



P5

Jildou Wassenaar  
**Revitalizing maritime heritage**  
Nedstaal, Alblasserdam



Introduction  
Research  
Urban  
Industrial complex  
Architecture  
Conclusion

	Introduction	—————	What? Why?
	Research	—————	How?
Design	Urban		
	Industrial complex		
	Architecture		
	Conclusion		

**Introduction**  
Research  
Urban  
Industrial complex  
Architecture  
Conclusion

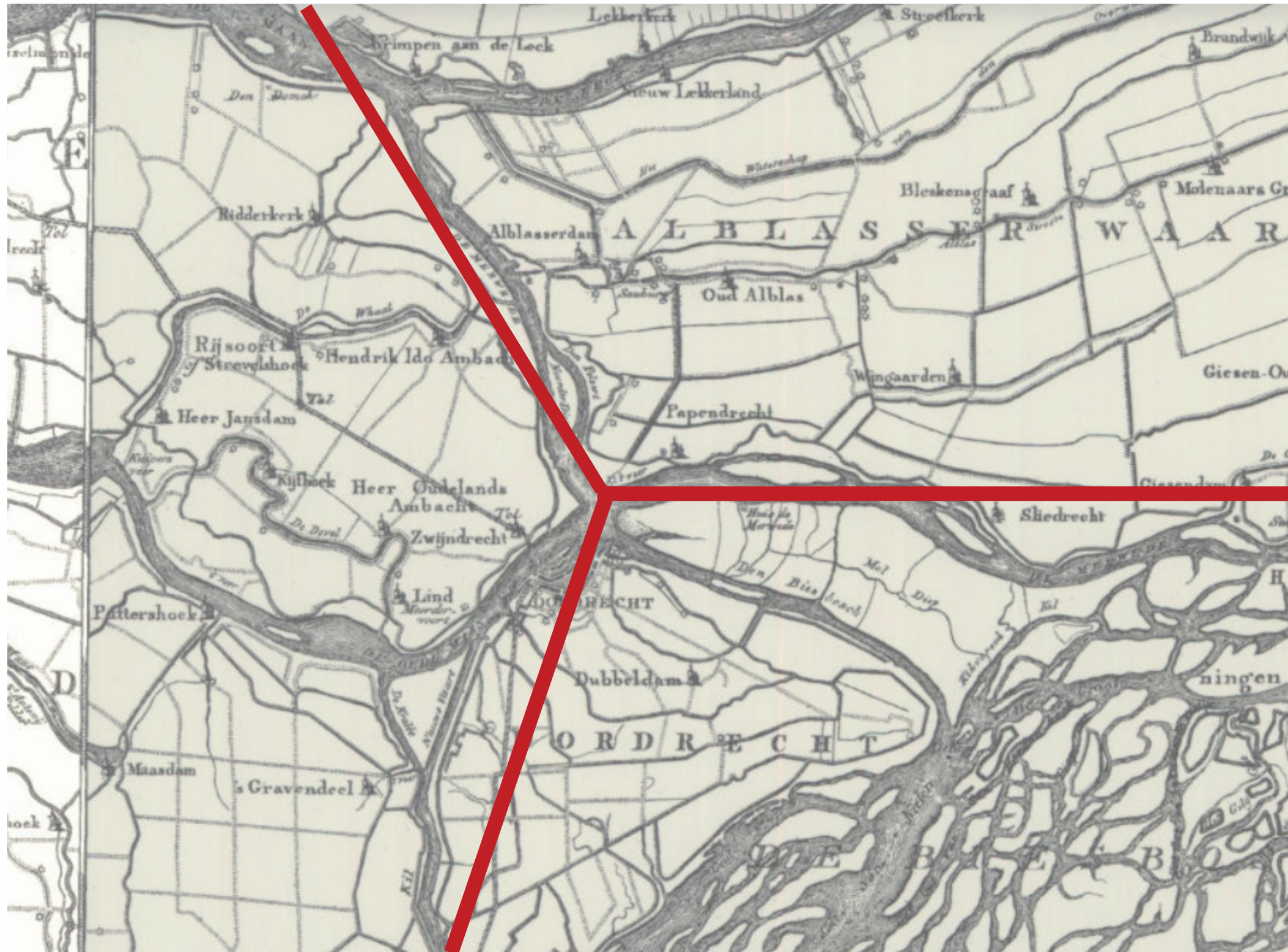


Nederland met gemeenten  
(Jan Willem van Aalst, 2023, with own addition)





Waterdriehoek  
(cultureel erfgoed, 2020, with own addition)



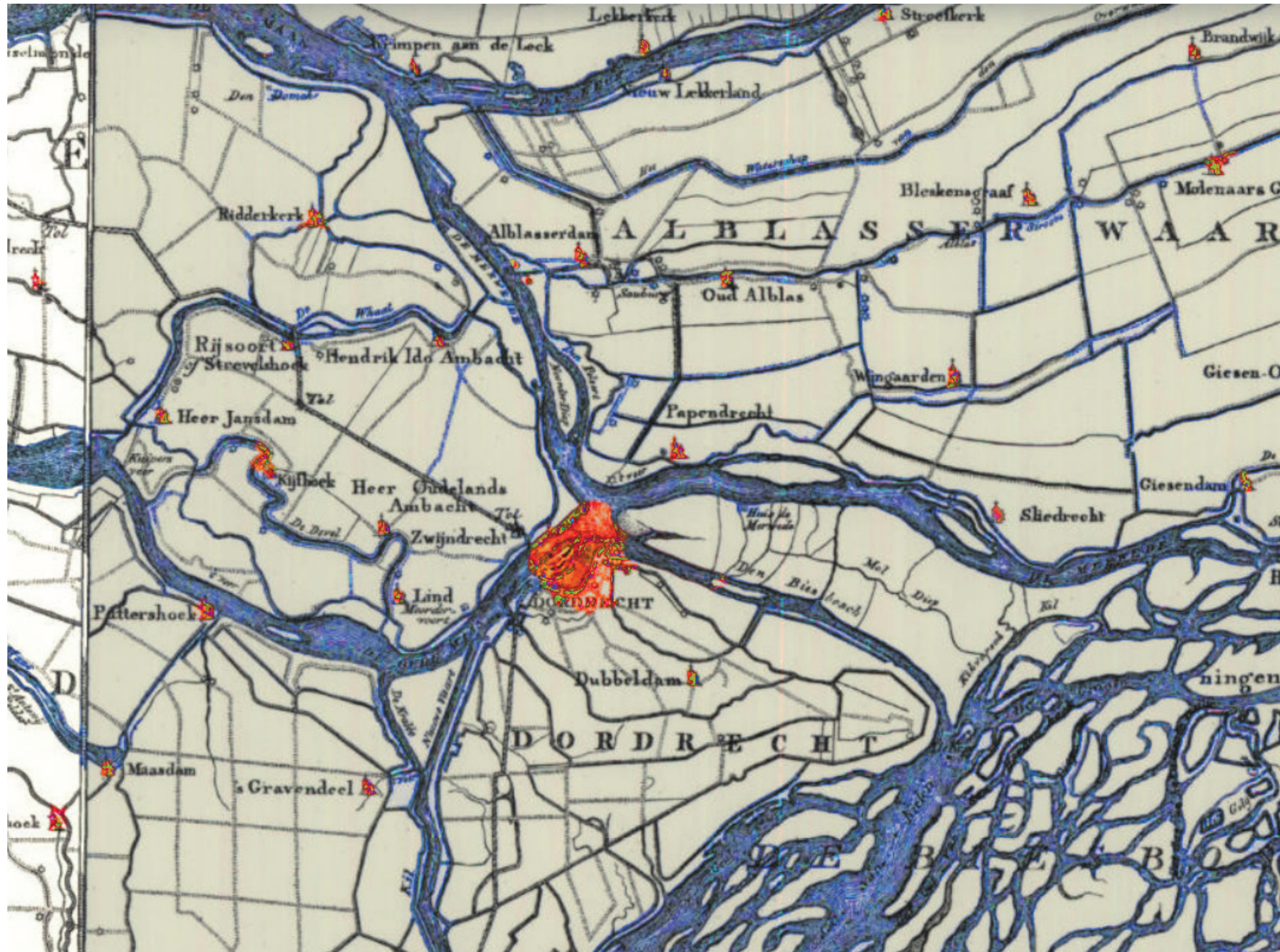
Alblasterdam 1840  
(Topotijdreis, 2024, with own addition)





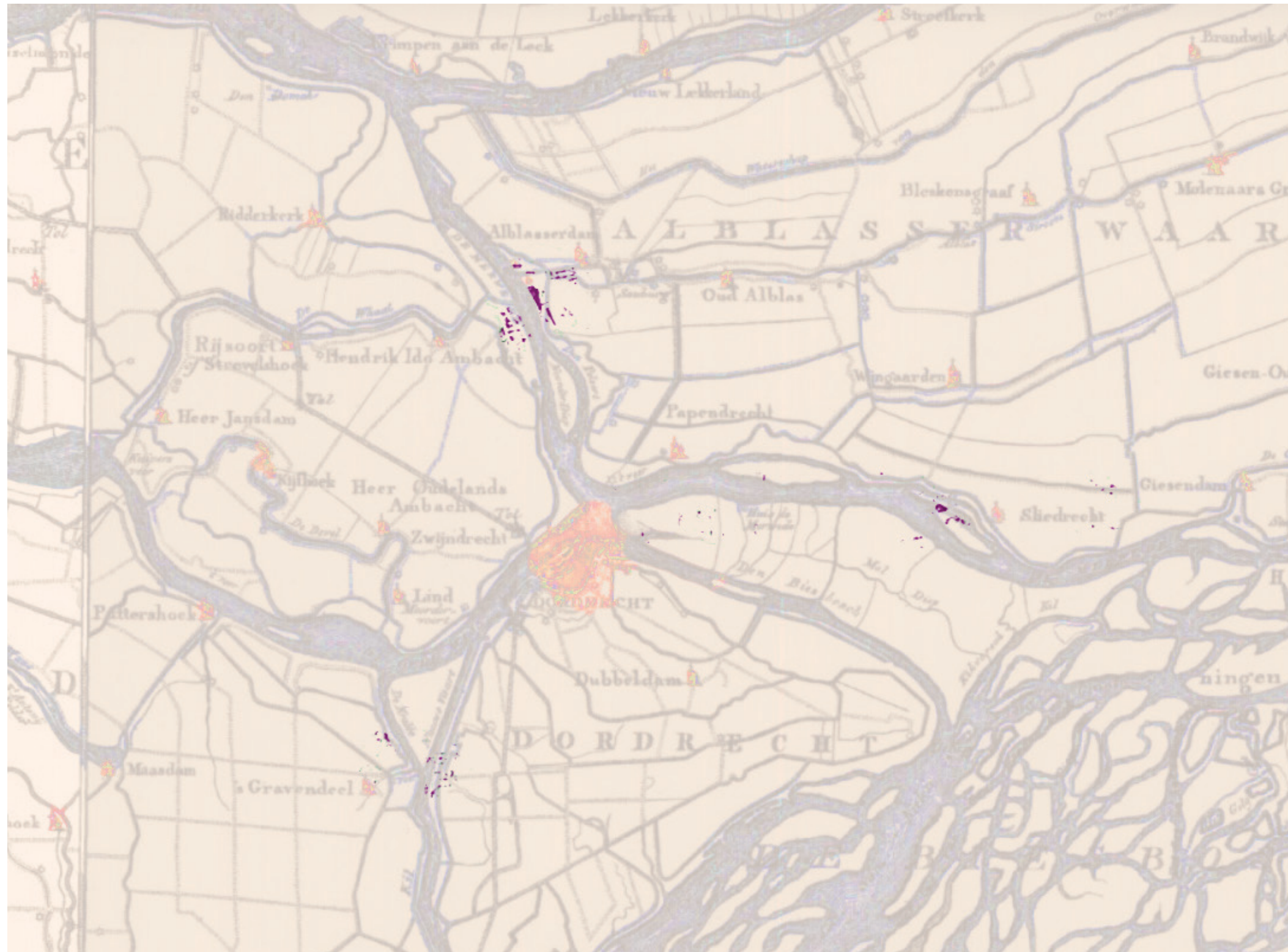
Alblaserdam 1840  
(Topotijdreis, 2024, with own addition)





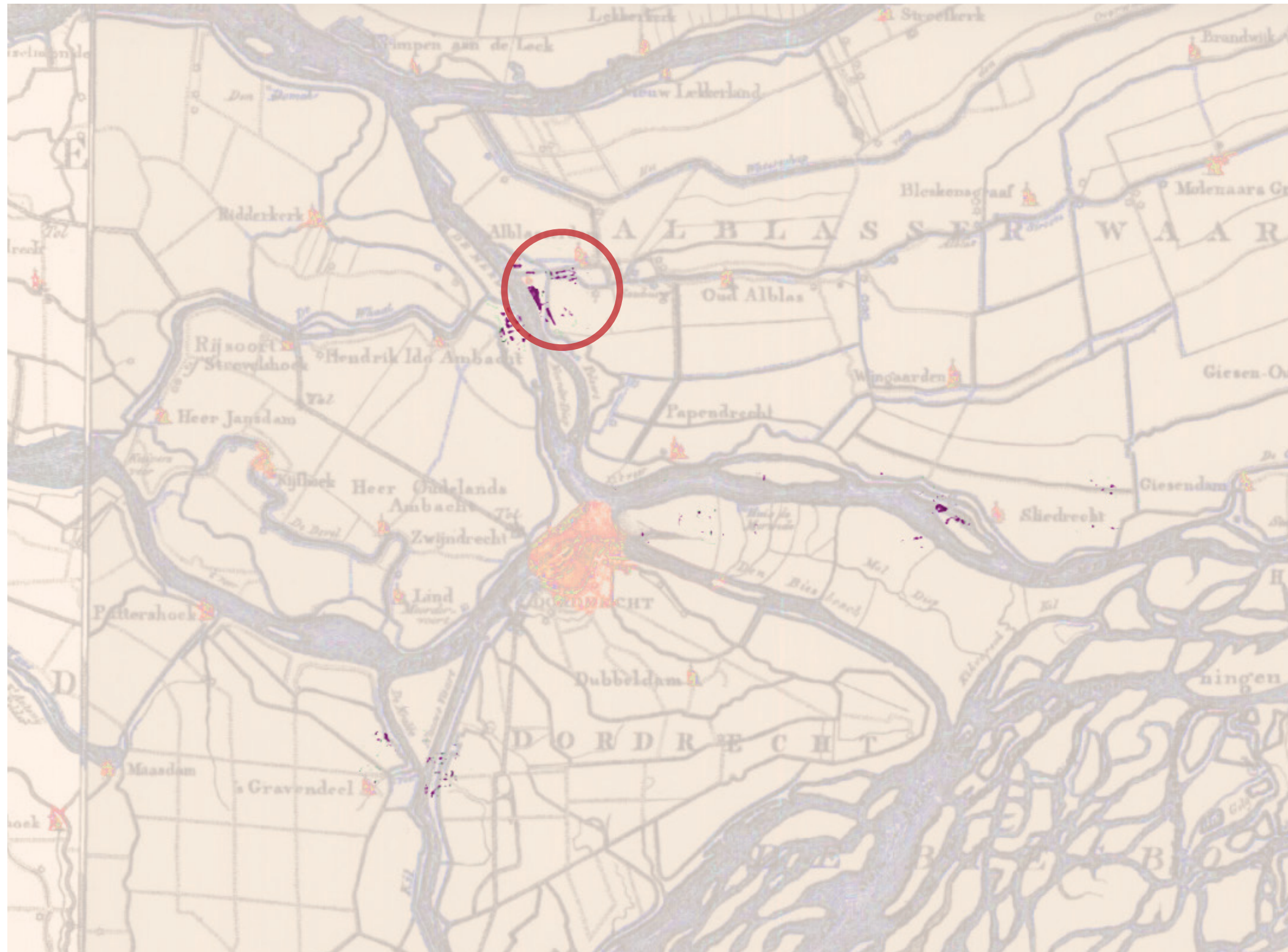
Alblaserdam 1840  
(Topotijdreis, 2024, with own addition)





Alblasterdam 1840  
(Topotijdreis, 2024, with own addition)





Alblasterdam 1840  
(Topotijdreis, 2024, with own addition)





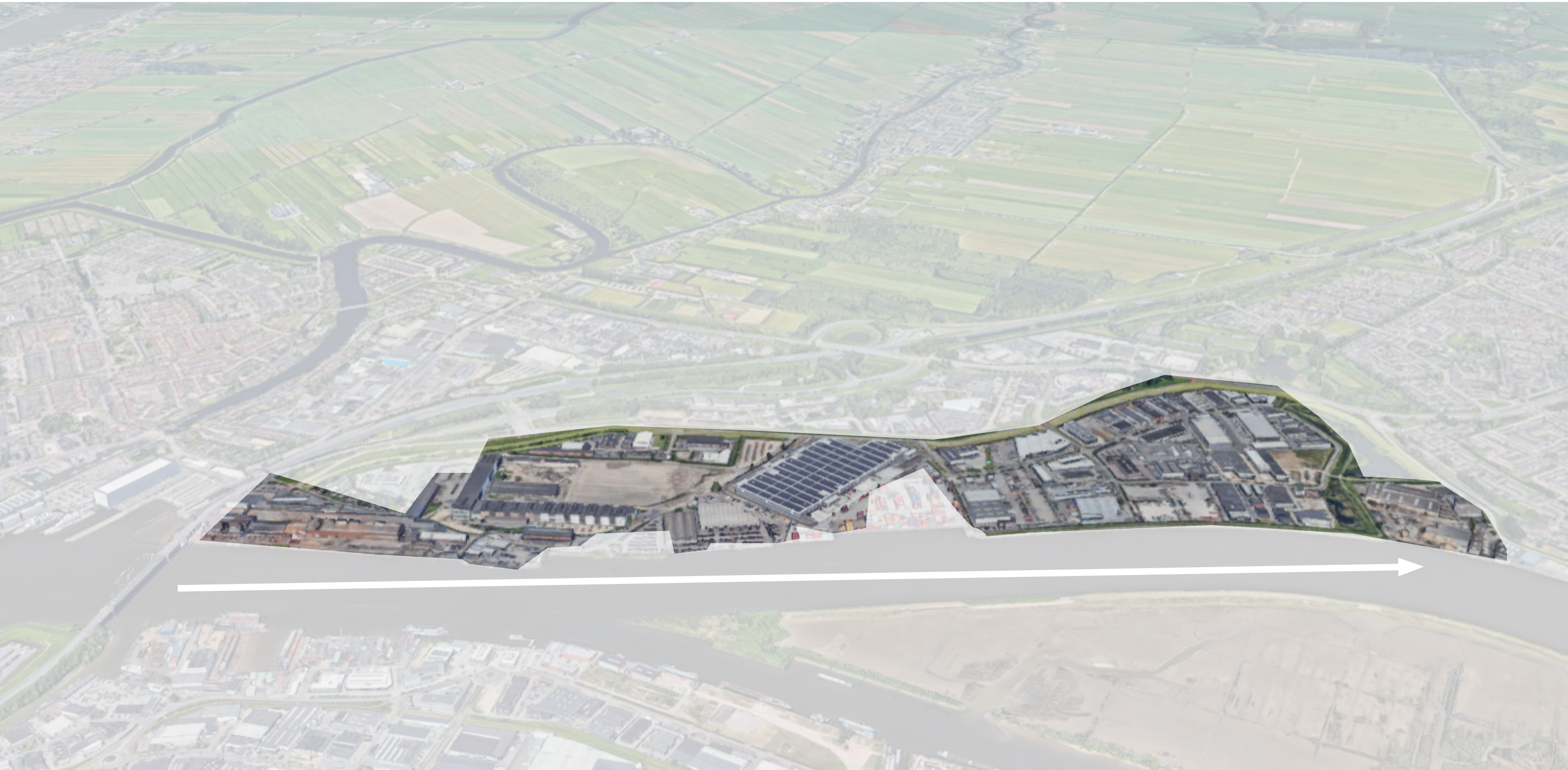
Nieuwland Park  
(Google earth, 2024)





Nieuwland Parc  
*(Google earth, 2024, with own addition)*





Nieuwland Park  
*(Google earth, 2024, with own addition)*





**Alblasterdam**

20314 inhabitants  
10,06 km<sup>2</sup>

**Papendrecht**

32300 inhabitants  
10,79 km<sup>2</sup>

2,5 km

**Niewland Park**  
*(Google earth, 2024, with own addition)*





**Nedstaal**  
Situating next to  
the city centre of  
Alblasterdam

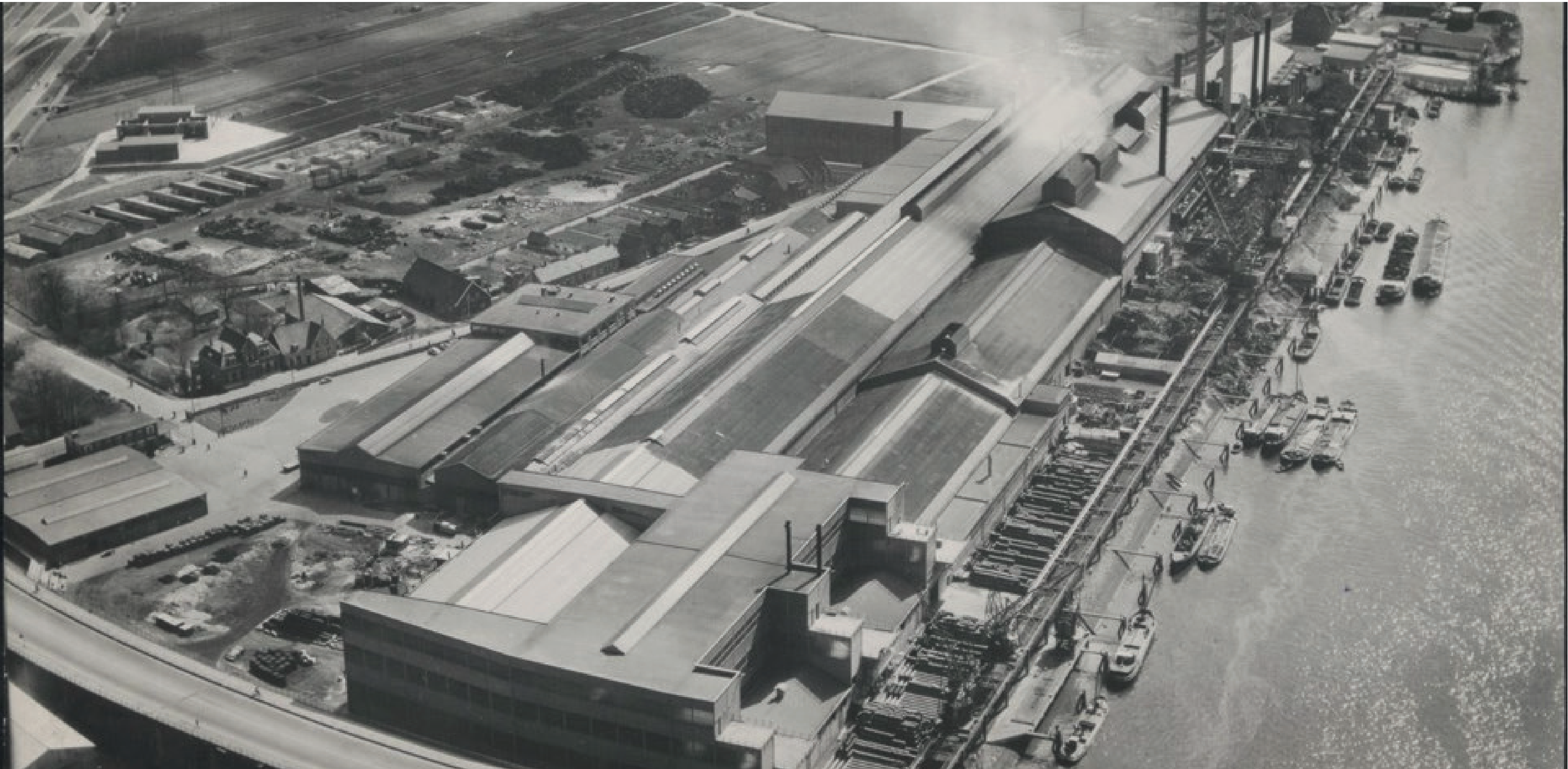
Niewland Parc  
*(Google earth, 2024, with own addition)*



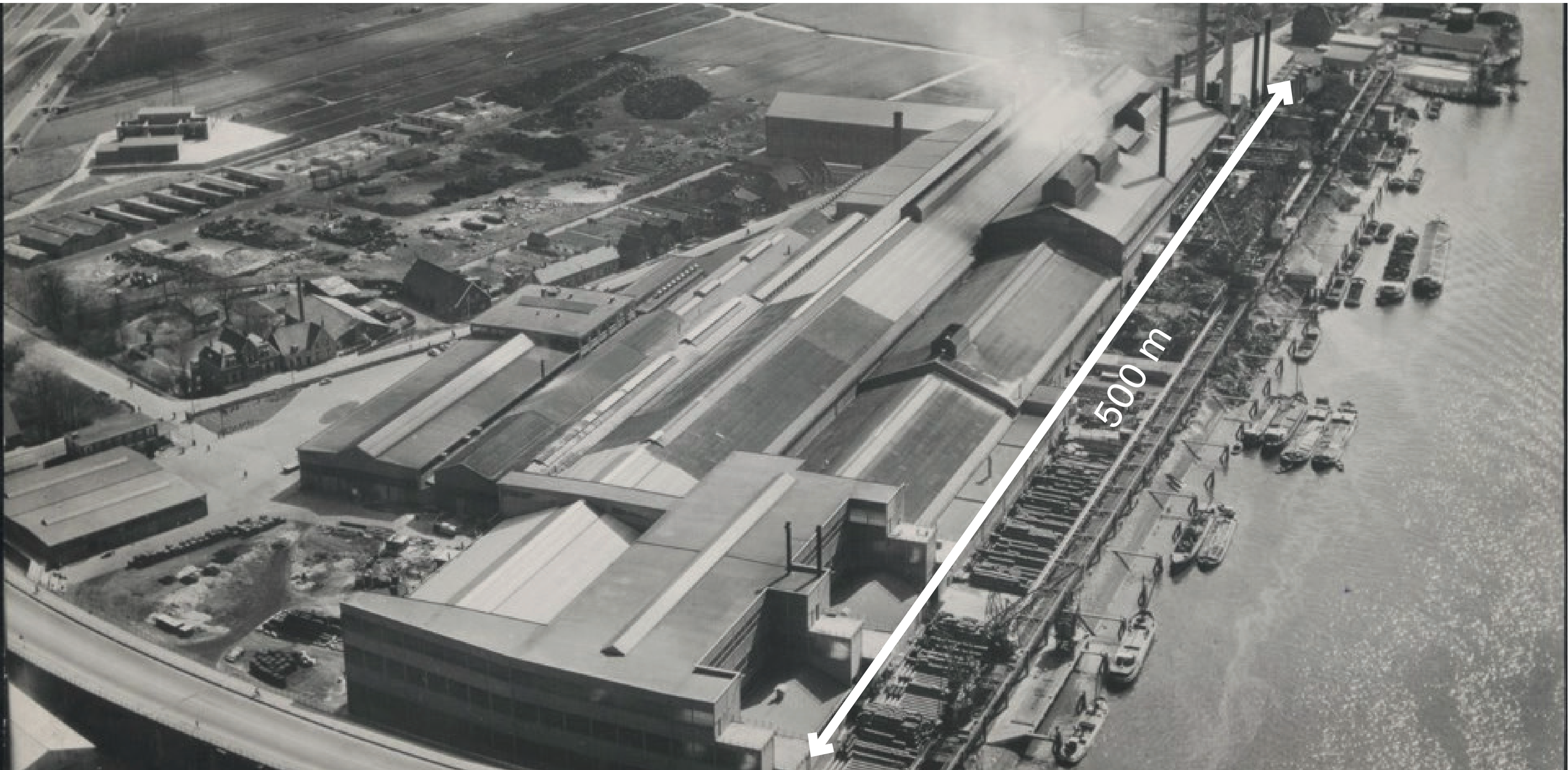


Nedstaal Alblasterdam  
*(Boyang Shen, 2024)*





Luchtfoto van Nedstaal, 1955  
(Collectie regionaal archief Dordrecht, 1955)



Luchtfoto van Nedstaal, 1955  
(Collectie regionaal archief Dordrecht, 1955)



**Production process**  
1. Scrap metal is melted

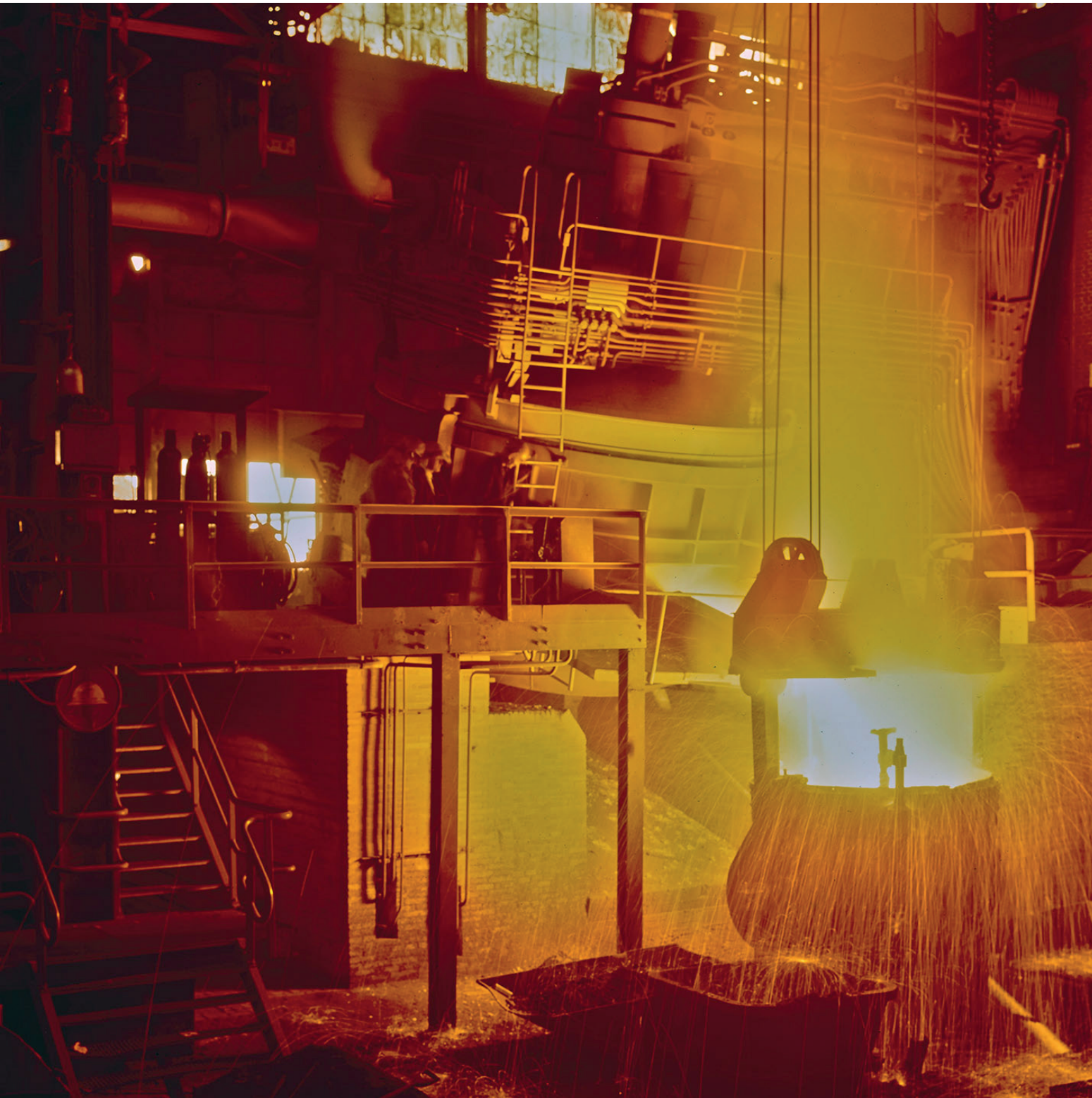


De smelterij van de kabelfabriek in Alblasterdam.  
(Regionaal archief Dordrecht, 1989)

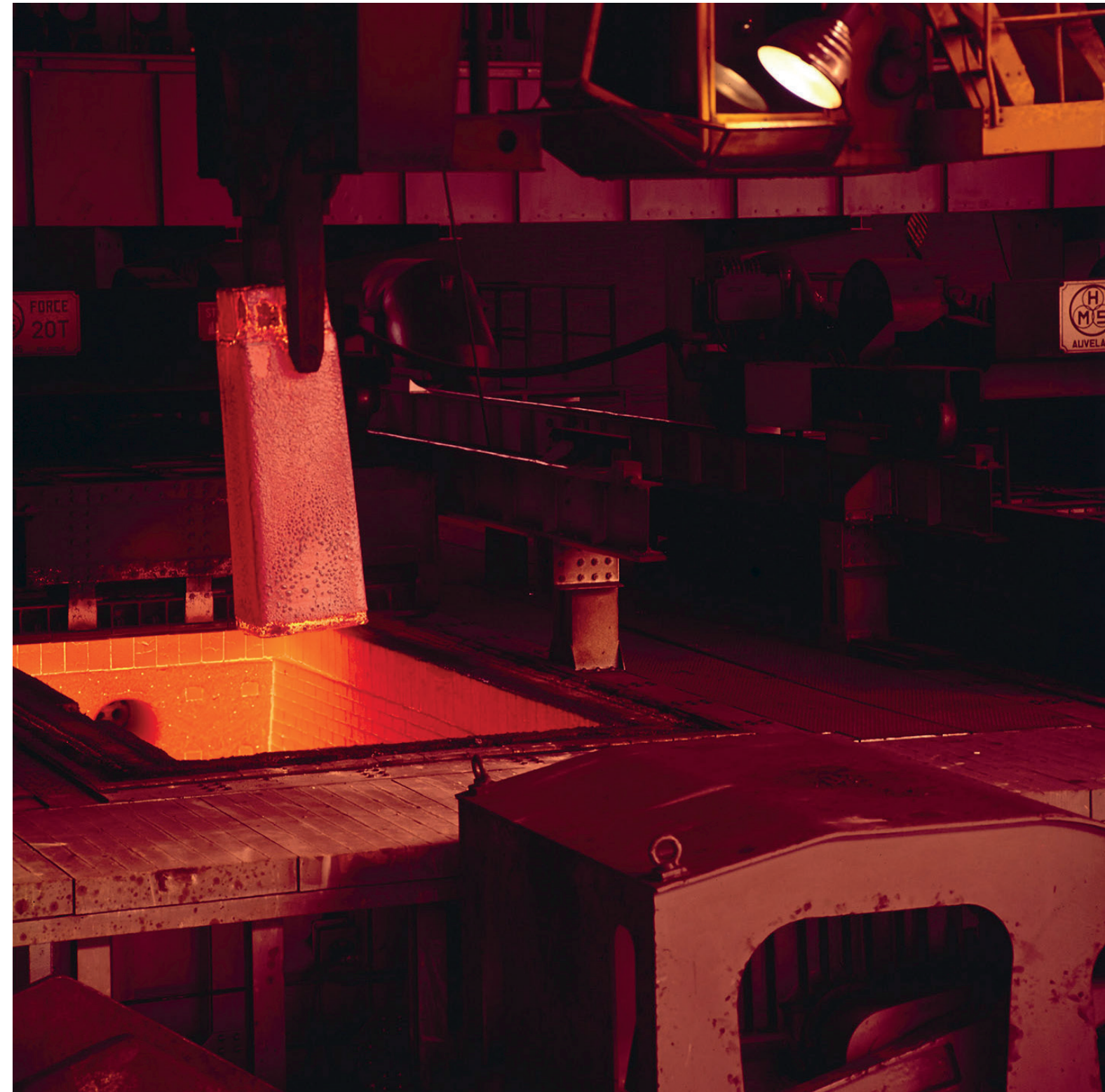


## Production process

### 2. Liquid steel is poured into a mould

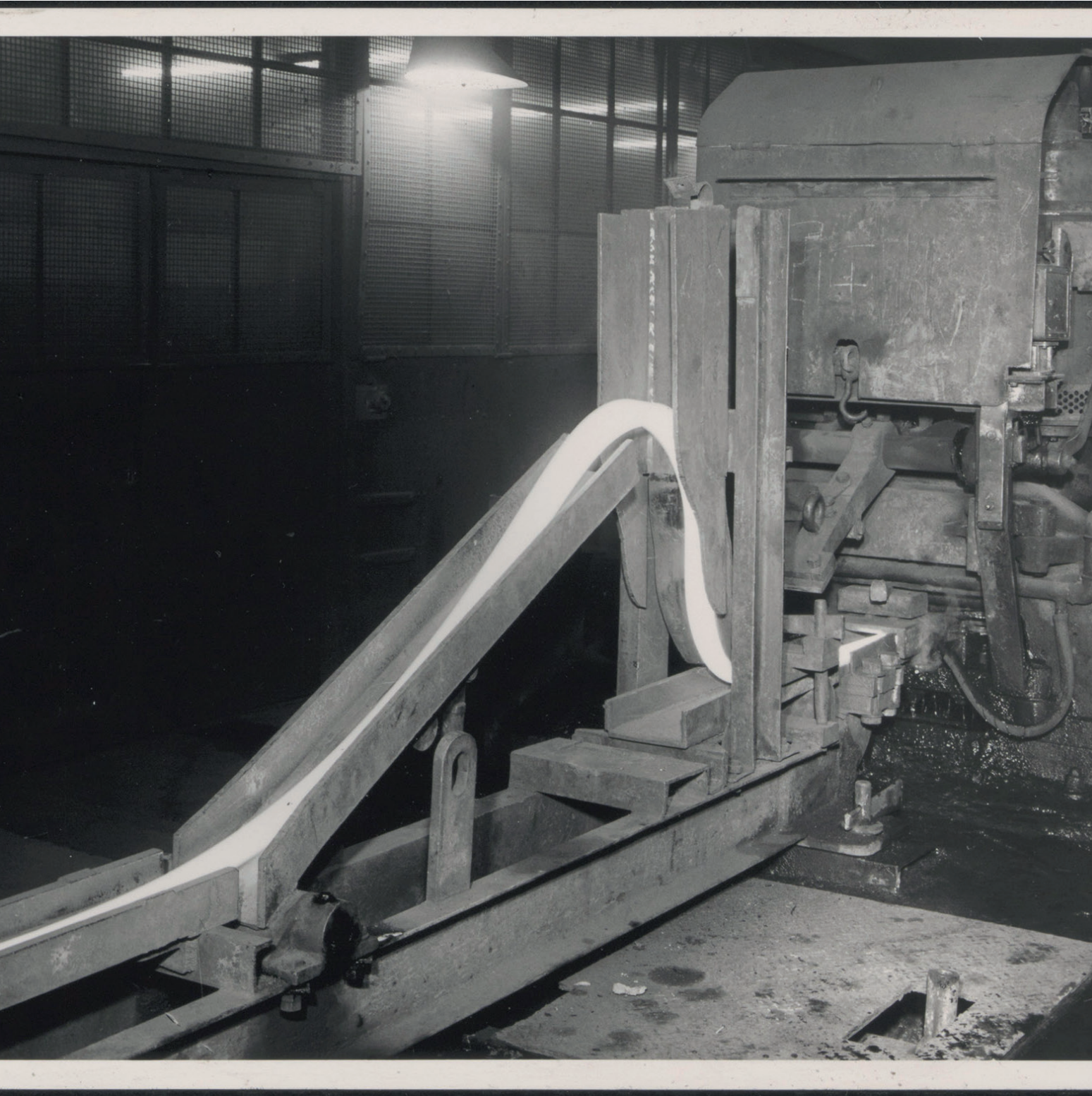


Afsteken van elektro-oven G van de kabelfabriek  
(Regionaal archief Dordrecht, 1989)



Putovens in de Kabelfabriek  
(Regionaal archief Dordrecht, 1989)



**Production process****3. Rolled steel strip enters the strip floor**

Wipgoot in de bandstraat van de kabelfabriek  
(Regionaal archief Dordrecht, n.d.)

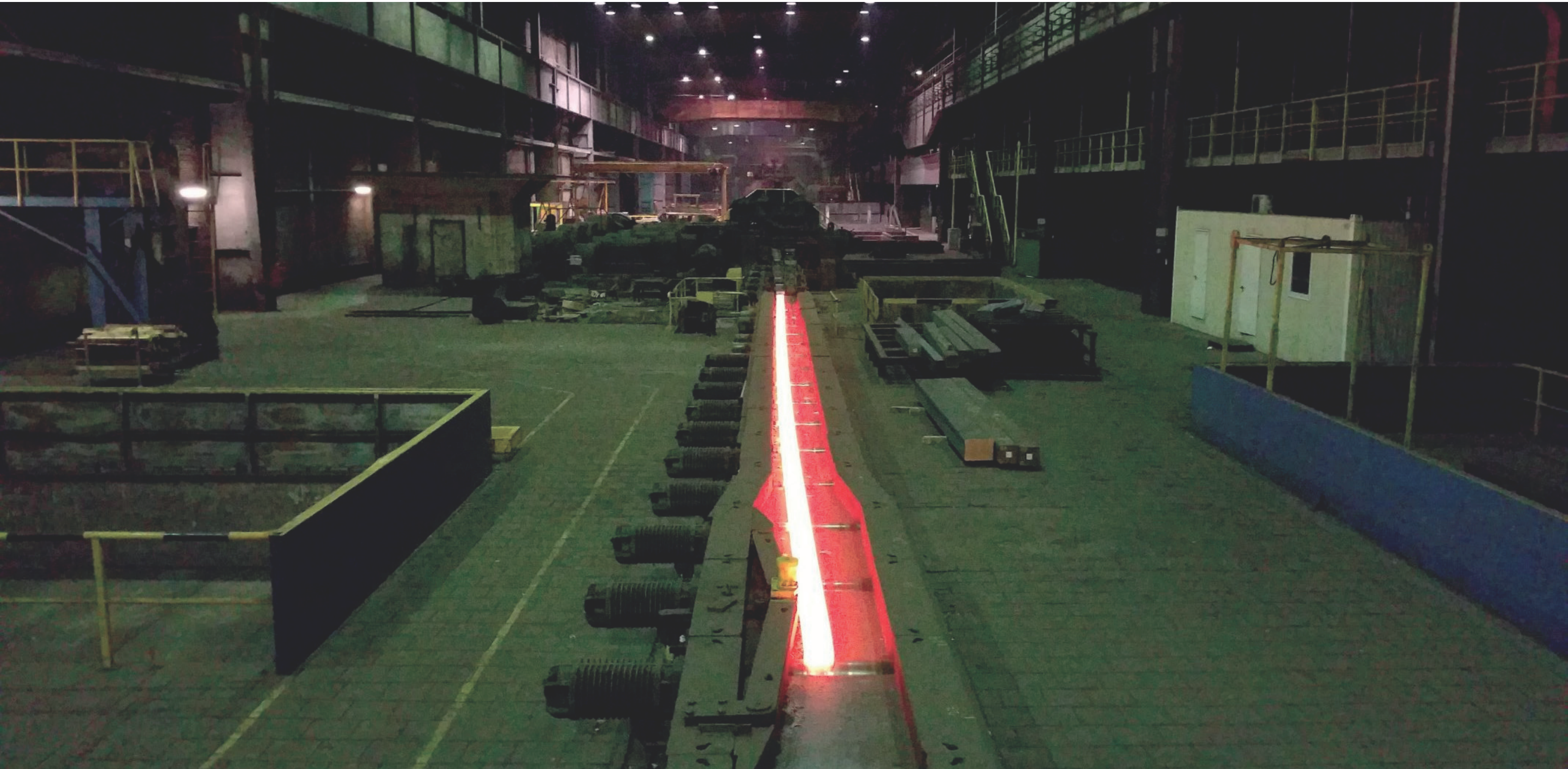


Gewalst stalen band komt met hoge snelheid de bandvloer op  
(Regionaal archief Dordrecht, 1974)



## Production process

### 4. Automatisatie because of red-hot steel



Nedstaal; van sloop tot vrije vertaling  
(djharry, 2019)



**Production process**  
5. Storage until transport



Nedstaal in Alblaserdam  
(Algemeen Nederlandsch Fotobureau 1984)



**Production process**  
6. Transport via river Noord

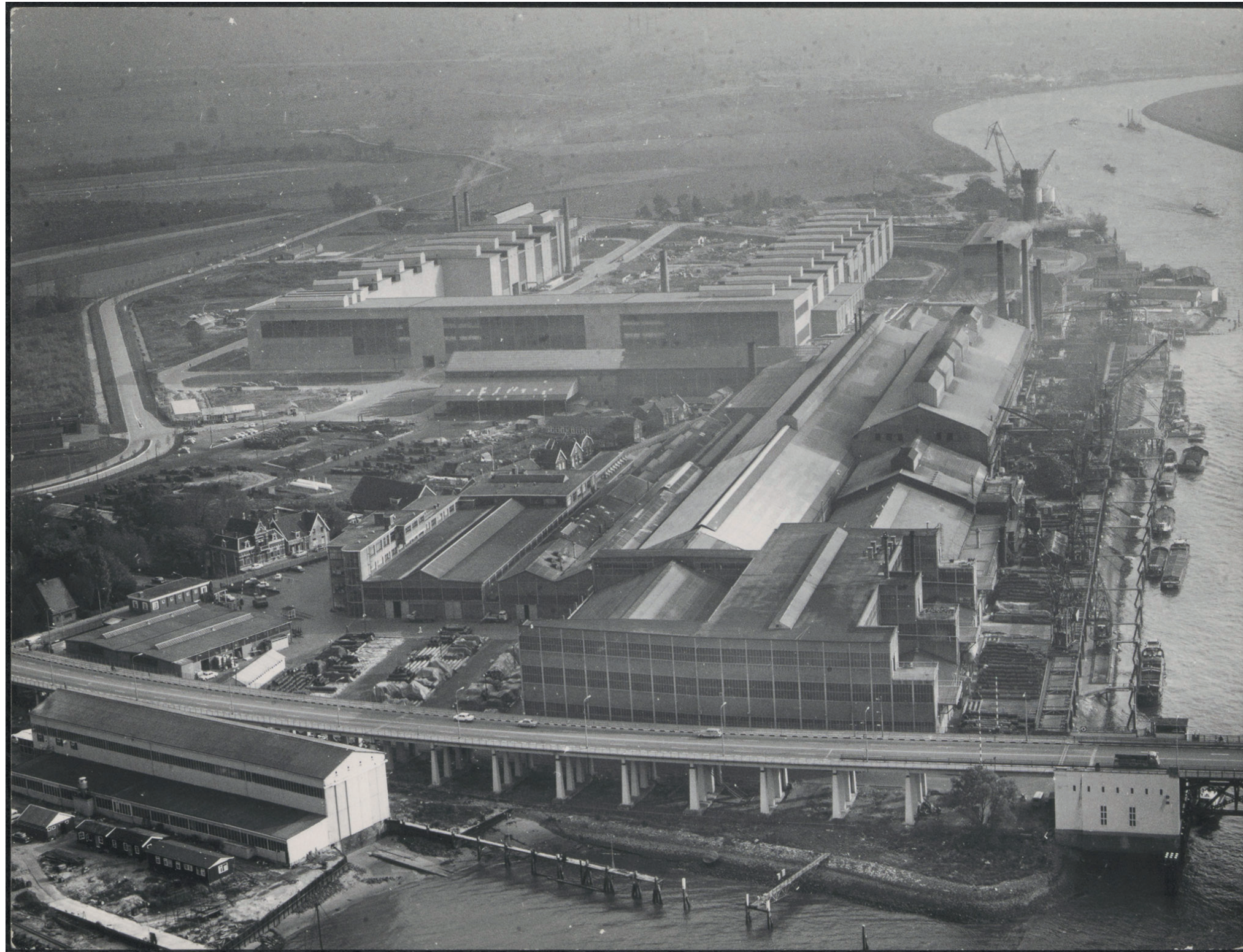


De kabelfabriek in Alblasserdam.  
(Regionaal archief Dordrecht, 1960)



## Heydays

### Expansion of Nedstaal building along river Noord



Luchtfoto van de kabelfabriek in Alblasterdam  
(Regionaal archief Dordrecht, 1966)



**Heydays**  
Well-known company

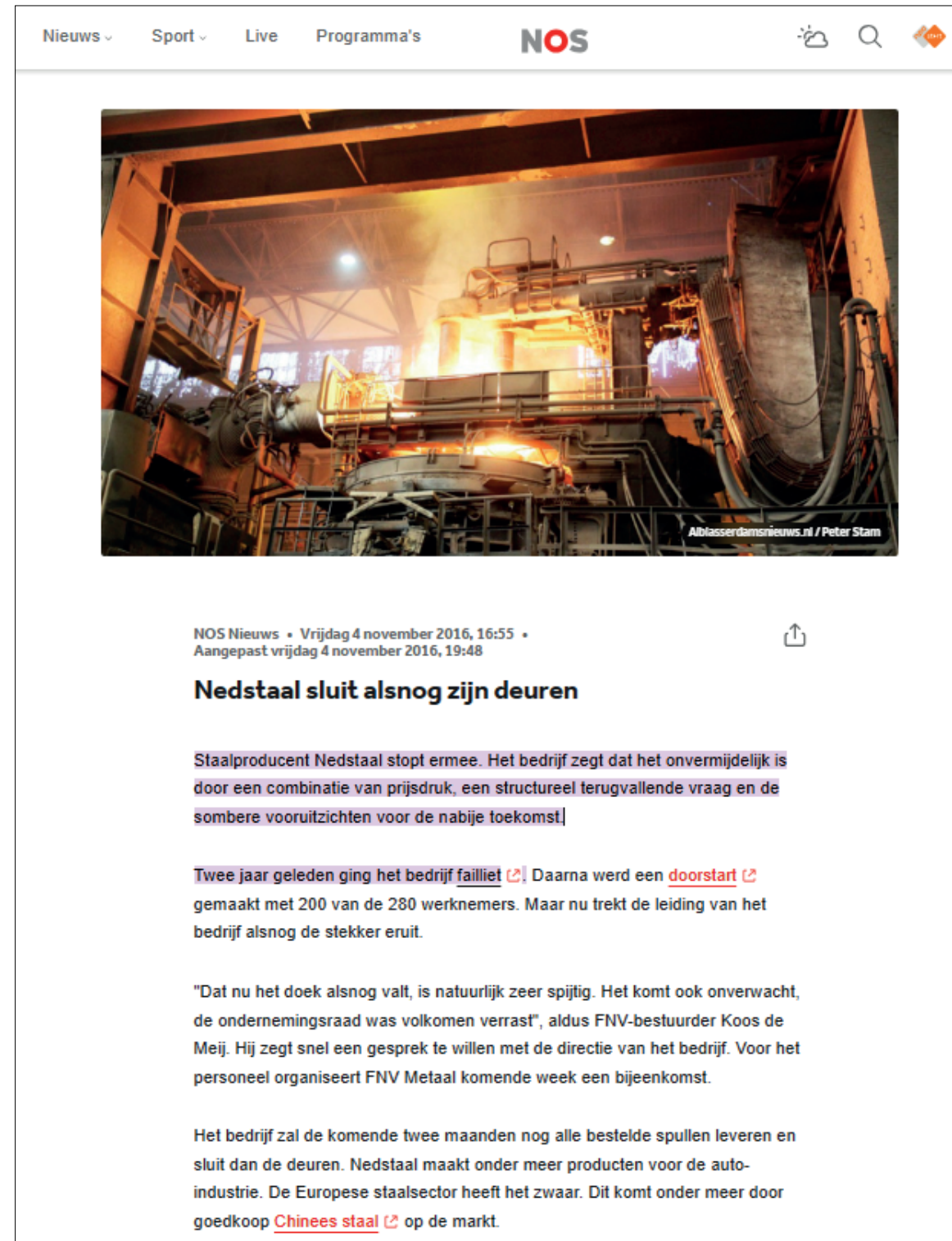


Bezoek van koningin Juliana en prins Bernard  
(Regionaal archief Dordrecht, 1951)



## Why transform?

### 1. Vacancy of Nedstaal company



Nedstaal sluit alsnog zijn deuren  
(NOS, 2016)



## Why transform?

### 1. Vacancy of Nedstaal company



Nedstaal  
(*Alblasserdamnieuws*, 2012)



Nedstaal site  
(*Own picture*, 2024)



Nedstaal interior  
(*Own picture*, 2024)



## Why transform?

### 2. Densification



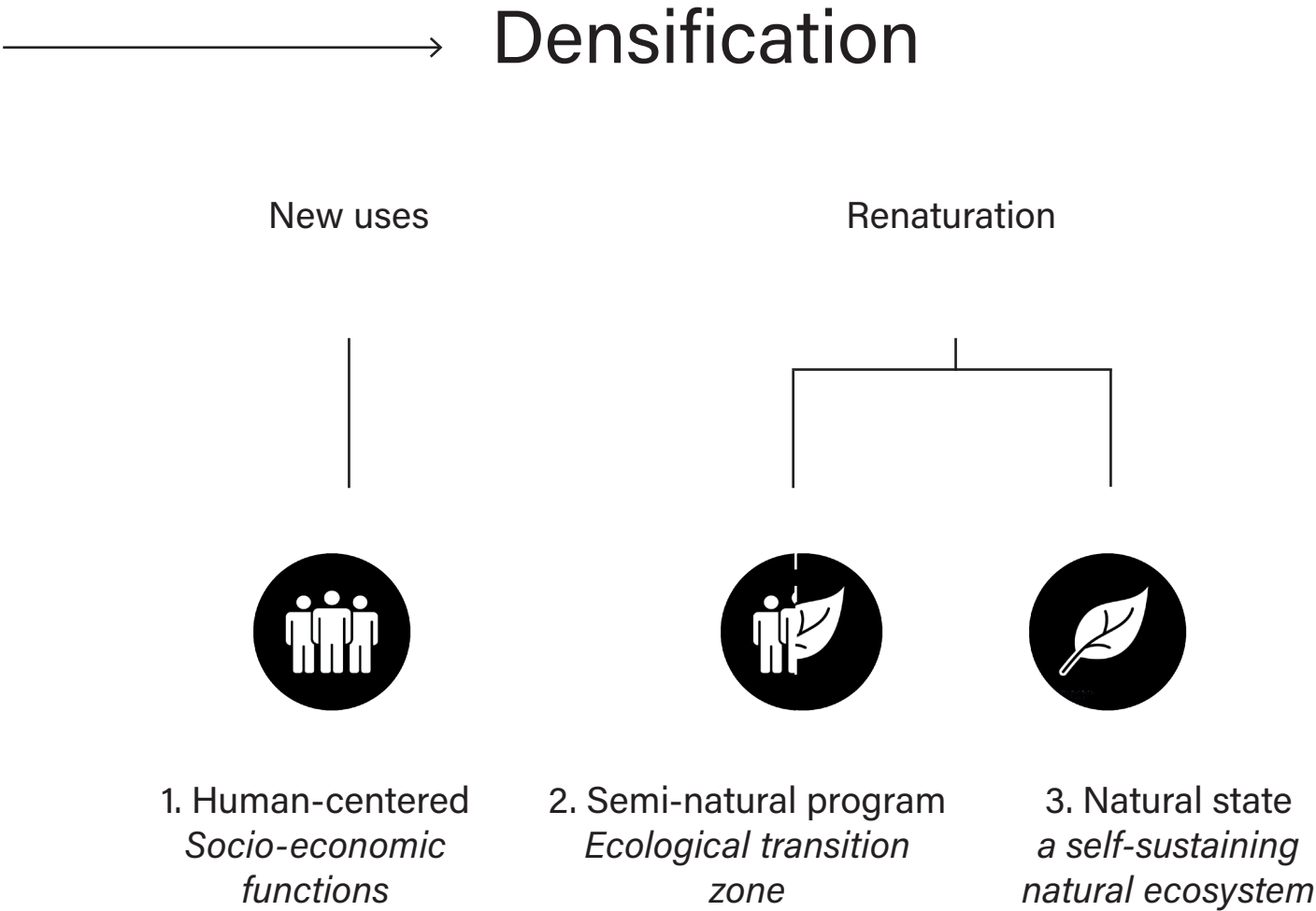
No net land take by 2025?  
(EU, 2016)



Why transform?  
2. Densification



No net land take by 2025?  
(EU, 2016)





Why transform?

3. Values




















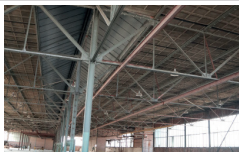

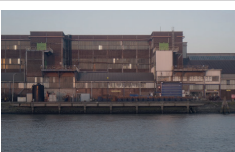



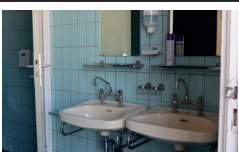
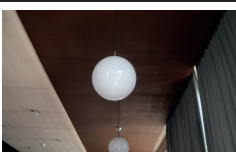



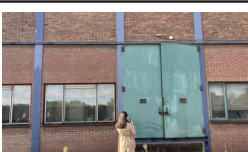
Value matrix  
(Kuipers & De Jonge, 2016)

	Age value	Historical value	Intentional commemorative value	Non intended commemorative value	Use value	New-ness value	(Relative) art value	Rarity value	Other relevant values
Surroundings/setting									
Site									
Skin (exterior)									
Structure									
Space plan									
Surfaces (interior)									
Services									
Stuff Maritime industrial heritage									



Why transform?  
3. Values

Value matrix with  
own additions  
*(Kuipers & De Jonge,  
2016. with own addi-  
tions)*





















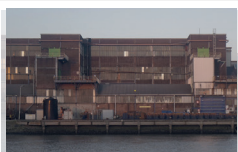



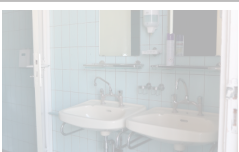
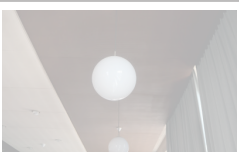



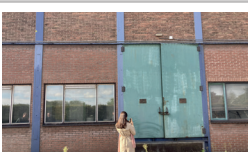
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Stuff Maritime industrial heritage									



Why transform?

3. Values

Value matrix with own additions  
(Kuipers & De Jonge, 2016. with own additions)

	Age value	Historical value	Intentional commemorative value	Non intended commemorative value	Use value	New-ness value	(Relative) art value	Rarity value	Other relevant values
Surroundings/setting									
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Why transform?  
3. Values



Longitudinal  
character +  
neighbourhood scale  
*Rarity value*

Luchtfoto van Nedstaal, 1955  
(Collectie regionaal archief Dordrecht)



Visibility from bridge  
and water (landmark)  
*Rarity value*

De kabelfabriek in vanaf de Brug over de Noord  
(Collectie regionaal archief Dordrecht)



Visible coloured layers  
*Historical value*

Nedstaal facade  
(Own pictures, 2024)

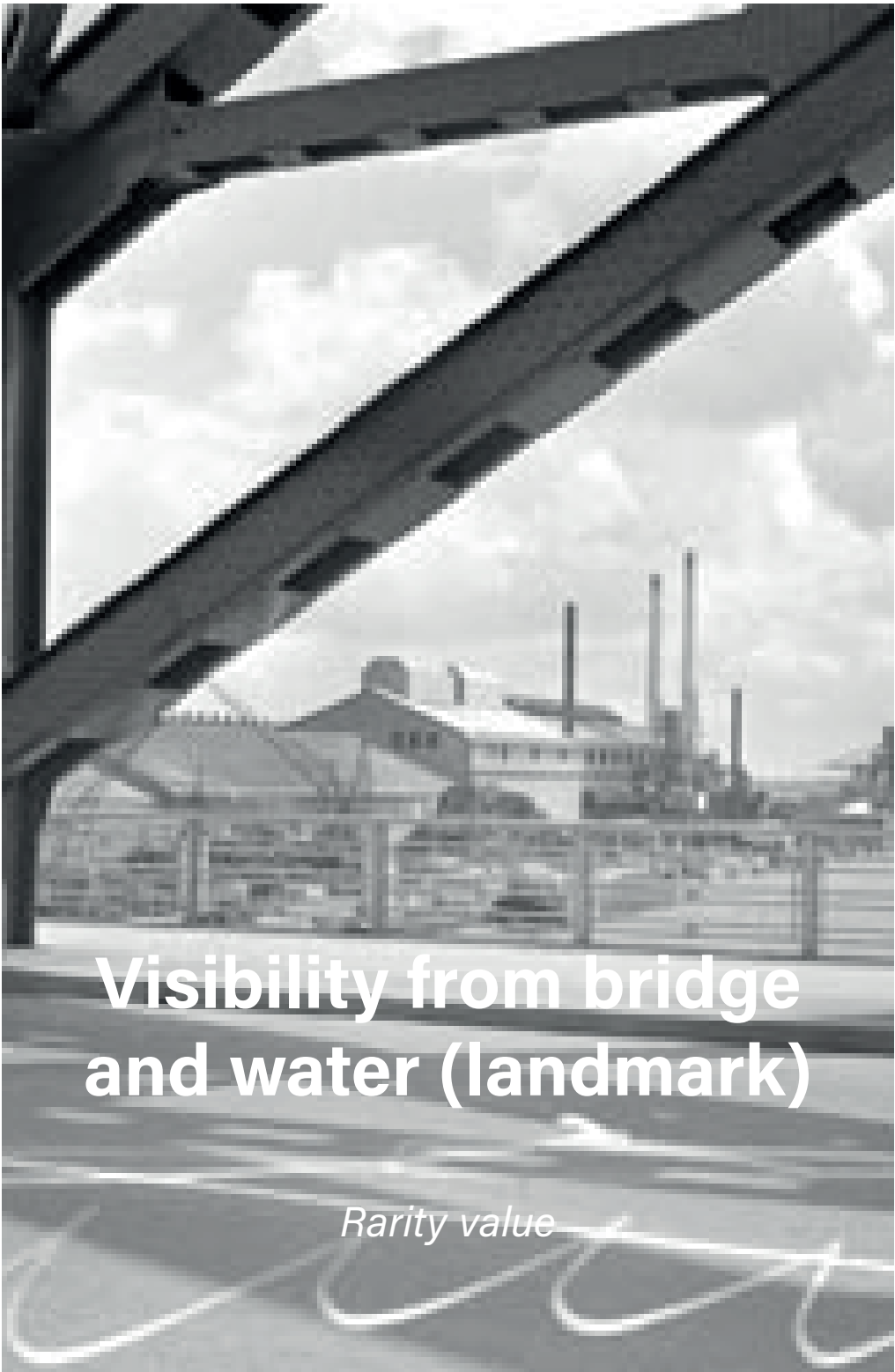


Why transform?  
3. Values



**Longitudinal  
character +  
neighbourhood scale**  
*Rarity value*

Luchtfoto van Nedstaal, 1955  
(Collectie regionaal archief Dordrecht)



**Visibility from bridge  
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Nedstaal facade  
(Own pictures, 2024)



## Why transform?

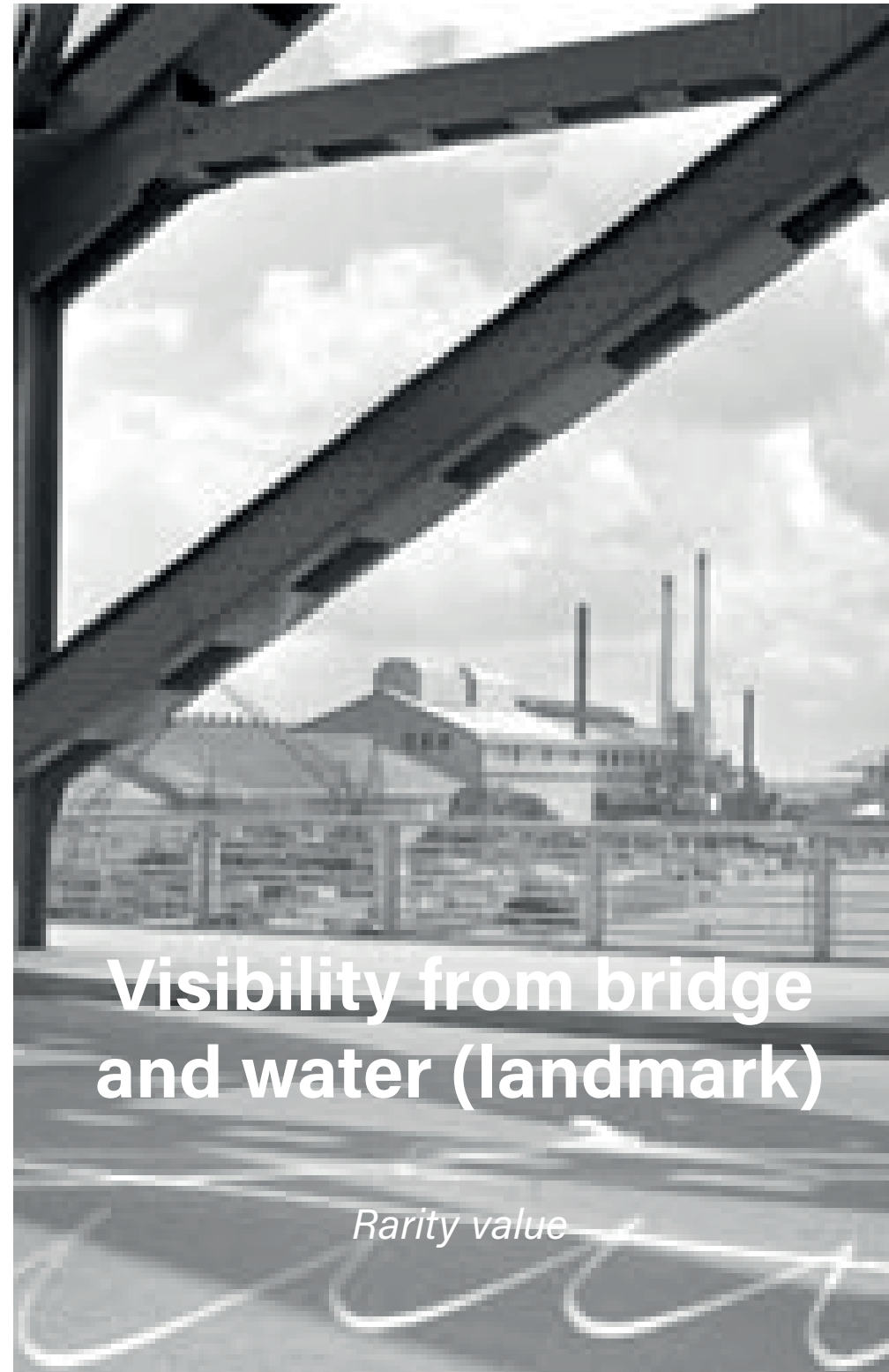
### 3. Values



**Longitudinal  
character +  
neighbourhood scale**

*Rarity value*

Luchtfoto van Nedstaal, 1955  
(Collectie regionaal archief Dordrecht)



**Visibility from bridge  
and water (landmark)**

*Rarity value*

De kabelfabriek in vanaf de Brug over de Noord  
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**Visible coloured layers**

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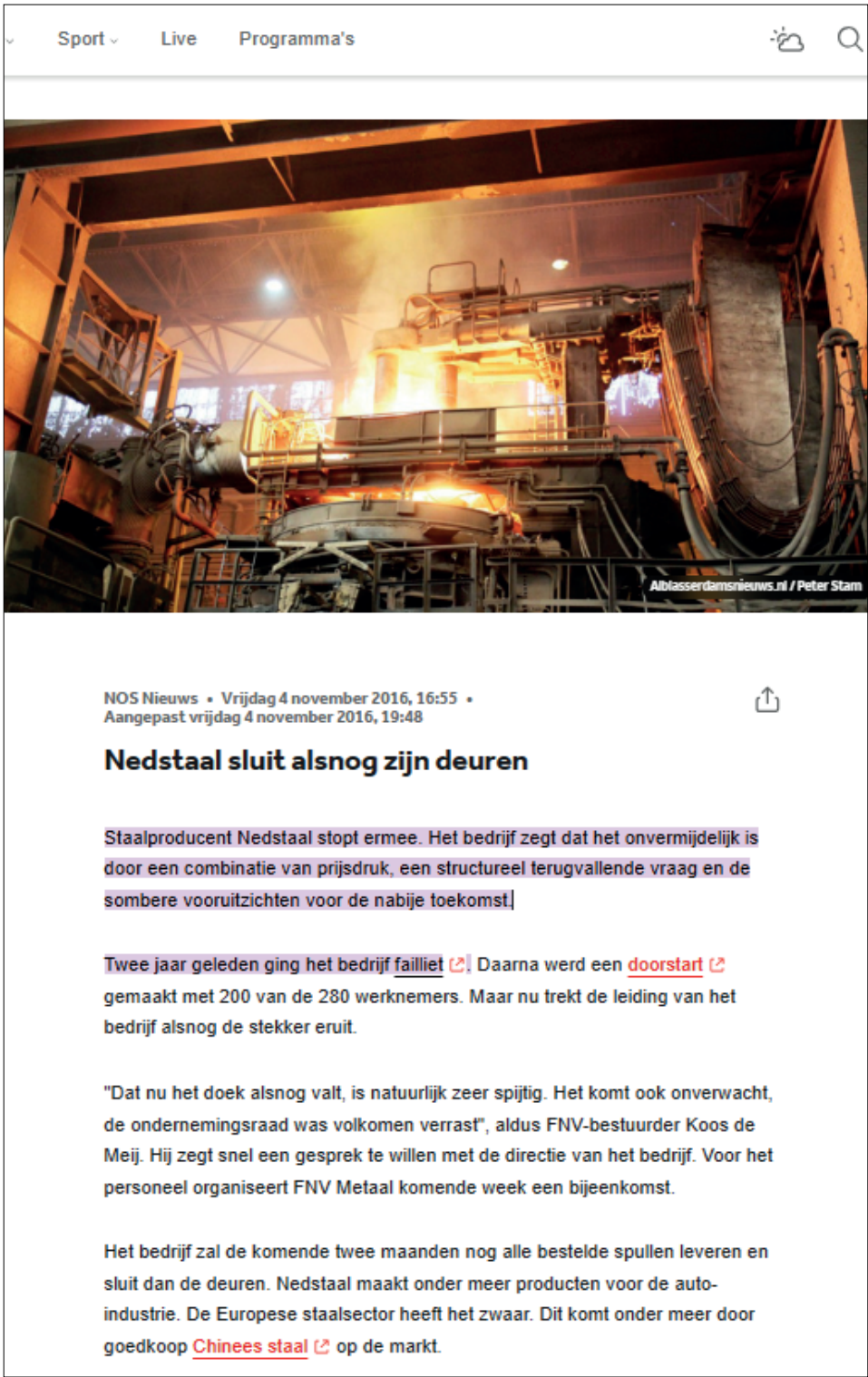


Why transform?  
Densify, vacancy, values



Nedstaal sluit alsnog zijn deuren  
(NOS, 2016)

&



Nedstaal sluit alsnog zijn deuren  
(NOS, 2016)

&



Nedstaal values  
(Own pictures, 2024)



Introduction  
**Research** ————— How?  
Urban  
Industrial complex  
Architecture  
Conclusion



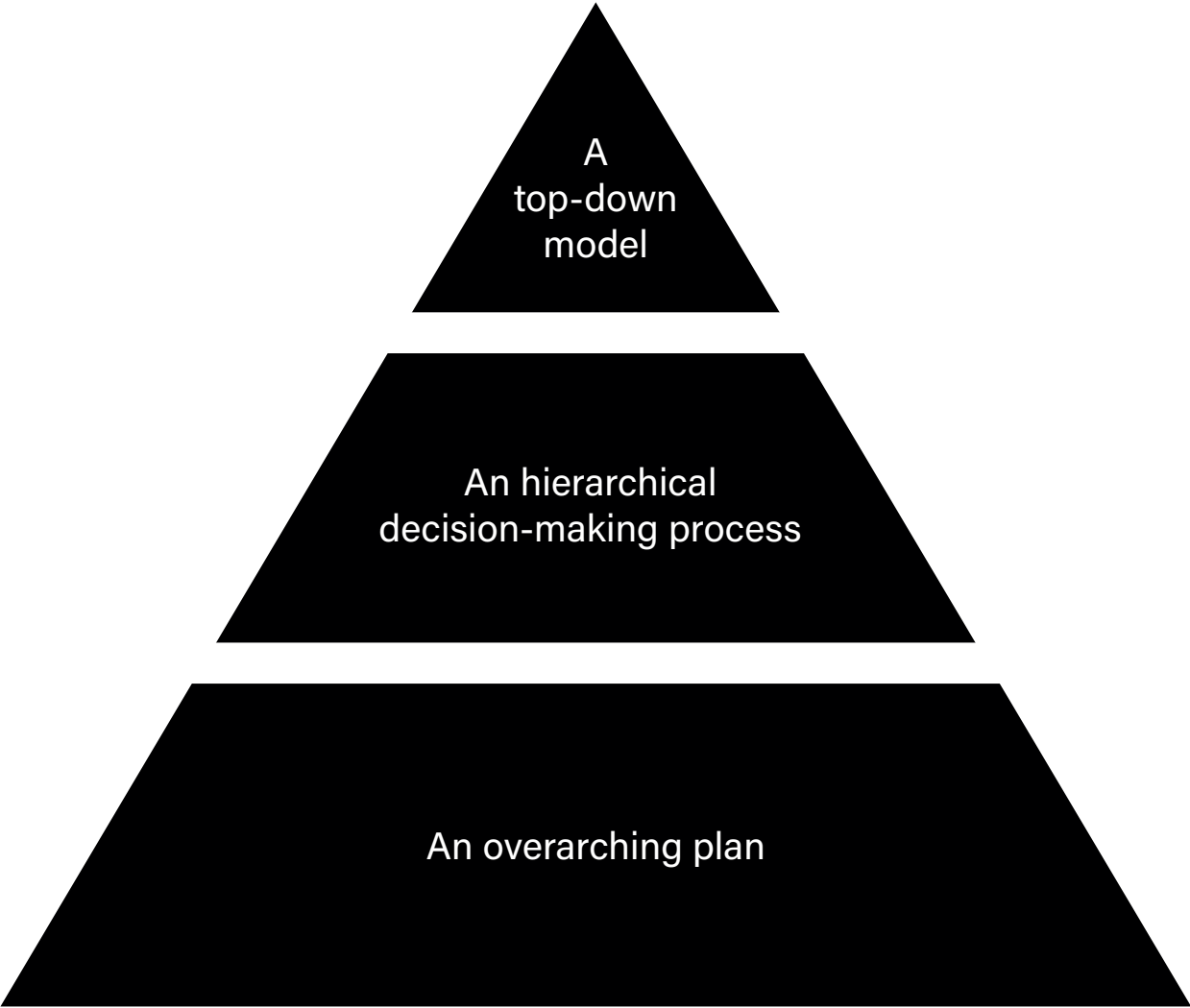
## **Problem statement**

**'Traditional urban planning approaches prove insufficient  
addressing the complexities of contemporary urban  
industrial heritage transformation'**

*(Oevermann and Mieg; 2025, Sun & Chen, 2021)*



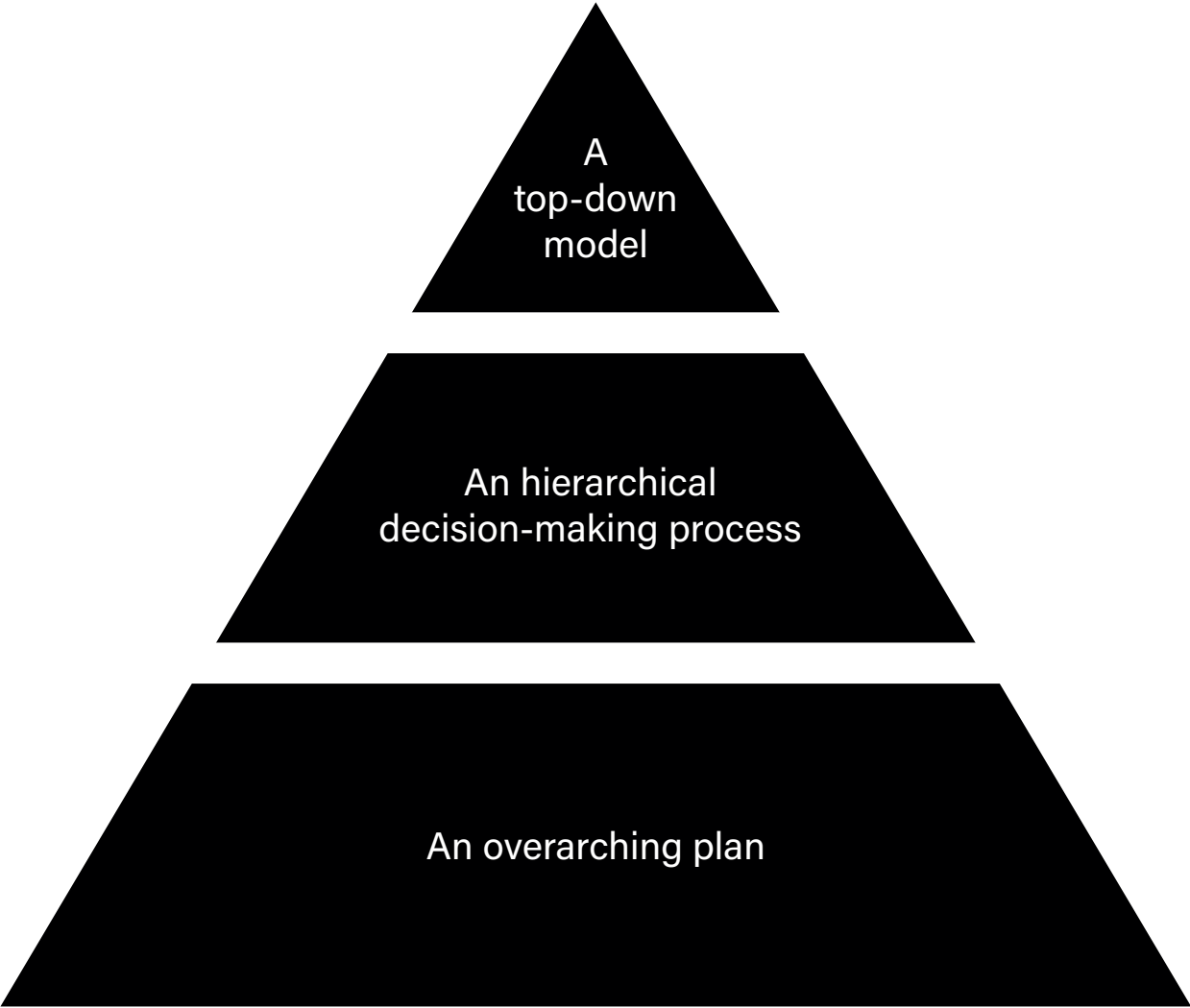
**Traditional urban development**  
*(Preite 2012)*





Traditional urban development

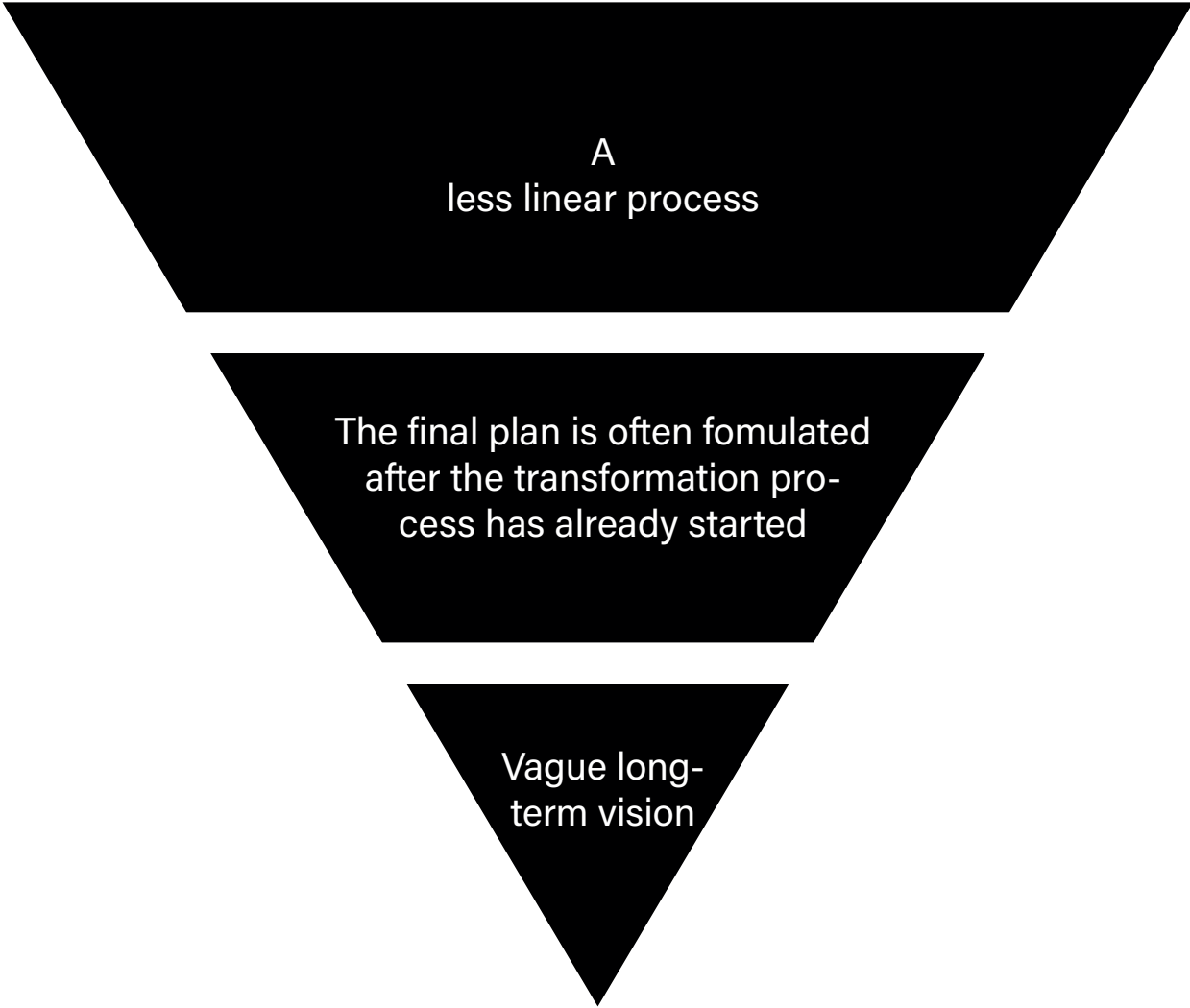
(Preite 2012)



/

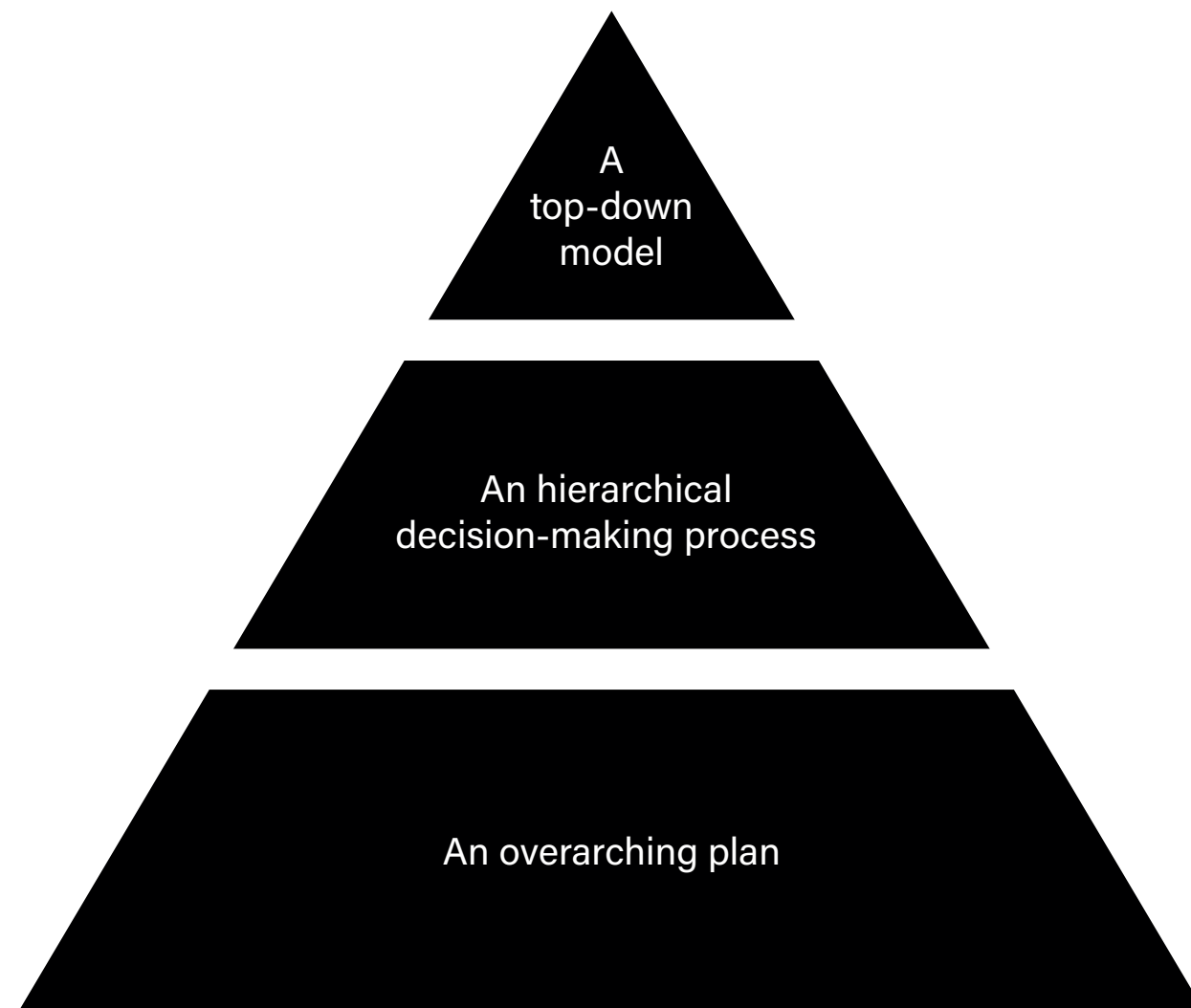
Urban redevelopment of industrial heritage

(Alpopi, 2013)

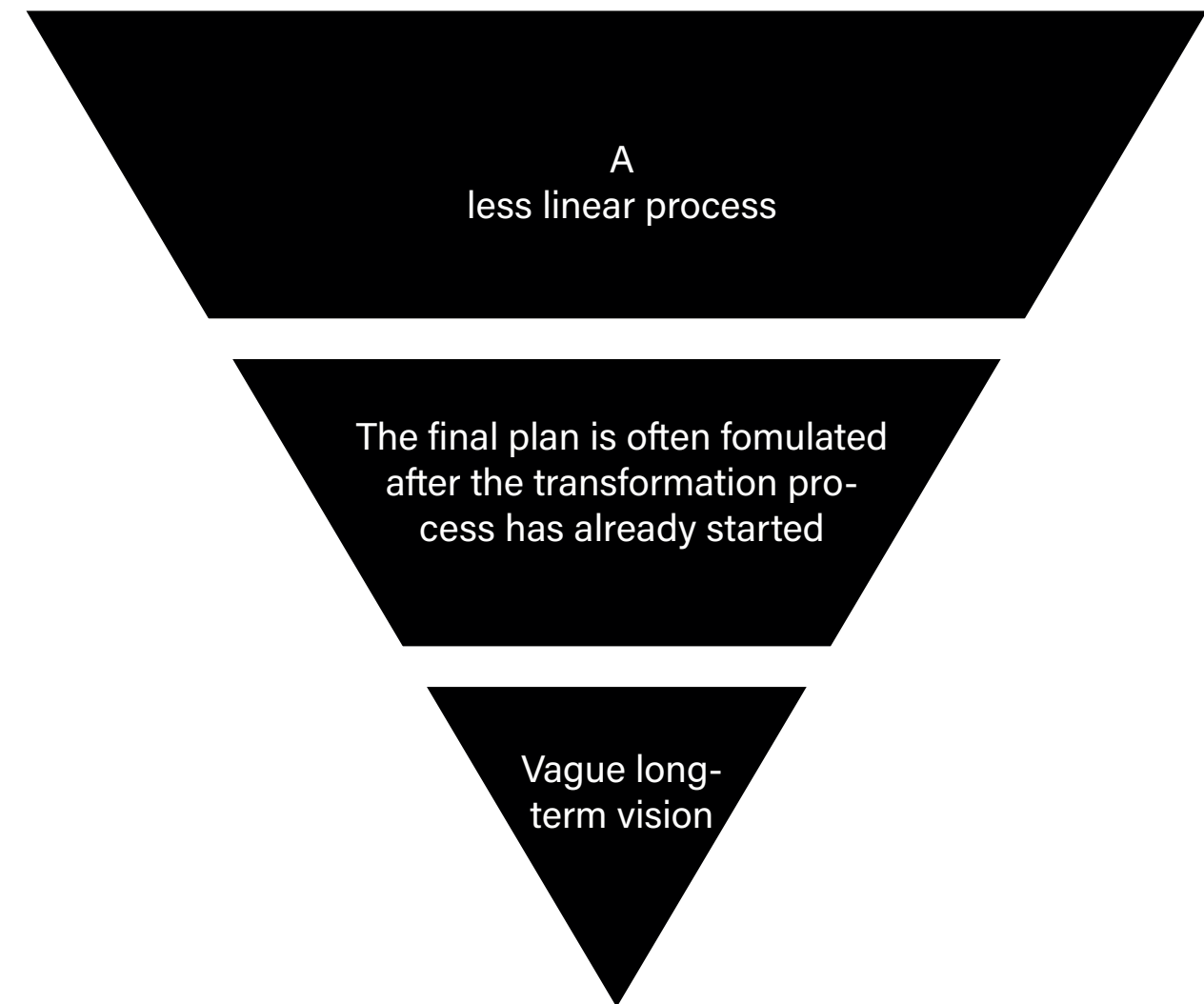




**Traditional urban development**  
*(Preite 2012)*



**/ Urban redevelopment of industrial heritage**  
*(Alpopi, 2013)*

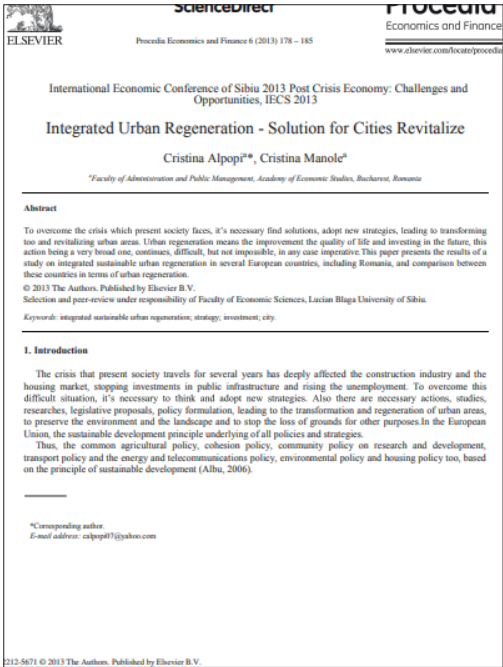


"How can urban regeneration strategies be evolved across different scales to guide the complexities of redeveloping industrial heritage?"

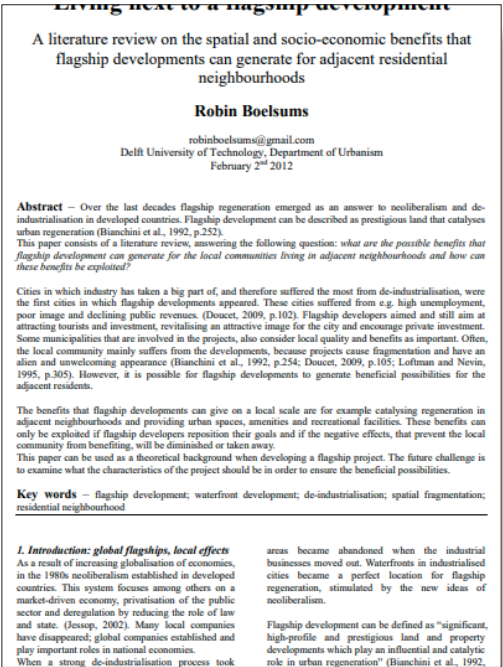


1. Literature review

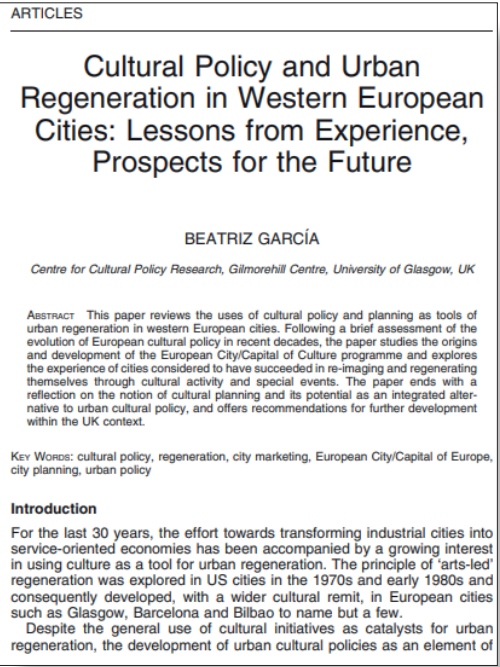
Academic papers



Integrated urban regeneration  
*(Alpopi & Manole, 2013)*



Living next to a flagship develop-  
ment  
*(Boeisums, 2012)*



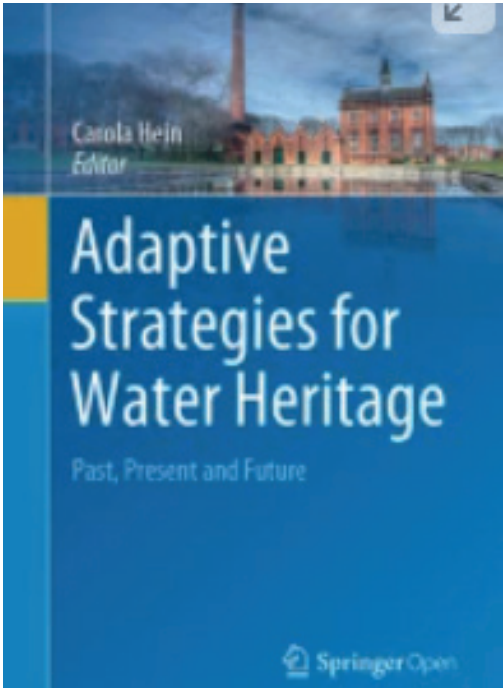
Cultural policy and urban regene-  
ration in Westen European cities  
*(Garcia, 2012)*



Conversion of industrial heritage  
as a vector of cultural regeneration  
*(Cristina et al., 2013)*

Etc.

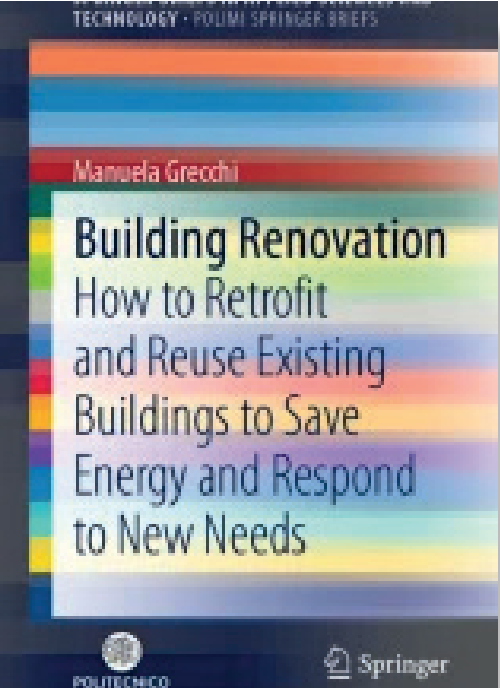
Theoretical books



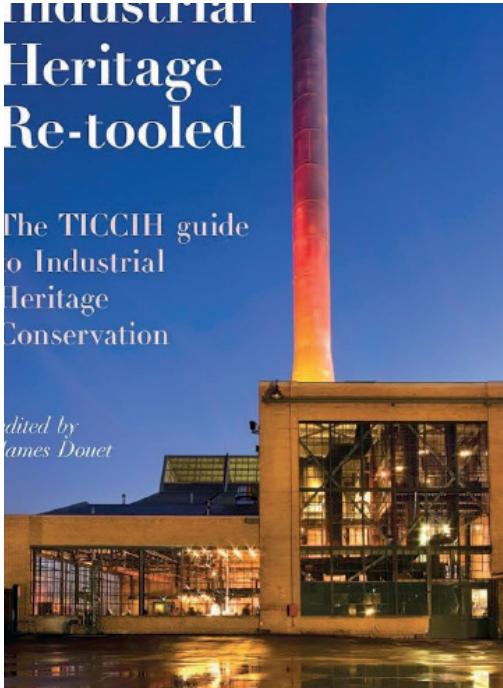
Adaptive strategies for water  
heritage  
*(Carola Hein, 2019)*



Overholland21  
*(Engel, 2021)*



Building renovation  
*(Grecchi, 2021)*



Industrial heritage re-tooled  
*(Douet, 2013)*

Etc.



Spatial guidelines for urban revitalisation

No top-down overarching plan  
Projects driven by vague long-term vision, using less rigid guidelines



Introduction

**Research**

Urban

Complex

Architecture

Conclusion

## Spatial guidelines for urban revitalisation

No top-down overarching plan

Projects driven by vague long-term vision, using less rigid guidelines





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**Research**

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## Spatial guidelines for urban revitalisation

No top-down overarching plan

Projects driven by vague long-term vision, using less rigid guidelines



Flagship project

Public places

Urban connectivity

Phased development

Defined program

Urban scale

Industrial complex scale

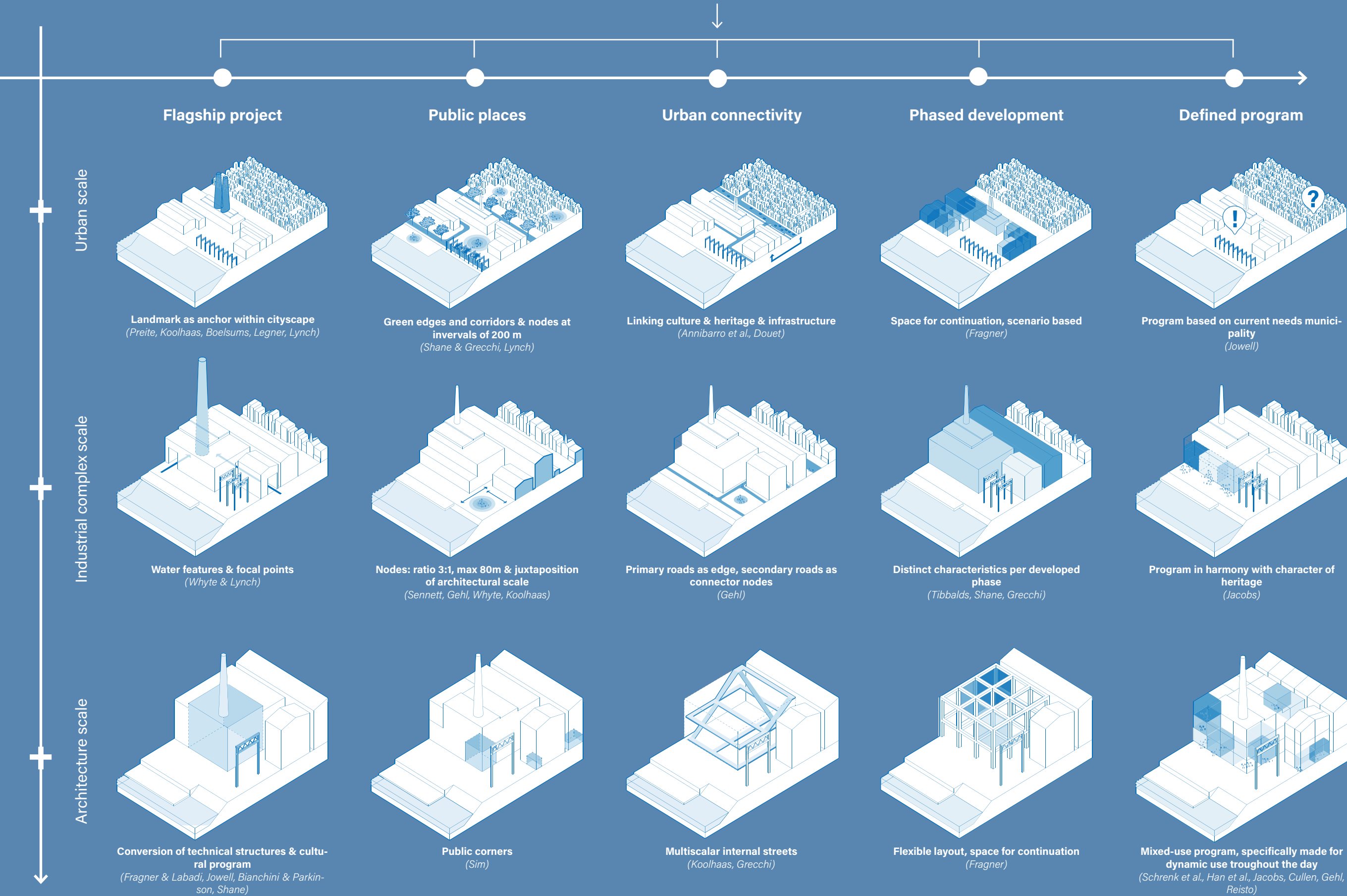
Architecture scale





Spatial guidelines for urban revitalisation

No top-down overarching plan  
Projects driven by vague long-term vision, using less rigid guidelines





2. Case study analysis



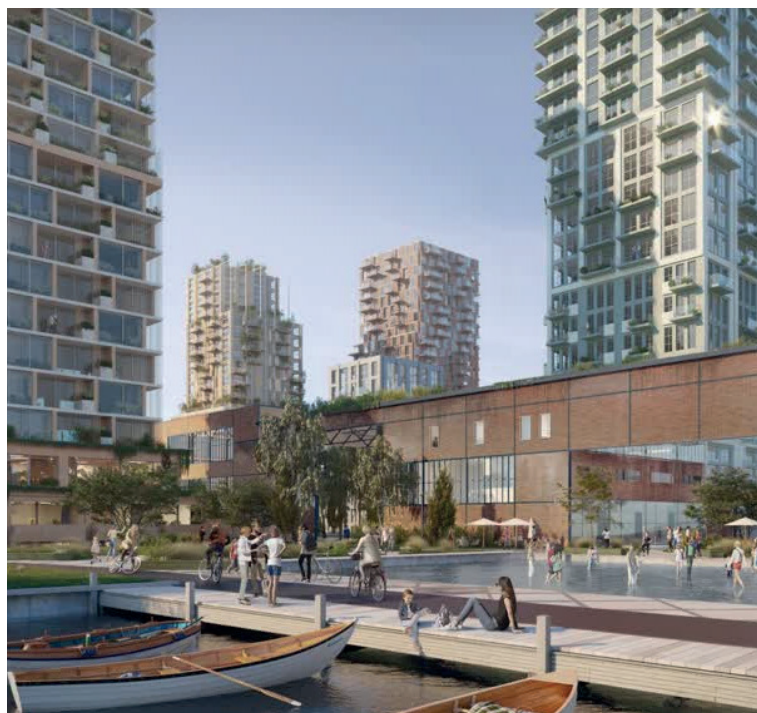
1. De Meelfabriek, Leiden  
*(Meelfabriek, 2024)*



2. Nordhavn, Copenhagen  
*(StateofGreen, 2022)*



3. Willemsoord, Den Helder  
*(De Havengids, 2025)*



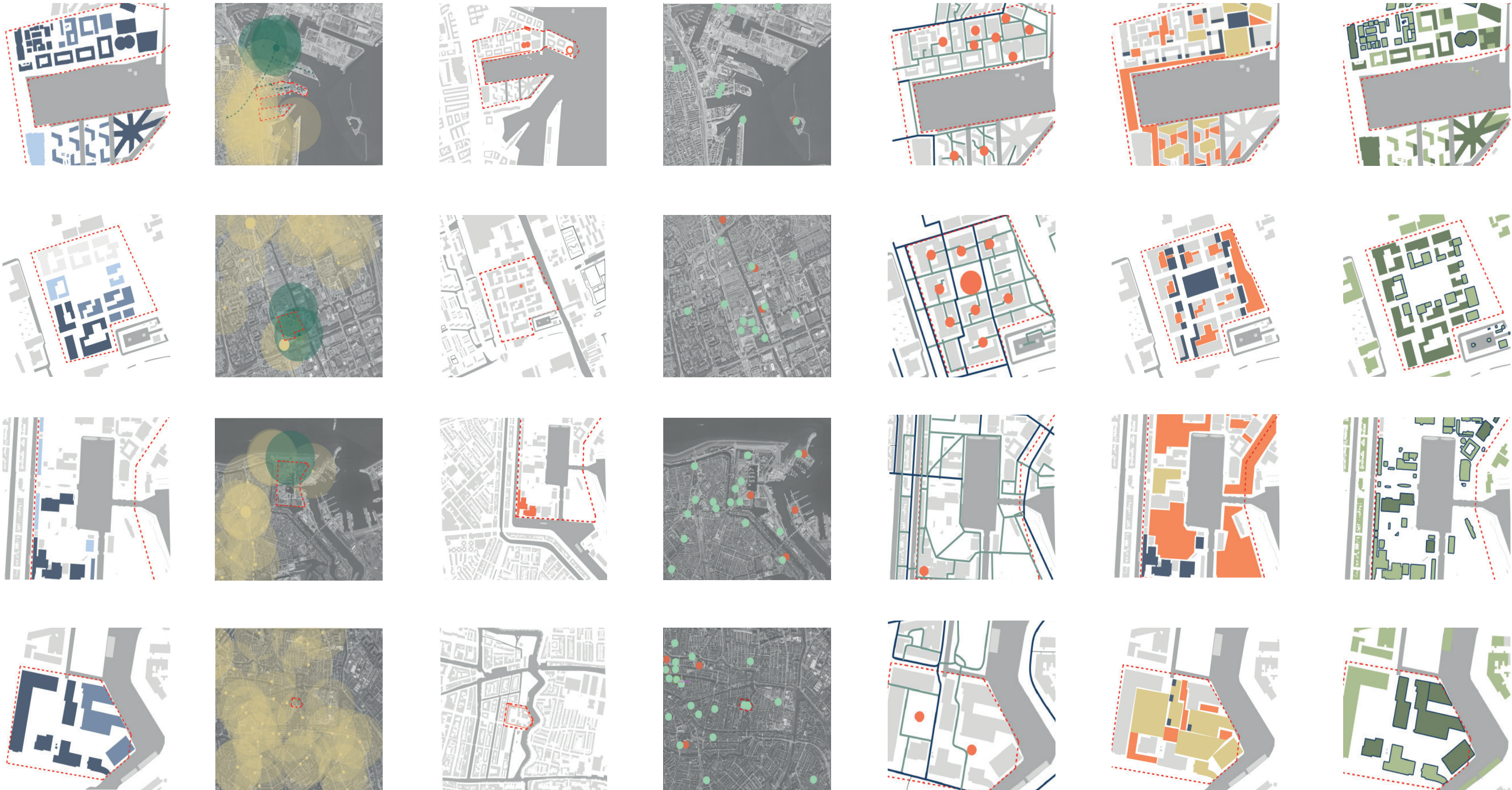
4. Kabelfabriek, Delft  
*(Mei Architects and planners, 2023)*



Nedstaal, Alblaserdam  
*(Boyang Shen, 2024)*



2. Case study analysis



Phased development  
(Own work, 2024)

Urban transportation  
(Own work, 2024)

Landmarks  
(Own work, 2024)

Cultural network  
(Own work, 2024)

Streets and nodes  
(Own work, 2024)

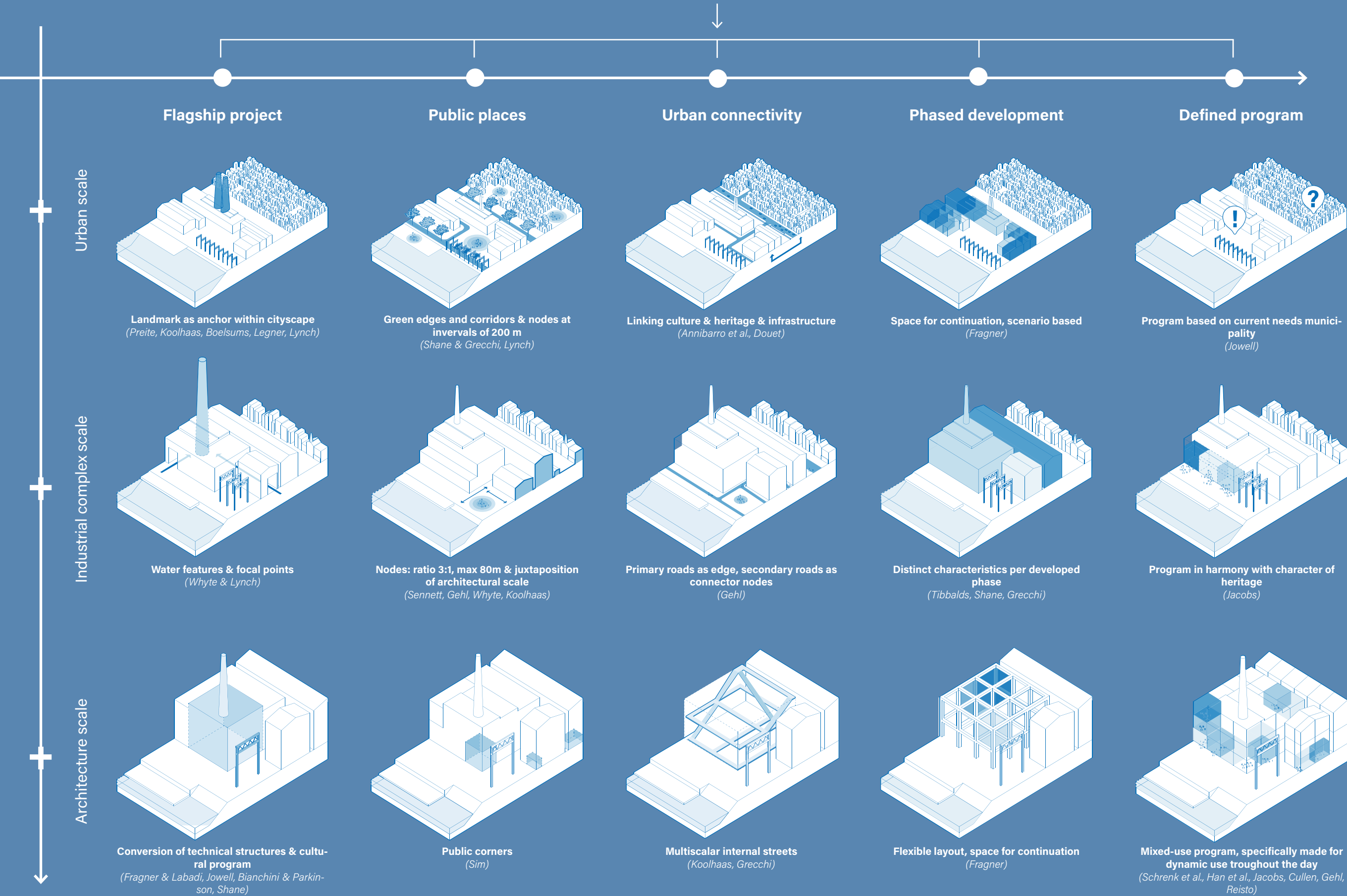
Public places  
(Own work, 2024)

Building shapes  
(Own work, 2024)



Spatial guidelines for urban revitalisation

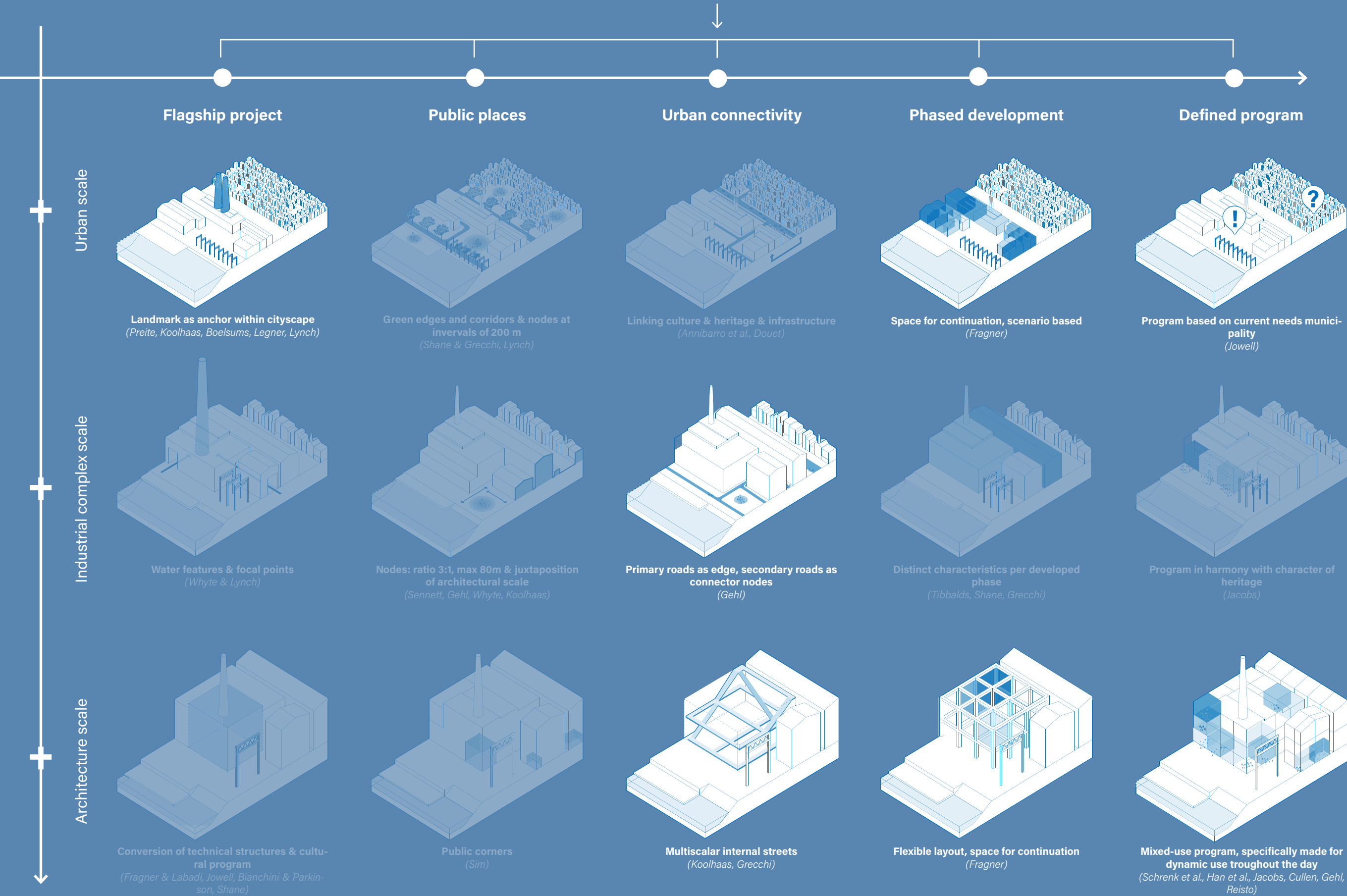
No top-down overarching plan  
Projects driven by vague long-term vision, using less rigid guidelines





Spatial guidelines for urban revitalisation

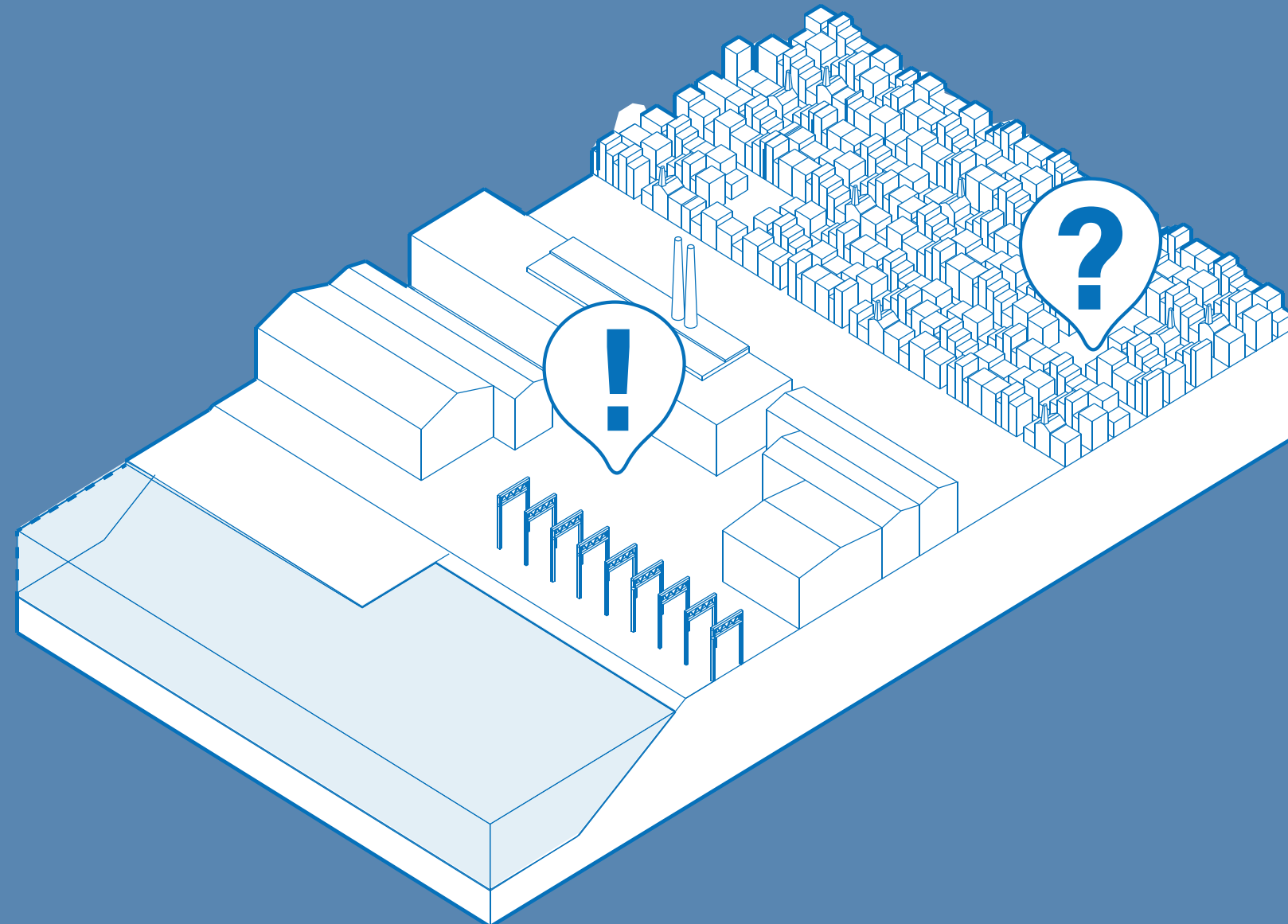
No top-down overarching plan  
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Introduction  
Research  
**Urban**  
Industrial complex  
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**Defined program**

Program based on current needs municipality  
(Jowell)



2 municipalities

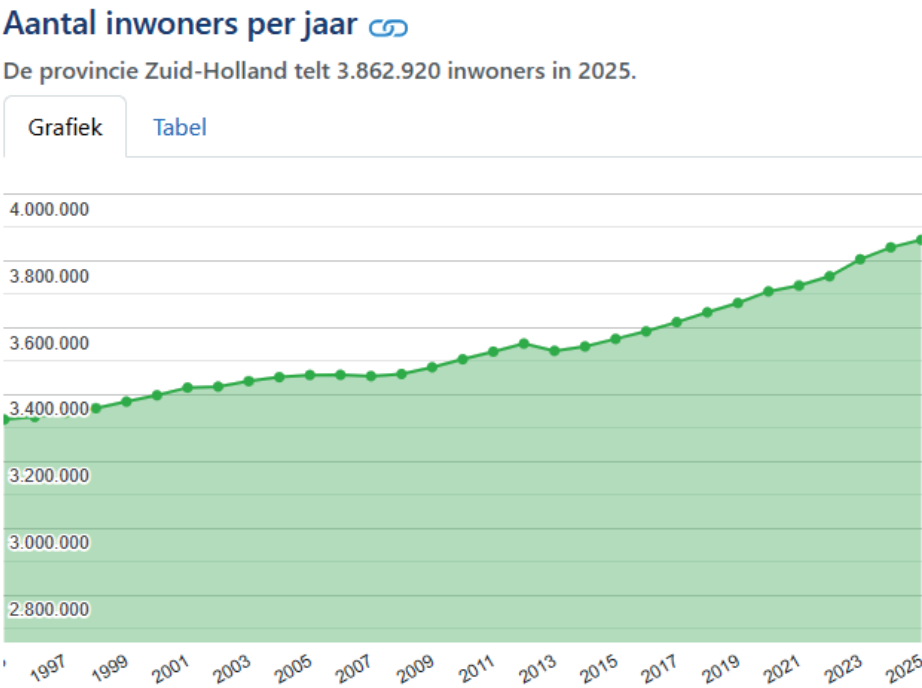


Niewland Parc  
(Google earth, 2024, with own addition)

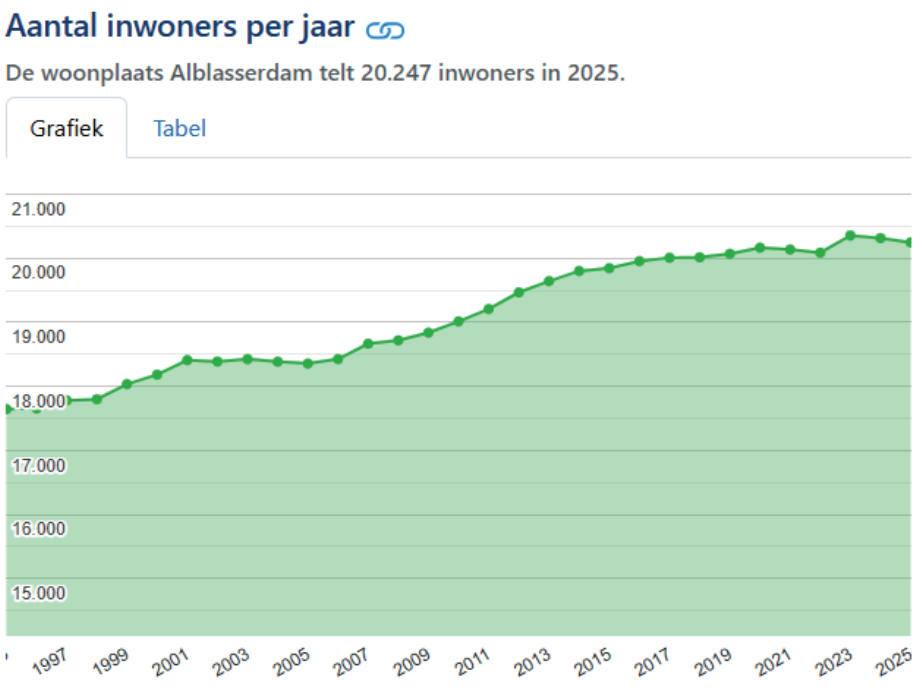
**Defined program**  
Based on needs municipality



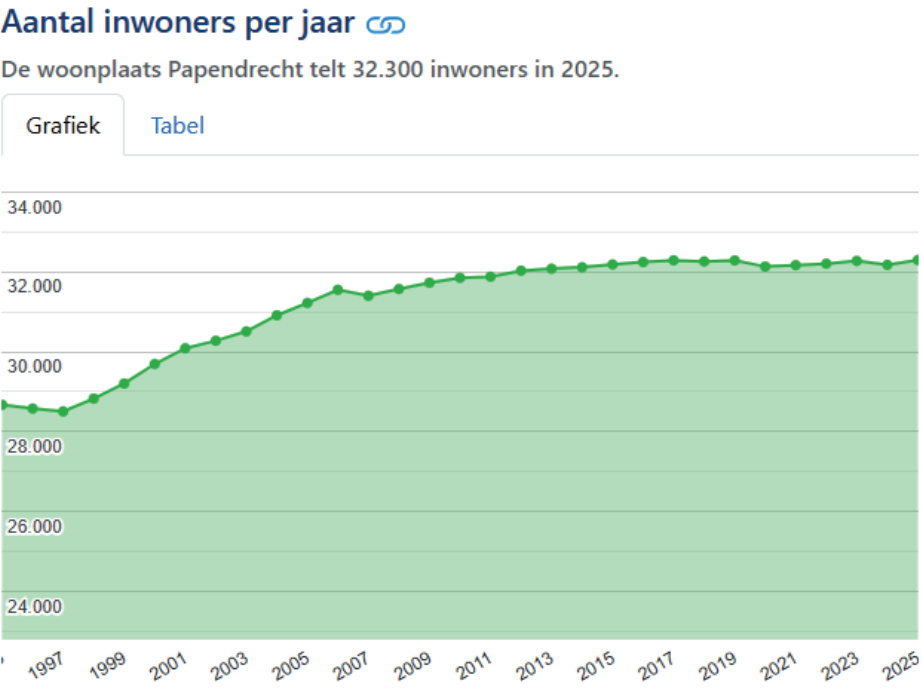
Increasing population



Population South Holland for each year  
(CBS, 2025)



Population Alblasserdam for each year  
(CBS, 2025)

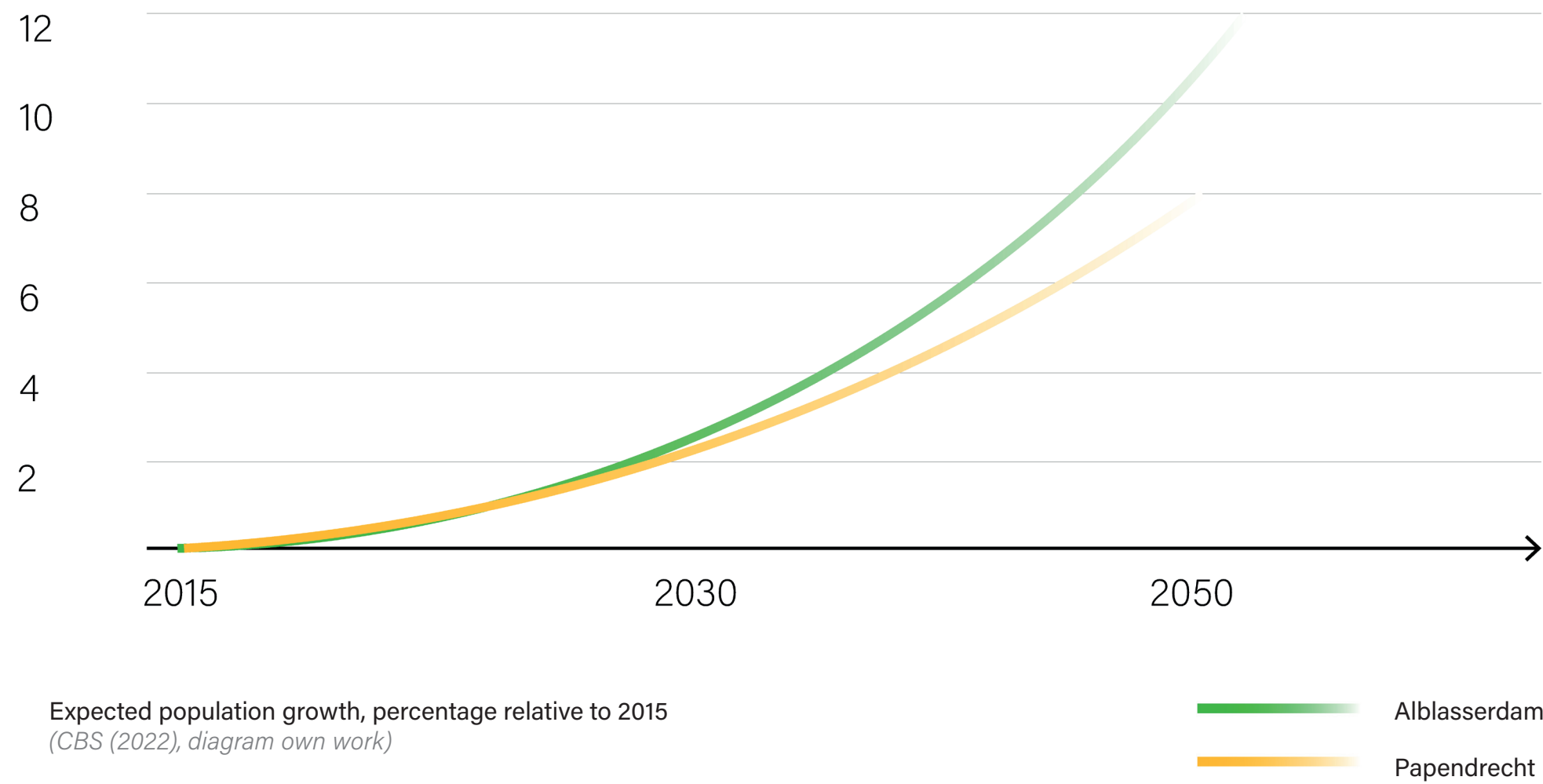


Population Papendrecht for each year  
(CBS, 2025)

**Defined program**  
Based on needs municipality



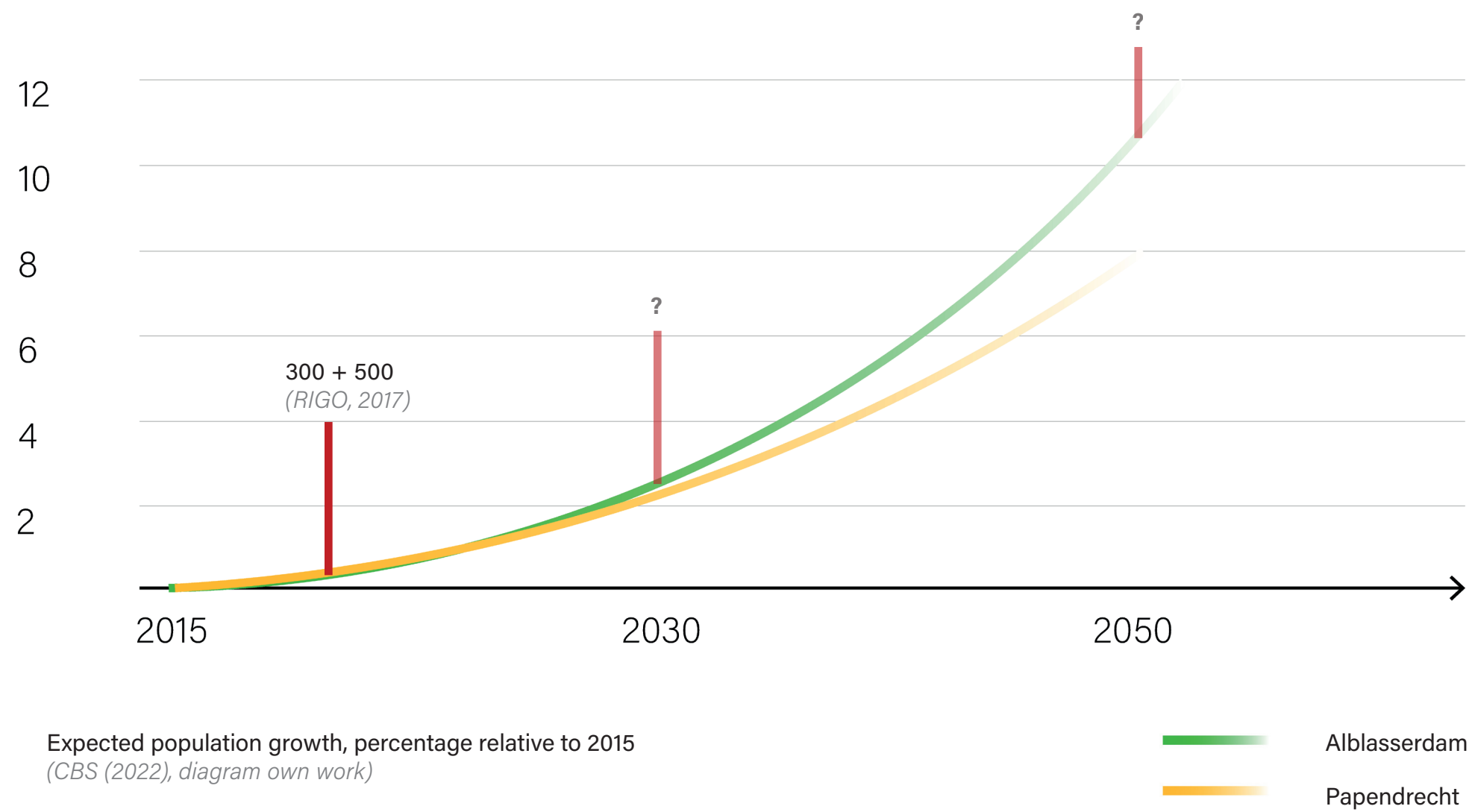
Expected population growth



**Defined program**  
Based on needs municipality



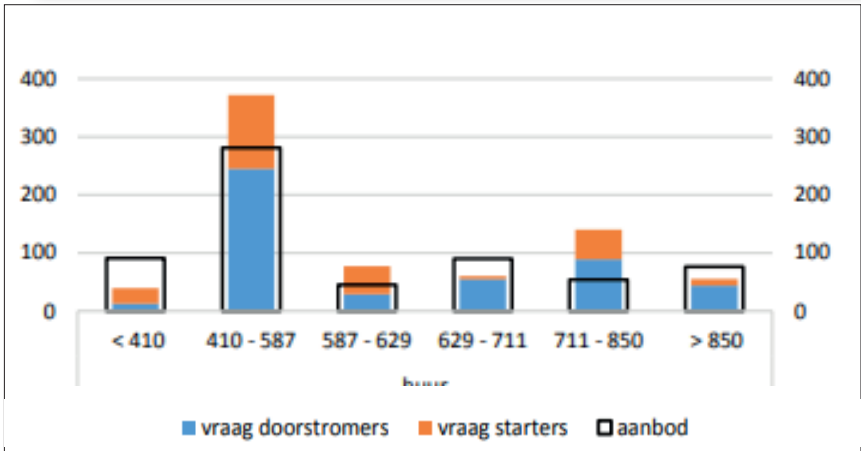
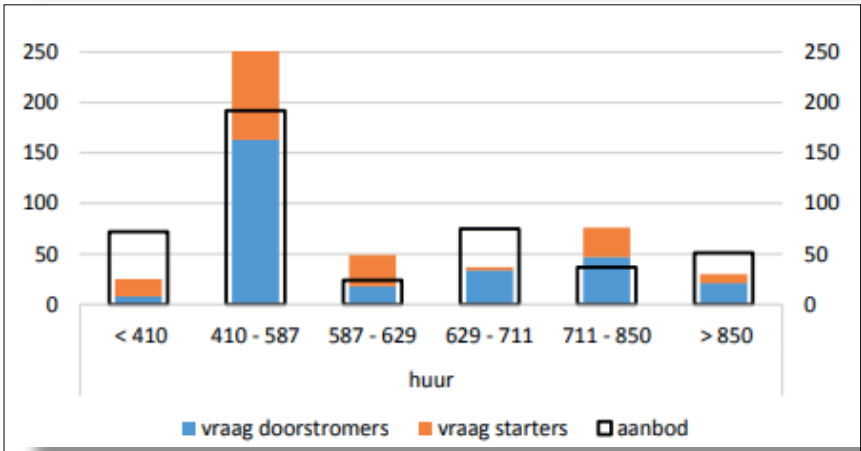
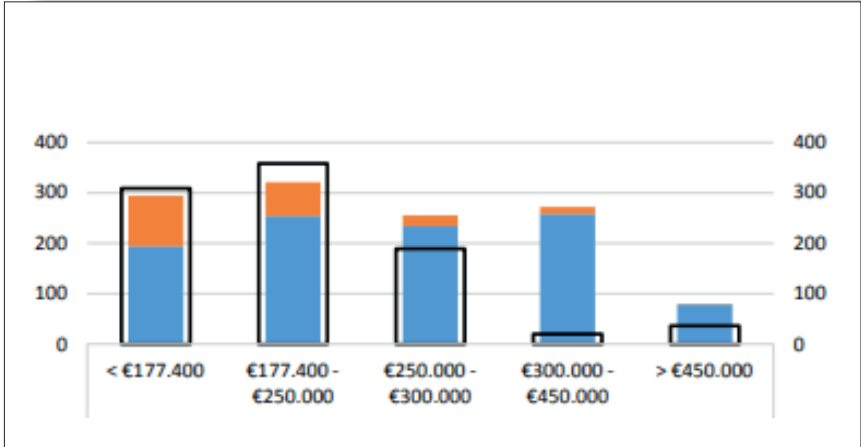
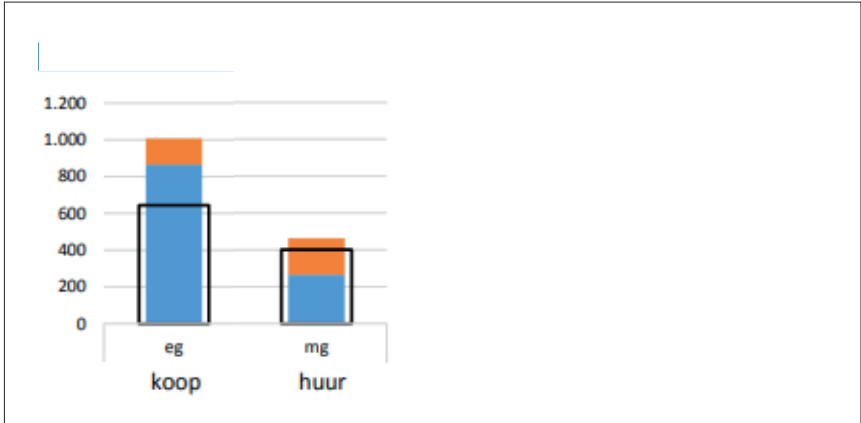
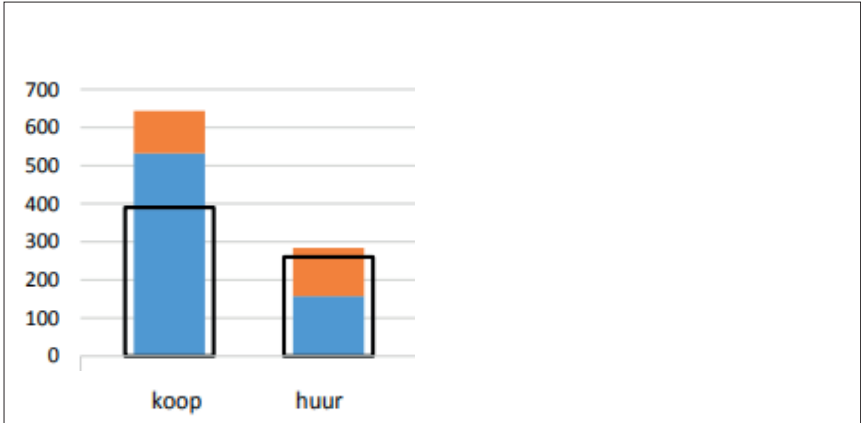
Need for housing



**Defined program**  
Based on needs municipality



Need for housing



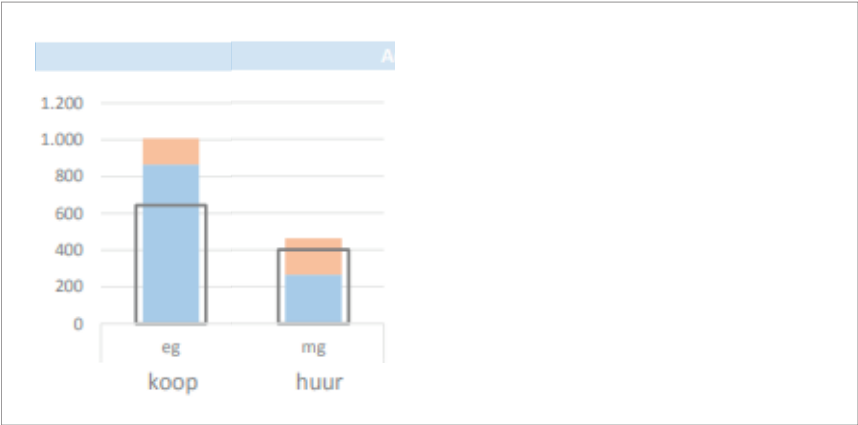
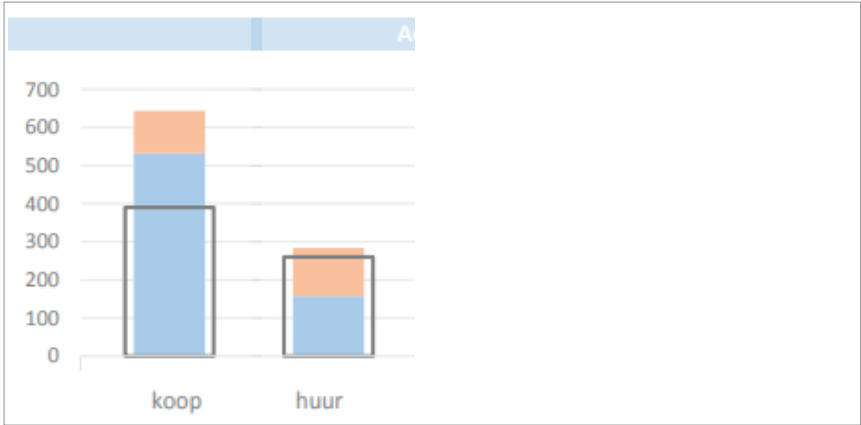
Supply and demand Alblaserdam, per price category  
(Woningmarktonderzoek Drechtsesteden Rigo, 2017)

Supply and demand Papendrecht, per price category  
(Woningmarktonderzoek Drechtsesteden Rigo, 2017)

**Defined program**  
Based on needs municipality



Need for housing



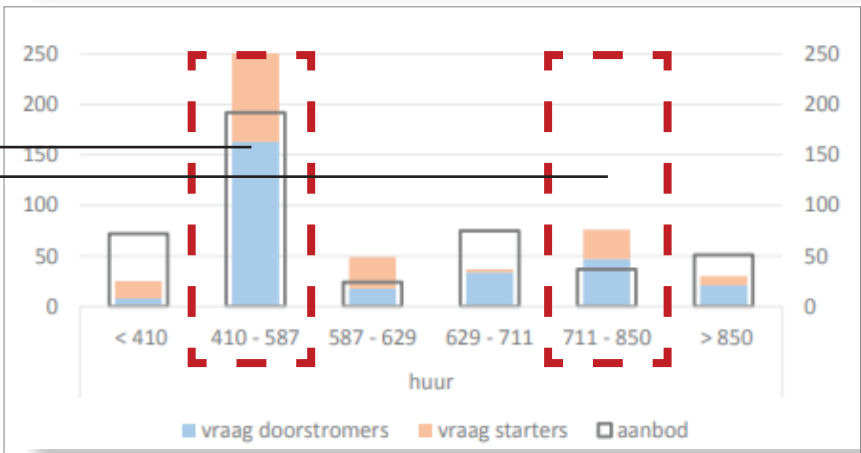
€400.000



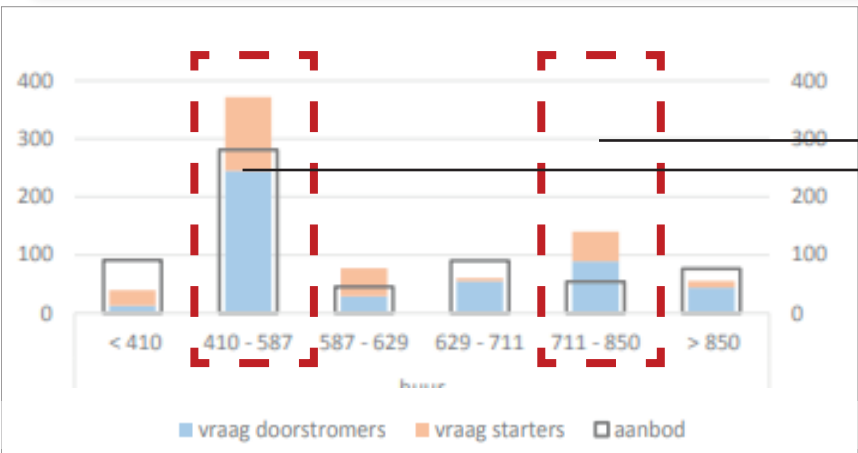
€400.000



€500/800



€500/800



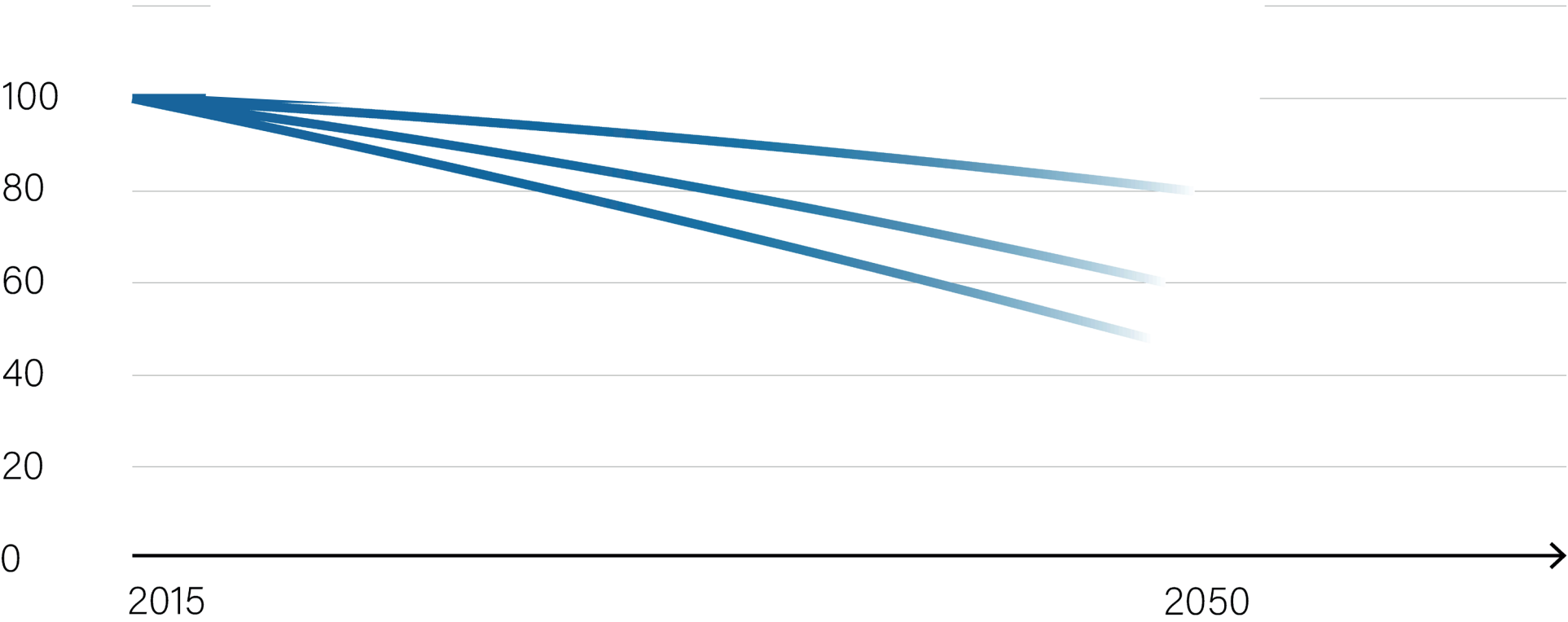
Supply and demand Alblaserdam, per price category  
(Woningmarktonderzoek Drechtsesteden Rigo, 2017)

Supply and demand Papendrecht, per price category  
(Woningmarktonderzoek Drechtsesteden Rigo, 2017)

**Defined program**  
Based on needs municipality



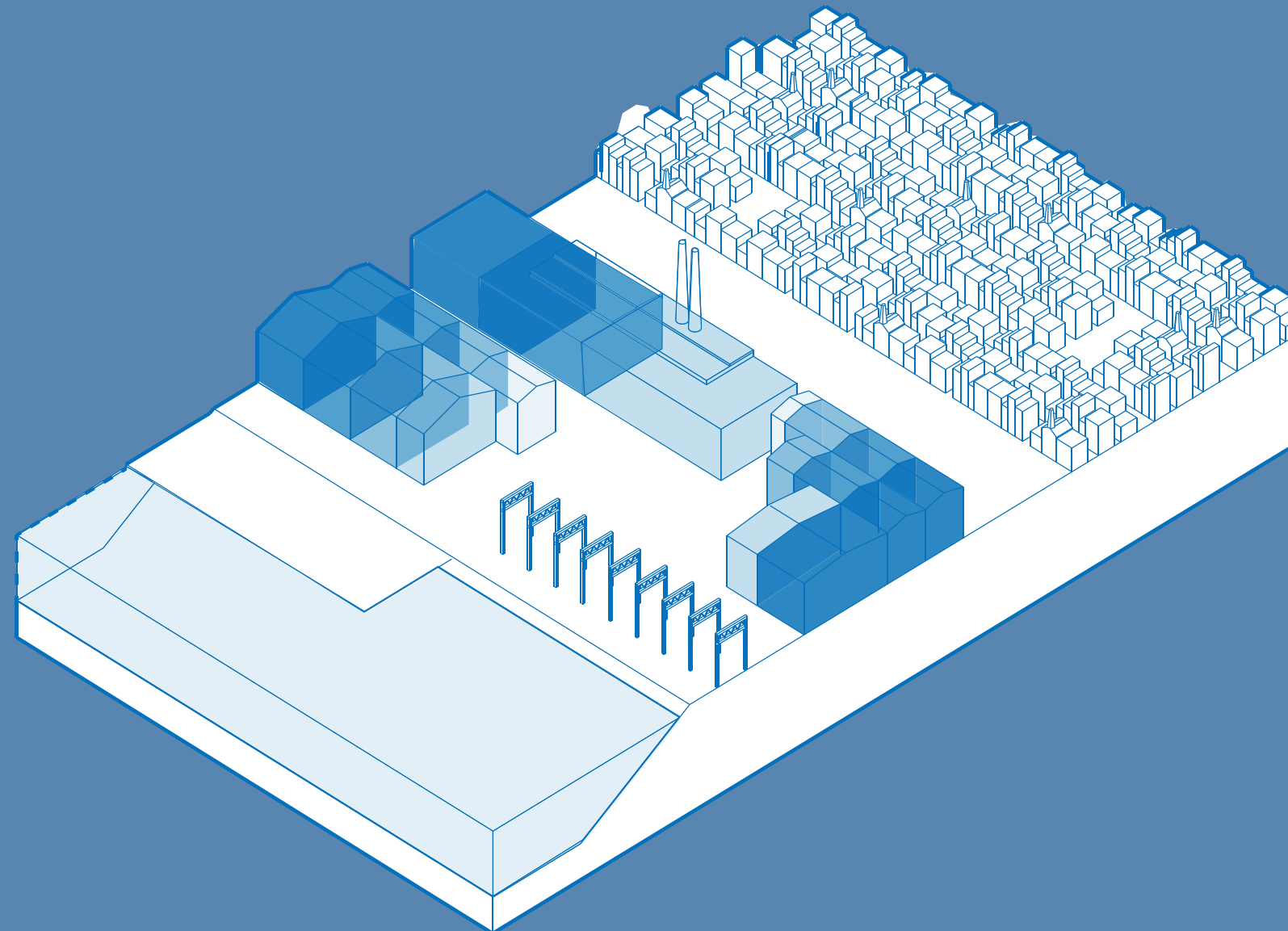
Decline of heavy industry



Expected decline heavy industry, percentage since 2015  
*(EU 2023, diagram own work)*

**Defined program**  
Based on needs municipality

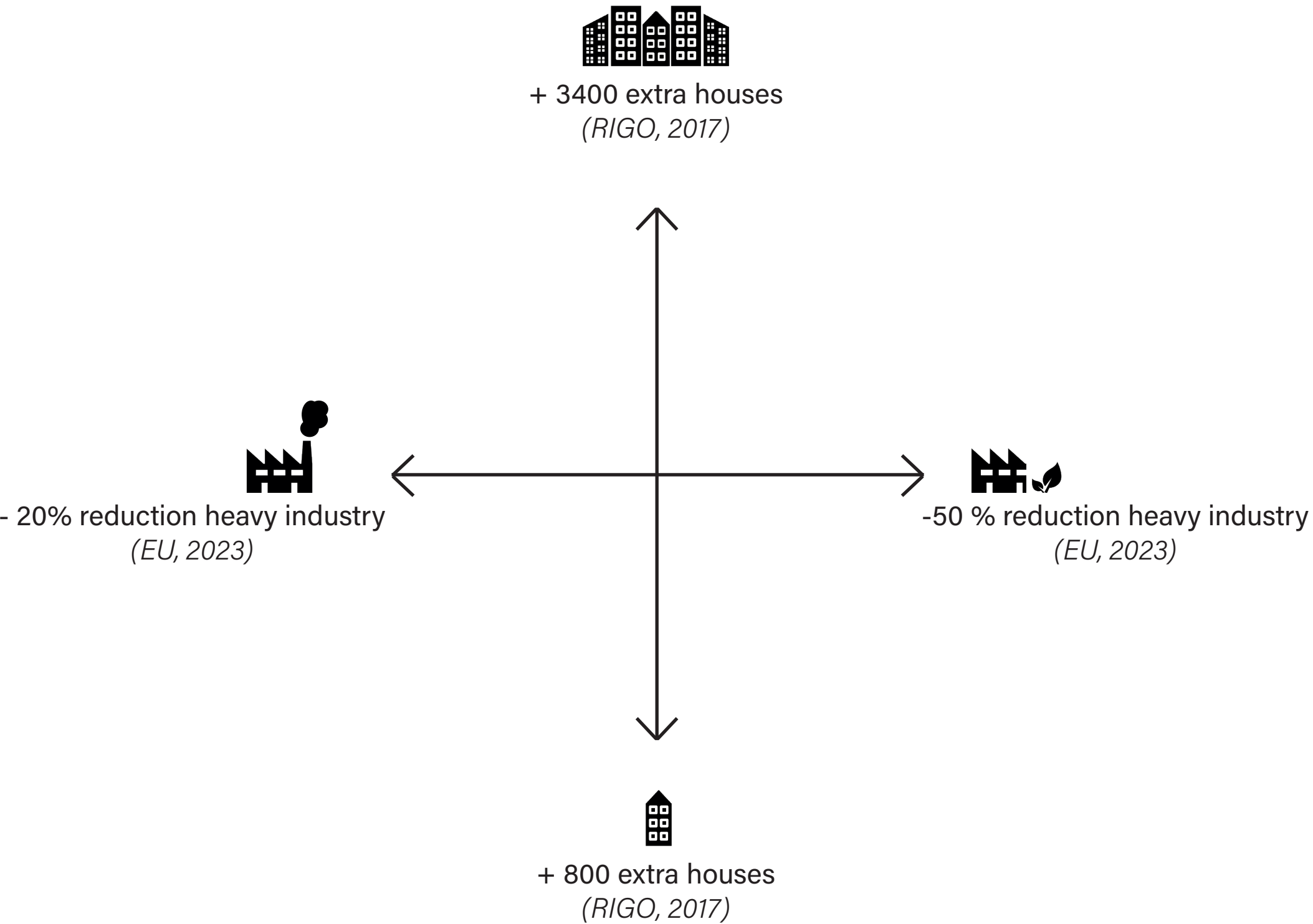




**Phased development**

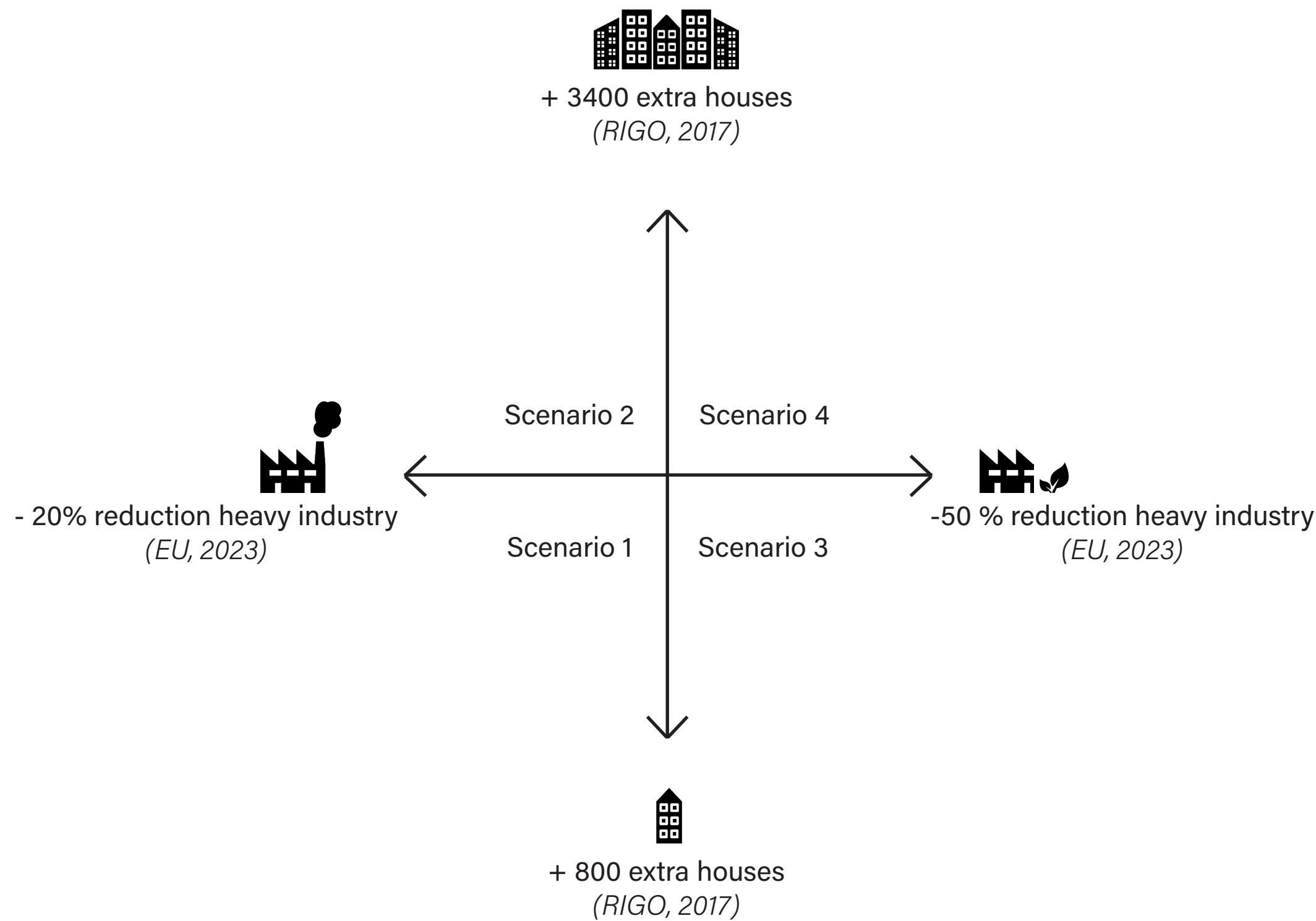
Space for continuation, scenario based

*(Fragner)*



**Phased development**  
Based on scenarios





**Phased development**  
Based on scenarios

Scenario 1

Housing



84  
*Apartments small*  
*Apartments medium*  
*Apartments large*

Culture



*Theater*  
*Church*  
*Library*

Sports



*Sportshall large*  
*Sportshall small*

Office



*Working spaces*

Commercial



*Cafe*  
*Supermarket*  
*Shops*

Other



*Parking*








Green



*Urban park*

**Phased development**  
Program based on scenarios

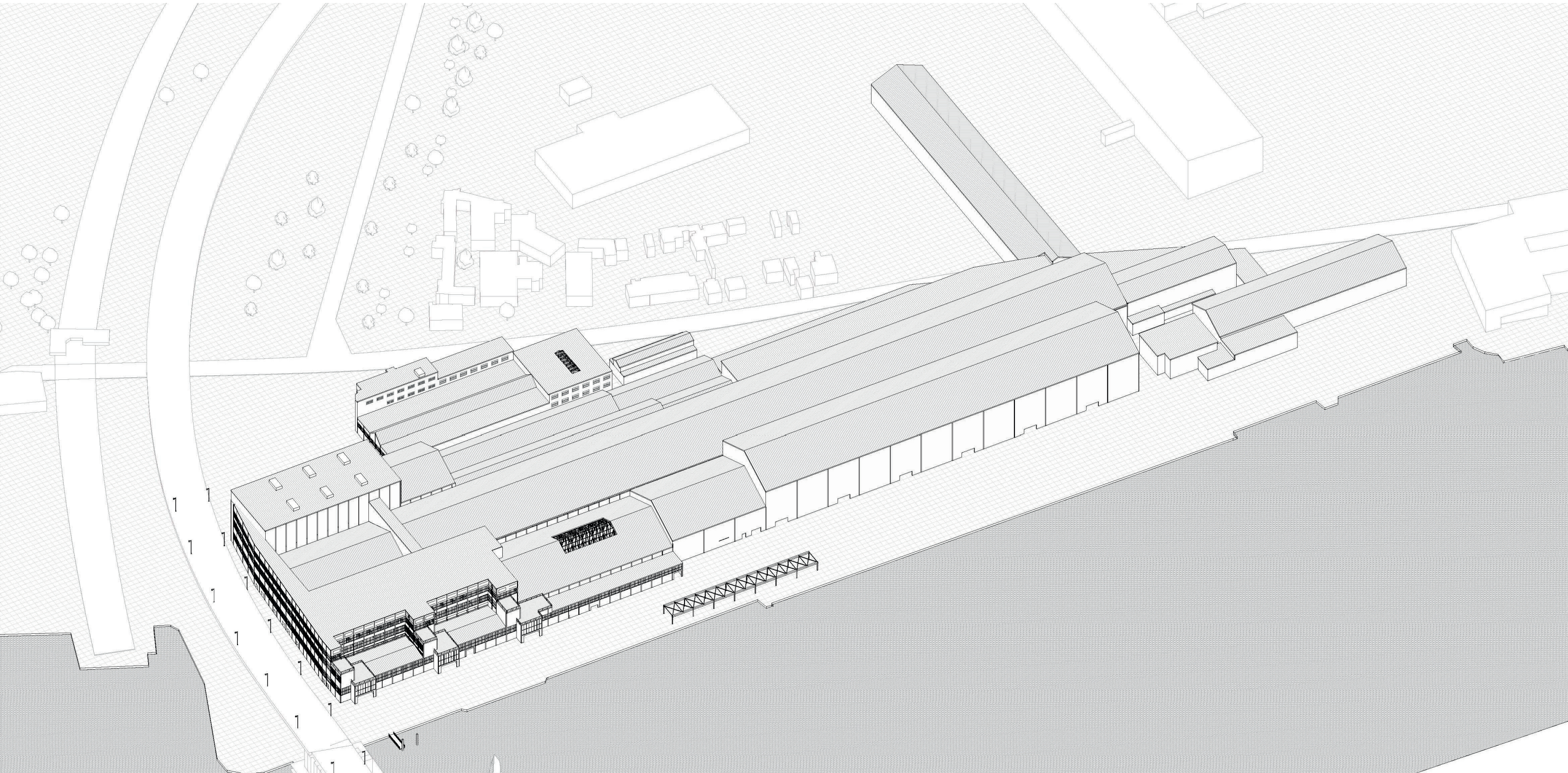


		Scenario 1	Scenario 2	Scenario 3	Scenario 4
		<div></div>			
<u>Housing</u>		84 <i>Apartments small</i> <i>Apartments medium</i> <i>Apartments large</i>	<i>Ground floor housing</i>	<i>Based on current needs</i>	<i>Based on current needs, densify</i>
<u>Culture</u>		<i>Theater</i> <i>Church</i> <i>Library</i>	<i>Museum</i>	<i>Gallery</i>	<i>Neighbourhood centre</i>
<u>Sports</u>		<i>Sportshall large</i> <i>Sportshall small</i>	<i>Swimming area</i> <i>Outside sports park</i>	<i>Running track</i>	
<u>Office</u>		<i>Working spaces</i>	<i>Offices</i>	<i>Offices</i>	
<u>Commercial</u>		<i>Cafe</i> <i>Supermarket</i> <i>Shops</i>	<i>Shops</i>	<i>Shops</i>	<i>Shops</i>
<u>Other</u>		<i>Parking</i>	<i>Medical practice</i> <i>children's day care</i>	<i>School</i>	<i>Extra busstop</i> <i>More parking</i>
<u>Green</u>		<i>Urban park</i>	<i>Park along quay</i>	<i>Extra urban park</i>	

**Phased development**  
Program based on scenarios



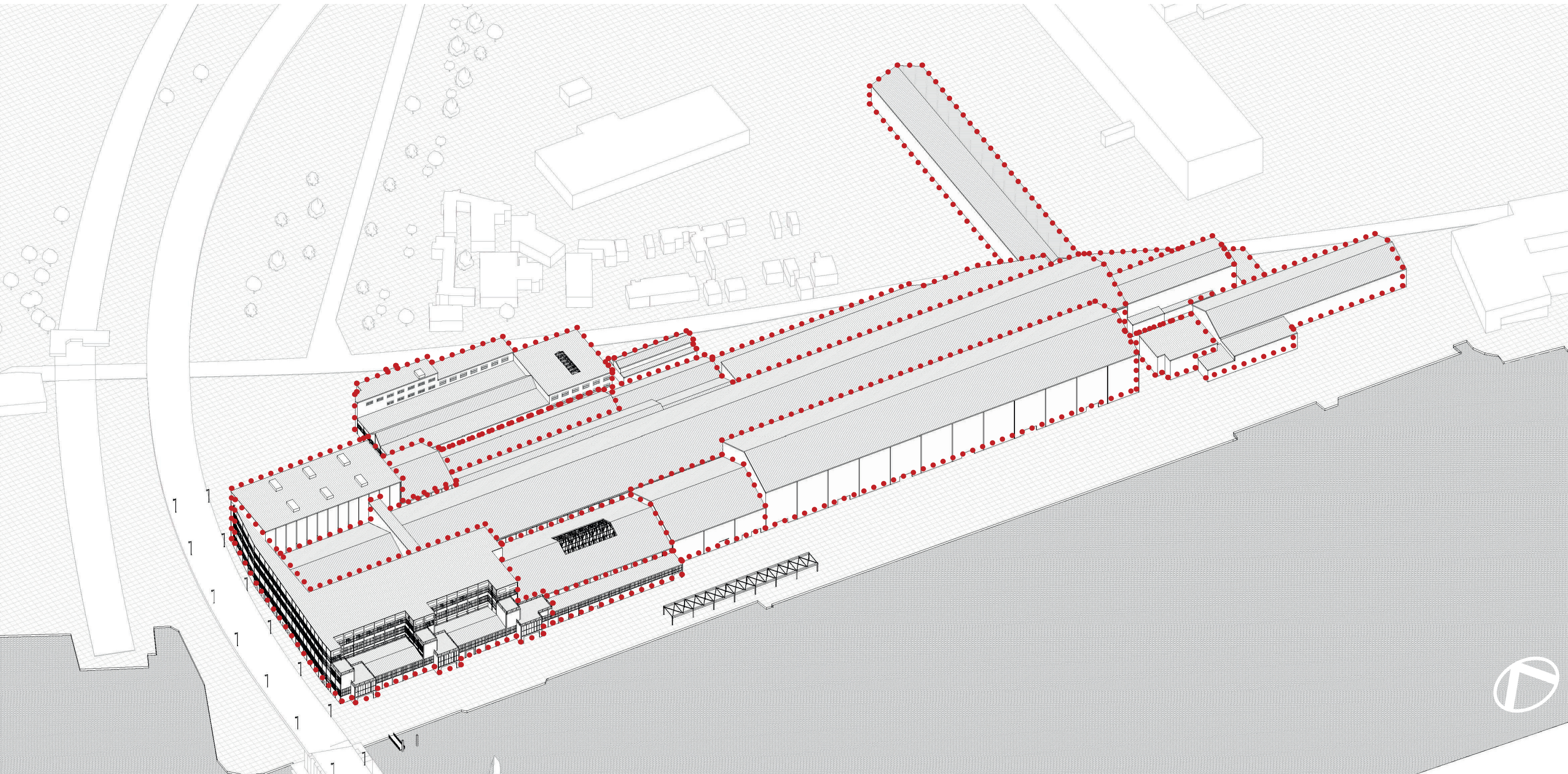
## Current buildings



**Phased development**  
**Program based on scenarios**



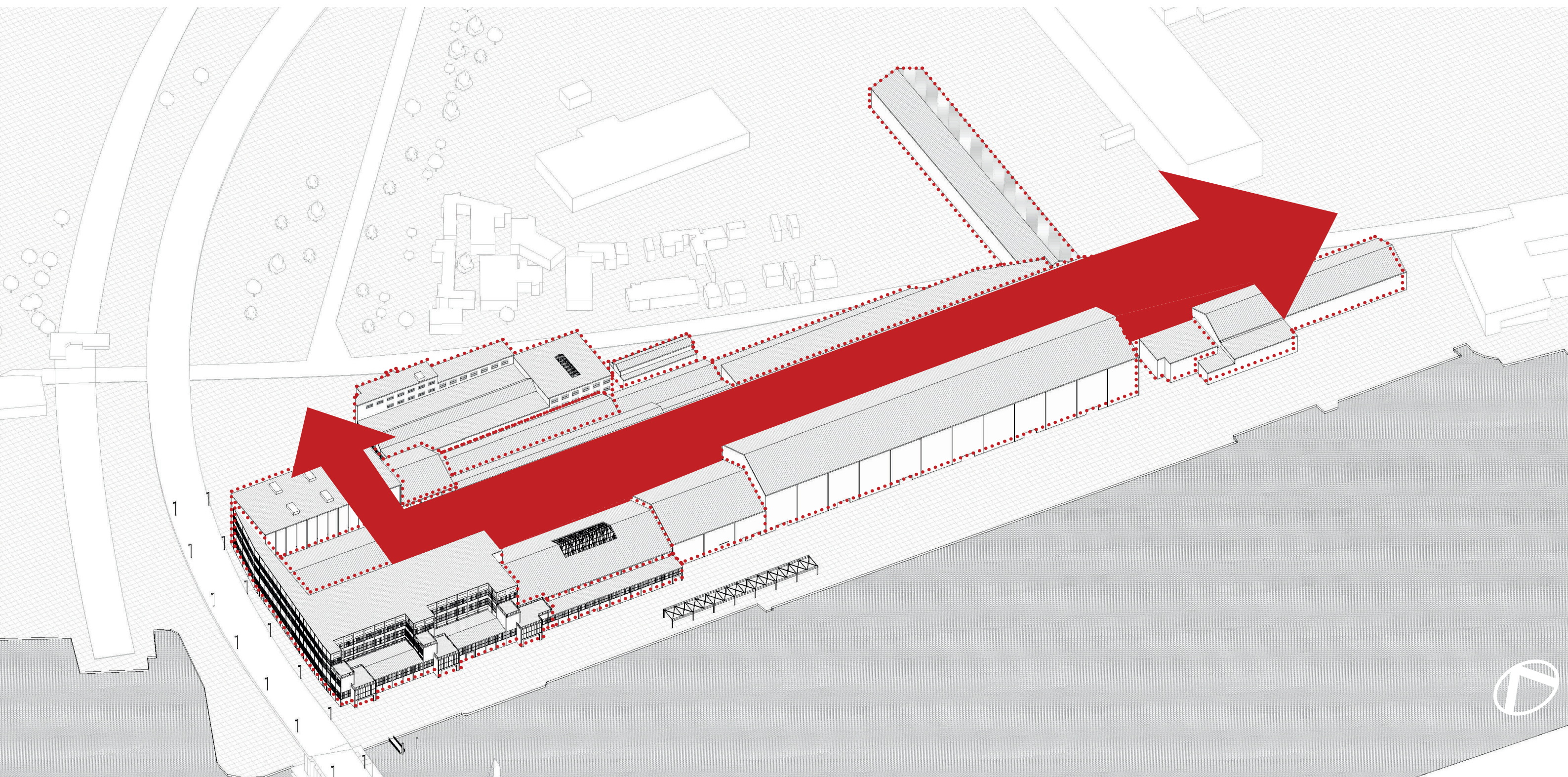
## Zones based on structural grid



**Phased development**  
Program based on scenarios



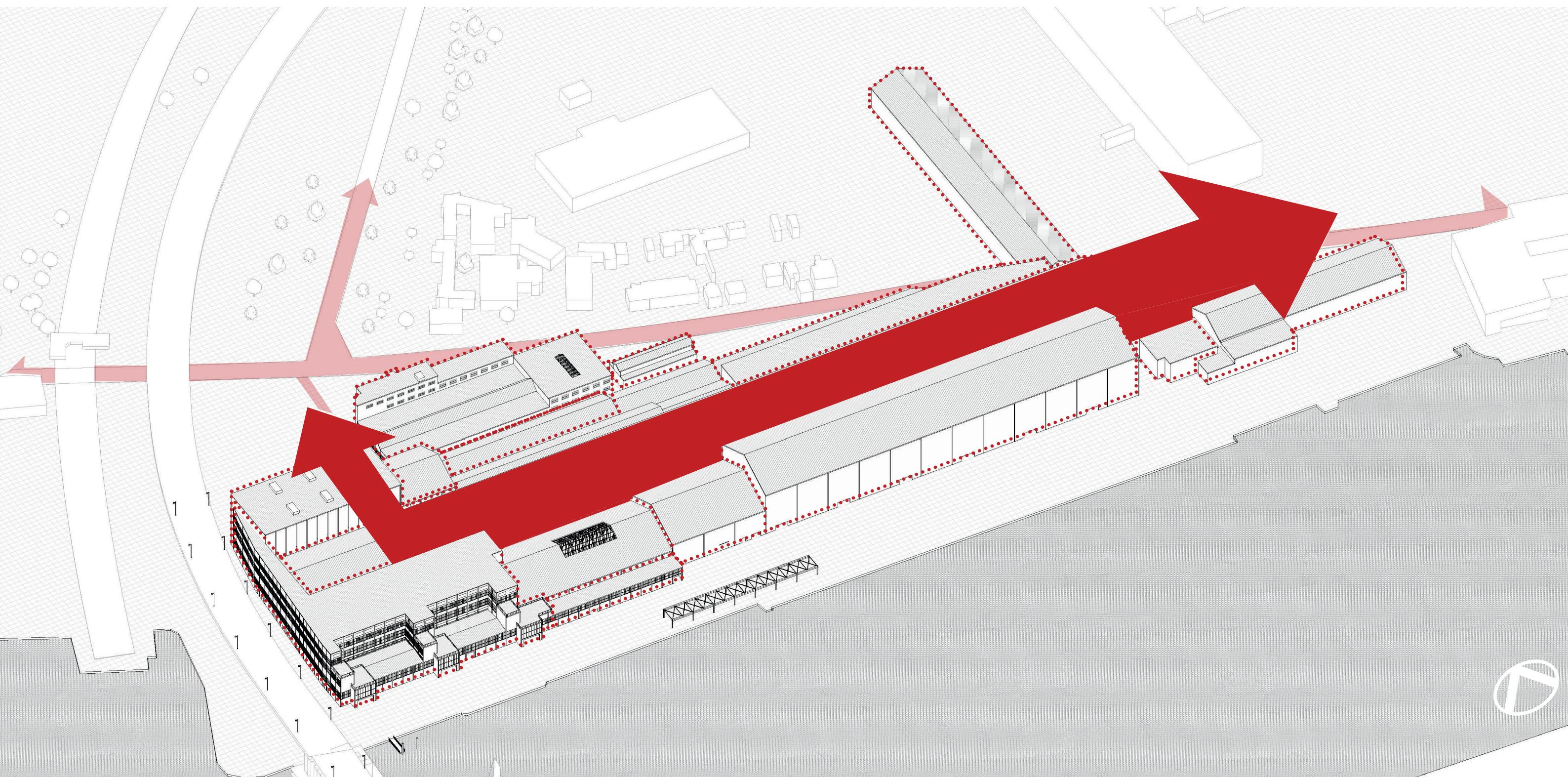
Phase 0



**Phased development**  
Program based on scenarios



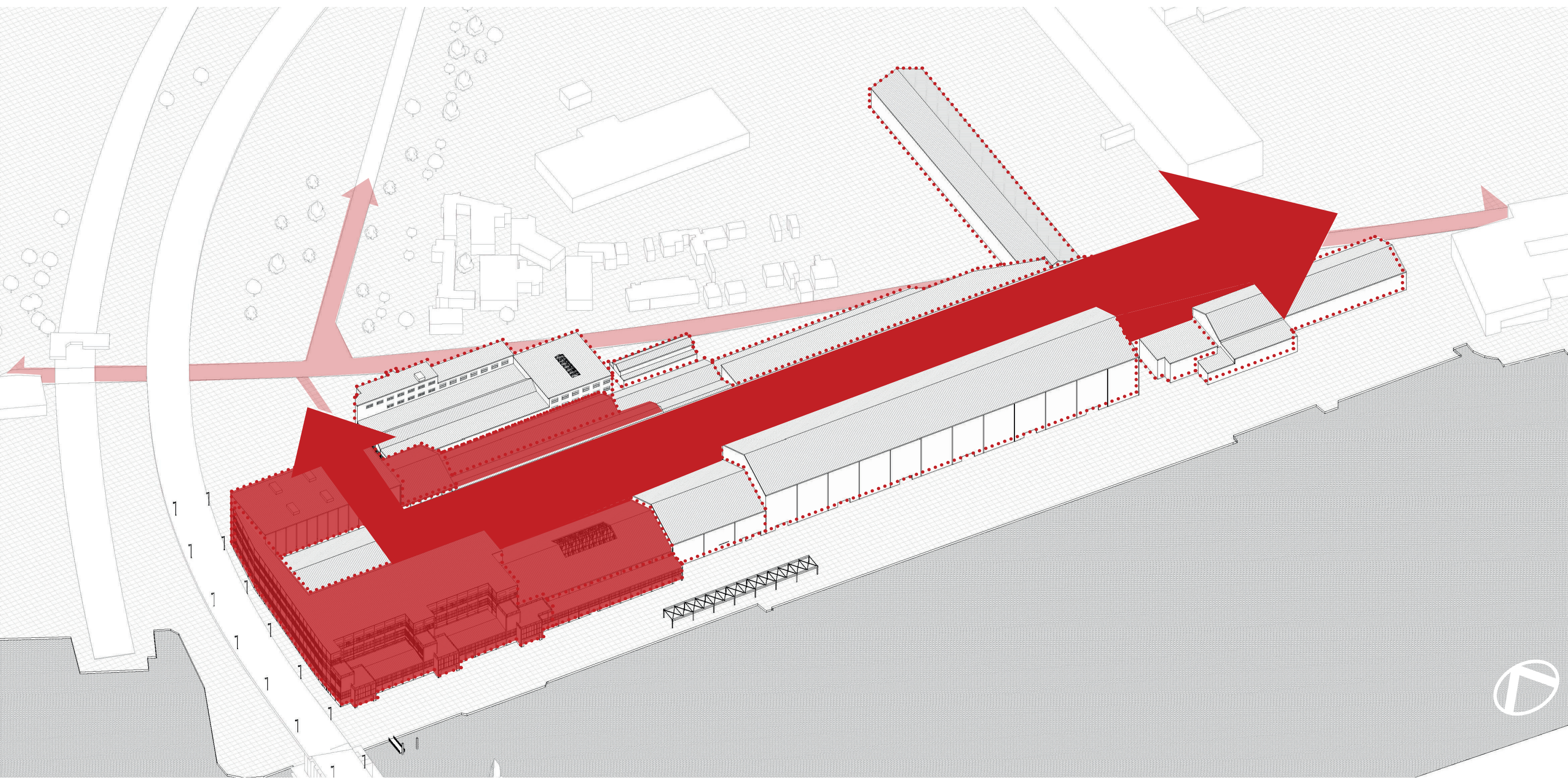
Phase 0



**Phased development**  
Program based on scenarios



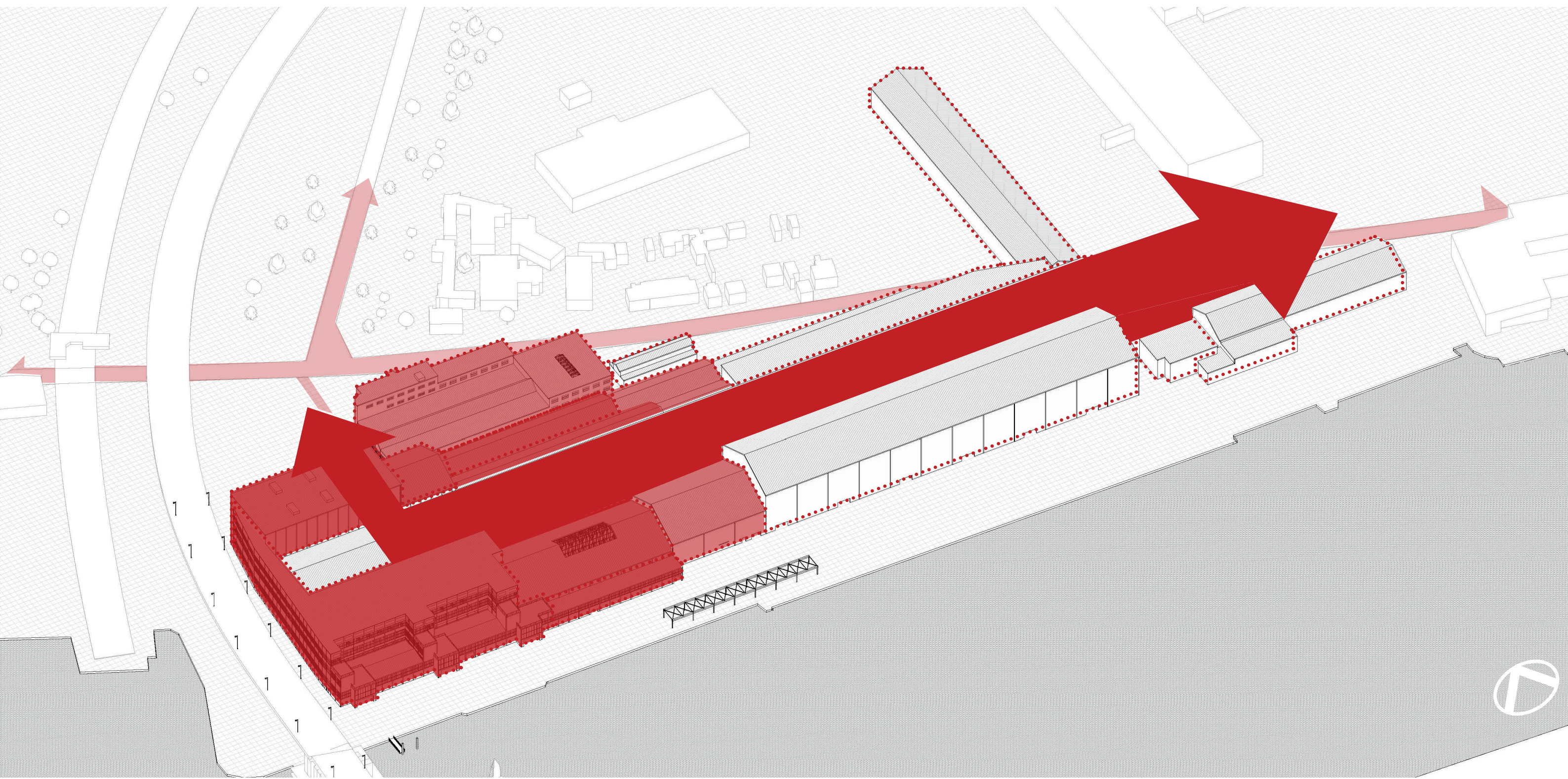
Phase 1



**Phased development**  
Program based on scenarios



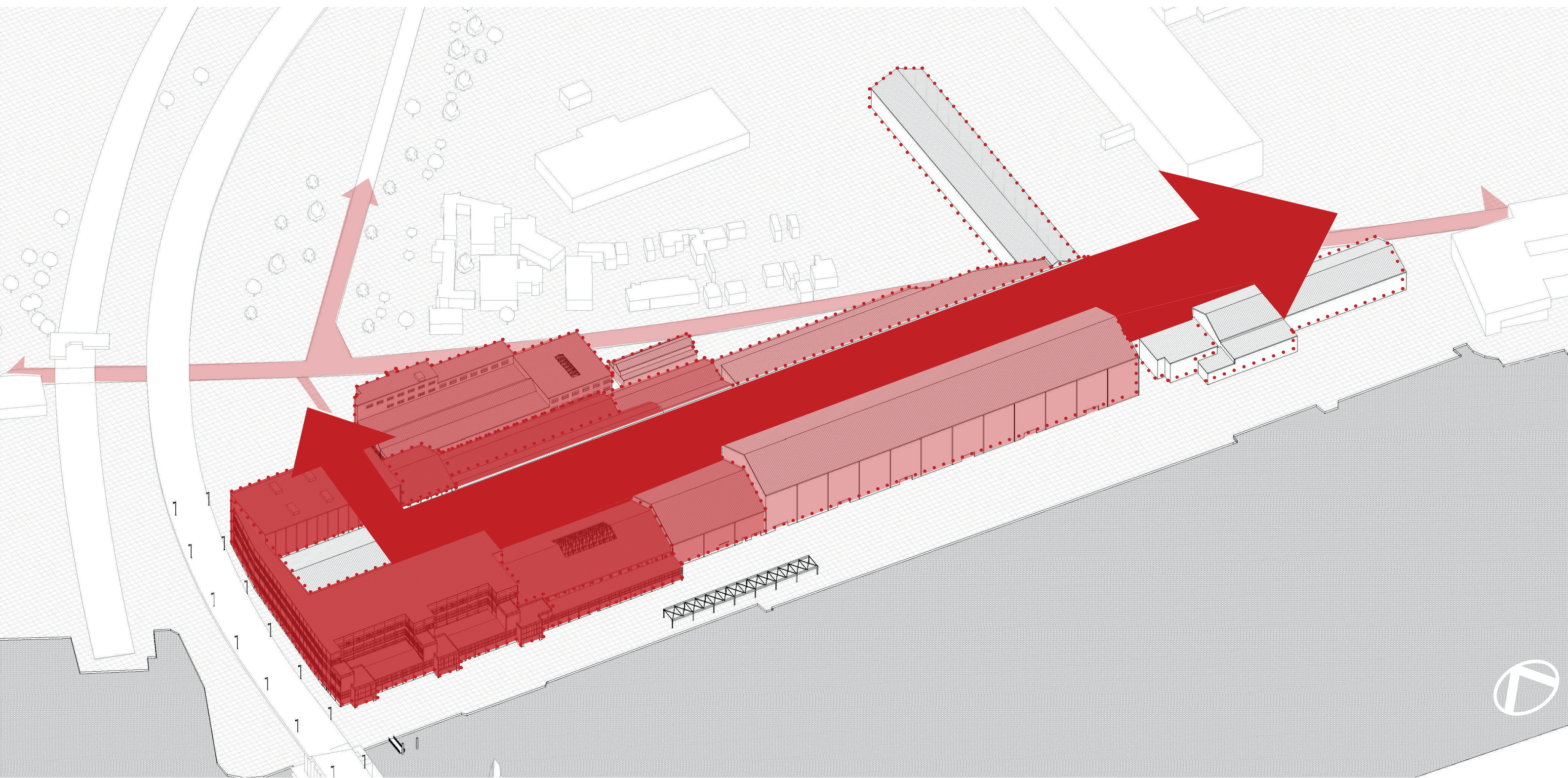
Phase 2



**Phased development**  
Program based on scenarios



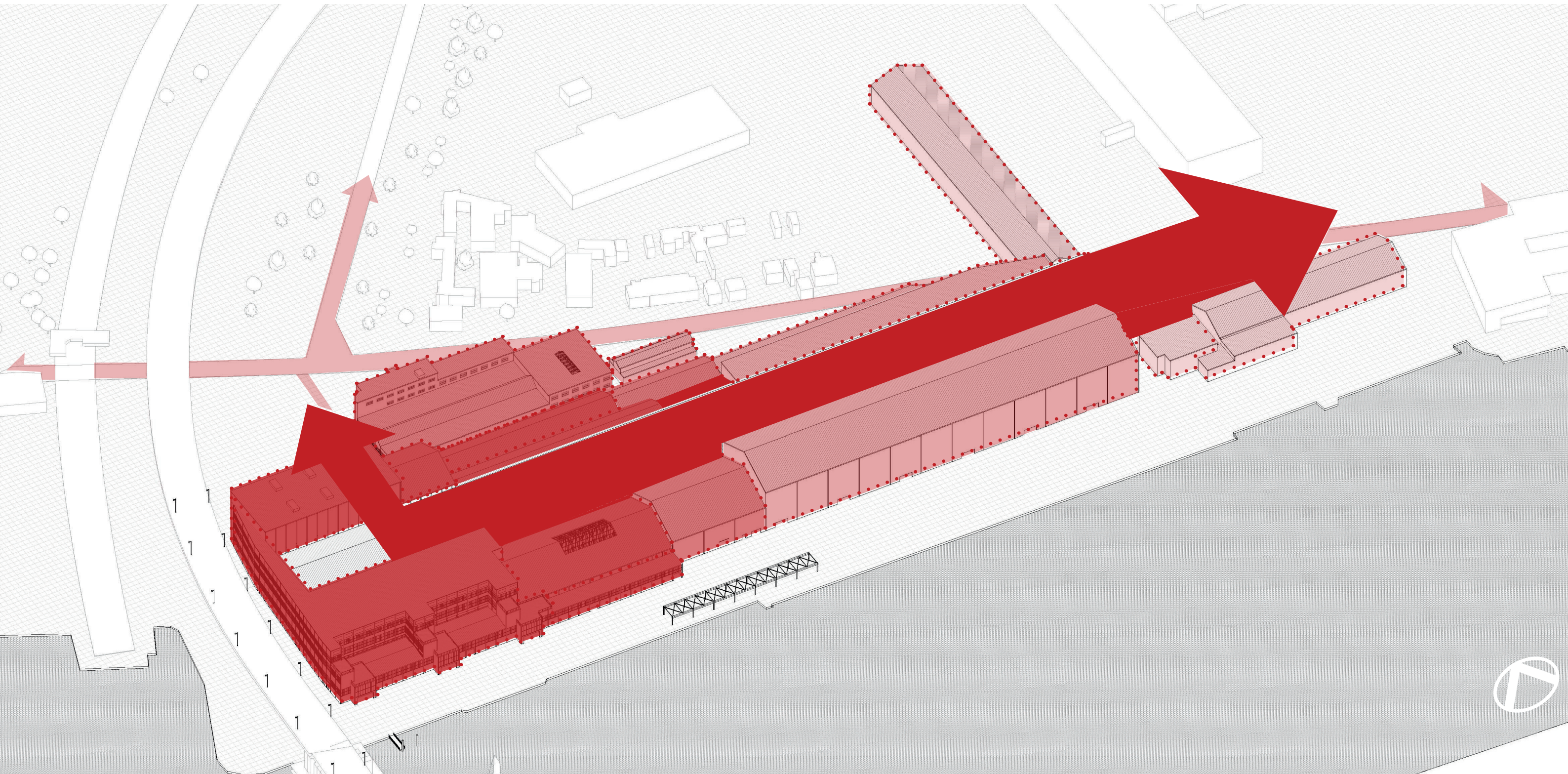
Phase 3



**Phased development**  
Program based on scenarios



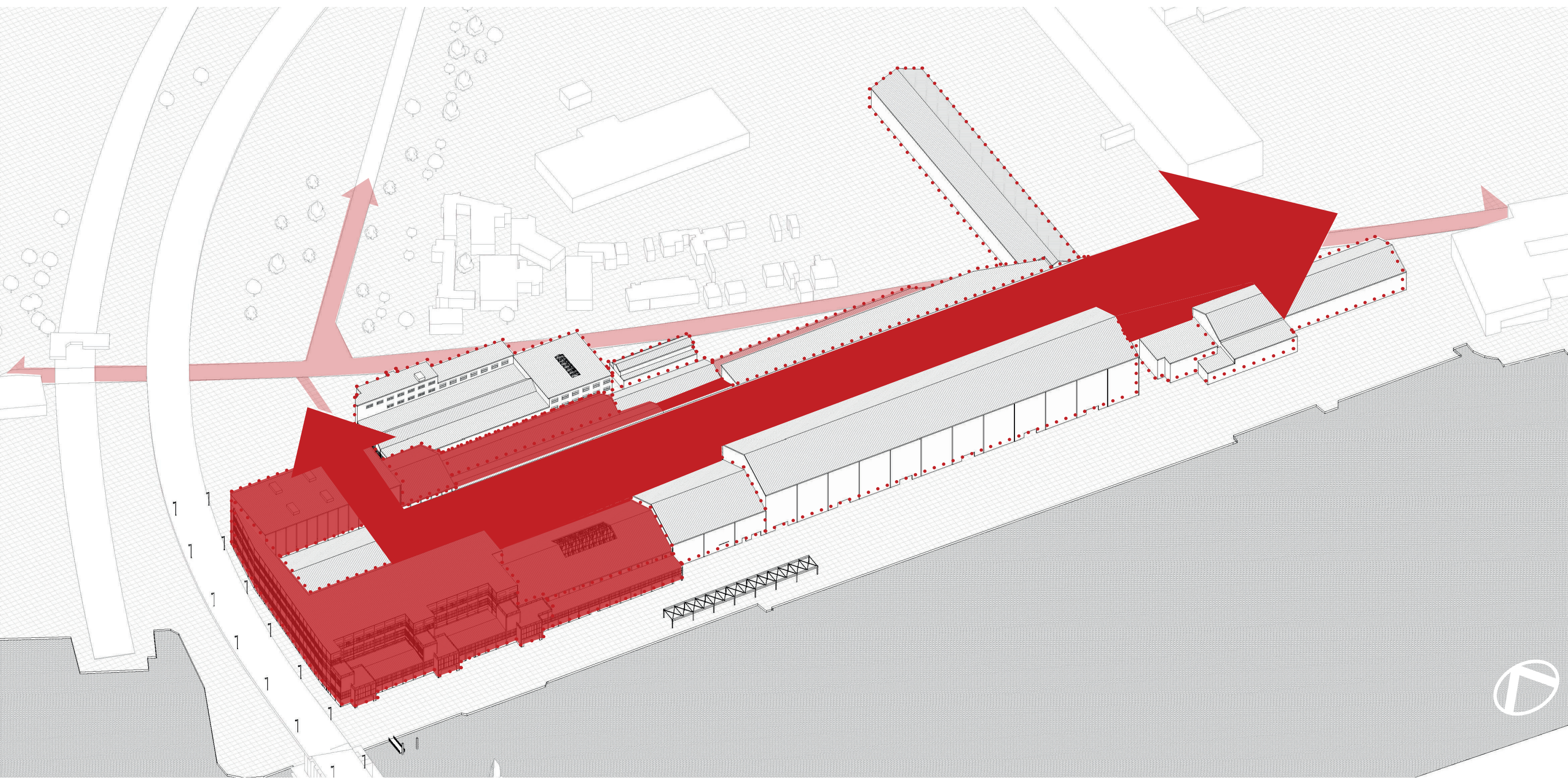
## Phase 4



**Phased development**  
Program based on scenarios



Phase 0 + 1

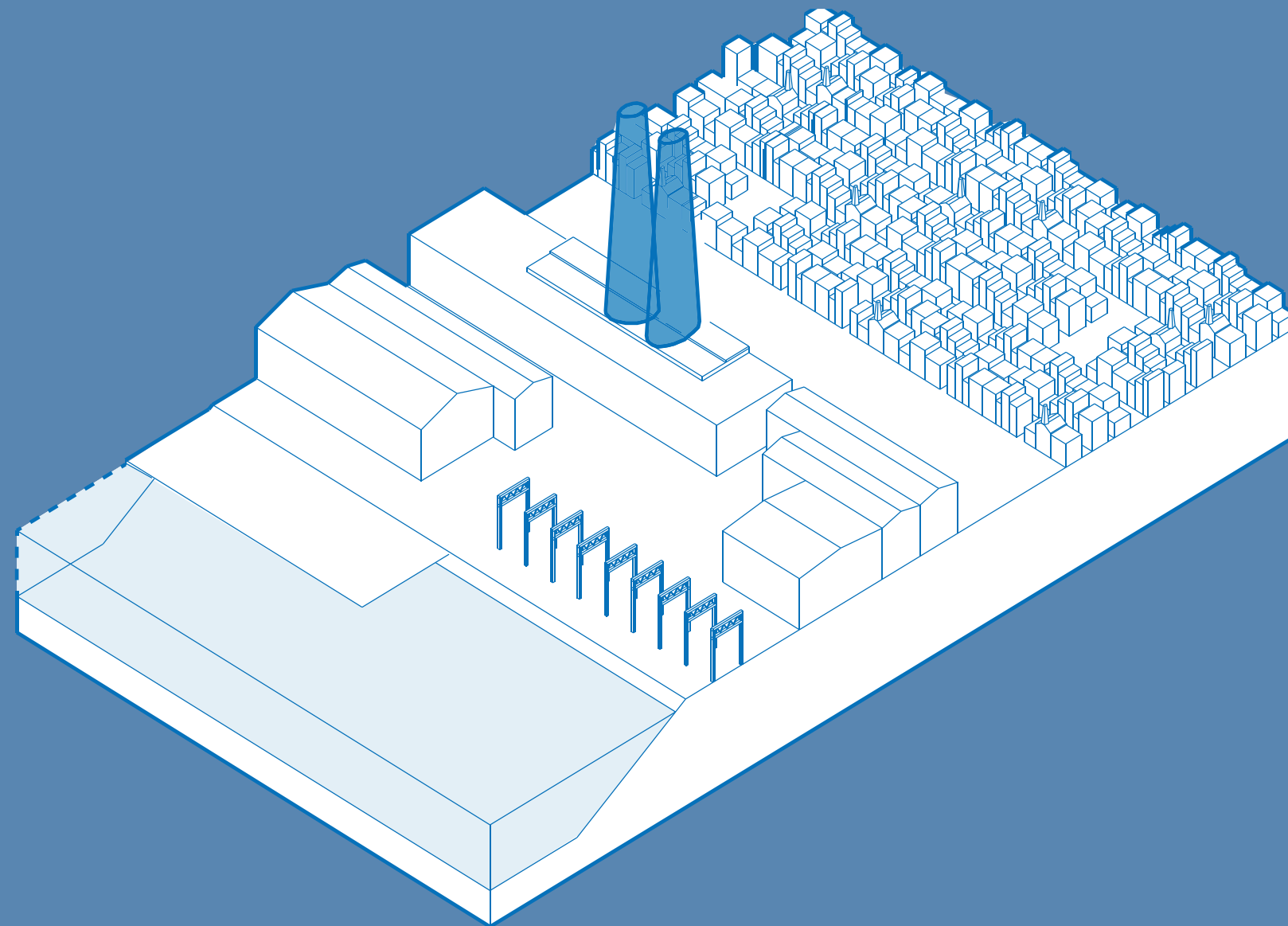


**Phased development**  
Program based on scenarios



Introduction  
Research  
Urban  
**Industrial complex**  
Architecture  
Conclusion



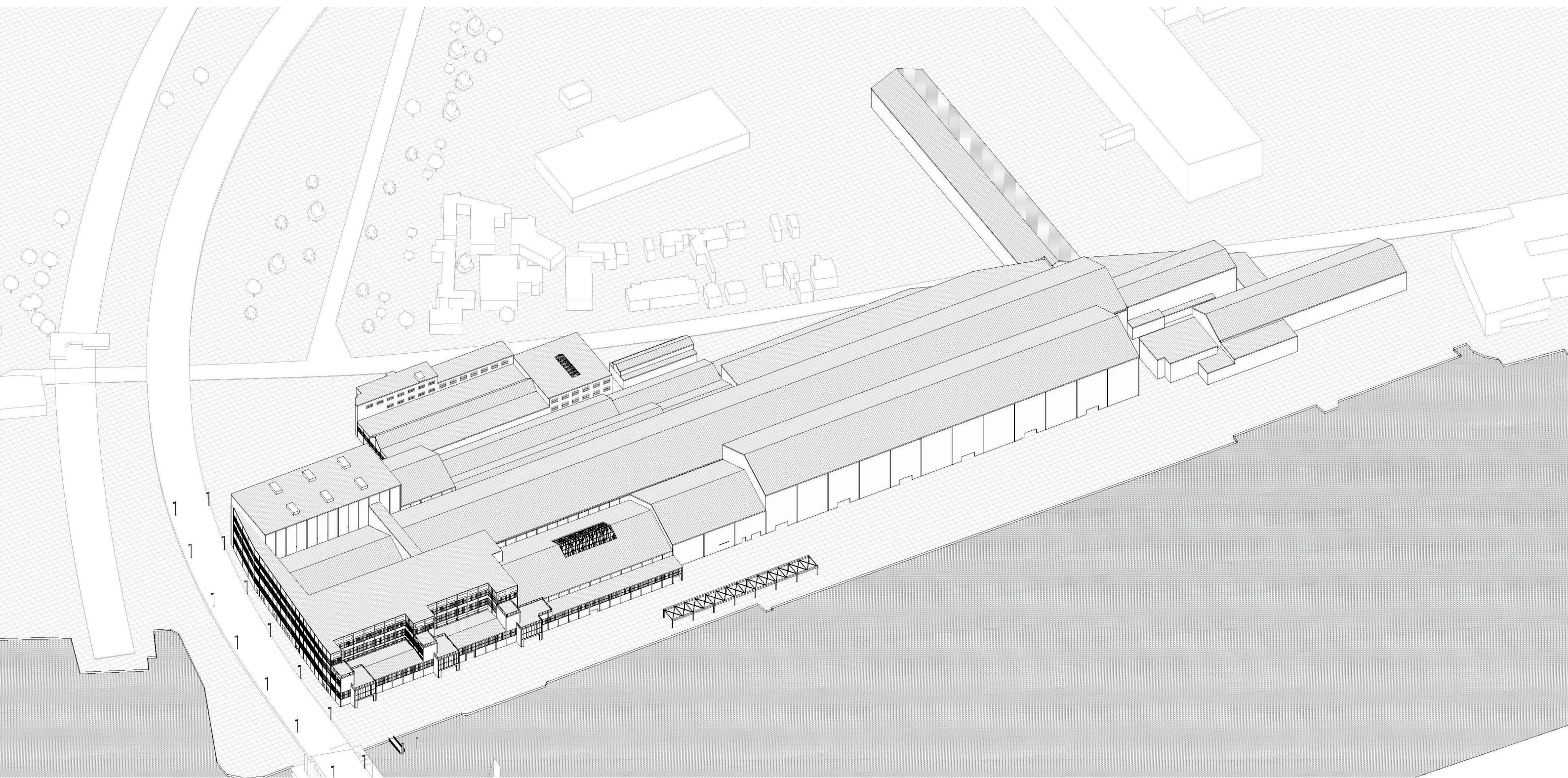


**Flagship project**

Landmark as anchor within cityscape  
(Preite, Koolhaas, Boelsums, Legner, Lynch)



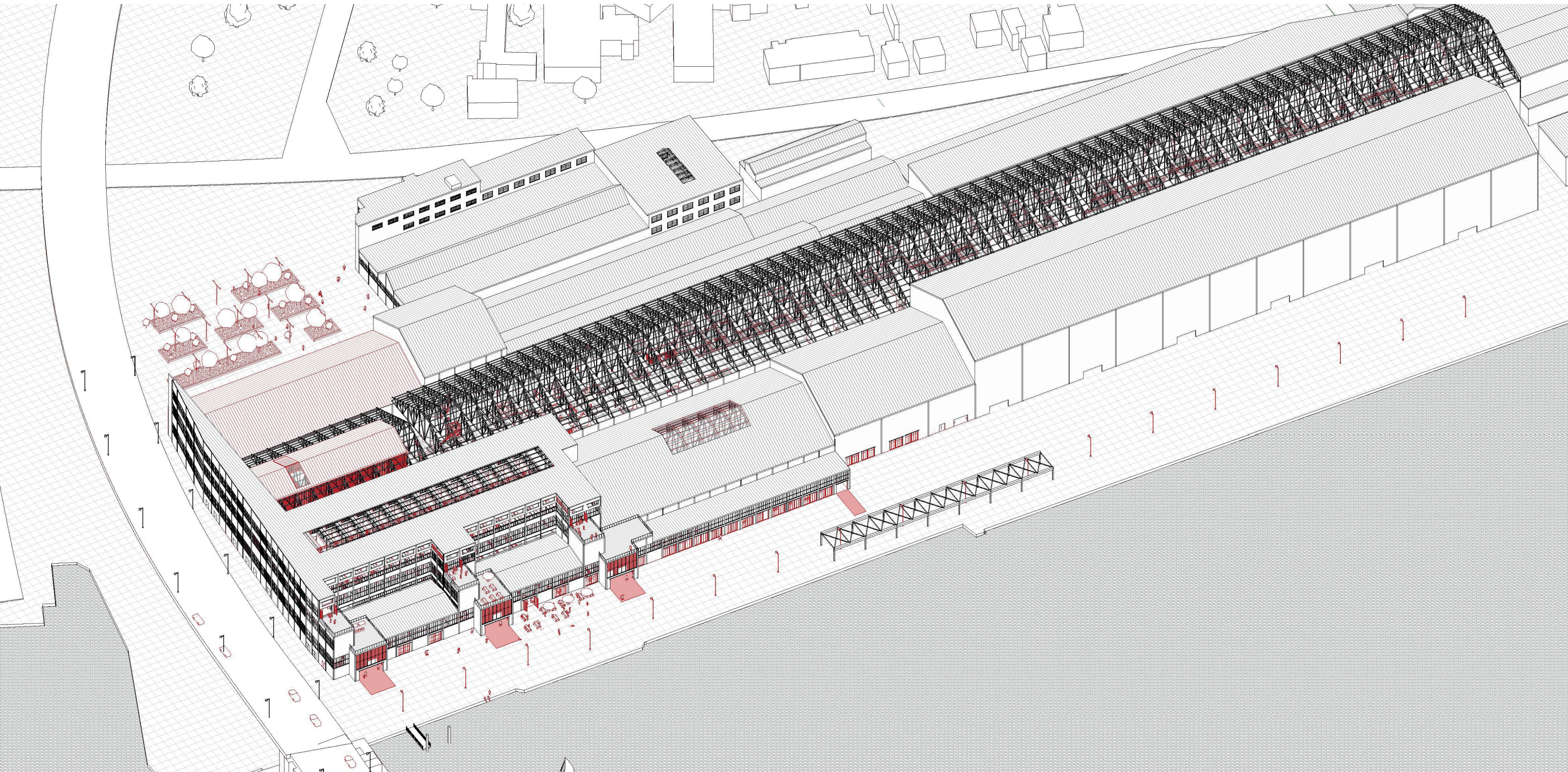
Current situation



**Flagship project**  
Landmark as catalyst



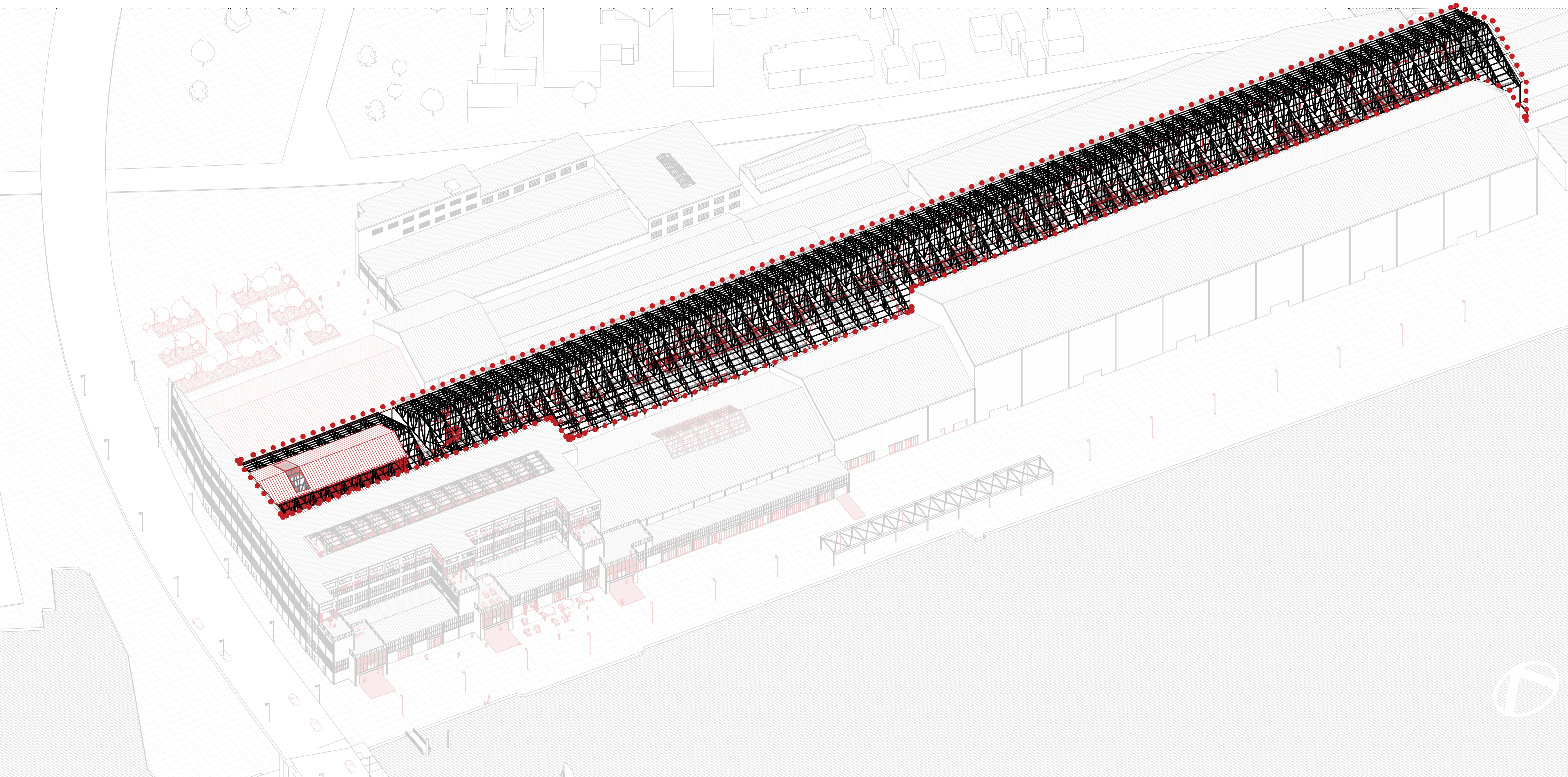
Phase 0 + 1



**Flagship project**  
Landmark as catalyst



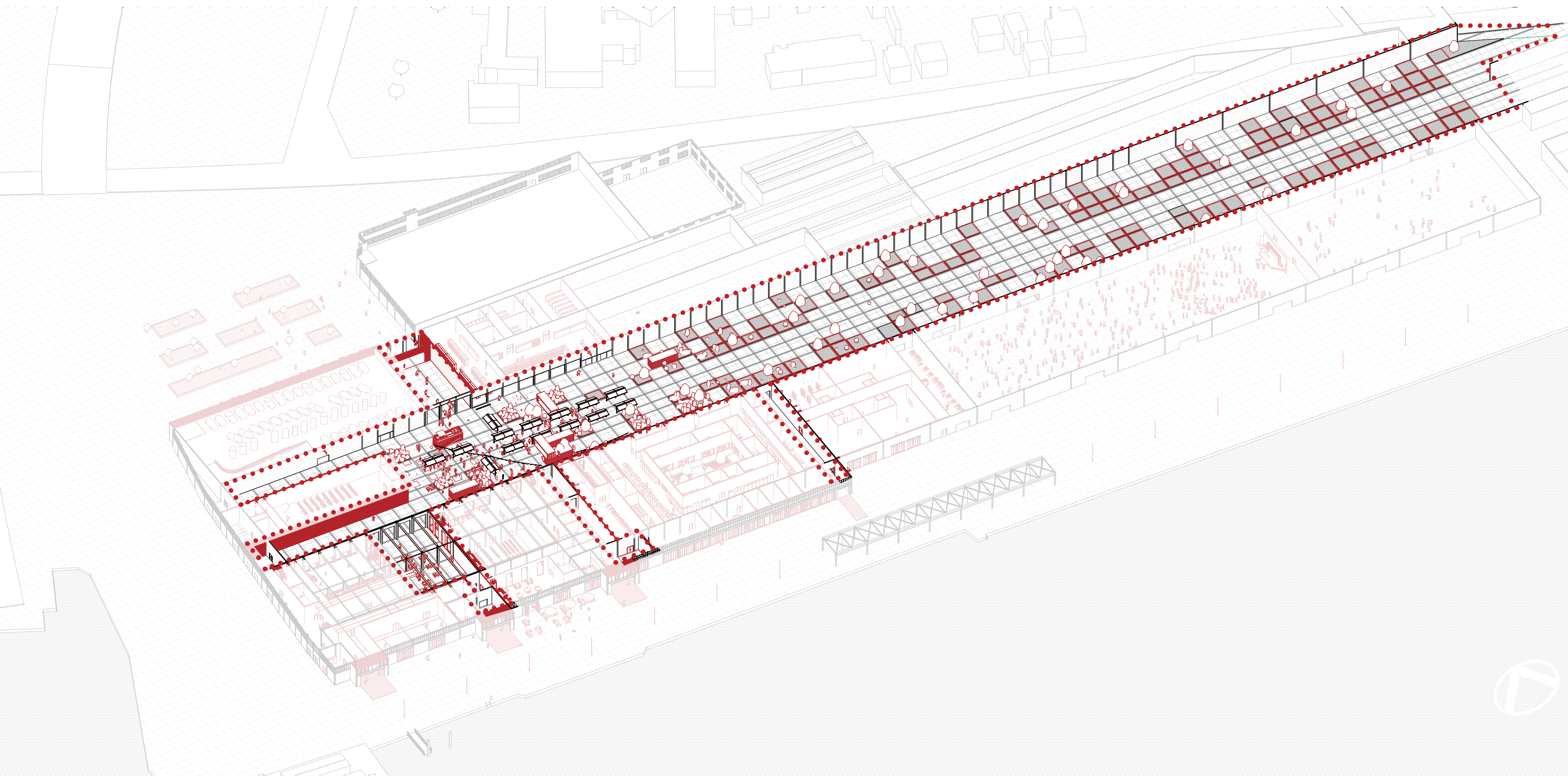
## 1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



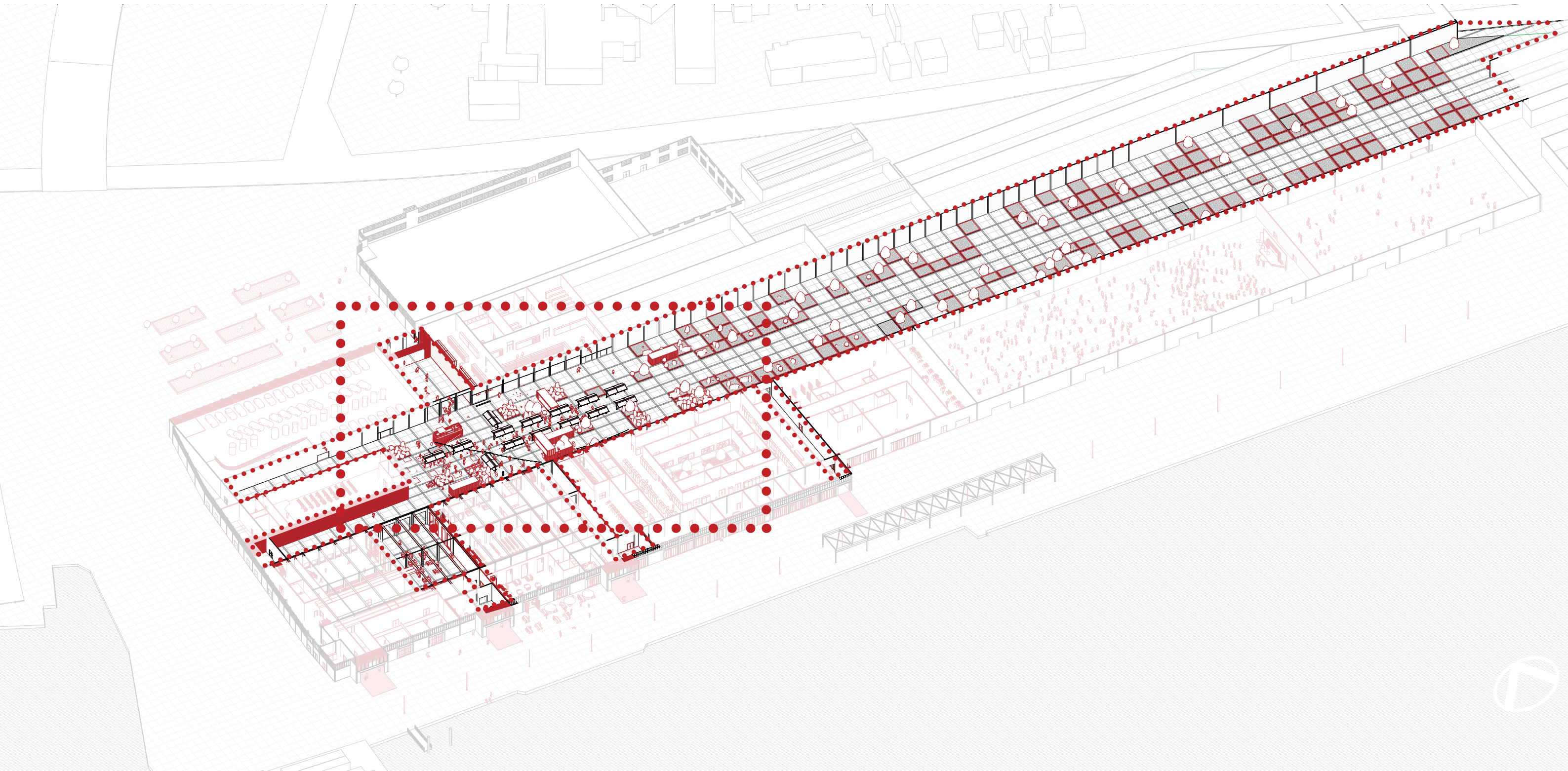
1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



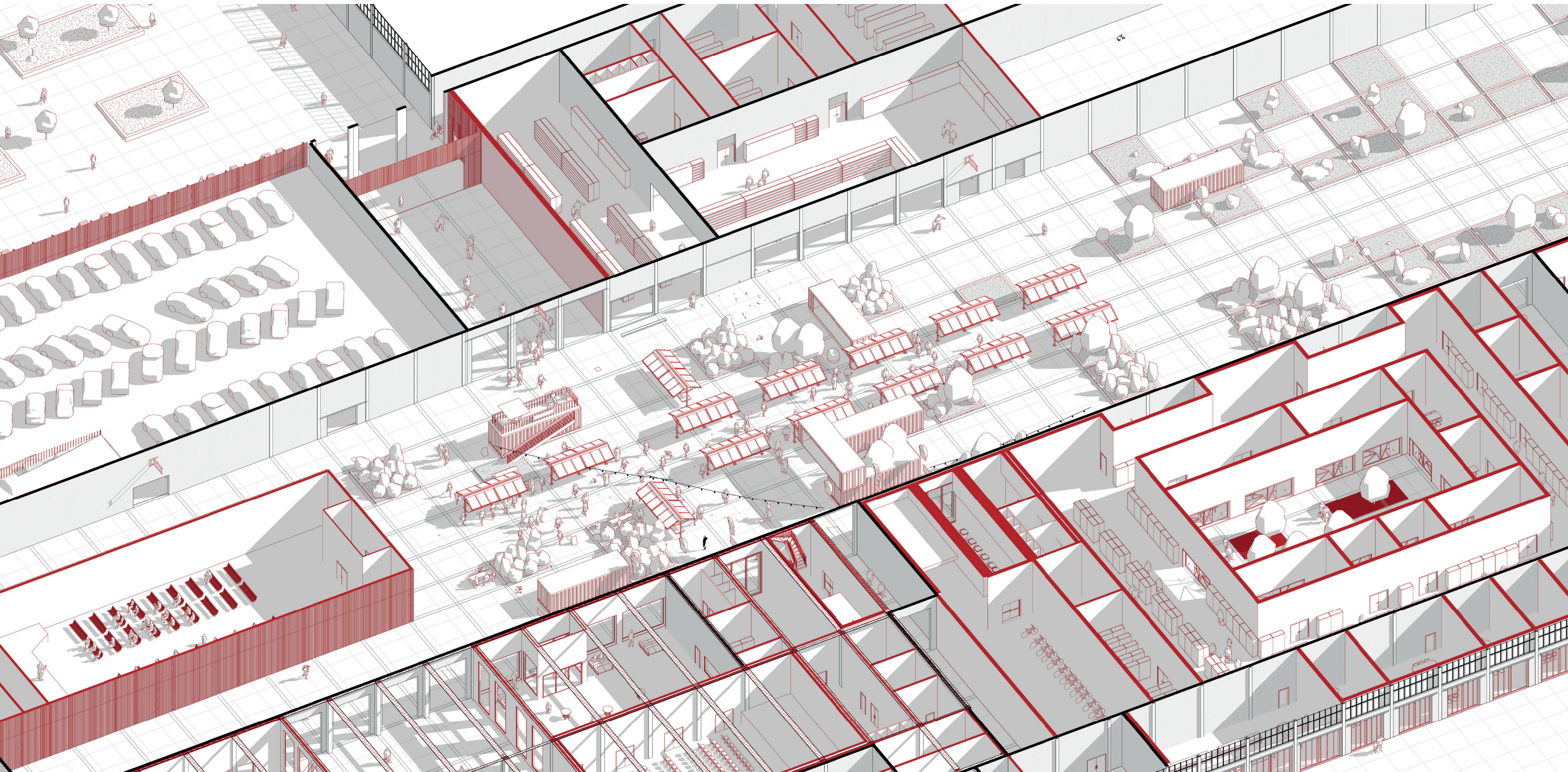
## 1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



## 1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



Introduction

Research

Urban

**Complex**

Architecture

Conclusion



Flagship project  
Landmark as catalyst



Introduction

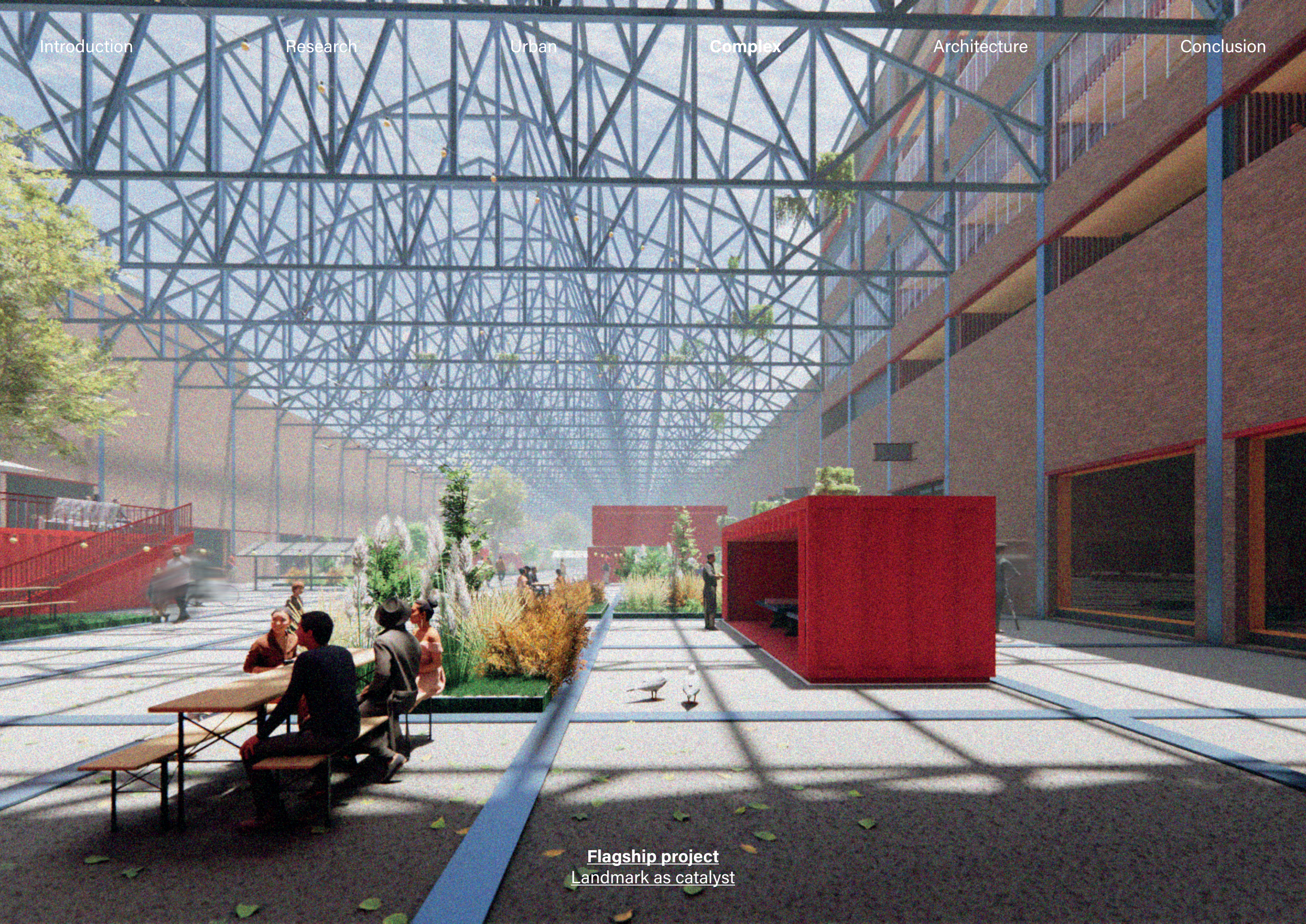
Research

Urban

**Complex**

Architecture

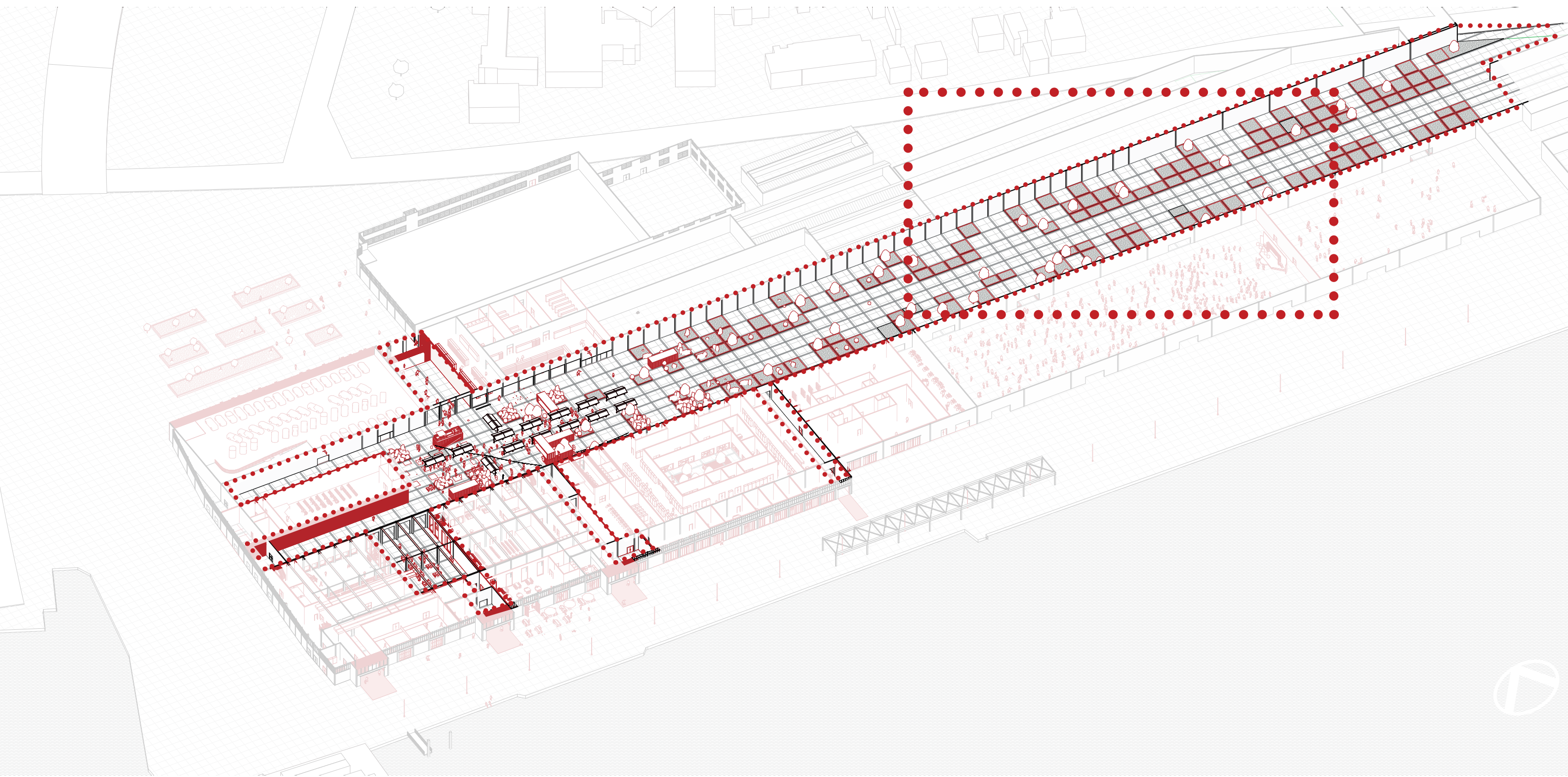
Conclusion



Flagship project  
Landmark as catalyst



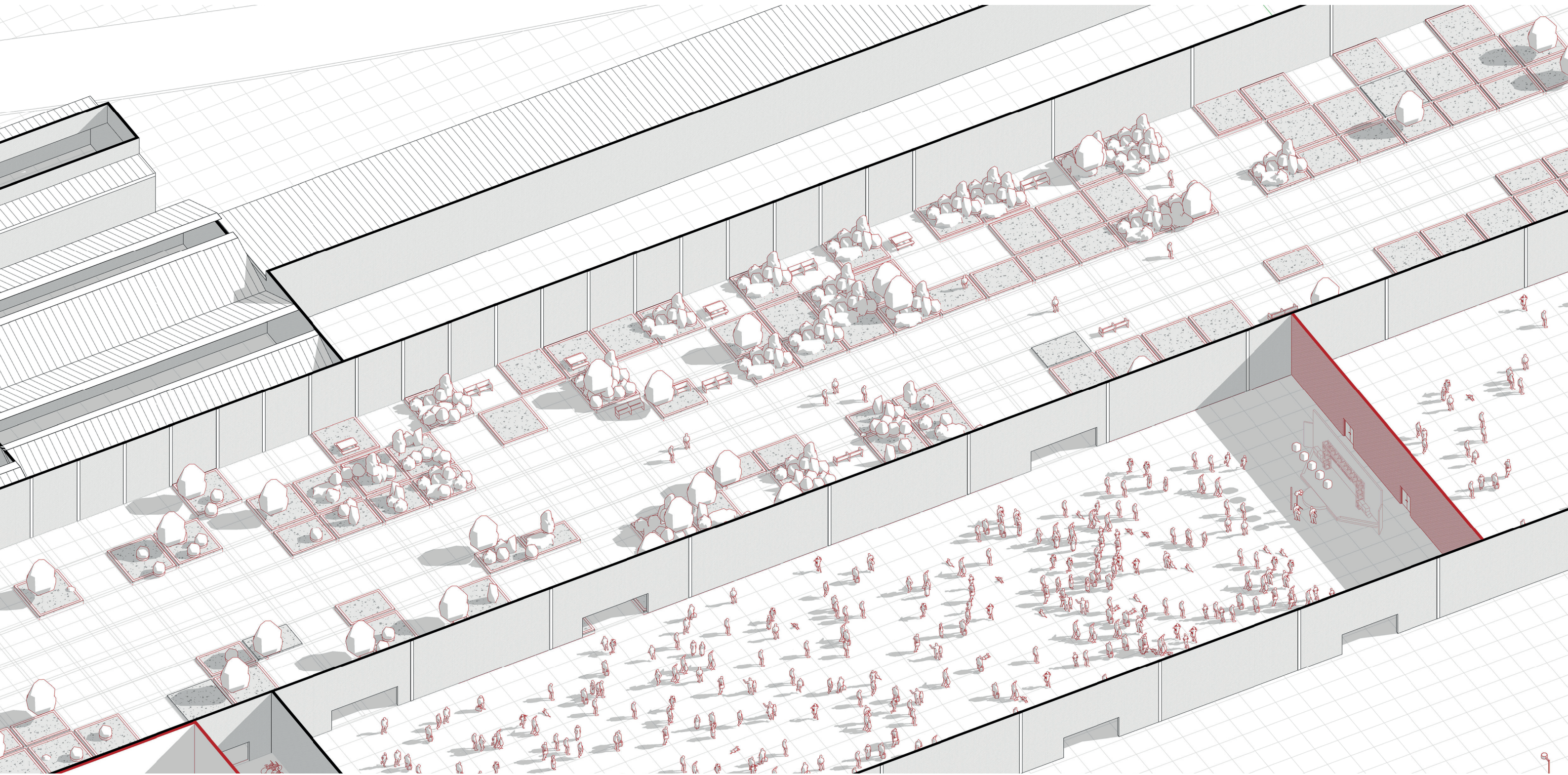
1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



## 1. Redevelopment internal street



**Flagship project**  
Landmark as catalyst



Introduction

Research

Urban

**Complex**

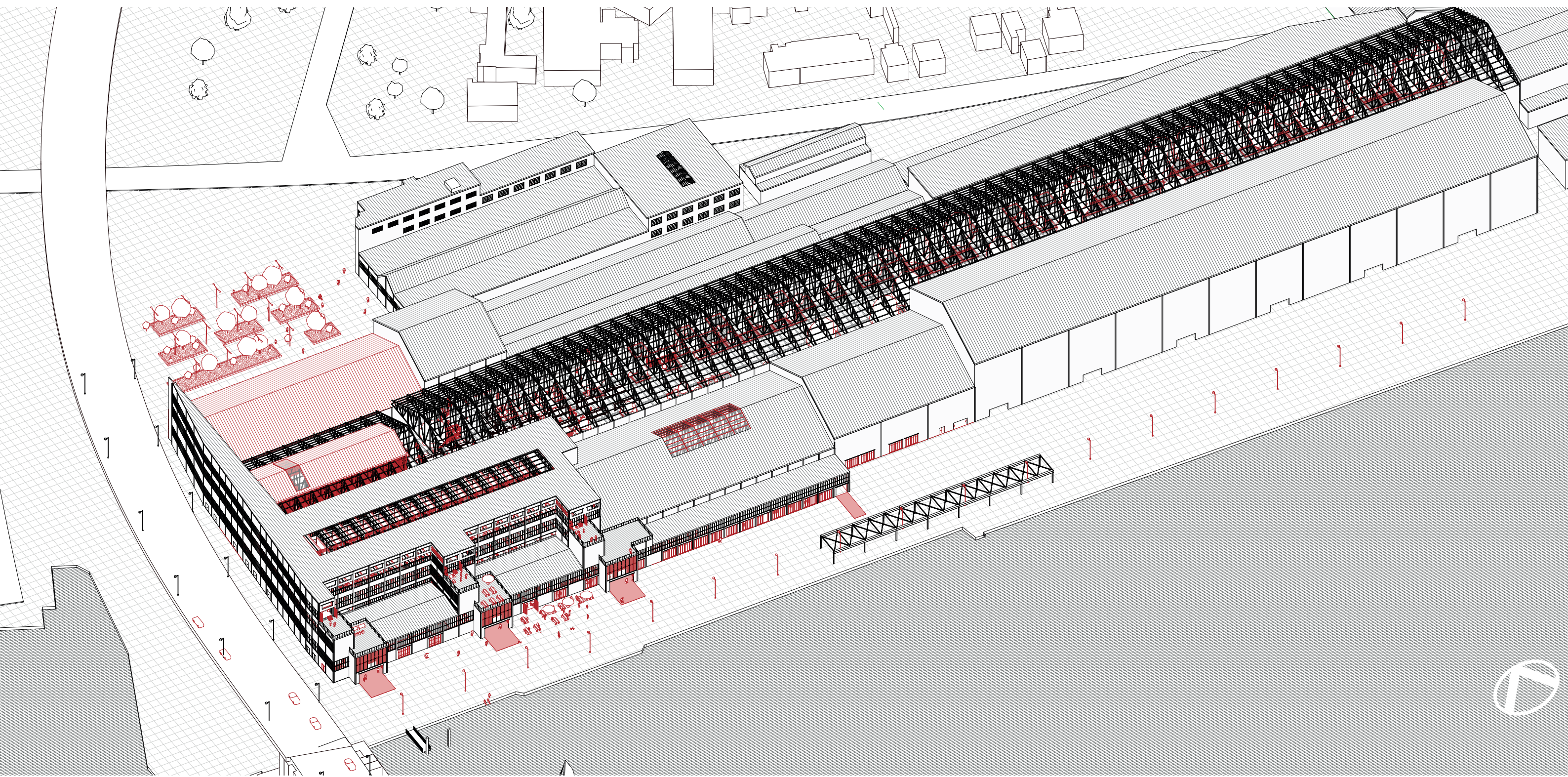
Architecture

Conclusion



Flagship project  
Landmark as catalyst

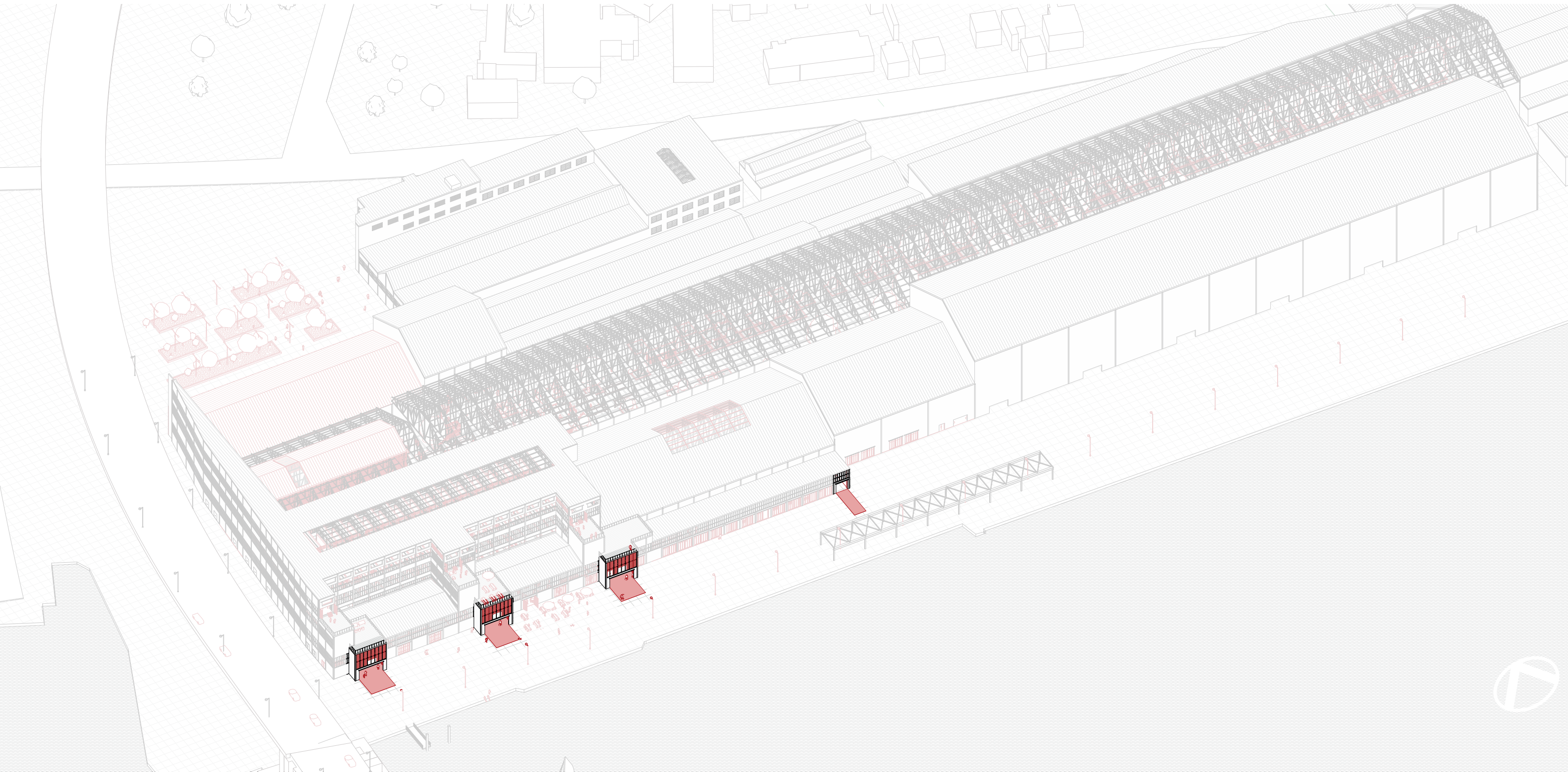




**Flagship project**  
Landmark as catalyst



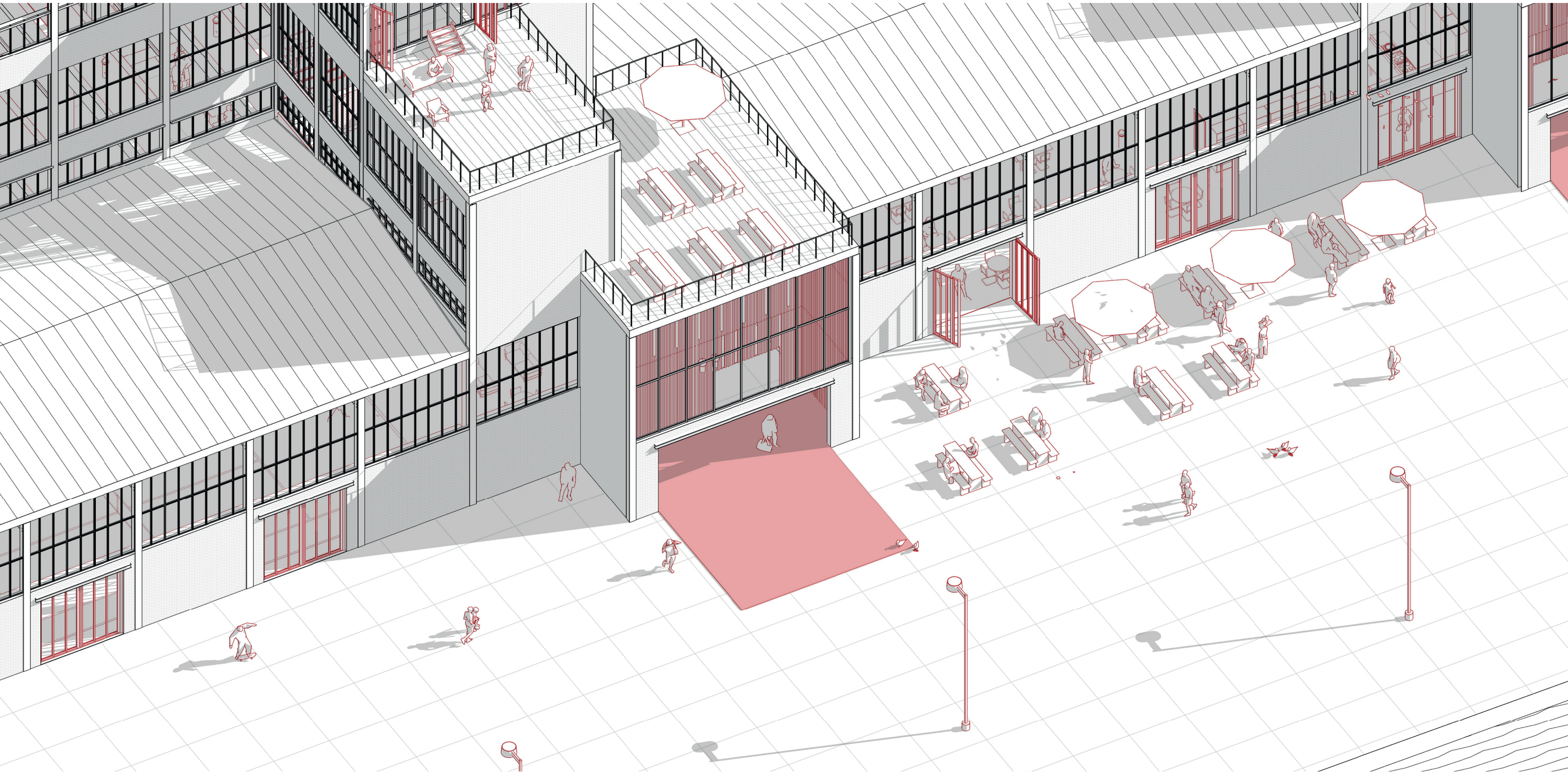
## 2. Highlighting the entrances



**Flagship project**  
Landmark as catalyst



## 2. Highlighting the entrances



**Flagship project**  
Landmark as catalyst



## 2. Highlighting the entrances



**Flagship project**  
Landmark as catalyst



Introduction

Research

Urban

**Complex**

Architecture

Conclusion



**Flagship project**  
Landmark as catalyst



Introduction

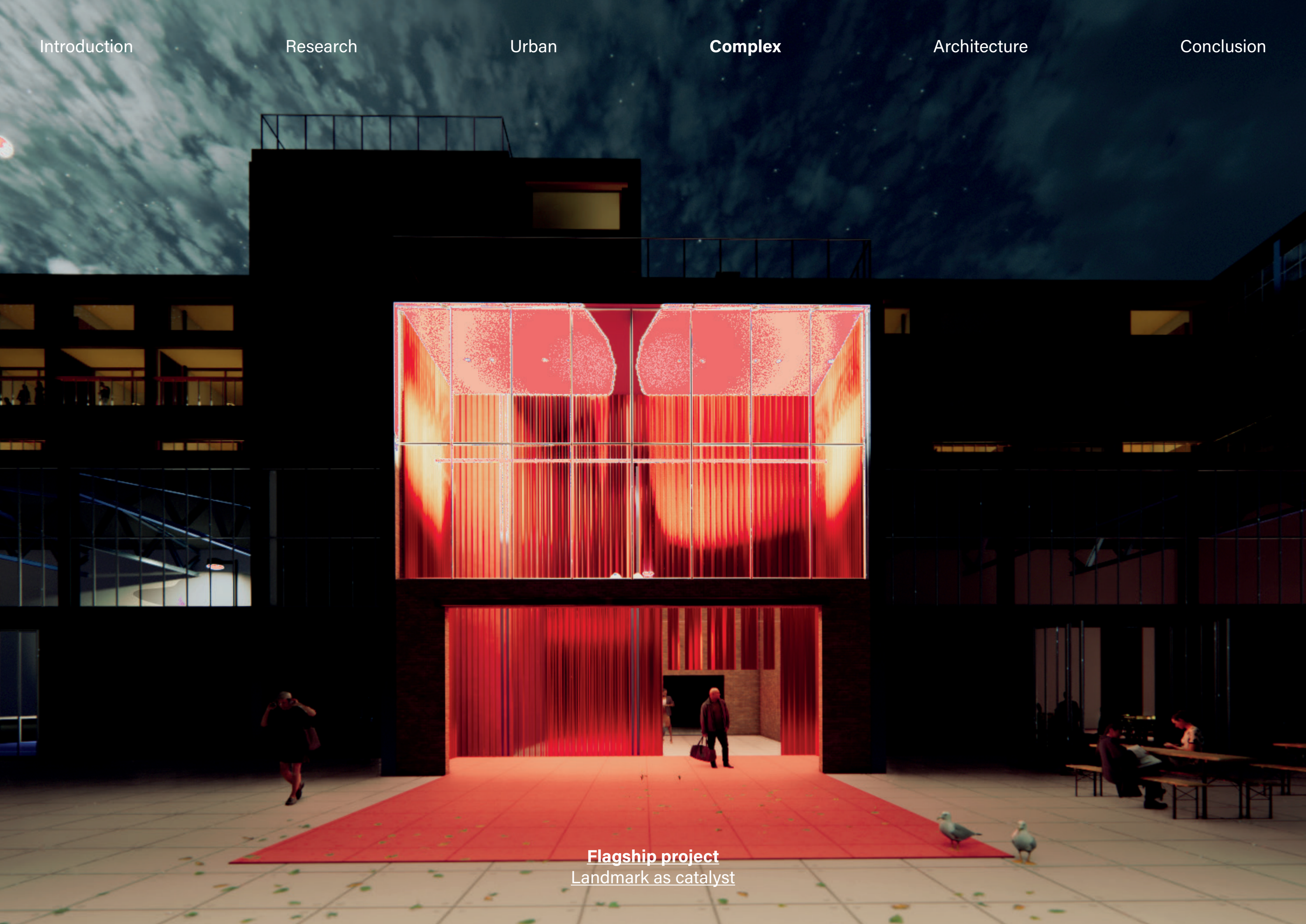
Research

Urban

**Complex**

Architecture

Conclusion



**Flagship project**  
Landmark as catalyst



Introduction

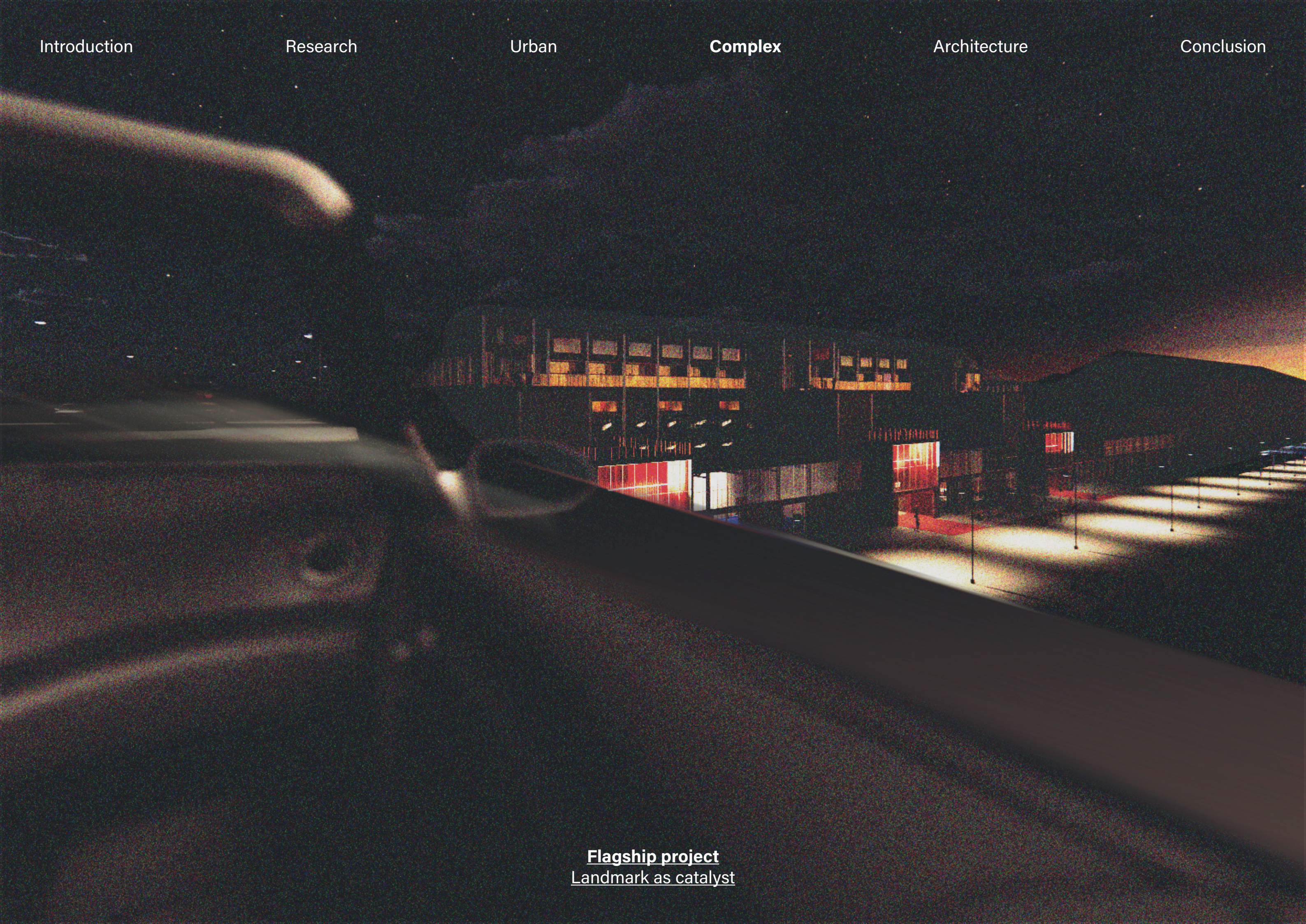
Research

Urban

**Complex**

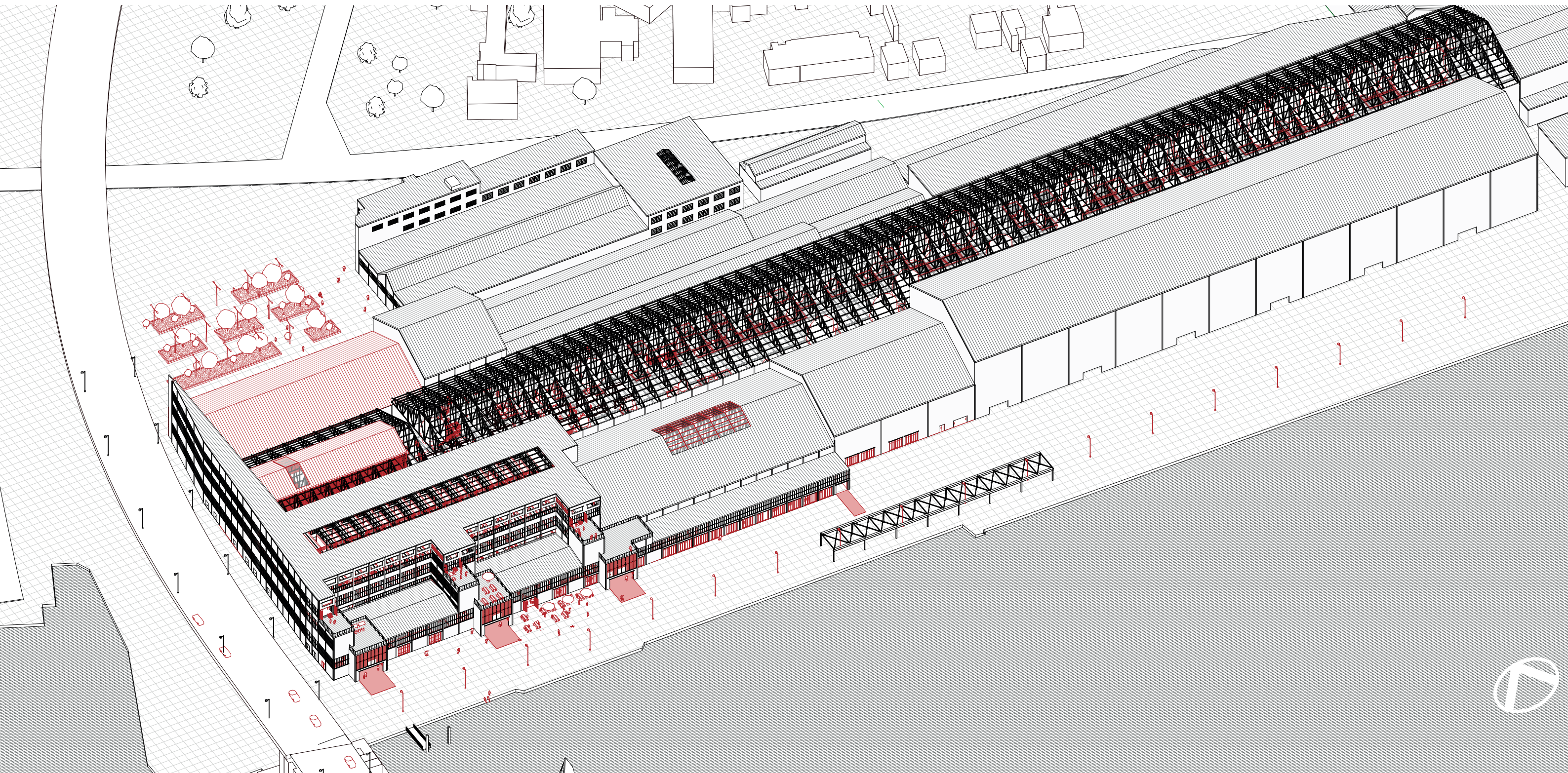
Architecture

Conclusion



Flagship project  
Landmark as catalyst

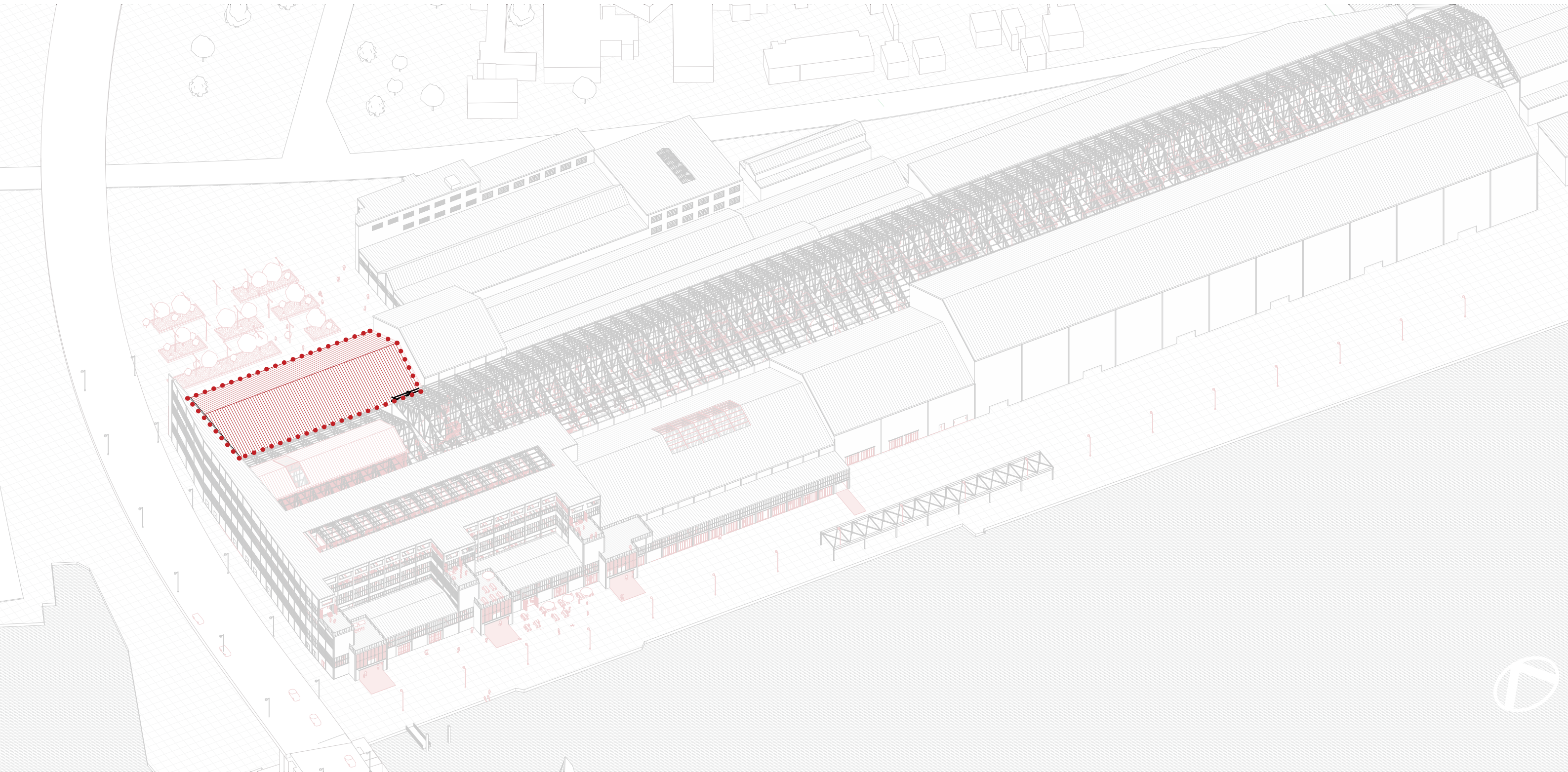




**Flagship project**  
Landmark as catalyst



### 3. Scaled urban integration



**Flagship project**  
**Landmark as catalyst**



### 3. Scaled urban integration



Nedstaal vanaf boven (Regionaal archief Dordrecht, n.d.)



Nedstaal vanaf boven  
Google earth, 2025

**Flagship project**  
Landmark as catalyst



### 3. Scaled urban integration



Nedstaal vanaf boven (Regionaal archief Dordrecht, n.d.)

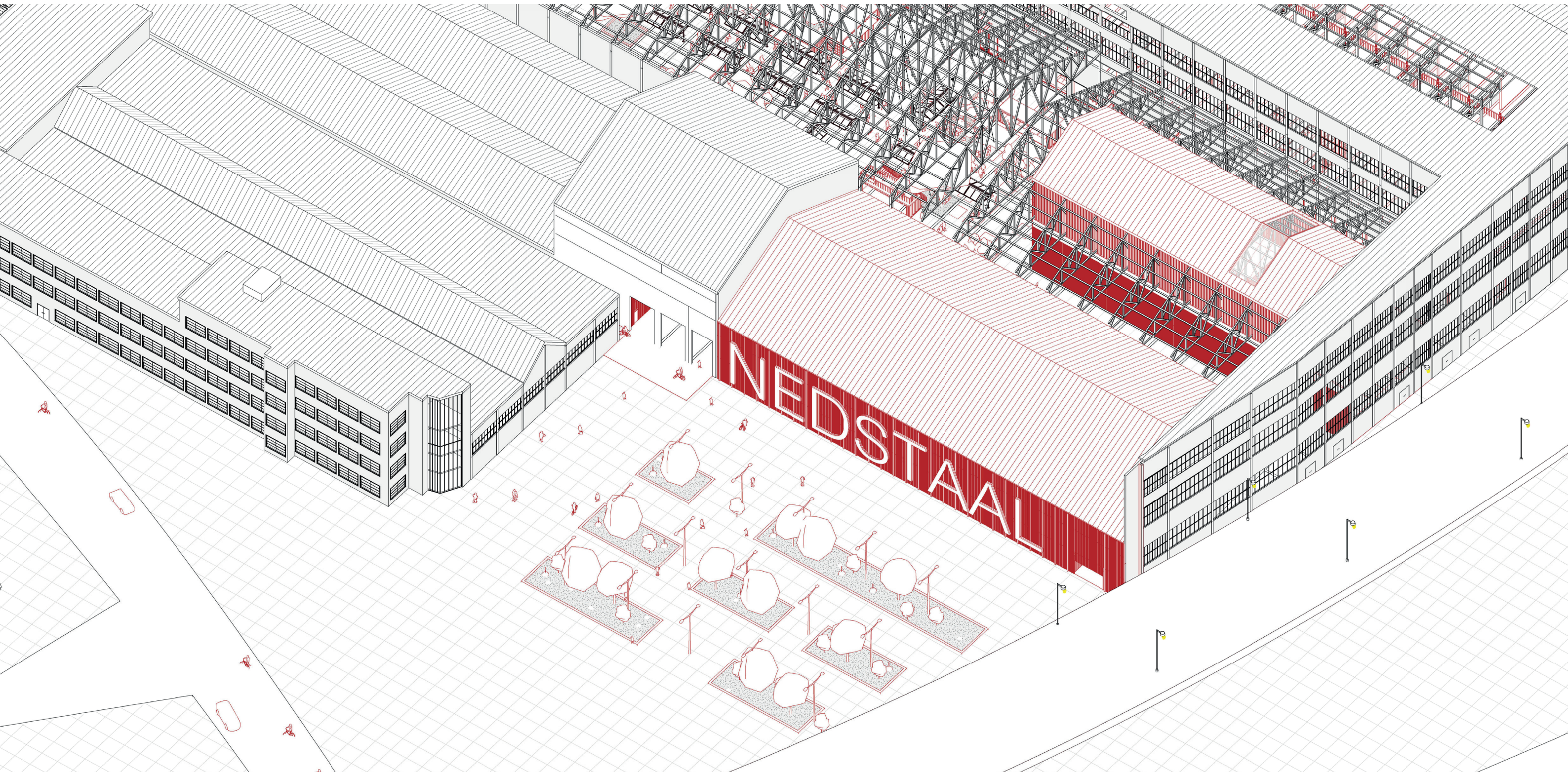


Nedstaal vanaf boven  
Google earth, 2025

**Flagship project**  
**Landmark as catalyst**



### 3. Scaled urban integration



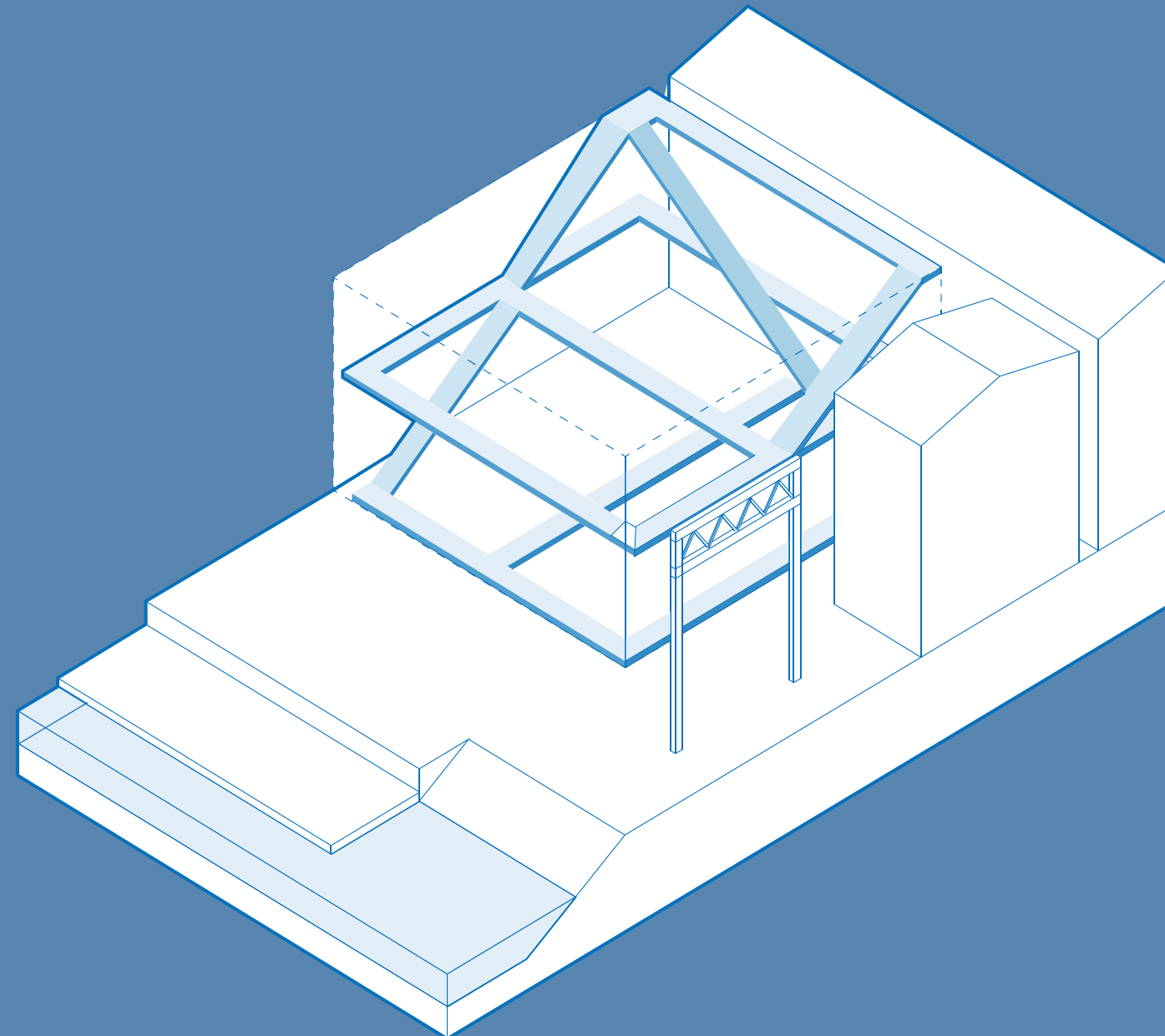
**Flagship project**  
Landmark as catalyst





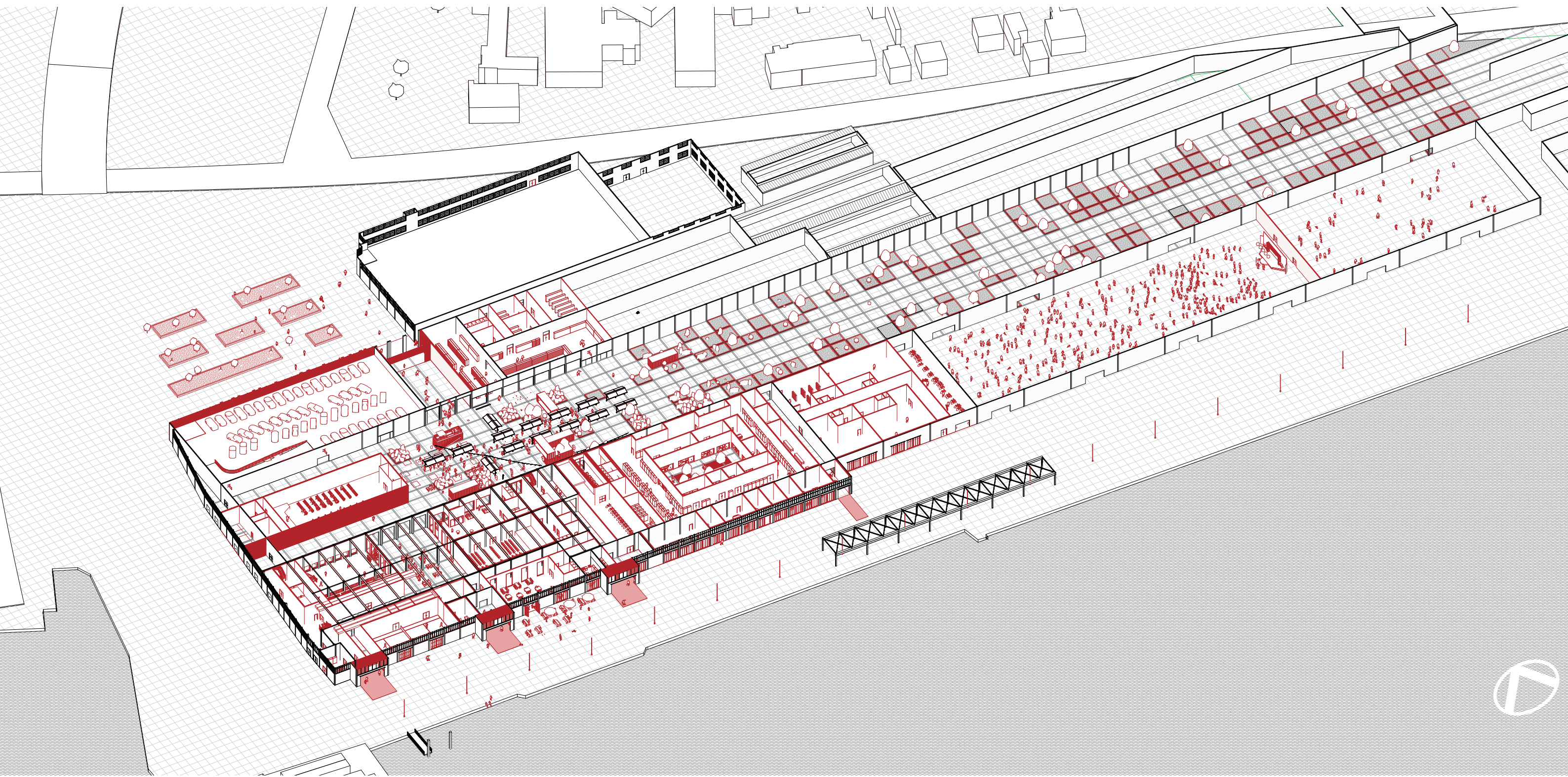
Flagship project  
Landmark as catalyst





**Urban connectivity**  
Multiscalar internal streets  
*(Koolhaas, Grecchi)*

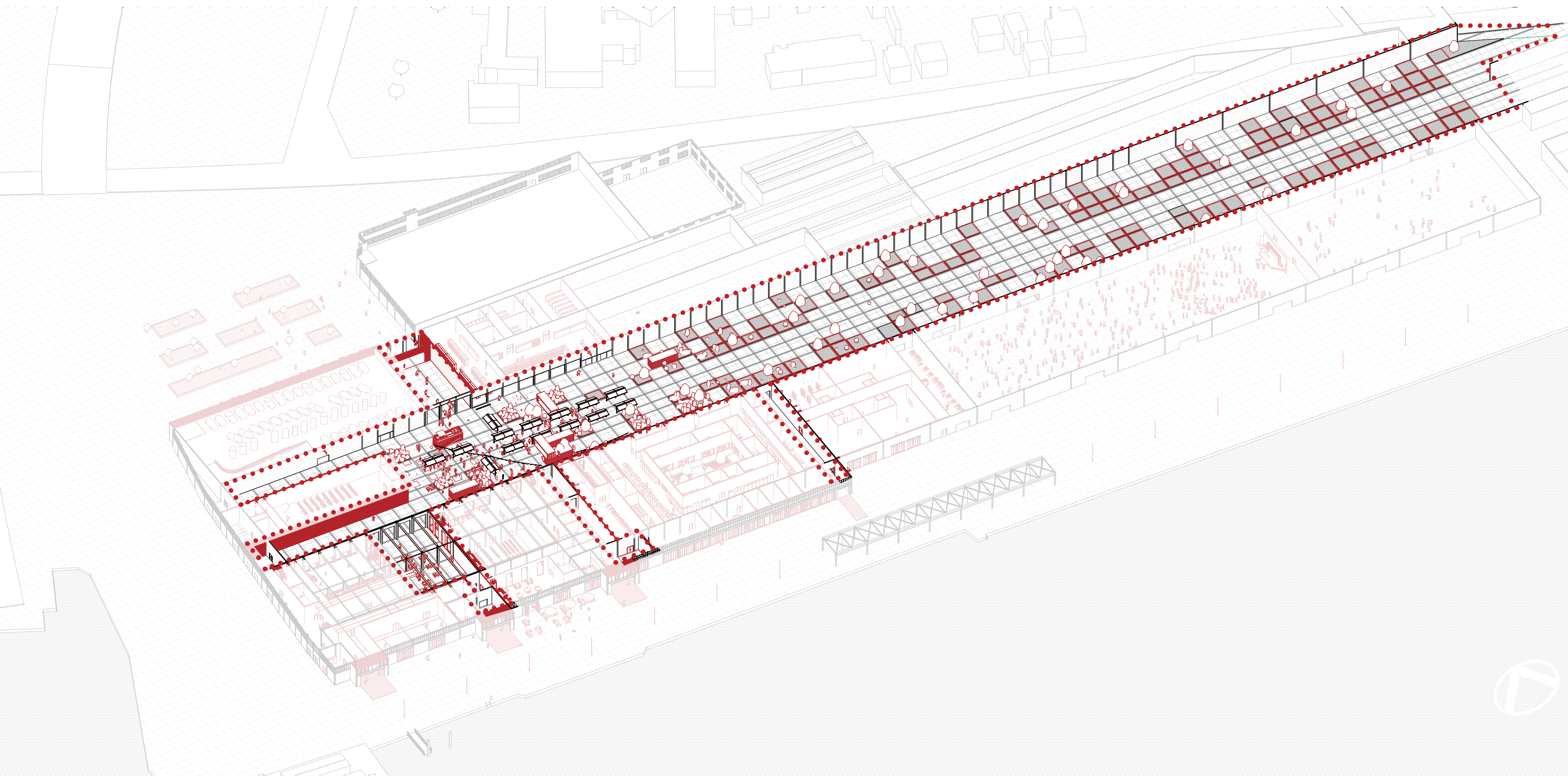




**Urban connectivity**  
Multiscalar internal streets

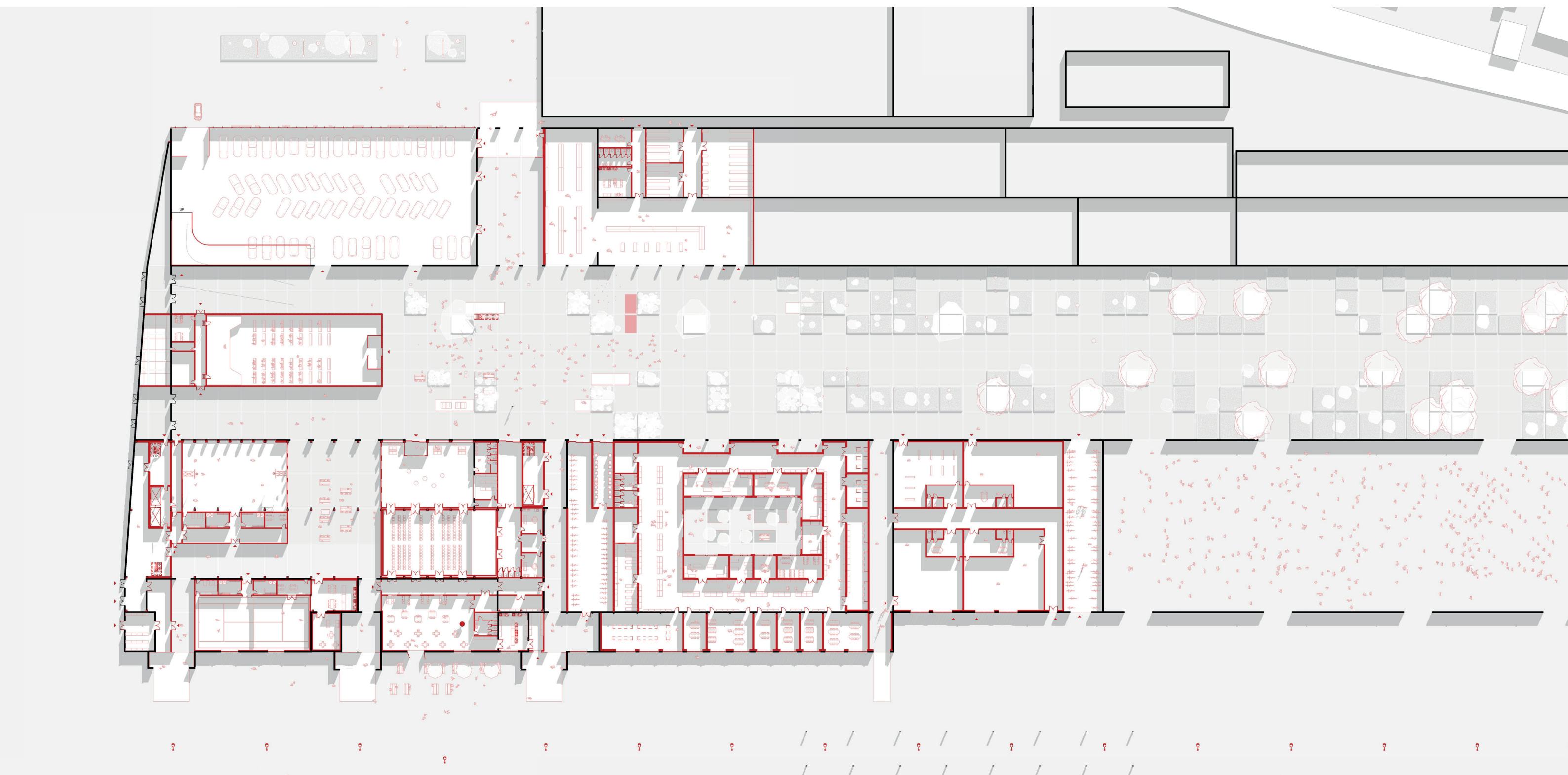


Routing



**Urban connectivity**  
Multiscalar internal streets

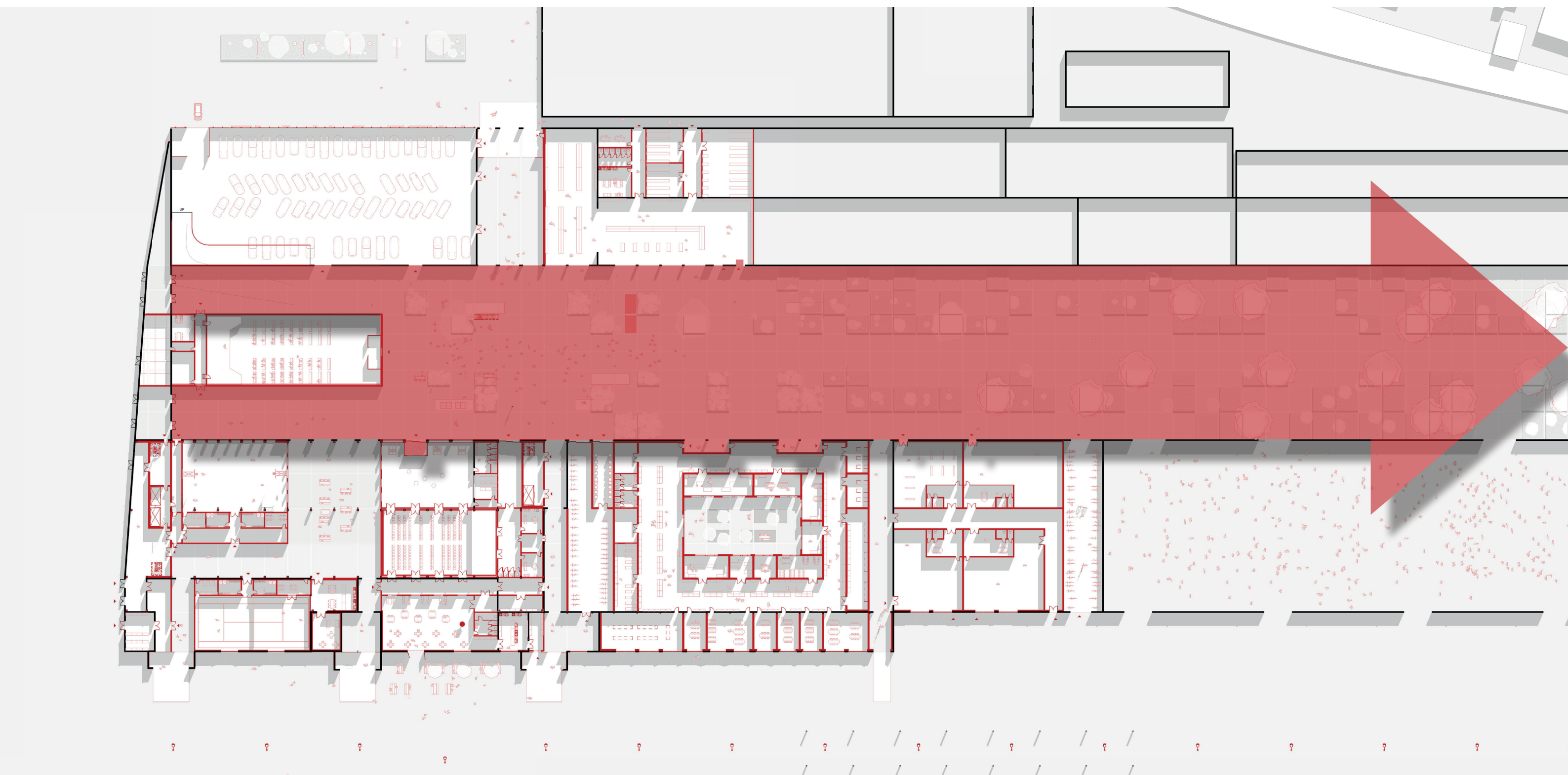




**Urban connectivity**  
**Multiscalar internal streets**



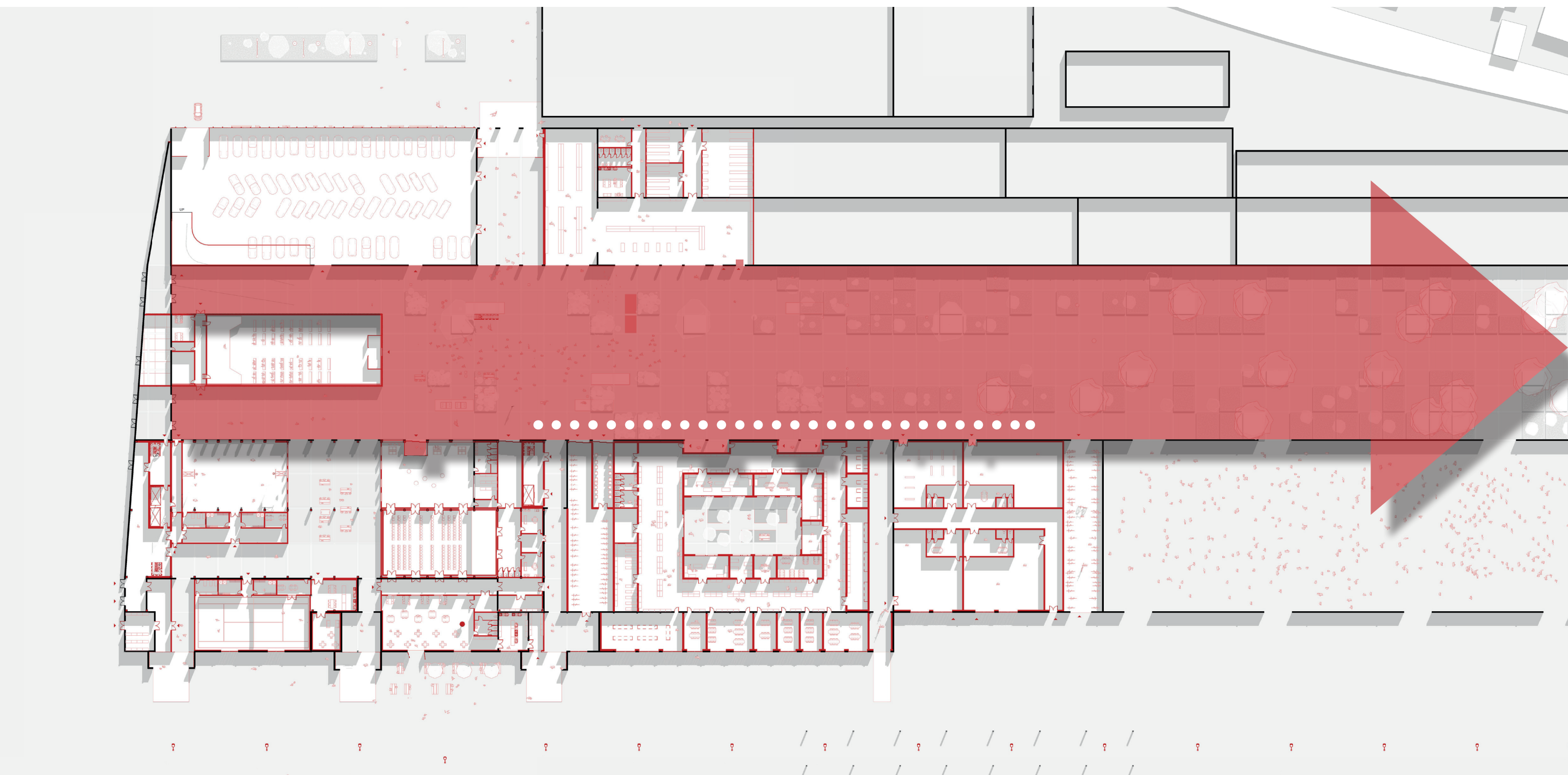
Main street



**Urban connectivity**  
**Multiscalar internal streets**



Main street - Internal facade



**Urban connectivity**  
Multiscalar internal streets



Introduction

Research

Urban

**Complex**

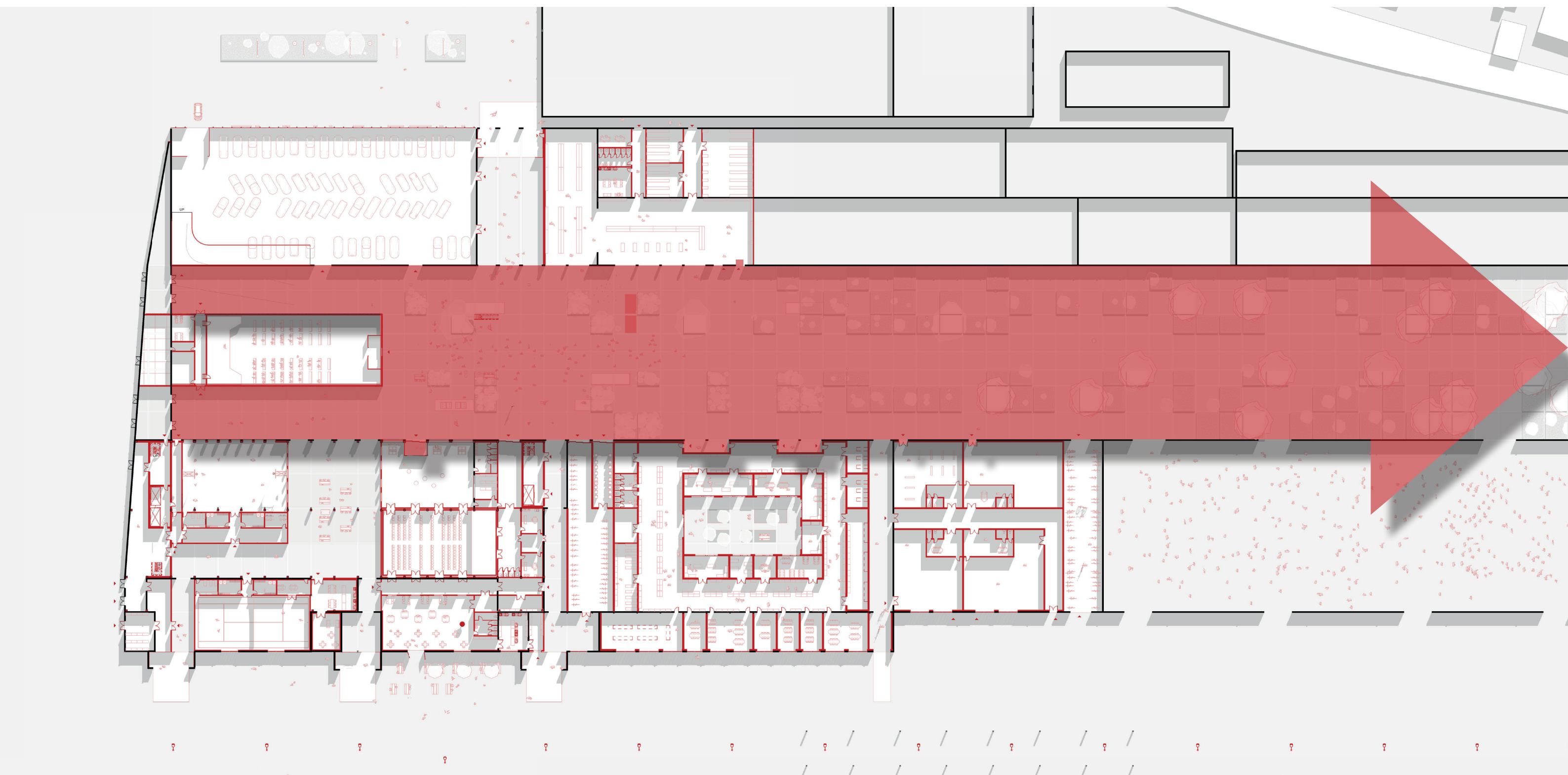
Architecture

Conclusion



Urban connectivity  
Multiscalar internal streets

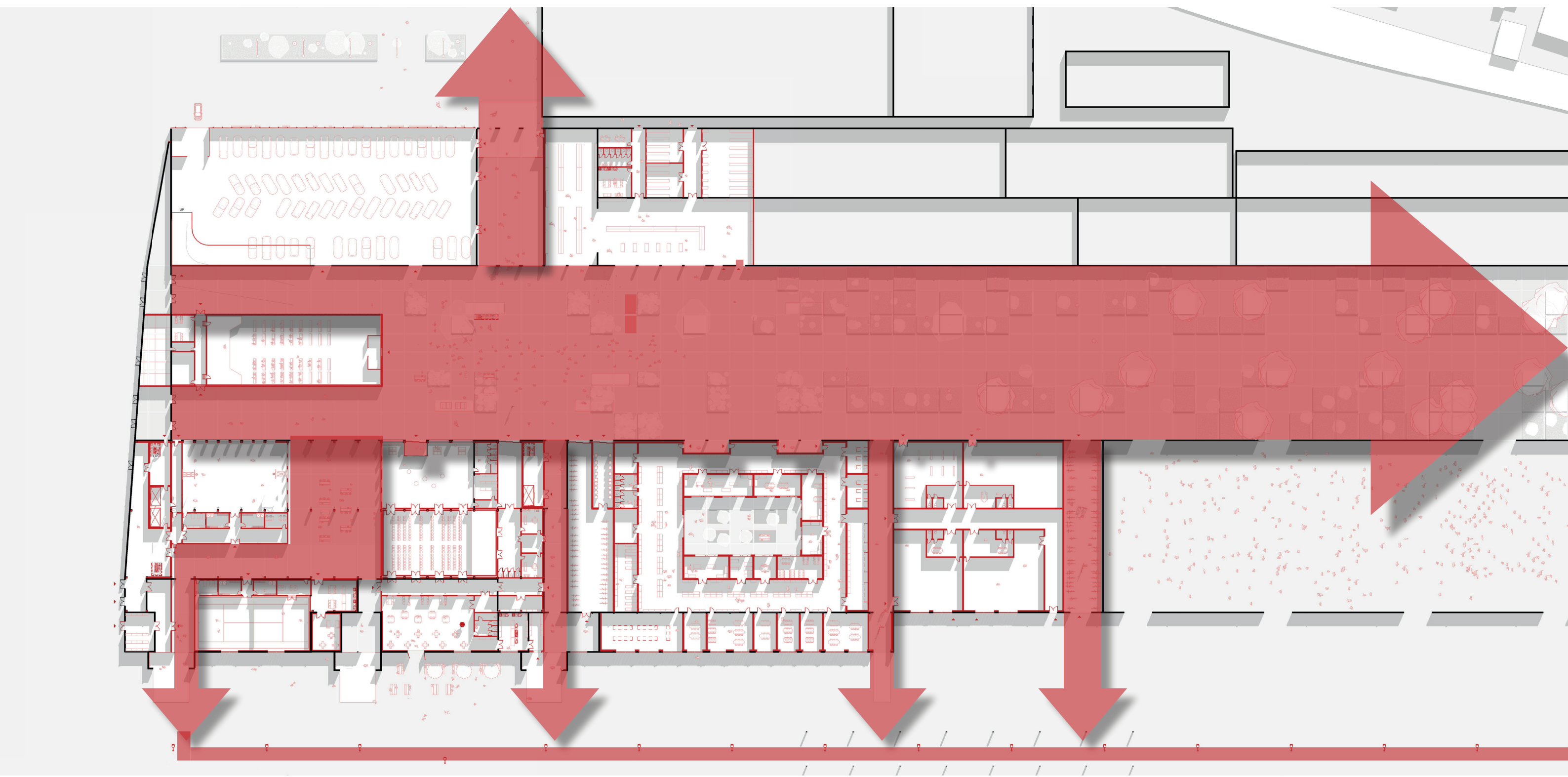




**Urban connectivity**  
**Multiscalar internal streets**



Passageways



Urban connectivity  
Multiscalar internal streets



Introduction

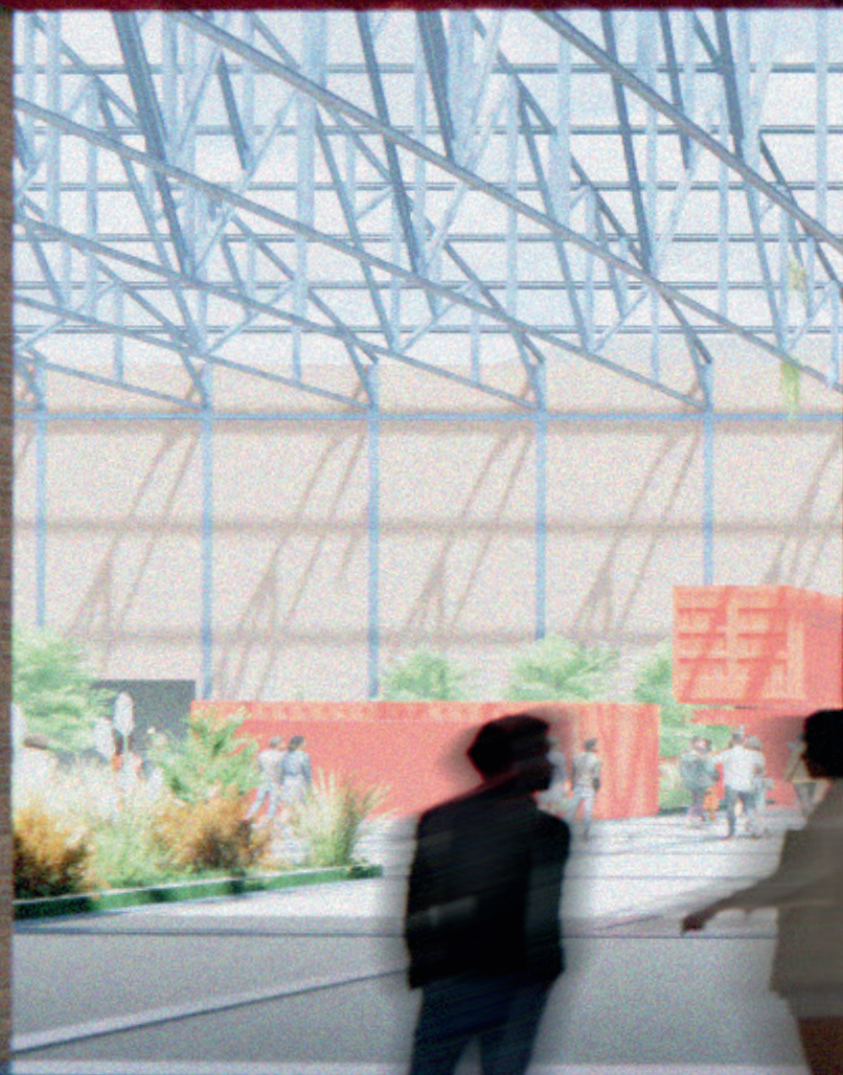
Research

Urban

**Complex**

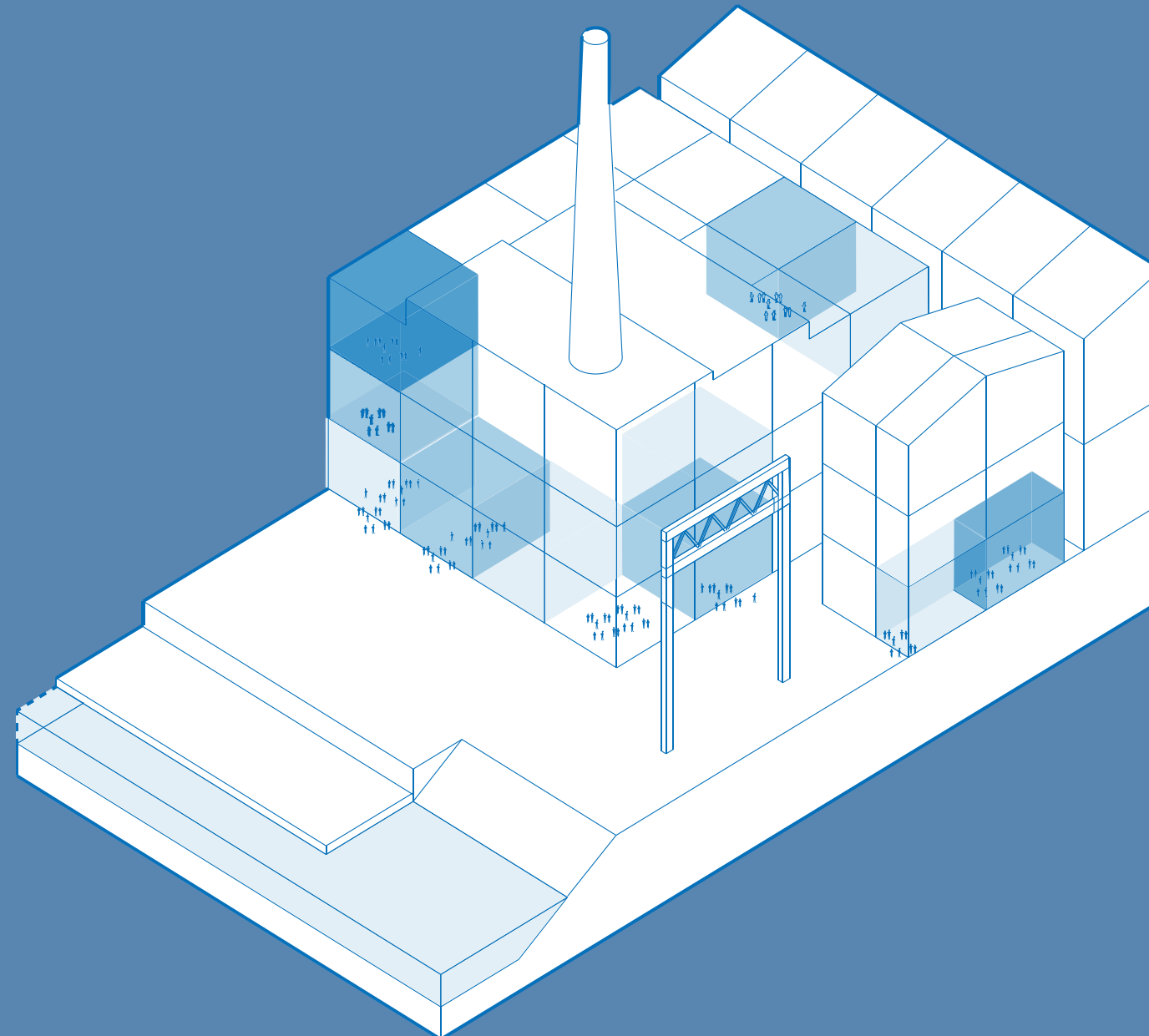
Architecture

Conclusion



Urban connectivity  
Multiscalar internal streets

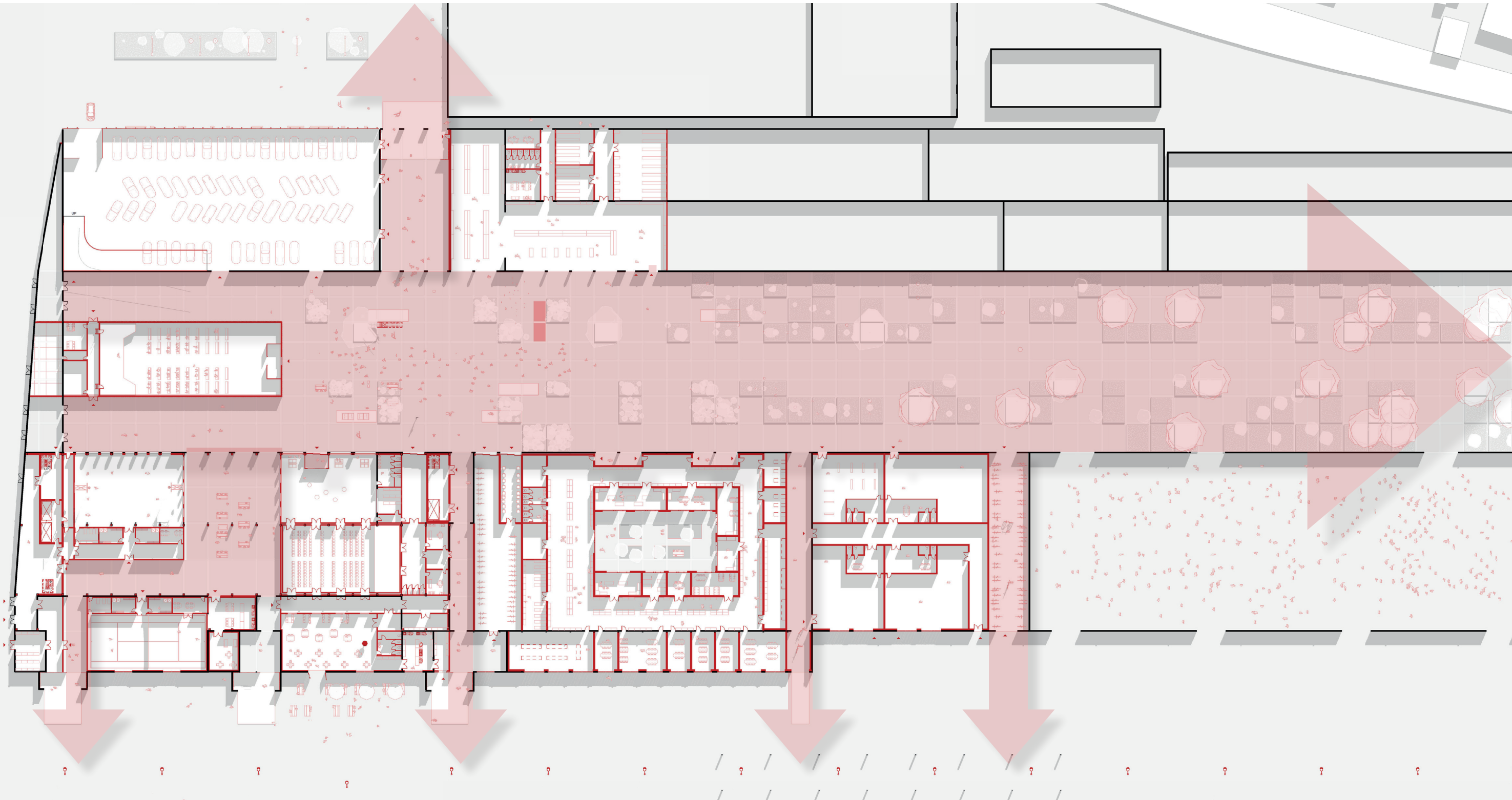




**Defined program**

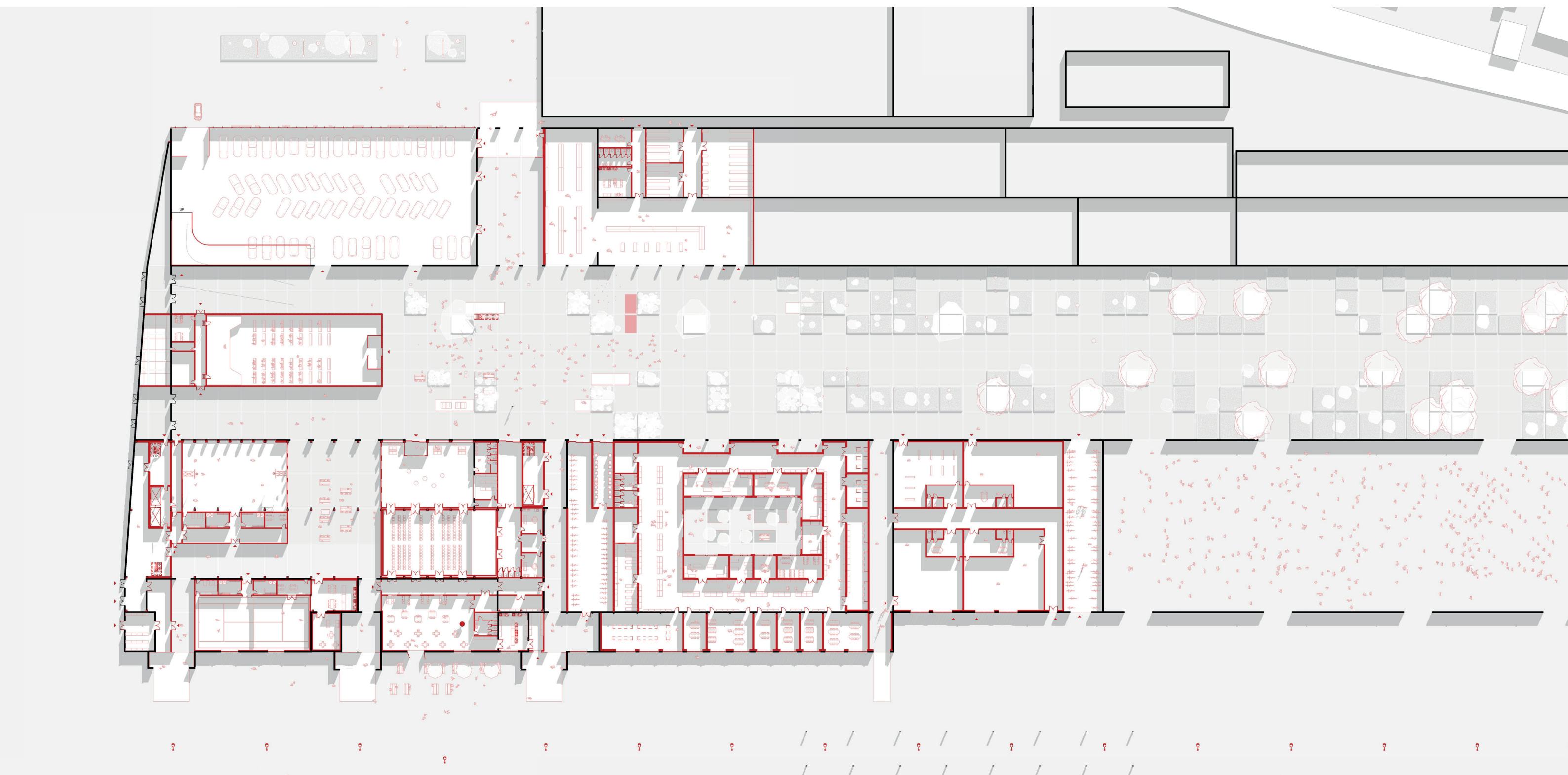
Mixed-use, for dynamic use throughout the day  
(Schrenk et al., Han et al., Jacobs, Cullen, Gehl, Reisto)





**Defined program**  
**Mixed-use dynamic**

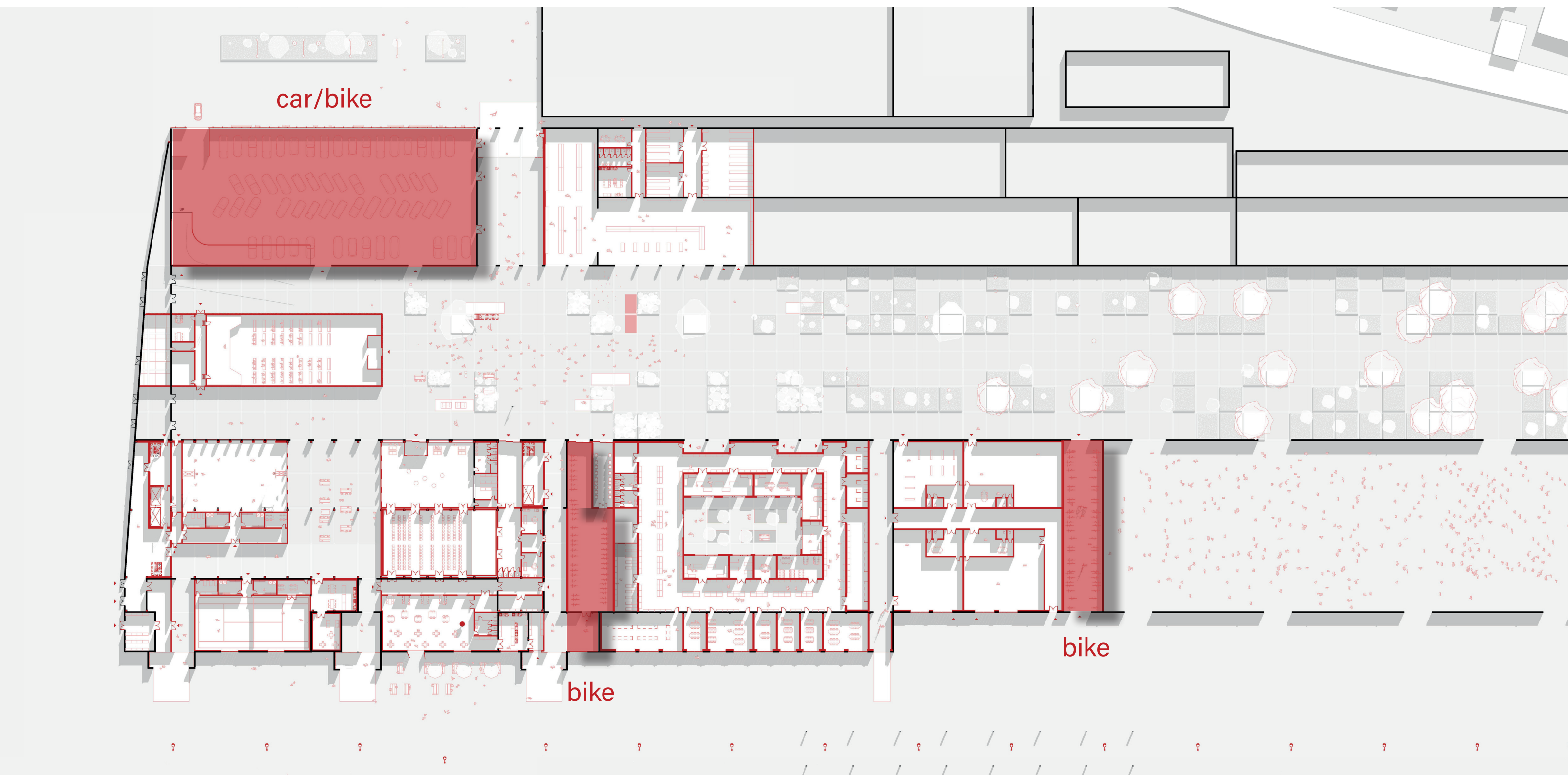




**Defined program**  
**Mixed-use dynamic**



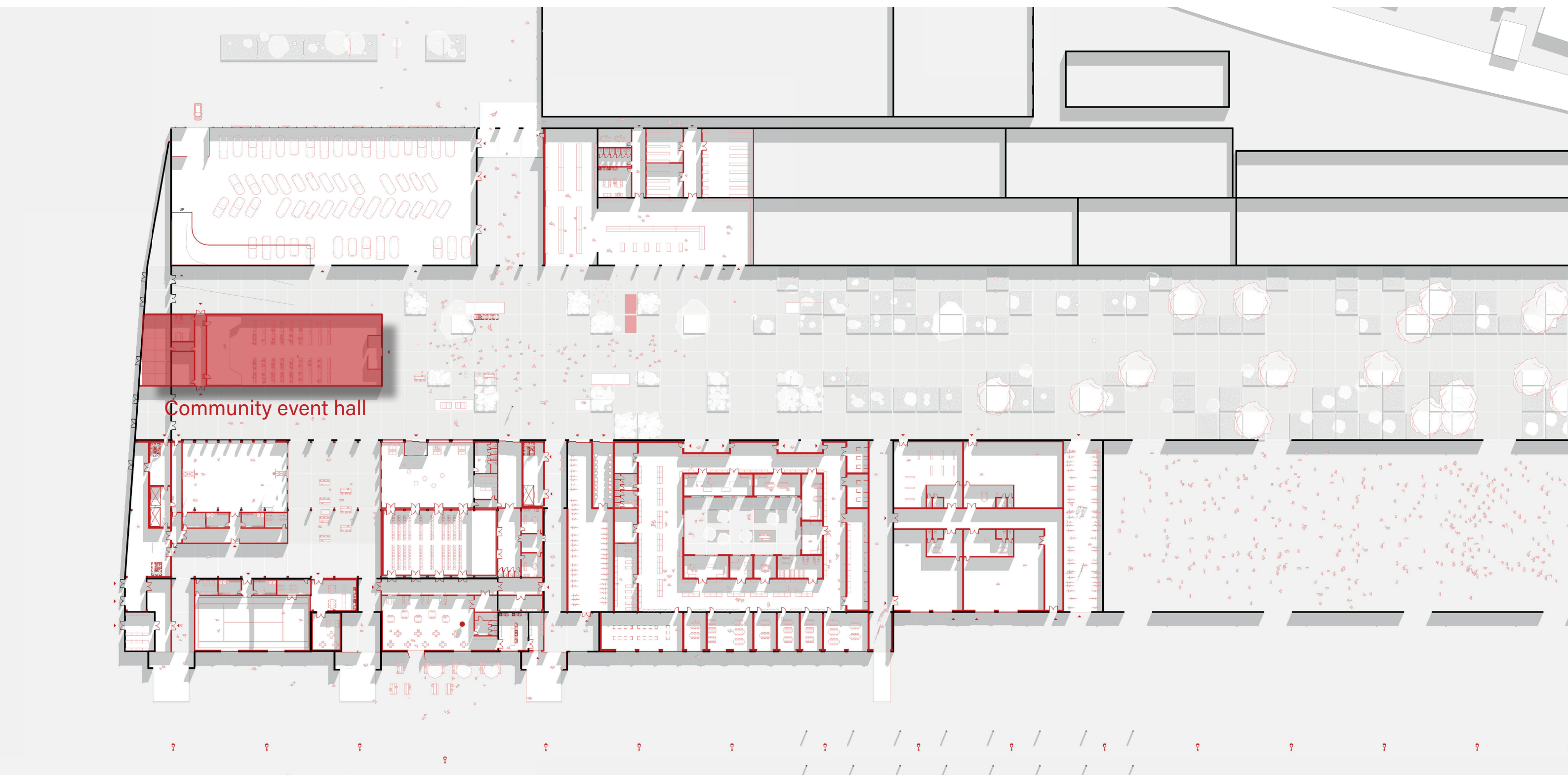
Accessibility



**Defined program**  
Mixed-use dynamic



Public program



**Defined program**  
**Mixed-use dynamic**



Introduction

Research

Urban

**Complex**

Architecture

Conclusion



Defined program  
Mixed-use dynamic



Introduction

Research

Urban

**Complex**

Architecture

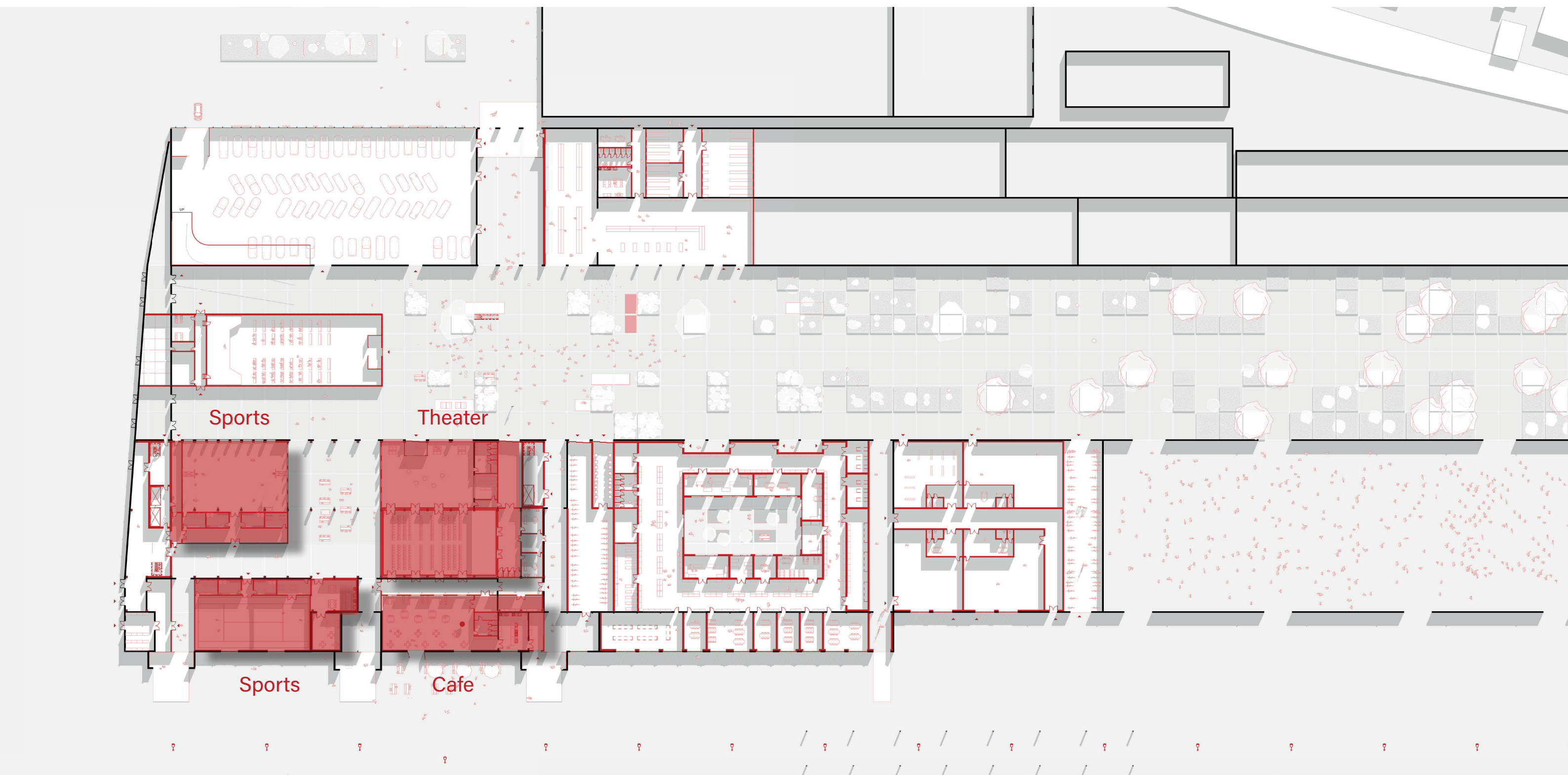
Conclusion



Defined program  
Mixed-use dynamic



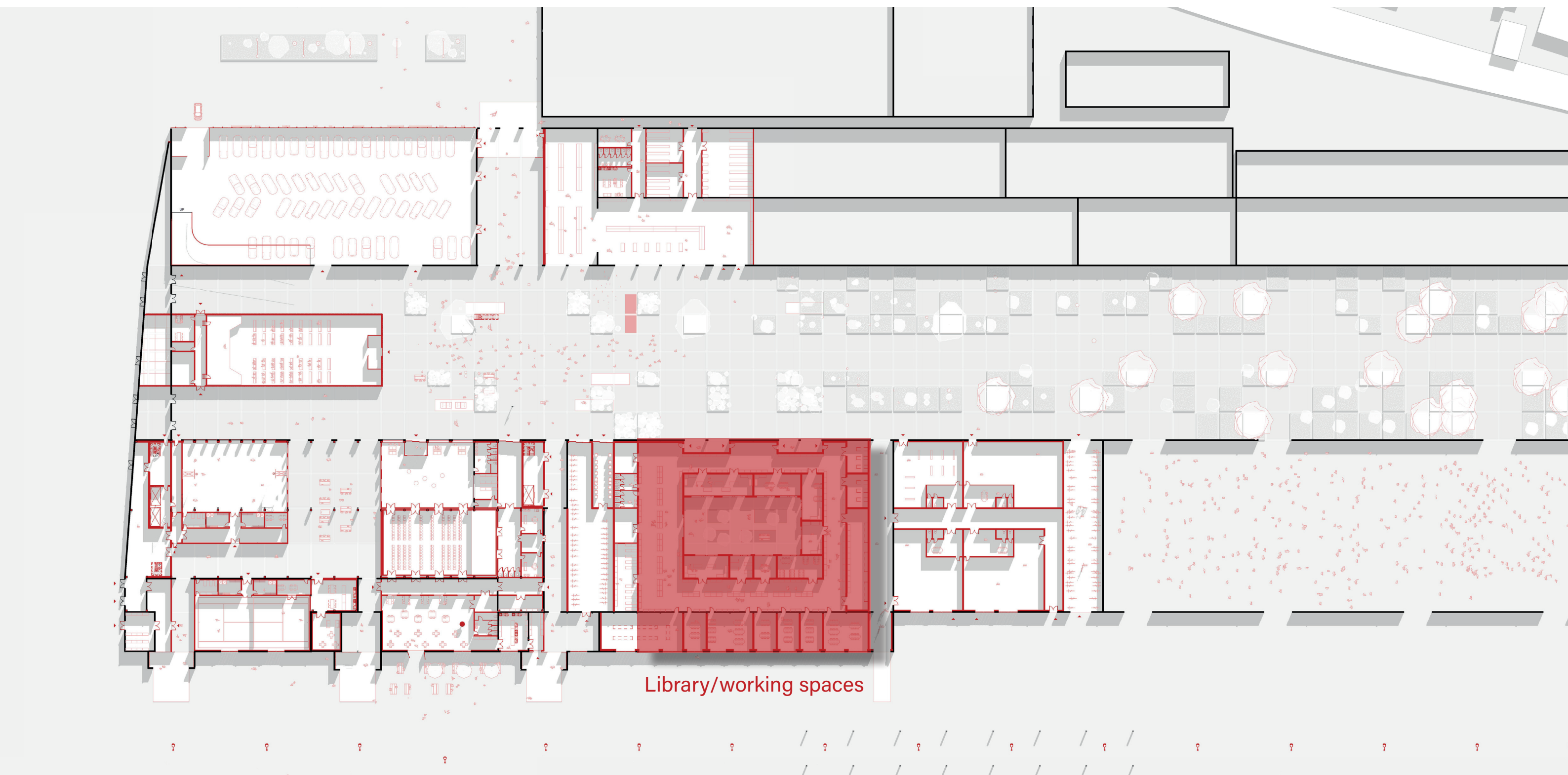
Public program



**Defined program**  
**Mixed-use dynamic**



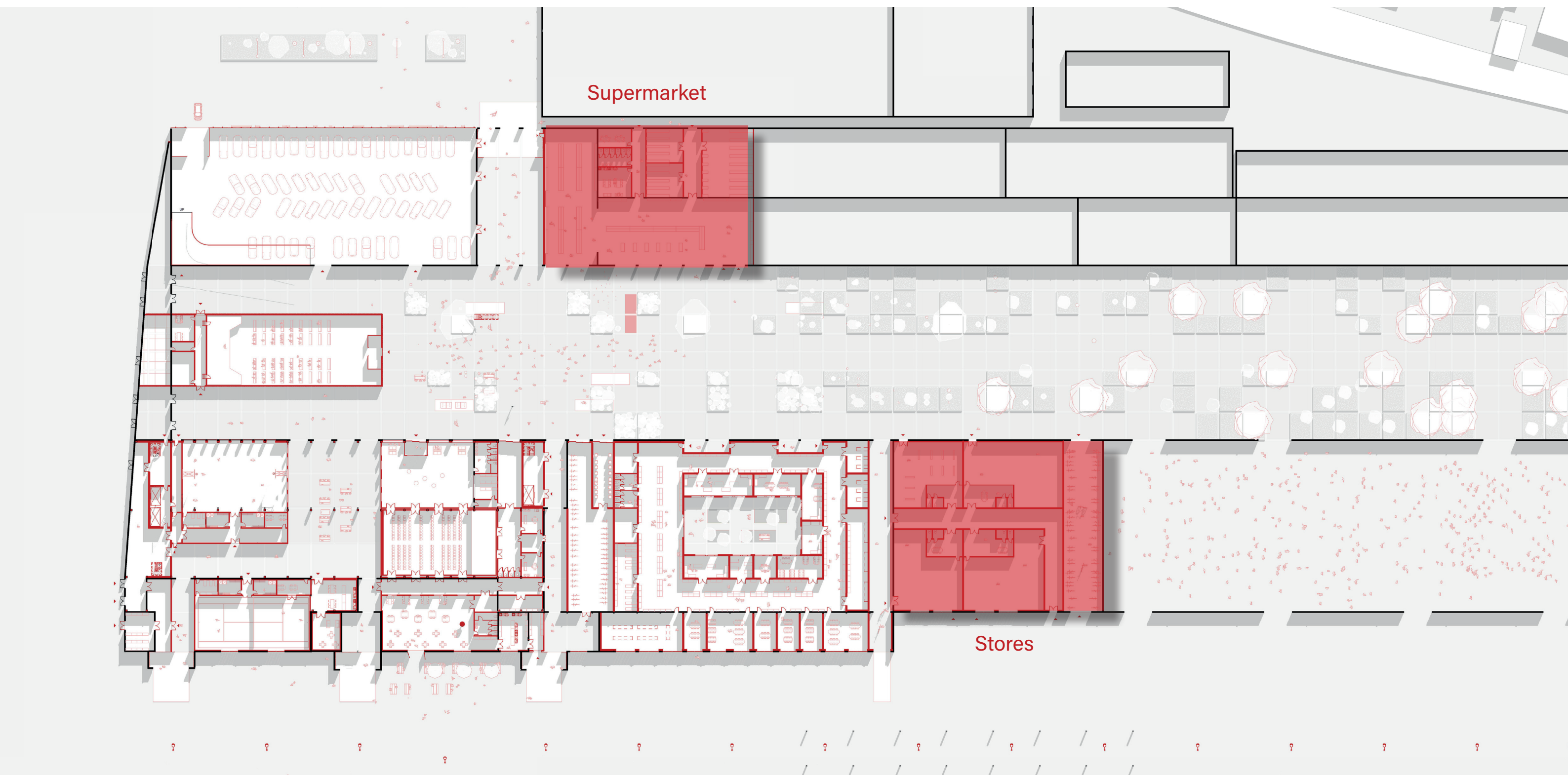
Public program



Defined program  
Mixed-use dynamic



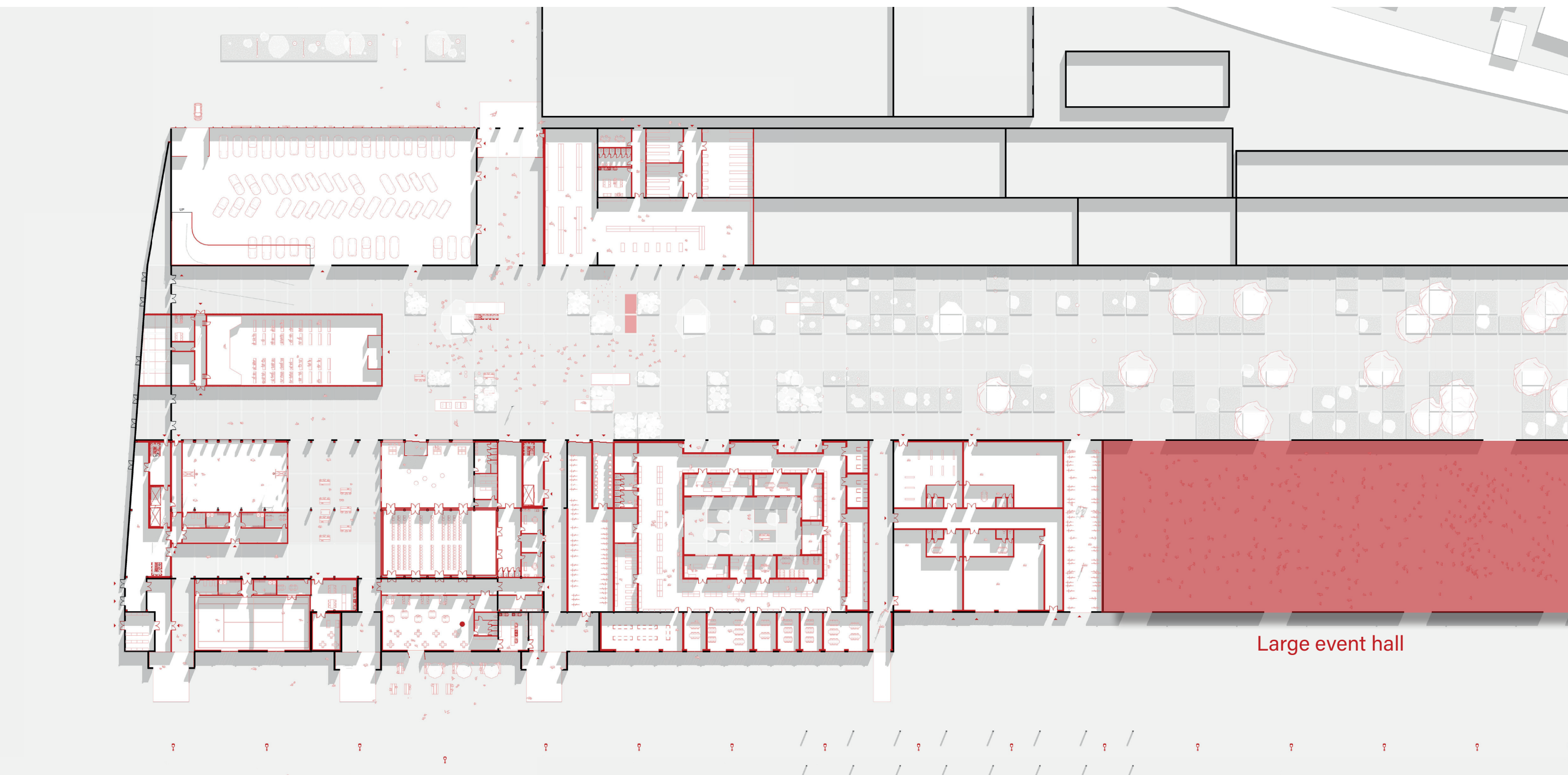
Commercial program



**Defined program**  
**Mixed-use dynamic**



Public program



**Defined program**  
**Mixed-use dynamic**



Introduction

Research

Urban

**Complex**

Architecture

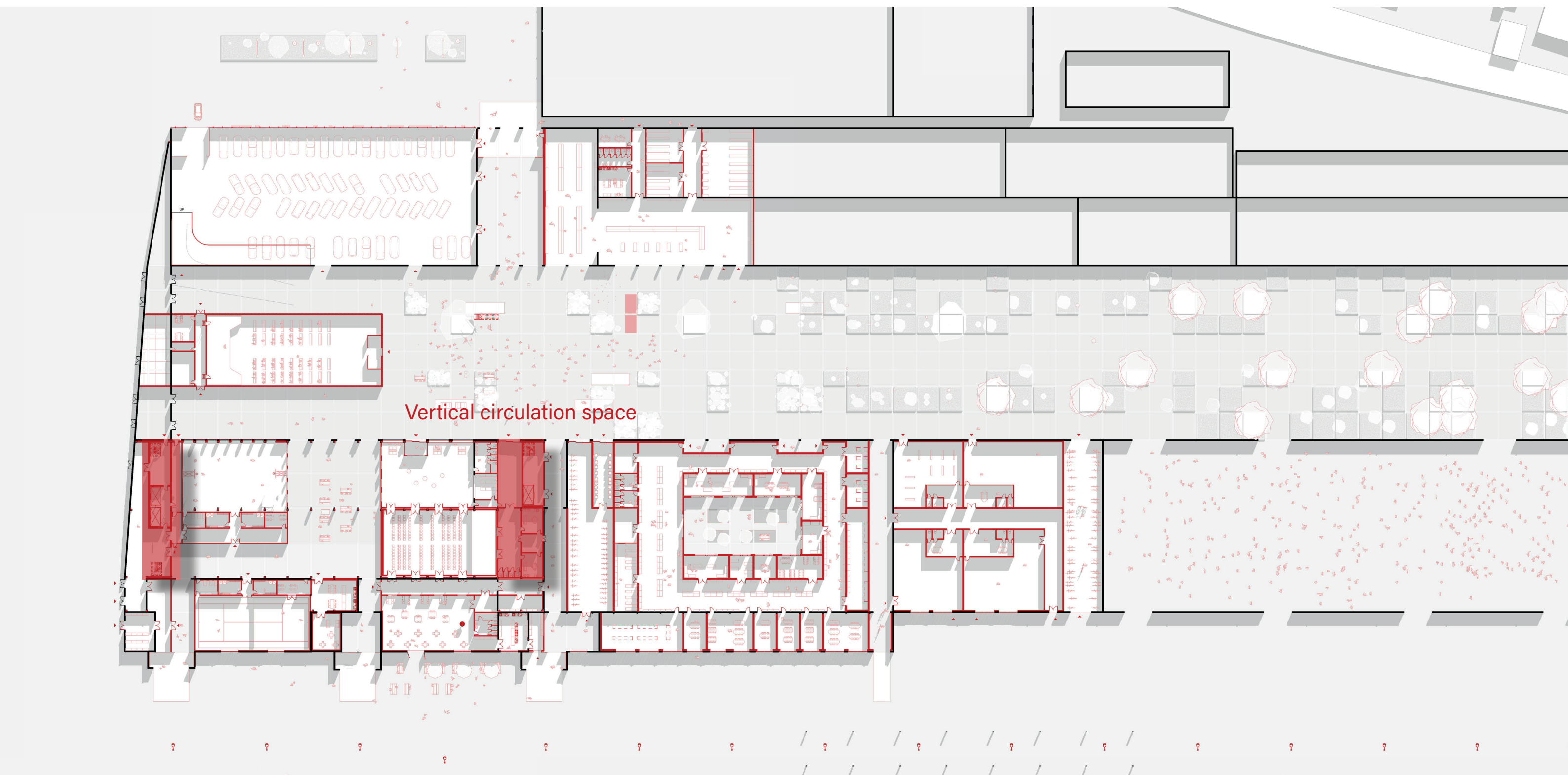
Conclusion



Defined program  
Mixed-use dynamic



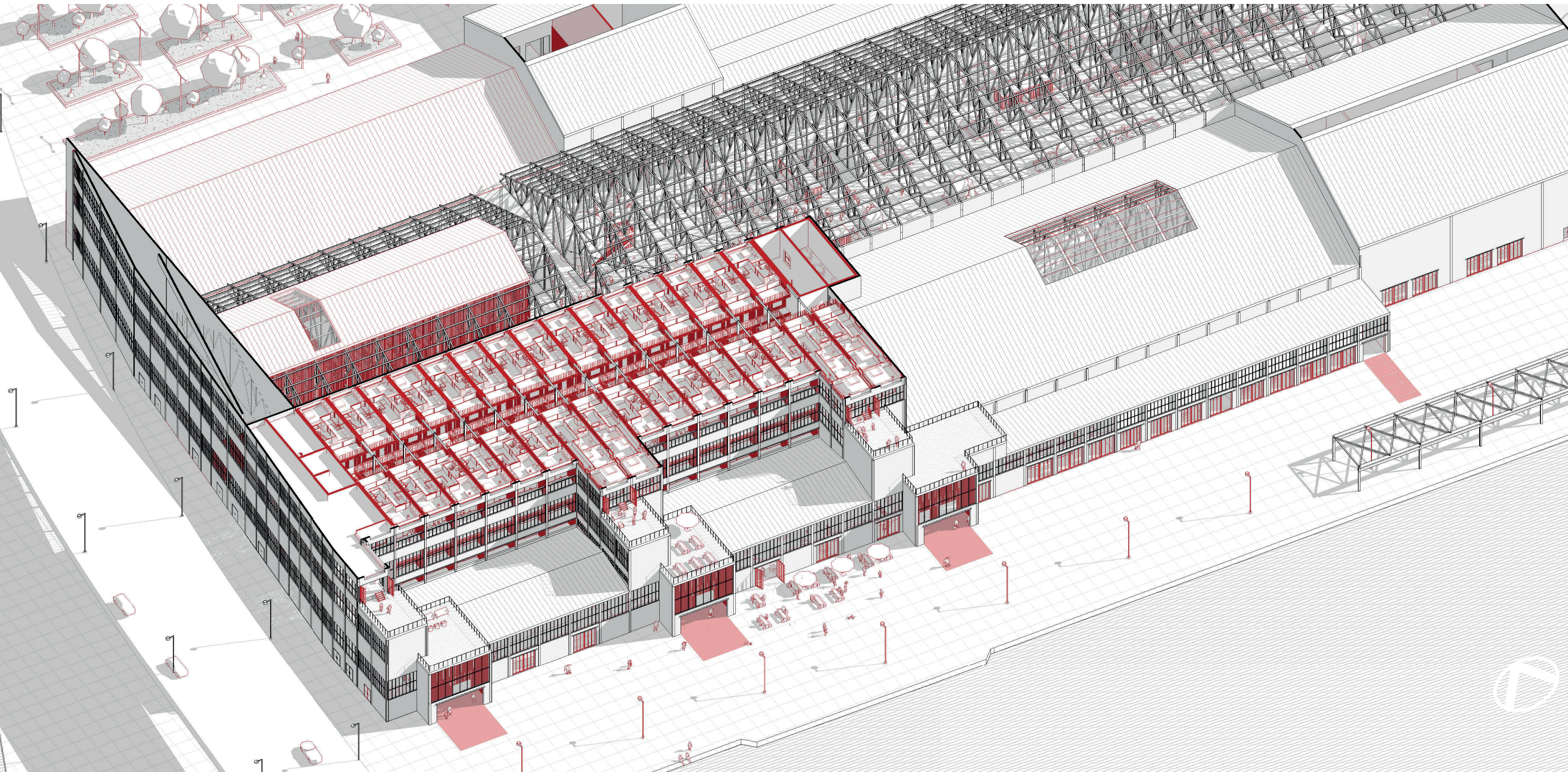
Residential



**Defined program**  
**Mixed-use dynamic**



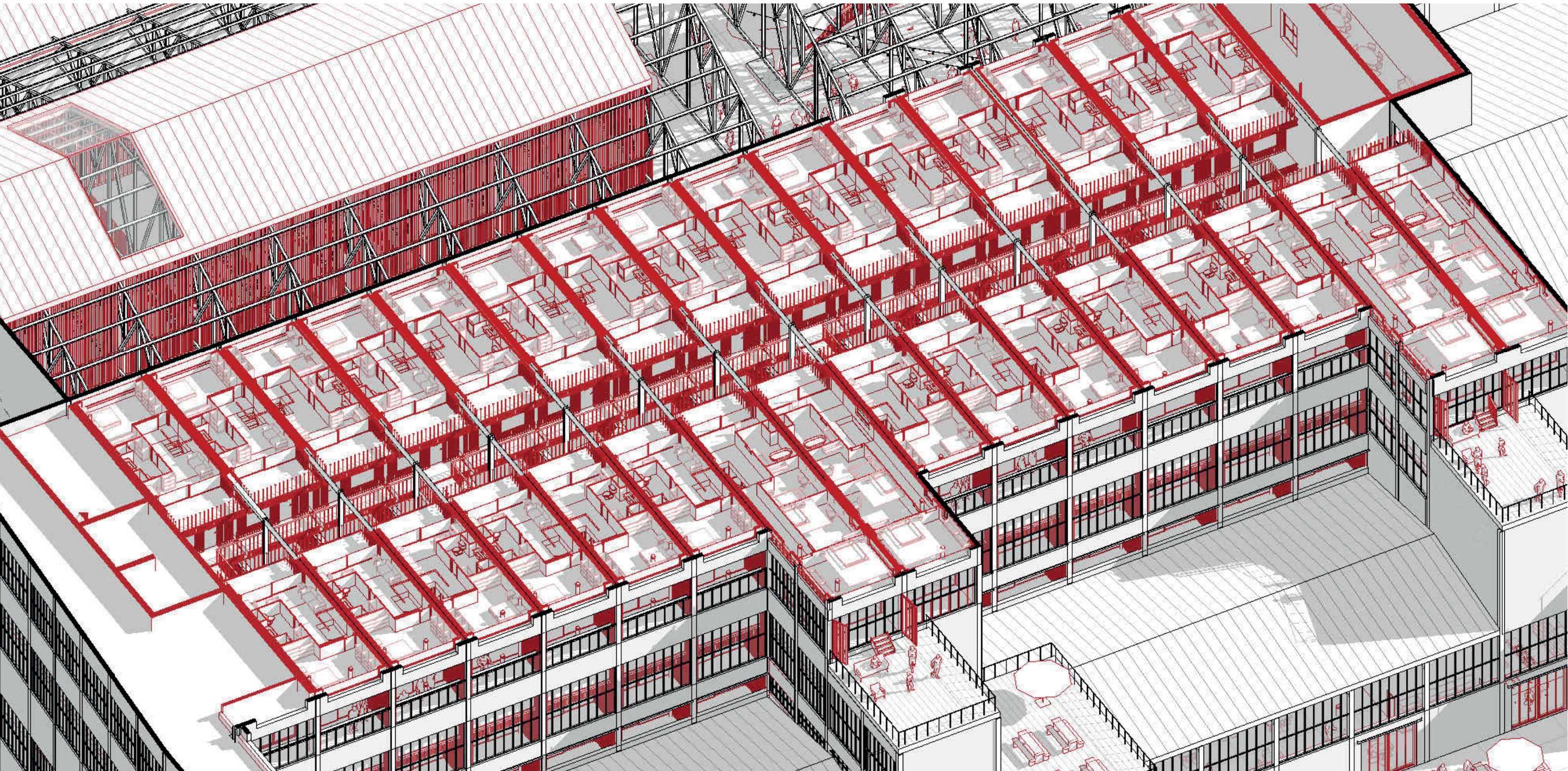
## Residential



**Defined program**  
**Mixed-use dynamic**



## Residential



**Defined program**  
**Mixed-use dynamic**



Introduction

Research

Urban

Complex

Architecture

Conclusion



Defined program  
Mixed-use dynamic



Introduction

Research

Urban

Complex

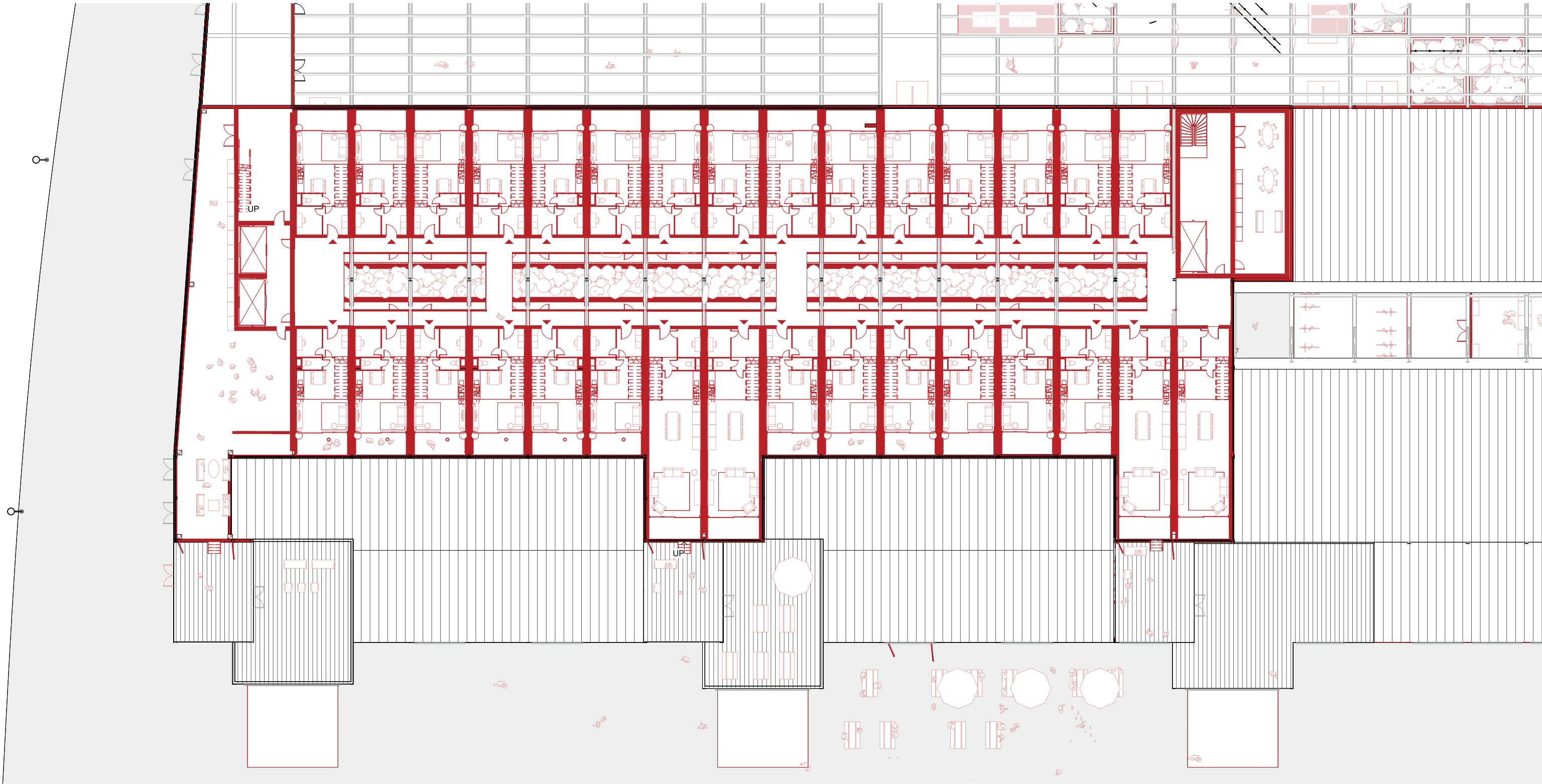
Architecture

Conclusion

Defined program  
Mixed-use dynamic



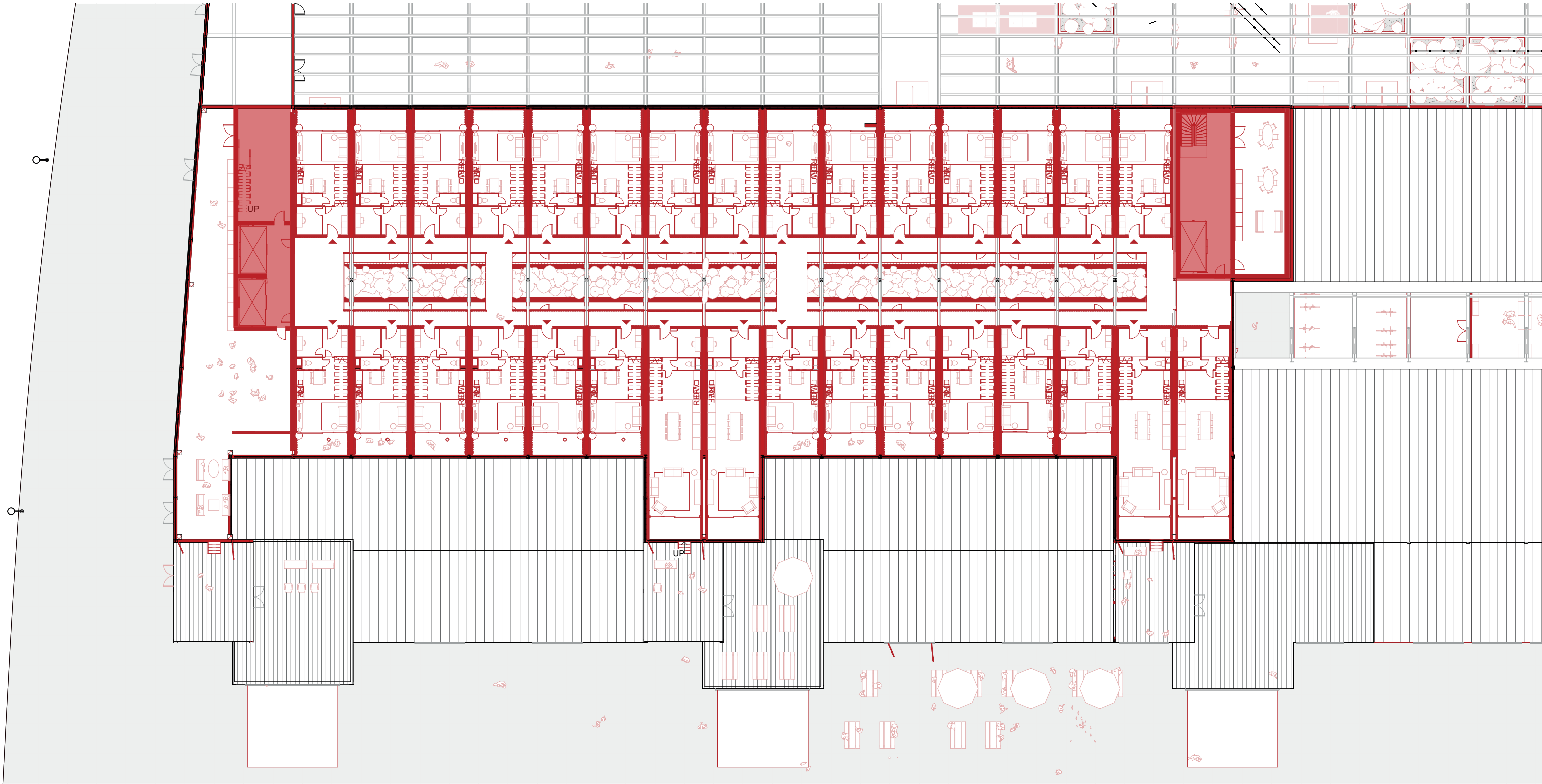




**Defined program**  
**Mixed-use dynamic**



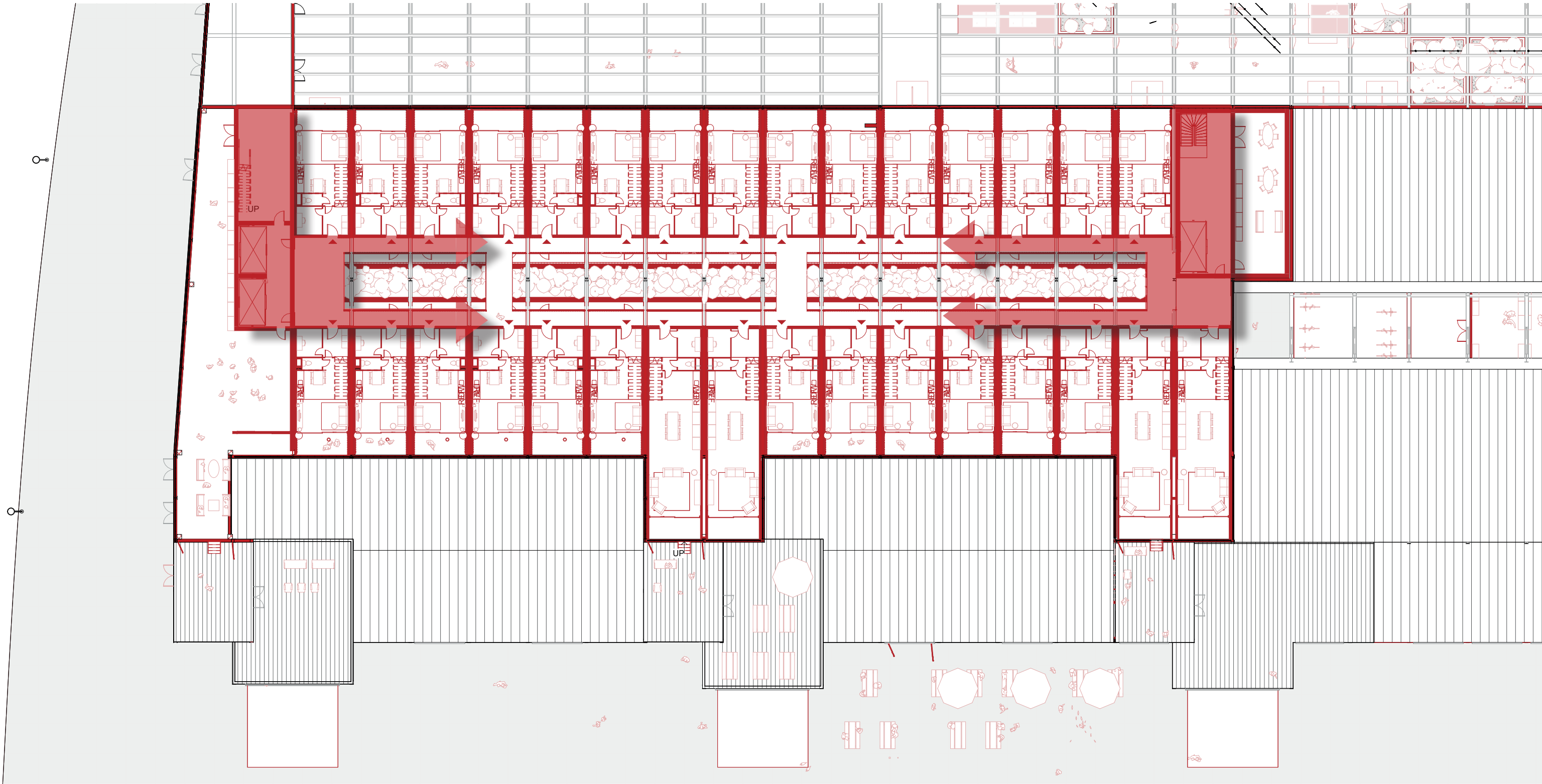
Accessibility



**Defined program**  
**Mixed-use dynamic**



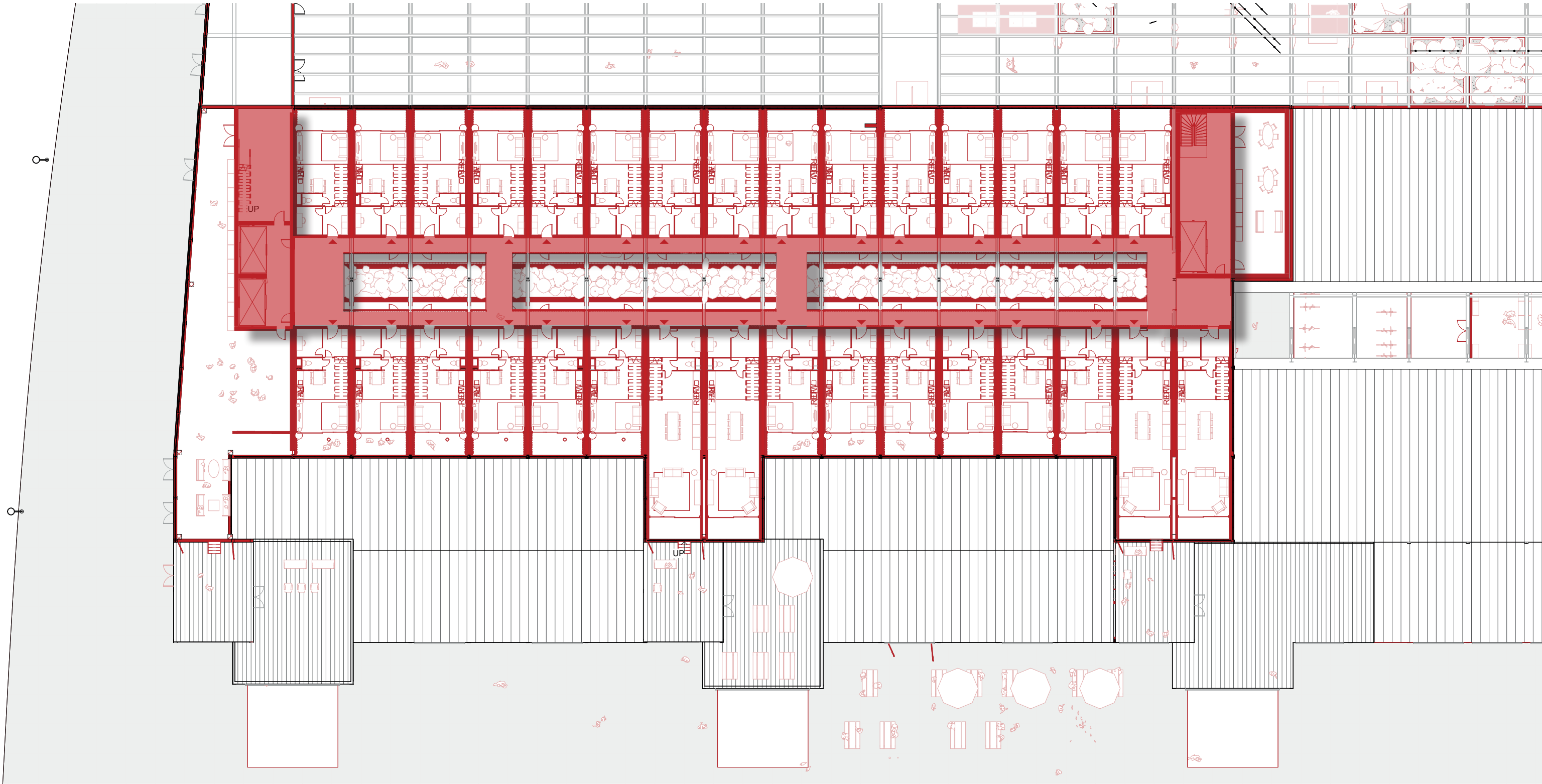
Accessibility



**Defined program**  
**Mixed-use dynamic**

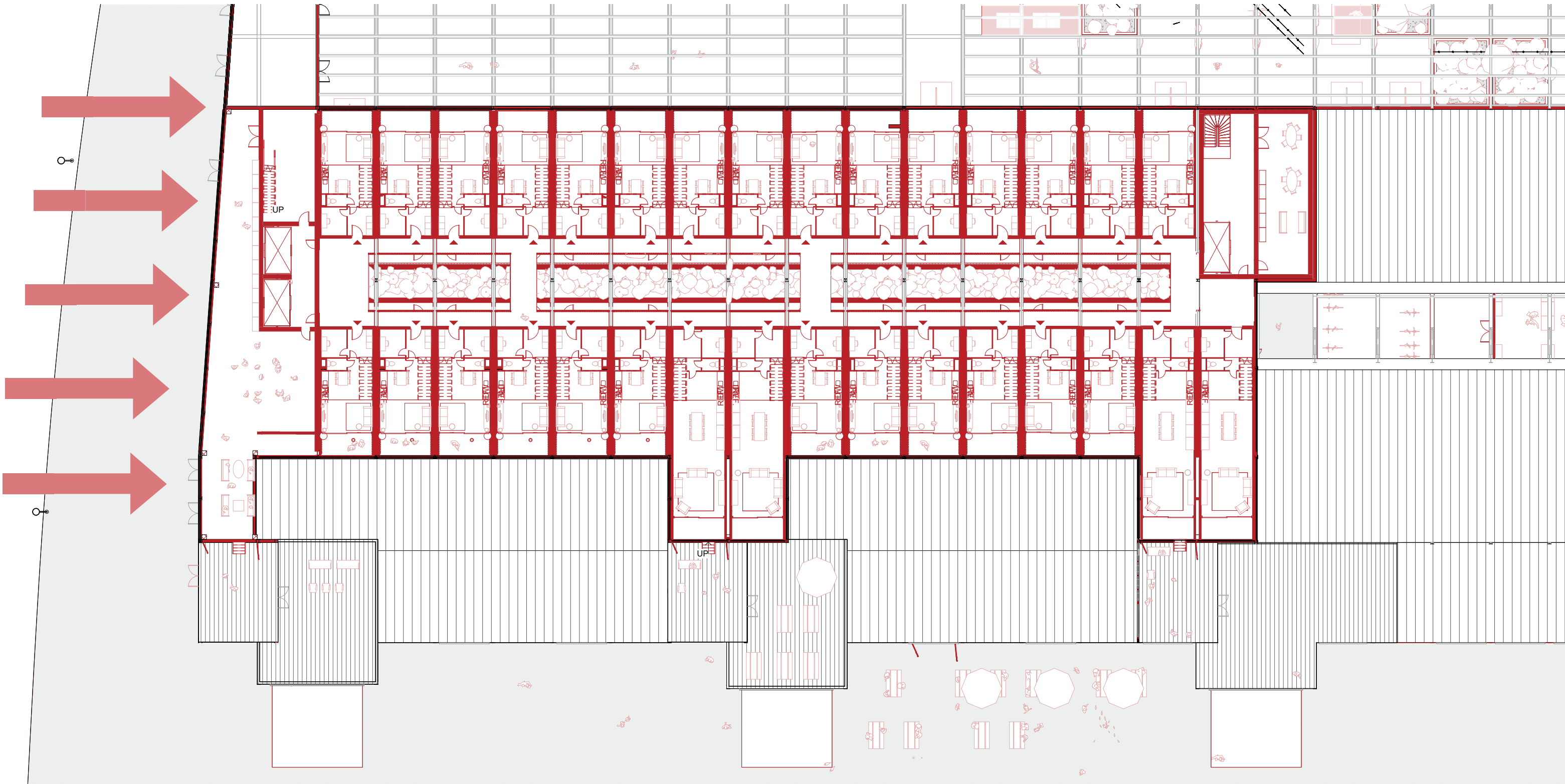


Accessibility



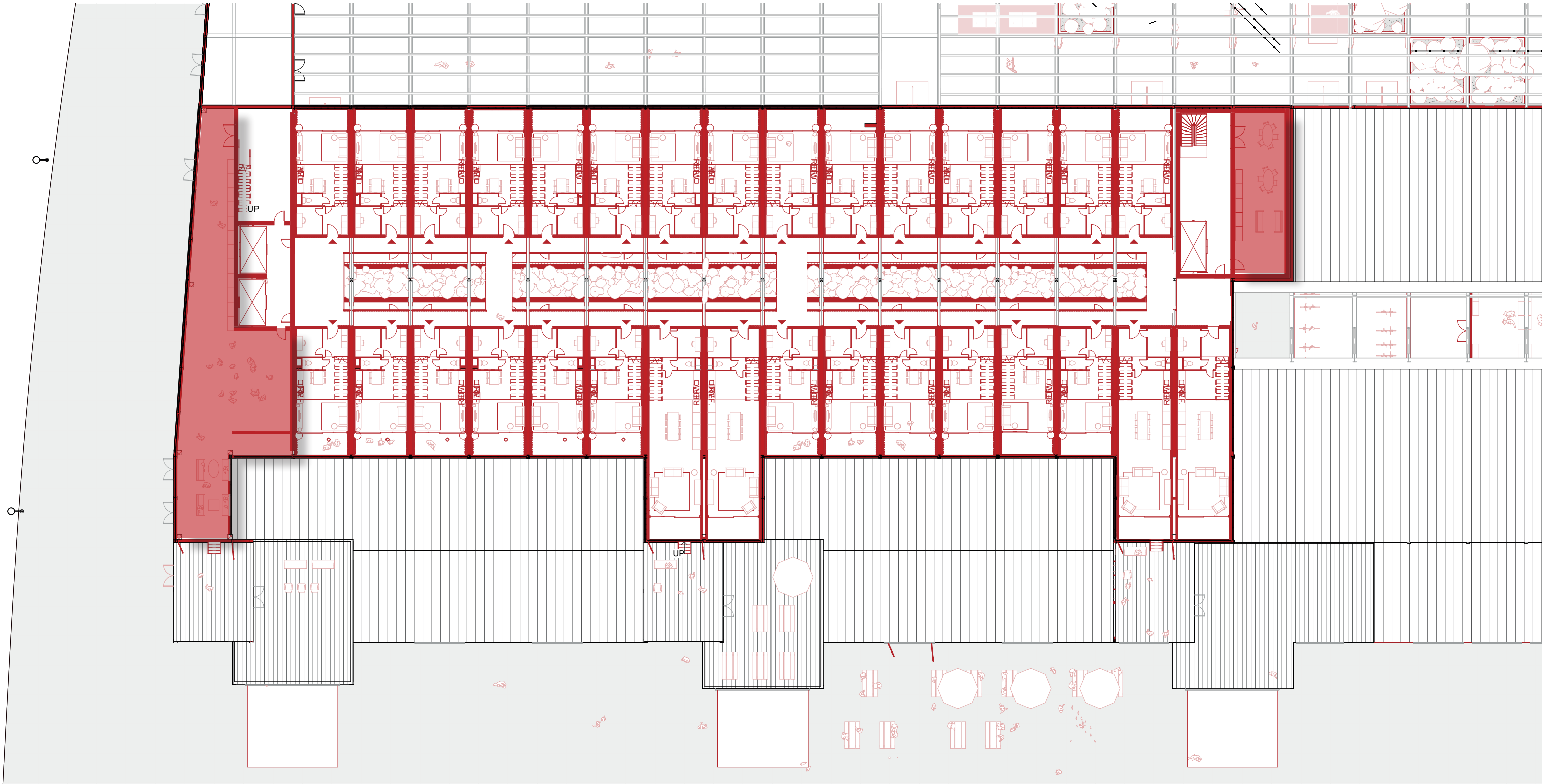
**Defined program**  
**Mixed-use dynamic**





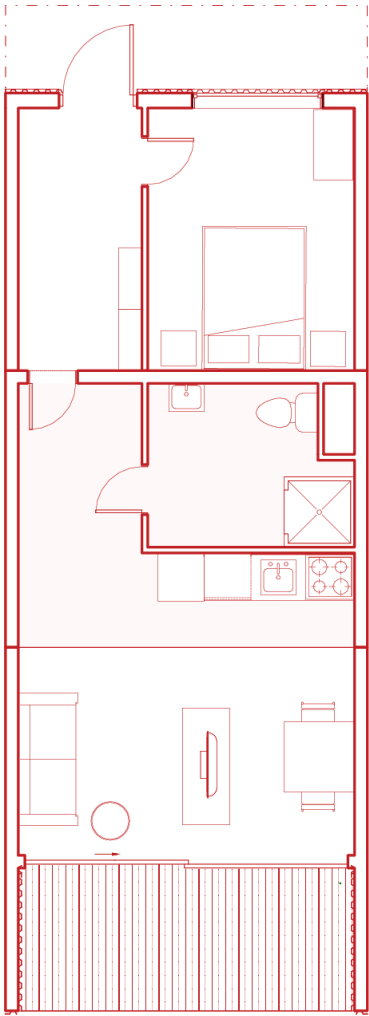
**Defined program**  
**Mixed-use dynamic**



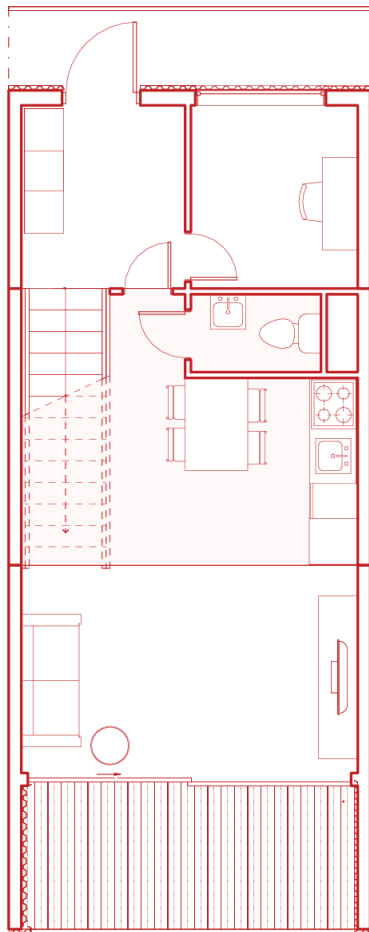


**Defined program**  
**Mixed-use dynamic**





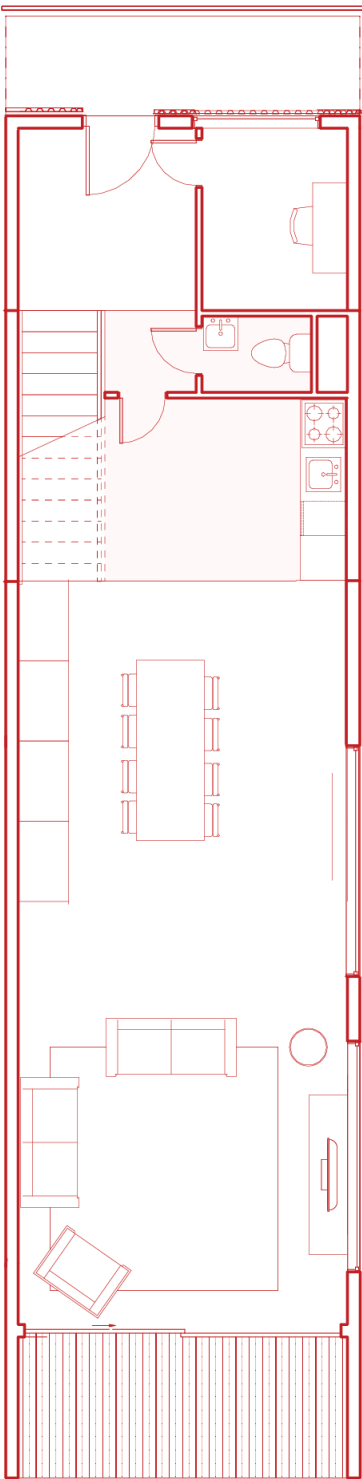
**Appartment 1**  
27 x  
Single floor  
56,4 m<sup>2</sup>



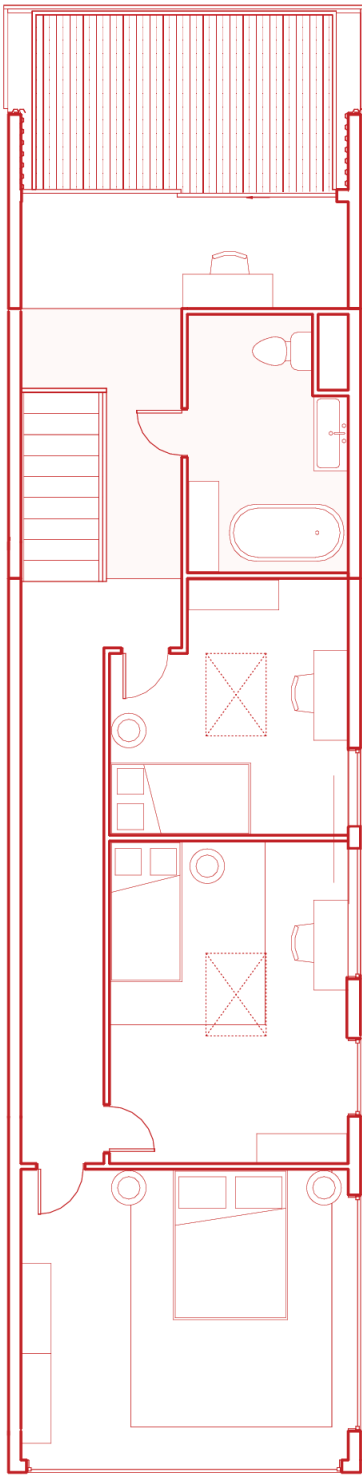
**Appartment 2**  
54 x  
Double floor  
112,8 m<sup>2</sup>



**Defined program**  
**Mixed-use dynamic**



**Appartment 3**  
4 x  
Double floor  
182,3 m<sup>2</sup>





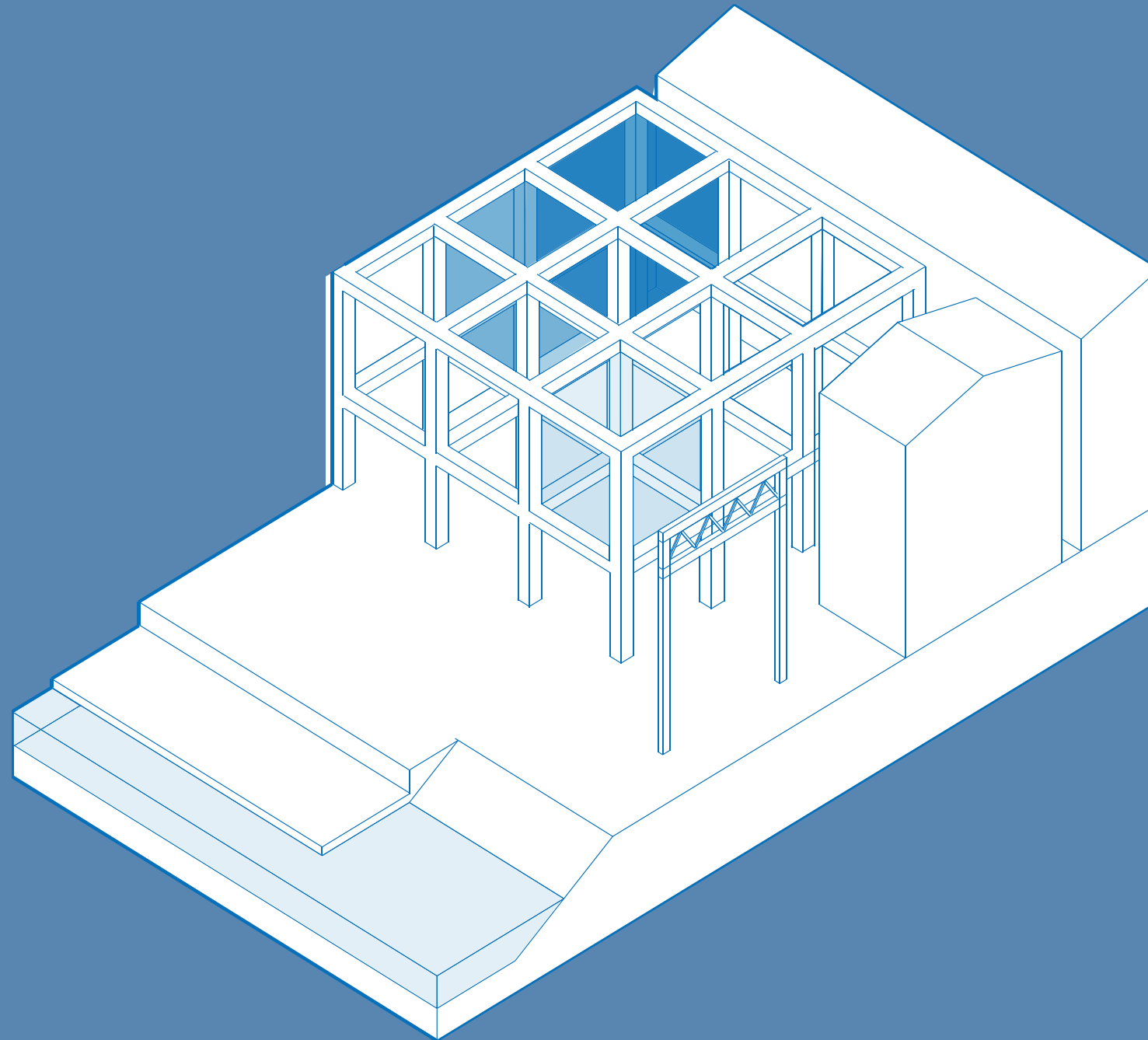


Defined program  
Mixed-use dynamic



Introduction  
Research  
Urban  
Industrial complex  
**Architecture**  
Conclusion





**Phased development**  
Flexible layout, space for continuation  
(Fragner)



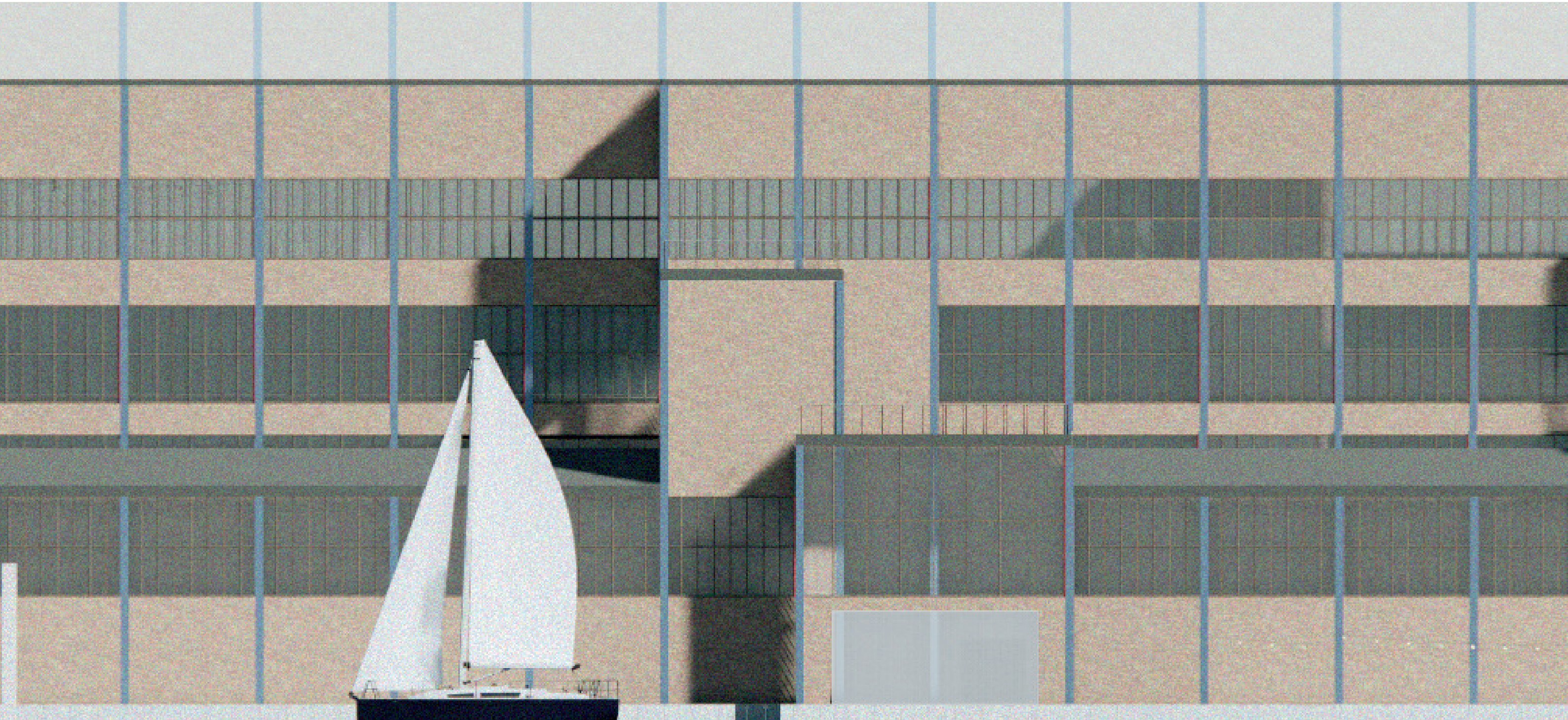
## Existing facade



**Flexible layout**  
**Space for continuation**



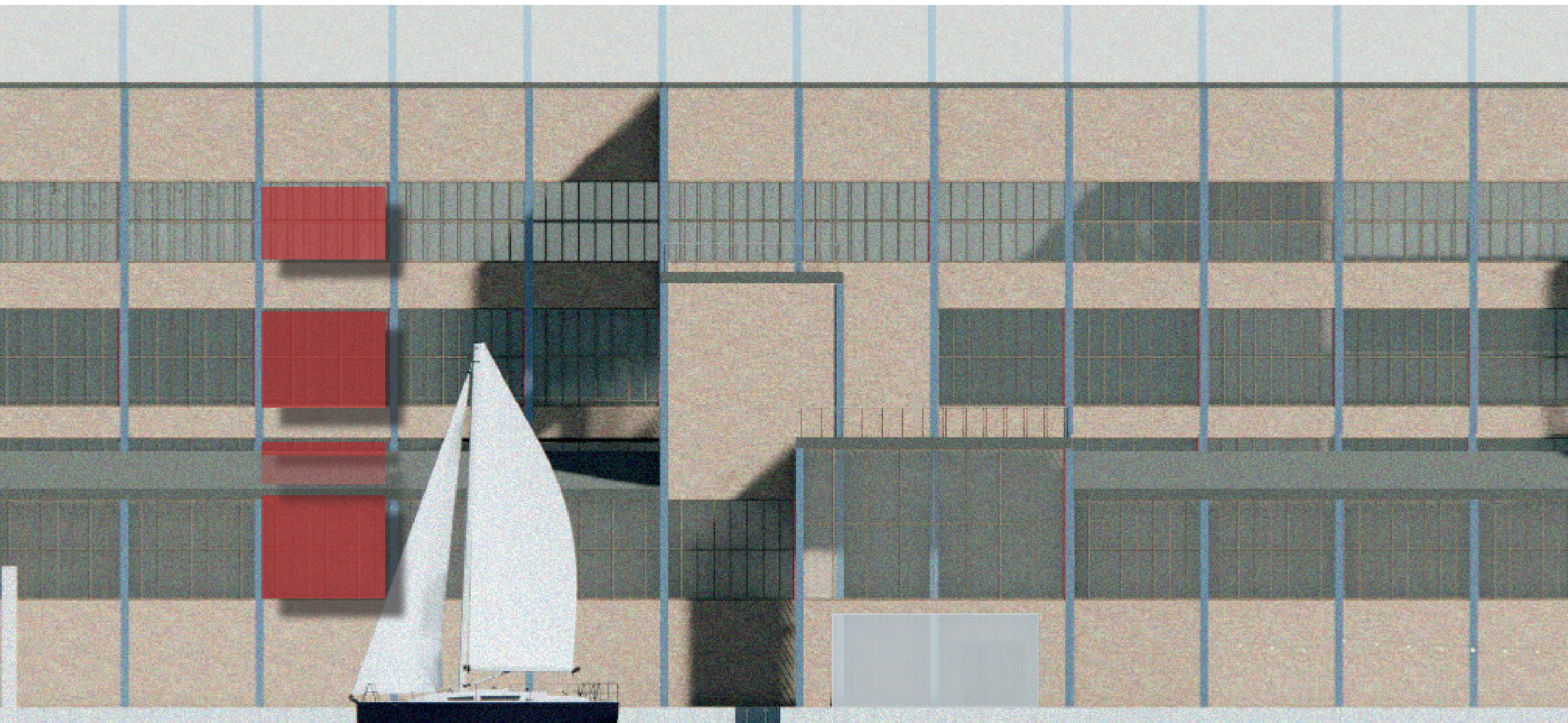
Existing facade



**Flexible layout**  
**Space for continuation**



Existing facade



**Flexible layout**  
**Space for continuation**



## New facade



**Flexible layout**  
**Space for continuation**



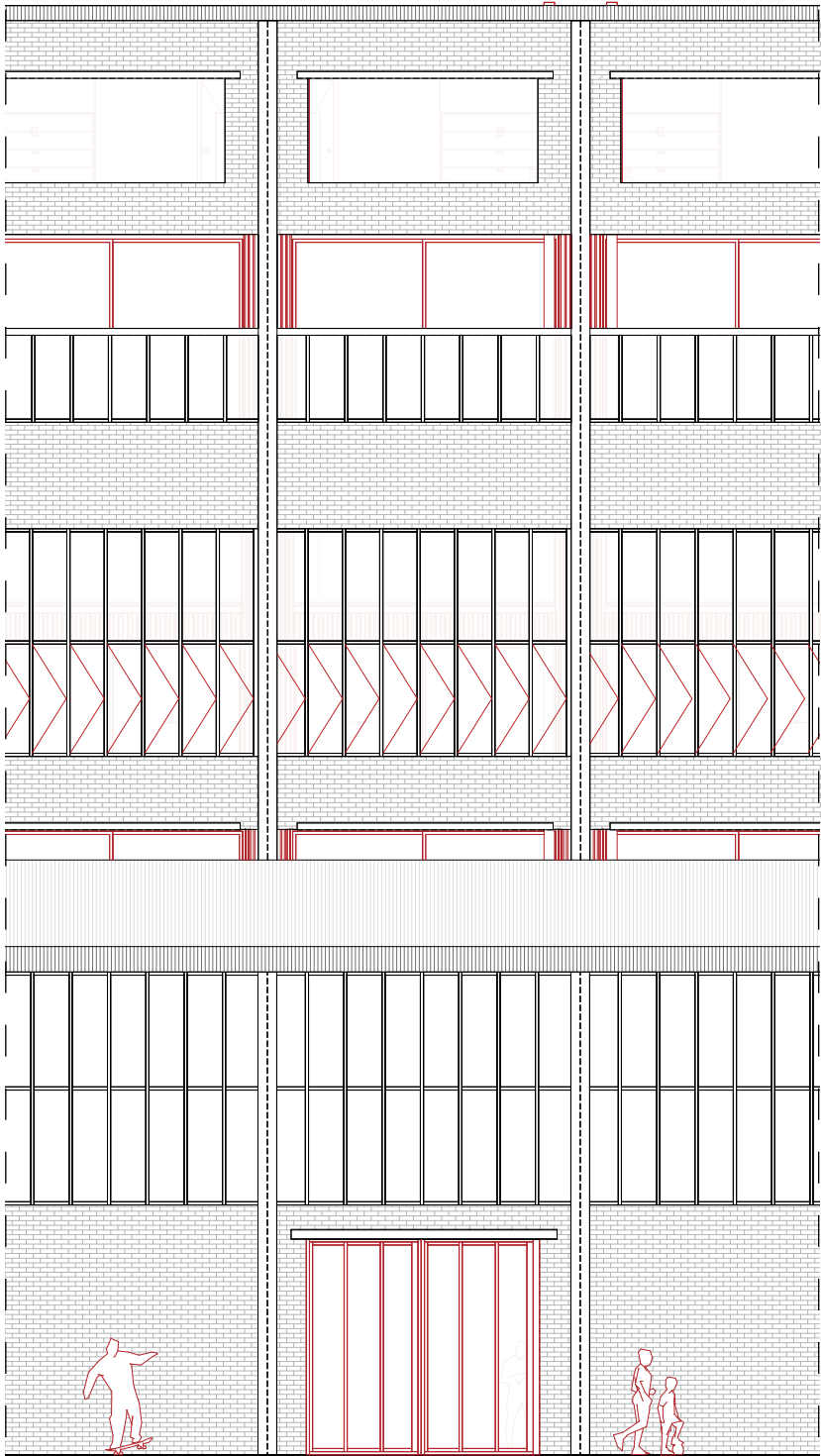
## New facade



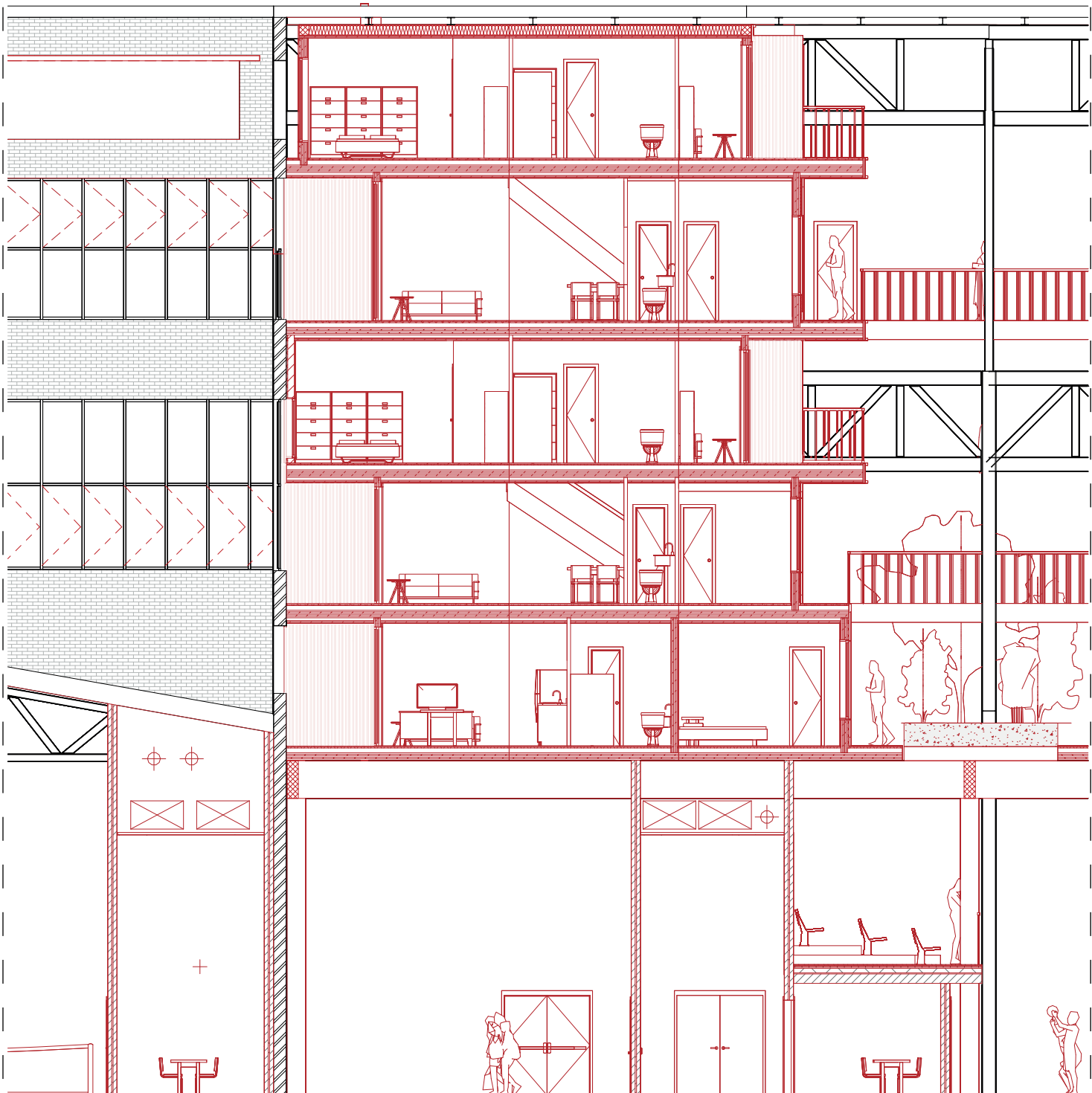
**Flexible layout**  
Space for continuation



Elevation



Section



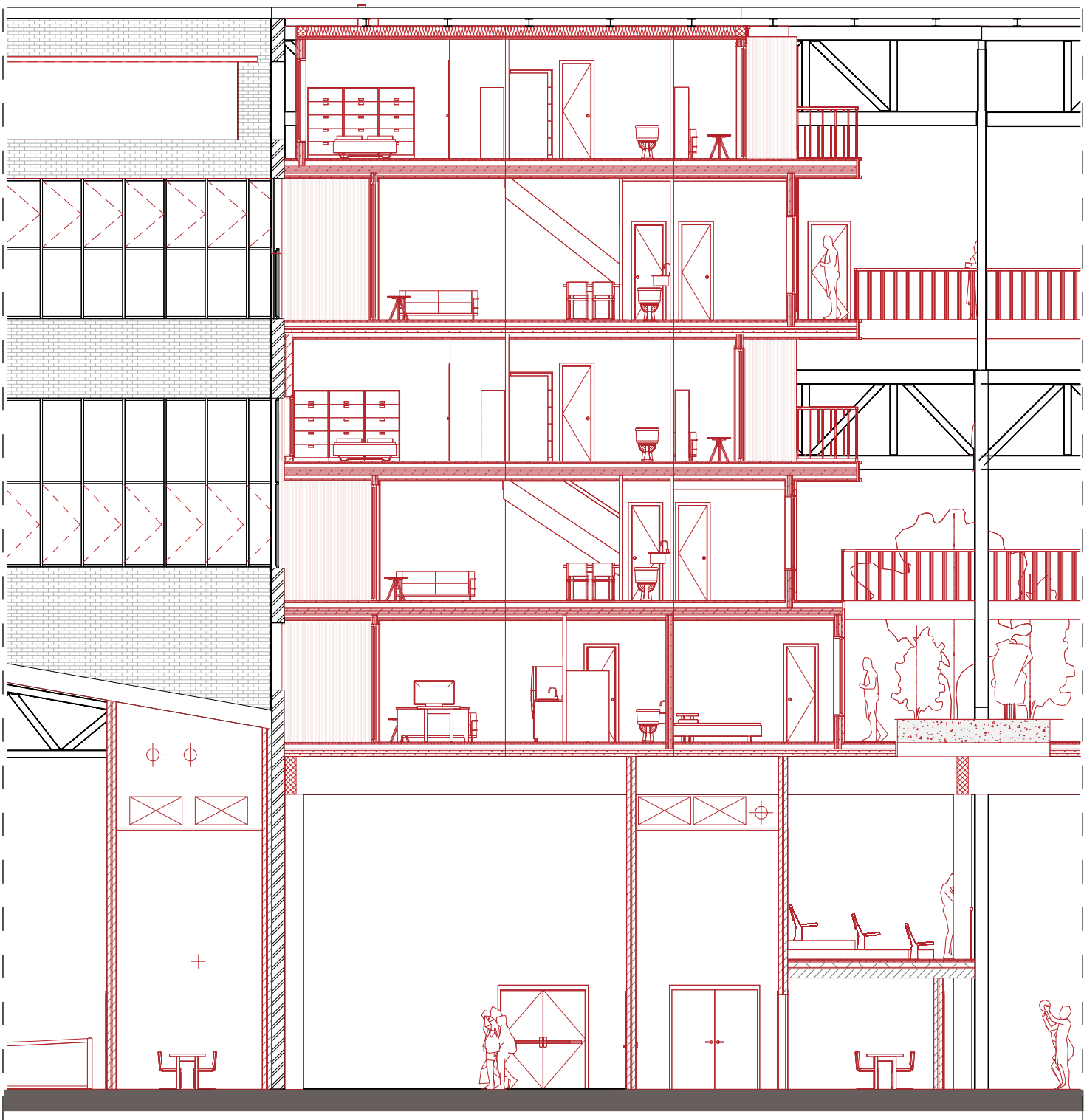
**Flexible layout**  
Space for continuation



Elevation

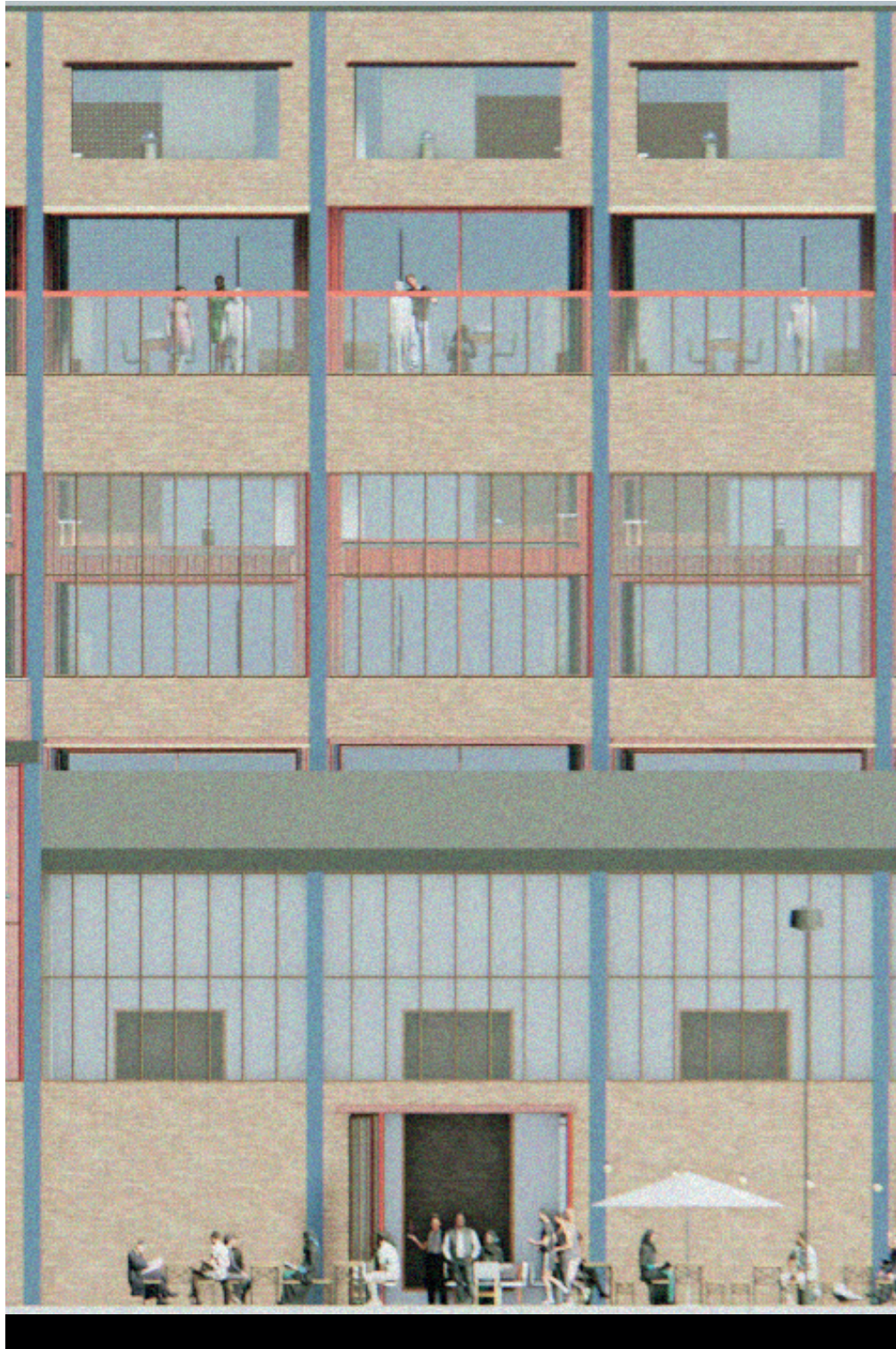


Section



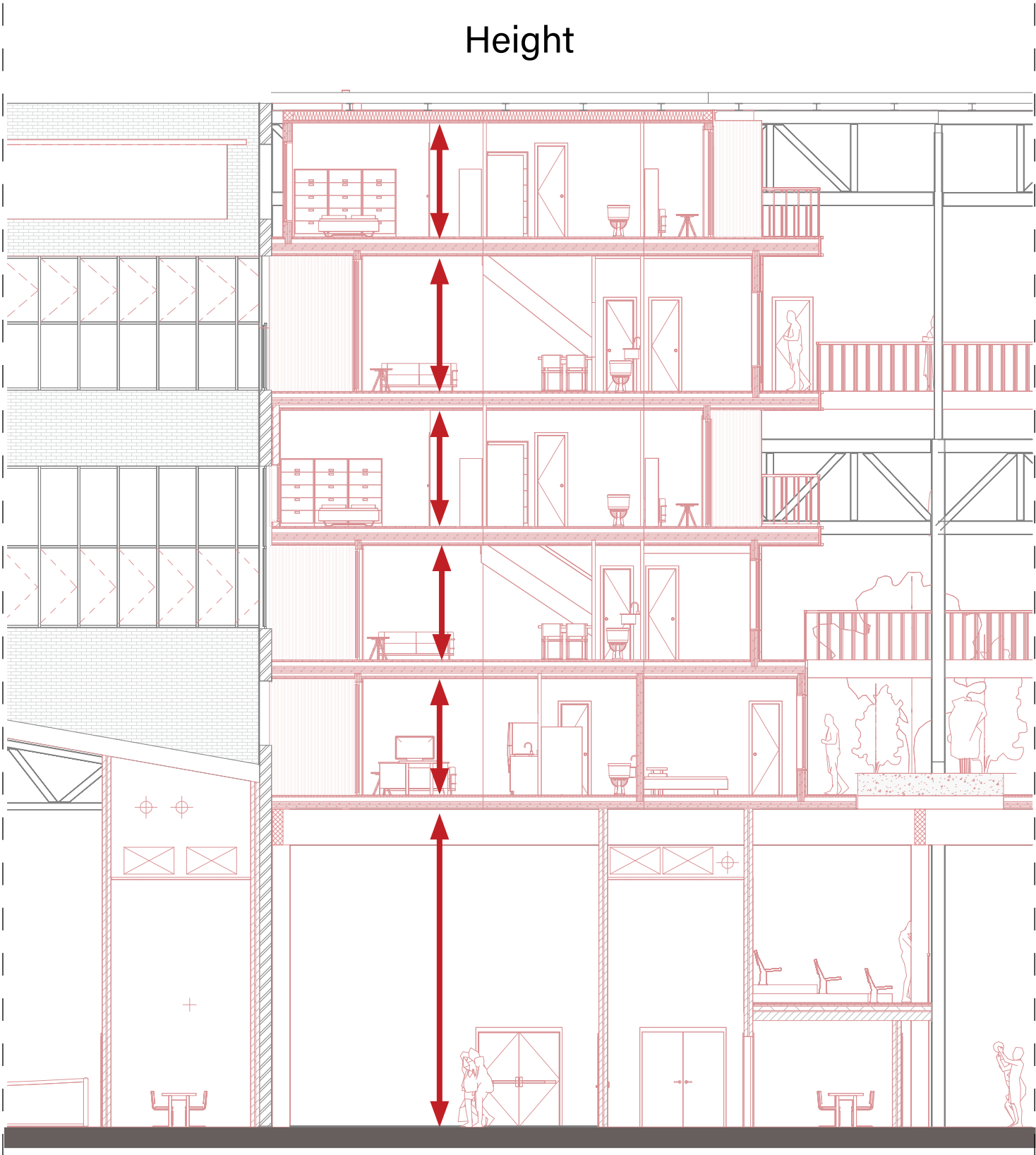
**Flexible layout**  
Space for continuation





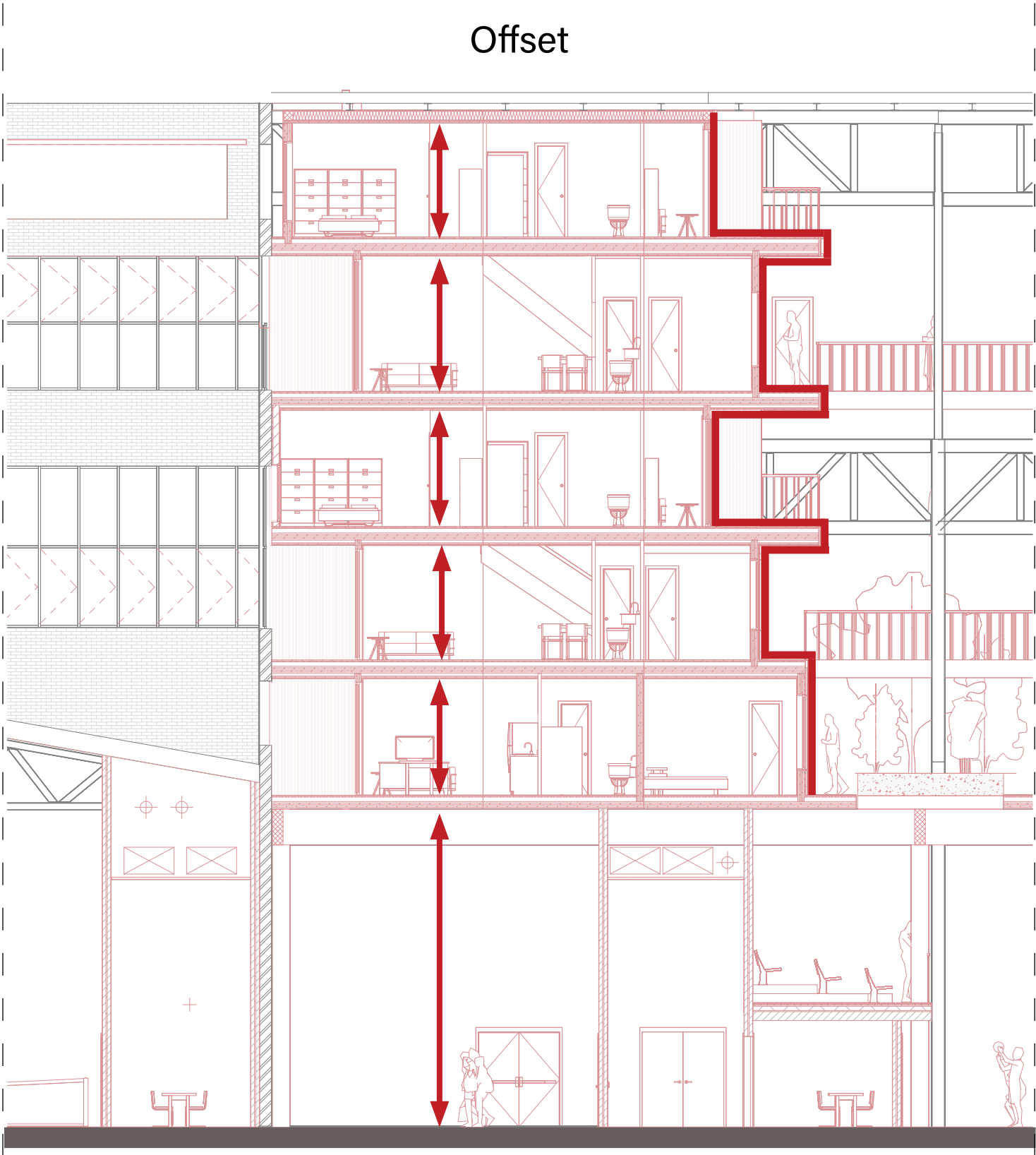
**Flexible layout**  
Space for continuation





**Flexible layout**  
Space for continuation





**Flexible layout**  
Space for continuation





Maritime industrial heritage

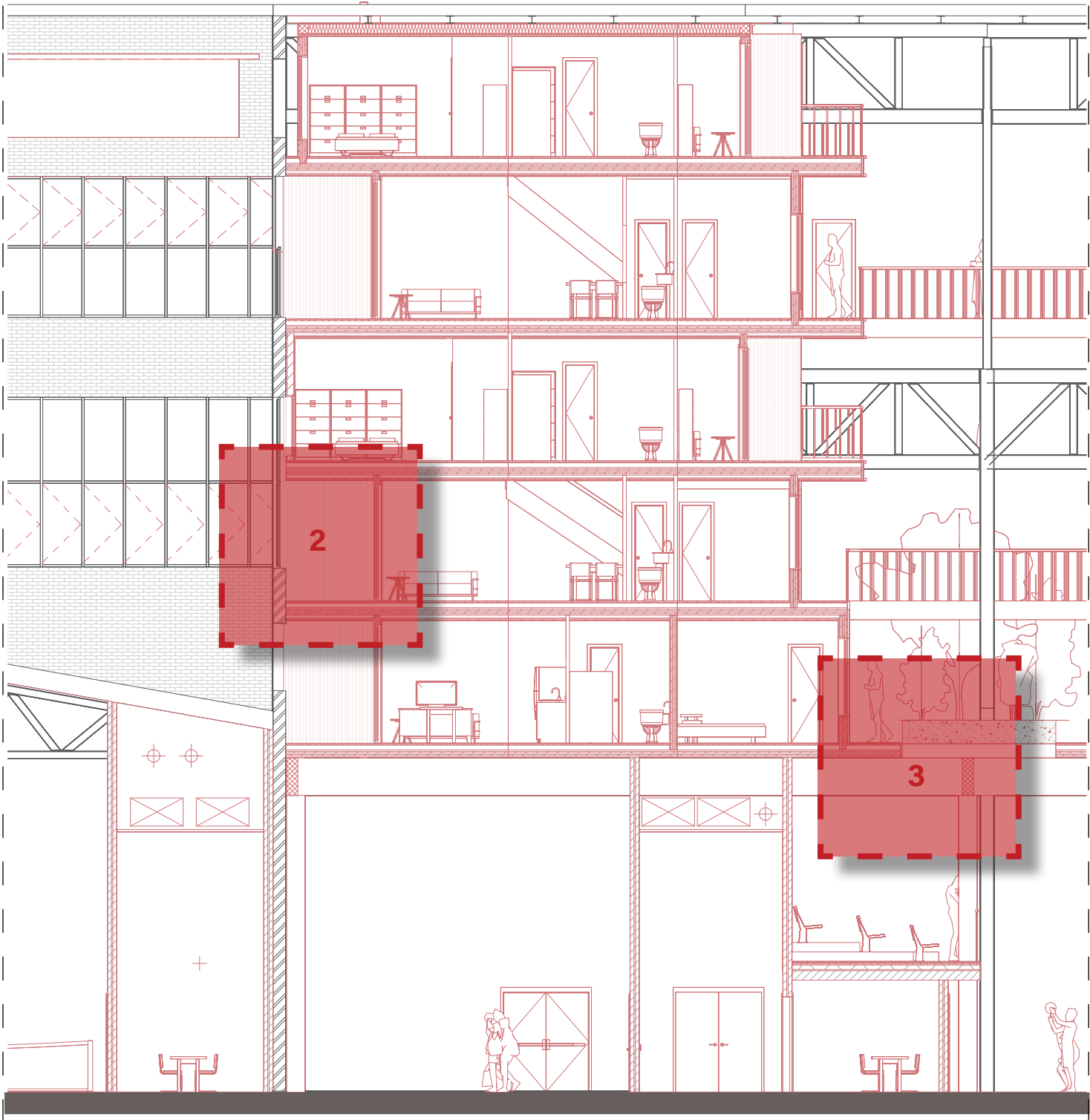


**Flexible layout**  
Space for continuation





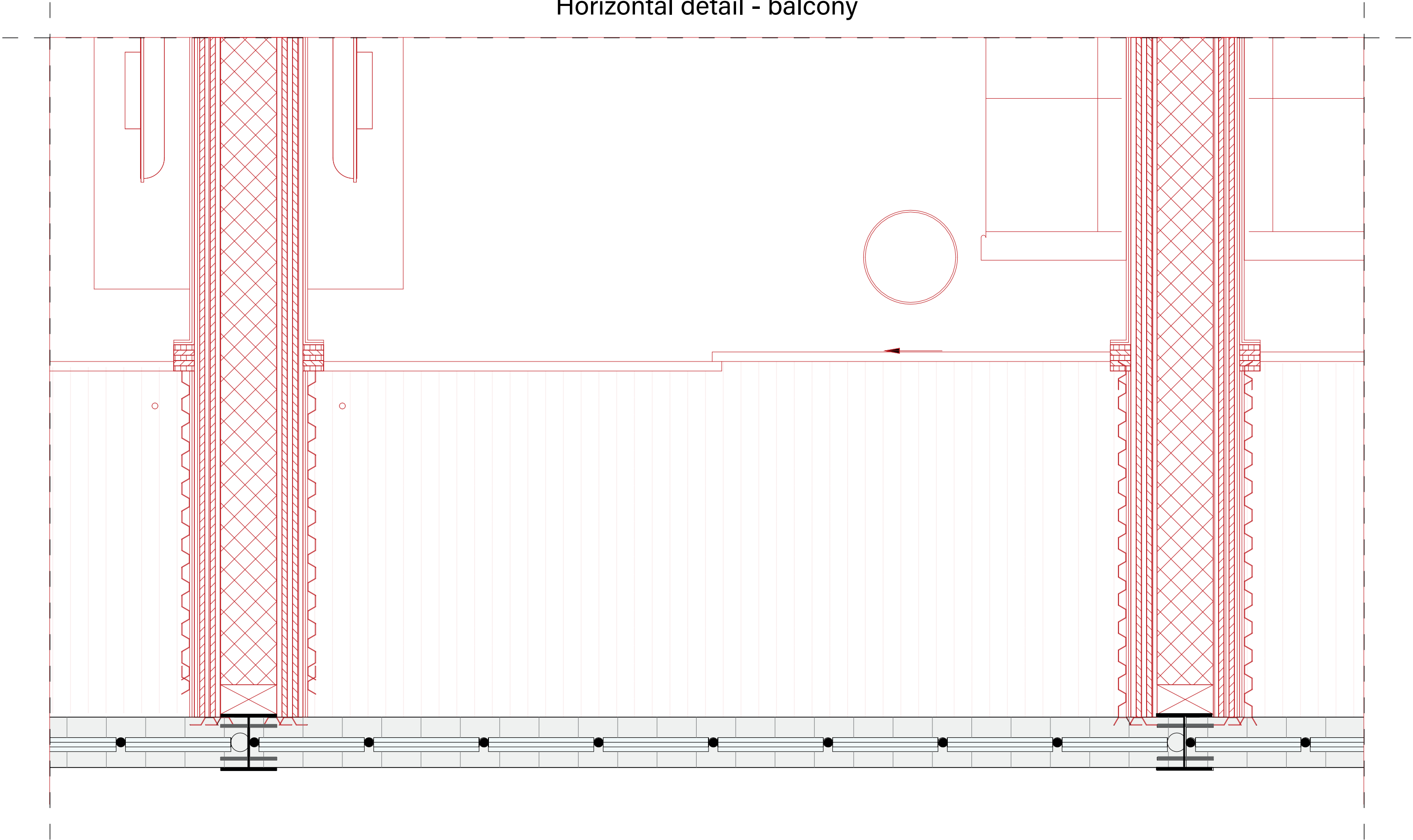
Details



**Flexible layout**  
Space for continuation



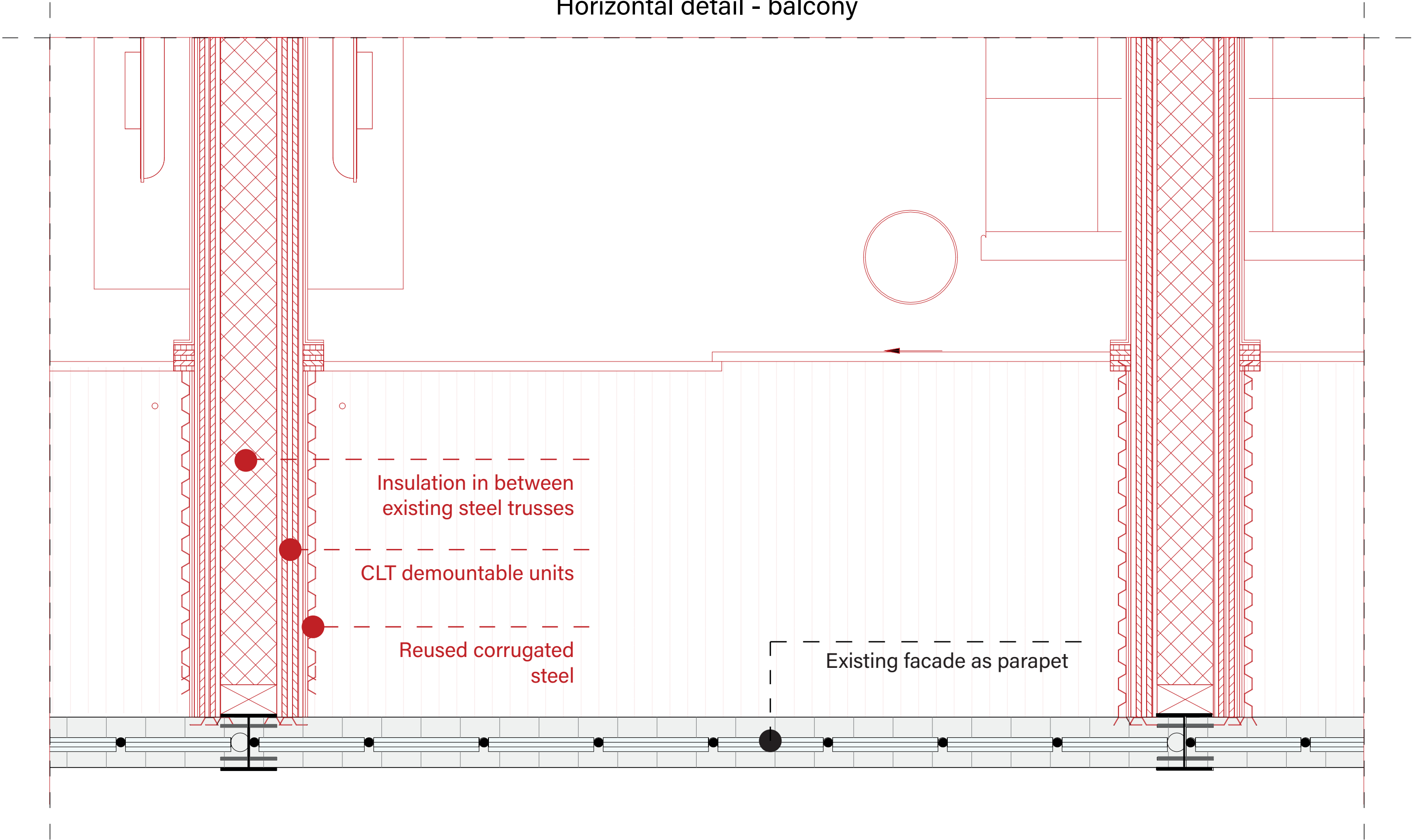
Horizontal detail - balcony



**Flexible layout**  
Space for continuation

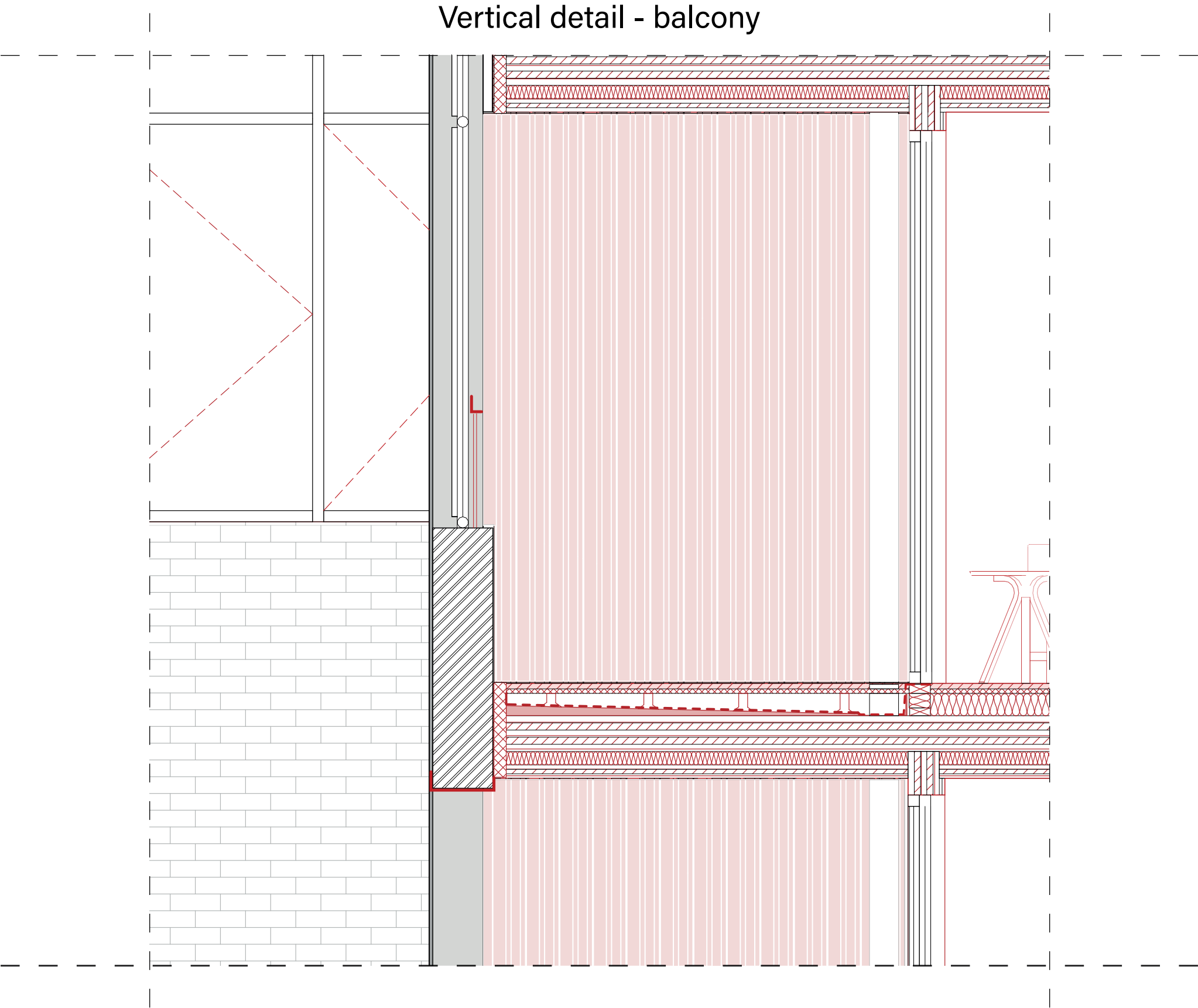


Horizontal detail - balcony



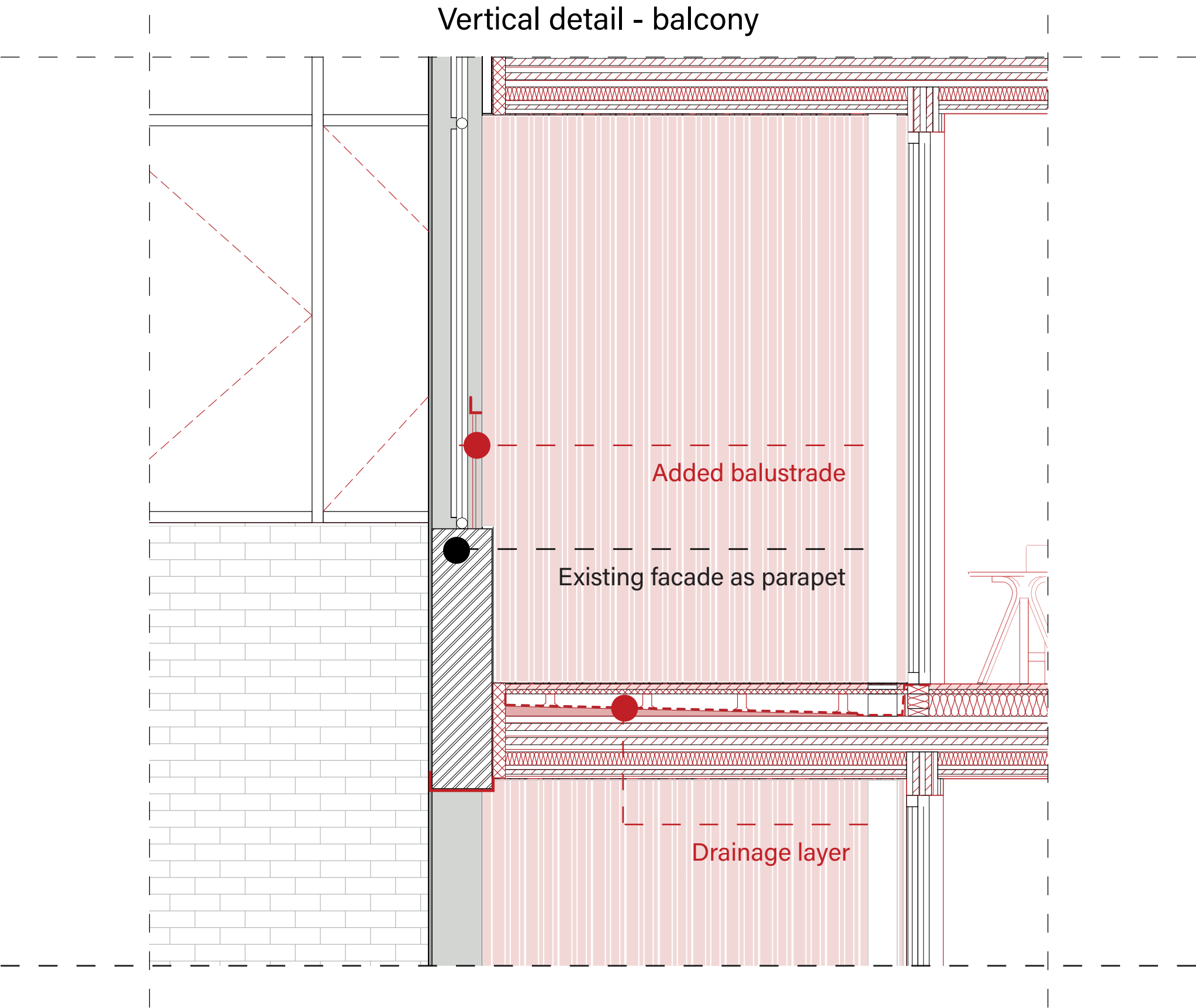
**Flexible layout**  
Space for continuation





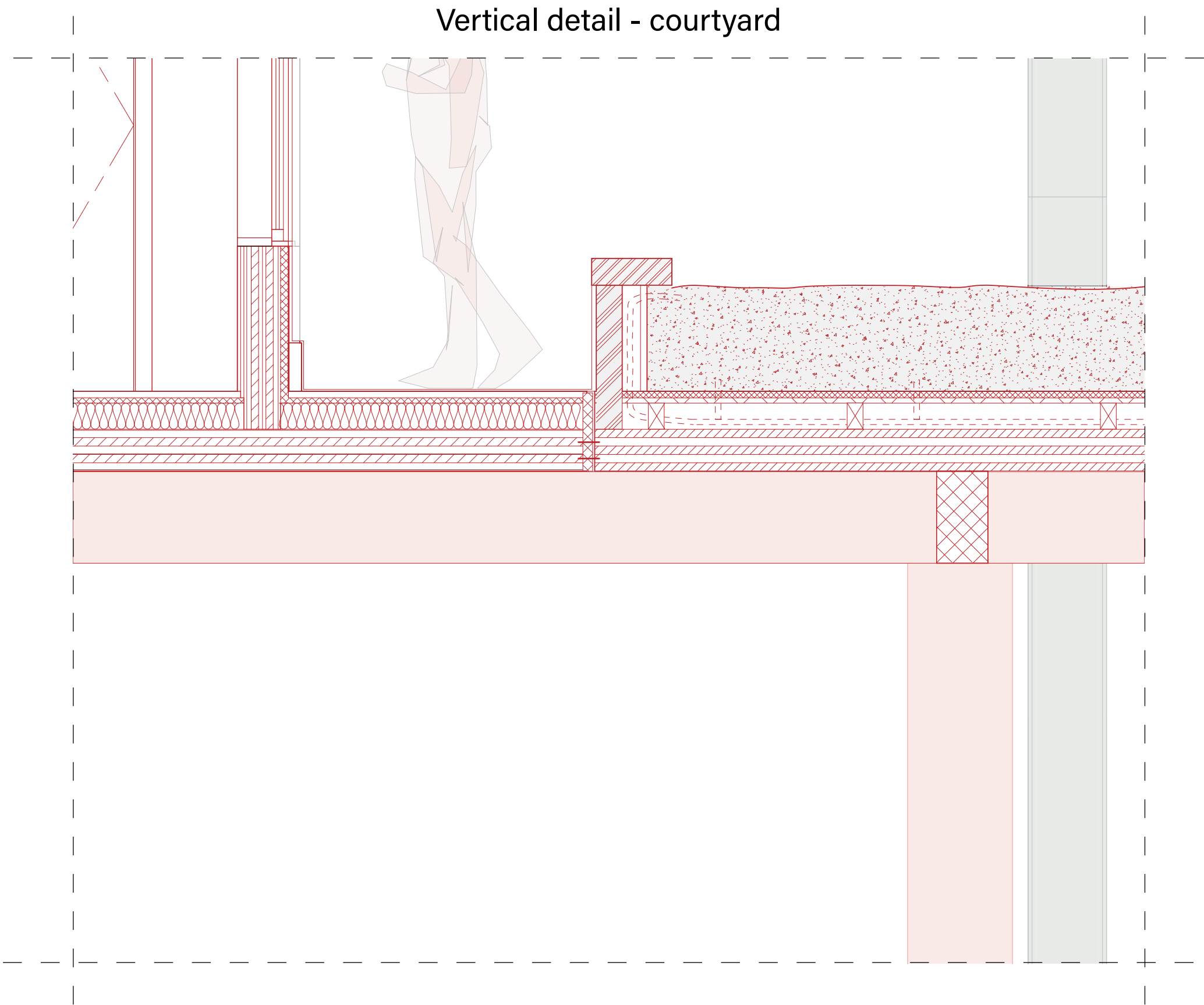
**Flexible layout**  
Space for continuation





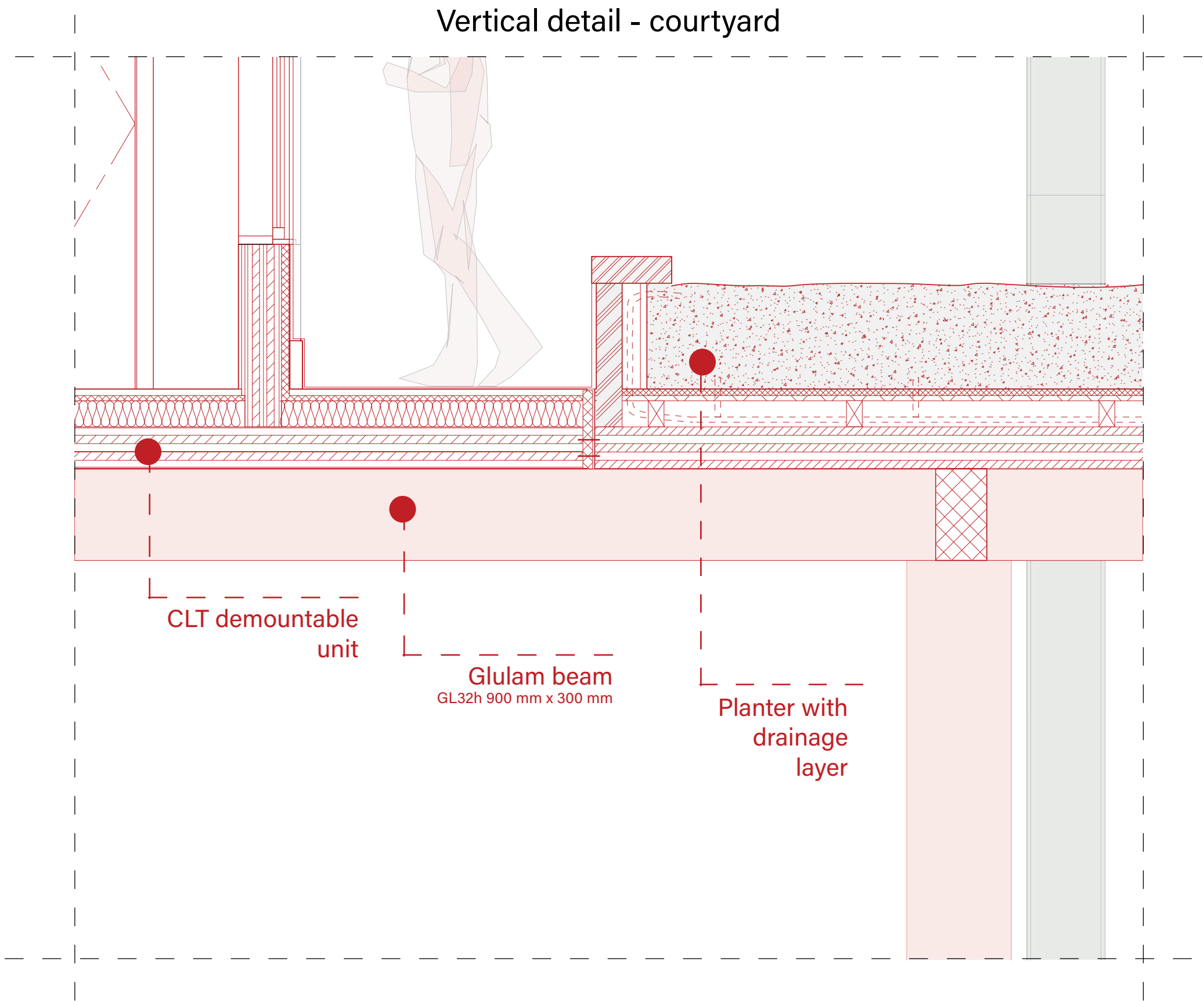
**Flexible layout**  
Space for continuation





**Flexible layout**  
**Space for continuation**



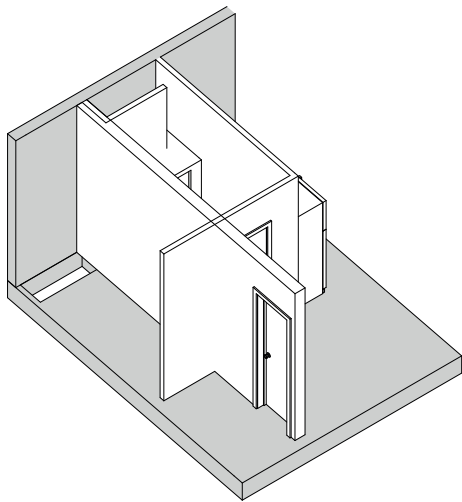


**Flexible layout**  
**Space for continuation**



Demountable structure

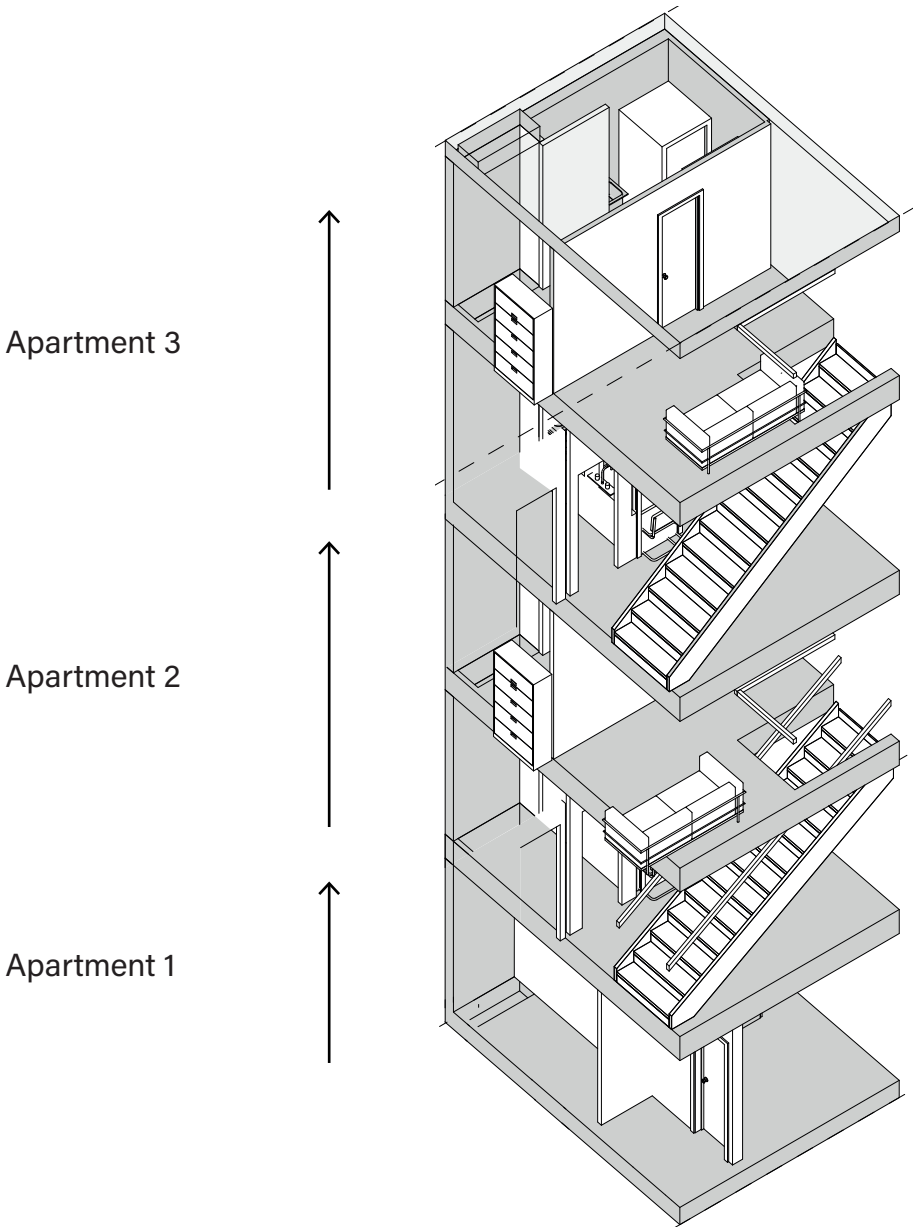
**1. Prefab core**  
With wet parts and vertical circulation



**Flexible layout**  
Space for continuation



1. Prefab core
- With wet parts and vertical circulation
2. Stacking of units
- 3 apartments, 5 levels



**Flexible layout**  
Space for continuation



**1. Prefab core**

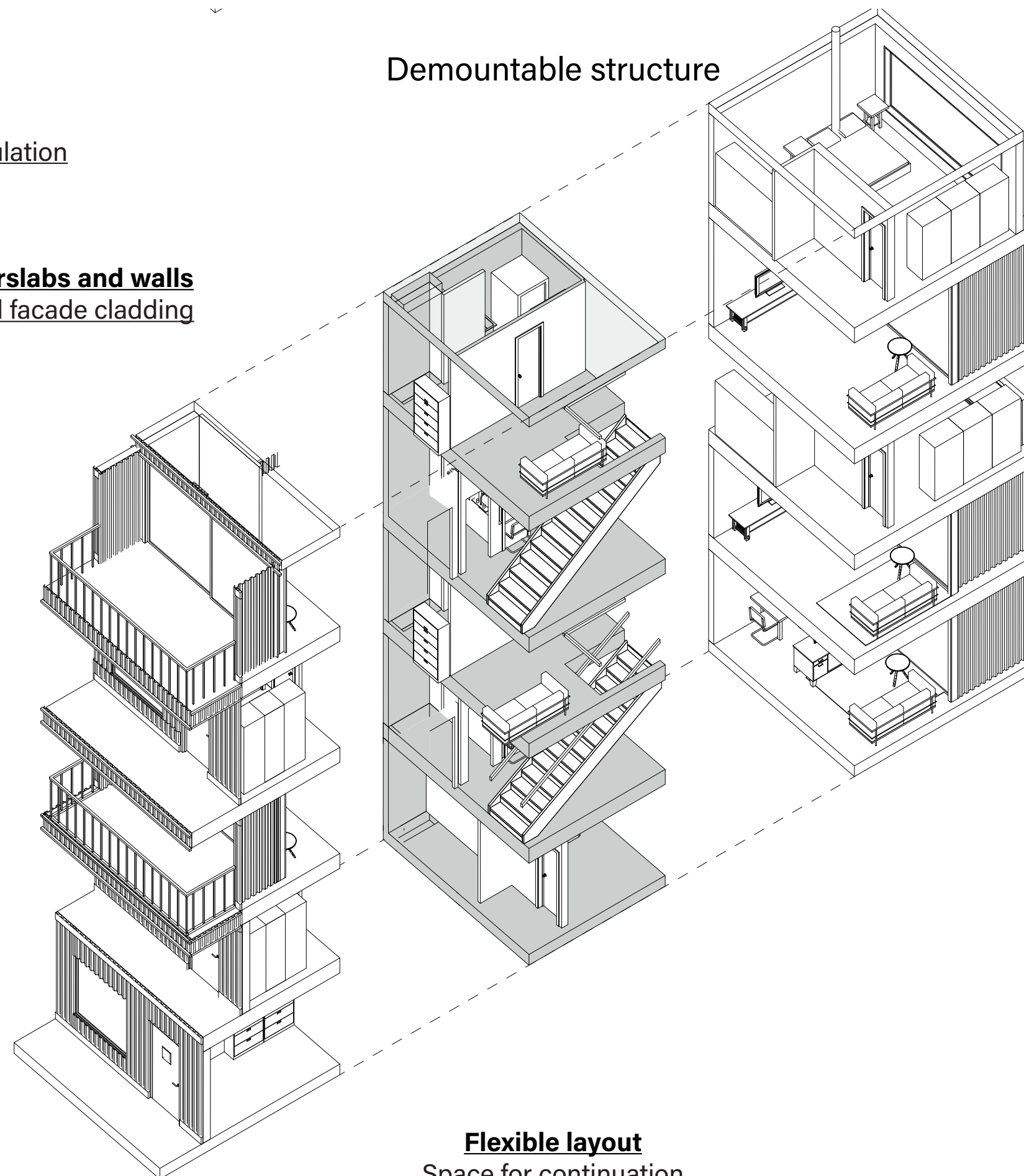
With wet parts and vertical circulation

**2. Stacking of units**

3 apartments, 5 levels

**3. Attaching demountable floorslabs and walls**

CLT structure + corrugated steel facade cladding



Demountable structure

**Flexible layout**  
Space for continuation



## Demountable structure

### **1. Prefab core**

With wet parts and vertical circulation

### **2. Stacking of units**

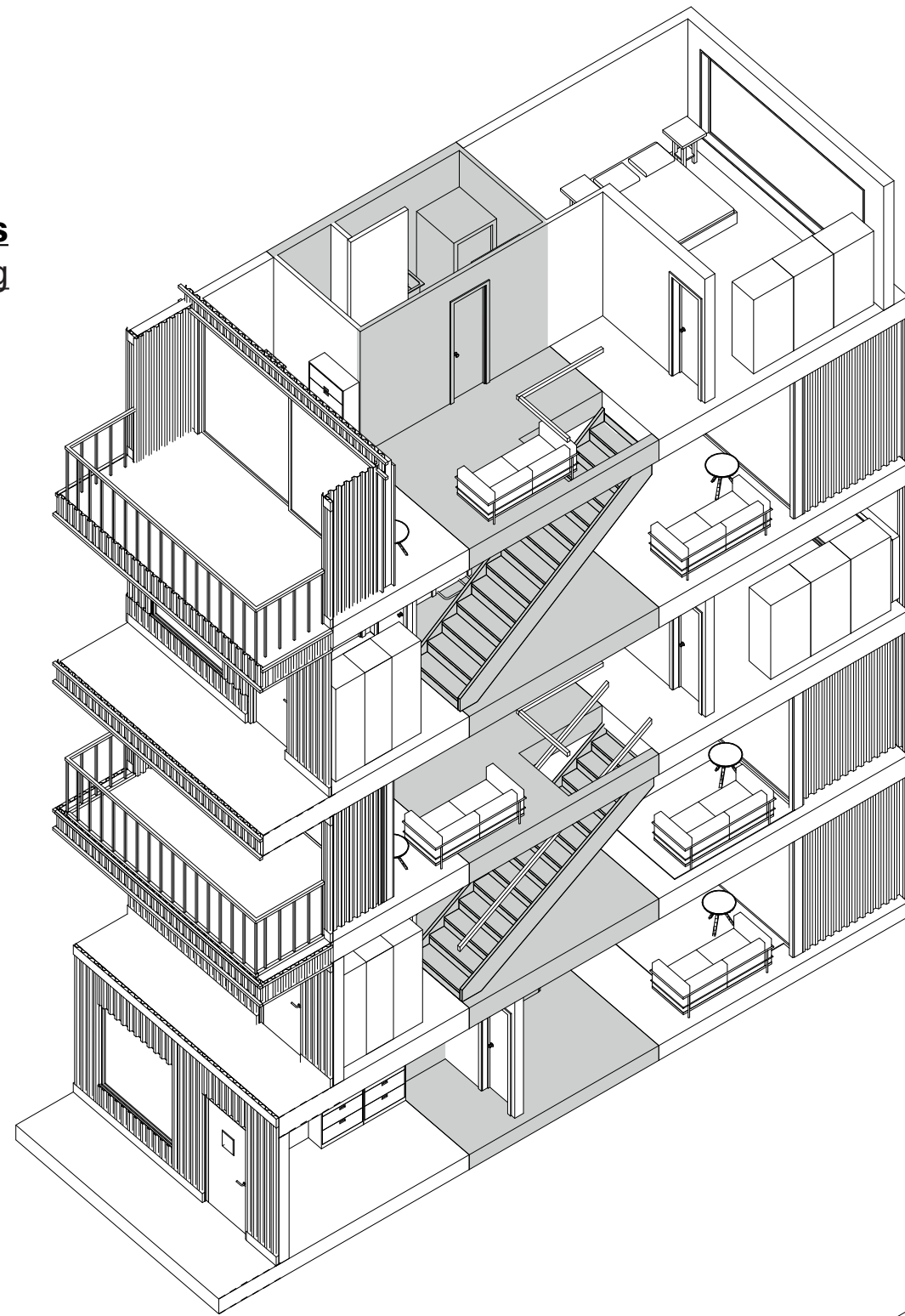
3 apartments, 5 levels

### **3. Attaching demountable floorslabs and walls**

CLT structure + corrugated steel facade cladding

### **4. Units placed within existing steel grid**

On top of glulam structure ground floor



### **Flexible layout**

Space for continuation



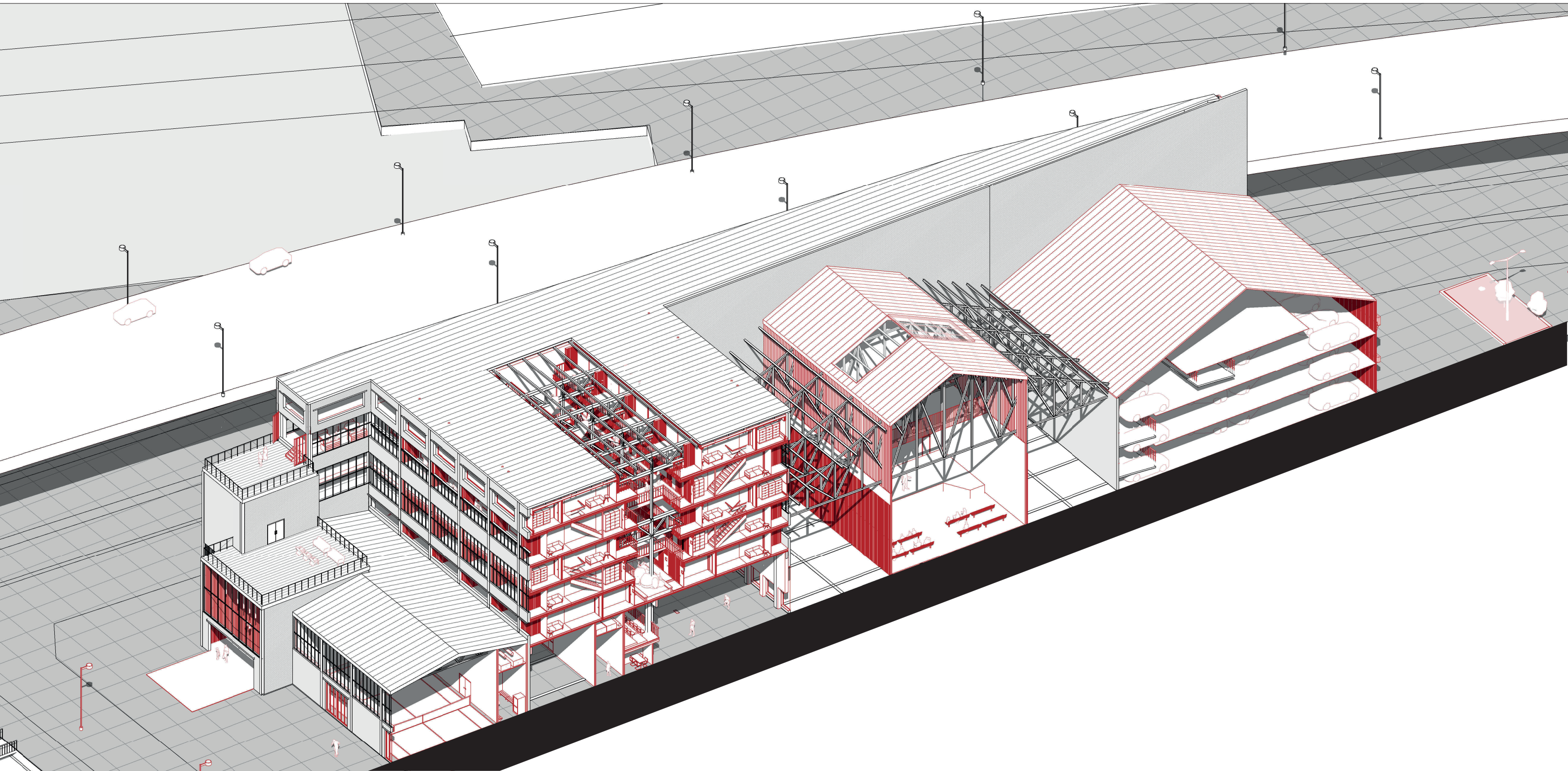
## Connection old and new facade



**Flexible layout**  
**Space for continuation**

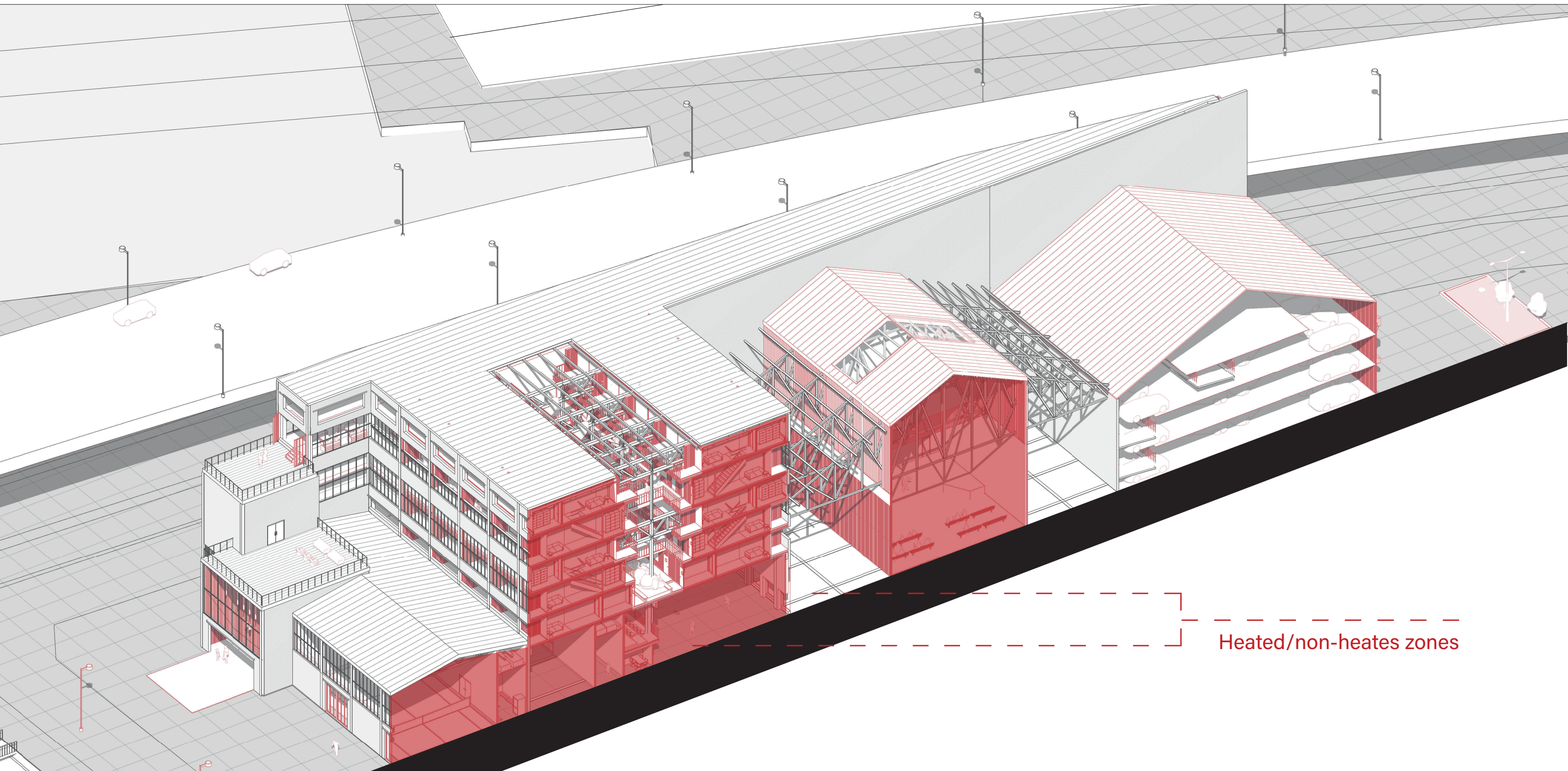


## Climate





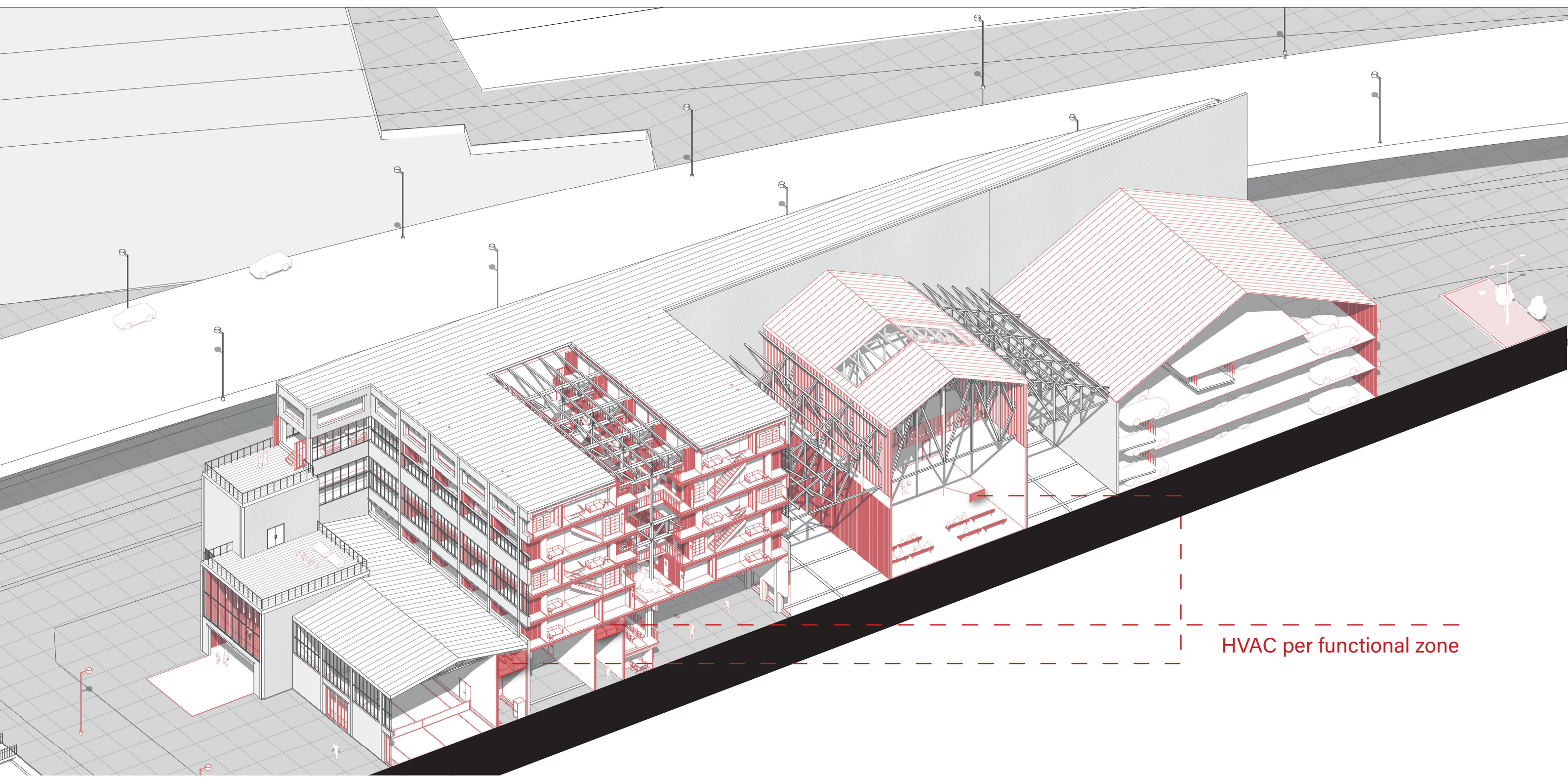
## Climate



Heated/non-heated zones

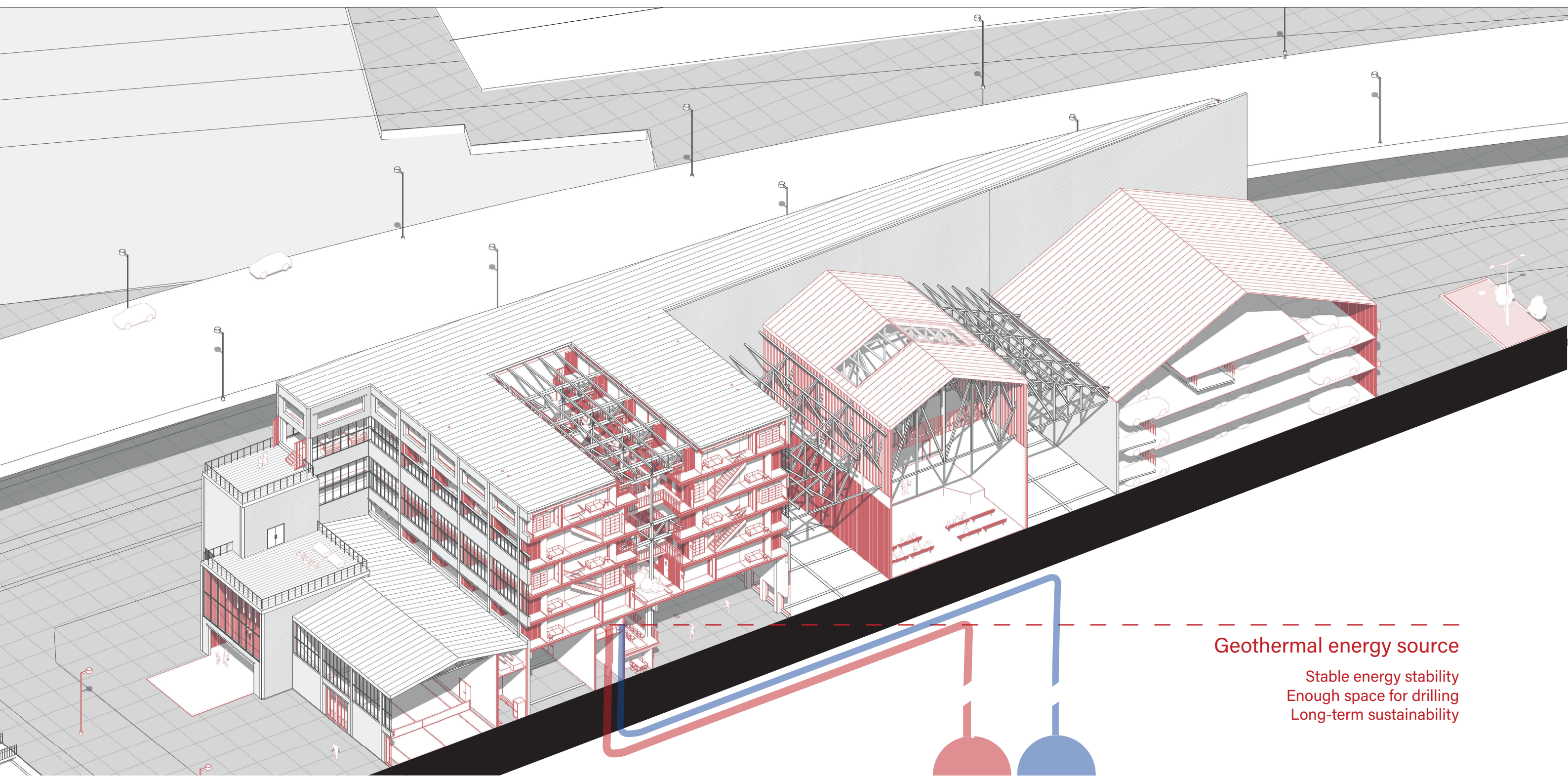


Climate





Climate

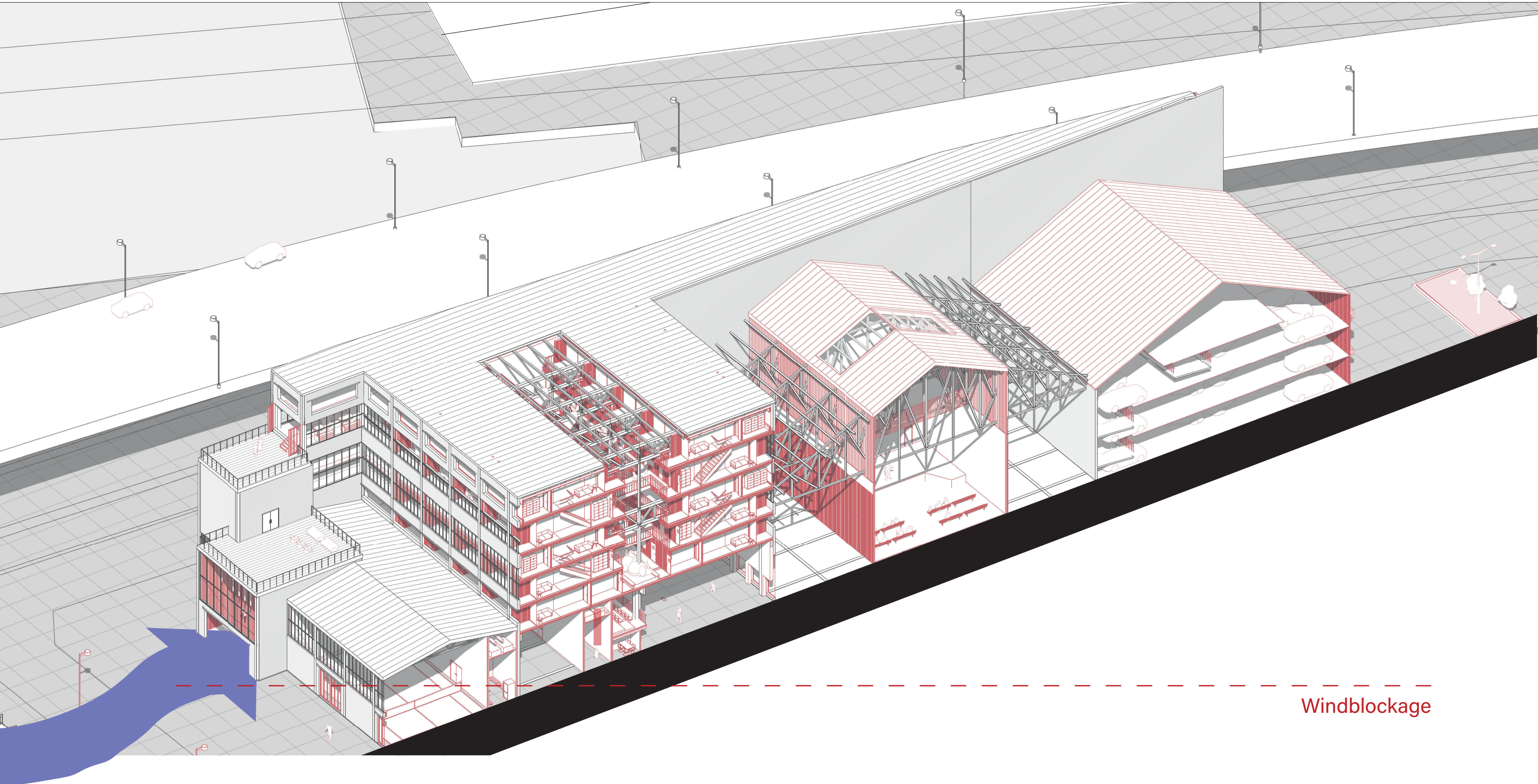


Geothermal energy source

Stable energy stability  
Enough space for drilling  
Long-term sustainability



Climate

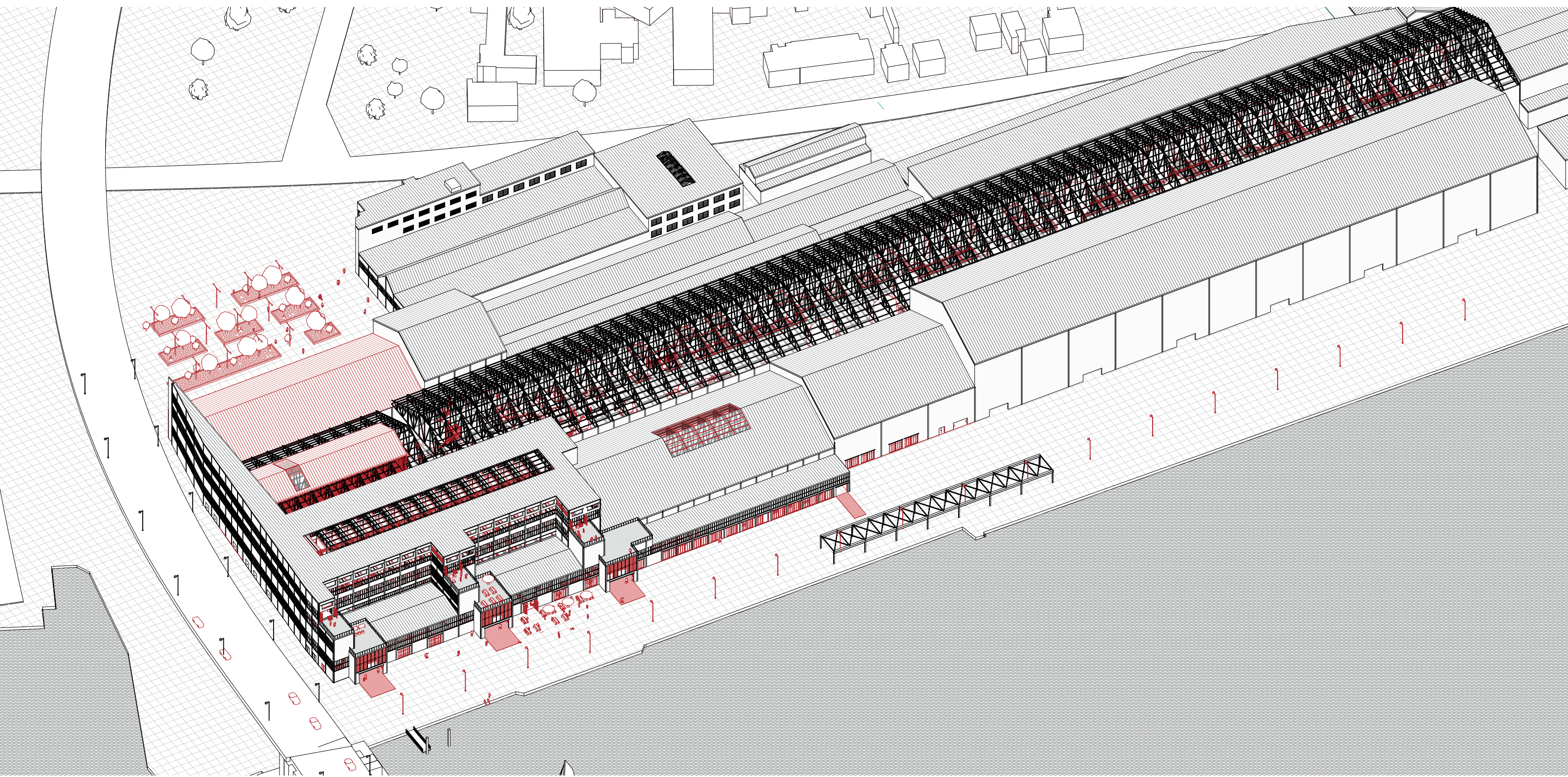


Windblockage



Introduction  
Research  
Urban  
Industrial complex  
Architecture  
**Conclusion**







Introduction

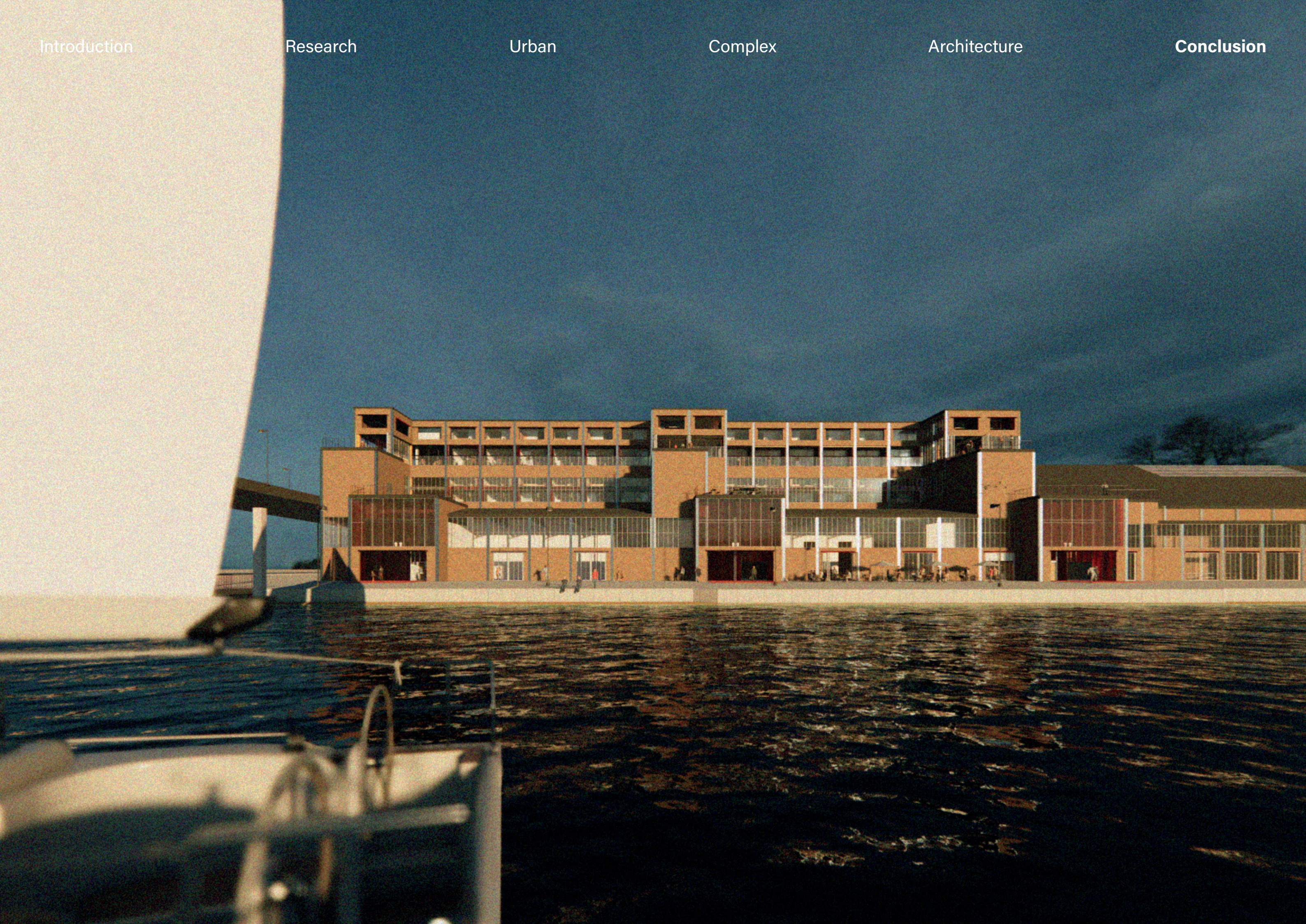
Research

Urban

Complex

Architecture

Conclusion





Introduction

Research

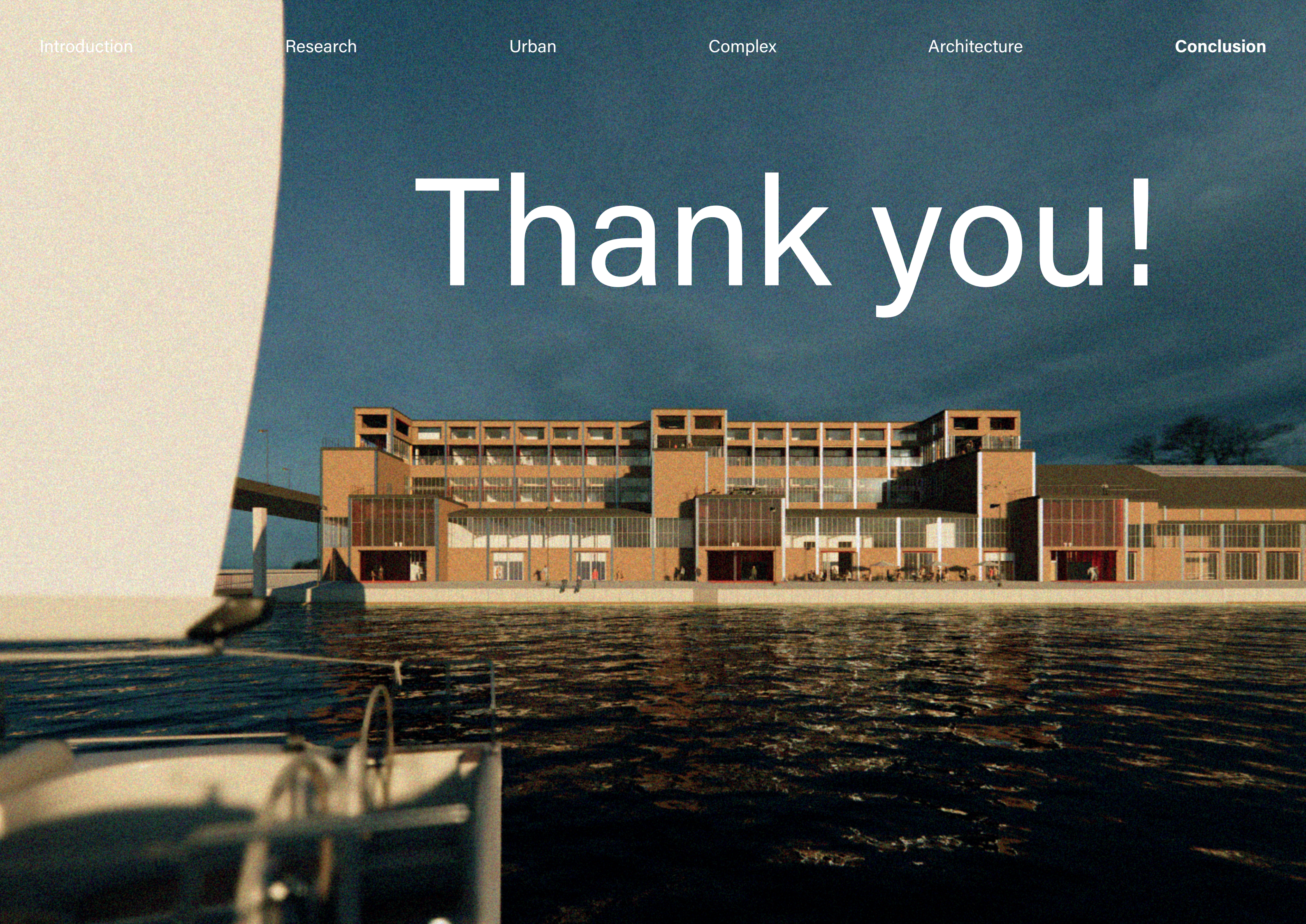
Urban

Complex

Architecture

Conclusion

# Thank you!



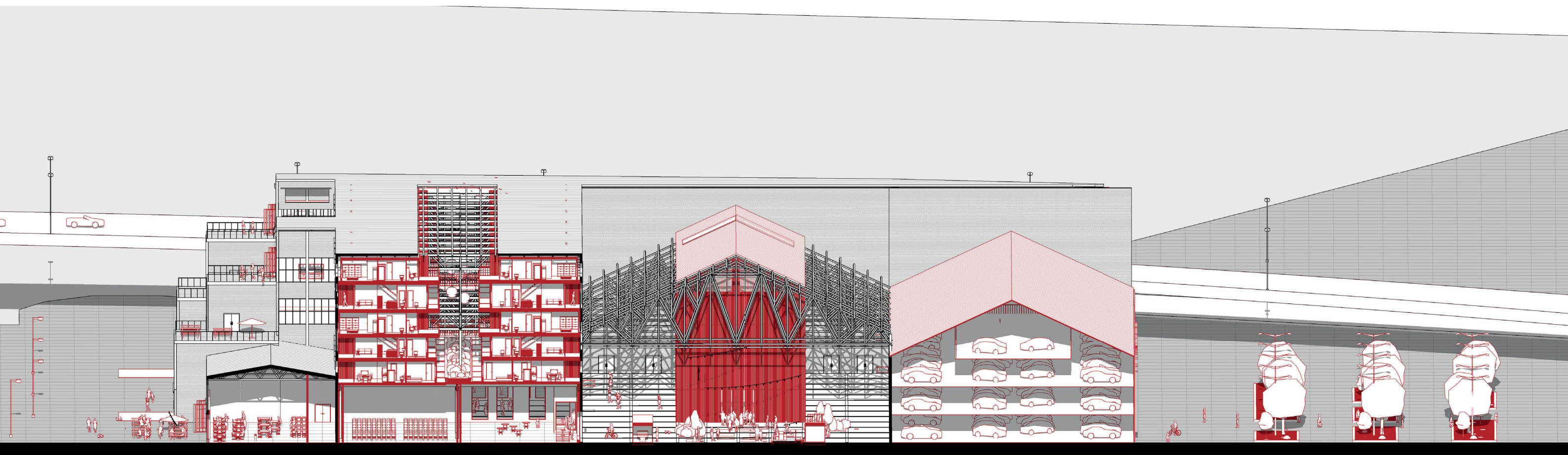


extra



**South facade**  
**View from the water**







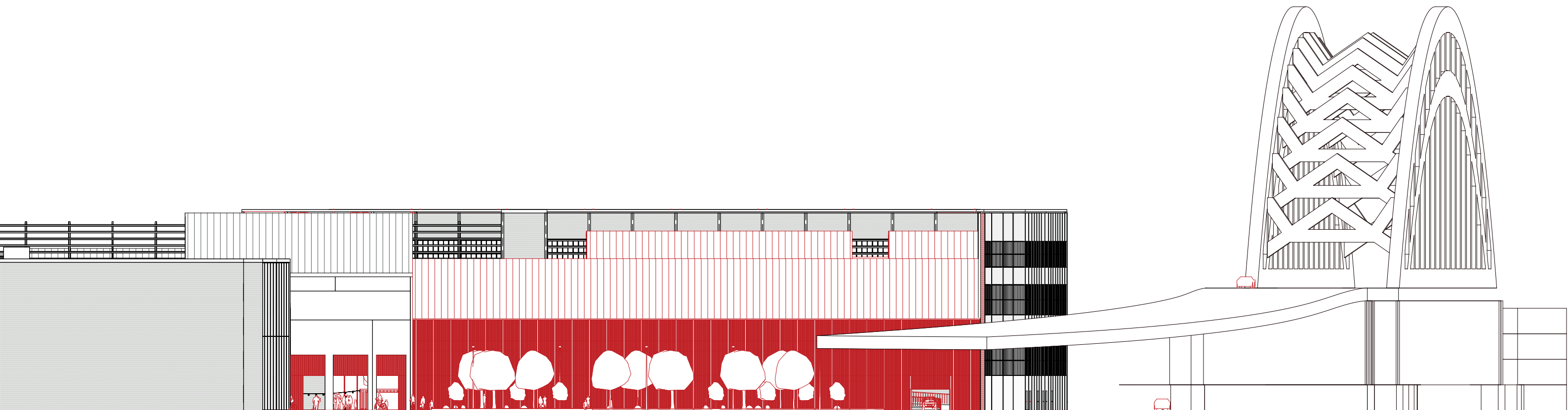
extra



**North facade**  
**View from the street**

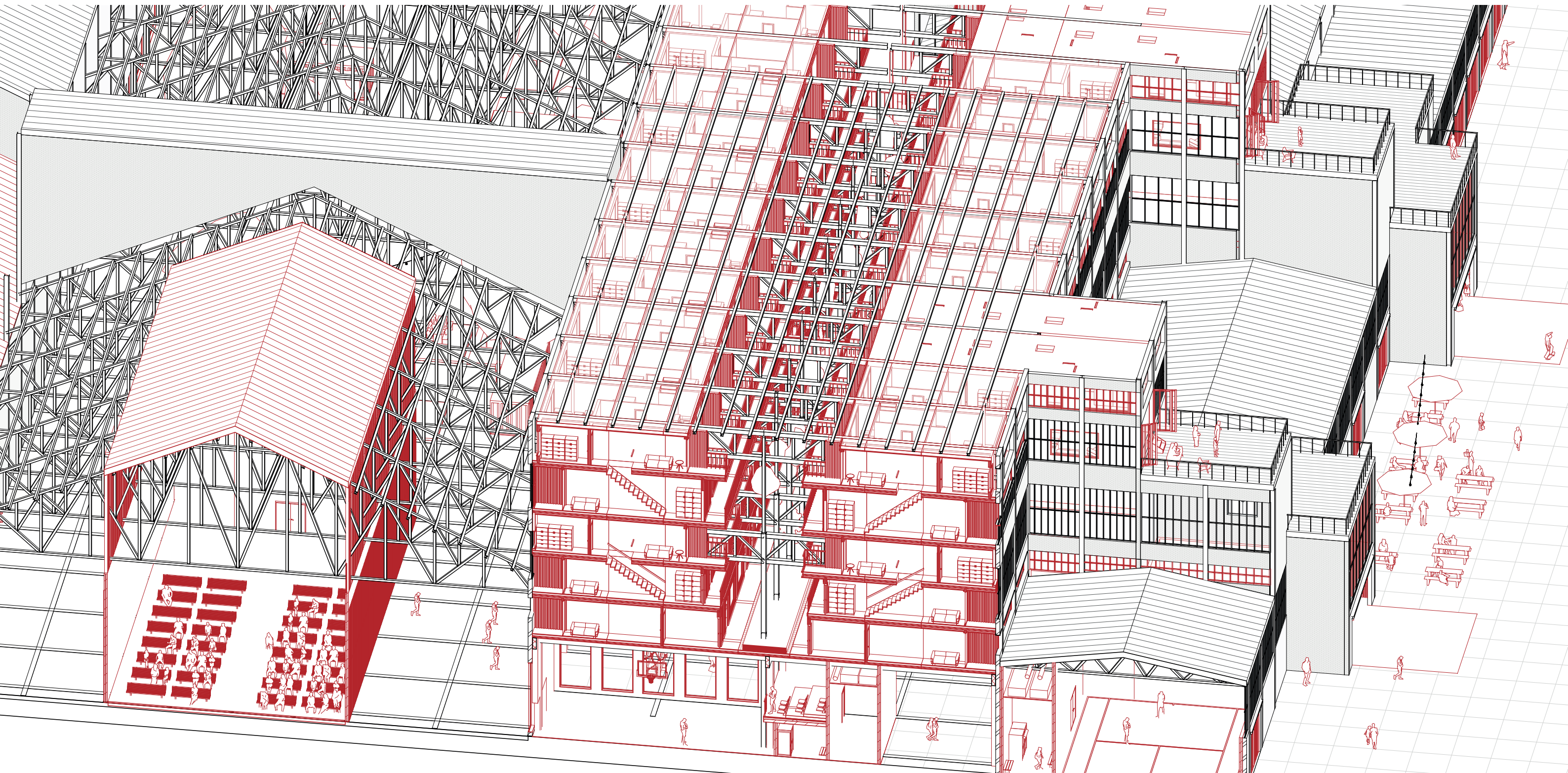


extra



**North facade**  
**View from the street**





**Courtyard section**  
3d view west side



extra



**Apartment**  
View towards river Noord

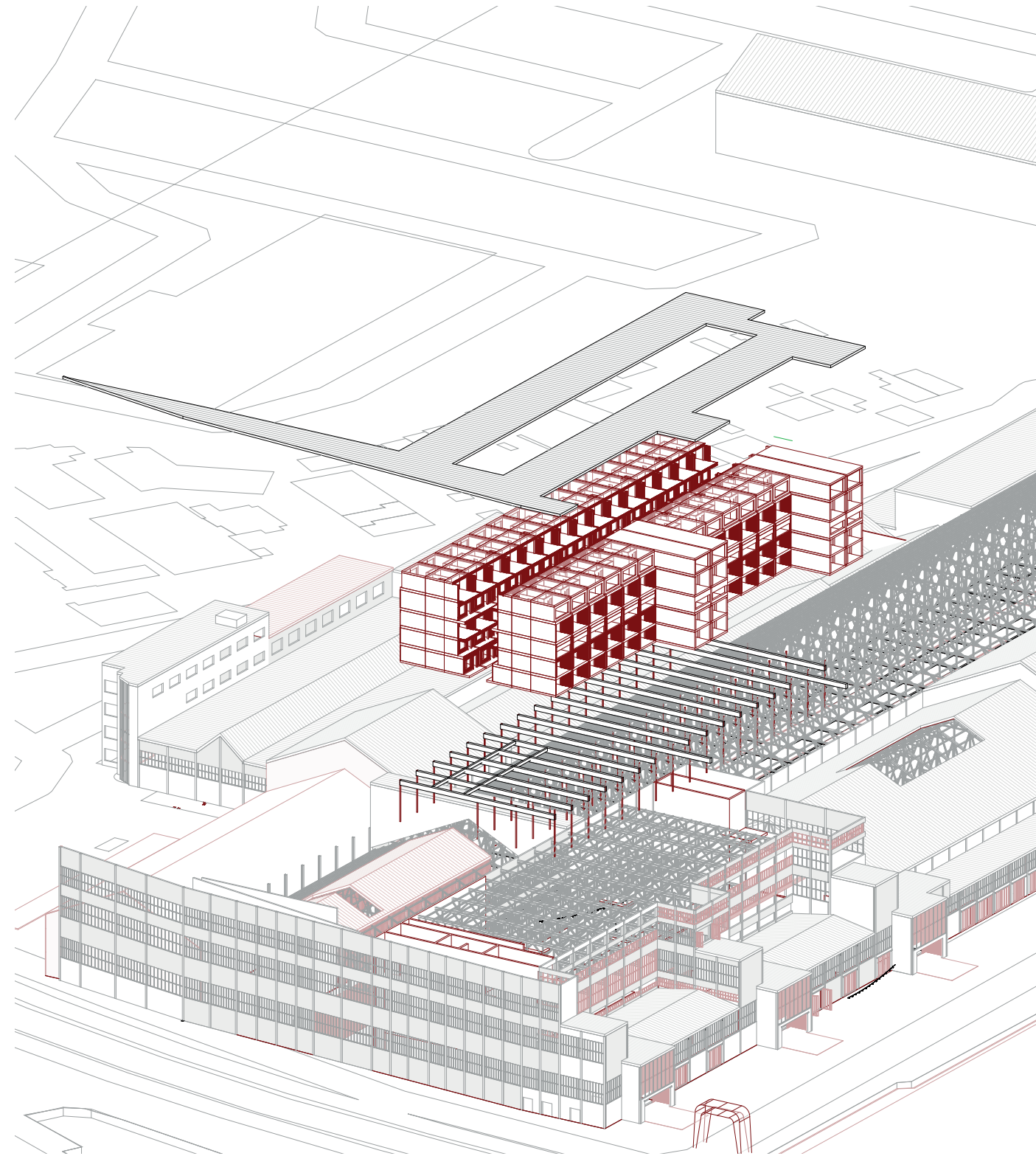


extra



**Apartment**  
View towards river Noord







extra

Oppervlakte	Aantal	Norm	Subtotaal
56 m <sup>2</sup>	27	1,1	29,7
112 m <sup>2</sup>	54	1,4	75,6
182 m <sup>2</sup>	4	1,6	6,4
<b>Totaal</b>	<b>85</b>		<b>111,7</b>

Deze parkeernormen zijn **inclusief** 0,2 pp per woning voor bezoekersparkeren.