# The HAKA Building Rotterdam

Book 3. Master Plan

Heritage & Architecture Studio Msc 2 2018 Delft University of Technology

Balder M.J. Otten 4285301 | Justin Au 4747623 | Electra Pangalau 4691695

# **Zoning Plan 05**

Harbour Redevelopment

# **Urban Vision 09**

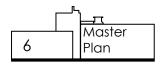
Urban Vision Sustainability Cultural Activity Education Programme Range Reference Projects Target Group

# **Thematical Master Plan 023**

Borders and Transition Recreational Activities Education and Business Sustainability Master Plan Option 1 Master Plan Option 2

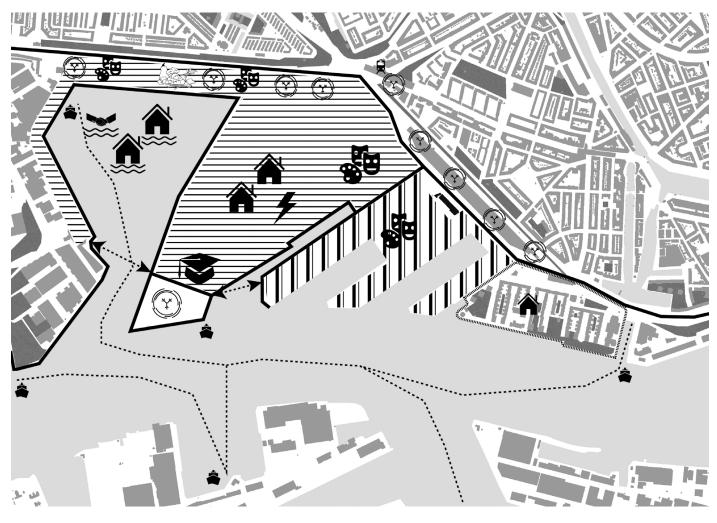
# Overview 030

# **Zoning Plan**



# **Harbour Redevelopment**

Regeneration Projects: Merwehaven - Vierhavens





Living & Working area Sort term redevelopment



Cultural Activity Long term redevelopment



Possibility for residential redevelopment



Floating residential zone



Floating business zone



Climate Campus



Catering facilities





Recreational space



Cultural Activity



Main traffic route



Waterways



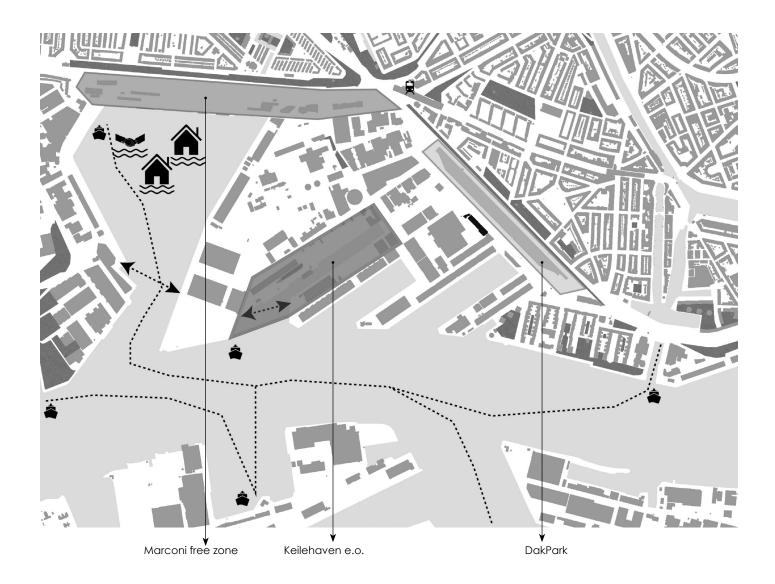
Bridge/connection point

Merwehaven-Vierhaven is developing into an international testing ground for innovative energy supply and water management.

Logistic port activities will gradually change from West to East to knowledge - intensive activity, education, living and working environments for pioneers and luxury living forms.

Each city port retains its own identity and together they from an economic hinge point between port and city. Two main goals:

- 1) Strengthen the economic structure of the port and the city.
- 2) Create an attractive high-quality living and working environment.



#### DakPark

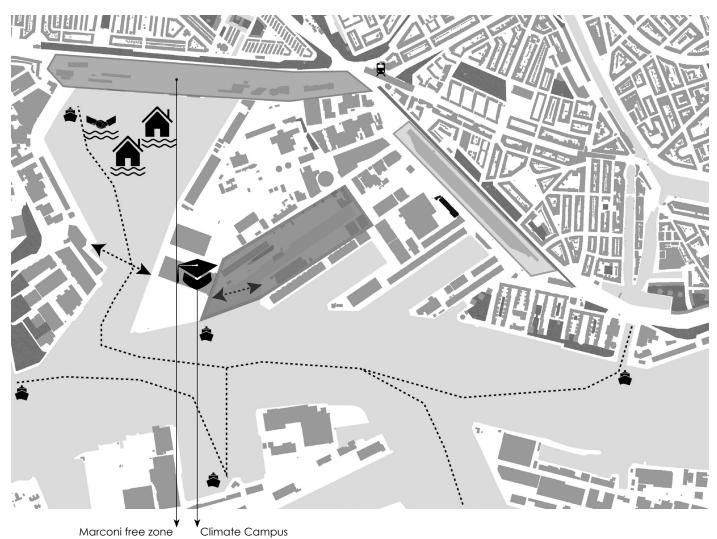
Vierhavenstraat has developed into Parklane. Following on the dike at nine meters above the ground level, a park of eight hectares, with a playground, orangery and café. On ground level, there are business premises for retail.

#### Keilehaven E.O.

The redevelopment of DakPark continues in the short term along the long, narrow Keilehaven. This zone already has varied use, which is in line with the offices, educational institutions and business around the Marconi square. The port itself becomes used, among other things, for the garbage boats and the Environmental Park (waste centre) and offers fantastic view over the Nieuwe Maas. Where space is released, new user functions that fit in the presence of business: innovative companies and studios, leisure economy, food and catering and residential sector. All companies get connection to the heat and cold supply of the power plant. The area is optimally accessible for port activities and urban activities.

The quays will be made public where possible.

# **Harbour Redevelopment**



#### Marconi free zone

Until recently this was a closed shunting yard that accesses to the water. There can be a mix here from functions to development: art, technology, parks and urban amenities. On the side of Marconiplein take temporary facilities in existing port warehouses and other buildings, including for catering, exhibition space, workshops. To the Schiedam's side offer existing buildings space for manufacturing, (water) technology, innovation and room for experiment. Also here are customization and innovative solutions required to reduce the noise load for future residents and users acceptable too to make. The new development requires two separate traffic systems: one for the port activities and one for the urban activities. Directly connected to the Marconi strip will soon be a small part of the guay along the Merwehaven. This broad one guay is part of New Mathenesse, an area with varied urban activity (car companies, construction, trade and industry) and the tourist attractive and internationally known distillery cluster. The neighborhood gets matching facilities such as berths for boats, a water sports club

and a café. The entirely forms a sustainable 'fleet', made of environmentally friendly materials, energy-neutral and water-resistant. Wastewater is in the area purified. On the piers arises a quiet urban living environment in a mix of low-rise and apartments, both with generous outside spaces.

#### Rotterdam Climate Campus

The Rotterdam Climate Initiative has the city is given international prominence. With an ambitious program will be Rotterdam ultimately a low-CO2 city and port. Initially, the Climate Campus housed in an existing one striking building, such as the Marconi Tower or a cultural-historical building. Here will be scientific research, education, one restaurant and cultural activities shelter find. In the course of time, the institute will grow and possibly move to a new one icon on the Nieuwe Maas. On the Marconi strip and there is plenty of room in the Merwehaven testing labs, an innovation yard and experiments in water basins. In the heart of the Campus, the Eon-Central, which is going to supply heat and cold surrounding buildings and industry. The already necessary renovation of the plant good chance for this.

# **Urban Vision**

#### What we want to achieve?

In order to gentrify to our specific area and to bring a higher quality of life we need to strengthen the following three areas:

- a) Sustainability
- b) education
- c) Cultural Activity

Focus	a) Sustainability	b) Cultural Activity	c) education
Aim	Sustainable energy concept of the redevelopment of the area.	Enhance the green landscape, with parks and recreational activities as well as food cultivation and agricultural activities.	Address the needs of the future users, educational character and orientation towards the youth.
Outcome	- A greener and more sustainable future for the city,  - lower carbon footprint and individuals spendings  - Possible healthier environment - air quality	- To attract visitors and potentional inhabitants to the city.  - As there is an unbalance of ecnomic classes in Rotterdam, by attracting higher income indivuals to drive up the economy of the area.  - influx in job opportunities	- attract young families  - enable the youth to have higher chances of job op portunities, which can bring economy back to the area  - educate the public of history, technology, culture and skills  - influx in job opportunities
ideas	- improved transportation con nection + new transportation systems (e.g. railway system)  - sustainable agriculture (food)  - sustainable energy source  - sustainable construction method  - laboratory - sustainability research centre	- parks - market - theatre - leasure centre - retail - clubs (music, art) - galleries - auditorium - sports ficilities - place for worship (religous)	- community centers (arts, dance, sports, social etc.) - schools (primary, middle school, university, academies) - library - museum + exhibition (culture, art) - archive - IT facility

# a) Sustainability



Sustainble transportation



Sustainble agriculture



Sustainble energy

# **Cultural Activity**

# b) Cultural Activity







Leisure centre - art, sports, skills etc.







A places to create, retail and resell







Eating and Drinking







Parks + Green spaces to gather, play, relax

# c) Education







Museums + Exhibition centres







schools (primary, middle school, university, academies)

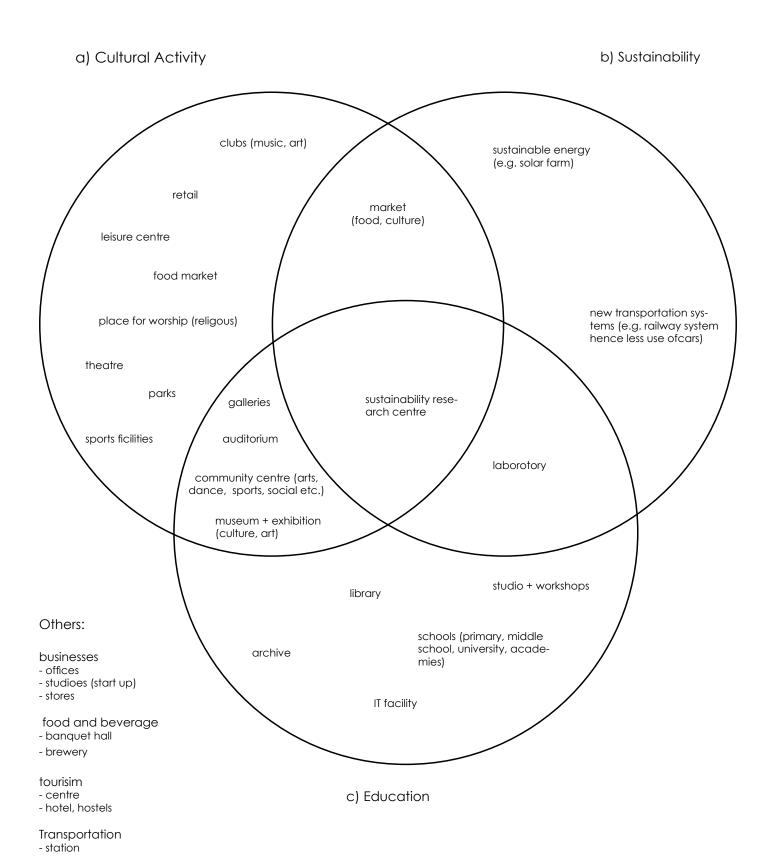






Studios + Workshops

### Potential programmes to the area:



Reference: Urban renewal project

a) + b) + c)



Madrid Río, Madrid

A project that transformed their ubran highway into an urban park.

The park opened in 2011, offering citizens spaces for sports, walks, and opportunities to learn about the city's history. In this instance, the motorway was not completely demolished, but traffic was diverted by underground tunnels.



# **Reference Projects**

Reference: Urban renewal project

a) + b) + c)



#### Maggie Daley Park

Maggie Daley Park is a 20-acre (81,000 m2) public park in the Loop community area of Chicago. It is near the Lake Michigan shoreline in northeastern Grant Park where Daley Bicentennial Plaza previously stood. Maggie Daley Park, like its predecessor, is connected to Millennium Park by the BP Pedestrian Bridge. The park was almost entirely remade with multiple new features including a new field house, an ice skating ribbon, climbing walls, landscaping and children's playground. A garden honors cancer survivors.



#### References of Urban renewal project

a)



#### Superkilen, Copenhagen

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Superkilen is a half a mile long urban space wedging through one of the most ethnically diverse and socially challenged neighborhoods in Denmark. It has one overarching idea that it is conceived as a giant exhibition of urban best practice – a sort of collection of global found objects that come from 60 different nationalities of the people inhabiting the area surrounding it. Ranging from exercise gear from muscle beach LA to sewage drains from Israel, palm trees from China and neon signs from Qatar and Russia. Each object is accompanied by a small stainless plate inlaid in the ground describing the object, what it is and where it is from - in Danish and in the language(s) of its origin. A sort of surrealist collection of global urban diversity that in fact reflects the true nature of the local neighborhood - rather than perpetuating a petrified image of homogenous Denmark.

# **Reference Projects**

#### Reference of Urban renewal projects

### a) + c)



#### Kop van Zuid, Rotterdam

The Kop van Zuid is built on old, abandoned port areas around the Binnenhaven, Entrepothaven, Spoorweghaven, Rijnhaven and the Wilhelmina Pier. These port sites and the Nieuwe Maas made for a large physical distance between the center and north of the Maas and southern Rotterdam. By converting this area into an urban area, and providing better infrastructure, planners sought to unite the northern and southern parts of the city. Placemaking was involved in this project.

#### a) + b)



#### Java Island, Amsterdam

The city of Amsterdam transform their Oostelijk Havengebied from decline into a successful urban renewal project. Various international architects transformed old abandoned port buildings into the most sought after residential buildings in the city. The site was abandoned due to less trade and functions as a breakwater.

The vibrant night life of squatters and artists from before the demolition for this project still exist in new theater, restaurants, and concert halls.

Diversity in form is celebrated in these houses, rather than an attempt at unity. Placemaking was involved in this project.

#### **Possible Target Group**

General

#### Households with low-income

This group doesn't have must to spent, and is with 51% the largest group in Rotterdam. Also in the area of the HAKA a lot of low-income households are living there.

#### Households with middle-income

This group has money to spent and is therefore interesting for businesses. The group is 33% of the population of Rotterdam.

#### Households with high-income

This is the smallest group, but the most interesting because they can spent a lot of money in the area of the HAKA. The group is 16% of the population of Rotterdam.

#### Young people

Nearly a quarter of the population of Rotterdam was in 2015 between the age of 20 and 35. This is 6% above the average of the Netherlands.

#### Seniors (65+)

This group will increase over the years from 15% to 18% in 2030. This differ from the trend in the hole Netherland were it increases to 24%. Also this group stays longer living at home due to changing regulating and finances.

#### Single living people

This group consist out of people that are living alone, it doesn't matter witch age they have. This was in 2015 nearly the half of the population of Rotterdam. Seventy-five percent of them are older than the age of 35. This number will rise due to obsolescence until 2030.

#### Students

The large group of young in Rotterdam is because of the university. There are 27.000 students living in Rotterdam and consume a lot of products in Rotterdam.

#### Highly educated people

This is a group that has a lot of money and brings businesses to the area, because of the spending capacity. Therefore they are interesting as a target group. Of the population 24% is high educated, 37% is low educated and 39% is average educated.

#### **Empty nesters**

This group had children but they moved out of the house. This group has time and money, witch they spent.



















Working/living in the area

#### Office workers

In the area of the HAKA Building are a lot of offices. These offices bring people to the area. They are a possible target group for the HAKA Building.

#### **Harbor workers**

Although this group isn't large, still they have to be considered. One thing is that the function of the harbor will move out to the sea and on the long term will no longer be in the area of the HAKA.



#### **Pedestrian**

This group is walking by, going to the shops or living in the area. Also his can be people that traveling though the area of the HAKA.



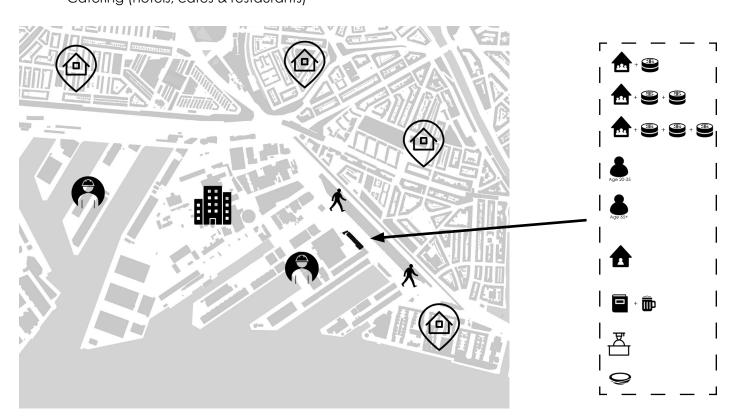
#### **Current residents**

In the area there are a lot op people living with a low-income.



# Possible functions for the HAKA to consider for the target group:

- Culture
- Entertainment
- Education
- Offices
- Ateliers
- Shops
- Living
- Recreation
- Catering (hotels, cafés & restaurants)



# Thematical Master Plan

# **Borders and Transition**



Vierhavenstraat and Dakpark

- Surrounding fence

--- Access to river front

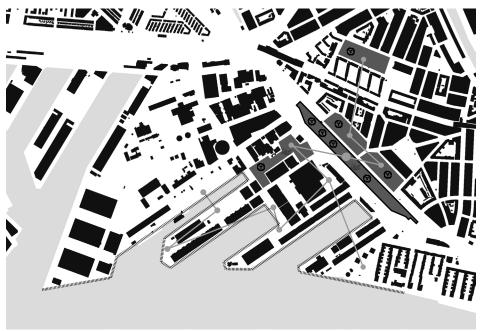
Three borders between the haka building and the immediate surroundings need to be "broken"so as to improve the connectivity and accessibility of the site.

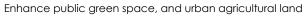
Existing borders



Transition Improvement

- 1) Improve circulation and accessibility in the area for pedestrians and cyclists needs to an urban scale.
- 2) Provide additional recreational space linked to the use of the buildings at the water front.
- 3) Use of the port for tourist marine.







Green public space



Urban Agriculture



Provision of Green pedestrian street



New recreational space

- 1) Improve the quality of the environment and the quality of the city by enhancing green space, parks and recreational space at the river front.
- 2) convert waste in between space to parks and recreational space.
- 3) Establish a connection between the Dakpark and the food bank in the immediate surroundings.



Enhance cultural activity

★ Place of Cultural Activity

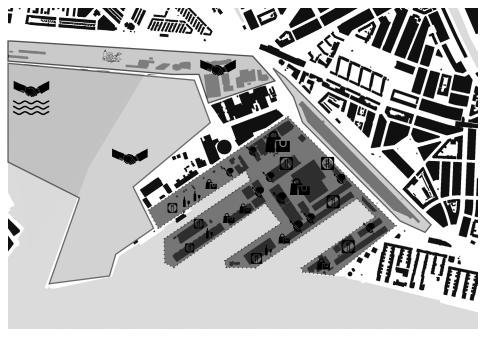
- 1) Address the needs of the artists, architects and craftsmen in the area by providing extra studios, meeting spaces, conference rooms, performance spaces, venues etc.
- 2) Maintain and exhibit the industrial character of the port with cranes, boat remains, machinery, chimneys etc.
  3) Use waste space, parks, landscape for cultural events of the city.

# **Education and Business**



Connection between education and culture. Education and history of the port.

- 1)Connection between primary and secondary education and higher education through the Climate Campus.
- 2) Education of youth around the history and importance of the harbour, the industrial activity and trade.
- 3) Education of youth around sustainable energy, water and built environment.



Increase Business Opportunities

- 1) New business opportunities for small scale entrepreneurs.
- 2) Start-ups
- 3) Studios, Galleries, Exhibition spaces and music halls, Book stores etc.
- 4) Retail such as restaurants, bars, pubs, clubs etc.
- 5) Connection with office businesses from the surrounding area and commercial zone of the DakPark.



- 1)Common grid for the surrounding area
- 2) Renewable sources of energy
- 3) Improve quality of the environment, C02 absorption and reuse, toxic waste, water quality etc.
- (東4) Sustainable mobility, through waterways or public transport. Pedestrian clean environment.
  - 5) cycling routes and storage space.

# **Master Plan Option 1**



In this way the Haka Building acquires the strong position it had when intially constructed.

The lekhaven port is restored to its original length, creating space for floating space, energy and water management, nice views, recreational green space, sustainable mobility and space for shop, start-ups, studios, restaurants, bars etc.

The haka building becomes the landmark or entrance point to a new cultural urban district.

#### **Building Scale**



Haka Building becomes a landmark



A reminder of the history of the port



An new entrance to a cultural community



Possible use for small scale business



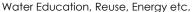
Cultural Centre, Multifunctional Arts space.



Office space for management agency of the development.

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**Urban Scale** 





Green high quality environment.



Urban Agriculture. Restoration of landscape



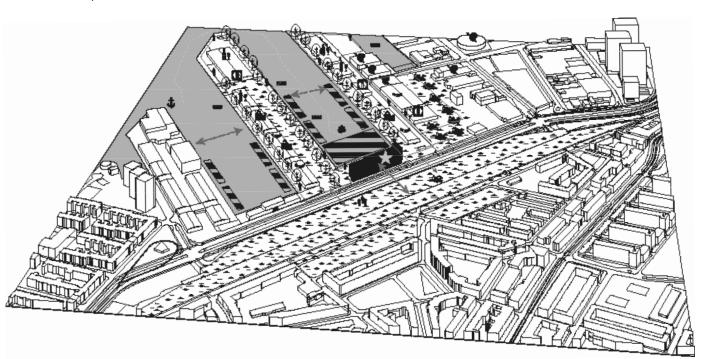
Retail, Stores and small scale businesses



Gentrification, income, employment opportunities



Cultural Activity, tourist attraction.





In this proposal the haka building becomes part of a more urban cultural hub. With the creation of a piazza at the back side of the Haka building and transfromation of the building's scale in the surrounding environment the area becomes an more direct extention of the city centre. Green space and landscaping is push at the edge of the river front. In a way this approach is more in the line of unlocking the existing resources to a new future. New pedestrian zones are created in the existing passageways. Empty space becomes greeen space.

The Haka building can be linked both to the educational, cultural and business sector of the area. It can work as the starting point or the redevelopment. It becomes more of transition point than a destination on its own.

#### **Building Scale**



Haka Building becomes a landmark.



Warehouses and Haka builiding reminders of the past.



Piazza of Cultural Activity and Education



Community Centre Possibility with educational and cultural activities



Connected with the regeneration plan of the surrounding area.



Small scale businesses and retail.

Meeting space. Co-working space.



Exhibition space or performance space.

Cultural Urban Hub

**Urban Scale** 



Connected to science and sustainable development



Improve the litaracy level of the surrounding communities.



Replace waste in between space with green public space



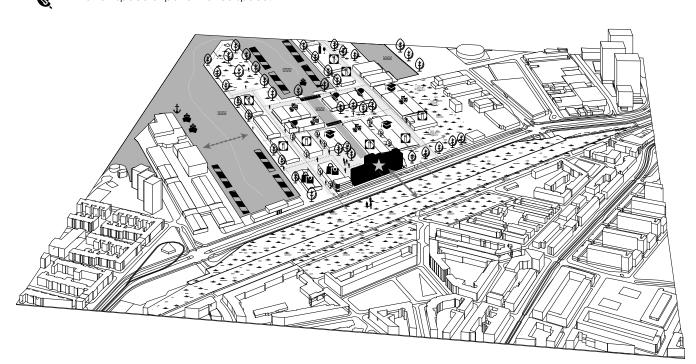
Maintain the connection to water on a smaller scale

## \*\*\*\*\*\*

Gentrification



Business opportunities. Increase Employment



# Overview

# Overview Conclusion

#### Urban Scale

#### Industrial character of the harbor



The harbor changed a lot thought the years. The HAKA building was first located on the water, but a part of the harbor was filled in. The harbor has an industrial character. There is a lock of livelines and a enclosed character of the industrial developments in the area. A significant amount of "in-between" land is wasted. Due to the industrial character of the area, there is a lack of human scale and transparency.

#### Area about food



The area has a connection with food. The HAKA building had the function of processing food. Near the site there is also a city garden.

#### Transformation of the area









The area now lacks green spaces. In the future the area will changes. The local government has plans to transform the area into living, working, cultural, recreational and educational area. With a focus on energy, water and education. The Merwehaven-Vierhaven will be developing into an international test-ing ground for innovative energy supply and water management.

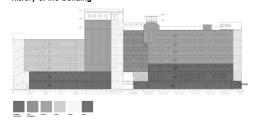
#### Current target group



The current target group working, living or passing by in the area are office workers, harbor workers, residents of the homes in the area and people that are visiting the area of passing by.

#### **Building Scale**

#### History of the building



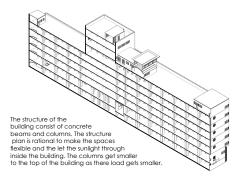
The architect of the Building is H.F. Mertens, who collaborated with J Koeman. The HAKA building was finished in 1932. In the building thefunctionsare separated, whatone of the characteristics of the "Neue Sachlichkeit" is. The building contained office spaces, silos, storage area, factory rooms, workshops and a home for the janitor.

#### Materials

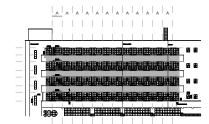


There are only a couple of materials used in the building. These are mainly concrete, ceramic files, steel and glass. The hole building is very simple materialized, this is one of the characteristics of the "Neue Sachlichkeit". The staircase of the factory part is very func-tional and the staircase of the offices is more armamented because of its formal function. Also there are differences in the entrances that materialized by its function.

#### Structure



#### Façade

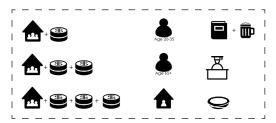


The is a lot of repetition is the façade. Because of the many windows in the façade there is a lot of sunlight inside of the building and the façade is very transparent. The surfaces of the façade are very flat and simple.

## Transformation possibilities

#### Target groups

Next to the current targets groups (offices workers, harbor workers, residents and people passing by or visiting the area) their have to be new target groups. These could be differ-ent group each function. For 1 make the building economically profitable this have to be people that have a high income or have money to spent. This could be students, highly educated people or empty nesters.



#### Possible program

Functions for the new program of the HAKA could be:

- Culture Entertainment Education Offices Ateliers Retail Living Recreation Catering



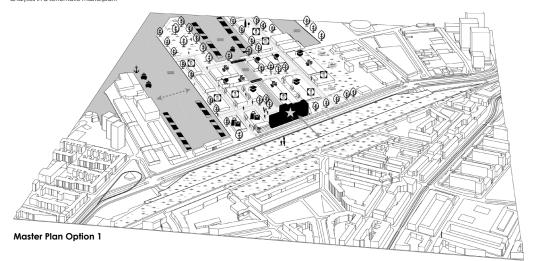






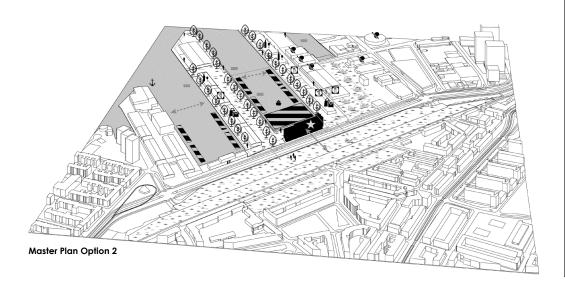
#### Masterplan

Combining the research and analyses in a schematic masterplan.



#### **Building transformation**

- Integrity of the original building.
- Express the original material and structural qualities.
- Combination and articulation of multiple functions.
- Maintain the connection with food.



# Icon Index Warehouses and Haka builiding reminders of the past. Piazza of Cultural Activity and Education Community Centre Possibility with edu-cational and cultural activities **©** Small scale businesses and retail. Meeting space. Co-working space Exhibition space or performance space Cultural Urban Hub Connected to science and sustainable development improve the litaracy level of the surrounding communities. Replace waste in between space with green public space Maintain the connection to water on a smaller scale Gentrification € Business opportunities. Increase Employ ment