The green structure of the area serves multiple goals: purifying the ground, adding recreational and living value, enhancing urban ecology and cooling down the city district.

With the different transformation strategies, an array of different densities and activity levels can be realised. In the ‘center’ of the area (red) a high density, connecting to the Havenstad-goals, is planned, while in the more quiet, green parts a lower density is planned.

The mobility and logistic hubs make a car-free neighborhood possible: combining the mobility function with other ‘centralised’ functions as for example a supermarket, data center or kindergarten enlarges this scope to ‘smart hubs’.
EXISTING SITUATION

- A contaminated, industrial area with different types of AST's.

GREENING THE SITE

- Providing comfort, recreational value, enhancing ecology and cooling to the area.

A MIXED-USE PROGRAM

- A mix of the new, circular port industries, housing and public functions.

A SEPARATED MOBILITY

- Personal (deck) and industrial (ground level) mobility with own 'layer'. Mainly over water, or using a mobility hub.

TWO WAYS OF BIO-MYCO REMEDIATION

- Using mushrooms and mycorrhiza for purifying contaminated soil.

AQUATHERMIA

- Using one of the AST's (buffer) and the existing piping for collective heating and cooling.

FYTO + MYCO REMEDIATION

- Using microalgae and mycorrhiza for purifying contaminated soil and plants.

A MIXED-USE PROGRAM

- A mix of the new, circular port industries, housing and public functions.

TWO WAYS OF BIO-MYCO REMEDIATION

- Using mushrooms and mycorrhiza for purifying contaminated soil.

AQUATHERMIA

- Using one of the AST's (buffer) and the existing piping for collective heating and cooling.
Dwellings

MAIN-B1
72 m²
LEVEL 9000

MAIN-A1
45 m²
LEVEL 7200
STRUCTURAL PLAN
1:100

MAIN-B1
10800

MAIN-A1
10800
DETAILS
WINDOW OPENINGS

MAIN A1 INTROVERT - FACADE
MAIN B1 EXTRAVERT - INTERIOR WALL

OPENING WINDOW IN TANKSHELL OUT
1:5 | VERTICAL

OPENING WINDOW IN TANKSHELL IN
1:5 | VERTICAL

OPENING WINDOW MID
TANKSHELL OUT
1:5 | VERTICAL

OPENING WINDOW OUT TANKSHELL OUT
1:5 | VERTICAL

OPENING WINDOW OUT TANKSHELL OUT
1:5 | VERTICAL

OPENING WINDOW OUT TANKSHELL OUT
1:5 | VERTICAL

OPENING WINDOW IN TANKSHELL OUT
1:5 | HORIZONTAL
DETAILS
TANK SHELL + NEW CONSTRUCTION

MAIN B1 EXTRAVERT - INTERIOR WALL
MAIN A1 INTROVERT - FACADE

1:10

DETAILS
EXTRAVERT CONSTRUCTION

MAIN B1 EXTRAVERT - EXTERIOR WALL

1:5

CONNECTION FLOOR BETWEEN DWELLINGS
1:5 VERTICAL

CONNECTION FLOOR BETWEEN DWELLING AND LOGGIA
1:5 VERTICAL

- Glue-laminated column
- 500 x 200 mm
- Glue-laminated beam
- 400 x 200 mm
- 'dry' heating
- pre-fab in gypsum fibreboard
- 30 mm
- hemp/flux
- insulation
- 250 mm
- ventilated
- cavity
- 100 mm
- waterresistant
- foil/layer damp-proof
- foil/layer
- Welded metal strip
- 10 x 125 mm
- Pre-fab wooden façade element
- Roller blind sunscreen
behind façade element
- Glue-laminated beam
main construction
- 200 x 400 mm
- Curtain wall system
- Triple-glazed panels + insulated sandwich panels
- Insulated sandwich panel in curtain wall system
- Acoustic insulation preventing impact noise
- Floor-elements (box) laid in main construction, on acoustic interrupting rubber elements
- DucoMax SR sound-absorbing ventilation

Knapp Gigant Connector
CONCEPT DRAWINGS
SELF-BUILDABLE SYSTEM

FINISH
- Wooden wall finish, customizable per panel (colour bio-based paint, texture or thickness)

INSULATION
- Added when needed, e.g. in division walls or exterior walls

'BOX' CONSTRUCTION
- Composed of 10 mm plywood panels, providing strength, stability and 'space'

'PLATE' CONNECTION
- 1.5 mm plywood panel providing the connection between building elements, while strengthening the construction

ACOUSTIC INSULATION
- Prevents impact noise transmission through the construction elements

1.536
1.600
40
40
912

CONCEPT DRAWINGS
SELF-BUILDABLE SYSTEM

MAIN BUILDING BOXES
FLOOR + WALL ELEMENT

CATALOGUE
FLOOR + WALL ELEMENTS

AXO
ELEMENTS IN USE

WALL PANELS

CUPBOARD WALL PANELS

WINDOWS + DOORS PANELS

FLOORING ELEMENTS
VISUALIZATION
INTROVERT
FACADES
MAIN-A1 INTROVERT
1:200

PROJECT DRAWINGS  AE 2020-2021
THIJS ASSELBERGS  PADDY TOMESEN
COEN DE VRIES 4370074  JOS DE KRIEGER
FACADES
MAIN-B1 EXTRAVERT

1:200