UNIVASTU BOOTES

SUSTAINABLE LIBRARY

FOR VARANASI

Presented by: Univastu Bootes Impex Tech Ltd.

MISSION

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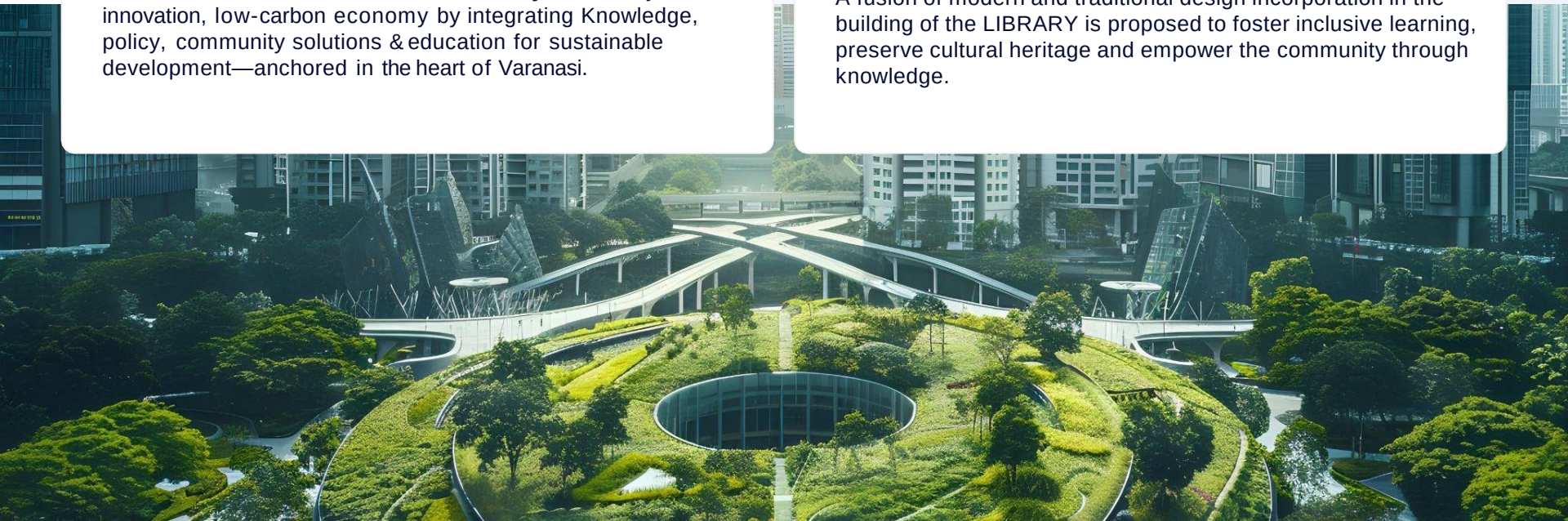
To create a world-class **Sustainable Library** that catalyzes innovation, low-carbon economy by integrating Knowledge, policy, community solutions & education for sustainable development—anchored in the heart of Varanasi.

VISION

NATION FIRST
राष्ट्र सर्वोपरि

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.

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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.

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SITE CONTEXT

A predominantly flat topography with minimal variation in levels.

Total Site Area 4128.35SQM

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

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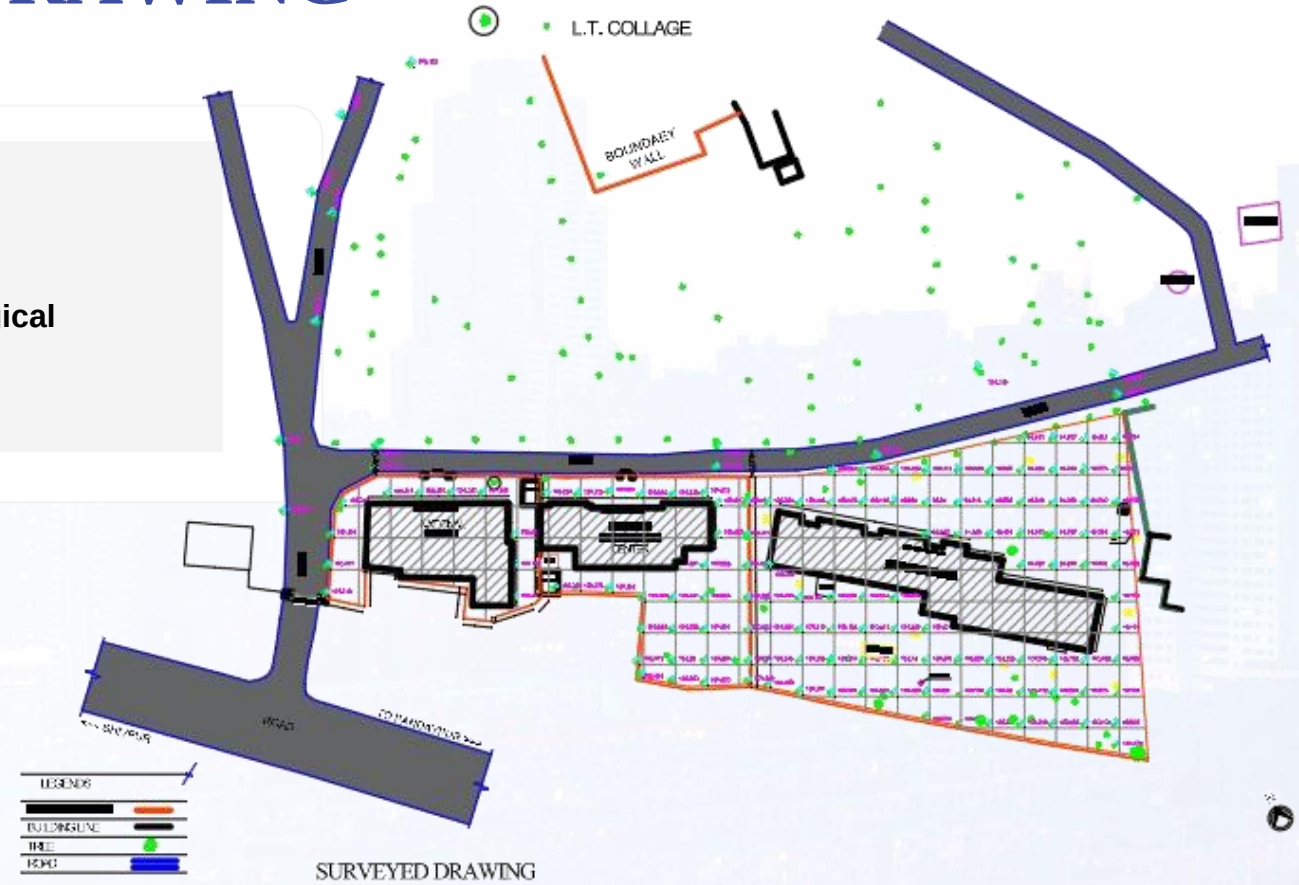
SURVEY DRAWING

Existing Building

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



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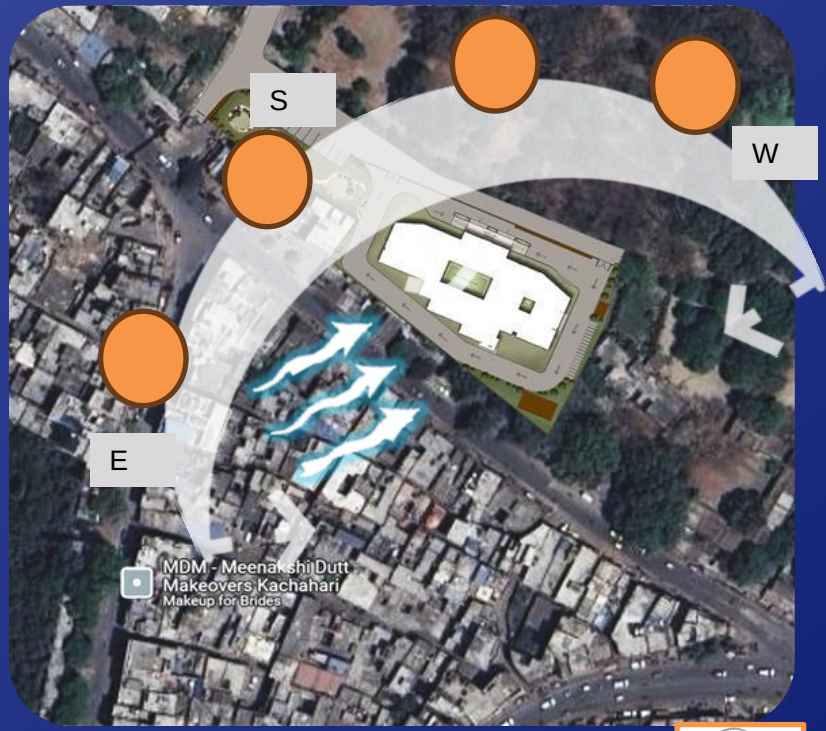
CLIMATIC ORIENTATION

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.



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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.

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"Designed in India, for Varanasi - with the wisdom of the past and the tools of tomorrow."

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

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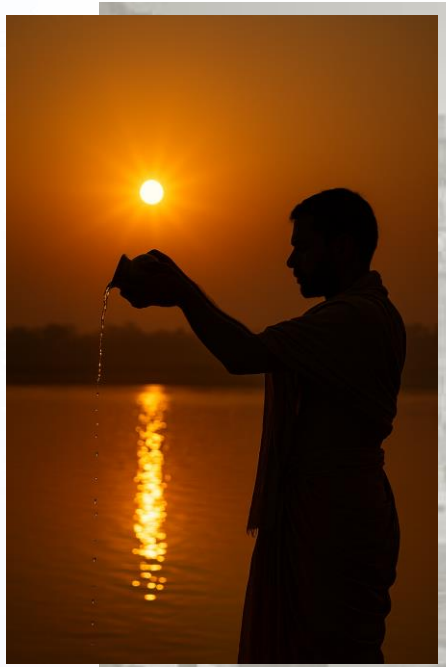
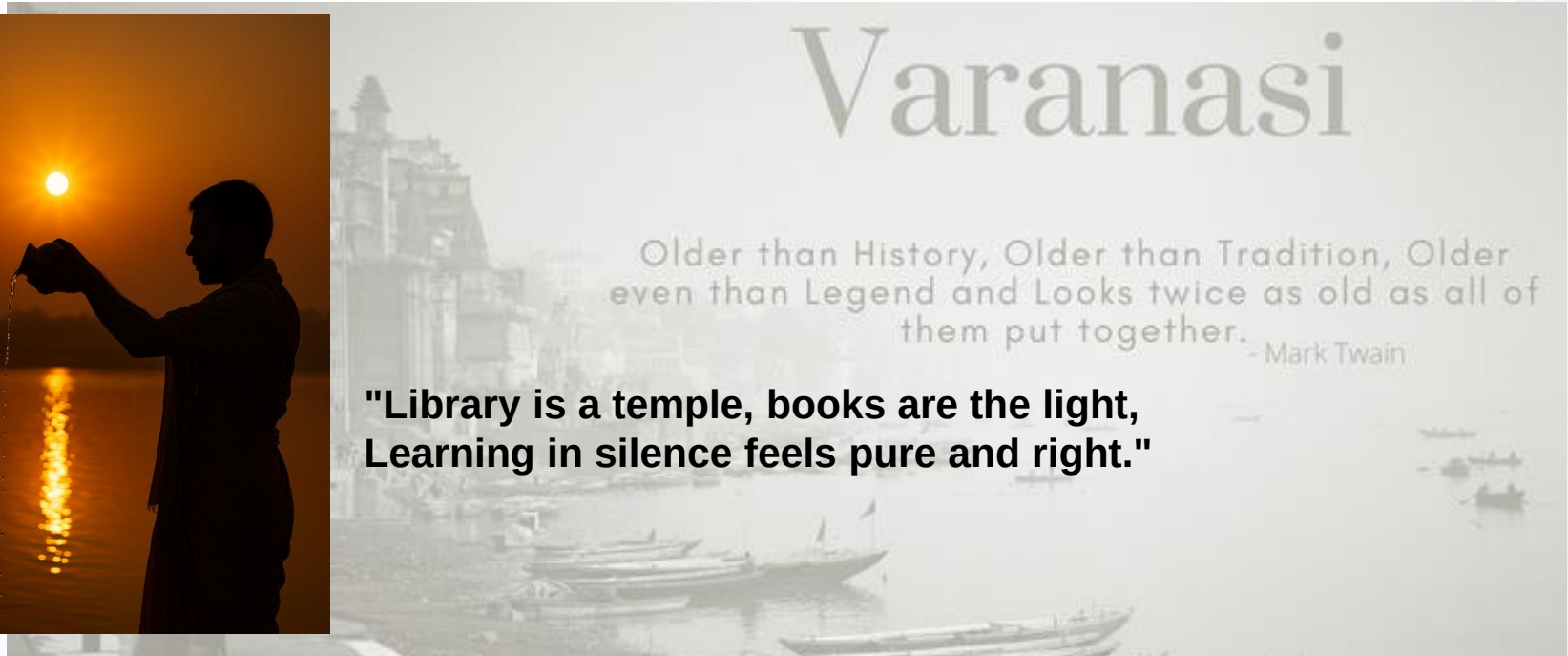
DESIGN CONCEPT

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.





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

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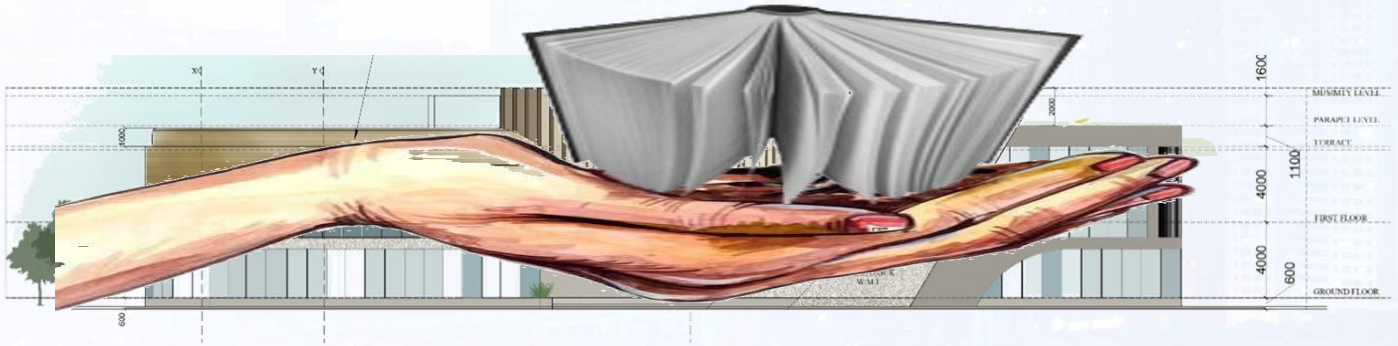
DESIGN CONCEPT

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.

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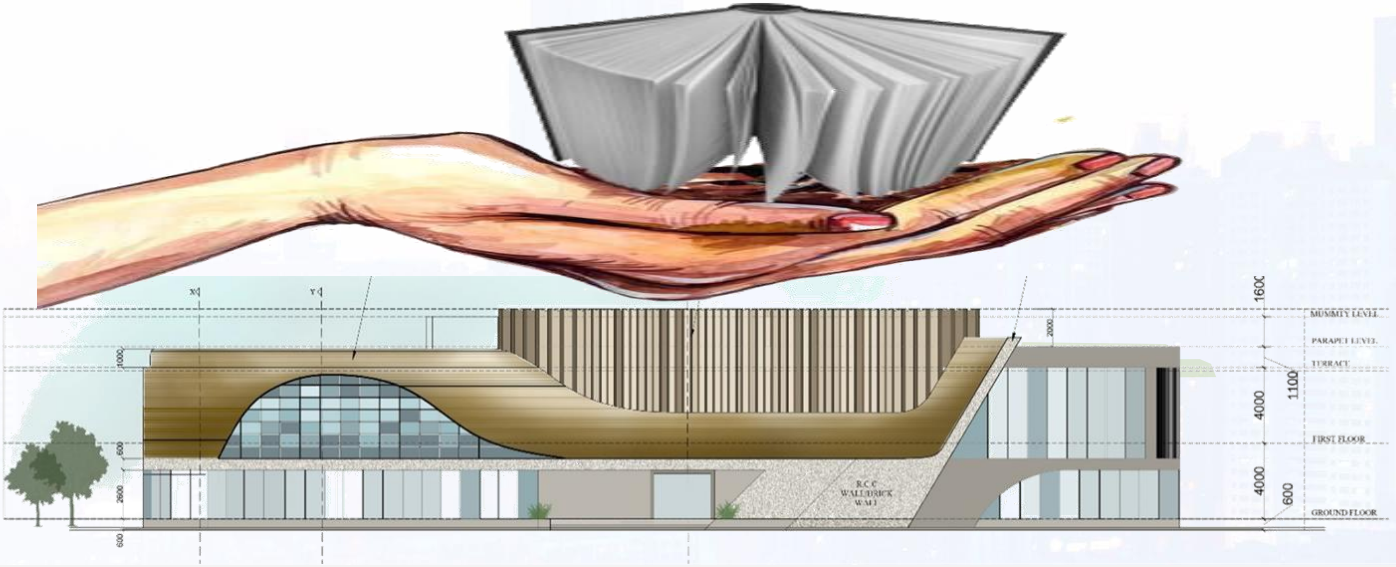
DESIGN CONCEPT



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

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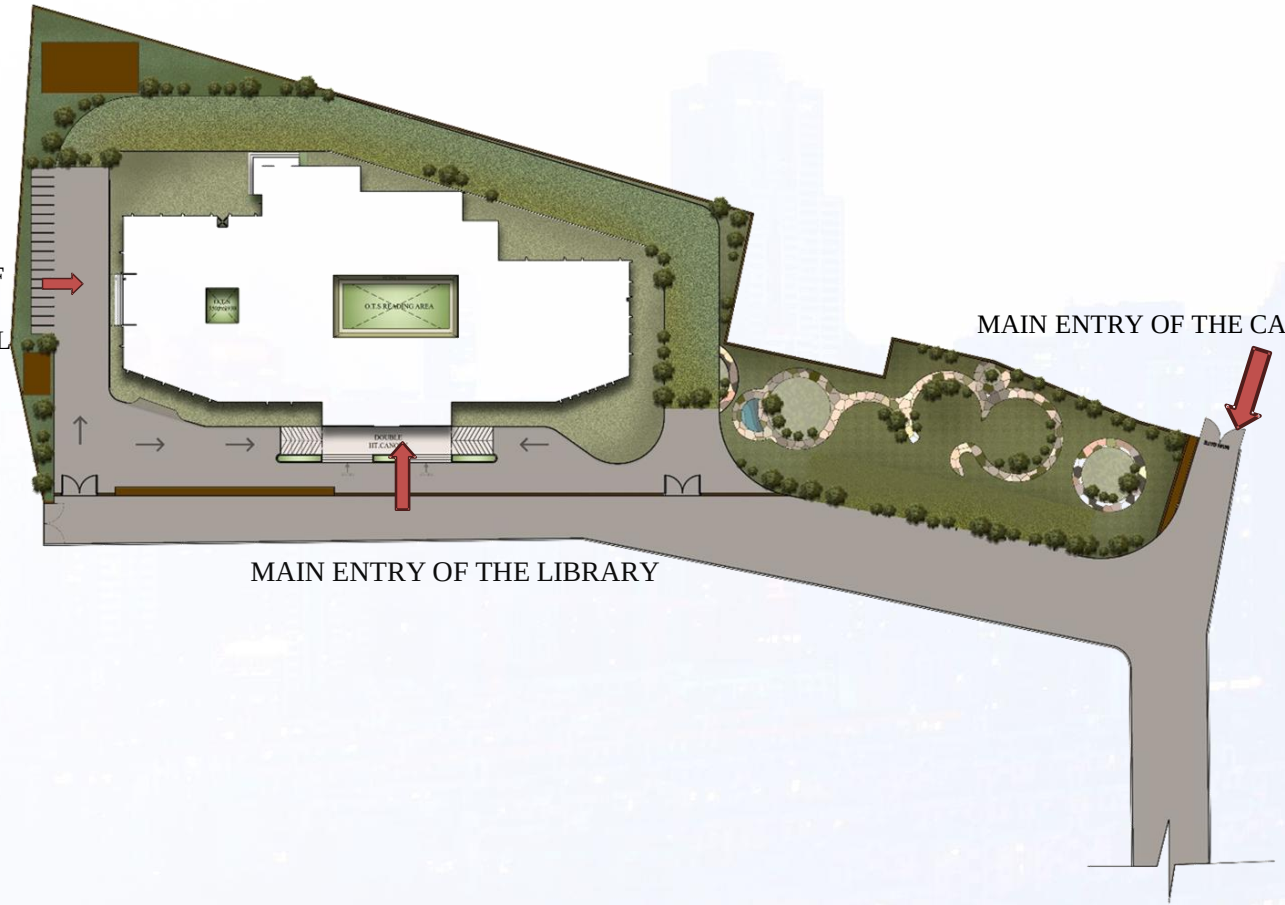
SITE PLAN



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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

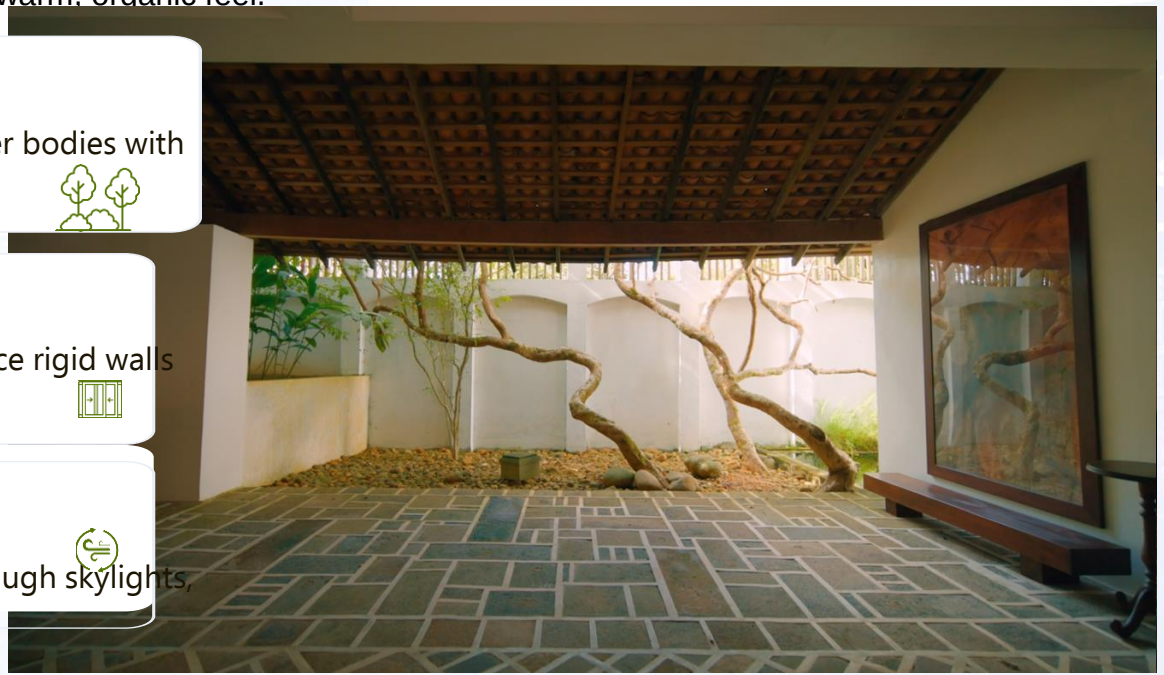
Seamless connection to gardens or water bodies with natural airflow.

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.



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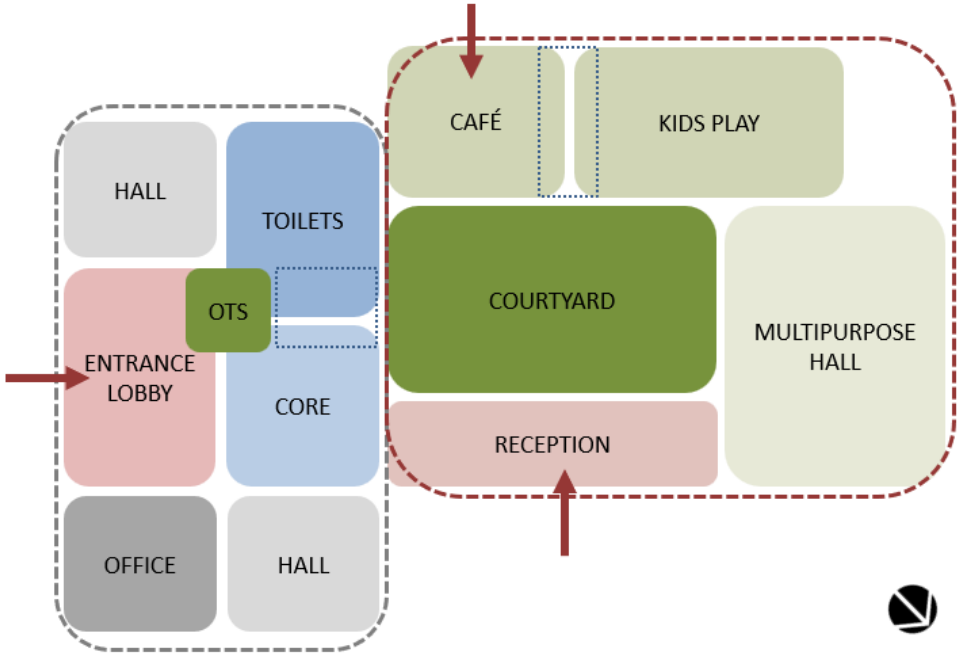
ZONING



INTERNAL SPATIAL ZONING

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AREA STATEMENT

Total Built up Area – 1709.2 sqm
Ground Coverage - 966 sqm

GROUND FLOOR

951.7m2

FIRST FLOOR

713.0m2

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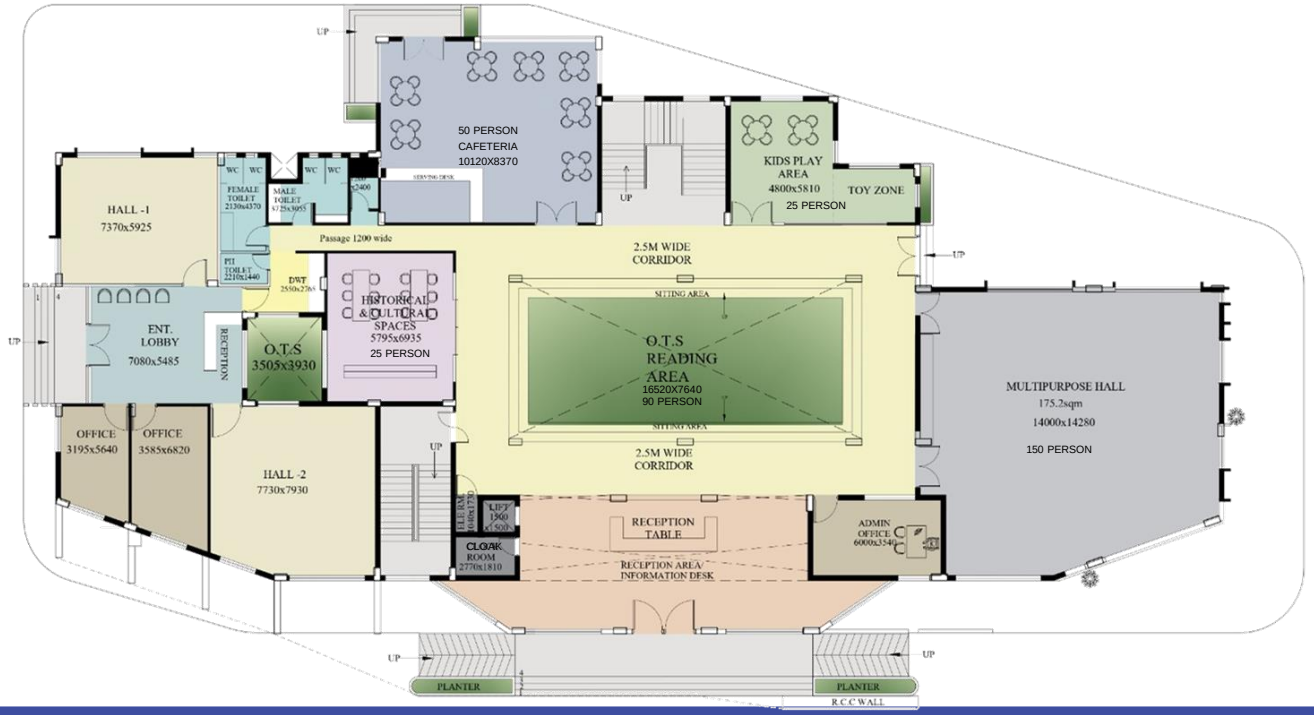
FLOOR PLANS



GROUND FLOOR

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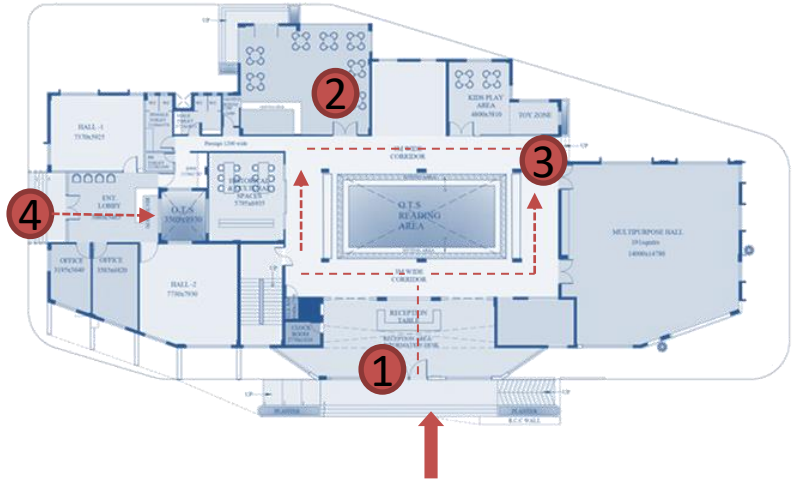
FLOOR PLANS - CIRCULATION



GROUND FLOOR

Circulation

Core

1 RECEPTION AREA

2 CAFETERIA

3 KID PLAY AREA

4 MAIN ENTRANCE OF REGIONAL PHYCHOLOGICAL CENTER

LEGEND

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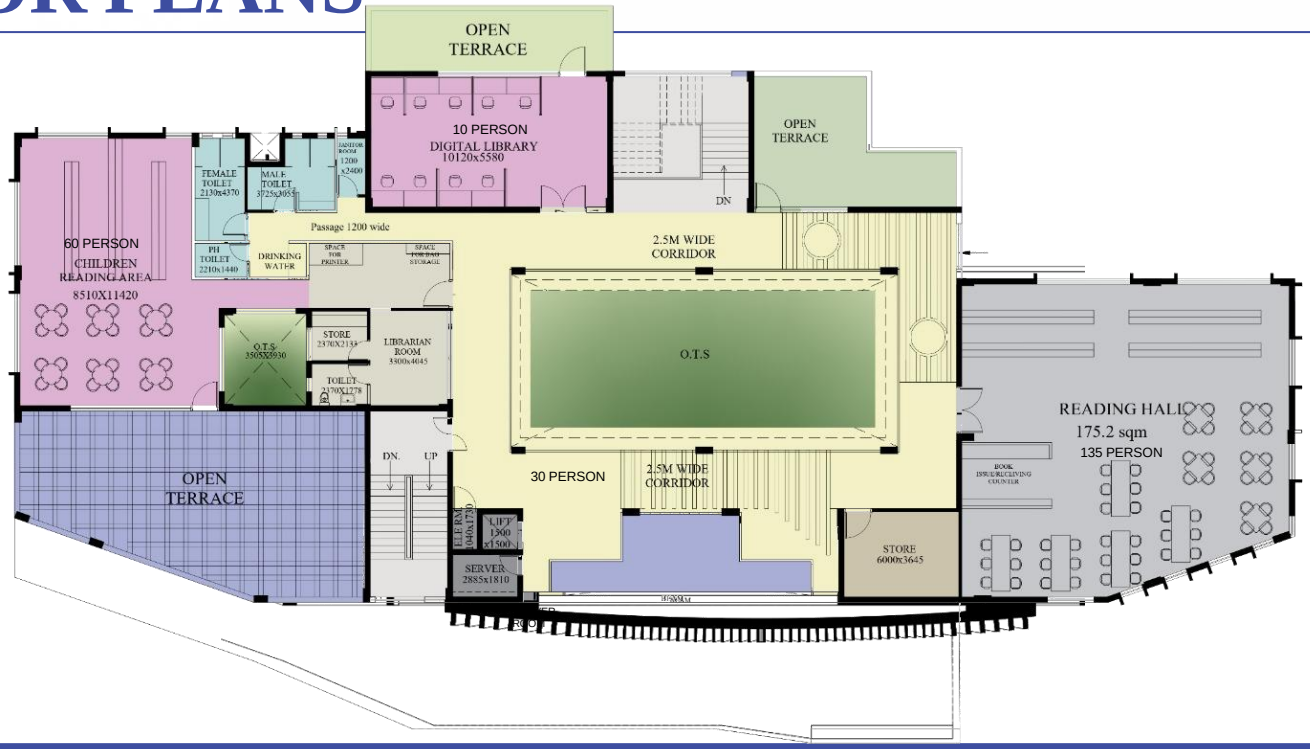
FLOOR PLANS



FIRST FLOOR

CONCEPTUAL 3D VIEW

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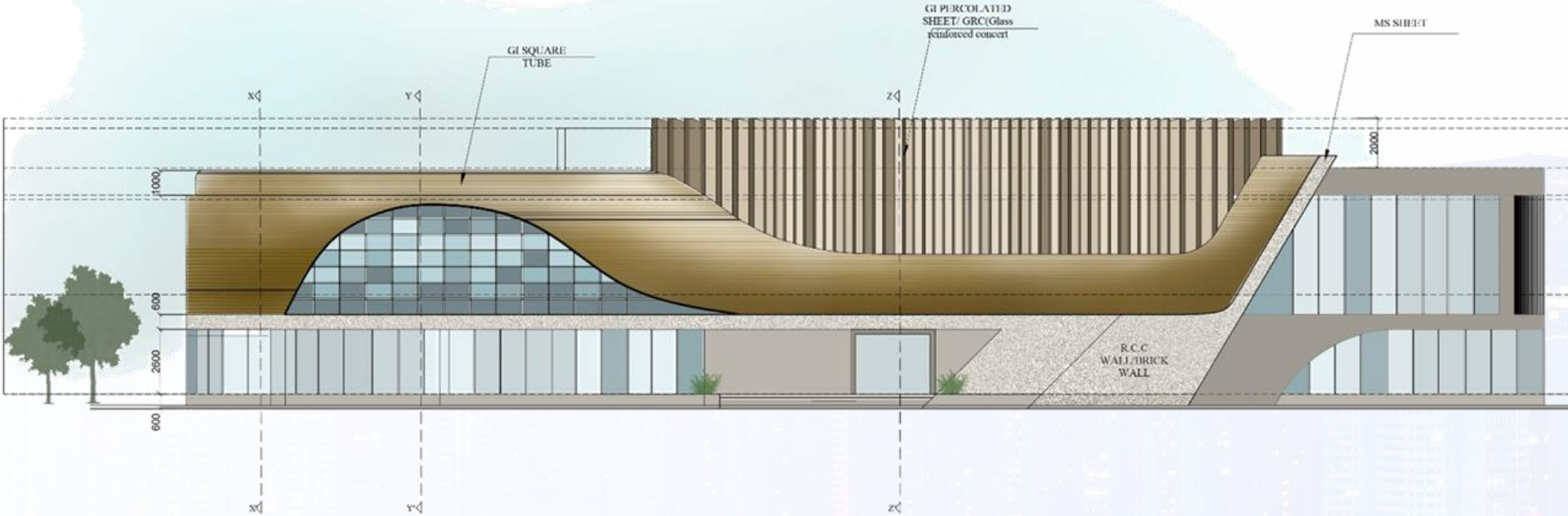
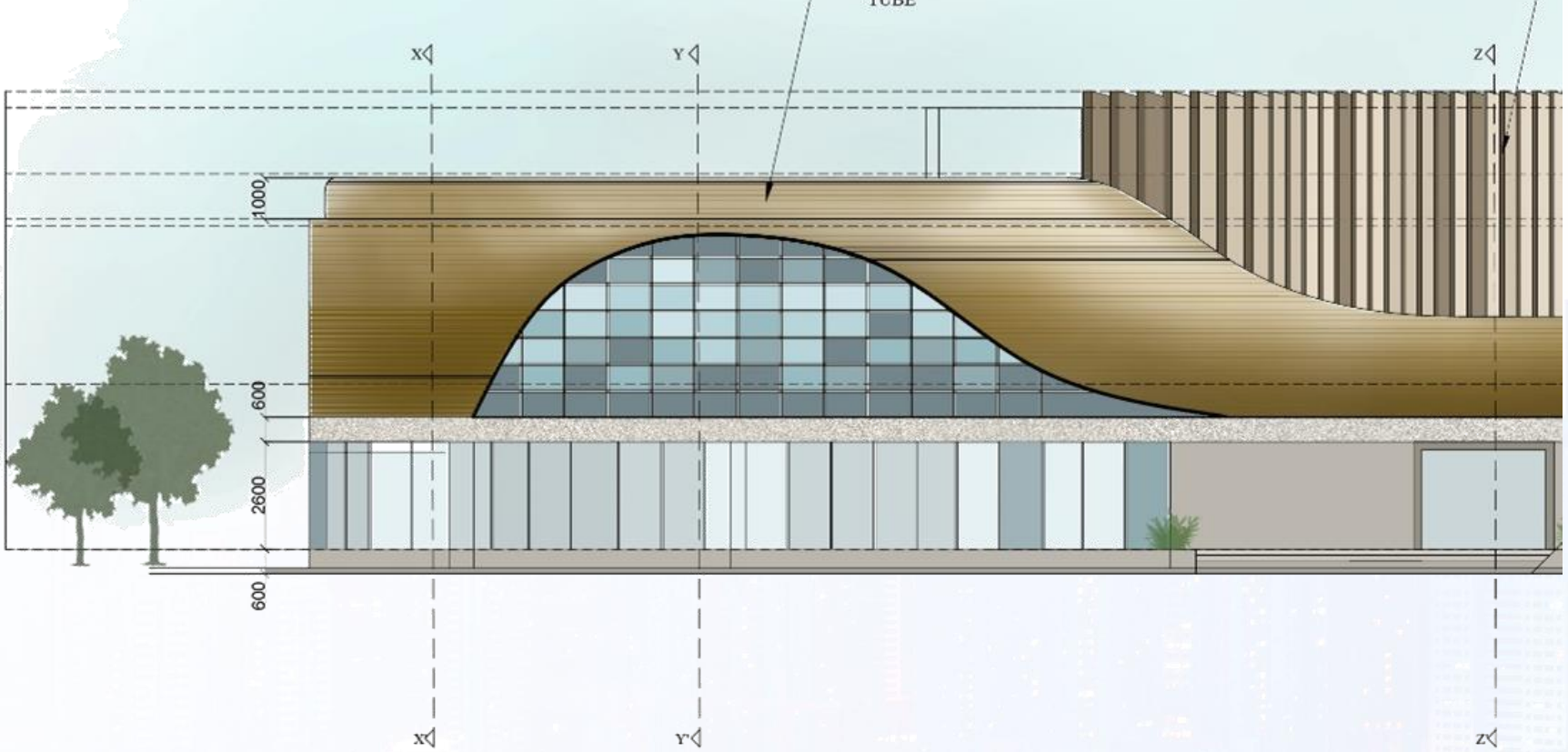


FRONT ELEVATION

UNIVASTU BOOTES

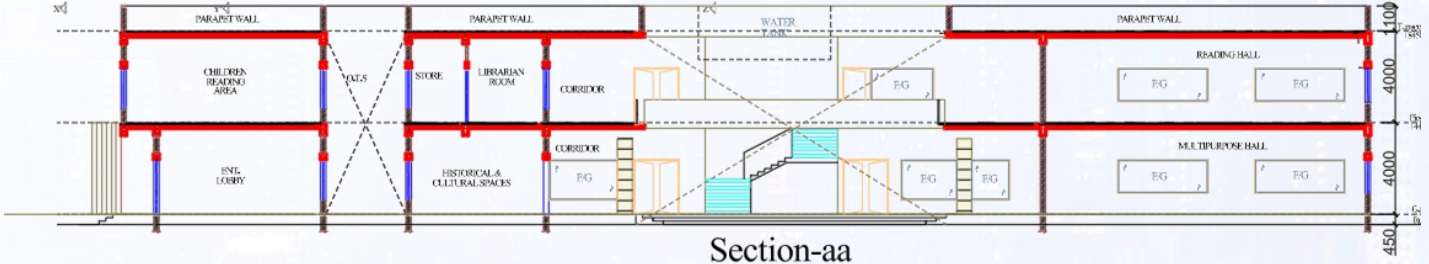


FRONT ELEVATION

UNIVASTU BOOTES

FRONT ELEVATION

UNIVASTU BOOTES



Section-aa

ELEVATION AND SECTION

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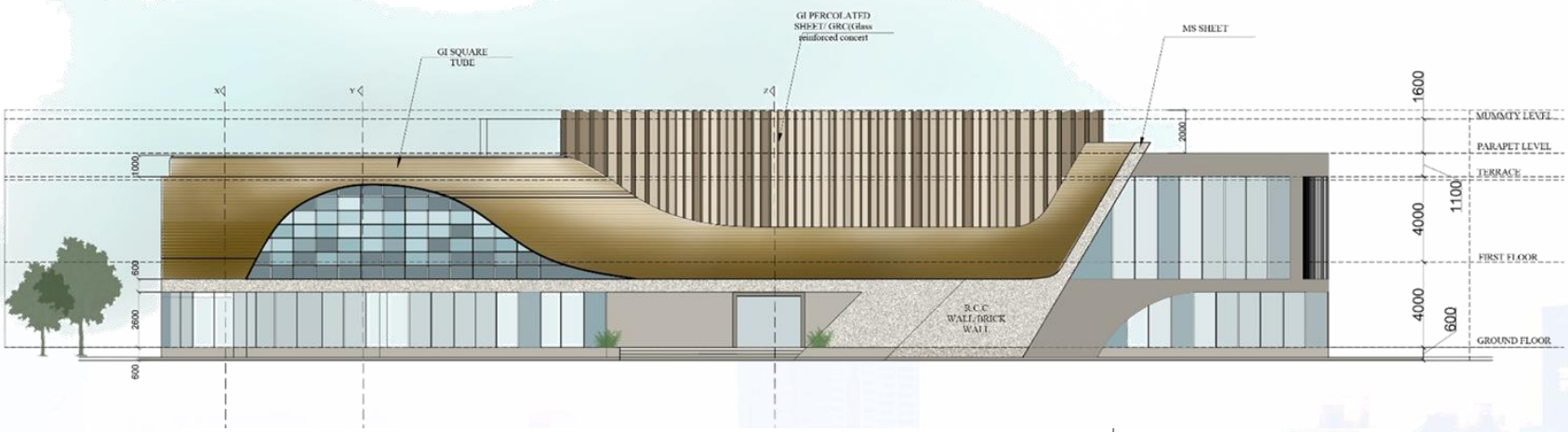
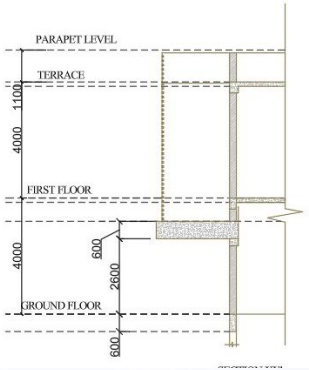
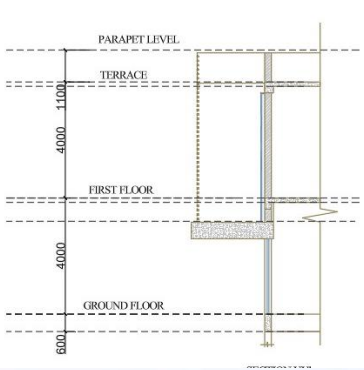
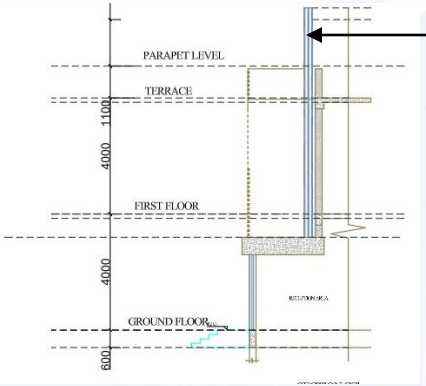




SECTION X-X'



SECTION Y-Y'



SECTION Z-Z'

SECTION OF FRONT FACADE

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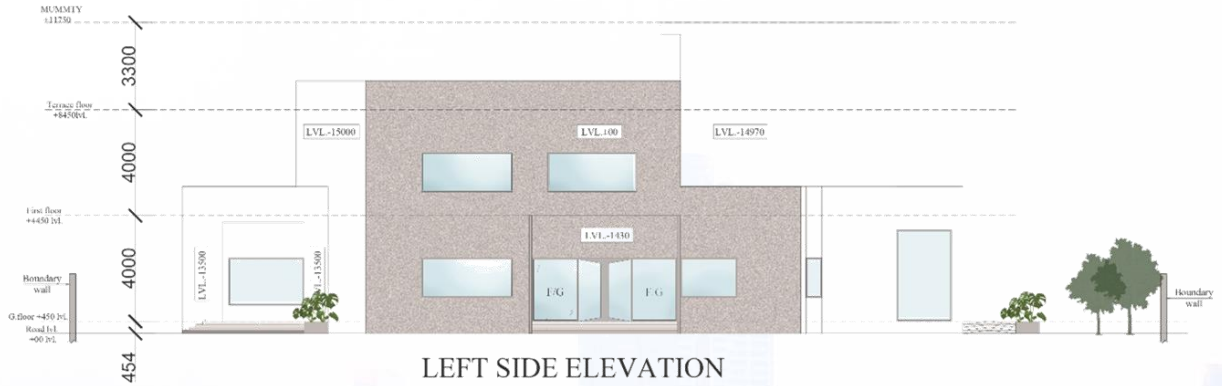

LEFT SIDE ELEVATION

RIGHT SIDE ELEVATION

SIDE ELEVATION

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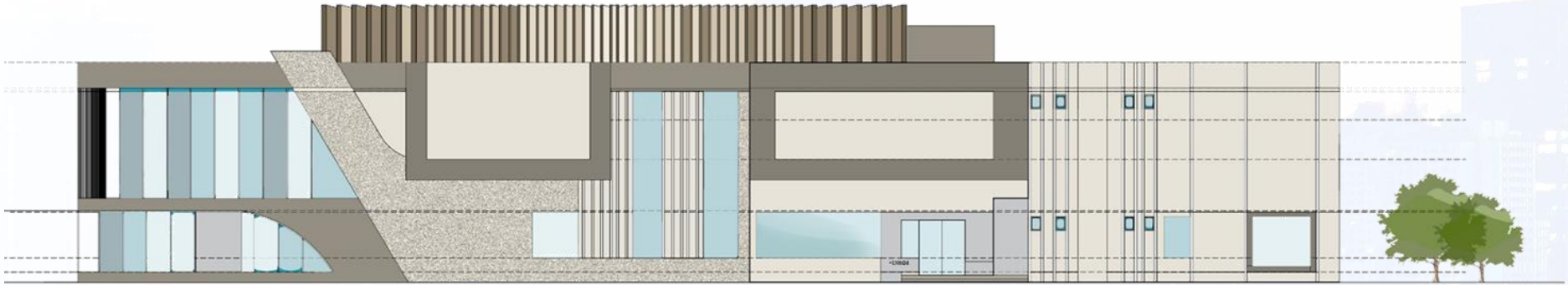

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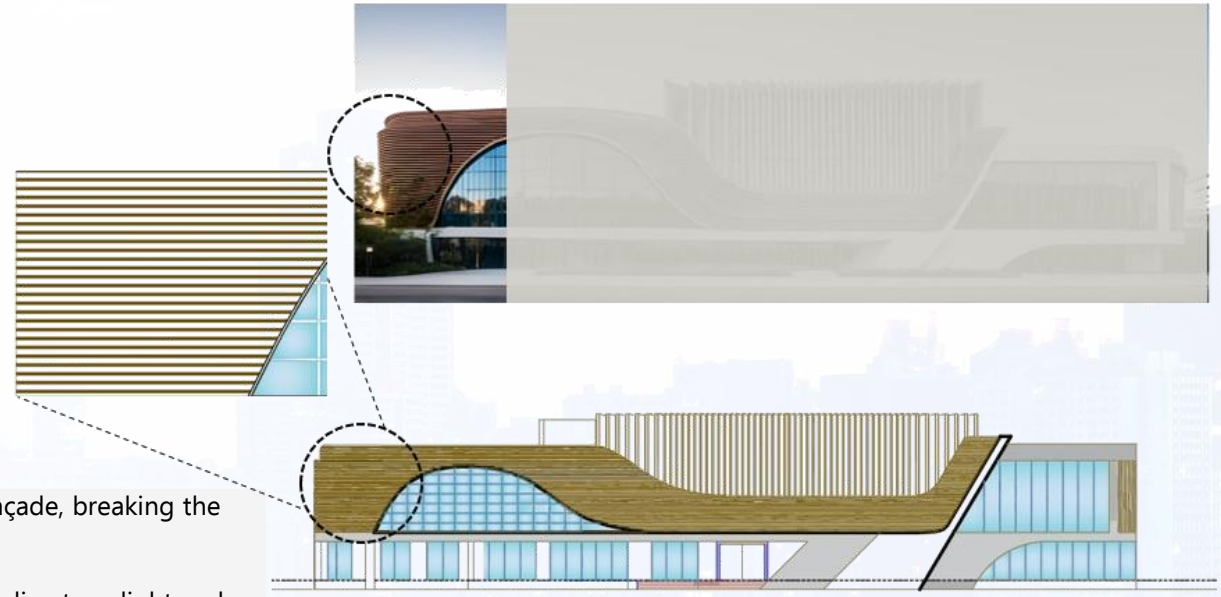
REAR ELEVATION

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.

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MATERIAL OF THE FACADE

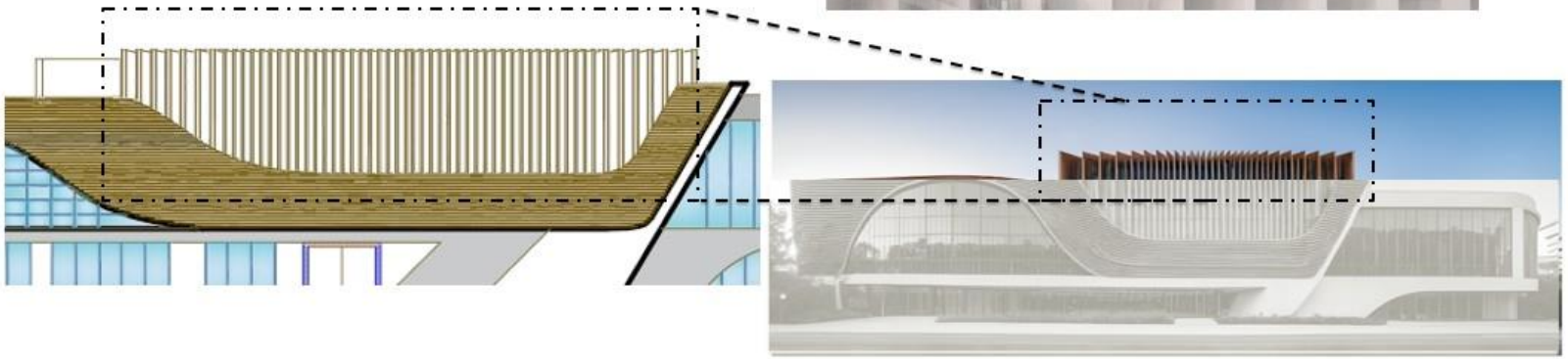
These vertical fins are constructed using perforated or porous materials, strategically spaced along the building's facade. Their key functions in sound control include:

•**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.



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EXTERIOR FAÇADE MATERIAL

AREA STATEMENT

VARANASI LIBRARY

AREA STATEMENT

SI NO.	SPACE	CARPET AREA (SQM)
	GROUND FLOOR	
	BLOCK - A (LIBRARY)	
1	RECEPTION	95
2	ADMIN	21.5
3	MULTIPURPOSE HALL	175.2
4	KIDS PLAY + TOY ZONE	37.2
5	CAFETERIA	85
6	HISTORICAL & CULTURAL SPACE	41.2
7	STAIRCASE - 01	26.1
8	STAIRCASE - 02	59.8
9	CLOAK ROOM	5
10	LIFT	2.25
11	ELECTRICAL ROOM	1.79
12	TOILET - MALE	9.4
13	TOILET - FEMALE	9.3
14	TOILET - PH	3.1
15	JANITOR ROOM	3.1
16	CORRIDOR	153.82
	TOTAL CARPET AREA (BLOCK- A)	728.76
	BLOCK - B (PSYCHOLOGICAL CENTRE)	
17	HALL - 01	43.6
18	HALL - 02	59.6
19	OFFICE - 01	15.7
20	OFFICE - 02	22.1
21	ENTRANCE LOBBY	38.7
	TOTAL CARPET AREA (BLOCK - B)	179.7
	TOTAL BUILT-UP AREA (BLOCK A + BLOCK B)	951.7

	FIRST FLOOR	
23	CHILDREN READING ROOM	35.7
24	READING HALL	175.2
25	STORE	17.8
26	DIGITAL LIBRARY	56.4
27	LIBRARIAN ROOM	13.3
28	LIBRARIAN ROOM - STORE	5
29	LIBRARIAN ROOM - TOILET	4.4
30	TOILET - MALE	9.4
31	TOILET - FEMALE	9.3
32	TOILET - PH	3.1
33	JANITOR ROOM	3.1
34	CORRIDOR	175.12
	TOTAL CARPET AREA	507.82
	TOTAL BUILT-UP AREA (BLOCK A + BLOCK B)	713
	MUMTY	
35	STAIRCASE MUMTY AND MACHINE ROOM	44.5
	TOTAL BUILT-UP AREA (MUMTY)	44.5
	GRAND TOTAL CARPET AREA	1416.28
	GRAND TOTAL BUILT-UP AREA	1709.2

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3D OVERVIEW

3D OVERVIEW

UNIVASTU BOOTES

3D OVERVIEW

UNIVASTU BOOTES

3D OVERVIEW

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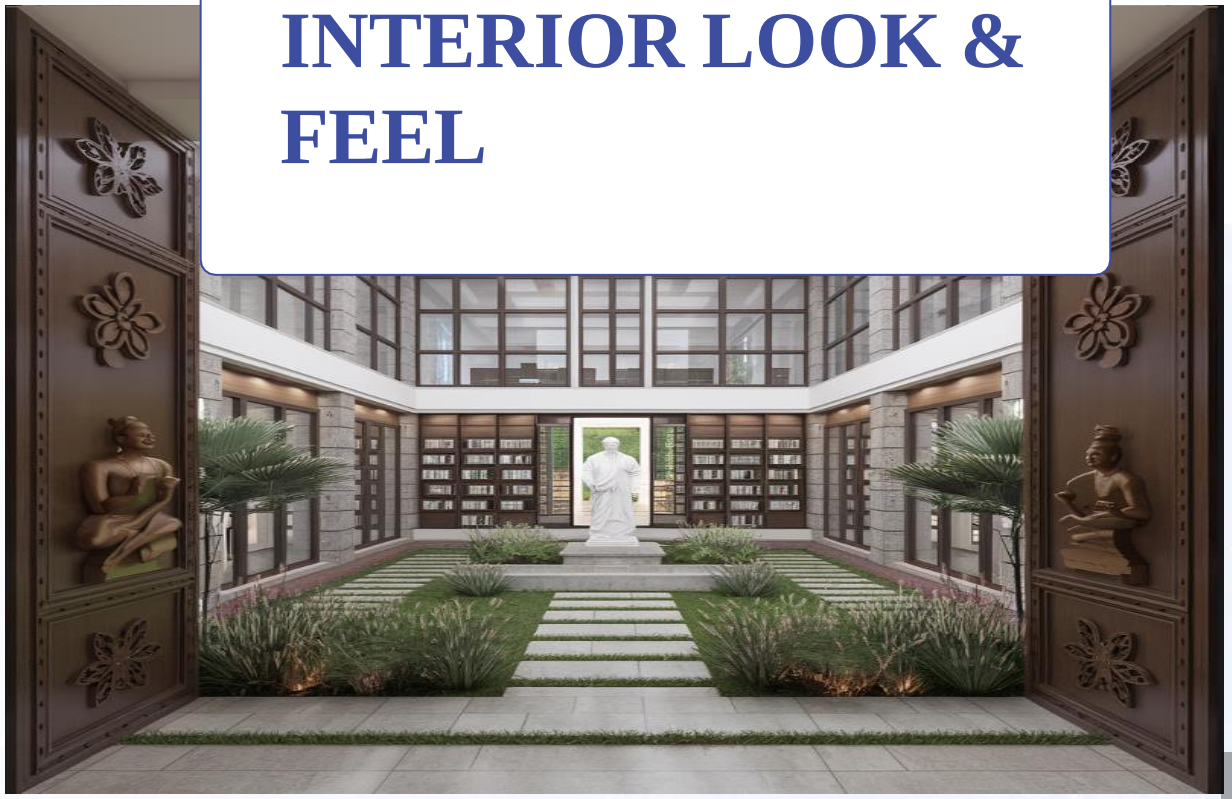
INTERIOR LOOK & FEEL



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RECEPTION AND INFORMATION DESK

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LIBRARY READING

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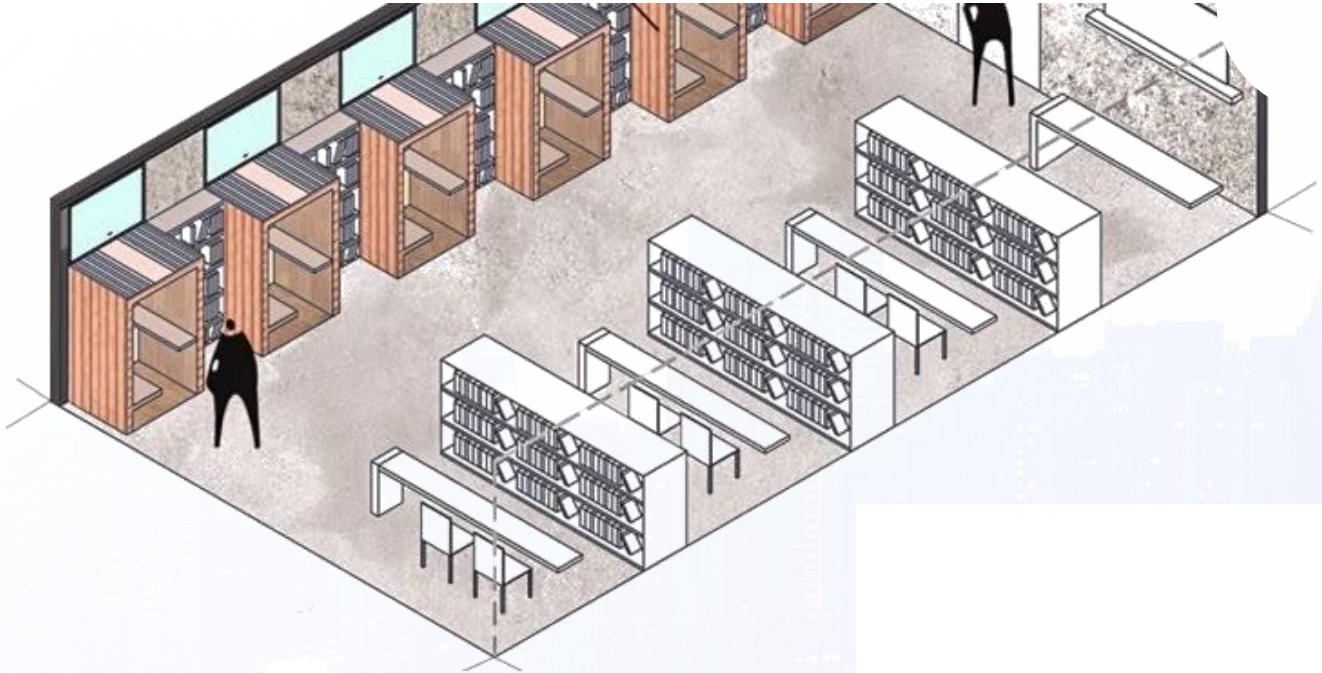

INTERIOR SPACE

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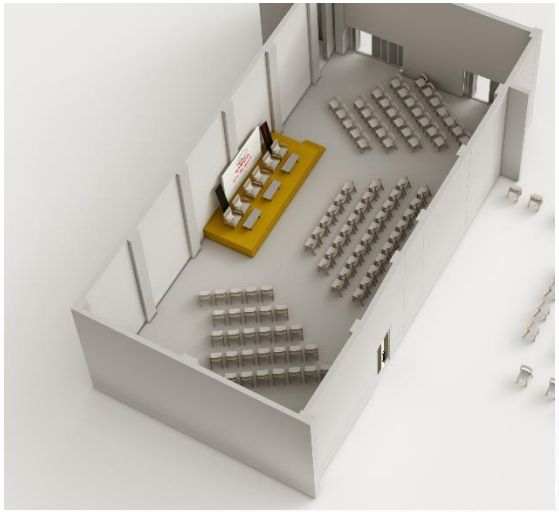
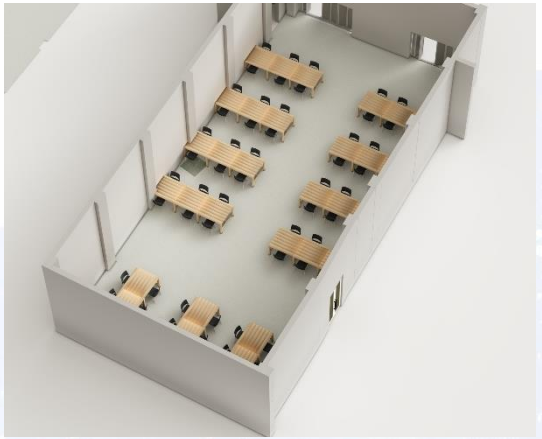


SEMINAR HALL



READING AREA

MUTI USE OF MUTIPURPOSE HALL

MULTIPURPOSE HALL

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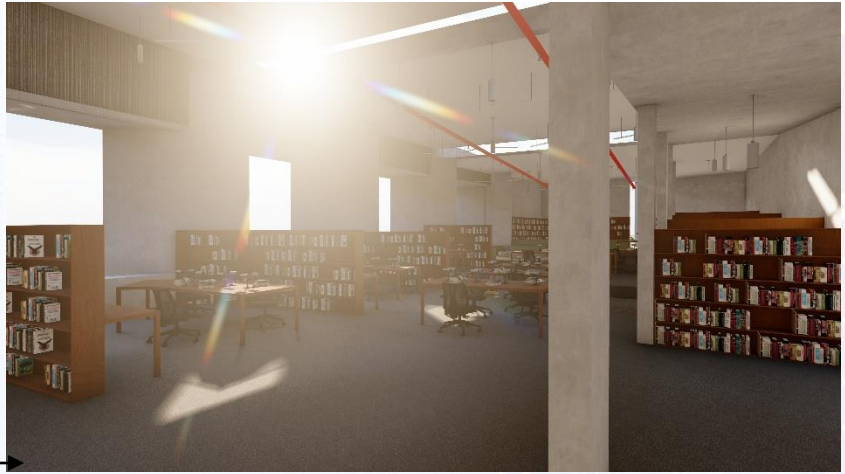

READING AREA

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CHILDREN READING AREA

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COMPARATIVE ANALYSIS

CONVENTIONAL BUILDING	NET ZERO BUILDING
Typically consumes more energy with lower efficiency.	Highly energy-efficient with minimal consumption.
Relies mainly on fossil fuels.	Powered by renewable sources like solar or wind.
Generates high carbon emissions.	Achieves net-zero or negative carbon output.
Uses conventional, high-carbon materials.	Uses recycled and low-embodied carbon materials.
Basic insulation with thermal losses.	Advanced insulation and airtight envelope.
Standard usage with higher wastage.	Efficient systems with water reuse and harvesting.
Uses traditional, energy-intensive systems.	Employs high-efficiency and passive HVAC systems.

COMPARATIVE ANALYSIS

CONVENTIONAL BUILDING	NET ZERO BUILDING
Uses conventional lighting with higher energy use.	Utilizes LED and smart daylighting systems.
Basic waste disposal with limited segregation.	Promotes recycling and zero-waste strategies.
May lack natural light and fresh air.	Designed for healthy indoor air and daylight access.
Lower initial construction cost.	Higher upfront investment due to green features.
Higher operational and maintenance costs.	Lower lifecycle cost due to efficiency savings.
Meets only basic code requirements.	Exceeds codes and meets green building certifications.
Less adaptable to climate or energy shifts.	Built for climate resilience and energy stability.

THANK YOU!

Pioneers in Net-Zero Infrastructure

Building a Sustainable, Aatmanirbhar Future

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