Espaces ouverts climatiques : Re-think Athens, Catharijnesingel à Utrech, et Parc de la Sennette à Bruxelles

Klimatologische open ruimten: *Re-think Athens, Catharijnesingel in Utrecht, en Park van de Kleine Zenne in Brussel*

Pierre-Alexandre Marchevet

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be sustainable

Climatic Open spaces

ESPACES OUVERTS, LEVIERS DE LA VILLE EN TRANSITION

Conférence Be Sustainable, Bruxelles

03/10/2023

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DESIGNING

MEANINGFUL

PLACES

73% of Europe’s population lives in cities at the moment

In 2050 it is estimated to be 82%

Source: United Nations

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DENSELY POPULATED CITIES
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LIVEABLE CITIES?
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Healty urban living
Creating places that have a positive impact on people and nature

Healthy people

- lokale beleefbare voedselproductie
- actieve mobiliteit, sport en spel

Healthy communities

- Sociaal en inclusief
- Betrokken; bottom-up en participatie
- Levendig; gevarieerd en passend programma

Healthy environment

- Schone lucht, water en grond
- Klimaatadaptatie
- Biodiversiteit
- Duurzaamheid

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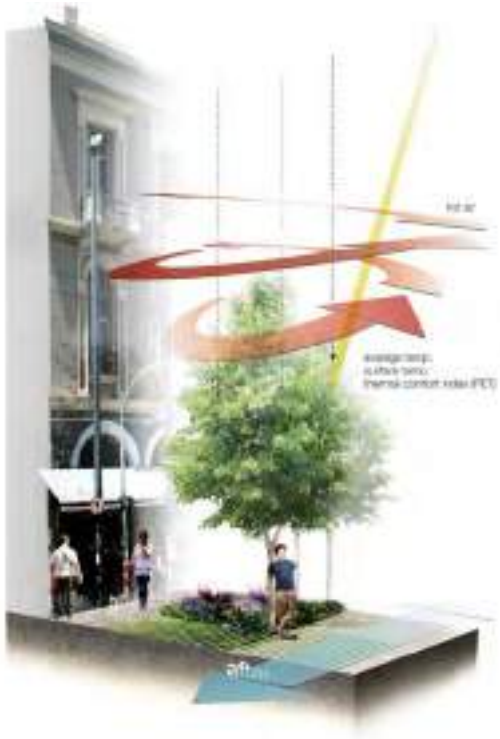
Call for a new approach
Components of the liveable city

1. HEALTHY URBAN LIVING



2. CLIMATE ADAPTATION

3. PEDESTRIAN FRIENDLY CITIES AND INTEGRATED MULTIMODALITY

4. DYNAMIC, VIBRANT AND INCLUSIVE PUBLIC SPACES

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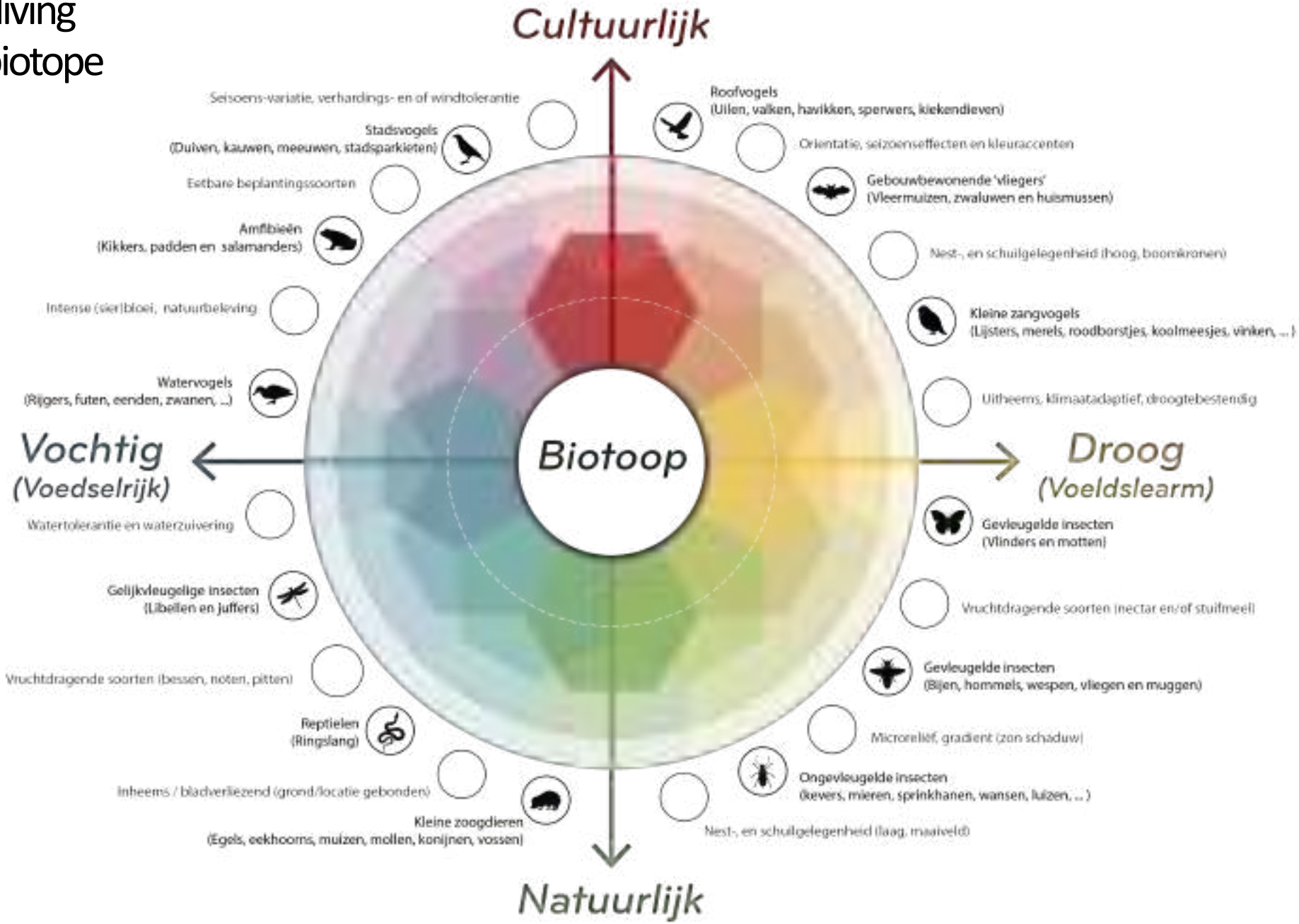
Healty urban living
The city as a biotope



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4 PROJECTS

RETHINK ATHENS

CATHARIJNSINGEL UTRECHT

NIJVERDAL GROTESTRAAT

KLEINE ZENNEPARK

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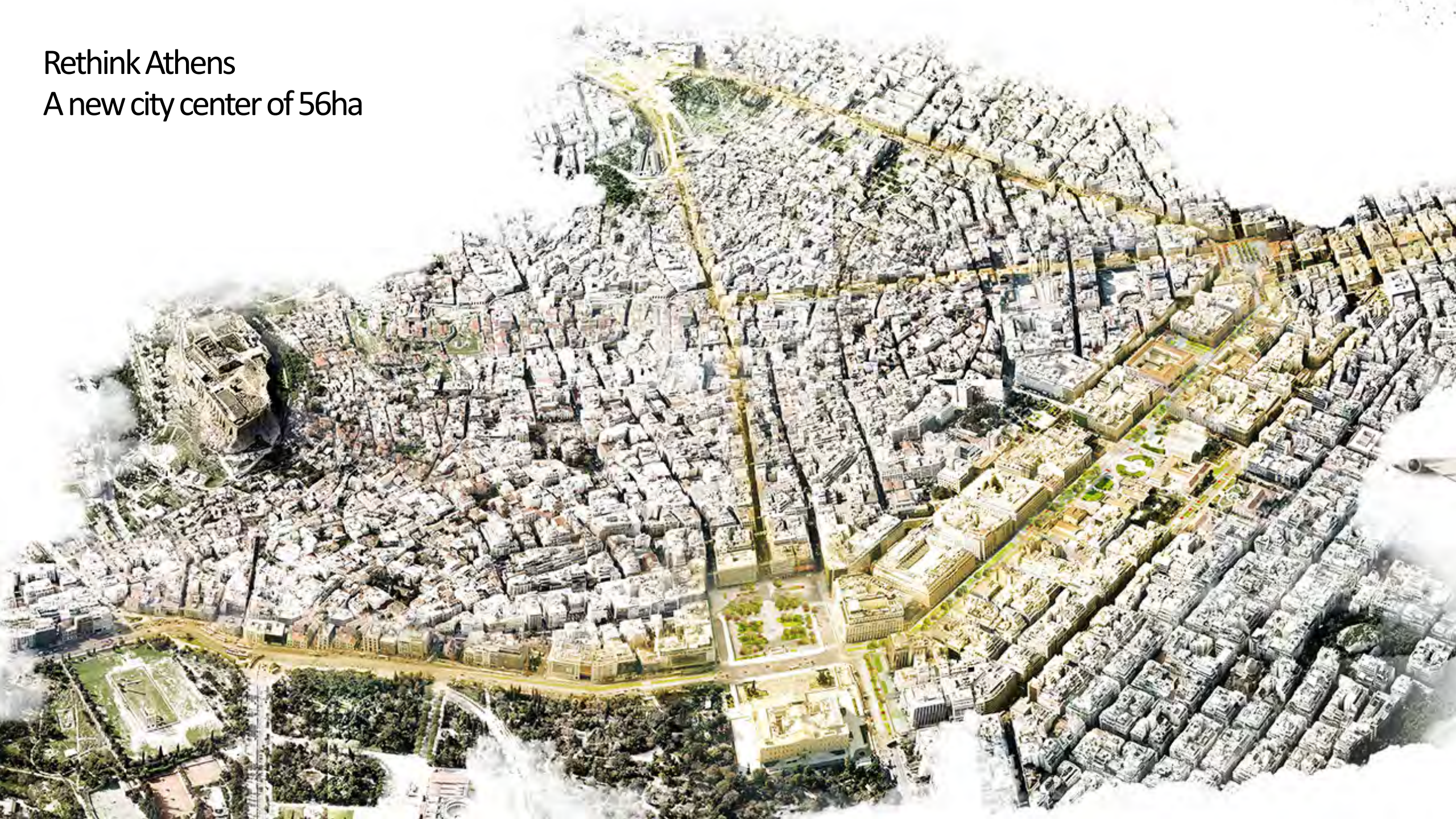
One step beyond | Rethink Athens

Greece | 2014-2019

Rethink Athens
A new city center of 56ha



Rethink Athens

Panapestimiou Av. | existing situation

Rethink Athens
Public space masterplan

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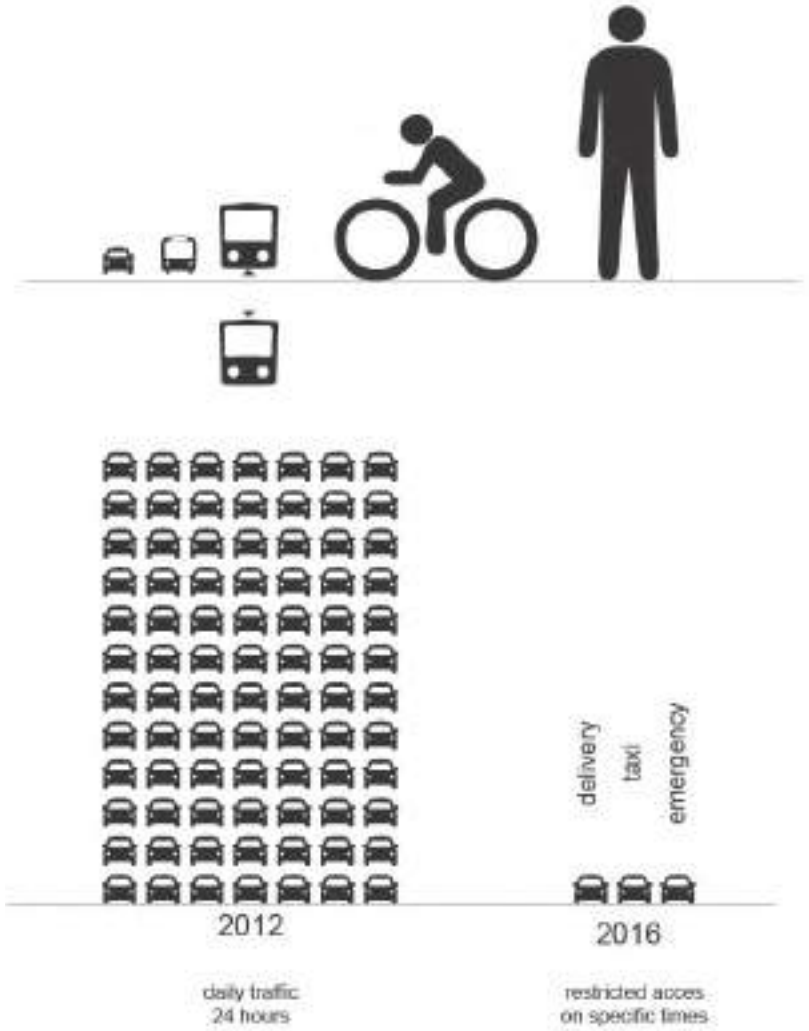
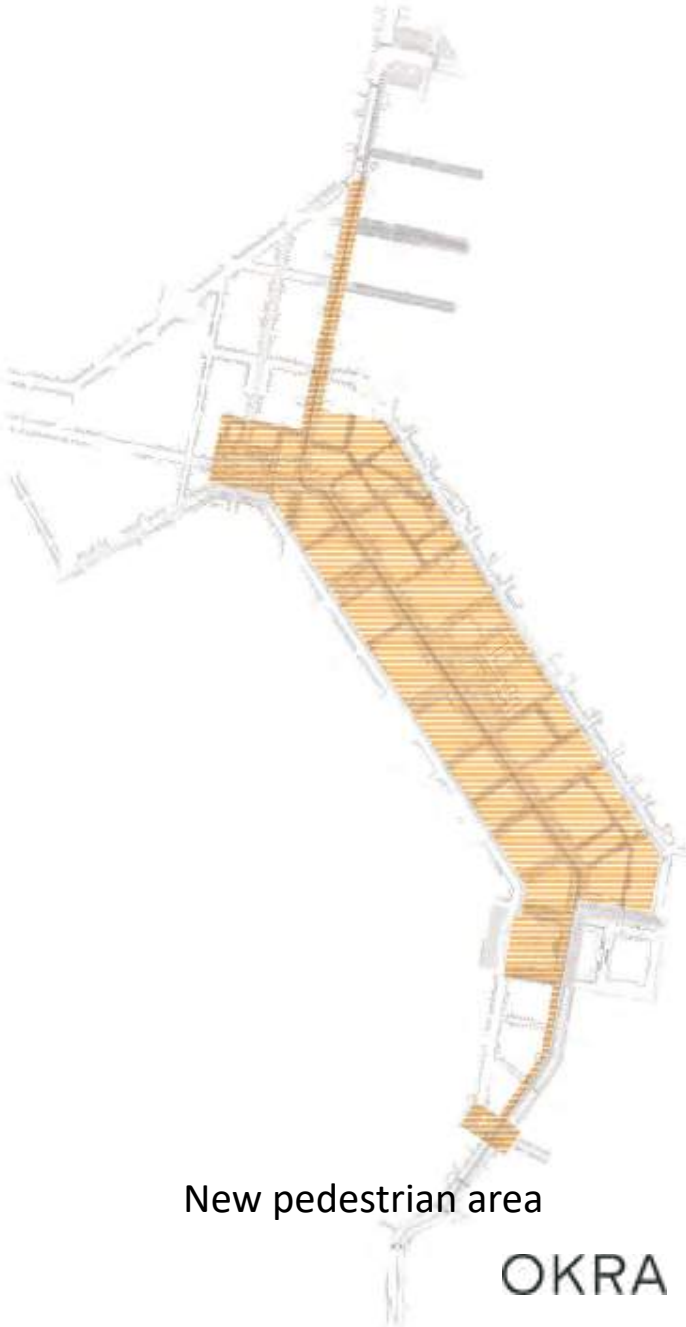
Rethink Athens
Movement and accessibility



Existing

Proposal



New pedestrian area

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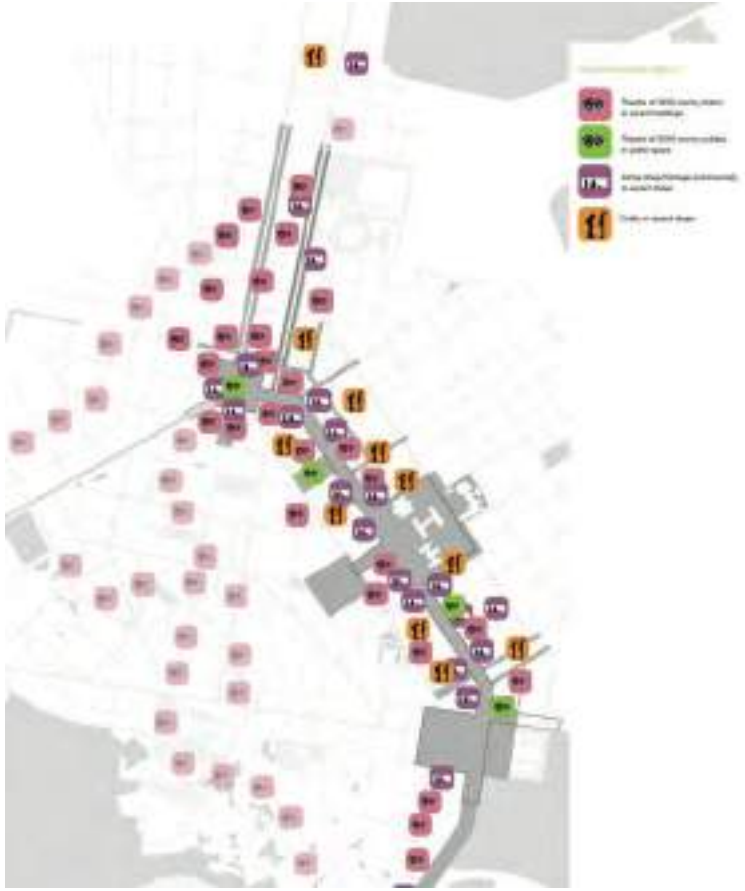
Rethink Athens
From accessibility to activation

MOVEMENT STRATEGY

FOCUS ON ACTIVE MOBILITY
- New tramway line
- Extensive bike path network
- Enlarge pedestrian area, sidewalks
- Creation of new pedestrian crossings



ACTIVATION STRATEGY

THEATRE OF 1000 ROOMS :
- In public space
- Commercial frontages
- Change of functions of vacant buildings

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Rethink Athens
Movement and accessibility

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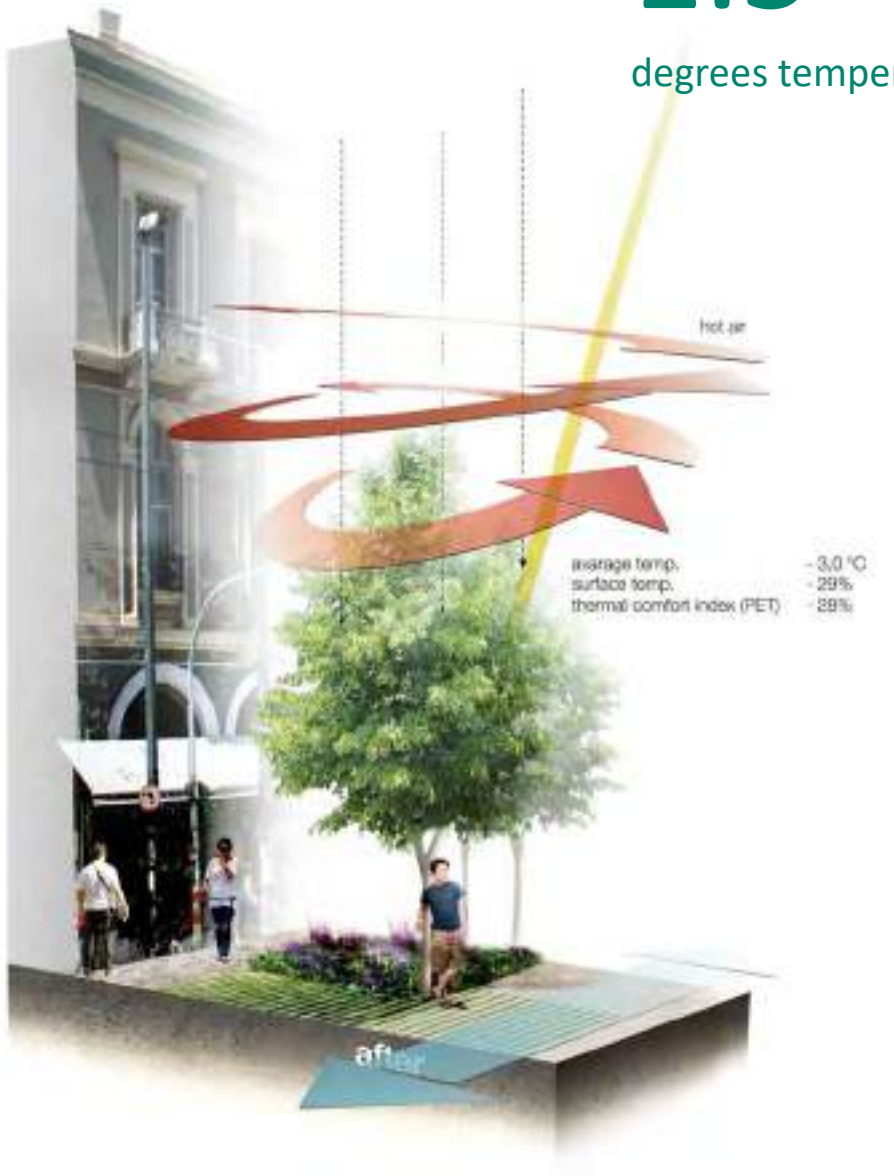
Rethink Athens
Climate comfort strategy



1.5 - 3.0

degrees temperature reduction

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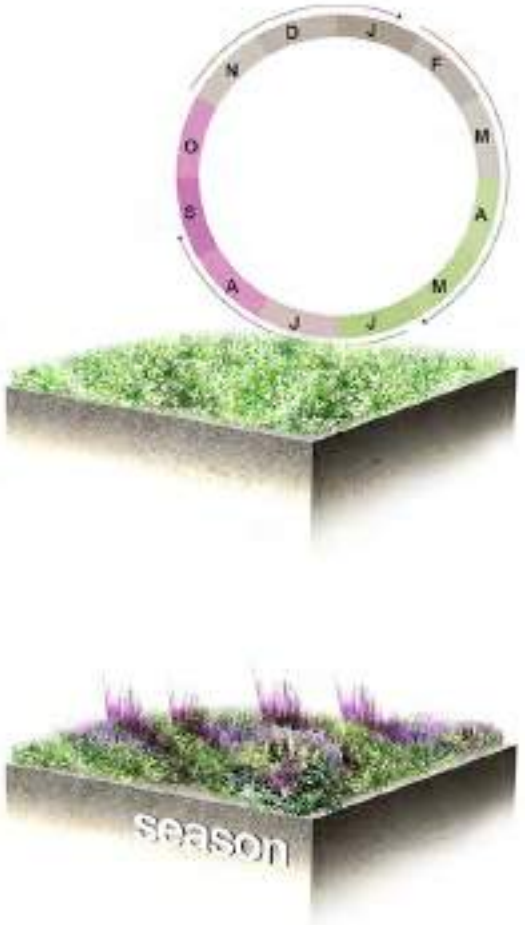
Rethink Athens

Green network : planting strategy



+ 800 trees

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Rethink Athens

Tree planting strategy : how to expand the existing tree cover

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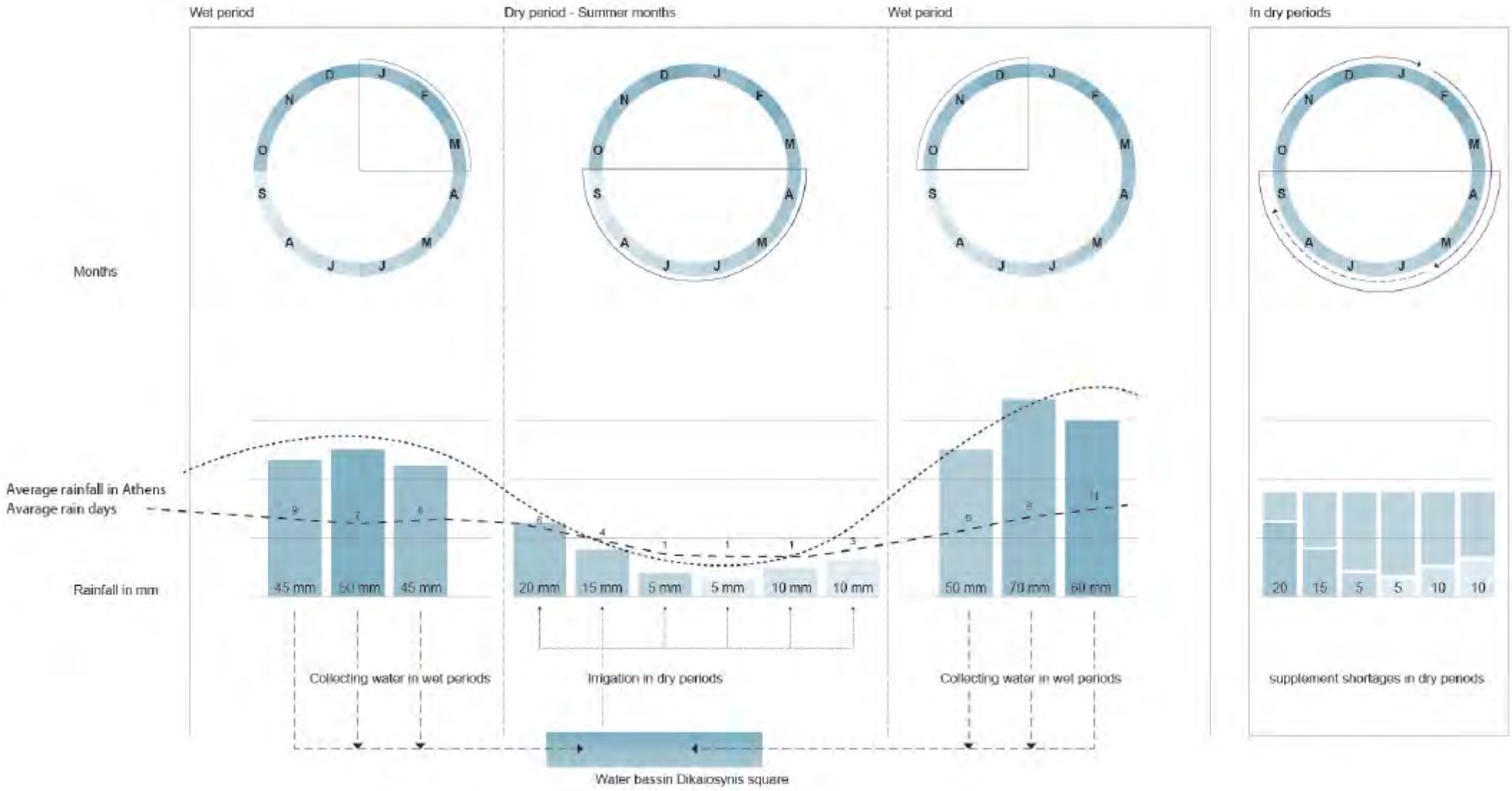
Rethink Athens
Green network

Rethink Athens
Blue network – a closer look at the potential ressource



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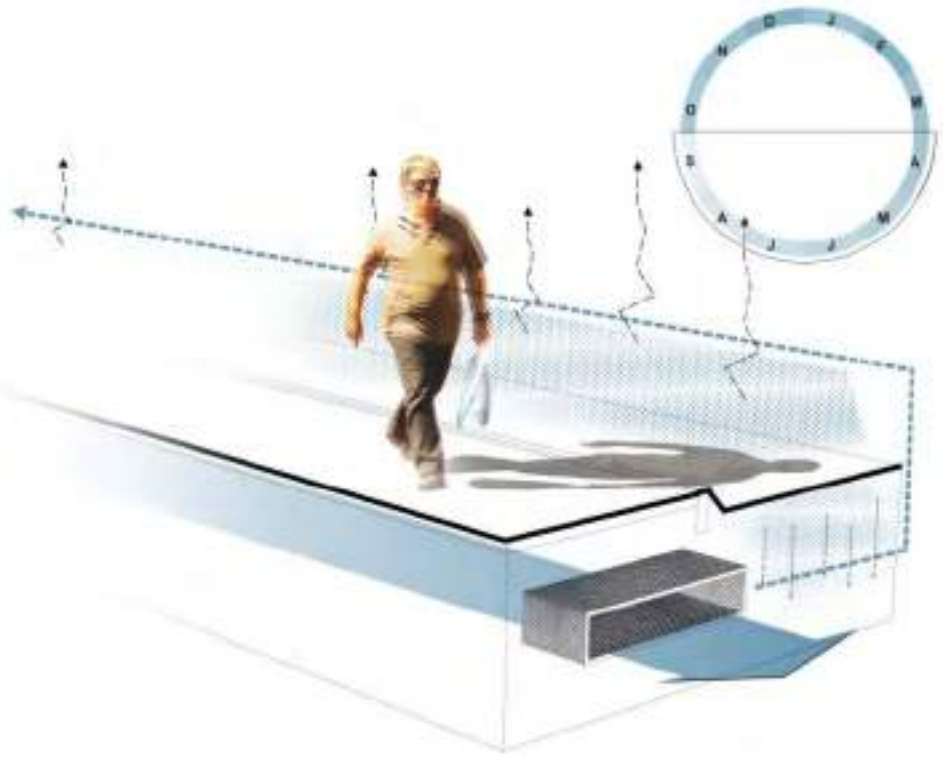
Rethink Athens
Blue network : timely use of water

Water retention in wet season



Irrigation in dry season

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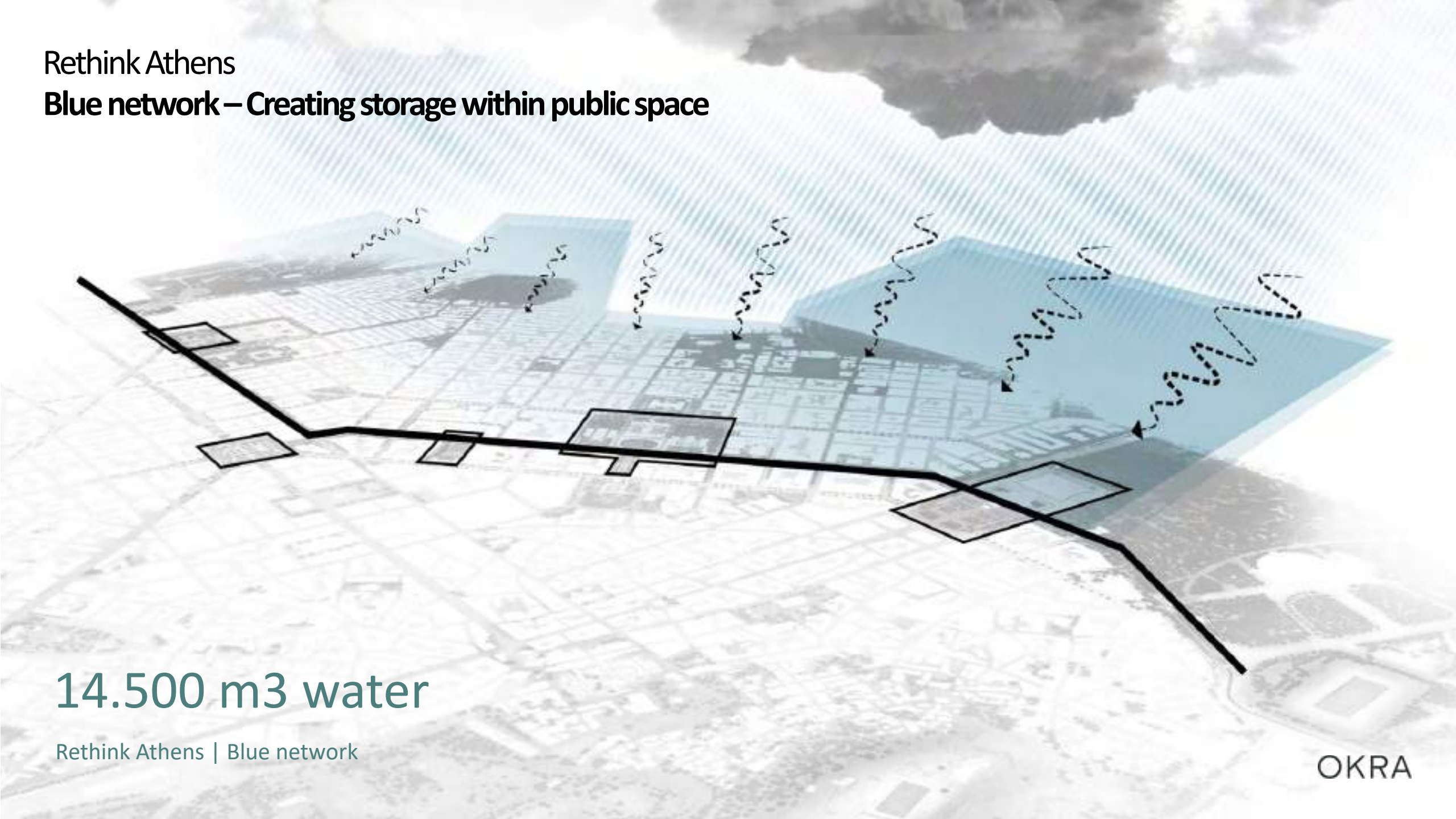
Rethink Athens

Blue network – Creating storage within public space



14.500 m3 water

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Rethink Athens
Blue network

Rethink Athens
Panapestimiou Av. | existing situation

Rethink Athens

Panapestimiou Av. | Reclaiming road space for urban life

Rethink Athens
Basis profile

> Defining the optimal profil in relation to it’s exposure

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Rethink Athens
Omonia square

Rethink Athens
Omonia square | project

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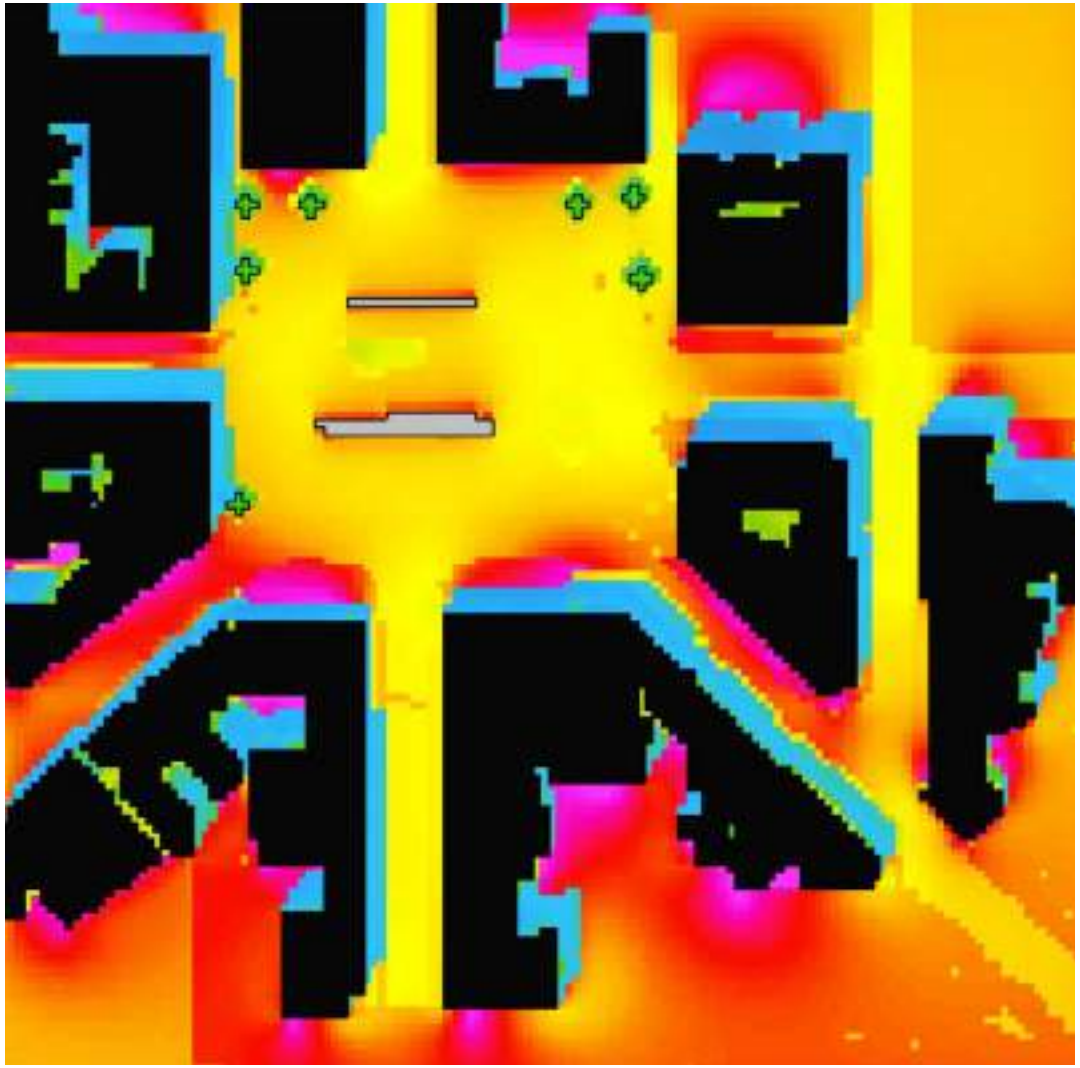
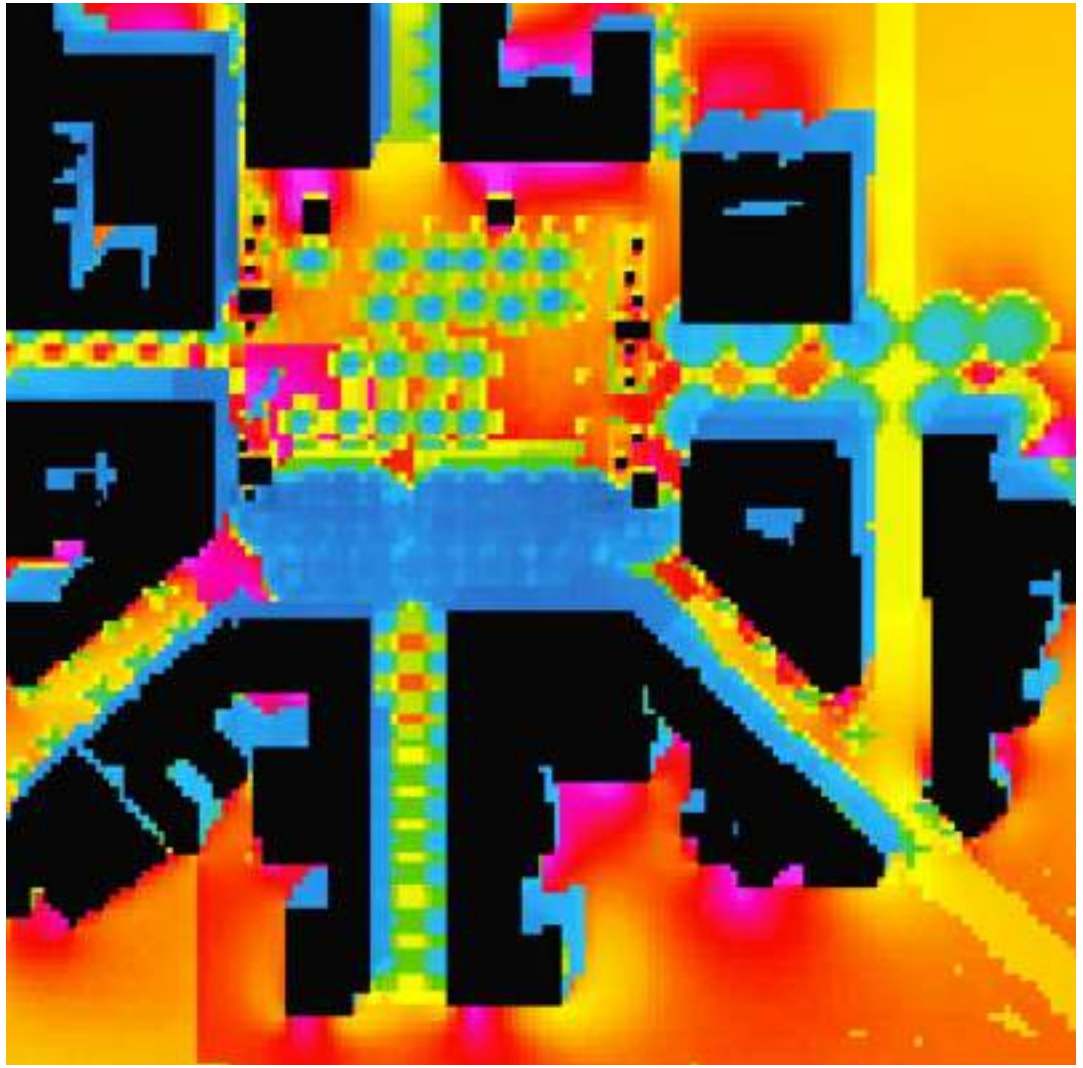
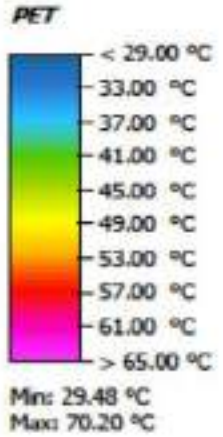
Rethink Athens
Climate simulations (existing / project)

Rethink Athens
Climate simulations (existing / project)







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Catharijnesingel Utrecht

Heritage and climate adaptation | The Netherlands

Catharijnesingel Utrecht
From urban highway to green-blue lung

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Catharijnesingel Utrecht
History

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Catharijnesingel Utrecht
Values

Identity of Utrecht

blue veins of the city

city park for the inner city

Urban connections

front garden of the residents

climate adaptive carrier

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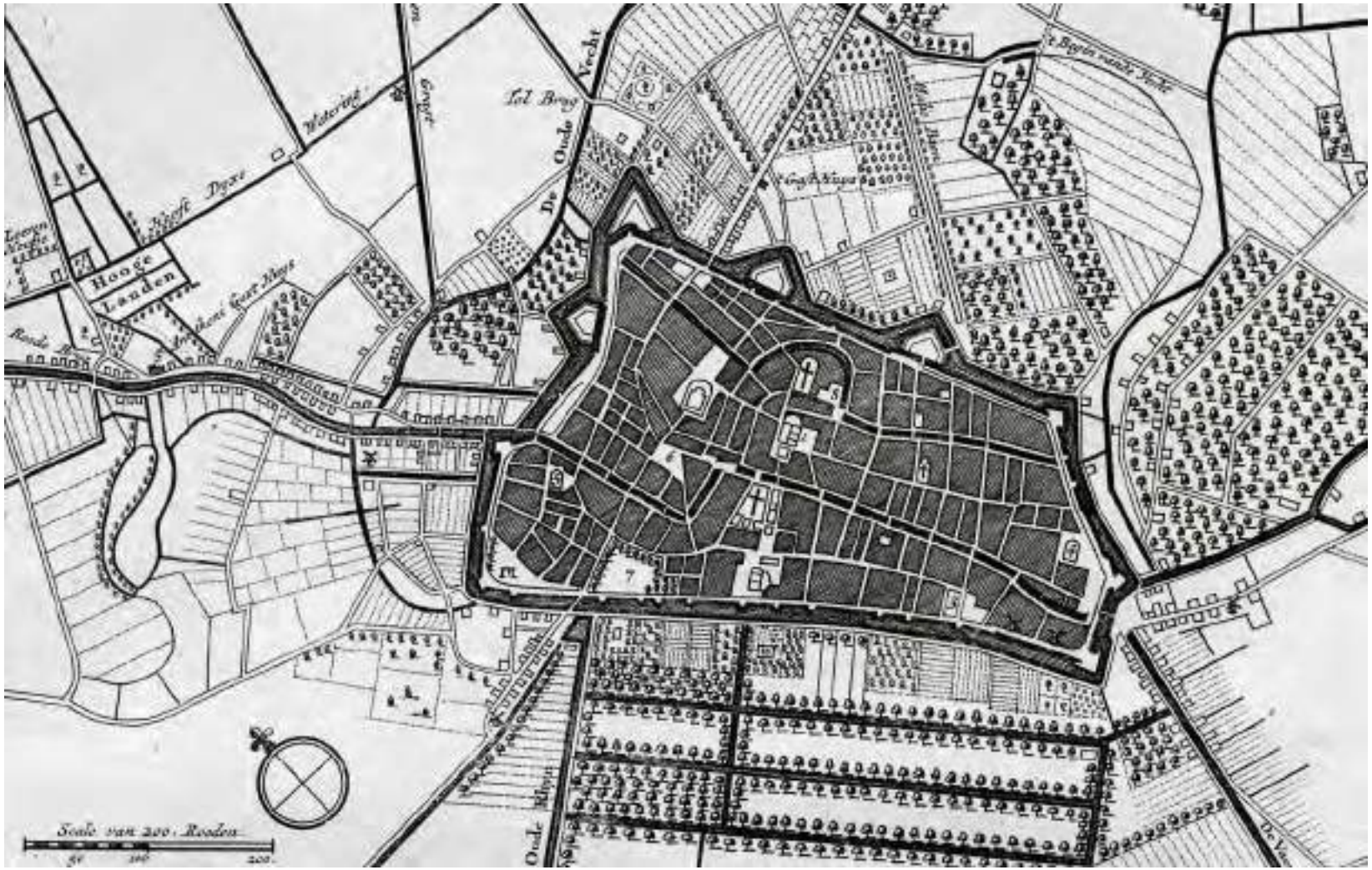
Catharijnesingel Utrecht
Expansion of the historic city – Moreelse 1665



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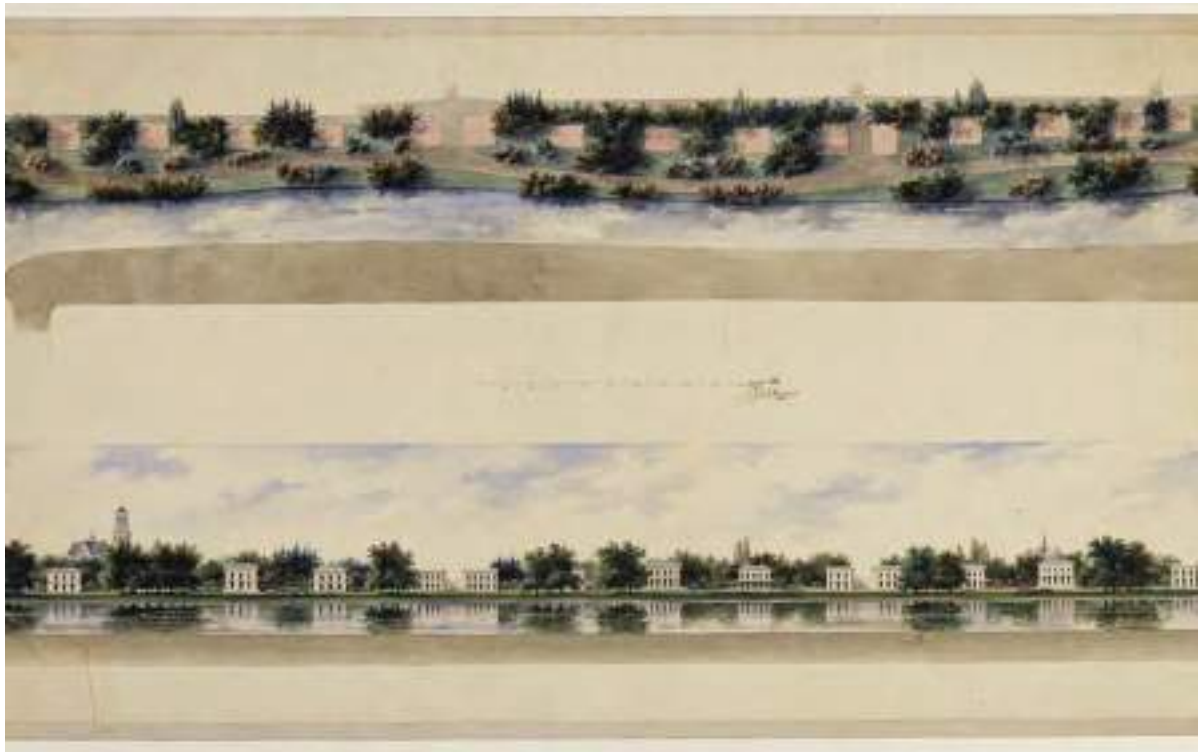
Catharijnsingel Utrecht
Before 1960
JAN

Catharijnsingel Utrecht
Construction works 1970

Catharijnesingel Utrecht
End of construction, circa 1975

Catharijnsingel Utrecht
Existing situation 2015

Catharijnesingel Utrecht
Design principles of 200 y old Zocher park



Original designs by zocher

Reinterpretation of zocher for today

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Catharijnesingel Utrecht
Preliminary design (existing / project)

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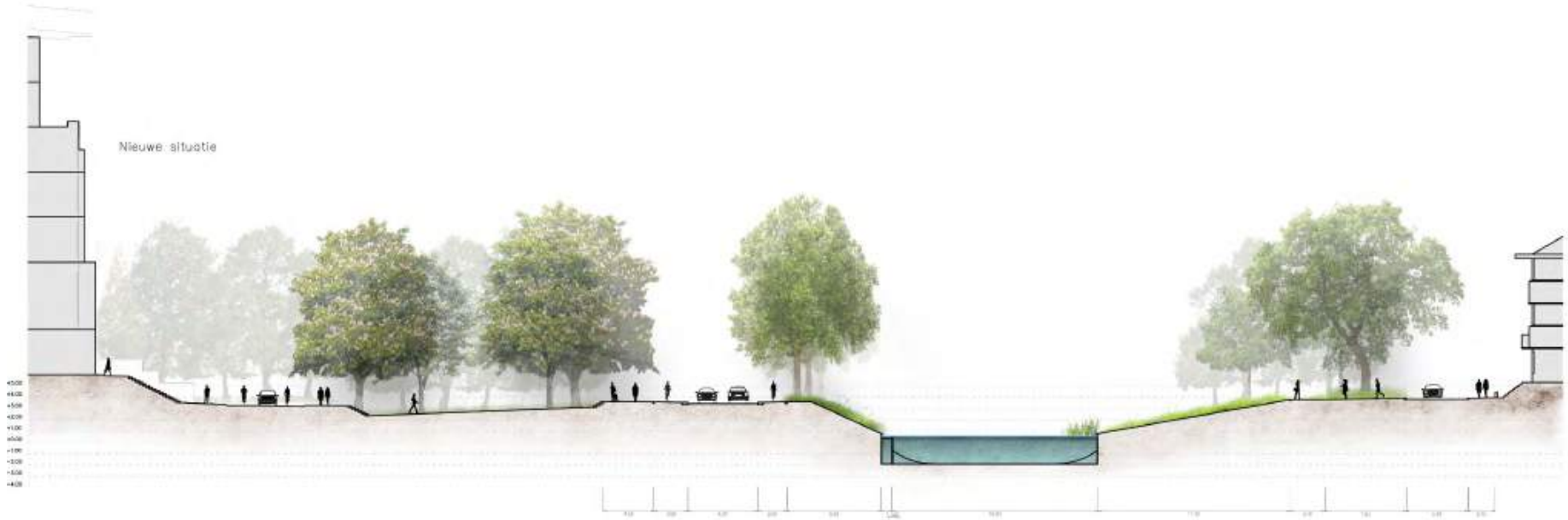
Before



Afer

OKRA

BEFORE
OKRA

DESIGN
OKRA

REALISED WORK
OKRA

Catharijnesingel Utrecht
Transformation

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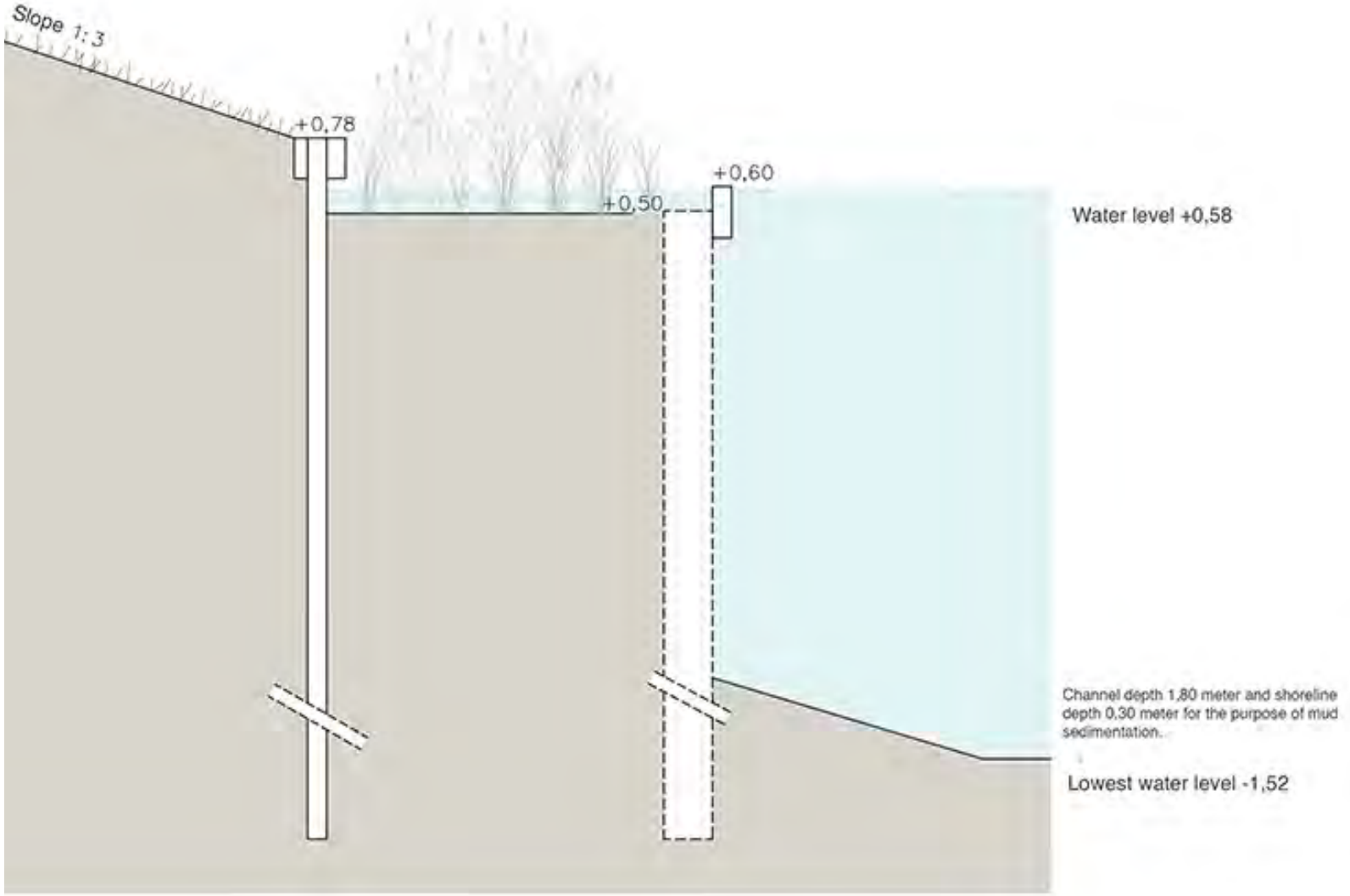
Catharijnesingel Utrecht
Detail of ecological zone



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Catharijnesingel Utrecht
Site comparison before and after

View away from inner city

OKRA

Catharijnesingel Utrecht
Site comparison before and after

View towards hoog catharijne

OKRA

Catharijnesingel Utrecht
Site comparison before and after

View away from hoog catharijne

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PRIMARK
OKRA

PRIMARK
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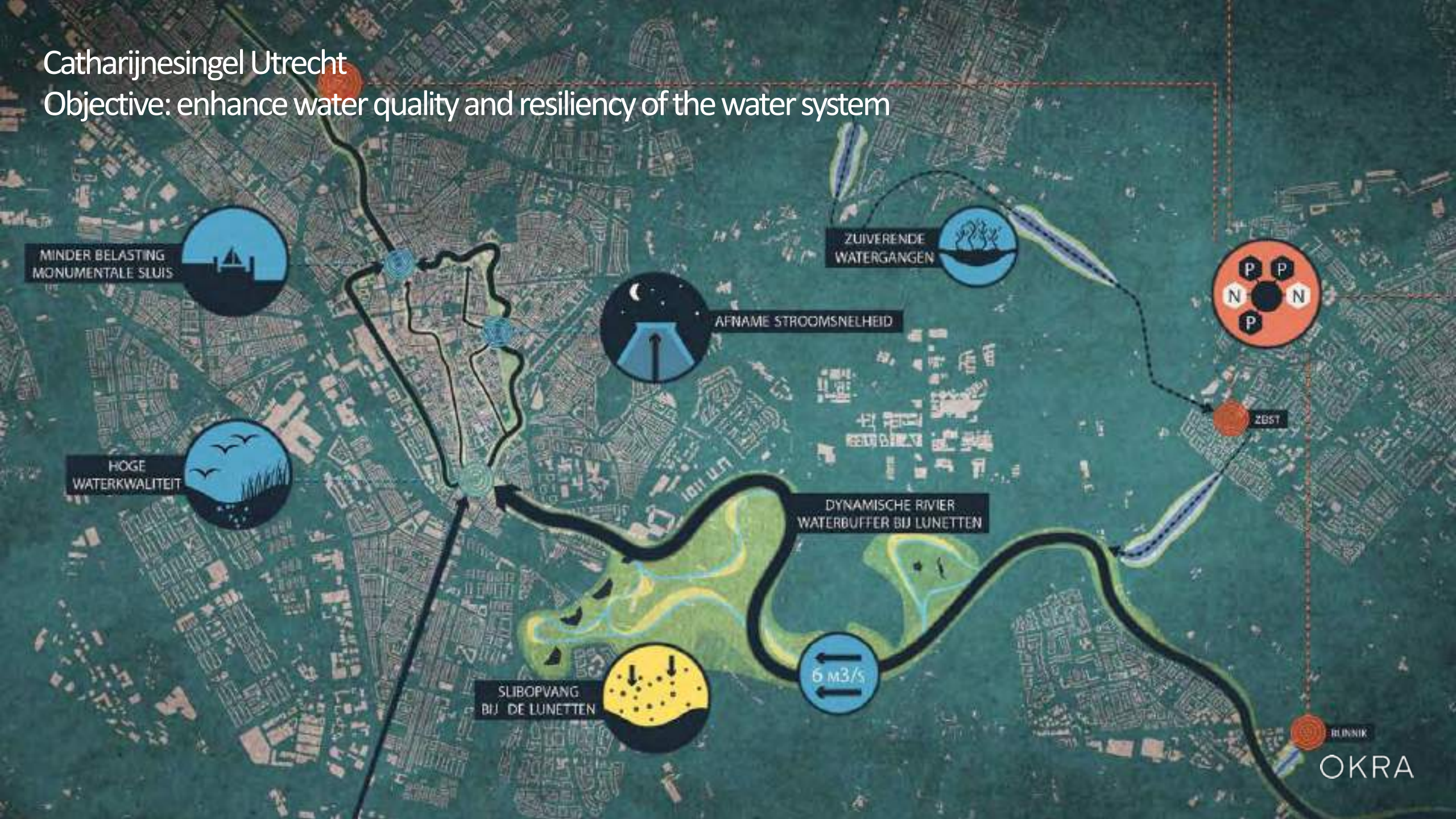
Catharijnesingel Utrecht
Open call urban design for the extreme

Catharijnesingel Utrecht

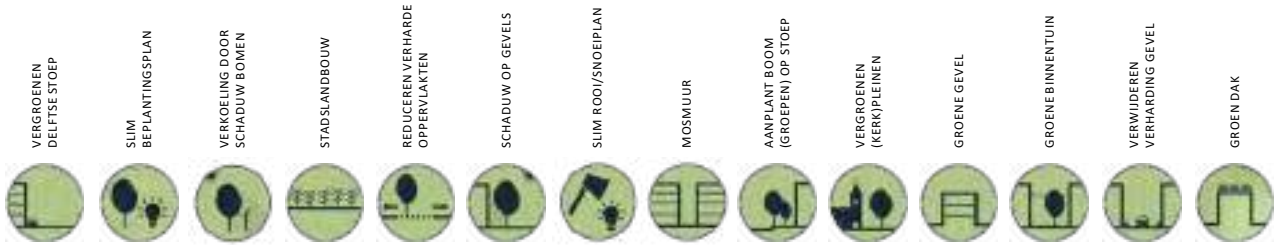
The water cranes of utrecht are tight and sit at a steady level, creating water quality problem by draught or heavy rains

Catharijnesingel Utrecht
Objective: enhance water quality and resiliency of the water system



Catharijnesingel Utrecht
10 chances for the implementation of a climate adaptive innercity

Catharijnesingel Utrecht
Toolbox of potential measures



Planting tools

Water tools

Infrastructural and organisational tools

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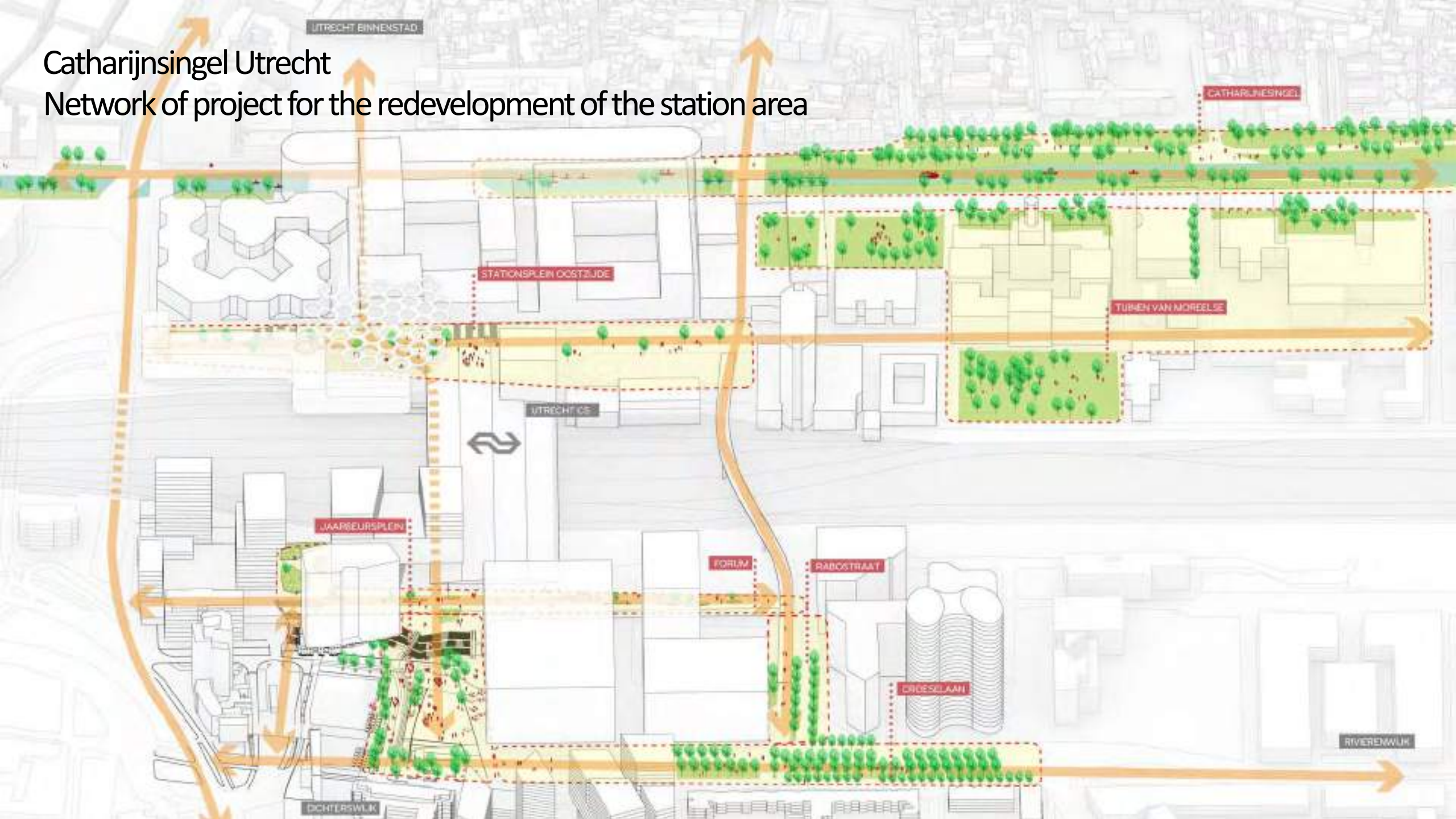
Catharijnsingel Utrecht
Network of project for the redevelopment of the station area



Catharijnesingel Utrecht
Concept sketch

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Catharijnsingel Utrecht

A strategic location to reconnect the historical center with the station area and beyond

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Winner of European Prize for Public Space 2022
CCCB Centre de Cultura Comtemporania de Barcelona

Nijverdal Grotestraat

Resilient regeneration | The Netherlands

Drachten
Papenburg
Sneek
Assen
Den Helder
Emmen
Haren
Meppel
Meppen
Alkmaar
Hoorn
Slagharen
Lingen
Zwolle
Nordhorn
Haarlem
Amsterdam
Almere
Almelo
NIJVERDAL
Deventer
Hengelo
Enschede
Leiden
Amersfoort
Apeldoorn
Den Haag
Utrecht
Delft
Arnhem
Rotterdam
Bocholt
Nijmegen
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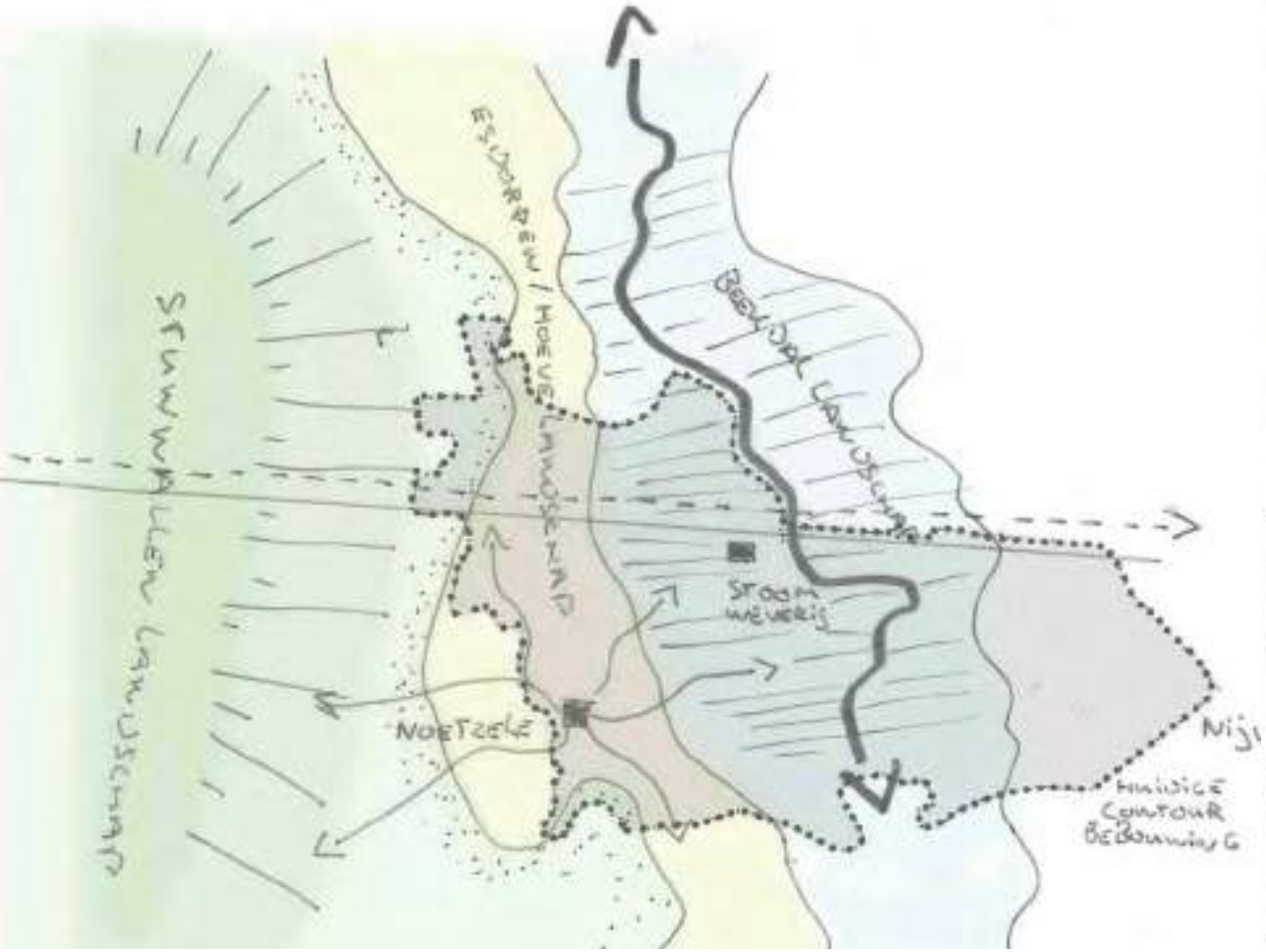
Landscape and historical context



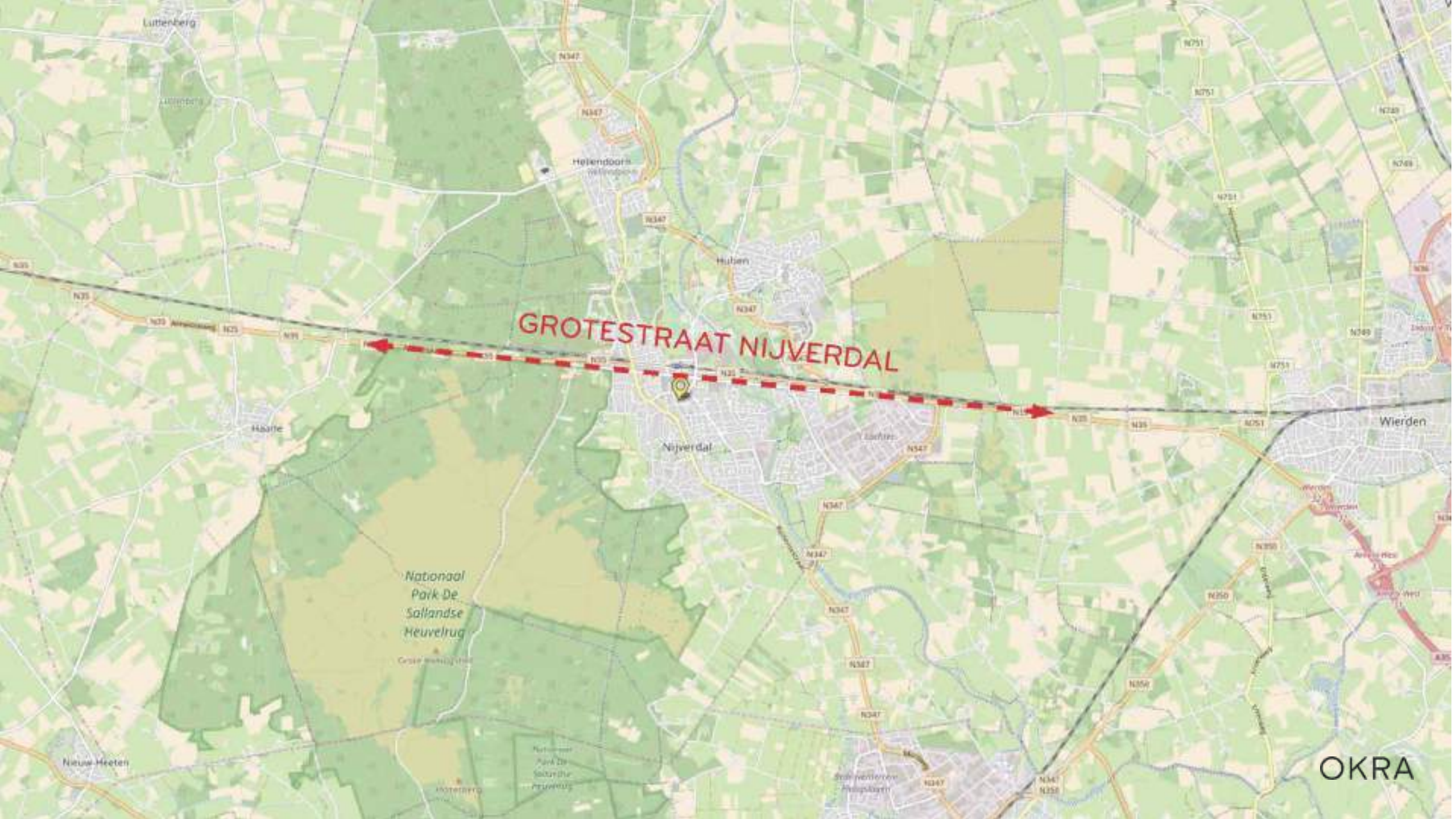
1920

1935

1975

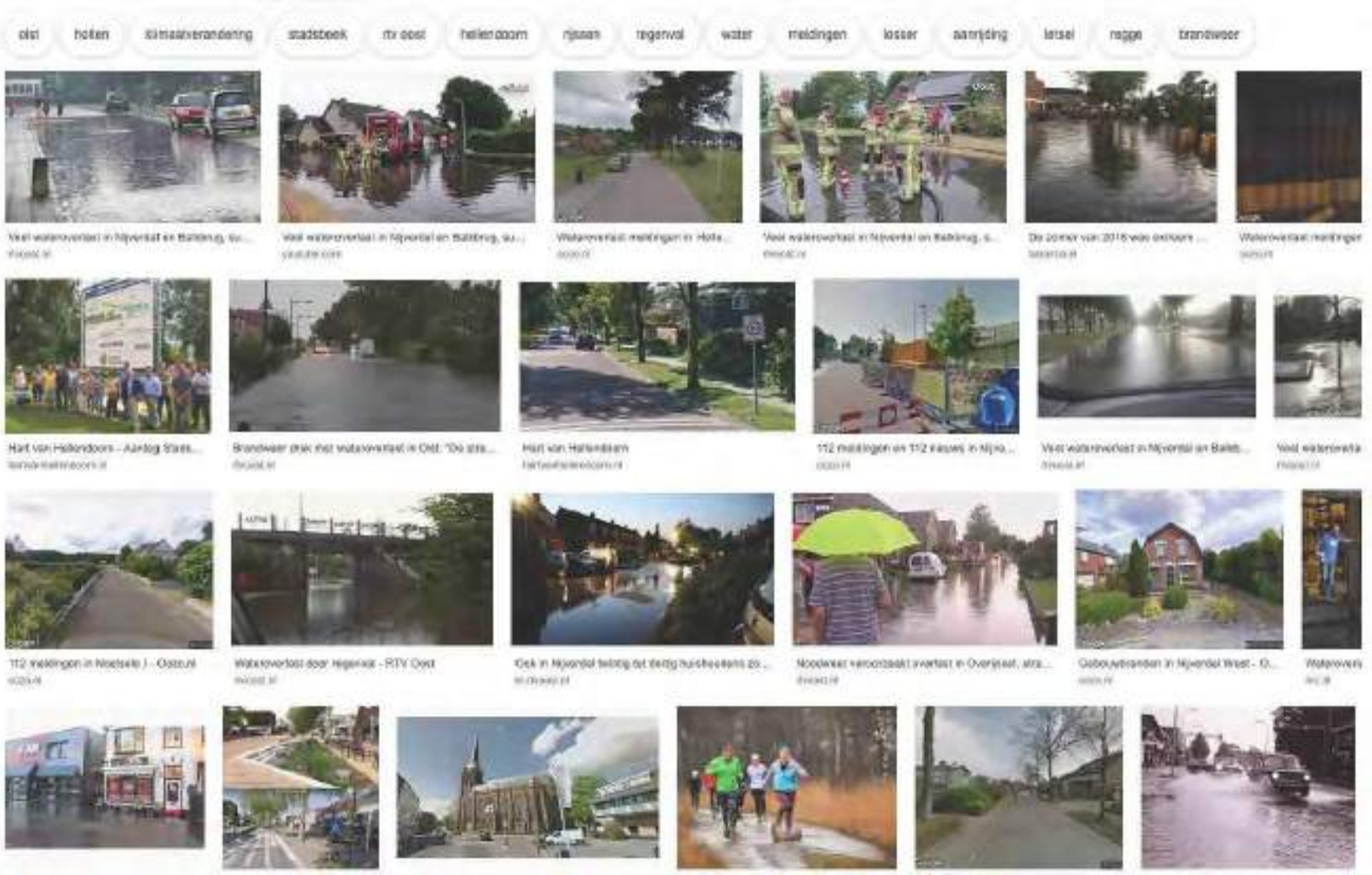
2015

OKRA


GROTESTRAAT NIJVERDAL
Nijverdal
Hulsen
Helendoorn
Wierden
Haarle
Nationaal Park De Sallandse Heuvelrug
Nieuw-Heeten
OKRA

VEENSTRA TRANSPORT
AMBULANCE
05-155
112
Grotestraat

Flooding in Nijverdal
Nijverdal centrum wateroverlast



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BEFORE | 2017

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AFTER | 2019
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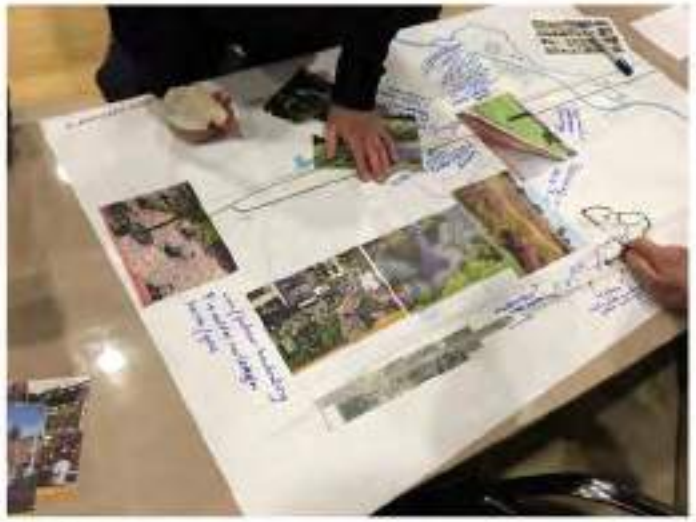
Community involvement
Participatory design



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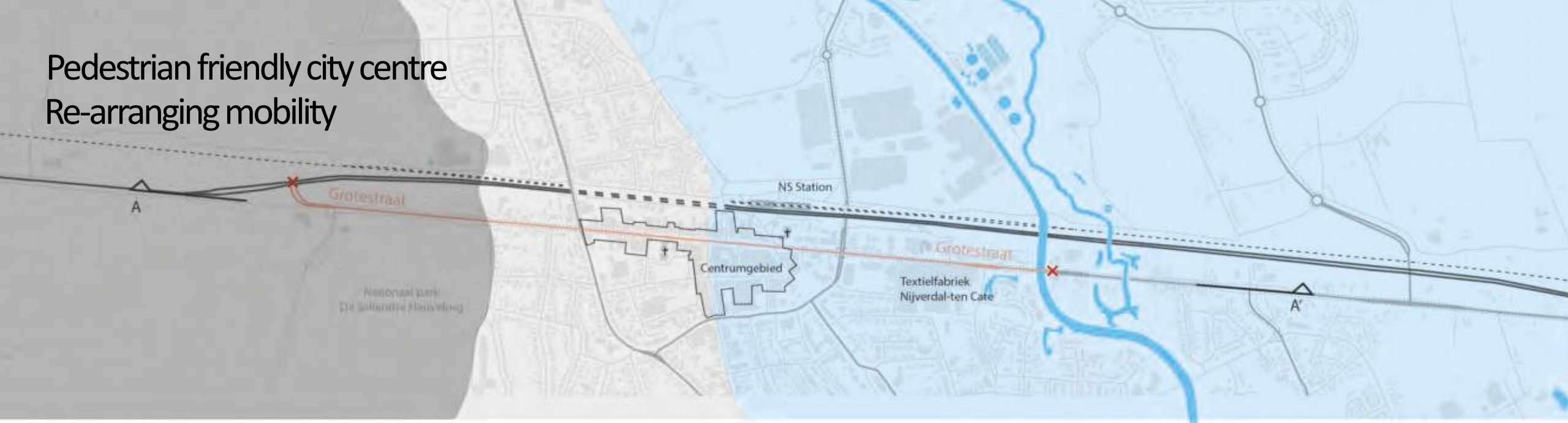
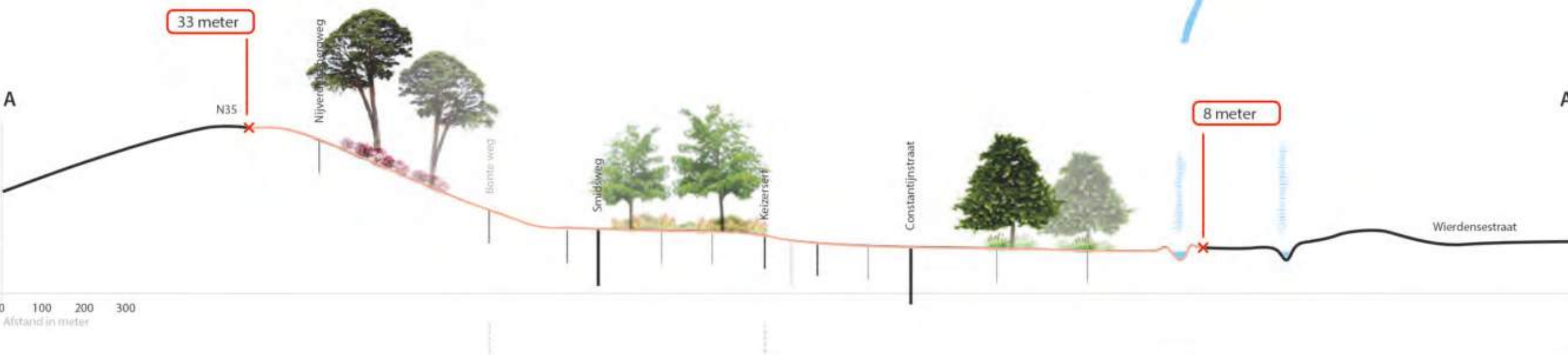
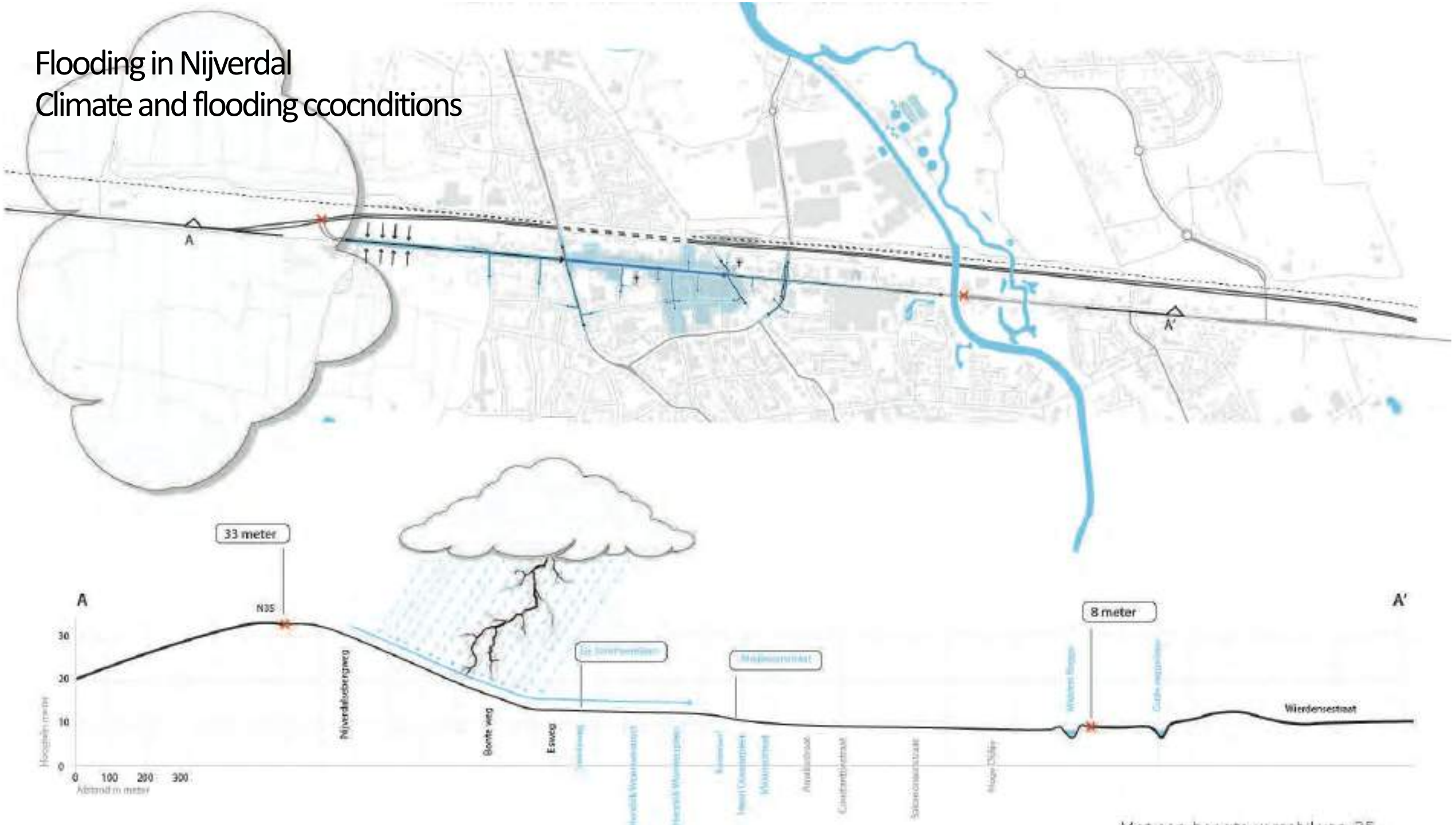
Pedestrian friendly city centre
Re-arranging mobility

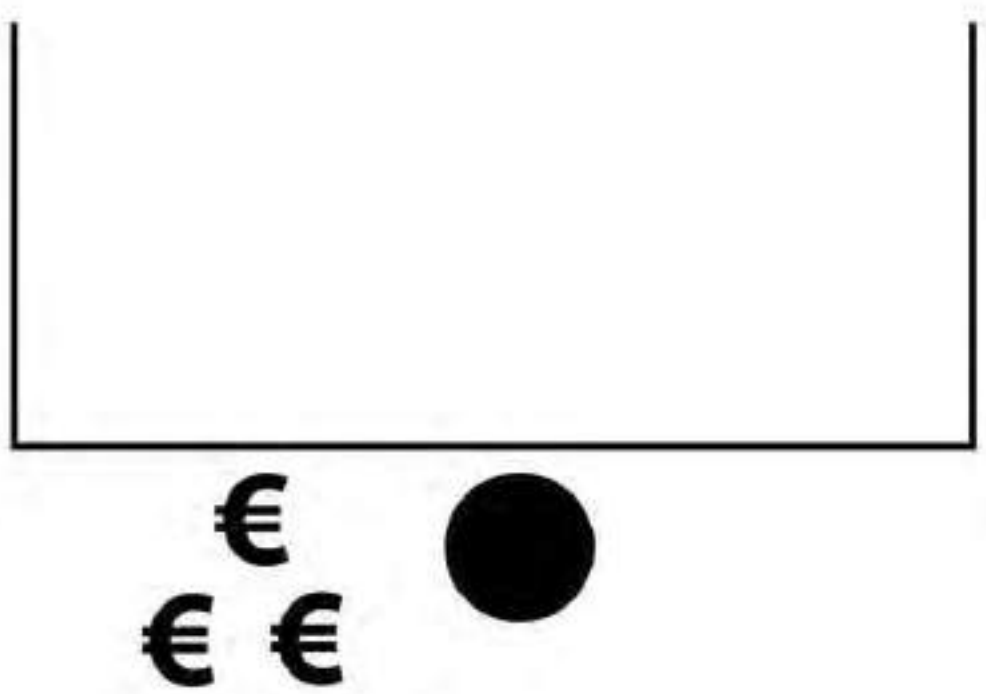




Flooding in Nijverdal
Climate and flooding ccocnditions



Investing money in above ground blue and green public realm
Future-proofing



INVESTING IN LARGER UNDERGROUND INFRASTRUCTURE

INVESTING IN SOLUTIONS INTEGRATED IN PUBLIC REAL

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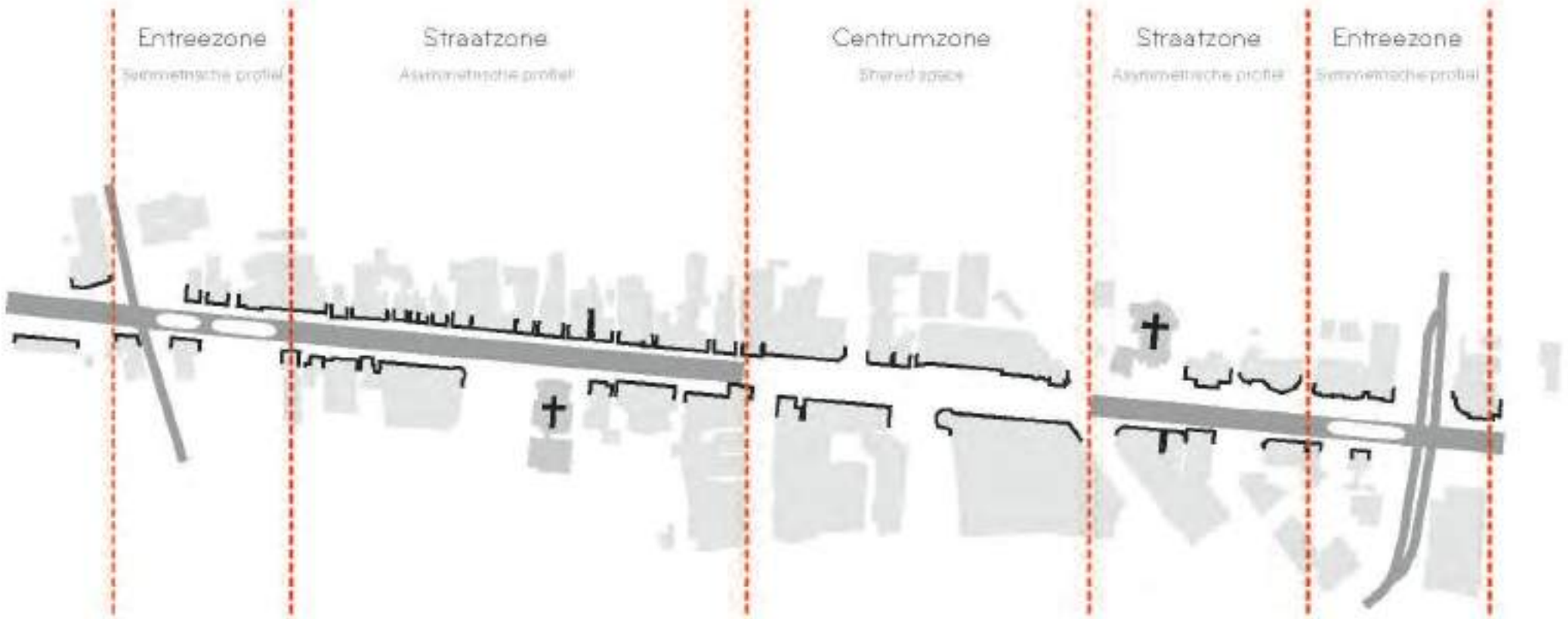
Integral approach
Rearranging the public realm plan



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Wadis
Sustainable water system

Locatieaanduiding

OKRA

Vini
KOMLIJNENBELT

JUWELIER
OKRA

OKRA

IJS & ZO
KRETA
Zuivelhoeve
OKRA

OKRA

OKRA

OKRA

OKRA

OKRA

MEDICAMENTE
DE GRENZE
PARFUMERIE

Parc de la Sennette

Anderlecht, Molenbeek Saint-Jean, Bruxelles

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dpd

Casa Del Rey
Restaurant - Bar
CASA DEL REY

Today
A lack of public green spaces within the city

Cartes du plan nature : zones de carence en espaces verts publics (carte 01-1) et Renforcement des continuités vertes
Kaarten van het Natuurplan: gebieden met een tekort aan openbaar groen (Kaart 01-1) en Versterking van de groencontinuïteit

Développer le potentiel paysager et écologique du quartier

Existant

Potentiel

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Périmètre d’intervention
Un parc en plusieurs phases

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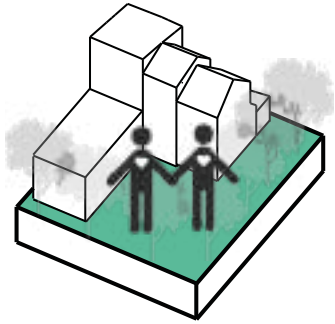
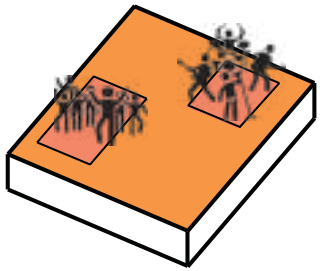
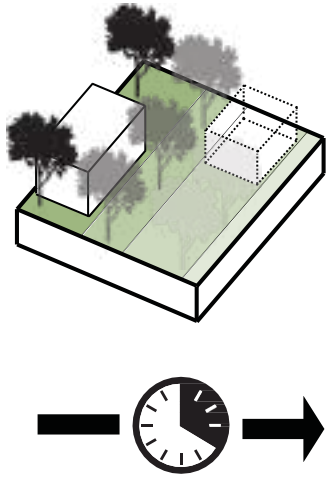
5 ambitions pour le quartier
Stratégie



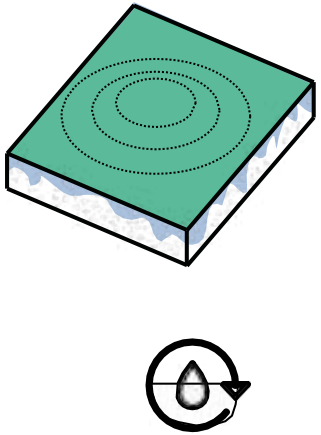
Offer natural spaces in a densely built district



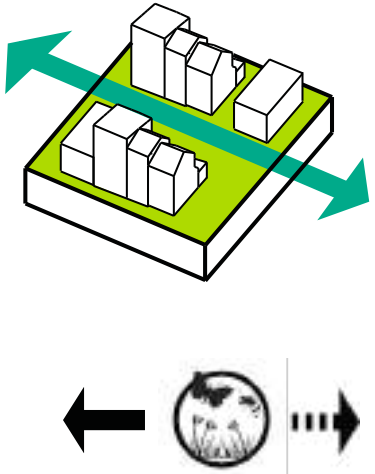
Create active and social spaces for all



Anticipate urban mutations and be flexible



Improve soil quality and water network



Set up an ecological network and framework

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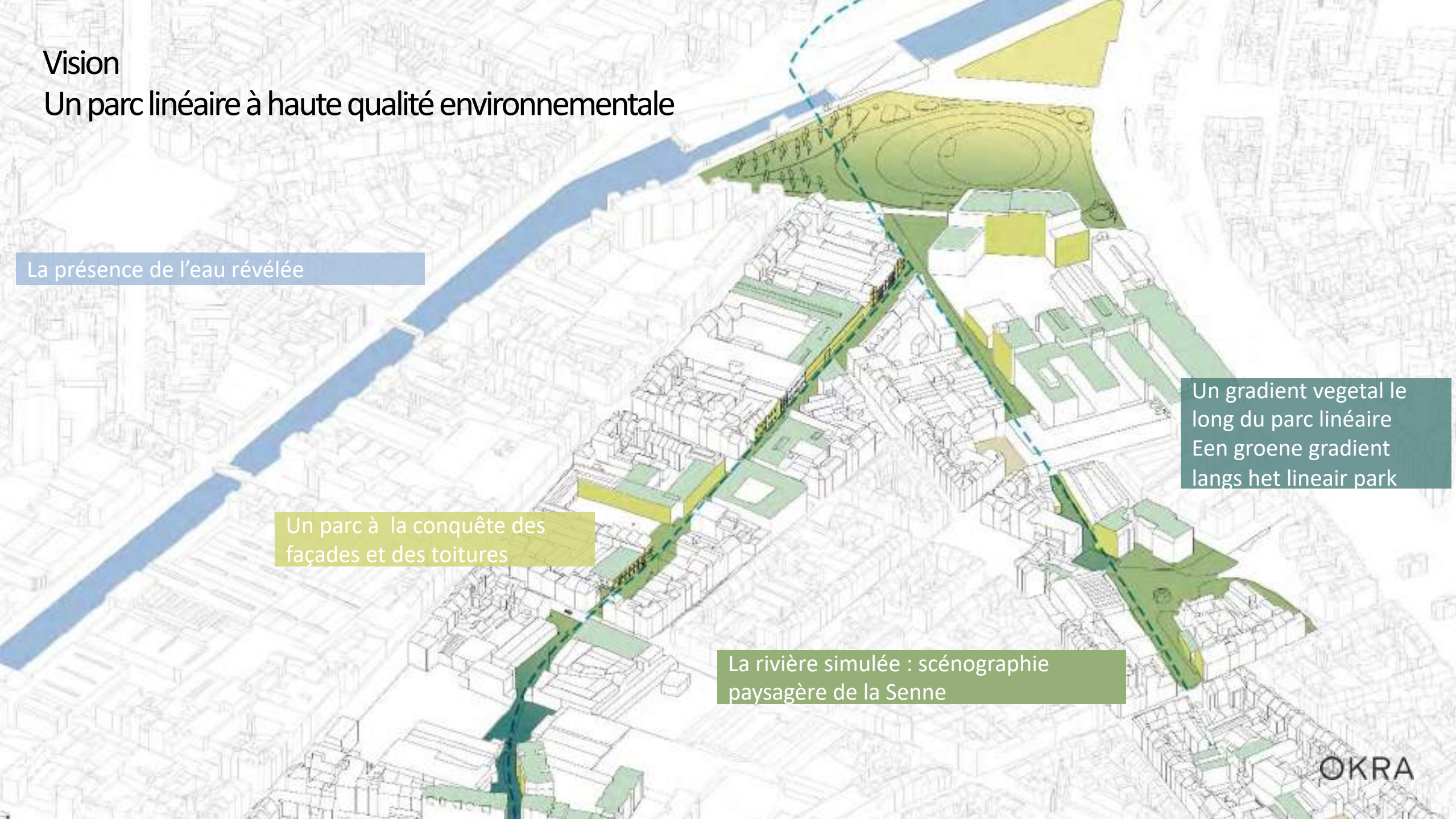
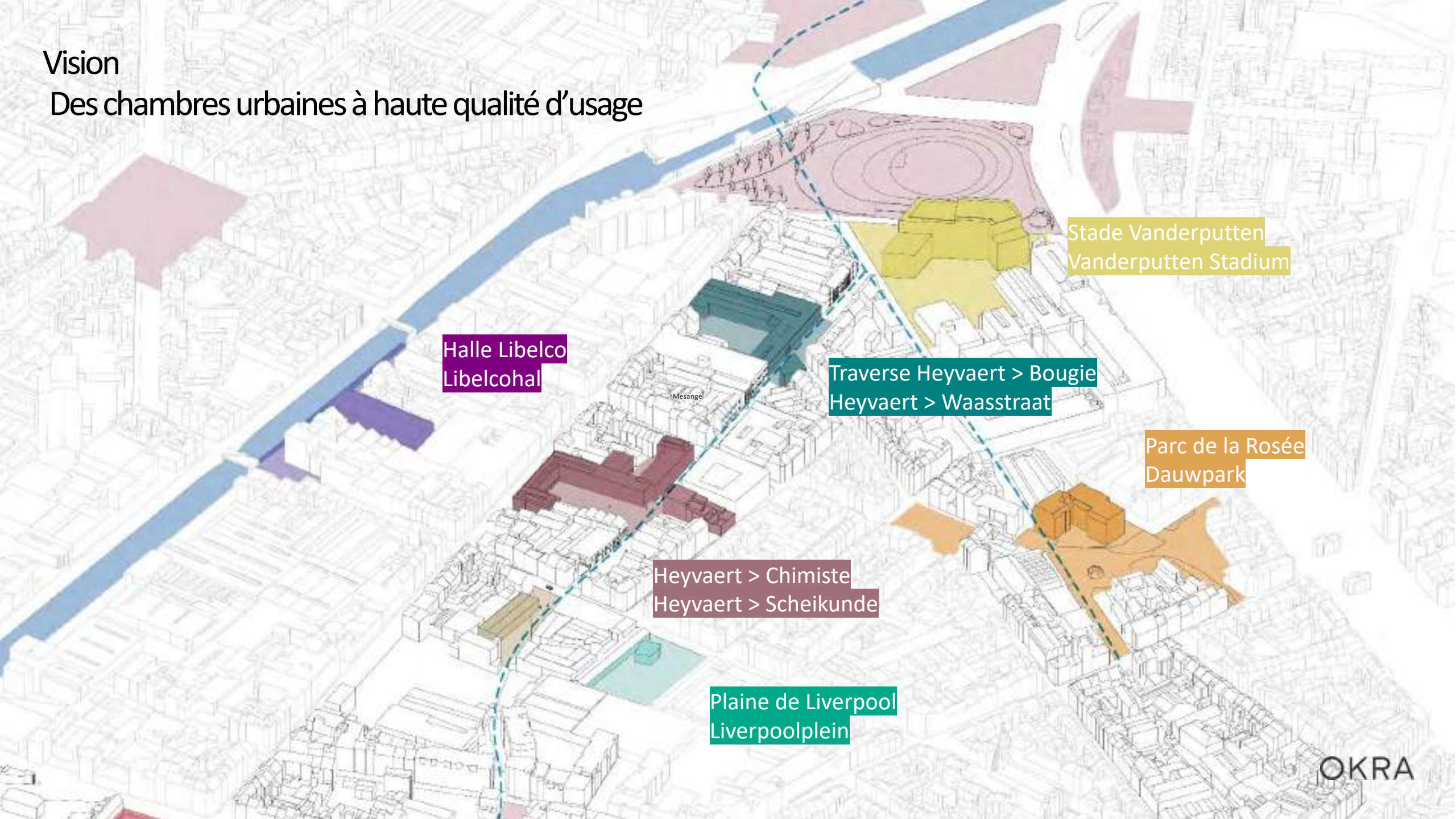
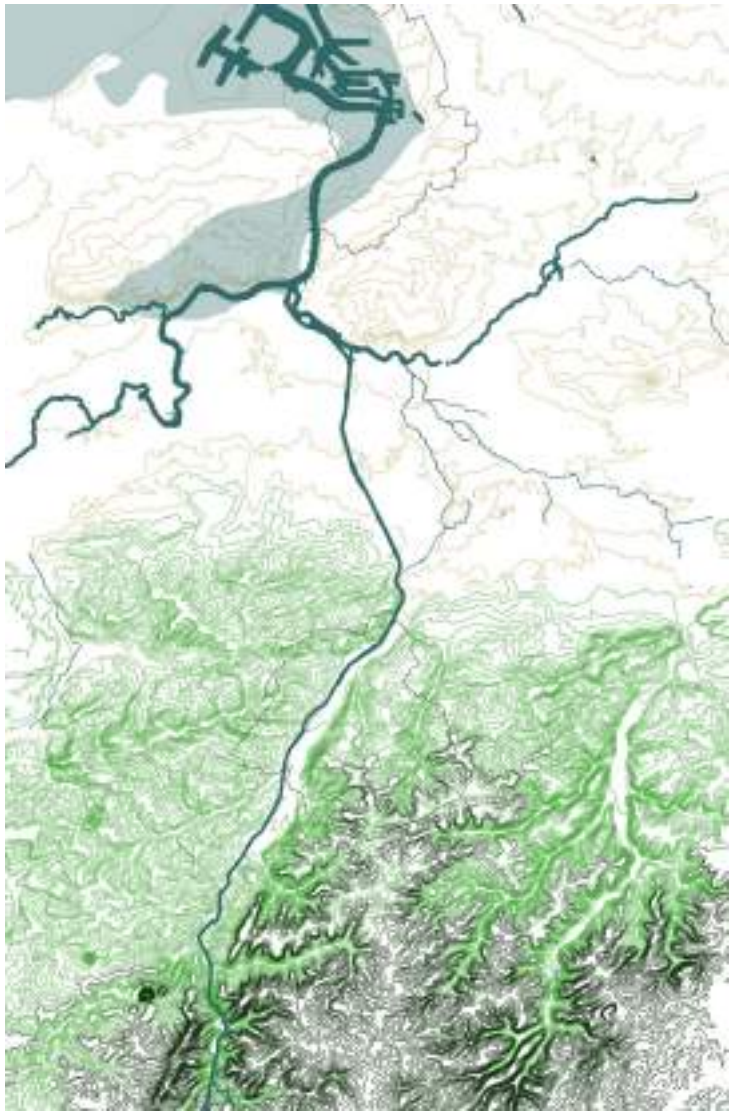
Vision
Un parc linéaire à haute qualité environnementale

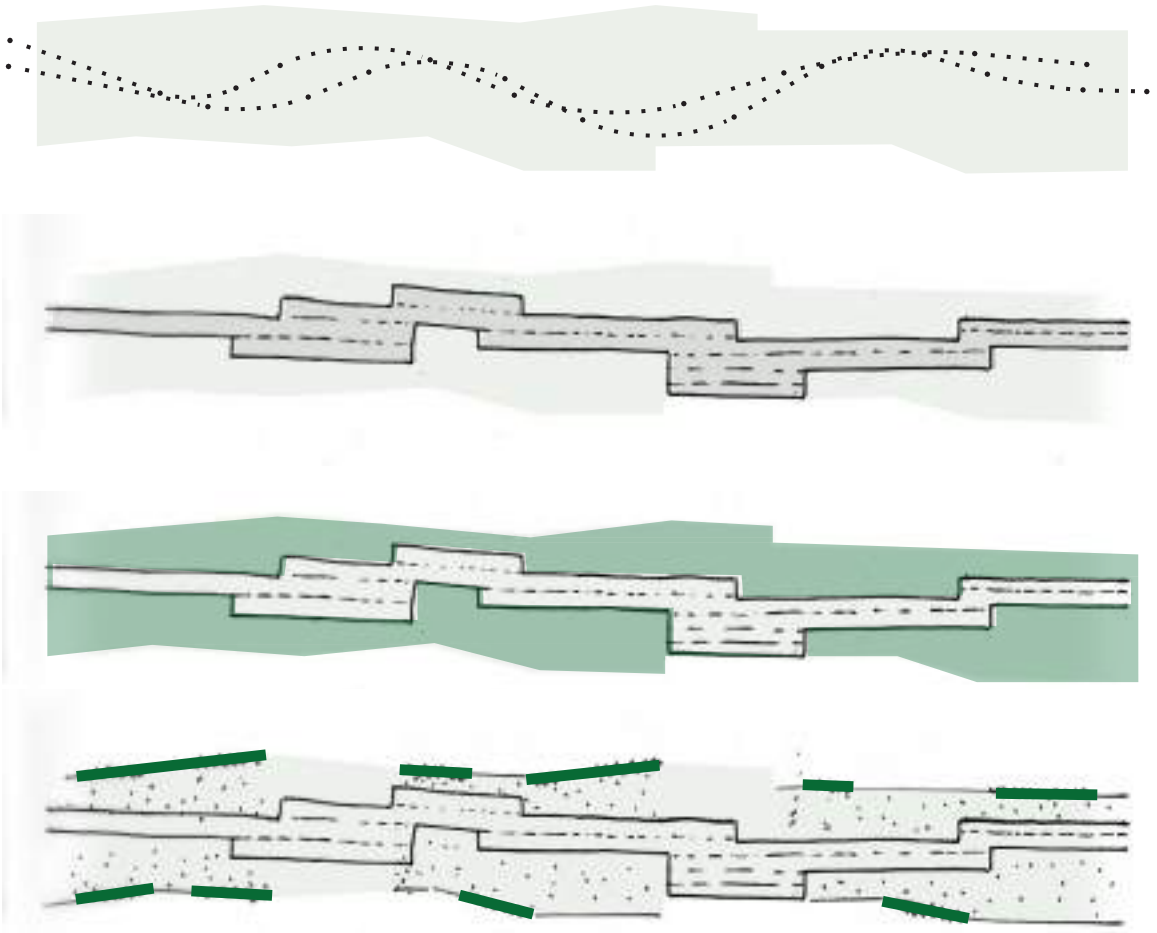


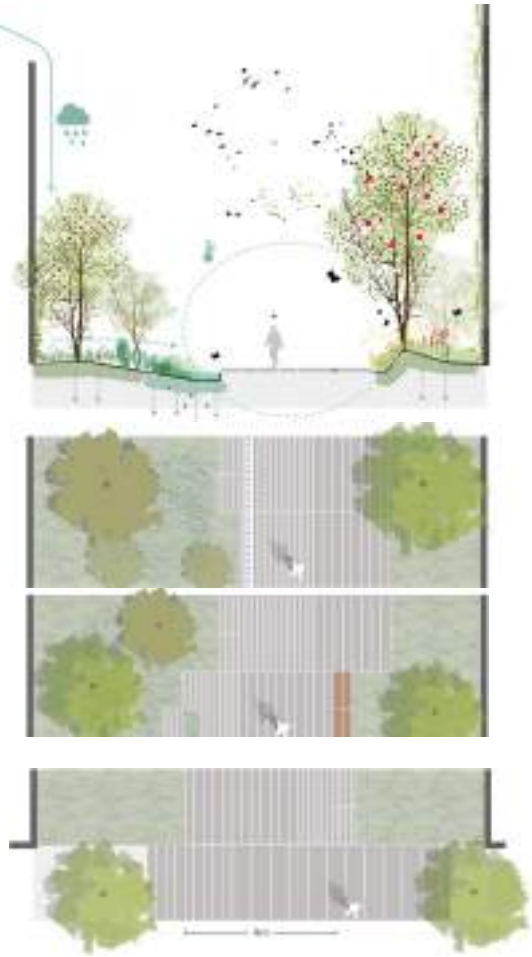
Vision
Des chambres urbaines à haute qualité d'usage



Imager le cour d’eau disparu
Un meandre minéral

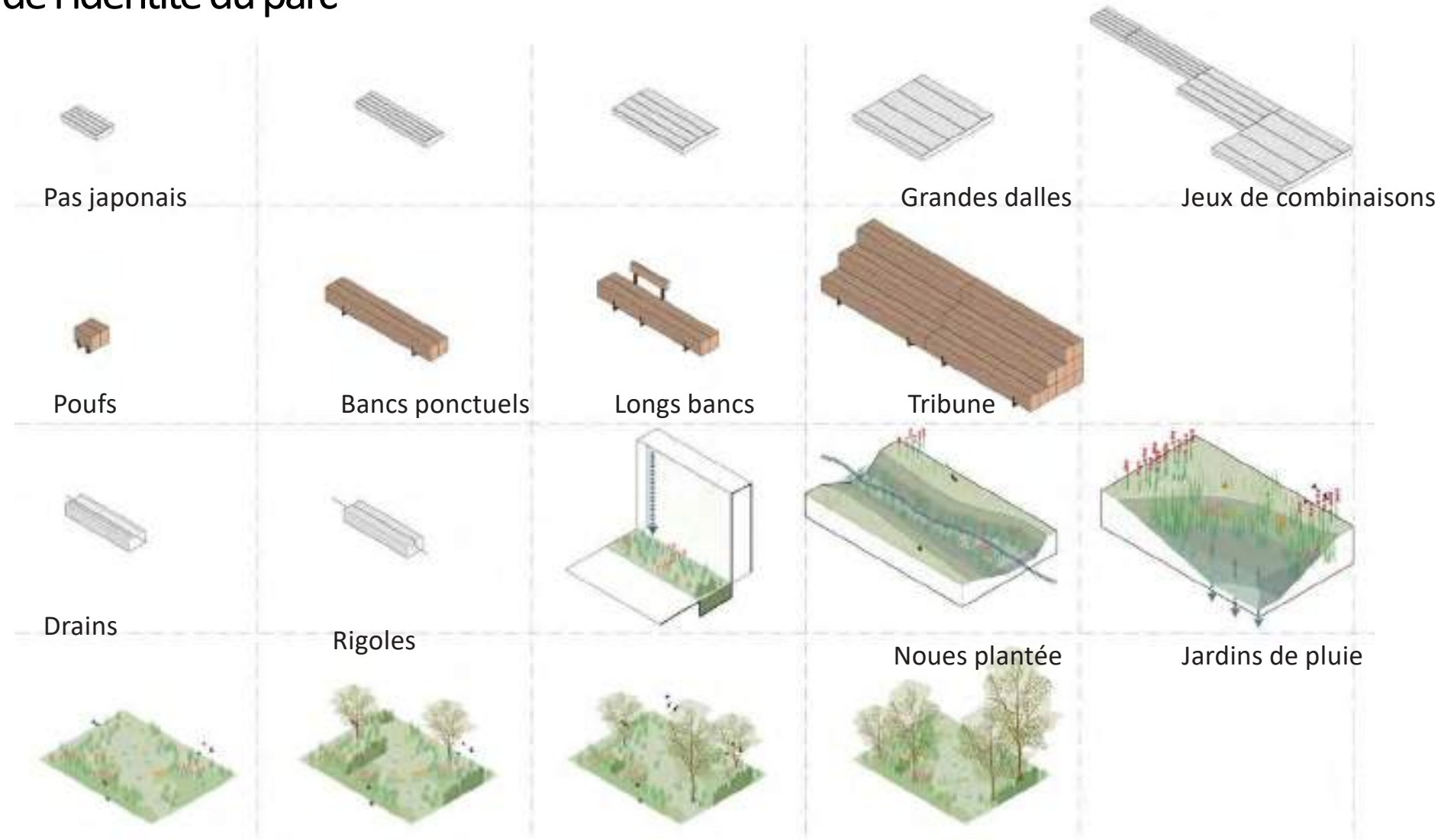






OKRA

Une boîte à outil
Composants de l'identité du parc



OKRA

Une boîte à outils
Principes d’interventions

OKRA

Parc de la sennette
Ilot Liverpool > Mégissiers

Un parc inclusif
Un espace pour tous

ACCESSIBILITÉ - BOÎTE À OUTILS
- Concevoir pour différents usagers
- Éviter les obstacles le long des grands axes
- S'assurer que les surfaces minérales soit régulières pour les différents usagers (personnes à mobilité réduites, chaises roulantes, chariots, etc.)
S'assurer du confort des équipements

ACCESSIBILITÉ

SENTIMENT DE SÉCURITÉ (sentiment que regardes non gênant) - BOÎTE À OUTILS
- **Programmer un espace inclusif:** encourager les activités et la présence des femmes, enfants et personnes âgées dans l'espace
- Veiller à suffisamment éclairer les espaces publics
- Avoir des principes d'orientation clairs et marquer les entrées et sorties du parc

SENTIMENT DE SÉCURITÉ

VISIBILITÉ

VISIBILITÉ - BOÎTE À OUTILS
- Concevoir des lignes claires et ouvertes
- S'assurer d'avoir des des rapports de co-visibilités entre les espaces normalement occupés par différents groupes, sans nécessairement fixer les interactions. En occupant différents espaces, différents groupes se croisent et se reconnaissent, ils instituent une forme de contrôle social sans être perçuent comme des menaces

MIXITÉ SOCIALE

MIXITÉ SOCIALE - BOÎTE À OUTILS
- Assurer un contact visuel direct entre les différents usagers
- **Programmer l'espace intelligemment:**
  - juxtaposer les activités de différents groupes à proximité les unes des autres, sports et jeux, tables d'échecs et agrès sportifs par exemple pour attirer une grande diversité d'usagers
  - hybrider les équipements afin d'éviter pour des usages mono-fonctionnels
  - Aménager des espaces ouverts et libres d'usage
  - Aménager des espaces conviviaux et fédérateurs : grandes tables, barbecues publics, éléments de jeux diffus, etc.

ATTRACTIVITÉ

ATTRACTIVITÉ - BOÎTE À OUTILS
- Privilégier une végétation riche et attractive toute l'année
- S'assurer du confort des matériaux, chemins et du mobilier
- Inclure des espaces ombragés et des éléments en eau pour les périodes chaudes
- Aménager un espace pour une petite activité commerciale
- Assurer une gestion soutenue des espaces

OKRA

Les reliques ludiques

La Play-pool comme espace ludique nichée dans les reliques industrielles mises en valeur

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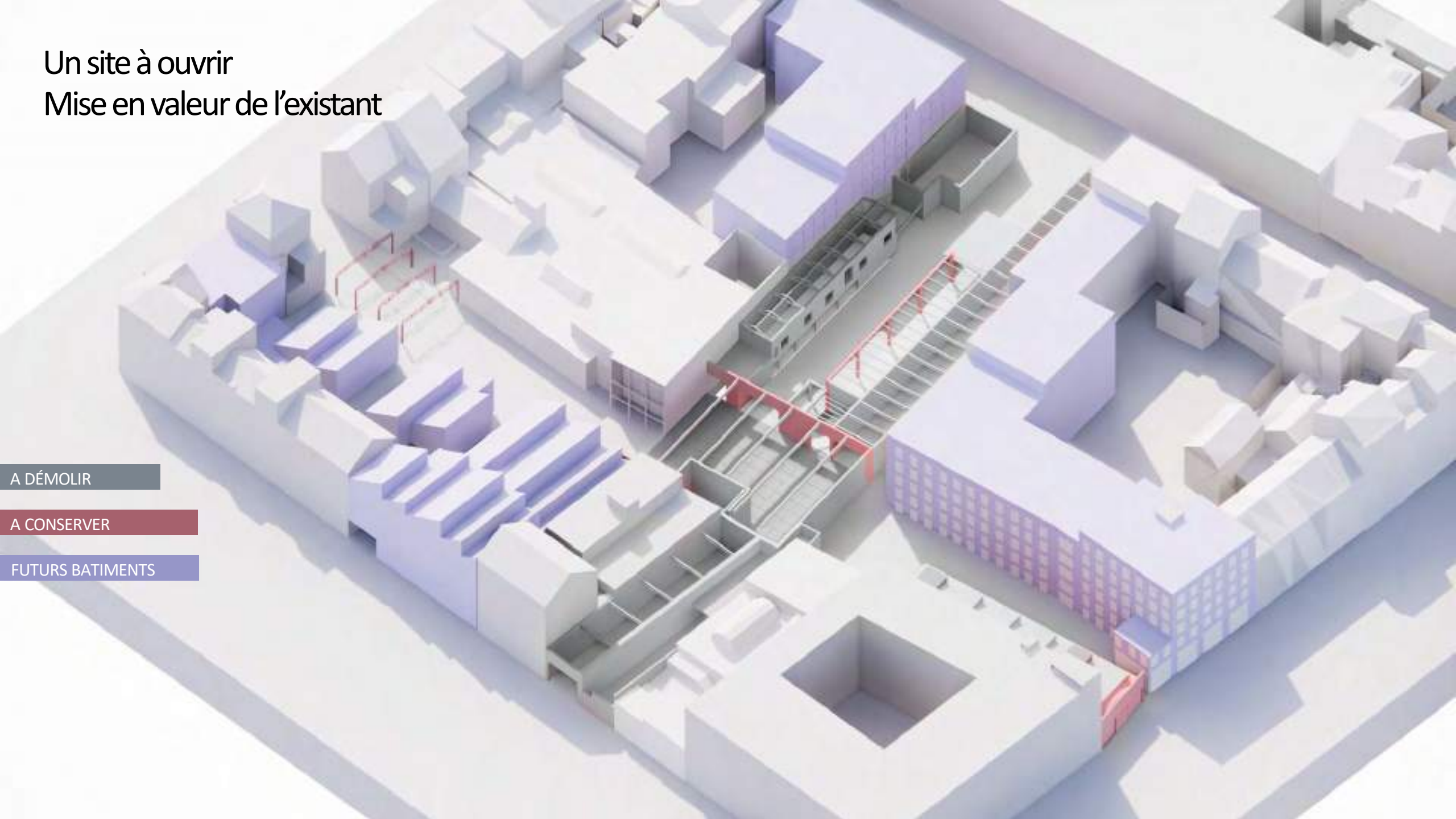
Atmosphères et programmation

OKRA

Le lit du cour d’eau élargi
OKRA

Un site à ouvrir
Mise en valeur de l'existant



A DÉMOLIR

A CONSERVER

FUTURS BATIMENTS

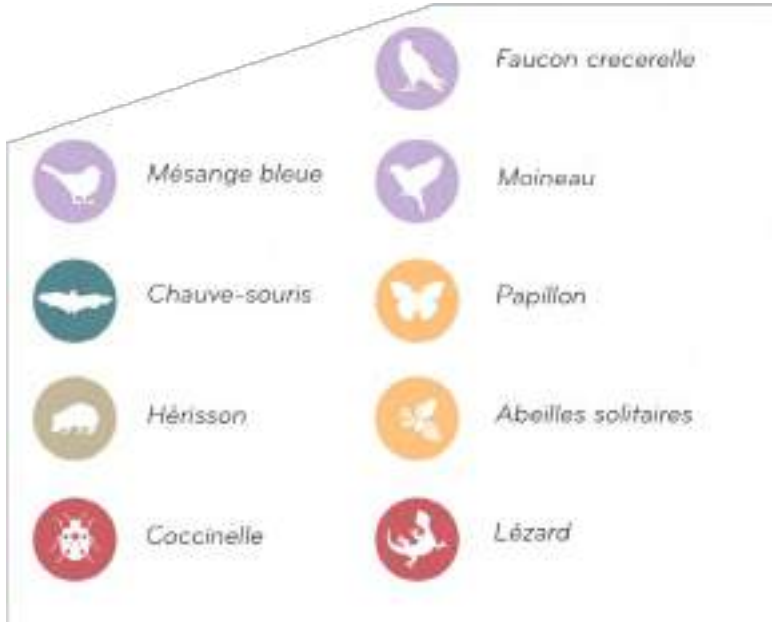
Le fond de Sennette

Le jardin de l’alchimiste

Les reliques ludiques

La porte Mégissier

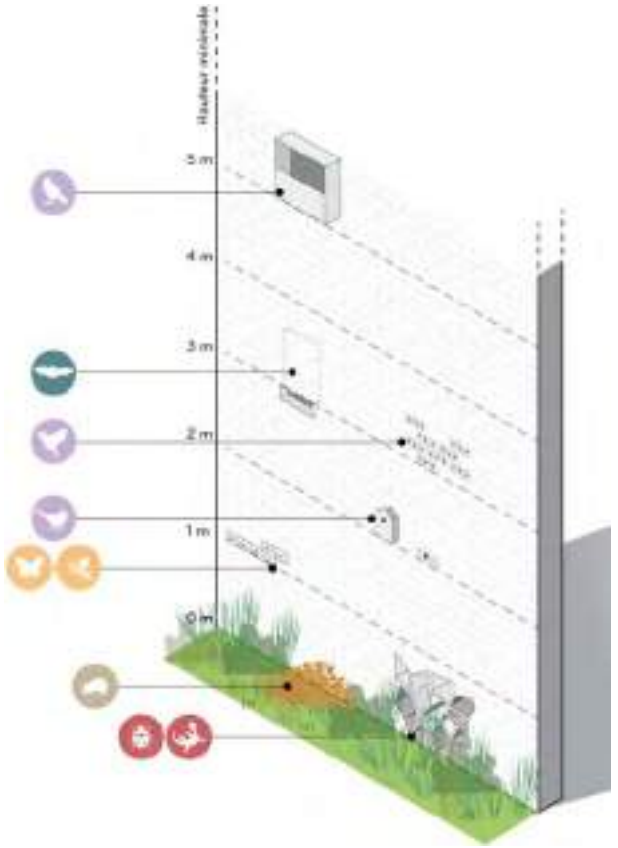
Habitat conquering walls



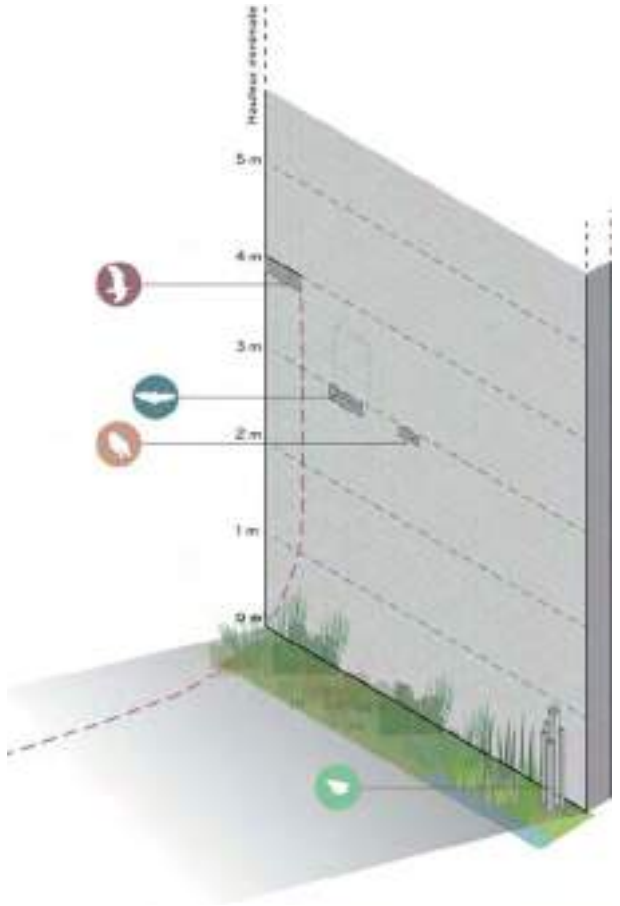
Espèces potentiellles pour les murs exposées au soleil (Sud - Sud-Est - Sud-Ouest)

Espèces potentiellles pour les murs à l'ombre (Nord - Nord-Est - Nord-Ouest)

MURS EXPOSÉES AU SOLEIL
(SUD - SUD-EST - SUD-OUEST)



MURS À L' OMBRE
(NORD - NORD-EST - NORD-OUEST)



OKRA

Parc de la sennette
Scénograhie urbaine et paysagère

Parc de la sennette
Impression du parc linéaire

Fresque de Roco Alvarez / Circularium

OKRA

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OKRA LANDSCAPE ARCHITECTS BV