Mental Health Centre Hembrug
Revitalizing Hemburg, to revitalize Society
P5 Job van den Berg 16-04-20
Structure

• Assignment & Inventory
• Hembrug
• Campus North

• Program
• Architectural approach

• Master plan Campus North
• Design Proposal Weapon depot
• Redesign Machine hall
Assignment & Inventory

An on heritage focused redesign for the ensemble Campus North in the former military production area of Hamburg in Zaandam.

• Building 8, Weapon depot
• Building 320, Machine hall
• Open space including the old Foundation of building 309, Storage and kantine
• Forest
Weapon depot and Machine hall
De Hem Peninsula

source: Grote Historische Atlas
1850 1905
Stelling van Amsterdam & Artillerie inrichtingen

source: KNM
Nature is taking over

source: Ministerie van Defensie
New developments
Campus North
Campus North

source: Apple Maps
Latin (campus, campi)

1. campus
2. level field/surface
3. open space for battle/games
4. plain
5. scope
6. sea

source: http://latin-dictionary.net/search/latin/
Campus North
For me it’s about the two faces of the site, on one hand the open campus structure: the freestanding buildings in the public space, orientated towards all directions, the repetitive patterns alongside all faces and the mix of typologies, which together form an uniform unity. On the other hand the forest, with his history and roots deep inside the past, gives the area its curious atmosphere. A roof of leafs penetrates the area and is meeting the open shared space in its core. It’s about the connection of those two worlds and how we as users are part in this. The forest was always a save haven, a place to shelter and to protect yourself when the sky was falling, but nowadays it can watch over you when you are escaping for modern society and find yourself peace and happiness. To see all of this your eyes are going through the buildings, light is falling on you, when you eyes are reaching trough the twigs. Sight lines are racing past you and disappear between the trees in the horizon. All of this is lying in different time layers on the area and now a new layer is painted over the area but we can still see his original soul trough his eyes, because they are the only things that never change.
Percentage of burn-out complaints

Average 17.3%

1. Almere 23.9
2. Haarlem 23.2
3. Amsterdam 23.1
4. Haarlemmermeer 20
5. Zaandam 18.6
6. Groot Amsterdam 18.1
Stress based mental illnesses

- Overstrained
- Depression
- Burn-out
Therapy

Individual

Group

loved ones
Therapy

- Individual
- Sports
- Creativity
- Discussions
- loved ones
How does Hembrug (and Campus North) fit the requirements to be a location for a mental healthcare?
GGZ Hembrug

1. Central location
GGZ Hembrug

1. Central location

2. Green
1. Central location
2. Green
3. Accessibility
GGZ Hembrug

1. Central location
2. Green
3. Accessibility
4. Isolation and connection
“The past cannot be changed, forgotten, edited or erased ... It can only be accepted”
GGZ Hembrug

1. Central location

2. Green

3. Accessibility

4. Isolation and connection

5. Idea of Heritage

6. Function of Hembrug

“Hembrug was always the place which gave the people the tools to defend themselves”
Boston model

- Therapy
- Residence
- Physical expression
- Creative expression
- Personal expression
- Workshops

- Physical expression
  - Therapy
  - Creative expression
  - Personal expression
  - Workshops

- Residence
Multifuncional use and future proof

- Open Residence
- Physical expression

- Therapy Workshops

- Personal expression

- Closed Residence
- Creative expression

Multifuncional use and future proof
Architectural concept
Layering in creating personal space
Architectural concept

Application on Hembrug

Hembrug
Campus North
Treatment building
Central space
Therapy room
Symbiosis

1 “The relationship between two different living creatures that live close together and depend on each other in particular ways, each getting particular benefits from the other.”

2 “A relationship between people, companies, etc. that is to the advantage of both”

source: Oxford Dictionary
Architectural approach

Cultural values as DNA of the building
Campus North
Campus North

DNA

Shared public space

Forest edge

Structure
How can the public space of Campus North contribute in creating a protected environment without losing the connection with Campus South, the forest and the rest of Hembrug?
Campus North

Main structure in Campus North
Campus North

Clarifying the entrance
Campus North
Clarifying the entrance
Campus North

Protect and direct
Campus North

Protect and direct
Campus North

Symbiosis

Shared public space

Forest edge

Structure
Campus North

Masterplan
Campus North
Community space
Campus North

Forest pavilions
Campus North Parking
Weapon depot
Weapon depot

DNA

Orientation over time

Facades and rhythm

Skylight and structure
Weapon depot
Original orientation 1899
Weapon depot
First redesign 1950
Weapon depot
Interior North-South reconnection
Weapon depot
Program
Weapon depot

Facilities
Weapon depot

Symbiosis

Orientation over time

Facades and rhythm

Skylight and structure
Weapon depot

Urban plan
Weapon depot

Ground floor
Weapon depot

First floor
Weapon depot
East-West section
Machine hall
Machine hall

DNA

Typology

Facade and daylight

Construction
Machine hall

Program

- Open Residence
- Physical expression
- Therapy Workshops
- Creative expression
- Personal expression
- Closed Residence
- Workshops
- Creative expression
- Personal expression
Machine hall
Organization

Offices  Therapy rooms  Living rooms

Green

Therapy rooms

Creative rooms

Offices

Living rooms

Theater

Creative rooms
Machine hall

Removing the annexes
Machine hall
Creating new entrance
Machine hall
Functional plan
Machine hall

Theatre
Machine hall

Entrance halls
Machine hall
Connect the halls
Machine hall
Routing
Machine hall

Meeting spaces
Machine hall
Practical execution
Machine hall

Space dividing
Machine hall

Symbiosis

Typology

Facade and daylight

Construction
Machine hall
Ground floor
Machine hall

Ground floor
Machine hall
First floor
Machine hall
Section North-South
Machine hall
Climate summer day
Machine hall
Climate summer day
Machine hall
Climate summer day
Machine hall
Climate summer day
Machine hall
Entrance mental health centre
Machine hall
South elevation

Current

New
Machine hall
Section entrance
Machine hall
Section facade
Machine hall
Entrance mental health centre
Machine hall

Entrance mental health centre
Machine hall
West elevation

Current

New
Machine hall

Roof
Machine hall

Skylights
Machine hall

Skylight

- Wood batten 120 x 50 mm
- Tempered Glass 4mm or semi-transparent solar panel
- Laminated double-glazing 4-15-7 mm
- Modular skylight system
- Plasterboard 19 mm
- Steel mounting profile
- EPDM 1 mm
- Insulation board 88 mm
- Roof boarding 19 mm
Machine hall
Theatre
Machine hall
Theatre
Machine hall

Construction
Machine hall
North elevation

Current

New
Machine hall
East elevation

Current

New
Machine hall

Pavilions
Machine hall
Entrance
Machine hall
Room dividing piles
Machine hall

Room dividing piles

- Bottom beam
- Lattice girder
- Wire rope thimble
- Steel wire clamp
- Steel cable Ø 4 mm
- Round steel foot plate bolted
- Round steel base plate bolted
- Rubber spacer
- Coated floating screed with floor heating 50 mm
- Insulation board 25 mm
- Leveling screed 30 mm
- Concrete foundation 200 mm
- Wooden pole Ø 150 mm
- Cable tensioner
- Milled notch
- Steel threaded rod welded
- Eye anchor

1000 < h < 4500

Rubber spacer

Coated floating screed
with floor heating 50 mm
Insulation board 25 mm
Leveling screed 30 mm
Concrete foundation 200 mm
Machine hall
Central space
Machine hall
Central space
Machine hall
Group therapy rooms
Machine hall
Group therapy rooms
Machine hall
Group therapy rooms
Machine hall
Offices
Machine hall

Windows

West Facade

East Facade
Machine hall
Windows

West Facade

East Facade
Machine hall
Living rooms
Machine hall

Stairs