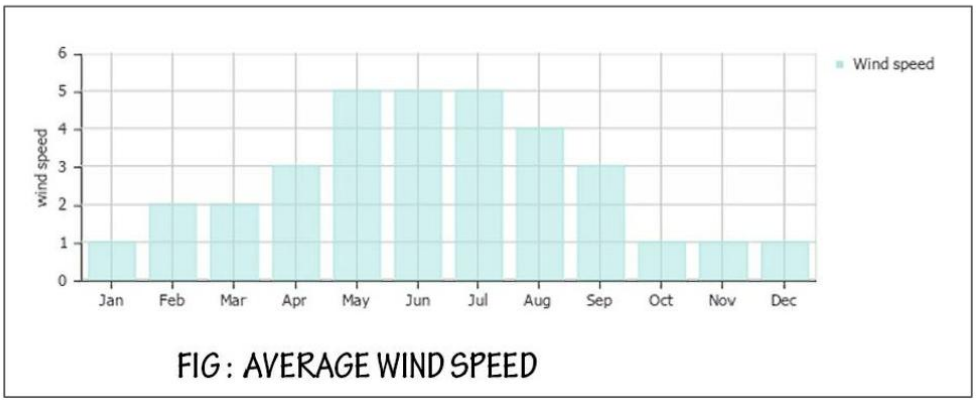


FIG : AVERAGE WIND SPEED

S.W.O.T. ANALYSIS :-

STRENGHT :

Strengths of Agra Boasts of 48 ASI protected monuments, including two World Heritage sites the Taj Mahal – one of the Seven Wonders of the World – and the Agra Fort. Important node on the golden triangle tourist circuit

WEAKNESS :

THE SITE ARE IS NOT DEVELOPED LIKE DRAIN LINE AND TREE PRESENT ON SIDE

OPPORTUNITIES :

DEVELOPING ART HERITAGE WILL ENHANCE THE HISTORY OF AGRA AND WILL INSPIRE ARTIST OF ALL WORLD

THREAT :

DENSITY WILL BE AS HIGHER AS IT IS .

LITERATURE STUDY 1

DRESDEN MUSEUM OF MILITARYHISTORY

Location : Germany
Architect : Ar. Daniel Libesknd
Clint : The Federal Reliance of Germany – Ministry of Detente
Build up area : 22,500 sq.mt
To commemorate : First World War
Project Year : 1876 , 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 wall 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

EXHIBITTS



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

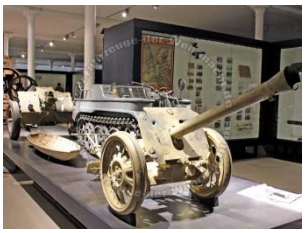
THROUGH THE TRANSFORMATION , ADDING NEW CHARACTER TO THE BUILDING

- 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 1

DRESDEN MUSEUM OF MILITARYHISTORY

INTERIOR



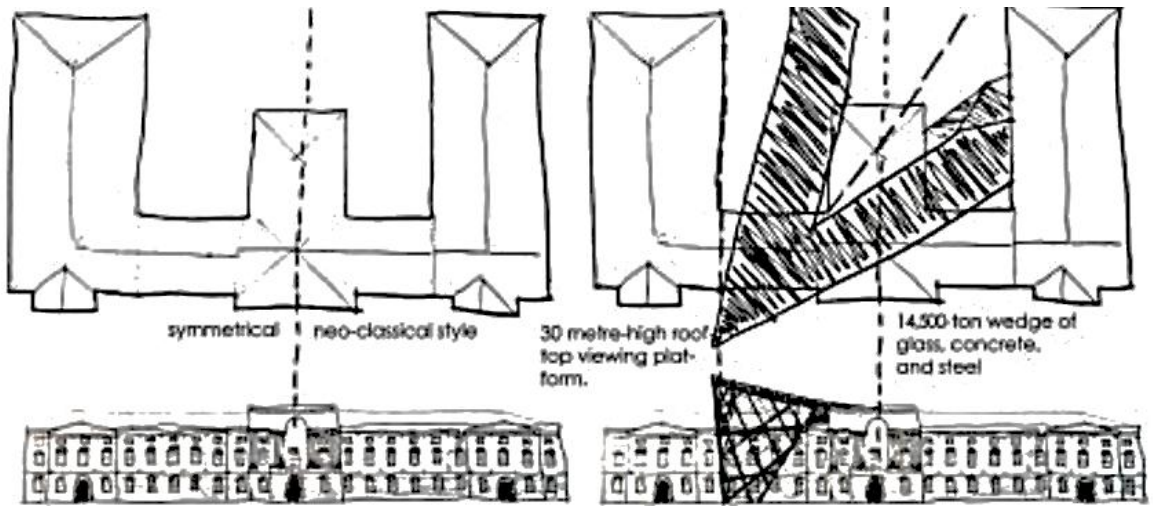
APPROACH

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

INFRENCE

NEGATIVE

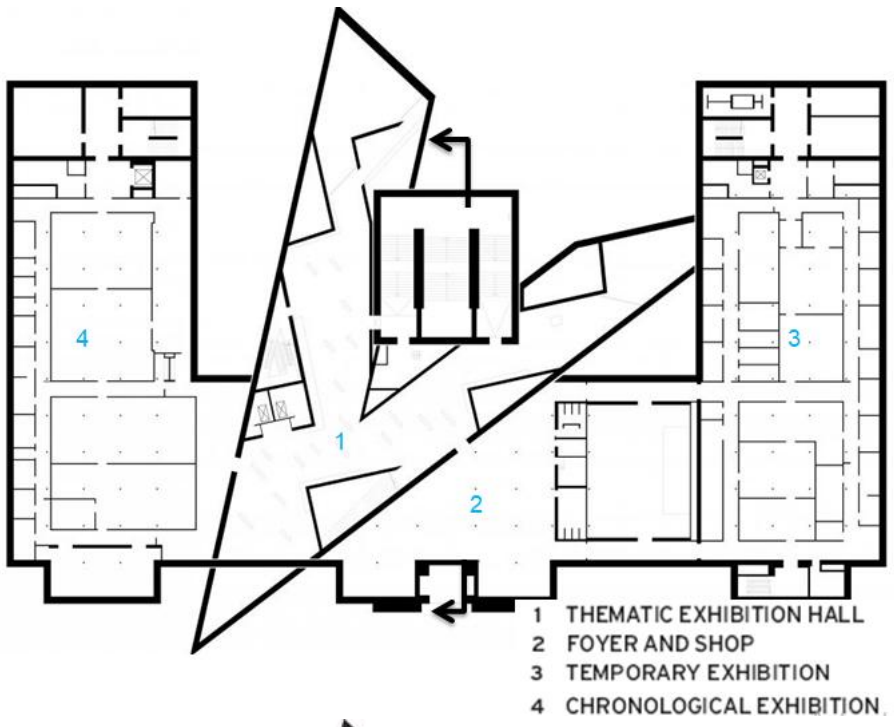
- The space feel under population
- Too often visitors fascinate at the forms or spaces rather than looking at the exhibits.
- The exhibits have good lighting and displaying layout but lack signage providing information people don't get the actual meaning of the displays

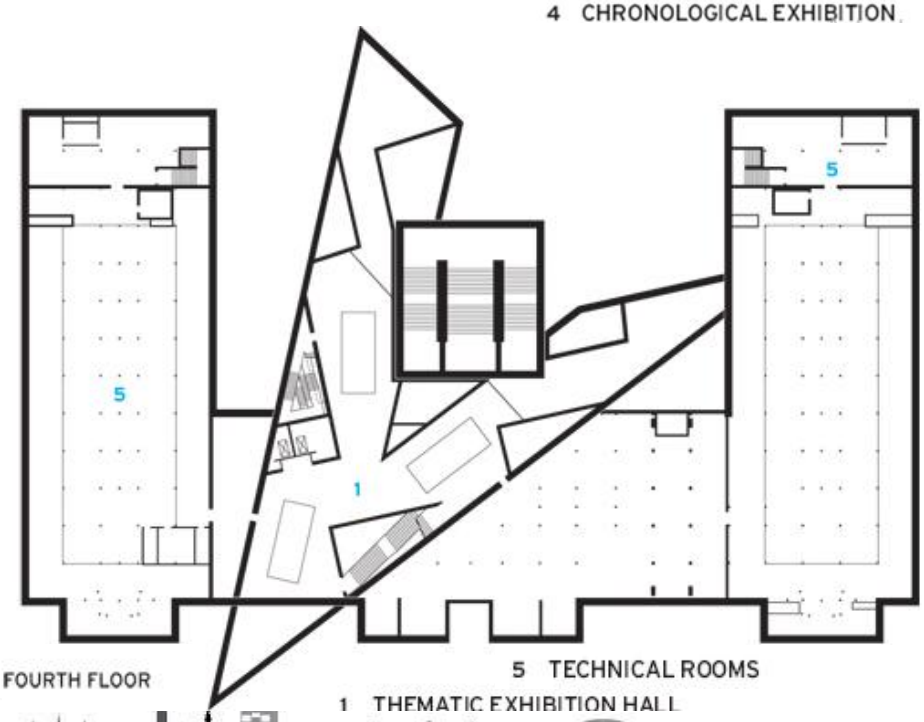


Old museum **New Museum**

LITERATURE STUDY 1

DRESDEN MUSEUM OF MILITARYHISTORY





LITERATURE STUDY 2

IMPERIAL WAR MUSEUM LONDON

Location : Lambeth Rd. London
Architect : Faster 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

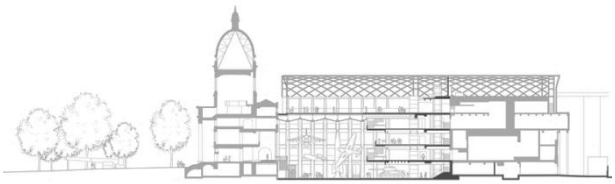
To learn about :

- 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 Goleries to Top Floor with current confflicts
- 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 2

IMPERIAL WAR MUSEUM LONDON

CONCEPT OF EXHIBTS

- First World War Galleries
- Exhibition
- Secret War
- Witness to War
- Lord Ashcraft Gallery
- Pease and Security 1945-2014
- Visitors see the conflict through the eyes of thoes who lived and died
- Their voices are presented through letters , daries and quatations
- Eash objects 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

INFRENCE

Positive

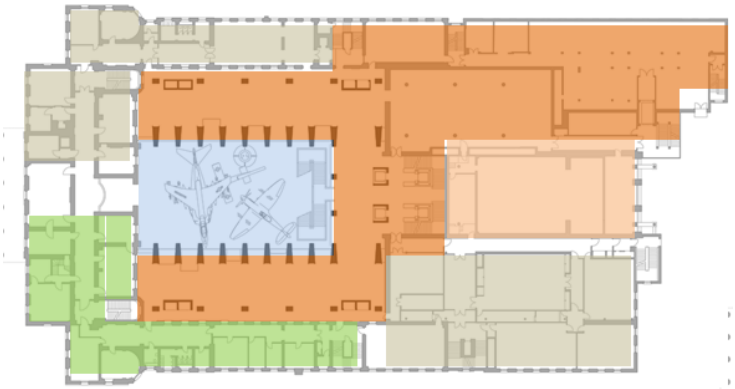
- Central atrium brings in pretty of natural light.
- Visitors got to experience – visitors are educated rather than just seeing
- Teachers what to do when was comes audio – visual workshop

Negative

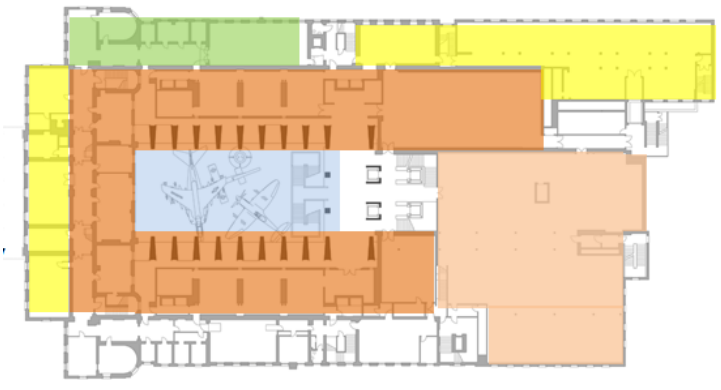
- The spaces are over – crowded by exhibits different to group up everything
- Frightening for kids – barrier could have been there

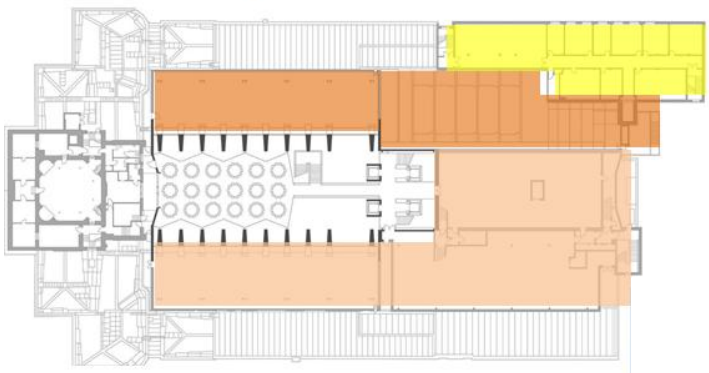
LITERATURE STUDY 2

IMPERIAL WAR MUSEUM LONDON



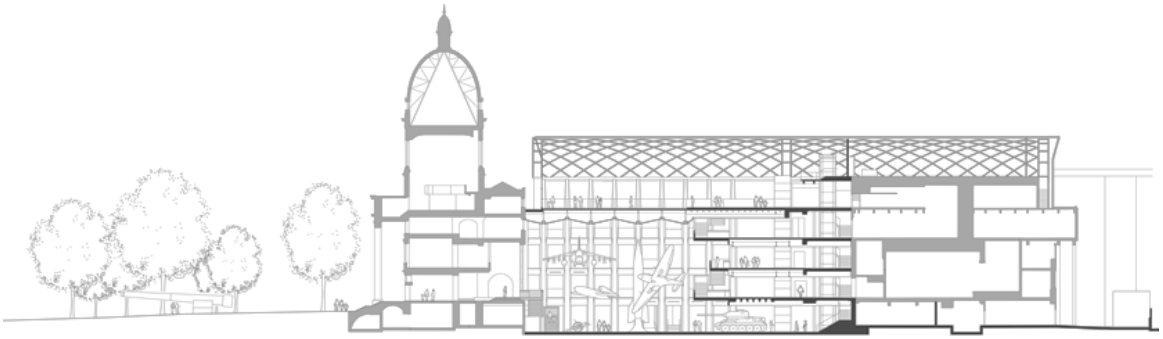
Admissions + Maintained space
Permanent Display
Educational hall , library
Atrium
Users facility – toilet , cafe , shop
Temporary Space

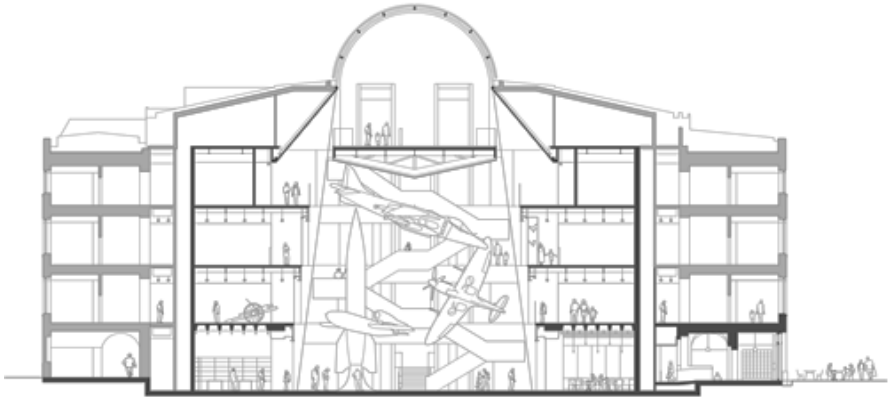


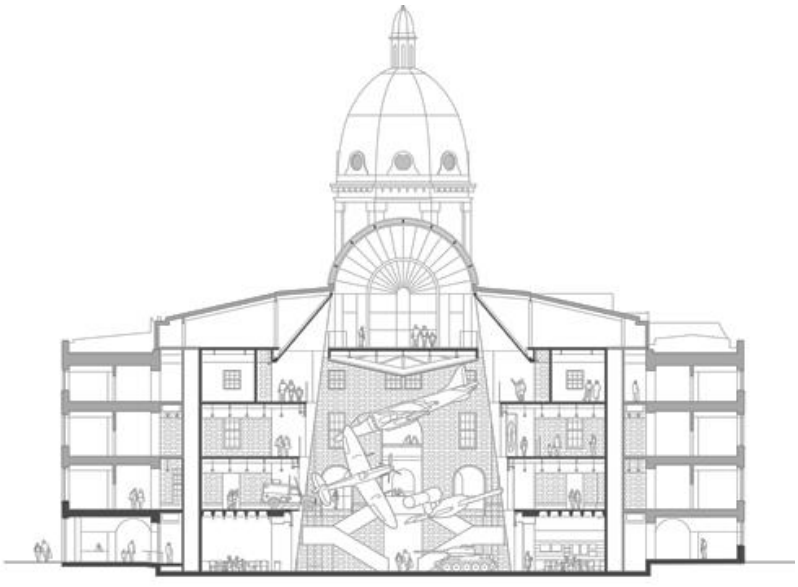


LITERATURE STUDY 2

IMPERIAL WAR MUSEUM LONDON

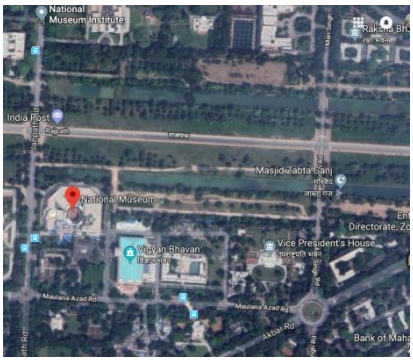






CASE STUDY 1

NATIONAL MUSEUM, NEW DELHI
ARCHITECT - GWYER COMMITTEE



Location : Jan path , New Delhi
Established Year : 1949
Site Area : 9.5 acre
Exhibits : Art , Cultural and Heritage of India
Woking Hours : 10AM-6PM

SITE SURROUNDINGS

EAST - VIGYAN BHWAN
WEST - JJAWAHARLAL NEHRU BHAWAN
NORTH – RAJPATH ROAD
SOUTH – ARCHAELOGICAL SURVEY OF INDIA

NEAREST STOPS

Central secretariat metro station – 1.2 k.m.

Indira gandhi international airport – 14.5 k.m.

New delhi railway station – 3.8 k.m.

Nearest stops :- National Museum bus stop

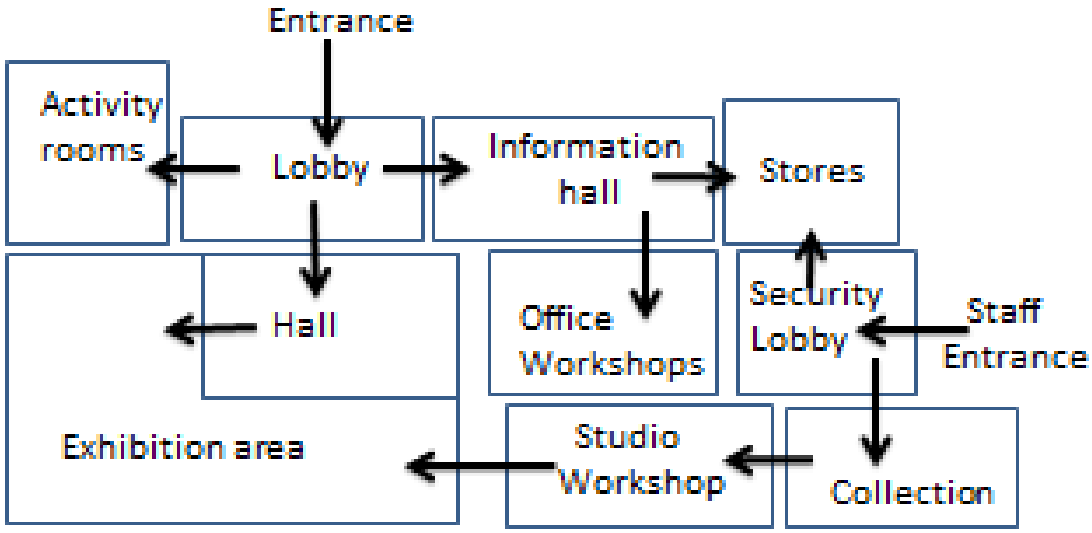
APPROACH ROAD

- Access to the museum is from main Maulana Azad road
- Inclined – entry from right side of building
- Two main entries from main road – one is Temporarily closed
- Separate entrance for VIP
- Store sculptures painting , Baggage Counter , Workshop , Vegetation , Water Body etc. are seen within site .

CASE STUDY 1

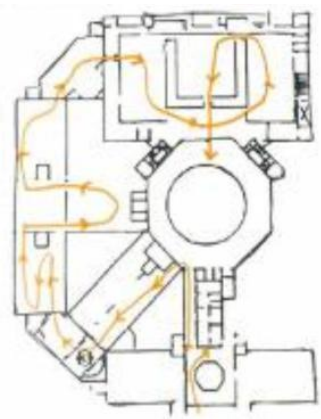
NATIONAL MUSEUM, NEW DELHI
ARCHITECT - GWYER COMMITTEE

LAYOUT



CIRCULATION

- Museum has radial circulation
- Visitor enter in exhibition area from gallery left hand side of token counter
- All exhibition hall is connected with each other with a centre circulation



AUDITORIUM

- 250 Seating capacity
- 190 seats on ground level
- 60 seats in balcony with projection room in between
- Balcony only used for V.I.P purpose
- Used for showing movies of art and culture
- Connecting with main enterence lobby
- Area : 340 mt sq

CASE STUDY 1

NATIONAL MUSEUM, NEW DELHI
ARCHITECT - GWYER COMMITTEE

NEAREST STOPS

Central secretariat metro station – 1.2 k.m.

Indira gandhi international airport – 14.5 k.m.

New delhi railway station – 3.8 k.m.

Nearest stops :- National Museum bus stop

FORM AND FUNCTION

- The building seems to merge with the surrounding buildings – as per DDA guidelines
- Building comprises of four stories with a basement
- Basic plan of the building is fan shaped with a circular courtyard in between surrounded by a covered veranda
- Wings are linked with the courtyard according to different requirement are need
- Building is made using high strength R.C.C and red sand stone

ENTERENCE LOBBY

Dome above hexagonal lobby

Central art piece

Ticket Counter

Museum shops

CASE STUDY 1

NATIONAL MUSEUM, NEW DELHI
ARCHITECT - GWYER COMMITTEE

EXHIBITION

- The museum has 200,000 works of art
- It also houses manuscripts , musical instrument , decorative art and textile , western art and armours
- Some of the galleries are
- Indus valley civilization
- Maurya art
- Gupta art
- Late medieval art

LIGHTING

- Artificial lighting is done in all the galleries with daylight exhibits kept to minimum
- Natural lighting is only used in centre
- In jewellery exhibition area the light is focused on the jewellery only

SERVICES

PARKING

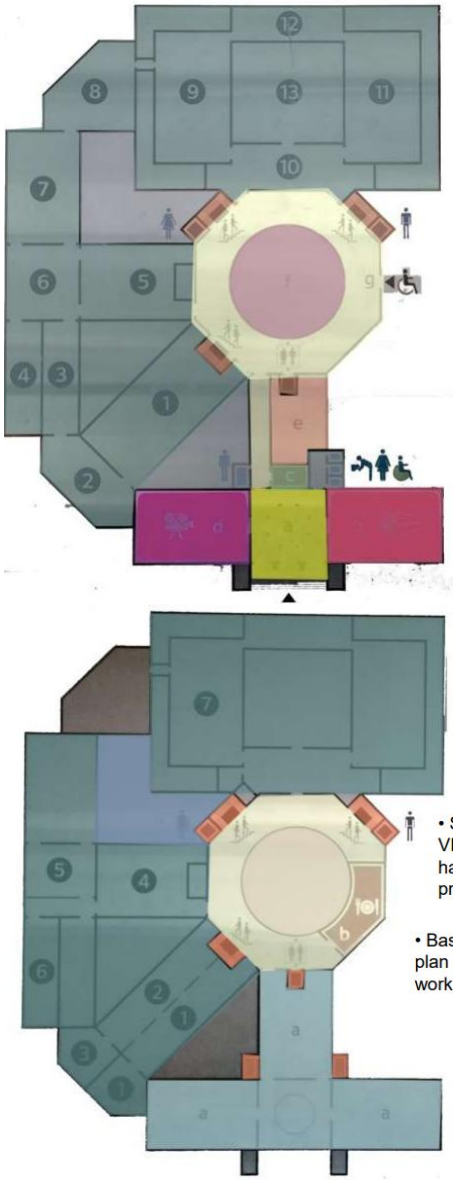
- Proper parking facilities are not given
- Clock room is located near parking

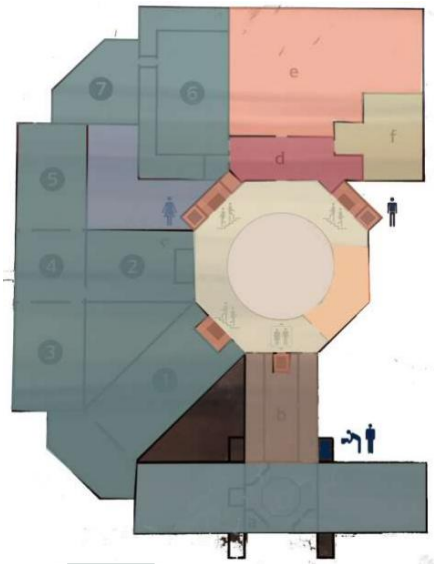
LANDSCAPE

- Ashoka , Devdaru , Meeta , Neem , Tulsi , Neem , Plam tree

CASE STUDY 1

NATIONAL MUSEUM, NEW DELHI
ARCHITECT - GWYER COMMITTEE





- Exhibition Spaces
- Entrance Lobby
- Auditorium
- Office of The D.G.
- Library
- Office
- Administrative Section
- Museum Institute
- Services

CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

INTRODUCTION:-

DILLI HAAT is a project of Delhi tourism and New Delhi municipal corporation. It provides an ambienceof a traditional village market for more contemporary needs. It provides a synthesis of craft, food ,and cultural activities.DILLI HAAT is not just a market place; it has been visualized as a showpiece of traditional Indian cultureaforum where rural life and folk art are brought closer to an urban business.These shops change hands every 15 days and therefore provide opportunity to the visitors with a different set of shops periodically and therefore motivates them to keep revisiting again and again .It provides encouragement to need artists and serves as an outlet centre for them .A small food court which brings a variety of cuisines of different states together.

LOCATION AND ACESSIBILITY:-

LOCATION - Kidwai Nagar, opposite INA market, NEW DELHI.
DATE OF COMPLETION- DECEMBER, 1993
CLIENT- DELHI TOURISM & MUNICIPAL CORPORATION OF DELHI.
ARCHITECT- PRADEEP SACHDEVA, DESIGN ASSOCIATES, NEW DELHI.
SITE AREA- 6 ACRES, APPROX. 100M x 300M
BUILT UP AREA- 3190 SQ M
SITE DIM.-100 x 300 M
GROUND COVERAGE - 12%
NEAREST METRO STATION-INA
NEAREST BUS STOP-INA

Dilli Haat: Location Map

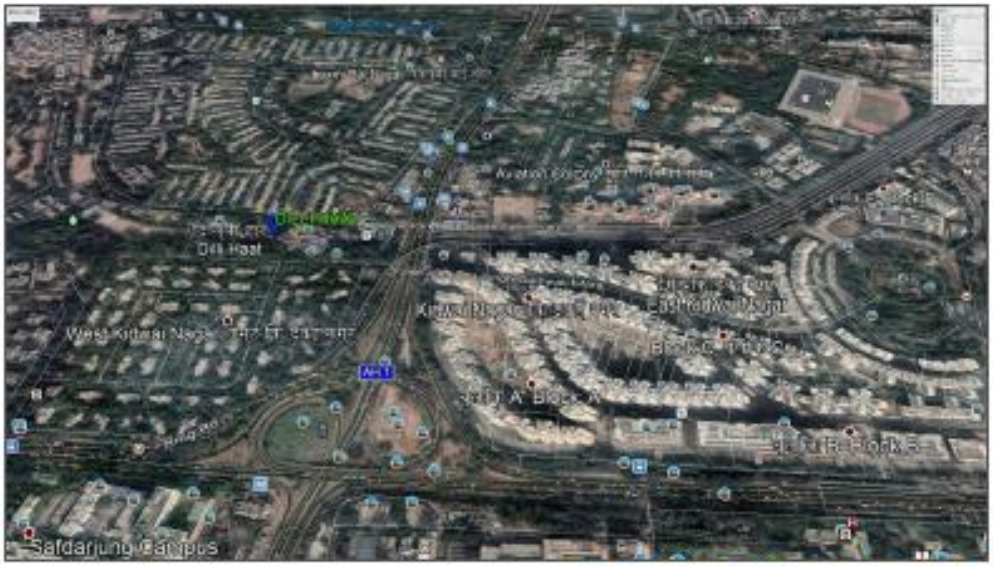
CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

FEATURES:-

- an entrance plaza, raised to block vehicular access and bring a new spatial identity for pedestrian circulation and ticketing services for entry to Dilli Haat.
- It is followed by a linear spine of movement flanked by stalls on both sides in cluster patterns showcasing the local and the regional crafts of India.
- Space syntax tools have been used to study the interaction between the spatial configuration and public movement in this spatial typology in an urban context.

SITE SURROUNDINGS



NEAREST STOPS:-

INA MARKET metro station 200M.

Indira gandhi international airport – 14.5 k.m.

New delhi railway station – 3.8 k.m.

Nearest stops :-AIMS HOSPITAL

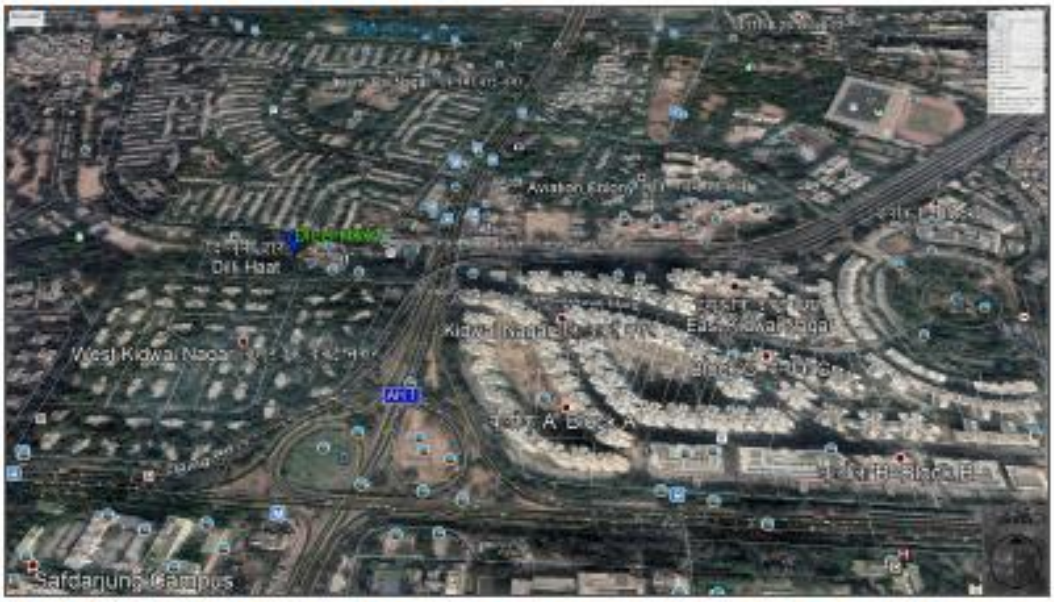
APPROACH ROAD :-

- Access to the Site is from main Maulana Azad road
- SHRI AUROBINDO ROAD Two main entries from main road – one is Temporarily closed
- Separate entrance for VIP
- Store sculptures painting , Baggage Counter , Workshop , Vegetation , Water Body etc. are seen within site .

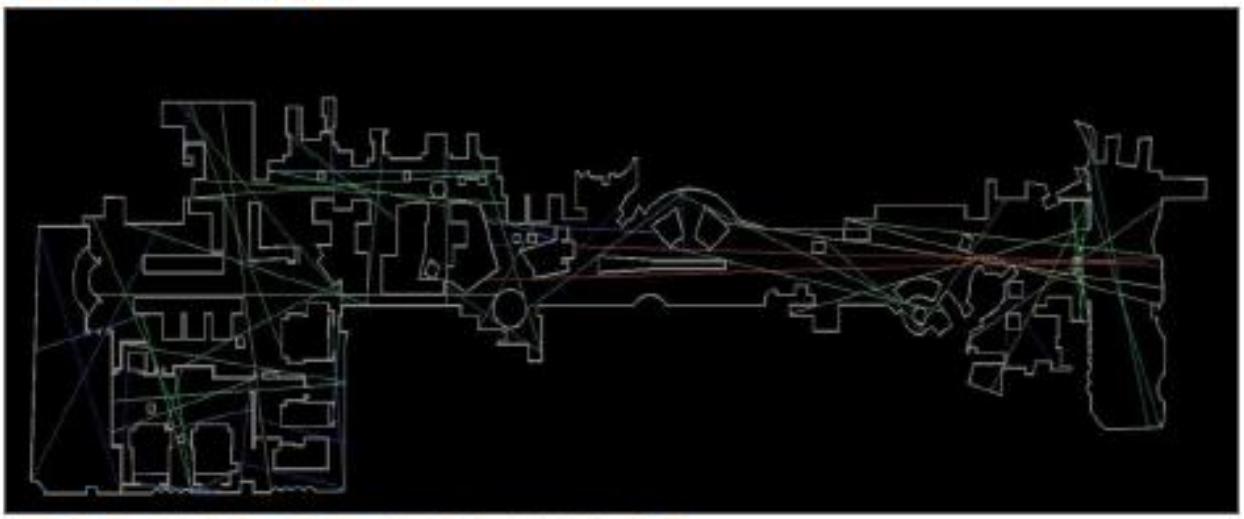
CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

APPROACH SITE :-



Axial Map Analysis Showing The Measure Connectivity :-



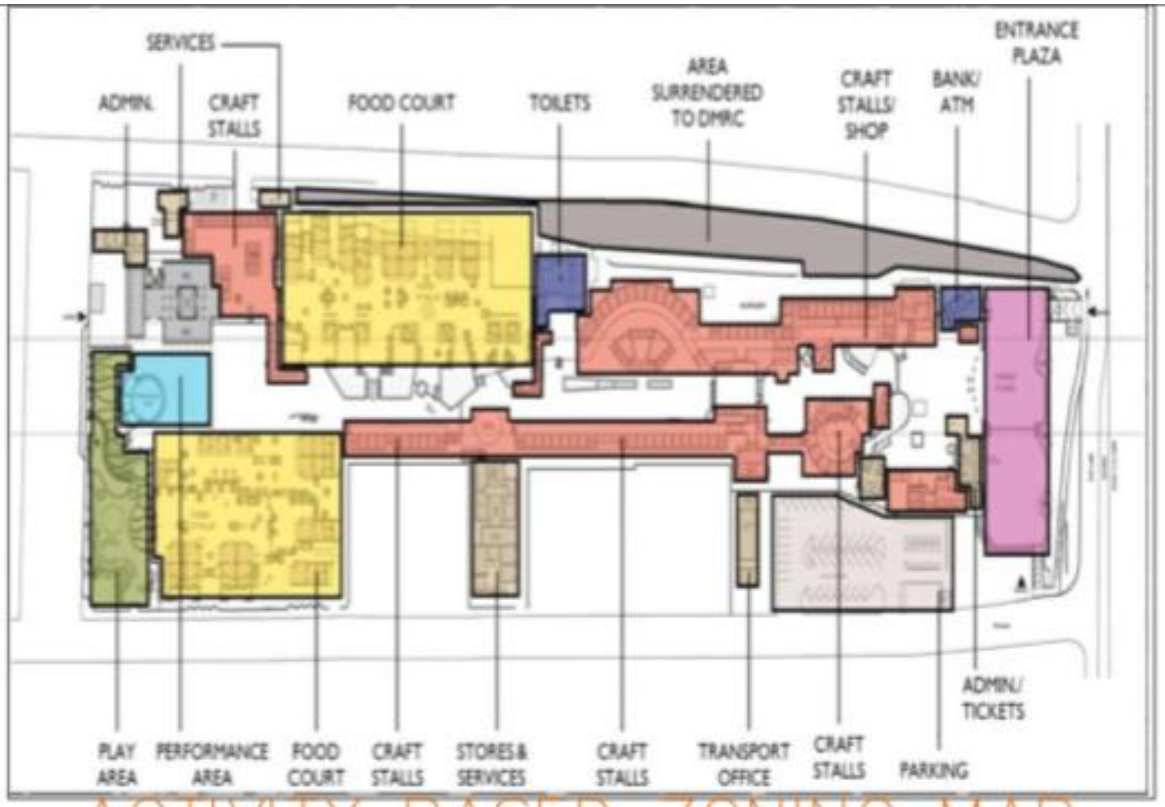
ZOINING OF DILLI HAAT :-

GEOMETRY:-

- The site is polygon with 4 sides

CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA



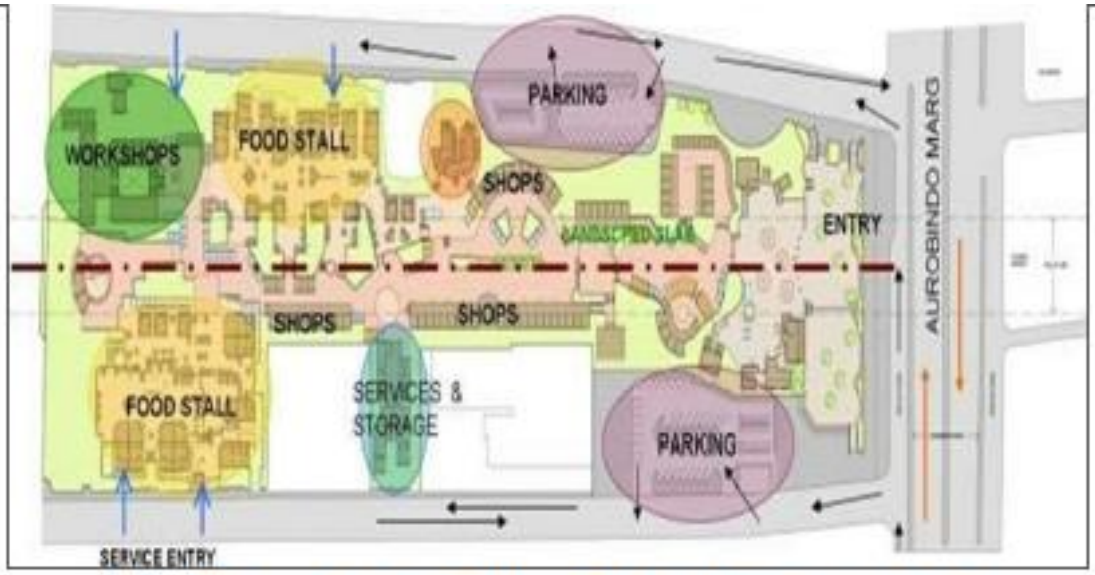
ACTIVITY BASED ZONING MAP

ENTRY/EXITS:-

- The site has 2 main entries and exits
- Gate number 1 is approx 10m wide with one pedestrian entry with security check point,other 2 for special occasion entrance .Vehicular entry is prohibited
- Approx 3 m wide space is used for theme display at the entrance.
- Has only one exit 1.2 m wide.
- Gate number 2 is approx 7m wide. Consist of one pedestrian entry 1.2 m wide and vehicular entry 4 m wide.
- Used as service gate.
- Consist of ticket counter 3m wide.
- Attached with a courtyard and administration block of app.10mx3m.
- Gives a direct passage to the stage.

CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA



AREA BASED ZONING MAP

PARKING :-

- consist of 2 parking
- around 90 car parking –visitors and
- around 150 two wheeler parking

ONE AT THE FRONT
AND OTHER AT THE BACK SIDE

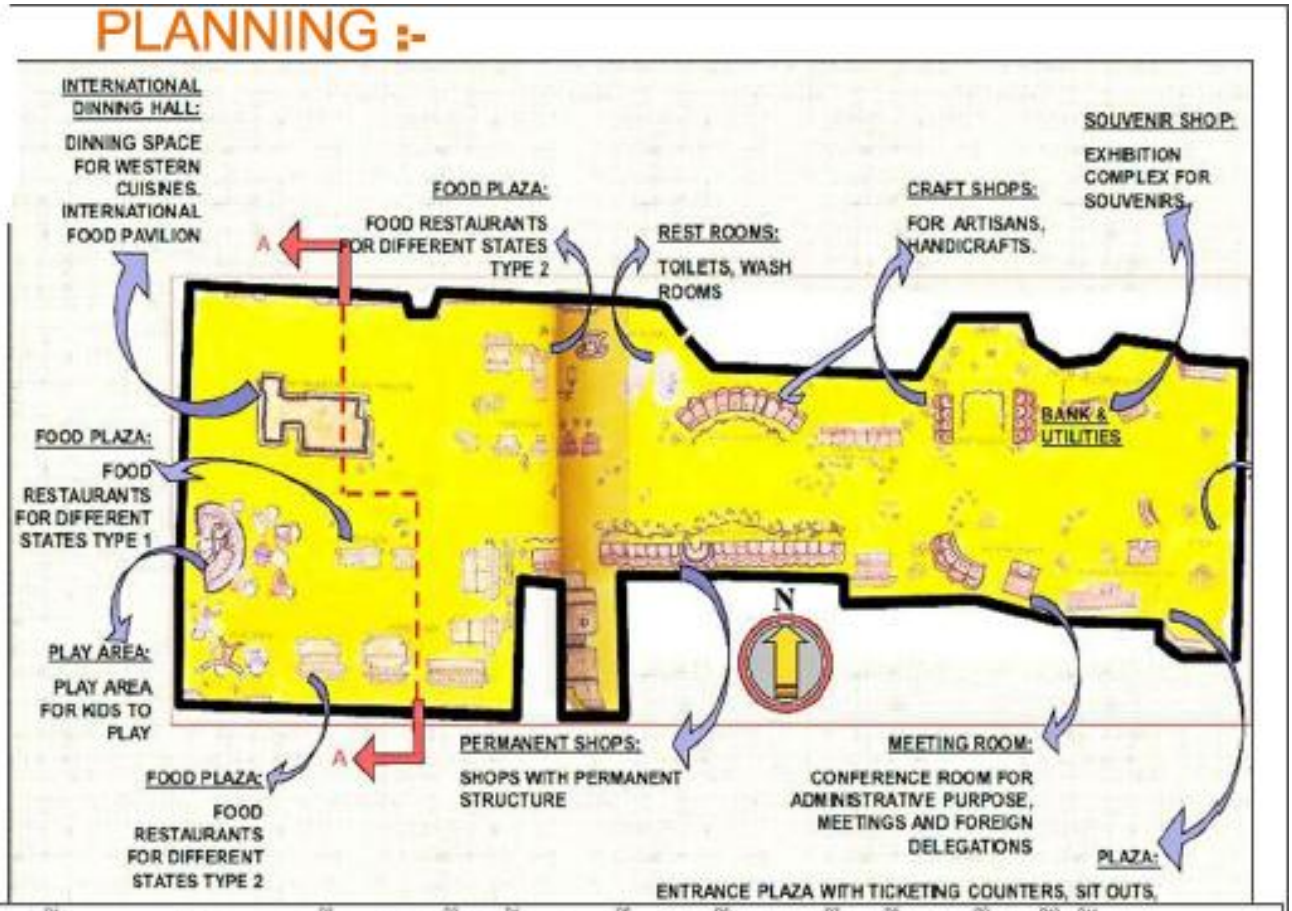
SECUIRTY :-

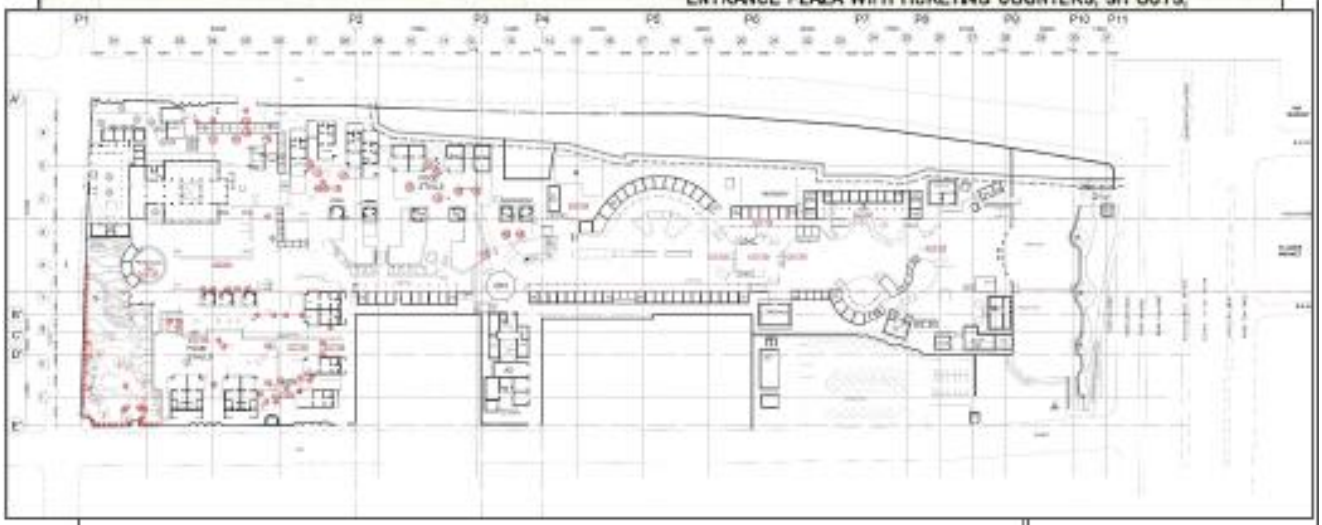
- Security check in of 2mx2m at the entrance.
- Cctv placed at various locations.
- Guards at every entrance.

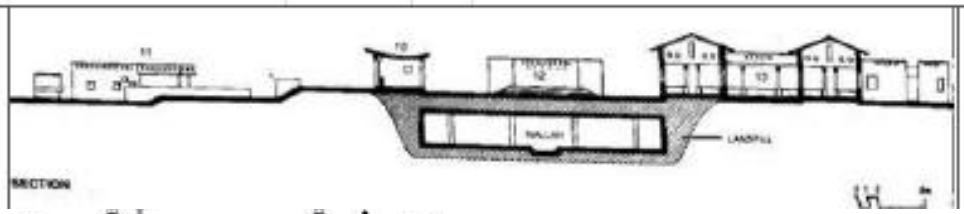
CCTV 35 UNIT
30 GUARD SECURITY GAURD
ON 24 * 7

CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA







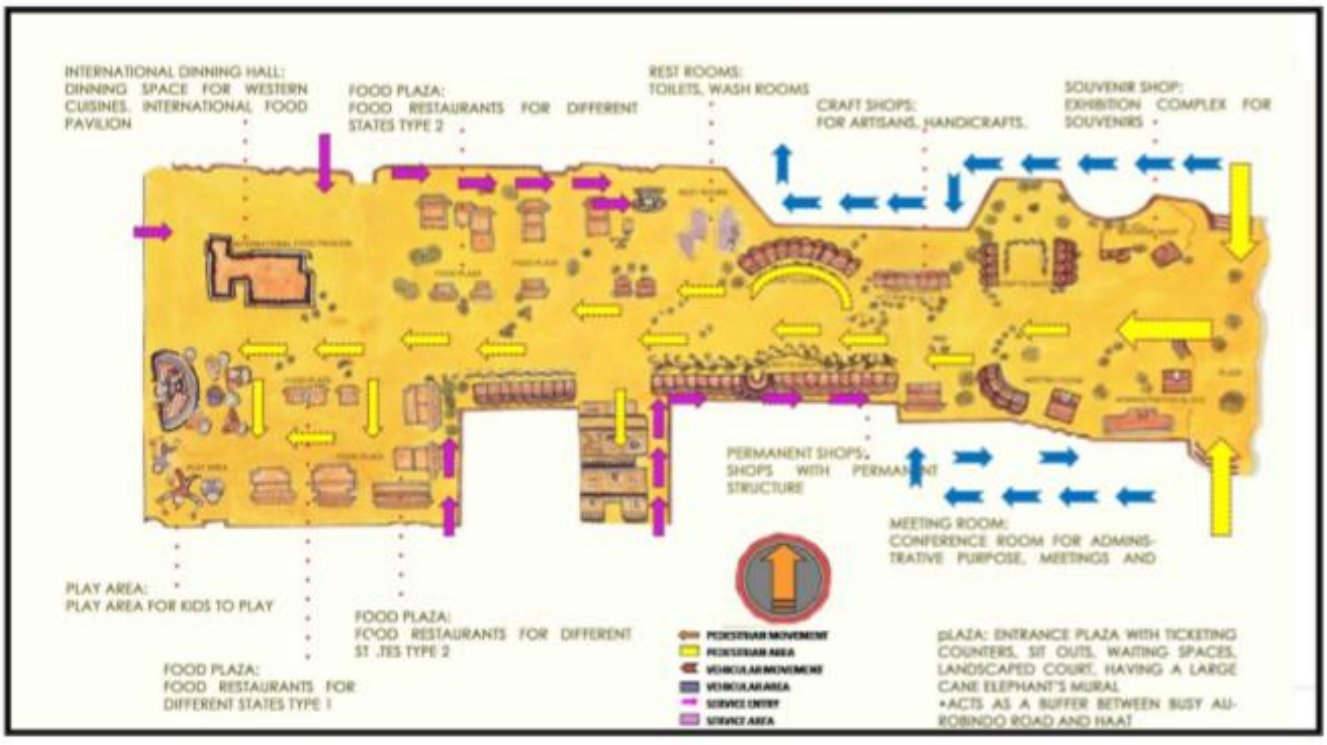
CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

CIRCULATION:-

- From the entrance to the end of the complex , the circulation is entirely pedestrian.
- By the use of ramps and steps , lots of levels have been created to define buildings more distinctly.
- Circulation in front of shops is through a verandah covered arcade 1.5 m wide.
- The spaces also get varied character becau the plaza changes character from a large entrance plaza to an oblong open space.
- 2 Service entrance has been provided on the periphery.

RAMP



CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

OPEN AIR THEATRE:-

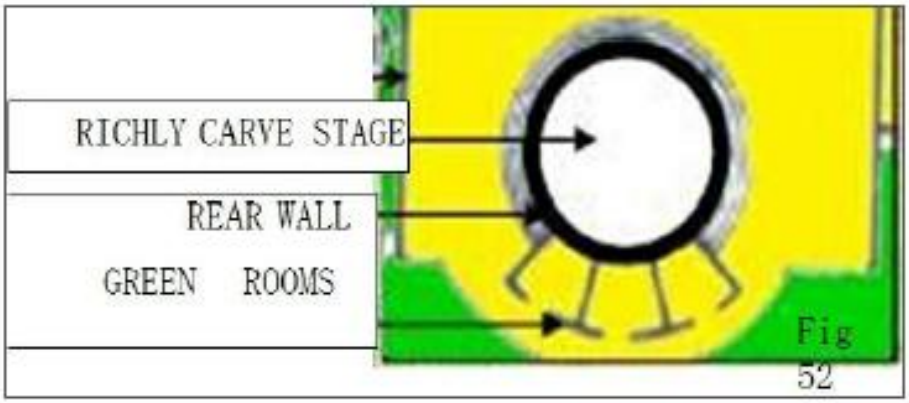


Fig 52

- The oat doesn't consist of permanent seating space whereas an open space is provided for seating purpose.
- Stage is circular in shape of app.5-6m dia.
- Consist of 3 green rooms at the back of 2x2.5m app.

MEETING ROOM :-

- Consist of a meeting room for foreign delegates as well as internal administration dept.
- Size app. Of 3mx7m.
- Used for events discussions and for vip waiting area

CASE STUDY 2:-DILLIHAAT DELHI

ARCHITECT - PRADEEP SACHDEVA

PLAN OF LIGHT FIXTURE :-

RED DOT SHOWS THE STREET LIGHT

CRITICAL ANALYSIS :-

- Green space is provided at relevant spaces.
- Consist of many negative spaces which are a place of dust collection.
- Unauthorised stalls have been setup.
- The spine concept is used very efficiently.
- Location of drinking water is not appropriate i.e. near to the washrooms.
- Number of ramps to reach different level are less are at far distances.
- Not all service entries are used.
- The placement system of stalls is convincing.
- the decorations enhance the beauty of the place.
- An entrance plaza, raised to block vehicular access and bring a new spatial identity for pedestrian circulation is a very special feature.
- Every kitchen has its own gas and water supply.
- Every food stall has different style of seating and shade.
- The paved area seems monotonous which can be improved.
- Temporary stalls structure can be improvised.
- Services are not maintained properly.

CONCEPT STAGE

CONCEPT: FUSION STYLE

WHAT IS FUSION STYLE :-

FUSION STYLE THAT COMBINES CULTURE, TECHNOLOGY, STYLE, SHAPE AND EVEN THE TIME, MADE "MEMORY" WHICH SHOULD EXIST IN HIS TIME, APPEARS TO BE A MODERN CIVILIZATION / NO TIME. FUSION STYLE OFFERS EVERYTHING, AND NO RULES THAT LIMIT OR HORSE'S BIT. CREATIVITY MOVE FREELY, LIKE THERE'S A "THE SKY IS THE LIMIT OF CREATIVITY". FOR EXAMPLE, AT PRESENT, IS A COMMON THING TO COMBINE MODERN ELEMENTS WITH CLASSIC ELEMENTS, AND EVEN BECOME A NECESSITY AND AN OBLIGATION IN A FUSION STYLE, DUE TO 'LIFE', OR 'SOUL' OR 'SPIRIT' IN THE DESIGN ITSELF.

MIXING MUGHAL WITH NEW STYLE:

MIX OLD STYLE WITH NEW STYLE, GOOD 'CLASS' WITH ITEM 'FLEA MARKET', CERTAINLY NOT GOING TO BE FIT, BUT IT WILL BE INTERESTING.
COMMERCIAL VALUE IN FUSION STYLE WILL PRESENT ITSELF AS A COMPARISON, SOMETIMES EVEN THIS VALUE IS NO LONGER THE IMPORTANT THING BECAUSE IT WAS MELTED ON A NEW MEANING, THAT IS BEAUTY. VERY SUITABLE GUIDELINES ARE "NICE AND AFFORDABLE"

WHY FUSION STYLE :-

THE SKYLINE OF THE AGRA IS CONSTRUCTED IN THE MUGHAL ARCHITECTURE SO THE GLIMPSE OF HERITAGE SHOULD MANIFEST IN THE CENTER
THE PROCESS OF CREATING THE WORLD OF ARCHITECTURE AND INTERIOR IS SOMETHING TO CONSIDER VALUE FOR MONEY, AND BECOMES A THING THAT FITS PERFECTLY IN THIS STYLE, BECAUSE FREEDOM IS NOT UNLIMITED. THE POINT IS HARMONY IN TASTE.

MUGAL ARCHITECTURE :-

MUGHAL ARCHITECTURE IS THE TYPE OF INDO-ISLAMIC ARCHITECTURE DEVELOPED BY THE MUGHALS IN THE 16TH, 17TH AND 18TH CENTURIES THROUGHOUT THE EVER-CHANGING EXTENT OF THEIR EMPIRE IN THE INDIAN SUBCONTINENT.
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CONCEPT STAGE

MODERN ARCHITECTURE :-

MODERN ARCHITECTURE, OR MODERNIST ARCHITECTURE, WAS AN ARCHITECTURAL STYLE BASED UPON NEW AND INNOVATIVE TECHNOLOGIES OF CONSTRUCTION, PARTICULARLY THE USE OF GLASS, STEEL, AND REINFORCED CONCRETE; THE IDEA THAT FORM SHOULD FOLLOW FUNCTION (FUNCTIONALISM); AN EMBRACE OF MINIMALISM; AND A REJECTION OF ORNAMENT.THE REVOLUTION IN MATERIALS CAME FIRST, WITH THE USE OF CAST IRON, DRYWALL PLATE GLASS, AND REINFORCED CONCRETE, TO BUILD STRUCTURES THAT WERE STRONGER, LIGHTER AND TALLER.

FUSION STYLE :-

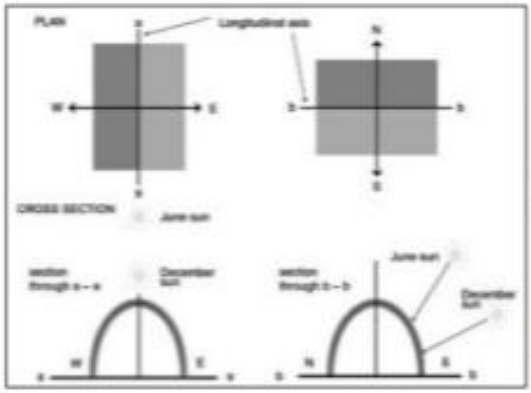
CONCEPT STAGE

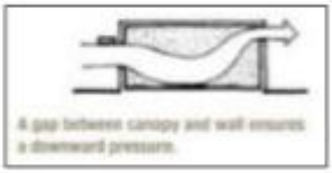
BUILDING ORIENTATION :-

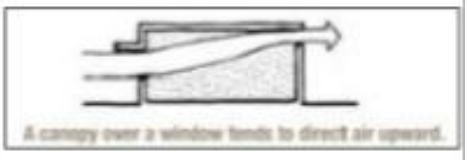
ORIENT THE BUILDING WITH LONGER AXIS IN THE EAST-WEST DIRECTION. THE BUILDING WITH GLAZED CURTAIN WALL FACING NORTHWEST SHOWS A SUBSTANTIAL REDUCTION IN LOAD COMPARED TO SOUTHWEST ORIENTATION.

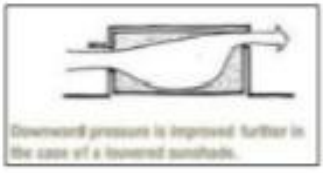
SOUTH ORIENTATION RECEIVES MAXIMUM SOLAR RADIATION DURING WINTERS WHICH IS PREFERABLE AS COMPOSITE CLIMATE RECEIVES SEVERE WINTERS. EAST WEST RECEIVE MAXIMUM SOLAR RADIATION DURING SUMMER AND VICE VERSA.

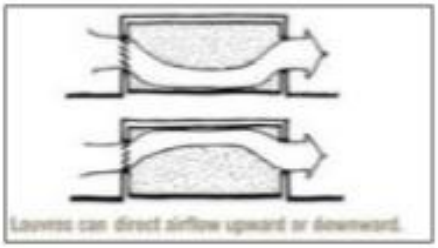
THUS , ATTENTION NEED TO BE PAID WHILE DESIGNING WEST FACADE AND SPACES BEHIND WEST FACADE. SHADING OF ROOF THROUGH DESIGN FEATURES LIKE PERGOLAS WILL HELP IN CREATING SHADE POCKETS.

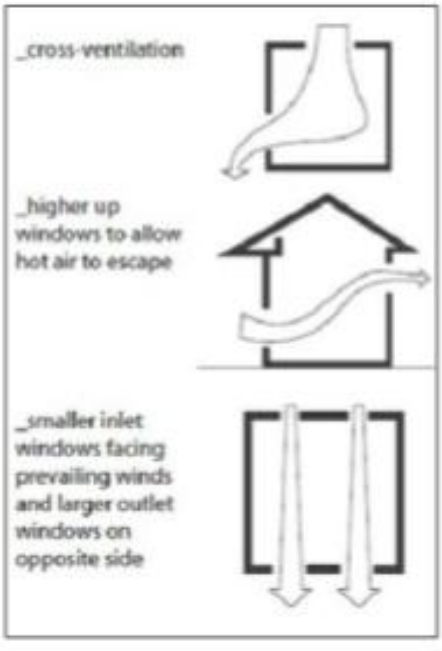








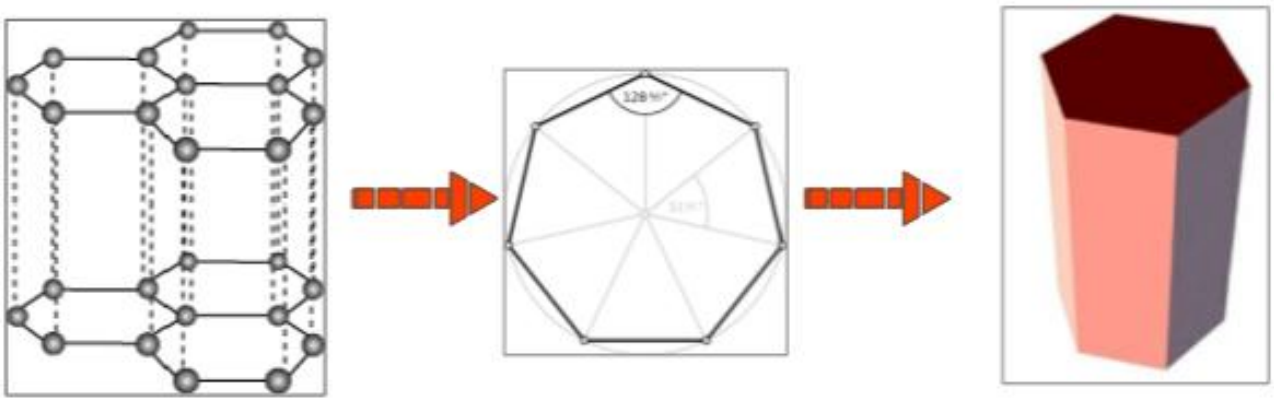




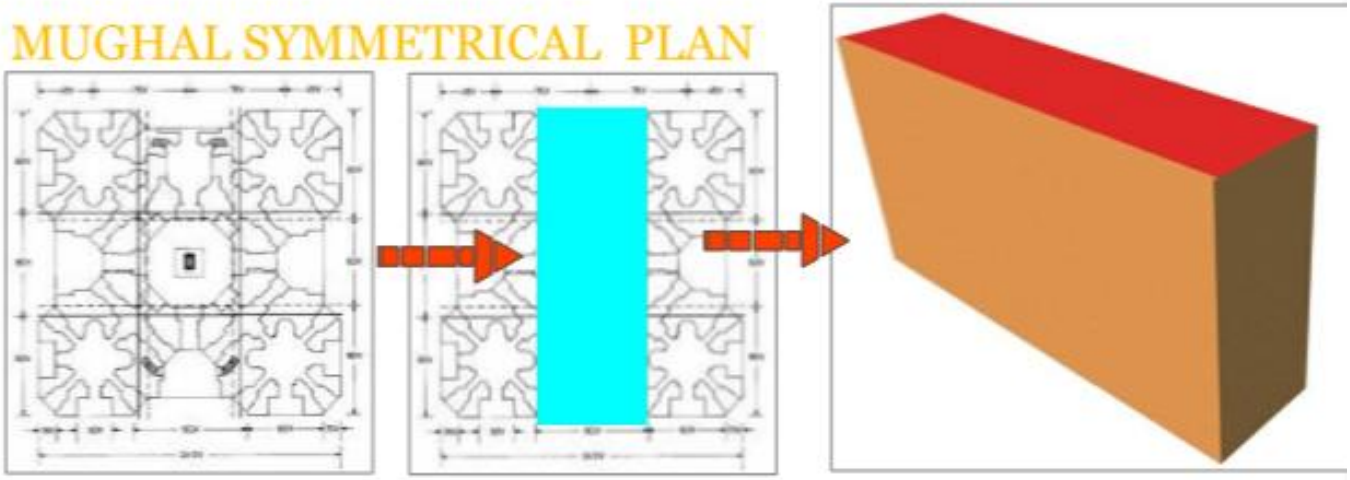
CONCEPT STAGE

FOAM EVOLUTION:-

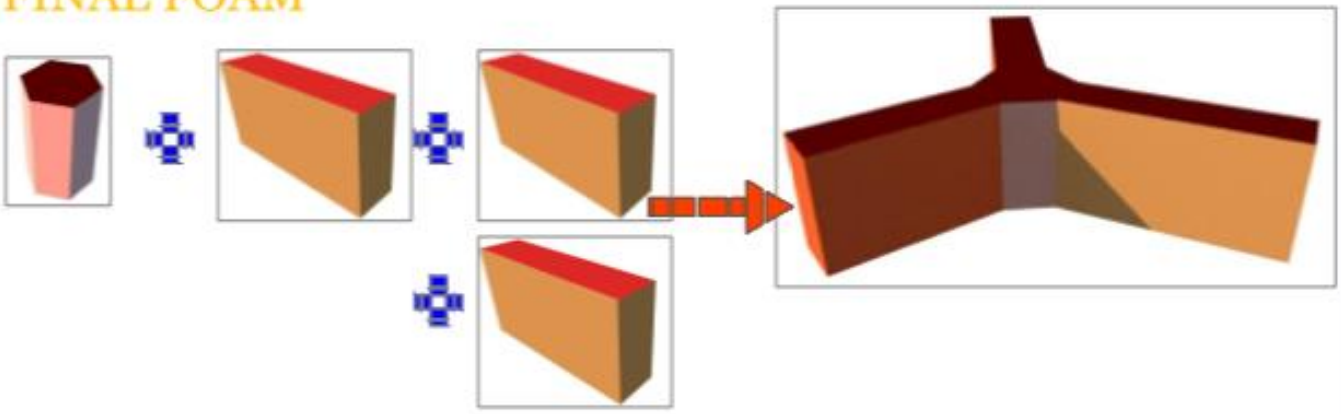
GRAPHITE CHEMICAL STRUCTURE



MUGHAL SYMMETRICAL PLAN



FINAL FOAM



CONCEPT STAGE

ZONING :-

10. ENTRY
7.TICKET COUNTER
8.GAURD ROOM
11.PARKING
12. PARKING
1ENTRANCE LOBBY
2.MUSEUM
3. EXHIBITION
9.CAFETARIA
4.ART GALLERY
5 .AUDITORIUM
13. HOSPITALITY
6. LIGHT AND SOUND SHOW
14. WATER BODIES
15 WORKSHOP

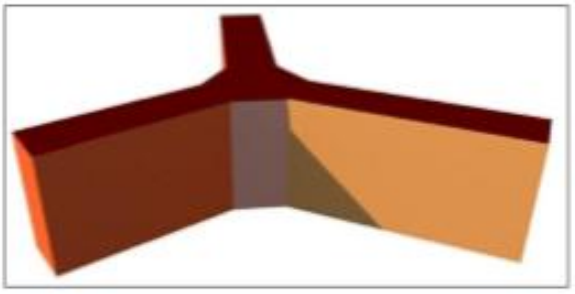
WALL OF HERITAGE :-FOR THE LIGHT AND SOUND SHOW

FRESCO (PLURAL FRESCOS OR FRESCOES) IS A TECHNIQUE OF MURAL PAINTING EXECUTED UPON FRESHLY LAID ("WET") LIME PLASTER. WATER IS USED AS THE VEHICLE FOR THE DRY-POWDER PIGMENT TO MERGE WITH THE PLASTER, AND WITH THE SETTING OF THE PLASTER, THE PAINTING BECOMES AN INTEGRAL PART OF THE WALL.

CONCEPT STAGE

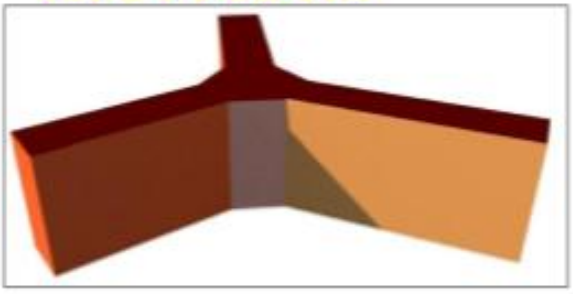
VERTICAL STACKING :-

GROUND FLOOR:-



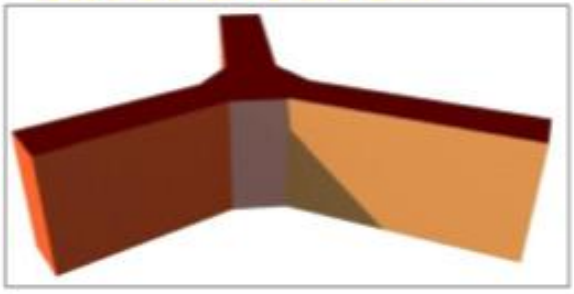
THIS FLOOR CONSIST OF:-
ENTRANCE LOBBY
#MUSEUM
#EXHIBITION
#ART GALLERY
#WORKSHOP

FIRST FLOOR:-



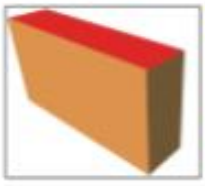
THIS FLOOR CONSIST OF:-
FAME GALLERY
#MUSEUM
#EXHIBITION
#ART GALLERY

SECOND FLOOR:-



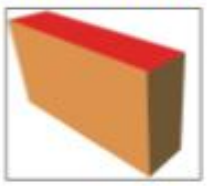
THIS FLOOR CONSIST OF:-
FAME GALLERY
#MUSEUM
#AUDITORIUM
#CAFETERIA
ADMIN ARRANGEMENT

HOSPITALITY GROUND FLOOR:-



IT CONSIST OF :-
WAITING AND RECEPTION
#DINING AREA AND KITCHEN
#OFFICE
#COMMON TOILET

HOSPITALITY FIRST FLOOR:-



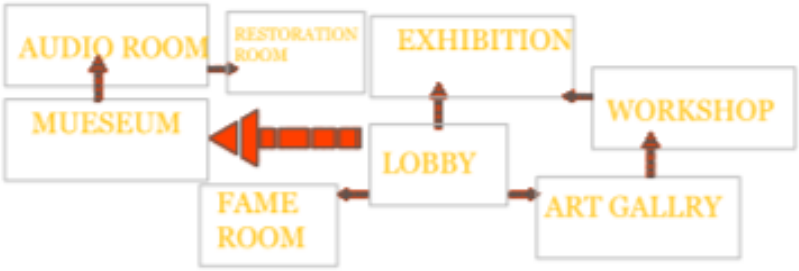
IT CONSIST OF :-
#ROOM
DORMITORY

CONCEPT STAGE

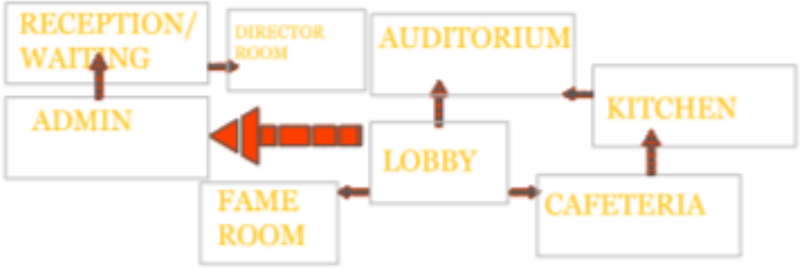
HORIZONTAL STACKING :-

GROUND FLOOR:-

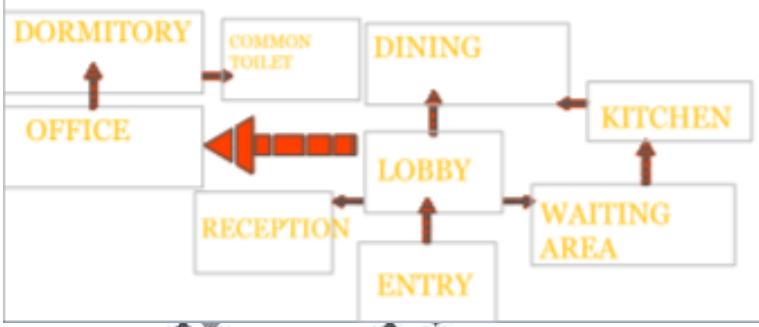
FIRST FLOOR:-



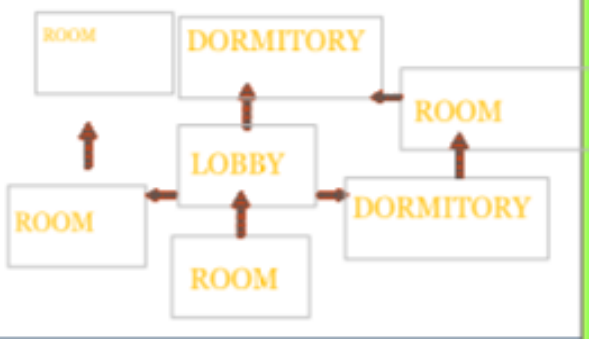
SECOND FLOOR:-



HOSPITALITY FIRST FLOOR:-



HOSPITALITY SECOND FLOOR:-



CONCEPT STAGE

ELEMENT FUSING :-

JALI

DOMES AND MINARETS

IWAN

MODEL AFTER MIXING ELEMENT OF MUGHAL ARCHITECTURE

INTERIOR

CONCEPT STAGE

BUILDING BY LAW :-

1 SITE AREA	25,050	sqm	
2 PERMISSIBLE GROUND COVERAGE	40	%age	
3 PROPOSED GROUND COVERAGE	38	sqm	
4 PERMISSIBLE FAR	120	%age	
5 PROPOSED FAR	105	sqm	
6 SETBACKS			
a Front	7 (12 m open space to be left at front)	mts	
b Side	7	mts	
c Rear	7	mts	
7 PERMISSIBLE HEIGHT	21	mts	
8 PERMISSIBLE NO OF FLOORS	:	nos	
9 PROPOSED HEIGHT	21	mts	
10 PROPOSED NO OF FLOORS	G+3	nos	
11 CAR PARKING			
a REQUIRED NO OF UNITS	130 units	ECS	
b NO OF ECU's IN BASEMENT PARKING	120	nos	
c NO OF ECU's ON SURFACE PARKING	10	nos	
12 OCCUPANCY FOR DIFFERENT USES WITHIN THE PROJECT			
a EDUCATIONAL	0	nos	
b INSTITUTIONAL	0	nos	
c RESIDENTIAL	32	nos	390 sq.m. @ 12.5 sq.m. per person
d ASSEMBLY	355	nos	200 seater fixed seating auditorium @1.2 sq.m. per person; Meeting room for 75 and 80 persons @ 2sq.m. and 2.25 sq.m. per person respectively
e MUSEUMS	3052	nos	10,290 sq.m. galleries; 5761 sq.m. of exhibition space @4sq.m. per person
f COMMERCIAL/RETAIL	50	nos	150 sq.m. @ 2sq.m. per person
g OTHER (BUSINESS)	581	nos	2711.6 sq.m. @10 sq.m. per person; library 1170 sq.m. @10 sq.m. per person ; research and workshop 1917.5 sq.m.
h TOTAL OCCUPANCY OF THE PROJECT	**4070**	nos	
13 LANDSCAPING			
a HARD SURFACES (Includes Paving, Parking & Roads etc)	6262.5	sqm	
b SOFT SURFACES (Includes Lawns, Greens, Plants etc)	8767.5	sqm	

CONCEPT STAGE

(i) 12.50 मीटर से अधिक ऊँचाई के भवनों हेतु सैट–बैक निम्नवत् होंगे:–

भवन की ऊँचाई (मीटर)	चारों ओर छोड़े जाने वाला सैट बैक (मीटर)
12.50 से 15 तक	5.0
15 से 18 तक	6.0
18 से 21 तक	7.0
21 से 24 तक	8.0
24 से 27 तक	9.0

		भू–आच्छादन (प्रतिशत)	एफ.ए.आर.
5.	सामुदायिक एवं संस्थागत सुविधाएँ		
	(क) निर्मित / विकसित क्षेत्र	35	1.50
	(ख) नए / अविकसित क्षेत्र		
	• सामुदायिक केन्द्र, बारातघर एवं धार्मिक भवन	40	1.50
	• अन्य संस्थागत	30	2.00

क्र. सं.	भूखण्ड का क्षेत्रफल (वर्ग मीटर)	भू–उपयोग की प्रकृति	बेसमेन्ट के प्राविधान
4.	1000 से अधिक	4.1 आवासीय / ग्रुप हाउसिंग, व्यवसायिक, कार्यालय, सामुदायिक सुविधाएं एवं अन्य बहुमंजिले भवन	1000–2000 वर्ग मीटर क्षेत्रफल तक के भूखण्डों में डबल बेसमेन्ट, 2000–10,000 तक 4 बेसमेन्ट तथा 10,000 वर्ग मीटर से अधिक में कोई प्रतिबन्ध नहीं।
		4.2 औद्योगिक	अनुमन्य भू–आच्छादन के बराबर, परन्तु 50 प्रतिशत की गणना एफ.ए.आर. में होगी।

; विभिन्न उपयोगों / अधिभोगों के भवनों के लिए पार्किंग व्यवस्था के मानक निम्नानुसार होंगे :–

क्र.सं.	उपयोग	समान कार स्थल की संख्या
7.	(क) सामुदायिक भवन, कान्फ्रेन्स हाल, बारातघर, उत्सव भवन	प्रति 100 व.मी. तल क्षेत्रफल पर 2.0
	(ख) अस्पताल, नर्सिंग होम	प्रति 100 व.मी. तल क्षेत्रफल पर 1.5
	(ग) सामाजिक / सांस्कृतिक संस्थान, क्लब	प्रति 100 व.मी. तल क्षेत्रफल पर 2.0
	(घ) महाविद्यालय, विश्वविद्यालय, तकनीकी एवं अन्य शिक्षण संस्थाएँ (स्कूल एवं इण्टर कालेज, आदि)	प्रति 100 व.मी. तल क्षेत्रफल पर 1.0
	(च) स्टेडियम	20 सीटों पर एक
	(छ) एम्यूज़मेंट पार्क / अन्य मनोरंजन स्थल	योजना के कुल क्षेत्रफल का 30 प्रतिशत

3.10 वाहनों को खड़े करने के स्थान (पार्किंग)

पार्किंग की प्रकृति के आधार पर प्रत्येक "समान कार स्थल" के लिए सर्कुलेशन एरिया सहित निम्न मानक होगा :–

(क) खुले क्षेत्र में पार्किंग : 23 वर्ग मीटर
(ख) कवर्ड पार्किंग : 28 वर्ग मीटर
(ग) बेसमेन्ट में पार्किंग : 32 वर्ग मीटर
(घ) मेकेनाइज्ड पार्किंग : 16 वर्ग मीटर

c) *Assembly buildings* — The open space at front shall be not less than 12 m and the other open spaces around the building shall be not less than 6 m.

NOTE — However, if assembly buildings are permitted in purely residential zones, the open spaces around the building shall be not less than 12 m.

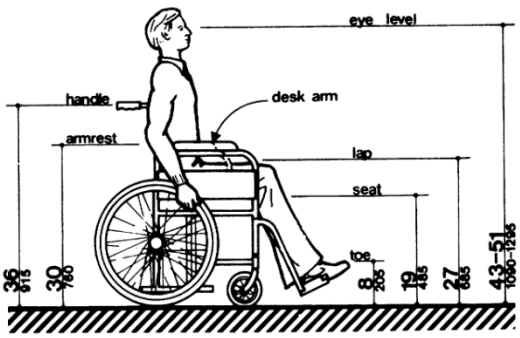
	NATIONAL MUSEUM DELHI (CASE STUDY-1)				STANDARDS	NATIONAL WAR MUSEUM DELHI (FINAL AREAS)				
SPACE REQUIREMENT	**UNITS**	**AREA (SQ.M)**	**TOTAL AREA (SQ.M)**	**OCCUPANCY** (PERSON	**AREA IN METER / PERSON**	**UNITS**	**AREA (SQ.M**	**PROPOS-ED AREA (SQ.M**	**OCCUPANCY** (PERSON)	**REFRENCES**
ADMINISTRATION			**720**					**785**		
DIRECTOR'S ROOM	1	40	40	1		1	40	40	1	From case study
ASST. DIRECTOR'S ROOM	1	30	30	1	15 -20SQ/M	1	30	30	1	From case study
CURATOR	3	40	120	3	15 -20SQ/M	3	40	120	3	From case study
ASST. CURATOR	4	30	120	4	15 -20SQ/M	4	30	120	4	From case study
EDUCATION PROGR-AM COORDINATOR	1	30	30	1		1	30	30	1	From case study
TRANSLATOR	1	30	30	1		2	30	60	2	From case study
ENTRANCE /WAITING AREA	1	50	50	25	0.8 SQM/ PERSON	1	50	50	25	From case study
STAFF ROOM	1	50	50	10	10 SQM/ PERSON	1	100	100	10	Neufert
FINANCE OFFICE	1	40	40	5	8 SQM/ PERSON	1	40	40	5	Neufert
CONFERENCE	1	150	150	50	3SQM/ PERSON	1	150	150	50	Neufert
TOILET	2	30	60		2-URINAL/21-45P WC- 1/25 PERSON (MALE) 1/15 PERSON (FEMALE) WASHBASIN 1/25, 1 FOR PHYSICAL HANDICAPPED	2	20	40		From case study
						1	5	5		NBC
STORE			**680**					**1000**		
DOCUMENTATION	1	80	80			1	100	100		From case study
RECORD ROOM	1	100	100			1	200	200		From case study
RESERVE COLLECTION	1	150	150			1	200	200		From case study
EXHIBITION STORE	1	350	350			1	500	500		From case study
										From case study
LABORATORIES			**1740**					**1065**		From case study
WORKSHOP	2	125	250			1	300	300		From case study
WORKSHOP MANAGER	1	15	15			1	15	15		From case study
CONSERVATION	1	1200	1200			1	300	300		From case study
STORAGE	1	275	275			1	450	450		From case study

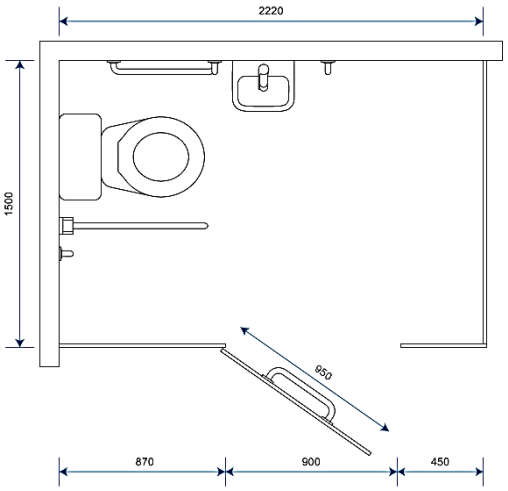
	NATIONAL MUSEUM DELHI (CASE STUDY-1)				STANDARDS	NATIONAL WAR MUSEUM DELHI (FINAL AREAS)				
SPACE REQUIREMENT	**UNITS**	**AREA (SQ.M**	**TOTAL AREA (SQ.M)**	**OCCUPA-NCY** (PERSON	**AREA IN METER / PERSON**	**UNITS**	**AREA (SQ.M)**	**TOTAL AREA (SQ.M**	**OCCUPANCY** (PERSON)	**REFRENCES**
ENTRANCE			**412**					**647**		
TICKET COUNTER	1	18	18	3		1	30	30	3	From case study
CLOAK ROOM	1	60	60	2		1	100	100	2	From case study
ENTRANCE LOBBY	1	250	250	200	1.2SQM/ PERSON	1	350	350	325	From case study
SECURITY	1	12	12	2		1	100	100	12	From case study
RECEPTION	1	12	12	2	5 SQM/ PERSON	1	12	12	12	From case study
TOILET	2	15	30		FOR PUBLIC 1-URINAL/50 PPL WC-1/250 PERSON (MALE) 1/150 PERSON (FEMALE) WASHBASIN 1/250 PERSON, 1 FOR PHYSICAL HANDICAPPED	2	25	50		From case study
						1	5	5		NBC
AUDIO- VISUAL ROOM					2.4 SQM/PERSON	1	60	60	25	STANDARD
TOILET						2	15	30		

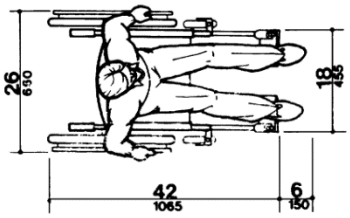
	NATIONAL MUSEUM DELHI (CASE STUDY-1)				STANDARDS	NATIONAL WAR MUSEUM DELHI (FINAL AREAS)				
SPACE REQUIREMENT	**UNITS**	**AReA (SQ.M**	**TOTAL AREA (SQ.M)**	**OCCUPA-NCY** (PERSON	**AREA IN METER / PERSON**	**UNITS**	**AREA (SQ.M**	**TOTAL AREA (SQ.M)**	**OCCUPNY** (PERSON)	
AUDITORIUM			**450**					**610**		
SEATING	1	300	3000	250	1.5 SQM/ PERSON +30% FOR STAGE,20% FOYER	1	325	325	180	Neufert
STAGE	1	100	100			1	98	98		Neufert
GREEN ROOM	1	30	30	3	4.5 SQ.M / PER	2	12	24	24	Neufert
PROJECTOR ROOM	1	20	20	1	1-wc 100-400 more 400 add 1 for 250 p	1	20	20	1	From case study
TOILETS					(2-wc 50-200 more 200 add 1 - 200)	2	15	30		Neufert , NBC
SERVICE ROOM						1	20	20		From case study
GUEST LOUNGE					1-URINAL/50 PPL'1 FOR PHYSICAL HANDICAPPED	3	30	90		From case study
CAFETARIA			**300**					**660**		
DINNING HALL	1		170		1.8- SQM / PERSON	1	450	450	300	Neufert
KITCHEN & STORE	1		90		40% AREA OF DINING	1	180	180		Neufert
TOILET					MALE WC 1/50 URINALS 1/50 FEMALE WC 2/50 1WB/1WC	2	15	30		NBC
SERVICES			**150**					**320**		From case study
AHU			30					150		From case study
TRANSFORMER			20					50		From case study
ELECTRICAL ROOM			20					50		From case study
GENERATOR ROOM			20					40		From case study
SURVEILLANCE ROOM			15					30		From case study

	NATIONAL MUSEUM DELHI (CASE STUDY-1)				STANDARDS	NATIONAL WAR MUSEUM DELHI (FINAL AREAS)			
SPACE REQUIREMENT	**UNITS**	**AREA (SQ.M)**	**TOTAL AREA (SQ.M)**	**OCCUPANCY** (PERSON)	**AREA IN METER / PERSON**	**UNITS**	**AREA (SQ.M)**	**TOTAL AREA (SQ.M)**	**OCCUPANCY** (PERSON)
SERVER ROOM			15	1				15	1
MAIN CONTROL ROOM			30	1				30	1
CARE TAKER ROOM			8					12	
PARKING					**2ECS/ 100 SQ.M**				
CAR	35				1.25SQ.M/VEHICLE				
2 WHEELER	80				50SQMT/ BUS				
BUS	2					5			
MUSEUM								4000	
HOSIPITALITY									
RECEPTION / WAITING LOUNGE						1	25	50	
ADMIN OFFICE						1	15	15	
GUEST ROOM							560	560	
SERVICE								12	
KITCHEN								40	
DINNING								100	
MAINTENANCE GARAGE			120			1		**350**	
GALLERIES	25	DIFF.	**9440**			2	DIFF.	8000	
EXHIBITION						2		5000	
TOTAL AREA			**18100**					22404	
CIRCULATION	40%		**7240**			25%		**5601**	
TOTAL BUILTUP AREA			**25340**					**28000**	
F.A.R			**1.2**					**1.2**	
NO. OF FLOORS			**G+2**					**G+1**	

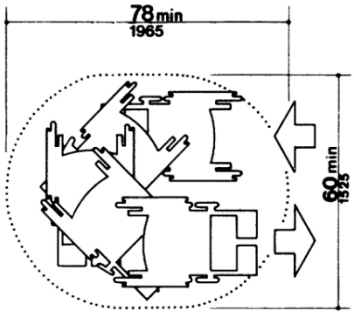
For Disabled People



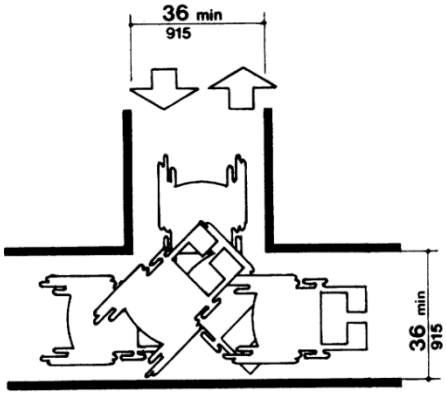




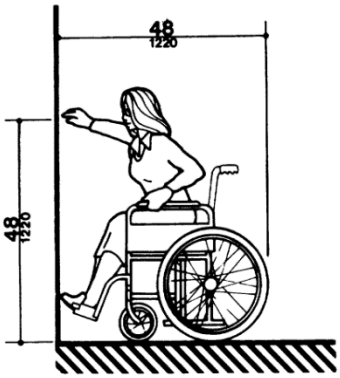
Wheelchair dimensions



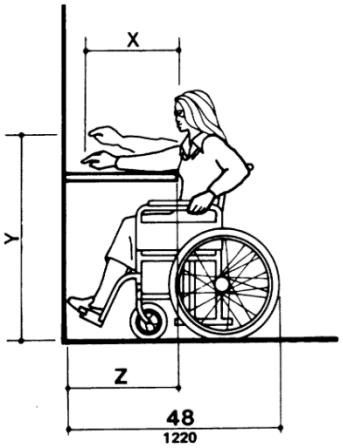
Space needed for smooth U-turn

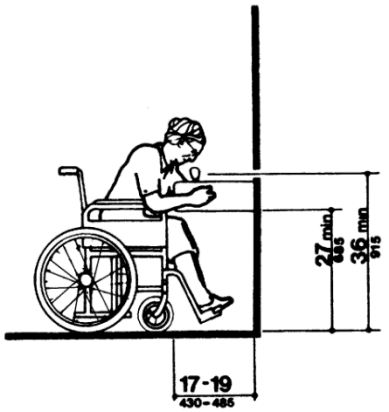


T-shaped space for 180-degree turns



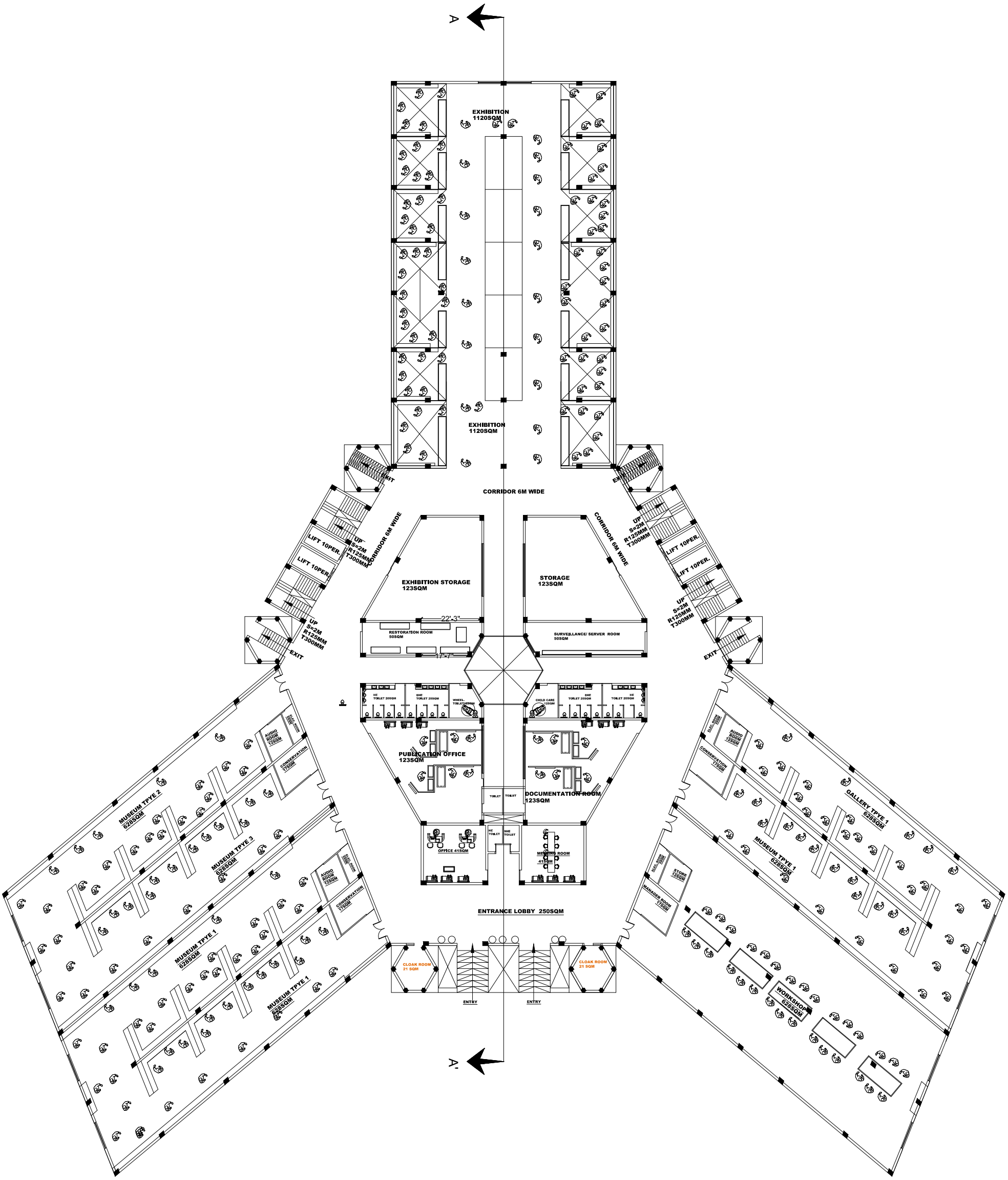
Forward reach limits



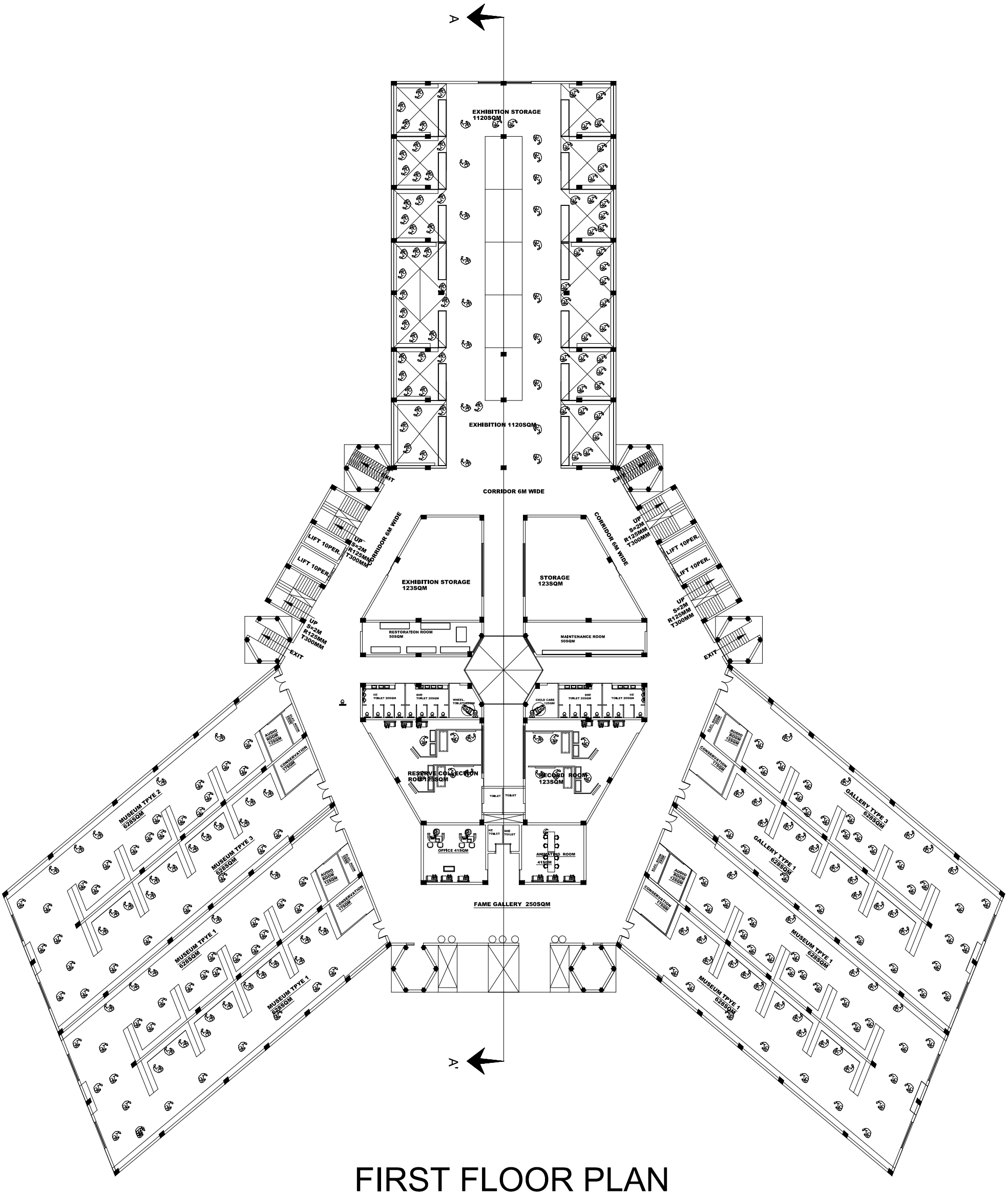


Drinking fountain, cantilevered type

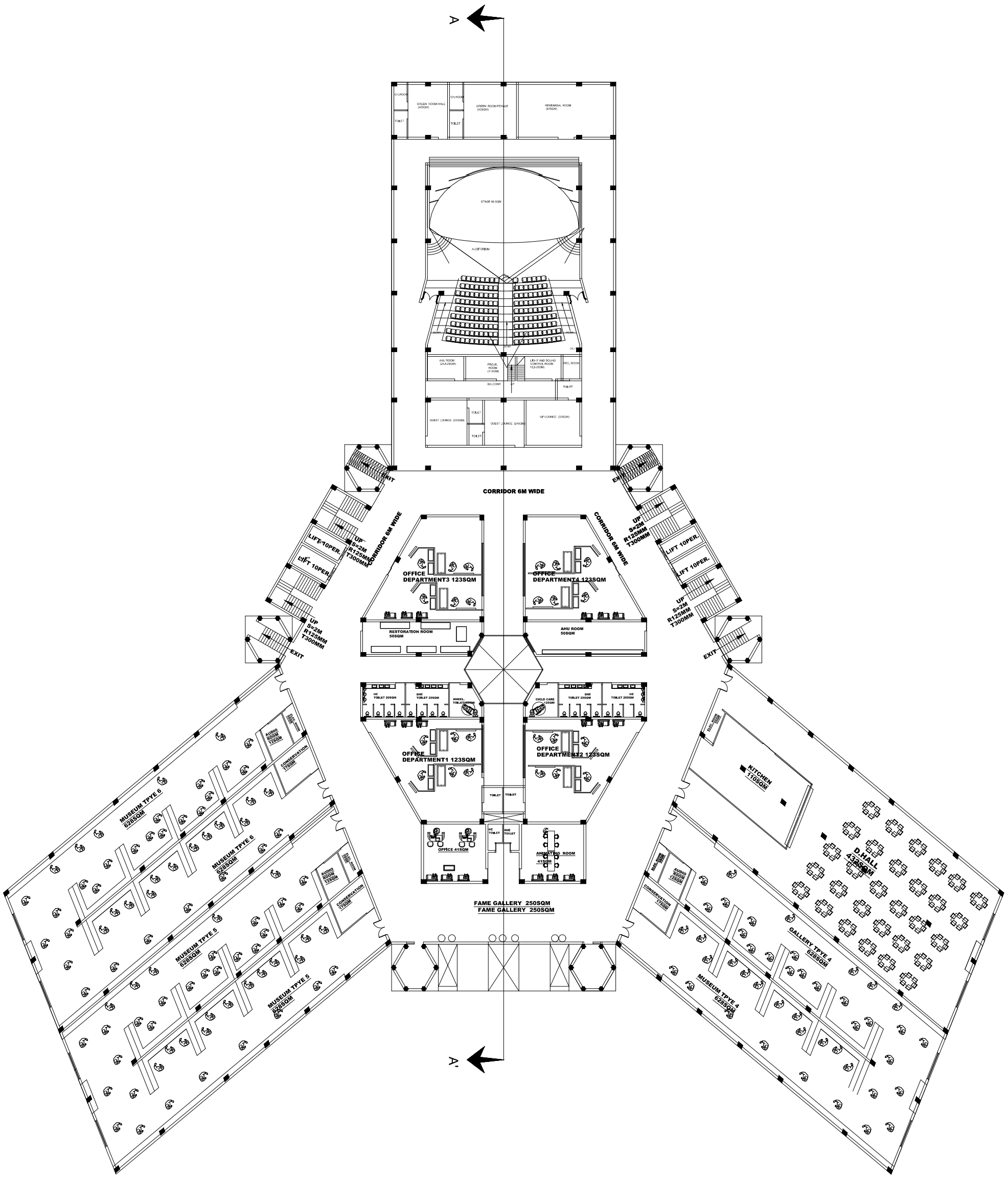
NOTE: X shall be ≤ 25 in (635 mm); Z shall be ≥ X. When X < 20 in (510 mm), then Y shall be 48 in (1220 mm) maximum. When X is 20 to 25 in (510 to 635 mm), then Y shall be 44 in (1120 mm) maximum.



GROUND FLOOR PLAN

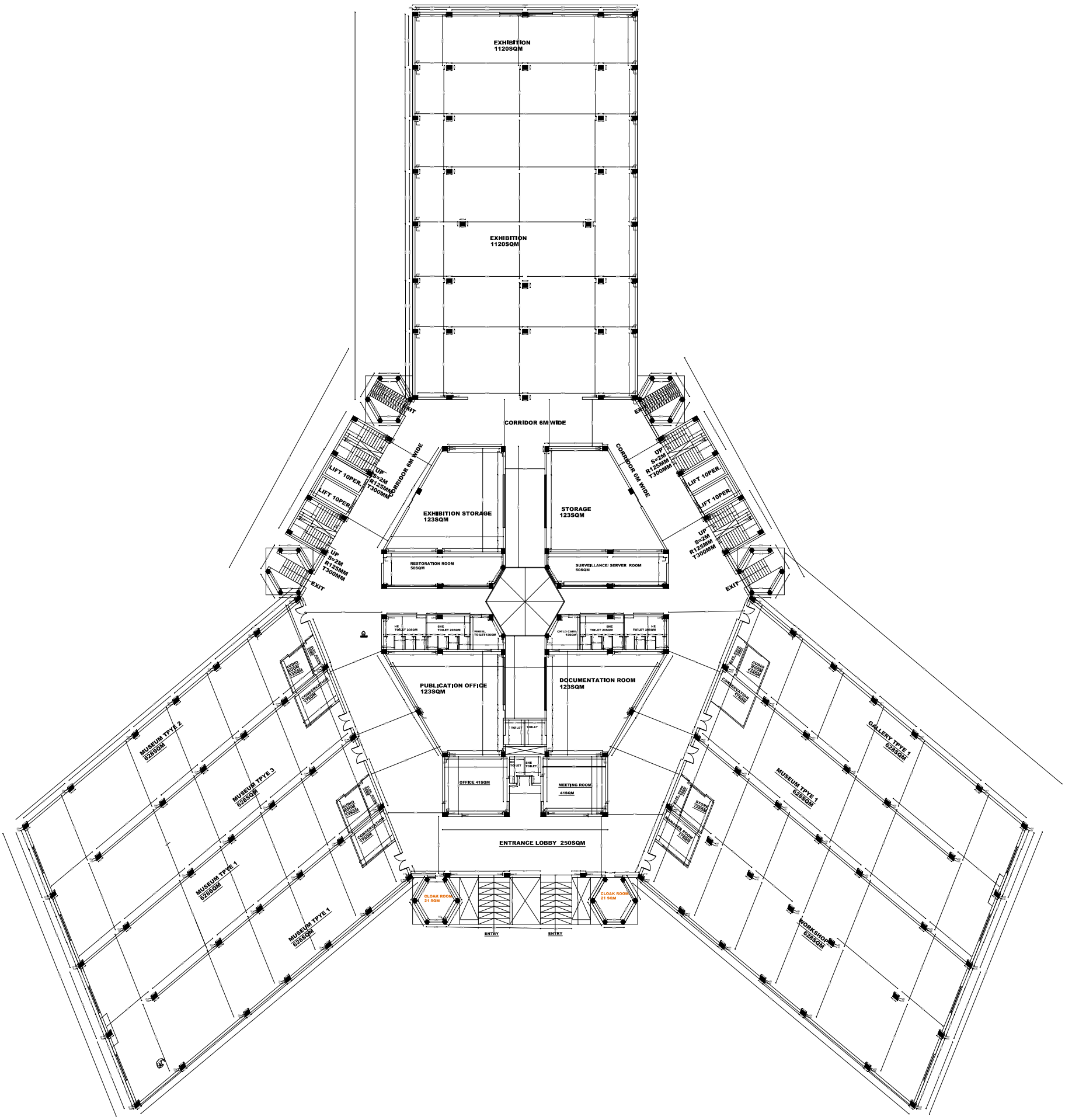


FIRST FLOOR PLAN

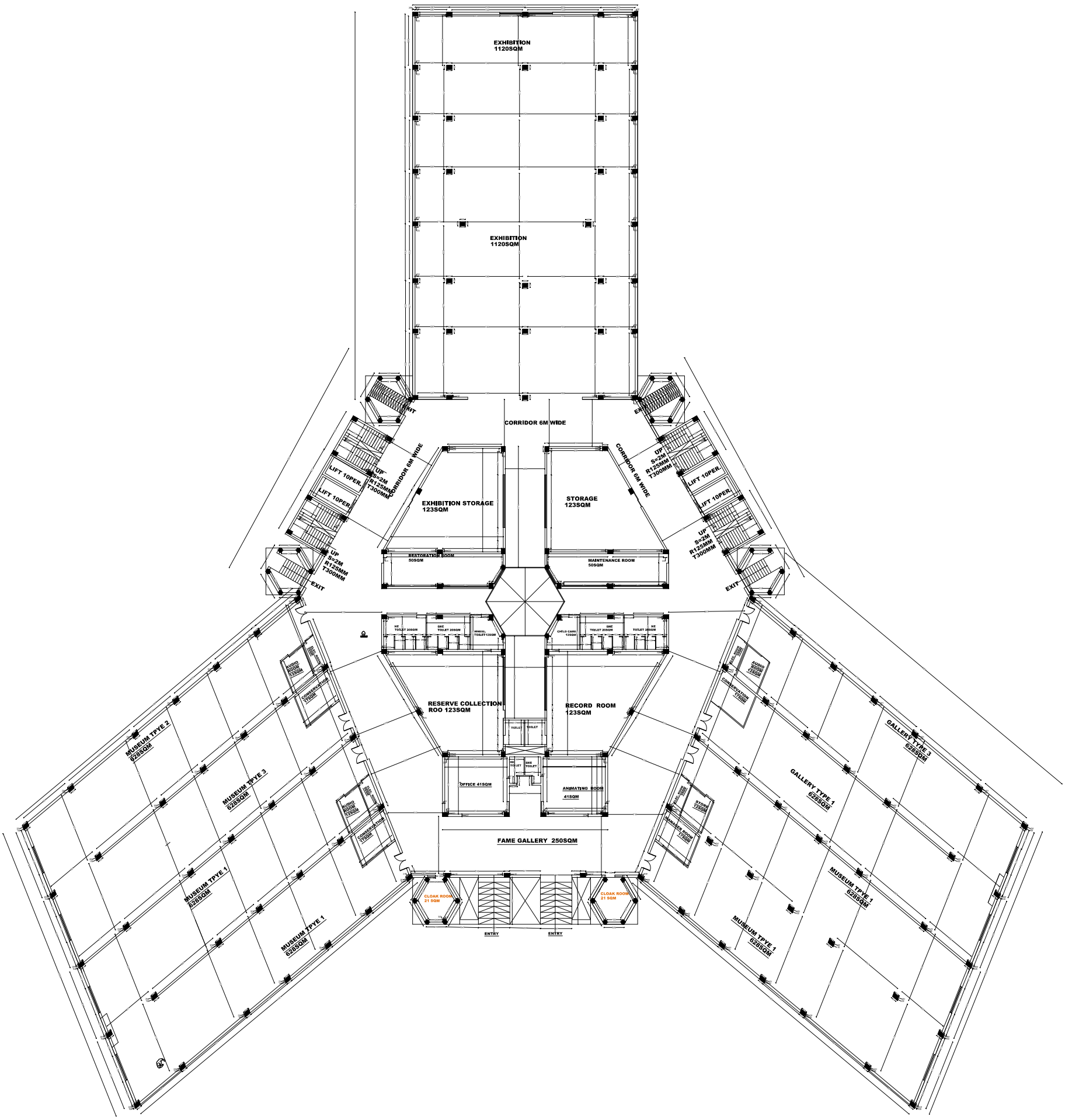


SECOND FLOOR PLAN

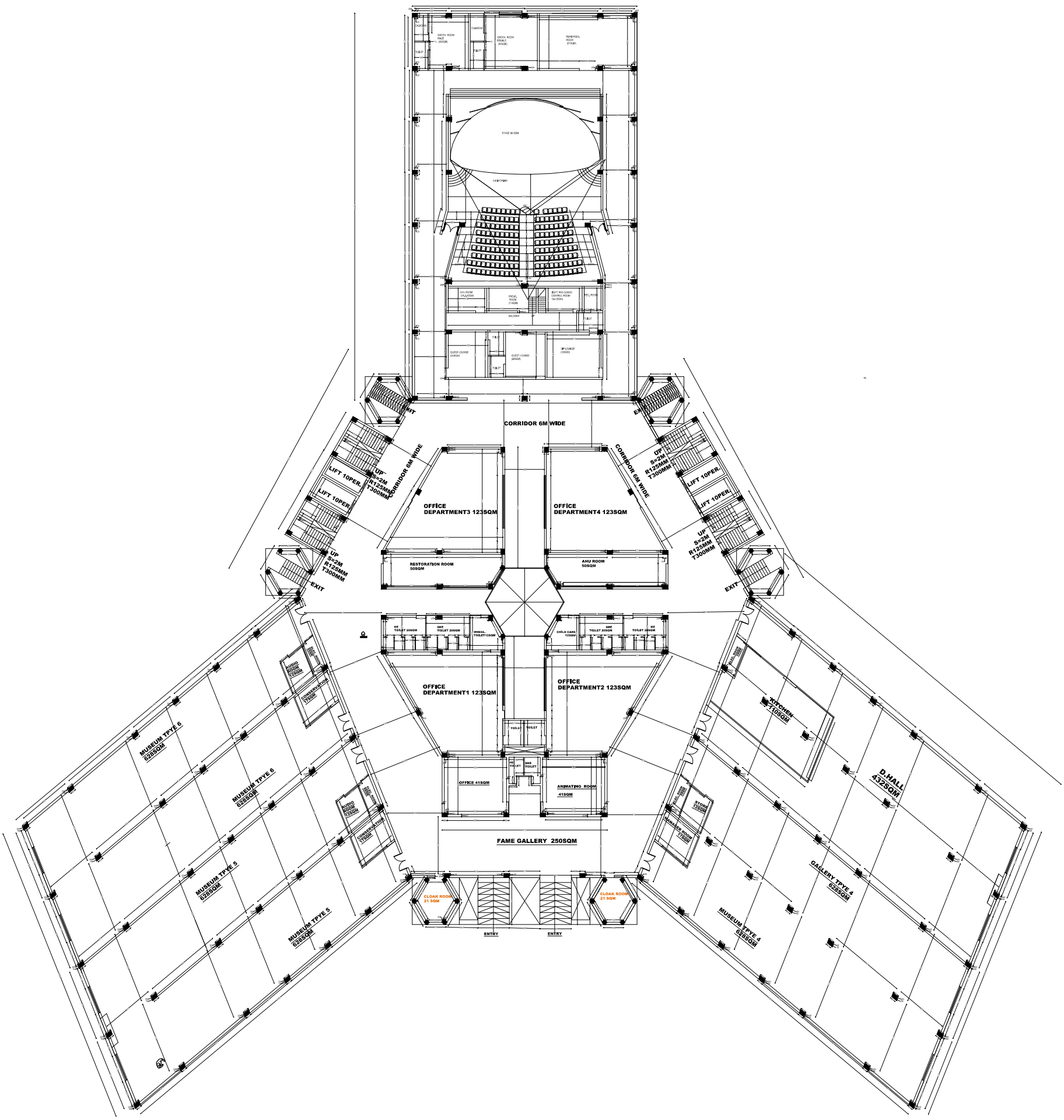
N



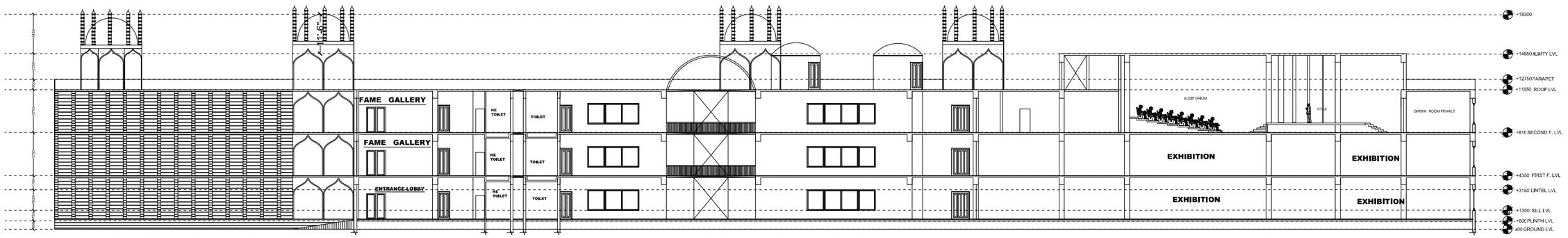
GROUND FLOOR PLAN(WORKING)



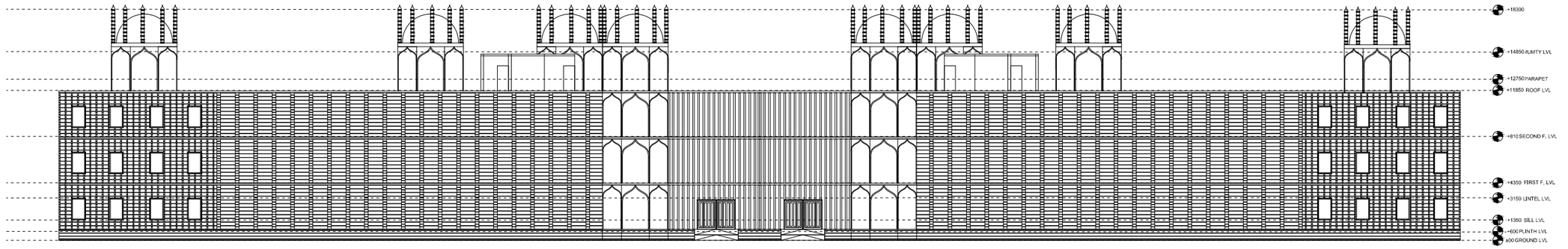
FIRST FLOOR PLAN(WORKING)



SECOND FLOOR PLAN(WORKING)

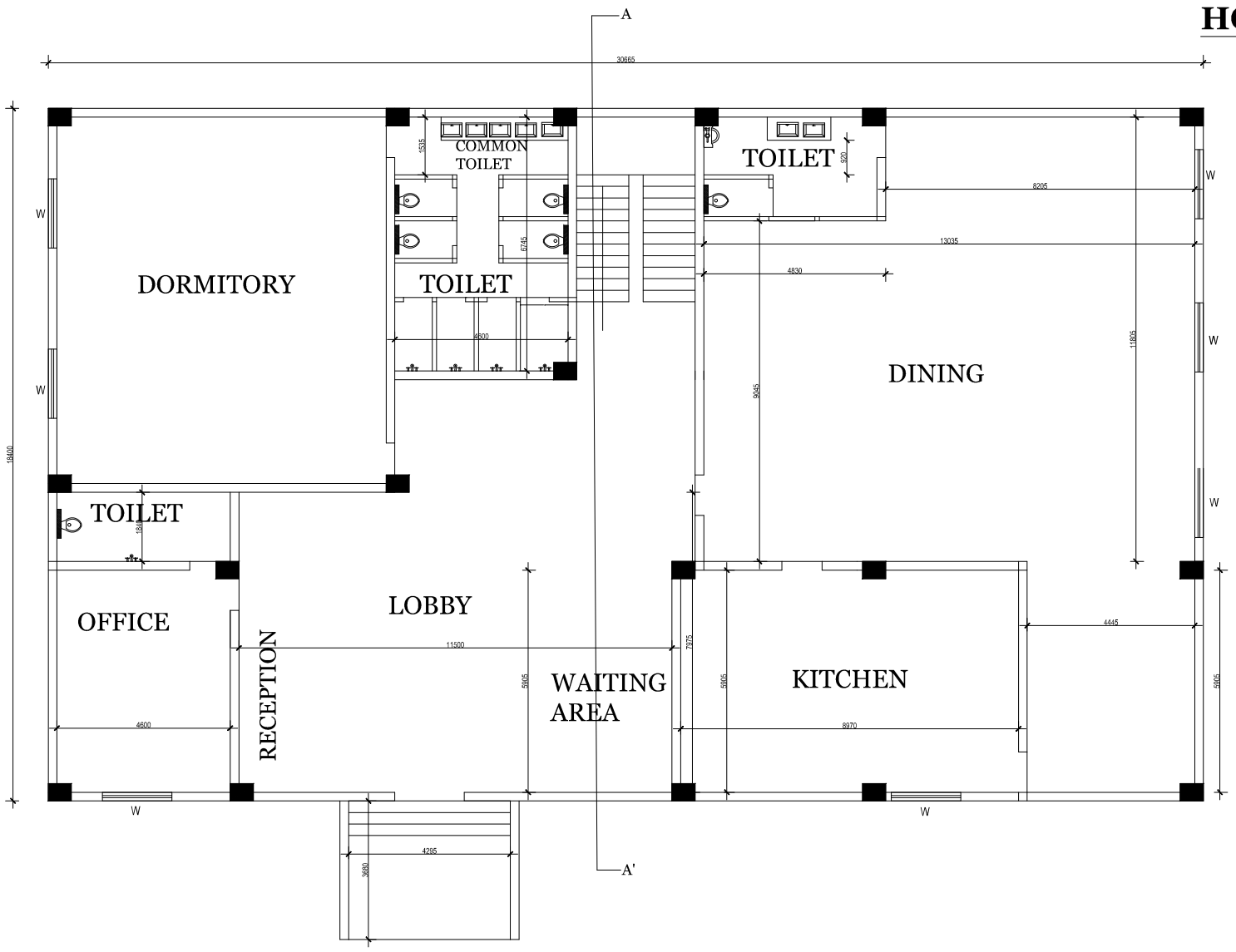


SECTION A-A'

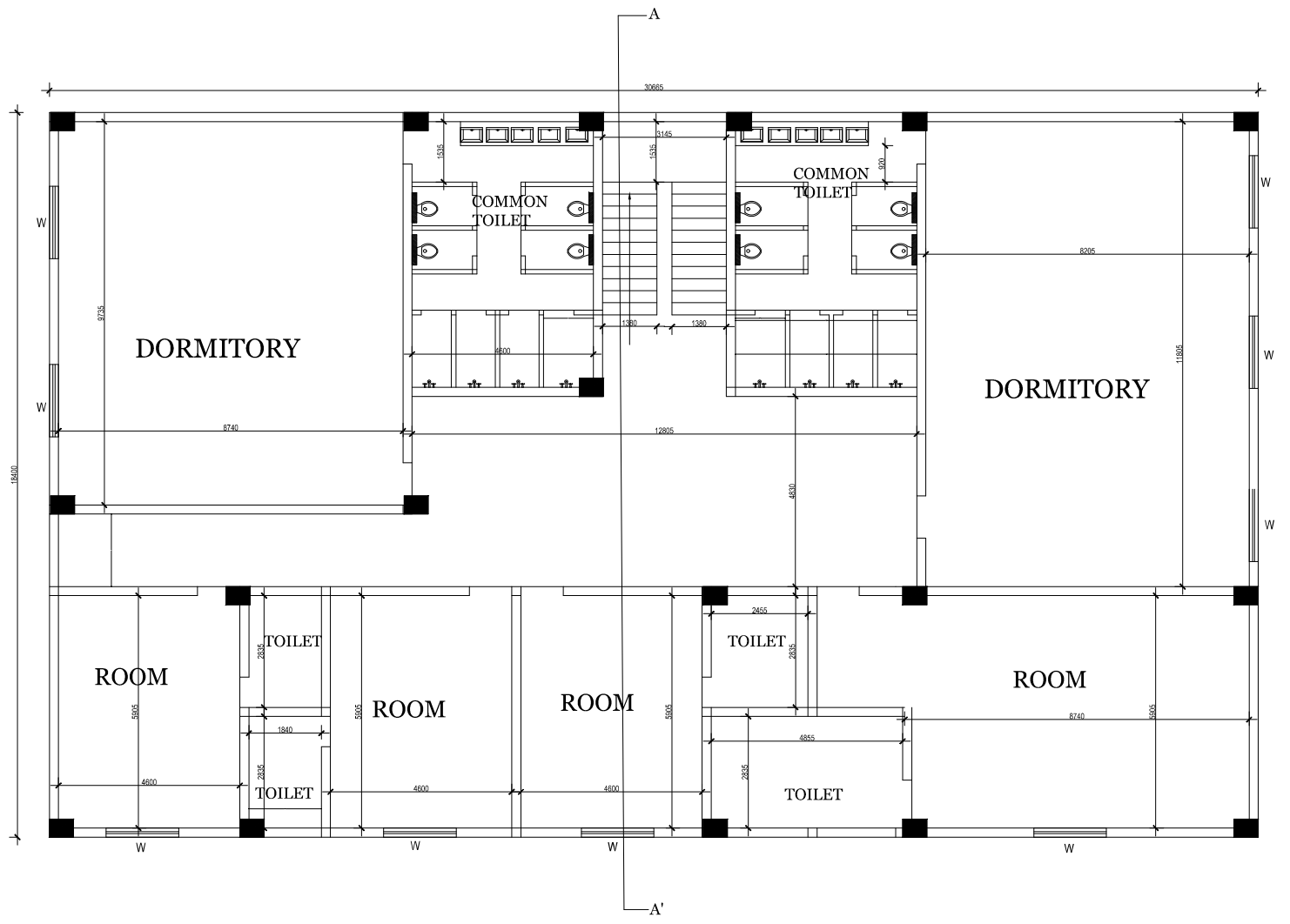


FRONT ELEVATION

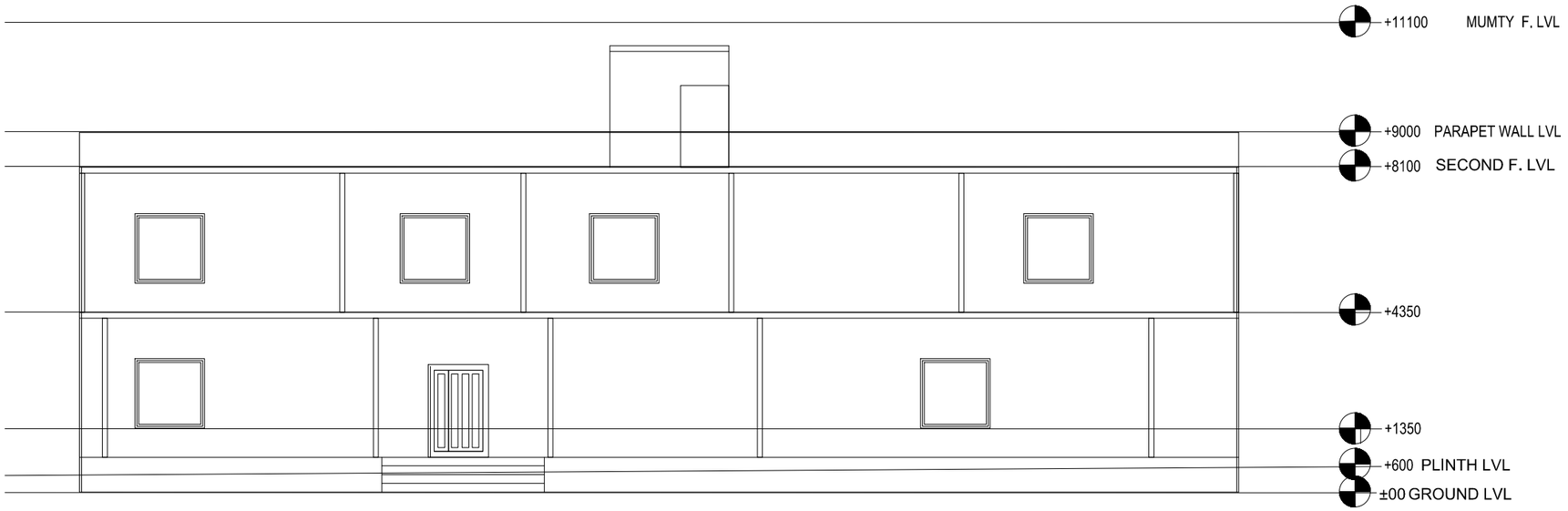
HOSPITALITY



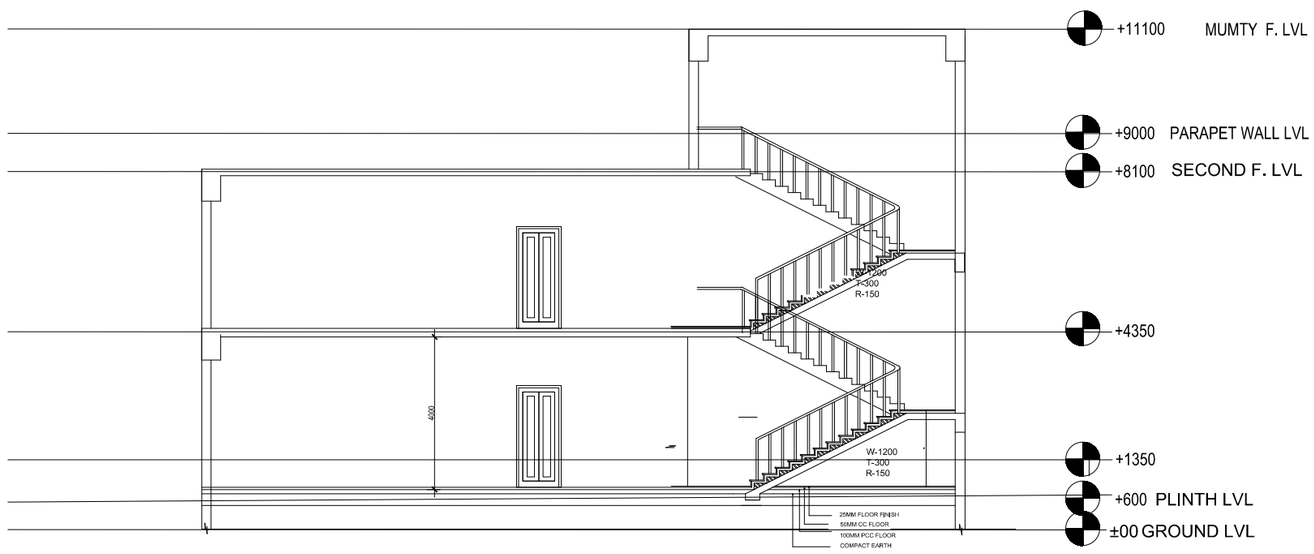
GROUND FLOOR PLAN



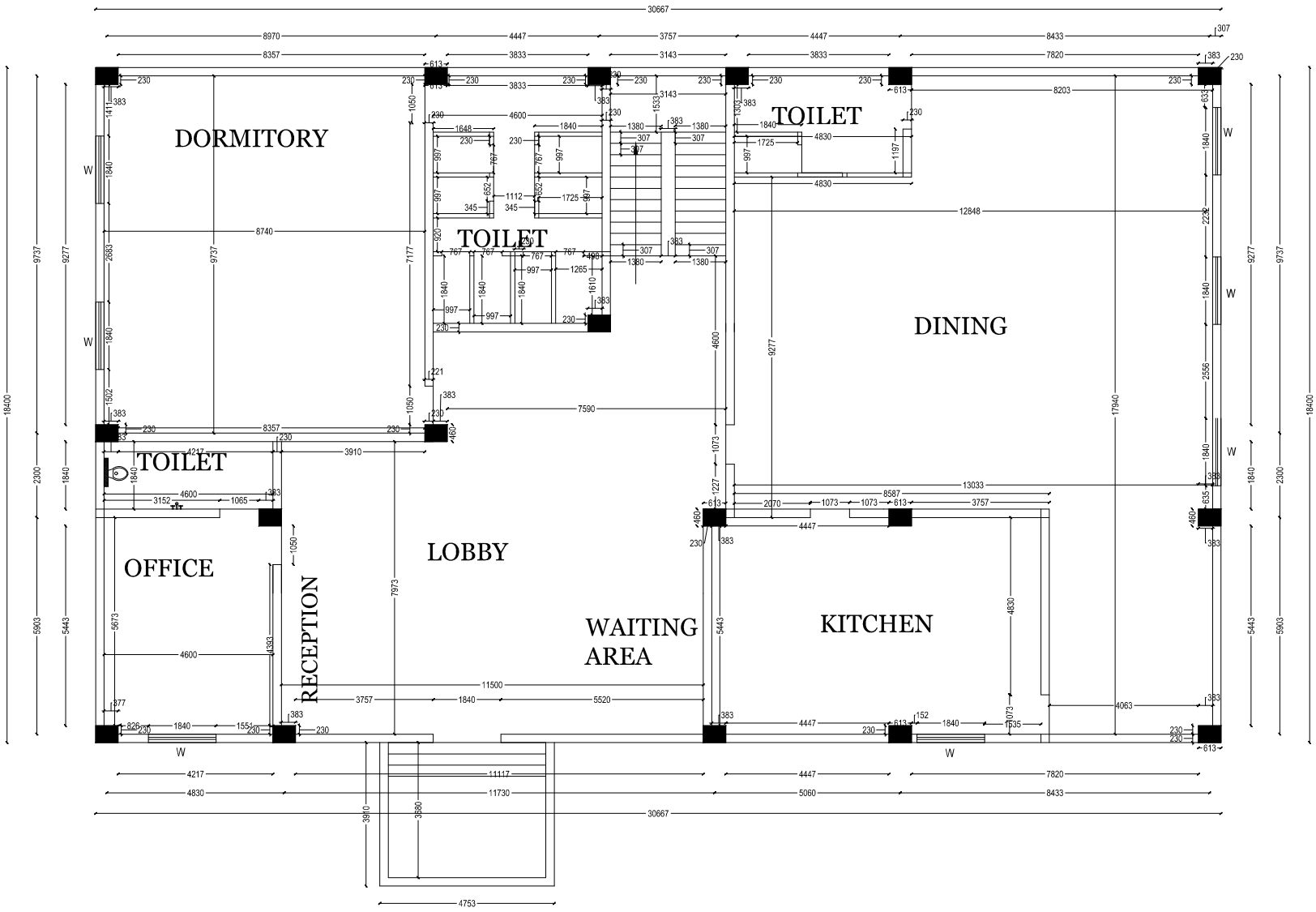
FIRST FLOOR PLAN



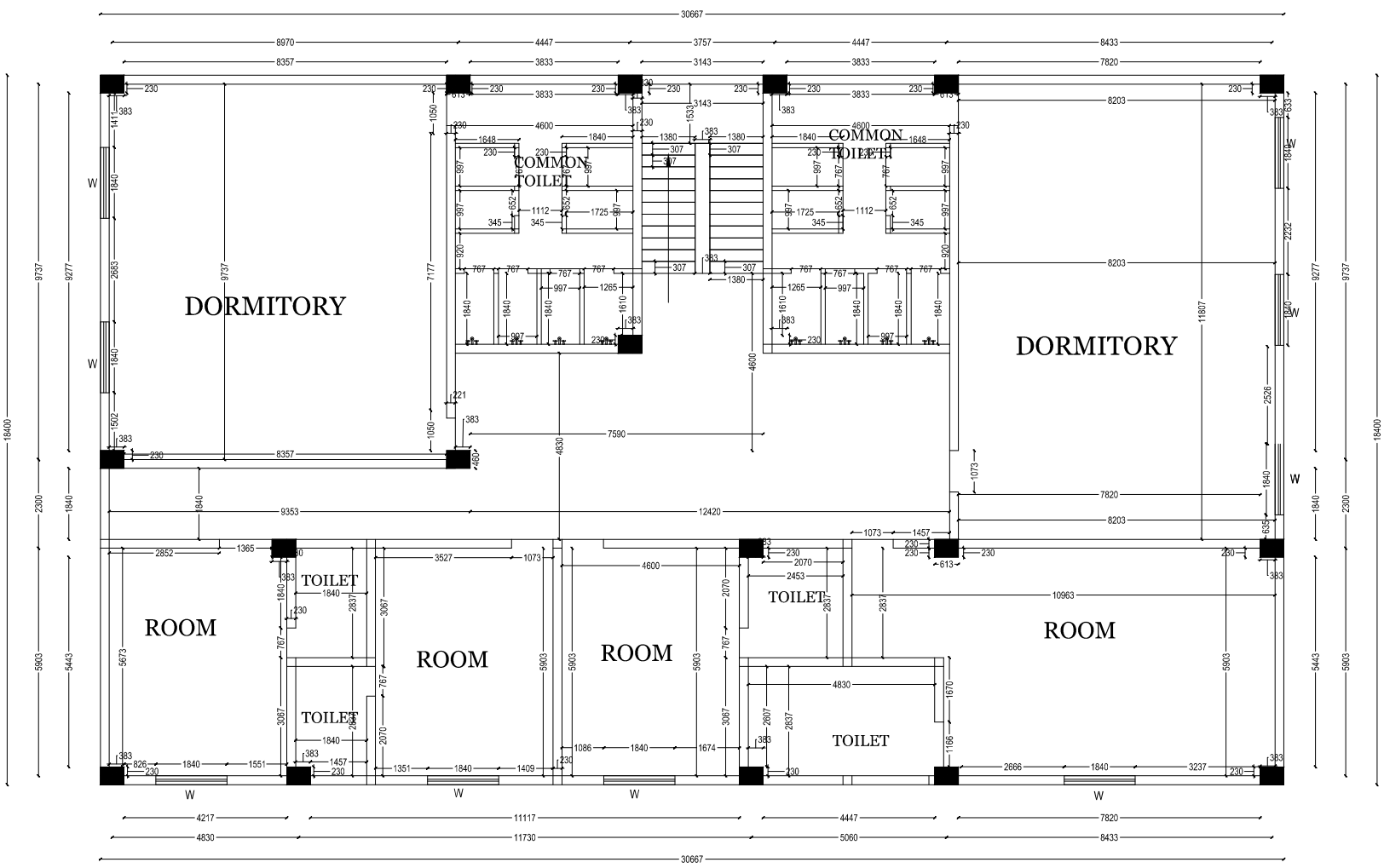
ELEVATION



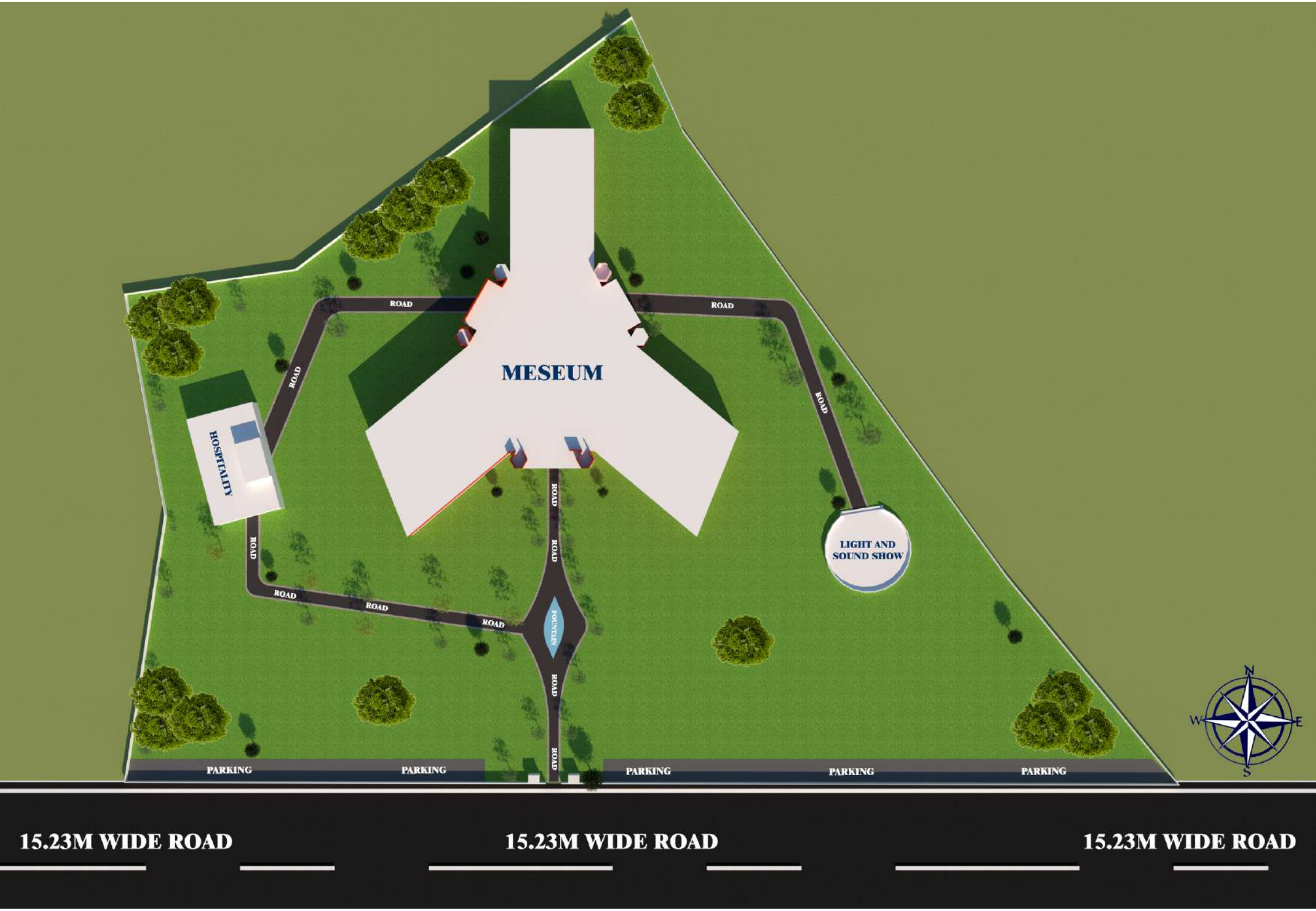
SECTION A-A'



GROUND FLOOR PLAN(WORKING)



FIRST FLOOR PLAN(WORKING)


MESEUM
HOSPITALITY
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
ROAD
FOUNTAIN
LIGHT AND SOUND SHOW
PARKING
PARKING
PARKING
PARKING
PARKING
N
W
E
S
15.23M WIDE ROAD
15.23M WIDE ROAD
15.23M WIDE ROAD