

GRAND CHOLA MUSUEM
(REVIVING TRADITION IN MODERNITY)

A THESIS

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Architecture degree

By

APARNA.V
(39210007)



DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY) Accredited

With Grade “A” by NAAC

JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI - 600 119

MAY 2024



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This is to certify that Thesis Report is the bonafide work of **APARNA.V (39210007)** who carried out the Thesis entitled "**Grand Chola Musuem**" under our supervision from November 2023 to May 2024.

Internal Guide
Ar. Arulmalar Ramraj

Internal Review Member
Ar. Surya Rajkumar

External Guide
Ar. Kishore Panikkar

Dean and Head of the Department
Dr. DEVYANI GANGOPADHYAY

Submitted for Viva voce Examination held on 20/05/24.

Internal Examiner

External Examiner

DECLARATION

I, **APARNA.V** hereby declare that the Thesis Report entitled "Grand Chola Musuem" done by me under the guidance of **Ar.Arulmalar Ramraj** (Internal Guide), **Ar.Surya Rajkumar** (Internal Review Member) and **Ar.Kishore Panikar** (External Guide) Sathyabama Institute of Science and Technology is submitted in partial fulfillment of the requirements for the award of Bachelor of Architecture Degree.

DATE: 20.05.2024



PLACE: Chennai

SIGNATURE OF THE CANDIDATE

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APARNA.V

THESIS SYNOPSIS

Gangaikonda Cholapuram holds immense historical and architectural significance as a symbol of Chola power and culture. However, the area lacks a comprehensive museum dedicated to showcasing the Chola heritage. This thesis explores the design and implementation of a sustainable Grand Chola Museum in Gangaikonda Cholapuram, integrating eco-friendly construction methods, community involvement, and innovative exhibition strategies.

The design approach for the Grand Chola Museum blends traditional elements with a modern touch, seamlessly merging historical authenticity with contemporary functionality. Utilizing Chola-era architectural motifs, such as intricate carvings and temple-inspired structures, the museum's aesthetic pays homage to its heritage. Simultaneously, modern design principles ensure practicality and accessibility, with eco-friendly materials and sustainable features integrated throughout.

This harmonious fusion creates a unique cultural space that honors the past while embracing the present, offering visitors an immersive and enriching experience at the intersection of tradition and innovation. This harmonious fusion not only preserves history but also enhances the user experience, creating a captivating journey through time for every visitor.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

In the heart of Gangaikonda Cholapuram lies an ancient legacy waiting to be unveiled, a testament to the grandeur and brilliance of the Chola dynasty. This historical enclave, once a thriving capital under Rajendra Chola I, echoes with tales of conquest, cultural vibrancy, and architectural splendor. Yet, amidst these echoes, there exists a poignant silence—a void where the narrative of Chola heritage remains fragmented and incomplete.

The Grand Chola Museum emerges as a beacon of hope, a cultural edifice poised to bridge the chasm between past glory and present understanding. Its envisioned corridors will house treasures of antiquity, from intricately carved sculptures to meticulously preserved manuscripts, offering visitors a journey through the annals of time.

1.2 NEED OF THE PROJECT

Gangaikonda Cholapuram, with its UNESCO World Heritage status, lacks a comprehensive institution dedicated to showcasing the multifaceted legacy of the Chola dynasty. The absence of a centralized museum deprives scholars, historians, tourists, and locals of a cohesive narrative that can elucidate the rich cultural tapestry woven by the Chola rulers. Thus, there arises a pressing need to establish the Grand Chola Museum as a beacon of cultural preservation, education, and heritage tourism.

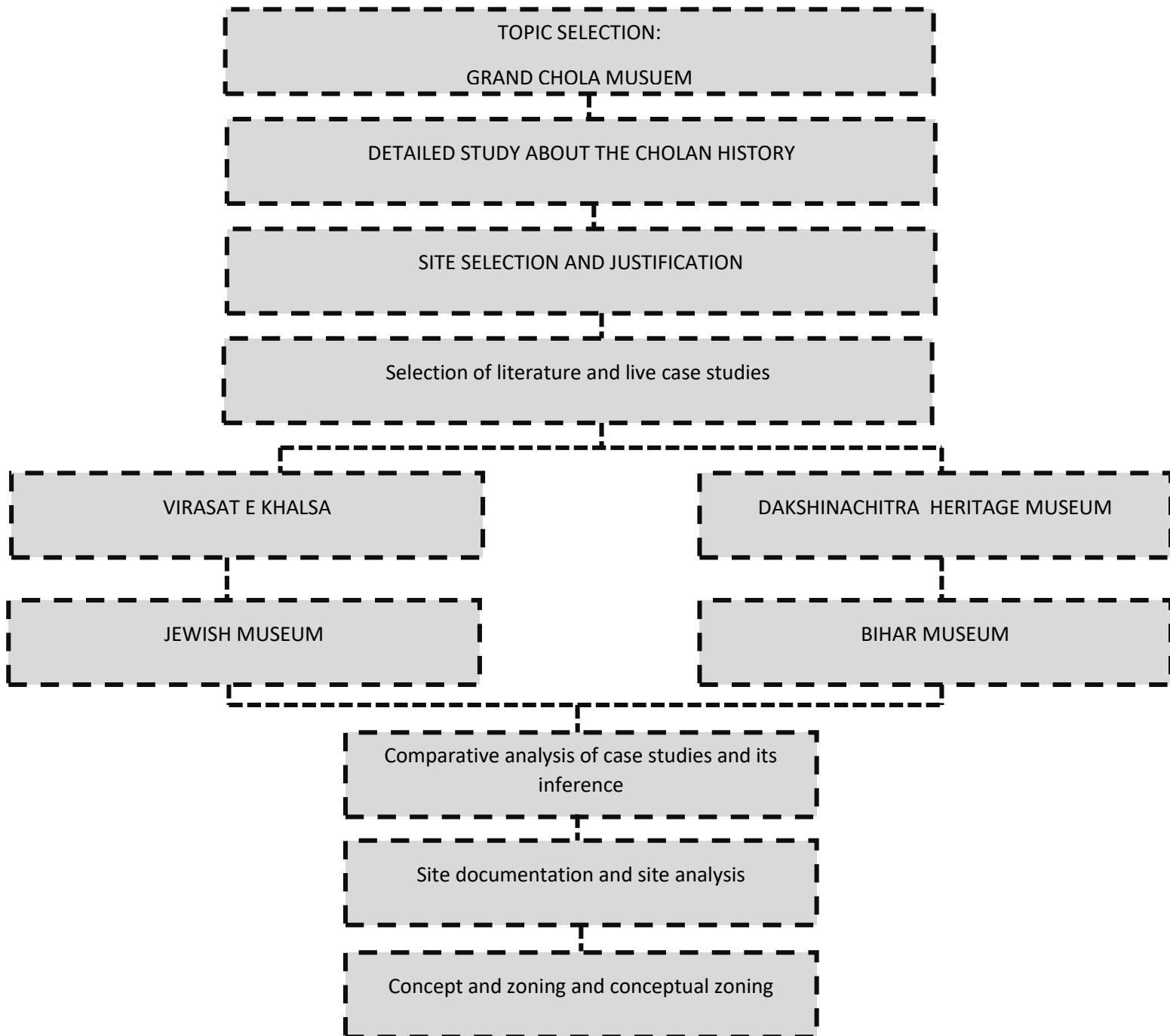
1.3 AIM AND OBJECTIVE

(a) To curate and exhibit a diverse collection of Chola artifacts, including sculptures, inscriptions, paintings, and historical documents.

(b) To provide a platform for scholarly research, academic discourse, and public education on Chola heritage and its significance.

(c) To engage with the local community, collaborate with cultural stakeholders, and develop outreach programs that promote cultural awareness and participation.

1.4 METHODOLOGY



CHAPTER 2

LITERATURE CASE STUDIES

2.1 VIRASAT-E-KHALSA

Architect: Moshe Sadie

Built- up Area: 161874 sqm

Site Area: 75 acres

Location: Anandpur Sahib, Punjab

Function: Heritage Museum

Context: Traditional

2.1.1 SPACIAL ANALYSIS:

Complex A serves as a pivotal gateway from Anandpur Sahib town to the museum, featuring functional zones such as the north wing with exhibition galleries and meeting rooms. The arcade on the eastern face guides visitors towards the auditorium, while a two-level library building offers a serene space for research. Noteworthy architectural elements include the 165m pedestrian bridge, adorned with four independently tied arches, and a spacious cafeteria with a dining area elevated to 316.4 meters above sea level, providing panoramic views. On the other hand, Complex B mirrors the amenities of Complex A, contributing to a cohesive spatial network with versatile spaces like lecture halls, workshops, and exhibit galleries. Together, these complexes enhance accessibility, facilitate diverse activities, and weave a narrative tapestry of Sikh history and culture for visitors to explore and appreciate.



Fig 2.1: Master Plan of Virat E Khalsa

The floor of the ravine forms the center piece of the complex. As far as possible, the natural landscape and topography has been maintained. Water, which is abundantly available has been incorporated as a major element in the landscaping scheme. The 165m long end wide pedestrian bridge, which is connecting complex A & C, primarily consists of four independently tied arches (three 33m long and one 27m long)

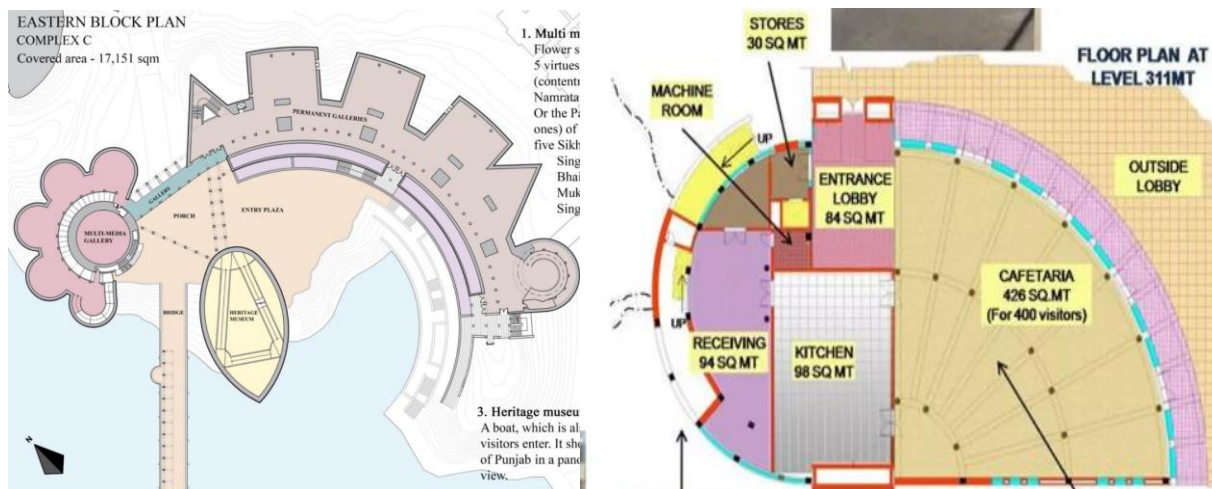


Fig 2.2: Floor Plan of Virat E Khalsa

2.1.2 MATERIAL ANALYSIS:

The structure is designed to cover all the seismic aspects which are applicable for India.

Columns and beams - fair faced concrete casted in single.

Columns - no shuttering joints.

Beams -limited, only in pattern shuttering ply imported from Finland for more length, thickness and smoothness.

. More than 2800 lighting fixtures.

. Electricity from 132kv substation of PSEB.

Clad with local sandstone and evoking the fortress cities of Rajasthan, Gwalior, and Punjab, the Centre acknowledges the Sikh's history as celebrated warriors. The walls ascending from the ravine level also clad with weather resistant sandstone. The upwardly curving roofs of the museum's tower like galleries are covered in stainless steel. It's designed in counterpoint to the rich tradition of gold domes that crown sacred Sikh buildings such as the Golden Temple in Amritsar.



Fig 2.3: Materials of Virat E Khalsa



Fig 2.4: Materials of Virat E Khalsa



Fig 2.5: Concept

The design has woven threads of the vernacular aesthetic into the very fabric of the Museum's visual language to highlight a robust, living culture. A narrative museum that endeavours to tell a story that is deeply spiritual

2.1.2 CIRCULATION

The circulation within the complex is strategically organized to guide visitors through a journey that unfolds the rich cultural heritage of Punjab while ensuring easy navigation and accessibility. Upon entering Virasat-e-Khalsa, visitors typically encounter a central gathering space or plaza, serving as a focal point for orientation and initial exploration. From this central hub, pathways

branch out, leading visitors towards different thematic zones and exhibition areas. The circulation paths are intuitively designed, often following a linear progression that aligns with the chronological or thematic flow of the exhibits.

Throughout the museum complex, clear signage, maps, and directional cues are provided to assist visitors in navigating the spaces and understanding the layout. Information kiosks or digital interfaces may also be strategically placed at key junctions to offer additional guidance and context about the exhibits and cultural significance. The circulation plan of Virasat-e-Khalsa incorporates rest areas, seating zones, and contemplative spaces along the pathways, allowing visitors to pause, reflect, and absorb the cultural richness of Punjab at their own pace. These resting points often offer picturesque views of the surrounding landscape, sarovars, or architectural elements, enhancing the overall visitor experience. Accessibility is a key consideration in the circulation design, with ramps, elevators, and barrier-free pathways ensuring inclusivity for visitors with mobility challenges or special needs. The circulation routes are designed to accommodate large numbers of visitors comfortably, especially during peak times or special events, without compromising on the quality of the experience.

2.1.2 LANDSCAPE AND LIGHTING

The landscape and lighting design of Virasat-e-Khalsa in Anandpur Sahib, Punjab, weave together to create a mesmerizing and culturally immersive experience. The landscape design is a harmonious blend of Sikh symbolism and natural beauty, featuring sarovars, native trees, and expansive lawns that reflect Punjab's tranquil environment and agricultural heritage. Water features like sacred pools and reflecting pools symbolize purity and spiritual cleansing, adding a profound sense of reverence to the surroundings. Pathways wind through the landscape, lined with indigenous flora and traditional paving materials, guiding visitors on a contemplative journey through Punjab's rich cultural tapestry.

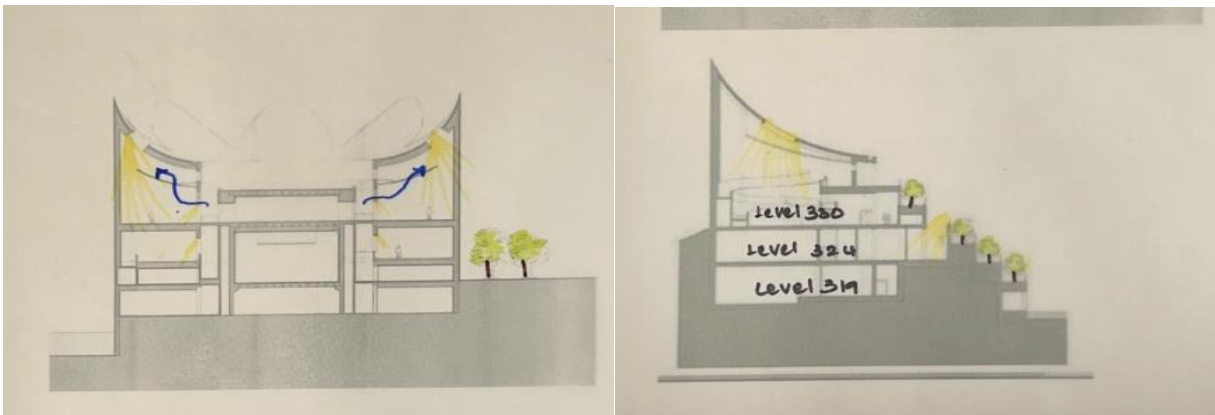


Fig 2.6:Section of Virat E Khalsa

The lighting design of Virasat-e-Khalsa is equally captivating, accentuating the intricate architectural details and cultural significance of the buildings. Illuminated facades, domes, and sculptural elements create a dramatic yet respectful ambiance, especially at night when the museum transforms into a visual spectacle. Energy-efficient LED fixtures, timers, and interactive

installations contribute to sustainability while enhancing the nocturnal beauty of the complex. Warm colors and cultural motifs in the lighting design resonate with Sikh traditions, fostering a sense of spirituality and connection to Punjab's heritage.

2.1.2 ICONIC FEATURES

The intricate detailing, including ornate domes, intricate carvings, and symbolic motifs, reflects the rich heritage and spiritual significance of Sikh culture. Inside the museum, visitors are greeted by the Grand Atrium, a breath-taking space that serves as the heart of Virasat-e-Khalsa. The Grand Atrium's soaring ceilings, elegant columns, and artistic lighting create a sense of grandeur and reverence, setting the tone for the cultural journey that awaits. Another iconic feature is the Darshan Deori, a monumental gateway that symbolizes the threshold between the temporal and spiritual worlds. The Darshan Deori's intricate marble work, symbolic arches, and welcoming design evoke a sense of awe and spirituality, inviting visitors to enter and explore the museum's treasures.

The architectural layout of Virasat-e-Khalsa also includes the Virasat Hall, a multi-purpose space that hosts cultural performances, exhibitions, and educational programs. With its flexible design, state-of-the-art audio-visual technology, and capacity to accommodate large gatherings, the Virasat Hall is a dynamic hub of cultural exchange and expression. The museum's landscaped grounds are another iconic feature, featuring serene sarovars (sacred pools), lush gardens, and reflective spaces that harmonize with the natural beauty of Punjab's landscape. These outdoor areas provide visitors with opportunities for contemplation, relaxation, and connection with nature, enhancing the overall immersive experience of Virasat-e-Khalsa.



Fig 2.7: Iconic Features of Virat E Khalsa

2.2 Jewish museum

Architect: Studio Libeskind

Built- up Area: 13000.0 m²

Site Area: 3.2 acres

Location: Berlin, Germany

Function: Historical Museum

Context: Urban

2.2.1 SPACIAL ANALYSIS:

The Earth ship, as Reynolds calls it, seeks to make the most of the energy of the sun, water, wind, and earth. The surroundings are sensitive to the orientations, opening to the north to make the most of light and solar energy through a wide glass corridor that acts as a distributor of the three classrooms and two wings of the school.

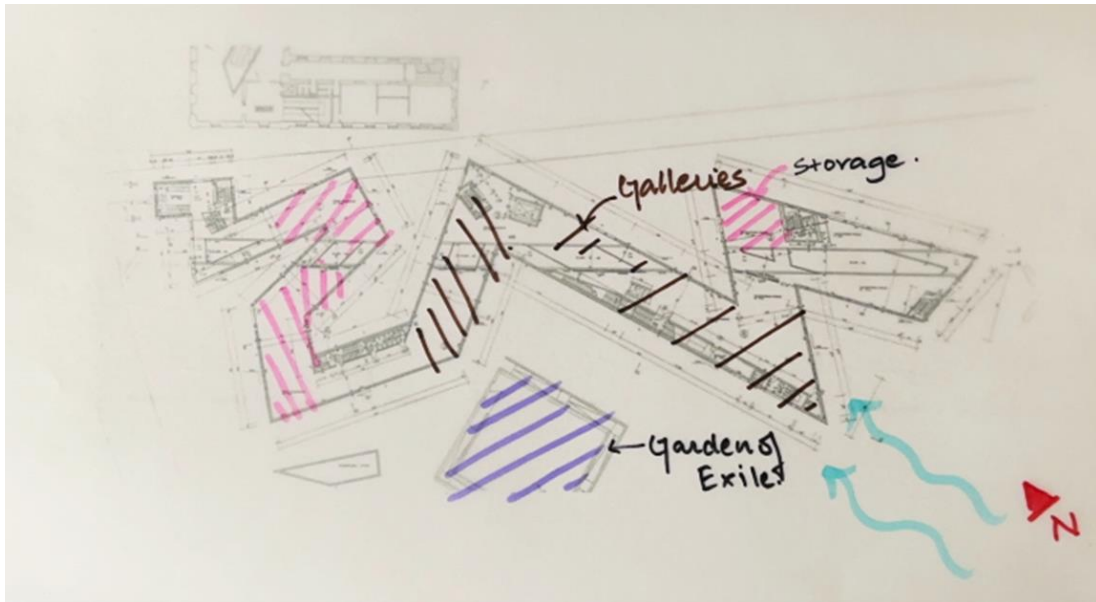


Fig 2.8: Plan of Jewish museum

The design of the expansion is based off of three conceptions. the inability to understand the complex history of berlin without acknowledging the vast contribution to the nation culturally economically, and intellectually by Jewish People a necessity to integrate the significance of the holocaust physically and spiritually into the fabric of Berlin by acknowledging the void of Jewish life in berlin, the history of berlin and Europe can have a human future

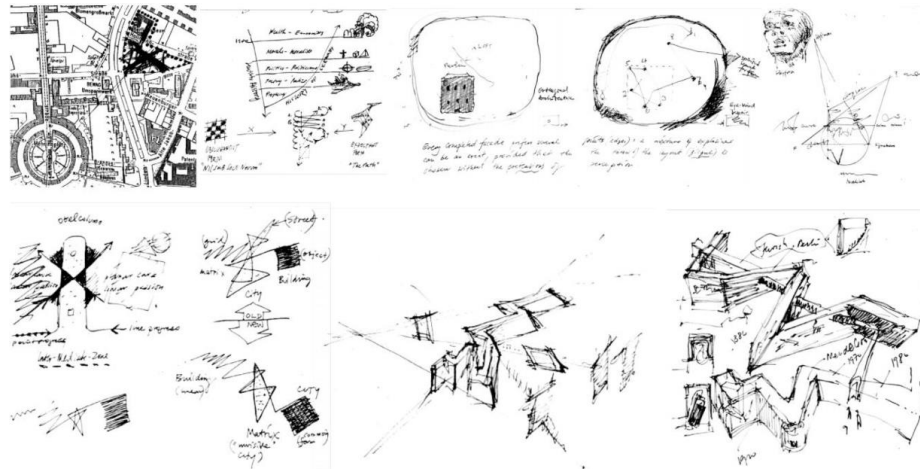


Fig 2.9: Concept of Jewish museum

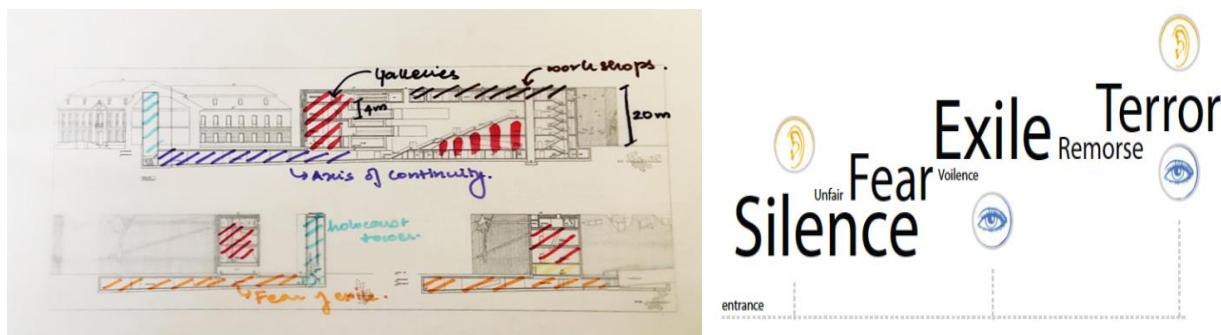


Fig 2.10(a): Section of Jewish museum Fig 2.10(b): User Emotion

Exploring visitor's experience in interiors. Unhomely home which has been haunted by absence, silence and violence of Jewish memories presents feeling like terror inside its cold, spiritless and strange body. The visitors experience terror differently in each spaces within one body of architecture. The form is made up of two linear structures one zig-zag the other straight Where the two lines intersect, a void is created extending from the ground level to the roof Thin expressive form is used to explain the Jewish lifestyle before, during, and after the Holocaust

This museum acts as a beacon that helps to establish and secure an identity wishing Berlin for Jewish people that was lost during the reign of the NAZI party. The intention of the voids is to express the feelings of absence, emptiness, and invisibility of the dehumanization that the Jewish people expounded during this time



Fig 2.11: Iconic features of Jewish museum

The Jewish Museum in Berlin was established to showcase and preserve the history of the Jewish community in Germany. It highlights their contributions to German society and addresses the Holocaust. The museum's architecture symbolizes the ruptured history of German Jews. It serves as a space for education, remembrance, and reflection on the complex relationship between Germany and its Jewish population.

2.2.2 MATERIAL ANALYSIS

The exterior of the Jewish Museum is clad in zinc-titanium panels, giving it a distinct and modern appearance. The use of these metallic panels not only provides durability and weather resistance but also symbolizes the scars and wounds of history, representing the hardships faced by the Jewish community. Inside the museum, the material palette continues to convey layers of meaning. The main spaces feature raw concrete walls, a deliberate choice that echoes the starkness and brutality of the Holocaust.

The rough texture of the concrete serves as a reminder of the harsh realities endured by millions. In contrast to the raw concrete, certain areas of the museum are finished with warm wood accents, creating a sense of warmth and humanity amidst the sombre surroundings. These wooden elements symbolize hope, renewal, and the resilience of the Jewish people throughout history.

Glass also plays a significant role in the material composition of the museum. The use of expansive glass walls and skylights allows natural light to penetrate the interior spaces, creating a play of light and shadow that symbolizes the interplay between darkness and enlightenment, tragedy and hope. Additionally, the incorporation of symbolic materials such as stone and steel in various installations and artworks within the museum further enhances its narrative depth. These materials carry historical and cultural significance, connecting visitors to the rich heritage and collective memory of the Jewish people.

2.1.2 CIRCULATION

visitors are typically directed to a central gathering area or orientation space, where they receive an introduction to the museum's layout, thematic focus, and key highlights. From this central hub, multiple pathways branch out, leading visitors towards different exhibition galleries, thematic zones, and interactive installations. The circulation paths are often designed to follow a chronological or thematic progression, allowing visitors to explore Jewish heritage in a structured yet flexible manner. Clear signage, maps, and directional cues are strategically placed throughout the museum to assist visitors in navigating the spaces and understanding the flow of exhibits. The museum's circulation plan incorporates a variety of spaces that cater to different aspects of Jewish history and culture. This may include historical galleries showcasing artefacts and stories from various periods, cultural exhibitions highlighting traditions, rituals, and artistic expressions, and thematic zones focusing on topics such as immigration, resilience, and community life. Interactive elements are integrated into the circulation design, offering visitors opportunities to engage with multimedia presentations, digital archives, and immersive experiences that deepen their understanding and connection to Jewish heritage. Rest areas, seating nooks, and contemplative spaces are strategically positioned along the pathways, allowing visitors to pause, reflect, and absorb the significance of the exhibits at their own pace.

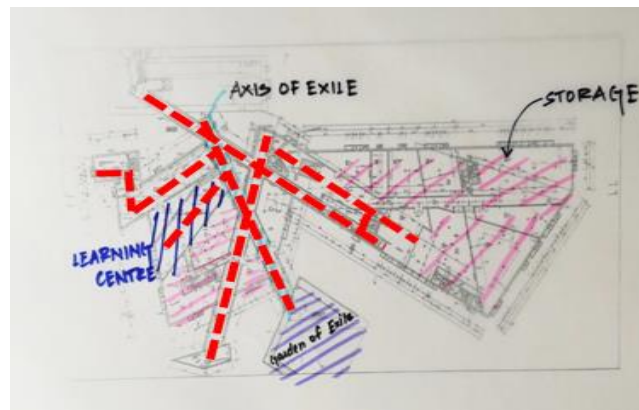


Fig 2.12: Circulation of Jewish museum

Accessibility is a key consideration in the circulation design of the Jewish Museum, with ramps, elevators, and barrier-free pathways ensuring inclusivity for visitors with diverse mobility needs. The circulation routes are designed to accommodate large numbers of visitors comfortably, particularly during peak times or special events, without compromising the quality of the visitor experience.

2.1.2 ICONIC FEATURES

This striking structure is characterized by its avant-garde design, featuring angular shapes, intersecting lines, and a titanium-clad exterior that symbolizes fractured history and resilience. The Libeskind Building's iconic zigzag form creates dynamic spaces within, serving as a metaphor for the complex and multifaceted narrative of Jewish history and identity. Within the museum, the Garden of Exile is another iconic feature that captures the essence of displacement and survival. This outdoor installation comprises 49 tilted columns supporting a garden of olive trees, representing the 49 original Jewish communities destroyed during the Holocaust. Visitors walking through this symbolic garden experience a sense of disorientation and resilience, mirroring the challenges faced by Jews throughout history.

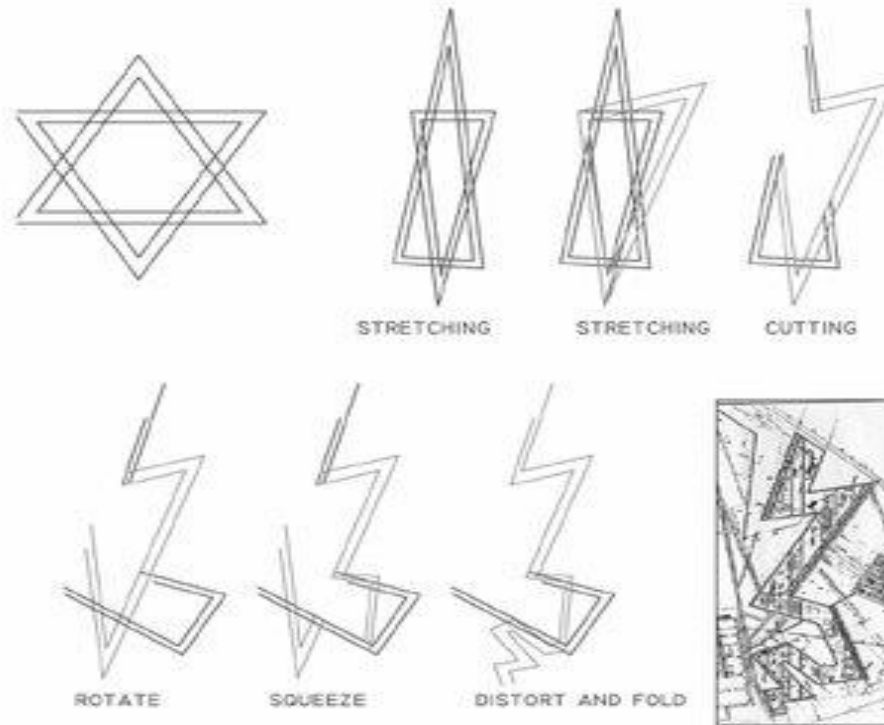


Fig 2.13: Iconic features of Jewish museum

The Holocaust Tower is a somber yet powerful feature of the museum, located within the Libeskind Building. This void-like space is devoid of natural light, creating a profound and introspective environment for reflection on the atrocities of the Holocaust. The starkness of the Holocaust Tower contrasts with the rest of the museum, serving as a poignant reminder of the darkest chapter in Jewish history. Art installations and exhibitions within the museum, such as the Memory Void and the Axis of Continuity, further contribute to its iconic status. The Memory Void is a space dedicated to commemorating the lives lost during the Holocaust, featuring an installation of 10,000 faces engraved in the walls, representing the individuality and collective memory of Holocaust victims. The Axis of Continuity is a symbolic passageway that connects the historical and contemporary narratives of Jewish life, showcasing artifacts, artworks, and interactive displays that celebrate Jewish heritage and resilience.

2.3 NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

Architect: Freelon AdjayeBond/SmithGroup

Site Area: 5 acre

Built- up Area: 38090sq. m

Location: Washington, DC

Function: Heritage Museum

Context: Urban

2.3.1 SPACIAL ANALYSIS:

The museum is on a small but sensitive and highly prized location on the northern edge of the National Mall, and is technically on the grounds of the Washington Monument. Bounded on all four sides by busy urban streets, it is both an island and a connection that maps views toward both the White House, then occupied by Barack Obama, and the Lincoln Memorial. It is also adjacent to the National Museum of American History, a museum once considered sufficient to tell the American story.

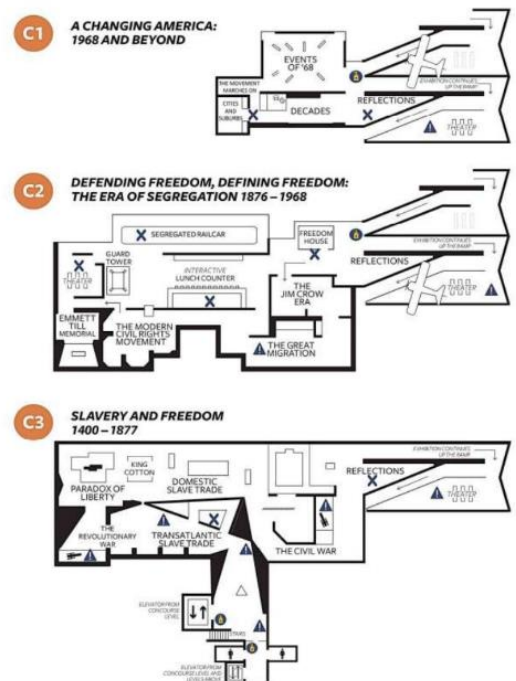


Fig 2.14(a): Site Plan Fig 2.14(b): Section



Fig 2.15: Floor Plans

The museum is on a small but sensitive and highly prized location on the northern edge of the National Mall, and is technically on the grounds of the Washington Monument. Bounded on all four sides by busy urban streets, it is both an island and a connection that maps views toward both the White House,

2.2.2 MATERIAL ANALYSIS

Another design element that stands out is the Corona, the unique ornamental form enveloping the exterior. The bronze colored filigree panels in the museum's façade draws on imagery from both African and American History, it pays homage to the exquisite craftsmanship of enslaved and free African American artisans and metalworkers in Charleston and New Orleans. The filigree's open weave helps to moderate the amount of light and heat entering the building. The Corona consists of 3,600 bronze colored cast aluminum panels covering 70,000 square feet and weighing a total of 230 tons.



Fig 2.16(a): Corona Panel Design

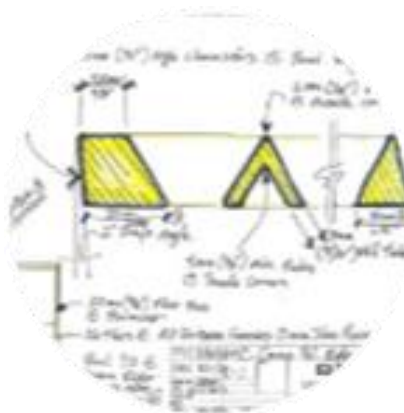


Fig 2.16(b): Concept



Fig 2.17: Section

The building incorporated several passive design elements. That is, they found ways to minimize the building's environmental footprint without installing high tech or costly add ones: Compact and climate responsive building form (less use of energy for both heating and cooling) Locating 60% of space below grade (less exposure to climate means less energy to heat and cool; the ground above acts as an insulator for the History Galleries in the lower levels) Solar controls via the porch overhang and Corona (reduce the heat gain in the building and cooling needs) Location of programs within nested layout of the building (protect exhibits from sun damage).

2.1.2 CIRCULATION

Upon entering the museum, visitors are often guided to a central gathering space or orientation area, where they receive an introduction to the museum's layout, thematic focus, and key highlights. This serves as a starting point for their immersive experience and helps orient them to the different sections of the museum. From the central hub, multiple circulation paths branch out, leading visitors to different floors, galleries, and thematic zones. The circulation routes are designed to follow a logical progression, allowing visitors to navigate the museum's diverse exhibits in a structured yet flexible manner. Clear signage, maps, and directional cues are strategically placed throughout the museum to assist visitors in finding their way and understanding the flow of the exhibits. The NMAAHC's circulation plan typically includes chronological and thematic galleries that cover a wide range of topics, including slavery and freedom, civil rights movements, cultural contributions, and contemporary issues. These galleries are interconnected through well-defined pathways, offering visitors a cohesive narrative of African American history and culture.

Interactive elements are integrated into the circulation design, providing opportunities for visitors to engage with multimedia presentations, oral histories, digital archives, and interactive displays. These interactive features enhance learning, encourage exploration, and foster a deeper connection to the museum's content. Rest areas, seating arrangements, and contemplative spaces are strategically placed along the circulation paths, allowing visitors to pause, reflect, and absorb the significance of the exhibits at their own pace. Accessibility is a key consideration in the circulation design, with ramps, elevators, and barrier-free pathways ensuring inclusivity for visitors with diverse mobility needs.

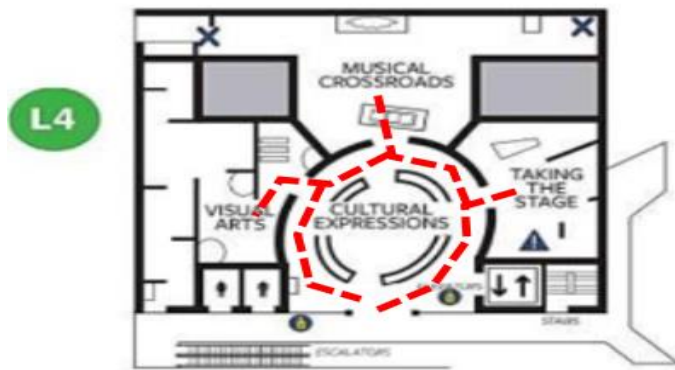


Fig 2.18: Circulation of National Museum of African American History and Culture

2.1.2 ICONIC FEATURES

Its exterior architecture, with its three inverted tiers resembling a crown or corona, stands as a testament to African architectural traditions and serves as a symbolic beacon on the National Mall. Inside, the Contemplative Court offers a tranquil space for reflection, cantered around a cascading water feature that encourages introspection amidst the museum's vibrancy. The "Corridor of Ancestors" is a striking display showcasing thousands of images representing African Americans' faces and stories, providing a profound narrative of resilience and identity. The Slavery and Freedom Galleries delve deep into the African American experience, while the Oprah Winfrey Theatre serves as a cultural hub for film screenings, performances, and discussions, celebrating African American contributions to media and arts. The Sweet Home Café celebrates African American culinary traditions, offering a menu inspired by diverse regional cuisines. These iconic features collectively make the NMAAHC a beacon of cultural heritage and education, inviting visitors to explore and engage with the multifaceted narratives of African American history and culture in a deeply meaningful way



Fig 2.19: Iconic Features of National Museum of African American History and Culture

2.4 DAKSHINACHITRA HERITAGE MUSEUM

Architect: Laurie baker, Benny kuriakose

Built- up Area: 3 acres

Site Area: 10 acres

Location: Malappuram, Tamil Nadu, India

Function: Cultural Museum

Context: Contemporary

2.4.1 ABOUT THE ARCHITECT

Laurie Baker was a British-born Indian architect renowned for his innovative and sustainable approach to architecture. He was born on March 2, 1917, in Birmingham, England, and later moved to India, where he spent much of his life and career. Baker's architectural style was deeply rooted in the principles of sustainability, cost-effectiveness, and a harmonious blend with nature. He believed in using locally available materials and traditional building techniques to create environmentally friendly structures that were also affordable for the common person. Throughout his career, Baker designed numerous buildings, including homes, churches, hospitals, and schools, primarily in the Indian state of Kerala. His designs often featured elements such as sloping roofs, terracotta tiles, and exposed brickwork, which not only added to the aesthetic appeal but also enhanced the buildings' sustainability and thermal efficiency. Baker's contributions to architecture earned him several accolades and honours, including the Padma Shri award from the Government of India in 1990. He passed away on April 1, 2007, leaving behind a legacy of environmentally conscious and socially relevant architecture that continues to inspire architects and designers worldwide.

2.4.2 SPACIAL ANALYSIS

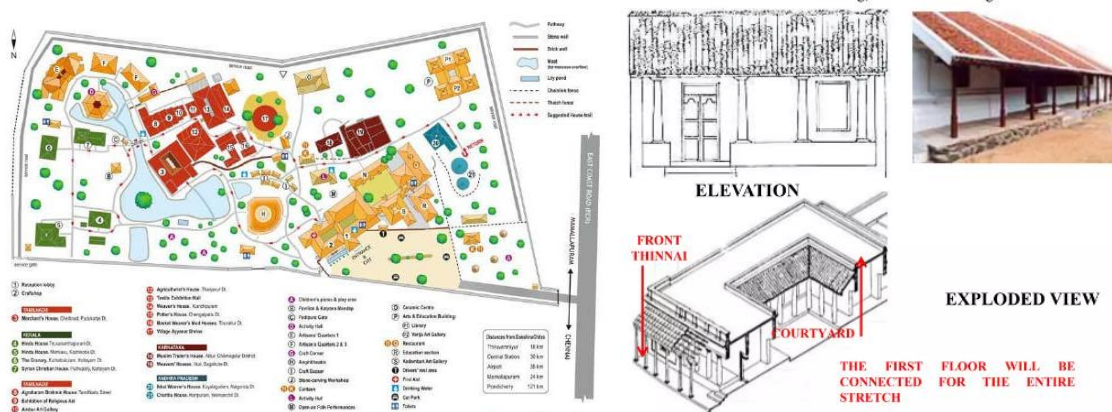


Fig 2.20(a): Site Plan Fig 2.20(b): Agriculturists House

Agriculturists House from Mayavaram. The agriculturist's house from Mayavaram district, is typical of many houses found in the villages in and around Thanjavur and Mayavaram districts. It has been reconstructed without any changes except in its orientation.: The original orientation of the house was north, so that the puja room and sacred area were on the west.: The front rooms were used for storage and sleeping. Basket Weavers Mud Houses from Chengleput. These houses are two reproductions of simple mud houses occupied by ordinary working class people of the state. The interiors of the houses show the lifestyle of ordinary villagers with space for cooking, praying, living and sleeping.

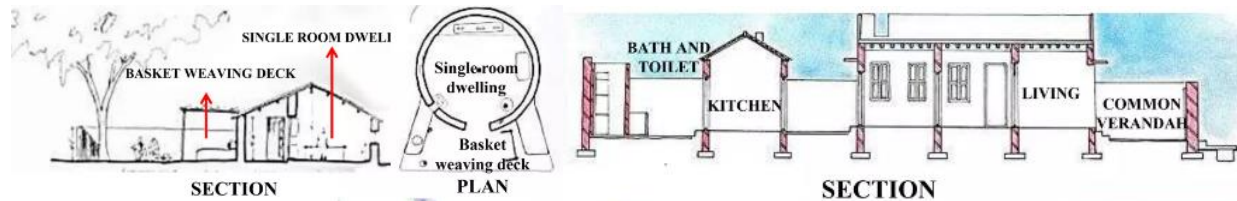


Fig 2.21(a): Weaver's Houses Fig 2.21(b): Section

Weaver's Houses From Nalgonda District-Andra Most weavers' houses and other village houses in Nalgonda and Warangal district follow a style locally known as bhawanti. The plan used commonly is the chitra sala, with three bays or sections and a small courtyard in the middle. The building materials include bamboo reapers, palmyra beams and semi- circular roof tiles. In a cyclone-prone area, fishermen and agricultural farmers build circular houses which nestle closely to form clusters. The shape and the positioning help the houses battle against the raging winds. The house consists of an inner circular room which is enveloped by another circular space that serves as the kitchen on one side and a store at the other end.. There is also a cooking area or vantasala just outside the house. Mostly, Tamil houses have an inner courtyard which is used for drying grains, shelling pods and for functions. There will be a raised veranda or small seating area in the front of the house. called a tinnai

Weavers House from Kanchipuram This house had one functional pit loom used for weaving Kanchipuram saris, along with a kitchen, a puja room and a front hall. The weaver's house had a large paved open area in the back that served as a utility area with toilets, bathing area, and facilities for washing clothes and kitchen vessels. over 16 weaver's houses were documented from Kanchipuram and the most repetitive elements and planning were documented and depicted in Dakshinachitra

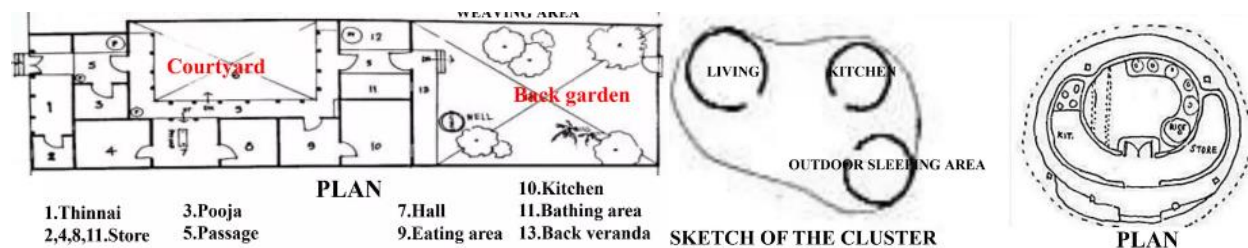


Fig 2.22:Weavers House From Kanchipuram

Brahmin houses were connected by a common wall and they were narrow in width and very long. The Ambur house originally had a longer courtyard for the cows, followed by another long, enclosed area, planted rather wildy, which led down to a stepped river embankment. Due to space restrictions at DakshinaChitra, the second courtyard was made smaller and the third has been omitted. The upper floor was used for sleeping, drying and storing grain

Merchants House from Chettinad. The exterior façade of the house at DakshinaChitra was a replication of a common façade of smaller Nattukottai Chettiar merchant houses the outside columned veranda of Burmese teak were a reconstruction from a house in the village of Aryakudi. The basic floor plan of a Chettinad house consists of a) an outside veranda (thinmai) for guests, with a room for conducting business on one or both ends; b) an interior courtyard to be used in ceremonies, with a raised seating area at one or both ends; c) a series of small double rooms opening

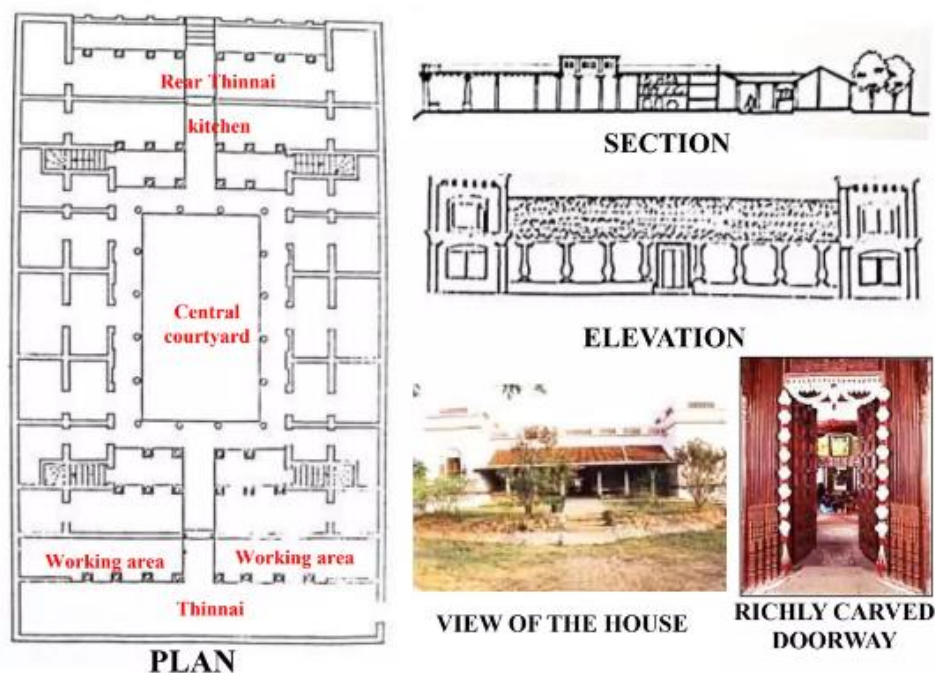


Fig 2.23: Brahmin House From Ambur

The Dakshinachitra Heritage Museum, designed by architects Laurie Baker and Benny Kuriakose, stands as a testament to South Indian heritage and architecture. Spread across 10 acres in Malappuram, Tamil Nadu, this cultural museum encompasses a built-up area of 3 acres. Baker, known for his sustainable and innovative approach, and Kuriakose, renowned for his expertise in heritage conservation, collaborated to create a space that embodies the essence of traditional South Indian houses.

The museum's spatial analysis reveals a rich tapestry of architectural styles. From the agriculturists' houses of Mayavaram with their emphasis on sacred areas and functional spaces, to the basket weavers' mud houses of Chengleput showcasing simplicity and functionality, each exhibit tells a story of ordinary life in South India. The weavers' houses from Nalgonda District

reflect a blend of local materials and traditional plans, while the weavers' houses from Kanchipuram demonstrate a focus on weaving activities and utility areas. Further exploring the diversity, the Brahmin house from Ambur unveils long, narrow layouts with multiple courtyards, catering to traditional Brahmin lifestyles.

Meanwhile, the merchants' house from Chettinad highlights exterior verandas for guests, interior courtyards for ceremonies, and rooms for business and family activities. These diverse layouts and functionalities come together at Dakshinachitra, offering visitors a comprehensive view of South Indian architectural heritage.

2.4.3 MATERIAL ANALYSIS

The Dakshinachitra Heritage Museum, conceived by architects Laurie Baker and Benny Kuriakose, intricately weaves together the cultural fabric of South India through its thoughtful material choices. Rooted in the ethos of sustainability and regional authenticity, the museum's architecture showcases a harmonious blend of locally sourced materials and traditional construction techniques. Brickwork and terracotta tiles form the backbone of many exhibits, echoing the timeless charm of South Indian villages. Bamboo and palmyra beams, known for their strength and eco-friendliness, stand as testament to indigenous ingenuity in structural design. Natural stone, meticulously integrated into both functional and ornamental aspects, adds a sense of permanence and history to the museum's narrative.

Wooden elements, sourced from nearby forests, infuse warmth and character into the spaces, evoking a deep connection to nature inherent in South Indian architecture. Thatched roofs and semi-circular roof tiles exemplify regional variations, showcasing how local communities adapted to their natural surroundings.

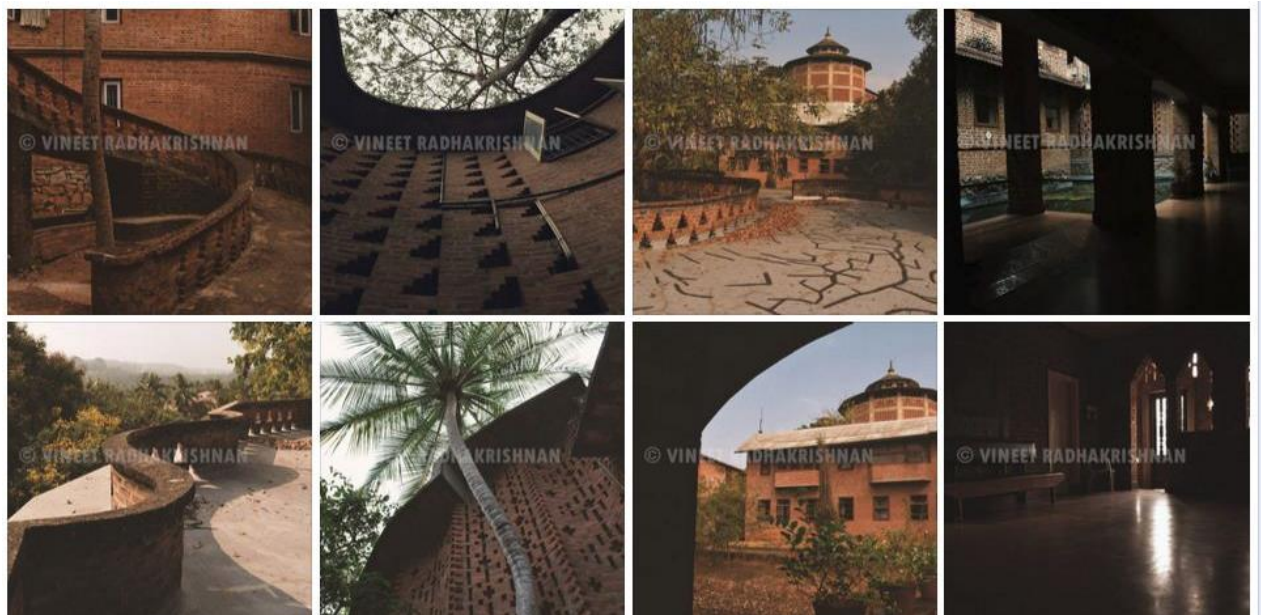


Fig 2.24: Material Analysis

2.1.2 CIRCULATION



Fig 2.25: Circulation of Dakshinachitra Heritage Museum

From this central point, multiple circulation paths branch out, leading visitors to different sections, galleries, and outdoor spaces. The circulation routes within Dakshinachitra Heritage Museum are designed to follow a logical and chronological progression, guiding visitors through various aspects of South Indian heritage, including architecture, art, crafts, lifestyles, and traditions. Clear signage, maps, and directional cues are strategically placed throughout the museum to assist visitors in navigating the spaces and understanding the thematic flow of the exhibits. The museum's layout often includes thematic zones or clusters that showcase specific aspects of South Indian culture, such as traditional homes, artisan workshops, performing arts spaces, and agricultural practices.

Visitors can follow these thematic paths to gain a comprehensive understanding of the region's cultural diversity and historical evolution. Interactive elements are integrated into the circulation design, providing visitors with opportunities to engage with hands-on activities, demonstrations, audio-visual presentations, and digital archives. These interactive features enhance the learning experience and encourage active participation. Rest areas, seating arrangements, and contemplative spaces are strategically placed along the circulation paths, allowing visitors to pause, reflect, and absorb the cultural significance of the exhibits at their own pace. The outdoor areas of Dakshinachitra Heritage Museum, including gardens, courtyards, and performance spaces, are also integrated into the circulation plan, offering visitors opportunities for relaxation, enjoyment, and cultural immersion.

2.5 BIHAR MUSEUM

Architect: Maki and Associates, Japan & Opolis

Built- up Area: 25410 m²

Site Area: 5.6 Hectares

Location: Malappuram, Tamil Nadu, India

Function: Cultural Museum

Context: Modern

2.5.1 ABOUT THE ARCHITECT

Of his design philosophy, he says, “Humanism in architecture has always been my focus and is a continuous thread running through all my projects. Fumihiko Maki's design philosophy centres on humanism, emphasizing decency and ethical considerations in architecture. Throughout his seven-decade career, he remains committed to meeting client desires while addressing hidden societal expectations. Maki prioritizes user experience, forming core teams for each project and engaging in detailed discussions. His designs seamlessly blend a minimalist Japanese aesthetic with Western influences and new technology. The architect's focus on multi-level human interactions sets his structures apart. The vision for the new Museum is to be a world-class showcase for the ancient history and heritage of the lands now known as Bihar. It will be a destination for resident Bihari's and also for domestic and international tourists alike. The mission of the new Museum is to celebrate this ancient past and to inculcate a sense of pride in modern-day Biharis

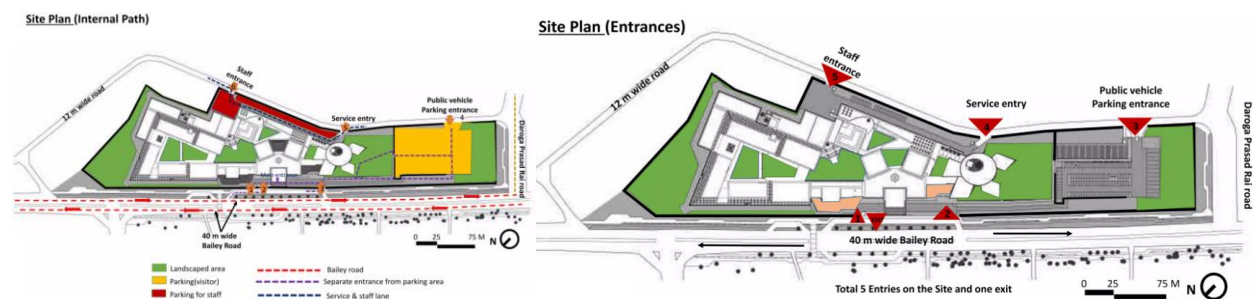


Fig 2.26(a): Site Plan Fig 2.26(b): Entry and Exit points

2.5.2 SPACIAL ANALYSIS

As visitors step into the museum, they are greeted by a grand entrance and a spacious foyer that sets the stage for an immersive exploration of Bihar's rich heritage. Inside, the exhibition galleries are meticulously curated, offering thematic insights into Bihar's history, art, archaeology, and cultural contributions. Each gallery is designed to evoke a sense of narrative continuity, employing lighting, sound, and interactive displays to engage visitors on a profound level.

The museum's design incorporates interactive and interpretive spaces, providing hands-on experiences and multimedia installations that enhance understanding and emotional connection. Architectural elements like alcoves, viewing platforms, and well-placed seating areas encourage contemplation and engagement with the exhibits. The circulation throughout the museum is carefully planned, ensuring a seamless flow and easy navigation for visitors of all ages and abilities. Technology plays a pivotal role in the museum experience, with digital enhancements such as touchscreens, augmented reality, and digital archives enriching the storytelling process without overshadowing the physical artifacts. Public amenities such as restrooms, cafes, and gift shops are seamlessly integrated into the museum's design, enhancing visitor comfort and convenience. Accessibility features ensure that the museum is welcoming to all, with ramps, elevators, and inclusive signage catering to diverse needs.

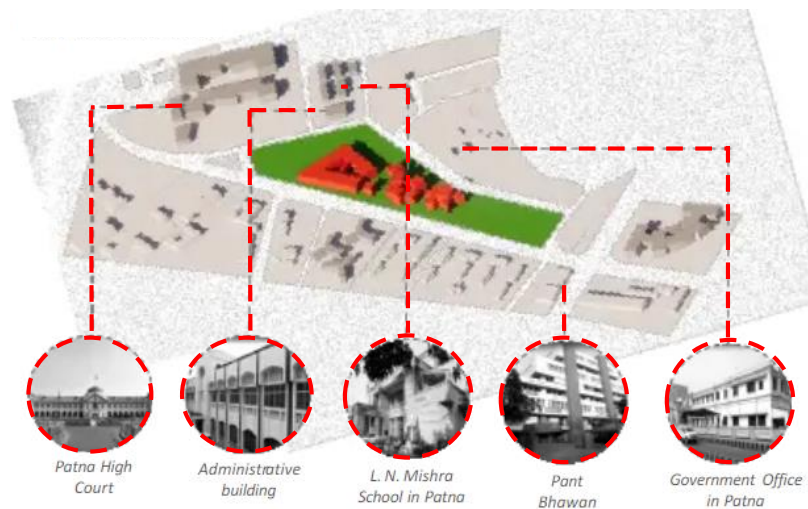


Fig 2.27: Spacial Analysis Of Bihar Museum

The exhibition galleries form the heart of the museum, meticulously organized thematically or chronologically to showcase Bihar's diverse cultural treasures, including art, history, archaeology, and cultural artifacts. Flexible layouts within these galleries allow for dynamic exhibit arrangements, ensuring a fresh and engaging experience with each visit. Interpretive spaces within the museum, such as audio-visual rooms and interactive displays, provide deeper insights and interactive learning opportunities, enriching visitors' understanding of Bihar's cultural significance. Clear signage and intuitive wayfinding systems guide visitors through the museum's

various sections, while atriums and courtyards offer visual relief and spaces for contemplation amidst the exhibits.

2.5.3 MATERIAL ANALYSIS

The exterior façade showcases a harmonious mix of materials such as locally sourced stone, including sandstone and granite, reflecting Bihar's geological diversity and craftsmanship legacy. These durable materials not only lend a timeless elegance to the museum's architecture but also contribute to its sustainability and resilience against weathering. Upon entering the museum, visitors encounter interior spaces characterized by a thoughtful selection of materials. Polished marble or granite flooring in common areas and exhibition halls exude a sense of grandeur while providing a durable and easy-to-maintain surface for high foot traffic. The use of glass, both in windows and interior partitions, allows natural light to permeate the spaces, creating a bright and welcoming ambiance. Wood plays a significant role in enhancing warmth and texture within the museum. Timber accents, such as wooden panels or furnishings crafted from local hardwoods like teak or rosewood, add a touch of organic beauty and cultural authenticity. These wood elements may also extend to decorative carvings or detailing, paying homage to Bihar's rich tradition of craftsmanship.



Fig 2.28: Material Analysis Of Bihar Museum

Weathering steel at the entrance.

Structural Finishing: RCC/MS

Extruded polystyrene Insulation in the wall.

Flooring: Granite/Rubber/Vitrified tiles/ Wood Internal

Wall Surfaces: Gypsum /Paint/ Wood Panel/ Stone/

Plaster External Wall Surfaces: Sandstone/ Limestone/ Granite cladding/ Corten steel panels/Terracotta In terms of modern materials, the museum integrates technology seamlessly. High-quality acrylics or polycarbonates may be used for interactive displays, protective barriers, and signage, blending functionality with a contemporary aesthetic. Sustainable materials such as recycled plastics or eco-friendly composites might also be incorporated into the museum's design, aligning with global trends in environmental consciousness. Additionally, metal elements such as stainless steel or brass accents are strategically employed for fixtures, handrails, and decorative features, adding a touch of modernity and refinement to the overall design scheme. These metal components not only offer durability and visual interest but also symbolize Bihar's industrial

progress

and

cultural

evolution.



Fig 2.29(a): Weathering steel in Foyer Projection Fig 2.29(b): Eps insulation in wall

CHAPTER 3

DATA COLLECTION AND STANDARDS

3.1 CIRCULATION

Circulation space identifies area of a building that is used for pedestrian travel, such as a hallway, stair way, and areas in a room that leads to another room. Develop exhibitions with these visitor circulation patterns in mind. Design so that visitors do not have to take extra steps. Designing circulation spaces should be: Widen corridors beyond the typical 8-9 feet currently in use. Also able to easily handle two-way traffic. Break up corridor Keep corridors a consistent width. Corridors that expand and contract create bottlenecks. Consider rounding or angling corners so there is a sight line to the intersecting corridor. Blind corners can be a hazard. People who walk at a fast pace or turn corners quickly do not see the traffic in the intersecting hallway. This can lead to congestion, bumping, collisions, and altercations. or lengths. This will reduce travel time and also discourage kids from running through the halls.

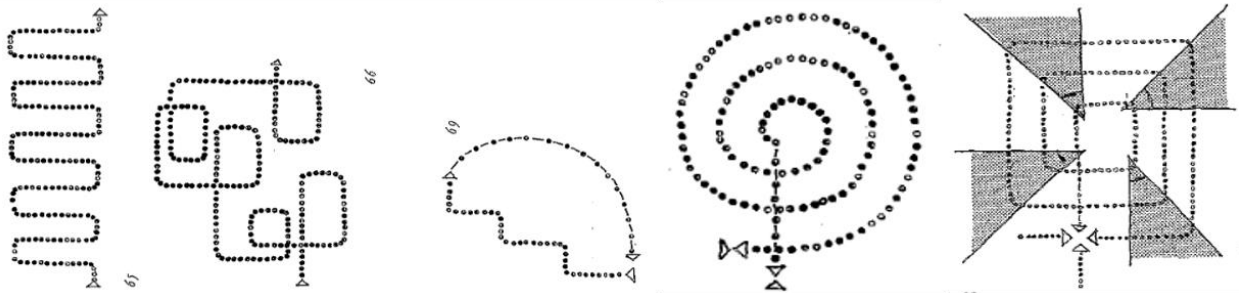


Fig 3.1: Various Circulation for Museums

The circulation route must be well lighted, clearly defined, and easy to follow. Create an accessible route with the following characteristics: To be accessible to people using wheelchairs and other mobility-oriented assistive devices, the circulation route must be at least 915 mm (0.91 m) wide for one-way traffic. For two-way routes, the minimum width is 1525 mm (1.5 m). It is recommended that even one-way traffic routes be a minimum of 1525 mm (1.5 m) to allow wheelchair users to stop to look at cases without blocking the route.

3.2 SITE ZONING

Public Collection Areas: Zone with environmental controls and security designed for the preservation of collections. On Public Areas: Zone which is meant for the staff alone with

environment controls and security. Public Non-Collection Areas: Zone in which the finish and durability and environment created for human comforts. Non Public-Collection Areas: Zone in which the finish and durability and environment created for the staffs alone. The basic objective of the Museum is to collect, preserve, study and exhibit significant objects of the community, and provide related educational services in order to increase public knowledge and stimulate creative activity. A good museum includes these basic functions: (1) curatorial, (2) display, (3) display preparation, (4) education. The display area is only about 40 percent of the area of the build

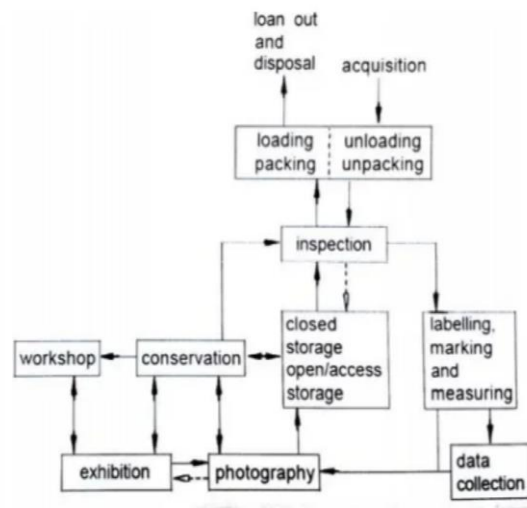
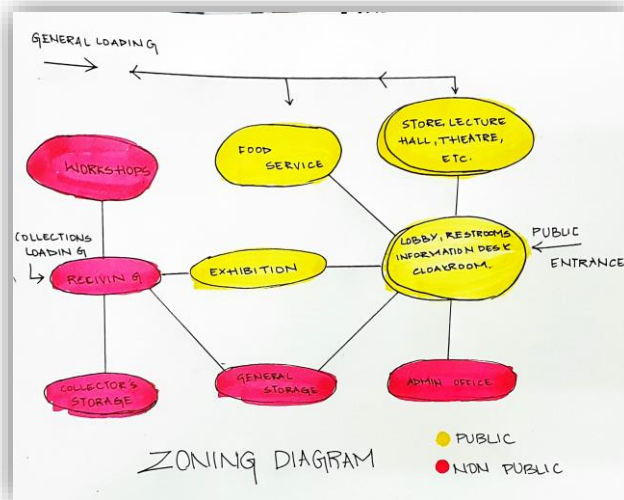


Fig. : 8 Layout of services

Fig 3.2(a): Site Zoning Fig 3.2(b): Layout of Services

In the operation of collection services, not every operation necessarily requires space, some a services separate may be provided by outside agencies. As far as possible, collection movement and public circulation should be kept separate.

3.3 APPROACH

Frontal. A frontal approach leads directly to the entrance of a building along a straight, axial path. The visual goal that terminates the approach is clear, it may be the entire front facade of a building or an elaborated entrance within the plane. Oblique. An oblique approach enhances the effect of perspective on the front facade and form of a building. The path can be redirected one or more times to delay and prolong the sequence of the approach. If a building is approached at an extreme angle, its entrance can project beyond its facade to be more clearly visible. Spiral. A spiral path prolongs the sequence of the approach and emphasizes the three-dimensional form

of a building as we move around its perimeter. The building entrance might be viewed intermittently during the approach to clarify its position or it may be hidden until the point of arrival.

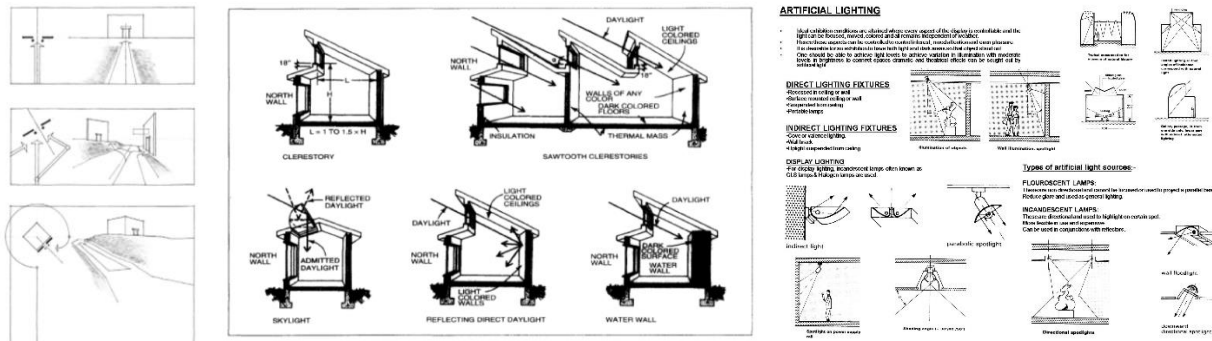


Fig 3.3(a): Approach Fig 3.3(b): Lighting

3.4 LIGHTING

Efficiently and precisely illuminating art Spotlights, floodlights and wall washers are flexible and efficient lighting tools for the effective presentation of art. The quality of lighting technology is not only important for the precise distribution of light and a qualitative art experience, but also for the long-term cost-efficiency of the lighting installation. When comparing the efficiency of luminaires, key figures need to be evaluated based on identical lighting tasks. In this respect, optical systems utilising the principle of projection via lenses benefit from qualitative and quantitative advantages compared to conventional reflector solutions. Often the arrangements can be staggered which produces a certain mystery and a desire on the part of the visitor to peek around corners to see what is next. Cases that area arranged to narrow the entrance a bit, so that the hall inside then opens out, provide a certain amount of interest. With little eye movement, people usually see and recognize with ease things that are within an approximately elliptical cone of vision, with the apex of the cone at the eye-level height.

CHAPTER 4

SITE STUDY AND ANALYSIS

4.1 SITE LOCATION

The site is located in Tamil Nadu, India, specifically in the Ariyalur district within Gangaikonda Cholapuram. It is situated near a major highway, making it easily accessible. One notable tourist attraction nearby is the Gangaikonda Cholapuram Temple, a magnificent example of Chola architecture and a UNESCO World Heritage site.

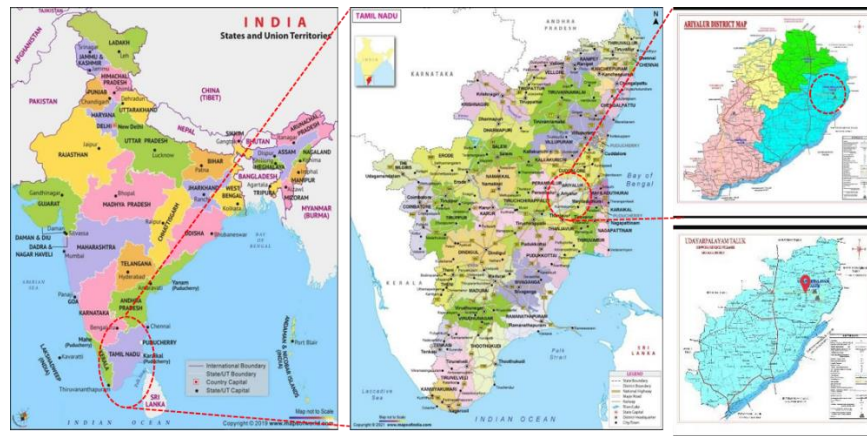


Fig 4.1: Site Location

4.2 SITE JUSTIFICATION AND FEASIBILITY:

Gaṅgaikoṇḍa Chōlapuram is a village located near to Jayankondam, Ariyalur district, Tamil Nadu, India. It became the capital of the Chola dynasty in c. 1025 by Chola emperor Rajendra I, and served as the capital for around 250 years. Rajendra Chola emerged victorious in the conquest of the Ganges, and in the commemoration of this event, he assumed the title 'Gangai Konda Chola'. It means the man who captured the Ganges and brought it to the South. King Rajendra-I was running his empire from Gangaikondacholapuram. Apart from conquering several countries, the Chola king established trade links with several countries including China. For nearly 1500 years, the Chola dynasty (300 B.C.–A.D. 1279) asserted its power—influencing religion, culture, and architecture—via a sophisticated maritime trade system that extended from India throughout Southeast Asia and even to China. Over 1,100 Antiquities like iron objects (nails), copper objects, copper coins, ivory objects, glass beads and bangle fragments, hopscotches, terracotta objects and ceramics like coursed red ware, red ware, black ware, black slipped ware, decorated ware and Chinese ware (Celadon and Porcelain) have been unearthed, implying trade links with Chinese. Archaeologists have now unearthed remains of the Chola palace which includes a 30 brick-course, 3- meter structure, and iron nails of various sizes. The museum would become another landmark in Ariyalur and attract more visitors to Gangaikonda Cholapuram, which is one

of most-sought after historical places across the world. “Gangaikondacholapuram may be a small village today, but it is from here that the Cholas had once ruled almost the whole of southeast Asia”



Fig 4.2: Site Justification

4.3 SITE HISTORY:

The conquest of the Gangetic plains in A.D. 1023 Rajendra-I built a great city called Gangaikondacholapuram and a Siva temple Gangaikondacholisvarar and a lake Chola Gangam in commemoration of his victory. The place, the temple and the lake (Chola Gangam) are the living embodiments of the heroism of the Tamils who unfurled the Chola's Tiger flag on the banks of the River Ganges. He also shifted his capital from Thanjavur to this newly built town. From his period to the end of the Chola family rule in A.D.1279 this city was the capital for the Chola Empire for a period of 256 years.

The gigantic stone temple which he built in this place is rich repository of beautiful sculptures of middle Chola period. This city is celebrated in the literature of Muvar ula of Ottakuttar and Kalingattuparani of Jayankondar. Rajendra's Gangetic expedition was over by his 11th regnal year (A.D.1023). The earliest reference which mentions the city of Gangaikondacholapuram is a record of A. D. 1027 of him. Hence it is evident that the city was built in memory of his great victory between A.D. 1023 and 1027. This temple is a living history of the Cholas in stone from the period of Rajendra-I and a beautiful gallery of Chola art and architecture. Many sculptures brought from Andhra, Karnataka and Bengal as war trophies are also preserved in the temple and in the nearby villages. Chandesura Anugraha Murthy and Sarasvathy are the most beautiful sculptures of the temple.

4.3 SITE ANALYSIS:

4.3.1 Site Inventory Analysis:

The map incorporates details regarding the site's drainage system, elevation contours, proximity to the Coastal Regulation Zone (CRZ), existing buildings, vegetation, sun exposure levels, and a water body named CHOLAGANGAM. Additionally, the map showcases the Arulmigu Peruvudaiyar Temple and nearby roads, including the Trichy-Chidambaram Road and National Highway NH 36.

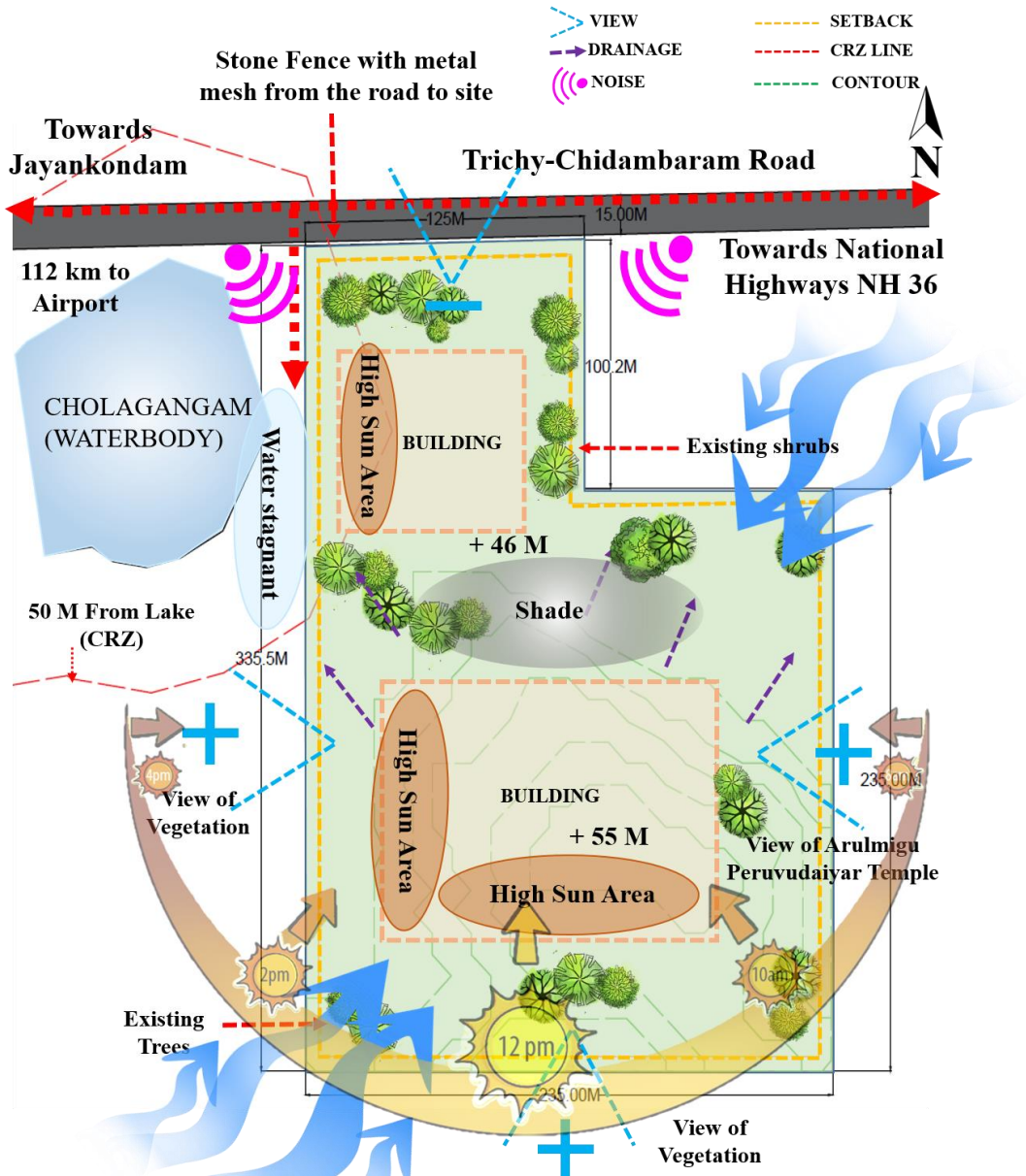


Fig 4.3: Site Inventory Analysis

4.3.2 Soil Type and Foundation

Spread Footings: Spread footings, also known as shallow foundations, are a common choice for stable soils with good bearing capacity. **Mat Foundations (Raft Foundations):** This type of foundation covers the entire footprint of the structure, providing stability by distributing the loads evenly. Mat foundations can be effective in areas where the soil has variable characteristics, such as the transition from red to yellow in the Ferruginous red loam. **Pile Foundations:** Pile foundations are driven deep into the ground to reach stable soil or bedrock, providing support for structures with challenging soil conditions. In areas where the Ferruginous red loam may have varying layers, piles can be driven through the less stable layers to reach a more stable foundation material.

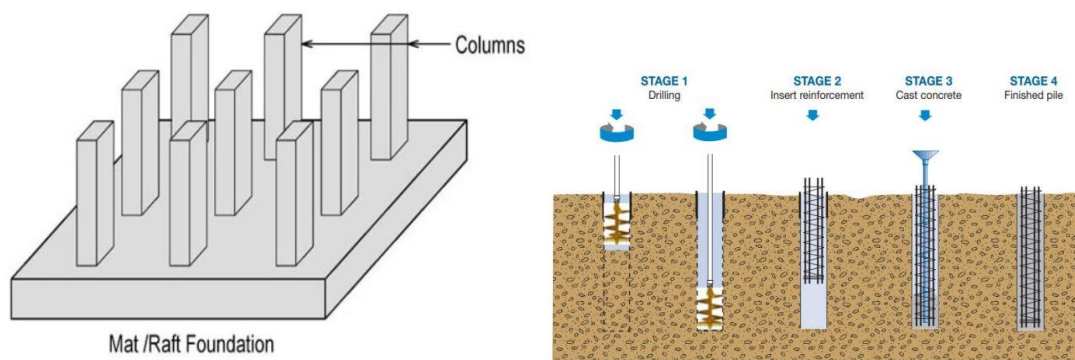


Fig 4.4(a): Raft Foundaation Fig 4.4(b): Pile Foundation

4.3.3 Climate

Gangaikonda Cholapuram boasts a tropical savanna climate characterized by hot and dry seasons. Currently, in May, expect scorching days with highs around 90°F (32°C) and warm nights near 76°F (24°C). Throughout the year, temperatures generally swing between a cool 73°F (23°C) and a scorching 99°F (37°C). Easterly winds, gentle breezes blowing from land to sea, are the norm, typically ranging from 6 to 29 miles per hour (10 to 47 kilometers per hour). Rainfall follows a distinct pattern. The monsoon season reigns from June to September, drenching the region with frequent showers and thunderstorms. This is in stark contrast to the rest of the year, which experiences considerably less precipitation. Temperatures can skyrocket to a sizzling 111°F (44°C) during this period. December and January bring some respite, being the coolest months, but even then, lows only dip to around 68°F (20°C). Similarly, the monsoon season between June and September holds the title for the wettest period, while December to April are the driest months, offering clear skies.

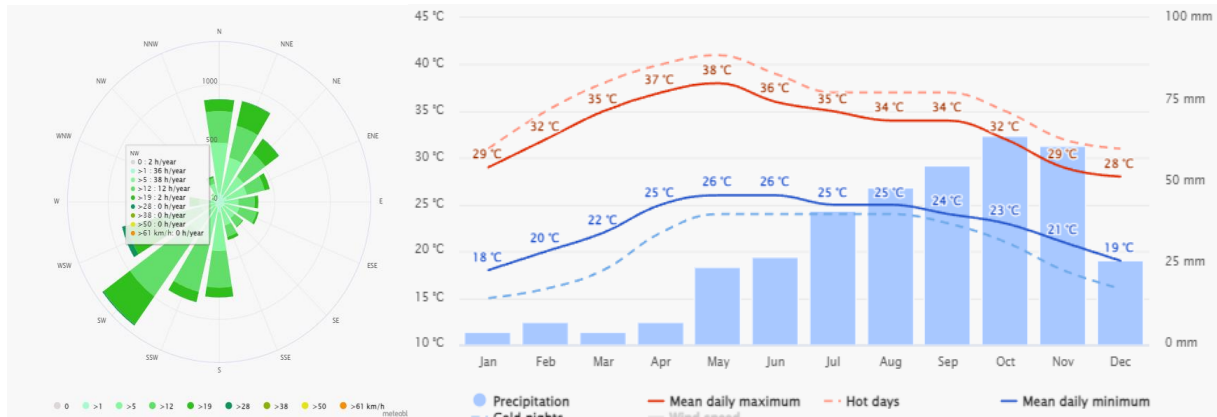


Fig 4.5(a): Wind Rose Diagram Fig 4.5(b): Temperature and Rainfall

4.3.4 Site Views

The site appears to be surrounded by fields on the north, south. To the east (right side in the image), there's a glimpse of the Gangaikondacholapuram Temple, while a lake or river can be seen to the west. The earliest reference which mentions the city of Gangaikondacholapuram is a record of A. D. 1027 of him. Hence it is evident that the city was built in memory of his great victory between A.D. 1023 and 1027. This temple is a living history of the Cholas in stone from the period of Rajendra-I and a beautiful gallery of Chola art and architecture. Many sculptures brought from Andhra, Karnataka and Bengal as war trophies are also preserved in the temple



Fig 4.6:: Views of the Site

CHAPTER 5

ARCHITECTURAL DESIGN

5.1 CONCEPT

5.1.1 Design Principles

The Grand Chola Museum is a testament to the concept of spatial organization inspired by the architectural principles of the Chola dynasty. Central to this concept is the alignment of the temple axis along the east-west direction. This deliberate orientation serves to connect key elements such as the sanctum, vim Ana (the tower over the sanctum), shrine, and other structural components. One of the defining features of the museum's design is its asymmetrical yet harmoniously balanced plan. This balance is achieved through careful consideration of the placement and proportions of various architectural elements. Despite the asymmetry, there is a clear hierarchical order that governs the arrangement of these elements. At the heart of this spatial organization is the focal point represented by the Nandi, a sacred bull statue. Positioned prominently atop the entrance gate, the Nandi not only serves as a visual anchor but also sets the orientation for the entire site. Visitors entering the museum are greeted by this iconic symbol, which immediately establishes a connection to the cultural and religious significance of the Chola dynasty.

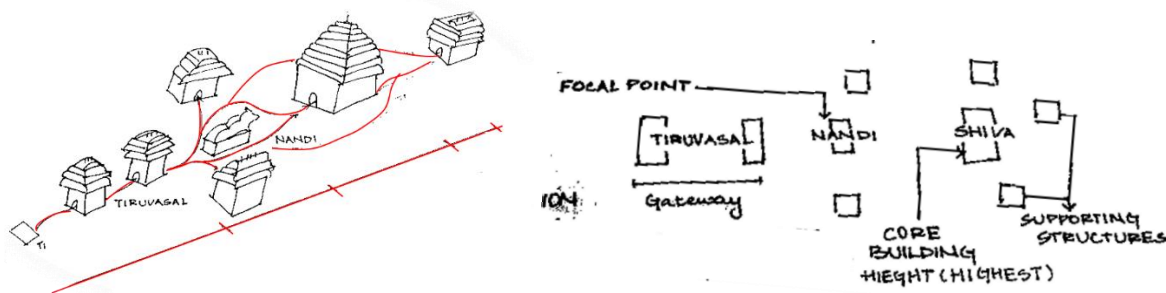


Fig 5.1:: The Spatial Analysis of A Temple

In addition to the main structures, the museum's design incorporates supporting structures that complement the overall composition. These supporting structures, characterized by their lower heights, play a crucial role in enhancing the aesthetic appeal and functional efficiency of the museum. They serve as architectural elements that frame and highlight the grandeur of the main temple-like structures while providing necessary infrastructure and circulation spaces for visitors. The Cholas were not only renowned for their architectural achievements but also for their strength, military prowess, and maritime expeditions. The Grand Chola Museum stands as a testament to the enduring legacy of the Chola dynasty, showcasing their architectural brilliance, cultural richness, and historical significance.

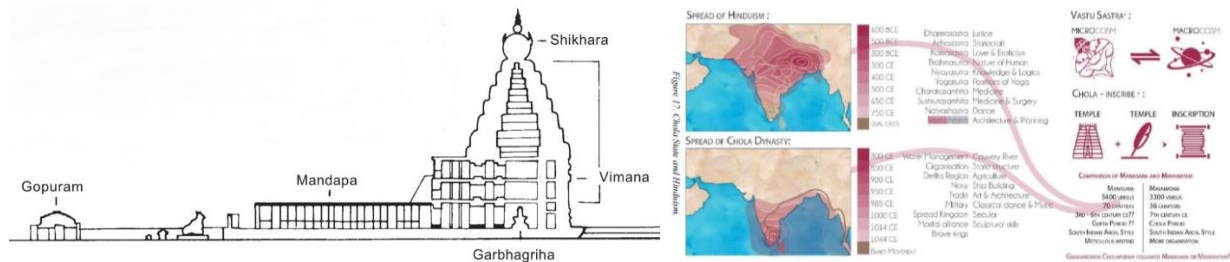


Fig 5.2:: Vaastu and the Placement of the Structures

Chola temples, influenced by Vaastu Shastra, emphasized cardinal direction alignment like east-facing entrances for solar energy. Sacred geometry, symmetry, and Vastu Purusha Mandala principles were integrated into their spatial layouts for spiritual resonance. Durable materials and natural elements showcased craftsmanship while promoting environmental harmony in temple construction.

5.1.2 Built form

The design of the built form takes inspiration from the concept of stacking, a technique often seen in temple architecture, particularly in the hierarchical order of the vimana. This design approach is intended to imbue the structure with a sense of complexity and grandeur, creating a visually dynamic and majestic appearance. By incorporating stacked elements, such as tiers or layers, the structure gains depth and dimensionality, enhancing its overall aesthetic appeal. The dynamic nature of the design captures the eye and engages the viewer, inviting exploration and appreciation of its intricacies. The interplay of light and shadow on the stacked surfaces adds a layer of complexity, enhancing the temple's visual impact and creating a captivating ambience. The built form's design, inspired by stacking and hierarchical order, elevates the temple's architectural expression, evoking a sense of awe and admiration among visitors.

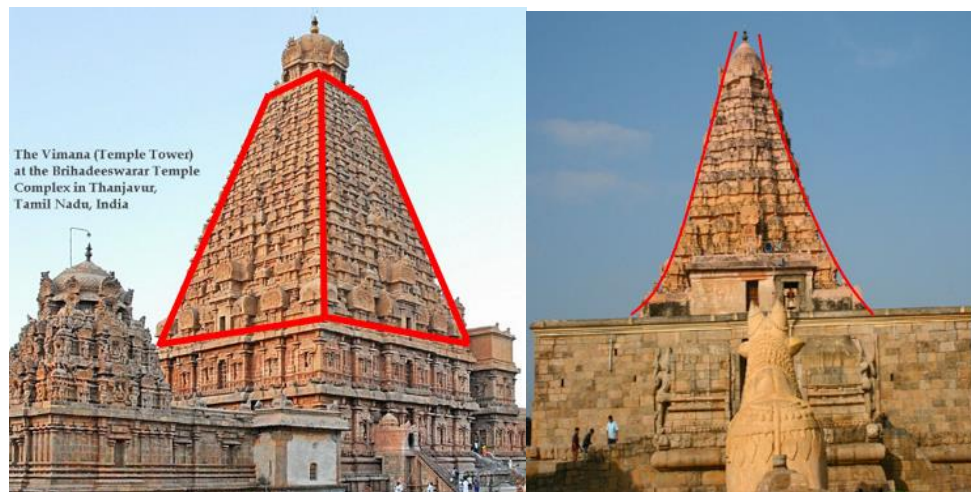


Fig 5.3:: The Pyramidal Structure

5.1.3 User Analysis

Family tourists are often energetic and seek entertainment, relaxation, and memorable experiences. Urban plazas provide an ideal setting for such tourists, and the spaces offering hands-on activities, storytelling experiences, and spaces to rest should be available and spaces to enjoy panoramic views. Tourists are typically eager and curious about new experiences. Cultural performances can be offered to provide them with a fresh and captivating experience, introducing them to the local culture and traditions. Additionally, souvenir shops can be included to allow tourists to take home a piece of their memorable journey. Students, researchers, and historians are known for their eagerness to learn and attention to detail. Therefore, spaces that cater to their needs are equipped with audiovisual resources and knowledge-sharing facilities. These spaces often include auditoriums for lectures and presentations, as well as libraries where informative exchanges can take place. Artists, architects, and various types of art enthusiasts are drawn to destinations for their appreciation of art and architecture., and interactive workshops or exhibitions that allow enthusiasts to engage with different art forms firsthand. The temple experiences a daily footfall ranging from 1000 to 2000 visitors, which significantly rises during festive seasons like Mahashivaratri, Thai Pongal, and Tamil Puthandu, often doubling or tripling. These occasions attract a diverse range of tourists and devotees seeking cultural experiences. Notably, after visiting the renowned Brihadeeswarar Temple in Gangaikonda Cholapuram, many tourists extend their exploration to this temple, adding to its foot traffic and cultural significance.

5.1.4 Design Elements

The entrance gate is in a stepped shape, featuring intricate carvings of tiger and elephant faces. These carvings are arranged in a hierarchical order based on height, with the tiger face at the top symbolizing strength and the elephant face below symbolizing wisdom. Additionally, the gate is adorned with meaningful inscriptions that add depth and context to the overall design. This combination of stepped structure, symbolic carvings, hierarchical layout, and thoughtful inscriptions creates a captivating and meaningful entrance that is sure to leave a lasting impression on visitors. The decorative wall adorned with inscriptions, featuring a carving of Raja Raja Chola and the Chola flag. This wall is positioned in front of a serene lotus pond, creating a picturesque setting that captures the essence of Chola heritage. The inscriptions add historical and thematic depth to the design, while the depiction of Raja Raja Chola and the Chola flag pays homage to their legacy and symbolism. The inscriptions on the decorative wall are meticulously crafted to reflect key aspects of Chola history, culture, and achievements. The decorative wall plays a crucial role in narrating the Chola legacy, educating visitors about their achievements, values, and cultural significance. Overall, this combination of elements creates a visually striking and culturally significant focal point.

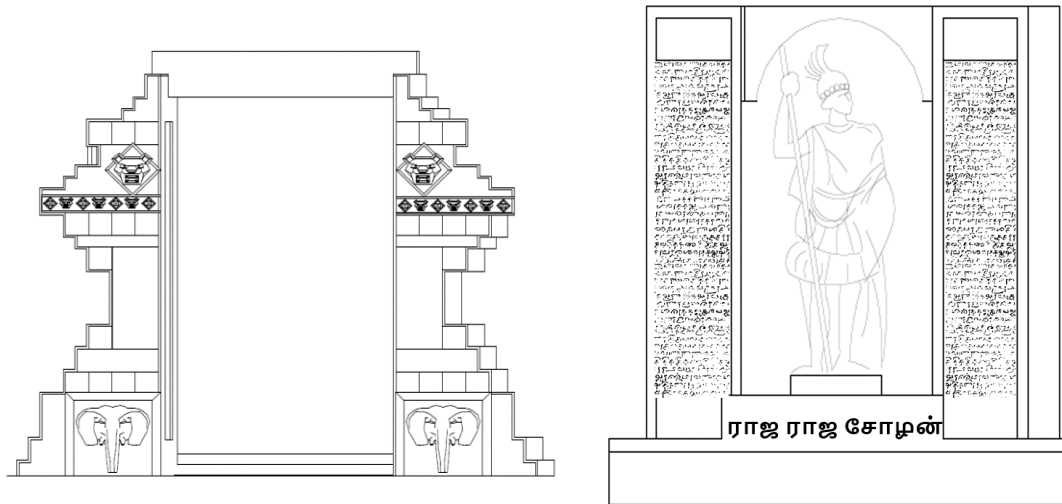


Fig 5.4: The Entrance Gate and Wall Inscription

Tunnel system or the more than 100 underground passageways that are believed to exist under this temple! There is believed to be a whopping 40km long underground tunnel from the Thanjavur Brihadeeswarar temple to the Ganagaikonda Cholapuram temple built by the Gangaikonda Chola king; Another important tunnel is known to exist between this temple and the Thanjavur palace. One is short and visitors are allowed in to feed their curiosity with goosebumps of an era long gone by. The routes were very useful to reach temples during auspicious days like Thaipusam and other such pious Hindu festivals. Sculptures are not carved just to make the temple look more beautiful. They are carved basing upon the various spiritual scriptures like Agamas, Shilpa, and Vastu Shastra's with inner meaning and also to awaken the spiritual sense. Dwarapalakas are the two guardian deities or the gatekeepers of the temple entrances or the Dwaras. Dwaram stands for door or entrance and the Palakas for guardians. They are a common feature of almost all the South Indian Temples.



Fig 5.5: Tunnel Gateways and Dwarapalakas

For the Chola dynasty, elephants symbolized power, strength, and prosperity. They were not just beasts of burden but majestic creatures that played crucial roles in royal ceremonies, processions, and even battles. The Elephant Stables, therefore, served as a testament to the Chola rulers' wealth and their ability to command such magnificent animals. Elephants were admired for their physical strength and resilience. Associated with deities like Lord Ganesha, they held spiritual significance and were integral to cultural celebrations, representing auspiciousness and continuity of traditions

Kalaripayattu, an ancient martial art was a combat system encompassing strikes, kicks, grappling, and weaponry, possibly used for training soldiers and for defence during warfare. Kalaripayattu represents physical prowess, discipline, and the art of self-defence, embodying values of strength, agility, and martial prowess valued in ancient Indian societies. It encompasses not just physical training but also mental discipline, breathing exercises, and healing techniques. Lotus motifs were prevalent in Chola art and architecture, showcasing the dynasty's cultural heritage and artistic achievements. Lotus ponds, along with sculptures and carvings depicting lotus flowers, were integral parts of Chola aesthetics and cultural identity. The lotus flower has deep spiritual symbolism in Hinduism, Buddhism, and other Indian religions. Lotus flowers were also associated with royalty and divine authority. They were often depicted in art and literature as symbols of kingship, prosperity, and divine blessings.

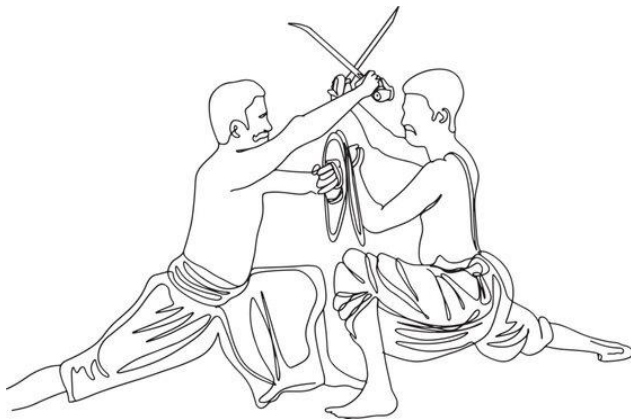


Fig 5.6:: Kalaripayattu and Elephant Sculptures

5.2 DETAILED DRAWINGS

5.2.1 Site plan:



Fig 5.7: Site Plan

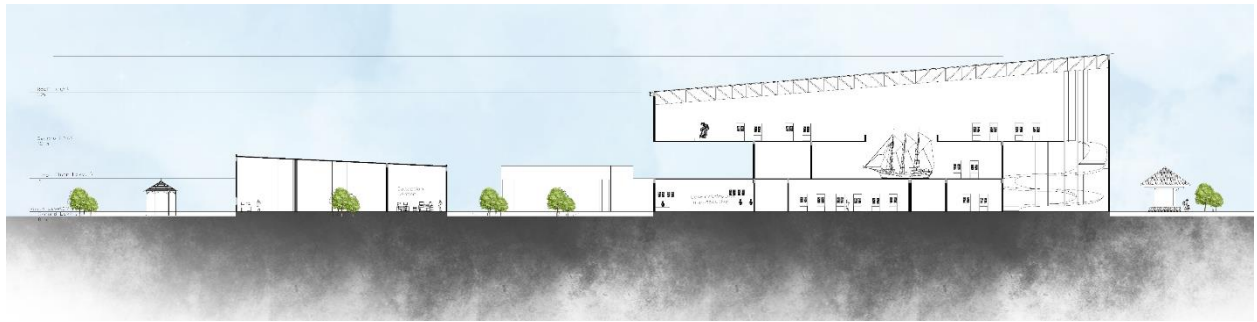


Fig 5.8:SectionAA'

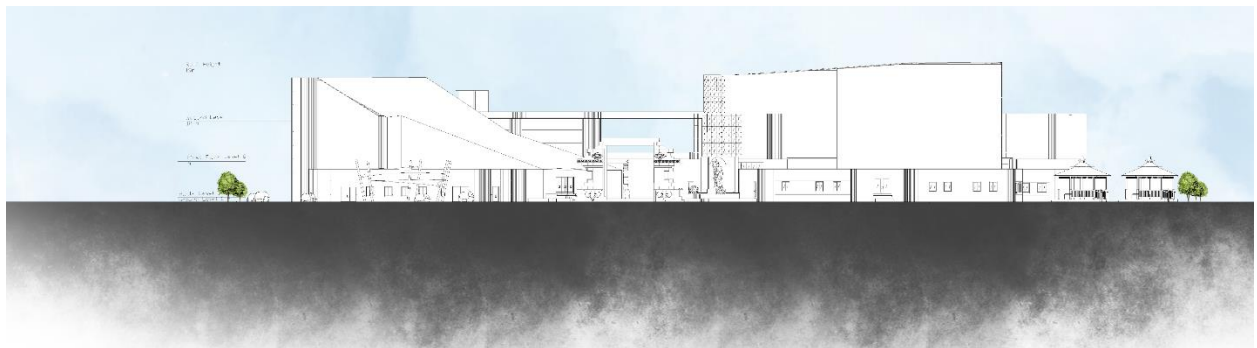


Fig 5.9:South-West Elevation



Fig 5.10:Section CC'



Fig 5.11: View When Entering –Drop Off Point

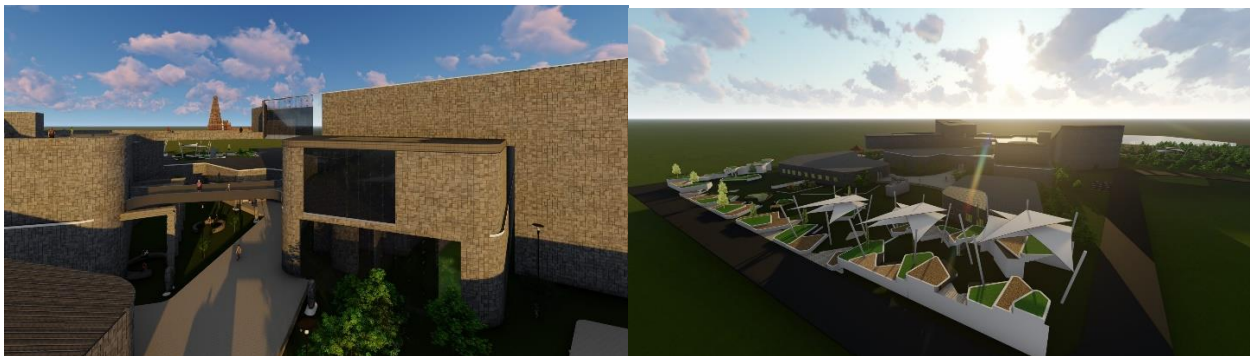


Fig 5.12: (a):The View From The Brigde 5.12: (b): Workshop Area



Fig 5.13 :View Towards The Temple In The Plaza

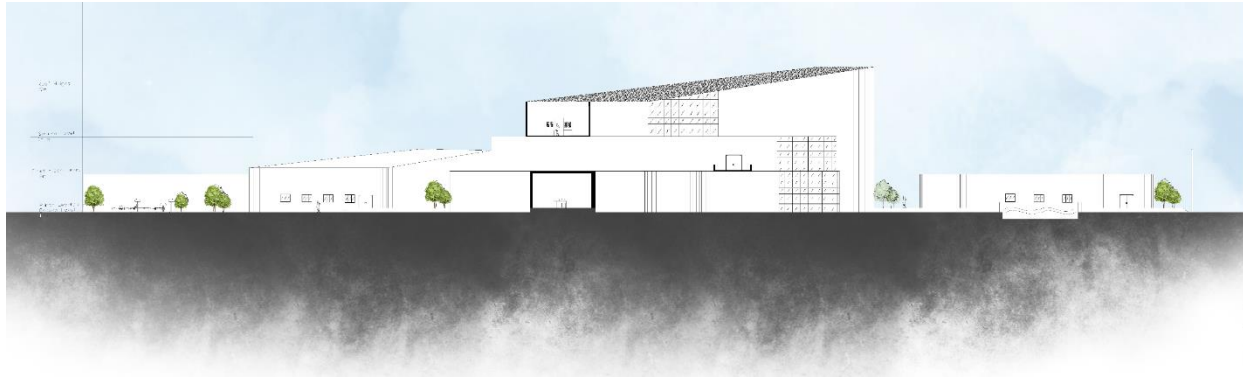


Fig 5.14:Section BB'



Fig 5.15:South-East Elevation



Fig 5.16:Section DD'

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DAKSINACHETRA HERITAGE MUSEUM		SITE LOCATION	
Architect: Lauren Jansen, Henry Gonsky Built-up Area: 1000 sqm Site Area: 1000 sqm Location: Madhavaram, Tamil Nadu, India Project: Cultural Museum Status: Completed ABOUT THE ARCHITECT The architect is a multidisciplinary team of architects, interior designers, and landscape architects. The team is based in Madhavaram, Tamil Nadu, India. The team has worked on various projects, including museums, galleries, and cultural centers. The team's design philosophy is to create a space that is both functional and aesthetically pleasing, and that reflects the local culture and heritage. ARCHITECTURE The architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. INTERIOR DESIGN The interior design is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. LANDSCAPE ARCHITECTURE The landscape architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof.		The museum is located in Madhavaram, Tamil Nadu, India. The site is a plot of land that is approximately 1000 sqm in area. The site is located in a residential area, and it is surrounded by a mix of residential and commercial buildings. The site is accessible by road and by public transport. ABOUT THE ARCHITECT The architect is a multidisciplinary team of architects, interior designers, and landscape architects. The team is based in Madhavaram, Tamil Nadu, India. The team has worked on various projects, including museums, galleries, and cultural centers. The team's design philosophy is to create a space that is both functional and aesthetically pleasing, and that reflects the local culture and heritage. ARCHITECTURE The architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. INTERIOR DESIGN The interior design is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. LANDSCAPE ARCHITECTURE The landscape architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof.	
SHAR MUSEUM		SITE LOCATION	
Architect: Pooja Kulkarni, Pooja Kulkarni Built-up Area: 1000 sqm Site Area: 1000 sqm Location: Madhavaram, Tamil Nadu, India Project: Cultural Museum Status: Completed ABOUT THE ARCHITECT The architect is a multidisciplinary team of architects, interior designers, and landscape architects. The team is based in Madhavaram, Tamil Nadu, India. The team has worked on various projects, including museums, galleries, and cultural centers. The team's design philosophy is to create a space that is both functional and aesthetically pleasing, and that reflects the local culture and heritage. ARCHITECTURE The architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. INTERIOR DESIGN The interior design is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. LANDSCAPE ARCHITECTURE The landscape architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof.		The museum is located in Madhavaram, Tamil Nadu, India. The site is a plot of land that is approximately 1000 sqm in area. The site is located in a residential area, and it is surrounded by a mix of residential and commercial buildings. The site is accessible by road and by public transport. ABOUT THE ARCHITECT The architect is a multidisciplinary team of architects, interior designers, and landscape architects. The team is based in Madhavaram, Tamil Nadu, India. The team has worked on various projects, including museums, galleries, and cultural centers. The team's design philosophy is to create a space that is both functional and aesthetically pleasing, and that reflects the local culture and heritage. ARCHITECTURE The architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. INTERIOR DESIGN The interior design is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof. LANDSCAPE ARCHITECTURE The landscape architecture is a blend of traditional and modern design. The building features a series of interconnected volumes that are arranged around a central courtyard. The building is constructed using a mix of materials, including brick, stone, and concrete. The design is inspired by the traditional architecture of the region, but it also incorporates modern design elements, such as large glass windows and a flat roof.	

0.3 GRAND CHOLA MUSUEM - REVIVING TRADITION IN MODERNITY

Plate 5.3: Case Studies ans Comparative Analysis

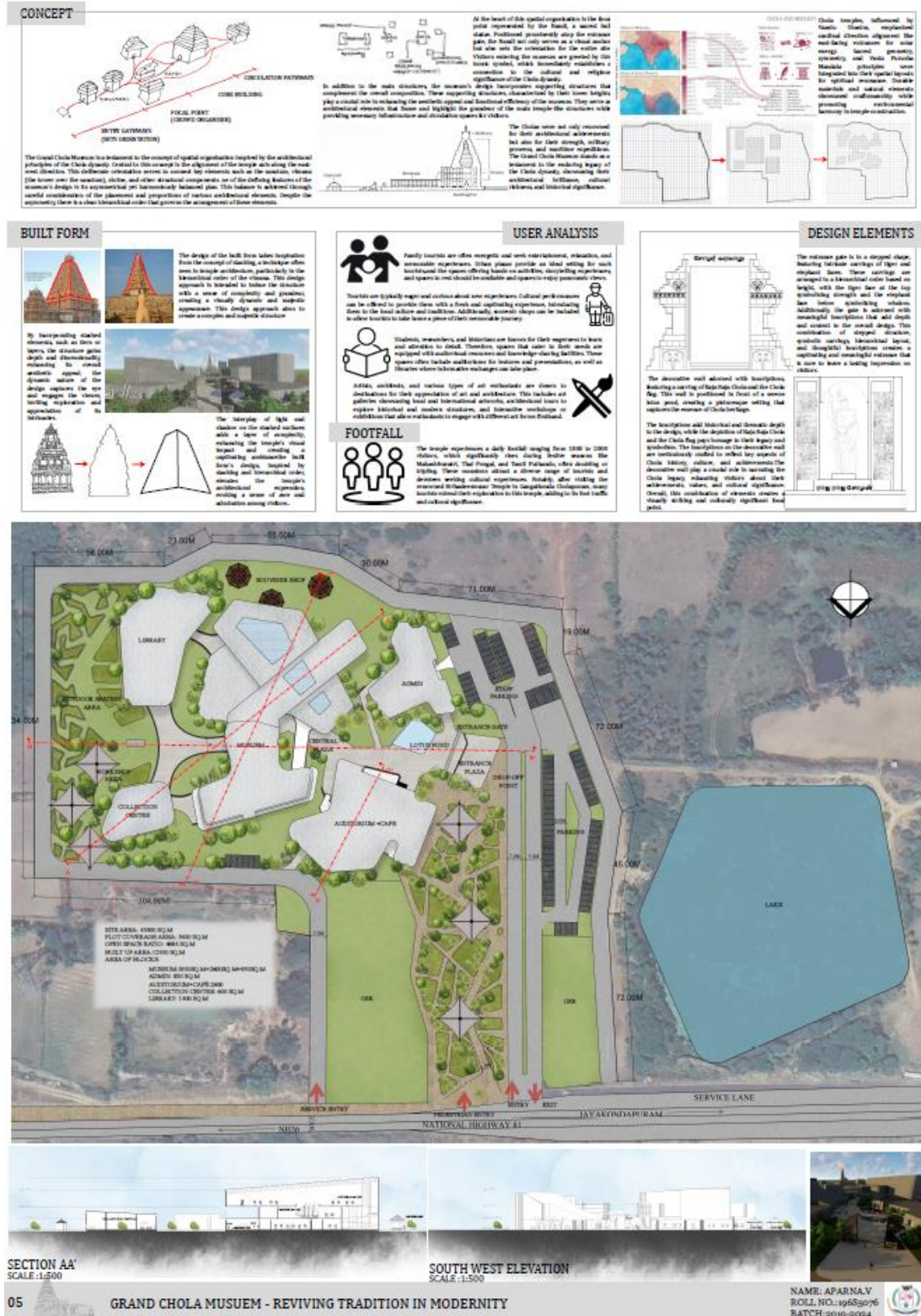


Plate 5.5: Site Plan and Concept

MUSEUM GROUND FLOOR PLAN
SCALE :1:200

06 GRAND CHOLA MUSUEM - REVIVING TRADITION IN MODERNITY

NAME: APARNA.V
ROLL NO.: 19655076
BATCH: 2019-2024



Plate 5.6: Master Plan and Musuem Ground Floor Plan

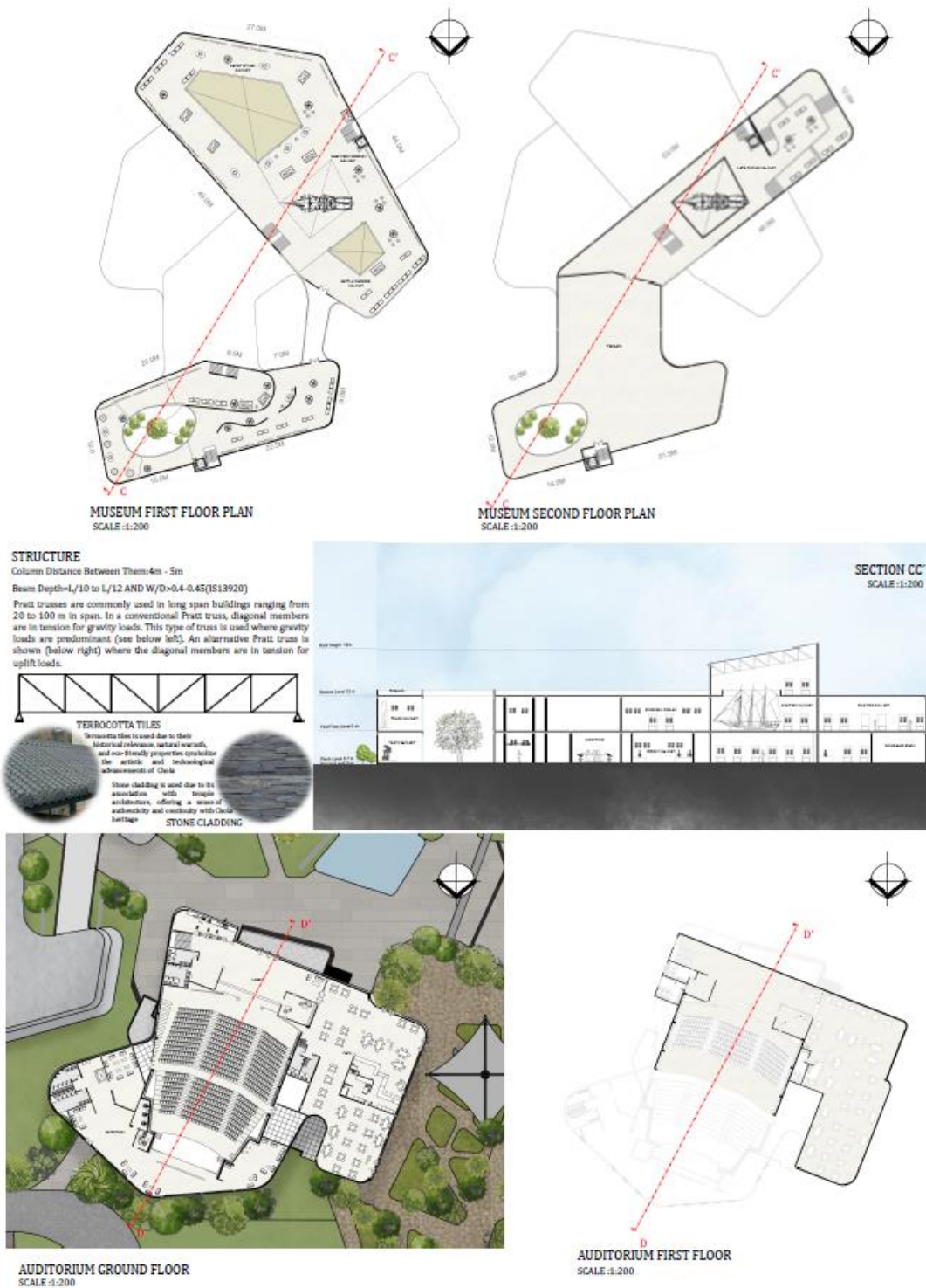


Plate 5.7: Museum Floor Plans and Auditorium Floor Plans



Plate 5.8: Surrounding Building Floor Plans and Sections



Plate 5.9: Model of the Musuem with Interior Views

CHAPTER 6

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