

HIGHWAY OASIS
A harmonious blend of pitstop and stay

A THESIS

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

By

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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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BONAFIDE CERTIFICATE

This is to certify that Thesis Report is the bonafide work of **Supriya B(39210093)** who carried out the Thesis entitled "**Highway Oasis – A harmonious blend of pitstop and stay**" under our supervision from December 2023 to May 2024.

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Submitted for Viva voce Examination held on

24/5/2024

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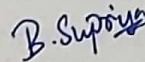
External Examiner

DECLARATION

I, **SUPRIYA B** hereby declare that the Thesis Report entitled "Highway Oasis – A harmonious blend of pitstop and stay" done by me under the guidance of **Ar. V Evelyn Jeny** (Internal Guide), **Ar. Sarath C Kanth** (Internal Review Member) and **Ar. Pramod Balakrishnan** (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: 24/05/24

PLACE: Chennai



SIGNATURE OF THE CANDIDATE

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I convey my thanks to **Dr.Devyani Gangopadhay**, Dean and Head of the Department, School of Building and Environment, Our Design Chair **Ar. Sarath C Kanth**, Thesis Coordinator **Ar. Gopiraj** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Thesis Internal guide **Ar. V Evelyn Jeny**, Internal Review member **Ar. Sarath C Kanth** and External Guide **Ar. Pramod Balakrishnan** their guidance, suggestions and constant encouragement which paved the way for the successful completion of my Thesis work.

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SUPRIYA B

THESIS SYNOPSIS

This project aims to design a sustainable architectural space combining pitstop and stay near Bodinayakannur, a region known for its natural beauty and greenery. The pitstop has a petrol bunk with service stations, clinic, convenience store, restaurant, entertainment spaces, etc. As for the stay it has both dorm-style units and individual units spread across half the site.

The site is in Madurai-Kochi highway which is 60 km away from Munnar. The site is surrounded by natural landscapes such as hills, plantations, and waterbodies. It has a seasonal river called Kottagudi flowing behind it.

The design focuses on utilizing locally available materials and few traditional techniques to create a harmonious blend between modern functionality and regional aesthetics. Local materials such as mud, stone and wood are majorly used on the site overall.

TABLE OF CONTENTS

S.NO	TITLE	PAGE NO.
1.	INTRODUCTION	1
1.1	INTRODUCTION	1
1.1.1	Pitstop	1
1.1.2	Resort	1
1.2	AIM	2
1.3	OBJECTIVE	2
2.	CASE STUDY	3
2.1	LEUBINGER FURSTENHUGEL SERVICE STATION	3
2.1.1	Location	3
2.1.2	Project description	3
2.1.3	Site plan (spatial zoning)	4
2.1.4	Service station plan	4
2.1.5	Car, other vehicle circulations	5
2.1.6	Truck circulations	6
2.1.7	Design features	6
2.1.8	Inference	9
2.2	ATALI GANGA ADVENTURE SPORTS RESORT RISHIKESH	10
2.2.1	Location	10
2.2.2	Project description	10
2.2.3	Site plan with spatial zoning	11
2.2.4	Restaurant plan	12
2.2.5	Upper level plan	12
2.2.6	Lower level plan	13
2.2.7	Accommodation unit	14
2.2.8	Design features	15
2.2.9	Inference	18
2.3	WILD COAST TENTED LODGE, SRI LANKA	19
2.3.1	Location	19
2.3.2	Project description	19
2.3.3	Main area plan	20
2.3.4	Site plan	21
2.3.5	Accommodation plans	21
2.3.6	Design features	22
2.3.7	Inference	24

2.4	TRAVELLER'S CONTAINER HOSTEL, CHINA	25
2.4.1	Location	25
2.4.2	Project description	25
2.4.3	Site plan	26
2.4.4	Site plan (spatial zone)	27
2.4.5	Concept	28
2.4.6	Circulation	29
2.4.7	Accommodation	30
2.4.8	Inference	33
2.5	VELS AND TEMPLE CITY, TAMIL NADU	34
2.5.1	Location	34
2.5.2	Context	34
2.5.3	Site plan	35
2.5.4	Circulation	37
2.5.5	Entertainment	38
2.5.6	Temple city	38
2.5.7	Small shops	39
2.5.8	Inference	39
3.	LITERATURE STUDY	40
3.1	BASIC REQUIREMENTS OF SPACES OF PETROL BUNK	40
3.2	STANDARD OF PETROL BUNK	40
3.2.1	Petrol bunk	40
3.2.2	Car and truck parking	42
3.3	BASIC REQUIREMENTS OF SPACES OF DORM	43
3.4	STANDARDS OF DORM	43
3.4.1	Bed and bunk bed	43
3.4.2	Bathroom	44
3.4.3	Dining	45
3.4.4	Kitchen	46
4.	SITE STUDY AND ANALYSIS	47
4.1	Site details	47
4.2	Parameters of selecting the site	47
4.3	Site location	48
4.4	Site justification	48
4.5	Accessibility	49
4.6	Landuse map of theni district	50
4.7	Existing site features	51
4.8	Site analysis	52

5.	ARCHITECTURAL DESIGN	53
5.1	Area statement	53
5.2	Concept and zoning	54
5.3	Master plan and site section	57
5.4	Restaurant	58
5.5	Accommodation	59
5.6	Convenience store and food court	60
5.7	Staff and trucker accommodation	61
6.	REFERENCE	62

1 INTRODUCTION

1.1 INTRODUCTION

PITSTOP

A pit stop in the context of highway travel typically refers to a brief stop or break that travelers make along their journey. These stops are commonly located at rest areas or service areas along highways and are designed to provide travelers with amenities and facilities to rest, refresh, and meet basic needs. It plays a crucial role in ensuring the comfort and well-being of travelers during long journeys, providing them with essential services and a chance to take a break before continuing their trip.

RESORT

A budget-friendly accommodation option that caters specifically to travelers and tourists, often those with a more adventurous and independent mindset. These accommodation units provide a communal and social atmosphere, allowing guests to interact with fellow travelers and share experiences. It provides an affordable and social accommodation option for budget-conscious travelers who value community and shared experiences during their journeys.



This design aims to create an opportunity for travelers to rejuvenate, refuel, and refresh their vehicle as well as their spirit. It aims to redefine the typical pitstop experience, transcending it into holistic oasis along their travel. Temporary stop for fuel can become 2-3 days stay for relaxing experience. By this design, a pitstop can become a destination itself. The resort design provides sharing units for people who prefer budget-friendly accommodation and for people who like to socialize with fellow travelers.

1.2 AIM

The aim of this project is to create a multifunctional space that seamlessly integrates a pitstop and a resort, fostering a dynamic environment that caters to the needs of both travelers seeking a convenient rest stop and stay for relaxation and memorable experience.

1.3 OBJECTIVE

- To design a space that combines the functionality of a pitstop and a resort, ensuring smooth transition between the two.
- To design for user, aiming to provide them a comfortable, engaging and memorable stay.
- To try and incorporate locally available elements and materials into the design.
- To develop strategies to engage with the local community, fostering positive relationships and contributing to the social and economic development of the surrounding area.

2 CASE STUDY

2.1 LEUBINGER FÜRSTENHÜGEL SERVICE STATION

2.1.1 LOCATION

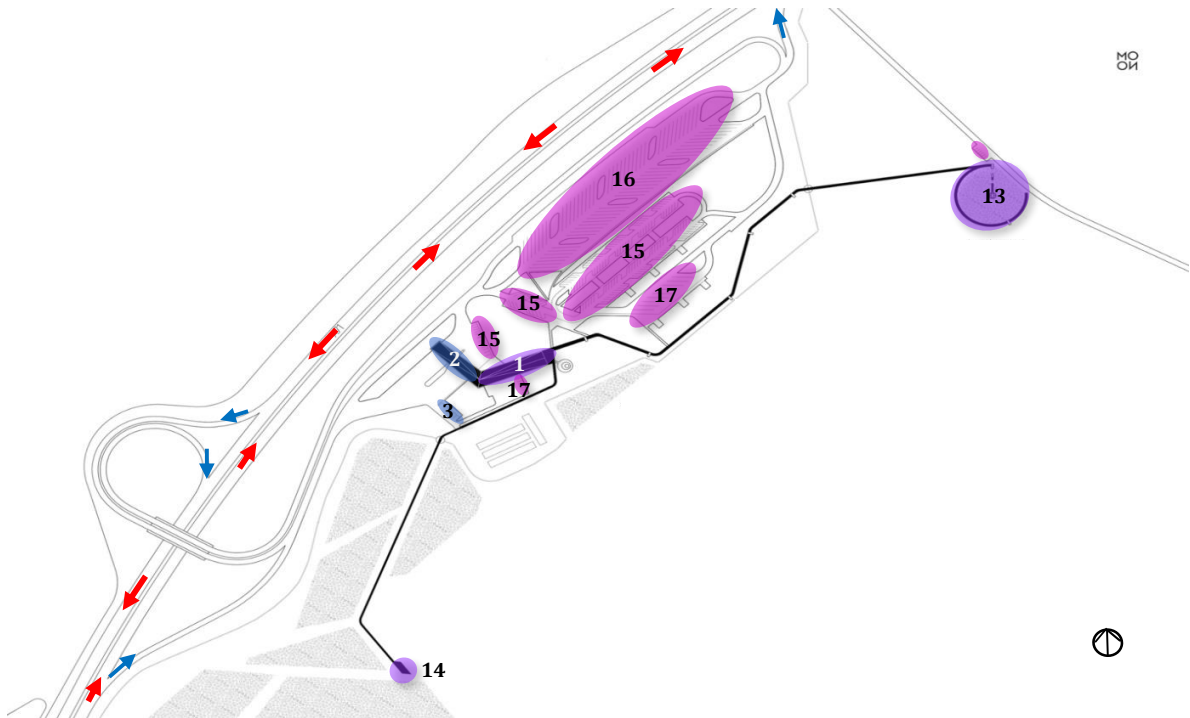
Located off the Bundesautobahn 72 motorway to the east of Leipzig, the centre sits alongside a new educational trail that celebrates the Leubinger Fürstenhügel site, which is one of the region's most important archaeological monuments. The tomb in this site is dated to the Bronze Age, the period of the Nebra Sky Disk. The burial mound was examined in 1877 and is attributed to the Únětice culture.

2.1.2 PROJECT DESCRIPTION

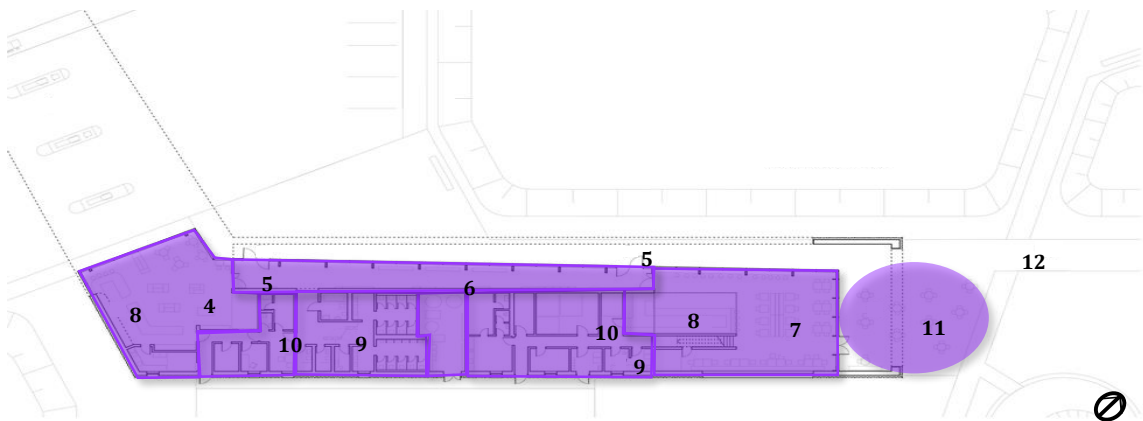
- AREA – 2,200 sq
- YEAR – 2021
- ARCHITECT – MONO Architekten

Leubinger Fürstenhügel is one of Thuringia's most important archaeological monuments. The burial mound is considered to be the largest and most well-preserved of its kind. In proximity to the archaeological find, an unusual project, the Leubinger Fürstenhügel service station, links architecture, landscape, and history. Part of the holistic concept was not only the careful emplacement of the structure within the historically significant surroundings but also the integration of an exhibition and an educational path.

2.1.3 SITE PLAN (SPATIAL ZONING)



2.1.4 SERVICE STATION PLAN

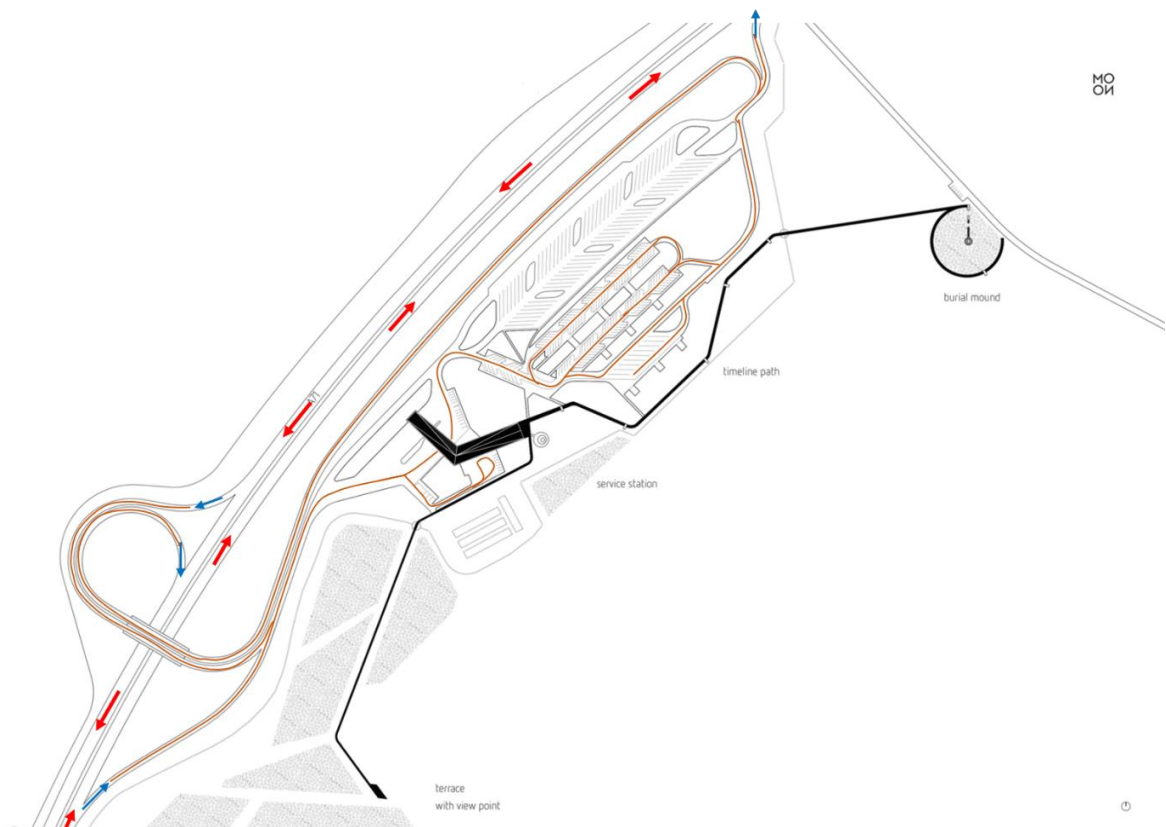


Fuel station	
1.	Fuel station for cars, bikes, etc
2.	Fuel station for trucks
3.	Charging station for E-cars

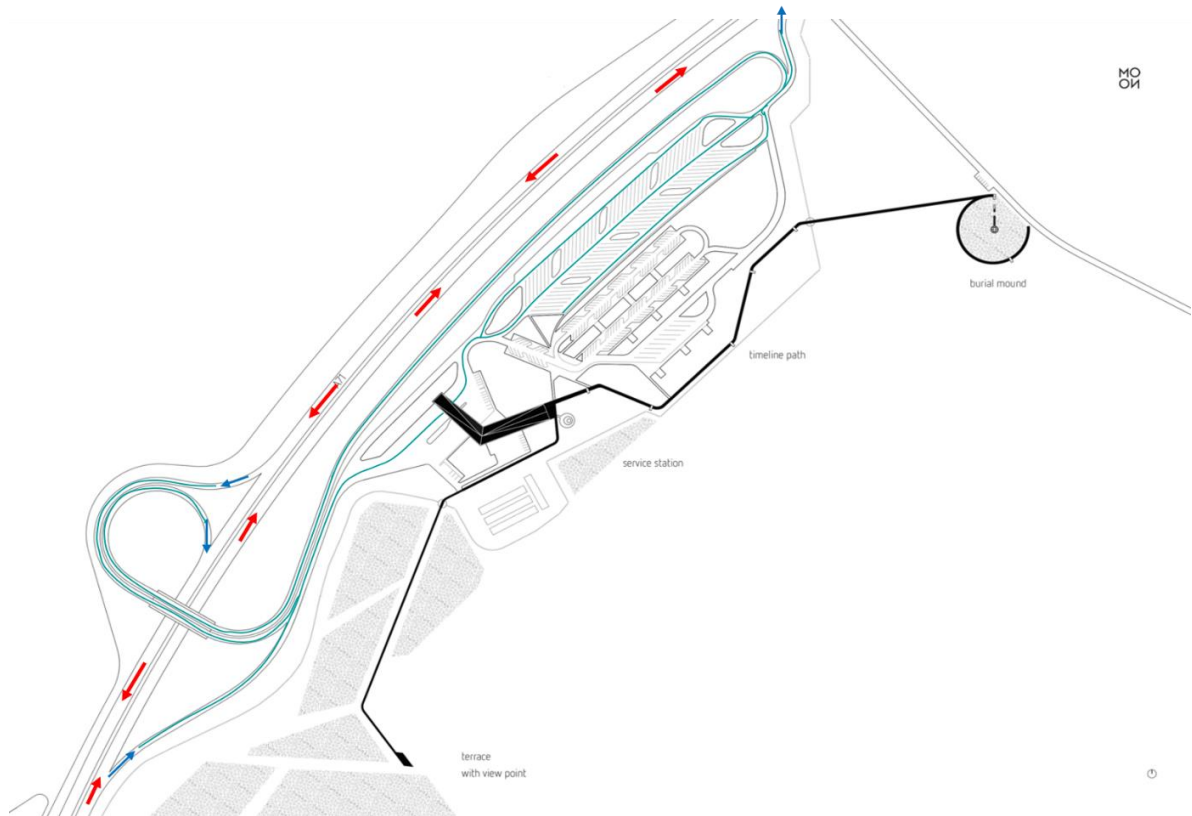
Parking	
15.	Car parking
16.	Truck parking
17.	Other vehicles parking
4.	

Communal spaces, recreational spaces	
4.	Shop service station
5.	Entrances
6.	Exhibition
7.	Guest area
8.	Kitchen
9.	Sanitary facilities
10.	Utility rooms
11.	Outdoor dining
12.	Educational path
13.	Burial mound
14.	Terrace with view point

2.1.5 CAR, OTHER VEHICLE CIRCULATIONS



2.1.6 TRUCK CIRCULATIONS



2.1.7 DESIGN FEATURES

WING 1



- It accommodates all functional components of the building such as the exhibition space,
- The side facing the road is completely glazed, which is to make the guest explore inside the building.
- The guest area is glazed on all three sides, where the other two sides offer a direct visual reference to the mound.

WING 2

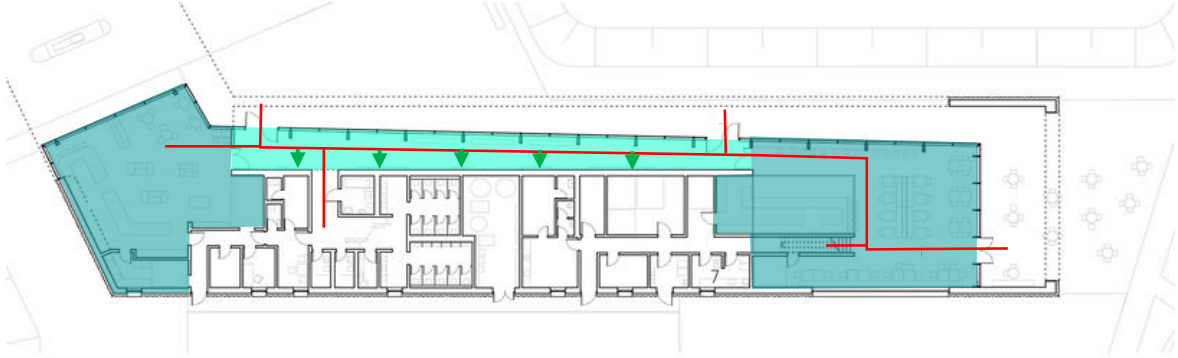


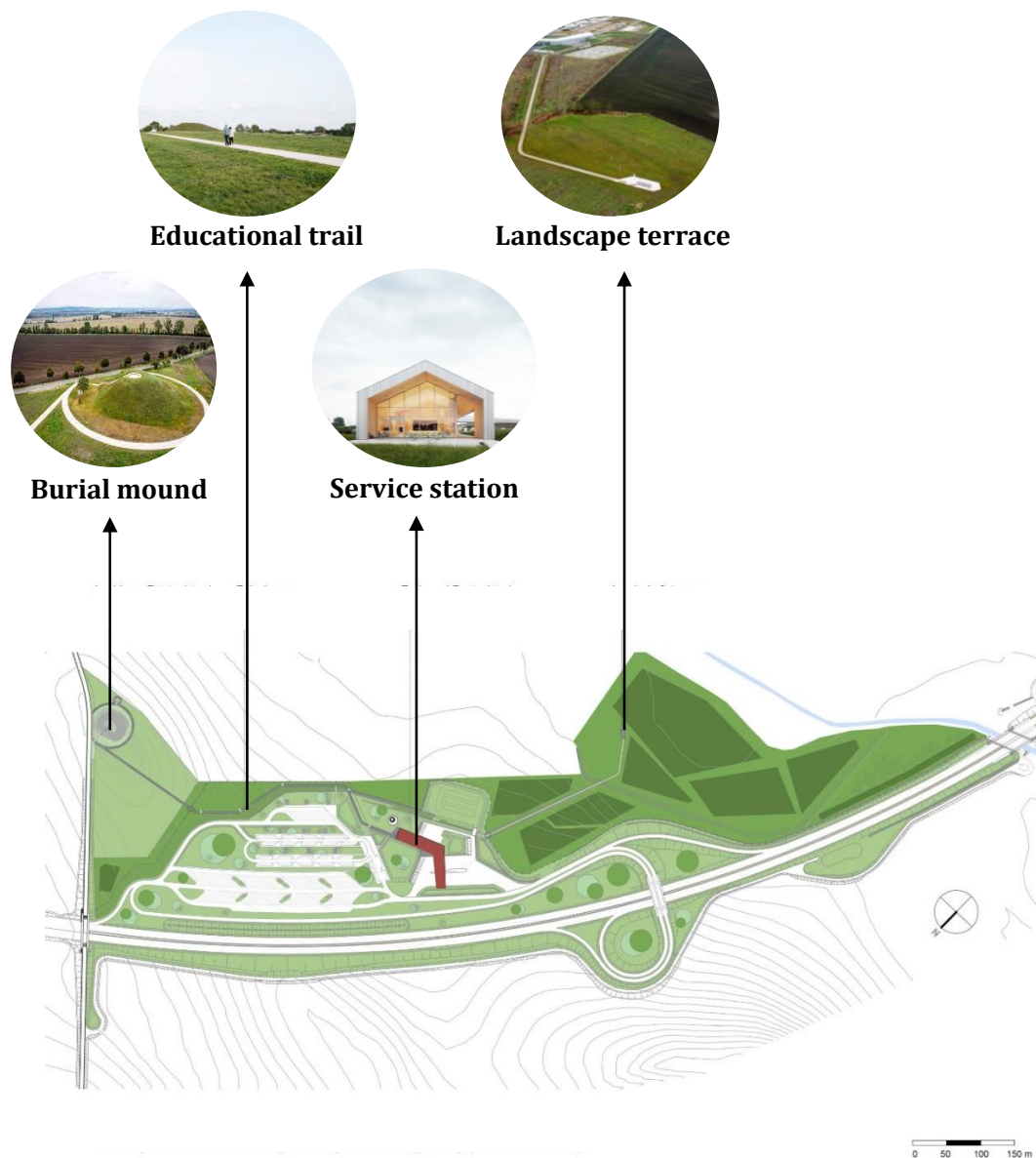
- It stretches over the refueling facility.
- It acts as entrance to the site as it is a large column-free structure. It also frames the first view of the burial mound.

MATERIALS

- Aluminum skin - Plain aluminum skin was used for the exterior, emphasizes the structure's overall calm impression.
- Wood - The walls and ceilings are covered with solid wood, to create a warm and friendly atmosphere.
- Stone flooring - It connects all the facilities and creates a design reference to the forecourt

THE EXHIBITION CORRIDOR





2.1.8 INFERENCE

- The main focus was the burial mound and the design revolves around it.
 - Building and landscape are designed to contribute to a calm and restrained aesthetic.
 - The integration of the exhibition and educational path is a major plus for the project.
- The layout and trail works together to take visitors on a journey through time, providing insights into historical events, archaeological finds, and the construction of tomb.

2.2 ATALI GANGA ADVENTURE SPORTS RESORT, RISHIKESH

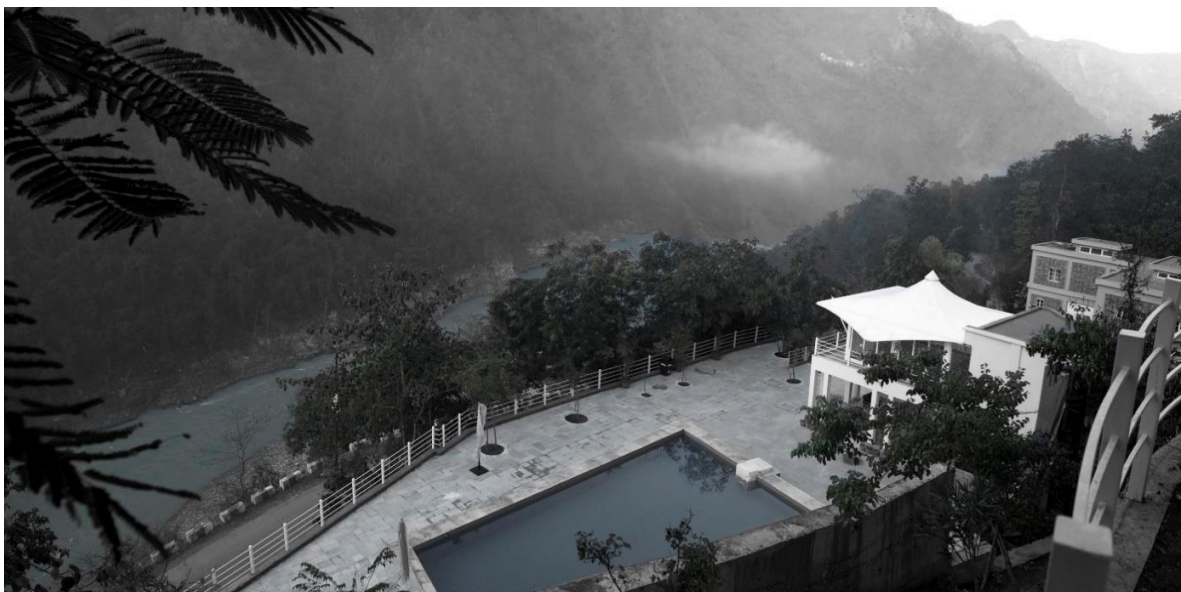
2.2.1 LOCATION

This adventure resort is located in Rishikesh with a breathtaking view of the river Ganga. Rishikesh is a city in the northern Indian state of Uttarakhand. It is located in the foothills of the Himalayas along the banks of the Ganges River. Rishikesh is known for its spiritual significance, yoga and meditation centers, and natural beauty.

2.2.2 PROJECT DESCRIPTION

- AREA - 2045 sq.m
- YEAR – 2012
- ARCHITECT – RLDA Studio

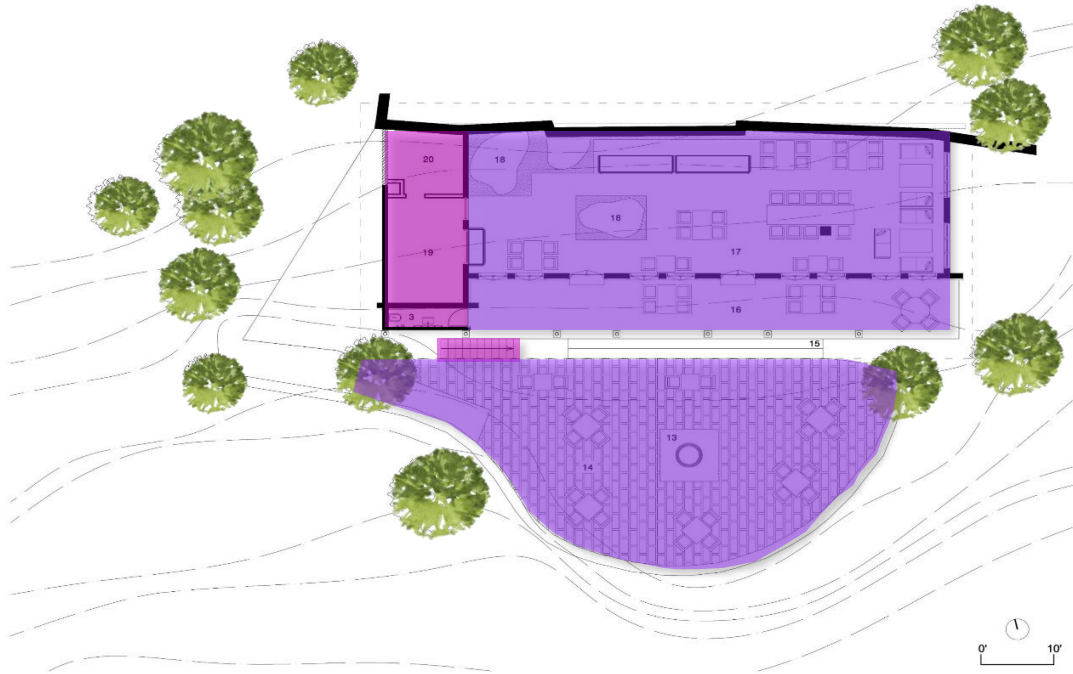
RLDA's design of an adventure sports resort, Atali in Rishikesh, brings together the aesthetics of locally-ascribed architecture, that inevitably evokes a sense of place as opposed to featuring a distinct style or language. Spanning across 1.5 acre of land, the resort comprises 22 independent cottages, storage facility with a dormitory at the upper level, a central open 'verandah' as the entrance court, a kayak pool and a restaurant overlooking the pool and sprawling landscapes beyond.



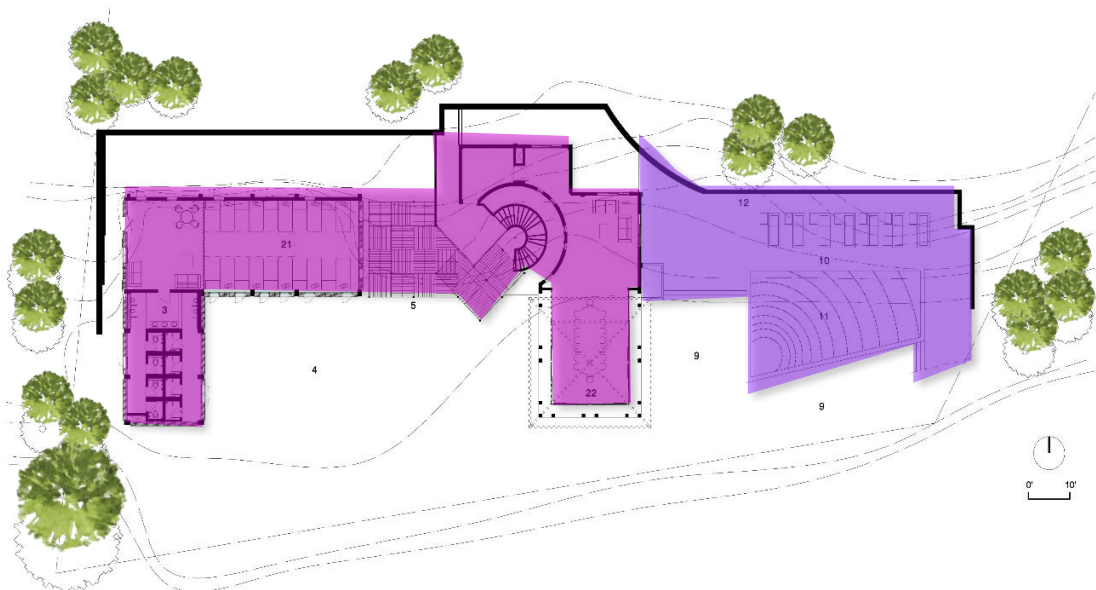
2.2.3 SITE PLAN WITH SPATIAL ZONING



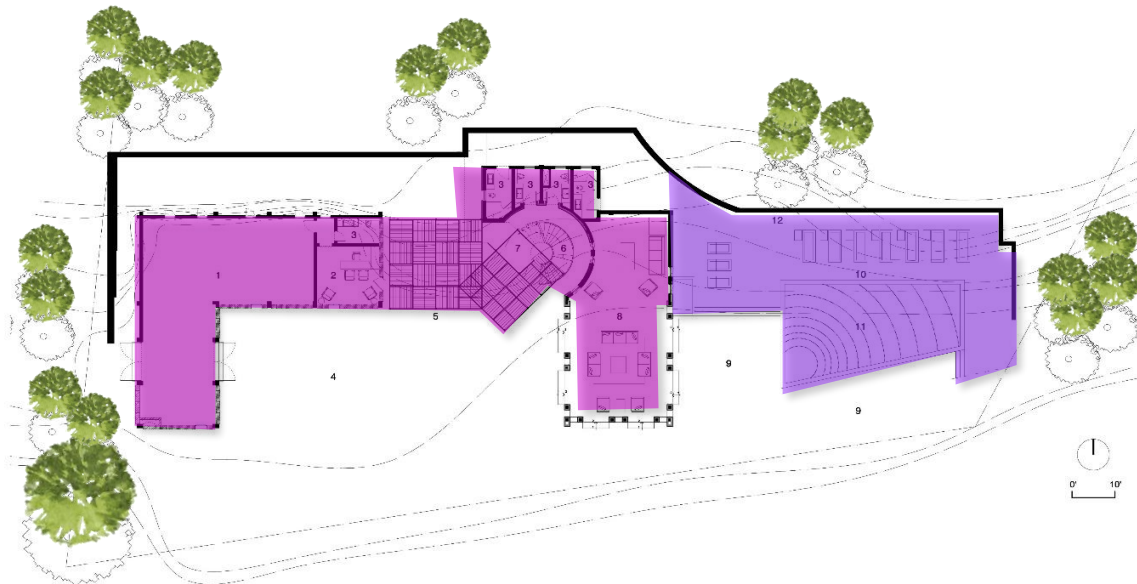
2.2.4 RESTAURANT PLAN



2.2.5 UPPER LEVEL PLAN



2.2.6 LOWER LEVEL PLAN



Accommodation

- Independent cottages – 16
 - Double bed
 - Deck
- Deluxe units (connected) – 1
 - Two cottages connected internally
 - Two interconnected rooms
- Deluxe units (not connected) – 2
 - Two cottages not connected internally
 - Separate rooms
- Villa - 2
 - Four bedroom
 - Master bedroom – 1
 - Twin bedroom – 2
 - Single bedroom – 1
- Dormitory for staff (upper level) – 10 beds

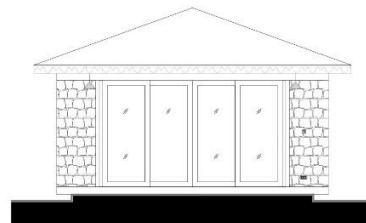
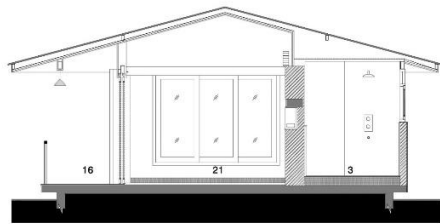
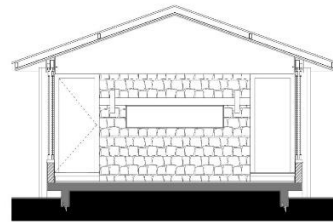
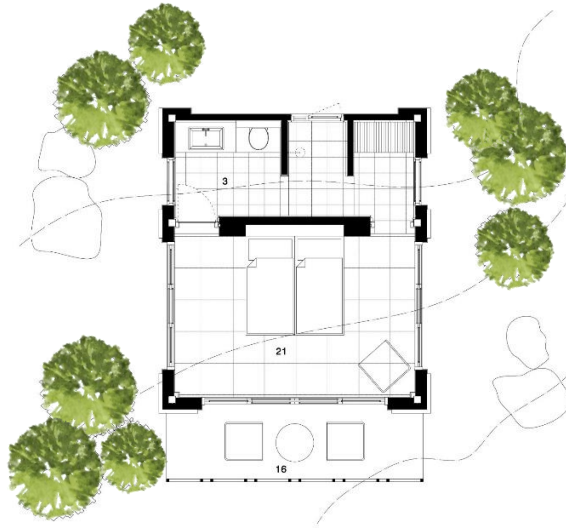
Communal spaces, recreational spaces

- Lower level
 - Verandah
 - Kayak pool
 - Kayak pool lower level deck
 - Rock climbing wall near lower deck
- Upper level
 - Kayak pool upper level deck

Service areas

- Lower level
 - Storage facility
 - Office
 - Restroom
 - Elliptical stairs
- Upper level
 - Restroom

2.2.7 ACCOMMODATION UNIT



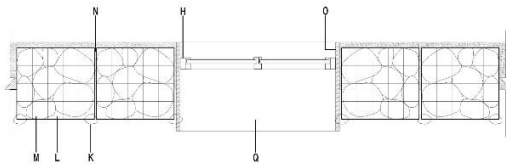
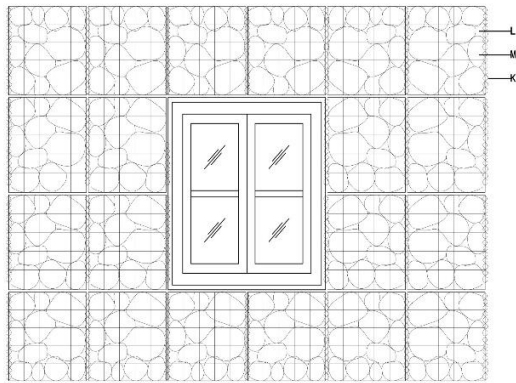
- 3 REST ROOM
- 16 OUTDOOR DINNING VERANDAH
- 21 ACCOMMODATION

0' 10'



2.2.8 DESIGN FEATURES

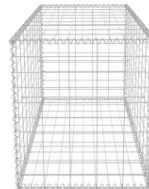
STONE BUILDING



Kota stone window sill



Mild steel casement window



Galvanized metal gabion box

This metal box is filled with random rubble and is bound with binding wire.



Random rubble

Rubble stone were available on site.



Rusted steel binding wire

Used for binding edge of one metal box to other to build a wall.



Recessed perforated metal plate

It is used on the side and backside of the gabion wall

DECK

Deck is provided in each level of the resort to enjoy the stunning view of the Himalayas and the river Ganga.

- Kayak pool lower and upper level deck.



RESTAURANT DECK



CLIMBING WALL

There is a climbing wall in the kayak pool deck, which is two-storey height. It is one of the adventure activities offered by the hotel. Other activities such as yoga, hiking, astronomy, camping are also offered within the site.



CIRCULATION



ACCOMMODATION

The cottages that dot the upper levels are characterized by their spartan luxuriousness. Entered through a private verandah, a central stone wall demarcates the tripartite bathroom from the bedroom. Extensively glazed, they open themselves up to the surrounding landscape. Their location, on the hill was determined by topography, views and distance from other such units. The metal structure of the cottages were fabricated off site. The cottages are accessed through a series of ramps and steps cut into the landscape.



2.2.9 INFERENCE

It chose aesthetics from construction methods and materials. The construction materials are chosen to connect social, historical, and religious context of river ganga. The cottages are strategically located on the hillside to optimize topography, views and privacy. The project is deeply integrated into the local context, considering weather system as crucial factor of the design.

2.3 WILD COAST TENTED LODGE, SRI LANKA

2.3.1 LOCATION

This resort is located on the edge of Yala National Park in the south of Sri Lanka. Yala covers an area of 1,260 sq.km and is divided into five blocks. It is situated in the southeastern region of the country, in the Southern province and Uva province. It is about 300 km from Colombo. It is known for its variety of wildlife and is important conservation of Srilankan elephants, leopards and aquatic birds.

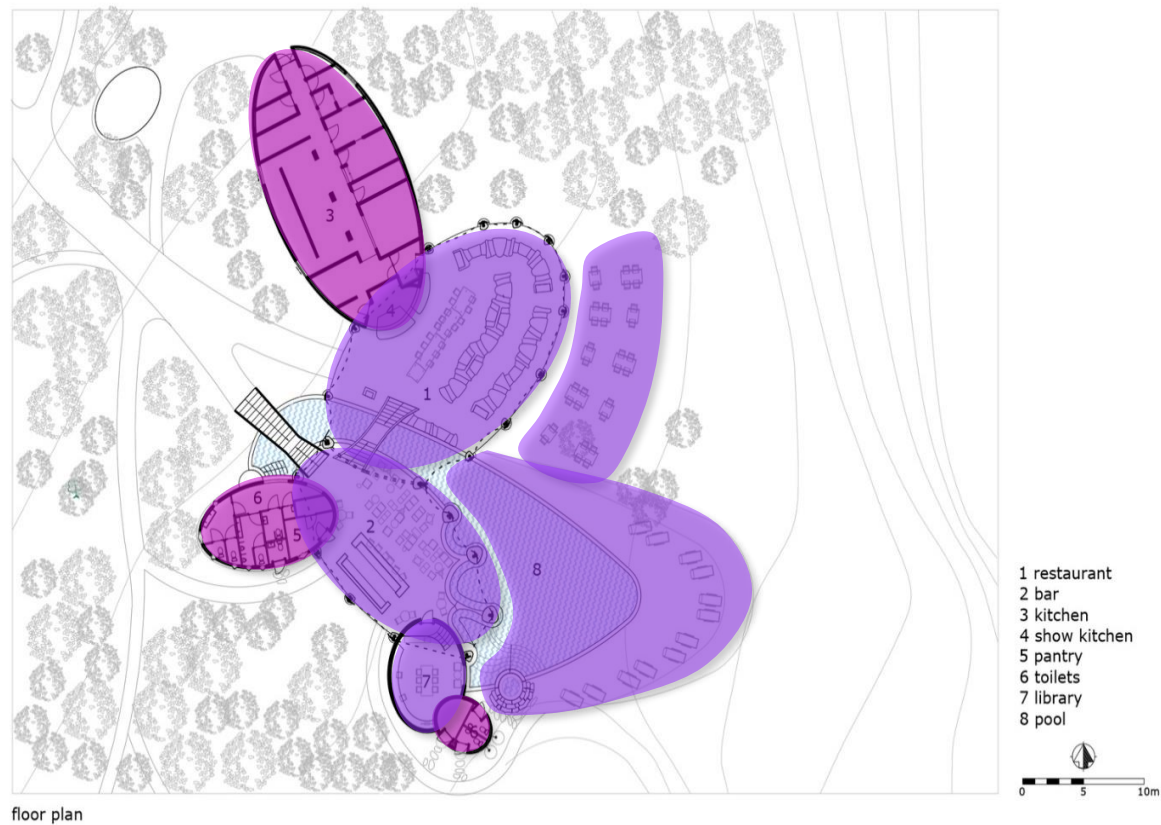
2.3.2 PROJECT DESCRIPTION

- AREA - 5250 sq.m
- YEAR – 2017
- ARCHITECT – Nomadic resorts

Nomadic Resorts and Bo Reudler Studio teamed up to design and construct Wild Coast Tented Lodge - the first of its kind in Sri Lanka. Sustainability, landscape and heritage are intertwined in the design of the Wild Coast Tented Lodge. The 36-tent safari camp welcomed its first guests in November 2017. The eco-resort's organic architecture integrates seamlessly into the site, which comprises dryland forests that merge into the rugged sandy coastline overlooking the Indian Ocean.



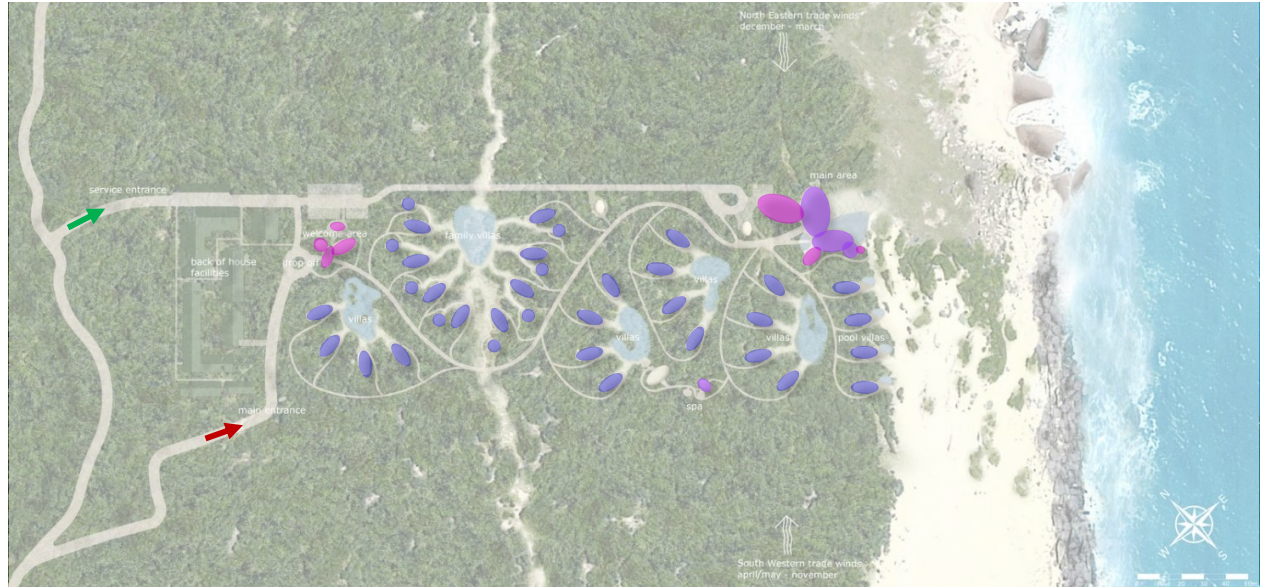
2.3.3 MAIN AREA PLAN



floor plan

Service areas	Accommodation	Communal spaces, recreational spaces
- Main Area - Kitchen - Show kitchen - Pantry - Toilets - Welcome area - Reception - Office - Toilets	- Cocoon pool suite – 4 - King bed + Single rollaway bed - Private pool - Cocoon Suite – 16 - King bed + Single rollaway bed - Outdoor viewing deck - Family cocoon suite – 8 - cocoon – king bed + single rollaway bed - urchin – twin bed	- Main Area - Restaurant - Bar - Library - Outdoor pool with deck - Spa

2.3.4 SITE PLAN



2.3.5 ACCOMMODATION PLANS





2.3.6 DESIGN FEATURES

BOULDERS

- The camp's main buildings appear as outcrops of boulder-like pavilions clustered organically together at either end of the site.
- They are light, open structures crafted from a woven grid shell bamboo structure clad in reclaimed teak shingles.
- These large, arched openings create a strong sense of space.



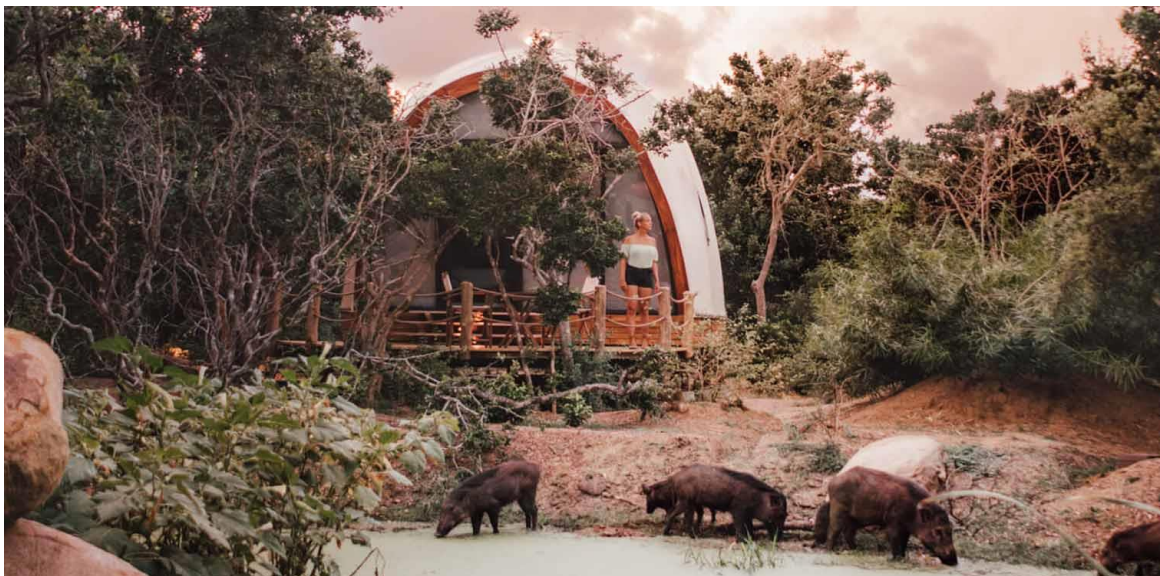
COCOONS

- These cocoons are present between the welcome area to the main area.
- The clusters of the cocoons are tensile membrane structures called Loopers.
- These cocoon structures only represent the villas.



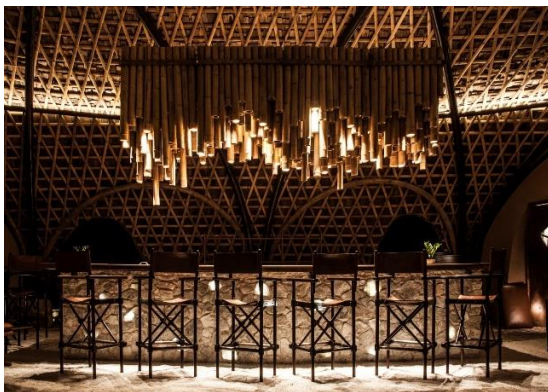
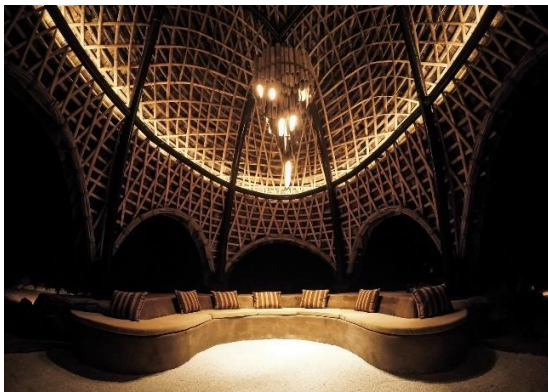
WATERING HOLE

These clay lined ponds, surrounded by cocoons, are fed with recycled waste water from the lodge.



MATERIALS

The interiors are mostly done with local materials such as stone, quartz and mud brick paired with copper, brass, terrazzo, wood, bamboo and textiles. Mud brick seatings and bamboo chandeliers are used in the main spaces.



INFERENCE

- The design revolves around local influences, and draws inspiration from vernacular traditions, materials, and community involvement.
- Major importance is given to the surrounding environment and the circulation of the resort.
- All the structures majorly resembles the surrounding elements in the site.
- The clustered placing of the structures, gives user a new experience while exploring.

2.4 TRAVELLER'S CONTAINER HOSTEL, CHINA

2.4.1 LOCATION

The hostel is located in the west of wild world Jinan, besides the bank of picturesque Wangyun lake. Wild world Jinan is located in Zhangqiu District, Jinan. It is a national-level wildlife kingdom integrating tourism, animal and plant protection research, and popular science education together.

2.4.2 PROJECT DESCRIPTION

- AREA – 4048 sq.m
- YEAR – 2021
- ARCHITECT – Qishe Architectural design office

This animal theme camp is designed for exploring and discovering nature, the buildings as the same as small boxes scattered in the nature of the forest. The theme camp occupies a total area of 4 hectares. This project currently has two themed container camps – the specialty restaurants and the open event venues, which makes it a good place for group activities, camping, and summer bonfire parties.



2.4.3 SITE PLAN



2.4.4 SITE PLAN (SPATIAL ZONING)



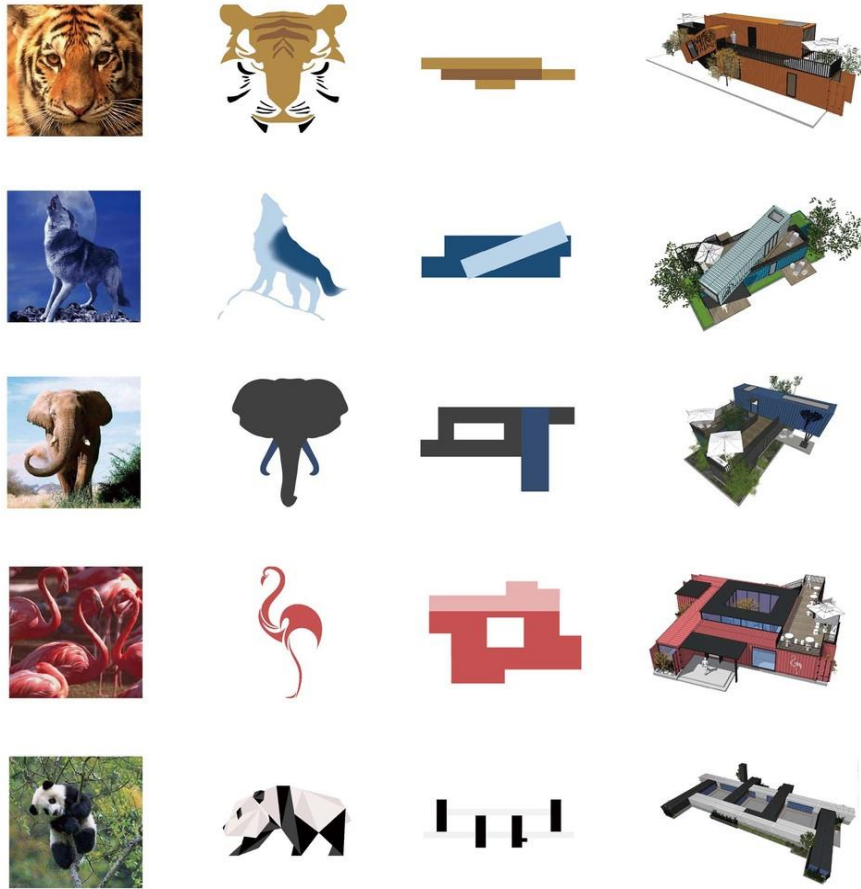
Accommodation

- The Bird camp (existing)
- The Tiger camp (existing)
- The Elephant camp (future)
- The Wolf camp (future)

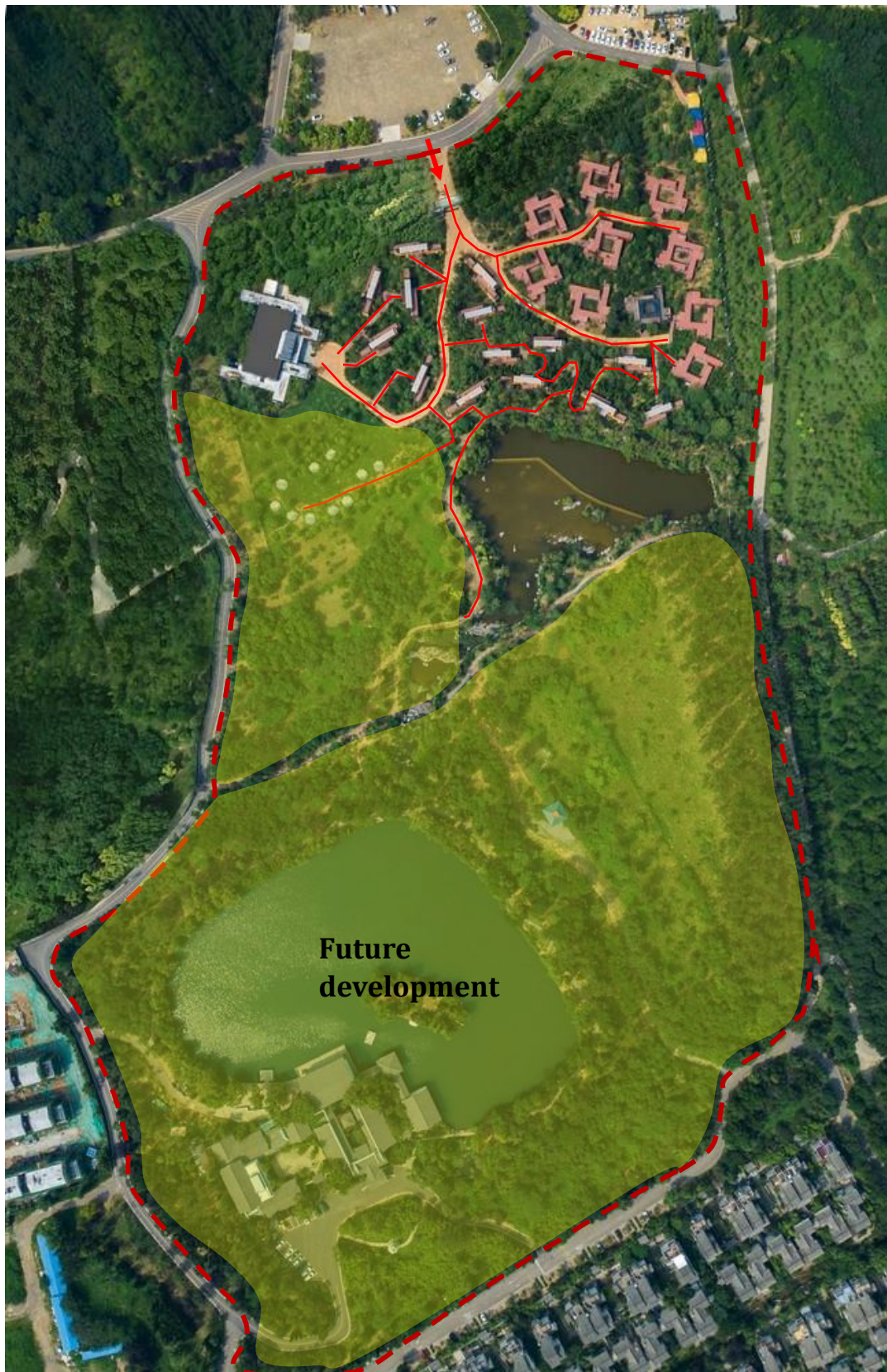
Communal spaces, recreational spaces

- The Panda restaurant

2.4.5 CONCEPT



2.4.6 CIRCULATION

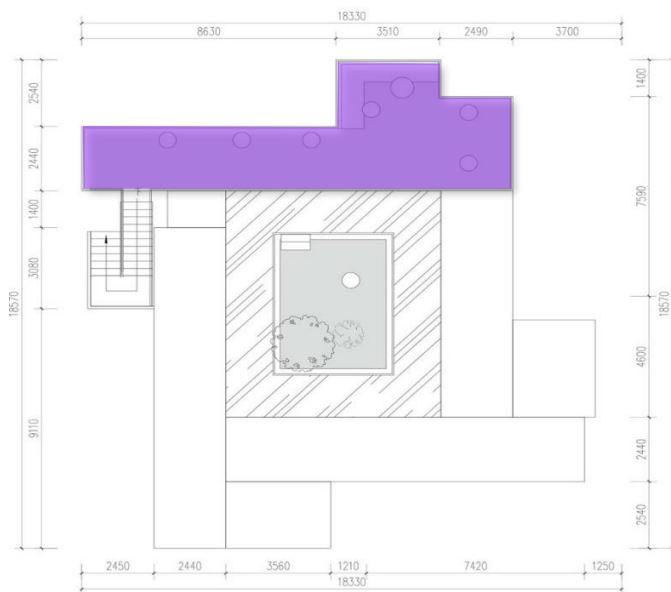


2.4.7 ACCOMMODATION

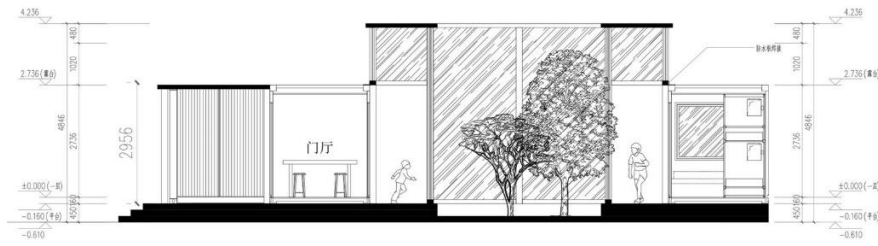
THE BIRD CAMP



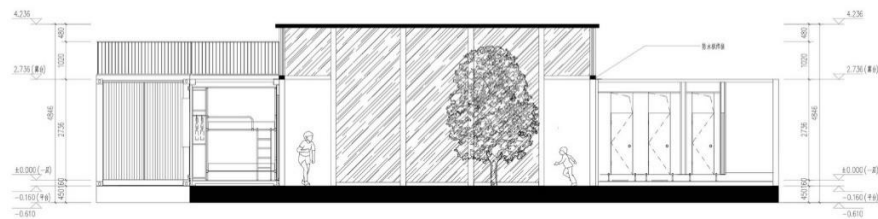
Ground floor plan



Terrace floor plan

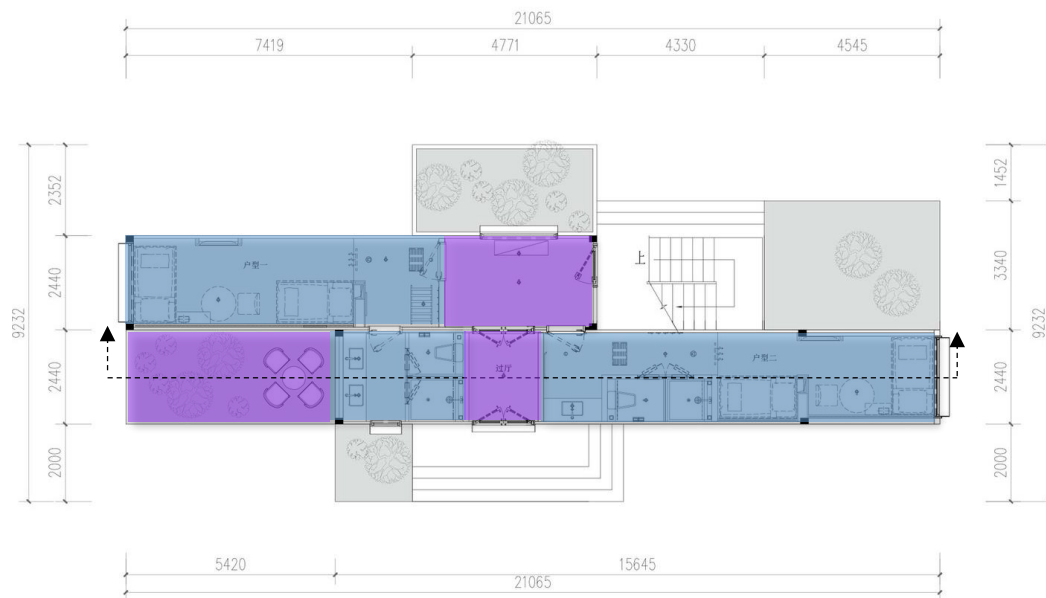


Section

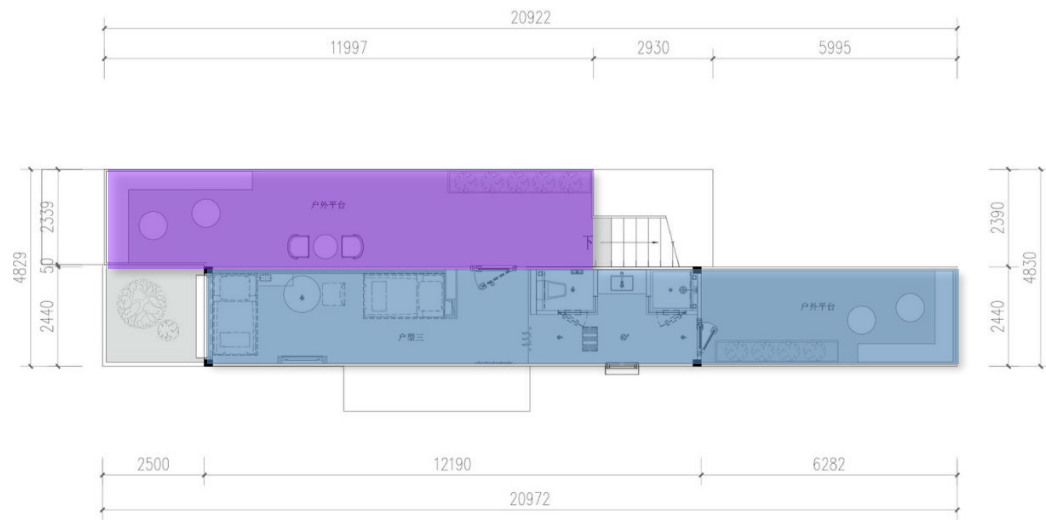


Elevation

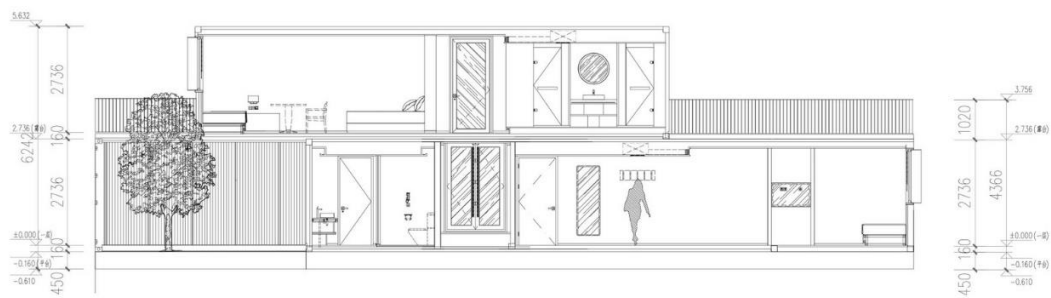
THE TIGER CAMP



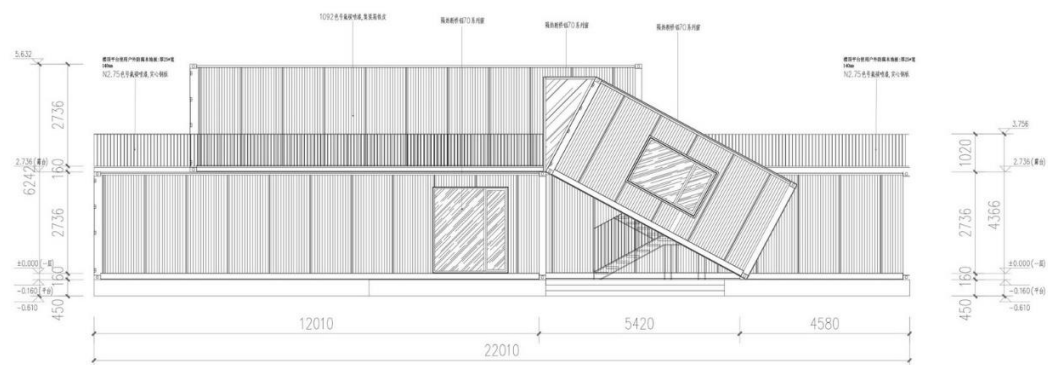
Ground floor plan



First floor plan



Section



Elevation

Accommodation	Communal spaces, recreational spaces
• The Bird camp - 4 rooms with 6 bunk beds each • The Tiger camp - 2 Private rooms with twin beds and attached bathroom - 1 Private room with twin beds, attached bathroom and	• The Bird camp - Courtyard - Lounge - Outdoor deck • The Tiger camp - Lounge
Services	
• Communal bathroom • Staircase	



2.4.8 INFERENCE

- Flexibility of combination, construction and application
- Modularity – Prefabricated module which achieves Carbon neutrality, sustainable development
- Good day light conditions
- Design with recyclable and disassembly strategy
- Variety of colors
- Integrate into nature

2.5 VELS AND TEMPLE CITY, TAMIL NADU

2.5.1 LOCATION

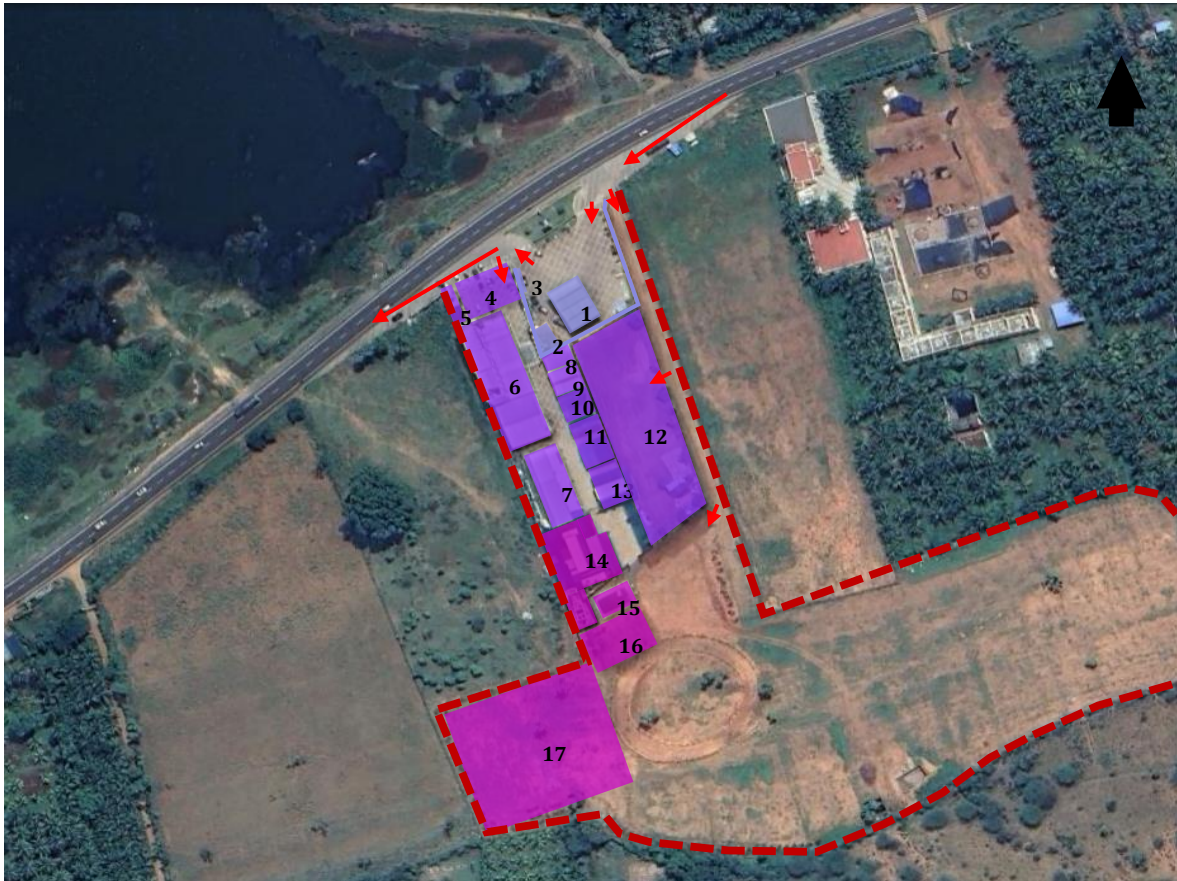
The pitstop is located in the Chennai-Theni highway before Kodaikanal. This location is a prime spot for a pitstop as many people, before turning for Kodaikanal or continuing in the same road for Theni, fill their tanks, relax for few mins, eat their meal, etc. This highway is majorly used by many people to travel to Kodaikanal and Theni. It also has a beautiful view of a lake opposite to it.

2.5.2 CONTEXT

Lot of vehicles pass through this particular highway as it is a major route to reach destinations like Theni, Kodaikanal, Munnar, etc. As it right before the junction which leads to Kodaikanal and Theni, people stop for fuel, rest, food, entertainment, etc as there won't be any stops while driving through hill roads which leads to Kodaikanal. There is also lake opposite to the bunk, which offers a beautiful view. It is also surrounded by hills, which creates a scenic view. Overall, people would relax and enjoy their few mins/ hrs of stop in this location.



2.5.3 SITE PLAN



Communal spaces, recreational spaces

4. Parking
5. Kiosks
6. - Temple city - Restaurant (GF)
- Temple city - Souvenir shop (GF)
- Temple city - Convenience store (GF)
- Vel - Café (FF)
- Vel - Accommodation (4 rooms) (FF)
- Vel - Meeting room (SF)
- Store rooms (SF)
7. Kiosks
- Textile shop
- Mattress shop
- Ice cream shop
- VR game
- Shoe shop
8. Convenience store
9. Toilets
10. Children's park
11. Parking
12. Parking
13. Kiosks
- Leather shop
- Non-veg restaurant
- Arcade

Entertainment and Adventure Zone

14. - Nursery
- Pet shop
- Billiards
- Massage chair
- Fish Pedicure
- Air Hockey
- Table tennis
- Cricket
- Archery
- Gun shoot
15. Artificial pond for water zorbing
16. Columbus ride, 360 cycle, cup and saucer ride, Bungee trampoline
17. RC bike track

Fuel Station

1. Fuel pump
2. - Office
- Dealer room
- Lubricant store
- Toilets
- Staff toilet
3. Air pump



2.5.4 CIRCULATION



2.5.5 ENTERTAINMENT

All adventure activities are targeted towards children. There are no rides for adults, but there are other fun activities such as archery, Cricket, table tennis, air hockey, massage chair, etc.



2.5.6 TEMPLE CITY

Temple city has a restaurant, souvenir shop and a convenience store in the dining area. It is separate from vel which owns the accommodation, café and meeting room in first and second floor. The entry to these is through the restaurant.



2.5.7 SMALL SHOPS

The small shops had VR games, arcade, ice cream shop, textile shop, fast food shop, shoe shop, and leather shop. These shops were placed along the path, on either side, which leads to the entertainment and adventure zone behind. It also has kids bikes, cars and train to entertain the kids. All these shops and the adventure zone belongs to vel.



2.5.8 INFERENCE

The overall zoning of petrol bunk, communal spaces and adventure zone is the major take away from the case study. Also, the activities provided in the adventure zone based on the site and the spaces such as restaurant, small shops, etc keep the people engaged and entertained who came here to take a break from their long journey. The major reason for the stop is for fuel and food, along with these needs they have provided activities to make them spend more time.

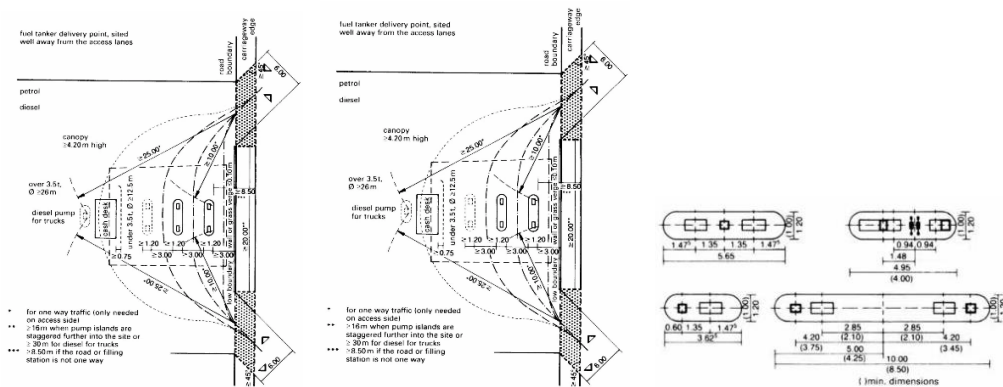
3 LITERATURE STUDY

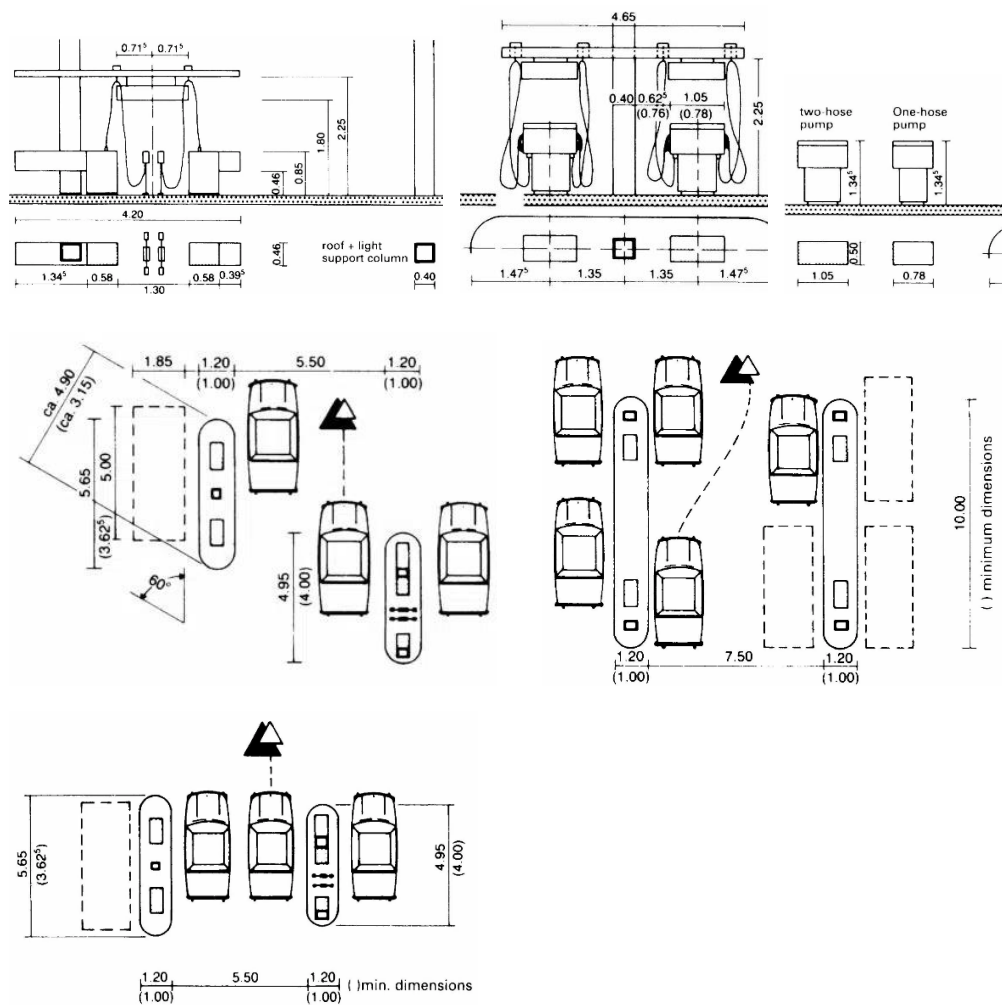
3.1 BASIC REQUIREMENTS OF SPACES OF PETROL BUNK

- Petrol bunk/ Gas station
- Washrooms
- Medical clinic
- Food court/ Dhaba
- Village Haat
- Restaurant/ cafeteria
- Convenience store
- ATM
- Sleeping pods
- Workshop
- Accommodation for truckers
- Children's play area
- Car parking
- Truck parking

3.2 STANDARDS OF PETROL BUNK

3.2.1 PETROL BUNK





turning circle	car	12.50 m
turning circle	truck	26.00 m
vehicle width	car	1.85 m
vehicle width	truck	2.50 m
vehicle length	car	5.00m
vehicle length	articulated truck	18.00

3.2.2 CAR AND TRUCK PARKING

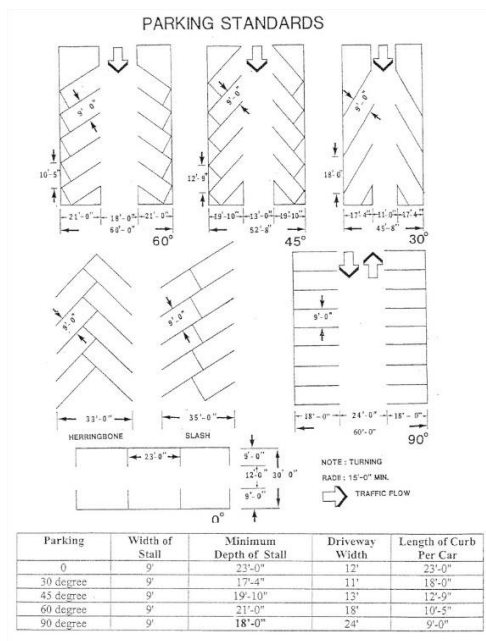
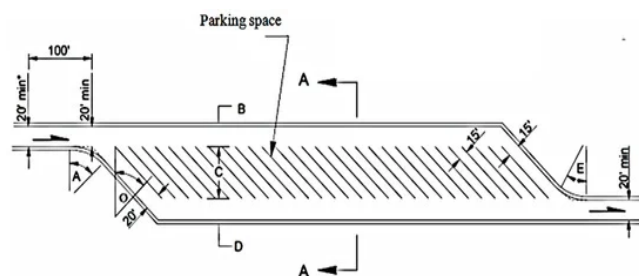
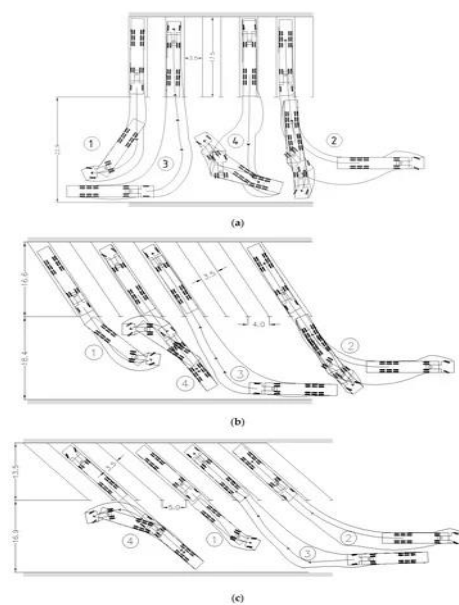


Table 1. Parking lot dimensions

Angle of Parking	Stall width	Curb length		Stall depth	Minimum driveway width	Lot width 1 row + 1 driveway	Sq ft 1 row + 1 driveway		Lot width 3 rows + 2 driveways		Lot width 4 rows + 2 driveways		Sq ft per car
		per car	per car				Sq ft per car	Sq ft per car	Sq ft per car	Sq ft per car			
Along curb = 0°	9'	23'	9'	12'	21'	483	30'	345	51'	391	60'	345	
	10'	23'	10'	12'	22'	506	32'	368	54'	414	64'	368	
30°	9'	18'	17 4"	11'	28 4"	510	45 8"	411	66 2"	397	83 6"	376	
	10'	20'	18 3"	11'	29 3"	585	47 6"	475	68 0"	453	86 2"	428	
45°	9'	12 9"	19 10"	13'	32 10"	420	52 8"	338	79 0"	376	98 10"	315	
	10'	14 2"	20 8"	13'	33 6"	490	54 0"	383	80 4"	379	100 10"	358	
60°	9'	10 5"	21 10"	18'	39 0"	407	60'	313	93 50"	330	116 0"	305	
	10'	11 6"	21 6"	18'	39 6"	435	61'	351	95 4"	366	116 6"	335	
90°	9'	9'	19'	24'	43'	387	62'	279	105'	315	124'	279	
	10'	10'	19'	24'	43'	430	62'	310	105'	350	124'	310	

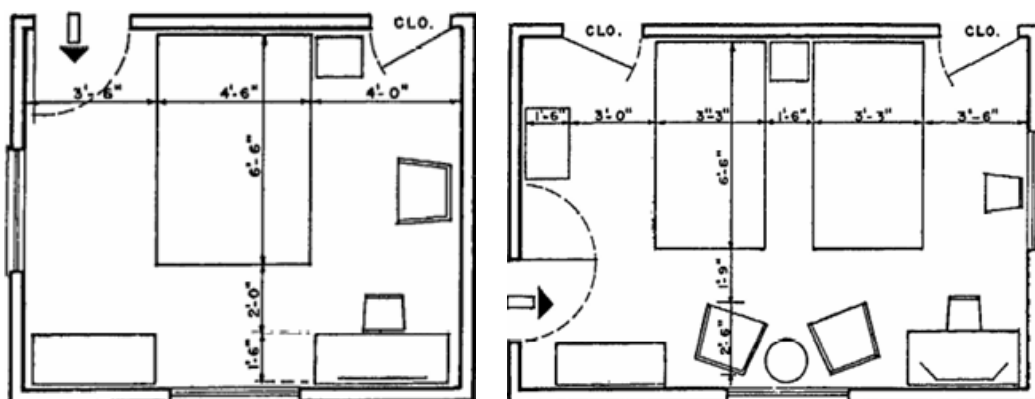


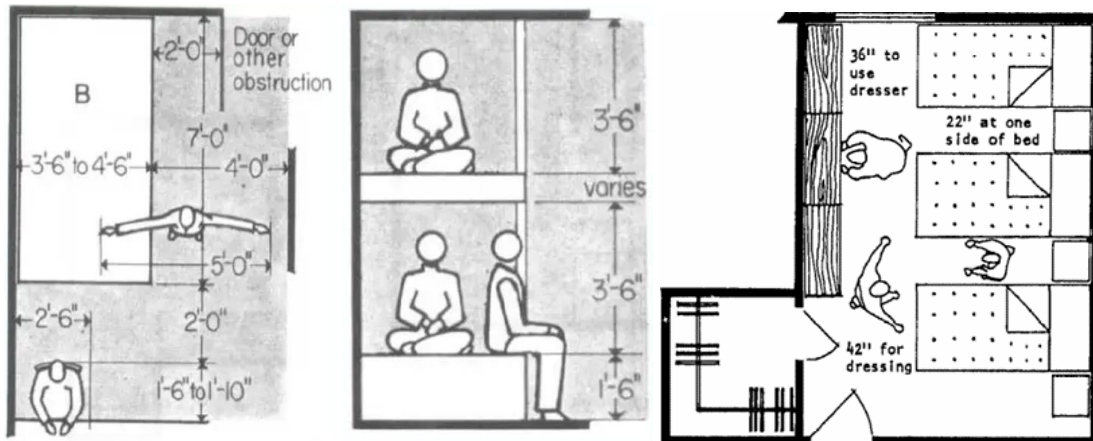
3.3 BASIC REQUIREMENTS OF SPACES OF DORM

- Petrol bunk/ Gas station
- Washrooms
- Medical clinic
- Food court/ Dhaba
- Village Haat
- Restaurant/ cafeteria
- Convenience store
- ATM
- Sleeping pods
- Workshop
- Accommodation for truckers
- Children's play area
- Car parking
- Truck parking

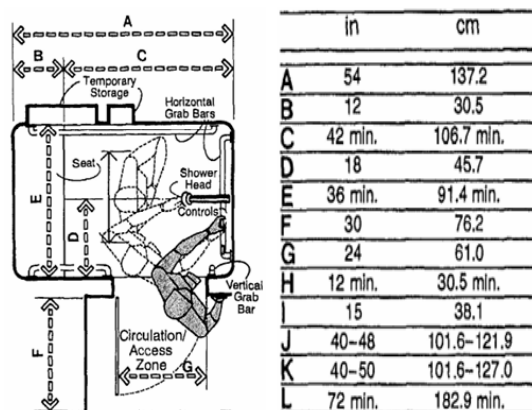
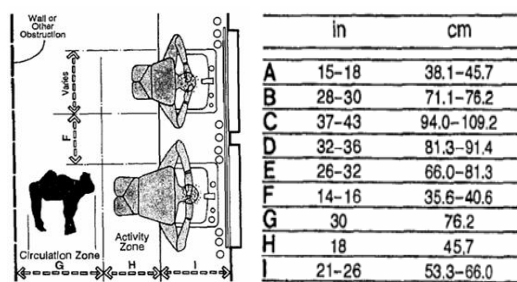
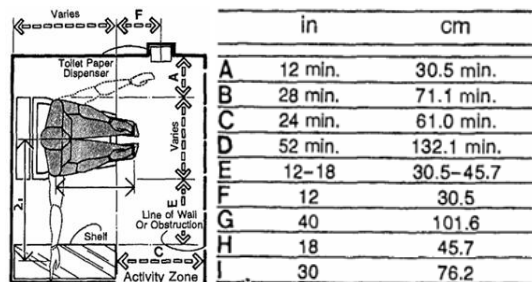
3.4 STANDARDS OF DORM

3.4.1 BED AND BUNK BED

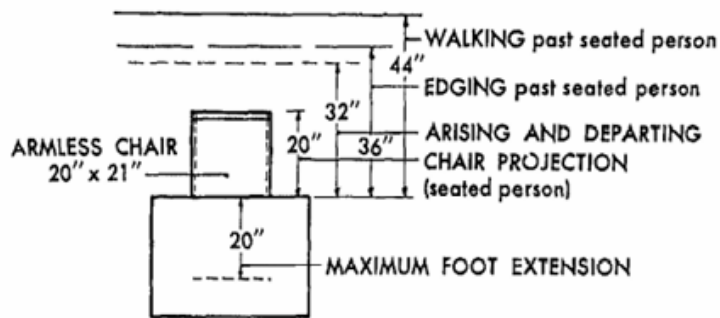
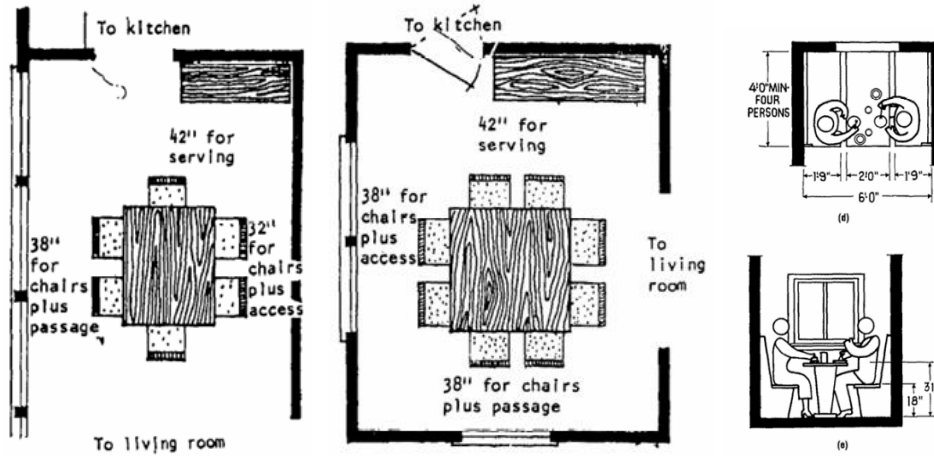




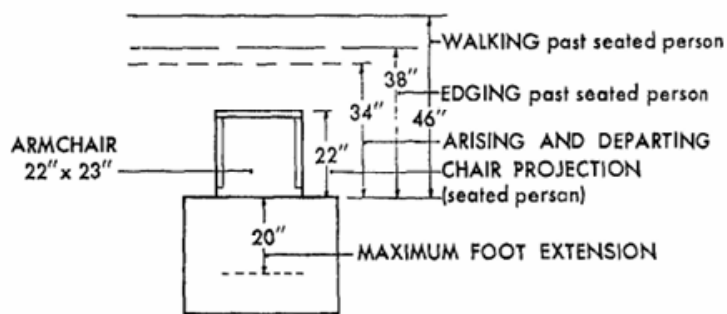
3.4.2 BATHROOM



3.4.3 DINING



Armless chair in place at table



Armchair in place at table

3.4.4 KITCHEN

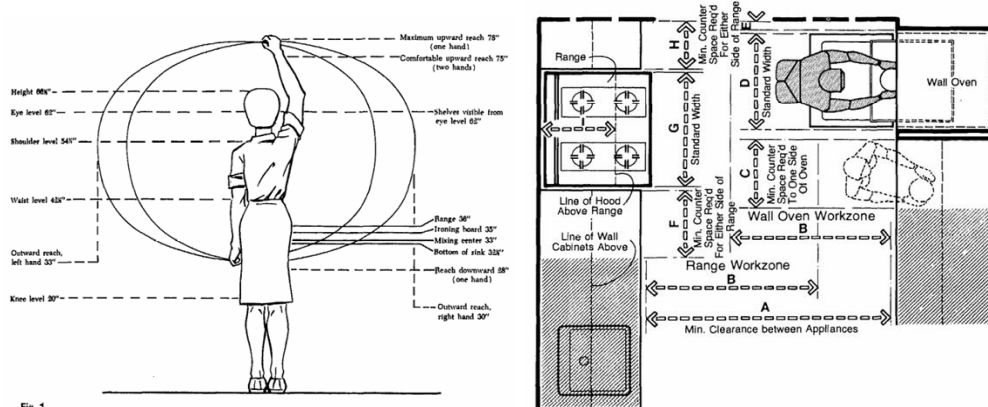
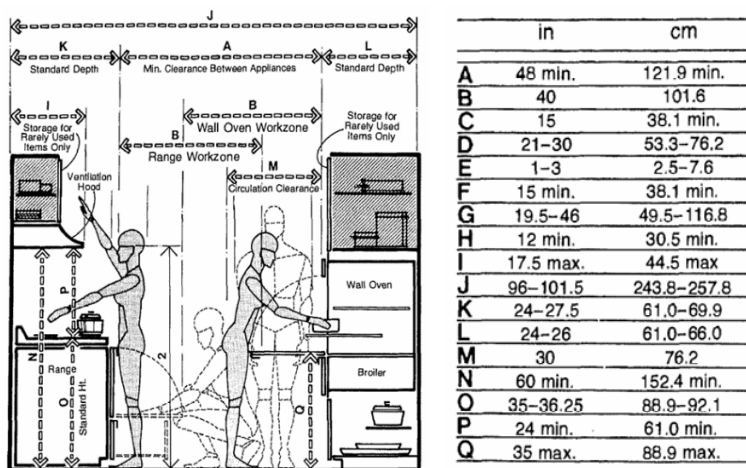
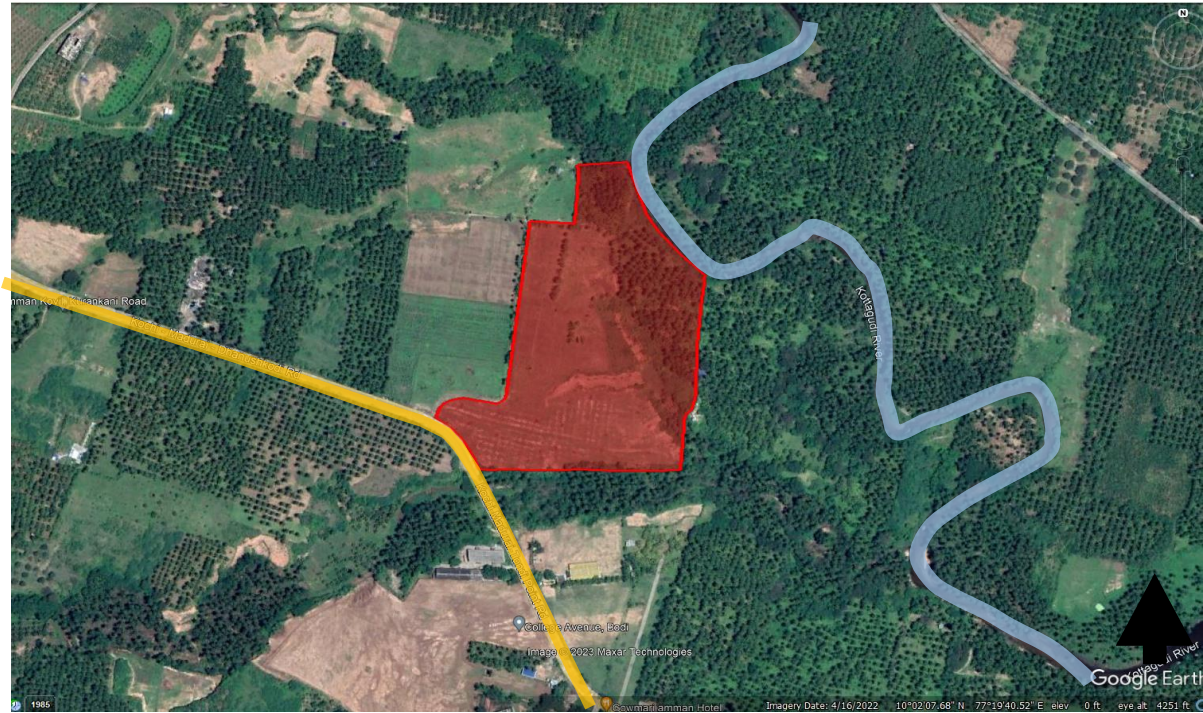


Fig. 1



4 SITE STUDY AND ANALYSIS

4.1 SITE DETAILS

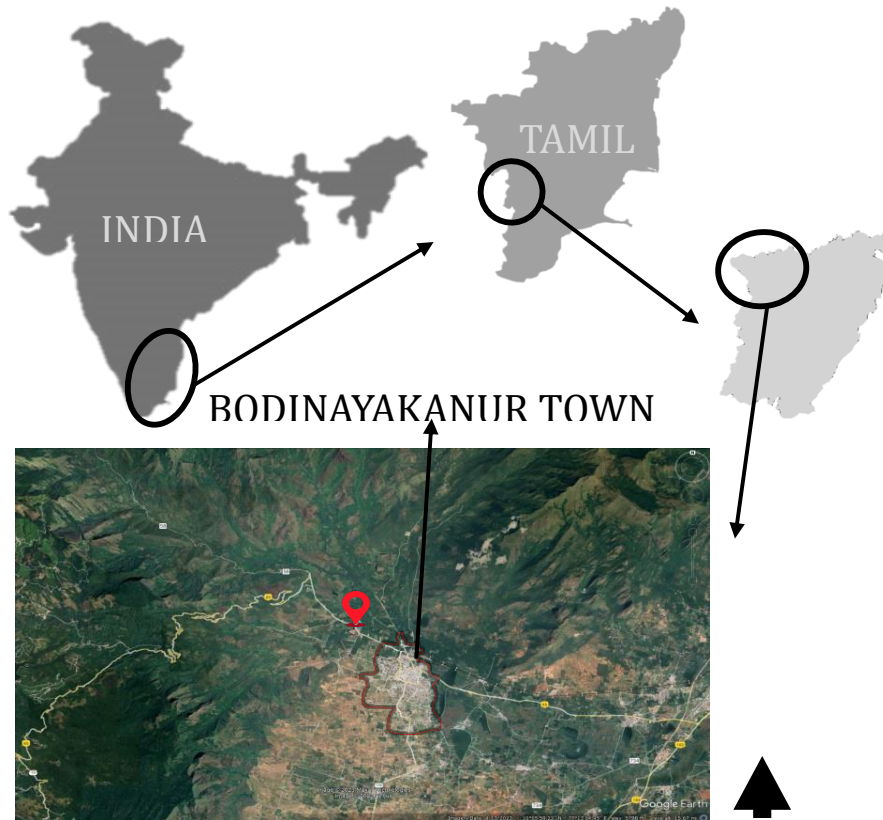


- LATITUDE AND LONGITUDE – 10°02'00.20"N, 77°19'53.81"E
- AREA – 14.6 acres
- ELEVATION – 1220 ft
- Between Munnar and Bodinayakanur, in NH 85 Madurai – Kochi highway

4.2 PARAMETERS OF SELECTING THE SITE

- HIGHWAY
- NEAR TOURIST DESTINATIONS/ SPOTS
- NEAR WATERBODY
- MAJOR TRANSIT ROUTE
- SURROUNDED BY GREENS
- BETWEEN TWO MAJOR TOURIST DESTINATION

4.3 SITE LOCATION



4.4 SITE JUSTIFICATION

- HIGHWAY : NH 85 Madurai – Kochi highway
 - Around 4,50,000 people visited Kerala from Tamil Nadu in the year 2021. (tourism statistics - keralatourism.org). In that around 1,50,000 visit Munnar. The major route used is NH 85.
 - Also lot of cargo vehicles use this NH 85 transport goods from Kochi to Tuticorin and vice-versa.
 - Lot of people from Kerala also use this route to travel to Tamil Nadu.
- BODINAYAKANUR :
 - Bodinayakanur is know for trekking trails, nature trails and picnic spots. Few spots like kurangani hills, kottagudi, bodi mettu view points are famous.
 - The site is near kottagudi river stream which can be used as one of elements for adventure.

- All though there are lot of tourists places in and around Bodinayakanur, there are very few accommodation facilities.

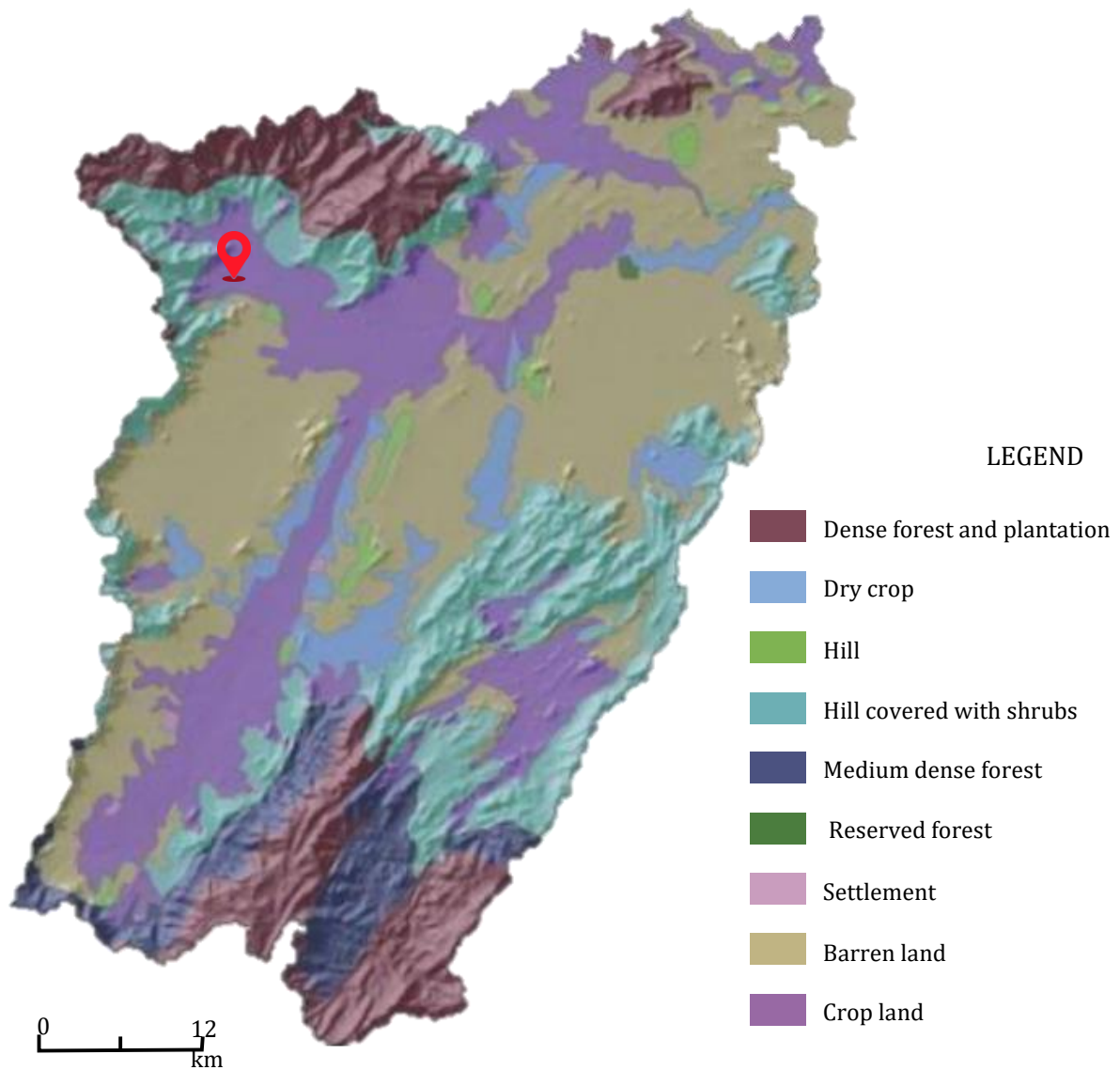
Sl. No. (1)	Place (2)	Name of the Hotels with Lodging Facilities (3)	Name of the Hotels without Lodging Facilities (4)
3	Bodinayakkanur Block	1.Thiruppathi Lodge, Kamarajar salai, Bodi.	42
		2.Hotel Dhalavai, Kamarajar Salai, Bodi.	
		3.Alankar lodge, South Raja St., Bodi.	
		4.Krishna lodge, Thendral nagar, Bodi.	
		5.Geetha lodge, Kamarajar bazaar, Bodi.	
		6.Vasantha vigar lodge, Kamarajar bazaar, Bodi.	
		7.I.J.Lodge, Palayam road, Bodi.	
		8.Senthil lodge, Perumal koil st., Bodi.	
		9.New Vaigai lodge, Kamarajar bazaar, Bodi.	
		10.S.P.S. Lodge, Kamarajar Bazaar Bodi.	
		11.Municipal Rest House,Near bus stand, Bodi.	

4.5 ACCESSIBILITY



- Bus stop – Thenkasiyampathi bus stand – 4km
- Railway station – Bodinayakanur railway station – 2.8km
- Airport – Madurai international airport – 94km

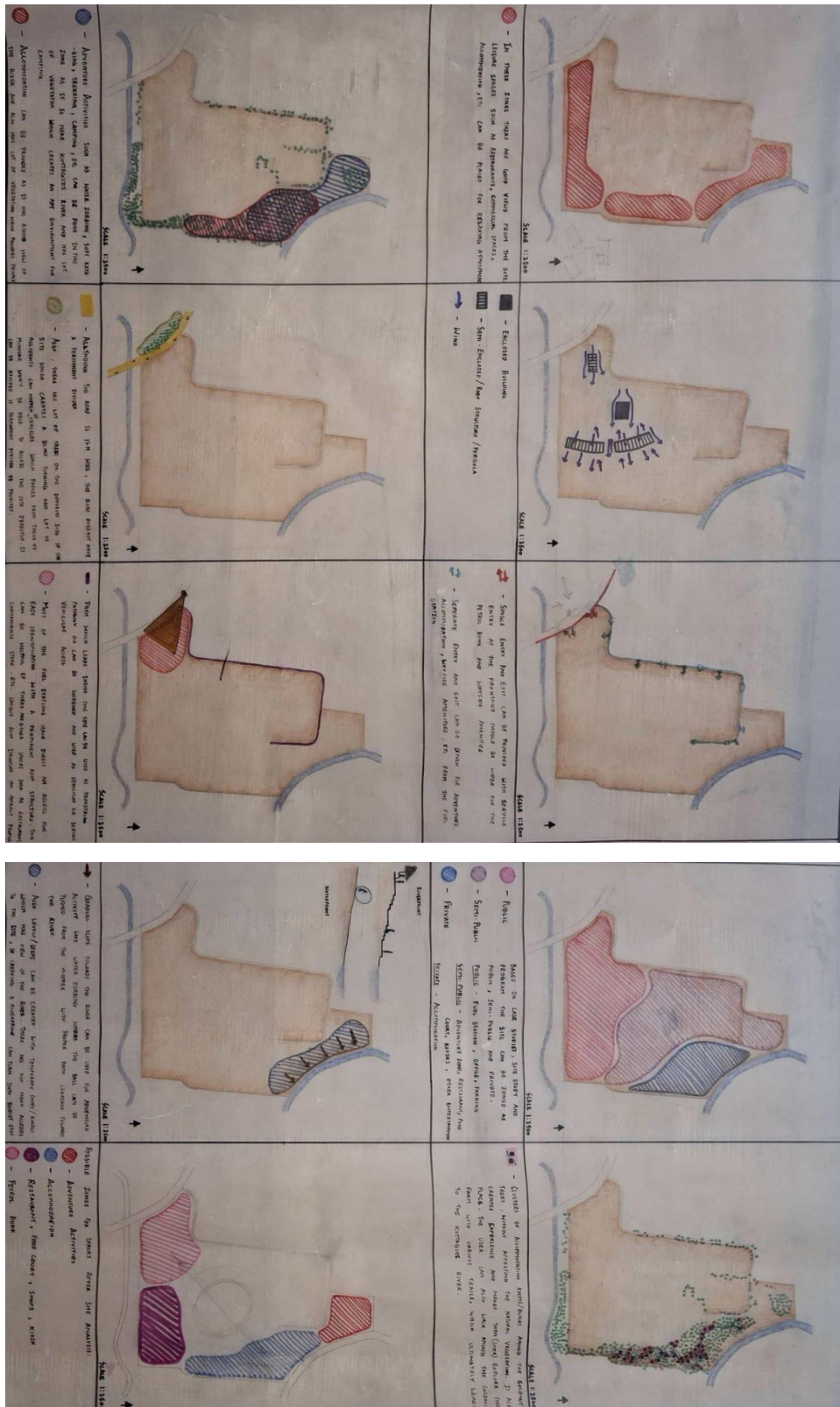
4.6 LANDUSE MAP OF THENI DISTRICT



4.7 EXISITING SITE FEATURES



4.8 SITE ANALYSIS

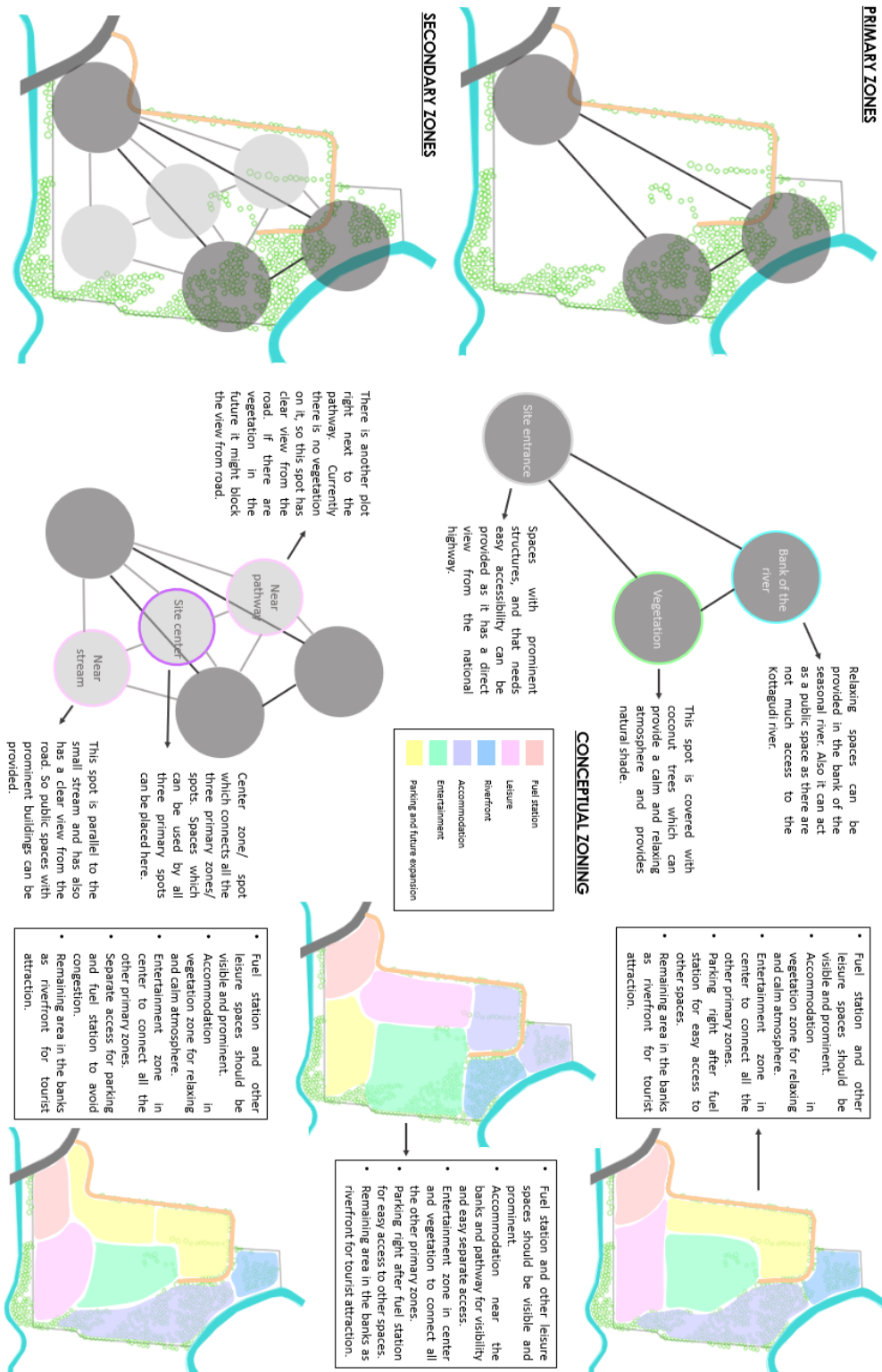


5 ARCHITECTURAL DESIGN

5.1 AREA STATEMENT

S.No	SPACE	NO OF USERS/ NO OF UNITS	AREA PER USER/UNIT (sq.m)	TOTAL AREA OF USER/UNIT (sq.m)	CIRCULATION (20%)	TOTAL AREA (sq.m)
PETROL BUNK						
1	Fuel station			350	70	420
2	Service station			60	12	72
3	Repair shop			40	8	48
4	Car wash			30	6	36
5	Charging station			8	1.6	9.6
6	Air pump			2	0.4	2.4
7	ATM					
8	Toilets	2	2.4	4.8		4.8
						592.8
RESTAURANT						
9	Dining (Non-Ac)	56	1.8	100.8	20.16	120.96
10	Dining (Ac)	116	1.8	208.8	41.76	250.56
11	Kitchen	15				70
12	Utility	5	1.5	7.5	1.5	9
13	Pantry	5	1.5	7.5	1.5	9
14	Dry storage	5	1.5	7.5	1.5	9
15	Cold storage	5	1.5	7.5	1.5	9
16	Janitor room					6
17	Locker room	10	1.5	15	3	18
18	Washroom					12
19	Hand wash	4	1.2	4.8	0.96	5.76
						519.28
FOOD COURT						
20	Stalls (3*5m)	20	15	300	60	360
21	Dining	600	1.8	1080	216	1296
22	Hand wash	12	1.5	18	3.6	21.6
23	Janitor room					6
24	Washroom					100
25	Hand wash	12	1.2	14.4	2.88	17.28
26	Store room					20
						1820.88
SUPERMARKET/ CONVENIENCE STORE						
27	Display area with bill counter	250	1.5	375	75	450
28	Stock room (5*6m)	2	30	60	12	72
29	Janitor room					6
30	Locker room	5	1.5	7.5	1.5	9
						537
COMMERCIAL ZONE						
31	Shops (5*6m)	10	30	300	60	360
						360
CLINIC						
32	Doctor's cabin					16
33	Medical shop	2				12
34	Reception/ Waiting area	12	1.5	18	3.6	21.6
35	Examine room	1	9	9		9
36	Locker room	3	1.5	4.5	0.9	5.4
37	Janitor room					6
38	Toilet	2	2.4	4.8		4.8
						74.8
ACCOMMODATION						
39	Cabin/hut/treehouse	10	30	300		300
40	Single room	5	20	100		100
41	Double room	10	30	300		300
42	Mixed dorm - 4 bed	4	40	160		160
43	Female dorm - 4 bed	4	40	160		160
44	Mixed dorm - 6 bed	4	50	200		200
45	Female dorm - 6 bed	4	50	200		200
46	Mixed dorm - 8 bed	2	60	120		120
47	Communal bathrooms (male)					51.408
48	Communal bathrooms (female)					48.384
49	Kitchen (Home cooked food)					70

5.2 CONCEPT AND ZONING



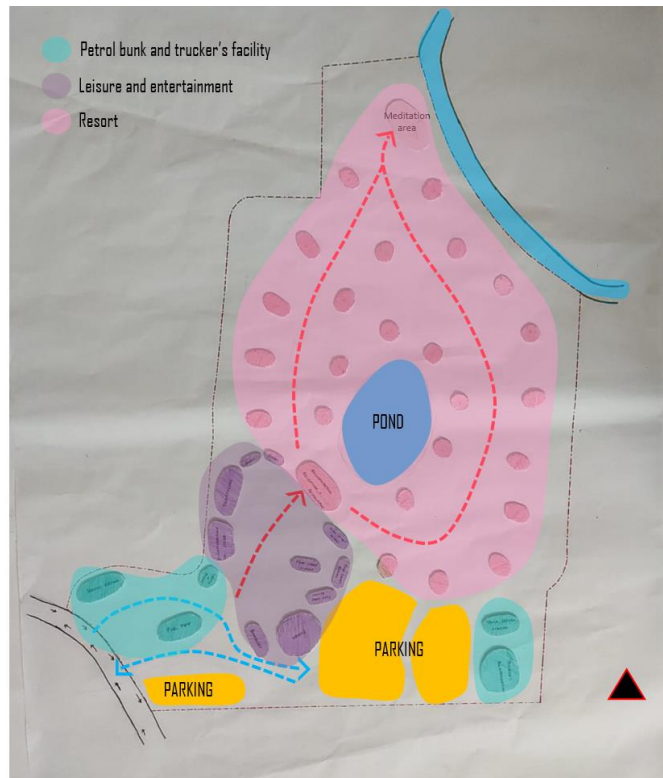
ITERATION 2

PROS

- Petrol bunk zone in the front for easy access.
- Spilt parking for petrol bunk, truck and resort.
- Leisure and entertainment zone between petrol bunk zone and resort for both common public and people staying in resort for easy access.
- Man-made pond and river access for resort..

CONS

- No access of river and pond for common public.
- Trucker's facility near few of rooms.



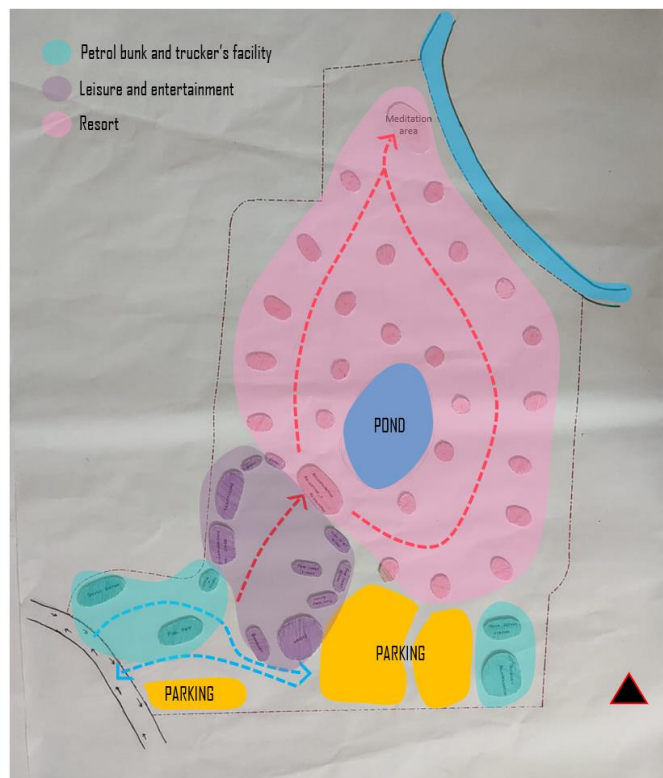
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CONS

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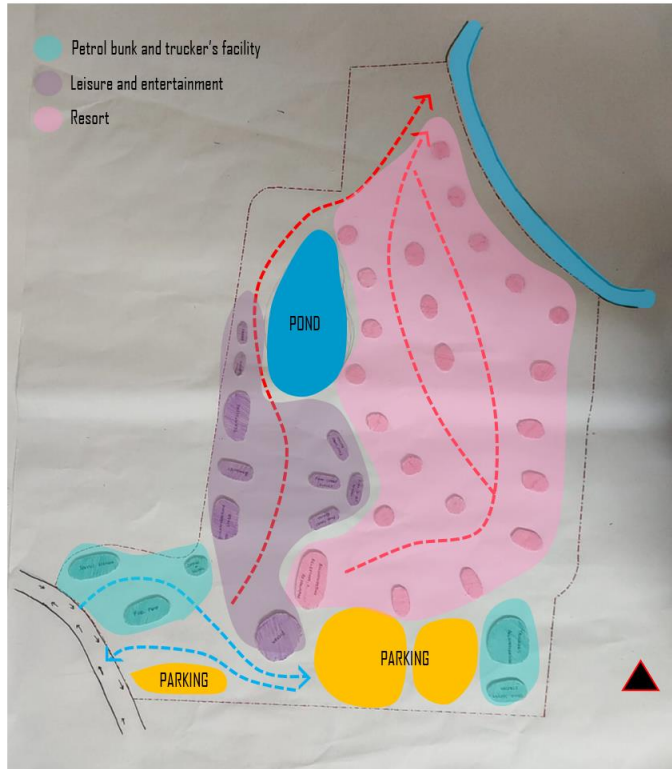
ITERATION 3

PROS

- Petrol bunk zone in the front for easy access.
- Leisure and entertainment zone between petrol bunk zone and resort for both common public and people staying in resort for easy access.
- Resort on the inner side for privacy and peace.
- Pond and river access for both common public and people staying in resort.
- Split parking for petrol bunk, trucks and resort.
- Resort access from parking.

CONS

- Less privacy for rooms near river as it has public access.
- Trucker's facility near few of rooms.



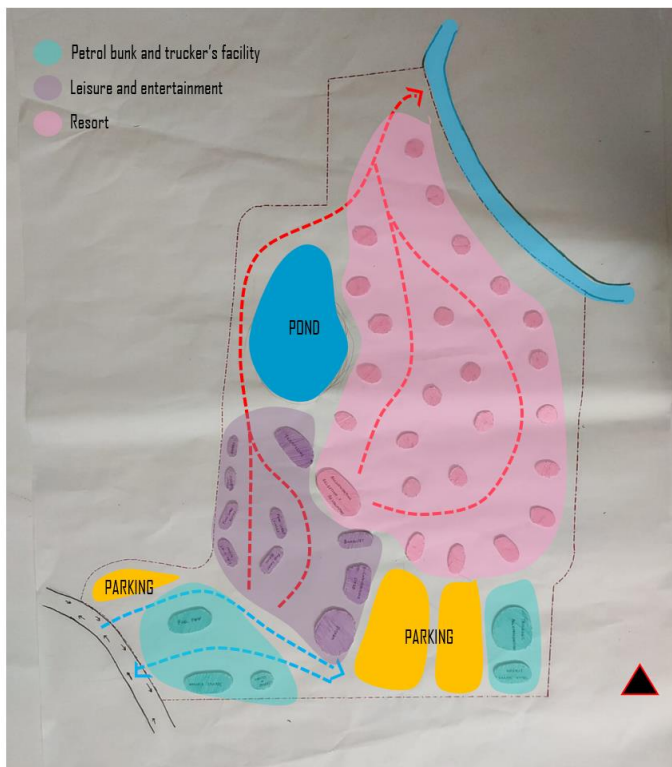
ITERATION 4

PROS

- Petrol bunk zone in the front for easy access.
- Leisure and entertainment zone between petrol bunk zone and resort for both common public and people staying in resort for easy access.
- Pond and river access for both common public and people staying in resort.
- Split parking for petrol bunk, trucks and resort.

CONS

- Less privacy for rooms near river as it has public access.
- Trucker's facility near few of rooms.



5.3 MASTER PLAN AND SITE SECTION



5.4 RESTAURANT



5.5 ACCOMMODATION



HIGHWAY OASIS

LEGEND

- LANDSCAPE
- MUD WALLS
- PARTITION WALLS
- LIMESTONE BASE WALL
- CONCRETE FLOORING
- FERROCRETE ROOF

0.4M THICK CDB WALL IS DONE FOR BOTH CONVENIENCE STORE AND FOOD COURT, WITH FERROCRETE ROOF OF THICKNESS 0.1M. REDOF REPRESENTS THE OUTER SHAPE OF THE WALLS. TERRACOTTA JAALI WORK IS DONE IN THE OPENINGS FOR AESTHETICS AND VENTILATION.

FOOD COURT PLAN

CONVENIENCE STORE PLAN

SECTION HH'

SECTION GG'

KEY PLAN

5.7 STAFF AND TRUCKER ACCOMMODATION

