

Retelling Kloos Kinderdijk

Revealing tangible and intangible values in the transformation of industrial manufacturing sites

P5 presentation

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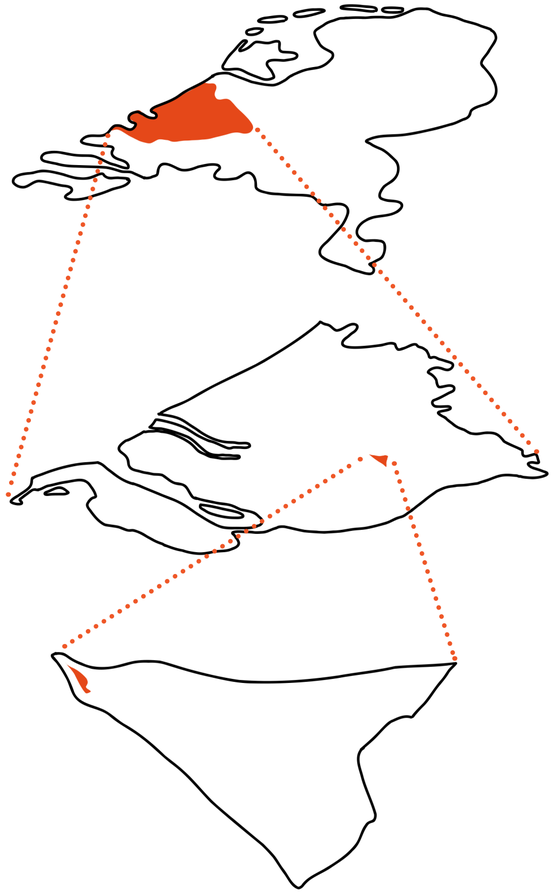
24.6.2024

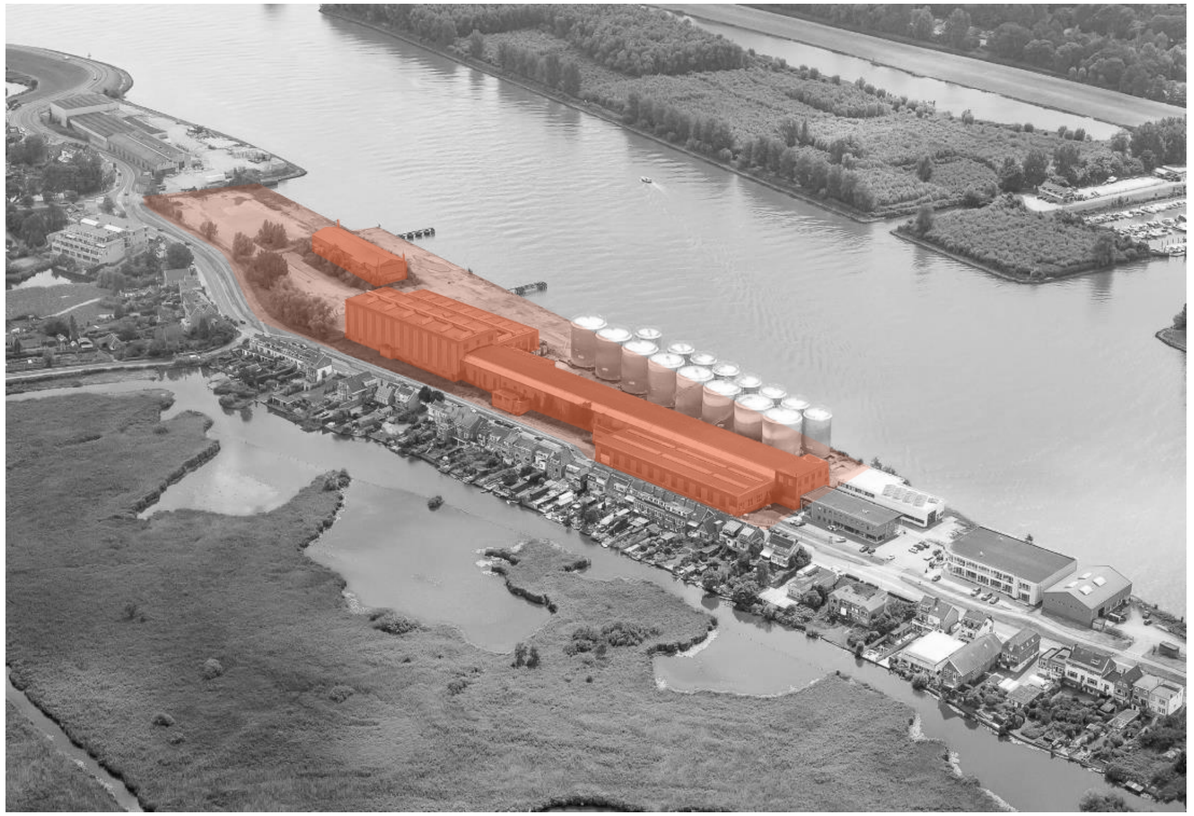
CONTEXT

KLOOS KINDERDIJK



Located in Alblasserdam

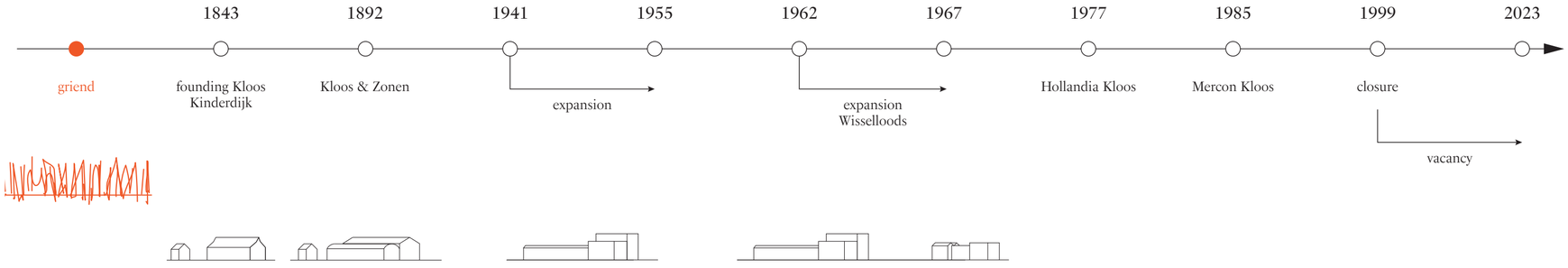
KLOOS KINDERDIJK



inbetween Noord river and boezem of Kinderdijk

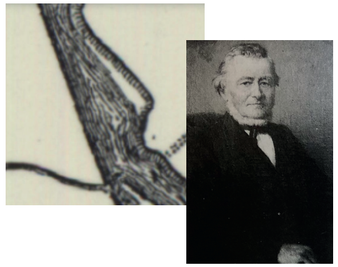
HISTORY OF KLOOS

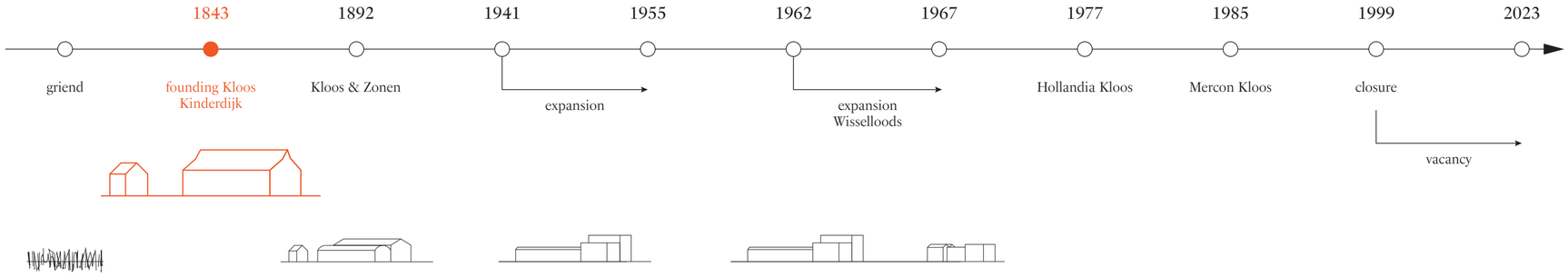




From griend to factory to ruin

HISTORY OF KLOOS





From griend to factory to ruin

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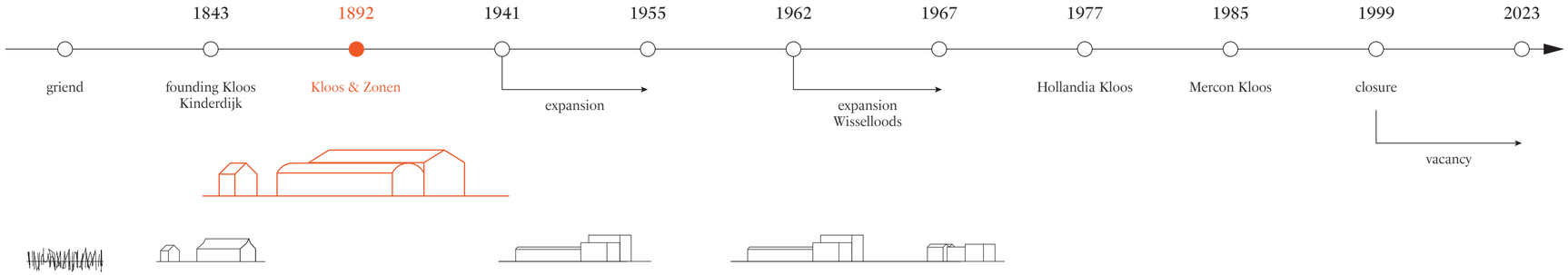

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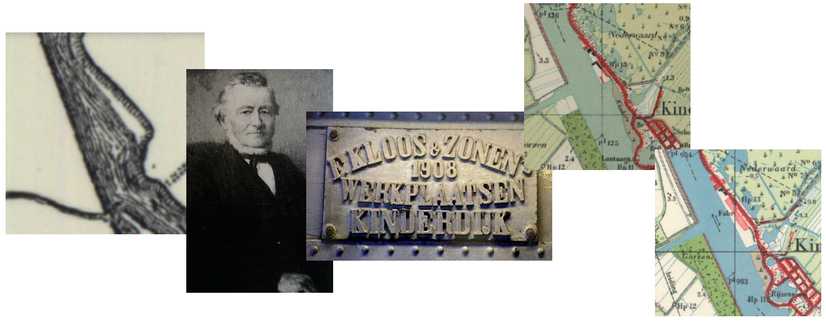

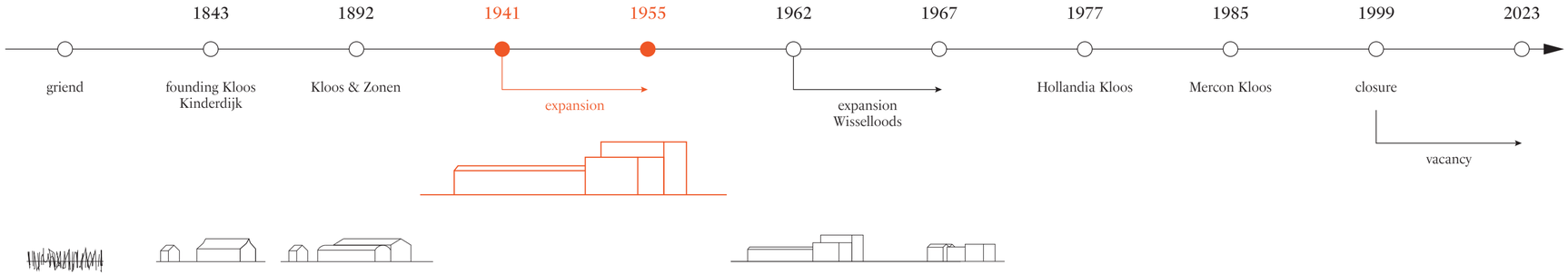

From griend to factory to ruin

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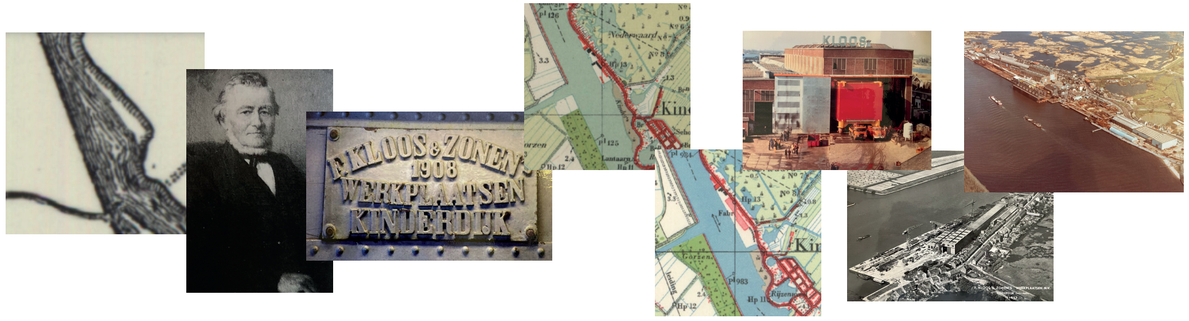

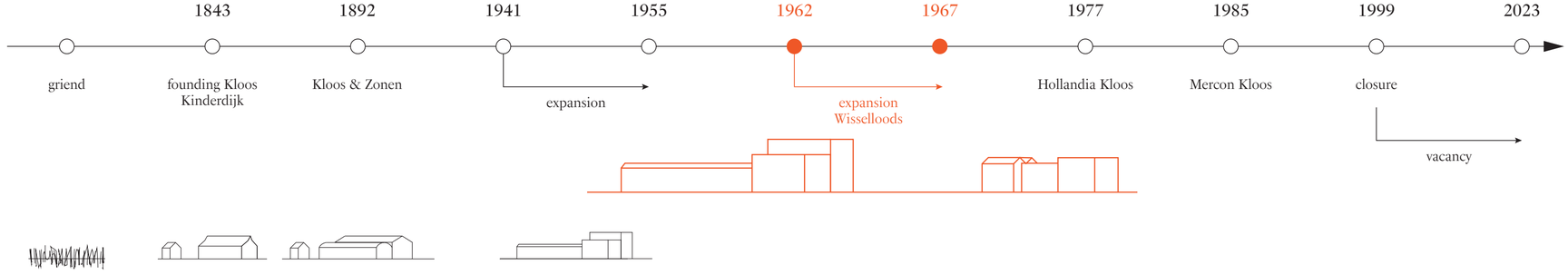

From griend to factory to ruin

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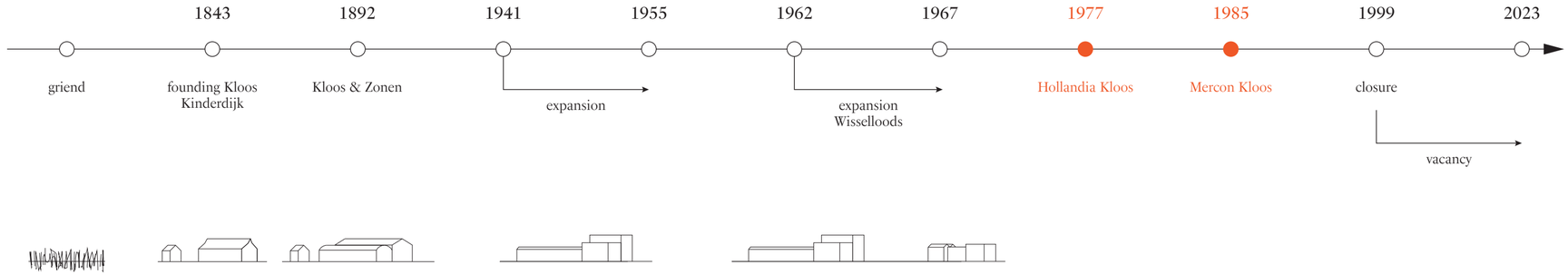

From griend to factory to ruin

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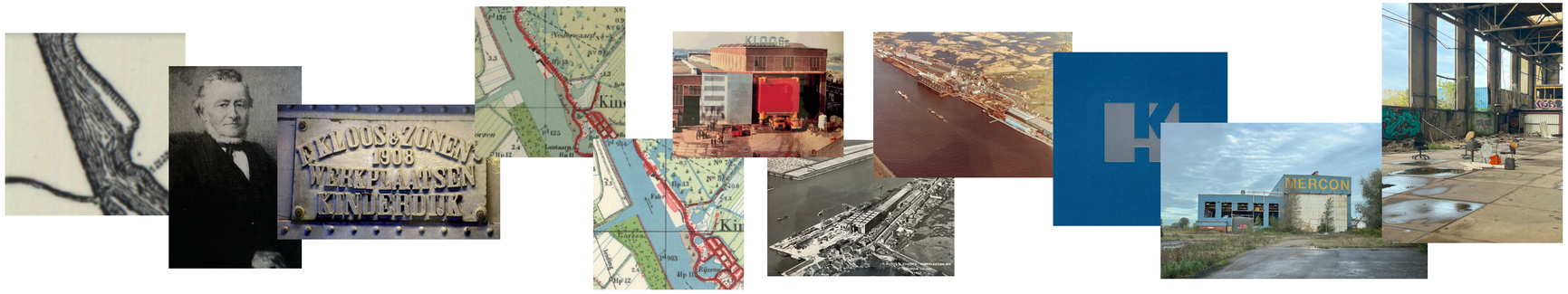


1843 griend

1892 founding Kloos Kinderdijk

1941 Kloos & Zonen

1955 expansion

1962 expansion Wisselloods

1967

1977 Hollandia Kloos

1985 Mercon Kloos

1999 closure

2023 vacancy



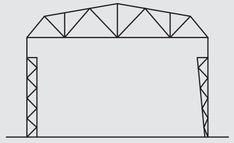
From griend to factory to ruin

VALUES OF INDUSTRIAL HERITAGE

Research

TANGIBLE VALUES

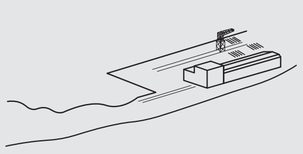
Material fabric



steel frame

openess created by the steel framing

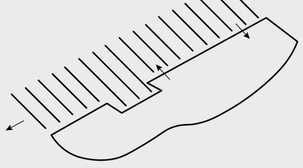
Components



large site with buildings from different times

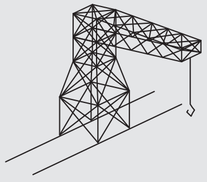
the site has grown over time

Setting



next to the water

Machinery



cranes

crane rails

air ducts from verfspuitcabine

Written documentation

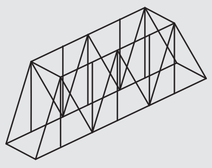


photo's create an idea of how the site was used

original plans in the archives

images of the workers and the production process

Goods created by the industry

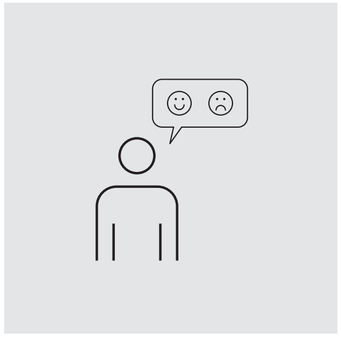


bridges built by Kloos

high voltage towers

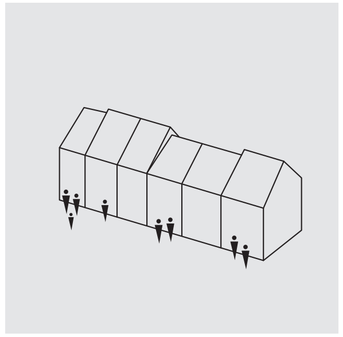
INTANGIBLE VALUES

Memories and stories



small village, everyone knew each other

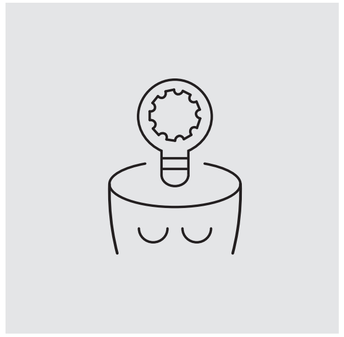
Working class society



religious character

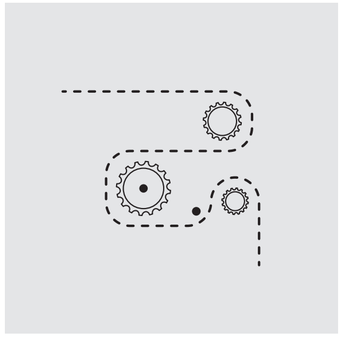
hard working

Human skill and knowledge



technical innovation

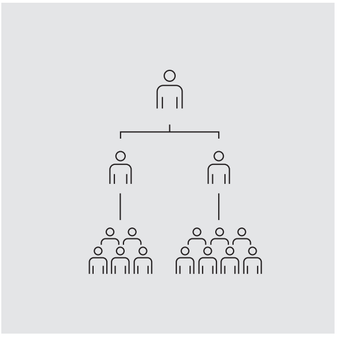
Productivity



busy, loud atmosphere

complex entity of the different steps in the manufacturing process

Organisation of labour



different types of functions: directors, administrative team, technical drawers, and heavy labour workers

MASTERPLAN

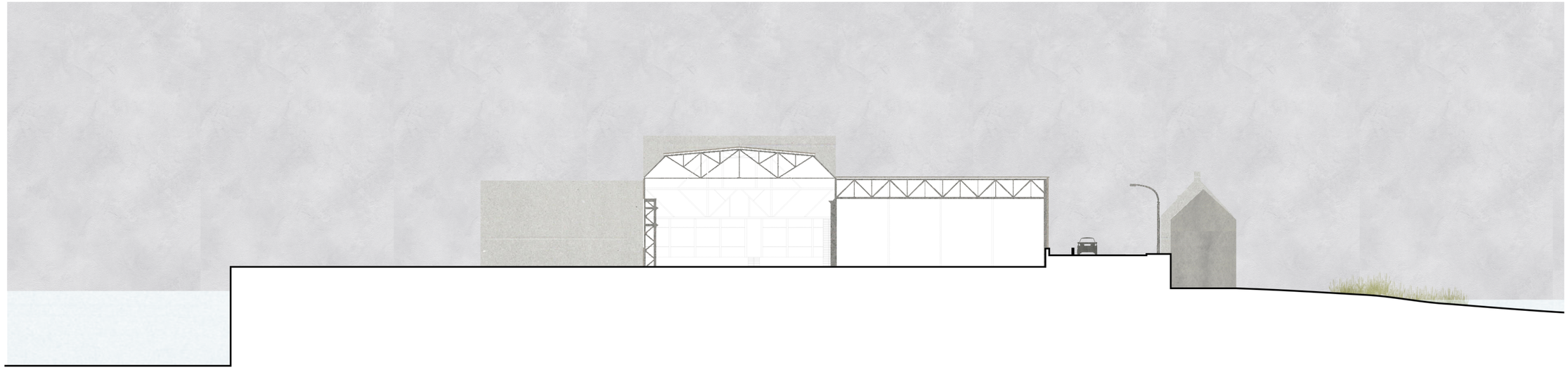
STARTING POINTS



Bedrijvig Hollands Dijkdorp (based on Structuurvisie Alblasserdam 2040)

Implement the vision of Alblasserdam

STARTING POINTS



improve spatial relationship with the surroundings

STARTING POINTS



source: Topotijdreis

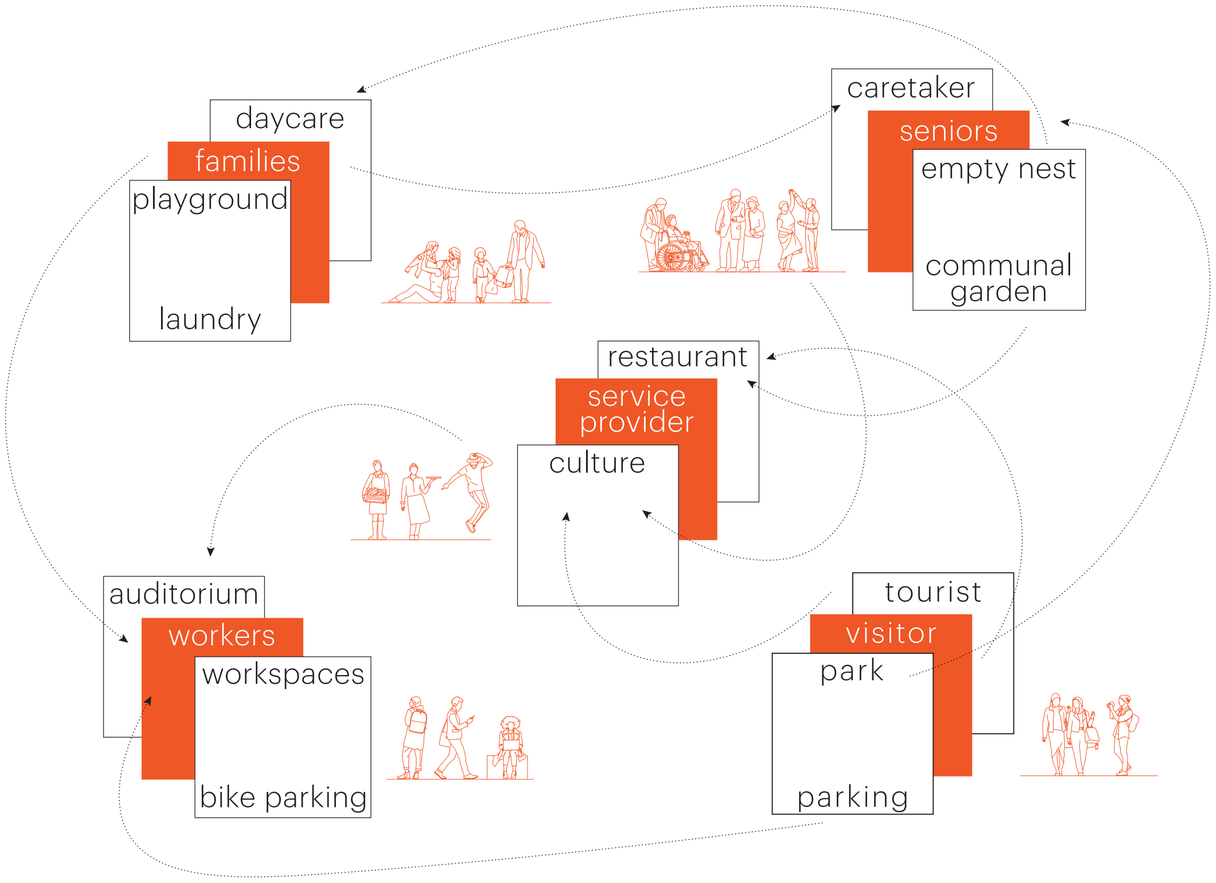


source: Historische Vereniging West-Alblasserwaard

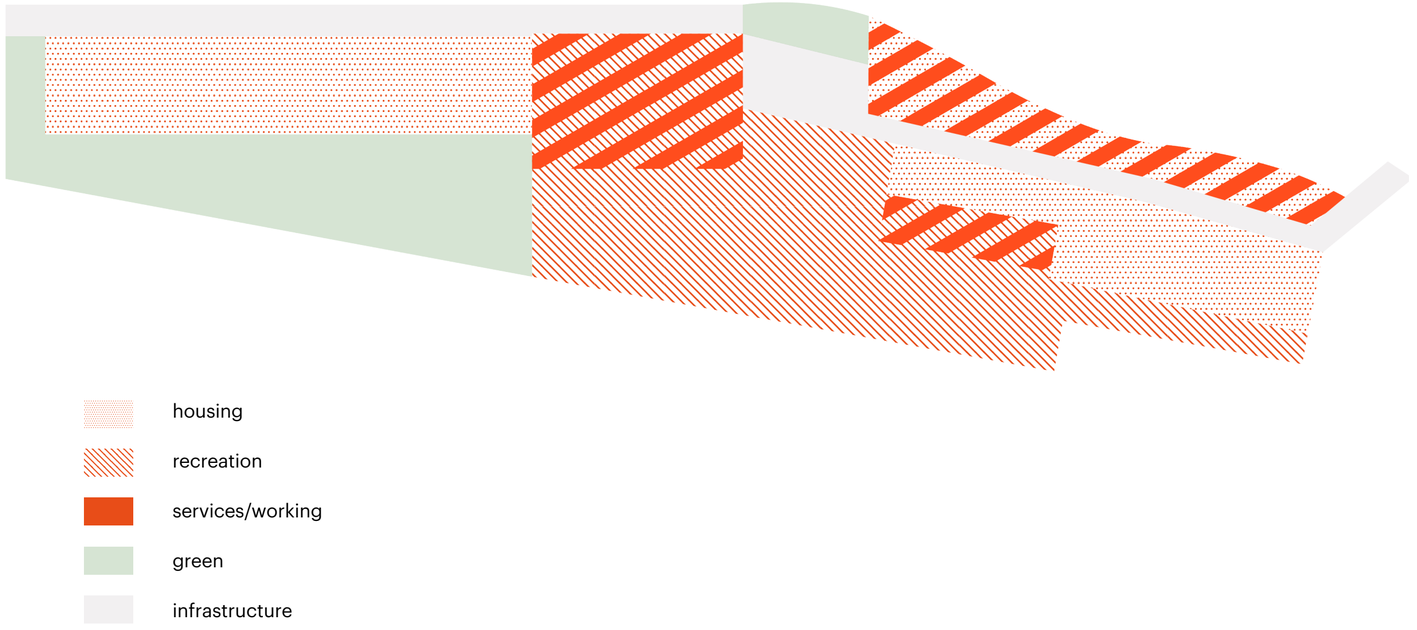


Tell the story of the location's multiple timelayers

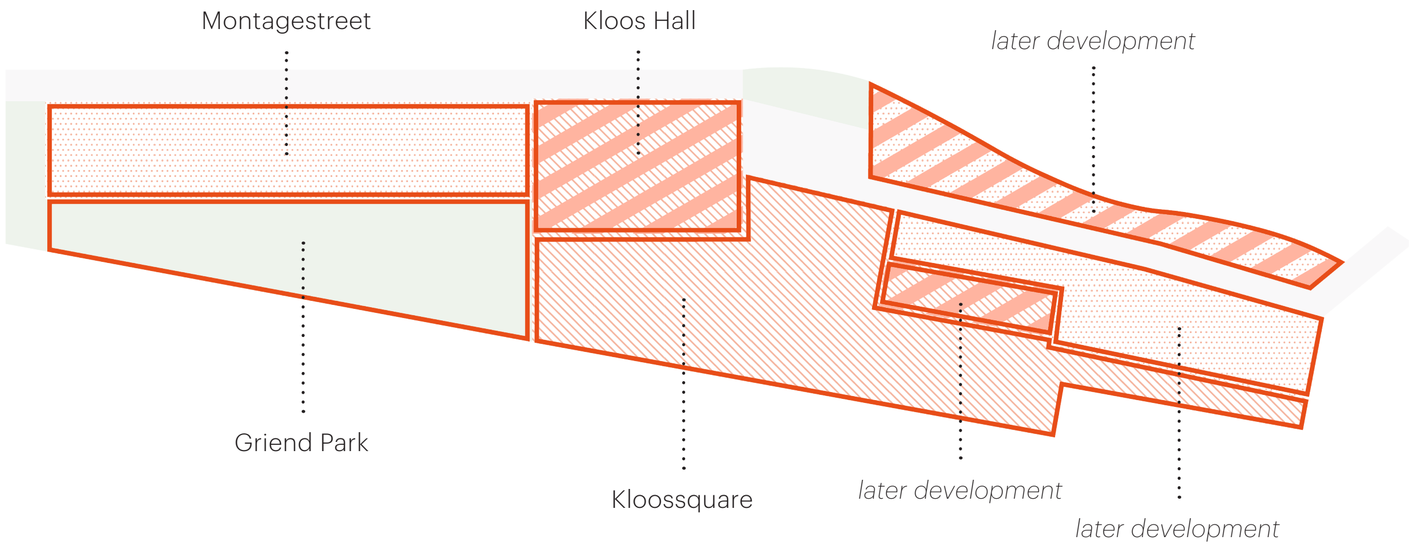
PROGRAM & USERS



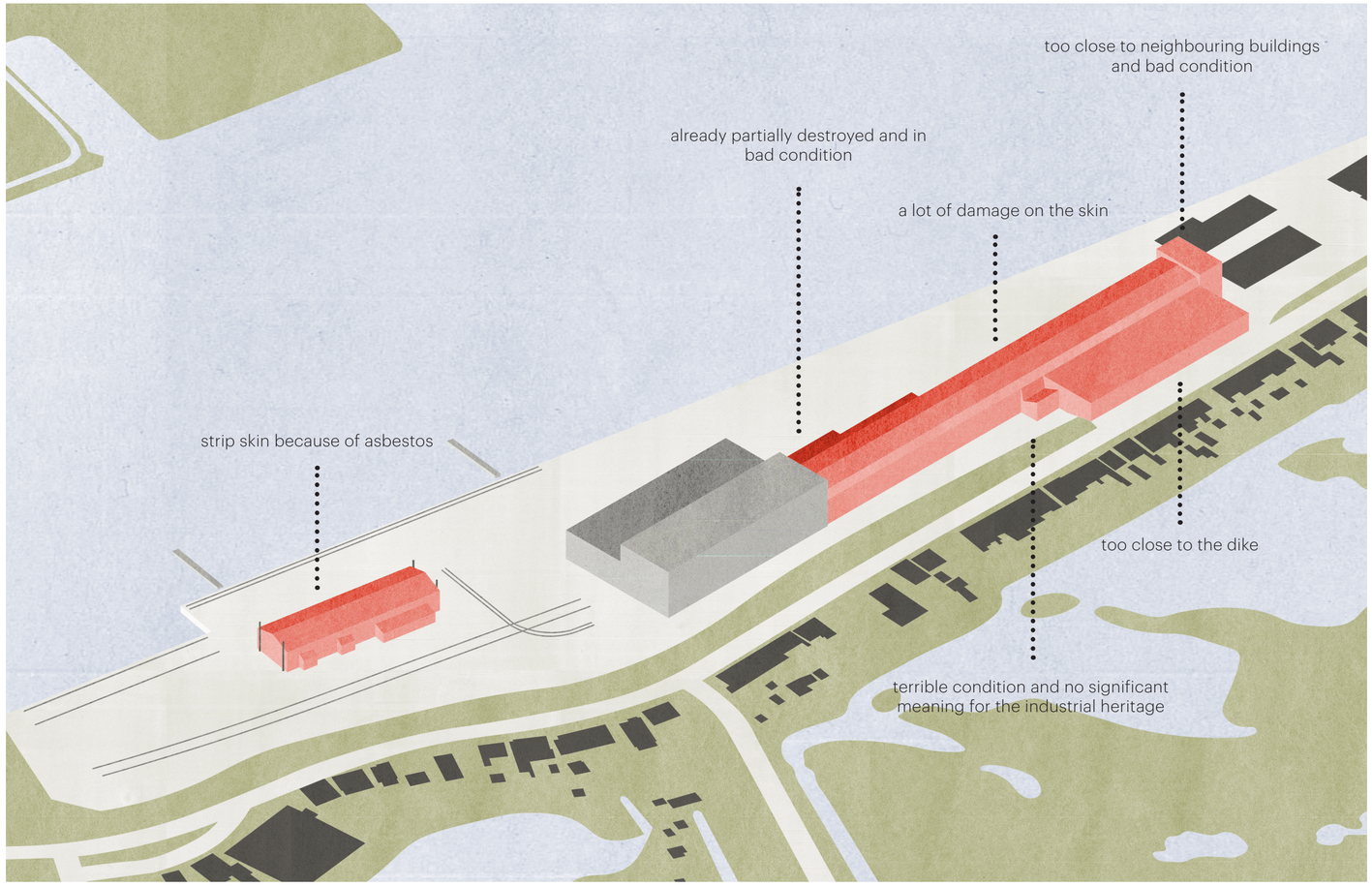
ZONING


housing
recreation
services/working
green
infrastructure

ZONING

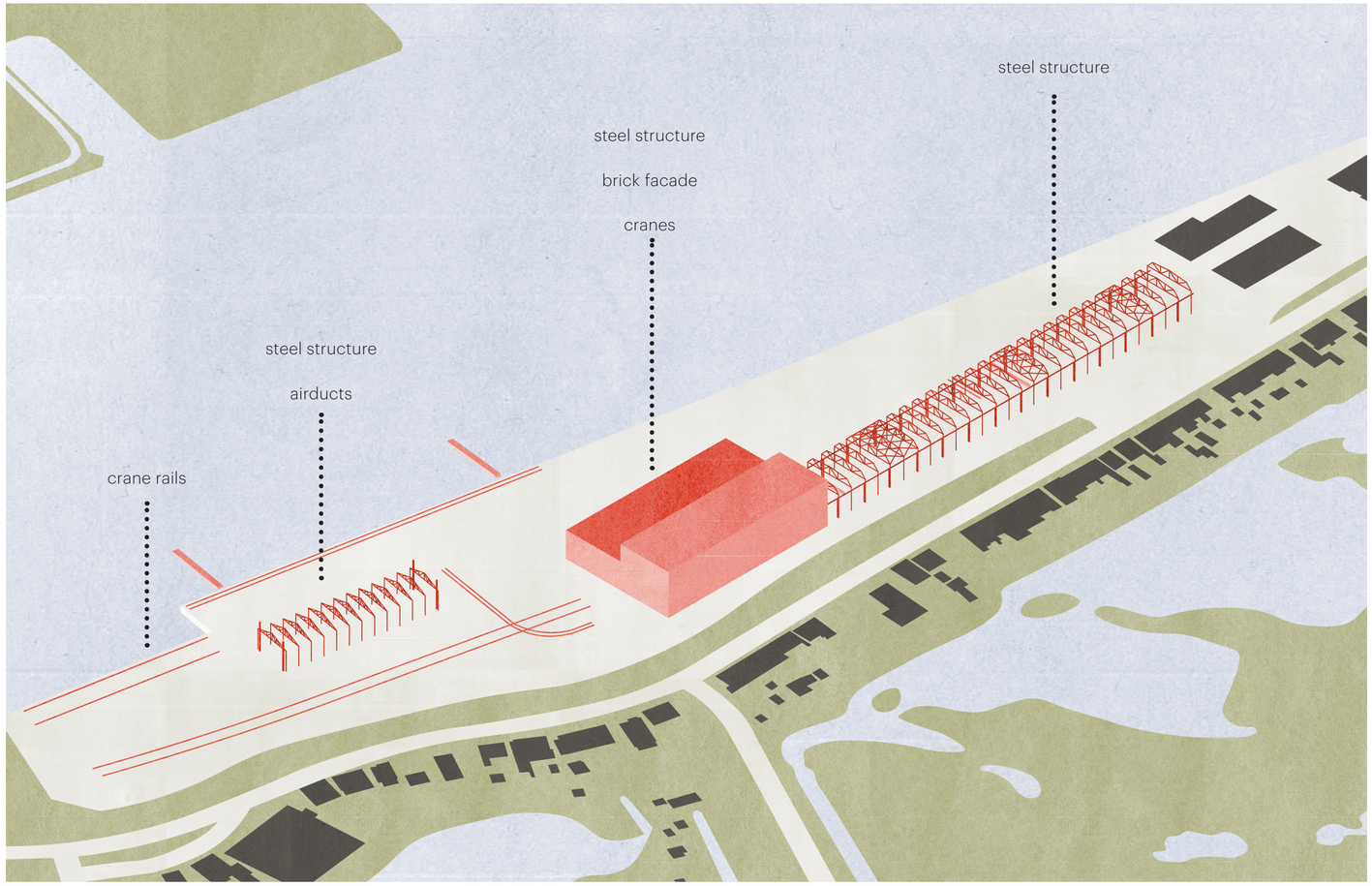

Montagestreet
Kloos Hall
later development
Griend Park
Kloossquare
later development
later development

INDUSTRIAL HERITAGE



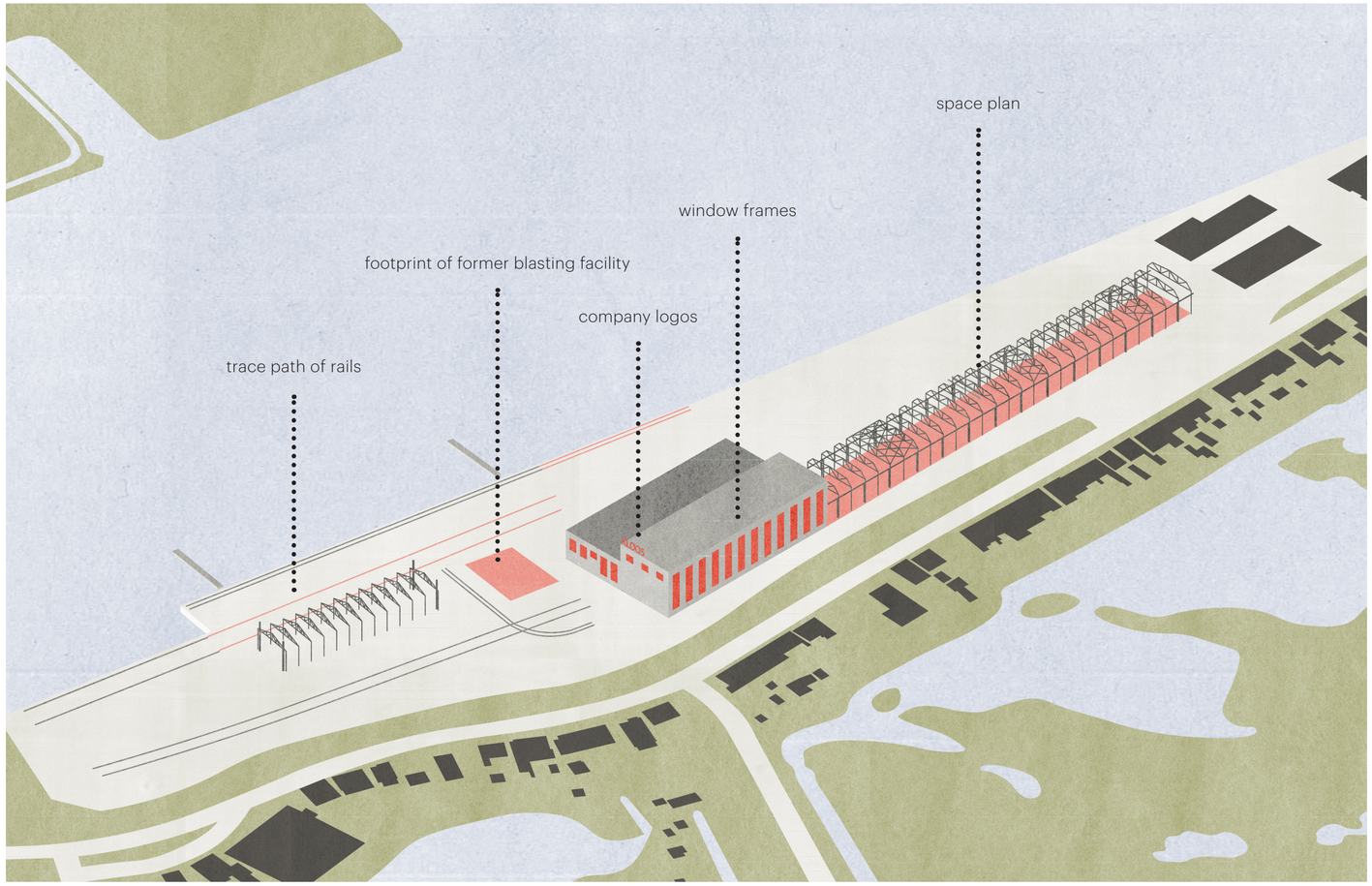
demolish

INDUSTRIAL HERITAGE



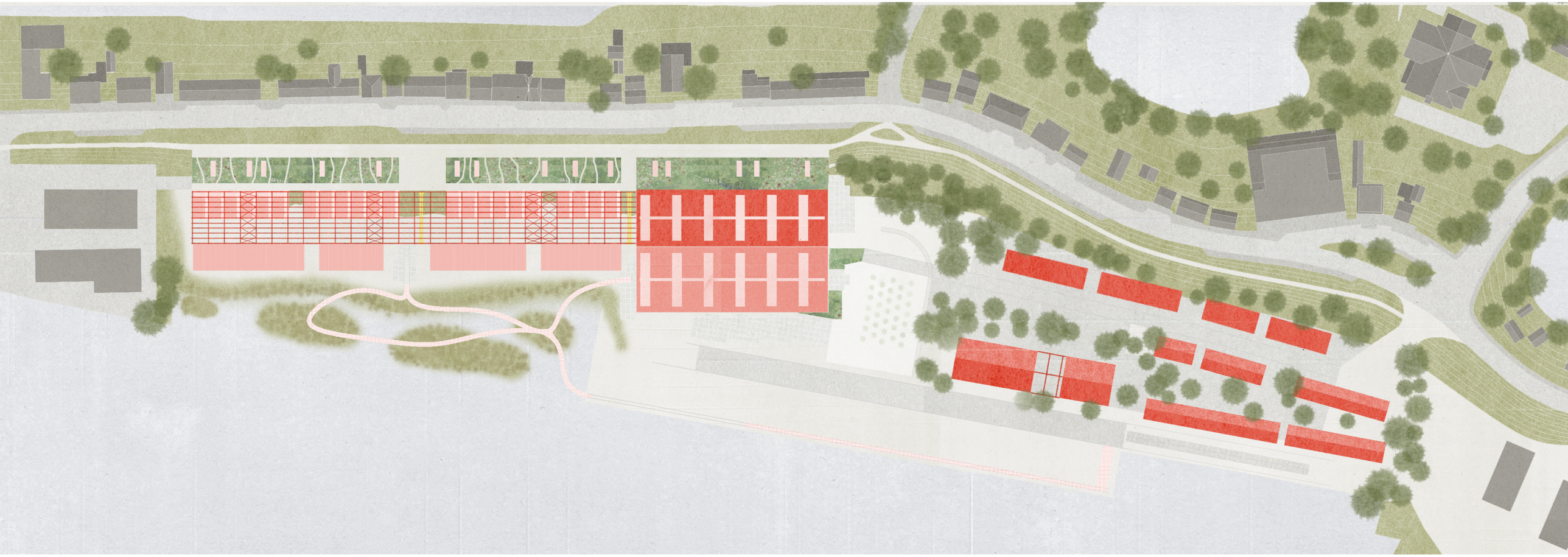
keep

INDUSTRIAL HERITAGE



reintroduce

MASTERPLAN



1:1.000

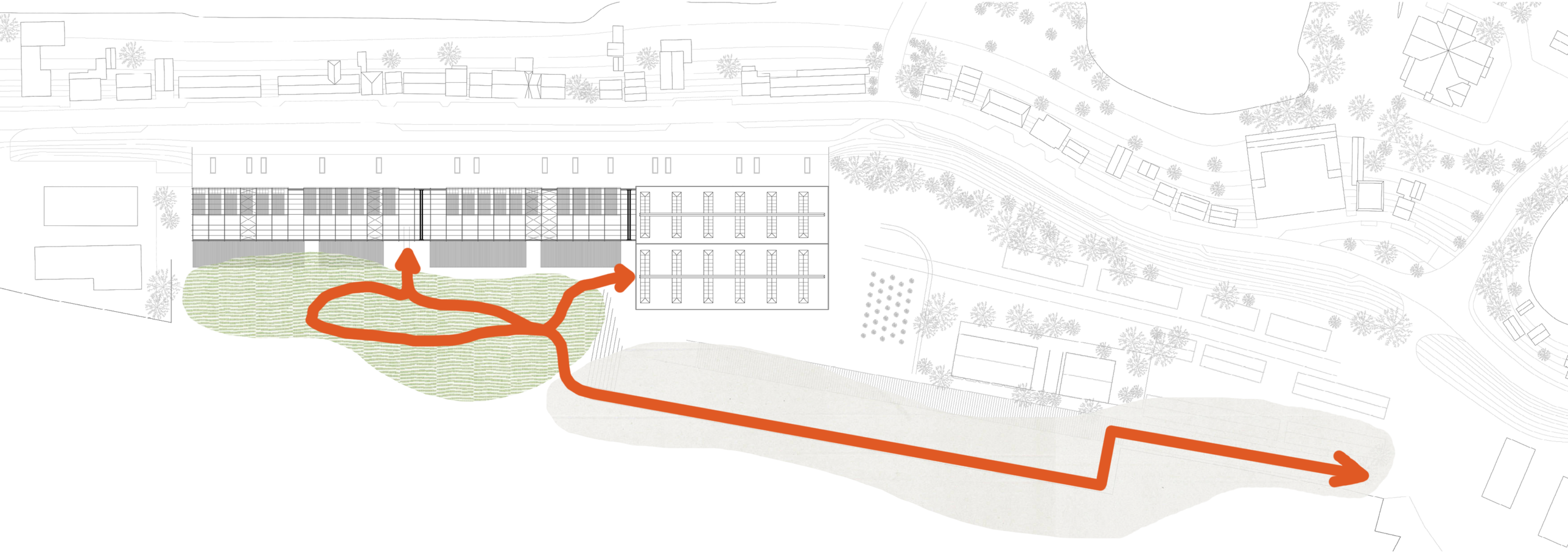
DESIGN

LANDSCAPE DESIGN



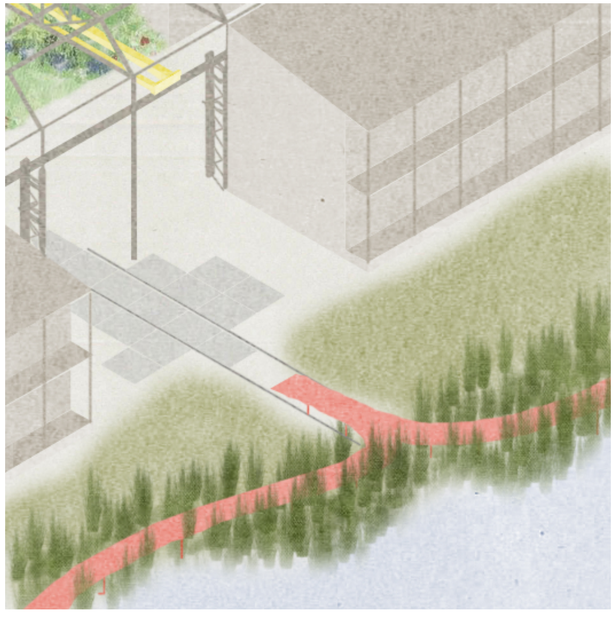
1:600

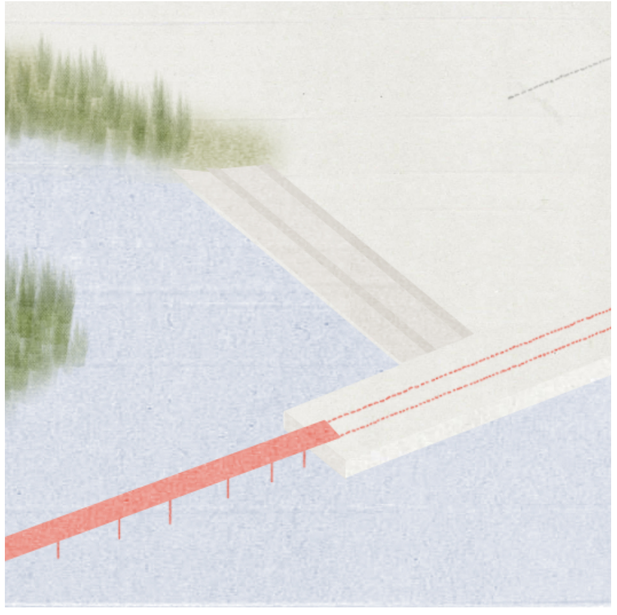
PUBLIC PATH

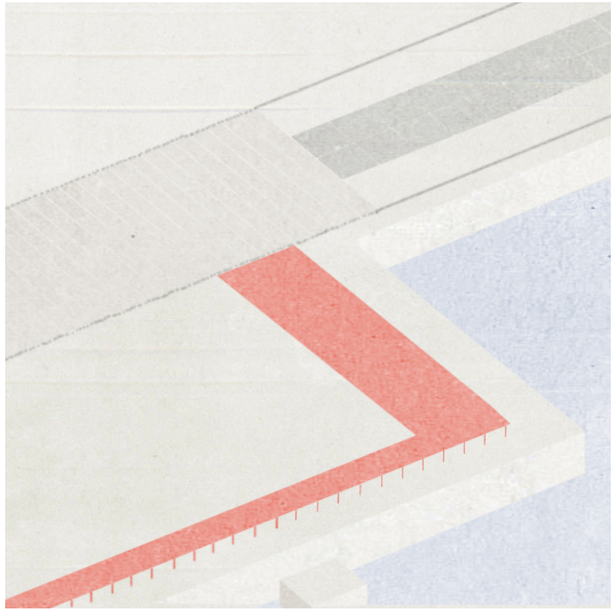


public route along the waterfront
natural - industrial

PUBLIC PATH







PATCHWORK OF PAVEMENTS

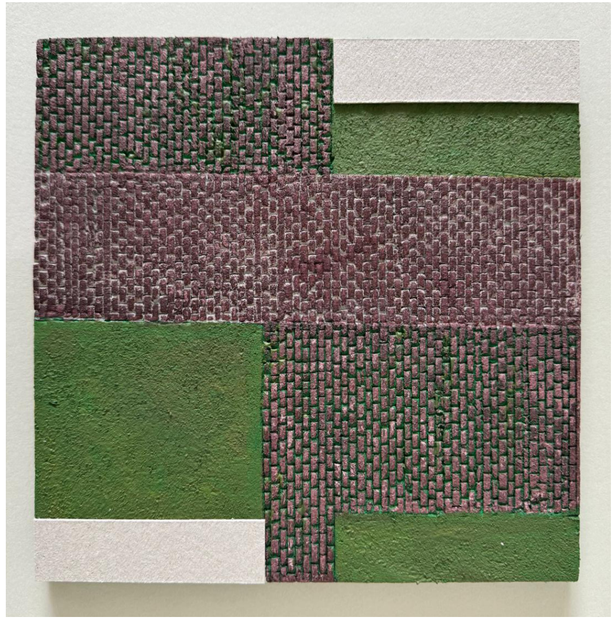




existing

PATCHWORK OF PAVEMENTS



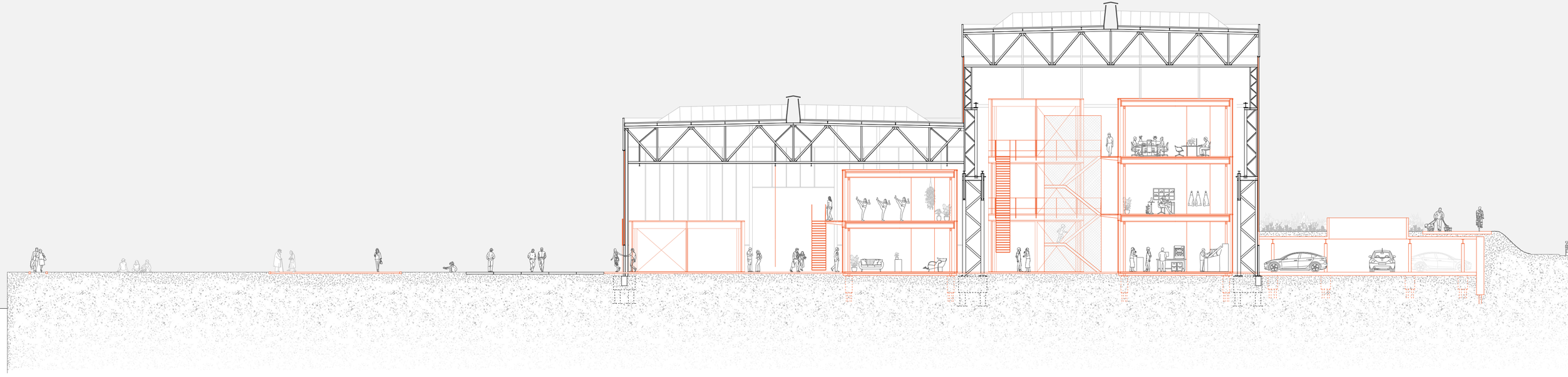


continuation

KLOOSHAL

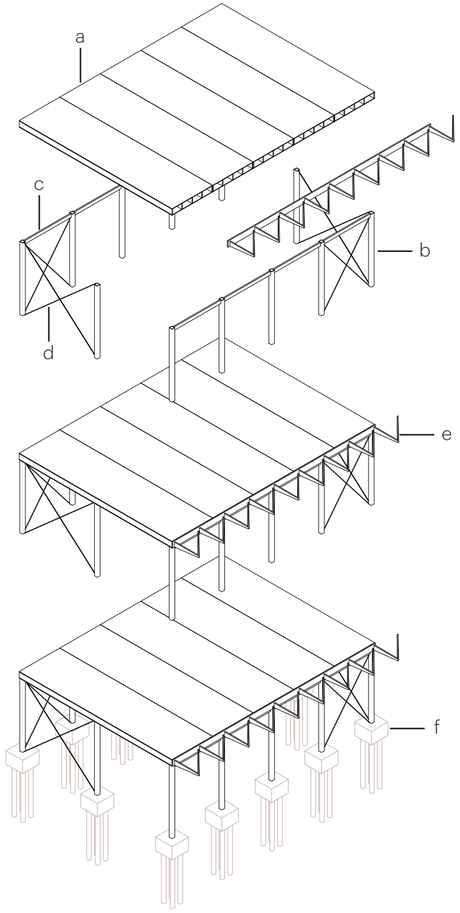


KLOOSHAL



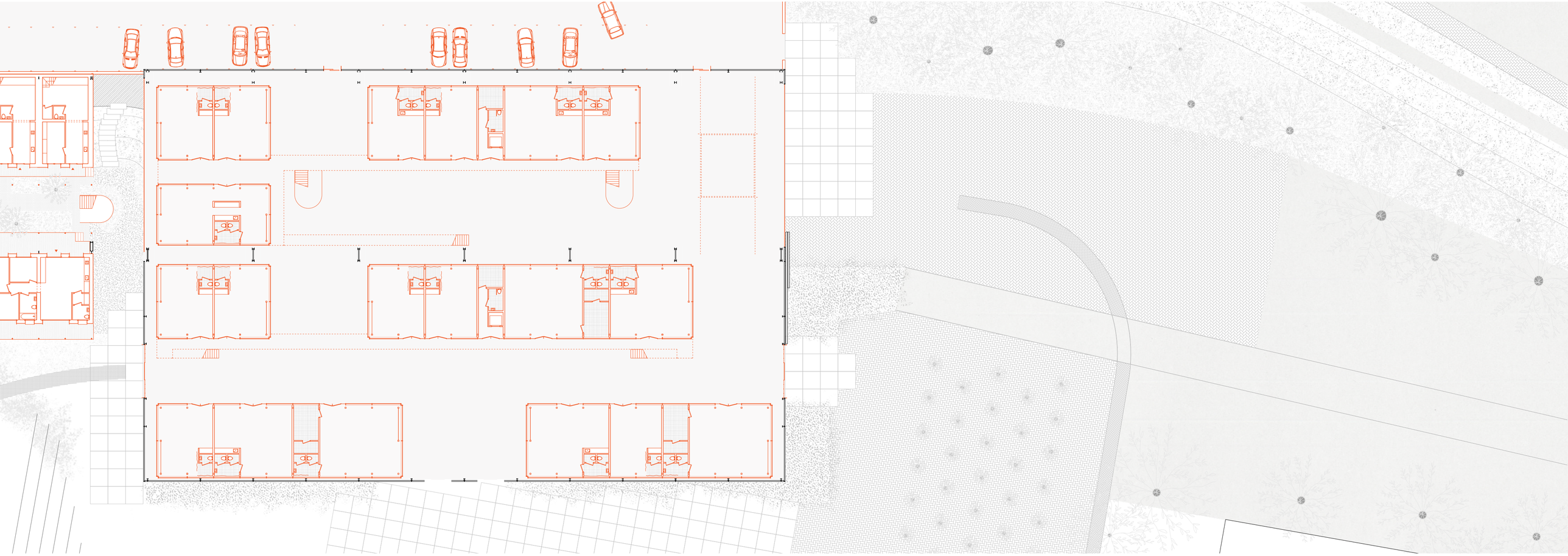
1:200

CONSTRUCTION



a 7500-9000 mm Kerto Ripa Box floor slab, KRB-2400x31-5x51x400-2400x2
b 180/10/3300-3900 mm square hollow steel column
c 60/180 mm glulam beam
d stability bracing
e steel gallery structure, cantilivering consoles
f concrete foundation, pile footing

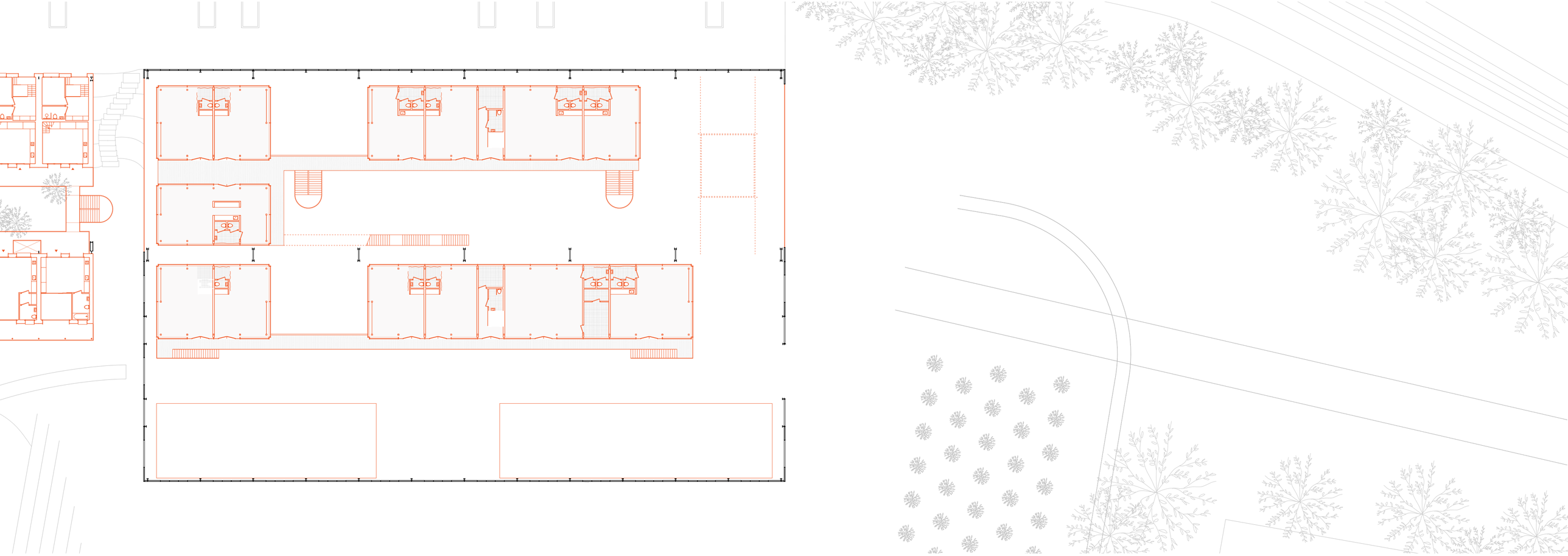
KLOOSHAL



1: 300

ground floor

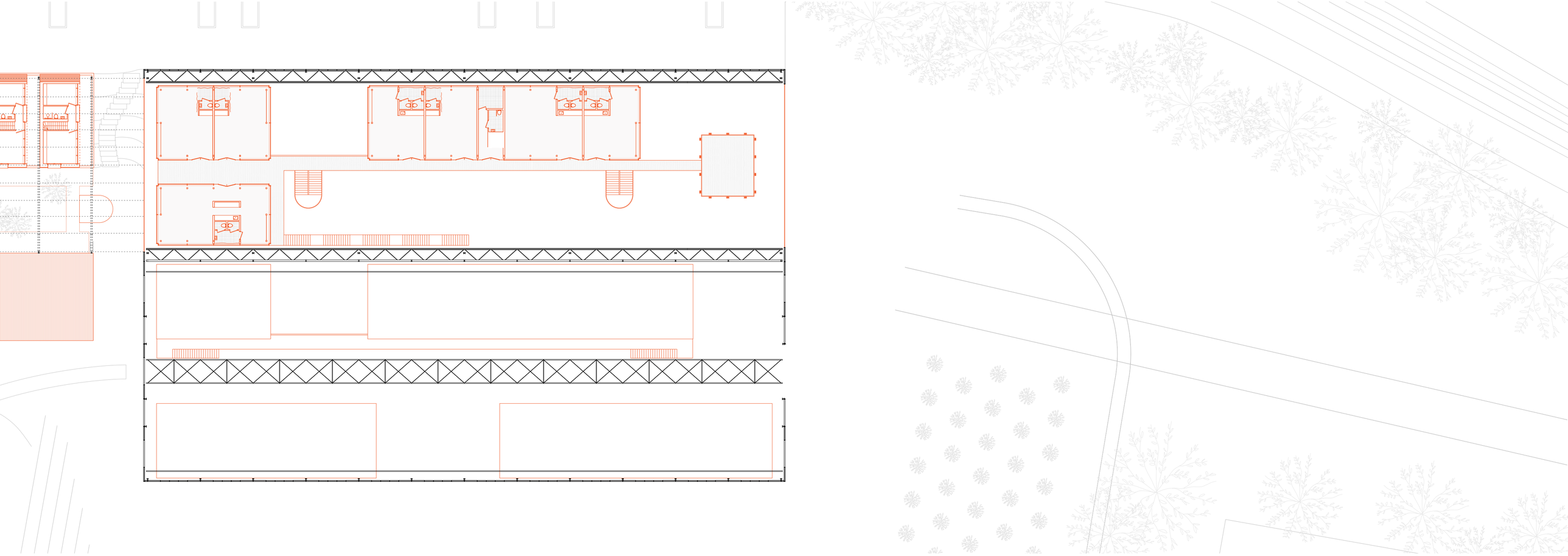
KLOOSHAL



1: 300

first floor

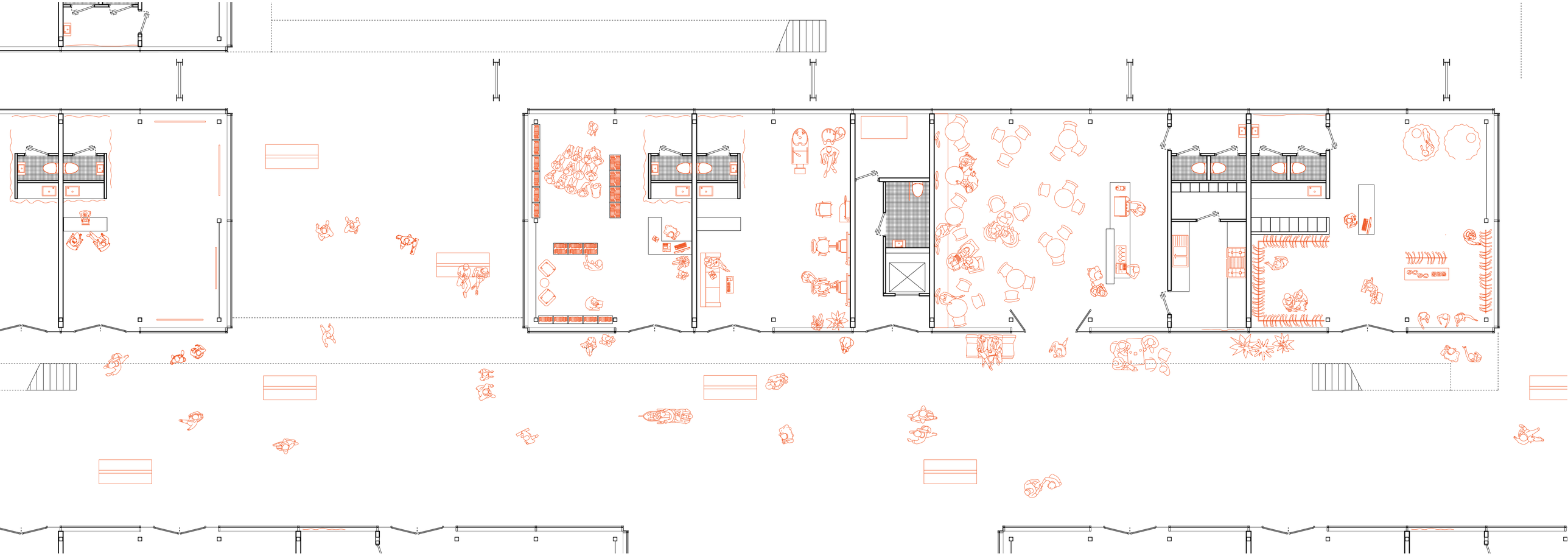
KLOOSHAL



1: 300

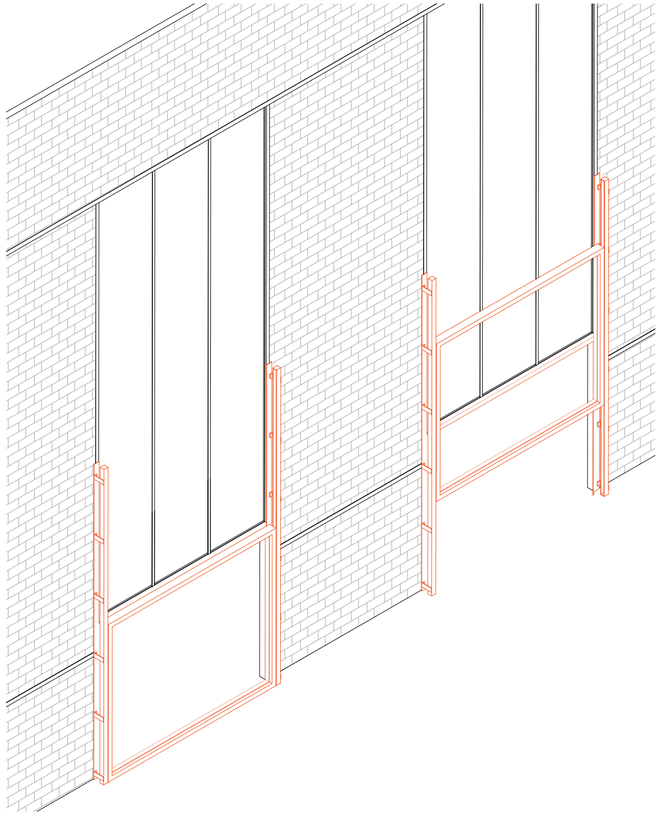
second floor

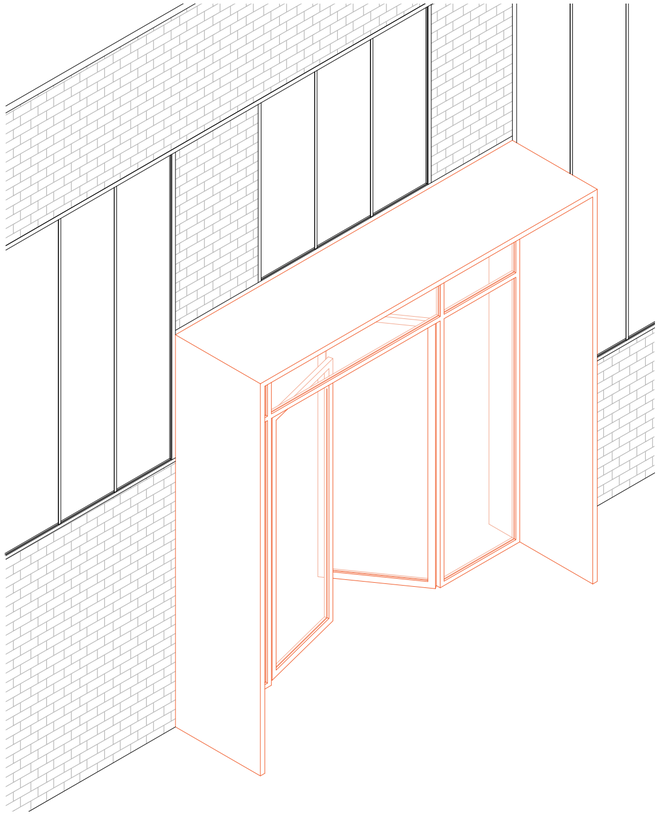
VARIATION OF UNITS



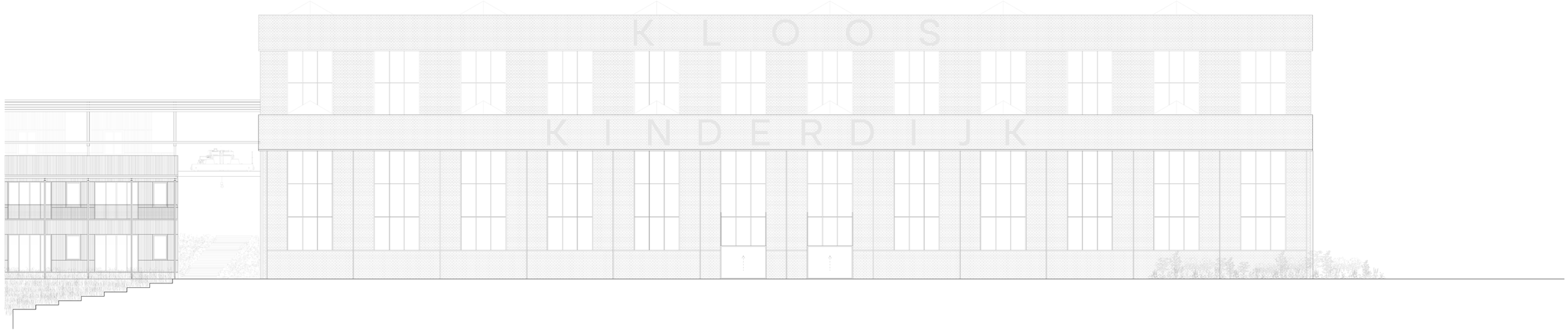
1:100

INTERVENTIONS TO THE EXISTING





ELEVATION WATERFRONT

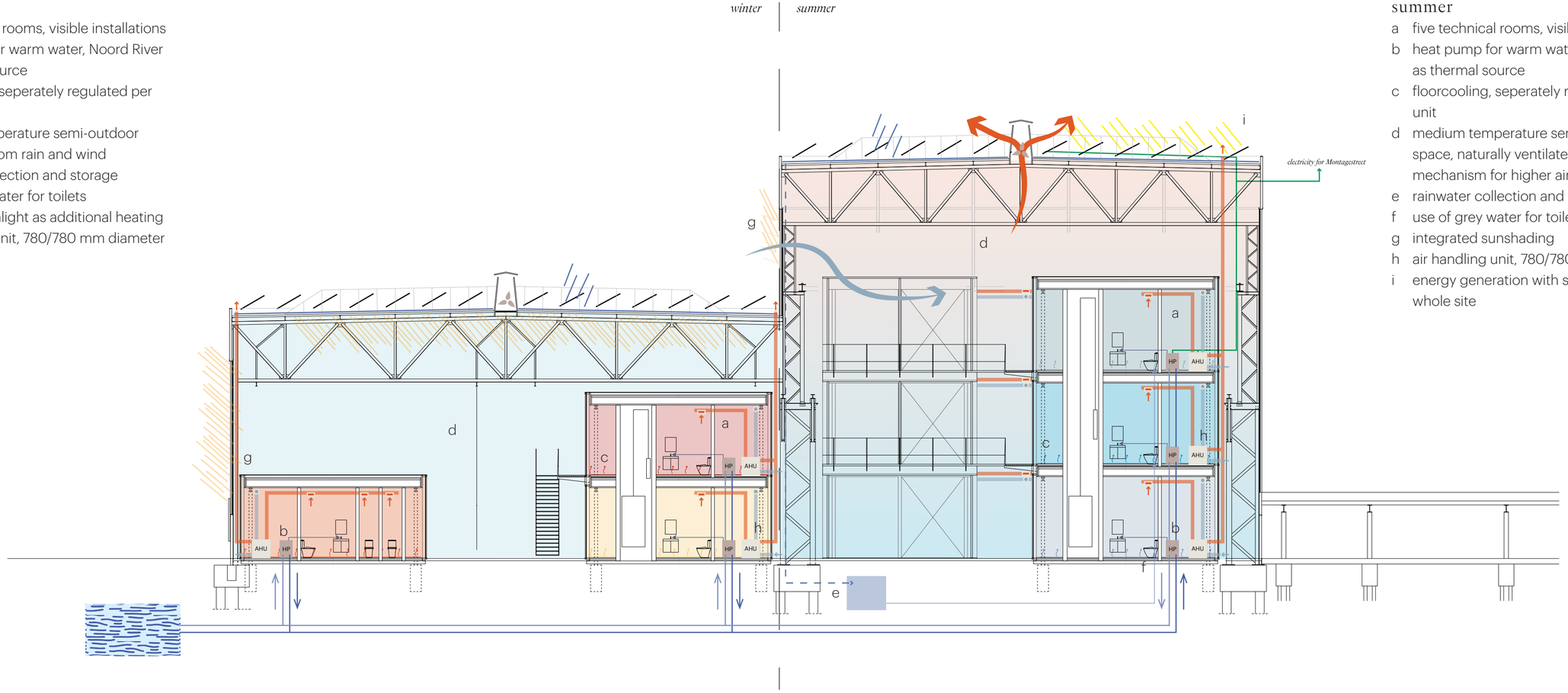


1:200

CLIMATE DESIGN

winter

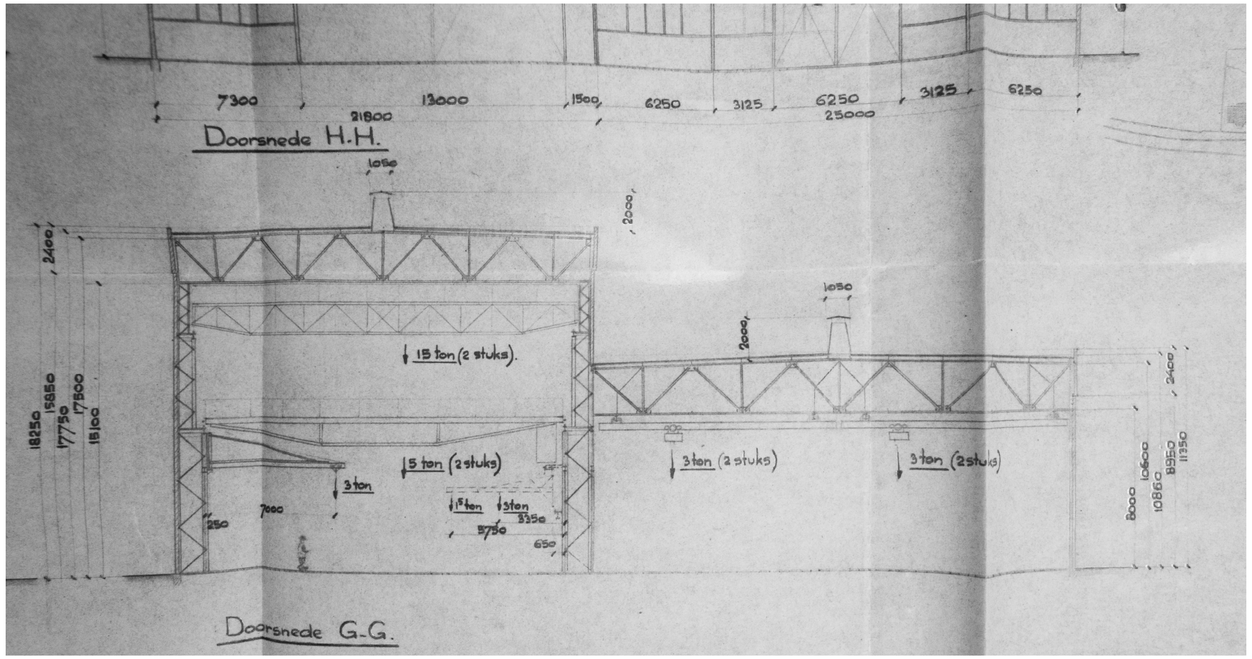
a five technical rooms, visible installations
b heat pump for warm water, Noord River as thermal source
c floorheating, seperately regulated per unit
d medium temperature semi-outdoor space, free from rain and wind
e rainwater collection and storage
f use of grey water for toilets
g access of sunlight as additional heating
h air handling unit, 780/780 mm diameter



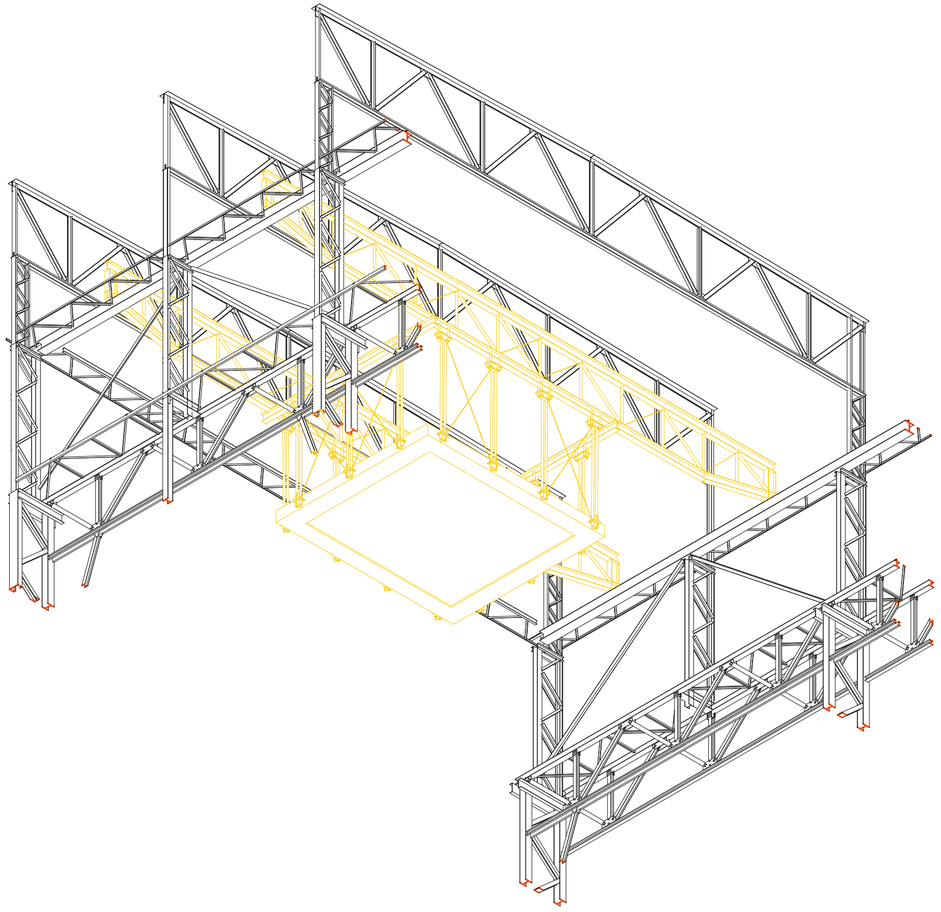
summer

a five technical rooms, visible installations
b heat pump for warm water, Noord River as thermal source
c floorcooling, seperately regulated per unit
d medium temperature semi-outdoor space, naturally ventilated, additional mechanism for higher air flow
e rainwater collection and storage
f use of grey water for toilets
g integrated sunshading
h air handling unit, 780/780 mm diameter
i energy generation with solar panels for whole site

MERCONPAVILION



MERCONPAVILION



ELEVATION MAIN ENTRANCE

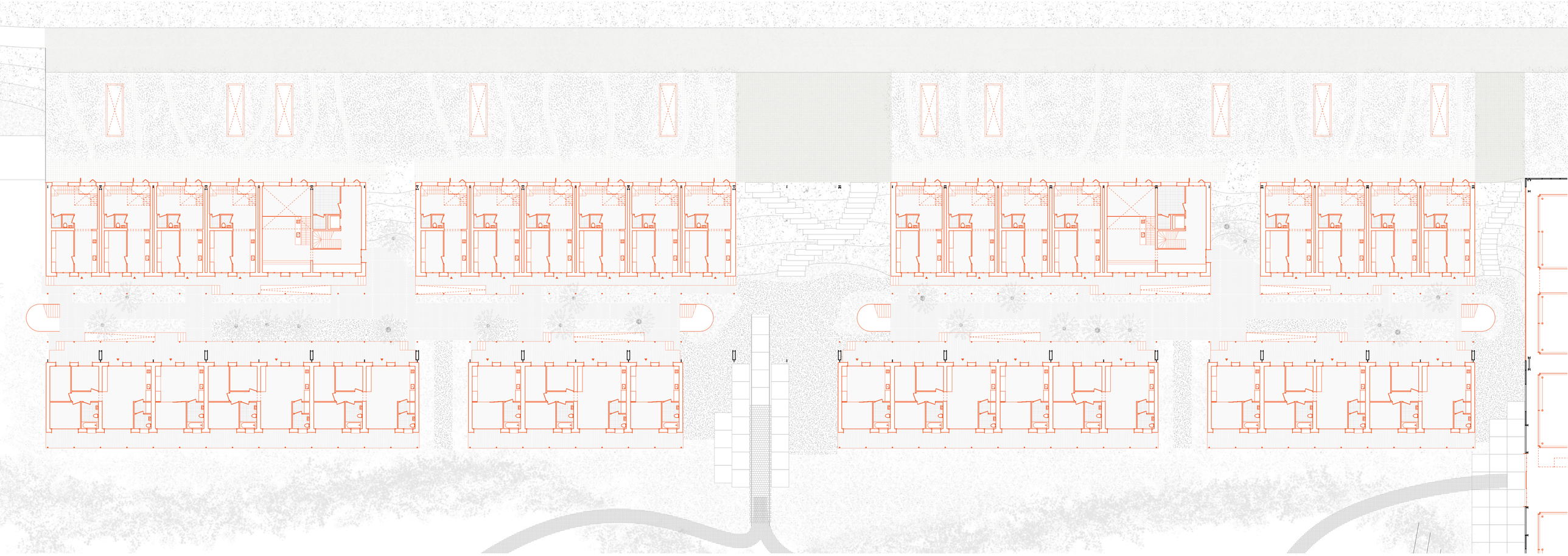


1:200

MONTAGESTRAAT



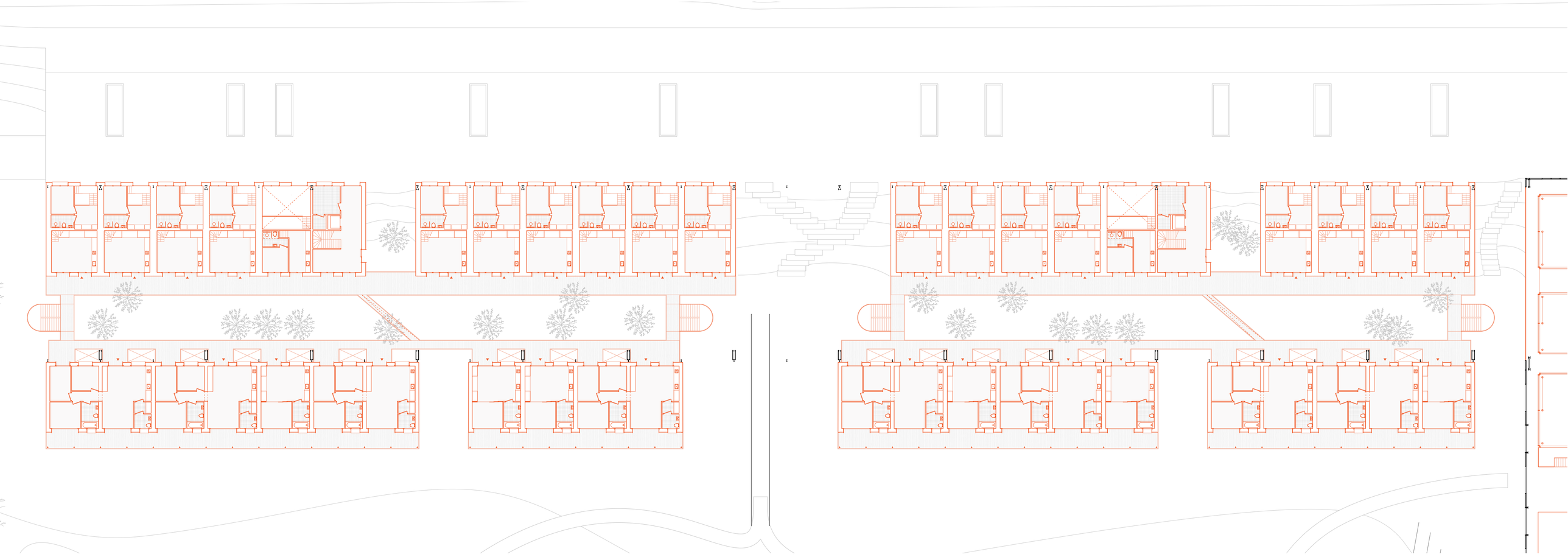
MONTAGESTRAAT



1:300

ground floor

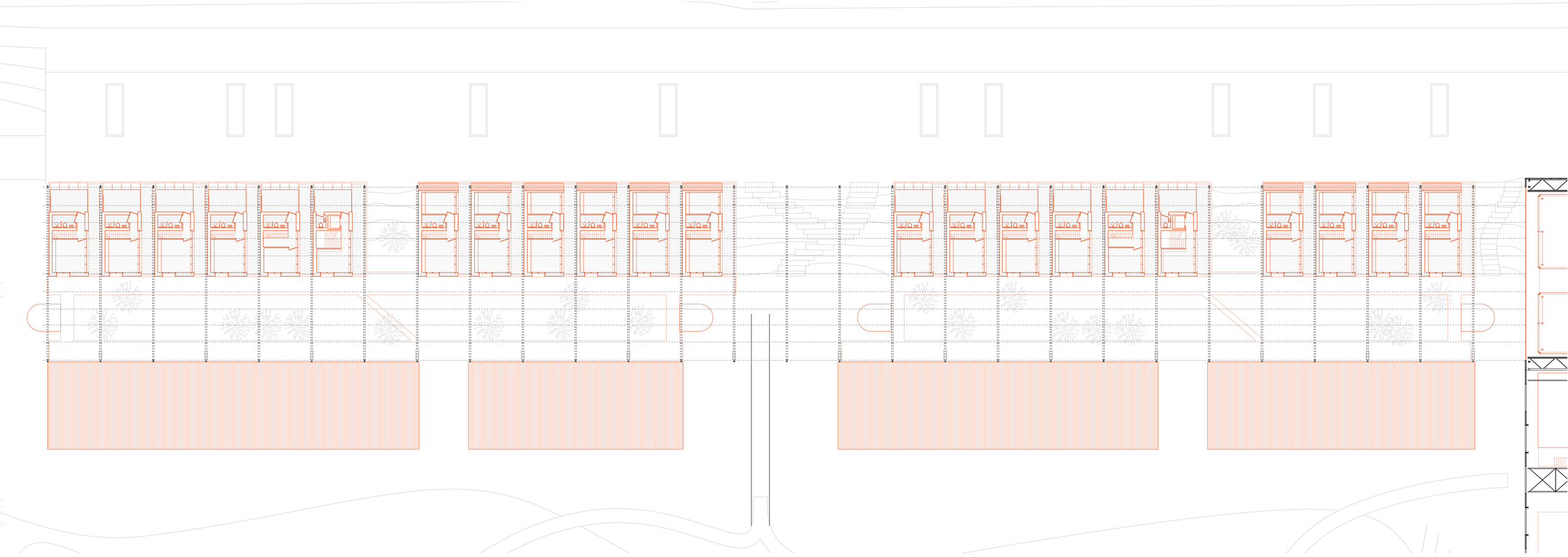
MONTAGESTRAAT



1:300

first floor

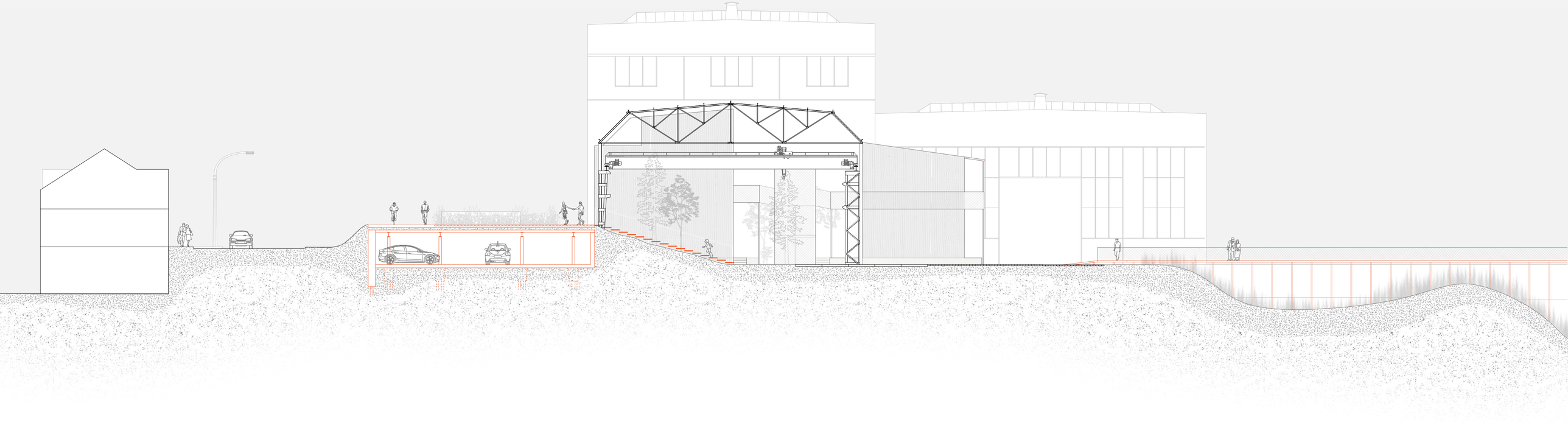
MONTAGESTRAAT



1:300

second floor

MONTAGESTRAAT



1:200

ELEVATION WEST-KINDERDIJK



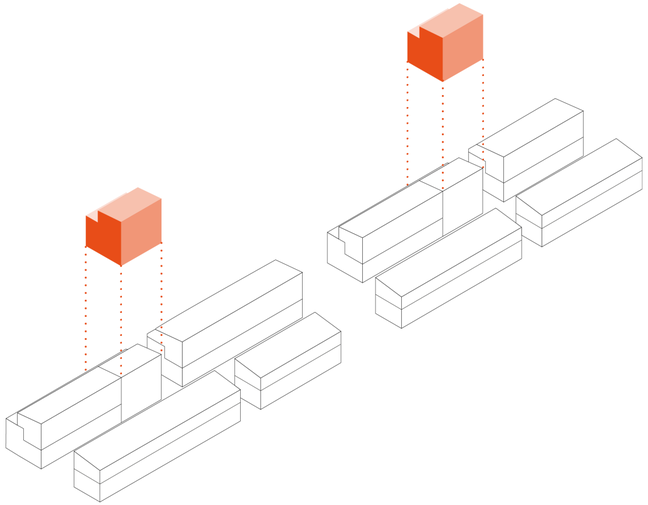
1:100

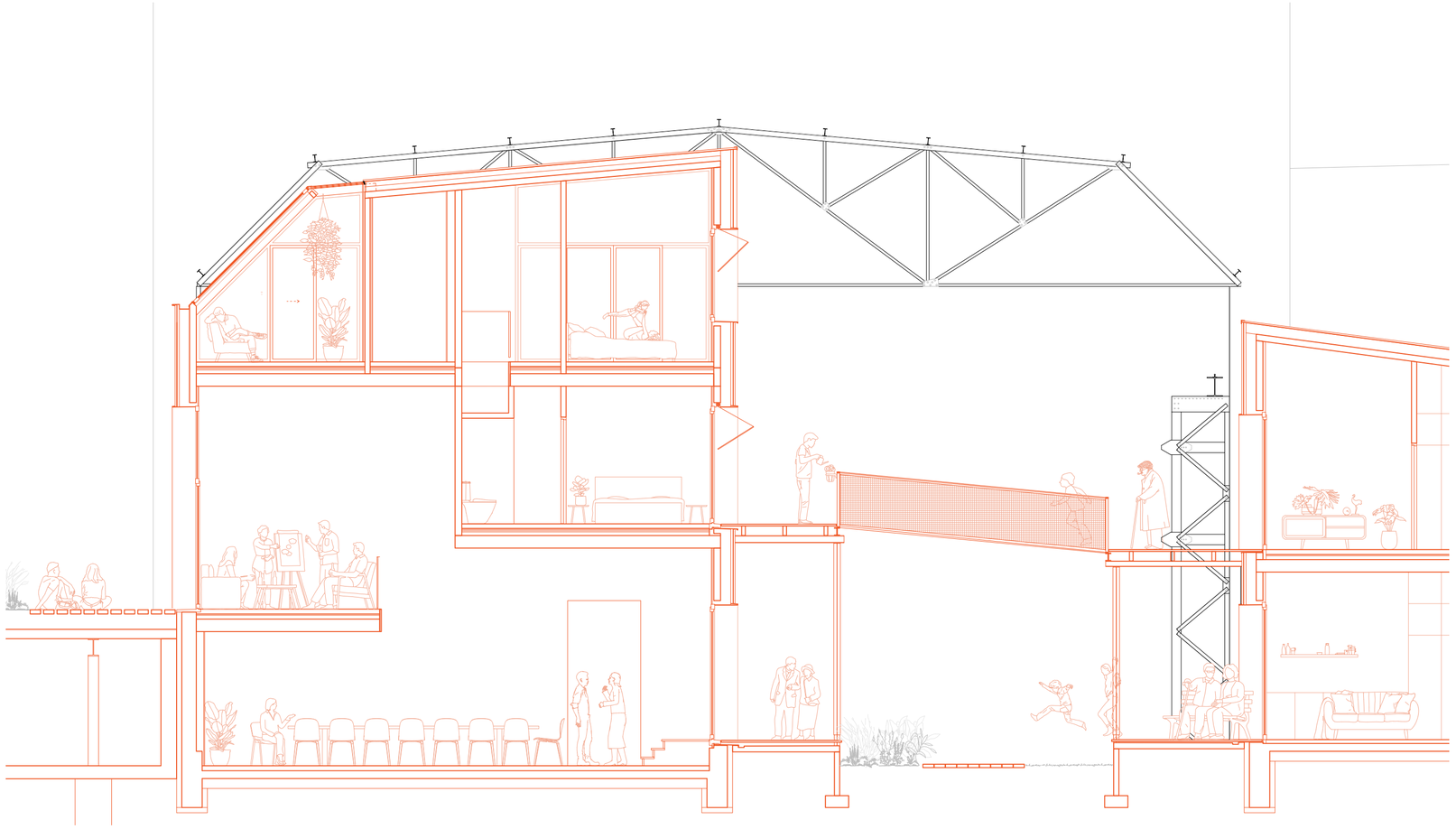
ELEVATION WATERFRONT



1:100

COLLECTIVE SPACE

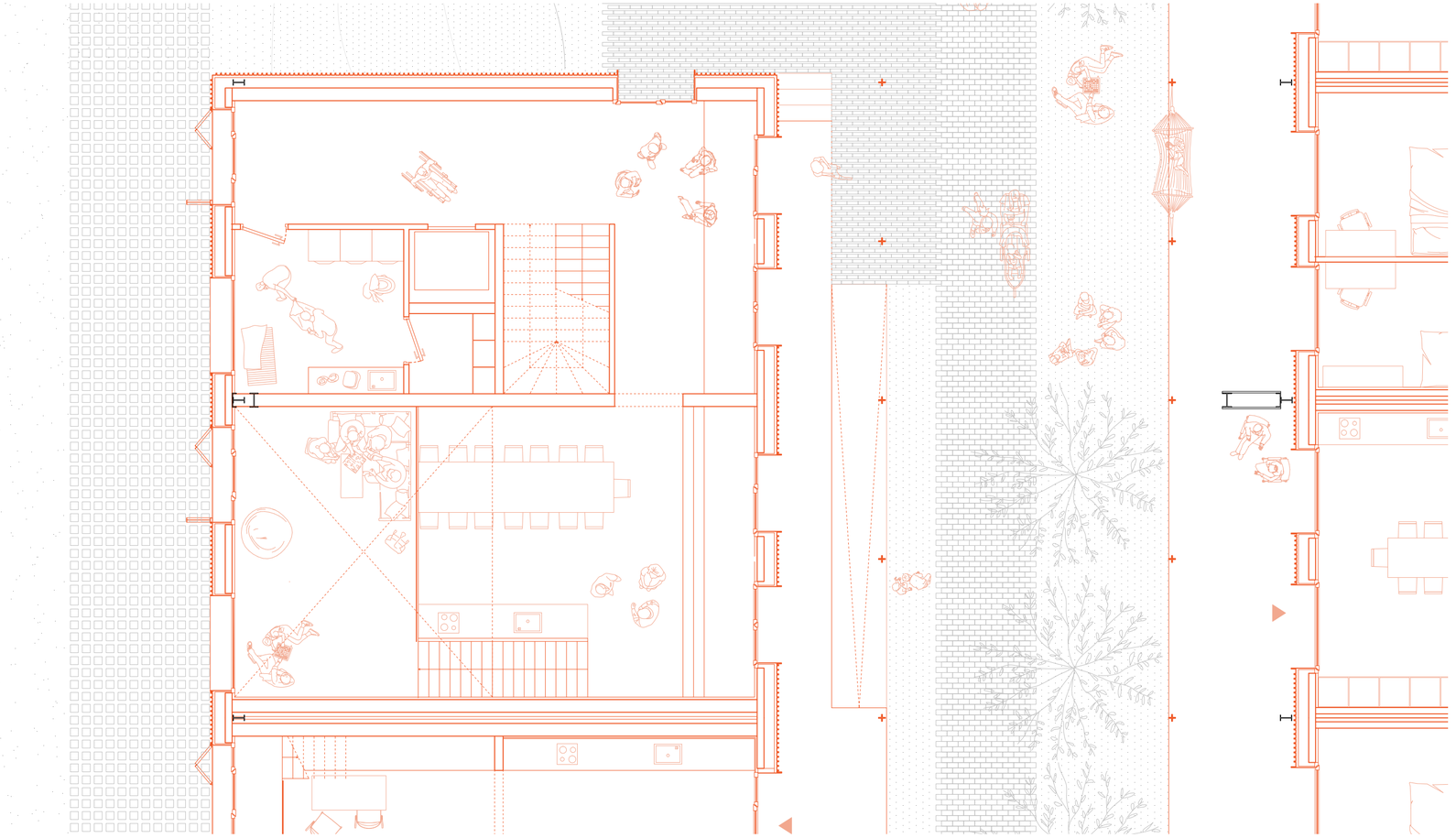




1/75

2 collective units

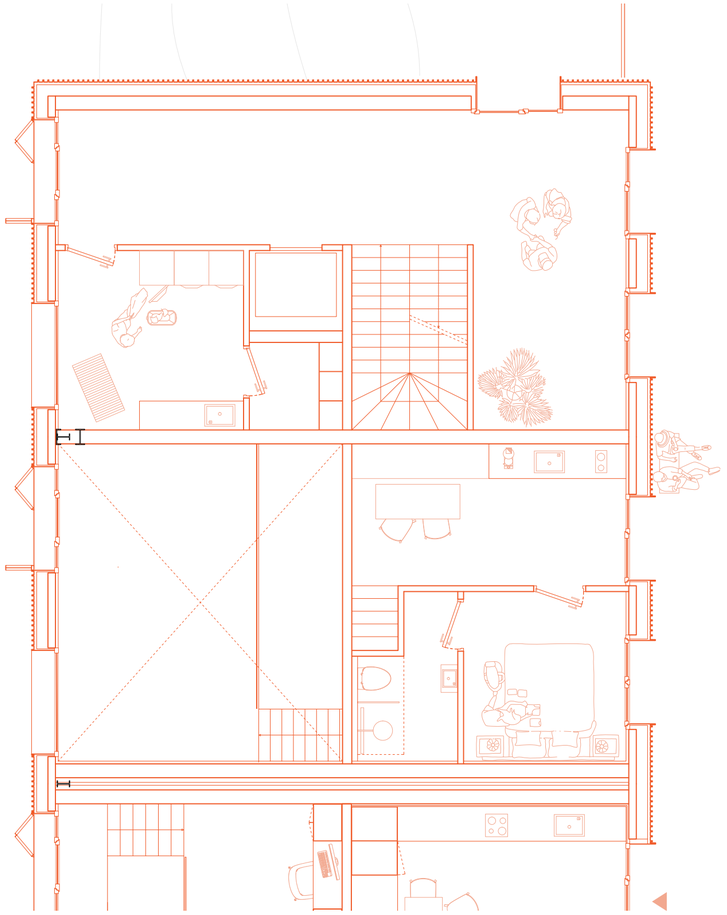
COLLECTIVE SPACE

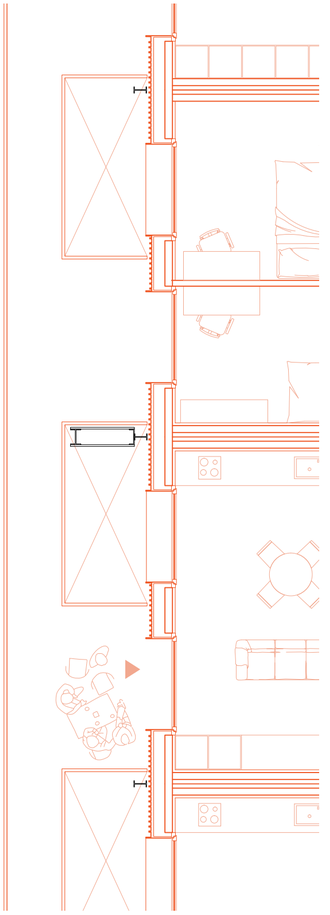


1/75

ground floor
living area and laundry room

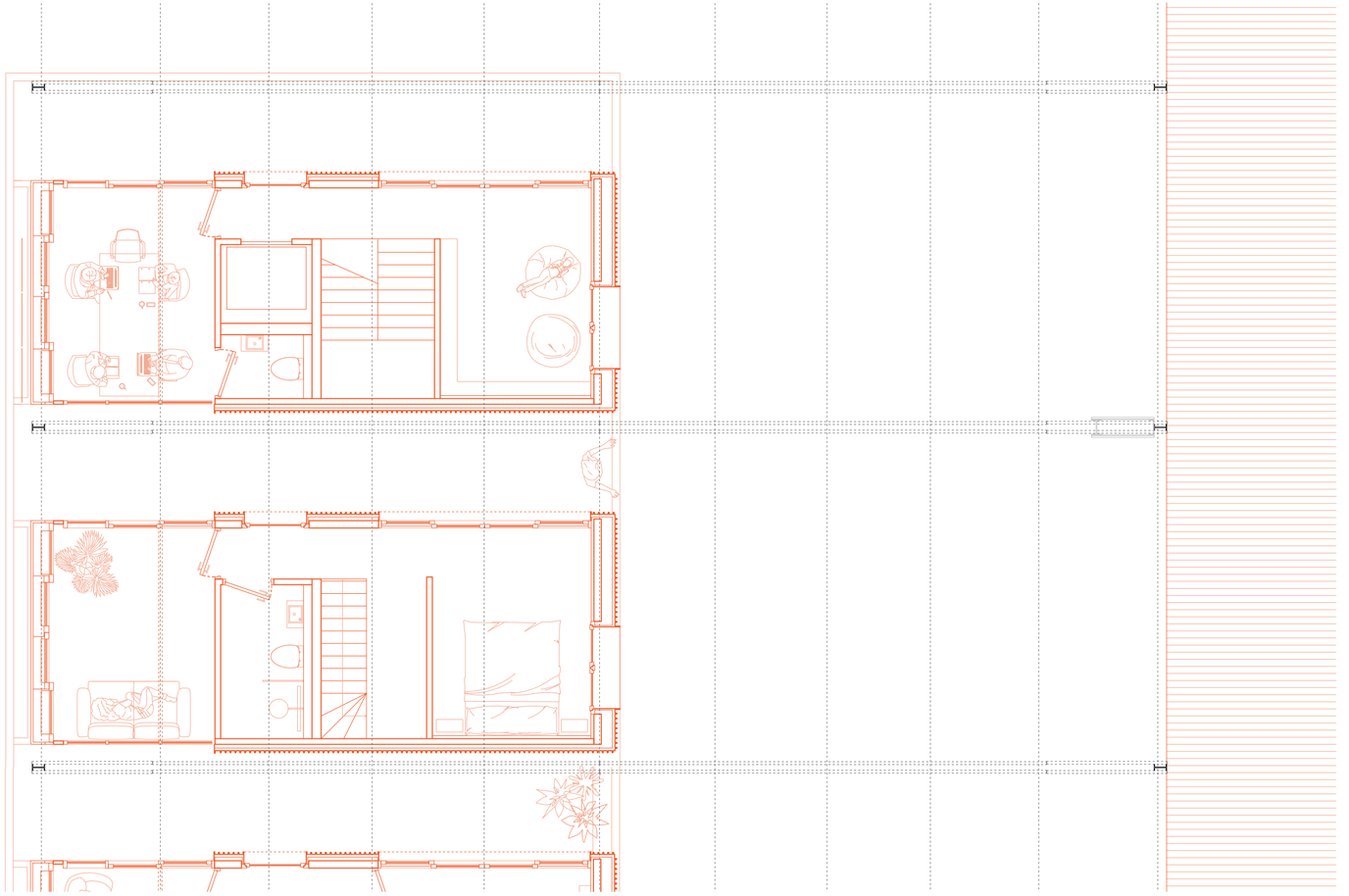
COLLECTIVE SPACE





first floor
laundry room and guestroom

COLLECTIVE SPACE



1/75

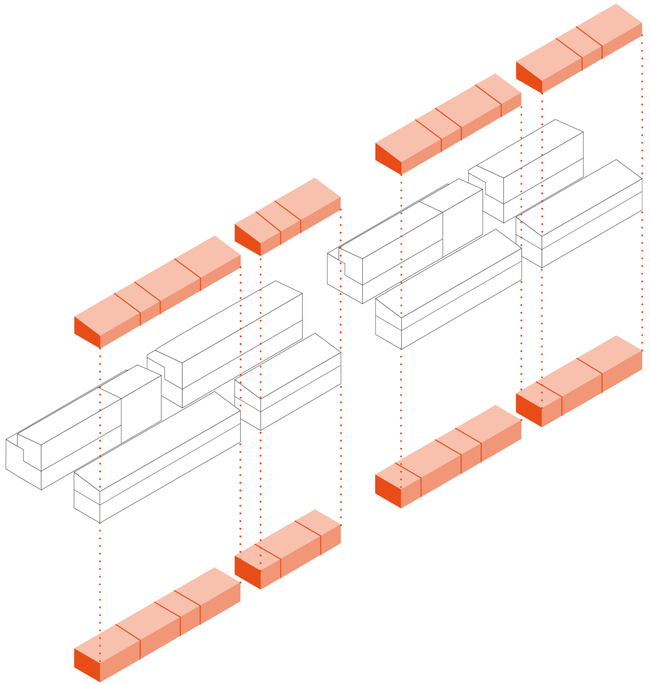
second floor

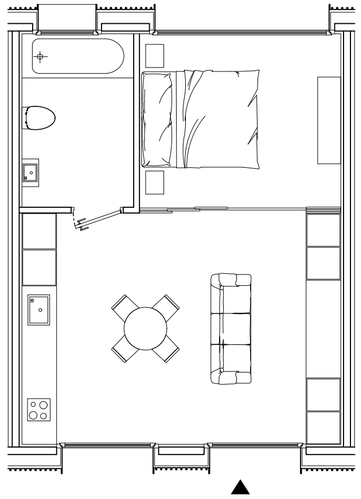
recreational space and library, guestroom

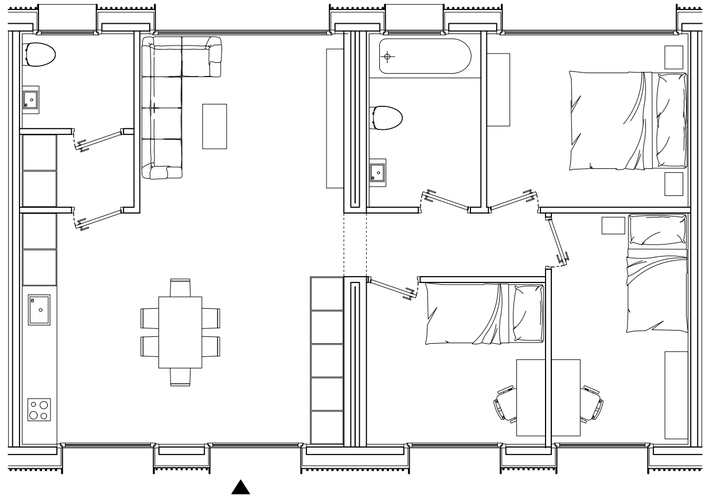
COURTYARD



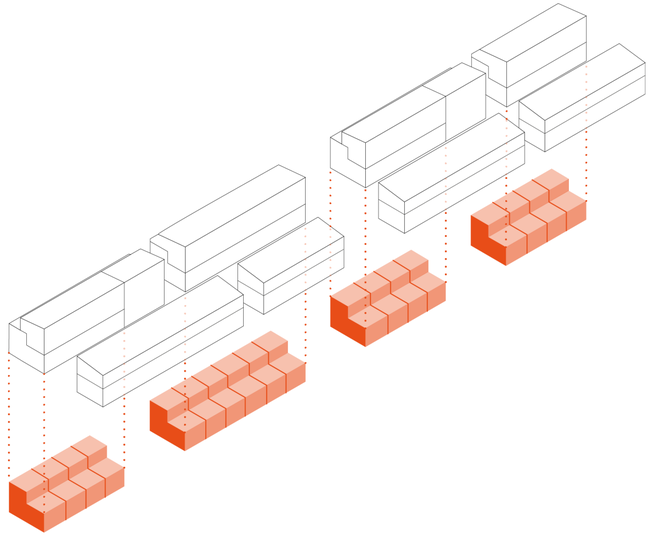
WATERFRONT APARTMENT

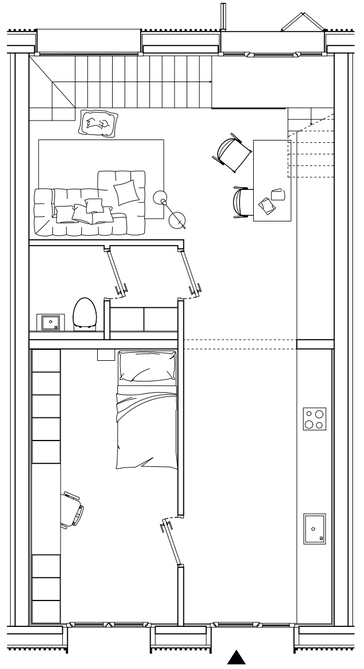


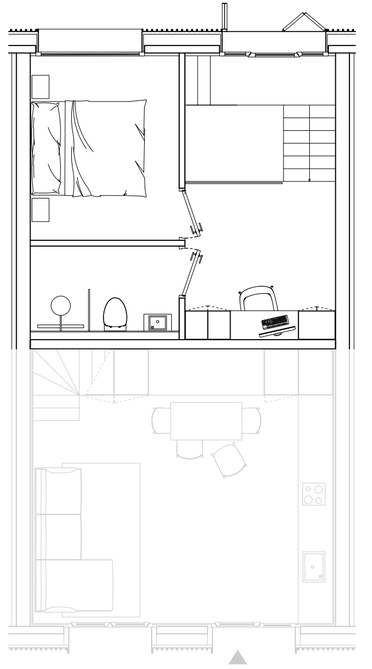




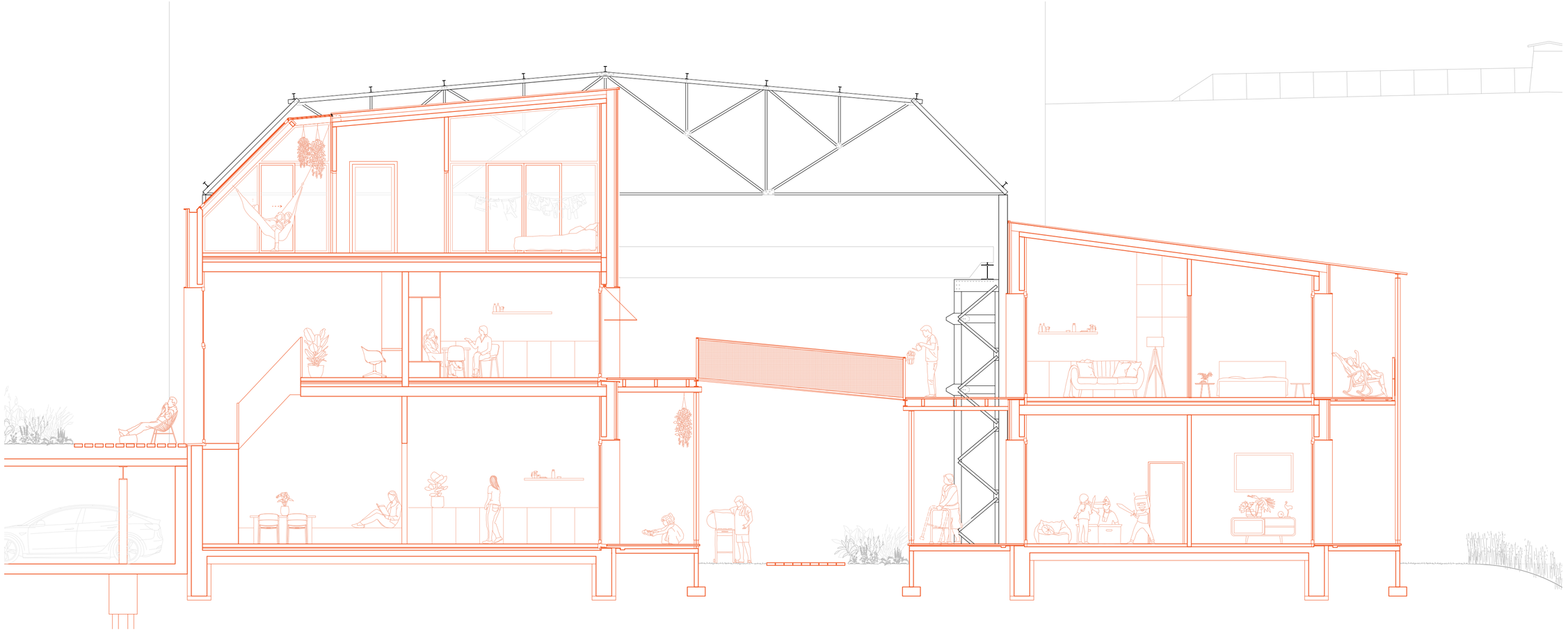
DIKE APARTMENT





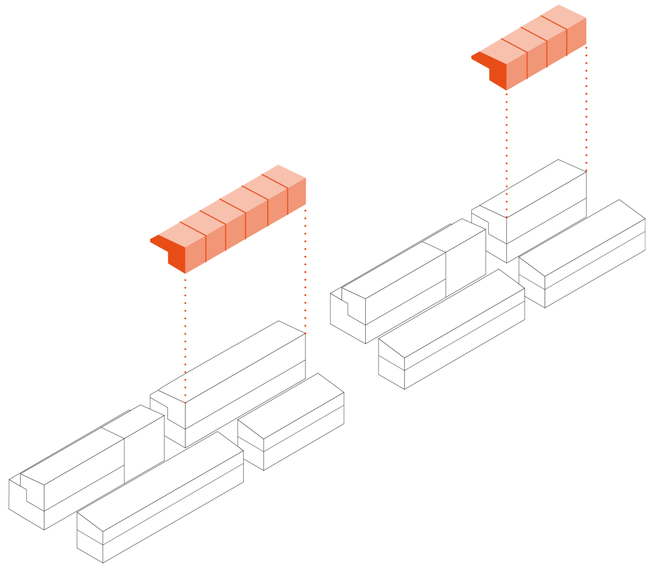


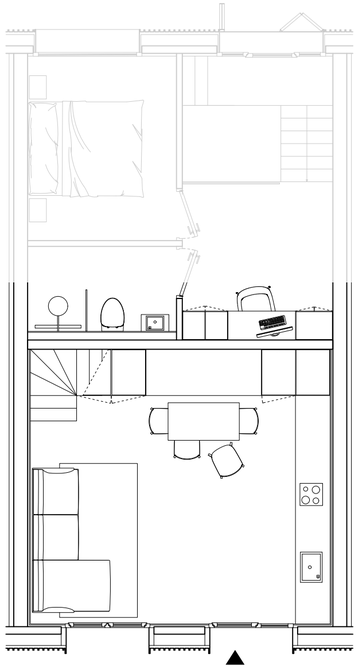
SECTION HOUSING

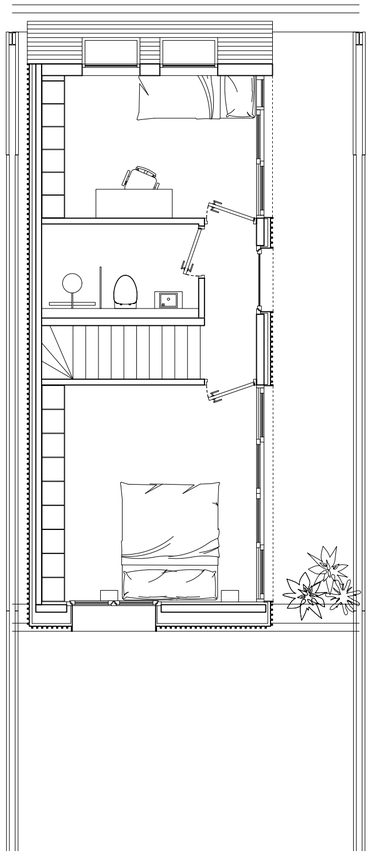


1/75

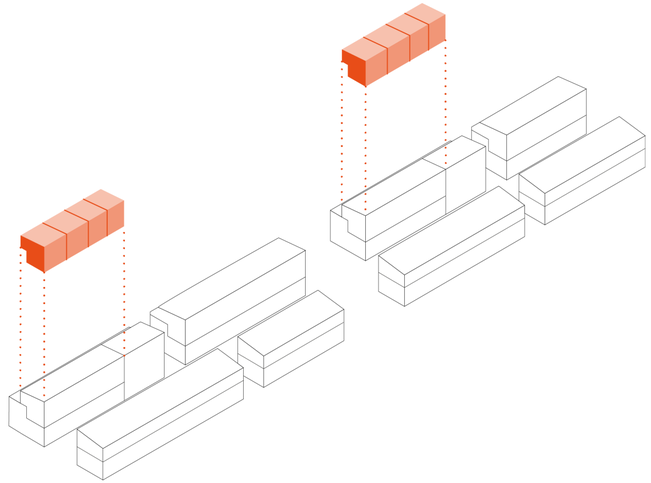
ROOFTOP APARTMENT

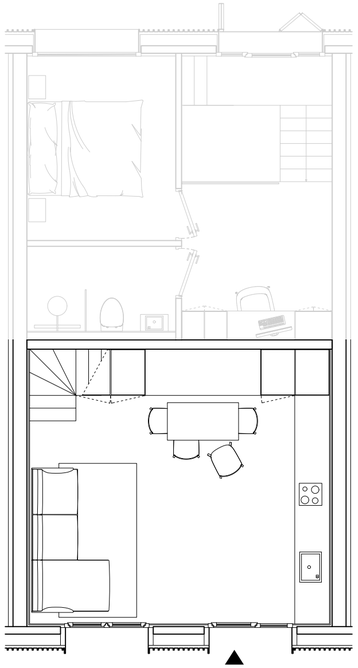


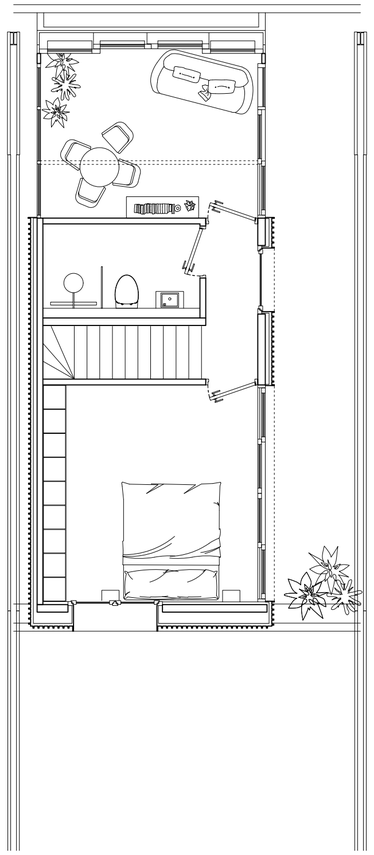




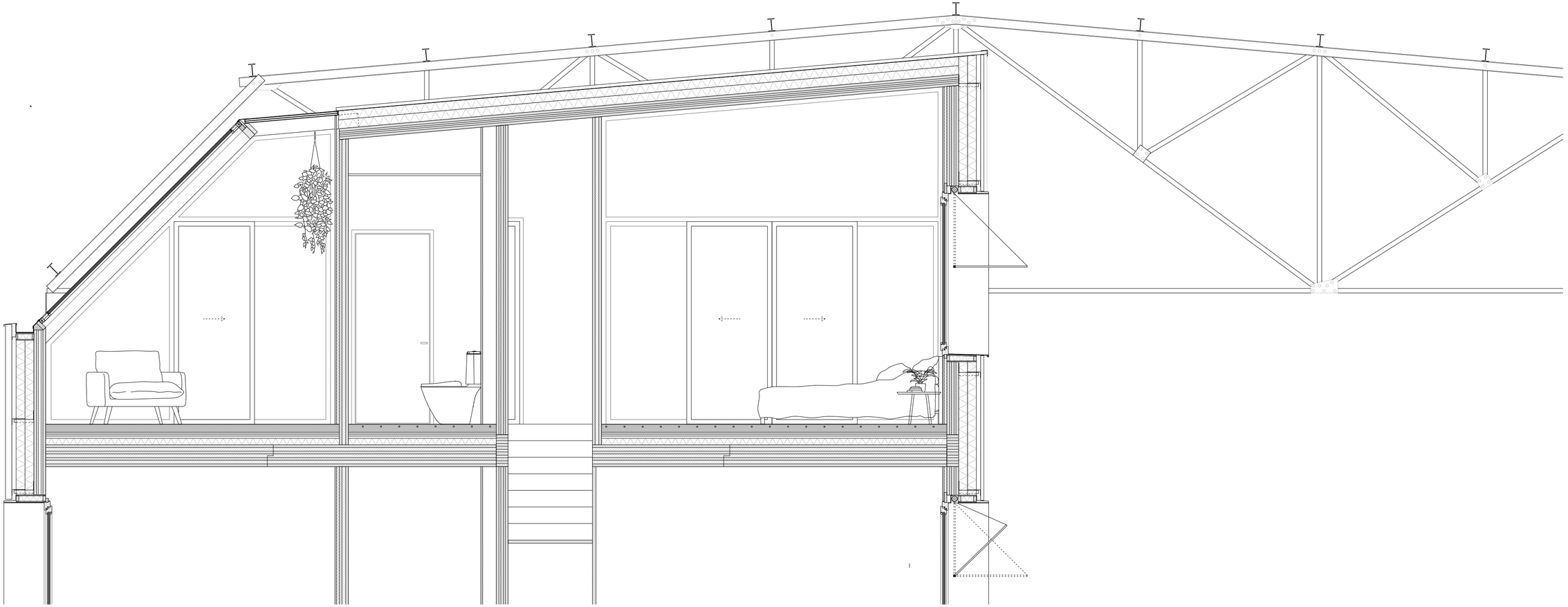
WINTERGARDEN LOFT





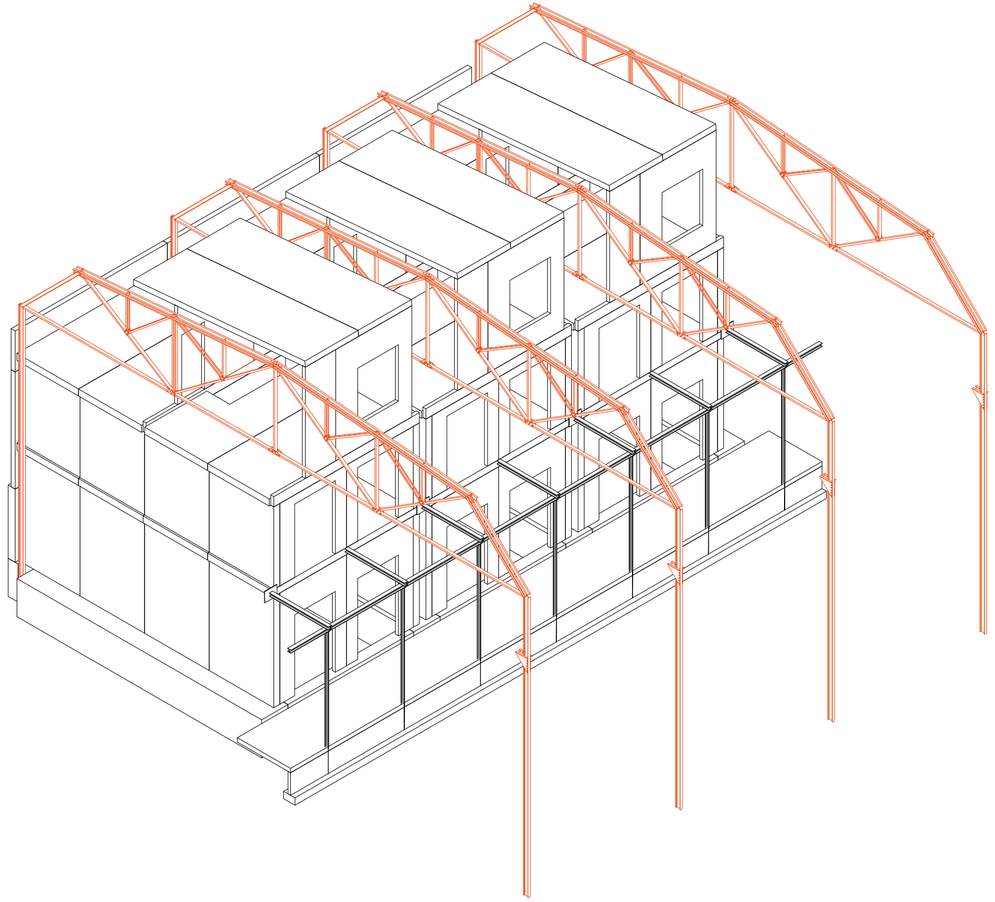


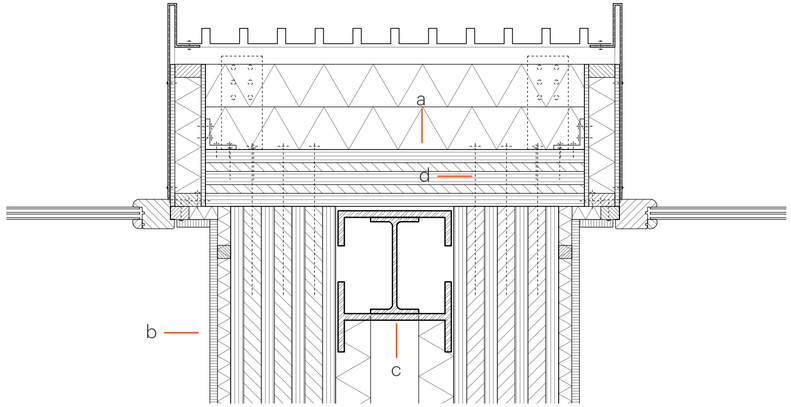
WINTERGARDEN



1:33

CONSTRUCTION

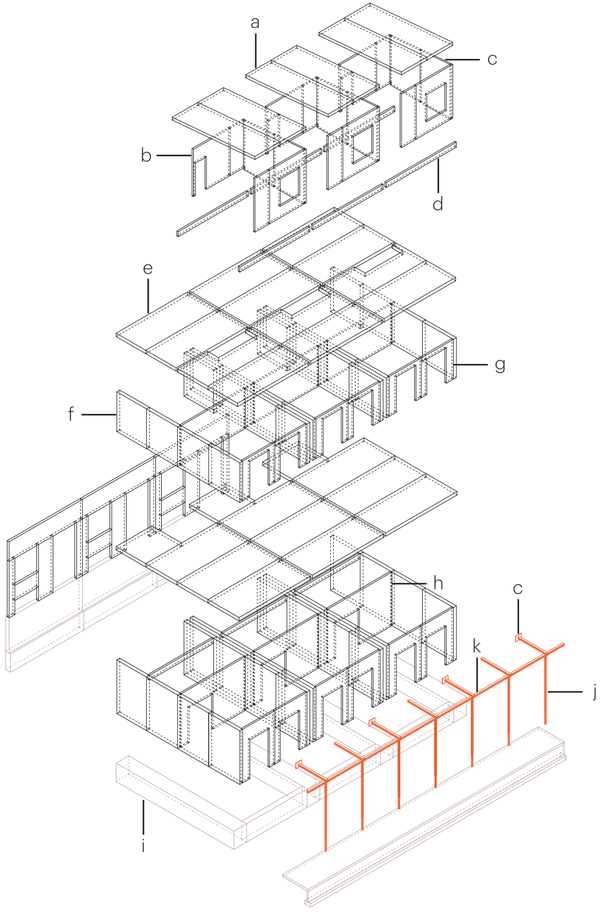




1:10

a 120 mm 5-ply CLT board
b 240 mm 7-ply CLT board
c existing steel column
d screw joint

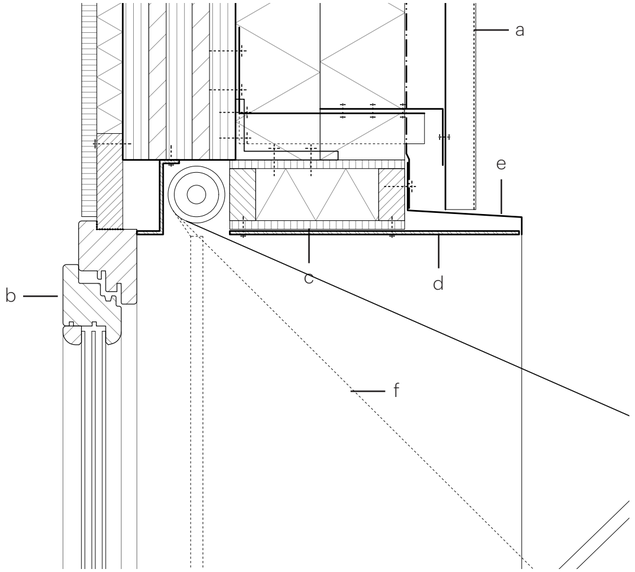
CONSTRUCTION

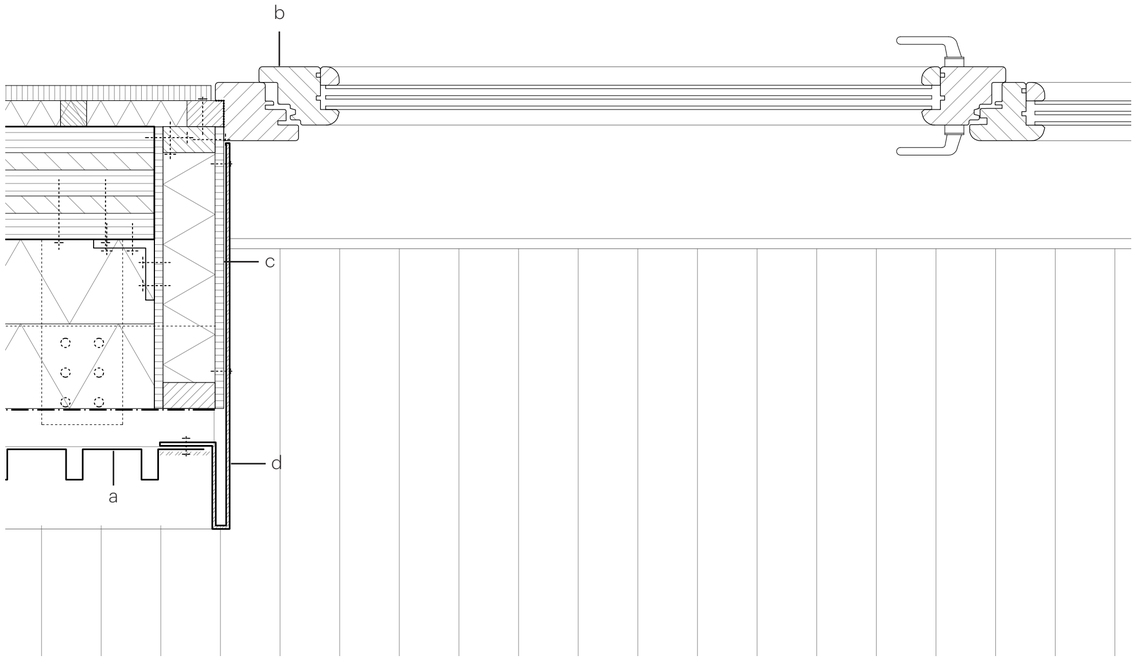


a roof: 120 mm 5-ply CLT board
b loadbearing wall 2nd floor: 130 mm 5-ply CLT board
c external wall 2nd floor: 100 mm 3-ply CLT board
d 130/352 mm glulam beam
e 1st and 2nd floor slab: 240 mm 7-ply CLT board
f loadbearing wall: 240 mm 7-ply CLT board
g external wall: 130 mm 5-ply CLT board
h internal wall: 130 mm 5-ply CLT board
i concrete foundation
j 120/120 mm steel column, cross profile
k 120/110 mm steel beam, I-profile
l fixing plate

STEEL FRAME

1:5

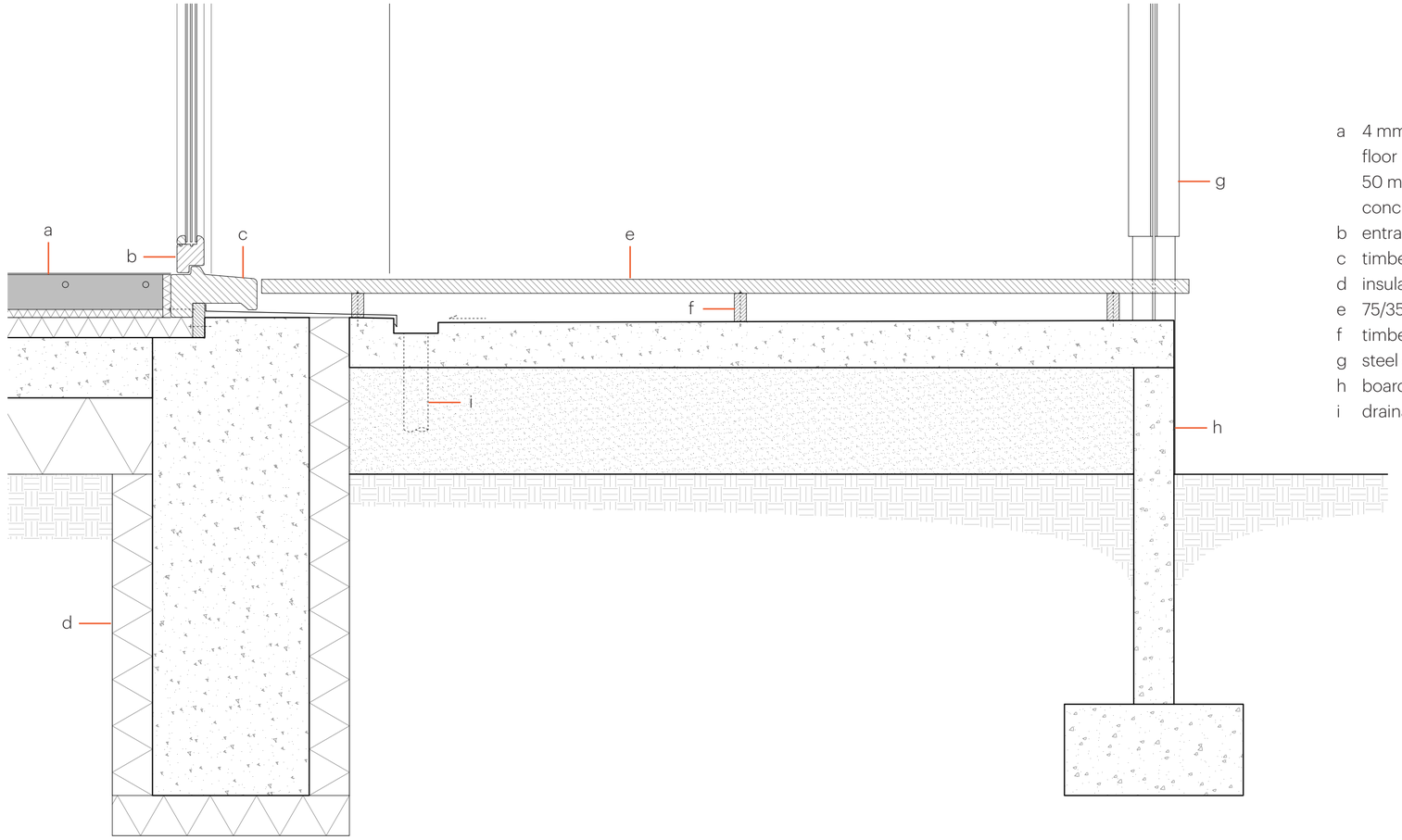




a 35/250 square profiled steel sheet, 50 mm enamelled steel substructure / cavity ventilation, 195 mm mineral wool insulation, 120 mm 5-ply CLT board, vertical studs and insulation, 20 mm plywood panel
b entrance door: oakwood frame, inswing, triple glazing
c insulated timber frame support structure
d steel frame
e drip sill
f folding arm awning

PLINTH

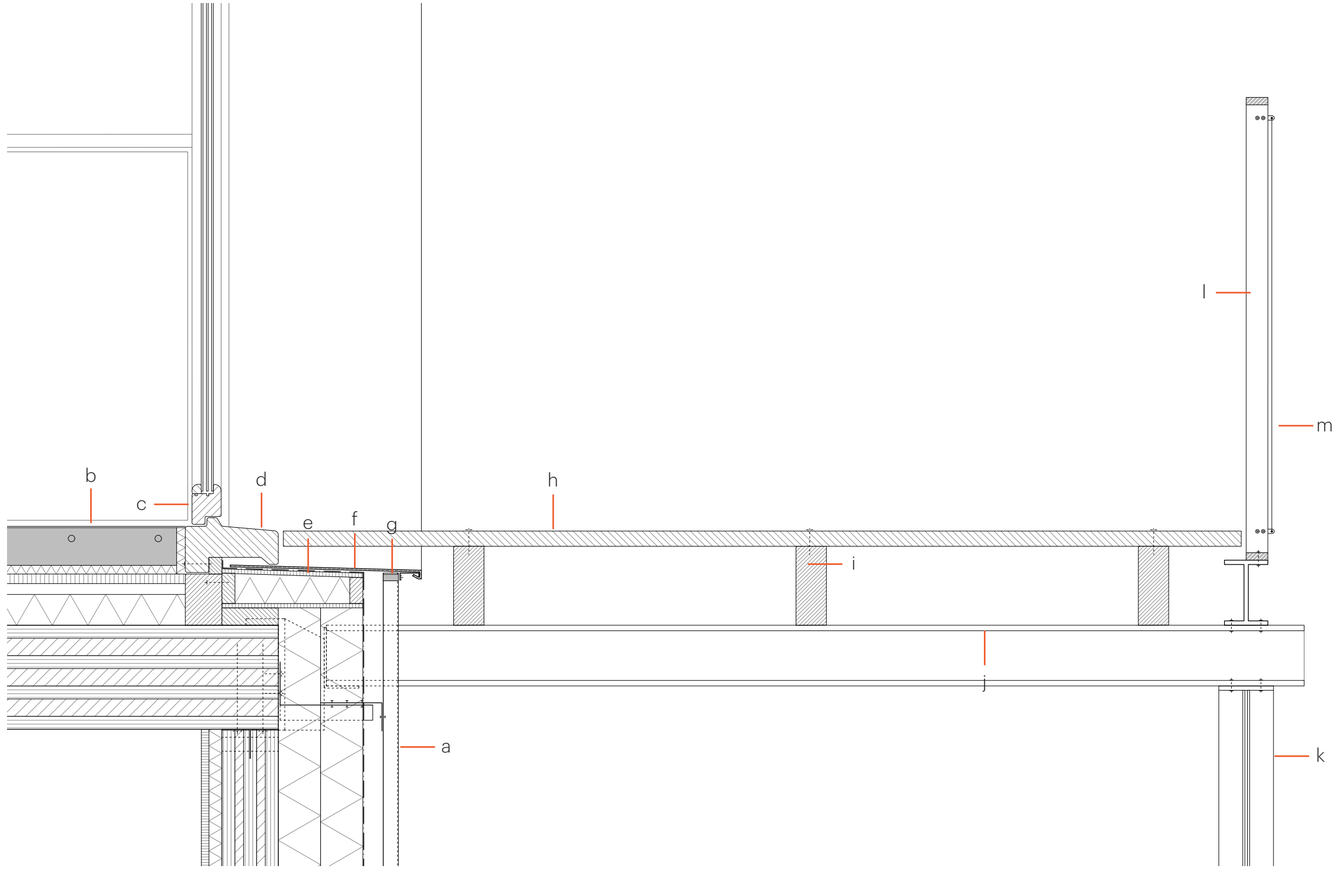
1:10



a 4 mm PVC floor covering, 80 mm cement screed with floor heating, 20 mm impact insulation (damping 4dB), 50 mm pressure-resistant insulation, 150 mm reinforced concrete slab, vapour barrier, 190 mm insulation, soil
b entrance door: oakwood frame, inswing, triple glazing
c timber sill
d insulated concrete foundation
e 75/35 mm wooden planks
f timber joist
g steel column, cross profile
h boardmarked concrete plinth
i drainage

GALLERY

1:10

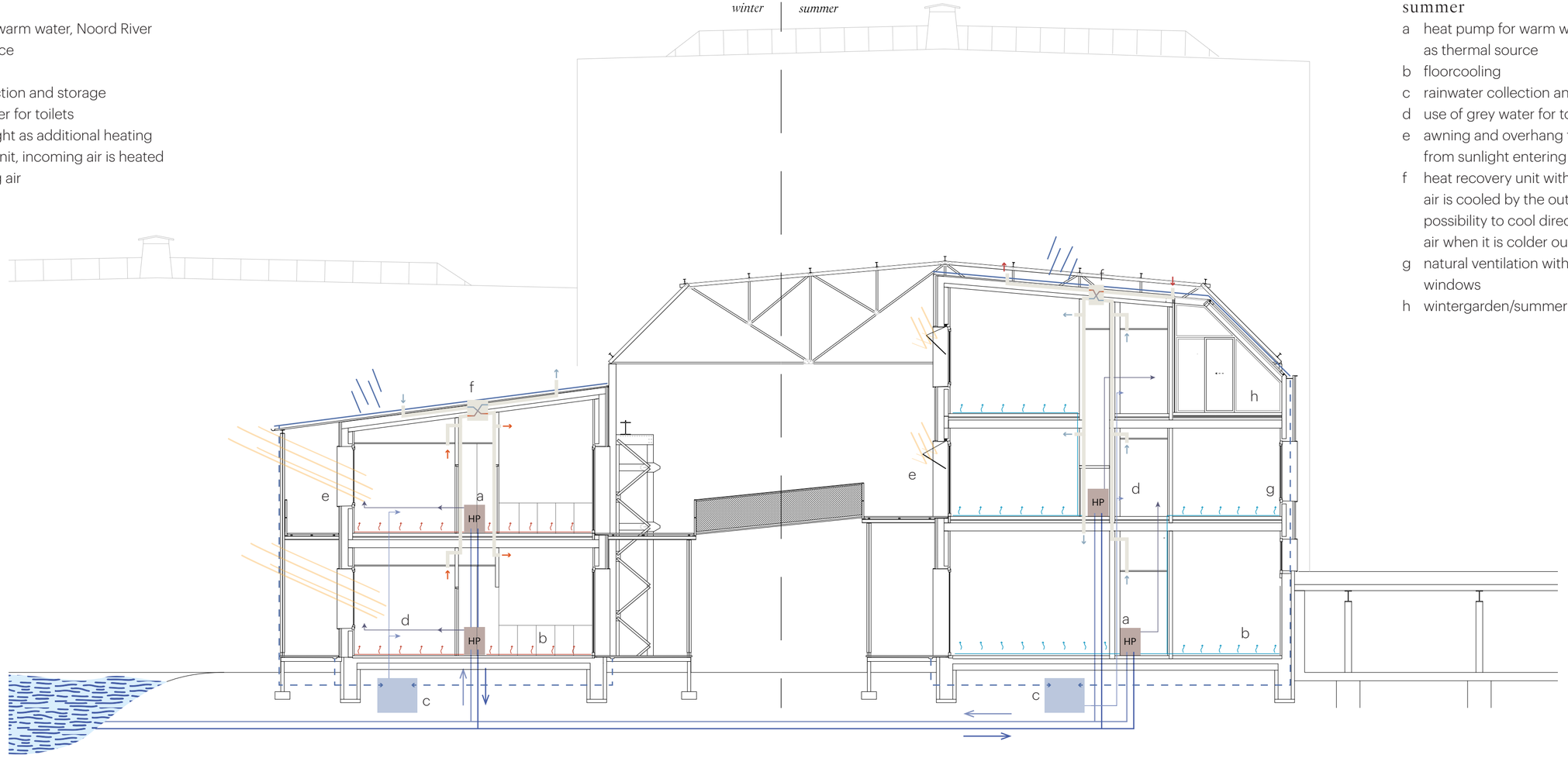


a 35/250 square profiled steel sheet, 50 mm enamelled steel substructure / cavity ventilation, 195 mm mineral wool insulation, 120 mm 5-ply CLT board, vertical studs and insulation, 20 mm plywood panel
b 4 mm PVC floor covering, 50 mm cement screed with floor heating, 20 mm impact insulation (damping 4dB), 22 mm fibre board, 95 mm floor joists with insulation, 240 mm 7-ply CLT board
c entrance door: oakwood frame, inswing, triple glazing
d timber sill
e insulated timber frame support structure
f steel frame
g filler strip
h 75/35 mm wooden planks
i 45/83 rectangular hollow steel joist
j steel beam, I-profile
k steel column, cross profile
l steel railing
m stainless steel wire rope mesh

CLIMATE DESIGN

winter

a heat pump for warm water, Noord River as thermal source
b floorheating
c rainwater collection and storage
d use of grey water for toilets
e access of sunlight as additional heating
f heat recovery unit, incoming air is heated by the outgoing air



summer

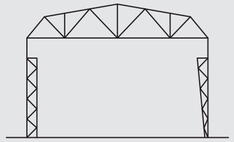
a heat pump for warm water, Noord River as thermal source
b floorcooling
c rainwater collection and storage
d use of grey water for toilets
e awning and overhang to prevent heat from sunlight entering the building
f heat recovery unit with bypass, incoming air is cooled by the outgoing air, possibility to cool directly with incoming air when it is colder outside
g natural ventilation with openable windows
h wintergarden/summer terrace

VALUES OF INDUSTRIAL HERITAGE IN TRANSFORMATION

Research to design

TANGIBLE VALUES OF MANUFACTURING SITES

Material fabric



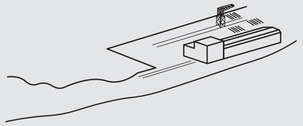
steel frame

openess created by the steel framing

steel structure is kept

reuse of material from demolishments

Components



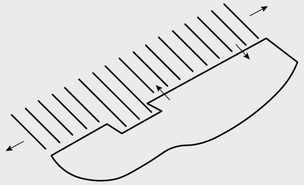
large site with buildings from different times

the site has grown over time

patchwork emphasises the complexity

division between former busy and quiet area returns in the zoning

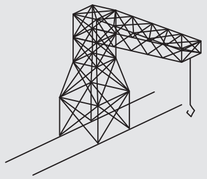
Setting



next to the water

its proximity to the water is used as a feature

Machinery



cranes

crane rails

air ducts from verfspuitcabine

rails are used for routing

Merconpavilion refers to a crane

Written documentation



photo's create an idea of how the site was used

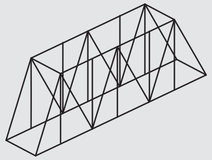
original plans in the archives

images of the workers and the production process

use of archive images to bring back old branding on the roof

Kloos Kenmerken as inspiration for color palette

Goods created by the industry

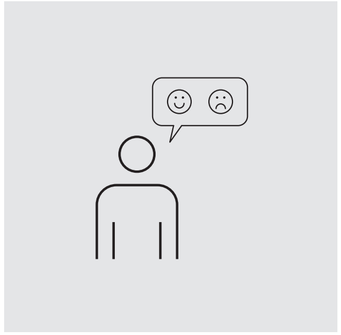


bridges built by Kloos

high voltage towers

INTANGIBLE VALUES OF MANUFACTURING SITES

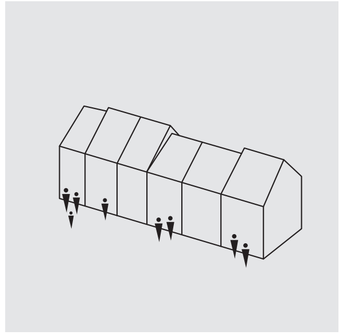
Memories and stories



small village, everyone knew each other

small scale community entities

Working class society



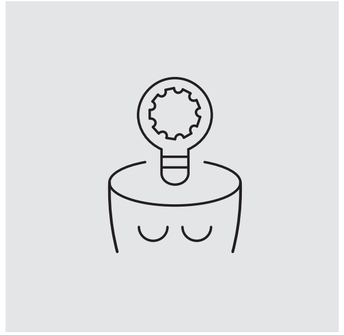
religious character

hard working

returning working functions to the location

(start-ups, small offices, small industry)

Human skill and knowledge

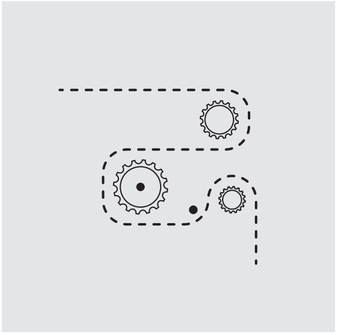


technical innovation

information for visitors along the path

innovative way of living

Productivity

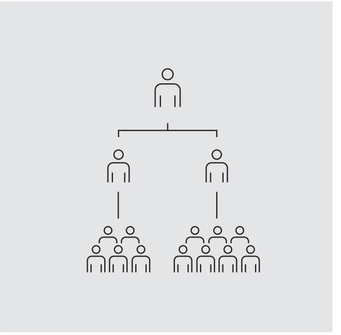


busy, loud atmosphere

complex entity of the different steps in the manufacturing process

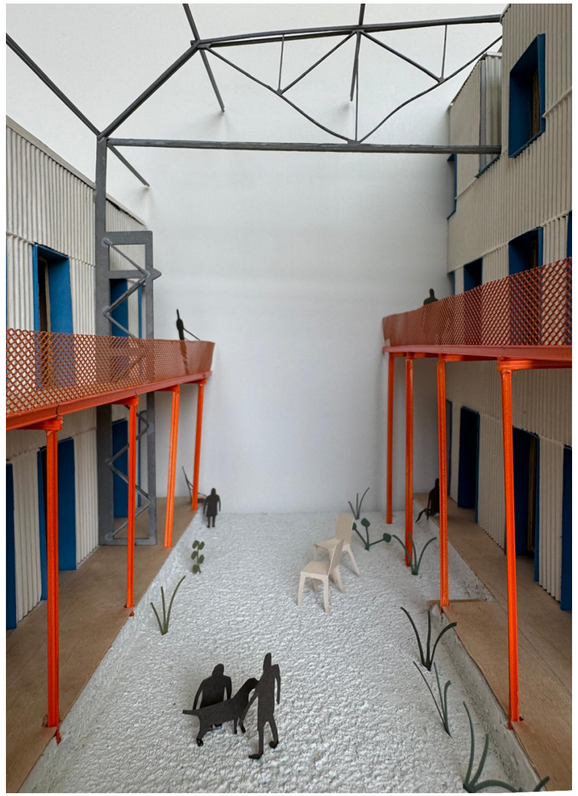
liveliness of the hall reflects the productive atmosphere

Organisation of labour



different types of functions: directors, administrative team, technical drawers, and heavy labour workers

naming of the components (Klooshal, Montagestraat, Merconpavilion)



Thank you for listening!