

**TEAM S**  
**TUTOR: AR. SHAHIRA**

# **SITE ANALYSIS OF TANJUNG TUAN & BLUE LAGOON**

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<b>RAYAN NADIR MOHAMMED ELBADAWI 0355099</b>			<b>THEN JIA CHENG 0344945</b>





# *Thalassophile*

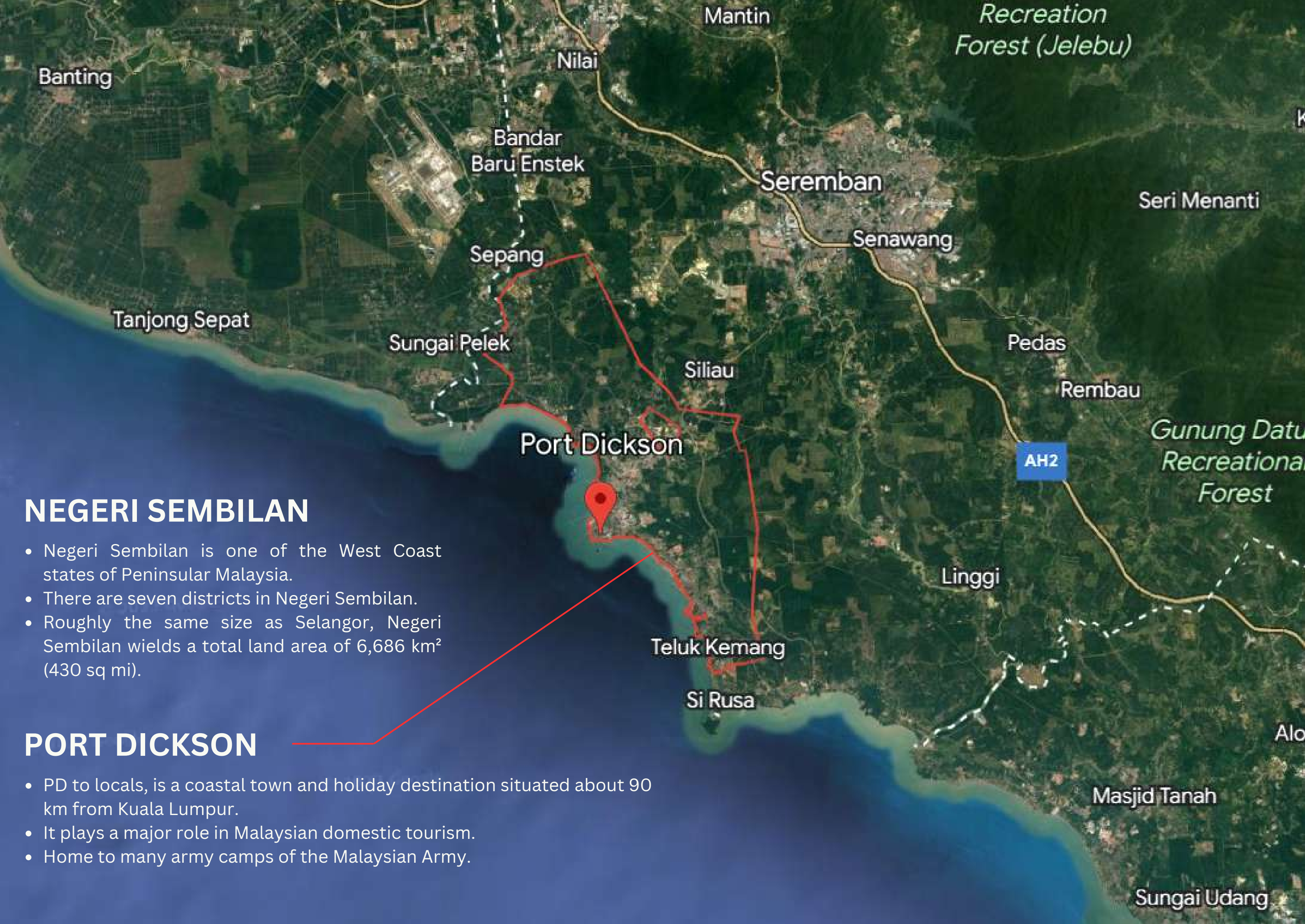
*- lover of the ocean.*

**VIDEO**



# TASK 01





## NEGERI SEMBILAN

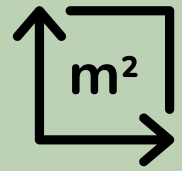
- Negeri Sembilan is one of the West Coast states of Peninsular Malaysia.
- There are seven districts in Negeri Sembilan.
- Roughly the same size as Selangor, Negeri Sembilan wields a total land area of 6,686 km<sup>2</sup> (430 sq mi).

## PORT DICKSON

- PD to locals, is a coastal town and holiday destination situated about 90 km from Kuala Lumpur.
- It plays a major role in Malaysian domestic tourism.
- Home to many army camps of the Malaysian Army.



# BACKGROUND INFORMATION OF TANJUNG TUAN RECREATIONAL FOREST



607,000 square metres  
of coastal rainforest.



Jalan Pantai, Tanjung Tuan,  
71050 Melaka (exclave)



Nature reserve

## Tanjung Tuan Recreational Forest

The Tanjung Tuan Recreational Forest was established in 1921, making it over 100 years old. Rumoured to be the place where Parameswara, (1344 – c. 1414), the last king of Singapura, and the founder of Malacca was buried.

The forest falls under the state of **Malacca** as it was gazetted by the Melaka state government. A section of Tanjung Tuan Recreational Forest has also been gazetted as a Wildlife and Bird Sanctuary since 1971. The lighthouse was built by the Portuguese in the 16th Century, and rebuilt by the British in the 18th century after was destroyed in battle. It contains eight curated hiking trails that provide varied hiking experiences, and is known as a fantastic destination for bird watching due to its location along the migratory bird route.



*Tanjung Tuan Recreational Forest*



*Cape Richardo*

## Cape Rachado

- Is an 80-hectare nature reserve 18km south from Port Dickson town
- This hilly cape is a gazetted wildlife sanctuary that features a historical lighthouse
- Administered by the state of Malacca
- Is also a popular bird watching spot

## Significance of having the Mangrove forest:

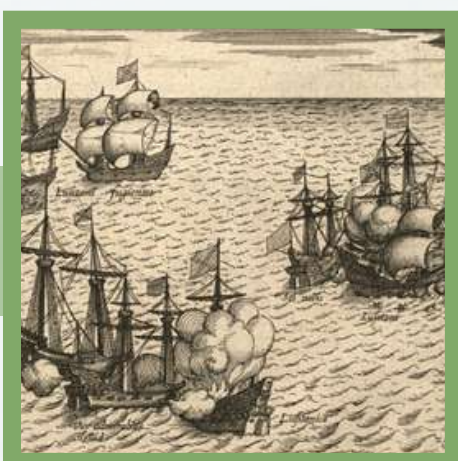
- Protecting both the saltwater and the freshwater ecosystems they straddle.
- Minimises erosion and absorbs the effects of storm surges during extreme weather events.
- Complex root systems filter nitrates and phosphates that rivers and streams carry to the sea.



# HISTORICAL TIMELINE



Tanjung Tuan was a prominent landmark for early settlers and indigenous communities in the region.



The Battle of Cape Rachado occurred just off the coast of Melaka.



World War II: The Japanese occupied Tanjung Tuan during their occupation of Malaya, and used it as a lookout post.



40 acres was gazetted out of the Permanent Forest Reserve status by the Melaka State Government for public purposes.



The ecosystem in Tanjung Tuan is disturbed as a result of an oil spill.

PAST

1606

1941-1945

1969

2020

1511

1863

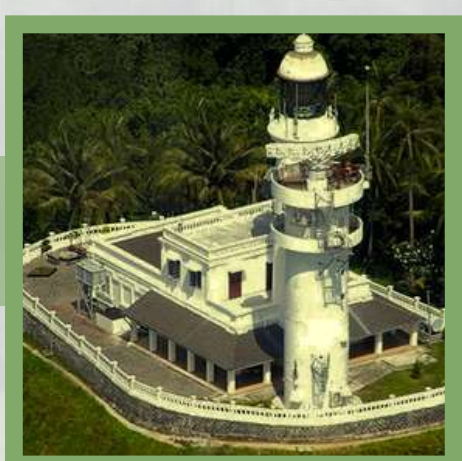
1957

1995

PRESENT



The Portuguese established the site and the lighthouse was initially built after they conquered Melaka.



The iconic Cape Rachado lighthouse is rebuilt by the British to guide ships safely through the strait.



Post-Independence: Malaysia gained independence in 1957, and Tanjung Tuan was gazetted as a forest reserve.



The Dutch ship Nassau was excavated from the area and is on display at Lukut Museum in Port Dickson.



The area has been maintained as a forest reserve, and mangrove saplings have been planted to rehabilitate the swamp ecosystem.



# OLD PHOTOS OF PORT DICKSON



*Port Dickson Railway Station*



*Port Dickson marketplace*



*Port Dickson shophouses*



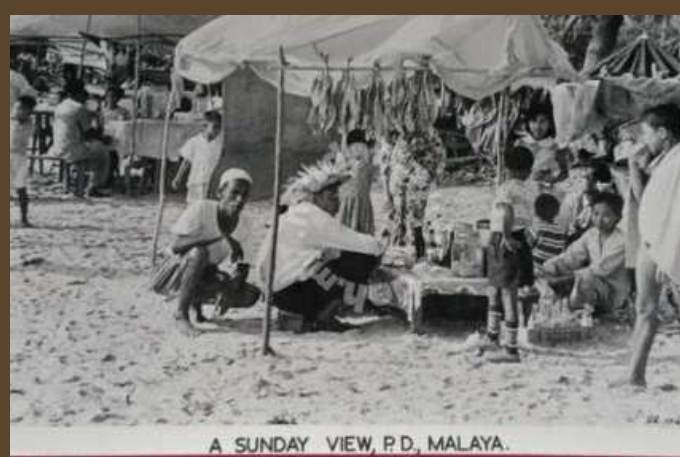
*Port Dickson town 1960*



*Port Dickson office 1960*



*Coolies drop off point*



*1950-selling collectibles*



*Mining work, 20th century*

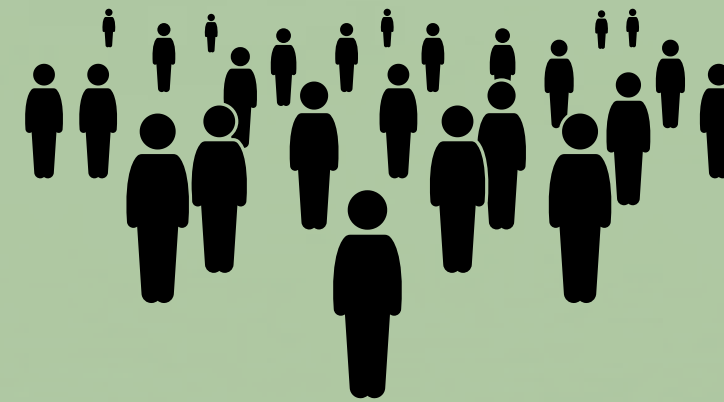


*Port seafront at lowtide*



# THE PEOPLE OF PORT DICKSON

**POPULATION:**  
**119,300 (2015)**



**POPULATION DENSITY:**  
**212.7/KM<sup>2</sup>**

## ECONOMY



### OIL AND GAS PRODUCTION

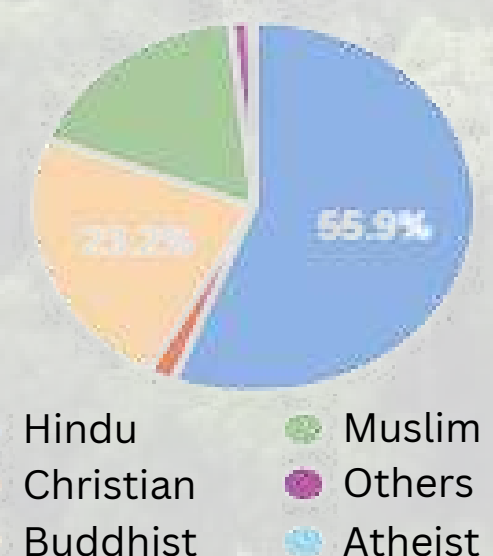
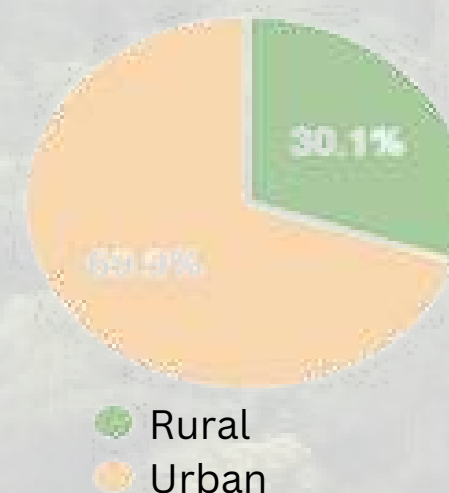
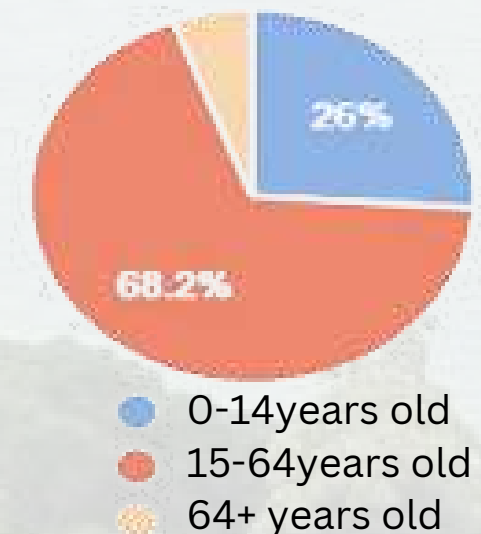
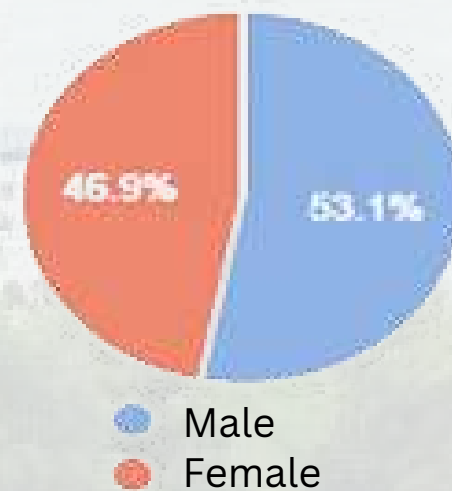
Port Dickson has two refineries which make significant contributions to the local economy

### TOURISM

The 18 km (11 mi) long beach from Tanjung Gemuk to Tanjung Tuan is a holiday destination for local visitors, especially those who come from the Klang Valley. Over the years, many hotels and resorts were opened to capitalize on the tourist draw.



## DEMOGRAPHICS





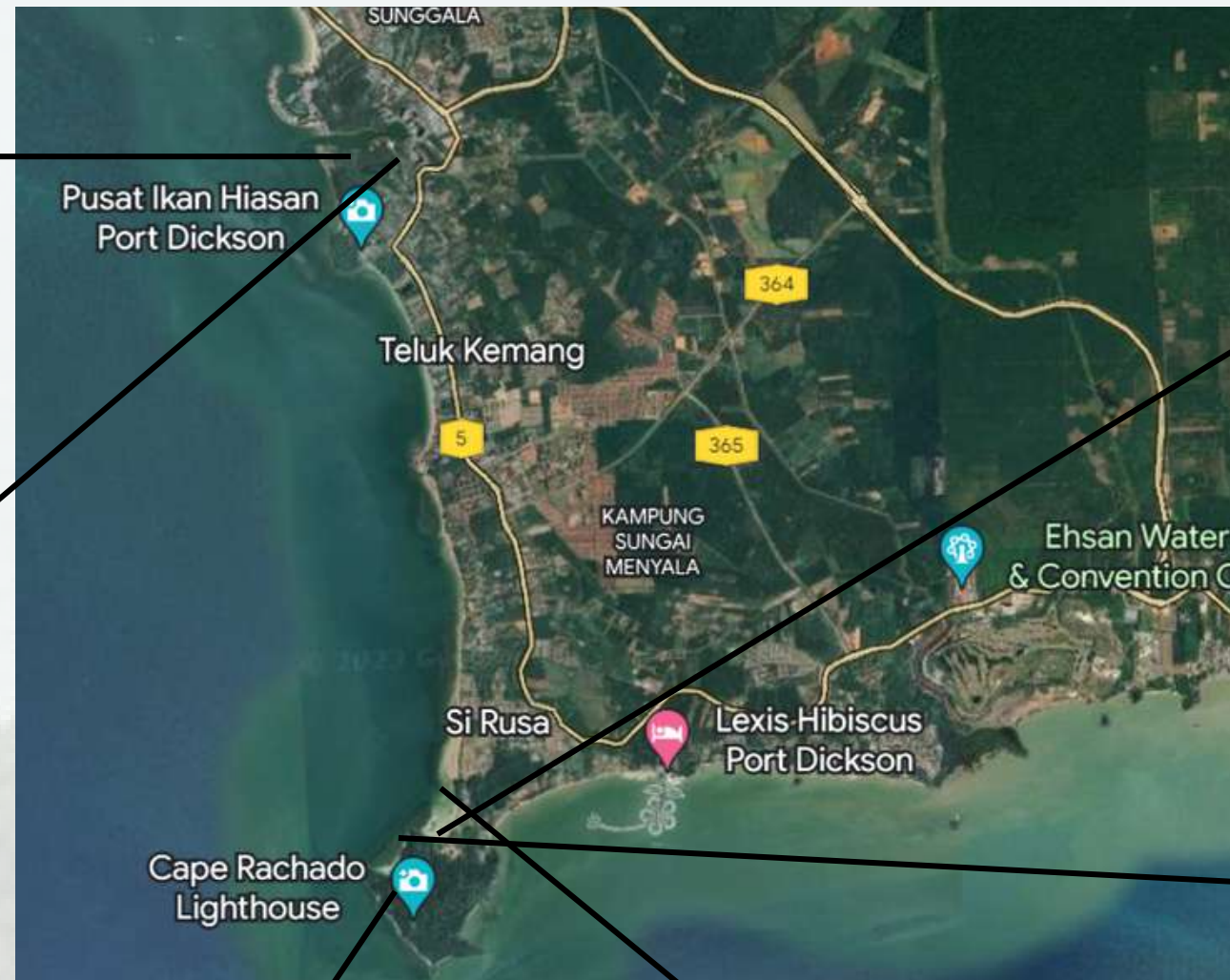
# LANDMARKS OF PORT DICKSON



**Army Museum**



**Wan Loong Temple**



**Tanjung Tuan  
Recreational Forest**



**Pantai Keramat**



**Cape Rachado Lighthouse**



**Blue Lagoon Tanjung Biru**



# 3 TYPES OF FOREST OF TANJUNG TUAN RECREATIONAL FOREST



## COASTAL FOREST

Coastal Forest: Tanjung Tuan is located along the coastline, and it features a coastal forest ecosystem.

Coastal forests are characterized by a mix of trees and plants that are adapted to withstand the coastal environment, such as the sandy soils.

These forests play a vital role in protecting coastlines and providing habitat for coastal wildlives.



## HILL DIPTEROCARP FOREST

Hill Dipterocarp Forest: Tanjung Tuan is situated on a small hill, and the surrounding area likely includes hill dipterocarp forest.

Hill dipterocarp forests are common in Southeast Asia and are characterized by tall, broad-leaved trees belonging to the dipterocarp family.

These forests support a diverse range of flora and fauna and are important for watershed protection and carbon sequestration.



## MANGROVE FOREST

Mangrove Forest: While not directly within Tanjung Tuan, nearby coastal areas contain mangrove forests.

Mangroves are specialized trees and shrubs that grow along tropical and subtropical coastlines.

These forests provide essential ecosystem services, such as protecting against coastal erosion, providing nursery grounds for marine life, and acting as a carbon sink.



# FLORA OF TANJUNG TUAN RECREATIONAL FOREST

Situated close to Port Dickson, The 122 ha lowland forest of Tanjung Tuan is a unique coastal myrtaceous forest remnant of the west coast of peninsula Malaysia.



## Vanilla planifolia

Used in antioxidants, aromatherapy flavouring and alleviates anxiety.



## Liana

Forests with lianas grow 150% more fruit; and have twice less the probability of dying.



## Chengal Tree

First class heavy hard wood construction material in traditional malay houses



## Parasol leaf tree

Used as sterilizer in operation rooms, as well as to cover meat during hunting.



## Meranti Tembaga

200 year old; Different species have different colored bark. Used as local material for furnitures.



## Cat's Claw Herb

Dietary supplement for various viral infections including HIV and human palimony virus.



## Chinese White Olive

Anti-inflammatory and detoxifying properties. used for an oil resin varnish known as 'elemi' and for printing inks.



## Rubber Tree

Seeds of rubber trees produce oil that can be used in soap, paints and varnishes.



# MIGRATORY BIRDS OF TANJUNG TUAN RECREATIONAL FOREST

Tanjung Tuan has been designated as an IBA or Important Bird Area by international non-profit organization BirdLife International, one of 55 found around Malaysia.

The migration periods are usually from January to April, but mid-March is the peak period to spot the raptors. The best time to spot them is also around 11.00 AM to 3.00 PM.

At the Raptor Watch event, visitors can spot up to 46 species of raptors, and out of that, 25 are migrant species.





# MIGRATORY BIRDS

OF TANJUNG TUAN  
RECREATIONAL FOREST



**Asian Glossy Starling**



**Asian Paradise-flycatcher**



**Banded Kingfisher**



**Black-naped oriole**



**Blue-throated Bee-eater**



**Changeable Hawk Eagle**



**Coppersmith Barbet**



**Orange-headed Thrush**



**Greater Flameback**



# ACTIVITIES

NEAR TANJUNG TUAN  
RECREATIONAL FOREST



Swimming



Birds Watching



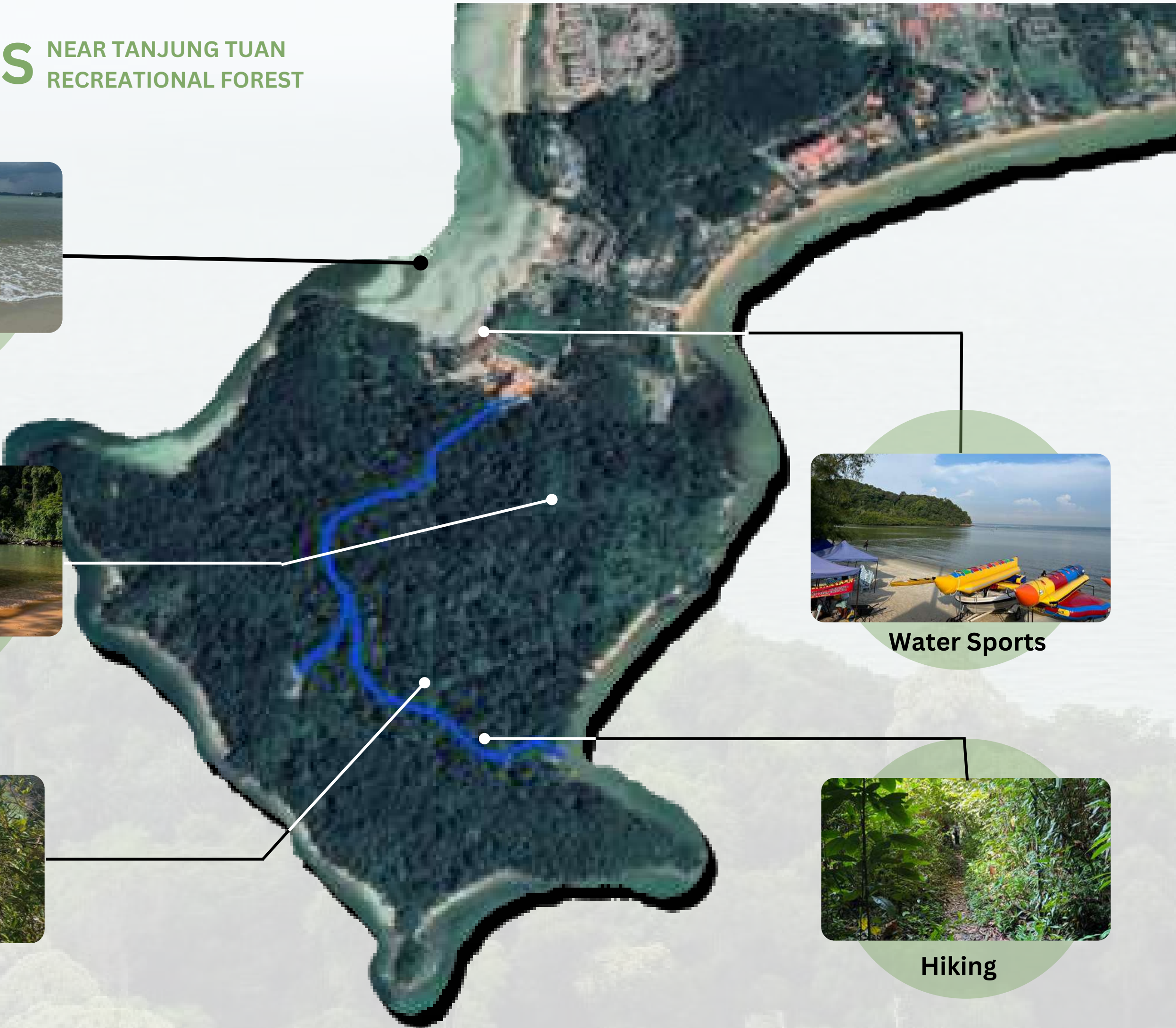
Rock Climbing



Water Sports



Hiking





# CONCLUSION

The presence of the three different types of forests should be amplified in the discovery centre.

A designated place for overnight stay (rooms) should be provided for birdwatchers.

An open space, preferably elevated, to allow for birdwatching activities from the discovery centre without the need to hike throughout the forest.



## TANJUNG TUAN RECREATIONAL FOREST

The discovery centre could consist of different routes that lead the user into different experiences inspired by the eight routes in the forest.

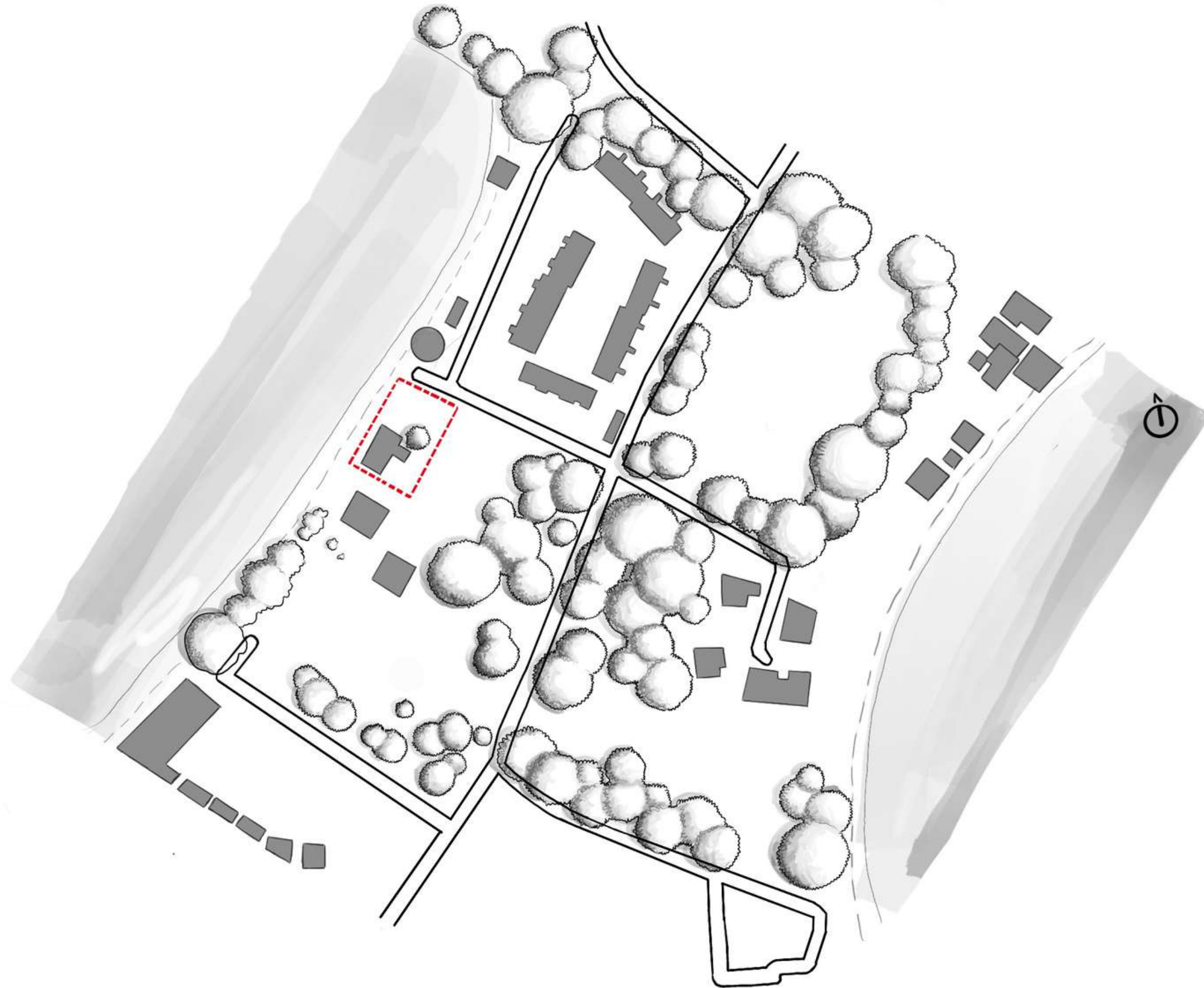
Elements to signify the historical aspect of the forest's rich history (lighthouse, reserve status, war invasions).

Discovery centre should make use of repurposed chengal wood for the construction process as it is native to the forest and its sturdiness, durability and resistance to termite attacks and fungal infestation.



# TASK 02

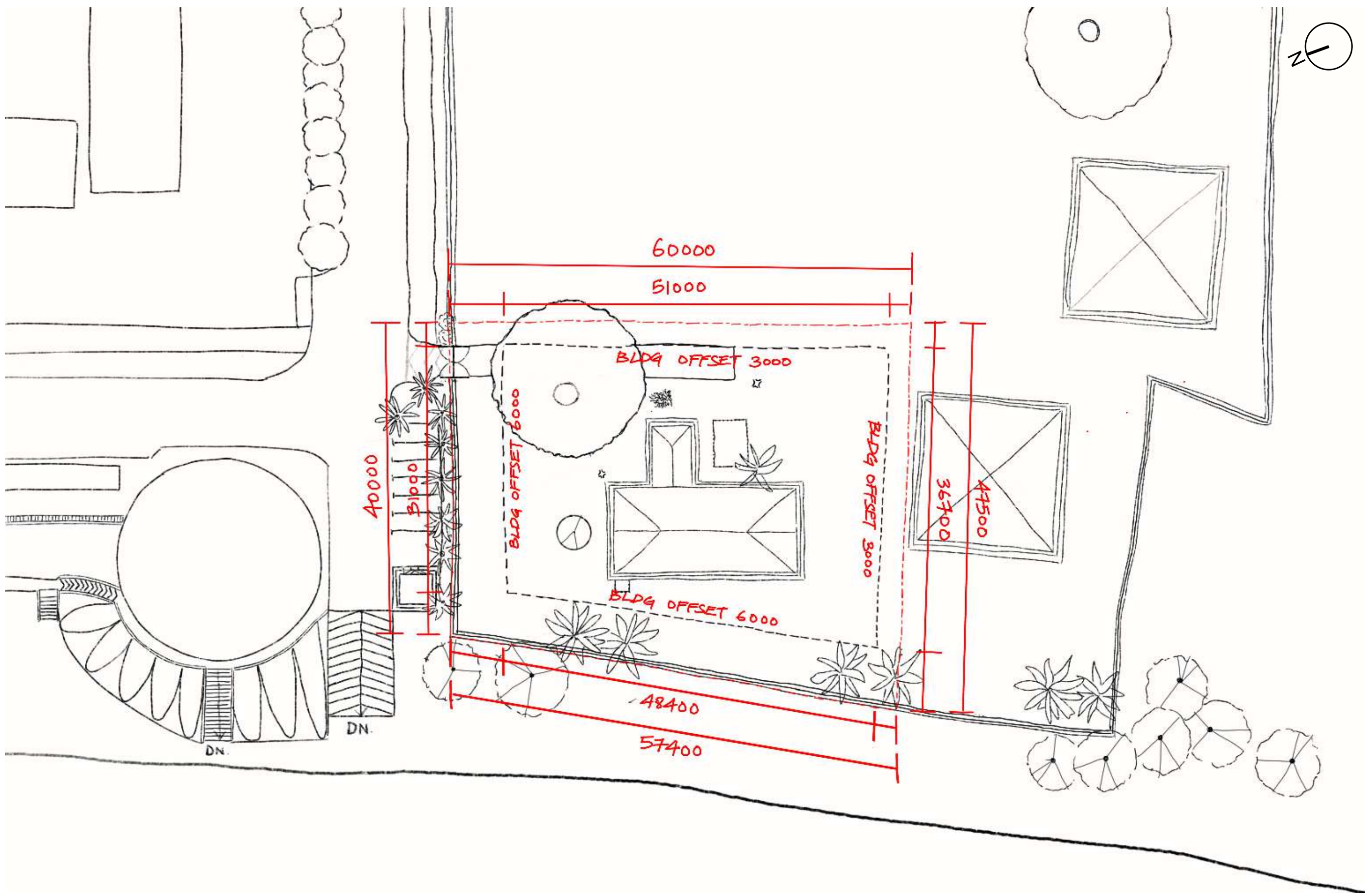






## Task 02

## Site Measurements and placements



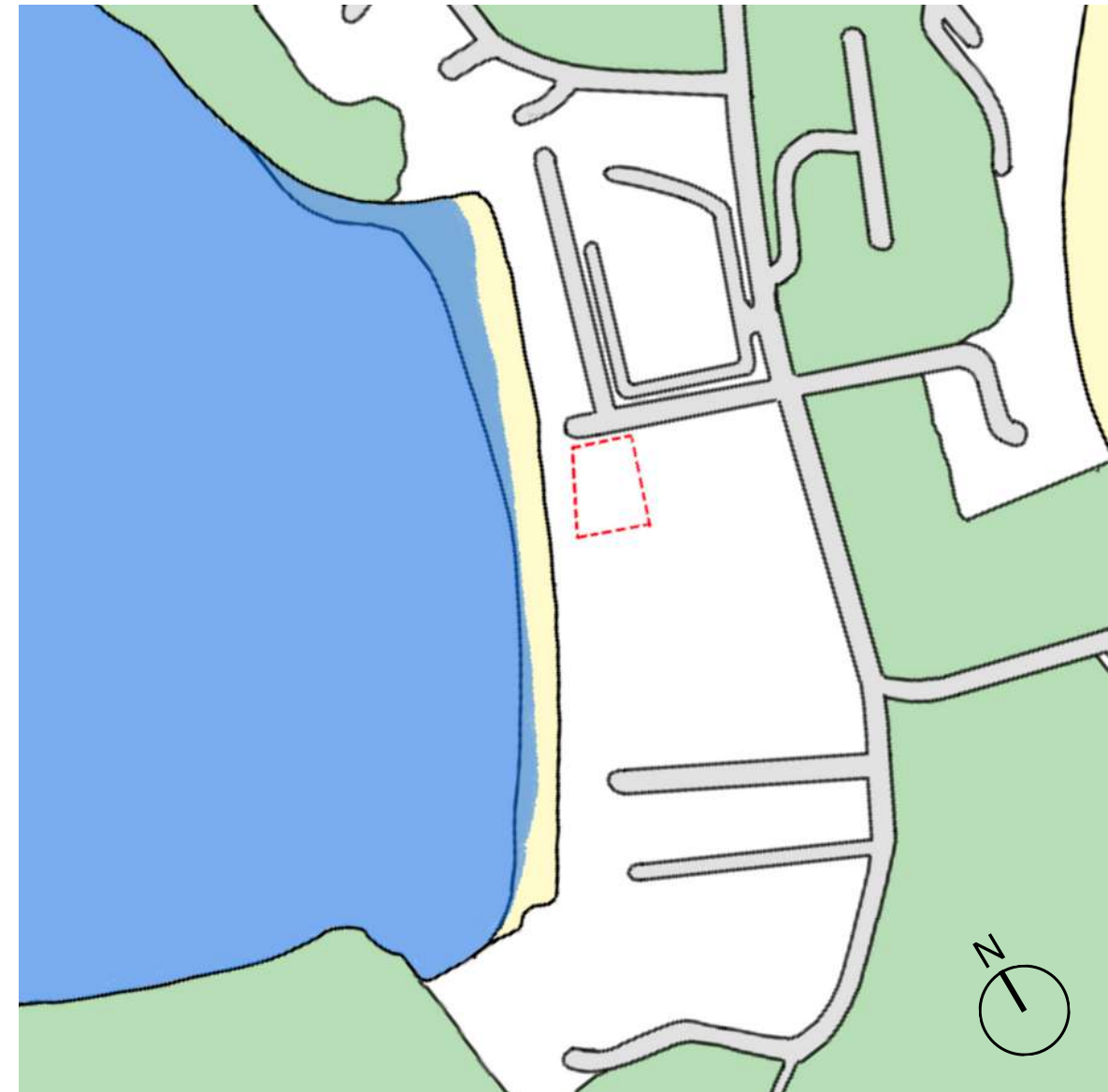


Low tide



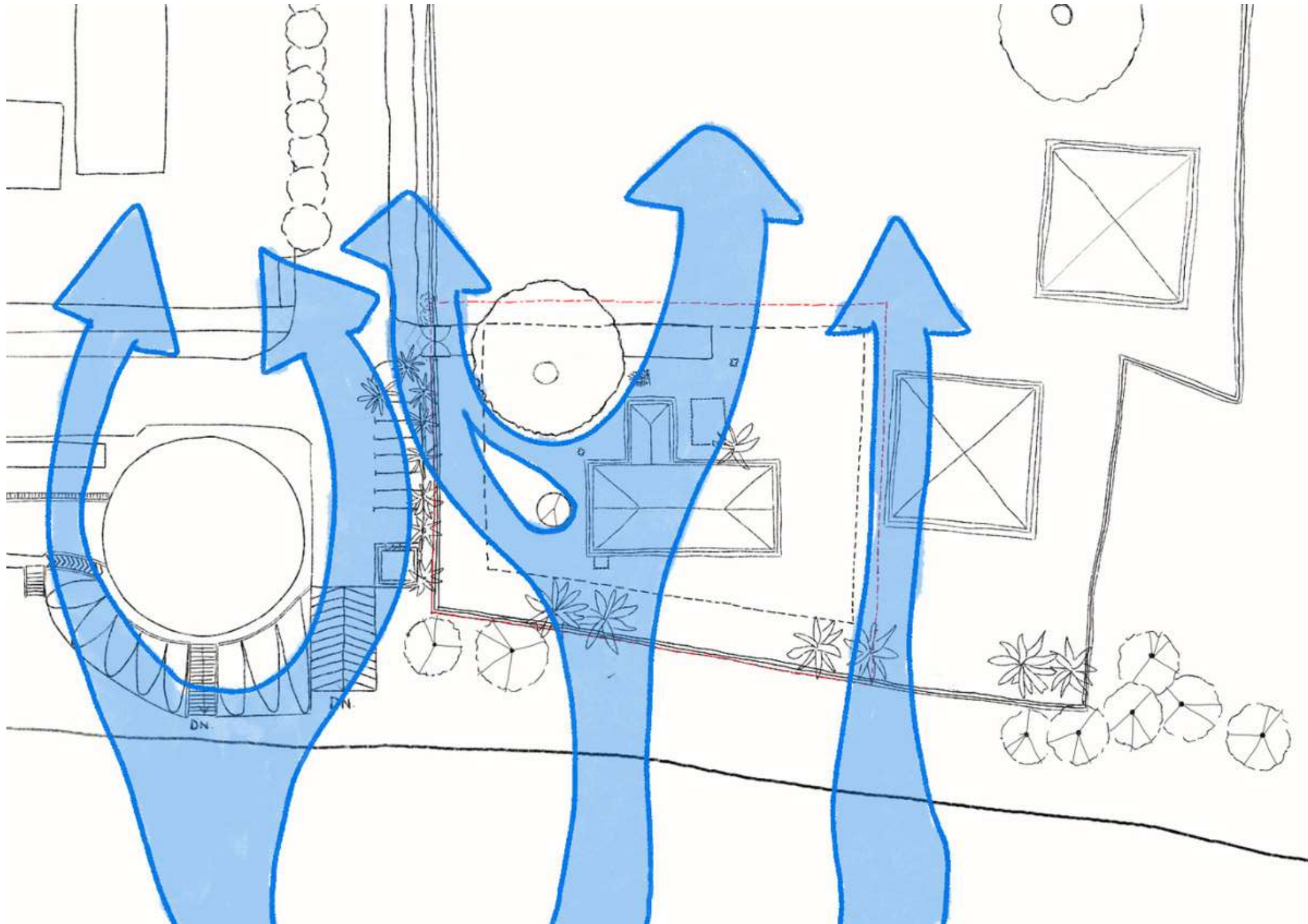
Land to sea distance: ~200m

High tide



Land to sea distance: ~10m



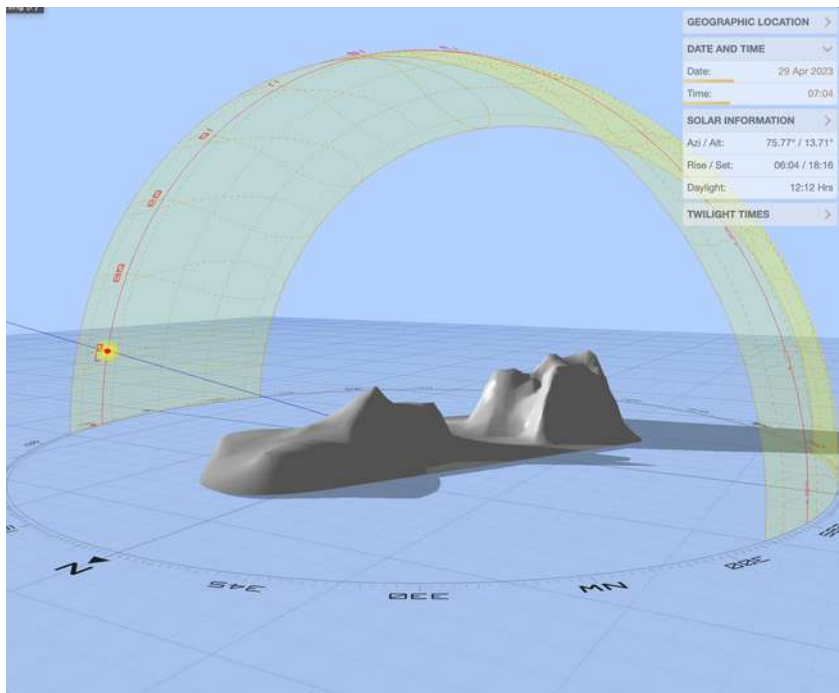


Wind direction  
(April)

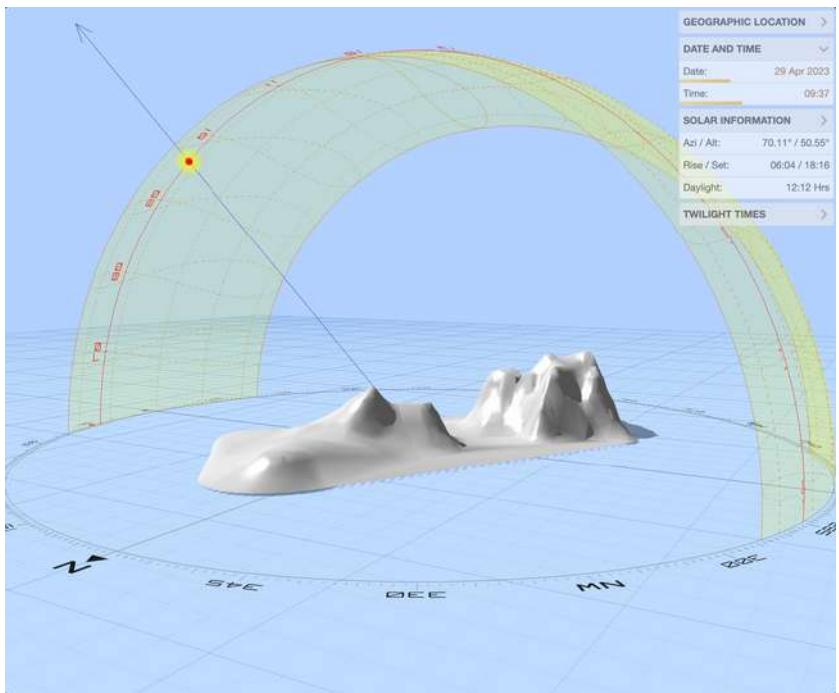


Task 02

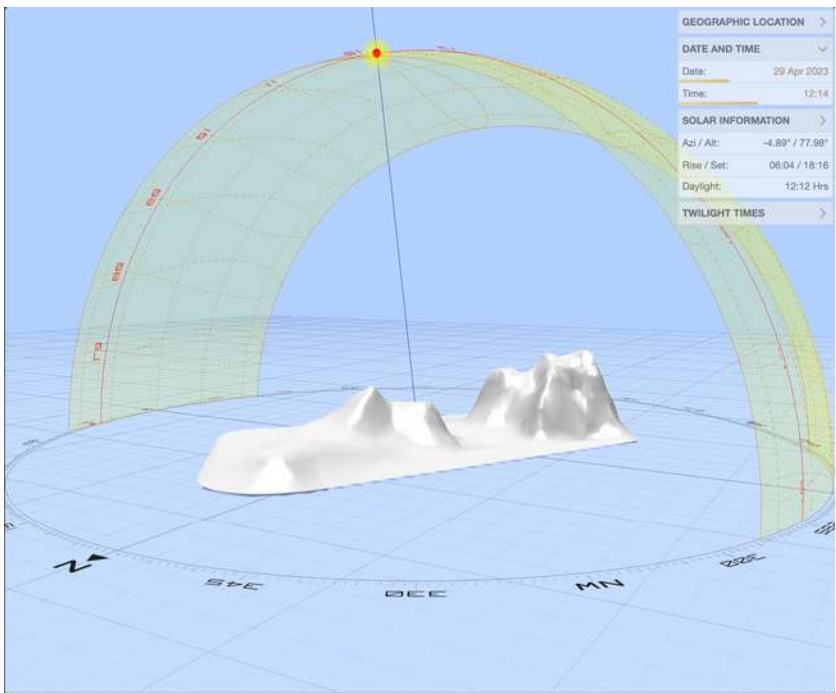
Orientation & Climate



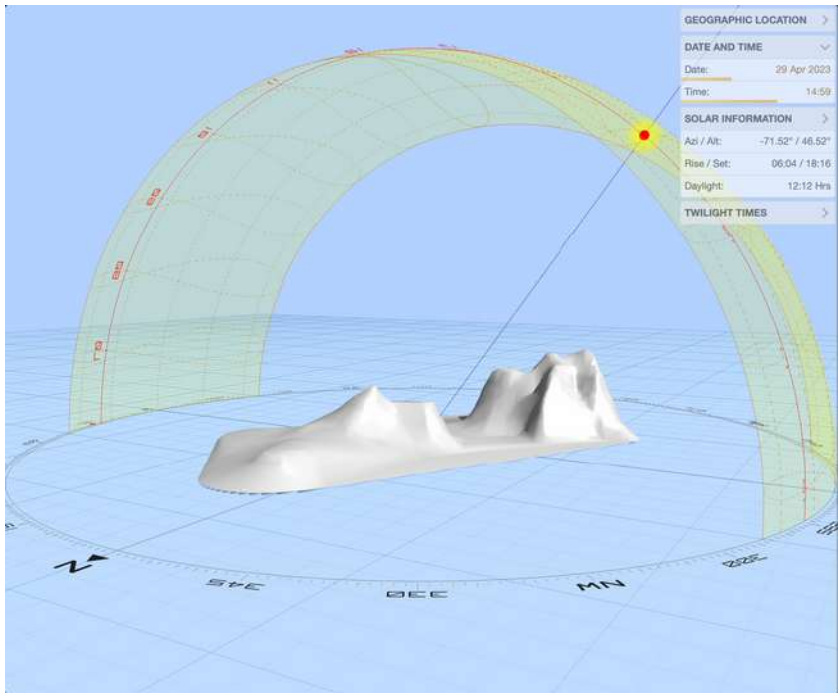
7am



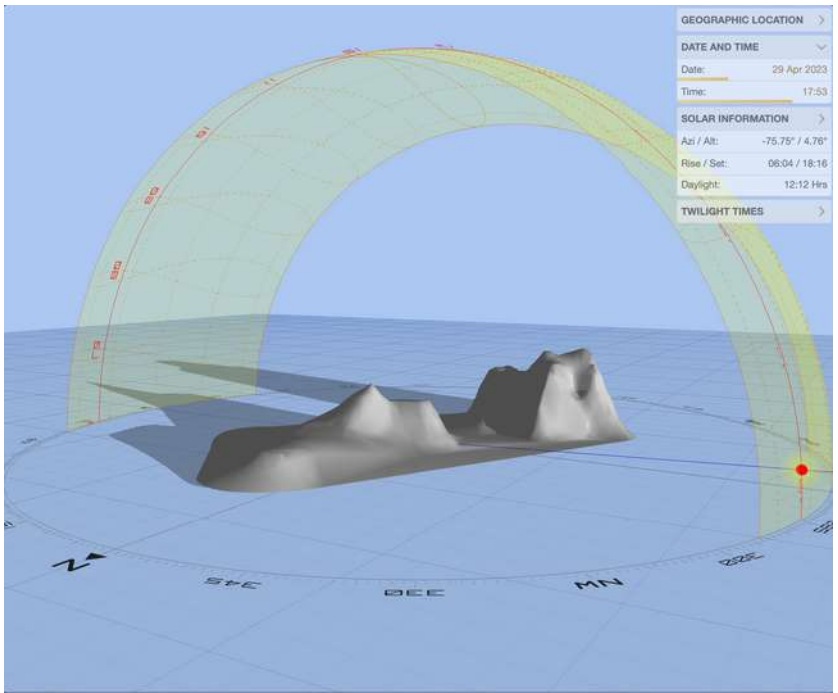
9am



12pm



3pm



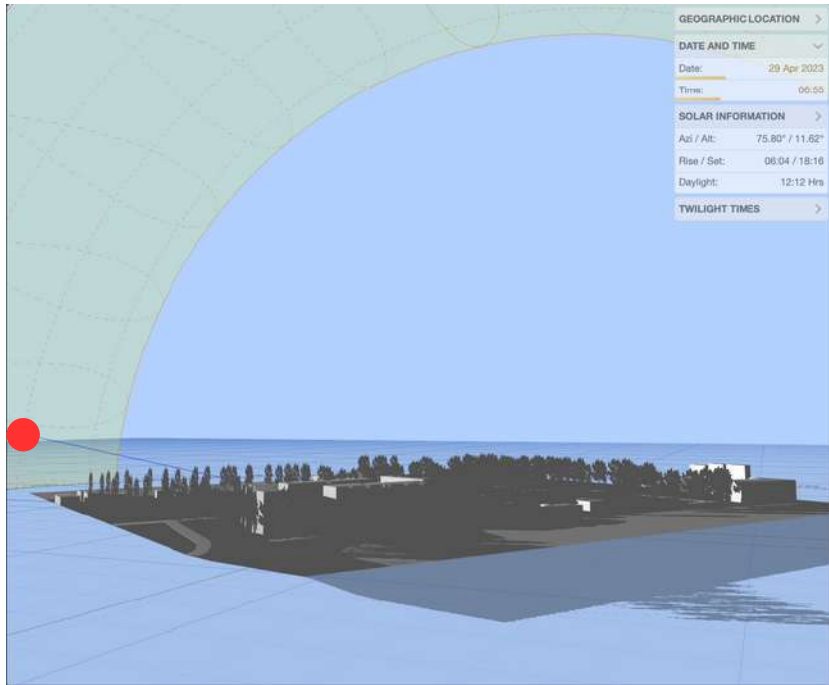
6pm

Macrosite sunpath

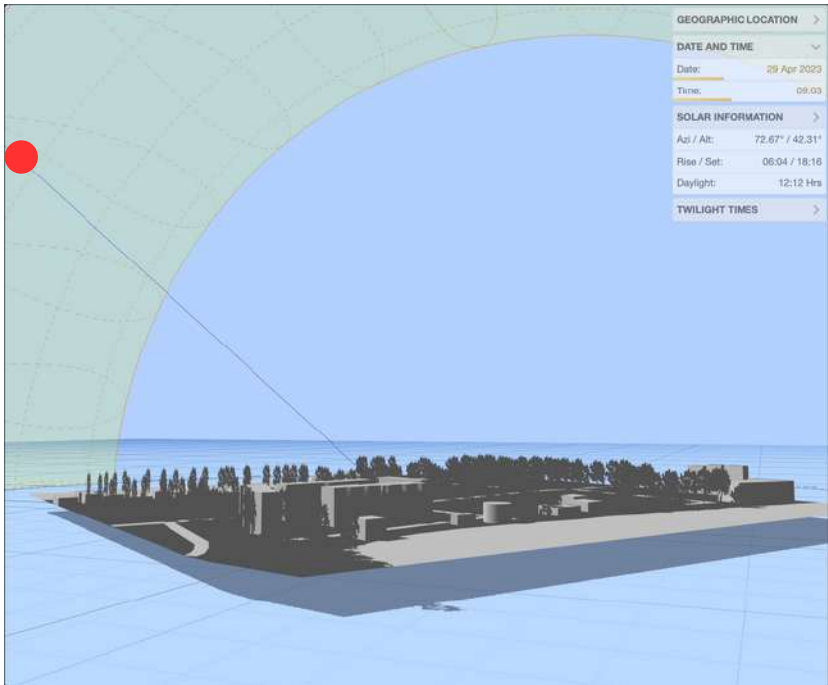


# Task 02

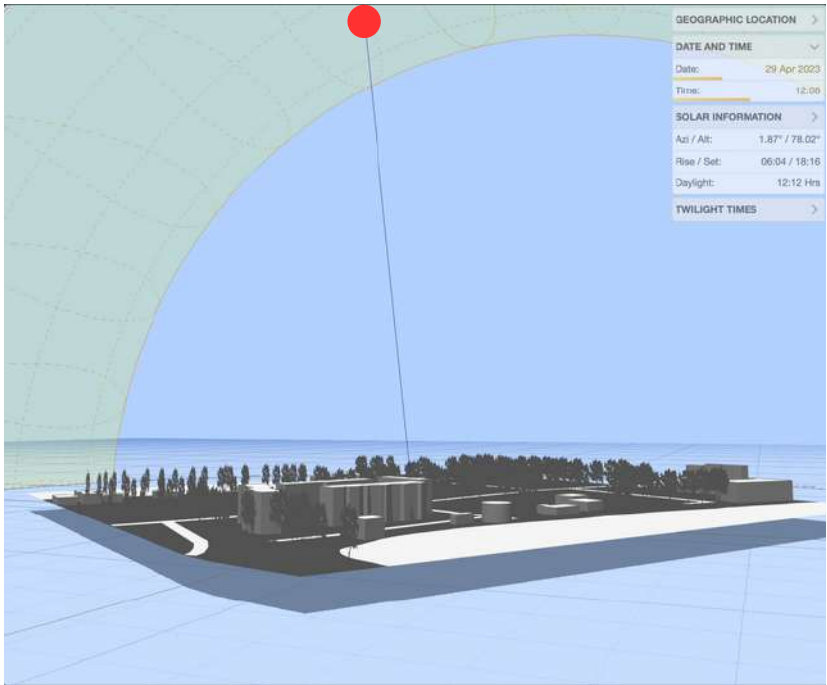
# Orientation & Climate



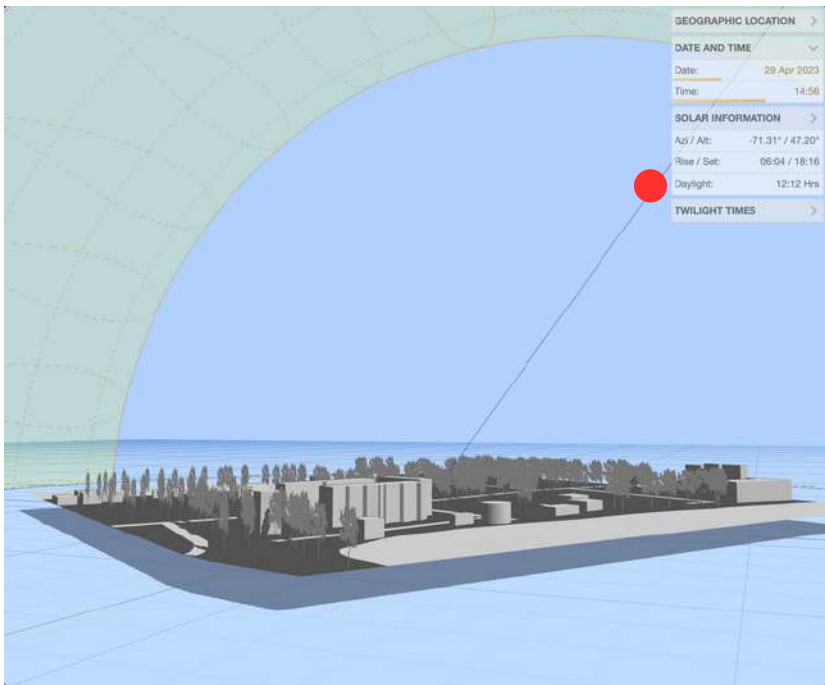
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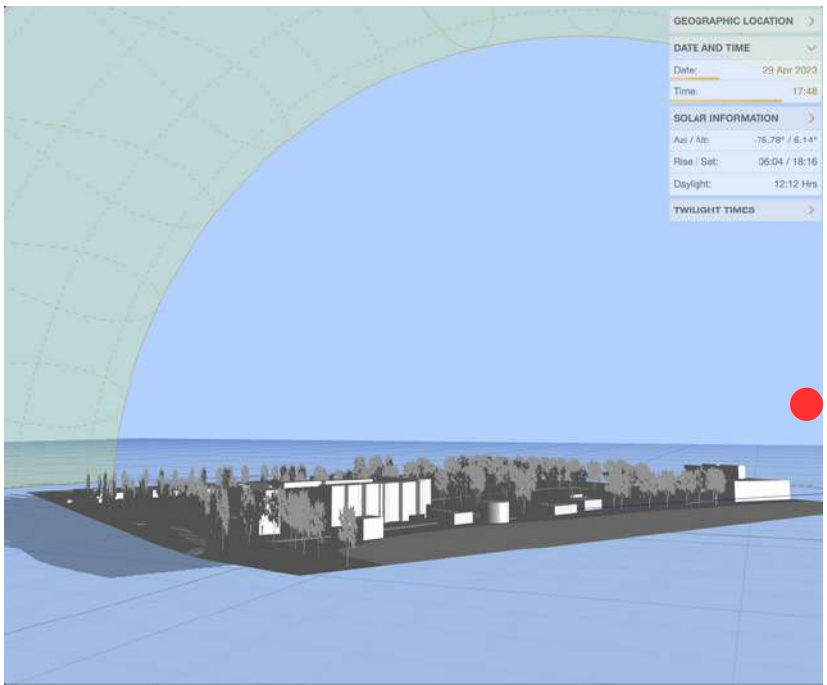
9am



12pm



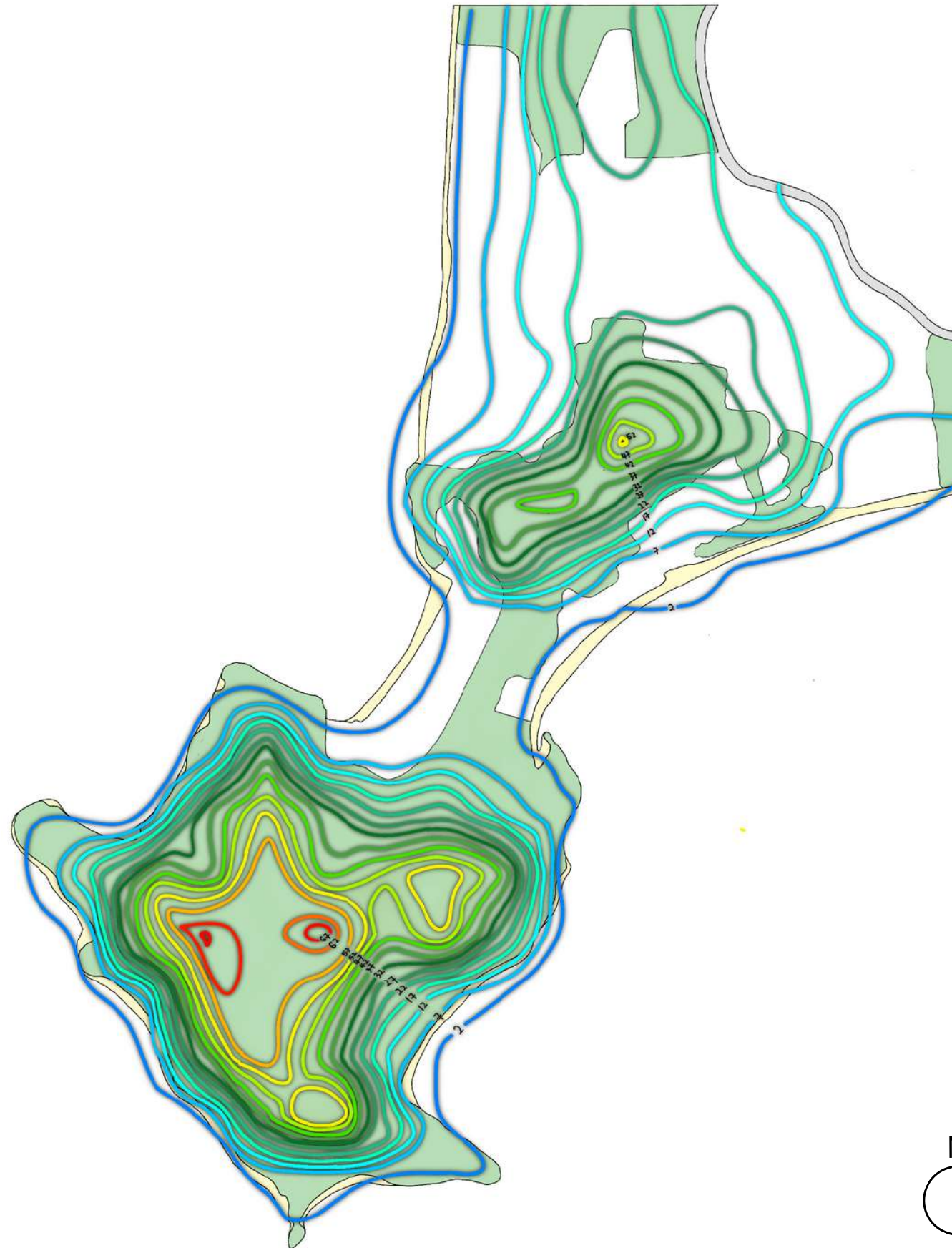
3pm



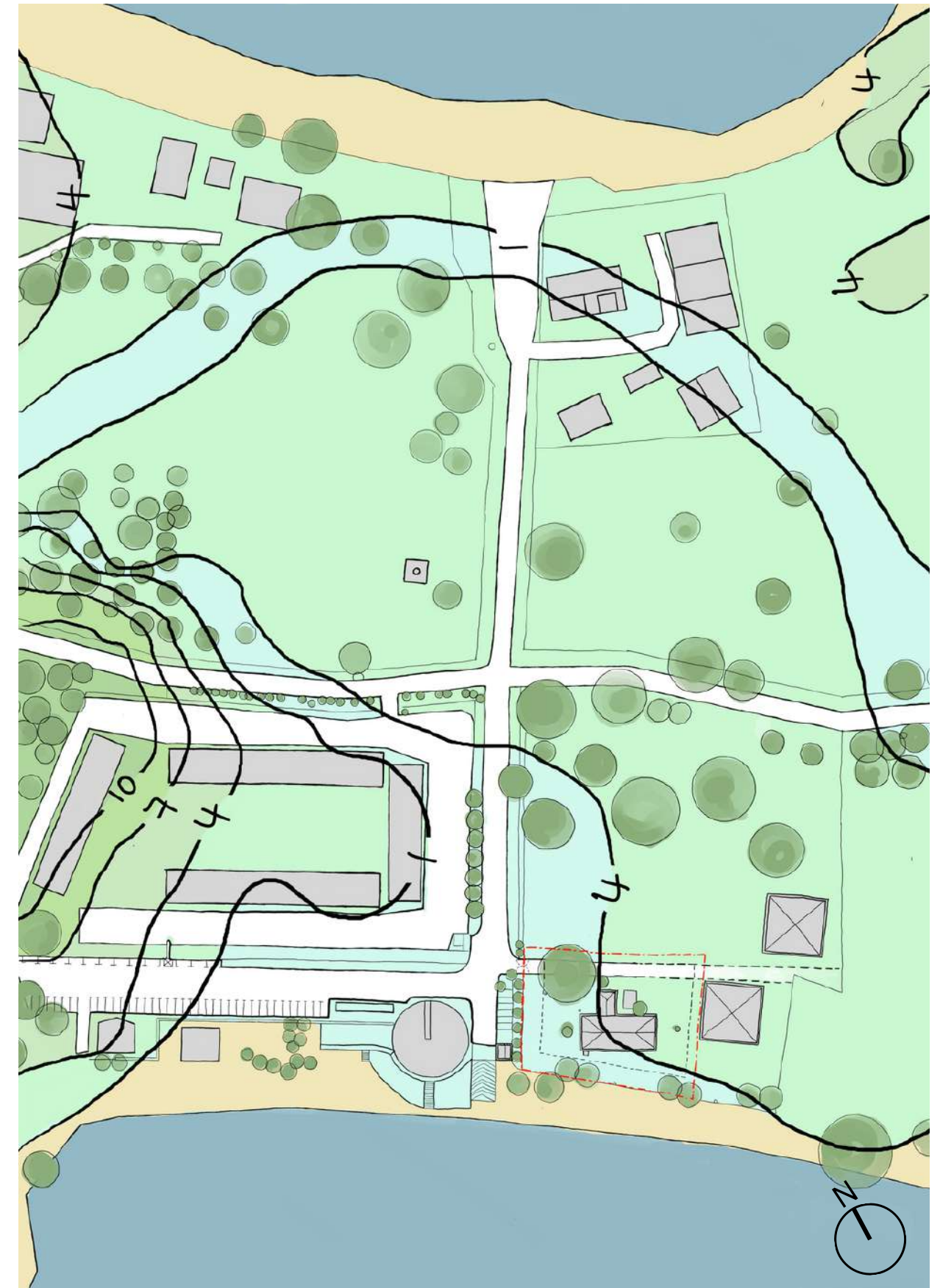
6pm

Microsite sunpath



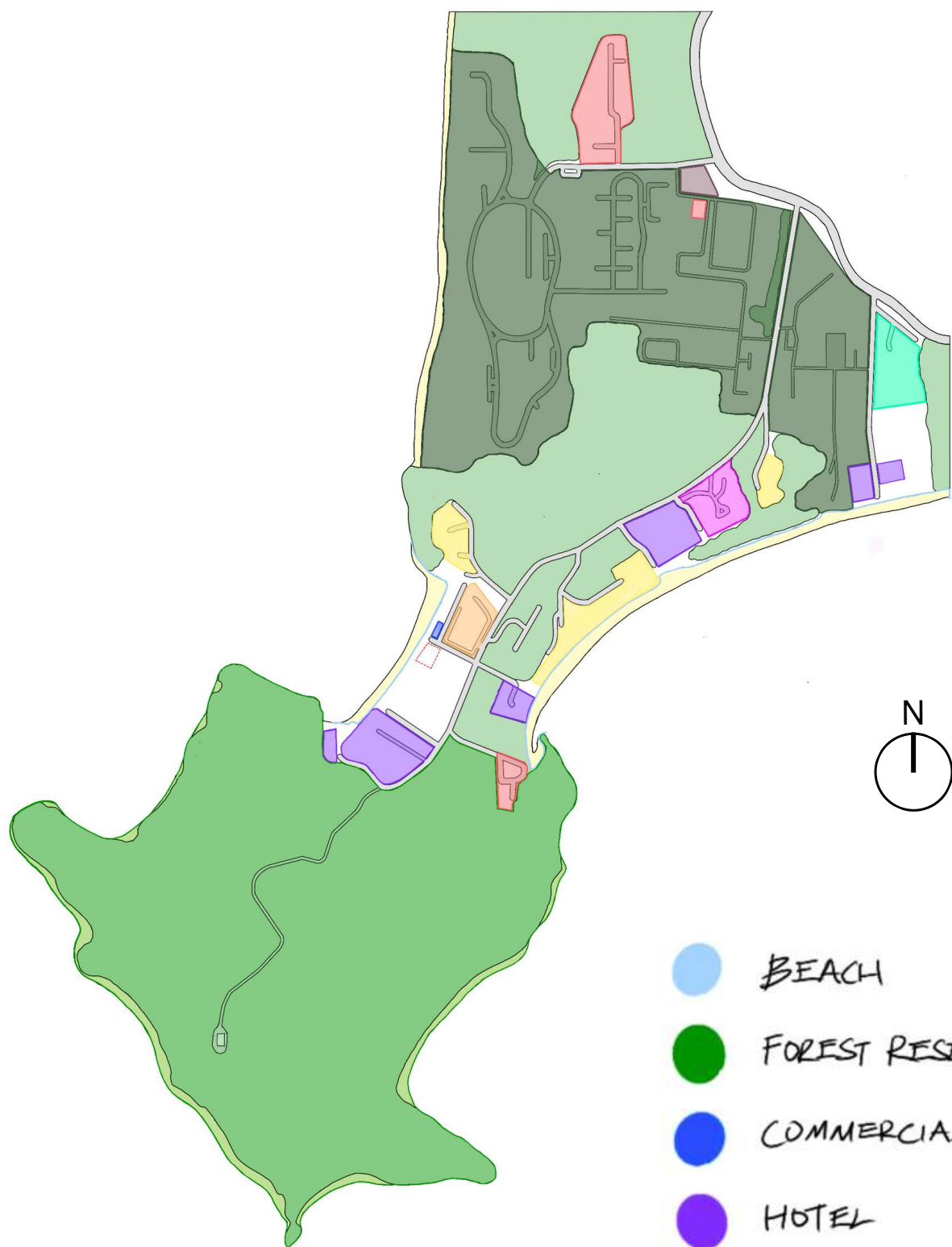


Macrosite (5m interval)

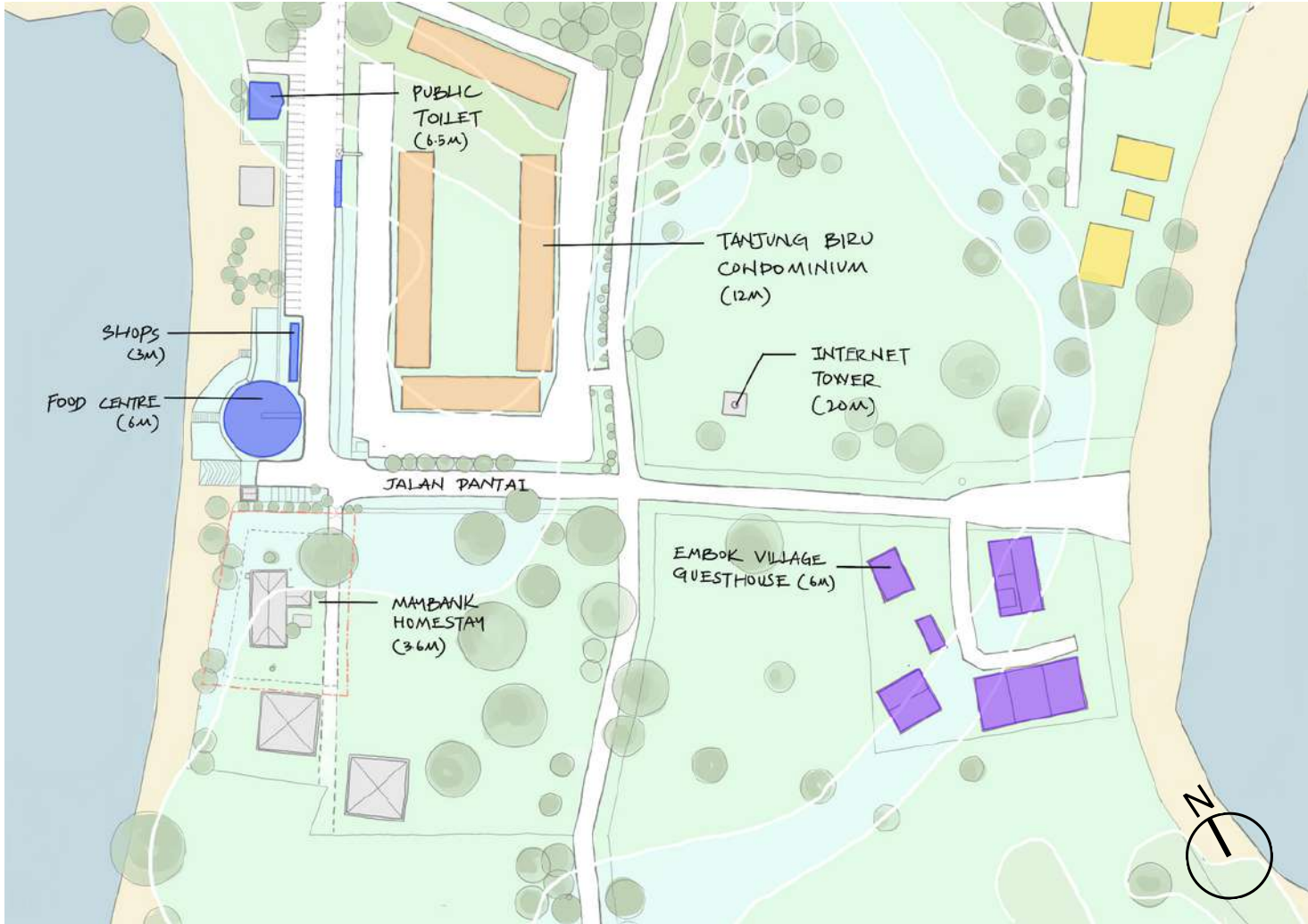


Microsite (3m interval)

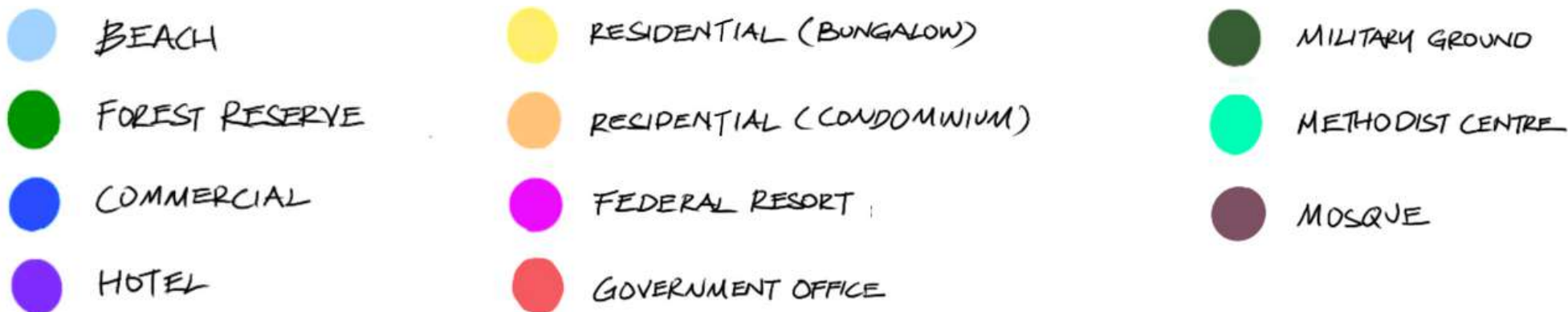




Macrosite



Microsite

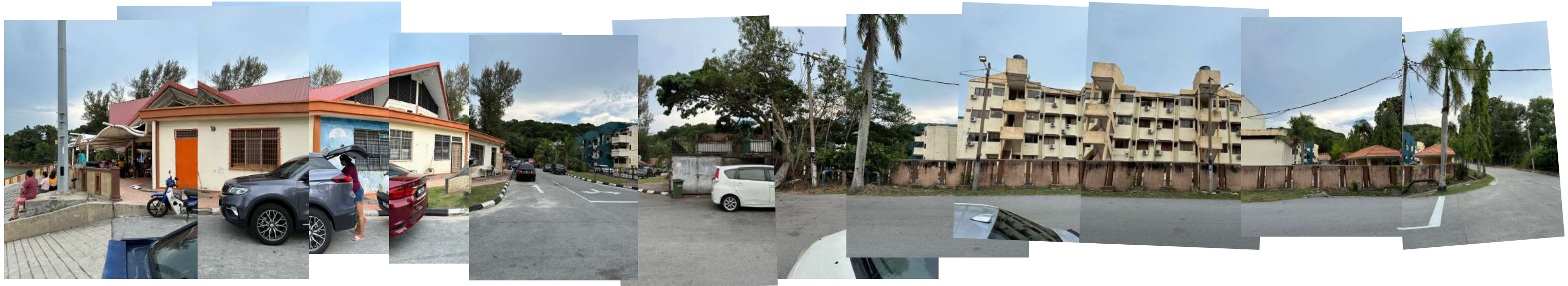




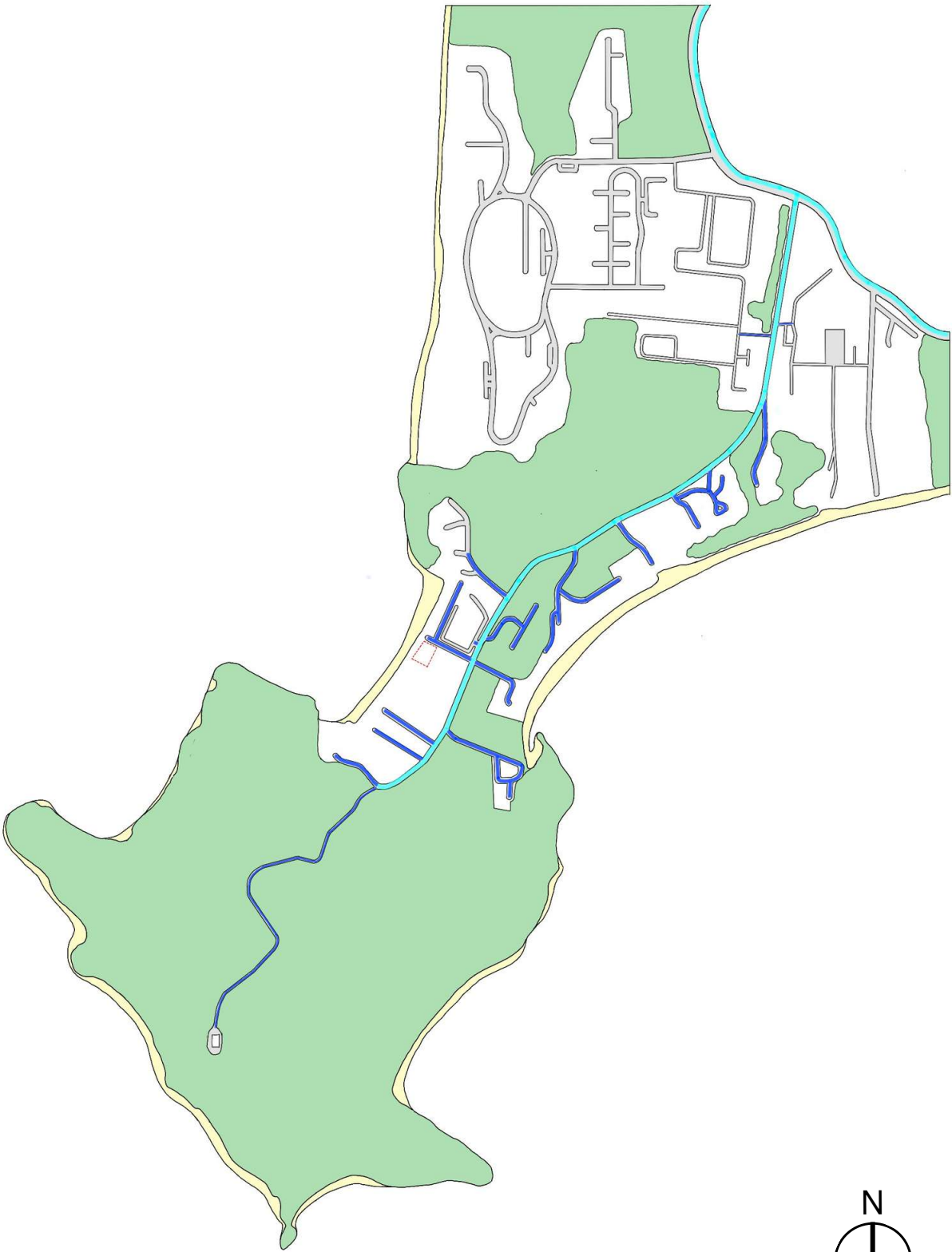
## Task 02

## Adjacent Street

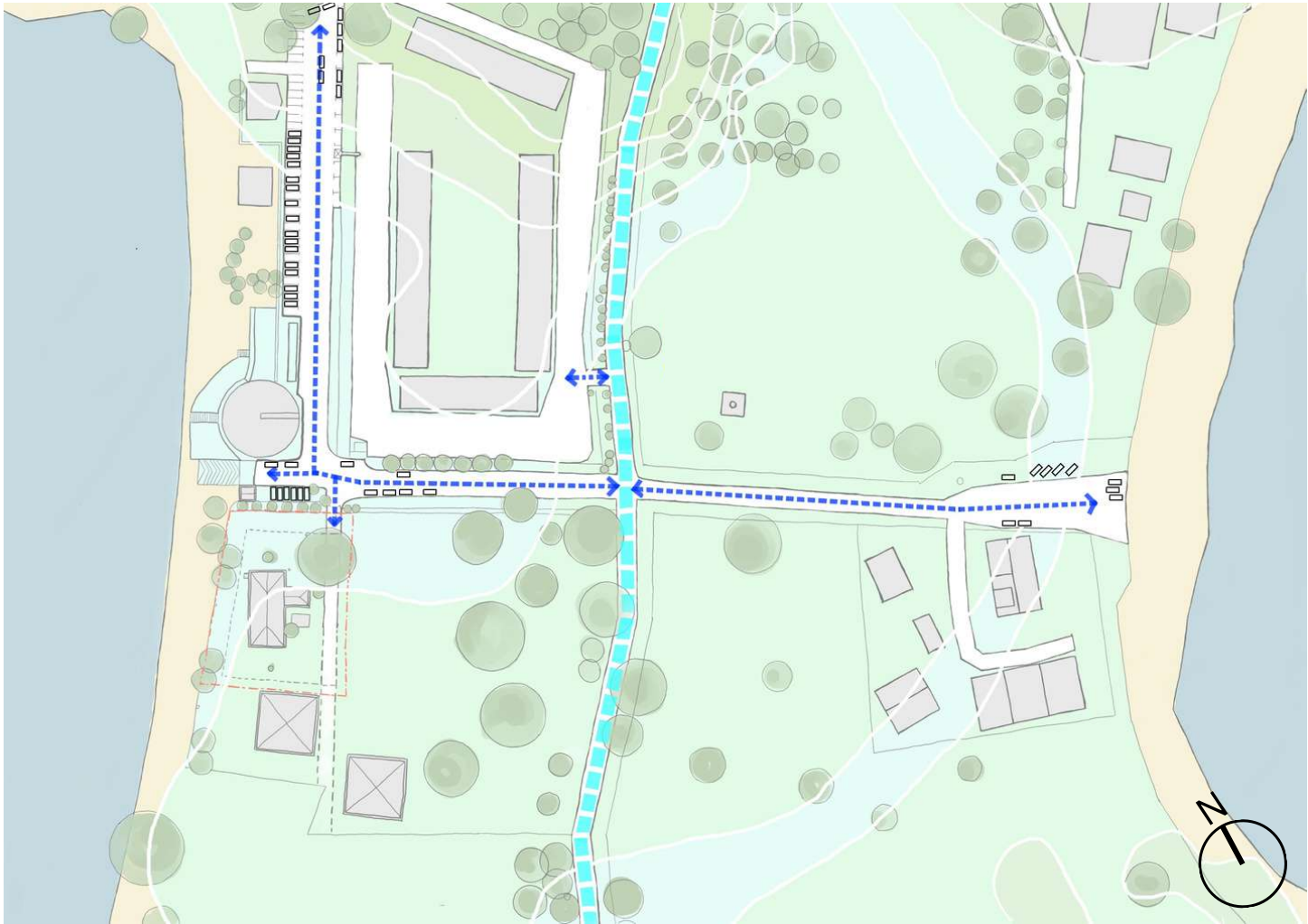
### Jalan Pantai







Macro-site



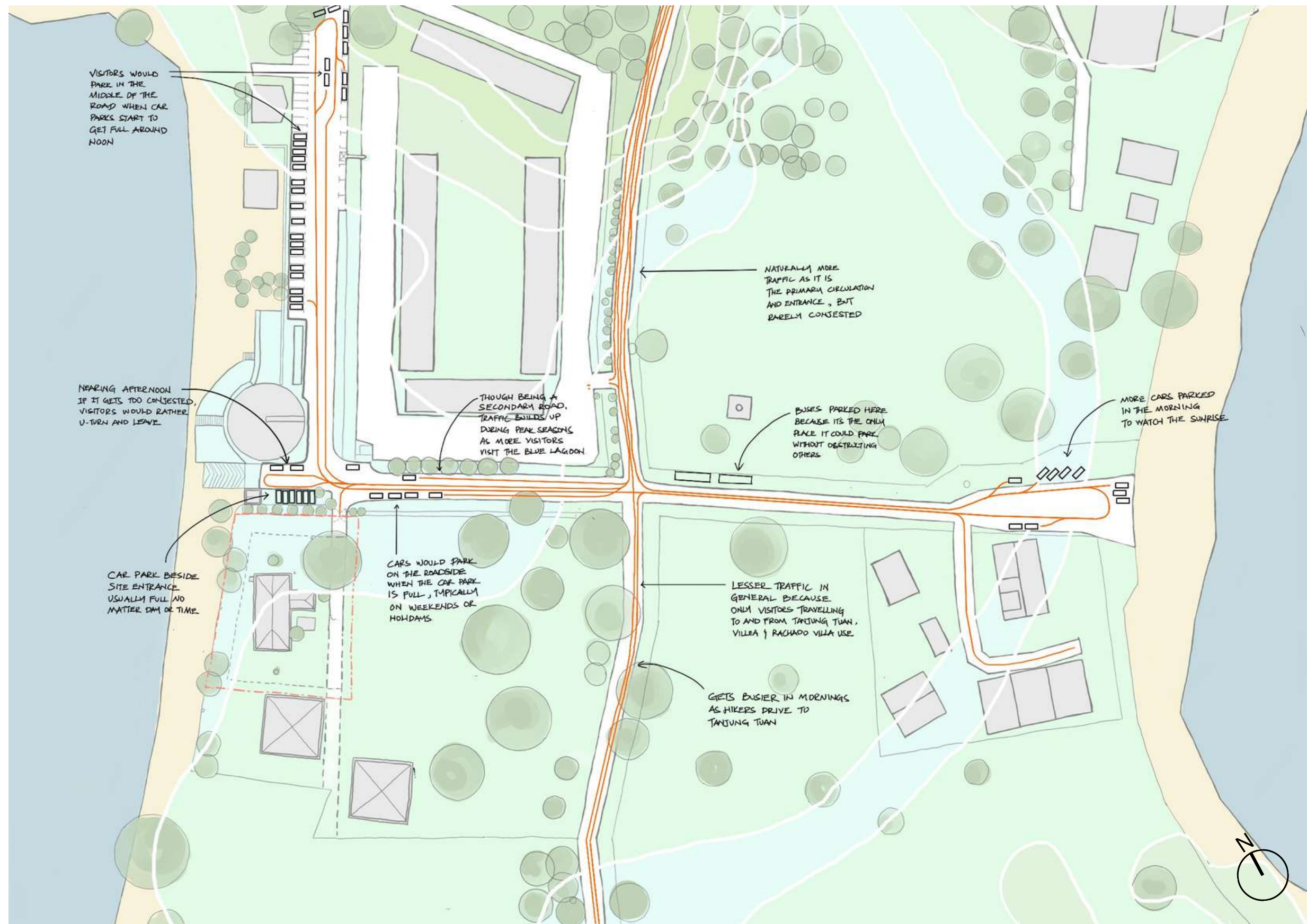
Microsite

- PRIMARY VEHICULAR CIRCULATION
- SECONDARY VEHICULAR CIRCULATION



## Task 02

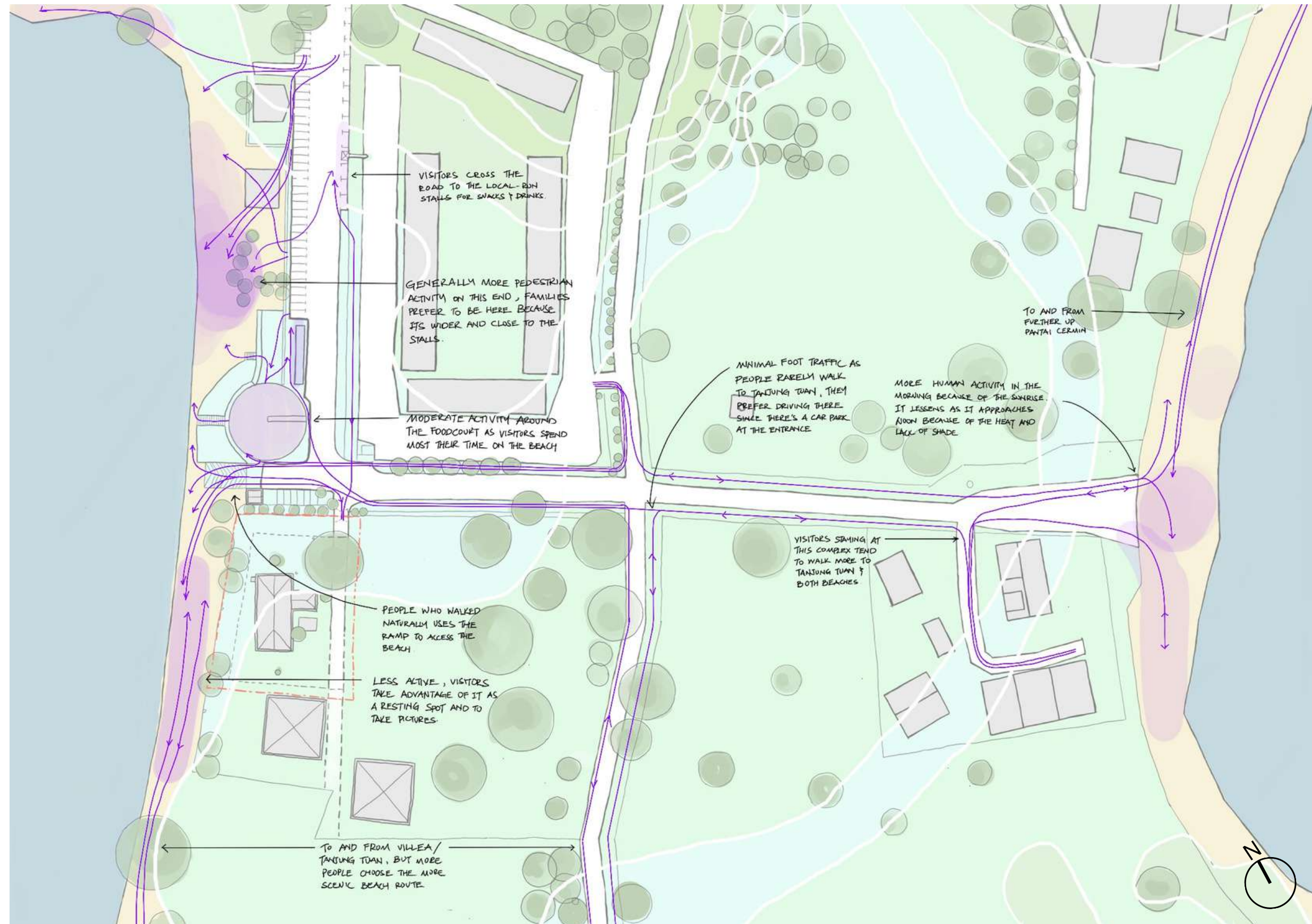
## Vehicular circulation





## Task 02

## Pedestrian circulation





Task 02

Vegetation Heights



Leucaena Leucocephala



Mimosa



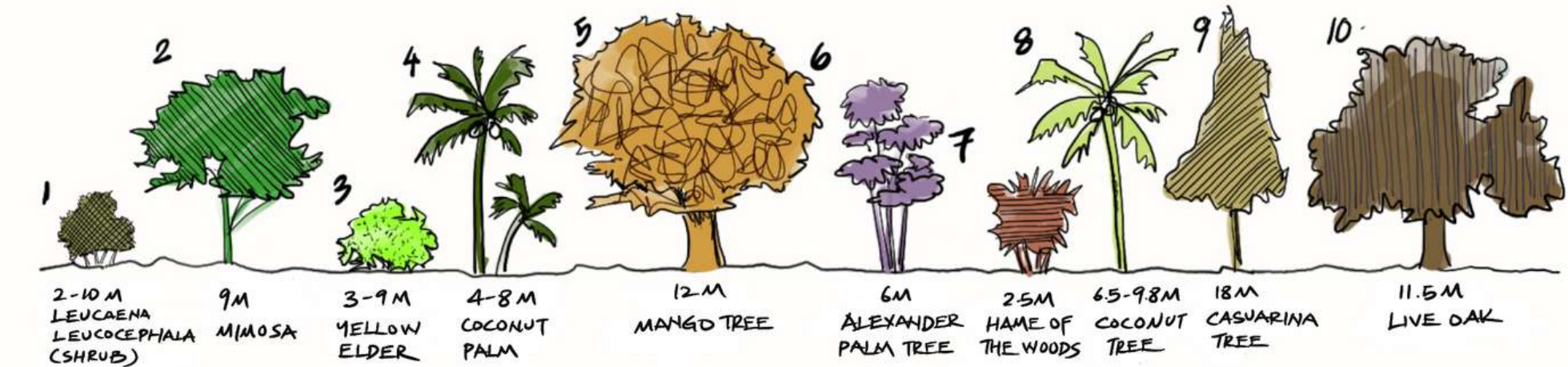
Yellow Elder



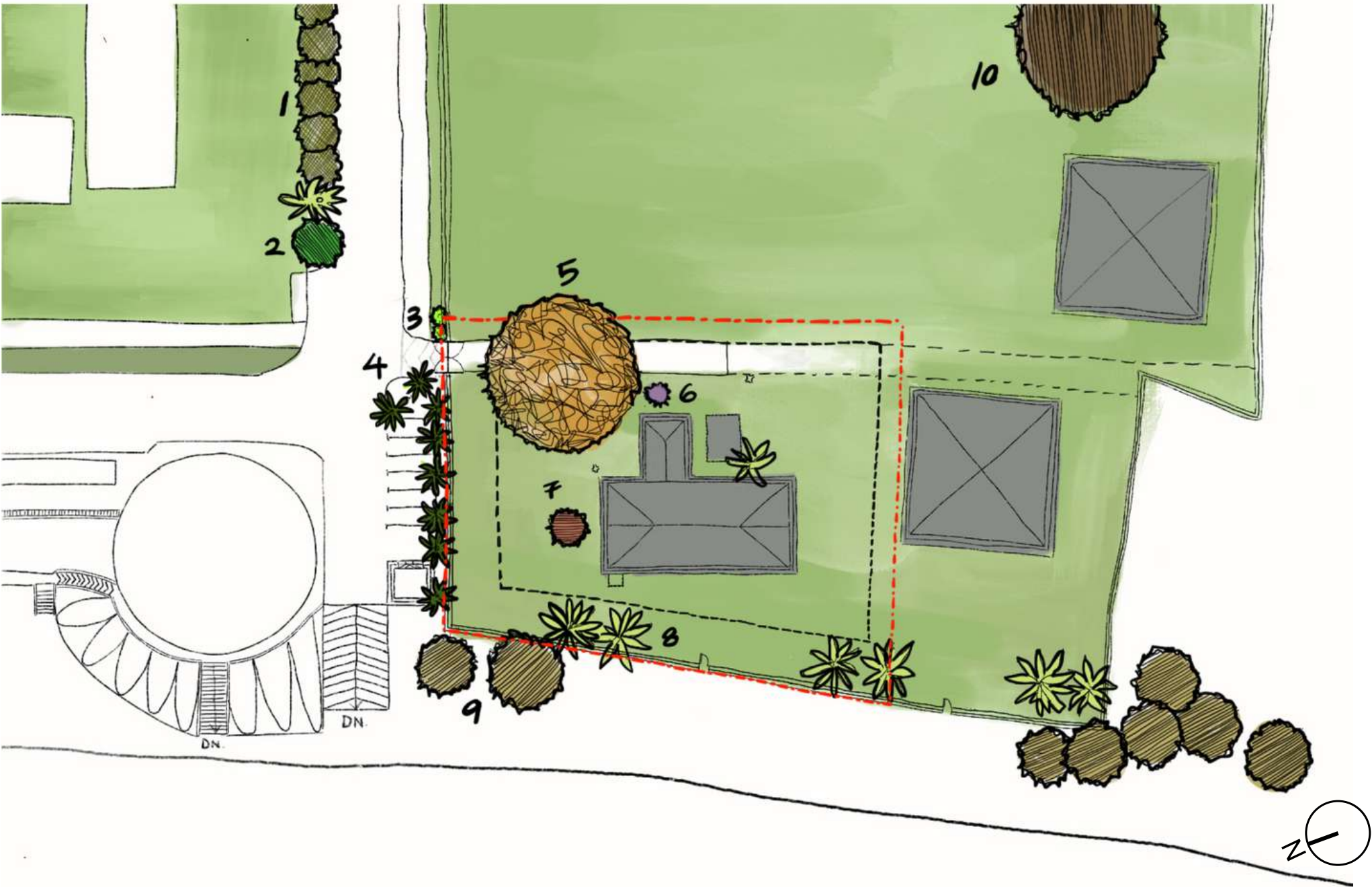
Coconut Palm Tree



Mango Tree



Scale: NTS



ALEXANDER PALM TREE



Flame of the Woods



Coconut Tree



Casuarina Tree

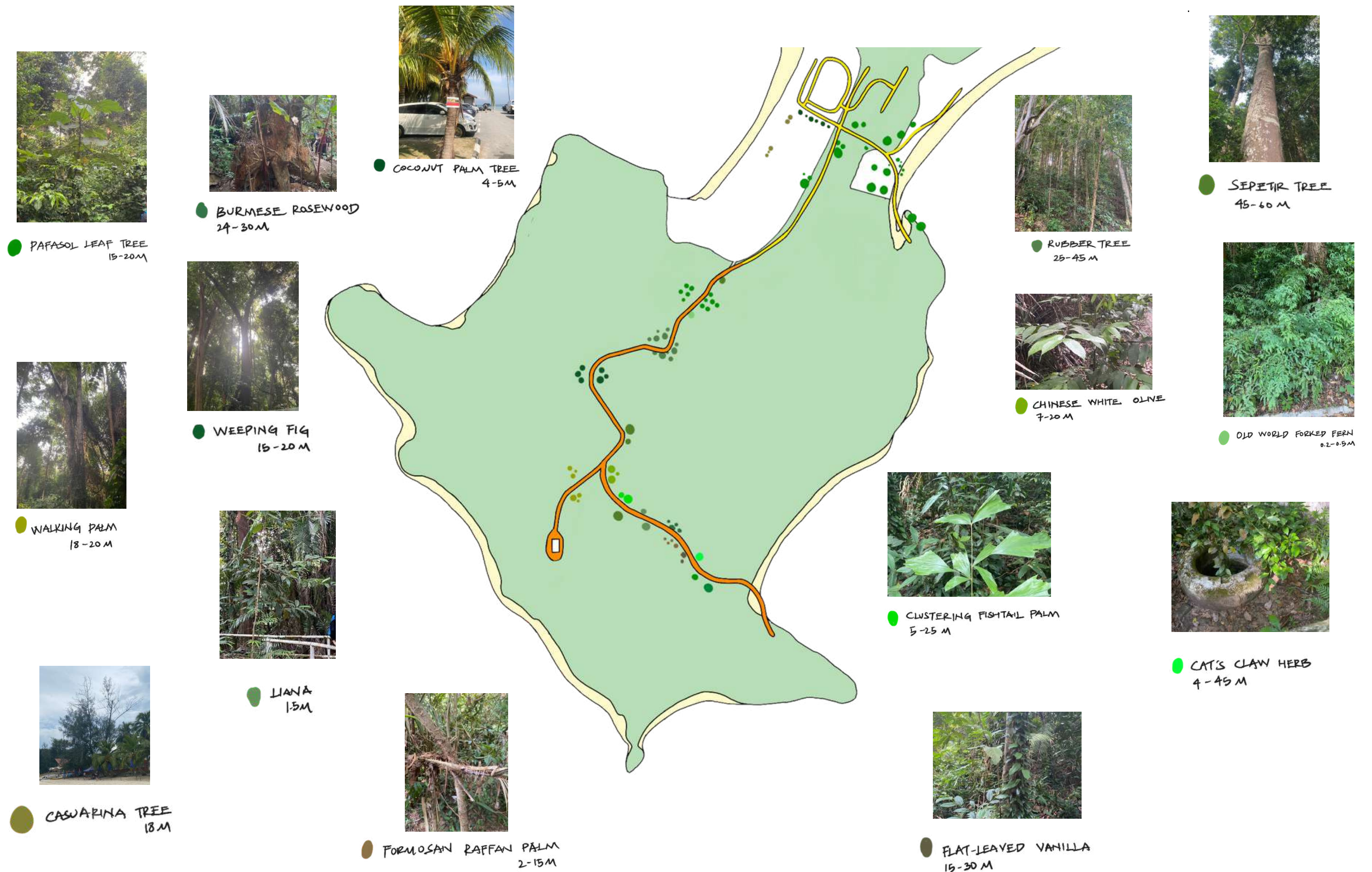


Live Oak



## Task 02

## Vegetation Heights

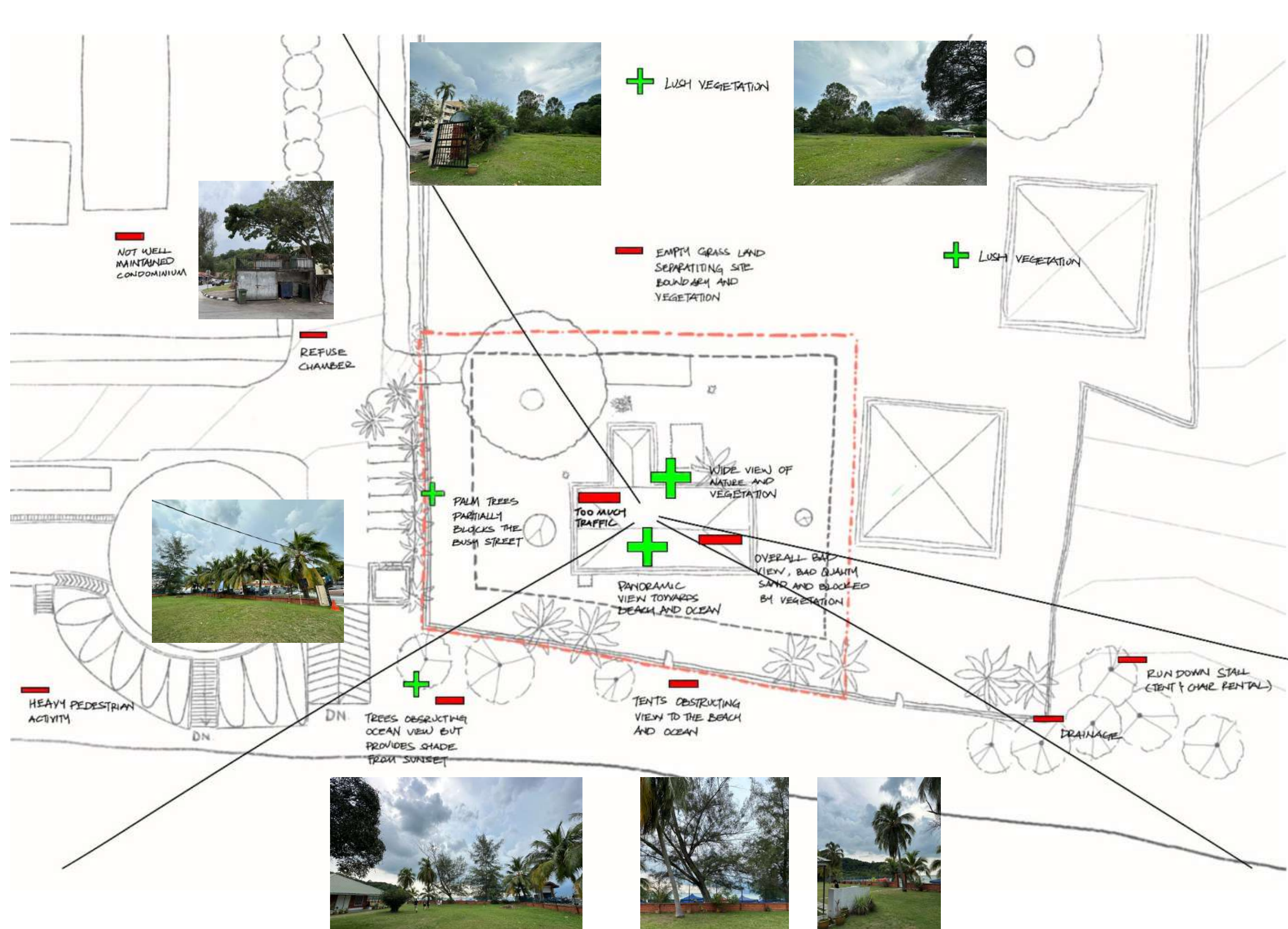


Macrosite



## Task 02

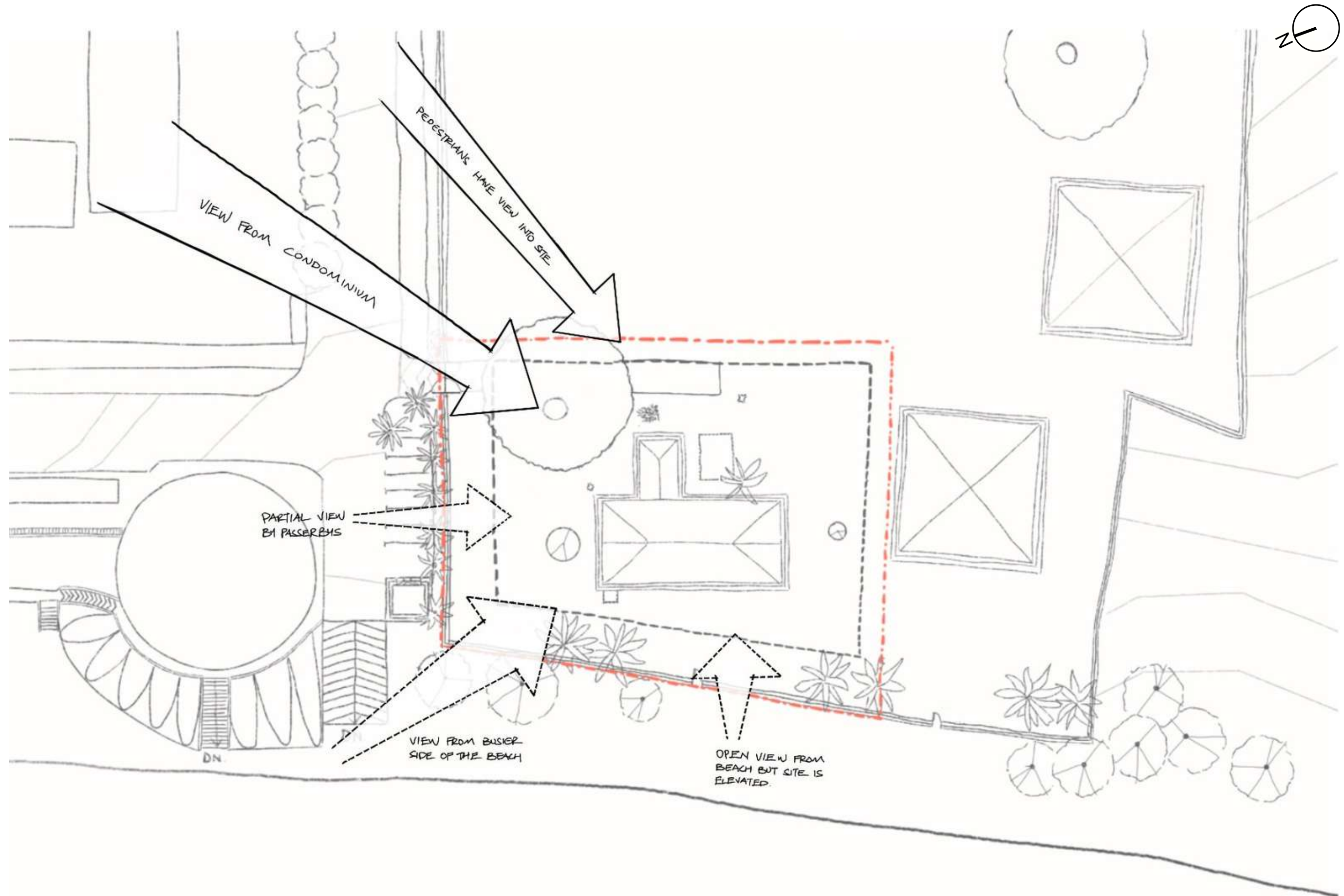
## View from site





## Task 02

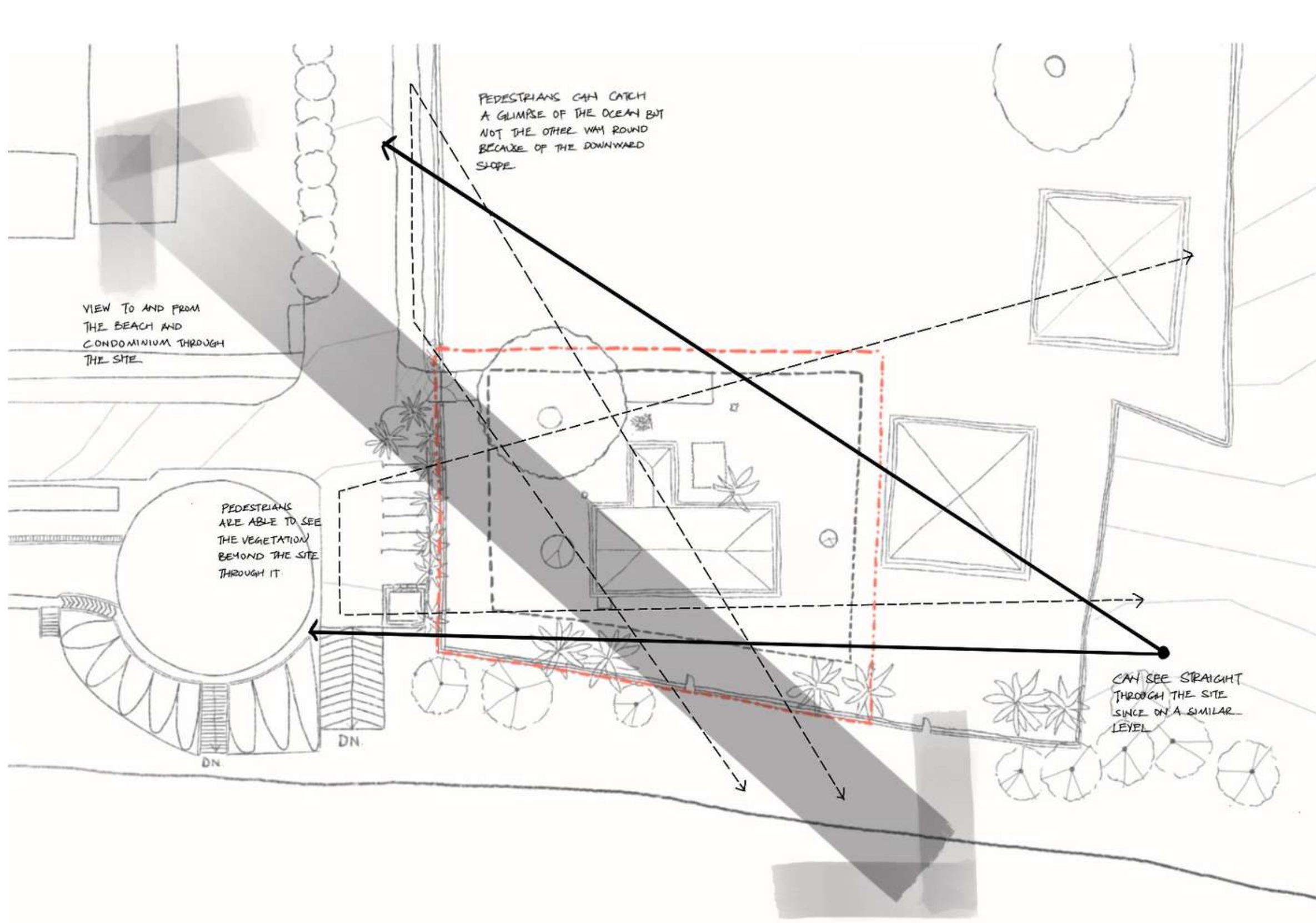
## View into site



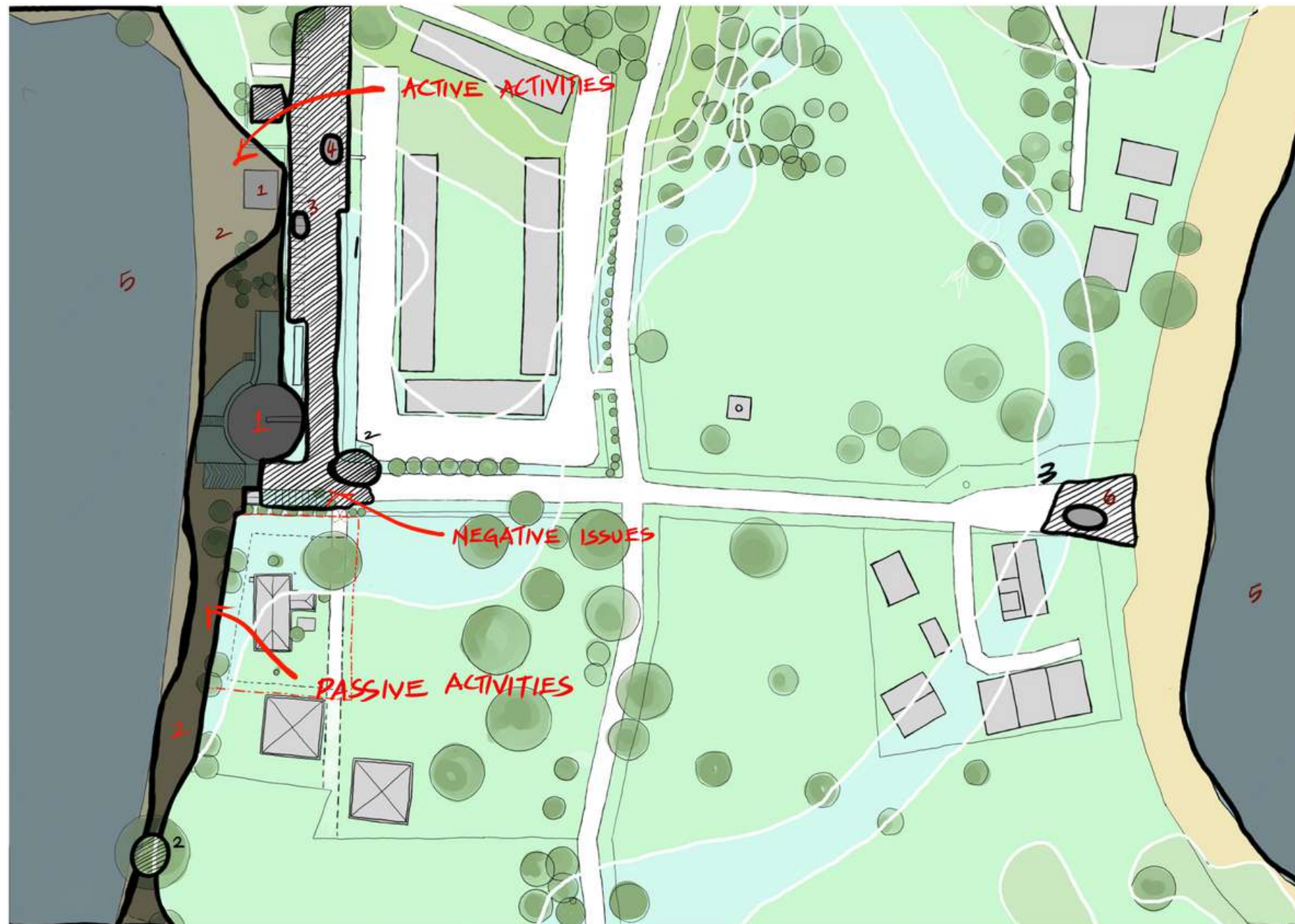


## Task 02

## View through site







### ACTIVE ACTIVITIES

#### 1. PLAYGROUND

MORE KIDS IN THE EVENING



#### 2. PUN-PUN

CANOPY RENTAL



#### 3. SELLING ICE CREAM FROM A TRICYCLE



#### 4. ROADSIDE STALLS SELLING SNACKS AND DRINKS



#### 5. BEACH ACTIVITIES

##### a) COLLECTING CRAB-CHUT SNAILS



##### b) KITE FLYING



#### c) NIGHT LIFE

LOCALS GO TO THE MIDDLE OF THE SEA TO CHECK THE TINY CRABS OUT. MORE CRABS COULD BE CAUGHT WHEN IT IS HIGH TIDE



#### d) EXTREME ACTIVITIES

MANY VISITORS COME TO PD TO ENJOY EXTREME SPORTS ON THE SEA LIKE: KAYAKING, BANANA BOAT ...



### PASSIVE ACTIVITIES

#### 1. FOODCOURT

MANY OF THE LOCAL CUISINES SOLD IN THE FOODCOURT.



#### 2. CAMPING

CAMPERS BRING THEIR OWN TENT TO THE CAMPSITE SET UP IN THE EVENING AND DISASSEMBLE THE NEXT DAY AFTER LUNCH



### NEGATIVE ISSUES

1. MINOR PARKING ISSUES WHERE SOME OF THE VISITORS TEND TO STOP THEIR CARS IN THE MIDDLE OF THE ROAD FOR THEIR OWN CONVENIENCE



2. SERIOUS LITTERING PROBLEM CAUSED BY INAPPROPRIATE MANAGEMENT AND SELFISHNESS OF USERS.



#### e) "SAND CASTLE"

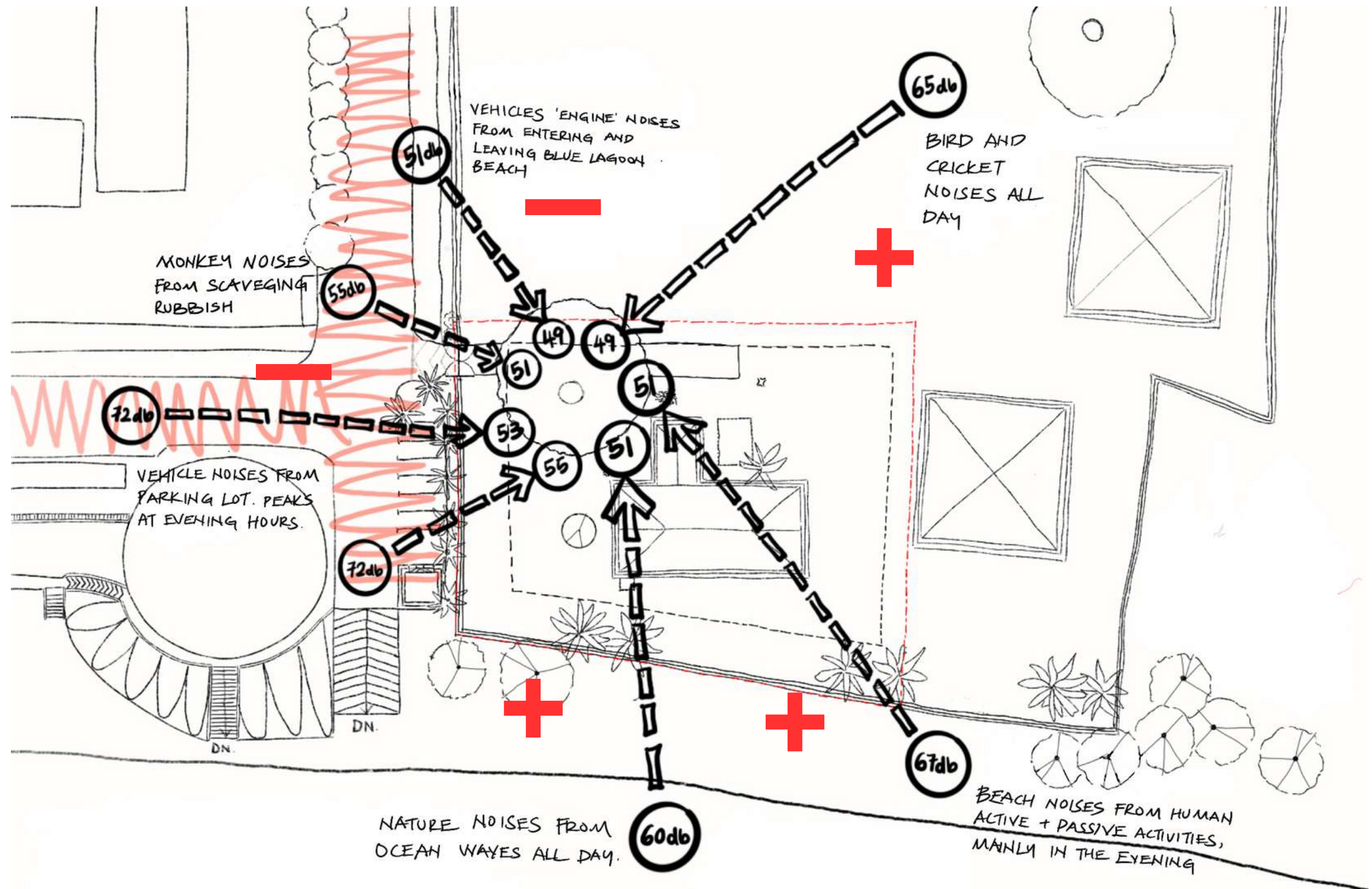
VISITORS ARE ABLE TO BUY TOOLS TO BUILD SAND CASTLES FROM NEARBY STALLS. MANY INTERESTING SAND CASTLES CAN BE SEEN ALONG THE BEACH.



#### 6. ROADSIDE STALL BUYERS CAN BARGAIN







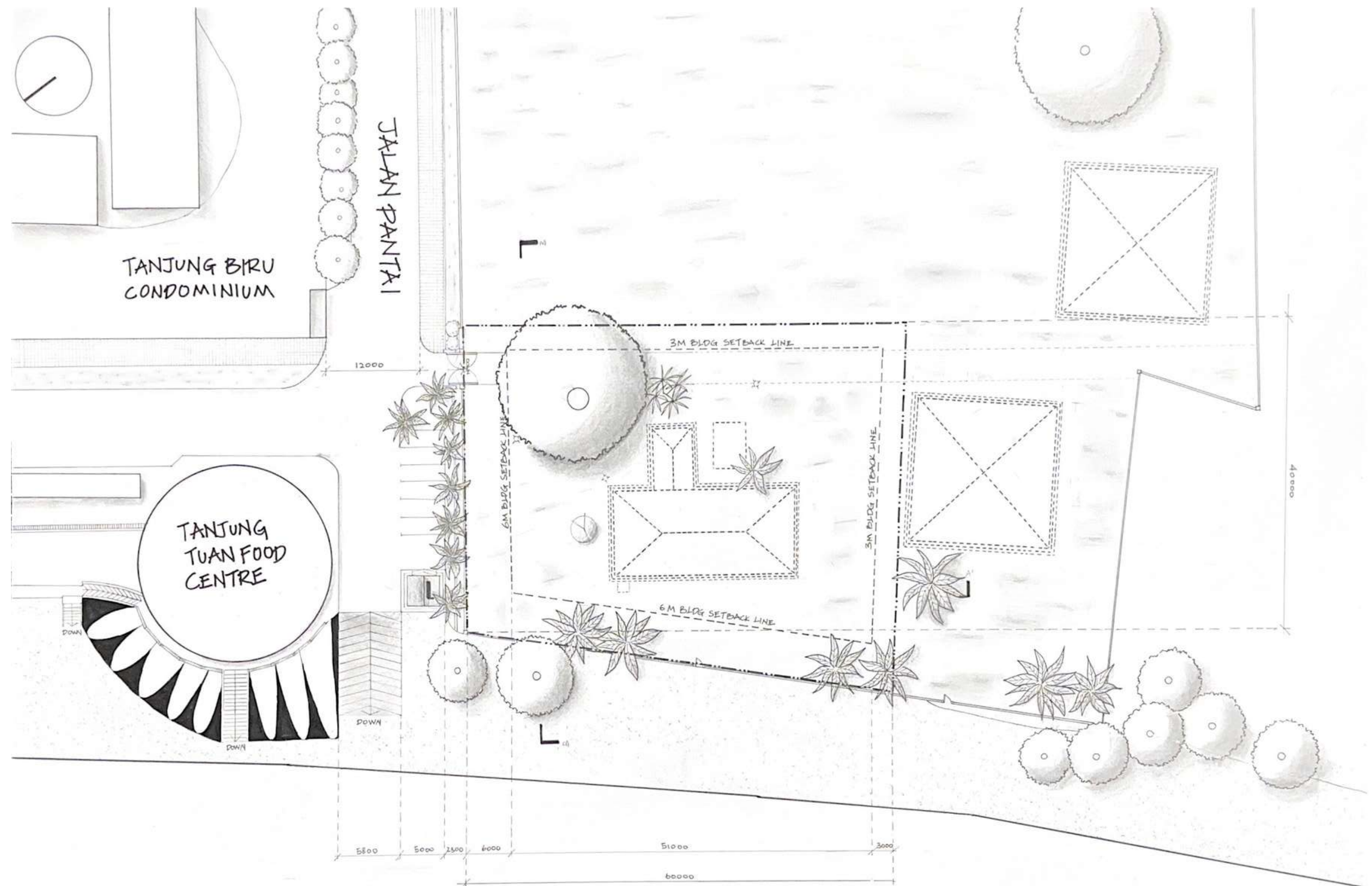


# TASK 03



## Task 03

## Site Plan with Adjacent Buildings (1:200)

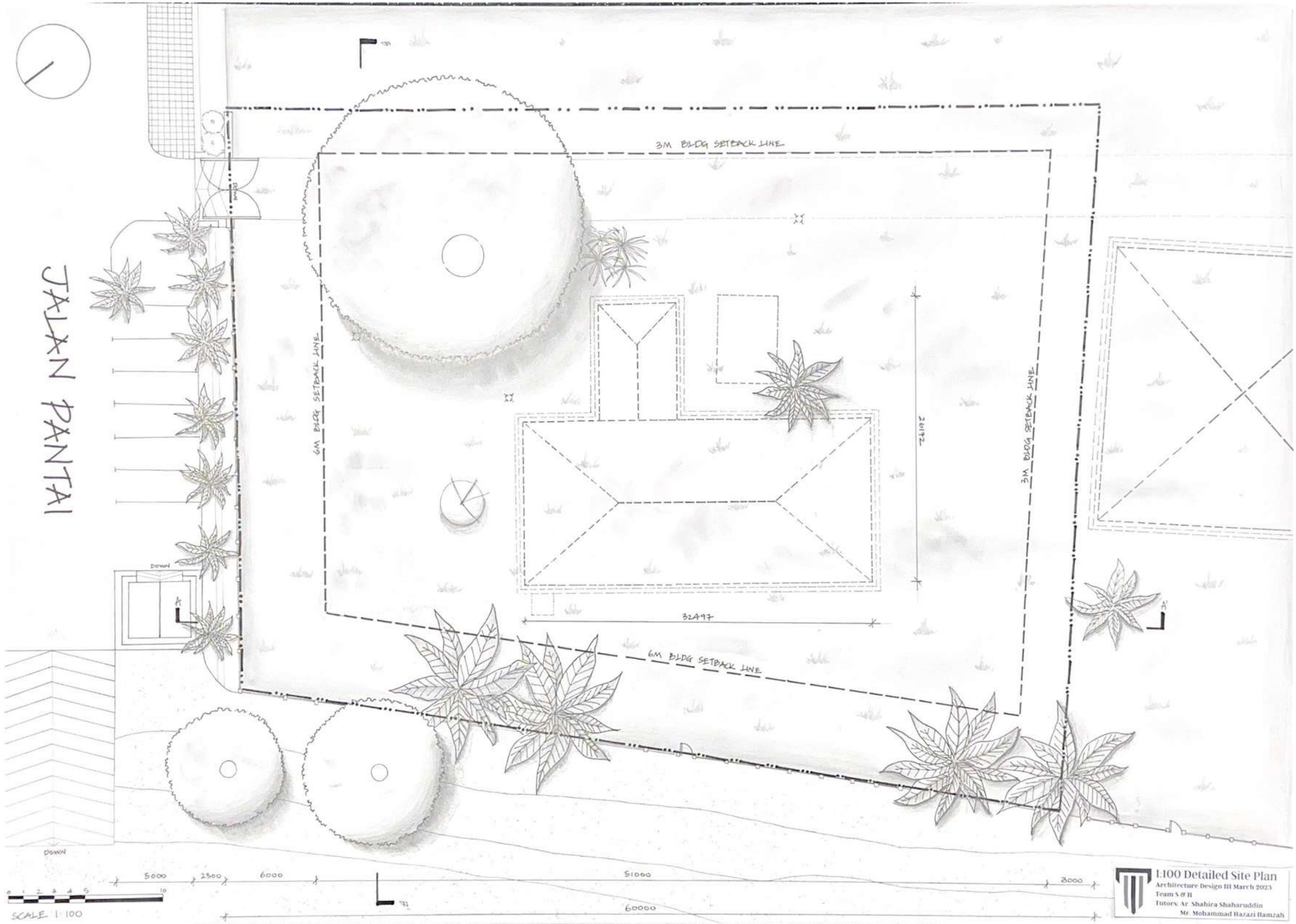


BLUE LAGOON BEACH

0 5 1 15 2 25 5  
SCALE 1:200

**1:200 Site Plan**  
Architecture Design III March 2023  
Team S # B  
Tutors: Ar. Shahira Shaharuddin  
Mr. Mohammad Hazazi Hamzah

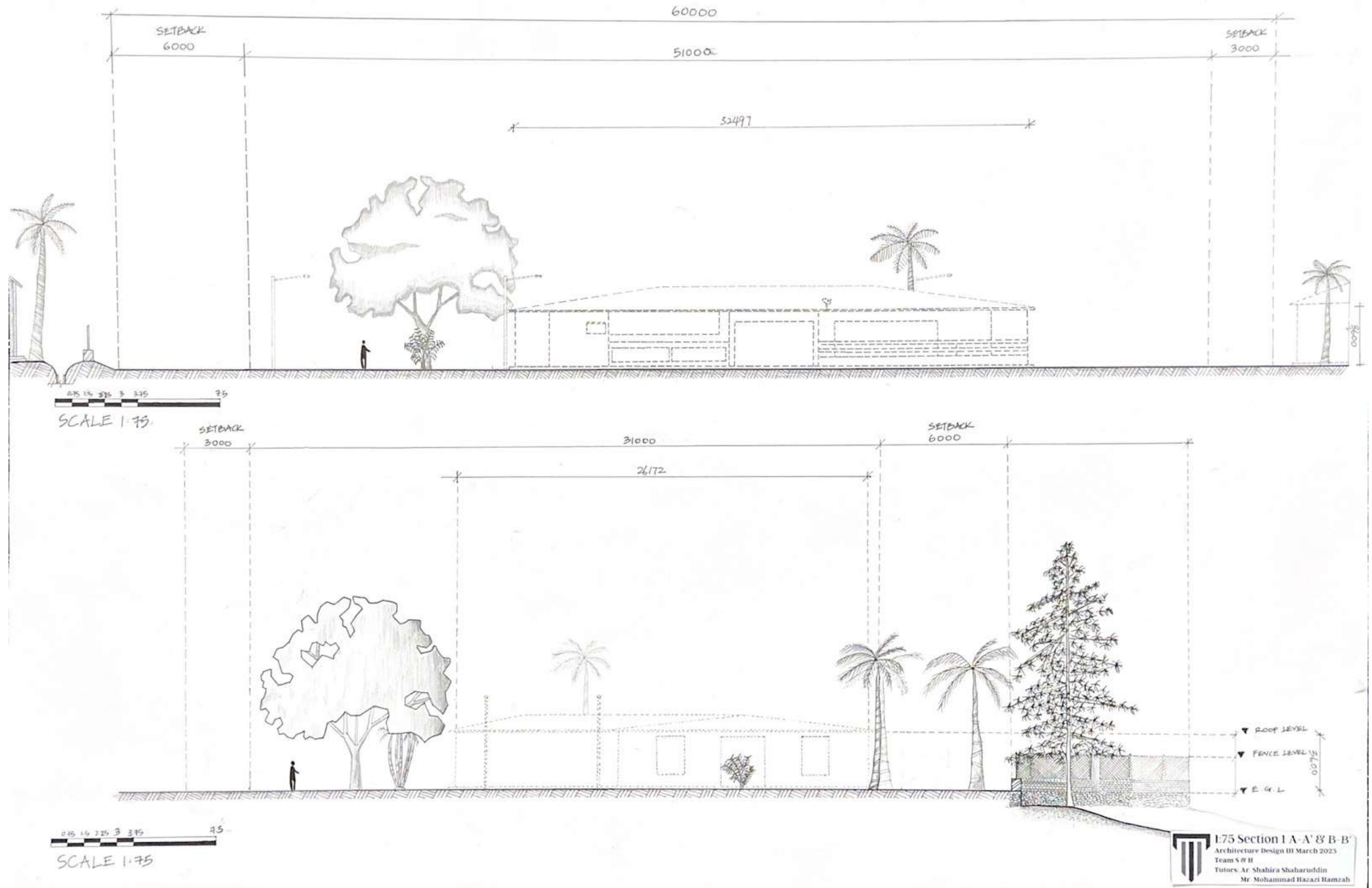






## Task 03

## Site Section (1:75)







Top View



Front View



Rear View



Perspective View



Perspective View





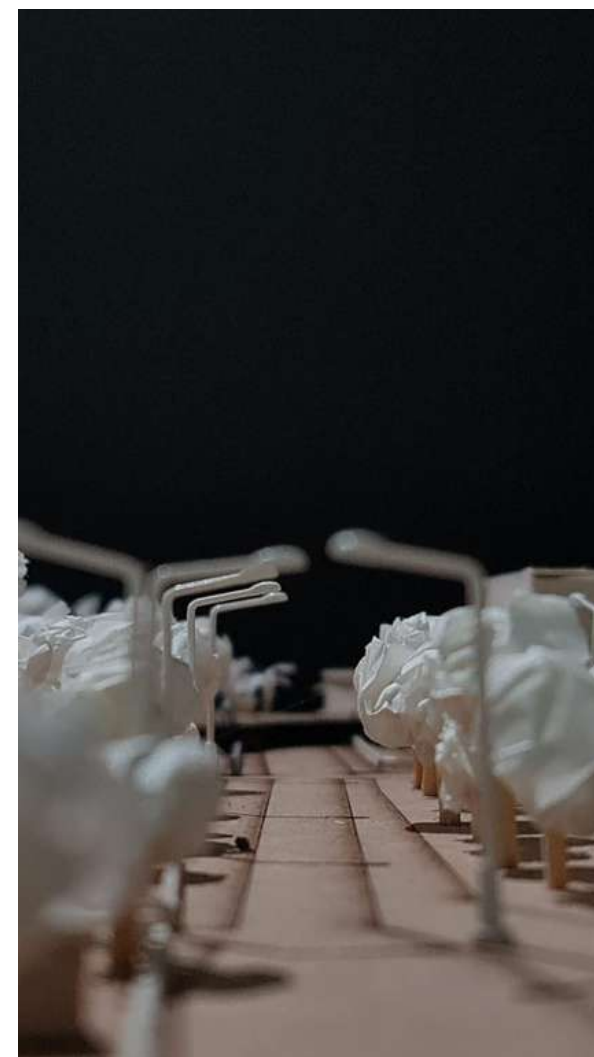
Left view



Close up detail



Close up detail



Close up detail



Close up detail



# TASK 04A



NESTLED ON THE MALAYSIAN COAST, PORT DICKSON BLENDS COLONIAL AND TRADITIONAL MALAY ARCHITECTURE WITH STUNNING NATURAL BEAUTY. EVOKING A SENSE OF WONDER DEEPLY EMBEDDED IN ITS HERITAGE. IT'S INTRIGUING PAST AS A FORMER BRITISH MILITARY OUTPOST DURING WORLD WAR II ADDS ANOTHER LAYER TO ITS ABSTRACT CHARACTER. THE TANJUNG TUAN FOREST, MONKEY BAY, AND PANTAI TANJUNG BIRU CONTRIBUTE TO THE TOWN'S CAPTIVATING ATMOSPHERE. LANDMARKS, ARCHITECTURE, AND NATURAL SURROUNDINGS TELL THE STORY OF A PLACE THAT HAS EVOLVED OVER TIME WHILE MAINTAINING ITS CULTURAL ROOTS. VISITORS CAN IMMERSE THEMSELVES IN THE SPELLBINDING ATMOSPHERE OF PORT DICKSON, WHERE CULTURES AND NATURE HARMONIOUSLY INTERTWINE.







PORT DICKSON, SITUATED ON THE MALAYSIAN COAST, IS NOT JUST A TOWN OF ENCHANTMENT, BUT ALSO A SPIRITUAL HAVEN THAT TOUCHES THE HEARTS OF ALL WHO VISIT. THE TOWN'S RICH PAST SERVES AS A BEACON OF HOPE, ILLUMINATING THE PATH TOWARDS A BRIGHTER FUTURE FOR THE NEXT GENERATION.

PORT DICKSON'S CAPTIVATING ATMOSPHERE, COMBINED WITH ITS RICH HISTORY, INSTILLS A DEEP SENSE OF SPIRITUALITY AND ENCOURAGES MANKIND TO LIVE IN HARMONY WITH BOTH THEIR SURROUNDINGS AND THEIR OWN INNER BEING. PORT DICKSON SERVES AS A SANCTUARY WHERE THE PAST, PRESENT, AND FUTURE CONVERGE, ALLOWING THE TOWN TO FLOURISH AS A PLACE WHERE SPIRITUALITY AND THE WONDERS OF NATURE COEXIST IN PERFECT HARMONY.



## BOARD 1 TANGIBLE

NESTLED ON THE MALAYSIAN COAST, PORT DICKSON IS A TOWN OF ENCHANTING GENIUS LOCI, WHERE THE FUSION OF COLONIAL AND TRADITIONAL MALAY ARCHITECTURE AND THE STUNNING NATURAL BEAUTY EVOKE A SENSE OF WONDER THAT IS DEEPLY EMBEDDED IN THE TOWN'S HERITAGE. IT'S INTRIGUING PAST AS A FORMER BRITISH MILITARY OUTPOST DURING WORLD WAR II ADDS ANOTHER LAYER TO ITS ABSTRACT CHARACTER, WHILE THE TANJUNG TUAN FOREST, MONKEY BAY, AND PANTAI TANJUNG BIRU EACH CONTRIBUTE THEIR UNIQUE ALLURE. THE TOWN'S LANDMARKS, ARCHITECTURE, AND NATURAL SURROUNDINGS COME TOGETHER TO TELL A STORY OF A PLACE THAT HAS EVOLVED OVER TIME WHILE MAINTAINING ITS CULTURAL ROOTS. PORT DICKSON INVITES VISITORS TO LOSE THEMSELVES IN THE SPELLBINDING ATMOSPHERE OF THE TOWN AND TO CONNECT WITH THE BEAUTY, HISTORY, AND SPIRIT OF THIS CAPTIVATING LOCATION WHERE CULTURES AND NATURE ARE HARMONIOUSLY INTERTWINED.

## BOARD 2 INTANGIBLE

PORT DICKSON, SITUATED ON THE MALAYSIAN COAST, IS NOT JUST A TOWN OF ENCHANTMENT, BUT ALSO A SPIRITUAL HAVEN THAT TOUCHES THE HEARTS OF ALL WHO VISIT. THE TOWN'S RICH PAST SERVES AS A BEACON OF HOPE, ILLUMINATING THE PATH TOWARD A BRIGHTER FUTURE FOR THE NEXT GENERATION. PORT DICKSON'S CAPTIVATING ATMOSPHERE, COMBINED WITH ITS RICH HISTORY, INSTILLS A DEEP SENSE OF SPIRITUALITY AND ENCOURAGES MANKIND TO LIVE IN HARMONY WITH BOTH THEIR SURROUNDINGS AND THEIR OWN INNER BEING. PORT DICKSON SERVES AS A SANCTUARY WHERE THE PAST, PRESENT, AND FUTURE CONVERGE, ALLOWING THE TOWN TO FLOURISH AS A PLACE WHERE SPIRITUALITY AND THE WONDERS OF NATURE COEXIST IN PERFECT HARMONY



# TASK 05



### GENIUS LOCI

Port Dickson has a rich history intertwined with its natural beauty. The secluded bay in Tanjung Tuan features a vast view of the sea while enveloped by hills filled with lush greenery. Its a community where wildlife gather as well, given the proximity to the Tanjung Tuan Forest Reserve. It is an escape that attracts many people to come for recreational purposes.

### CONCLUSION

The design should respond to the breathtaking views of Tanjung Tuan especially the sea and the site conditions. Our aim is to showcase and experience the beauty of Tanjung Tuan through architecture. The design should reflect its natural beauty and its rich history. It should feel welcoming to people so that the community are able to experience it.





## Task 05

### Site Context

#### SUNPATH AND VENTILATION



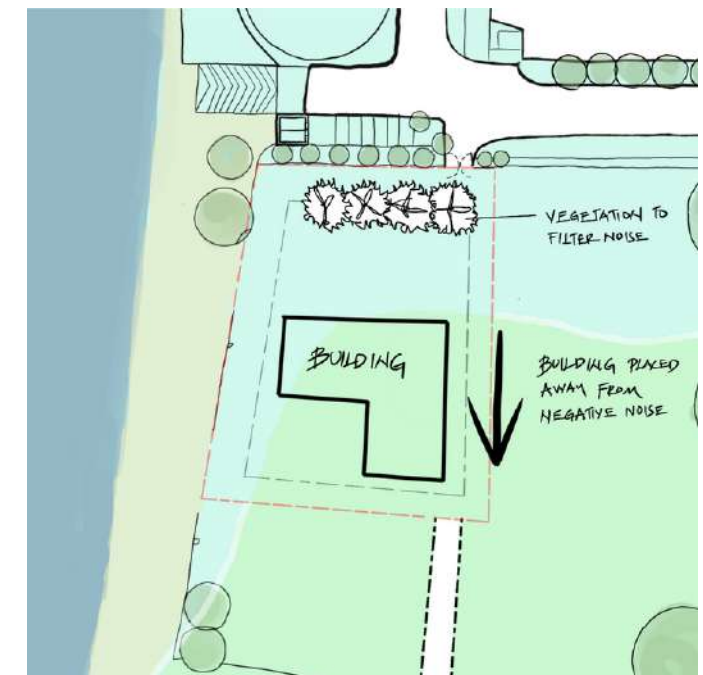
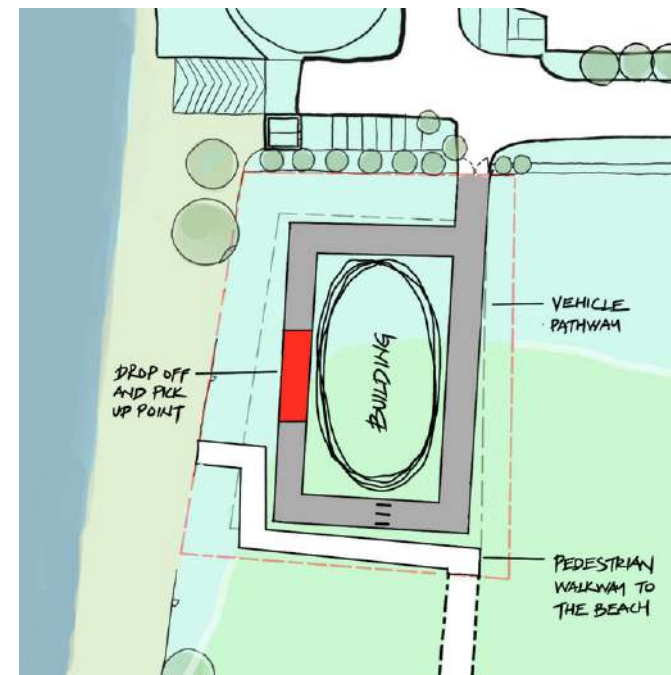
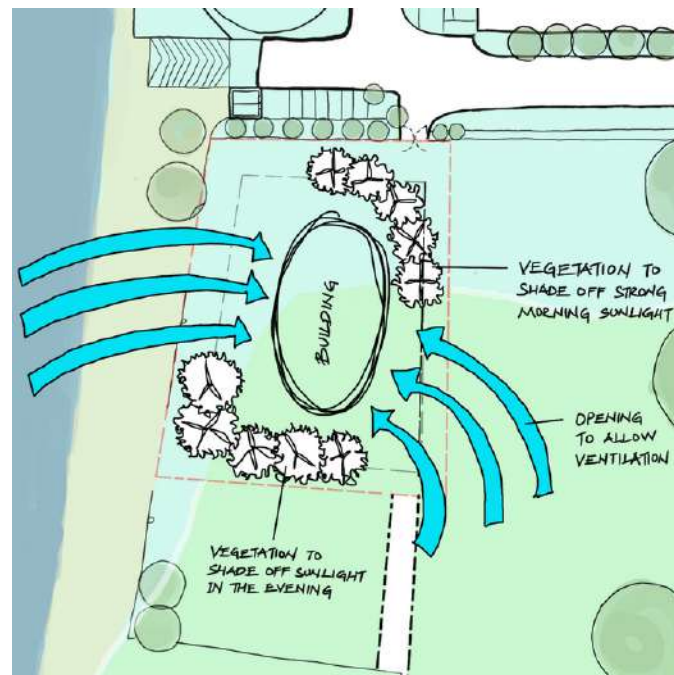
#### CIRCULATION



#### NOISE



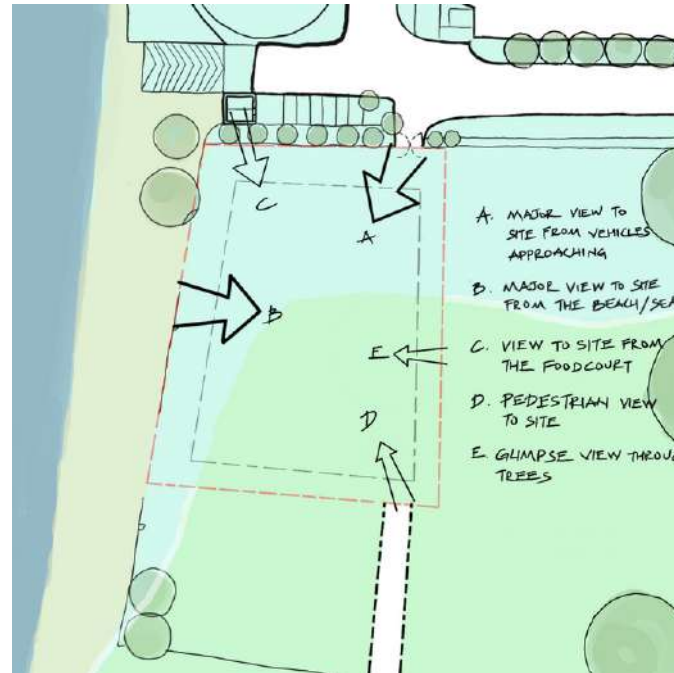
### Site Response



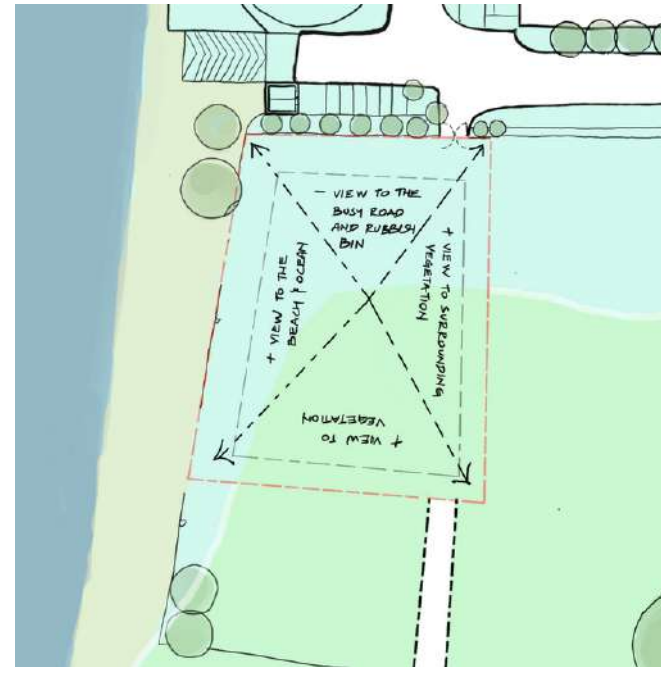


# Site Context

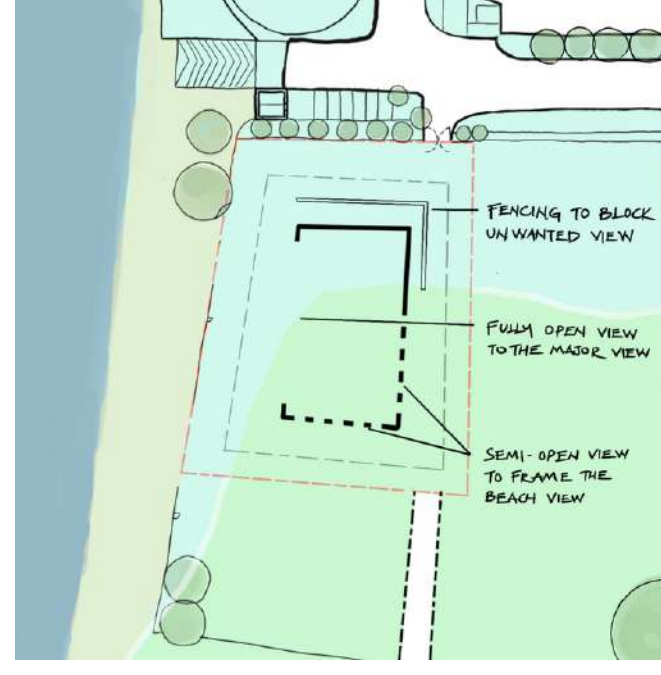
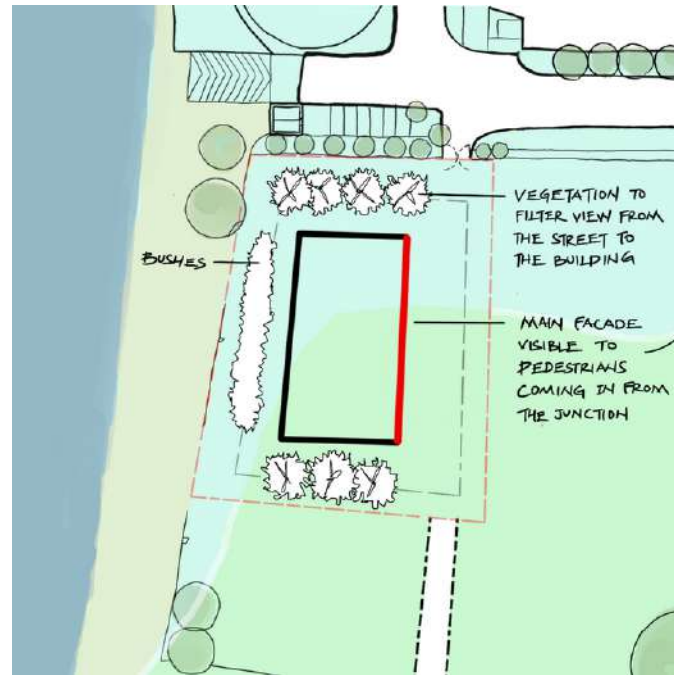
VIEWS TO SITE



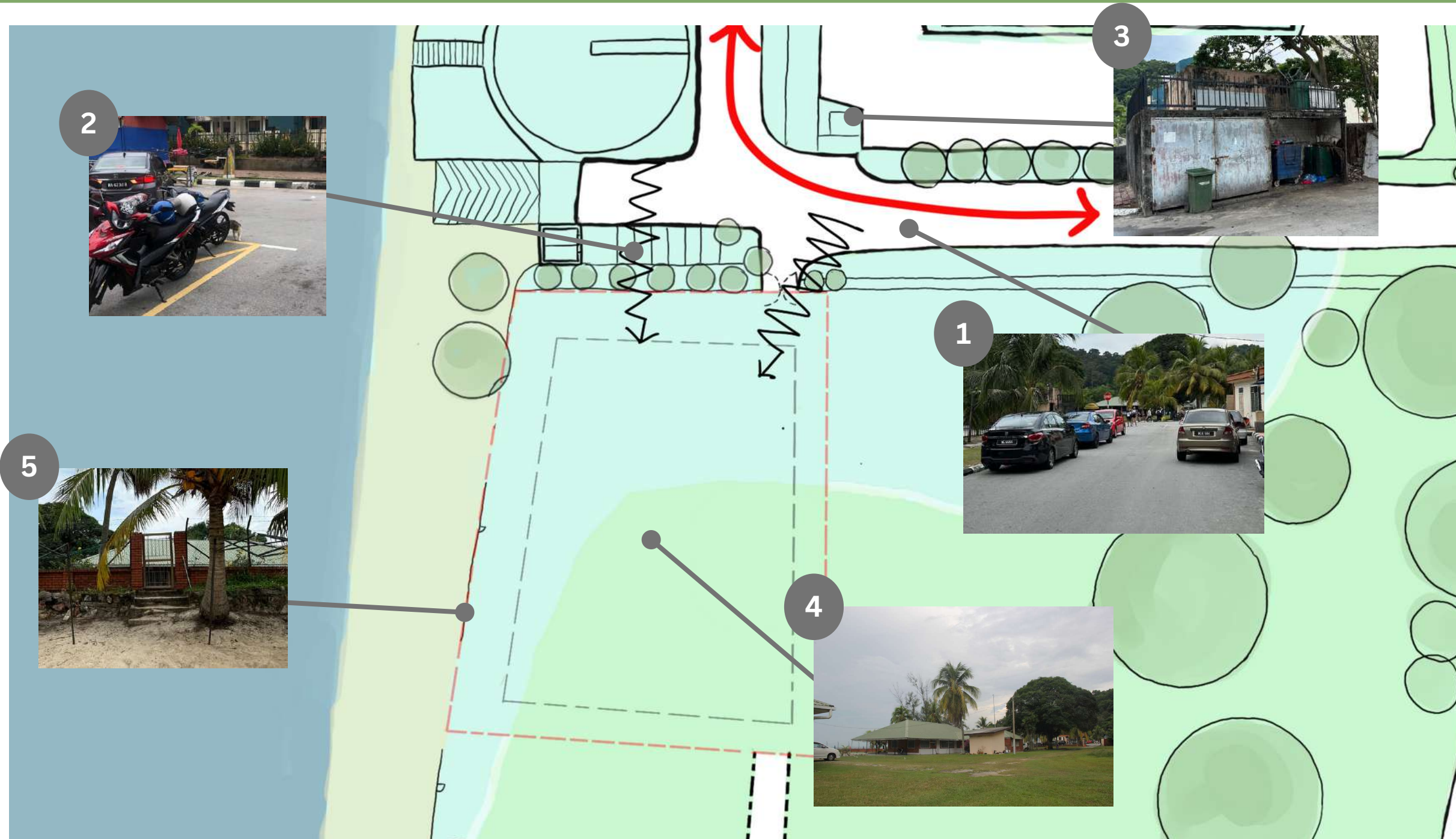
VIEWS FROM SITE



# Site Response







1

## CIRCULATION

- Illegal parking
- Congested road
- Negative road

2

## NEGATIVE NOISE

- Vehicular noise from road
- Boat engine noise

3

## SMELLS

- Garbage point
- Monkey rummaging through garbage
- Negative view

4

## SUN GLARE

- Afternoon sun & morning sun produces glare
- Uncomfortable for eyes

5

## ACCESS POINT

- Broken staircase
- Difficulty using the staircase
- Prone for user to fall





1

## VIEWS

- Building facing west for positive view
- Use vegetation/fencing to filter negative views

2

## VENTILATIONS

- Open space in/between building to allow cross-ventilation
- Open courtyard
- Lighter materials used

3

## EXISTED PATHWAY

- Continuation of existing pathway into site
- Use it as a public access to beach and building

4

## LACK OF LIGHT POLES

- Use artificial lighting with high lux to indicate entry point near road

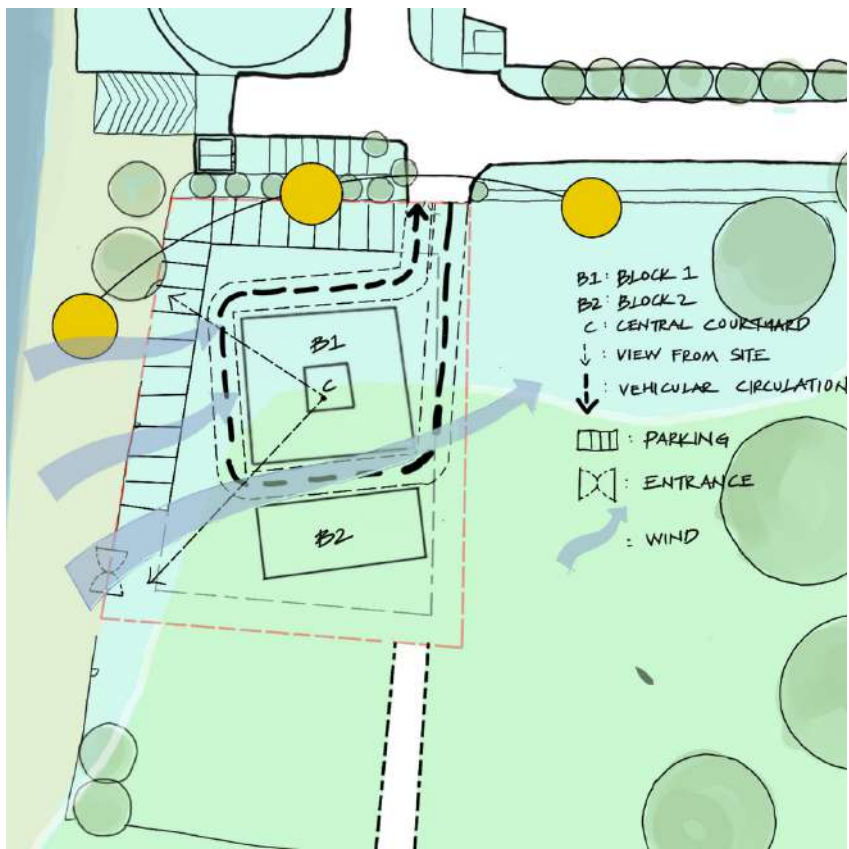
5

## LITTERING

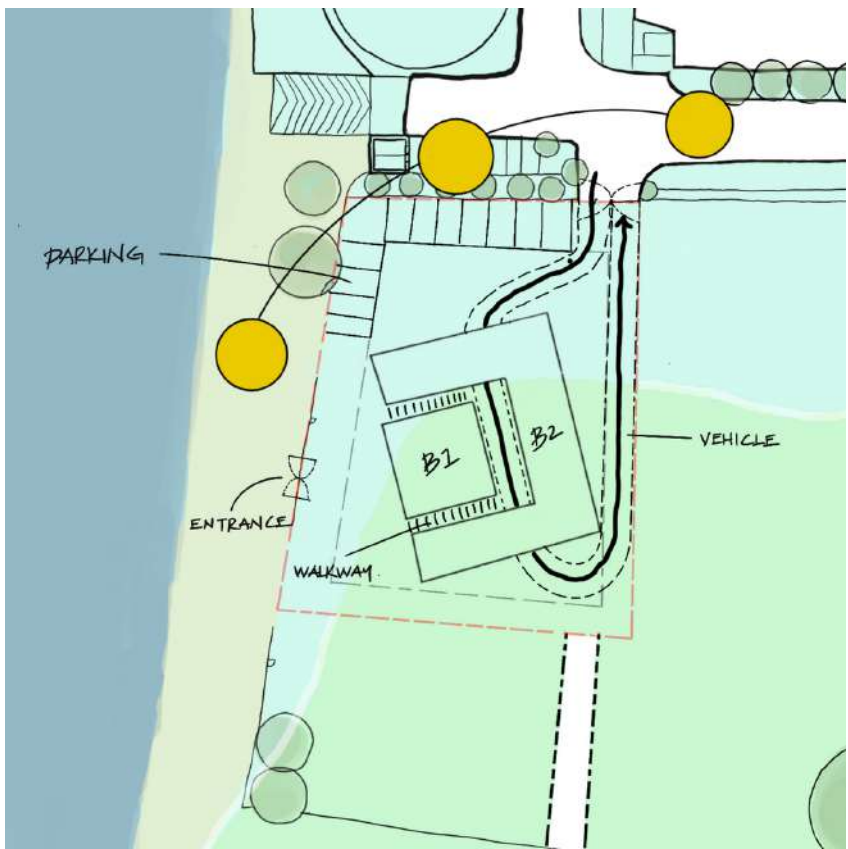
- Provide designated rubbish bins for trash



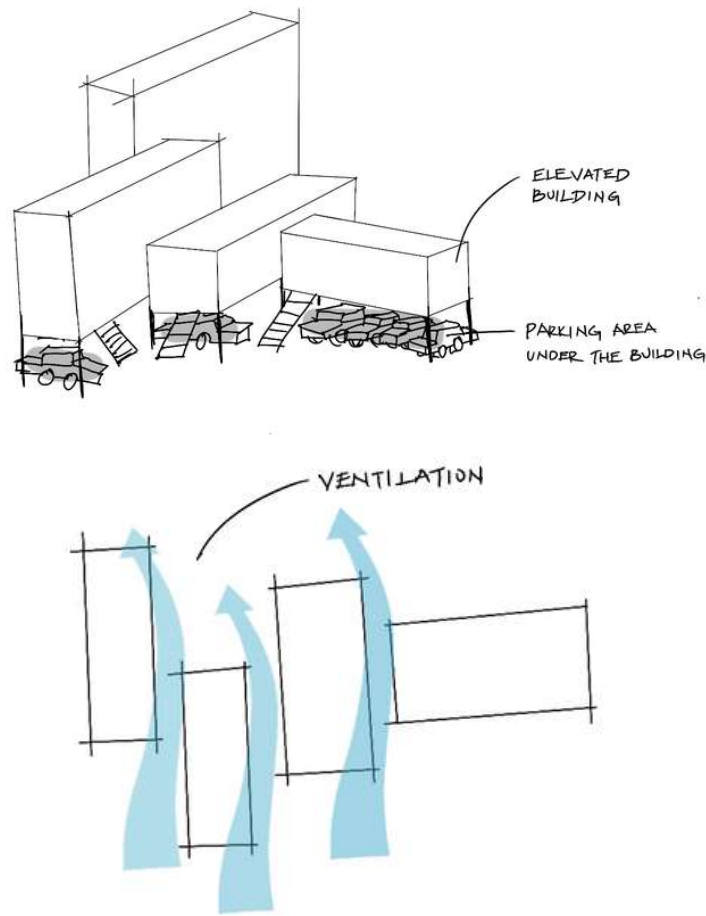
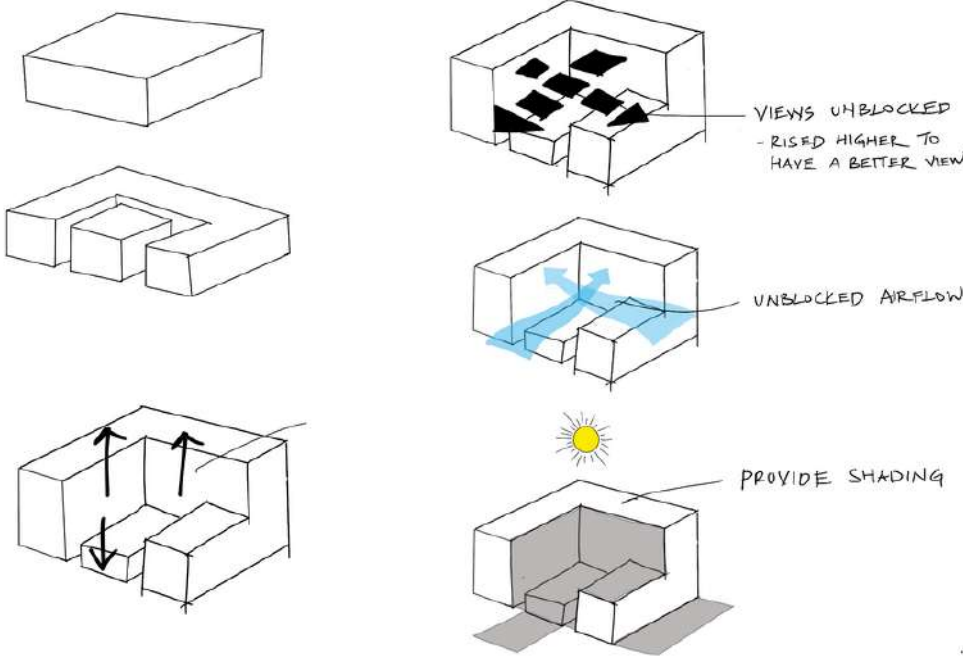
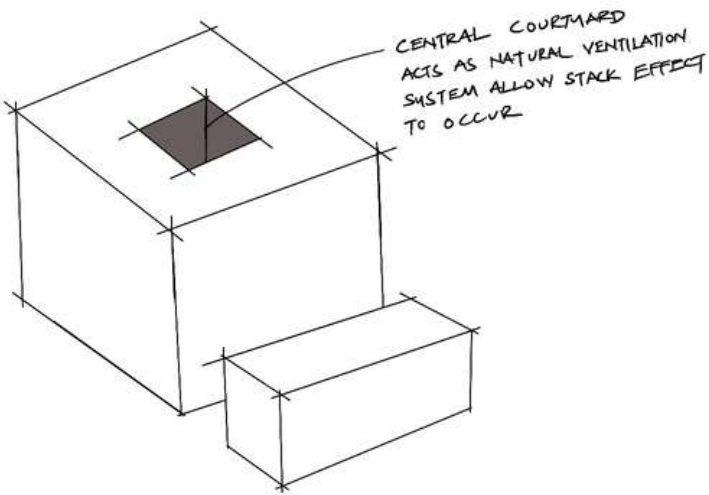
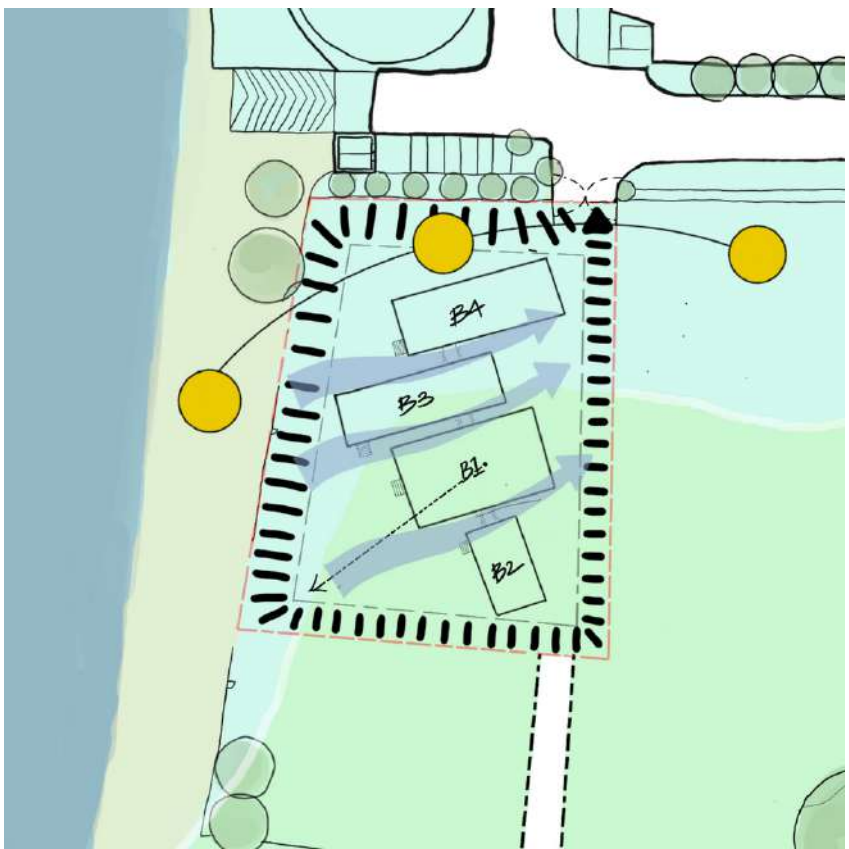
CONCEPT DEVELOPMENT 1



CONCEPT DEVELOPMENT 2



CONCEPT DEVELOPMENT 3





**THANK YOU  
VERY COOL <3**

