



UNIVASTU BOOTES

SUSTAINABLE LIBRARY

FOR VARANASI



Presented by: Univastu Bootes Impex Tech Ltd.

MISSION



UNIVASTU BOOTES

To create a world-class **Sustainable Library** that catalyzes innovation, low-carbon economy by integrating Knowledge, policy, community solutions & education for sustainable development—anchored in the heart of Varanasi.

VISION



A fusion of modern and traditional design incorporation in the building of the LIBRARY is proposed to foster inclusive learning, preserve cultural heritage and empower the community through knowledge.



VISION



The Varanasi Library, as a repository of knowledge and wisdom, stands as a beacon of learning and intellectual pursuit. To honor the legacy of Swami Vivekananda—one of India's greatest philosophers and spiritual leaders—a grand gate façade is envisioned, embodying the core values he espoused: purity, education, Indian religion, and nationalism.



VISION

SYMBOLISMS & ICONOGRAPHY



Lion

Swami Vivekananda is often symbolized by a lion, representing his courage, strength, and leadership qualities.



Monk's Robe

His saffron robe symbolizes renunciation and dedication to spiritual pursuits.



Lotus

The entrance will showcase intricate lotus carvings with (White marble/Sandstone?) inlays, reflecting Vivekananda's ideals of purity and enlightenment.



Books and Scriptures

Representing his vast knowledge and his emphasis on education and learning.



The Wandering Monk

This symbolizes his travels across India and the world, spreading his message of Vedanta and universal brotherhood.



Palms closed

The gateway will feature Om, the Peepal tree, and spiritual figures, reflecting Vivekananda's vision, with a chhatri symbolizing divine wisdom.



SITE CONTEXT

A predominantly flat topography with minimal variation in levels.

Total Site Area 4128.36SQM

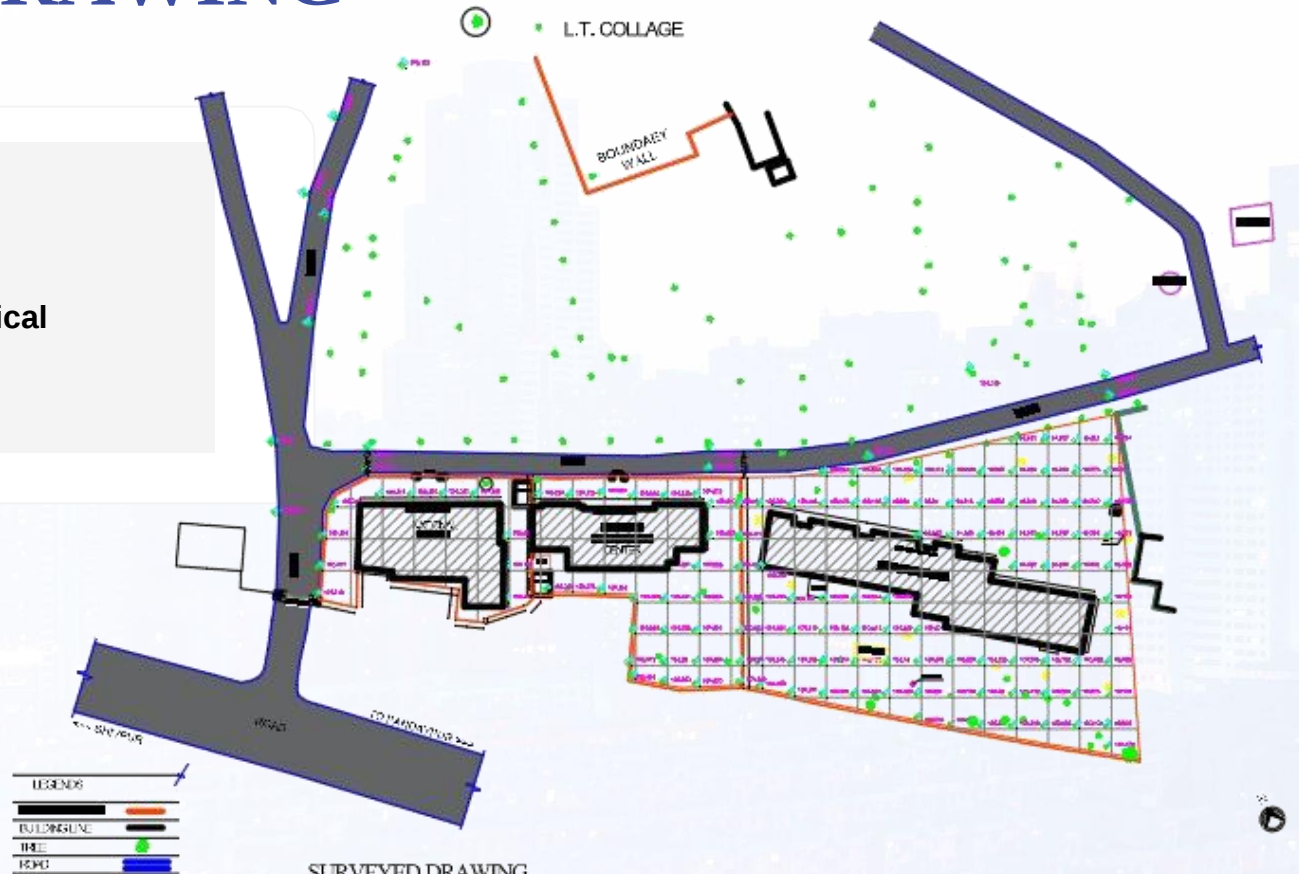
The rear of the Proposed layout of the Site has private building up to 2 story.



SURVEY DRAWING

Existing Building

1. Library
2. Regional Psychological Research center
3. Staff Quarter



SURVEYED DRAWING



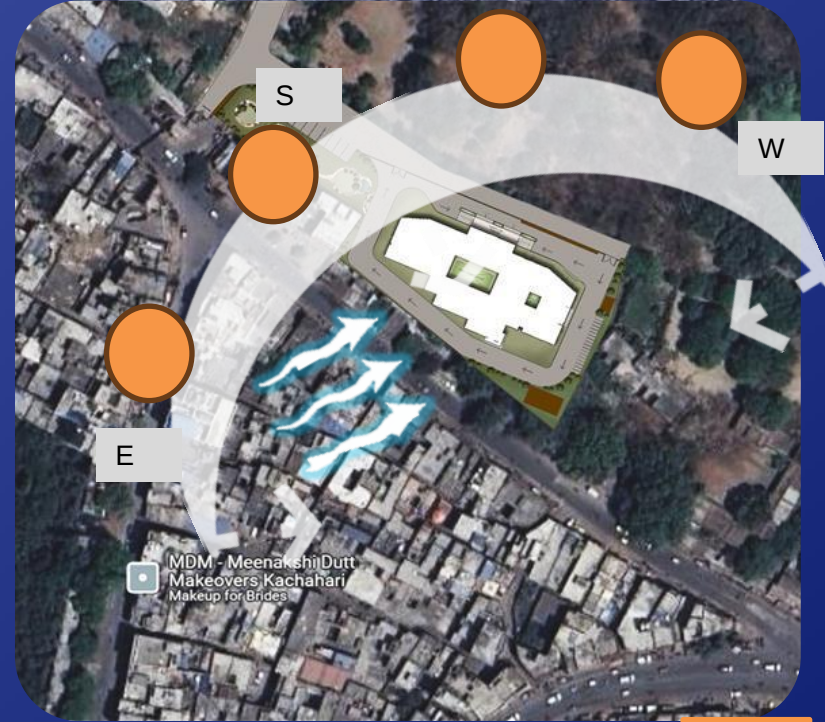
CLIMATIC ORIENTATION

Varanasi experiences a humid subtropical climate with distinct seasonal variations, influenced by its location in the northern Indo-Gangetic plains of India

- Temperature:** Around 2 °C to 45°C
- Conditions:** Extremely hot and dry; heatwaves are common.

Proper drainage systems, elevated plinths, and moisture-resistant finishes are necessary.

Use of materials with thermal mass, provision for sunlight penetration, and protection from cold winds.



DESIGN PHILOSOPHY

Environmental Sustainability

Adopt energy-efficient systems, minimize waste, and use sustainable materials.

Community Integration

Involve the community in planning and create green spaces.

Net-Zero Ready Infrastructure

Every material and orientation choice made to support passive cooling, daylight optimization, and renewable integration.

Multi-Use Modularity

Flexible spaces designed for Reading area, multipurpose Hall, Cafeteria and Digital Library —all in one integrated layout.

Innovation in Learning & Knowledge Sharing

Leverage smart technologies, digital resources, & collaborative tools to enhance the library experience.



DESIGN CONCEPT

The Varanasi Library, as a repository of knowledge and wisdom, stands as a beacon of learning and intellectual pursuit to honour the legacy of Swami Vivekananda.

OBJECTIVE: The grand gate façade of Varanasi Library will not just be an entryway but a tribute to Swami Vivekananda's enduring legacy but It will also inspire visitors, scholars, and spiritual seekers to embrace knowledge, purity, and national pride, while honouring India's rich cultural and religious traditions.

CONCEPT AND SYMBOLISM: The design of the grand entrance will be a fusion of classical Indian architecture and modern artistic interpretations that reflect Swami Vivekananda's ideals. The structure will be both an artistic masterpiece and a symbolic representation of his message.



WORSHIP



KNOWLEDGE



Worship through Knowledge
The Sacred Journey of the Mind



DESIGN CONCEPT

SURYA NAMASKARAM

The rising sun and sun worship are especially significant in Varanasi city due to its religious, spiritual, and cultural heritage. The interplay between **sunlight** and **spirituality** is felt every morning as people gather at the ghats to honor the life-giving force of the sun.



Varanasi

Older than History, Older than Tradition, Older even than Legend and Looks twice as old as all of them put together.
- Mark Twain

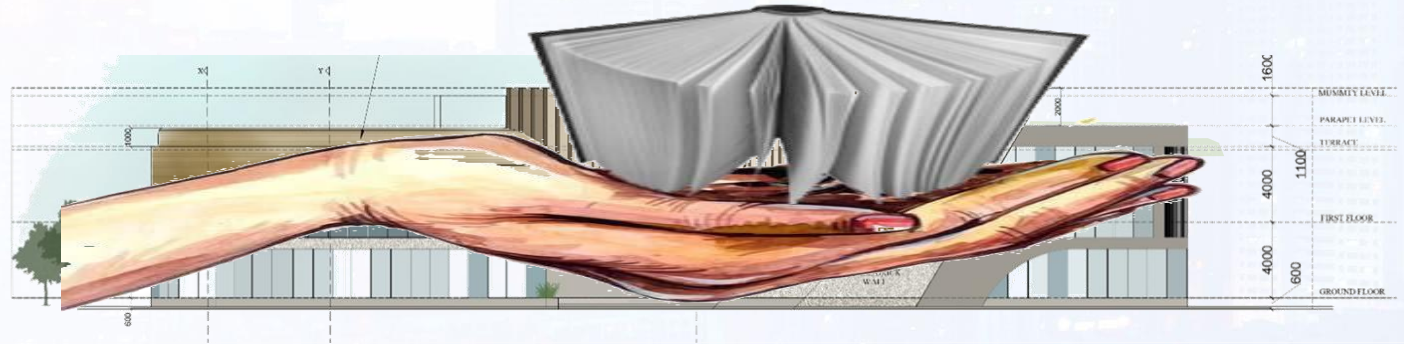
**"Library is a temple, books are the light,
Learning in silence feels pure and right."**



DESIGN CONCEPT

The library façade is envisioned as a symbolic blend of worship and knowledge—a sanctuary where books are revered as sacred objects and learning is treated as a spiritual journey.

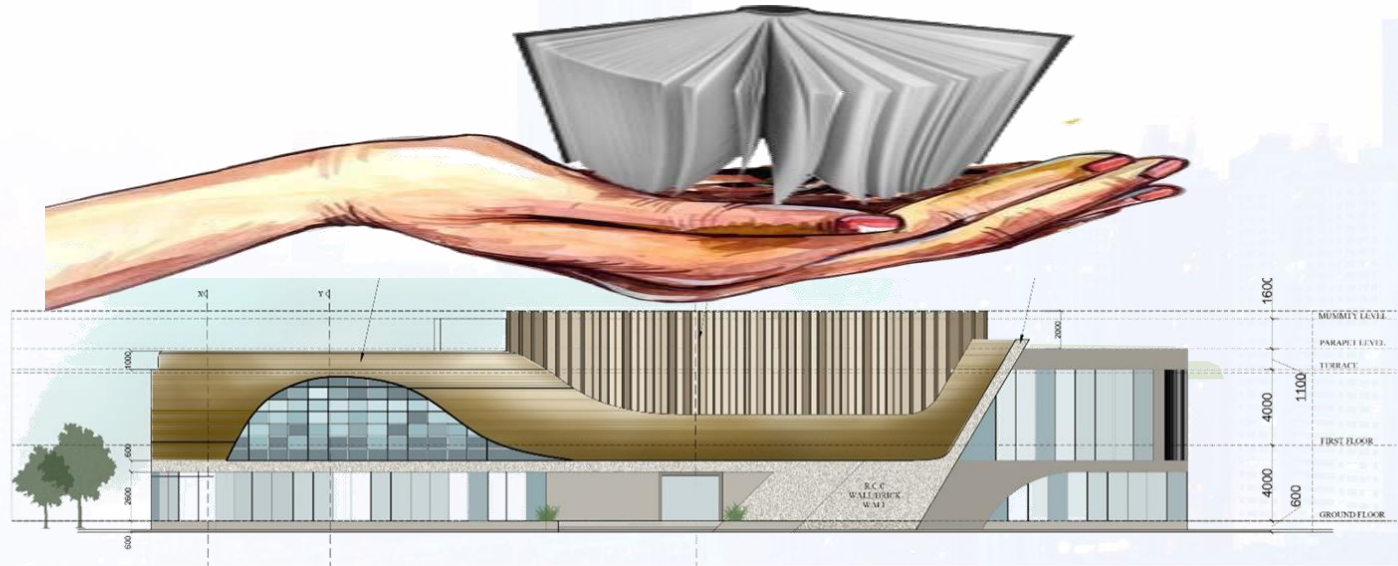
Drawing inspiration is from places of worship, the design incorporates architectural elements that evoke reverence, such as arches, vertical lines, and light-filled spaces, while integrating motifs of books and writing to represent the pursuit of wisdom.



The worship of knowledge in this image resembles the symbolism of this building structure & design.



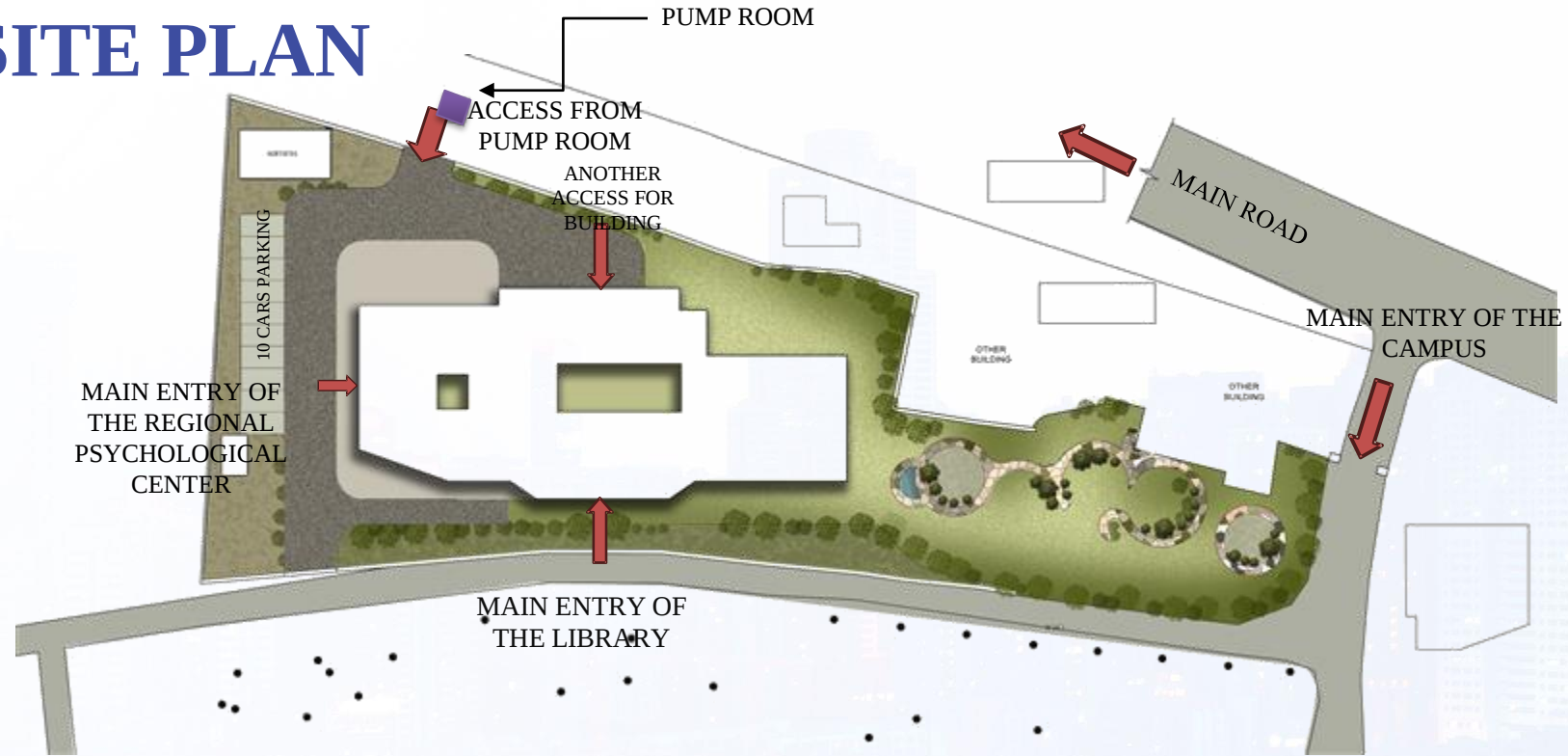
DESIGN CONCEPT



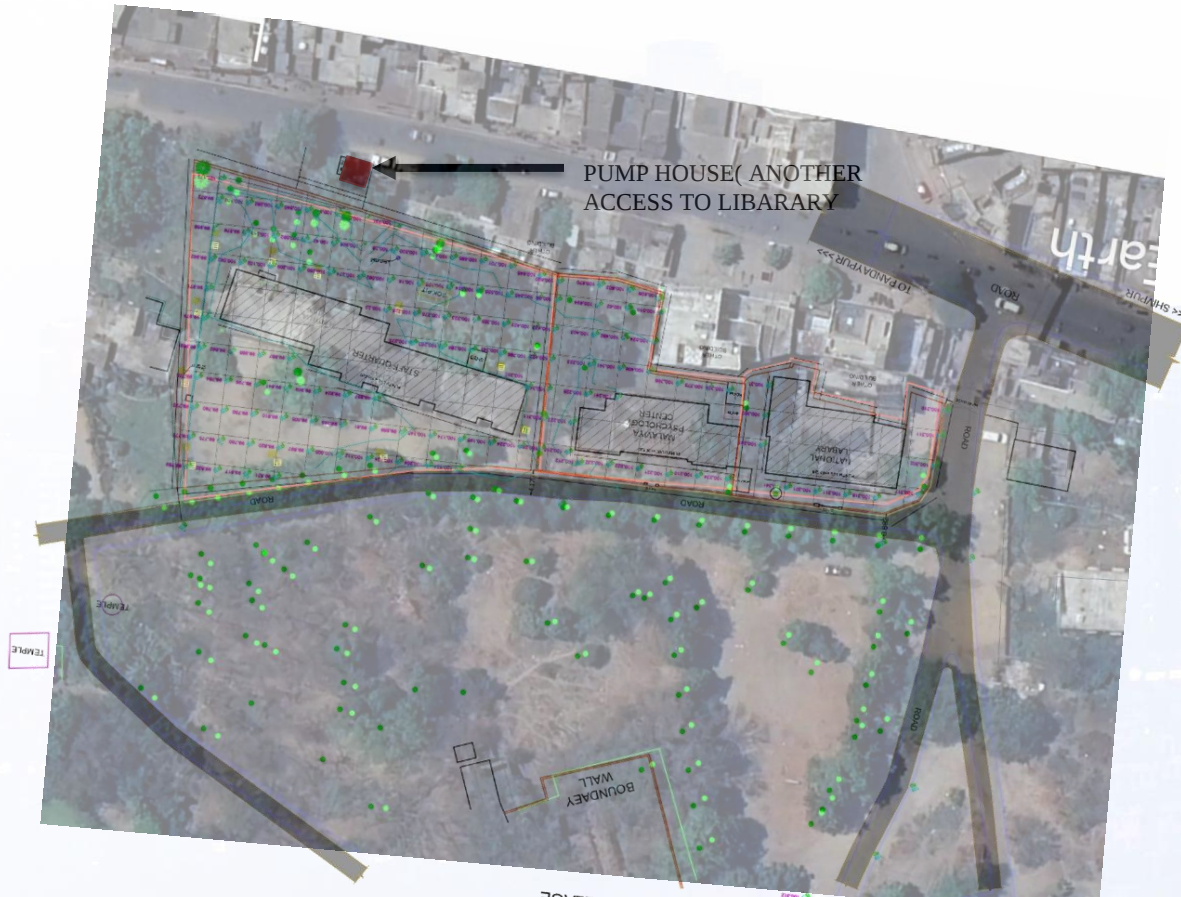
Swami Vivekananda's importance for knowledge, spirituality & the youth is clearly symbolic in this building design



SITE PLAN



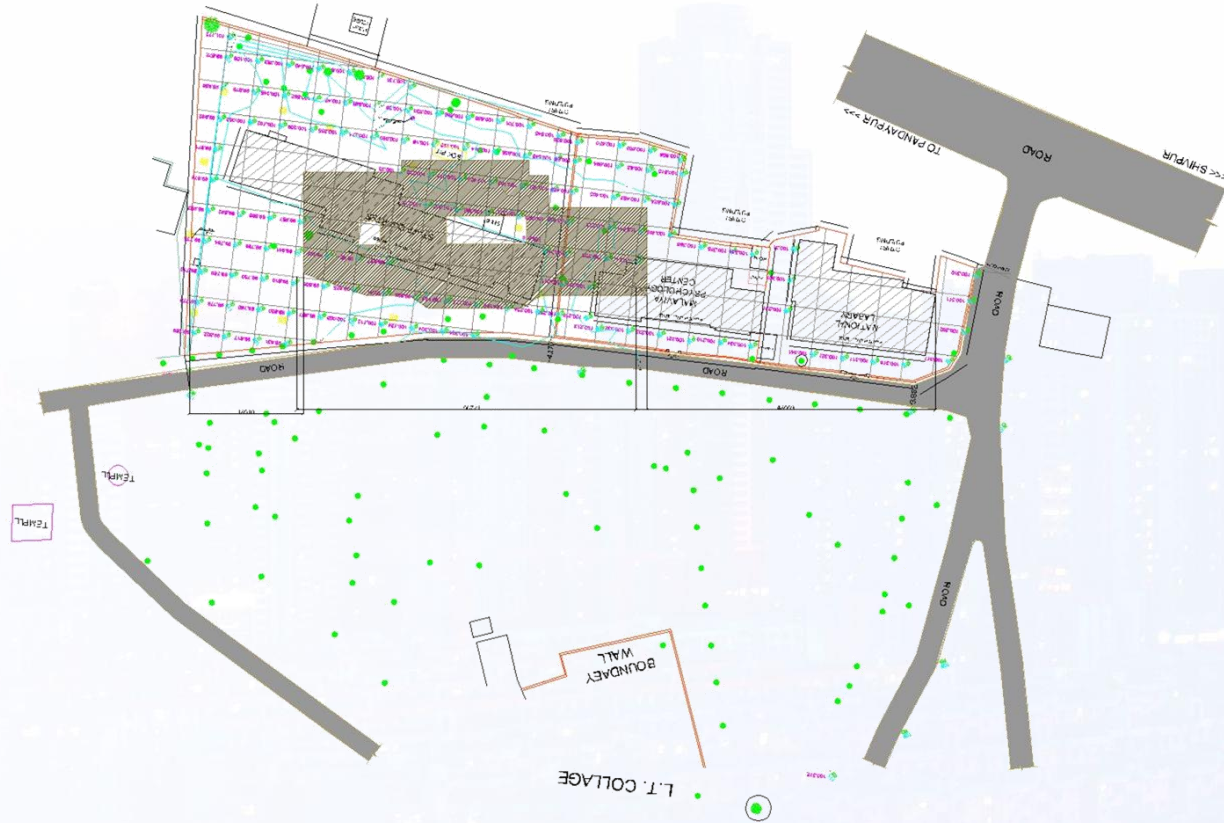
SURVEY PLAN



SURVEY PLAN



SITE AND SURVEY PLAN



DESIGN CONCEPT OF PLAN

The design starts with the user's needs and experience, shaping the space from the inside out. It blends indoor and outdoor areas through open courtyards, verandas, and large openings, using natural light, ventilation, and local materials like wood and brick to create a warm, organic feel.

Open Courtyards & Verandas

Seamless connection to gardens or water bodies with natural airflow.



Frameless Thresholds

Large openings and sliding panels replace rigid walls for smooth indoor-outdoor flow.

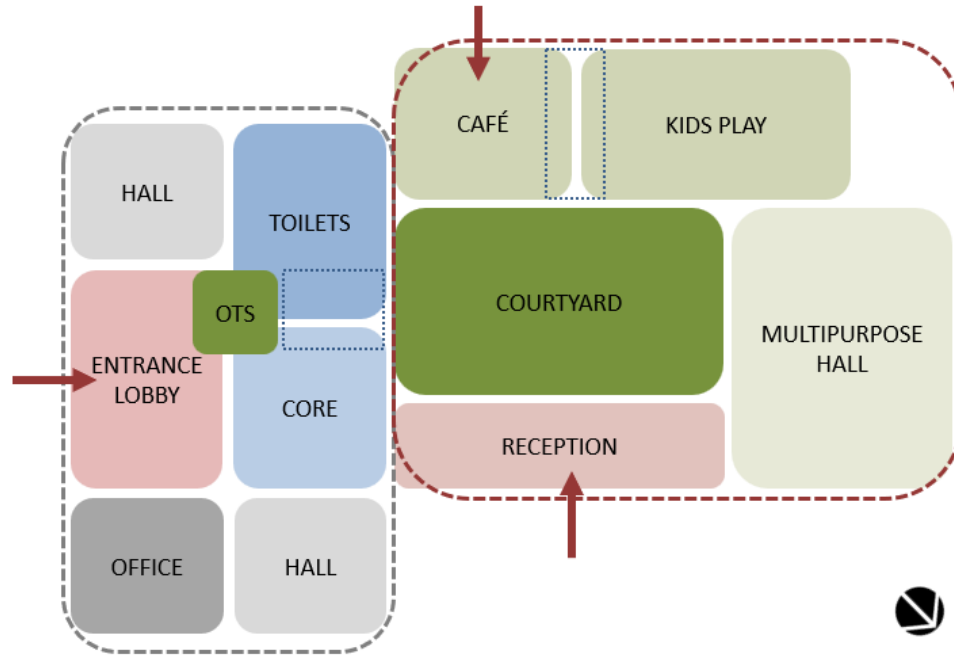


Natural Light & Ventilation

Cross-ventilation and soft daylight through skylights, latticework, and well-placed windows.



ZONING



INTERNAL SPATIAL ZONING



AREA STATEMENT

Total Built up Area – 21069 SQFT
1958.09 sqm
Ground Coverage - 1067.21sqm
11483.17SQFT

GROUND FLOOR

992.4m2

FIRST FLOOR

808.91m2

SECOND FLOOR

83.89m2

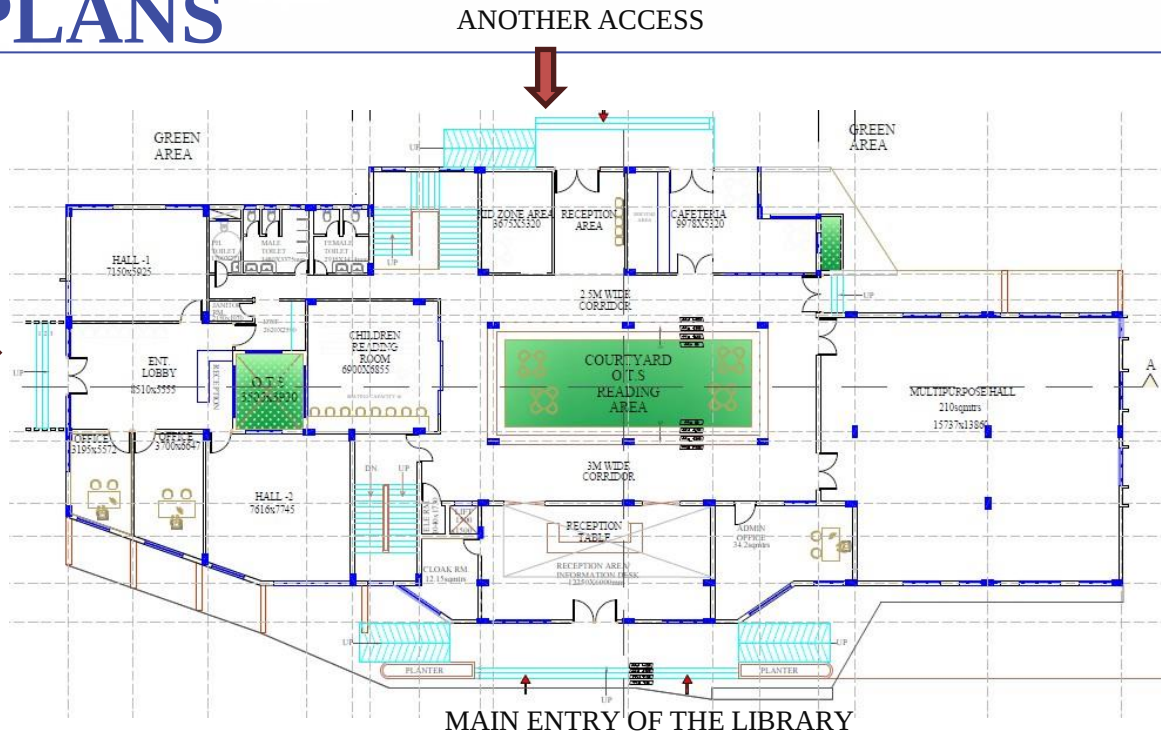
SERVICES

72.89m2



FLOOR PLANS

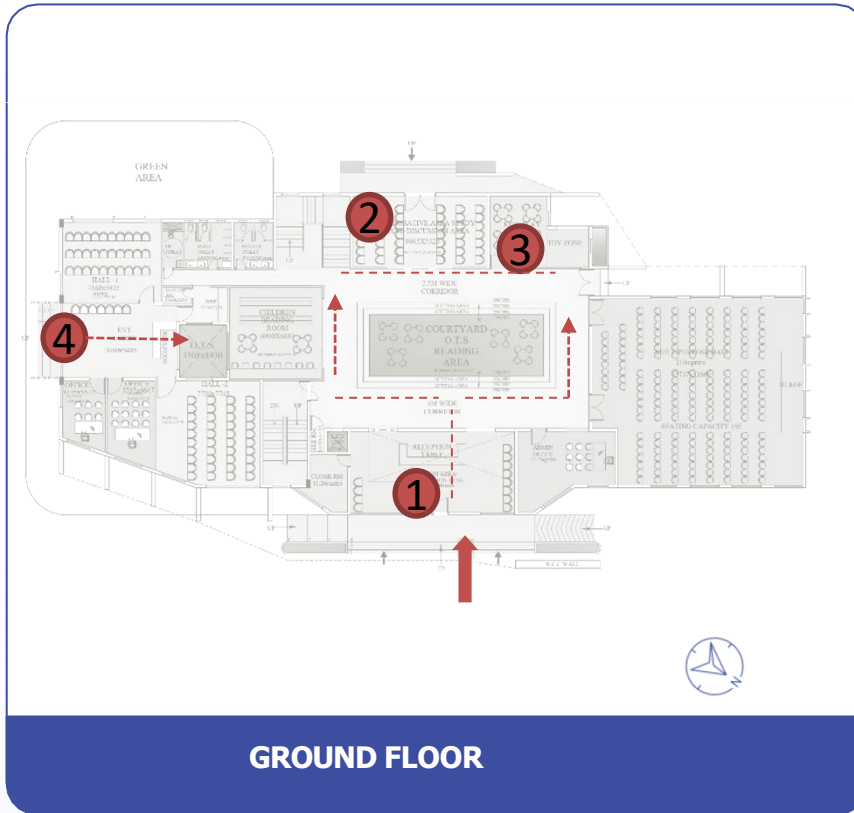
MAIN ENTRY OF
THE REGIONAL
PSYCHOLOGICAL
CENTER



GROUND FLOOR PLAN



FLOOR PLANS - CIRCULATION



.....> Circulation

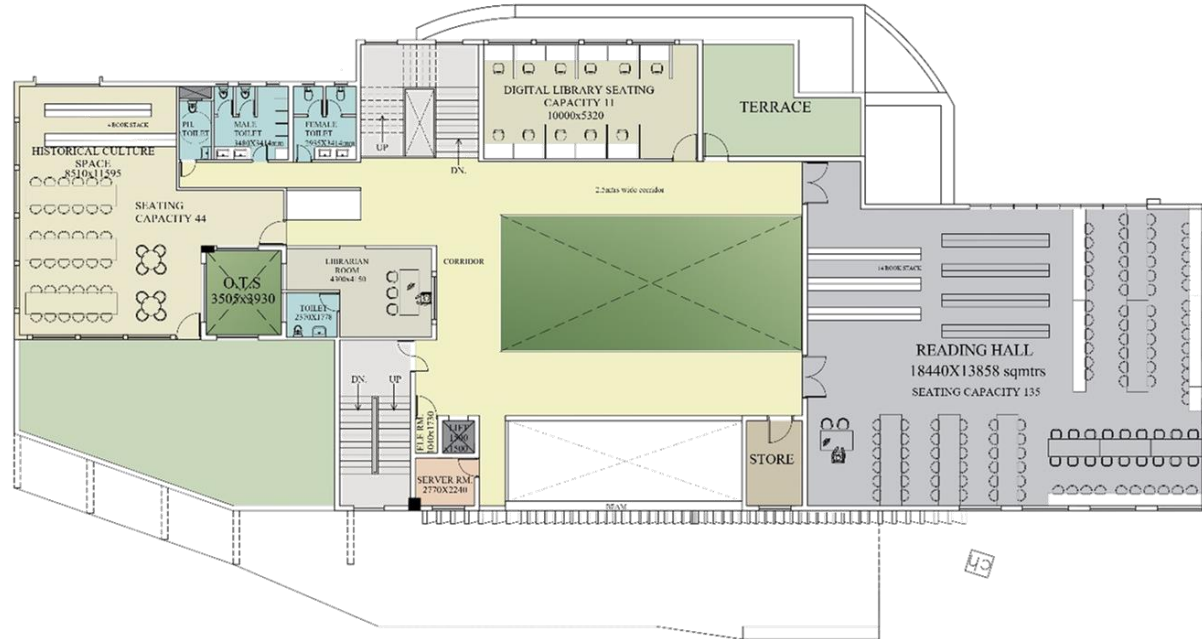
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- 1 RECEPTION AREA
- 2 FUTURE RECEPTION AND DISCUSSION ZONE
- 3 KID PLAY AREA
- 4 MAIN ENTRANCE OF REGIONAL PSYCHOLOGICAL CENTER

LEGEND



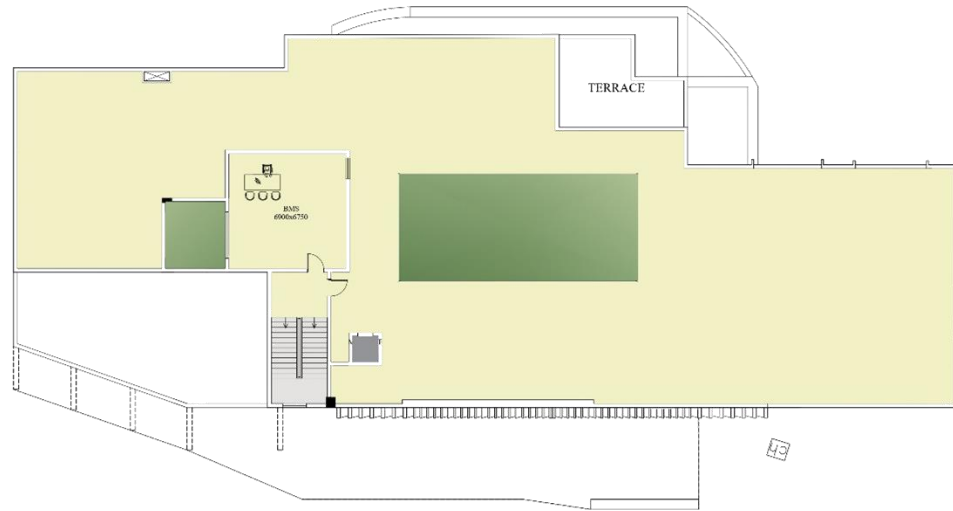
FLOOR PLANS



FIRST FLOOR PLAN



FLOOR PLANS



SECOND FLOOR PLAN



CONCEPTUAL 3D VIEW

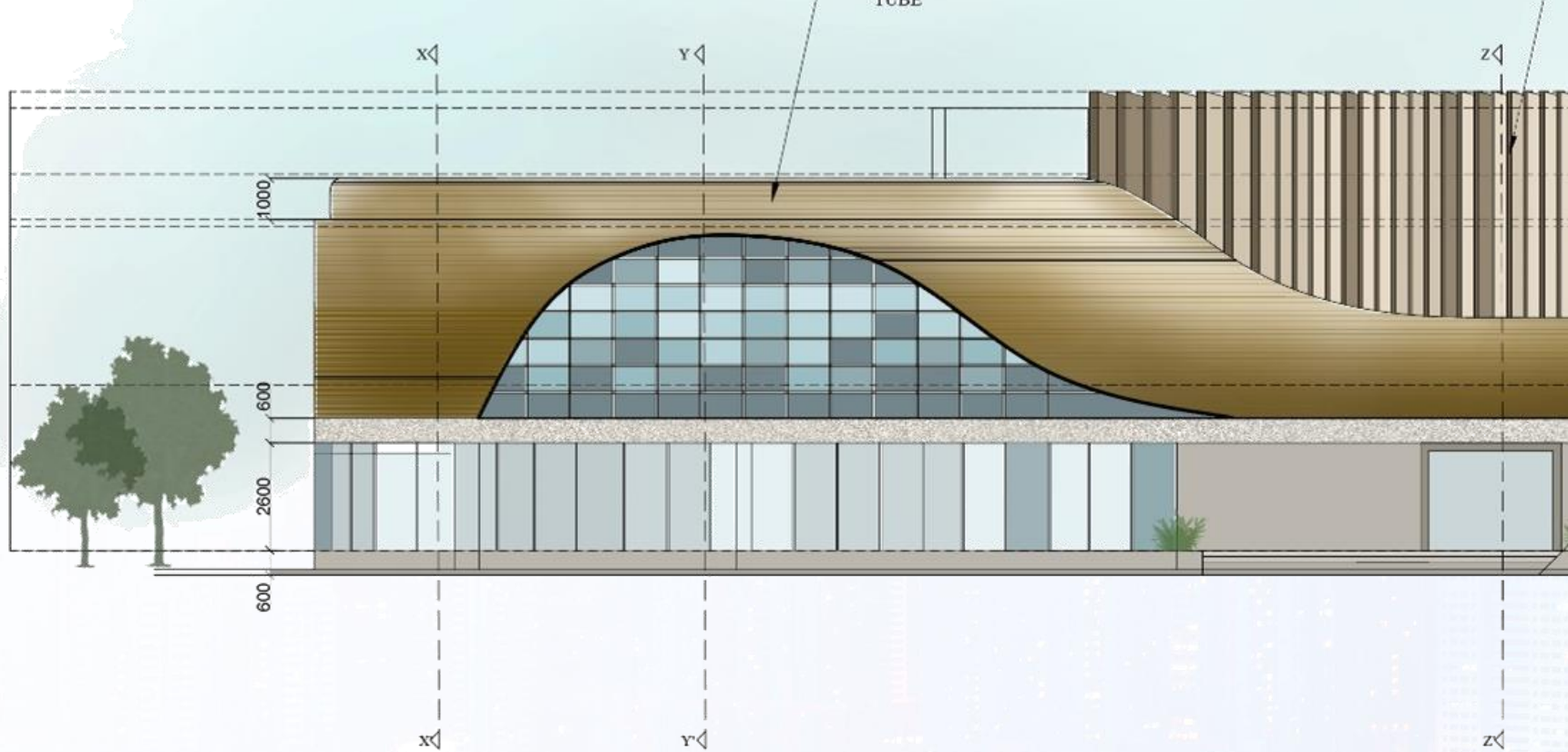


UNIVASTU BOOTES



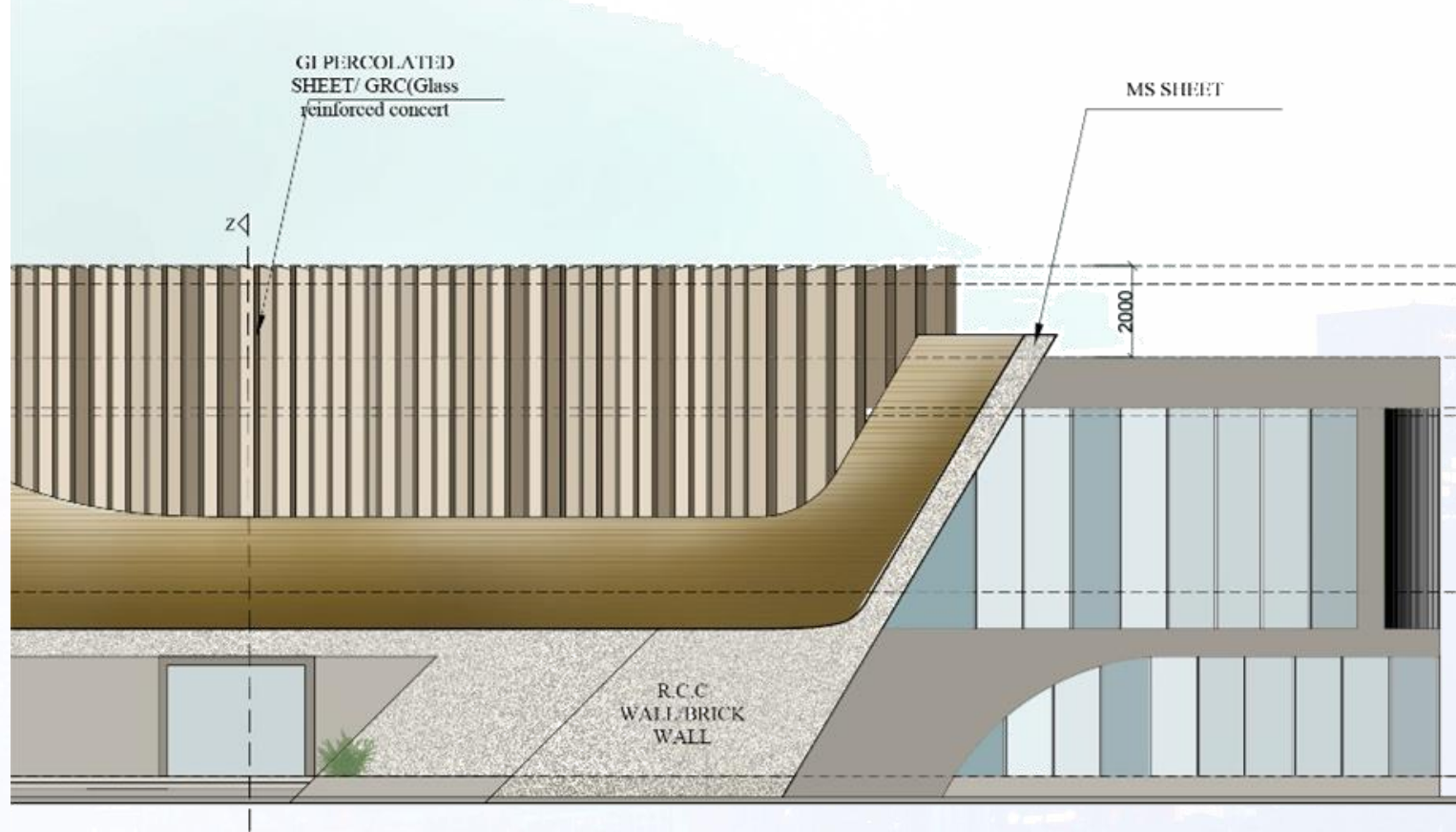
FRONT ELEVATION





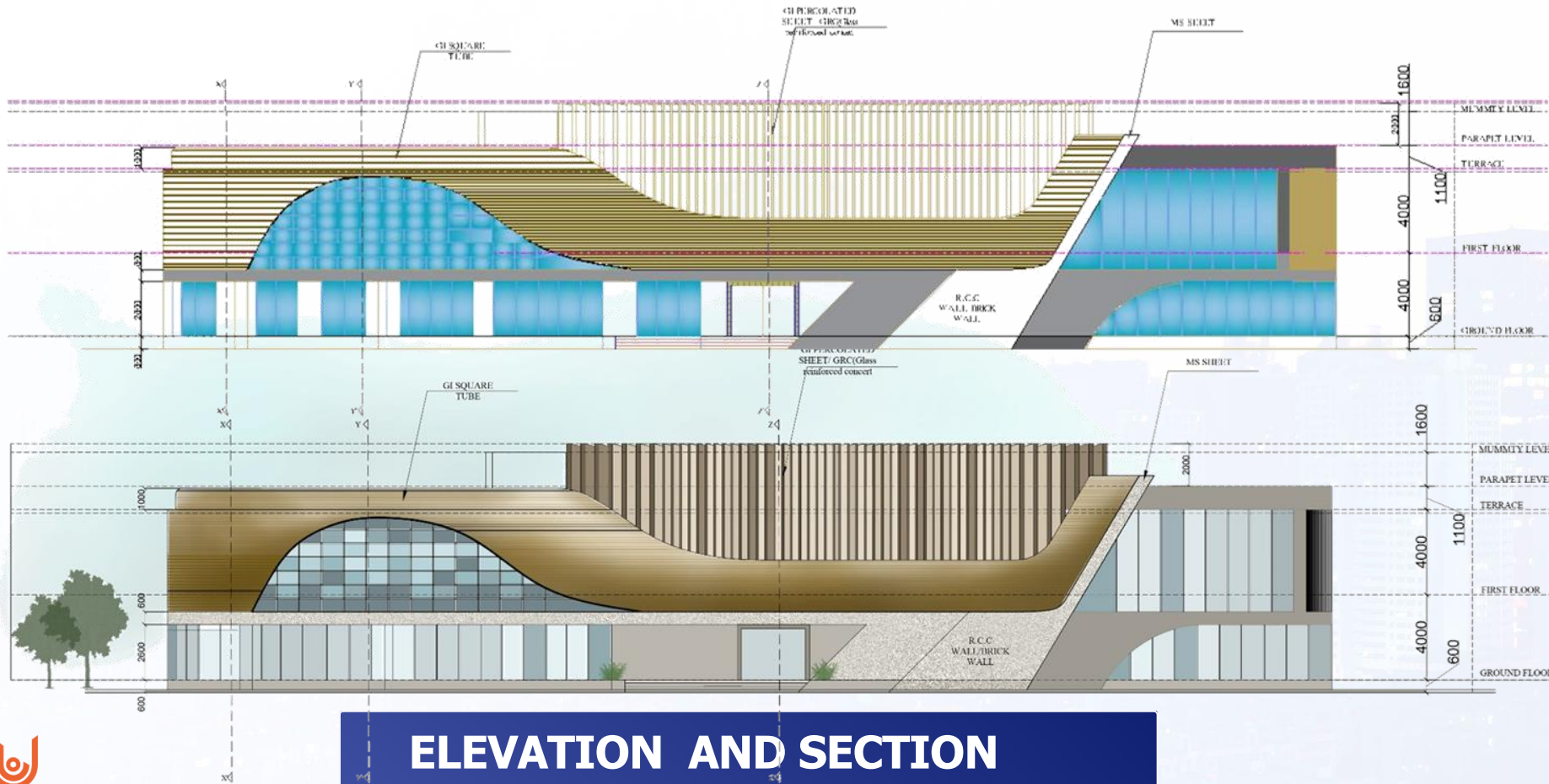
FRONT ELEVATION





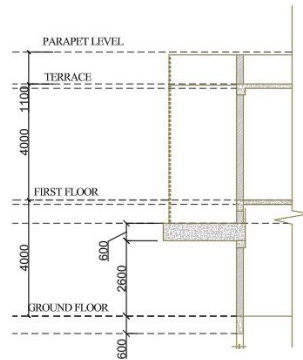
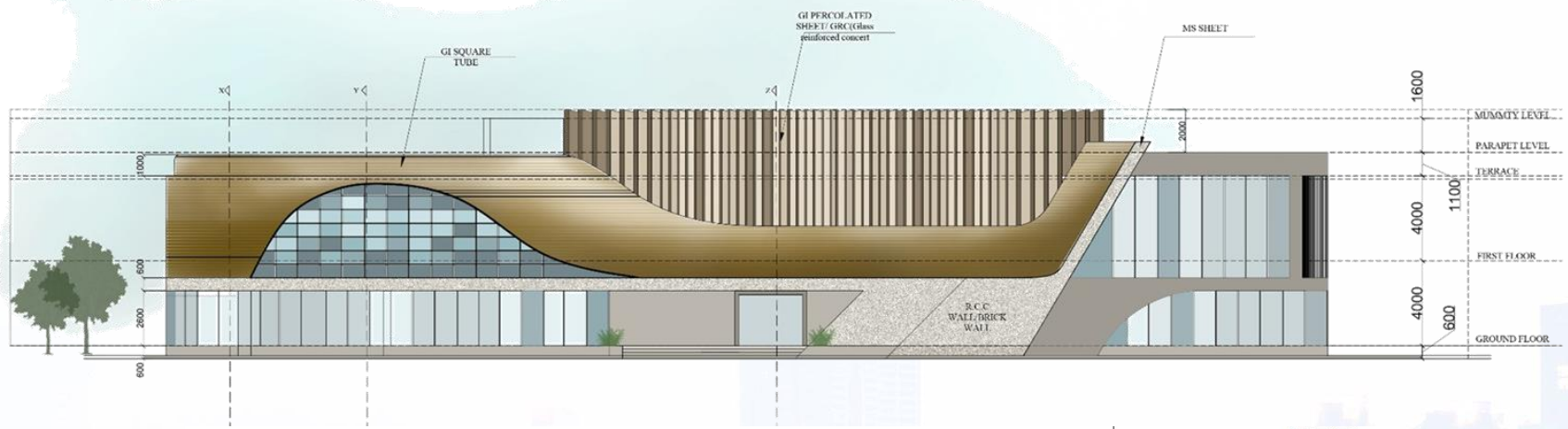
FRONT ELEVATION



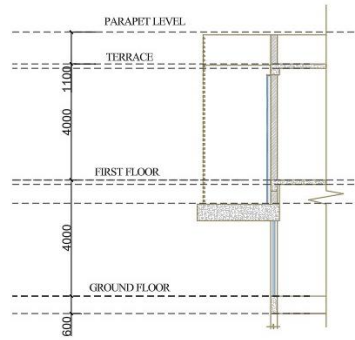


ELEVATION AND SECTION

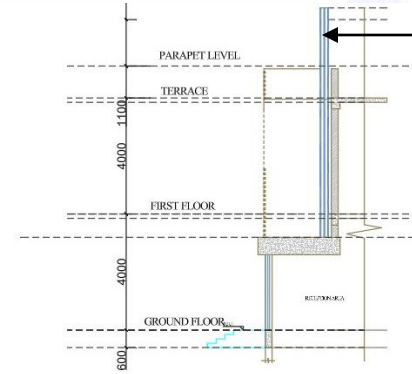




SECTION X-X'



SECTION Y-Y'

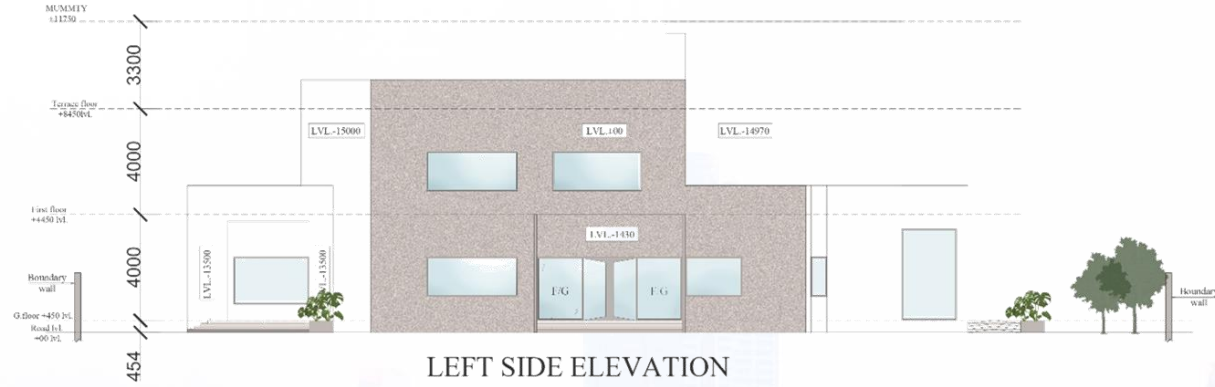


SECTION Z-Z'

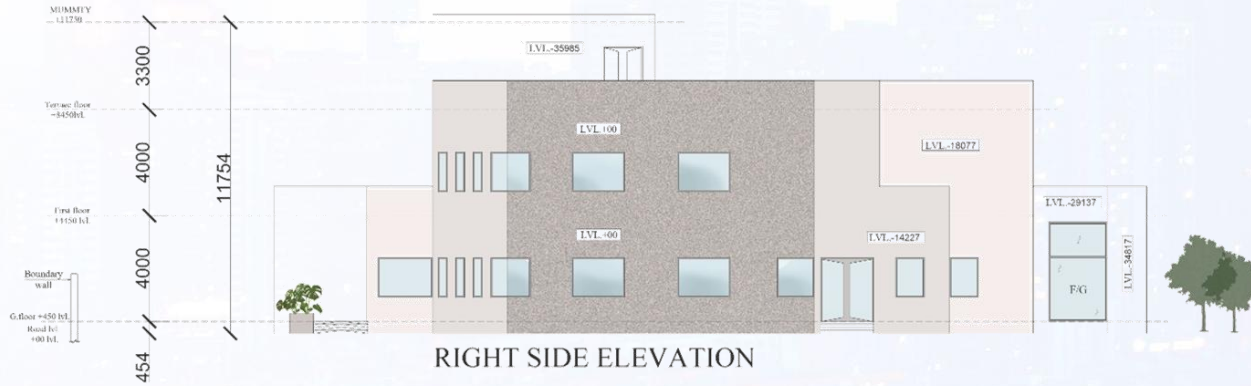
VERTICAL FINES

SECTION OF FRONT FACADE





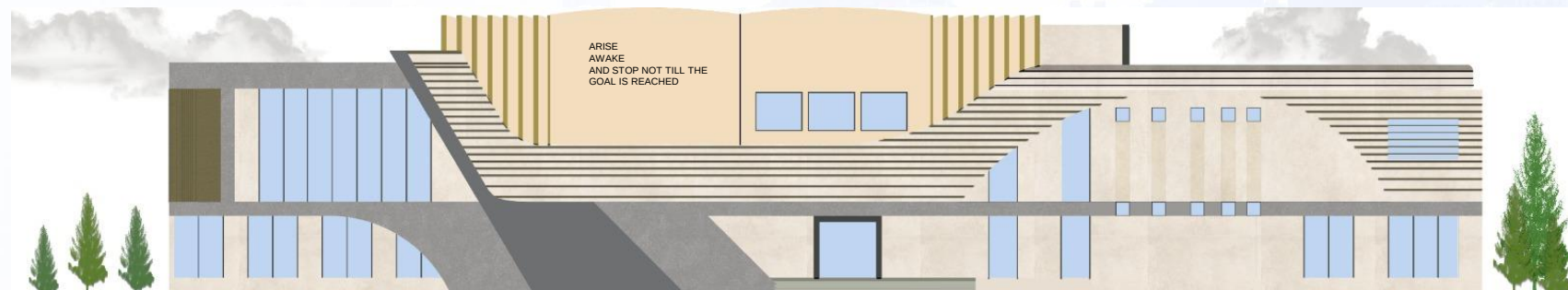
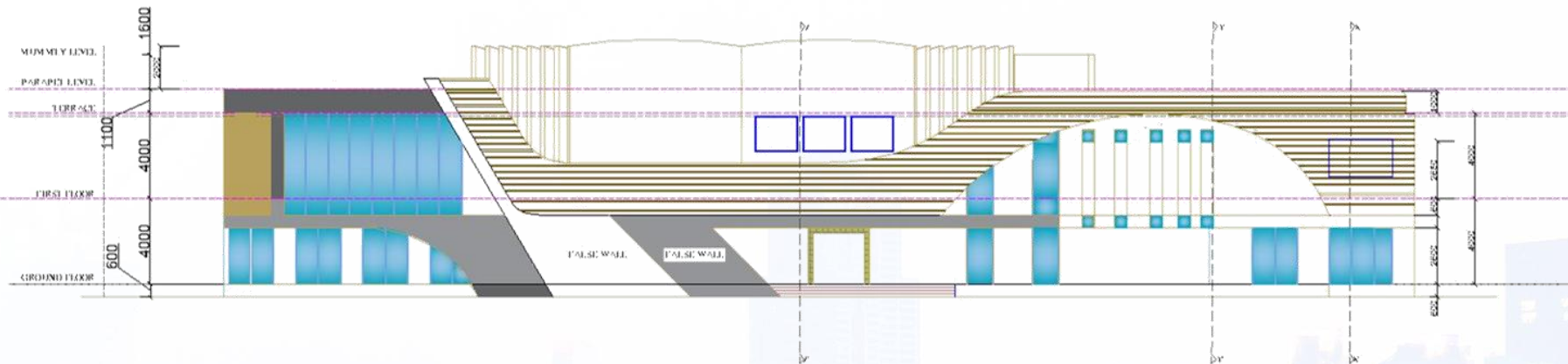
LEFT SIDE ELEVATION



RIGHT SIDE ELEVATION

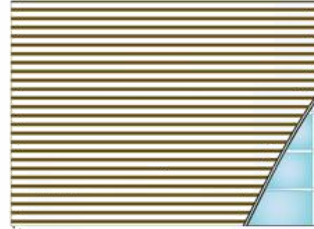
SIDE ELEVATION







GI SQUARE PIPE ON
THE FRONT FACADE



- Aesthetic Variety:** Adds **texture and depth** to the façade, breaking the monotony of glazing and solid panels.

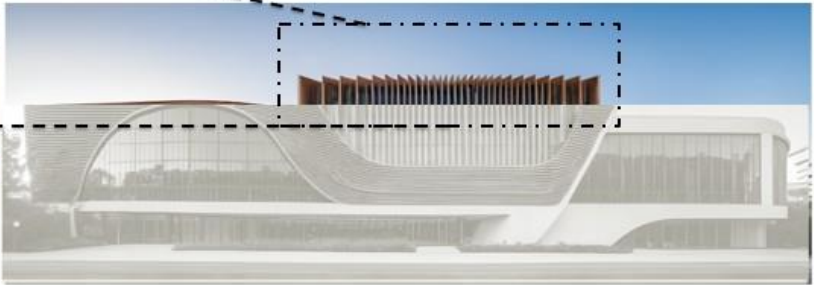
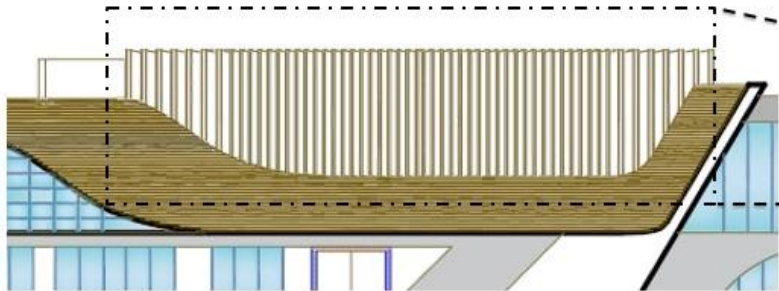
- Solar Control:** Functions like a **brise-soleil**, reducing direct sunlight and glare while maintaining transparency and air circulation.

- Modern Identity:** Gives the building a **contemporary, lightweight appearance**, contrasting the solid RCC and brickwork below.



These vertical fins are constructed using perforated or porous materials, strategically spaced along the building's facade. Their key functions in sound control include:

- Sound Diffusion:** The fins disrupt direct sound wave paths, scattering them to reduce noise intensity before it enters the interior.
- Partial Absorption:** Depending on the material (e.g., micro-perforated metal, acoustic fabric, or mesh), the fins can absorb portions of high-frequency noise.
- Barrier Effect:** The physical presence of the fins acts as a buffer layer, limiting direct line-of-sight noise intrusion from surrounding areas such as roads or open public spaces.
- Ventilation & Light Control:** Unlike solid walls, these fins allow air circulation and daylight to pass through while still offering acoustic benefits.



SEATING CAPACITY

VARANSI LIBRARY		
SEATING CAPACITY FOR SPACE		
SI NO.	SPACE	NO. OF PERSON
GROUND FLOOR		
BLOCK - A (LIBRARY)		
1	RECEPTION AREA	12
2	ADMIN	14
3	MULTIPURPOSE HALL	195
4	KIDS PLAY + TOY ZONE	16
5	COLLABORATIVE STUDY AND DISCUSSION AREA	43
6	CHIDRRREN READING ROOM	16
7	COURTYARD AND O.T.S	100
	TOTAL PERSON (BLOCK- A)	396
BLOCK - B (PSYCHOLOGICAL CENTRE)		
1	HALL - 01	30
2	HALL - 02	40
3	OFFICE - 01	12
4	OFFICE - 02	6
5	ENTRANCE LOBBY	8
	TOTAL PERSON (BLOCK - B)	96
FIRST FLOOR		
1	HISTORICAL CULTURE SPACES	44
2	READING HALL	135
3	DIGITAL LIBRARY	11
4	LIBRARIAN ROOM	6
	TOTAL PERSON	196
	TOTAL PERSON(BLOCK A + BLOCK B)	688
SECOND FLOOR		
1	BMS	



AREA STATEMENT

VARANSI LIBRARY AREA STATEMENT		
SI NO.	SPACE	CARPET AREA (SQM)
GROUND FLOOR BLOCK - A (LIBRARY)		
1	RECEPTION	74.06
2	ADMIN	34.48
3	MULTIPURPOSE HALL	210.86
4	KIDS PLAY + TOY ZONE	37.72
5	COLLABORATIVE AREA STUDY AND DISCUSSION AREA	54.5
6	CHILDREN READING	47.93
7	STAIRCASE - 01	25.9
8	STAIRCASE - 02	30.05
9	CLOAK ROOM	11.52
10	LIFT	2.25
11	ELECTRICAL ROOM	1.79
12	TOILET - MALE	11.96
13	TOILET - FEMALE	10.09
14	TOILET - PH	4.21
15	JANITOR ROOM	2.79
16	CORRIDOR	158.62
TOTAL CARPET AREA (BLOCK- A)		718.73
BLOCK - B (PSYCHOLOGICAL CENTRE)		
17	HALL - 01	43.6
18	HALL - 02	58.6
19	OFFICE - 01	15.51
20	OFFICE - 02	21.84
21	ENTRANCE LOBBY	55.35
TOTAL CARPET AREA (BLOCK - B)		194.9
TOTAL BUILT-UP AREA (BLOCK A + BLOCK B)		992.4

FIRST FLOOR PLAN		
1	HISTORICAL CULTURE SPACE	103.42
2	LIBRARIAN ROOM	22.84
3	STAIRCASE - 01	25.9
4	STAIRCASE - 02	30.05
5	DIGITAL LIBRARY SEATING	53.35
6	READING HALL	262.13
7	STORE	10.58
8	TOILET - MALE	11.96
9	TOILET - FEMALE	10.09
10	TOILET - PH	4.21
11	JANITOR ROOM	1.7
12	CORRIDOR	154.92
13	LIBRARIAN ROOM - TOILET	5.03
14	SERVER RM.	6.41
15	ELE RM.	1.7
16	TERRACE	127.39
TOTAL CARPET AREA		831.68
TOTAL BUILT-UP AREA		808.91
SECOND FLOOR PLAN		
1	BMS	70.89
1	STAIRCASE MUMTY AND MACHINE ROOM	44.5
2	SERVICE	72.89
GRAND TOTAL BUILT-UP AREA		1958.09





3D OVERVIEW



UNIVASTU BOOTES



3D OVERVIEW



UNIVASTU BOOTES



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3D OVERVIEW

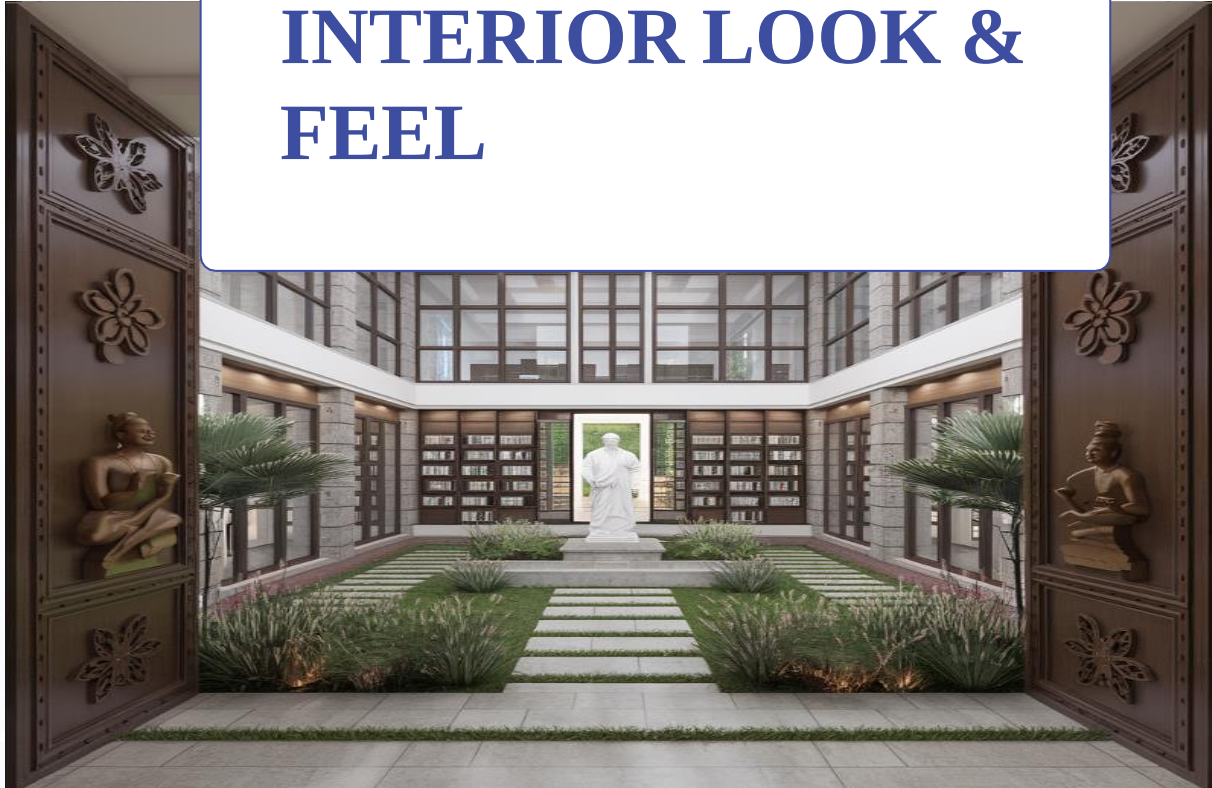


3D OVERVIEW



UNIVASTU BOOTES

INTERIOR LOOK & FEEL



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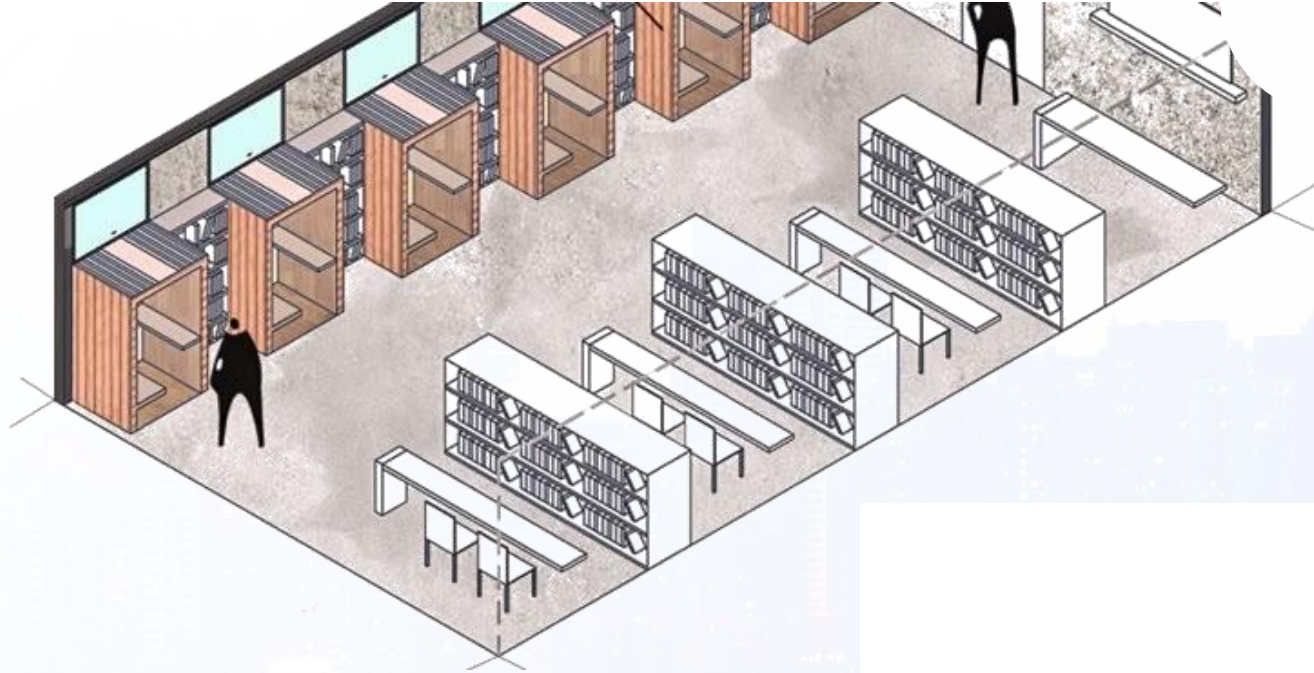
RECEPTION AND INFORMATION DESK





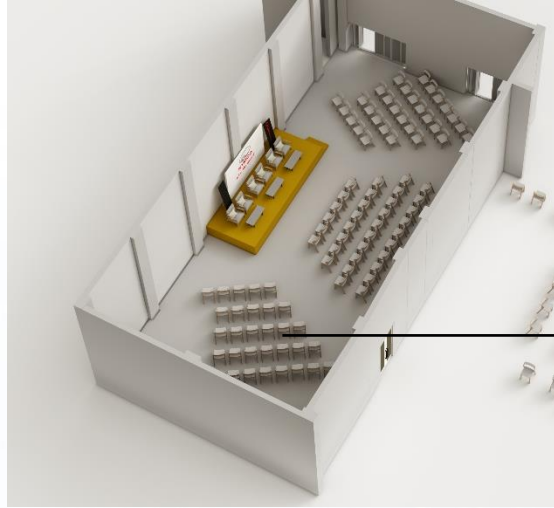
LIBRARY READING



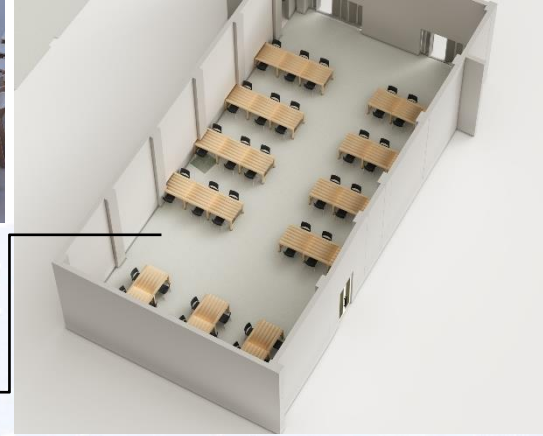
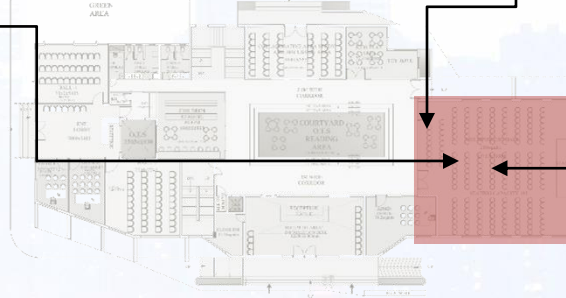


INTERIOR SPACE





SEMINAR HALL

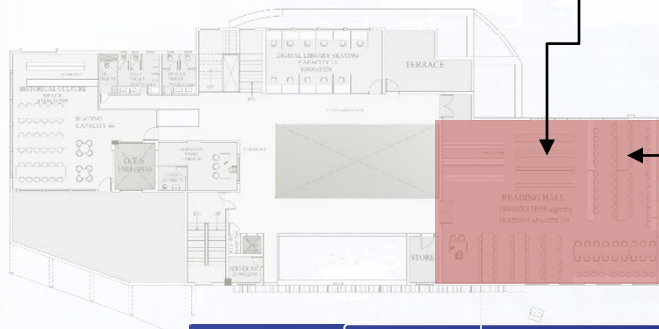
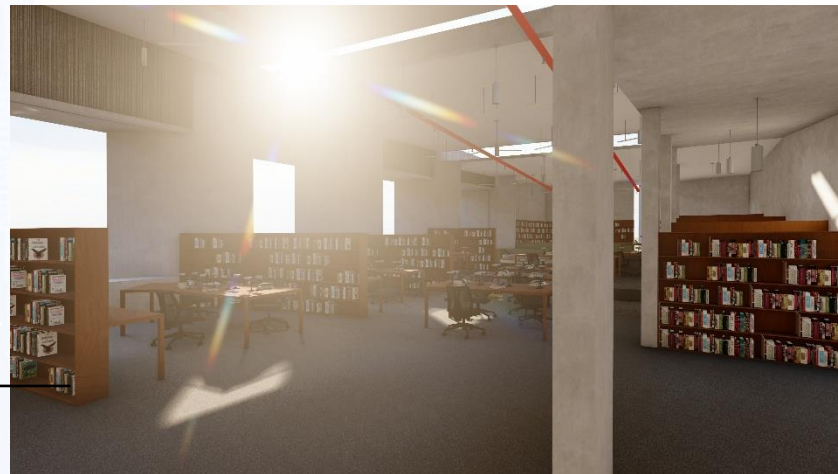


READING AREA

MUTI USE OF MUTIPURPOSE HALL

MULTIPURPOSE HALL





READING AREA





1. **MAIN READING ROOM CAPACITY OF BOOK RACK – 18000 BOOKS**

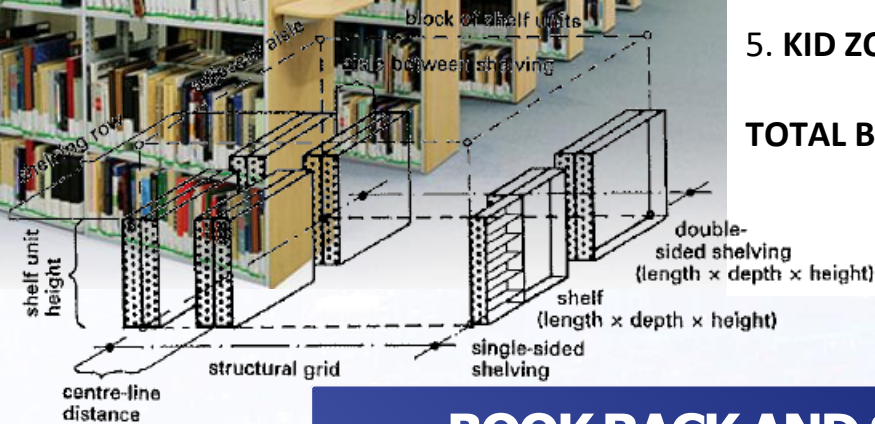
2. **DIGITAL LIBRARY – 2000 BOOKS**

3. **OTHER READING ROOM- 10,000 BOOK**

4. **HISTORICAL CULTURAL SECTION- 4000 BOOKS**

5. **KID ZONE – 800 BOOKS**

TOTAL BOOKS – 34800



BOOK RACK AND STORAGE



COMPARATIVE ANALYSIS

CONVENTIONAL BUILDING

Typically consumes more energy with lower efficiency.

Relies mainly on fossil fuels.

Generates high carbon emissions.

Uses conventional, high-carbon materials.

Basic insulation with thermal losses.

Standard usage with higher wastage.

Uses traditional, energy-intensive systems.

NET ZERO BUILDING

Highly energy-efficient with minimal consumption.

Powered by renewable sources like solar or wind.

Achieves net-zero or negative carbon output.

Uses recycled and low-embodied carbon materials.

Advanced insulation and airtight envelope.

Efficient systems with water reuse and harvesting.

Employs high-efficiency and passive HVAC systems.



COMPARATIVE ANALYSIS

CONVENTIONAL BUILDING

Uses conventional lighting with higher energy use.

Basic waste disposal with limited segregation.

May lack natural light and fresh air.

Lower initial construction cost.

Higher operational and maintenance costs.

Meets only basic code requirements.

Less adaptable to climate or energy shifts.

NET ZERO BUILDING

Utilizes LED and smart daylighting systems.

Promotes recycling and zero-waste strategies.

Designed for healthy indoor air and daylight access.

Higher upfront investment due to green features.

Lower lifecycle cost due to efficiency savings.

Exceeds codes and meets green building certifications.

Built for climate resilience and energy stability.





THANK YOU!

Pioneers in Net-Zero Infrastructure

Building a Sustainable, Aatmanirbhar Future

GURUGRAM | MUMBAI | CHANDIGARH | PUNE | JHANSI | PRAYAGRAJ | NOIDA | BHOPAL | STOCKHOLM | NEW YORK



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