Amsterdam's approach to integral public space design

Case Study Amstel-Stad, Amsterdam

Marina Vasarini and Alessandra Riccetti

18-06-2021

City of Amsterdam

Congress Responsive Cities

Adapting Under Pressure

16-18 June 2021 | Edinburgh

Introduction

Team


Joyce *van den Berg*


Hans *van der Made*


Maki *Ryu*


Alan *Douchet*


Marina *Vasarini Lopes*

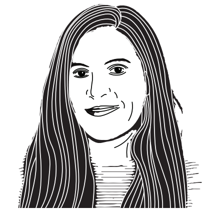

Nadine *Schilder*

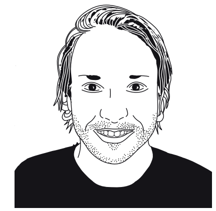

Caroline *Pompe*


Alessandra *Riccetti*

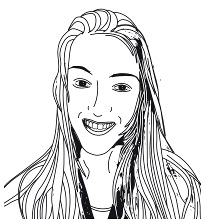

Anne-Marije *Duin*


Timo *Banning*
(stagiair)


Venetia *Kollia*


Sten *Camps*


Szymon *Michalski*


Isabele *Timmermans*
(stagiair)


Eric *Kraak*


Ingrid *Oosterheerd*


Eliane *Beyer*


Endre *Timár*


Benjamin *Rothmeier*
(stagiair)


Emilie *van Zinnicq Bergmann*
(stagiair)


Peter *Heij*


Ellen *Nieuwboer*


Bob *Mantel*


Richard *Ruijtenbeek*


Lidwien *Besselink*


Tohid *Korse*
(stagiair)


Annoejska *Nienhuis*


Basia *van Rijt*

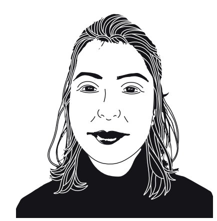

Krijn *Nugter*


Jana *Crepon*


Maarten *Nulle*


Mirjam *Koevoet*


Louis *Amerongen*

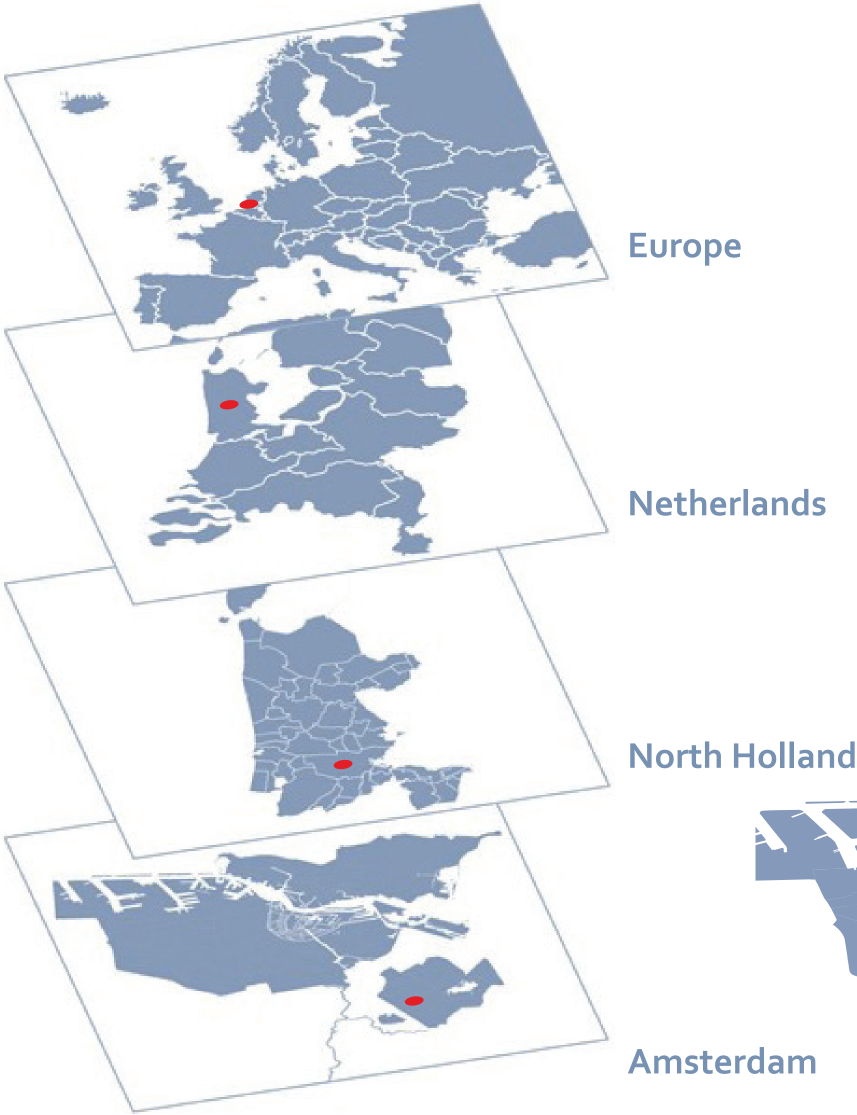

Carolina *Rodrigues Martinho*
(stagiair)

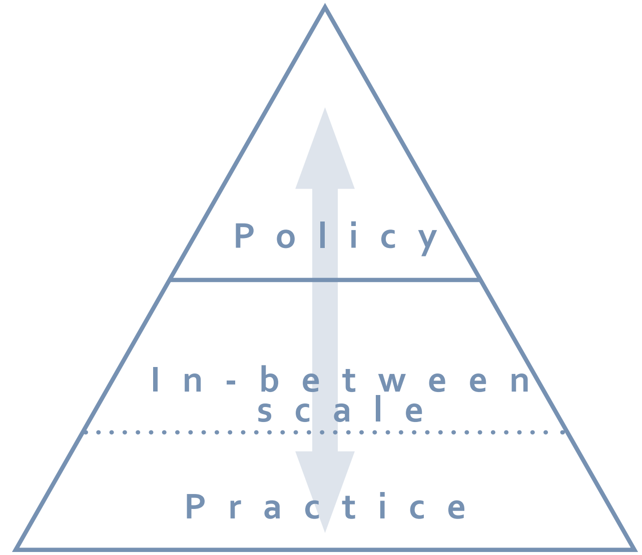
Context

UN sustainable development goals

UN sustainable development goals

Context
Amstel-Stad






Apollo

What is the assignment?

What is the assignment?

Urgencies in Amsterdam

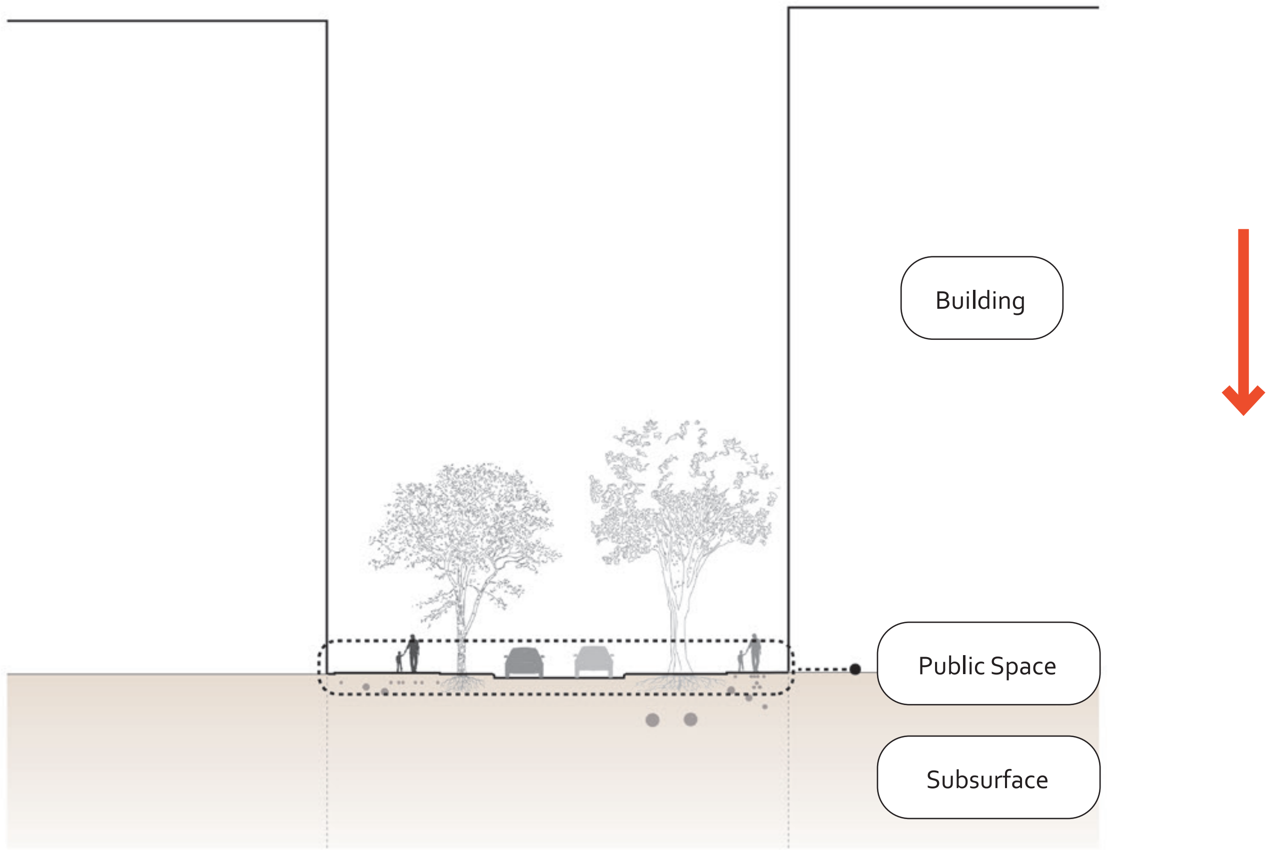
Adaptation to climate change

Crowded subsurface

Energy Transition

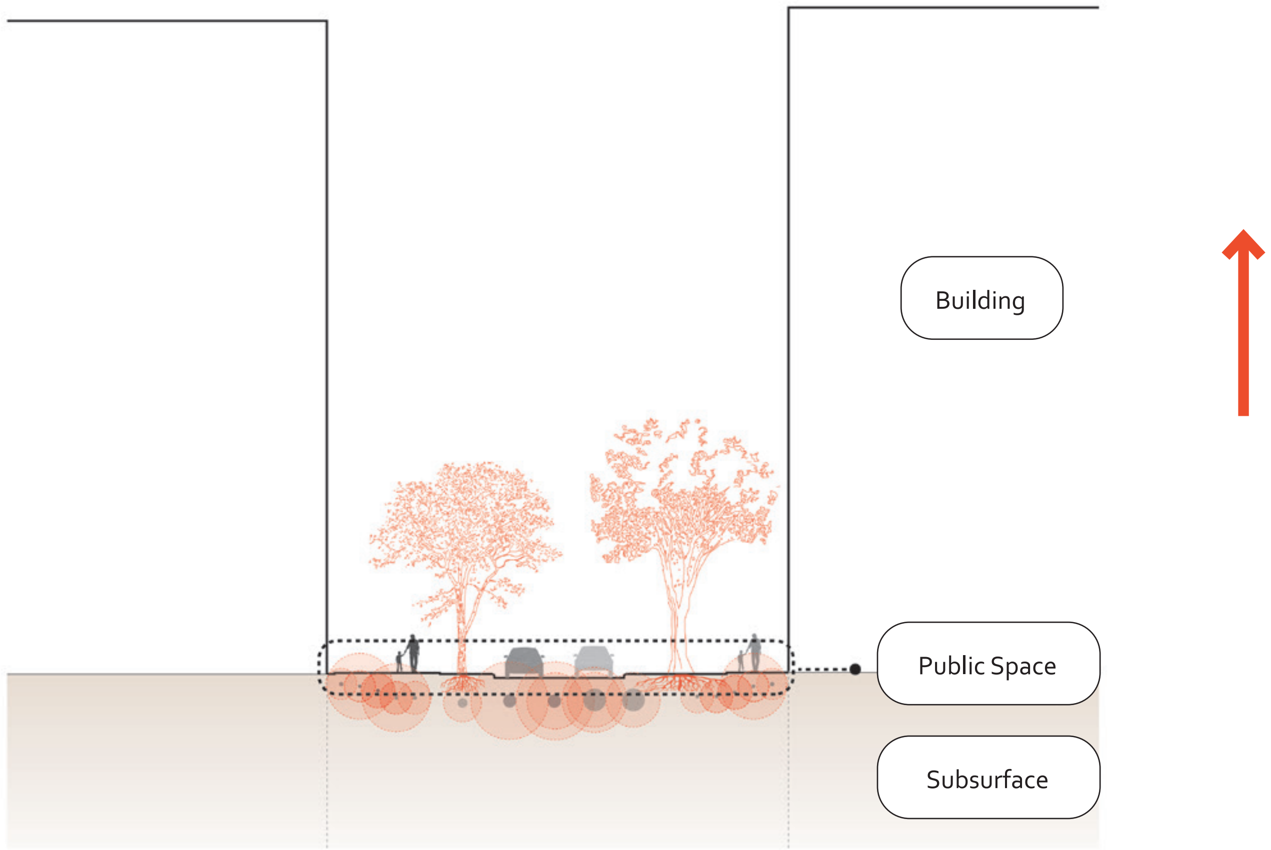
Area densification

What is “normal”?



What is "normal"?

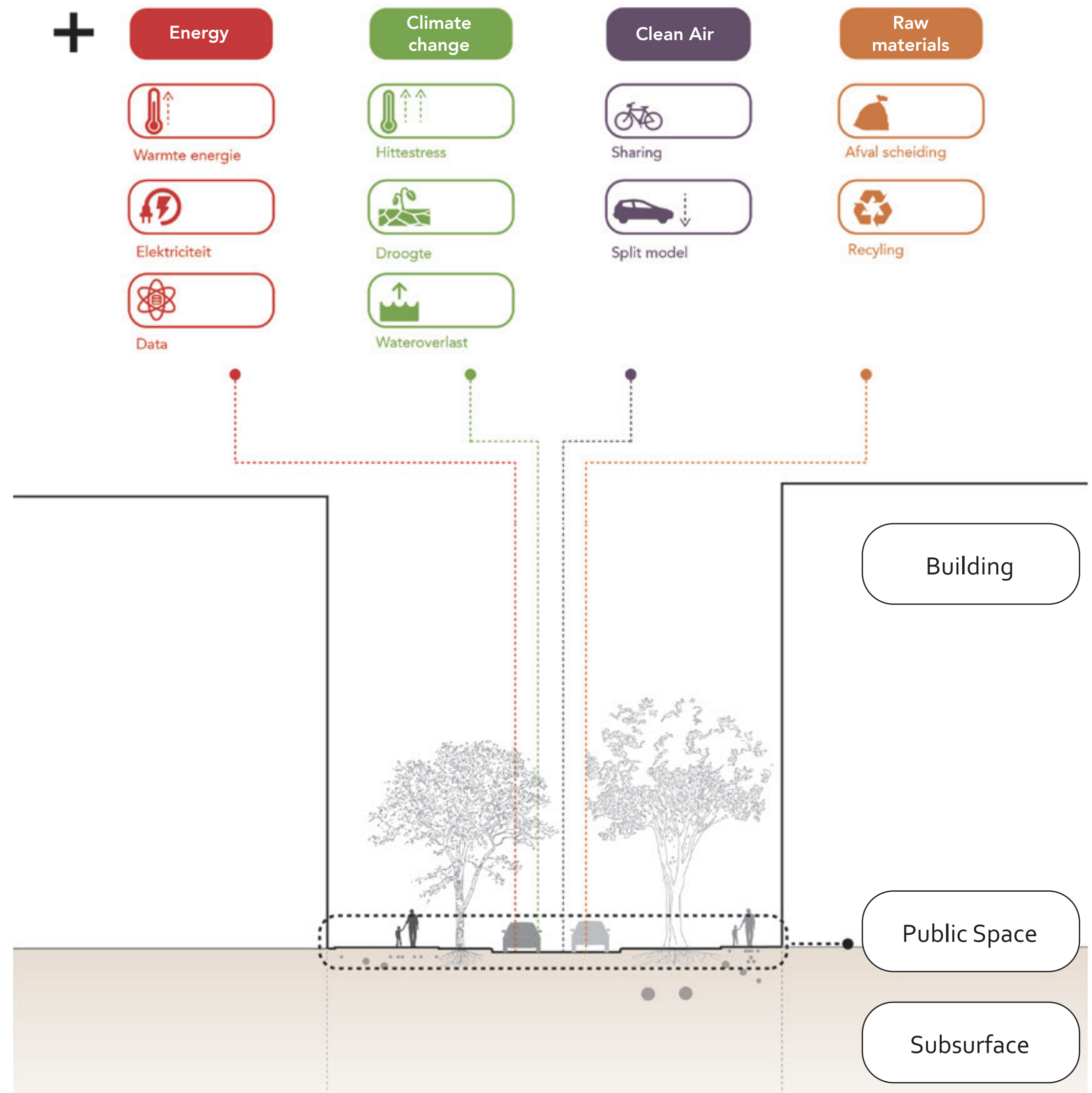
No more space



What is the assignment?

Seven themes

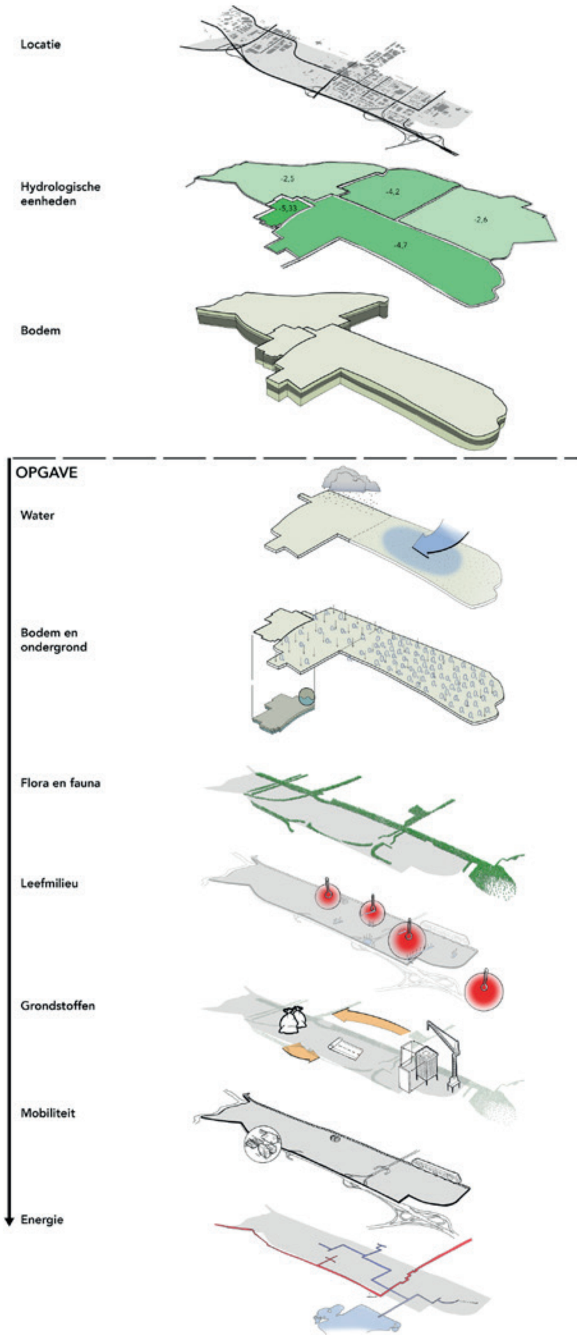
- Living Environment
- Water
- Flora & Fauna
- Energy
- Soil & Subsurface
- Mobility
- Materials



How do we approach this?

How do we approach this?

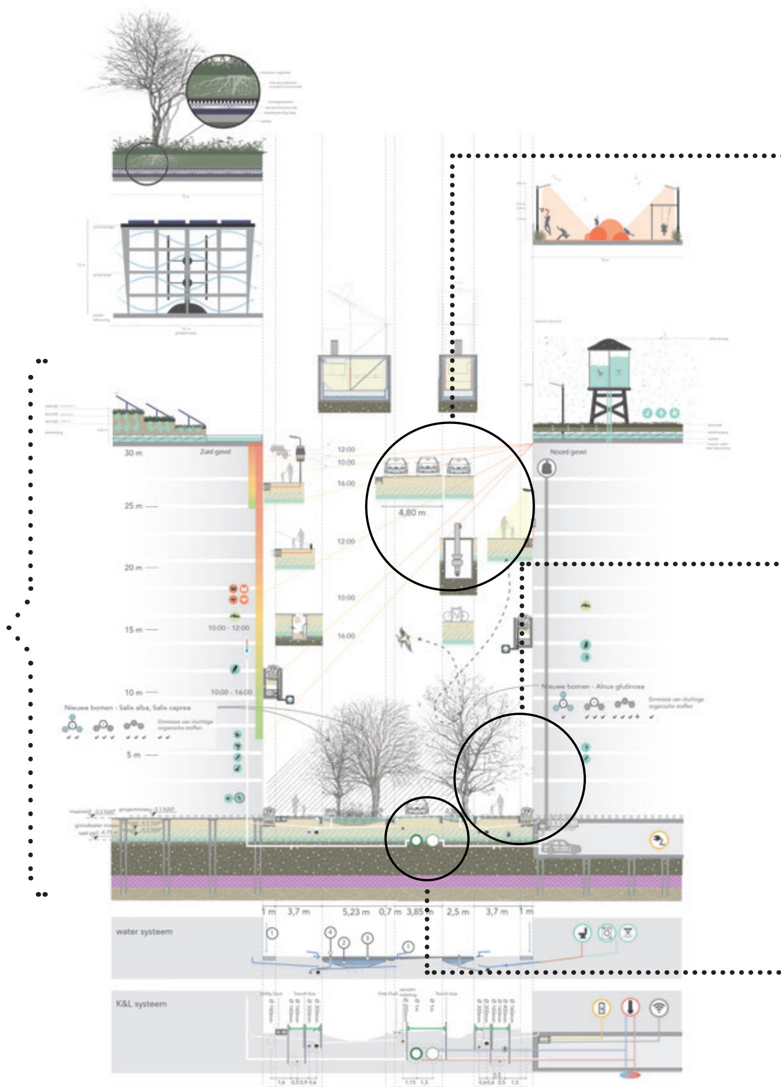
Transdisciplinary approach

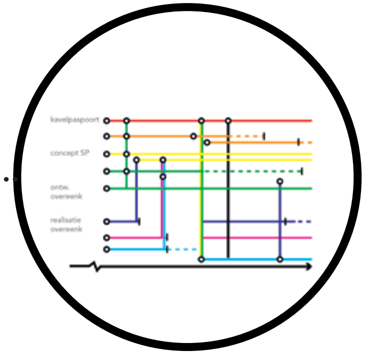


How do we approach this?

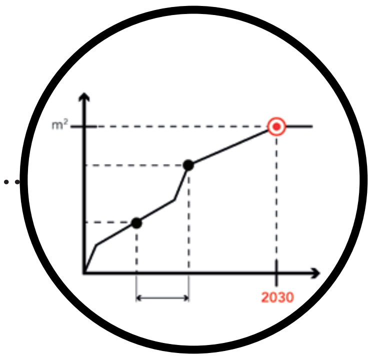
Organisation

Data

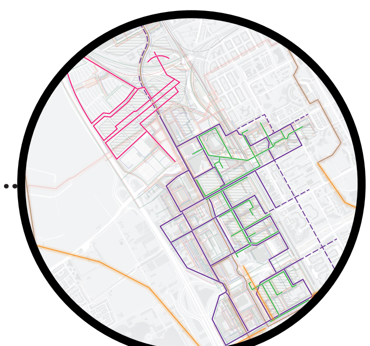




Contracts



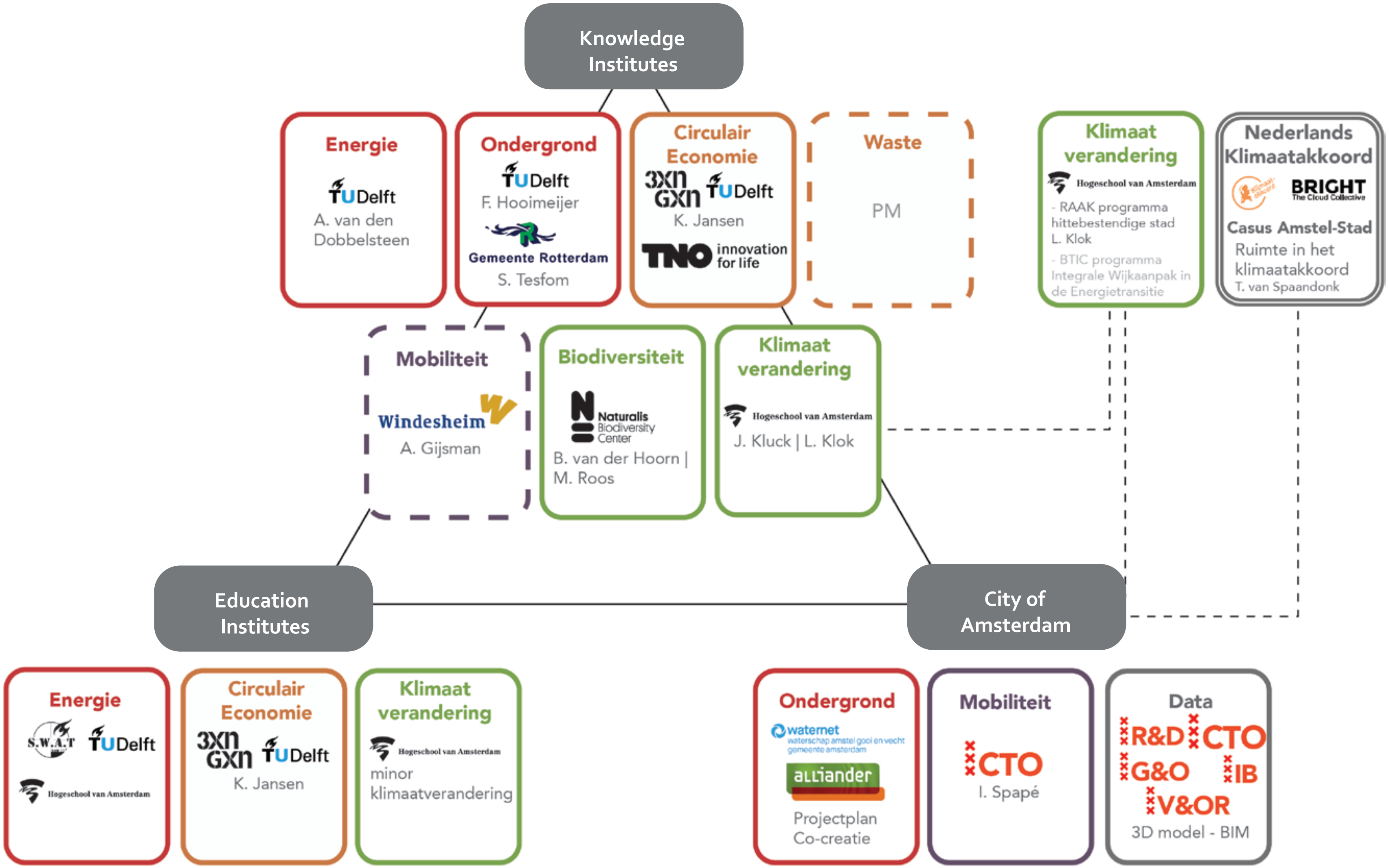
Tendering



Systems

Afbeelding: Tredjenatur, Climate Tile
Bron: https://www.tredjenatur.dk/en/portfolio/climatetile/

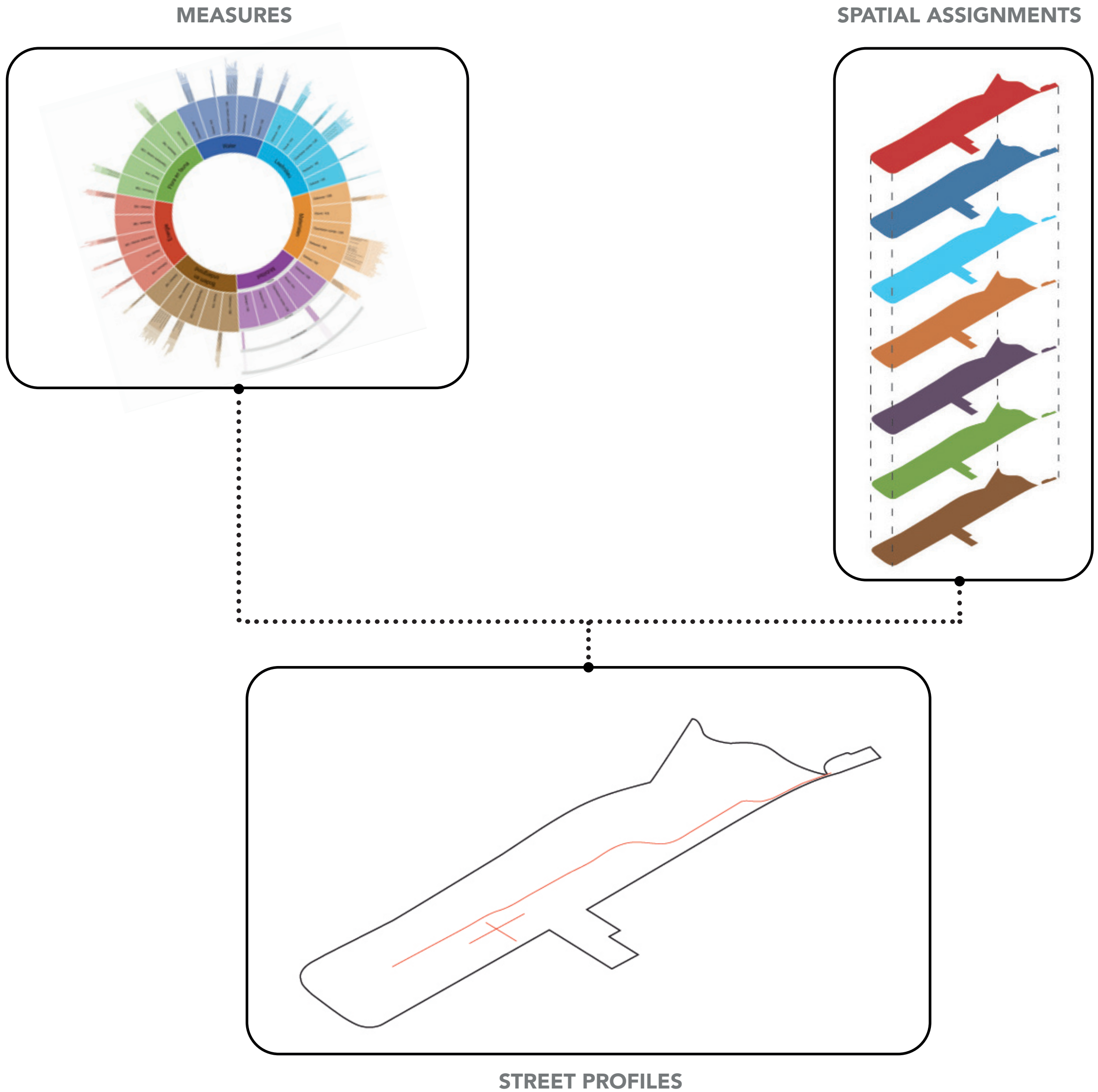
How do we approach this?
Collaboration



How does it work?

How does it work?

Method Integral Approach

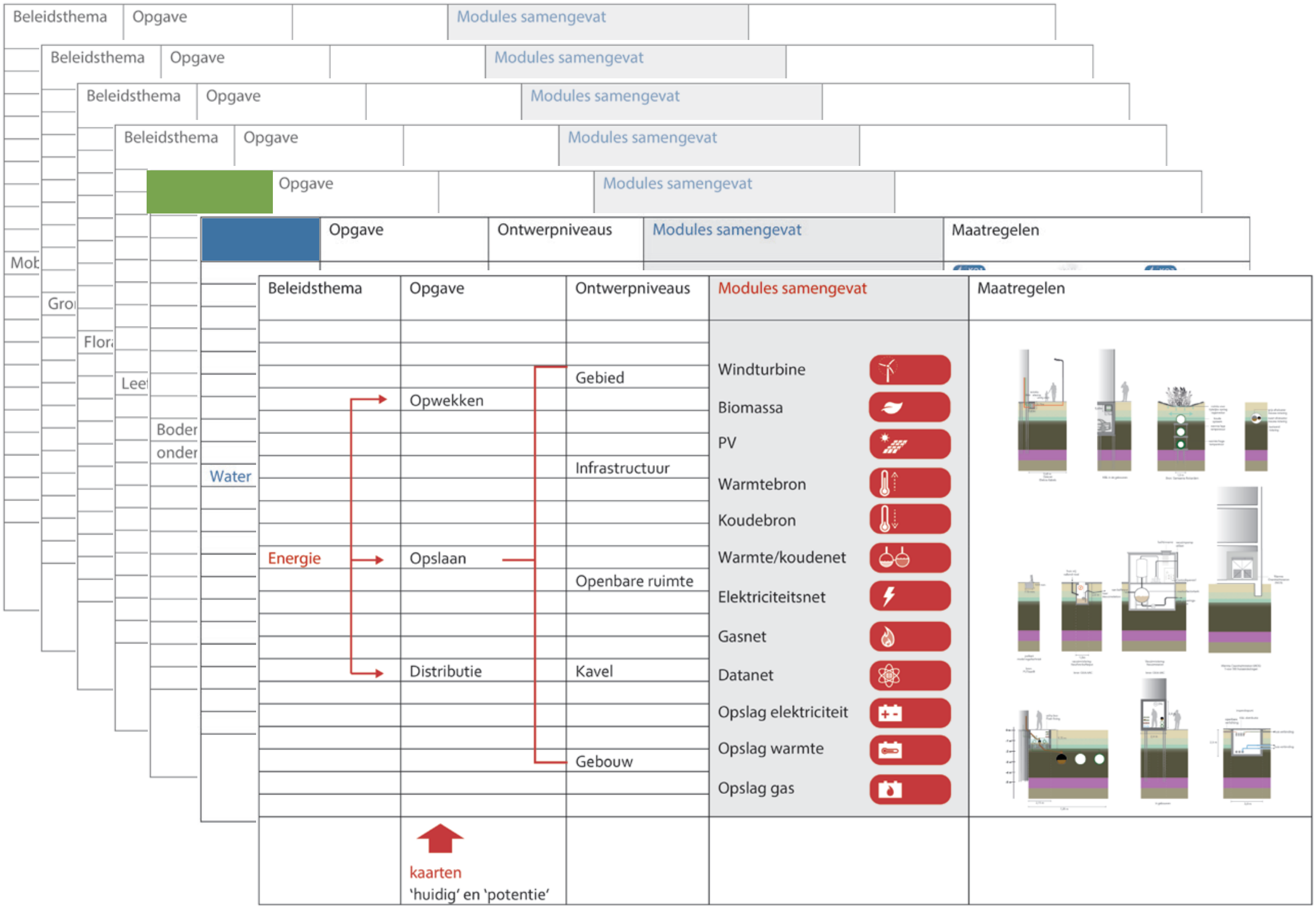


How does it work?

Catalogue of themes, scales, measures, resulting details

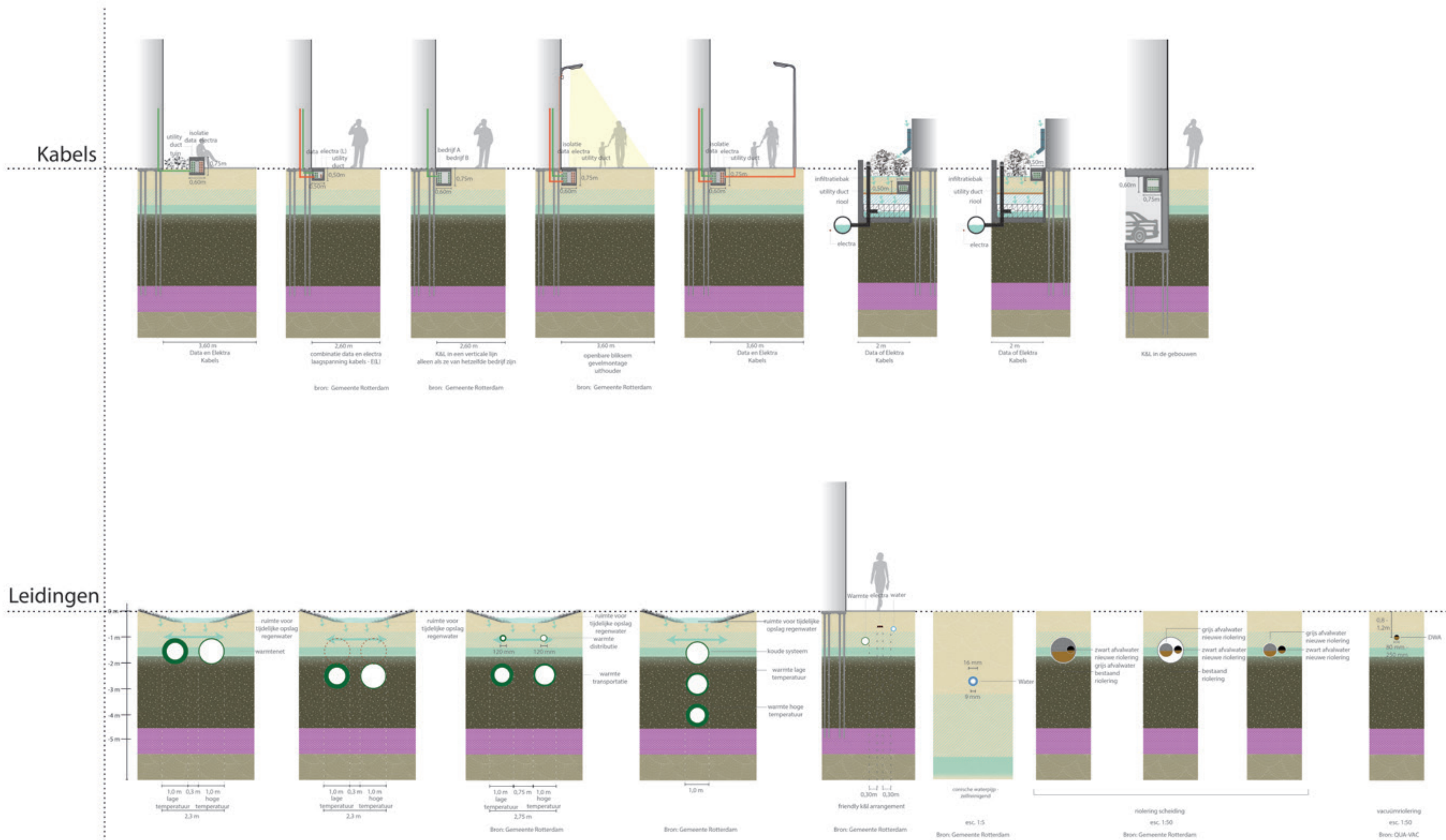
How does it work?

Method Integral Approach



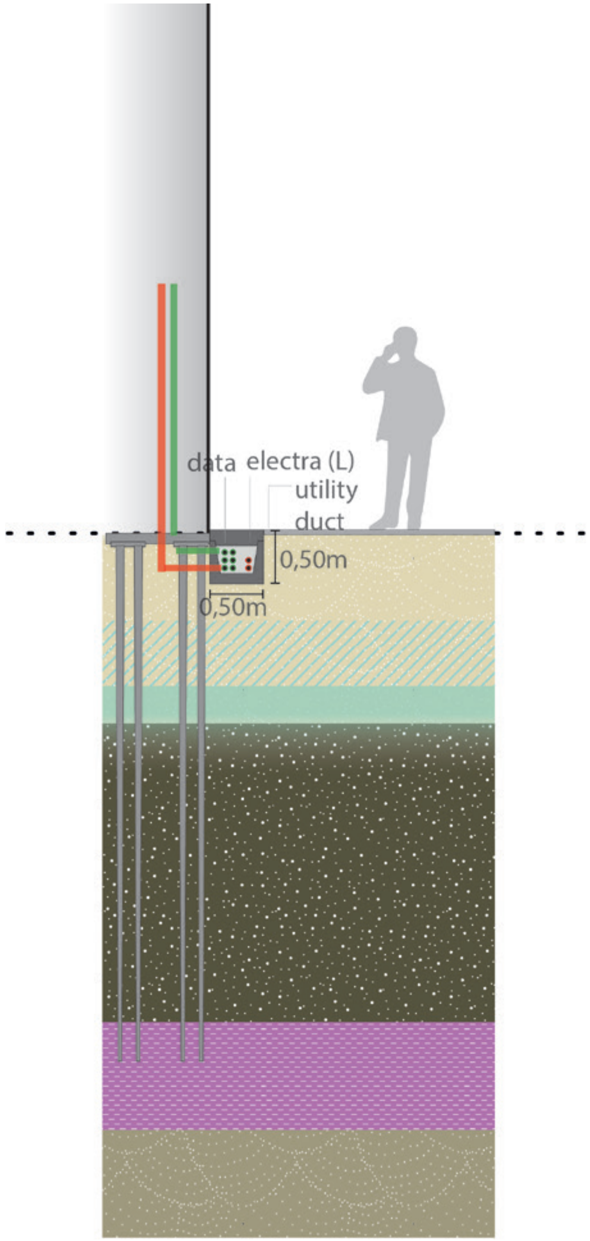
How does it work?

Example of resulting details



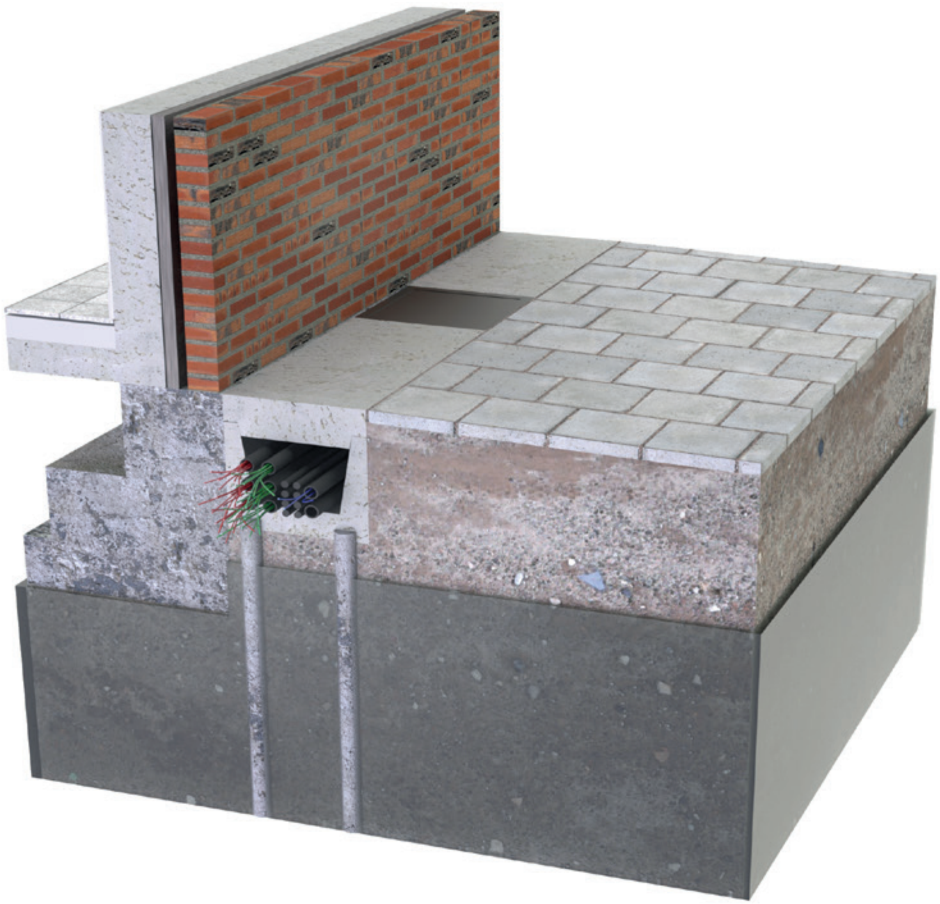
How does it work?

Exemple of utility duct



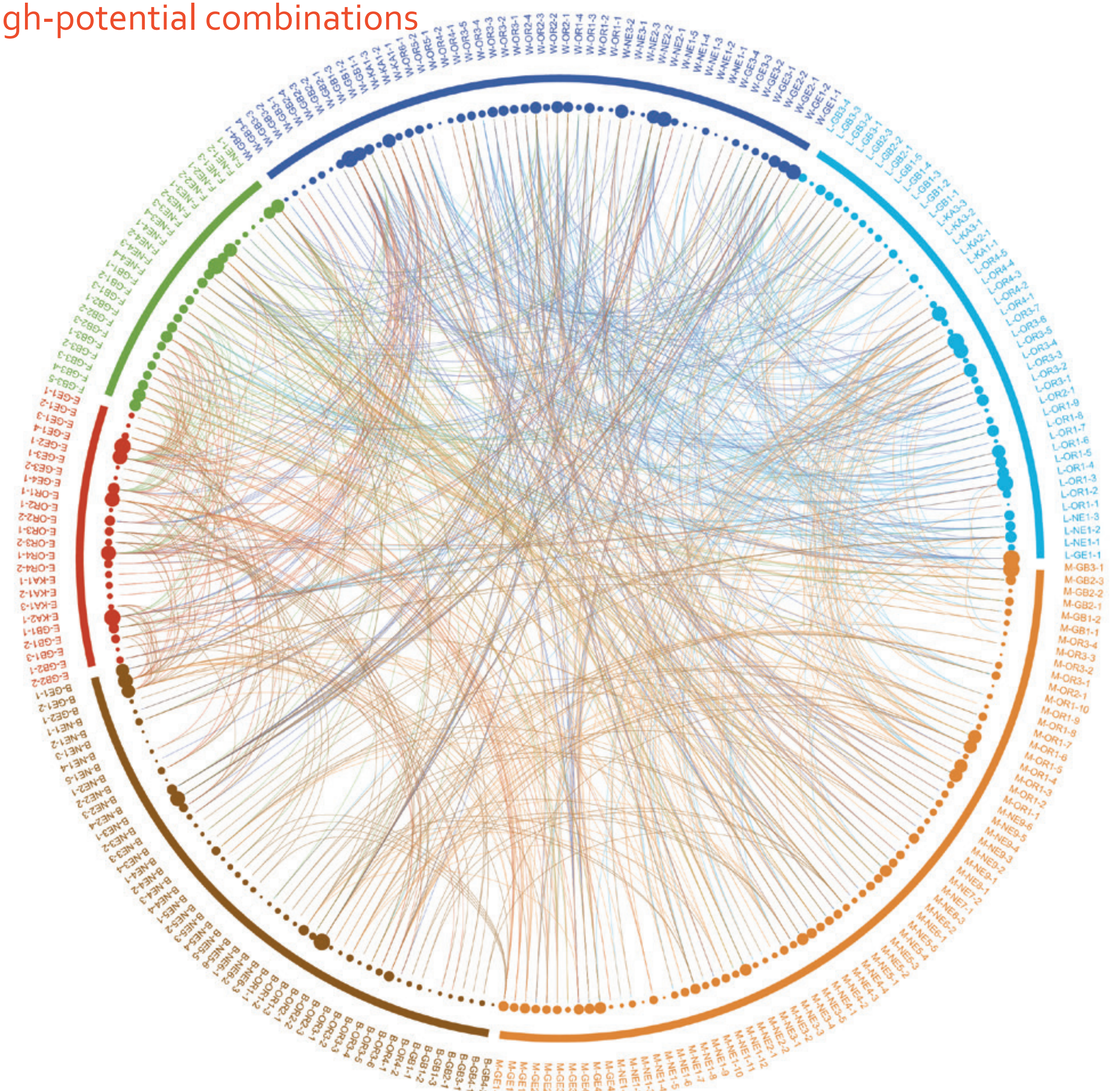
How does it work?

Example of utility duct



How does it work?

Catalogue high-potential combinations



Spatial assignments

Spatial Assignments

Inventory of current and potential

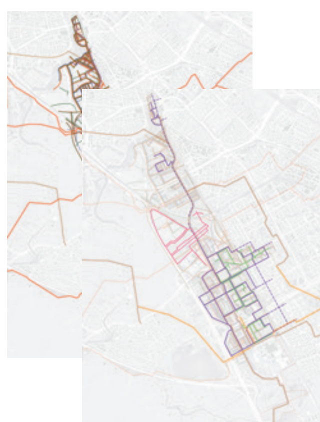
Living Environment

Water

Flora & Fauna

Energy

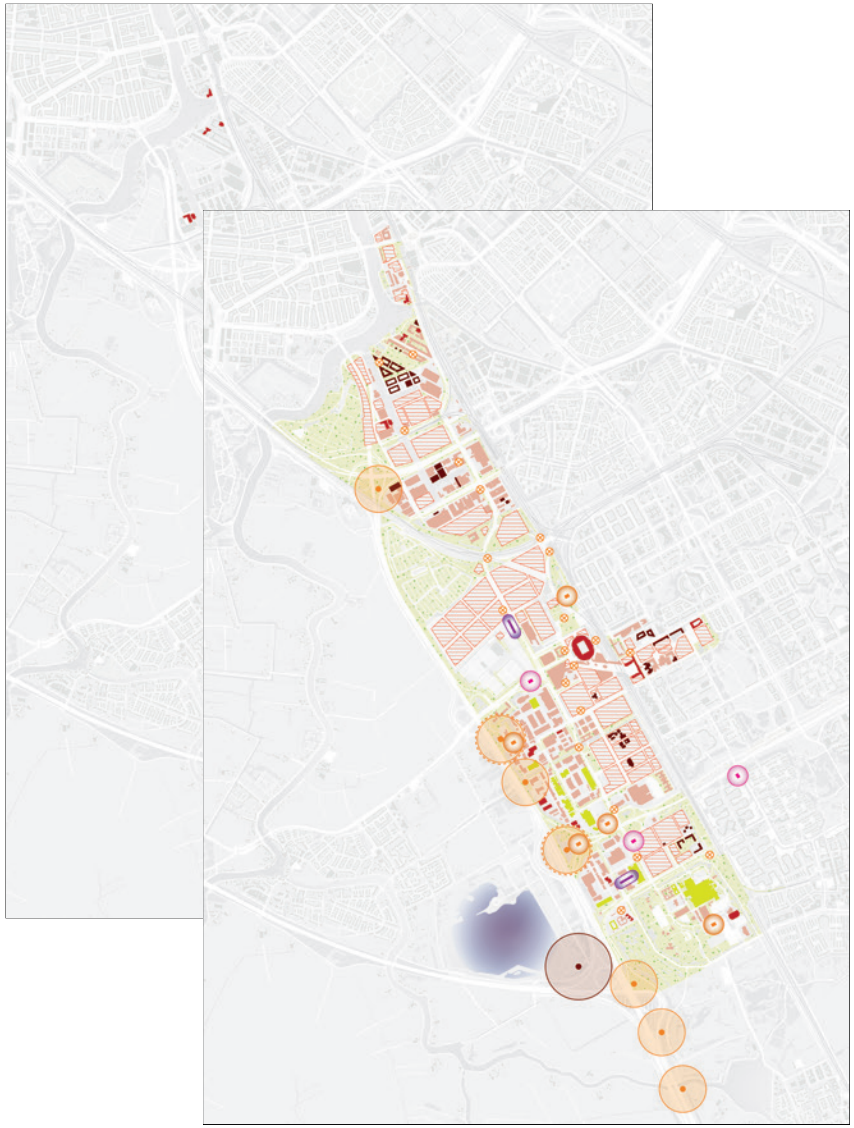
Soil & Subsurface



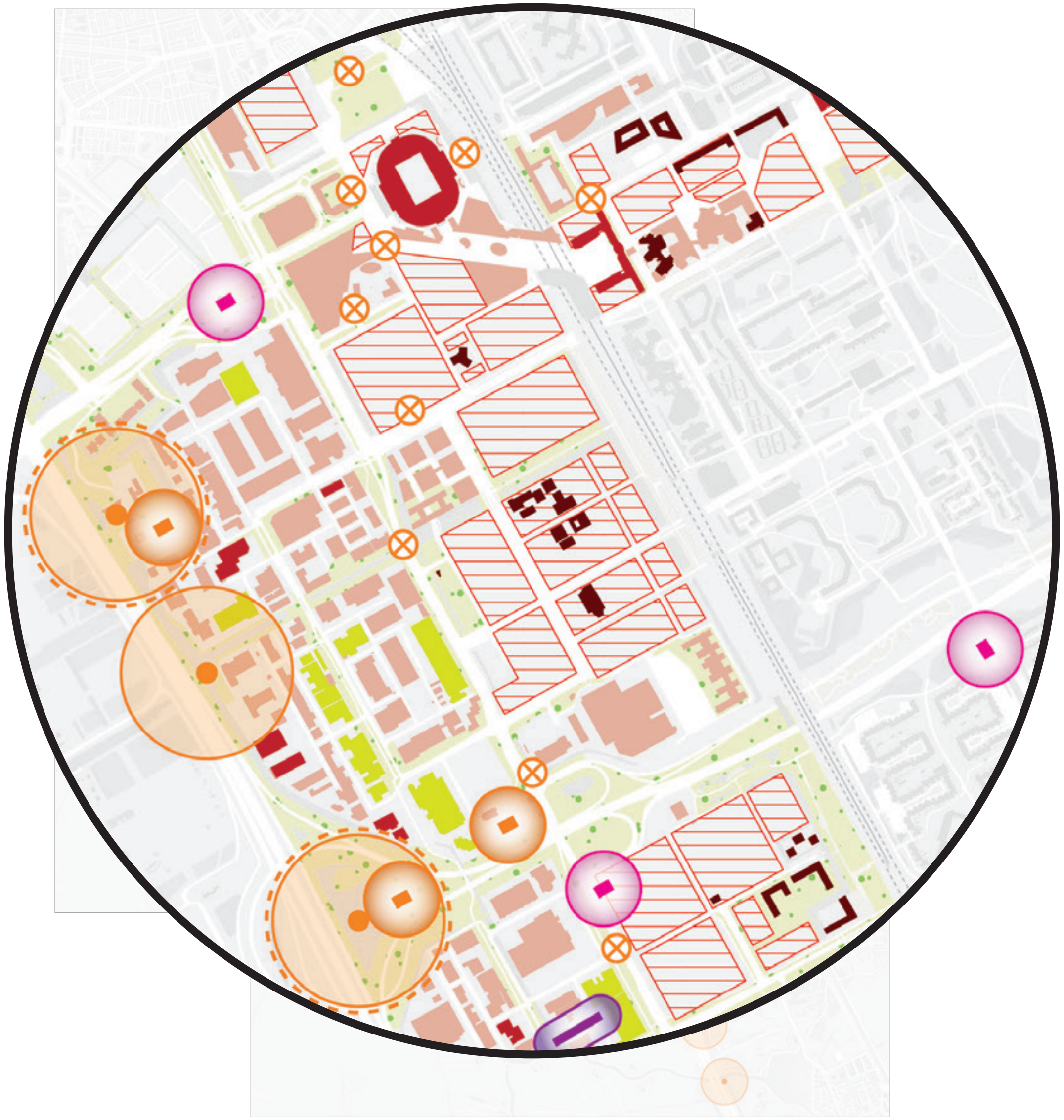
Mobility

Materials

Potential
Energy

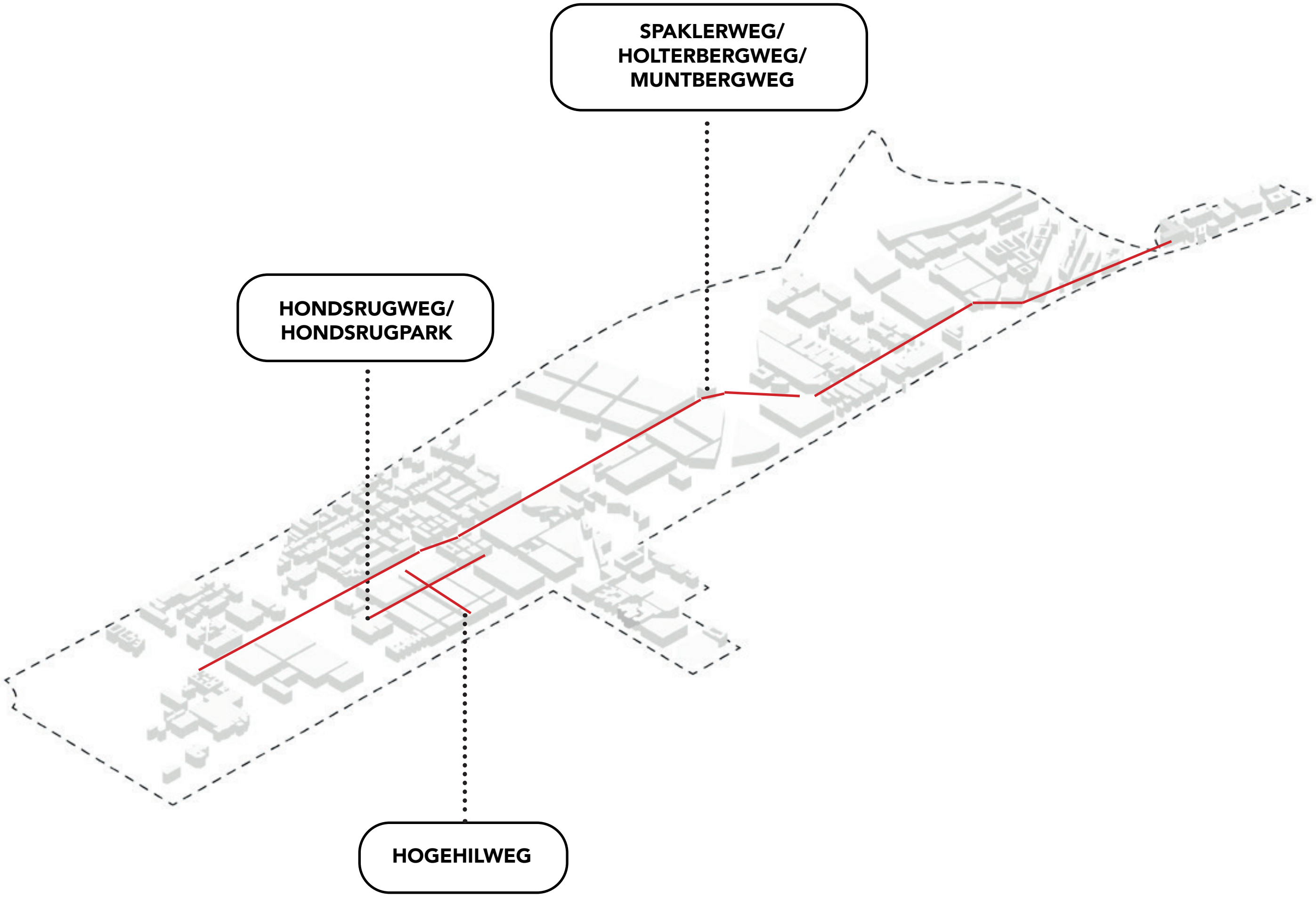


Potential
Energy



Street profieles

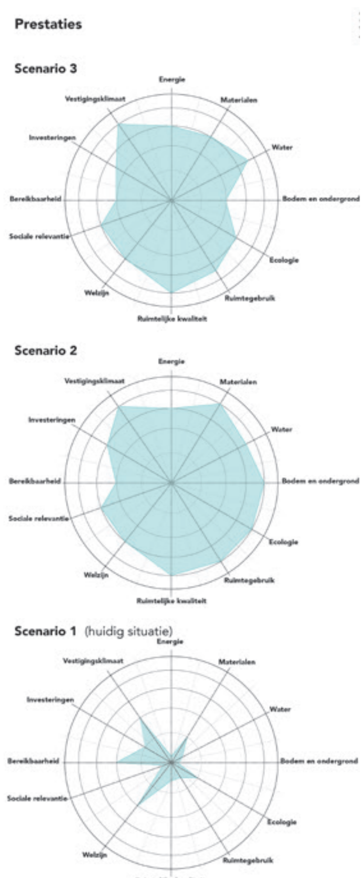
Profiles



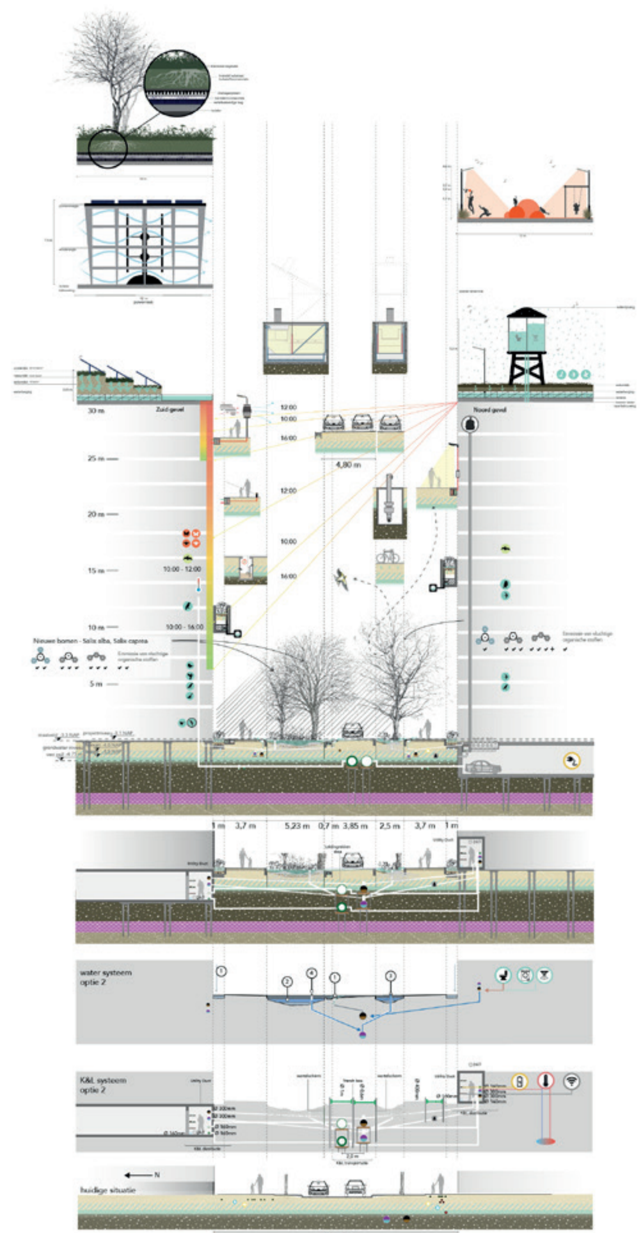
SPAKLERWEG/
HOLTERBERGWEG/
MUNTBERGWEG
HONDSRUGWEG/
HONDSRUGPARK
HOGEHILWEG

Hogehilweg

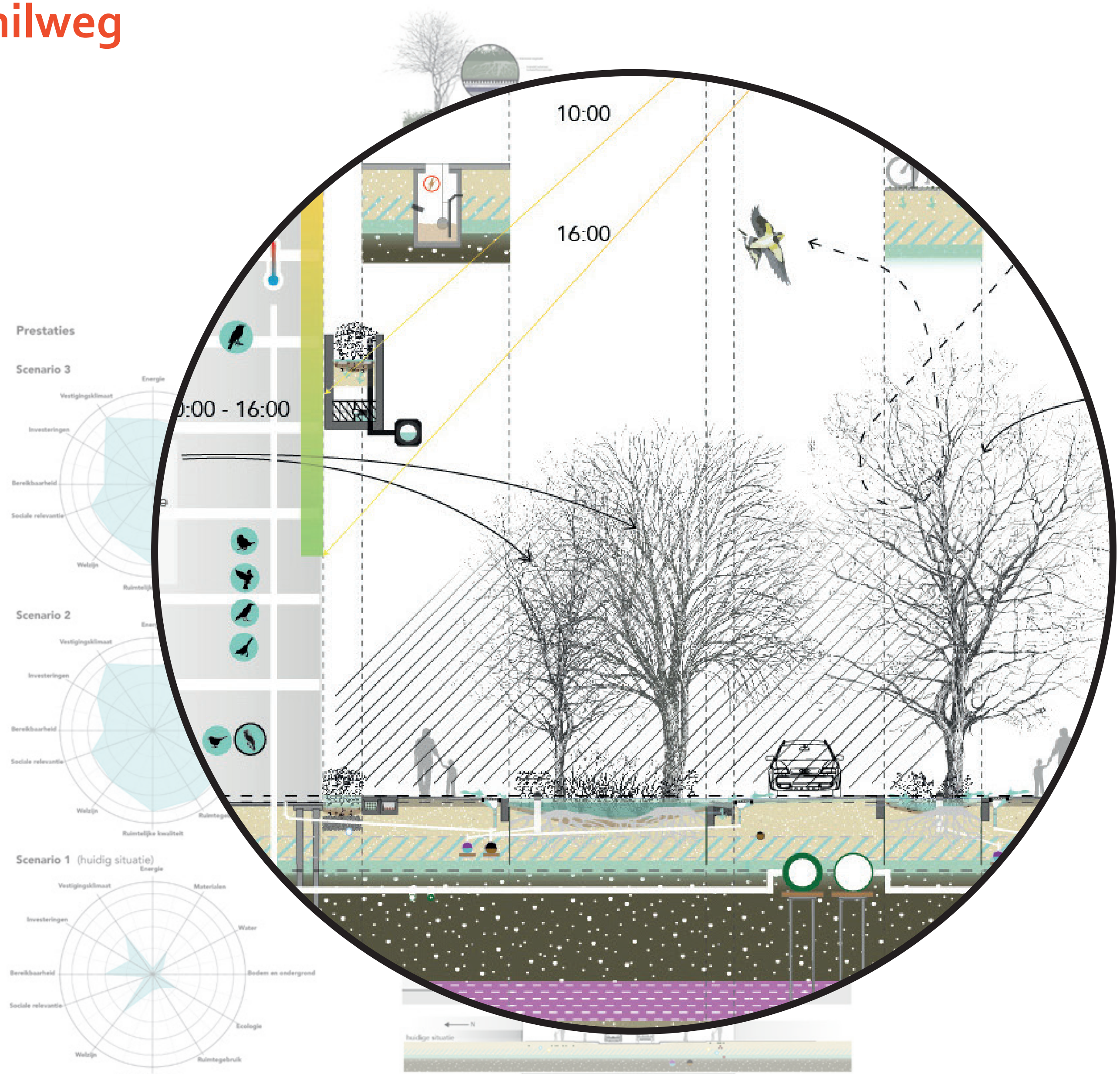
Defining priorities = Ambitieweb



Programming = Cross section

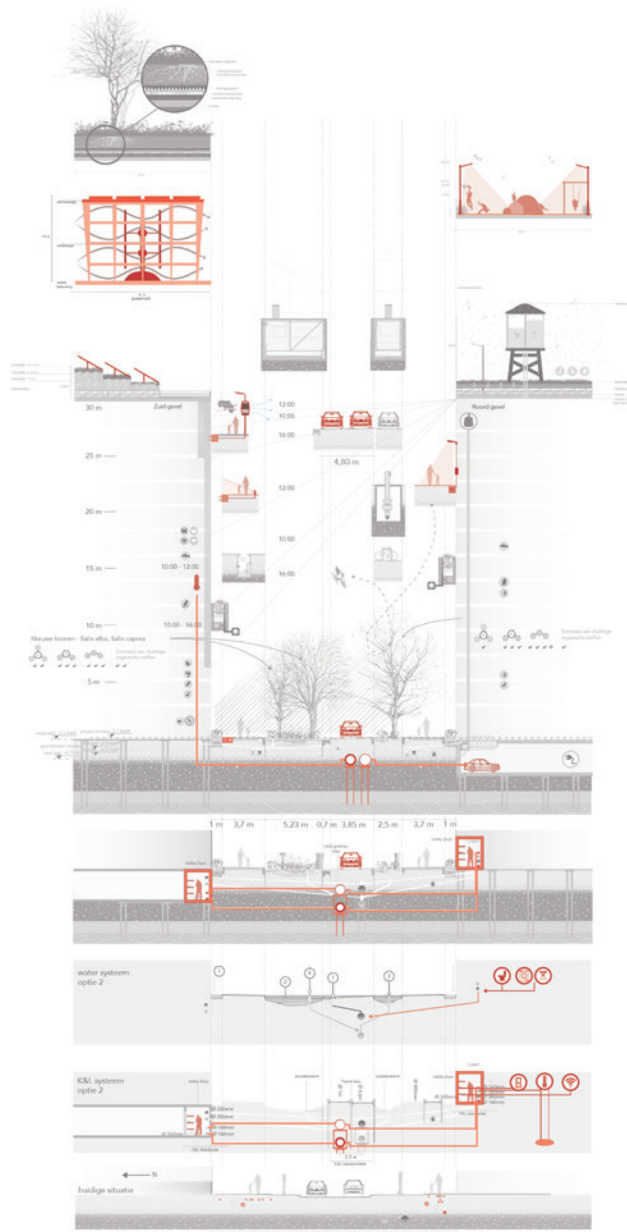


Hogehilweg

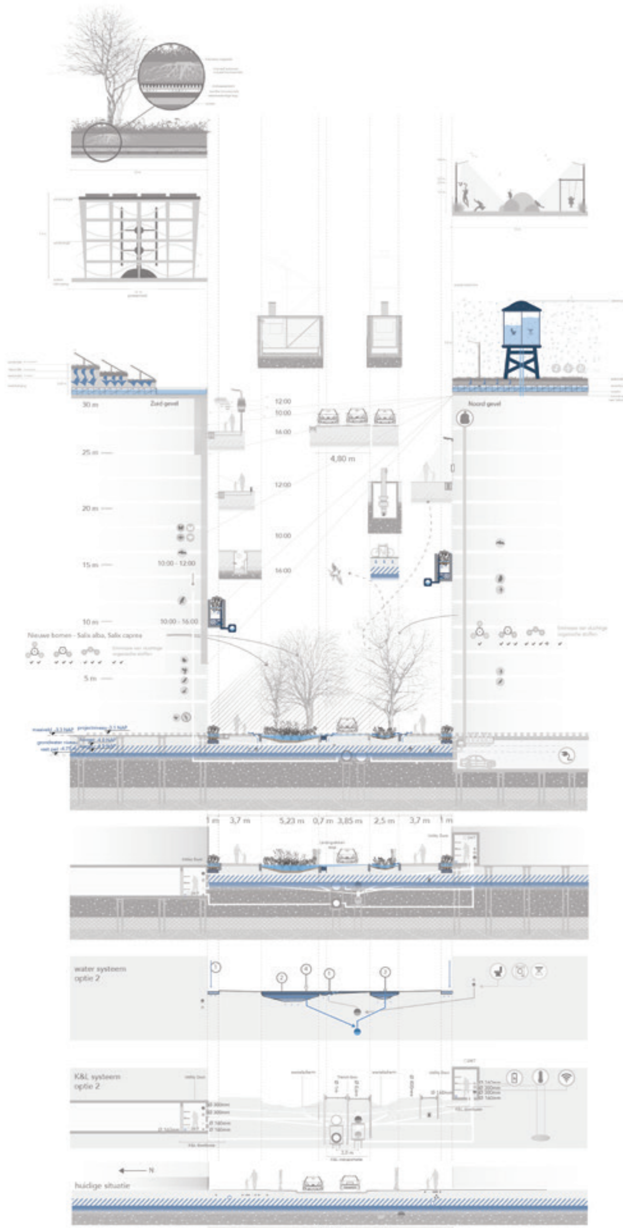


10:00
16:00
0:00 - 16:00
Prestaties
Scenario 3
Scenario 2
Scenario 1 (huidig situatie)

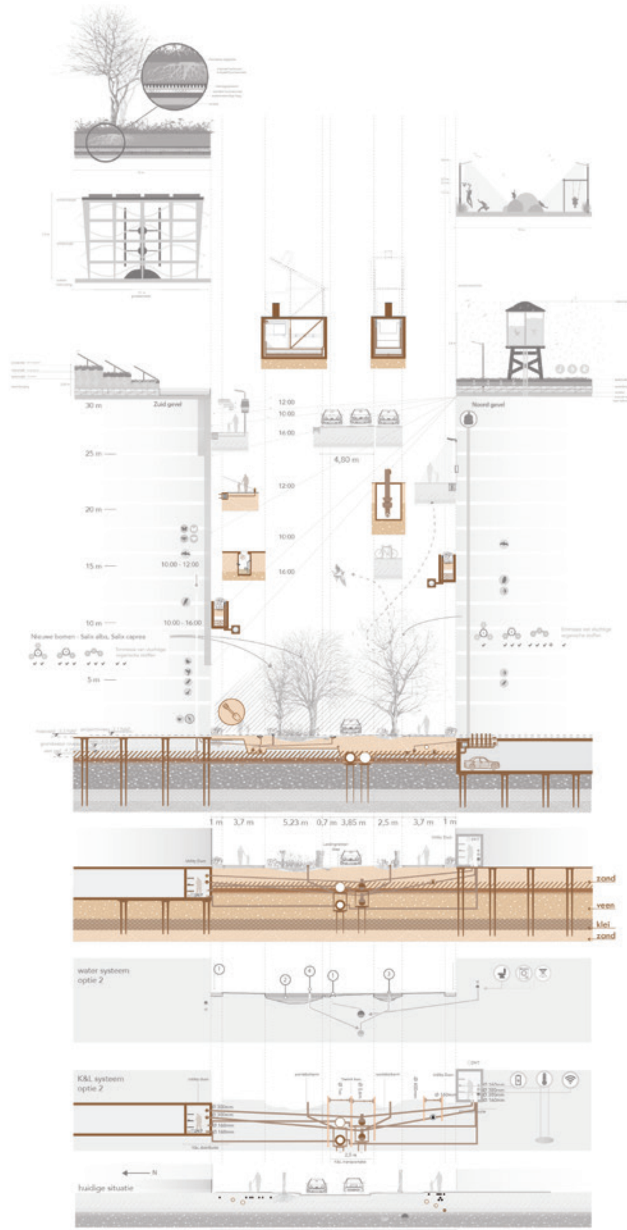
Hogehilweg
Energy



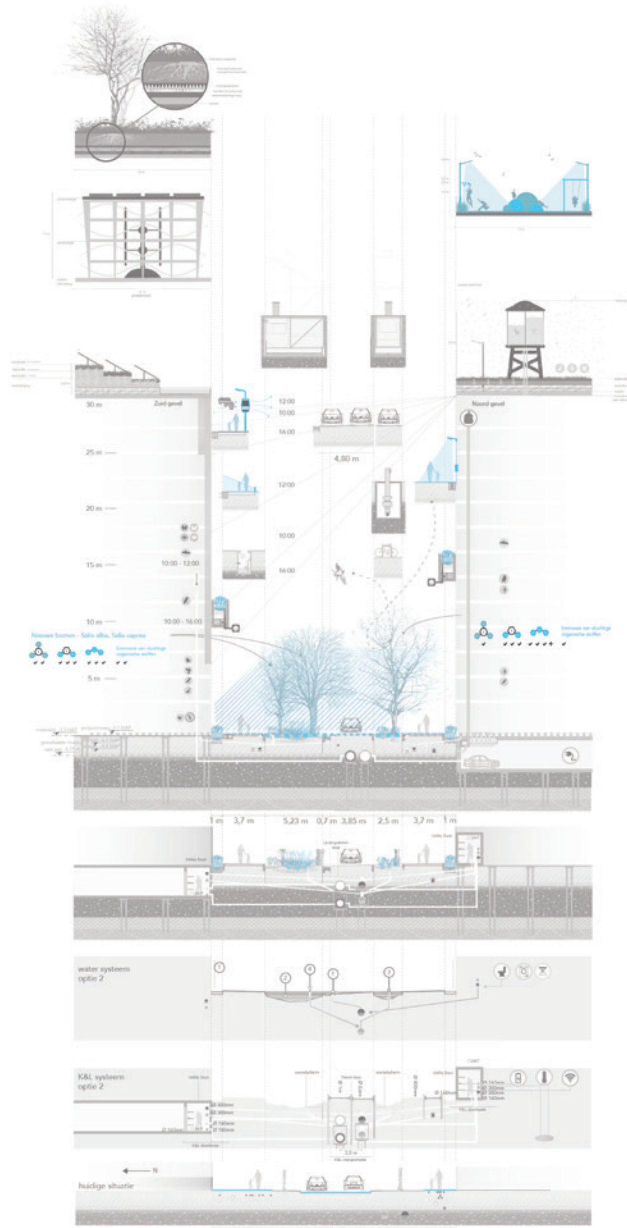
Hogehilweg
Water



Hogehilweg
Soil and subsurface



Hogehilweg
Living Environment



Hogehilweg
Flora and fauna

Biodiversity

Boom voordelen

Soort: Wilg (Salix)
Grootte: 10 cm, goede conditie

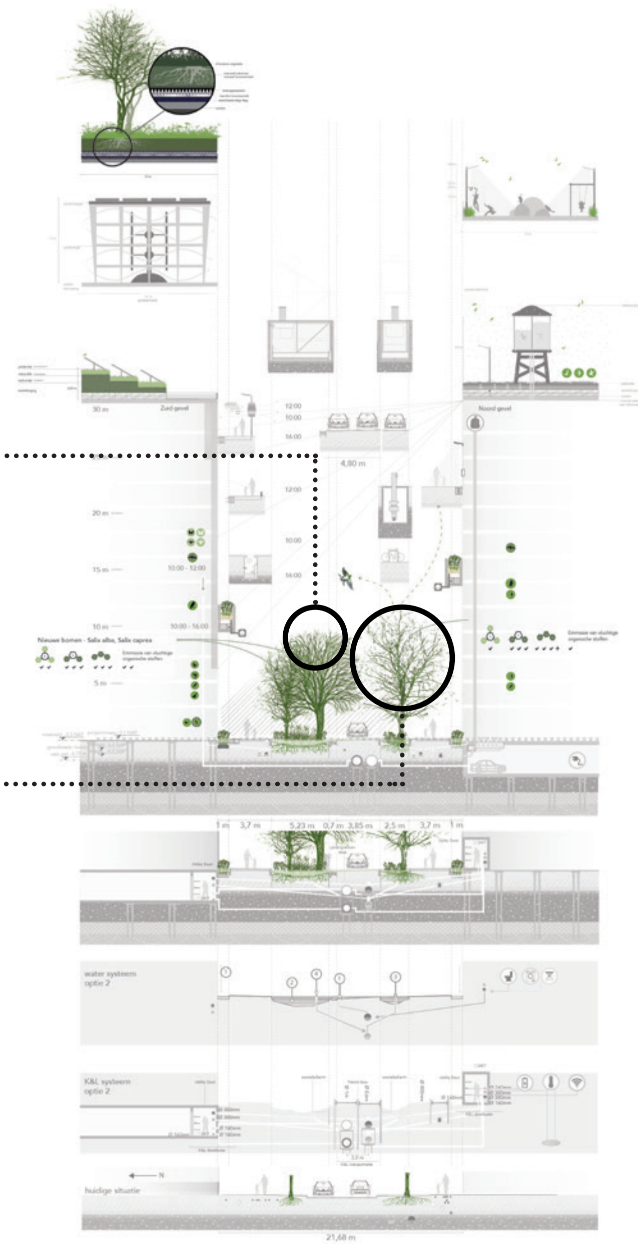
Totaal voordeel dit jaar	€ 30,06
CO2 gereduceerd	€ 20,42
CO2 equivalent carbon geabsorbeerd per jaar	11, 06 kg
Stormwater	€ 1,97
Neerslag opgevangen per jaar	1 097,7 Liter
Lucht vervuiling verwijderd per jaar	€ 0,27
Ozon	0,02 kg
Nitorgen dioxide	0,01 kg
Sulfide dioxide	0,00 kg
Grote deeltjes**	0,01 kg
Energie verbruik per jaar*	€ 7,07
Electriciteits besparing (A/C)	20,79 kWh
Brandstof besparing (NH, Olie)	2,93 therms
Voorkomen uitlaatgassen	
Carbon dioxide	24,82 kg
Nitorgen dioxide	0,00 kg
Sulfide dioxide	0,03 kg
Grote deeltjes**	0,00 kg

Voordelen zijn schatting gebaseerd op USDA Forest Service onderzoek e zijn bedoeld als richtlijn.

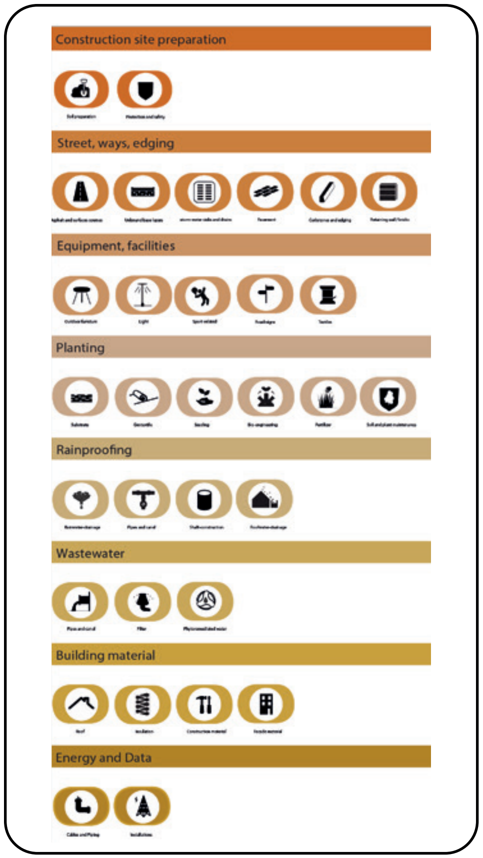
* Postieve energie waarde geven een indicatie aan van bespaarde of gereduceerde uitlaatgassen. Negatieve energie waarde geven een toena van uitlaatgassen aan.

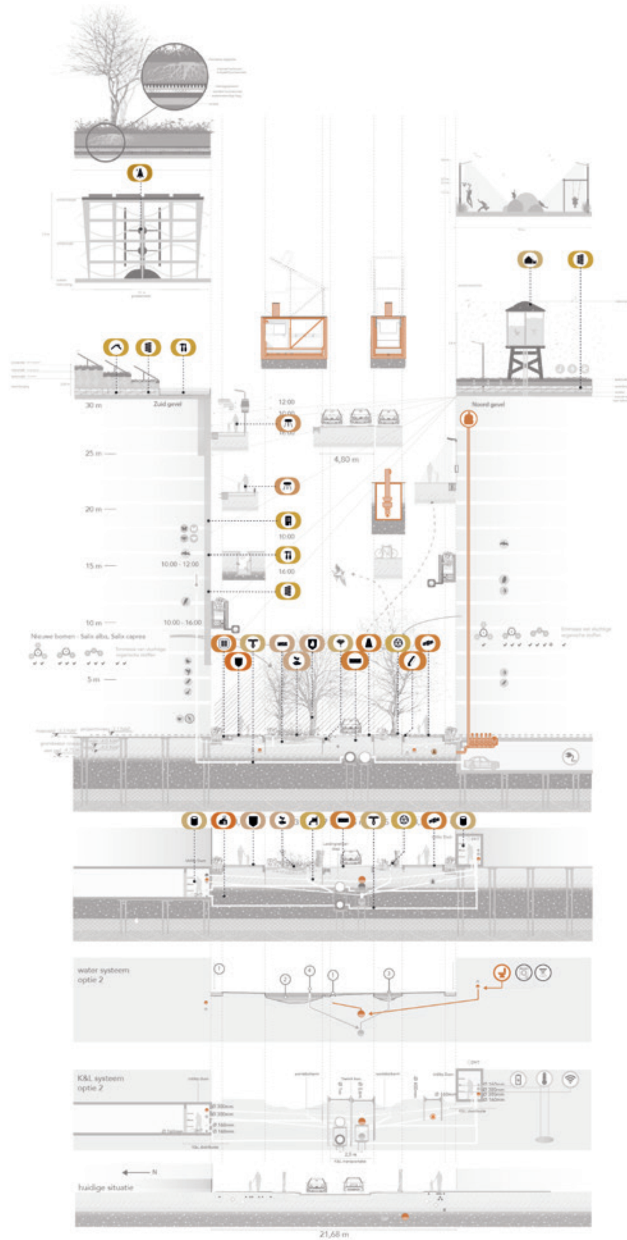
**is niet groter dan 10 micrometer.

bron: itreetools.org

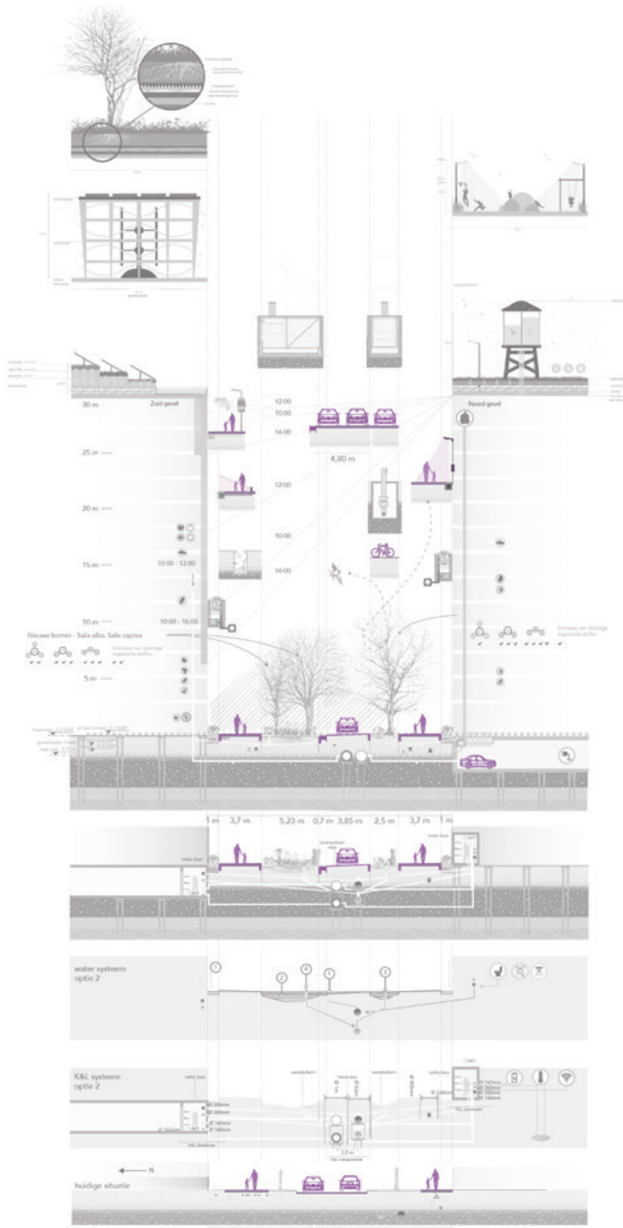


Hogehilweg
Materials





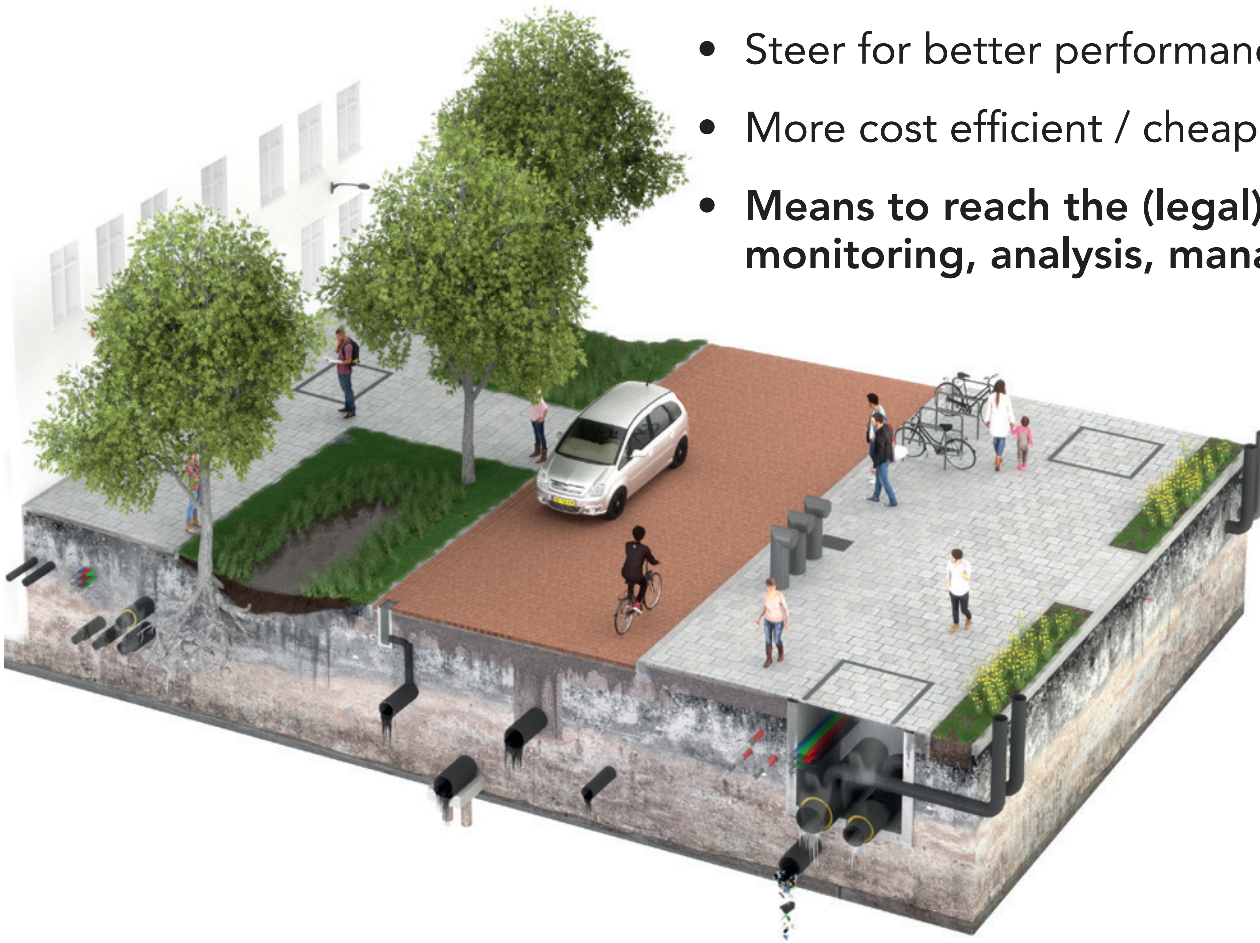
Hogehilweg
Mobility



Hogehilweg

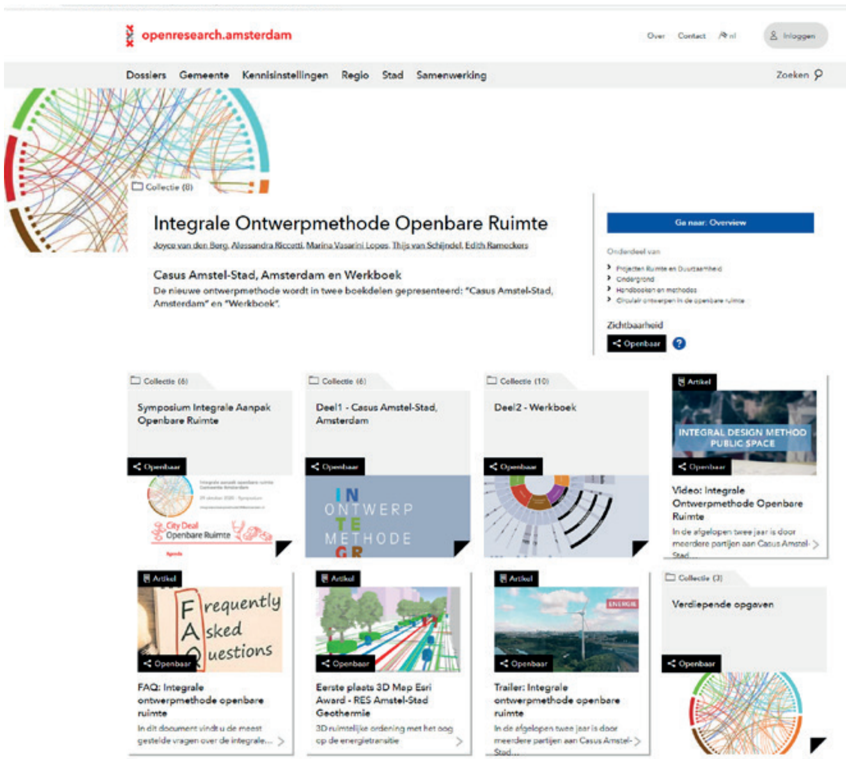
What is the result?

- Working method for programming and designing integral sustainable public space.
- Integral coordination and cooperation (co-creation)
- Steer for better performance / fewer errors
- More cost efficient / cheaper!
- **Means to reach the (legal) goals needed: data, monitoring, analysis, management, accountability**

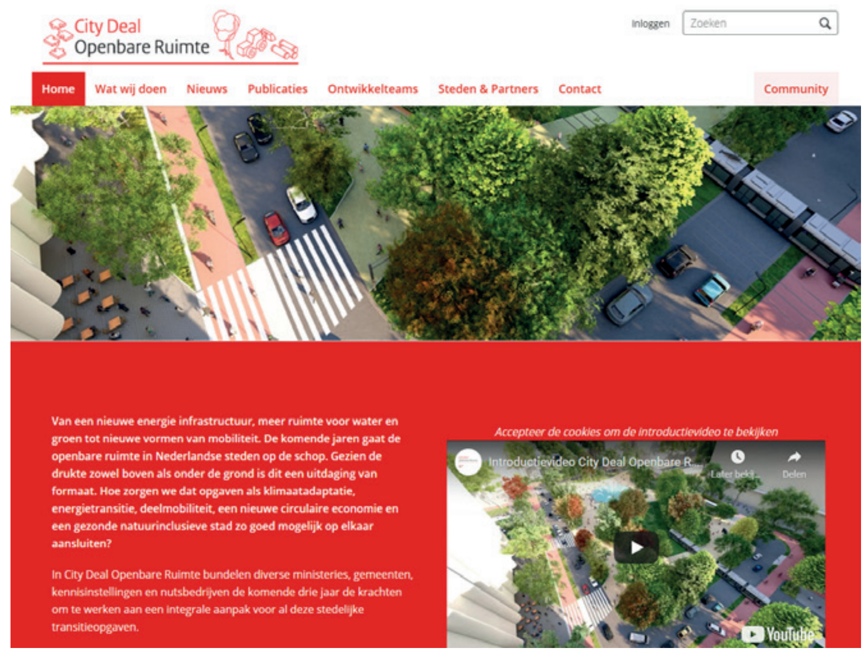


Where you can find us

openresearch.amsterdam/en



citydealopenbareruimte.nl




contact
integraleontwerpmethodeOR@amsterdam.nl
Thanks for your attention
City of Amsterdam