



Country / City

University / School

Academic year

Title of the project

Authors

Netherlands/Amsterdam

Academy of architecture, school of arts

4th year

Lifeline "A growing structure with an inspiring symbiosis between plant, animal and human".

Floris Grondman







# PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

Máster d'Arquitectura del Paisatge -DUOT - UPC

ETSAB- Escola Tècnica Superior

d'Arquitectura de Barcelona

Avenida Diagonal, 649 piso 5

08028 Barcelona-Spain

## TECHNICAL DOSSIER

Title of the project Lifeline "A growing structure with an inspiring symbiosis between plant, animal and human".  
Authors Floris Grondman  
Title of the course Graduation project  
Academic year 4th year  
Teaching Staff Hanneke Kijne, Sjaf Jansen, Donald Marskamp  
Department/Section/Program of belonging Landscape architecture, design en research for complex urban and landscape assignments  
University/School Academy of acitecture, urban development en landscape architecture.

Written statement, short description of the project in English, no more than 250 words

In this project a new green-blue structure has been designed for the city of Utrecht, where the banks of the Amsterdam-Rhine Canal and the Merwede Canal will be transformed into a growing structure as a new round of Kanaleneiland. The housing expansion planned by the city at this location near the center will put public space under pressure because of the high density. Partly because of these developments, it is now a good time to create a strong natural (and recreational) round of canals that is of great significance for the city. This lifeline keeps this part of the city vital and climate adaptive with healthy urbanization for plants, animals and humans.

The lifeline is made up of three carriers: the fully regulated and adaptive water system is based on an expansion of the current wetting and ensures that a robust water system is created on the entire Kanaleneiland. The gradients in the green structure create good conditions for plant growth that create a robust green structure. The hardening and a toolbox of architectural elements are not only functional, but in a poetic way create a wonderful interplay between the dynamic green and static gray in the environment.

The various design applications of this toolbox ensure a rich ecological environment at different scale levels with a symbiosis between plant, animal and human. In scale models 1:1, this interplay between green and gray has been worked out into beautiful elements in which the desired symbiosis is visible. By offering space and time, the lifeline is a growing green-blue structure in which development and change are essential. This way, the urban space can be functional and inspiring at any moment in its development.

For further information

**Máster d'Arquitectura del Paisatge -DUOT - UPC**

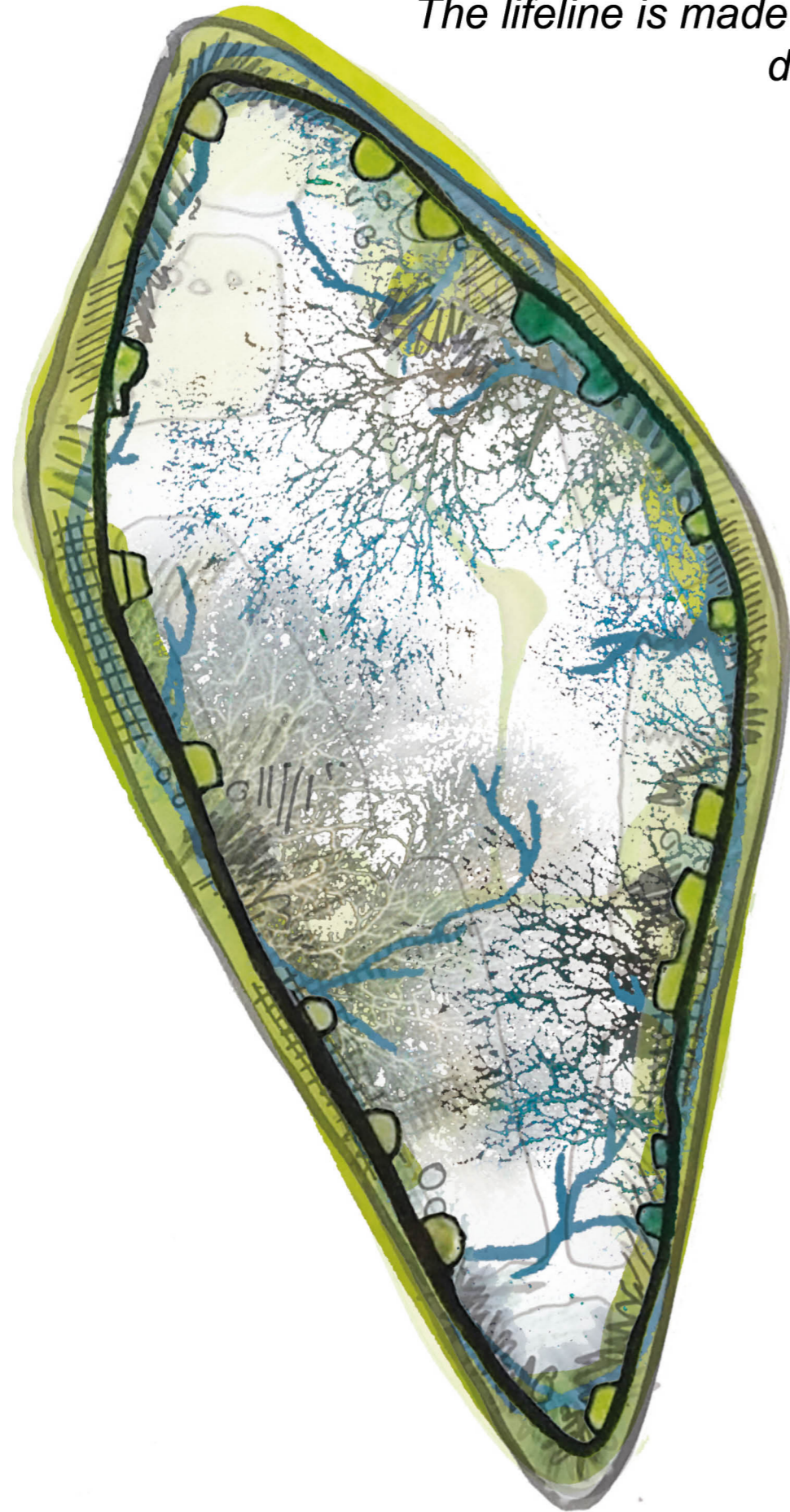
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Consult the web page <http://landscape.coac.net/>



The lifeline is made up of three carriers. The relationship will be different for each situation.



#### Watersystem

The lifeline is capable to absorb a big amount of rainwater. Because of the closed system its rainproof and robust.



#### Greenstructure

In combination with a good water system nature can flourish. A gradient of different profiles makes the structure divers en ecological rich



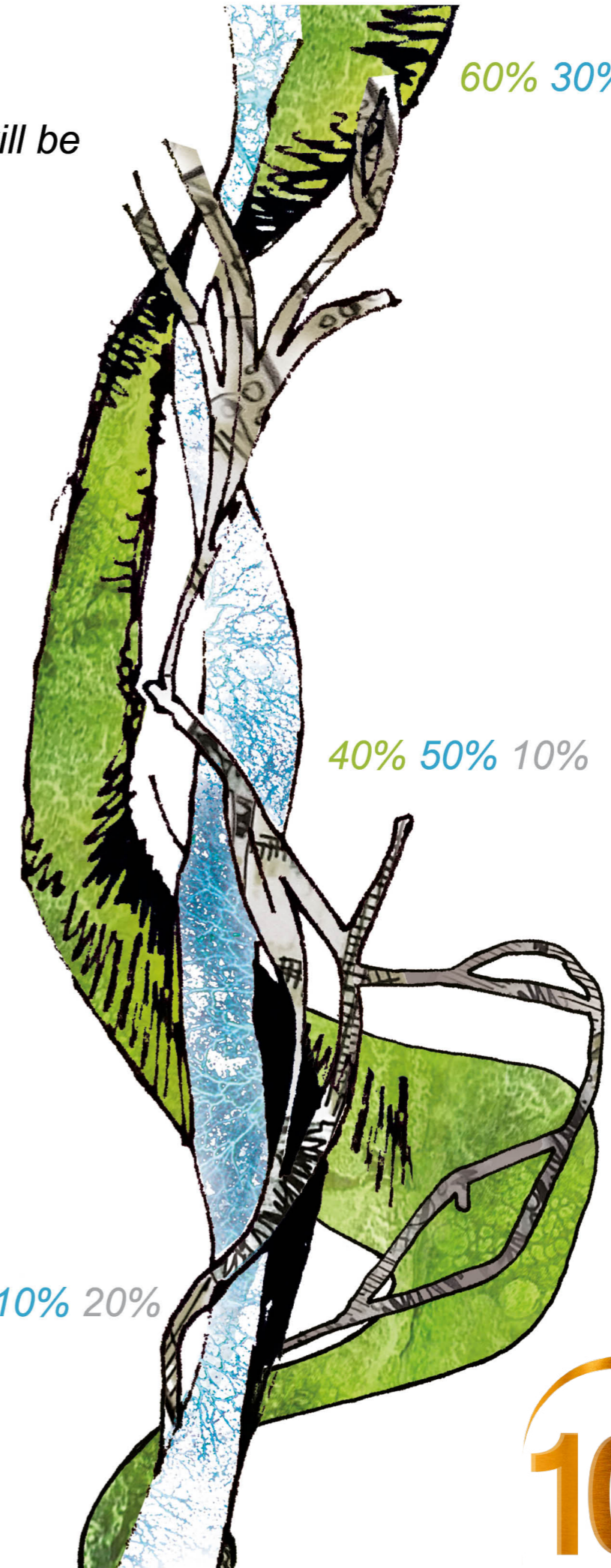
#### Paving

The hardening is a layer added by humans that tells a story. It allows decay and growth and plays with the dynamics of nature

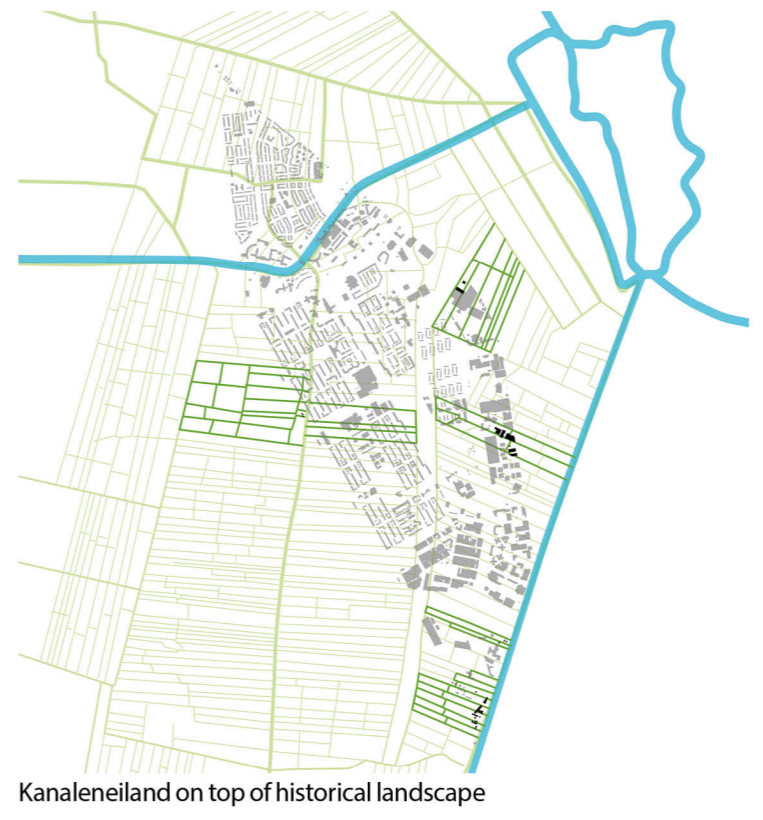
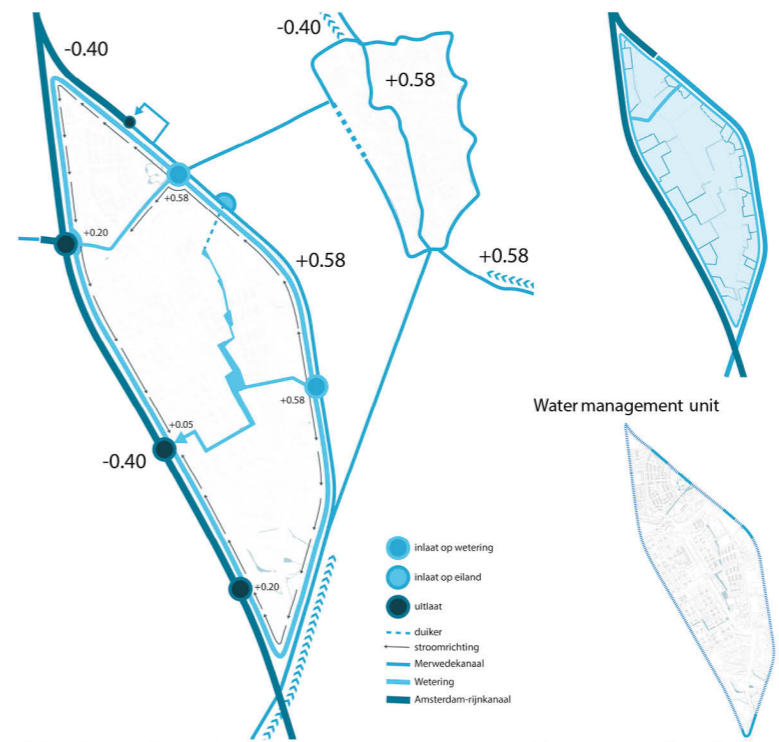
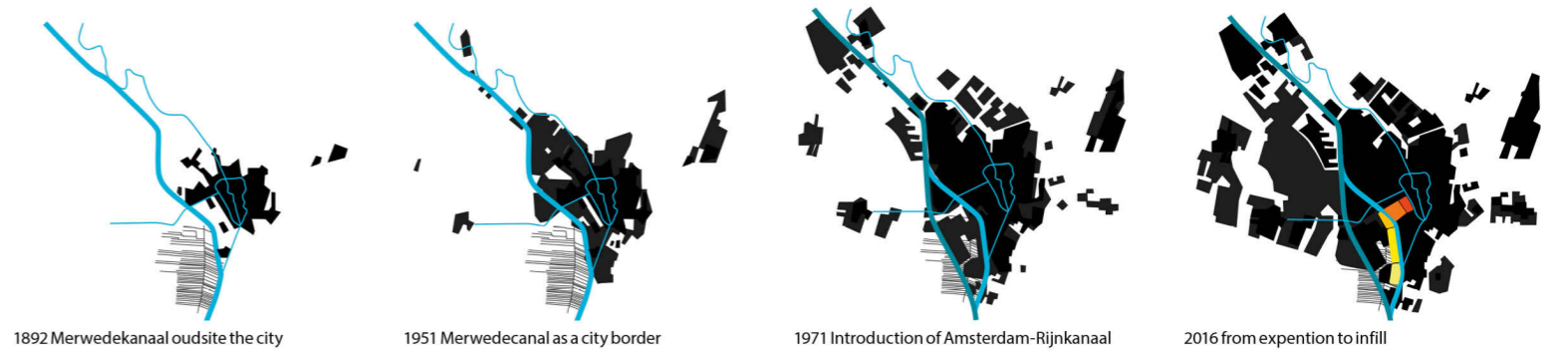
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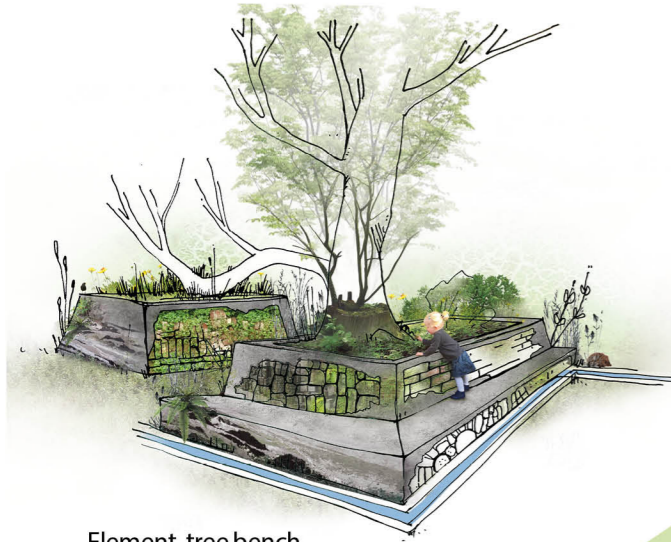
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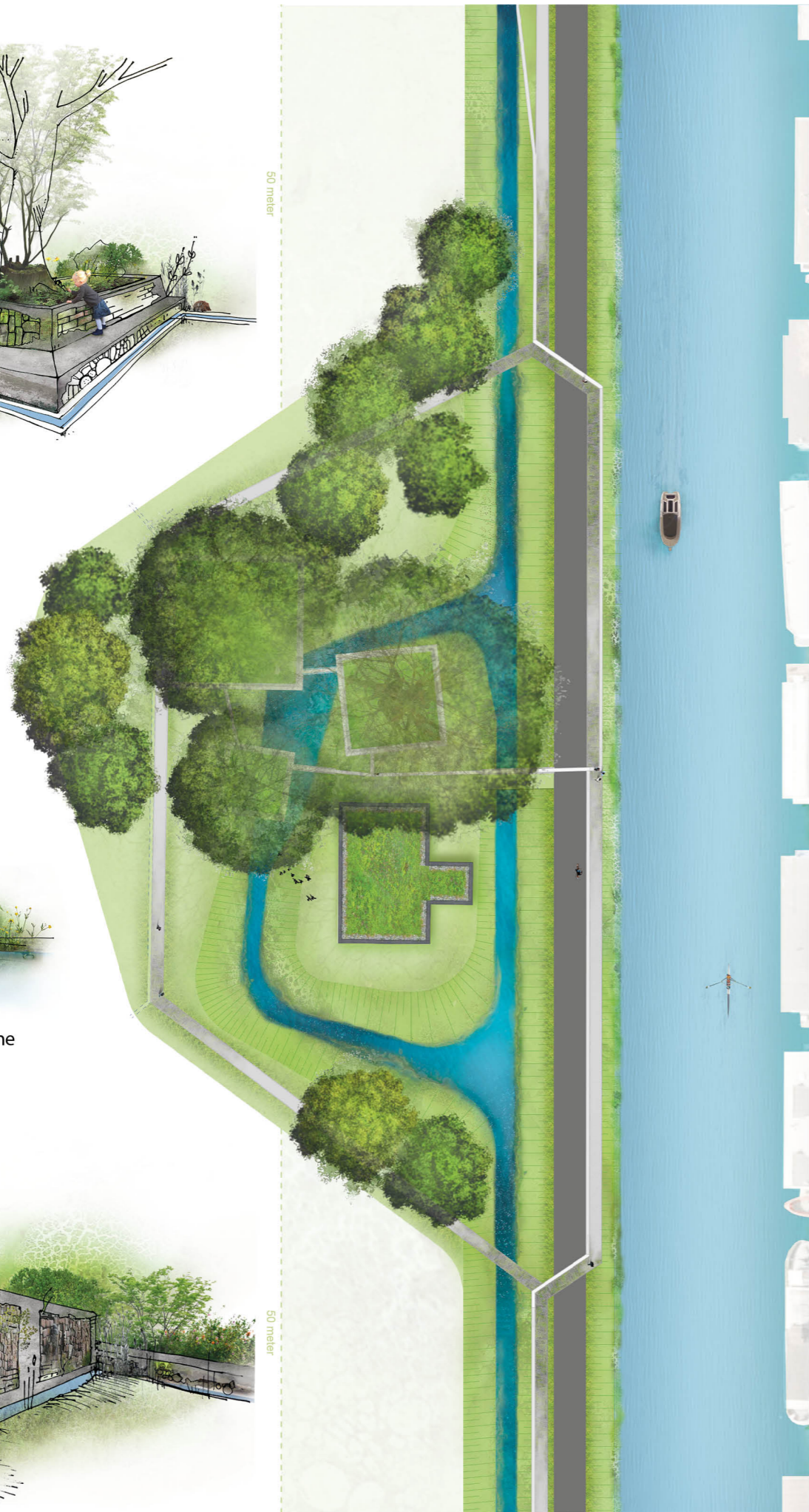
Element, tree bench



Element, stepping stone



Element, biotope wall



Plan, elaboration "Tree biotope"



Section, elaboration "tree biotope"



Visual "Tree biotope"