

TOURISM CENTRE AT MAHABALIPURAM

A THESIS

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

By

ERAIANBU SJ
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DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND ENVIRONMENT

SATHYABAMA

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

With Grade “A” by NAAC

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CHENNAI - 600 119

MAY 2024



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This is to certify that Thesis Report is the bonafide work of **ERAIANBU.SJ(39210098)** who carried out the Thesis entitled "**TOURISM CENTRE AT MAHABALIPURAM**" under our supervision from December 2023 to May 2024

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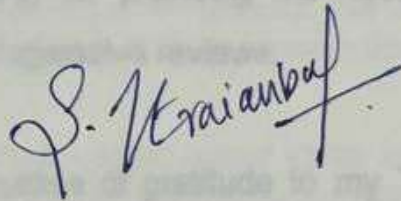
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DECLARATION

I, **ERAIANBU.S.J** hereby declare that the Thesis Report entitled "Tourism centre at mahabalipuram" done by me under the guidance of **Ar. Ar.Mohana Gopiraj** (Internal Guide), **Ar. Seetha visalakshi** (Internal Review Member) and **Ar. Meenakshi** (External Guide) Sathyabama Institute of Science and Technology is submitted in partial fulfillment of the requirements for the award of Bachelor of Architecture Degree.

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PLACE: Chennai

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ERAIANBU.S.J

THESIS SYNOPSIS

Mahabalipuram, an ancient town in Tamil Nadu, India, and a UNESCO World Heritage site, is celebrated for its remarkable rock-cut temples, monolithic structures, and intricate carvings from the Pallava dynasty. Despite its historical and cultural significance, the town faces challenges in managing the influx of tourists, preserving its heritage, and providing adequate visitor facilities. This thesis proposes the development of a comprehensive tourism centre aimed at enhancing the visitor experience, promoting sustainable tourism practices, and ensuring the conservation of Mahabalipuram's cultural assets.

The proposed tourism centre will serve as a hub for education, engagement, and sustainability. It will feature interactive exhibition halls that narrate the history and cultural significance of Mahabalipuram, educational facilities for workshops and cultural performances, and visitor amenities such as cafes and souvenir shops. Sustainable infrastructure will be a cornerstone of the design, incorporating green building practices, waste management systems, and renewable energy sources. Additionally, the centre will improve transportation links and ensure accessibility for all visitors, including those with disabilities.

This development aims to achieve multiple outcomes: enhancing the overall visitor experience through informative and engaging displays, managing tourist flow to reduce environmental impact, and preserving the site's heritage through responsible tourism practices. Furthermore, the project seeks to involve the local community, providing economic benefits and fostering a sense of ownership and pride. By creating a sustainable and educational tourism centre, Mahabalipuram can continue to welcome and educate visitors while safeguarding its historical treasures for future generations.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

- An Tourism center,or visitor interpretive center is an institution for dissemination of knowledge of natural or cultural heritage. A tourist center, also known as a tourist information center or visitor center, is a physical location typically found in popular tourist destinations or attractions where visitors can obtain information, maps, brochures, and advice about the local area and its attractions. These centers serve as a hub for tourists seeking guidance on accommodations, dining options, activities, transportation, and other relevant information to enhance their travel experience.
- Tourism centers are often operated by local tourism boards, government agencies, or private organizations with the goal of promoting tourism and providing assistance to visitors. They play a crucial role in helping tourists navigate unfamiliar surroundings, discover hidden gems, and make the most of their visit to a particular destination. Tourist centers may also offer ticketing services, souvenirs, and sometimes guided tours or other activities to enhance the visitor experience
- Tourism centers use different means of communication to enhance the understanding of heritage. To aid and stimulate the discovery process and the visitor's intellectual and emotional connection to heritage, the main presentation strategy tends to be user-friendly and interactive, and often use scenography exhibitions and multimedia programs

1.2 NEED OF THE PROJECT

Mahabalipuram 's primary strength is the magnificent Shore temple, an international destination. This project showcases the Pallava history, culture, cuisine, performing arts, handicrafts, literature, administrative manuscripts, weaponry. It is part of a larger masterplan to improve visitor facilities in the area surrounding the monuments, which attracts upto eight millioin visitors a year.

My Tourism centre is envisioned as a vibrant hub that celebrates the local culture and natural beauty, offering immersive and educational experiences for visitors. It will serve as a gateway to the region's attractions, providing comprehensive information, guided tours, and interactive exhibits that showcase the history, heritage, and ecological diversity of the area., a interpretation center which presents the political and cultural milestones of the different eras of its history and the present through its art and architecture.

The project is expected to enhance the quality of tourism related fuctions. And in return increase the inflow of tourists. Moreover, the project is to facilitate the local craftsmen and artists in providing them a platform to produce better quality artifacts, learn and share skills, exhibit their work and eventually market it.

1.3 AIM AND OBJECTIVE

The primary aim of the tourism centre is to enhance the tourism experience by providing comprehensive, accessible, and engaging resources and services that highlight the unique cultural, historical, and natural assets of the region. It seeks to foster sustainable tourism practices that benefit both visitors and the local community.

- Promote Local Heritage and Culture
- Enhance Visitor Experience
- Support Sustainable Tourism:
- Engage and Support the Community
- Involve local residents in tourism activities and promote local businesses.

1.4 METHODOLOGY

- Research Design:
- Qualitative and Quantitative Approaches: Use a mix of qualitative methods (interviews, focus groups) and quantitative methods (surveys, data analysis) to gather comprehensive data.
- Case Studies: Examine successful tourism centres to identify best practices and innovative approaches.
- Data Collection:
- Surveys: Distribute surveys to tourists, local residents, and business owners to gather insights on needs, expectations, and experiences.
- Interviews: Conduct in-depth interviews with key stakeholders including tourism experts, local authorities, and community leaders.
- Focus Groups: Organize focus group discussions with diverse participant groups to explore specific topics in detail.
- Site Analysis:
- Location Assessment: Evaluate potential sites for the tourism centre based on accessibility, visibility, and proximity to key attractions.
- Environmental Impact: Conduct an environmental impact assessment to ensure sustainable development practices are followed.
- Needs Assessment:
- Tourist Needs: Identify the needs and preferences of tourists through data analysis and market research.
- Community Needs: Assess the needs and expectations of the local community to ensure the centre benefits residents.
- Design and Planning:
- Concept Development: Create conceptual designs for the tourism centre, including layout, facilities, and interactive elements.
- Documentation and Reporting

CHAPTER 2

LITERATURE CASE STUDIES

2.1 HAVELI DHARMAPURA

2.1.1 ABOUT

Located in: Old Delhi

Address: 2293, Gali Guliyan, Dharampura, Delhi-6



Fig 2.1: Haveli

2.1.2 INTRODUCTION

- Haveli Dharampura, built in 1887 CE and currently owned by BJP leader Vijay Goel, is a 19th-century haveli in Chandani Chowk area of old Delhi that has been awarded a special mention in UNESCO Asia-Pacific Awards for Cultural Heritage Conservation in 2017
- Haveli Built during late Mughal and colonial periods, the facades of havelis were magnificently carved in buff and red sandstone adorned with floral patterns, sculptures and fluted modulations. With a centrally placed courtyard surrounded by rooms the interiors followed courtyard planning. Beautiful jharokhas (windows). Chattris (umbrellas), small decorative balconies, fluted columns, well designed chabutras (platforms)
- traditional baithkas (drawing rooms) and marble floors are features of the Mughal Architectural styles
- Walking down the embellished lane we reach the grand entry of the Haveli highlighted with a very intricate stone carving and cutting work. The pedestal has an engraved chariot and a few steps above are carvings of different patterns of flowers and vines typical of Havelis in India. The front façade has 2 major colors which are light brown Dholpur stone and red paint.



Fig 2.2: Haveli Dharampura

2.1.3 SPACIAL ANALYSIS AND MATERIAL USED:

The open courtyard has an octagonal flooring pattern with a water fountain at its center, which is replicated form of courtyard planning typical to any haveli. All the functions revolving around the courtyard, providing good visual connectivity, improving the light and air quality throughout the Haveli. On the ground floor the courtyard extends into the restaurant area through the wide glass panels which replaced the existing doors under arches. The upper floors are placed with a setback from the floor below it. This helps more in the visual connectivity

- The restaurant holds the capacity of 50 persons and the furniture is finished in dark polished wood which adds on to the natural look of the lakhori bricks. The restaurant was given an antique look with lakhori brickwork and retaining the existing arched vaults
- The haveli of terrace is the most visually connected space in the Haveli and hence it can be used as a space for dance/music performances. The second floor has 7 rooms which include 3 suites. The corners of every floor has small pockets of spaces which are used as open sheeshah rooms with a lounge setup of furniture.
- A huge jharoka has been hanged from the walls of the third floor which covers a corridor behind and is white painted. This is an amalgamation of Rajasthan's architecture style and Jain's Architecture style into the

2.1.3 FLOOR PLANS , SECTIONS AND ELEVATIONS:



Fig 2.3: Haveli floor plans

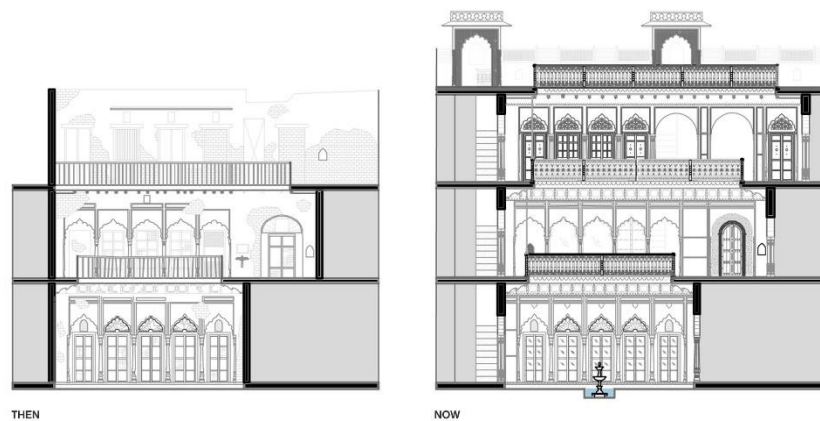
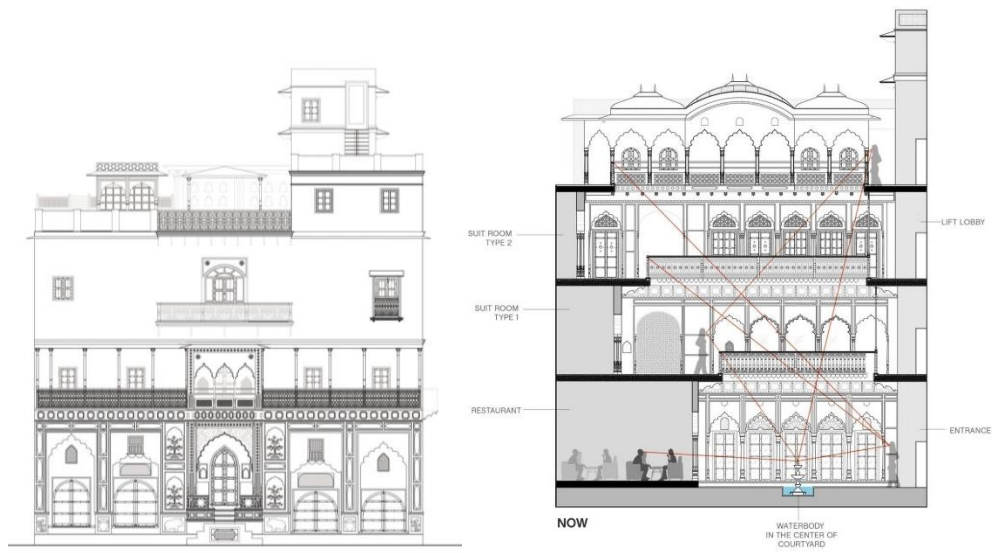


Fig 2.4: Haveli section & elevation

2.1.4 FACILITIES:

All the rooms open up to the courtyard with immense inflow of natural light, airflow and visual connectivity. Above the reception area on the ground floor, private suites have been placed in the first and the second floor with a small covered courtyard. This space of the Haveli is called the "Choti Haveli" which translates to small Haveli, because it in itself has all the features and architectural ambience of an entire Haveli. These suites are large rooms with a living area, bedroom and a lavish toilet.

Types of rooms

- Diwan-E-Khas room
- Jharoka room
- Shahjahan Suites
- Jahan Ara
- Mumtaz mahal



Fig 2.5: Rooms

The living area and the bedroom are separated by existing Rajasthan style architectural arches and columns. these rooms have windows opening into the narrow lanes of Gali Anar infusing the life of old city into the haveli.

Outdoors

Outdoor furniture,Sun terrace,Terrace

Parking

No parking available

Safety & security

Fire extinguishers,CCTV outside property,CCTV in common areas,Smoke alarms,Security alarm
24-hour security,Safety deposit box

Activities

Live music & dance performance,Tour or class about local culture,Additional charge,Themed
dinner nights ,Additional charge,Walking tours,Additional charge

Reception services

Entertainment and family services

General

Air conditioning,Heating,Car hire,Packed lunches,Lift

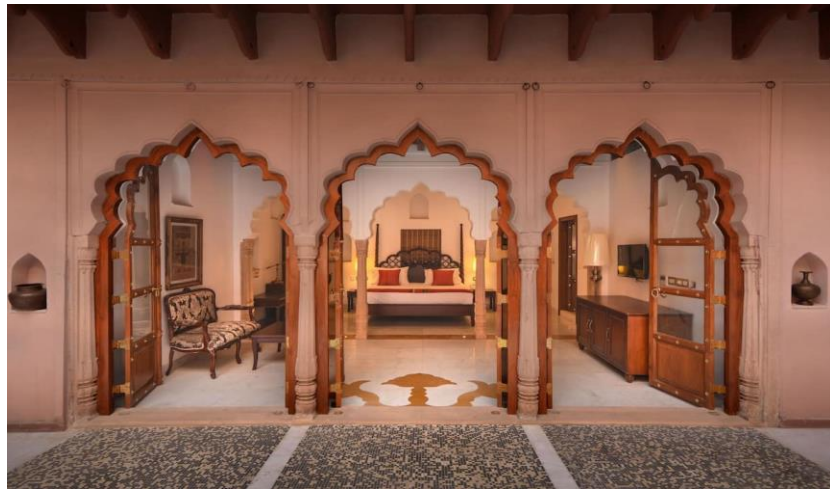


Fig 2.6: Haveli

2.2 DILLI HAAT INA

2.2.1 ABOUT

location - kidwai nagar, opposite ina market, new delhi.

date of completion- december, 1993

client- delhi tourism & municipal corporation of delhi.

architect- pradeep sachdeva, design associates,newdelhi.

site area- 6 acres, approx. 100m x 300m

built up area- 3190 sq m site dim.-100 x 300 m ground coverage - 12% nearest metro station-ina



Fig 2.7: DILLI HAAT

2.2.2 INTRODUCTION

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



Fig 2.8: DILLI HAAT

2.2.3 SPACIAL ANALYSIS

Features

an entrance plaza, raised to block vehicular access and bring a new spatial identity for pedestrian circulation and ticketing services for entry to Dilli Haat. It is followed by a linear spine of movement flanked by stalls on both sides in cluster patterns showcasing the local and the regional crafts of India



Fig 2.9: DILLI HAAT

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

Food stall-Consist of multi cuisine food stalls from different state of the country.Sizes of 4.8mx5m,3mx4m.

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

Entry/exit

- The site has 2 entries and exits.
- Gate no.1 is approximately 10m wide with one pedestrian entry with security check point, Gate no. 2 is for occasional use.
- Approximately 3m wide space is used for theme display at the entrance.
- Consists of ticket counter of 10m x 2.5m with 6 booths 1.2m wide each, alongside with two atms.
- Consist of 2 offices of dilli tourism for enquiry purposes.
- Supported with security check in of 2mx2m .
- Attached with administration dept.10mx3m approx.
- Gate number 2 is approx 7m wide. Consist of one pedestrian entry 1.2 m wide and vehicular entry 4m wide.
- Used as service gate.
- Consist of ticket counter 3m wide.
- Attached with a courtyard and administration block of app.10mx3m.
- Gives a direct passage to the stage.



Fig 2.10: DILLI HAAT

2.2.4 CIRCULATION AND ZONING

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

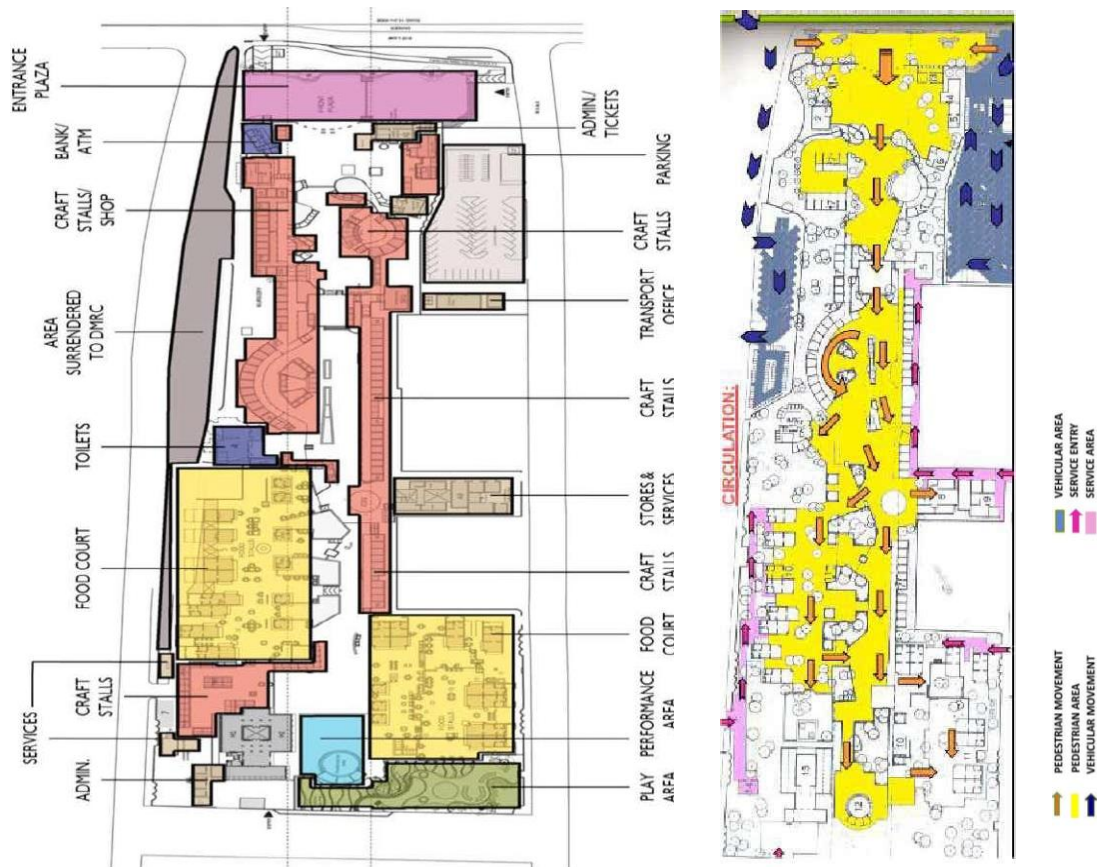


Fig 2.11: DILLI HAAT zoning & circulation

2.3 RAAS JODHPUR

2.3.1 ABOUT

Located in: Jodhpur;Rajasthan

Address: Tunwar ji ka Jhalra, Makrana Mohalla, Gulab Sagar Rd, Sagar, Jodhpur, Rajasthan 342001

2.3.2 INTRODUCTION

RAAS is a 1.5-acre property uniquely located at the base of the Mehrangarh Fort. The brief was to create a luxury boutique hotel in the context of the Old city quarter of Jodhpur. This has been translated into a project where there is a dialogue between the old and the new. Luxury was about being authentic both in terms materials and workmanship, and in providing visitors a tactile and sensual experience within the historical context of the old city of Jodhpur without taping the old. The property was inherited with three, beautiful period structures (17th-18th century) which have been painstakingly restored with traditional craftsman in the original materials such as lime mortar and Jodhpur sandstone



Fig 2.12: RAAS

2.3.3 SPACIAL ANALYSIS AND MATERIAL USED:

The site spread over 3 contemporary buildings, (us-ing the same materials and skills as the traditional buildings) inserted into the site in a manner that they frame the visual and spatial relationship among the old buildings and the Fort, creating a dialogue between the old and the new

The buildings are inspired by the age old double skinned structures of the region, (the traditional stone latticed jharokha forms of Rajasthani architecture - which perform multiple fune-tons of passive cooing and offering privacy to the user these buildings act as lanterns framing the site.

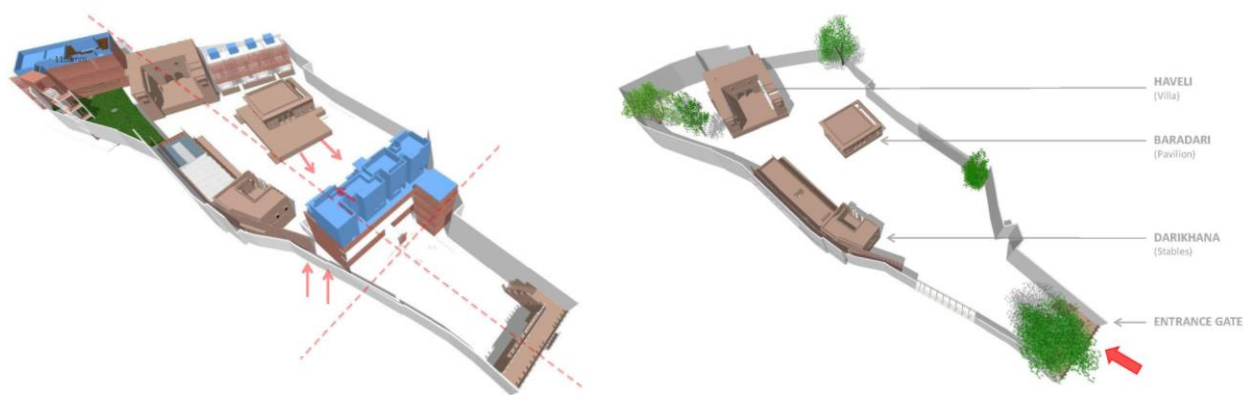


Fig 2.13: RAAS

Material used

Crafted by over a hundred regional artisans and master-craftsmen, the development - building and interiors - is conceived and executed using the fundamentals of sustainable architecture.

70% of the materials and people used on site have been sourced locally, most within a 30 km radius. Every element is handcrafted with a focus on simplicity, and function - beauty being the skill and care of the craftsman that has gone in to creating the piece. Materials include hand cut stone, poured in situ pigmented cement terrazzo on floors, walls and as furniture. Locally crafted furniture and cabinets in sheesham (a local Indian hardwood)

2.3.4 FLOOR PLANS , SECTIONS AND ELEVATIONS:

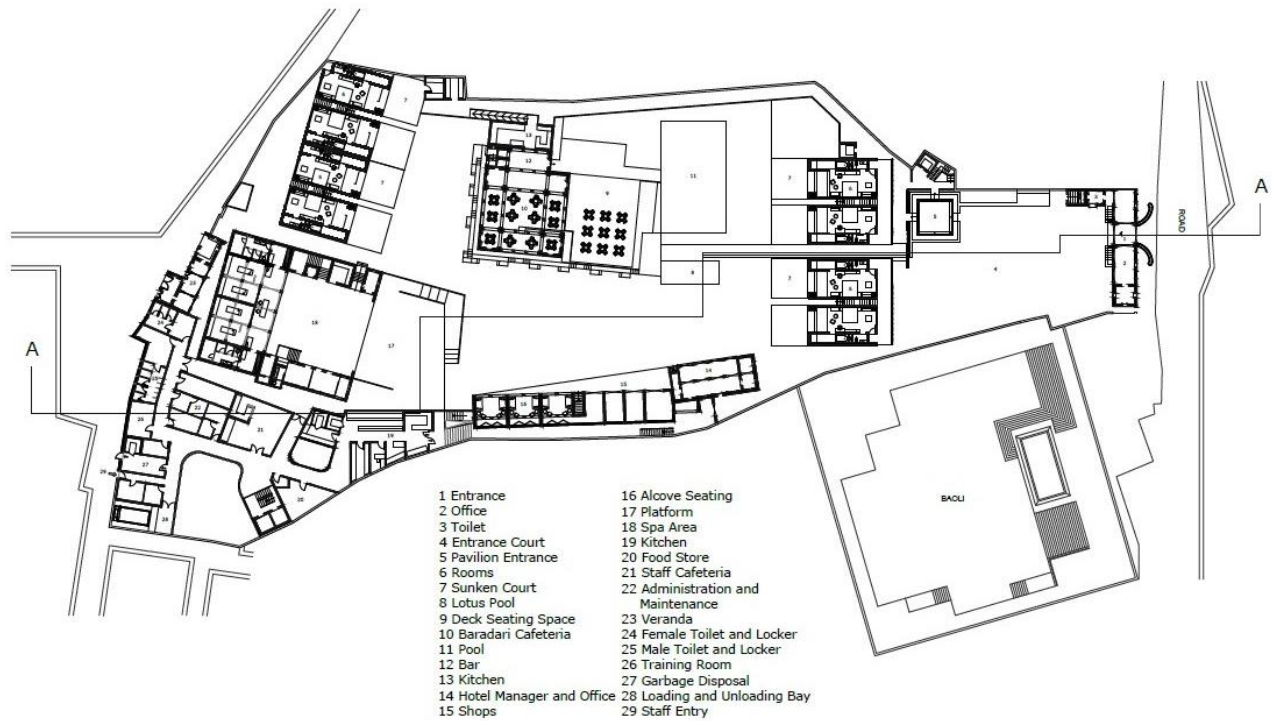


Fig 2.14: RAAS site plan

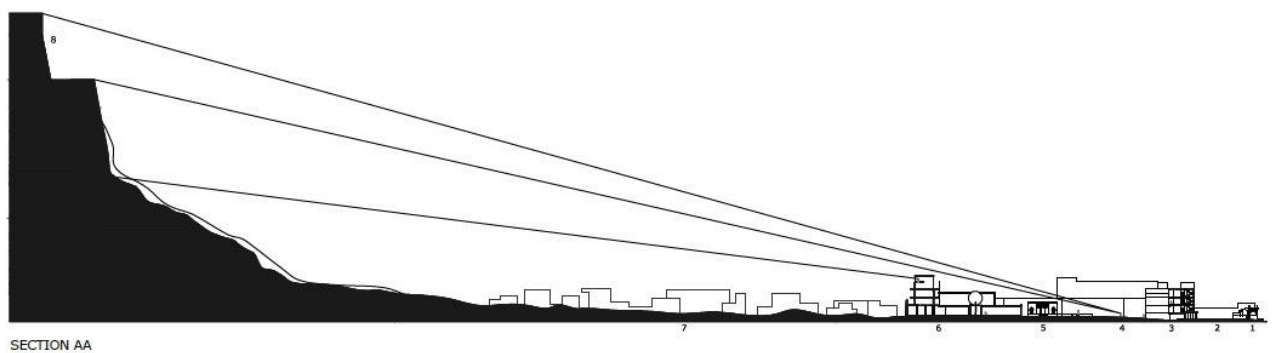
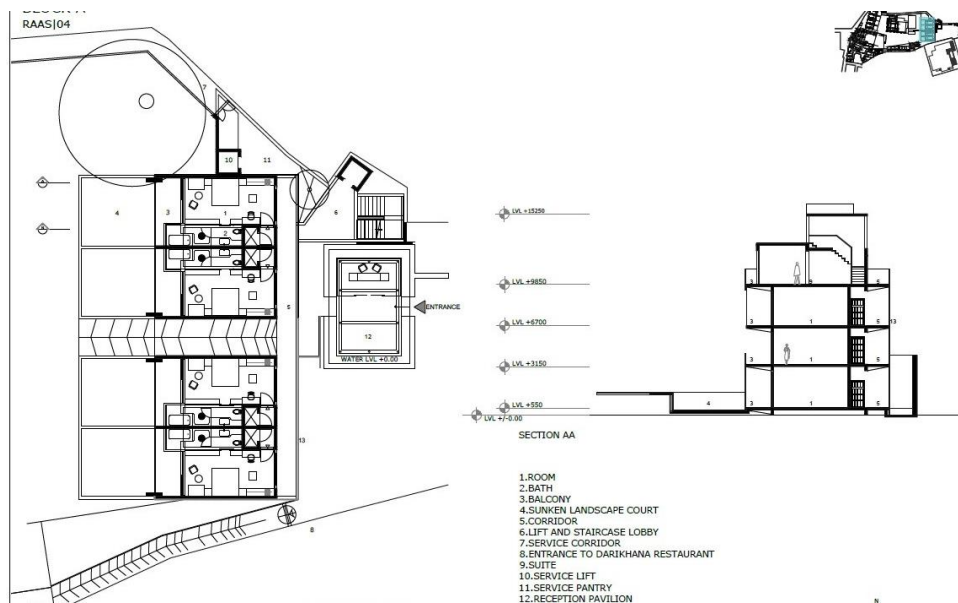
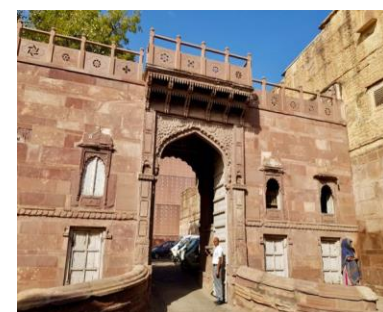
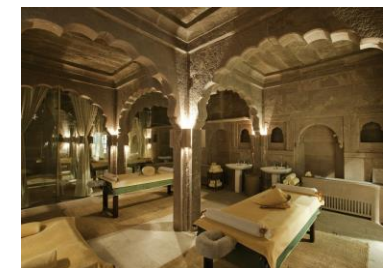
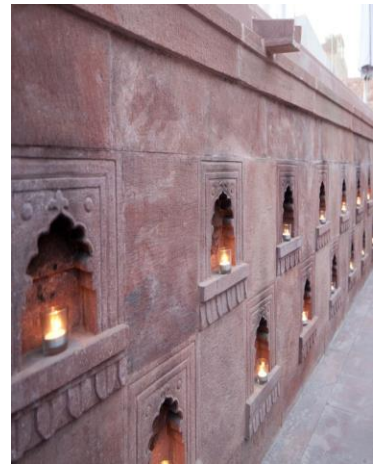
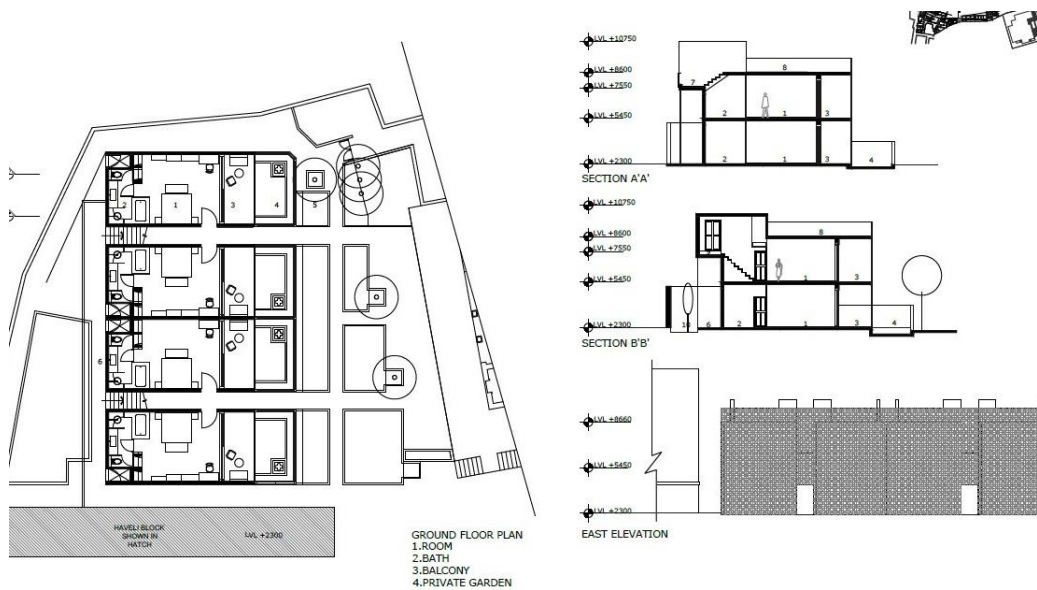


Fig 2.15: RAAS section



Fig 2.16: RAAS floor plans,section & elevation



Darikana Block and Entrance gate

Fig 2.17: RAAS floor plans,section &elevation

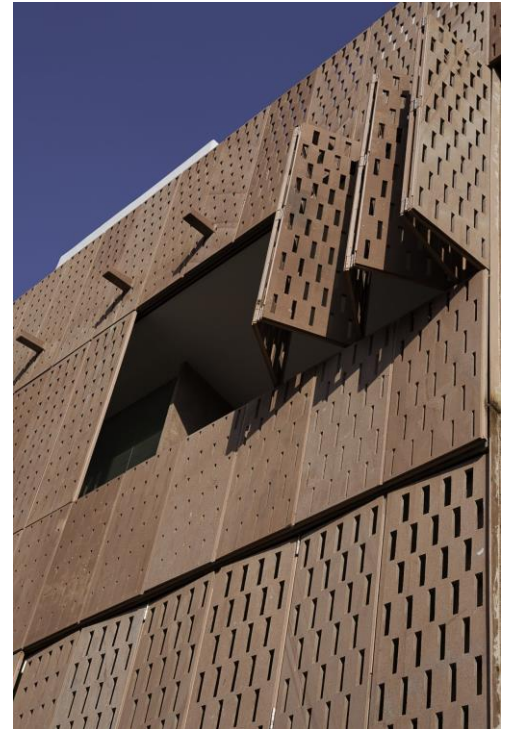
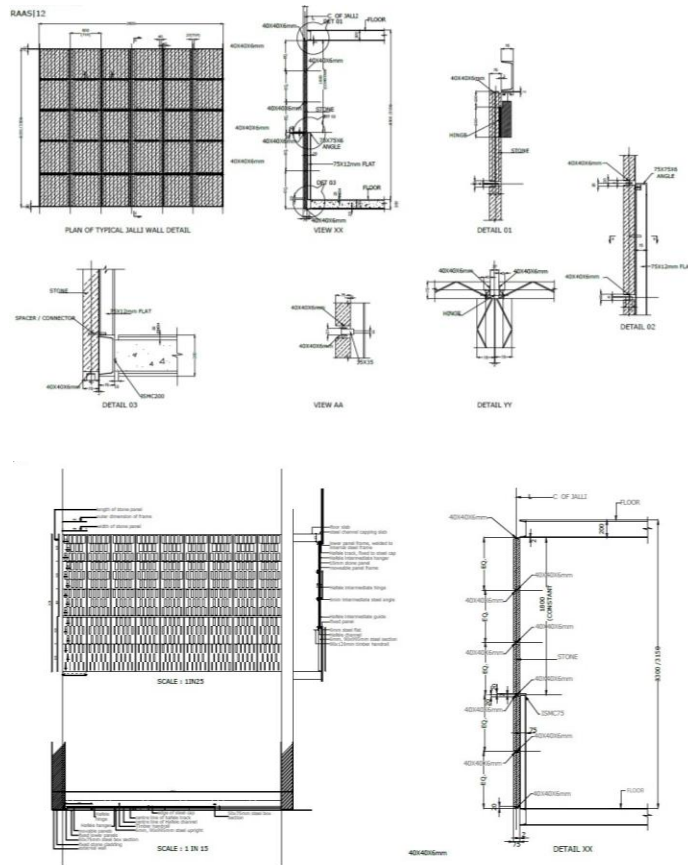
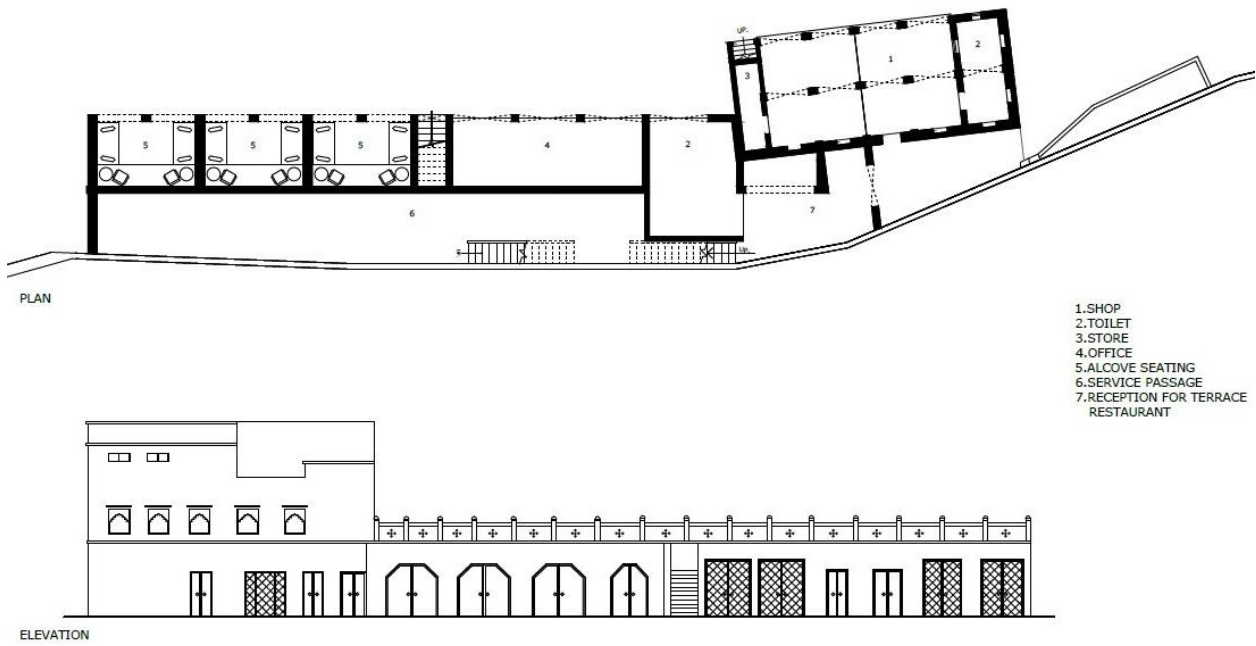


Fig 2.18: jaali detail

2.4 JAWAHAR KALA KENDR

2.4.1 ABOUT

Location : jaipur, rajasthan

construction time - 6 years

constructed by pwd

site area - 9.5 acres

completed on – 1991

build area: 8100sqm



Fig 2.19: Jawahar Kala Kendra

2.4.2 INTRODUCTION

Jawahar Kala Kendra (JKK) is a renowned multi-arts center located in Jaipur, Rajasthan, India. Established in 1993, this cultural hub was designed by the celebrated architect Charles Correa and stands as a testament to India's rich artistic heritage and vibrant contemporary art scene. Named after India's first Prime Minister, Jawaharlal Nehru, JKK serves as a dynamic platform for the preservation, promotion, and proliferation of traditional and modern arts.

The architectural design of Jawahar Kala Kendra draws inspiration from the ancient city plan of Jaipur, incorporating Vastu Shastra principles, which harmonize space with nature. The complex is divided into nine squares, representing the nine planets, with each square hosting various facilities such as galleries, museums, theaters, and studios. This thoughtful layout not only pays homage to Jaipur's historical and cultural essence but also provides a functional and inspiring space for artists and visitors alike.

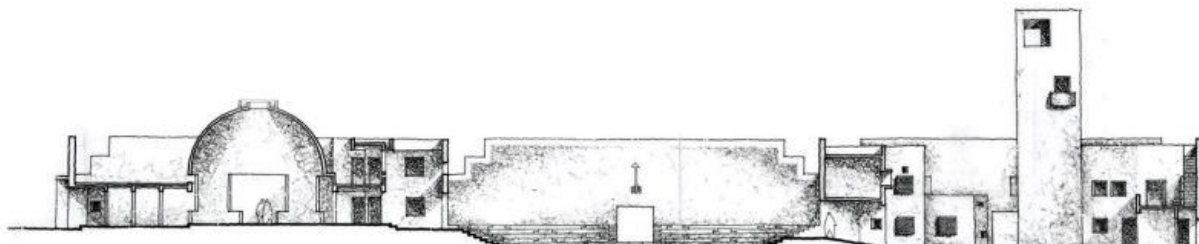


Fig 2.20: Jawahar Kala Kendra section

2.4.3 CONCEPT

- The plan is inspired by the original city plan of Jaipur
- consists of 9 squares - central square left open
- whole complex is a unique design
- the concept of 9 squares as navagraha
- navagraha concept with its energy values their colour and functionality
- each square was linked to the planet
- partially open courtyards and traditional design elements of Rajasthan

Concept to design

- Plan invokes directly the original navagraha or nine house nana-dala.
- One of the squares is pivoted to recall the original city plan and also to create the entrance.
- The plan of Jaipur city based on the nine square yantra in which one square is displaced and two central squares combined.
- The squares are defined by 8m high wall, symbolic of the fortification

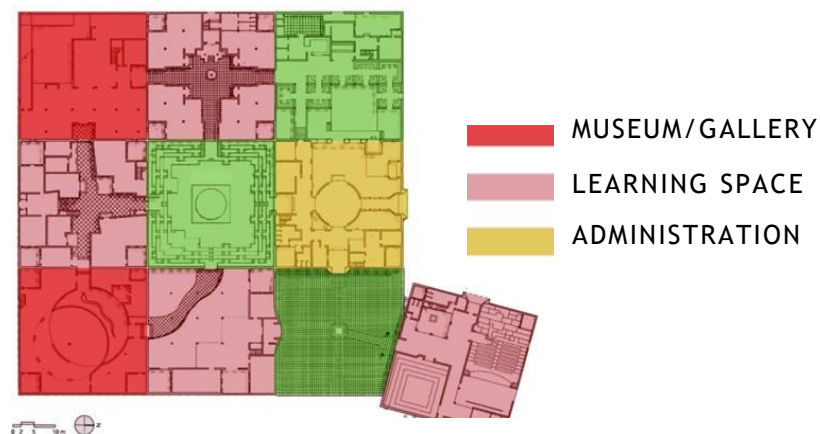


Fig 2.21: Jawahar Kala Kendra plan

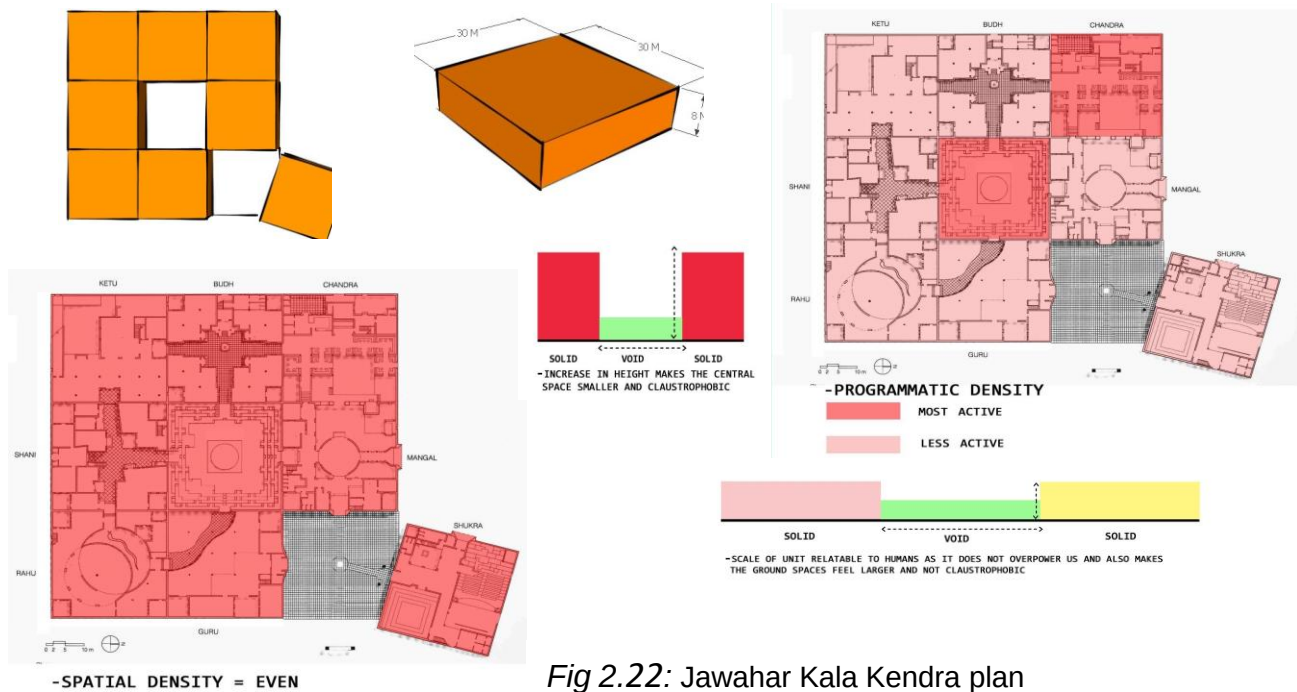


Fig 2.22: Jawahar Kala Kendra plan

2.4.4 RESPONSE TO CLIMATE

The climate of jaipur is hot and semi arid. The architect has dealt with this by having a courtyard such that it draws in air from all sides. The openings in the wall are small thus leading to venturi effect of pergolas to provide shade

The climate of jaipur is hot The external walls are clad with red agra sandstone topped by a coping of beige dholpur sandstone. • On these surfaces, the presence of each planet is expressed by its traditional symbol inlaid in white marble with polish black granite and mica slate



Fig 2.23: Jawahar Kala Kendra

2.4.5 SPACIAL ANALYSIS

Layout according to the mandala

The building program has been "disaggregated" into eight separate groupings corresponding to the myths represented by that particular planet

For instance, the library is located in the square of the planet mercury which traditionally represents knowledge,

The theatres are in the house of venus, representing the arts.

The central square, as specified in the vedic shastras, is void: representing the nothing which is everything.

The flooring pattern in this square is a diagram of the lotus representing the sun. city palace, jaipur.

The astrological symbol of each planet is directly expressed in a cut-out opening along its external wall

Representation of these nine blocks as the nine planets.

Library in jupiter section which represents wisdom and knowledge.

The mars section representative of power has the administrative block

Division according to navagraha

1.KETU,2.BUDDHA,3.CHANDRA,4.SANI,5.CENTRAL COURT,6.MANGAL,7.RAHU,8.GURU, 9.SUKHRA



C. FORM, PLANING PRINCIPLES AND PRACTICES

Form Evolution:

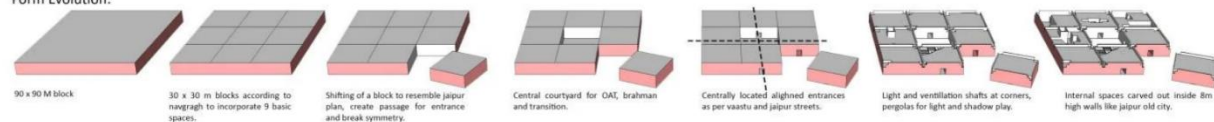
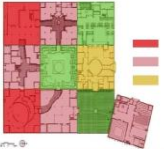
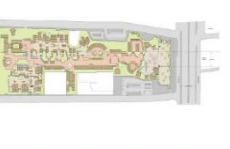


Fig 2.24: Jawahar Kala Kendra

CHAPTER 3

COMPARITIVE ANALYSIS

Criteria	Jawahar kala kendra	Raas hotel	Dilli haat ina	Haveli dharampura
Architect	Charles Correa	The Lotus Praxis Initiative	Pradeep Sachdeva	Kapil Agarwal
Client	Rajasthan Government ,india	Nikhilendra Singh	Delhi Tourism and Municipal corporation	Vijay Goel
Location	Jaipur, Rajasthan	Jodhpur, Rajasthan	Kidwai Nagar, New Delhi	Chandni Chowk, New Delhi
Climate	Monsoon-influenced hot semi-arid climate	Monsoon-influenced hot semi-arid climate	Composite	Composite
Completed	1992	2010	1994	2009
Site area	9 Acre	1.5 Acre	6 Acre	418 sq.m
Components	Museum, Theatre, Library, Art displays, Cafeteria, Studios	39 Rooms, Swimming Pool, Dining Area, Spa, Heritage Suites	Shops, Restaurants, Food court, Performance Area, Play area	Dining Area, Spa, Heritage Suites
Site planning				
Architecture	Jawahar Kala Kendra is a modern cultural center designed by architect Charles Correa, known for its postmodern and experimental architectural style	Raas Hotel often features contemporary luxury design with a blend of traditional elements	Dilli Haat exhibits an open-air bazaar style with architectural influences from various Indian states	Haveli Dharampuri, being a traditional haveli, showcases intricate architecture with ornate detailing and historical design elements
Structure	It incorporates geometric shapes, exposed brickwork, and open spaces, reflecting Correa's vision of a contemporary cultural institution	It may incorporate modern materials and technologies while maintaining a sense of elegance and cultural aesthetics	It is designed to create a vibrant and dynamic marketplace atmosphere, typically using simple structures with regional architectural touches	The haveli structure often includes courtyards, arches, and finely crafted facades, representing traditional Rajasthani architecture
Cultural Context	Jawahar Kala Kendra stands as a symbol of modernity in cultural spaces, representing a departure from traditional architectural norms	Raas Hotel may blend modern luxury with local architectural features, creating a harmonious setting for guests	Dilli Haat's architecture aims to represent the diversity of Indian culture through its market-style structures	Haveli Dharampuri's architecture is deeply rooted in the historical and cultural context of Rajasthan
Functionality	Jawahar Kala Kendra's design considers the diverse functions of a cultural center, incorporating galleries, theaters, and exhibition spaces	Raas Hotel's architecture prioritizes comfort, aesthetics, and functionality to provide a luxurious experience	Dilli Haat's design focuses on creating a flexible and engaging space for artisans, vendors, and visitors	Haveli Dharampuri's architecture aligns with its historical purpose, providing shelter and reflecting the lifestyle of the region
Why ?	 1.Interpretation of Jaipur, Pink city in a Modern way 2.Use of Local building materials	 1.Designing with existing Heritage structures 2.Use of regional Architectural elements in contemporary style	 1.Completely pedestrian active public 2.place Traditional market catering to contemporary urban needs	 Use of regional Architectural elements in contemporary style
Material used	Sandstone	Sandstone	Brick, Kota stone	fired bricks, sandstone, wood, marble, granite and plaster
Parking	Onsite parking	Onsite parking	Onsite parking-consist of 2 parking around 90 car parking visitors and around 150 two wheeler parking	No parking

CHAPTER 4

DATA COLLECTION AND STANDARDS

4.1 COASTAL ZONE REGULATIONS:

The coastal zone, the meeting place of land, sea and air is a dynamite area with many cyclic and random processes owing to a variety of resources and habitats. Nearly three quarters of the world population live near on the coast, as found to be true in India also, which has about 7500km of coastline with many sprawling and still growing coastal cities. the coastal regulation is thus a place of hectic human activity, followed by intense urbanisation, resulting in human interference because of rapid development. The coastal ecosystem is now highly disturbed due to problems like pollution, erosion, flooding, etc., as the only way to combat these problems and to preserve coastal zone for future generations, the concept of coastal zone regulations has been developed by many countries around the world.

TamilNadu coast is nearly 950km long, endowed with a variety of coastal habitats like the coral reef, mangroves, seaweeds and variety of coastal industries. There is an urgent need to protect this coastal environment while ensuring its continued production and development. Hence, there arises a need to collect, analyse and assess the data for the effective monitoring and management of the coastal area.

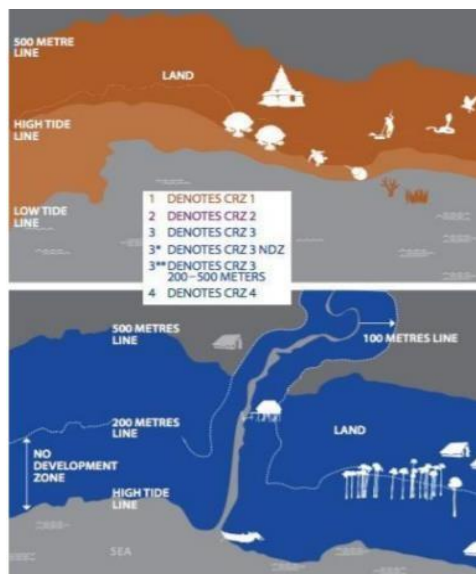


Fig 4.1: CRZ

4.2 CLASSIFICATION OF COSTAL REGULATION ZONE

As per the notification, Coastal regulation zone is the boundary from the high tide line up to 500m in the land ward side and a stage of 100m along banks of creeks, estuaries, backwater and rivers subject to tidal fluctuations, is called the coastal regulation zone (CRZ). CRZ along the country has been placed in four categories:

Category I (CRZ-1)

Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wild habitats, mangroves, corals/coral reefs, area close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty, historical and heritage areas, areas rich in genetic biodiversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such areas as may be declared by the authorities.

Areas between the Low Tide Line and High Tide Line

Regulations:

- No new constructions shall be permitted within 500m of the HTL.

Category II (CRZ-II)

The area that have already been developed up to or the shoreline. For this purpose, ' Developed Area' is referred to as that area within the municipal limits or in other legally designated urban areas which is already substantially built up and which has been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains.

Regulations:

- Buildings shall be permitted neither on the seaward side of the existing road (or roads proposed in the approved Coastal Zone Plane of the area) nor on the seaward side of the existing and proposed road. Existing authorized structures shall be subject to the existing local Town and Country Planning regulations including the existing norms of FIS/FAR.
- Reconstruction of the authorized building to be permitted subject to the existing FSI/FAR norms and without change in the existing use.
- The design and construction of buildings shall be consistent with the surrounding landscape and architectural style.

Category III (CRZ-III)

Areas that are relatively undisturbed and those which do not belong to either Category I or II. These will include coastal zone in the areas (developed and undeveloped) and areas within Municipal limits or in other legally designated urban areas which are not substantially built up.

Regulations:

- The area up to 200m from the HTL is be earmarked as 'No Development Zone'. No construction shall be permitted in this zone except for repairs of existing authorized structures not exceeding existing FSI, existing plinth area and existing density. However, the following uses may be permissible in this zone-agriculture, horticulture, gardens, pastures, parks, play fields, forestry and salt manufacture from sea water.
- Development of vacant plots between 200 and 500m of High Tide Line in designated areas of CRZ-III with prior approval of Ministry of Environment and forests permitted for construction of hotels/beach resorts for temporary occupation of tourists / visitors.
- Construction/ reconstruction of dwelling units between 200m and 500m of the High Tidal Line permitted so long as it is within the ambit of traditional rights and customary uses such as existing fishing villages and gothans. Building permission for such Construction/reconstruction will be subject to the conditions that the total member of dwelling unit shall not be more than twice the number of existing units; total area covered on all floors shall not exceed 9 meters and construction shall not be more than 2 floors (ground floor plus one floor).

Category IV (CRZ-IV)

Coastal stretches in the Andaman and Nicobar Islands, Lakshadweep and small islands, except those designated as CRZ I, CRZ II and CRZ III.

Regulations

Andaman and Nicobar Islands:

1. No new construction of buildings shall be permitted within 200m of HTL.
2. The buildings between 200m and 500m from the HTL shall not more than 2 floors, the total area covered on all floors shall not be more than 50% of the plot size and total height of construction shall not exceed 9m.
3. The design and construction of buildings shall be consistent with the surrounding landscape and local architectural style.
4. Corals and sand from the beaches and coastal waters shall not be used for construction and purposes.
5. Dredging and underwater blasting in and around coral formations shall not be permitted

6. However, in some of the islands, coastal stretches may also be classified into categories of CRZ- I or II or III with the prior approval of the MoEF and in such designated structures.

4.3 Activities prohibited within the CRZ

The following activities are declared as prohibited within the CRZ:

1. Setting up of new industries and expansion of existing industries, except those directly related to waterfront or directly needing foreshore facilities.
2. Manufacture or handling or disposal of hazardous substances.
3. Setting up and expansion of fish processing units including warehousing (excluding hatchery and natural fish drying in permitted areas)
4. Setting up and expansion of units/mechanism for disposal of waste and effluents into the water course.
5. Discharging of city untreated waters and effluents from industries, cities or towns and other human settlements.
6. Dumping of city or town waste for the purposes of land filling or otherwise; the existing practice, if any, shall be phased out within a reasonable time not exceeding three years from the date of notification.
7. Dumping of ash or any wastes from the date of notification.
8. Land reclamation, building or disturbing the natural course of sea water with similar observations, except those required for control of coastal erosion and maintenance or sandbars except tidal regulators, storm water recharge.
9. Harvesting or drawl of groundwater and construction of transfer within 200m of HTL; in the 200m to 500m zone it shall be permitted only when done manually through ordinary wells for drinking, horticulture, agriculture and fisheries.
10. Construction activities in ecologically sensitive areas 15

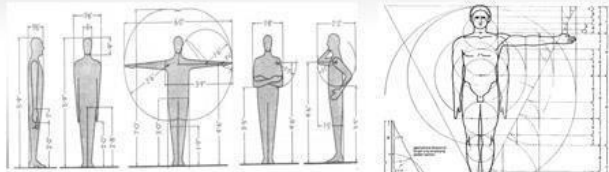
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4.4 STANDARDS

DIMENSIONS OF THE HUMAN FIGURE

The dimensions and clearances shown for the average adult [Fig. 2] represent minimum requirements for use in planning building layouts and furnishings if possible, clearances should be increased to allow comfortable accommodations for persons larger than average. The height of tabletops shown on the next page is 2 ft 5 in; some authorities prefer 2 ft 6 in, or sometimes 2 ft 6 1/2 in. Since doorways and passageways must normally be dimensioned to permit the movement



FURNITURE CLEARANCES

To select the right side for a mirror in a room of furniture in the bedroom, not just that the following elements should be observed:

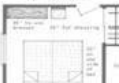
- (1) is at one side of bed for dressing;
- (2) between side of bed and side of dressing chair;
- (3) is in front of dressing chair, and head and feet;
- (4) is for major circulation path (near to closet, etc.);
- (5) is on one side of bed for circulation;
- (6) is on unoccupied side of double bed. The least-used side of a single or twin bed is the preferred side for a well-placed in bedroom for the entry.



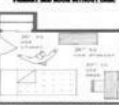
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PREGNANT BIRD ROOM.



FORMER AND BORN WITHOUT



KITCHENS: Kitchens in India are no longer used only as a space for cooking meals. A kitchen, today also acts as an interior space for storage of foodgrains and raw materials, storage of utensils, washing machines, refrigerators and other electrical-electronic gadgets. Storage for gas cylinders, breakfast counters or mini dining tables for users convenience. One must consider the fitting cost of construction and try and accommodate all modern and efficient basic equipment available in the local market to give the housewife or user the most functional and effective kitchen.

1. Fast moving items.
2. Slow moving items.
3. Rarely required items.
4. Occasionally required items.

storage for gas

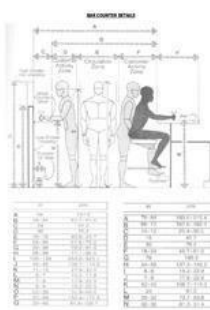
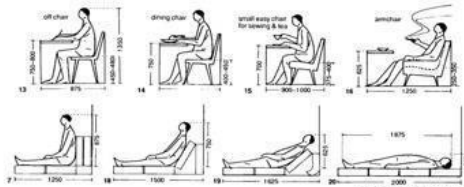
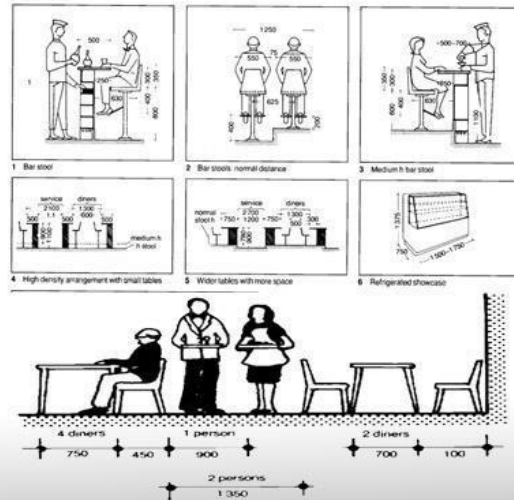


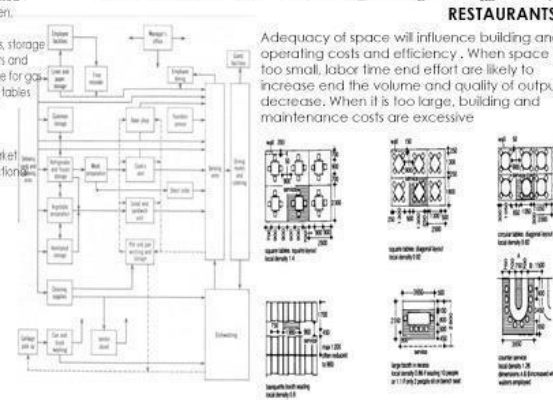
Fig. 6 Although the recommended minimum size for a secondary bedroom is 10' 0" x 12' 0", these diagrams indicate how a double bed, night table, chair, and dresser can be accommodated in a room only 9' 6" x 11' 0".

SNACK BARS

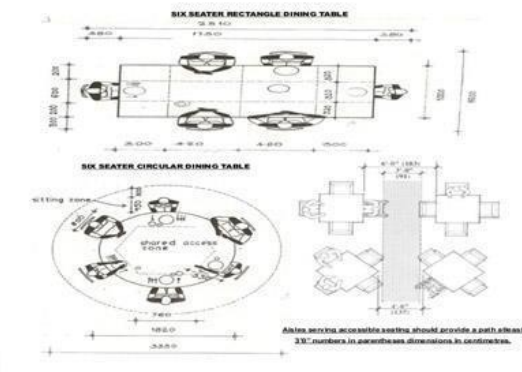
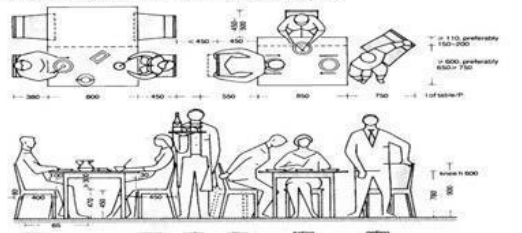


RESTAURANTS

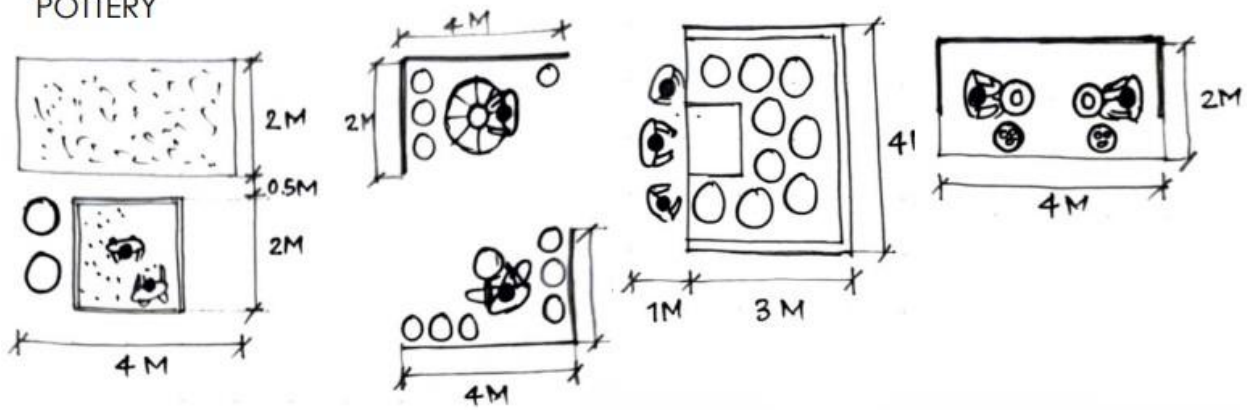
Adequacy of space will influence building and operating costs and efficiency. When space is too small, labor time and effort are likely to increase and the volume and quality of output decrease. When it is too large, building and maintenance costs are excessive.



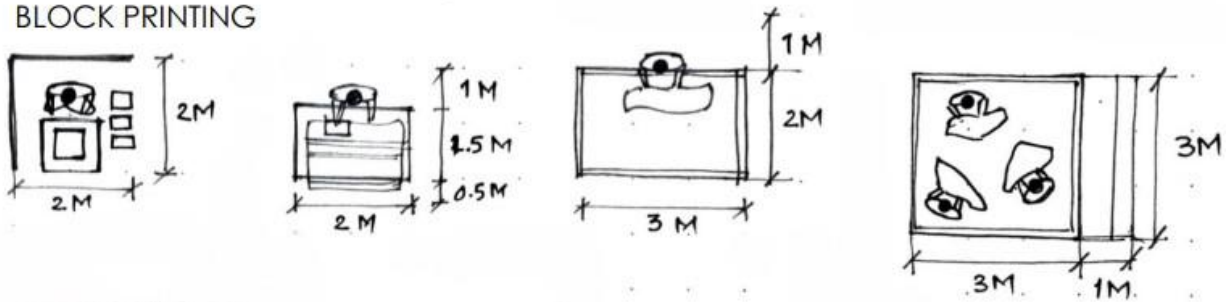
ow diagram showing functional relationships



POTTERY



BLOCK PRINTING



CHAPTER 5

SITE STUDY AND ANALYSIS

5.1 SITE STUDY:

Location-Mahabalipuram,Tamilnadu

Latitude and Longitude-12.611761N,80.190717E

Site Extent-35 Acres

Road Width-20m Regulation followed-CRZ II



5.2 SITE JUSTIFICATION:

The site is chosen is in between the 2 main tourist site in Mahabalipuram.

Every tourist in Mahabalipuram predominantly visit shore temple and five rathas.

The site that has chosen in between the 2 sites and the site is located in the main road connecting both of the heritage sites.

Average visitor at Mahabalipuram is 2000-3000 people per day (before covid), 1000 people per day (during covid)

Mahabalipuram has a large number of beach resorts that promotes the tourism.

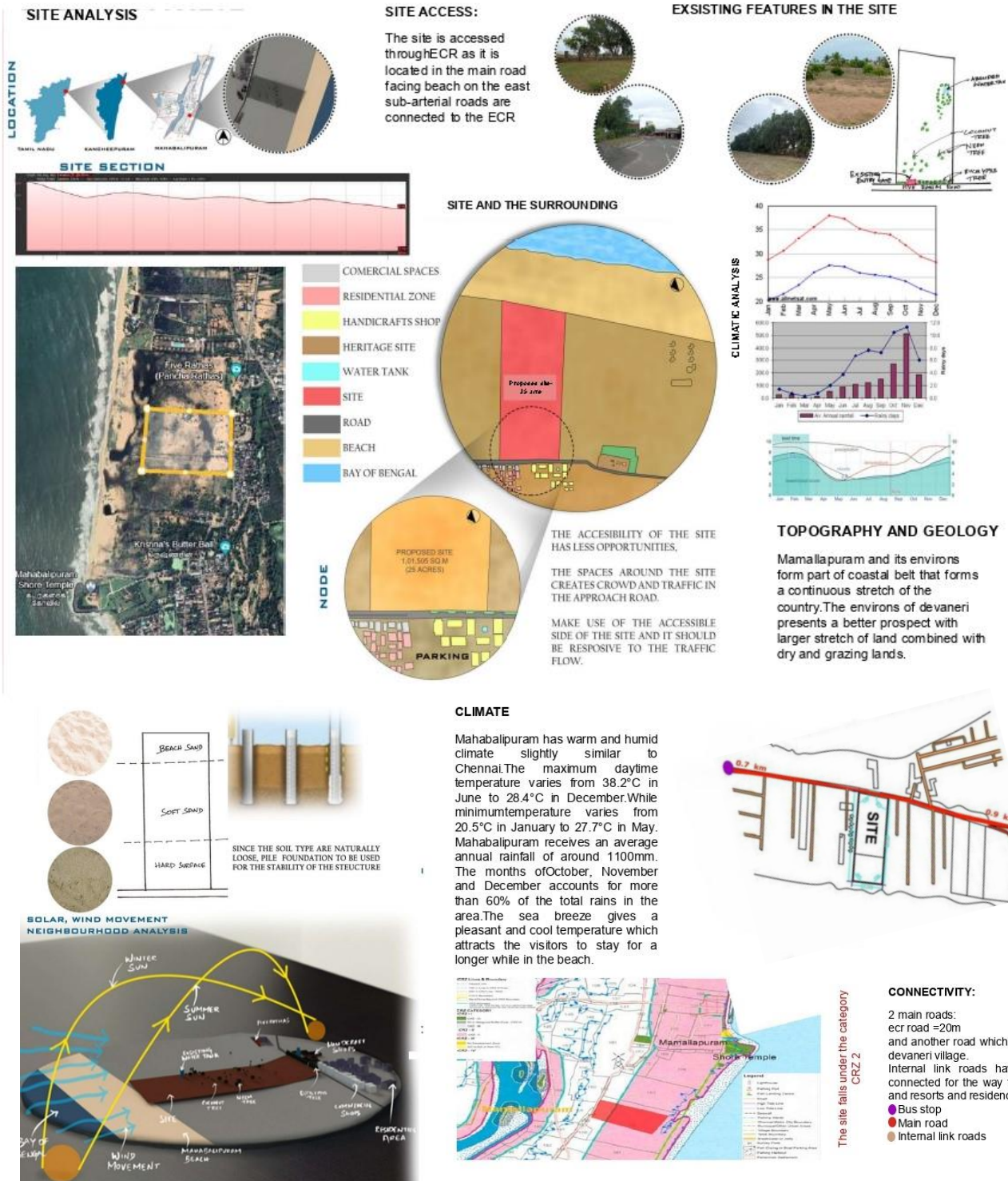
The site is approached by the main road this gives the tourism centre a quite no Of population

The footfall can be of 1500 people as a floating population.

The number of visitors keep increase by the evening of the day compared to morning. -

The site extends from the road to beach at the rear end, this gives an opportunity to develop a private beach facility to attract visitors to the centre

5.3 SITE ANALYSIS





GROUND WATER:

The ground water is the main source of watersupply for both the local people and the commercial activities that are cater-ing the tourist people. The running of Buckingham canal opposite to my site is the advantage of watersupply

CHAPTER 6

ARCHITECTURAL DESIGN

6.1 SPATIAL REQUIREMENTS

Restaurant ground floor-3405sqm

Restaurant first floor-1300sqm

Restaurant total built up-4705sqm

Reception ground floor-850sqm

Reception first floor-870sqm

Reception total built up-1720sqm

Cottage1-64.2sqm

C1-9units*64.2sqm=577.8sqm

Cottage2-72.3sqm

C2-3units*72.3sqm=216.9sqm

Cottage3 ground floor-95.3sqm

Cottage3 first floor-95.3sqm

Cottage3 total built up-190.6sqm

C3-3units*190.6sqm=571.8sqm

Total cottage built up-1366.5sqm

Backpacking logging total built up-1900

Resort restaurant-400sqm

Museum ground floor-4100sqm

Museum first floor-3800sqm

Museum total built up-7900sqm

Auditorium total built up-3670sqm

Craft bazaar unit-25sqm

Total units 38-38*25sqm=950sqm

Craft bazaar toilet-52sqm

Workshop 1-422sqm

Workshop 2-422sqm

Workshop 3-322sqm

Workshop total built up-1166sqm

Visitors centre ground floor-475sqm

Visitors centre first floor-475sqm

Visitors centre total built up-950sqm

STP-225sqm

Food stall-80sqm

Food stall units $4 \times 80\text{sqm} = 320\text{sqm}$

TOTAL SITE AREA-142650.53sqm

TOTAL BUILT UP AREA –15633sqm

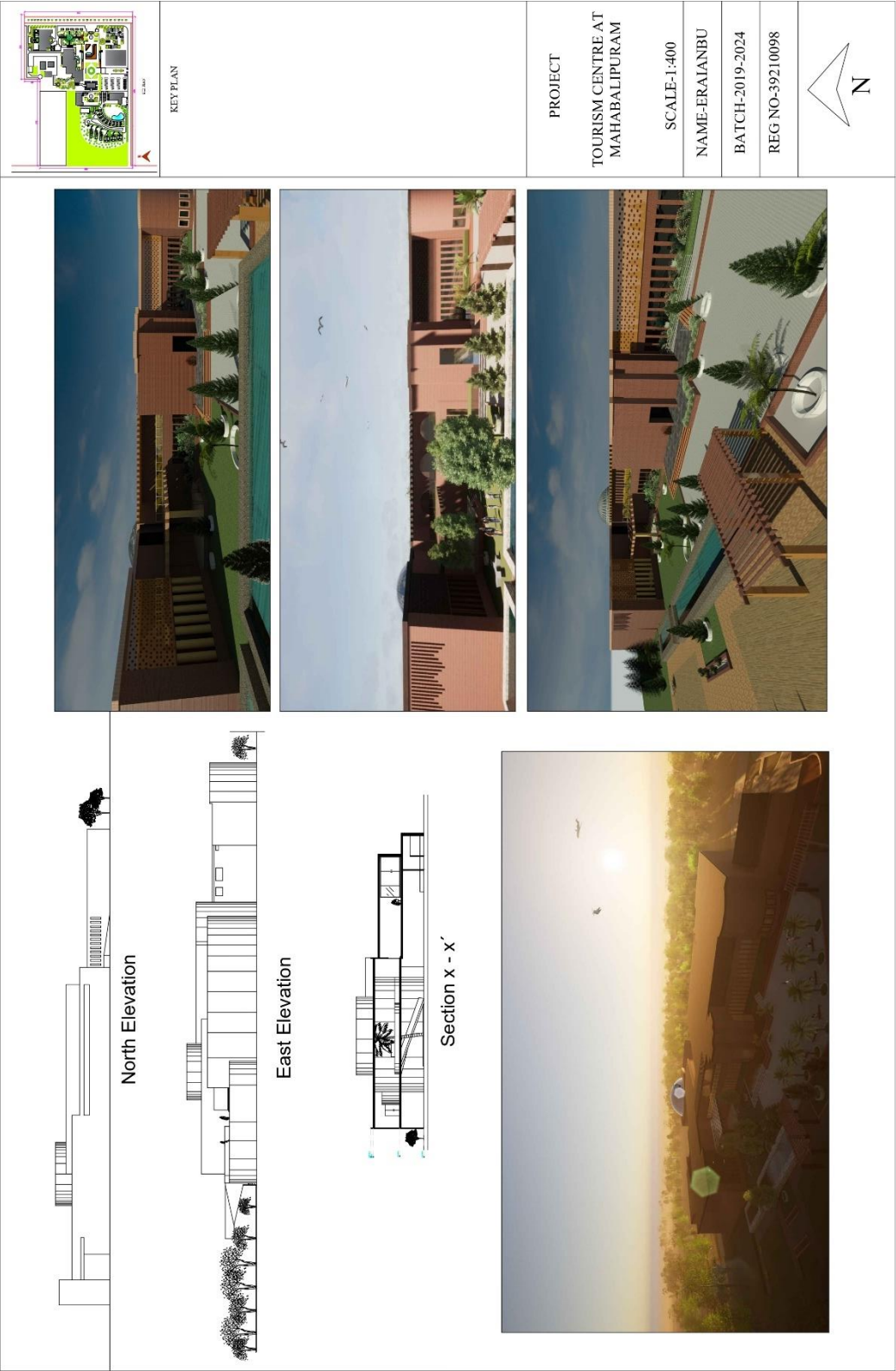
6.2 DETAILED DRAWINGS



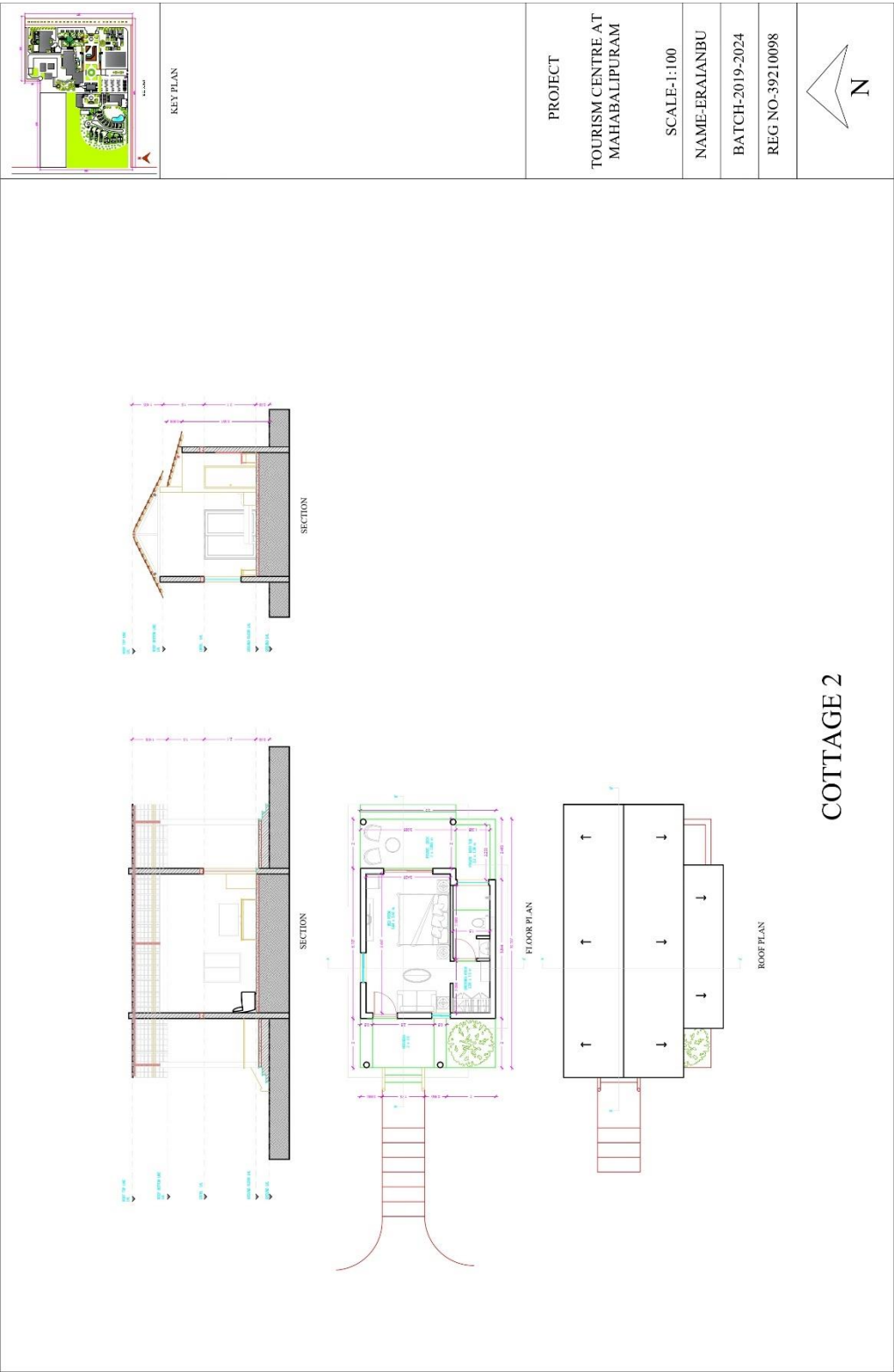






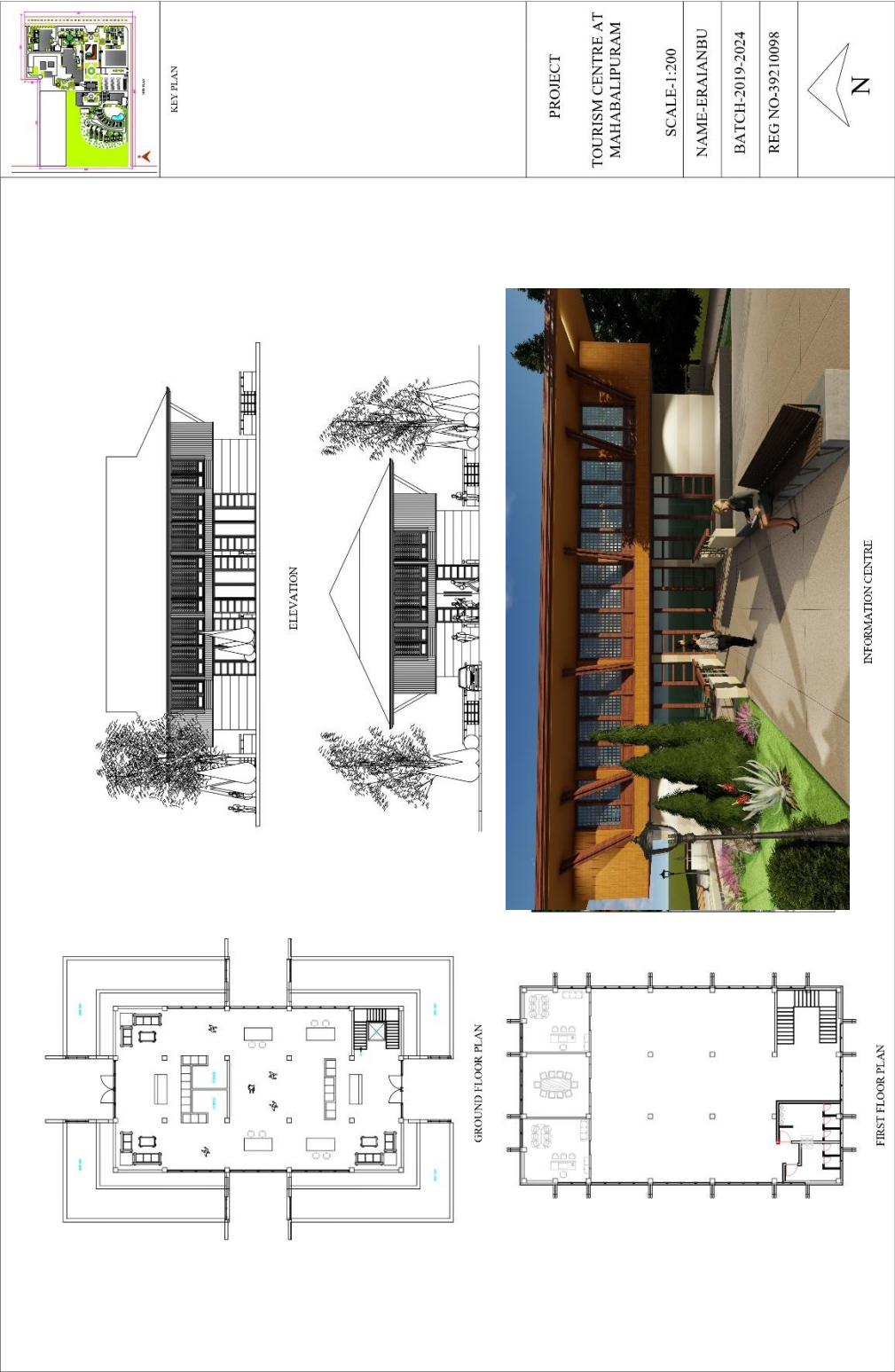




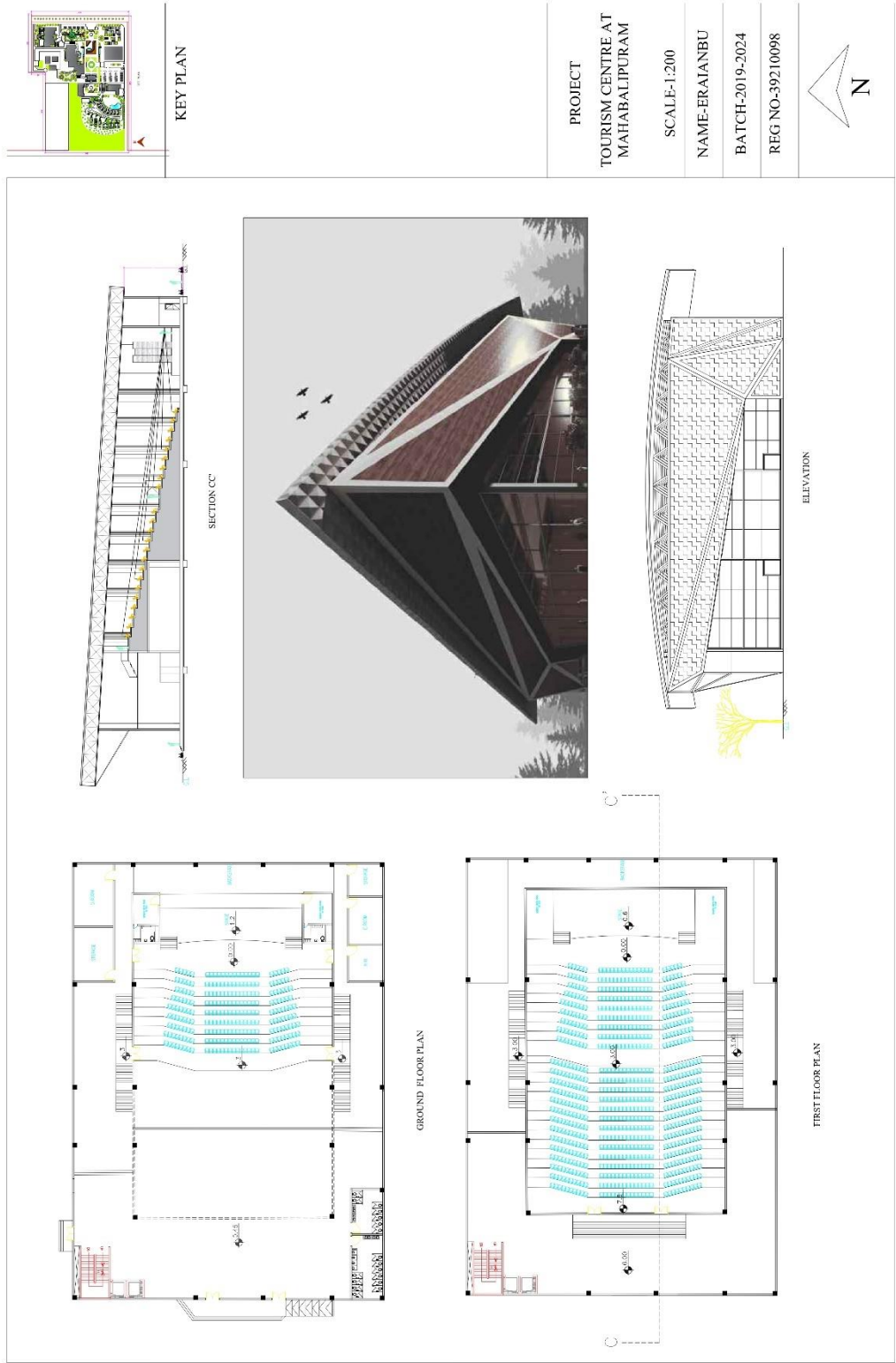












FOOD STREET

TOURISM CENTRE AT MAHABALLIPURAM
ERAIANBU-REG-39210098



CHAPTER 7

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7. [https://www.google.com/search?q=google+earth+web&rlz=1C1CHBF_enIN917IN917](https://www.google.com/search?q=google+earth+web&rlz=1C1CHBF_enIN917IN917&oq=GOOGLE+E&aqs=chrome.1.0i433i457j0i20i263i433j69i57j0i433l2j0l2j69i60.5612j0j9&sourceid=chrome&ie=UTF-8)
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