

A revitalized Kop van Zuid

Bridging the gaps between the developing Kop van Zuid and its transforming surrounding neighborhoods through public space

Georgiana Ungureanu
1535560

TU Delft, Msc Urbanism

P4 Presentation, Complex Cities Studio

1st mentor Diego Spulveda
2nd mentor Maurice Harteveld
3rd mentor Jolai van den Vegt

October 2010

A sunset over a city skyline with construction cranes. The sky is filled with orange and yellow clouds, and the city buildings are silhouetted against the bright horizon. The water in the foreground is dark and calm.

Keywords:

economic transformation

service economy

creative class as focus group

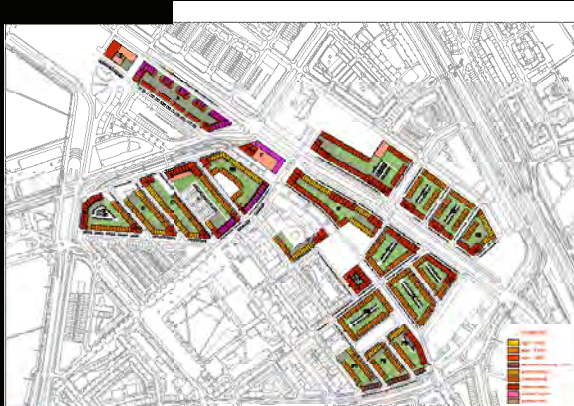
‘super-diversity’

new demands

integral approach

public space as activator

Critical assess the current trends on area development



Make a proposal that improves the area development model and takes a multicultural approach as a way to integrate the neighbourhoods through public space



Content

The kop van Zuid project

The effects of the Kop van Zuid development

Trends: the new projects as a continuation of the Kop van Zuid model

The Kop van Zuid in the Rotterdam context

The future: new opportunities

Proposal

Evaluation

Rotterdam city in the Netherlands

- Second biggest city in the Netherlands
- A working city
- Characterized by its port activities



Kop van Zuid development in context of Rotterdam

- Developed on a former port area
- As a strategy for diversifying its economy
- And attracting the creative class



The meaning of the Kop van Zuid project today

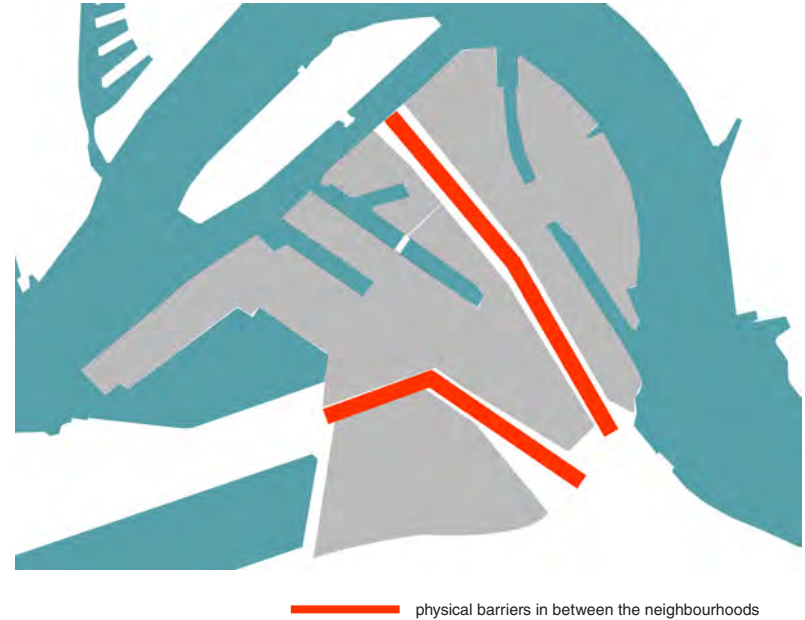
- An extension of the city centre on the south bank of the Maas
- An attraction for a whole new range of inhabitants
- A strong improved connectivity with the city centre through the Erasmus Bridge, a new metro line and two new tram lines



Effects of the Kop van Zuid model of development on the surrounding area

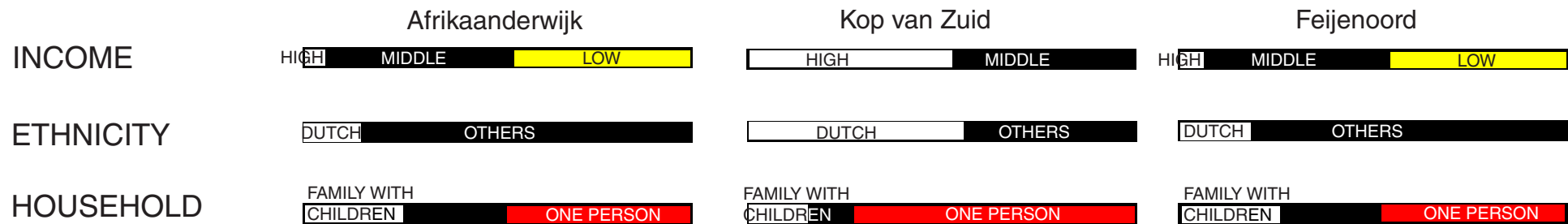
1) Physical-spatial fragmentation due to connectivity and missing functional links

- there are a lot of physical barriers present in between the Kop van Zuid and its surrounding neighborhoods
- as a result the local connectivity is poor

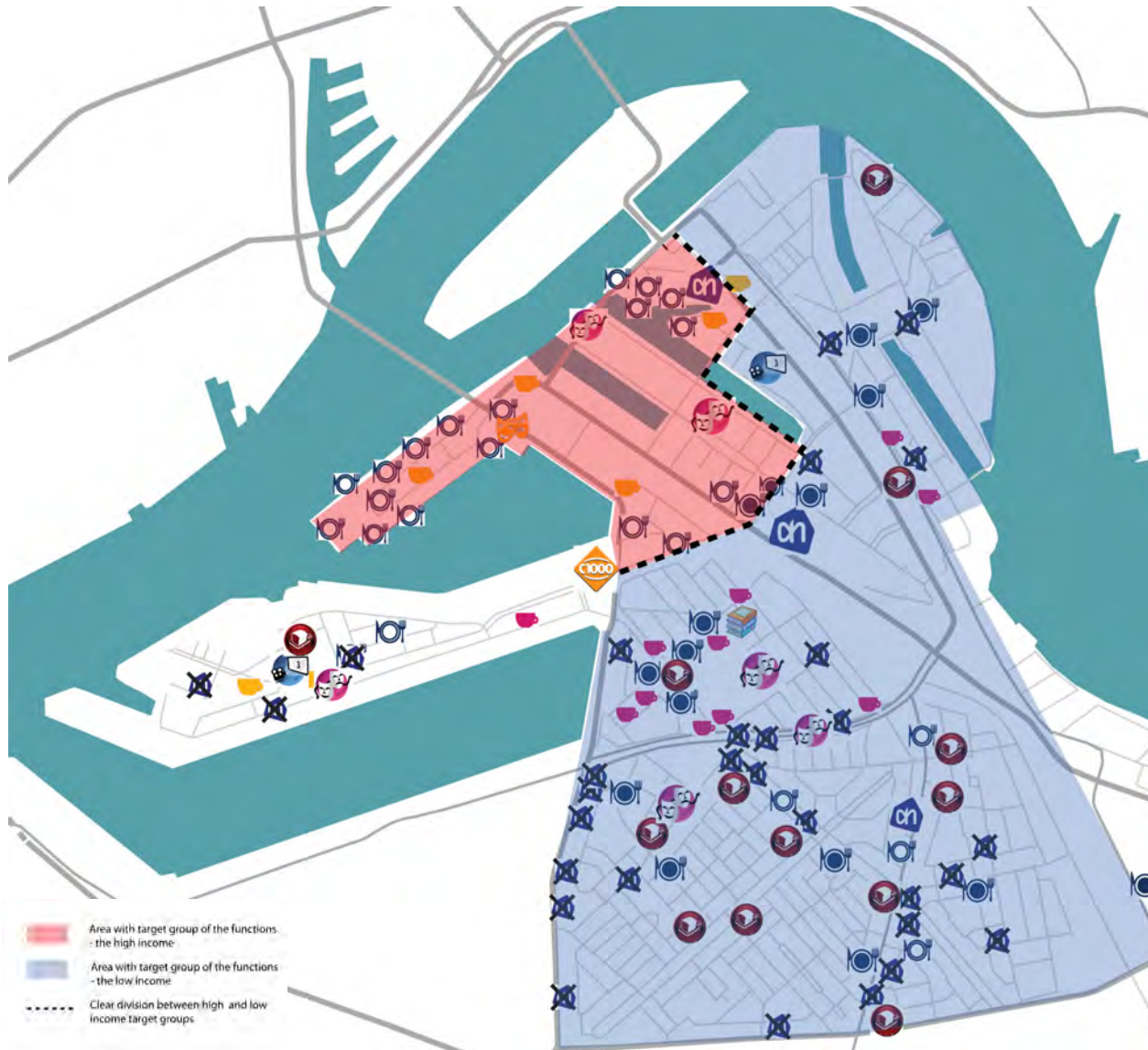


2) Social-spatial fragmentation due to: division of the social groups

- a diversity of groups with very different demands from the public space

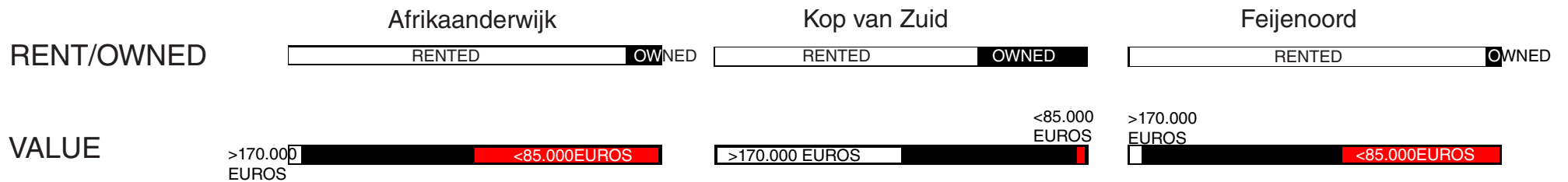


Division of the functions and the target groups



Division of the housing market

- misbalance in between the different neighbourhoods regarding the housing segments



3) As a result of the fragmentation

The public spaces are in Kop van Zuid highly designed but not used

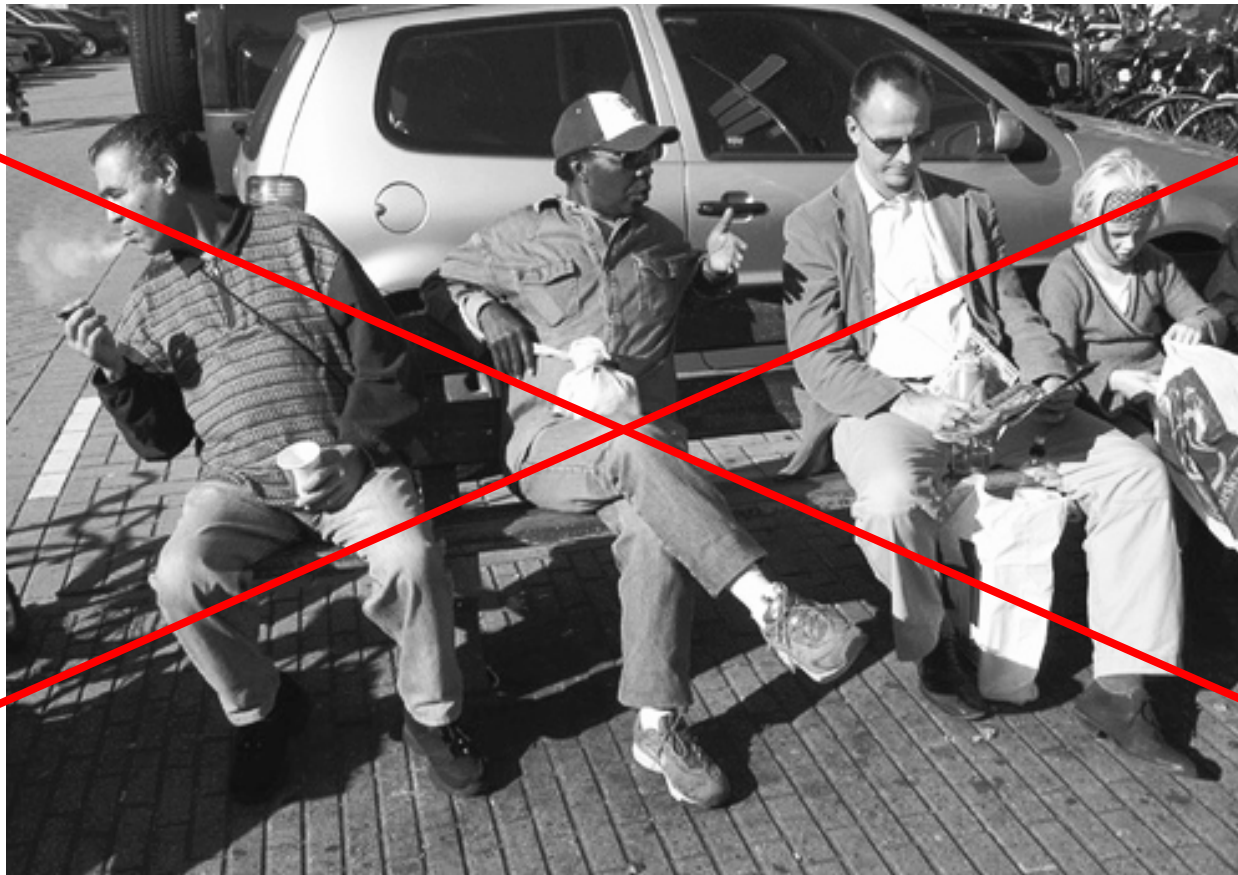


In Afrikaanderwijk and Feijenoerd dysfunctional, dirty and unsafe, but even so important for the local communities



There are no spaces where the interaction between the different groups could take place

-No places that would answer the demands of the various groups



Trends: the new projects are continuing
the same model of development

A housing market segment targeting the high-income group


- 70% of the proposed houses very expensive houses



Extensive demolition in the case of the Parkstad project

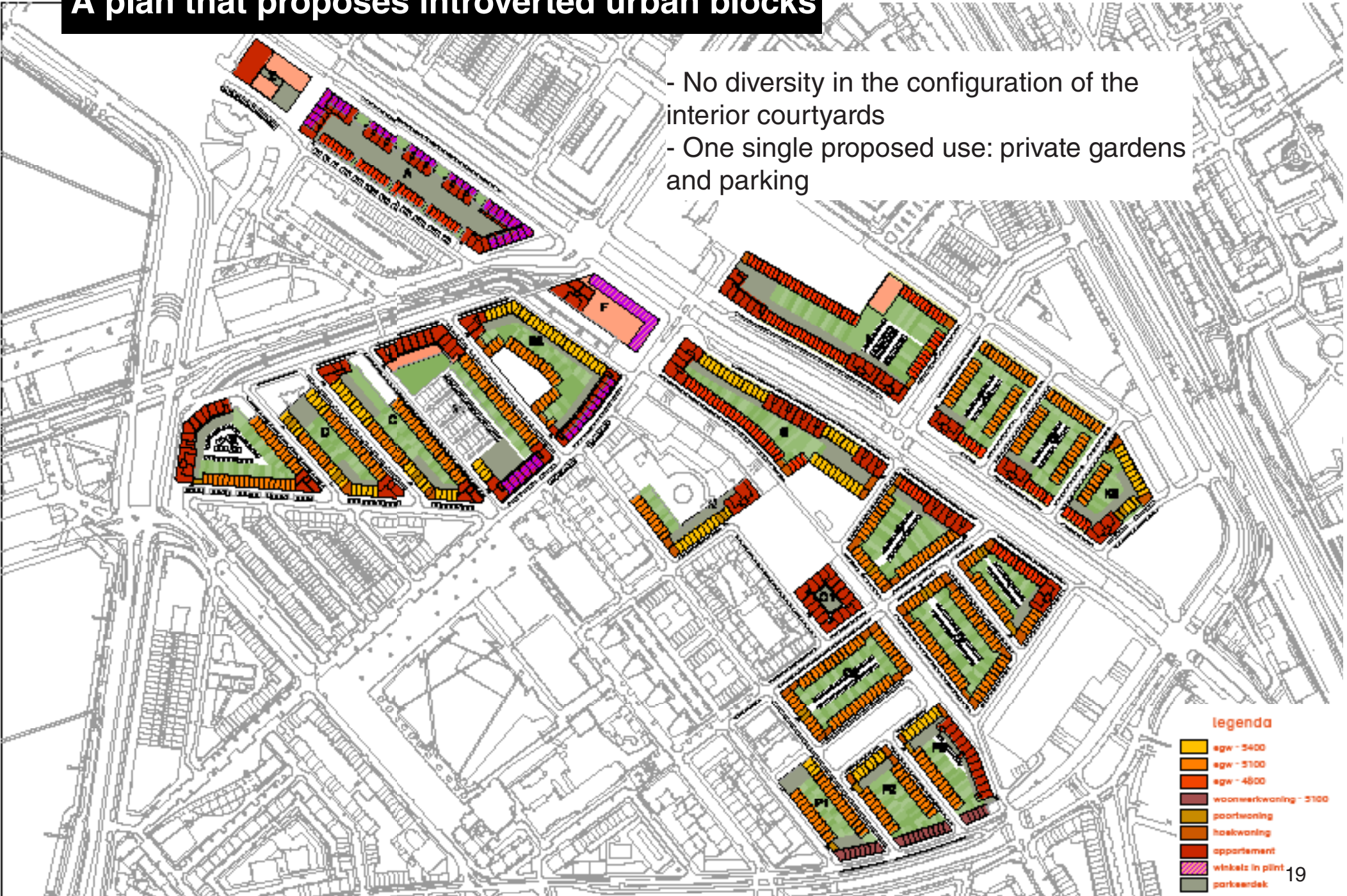
- A big part of the current inhabitants are going to be dislocated
- And forced to move, due to the housing replacement



 Area planed to be demolished

A plan that proposes introverted urban blocks

- No diversity in the configuration of the interior courtyards
- One single proposed use: private gardens and parking



Functions targeting the same high-income group

- The main concentration of functions as a continuation of the Entrepot area
- No connections with the shopping street in Feijenoord



As result: there are no spaces created for the social encountering of the different groups

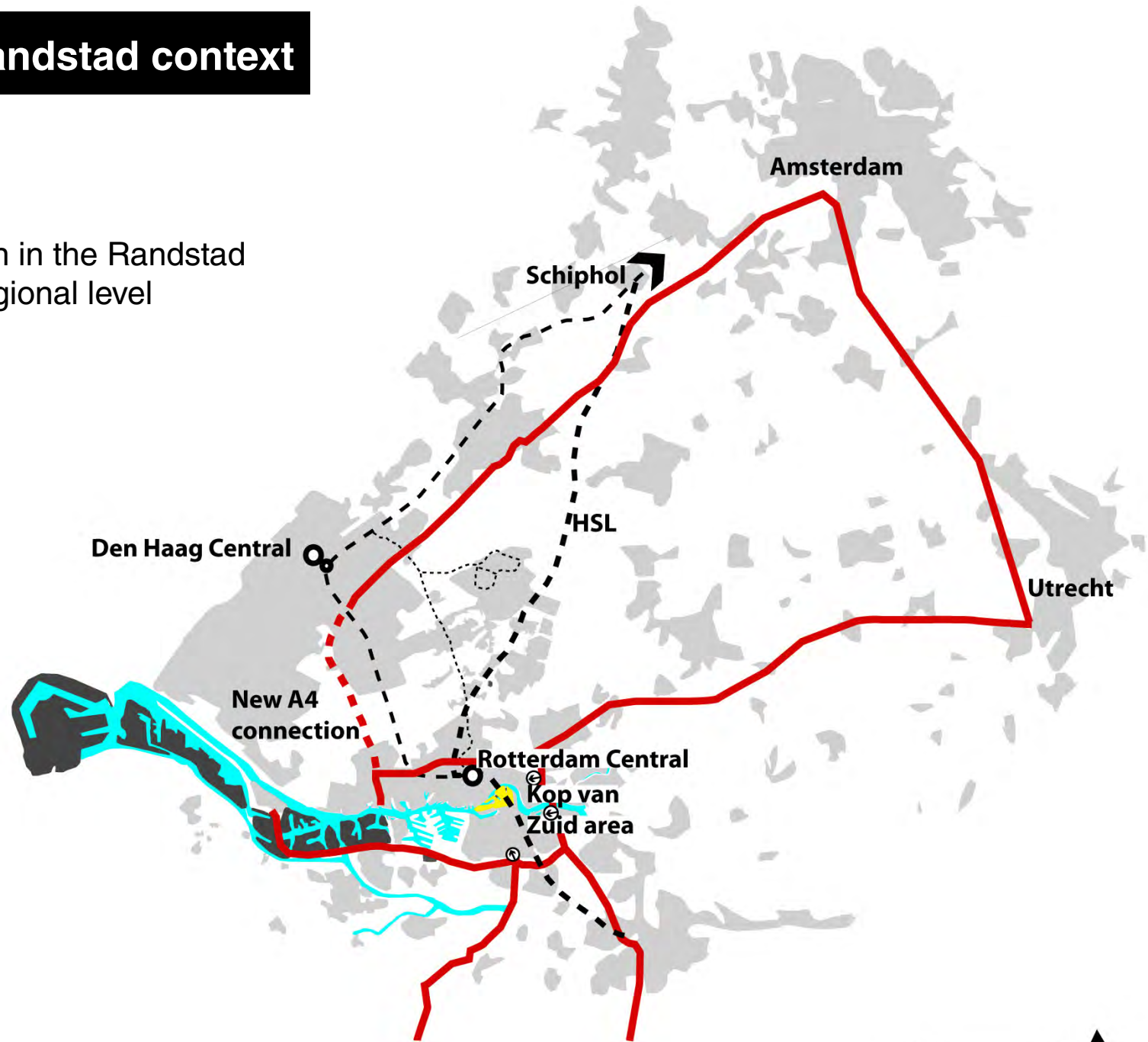
-No places that would answer the demands of the various groups



Kop van Zuid in the context of the city of Rotterdam


Kop van Zuid in the Randstad context

- Kop van Zuid at a key location in the Randstad
- Very well connected at the regional level



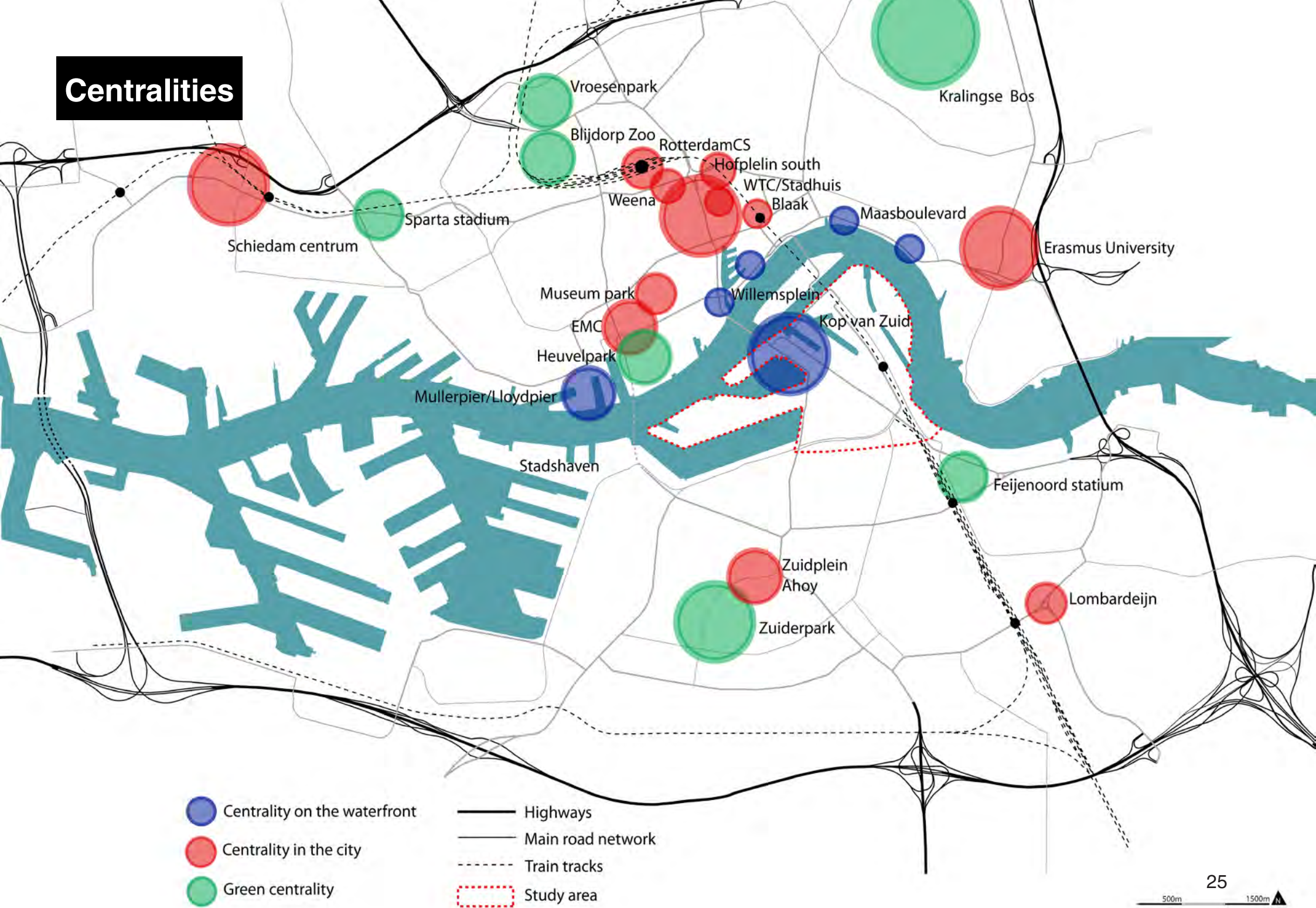
Corridors



 Study area

500m 1500m 

Centralities

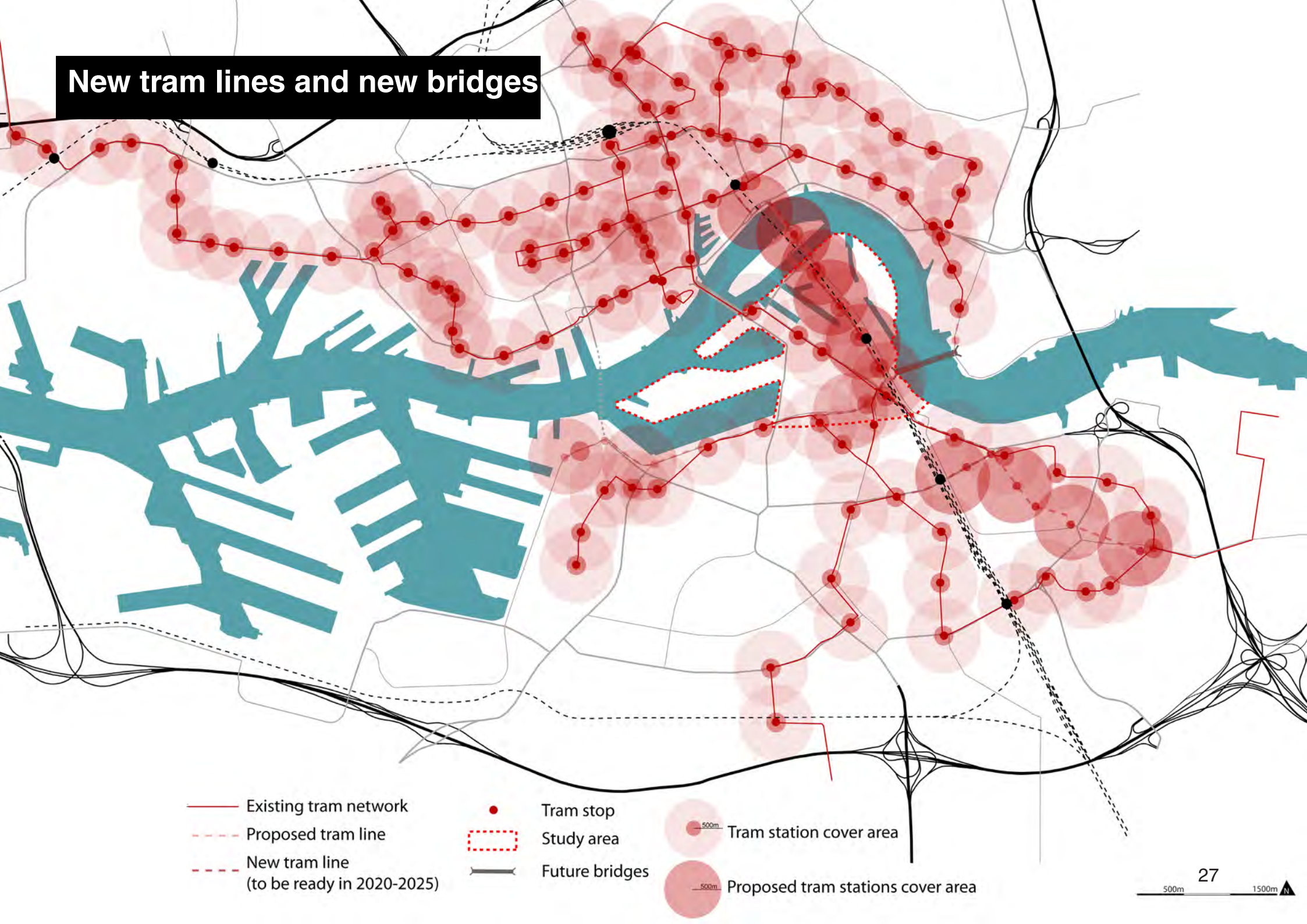


- Centrality on the waterfront
- Centrality in the city
- Green centrality

- Highways
- Main road network
- - - Train tracks
- ⋯ Study area

**The future: large scale opportunities
brought by the new infrastructural
development plans**

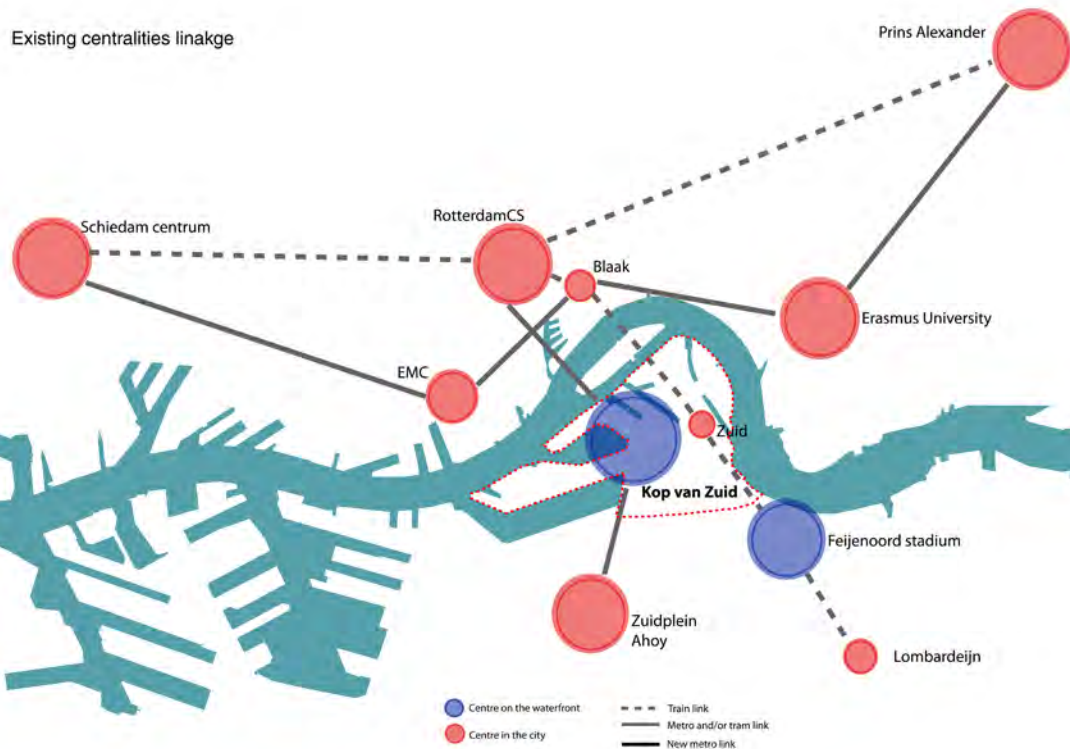
New tram lines and new bridges



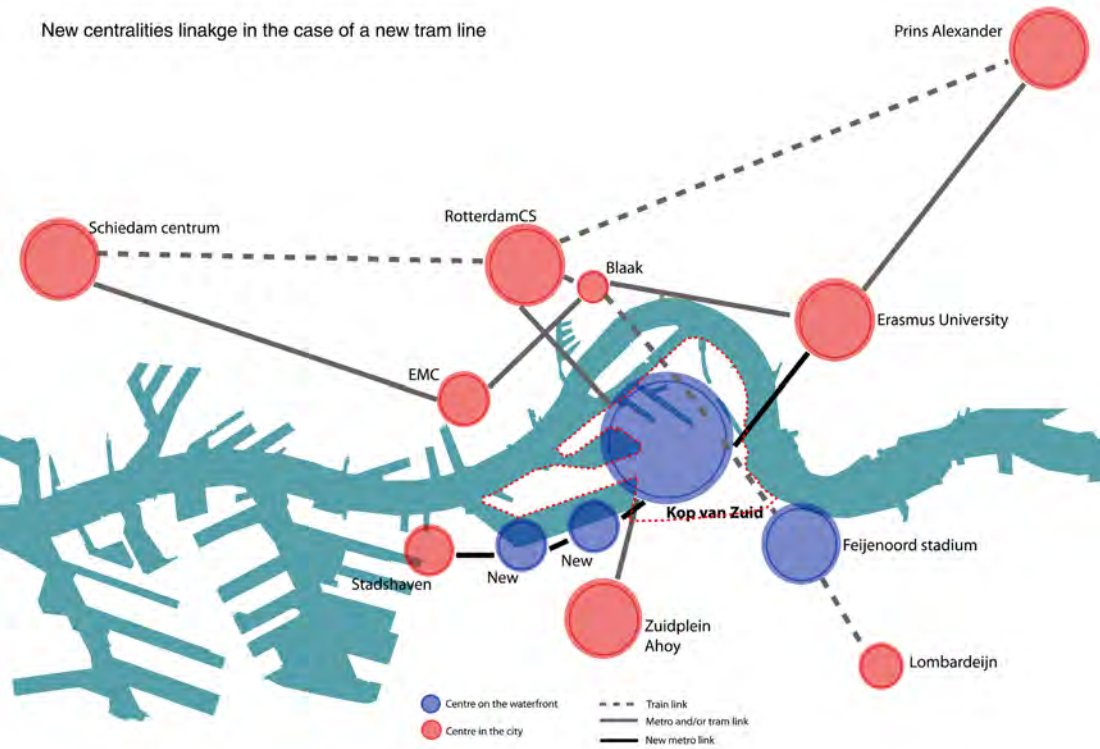
- Existing tram network
- Proposed tram line
- New tram line (to be ready in 2020-2025)
- Tram stop
- Study area
- Future bridges
- Tram station cover area
- Proposed tram stations cover area

New tram lines and new bridges effects on the centralities linkage

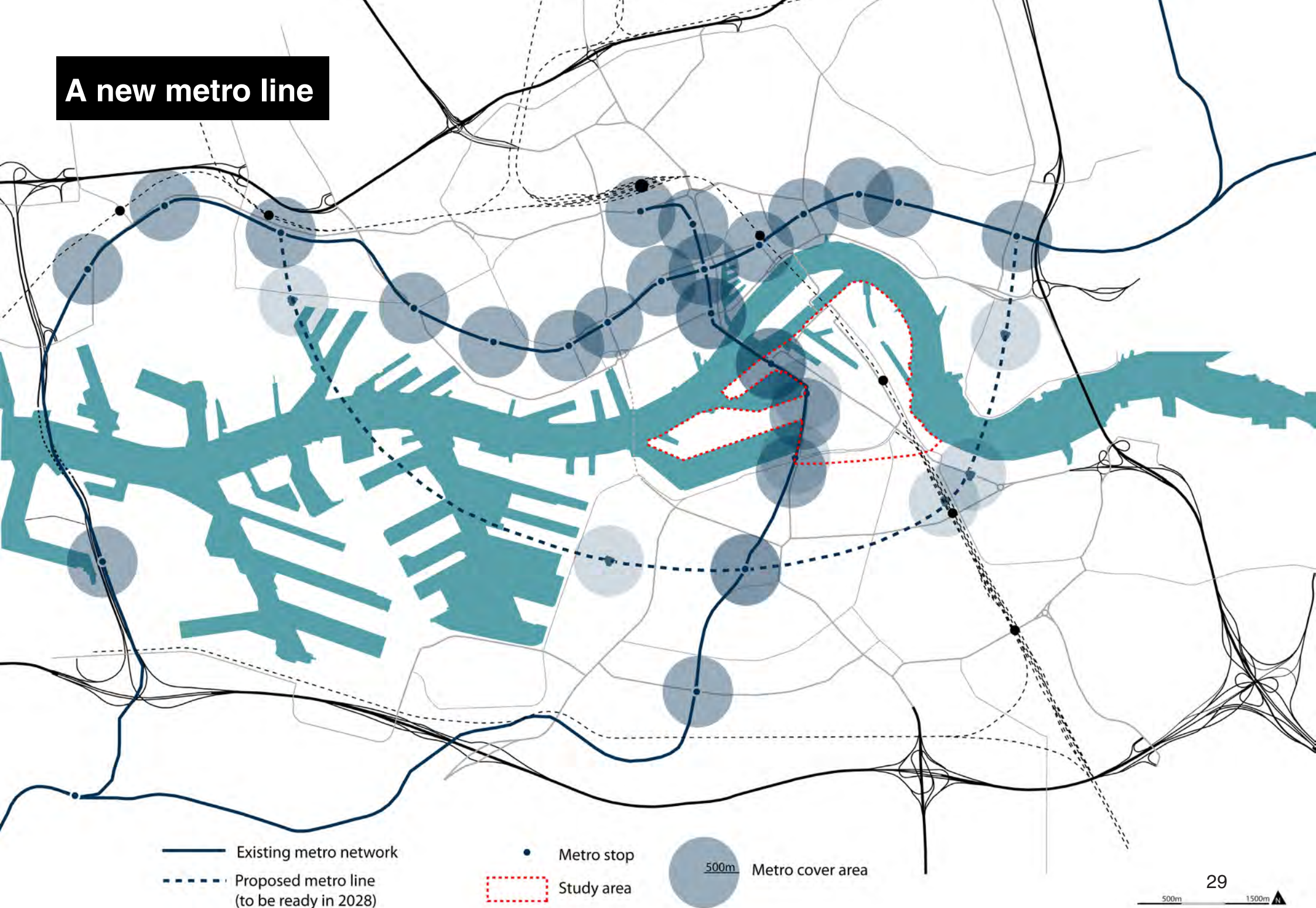
Existing centralities linkage



New centralities linkage in the case of a new tram line

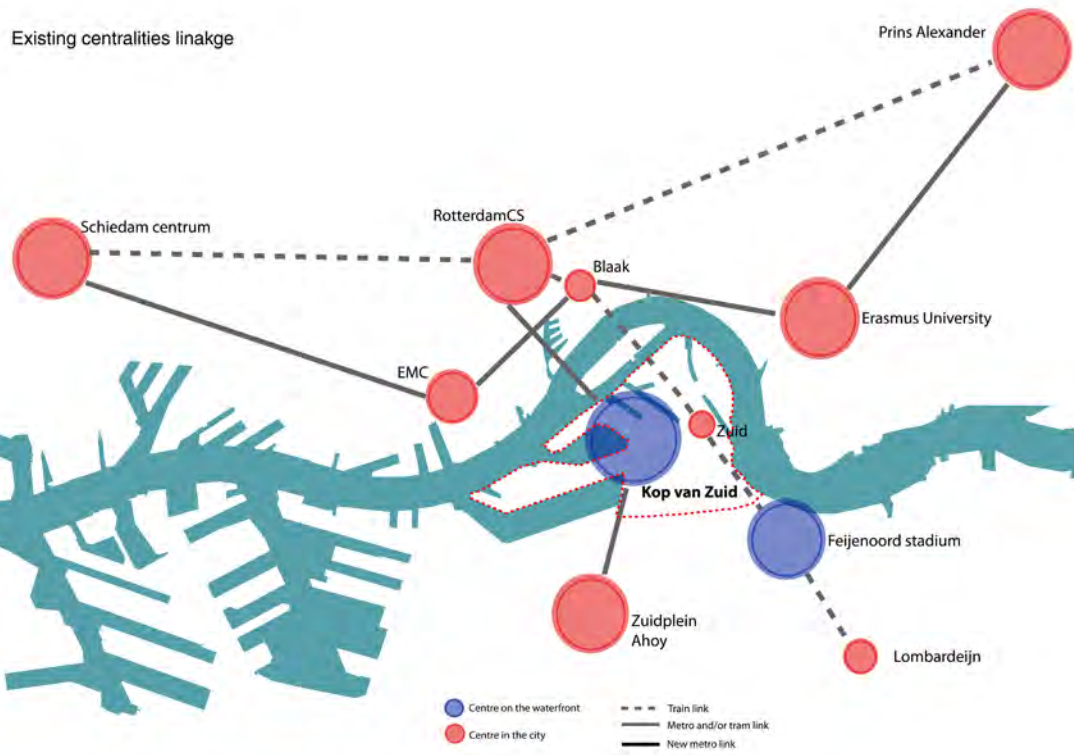


A new metro line

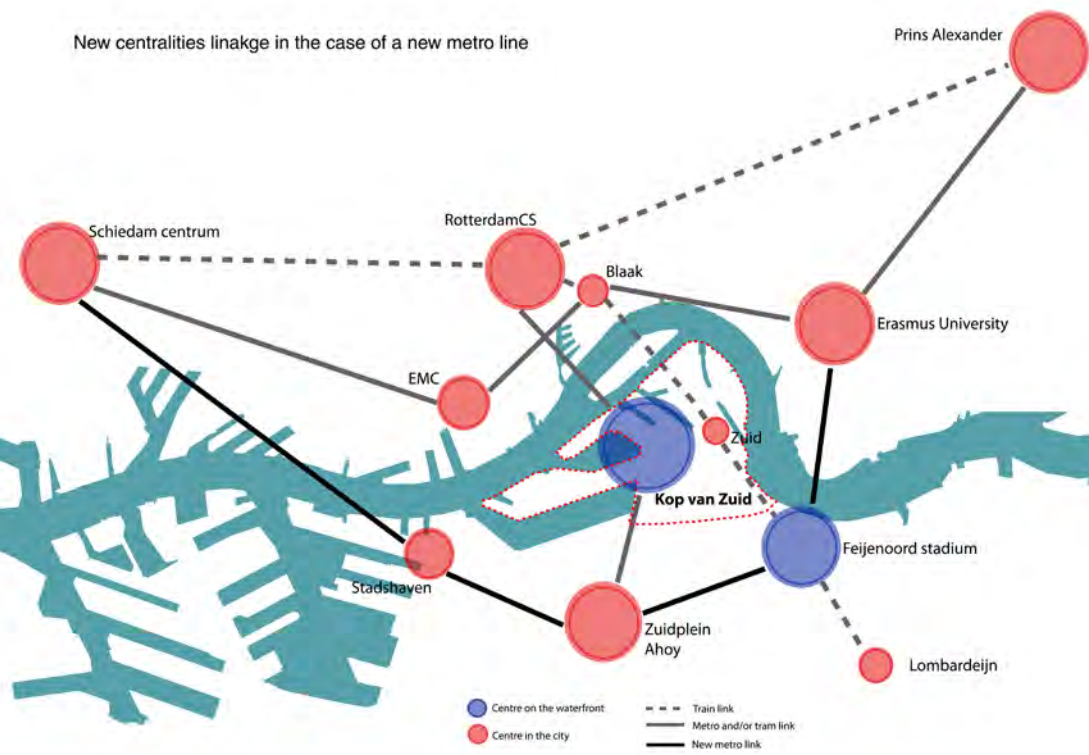


A new metro line effect on the centralities linkage

Existing centralities linkage



New centralities linkage in the case of a new metro line

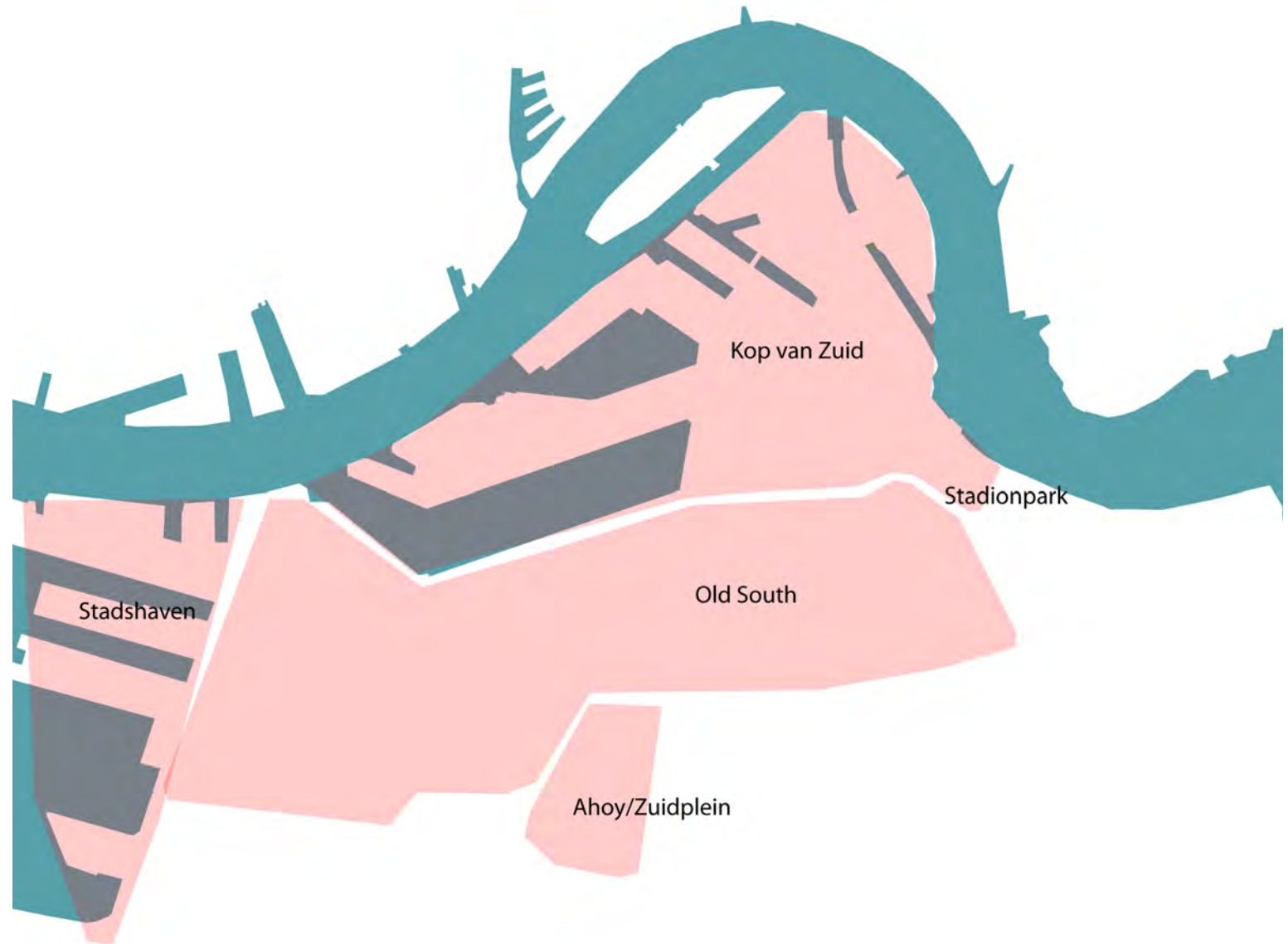


The area will support spatial and social transformation

**But, how to transform the area in way
that creates **integration instead of further
fragmentation?****

Municipality high points on the agenda for south Rotterdam

- better housing conditions
- safe, functional and attractive public spaces
- strengthening the local economy, by providing support for the start-up entrepreneurs



Opportunities for the Kop van Zuid area at the local scale

Connect

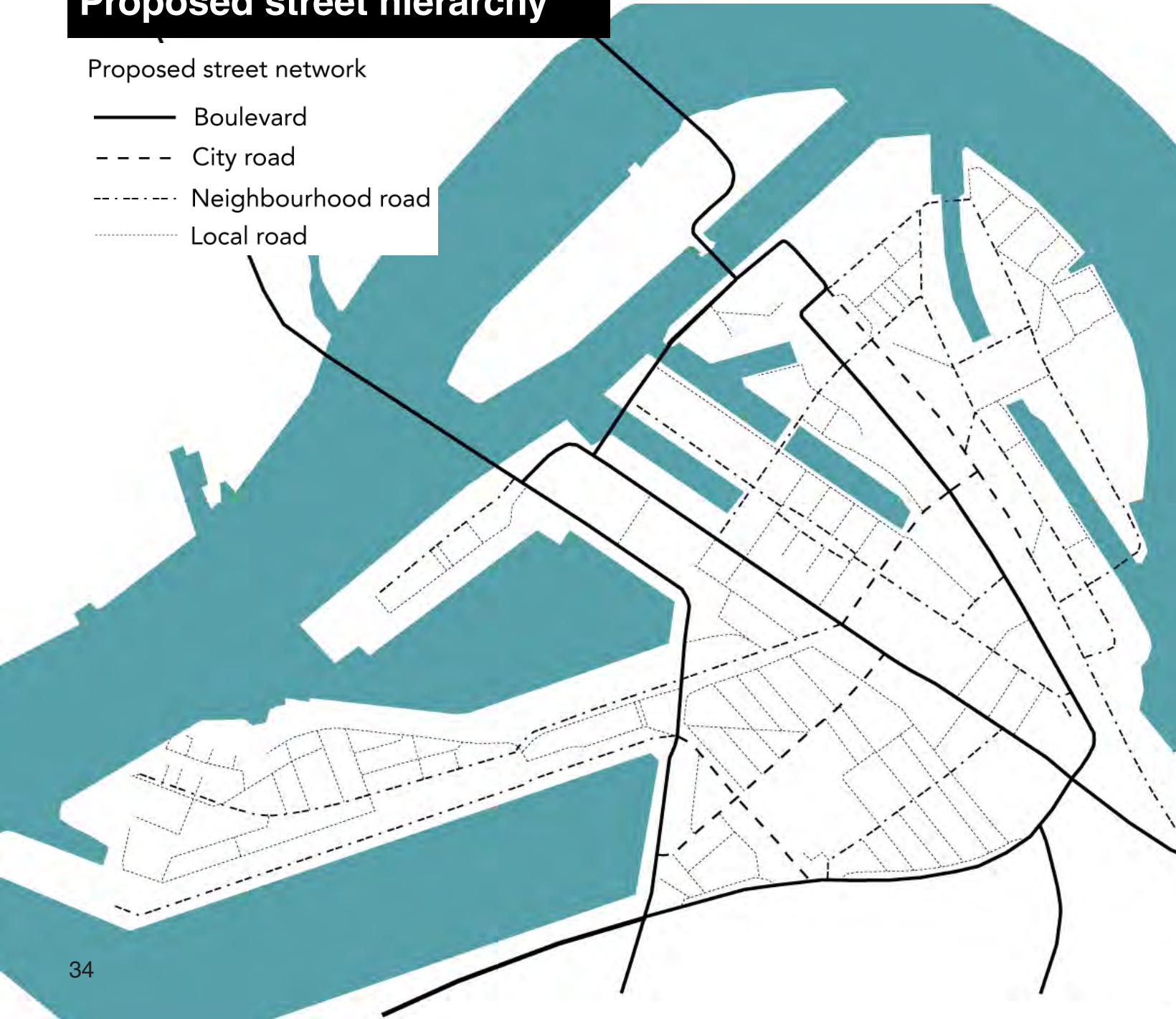
- eliminate barriers
- add the missing links



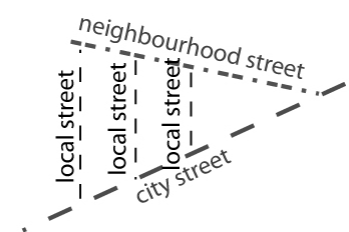
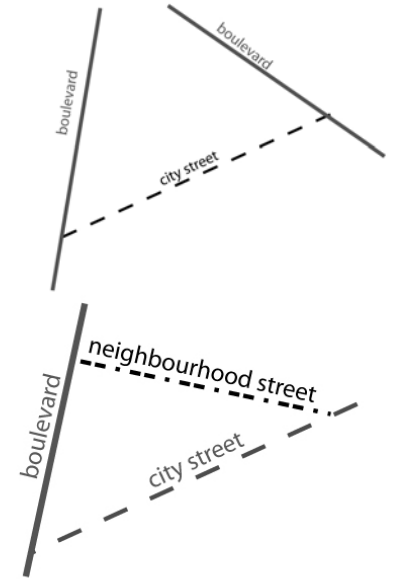
Proposed street hierarchy

Proposed street network

- Boulevard
- - - City road
- · - · - Neighbourhood road
- · · · · Local road





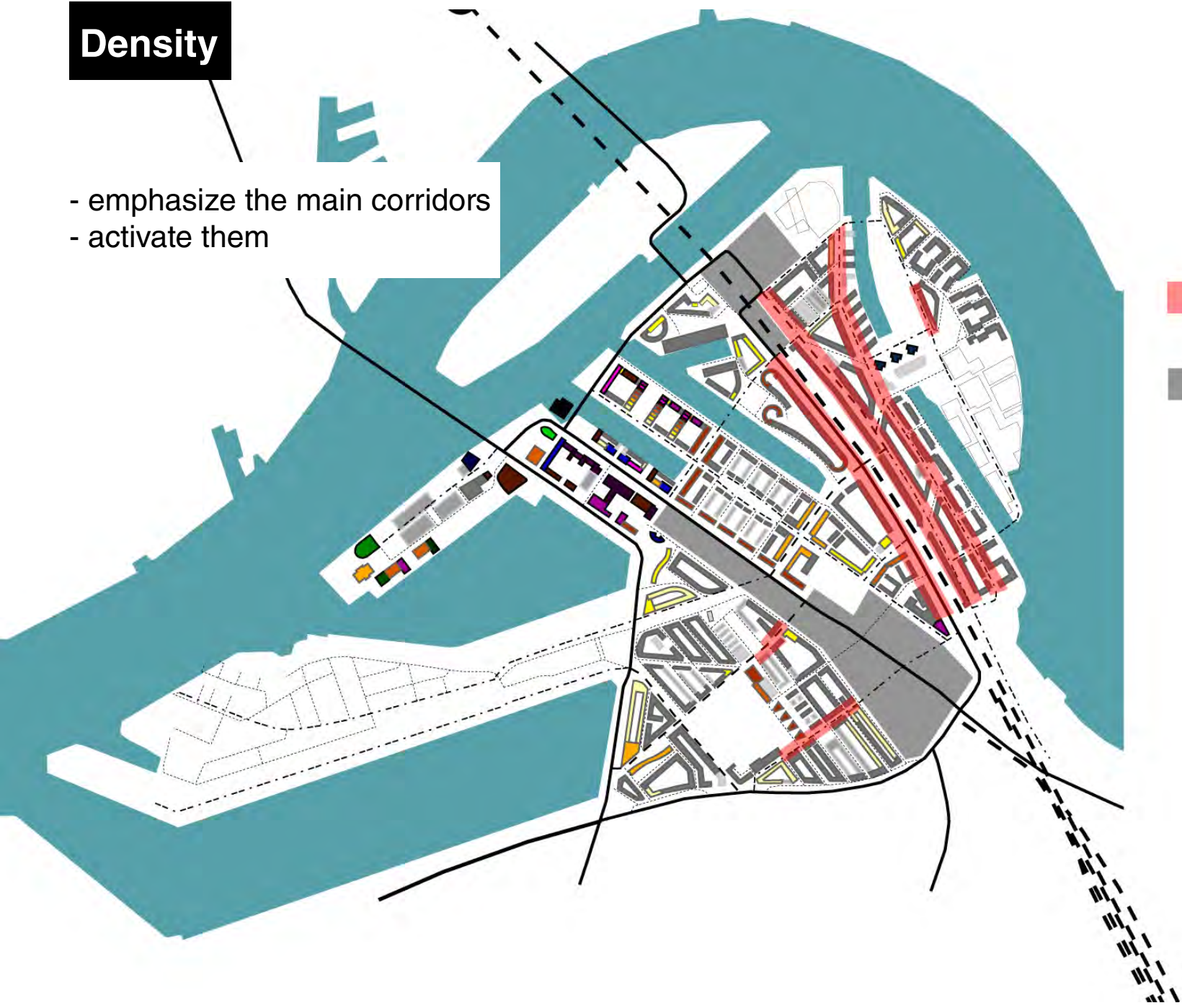
Connectivity principles



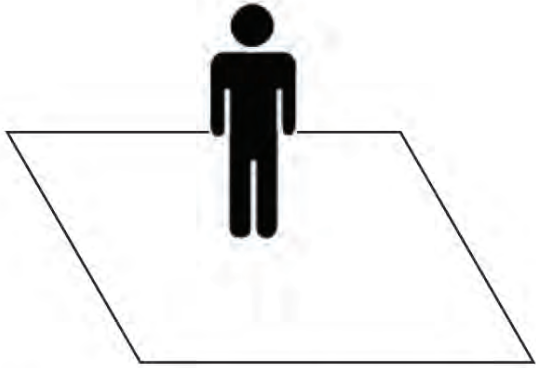
Density

- emphasize the main corridors
- activate them

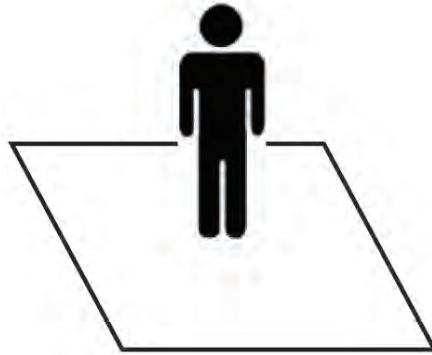
-  Opportunity for increasing the density in the existing built environment
-  Opportunity for building on the vacant land



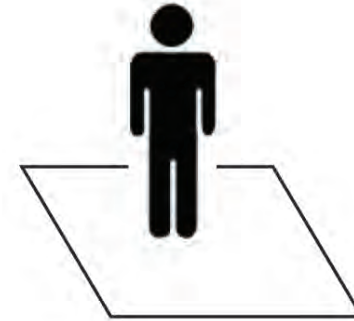
Functions



Hillesluis: 5,23 sqm/household



Oude noorden: 4,4 sqm/household



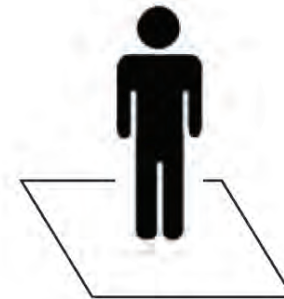
Rotterdam average: 3,22 sqm/household



Afrikaanderwijk: 1,4 sqm/household



Feijenoord: 0,59 sqm/household

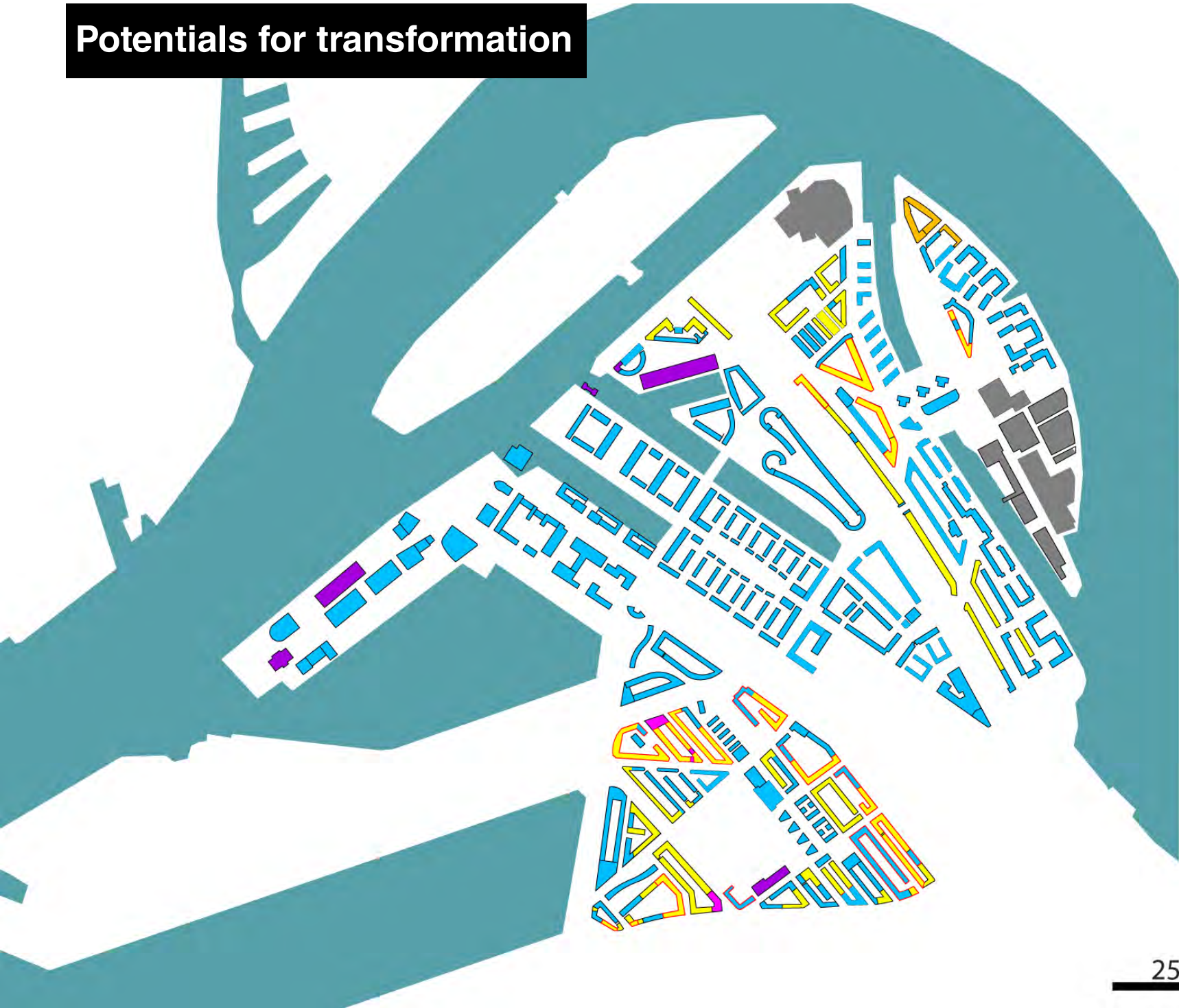


Kop van Zuid: 2,7 sqm/household

Potentials for adding functions



Potentials for transformation



Building period and current stage

- original buiding renewed
- original buiding
- constructed after 1975
- monument
- town monument
- in need for technical research
- industrial building

Relations between the street hierarchy, program and public space character

	Local street	Neighbourhood street	City street	Boulevard
Goal	<ul style="list-style-type: none"> - to activate the local life - to create a safe living environment 	<ul style="list-style-type: none"> - to offer a soft transition from the most public street in the neighbourhood (the city street) to the very local streets - create the condition for living and working environments, which would bring extra quality in the neighbourhood, and could attract new groups of inhabitants 	<ul style="list-style-type: none"> - to create an activator in each neighbourhood, that targets several groups - to create the condition for economic development - to bring extra quality in the several neighbourhoods in order to improve their image and attract a more diverse group of users for the existing and proposed facilities - to create the proper environment in which the different groups meet and greet 	<ul style="list-style-type: none"> - to transform the existing boulevards characterised by the transport lines (train, metro and train) and fast auto traffic, that create barriers in between the several neighbourhoods, in connectors in between them
Main user groups	- local residents	- local and neighbourhood residents	- local, neighbourhood and city residents + tourists	- local, neighbourhood, city and regional residents - tourists
Connectivity concept				
Main program	<ul style="list-style-type: none"> - residential (predominantly mono-functional) 	<ul style="list-style-type: none"> - residential - work and live - schools, day care, sport centers 	<ul style="list-style-type: none"> - residential - work and live - retail (with a variety of target groups) - culture and leisure (with an extended range of opening hours: day and evening) 	<ul style="list-style-type: none"> - residential - office - eat & drink - regional functions
Public space character	<ul style="list-style-type: none"> - street: possibility to stop, linger, seat... - in relation with communal spaces integrated in the urban context - cultural related uses <p>Main use pattern: </p> <p>Character: </p> <p>Functions: </p>	<ul style="list-style-type: none"> - street: possibility to stop, linger, seat... - in relation with playgrounds, sport fields - with main usage pattern during the day timer (receiving full sun in the middle of the day) <p>Main use pattern: </p> <p>Character: </p> <p>Functions: </p>	<ul style="list-style-type: none"> - street: pedestrian comfort, promenade character, possibility to stop, linger, seat, through both public and private facilities (from terraces, restaurants...) in relation with the infrastructure facilities (the tram, train and metro stops) - in relation with small scale squares as spaces for short time stops - neutral character <p>Main use pattern: </p> <p>Character: </p> <p>Functions: </p>	<ul style="list-style-type: none"> - street: pedestrian comfort, promenade character, possibility to stop, linger, seat, through both public and private facilities (from terraces, restaurants...) in relation with the infrastructure facilities (the tram, train and metro stops) - in relation with small scale squares as spaces for short time stops - neutral character <p>Main use pattern: </p> <p>Character: </p> <p>Functions: </p>
Typology	<ul style="list-style-type: none"> 1. Active frontages (Carmona, 2003): - housing with direct entrances from the street (with 20-25 doors and windows every 100m) - soft transition between the public and the private space - high articulated frontage (nooks, corners, alcoves, small setbacks, steps, and ledges at the street level) - no blind/black facades and few passive ones 	<ul style="list-style-type: none"> 1. Active frontages (Carmona, 2003): - housing with direct entrances from the street (with 20-25 doors and windows every 100m) - possible work and living typologies with working space at the ground floor with direct access from the street - high articulated frontage (nooks, corners, alcoves, small setbacks, steps, and ledges at the street level) - no blind/black facades and few passive ones 	<ul style="list-style-type: none"> 1. Active frontages (Carmona, 2003): - housing with direct entrances from the street (with 20-25 doors and windows every 100m) - high concentration of functions, with various target groups taking place at the ground floor - high articulated frontage (nooks, corners, alcoves, small setbacks, steps, and ledges at the street level) - no blind/black facades and few passive ones 	<ul style="list-style-type: none"> 1. Active frontages (Carmona, 2003): - collective living buildings, with ground floor reserved for office, services and/or catering functions (which create a critical concentration of 20-25 doors and windows every 100m) - high articulated frontage (nooks, corners, alcoves, small setbacks, steps, and ledges at the street level) - no blind/black facades and few passive ones
Permeability	- integrated semi-public spaces into the urban fabric, with accentuated connections between the public space and the semi-public spaces (Vigano)	- unbroken blocks not longer than 60m	- unbroken blocks not longer than 90m	- unbroken blocks not longer than 90m

Public space

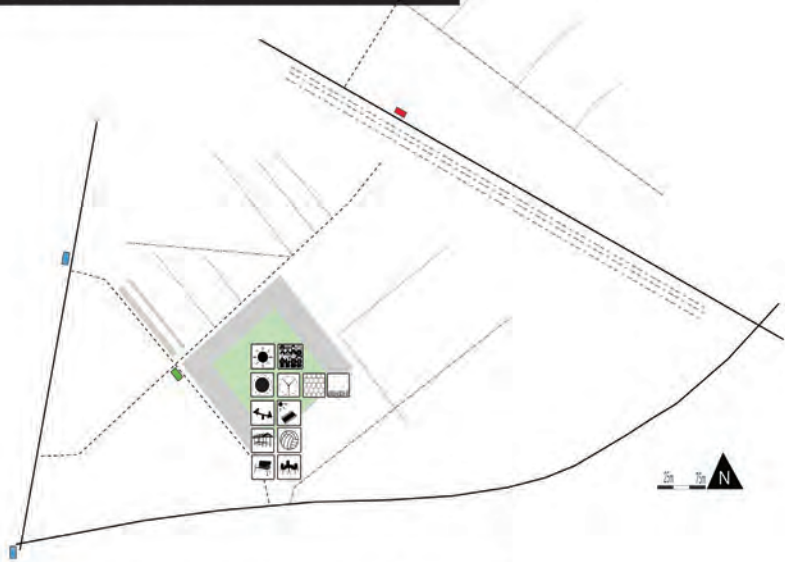


Public space role in the network. Evaluation example

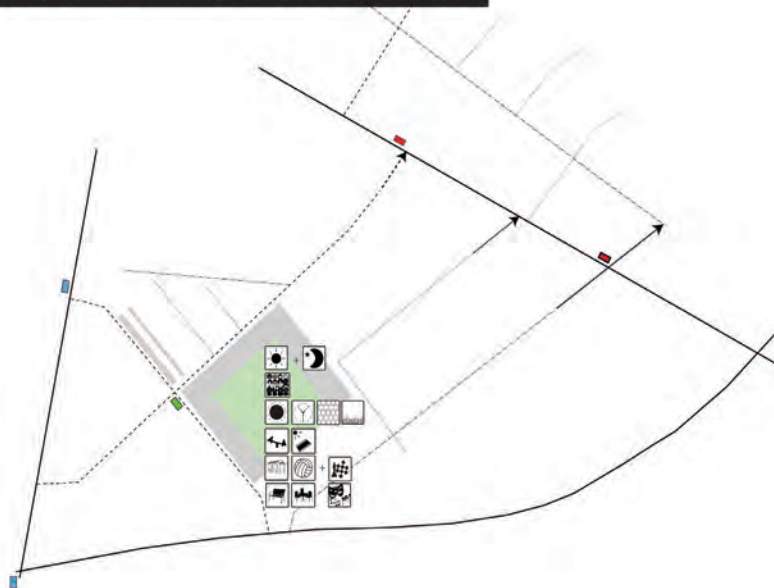
-evaluation of the morphology

Afrikaanderplein

Connectivity diagram/ Existing functions and character



Connectivity potentials/ Potential functions and character



- tram station
- bus station
- metro station
- local street
- - - neighbourhood street
- - - city street
- boulevard
- potential connection



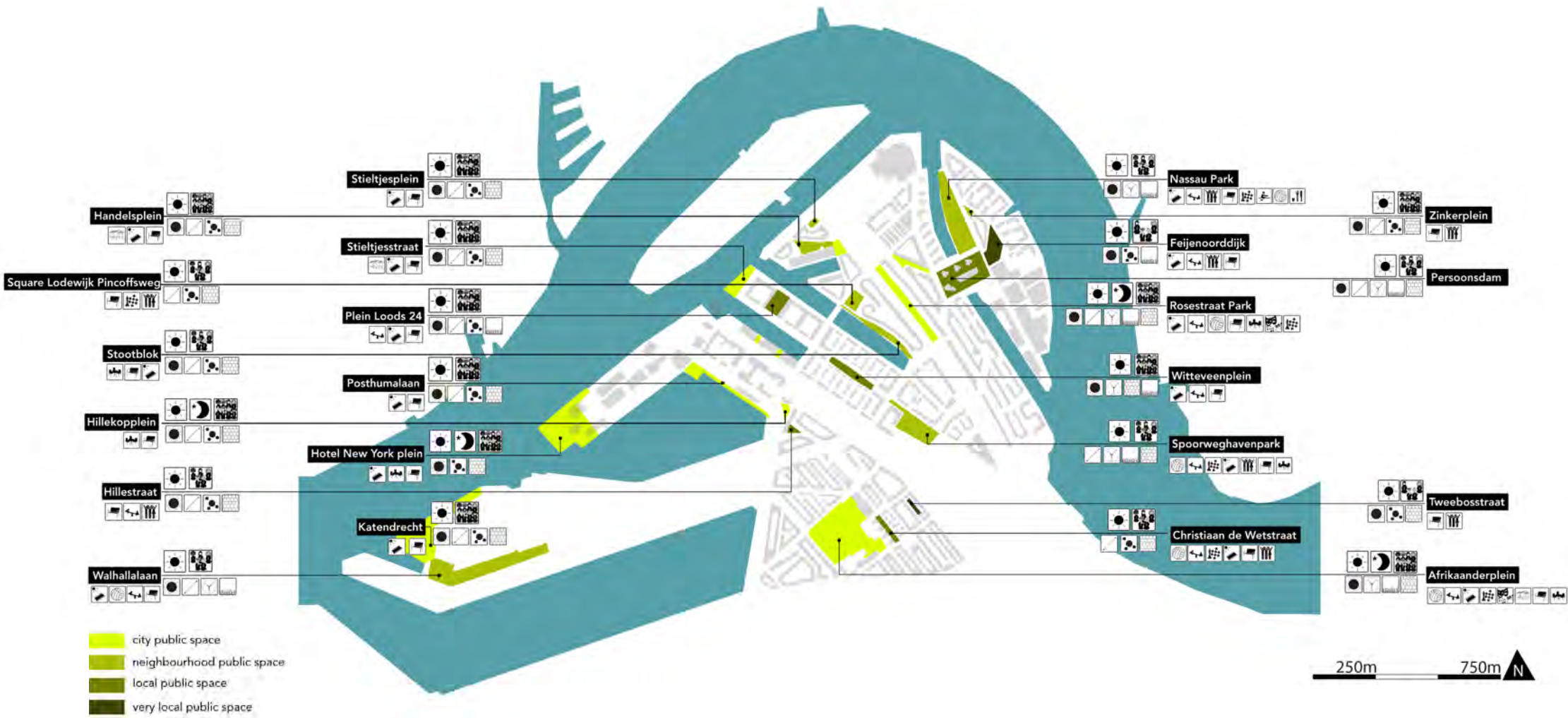
Public space role in the network. Evaluation example

Relation with the built environment/ Existing program of the built environment



-  mixed function
-  official building side with entrances
-  library entrance
-  sport centre entrance
-  school entrance
-  mosque entrance

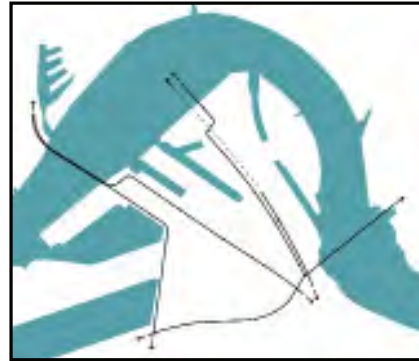
Public space potentials



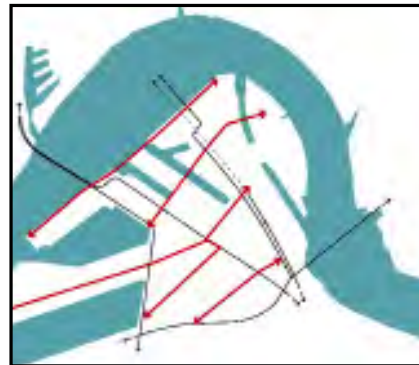
Vision

An integrated area

1. Take advantage of the improved infrastructure!

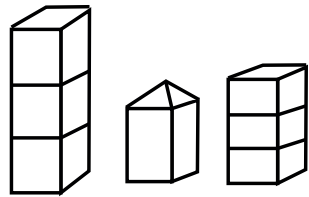


2. Brake the barriers and connect the neighborhoods!

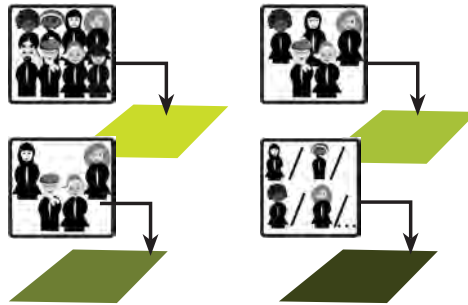


3. Connect, activate the locality and enable the integral use of the area, through a clear street and public space network

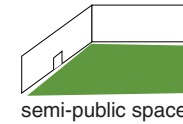
Create an area with a variety of housing typologies, public spaces and functions that attracts and answers the demands of a diversity of groups



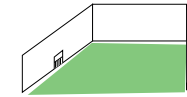
high variety of housing typologies



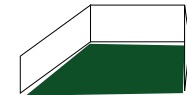
high variety of public spaces that answer various needs



semi-public space



semi-private space accessible to the block residents, visual accessible



public-private space visual accessible

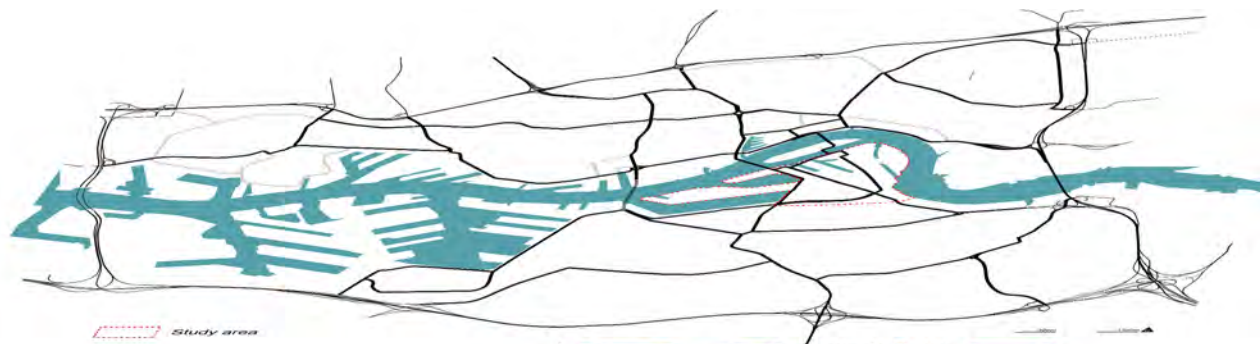
high variety of semi-public spaces



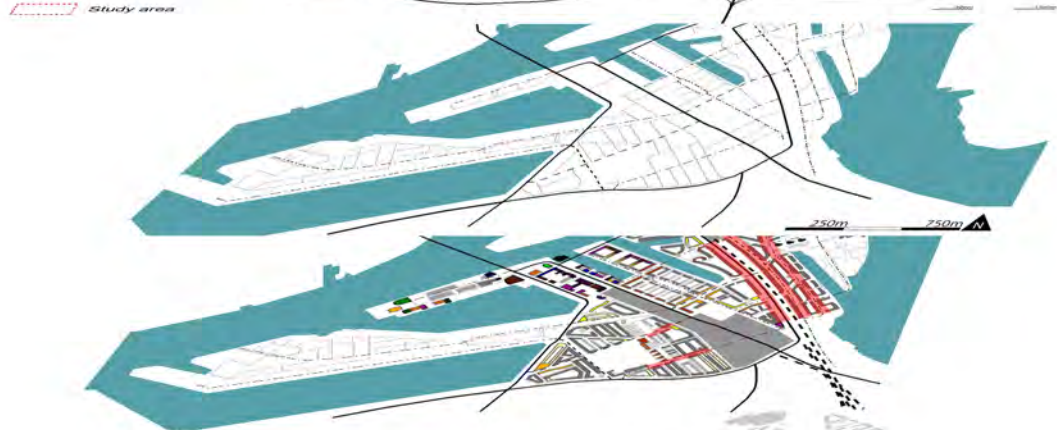
high variety of functions



Strategy

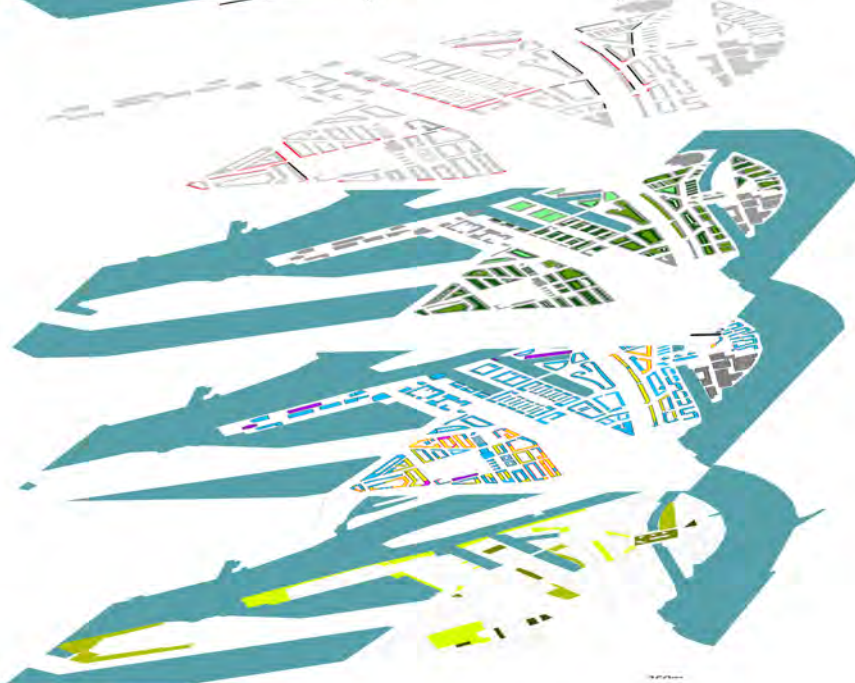


Large scale connectivity



Potentials for the local connectivity

Potential for increasing the density

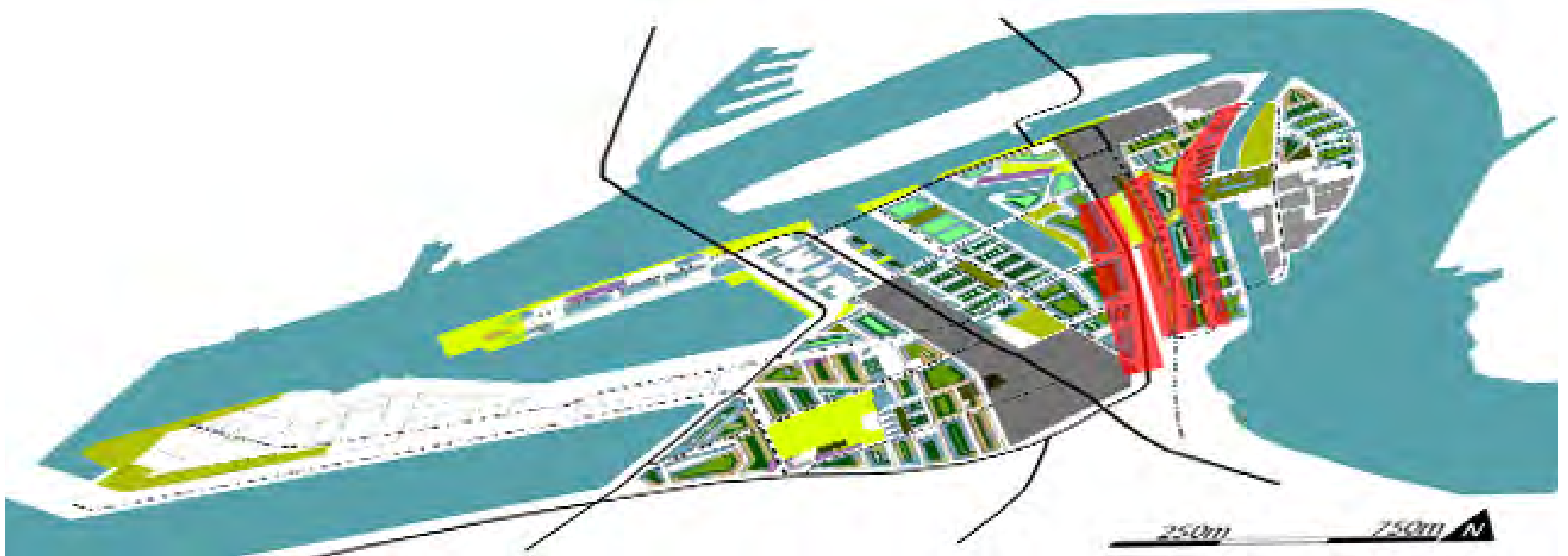


Potentials for adding functions

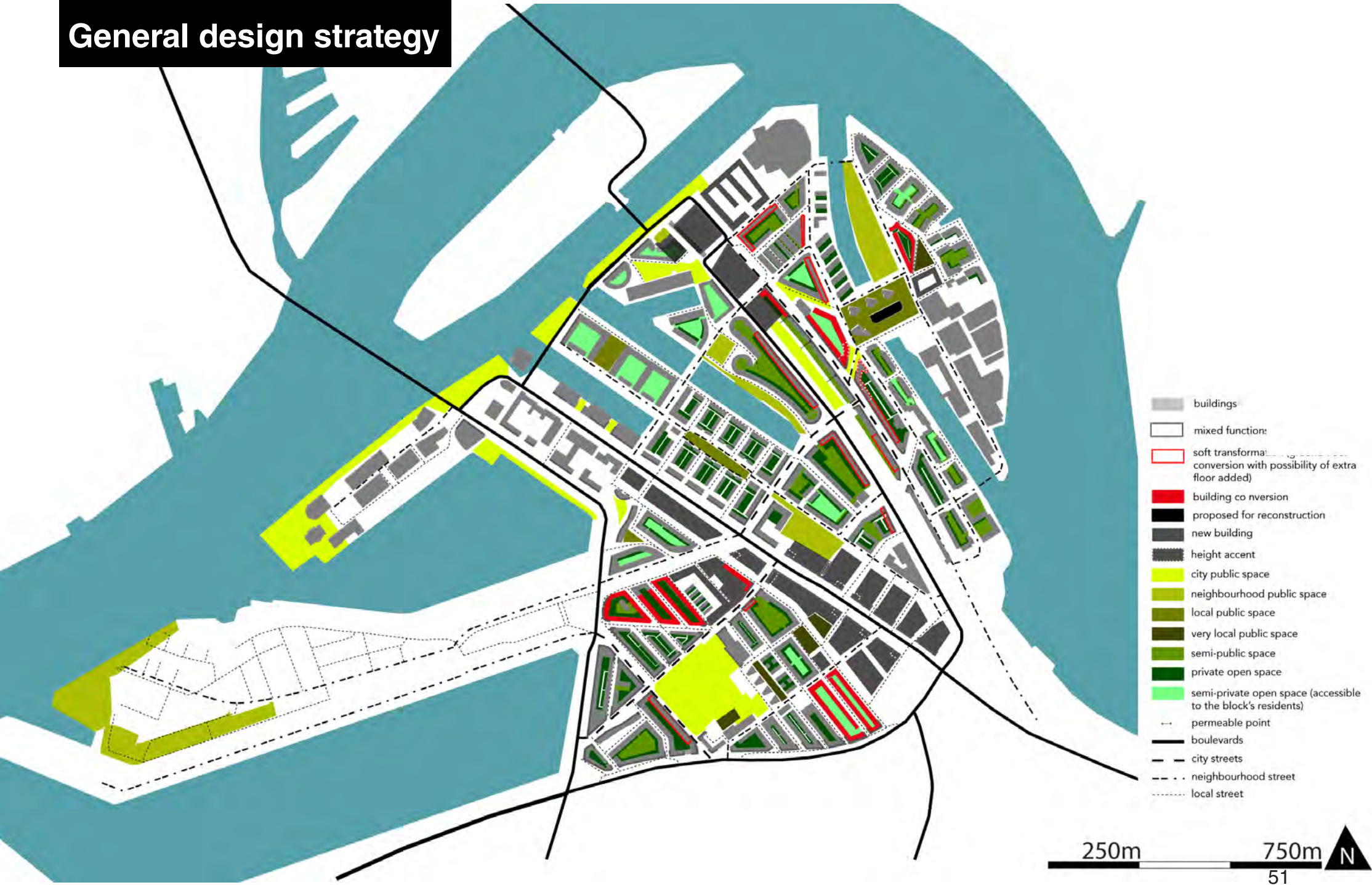
Semi-public space and permeability

Potentials for transformation of the built environment

Public space potentials



General design strategy



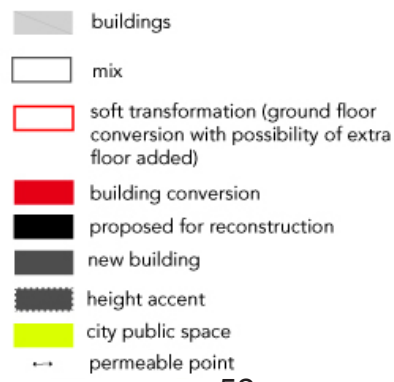
Design strategy for boulevards

Strategic guidelines

1. Foster physical connectivity and continuity
2. Encourage street level activity
3. Use incentive zoning strategies in order to attract the investment in a higher mix of functions, and investments into the quality of the public space

Stakeholders

- GOVERNMENTAL**
Province Zuid Holland, Municipality of Rotterdam, Pact of Zuid
- INVESTORS**
Vestia, Developers, Companies, RET, Parking companies
- SOCIETY**
Residents associations, NGOs



Design strategy for city street

Strategic guidelines

1. Encourage intense street level activity
2. Encourage high diversity in terms of land use and built form
3. Use incentive zoning strategies in order to attract investment into a highly mixed program, and a qualitative public space

Stakeholders

GOVERNMENTAL

Province Zuid Holland, Municipality of Rotterdam, Pact of Zuid

INVESTORS

Vestia, Developers, Companies, Parking companies

SOCIETY

Residents associations, NGOs, Local entrepreneurs association, New residents association



250m 750m N

Design strategy for neighbourhood street

Strategic guidelines

1. Involve the local communities in the transformation process
2. Encourage the local entrepreneurship

Stakeholders

GOVERNMENTAL

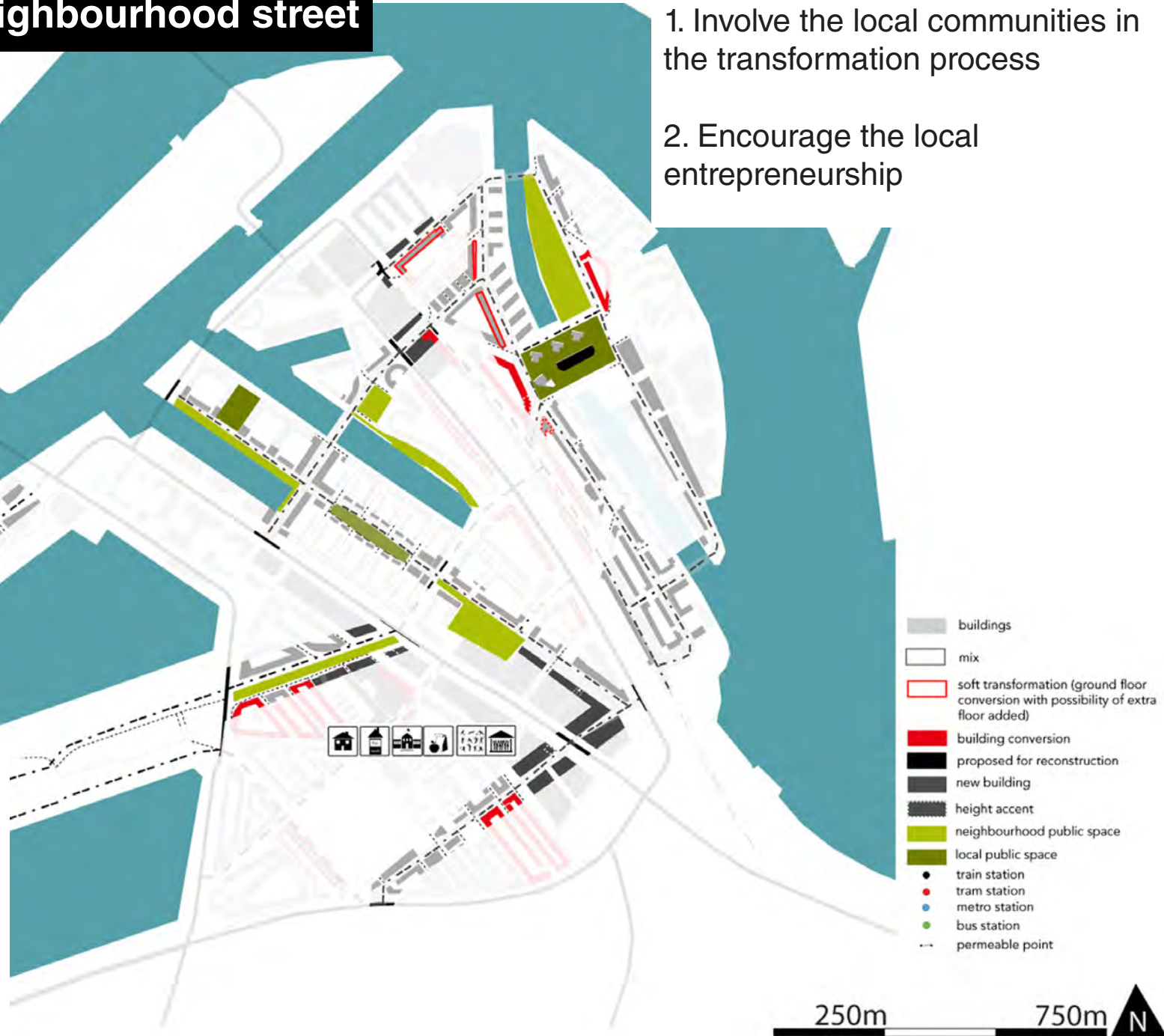
Municipality of Rotterdam, Pact of Zuid

INVESTORS

Vestia, Developers

SOCIETY

Residents associations, NGOs, Local entrepreneurs association, New residents association



Design strategy for local street

Strategic guidelines

1. Avoid residential exclusivity by encouraging public accessibility to community spaces
2. Involve the local communities in the transformation process

Stakeholders

GOVERNMENTAL

Municipality of Rotterdam, Pact of Zuid

INVESTORS

Vestia, Developers

SOCIETY

Residents associations, NGOs, Local entrepreneurs association, New



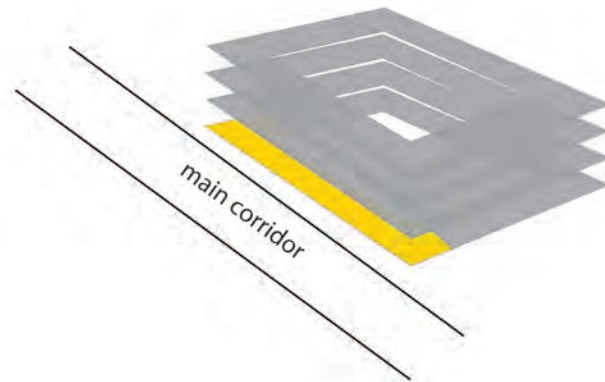
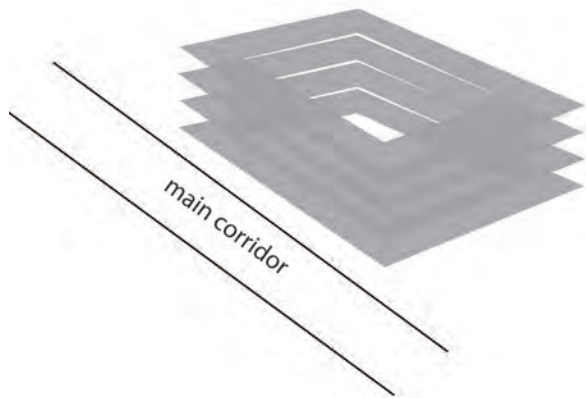
- buildings
- mix
- soft transformation (ground floor conversion with possibility of extra floor added)
- building conversion
- proposed for reconstruction
- new building
- height accent
- private open space
- semi-public space
- semi-private open space (accessible to the blocks residents)
- very local public space
- train station
- tram station
- metro station
- bus station
- permeable point



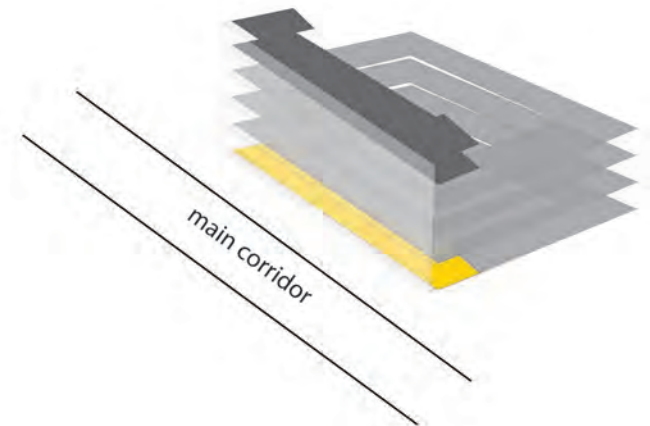
General design strategy for the built environment



General strategy for the soft floor transformation



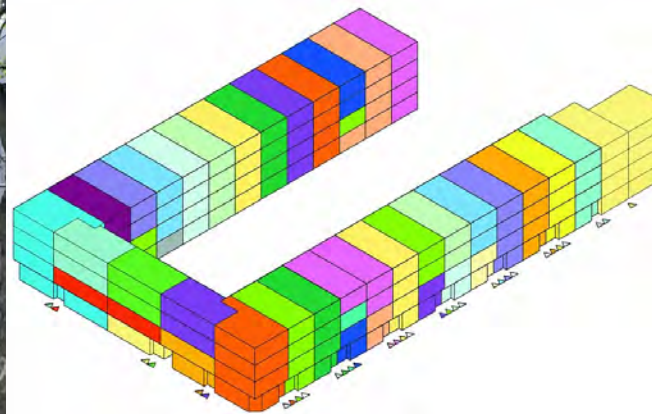
**convert the residential
ground floor function
into commercial
function**



**convert the residential
ground floor function
into commercial
function and add extra
floors and lift with
galleries**

General strategy for the built environment transformation through CPO strategies

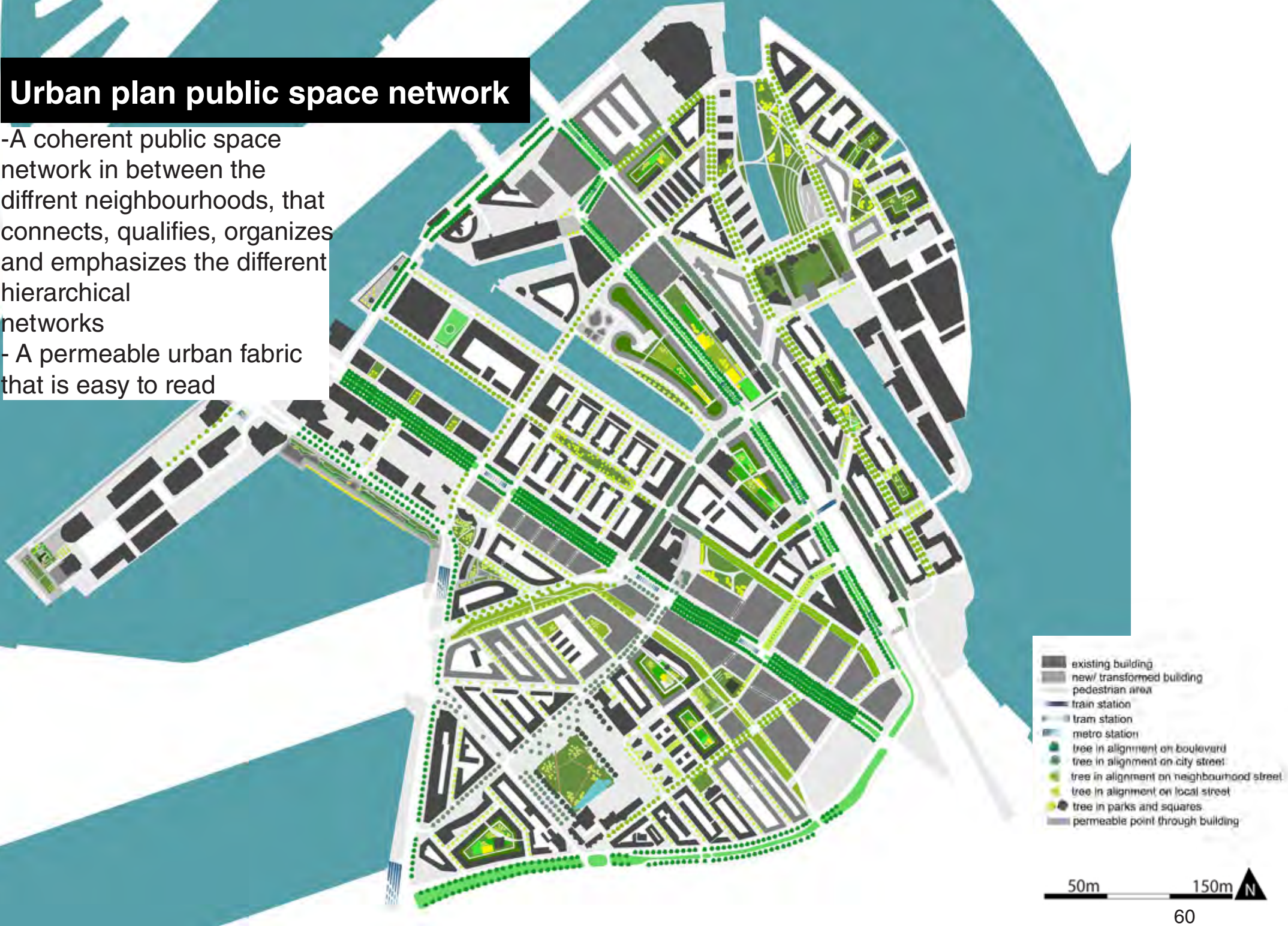
- As a contra strategy for the transformation of the original buildings, in stead of demolishing
- In order to keep the identity of the area
- The existing inhabitants can be involved and kept into the area



Urban plan

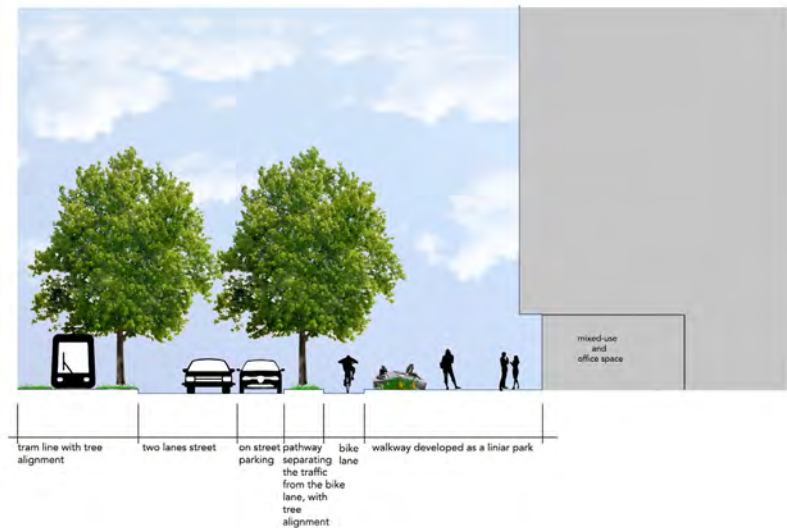
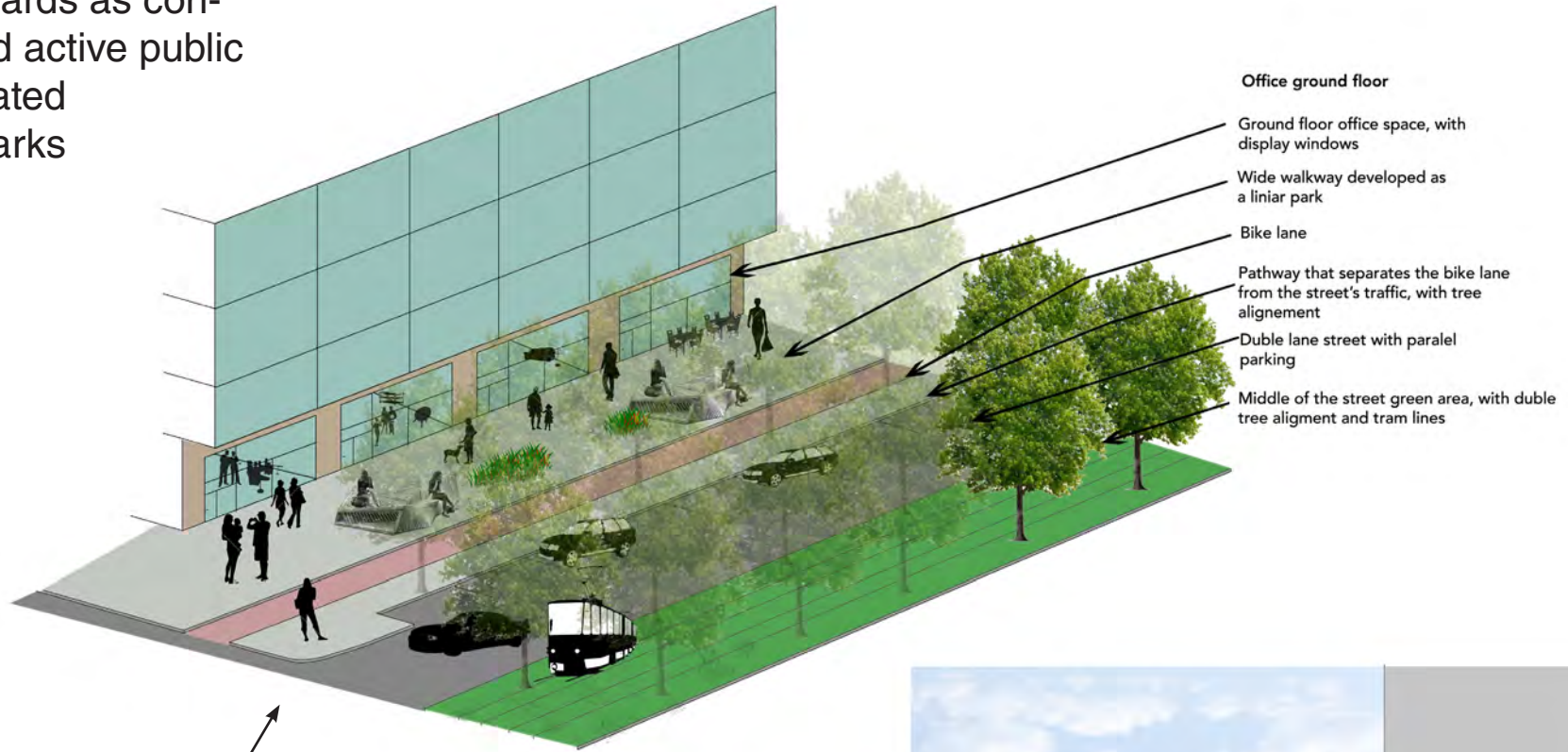
Urban plan public space network

- A coherent public space network in between the different neighbourhoods, that connects, qualifies, organizes and emphasizes the different hierarchical networks
- A permeable urban fabric that is easy to read



Urban plan boulevards public space

The boulevards as connectors and active public spaces treated as linear parks



Urban plan city street public space

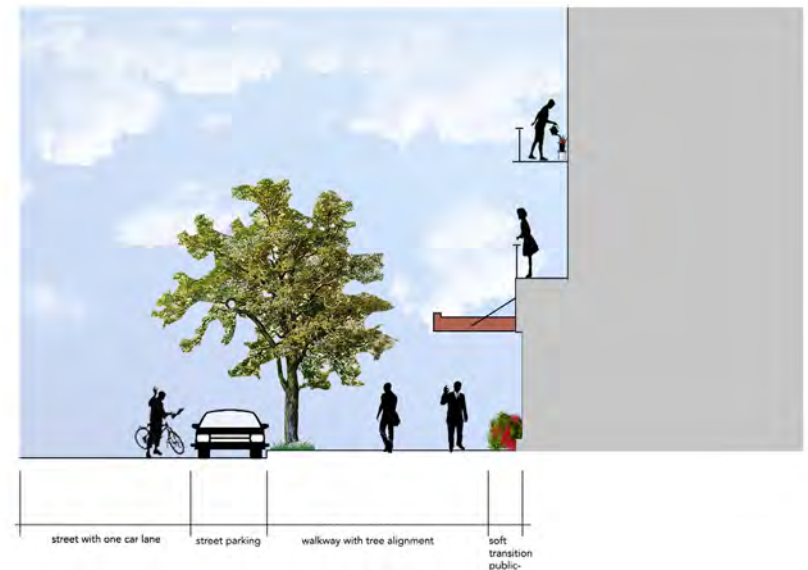
The city street as a active public space with a high variety of functions



street with one traffic lane per sense 45 degrees parking wide pathway with tree alignment and benches outdoor space for dinning and commercial activities

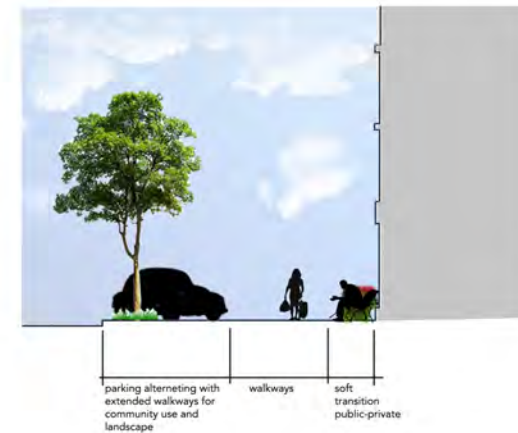
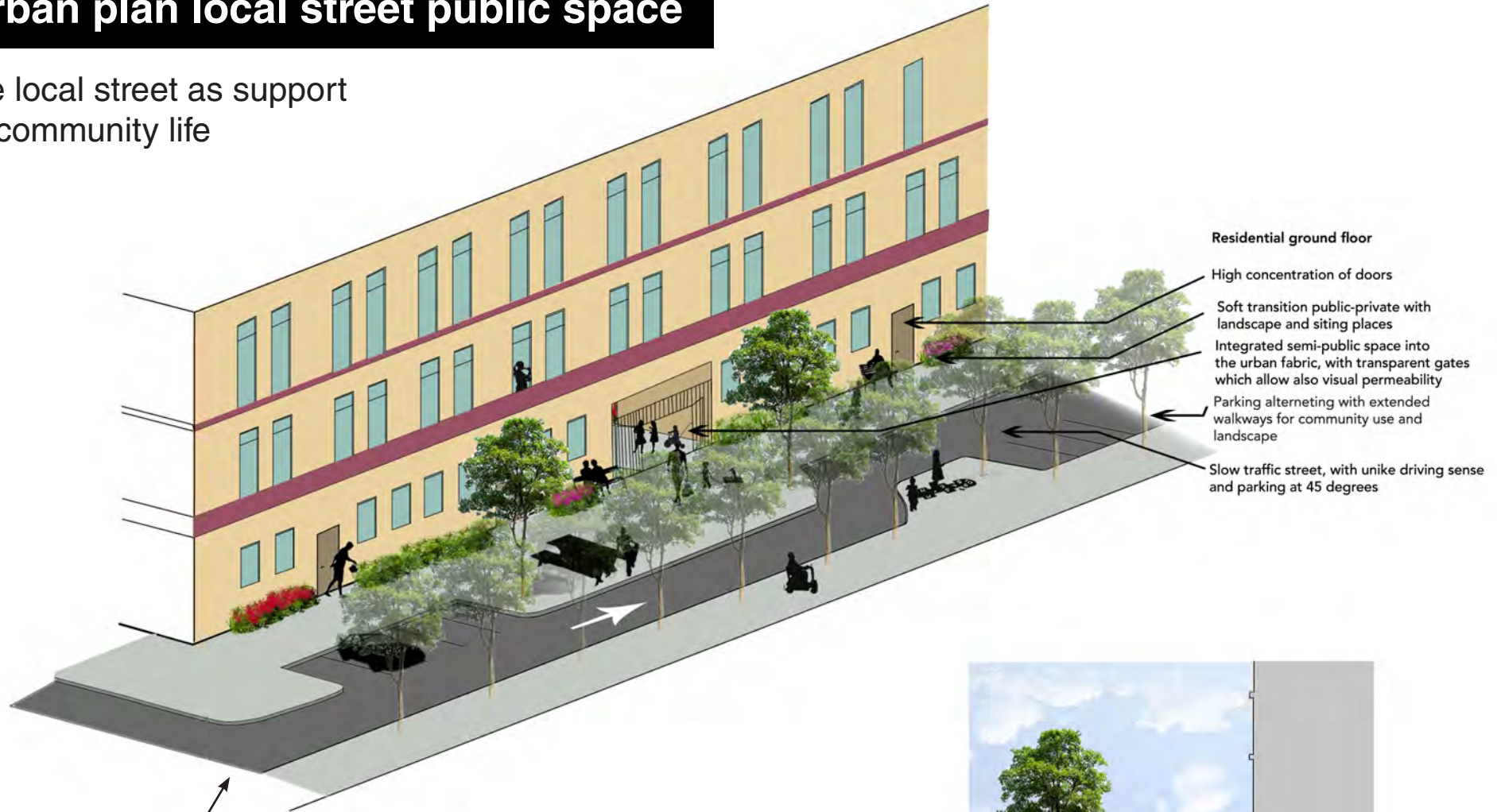
Urban plan neighbourhood public space

The neighbourhood street
an active public space at
the local level



Urban plan local street public space

The local street as support for community life



Urban plan functions as public space activators

-Social infrastructure functions in key locations marking the connections with another street level



- Highly mixed use ground floor
- Mixed use ground floor, with predominant office functions
- Social infrastructure
- Work and live ground floor
- ① Theater
- ② HBO
- ③ School
- ④ Sport centre
- ⑤ Art and community centre
- ⑥ Child care
- ⑦ Mosque
- ⑧ Training centre
- ⑨ Job information centre
- ⑩ Municipality
- ⑪ Library
- ⑫ Eldery centre

General urban plan

-An integrated open system that considers all the different demands

-Brings the regional advantages to the local level, in order to potentiate the performance of the local level



- existing building
- new/ transformed building
- pedestrian area
- train station
- tram station
- metro station
- tree in alignment on boulevard
- tree in alignment on city street
- tree in alignment on neighbourhood street
- tree in alignment on local street
- tree in parks and squares
- permeable point through building
- Highly mixed use ground floor
- Mixed use ground floor, with predominant office functions
- Social infrastructure
- Work and live ground floor
- ① Theater
- ② HBO
- ③ School
- ④ Sport centre
- ⑤ Art and community centre
- ⑥ Child care
- ⑦ Mosque
- ⑧ Training centre
- ⑨ Job information centre
- ⑩ Municipality
- ⑪ Library
- ⑫ Eldery centre

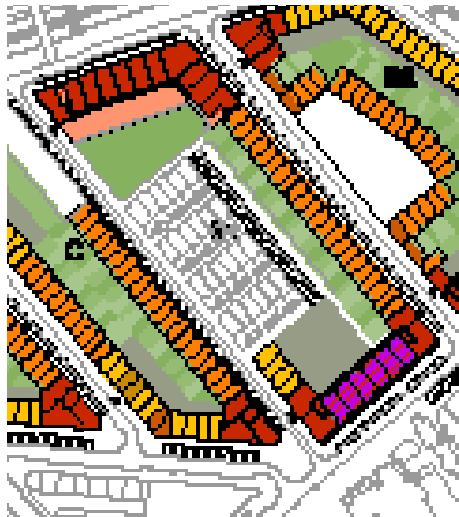


Design project

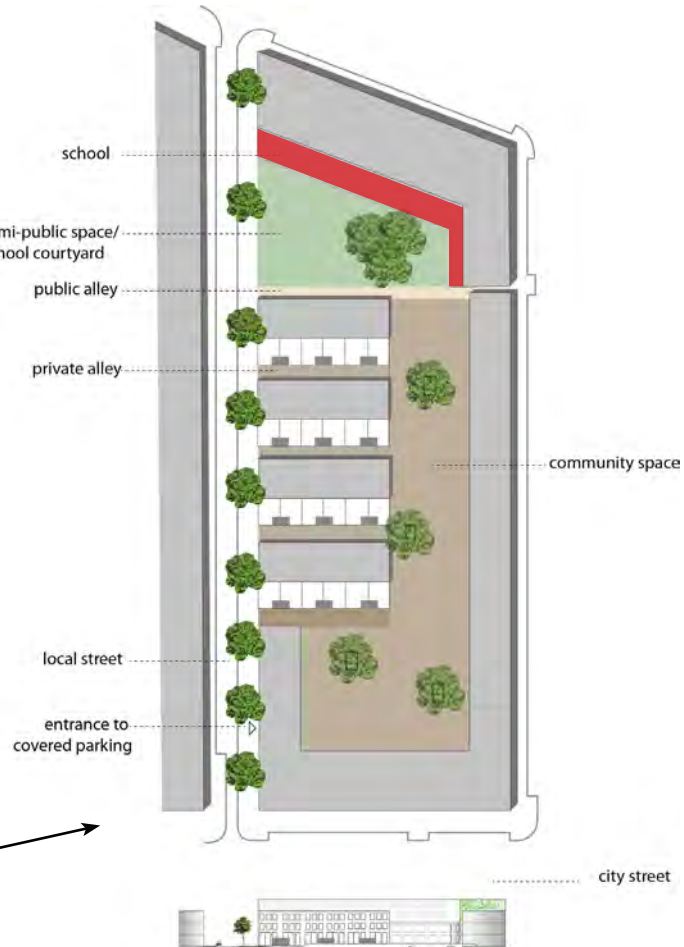
Selected area for the design project



Design detail private courtyard first interpretation



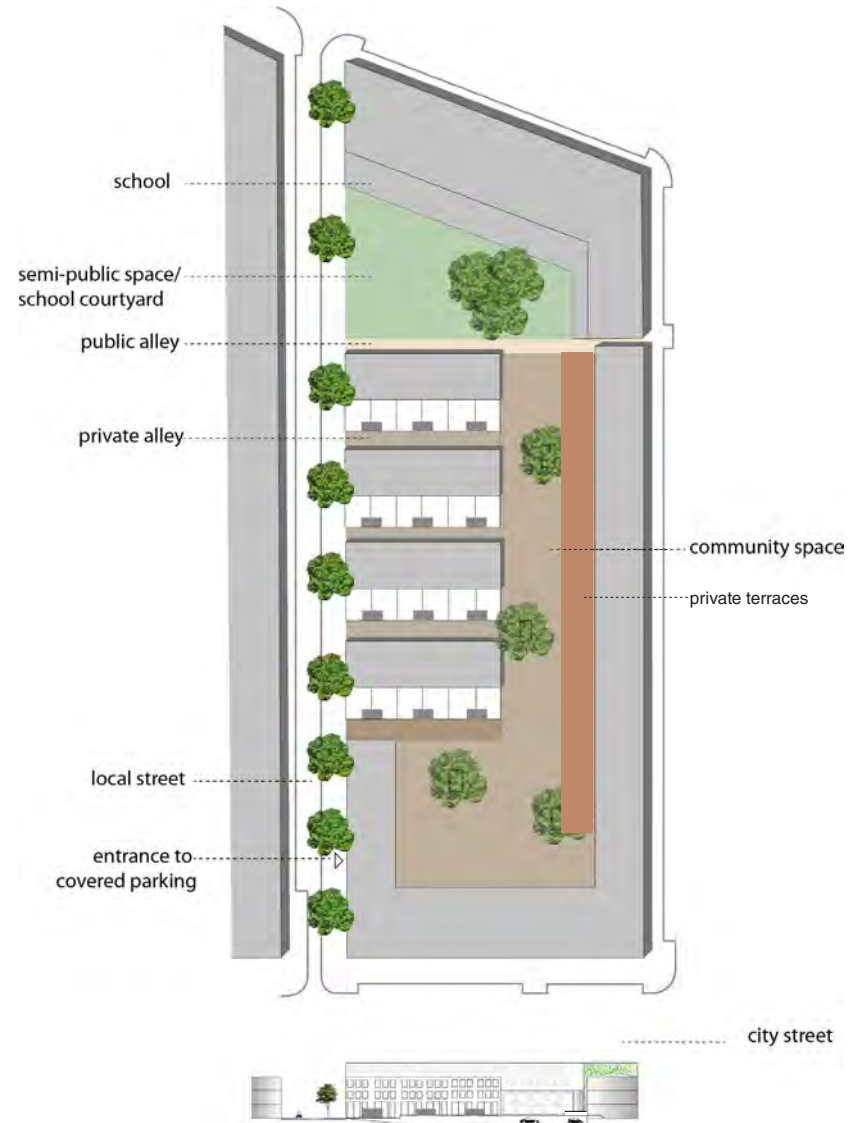
Municipal plan design for the proposed block
Source: Palmbout



View on the community space



Design detail private courtyard second interpretation



View on the community space



Active community space integrated into the public life



Active semi-public space integrated into the public life



Active local street integrated into the higher network



Continuity of the city street between the Kop van Zuid and Afrikaanderwijk



View on the city street from Kop van Zuid to the Laan op Zuid



View of the city street connection on the Laan op Zuid

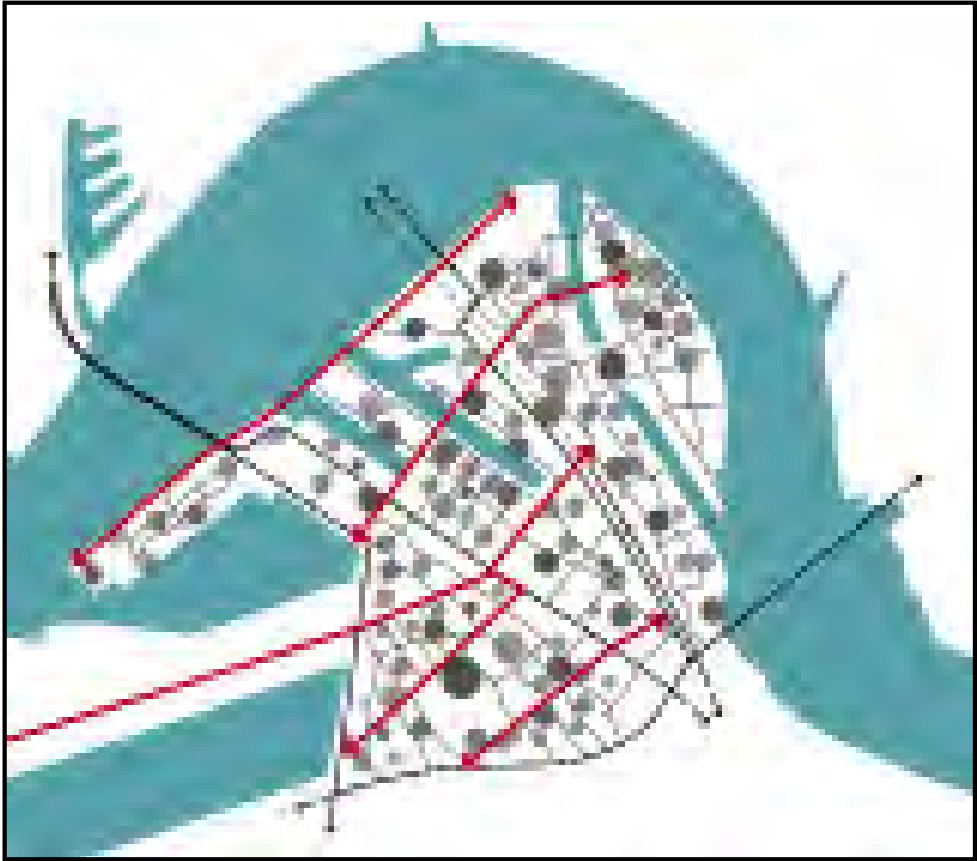


View from Laan op Zuid towards the city street in Afrikaanderwijk



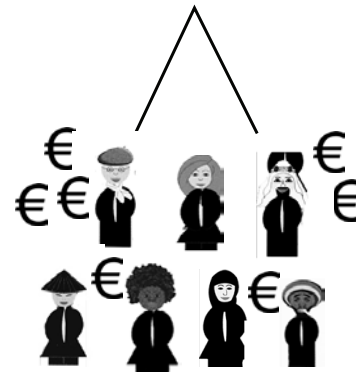
Evaluation

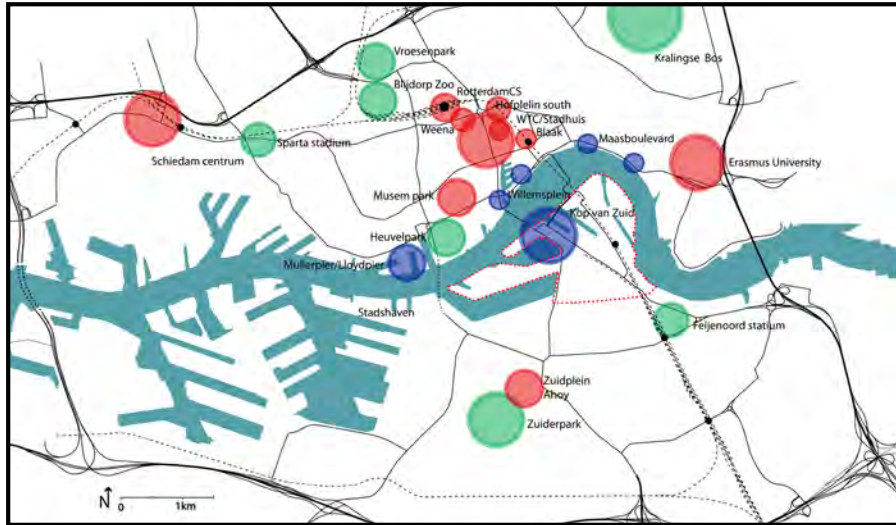
An integrated system that takes advantage of the infrastructural developments and enhance the activation of the locality



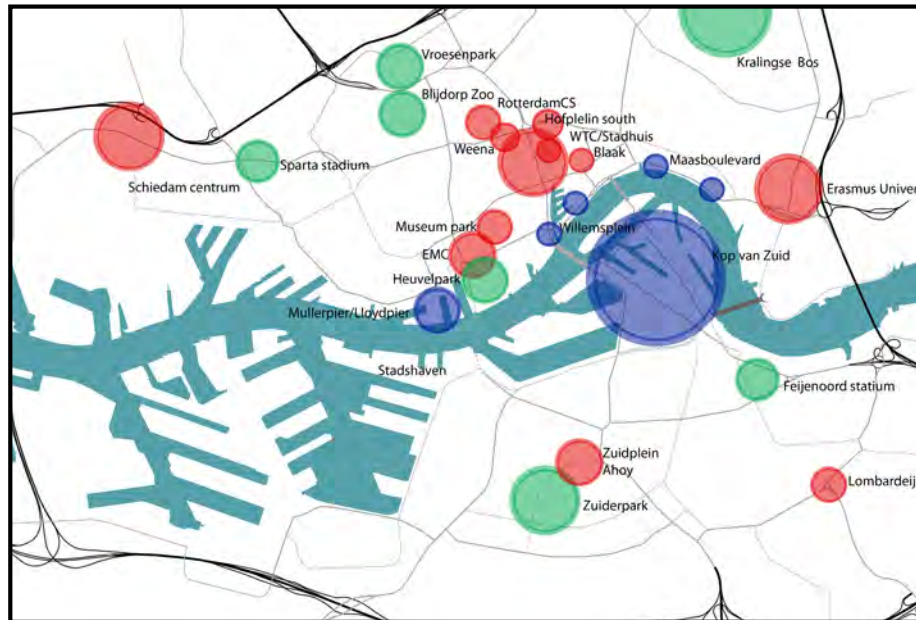
From two individual plans that focus mainly on the high

To an integral open plan that considers the diversity of groups and their demands





From Kop van Zuid an exception in Rotterdam South



To Kop van Zuid an empowered and integral centrality that spreads its benefits to the surrounding neighbourhoods

Thank you!
Questions?