

AMERICAN UNIVERSITY OF BEIRUT  
UNDERGRADUATE CAPSTONE PROJECT  
IN  
LANDSCAPE ARCHITECTURE  
SUBMITTAL FORM

RIGHT TO ACCESS: THE SEA AND THE CITY

by

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LDEM 242 - Advanced Design – 6 Credits  
Spring 2015-2016  
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### **Acknowledgements**

This capstone project has been a challenging and exciting experience. I have applied the skills that I have learned throughout my academic years, while also learning new ways of thinking throughout this past year.

I would like to first thank my advisor, Dr. Yaser Abunnasr for all the advice and support throughout this journey.

I would also like thank my classmates and my family for the motivational support that they have given me.

I was fortunate enough to go through this

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## 01 The Coast of Beirut

Since the end of the civil war (1975-1990), Beirut has been exposed to re-construction projects that have altered the city's identity. During the post-war period, the regulatory framework for construction in Lebanon empowered private groups to plan the city, which gradually erased the culture and heritage in the city, leading to the weakening of the public sector. This has enabled the social dimension in laws to disappear, while also diminishing the accessible public spaces in Beirut.

The case of Beirut's coast is one case that has resulted in private exploitation while blocking the public from previously accessible sea-fronts. Beirut has been exposed to exploitation through various methods, and went through a major transformation in its sea shore.

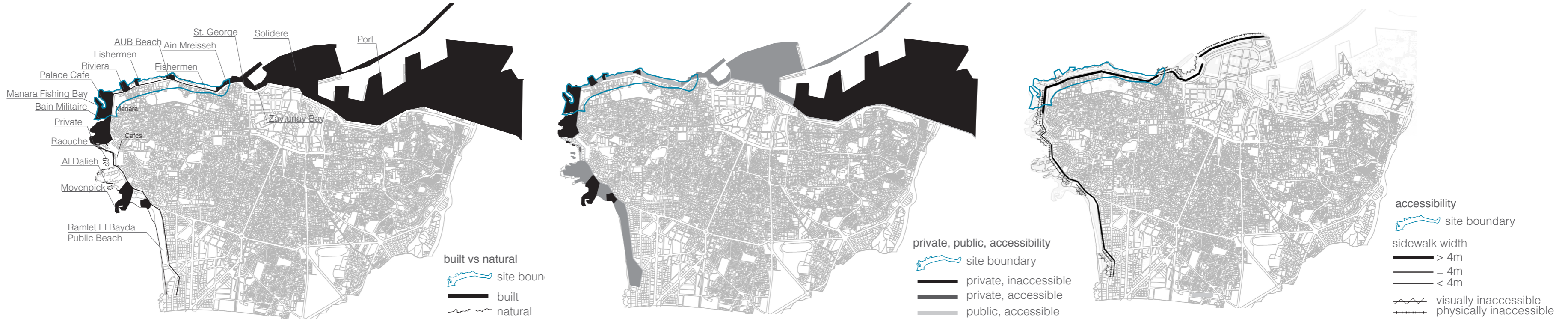


Fig. 1 Overview on the coast of Beirut



## 02 Project Statement

Beirut is gradually turning its back to the sea, a growing separation between the sea and the city has been created.

Rapid development along the coast has altered the relationship between the sea and the city, where accessing the sea became a battle to the people

This research project aims to assess the types of access that are present from the city to the sea. The stretch along the coast, from Ain El Mreisseh to Manara, is one of the last remaining coastal strips that still has a connection to the sea. Through revising and questioning the concept of the right to access, I aim to propose a design strategy that will introduce or enhance accessibility, while preserving the existing natural areas and cultural practices.

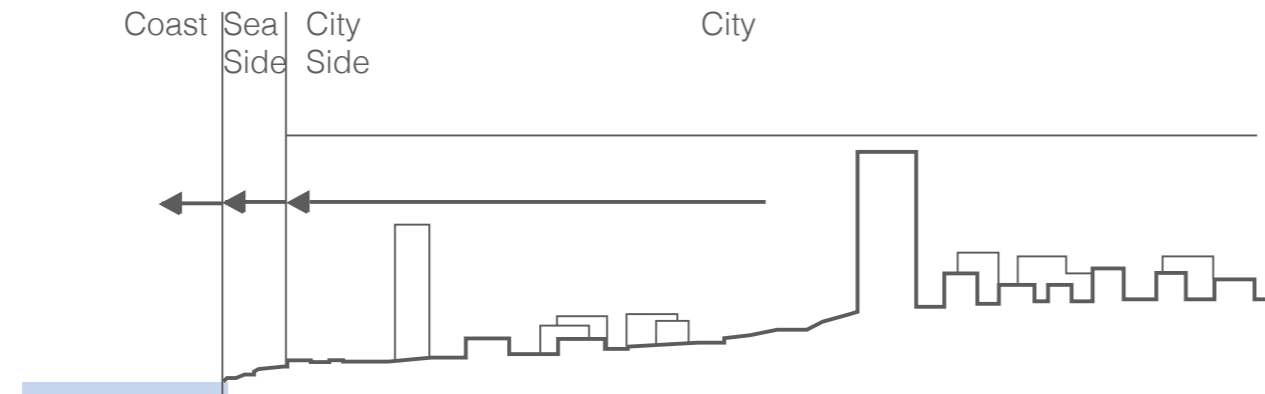


Fig. 2.0 Three layers of accessibility

I intend to study three layers of accessibility:

- 1 City to City Side
- 2 City Side to Sea Side
- 3 Sea Side to Coast

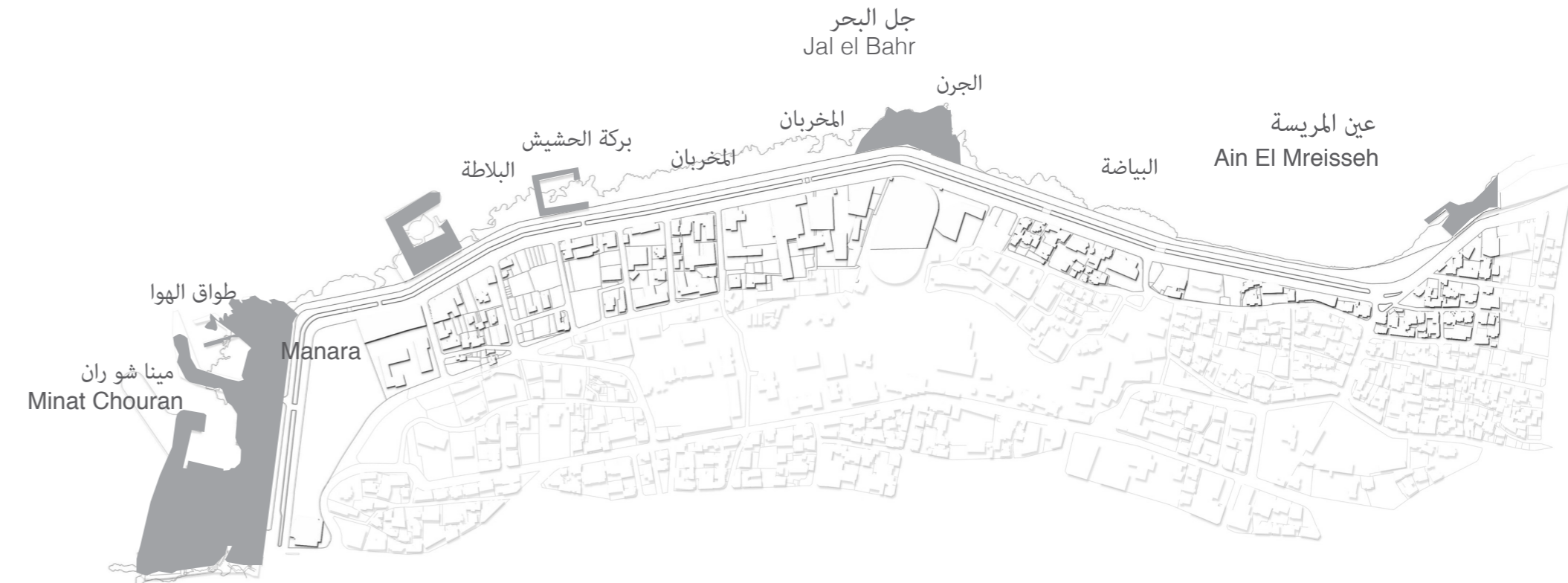
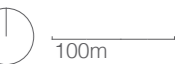


Fig. 2.1 Base map with private/built areas along the coast



### 03 History of the Coast

The site, from Ain Mreisseh till Manara was an empty green land, with traditional houses along situated along the coast. It was an open space that was directly connected to the sea, where people used to come to swim and have picnics.

The development around the sectors along this strip was due to the establishment of the American University of Beirut and the tramway that reached Bliss street (parallel to Corniche).

The identity of the site went through a radical transformation with time, as major events occurred (shown in the timeline).

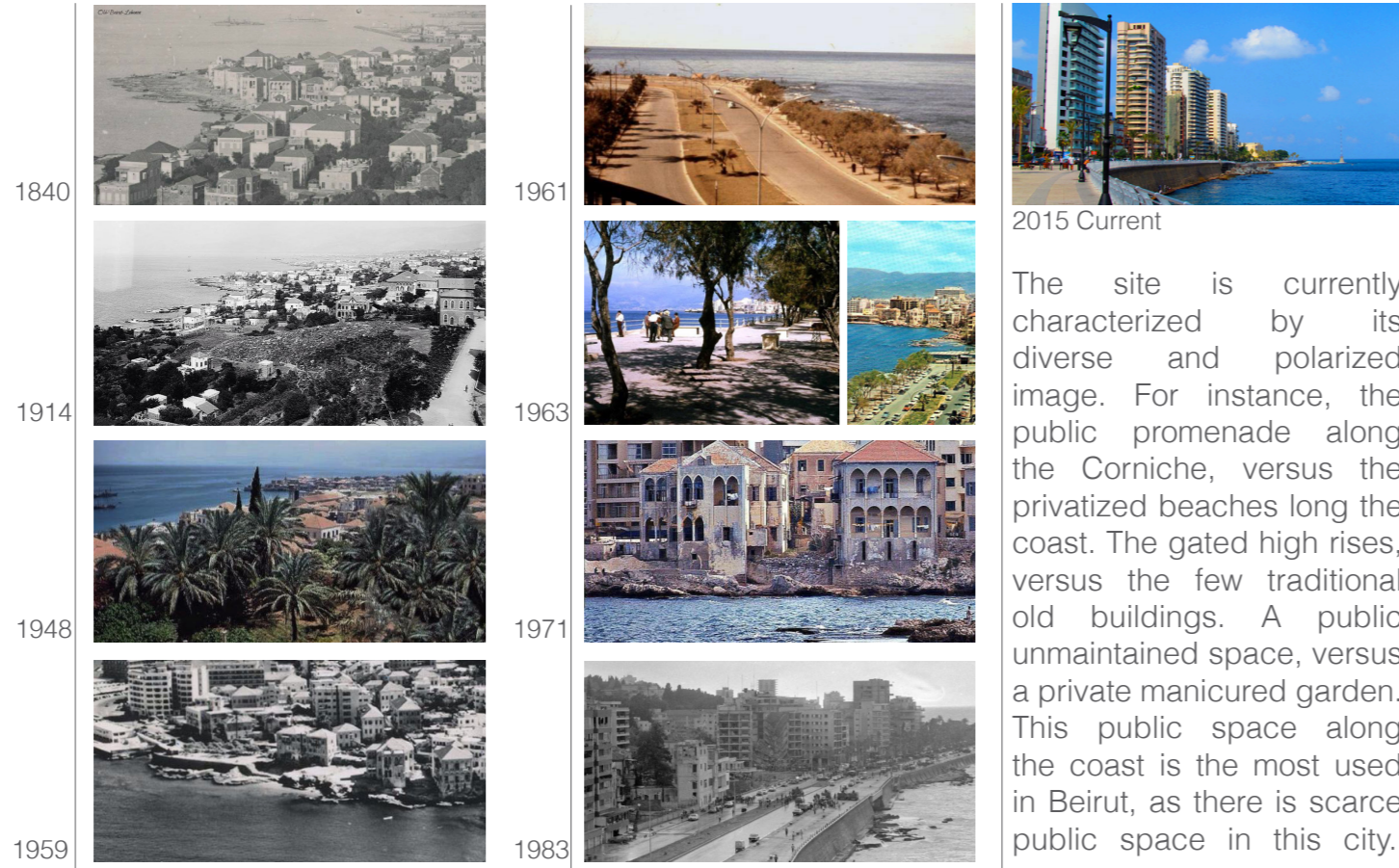


Fig. 3.0 History through pictures

The site is currently characterized by its diverse and polarized image. For instance, the public promenade along the Corniche, versus the privatized beaches long the coast. The gated high rises, versus the few traditional old buildings. A public unmaintained space, versus a private manicured garden. This public space along the coast is the most used in Beirut, as there is scarce public space in this city.

### Section II Contextual Inventory and Analysis

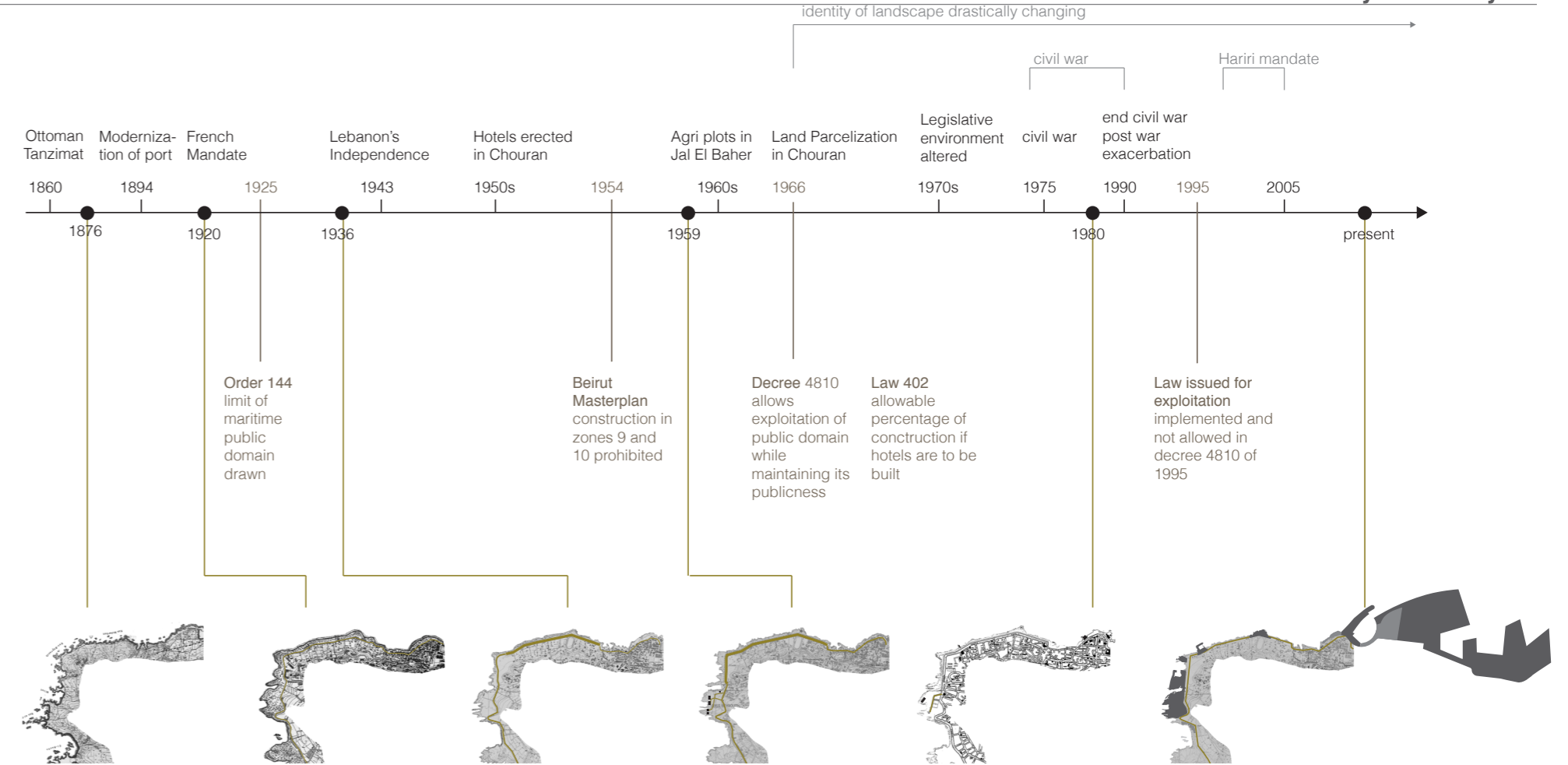


Fig. 3.1 Timeline of events, legal framework and demographic change



### 04 Land Use

There are three fishermen ports along the site. One, which is Ain El Mreisseh port, holds a traditional identity, while the other two in Jal El Baher and Minat Chouran are recent. There are the main educational institutions, AUB, ACS and IC. There is a main military area in Minat Chouran, which increases the amount of security present on site, thus creating an unwelcoming feeling to the people. There are a few commercial areas, leaving the non-commercial areas devoid of people's activities. There is some private squatting along the coast, due to the military 'resort', restaurants, and a hotel. The edge of the city is mainly residential, composed of high-rise buildings.



Ain Mreisseh Fishermen Port



High Rise Residential Buildings



Cafe



Riviera Hotel Resort

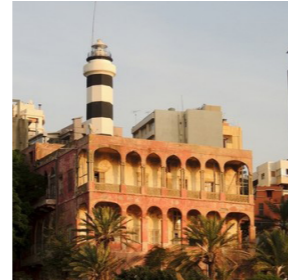


AUB

Fig. 4.0 Land use pictures



New Lighthouse



Old Rose House and Lighthouse



Fig. 4.1 Land use map

## 05 Legal Framework

The existing condition of private and public spaces is a major issue that should be considered while understanding the accessibility of the spaces in this site. According to Beirut's Masterplan, the maritime public domain should remain accessible to the public and construction is prohibited. However, due to some decrees, there has been illegal construction on the coast, leading to private ownership, hence decreasing the public space.

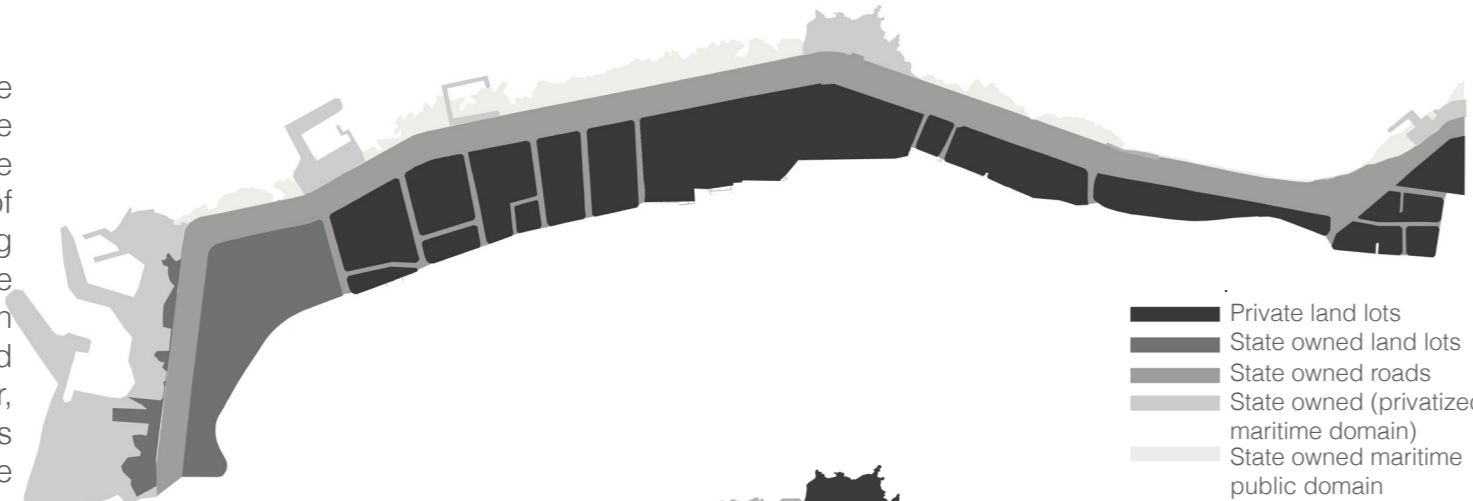


Fig. 5.1 Ownership map



Fig. 5.2 Accessibility to spaces map



Fig. 5.0 «right» to access

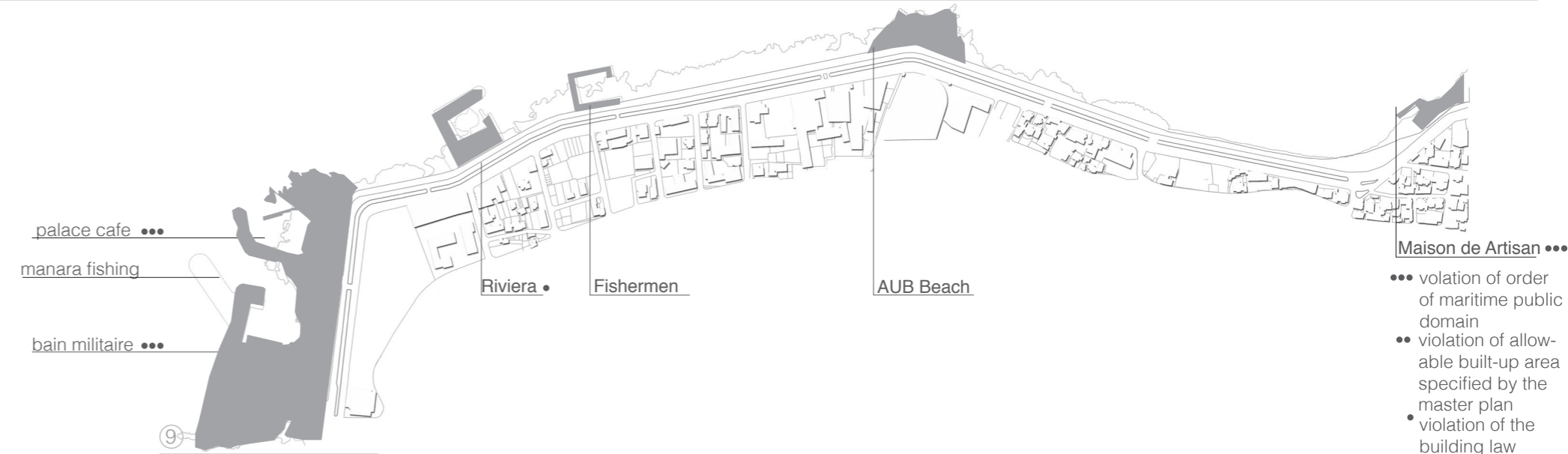


Fig. 5.3 Ownership and private exploitation map

### beirut master plan . zoning laws along the coast

zone 9 . construction of any kind is prohibited in this zone

### laws, decrees and orders that govern the seafront

#### Order No. 144

(issued in 1925) categorizes the sea, which is defined to include the furthest high- water point on the beach, as an inalienable maritime public domain.

#### Environment Law No. 444

(issued in 2002) establishes free and open access to the seashore as a right of every Lebanese citizen.

#### Decree No. 14914

(issued in 1966) limits the use of all plots in Zone 10 to sports, leisure, and maritime activities only. It also sets a one-floor construction limit (vis- à-vis height) in the zone, and a ten percent surface exploitation factor for real estate companies based on Article 19 of the Urban Planning Law.

#### Decree No. 4810

(issued in 1966) amended the Public Maritime Domain Law, and applies to all private property areas adjacent to the sea. It allows for the exploitation of the maritime public domain on condition that the government approves the nature of the proposed project and area sought for exploitation, as well as contributes to the Law No. 402

(issued in 1995) allows for the doubling of the exploitation factor for all plots with a surface area above twenty thousand square meters.



### 06 Circulation

Paris Avenue is the main road on the Corniche. The tertiary roads are perpendicular to the main one, and connect to the neighborhoods of the city.

The vehicular circulation and pedestrian flow are blocked at some points as they are faced with security due to military presence or educational institutions.

There is a bus route that stops along the strip. There are also many parking lots that cater for passers by, students and residents.

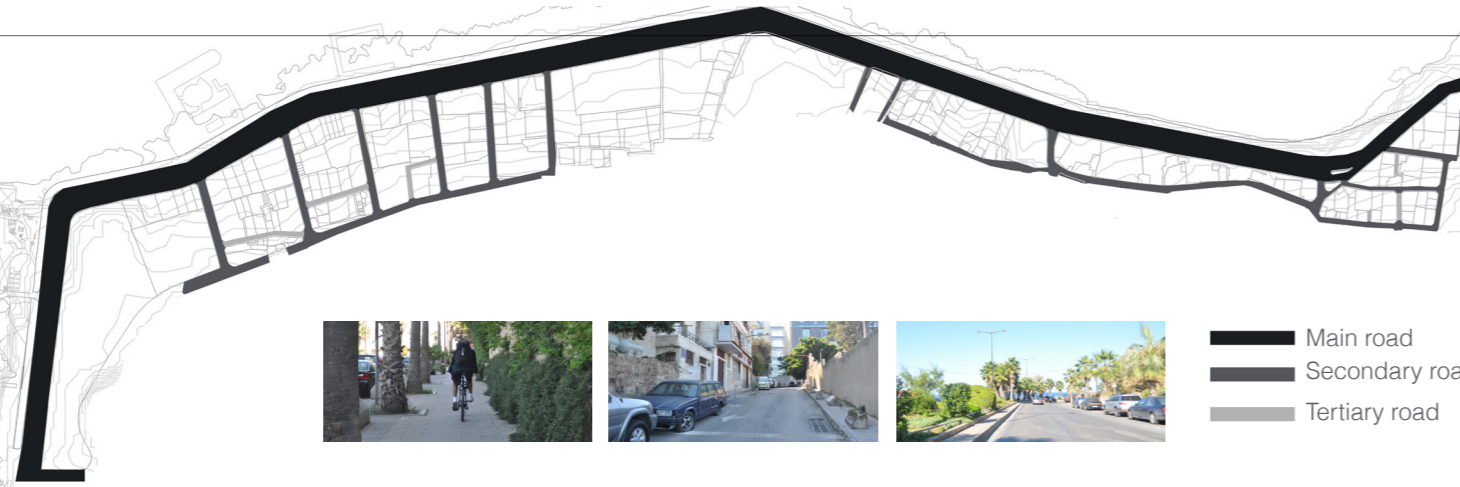


Fig. 6.0 Road network map



- Main road
- Secondary road
- Tertiary road



Fig. 6.1 Vehicular circulation map



- Vehicular circulation



Fig. 6.2 Pedestrian circulation map

- Pedestrian circulation

Fig. 6.3 Bus route map

- Bus route
- Bus stop

Fig. 6.4 Parking spaces map

- Parking on street
- Parking zone



07 Ecology

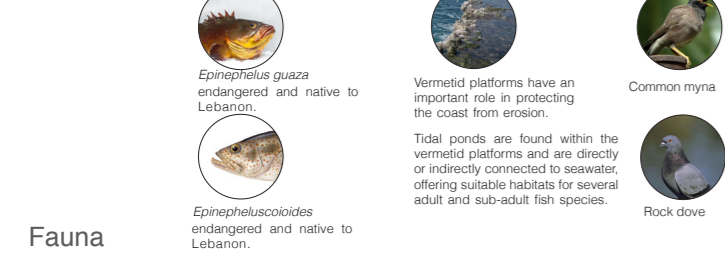
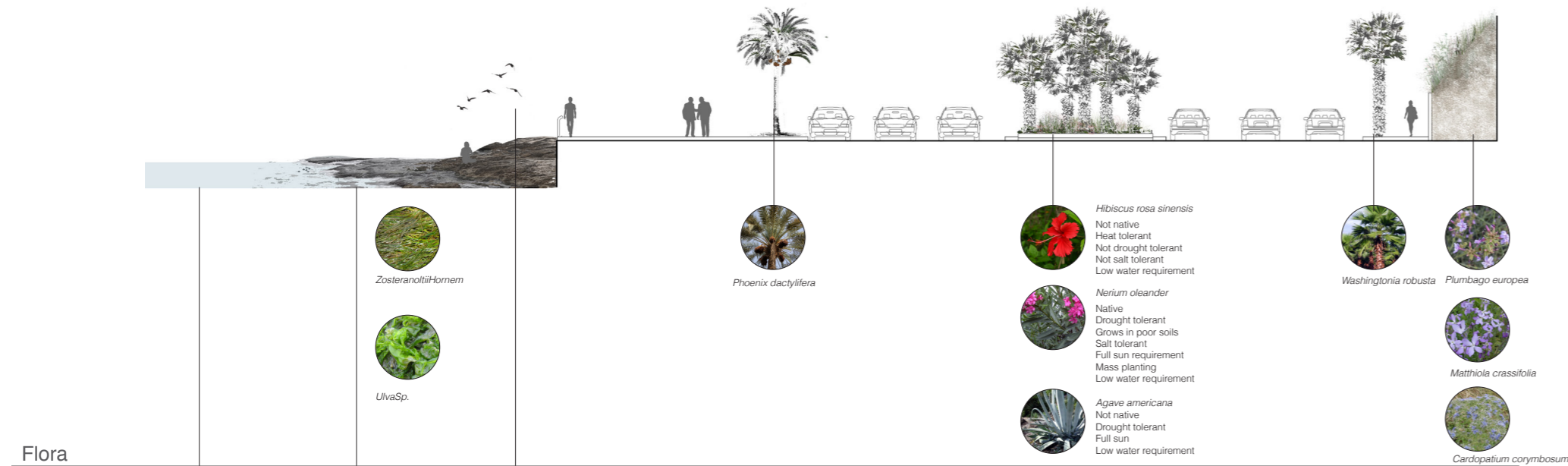
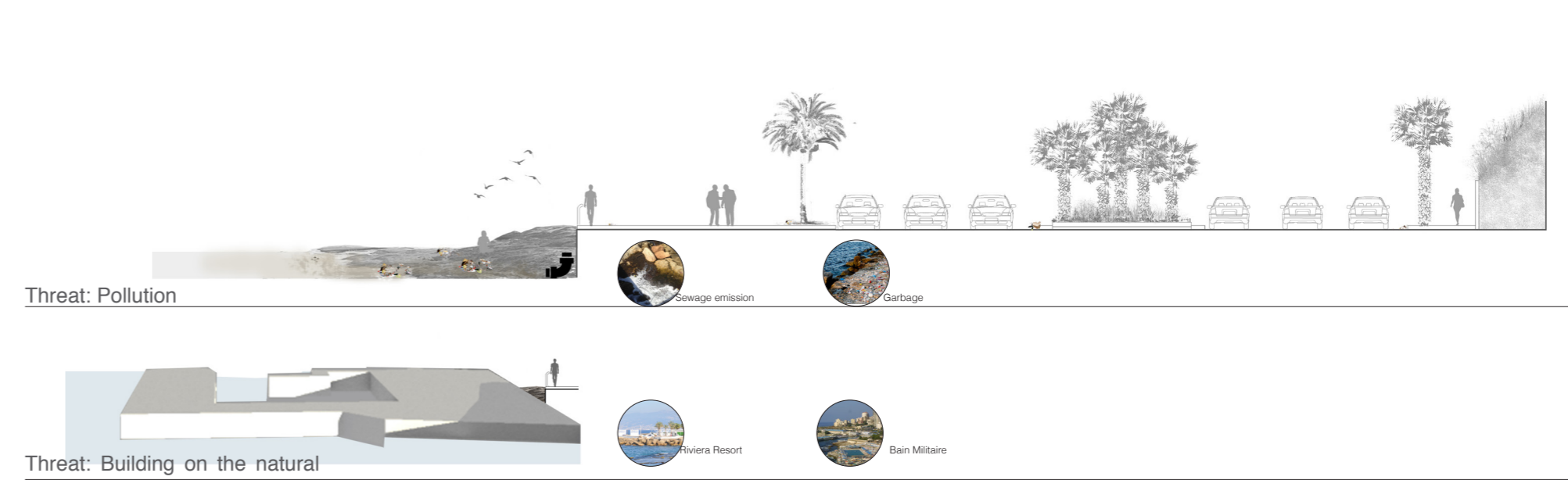


Fig. 7.0 Fauna and flora species

There are native flora and fauna species that the coast is rich with. This current marine ecosystem is slowly disappearing as the development is expanding.



The direct threat that occurs daily is the pollution of solid waste and garbage by the people, and the sewage emission system which calls for a proper water waste management system.

The second threat to the ecosystem is the construction on the maritime domain, which harms the natural vermetid platforms, as well as various fauna and flora species.



Fig. 7.1 Threats to the ecosystem



**08 Socio-Spatial Interaction**  
A Theoretical Approach

Spatial structures are dynamic and are not self-defined. They are not structures that exist independently of our surrounding. Instead, they are a result of the interactions between the social patterns and the spatial forms. There is interplay between social practices and the physical environment, and this relationship transforms a space to a place. The Corniche consists of several activities and different types of places due to the presence of different users.

According to Lefebvre's theory of production of spaces, "space is the result and cause, the product and the producer" (Lefebvre 1991). Space is produced by those who use it, and the users act in the space based on its structure. This action-reaction process between the physical and social entities creates unity between

action and space. Hence, space is not the background of our actions; instead, it becomes part of the action. As the linearity of the Corniche allows people to see it as a path, people have been using it for walking and jogging. Also, as the sidewalk of Corniche changes in width, the activities alternate from simply strolling along the path, to gathering in a wide space. Through exploring the relationship between spatial structure and human behavior, we can understand that spaces and people function together; as a space is shaped by its users, it also shapes the activities of the people in it. Furthermore, physical space plays a major role in the social world, as the social relations do not exist except in and through space, meaning that their "underpinning is spatial"(Lefebvre 1991).



Fig. 8.0 Social Activities

## 08 Socio-Spatial Interaction

### A Theoretical Approach

#### Space Becoming Multiple Places

The living space, which can be determining and can be determined simultaneously, becomes appropriated by the users (Kidder 2008). Through the appropriation of space by different users, diverse types of places emerge. In the case of the Corniche, appropriation can be seen through the people's control over the objects. For instance, makeshift access points across the balustrade have been constructed (i.e. ropes and ladders) to reach the sea. Also, concrete blocks have been moved around in order to use them as benches.

Spaces that are filled with activities form what we refer to as places, which are spaces with meaning. The re-imagining of space offers multiple identities of places, many of which

are newly introduced and defy the intended conception of the space (Lefebvre 1991). The alternative uses that emerge by the people are the result of subjective perception. The perceptions of the people in this site vary from seeing the Corniche as a contemplation place, picnic area, playground, outdoor gym and many other uses. Elements in the space are perceived by individuals based on what they view them as, hence attributing certain meanings to the objects. The balustrade along the Corniche is perceived as a bench for contemplation, hence transforming the identity of the balustrade from just being a fence, into an interactive edge, a bench. In turn, their perception is reflected towards the space itself, making the personal image visible to the public (Lynch 1960).

#### Places of Cultural Exchange

Culture is embedded in a place, which creates the cultural landscape that is constituted of the superimposed forms on the physical landscape. Building on that idea, geographer Carl O. Sauer believes that a cultural landscape is formed by a 'culture group' acting on a natural landscape; where culture is the agent and the natural space is the medium. John B. Jackson further emphasizes this idea by stating that a landscape is never a separate feature of the natural environment; instead, it is the place in which humans establish themselves through space and time (Elliott 2004). Landscape can be seen as a place of cultural exchange, where social and cultural practices can be exchanged in places between people and communities.

Consequently, these forms become cultural heritage (Elliott 2004). Jackson believes that the shared places, such as the streets, corners, houses and places of work can depict the history and society of the landscape, and this allows us to see ourselves in relation to the world around us, further building an image of our environment (Jackson 1984).

## 08 Socio-Spatial Interaction

### A Theoretical Approach

#### Building the Image(s) of the City

The image of the environment is formed through a two-way process, which occurs between the observer and his environment. Kevin Lynch introduces this concept of the selection process, in which the observer chooses what he sees while attributing to it a personal meaning. Hence, the image varies between different people (Lynch 1960). Lynch views the city through a process, in which the observer first identifies an element in the city and recognizes it as a separate entity. Then, a mental image of the object is built based on the spatial and pattern relation of the object to other elements and the observer. As a result, meaning is born within the observer, which creates a virtual and emotional connection between the observer

and the object; the object is not just seen now, it is also felt. The pattern of perception changes based on the external physical shapes of the elements and the experiences that the person observes and passes through. This becomes a learning process for the observer to read, perceive and navigate the city (Lynch 1960). Similarly to Lynch, Christopher Alexander relates the spatial forms to occurring events. The patterns of events in the city create the character of the place, which are formed by the physical form and the events that occur within it. The patterns are repeated in the city's fabric, forming the city's character (Alexander 1979).

#### Reading the Landscape through a Narrative

The concept of pattern language that Alexander introduces focuses on the features of the city that connect to the human self, which successively affect the way in which the human reads his surrounding (Alexander 1977). Along the Corniche, the patterns of the people along and across the linear strip create living patterns to the space. These living patterns that Alexander describes can become the events that are used as references to read the city. This results in reading the landscape through a narrative of associations and references. Based on our imaginations and the mental images that we build, we are able to orient ourselves in the space based on memory and experience (Lynch 1960). The patterns are not

only created by the people, but they can be within the environment itself; for instance, a wave crashing across the sidewalk. These events in the places create memories for the people, which allows them to locate themselves based on the place where the wave hit the sidewalk, where the fishermen gather, the makeshift latter across the balustrade, or where the person was once standing while contemplating the sunset across the sea. The landscape narrative allows places to configure narratives, in which landscapes are not only the background setting of the stories, but they are continuously changing. "It is through narrative that we interpret the processes and events of place. We come to know a place because we know its stories" (Potteiger 1998). Place becomes

an association or a reference point, and a narrative of events, which are written in the physical form of the landscape, consequently becoming concrete and tangible elements in the landscape that make its identity (Potteiger 1998).



**08** Socio-Spatial Interaction  
A Theoretical Approach



Fig. 8.1 Photographic Narrative

## 08 Socio-Spatial Interaction

### A Theoretical Approach

Based on an oral history project by «Dictaphone» group, we can trace back memories and cultural practices along the coast.

#### Minat Chouran

We used to swim in the area currently known as Sporting Club. The place was called Hammam Kamar. Swimming was for free, no entrance fee was required. Pottery was sold at the current location of Bain Militaire. In the nineteen sixties, this became the Sporting Club and an entrance fee was set. (Residents of Qoreitem)

In the nineteen fifties, we used to swim in Sporting Club which had a different name at the time, and it was a free entrance. There used to be kiosks that sold coffee and arguile and we used to cross the rocks to swim. (Residents of Ashrafieh)

ميننا شوران  
Minat Chouran

جل البحر  
Jal el Bahr

عين المريسة  
Ain El Mreisseh

Jal el Bahr

By the sea, there was a steel stairs which gave access from the Corniche down to the rocks where we used to swim. During spring and summer times, we used to swim everyday around 6/5:30pm at the stone platform in the area between IC and Riviera. (Residents of Ras Beirut)

Ein el Mreisseh

In 1973, many houses were demolished and the water spring was covered up to give way for the enlargement of the Corniche. Before this had happened, Ein el Mreishh gulf area, stretching from the water spring up to the mosque, provided a natural indent where boats were loaded and a rocky beach was used by the neighborhood residents and fishermen. Since 1943, Normandie Beach, which was located at the water spring, became a main destination for Ras Beirut residents. There were several cafes in the area including Café el Jamal which was demolished during this current year. (Residents of Ein el Mreisseh)

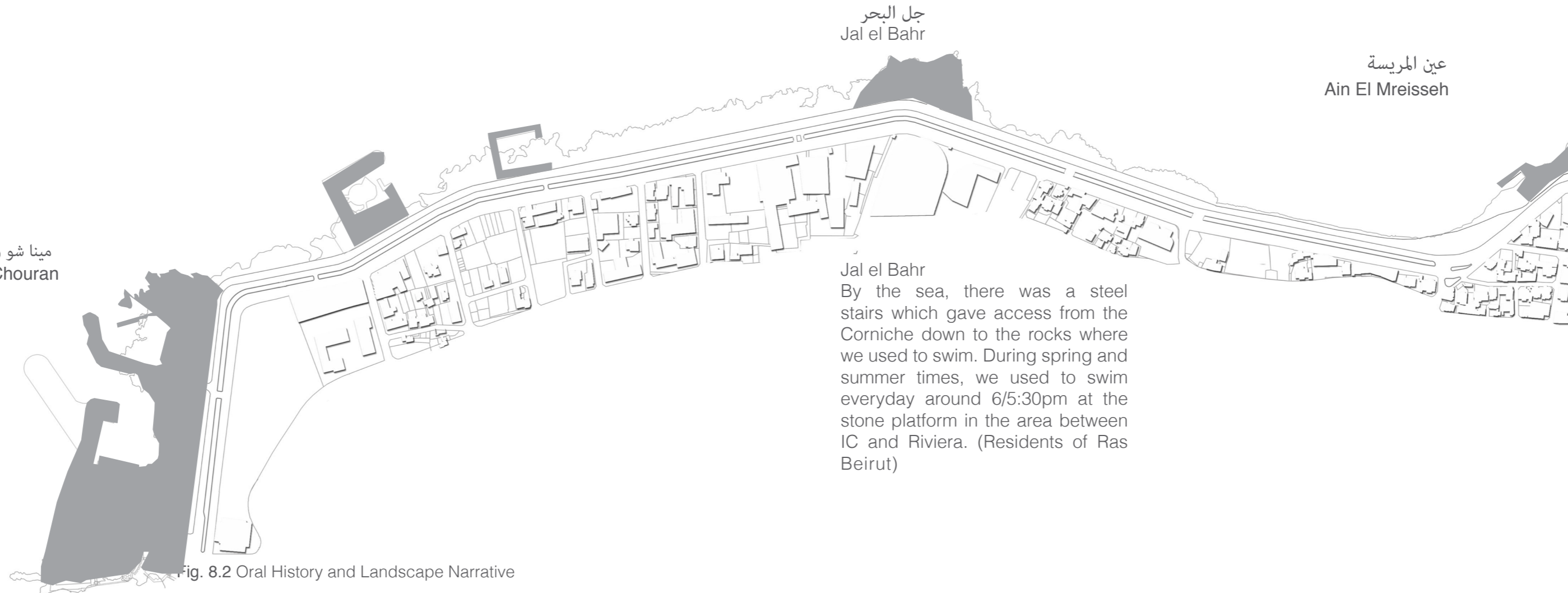
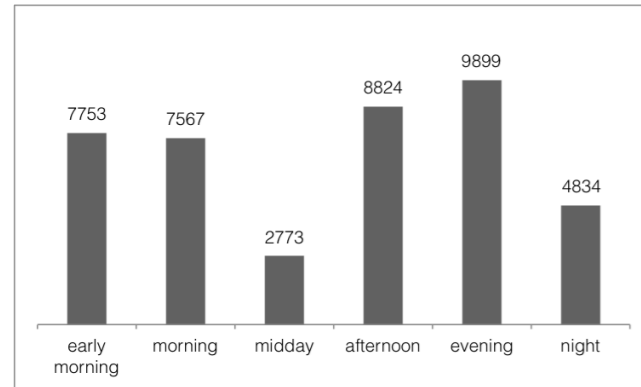


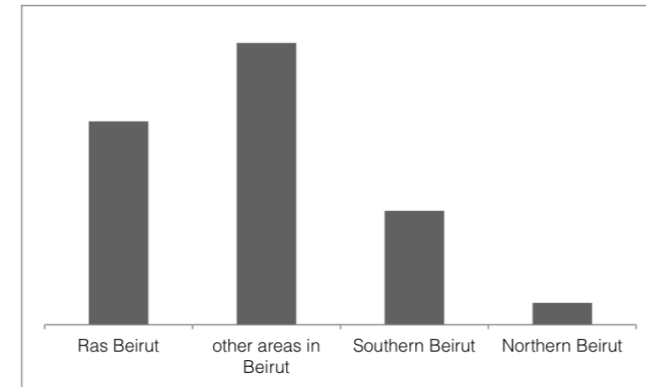
Fig. 8.2 Oral History and Landscape Narrative

## 09 Social Statistics

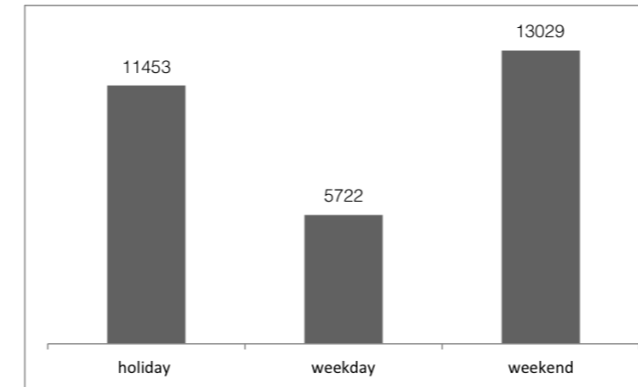
Statistics based on the social activities were made after observations and calculations.



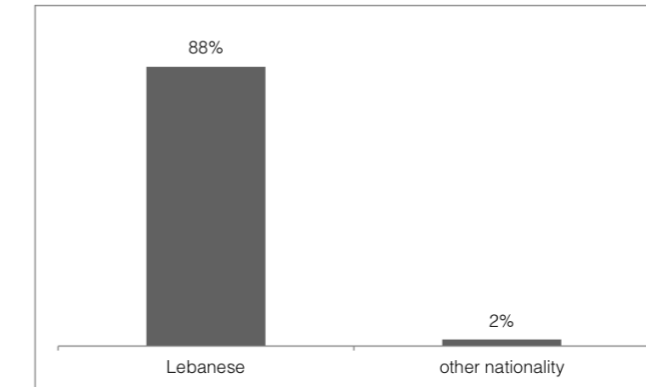
Number of people during time slots



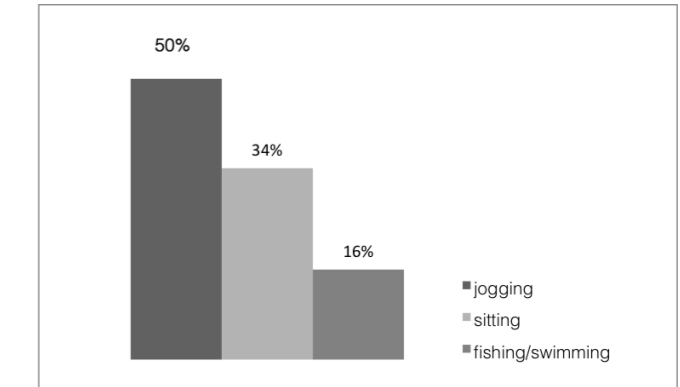
Where people come from to the Corniche



Number of people during different types of days



Locals are more abundant than foreigners



Types of users

Fig. 9.0 Statistics on Social Activities



## 10 Accessibility

Accessibility in this case can be studied through the barriers existing on site.

This layer can determine the relationship between the people and the space. Here, we can notice that there are spaces that act as barriers due to security, and there are barriers such as the balustrade that create the 'informal access' by the people, from the city to the sea.



Fig. 10.0 Barriers map

security measure map

- private security
- institutional
- governmental
- security booth
- movable fence
- concrete block
- surveillance



## 10 Accessibility

Accessibility in this case can be studied through the physical access existing on site.

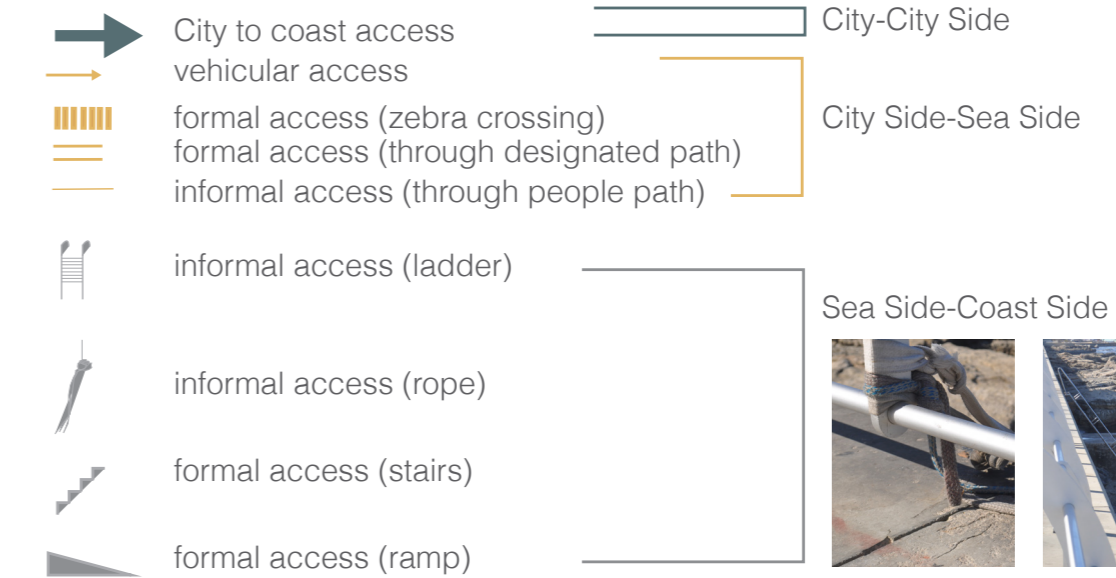
There are three layers of access shown in the map, and these layers determine the circulation and connectivity between the city and the sea.

There are formal access points versus informal ones.



Fig. 10.1 Physical Accessibility map

3 layers of physical access



### 10 Accessibility

Visual accessibility on site is present along the Corniche except for the build up maritime domain. Due to the hilly topography, there are visual access points from the inner city.



Fig. 10.2 VisualAccessibility map



Continuous visual access along the Corniche

Visual access from the hill



### 11 Ecological Approach

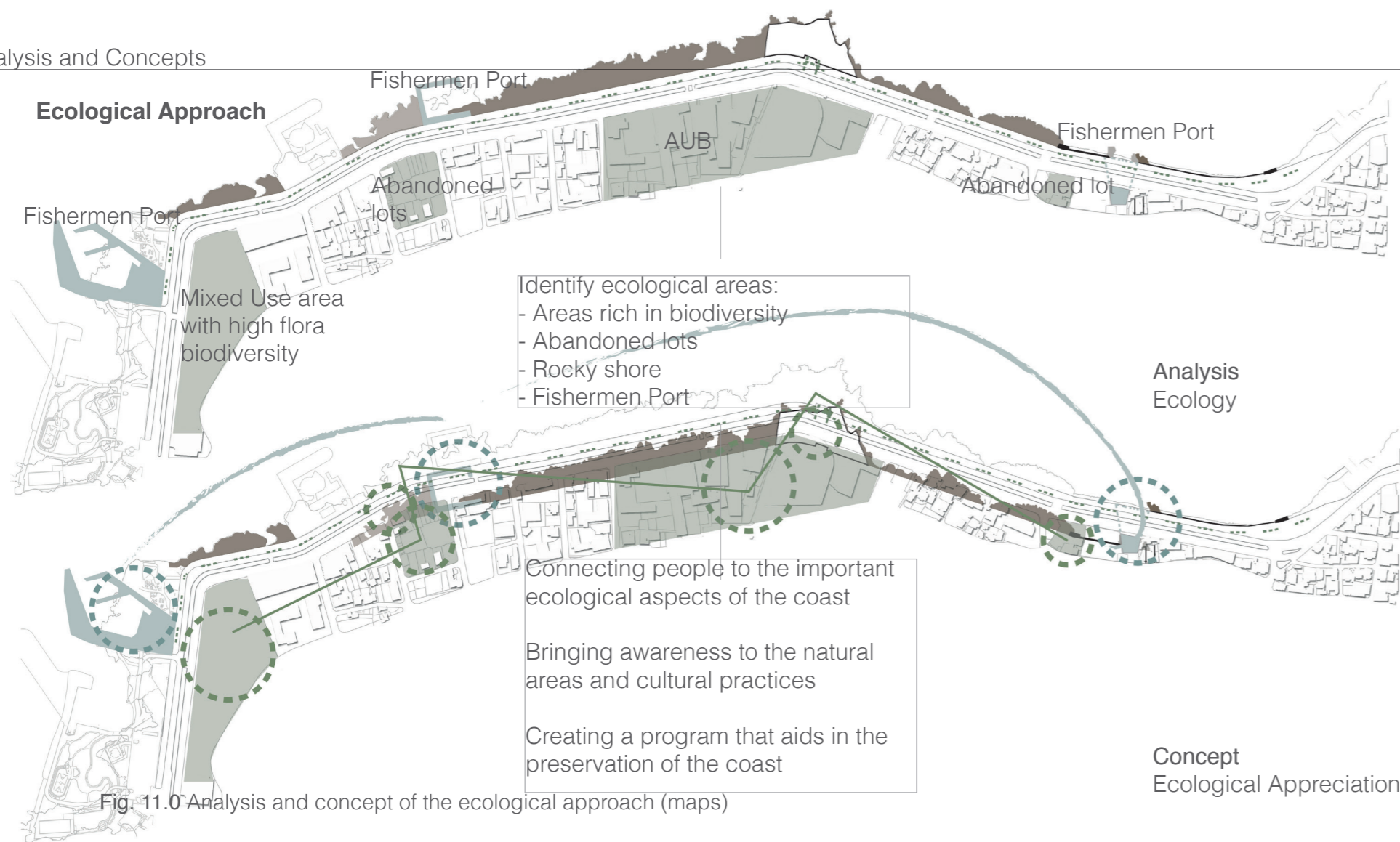


Fig. 11.0 Analysis and concept of the ecological approach (maps)

### 12 Barriers

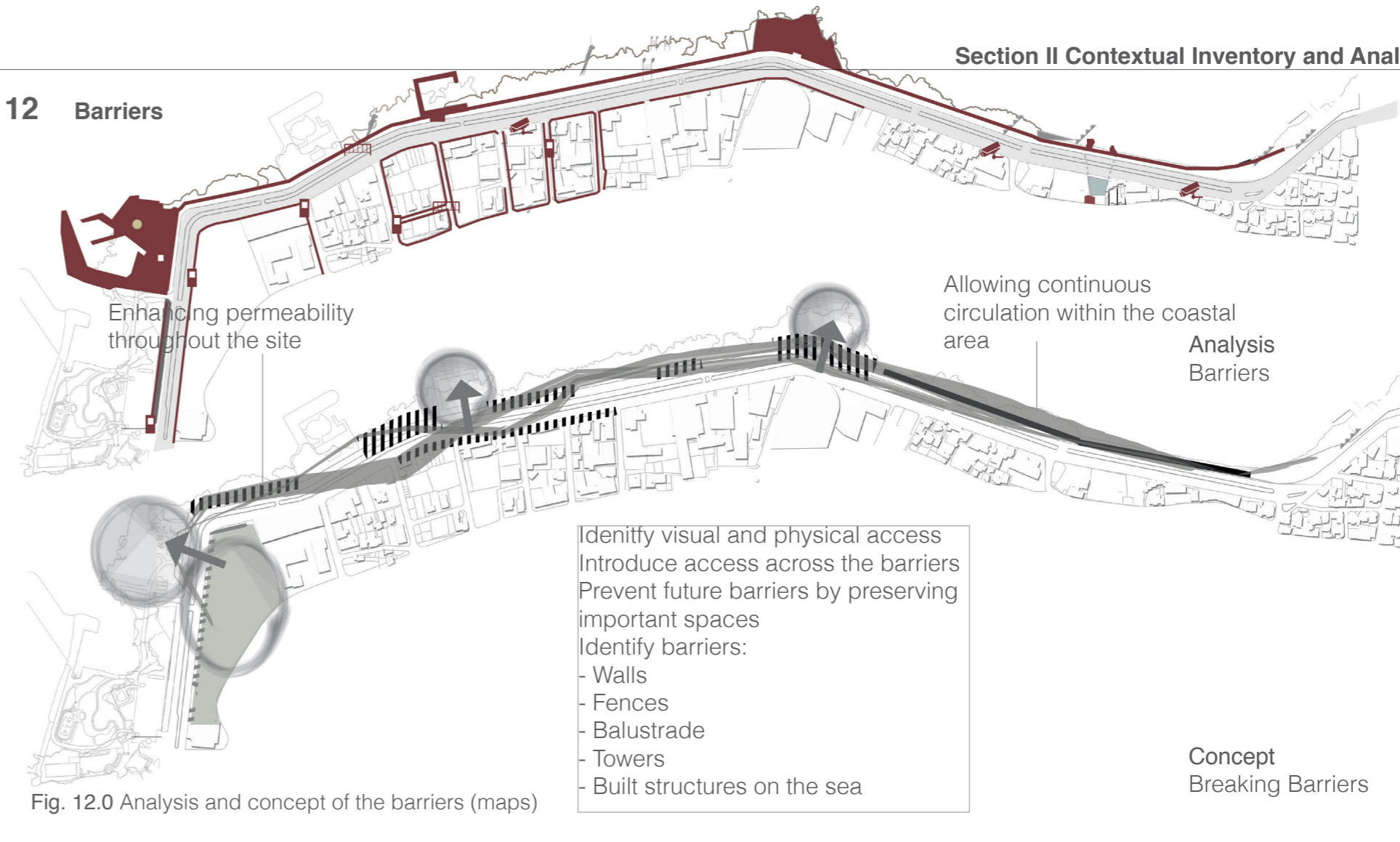


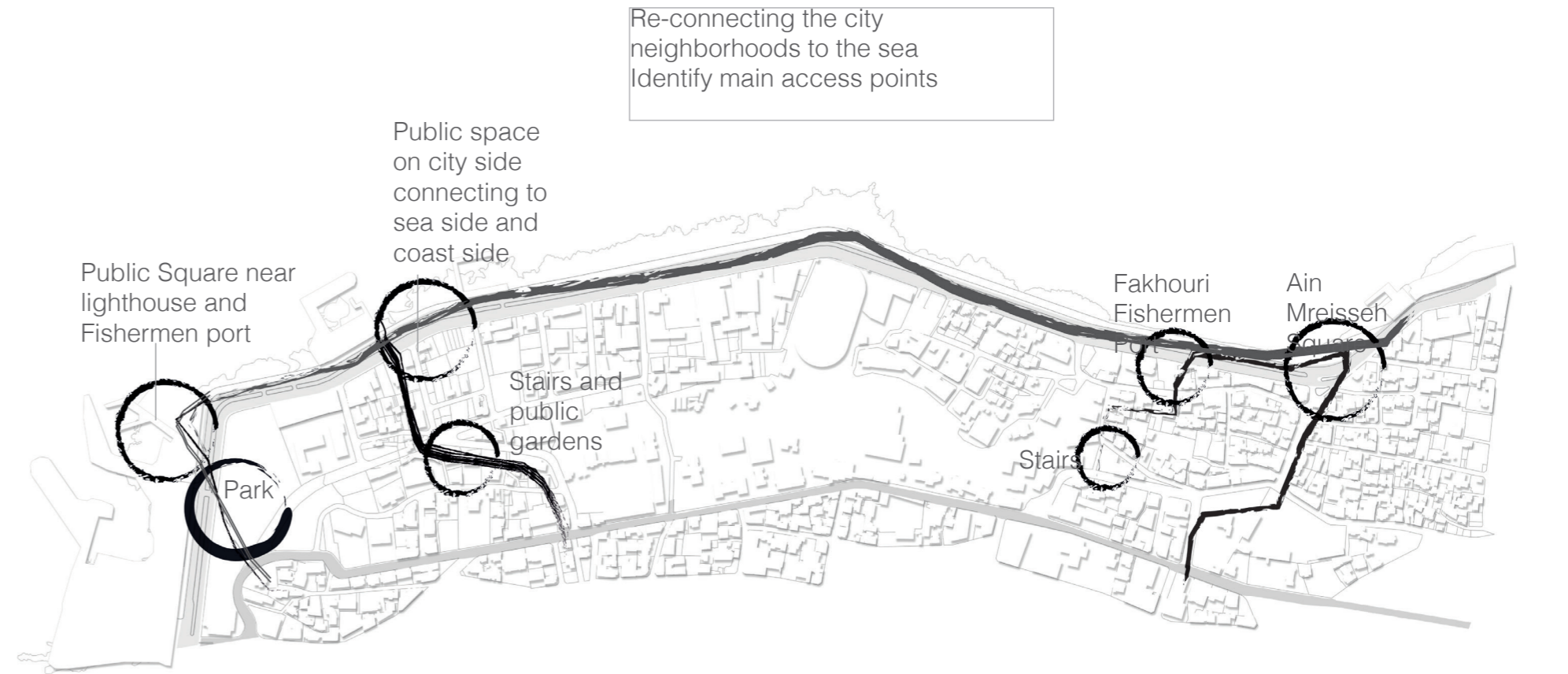
Fig. 12.0 Analysis and concept of the barriers (maps)



### 13 Context



Analysis  
Context

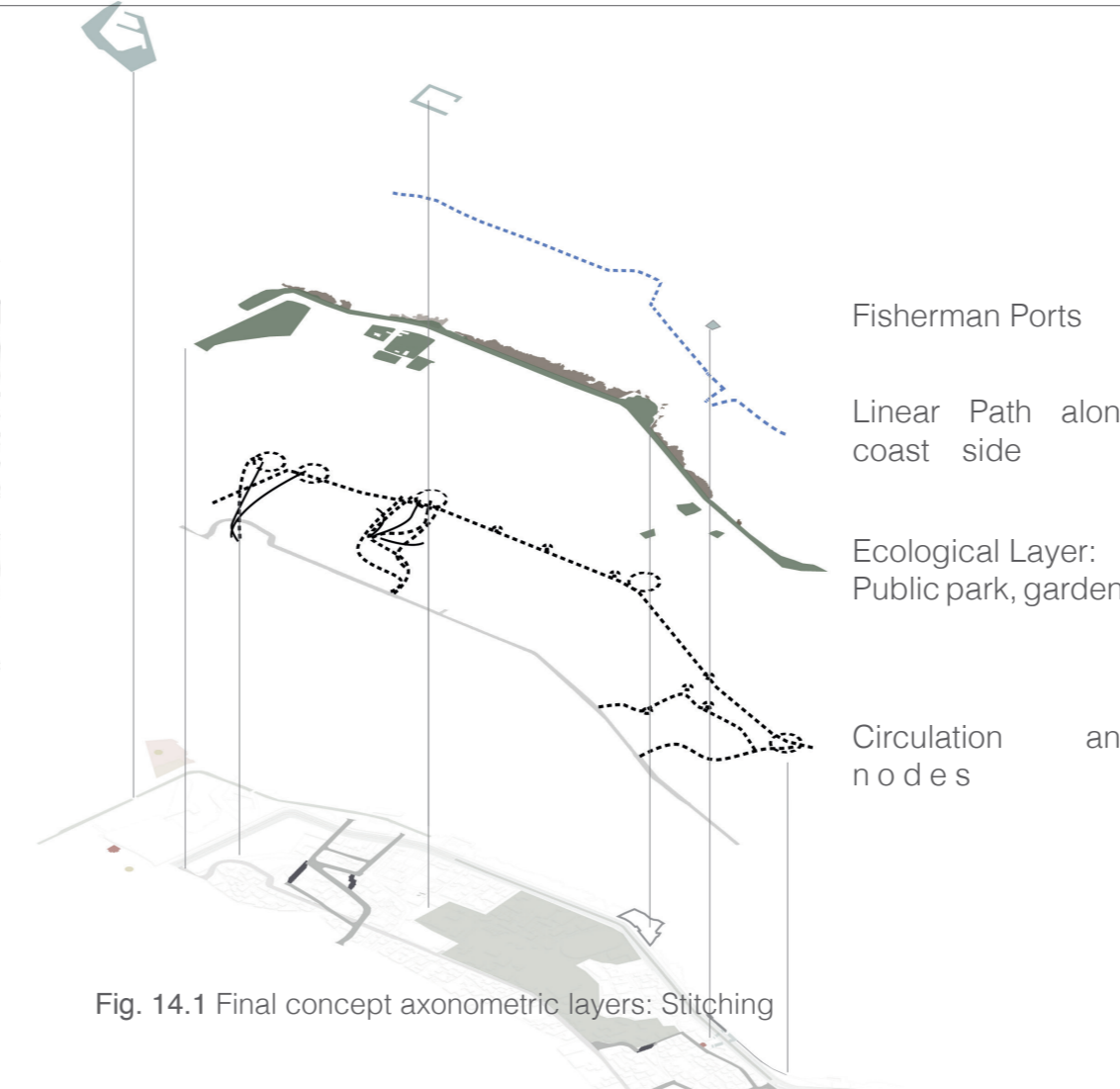
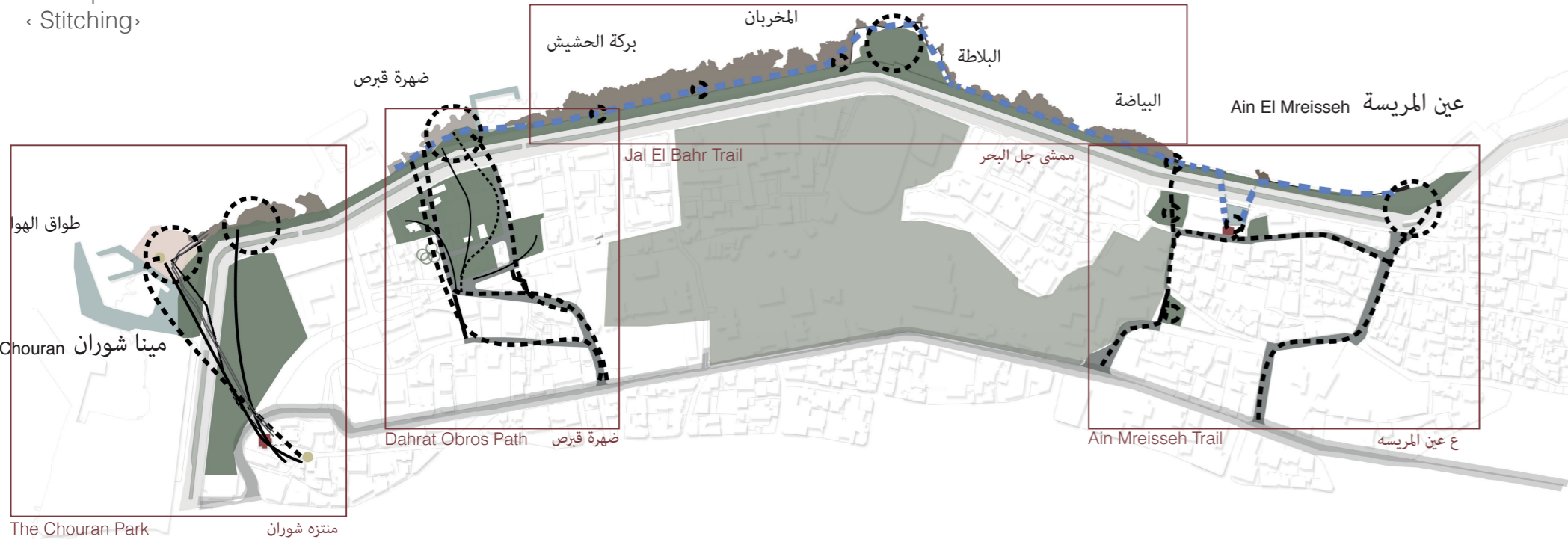


Concept  
City to Sea Connections

Fig. 13.0 Analysis and concept of the context (maps)

### 14 Final Concept: Stitching

A combination of the previous concepts was created to form «Stitching»



Fisherman Ports  
 Linear Path along coast side  
 Ecological Layer: Public park, gardens  
 Circulation nodes and nodes

| Purpose   | Strategy   |
|---|--|
| Reconnecting the city neighborhoods to the sea  | Identify city elements:<br>- Major access paths from city to sea<br>- Stairs<br>- Open Spaces<br>- Landmarks<br>- Fishermen ports<br>- Rocky shore |
| Improving the imageability of the city, where the city's elements are easily identifiable and are grouped into an overall pattern | Connect the elements through a holistic approach   |

Fig. 14.0 Final concept map: Stitching

Fig. 14.1 Final concept axonometric layers: Stitching



# 15 Case Studies

## Background

Project Name Harborfront  
Location Copenhagen, Denmark  
Year 2002, 2003, 2013

Strategy by Municipality of Copenhagen  
Commissioner Port of Copenhagen  
Interventions by Multiple designers

## Problematic

As the development along the harbor separated the people from the water, this project aims to regenerate public life along the water while providing meaning to the place

## Strategy

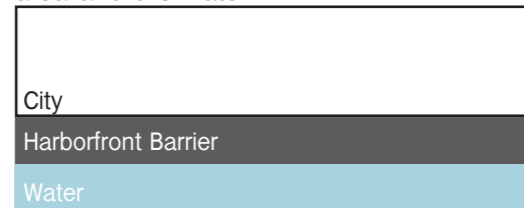
- 1 Interventions that create a dialogue with the history of the place
- 2 The project creates a new type of public space for the city, characterized by its own identity

## Process

Copenhagen's harborfront has been developed through a long process divided into several phases, focused on different areas.

### 1970s

No parks in the area of Islands Brygge  
 Commercial and industrial harbor stood as a barrier between the existing residential area and the water



Former Harborfront

### 1978

Local residents organized an action committee (led by architect Poul Jensen and landscape architect Annelise Bramsnaes) to prevent a new vacant area from being built

### 1983

1 hectare of land granted by the Harbor Authority. Residents planted trees and grass to create a park, which opened in 1984



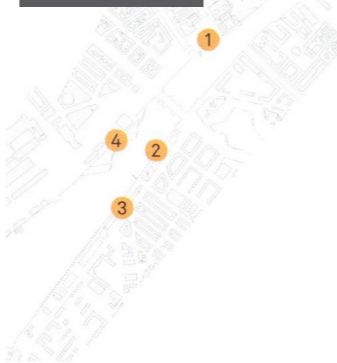
### 1995

Municipality of Copenhagen provided economic support for an extension of the park by 2.8 hectares  
 Municipality took charge to improve the quality of the harbor water

### 2002, 2003, 2013

Interventions built along the waterfront, such as three Harbor Baths

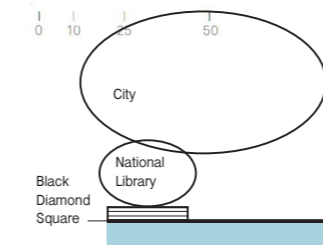
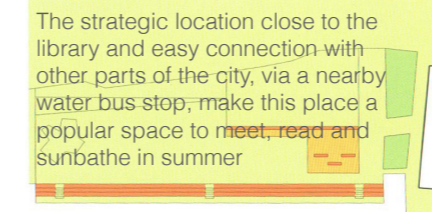
## Interventions



- Accesses ▶
- Relaxation areas ■
- Sitting areas ■
- Circulation ■
- Vegetation ■

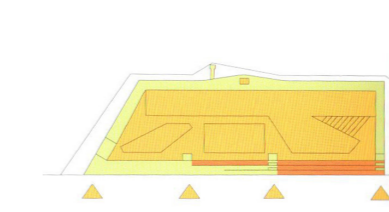
### 1 Black Diamond Square

The National Library is a city landmark known as Black Diamond. The cafe-terrace outside the Library has become a popular public



### 2 Harbor Bath at Islands Brygge

Architects Julien de Smedt and Bjarke Ingels  
 Built in 2003  
 Symbol of the harbor's regeneration



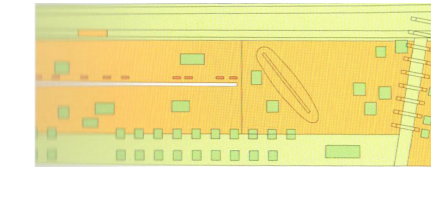
Has 5 pools and a capacity for 600 people

The Harbor Bath designed as a place to exercise, socialize and play

It was built following the improvements of the water quality in the harbor

### 3 Havneparken in Islands Brygge

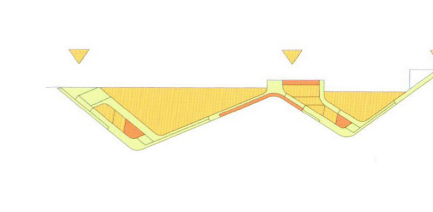
Long waterfront park  
 Located at the center of the park  
 Commemorates the history of the site



Integrates a fragment of a railroad track and an old train car to remind visitors of the site's industrial past

### 4 Kalvebod Waves

Architects JDS architects  
Area 8,500 m<sup>2</sup>  
 Walking promenades, resting and sports areas



A sinuous wooden promenade connects the edge of the pier with the water enclosing two plazas, several facilities and swimming pools



# 15 Case Studies

## Background

Project Name Waterfront Seattle  
Location Seattle, United States  
Year 2012  
Landscape Architect James Corner

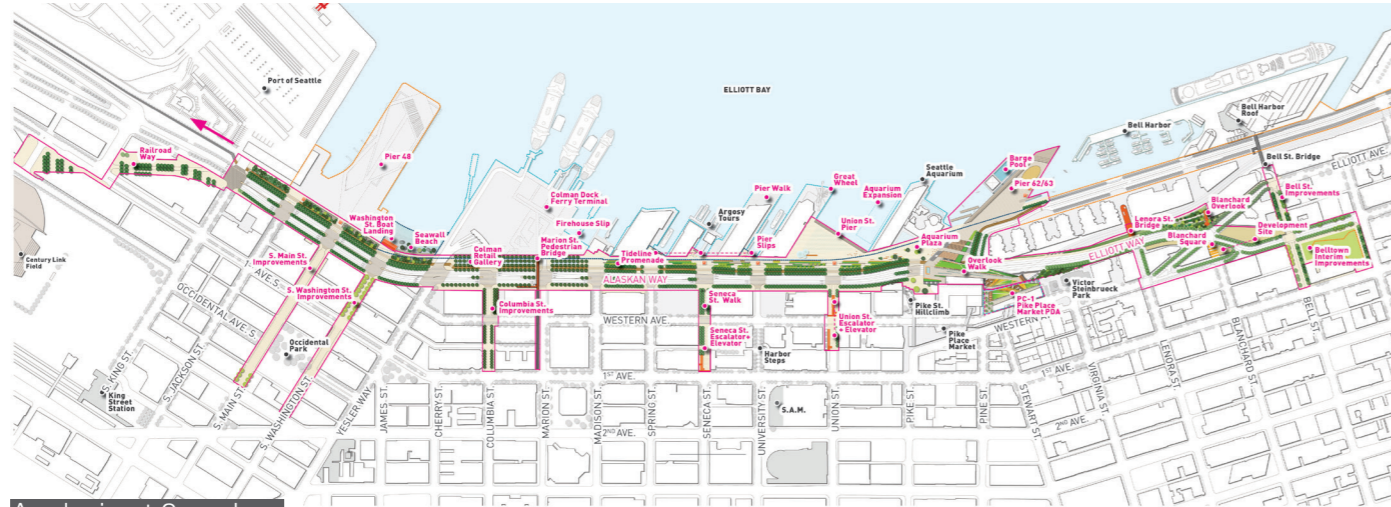
## Problematic

As the central Seattle waterfront is aging and lies disconnected from the city, the City of Seattle aims to create a "waterfront for all", thus transforming the central waterfront and reconnect Seattle to Elliott Bay.

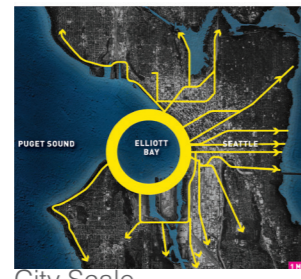
## Objectives

- Create a Waterfront for All
- Put the shoreline and innovative, sustainable design at the forefront
- Reconnect the City to its Waterfront Embrace and celebrate Seattle's past, present and future
- Improve access and mobility
- Create a bold vision that is adaptable over time
- Develop consistent leadership –from concept to construction to operations

## Site Plan



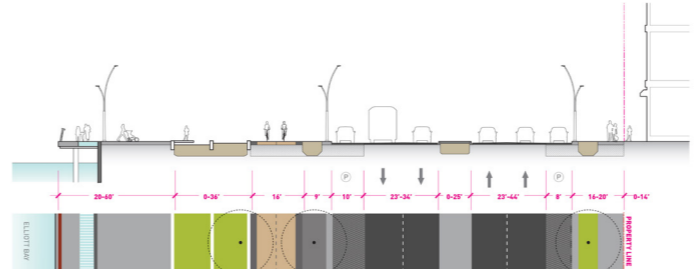
## Analysis at 3 scales



## Two Approaches

### Urban Street

The streets and pedestrian promenade act as connectors between existing shopping, dining, boating and cultural activities, while also connecting people to new waterfront destinations and the city beyond



### Zoom in Plan of Alaskan Way



### Section of the Bike Path



### Waterfront

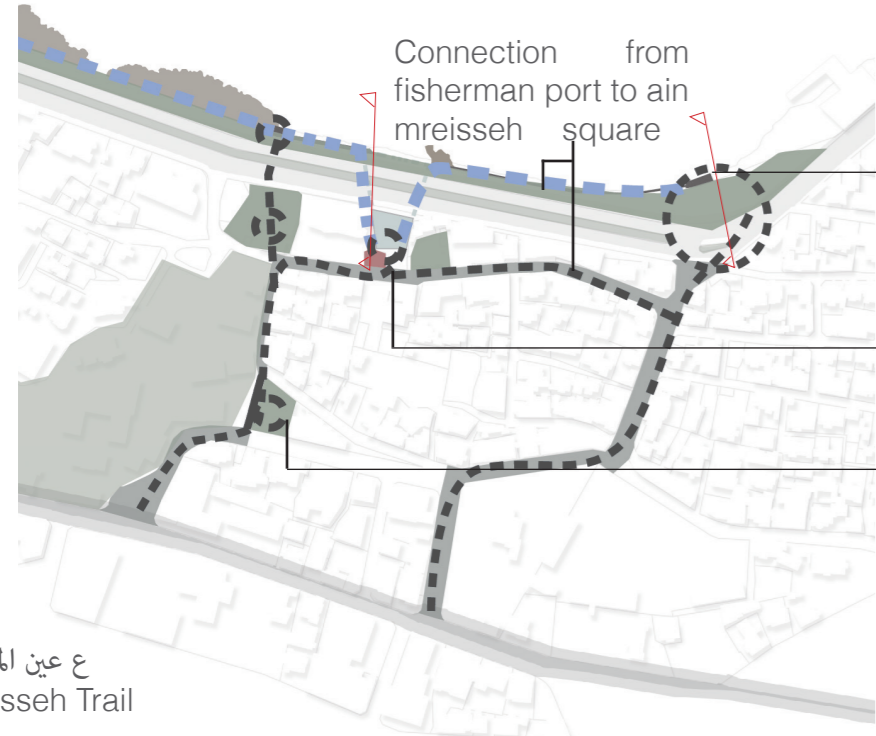
The waterfront was organized by zones of programmatic focus. Those include specific neighborhoods such as Pioneer Square and Belltown, a retail area at the historic piers, etc...



- New Destination (red circle)
- Existing Destination (grey circle)
- Transit Routes (dashed line)
- Waterfront Public Realm (yellow line)
- Bike Path (green line)
- Alaskan Way and Elliott Way (grey line)

# 16 Stitching: Four Zones

## Zone 1



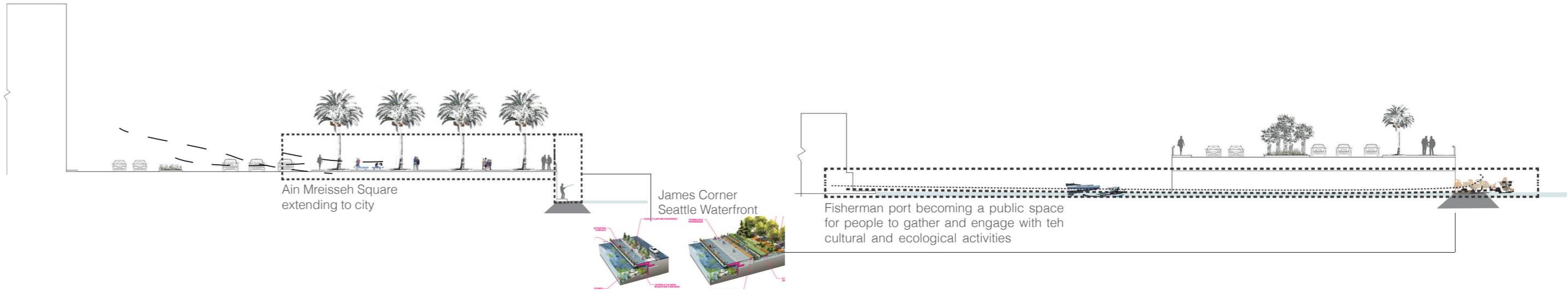
Ain Mreisseh square connecting to city, and not just the sea side

Sea Trail from Fisherman Port to concrete slabs on the sea

Stairs near garden-potential to maximize public green spaces

عين المرسيه  
Ain Mreisseh Trail

Fig. 16.0 Zone 1 Program Development





### 16 Program Development: Four Zones

#### Zone 2

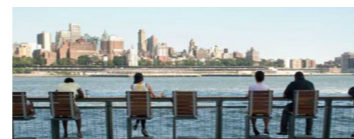
A proposal for AUB to open its borders along the coast side

Transforming AUB beach to an open public space which extends from the sidewalk

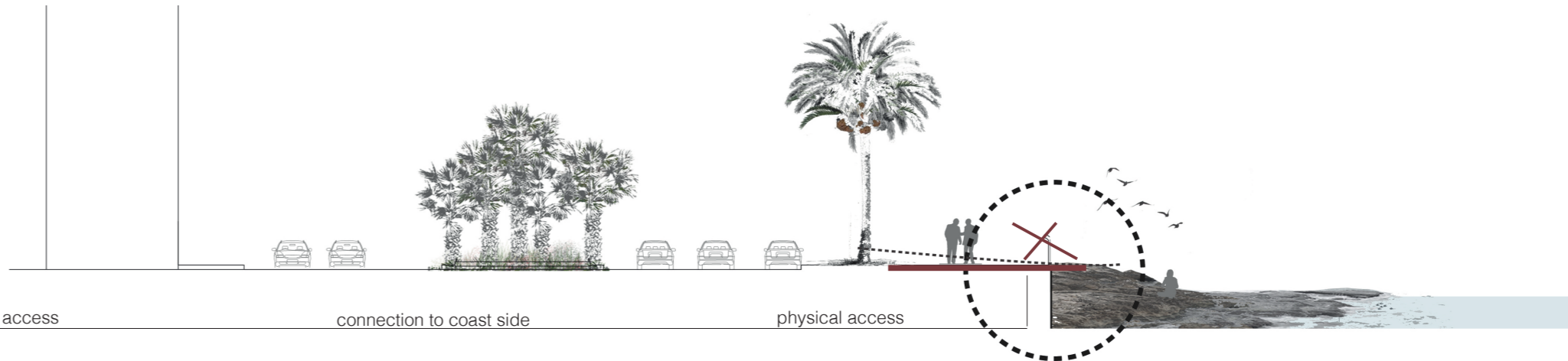
formal access points to the coast side



ممشي جل البحر  
Jal El Bahr Trail  
linear trail along the sea side, with nodes to access the coast side



visual access



connection to coast side

physical access

Fig. 16.1 Zone 2 Program Development

# 16 Program Development: Four Zones

## Zone 3



Fisherman Port used as fishing deck for public

Removing balustrade and extending sidewalk to 'rubble' shore

Public open space connecting to open space on sea side

Public open spaces and gardens as nodes for residents and students

Stairs are potential nodes for activities

Public open spaces and gardens as nodes for residents and students nearby



Public open space connecting to open space on sea side

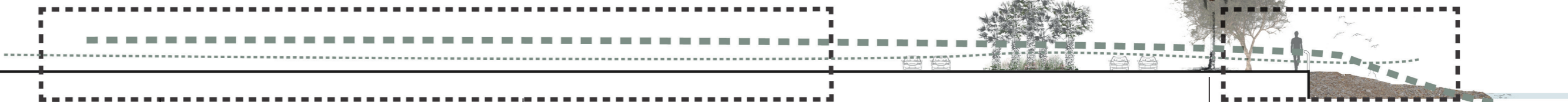


Tamarisk trees can be re-planted as they existed along the sea shore before (also because they are native and salt tolerant)

A main gathering point for people and festivity destination



Removing balustrade and extending sidewalk to 'rubble' shore



زهرة قبرص

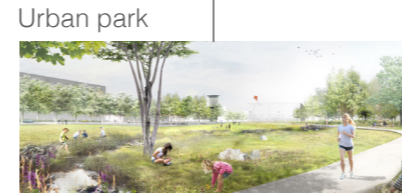
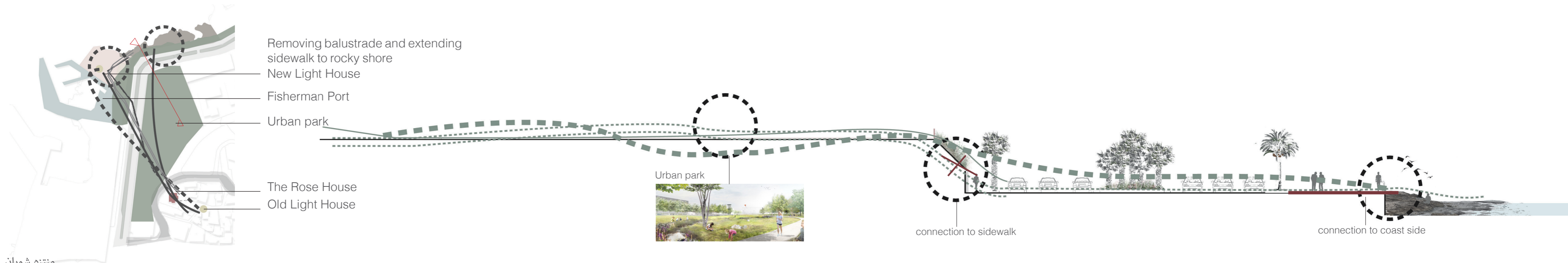
Dahrat Obros Path path with activity/public space nodes that reach a large node between the city side-sea side-coast side

Fig. 16.2 Zone 3 Program Development



### 16 Program Development: Four Zones

Zone 4: Chosen to develop



منتزه شوران  
 The Chouran Park urban park with cultural trail

Fig. 16.3 Zone 4: Chosen Program to Develop



### 17 Site Context | Zone 4: Manara

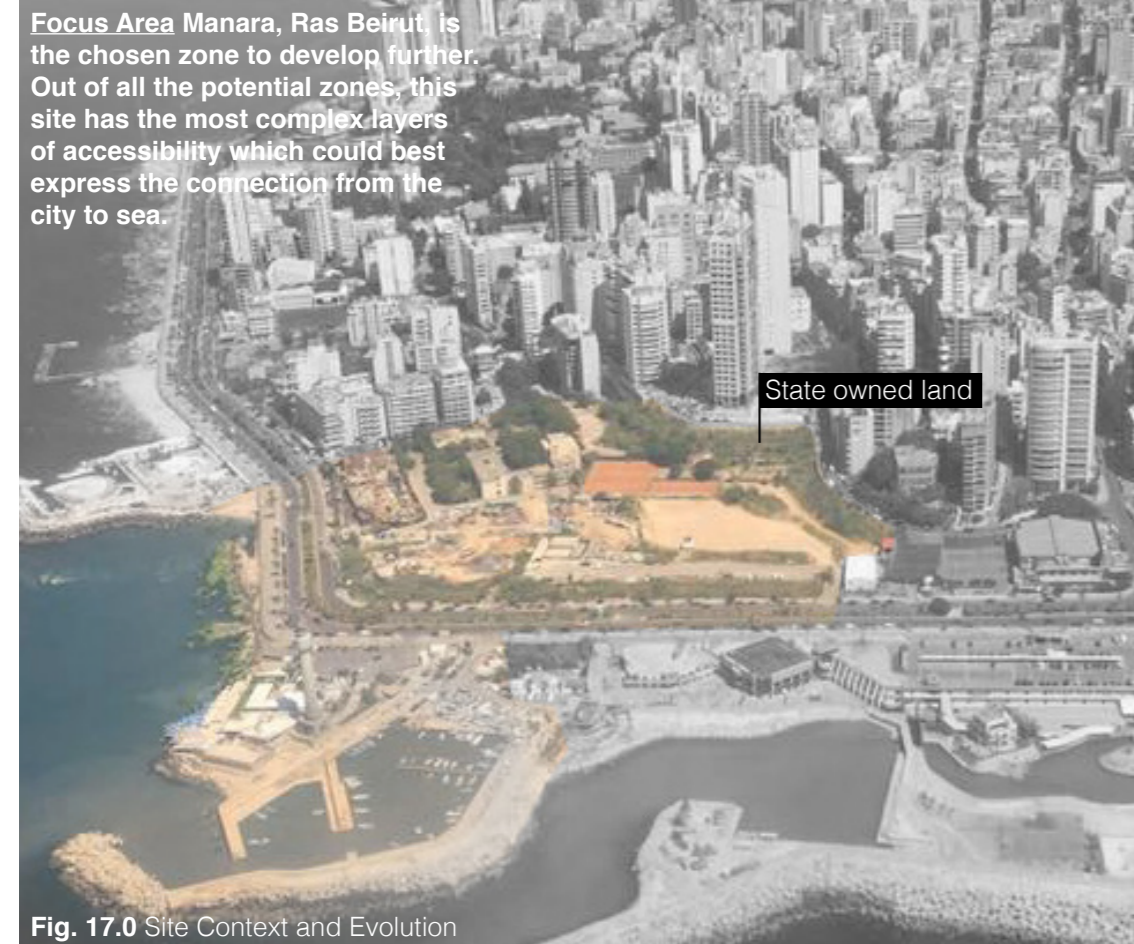


Fig. 17.0 Site Context and Evolution

February 2000



December 2006



August 2015

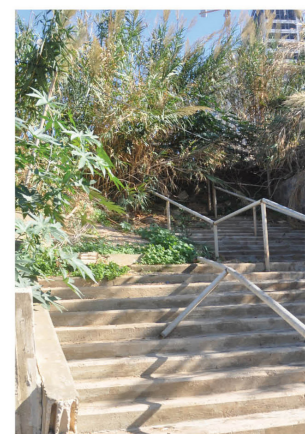
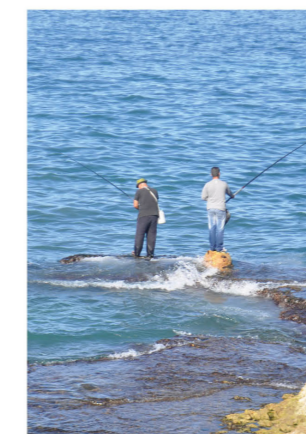
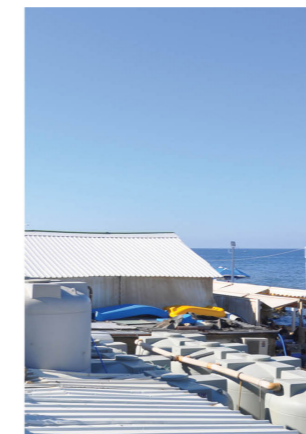


Fig. 17.1 Site Pictures



# 18 Site Analysis

First layer of accessibility: Physical

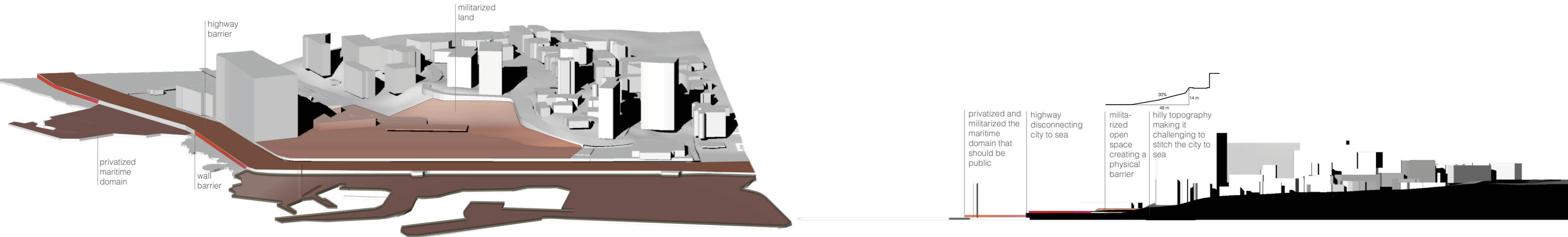


Fig. 18.0 Physical Connection

# 18 Site Analysis

Second layer of accessibility: Visual

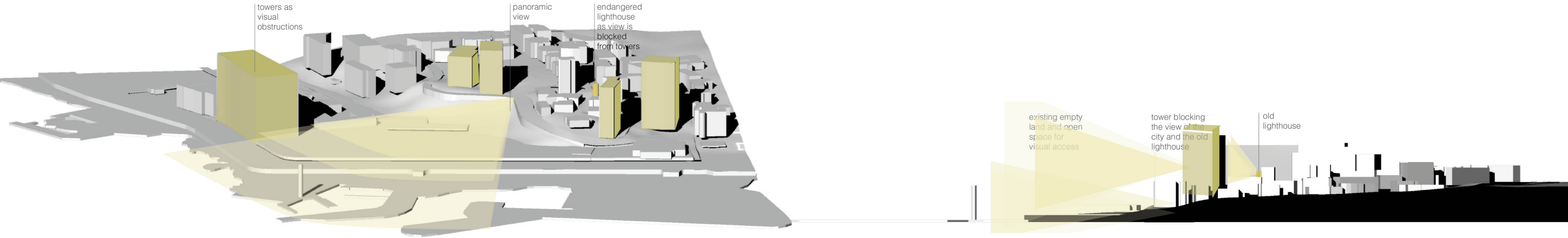


Fig. 18.1 Visual Connection



### 18 Site Analysis

Third layer of accessibility: Ecological

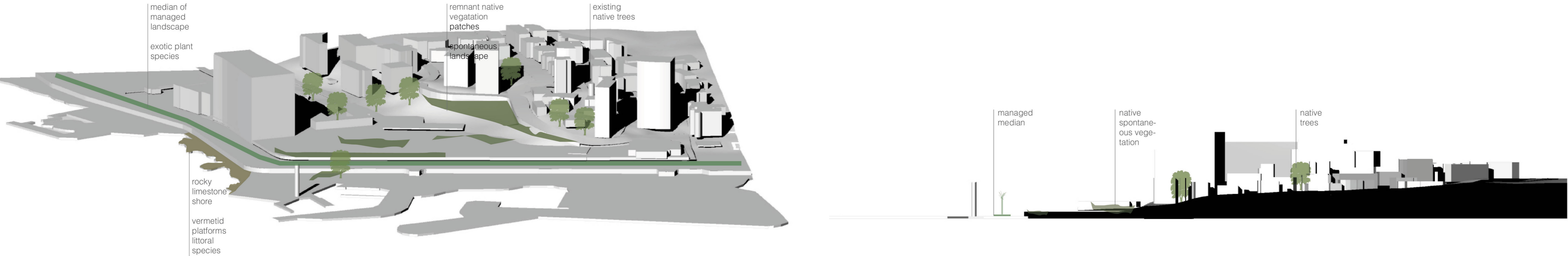


Fig. 18.2 Ecological Connection

### 18 Site Analysis

Fourth layer of accessibility: Cultural/Historical

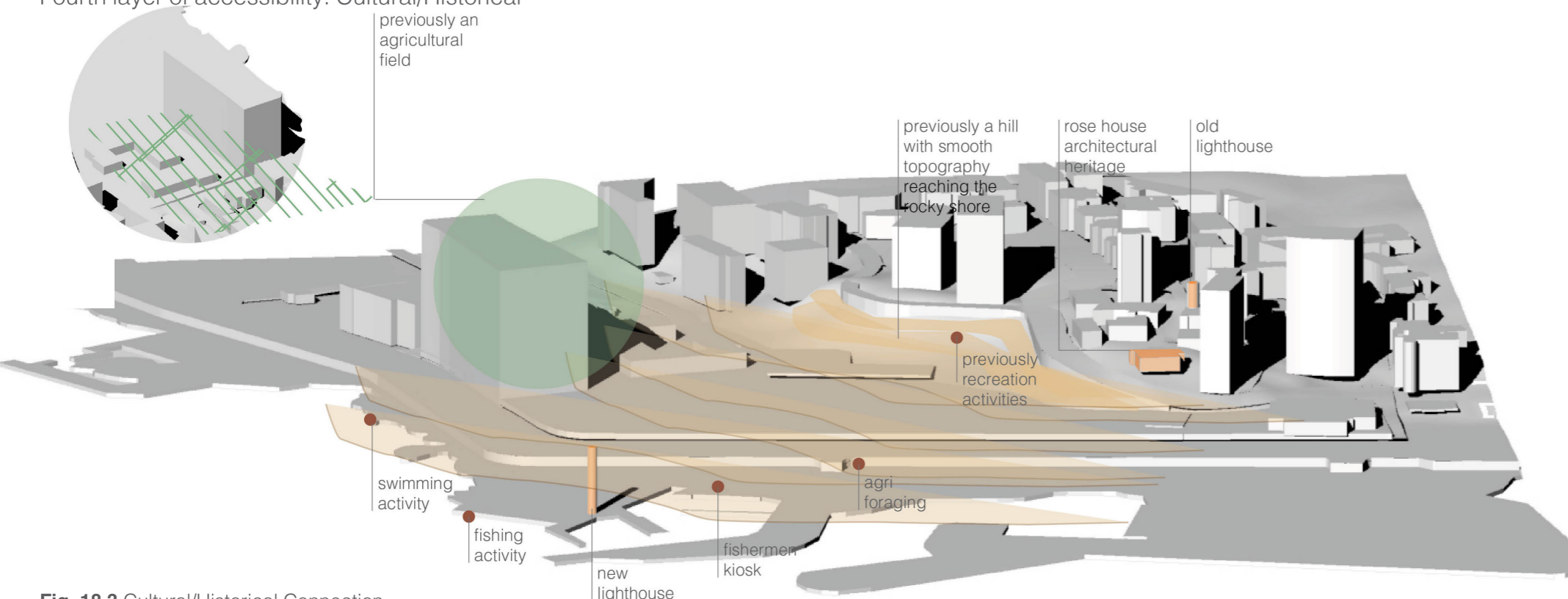
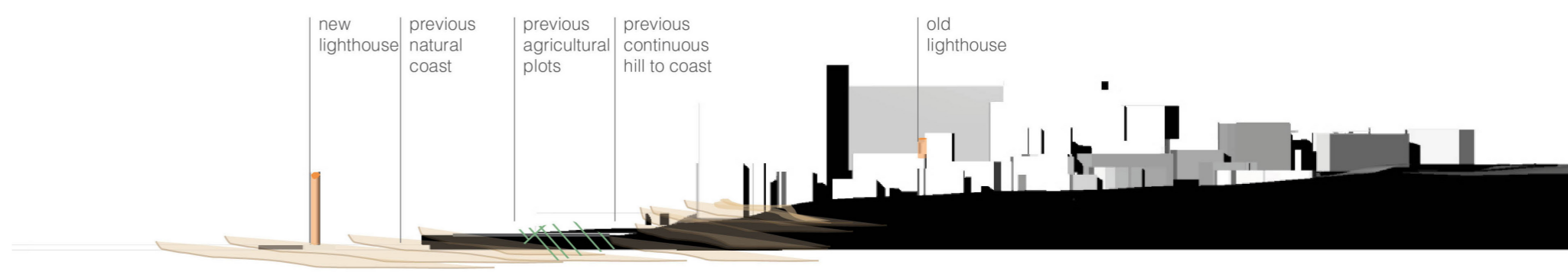


Fig. 18.3 Cultural/Historical Connection



### 19 Concept

Concept of stitching the city to the sea through a public park consisting of physical, visual, ecological and cultural/historical connections

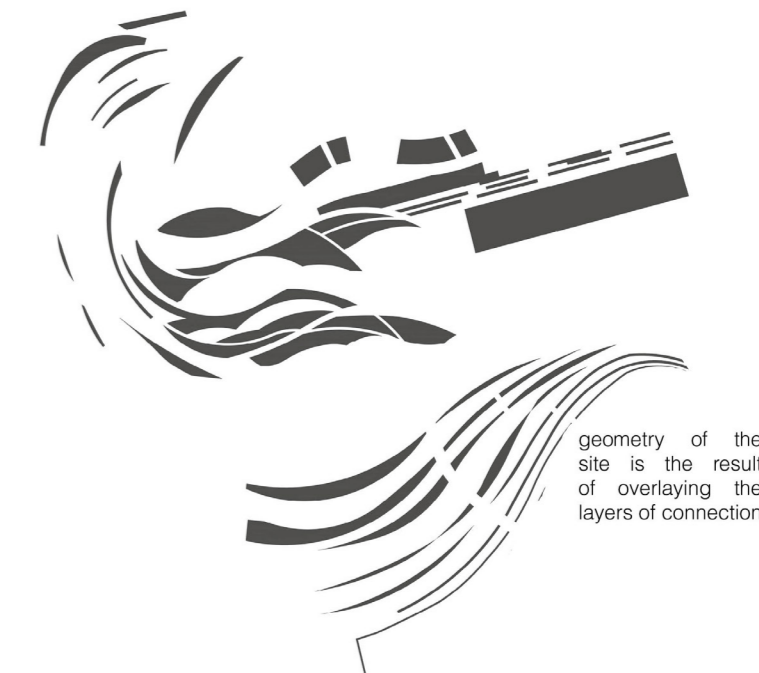
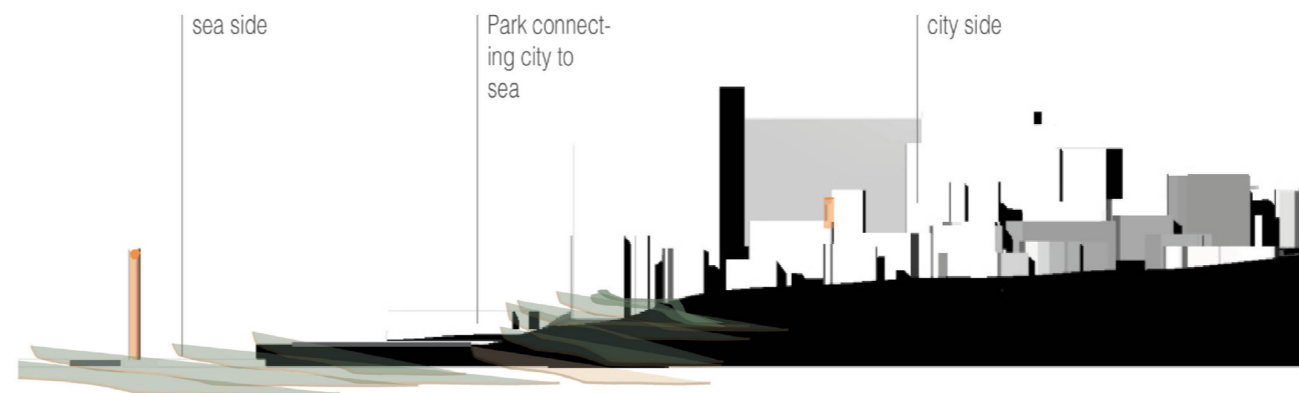
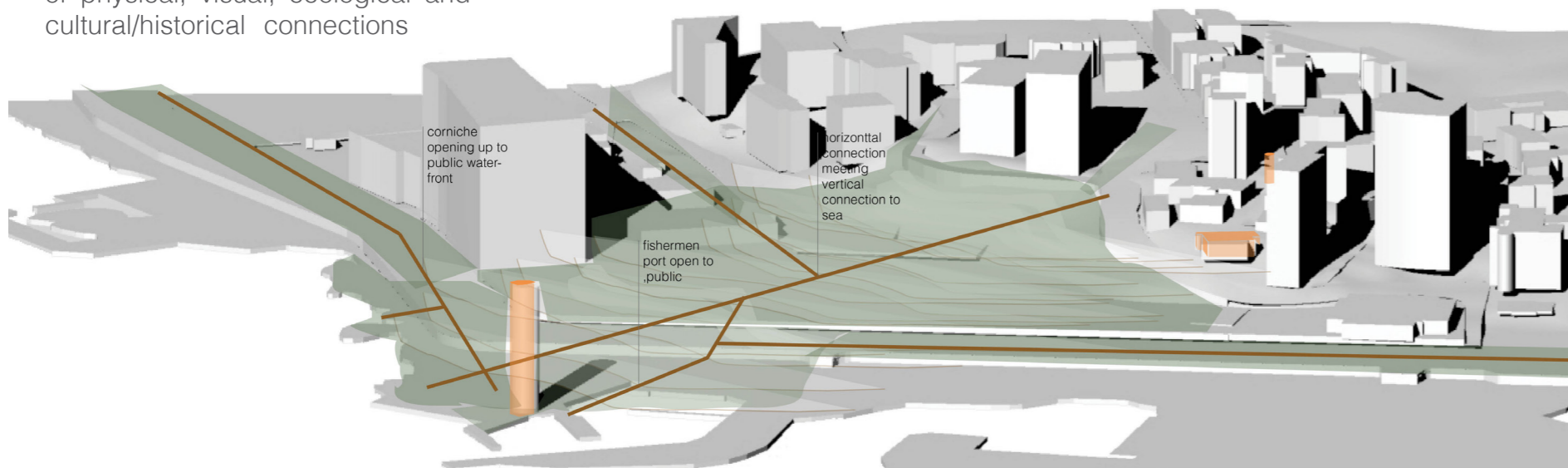


Fig. 19.0 Conceptual Diagrams



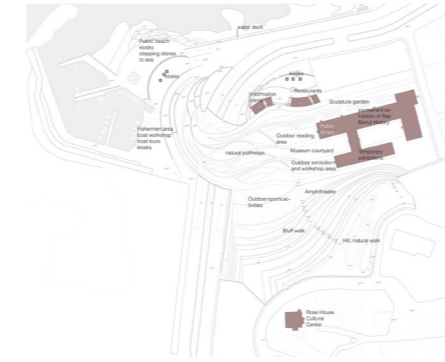
## 20 Proposed Plan

The proposed design is a result of the analysis on different types of accessibility. The Manara Park is a vision of stitching the city to the sea and sea to the city. The flow of the organic shapes of the park allow the city to be connected horizontally and vertically.

The park is seen as a holistic connector, as it connects the remnant ecological patches to make them one entity, it connects the present social and cultural practices to those of the past through its program, and hence it connects the people to their city and the sea.



Fig. 20.0 Site Plan



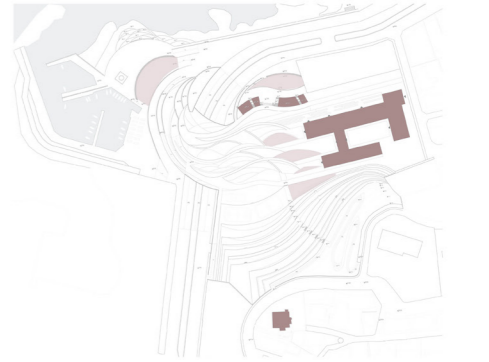
Program



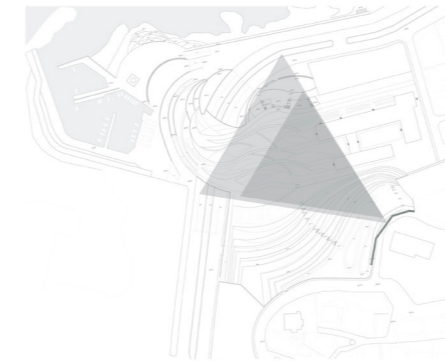
Pedestrian Circulation



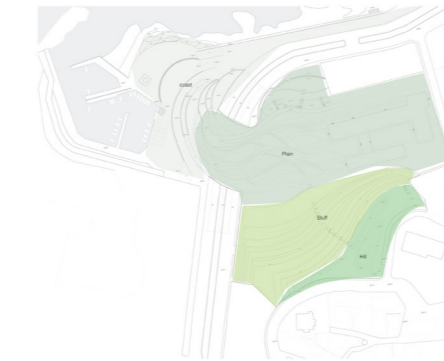
Vehicular Circulation



Built Areas and Plazas



Main Viewshed from Hill



Landscape Transitions

Fig. 20.1 Plan Diagrams and a Case Study



PWP Barangaroo Headland Park



## 21 Hardscape and Softscape

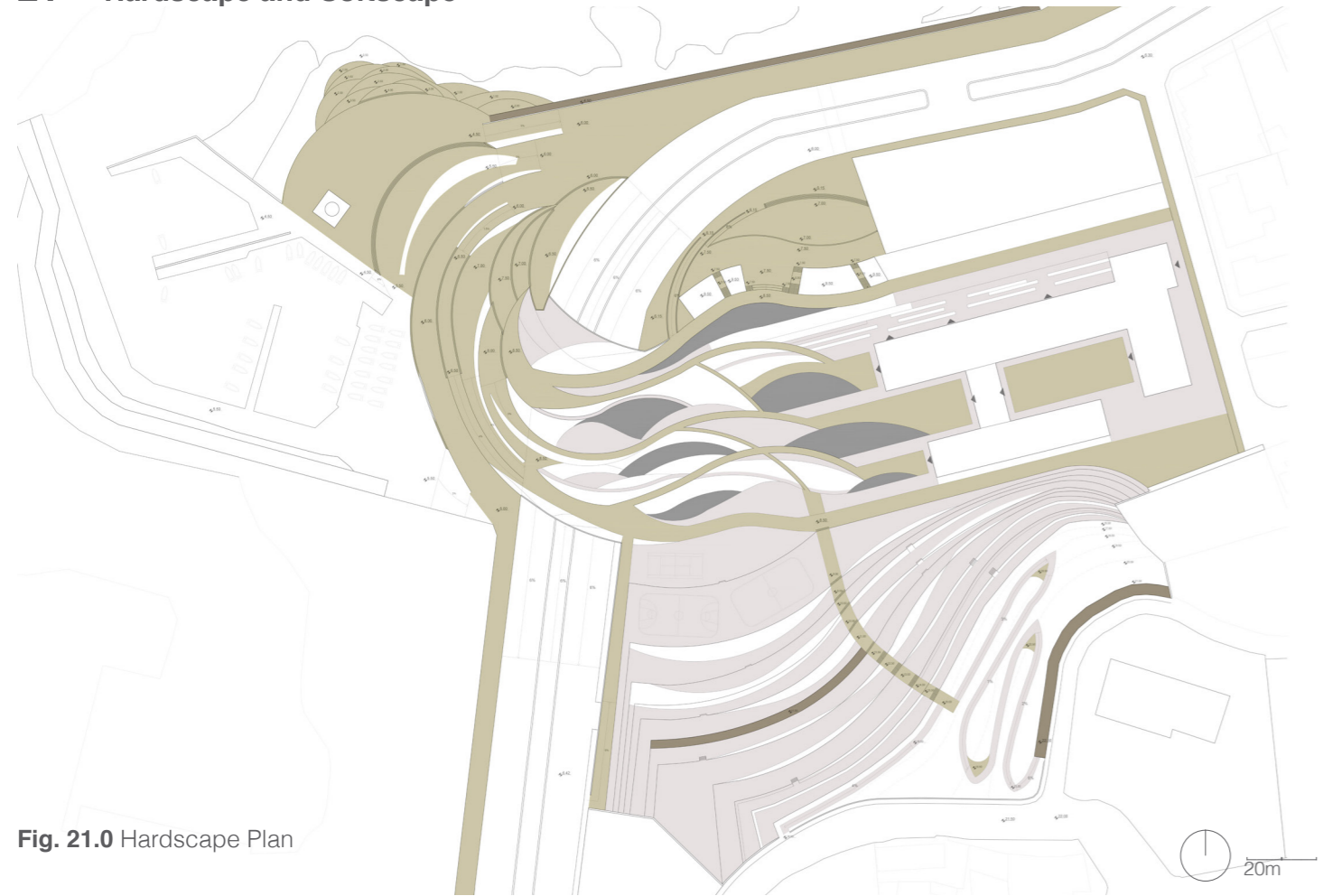


Fig. 21.0 Hardscape Plan

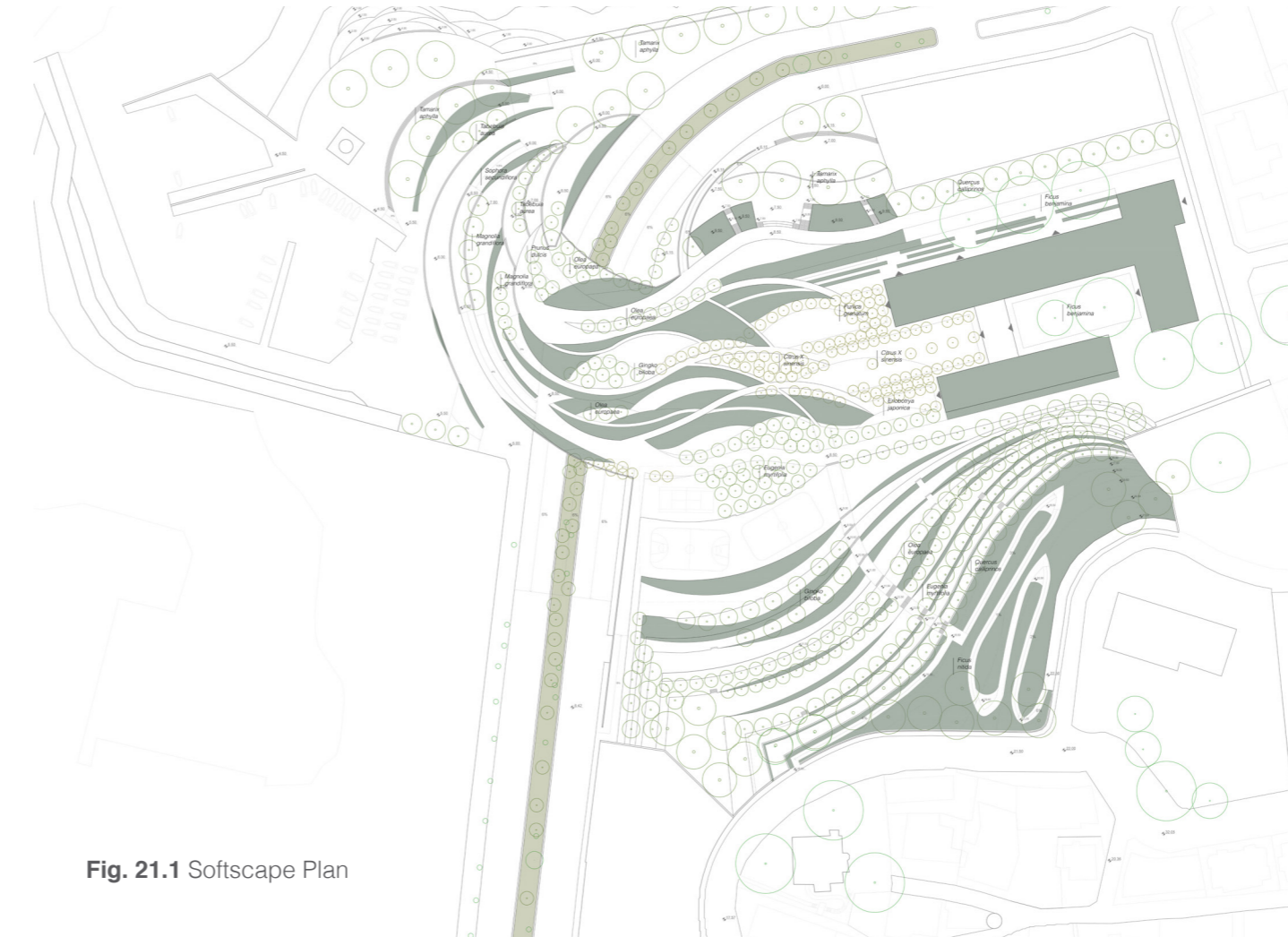


Fig. 21.1 Softscape Plan






**Native Coastal Shrubs, Spontaneous Landscape**

**Examples:**

- Albizia julibrissin* Mill: Deciduous tree. Coastal landscape. Lanceolate leaves, flowers have a greenish creamy color. Planted inland and spontaneously naturalized.
- Albizia leopoldorum* L: Perennial. Rocky beach. Greenish green leaves, spikes falling after flowering time. White to pink flowers from March to July. Sandy coastal habitats, coastal cliffs. Littoral species.
- Alseodaphne neryloides* Benth: Annual. Coastal cliffs. White flowers from March to May becoming concave fruits wash land, grassy hillsides.
- Antirrhinum caespitosum* L: Annual. Coastal cliffs. White flowers from March to May becoming concave fruits wash land, grassy hillsides.
- Albizia julibrissin* Mill: Deciduous tree. Coastal landscape. Lanceolate leaves, flowers have a greenish creamy color. Planted inland and spontaneously naturalized.

**The Median, Managed Landscape**

- Large Ficus Tree
- Large Shrub Trees
- Medium Shrub Trees
- Fruit Trees

|  |  |   |
|--|--|---|
|  <i>Ficus benjamina</i>     |  <i>Quercus calliprinos</i>   |  <i>Sophora secundiflora</i> |
|  <i>Ficus religiosa</i>     |  <i>Purica granatum</i>       |  <i>Zizania aculeata</i>     |
|  <i>Eugenia myrsina</i>     |  <i>Eriobotrya japonica</i>   |   |
|  <i>Citrus aurantiaca</i>  |  <i>Magnolia grandiflora</i> |   |
|  <i>Grevia nitida</i>     |  <i>Purica indica</i>       |   |
|  <i>Citrus x sinensis</i> |  <i>Tabebuia surata</i>     |   |



22 Cross Section

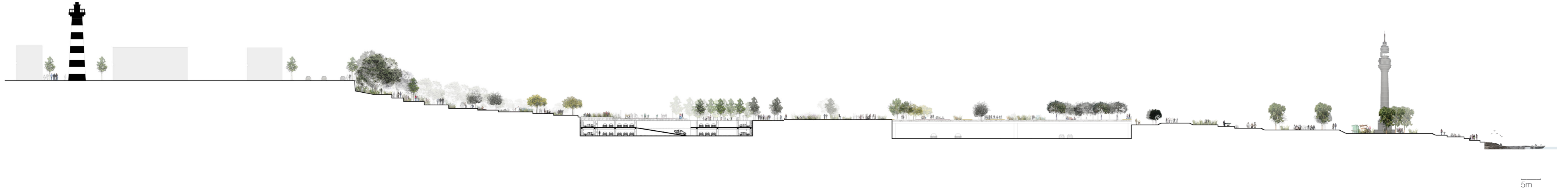


Fig. 22.0 Cross Section



23 Perspectives

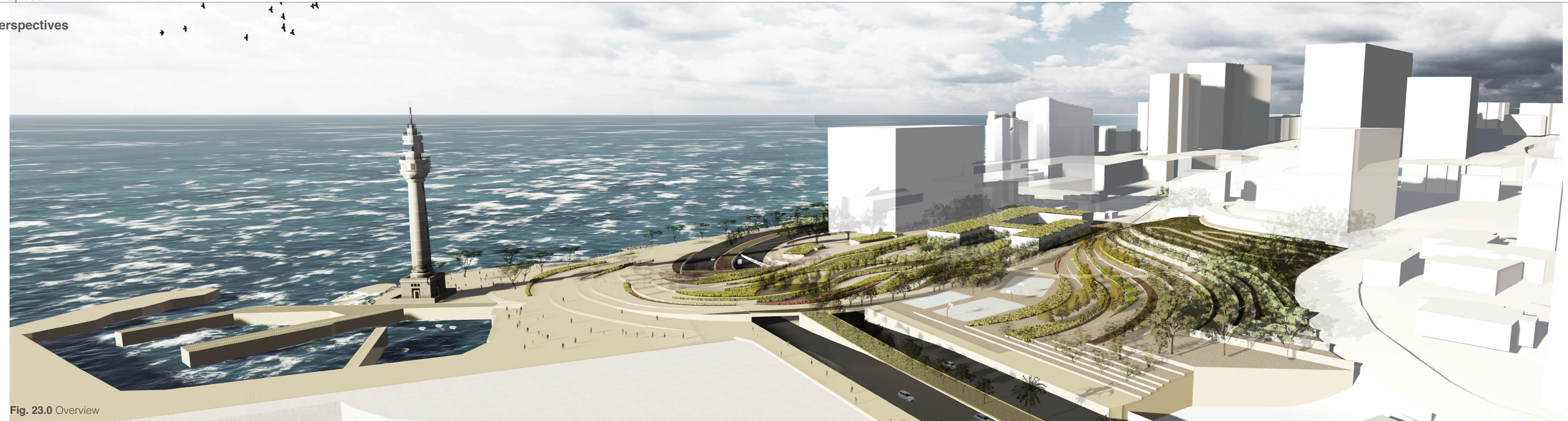


Fig. 23.0 Overview



23 Perspectives



Fig. 23.1 Beach Zone



Fig. 23.2 Coastal Zone



## Manara Park re-envisioning Beirut's coast

The Manara Park challenges the current threats that are being brought upon the coast of Beirut.

The design was created from the identity of the site, the existing ecology and the present cultural and historical practices and landmarks.

It is a link between the city to the sea, as much as it is a link between the city and its identity.

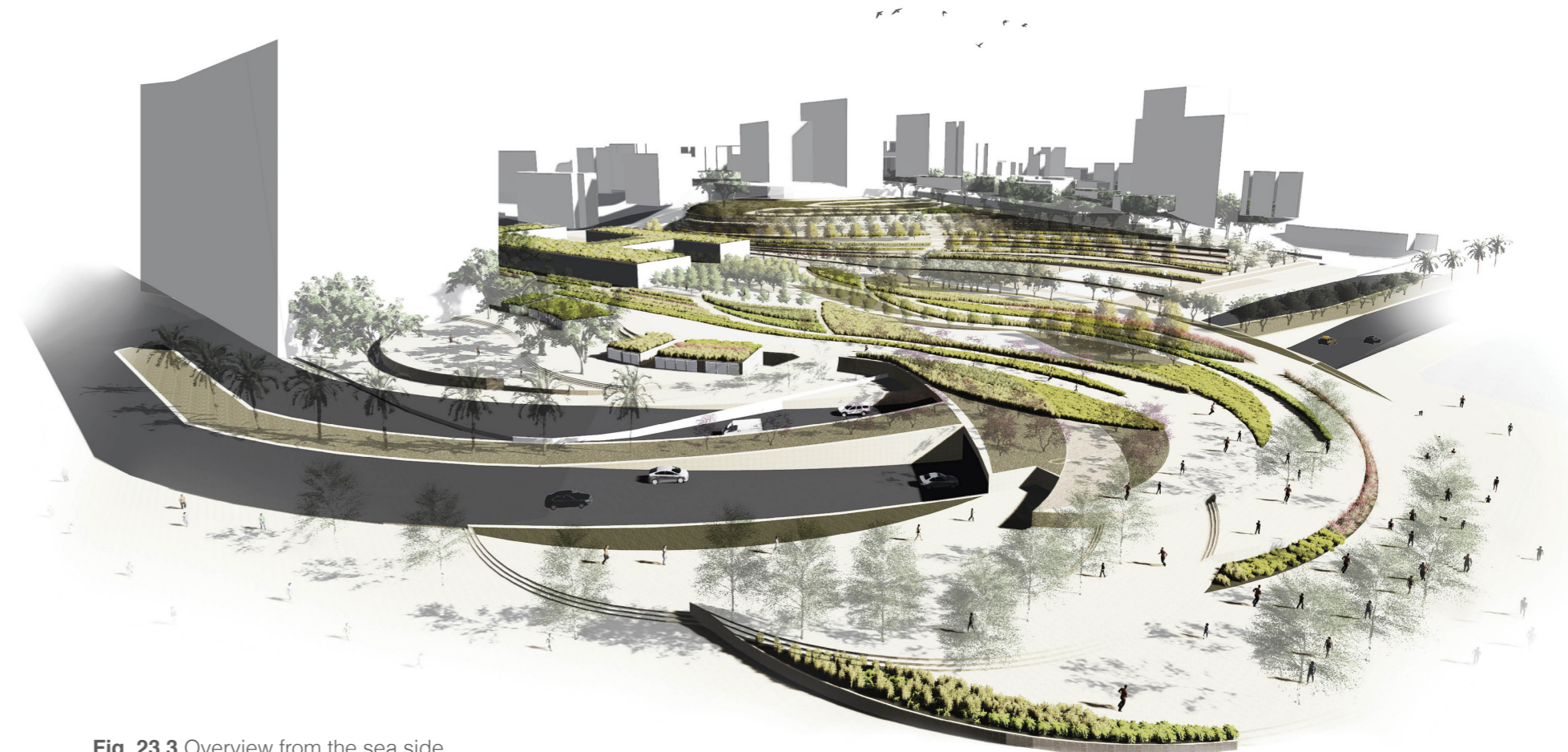


Fig. 23.3 Overview from the sea side