



Preserving Identity Through Density

Masterplan Hembrugterrein | Zaandam

Jorn de Haan
June 5, 2026

CONTENT

1. INTRODUCTION
2. ANALYSIS
3. FRAMEWORK
4. DESIGN
5. CONCLUSION

INTRODUCTION

RELEVANCE



Havenkwartier, Deventer



Merwehaven, Rotterdam



Java-eiland, Amsterdam

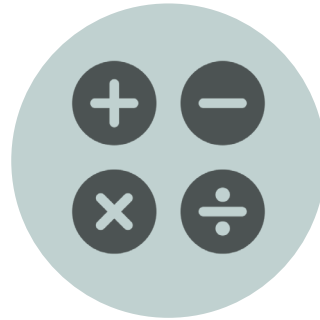
GOAL

creating a **comprehensive masterplan** which transforms a **neglected area** into a **vibrant neighbourhood** to contribute to the **housing supply** in the Netherlands

METHODS



research by design



research by drawing
and calculation



location
analysis



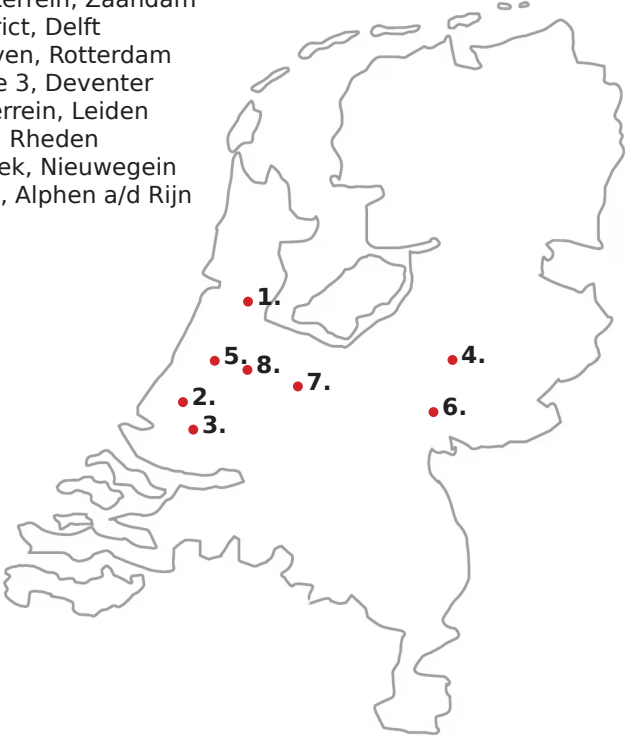
interviews



literature review

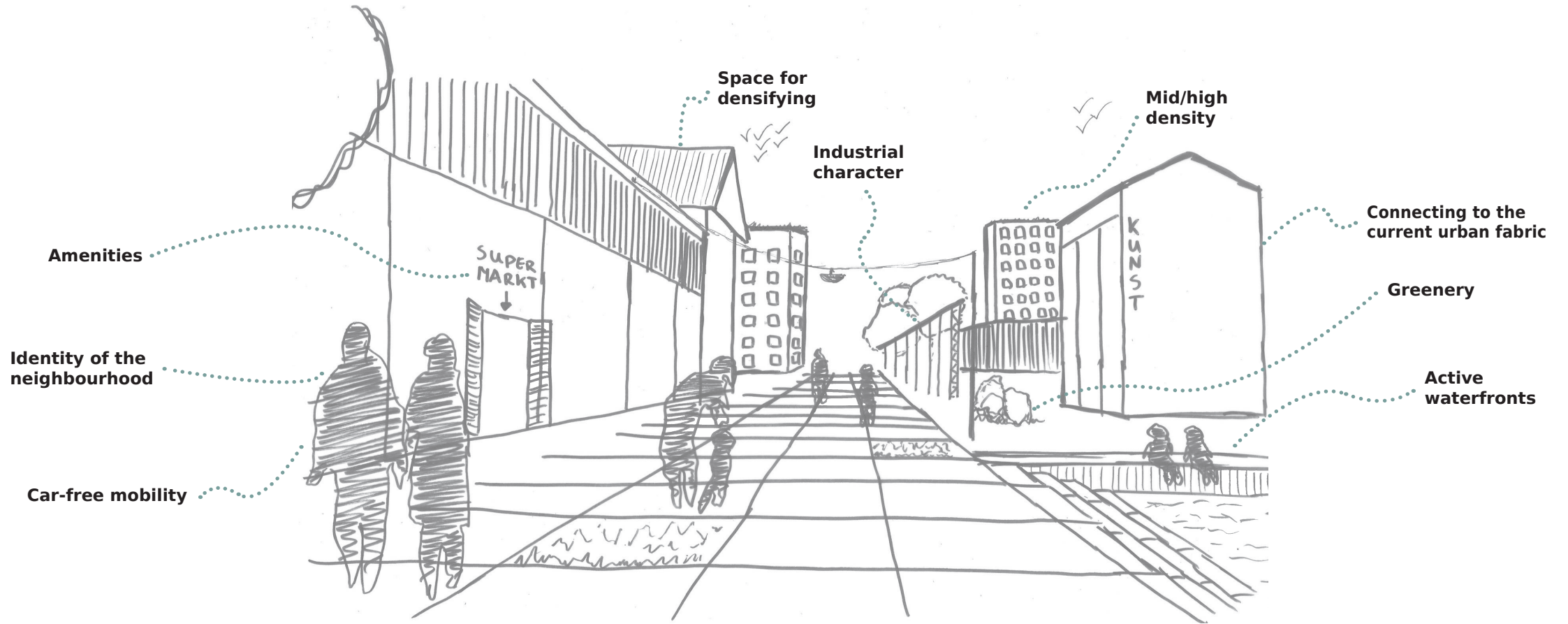
LOCATION CHOICE

- 1. Hembrugterrein, Zaandam
- 2. Kabeldistrict, Delft
- 3. Merwehaven, Rotterdam
- 4. Bergweide 3, Deventer
- 5. Werninkterrein, Leiden
- 6. Haveland, Rheden
- 7. Zeepfabriek, Nieuwegein
- 8. Rijnhaven, Alphen a/d Rijn

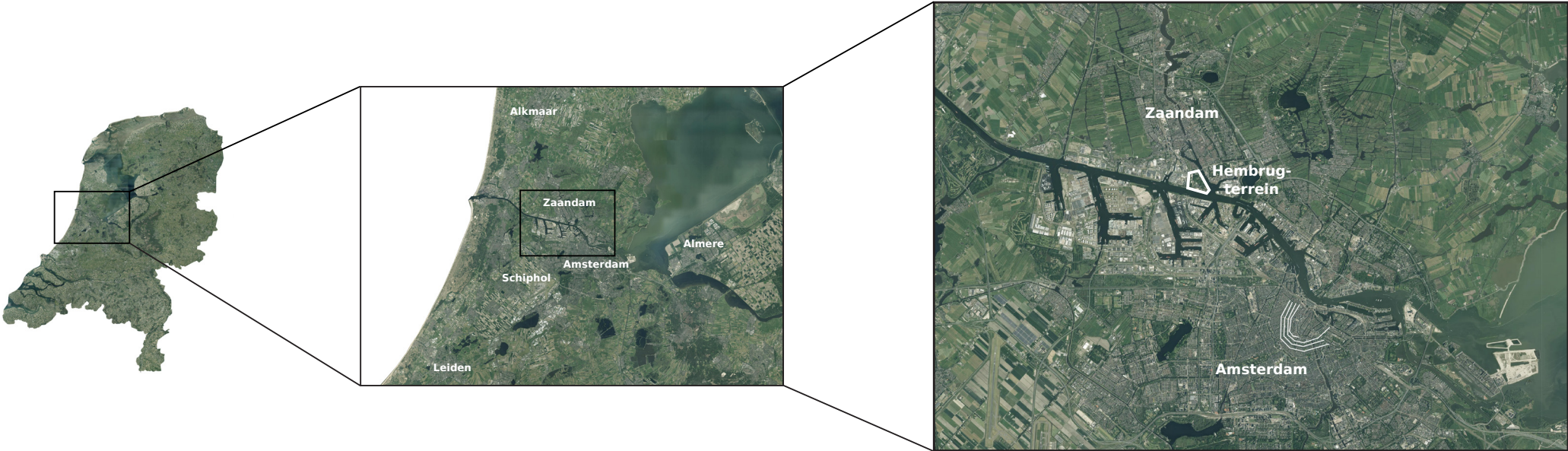


AMBITIONS

Creating a **vibrant and lively** new neighbourhood with focus on the **history** of the area

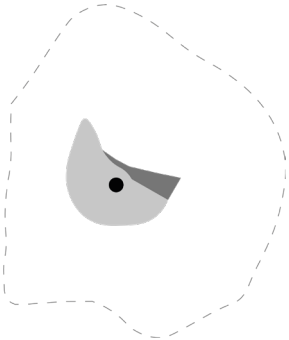


HEMBUGTERREIN

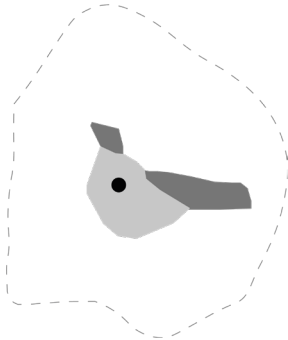


DEVELOPMENT AMSTERDAM REGION

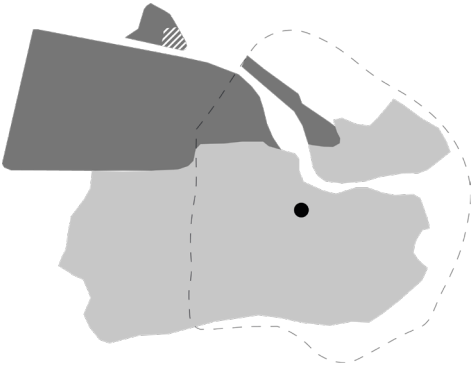
13th century



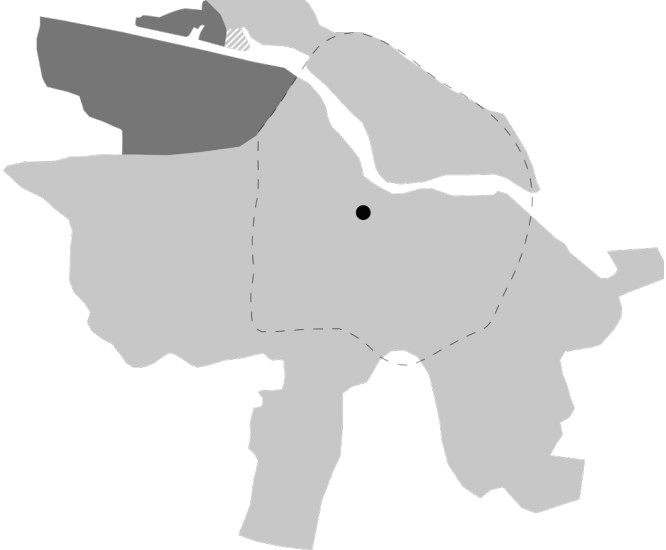
19th century



20th century



now/future

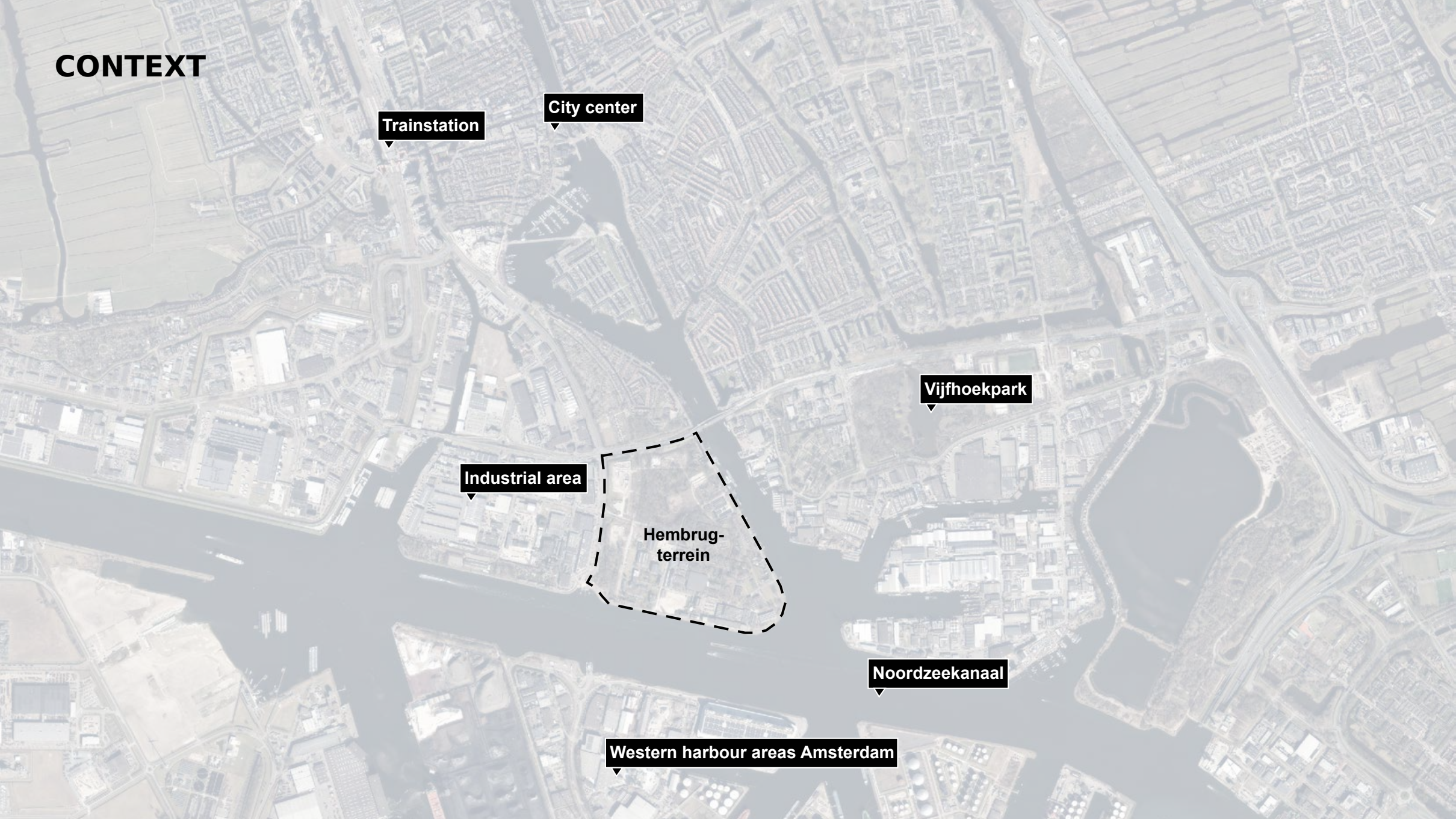


Legend

- harbour area
- urban area
- Hembrugterrein
- Dam Square
- current A10 ring

ANALYSIS

CONTEXT



Trainstation

City center

Industrial area

Hembrugterrein

Vijfhoekpark

Noordzeekanaal

Western harbour areas Amsterdam

HISTORY: 1880



PRODUCTION



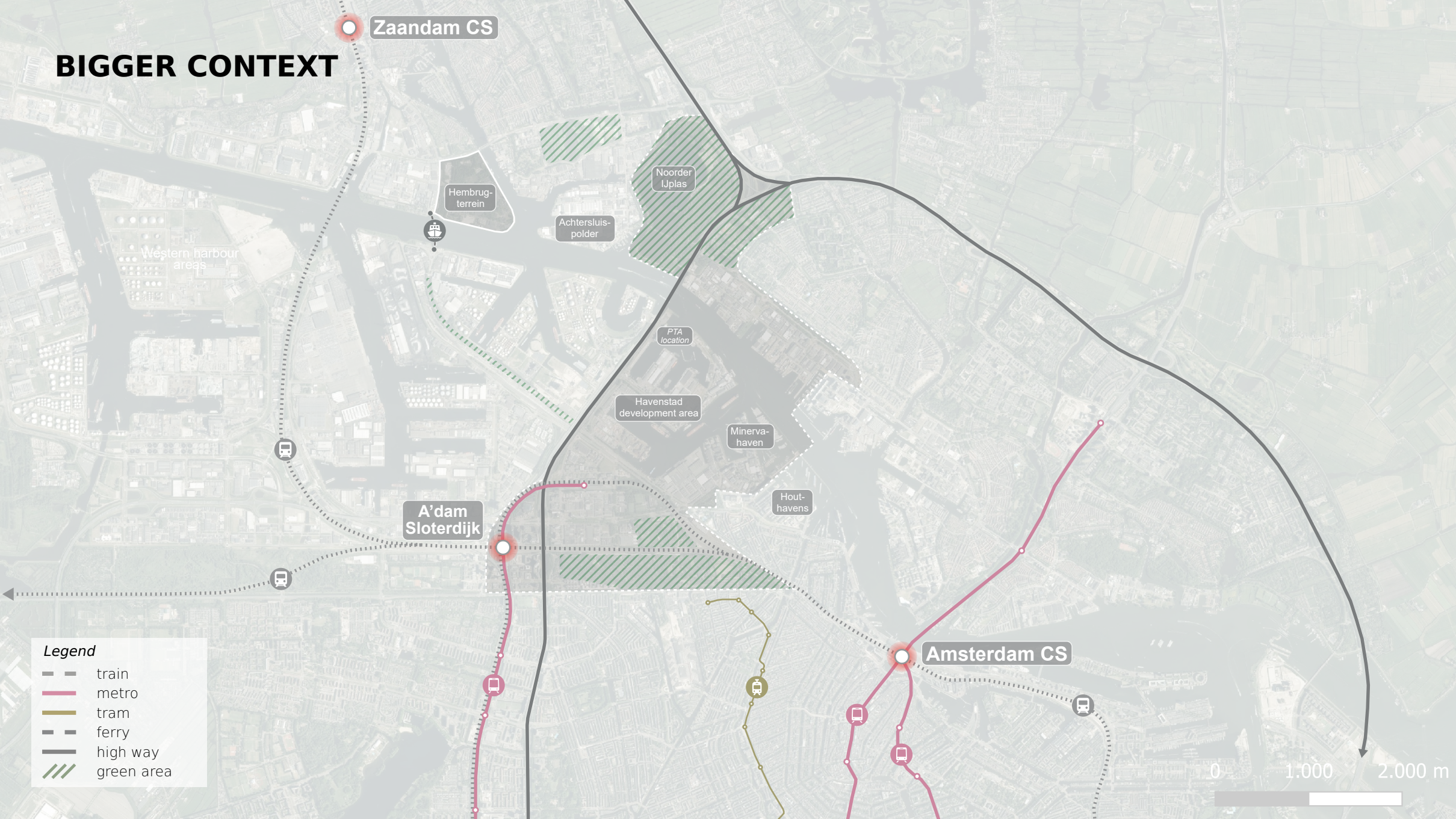
TESTING



ABANDONED



BIGGER CONTEXT

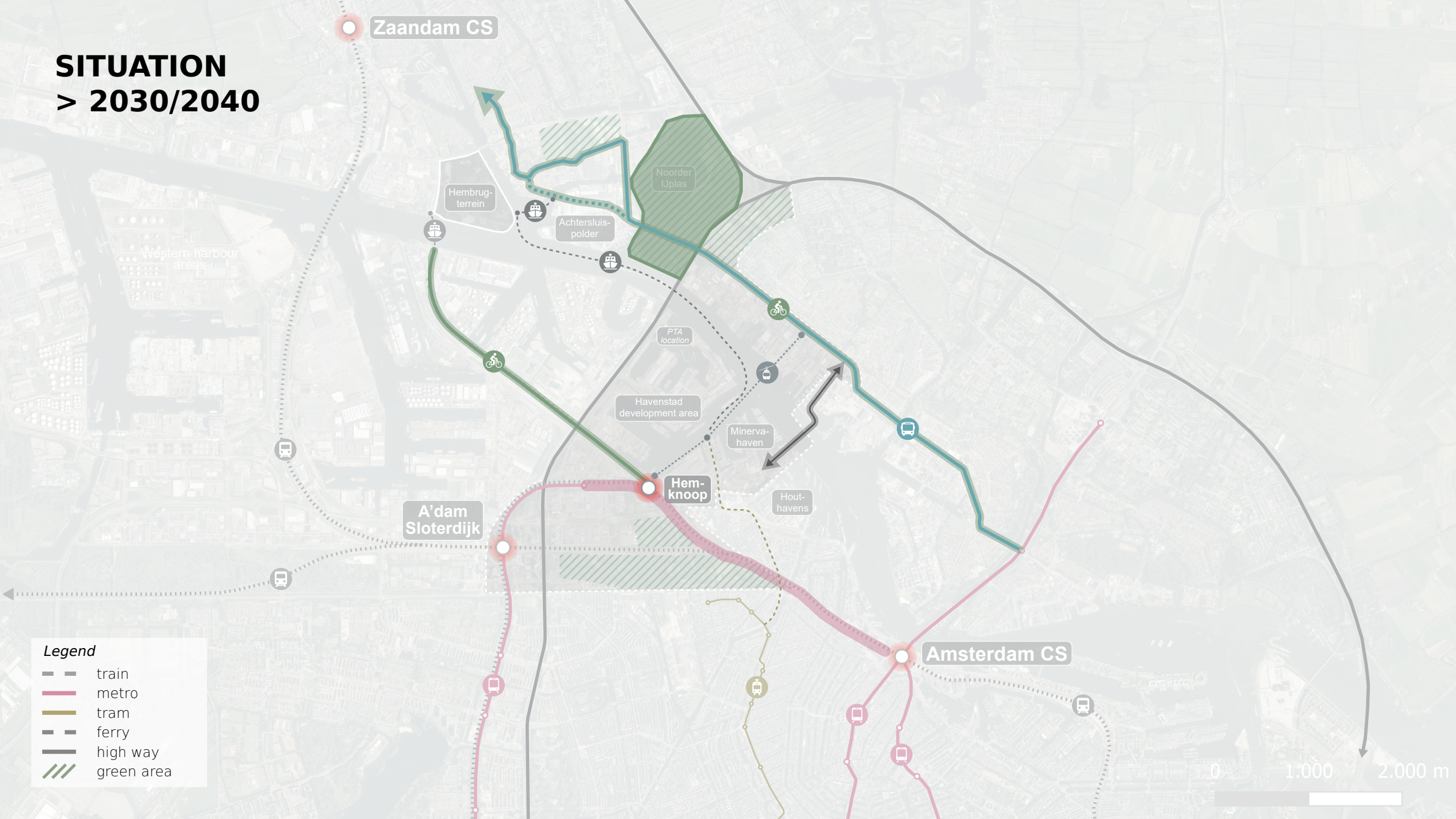


Legend

- train
- metro
- tram
- ferry
- high way
- green area

0 1,000 2,000 m

SITUATION > 2030/2040



Legend

- train
- metro
- tram
- ferry
- high way
- /// green area

0 1,000 2,000 m

HERITAGE



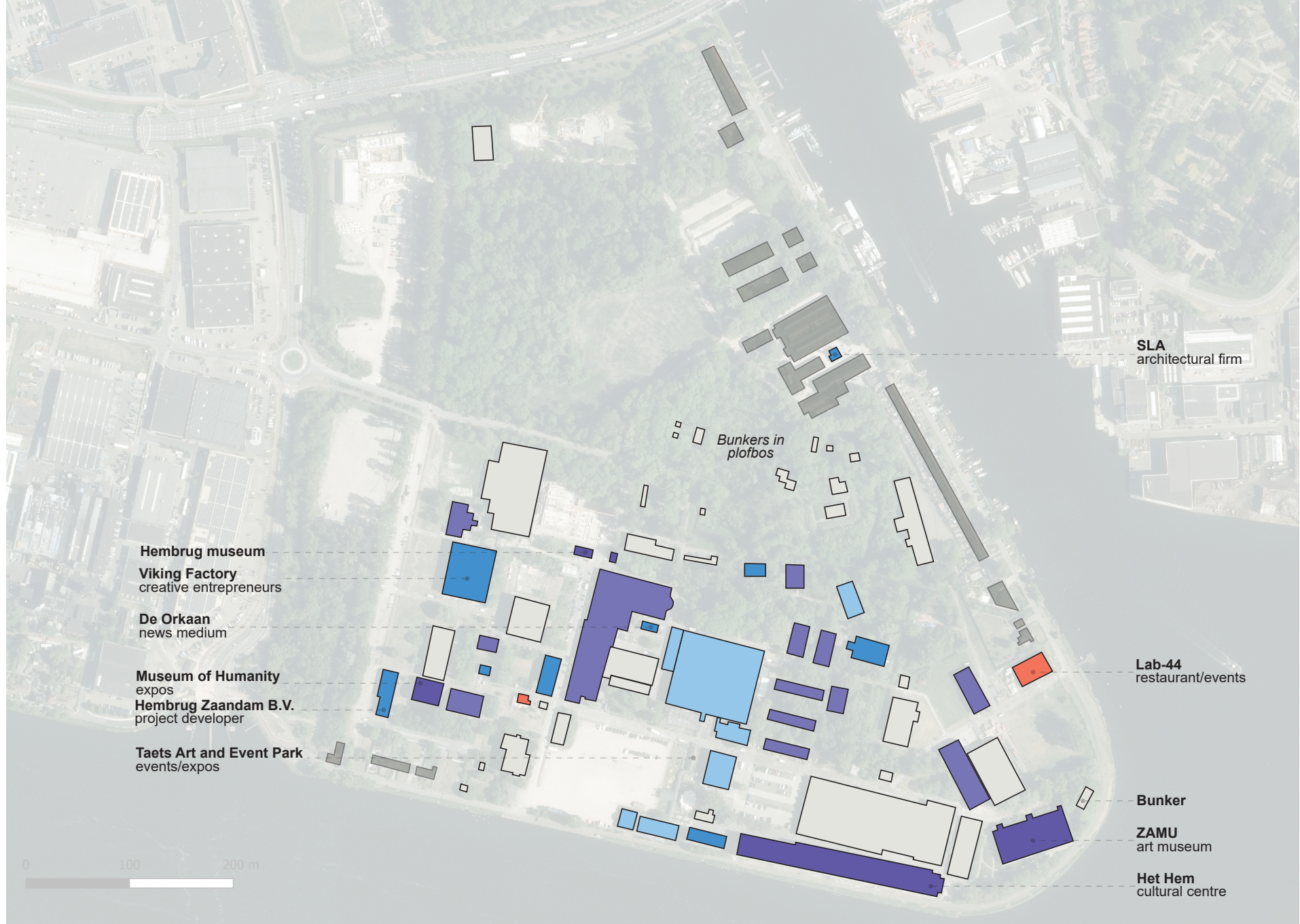
CURRENT ENTREPRENEURS



CURRENT ENTREPRENEURS

Legend

- museum/cultural
- atelier/gallerie
- office
- events
- restaurant
- vacant space
- residential function



ECOLOGY

- Legend*
- water
 - greenery
 - valuable tree
 - monumental structure
 - existing building



HEMBRUGBOS



Naorlogsebos
5,6 ha

Plofbos
2,6 ha

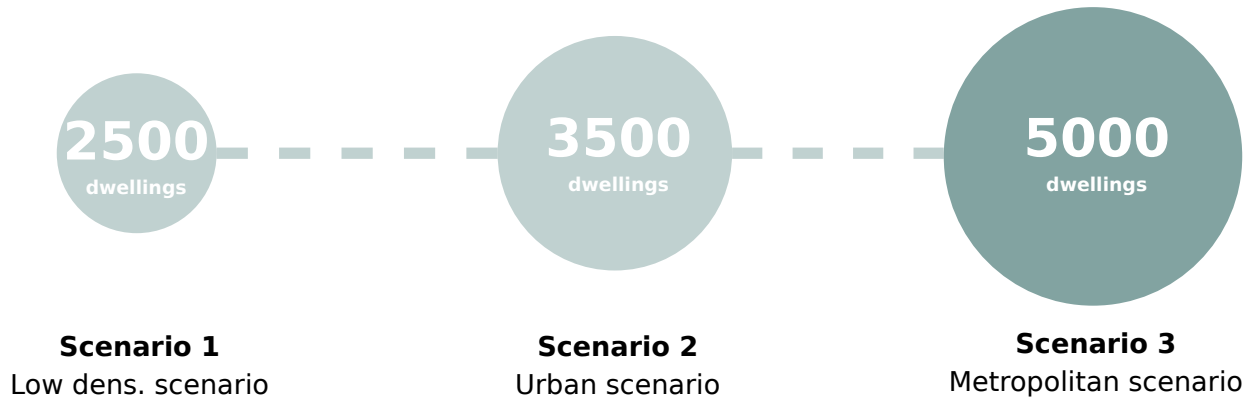


NAORLOGSEBOS



PLOFBOS

DENSITY



1. Amenities

POSSIBLE FROM 10.000 RES.

big supermarket	> 7500 res.
pharmacy	> 8000 res.
big sports location	> 8000 res.
secondary school	> 10000 res.

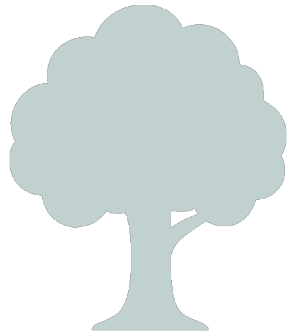
ADDITIONALLY TO

package point/shared mob.
bakery/butcher
general practitioner (GP)
physiotherapy
dentist
community center
primary school
daycare

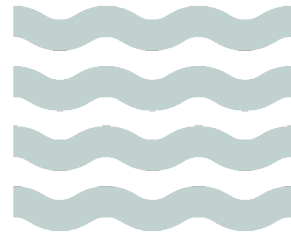
2. Public transport possibilities

- Tramstop (HOV-line)
- Buslines
- Bicycle bridge
- Metro network?

IDENTITY HEMBRUGTERREIN



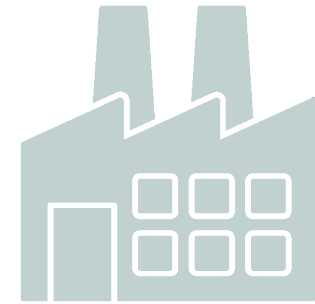
FOREST AREA



WATERFRONT



HERITAGE



INDUSTRIAL

FRAMEWORK

TARGET GROUPS



URGENT HOUSING
SEEKERS

YOUTH

ADULTS

FAMILIES

ELDERLY



YOUNG PEOPLE



STARTERS



ENTREPRENEURS

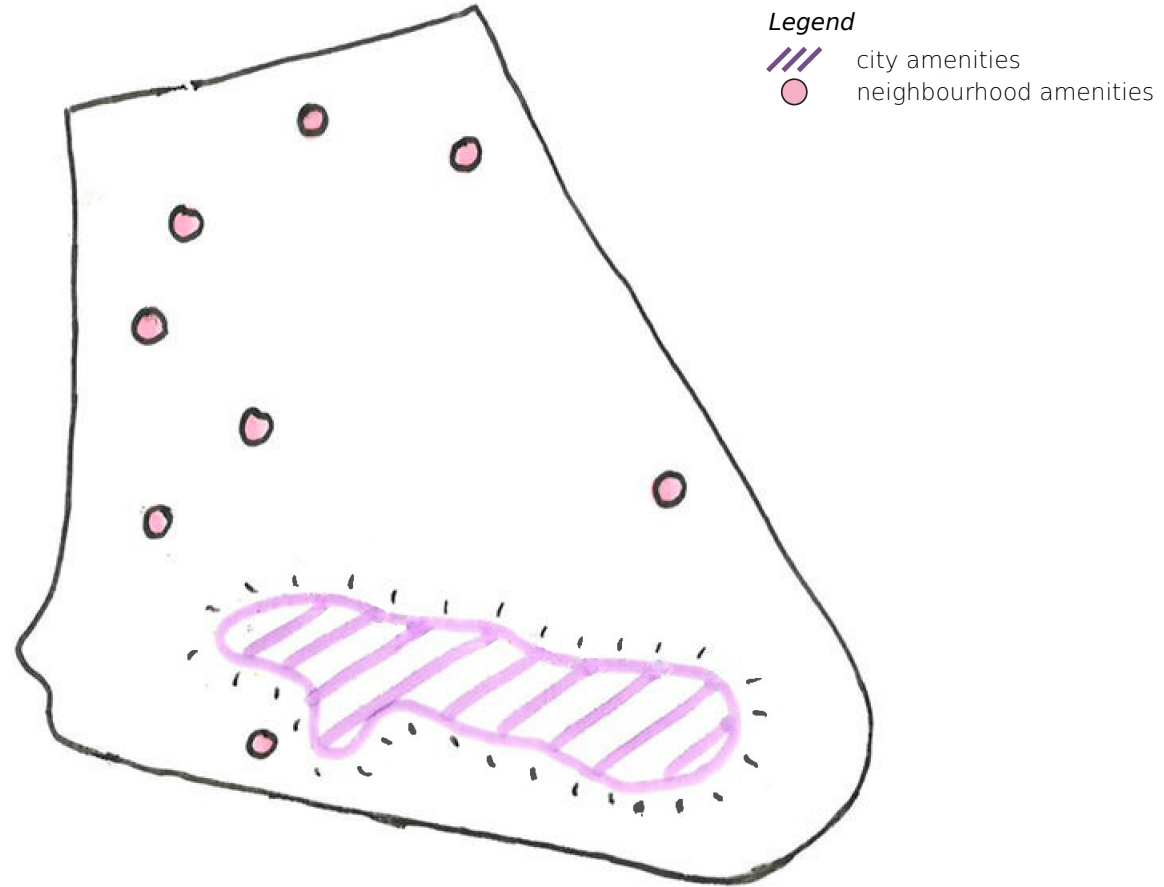


FAMILIES



SENIORS

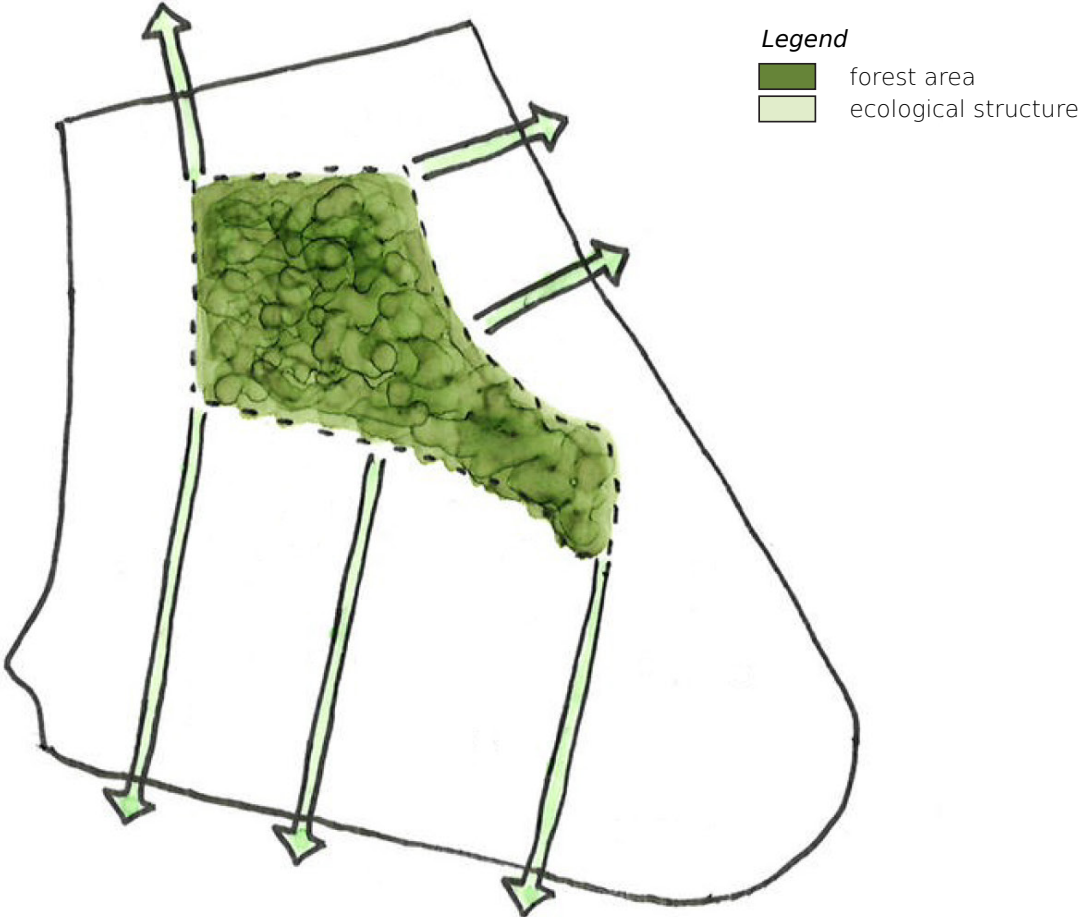
AMENITIES



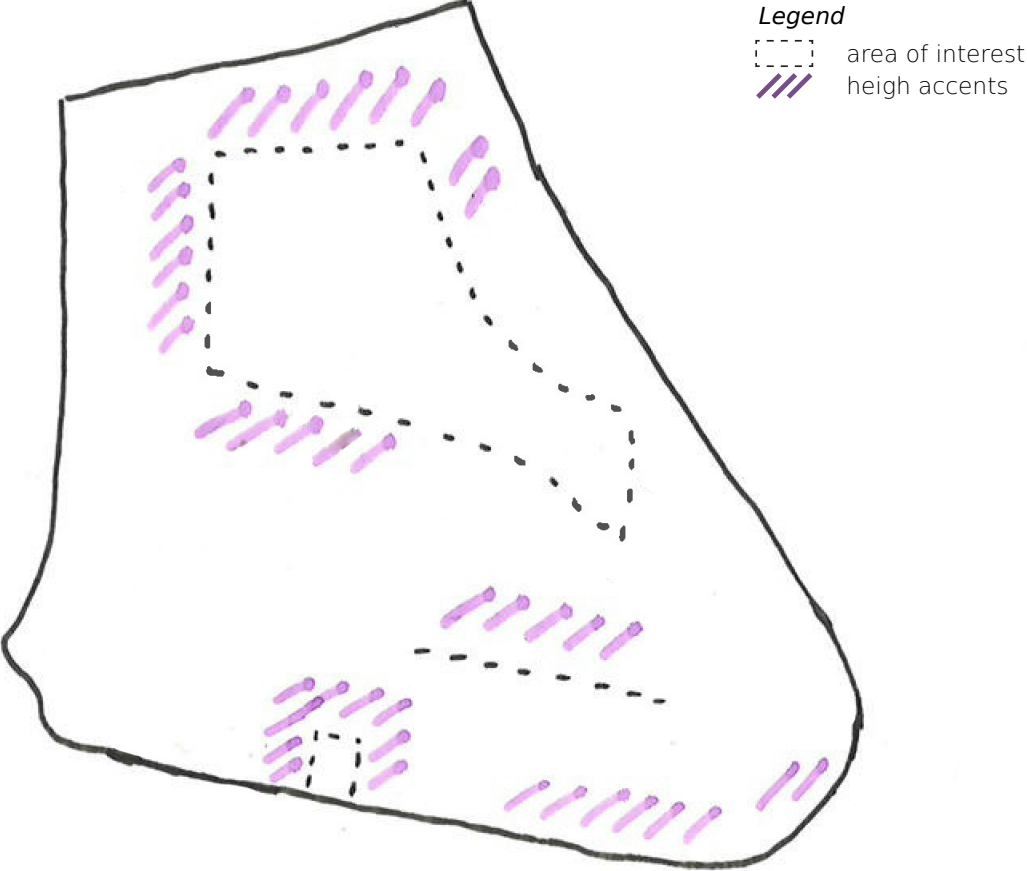
MOBILITY



GREEN STRUCTURE

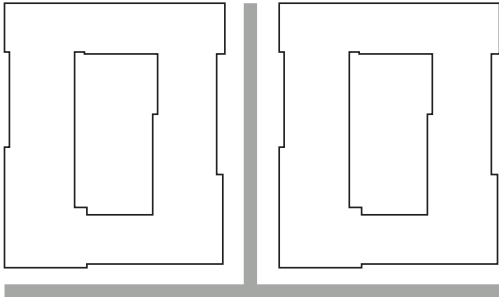


HEIGHT ACCENTS

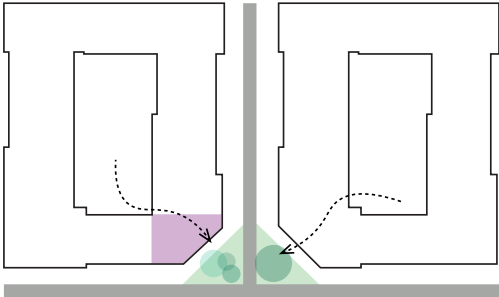


BUILDING BLOCKS

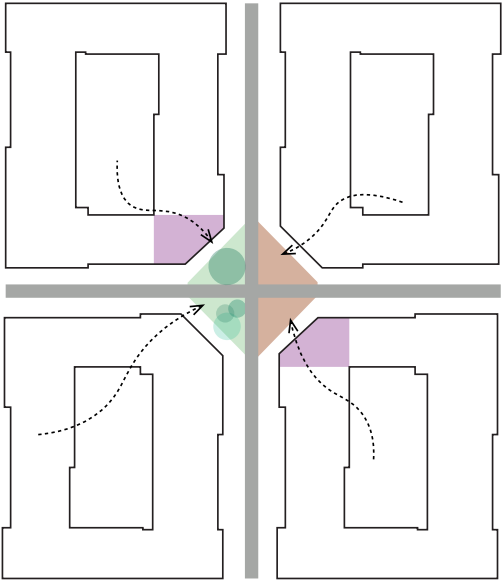
conventional closed building block



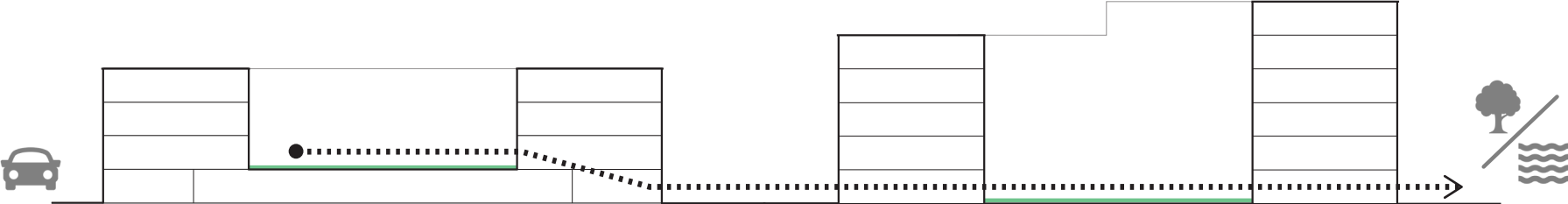
**Hembrugterrein:
2 corners as public space**



**Hembrugterrein:
4 corners as small square**



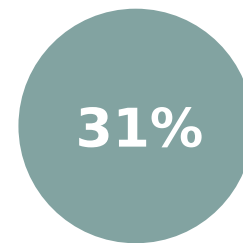
COURTYARDS



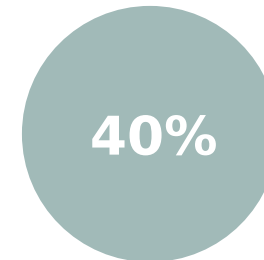
HOUSING PROGRAMME

445.000 m² housing programme

Type	Social rental	Mid-range	Open-market	Total
Studio	80%	20%	-	1000
One-bedroom apartment	50%	40%	10%	1000
Two-bedroom apartment	20%	60%	20%	1200
Three-bedroom apartment	-	40%	60%	1200
Ground-floor house	-	30%	70%	600
Total	1540	1980	1480	5000
Ratio	31%	40%	29%	100%



Social rental



Mid-range



Open-market

DESIGN

CONCEPT

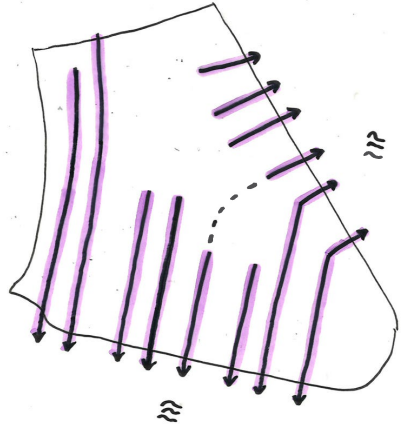


1. Starting point

CONCEPT



1. Starting point

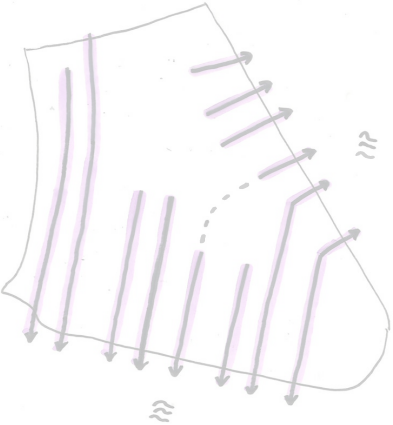


2. Primary structure

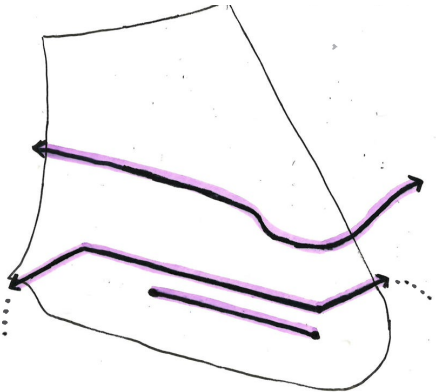
CONCEPT



1. Starting point



2. Primary structure

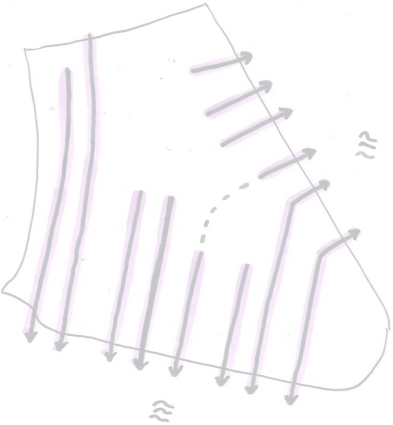


3. Main horizontal structure

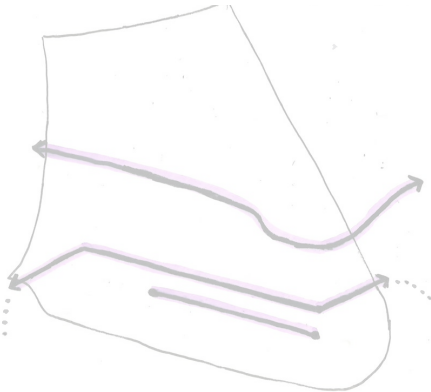
CONCEPT



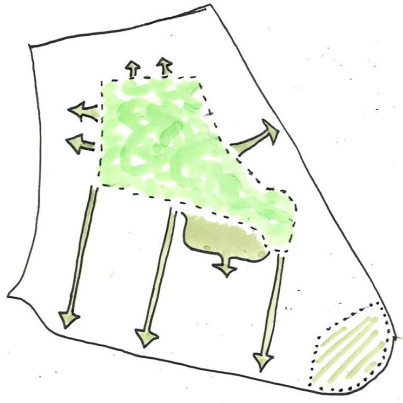
1. Starting point



2. Primary structure



3. Main horizontal structure

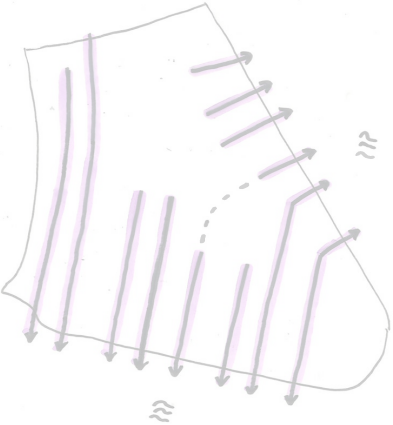


4. Expansion of forest area

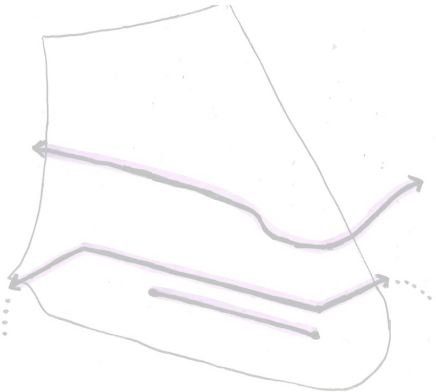
CONCEPT



1. Starting point



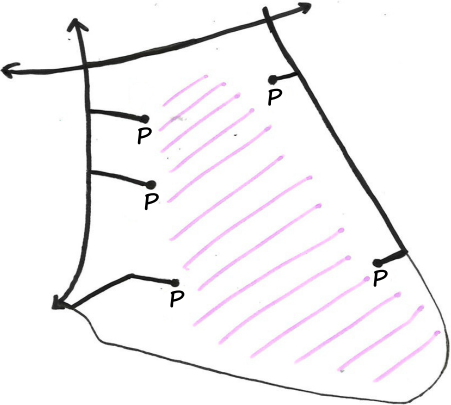
2. Primary structure



3. Main horizontal structure



4. Expansion of forest area

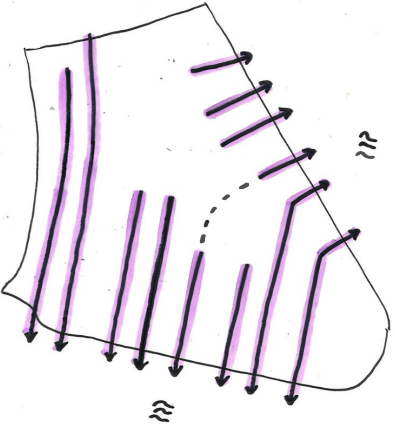


5. Car-free inner area

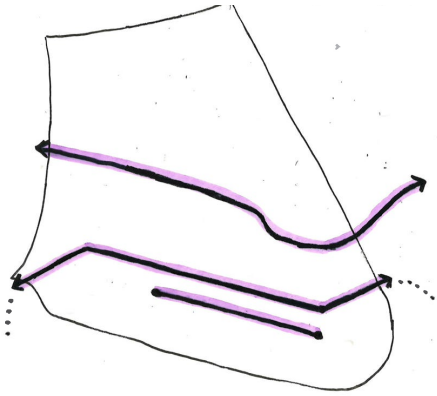
CONCEPT



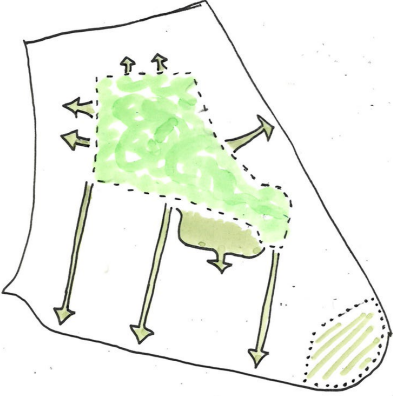
1. Starting point



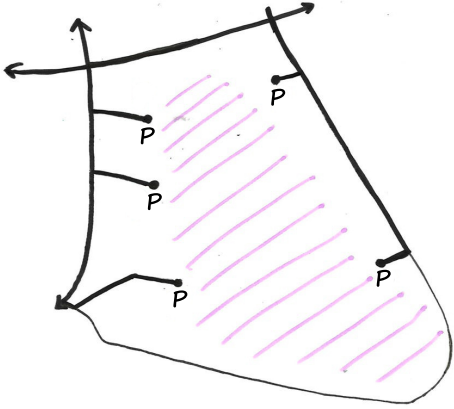
2. Primary structure



3. Main horizontal structure



4. Expansion of forest area



5. Car-free inner area

MASTERPLAN

Legend

-  new building
-  existing building
-  main green structure
-  grass
-  water
-  open water
-  road
-  path
-  tunnel/gate route
-  courtyard
-  private outdoor space

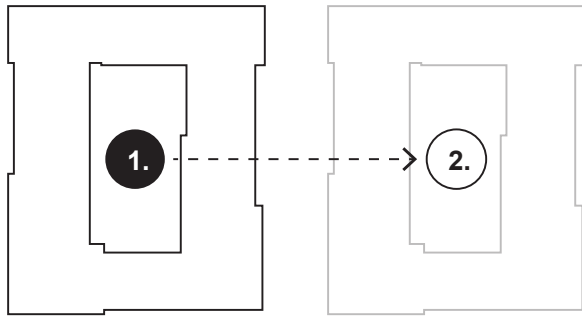




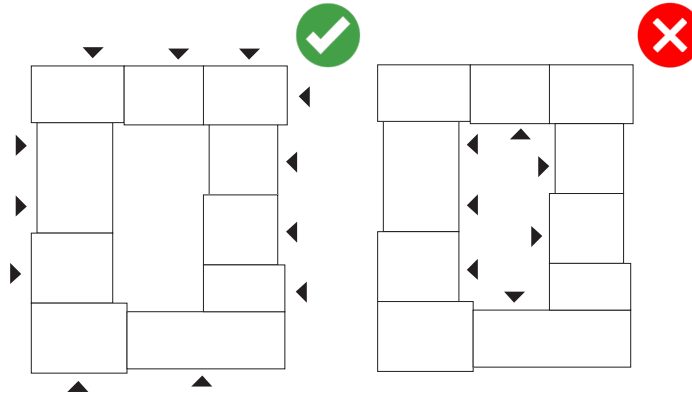
Made with ChatGPT (with selfmade sketch as base)

DESIGN GUIDELINES

First building block as example



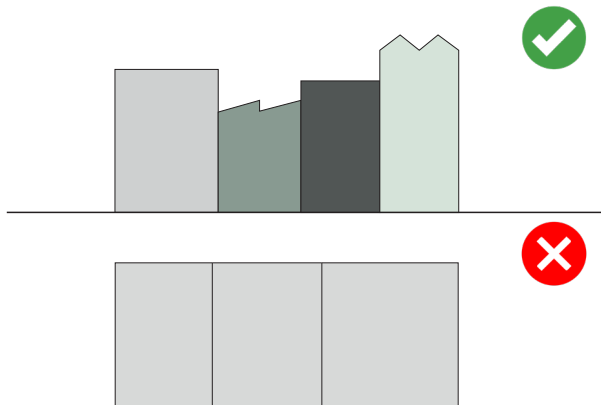
Front doors at the street



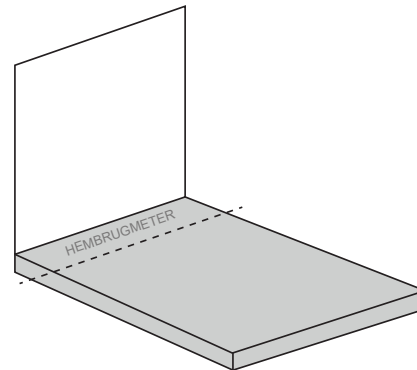
Wild character of planting



Different units in building block



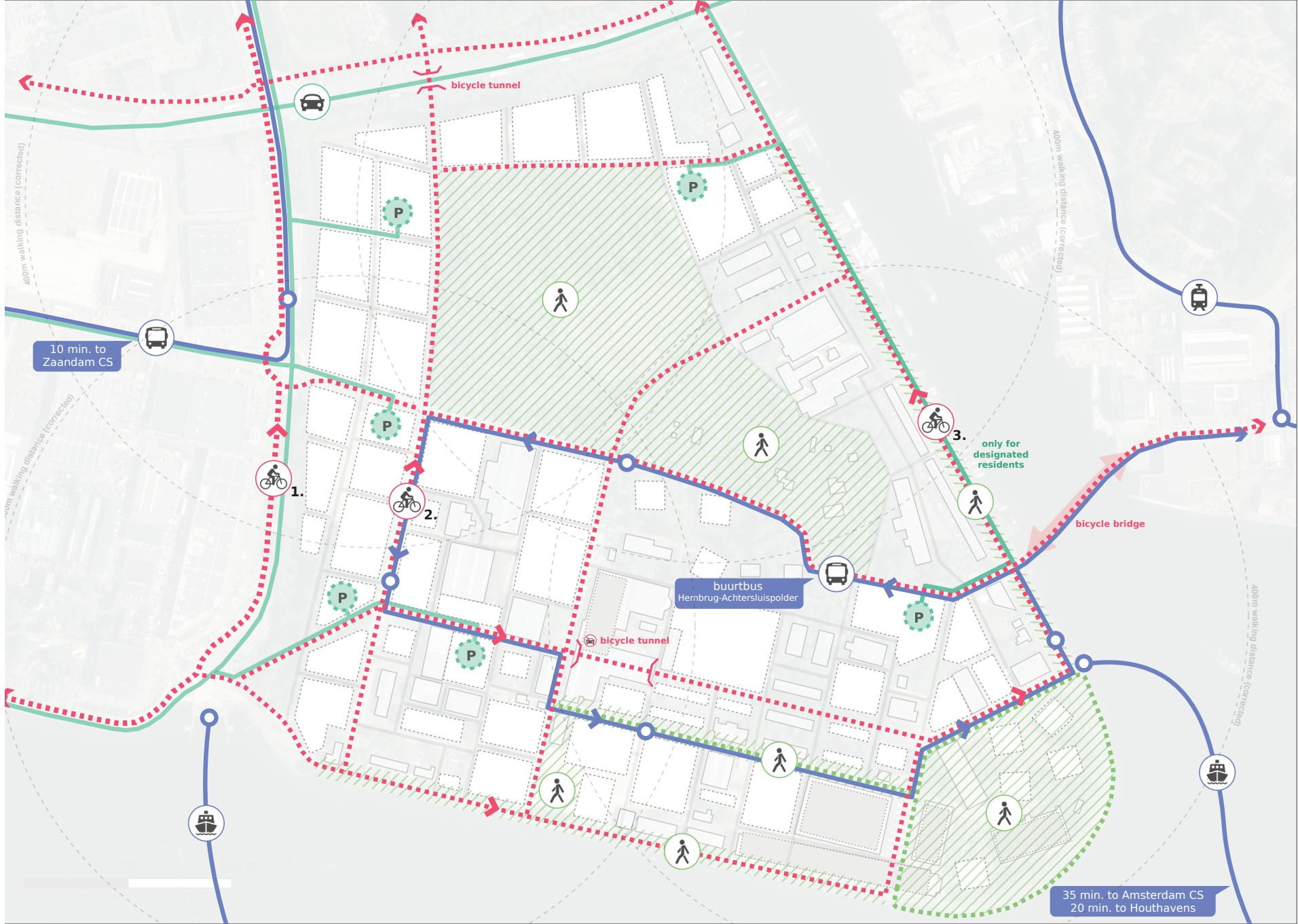
Hembrugmeter: semi-private space





Made with ChatGPT (with selfmade sketch as base)

MOBILITY



Legend

- car route
- public transport route
- bicycle route
- /// pedestrian zone
- pedestrian route
- P parking garage

10 min. to Zaandam CS

buurtbus
Hembrug-Achtersluispolder

35 min. to Amsterdam CS
20 min. to Houthavens

1.

2.

3.

only for designated residents

bicycle bridge

bicycle tunnel

bicycle tunnel

400m walking distance (corrected)

400m walking distance (corrected)

400m walking distance (corrected)

400m walking distance (corrected)

STREETS



Legend

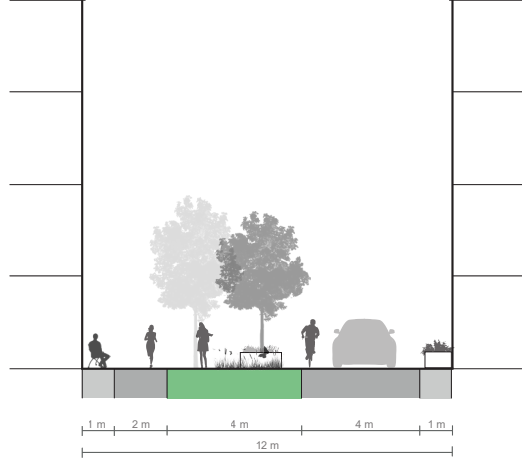
- urban living street
- residential street
- - - alleyway
- boulevard

STREETS

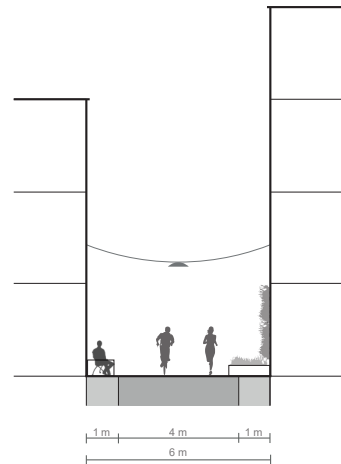
Type 1:
Urban Living Street



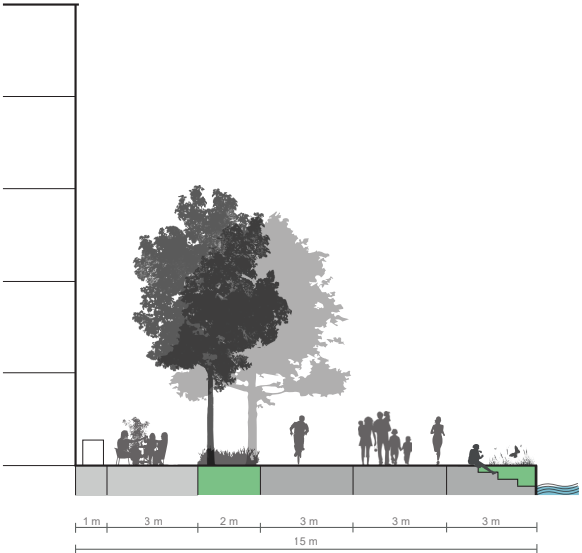
Type 2:
Residential street



Type 3:
Alley-ways



Type 4:
Boulevards



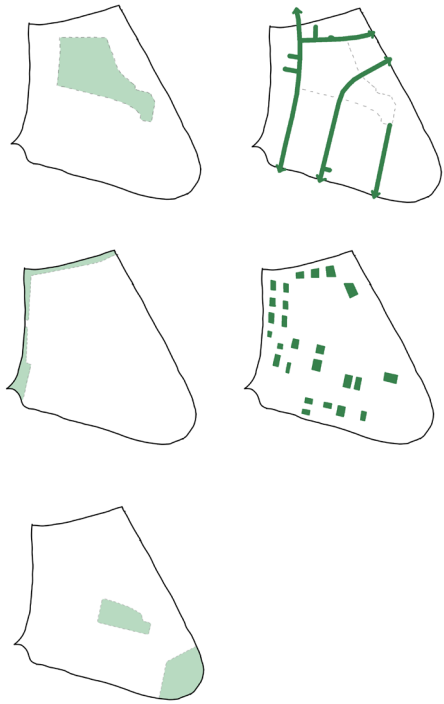


Made with ChatGPT (with selfmade sketch as base)



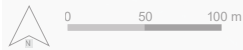
Made with ChatGPT (with selfmade sketch as base)

GREEN STRUCTURE



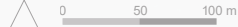
Legend

- Hembrugbos
- ecological structure
- green courtyards
- green belt
- campus area



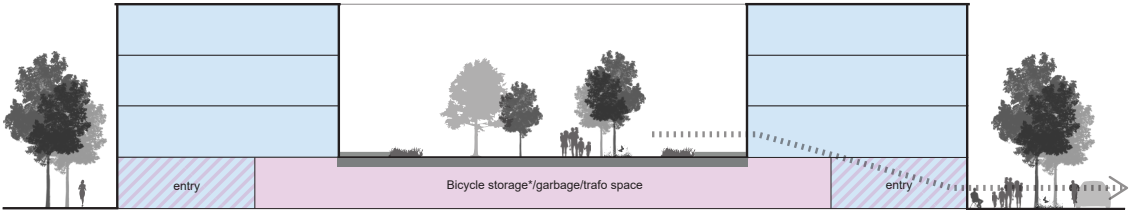
COURTYARDS

- Legend**
- public courtyard
 - private courtyard
 - elevated courtyard
 - route (through gates)



COURTYARDS

Type A: elevated courtyard



Type B: courtyard on ground-level



**Bicycle storage together with building next to it under courtyard*

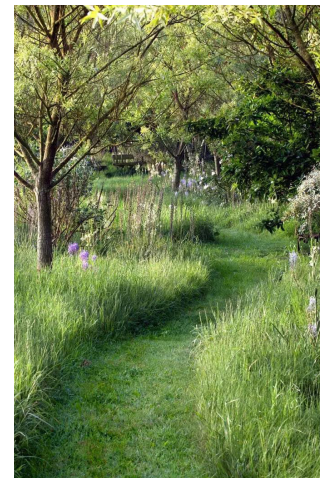
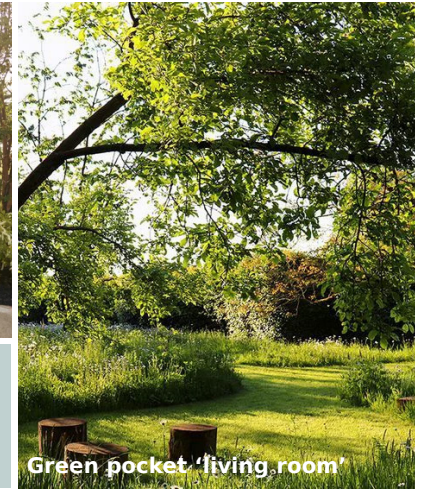
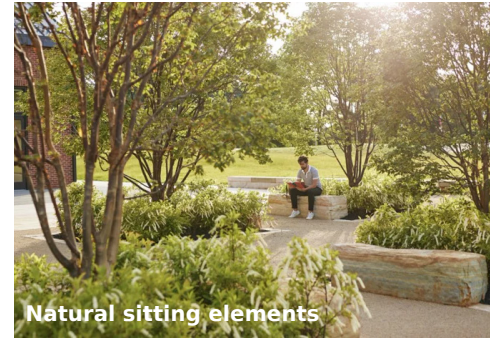


SQUARE: HEMPLEIN

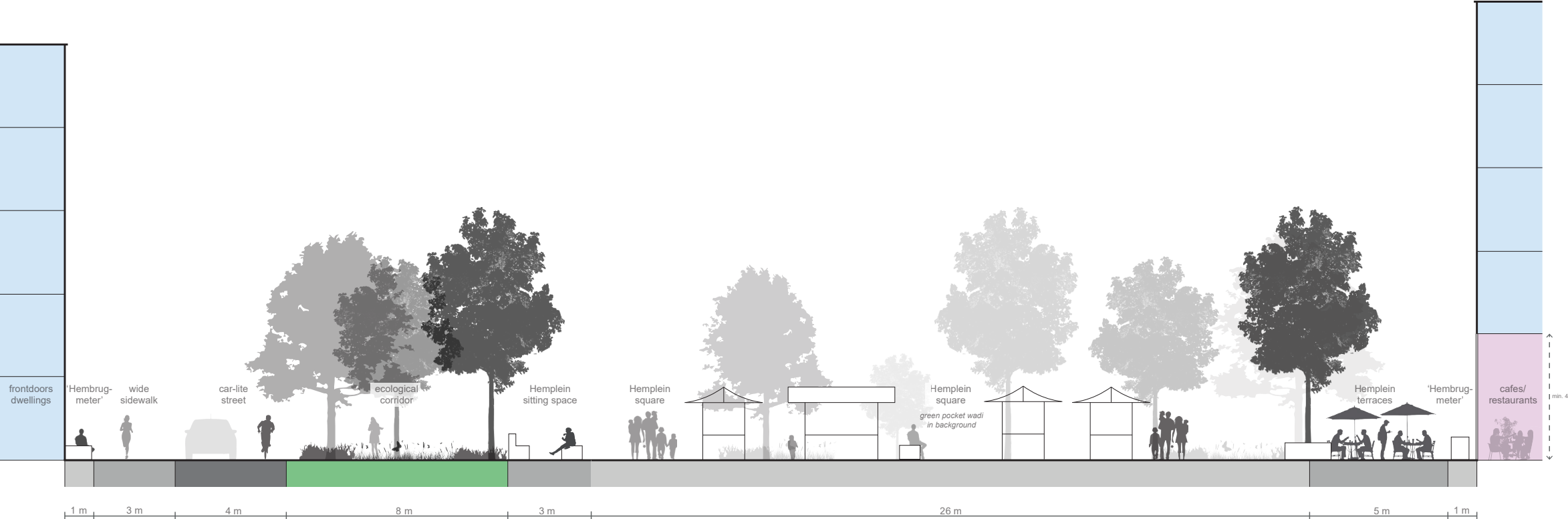


Legend

- new building
- existing building
- ecological structure
- sidewalk
- (bicycle) road
- 'Hembrugmeter' path
- terrace/outdoor space
- sitting space
- square (free space)
- restaurant/cafes
- water



SQUARE: HEMPLEIN

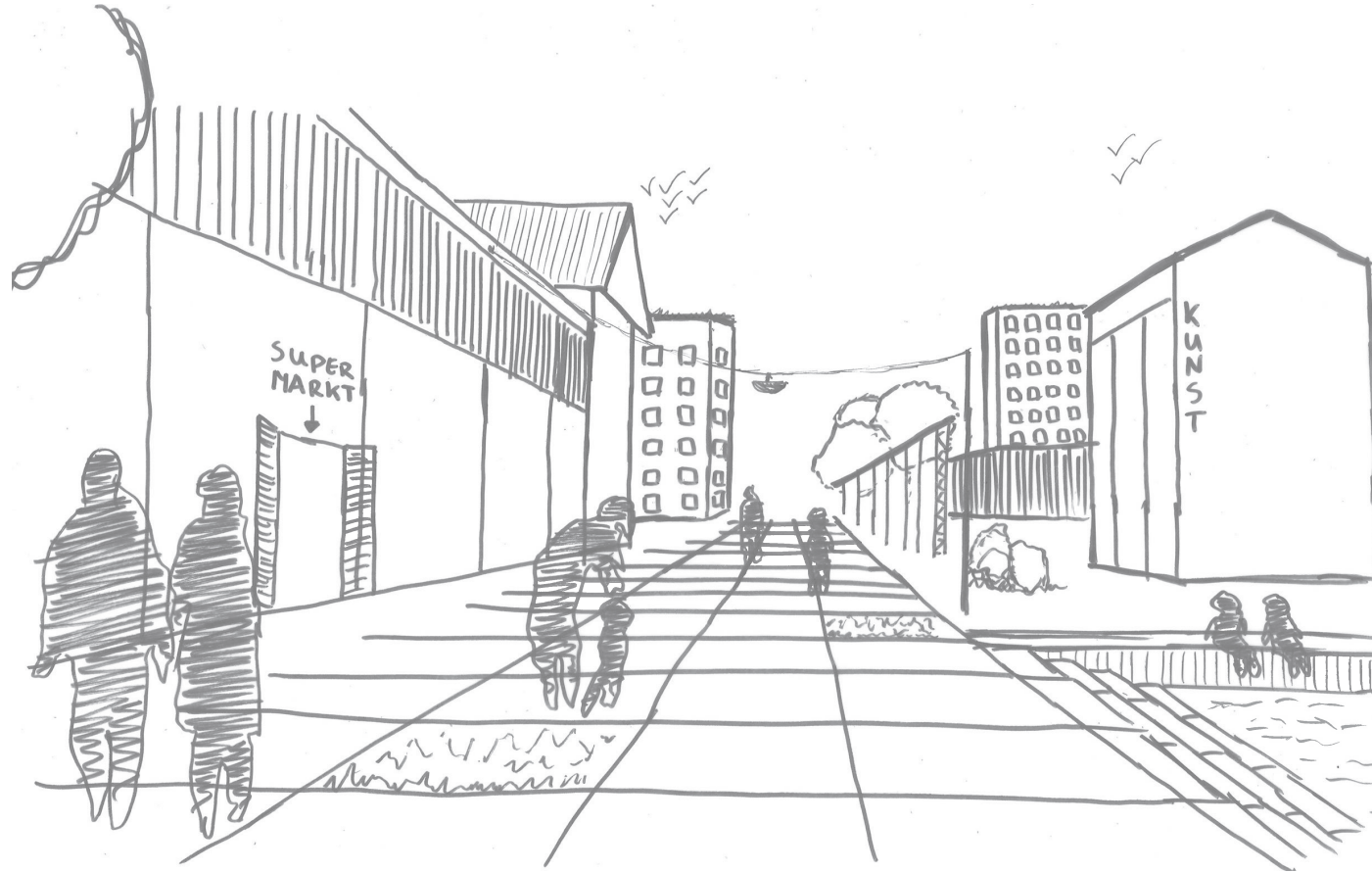




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CONCLUSION

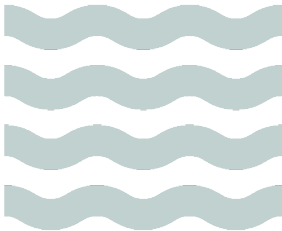
Creating a **vibrant and lively** new neighbourhood with focus on the **history** of the area



CONCLUSION



FOREST AREA



WATERFRONT



HERITAGE



INDUSTRIAL

DENSITY

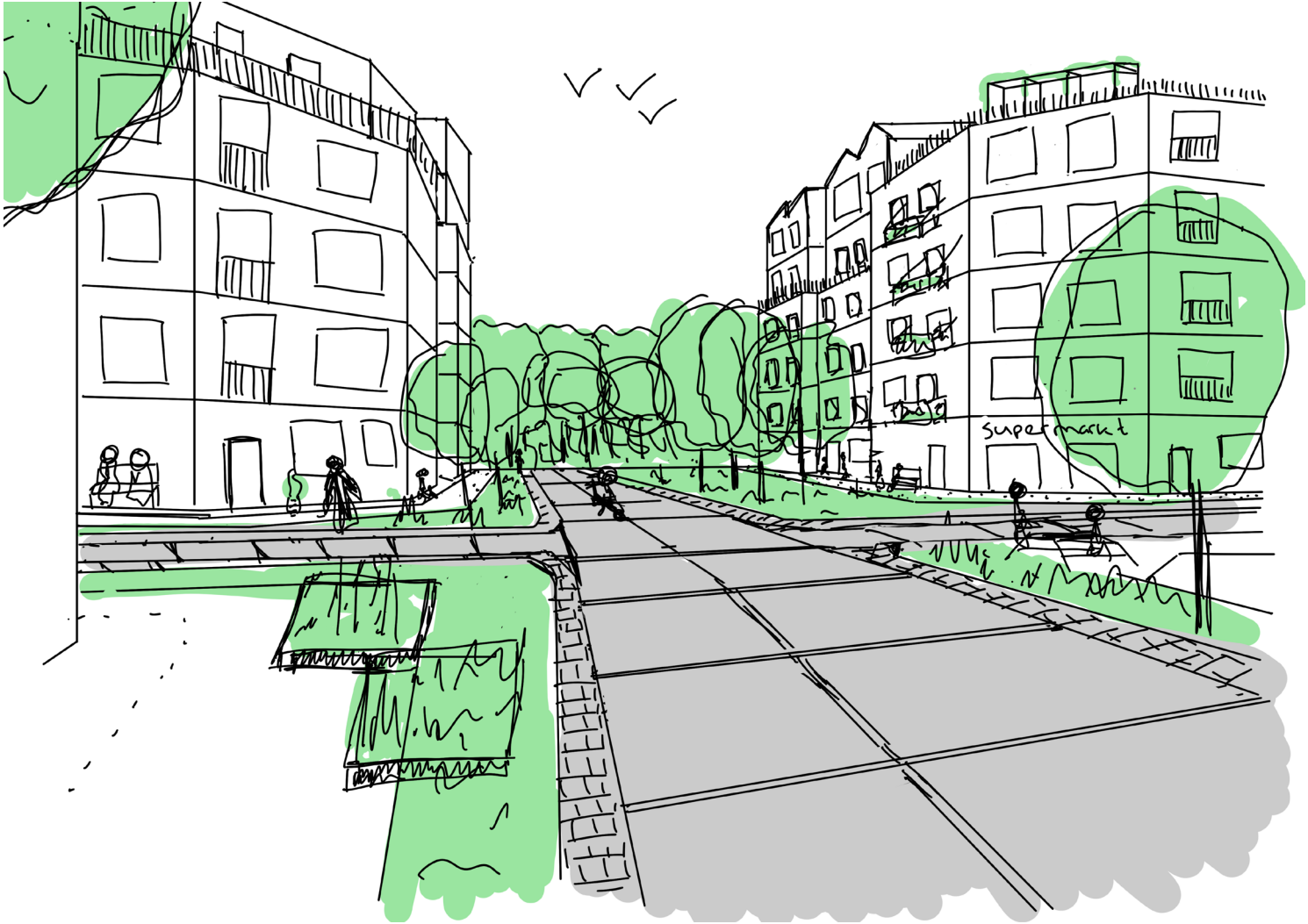


Preserving Identity Through Density

Masterplan Hembrugterrein | Zaandam

Jorn de Haan
June 5, 2026

CHAT.GPT SKETCH



ROUTE THROUGH MONUMENT



Reference project: Young City Gdansk, MVDRV (2017)