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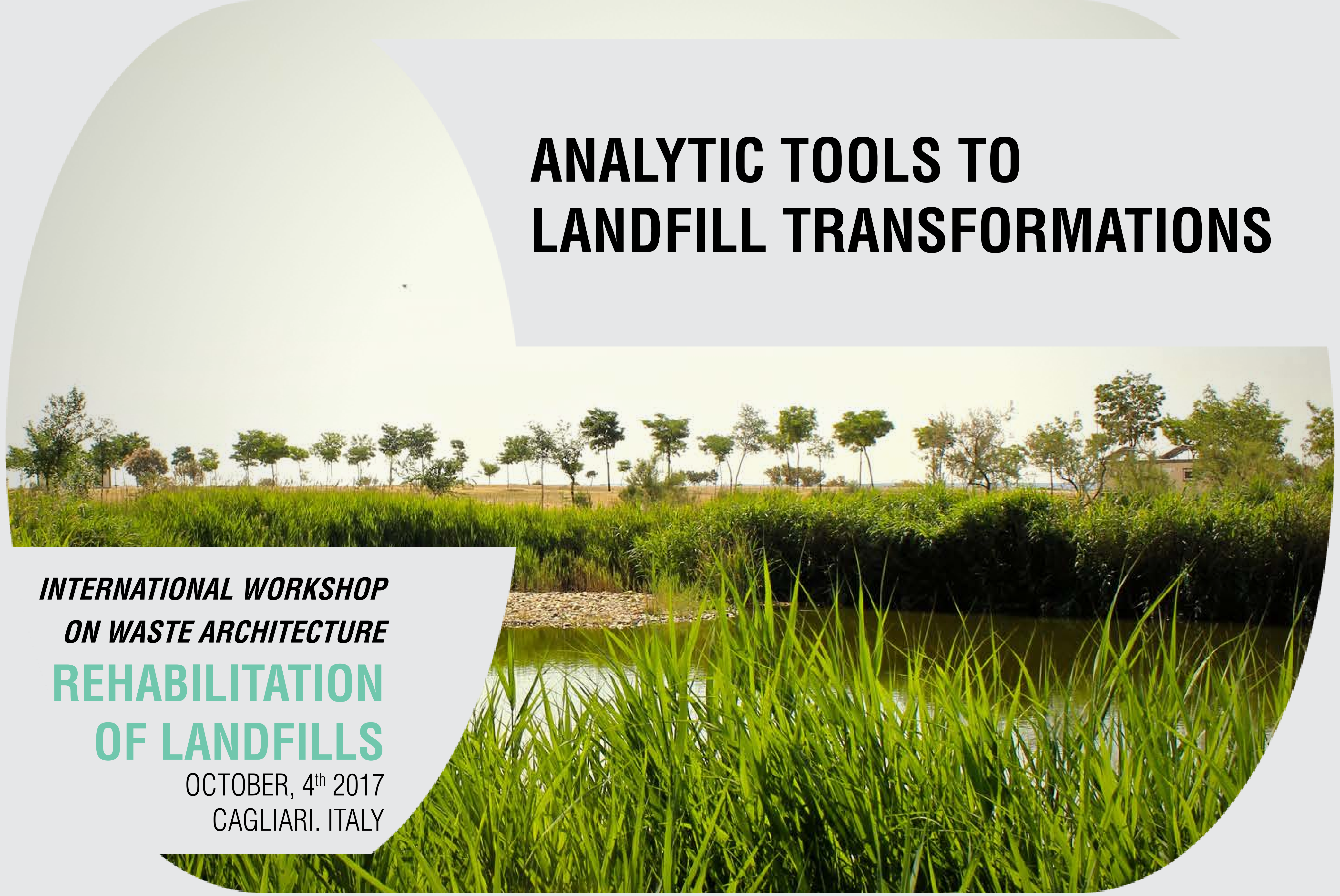
WASTE ARCHITECTURE
PLATFORM

# ANALYTIC TOOLS TO LANDFILL TRANSFORMATIONS



*INTERNATIONAL WORKSHOP*
*ON WASTE ARCHITECTURE*

## REHABILITATION OF LANDFILLS

OCTOBER, 4th 2017
CAGLIARI. ITALY

# 1. To prepare the horizontal ground plane. Topography

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TOPOGRAPHY OF STABILIZING TERRACES
EL GARRAF LANDFILL, BARCELONA, SPAIN


# 2. Subsidence and prevention

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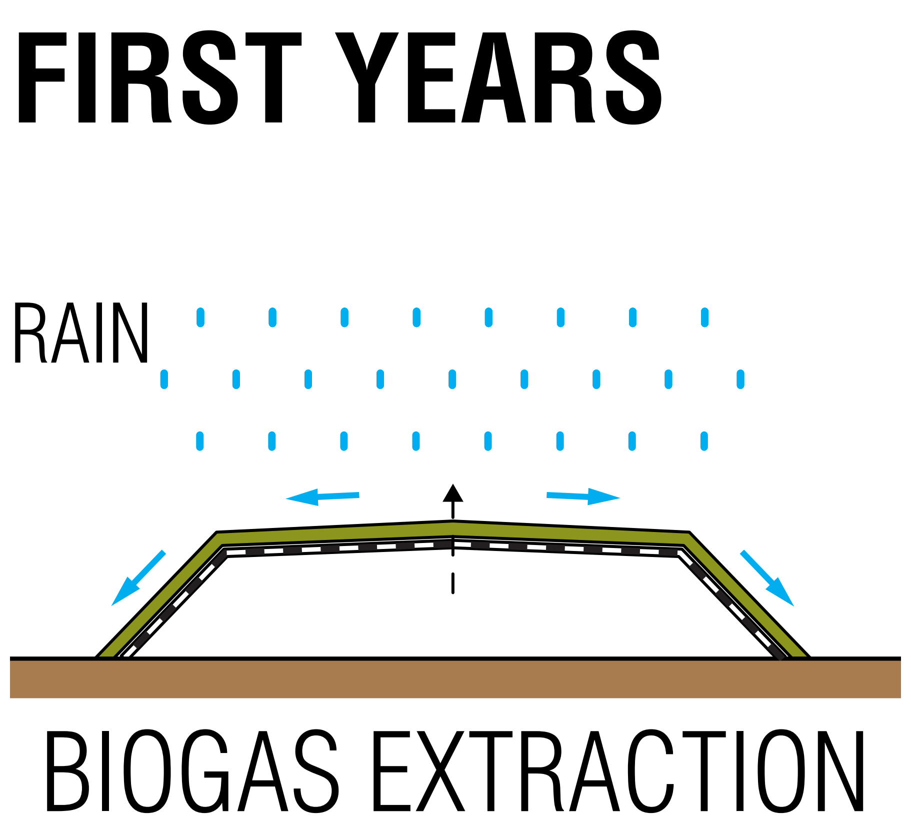
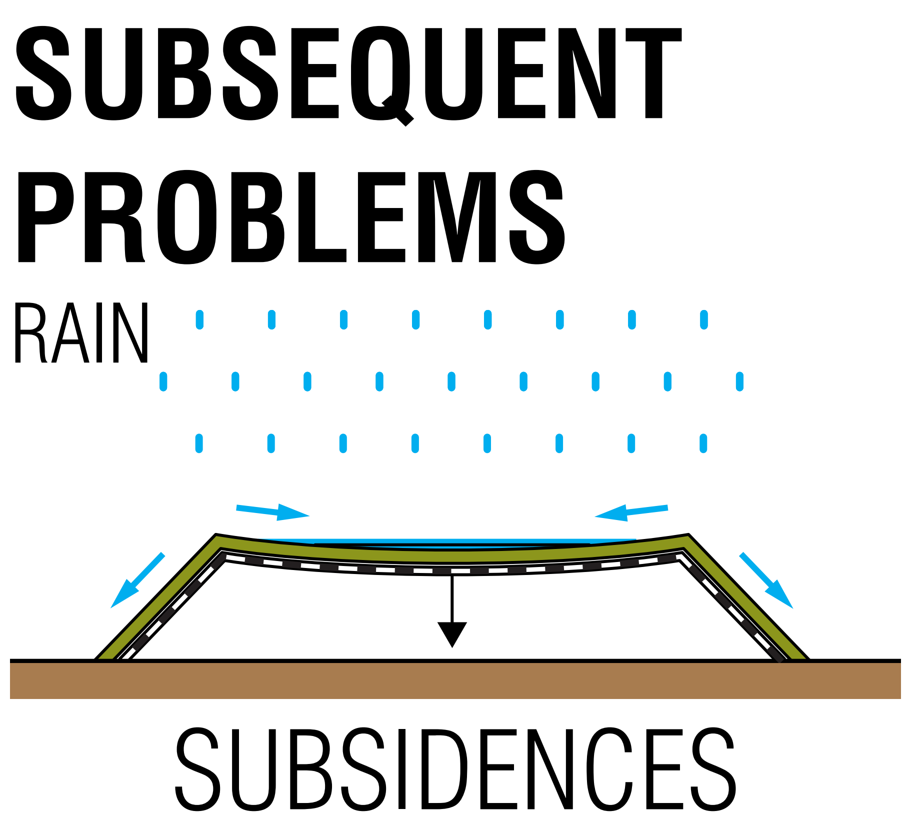
LAND-SUBSIDENCE VISIBLE TO THE NAKED EYE
EL GARRAF LANDFILL, BARCELONA, SPAIN



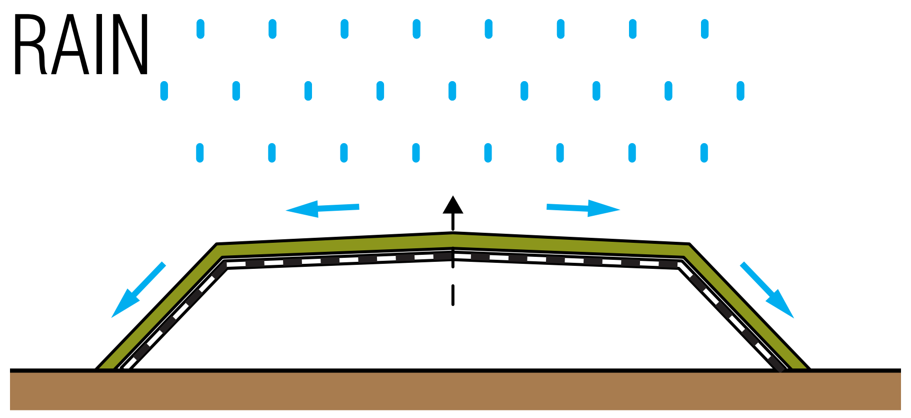



# 2. Subsidence and prevention



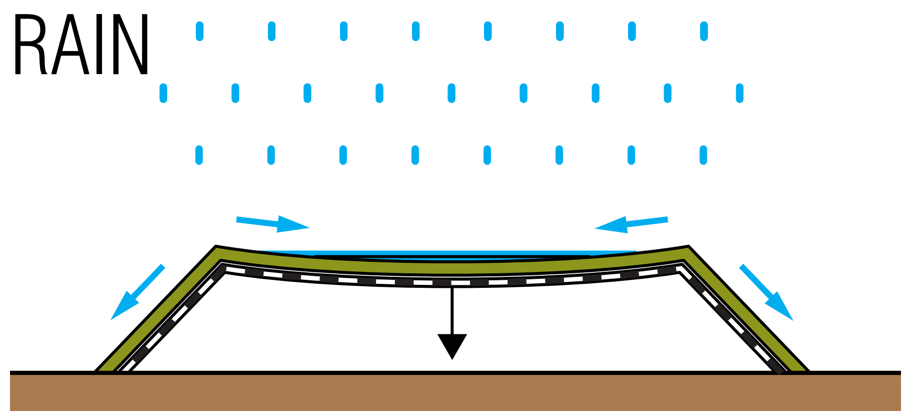
LAND-SUBSIDENCE VISIBLE TO THE NAKED EYE
EL GARRAF LANDFILL, BARCELONA, SPAIN

## FIRST YEARS



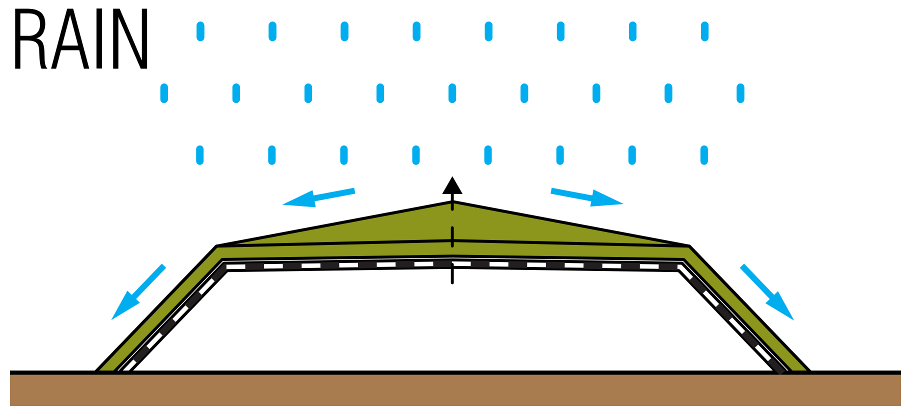

BIOGAS EXTRACTION

## SUBSEQUENT PROBLEMS



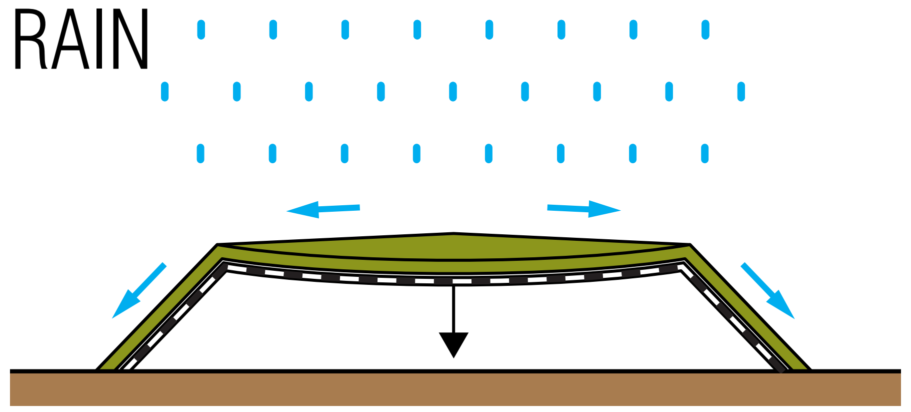

SUBSIDENCES

## IMPROVING PROPOSAL




BIOGAS EXTRACTION

## IN THE NEXT YEARS

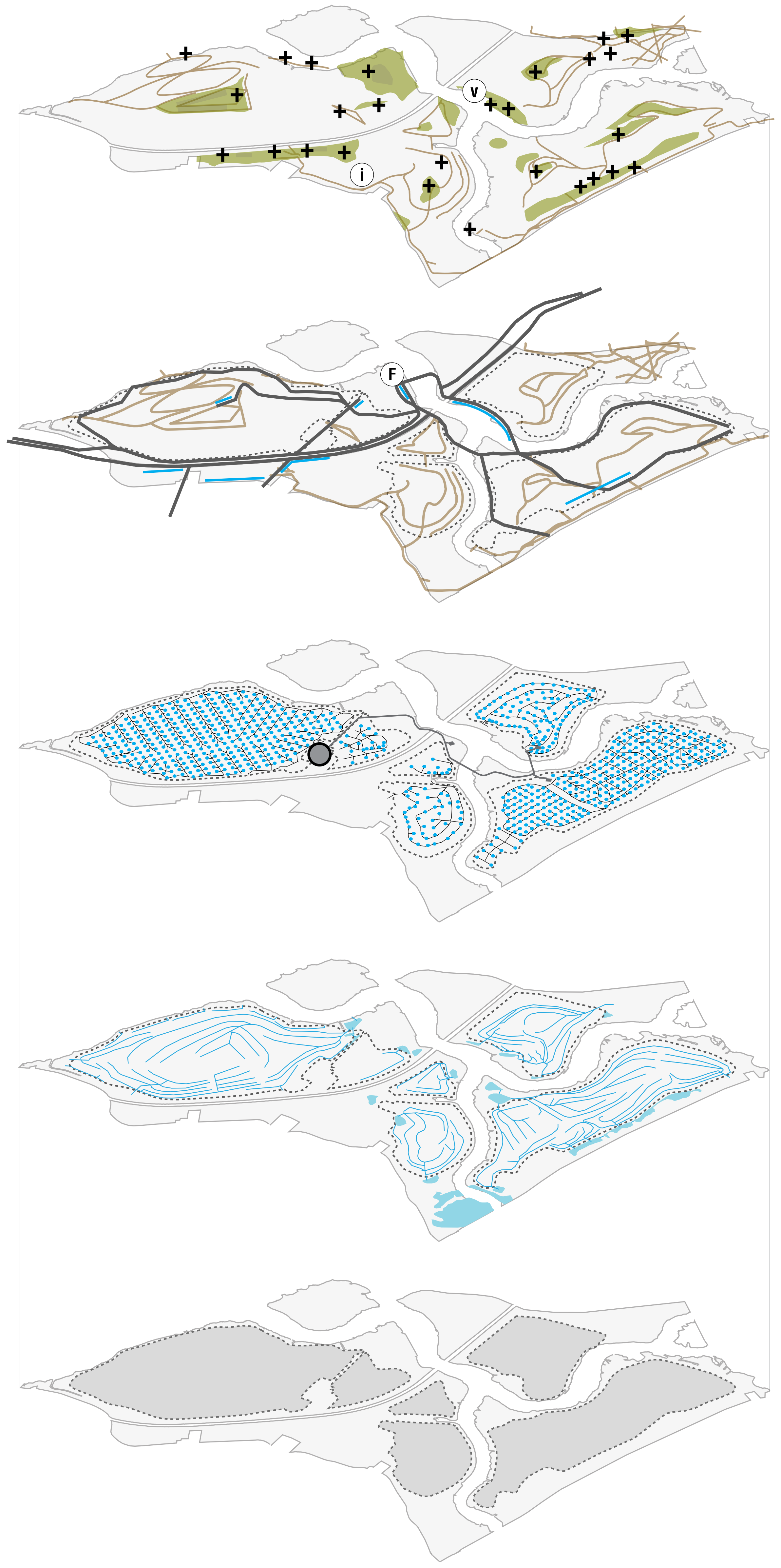



SUBSIDENCES

# 3. The surface order



## FRESH KILLS, NEW YORK, USA



5. NEW PROGRAM

4. NEW CIRCULATIONS

3. BIOGAS EXTRACTION NETWORK

2. LIQUID COLLECTION + CONTAINMENT

1. 150 MILION TONS OF WASTE

# 4. Territorial continuity



MANZANARES LINEAL PARK, MADRID, SPAIN

PARQUE ATLÁNTICO, SANTANDER, SPAIN

CERRO DEL TÍO PÍO, MADRID, SPAIN

# 5. Accessibility and connectivity

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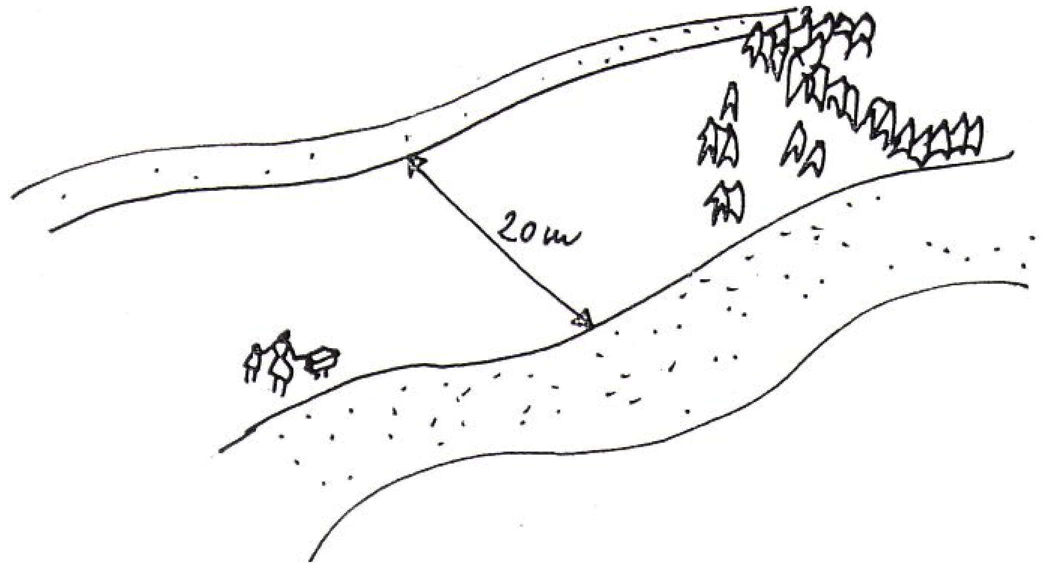
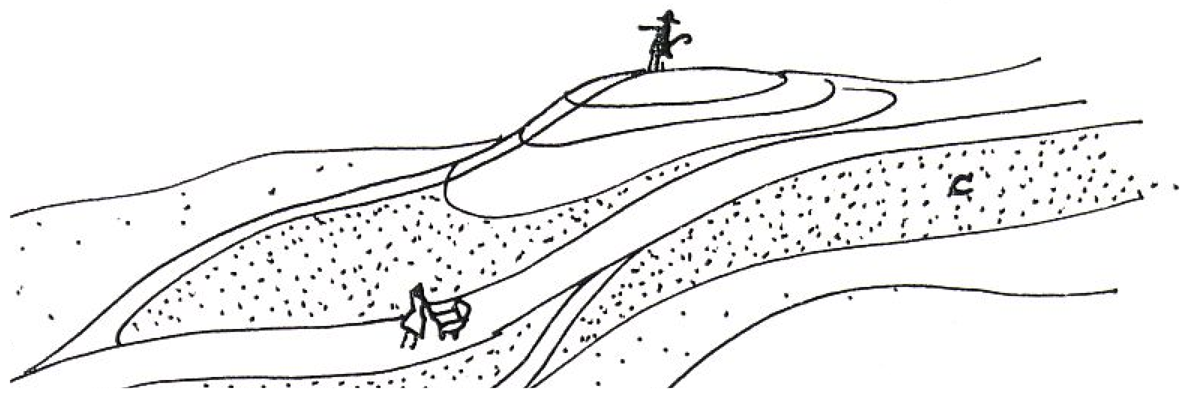
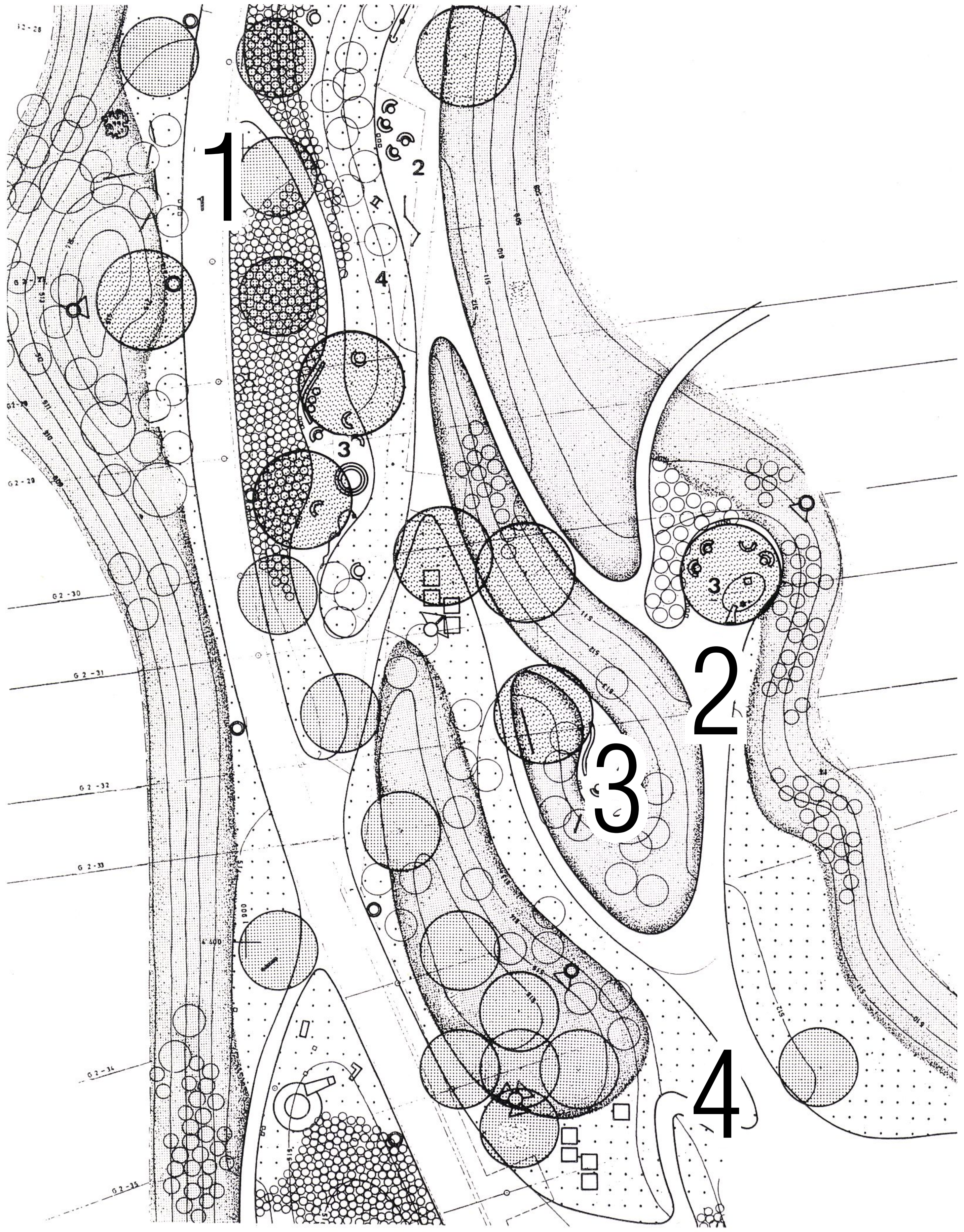
## MAIN AND SIDE PATHS - OLYMPIASTADION MUNICH, GERMANY






1. MAIN PATH
2. SIDE PATH
3. PLAY AND SEATING AREAS
4. ACCESILBLE LAWN

PARQUE ATLÁNTICO, SANTANDER, SPAIN

OLYMPIASTADION MUNICH, GERMANY

# 6. The itinerary like a principal support

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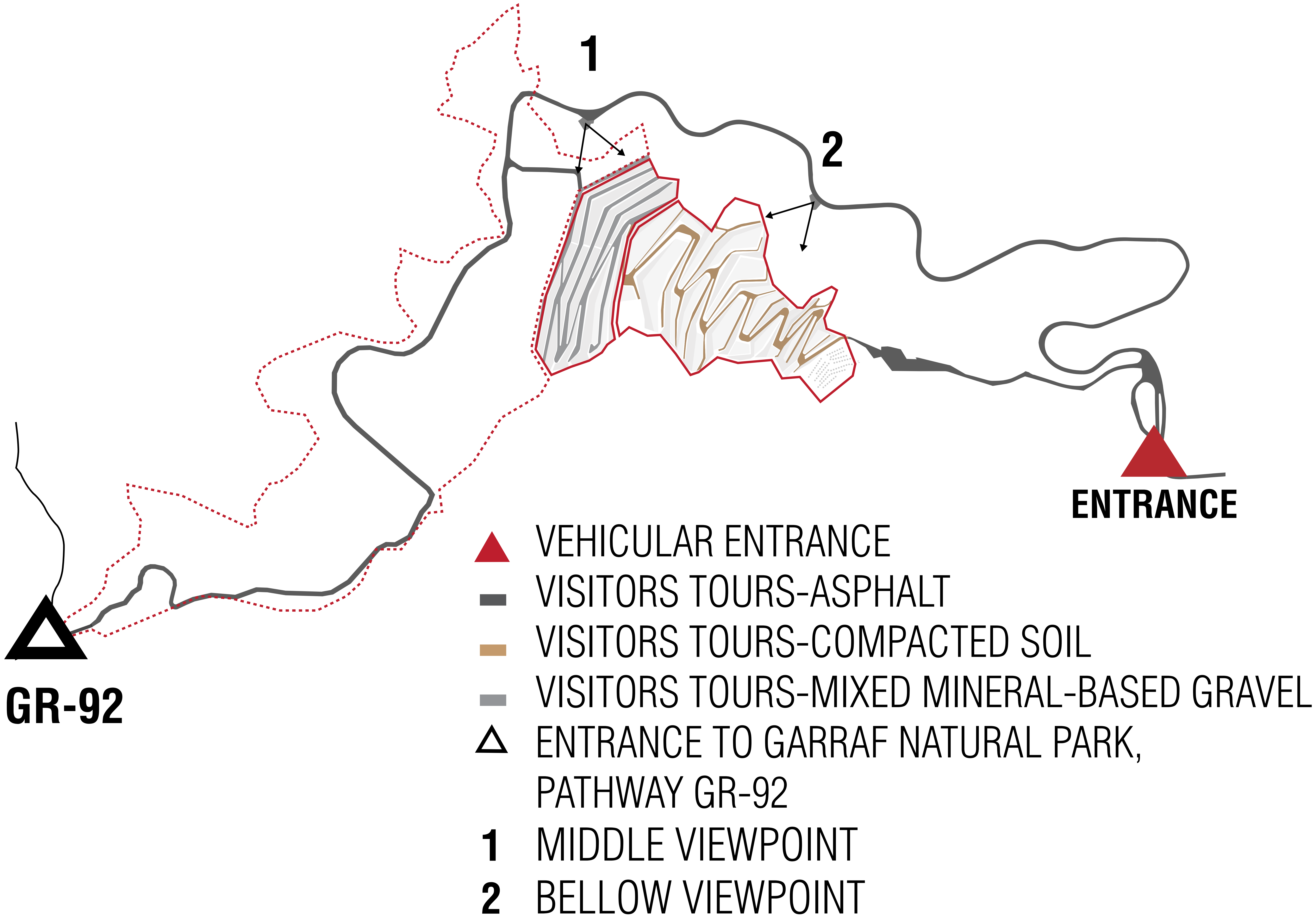
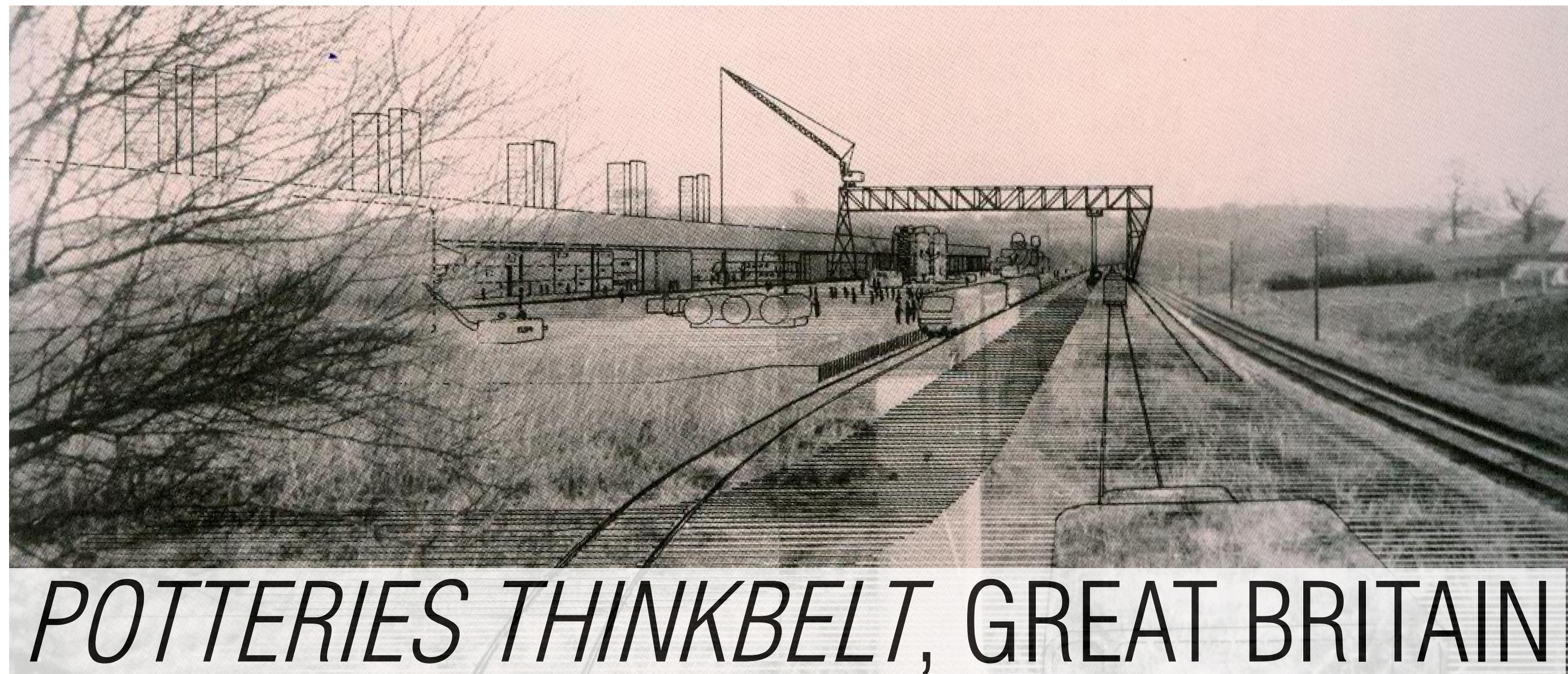
## TRAILS + TRAFFIC - EL GARRAF LANDFILL, SPAIN





EL GARRAF, SPAIN


BOTANIC GARDEN, SPAIN


*POTTERIES THINKBELT*, GREAT BRITAIN

# 7. Dealing with specific landscape values

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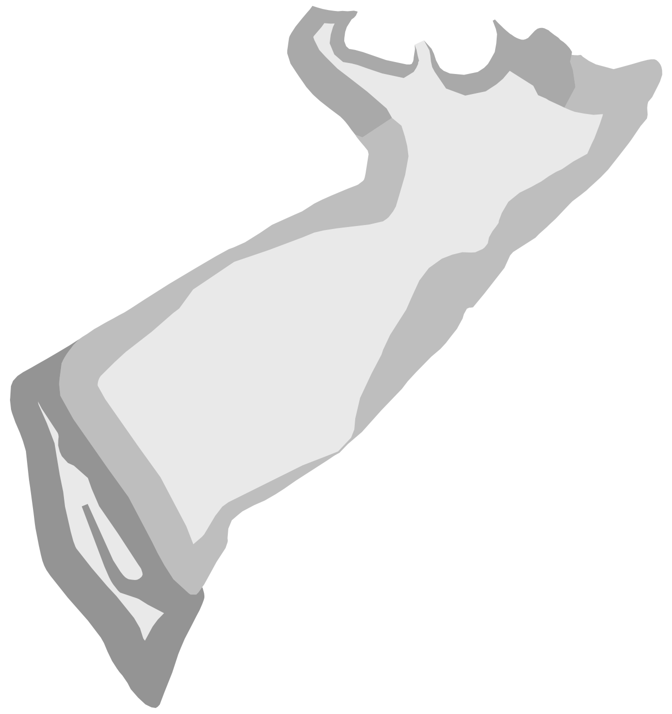
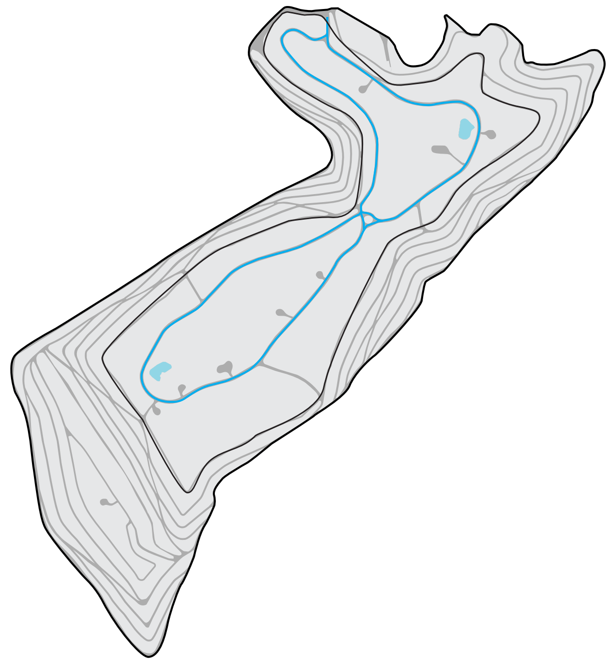
## LAYERS OF RECOVERY PROCESS - VALDEMINGÓMEZ LANDFILL

TOPOGRAPHY

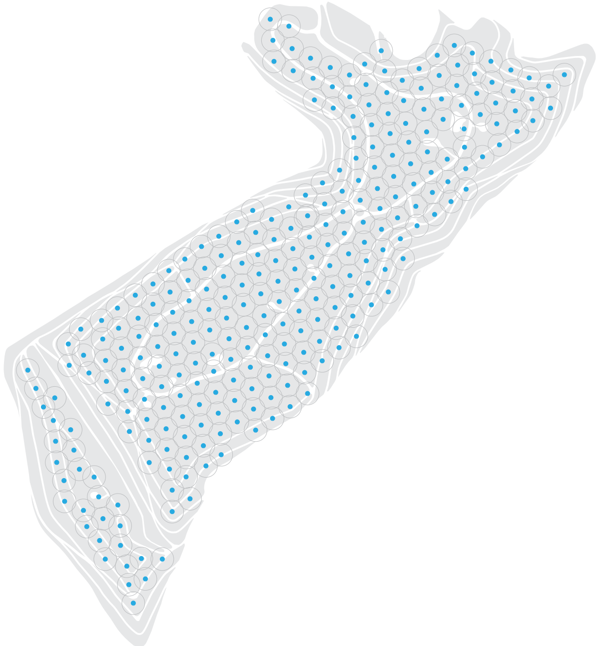


WATER SYSTEM

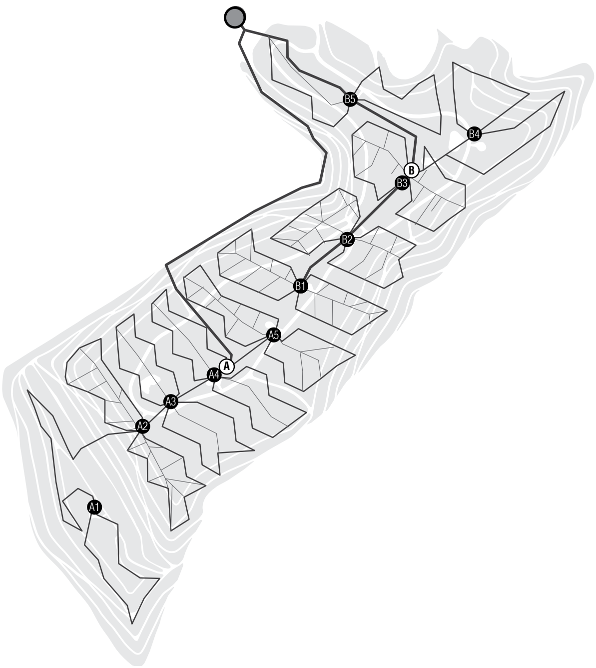
TRAILS AND TRAFFIC



BIOGAS COLLECTION WELLS



BIOGAS COLLECTION



VEGETATION

BYXBEE PARK, PALO ALTO, USA

VALDEMINGÓMEZ, MADRID, SPAIN

# 8. Vegetation. Altimetry and orientation

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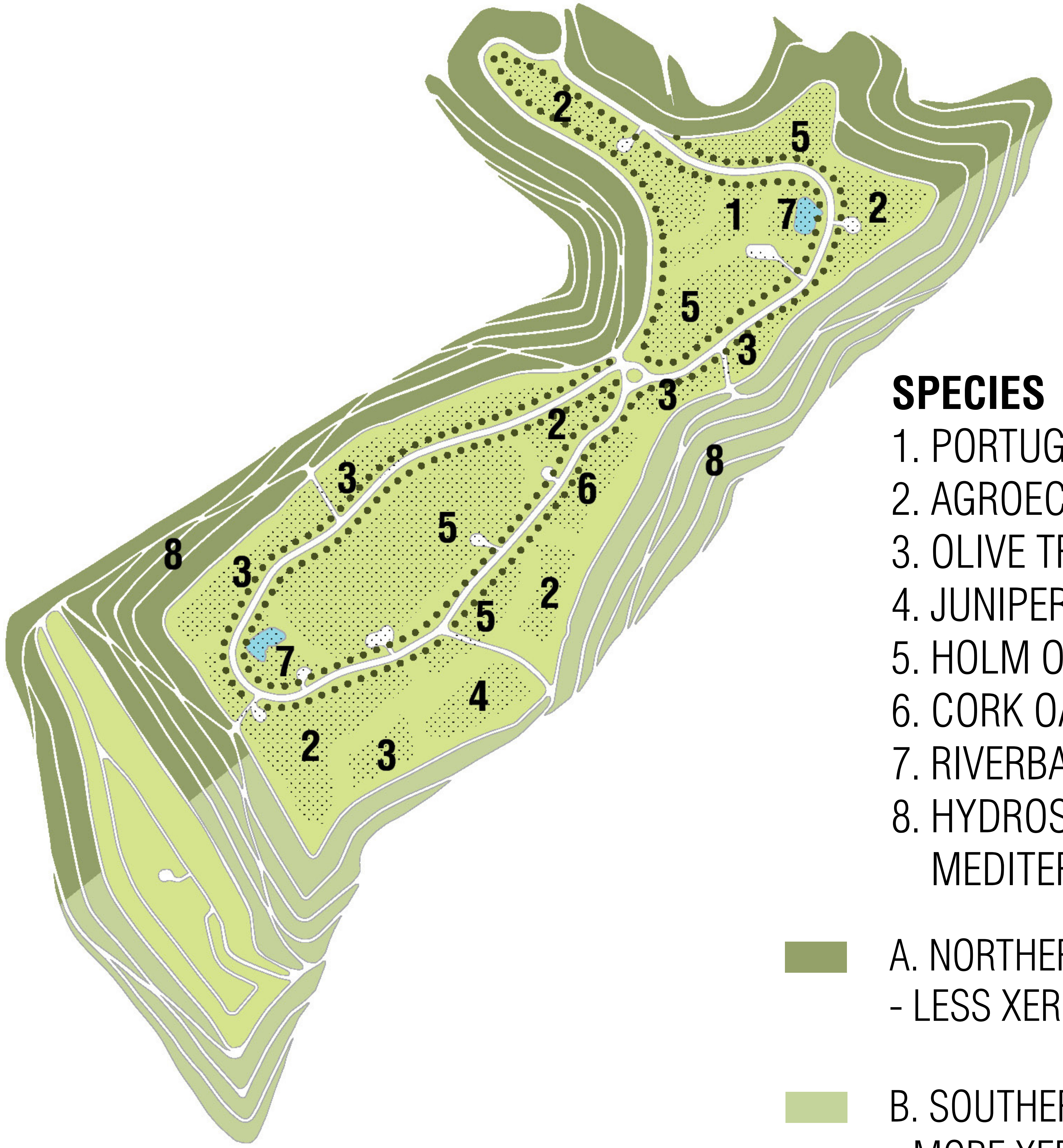
## VEGETATION - VALDEMINGÓMEZ LANDFILL



**SPECIES**

1. PORTUGUESE OAK
2. AGROECOSYSTEM
3. OLIVE TREE
4. JUNIPER TREE
5. HOLM OAK
6. CORK OAK
7. RIVERBANK VEGETATION
8. HYDROSEEDING + MEDITERRANEAN SCRUB

A. NORTHERN ORIENTATION
- LESS XEROPHILOUS VEGETATION

B. SOUTHERN ORIENTATION
- MORE XEROPHILOUS VEGETATION

# 9. New connections to natural surroundings

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BYXBEE PARK, PALO ALTO, USA

FRESH KILLS, NEW YORK, USA

EL GARRAF, BARCELONA, SPAIN

VALDEMINGÓMEZ, MADRID, SPAIN

# 10. Water problem. Water drainage systems

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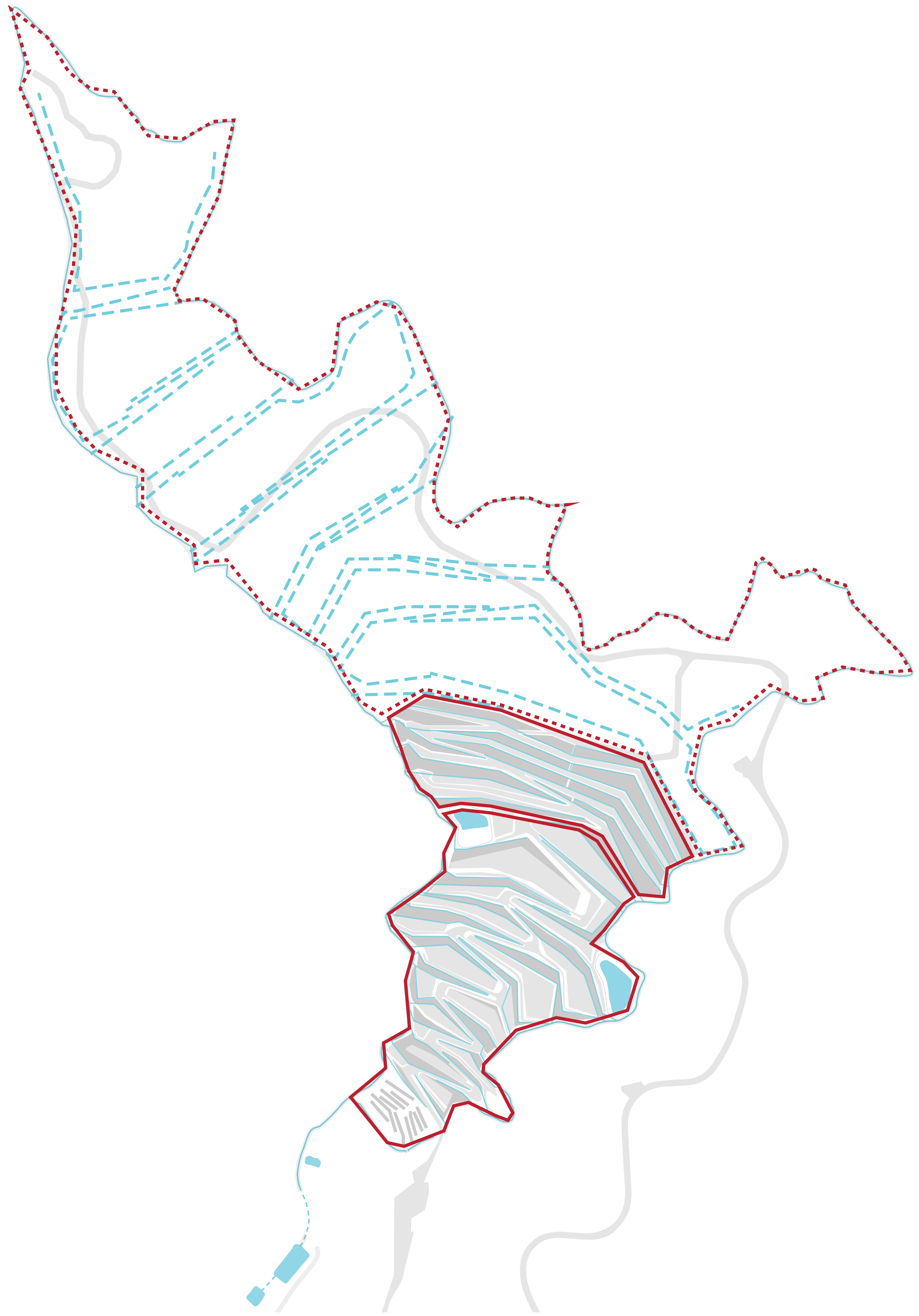
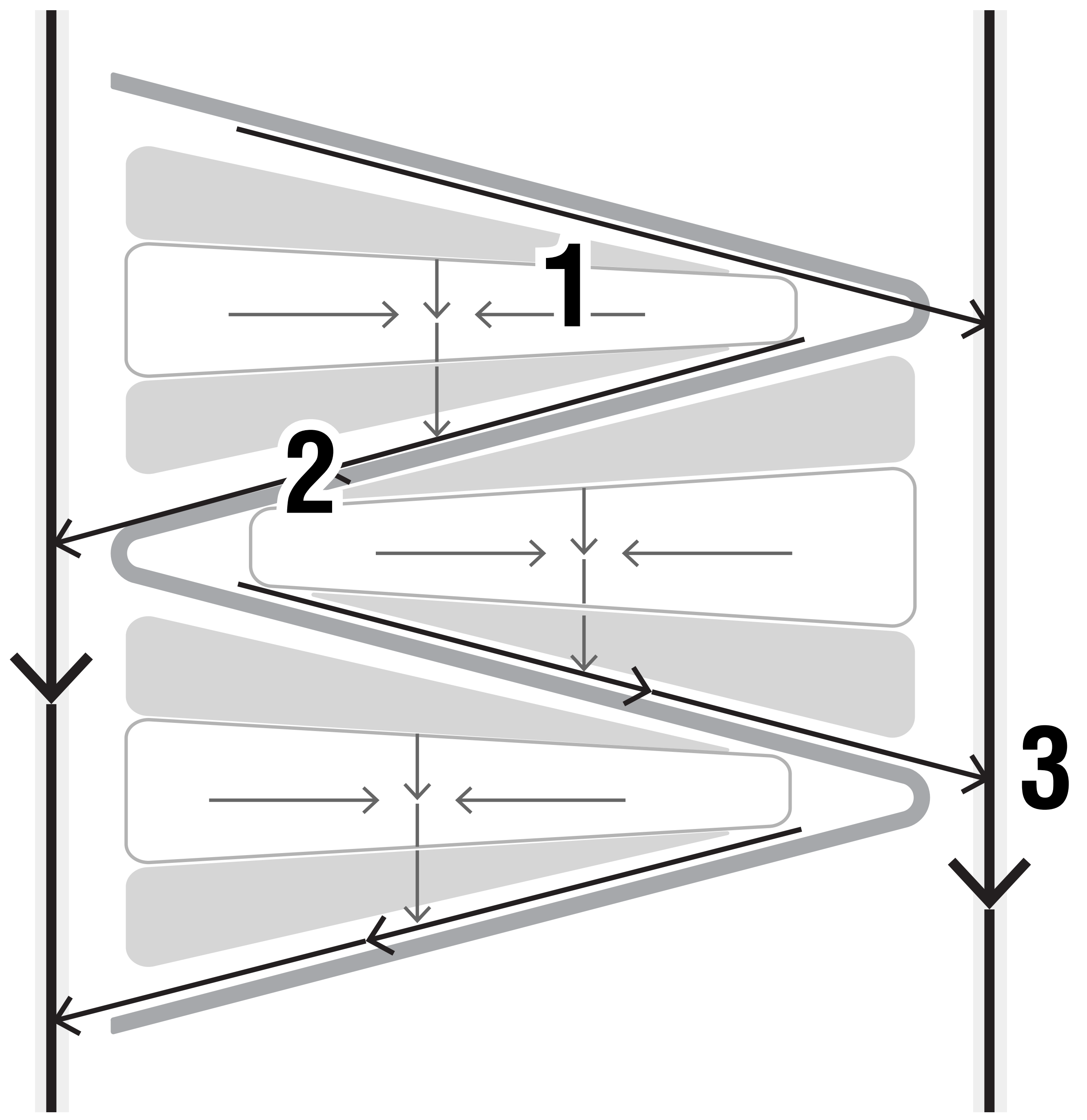
WATER DRAINAGE SYSTEMS - EL GARRAF LANDFILL, SPAIN






**SURFACE RAINWATER DRAINAGE NETWORKS**

1. SUPPORTING RAINWATER DITCH
2. RAINWATER DITCH
3. PERIMETER DUCTS

# 11. To educate and sensitize. Infrastructures of dissemination

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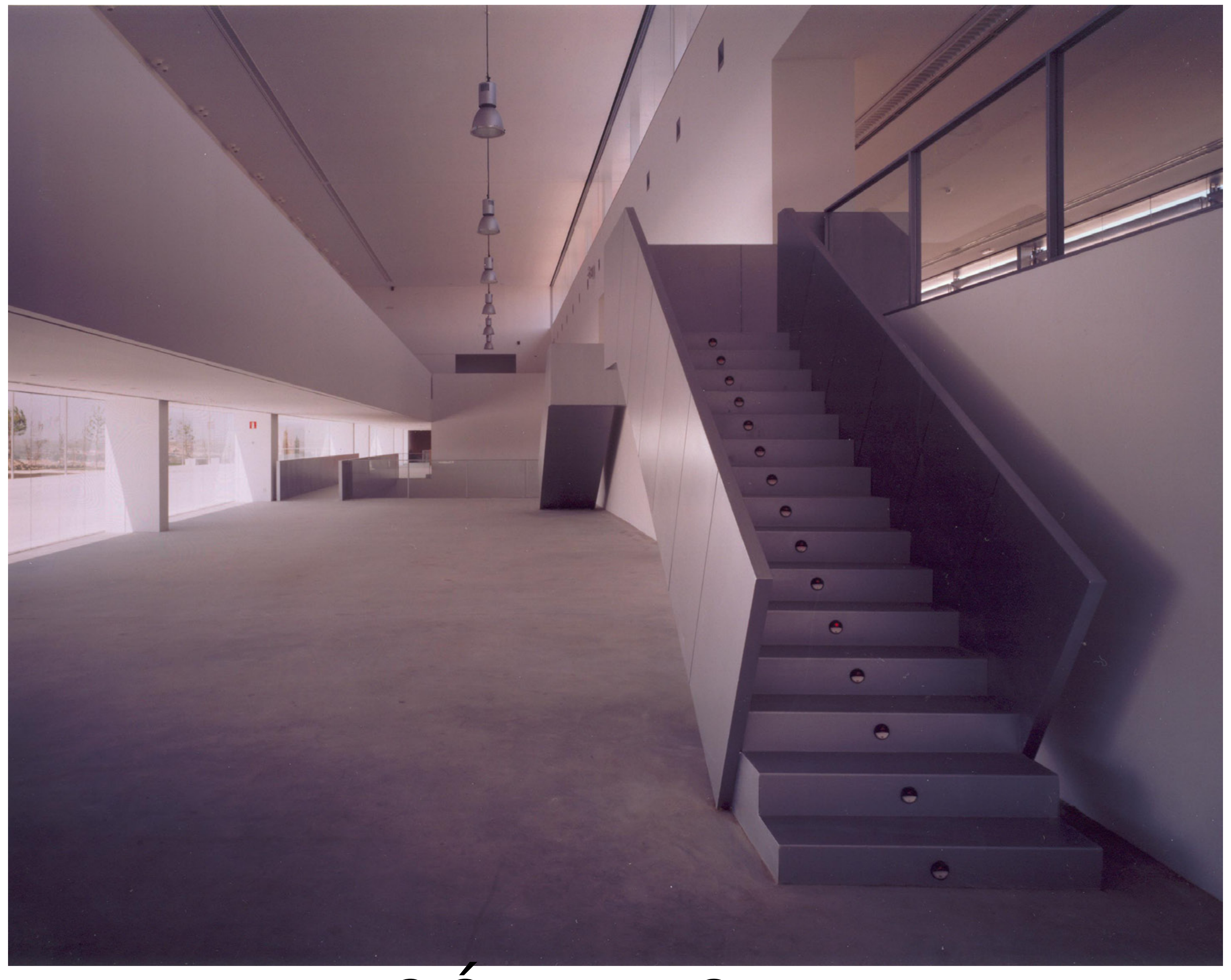
FRESH KILLS, NEW YORK, USA



VALDEMINGÓMEZ, SPAIN

EL GARRAF, SPAIN

# 12. The climate. Seasonal screenings

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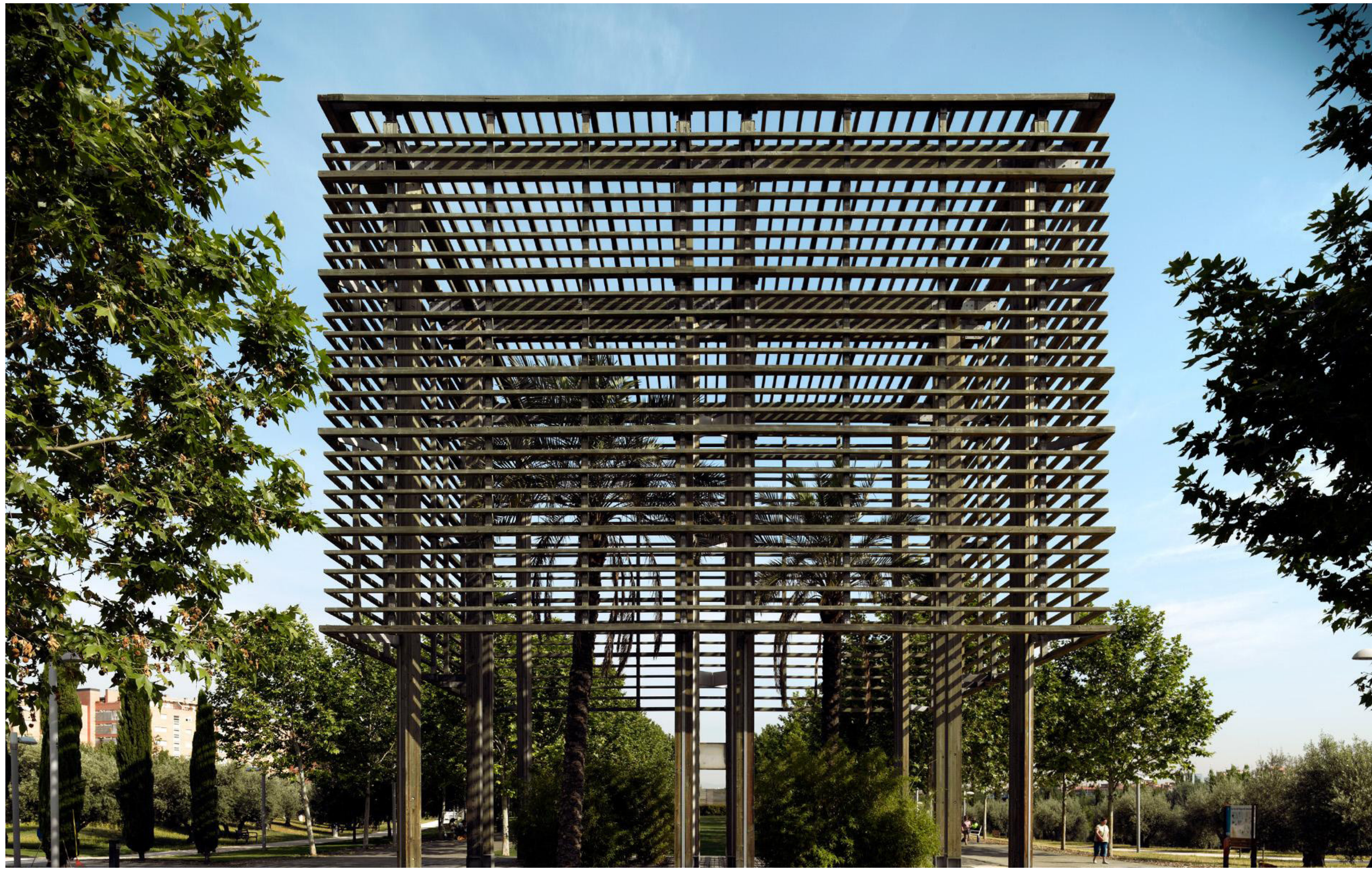
ARIEL SHARON PARK, TEL AVIV, ISRAEL



MANZANARES LINEAL PARK, MADRID, SPAIN

# 13. Creating a new landscape identity

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BYXBEE PARK, PALO ALTO, USA

NORTHALA FIELDS PARK, ENGLAND

# 14. The geometry like a layout instrument

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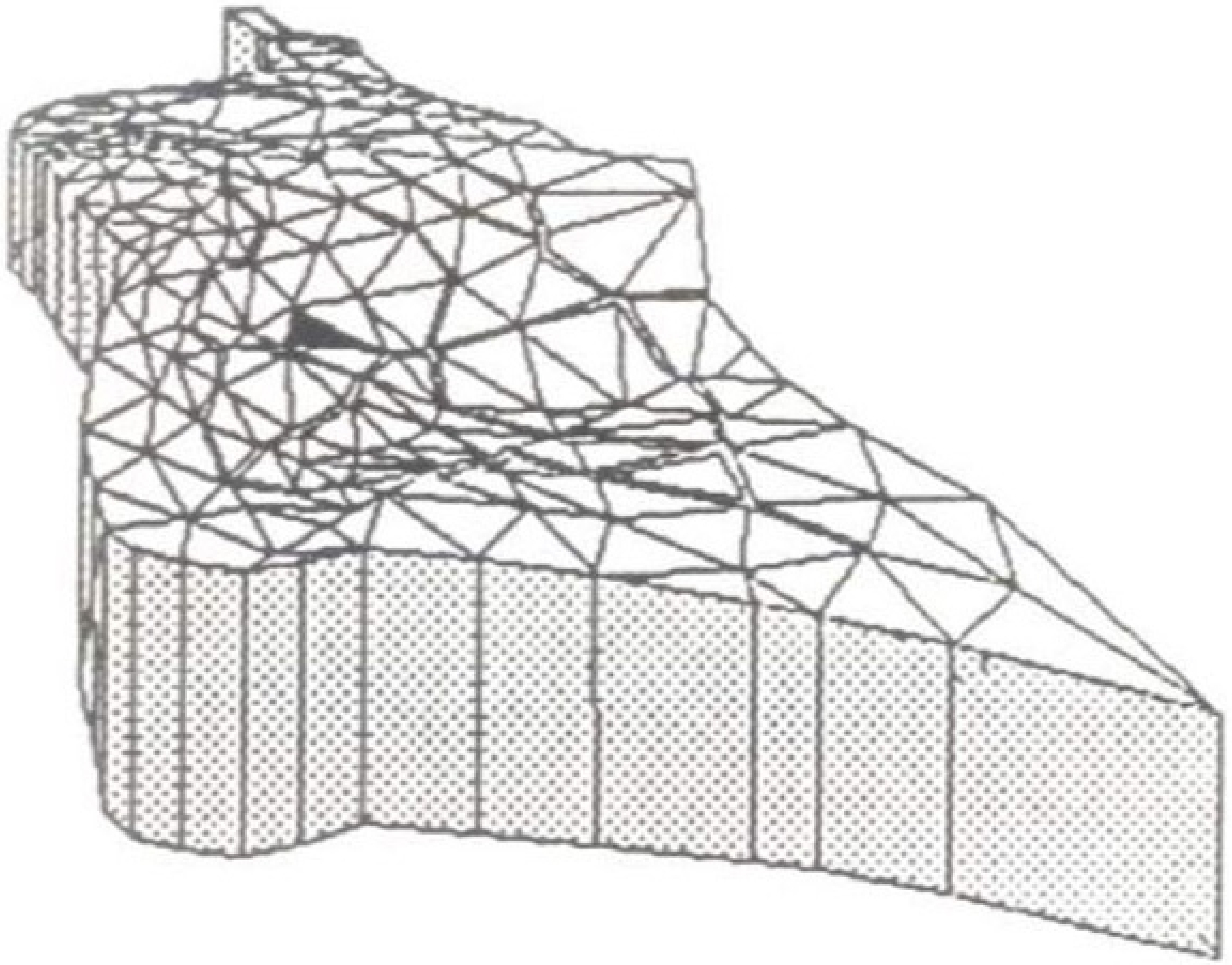
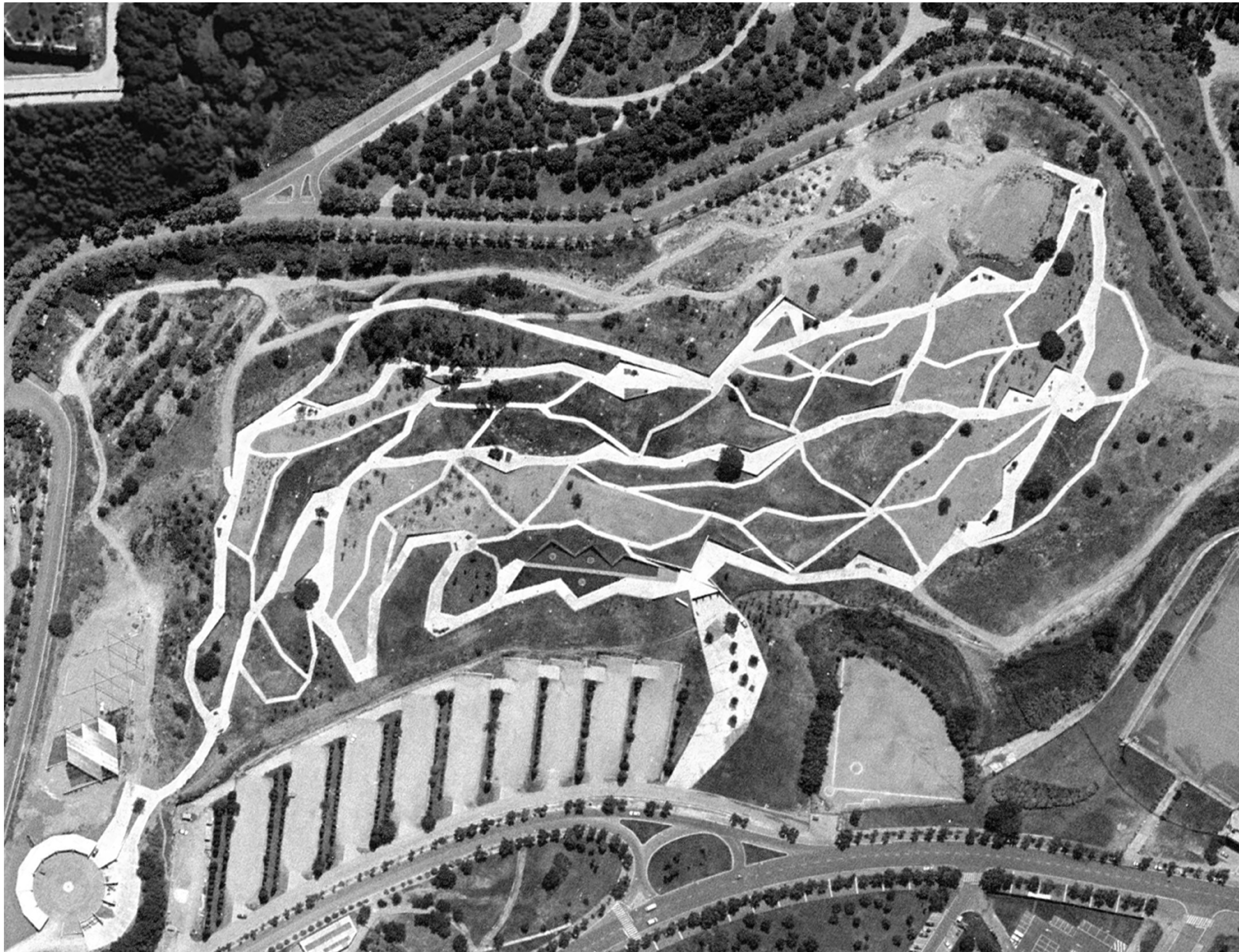




TRIANGULAR GEOMETRY -
BOTANIC GARDEN
BARCELONA, SPAIN

# 15. Learning from the agriculture

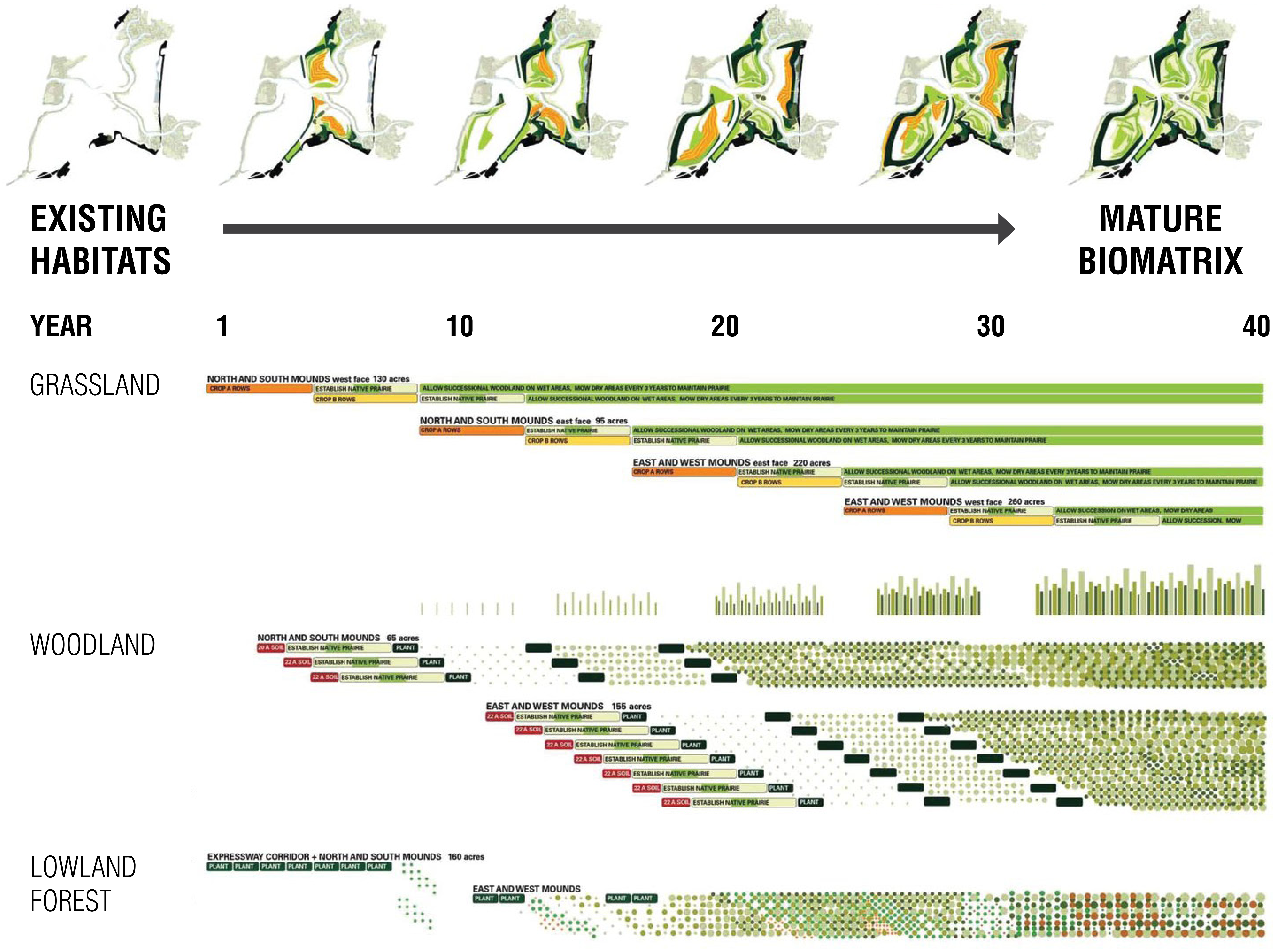


EL GARRAF, BARCELONA, SPAIN

# 16. Nature and the city. Hybridization over time



## CULTIVATING NEW HABITATS OVER TIME - FRESH KILLS PARK, NEW YORK, USA



# 17. Operations with temporary character

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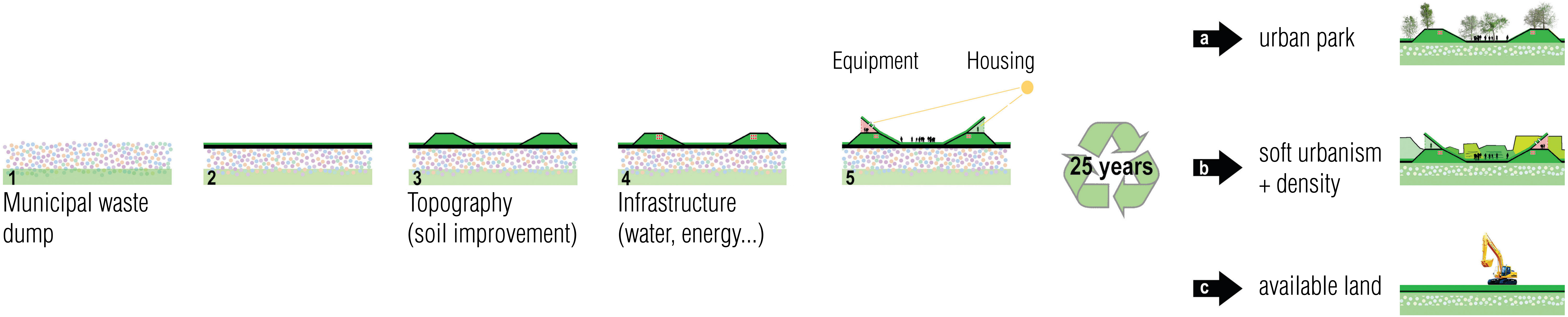
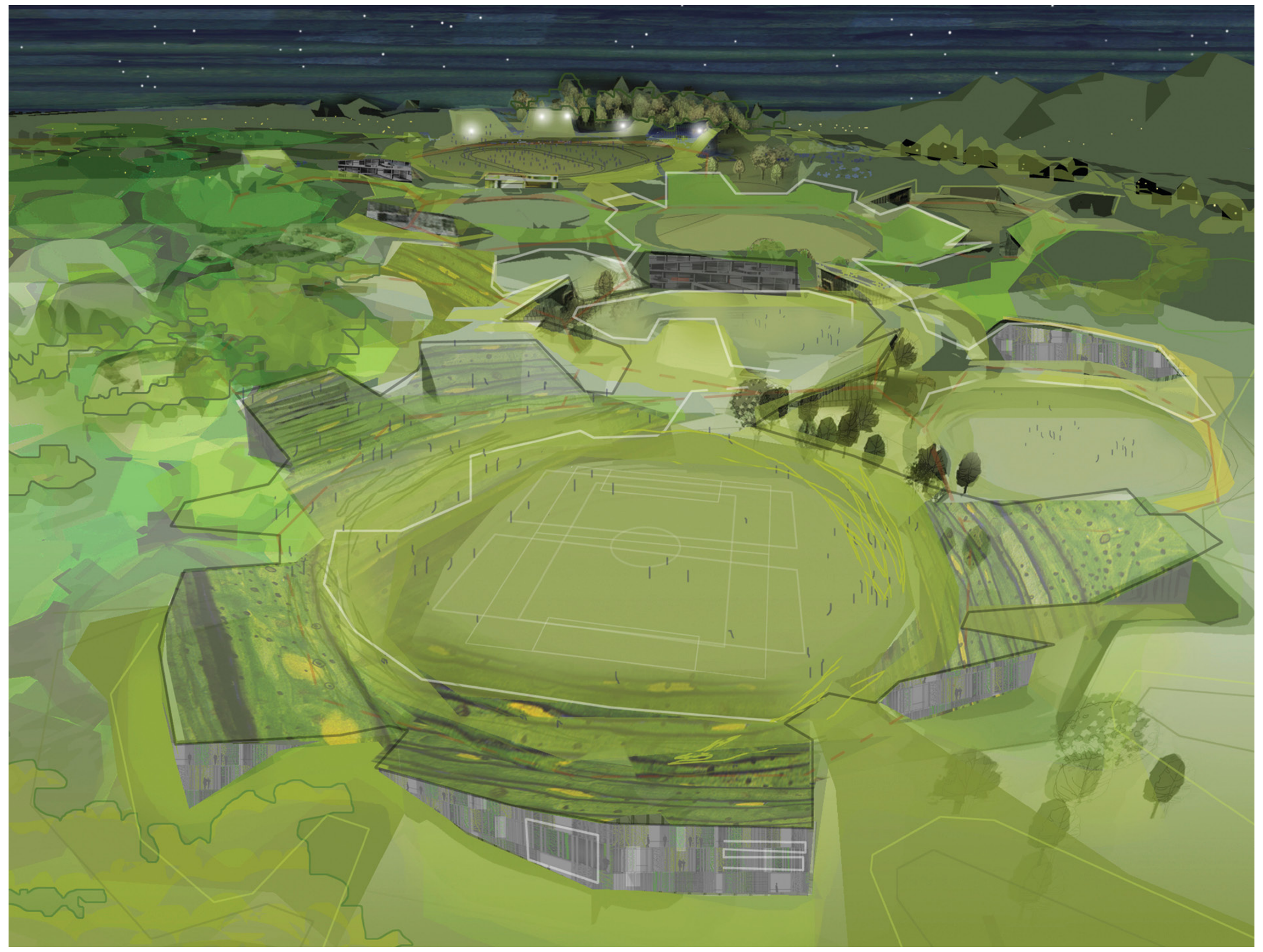
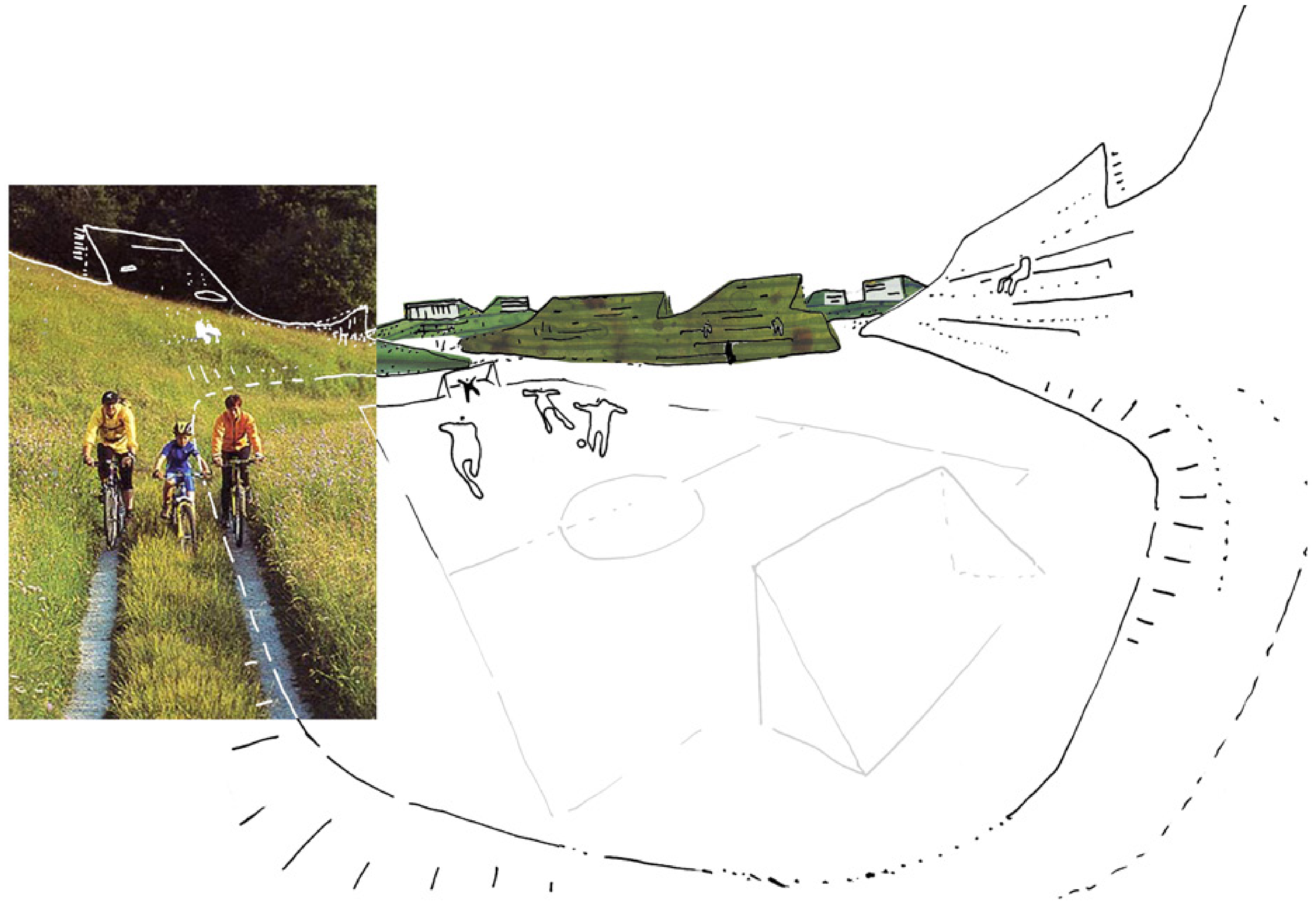
## TEMPORARY HOUSING, MARIBOR LANDFILL, SLOVENIA (COMPETITION, ECOSISTEMA URBANO)





# 18. Slow operations. Natural processes

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EL GARRAF, SPAIN

# 19. Optimise resources

CONCENTRATED AND PUNCTUAL OPERATIONS TO PROVOKE CHANGES OVER TIME

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# 20. Maintain the active boundary expectant

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VALDEMINGÓMEZ, MADRID, SPAIN