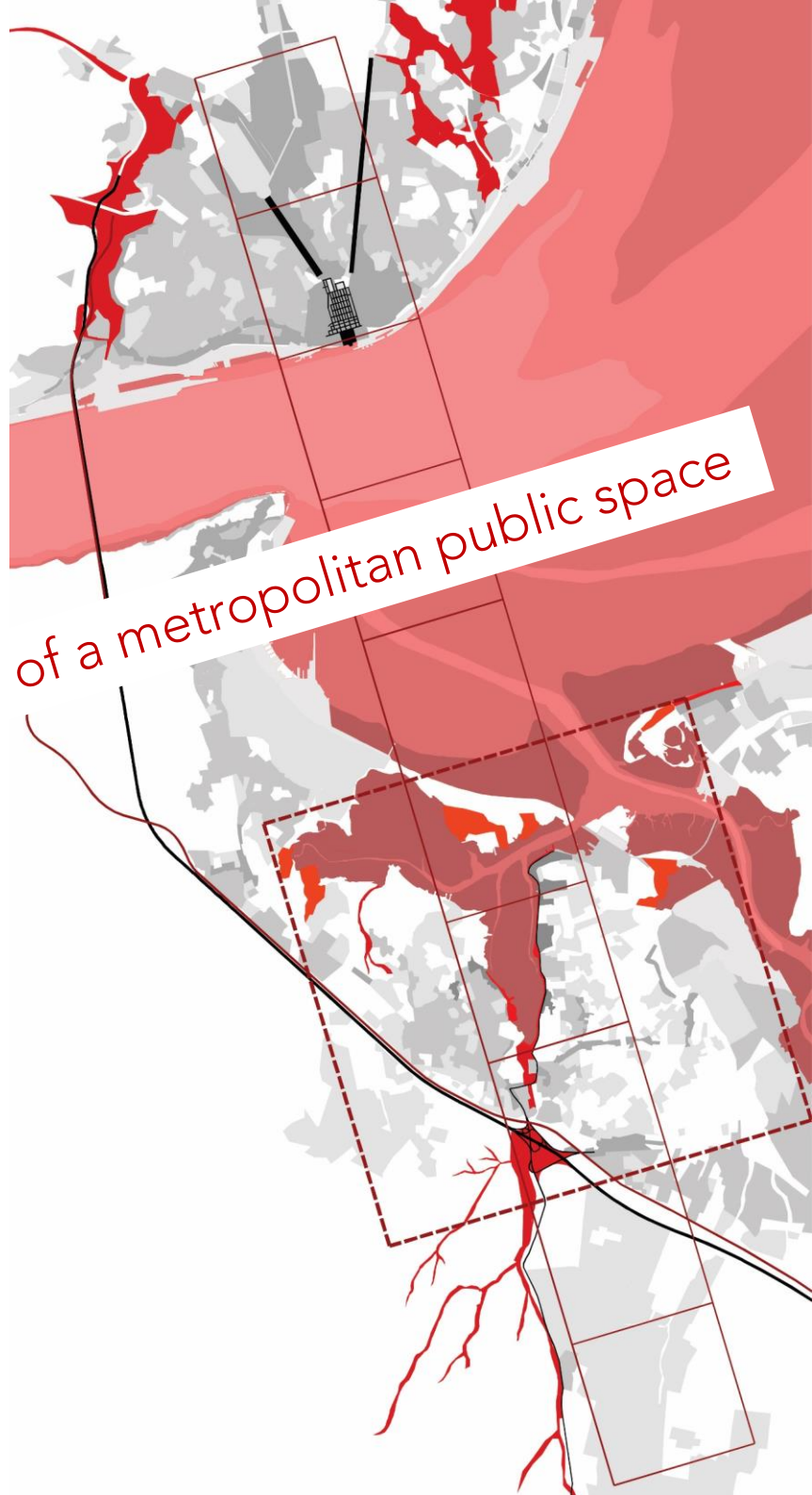


lisbon+seixal axis+bay
designing the architecture of a metropolitan public space



designing the architecture of a metropolitan public space

This book presents the results of an architecture and urbanism Studio Lab in which public space and its architectural, urban and metropolitan scales were explored through drawn interpretation and design.

Faculdade de Arquitetura da Universidade de Lisboa

Integrated Master in Architecture + Urbanism

Project Lab IV • 4th year • 1st semester • 2020/2021

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A contribution to **MetroPublicNet**:
Building the foundations of a Metropolitan Public Space Network to support the
robust, low-carbon and cohesive city: projects, lessons and prospects in Lisbon
metropublicnet.fa.ulisboa.pt

FCT funded project – 2021-2024 . ref. PTDC/ART-DAQ/0919/2020



MetroPublicNet

a metropolitan public space network
for the robust, low-carbon and cohesive city



FACULDADE DE ARQUITETURA
UNIVERSIDADE DE LISBOA

CiAUD

Centro de Investigação
em Arquitetura, Urbanismo e Design

URB in LAB
URBANISM & TERRITORIAL DYNAMICS

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para a Ciência
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lisbon+seixal, axis+bay
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edition

CIAUD
Centro de Investigação em Arquitetura, Urbanismo e Design
Research Center in Architecture, Urbanism and Design

Faculdade de Arquitetura da Universidade de Lisboa
URBinLAB – Urbanism & Territorial Dynamics
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"Public space combines 'urban things', physical materials that are able to make perceptible an idea of the city. Hegel said that beauty is the perceptible expression of an idea. And this is the grandeur and difficulty of public spaces. Ground and mud, cobblestones and slabs, asphalt and concrete, wood and leaves on the trees shift here from being generic to components for making urban quality a material thing. Walls, land, lamp posts, doorways, ramps, vehicles, corners and crannies establish the sensations of the mind that bring people into relation. The city, made of conflict and solidarity, stability and dynamism, connection and distance, appears in the material condition of public space. Over and above sociological, political and functional considerations, public space imposes itself as a material fact, a substratum joining matter and idea, trying to ensure that it turns out to be beautiful."

(The impossible project of public space, Manuel de la Solà-Morales, 2004, p. 102)

"Public space is the structuring framework of urbanity: mixity, density, collective, multi-dimensional, uses, continuity and mesh, temporality, sharing, biodiversity, image and representation, are all concepts that will define the urban intensity of the different places of the metropolis. As a structuring maker of urbanity, for public space, style and decoration are only secondary subjects in relation to the essential elements on its form, its character, its flexibility and adaptability, its systemic role, its environmental dimension, its materiality."

(L'espace public, infrastructure de la métropole, Oriol Clos, 2016, p. 6)

Theme

The core topic for the Project Lab IV is the exploration of the potential of public space as a multi-scale design tool for architecture and urban and territorial design, under a metropolitan spatial perspective.

In the past 20 years, in the wake of Expo 1998 in Lisbon, national urban regeneration and rehabilitation strategies had a significant impact on the upgrade of public space in Lisbon Metropolitan Area (LMA), with hundreds of projects delivered. Especially under EU funding frameworks, many public space projects have been delivered under the rationales of environmental resilience (i.e. water and flood management, green corridors, urban agriculture), sustainable mobility (i.e. transit systems, bicycle and walkable paths, traffic and parking control) and social inclusion (i.e. social housing neighbourhoods and precarious settlements, new local facilities), widening the scope and relevance of public space.

In sprawling territories, facing considerable problems of ecological fragmentation, urban dispersion and inefficient mobility, such as Lisbon's, a metropolitan approach is needed to articulate various systems and to promote a better-balanced distribution of resources and opportunities.

This is a fundamental scale to coherently shape synergic, continuous and connected networks, such as green infrastructure, transport and urban amenities. The same applies to public space: as a transcalar and multidimensional structural network, it offers the possibility to interconnect and integrate these fields in search for synergic responses to emerging challenges. If conceptualized, planned and designed at the metropolitan level, public space can provide an integrated and coherent network, capable of efficiently responding to the challenges of urban robustness, low-carbon mobility and territorial cohesion. Additionally, such network can be seen as an opportunity to build a missing and socially identifiable metropolitan identity – a fundamental challenge in today's metropolises.

The challenge can thus be summarized into three questions:

- How can networks and itineraries shape coherent structures of urban landscape?
- How can the metropolis become more cohesive and balanced through focal interventions?
- How can a building intermingle with public space and play a relevant role in the metropolis?

Objectives

Project Lab IV program seeks to stimulate the development of the understanding of complex urban organisms in their relationship with the wider territory and the use of plans as instruments of territorial transformation, at various levels, as well as the project and design of public space.

Thus, the unit's specific objectives are:

- the characterization of a large urban area, based on a selection of analysis and information themes from different sources;
- the design of a strategy for the evolution of the territory, integrating economic and social aspects as well as a set of actions that impact on the physical component of the area under study, with a view to achieving the previously defined objectives and program;
- the exploratory design of focal spaces in which strategic ideas can be tested and materialized in a local and material scale.

Project Lab IV combines urban and architectural design aimed at meeting topical challenges of the contemporary city:

- Environmental resilience and low-carbon mobility
- Inclusive and connected public space
- Innovative architectural solutions for an adaptive habitat

Curricular contents

The design exercise considers territory recognition steps (survey, interpretation and intervention lines) and intervention steps (identification of strategies, programs and solutions for the development of urban projects with greater focus on public space). The project approach explores a vision of the city, articulating theory and practice, reading and design from the response to a set of sequential steps with the main objective of building a material urbanity for the intervention area.

Lisbon Metropolitan Area's recent development produced a highly heterogeneous spatial, functional and social mosaic, on which challenges of infrastructural and environmental robustness and public space qualification arise as key challenges. In this context, and in line with prospective development visions for the metropolitan territory of Lisbon and the municipality of Seixal, opportunities for urban, environmental and public space qualification around Seixal Bay and along the Lisbon-Fogueteiro mobility axis will be explored.

Establishing a relationship between objectives, theme, territory and opportunity, the unit's key contents are focused on four components:

- reading and interpreting the metropolitan territory, its structuring elements and urban evolution processes, as well as its cultural, social and landscape values;
- current challenges of spatial planning and qualification of urban space, in particular in terms of mobility, the structuring of public space and environmental resilience;
- tools of urban and territorial design, namely those associated with the structuring of public space networks, articulated with various scales and of different nature;
- design of public space, in a relationship with the built fabric and the landscape components of the site.



Photo: JRS

The territory

The Project Lab's work territory is understood as a multi-scale entity in which the complexity of urban life unfolds along with the site's natural flows. Scales are useful for pragmatic research and design operations, as they establish levels of coherence (cartography, institutions, geographical references), but need to be considered as always relational and inter-dependent between themselves.

Under this approach, four main scales are defined:

- Lisbon's Metropolitan Area is the general frame of reference to understand the large-scale territorial features of a metropolitan territory;
- The Tagus estuary – especially the wide body of water between Lisbon, Almada and Alcochete – is the reference scale to identify and create programmatic and cultural relationships;
- The Seixal bay is defined as the reference scale for structural urban interventions;
- Specific local sites (to be defined as part of the work process) will provide the framework for public space and built space design proposals.

Besides these scales, two ideas are initially proposed to understand the Lab's territorial framework:

An *axis* that crosses Lisbon and Seixal:

a line connecting the core of the metropolis over the Tagus river

A *bay* that shapes Seixal:

a body of water as the common ground of a complex urban landscape

Lisbon-Seixal *axis* offers a *cross-section* in which the unique relationship between water and land and the diversity of human settlement and activities can be observed. This axis can be outlined not only by abstract line connecting Terreiro do Paço in Lisbon with the old town of Seixal, but also on the built spaces that frame Lisbon – such as Baixa axial grid and its development to the north along the late 19th century avenues – and the Tagus South Bank – namely along the national road to Sesimbra.

Seixal *bay* is a can be read as a mimetical metaphor of the Tagus estuary, as it provides a outstanding landscape that brings together a range of urban patches of different nature, configuration and use. The bay is also a key identitary feature understood as a potential resource for Seixal's future development. These two territorial frameworks provide a synthetical approach to the metropolitan complexity, as they intersect fundamental features of the metropolitan landscape and networks.

Although highly diverse and heterogeneous, the development process of Lisbon's Metropolitan Area in the second half of the 20th century is commonly regarded as highly fragmentary, discontinuous and disruptive in terms of infrastructural provision, morphological coherence and open space/ecological continuity. This process left significant problems for which specific spatial responses are required, namely post-industrial sites, splintered patches of open space, low-quality and fragmentary urban fabrics, badly integrated and car-dependent mobility.

On the other hand, and especially in Seixal, there is a strong acknowledgment of high potential regarding territorial regeneration based on landscape and cultural heritage, diverse and active human capital and introduction of new fields of economic development (tourism, nautical uses, sports, new industrial sectors, ecological services).



The work structure

A sequence of articulated assignments will be developed throughout the semester. These assignments are organized in three main stages and are understood as a methodological approach to the design process. For each stage, specific objectives, outcomes and format are defined.

1st stage: MAP + DECODE + INTERPRET

Mapping, decoding and interpret the site and the metropolis

Objectives:

Decoding the territorial structure of Lisbon Metropolitan Area and understanding the role of Seixal in it
Exploring the spatial complexity of a complex urban organism looking at its public space structure

Outcomes:

Cartographic, drawn and photographic representation and interpretation of metropolitan systems, fabrics and urban elements at different territorial scales

Format:

2 printed 0,89 m x 0,89 m panels according to provided layout
1 booklet (pdf file) with drawings and references used in the panels (0,21 x 0,21 m)

Group work

2nd stage: REFERENCE + STRATEGY + STRUCTURE

Defining a territorial idea and outlining a multi-scale public space structure,
in tandem with a set of analogous references

Objectives:

Devising a concept for the territorial valorization of Seixal and its bay, using public space as a structural frame and design tool to improve connection, cohesion and identity

Outlining a public space network by assembling relevant paths and sites (a project of projects)

Creating a set of analogous architectural and spatial references of relevance for the project concept

Outcomes:

Interpretative drawn decoding of relevant references of architectural and urban scale interventions

Structure plan for the axis / bay of Seixal:

plan

concept model

proposal images + diagrams + short text

Format:

2 printed A1 (0,594 x 0,891 m) panels with plan, images, diagrams and text

1 model: base size 0,594 x 0,891 m

1 booklet (pdf file) with drawings, references and text used in the panels (0,21 x 0,21 m)

Individual work

3rd stage: DESIGN + ATMOSPHERE + MATERIAL

Developing a public space project for a nodal site

Objectives:

Designing nodal points of the multi-scale public space structure

Devising a coherent programmatic dialogue between spatial, functional, ecosystemic, landscape and memory dimensions of public space

Exploring the project's spatial and material features and their continuity with the built fabric

Outcomes:

Public space project in nodal site

Format:

printed A1 (0,594 x 0,891 m) panels with plan(s), section(s) and atmospheres – ref. scales 1:500 to 1:20

1 booklet (pdf file) with drawings, references and text used in the panels

minimum 1 model

Individual work



Photo: JRS

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2

public space

map + decode + interpret

In order to develop a coherent and systematized approach to the Project Lab's exercises, a simple framework is proposed to guide the data survey, mapping and interpretation stages and to provide the basis for synthesis in the strategy and design stages.

This framework considers five systems on which the complexity of public space can be traced and layered:

- **Mobility, transportation and interfaces**

The mobility system reveals the basic infrastructural elements related to the flow of people and goods, considering road and railroad, airport and port, river traffic and main multimodal interfaces. Large scale infrastructures highlight the backbone of regional mobility hubs and provide a global view on the major concentrations of people in movement. A more local approach to this system reveals more discrete forms of mobility, including leisure and sport nautical facilities, bus routes and stops or cycle lanes. Urban sections are used to highlight spatial articulations between the river and the urban infrastructure and public space.

- **Water & waterfronts**

Water and waterfronts system is focused on the complex interaction between the river and the urban landscape, with a specific look on the multiple configurations of its edges and banks. Seen as a fundamental shaper of the landscape and of the urban settlement logics, the waterscape is revealed through the bathymetry, the tides, natural banks, beaches and marshlands, artificial landfills and specific forms of exploration of the water/land interface (i.e. port, tidal mills, salt extraction, fish farms). The diversity and richness of these interfaces are seen as potential fields of innovation for structural public space interventions.

- **Green spaces and green structure**

Having an important relationship with the water system, green structure is focused on the role of open space as the support for ecological spaces and promotion of natural cycles and biodiversity. On a larger scale, the diversity of these spaces and their multiple configurations and spatial patterns is reinforced by the contrasting nature of urban green spaces. This system reveals the potential of using green structure as a thread to shape continuous lines of public space using ecological services as a rationale.

- **Territorial memory & heritage**

The fourth system deals with the reading of the territory as a palimpsest in which urban landscape is the result of a time-framed process. This perspective highlights meaningful geographical and territorial strata and the evolution of specific urban fabrics to understand fundamental matrices of persistence and transformation. At more local scale, this “territorial memory” is seen as a resource that is materialized and revealed in specific elements of cultural heritage, such the old tidal mills, former industrial complexes, small fishing urban settlements, rural *quintas* or local churches. This system can thus provide conceptual arguments for linking and outlining spatially and timely situated public space interventions.

- **Urban fabrics, habitat and polarization**

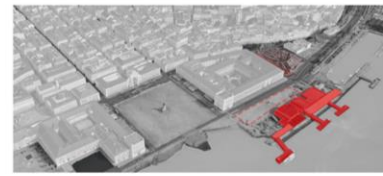
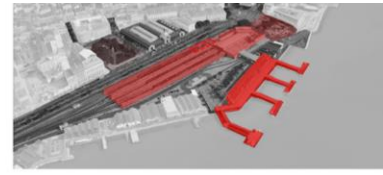
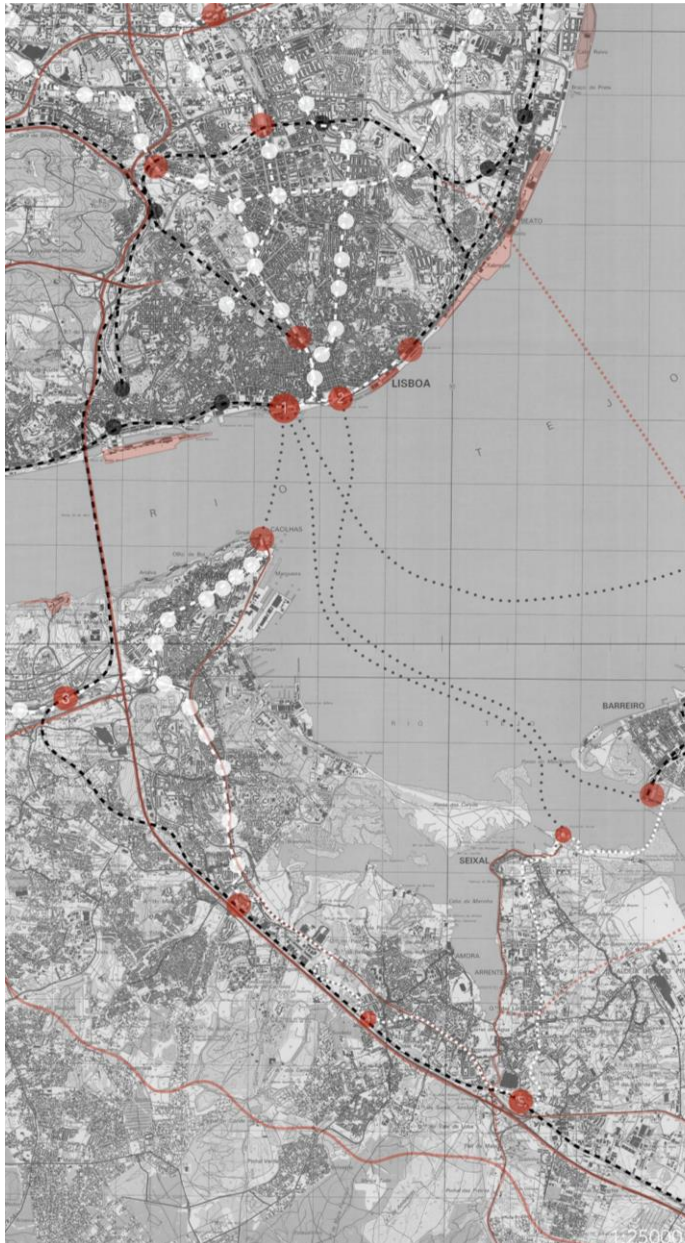
This system highlights the morphological and functional relationship between urban fabrics and collective uses. At a larger scale, it reveals the main metropolitan polarities (i.e. office areas, university and research campuses, touristic districts, shopping and retail clusters, large sport facilities) and their relationship with fundamental mobility networks. At a more local scale, it outlines relational aspects of neighborhood livability, namely the typological configuration of housing and the local collective facilities and public spaces. Issues such as urban diversity, single/mixed uses and proximity services are discussed as a basis for better connected and inclusive public spaces.

For each of the five systems, three **scales** are considered:

- [sub]metropolitan, with a scope centered around Tagus Estuary, Lisbon and the main urban areas on its banks, at a scale of 1:25000, aprox. 18 x 12 km.
- intermediate urban systems, with a scope centered around Seixal Bay and the multiple urban fabrics and open spaces that provide a coherent landscape unit, at a scale of 1:5000, aprox. 4 x 2 km.
- local scale and building clusters, to be approached through a small set of representative samples, in which spatial and architectural configurations are outlined at a free scale.

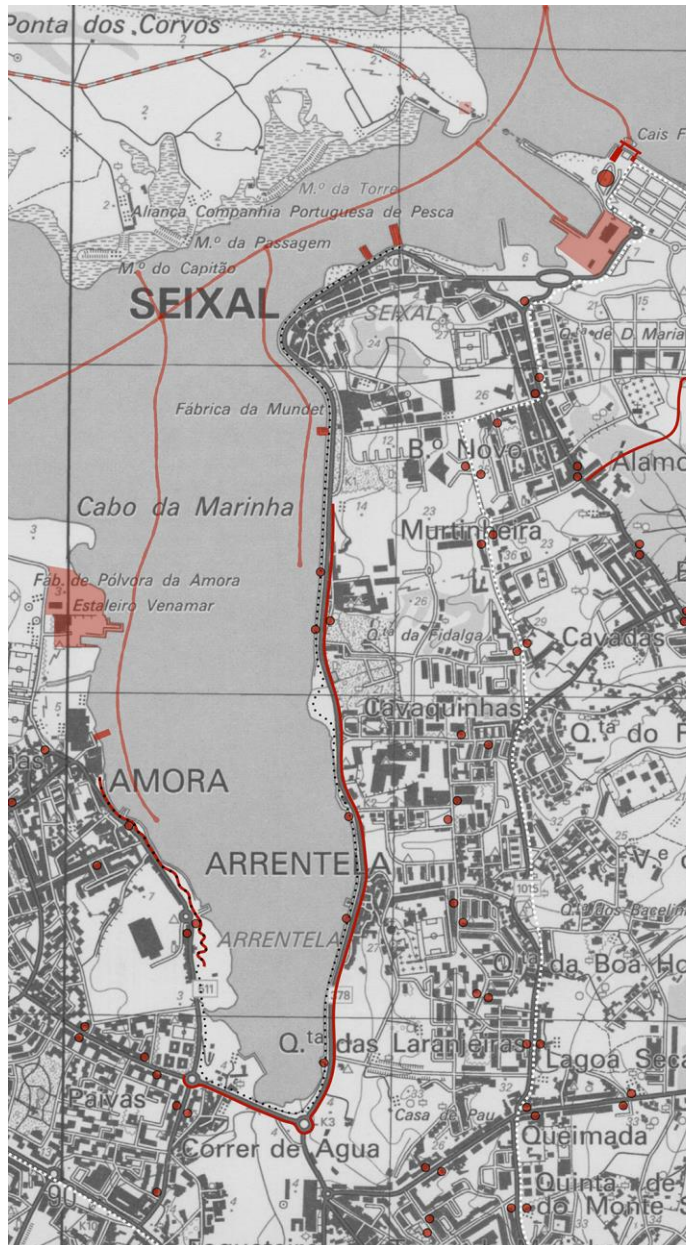
mobility, transportation and interfaces

Eduardo Leitão | Esther Titos | João Gouveia



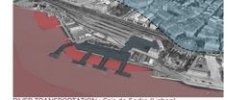
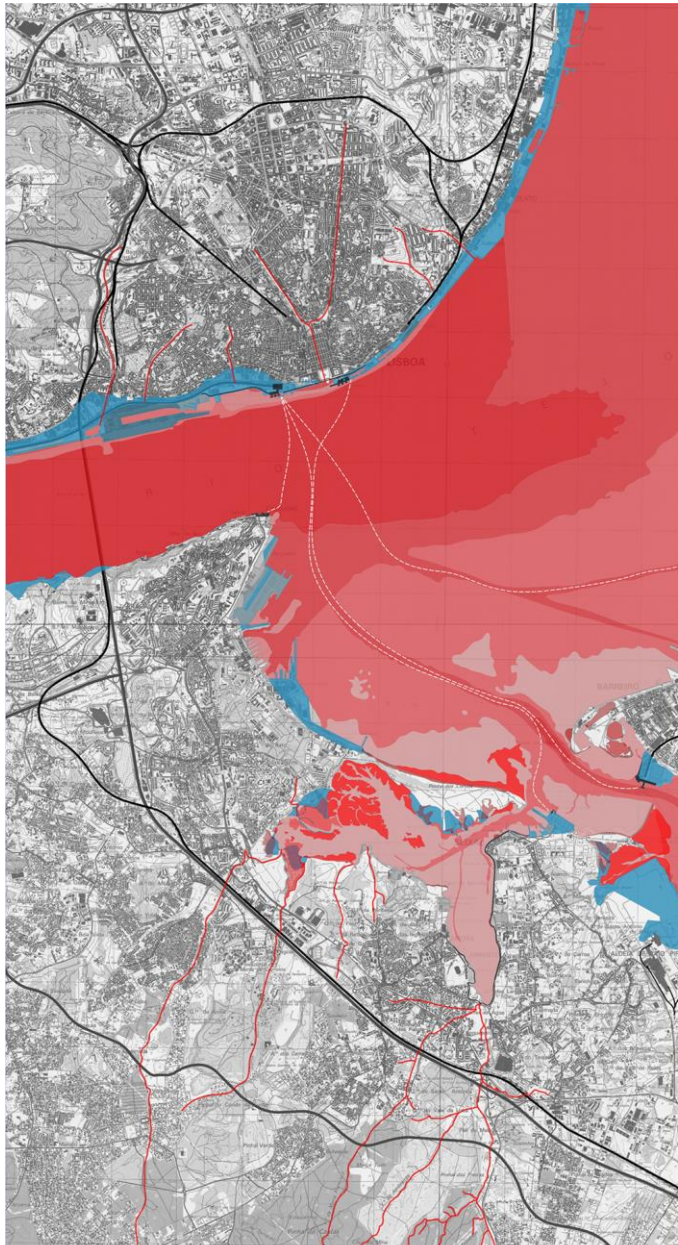
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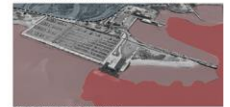


water and waterfronts

Anamarija Skobe | Kamilla Jesus | Luísa Flores

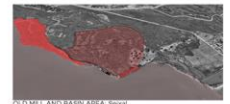


RIVER TRANSPORTATION: Carris do Sodre (Lisbon)

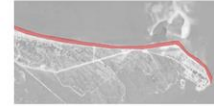


RIVER TRANSPORTATION: Serral

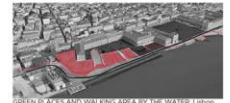
••••• old train line



OLD MILL AND BASIN AREA: Serral



SANGO WATERFRONT: Serral

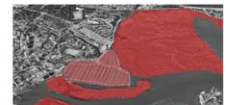
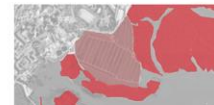


GREEN PLACES AND WALKING AREA BY THE WATER: Lisbon



GREEN PLACES AND WALKING AREA BY THE WATER: Serral

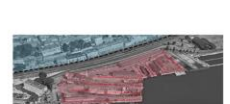
••••• old docks and waterline



OLD MALT MARGHET AND WETLANDS: Serral



SHIP YARD Lisbon



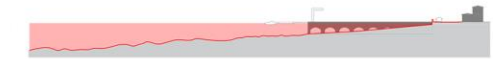
SHIP YARD Serral

water and waterfronts

Anamarija Skobe | Kamilla Jesus | Luísa Flores



LOW TIDE: WALKING WATERFRONT



HIGH TIDE: WALKING WATERFRONT



LOW TIDE: SEXUAL PORT



HIGH TIDE: SEXUAL PORT



LOW TIDE: SEXUAL SHIP YARD



HIGH TIDE: SEXUAL SHIP YARD



LOW TIDE: SEXUAL GREEN WALKING AREA



HIGH TIDE: SEXUAL GREEN WALKING AREA



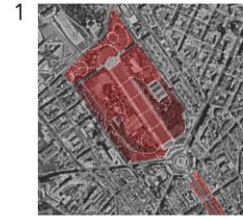
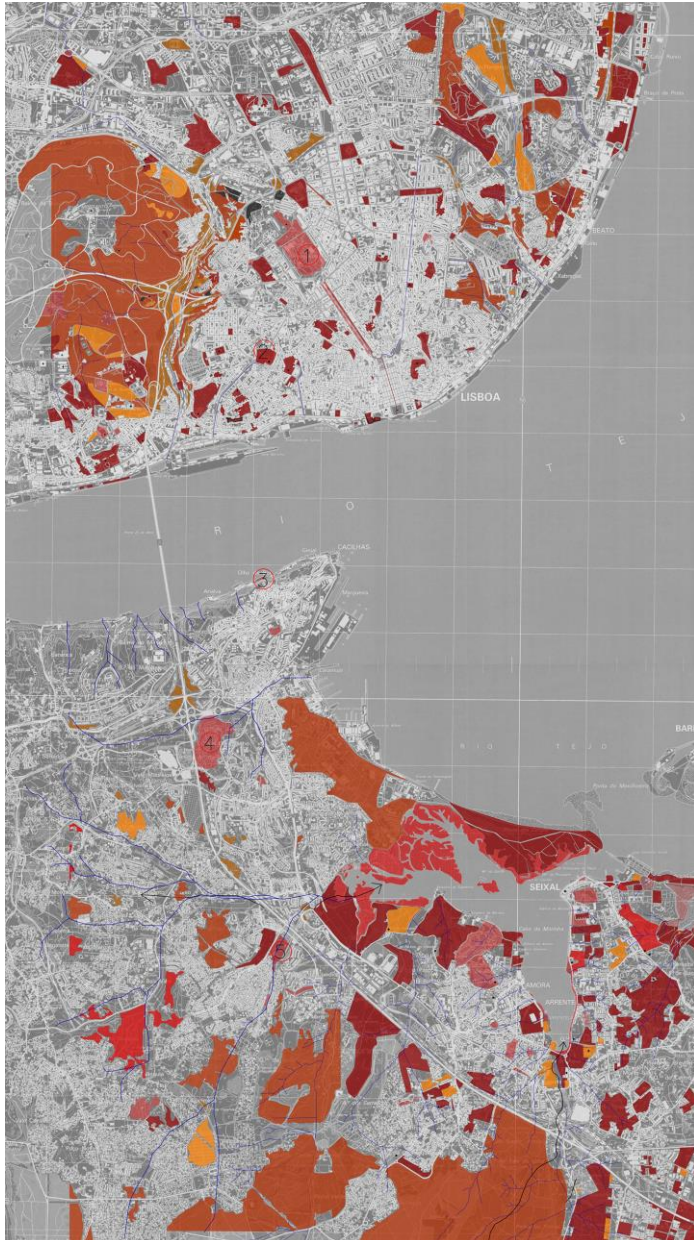
LOW TIDE: OLD ROMAN WALL AND WETLAND



HIGH TIDE: OLD ROMAN WALL AND WETLAND

green spaces and green structure

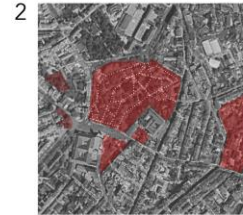
Nicole Rodrigues | Nicoleta Banari | Sara Alfonso



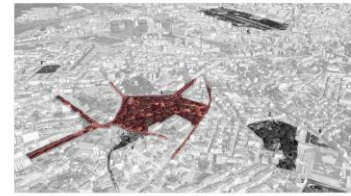
Pq. Eduardo VII | 1:50000



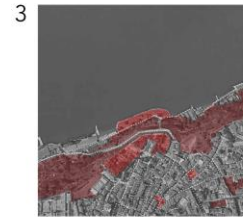
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4. Jardim Botânico da Universidade de Lisboa | INTERSTECIAL : 3. Instituto Geográfico português



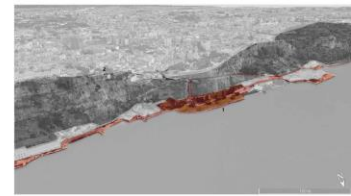
Jardim da Estrela | 1:5000



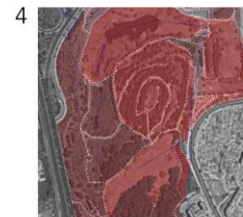
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| 4. Jardim 5 de Outubro | 7. Jardim da Parada | INTERSTECIAL : 6. Praça de S. Bento



Geigel | 1:5000



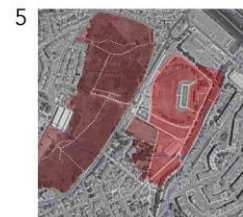
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Parque da Paz | 1:5000



GREEN STRUCTURES | PARKS : 1. Parque da Paz | DENSE VEGETATION : 2 | 3 | 4 | 5 | INTERSTECIAL : 6 | 7.



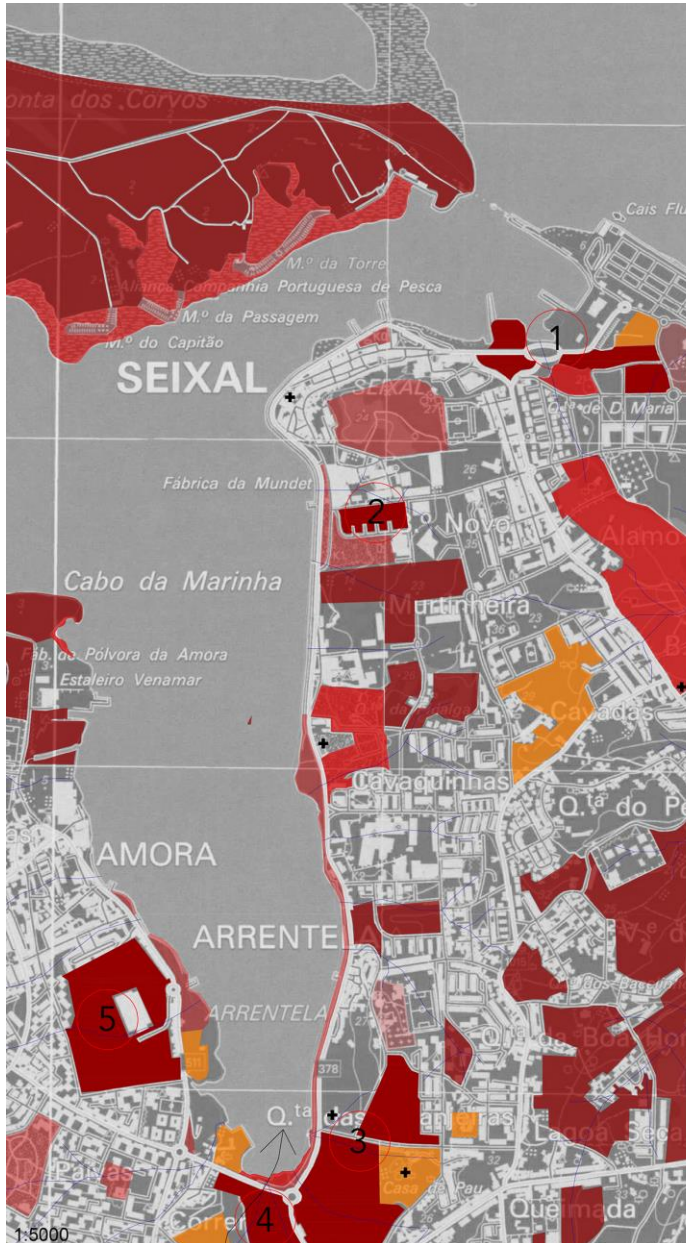
Ci.ª de Mariaiva | 1:5000



GREEN STRUCTURES | PARKS : 1. Quinta de Mariaiva | UNURBED GREEN SPACES : 2 | 3.

green spaces and green structure

Nicole Rodrigues | Nicoleta Banari | Sara Alfonso



Quinta da Trindade | Seixal



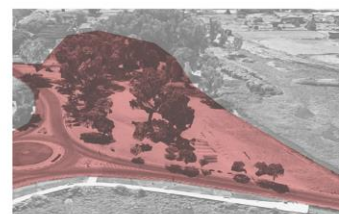
Seixal



Seixal

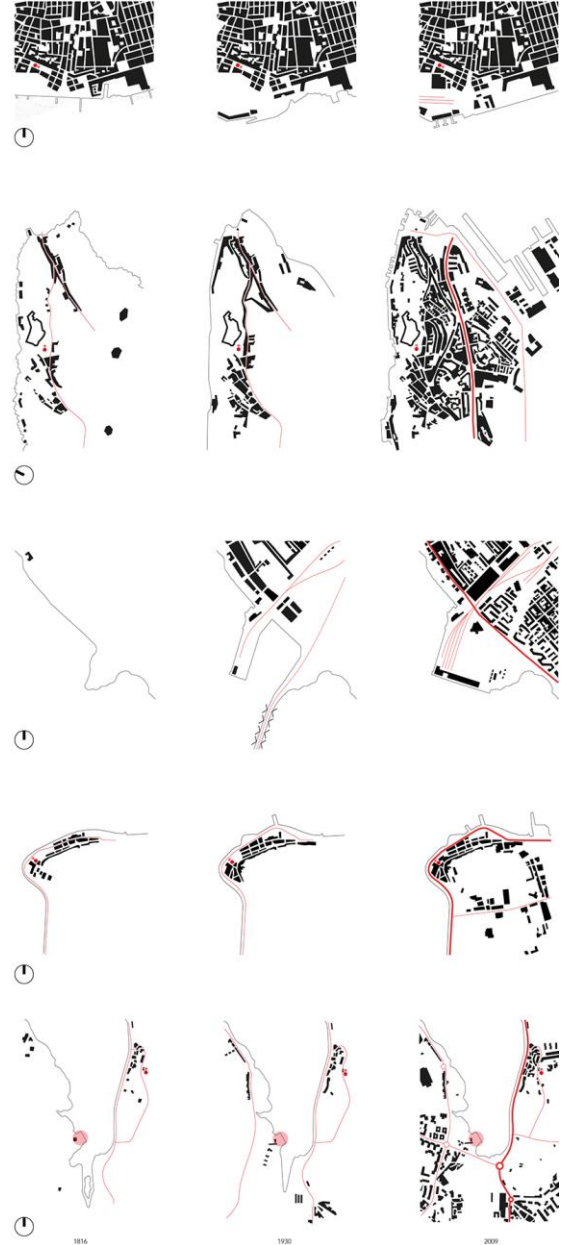


Corner de Água | Seixal



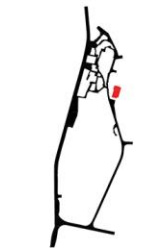
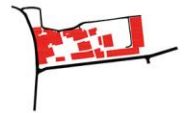
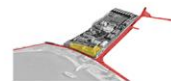
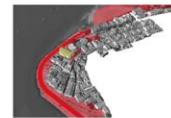
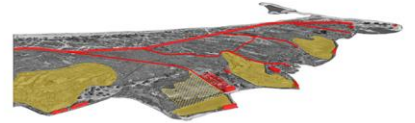
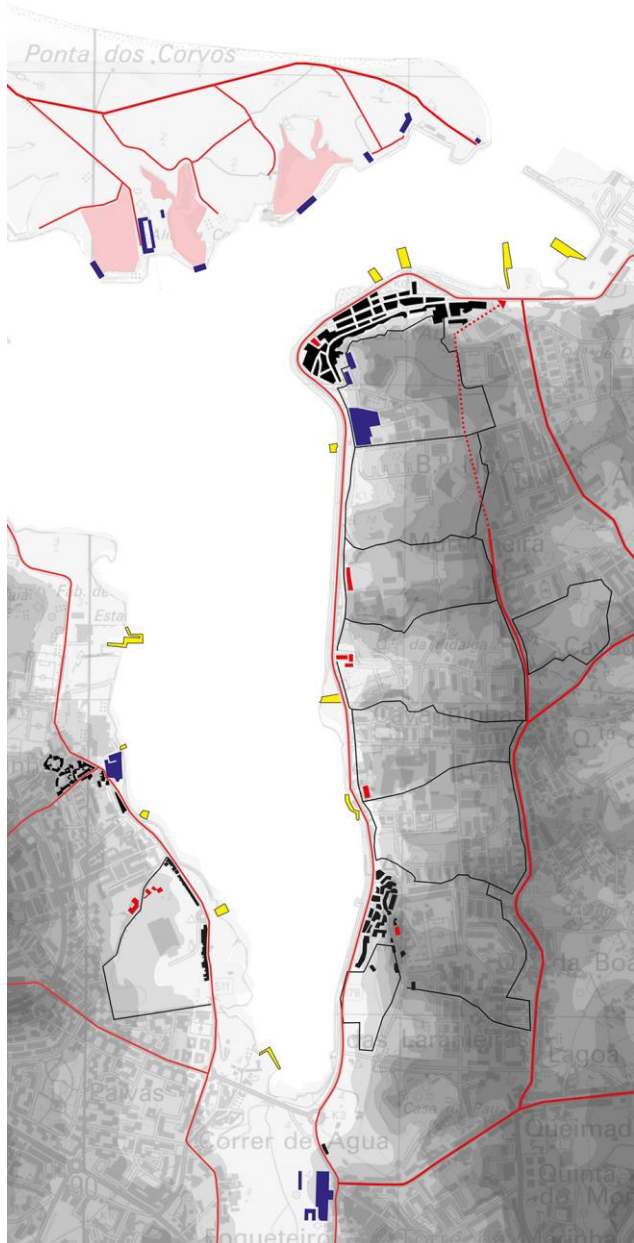
territorial memory and heritage

Alexandre Bardet | Andrea Carboni | Francisco Janeiro



territorial memory and heritage

Alexandre Bardet | Andrea Carboni | Francisco Janeiro

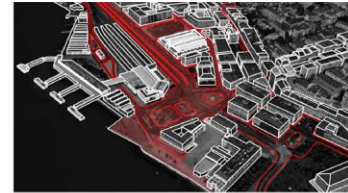


urban fabrics, habitat and polarization

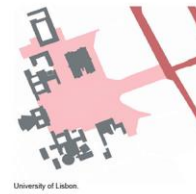
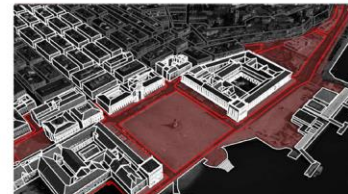
Daniele Calciati | Omar Lai | Raul Corvelo



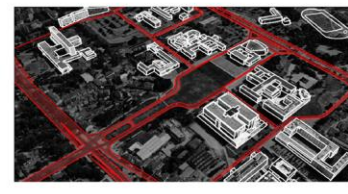
Casa do Saldes



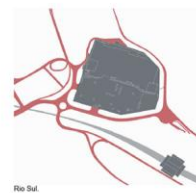
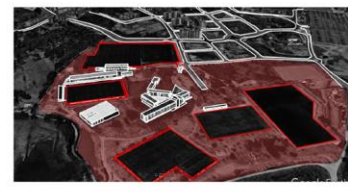
Praça do comércio



University of Lisbon



Benfica Campus

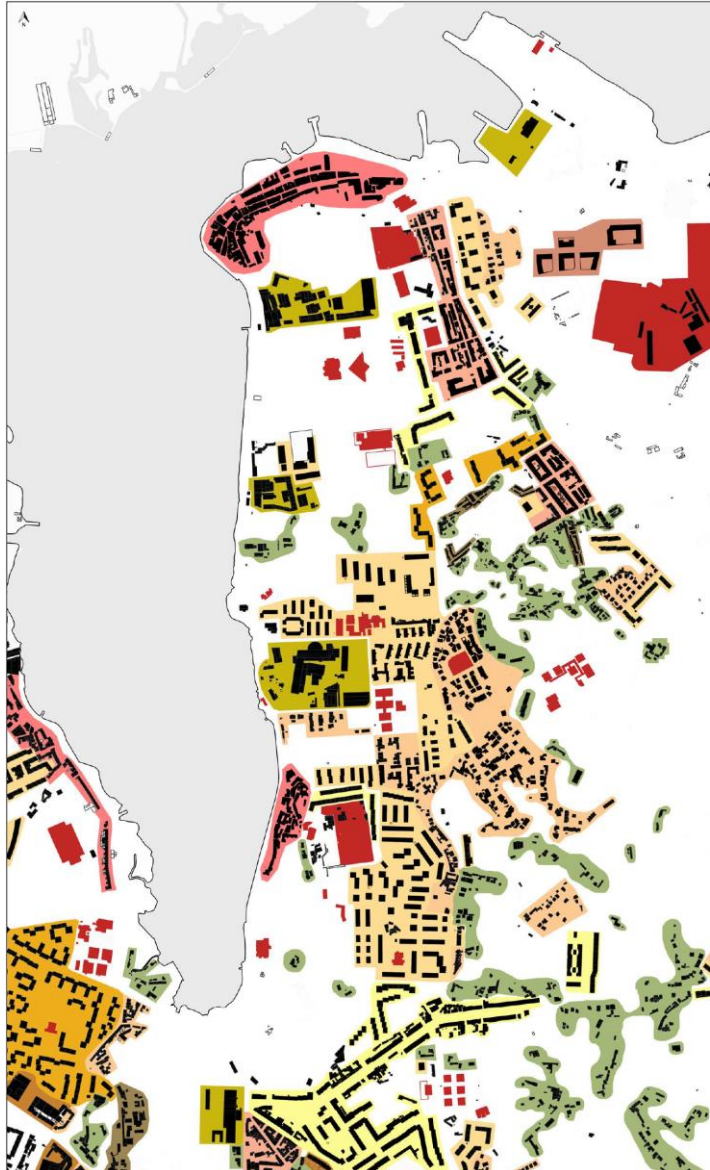


Rio Sul



urban fabrics, habitat and polarization

Daniele Calciati | Omar Lai | Raul Corvelo



Oleiros



Quinta da Bridade



Praça Antónia Costa e Silva



Junta de Alentejo



Av. General Humberto Delgado





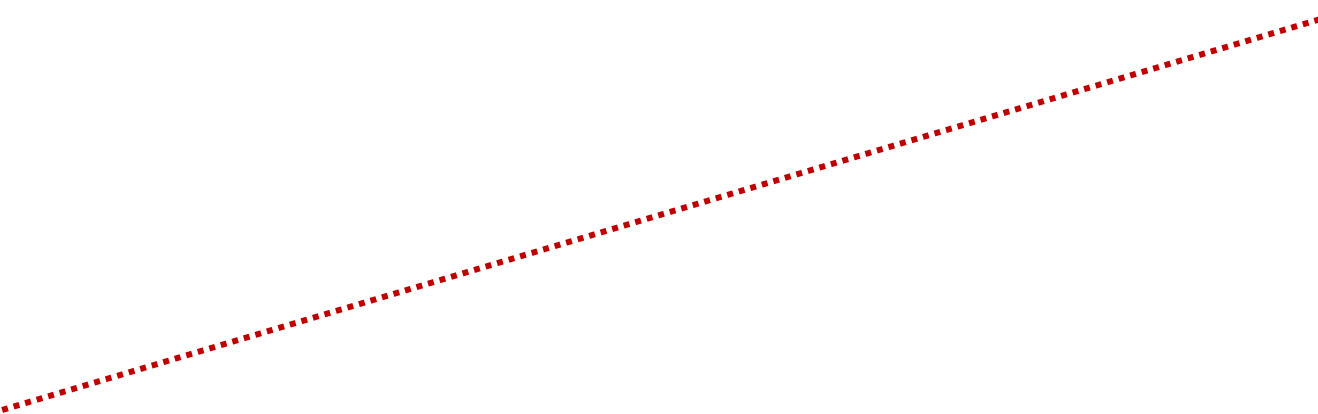
3

public space

strategy + structure

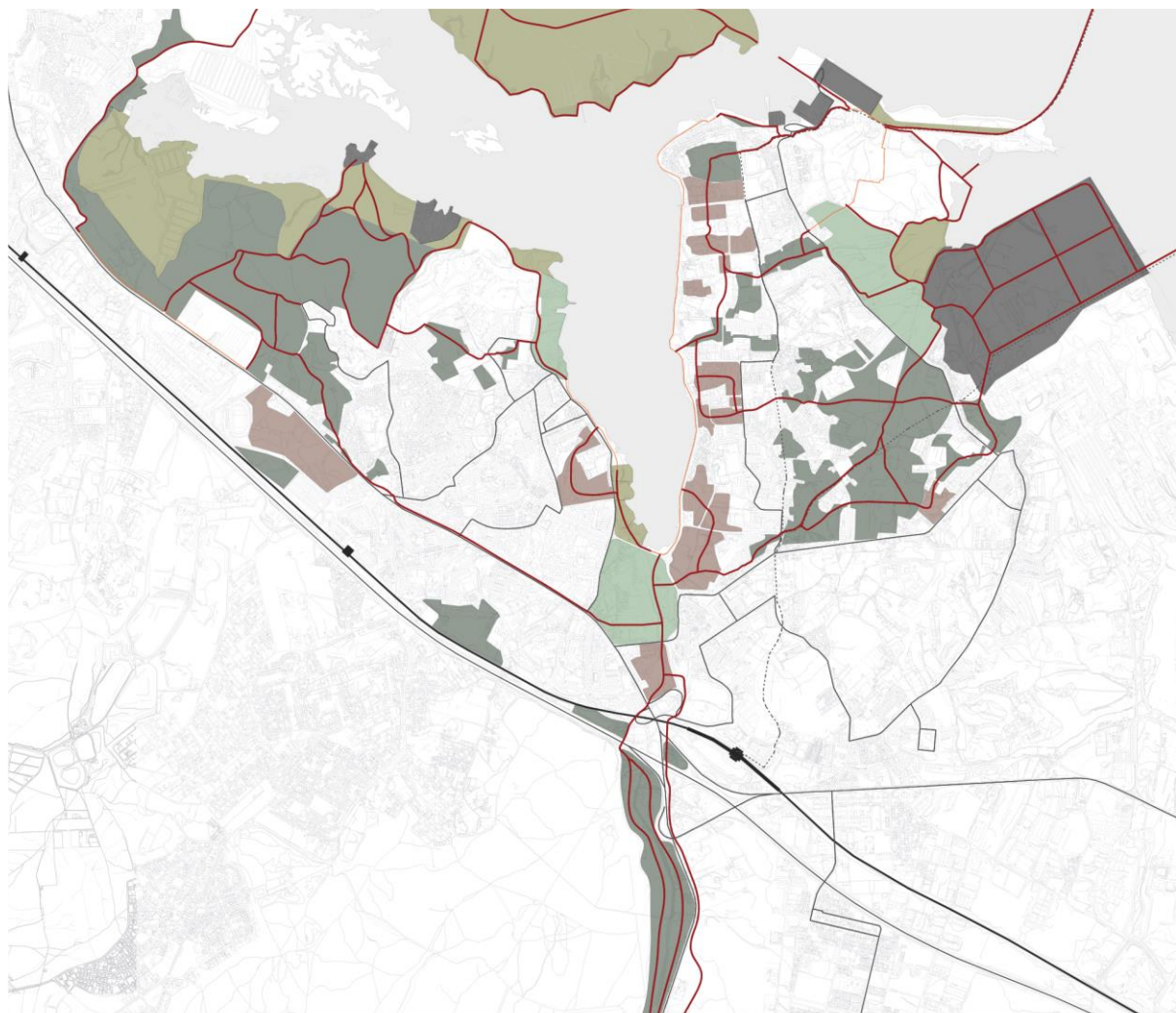
public space . strategy + structure

Alexandre Bardet



Establishing a network of pedestrian paths connecting diverse territorial patches while consolidating underused open spaces.

The new public space network proposes different solutions according to the morphological character of each space.



ESCALA 1 : 10 000

- REDE PROPOSTA DE PERCURSOS PEDESTRES
- PERCURSOS PEDESTRES EXISTENTES
- LINHA FERROVIÁRIA
- REDE TRANSPORTES RODOVIÁRIOS
- METRO SUPERFÍCIE PDM

ÁREAS POR CONSOLIDAR IDENTIFICADAS E USOS ATRIBUÍDOS:

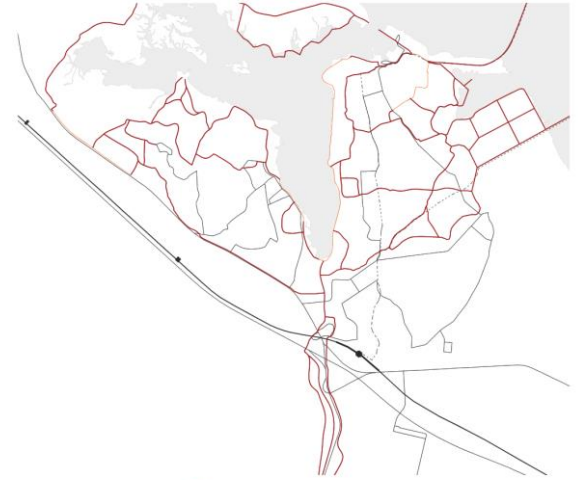
- ÁREA ECOLÓGICA INTERVENÇÃO MÍNIMA
- ÁREA EDIFICÁVEL
- ÁREA DE CARÁCTER MISTO OU ESPECIALIZADO
- PARQUE URBANO
- ÁREA EDIFICÁVEL COM ELEVADO CARÁCTER ECOLÓGICO E PAISAGÍSTICO



ÁREAS POR CONSOLIDAR

ESCALA 1 : 20 000

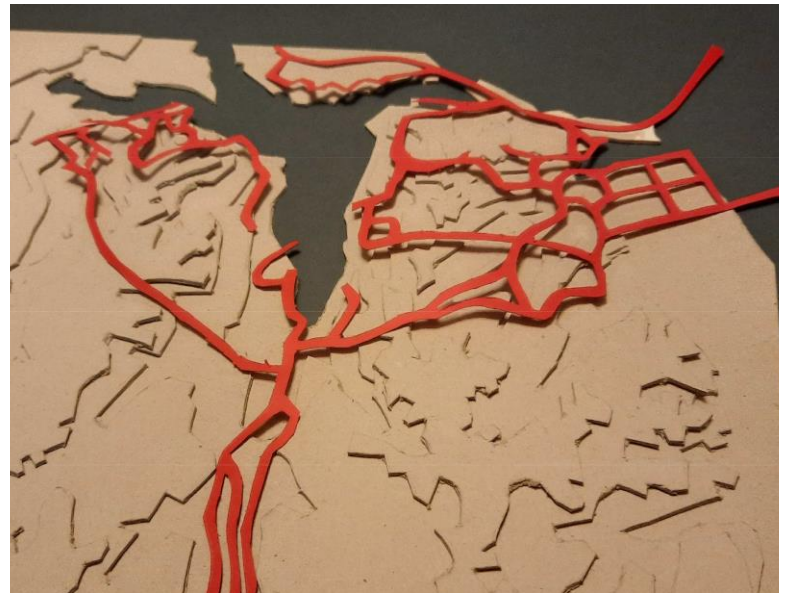
- ÁREA ECOLÓGICA INTERVENÇÃO MÍNIMA
- ÁREA EDIFICÁVEL
- ÁREA DE CARÁCTER MISTO OU ESPECIALIZADO
- PARQUE URBANO
- ÁREA EDIFICÁVEL COM ELEVADO CARÁCTER ECOLÓGICO E PAISAGÍSTICO

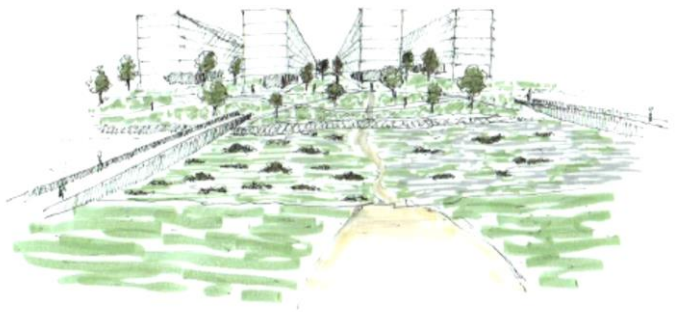
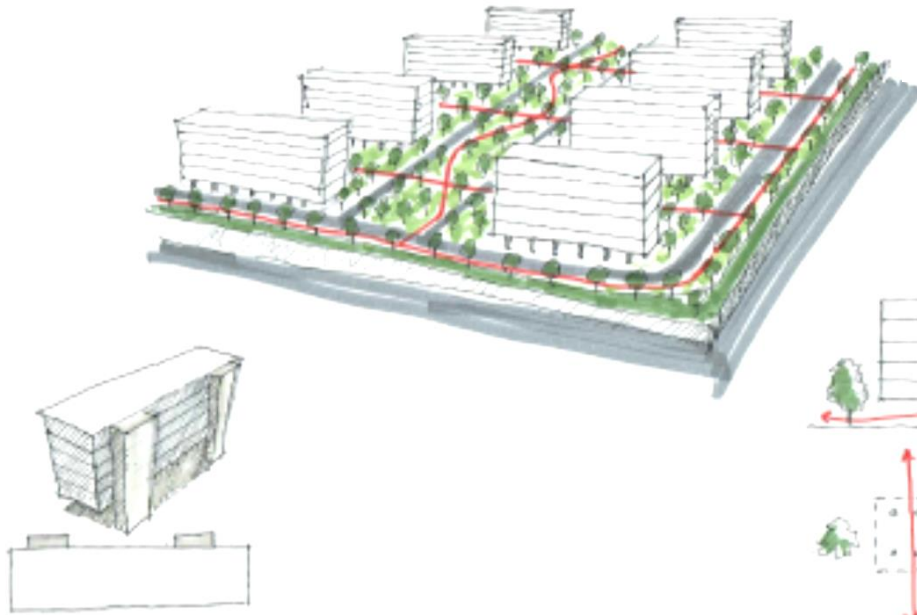


REDE MOBILIDADE

ESCALA 1 : 20 000

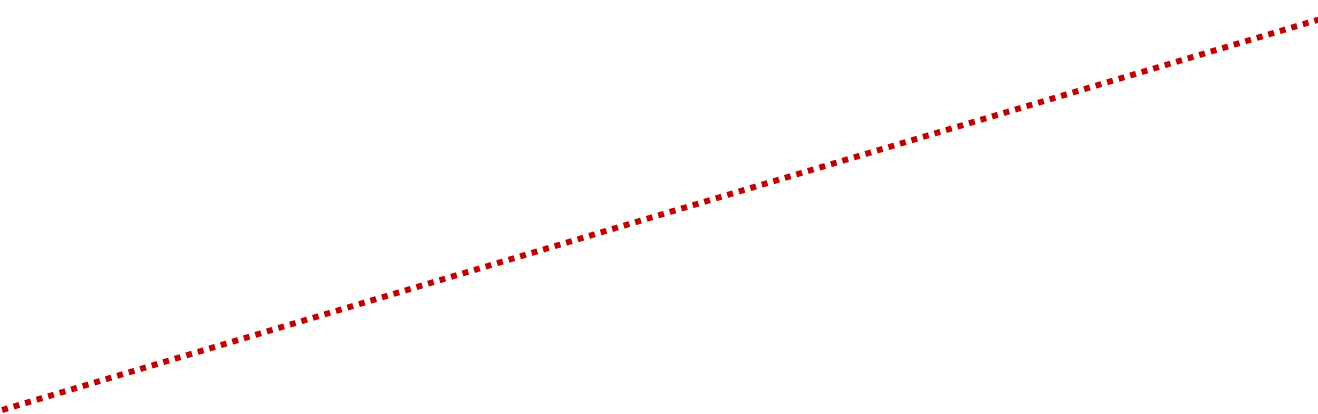
- REDE PROPOSTA DE PERCURSOS PEDESTRES
- PERCURSOS PEDESTRES EXISTENTES
- LINHA FERROVIÁRIA
- REDE TRANSPORTES RODOVÁRIOS
- METRO SUPERFÍCIE PDM





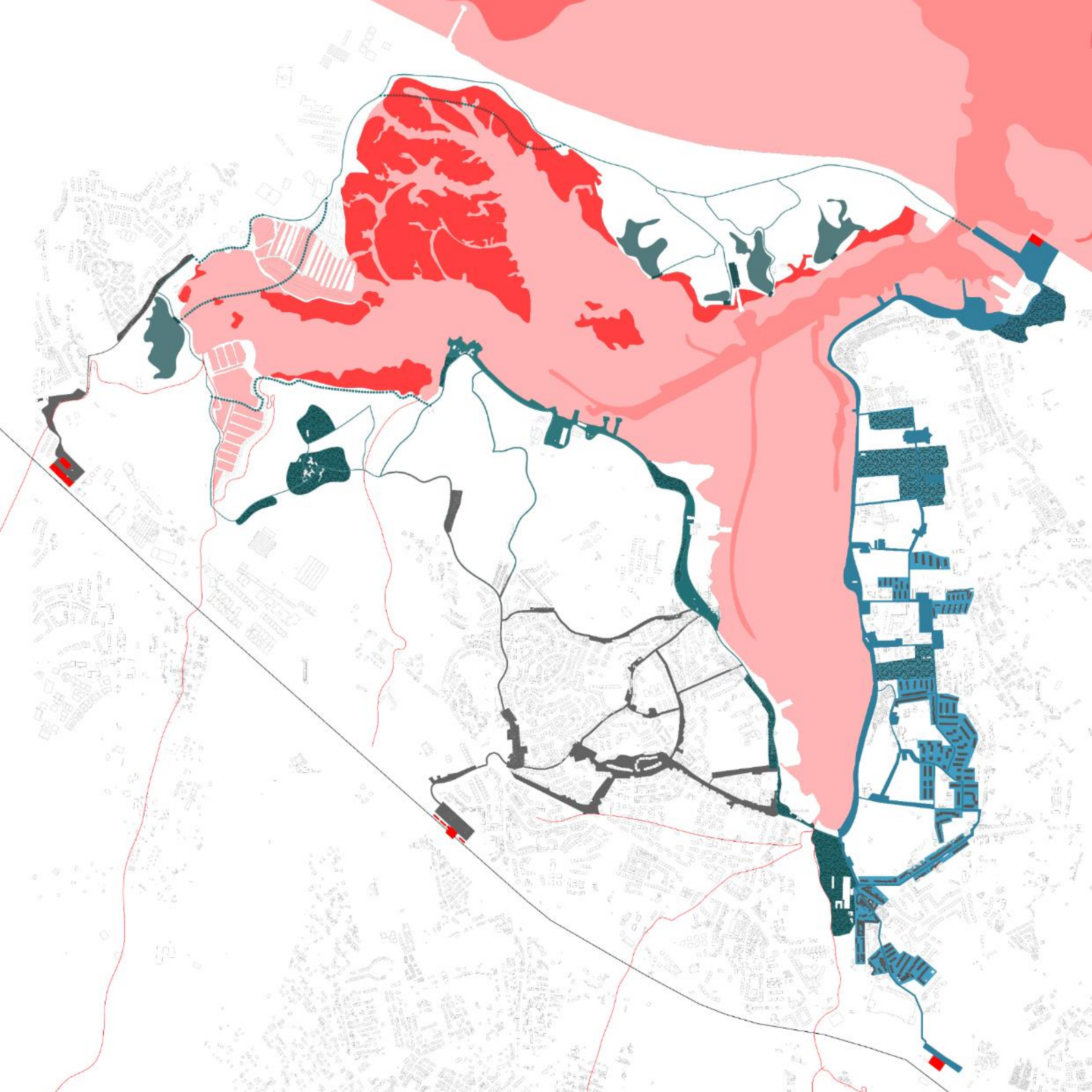


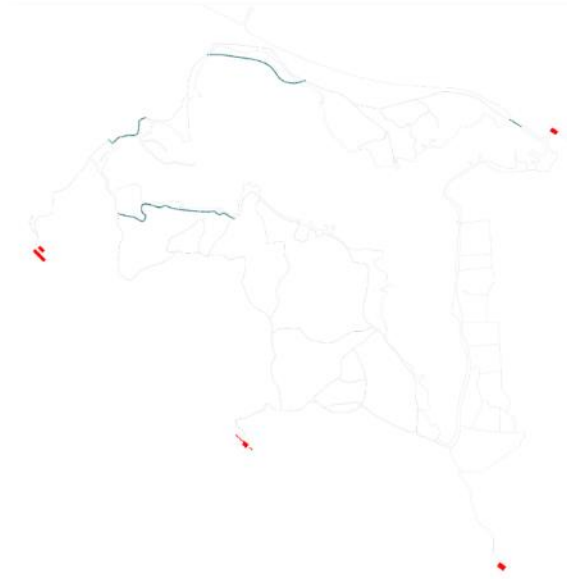
Anamarija Skobe



Blue, green and gray: these are the colours of the proposed network bringing together the bay waterfronts, the open space patches and the train stations

Sensitive heritage and environmental areas are combined as key elements of the new network using low-cost interventions and reminiscence of local materials





BLUE, GREEN AND GRAY NETWORKS



NETWORK OF NEW PUBLIC SPACES IN NEIGHBORHOODS



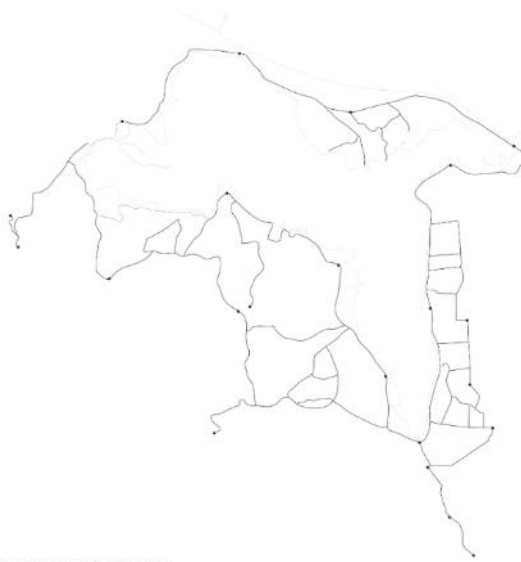
NEIGHBORHOOD PUBLIC SPACE



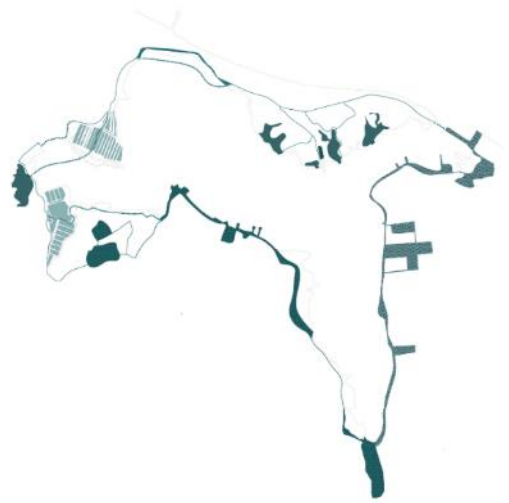
BICYCLE STATION



T STREET



NETWORK WITH BICYCLE STATIONS



NETWORK OF EMPTY AREAS FOR NEW PUBLIC SPACES



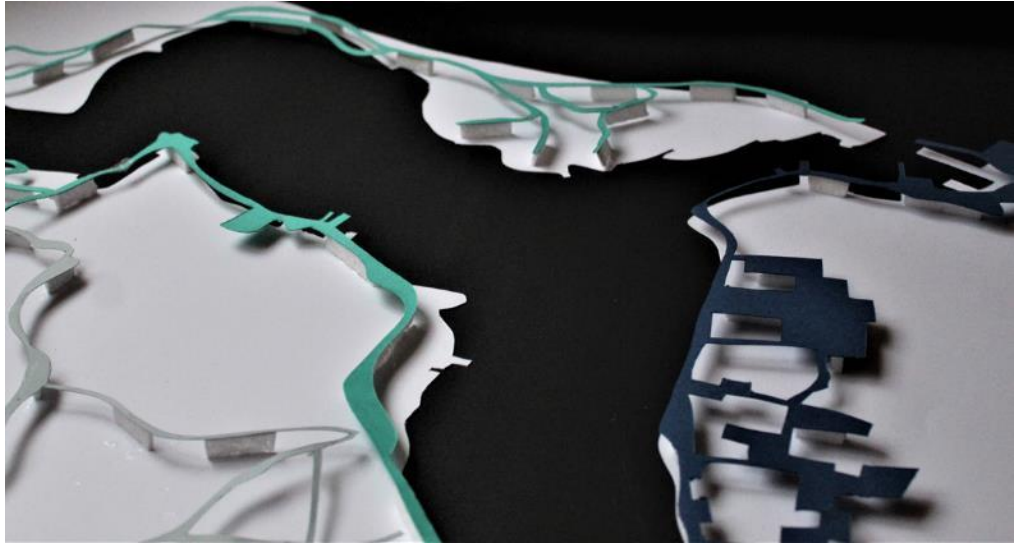
OLD TIDE MILL WITH NEW PURPOSE



PATHS IN THE LEFT SIDE OF THE BAY

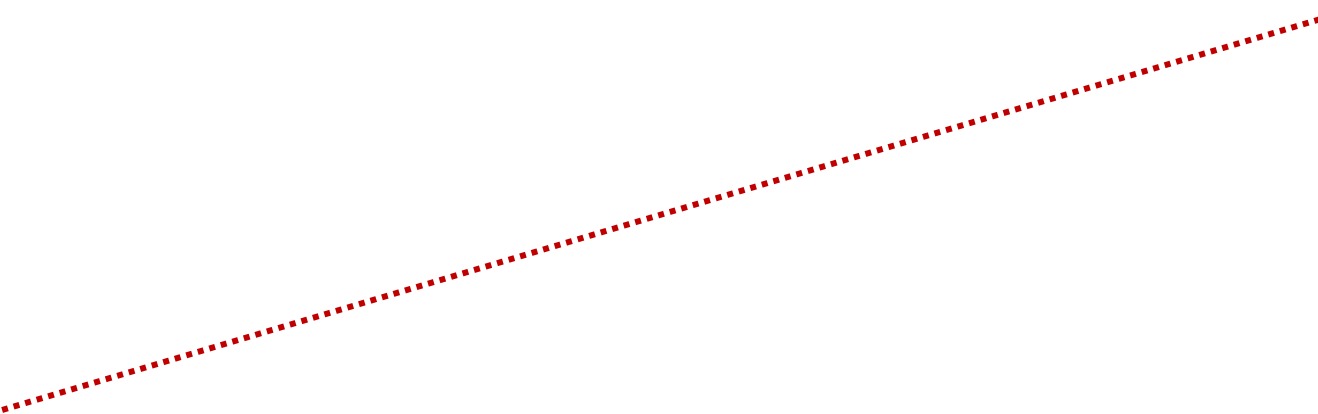


WOODEN PATHS IN THE WETLAND



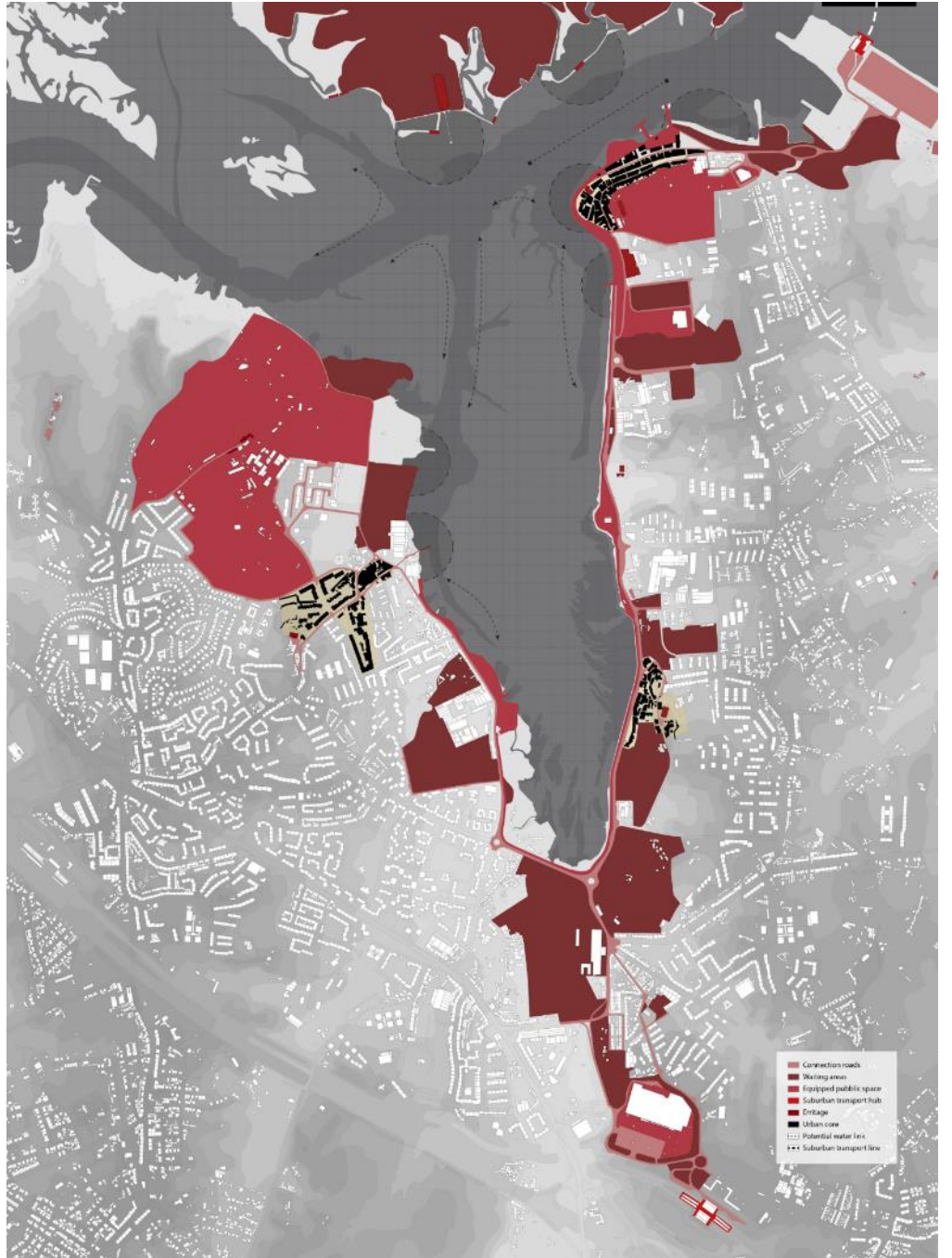
public space . strategy + structure

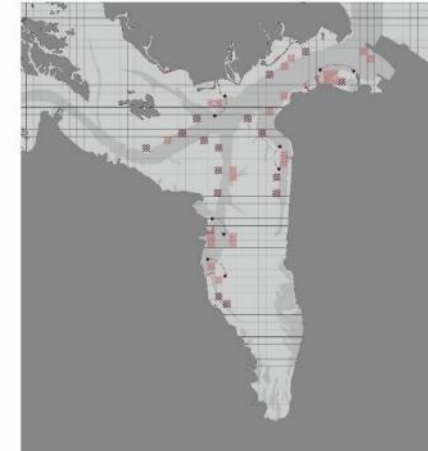
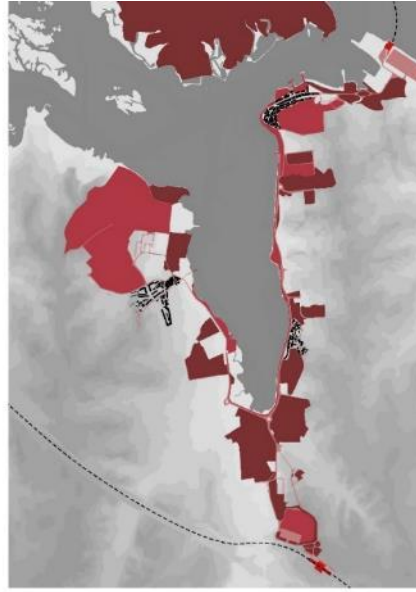
Andrea Carboni

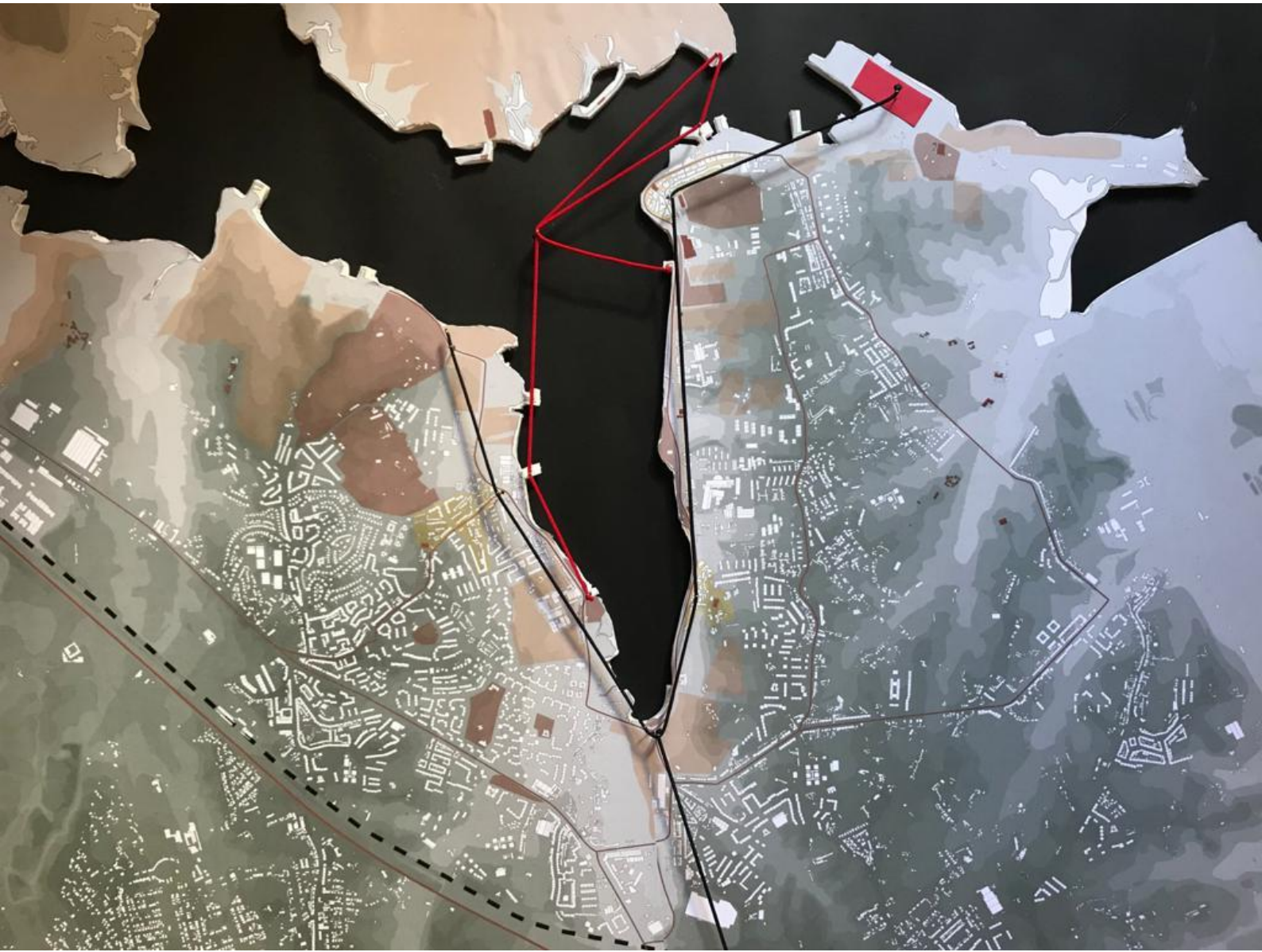


Seixal bay is the common ground of the new public space structure,
organizing a continuous path that connects the surrounding spaces

The water and its changing dynamic is the stage for floating devices
in which multiple activities can occur and be deployed in different
configurations around the year



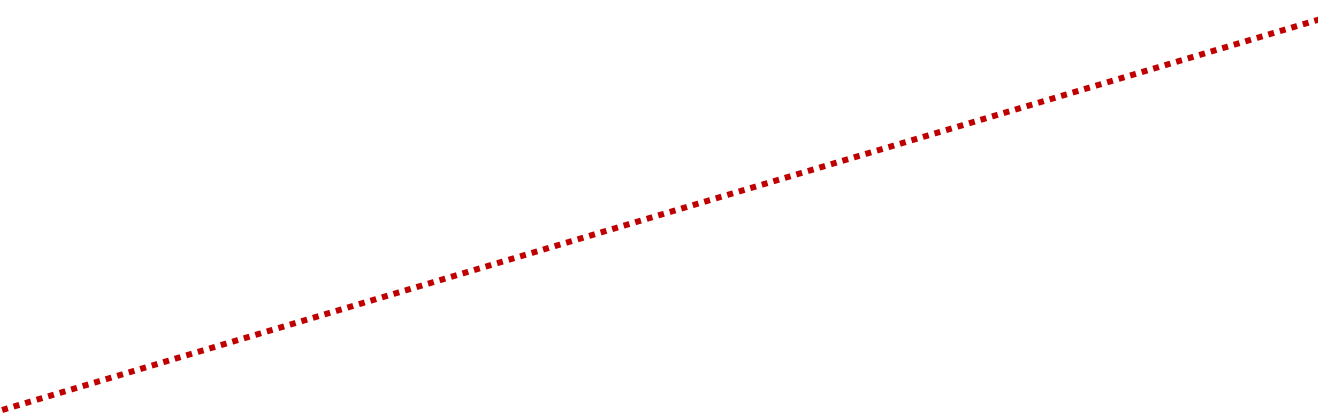






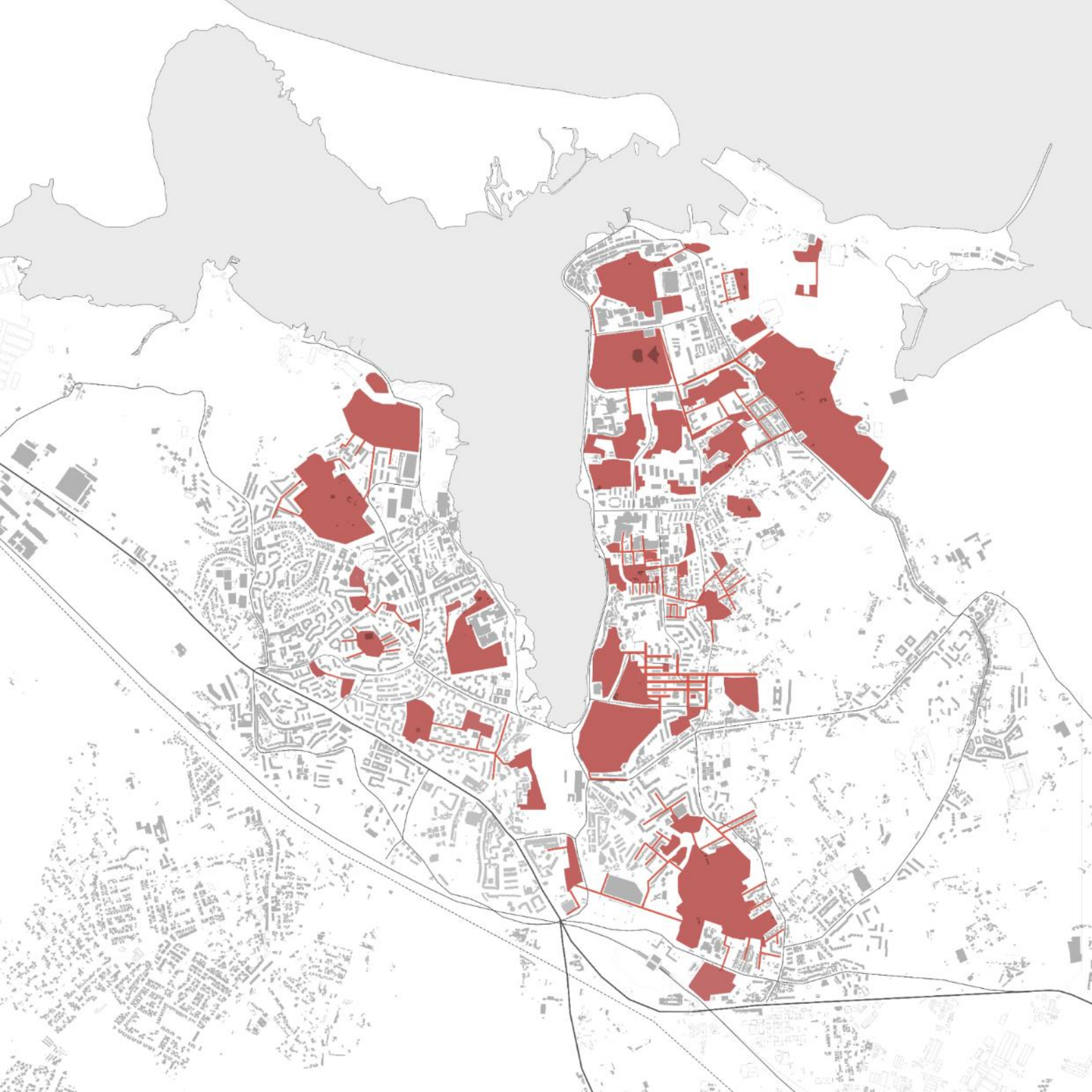
public space . strategy + structure

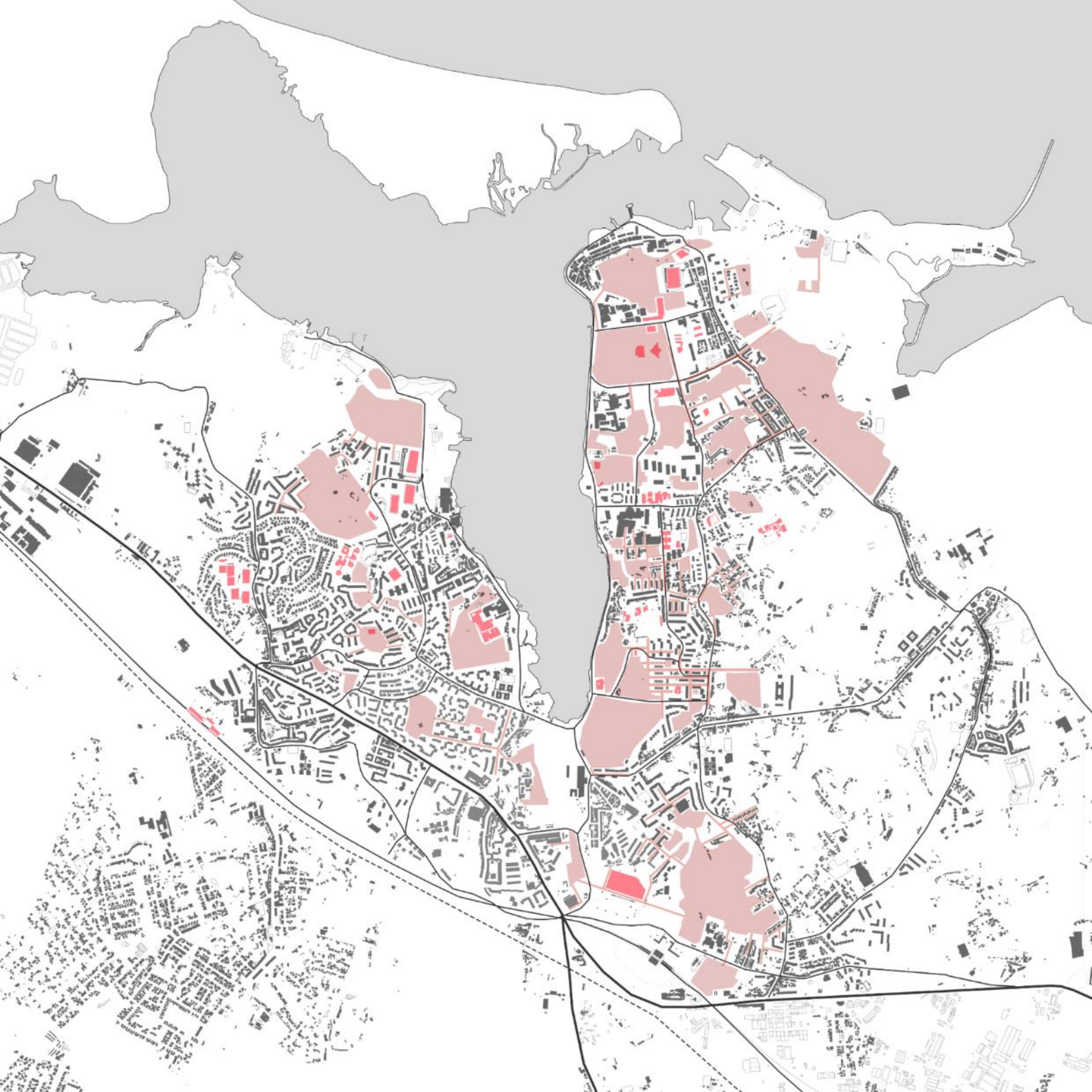
Daniele Calciati



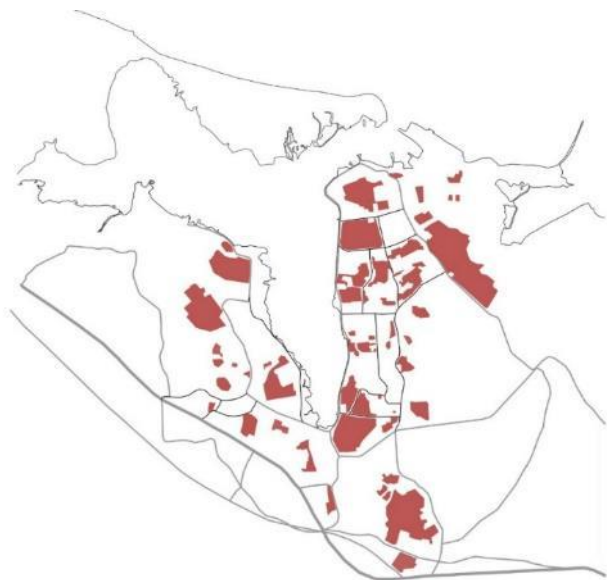
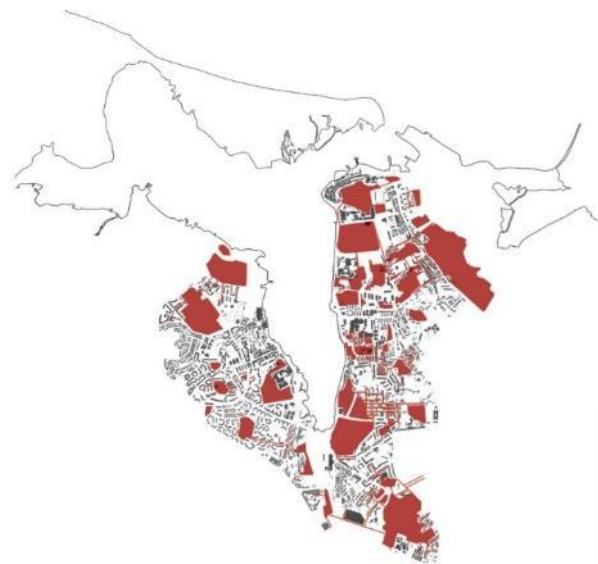
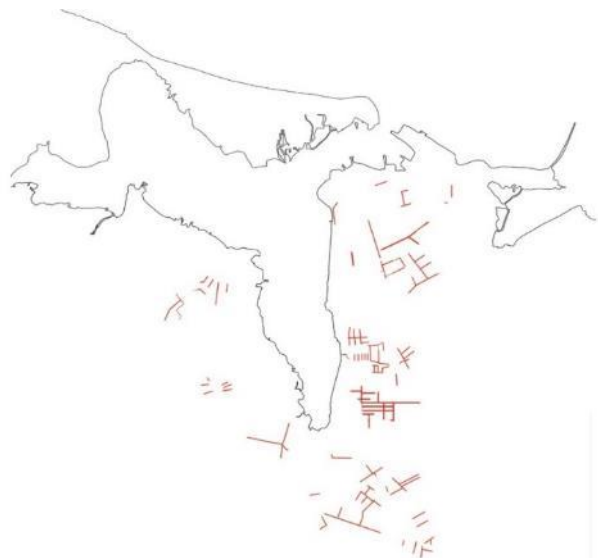
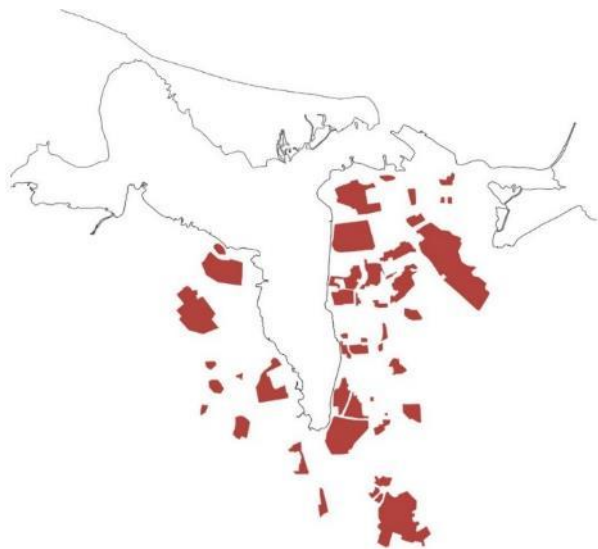
The structure articulates large open spaces with the thin network of residential fabrics and linking local urban facilities

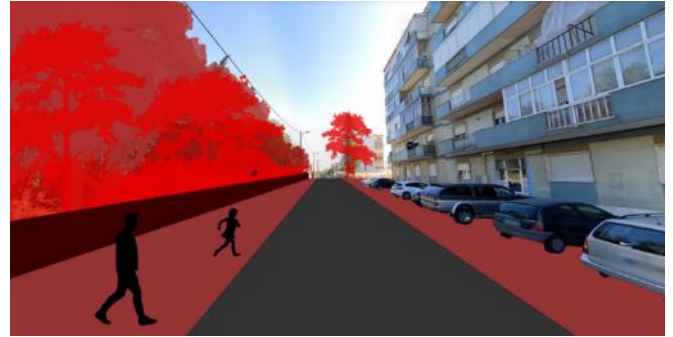
Local requalification in Seixal neighborhoods becomes the driver of an incremental public space network





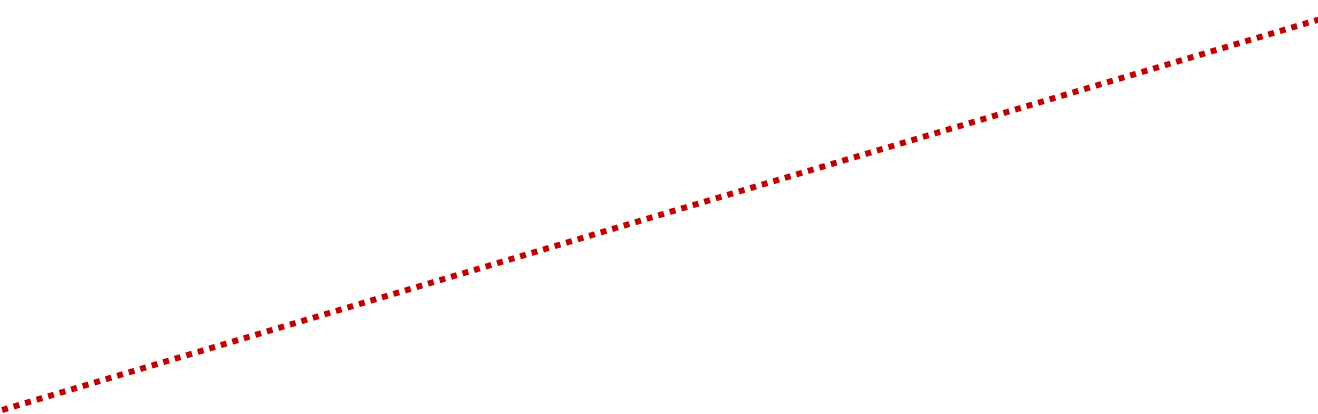






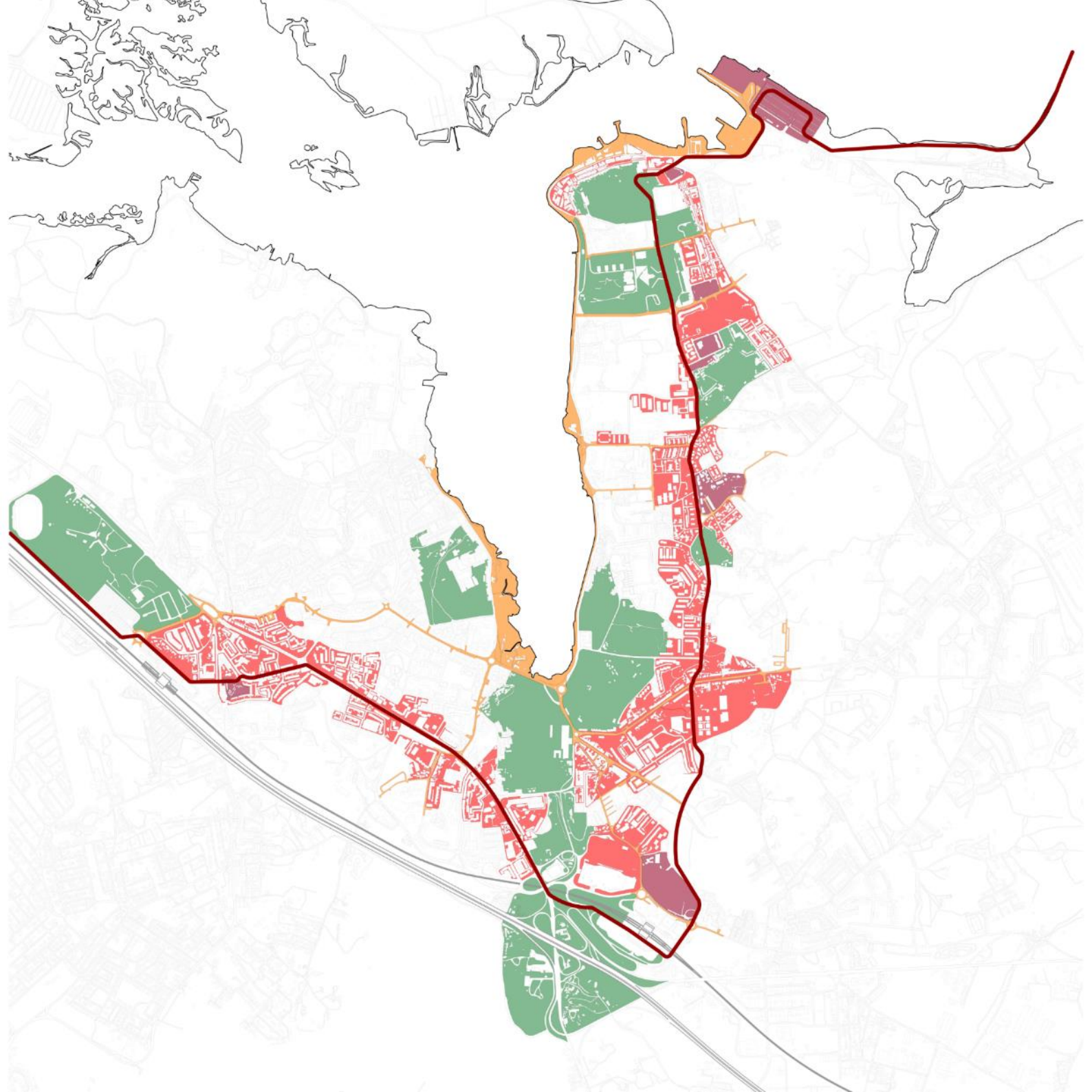
public space . strategy + structure

Eduardo Leitão



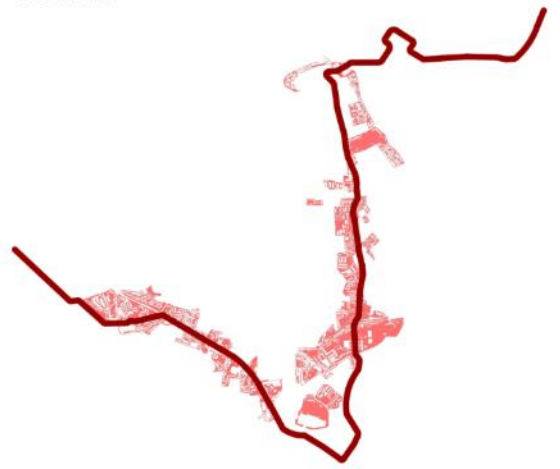
The new public space structure takes the future tram line as the driving opportunity to restructure and requalify existing territories

A central spine along the tramway is combined with green patches of open space and with the outstanding linear paths on the bay

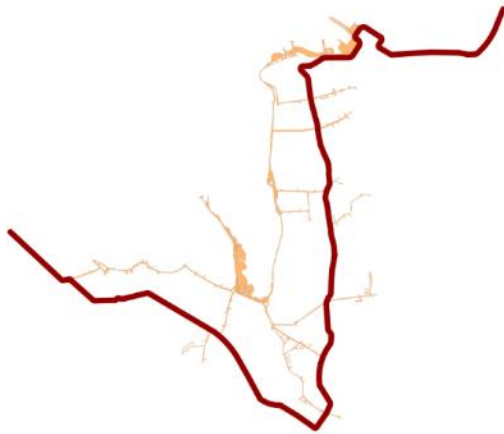




Proposals for requalification and restructuring of green spaces



Proposed Areas for Urban restructuring and requalification



Proposed Spine of soft mobility and connection of key points to the surface meter line



Anchor areas for urban development along the line



Concept collage for surface meter line



Concept collage for seixal interface



Concept collage for green structures



Concept collage for urban requalification

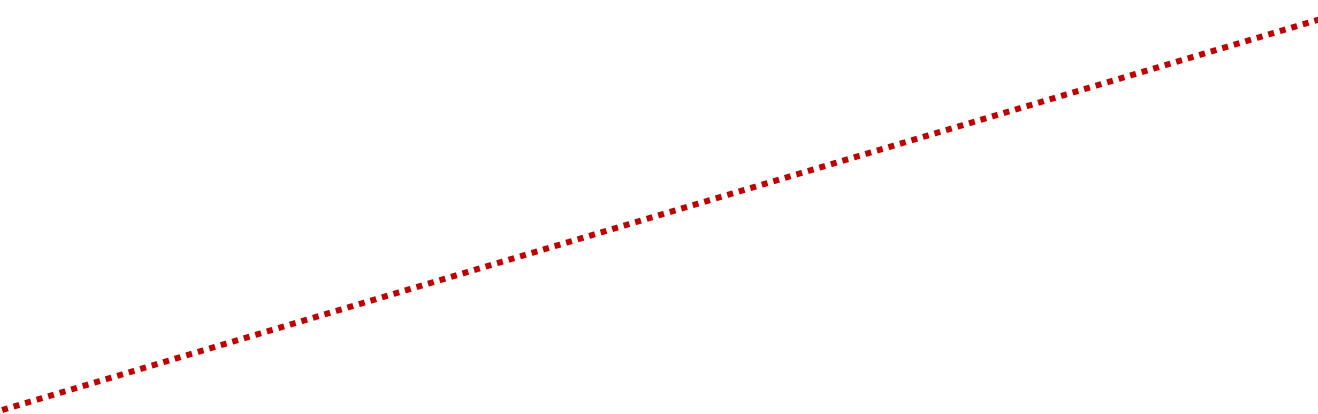


Concept collage for soft mobility spine



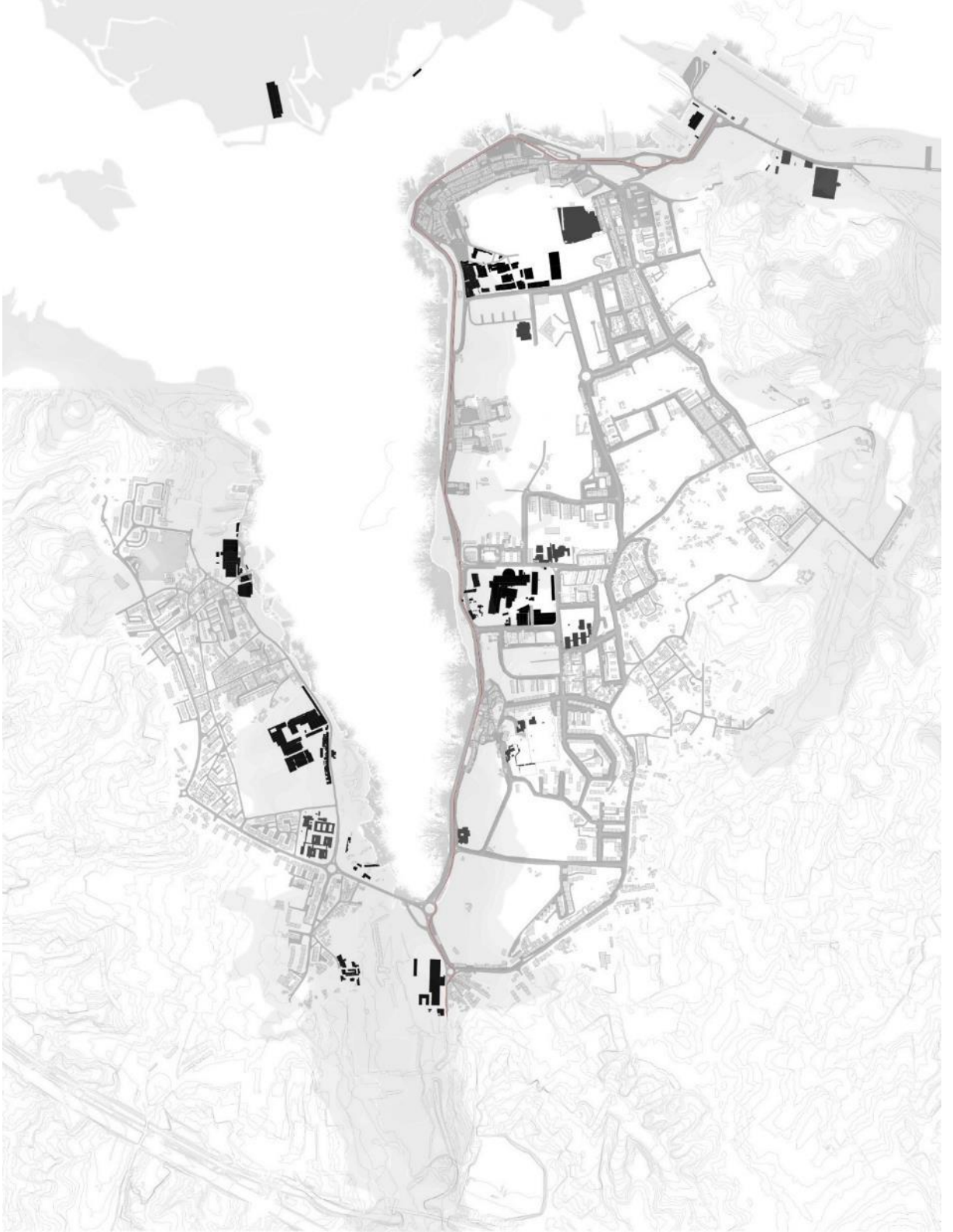


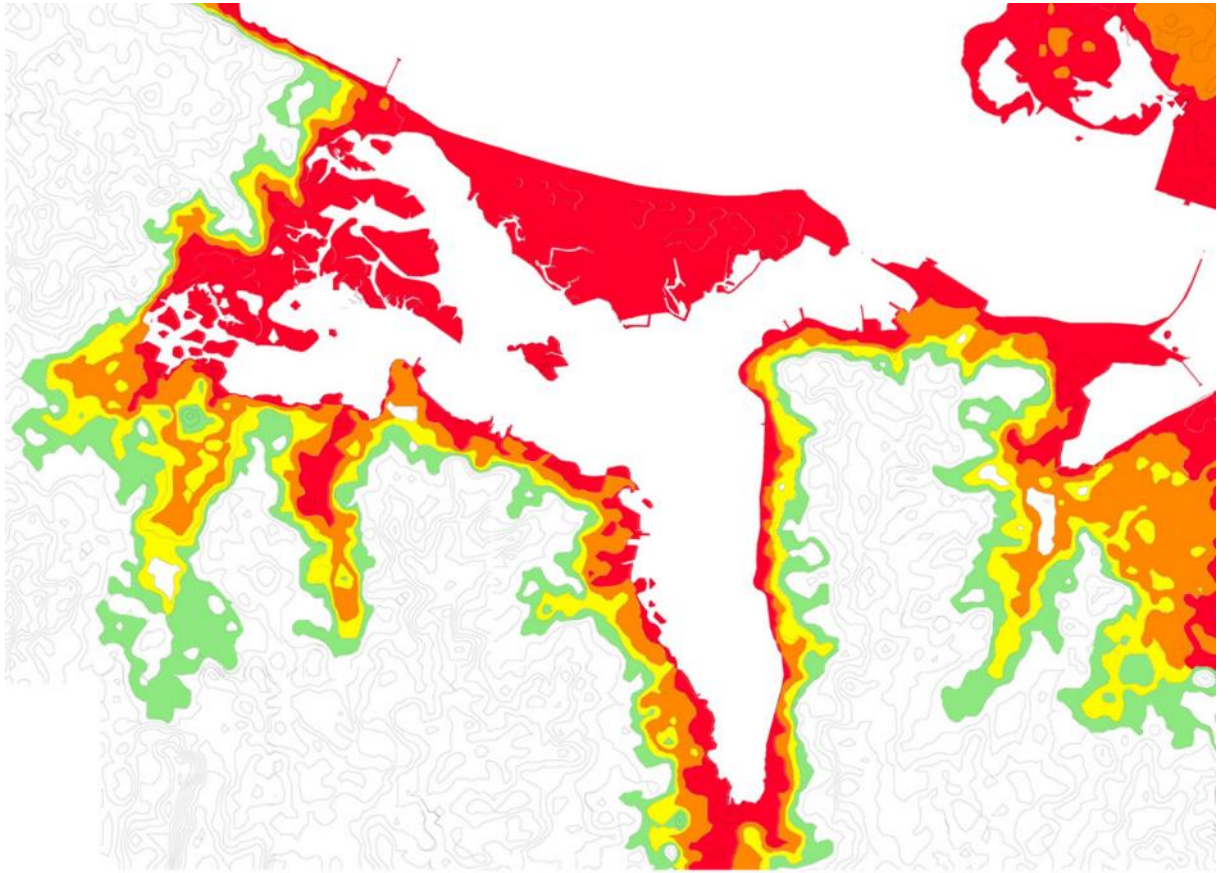
Esther Titos



Climate change impacts such as the rise of average sea levels are the central challenge to be tackled by the new public space structure along Seixal's bay

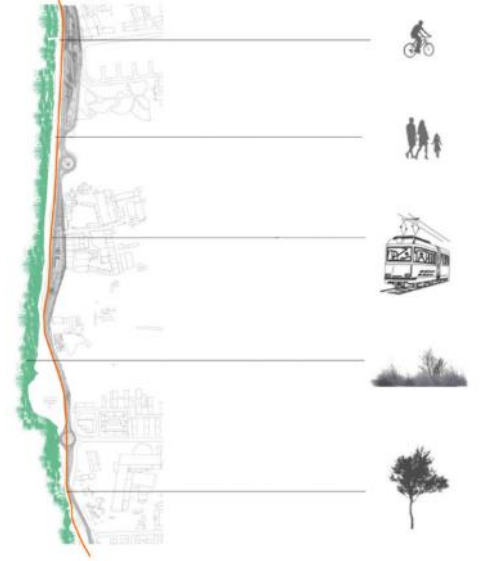
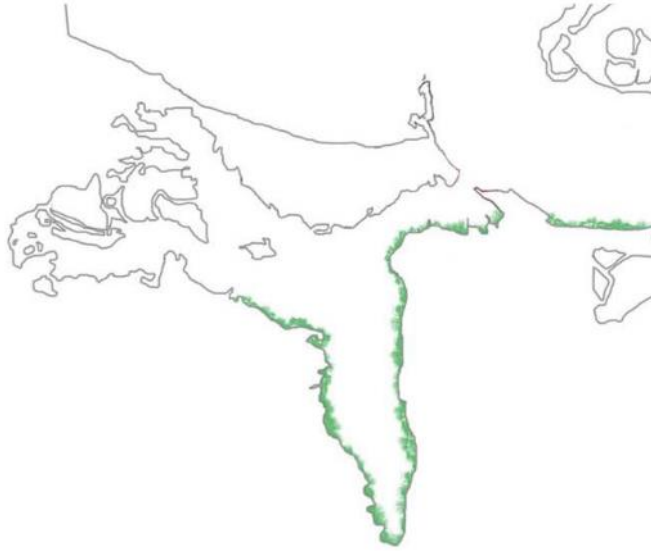
A sequence of transition spaces between land and water will protect the waterfronts while creating opportunities for inland requalification and linking.

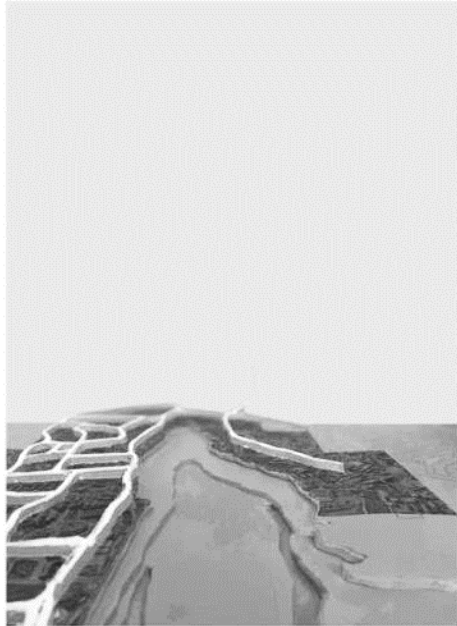




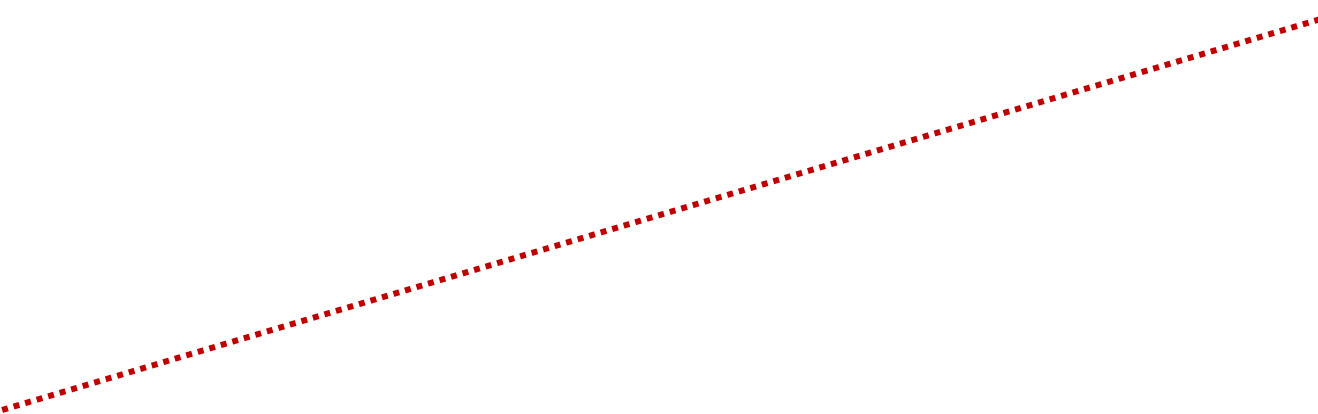
- Very high vulnerability
- High vulnerability
- Medium vulnerability
- Low vulnerability

0 50 100



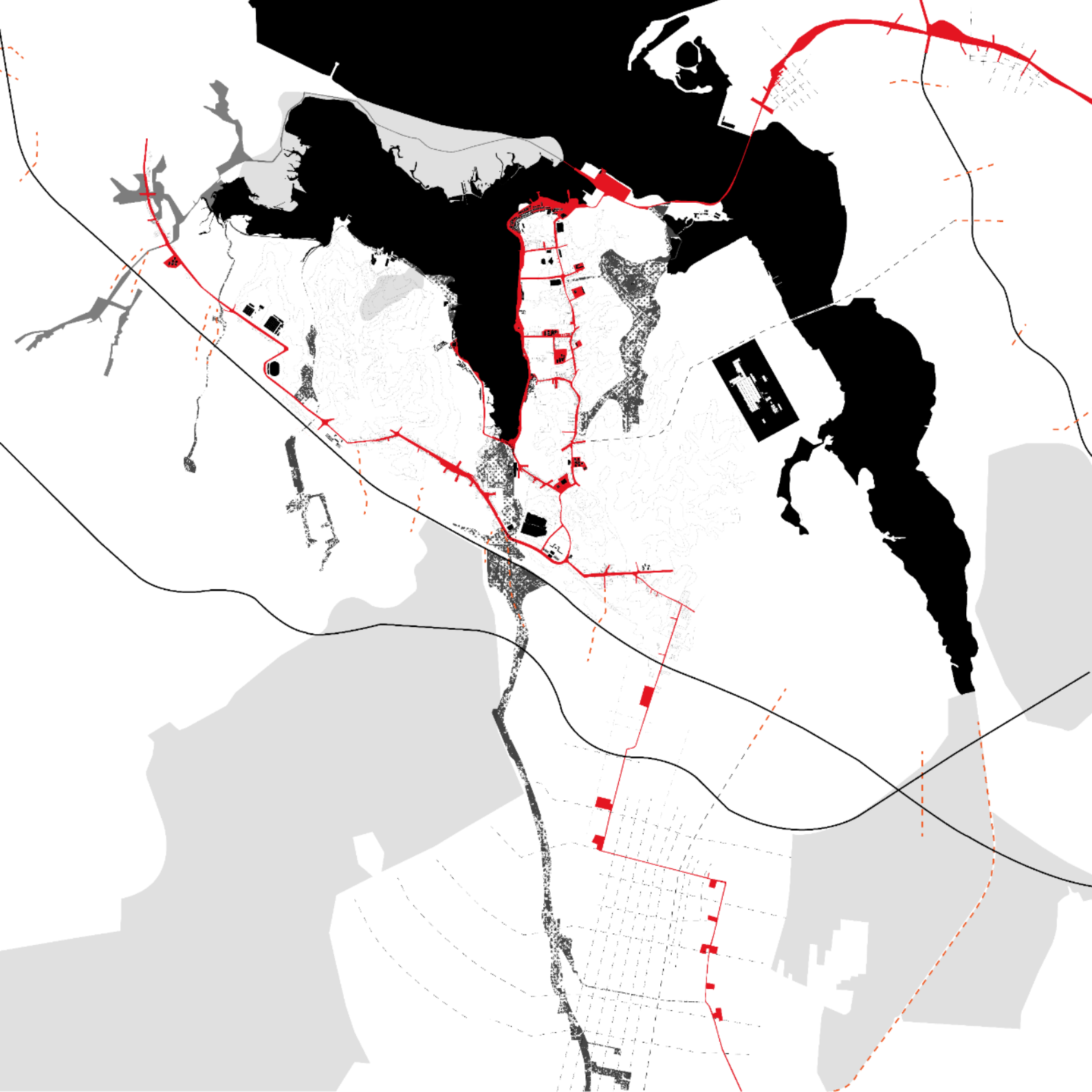


Francisco Janeiro



The public space network is an assemblage of four systems: the hard spine, the soft spine, the green leafs, and the consolidated bay waterfront.

Each spine provides a linear continuity while engaging with the infrastructural, functional, ecological and material layers of the urban fabric





HARD_SPINE

IMPERMEABLE SOIL

RIDGE LINES

REGIONAL MOBILITY

HIGH DENSITY



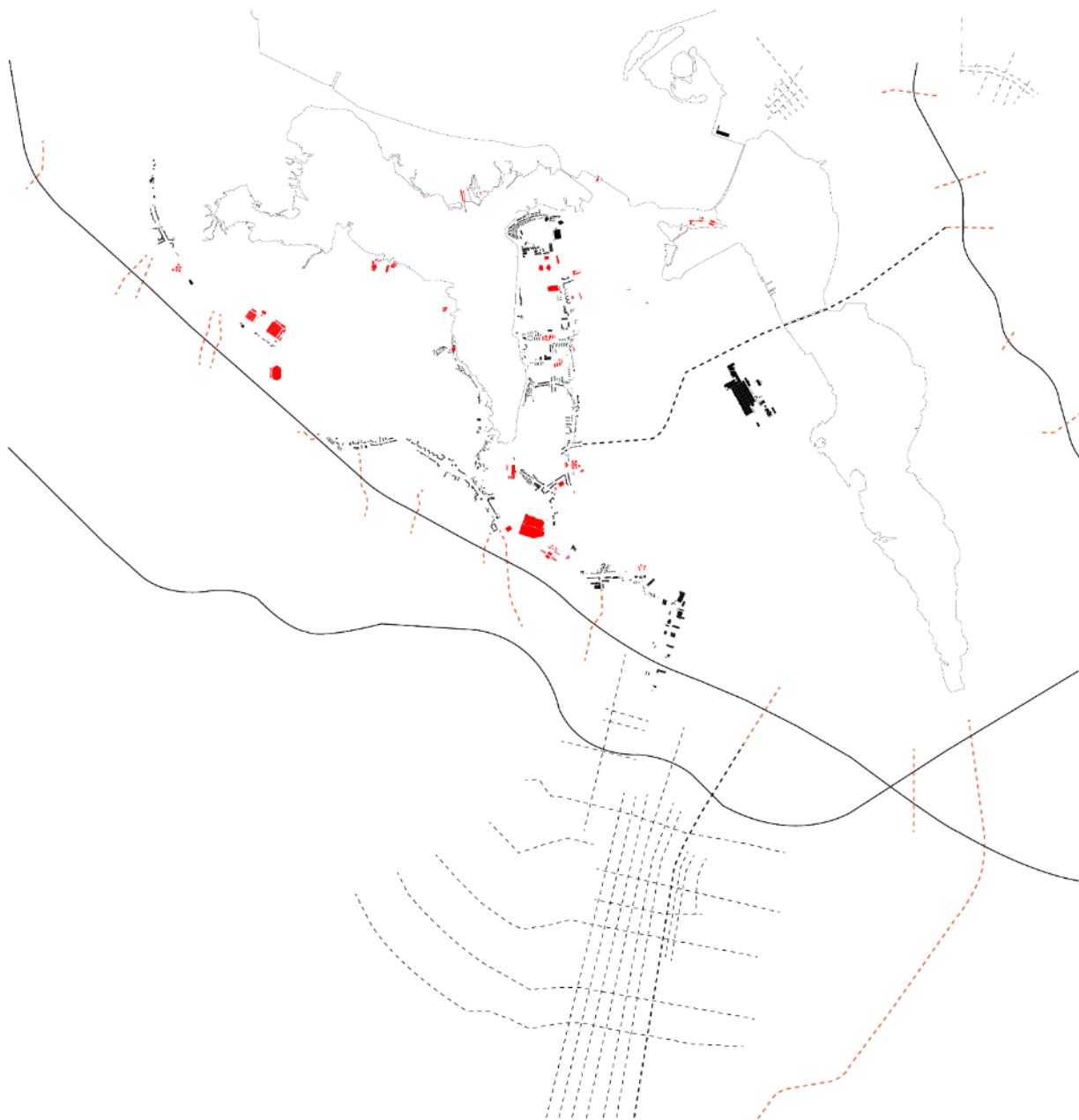
SOFT_SPINE

ABSORPTION SOIL

WATER LINES

SOFT MOBILITY

LOW DENSITY



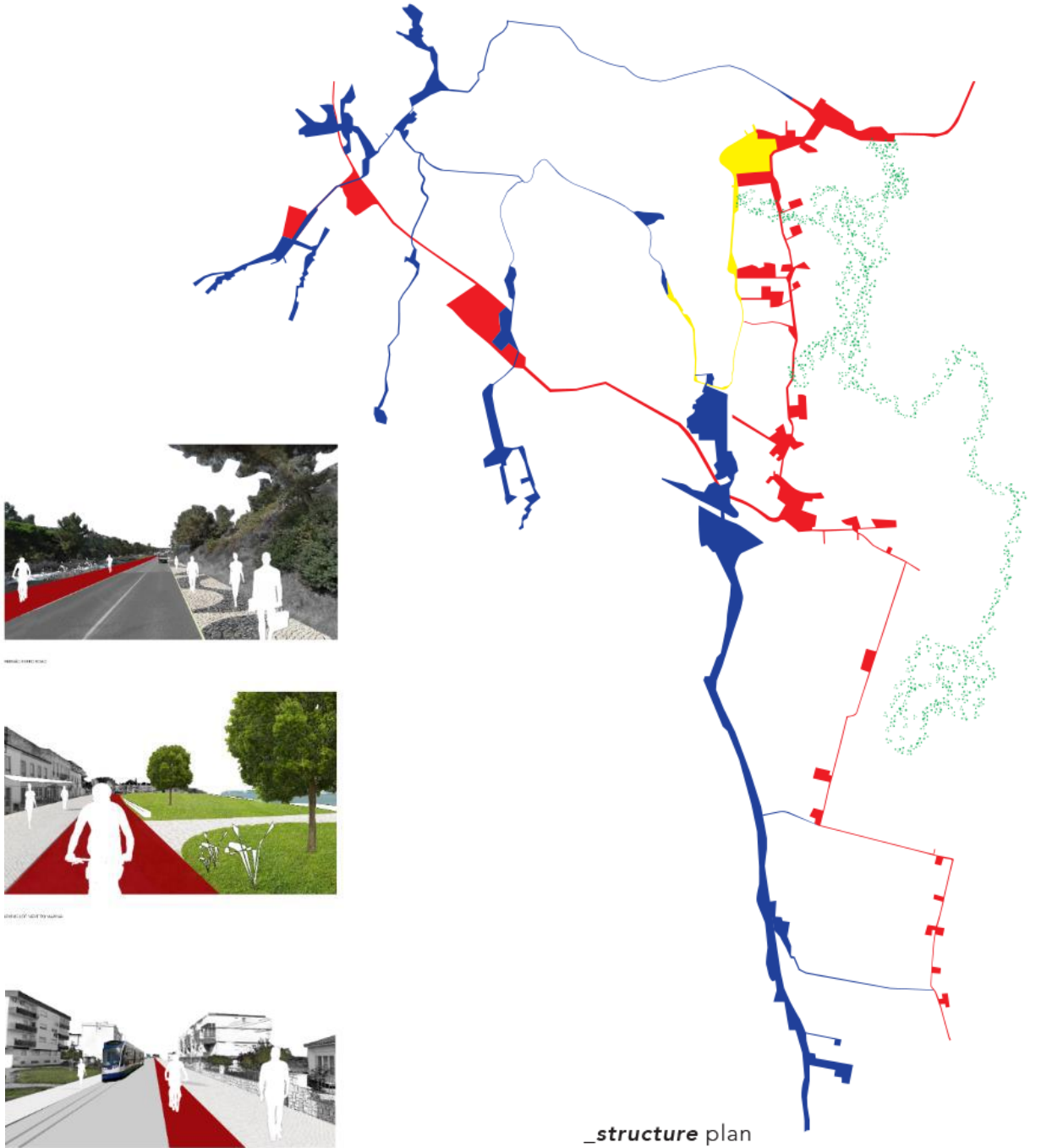
NORTH HIGH DENSITY

SOUTH LOW DENSITY

ASFALT RIVERS BETWEEN

GREEN DISCONTINUITY

LACK OF PUBLIC SPACE



_structure plan



01



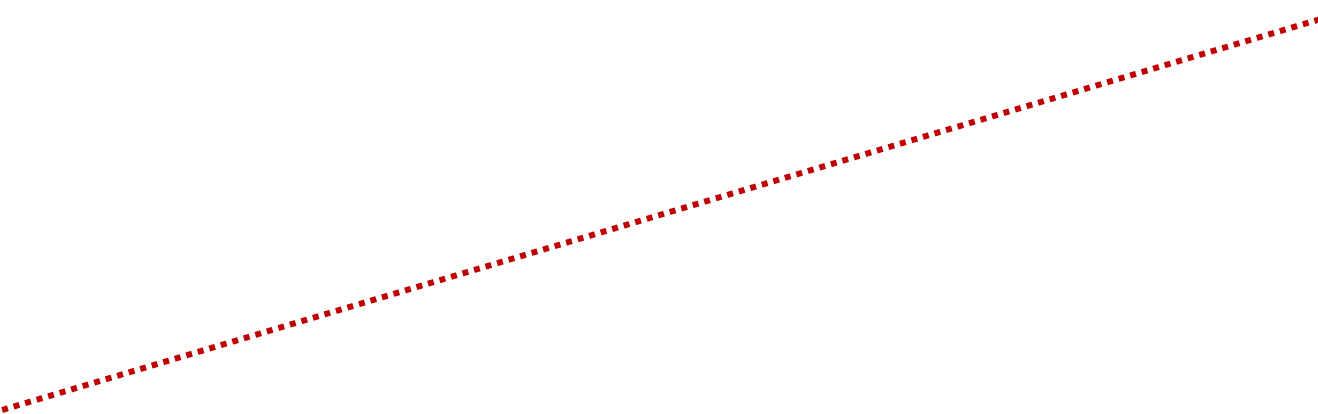
02



03

public space . strategy + structure

João Gouveia



Reimagining Seixal bay as a system that extends to the south, along its wetlands and water lines is the structural concept for a new public space network.

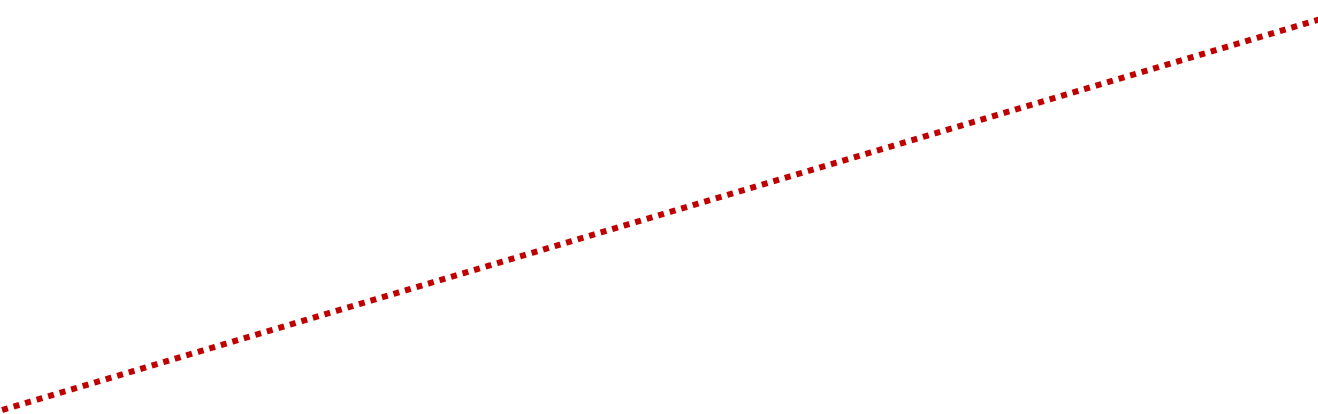
New landscape interfaces between land and water may be explored on a new borderline of high ecological value and adapted to climate change





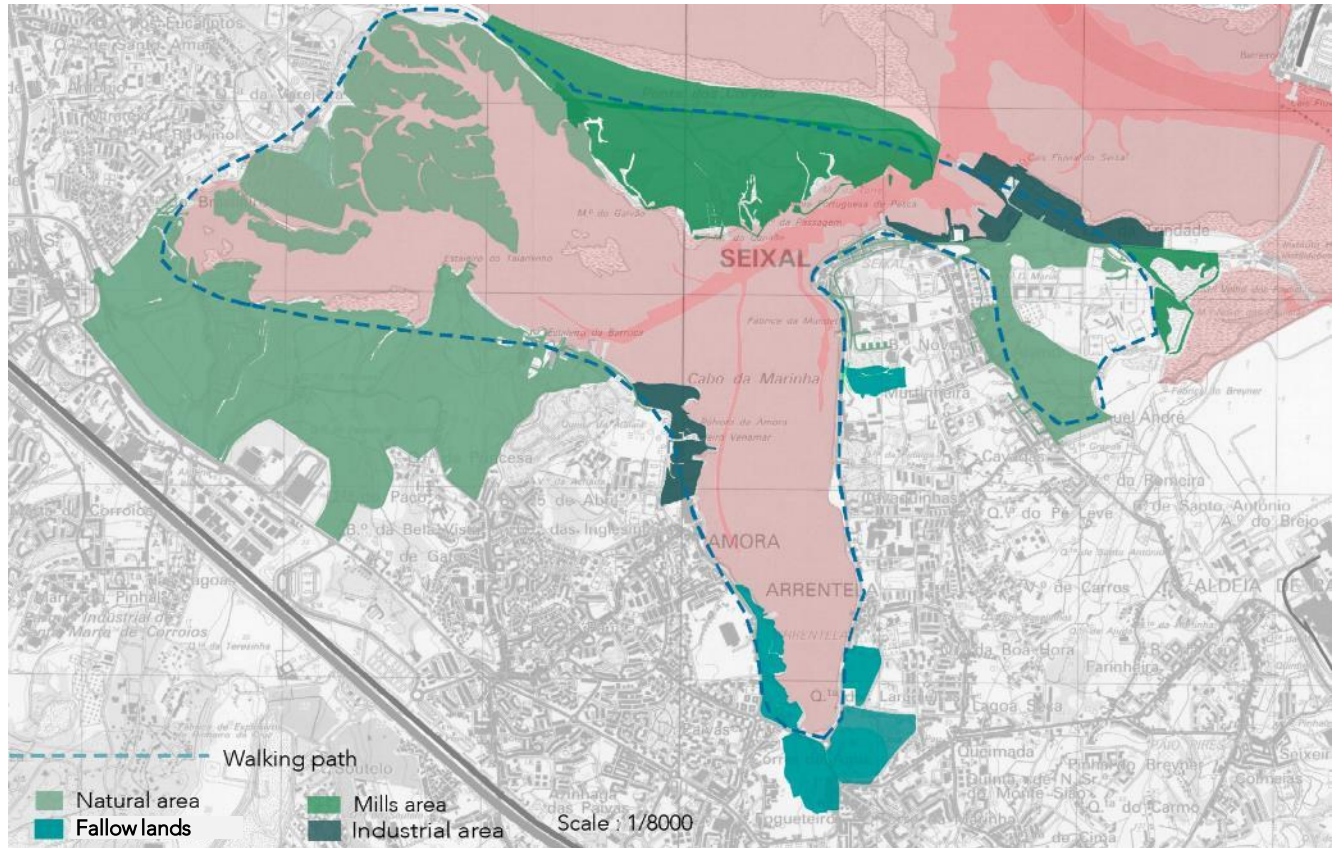
public space . strategy + structure

Luísa Flores

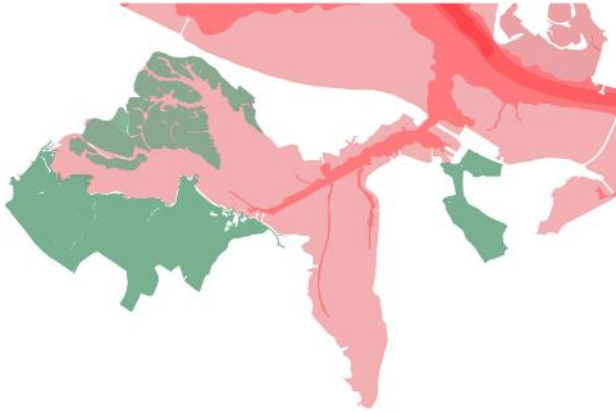


Four scenarios – four ideas for a public space structure: the natural areas, the fallow lands, the industrial and transport areas, the mills areas.

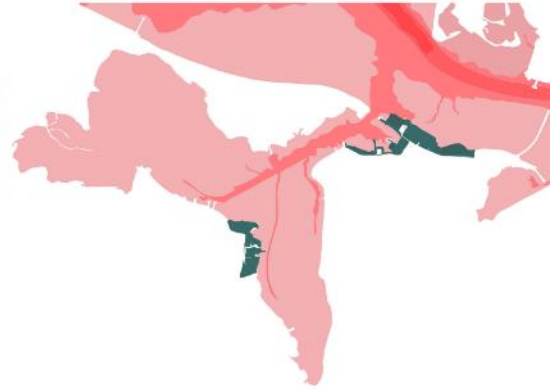
A ring of connections links the four areas and activates new activities according to each vocation, potential and heritage.



Natural areas



Industrial and transport areas



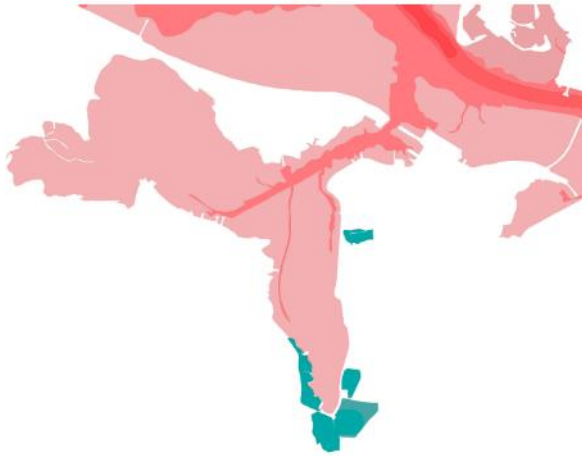
Value the Corroios area, in a way to attract people, who live near the water, creating spaces and/or pathways of connection with the mills, bird observation and a space for leisure, creating jobs, economy, to bring the residents, the national tourist and external tourism



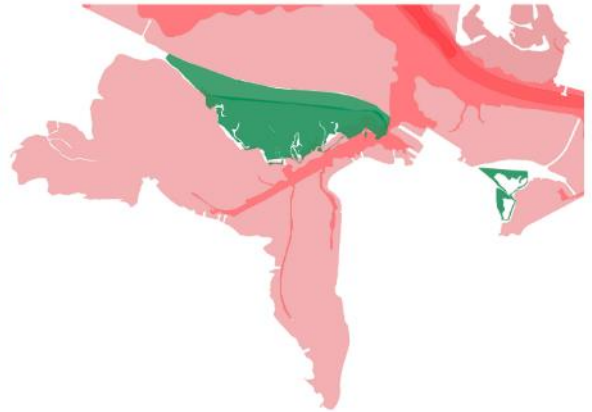
Restructure the shipyard and the boat terminal, so they can be more efficient for all, the ones who work there and the people



Fallow land



Mills areas

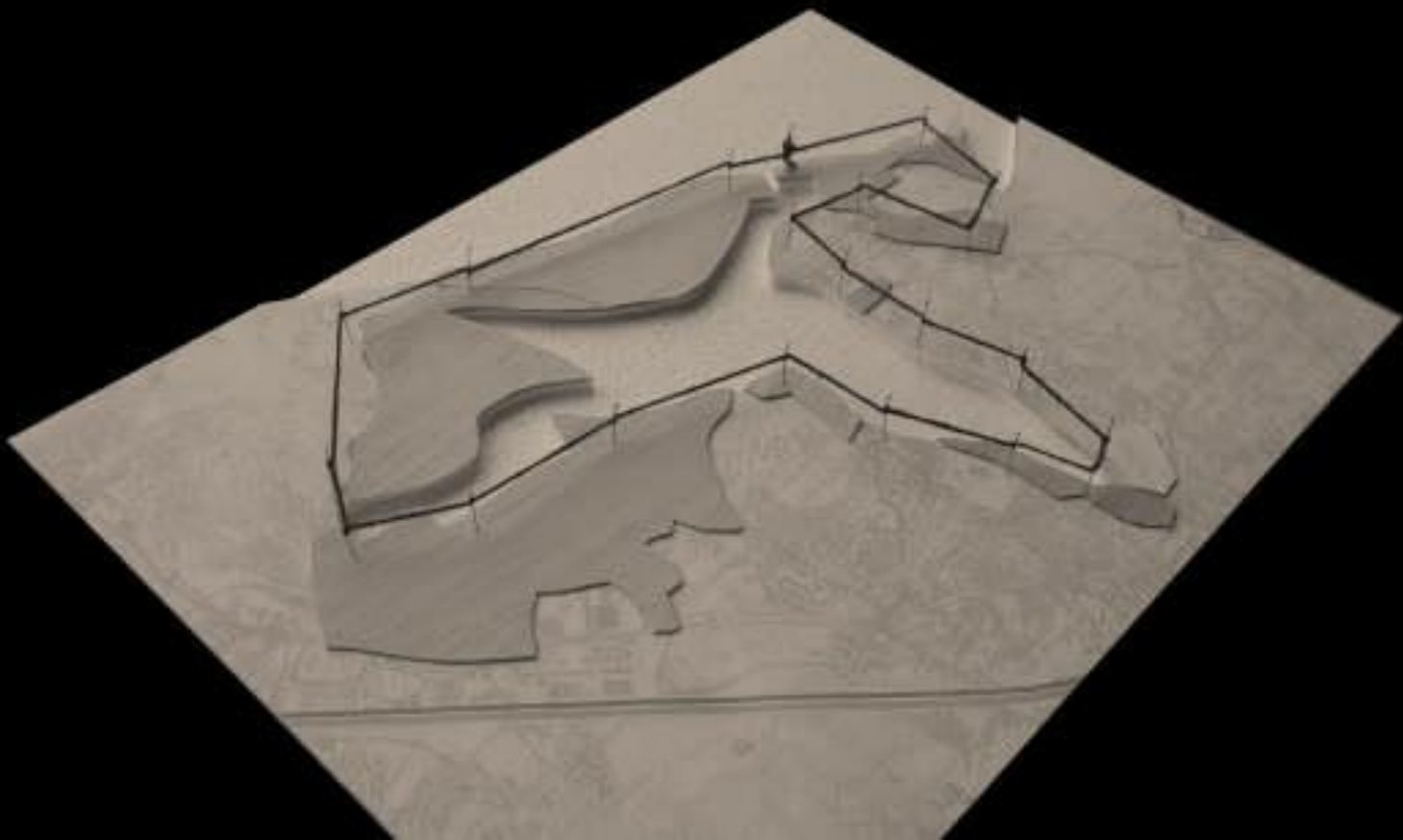


Qualify the area to respecting his biodiversity and remodulate the existing buildinging of an old manufacture, as well, proportion areas of living and lesure, as work and tourism area



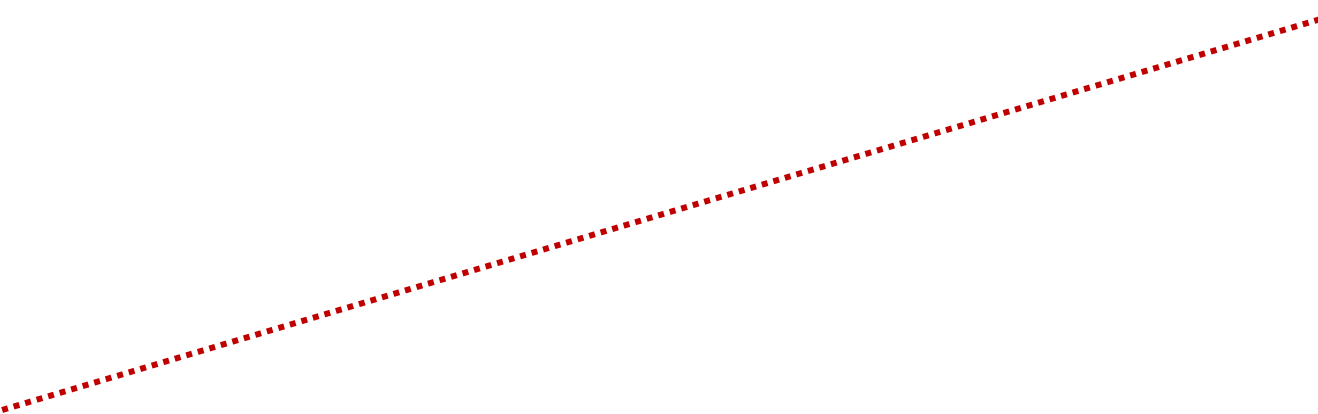
Rehabilitate the mills station, one in a museum, and the rest to supply green energy to Seixal and one to served as a potential place for co-working, culture and sustainable tourism





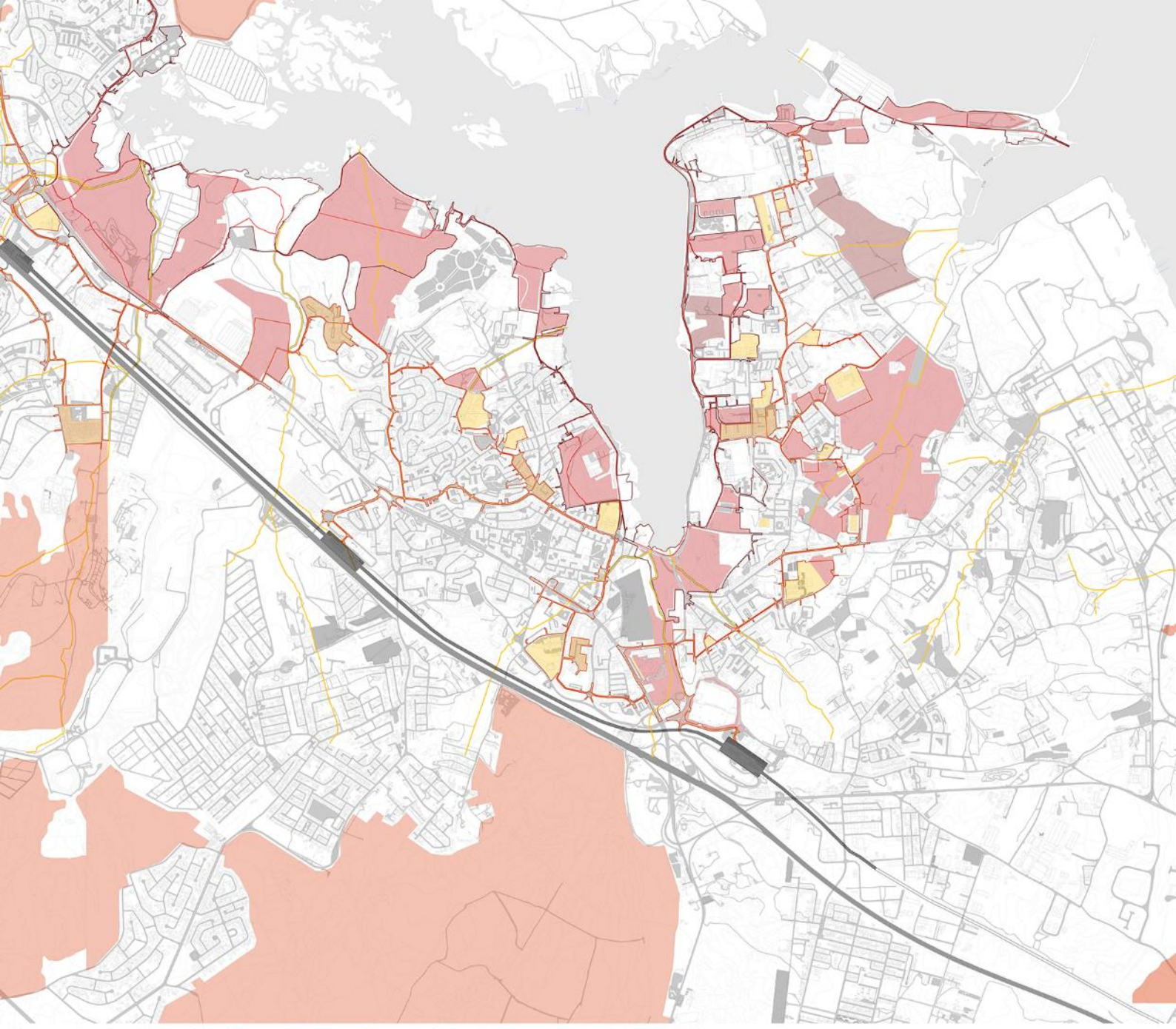
public space . strategy + structure

Nicole Rodrigues



Tracing the street network, combining it with large open spaces and fallow lands,
assembling them along new connections of flow and meaning...

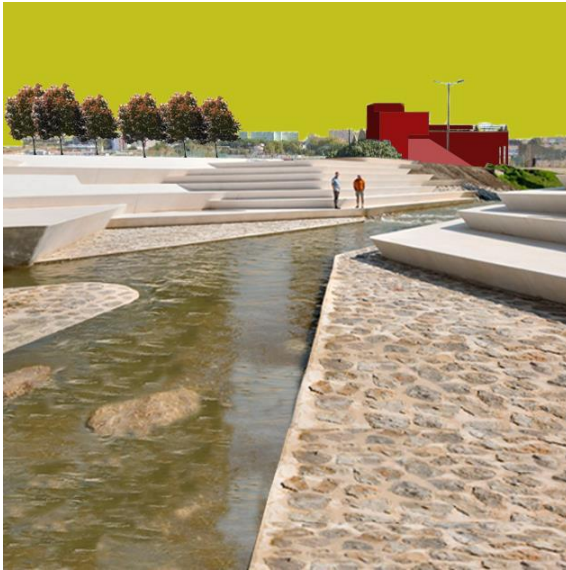
New landscape interfaces between land and water may be explored on a
new borderline of high ecological value and adapted to climate change

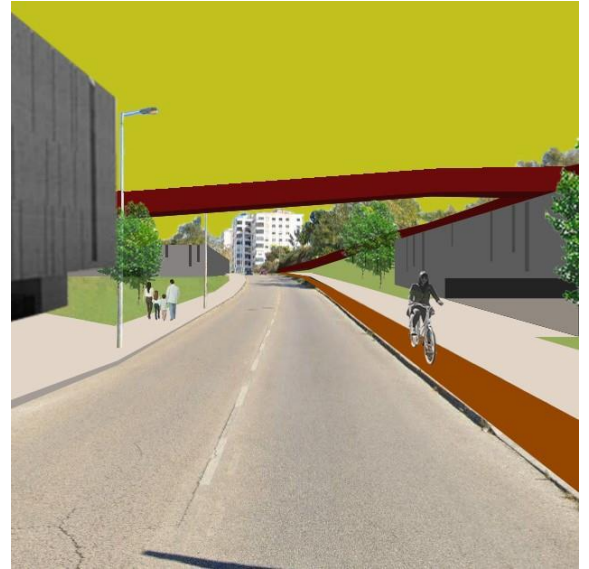


■ Train stations / line ■ Agricultural spaces ■ Green spaces ■ Quintas ■ Unused Spaces ■ Social Neighborhoods ■ Schools — Riverside Path — Inland Path — Social neighborhood and train station Connection — Defined Riverside Path with some spaces — Defined Inland Path with schools and neighborhoods — Riverside Path and Inland Path Connection

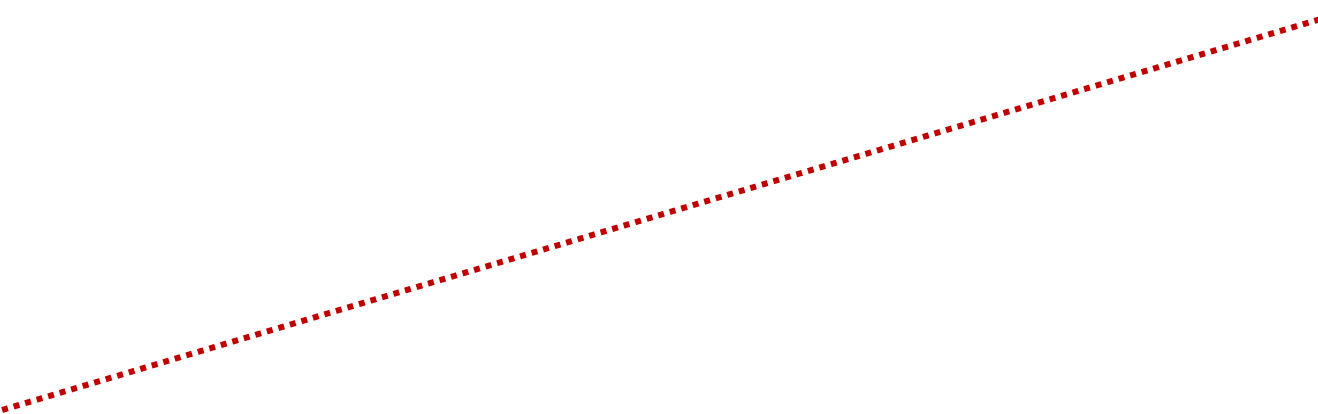








Nicoleta Banari

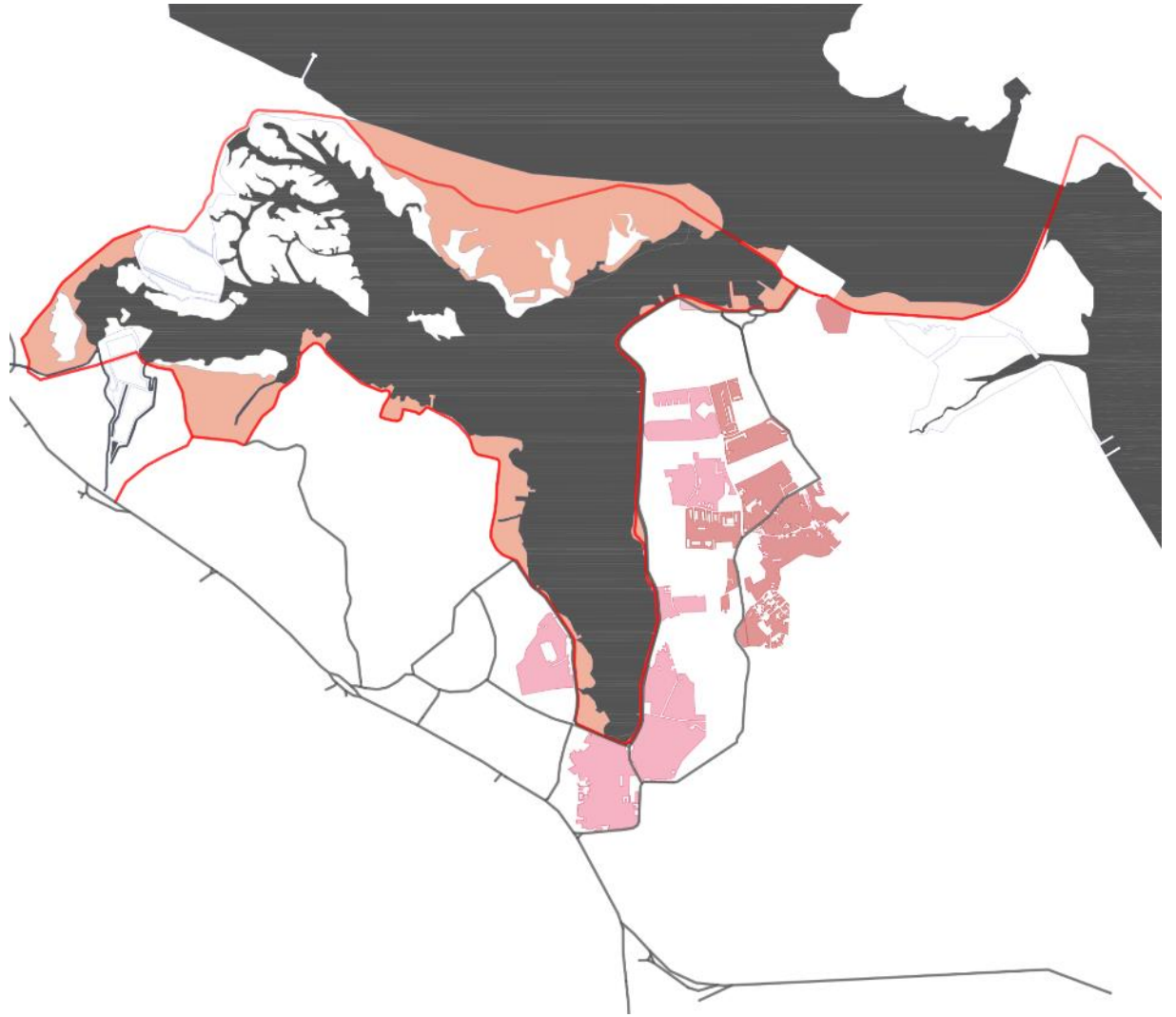


A ring that connects meaningful spaces around Seixal's bay, allowing for the discovery of landscape, heritage and the everyday life of urban spaces

Three strategies deal with the specific character of public space:
coastal requalification, urban requalification, green space requalification

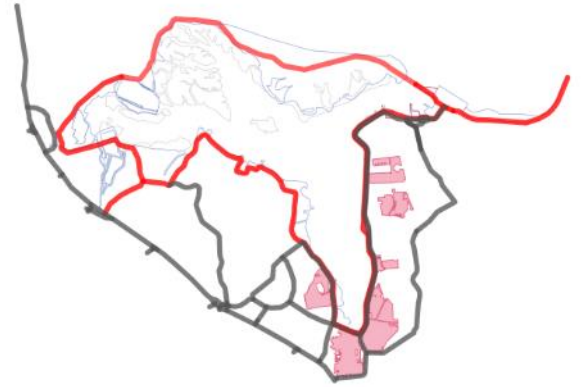




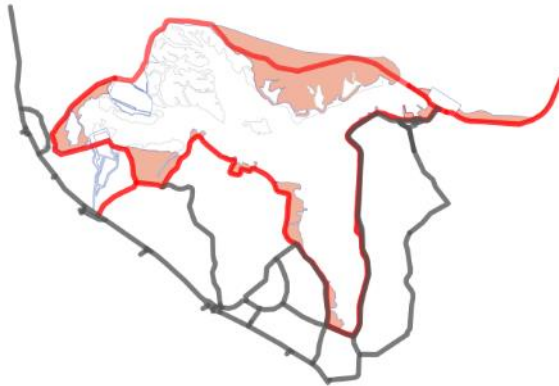




ring structure



green space requalification



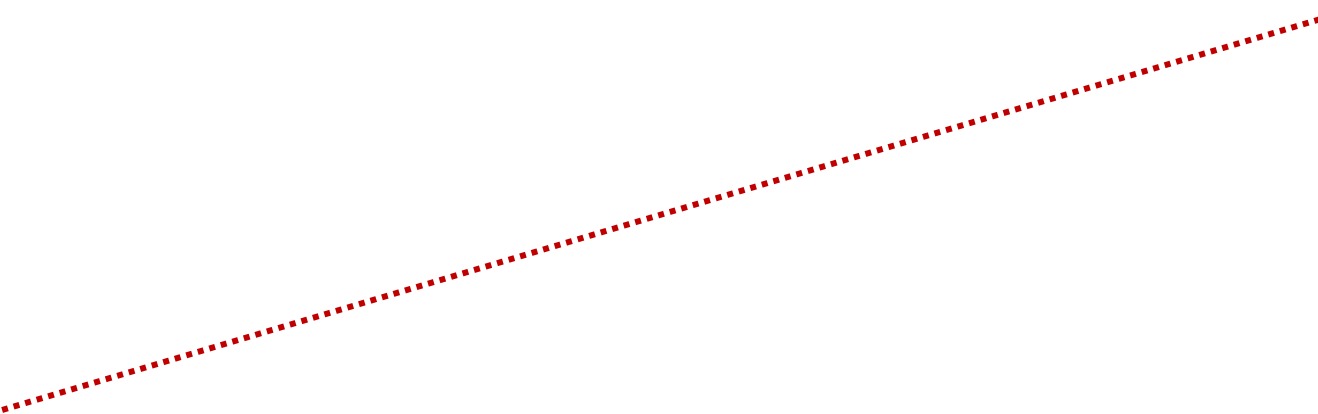
coastal requalification



urban requalification



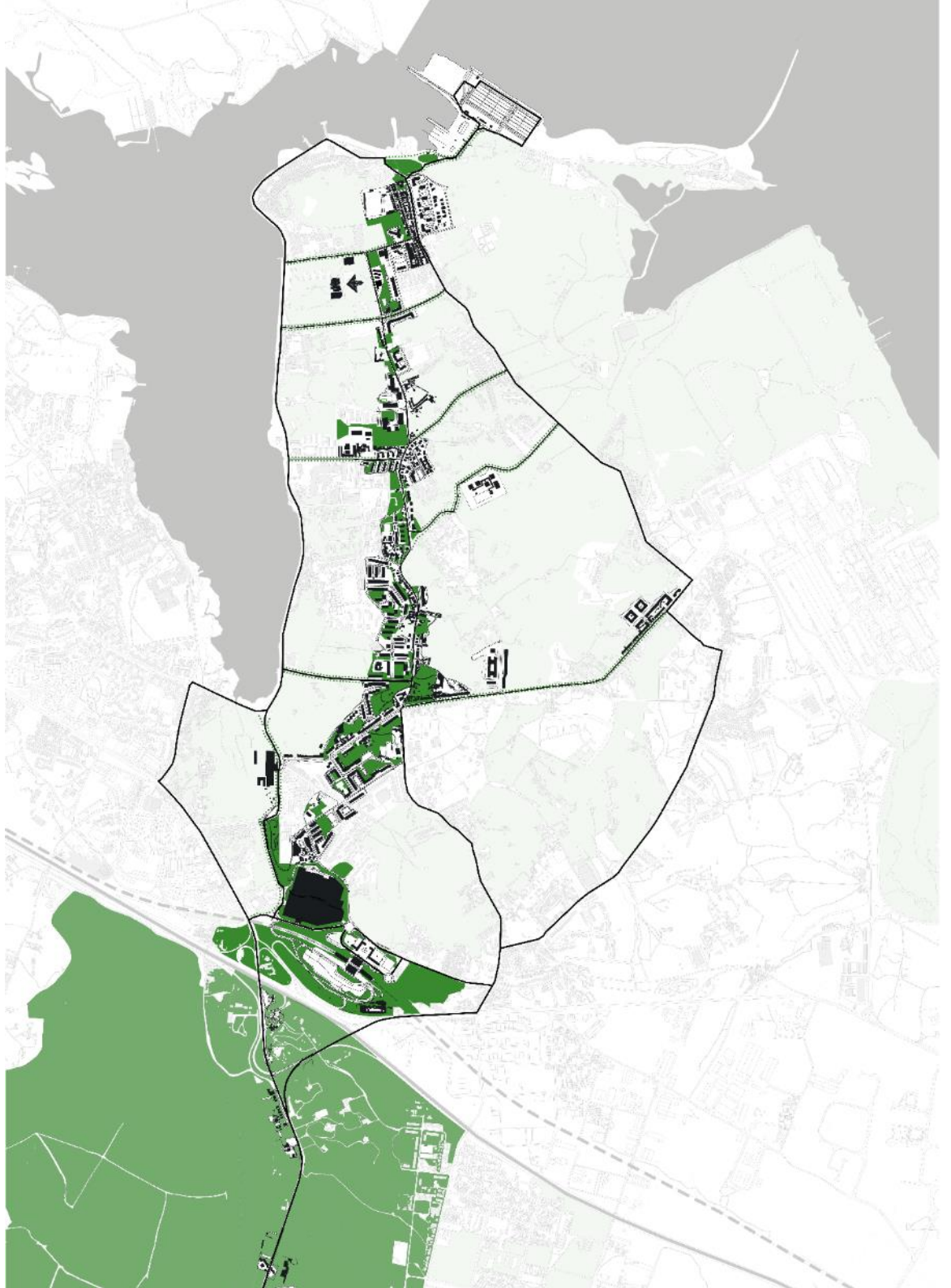
Omar Lai



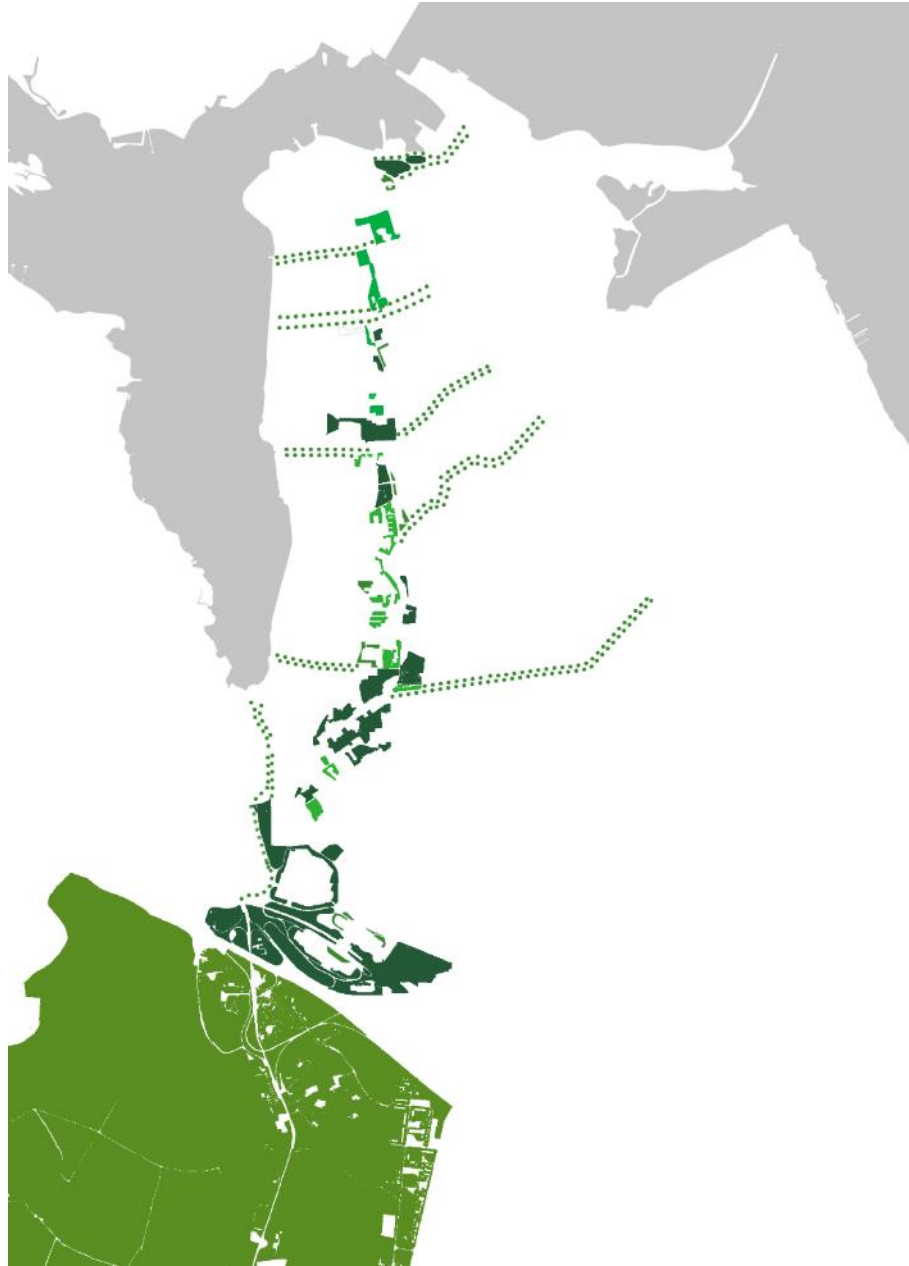
A green spine defines the main connection along Seixal peninsula,
creating a lively corridor along its main residential areas and important 'quintas'.

The spine is crossed by transversal paths establishing a connection to the lower levels,
and extends towards the transport and ecological node of Fogueteiro







- Green linear connection
- Qualified semi-public green areas
- Green area of ecosystemic importance
- Qualified public green areas
- Unqualified semi-public green areas



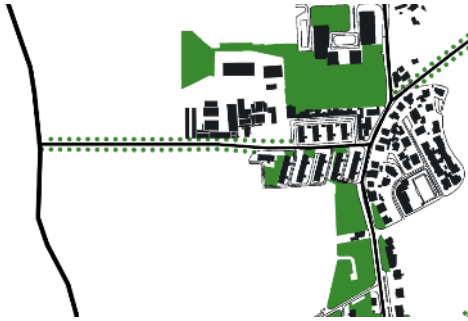


-  Urban fabric directly influenced by the intervention
-  Services on a territorial scale

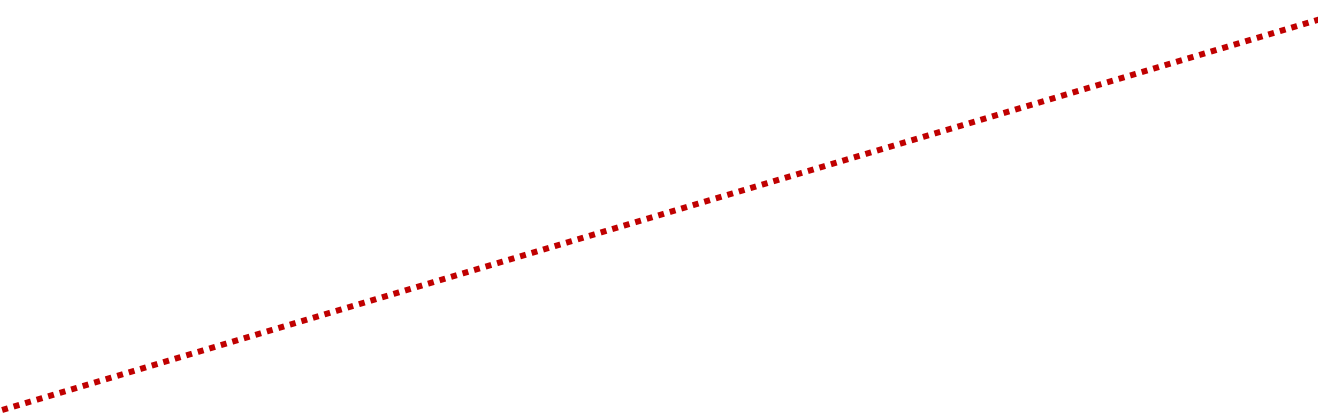


— Connection roads subject to intervention

— Already existing connection roads

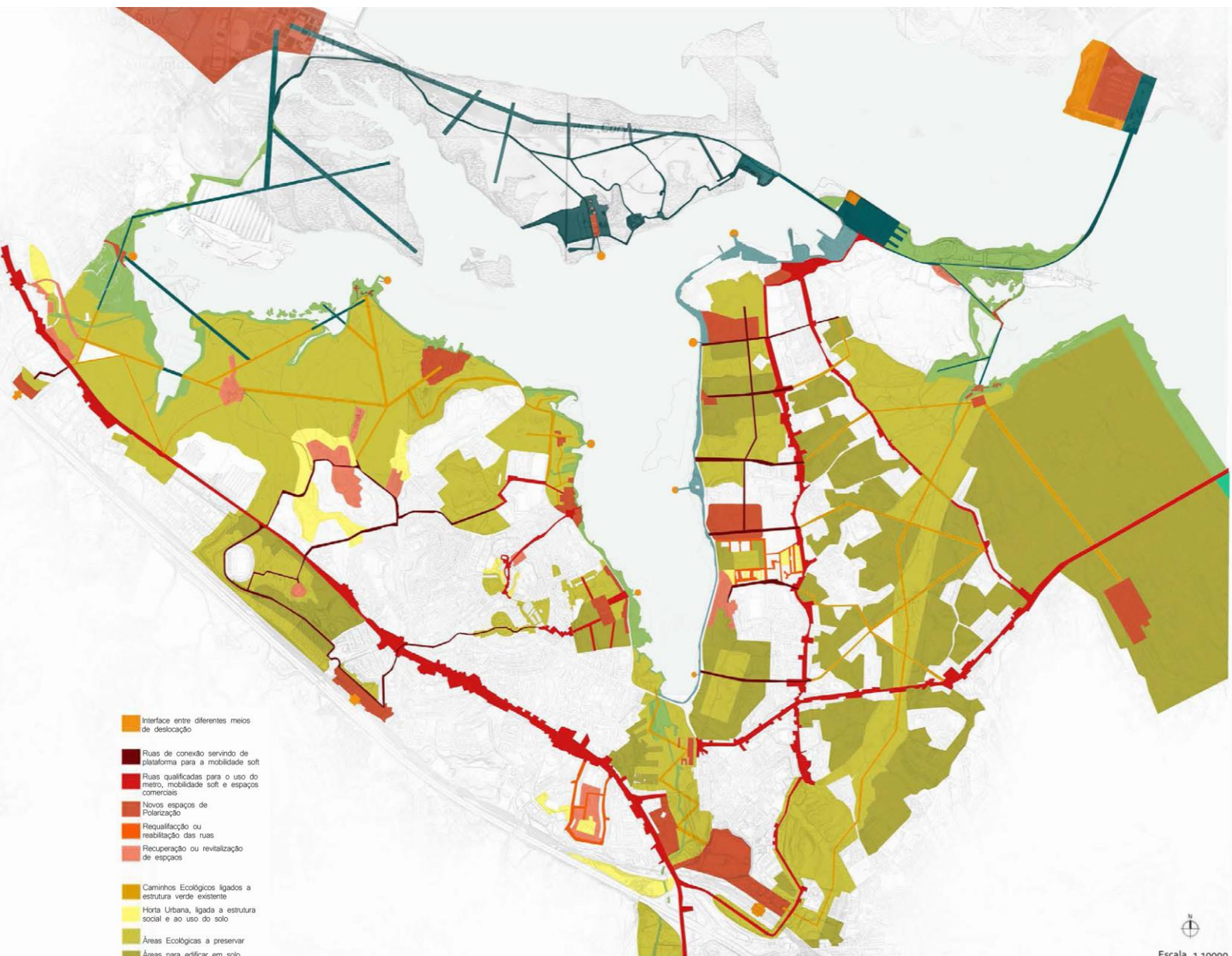


Raul Corvelo



Three public space networks: Red (the requalification of streets, squares and polarization);
Green (the open space system); Blue (the water and the waterfronts)

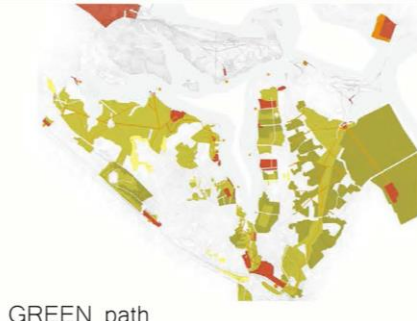
Different programs to activate and link the urban diversity and the landscape values,
looking for latent spaces that connect heritage and emerging practices



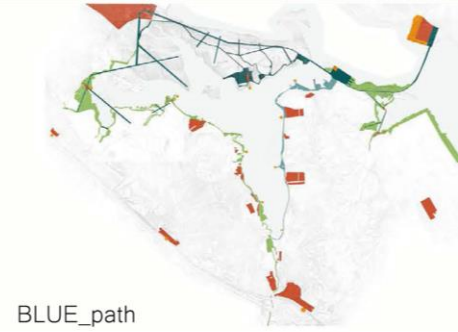
- Interface entre diferentes meios de deslocação
- Ruas de conexão oriundo de plataforma para a mobilidade soft
- Ruas qualificadas para o uso do metro, mobilidade soft e espaços comerciais
- Novos espaços de Polarização
- Requalificação ou reabilitação das ruas
- Recuperação ou revitalização de espaços
- Caminhos Ecológicos ligados a estrutura verde existente
- Horta Urbana, ligada a estrutura social e ao uso do solo
- Áreas Ecológicas a preservar
- Áreas para edificar em solo urbanizável, adoptando o conceito Eco-urbano/Sustentabilidade
- Caminhos ecológicos ligados margem ribeirinha e ao sapal
- Área costeira ecológica a preservar
- Continuidade do passeio ribeirinho



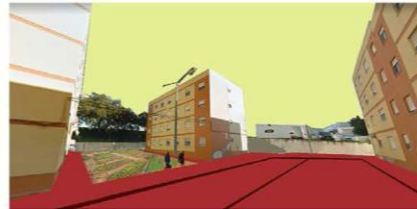
RED_path



GREEN_path



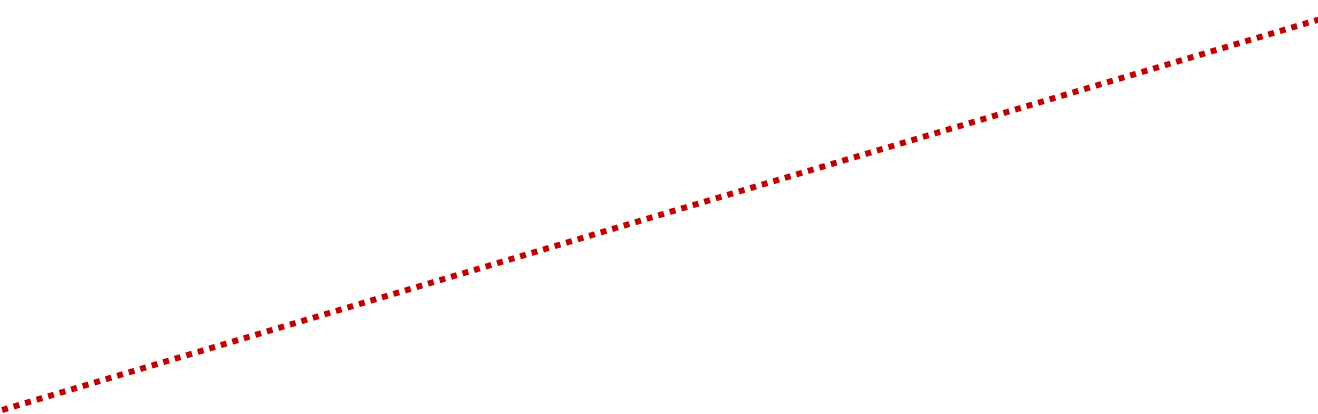
BLUE_path





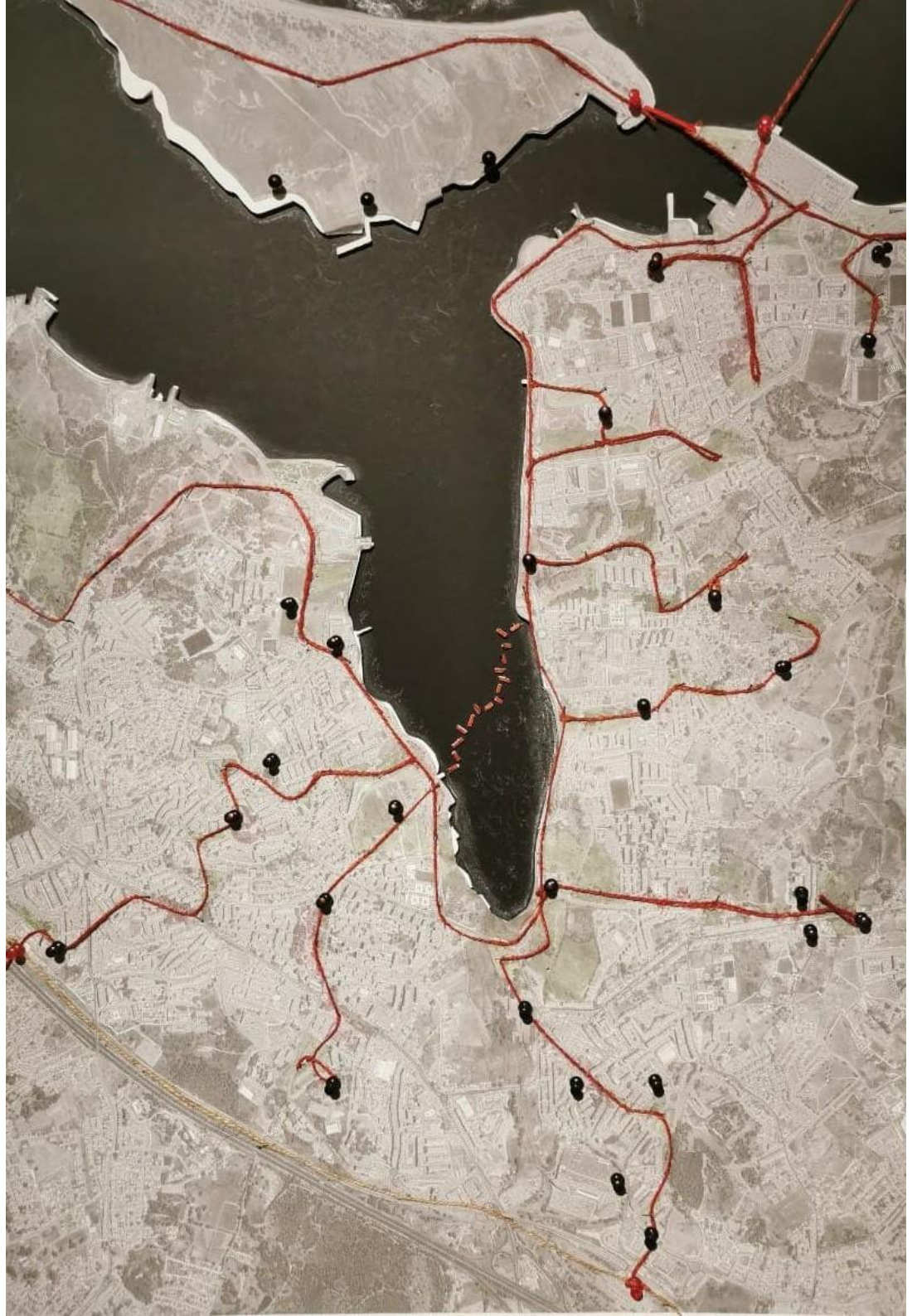
public space . strategy + structure

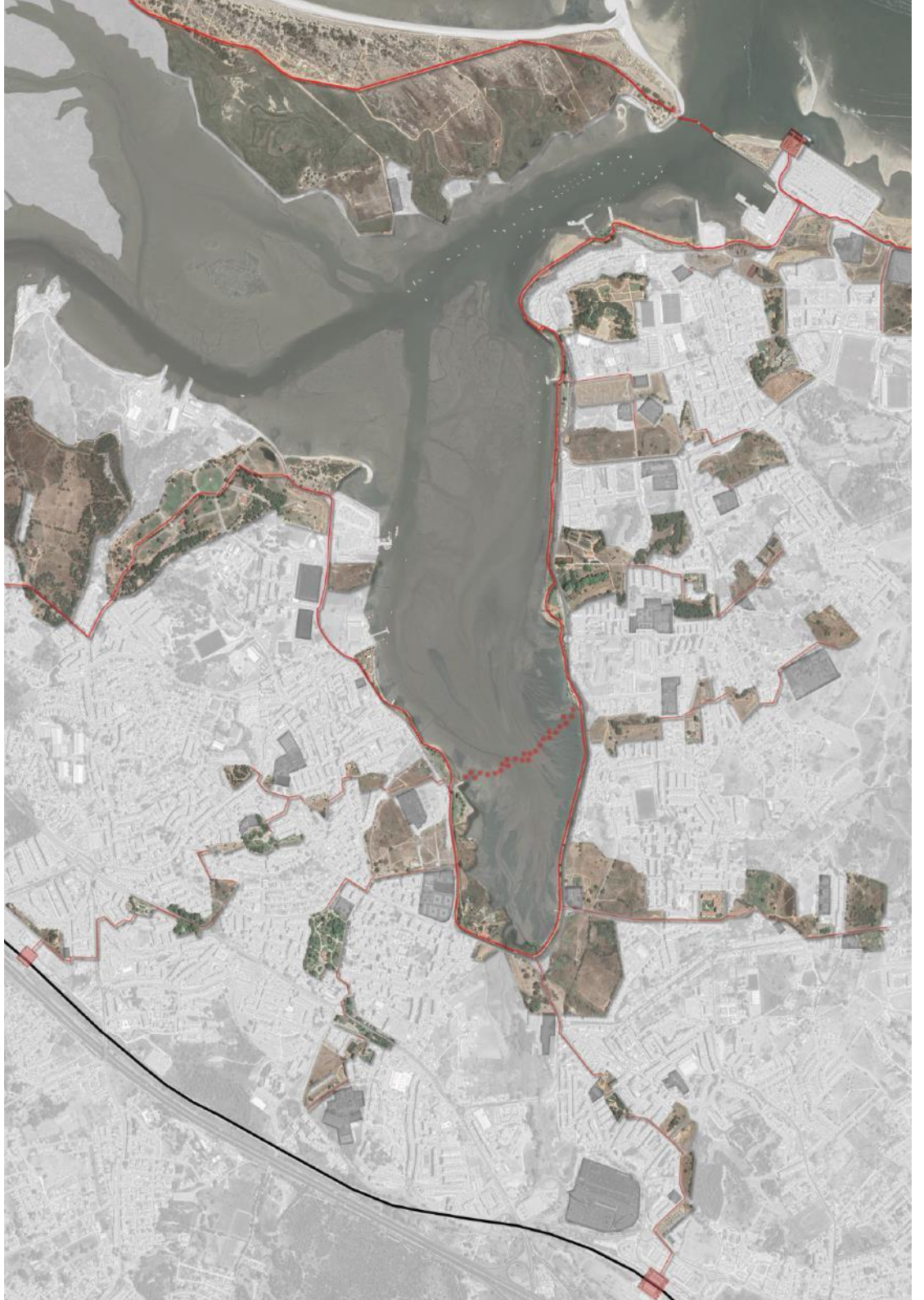
Sara Alfonso



Seixal is the focus of a new crossing network departing from its waterfront.
A collection of open spaces builds a reticulate inland necklace.

Multiple scales are brought into the structure, organizing not only large scale green areas
but also thinner threads connecting the major urban facilities





1st SYSTEM: THE LINE



2nd SYSTEM: THE GREEN STRUCTURE AND URBAN FACILITIES



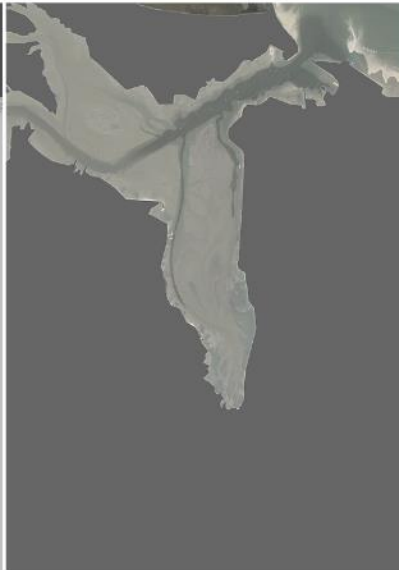
3rd SYSTEM: THE CONNECTIONS IN BETWEEN



CONTINUITY BETWEEN QUALIFIED AND UN-QUALIFIED SPACES



GREEN STRUCTURE RELATED WITH THE WATER



TYPE OF CONNECTIONS: LINEARY AND COMPLEMENTARY







4

public space

design + atmosphere + material

public space . design . atmosphere . material

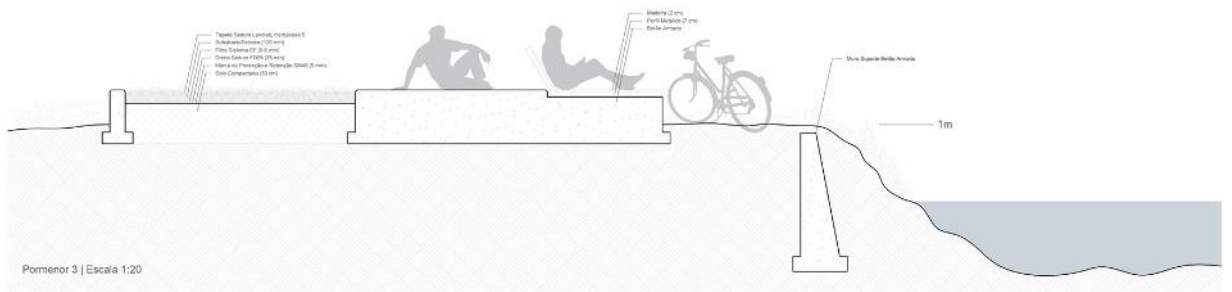
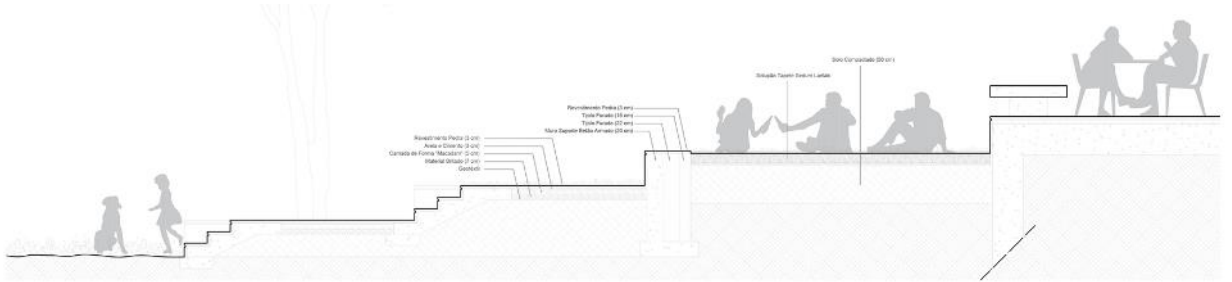
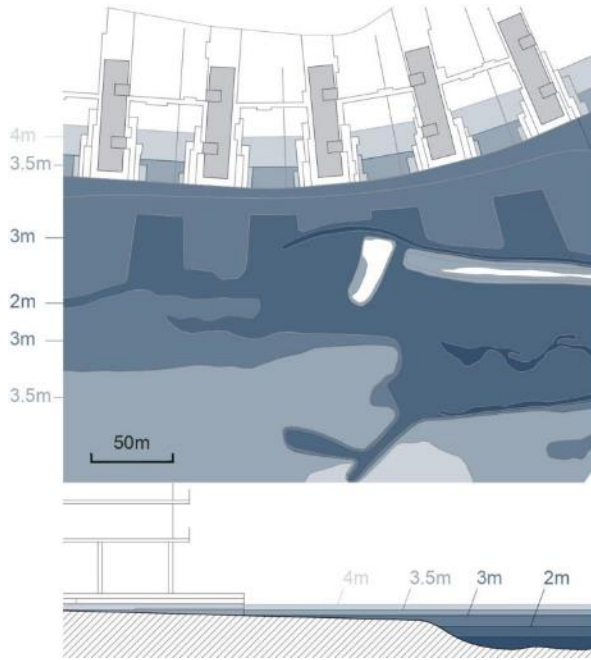
Alexandre Bardet

The wetlands in Rio Judeu, south of Seixal bay, become the potential area to design a new relationship between what are now splintered fabrics.

The public space organizes a transition between the water and floodable spaces and a new housing structure, through a system of plinths and spatial thresholds



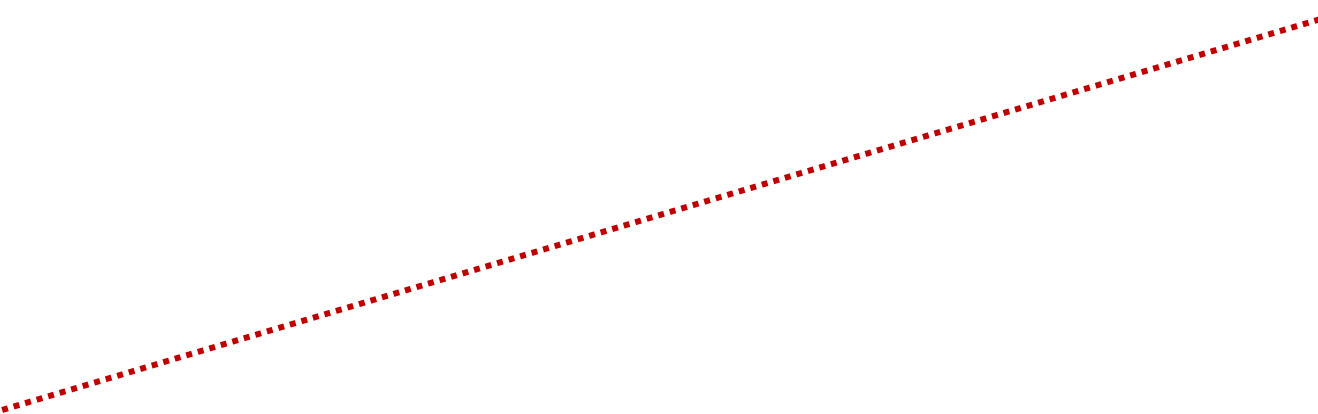






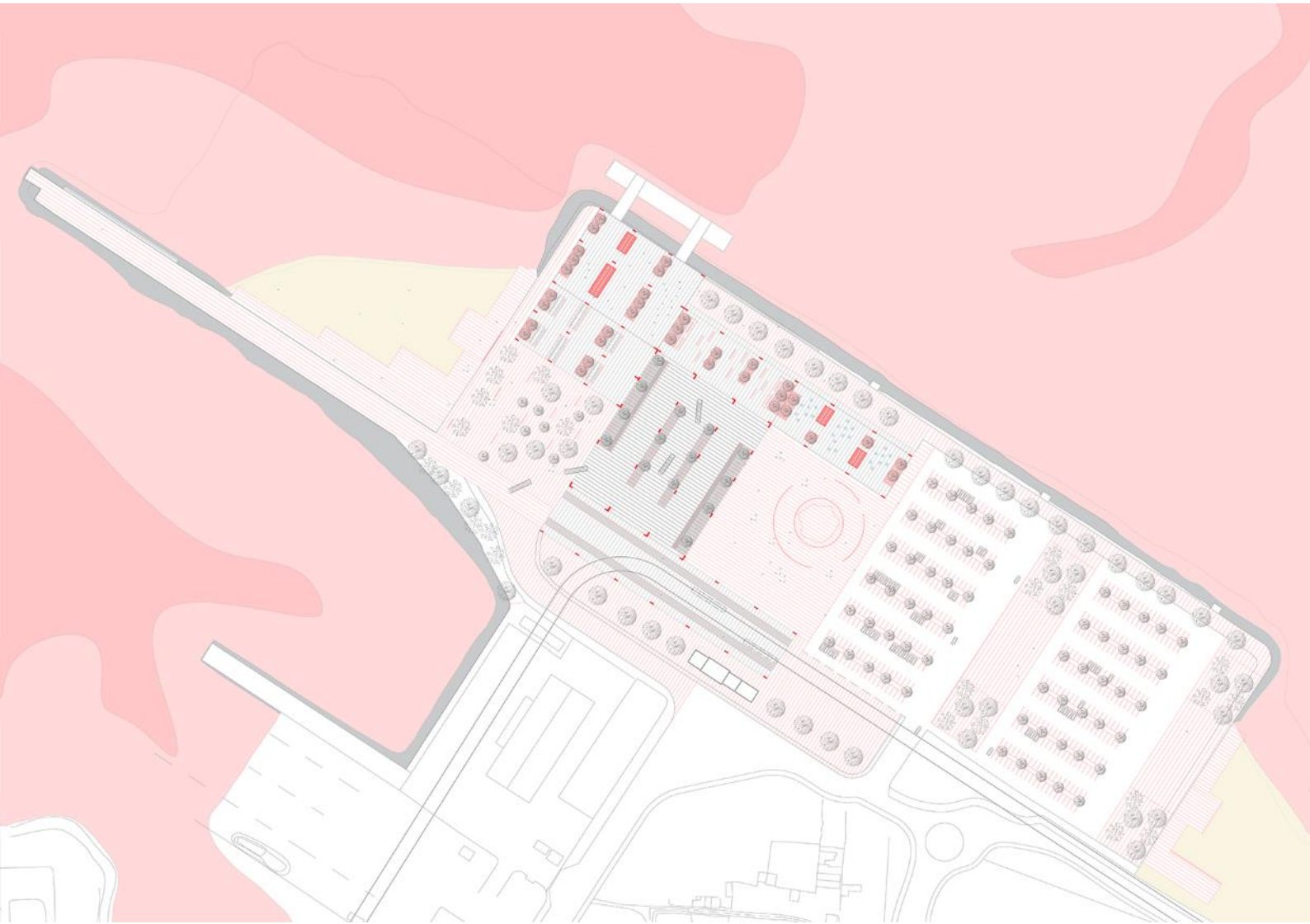
public space . design . atmosphere . material

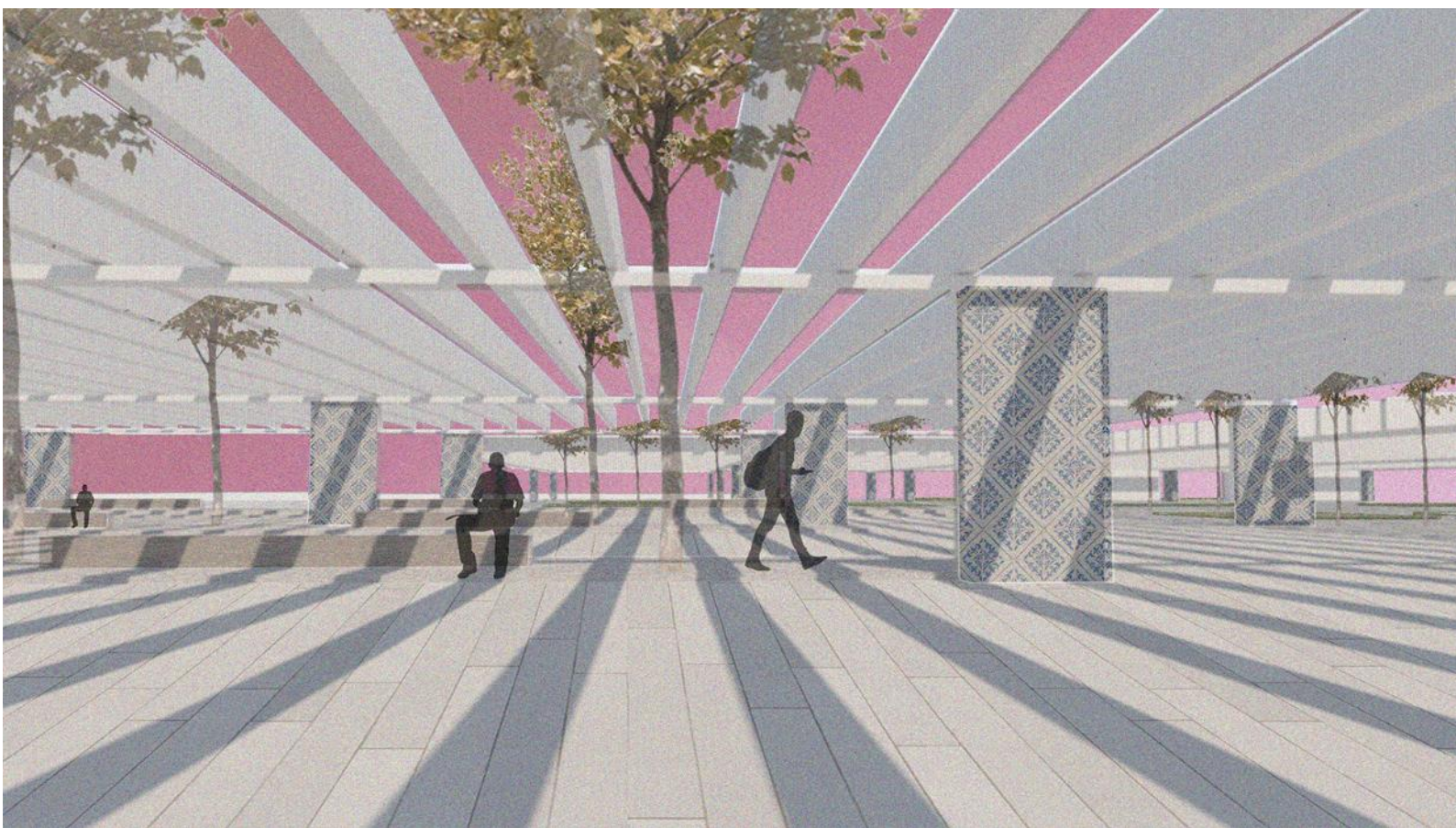
Anamarija Skobe

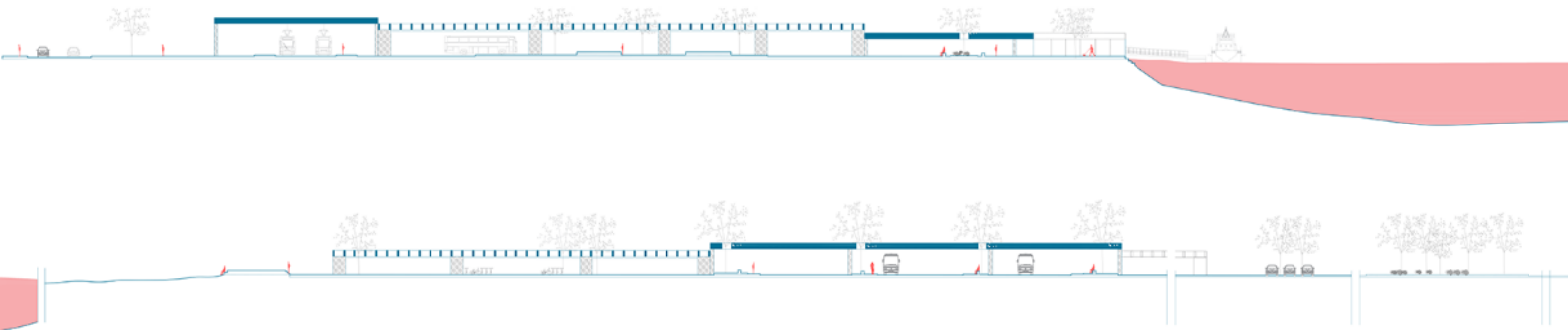


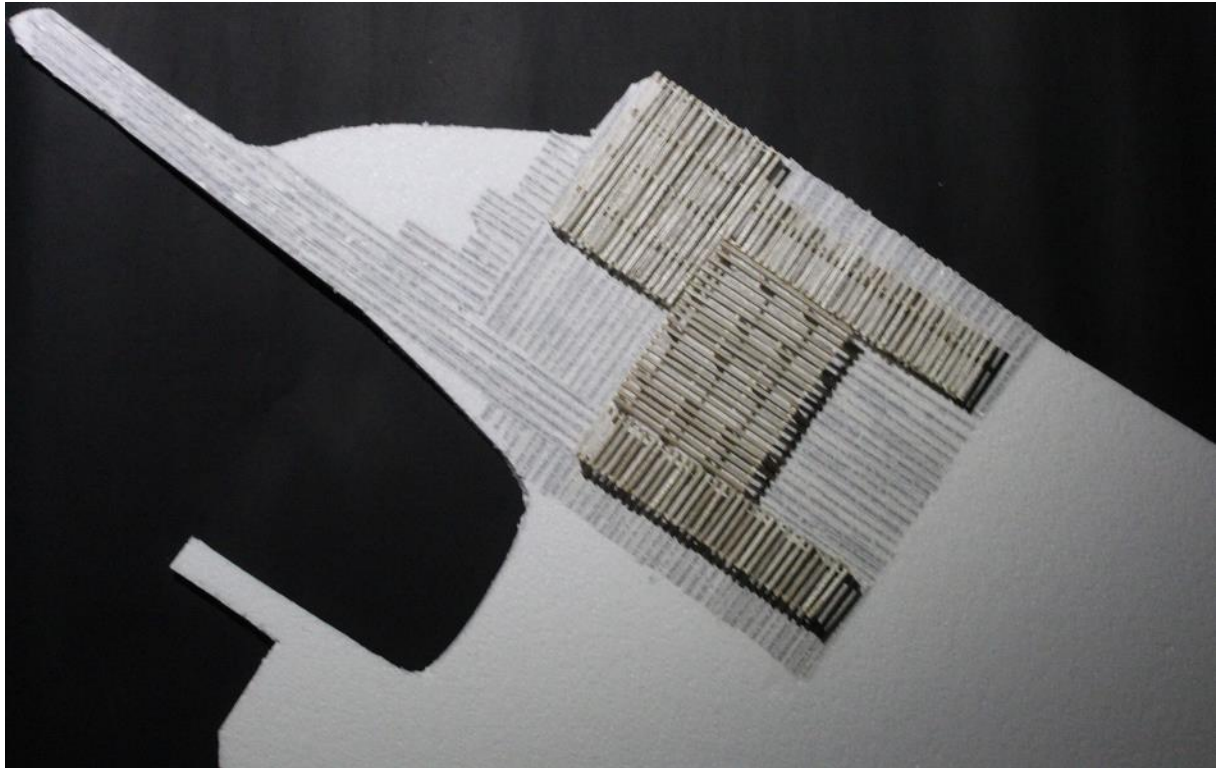
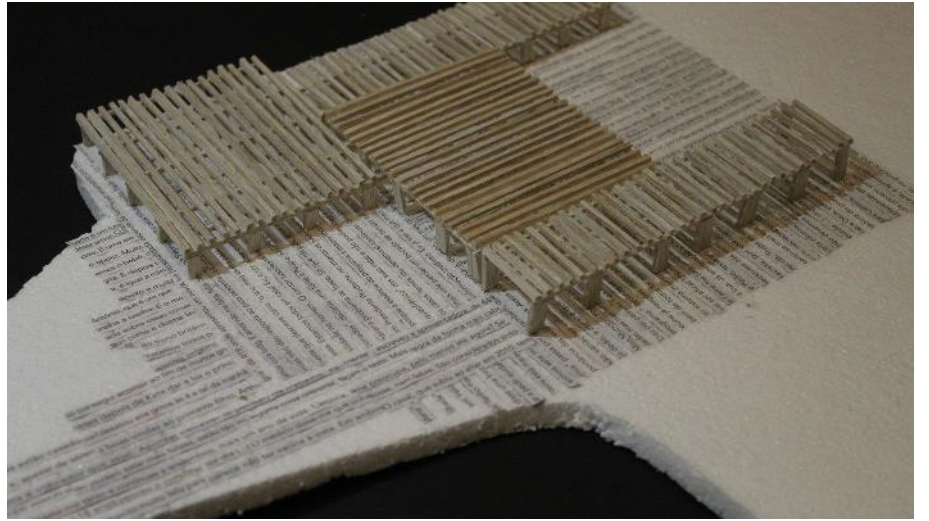
Reimagining the river boat terminal landfill as a new gateway to Seixal is the theme for a complex and multifunctional public space.

A light canopy floats above an extended field where multiple activities are accommodated, providing a dynamic pattern that changes with the sunlight



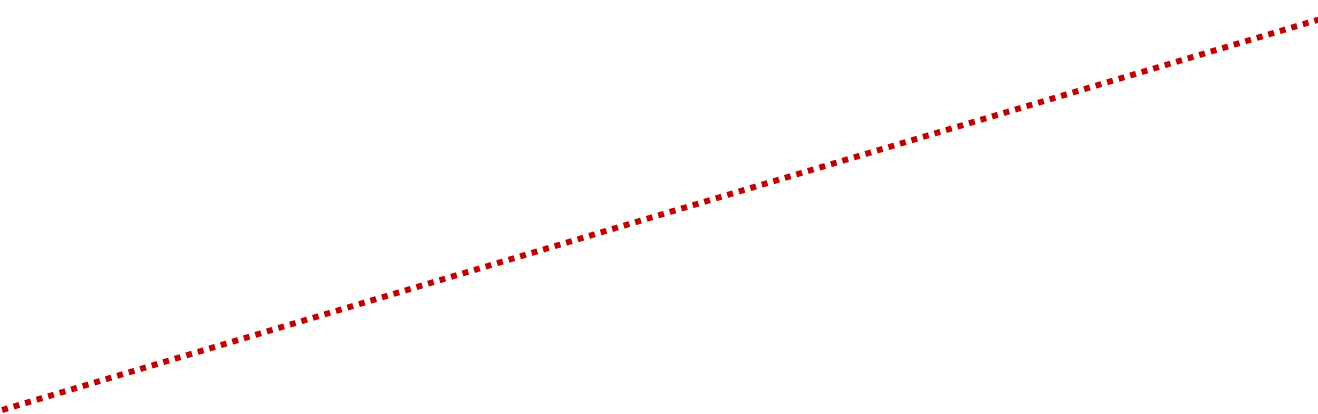






public space . design . atmosphere . material

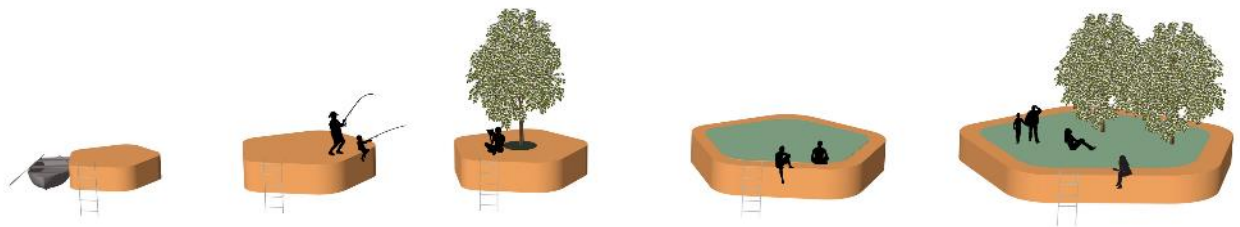
Andrea Carboni

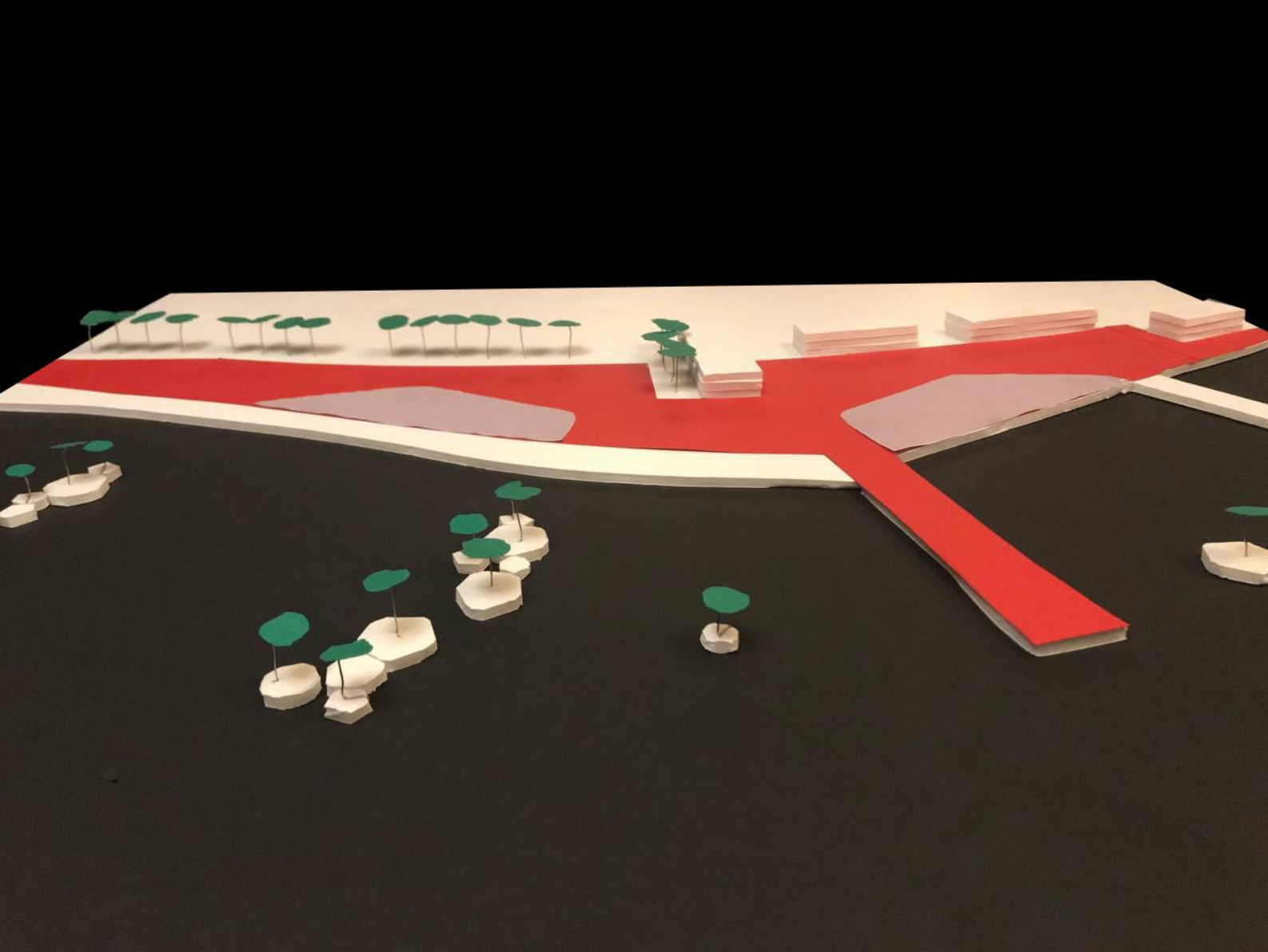


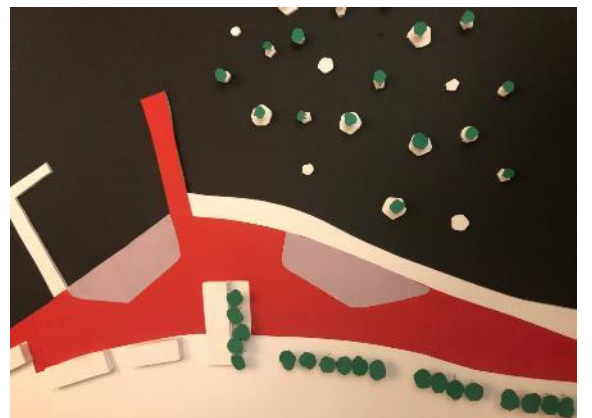
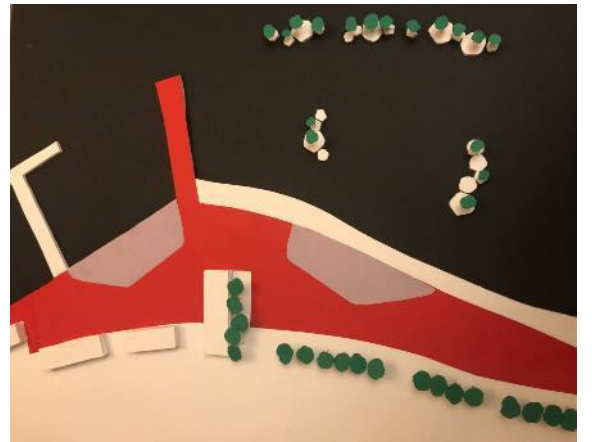
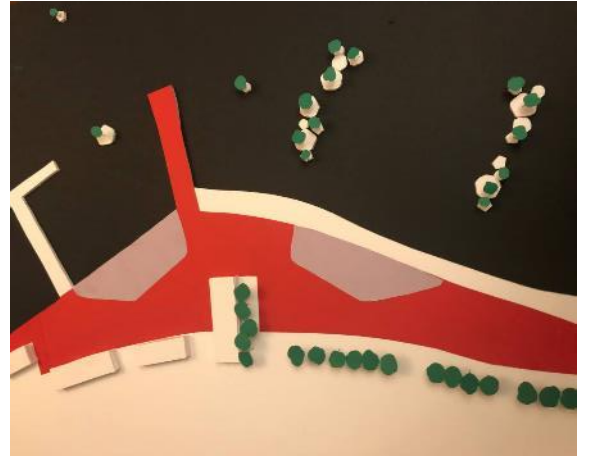
The existing parking lot east of Seixal becomes the new door into the old town offering an extended line and a generous plaza opened to the water.

A simple configuration organizes multifunctional paved areas, tree limits and a dynamic wall to the beach. Floating platforms open the water to unexpected uses.



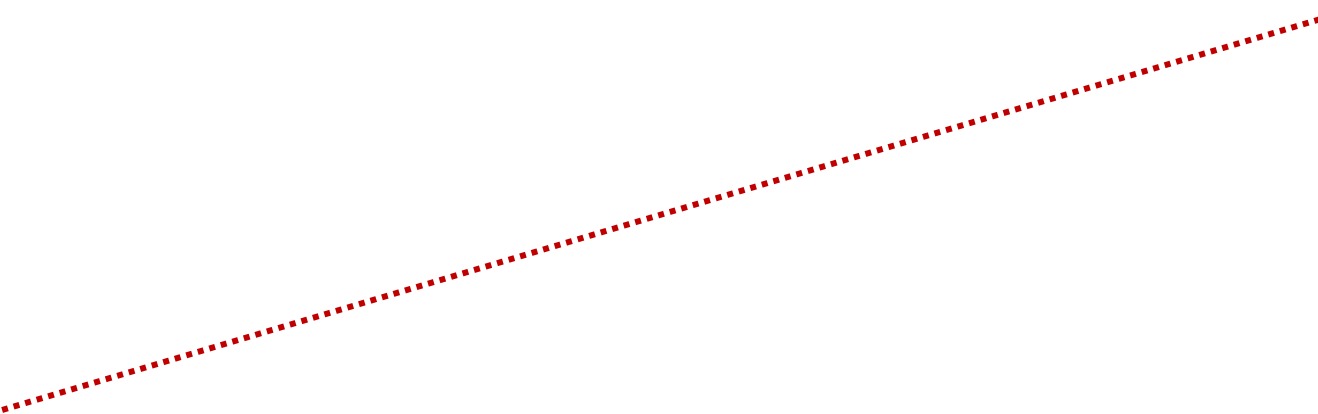






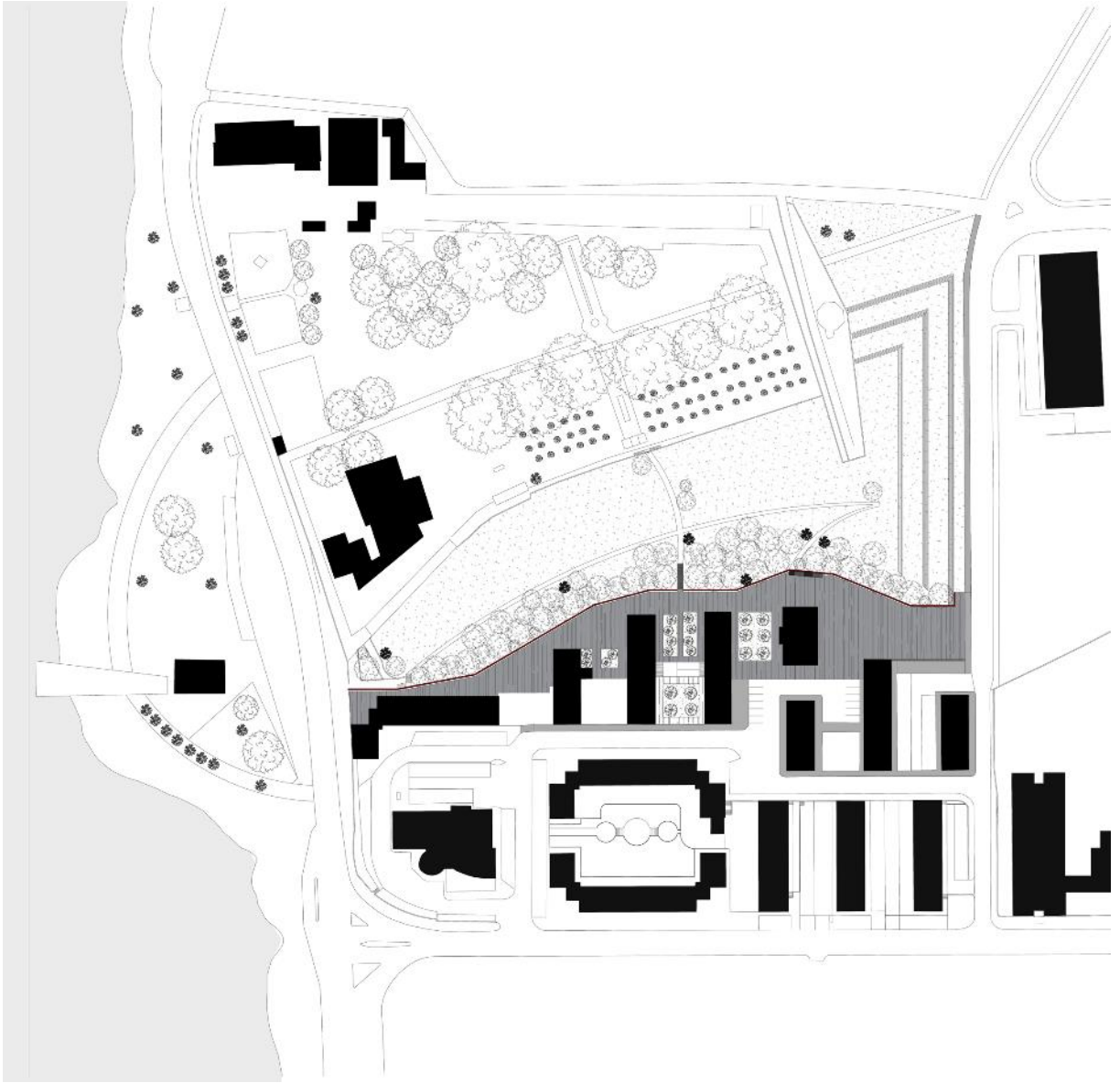
public space . design . atmosphere . material

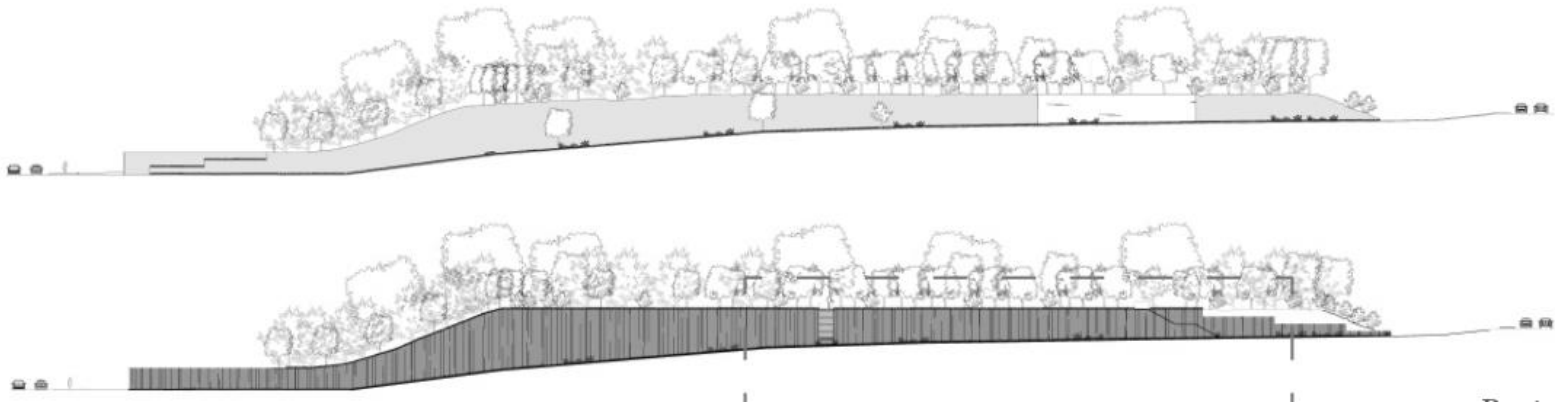
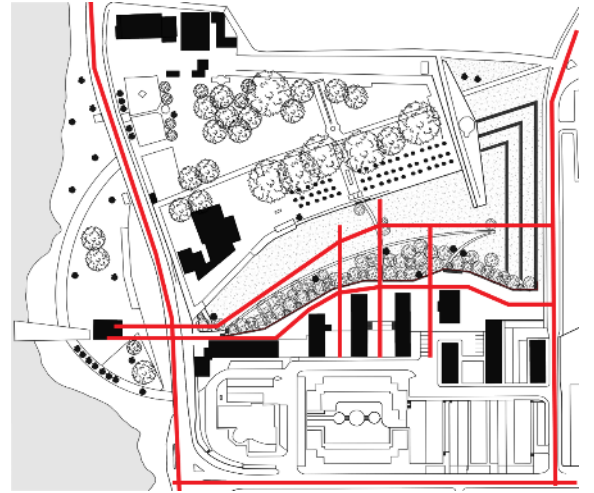
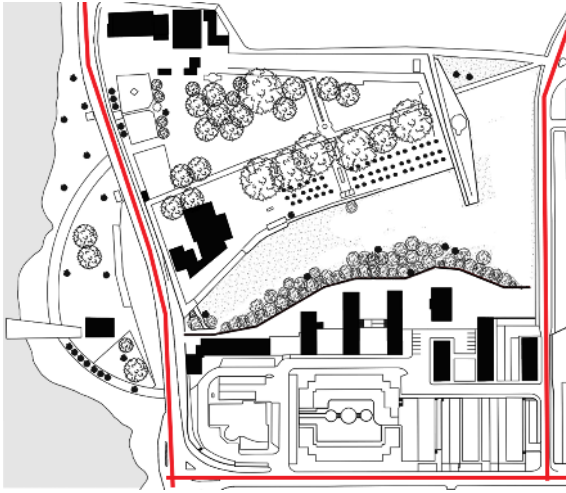
Daniele Calciati



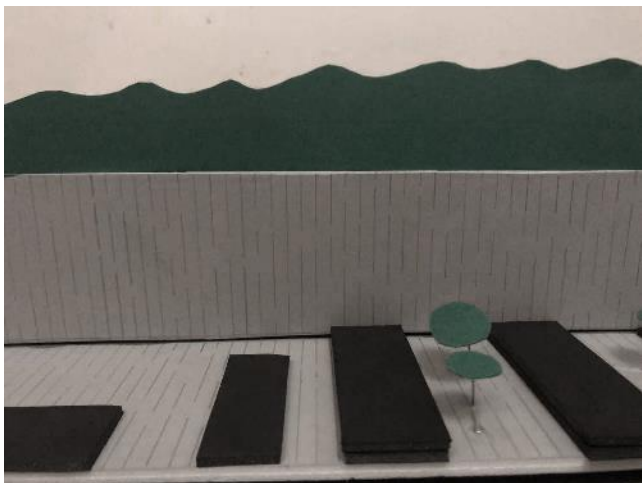
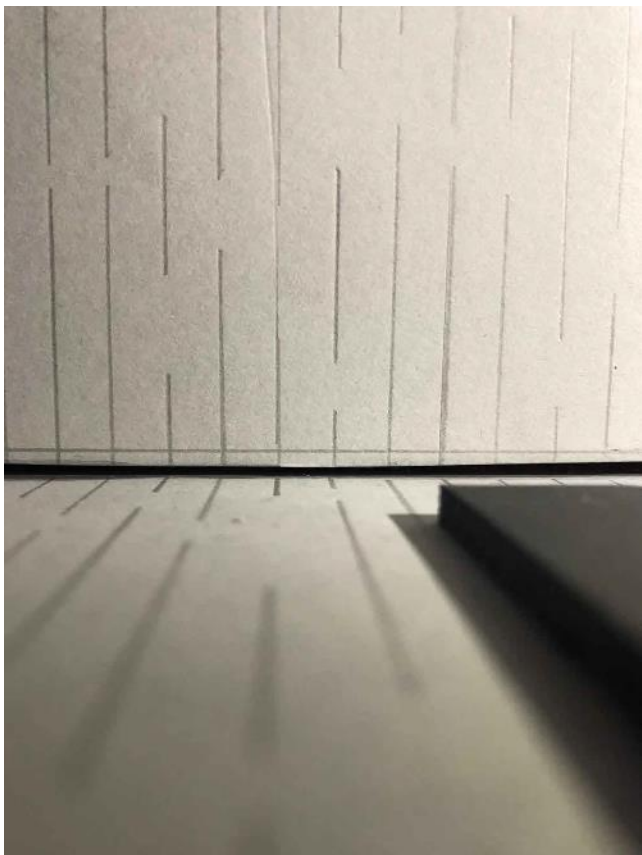
Devising a new relationship between Quinta da Fidalga and
the Cavaquinhas residential neighborhood.

A new wall that reorganizes the topographical limit and
creates the material theme for the neighborhood public spaces.



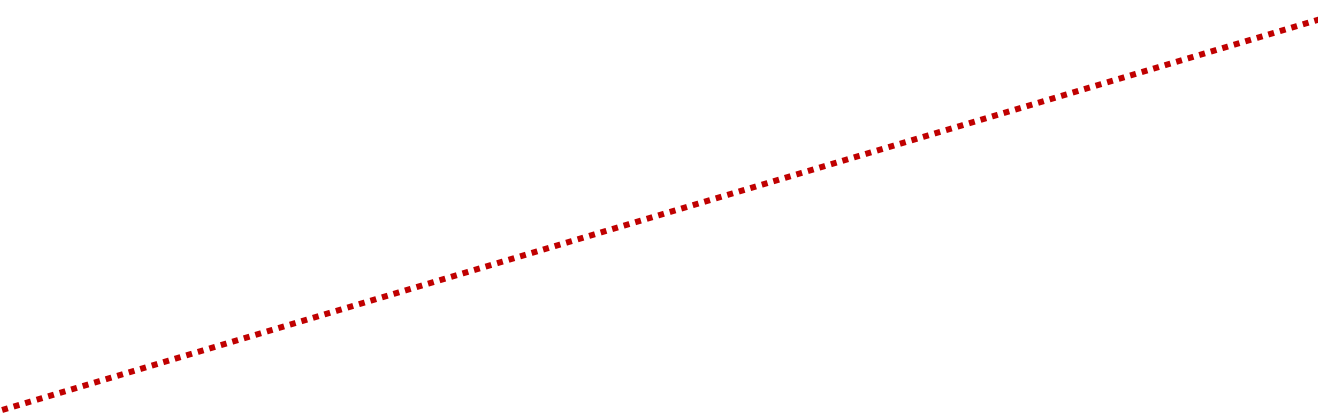






public space . design . atmosphere . material

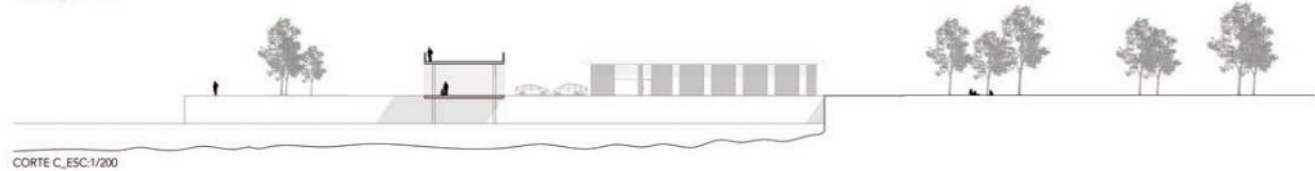
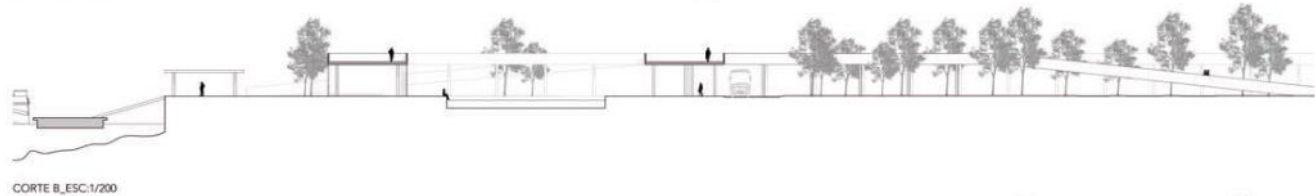
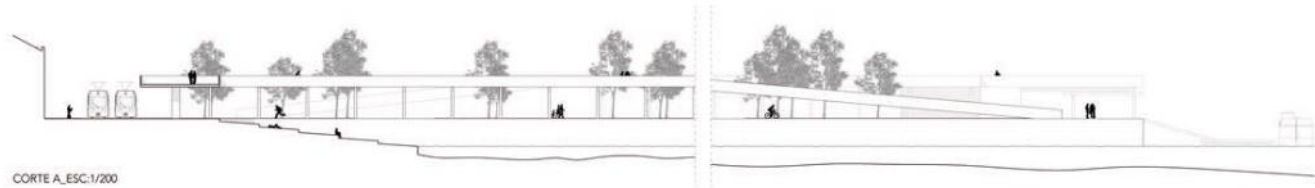
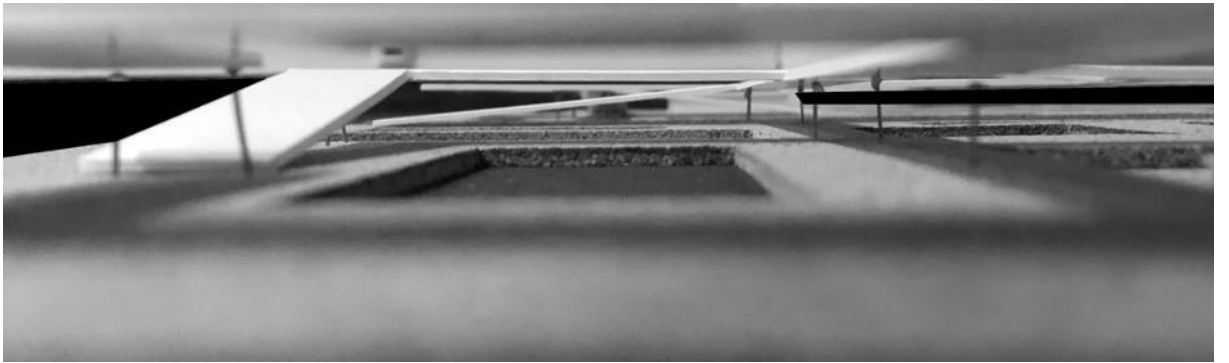
Eduardo Leitão

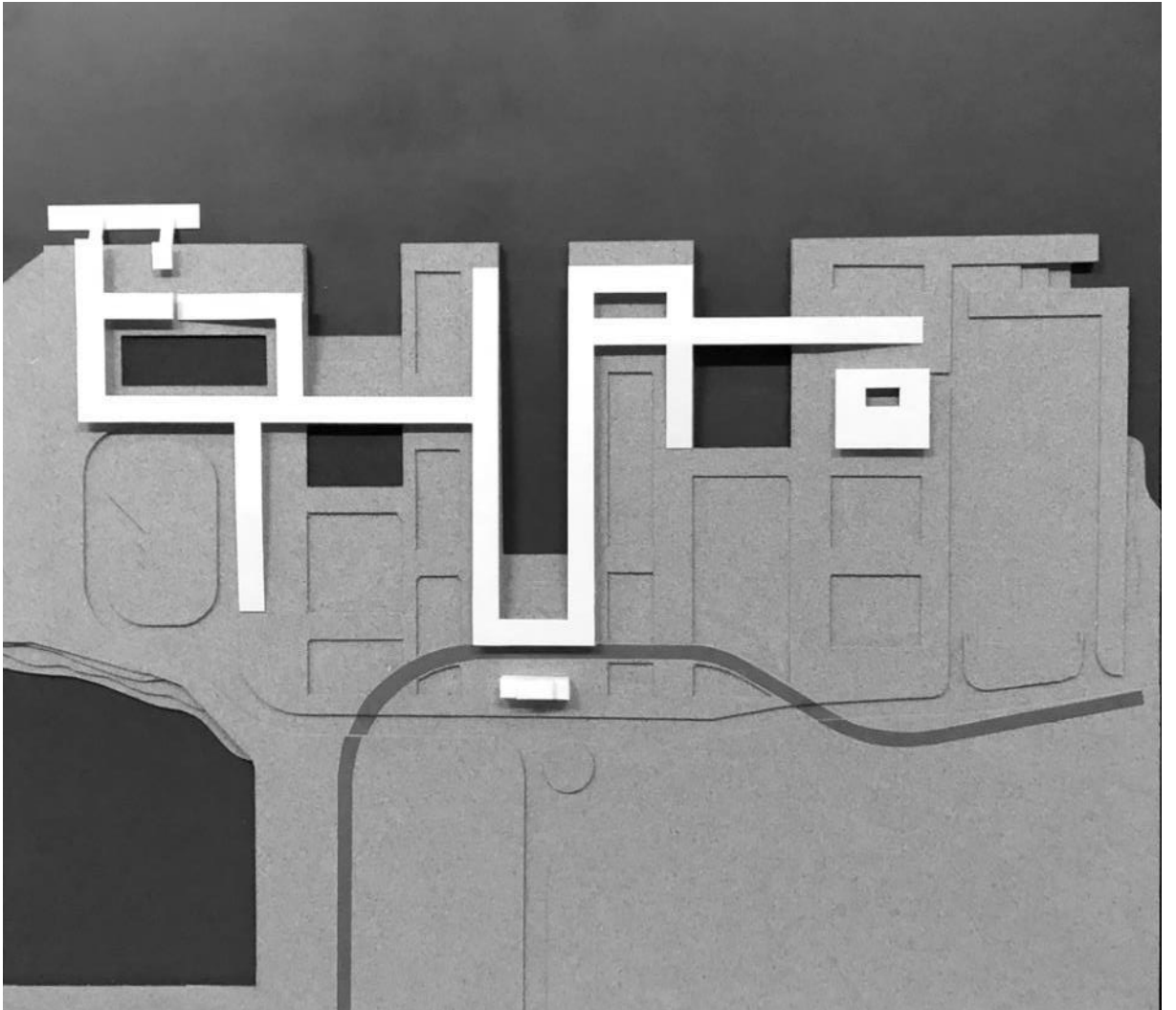


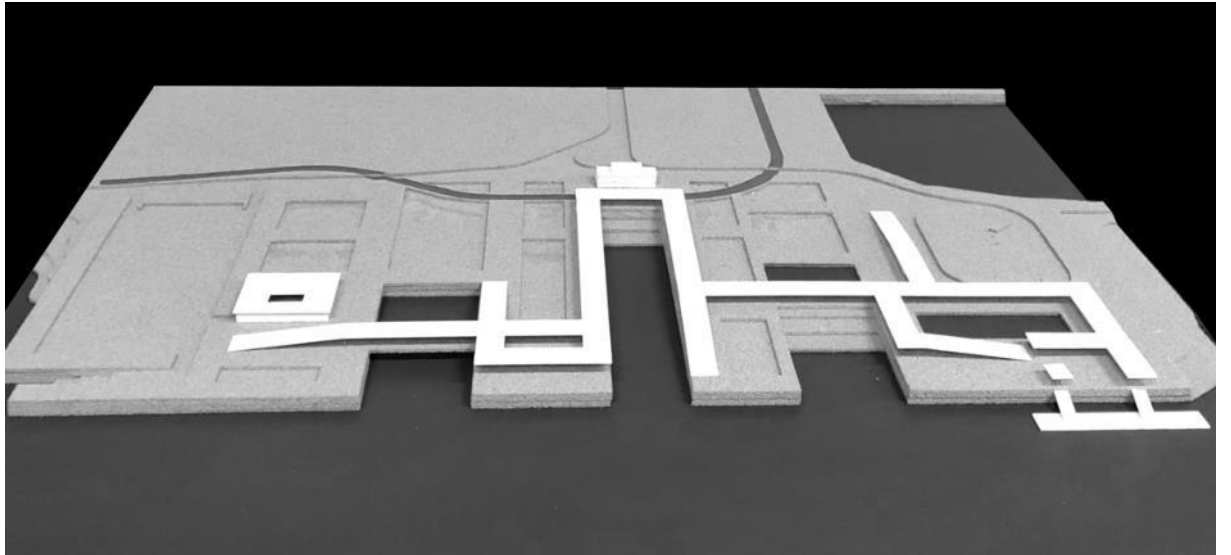
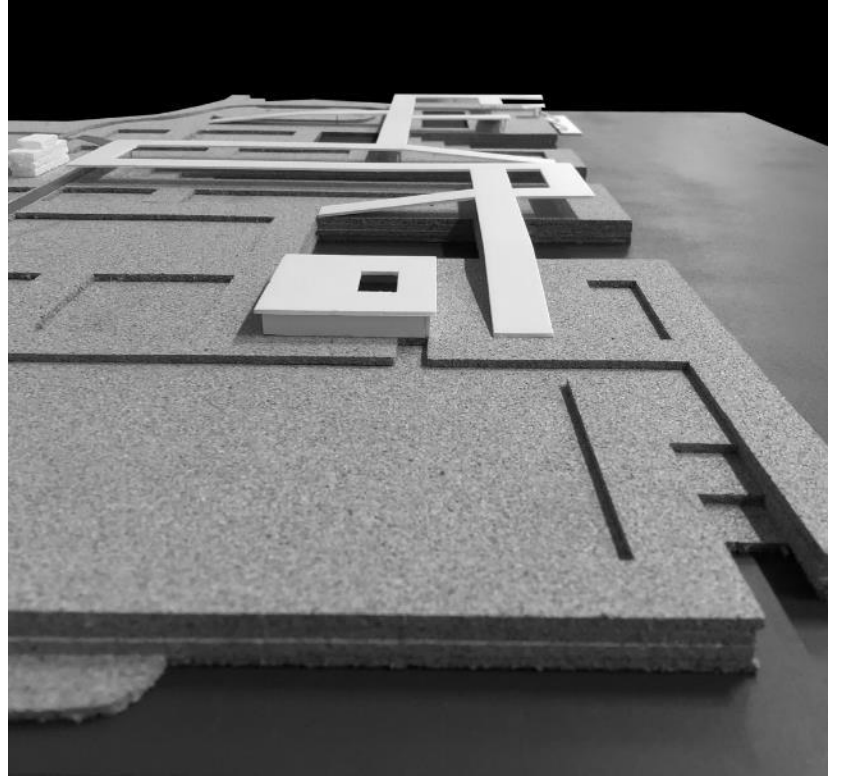
Seixal's boat terminal and its landfill are the infrastructure upon which two new layers are added, by excavating and revealing the water and by overlapping a walkable paths that redefines edges, ramps and courtyards.

The public space is seen as an open, adaptable and incremental system.



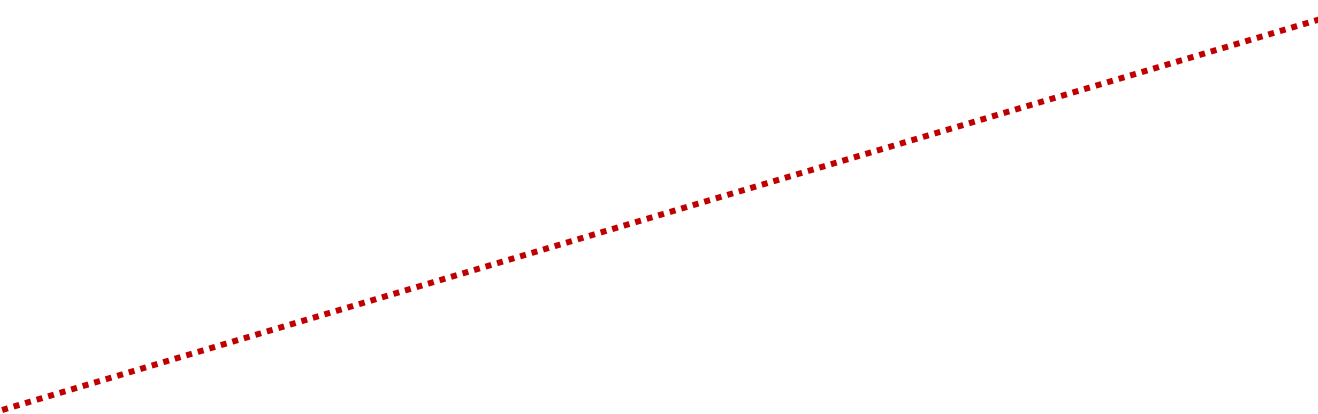






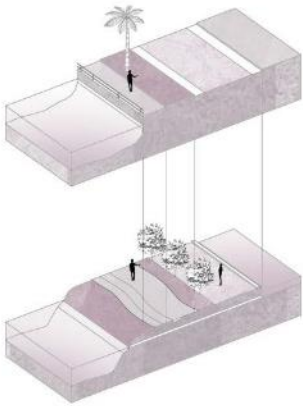
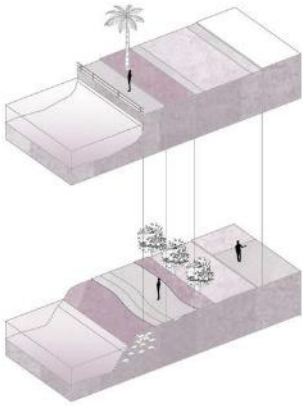
public space . design . atmosphere . material

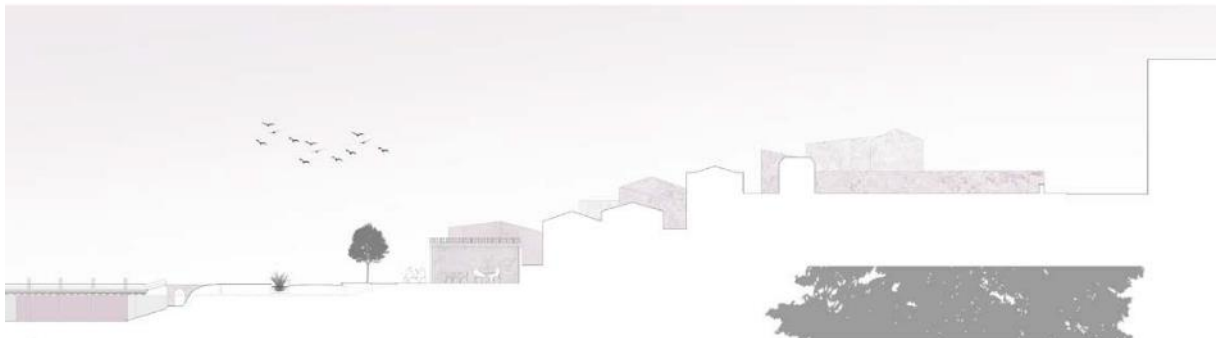
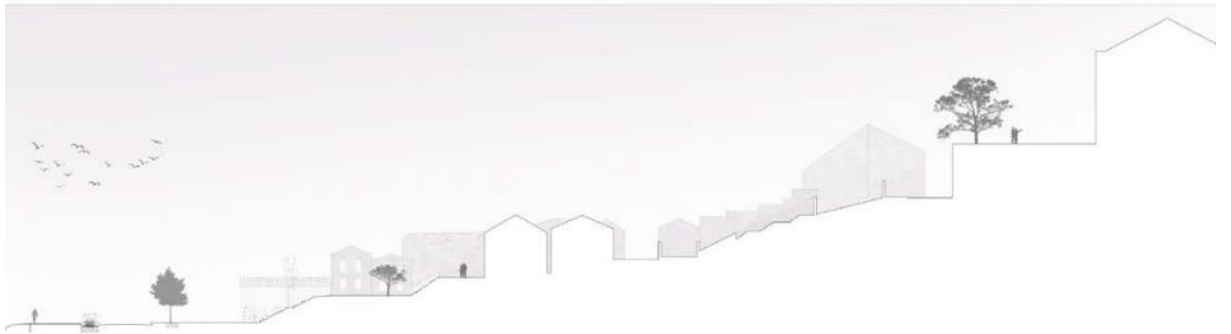
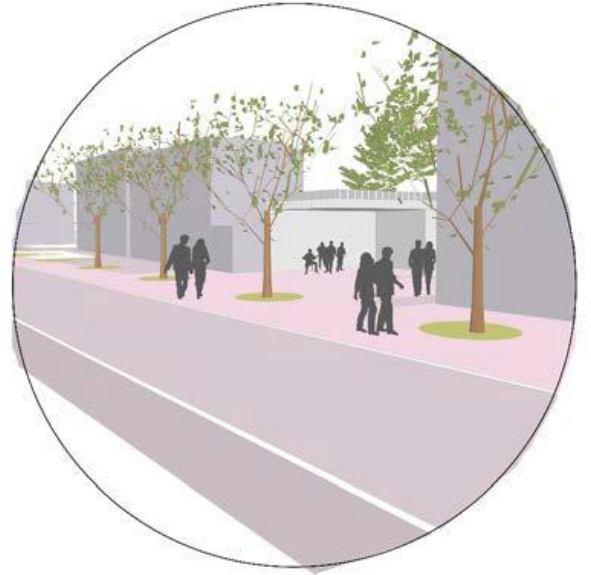
Esther Titos

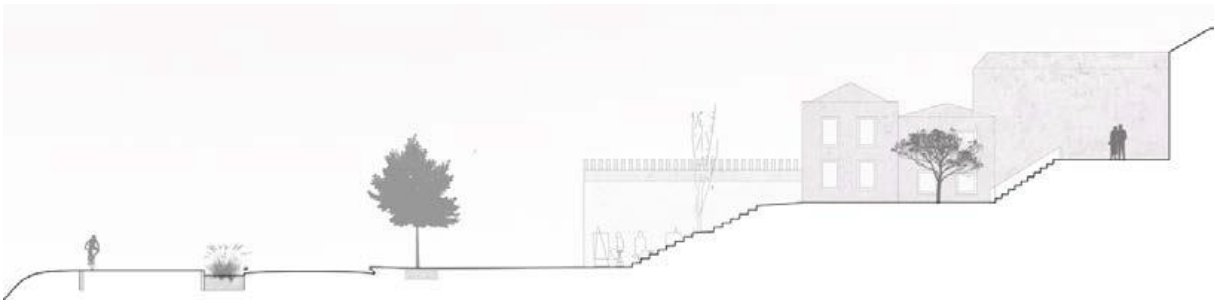
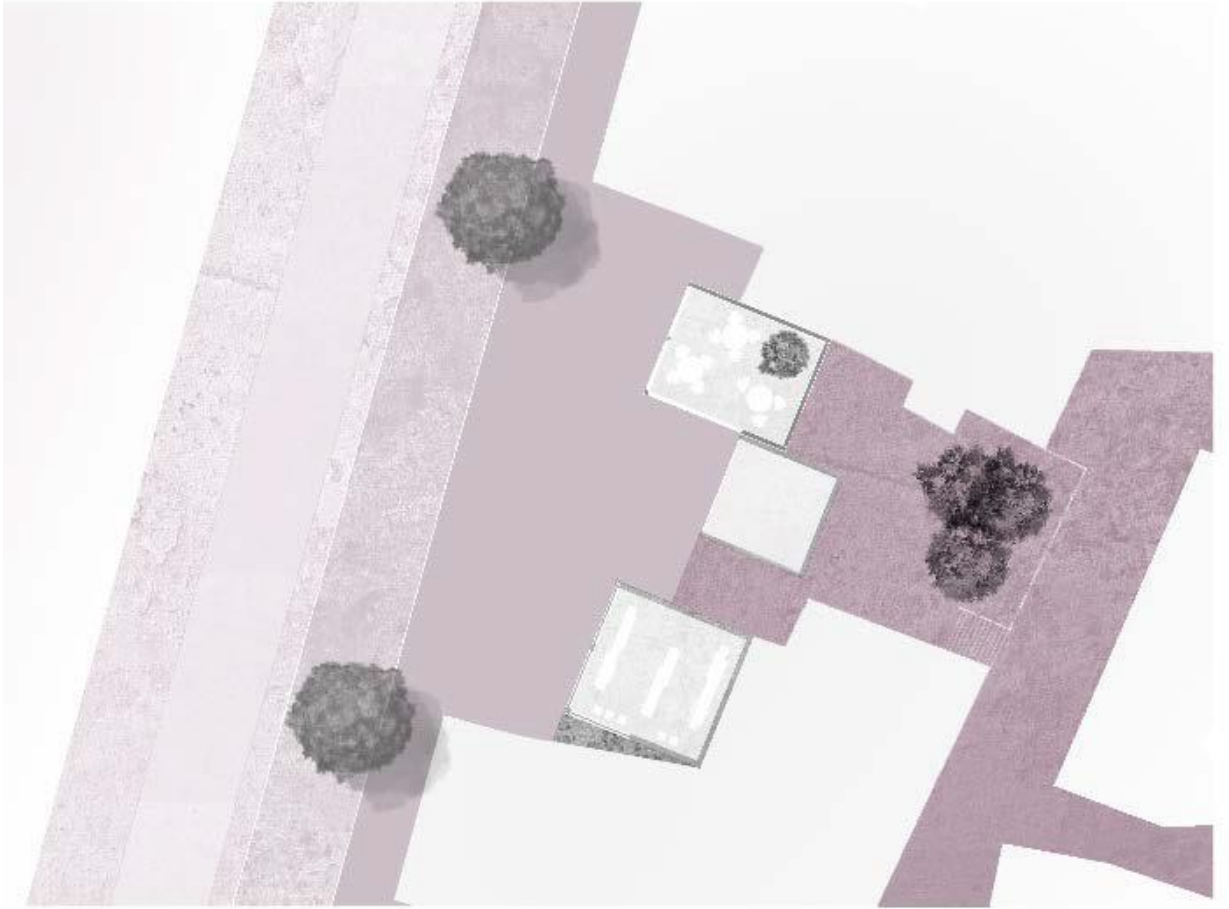


The threshold between Arrentela old town and its waterfront by the bay is redesigned to articulate flooding resilience with more walkable spaces.

Water reservoirs mark special moments, while a porous connection with the upper levels reactivates underused buildings and offers new vitality.



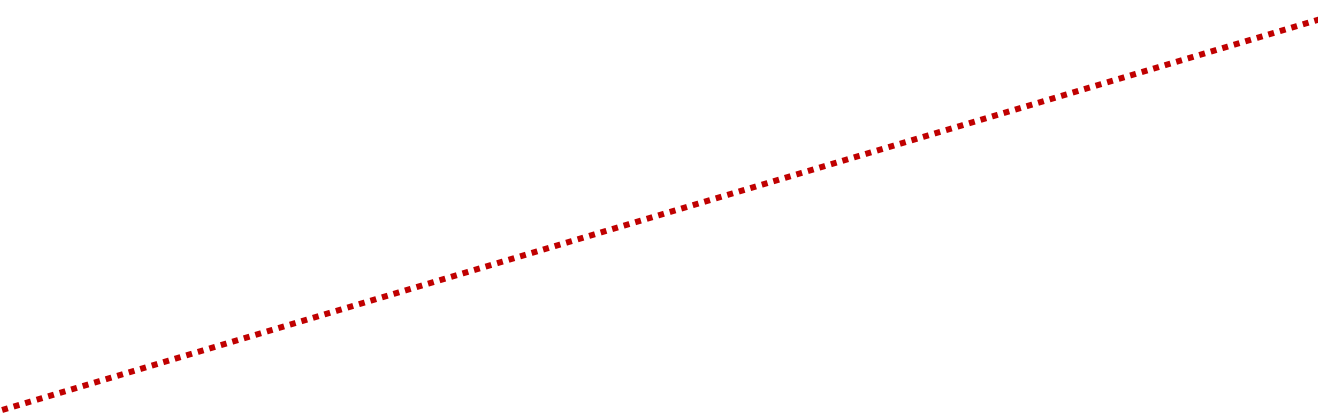






public space . design . atmosphere . material

Francisco Janeiro



The symbolic relationship of Amora with its waterfront is materialized in a renewed public space in which the nautical activities play a central role.

A regular three-dimensional pattern organizes a simple play of volumes, pavements and quay infrastructures, in a dialogue between hard and soft materiality.



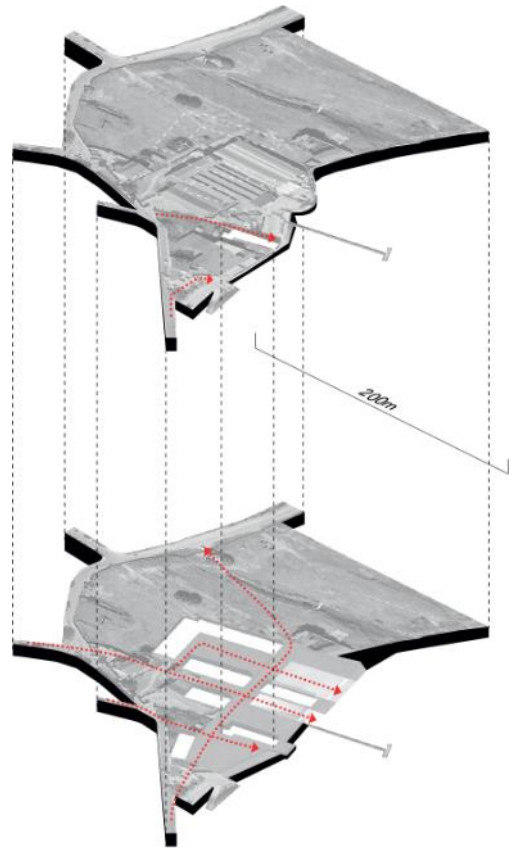
_à priori space



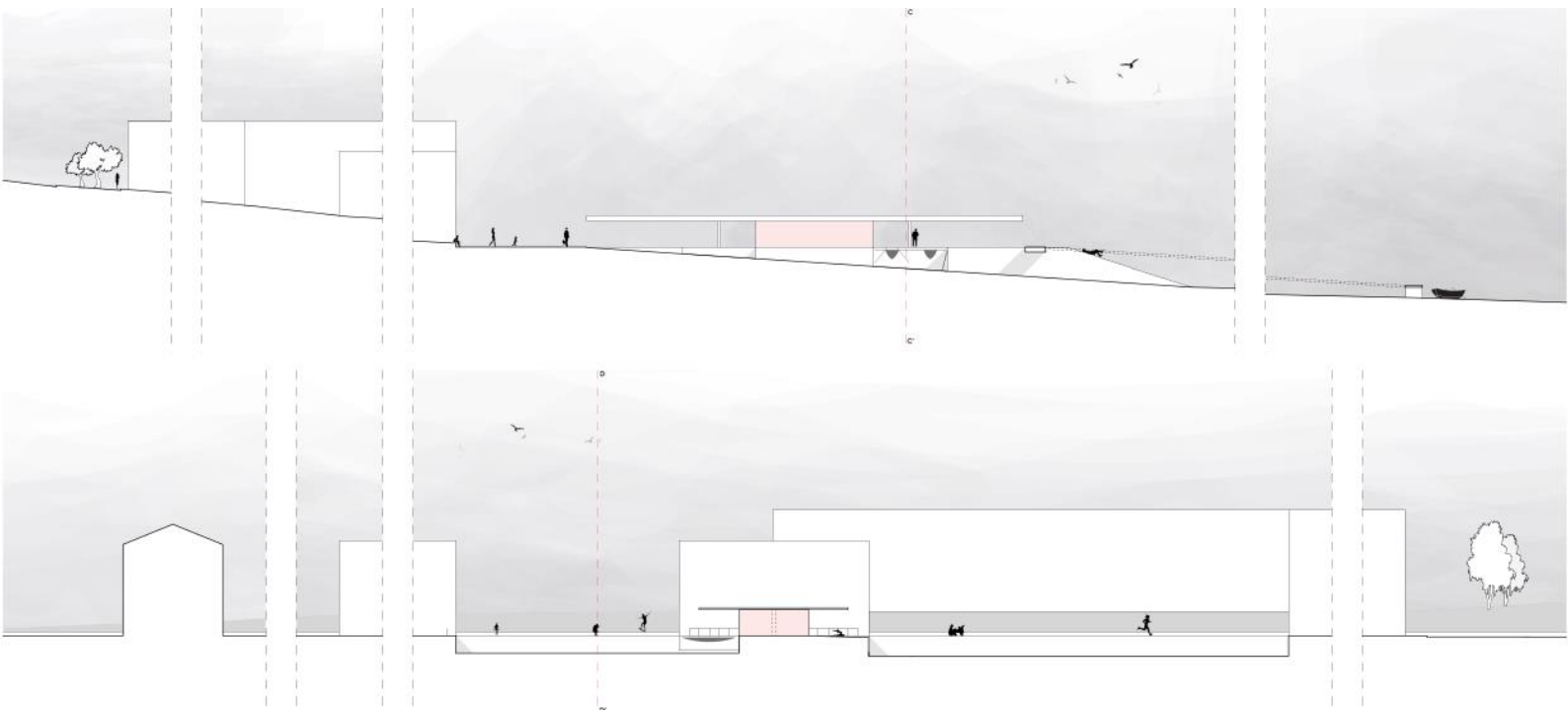
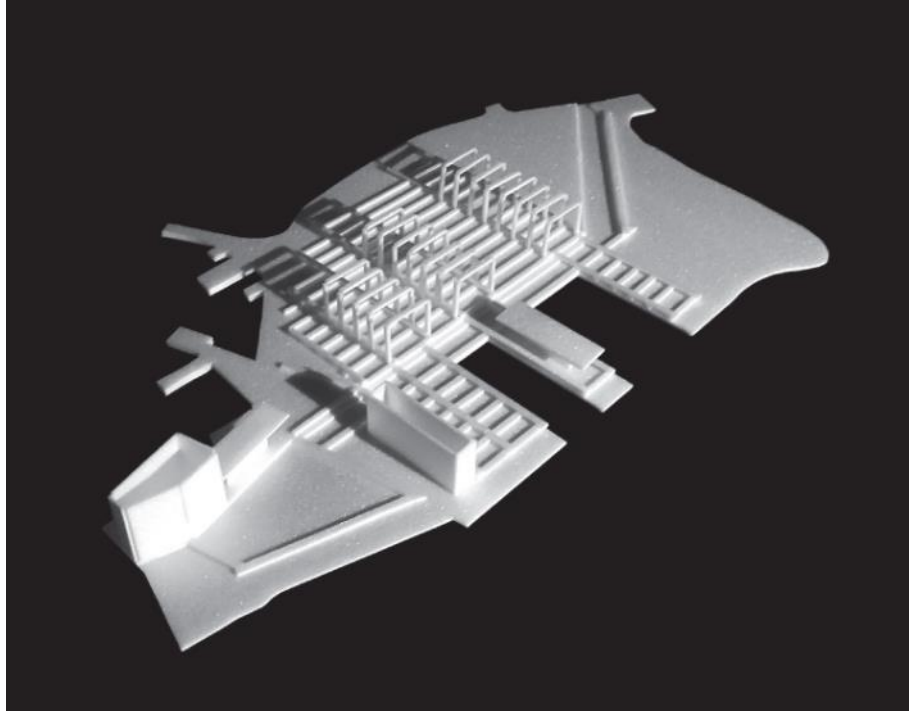
_proposed spaces

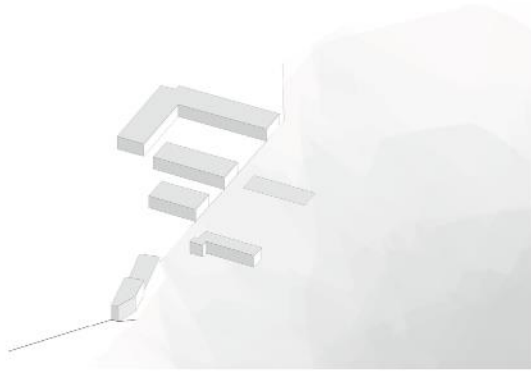
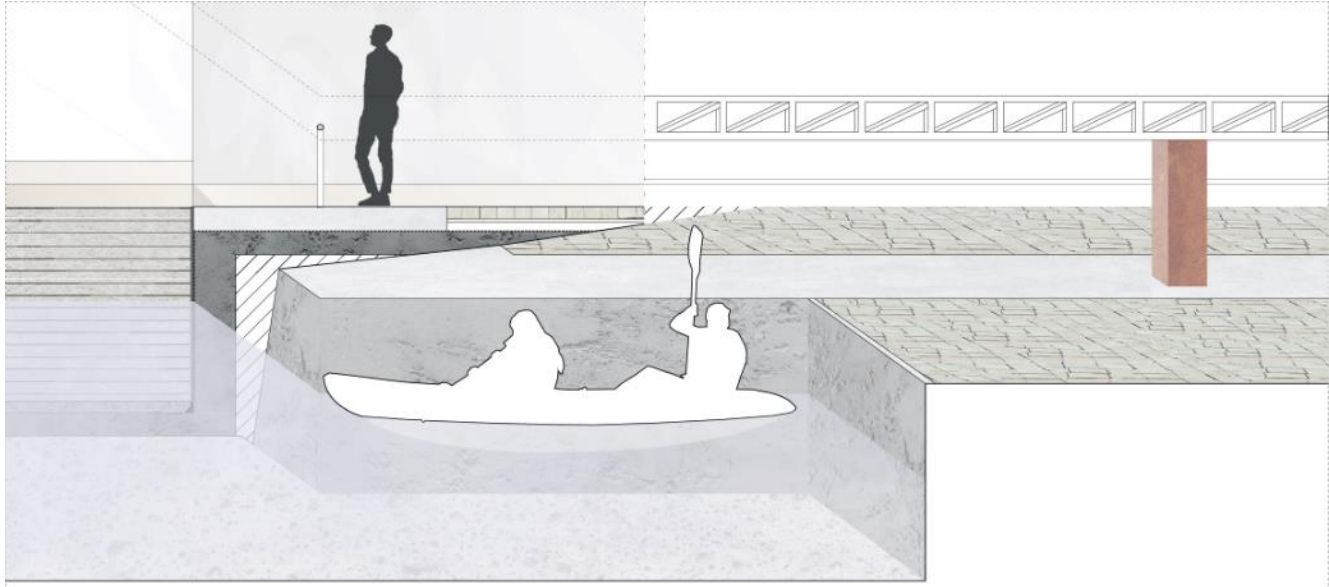


_territorial relationships

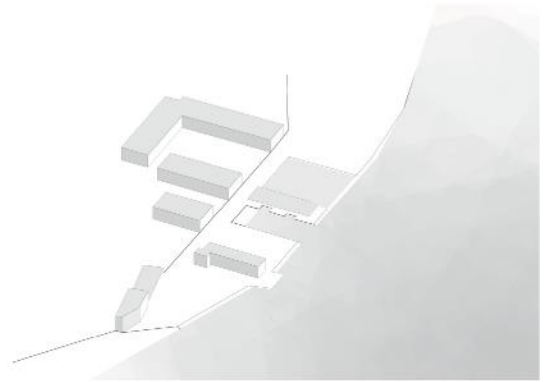


_axonometric scheme

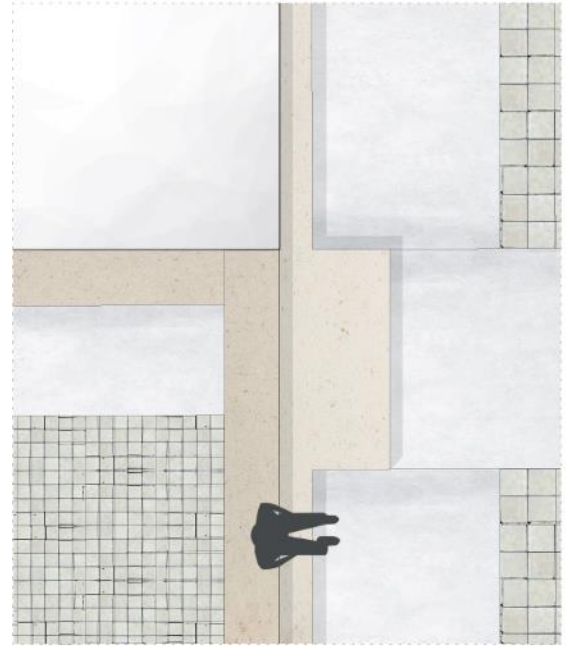




_water levels [+3] scheme



_water levels [+2] scheme

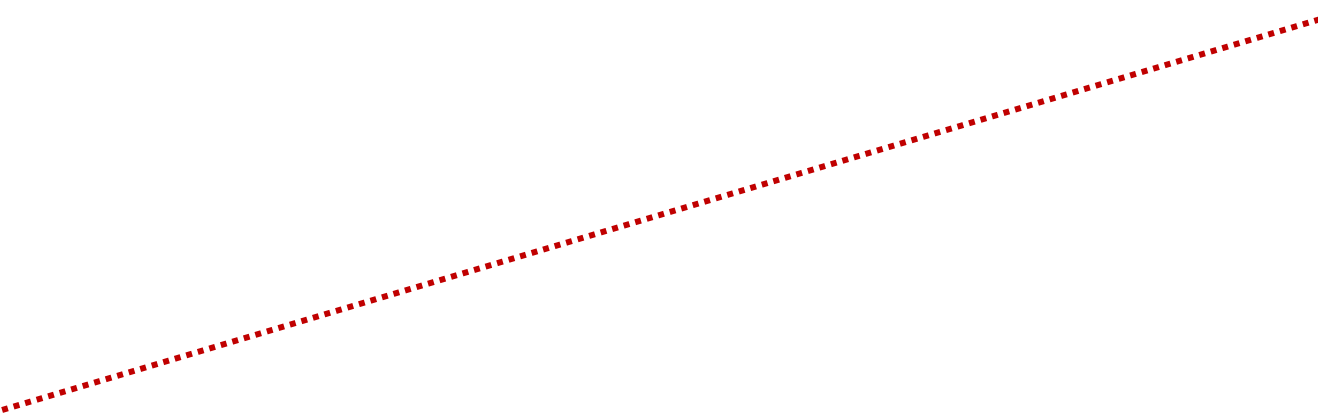


_atmosphere **detail**

_atmosphere **detail**

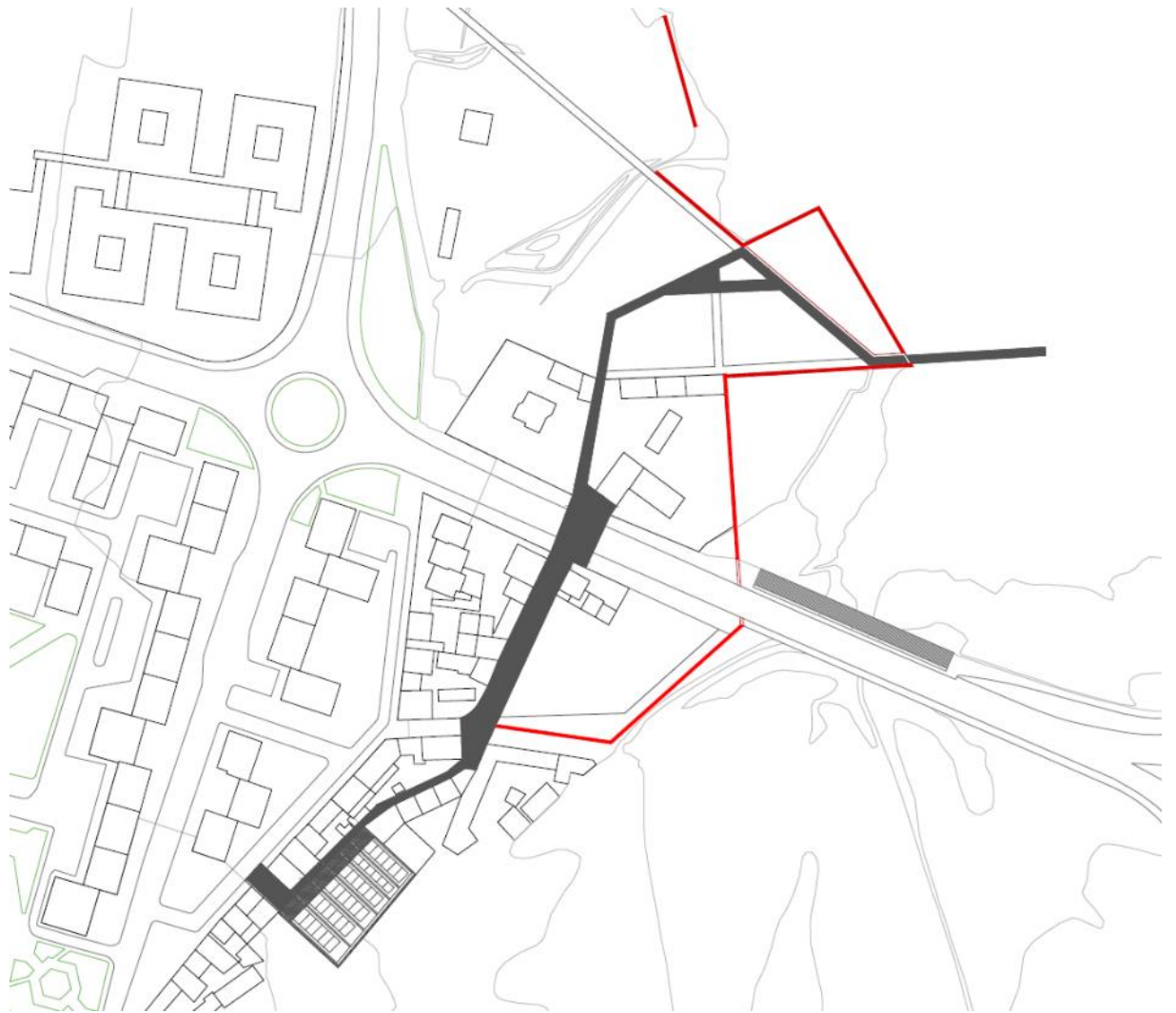
public space . design . atmosphere . material

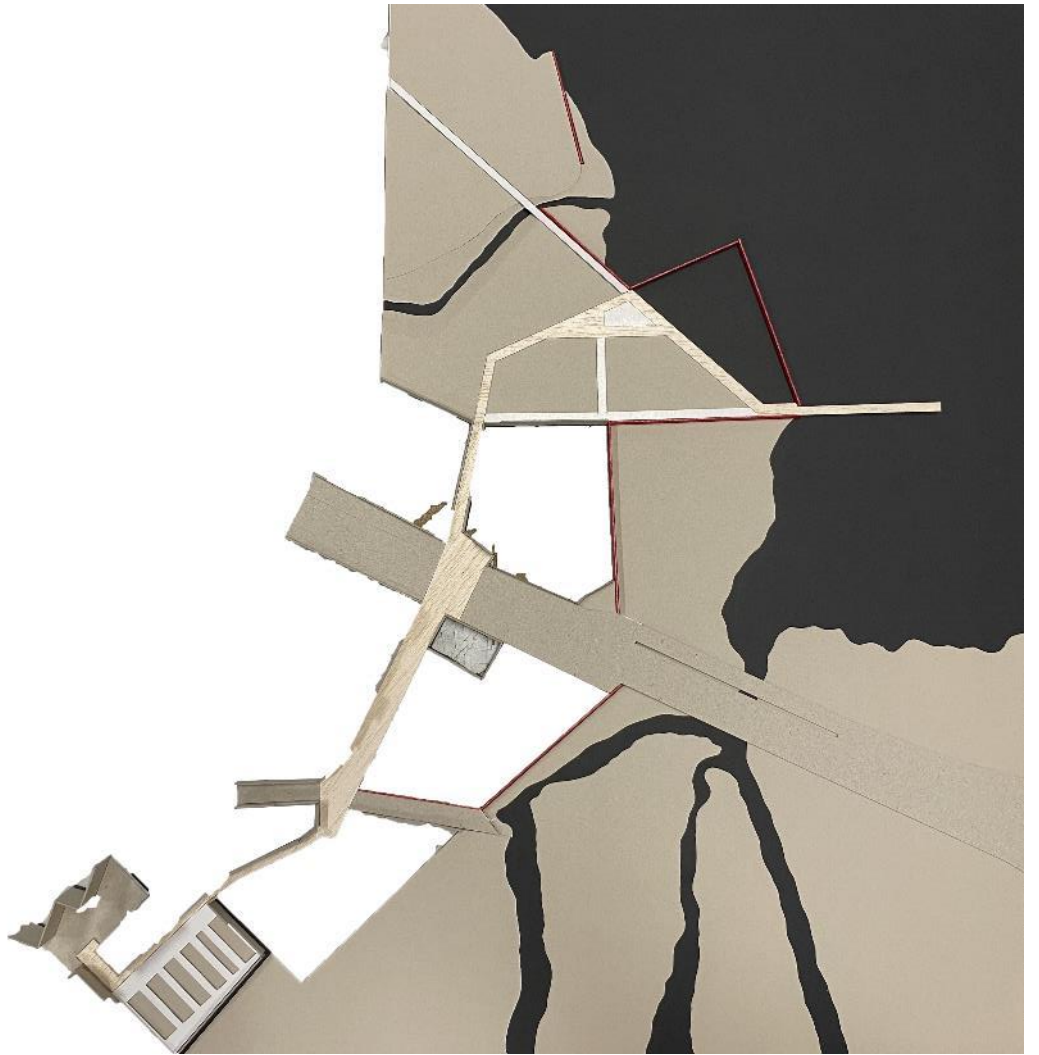
João Gouveia

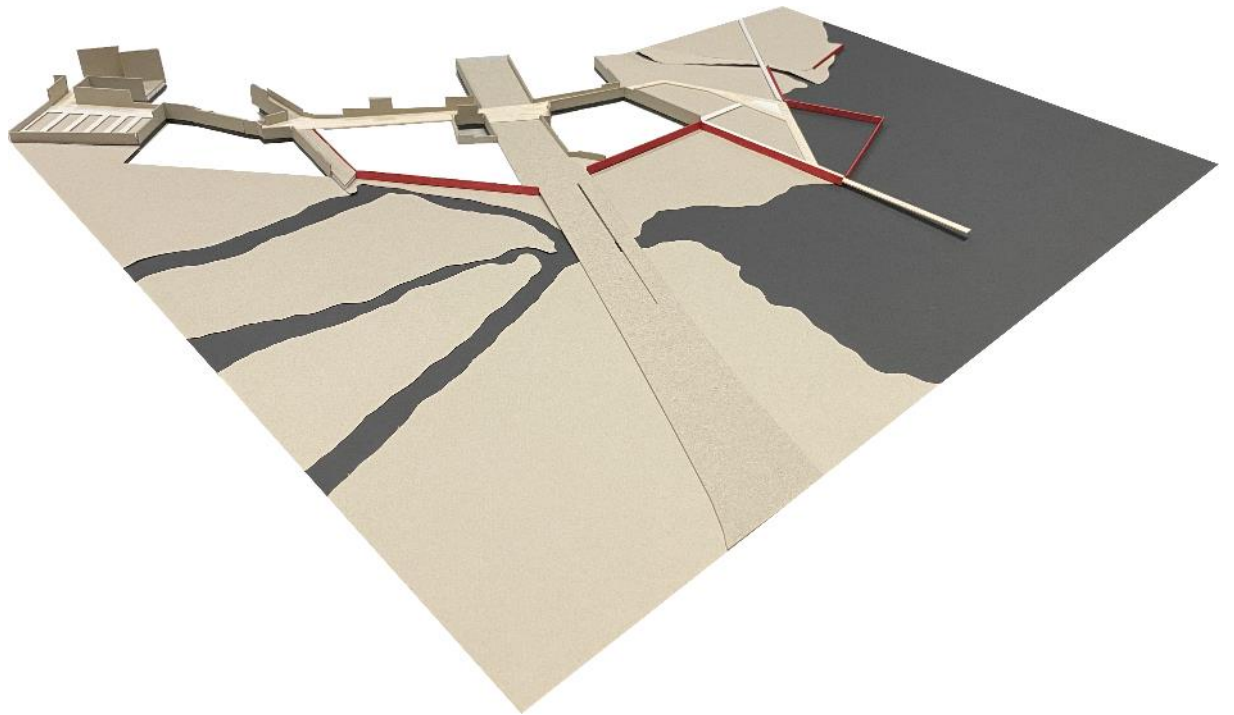


The old harbour of Porto da Raposa is rediscovered in a discrete, almost archeological, intervention at the south area of Seixal bay.

Revealing the harbour wall is the trigger to reestablish the continuity with traces of territorial interdependence between land and water.

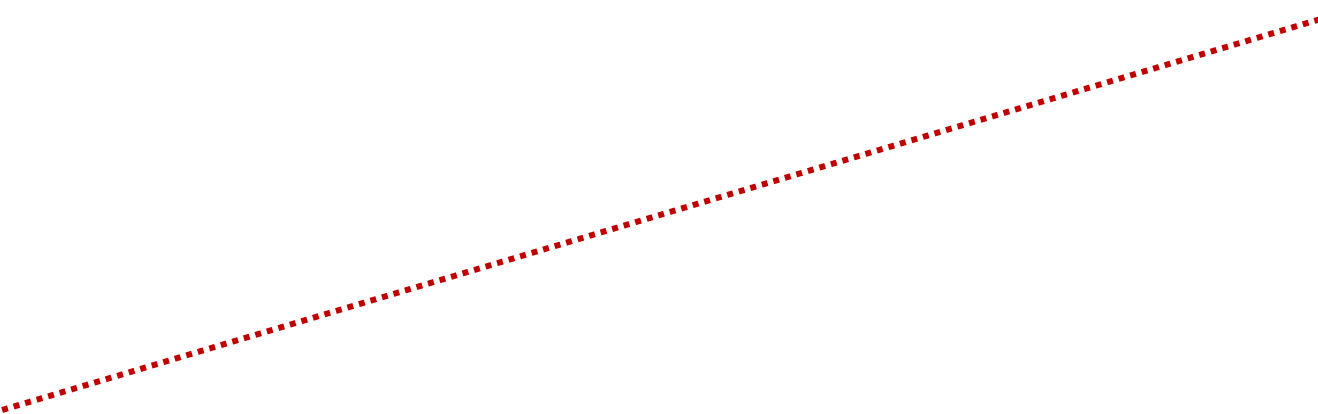






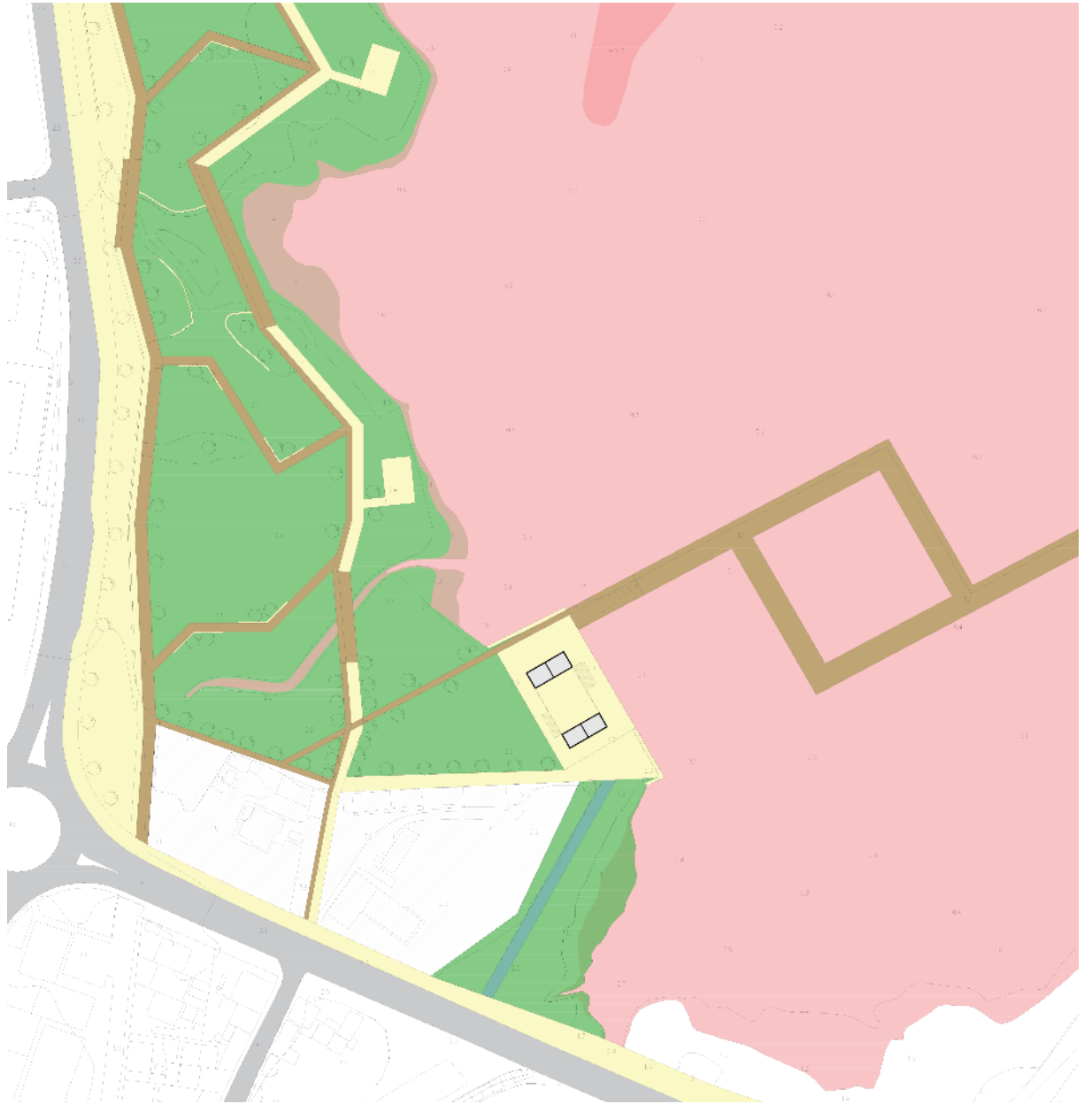
public space . design . atmosphere . material

Luísa Flores



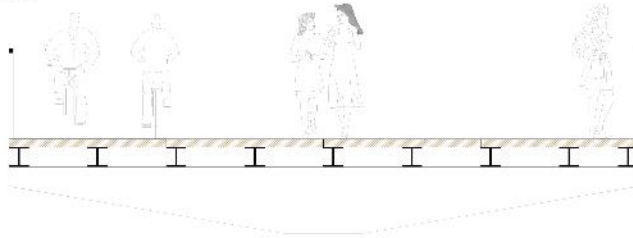
The area around the old Porto da Raposa is the missing link of the continuous Seixal's bay walking path. The intervention closes the link and reveals its potential.

A wet and porous area allows for water rise. A new path over the bay frames the dialogue between the old harbour and the urban landscape.



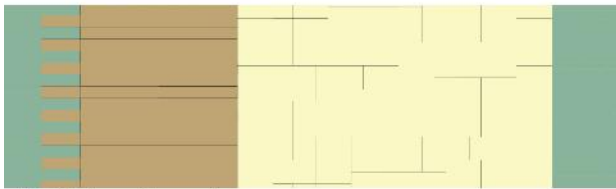


1/200

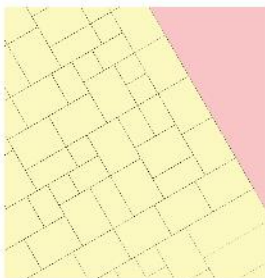


1/20

Atmospheres



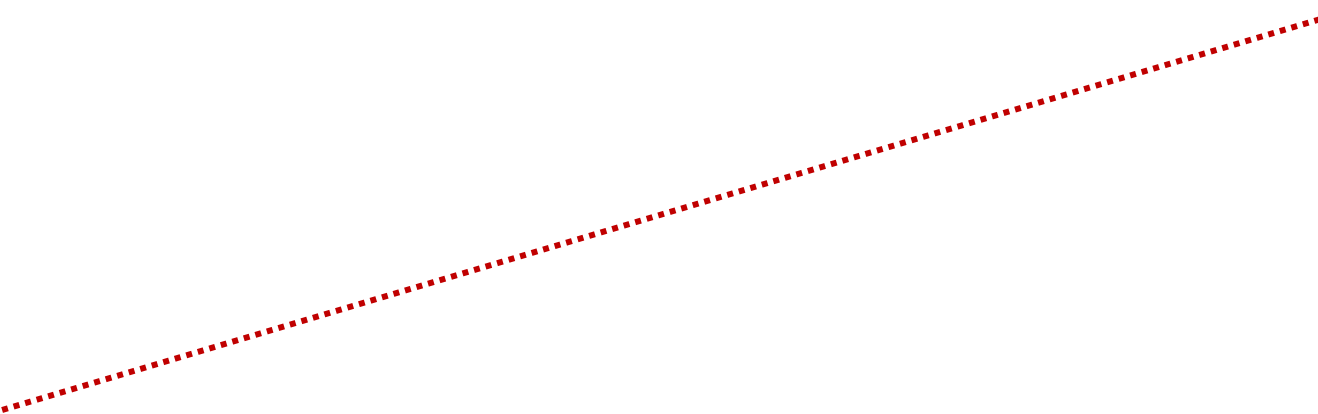
Detail of a walking path



Detail of a stone floor (terminal)

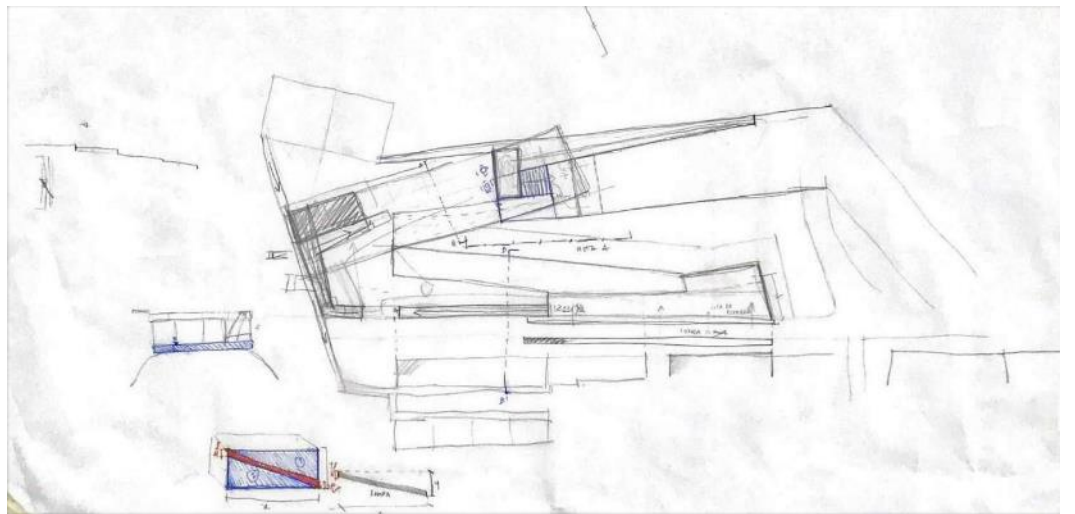
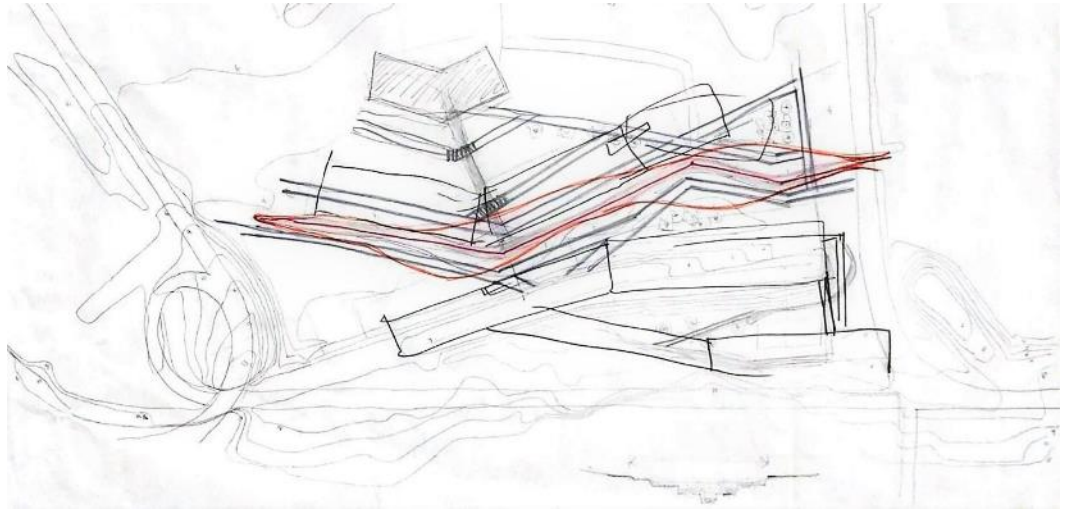
public space . design . atmosphere . material

Nicole Rodrigues



The wetland between Fogueteiro and Torre da Marinha is a complex and nodal site around which new opportunities are devised.

A system of platforms shapes a new lived landscape over the floodable area, while establishing a new topographical dialogue between the fragmented spaces around.







Plan - 1



Plan - 2



Plan - 3

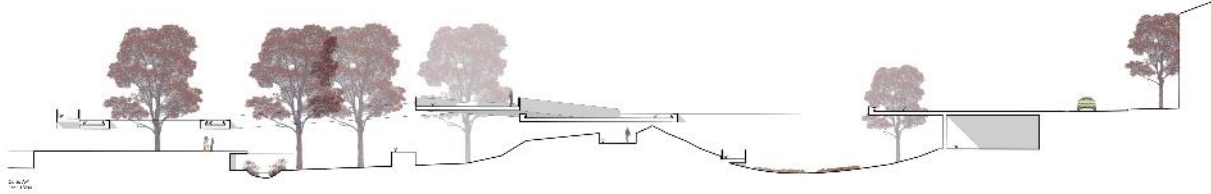
Plan - 4



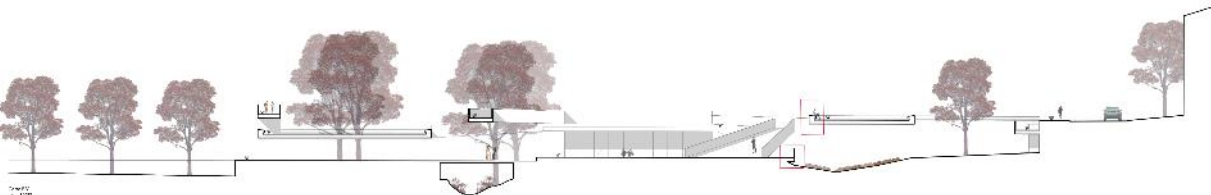
Plan - 5



Plan - 6



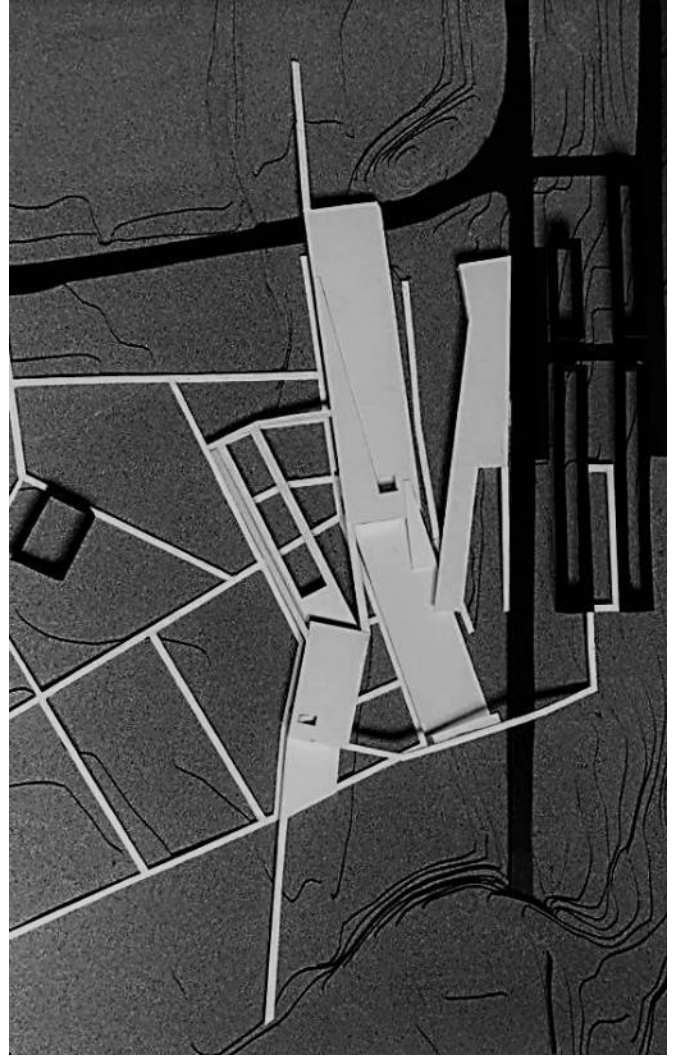
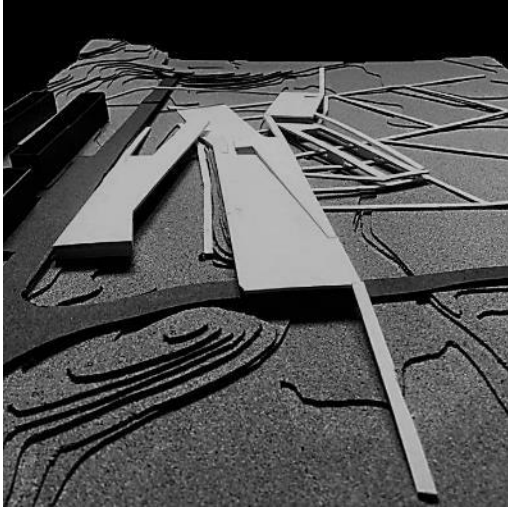
Section - 1

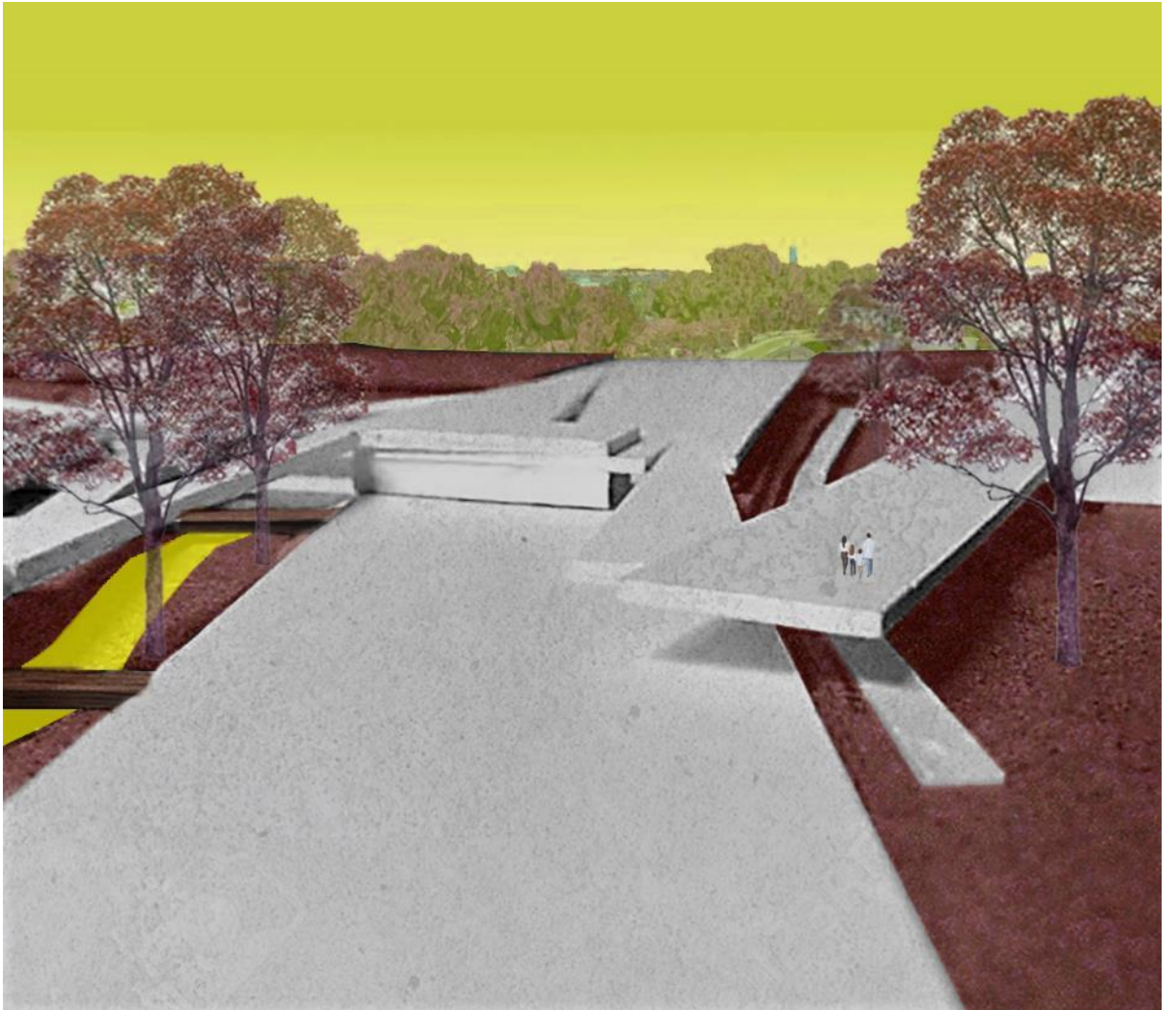


Section - 2



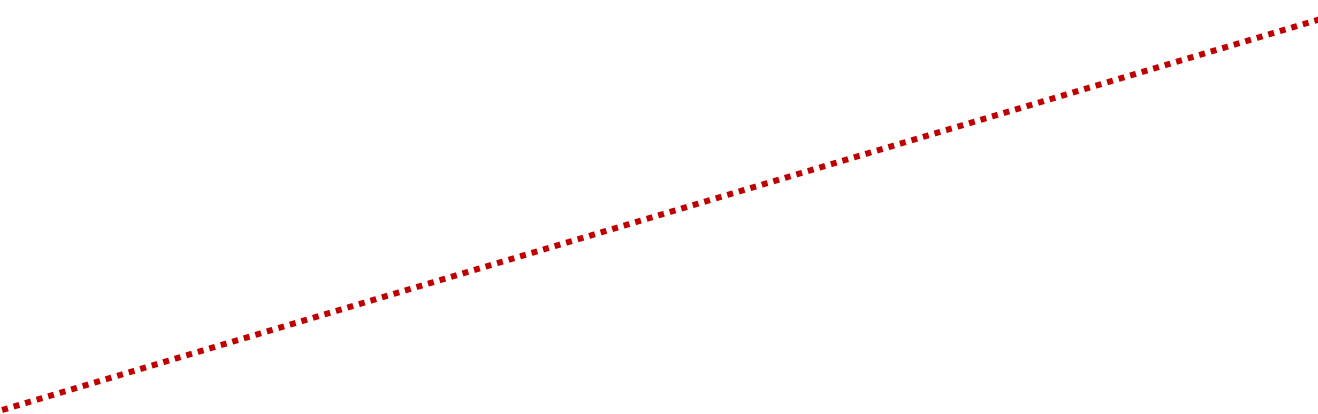
Section - 3





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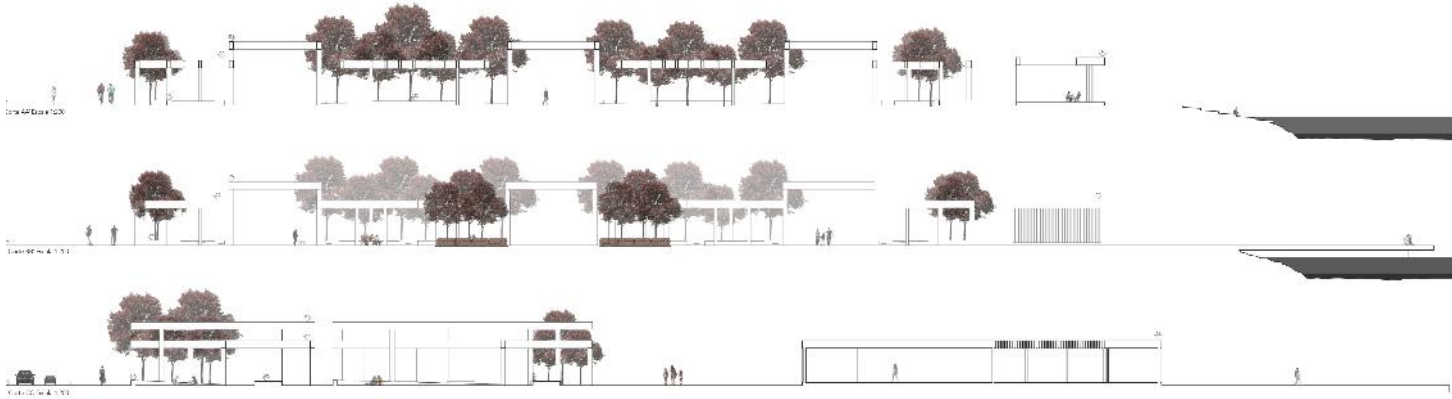
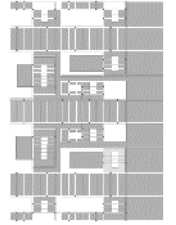
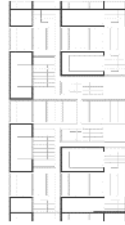
Nicoleta Banari

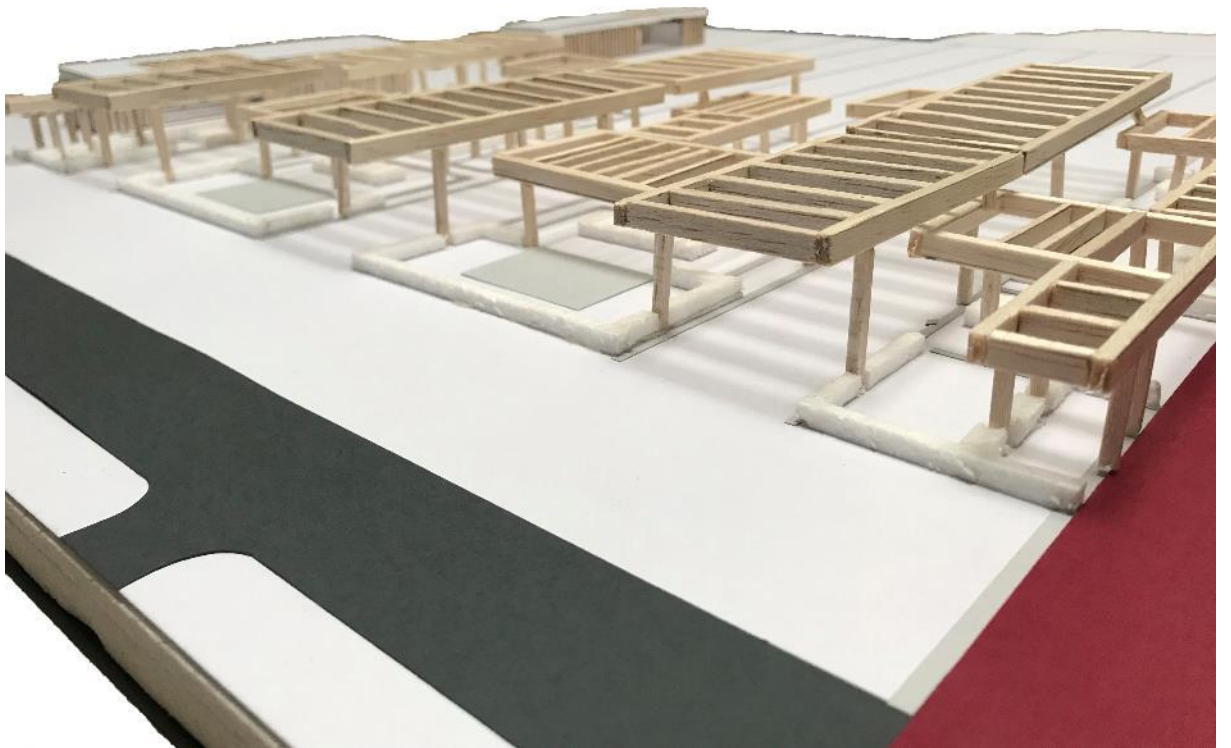


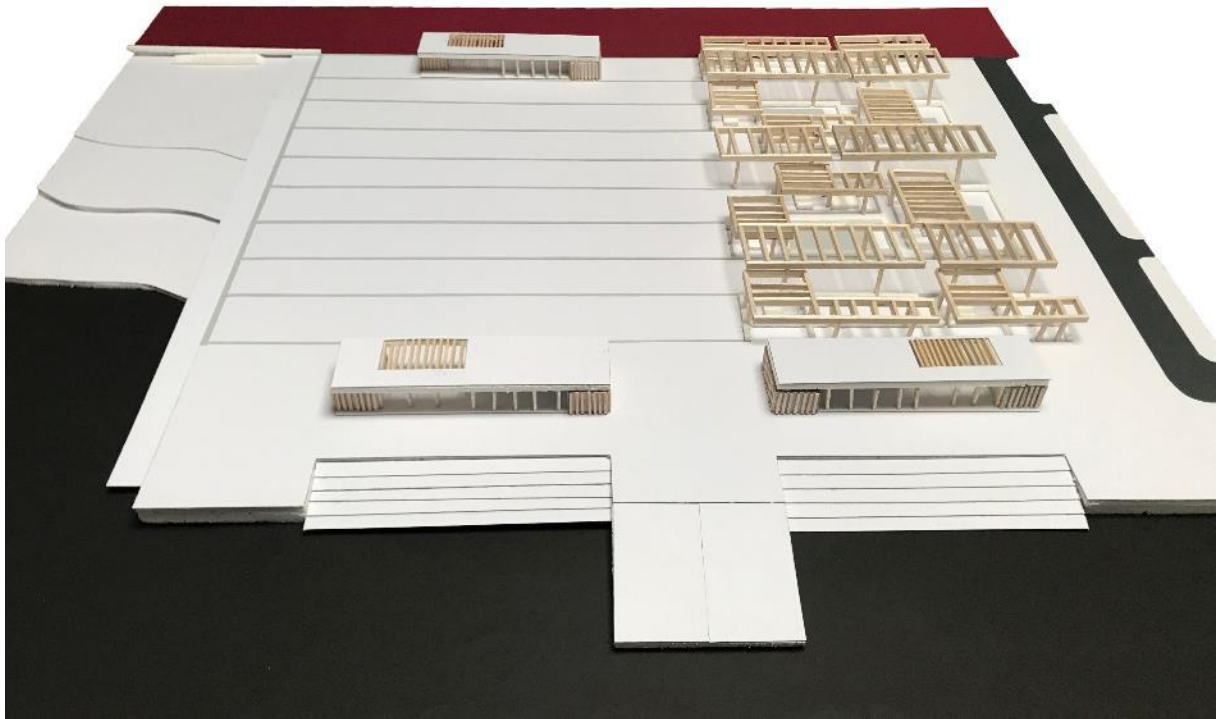
The underused car parking close to Seixal boa terminal is reactivated as the scenario for ephemeral and leisure activities, in continuity with Ponta da Azinheira.

Light wooden structures shape a large scale flexible space open to the beach, while framing small commercial and playground units.



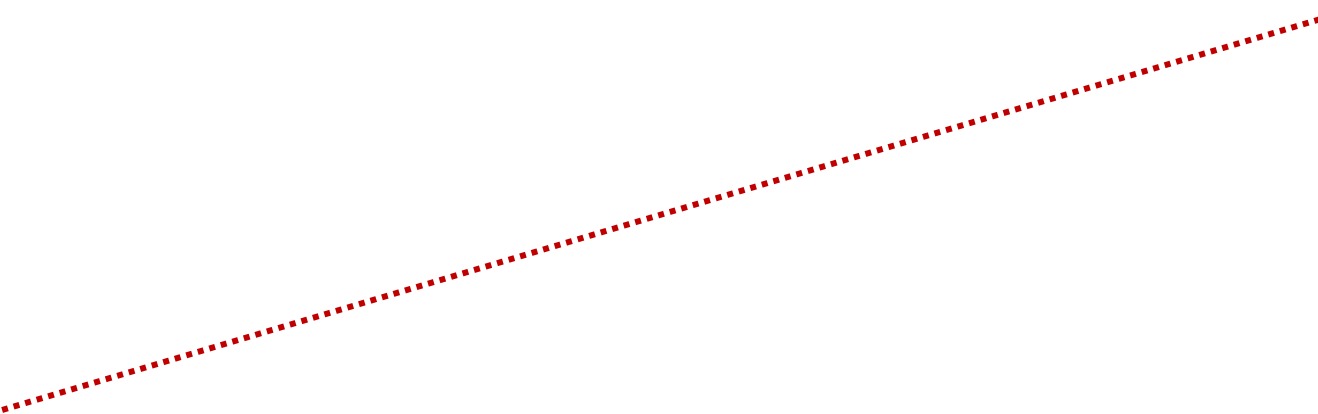






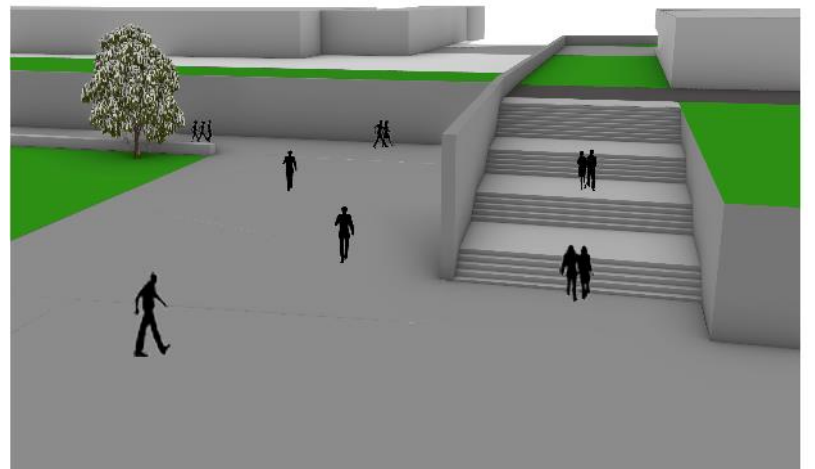
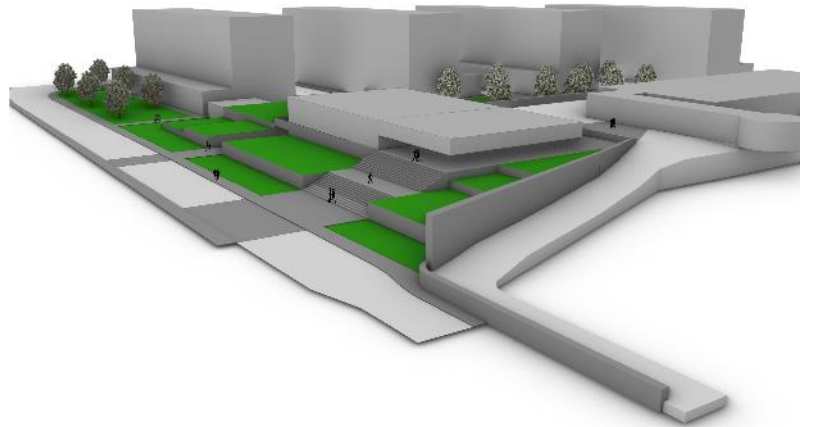
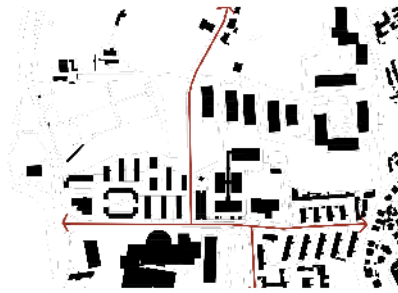
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Omar Lai

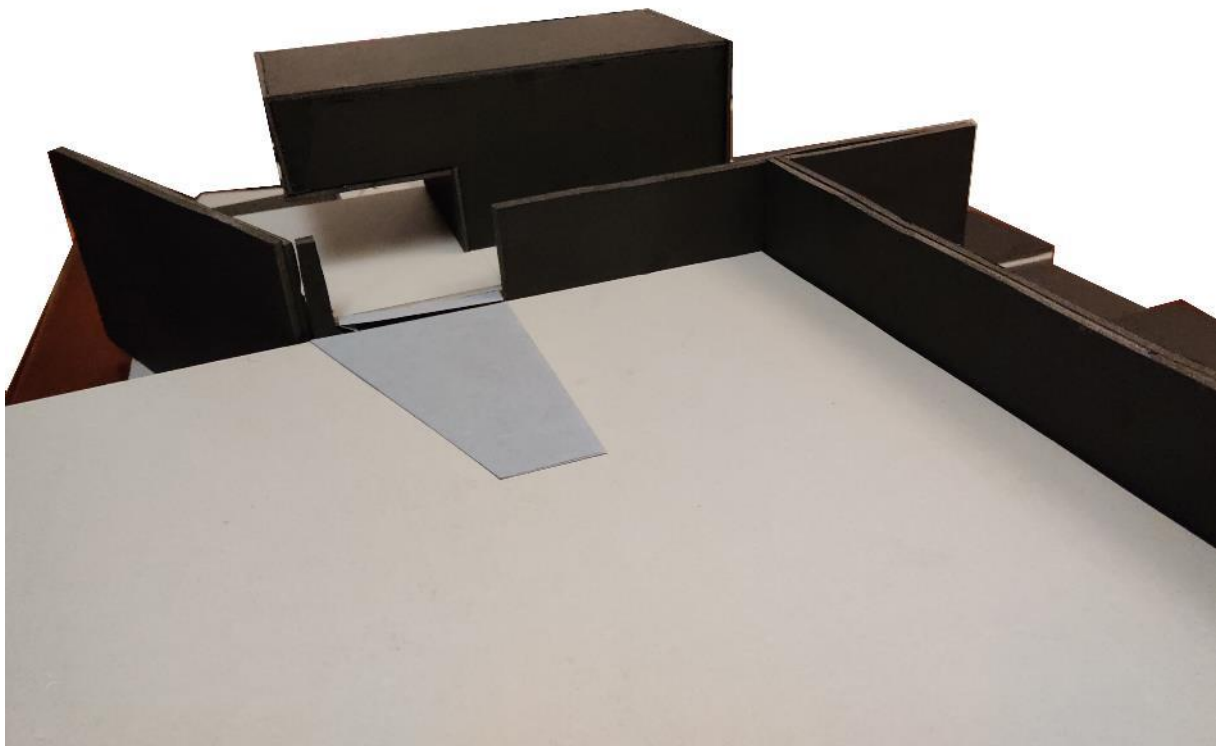


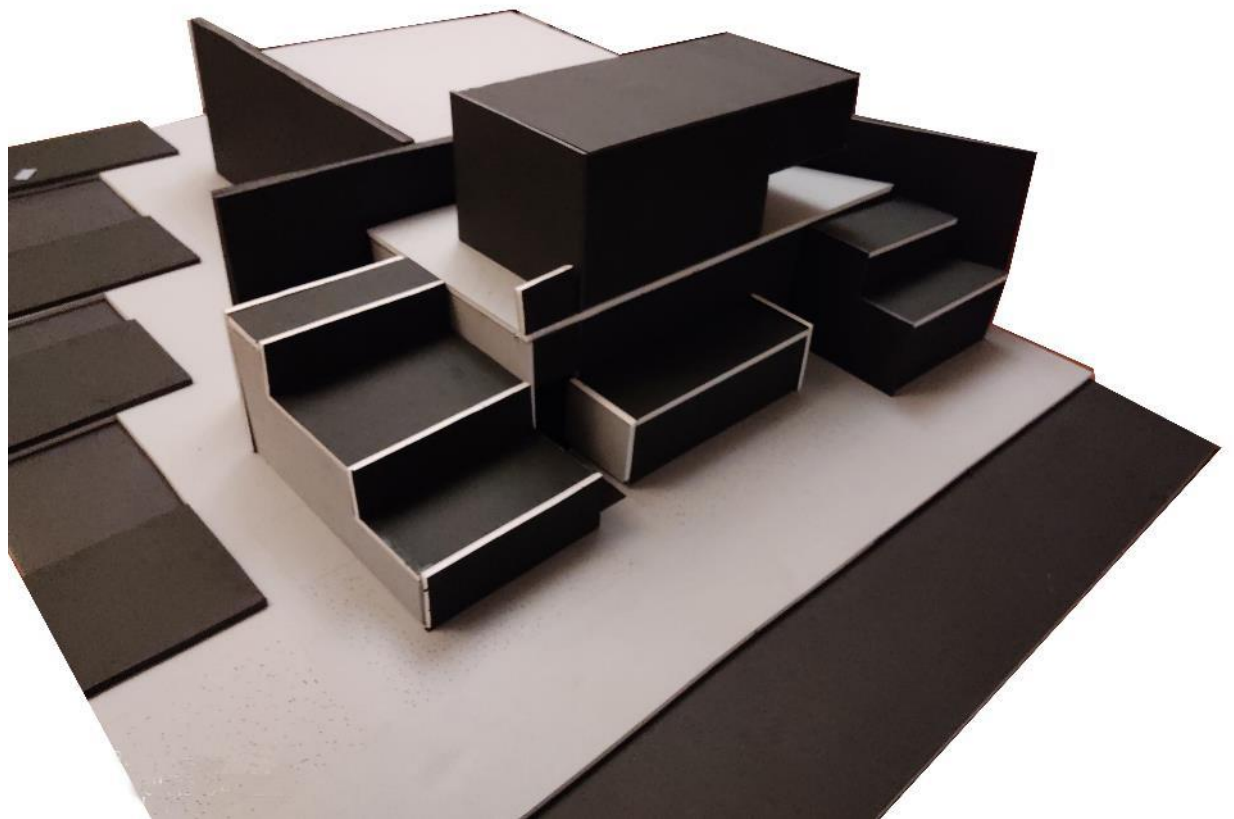
The limit around José Afonso secondary school and the residential neighborhood to its north is redesigned to promote a new shared entrance public space.

A topographical structure shapes the new limit, offering a new neighborhood facility, while a sequence of passages organizes hereto vacant spaces.



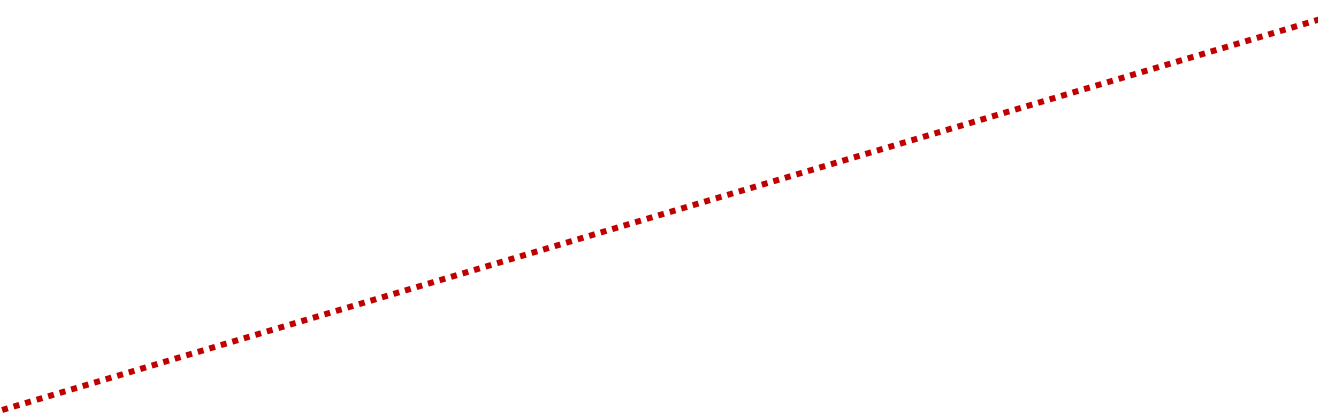






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Raul Corvelo

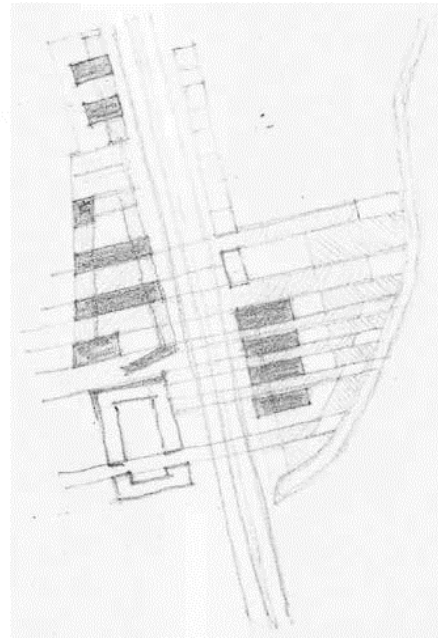
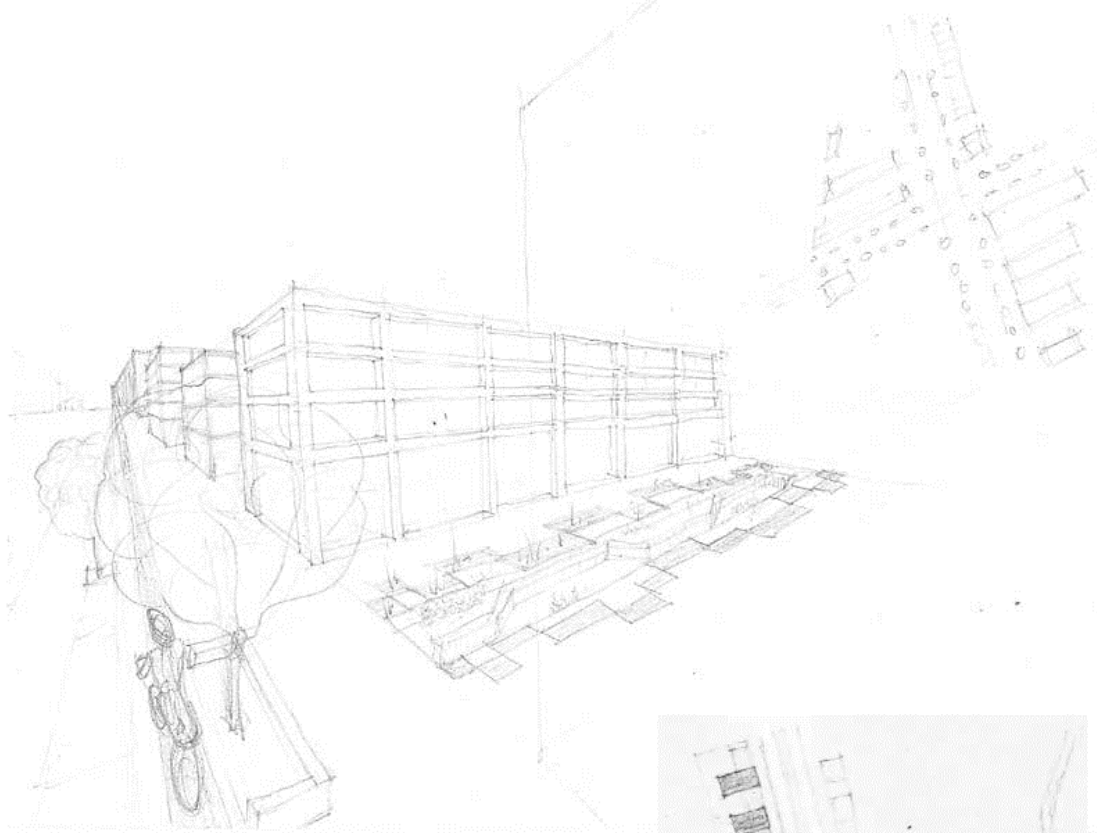


Fogueteiro becomes the main gate to Seixal, associating two fundamental spaces:
the national road (EN10) and Rio Judeu wetland.

A multifunctional avenue organizes the former road into a coherent urban landscape
while the open space is structured as a leisure, productive and
connective space, aimed at stitching today's infrastructural barriers.





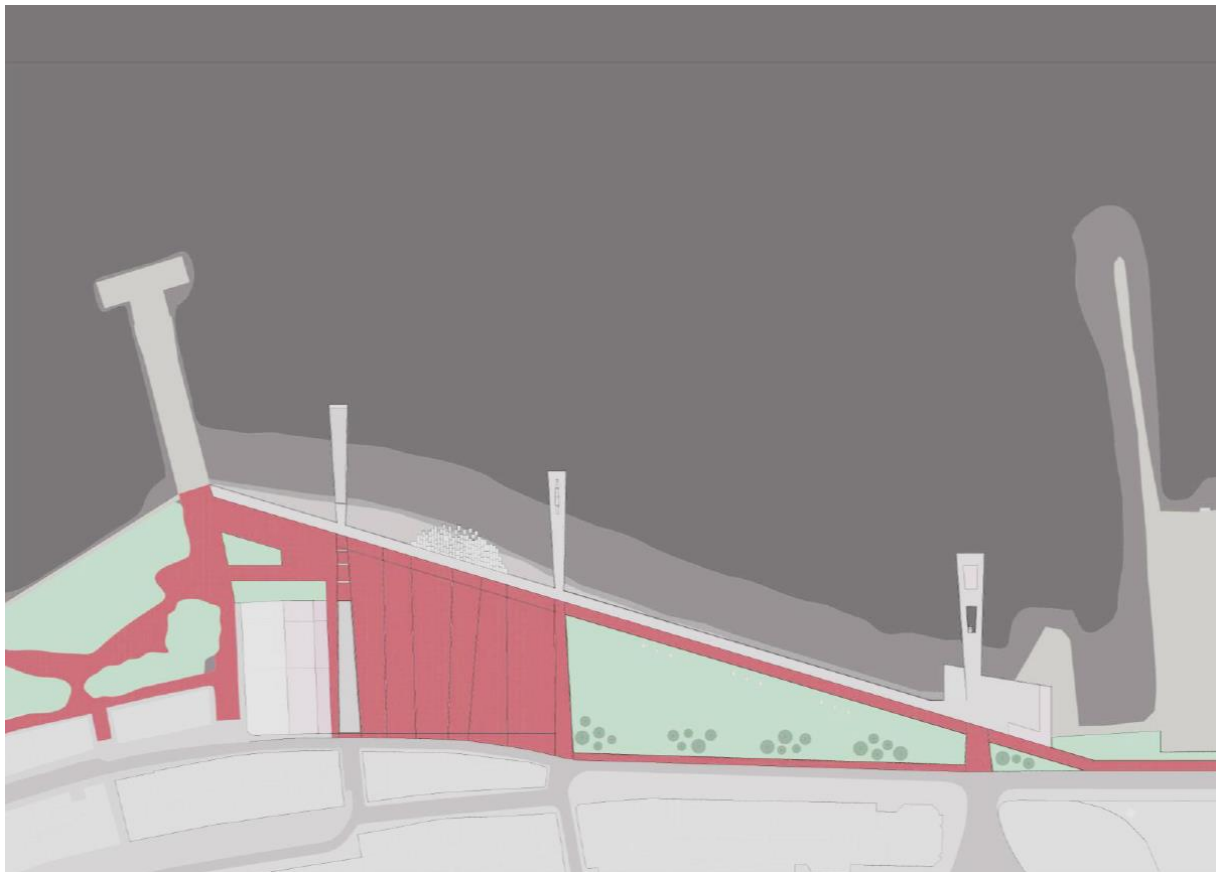
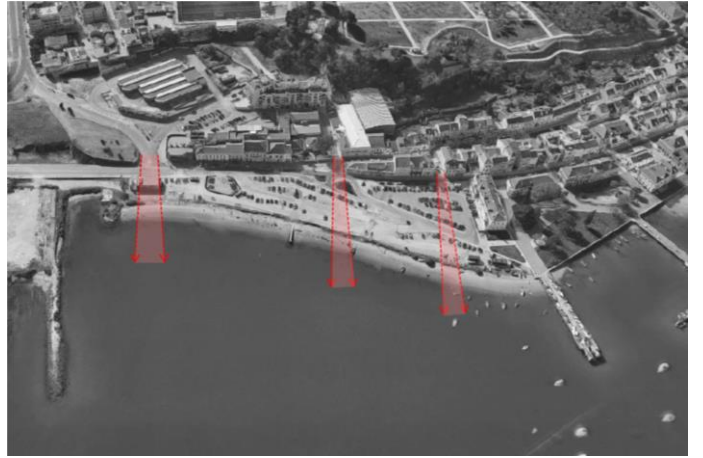


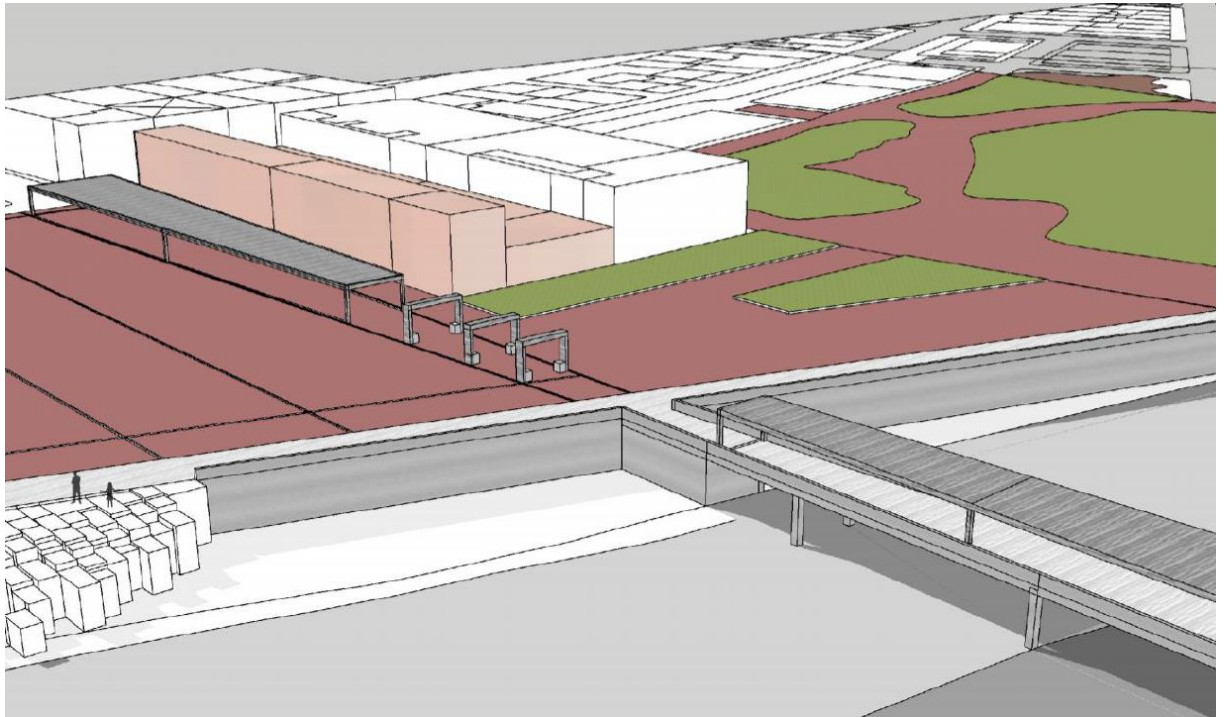
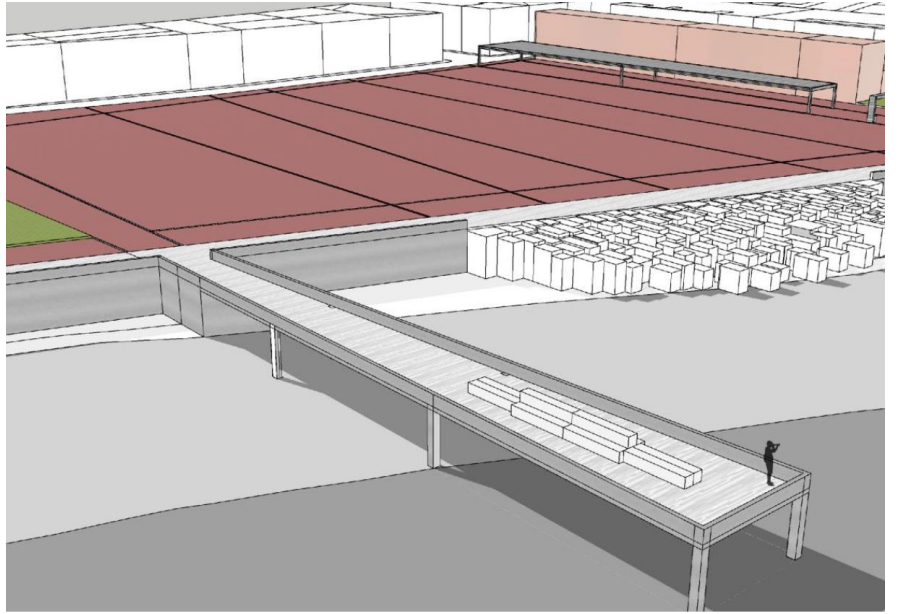
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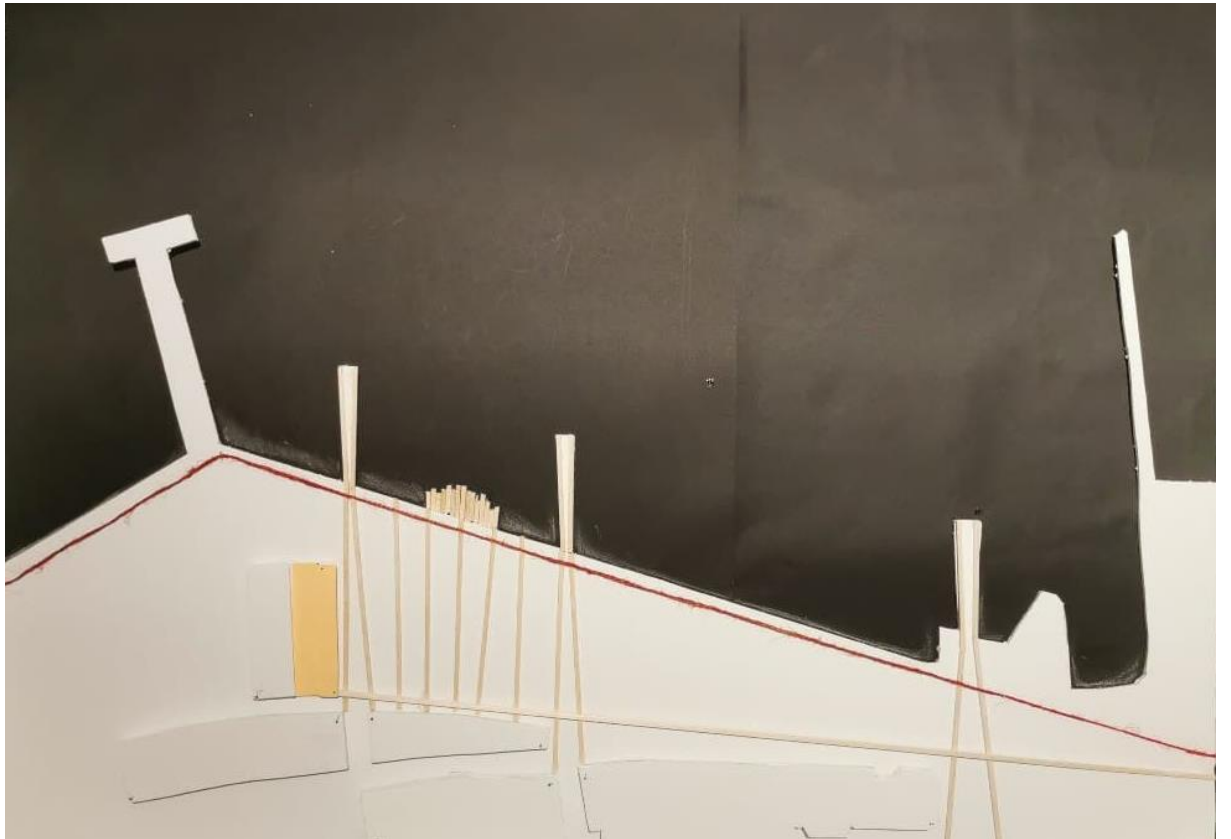
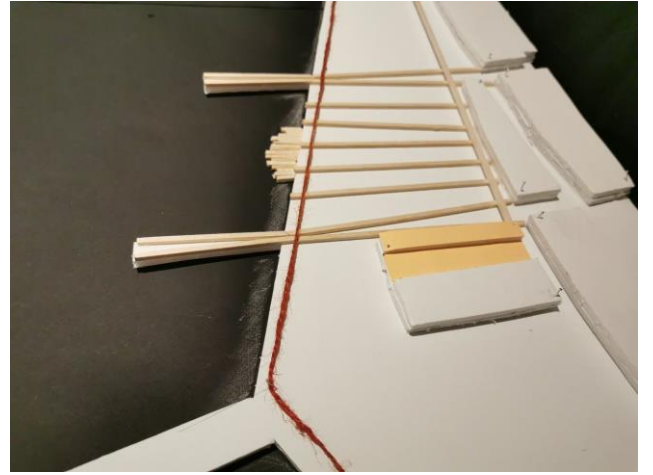
Sara Alfonso

The simple and regular urban layout of Seixal's old town is the geometric basis to recover its east-side square as fundamental public space.

Two main areas – one paved and one green – frame the new space, proposing a new dialogue with the system of piers that connect Seixal with its bay.









Bridging research and design exploration

MetroPublicNet - Building the foundations of a Metropolitan Public Space Network to support the robust, low-carbon and cohesive city: Projects, lessons and prospects in Lisbon, is a FCT funded three-year project initiated in 2021, which aims at mapping, decoding, assessing and discussing the result of 20 years of public space improvements in Lisbon Metropolitan Area (LMA). MetroPublicNet's main hypothesis is that public space, if conceived and shaped at the metropolitan scale, offers the possibility to interconnect and integrate various fields in search for synergic responses and can serve as a platform to assess urban policies and to strengthen territorial design practices.

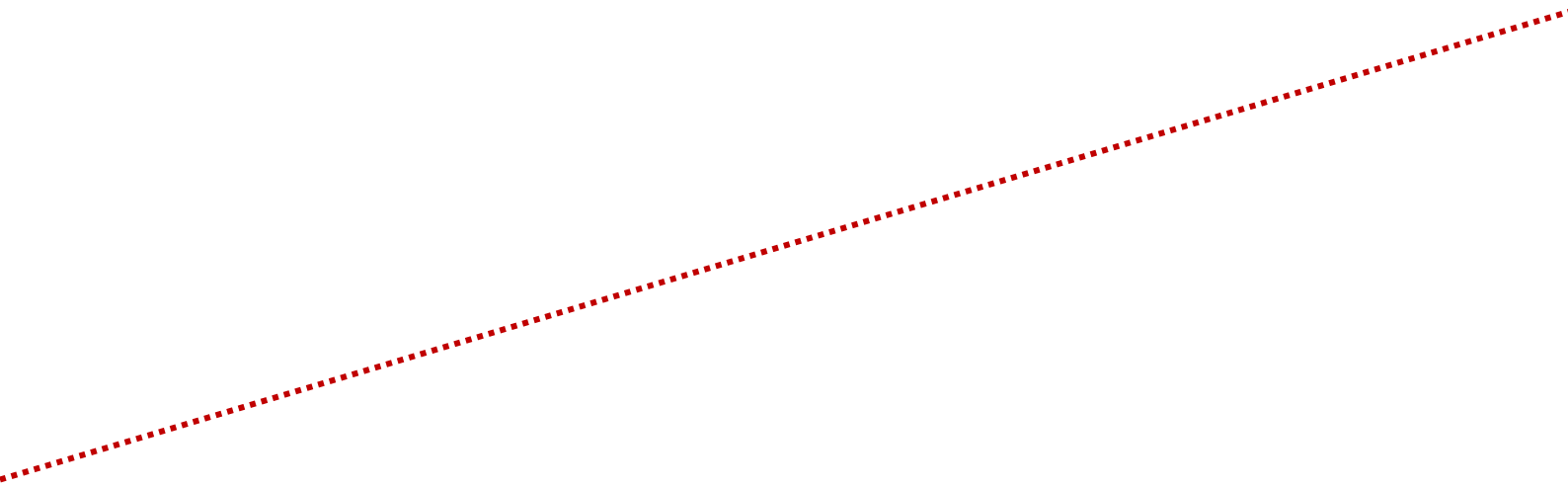
The project focuses on LMA's public space improvement experiences to assess and discuss its rationales and impacts, particularly under a metropolitan perspective. Additionally, the project explores innovative territorial design practices in search for synergic responses and as a contribution to building a metropolitan identity.

While acknowledging public space complexity, the project engages with three rationales associated with the sustainable and integrated use of land and territorial resources: 1) blue & green infrastructure, 2) walkability & active mobility, 3) neighborhoods connection & cohesion. The implementation of public space projects under these rationales requires a systemic and coherent approach which relates with other established networks (i.e. ecological, transport, urban facilities), considering it as an opportunity and a potential tool to improve responses, especially in metropolitan territories. Intrinsically, its contribution may go beyond LMA and contribute towards a founded perspective for the urban policy, planning and design across borders.

The project uses a Territorial Design approach to explore the concept of a Metropolitan Public Space Network for LMA, a forward-looking exercise in which the academy, administration and society is involved to explore scenarios and build a set of recommendations and guidelines to inform territorial policy.

The Project Lab IV design work developed at FA-ULisboa and present in this book is seen as a first contribution to this goal, by exploring the multiple dimensions of public space in a complex metropolitan territory at various scales, engaging interpretation and speculation in an incremental design process.





lisbon+seixal axis+bay

designing the architecture of a metropolitan public space



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