TARWEWIJK MOBILITY HUB

MIGRATION OF MOBILTY AS PUBLIC SPACE

Hotel New York

Complex Projects - Wenshun Cui

23/06/2021

fall semester

INDEX

Migration of idea

Migration of mobility

Migration of mobility
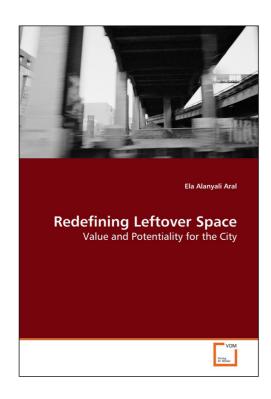
Unprogrammed space caused by infrastructure

Definition of leftover space

Redefining leftover space.
Value and potentiality for the city,
by Ela Alanyali Aral, 2009

Leftover space:

1. Use properties of space; unused, underused or misused ones.
2. The control exercised on space; those not controled through time.
3. The maintenance of space; those not maintained as reflected in their physical appearances as well.

Problems of leftover spaces caused by infrastructures
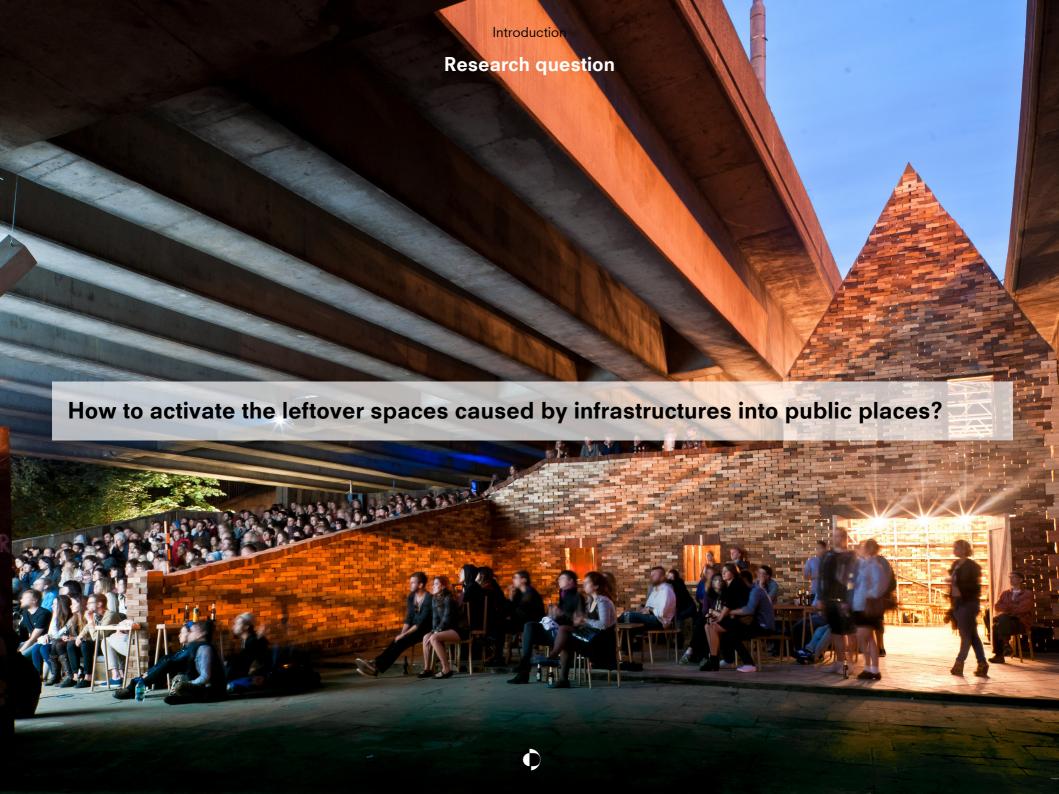

1. Lack of spatial quality

2. Lack of connections to surroundings

3. Create divisions

4. Safety issue

How to activate the leftover spaces caused by infrastructures into public places?

Leftover space in Rotterdam

Rotterdam Zuid as the selected site

Leftover space in Tarwewijk

Tarwewijk Mobility Hub as catalyst for activating the leftover spaces

Tarwewijk Mobility Hub --- Gathering effect

Tarwewijk Mobility Hub --- Activate leftover space

Tarwewijk Mobility Hub --- Corridor as extension of metro station

Tarwewijk Mobility Hub --- Renovation of leftover spaces

Introduction

Research

Design brief

Concept

Implementation

Development

Conclusion

INDEX

Problem Statement

Leftover spaces caused by infrastructure are difficult to be activated, they usually create many problems in city planning and affect people's living quality.

Research question

Leftover spaces caused by infrastructure are difficult to be activated, they usually create many problems in city planning and affect people's living quality.

How to activate the leftover spaces caused by infrastructures into public places?

Research Methodology

Theoritical research

Typology research

Nakameguro koukashita, Tokyo, Japan

Underline park, Miami, USA

Folly For a Flyover, London, UK
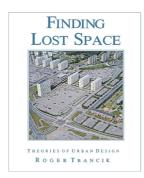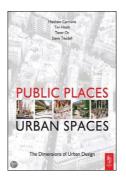
Bicycle Skyway, Xiamen, China,

Research Output --- 4 aspects to activate leftover spaces

Accessibility   **Diversity**   **Inclusivity**   **Reconnection**

Research Output --- Accessibility

The capability and opportunity of leftover spaces to be reached and entered by people

Accessibility_ Reservoir Station by Genton Architects, Australia
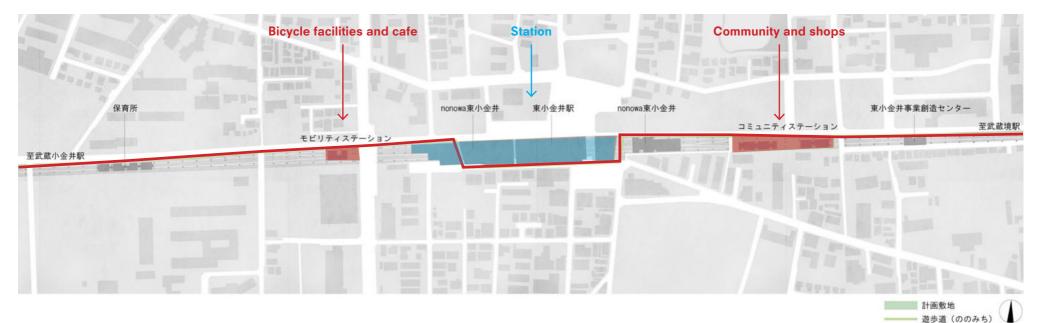
Accessibility_Chuo line Community Station Higashikoganei, Tokyo, Japan

Bicycle facilities and cafe

Station

Community and shops

保育所

nonowa東小金井   東小金井駅   nonowa東小金井

東小金井事業創造センター

至武蔵小金井駅

モビリティステーション

コミュニティステーション

至武蔵境駅

計画敷地

遊歩道（ののみち）
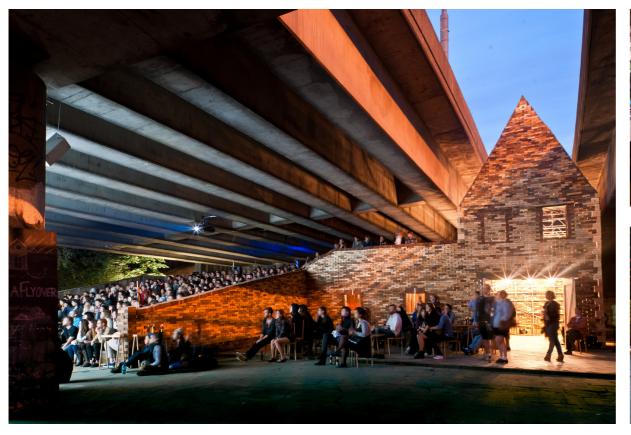
Research Output --- Diversity

The fact of many different types of atmospheres, activities, people can be included into the leftover spaces

Diversity_Folly for a flyover, London, UK, 2011

Diversity_Underline park, Miami, USA

THE STATION PLAZA

THE DOG PARK

THE RIVER ROOM

THE HAMMOCK PLAY ZONE

THE MEADOW ARC

THE OOLITE ROOM

THE GYM

THE PICNIC POCKETS

SIMPSON PARK HAMMOCK

SOUTHSIDE PARK

MIAMI RIVER WALK

MIAMI RIVER

SW 17TH RD
SW 15TH RD
SW 13TH ST
SW 12TH ST
SW 11TH ST
SW 10TH ST
SW 9TH ST
SW 8TH ST
SW 7TH ST
SW 2ND AVE
SW 1ST CT
SW 1ST AVE

0   200'   400'

Research Output --- Inclusivity

the capability of including people from all groups, especially vulnerable groups such as children, elderly people, and disabled people, and treat them all fairly and equally

Inclusivity_Sky-rail community nodes by March Studio, Australia
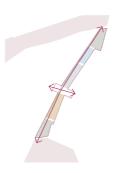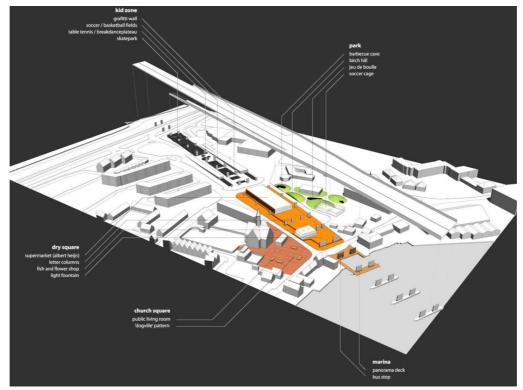
Research Output --- Reconnection
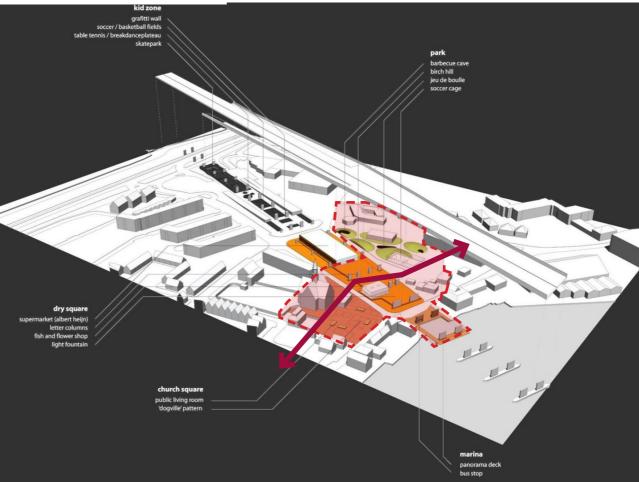
to link the leftover spaces together and reconnect with the city and become part of the urban planning

Reconnection_A8ernA, Koog aan de Zaan, Zaanstad, Netherlands

Plaza under the infrastructure

Re-connect the church and city hall

kid zone
grafitti wall
soccer / basketball fields
table tennis / breakdanceplateau
skatepark

park
barbecue cave
birch hill
jeu de boulle
soccer cage

dry square
supermarket (albert heijn)
letter columns
fish and flower shop
light fountain

church square
public living room
'dogville' pattern

marina
panorama deck
bus stop

Plaza under the infrastructure

Research Outcome

Accessibility

Diversity

Inclusivity

Reconnection

INDEX
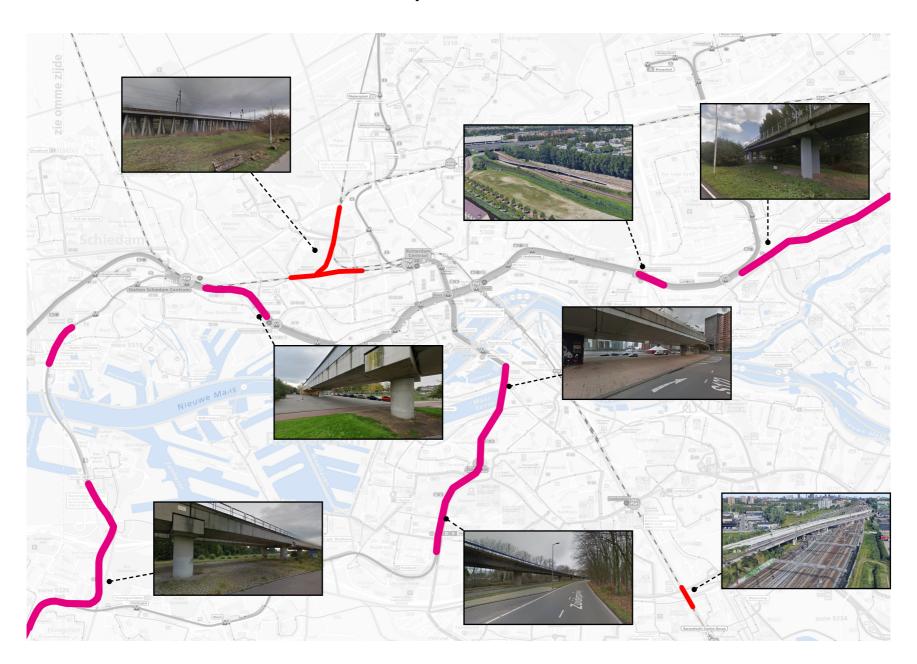
Leftover spaces in Rotterdam

Rotterdam Zuid as the selected site

Comparing Rotterdam South with Rotterdam North (Current situation)

ROTTERDAM NORTH

CENTRAL DISTRICT
Where Rotterdam and Europe meet

CHINA TOWN
The melting pot of Rotterdam

MAURITS QUARTER
A fascinating mix of culture and high-end fashion

MUSEUM PARK
The perfect place to find art in all its diversity

LIJNBAAN DISTRICT
The shopping heart of Rotterdam

LAURENS QUARTER
Exciting shopping and entertainment area

MARITIME DISTRICT
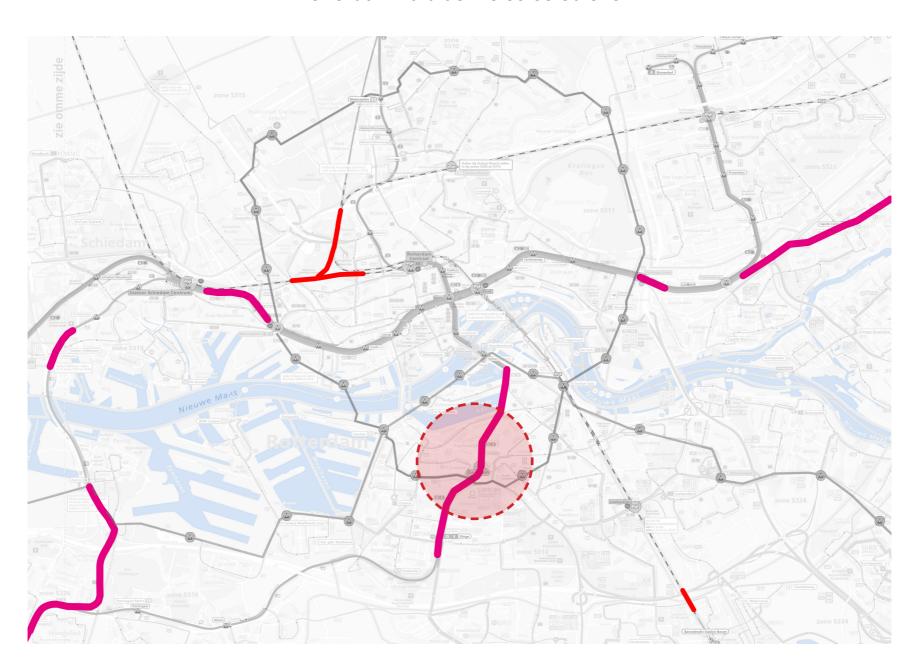A romantic piece of Rotterdam

LLOYD QUARTER
Monumental warehouses versus modern architecture

KOP VAN ZUID
Modern with a rich history

HISTORIC DELFSHAVEN
Picturesque spot with a grand history

THE PARK
Relax in an oasis of peace

KATENDRECHT
Historical city with a developing food district

WATERFRONT AND NOORDEREILAND
Experience the maritime roots of the city

CITY GARDENS
Monumental architecture in a green environment

RESIDENTIAL DISTRICTS
Residential areas right next to the central districts

ROTTERDAM SOUTH

HEART OF SOUTH
An endless shopping and event experience

AHOY
Cultural event venue of Rotterdam

ZUIDERPARK
Enjoy nature in the largest park of Rotterdam

WAALHAVEN
The place where harbor meets city

RESIDENTIAL DISTRICTS
Residential areas right next to the central districts

Based on:
Municipality of Rotterdam (2020). 'Welkom in Rotterdam' -
map. Consulted from: www.rotterdam.info

Comparing Rotterdam South with Rotterdam North (Future vision)

ROTTERDAM NORTH

CENTRAL DISTRICT
Where Rotterdam and Europe meet

CHINA TOWN
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RESIDENTIAL DISTRICTS
Residential areas right next to the central districts

FUTURE PATCHES
New characteristical districts

Based on:
Municipality of Rotterdam (2020). 'Welkom in Rotterdam' - map. Consulted from: www.rotterdam.info

Collage city

Rijnhaven

Productive Waterfront

Pop-up Boulevard

Cultural Strip

Green City

Health & Education

Zuidplein-Ahoy
Culture & Creative Zone

Productive Waterfront

Water Square, Rotterdam

Copenhagen Harbour Bath

Dryline, New York

Rijnhaven

Park Maashaven

Maashaven Bridge

Waste Management

Feijenoord City

New tram line

Logistics Terminal

Dike Park

Cultural Strip

Productive Waterfront

New Metro Station

Rotterdam CS

Tram Stops

tram to Rotterdam Noord
via Maastunnel

Ahoy / Zuidplein

Complex Project   Hotel New York

Hart van Zuid

Pop-up Boulevard

Cultural Strip

Creative Zone

Rijnhaven Ⓜ

Feijenoord City

New Metro Station

Resilient community

New tram line

Cultural Strip

Culture market

Creative Zone   Creative heart

Revitalisation of Housing

Pop-up boulevard

Feijenoord City Ⓜ

Ahoy / Zuidplein

New metro line

Airport Ⓜ

Ⓜ

Health and green city

Health and education district

Green city

Play cycle - Feijenpoort

New tramline

Resilient community

Green Playground

Green City

Health and education district

New tunnel

Feijenoord City

Airport

New metro line

My contribution

Rijnhaven

Productive Waterfront

Pop-up Boulevard

Cultural Strip

Green City

Health & Education

Zuidplein-Ahoy
Culture & Creative Zone

Leftover space at site --- Metro line
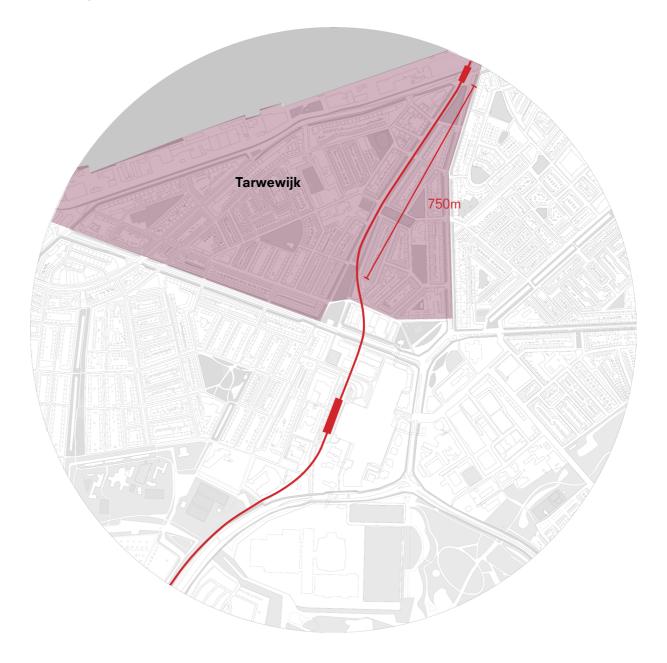
Division inside neighborhood

Low quality spaces

Tarwewijk

750m
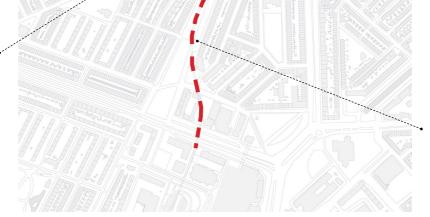
Leftover space in Tarwewijk

Research Outcome

Accessibility

Diversity

Inclusivity

Reconnection

New Tarwewijk Mobility hub

Mobility hub:

Metro station

Bicycle storage

Maashaven

Tarwewijk

Vreewijk

Zuidplein

Zuidplein

Carnisse

Zuiderpark

	current state	future proposal
Tram line		
Tram stop		
Metro station		
Metro line viaducts		
Metro network underground		
Water taxi stop		
Bus line		
Bus stop		
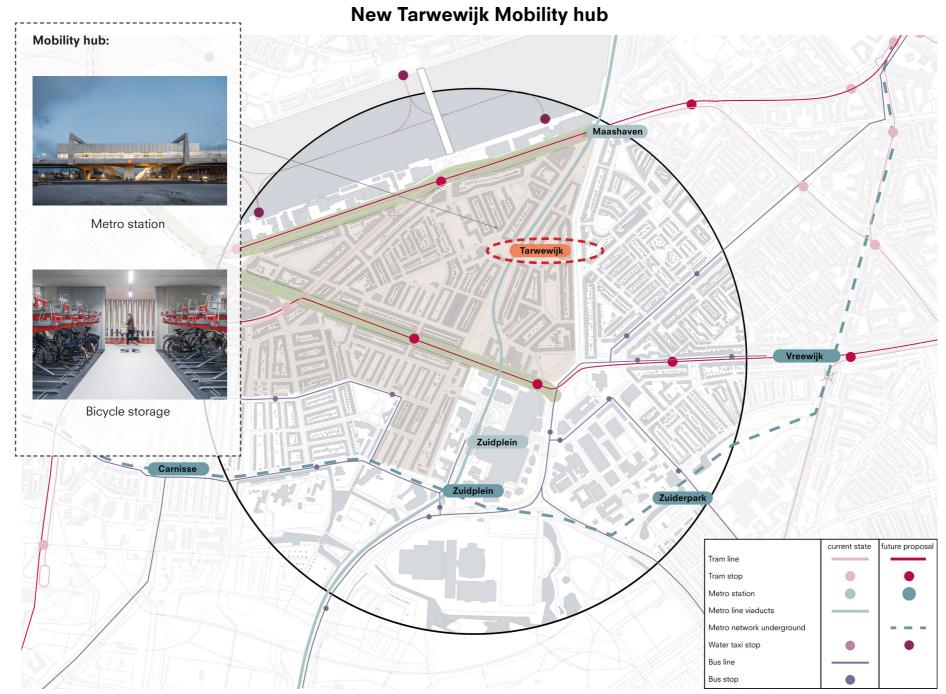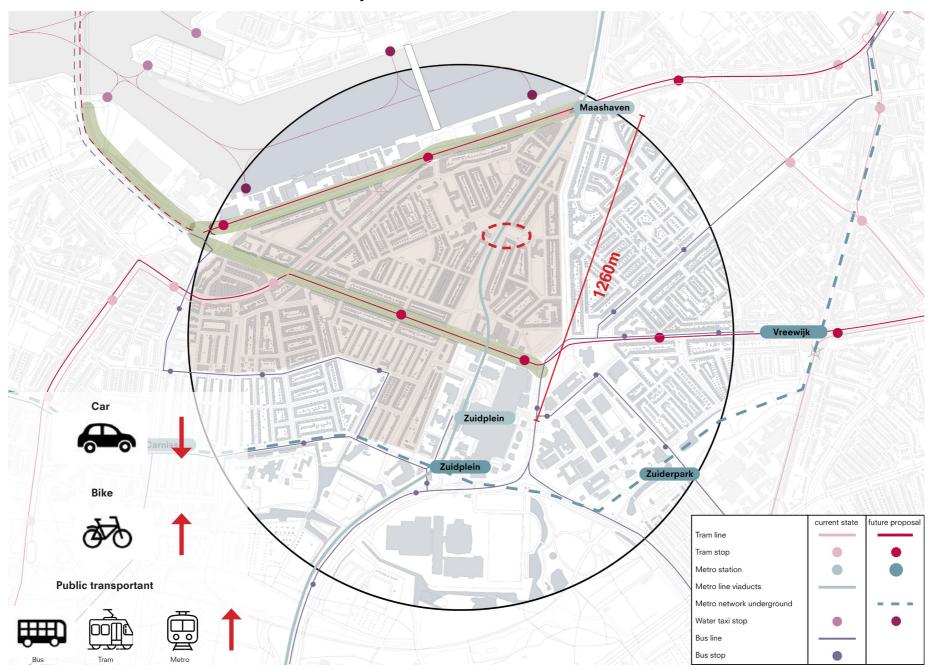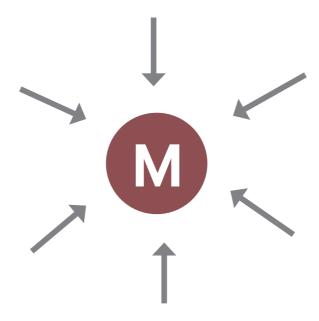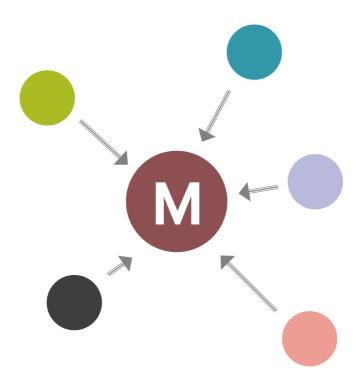
Mobility hub: contribute to the district

Maashaven

1260m

Vreewijk

Car

Zuidplein

Bike

Zuidplein

Zuiderpark

Public transportant

Bus   Tram   Metro

	current state	future proposal
Tram line		
Tram stop		
Metro station		
Metro line viaducts		
Metro network underground		
Water taxi stop		
Bus line		
Bus stop		

Mobility hub: For accessibility
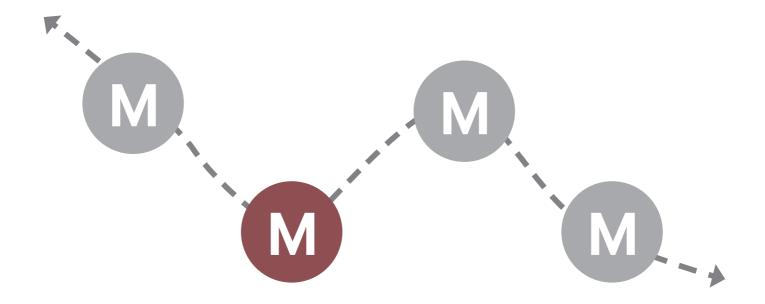
Mobility hub: For diversity

Mobility hub: For inclusivity

Mobility hub: For connection
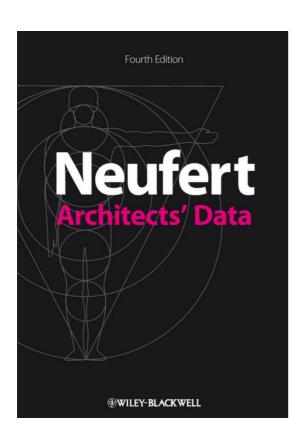
Project statement

"A mobility hub functions as a catalyst for activating the leftover spaces under the infrastructure in Tarwewijk while also functions as a central hub for local neighborhood."

Capacity of metro station + bicycle storage

Fourth Edition

Neufert
Architects' Data

WILEY-BLACKWELL

VELD ACADEMIE

HART VAN ZUID 2019
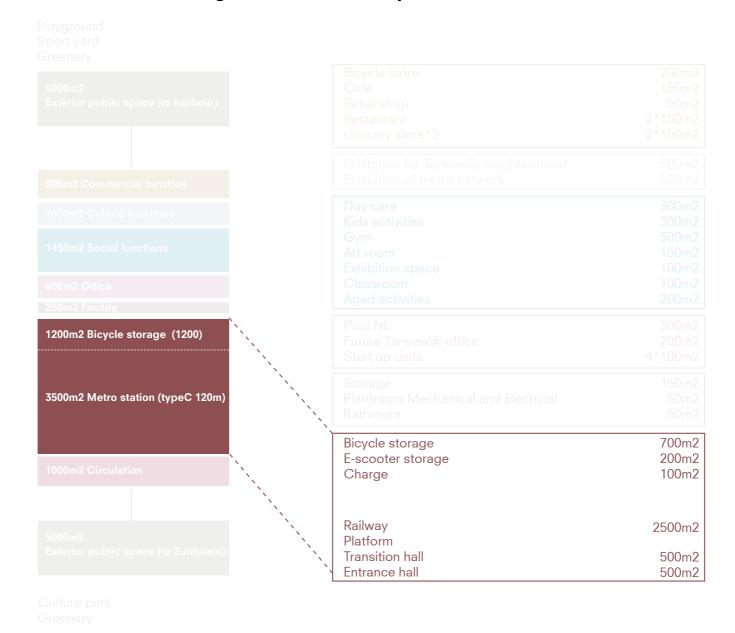
Onderzoek naar overstapbeleving en fietsgebruik in Hart van Zuid, Rotterdam

People flows of metro station in 2014

Station name:	Number (in)	Number (out)
Rotterdam Centraal	14.379	14.414
Stadhuis	3.775	4.338
Beurs (Lijnen D en E)	21.466	20.778
Leuvehaven	2.437	2.737
Wilhelminaplein	6.868	6.981
Rijnhaven	3.209	3.216
Maashaven	4.788	4.679
Zuidplein	13.268	13.565
Slinge	5.032	4.946

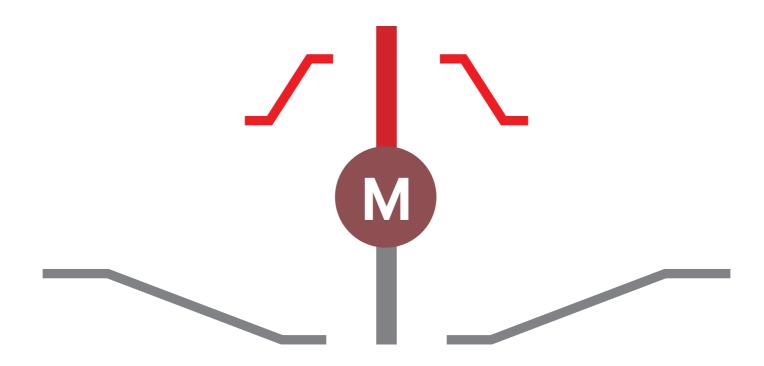| Datum	Dag	Tijdslot	Totaal aantal fietsen	Goed geparkeerd	%	Fout geparkeerd	%
22-nov	Donderdag	14:00-15:00	586	339	57,8	247	42,2
22-nov	Donderdag	16:00-17:00	570	375	65,8	195	34,2
22-nov	Donderdag	17:00-18:00	509	311	61,1	198	38,9
23-nov	Vrijdag	09:00-10:00	517	332	64,2	185	35,8
24-nov	Zaterdag	11:00-12:00	462	287	62,1	175	37,9
26-nov	Maandag	08:00-09:00	378	241	63,8	137	36,2
27-nov	Dinsdag	13:00-14:00	407	203	49,9	204	50,1
28-nov	Woensdag	10:00-11:00	477	292	61,2	185	38,8
28-nov	Woensdag	12:00-13:00	465	296	63,7	169	36,3
02-dec	Zondag	15:00-16:00	580	360	62,1	220	37,9
Gemiddeld			495	304	61,2%	191	38,8%
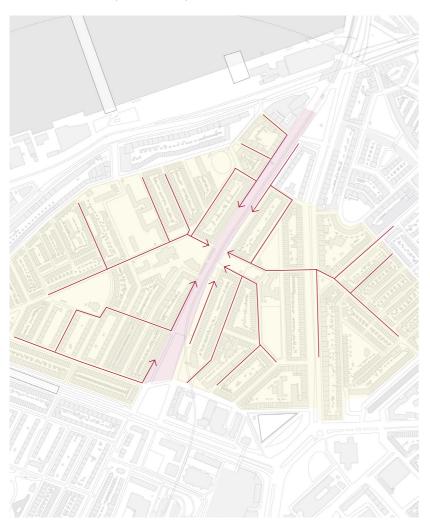
Program bar for mobility function

Playground
Sport yard
Greenery

5000m2 **Exterior public space (to harbour)**	

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

900m2 Commercial function

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

1000m2 Culture functions

1450m2 Social functions

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

900m2 Office

250m2 Facility

Post NL	300m2
Future Tarwewijk office	200m2
Start up units	4*100m2

1200m2 Bicycle storage (1200)

3500m2 Metro station (typeC 120m)

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle storage	700m2
E-scooter storage	200m2
Charge	100m2
Railway Platform	2500m2
Transition hall	500m2
Entrance hall	500m2

1000m2 Circulation

5000m2 **Exterior public space (to Zuidplein)**	

Culture park
Greenery

Two types of users

Local Residents: (Destination)

Visitors: (passing through)

Residents from Productive Waterfront and Katendrecht to Hart van Zuid by walking and cycling

Residents from Hart van Zuid to Katendrecht and Productive Waterfront by walking and cycling

Functions for residence

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood
Exhibition of metro network

Day care
Kids activities
Gym
Art room
Exhibition space
Classroom
Aged activities

Post NL	300m2

5000m2
Exterior public space (to harbour)

Commercial function

Culture functions

Social functions

Office

250m2 Facility

Bicycle storage

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

3500m2 Metro station

Bicycle repairing	100m2

1000m2 Circulation

Charge	100m2
Bicycle renting office	100m2
Railway	2500m2
Platform	
Transition hall	500m2
Entrance hall	500m2

5000m2
Exterior public space (to Zuidplein)

Culture park
Greenery

Functions for Visitors

5000m2 Exterior public space (to harbour)	
900m2 Commercial function	
Culture functions	
1450m2 Social functions	
Office	
250m2 Facility	
Bicycle storage	
3500m2 Metro station	
1000m2 Circulation	
5000m2 Exterior public space (to Zuidplein)	

Commercial function

Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

Future Tarwewijk office	200m2
Start up units	4*100m2

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle renting office	100m2

Charge	100m2
Bicycle renting office	100m2
Railway	2500m2
Platform	
Transition hall	500m2
Entrance hall	500m2

Culture park
Greenery

Program Bar

Playground
Sport yard
Greenery

5000m2 **Exterior public space (to harbour)**		

10.0% | **900m2 Commercial function**

10.0% | **1000m2 Culture functions**

14.5% | **1450m2 Social functions**

7.0% | **900m2 Office**

3.5% | **250m2 Facility**

1200m2 Bicycle storage

45.0% | **3500m2 Metro station**

10.0% | **1000m2 Circulation**

5000m2
Exterior public space (to Zuidplein)

Culture park
Greenery

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

Post NL	300m2
Future Tarwewijk office	200m2
Start up units	4*100m2

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle storage	700m2
E-scooter storage	200m2
Charge	100m2
Bicycle renting office	100m2
Bicycle repairing	100m2
Railway Platform	2500m2
Transition hall	500m2
Entrance hall	500m2

Design ambition

Accessibility

Diversity

Inclusivity

Reconnection

Program ambition --- Mobility function

Commercial function		Diversity
Social functions		
Office		Inclusivity
Mobility function	→	**Accessibility**
Culture functions		Reconnection

Program ambition --- mobility function as catalyst

Commercial function

Social functions

Office

Mobility function

Culture functions

Diversity

Inclusivity

Accessibility

Reconnection

Program ambition --- mobility function as catalyst

| Commercial function |
| Social functions |
| Office |

| Mobility function |

| Culture functions |

Diversity

Inclusivity

Accessibility

Reconnection

Program ambition --- Design in phases

Phase 03 | 02 | **Phase 01** | 02 | Phase 03

Phase 01: Tarwewijk mobility hub --- Mobility related functions

Playground
Sport yard
Greenery

5000m2
Exterior public space (to harbour)

400m2 Commercial function

500m2 Culture functions

300m2 Social functions

500m2 Office

250m2 Facility

1200m2 Bicycle storage

3500m2 Metro station

1000m2 Circulation

5000m2
Exterior public space (to Zuidplein)

Culture park
Greenery

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

Post NL	300m2
Future Tarwewijk office	200m2
Start up units	4*100m2

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle storage	700m2
E-scooter storage	200m2
Charge	100m2
Bicycle renting office	100m2
Bicycle repairing	100m2
Railway	2500m2
Platform	
Transition hall	500m2
Entrance hall	500m2

Phase 01: 7300m2

Phase 02: Volumns along the infrastructure

Playground
Sport yard
Greenery

5000m2
Exterior public space (to harbour)

900m2 Commercial function

1000m2 Culture functions

1450m2 Social functions

900m2 Office

250m2 Facility

1200m2 Bicycle storage

3500m2 Metro station

1000m2 Circulation

5000m2
Exterior public space (to Zuidplein)

Culture park
Greenery

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

Post NL	300m2
Future Tarwewijk office	200m2
Start up units	4*100m2

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle storage	700m2
E-scooter storage	200m2
Charge	100m2
Bicycle renting office	100m2
Bicycle repairing	100m2
Railway	2500m2
Platform	
Transition hall	500m2
Entrance hall	500m2

Phase 02: +2250m2 = 9550m2

Complex Project   Hotel New York

Phase 03: Future development of Tarwewijk

Playground
Sport yard
Greenery

5000m2
Exterior public space (to harbour)

900m2 Commercial function

1000m2 Culture functions

1450m2 Social functions

900m2 Office

250m2 Facility

1200m2 Bicycle storage

3500m2 Metro station

1000m2 Circulation

5000m2
Exterior public space (to Zuidplein)

Culture park
Greenery

Bicycle store	200m2
Cafe	150m2
Retail shop	50m2
Restaurant	2*150m2
Grocery store*2	2*100m2

Exhibition for Tarwewijk neighborhood	500m2
Exhibition of metro network	500m2

Day care	300m2
Kids activities	300m2
Gym	300m2
Art room	150m2
Exhibition space	100m2
Classroom	100m2
Aged activities	200m2

Post NL	300m2
Future Tarwewijk office	200m2
Start up units	4*100m2

Storage	150m2
Plantroom Mechanical and Electrical	50m2
Bathroom	50m2

Bicycle storage	700m2
E-scooter storage	200m2
Charge	100m2
Bicycle renting office	100m2
Bicycle repairing	100m2
Railway Platform	2500m2
Transition hall	500m2
Entrance hall	500m2

Site ambition --- Reconnection to urban environment
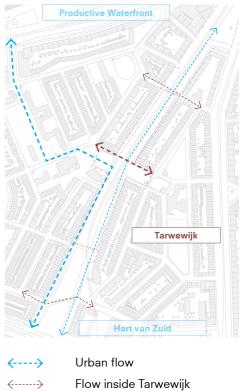
1.Minimum impact to residential blocks
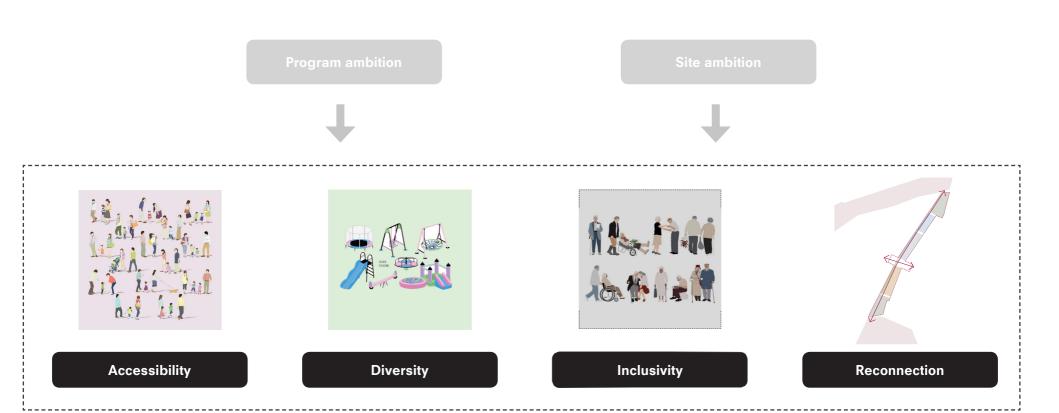
2 Reconnect the neighborhood

Productive Waterfront

East Tarwewijk

Hart van Zuid
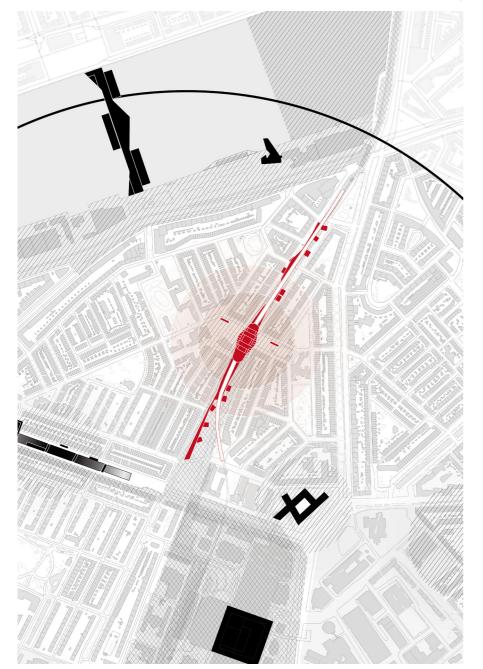
3. Connection between Productive Waterfront and Hart van Zuid

Productive Waterfront

Tarwewijk

Hart van Zuid

← - - - → Urban flow

← - - - → Flow inside Tarwewijk

Summary of Ambitions

Program ambition

Site ambition

Accessibility

Diversity

Inclusivity

Reconnection

Tarwewijk mobility hub

Introduction

Research

Design brief

Concept

Implementation

Development
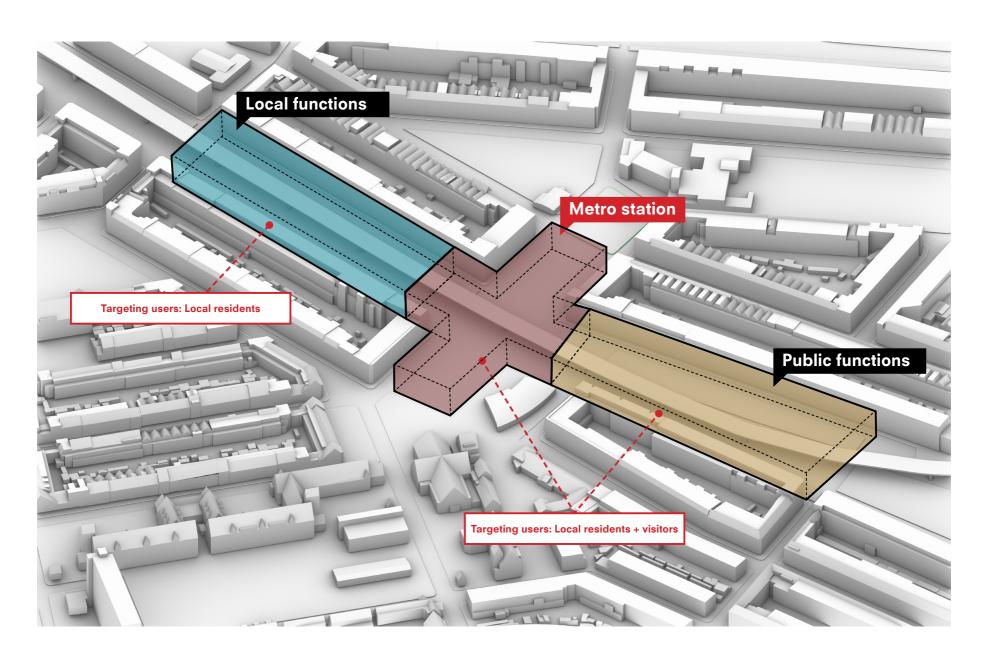
Conclusion

INDEX

Program zones

Local functions

Targeting users: Local residents

Metro station

Public functions

Targeting users: Local residents + visitors
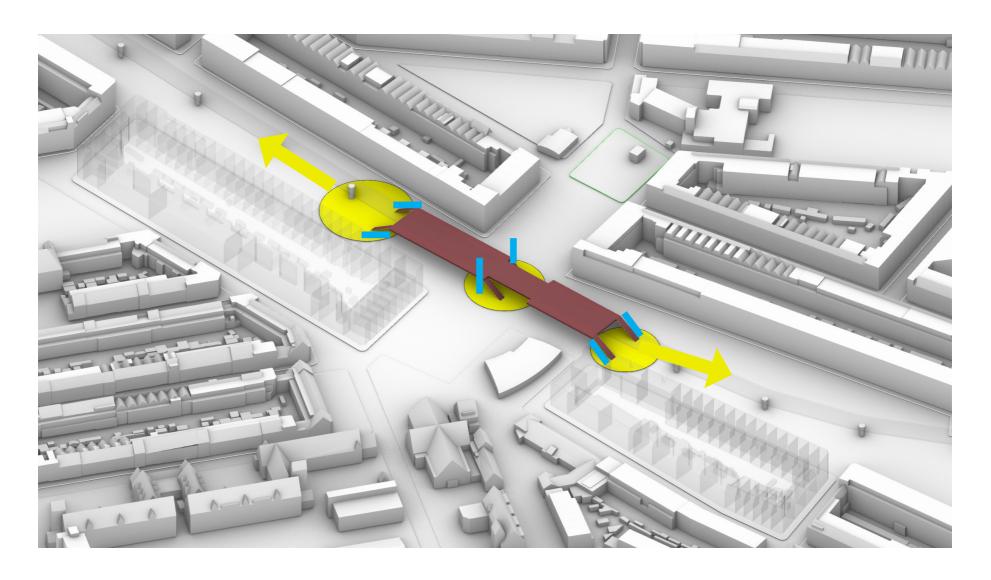
Flow of metro station to leftover space

Accessibility Diversity **Inclusivity** Reconnection
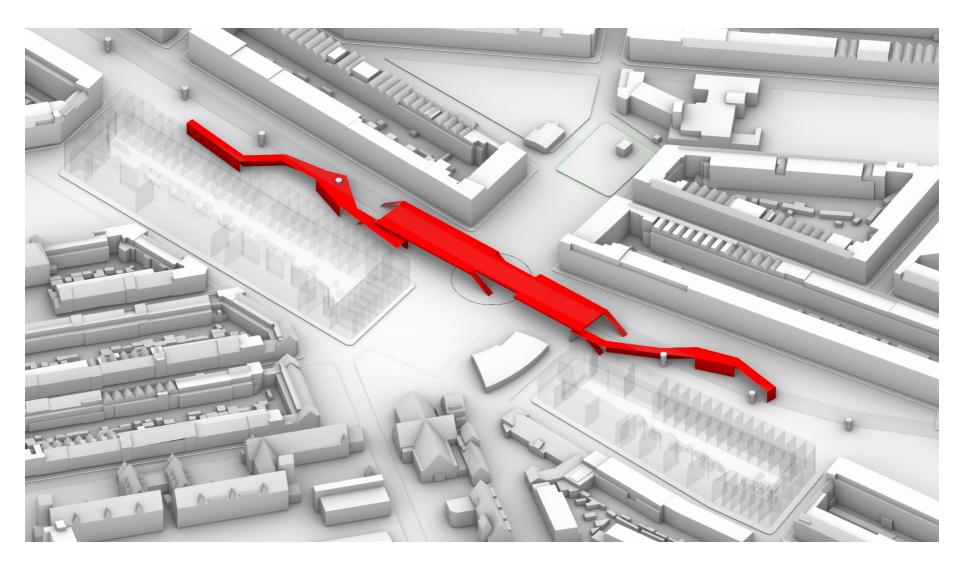
Language of metro station will extend further

Accessibility **Diversity** Inclusivity **Reconnection**
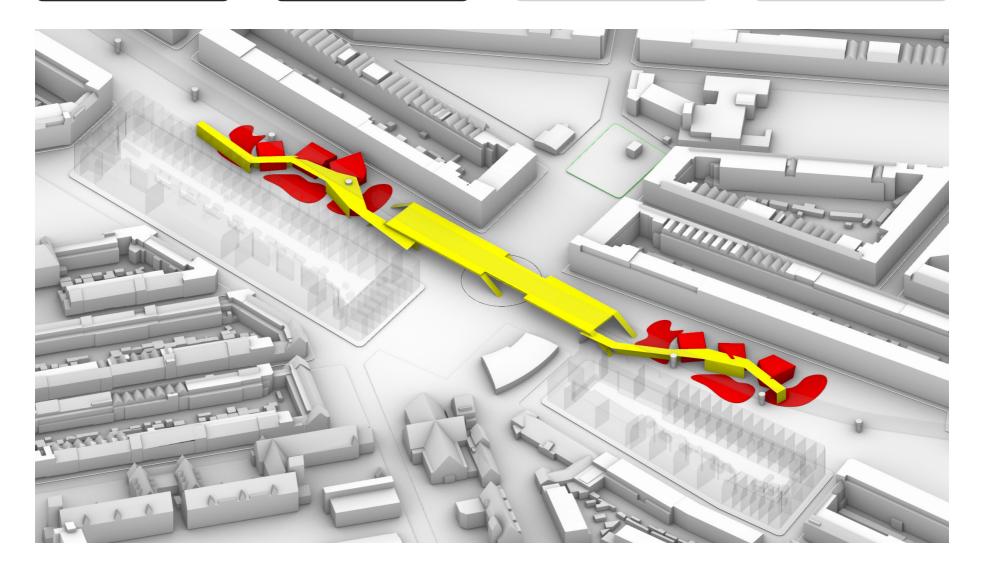
Modules attached by it

Accessibility	**Diversity**	**Inclusivity**	Reconnection
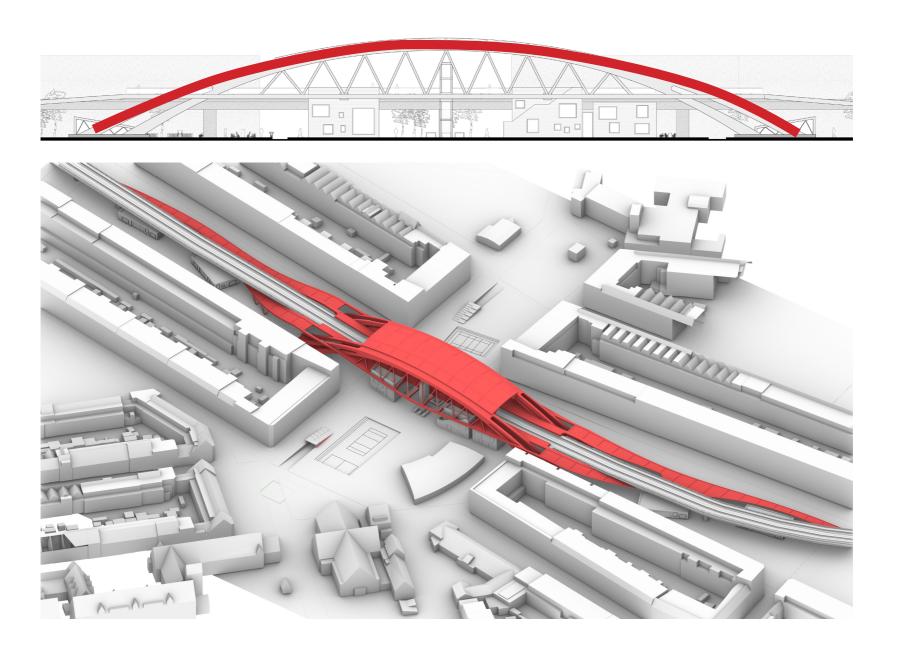
Two Architectural languages

Accessibility   **Diversity**   Inclusivity   Reconnection

Language 01: Mobility functions

Existing metro staion along the DE line

Slinge metro station

Zuidplein metro station

Maashaven metro station

Rijnhaven metro station
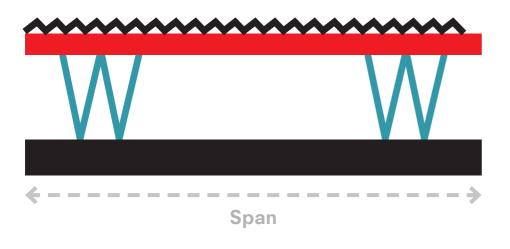
Feature of existing metro station nearby

1. "V" shape

2. Span along infrastructure

Span
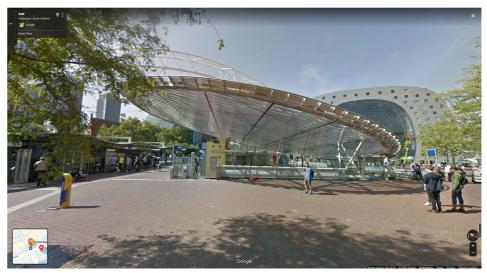
Metro stations in Rotterdam

Spijkenisse Centrum metro station

Pernis metro station

Parkweg metro station

Rotterdam blaak station

Stations in Amsterdam

Amsterdam central station

Amsterdam central metro station
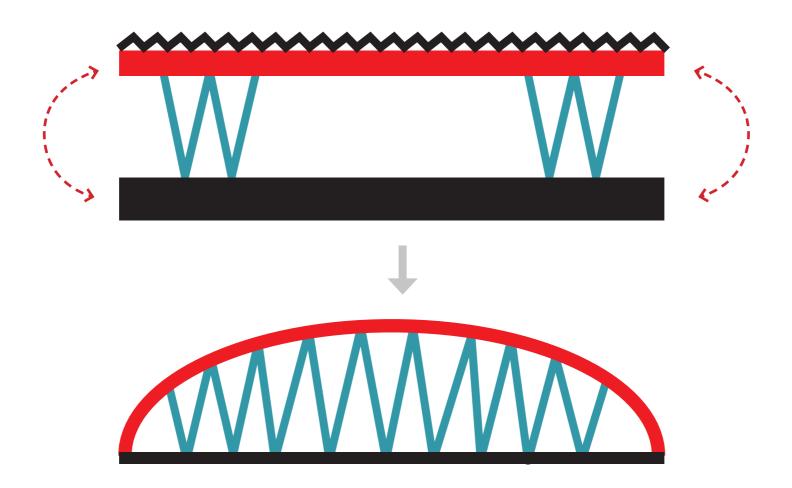
Amsterdam sloterdijk station

Amsterdam Bijlmer ArenA metro station
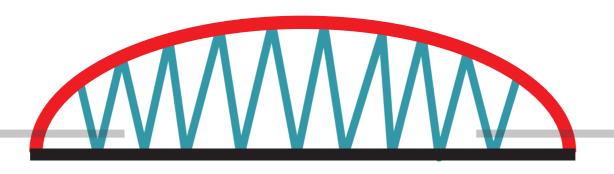
Combining old and new

Accessibility | Diversity | Inclusivity | **Reconnection**

Bridge shape to push people into two sides
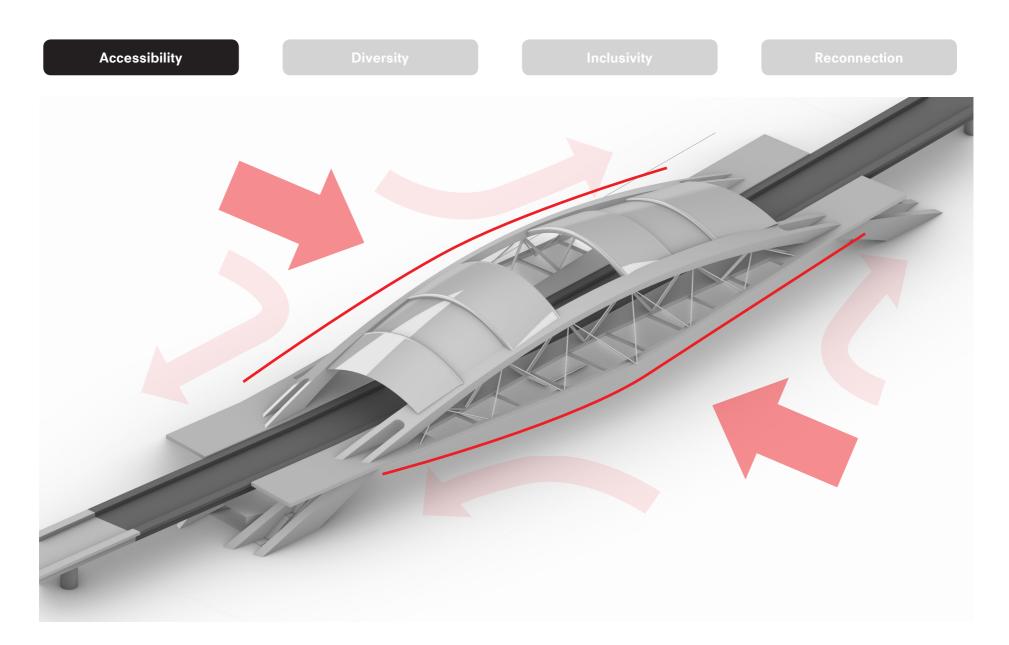
Accessibility | Diversity | Inclusivity | Reconnection

James Joyce Bridge, Dublin

Middle curve + landmark
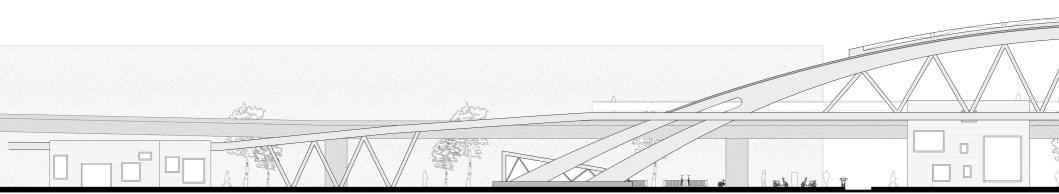
Accessibility   Diversity   Inclusivity   Reconnection

Middle curve + landmark

Accessibility   Diversity   Inclusivity   Reconnection

Language of corridor

Accessibility **Diversity** Inclusivity **Reconnection**

Language of corridor

Accessibility   **Diversity**   Inclusivity   **Reconnection**
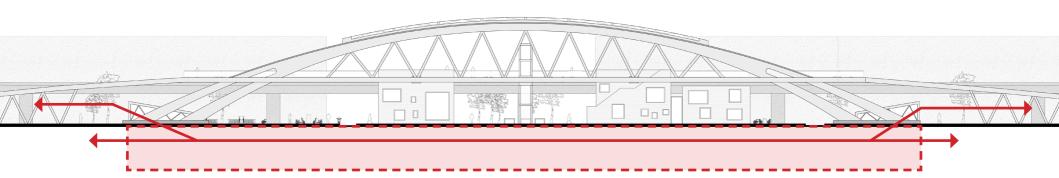
Above bicycle parking area as barriers
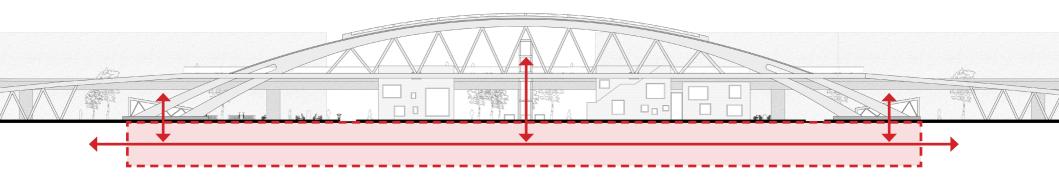
Underground bicycle storage
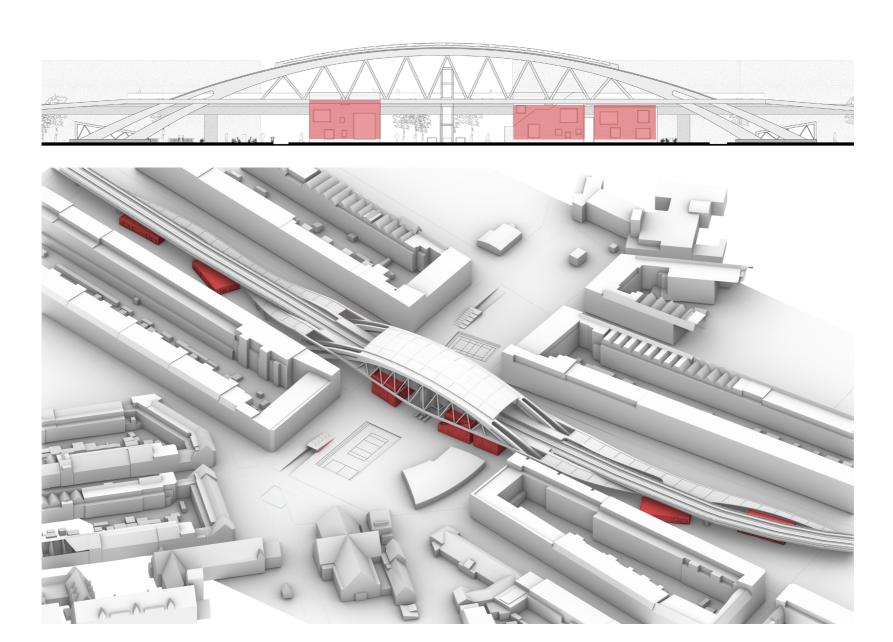
Accessibility   Diversity   Inclusivity   Reconnection
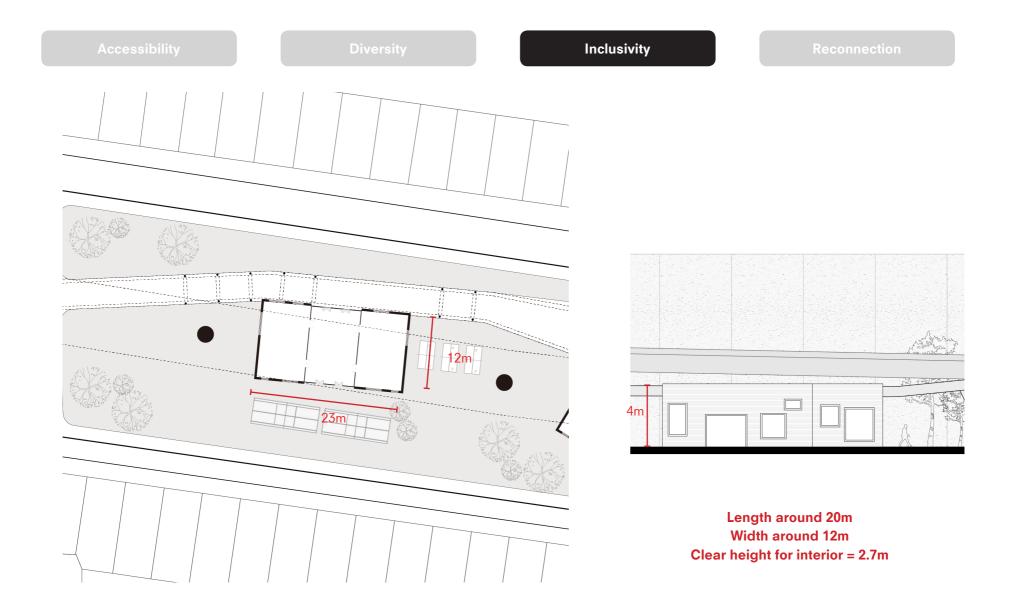
Better connection between bicycle storage and metro station

Language 02 solid timber volume

Rules for timber volumes: Human scale, small volume

| Accessibility | Diversity | **Inclusivity** | Reconnection |

12m

23m

4m

**Length around 20m
Width around 12m
Clear height for interior = 2.7m**
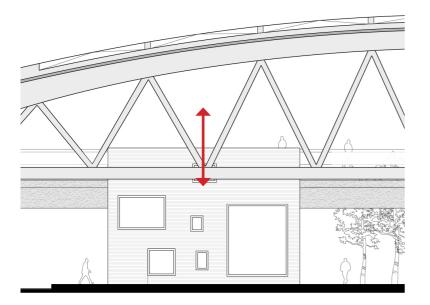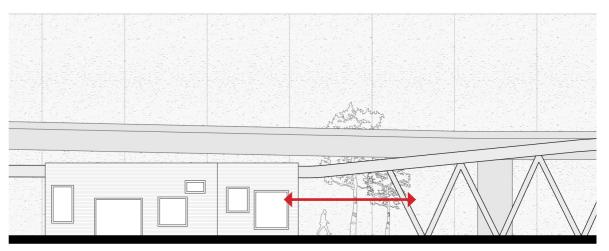
Hub inside, connect to public space and corridor

Accessibility   Diversity   **Inclusivity**   Reconnection

Facade --- Solid block

Accessibility

Diversity

Inclusivity

Reconnection

Facade --- Timber as another material_Contrast

| Accessibility | **Diversity** | Inclusivity | Reconnection |

Green roof

Accessibility | Diversity | Inclusivity | **Reconnection**

Tarwewijk Mobility hub --- Phase 01

Introduction

Research

Design brief

Concept

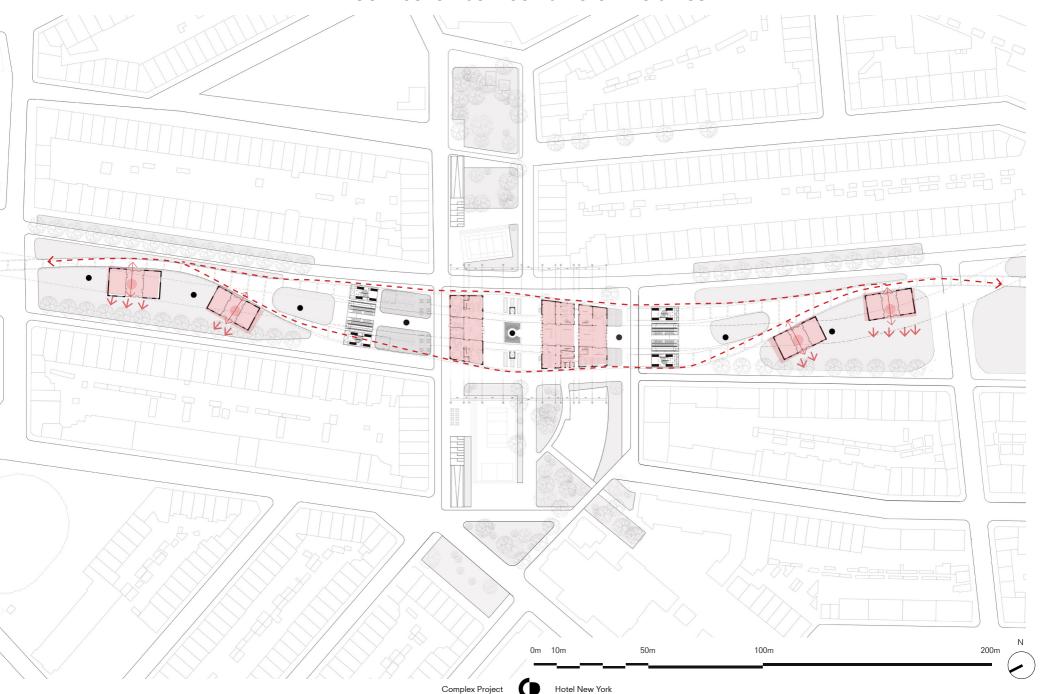**Implementation**

Development

Conclusion

INDEX

Existing situation

0m 10m   50m   100m   200m

N

Implementation

Site plan 1:1000

0m 10m   50m   100m   200m

N

Site plan 1:1000

| 0m | 10m | | 50m | | 100m | | 200m |

Complex Project   Hotel New York

Connection between different volumes

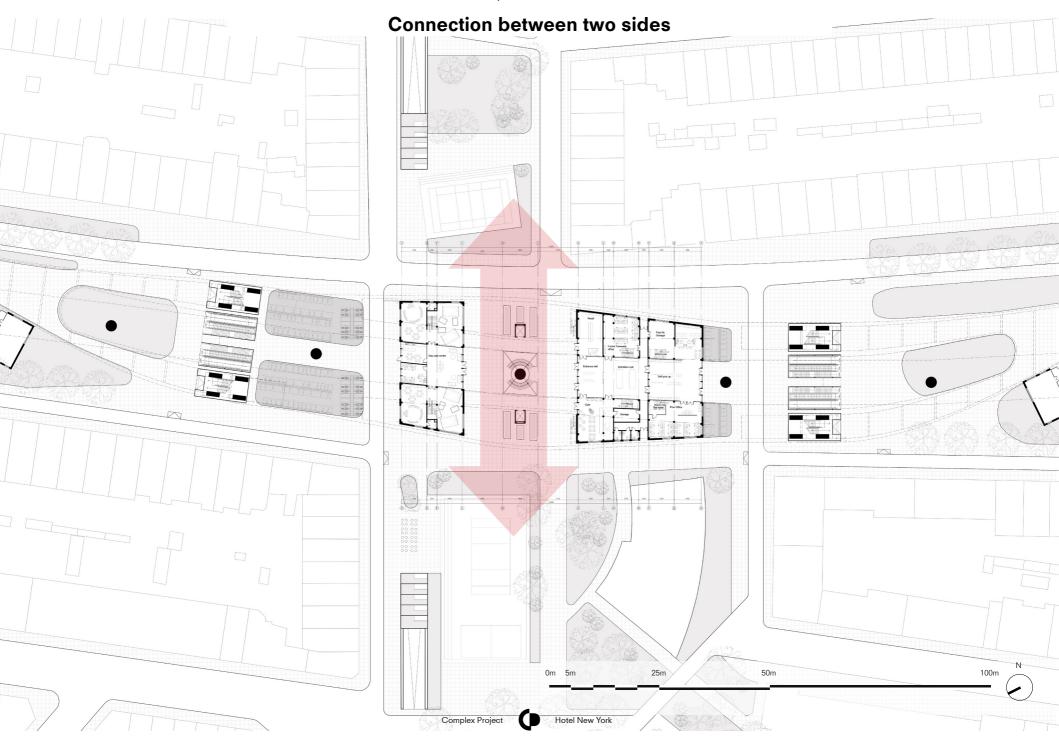0m 10m   50m   100m   200m

N

Complex Project   Hotel New York

Corridor --- volumes --- public space

Implementation

Urban implementation 1:500

0m   5m   25m   50m   100m

Complex Project   Hotel New York

Important flows at site

0m 5m   25m   50m   100m

N

Complex Project   Hotel New York

Connection between two sides

0m 5m   25m   50m   100m

Complex Project   Hotel New York

Implementation

Central volumes

0m 5m   25m   50m   100m

N

Central volumes_Shifting walls

Retail

Future Tramwork office

Post NL Storage

Entrance hall

Exhibition hall

Self-pick up

Day care center

Cafe

Storage

Post Office

Taxi rank

0m 5m   25m   50m   100m

N

Complex Project   Hotel New York

Bicycle flow

Legenda:

← - - - → Primary flow

← - - - → Above ground bicycle storage

←——→ Secondary flow

← - - - → people walking with bike

Complex Project ◐ Hotel New York

Implementation

People flow

Legenda:

- ← - - → Primary flow
- ←——→ Secondary flow

Complex Project ◐ Hotel New York

Logistic flow

Ground floor plan

Day care center

Retail

Future Tarwewijk office

Post NL Storage

Entrance hall

Exhibition hall

Self-pick up

Cafe

Tea room

Post Office

Storage

Legenda:

- Mobility functions
- Office
- Social
- Commercial
- Exterior public space
- Culture
- Service/Facility

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Day care center

Retail

Future Tarwewijk office

Entrance hall

Post NL Storage

Exhibition hall

Self-pick up

Day care center

Cafe

Tea room

Post Office

Storage

Legenda:

■ Mobility functions   ■ Social   ■ Exterior public space

■ Office   ■ Commercial   ■ Culture   ■ Service/Facility

0m 2m   10m   20m   40m   N

Complex Project   Hotel New York

Retail

Post NL
Storage

Future Tarwewijk
office

Entrance hall

Exhibition hall

Self-pick up

Day care center

Cafe

Storage

Tea room

Post Office

Legenda:

Mobility functions   Social   Exterior public space

Office   Commercial   Culture   Service/Facility

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Commercial functions

Legenda:

- Mobility functions
- Office
- Social
- Commercial
- Exterior public space
- Culture
- Service/Facility

0m 2m 10m 20m 40m

N

Complex Project Hotel New York

Future Tarwewijk office

Retail

Post NL
Storage

Future Tarwewijk
office

Entrance hall

Exhibition hall

Self-pick up

Day care center

Cafe

Storage

Tea room

Post Office

Legenda:

Mobility functions

Social

Exterior public space

Office

Commercial

Culture

Service/Facility

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Post NL

Retail

Future Tarwewijk office

Post NL Storage

Entrance hall

Exhibition hall

Self-pick up

Day care center

Cafe

Storage

Tea room

Post Office

Legenda:

- Mobility functions
- Office
- Social
- Commercial
- Exterior public space
- Culture
- Service/Facility

0m 2m   10m   20m   40m   N

Complex Project   Hotel New York

Volumes and public space

Day care center

Retail

Future Tarwewijk office

Post NL Storage

Entrance hall

Exhibition hall

Self-pick up

Cafe

Storage

Tea room

Post Office

Complex Project   Hotel New York

0m 2m   10m   20m   40m

N

Hub connections --- Visual (Phase 01)

Day care center

Retail

Future Tarwewijk office

Post NL Storage

Entrance hall

Exhibition hall

Self-pick up

Cafe

Storage

Tea room

Post Office

Complex Project

Hotel New York

0m 2m 10m 20m 40m

N

Contious view --- from ticket hall to Post NL

1st floor plan 1:200

Storage

Manager office

3.200m

Meeting Room

Storage

Cafe

Manager office

Meeting Room

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Functions

Future Tawiweijk office

PostNL light goods storage

Storage

Manager office

Meeting Room

3.200m

Storage

Cafe

Manager office

Meeting Room

Day care

Cafe

PostNL office

Legenda:

▢ Mobility functions		▢ Social		▢ Exterior public space
▢ Office	▢ Commercial	▢ Culture		▢ Service/Facility

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Up to the platform --- Middle court

Up to the platform --- Two sides

Implementation

Platform plan 1:500

8000 8000 8000 8000 8000 8000 8000 8000

8.400m

8000 8000 8000 8000 8000 8000 8000 8000

0m 5m   25m   50m   100m

N

Complex Project   Hotel New York

Relation between roof garden and metro station

8000　8000　8000　8000　8000　8000　8000　8000　8000

8.400m

8.900m

8000　8000　8000　8000　8000　8000　8000　8000　8000

Legenda:

■ Mobility functions　　■ Social　　■ Exterior public space

■ Office　　■ Commercial　　■ Culture　　■ Service/Facility

0m　2m　　　10m　　　　20m　　　　　　　40m

N

Complex Project　　◖ Hotel New York

On the platform

Roof garden as the exhibition for Tarwewijk

8000   8000   8000   8000   8000   8000   8000   8000   8000

8.400m

8.900m

8000   8000   8000   8000   8000   8000   8000   8000   8000

0m   2m   10m   20m   40m

N

Complex Project   Hotel New York

Roof garden as the exhibition for Tarwewijk

8000 8000 8000 8000 8000 8000 8000 8000

8.900m

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

To the future of Tarwewijk

Implementation

Basement plan 1:500

-2.500m

-2.500m

-4.000m

Storage

Renting office

Repairing facility

Mechanical

0m 5m   25m   50m   100m

N

Complex Project   Hotel New York

Capacity

-2.50

Capacity:

Bicycle parking: 1200
E-scooter (small): 100
E-scooter (motor): 40

Storage

-4.000m

Renting office

Repairing facility

Mechanical

-2.500m

0m 2m   10m   20m   40m

N

Complex Project   Hotel New York

Bicycle related functions

Bicycle store

Renting office

Bicycle repairing

Facilities

Legenda:

- Mobility functions
- Office
- Commercial
- Social
- Culture
- Exterior public space
- Service/Facility

Complex Project · Hotel New York

Bicycle storage

Functions

Bicycle repairing

Bicycle store

Legenda:

■ Mobility functions	■ Social	■ Exterior public space	
■ Office	■ Commercial	■ Culture	■ Service/Facility

0m 2m   10m   20m   40m

Complex Project   Hotel New York

Openess
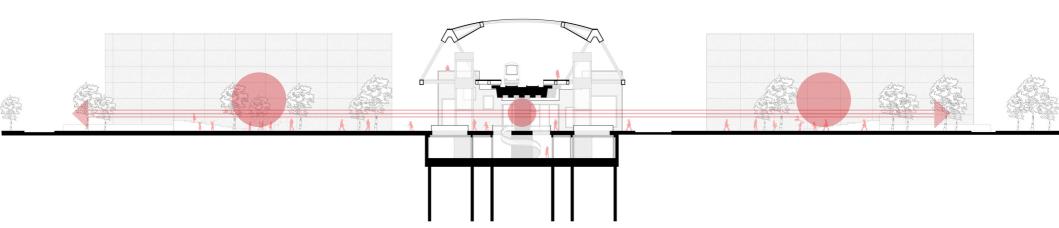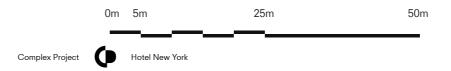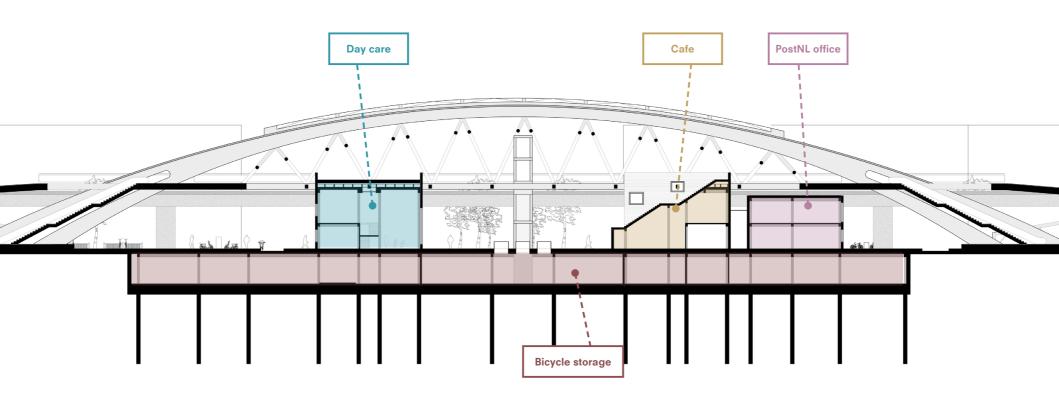
Reconnection of Tarwewijk

0m 5m   25m   50m

Section A-A

Day care

Cafe

PostNL office

Bicycle storage

Legenda:

■	Mobility functions	■	Social	■	Exterior public space
■	Office	■	Commercial	■	Culture	■	Service/Facility

0m 2m   10m   20m   40m
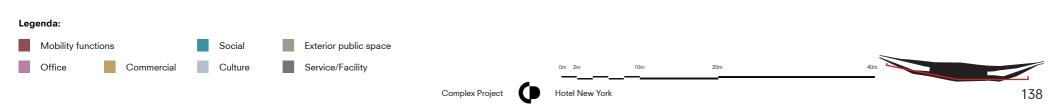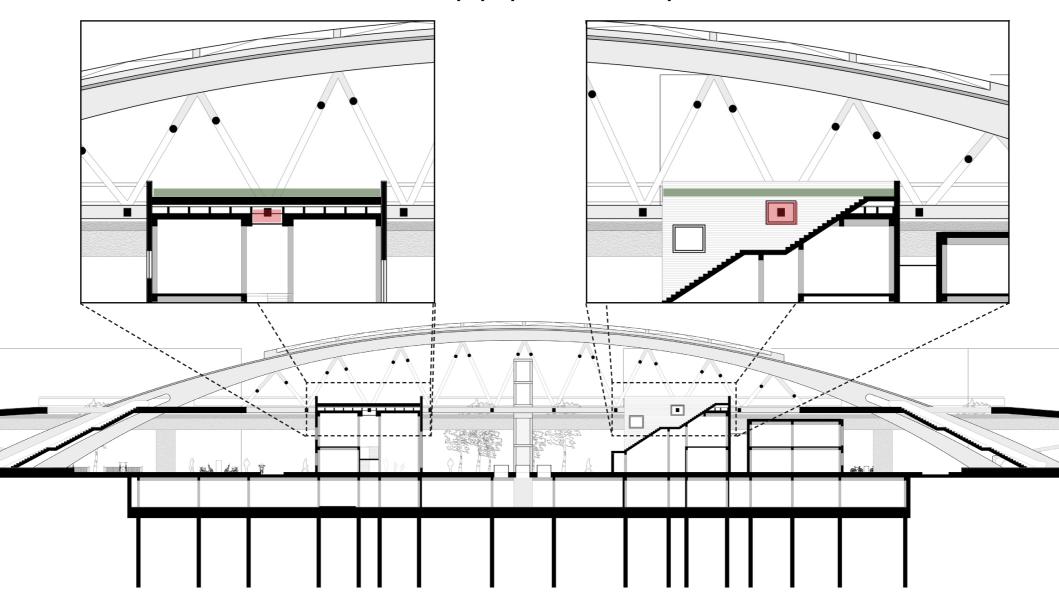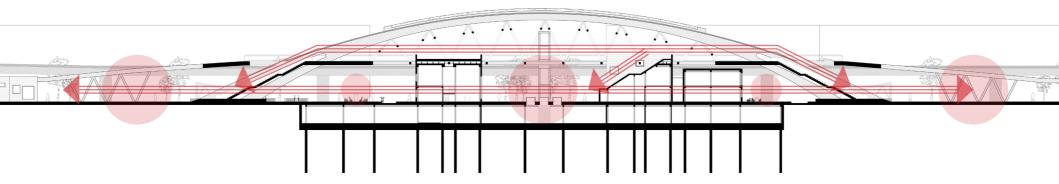
Timber volume pop-up from the metro platform

Reconnection of Leftover space

0m 5m   25m   50m

Tarwewijk mobility hub

Continuous view

Middle court

On the platform

Corridor to timber volumes

Bicycle storage

Volumes to public space

INDEX
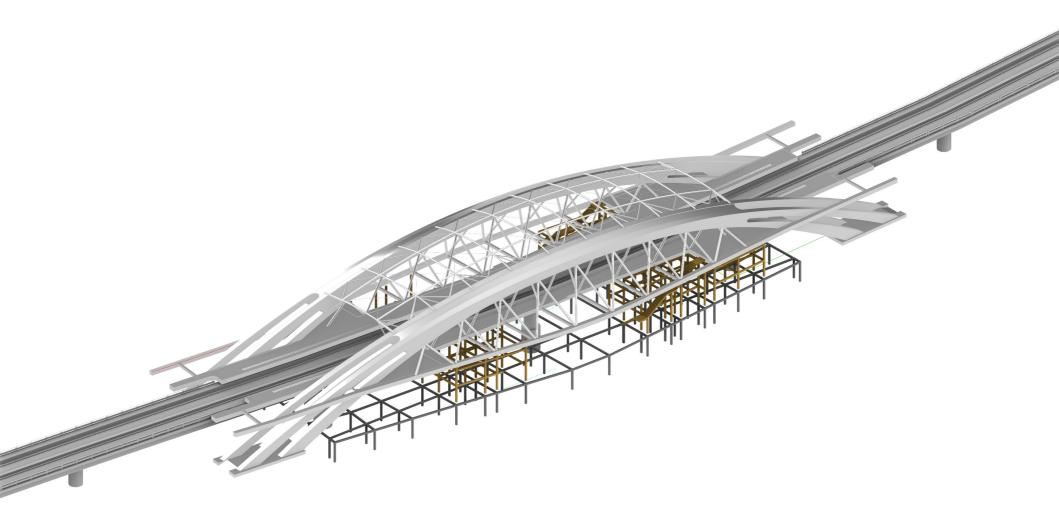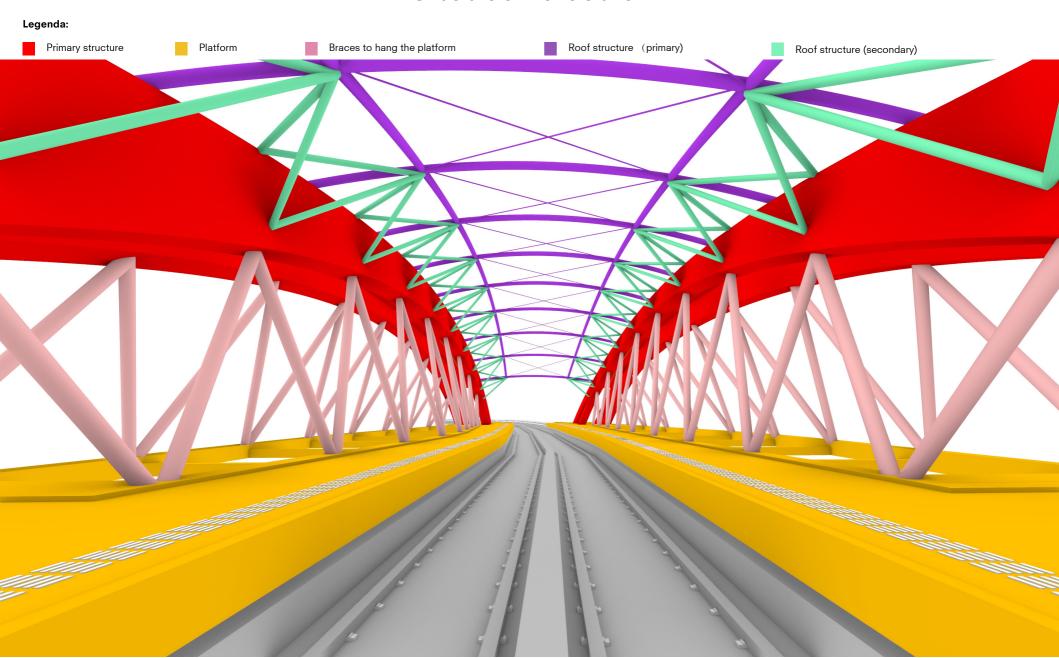
Structure overview

Structure of metro station
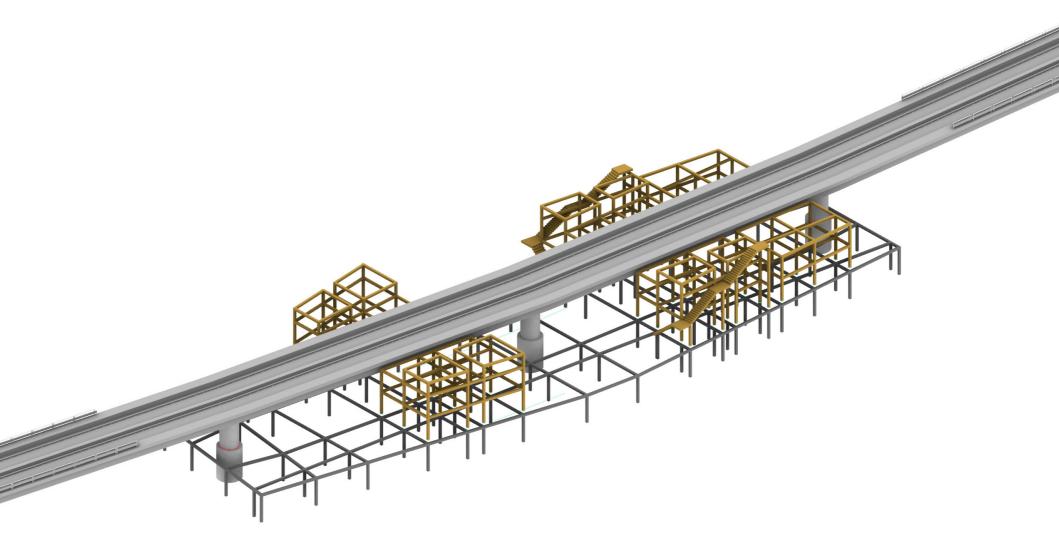
Legenda:

- 🟥 Primary structure
- 🟨 Platform
- 🟪 Braces to hang the platform
- 🟪 Roof structure （primary)
- 🟩 Roof structure (secondary)

Structure of metro station

Legenda:

🟥 Primary structure   🟧 Platform   🟪 Braces to hang the platform   🟪 Roof structure （primary)   🟩 Roof structure (secondary)
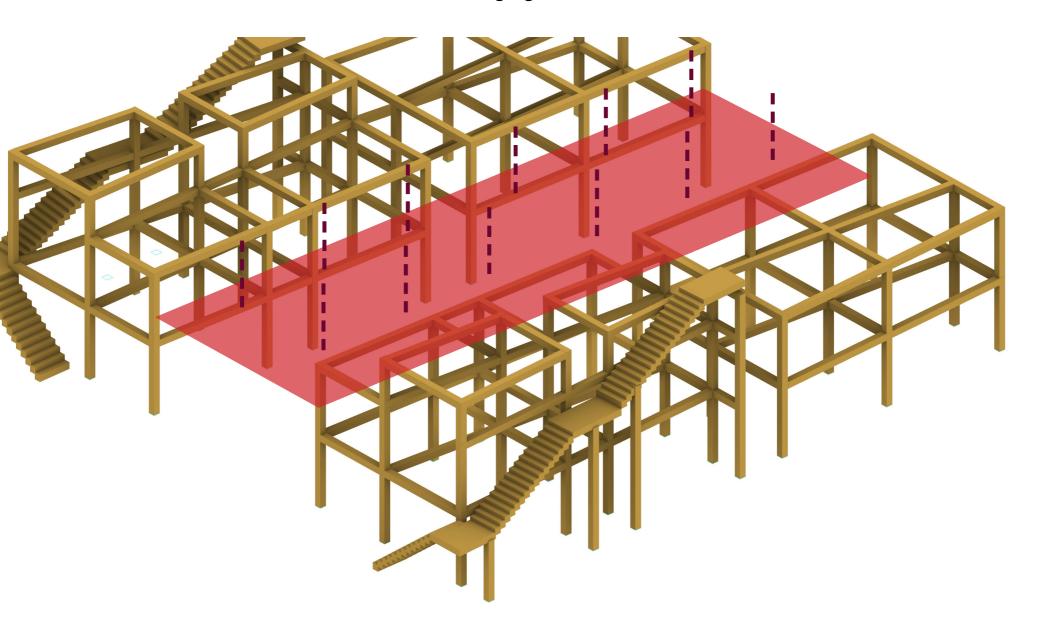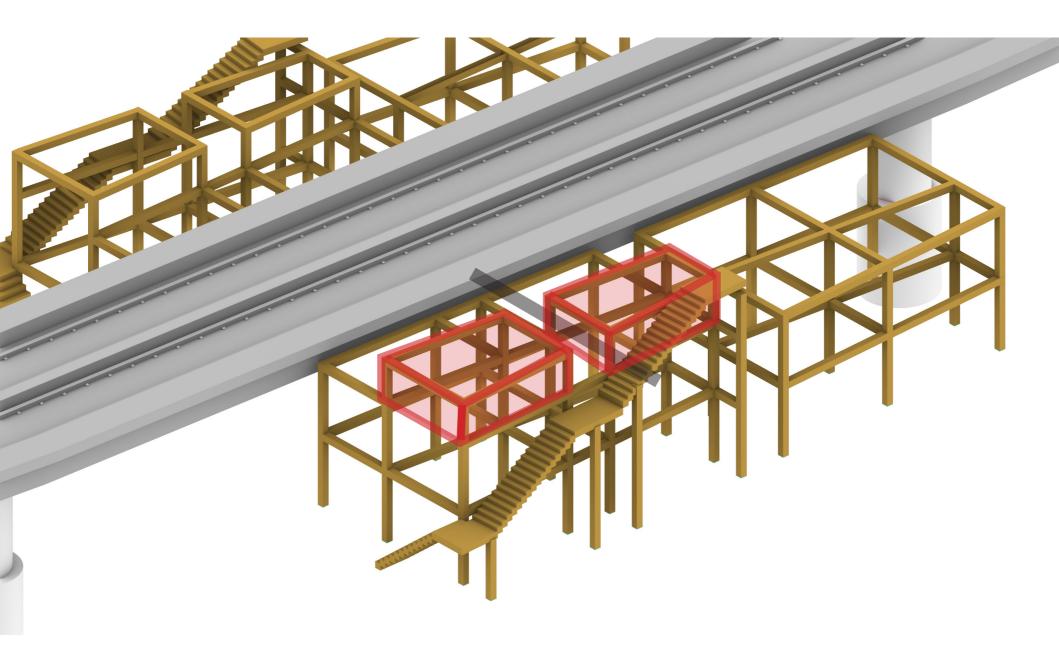
Structure of timber volume + bicycle storage

Middle roof hanging from infrastructure

Structure between solid volume and metro station

1:5 Detail

Distancing of solid timber volume from structure of metro station

Fence Construction:

30mm fir boarding
75mm cavity
100mm laminated cross-boarded timber
160 cavity
180mm laminated cross-boarded timber
20mm sheathing board
20mm/20mm timber stud
20mm timber finishing

Roof Construction:

Domestic grass seed
280 mm substrate
Protective mat
20mm sheathing board
630mm ventilated cavity
(100mm timber stud cantilevered on
the top of platform)
Waterproof membrane
20mm sheathing board
100mm sound insulation
160mm insulating wood fibre panel
20mm sheathing board
vapour barrier
300mm suspended soffit for lighting system
40 mm acoustic ceiling in microperforated panels

0m   0.5m   1m

1:5 Detail

Step back of solid timber volume from structure of metro station

Roof Construction:

Domestic grass seed
280 mm substrate
Protective mat
20mm sheathing board
630mm ventilated cavity
(100mm timber stud cantilevered on
 the top of platform)
Waterproof membrane
20mm sheathing board
100mm sound insulation
160mm insulating wood fibre panel
20mm sheathing board
vapour barrier
300mm suspended soffit for lighting system
40 mm acoustic ceiling in microperforated panels

1:5 Detail
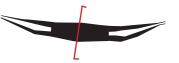
Flexible joint between roof garden of timber volume and metro station

Platform Construction:

6mm steel sheeting with painted concrete finishing
150mm steel profiled steel sheet
450mm rectangle steel beam
6mm white printed steel sheeting

Platform Construction:
6mm Stainless Steel finishing tear pattern
150mm steel profiled steel sheet
450mm rectangle steel beam
6mm white printed steel sheeting

0m   0.5m   1m
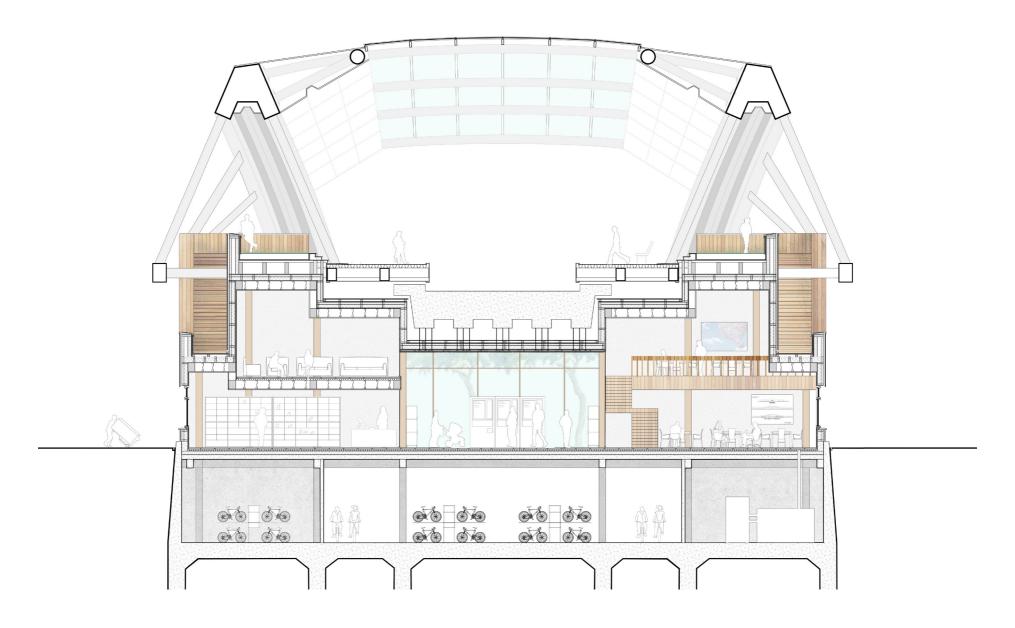
Distance between platform and infrastructure

Platform Construction:
6mm Stainless Steel finishing tear pattern
150mm steel profiled steel sheet
450mm rectangle steel beam
6mm white printed steel sheeting

Platform Construction:
6mm Stainless Steel finishing tear pattern
150mm steel profiled steel sheet
450mm rectangle steel beam
6mm white printed steel sheeting

0m   0.5m   1m

Complex Project   Hotel New York

Interfor fragment

Atmosphere on the platform

Material

Clear Anodized Aluminium Panel
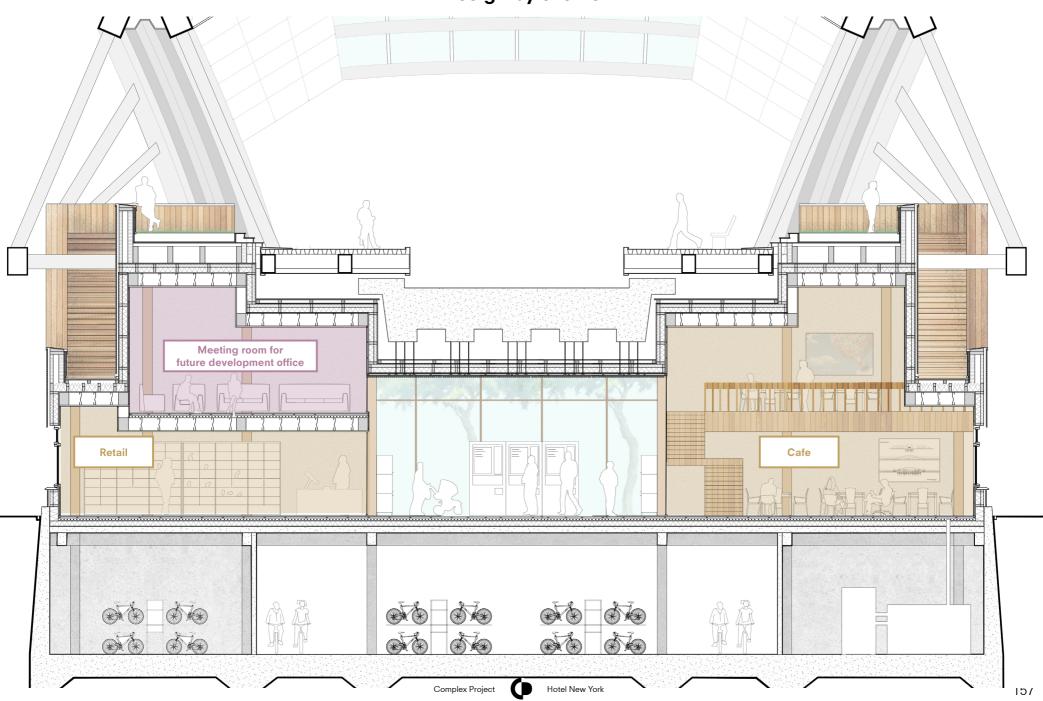
stainless steel finishing tear pattern
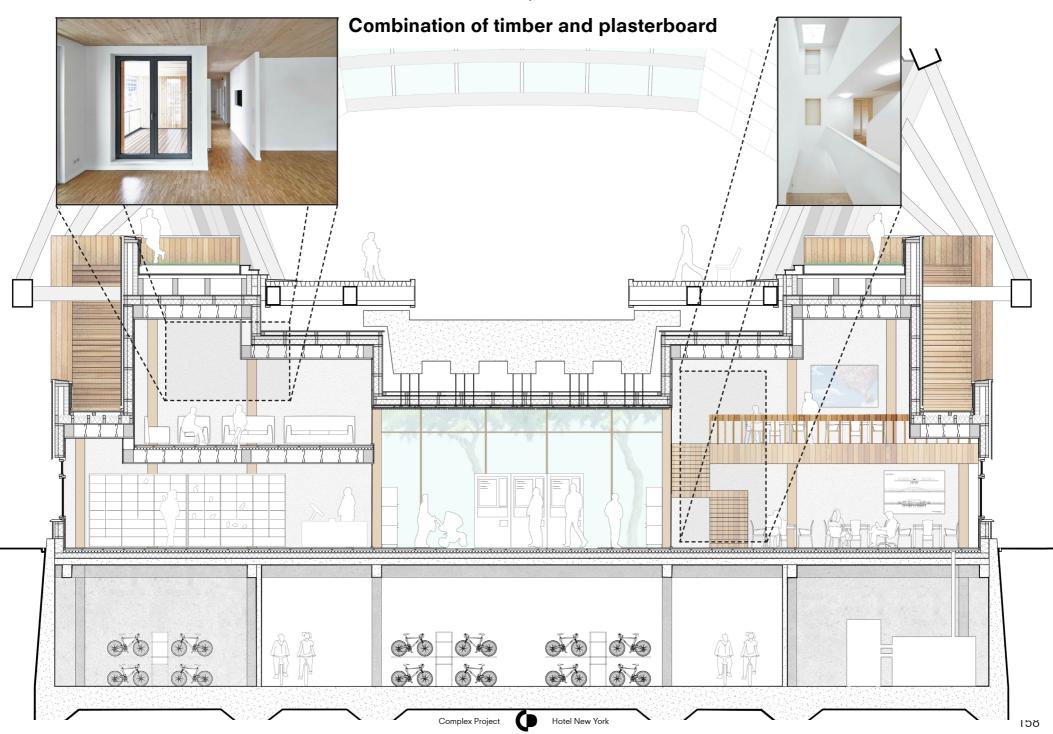
Atmosphere on the platform

Design by clients

Meeting room for future development office

Retail

Cafe

Combination of timber and plasterboard
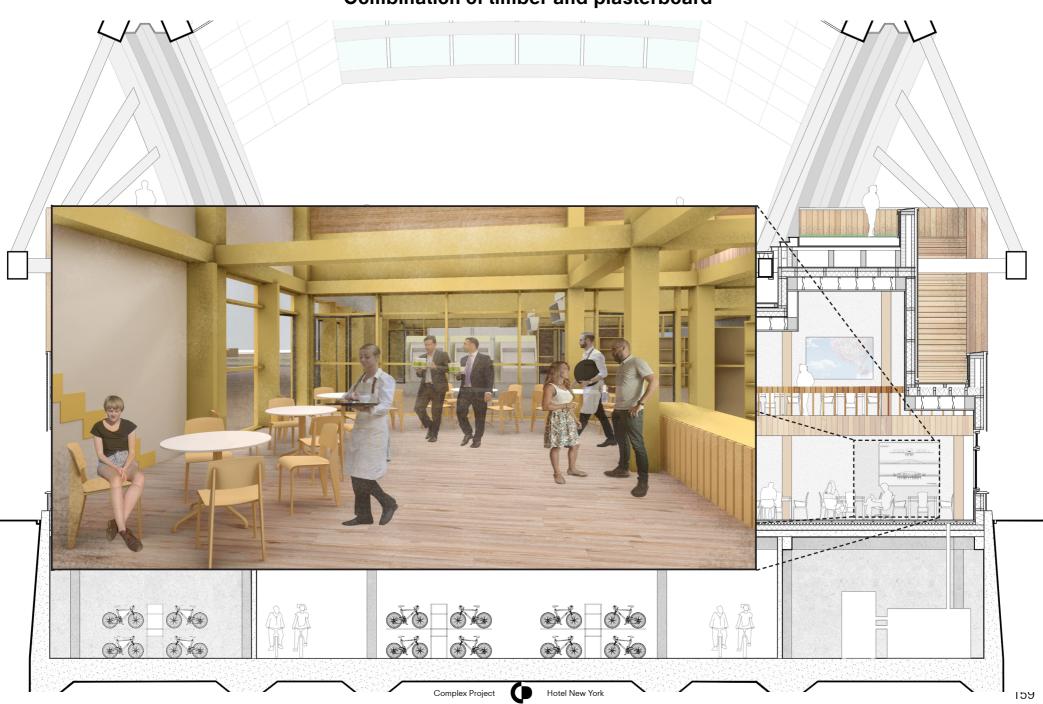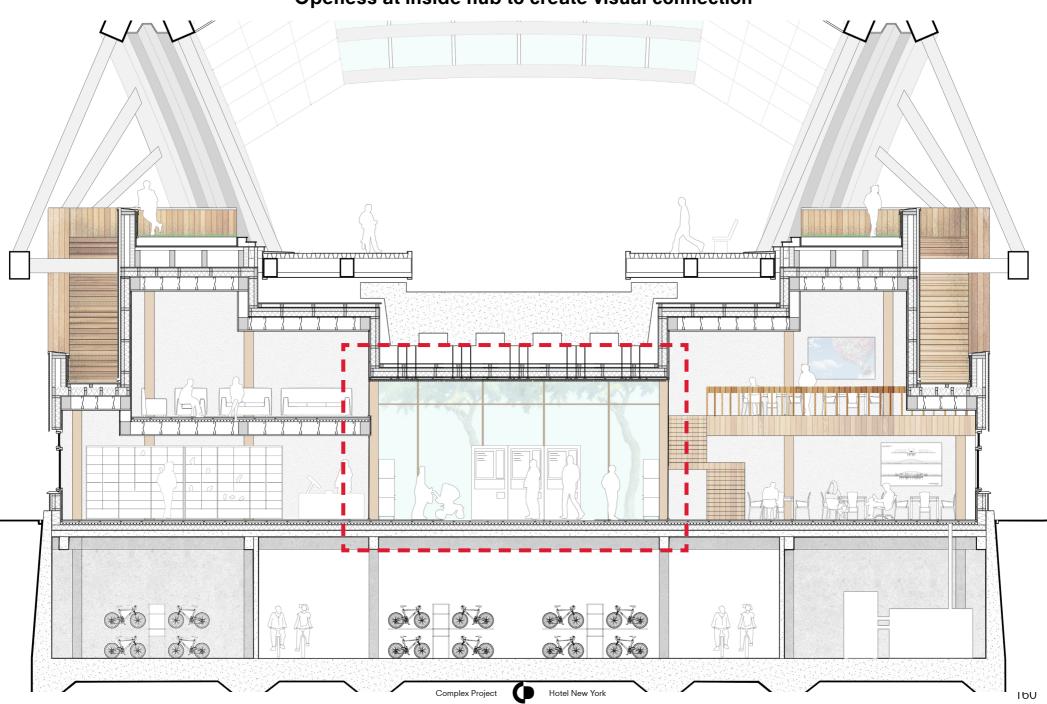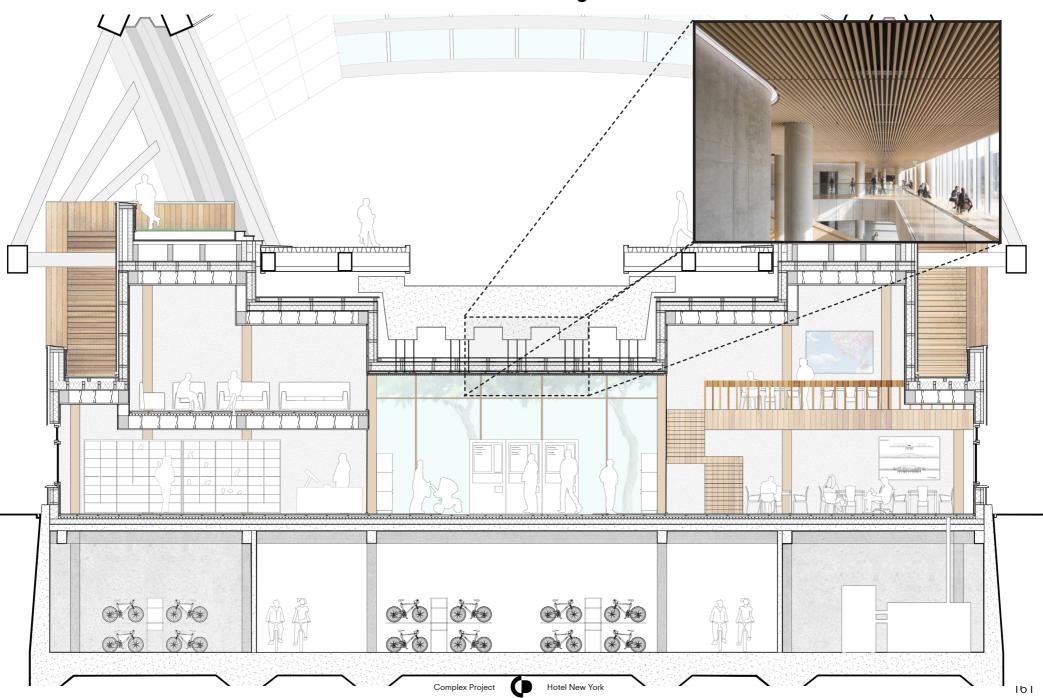
Combination of timber and plasterboard

Openess at inside hub to create visual connection
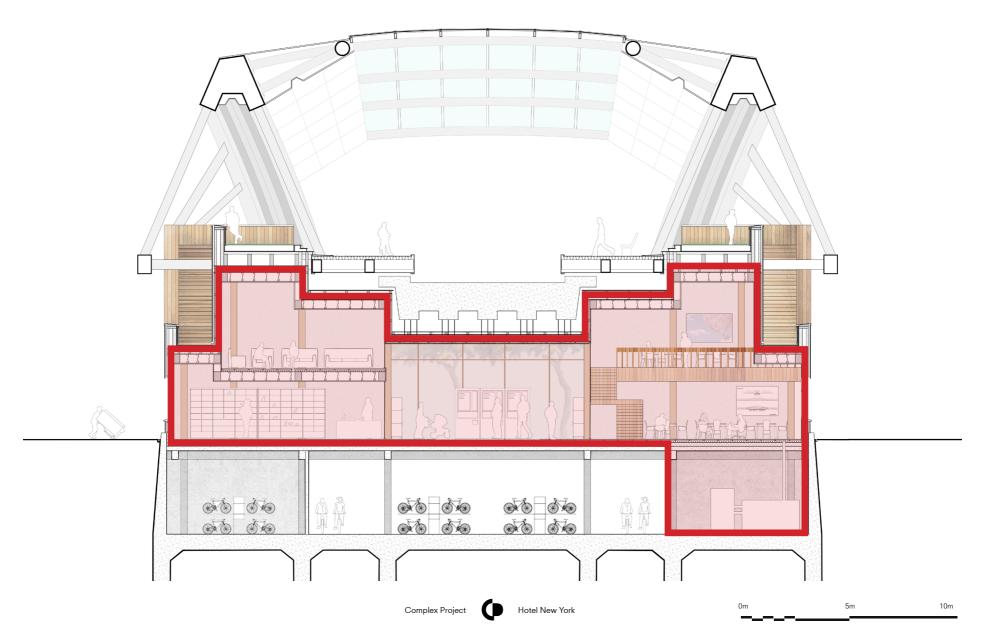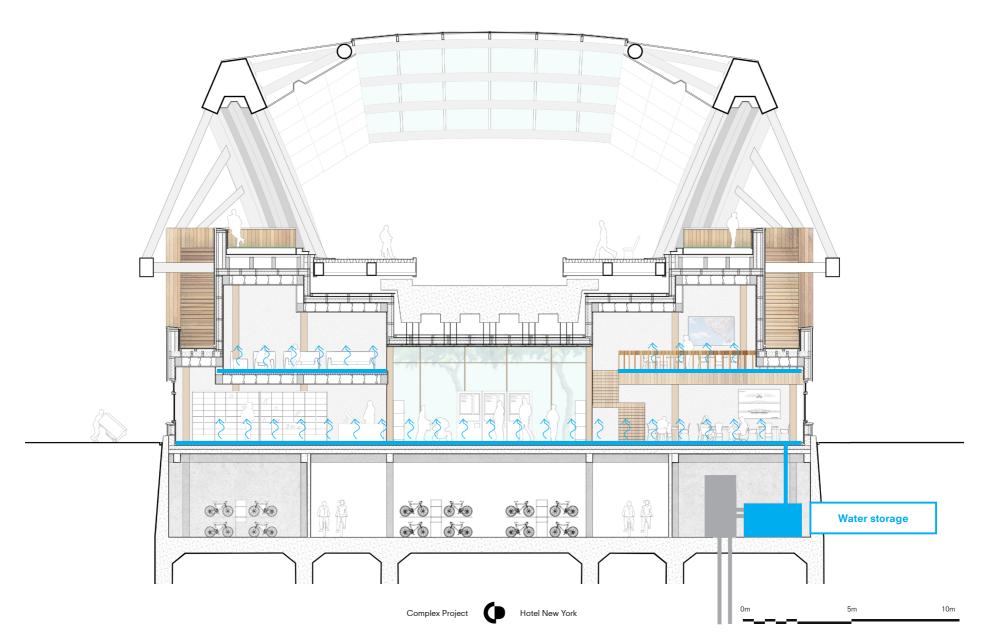
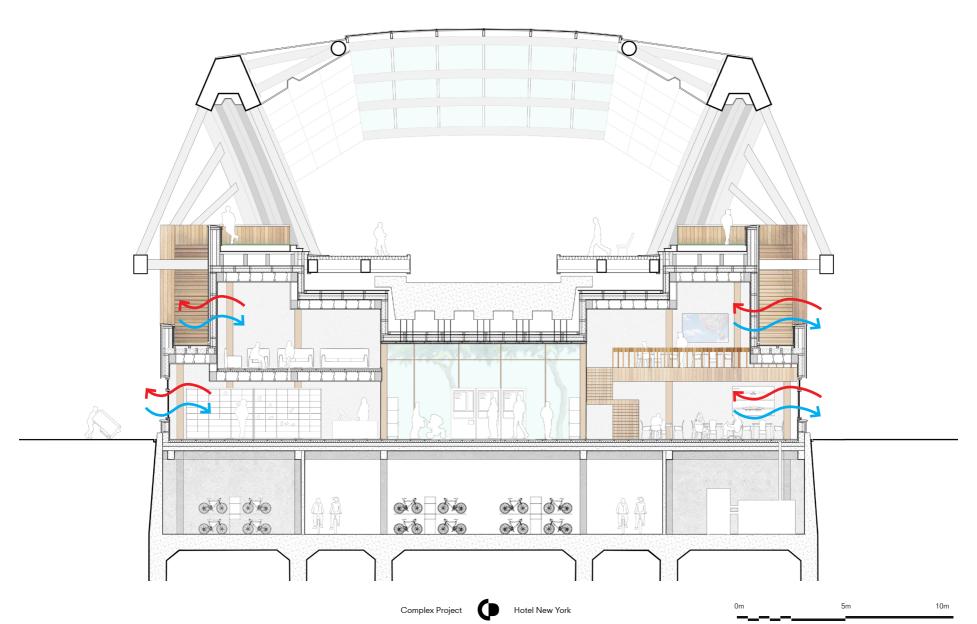# Timber roofing
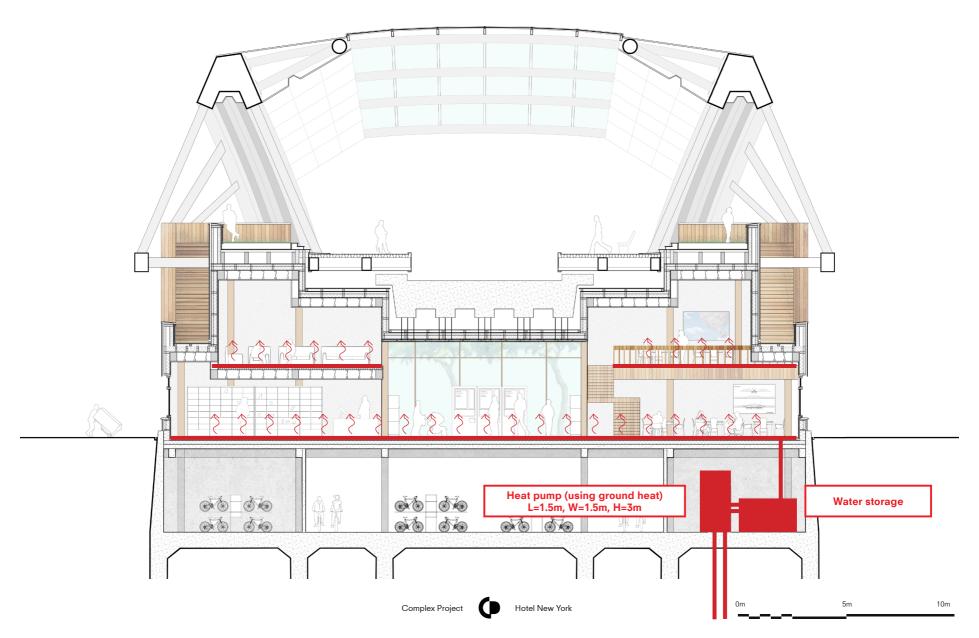
Central hall

Climate & sustainability_insulation

0m   5m   10m
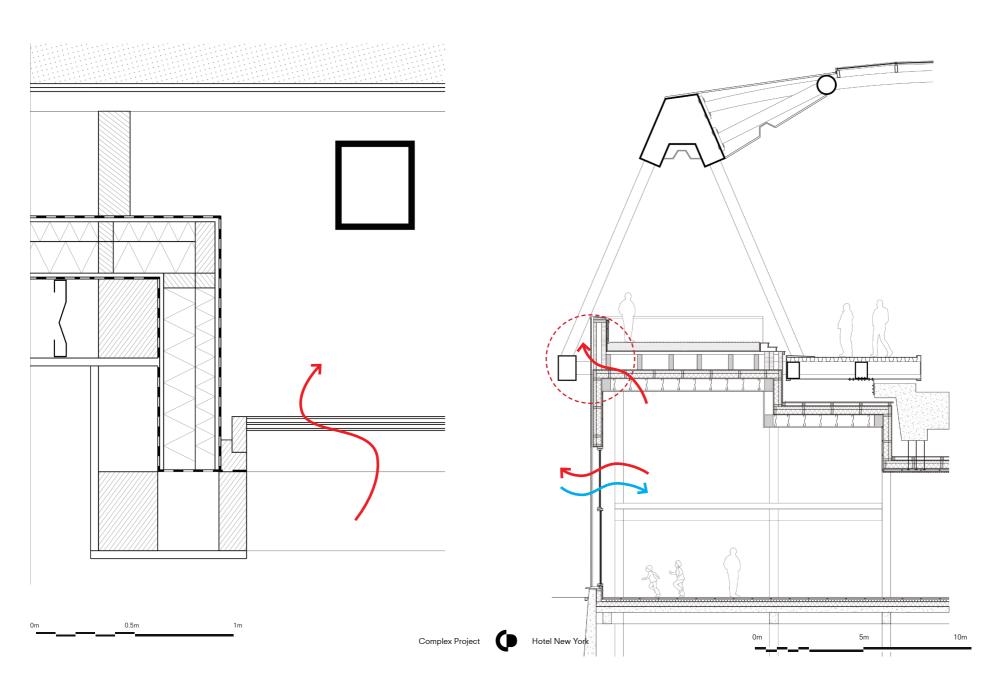
Climate & sustainability_ floor heating system

Heat pump (using ground heat)
L=1.5m, W=1.5m, H=3m

Water storage

0m   5m   10m

Climate & sustainability_ floor Cooling system
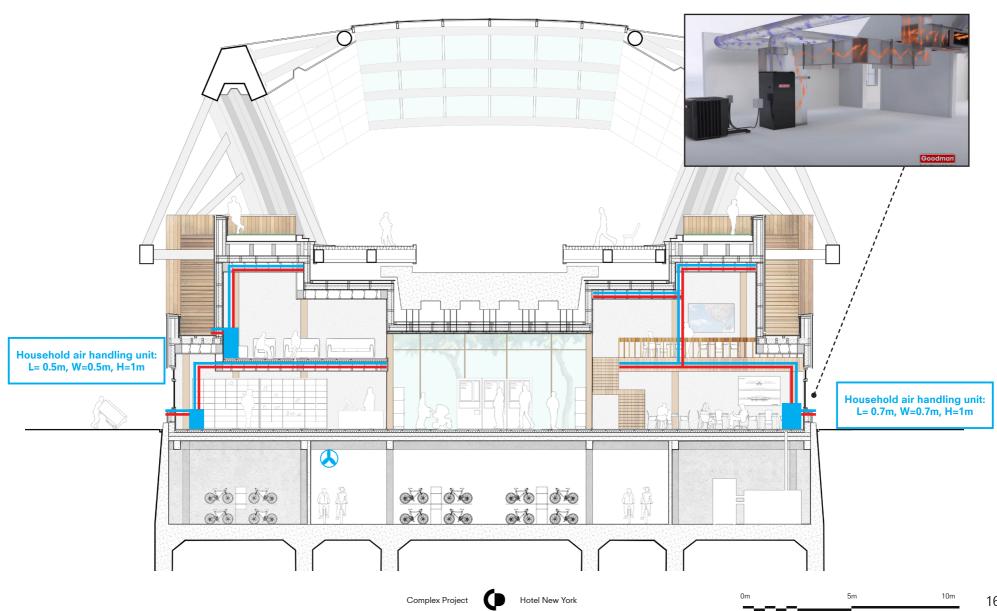
Water storage

0m   5m   10m

Climate design_ Natural ventilation system (summer)

0m   5m   10m

Climate design_ Natural ventilation system (summer)

0m   0.5m   1m

0m   5m   10m
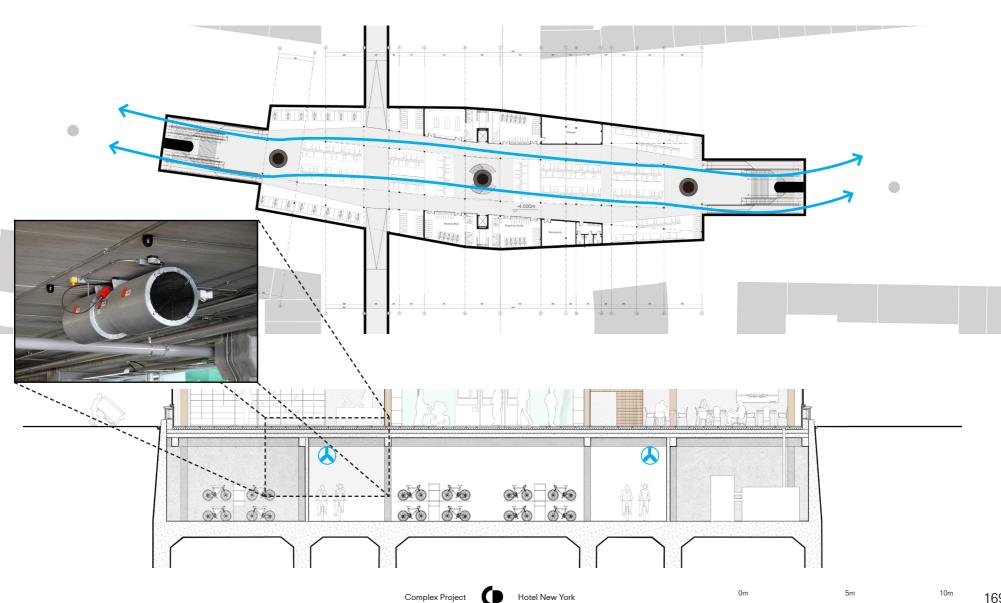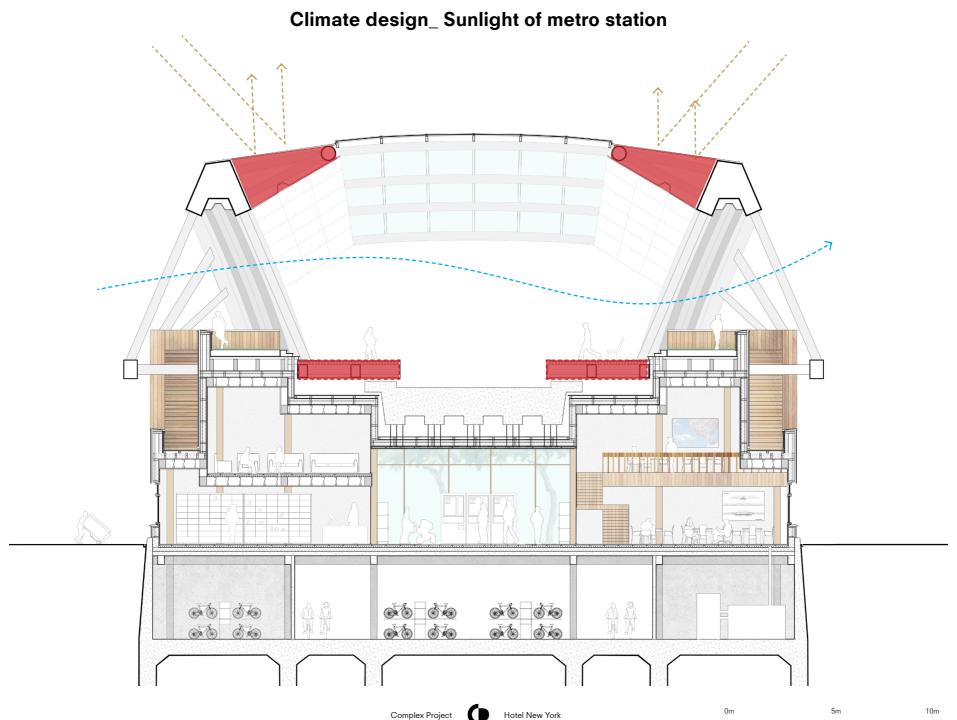
Climate design_ Mechanical ventilation

Household air handling unit:
L= 0.5m, W=0.5m, H=1m

Household air handling unit:
L= 0.7m, W=0.7m, H=1m

Climate design_ Jet fan ventilation_Bike storage

Climate design_ Sunlight of metro station

Complex Project   Hotel New York

0m   5m   10m

Final design --- interior
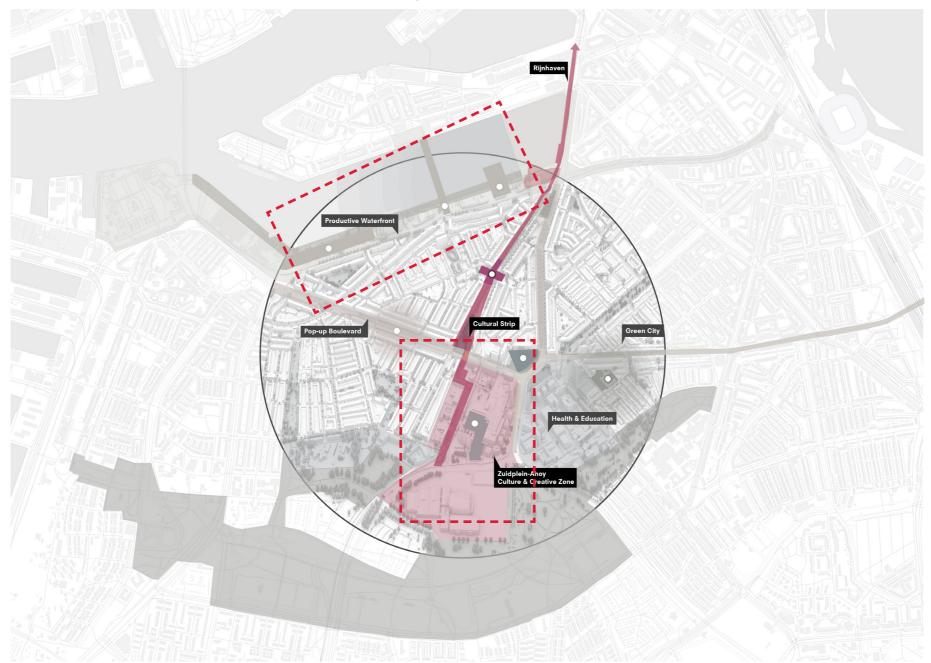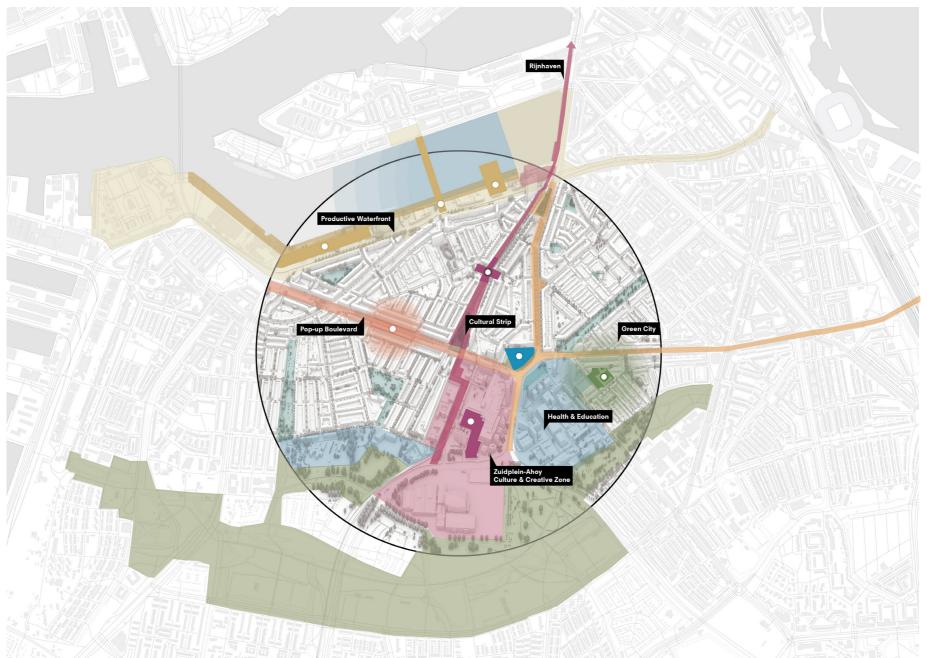
Final design

My contribution

Rijnhaven

Productive Waterfront

Pop-up Boulevard

Cultural Strip

Green City

Health & Education

Zuidplein-Ahoy
Culture & Creative Zone

Collage city

Rijnhaven

Productive Waterfront

Pop-up Boulevard

Cultural Strip

Green City

Health & Education

Zuidplein-Ahoy
Culture & Creative Zone

Introduction

Research

Design brief

Concept

Implementation

Development

Conclusion

INDEX

Tarwewijk mobility hub

Accessibility　　　**Diversity**　　　**Inclusivity**　　　**Reconnection**

Ambitions for activating leftover space

Accessibility

Diversity

Inclusivity

Reconnection

Catalyst --- other programs has gathering effect

Accessibility   Diversity   Inclusivity   Reconnection

Programs with attraction

Supporting programs

Design rule --- different identity comparing with surrounding

Accessibility **Diversity** Inclusivity Reconnection

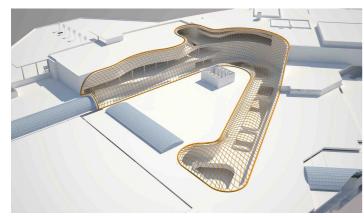# Design rule --- pushing people to leftover space

Accessibility

Diversity

Inclusivity

Reconnection

Design rule --- Connection

Accessibility Diversity Inclusivity **Reconnection**

From leftover spaces to public spaces

Accessibility	Diversity	Inclusivity	Reconnection

THANK YOU.

complex projects