



THESIS REPORT
ON

**"SCHOOL OF PLANNING & ARCHITECTURE ”
AT RAJARHAT,KOLKATA**

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR
THE DEGREE OF
BACHELOR OF ARCHITECTURE

BY

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SESSION - 2024-25

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 “**SCHOOL OF PLANNING & ARCHITECTURE**” AT **RAJARHAT, KOLKATA** under the supervision of **AR. KUNWAR GHANSHYAM YADAV**, is the bonafide work of **KM. PRITI GUPTA (1200101025)** and can be accepted as partial fulfilment of the requirement for the degree of **Bachelor of Architecture, School of Architecture and Planning, BBDU, Lucknow.**

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Recommendation Accepted

Not Accepted

External examiner - I

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Certificate Of Thesis Submission for Evaluation

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3. Thesis Title: **“SCHOOL OF PLANNING & ARCHITECTURE AT KOLKATA**.....:

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6. Thesis preparation guide was referred to for preparing the thesis. Yes / No

7. Specification regarding thesis format have been closely followed. Yes / No

8. The content of the thesis have been organized based on the guidelines. Yes / No

9. The thesis has been prepared without resorting to plagiarism Yes / No

10. All the sources used have been cited appropriately Yes / No

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CHAPTER-1

INTRODUCTION

Aim

- To provide comprehensive architectural education, fostering creativity, sustainability, and innovation in design while addressing urban and environmental challenges.

Objectives

- To establish a center of excellence in architectural education that fosters creativity, innovation, and sustainable design solutions.
- To integrate theoretical knowledge with practical application by emphasizing hands-on learning, research, and industry collaborations.
- To promote sustainable and context-sensitive design that responds to environmental, social, and cultural needs.
- To develop professionals with a strong ethical foundation who contribute to urban planning, community development, and built environment improvement.
- To encourage interdisciplinary learning and technological advancements in architecture and planning to address future challenges in the field.

Scope of work

- Academic Excellence & Curriculum– Covers the structure of architectural and planning education, including design studios, theory, and practical applications.
- Infrastructure & Facilities– Highlights the campus design, studios, workshops, digital labs, and research centers that enhance learning.
- Research & Innovation– Explores advancements in sustainable architecture, urban planning, smart cities, and heritage conservation.
- Career Opportunities & Impact– Focuses on the professional scope, industry collaborations, internships, and contributions to urban development.

Background

- Kolkata, the capital of West Bengal, formerly known as Calcutta, is one of the important metropolitan cities in India. Kolkata is fondly known as the "City of Joy". It is spread on the banks of Hooghly River and has an elevation of 9 metres. The total area of Kolkata is 1886 square kilometres.

As per provisional reports of Census India, population of Kolkata in 2011 is about 45 lakhs. The Sundarbans delta separates Kolkata from the Bay of Bengal.

Physical Characteristics of The City:

❖ Location And Area

- ❖ Kolkata the capital of West Bengal, formerly known as Calcutta, is one of the important metropolitan cities in India, Many prominent names are associated with the city such as Rabindranath Tagore, Mother Teresa, Satyajit Ray and Subhash Chandra Bose to name a few. Kolkata is located at 22.82 degree North: 88.20 degree East. The total area of Kolkata is 1886 square kilometres.

❖ Topography

- Flat and low-lying terrain, average elevation of 5–10 meters above sea level.
- Located on the eastern bank of the Hooghly River.
- Predominantly alluvial soil – soft, fertile, but prone to waterlogging.
- Eastern Kolkata Wetlands act as natural drainage and ecological buffer.
- Falls under Seismic Zone III – moderate earthquake risk.

❖ Regional Setting & Connectivity

- **Strategic Location:** Situated in eastern India, on the banks of the Hooghly River, near the Ganga delta.
- **Well-Connected by Rail:** Major junction for Eastern and South-Eastern Railway zones; major stations include Howrah and Sealdah.
- **Road Network:** Connected by NH-16, NH-2, and EM Bypass, with growing metro and flyover networks.
- **Air Connectivity:** Served by Netaji Subhas Chandra Bose International Airport with both domestic and international flights.
- **Port & Waterways:** Home to the Kolkata Port Trust, supporting inland water transport and trade logistics.

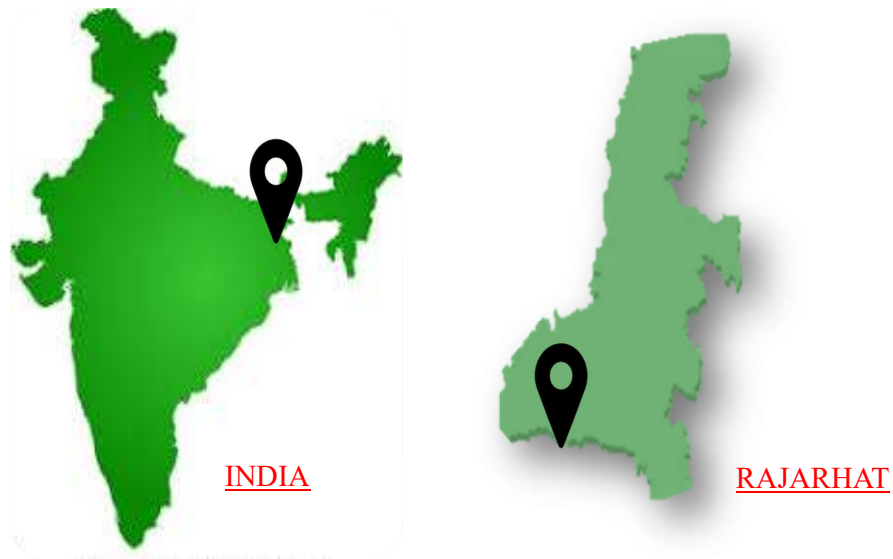
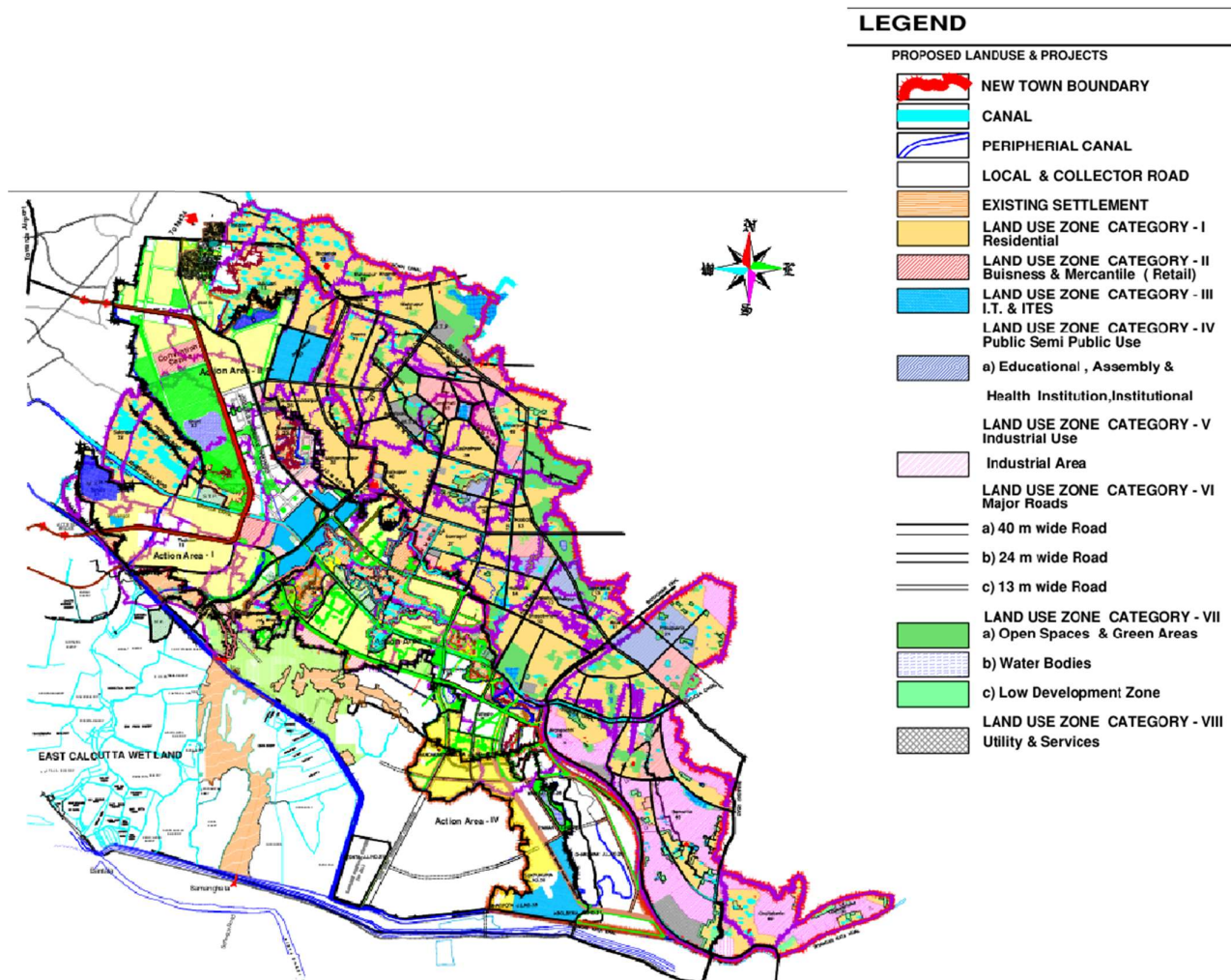


Figure 1- MAP OF INDIA AND MAP OF RAJARHAT KOLKATA



CHAPTER-2

SITE ANALYSIS

Introduction

A law school (also known as a law Centre, college of law, or faculty of law) is an institution, professional school, or department of a college or university specializing in legal education, usually involved as part of a process for becoming a judge, lawyer, or another legal professional within a given jurisdiction. Depending on the country, legal system, or desired qualifications, the coursework is undertaken at undergraduate, graduate, or both levels.

Location: Action Area III, B, Newtown, New Town,
Kolkata, West Bengal.

Area: 9 acres

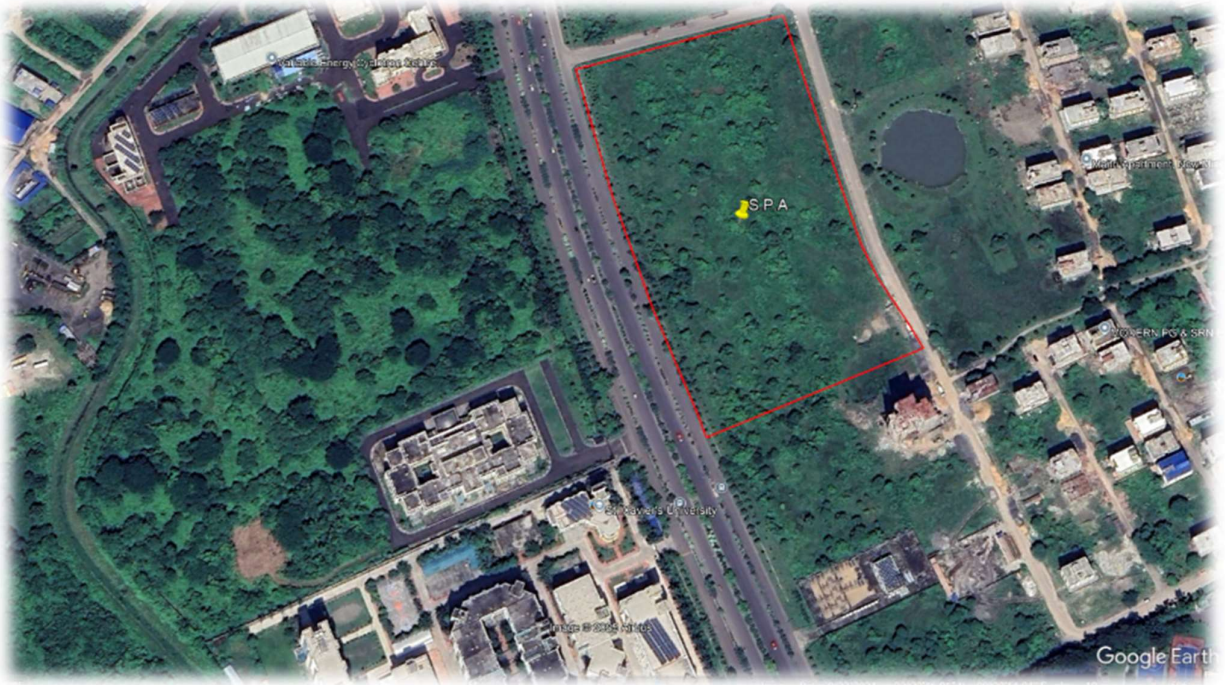


Figure 3- SITE IMAGES - VIEWS

Project boundary

- Front road – 40 m road

Left side road – 12m

- Right side – Residential
- Rear side – 12 m

Setback

- Front – 9 m
- Rear – 6 m
- Left side -4.5 m
- Right side -4.5 m



Figure 4- SITE BOUNDARY



Figure 5- SITE STREET VIEW

Accessibility

- **Railway Stations:** ~15–20 km from **Sealdah & Howrah** stations
- **Metro:** Close to **upcoming Line 6** metro stations (Eco Park, Akankha)
- **Airport:** ~12–14 km from **Roads:** Well-connected via **Major Arterial Road (MAR) & New Town Expressway**
- **Bus/EV Access:** Frequent buses, autos, EVs; pedestrian & cycle-friendly roads



Figure 6- RAIWAY STATION



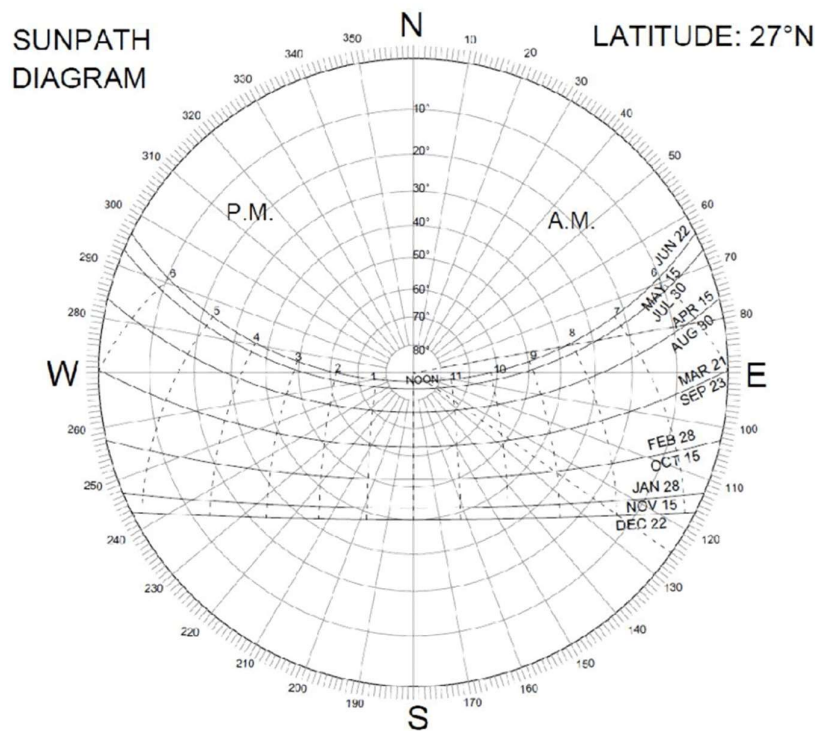
Figure 7- AIRPORT

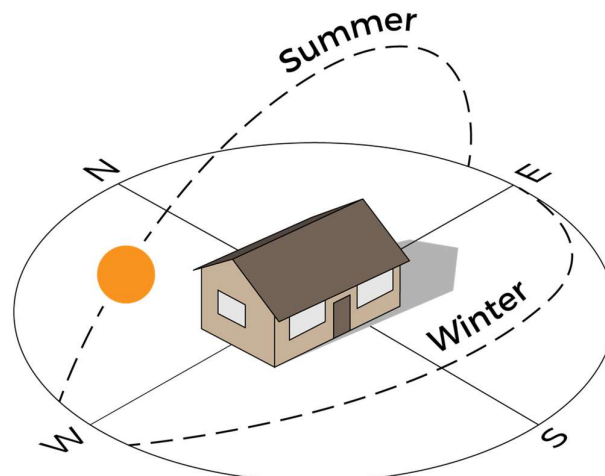
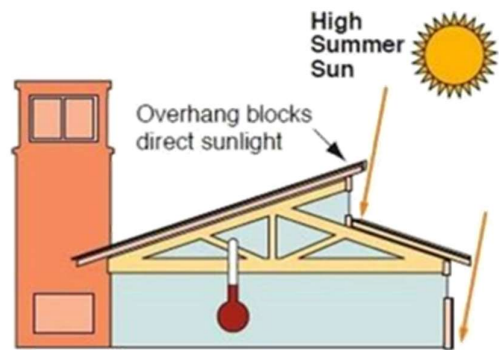
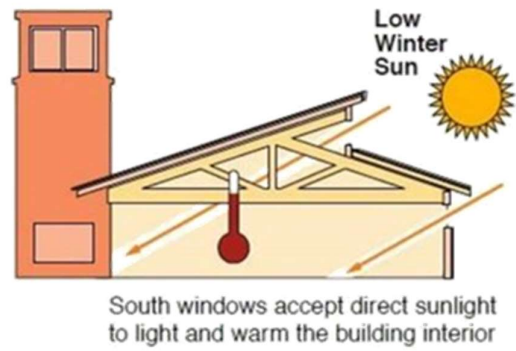
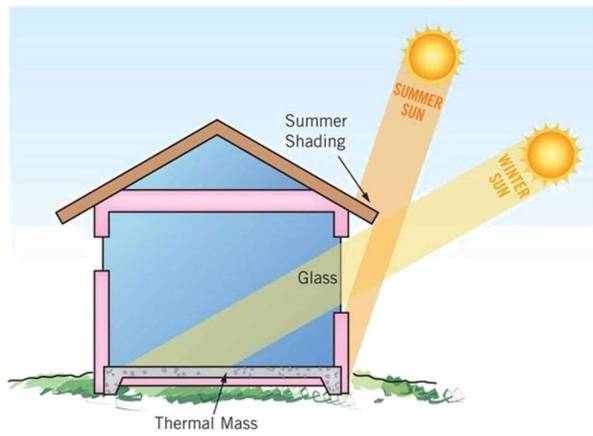
Climate of KOLKATA

The average wind speed in Kolkata is 11 km/h with the maximum wind speed of around 41 km/h. The average ambient temperature in Kolkata remains around 26°C (78.8°F) year-round. The average relative humidity in Kolkata generally hovers around 70-77%, but it can fluctuate significantly throughout the year.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Nov	Oct	Dec	Year
Record high °C (°F)	34.0 (93.2)	38.0 (100.4)	47.0 (116.6)	47.0 (116.6)	46.0 (114.8)	45.0 (113.0)	38.0 (100.4)	38.0 (100.4)	37.0 (98.6)	37.0 (98.6)	35.0 (95.0)	33.0 (91.4)	47.0 (116.6)
Average high °C (°F)	28.02 (82.44)	31.96 (89.53)	36.41 (97.54)	39.32 (102.78)	38.91 (102.04)	37.04 (98.67)	33.75 (92.75)	33.21 (91.78)	32.78 (91.0)	32.15 (89.87)	31.07 (87.93)	28.32 (82.98)	33.58 (92.44)
Daily mean °C (°F)	24.52 (76.14)	28.24 (82.83)	32.21 (89.98)	34.7 (94.46)	35.0 (95.0)	34.16 (93.49)	31.72 (89.1)	31.11 (88.0)	30.53 (86.95)	29.69 (85.44)	28.03 (82.45)	25.11 (77.2)	30.42 (86.76)
Average low °C (°F)	17.8 (64.04)	20.77 (69.39)	24.05 (75.29)	27.06 (80.71)	28.78 (83.8)	29.2 (84.56)	27.91 (82.24)	27.3 (81.14)	26.59 (79.86)	24.83 (76.69)	22.1 (71.78)	19.01 (66.22)	24.62 (76.32)
Record low °C (°F)	12.0 (53.6)	15.0 (59.0)	19.0 (66.2)	16.0 (60.8)	20.0 (68.0)	22.0 (71.6)	22.0 (71.6)	23.0 (73.4)	20.0 (68.0)	19.0 (66.2)	15.0 (59.0)	12.0 (53.6)	12.0 (53.6)
Average precipitation mm (inches)	6.61 (0.26)	16.02 (0.63)	23.12 (0.91)	57.74 (2.27)	90.97 (3.58)	181.61 (7.15)	339.22 (13.36)	356.02 (14.02)	259.37 (10.21)	164.63 (6.48)	40.26 (1.59)	8.99 (0.35)	128.71 (5.07)
Average precipitation days (≥ 1.0 mm)	1.09	1.91	4.64	6.73	9.73	18.36	26.55	26.82	23.55	14.36	2.18	1.0	11.41
Average relative humidity (%)	43.14	41.91	48.36	56.39	61.51	65.26	74.5	78.34	79.75	73.02	56.6	46.39	60.43
Mean monthly sunshine hours	8.6	8.84	11.41	11.76	13.2	13.09	12.1	11.71	10.36	10.81	10.82	8.59	10.94

Figure 1- TEMPERATURE GRAPH OF KOLKATA





Architecture of Kolkata:

The architectural setting of Kolkata, India's cultural centre, is interesting and reflects the city's turbulent past. The colonial era's influences and indigenous styles are flawlessly incorporated into the city's architecture. With more than 200 years of British colonial rule, Kolkata served as a blank canvas for spectacular buildings that bear witness to the city's illustrious past.

The following are distinct features of Kolkata architecture:

- Colonial Influence: Rich legacy of British-era buildings (e.g., Victoria Memorial, Writer's Building) with neoclassical, Indo-Saracenic styles.
- Bengal Terracotta Temples: Unique terracotta ornamentation seen in temples from the pre-colonial era (e.g., Dakshineswar, Kalighat).
- Rajbari & Zamindari Architecture: Traditional courtyard houses with decorative columns, verandahs, and thakur dalans.
- Art Deco & Early Modernism: Mid-20th century buildings show art deco details, curved balconies, and linear facades.
- Dense Urban Fabric: Narrow lanes, mixed-use buildings, and strong street-edge continuity, especially in North Kolkata.



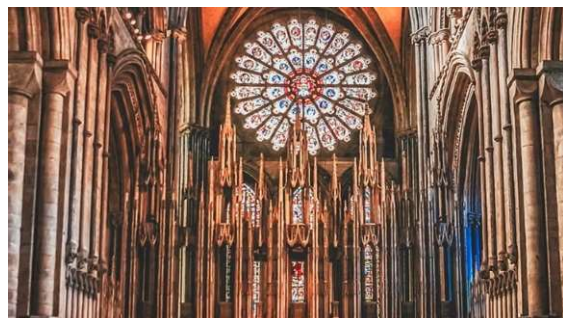
Victoria memorial, Kolkata



Howrah bridge, Kolkata



Indian museum



St. Paul's Cathedral

CHAPTER-3

CASE STUDY

Case Study -1 School of Planning & Architecture, Delhi

Location - Near ITO in Indraprastha Estate in New delhi

Area – 20 Acre

Year - 1941

Architects - Walter Sykes George, Prof. T.J. Manickam

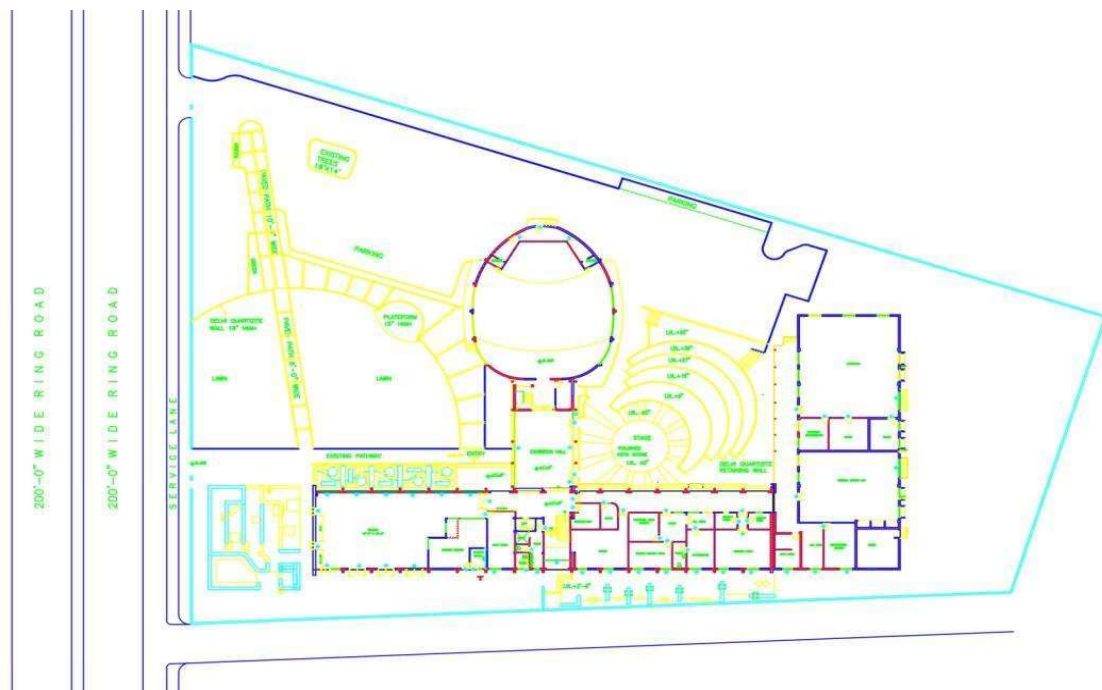


Figure 2 - SITE PLAN OF SPA delhi

Introduction

School of Planning and Architecture, Delhi School of Planning and Architecture, Delhi (SPA Delhi) is a premier higher education institute located in New Delhi, India specializing in education and research in the field of Planning and Architecture. School of Planning and Architecture, Delhi functions from two independent academic campuses and an additional campus for residential accommodation in the city of Delhi at present. The two academic campuses, distanced away from each other by a few hundred meters, occupy areas within the heart of Delhi's administrative and institutional zone barely 3km from the city's main CBD. The residential campus, on the other hand, is located within other residential enclaves of south Delhi around 8km away from the academic zone.

Type of building : Institutional

Project name : school of planning and architecture, delhi

Location : near ITO in Indraprastha Estate in New Delhi

Builtup area : 6500 sq.M

Ground coverage : 1600sq.M

Year of inauguration : 1941

Site area: 20 acres

Architecture style : Modern

COURSES OFFERED : -

Under-graduate Programmes-

Bachelor's Programme In Architecture (5yrs)

Bachelor's Programme In Planning (4yrs)

Post-graduate Programmes (2yrs)

Master's Programme In Architecture With Specialization In

- Architectural Conservation - 30
- Industrial Design - 30
- Urban Design - 30 –

Master's Programme In Planning With Specialization In-

- Environmental Planning - 30
- Housing - 30
- Transport Planning - 30
- Regional Planning - 30
- Urban Planning - 30
- Master's Programme In Building Engineering And Management - 30
- Master's Programme In Landscape Architecture – 30

PLAN

INFORMAL SPACE

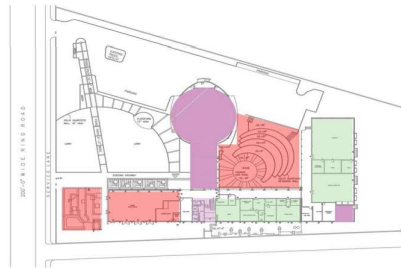
- CANTEEN & O.A.T
SITTING SPACES

- Canteen is the hot spot of campus, it also has a stationary shop in it.
- Open sitting spaces are not effectively used.
- OAT is used for various activities and informal sessions.

FORMAL SPACES

- WORKSHOP
MULTIPURPOSE HALL
CLASSROOM
FACULTY ROOM

- Workshops are well lit naturally.
- Faculty rooms are attached to classrooms due to lack of space.



Workshops from inside in which natural light coming from openings.



Facade of Academic building in which window are provided in the studio for light & air ventilation with shading devices.



Canteen with stationary shop with seating spaces.



Studio have well natural light ventilation, with cluster seatings are provided.



At the entrance of Studio at corner Dustbin are provided.

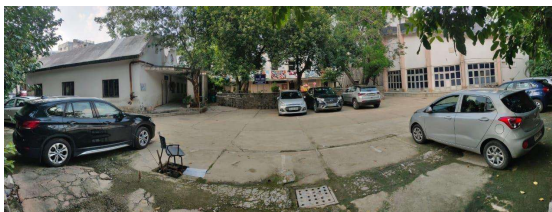
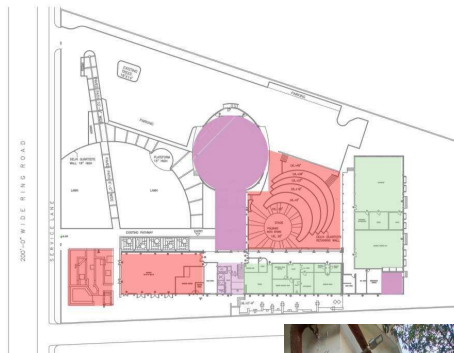
Figure 3 - Plan of Formal and Informal spaces

PLAN

SEMI-FORMAL SPACES

- CIRCULATION
SERVICES
EXHIBITION HALL
STORE

Flexible space used as Exhibition Hall. Recreational area and also act as a foyer to the multipurpose hall.



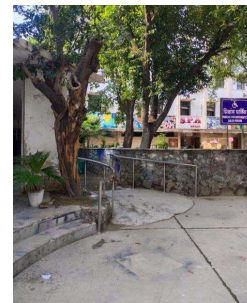
Parking are provided with the circulation space are shown, which connect the OAT, Workshops, Kind of Exhibition Space



Department of Industrial Design corridor



Zigzag roof are provided in the workshop for natural light ventilation.



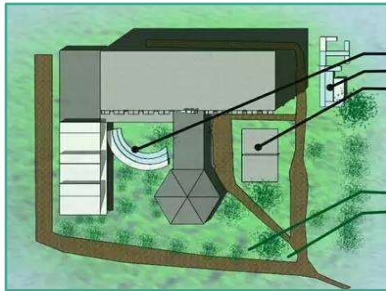
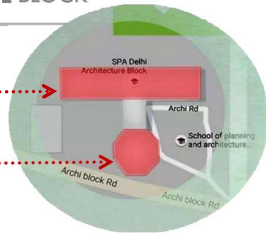
Ramp are provided with parking space.
Barrier free Designed.

Figure 4 - Plan of semi Formal spaces

SHAPE OF THE BLOCK

RECTANGULAR

OCTAGONAL



OAT
SEATING AREAS
PLAYING COURT

GREEN AREAS
Sculpture made of rocks abstract from made up of brick
35% coverage of green area.

MATERIAL USED IN BUILDING :

□ Exterior

Wall: Exposed brick, Plaster on surface
Double skin facade(jaali)

Floor :- Kota stone,
Sculpture:- Tile brick, Stone

□ Interior

Wall:- Brick wall, plaster

Floor :- Kota stone, Granite stone

Roof:- Rcc slab



01



02



03



04

Figure 5 – Shape of the block

INFERENCES

CONCEPT & DESIGN

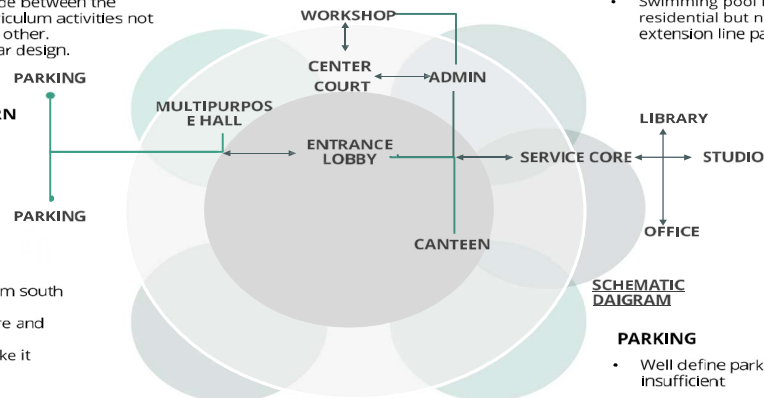
- The distinction is made between the academics & the curriculum activities not merging one into the other.
- Rectangular and linear design.

MOVEMENT PATTERN

- Circulation is very clear cut due to the shape of the building.

STUDIOS

- Design to get light from south sun and north sun
- Interaction with nature and landscape is missing
- Narrow walkways make it congested.



HOSTELS

- Away from main academic block
- Planned In steeped pattern
- Courtyard planning as interactive space
- Exposed Brick work
- Swimming pool in between hostel and residential but not used due to high extension line passes above it.

SCHEMATIC DAIGRAM

PARKING

- Well define parking area but insufficient

Figure 64 – Inferences



Figure 75 - ELEVATIONS



Figure 86 - VIEWS

CASE STUDY -2

CEPT, AHMEDABAD

Introduction

The School of architecture at Ahmedabad is a part of the campus of Centre For Planning and Technology (CEPT). The campus consists of Visual art centre, communication science centre and school of planning. This school of architecture is the most contemporary school in India. The design is selectively developed and a large area is used for landscape.

About Site

- Kasturbhai Lalbhai Campus, University Rd, Navrangpura, Ahmedabad, Gujarat.

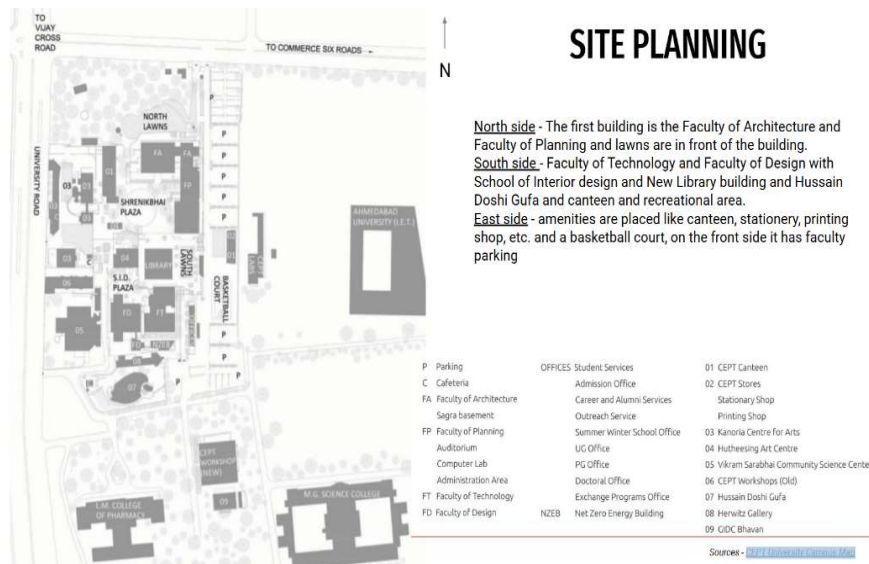


Figure 97 - MAP OF CEPT, Ahmedabad

Approach

- Airport- 11 km
- Railway station- 4 km
- 0.3 km from the municipal transport bus stand
- km from Bus Rapid Transit System

School in CEPT

- School of Architecture
- School of Planning
- School of Building Science and Technology
- School of Interior Design.

About Campus

Total Site Area: 36421.70 sq.m. (9 acres) Total built-up: 8000 sq m.

Architect- Balkrishna Vithaldas Doshi

Courses offers

Faculty of Architecture

Bachelor's in Architecture (5 years) (80 seats)
Master's in Architectural Design
Master's in Conservation and Regeneration
Master's in Architectural History and Research
Master's in Landscape Architecture (2 years) (24 seats)
PhD in Architecture

Faculty of Planning

Bachelor's in Urban Design
Master's in Urban Planning
Master's in Urban Transport Systems
Master's in Urban Infrastructure
Master's in Urban Housing
Master's in Urban Design
PhD in Planning

Landuse

○ Architectural design, landscape design, urban design, planning

- Studios
- Class room
- Seminar room
- Reprography room
- Library
- Offices
- Climatology lab
- Material lab
- Locker room
- Presentation room
- Computer lab
- modelmaking workshop

○ Administration

- Director office + 2 PA + waiting
- Accounts dept.
 - 2 office
 - audit room
 - cubicles
 - store
- Academic cell
- Exam cell
- Admission cell
- Fee cell
- Academic office
- Project room
- Faculty lounge+pantry+cubicle
- Board room
- Industrial program room
- Design management lab
- Office

○ Animation Film design

- A.V & resource centre
- Digital documentation centre
- Computer studio
- Layout and plate making studio
- Dark room
- Offset printing
- Printing lab
- Printing store
- Leather
- New media
- Editing room
- Camera room
- Sound room
- Store
- VMP editing room
- Classroom
- offices

○ Textile Design

- Weaving lab
- Apparel studio
- Stitching lab
- Apparel design lab
- Textile design computer lab
- Classroom
- Apparel store
- Textile Printing lab
- Screen printing studio
- Screen printing store
- Dyeing studio
- office

○ Product Design

- Studio
- Material sample library
- Drawing studio
- Classroom(2)
- Office
- Visiting faculty
- Project studio + office
- Ergonomic studio + office

○ Ceramic & Glass Design

- Ceramic labs(1)
- Ceramic Design studio
- Plaster and glass lab
- Furnace lab
- Prototype display
- Faculty cubicles

- Graphics/visual Design
- Design studio
- Film video communication studio

• Film & video communication

- Photo studio
- Film and video lab
- Animation camera room
- Slide room
- Preview room
- Photo store
- Store
- Classroom
- A.V. Store
- QR lab
- Dark room
- Offices



Figure 18 – site view



Figure 19 - MAIN GATE

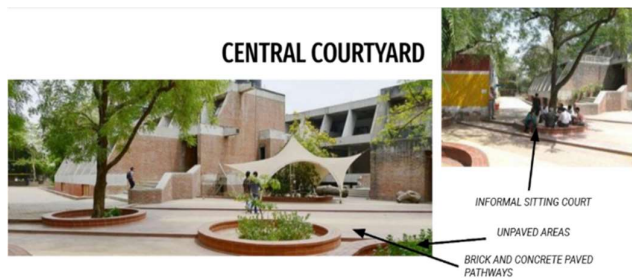


Figure 20 – central courtyard



Figure 21 – Landscape



Figure 22 – elevations

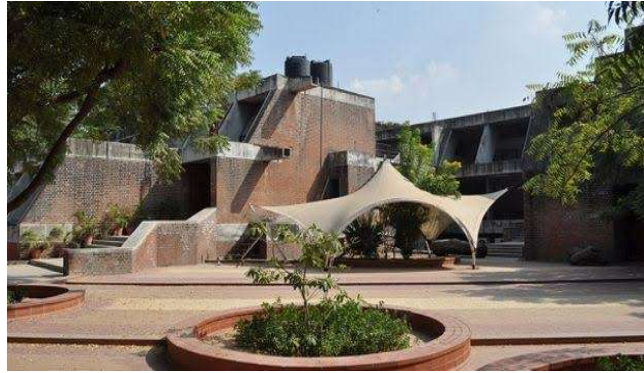


Figure 10 - VIEWS

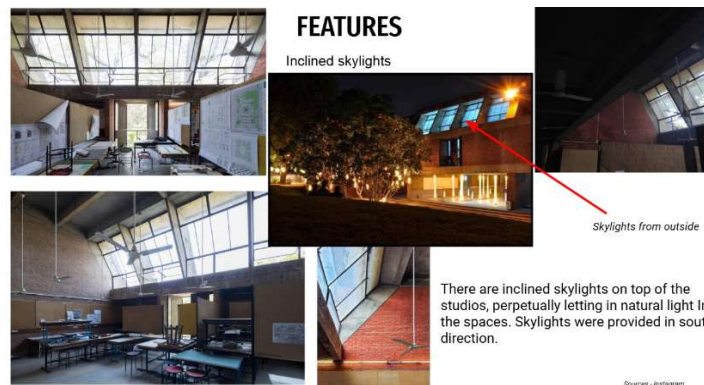
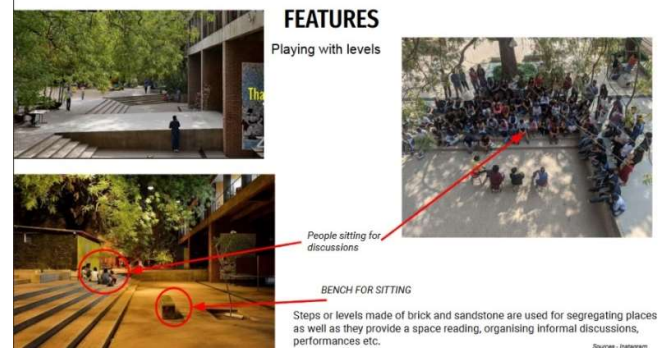
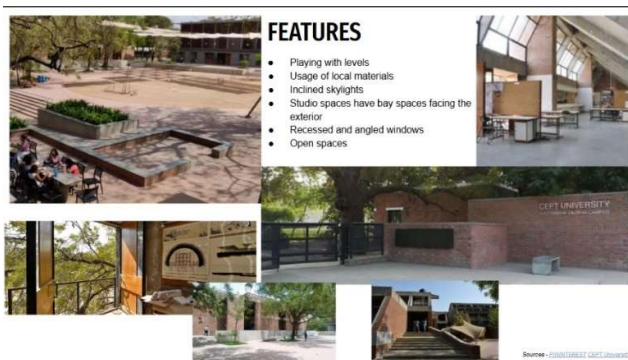


Figure 11 – Design features

CHAPTER-4

LITERATURE STUDY

Case Study -1 SPA VIJAYAWADA

GENERAL ANALYSIS

- LOCATION- Vijayawada andhra pradesh, India
- BUILDING TYPE – Institute
- CAMPUS – Urban
- FORM – Cuboid of voids
- ARCHITECT – Manish agarwal
- TOTAL BUILT-UP AREA- 38588 sq.m

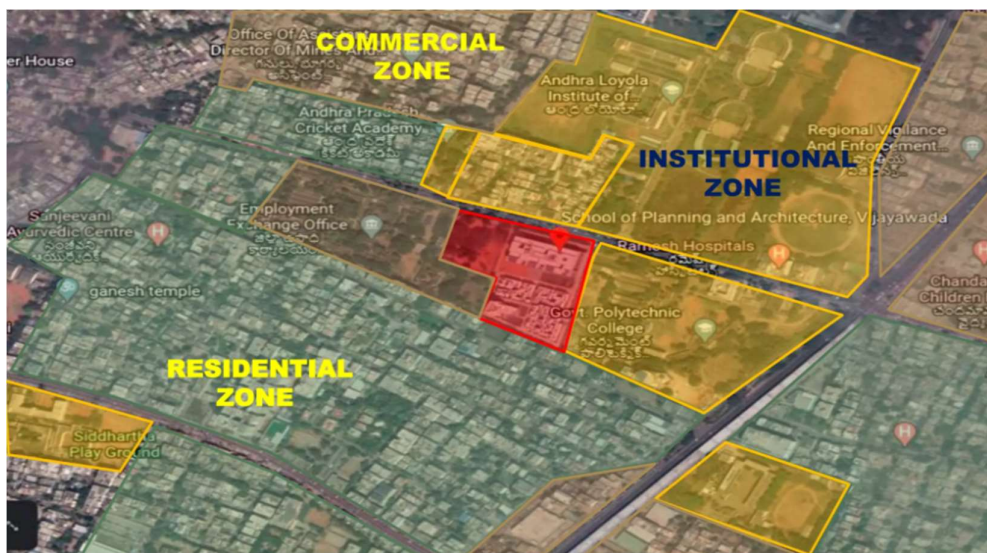


Figure 125 – Site View

CONCEPT

- The intent was to create social spaces that are embedded within its cultural context along with an environmentally sensitive response to create a built environment which enables learning and living as a community.
- The buildings in the campus capture maximum natural lighting and ventilation through multi-level courtyards and lightwells.
- The concept serves to facilitate more interaction among the students, produce spaces to meet informally, and enhance social integration across the students and faculty by means of integrating design aspects like courtyards, verandah etc.
- The large volume is punctured by voids, creating a rhythmic play of light and shadows which allows the building to respire.

THE DESIGN FORM FOLLOWING THE FUNCTION :-

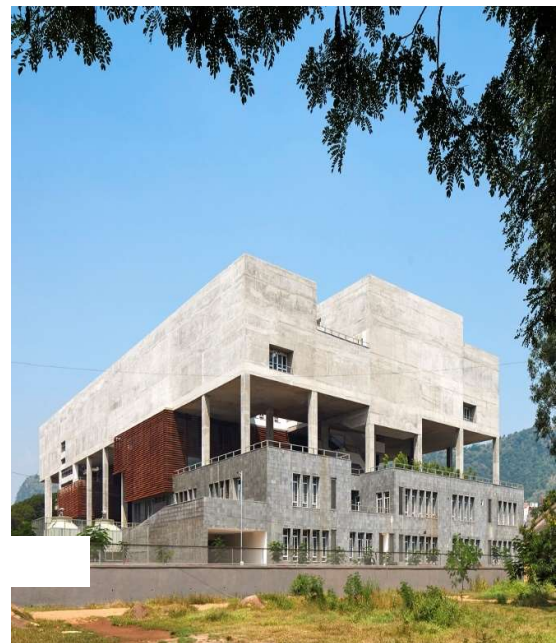
Form of the building is a direct response to the hot and humid climate of Vijayawada, which enables shading and cross ventilation. North-light sections for studios along with insulation of the roof and landscaping create responsive configurations"

SERVICES:-

- Solar water heating systems for hostels and kitchens 19800 litres per day capacity.
- The campus has ground water recharge pits.
- Solar power generation.
- The recycled water from STP is used for gardening and flushing of toilets.
- A sewage treatment plant with 100 kLD capacity.
- A composting yard is in the making for recycling of kitchen waste.
- The LAN in the campus caters.



Figure 13 - EXTERIOR VIEWS



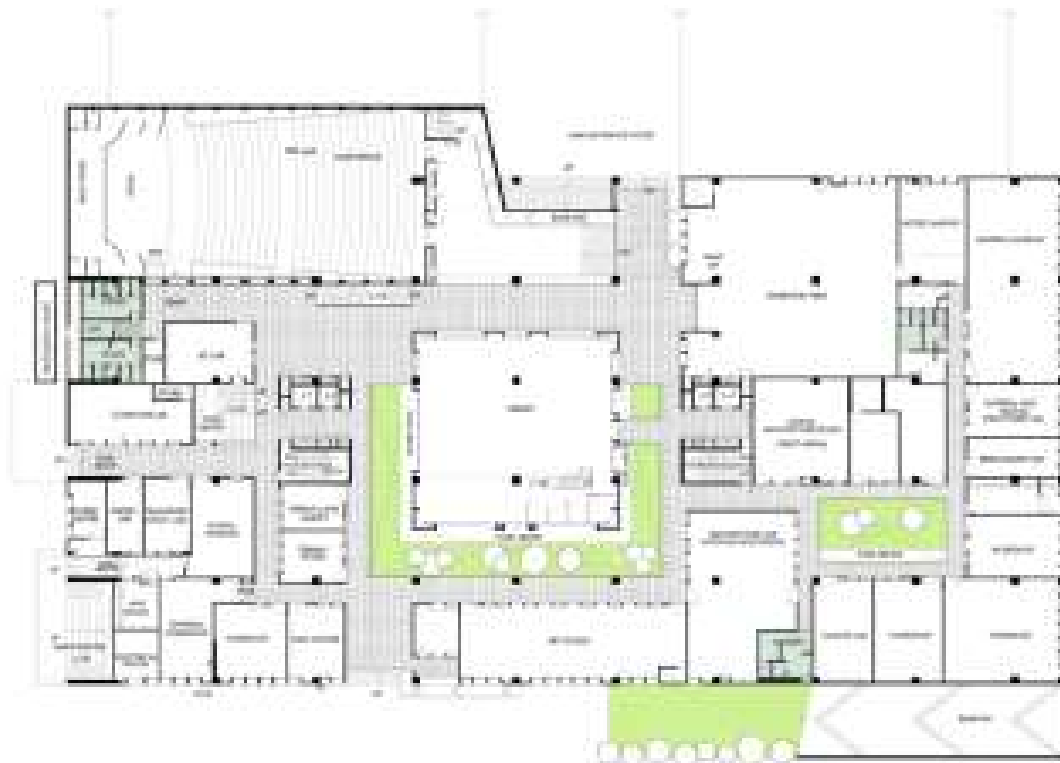


Figure 14 – Ground Floor Plan



Figure 28 – First Floor Plan

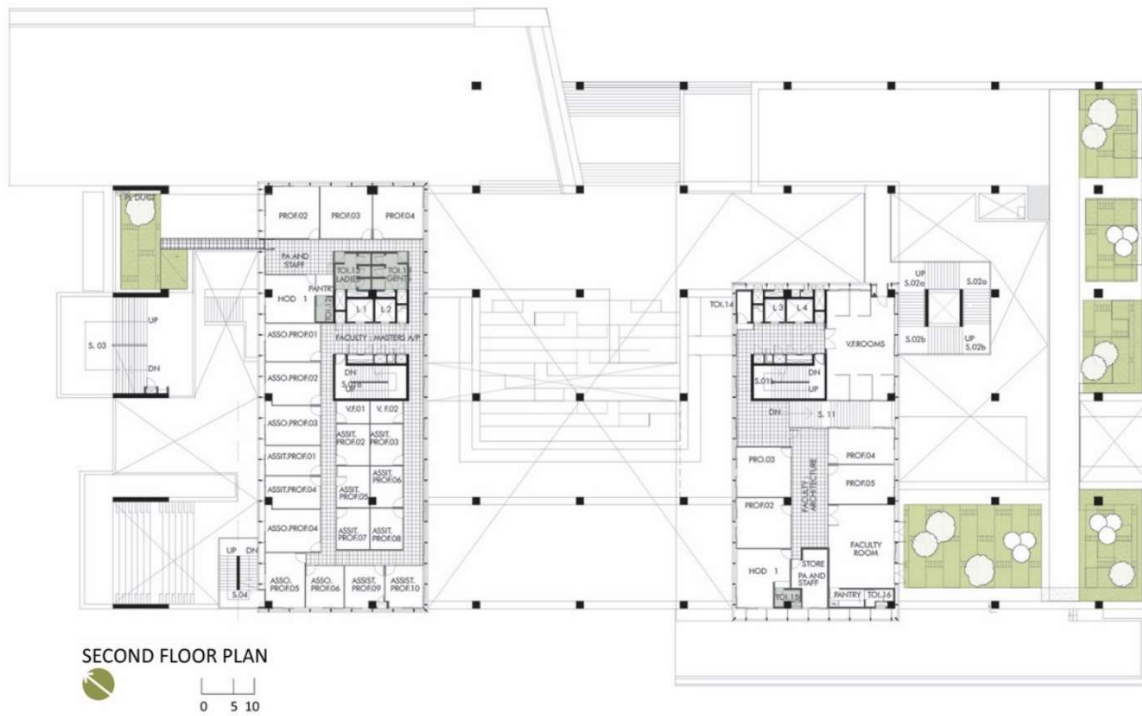


Figure 29 – Second Floor Plan

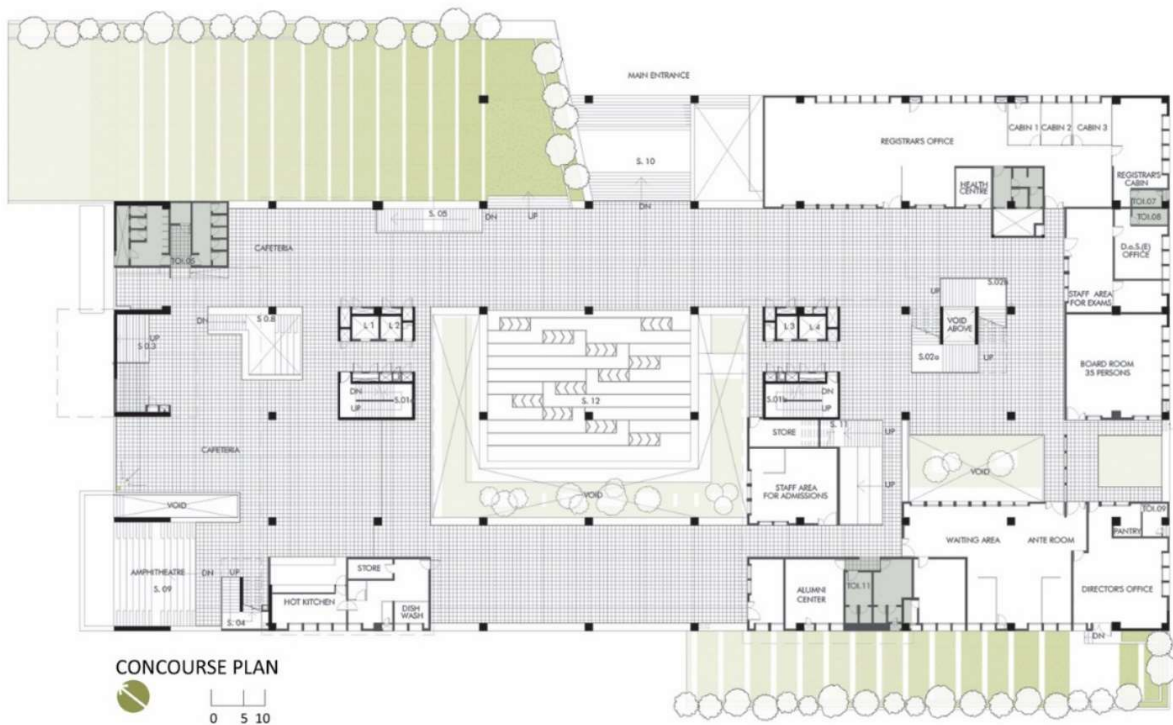


Figure 30 – Third Floor Plan

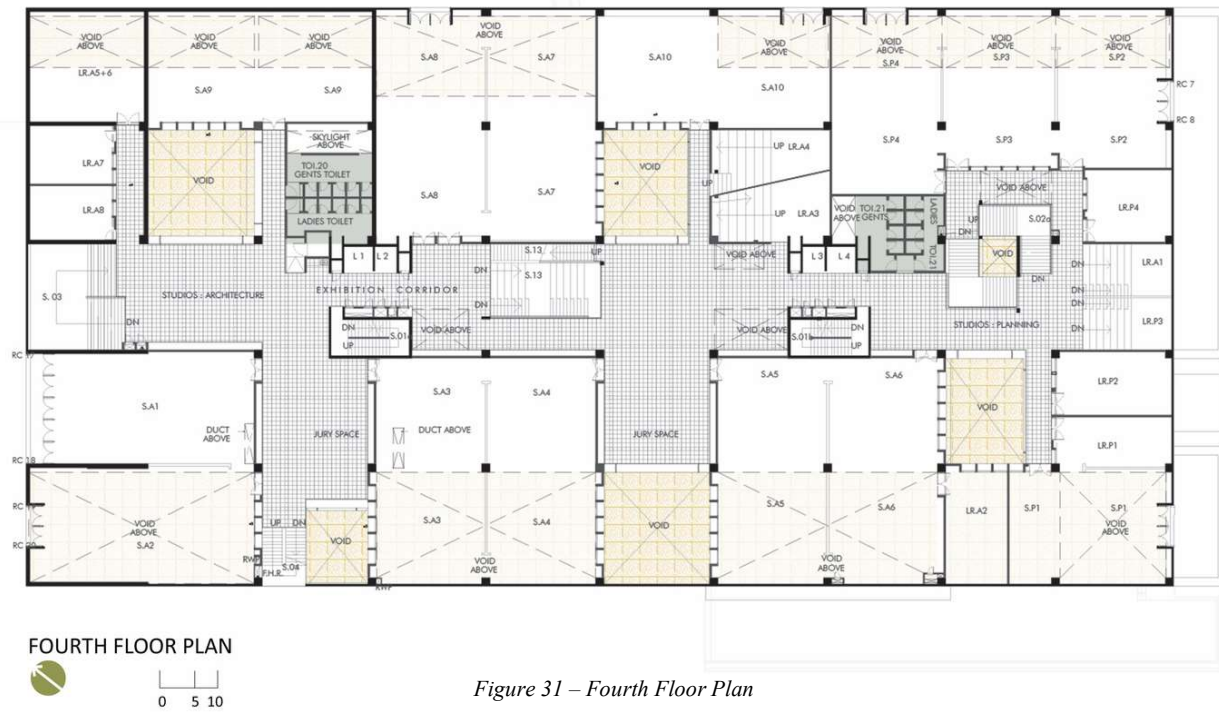


Figure 31 – Fourth Floor Plan



Figure 32 – Fifth Floor Plan



Figure 33 – Interior Views

CHAPTER-5

AREA PROGRAMME

UNDERGRADUATE PROGRAMMES

No.	Programme	Year	Students/year	Total
1	B. Arch	5	120	600
2	B. Planning	4	40	160

POSTGRADUATE PROGRAMMES

No.	Programme	Year	Students/year	Total
1.	URBAN DESIGN	2	20	40
2.	LANDSCAPE ARCHITECTURE	2	30	60

AREA BY LAWS -

S.NO.	AREA OF PLOT	PERM. GROUND COVERAGE	PERMISSIBLE FAR
1	36421 SQM	45%	1.5

PROJECT SUMMARY -

S.NO.	DESCRIPTION	QUANTITY	UNIT
GENRAL PROPOSAL			
1.	PLOT AREA	36421	SQM
2.	PERM. GROUND COVERAGE (45%)	16389	SQM
3.	BUILTUP AREA	54631	SQM
4.	TOTAL NO. OF PARKING		

APPENDIX-C
INFRASTRUCTURE REQUIREMENTS

A: SPACE

S. No.	Year of Operation	1 st Year			2 nd Year			3 rd Year			4 th Year			5 th Year			Remarks
	Sanctioned Intake	40	80	120	40	80	120	40	80	120	40	80	120	40	80	120	
	Activity Spaces (Carpet Area)																
1.	Studio - 120 sq. m each	1	2	3	2	4	6	3	6	9	4	8	12	4/5	9	13	Flexibility in terms of studio spaces can be based on local conditions, provided that area of 3 Sq. M. per student of sanctioned intake is made available. Studios for Stage 2 of the course are to make provision for use of laptops with internet connectivity.
2.	Lecture rooms- 60 sq. m each	1	2	3	1	2	3	2	4	6	2	4	6	2	4	6	If studios incorporate lecture spaces within them, then the area of studio spaces shall be calculated at 4 sq m per student. To be provided with OHP and digital projection facilities and sound amplifier system.
3.	Labs and Workshops - 40 sq.m each	1	1	1	2	2	2	3	3	3	3	4	4	3	4	4	Climatology/Environmental lab, Surveying lab, Model making and carpentry workshop, Material Museum etc.
4.	Computer Centre - 60 sq. m	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
5.	Library	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Library shall have 0.6 Sq. m. per student upto total student strength of 200 and 0.3 Sq. m for every additional student beyond student strength of 200. Library shall be provided with reprography and scanning facilities.
6.	Principal/Director/HOD's Office - 30 sq.m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7.	Administrative Office - 30 sq. m 60 sq.m	1 -	- 1	- 1	1 -	- 1	- 1	1 -	- 1	- 1	1 -	- 1	- 1	1 -	- 1	- 1	

[भाग III—खण्ड 4]

भारत का राजपत्र : असाधारण

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8.	Staff Rooms / Cabins - Professor- 12 sq. m each Associate Professor- 8 sq. m each Assistant Professor- 6 sq. m each																As per the faculty norms in the yearly progressive manner
9.	Staff Lounge 30 sq. m/ 60 sq.m																
					-	1	1	-	1	1	-	1	1	-	1	1	
10.	Construction Yard - 200 sq. m																Open space activity from second year onwards
11.	Students Common/Rest Rooms																Adequate as per Building Regulations

CHAPTER-6

AREA ANALYSIS

AREA PROGRAM :

AS PER GUIDELINE (AICTE)										AS PER GUIDELINE (COA)				Case Study - 1			Case Study - 2			Final Recommended Area		
Standard Data										SPA VJAYWADA				SPA DELHI								
Name of Spaces	Capacity (No. of Person)	Standard (Sq.meters)	Unit area	No. of units provided	Total Area in Sq.m	Capacity (No. of Person)	Standard (Sq.meters)	Unit area	No. of units provided	Total Area in Sq.m	Capacity (No. of Person)	Standard (Sq.meters)	Unit area	No. of units provided	Total Area in Sq.m	Capacity (No. of Person)	No. of units provided	Total Area in Sq.m	Name of Spaces	Capacity (No. of Person)	Total Area in Sq.m (min)	Total Area in Sq.m (max)
B. Arch (I to V Studio)	60		66	5	330	40	3	120	1	120					100	6sqm/ student	10	1200	B. Arch (I to V Studio)		100	1200
B. Planning	60		66	4	264	40	3	120	1	120									B. Planning		120	264
Tutorial Rooms	60		33	6	198	40			1	60							10	400	Tutorial Rooms		60	400
Laboratory	60		66	5		40			1	60					53				Laboratory		53	60
Computer Laboratory	60		66	5	330	40			1	60					81				Computer Laboratory		60	330
Transportation Lab															26				Transportation Lab			26
Survey Lab															30		1	50	Survey Lab		30	50
BC Lab															57		1	120	BC Lab		57	120
Climate Lab																			Climate Lab			
Research Laboratory	-	-	-	-	-														Research Laboratory			
Model making & Carpentry Workshop	60		200	1	200	40			1	40					54		1	150	Model making & Carpentry Workshop		40	200
Workshop 1															64				Workshop 1			64
Workshop 2															133				Workshop 2			133
Workshop 3															77				Workshop 3			77
Workshop 4															61				Workshop 4			61
Environmental Workshop															68				Environmental Workshop			68
Studio/Material Museum	60		132	5	660										199				Studio/Material Museum		199	660
Computer Centre			75	1	75														Computer Centre			75
Library & Reading Rooms			150	1	150										429				Library & Reading Rooms		150	429
Art Studio															196		1	245	Art Studio		196	245
Seminar Halls			132	1	132										444		1	150	Seminar Halls		132	444
Construction Yard										200 sqm									Construction Yard			200

Academic Block (UG)

CHAPTER-7

CONCEPT

Universal Design

Universal Design (UD) is an approach that aims to create environments, products, and systems that are accessible and usable by people of all abilities and diverse backgrounds. In the context of educational

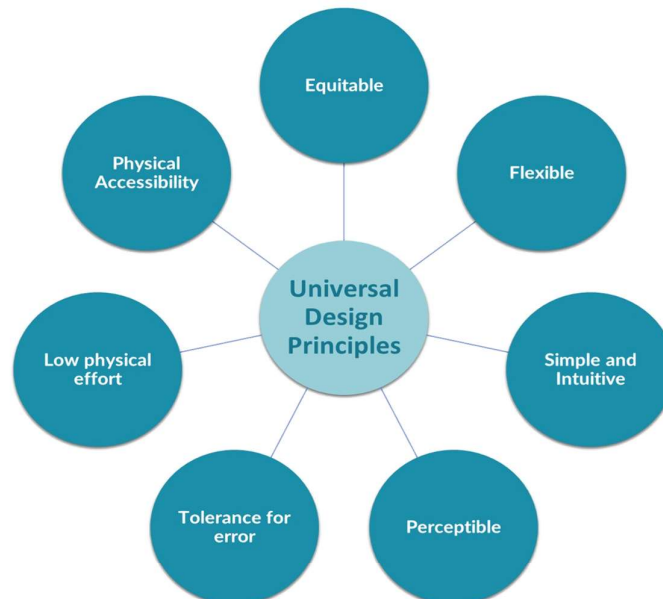


Figure 34 - PRINCIPLES OF UNIVERSAL DESIGN



Figure 35 - ZONES

buildings, implementing universal design principles can greatly enhance inclusivity and accessibility.

Form Evolution & Concept

A **courtyard** is an open-air area surrounded by tall walls or buildings, typically located in a building's center. Modern courtyards are an architectural feature most commonly seen in office spaces and universities, where students and workers can relax, eat, or talk to peers.

Advantages of Courtyard Typology:

1. Courtyard Lights up its Surrounding Spaces.
2. Courtyard Provides Ventilation:
3. Creates a relaxing space

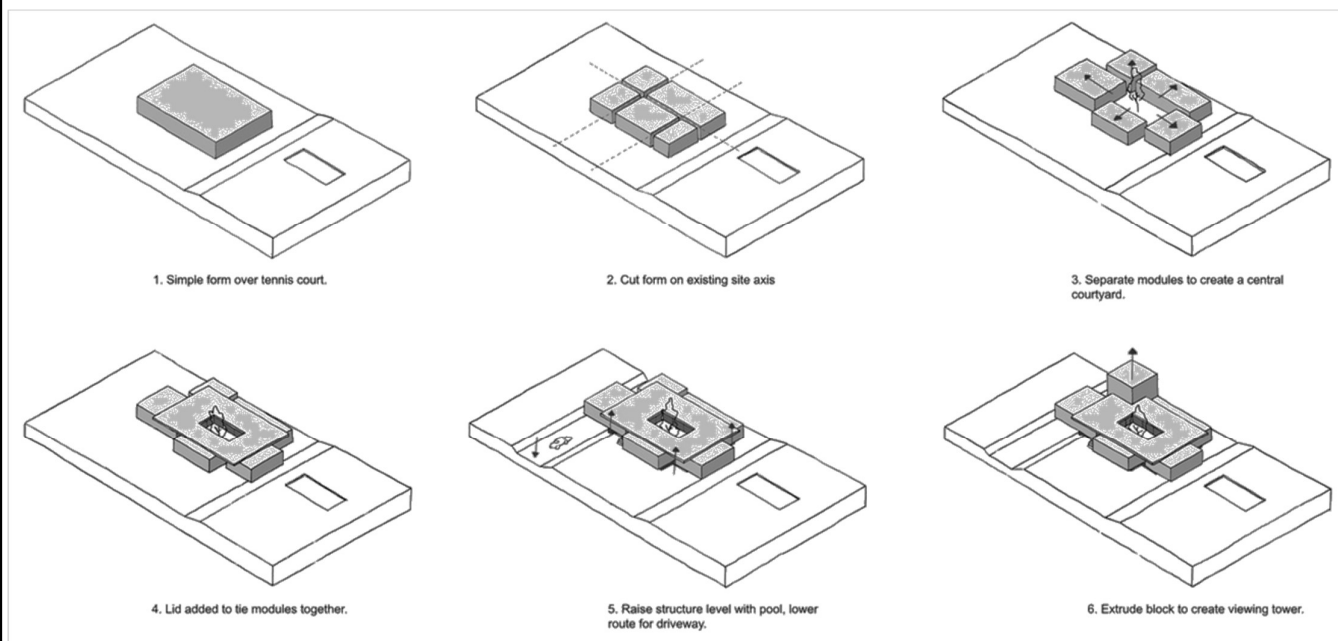


Figure 156 - Form Evolution & Concept

Design Considerations & Requirements

Infrastructure and Buildings:

- Classrooms: Spacious, well-lit, and equipped with modern teaching aids.
- Library: A well-stocked library with comfortable seating, study areas, and access to legal databases.
- Administrative Block: Offices for administrative staff and faculty.
- Staff Quarters: Comfortable accommodation for teaching and non-teaching staff.
- Hostels: If applicable, provide safe and comfortable living spaces for students.
- Special Facilities: Ensure ramps, rails, and accessible toilets for differently-abled individuals.

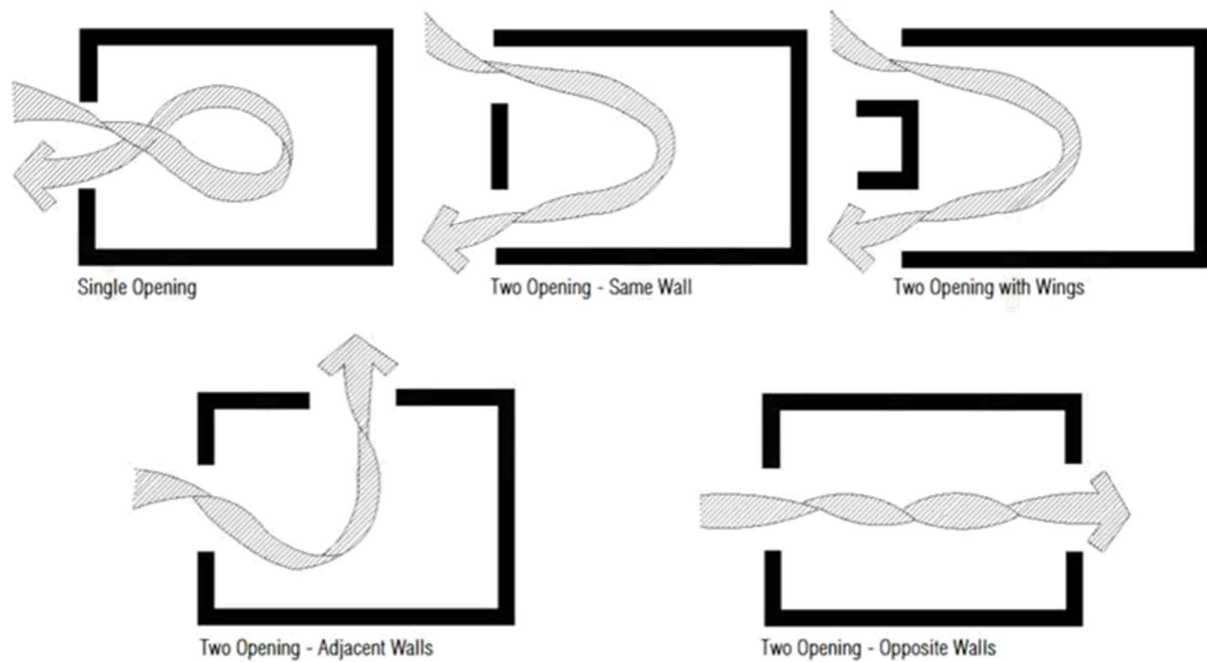


Figure 177 - AIR MOVEMENT IN BUILDING

Figure 187- AIR AND VENTILATION

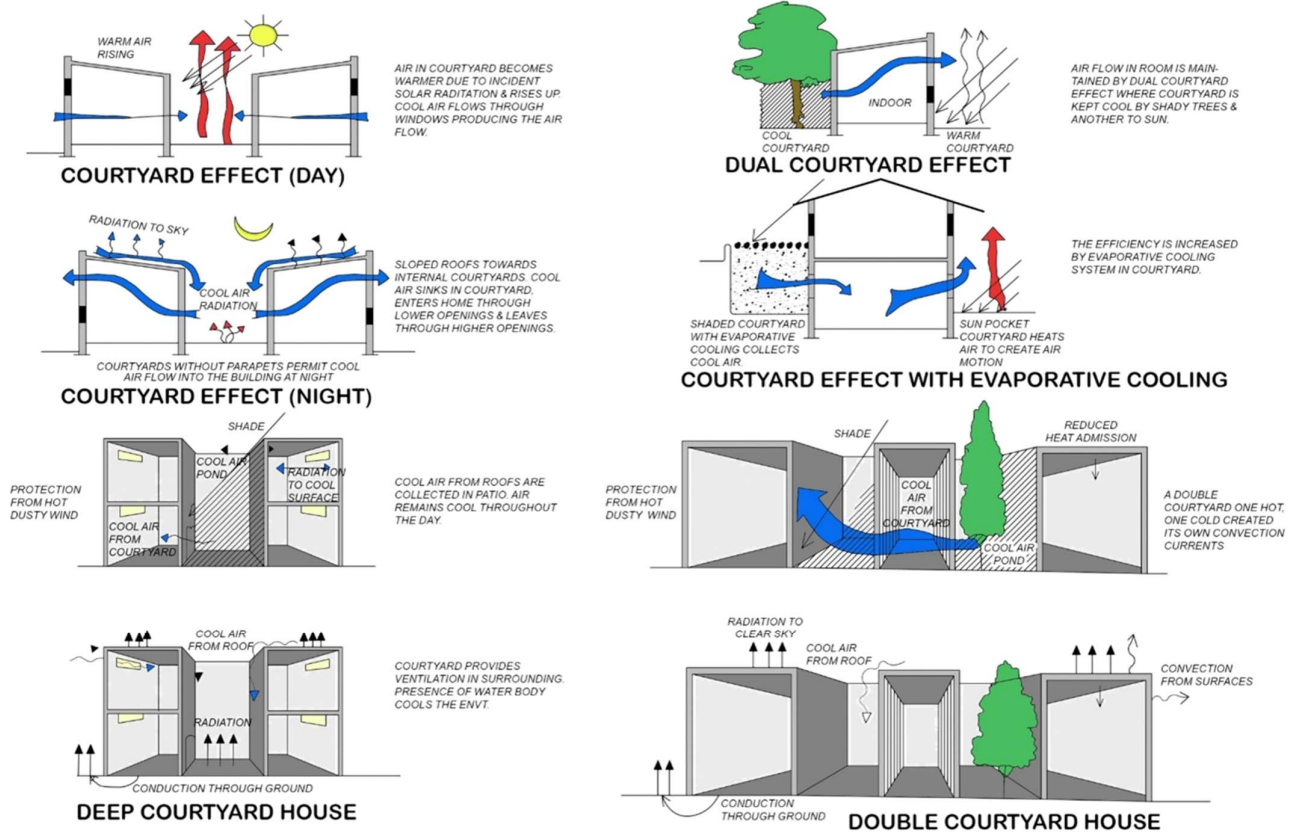


Figure 168 - BUBBLE DIAGRAM

CHAPTER-8

SITE PLAN

CHAPTER-9

DRAWINGS – PLAN, ELEVATION, SECTION & 3D VIEWS

CHAPTER-10

ELECTIVE – 1 LANDSCAPING

BIBLIOGRAPHY

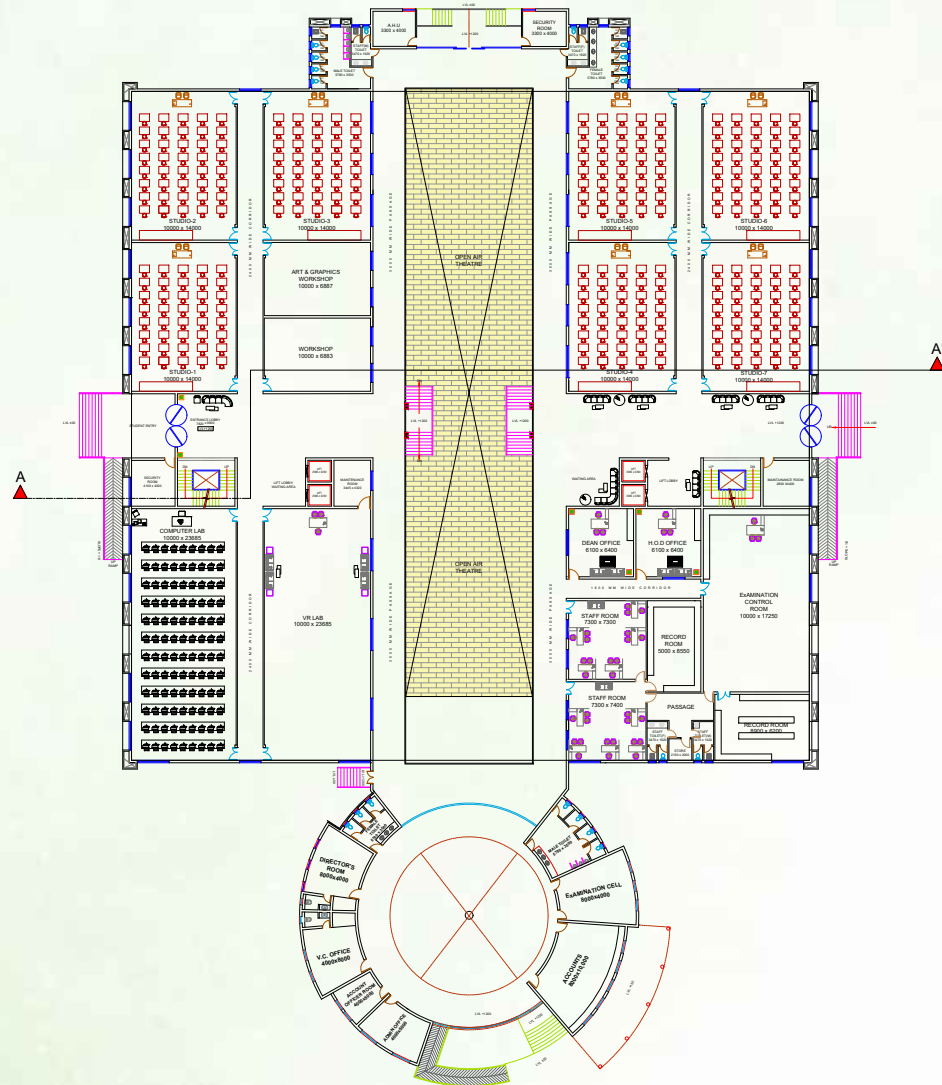
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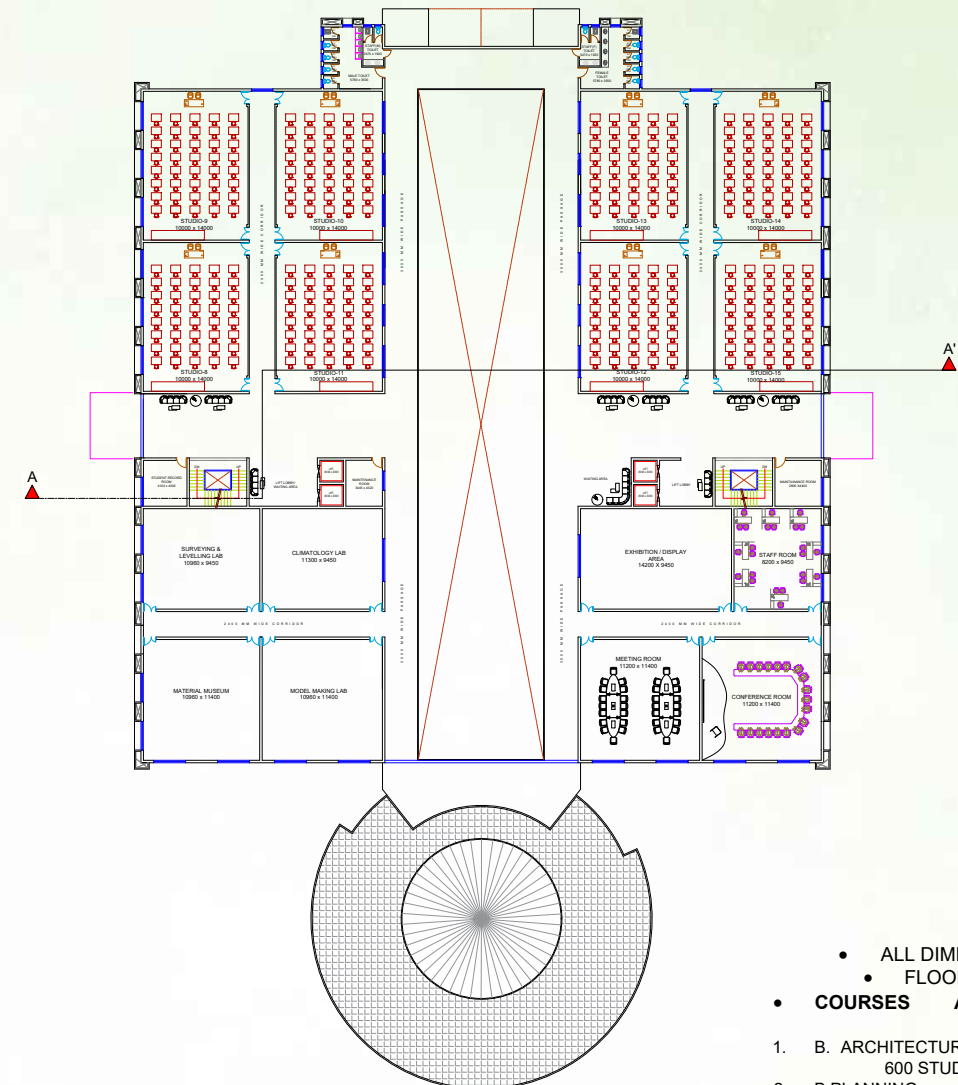
BOOKS REFERENCES:

- Neufert Architects' Data
- Time-Saver Standards
- NBC

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GROUND FLOOR PLAN



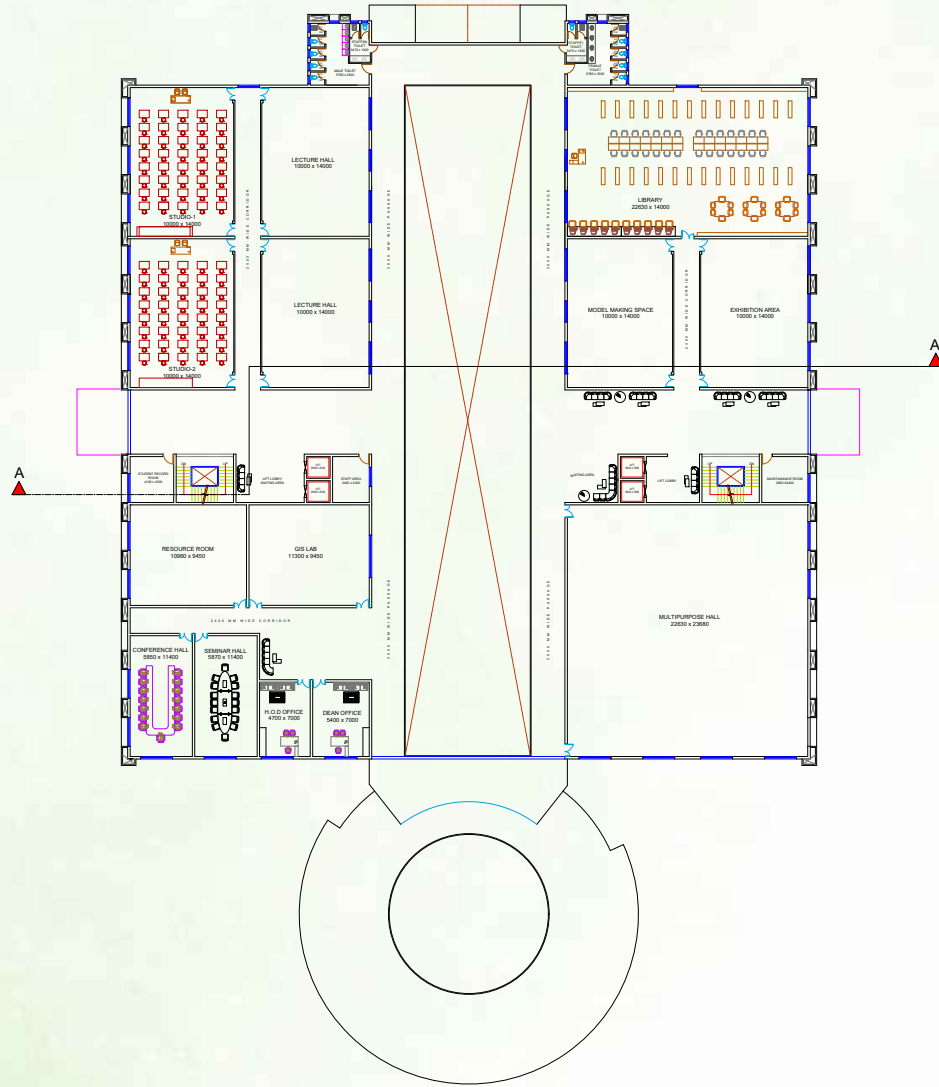
FIRST FLOOR PLAN

NOTE :

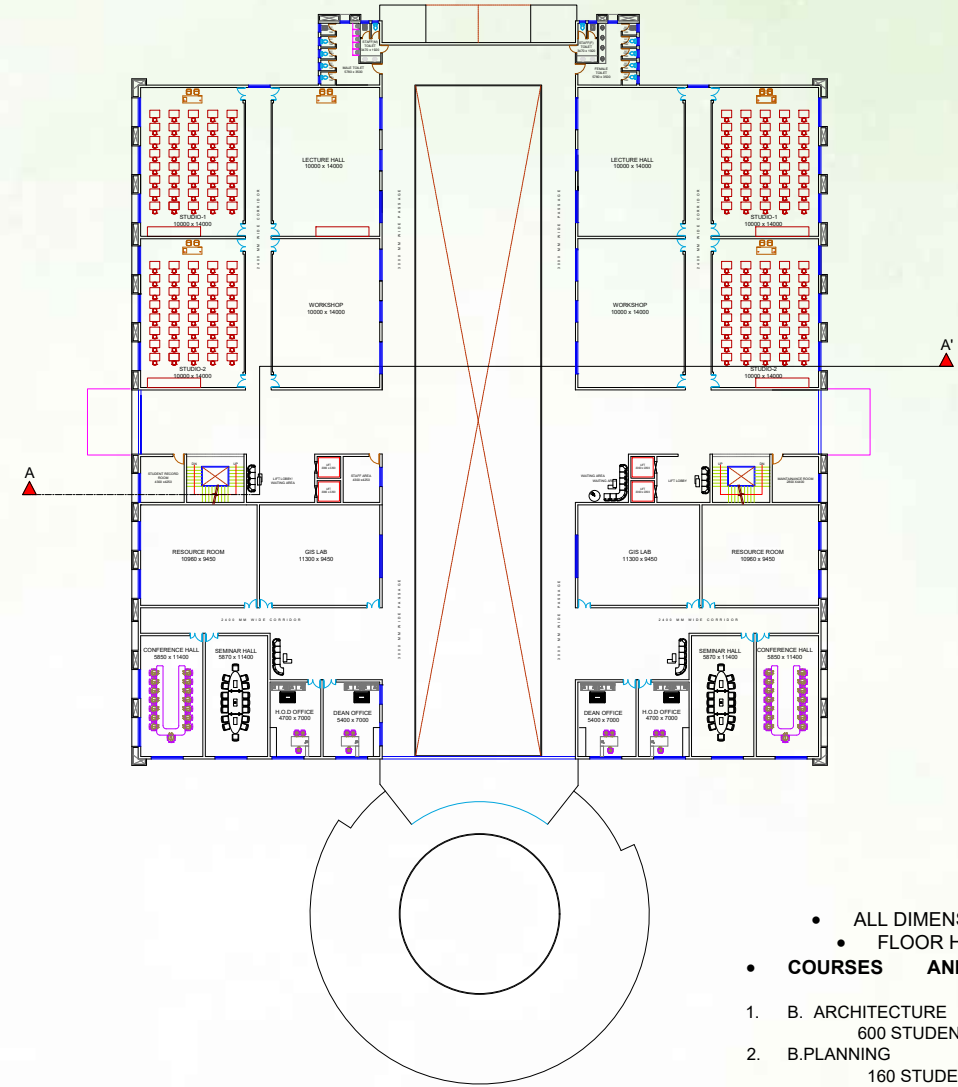
- ALL DIMENSIONS IN MM
 - FLOOR HT. - 3600 MM
 - **COURSES AND TOTAL STUDENTS :**
1. B. ARCHITECTURE - 5 YEARS - 600 STUDENTS -15 CLASS
 2. B.PLANNING - 4 YEARS - 160 STUDENTS -4 CLASS
 3. URBAN DESIGN - 2 YEARS - 40 STUDENTS - 3 CLASS
 4. LANDSCAPE ARCH. - 2 YEARS - 60 STUDENTS - 3 CLASS
- TOTAL NUMBER OF STUDENTS : **860 STUDENTS**
 - TOTAL NUMBER OF CLASSES : **25 CLASSES**



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SECOND FLOOR PLAN



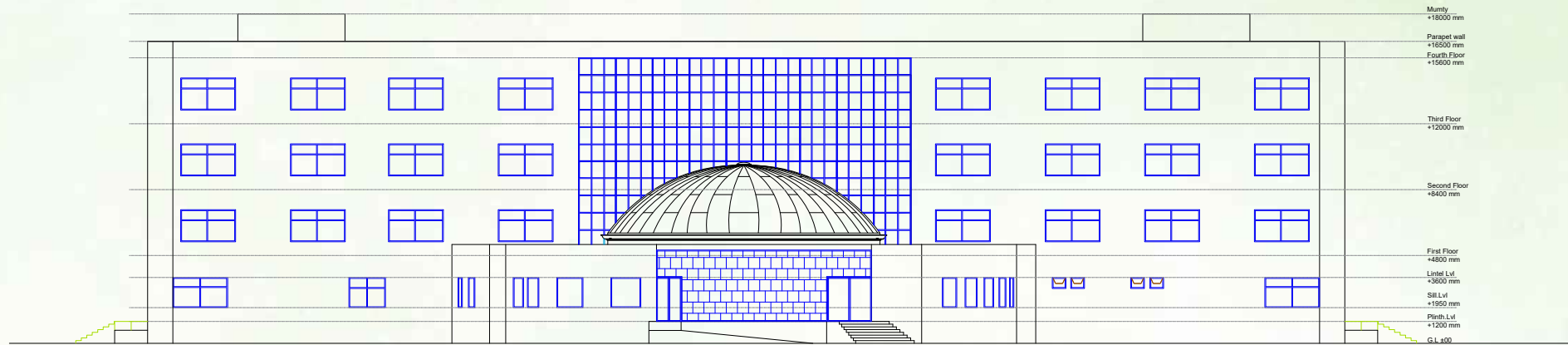
THIRD FLOOR PLAN

NOTE :

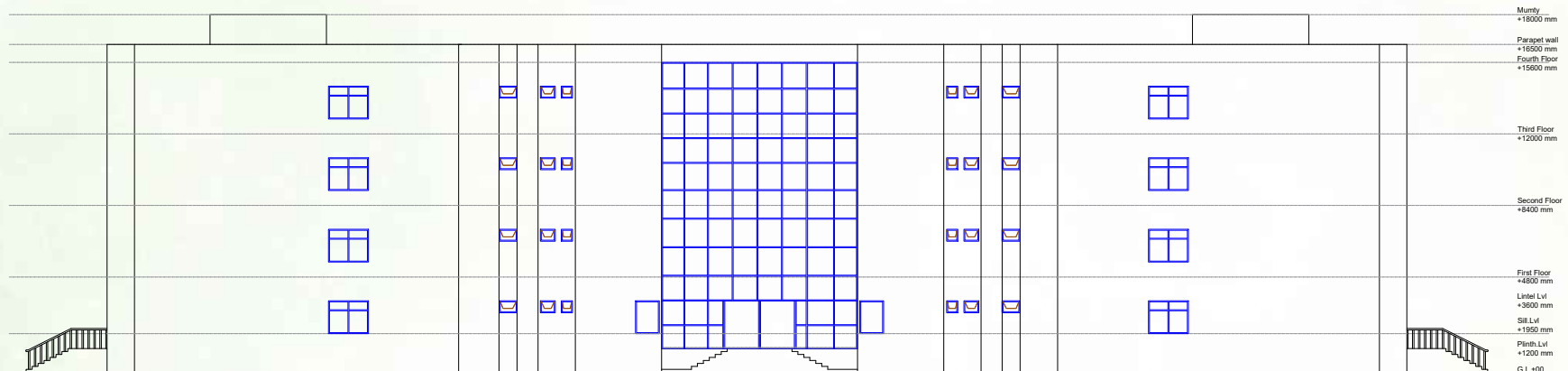
- ALL DIMENSIONS IN MM
- FLOOR HT. - 3600 MM
- **COURSES AND TOTAL STUDENTS :**
 1. B. ARCHITECTURE - 5 YEARS - 600 STUDENTS -15 CLASS
 2. B.PLANNING - 4 YEARS - 160 STUDENTS -4 CLASS
 3. URBAN DESIGN - 2 YEARS - 40 STUDENTS - 3 CLASS
 4. LANDSCAPE ARCH. - 2 YEARS - 60 STUDENTS - 3 CLASS
- TOTAL NUMBER OF STUDENTS : **860 STUDENTS**
- TOTAL NUMBER OF CLASSES : **25 CLASSES**



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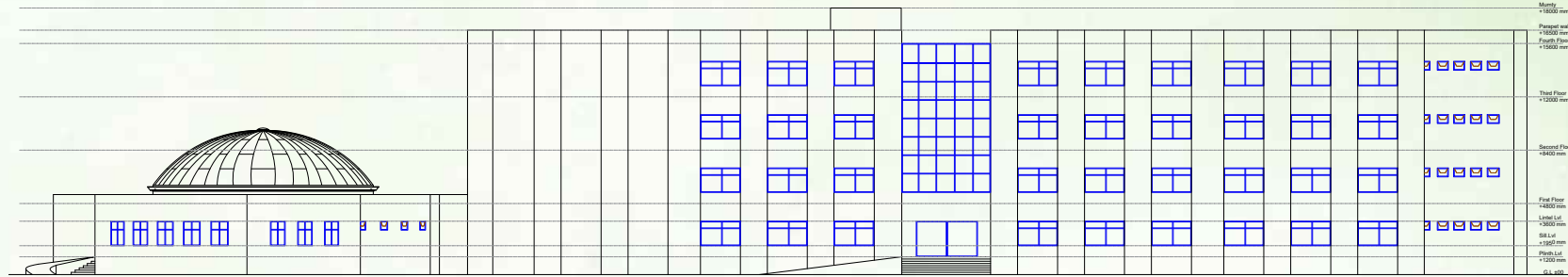
FRONT ELEVATION



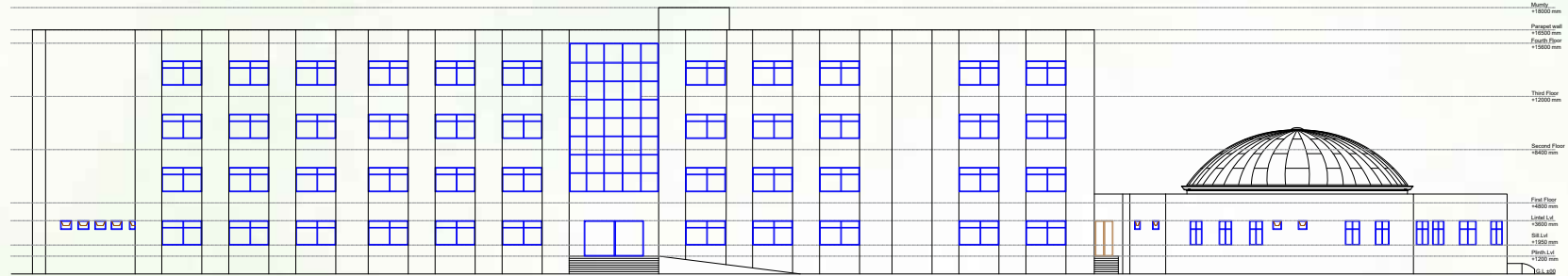
REAR SIDE ELEVATION



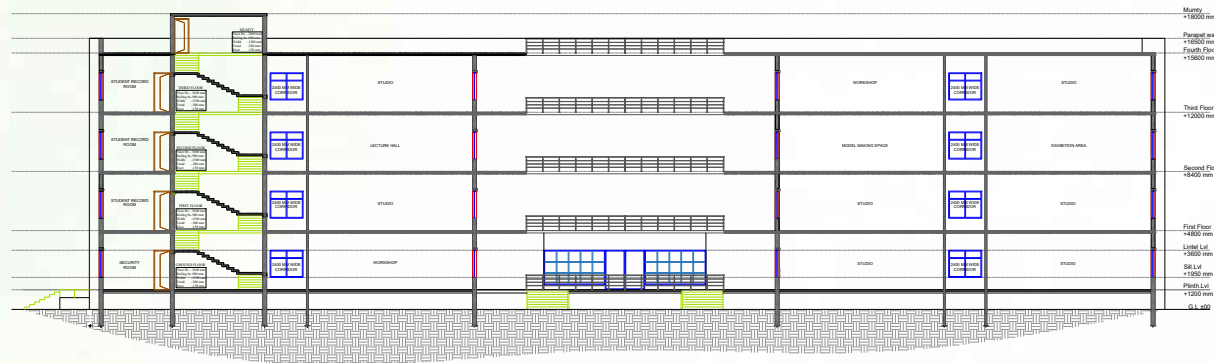
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RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



SECTION AT AA'



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GROUND FLOOR PLAN

WARDEN ROOM - 1 NO.

VISITORS ROOM - 1NO.

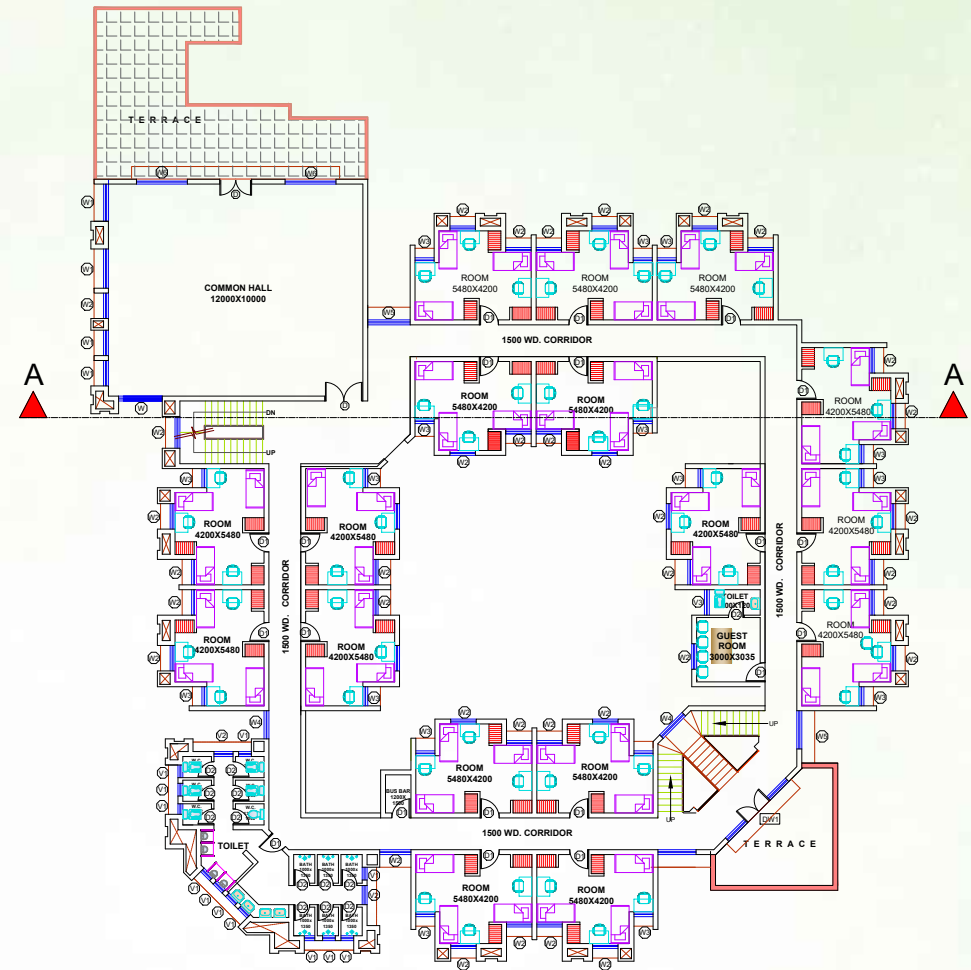
NUMBER OF ROOMS - 16 ROOMS

NUMBER OF BEDS PER ROOM - 3 BEDDED

TOTAL NO. OF BEDS- 180 BEDS

FLOOR HT - 3150 - 4 FLOORS

STEPS - 21 NOS. - 150MM



FIRST FLOOR PLAN

BOYS HOSTEL BLOCK



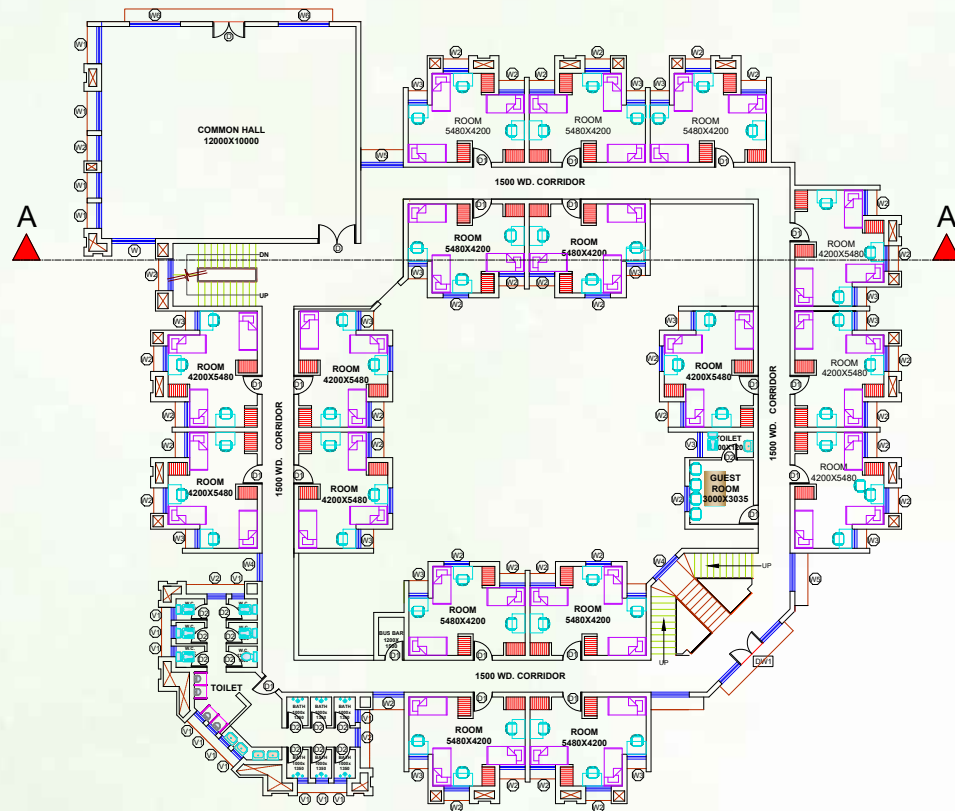
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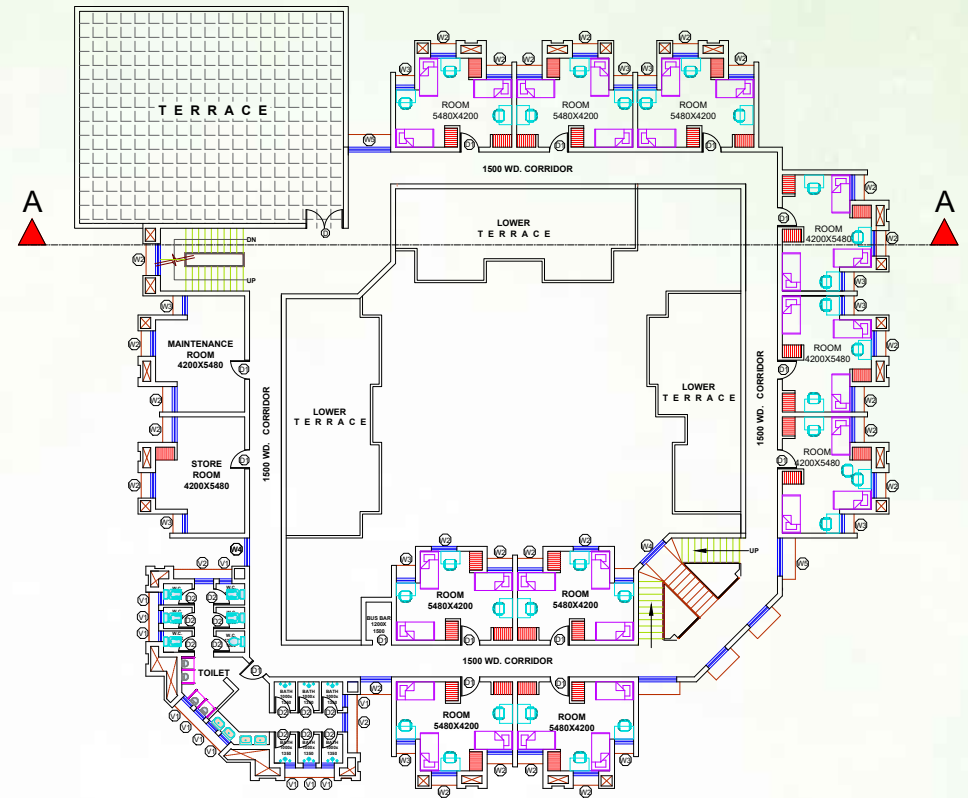
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ROLL NO- 1200101025

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SESSION - (2025-26)

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SECOND FLOOR PLAN



THIRD FLOOR PLAN

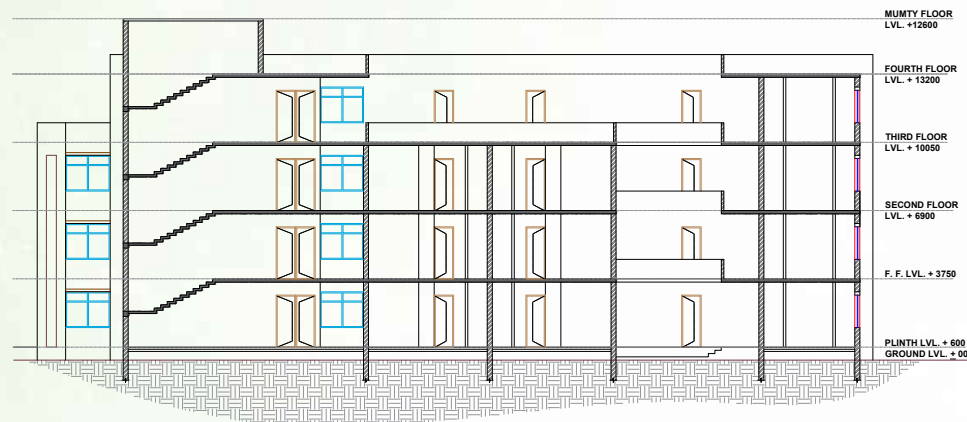


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FRONT ELEVATION

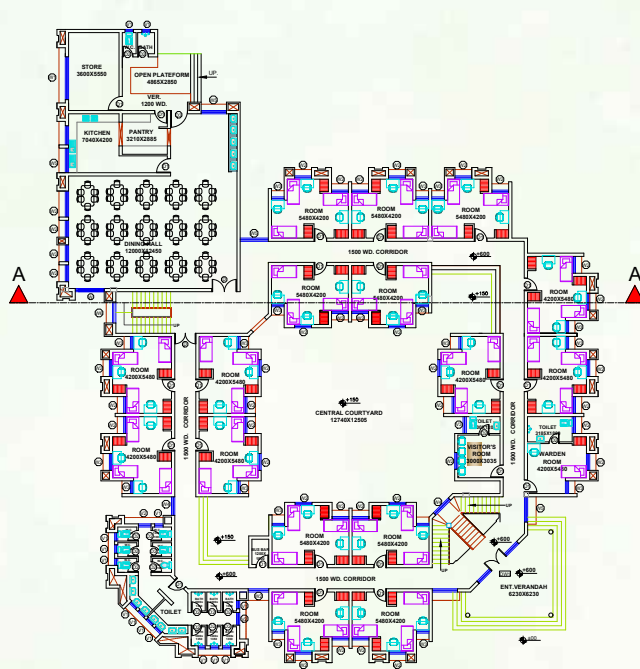
RIGHT SIDE ELEVATION



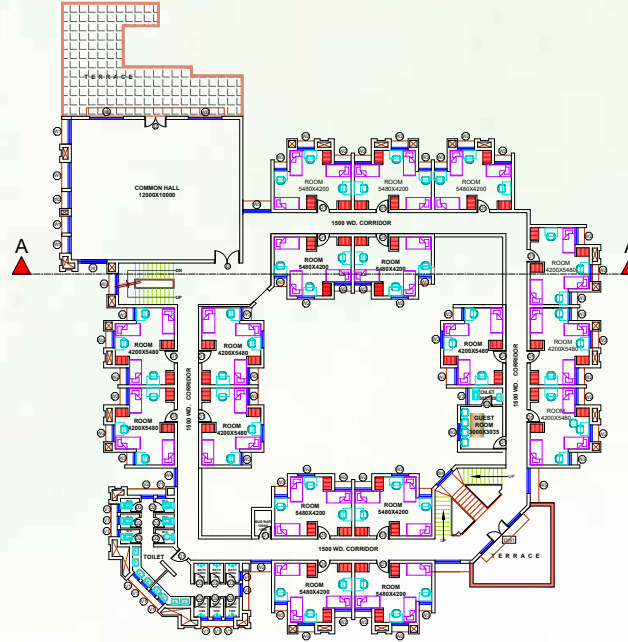
SECTION A-A'



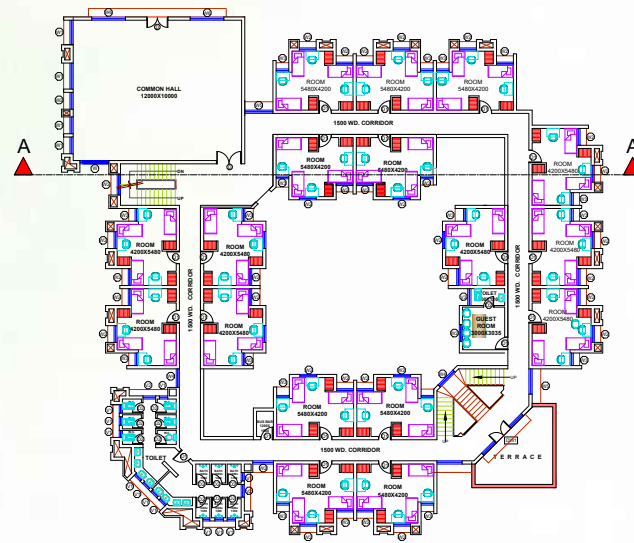
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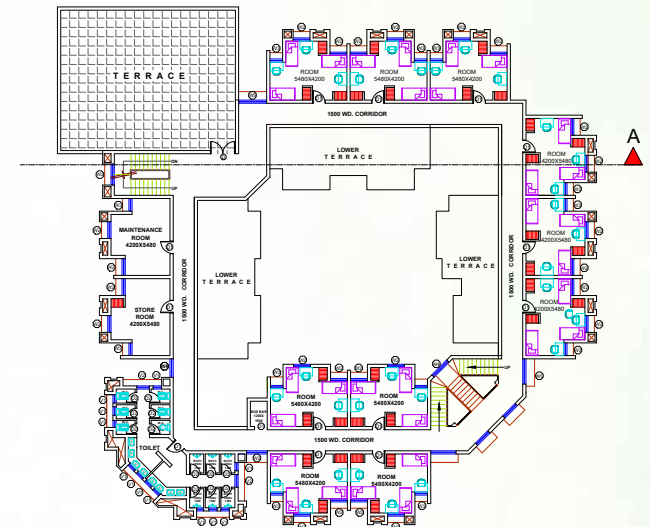
GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECOND & THIRD FLOOR PLAN



SECOND FLOOR PLAN



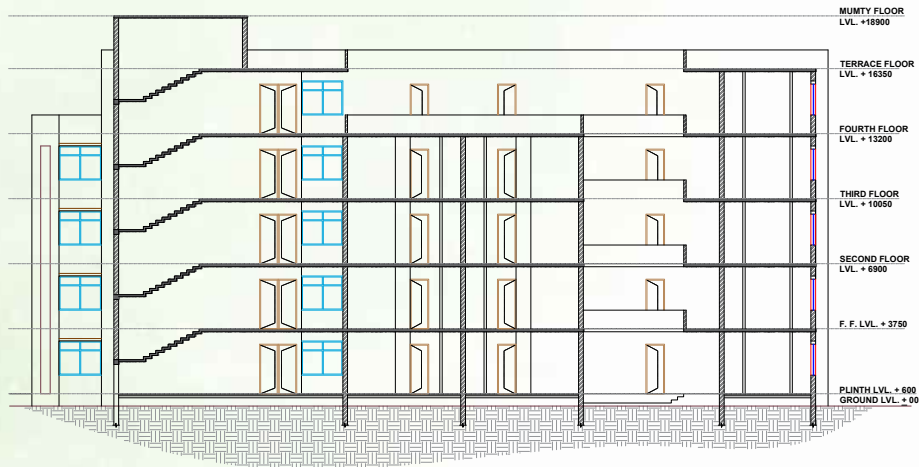
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FRONT ELEVATION



RIGHT SIDE ELEVATION



SECTION A-A'

GIRLS HOSTEL BLOCK



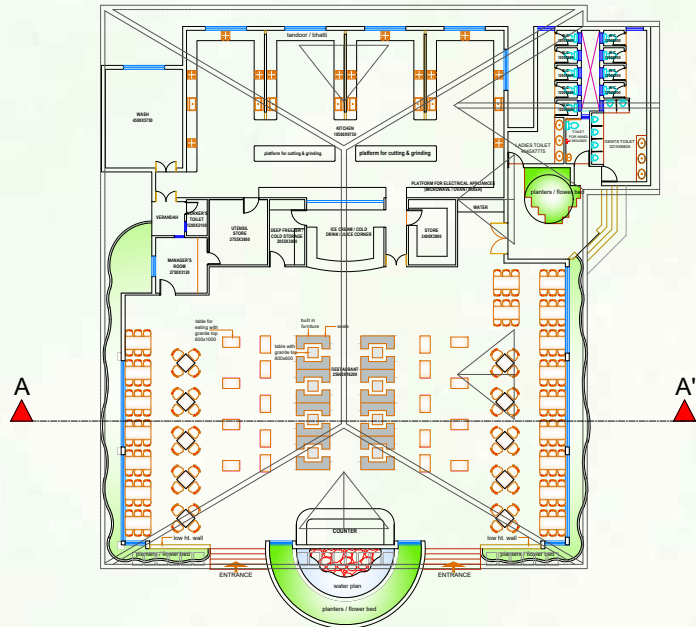
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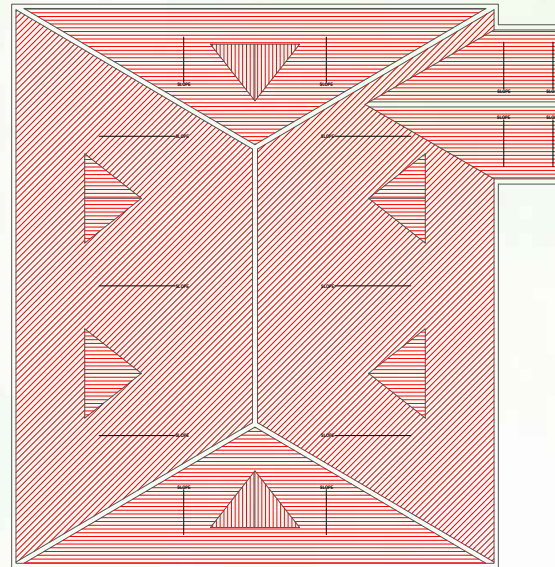
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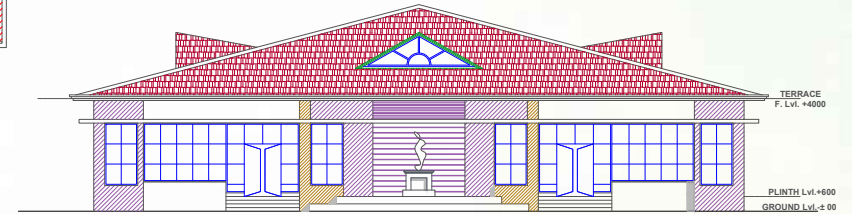
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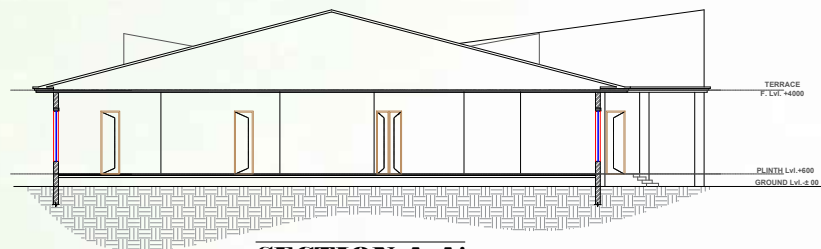
GROUND FLOOR PLAN



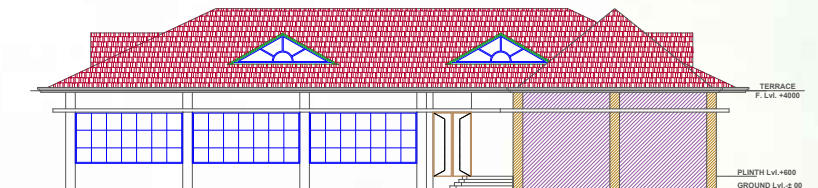
ROOF PLAN



FRONT ELEVATION



SECTION A-A'



SIDE ELEVATION

C A N T E E N



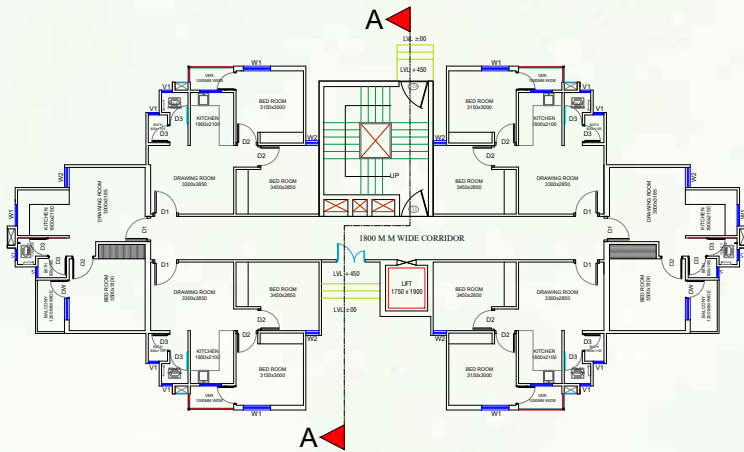
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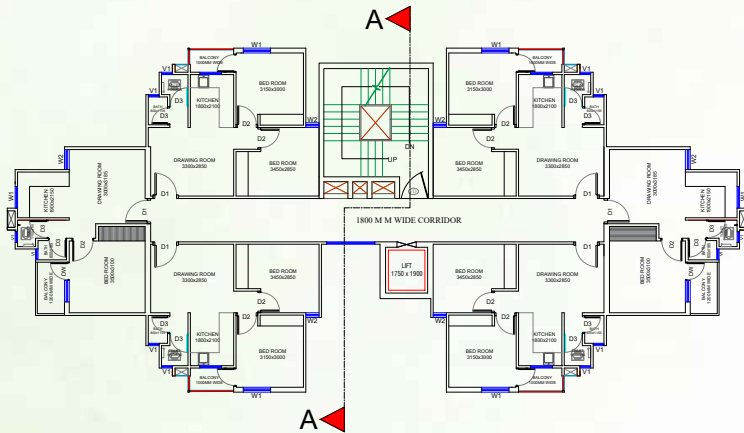
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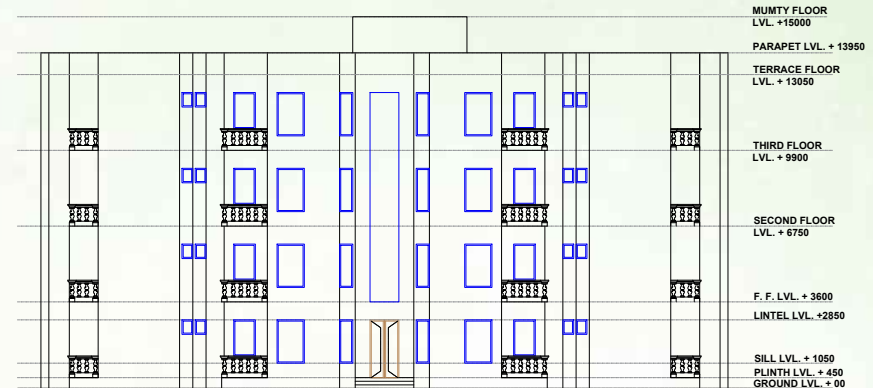
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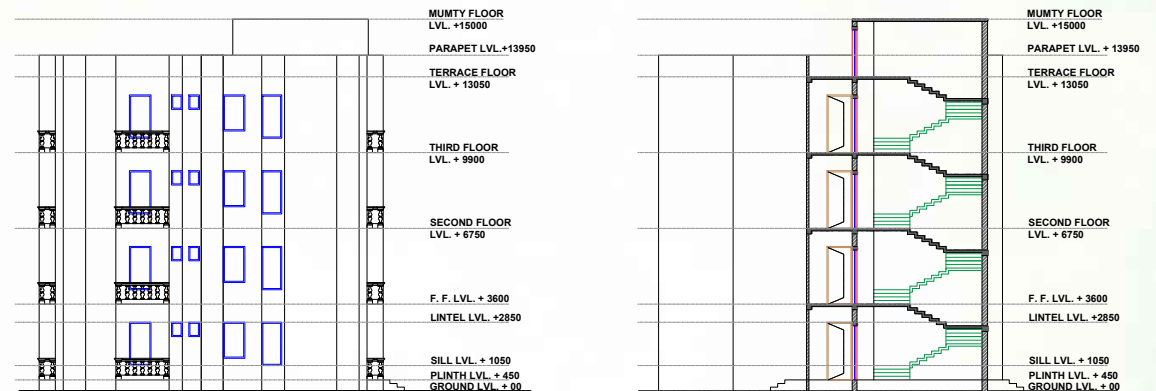
GROUND FLOOR PLAN



TYPICAL FLOOR PLAN



FRONT ELEVATION



SIDE ELEVATION

SECTION A-A'



SCHOOL OF PLANNING & ARCHITECTURE



S I T E P L A N



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