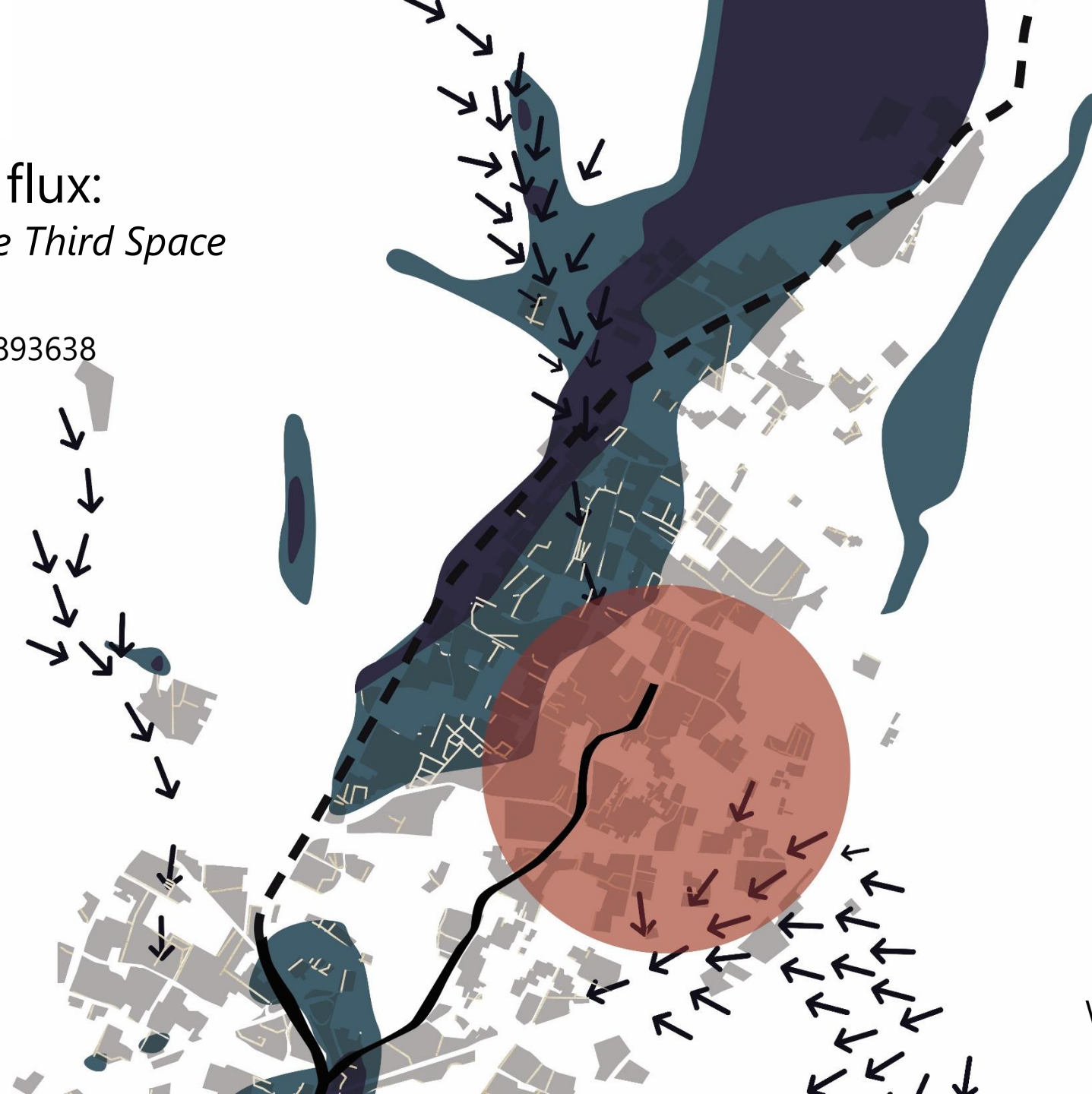


Athens in flux: *Re-envisioning the Third Space*

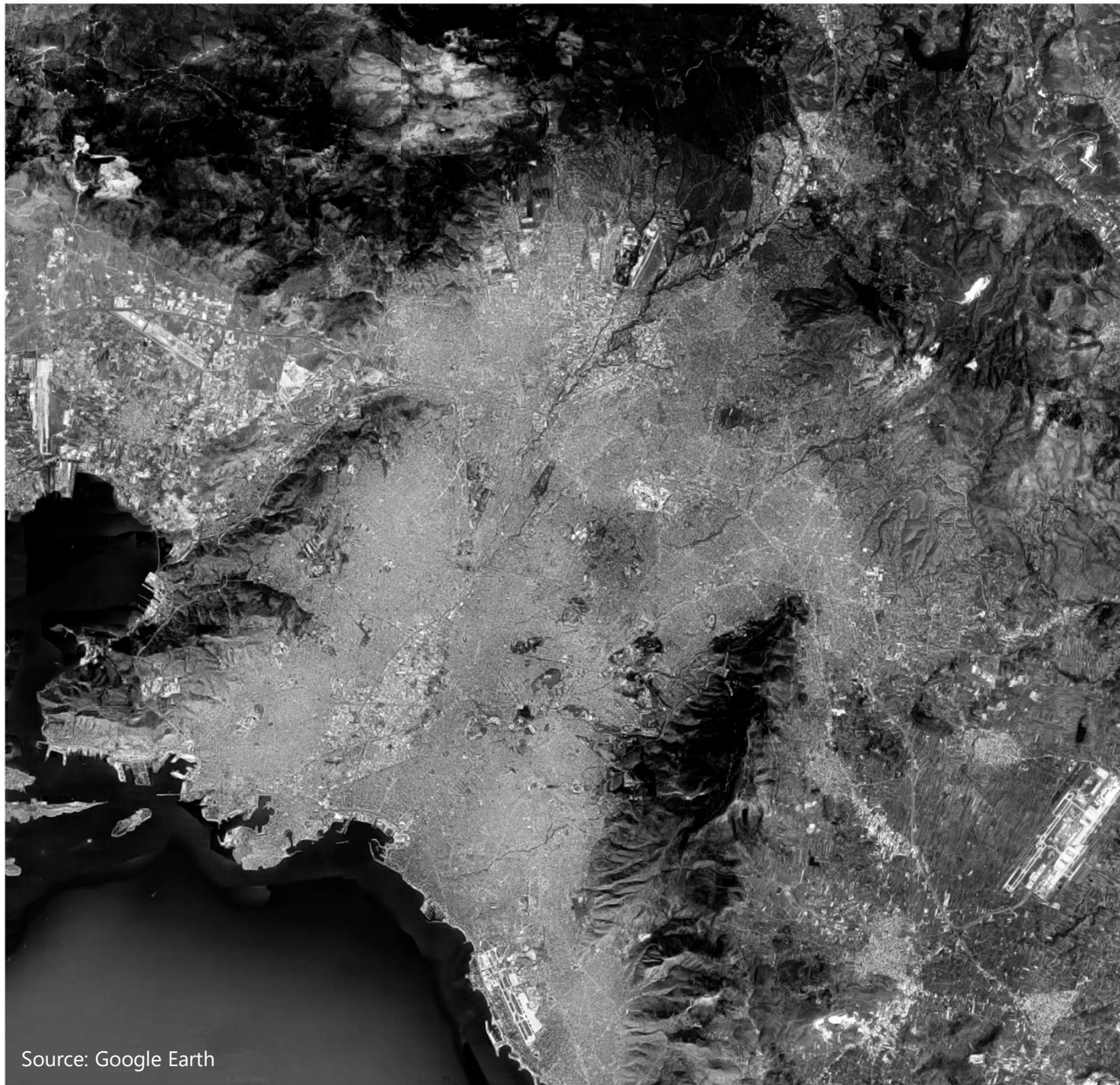
Georgia Gkratsou | 4893638



Mentors:

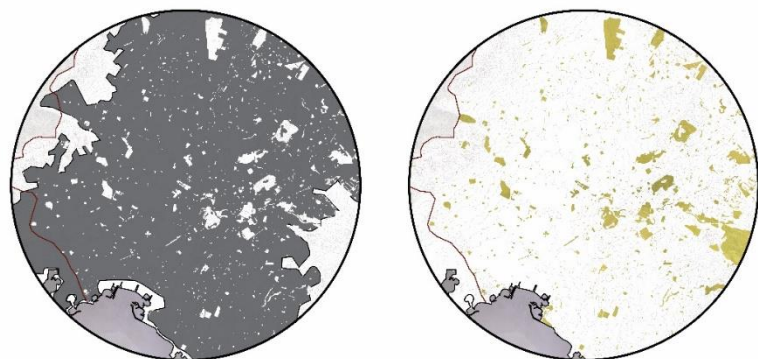
Denise Piccinini
Willemijn Wilms Floet

The site: Athens



Source: Google Earth

Environmental challenges of Athens



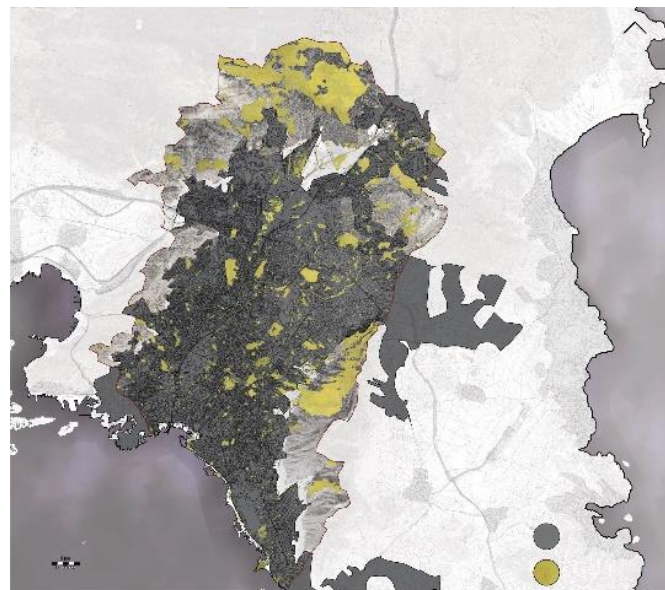
Spatial imbalance
of built and green spaces



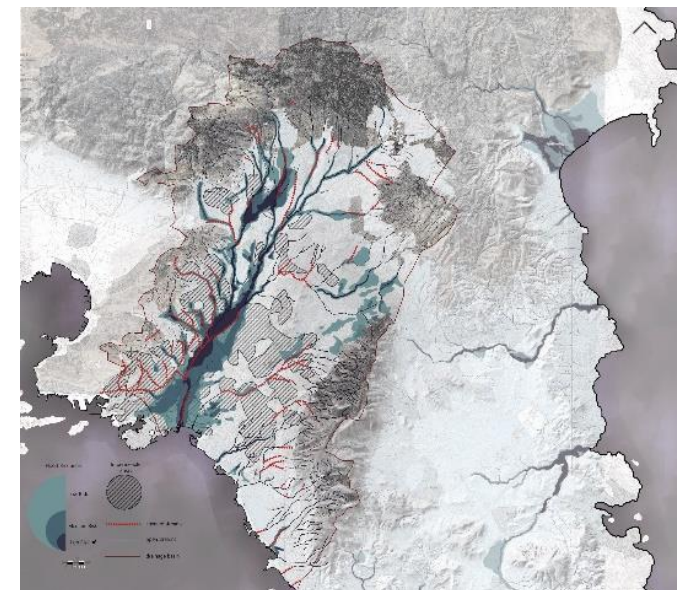
Soil, water, air
contamination



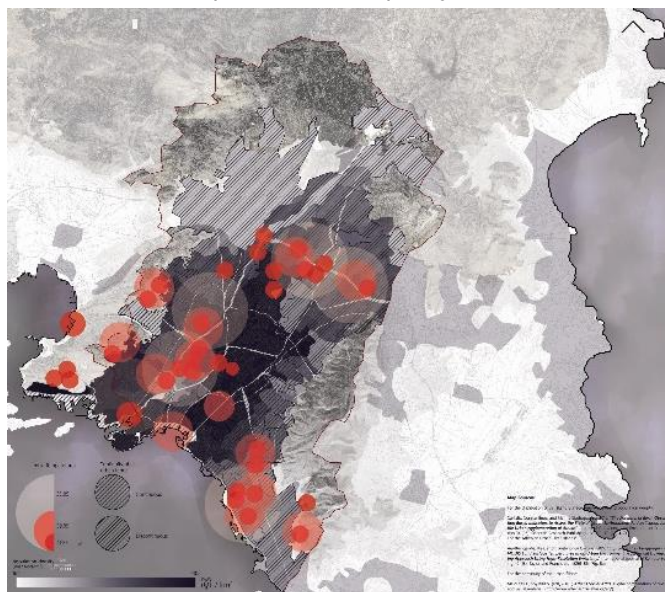
Climate change



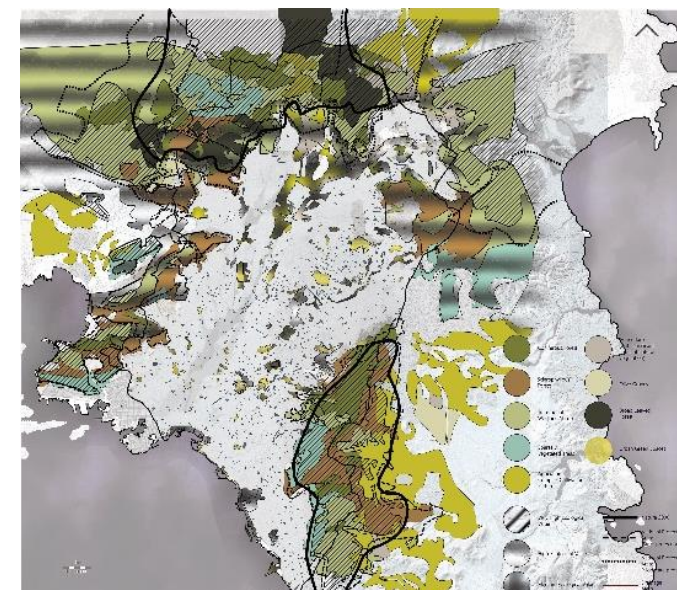
Urbanization | Antiparochi | Polykatoikia



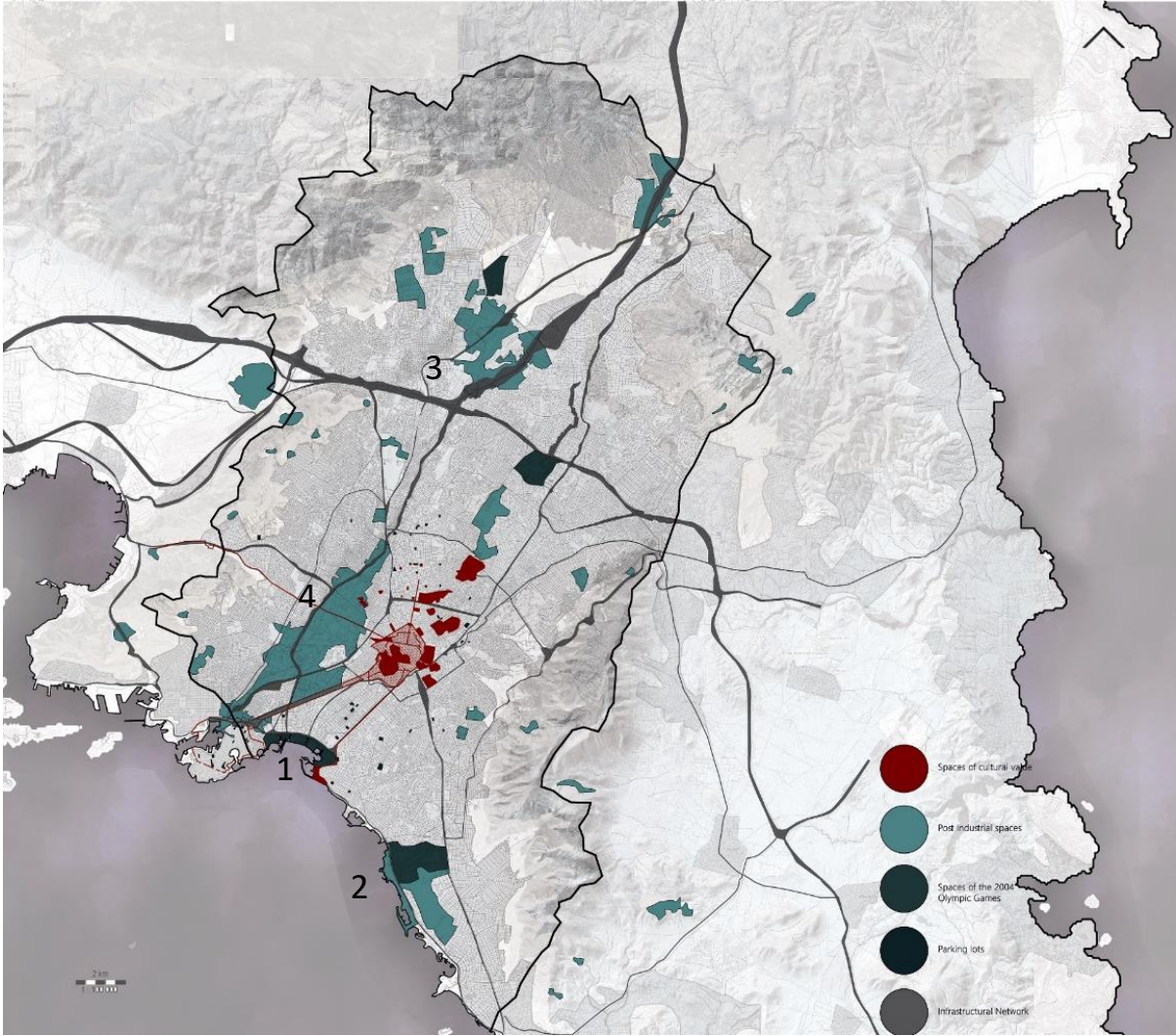
Flood Risk



Heat Island Effect



Medium to low quality of ecosystems



1. Faliron Coast



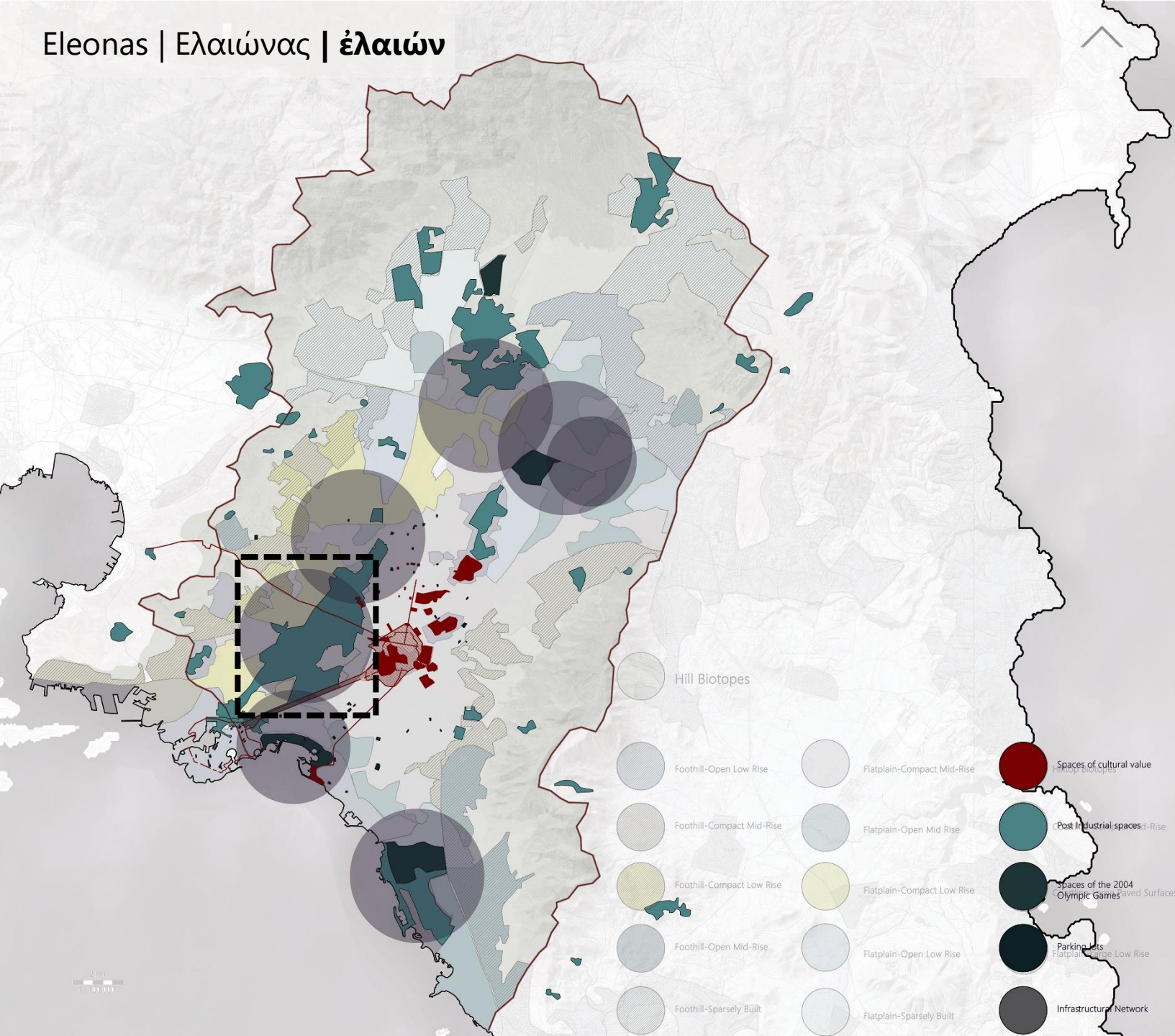
2. Hellinikon Airport

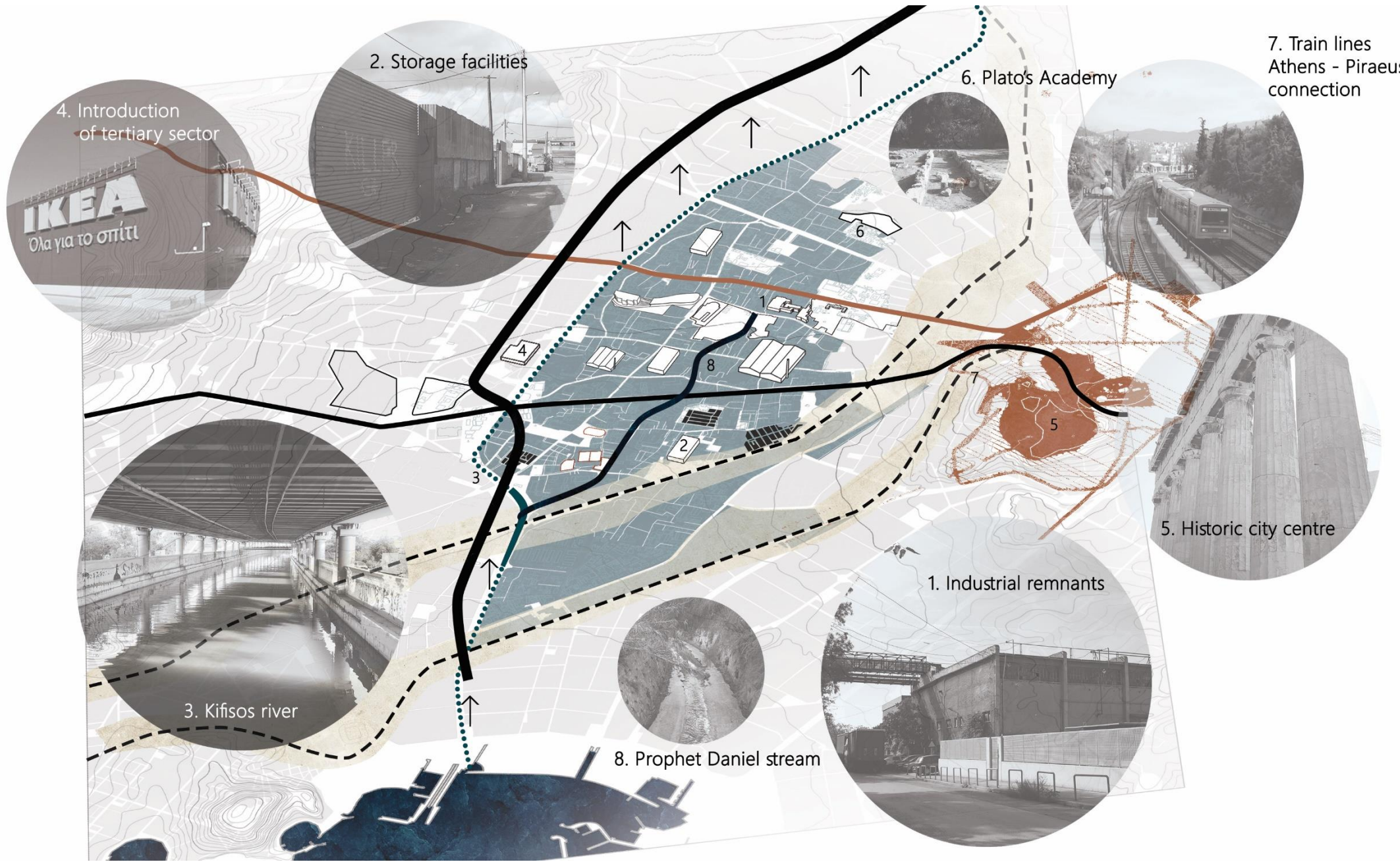


3. Infrastructural Network



4. Eleonas



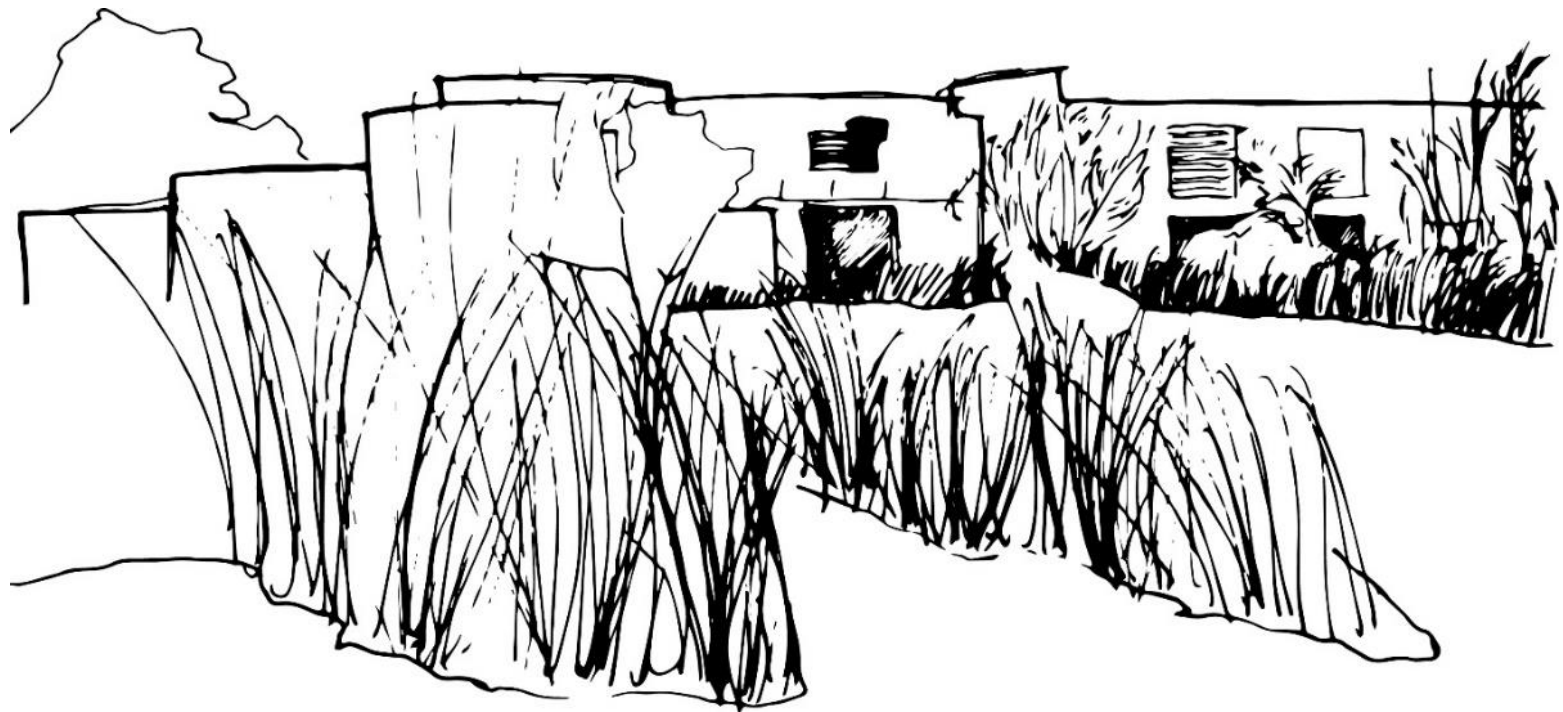
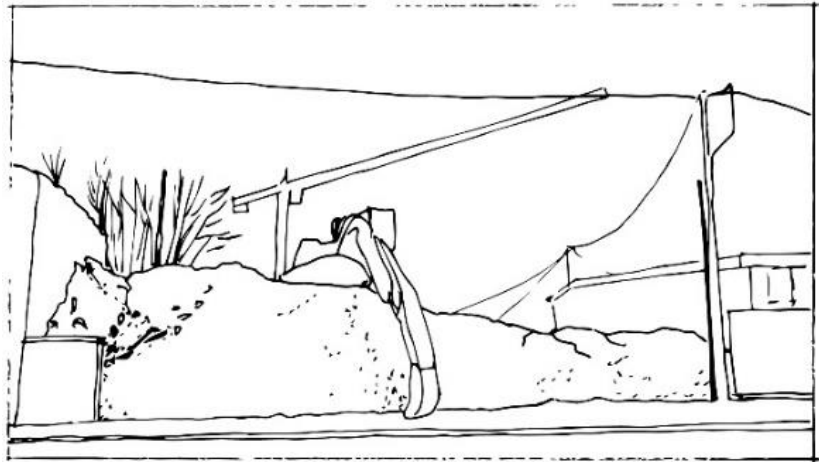
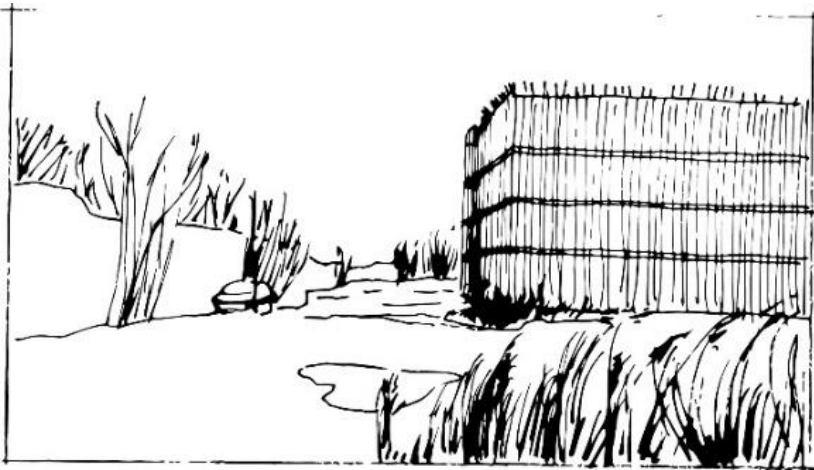
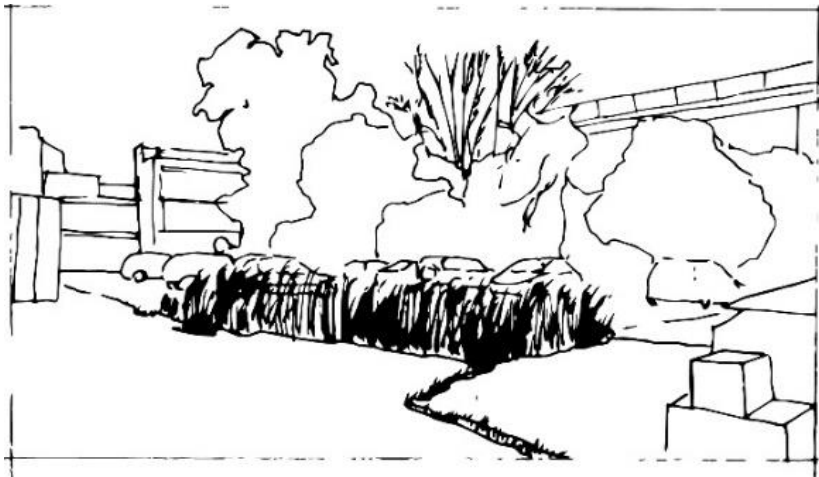


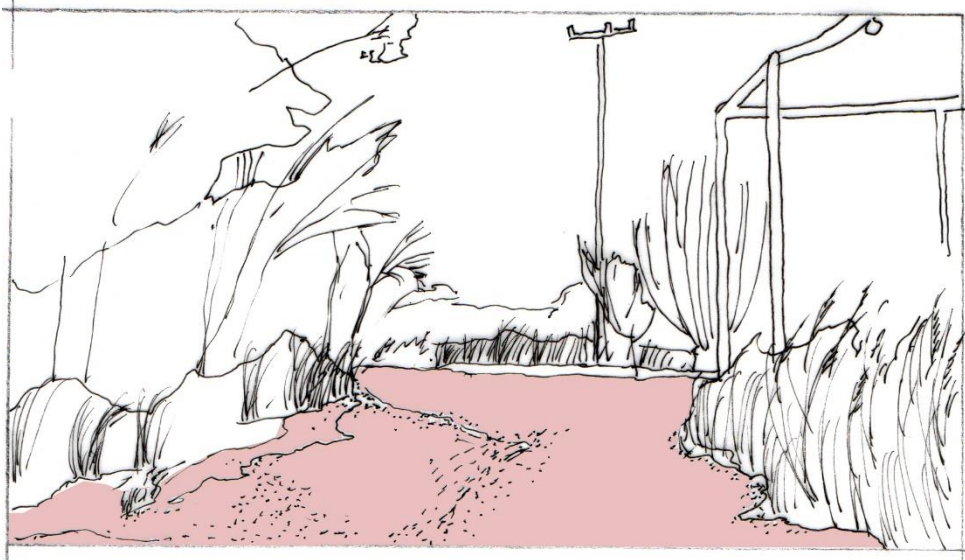
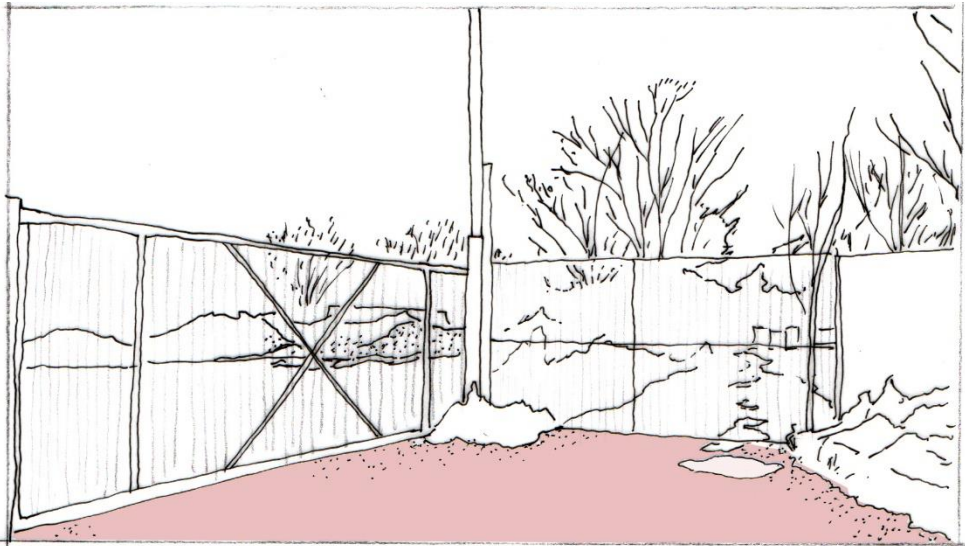
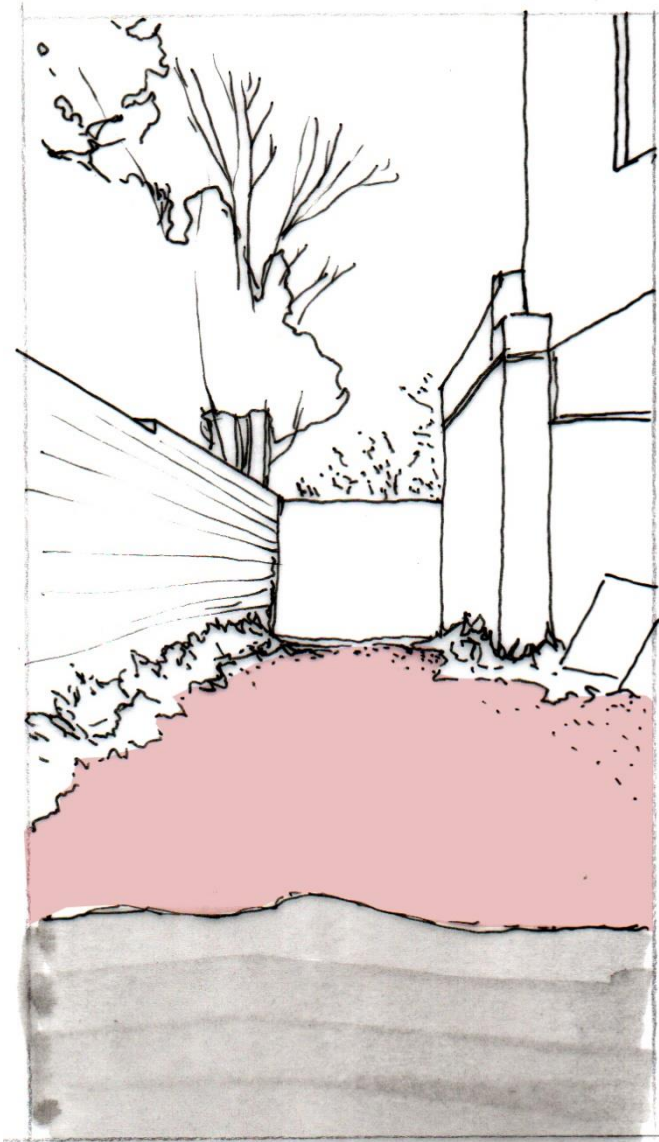


Flood challenge



Soil and water contamination by waste









THIRD SPACES

"Vacant lands"



"Wastelands"



"Urban Voids"



"derelict land"



Terrain Vague

"Empty, abandoned space in which a series of occurrences have taken place [...]."

*Such urban space, which I will denote by the French expression **terrain vague**, assumes the status of fascination, the most solvent sign with which to indicate what cities are and what our experience of them is."*

Ignasi de Solà-Morales, 1995

Third Landscape | Délaissés

*Neglected spaces (**délaissés**) result from the abandonment of an activity and they evolve into a secondary landscape. [...] A strong dynamic characterizes the secondary landscapes. A neglected space quickly welcomes pioneer species which soon disappear in favor of increasingly stable species until a balance is achieved. The secondary landscapes are heterogeneous and chaotic.*

Gilles Clément, 2004



THIRD SPACES

"Vacant lands"



"Wastelands"



"Urban Voids"



"derelict land"



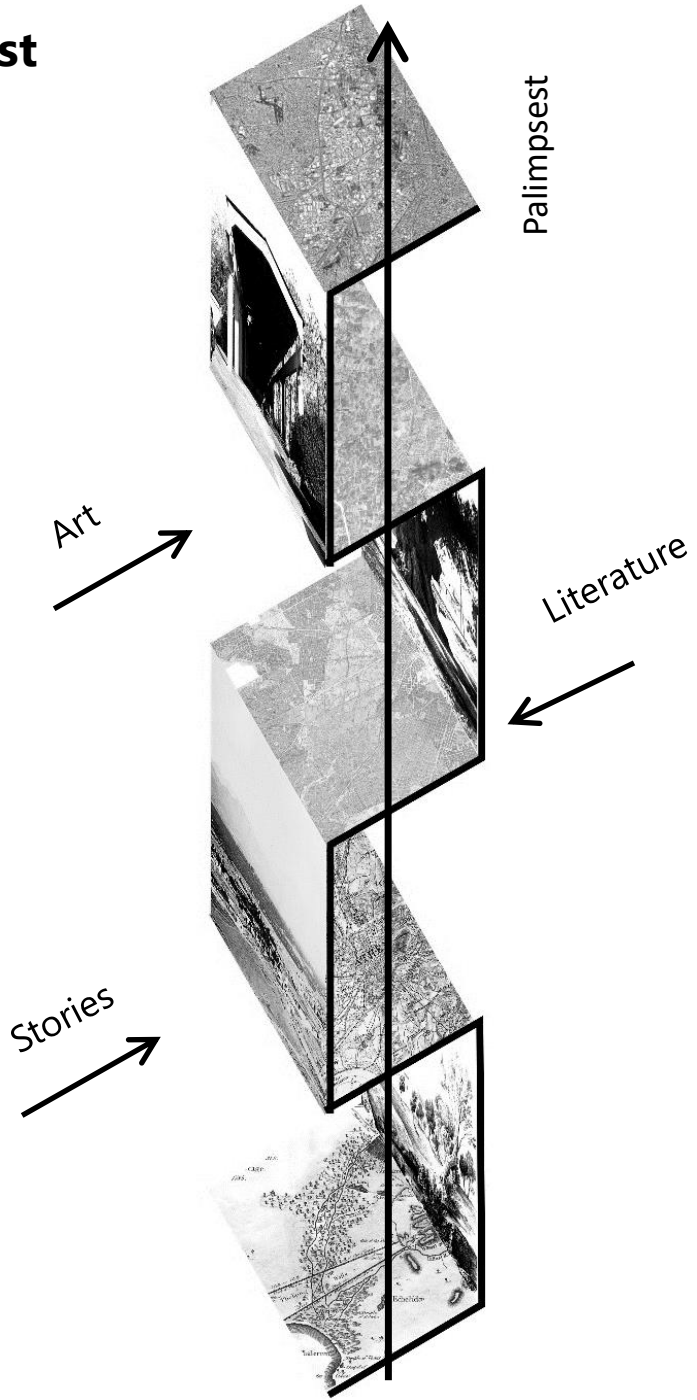
Third Spaces

- All types of places that constitute a territory of refuge for **biological diversity**. As a result of their abandonment, the Third spaces evolve into secondary landscapes that are colonized by pioneer species and perform ecological services.
- Spaces of **aesthetic variety**. The wild, untended vegetation comes in contrast with the maintained vegetation of urban green spaces, thus attributing aesthetic variety to the urban setting
- Spaces of **cultural value**





Palimpsest



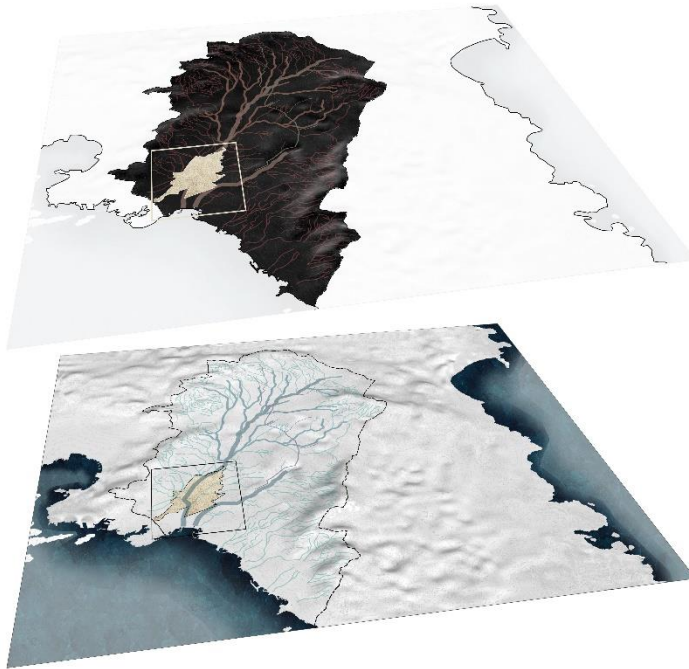
Urban Biotores

Lenses of approach



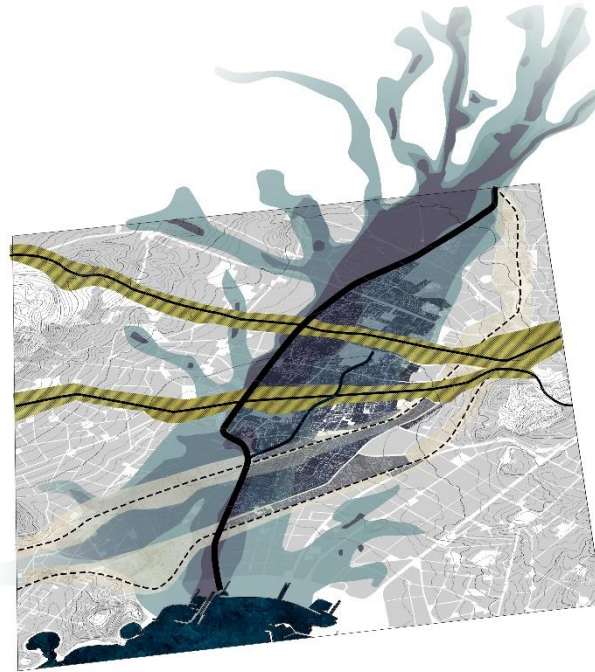
A multiscalar approach

Regional Scale: Attica Basin



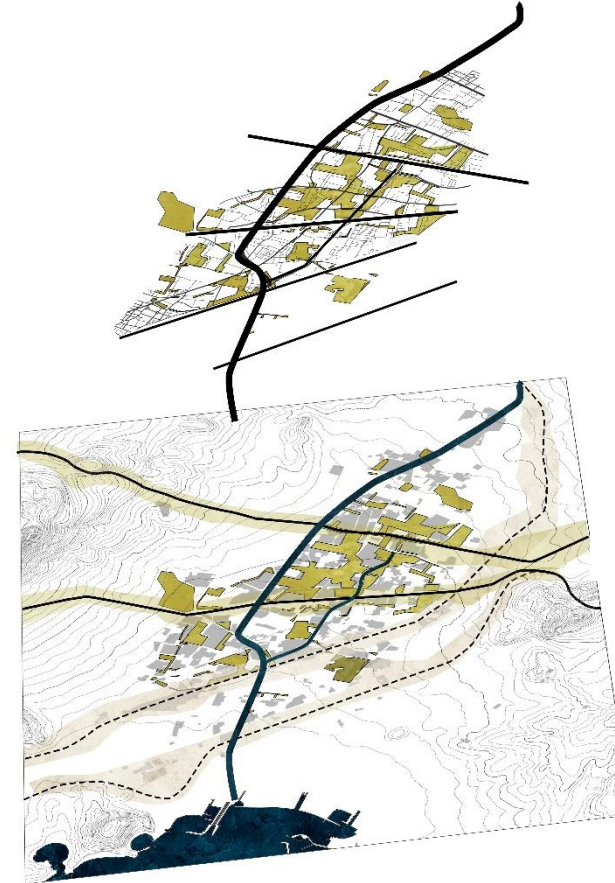
- Drainage basin of the rivers and streams of Athens
- **AREA OF EFFECT**

Urban Scale: Eleonas



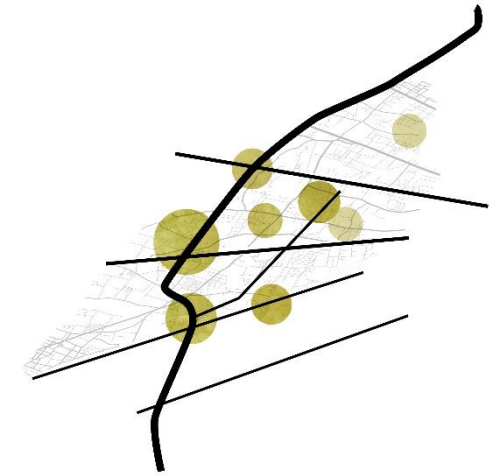
- Forces that act upon Eleonas and definition of the areas these forces affect
- **AREA OF INFLUENCE**

Patches and Corridors



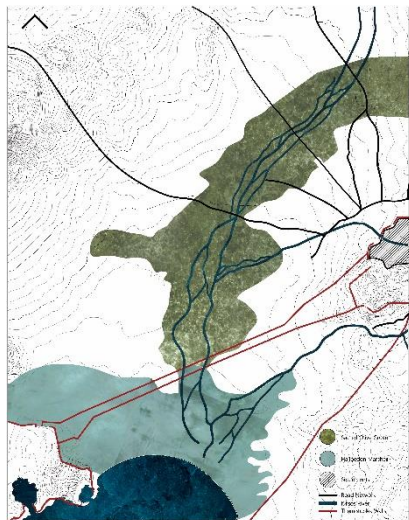
- Identified patterns
- **AREA OF CONTROL**
- Product: Masterplan of landscape architectonic design for the ruderal landscapes

Segments



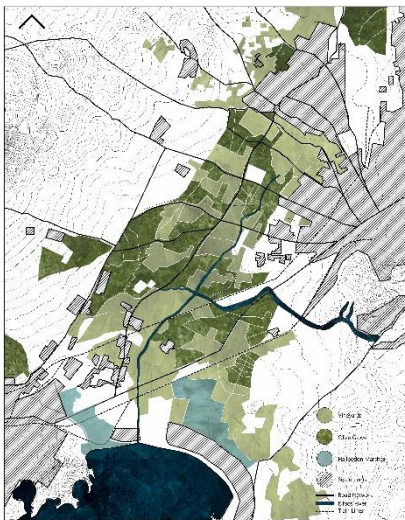
- Selection criteria:
 - Ecological conditions and challenges
 - Level of accessibility
 - Cultural significance
- **AREA OF CONTROL**
- Product: Landscape architectonic design

7th century B.C. – 1834



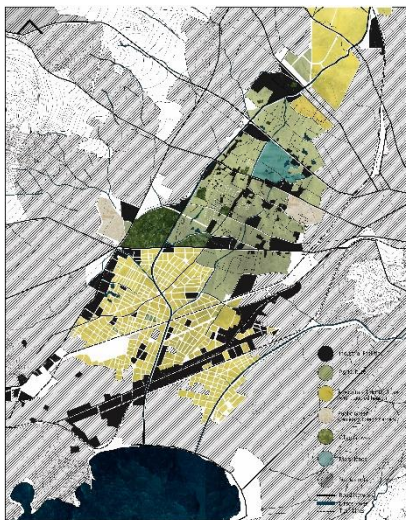
AGRICULTURE

1835 - 1921



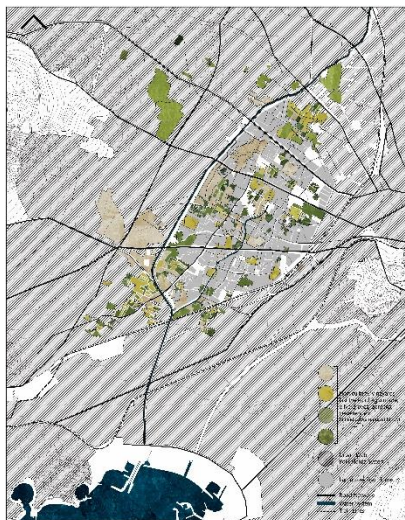
AGRICULTURE
First steps towards industry

1922 - 1965



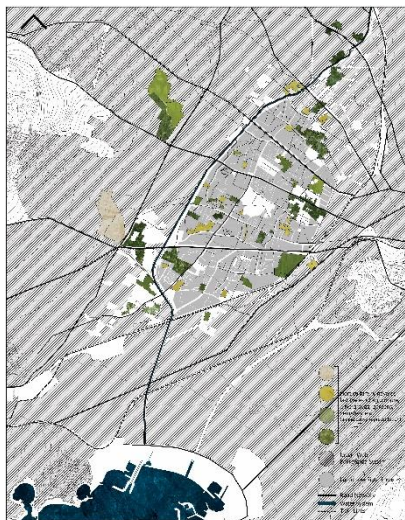
AGRICULTURE
INDUSTRY
HORTICULTURE

1966 - 1974



INDUSTRY

1975 - 1995



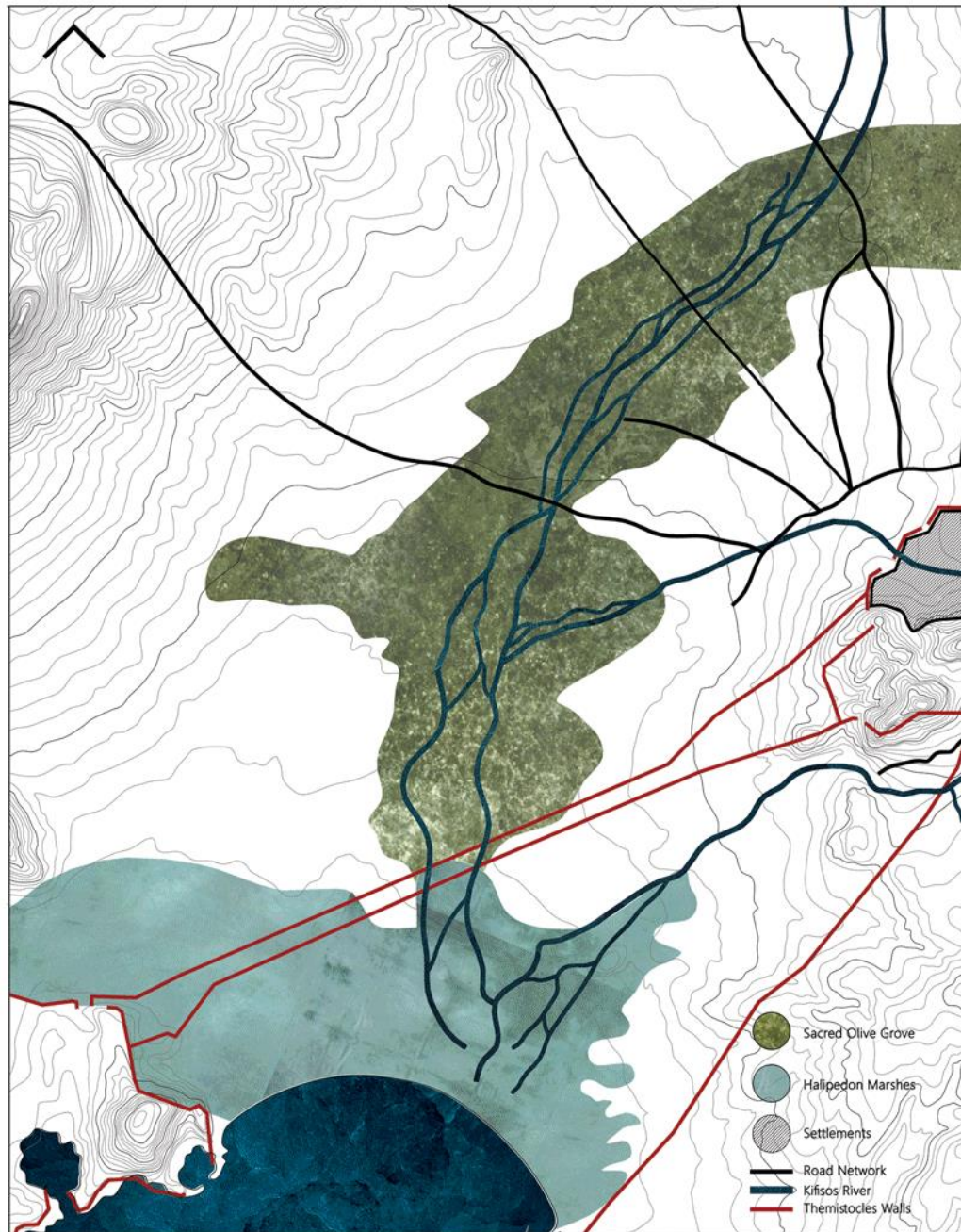
POST-INDUSTRIAL ERA

1995 - 2020



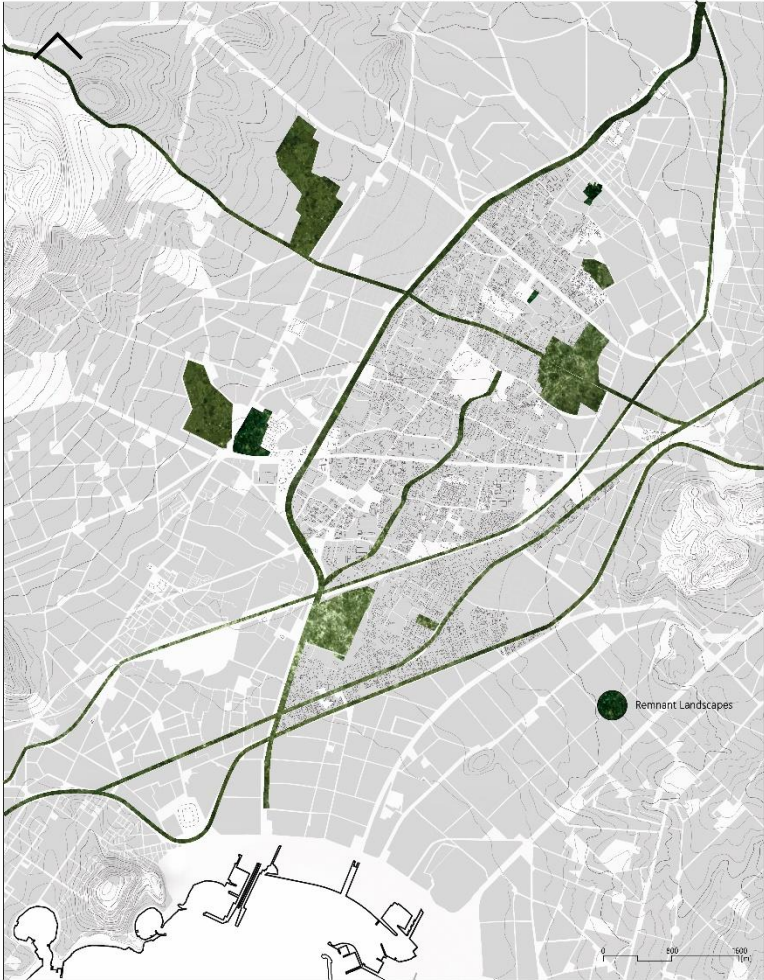
POST-INDUSTRIAL ERA

7th century B.C. – 1834: AGRICULTURE

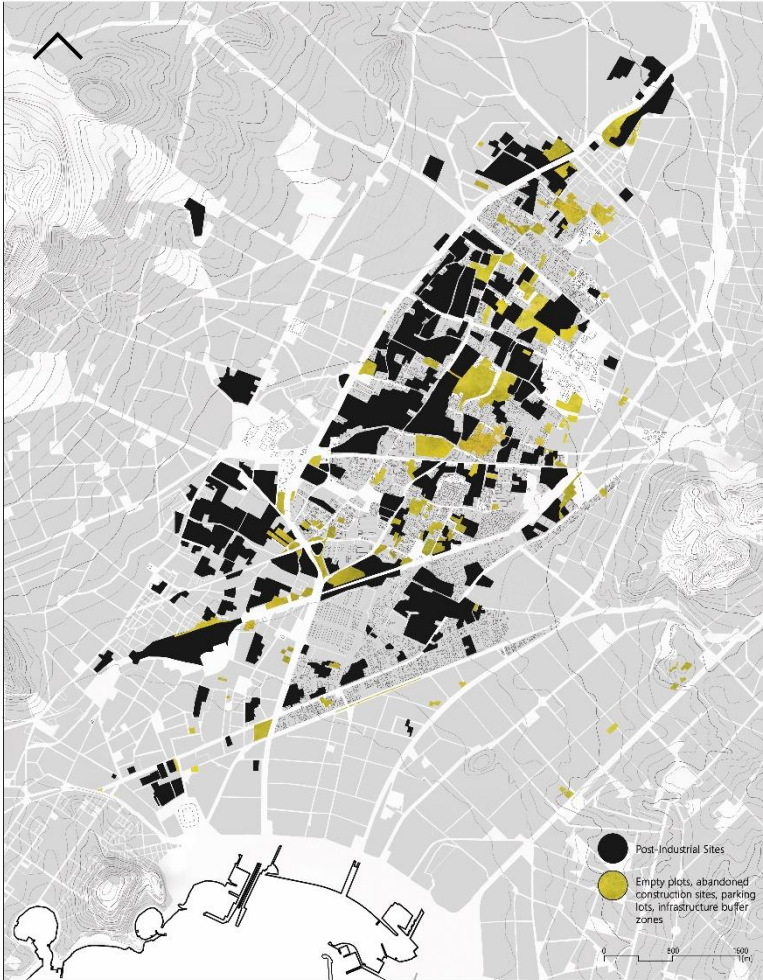


*"As for this place, it is clearly a holy one
Shady with vines and olive trees and laurel;
A covert for the song and hush of nightingales
In their snug wings"*

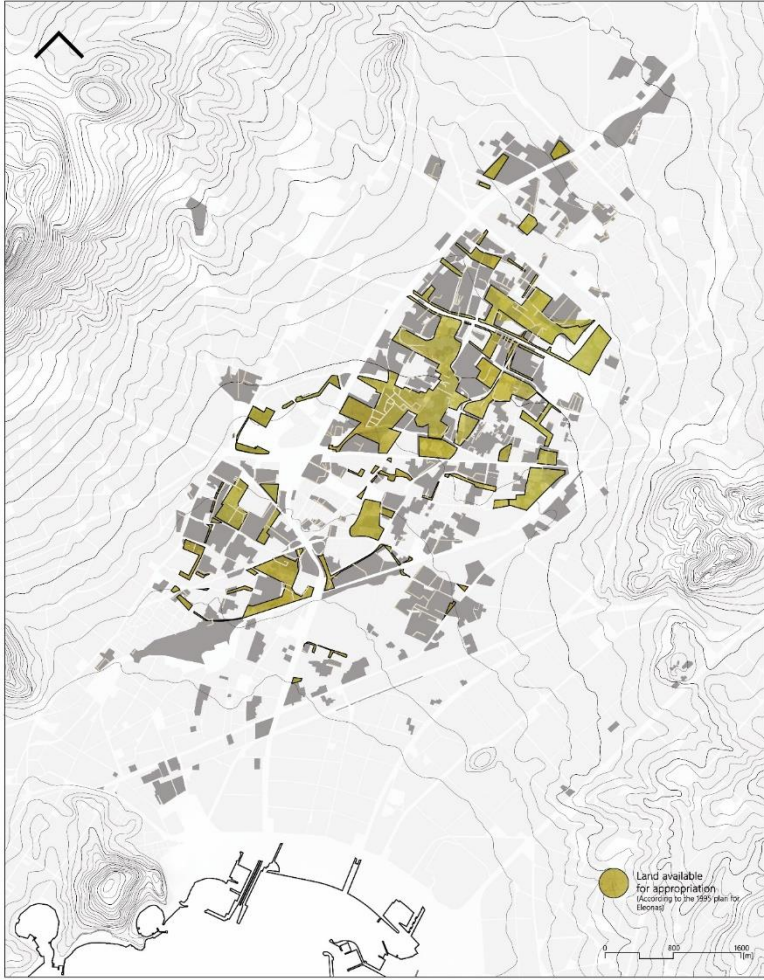
Sophocles, Oedipus at Colonus



Remnant Landscapes



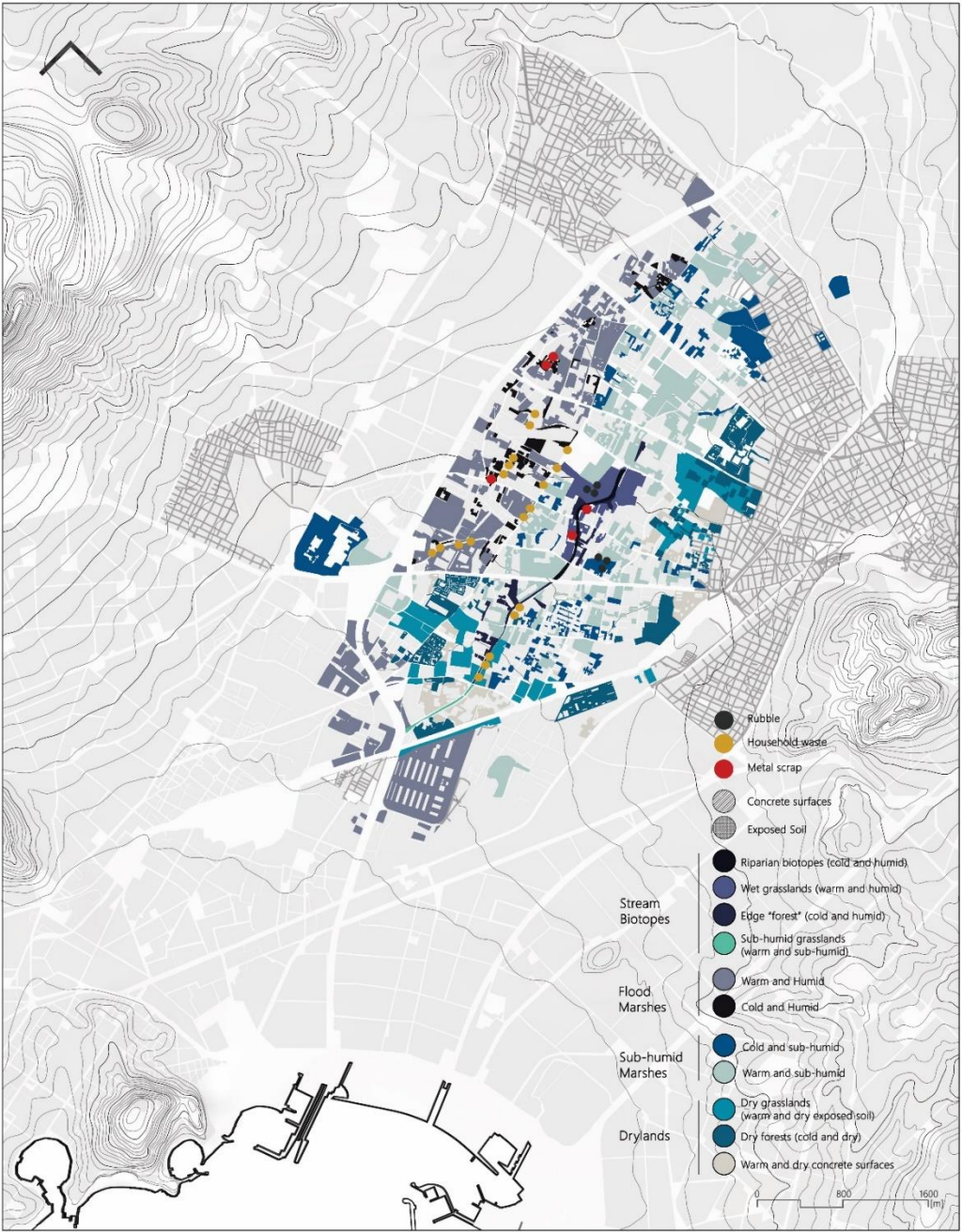
Third spaces



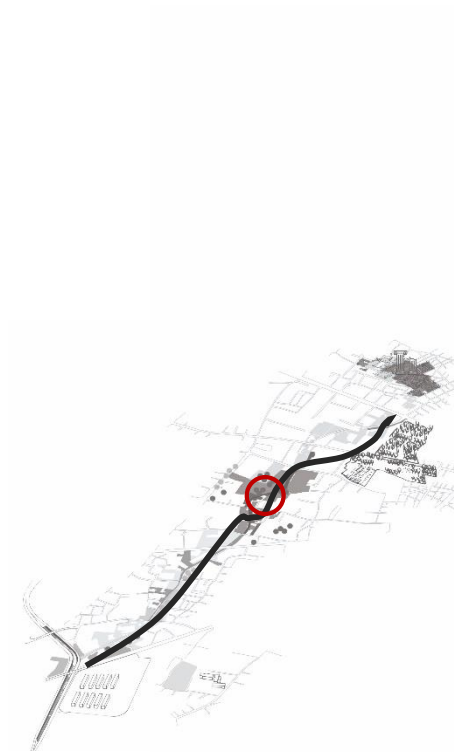
Areas available for appropriation
(1995 Master Plan for Eleonas)

Criteria:

- Temperature (Summer-Winter)
- Presence of water
- Presence of shade
- Surface materials (exposed soil/concrete surfaces)







Contaminants

Contaminants | Surface runoff

[Na+].[Cl-]
Road salt

[P]
Phosphorus

[O-]N([O-])=O
Nitrate

C
Coal

[Ni]
Nickel

[Pb]
Lead

[Cd]
Cadmium

[Cu]
Copper

Contaminants | Groundwater + stream

[O-]S(=O)(=O)[O-]
Sulfate

[O-]N([O-])=O
Nitrate

[Mg]
Magnesium

[Na]
Sodium



Groundwater

Materiality



Existing flora

Ruderal species

Warm & humid

Ruderal species

Warm & humid

Riparian species

Cold & humid

Wet grasslands

Cold & humid

Edge forest

Warm & Humid





Existing fauna



Contaminants
Surface runoff



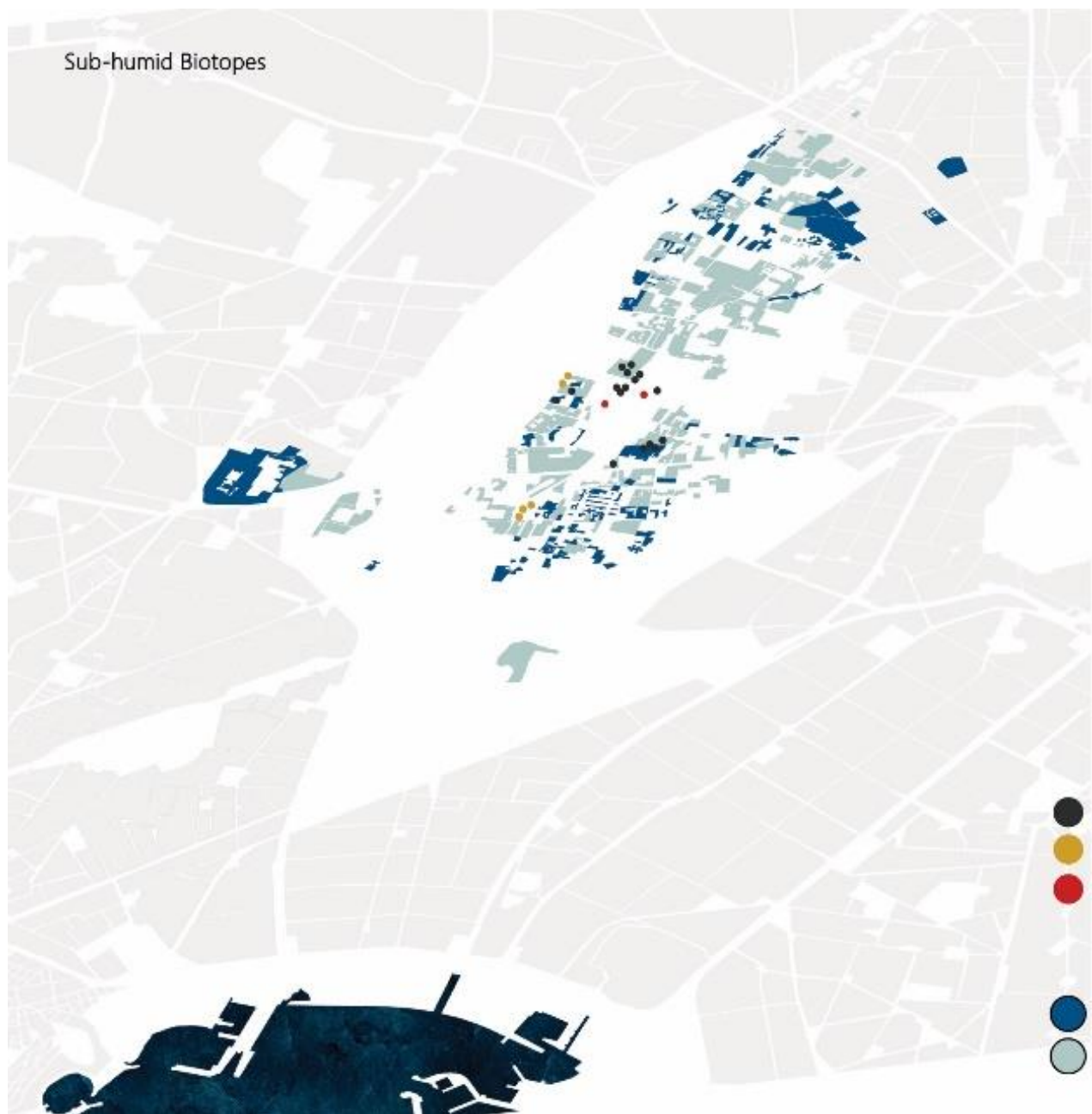
Materiality

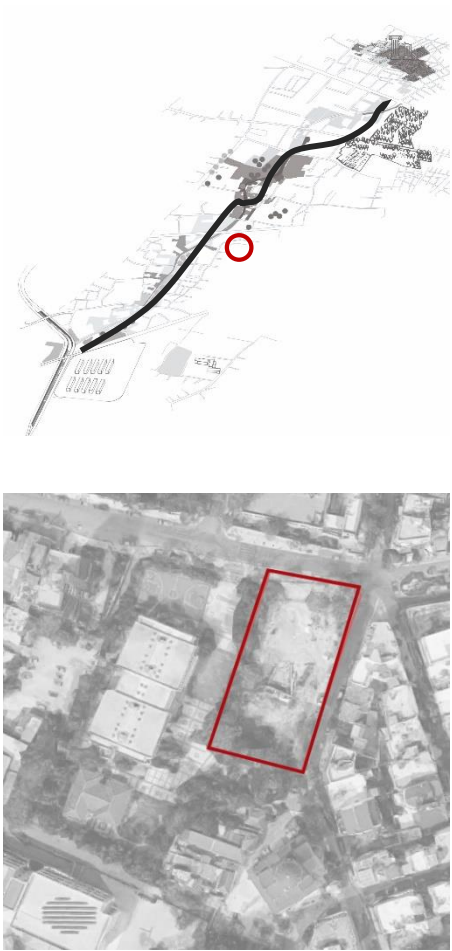


Existing flora

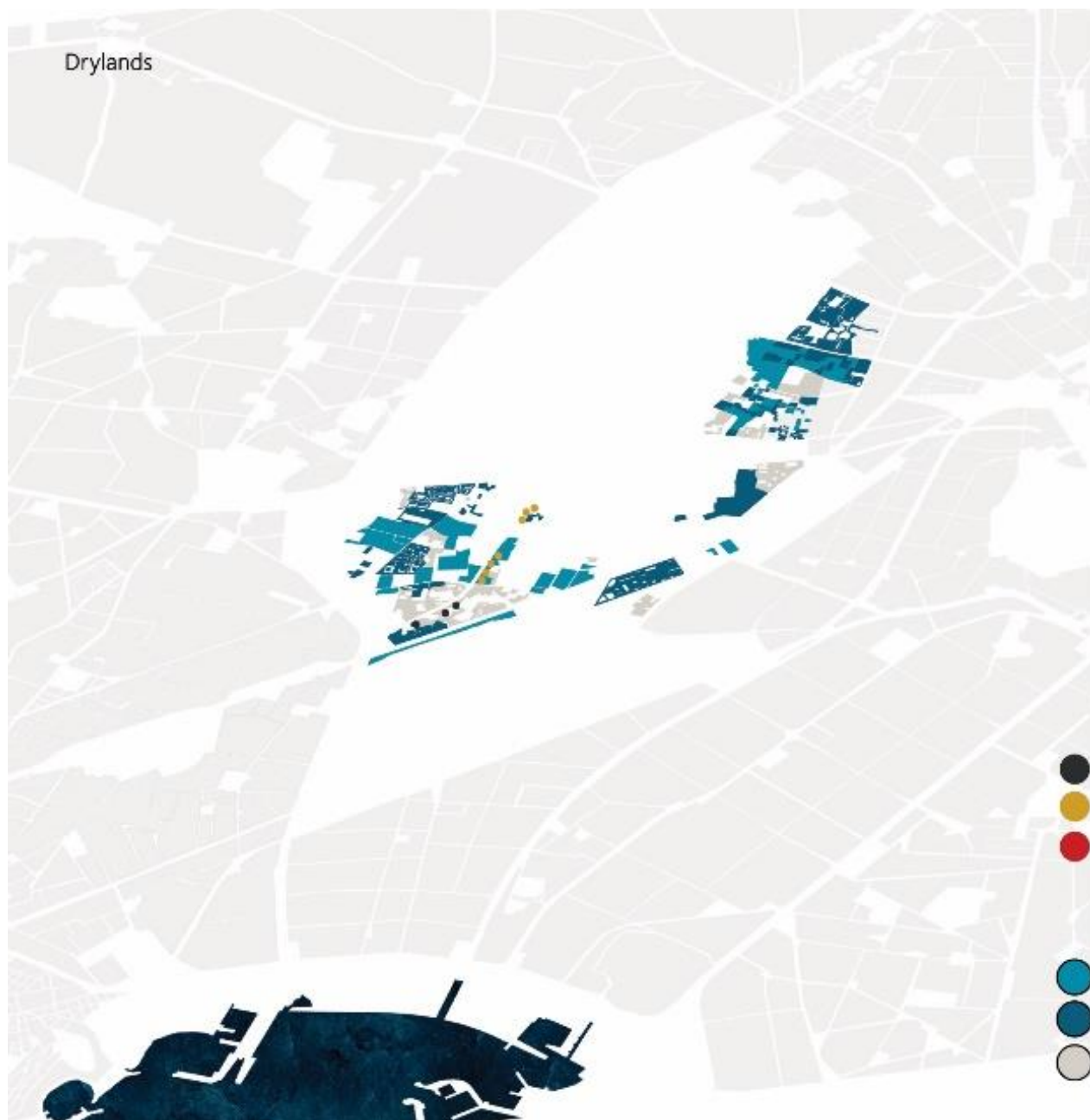


Wall plants





Existing fauna	 Columba livia	 Streptopella decaocto	 Testudo marginata	 Sturnus vulgaris	 Erinaceus roumanicus				
Materiality									
Existing flora	 Ailanthus altissima (Mill.) Swingle		 Cynodon dactylon	 Dittrichia viscosa (L.) Greuter	 Platanus orientalis	 Sisymbrium officinale (L.)	 Echallium elaterium	 Solanum elaeagnifolium Cav.	 Malva parviflora L.
			"Interior" plants		"Border" plants				



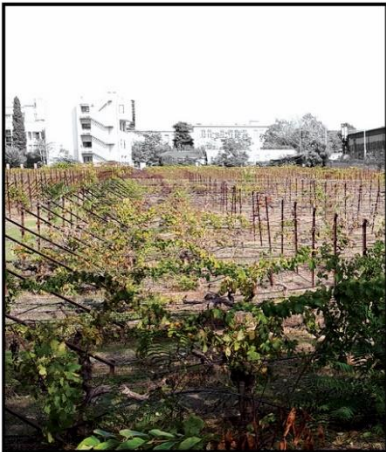
1. Plato's Academy



2. Ancient Olive Grove
(University of West Attica Campus)



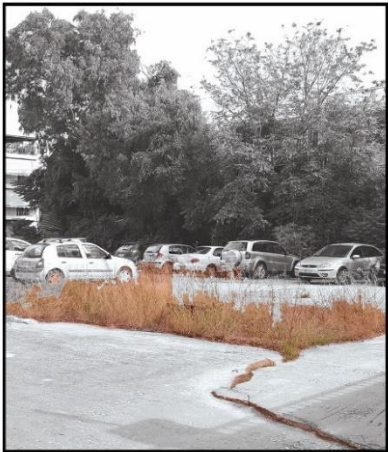
3. School of Agriculture



4. Remnants of the built environment



5. Parking lots



6. Prophet Daniel Stream



Constant Maintenance

Zero Maintenance

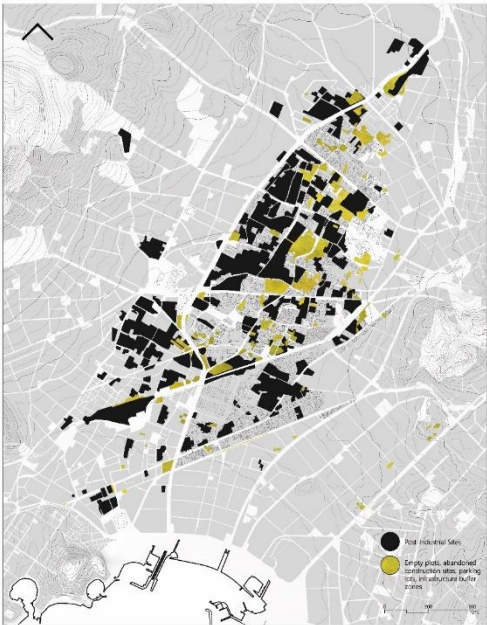
Materiality



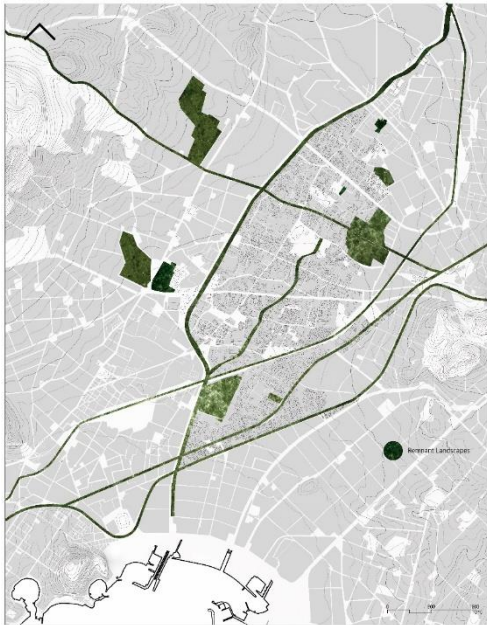
Vegetation



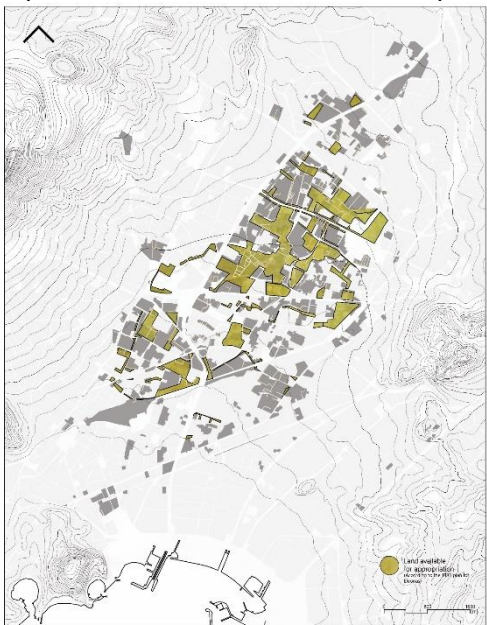
Ruderal landscapes



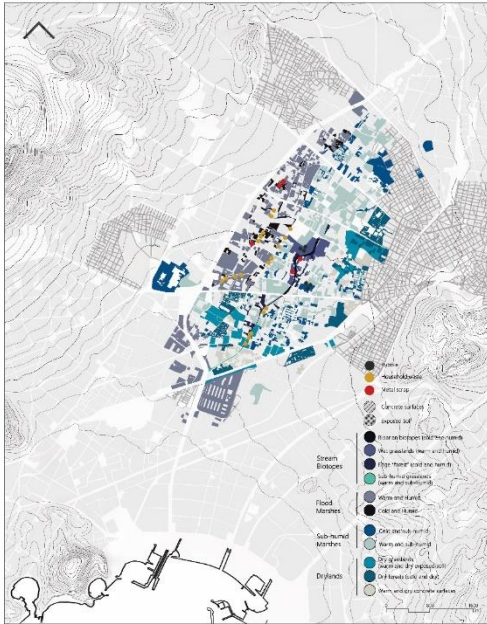
Remnant Landscapes



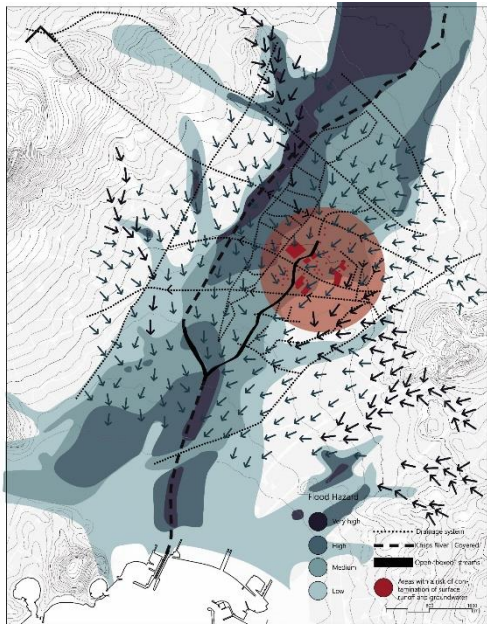
Areas available for appropriation (1995 Master Plan for Eleonas)



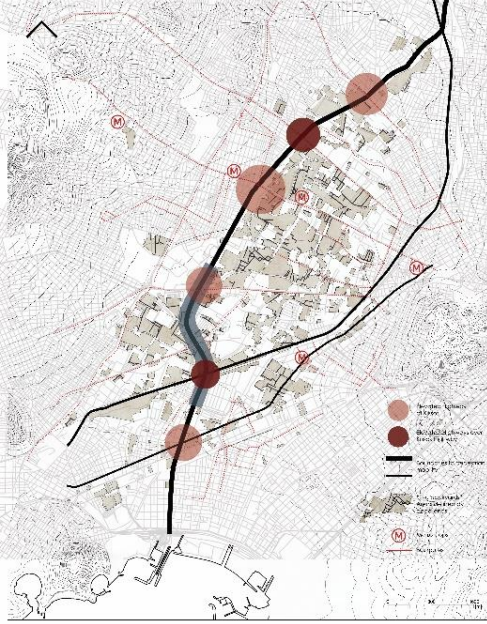
Biotopes of Eleonas



Environmental issues



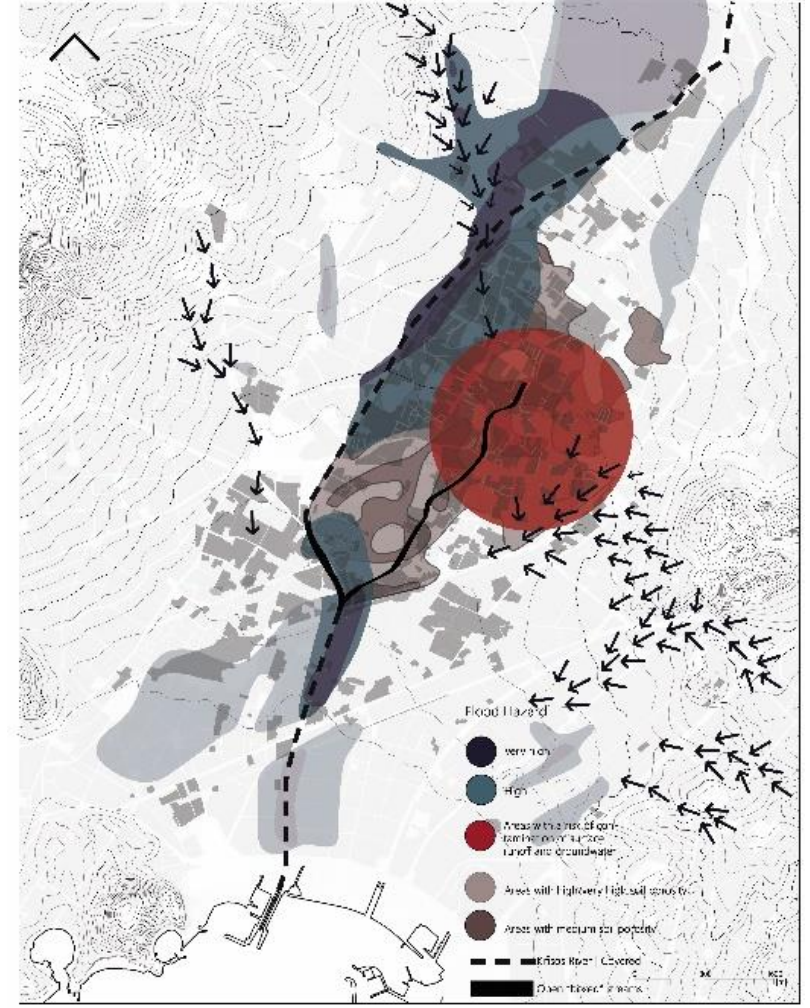
Dead Ends



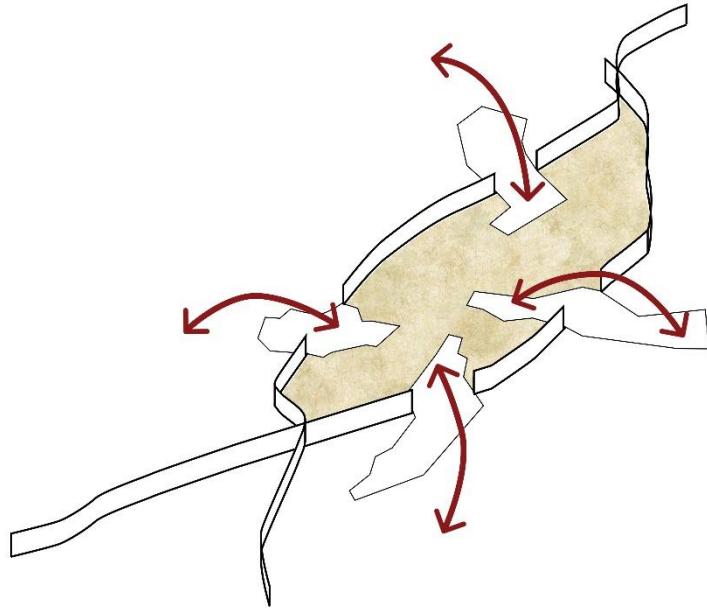
Social Issues



Working with natural processes

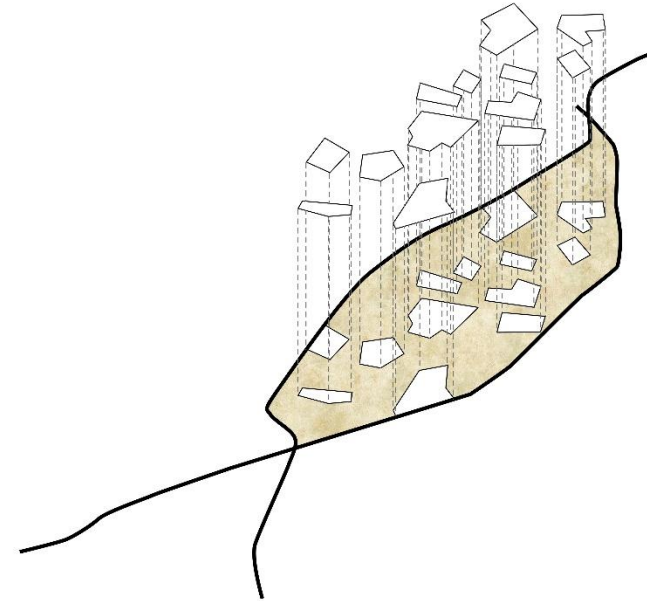


Creating connections



Invert the introvert character of the Third space and transform it into an accessible and permeable space.

Identifying and utilizing the voids



The landscape architectonic design starts from the open spaces.

The buildings found in the site are in the background, playing a secondary role in the design. The design is determined by what should not be built.

Activating existing “anchors”



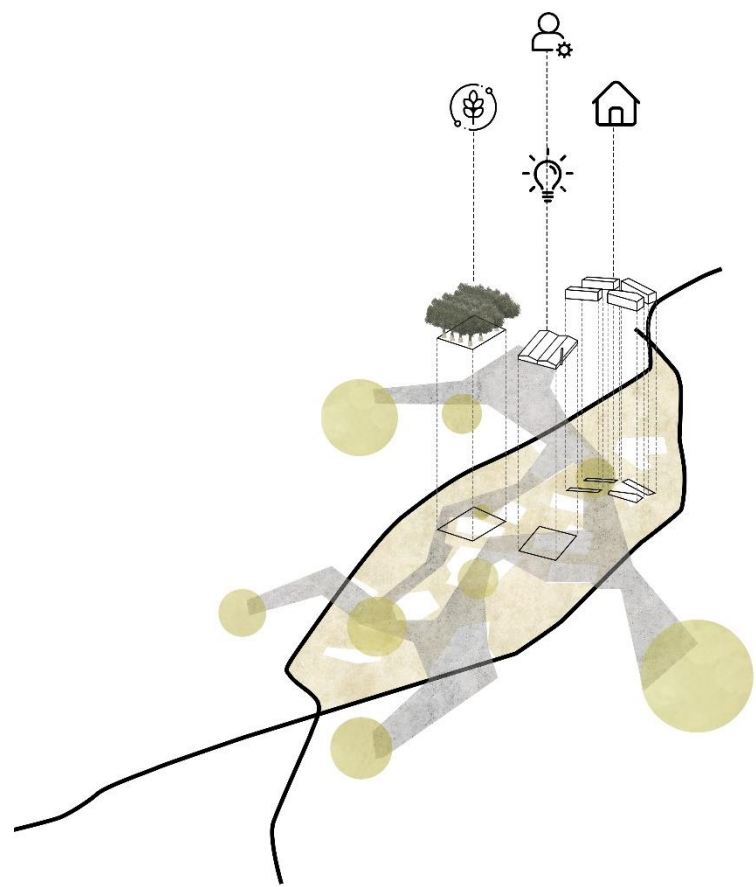
Identifying and recognizing the cultural value of remnant landscapes.

Creating networks



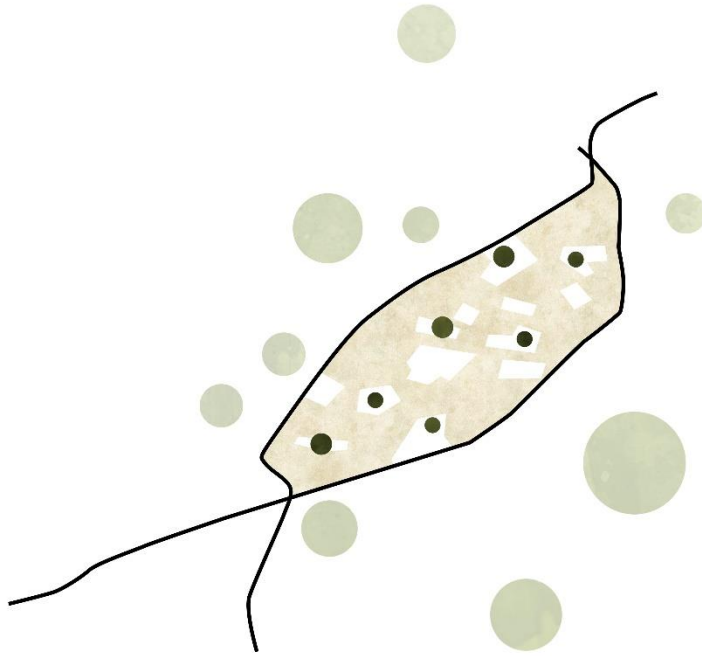
Creating new networks of connections between the anchors and the context. Use of the Third spaces as the connecting element.

Introducing new layers & activities



Different levels of intervention
New elements
New activities
Re-purposing & recycling of the existing building stock

Enhancing Ruderal Refugia



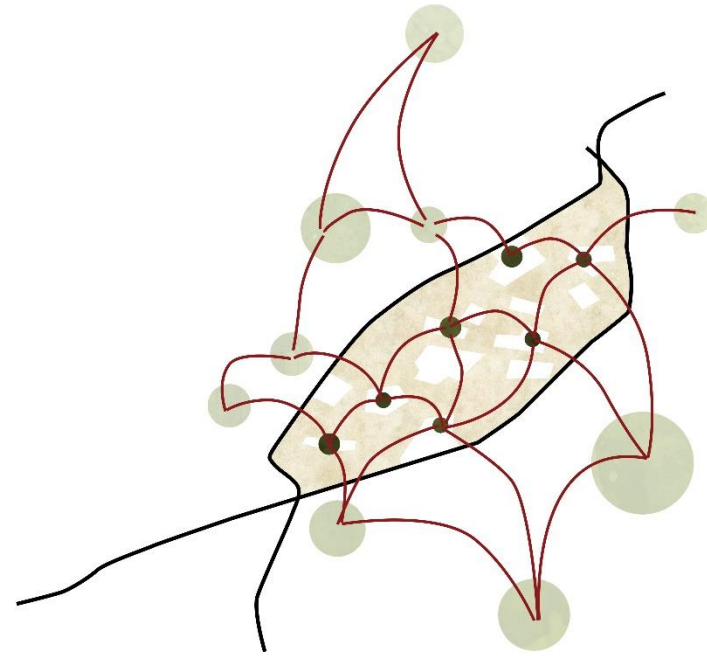
Third spaces with exposed soil and a strong presence of spontaneous vegetation. Patches that present the opportunity to enhance the ecological continuum of the Third space.

Ecological succession: Unhindered process

Areas of zero maintenance and human interference.

Introduced for scientific observation and aesthetic variety.

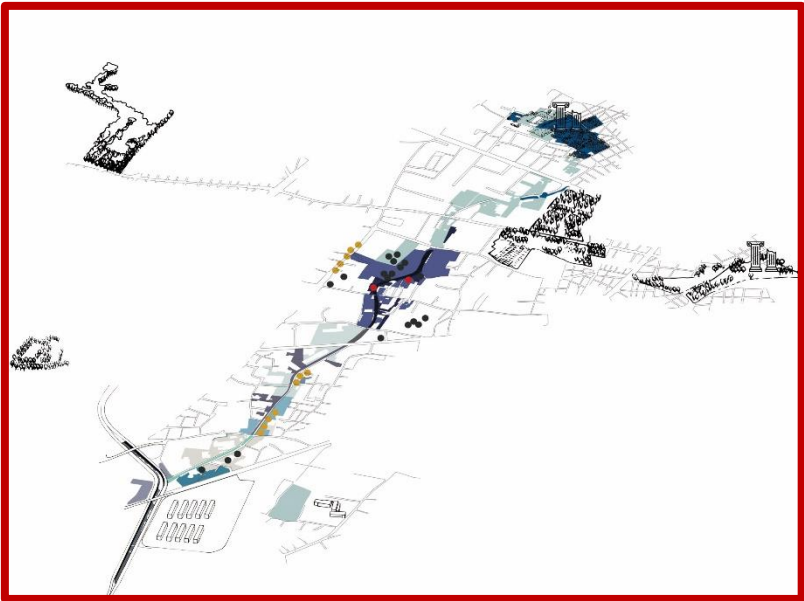
Creating stepping stone connectivity between biotopes



DESIGN PROPOSAL

Proposed projects

The Prophet Daniel stream

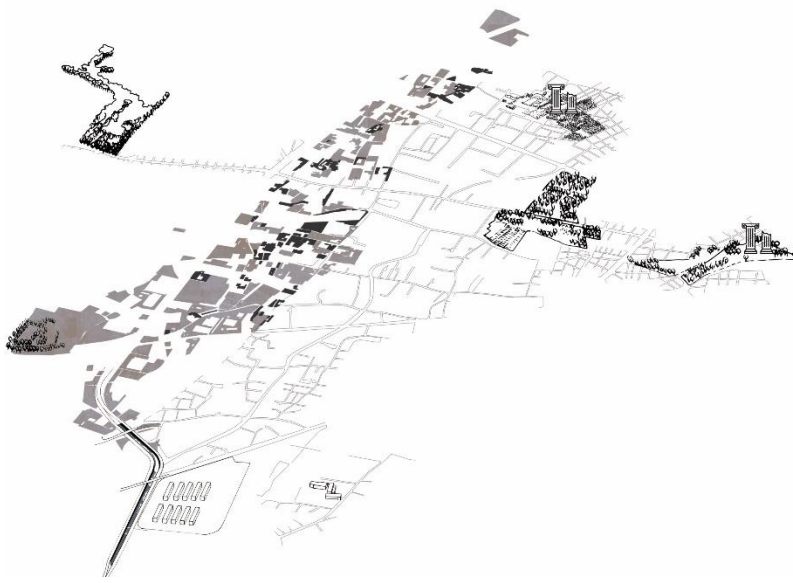


Inversion of the "introvert" character of the stream by accessing the Third spaces through the dead ends.

Transformation into a spine of public spaces that connect Plato's Academy from the north to the open part of Kifisos river in the south.

Introduction of activities related to ecology, education and recreation.

The flood marshes



Use of dead ends and Third spaces to dissolve the "labyrinth" sense of the space

Use of flood events to hold and recycle rainwater.

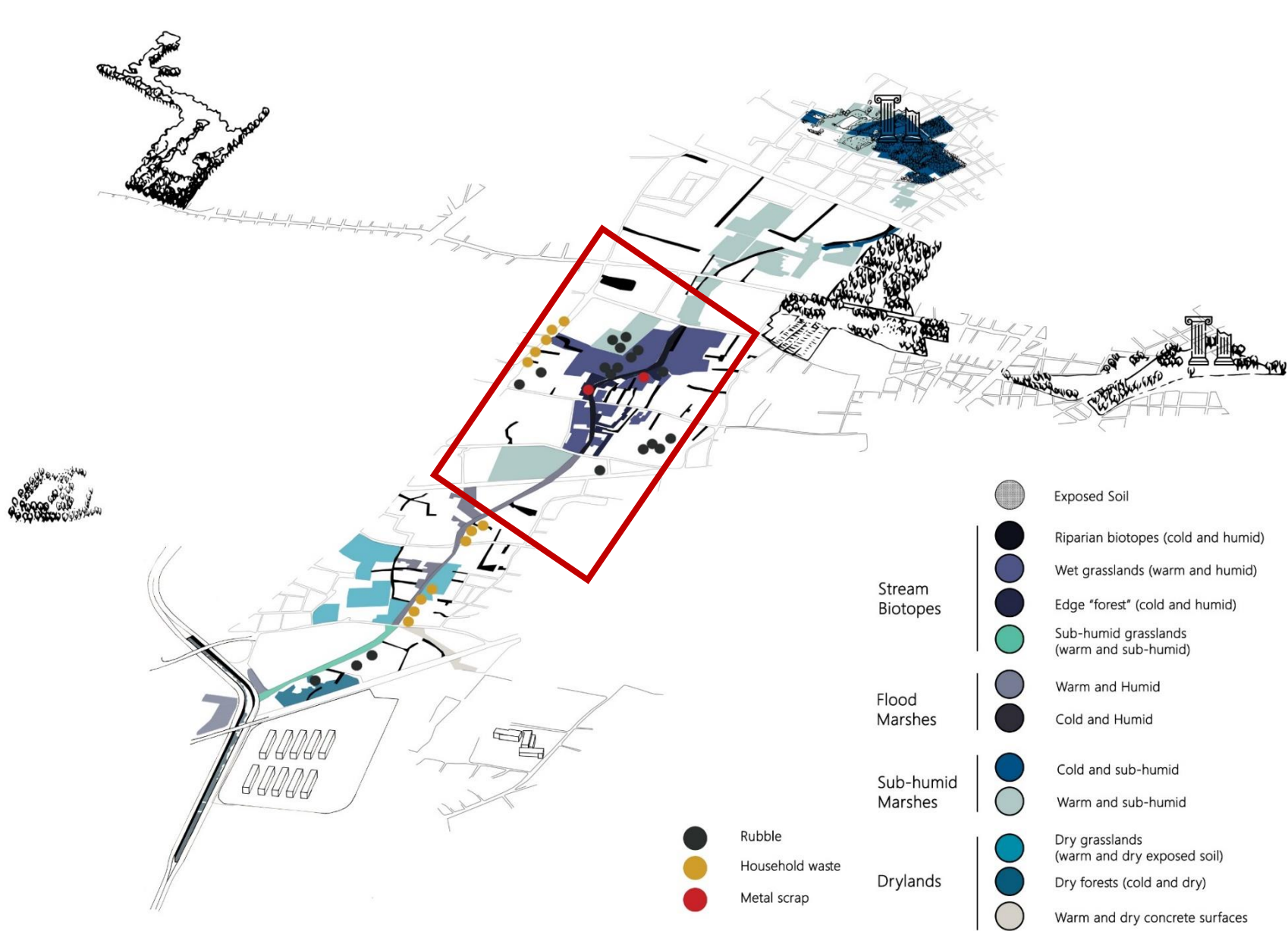
The Sacred Road | Iera Odos

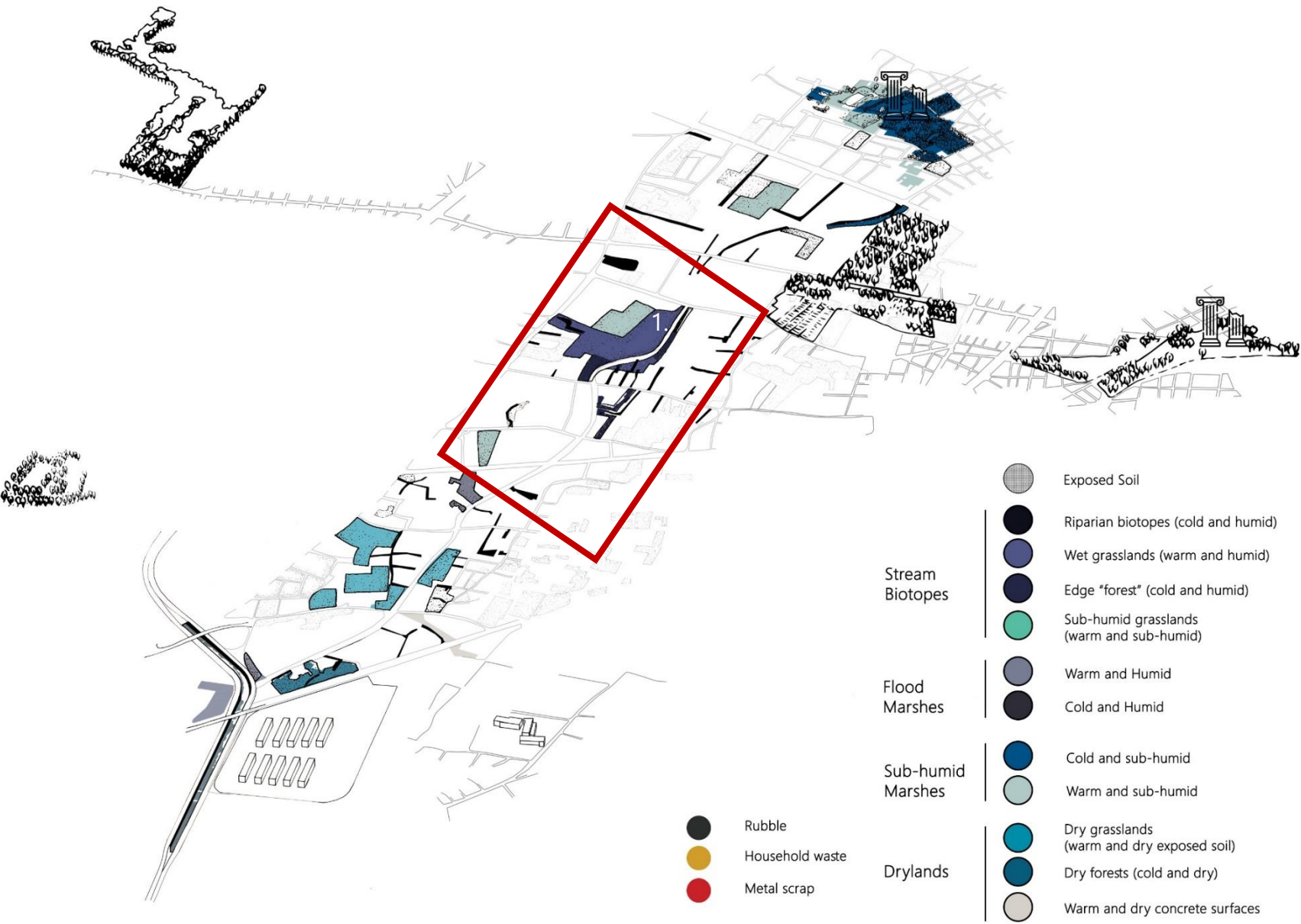


An urban corridor with pockets of ecology.

STREAM PROJECT | PROPHET DANIEL STREAM







Ruderal Refugia

Third spaces with exposed soil and a strong presence of spontaneous vegetation. Patches that present the opportunity to enhance the ecological continuum of Eleonas.

- Ecological succession: Unhindered process
- Areas of zero maintenance and human interference.
- Introduced for scientific observation and aesthetic variety.





Mounds of rubble and plastic
opportunity for new spatial qualities & ecological diversity



Stream | Riparian Vegetation

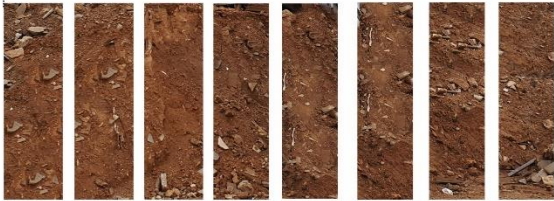




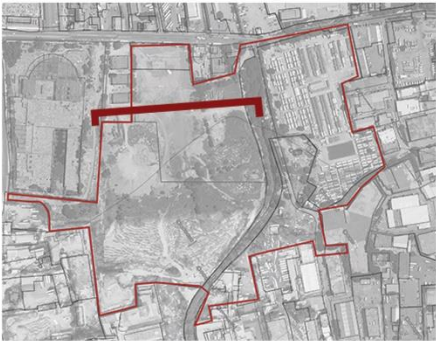
Stream | Riparian Vegetation



Mounds of excavated soil
opportunity for new spatial qualities

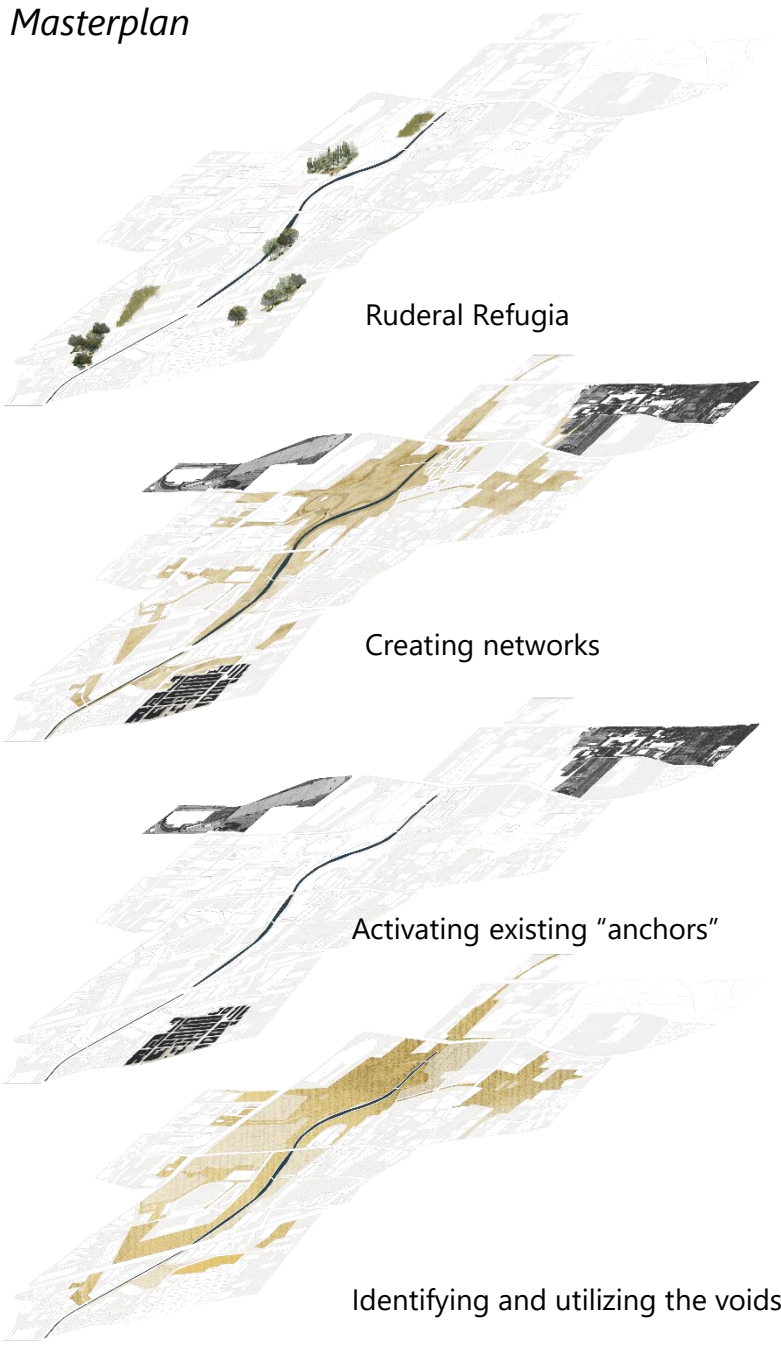


Vegetation along the walls





Masterplan

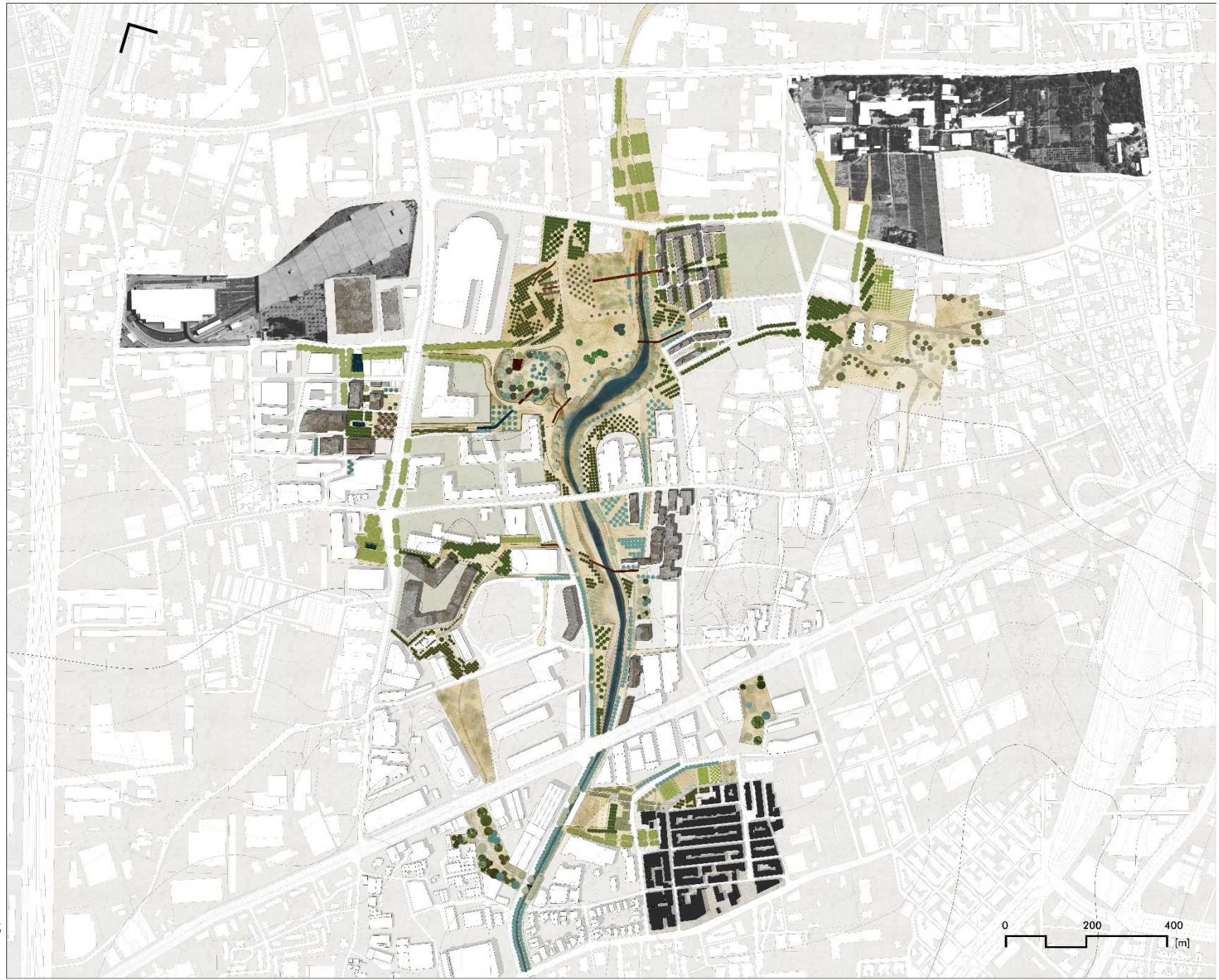


Ruderal Refugia

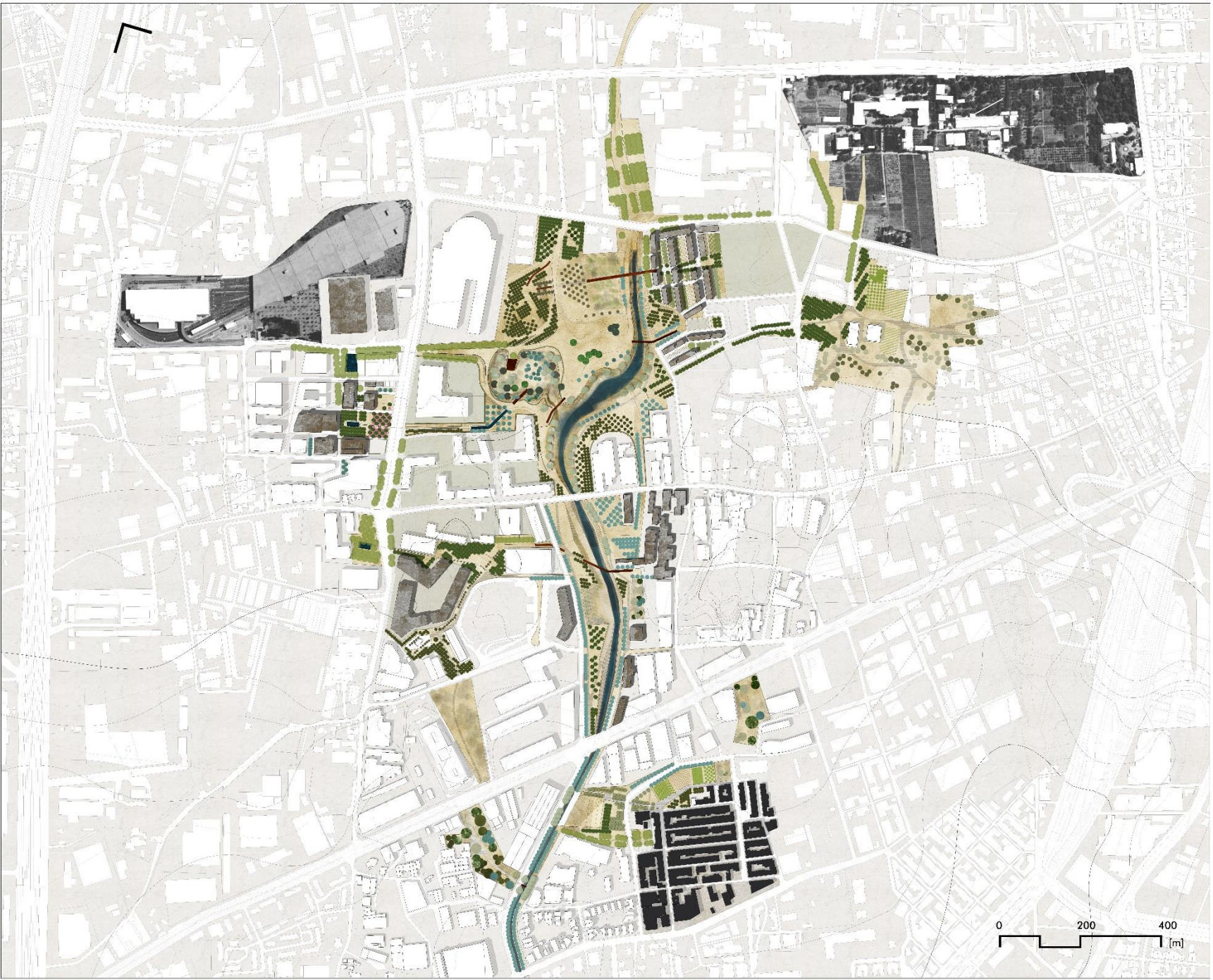
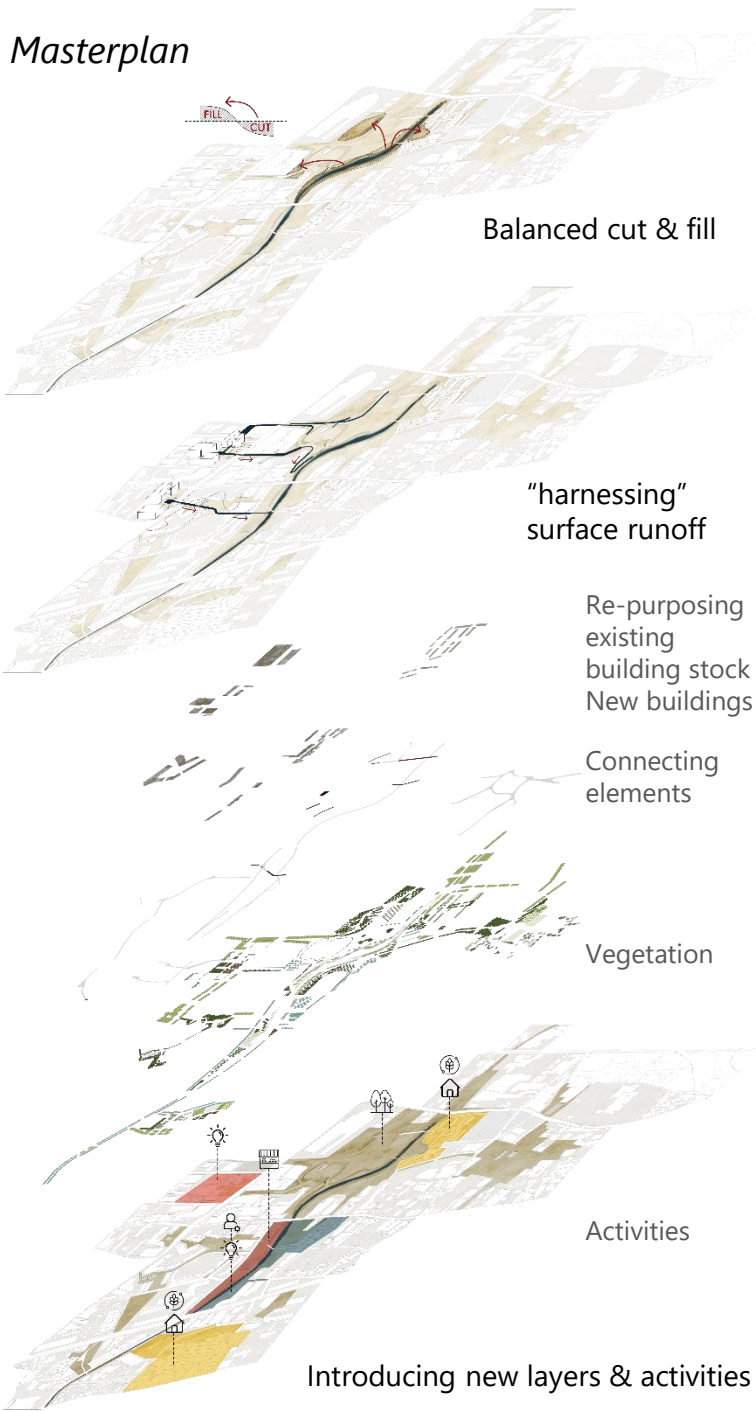
Creating networks

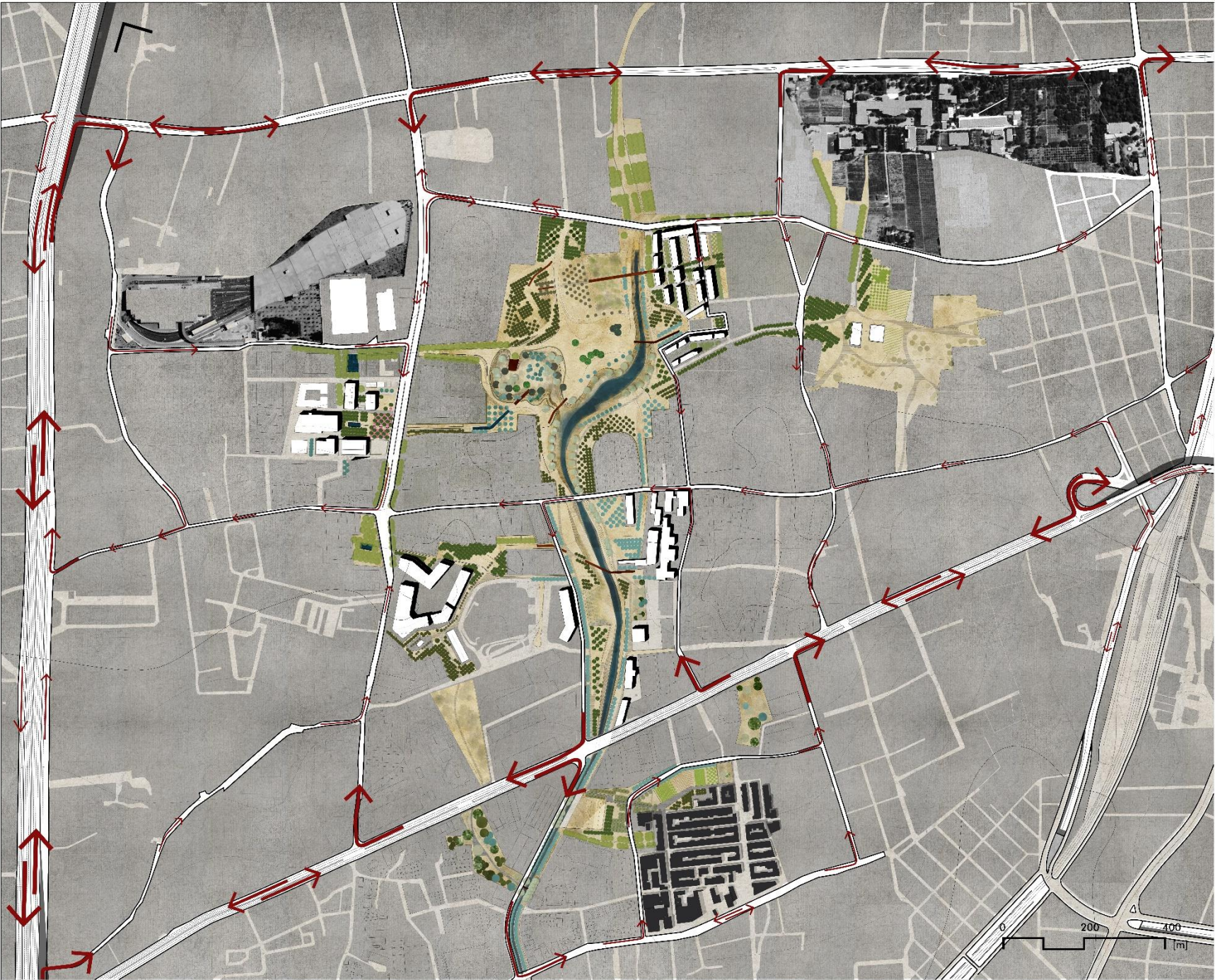
Activating existing "anchors"

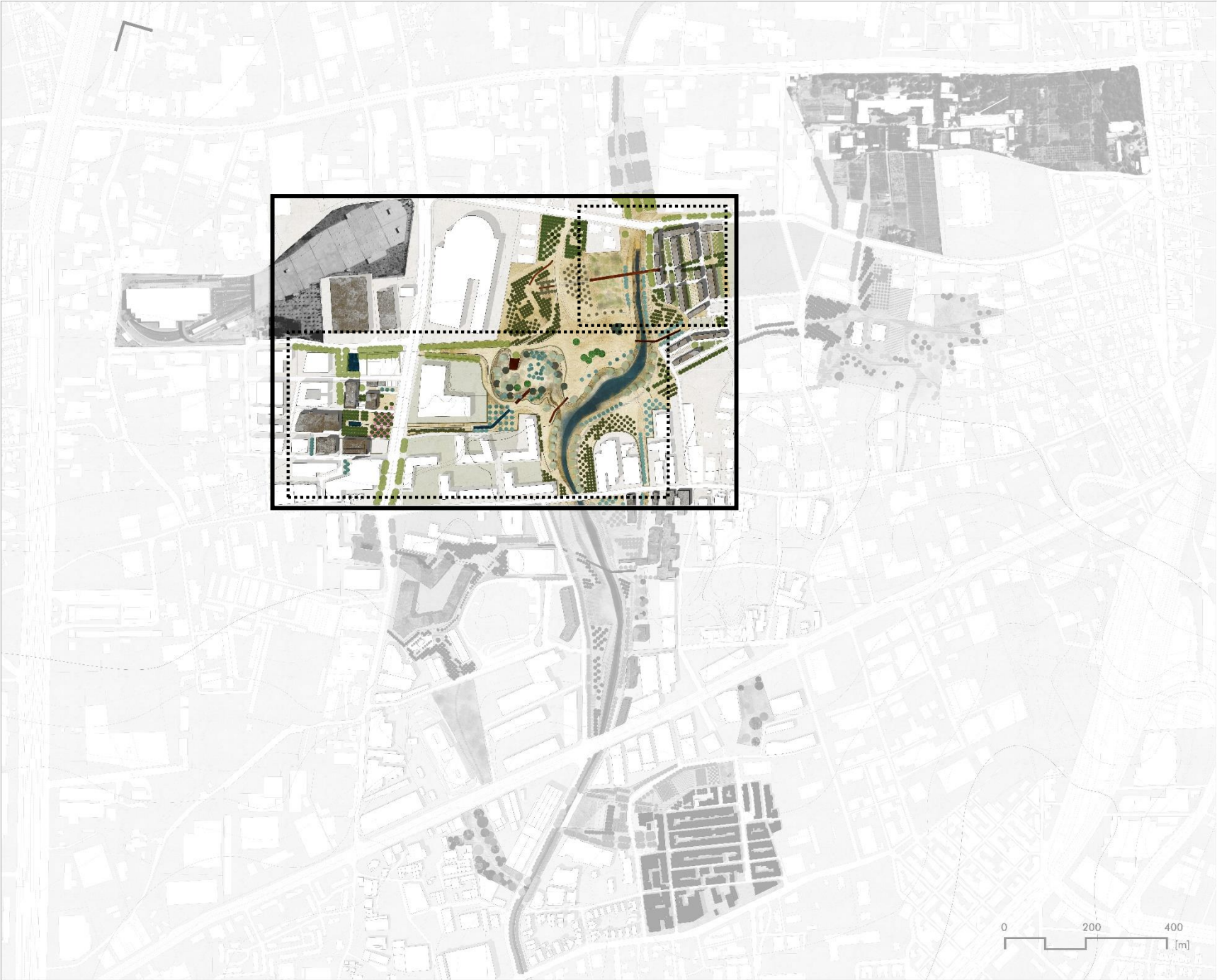
Identifying and utilizing the voids



Masterplan



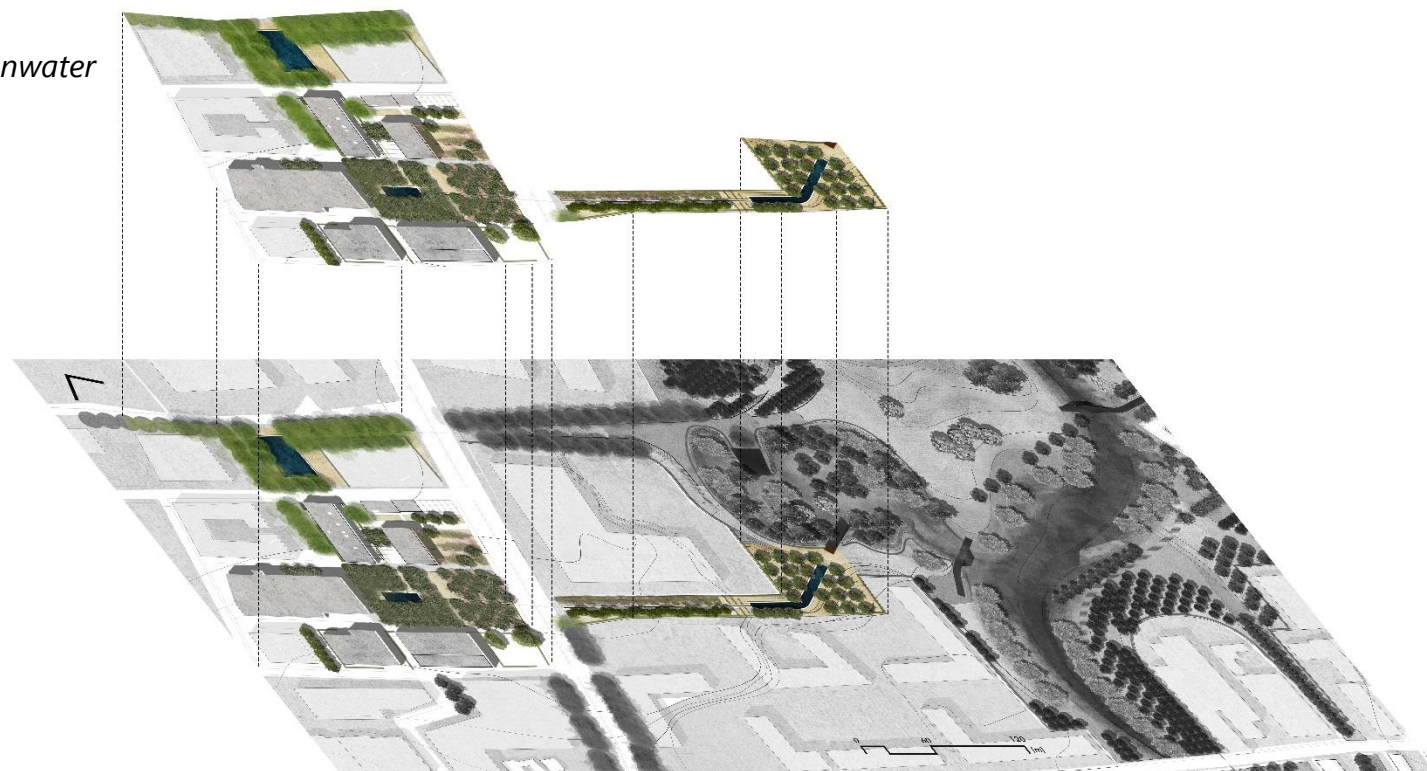




The flood marshes 25 years from now

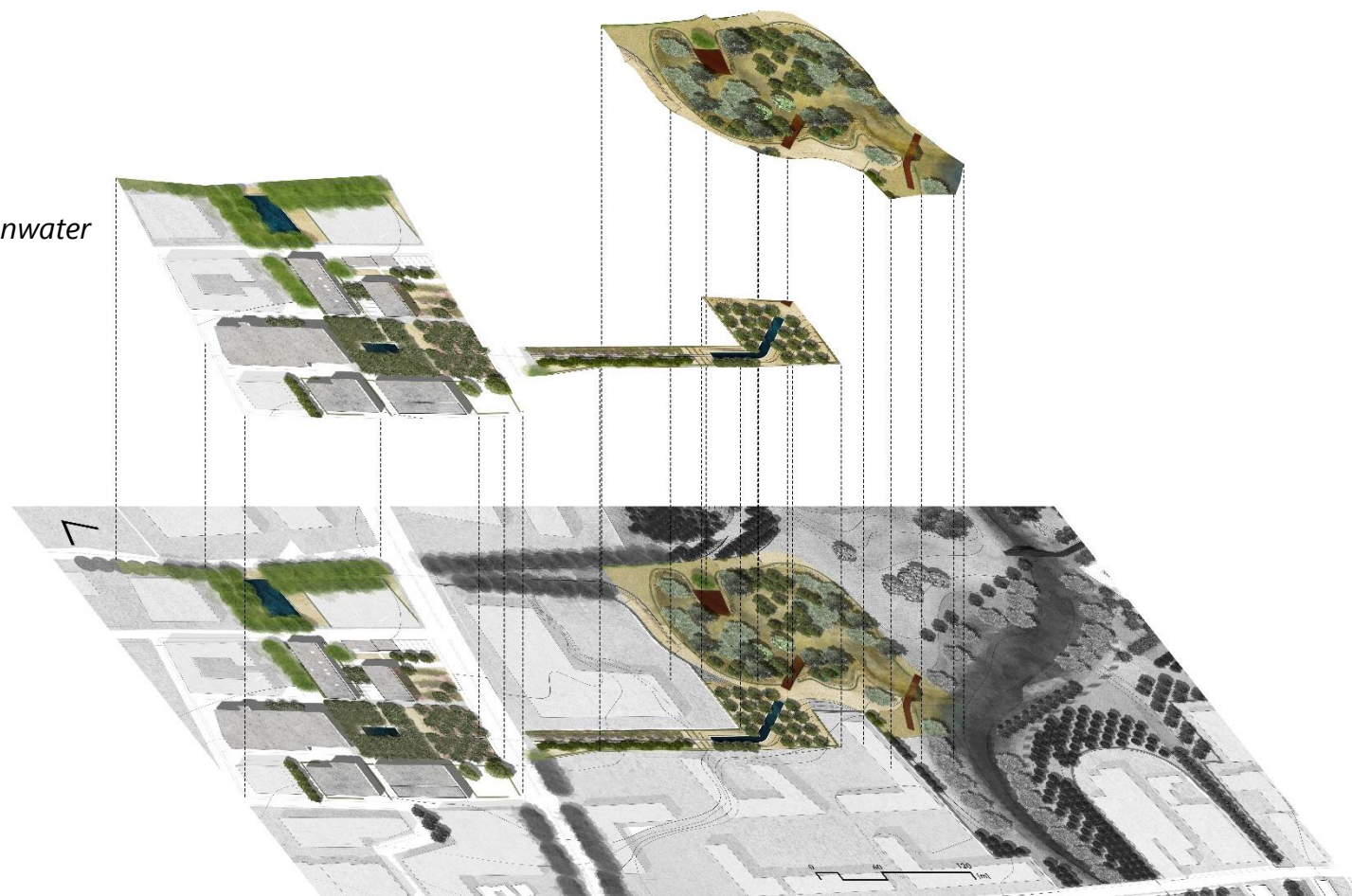


Alsos: Harnessing excess rainwater



Ruderal refugia

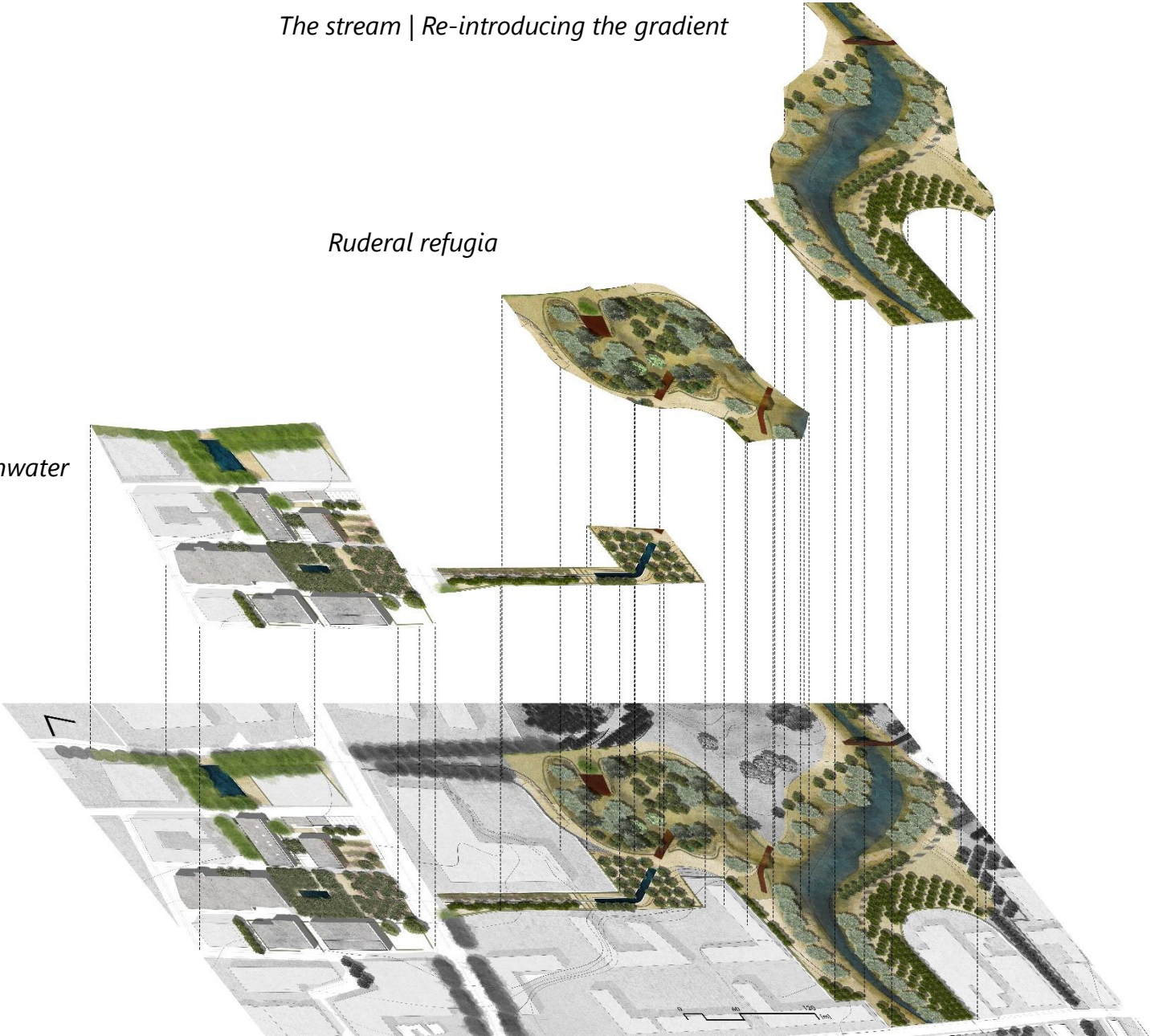
Alsos: Harnessing excess rainwater



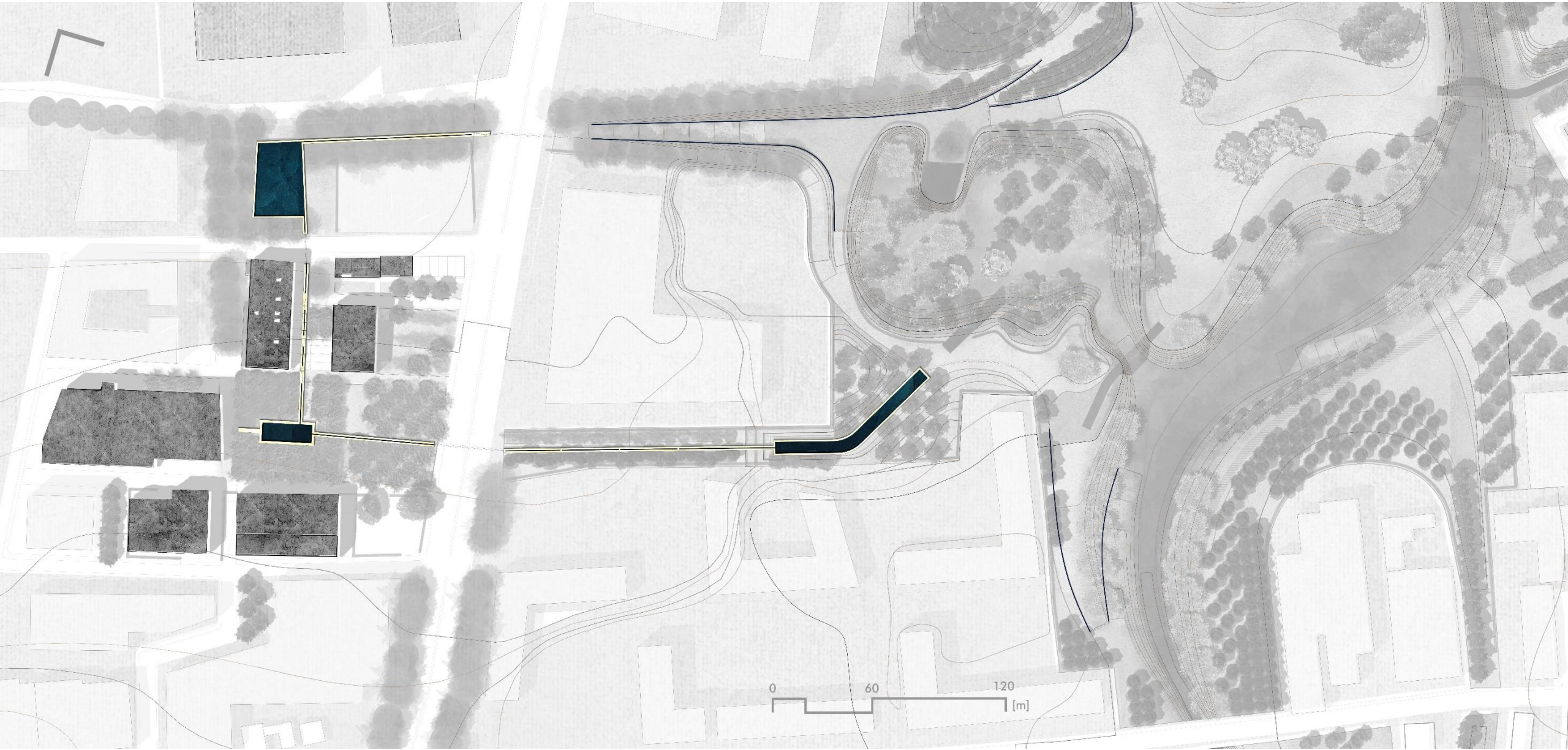
The stream | Re-introducing the gradient

Ruderal refugia

Alsos: Harnessing excess rainwater





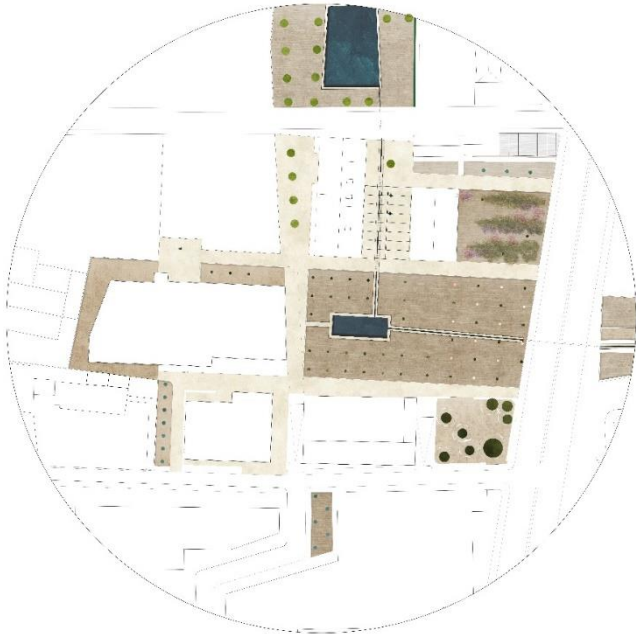




ἄλσος | alsos

- A temenos, a delimited place, sacred to the gods.
- They can consist of only a few trees, wild or planted, with or without flowers, on a large or small scale and of high or low aesthetic interest.
- **Green foliage and cool shade predominate [...] and are part of the topos (τόπος)**

PHASE 1: 5 YEARS



PHASE 2: 10 YEARS



PHASE 3: 25 YEARS



Gleditsia
(*Gleditsia triacanthos*)



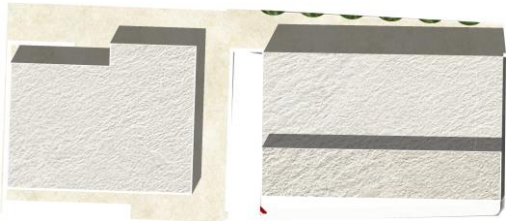
Almond tree
(*Prunus dulcis*)



Olive tree
(*Olea europaea*)



Poplar
(*Populus alba*)



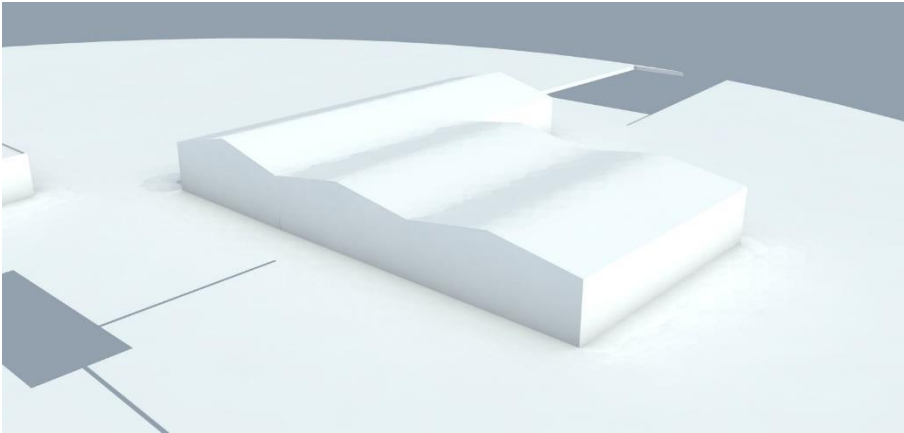
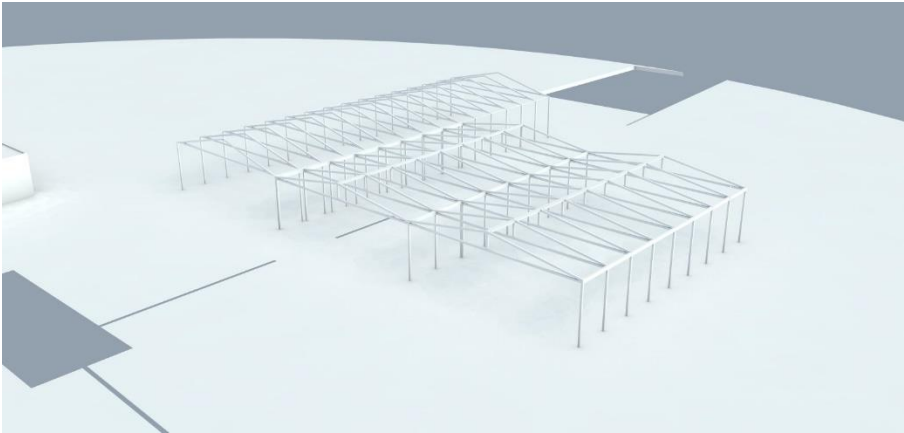
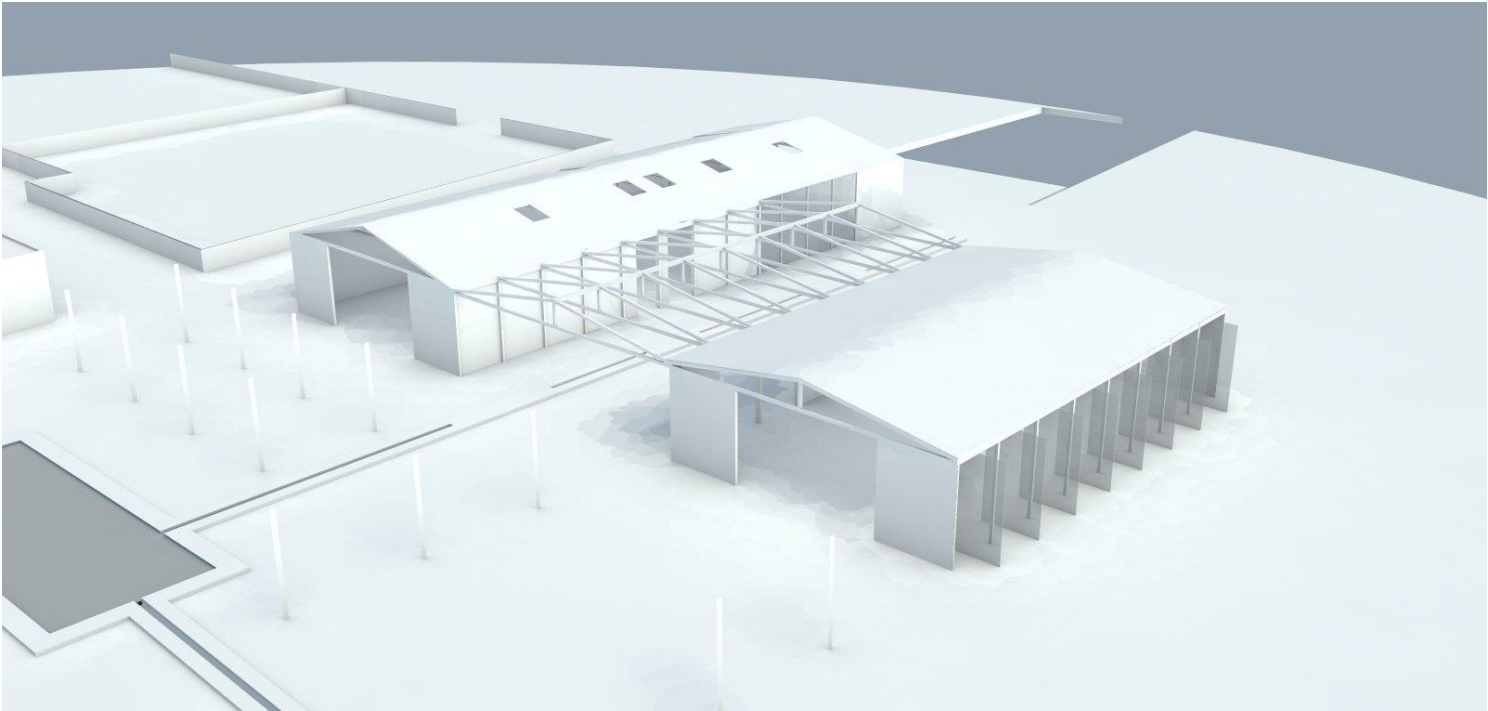
Local commerce

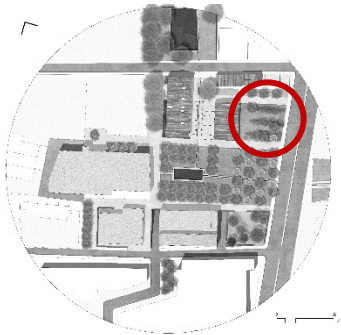
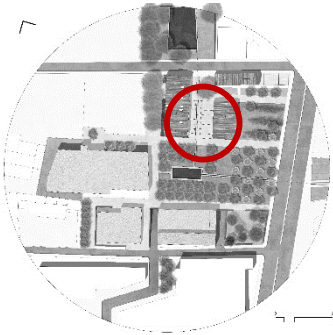


Startup companies recreation



Introduction of student housing







ύλη | hyle

- A wild, untended forest consisting of trees that do not bear fruit
- Hyle [...] grows thick with trees and is not groomed.

Salix alba & Populus alba galleries:

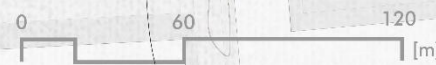
Riparian forests that are characterized by multi layered canopies dominated by populus spp. Salix spp.
The relief is either flat or with gentle slopes (0-10%).

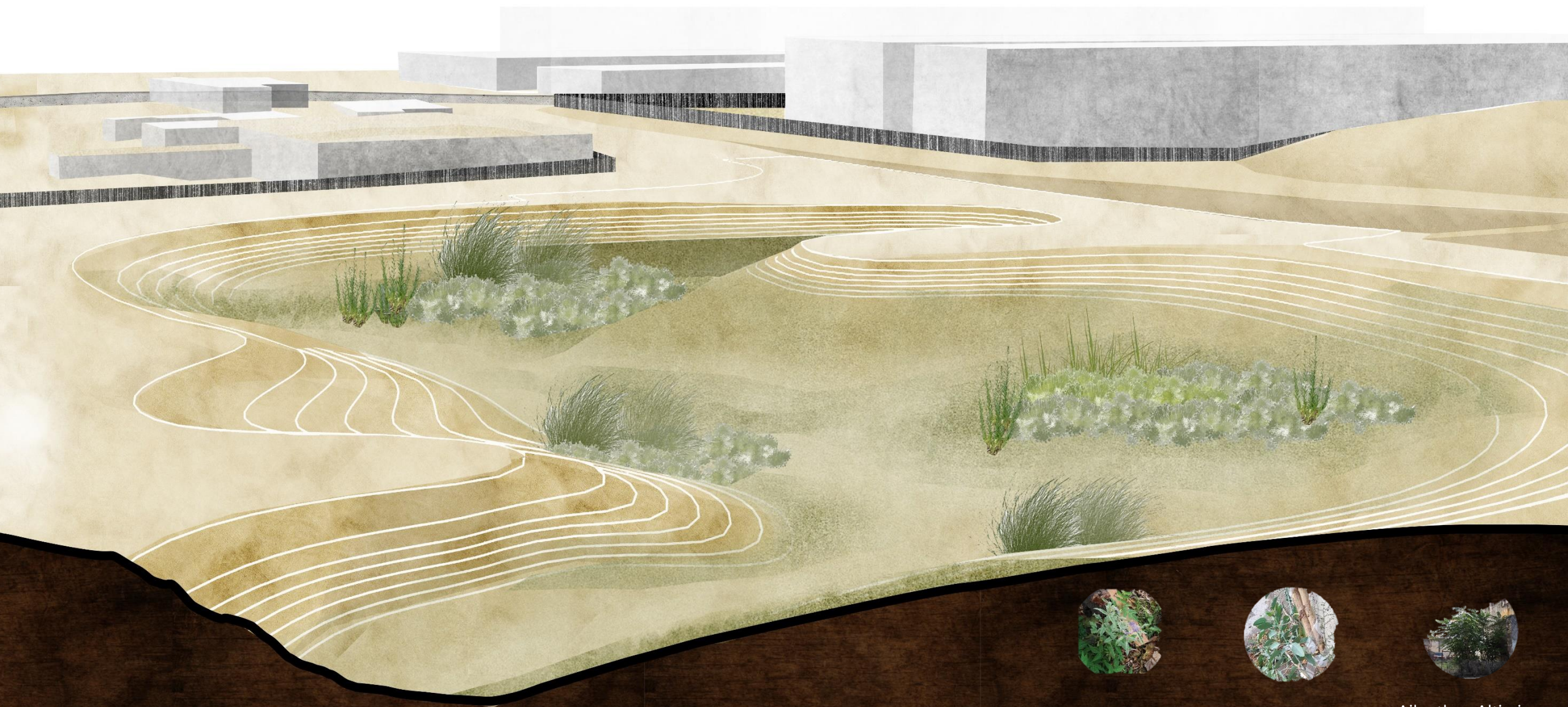
Shrubs

Salix elaeagnos “Angustifolia”
Salix purpurea

Herbaceous:

Solanum dulcamara
Calamagrostis spp.
Cionura erecta





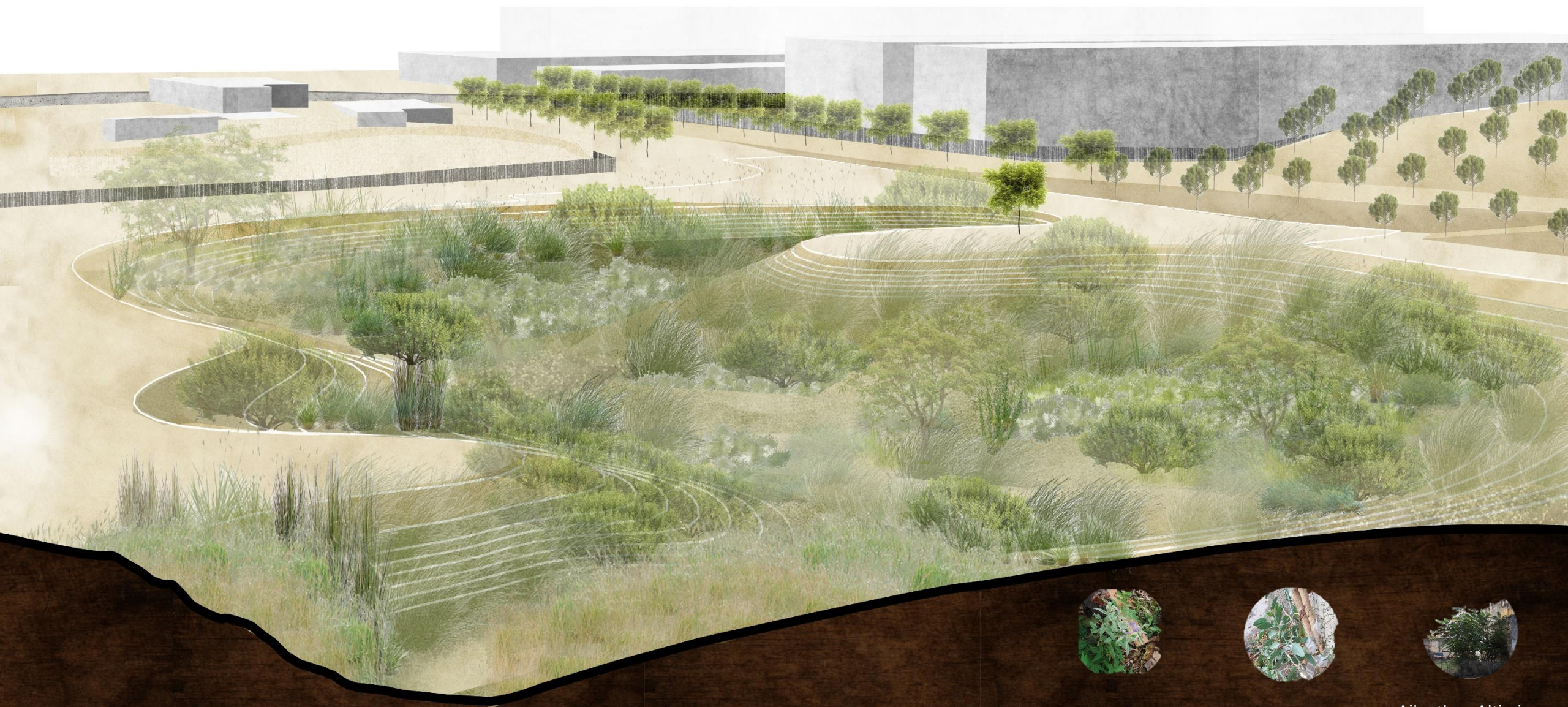
Solanum elaeagnifolium
Cav. Solanaceae



Nicotiana glauca
Graham



Ailanthus Altissima
(Mill.) Swingle



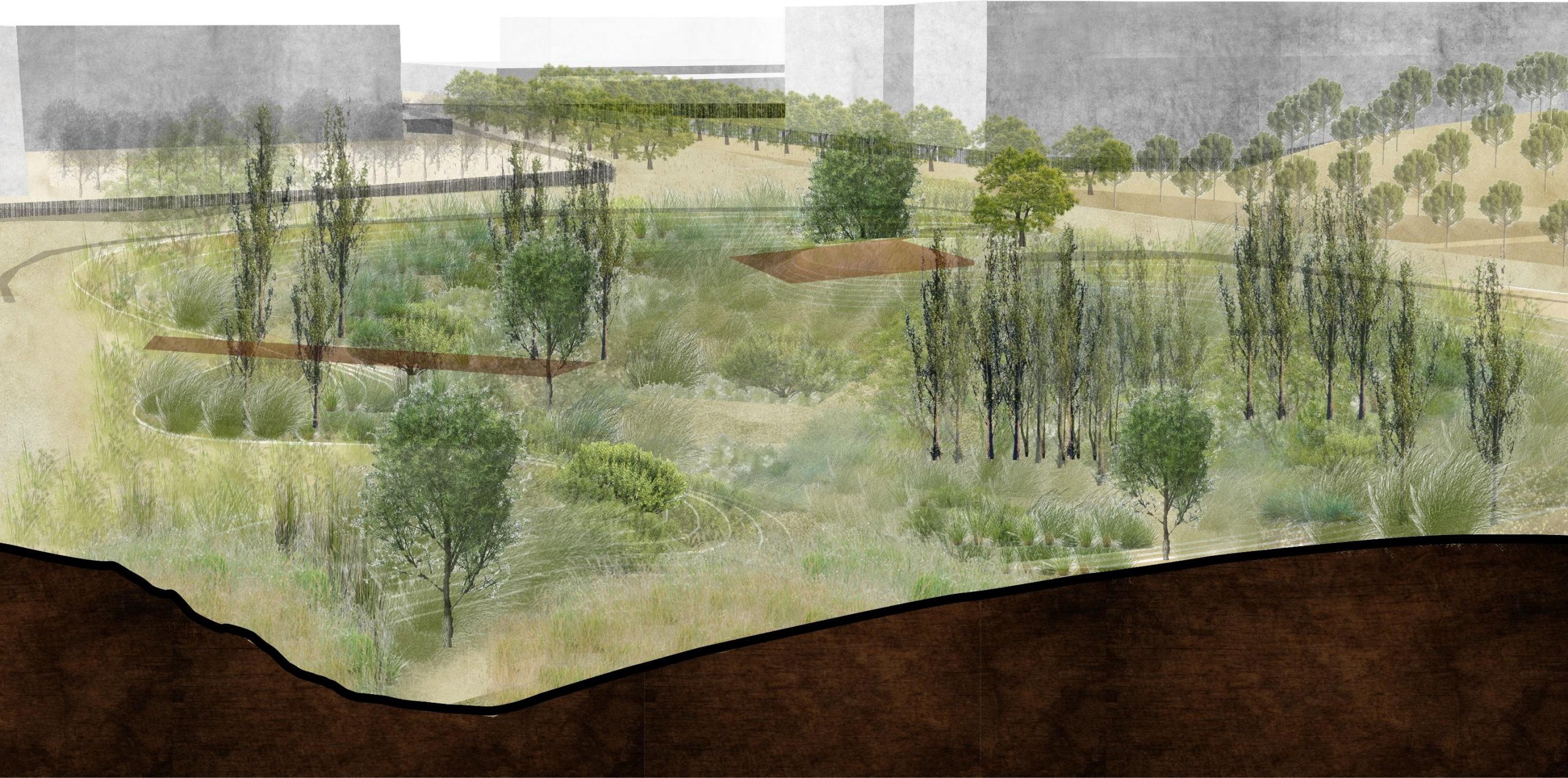
Solanum elaeagnifolium
Cav. Solanaceae

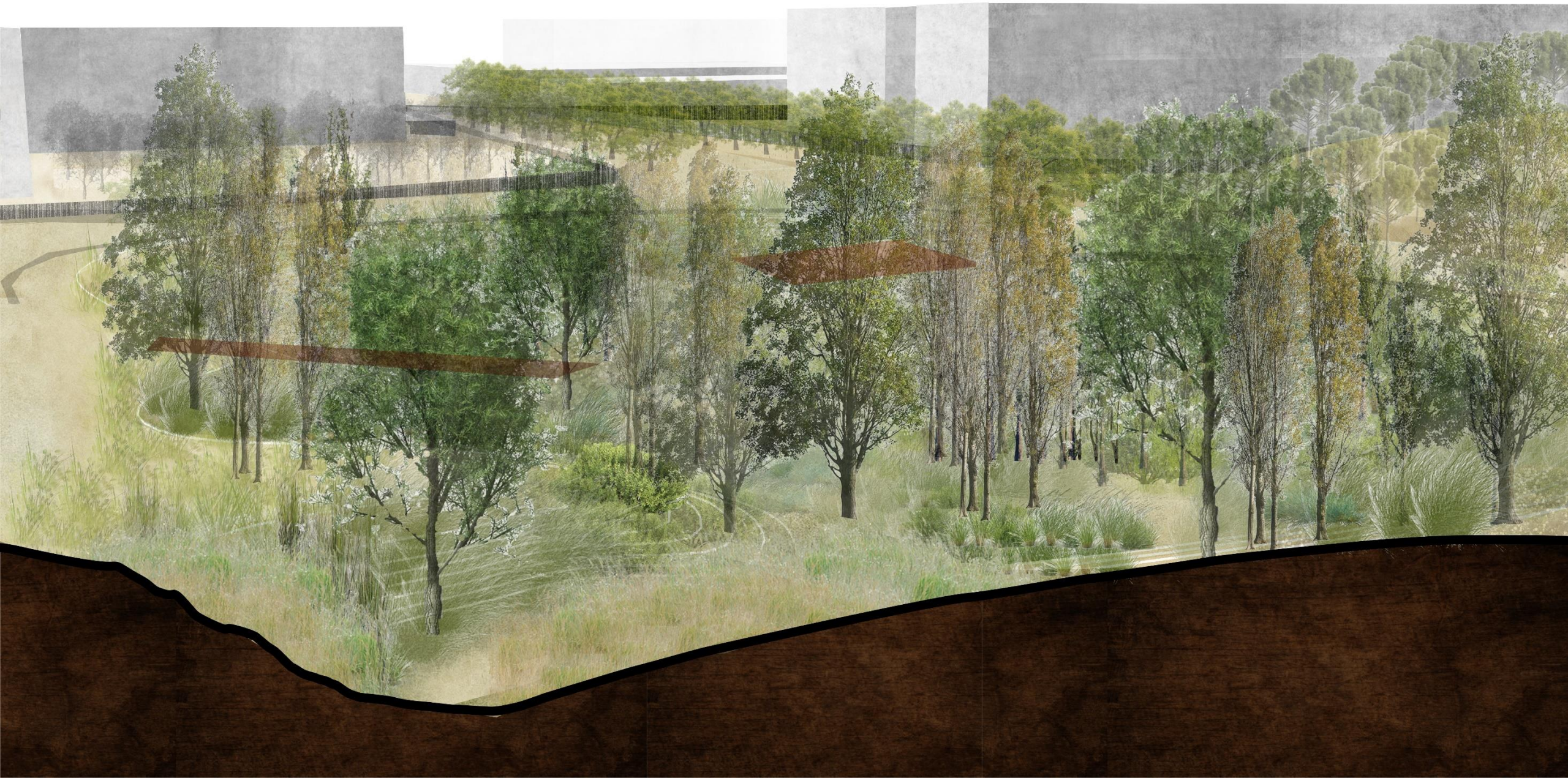


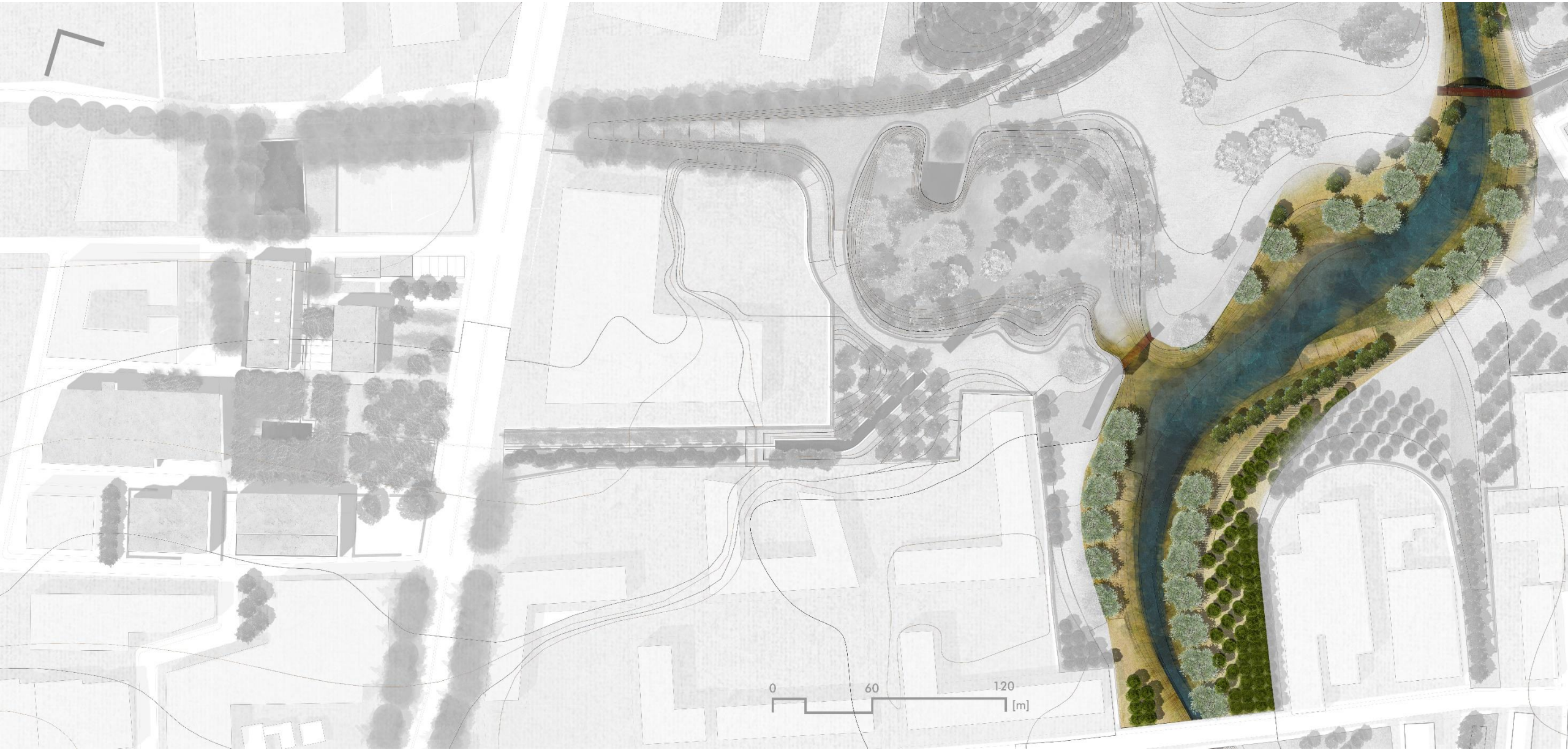
Nicotiana glauca
Graham

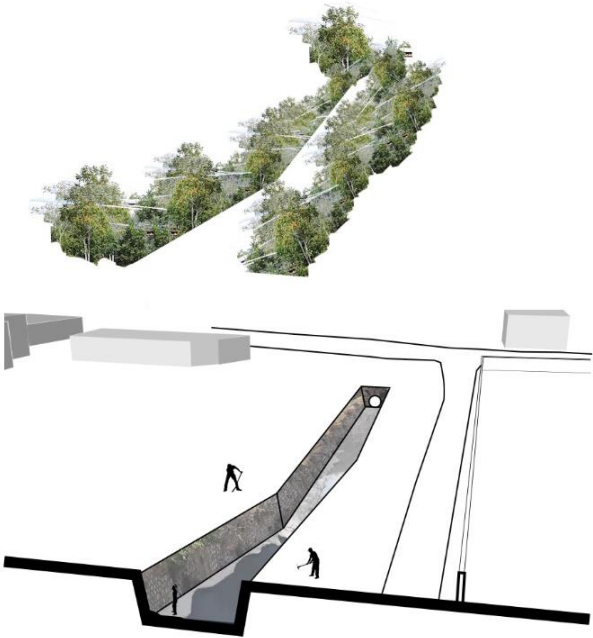
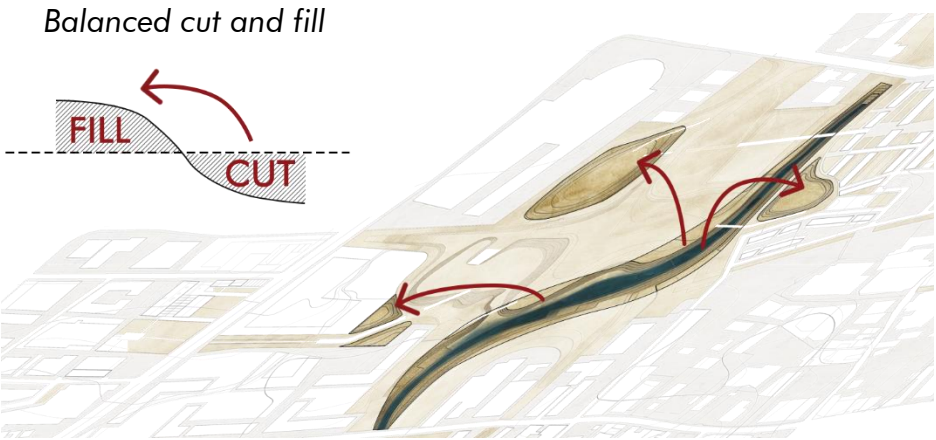


Ailanthus Altissima
(Mill.) Swingle

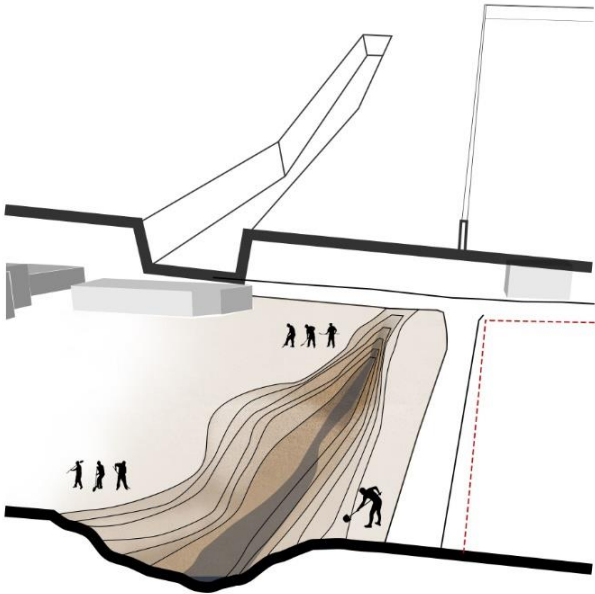








Breaking down the concrete boundary of the stream.



Changing the stream edges



Creating a gradient

Vegetation plan



Gleditsia
(*Gleditsia triacanthos*)



Willow (Salix alba)



Ash
(*Fraxinus angustifolia*)



Field elm
(*Ulmus minor*)



Olive tree
(*Olea europaea*)



Almond tree
(*Prunus dulcis*)



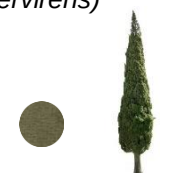
Poplar
(*Populus alba*)



Pine
(*Pinus halepensis*)



Mediterranean cypress
(*Cupressus sempervirens*)





Water basins





The stream

Prophet Daniel Stream



Existing condition

1. Eleonas Refugee Camp:

Since 2015
Currently hosting 1470
refugees in 297 units
(containers)

A TEMPORARY FACILITY

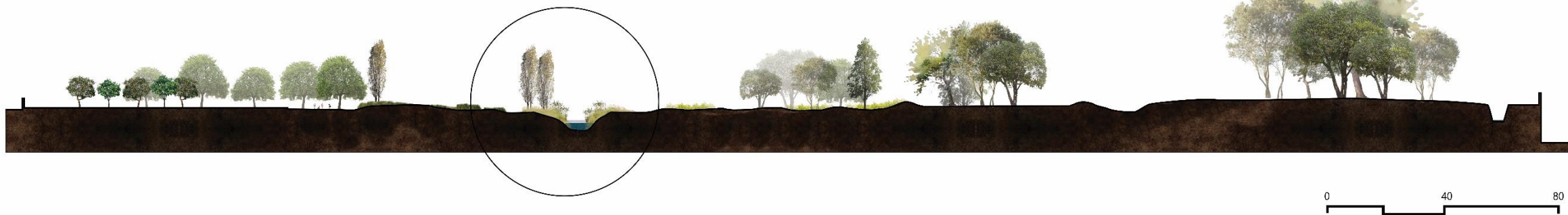
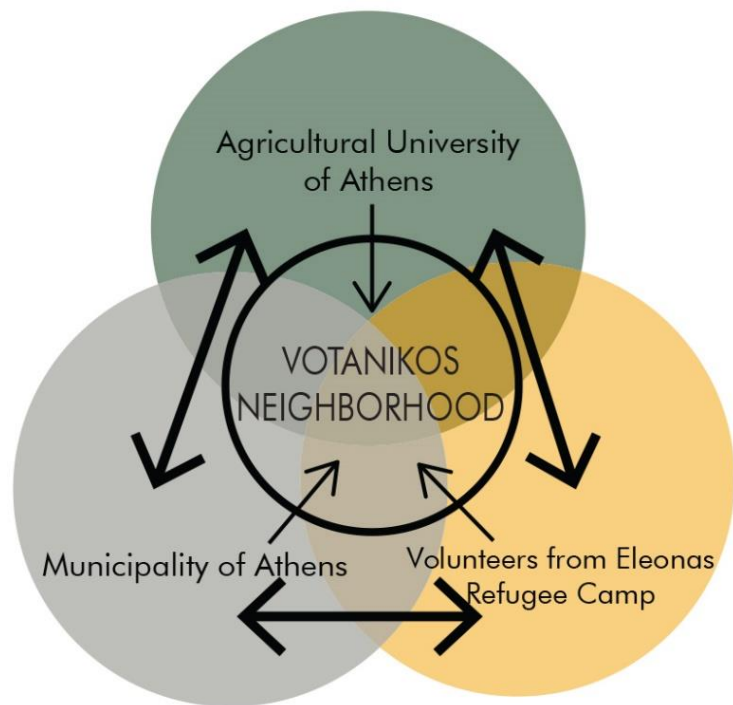
2. Prophet Daniel Stream

A natural boundary to the
camp

3. Soil contamination from industrial activities

4. Existing anchors nearby: Agricultural University of Athens







Development Phases

Phase 1 | 5 years

Transformation of existing public spaces

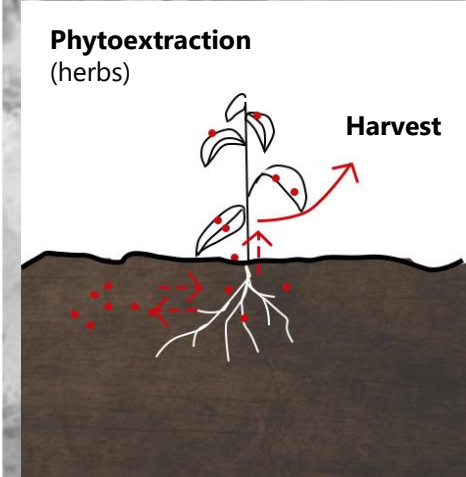
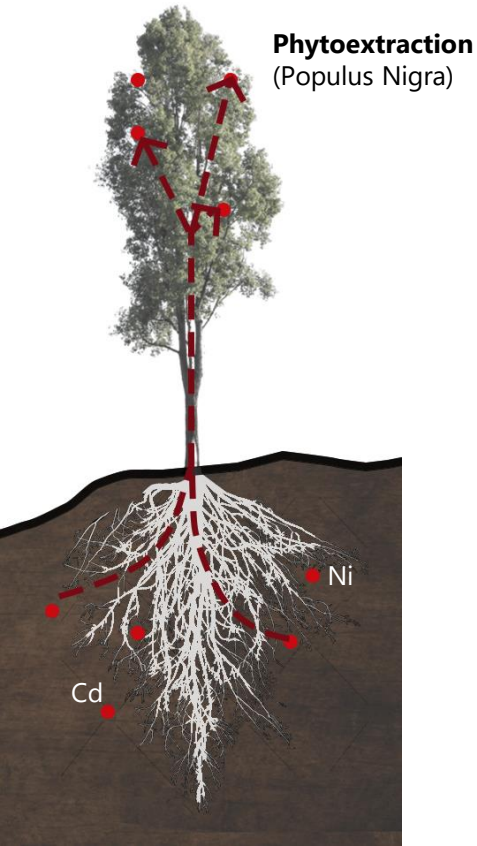
Creating connections with the stream & the ruderal refugia



Phase 2 | 10 years

Forming the first communal gardens for the purpose of Soil remediation

Social integration for all individuals involved



Phase 3 | 15 years

Introduction of orchards of citrus trees, pomegranate, herbs and vineyards in the remediated soil. Cultivation and maintenance of the orchards are a shared responsibility between refugees and permanent population.

*The orchards become **a source of income for the refugees.***

*Forming the second communal gardens for the purpose of Soil remediation
Housing for both refugees and locals*

Social integration for all individuals involved. Creation of social bonds.



Phase 4 | 20 years

*The soil is adequately clean.
All the orchards are cultivated
and maintained by both refugees
and permanent residents.*

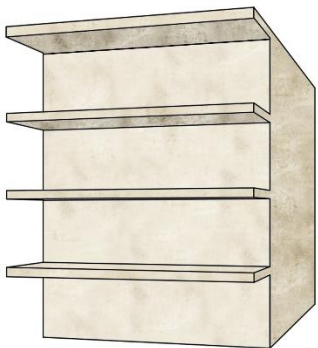
*In an attempt to enhance social
integration, new residential
blocks are introduced, housing
both refugees and local
inhabitants.*



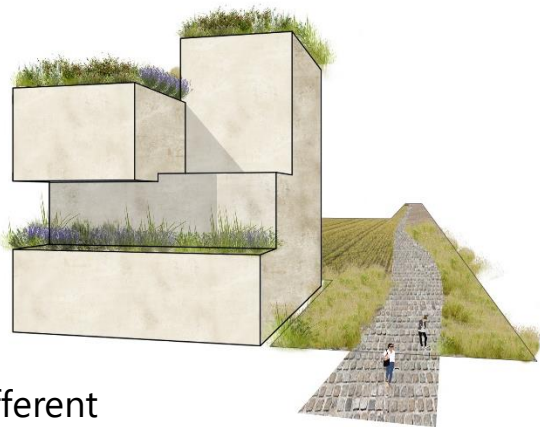
Polykatoikia the multifunctional:

Residential
Commercial
Recreational

Ecological
Social



Residential
Offices
Commercial
Recreational



Creating different
conditions for ecology



Vegetation plan

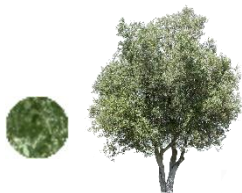
Gleditsia
(Gleditsia triacanthos)



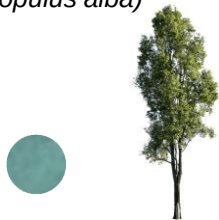
Willow (Salix alba)



Olive tree
(Olea europaea)



Poplar
(Populus alba)



Pine
(Pinus halepensis)

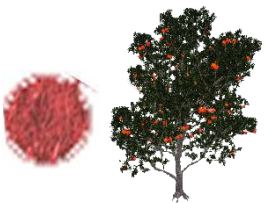


Mediterranean cypress
(Cupressus sempervirens)



Community gardens

Pomegranate
(Punica granatum)



Pear tree
(Pyrus communis)



Citrus trees (Lemon tree, orange tree)
(Citrus limon, Citrus x sinensis)

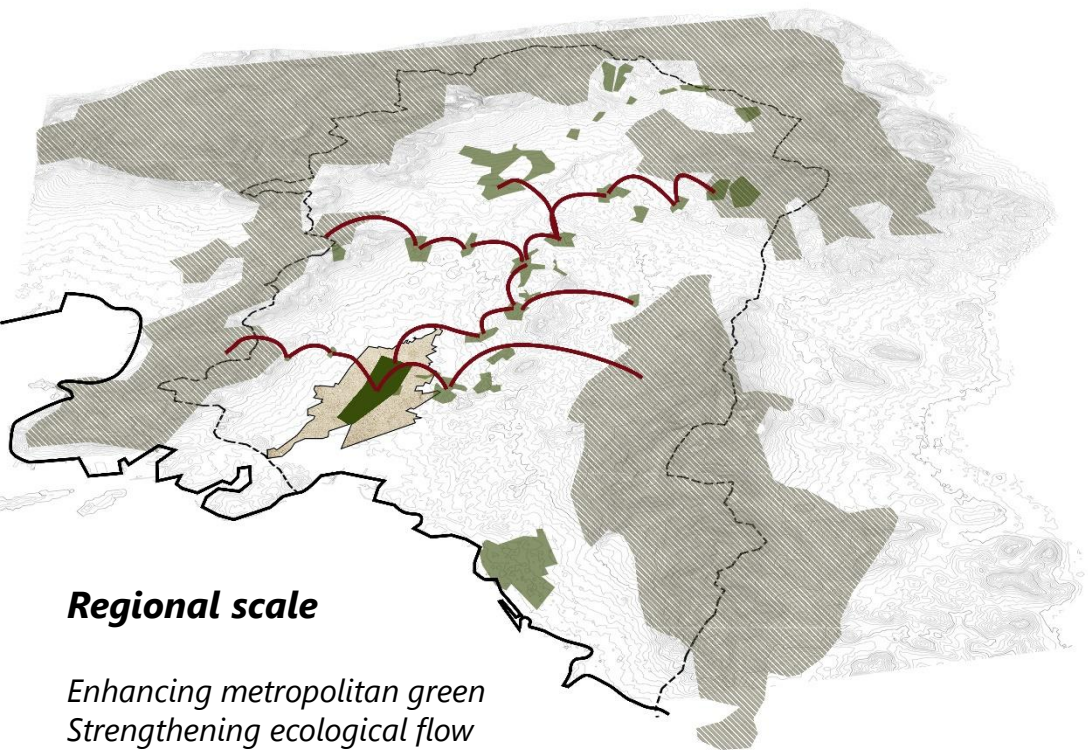


Vineyards
(Vitis vinifera)



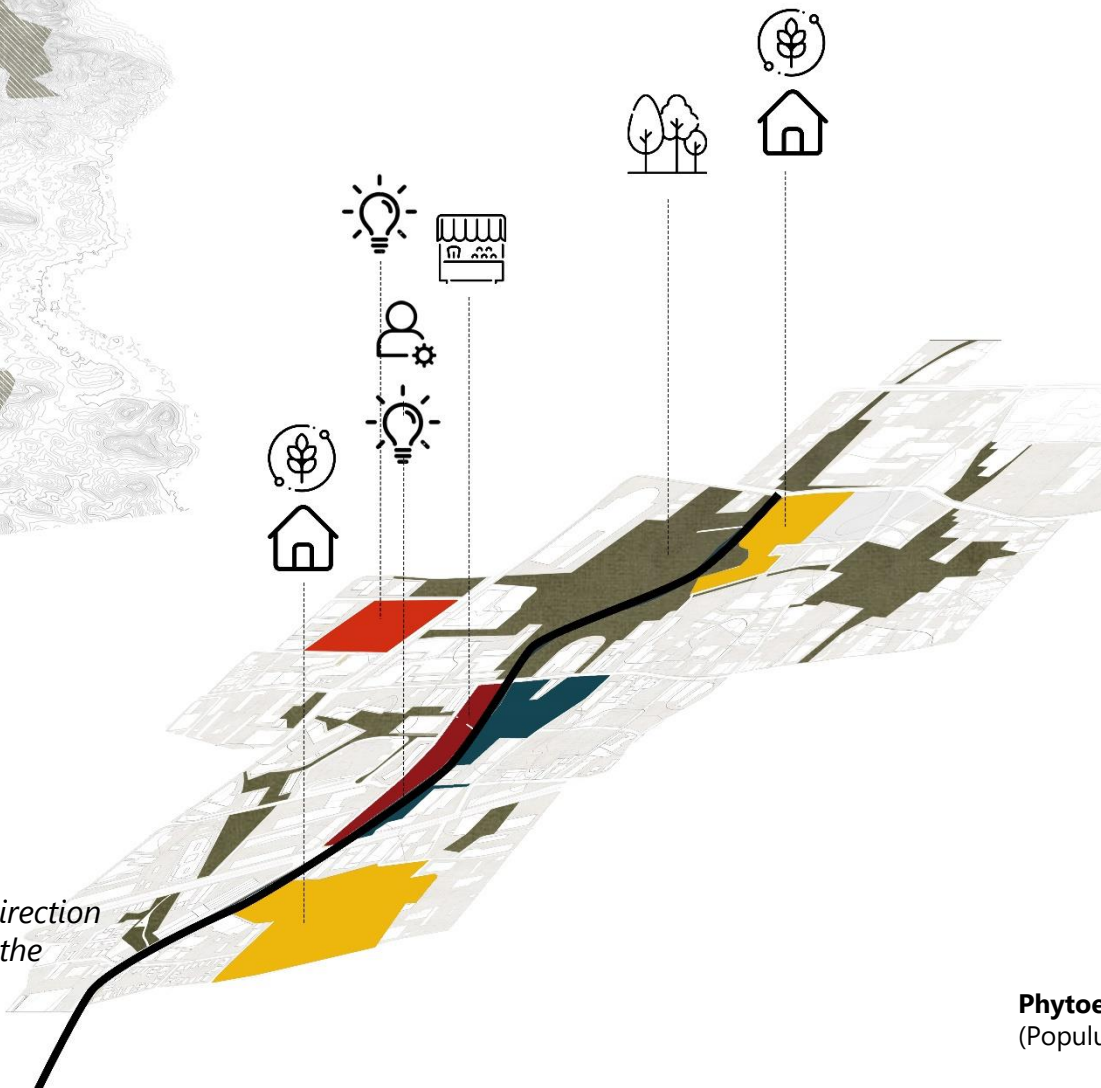






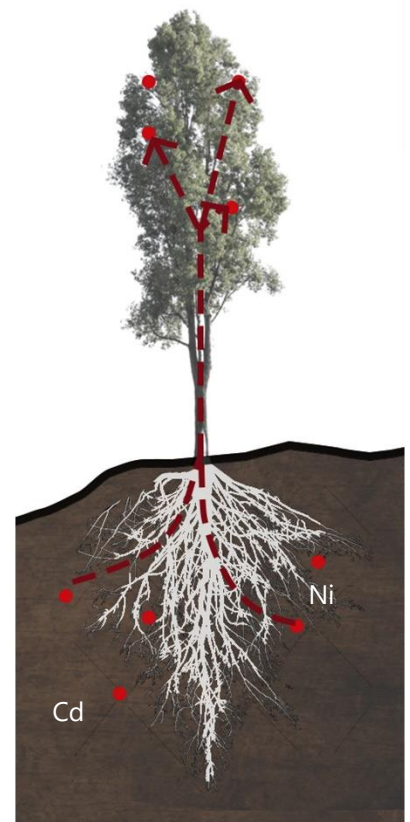
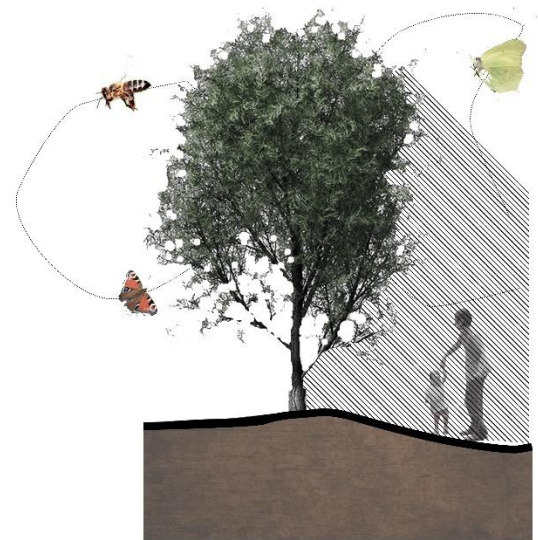
Urban scale

Providing connectivity in the North-South direction
Creating a “spine” of public activities along the stream



Segments scale

Providing shade and cooling with proposed vegetation
Attracting fauna (insects)
Functioning as soil remediating elements



Phytoextraction
(Populus Nigra)



Stavros Niarchos Foundation Cultural Center



Park am Gleisdreieck, Berlin



Stavros Niarchos Foundation Cultural Center

+



Park am Gleisdreieck, Berlin

=





Ruderal Refugia



The stream



Votanikos neighborhood



Alsos

No human interference

High levels of human interference