

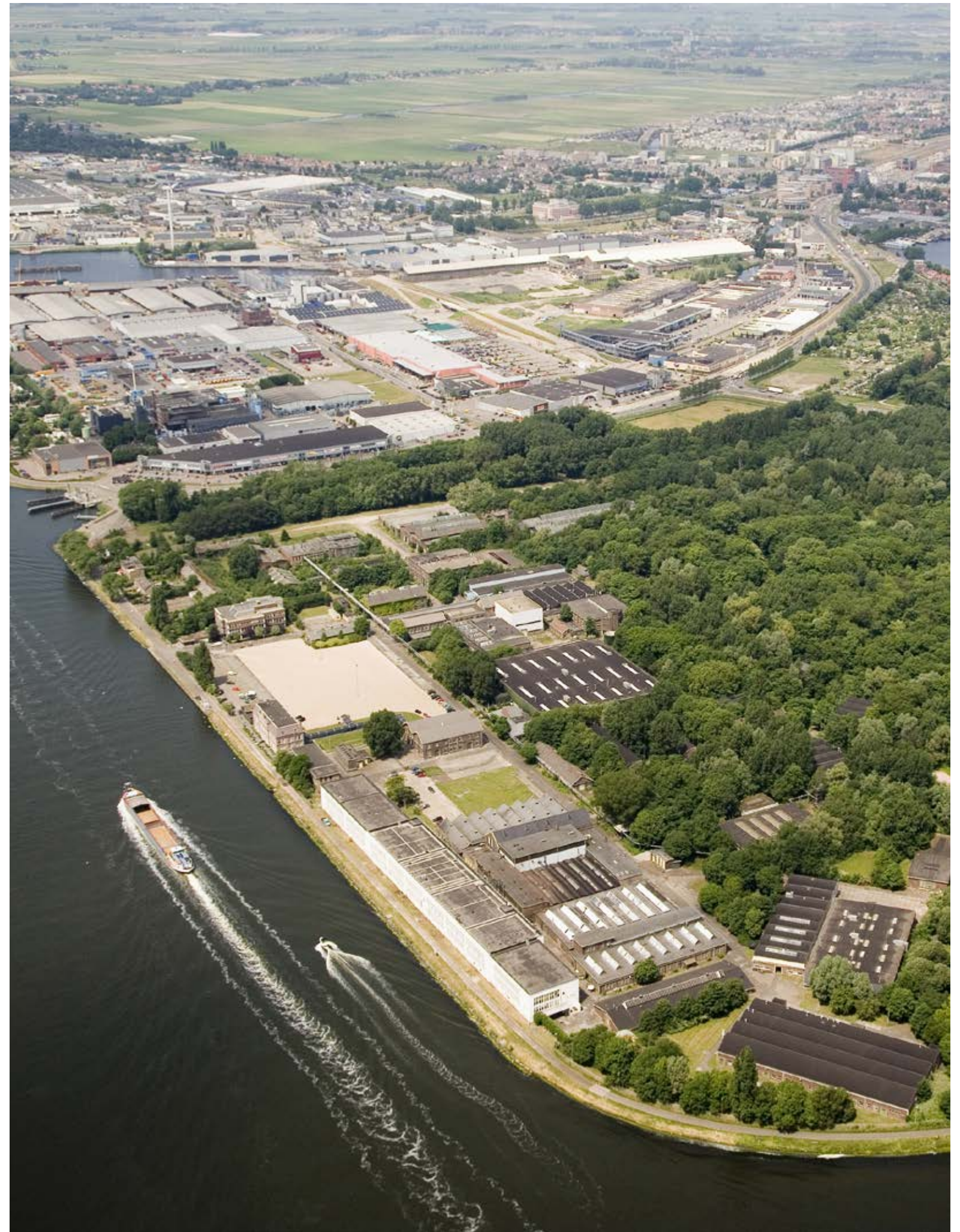
P5 Presentation

Hembrug Peninsula – Revitalising Heritage

Kilian Mol, 4290097

Heritage & Architecture

Tutors: Lidy Meijers & Ger Warries



Content

1. Analysis

Contextual analysis

Campus North analysis

Building analysis

2. Design

Master plan Campus North

Machine hall

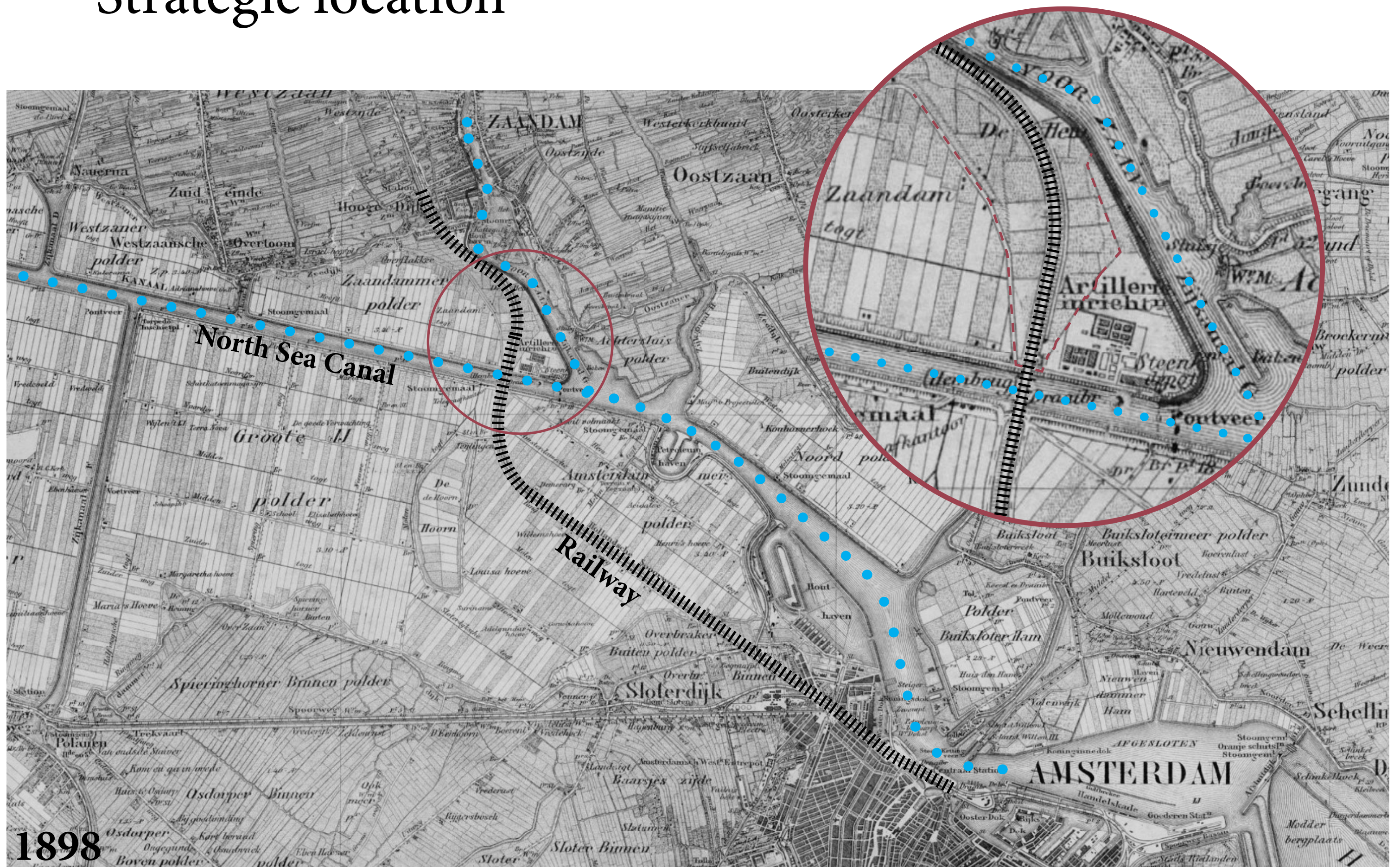
Weapon depot

3. Reflection







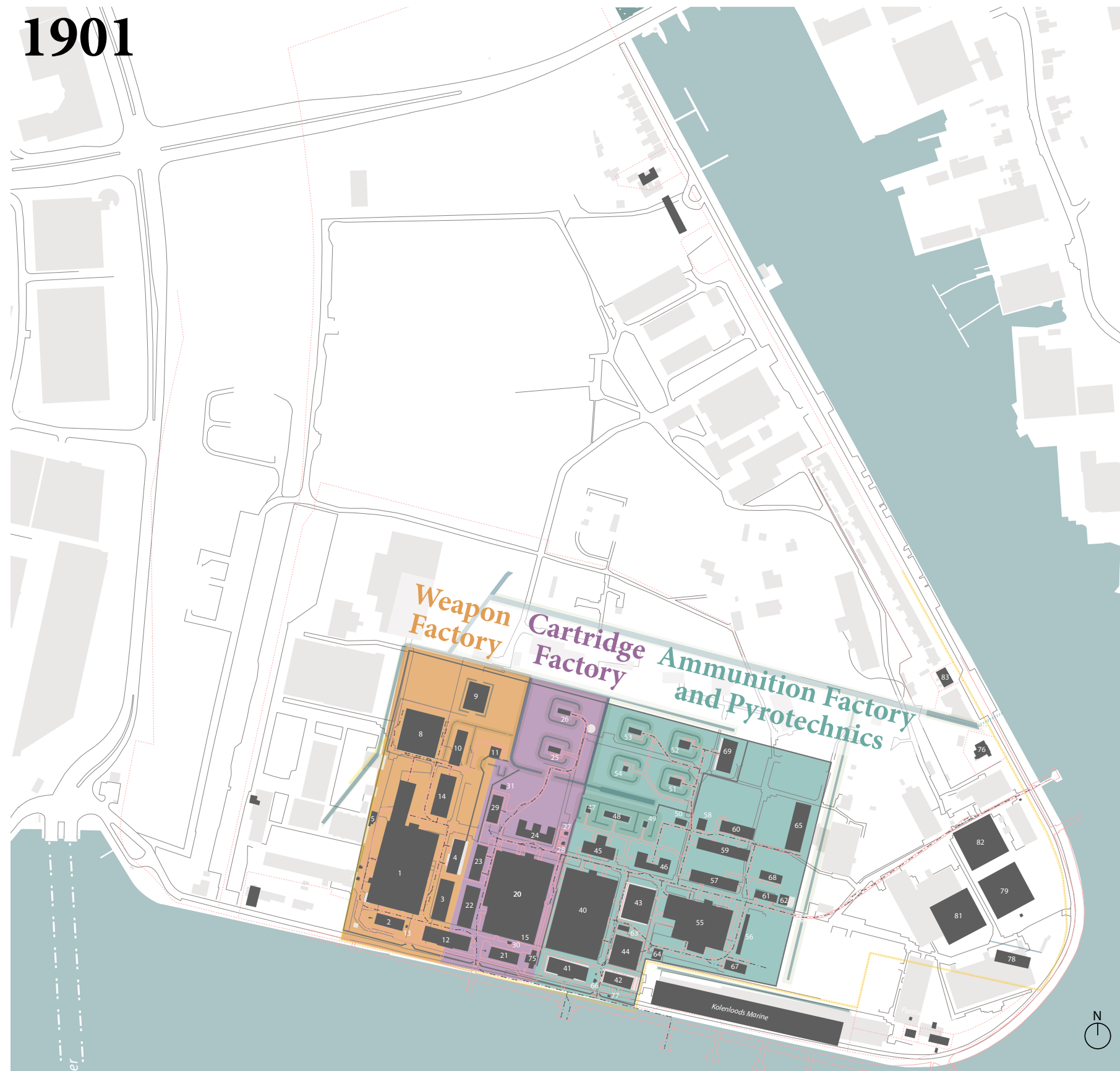




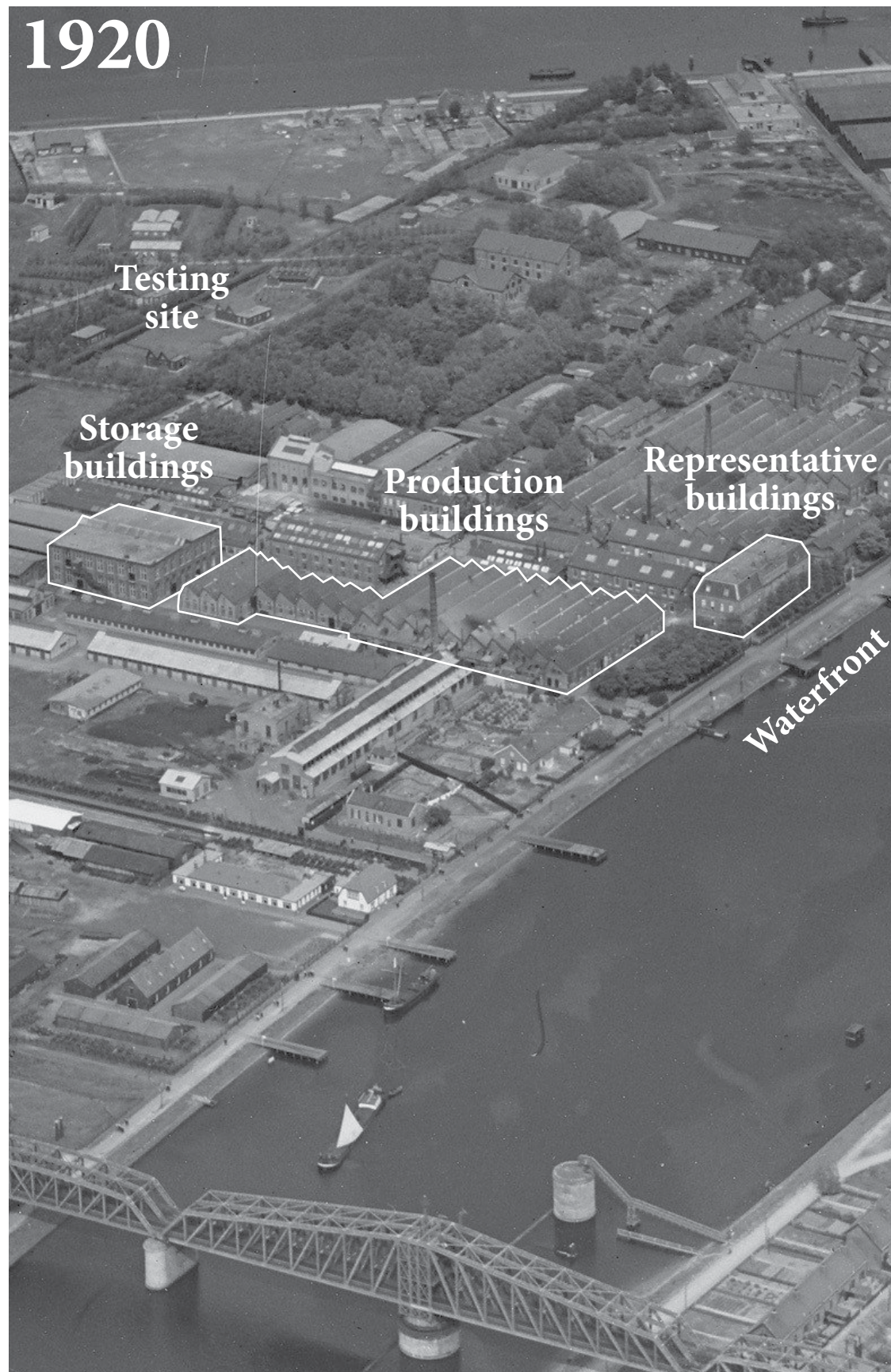
Analysis Original setup



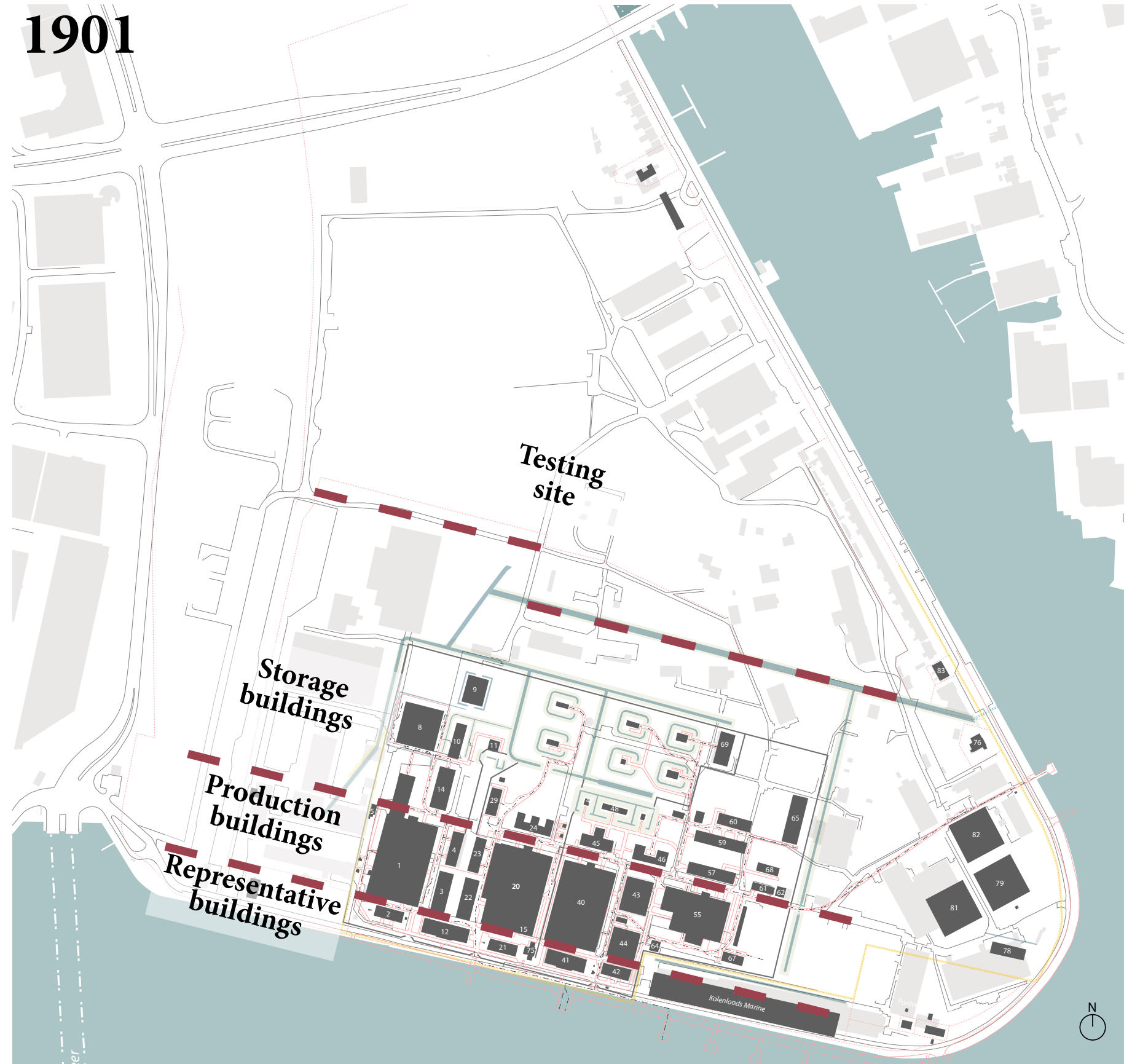
Source: <https://nimh-beeldbank.defensie.nl/>



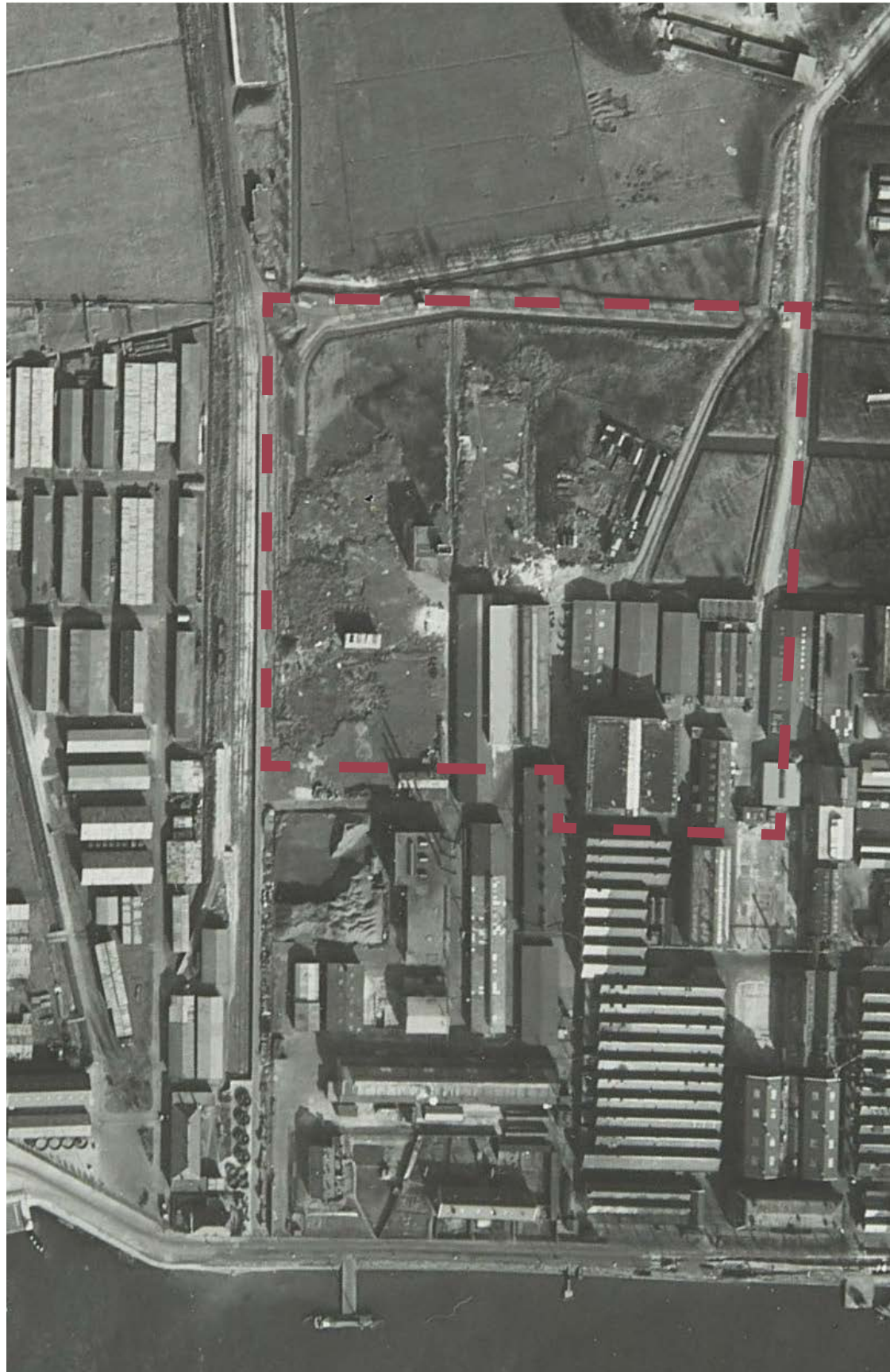
Source: Na Hu



Source: <https://nimh-beeldbank.defensie.nl/>



Source: Na Hu



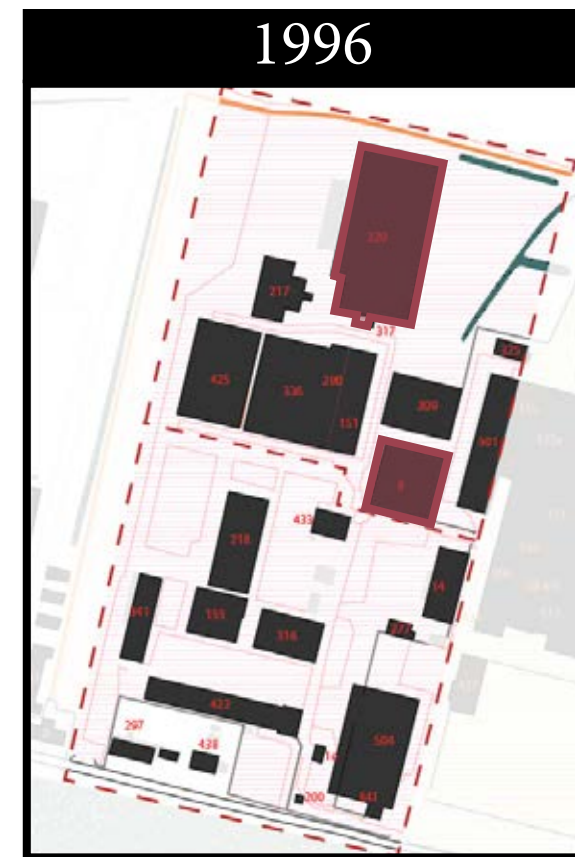
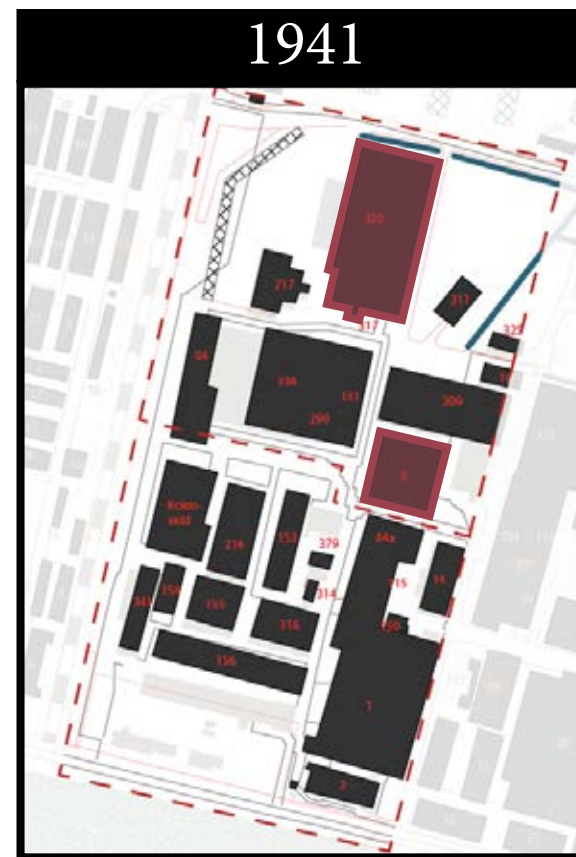
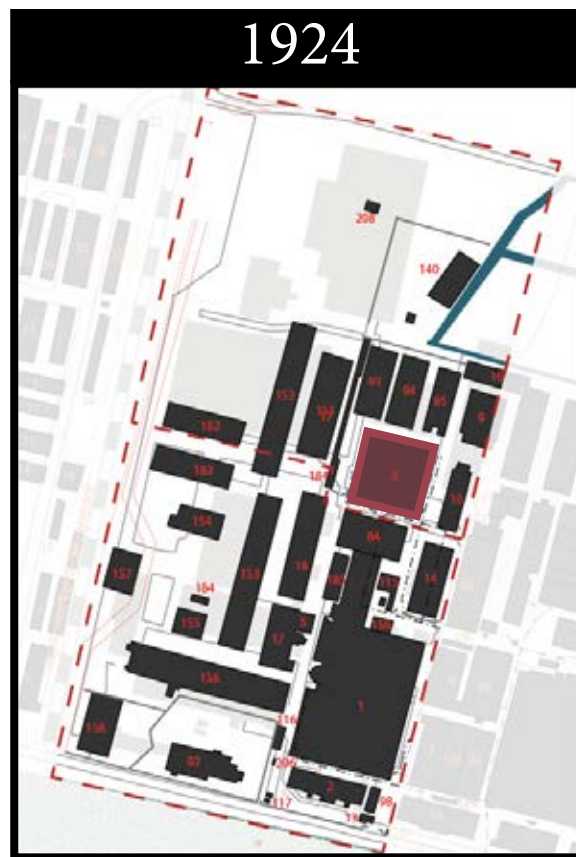
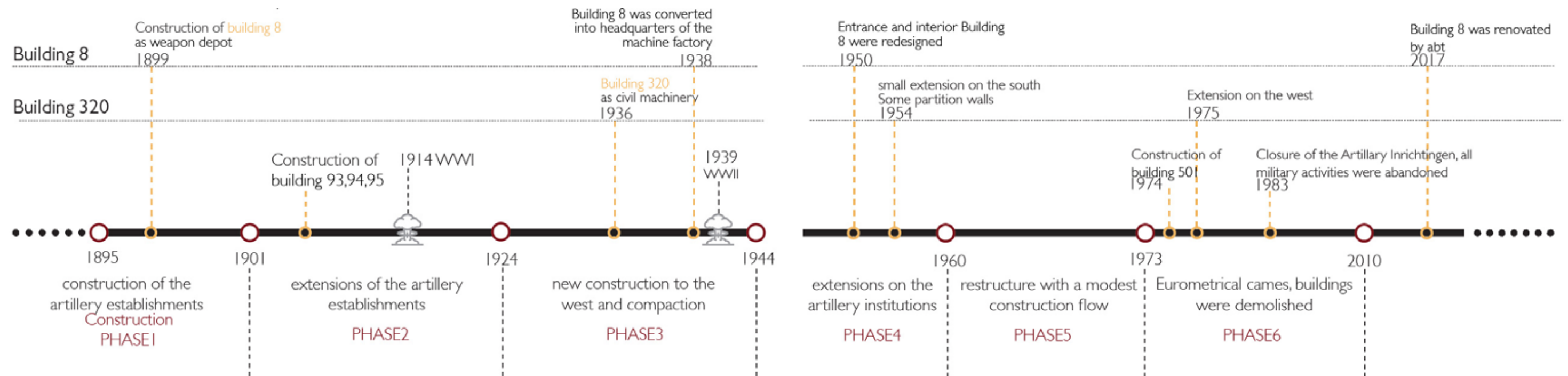
Source: Nederlands Instituut voor Militaire Historie



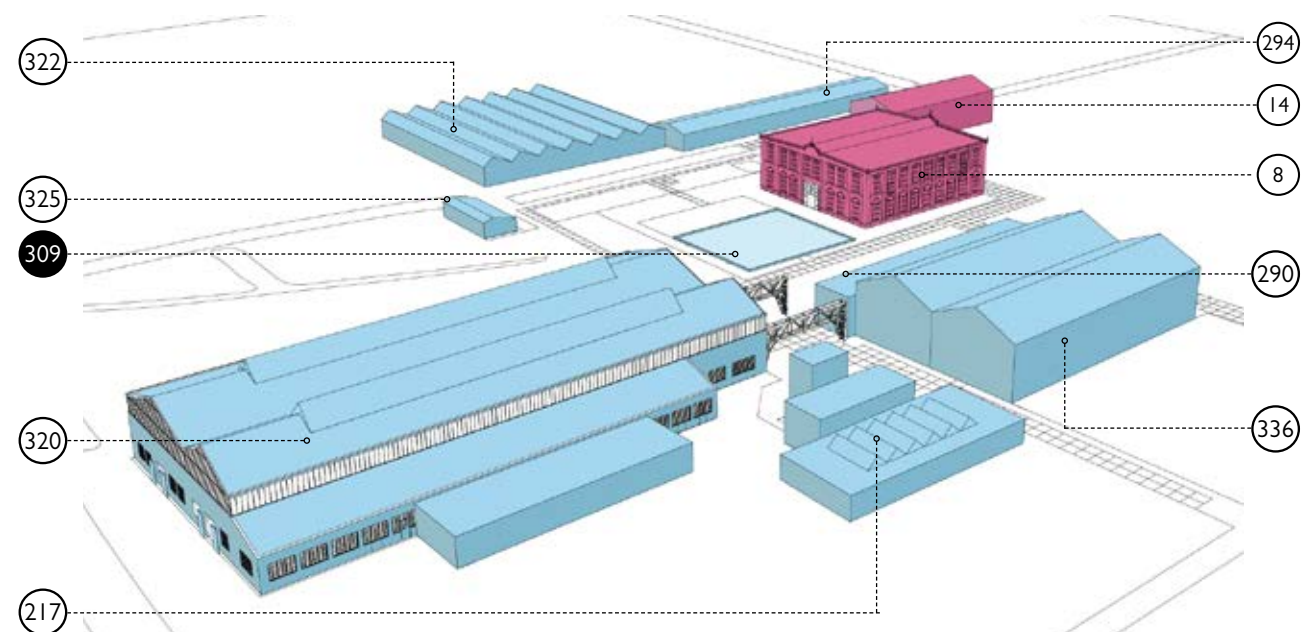
Source: Na Hu

1 Analysis Historical development

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Analysis Building types



■ Building fase I: 1895-1901

*Building 8 (weapon depot): 1899 (renovated in 2017)
Building 14 (warehouse): 1901

■ Building fase II: 1902-1924

Building 151 (workshop): demolished

■ Building fase III: 1925-1944

*Building 217 (manufacturing building for optical instruments): 1916
Building 322 (gloeierij): 1928
*Building 336 (assembly hall and welding shop): 1931
*Building 290 (assembly hall and welding shop): 1931
Building 309 (shipping warehouse): 1931 - foundation still visible
Building 294 (pressing shop): 1932
*Building 320 (machine hall): 1936
Building 325 (transformer building): 1941

■ Building fase IV: 1945-1960

Building 425 (Paint shop): 1953 - demolished

■ Building fase V: 1961-1973

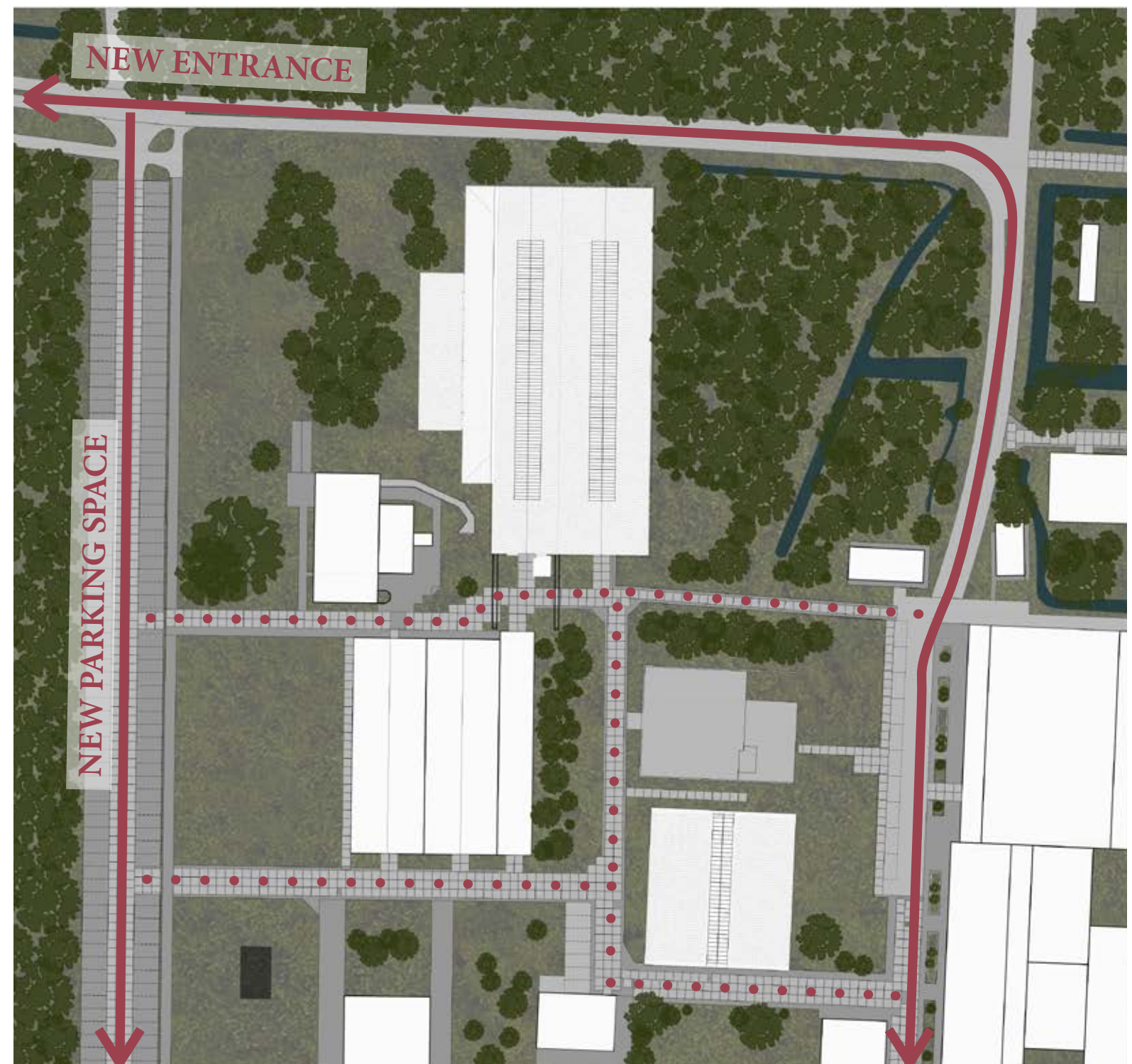
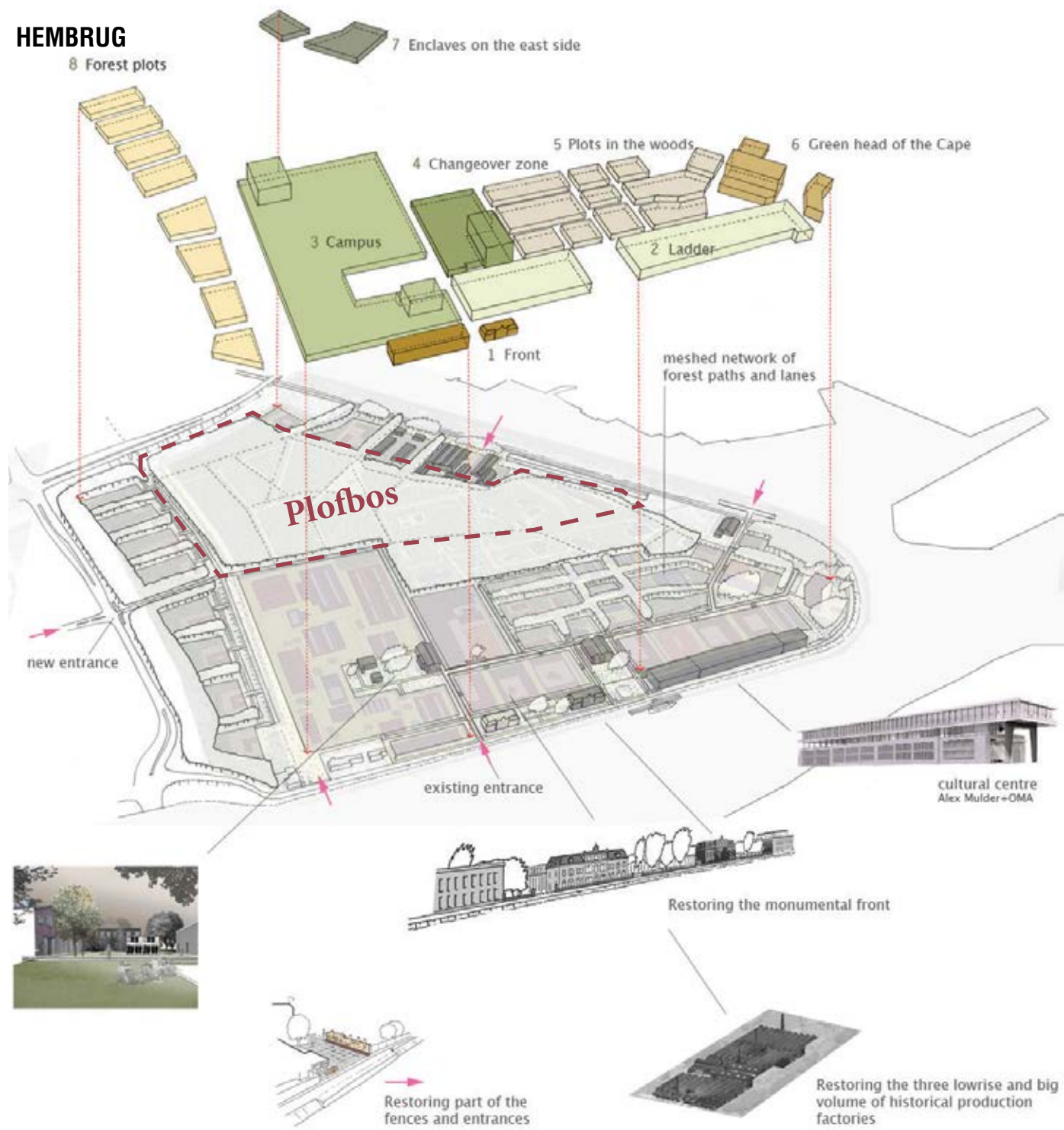
■ Building fase VI: 1974-2019

* : Rijksmonument
Italic: demolished
(): original function

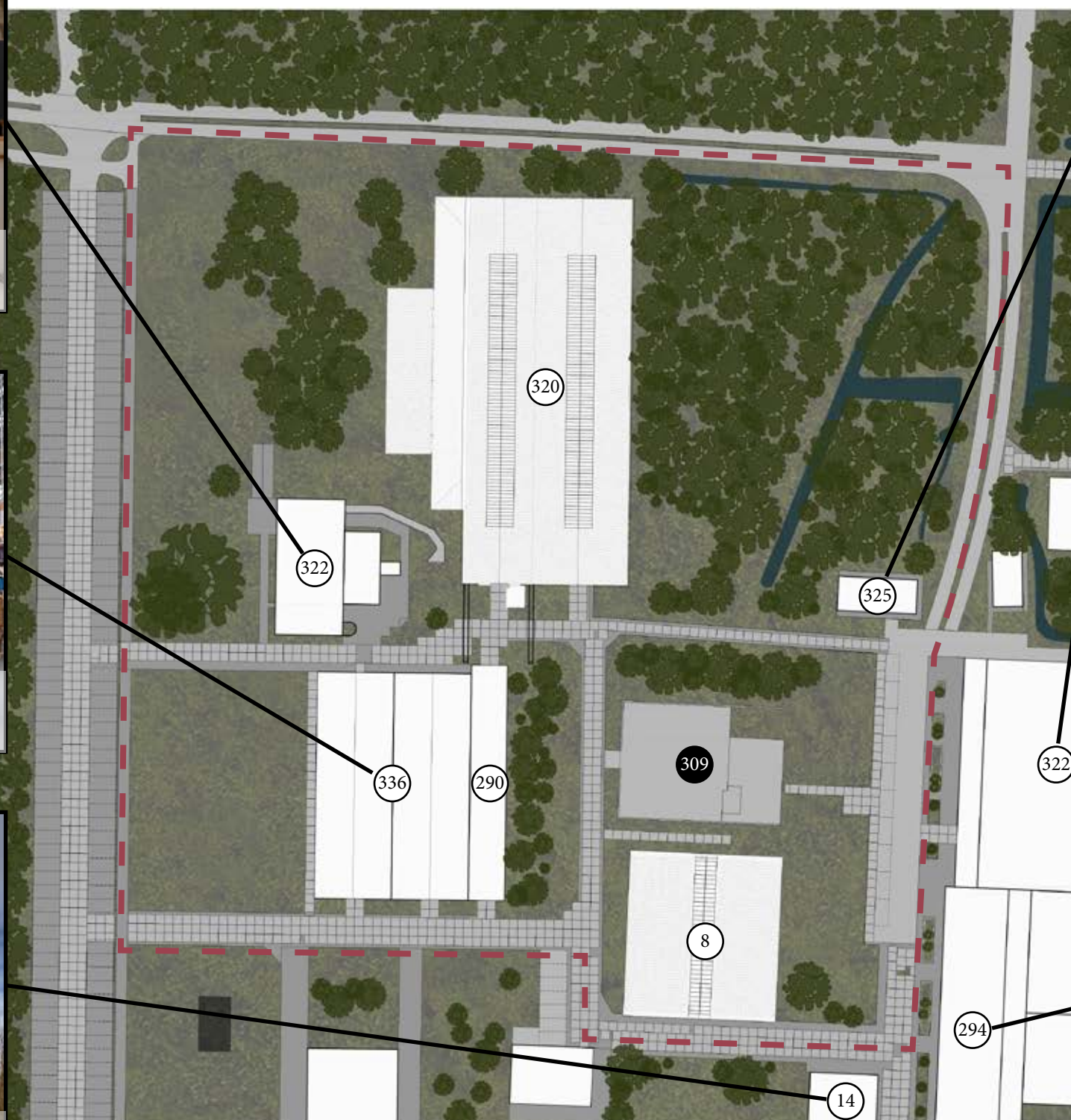


1 Analysis Redevelopment strategy

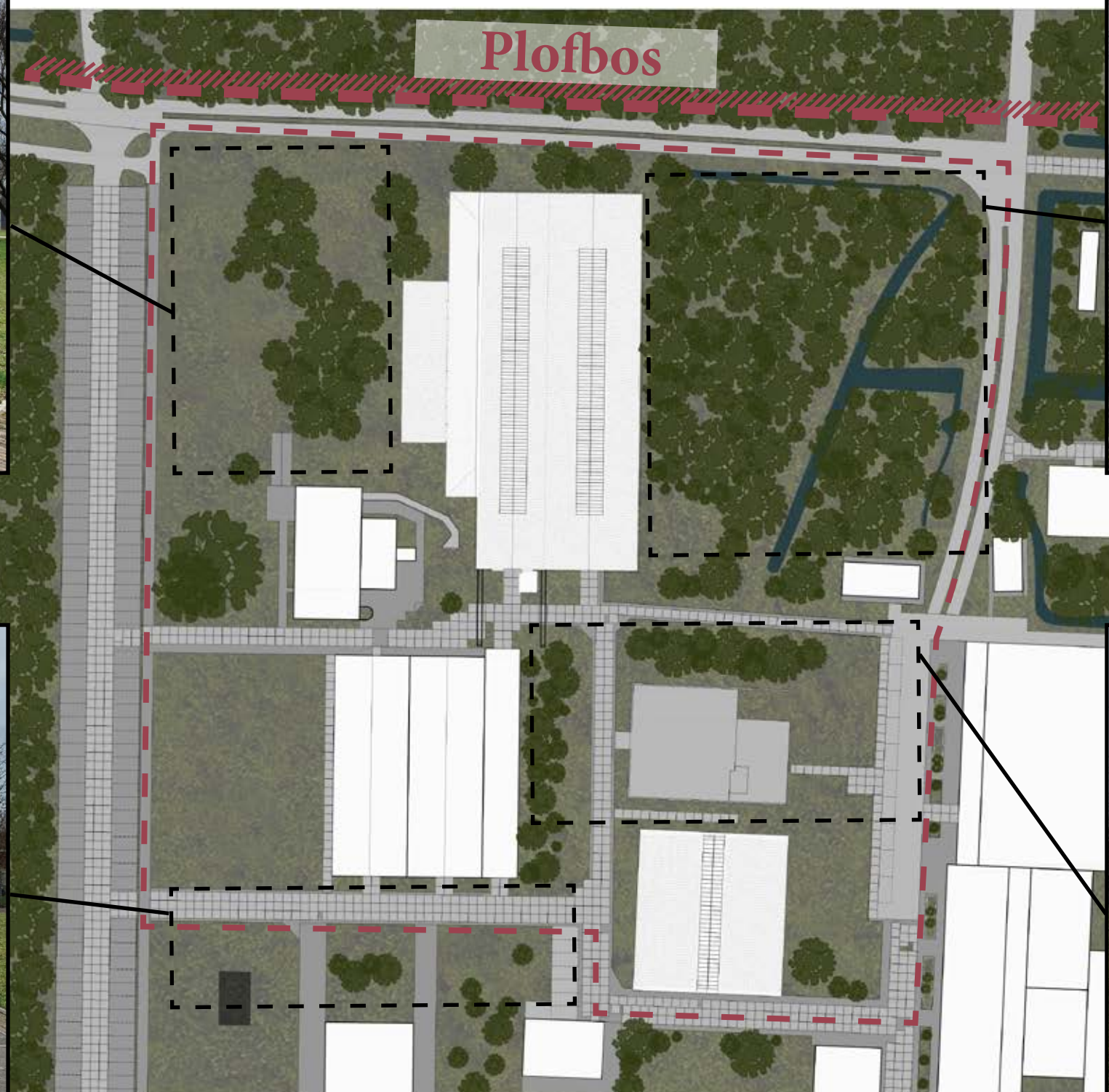
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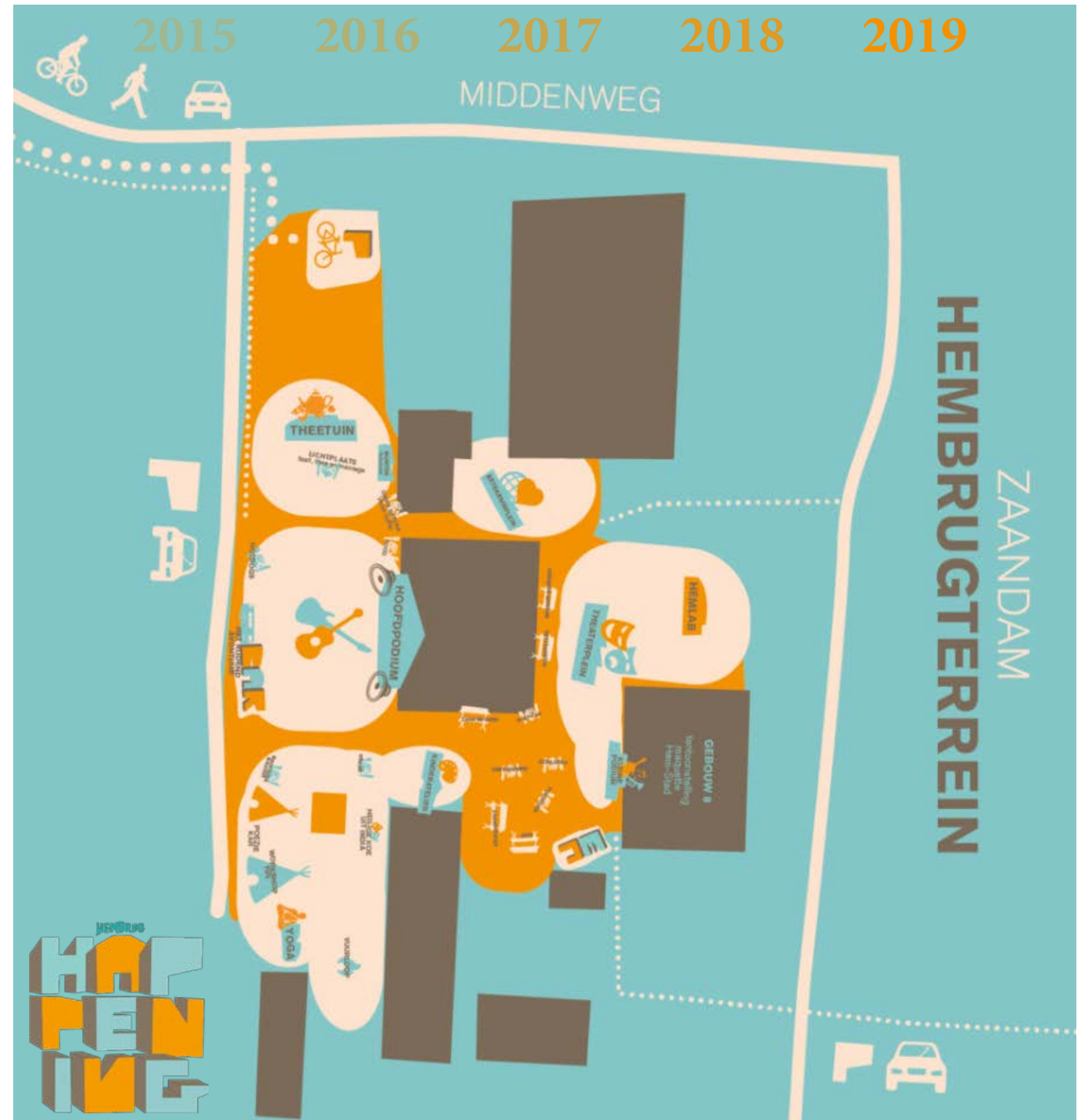


Current program



Green open spaces

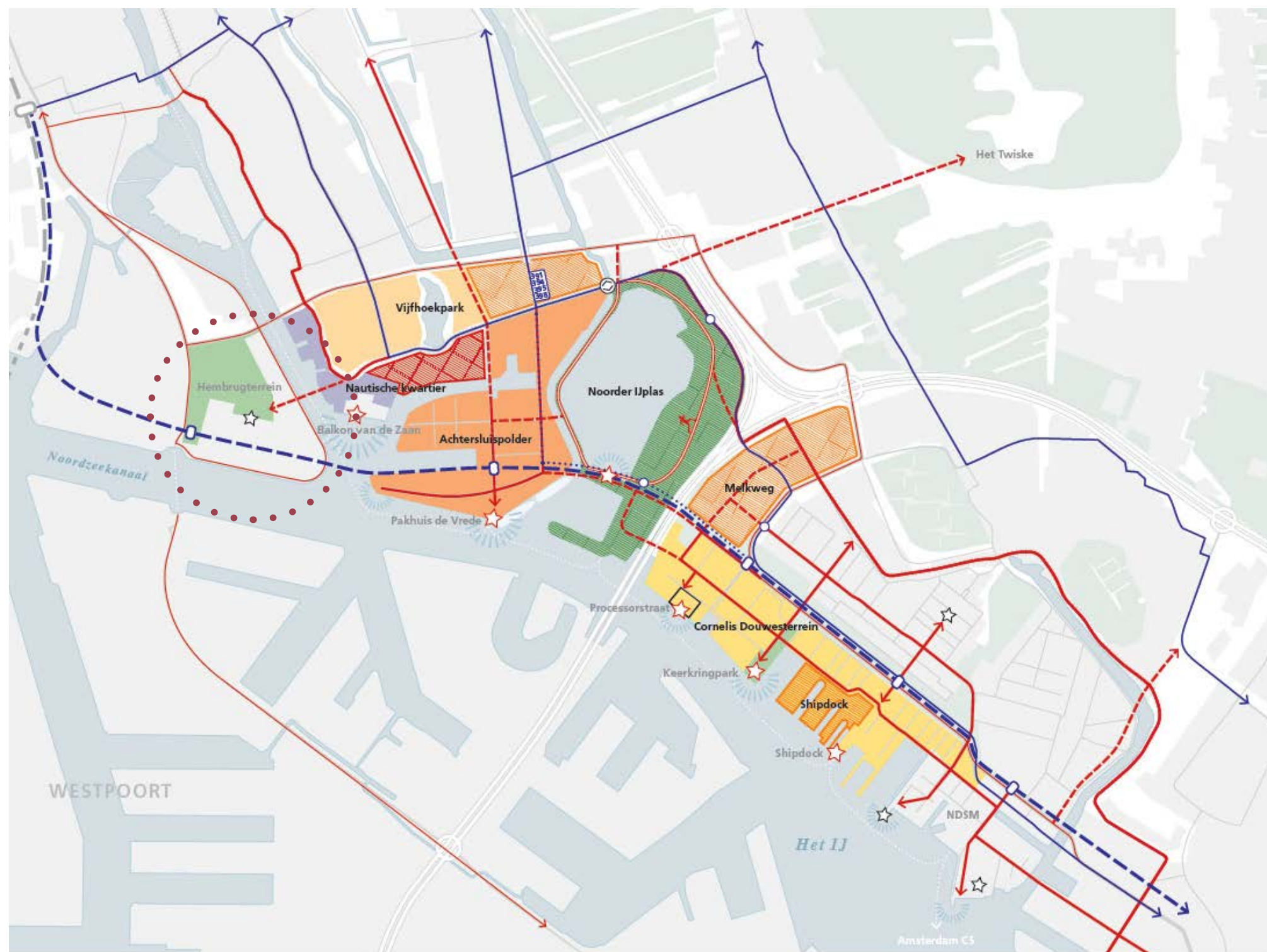




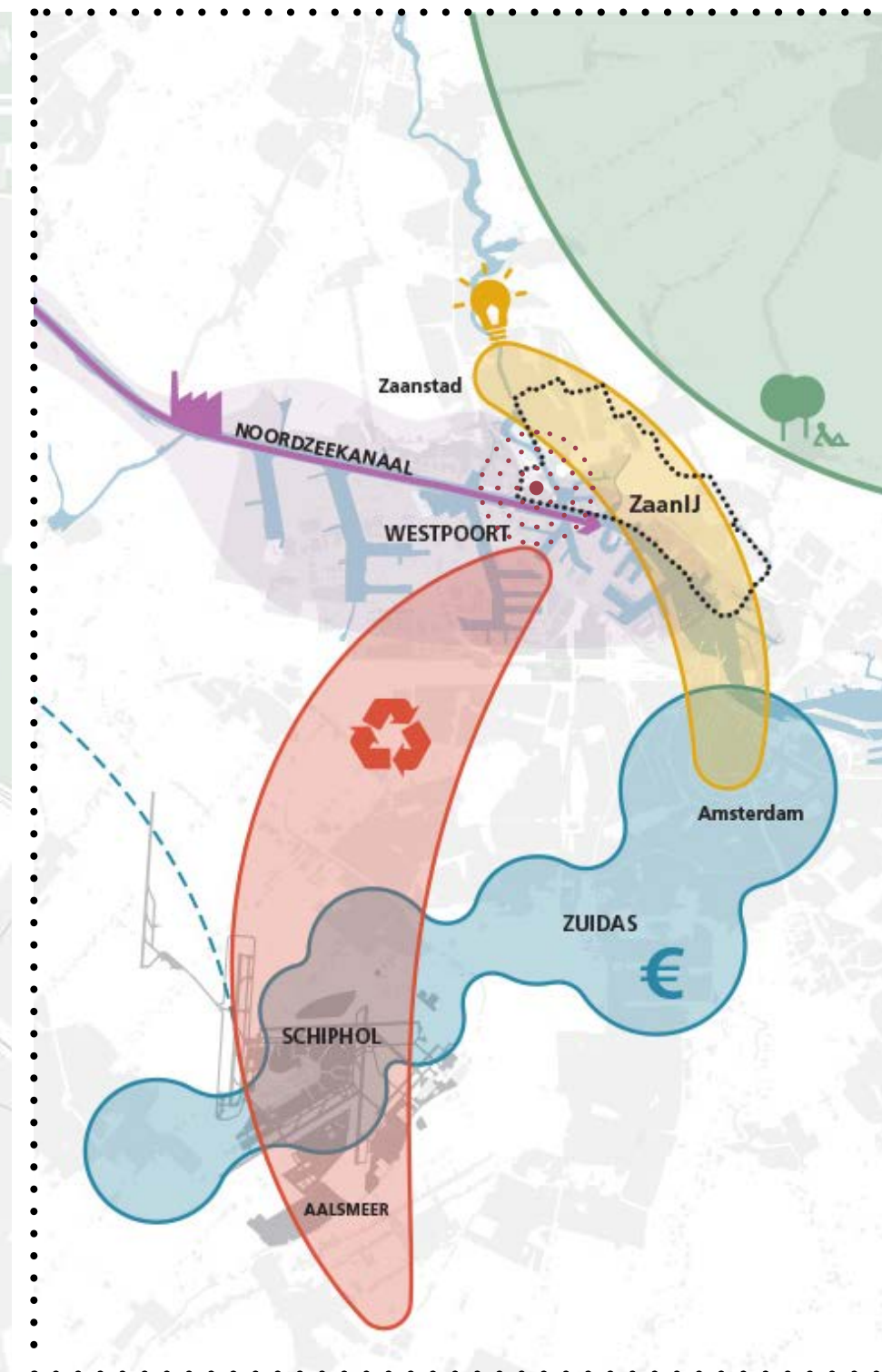
Project buildings



Source: <http://hembrughappening.nl/>



Future vision ZaanIJ 2040



Transformation strategy Haven-Stad 2017

Past

Military factory

Secluded area

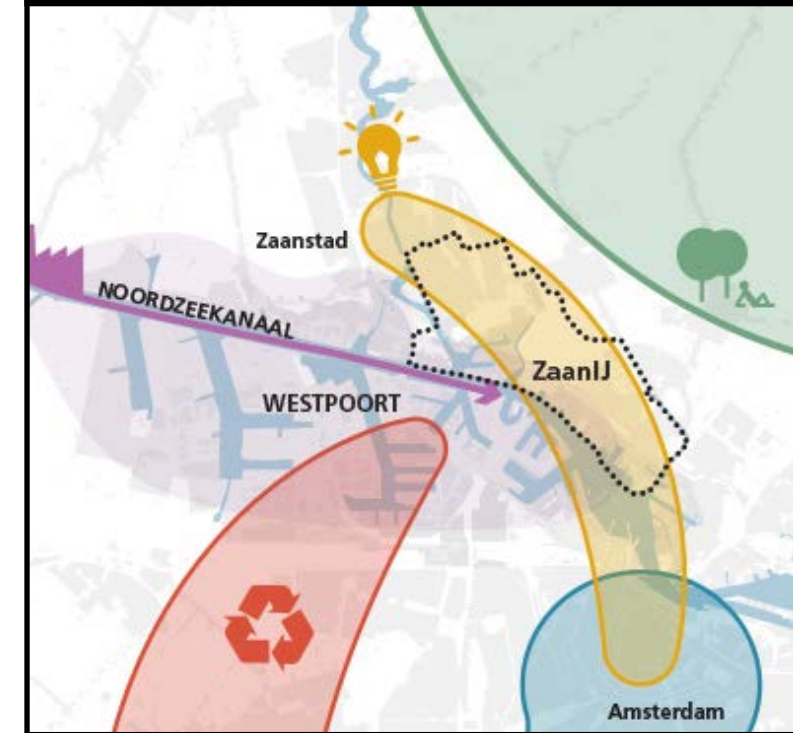
Orientated to the water

Present

**Redevelopment program
partly focussed on arts,
crafts and design**

Partly opened area

Changing orientation

Future

**Arts, Crafts and Design
Centre of A'dam and Zaan
region**

Public area

Campus North as entrance

Content

1. Analysis

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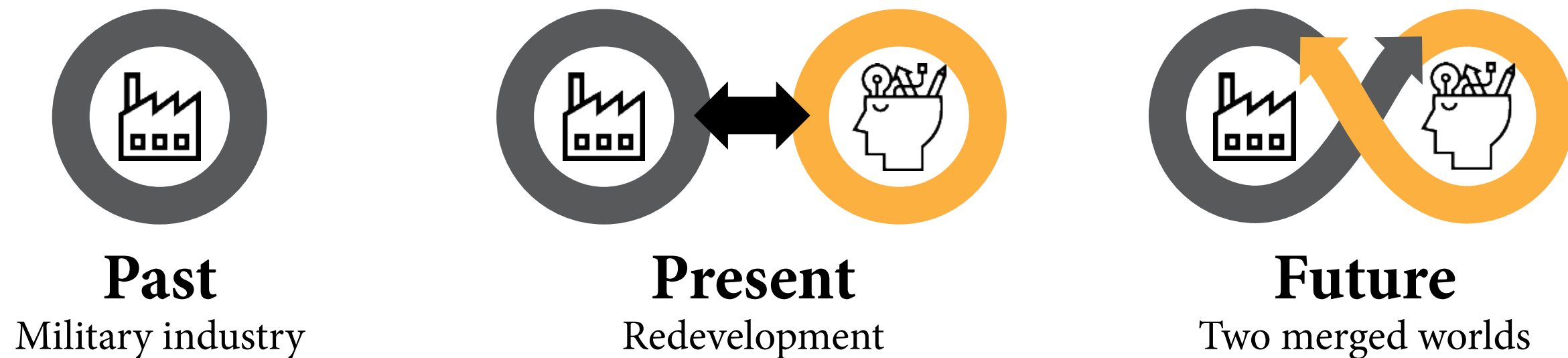
Master plan Campus North

Machine hall

Weapon depot

3. Reflection

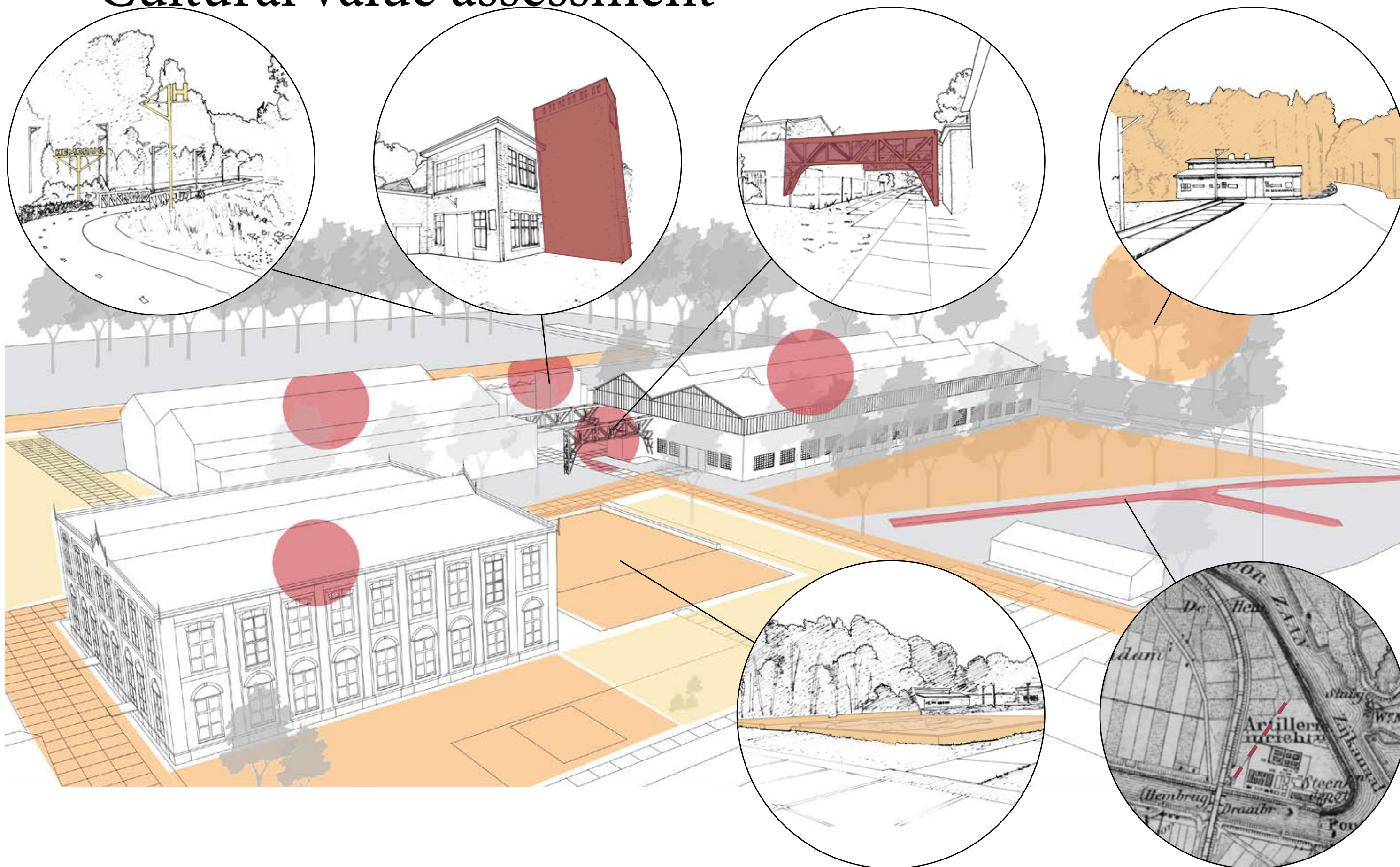
Research question



“How could my design interventions stimulate the transformation of the former military industrial site into the art, craft and design center of Amsterdam and the Zaan region without losing the valuable historical character of Hembrug?”



Cultural value assessment



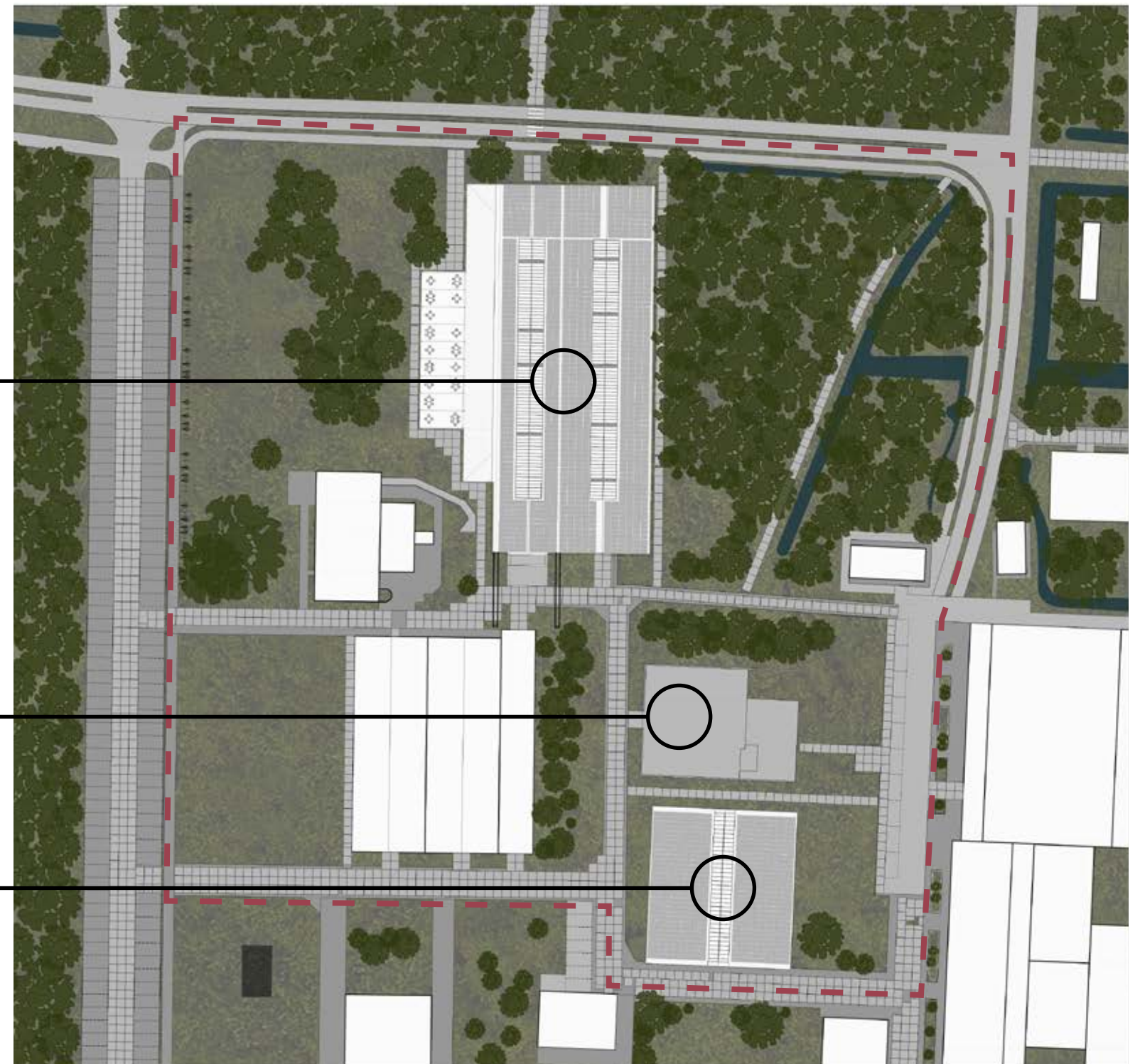
Master plan Campus North

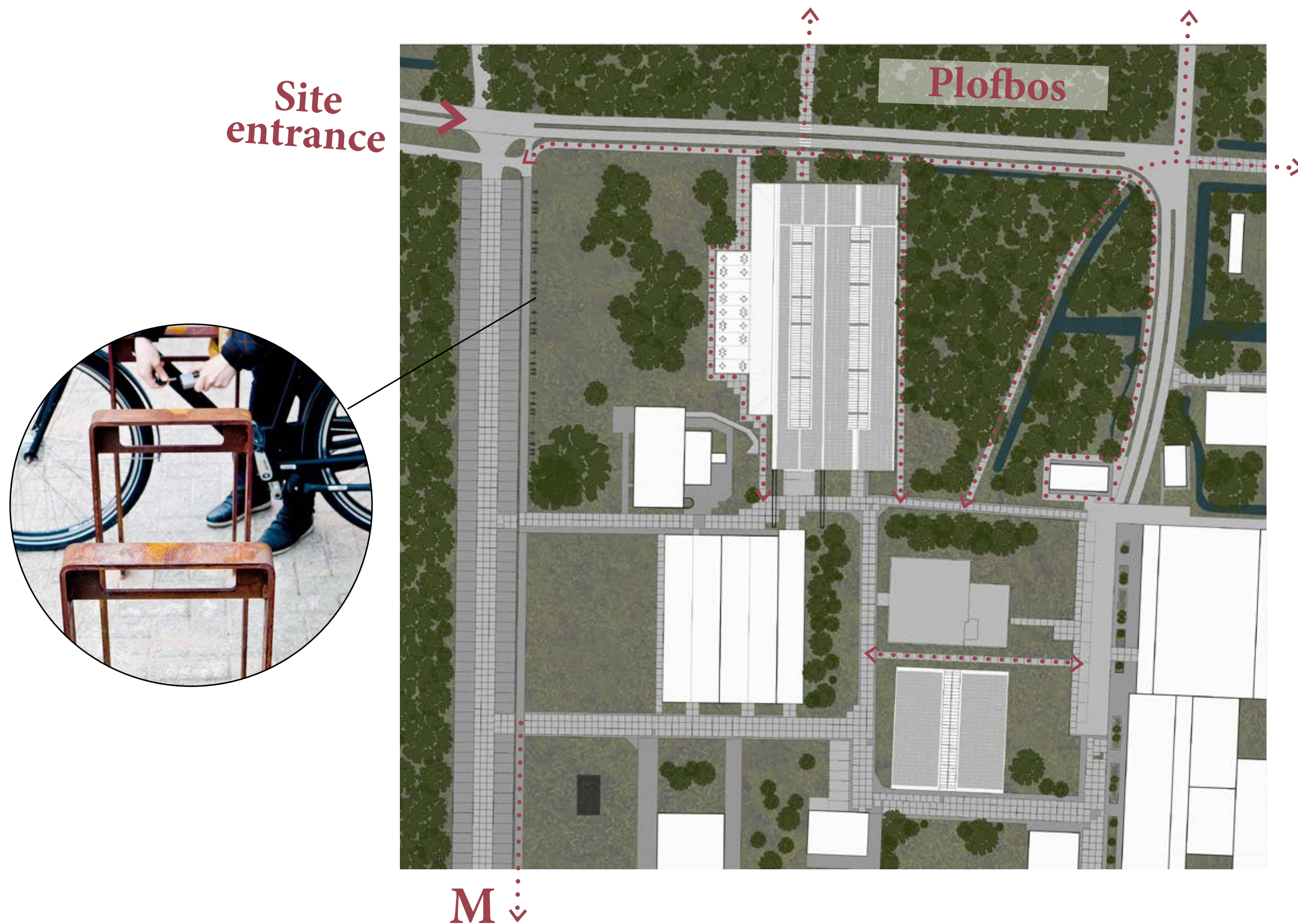
“Creating an inspiring place of art, crafts and design. Combining traditional crafts with the state of the art. A place where the past meets the future.”

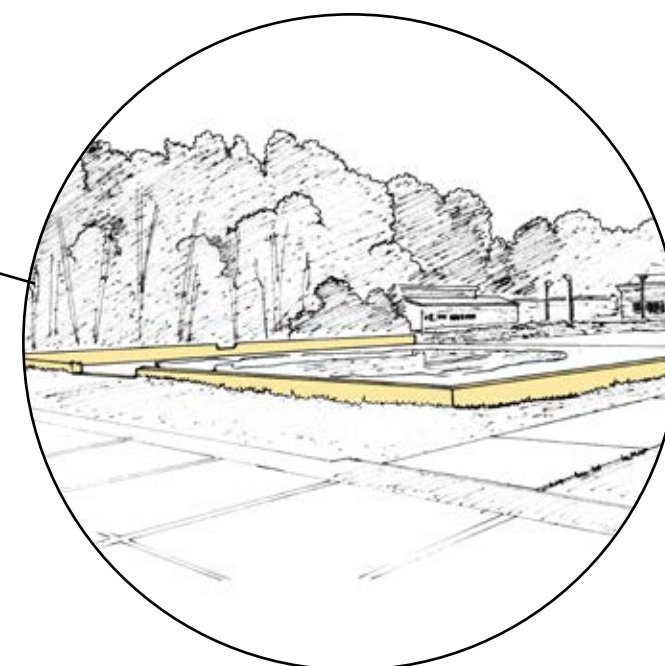
Machine Hall will be a place of art and craft where artists will host events and workshops with space for art exhibitions.

Open space in between will be a place for social interaction and public open air events where art and design will be presented.

Weapon Depot will provide flexible and fixed workplaces for designers and creative entrepreneurs who will host and want to be involved in these artistic events.







Entrance Hembrug

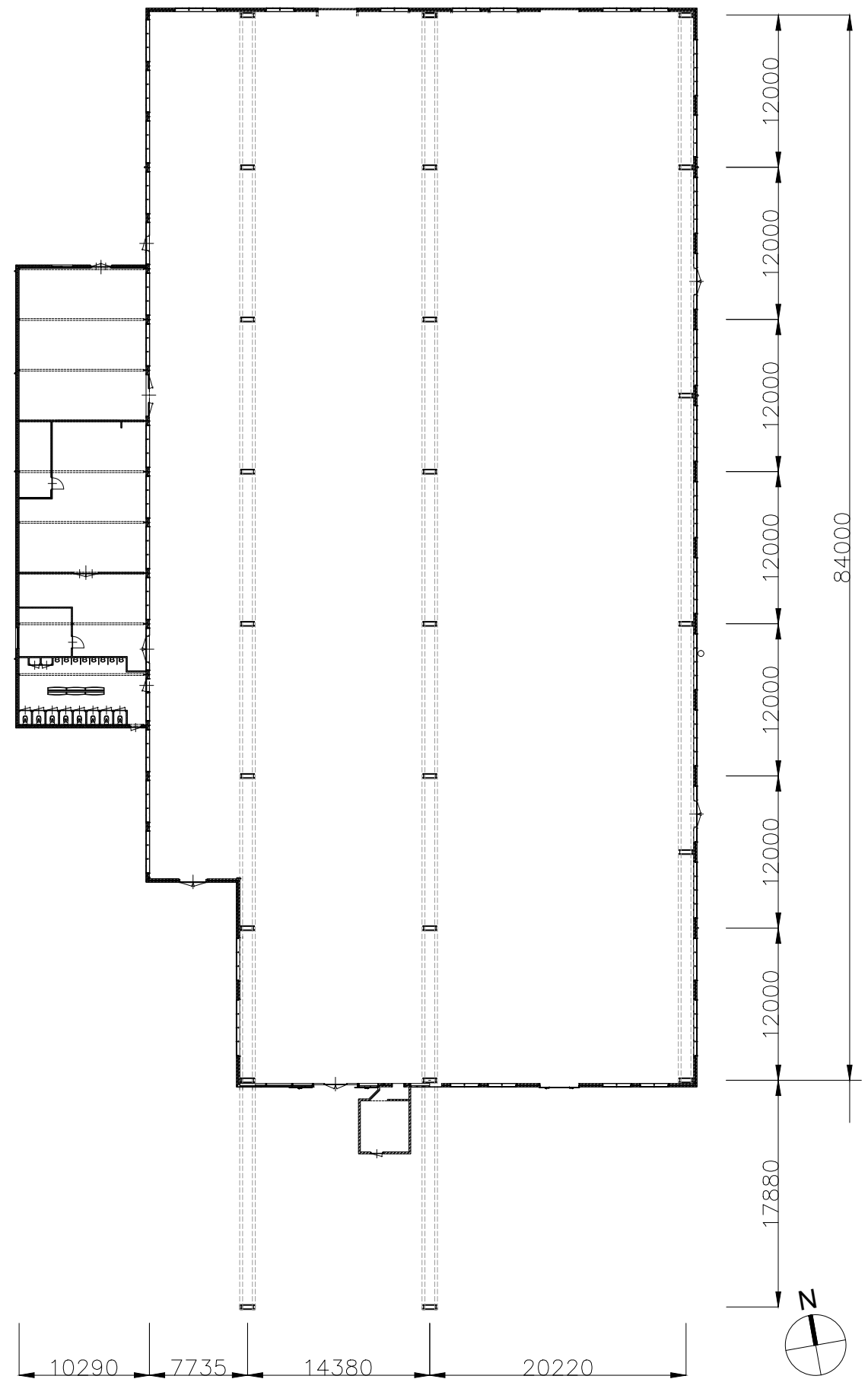


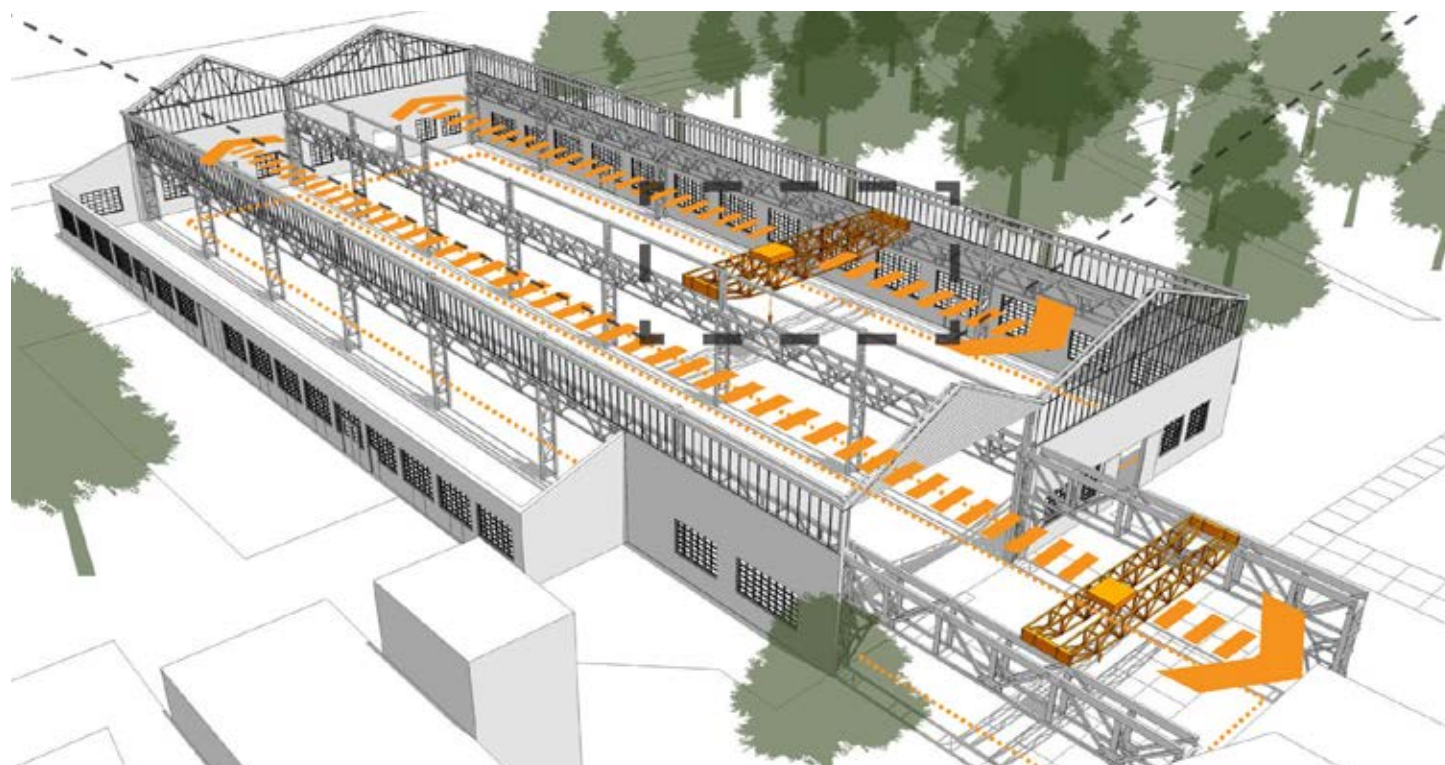


Current condition



Design Original function









Cultural value assessment

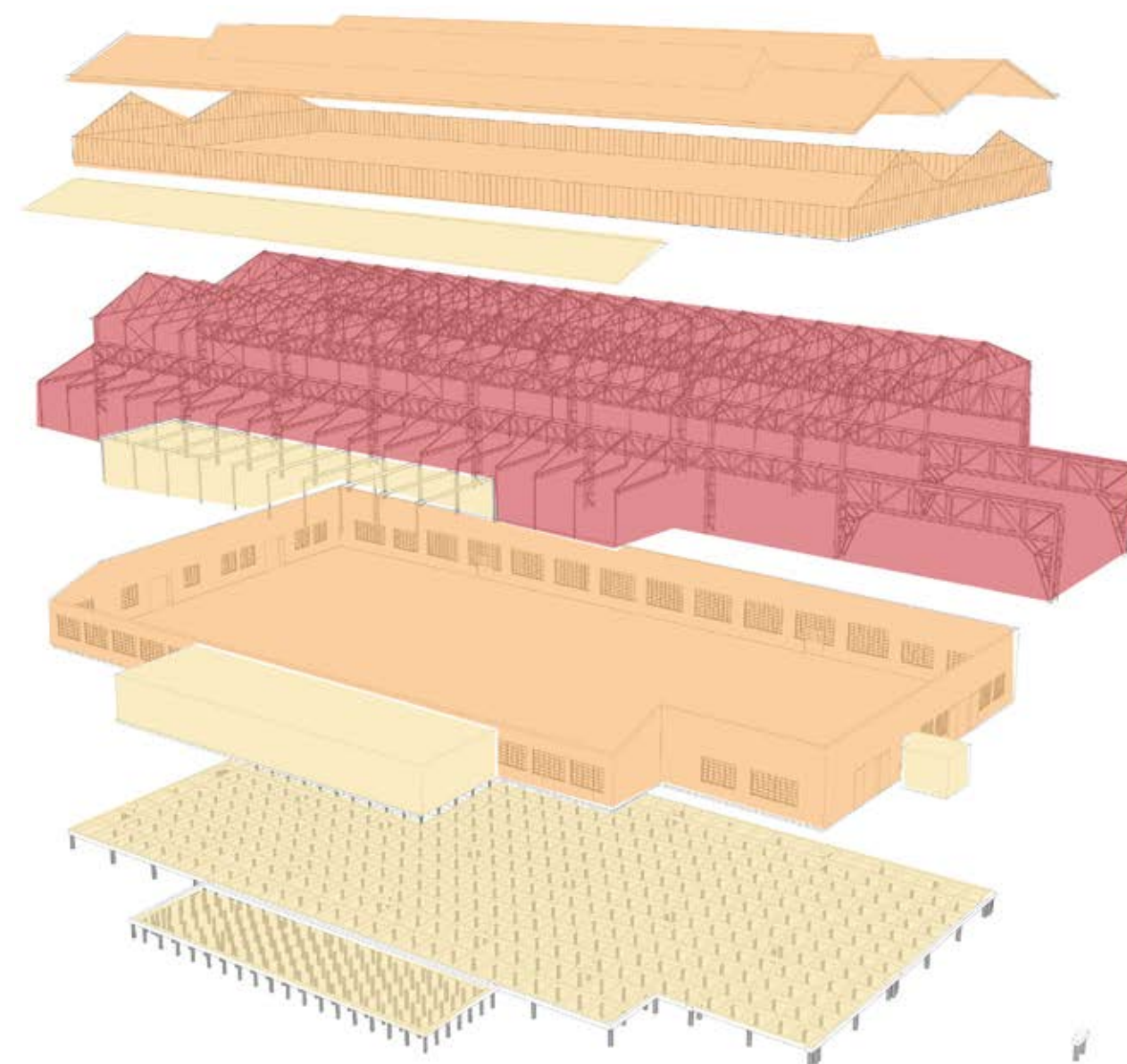
Most valuable aspects

Crane tracks

Spatiality (open)

Scale (big)

Production

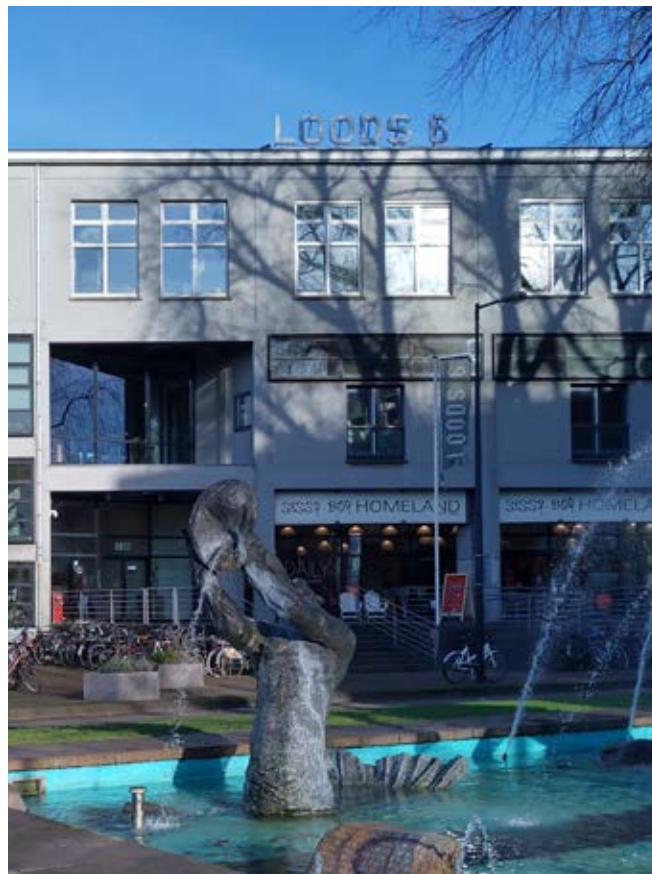


Ground Floor Plan



Loods 6

Stichting Kunstwerk Loods6

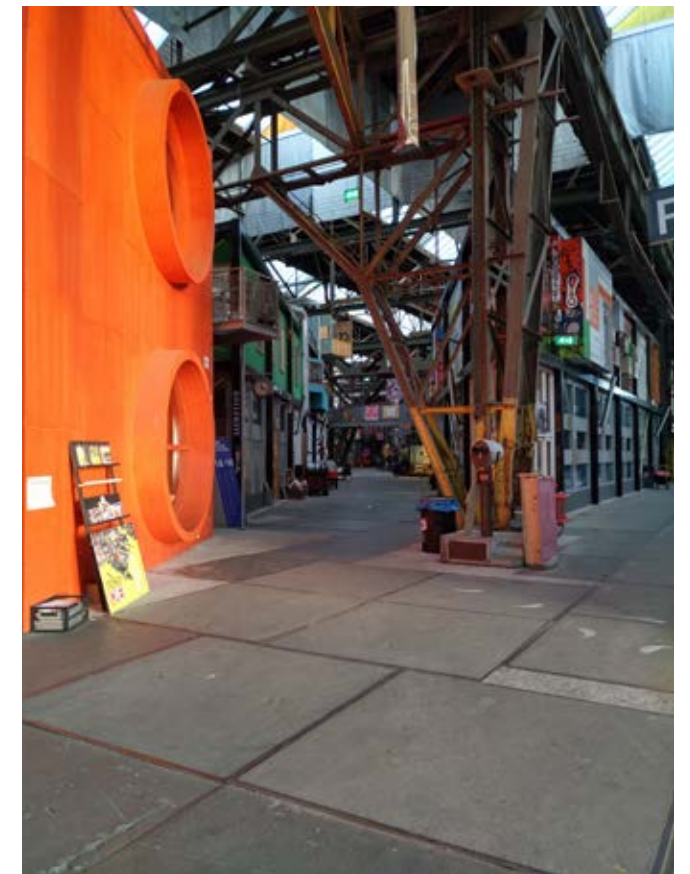


KNSM laan 143, Amsterdam

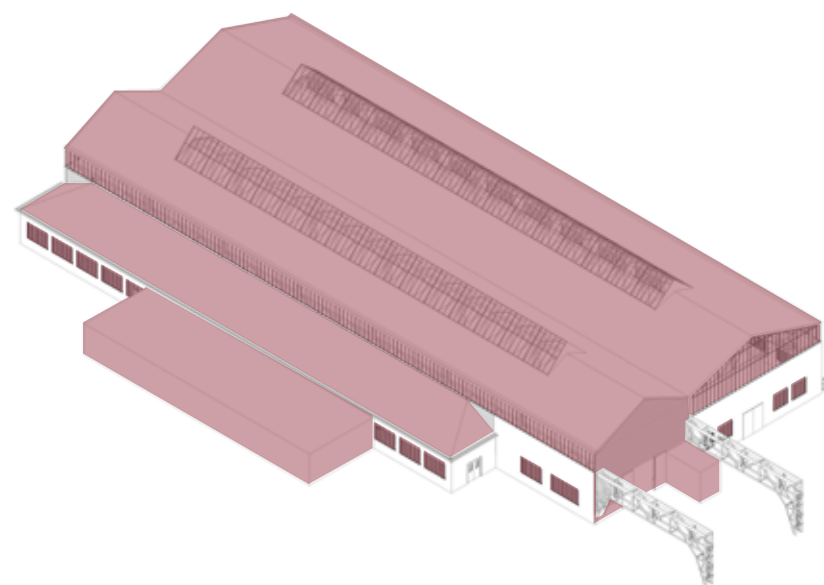
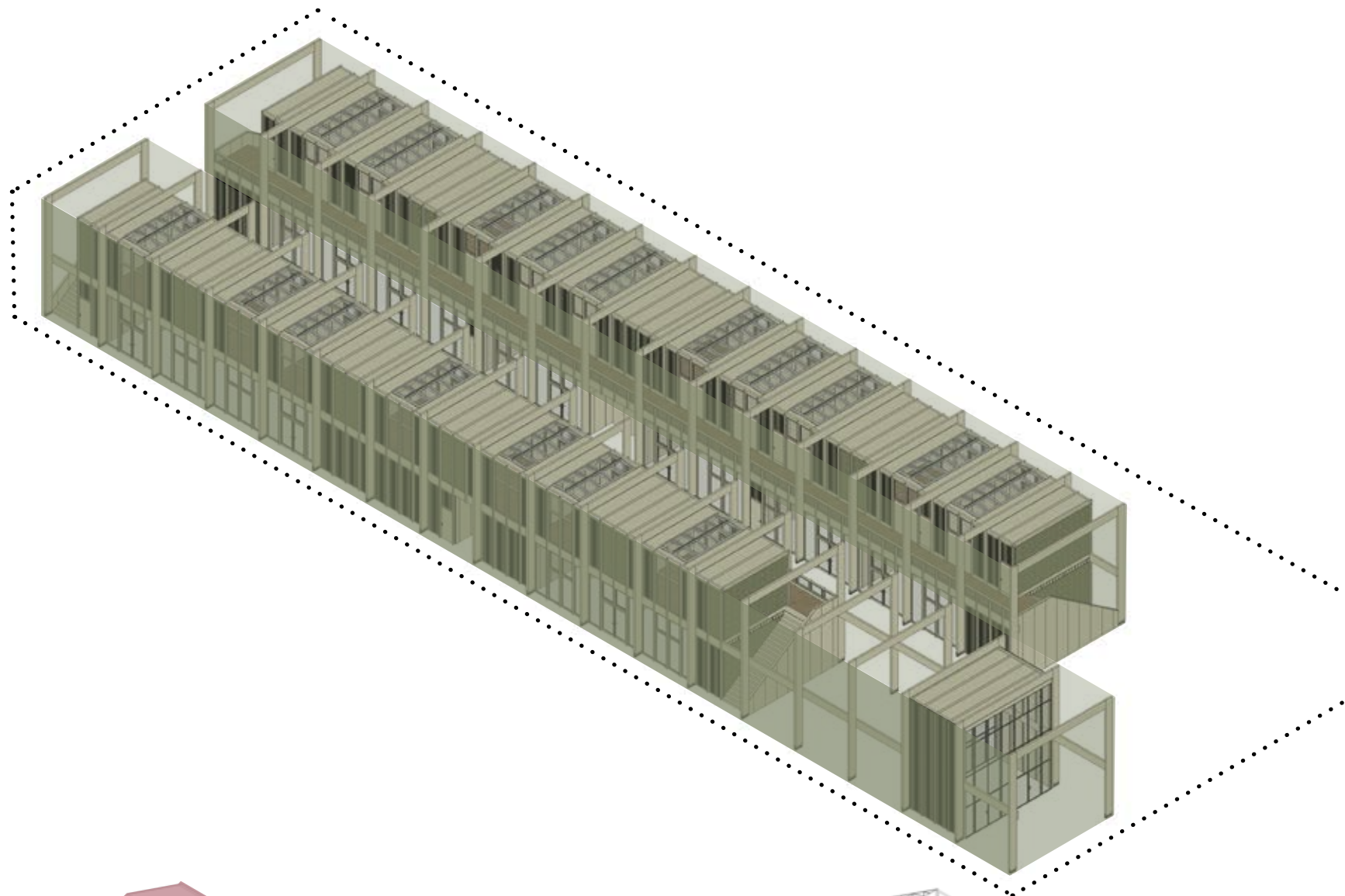


NDSM Loods

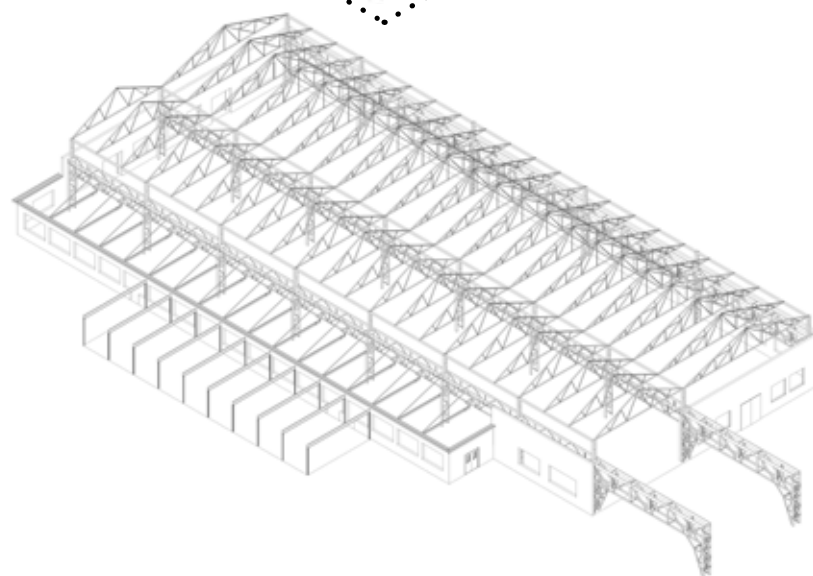
Stichting Kinetisch Noord



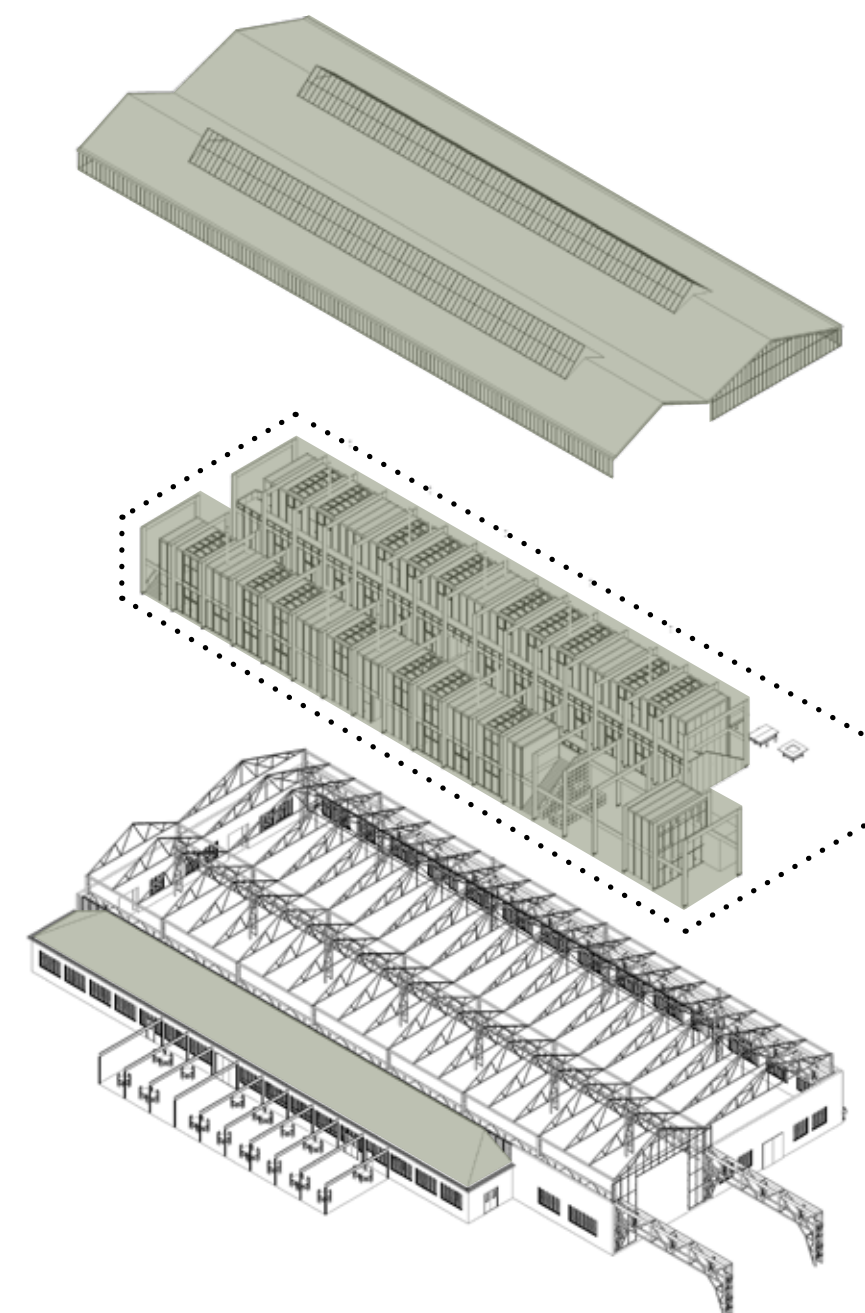
NDSM-Plein 85, Amsterdam



Remove

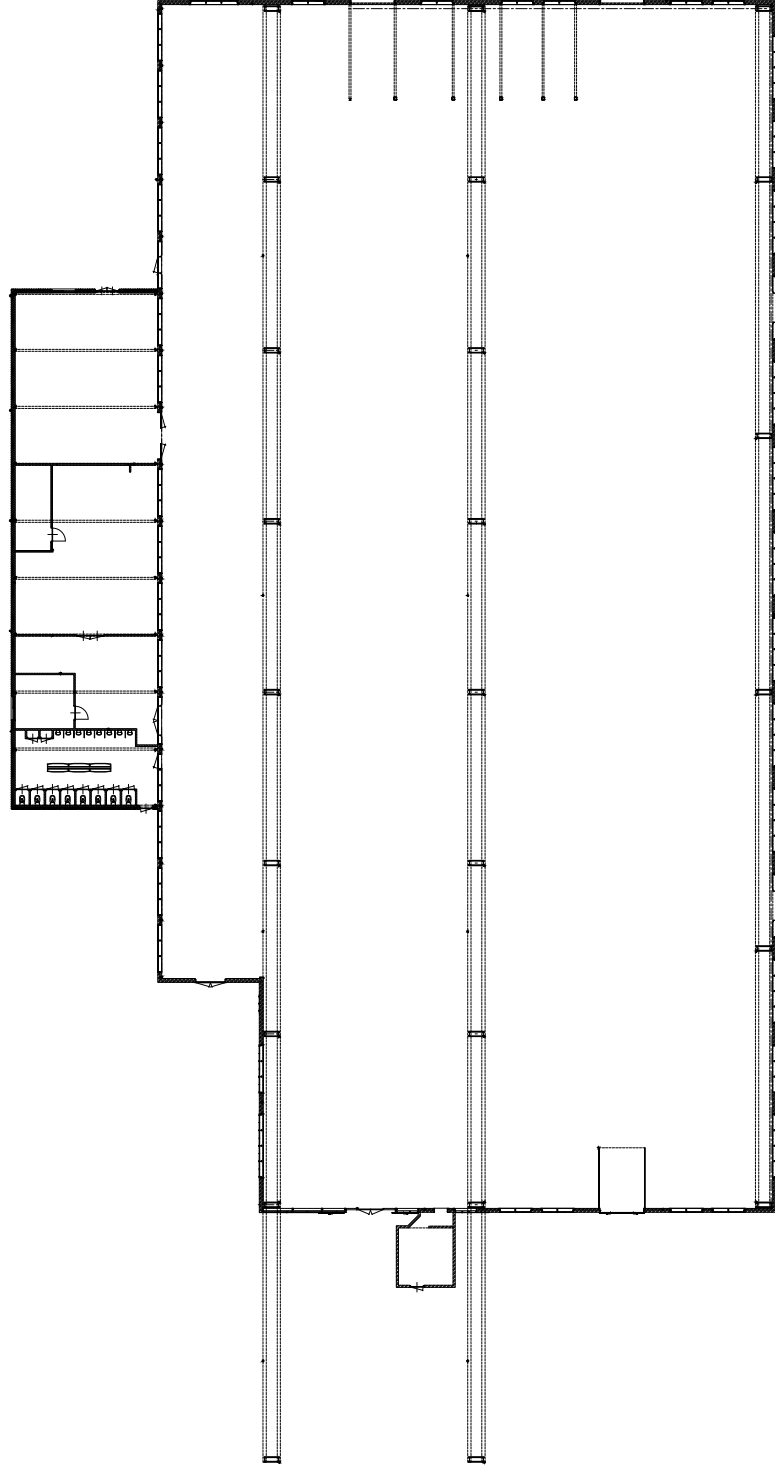


Preserve

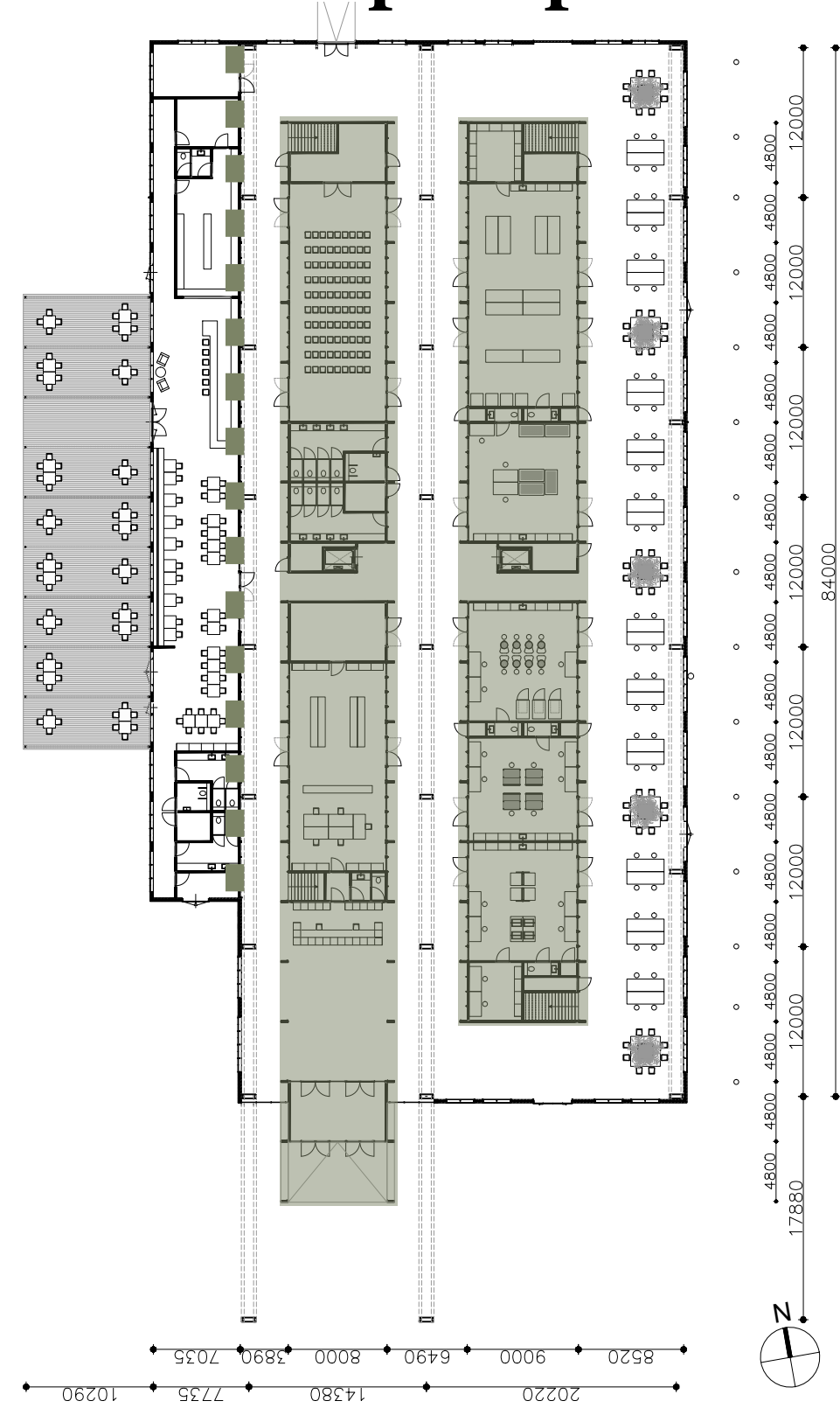


Add

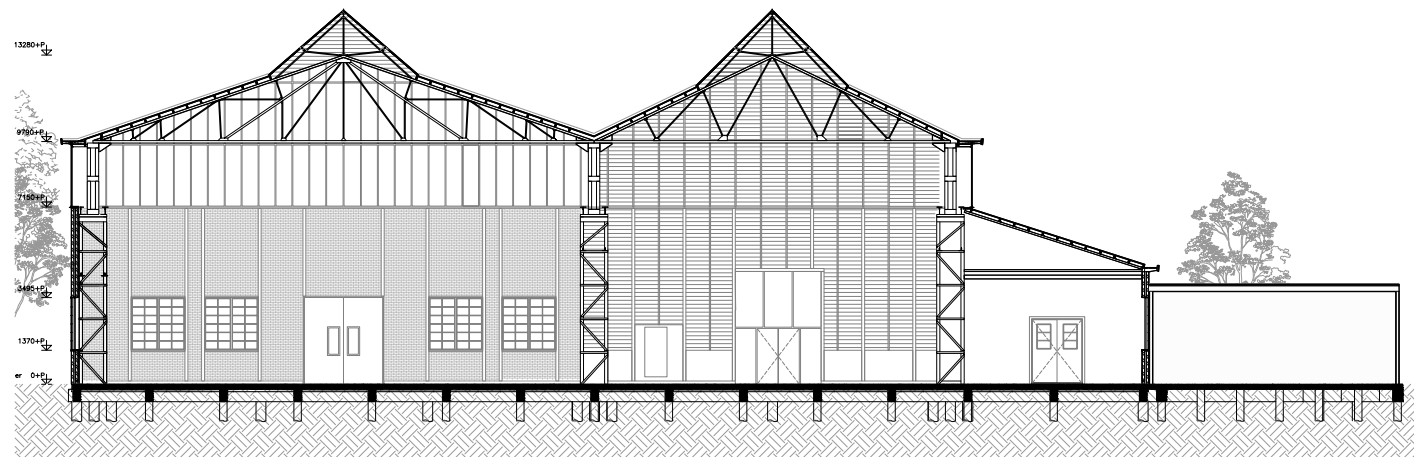
Original space plan



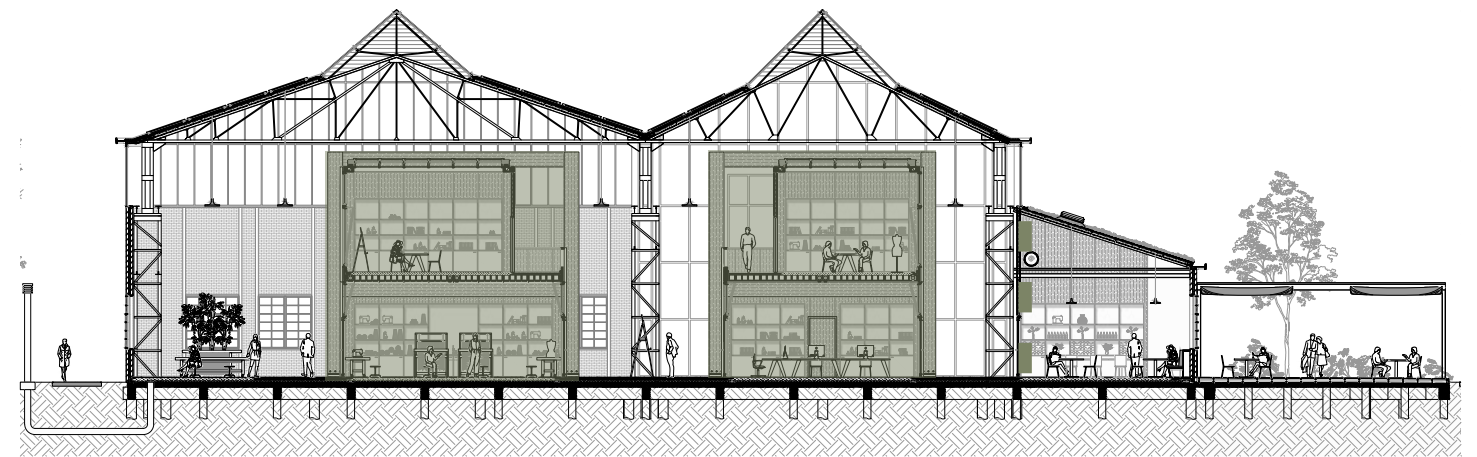
New space plan



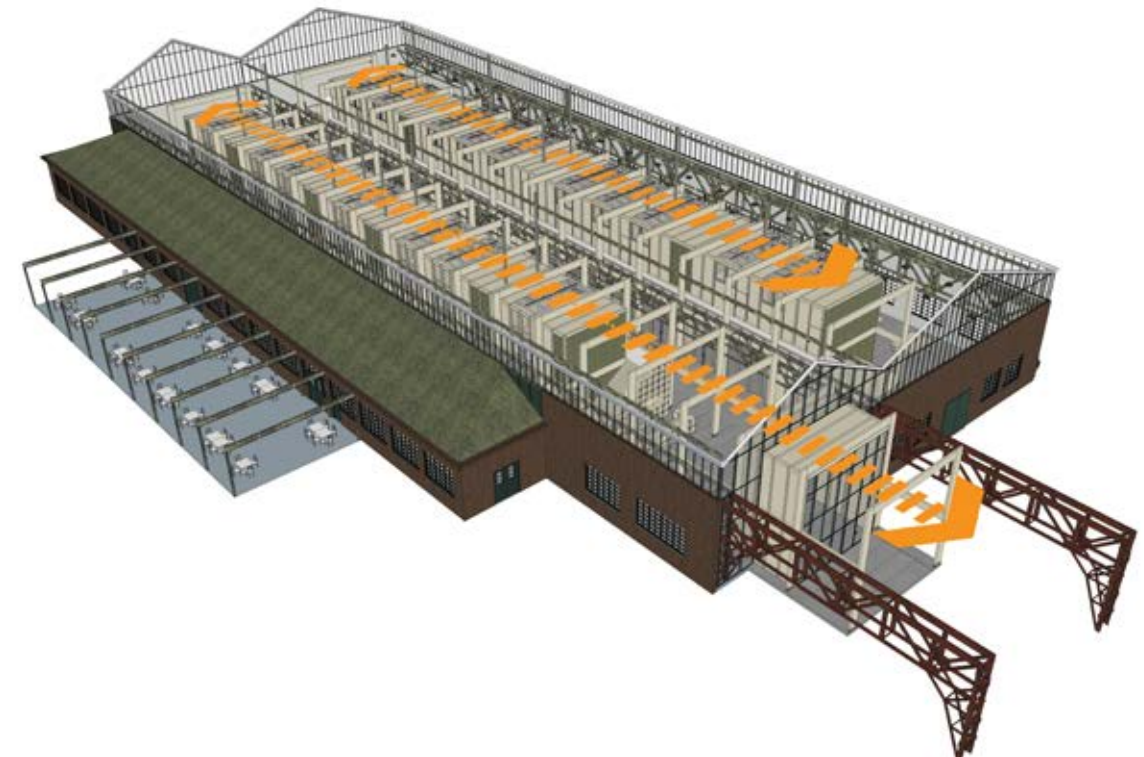
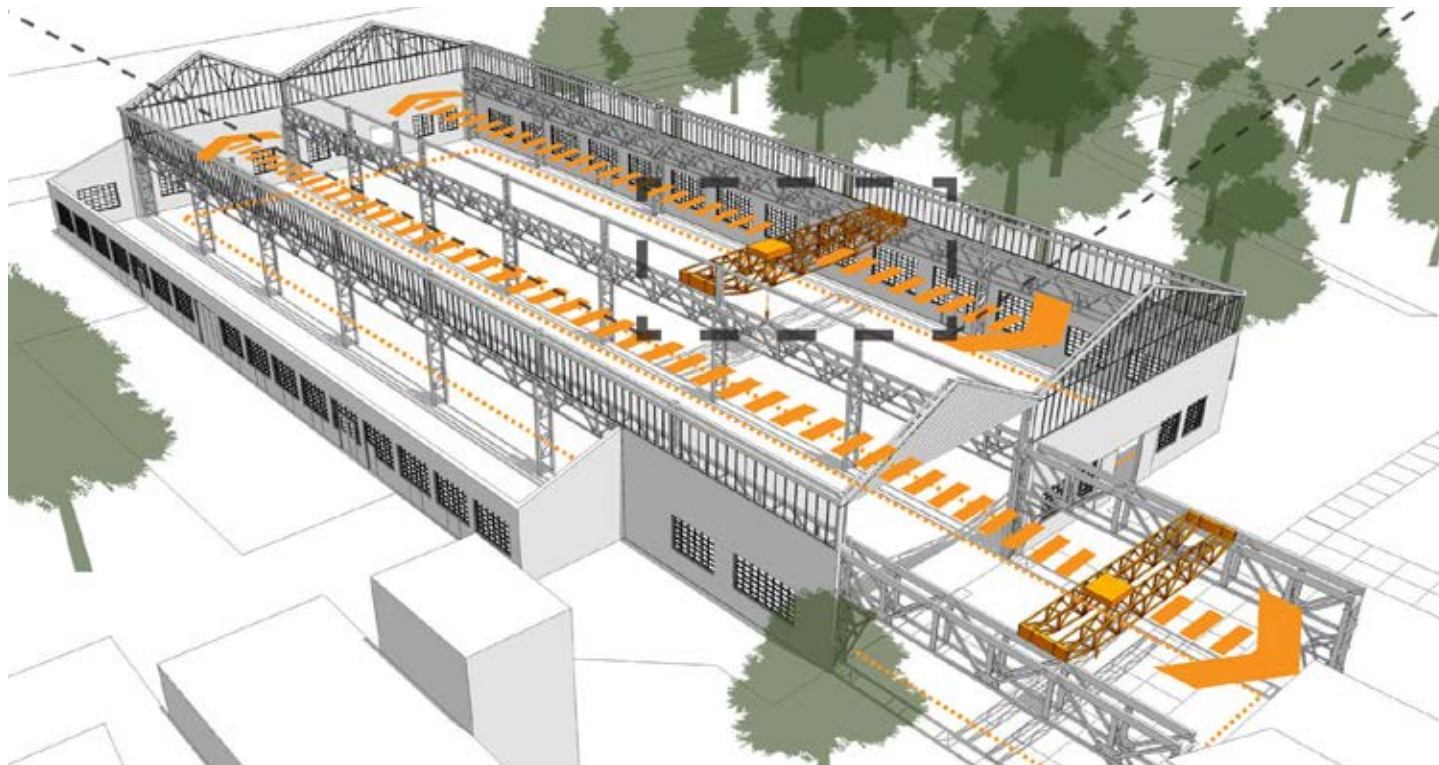
Original section



New section



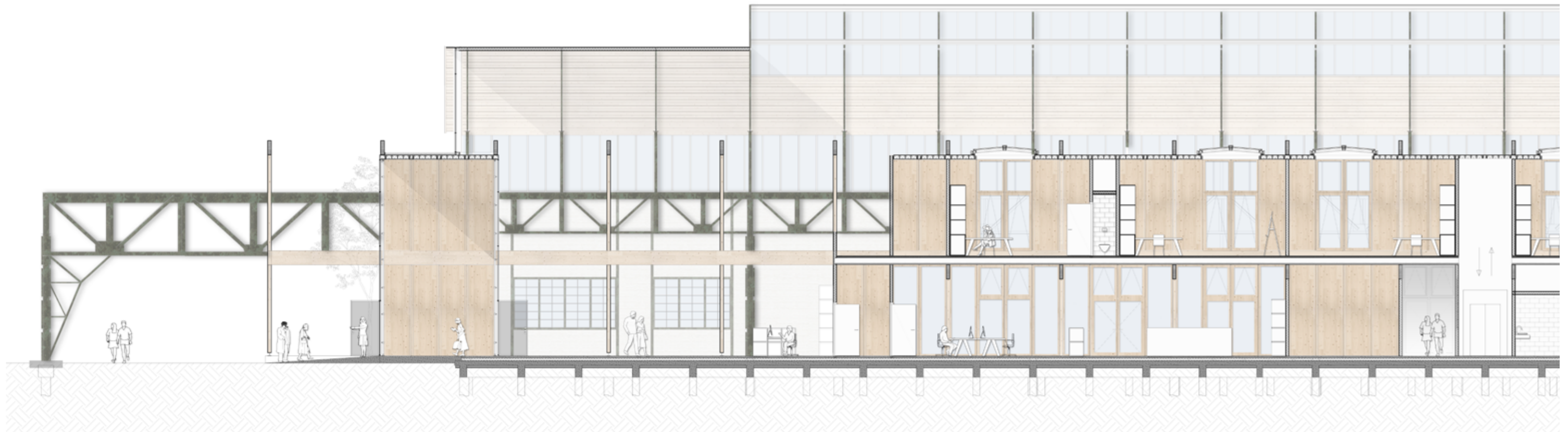
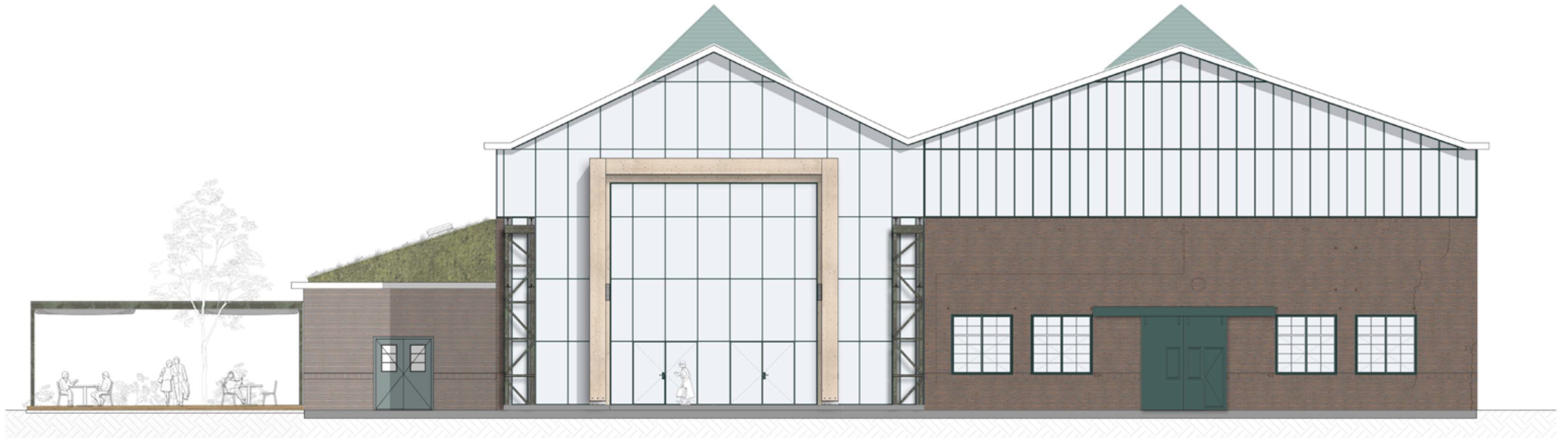
Referring to crane tracks



2 Design Existing South facade

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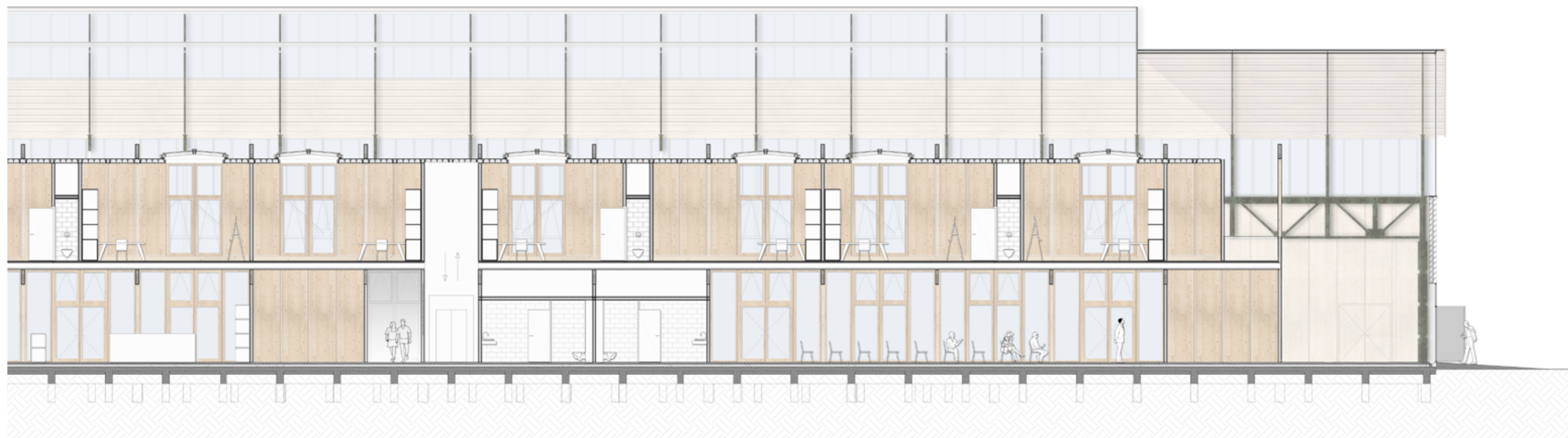




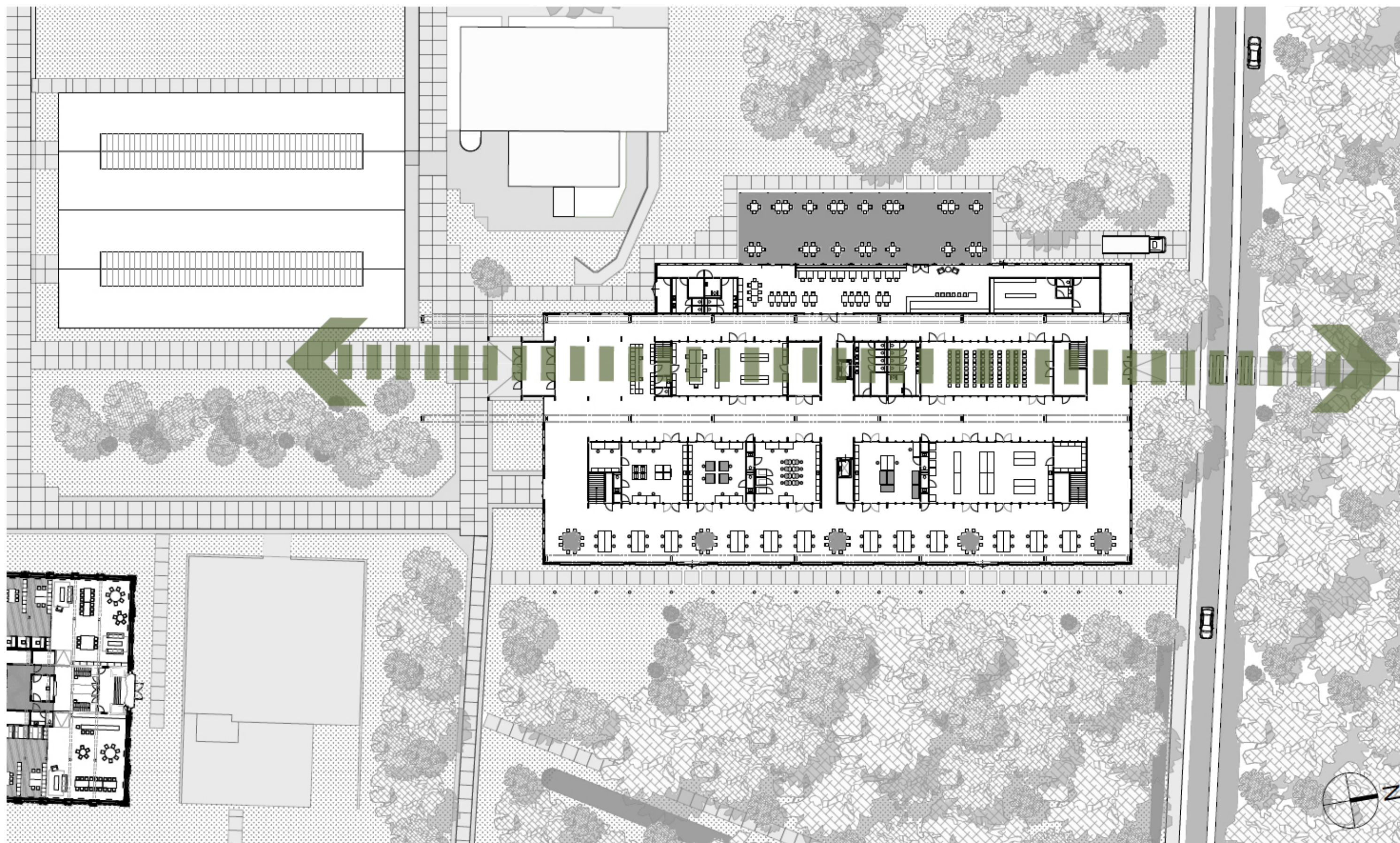
New main entrance



New entrance North facade

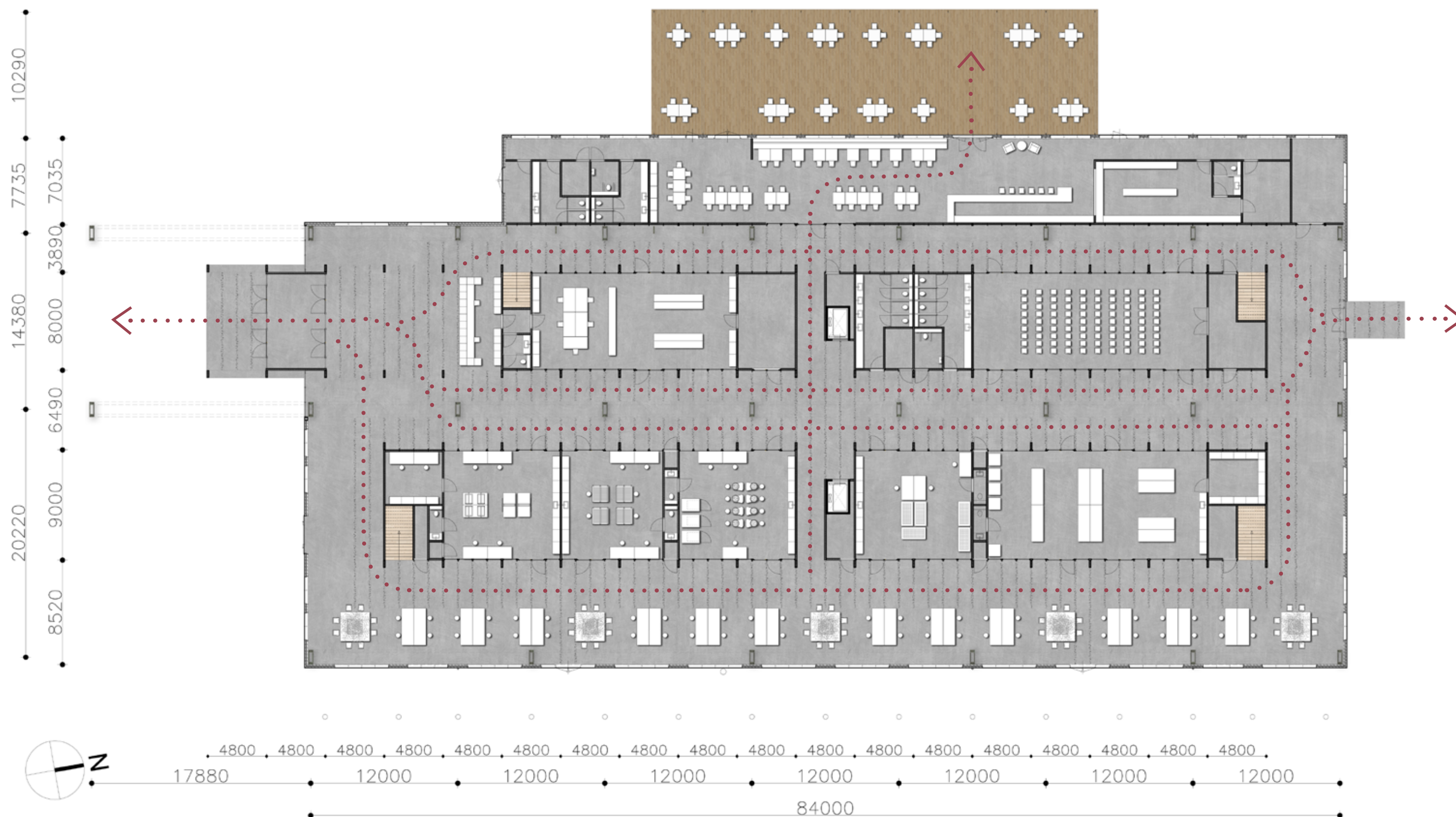


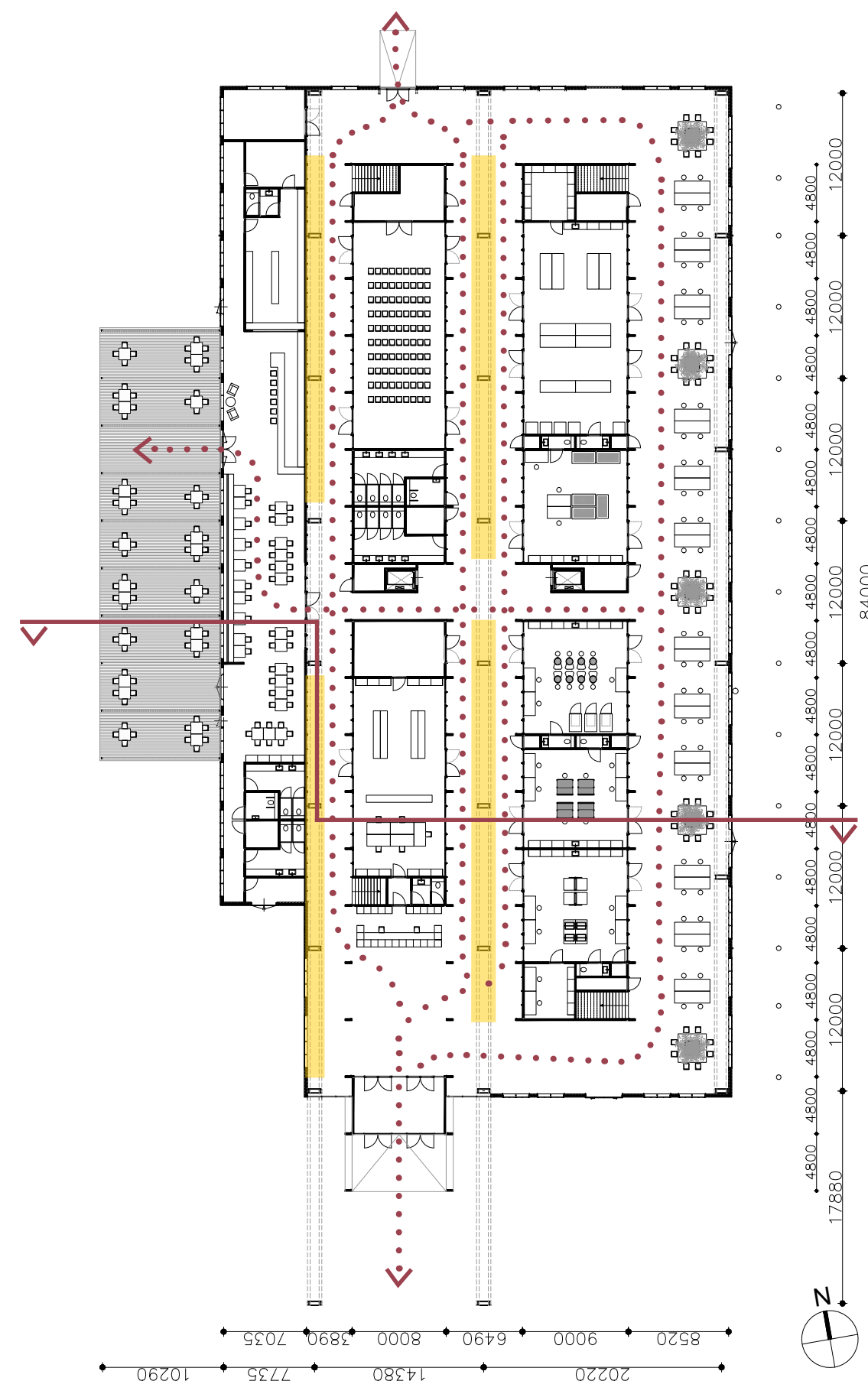
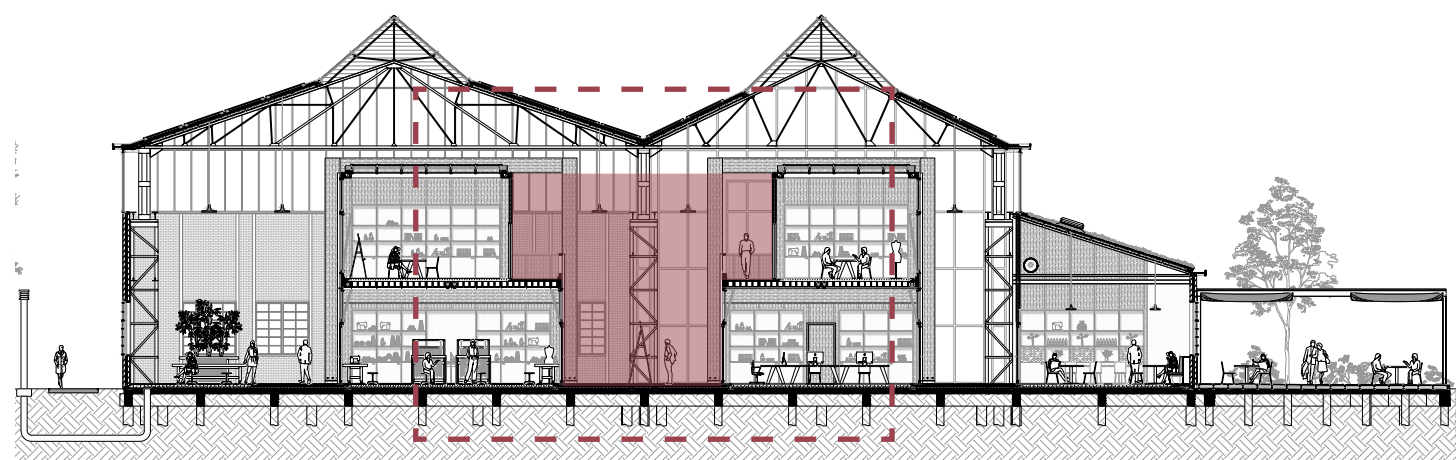
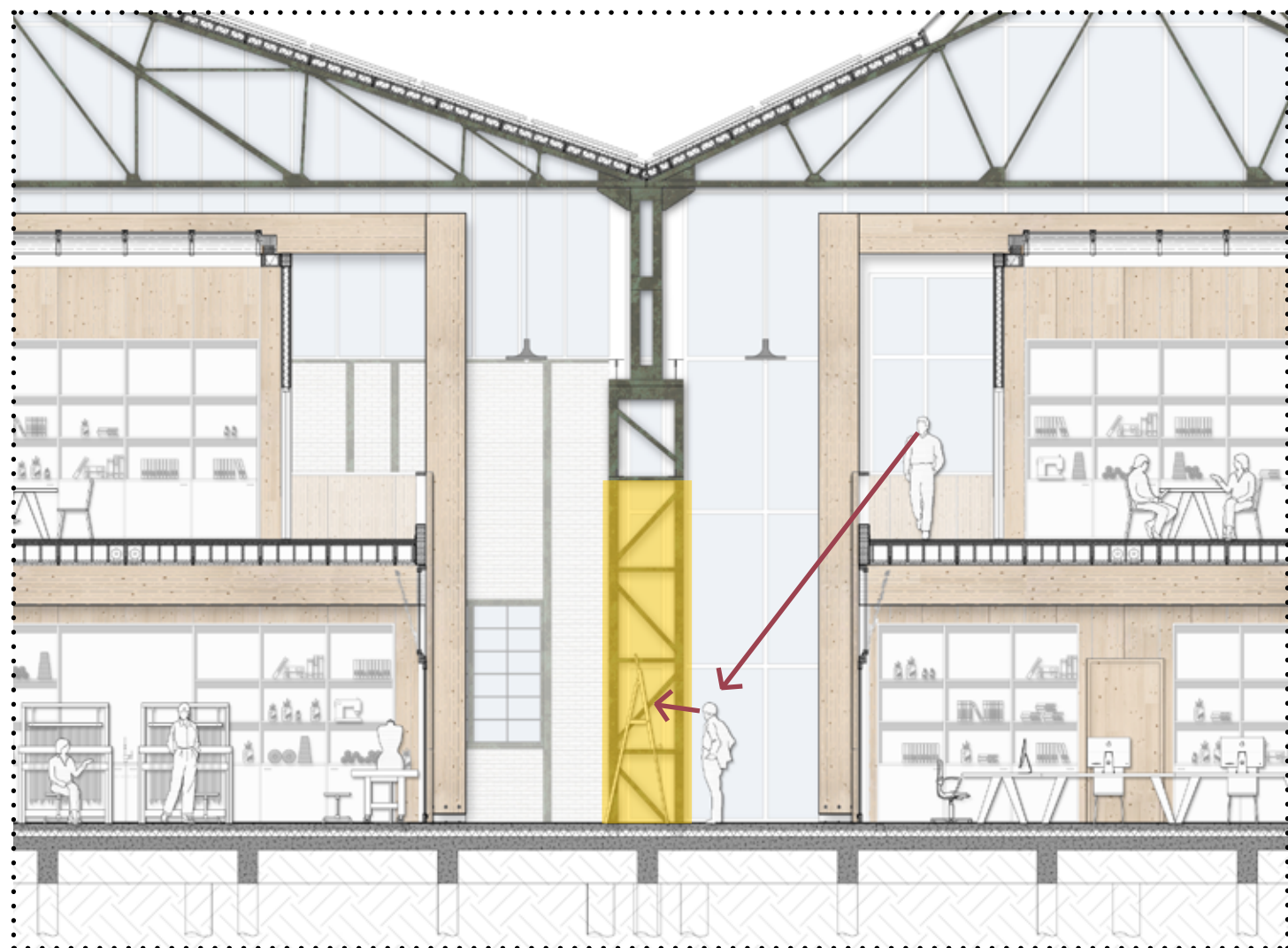
New connection



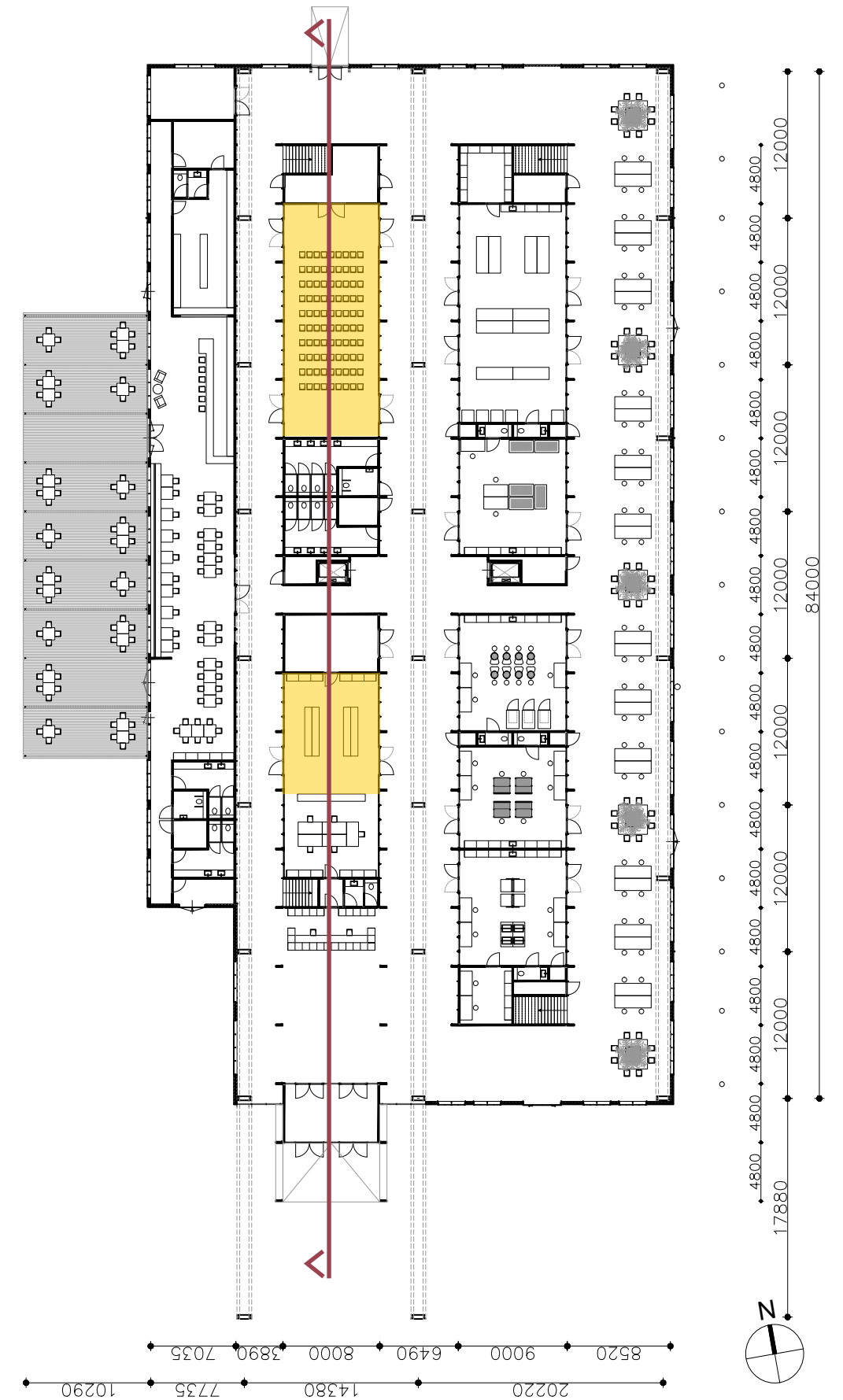
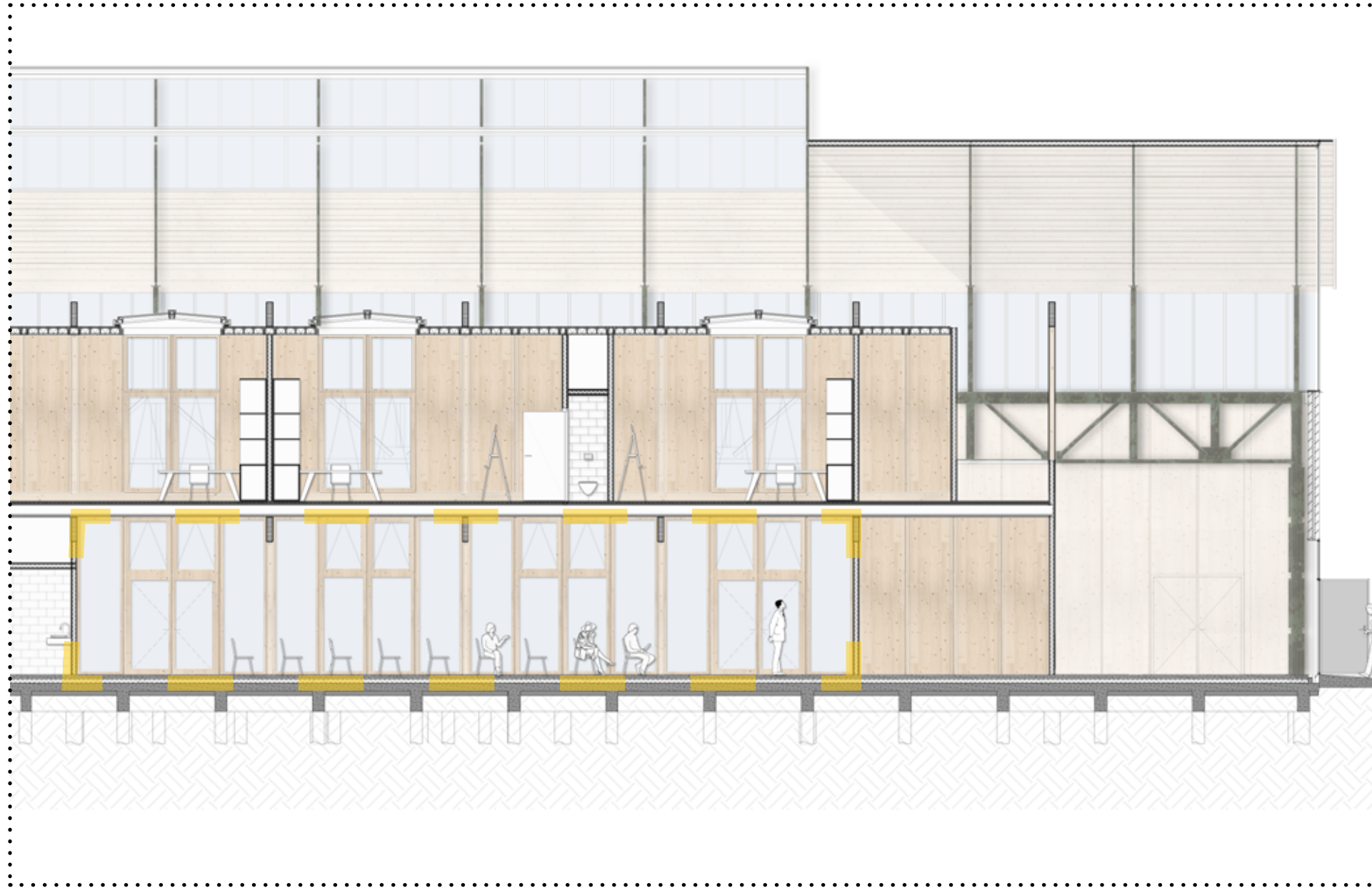
Entrance hall

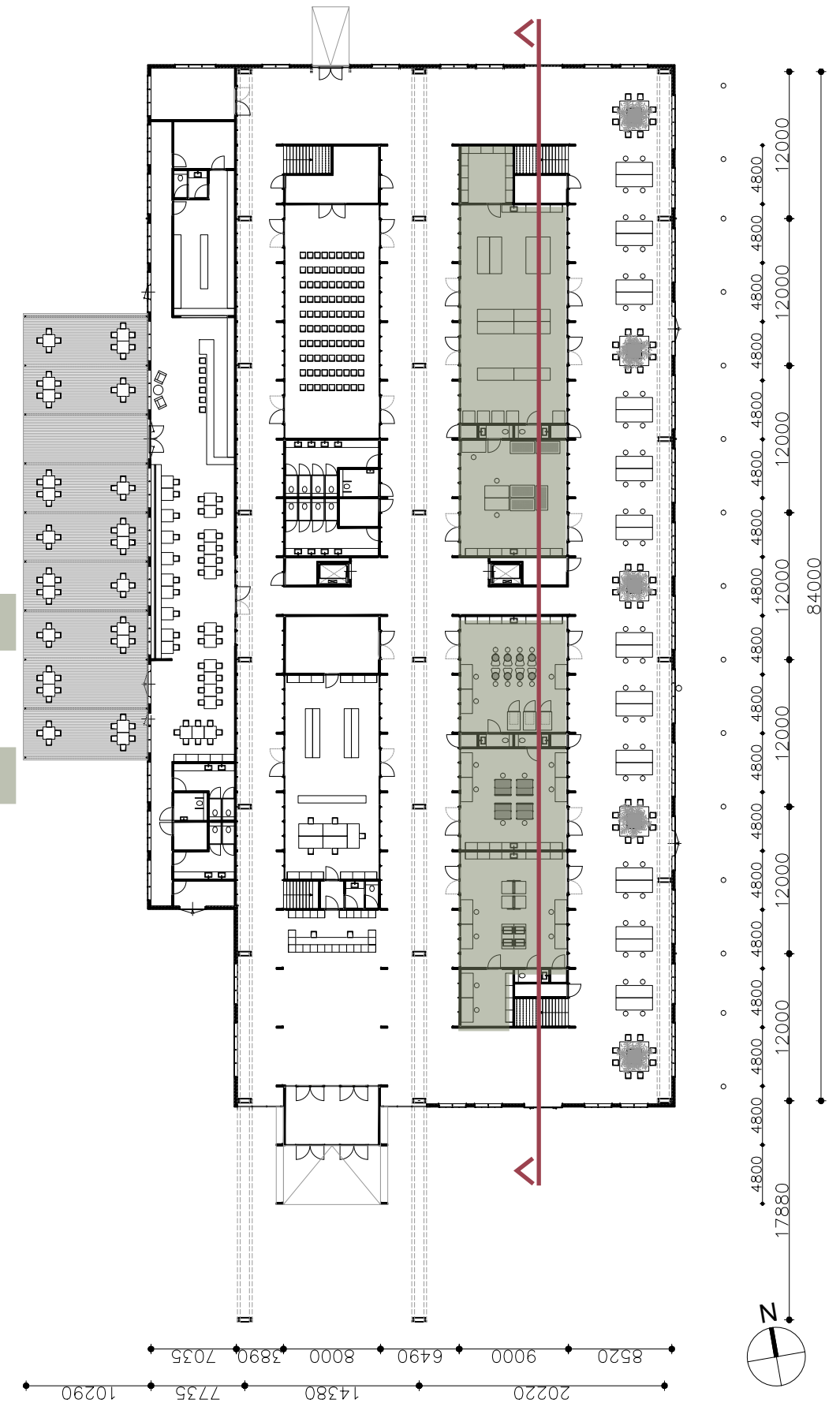
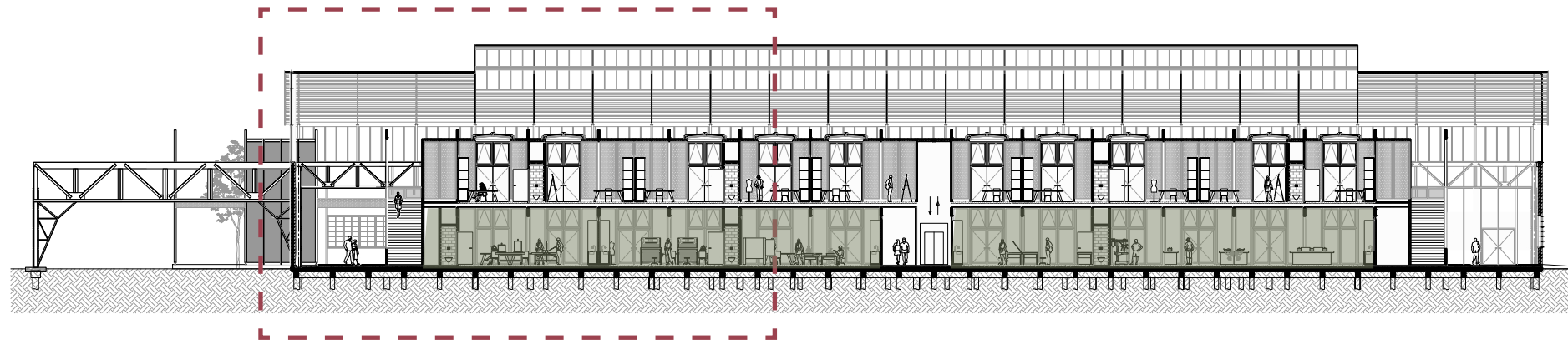
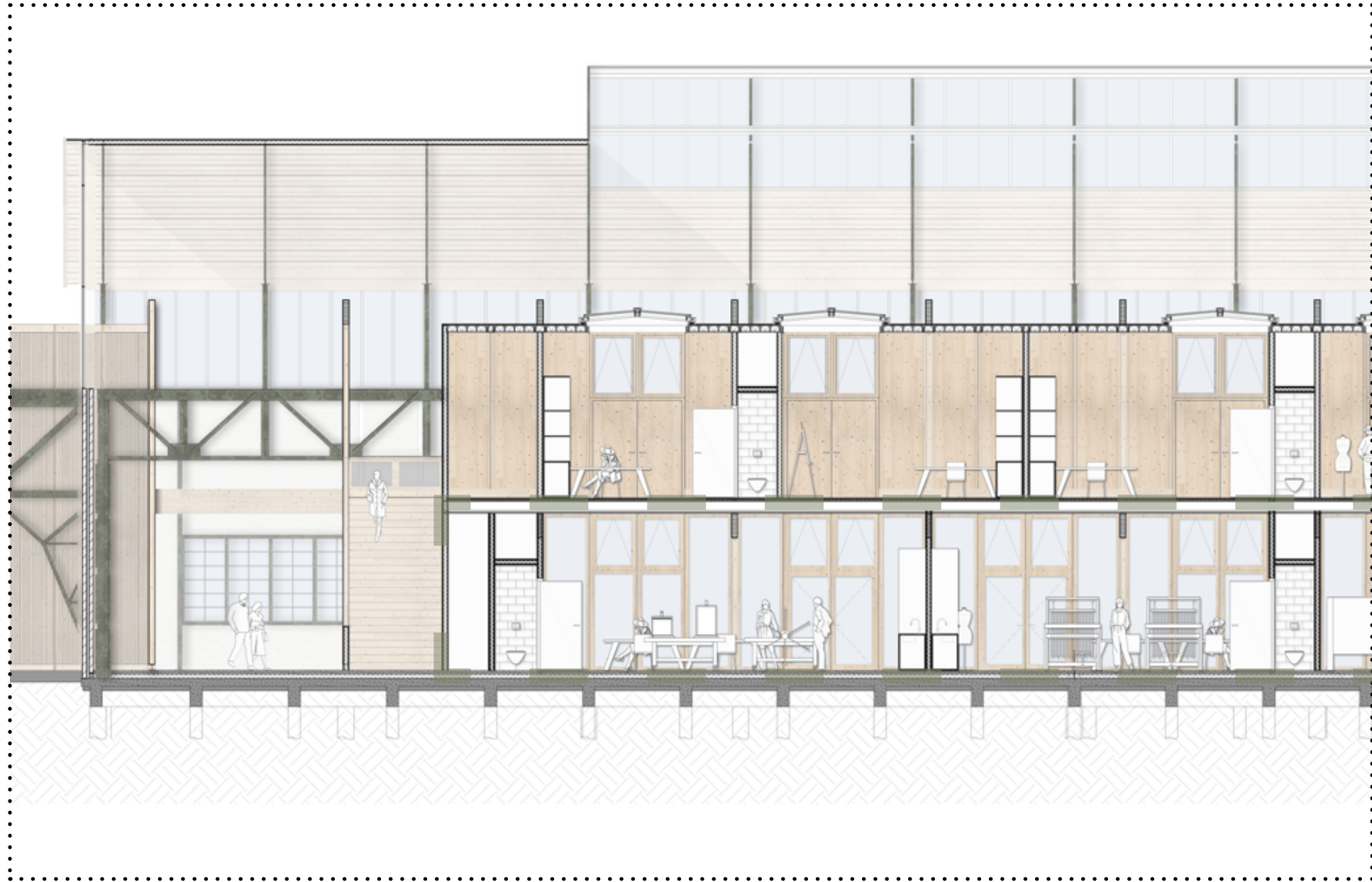




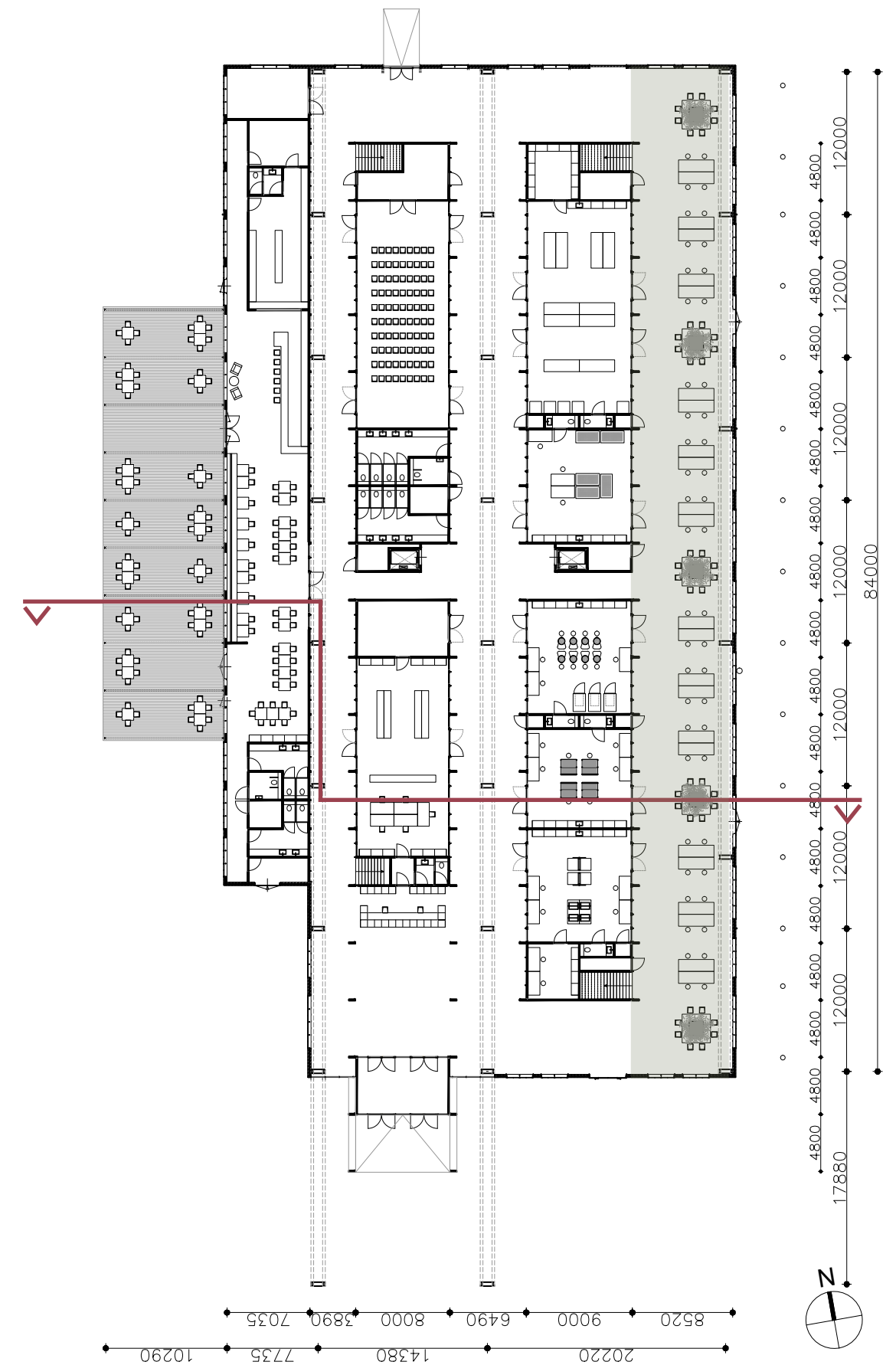
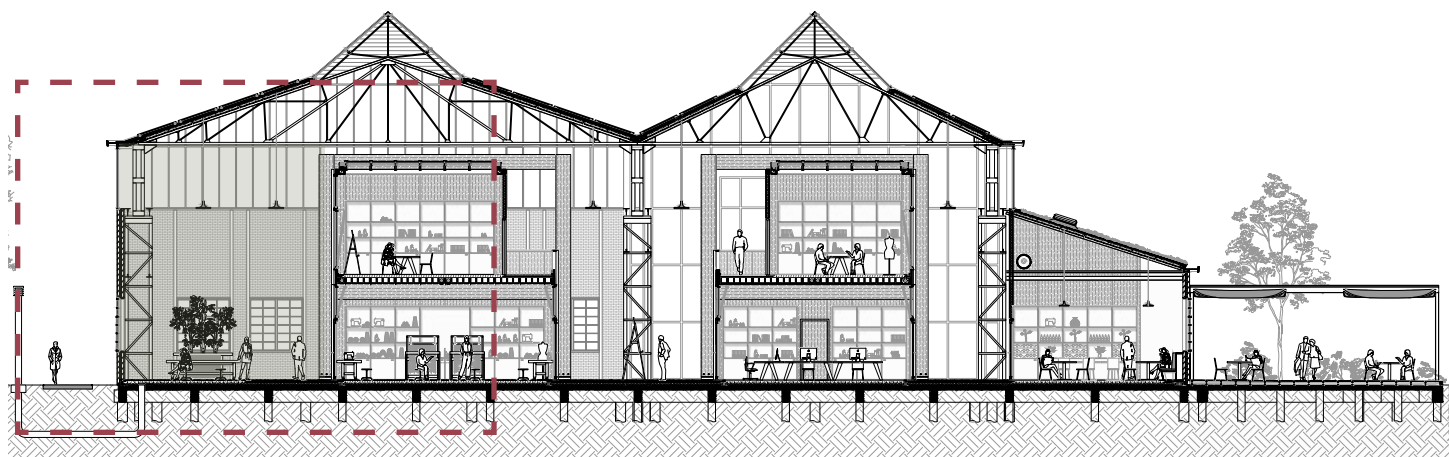
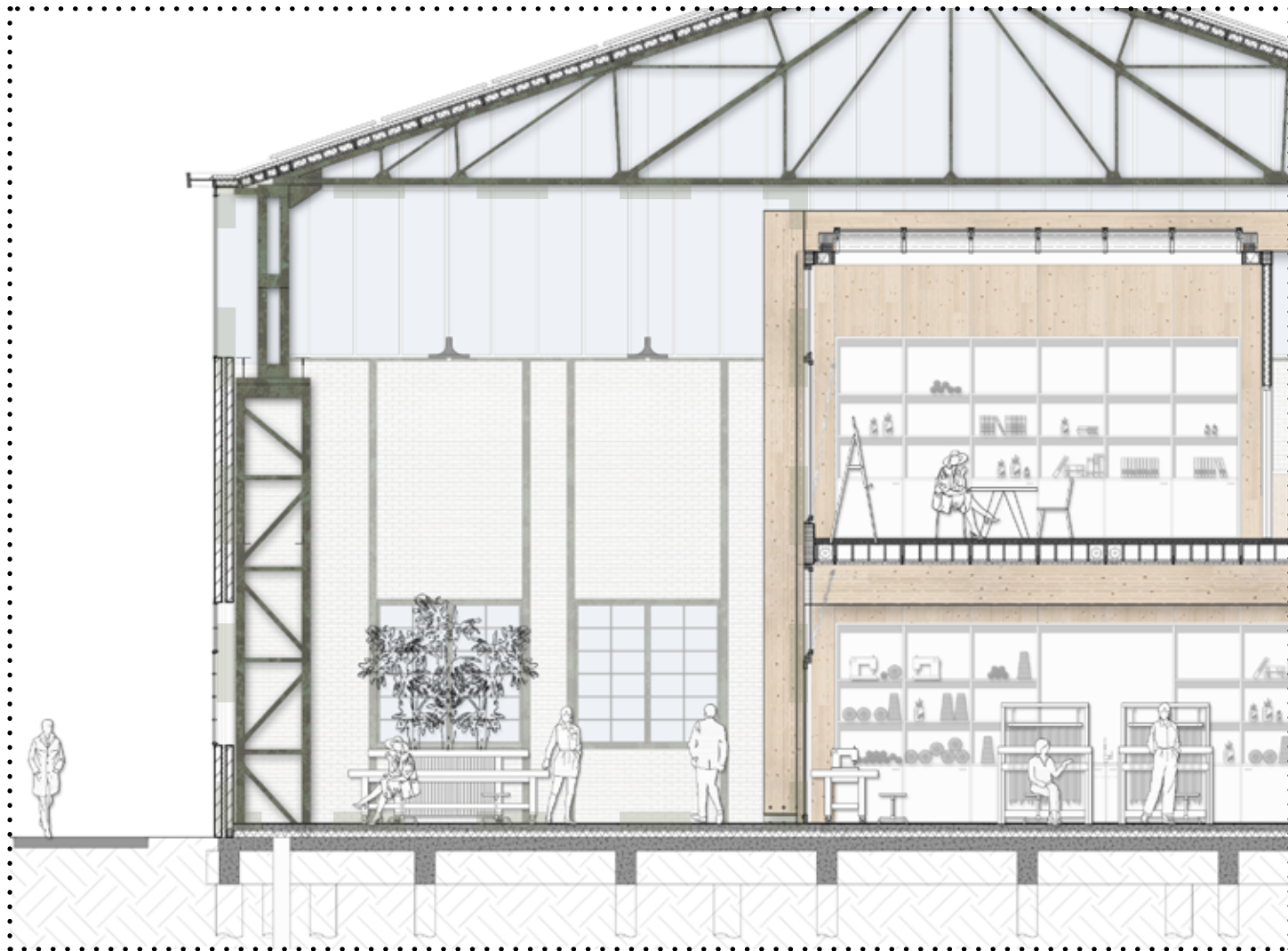








Design Collective event hall

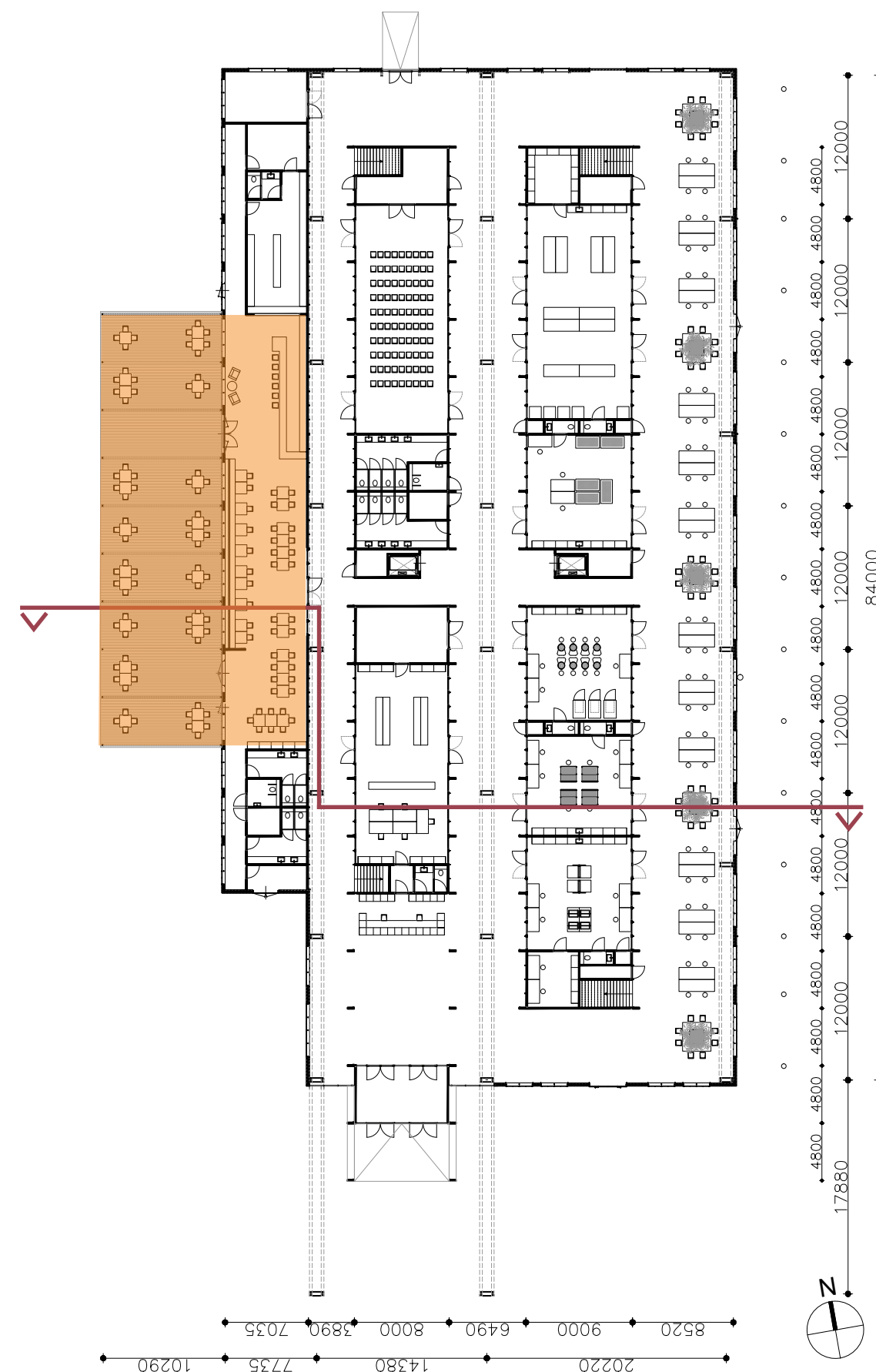


Collective event hall

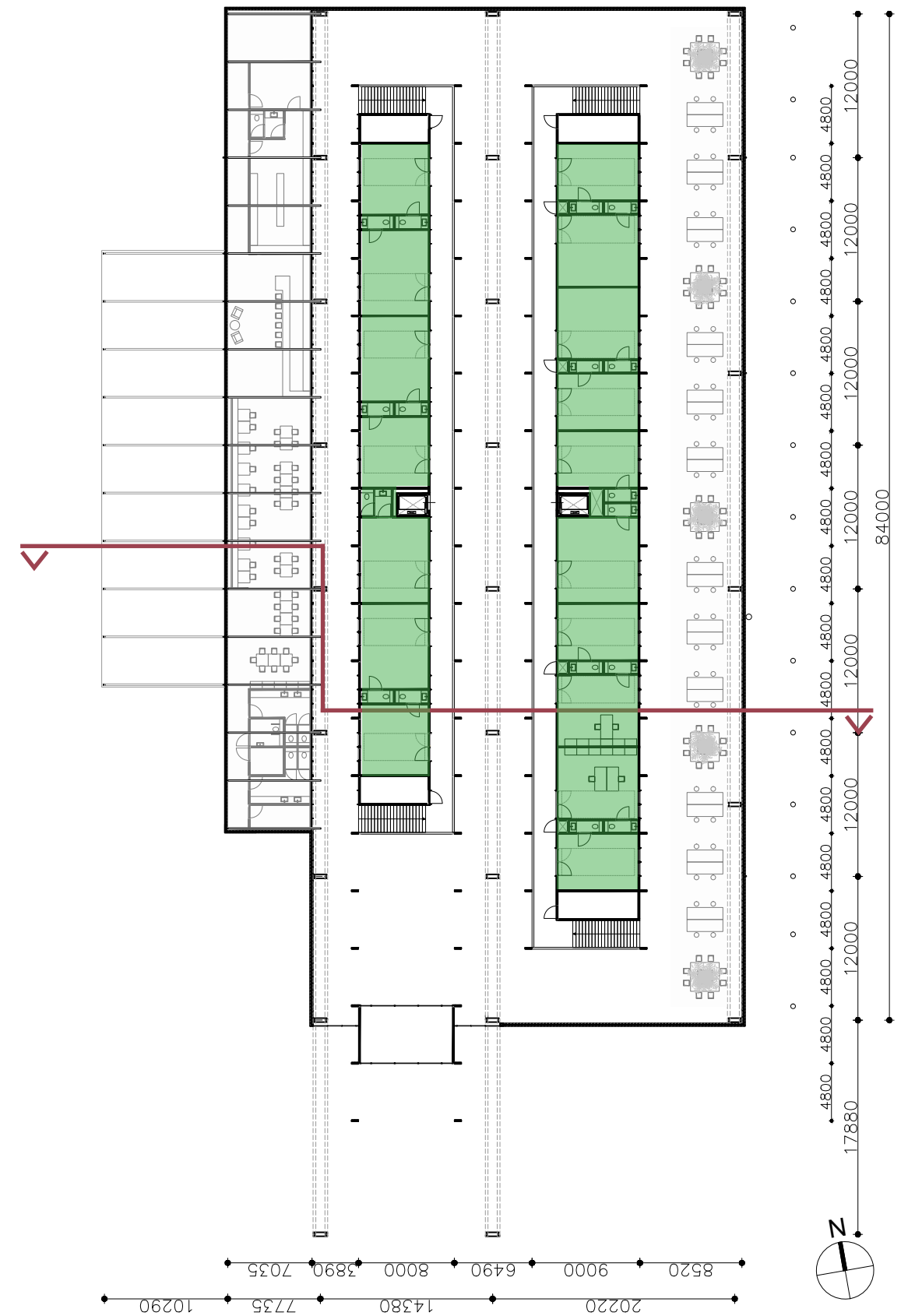
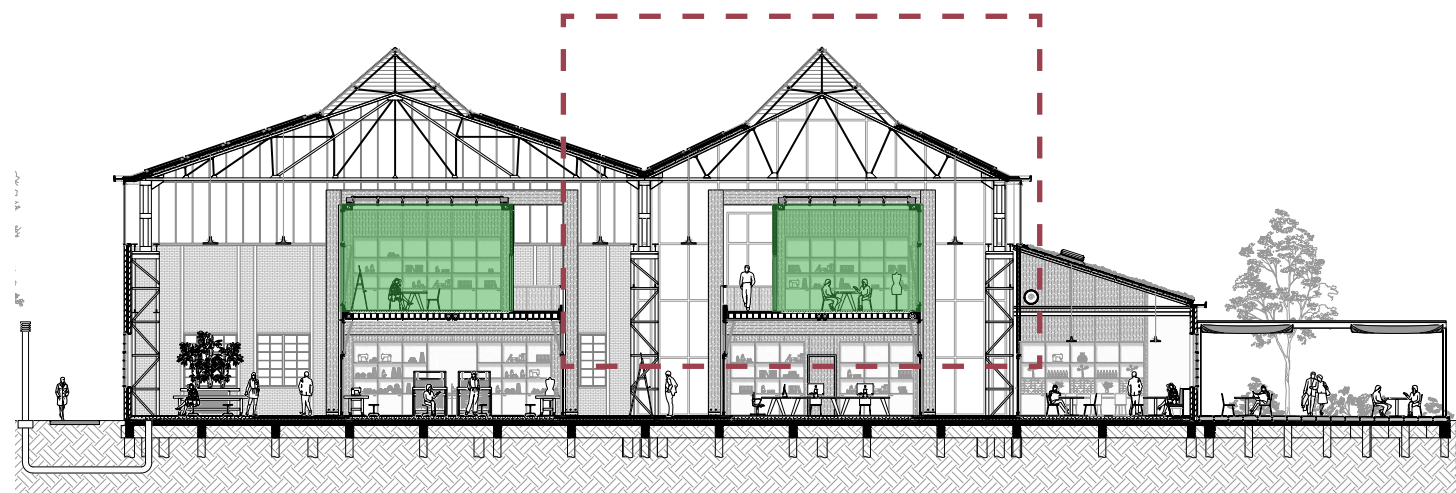
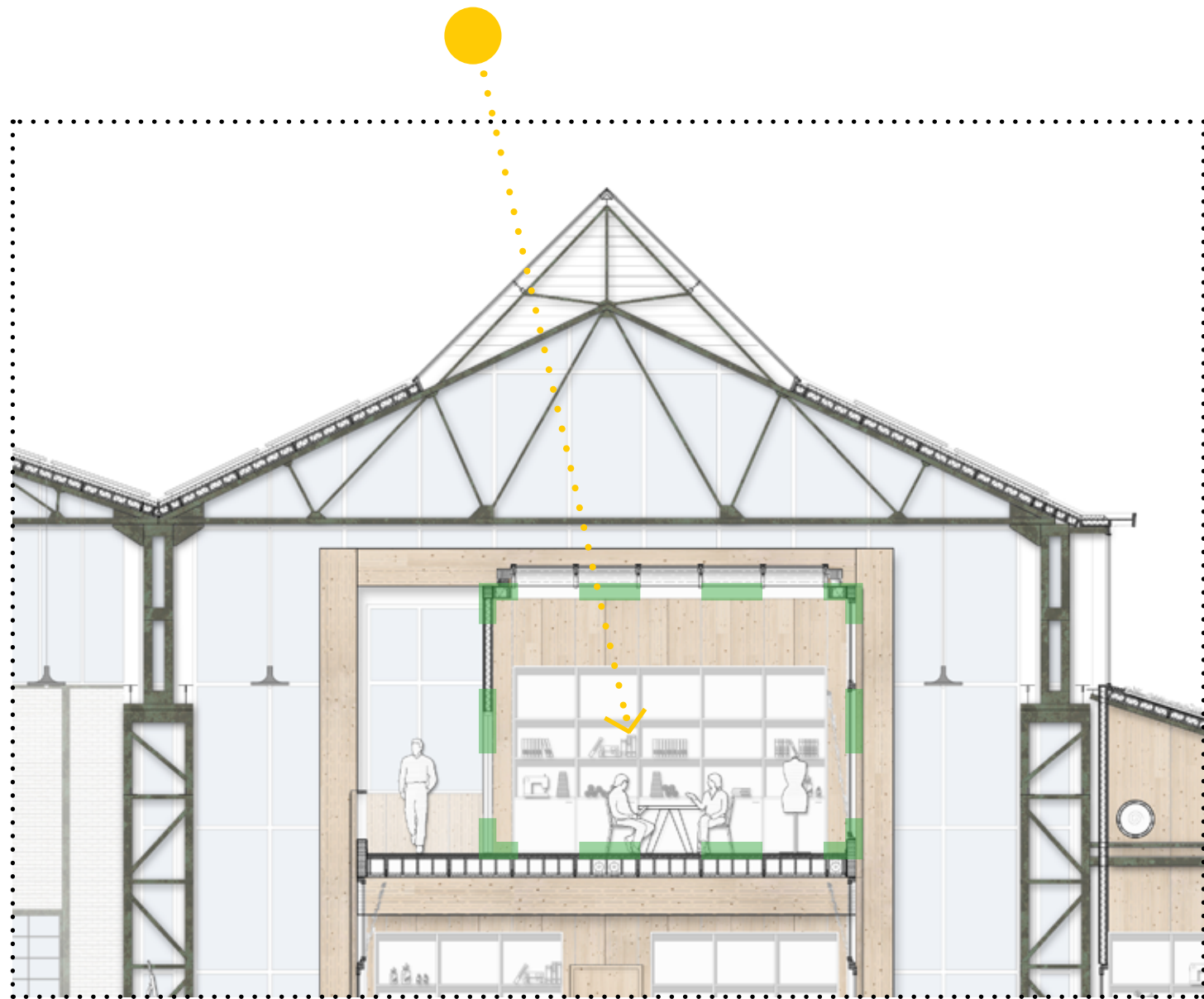


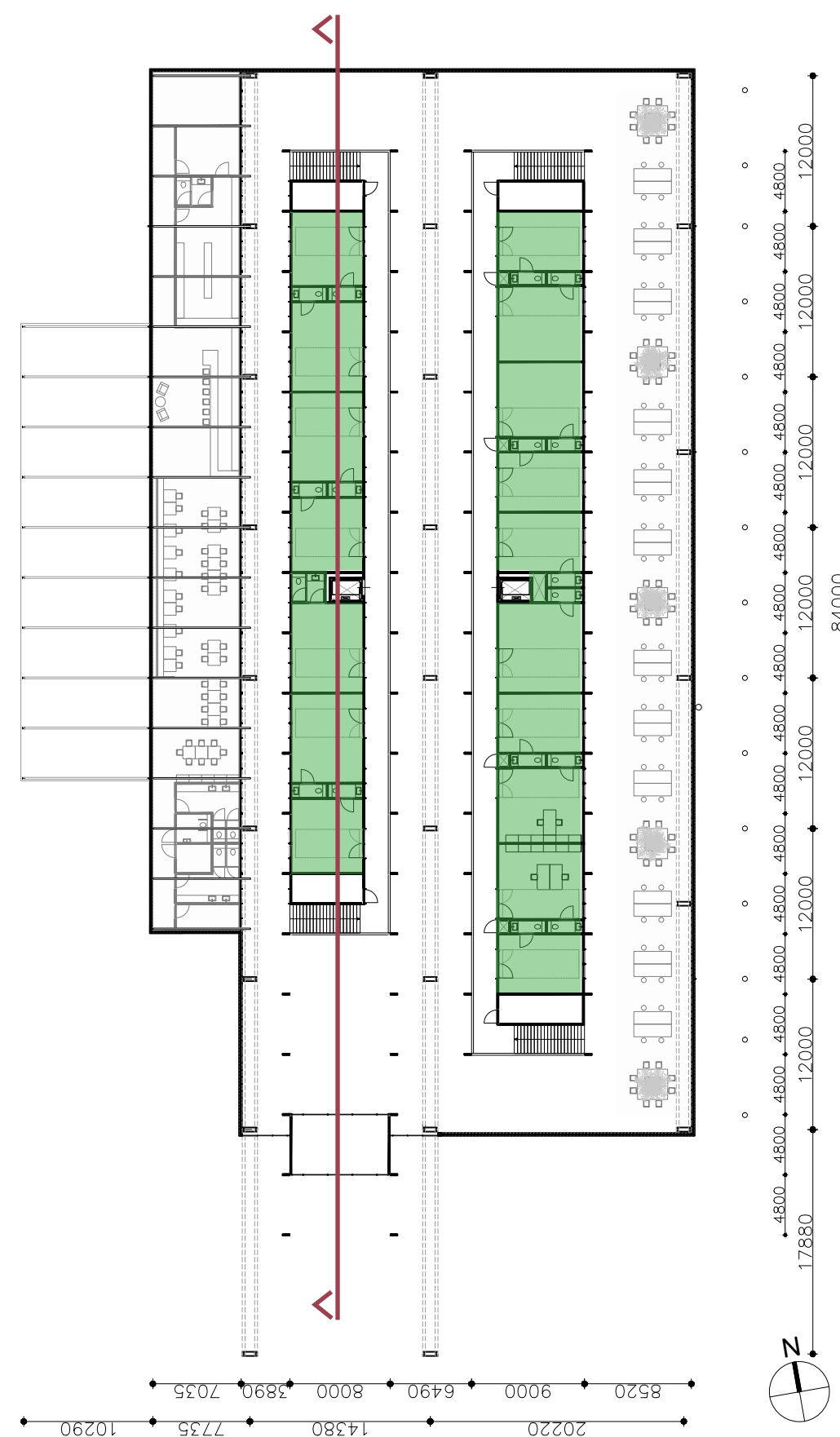
Collective event hall







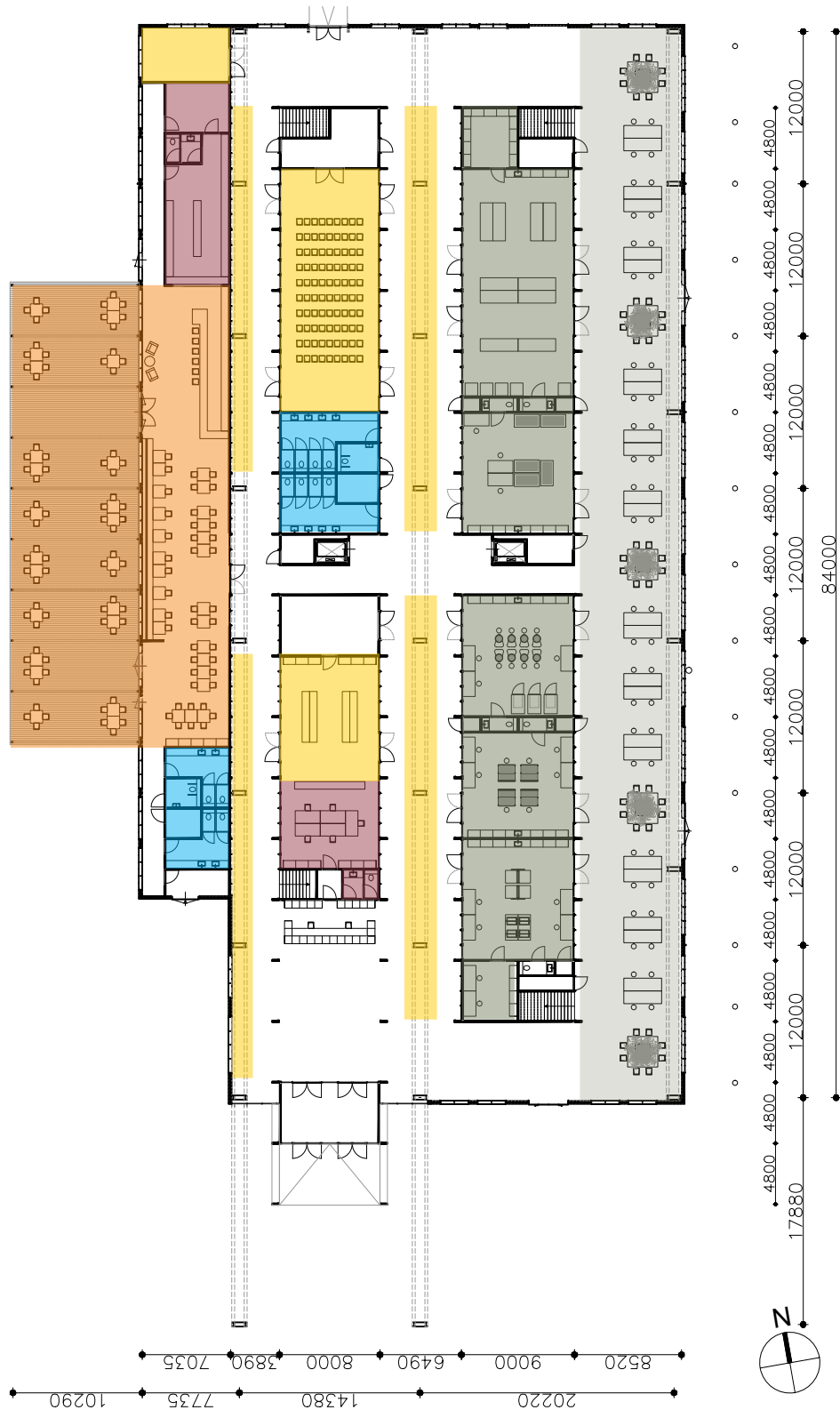






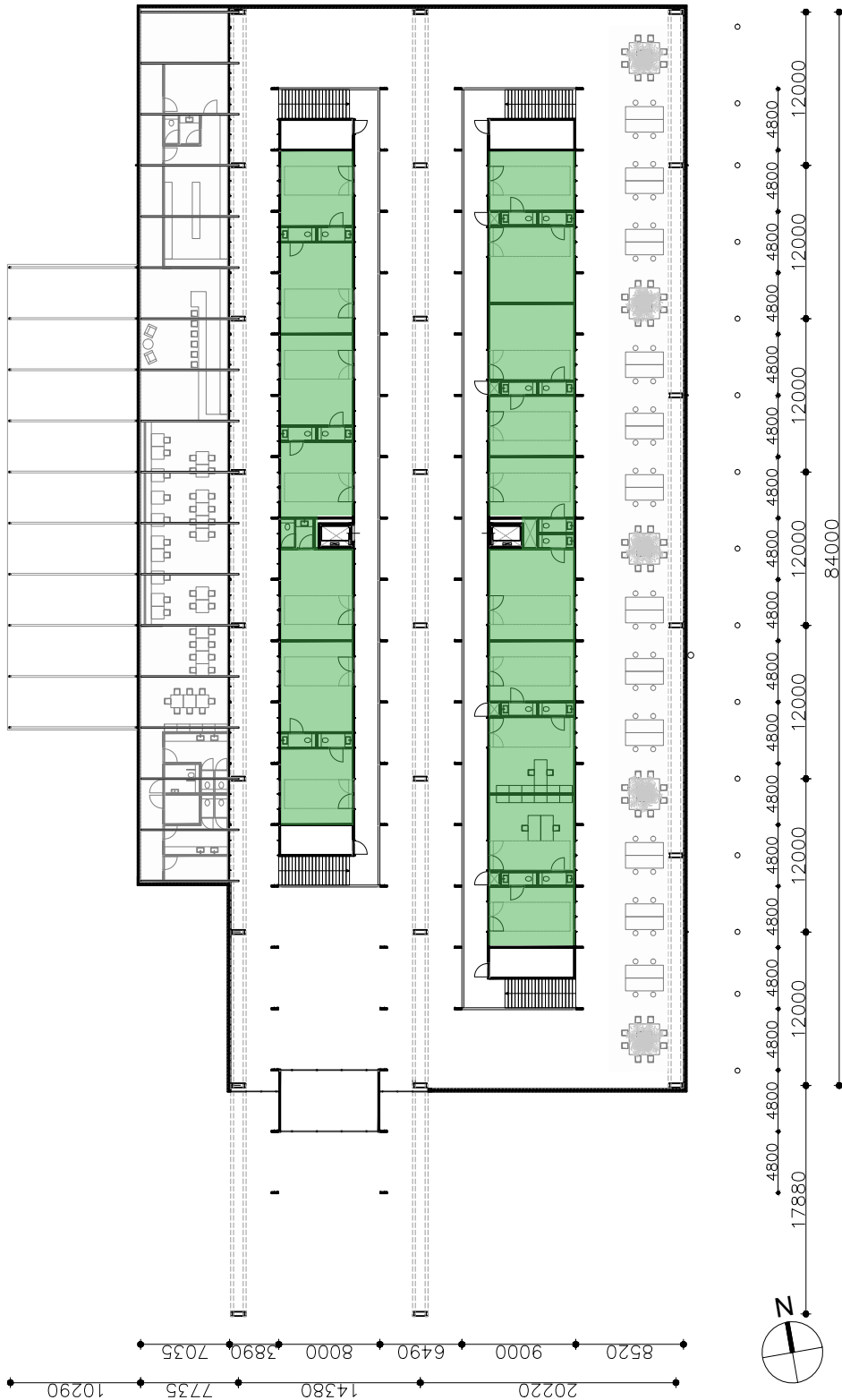
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- Management
- Event and exhibition space
- Craft workshops
- Collective workspace
- Restaurant and terrace
- Toilets

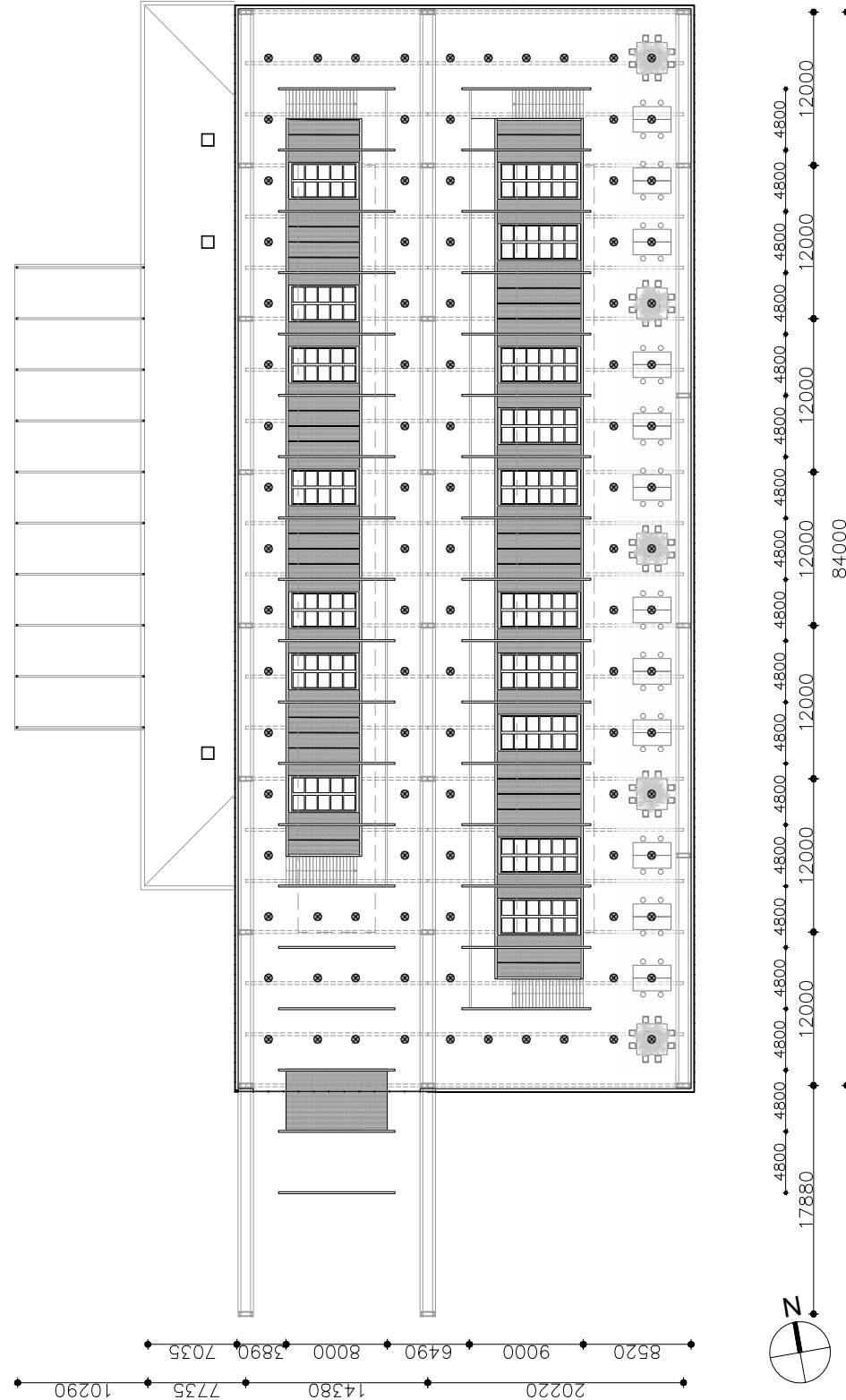


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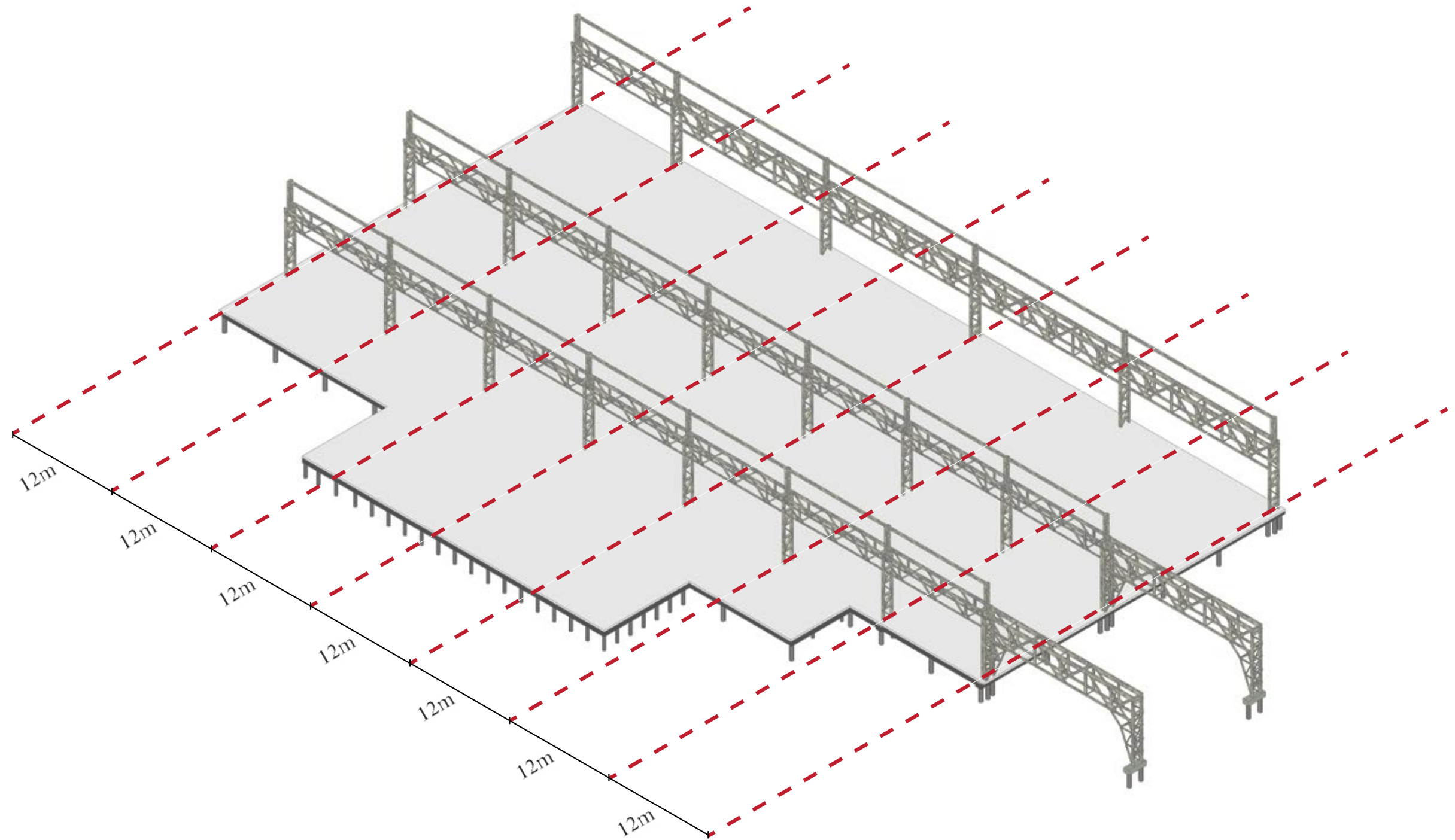
- Artists' studios



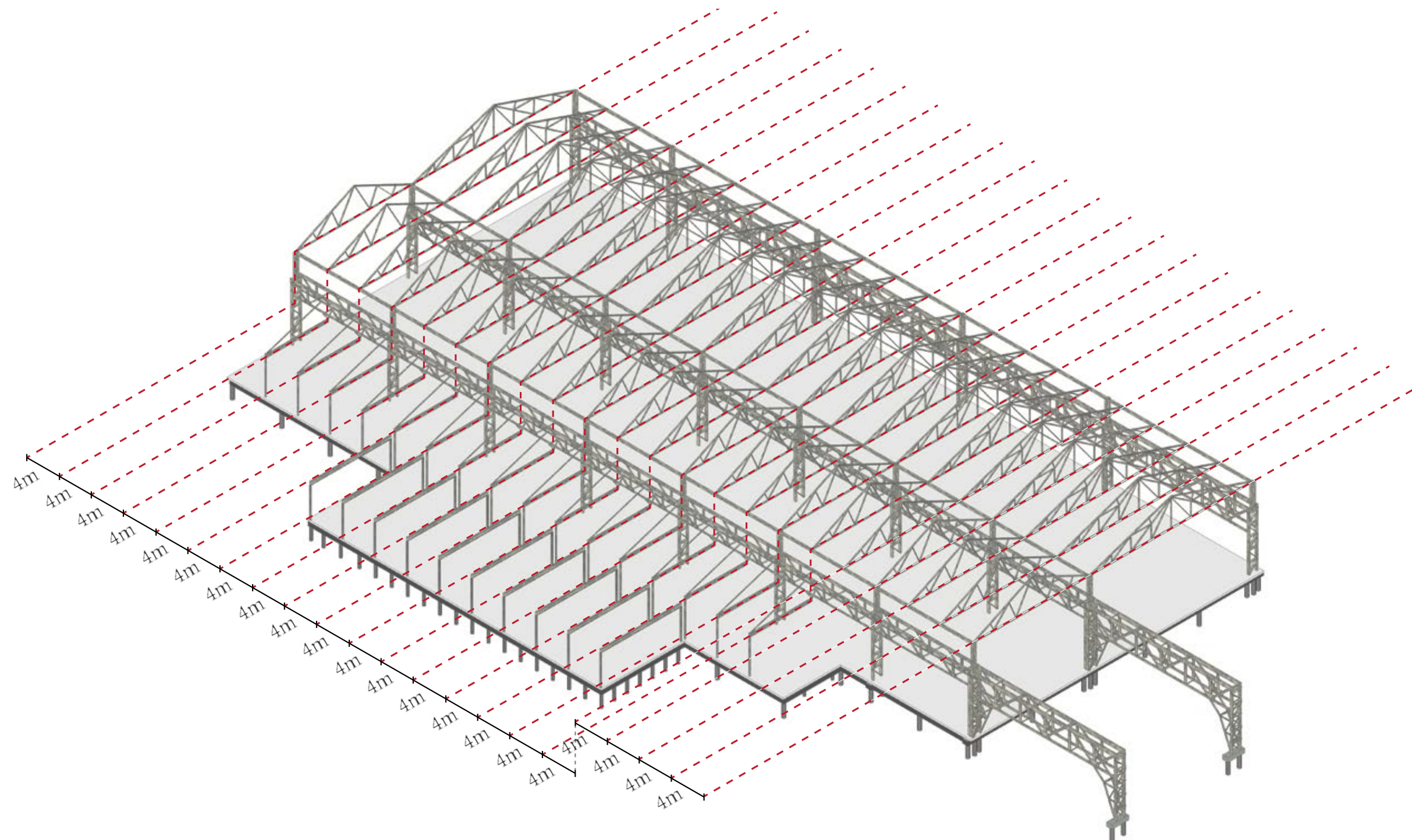
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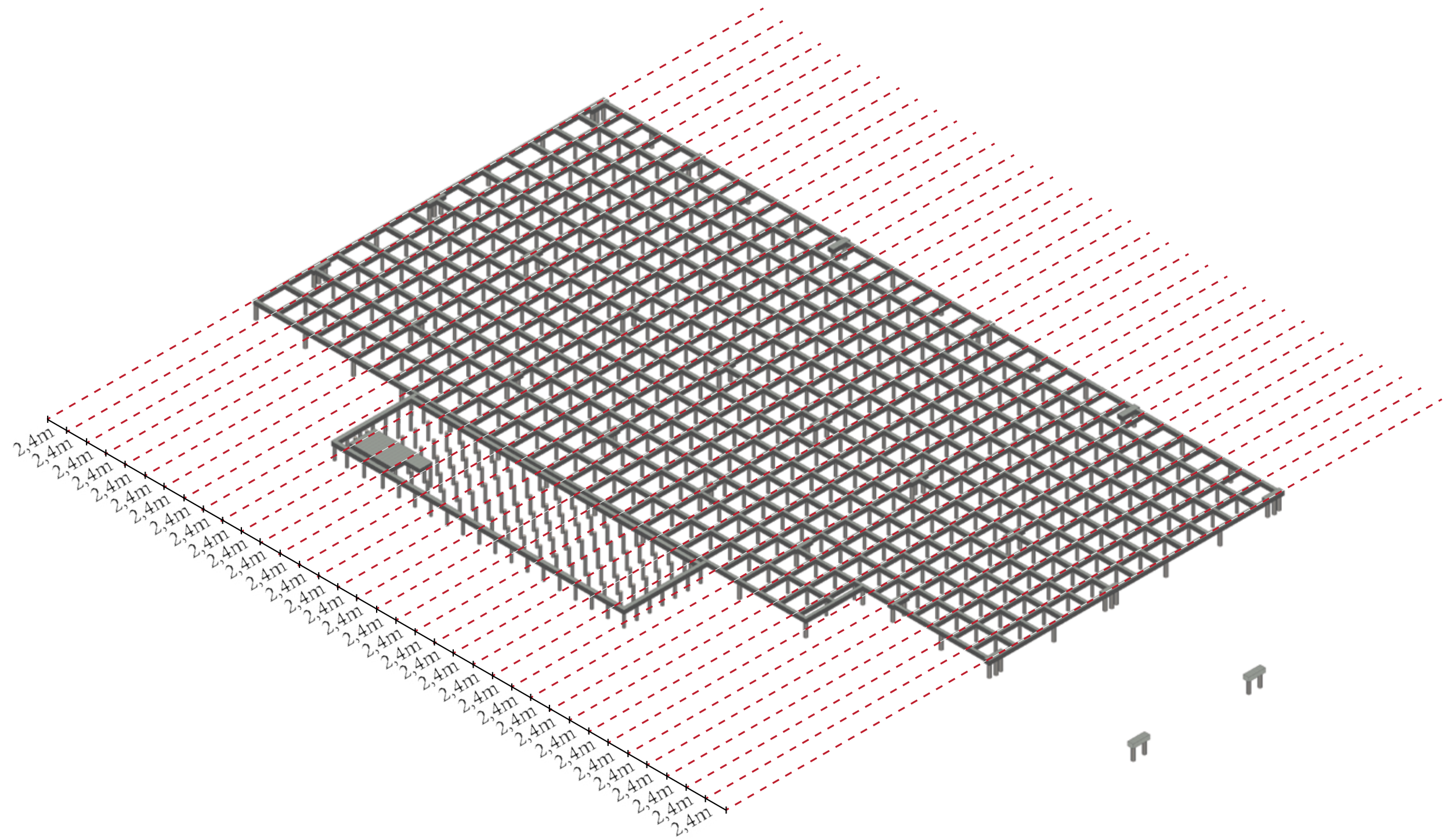
Existing structure (crane)

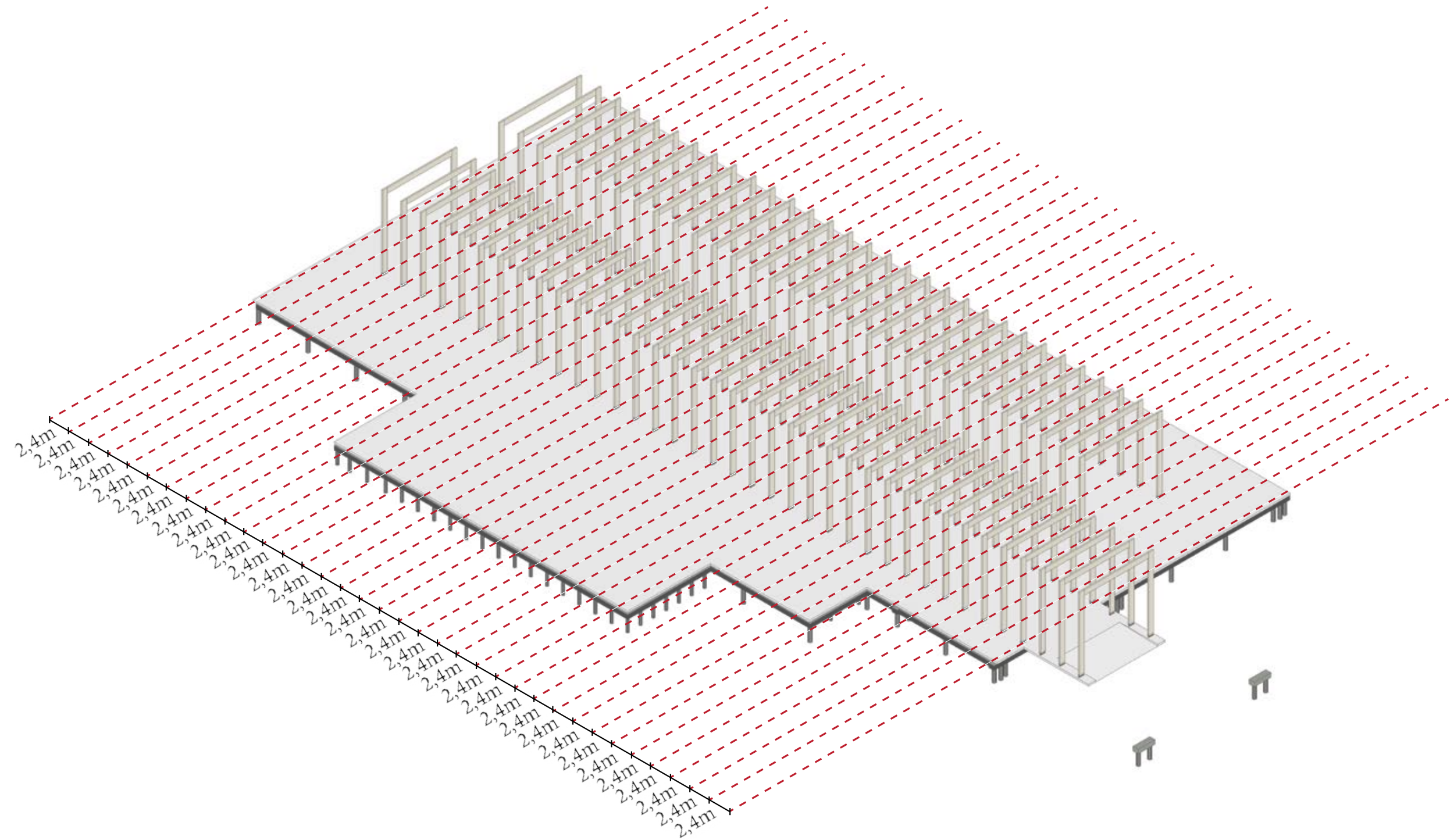


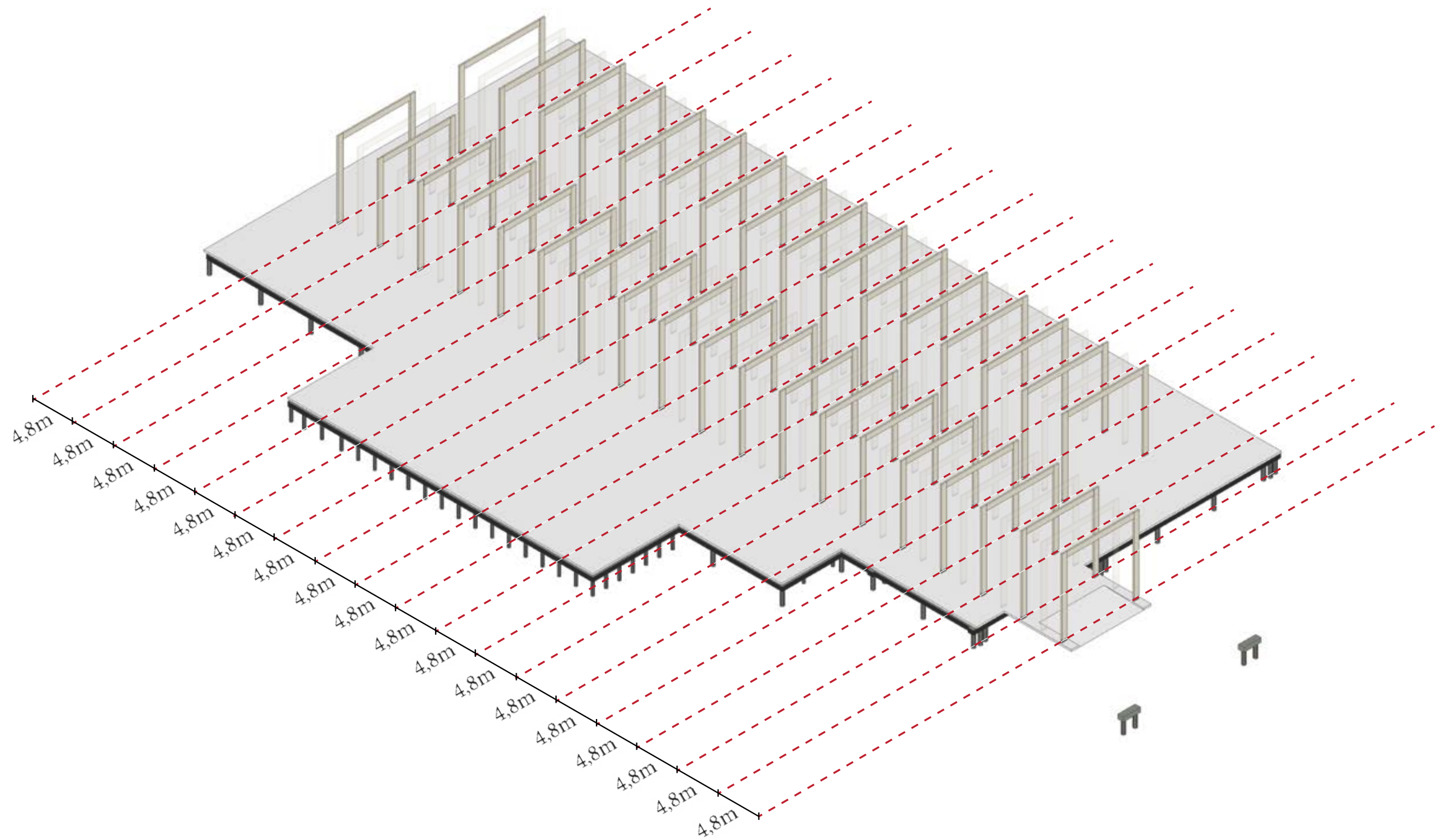
Existing structure (roof)

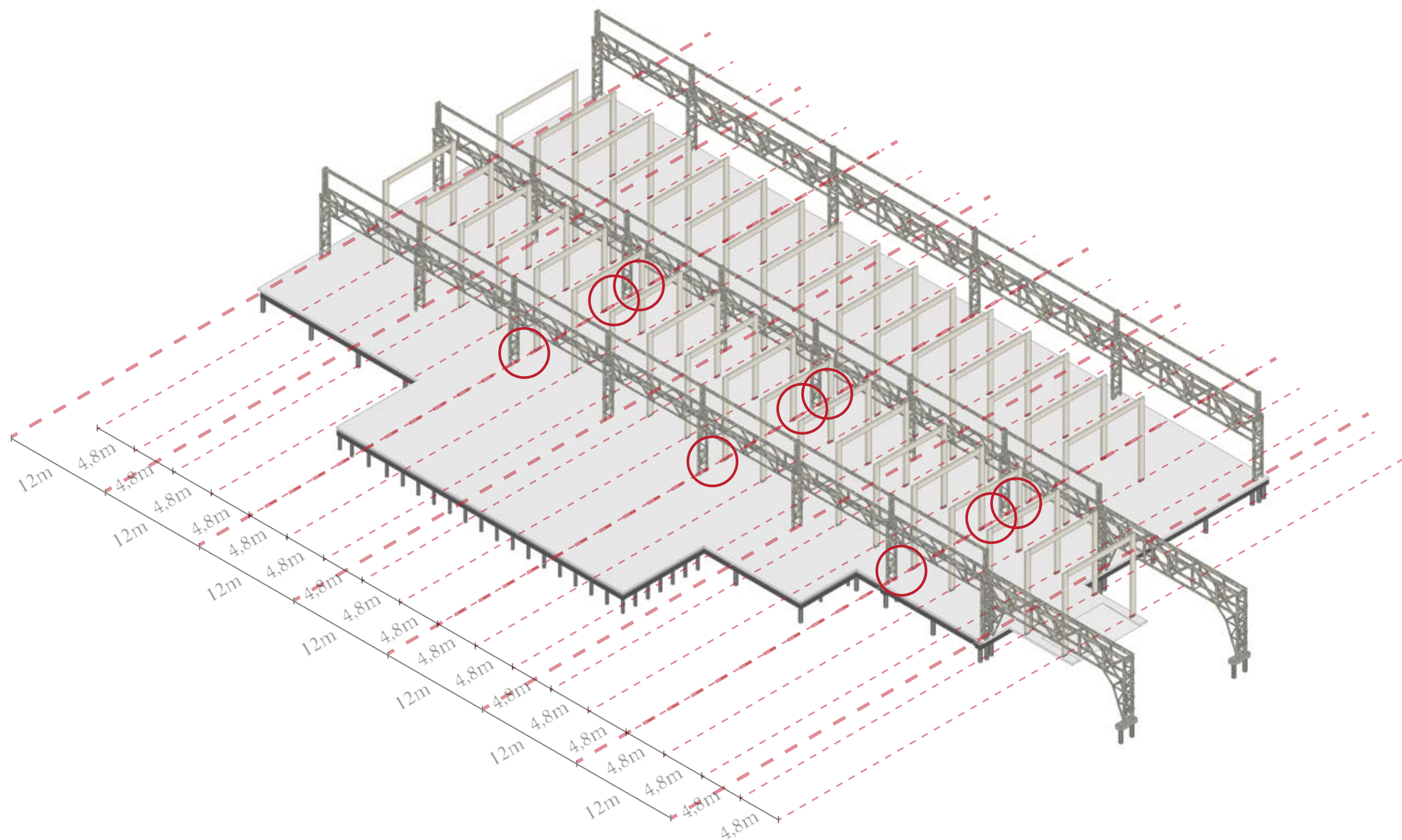


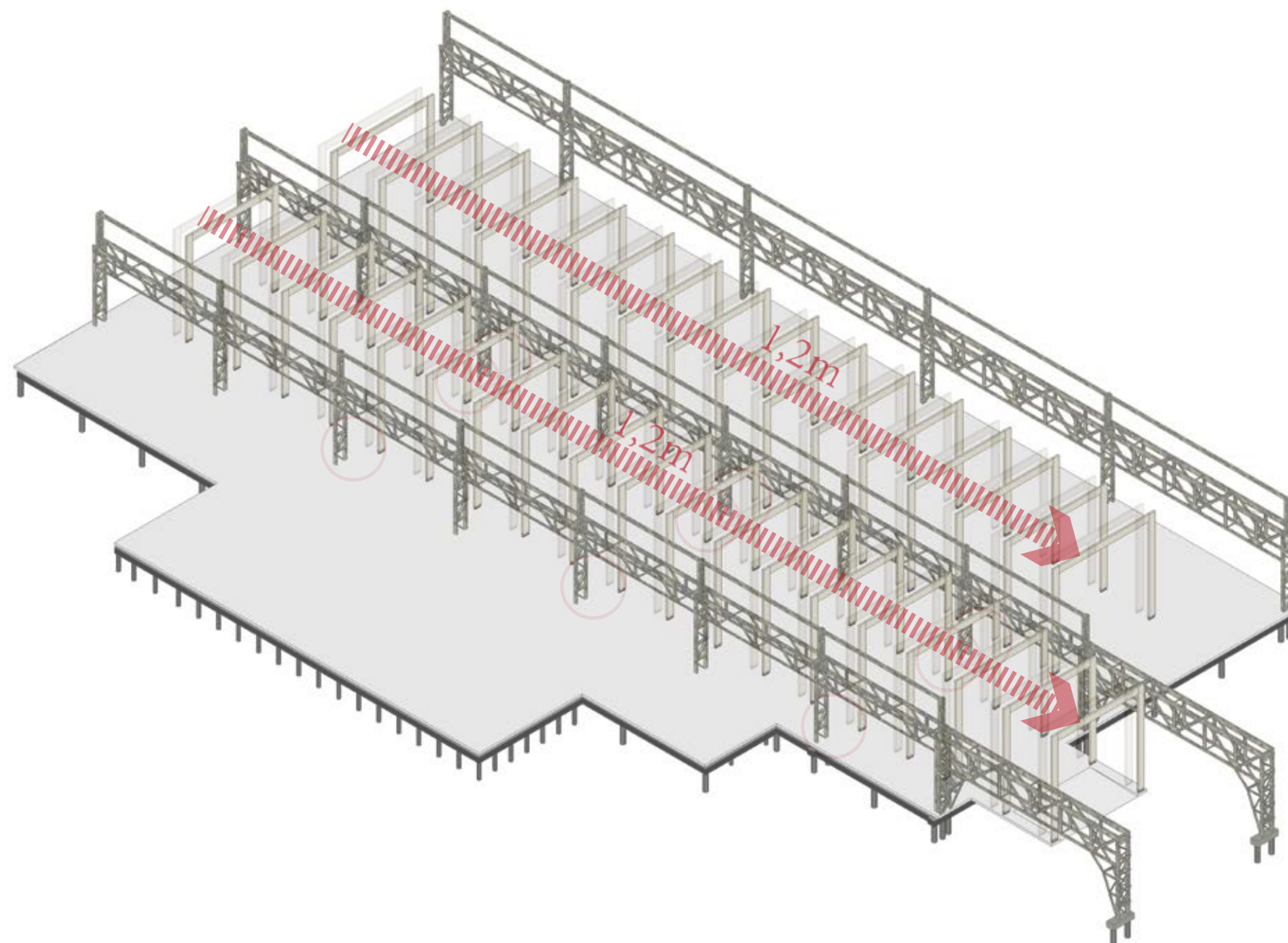
Existing foundation

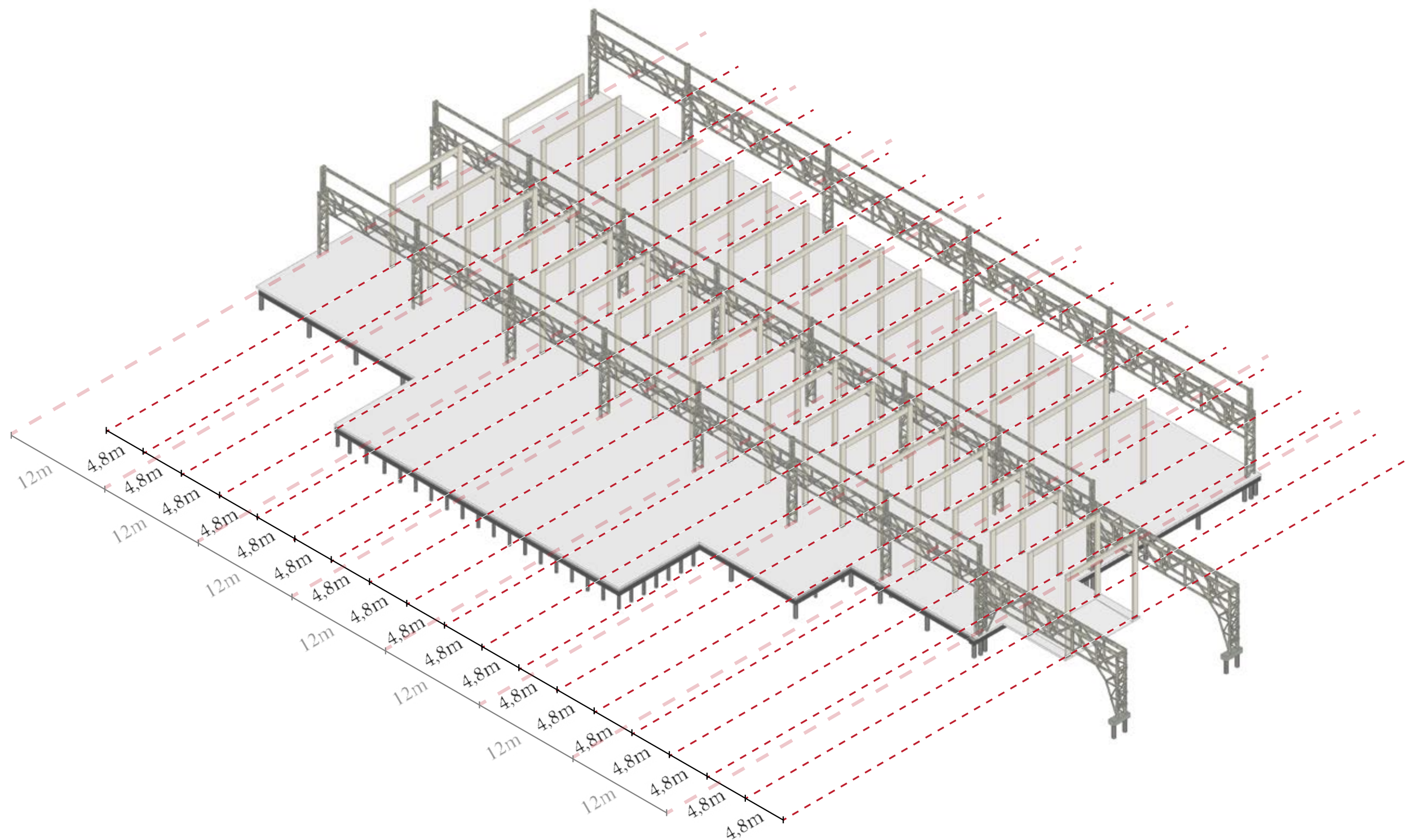




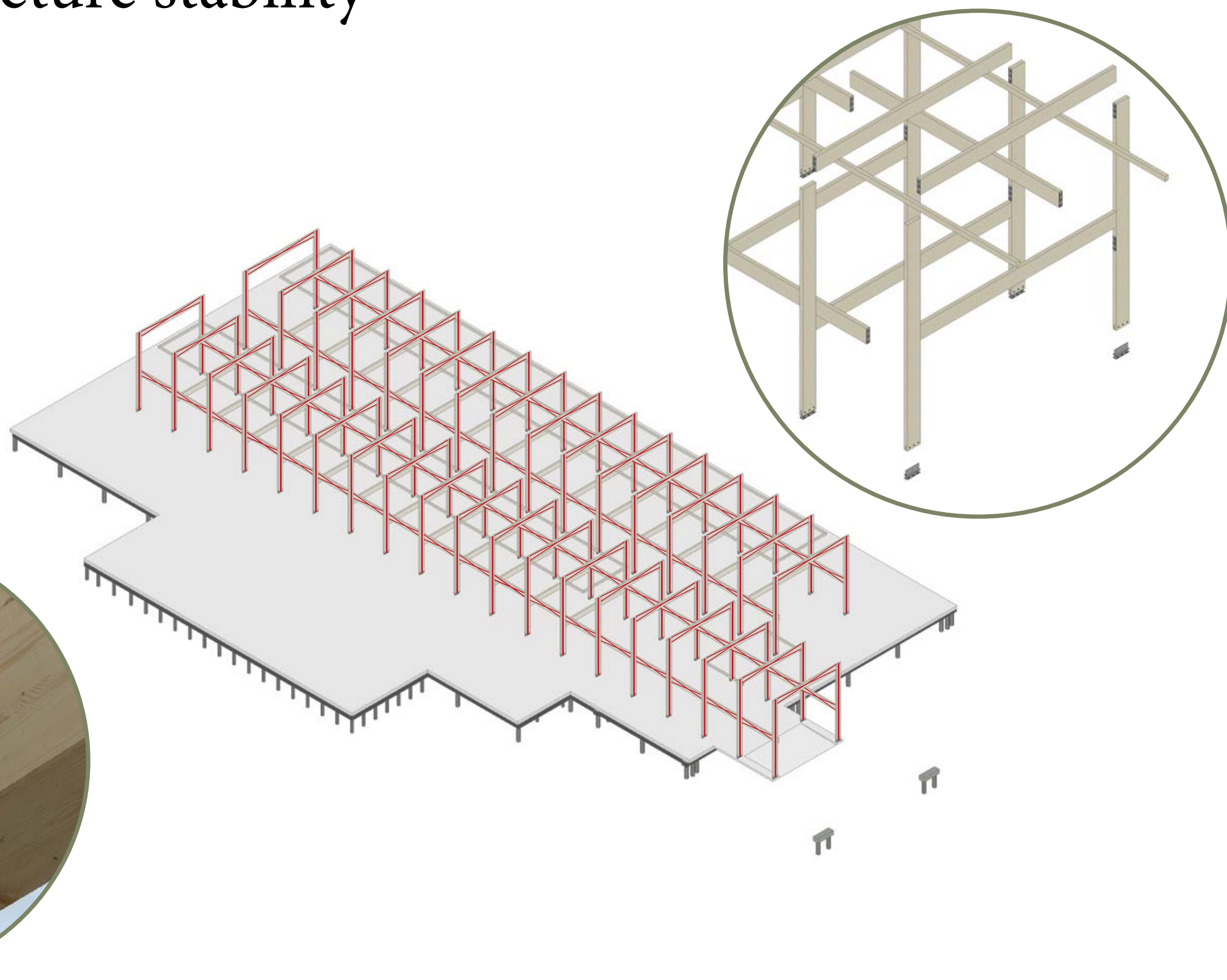






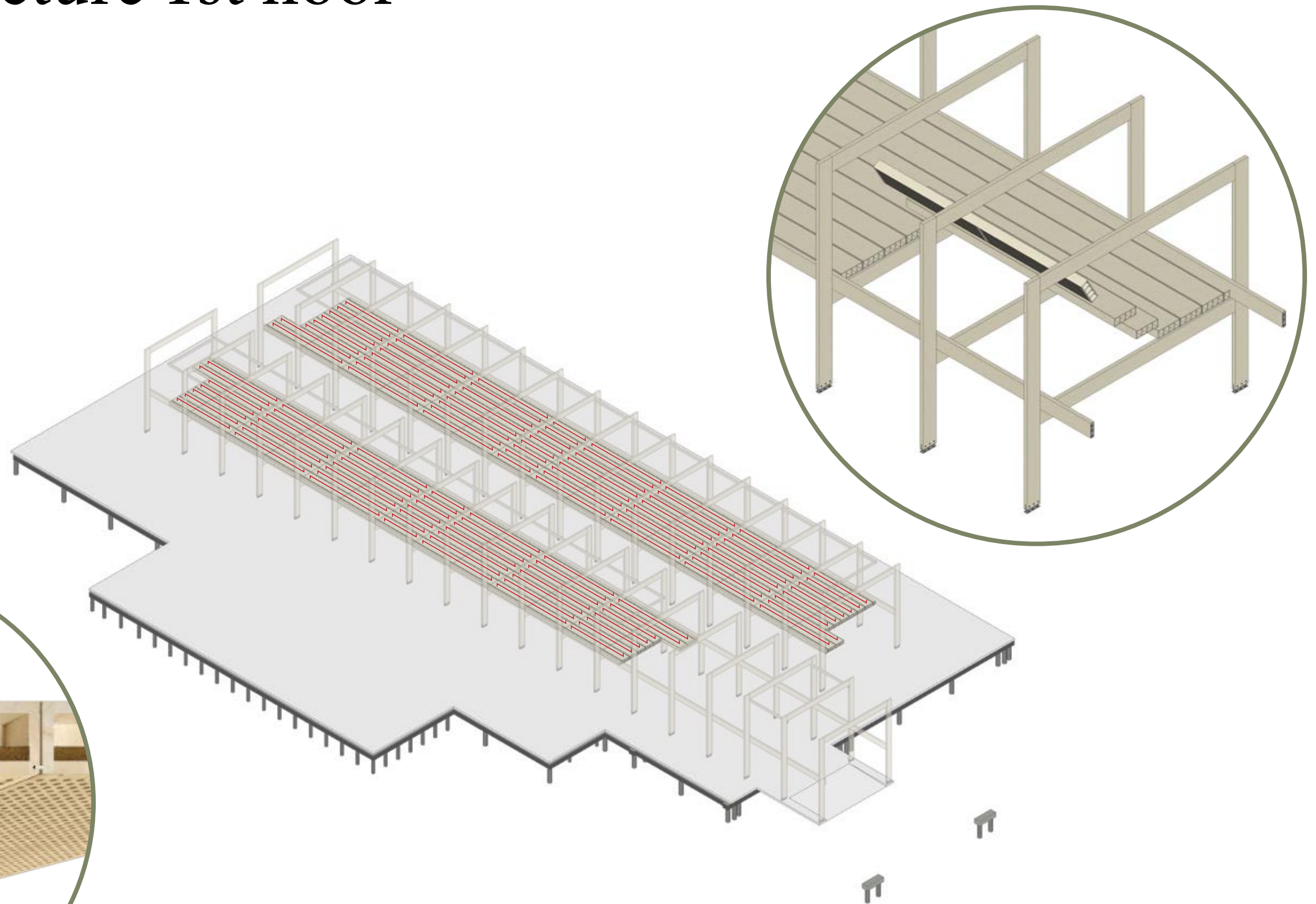


New structure stability

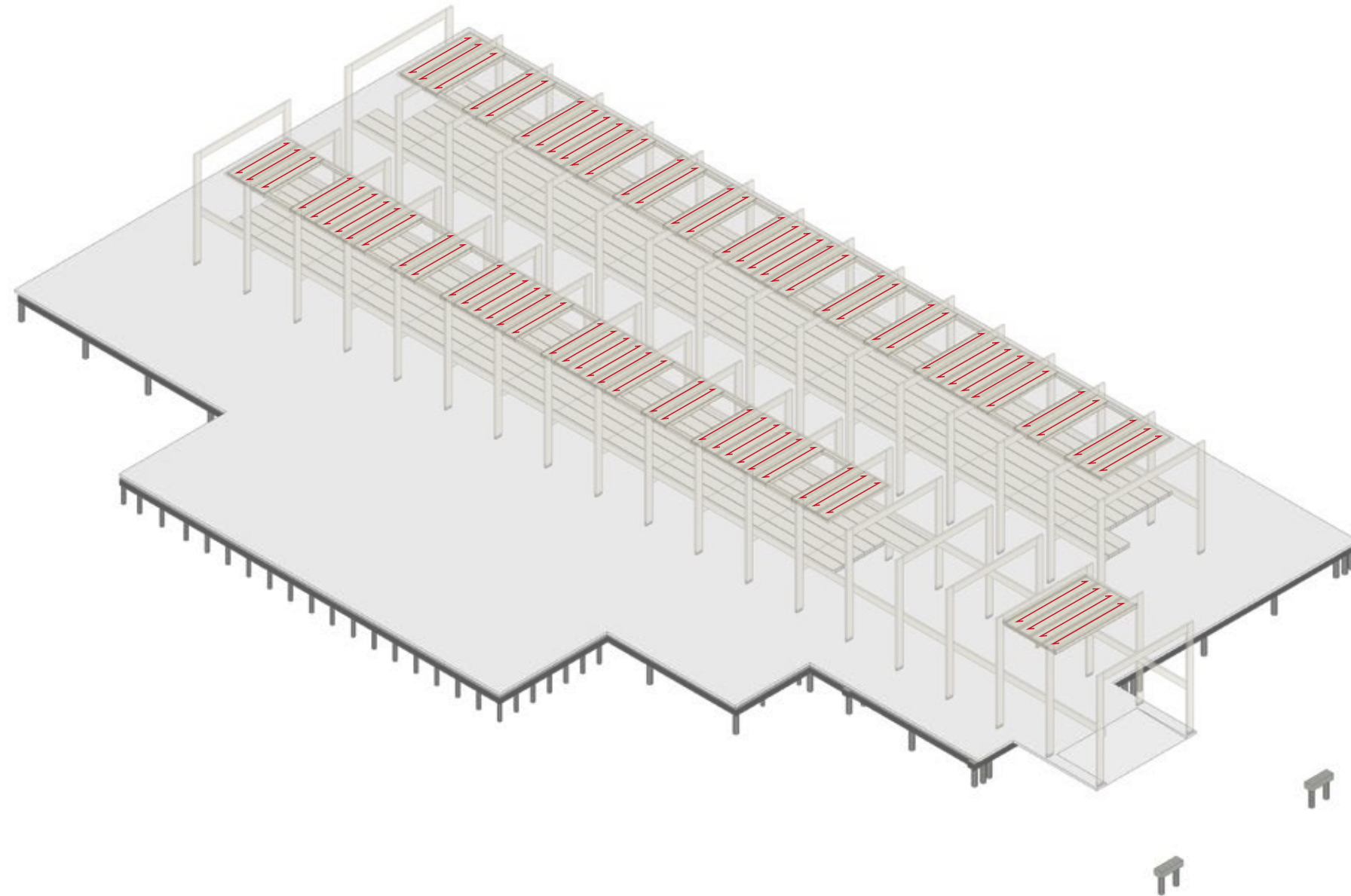


2 Design
New structure 1st floor

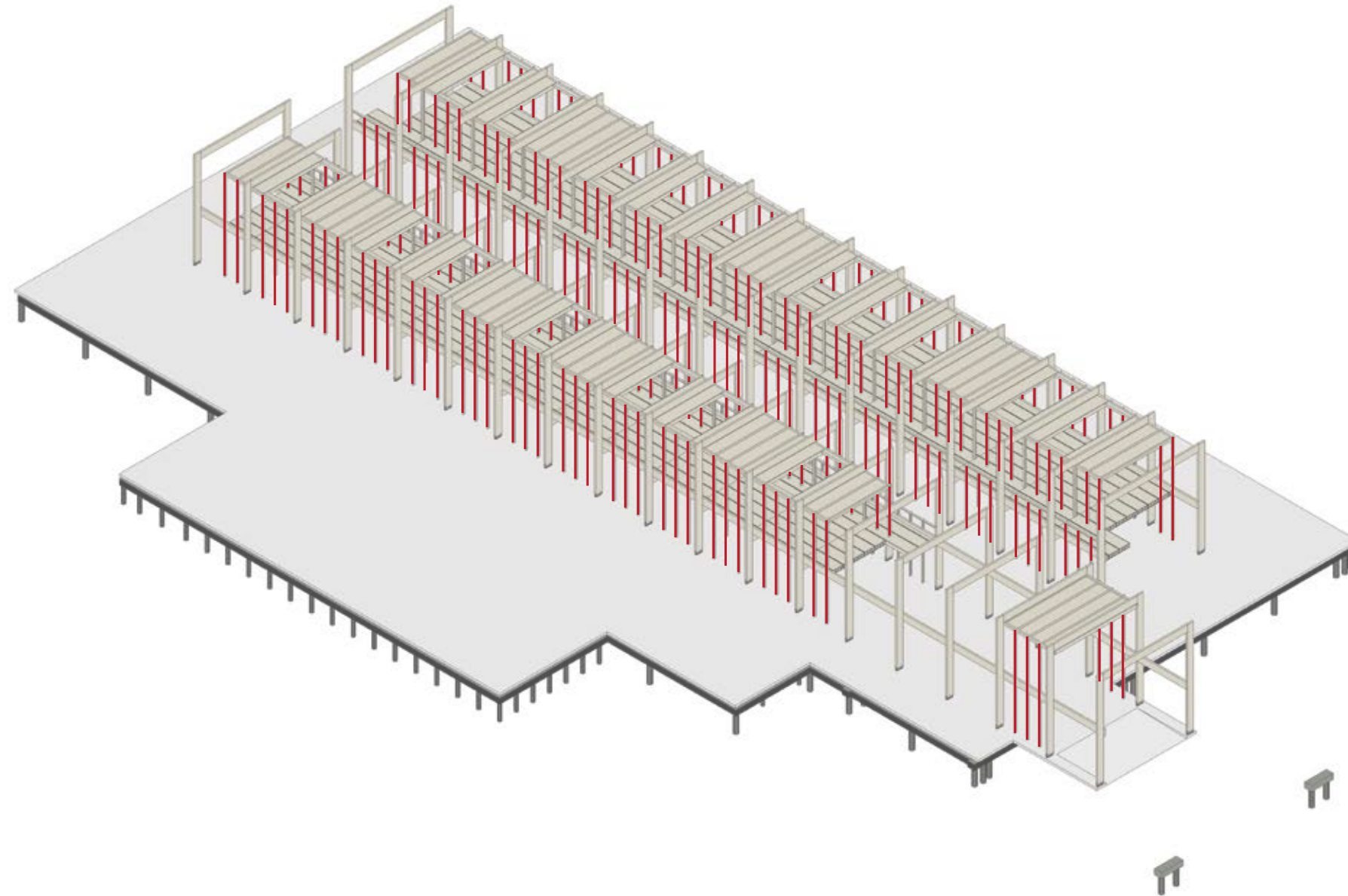
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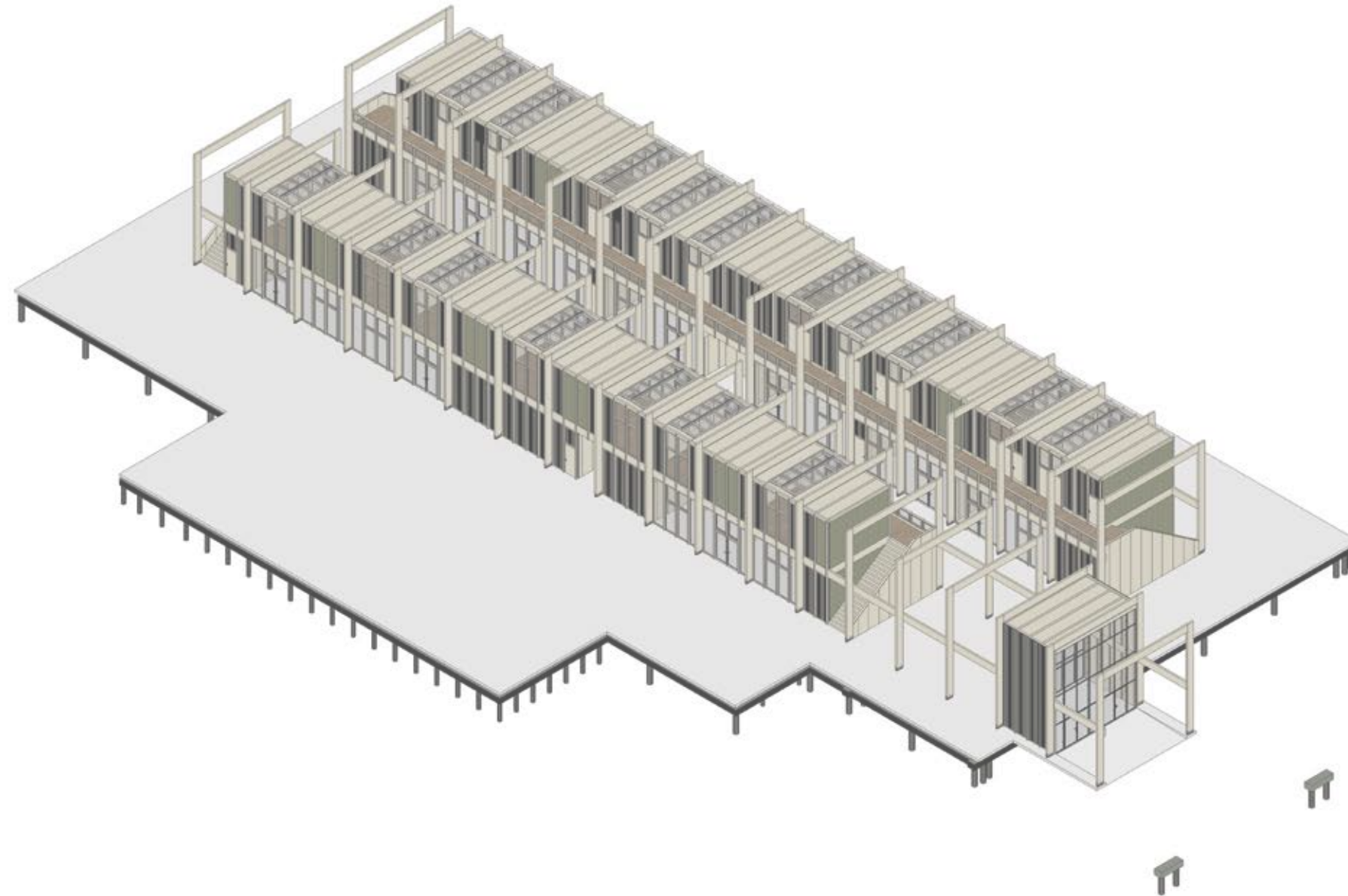
New structure ceiling



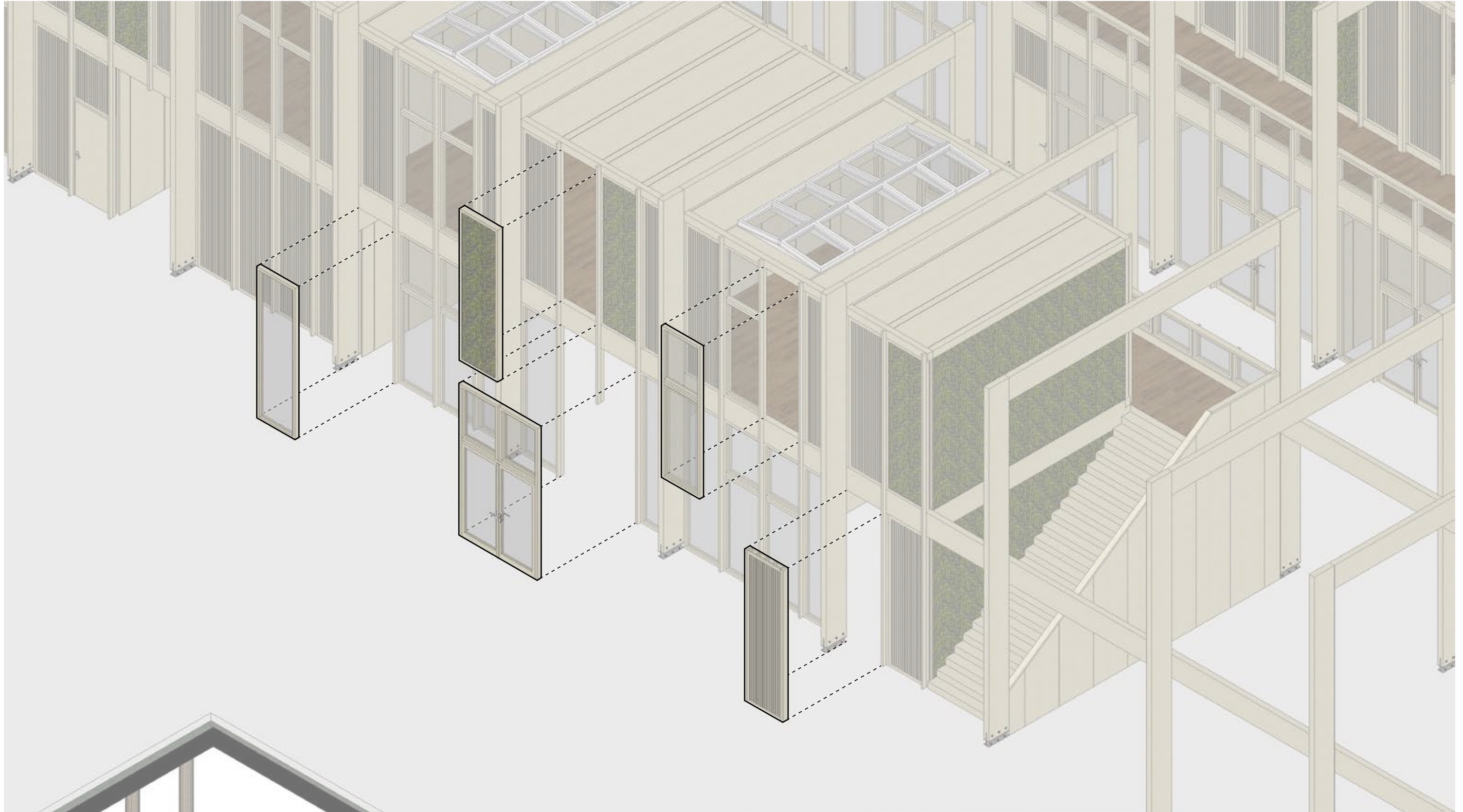
New structure framework

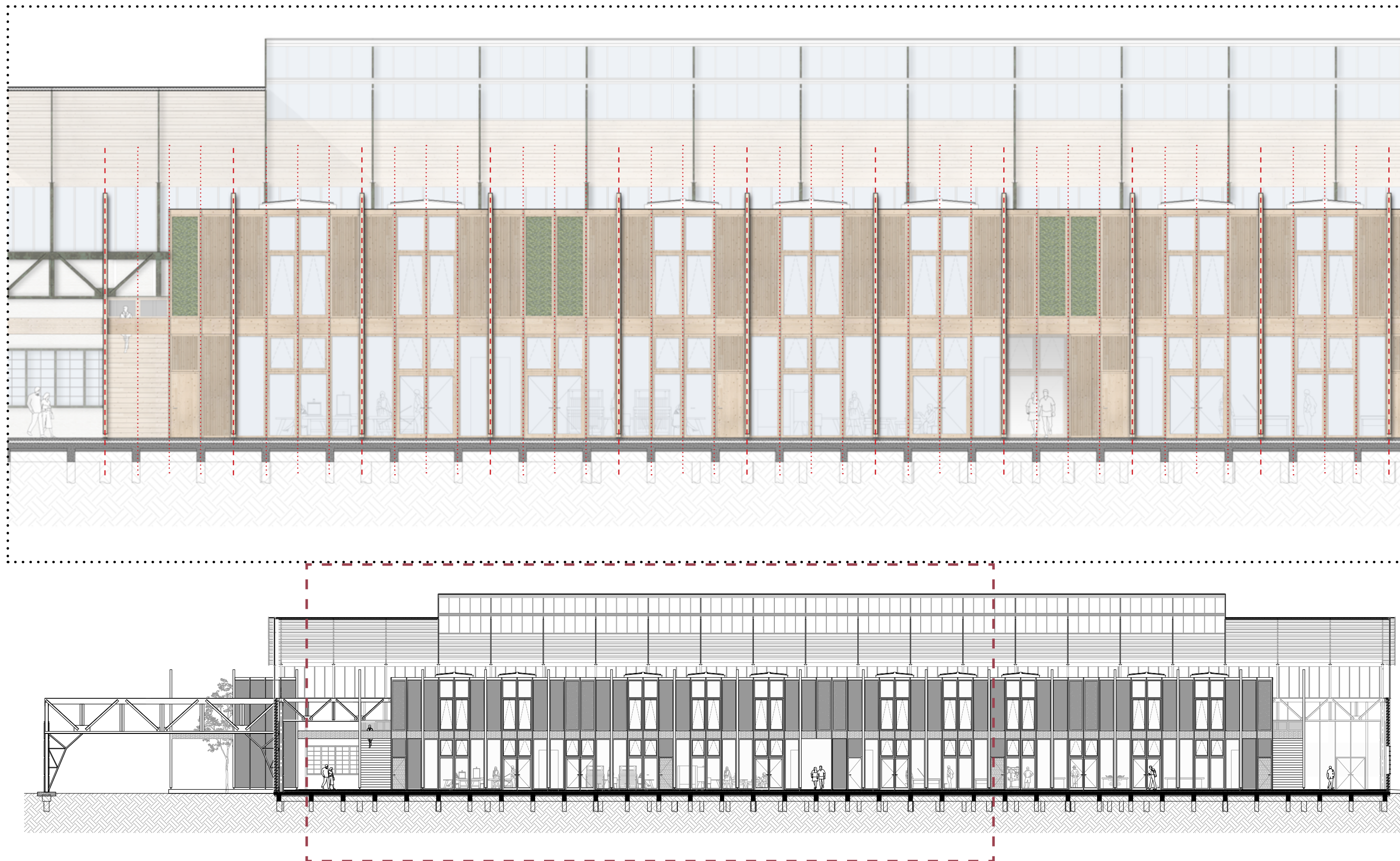


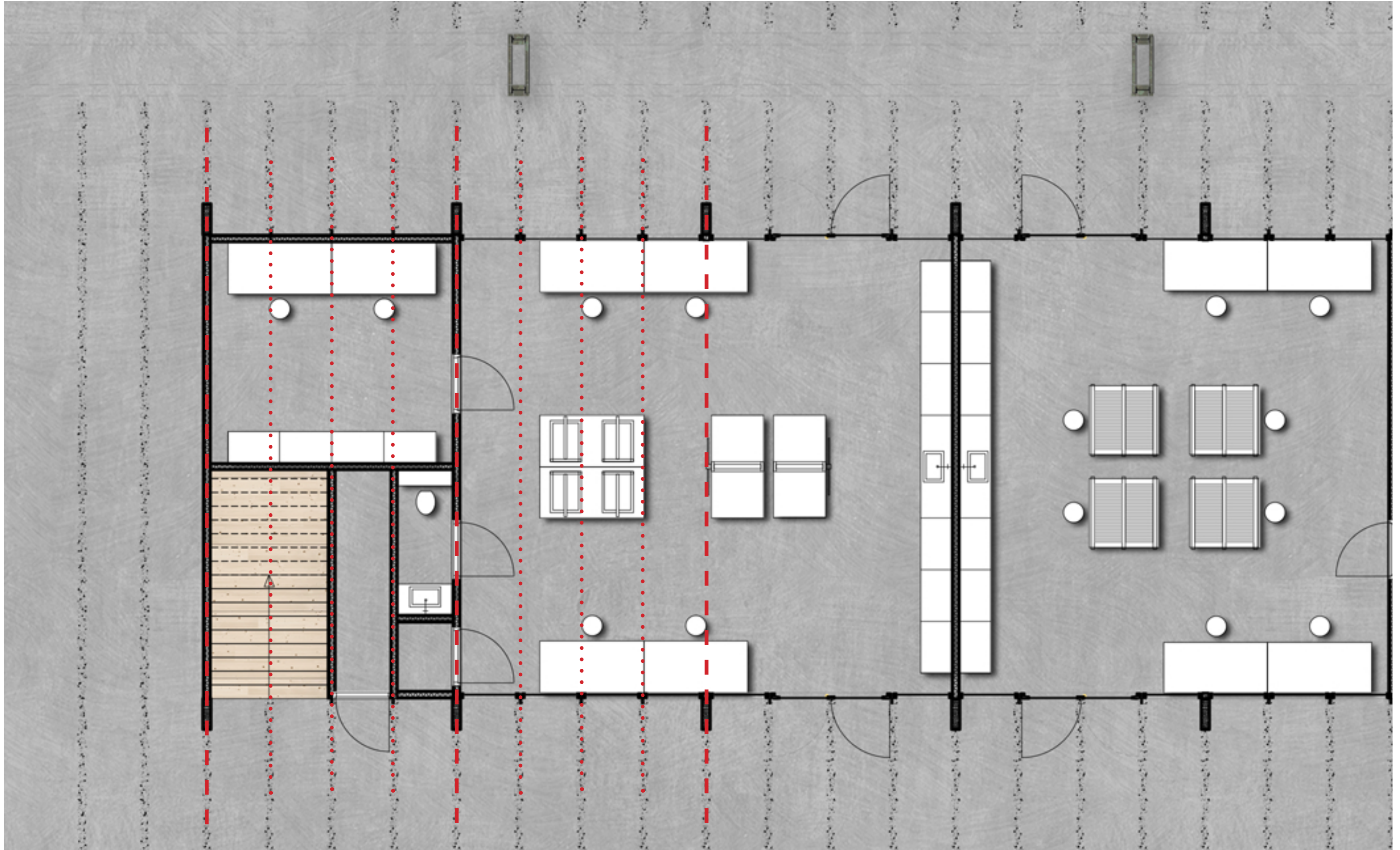
New modular skin

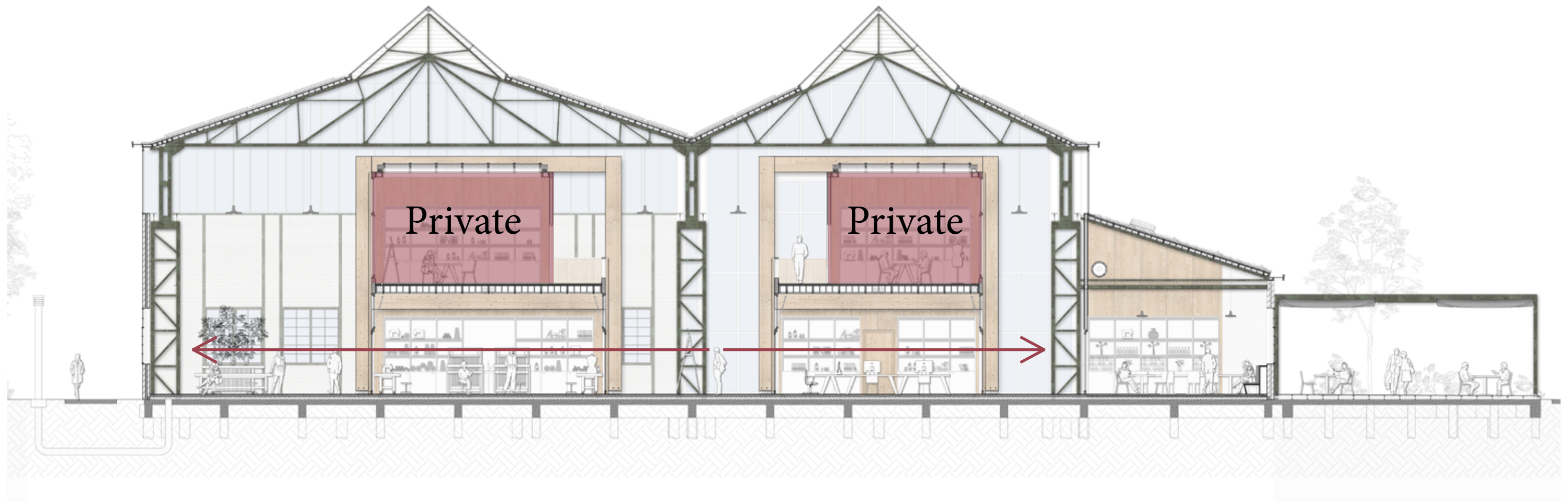


New modular skin



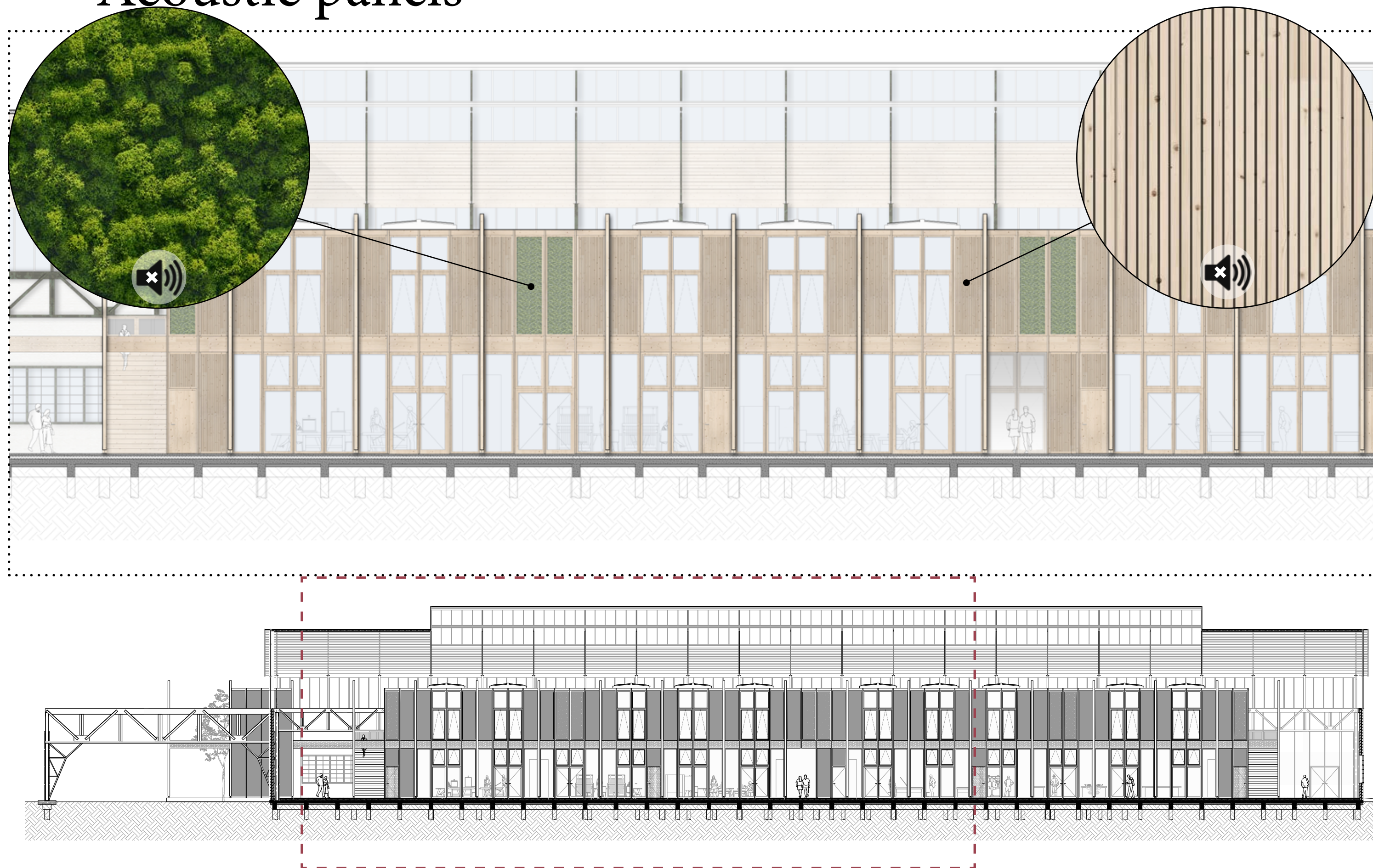


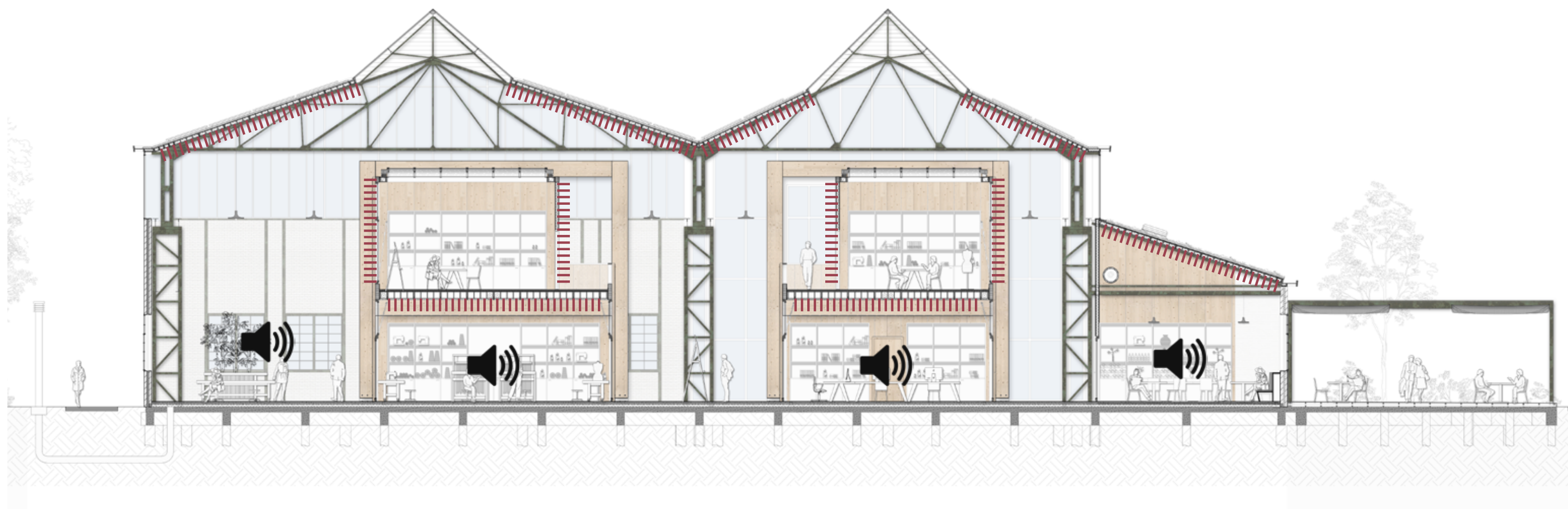


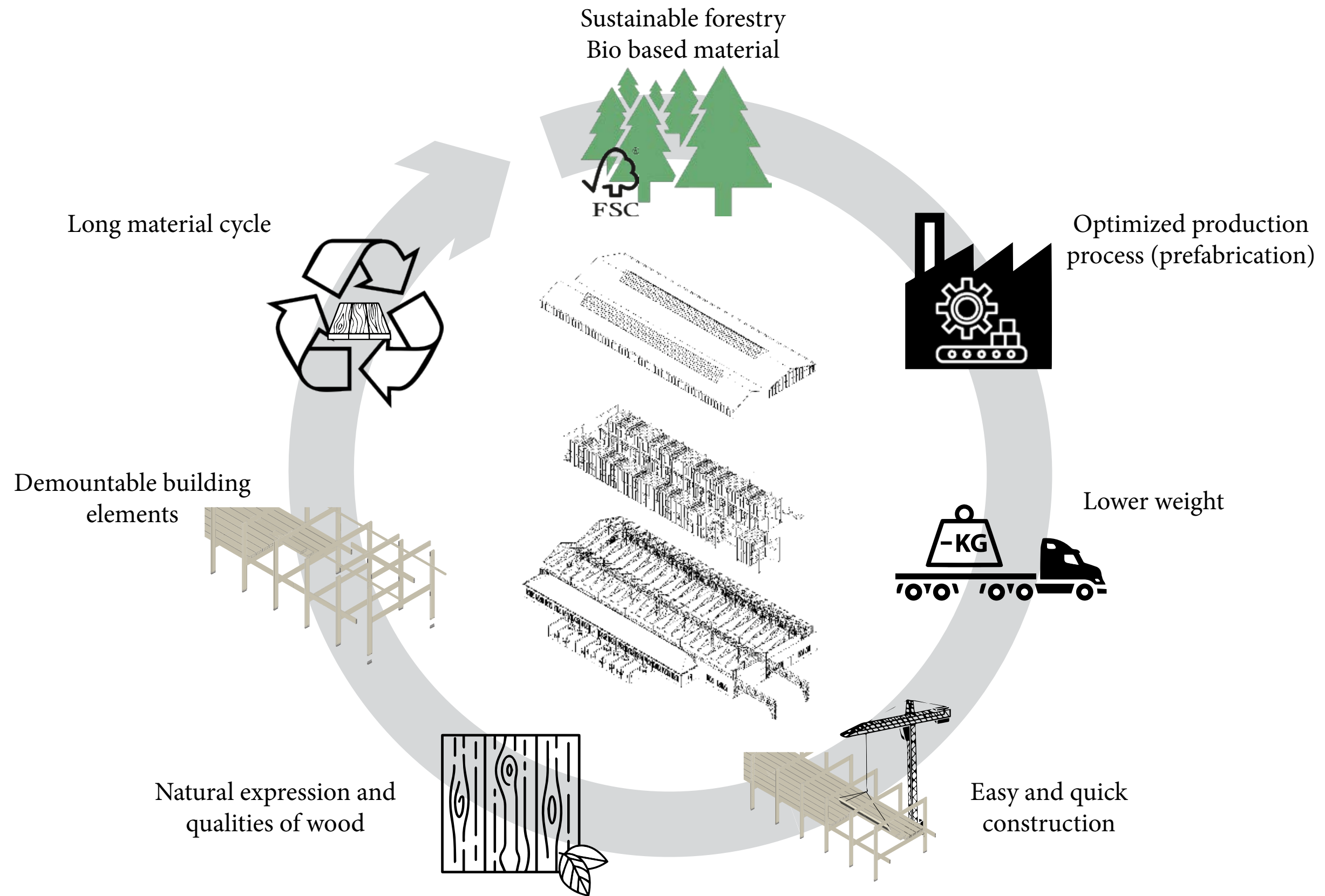




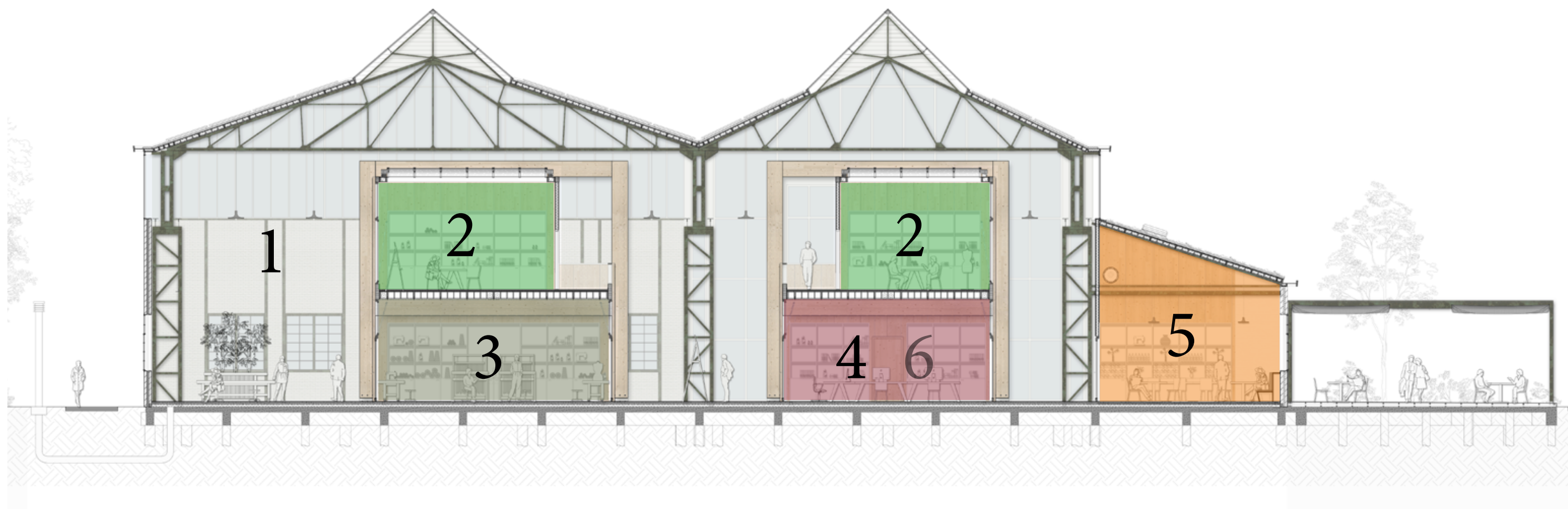
Acoustic panels



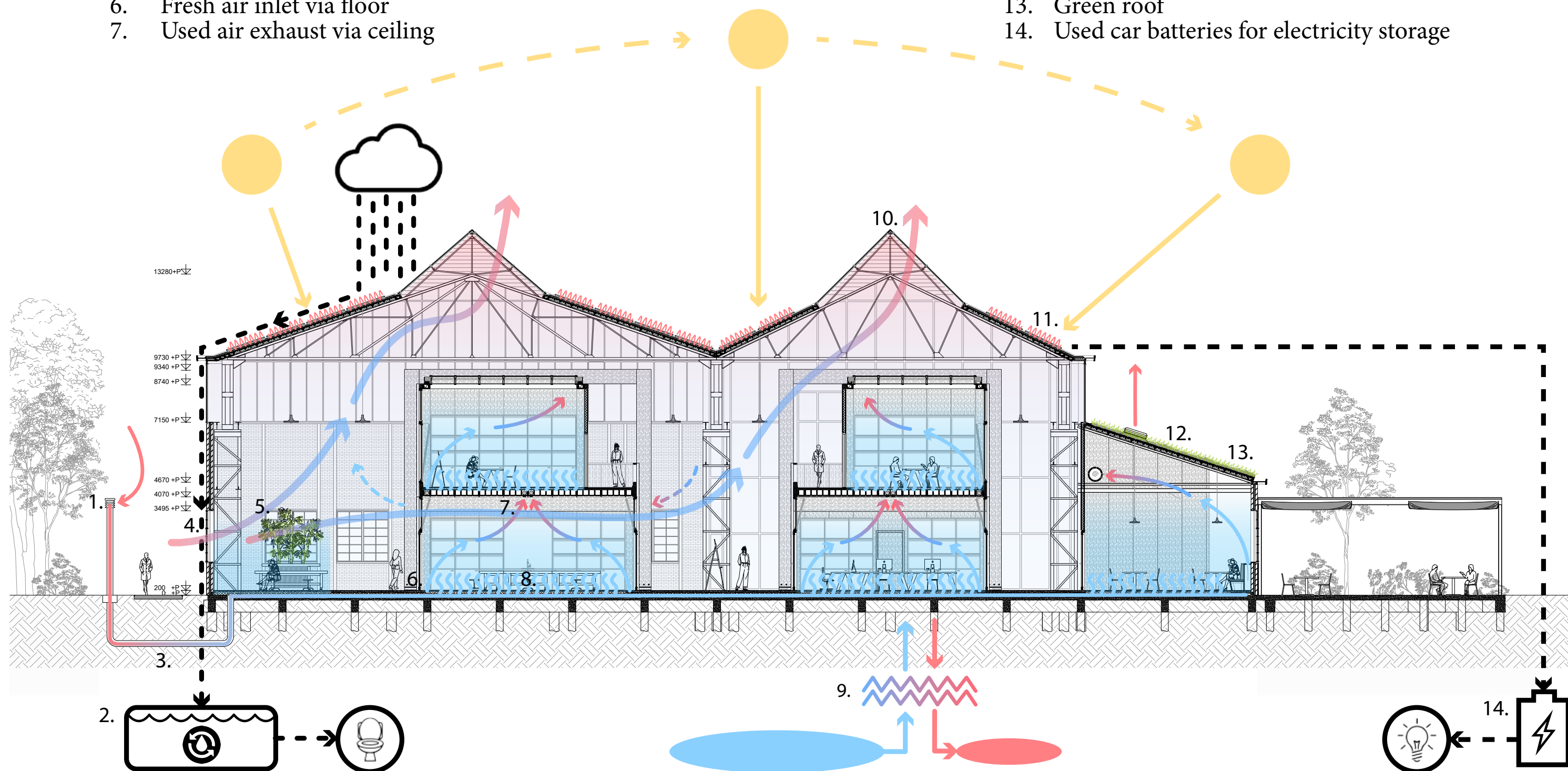




1. In-between space
2. Artist studios
3. Craft workshops
4. Management office
5. Restaurant
6. Event space



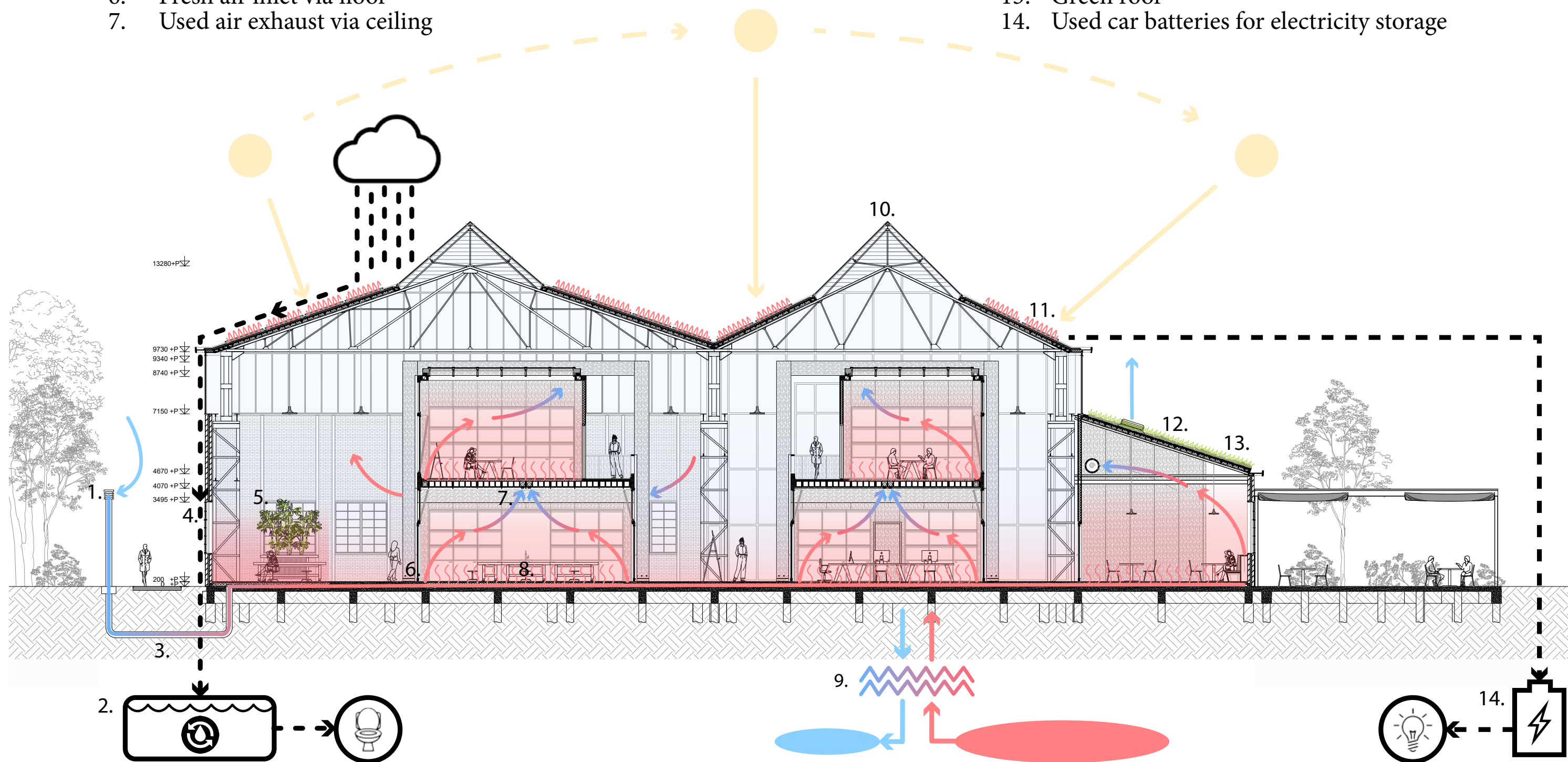
8. Hybrid floor heating/cooling system
9. Seasonal thermal energy storage (or STES)
10. Natural air exhaust
11. Solar Photovoltaic & Thermal energy system (PVT)
12. Used air exhaust
13. Green roof
14. Used car batteries for electricity storage

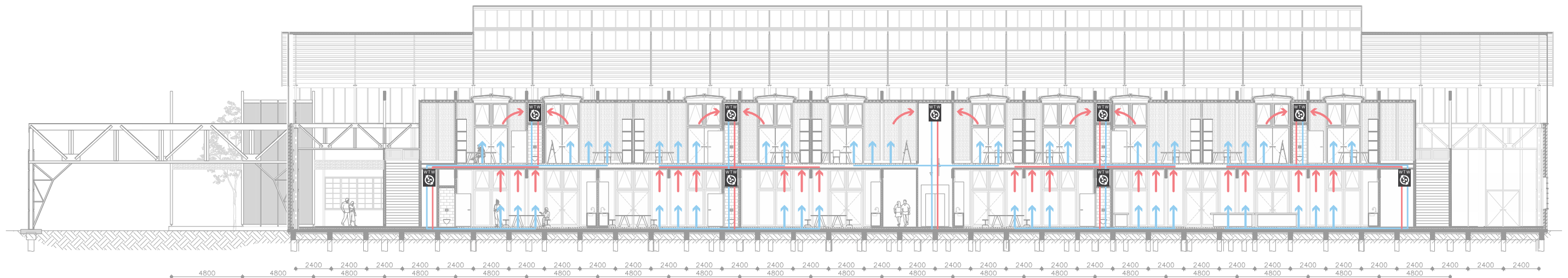
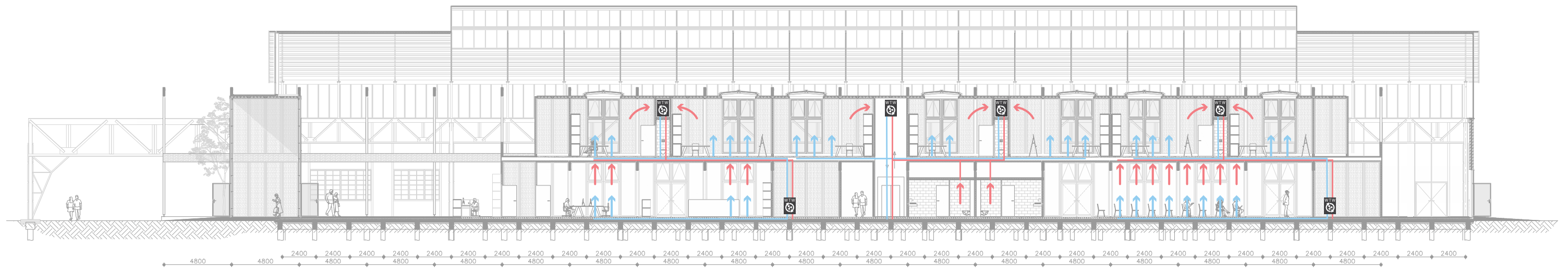


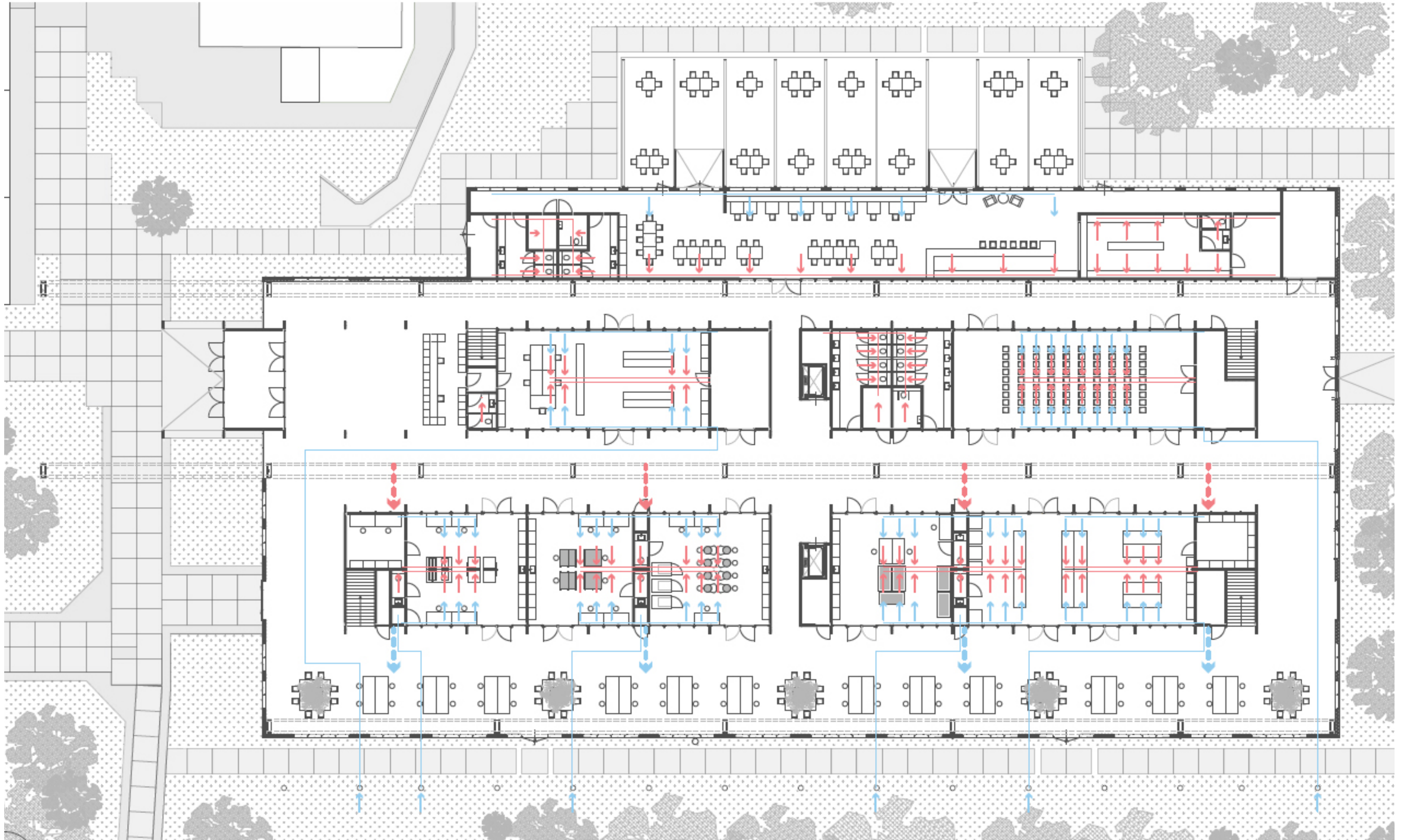
Design Climate scheme winter

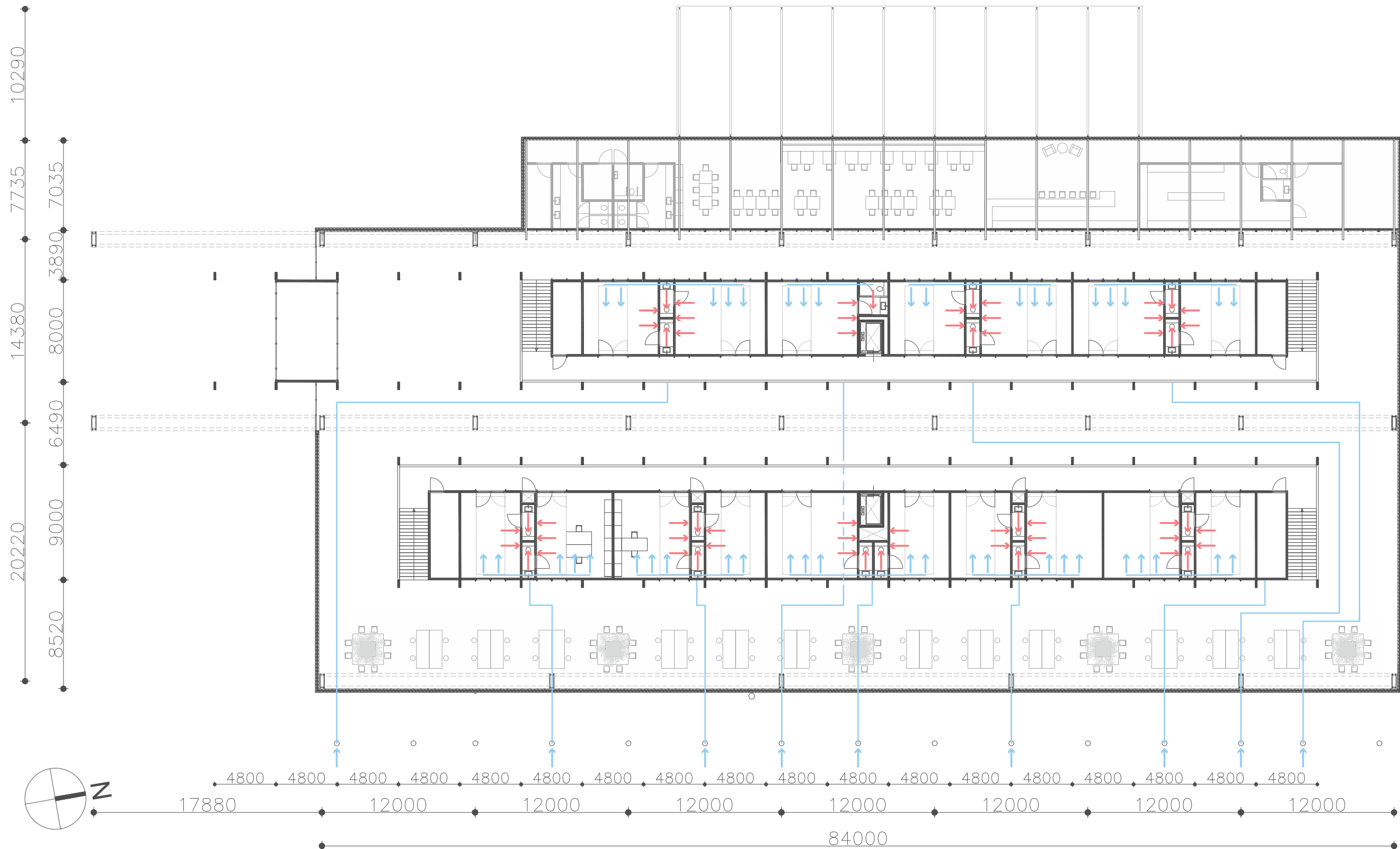
1. Fresh air intake mechanical ventilation/street light
2. Rainwater treatment used for gray water circuit
3. Underground ventilation duct
4. Openable steel window frames
5. Indoor greenery
6. Fresh air inlet via floor
7. Used air exhaust via ceiling

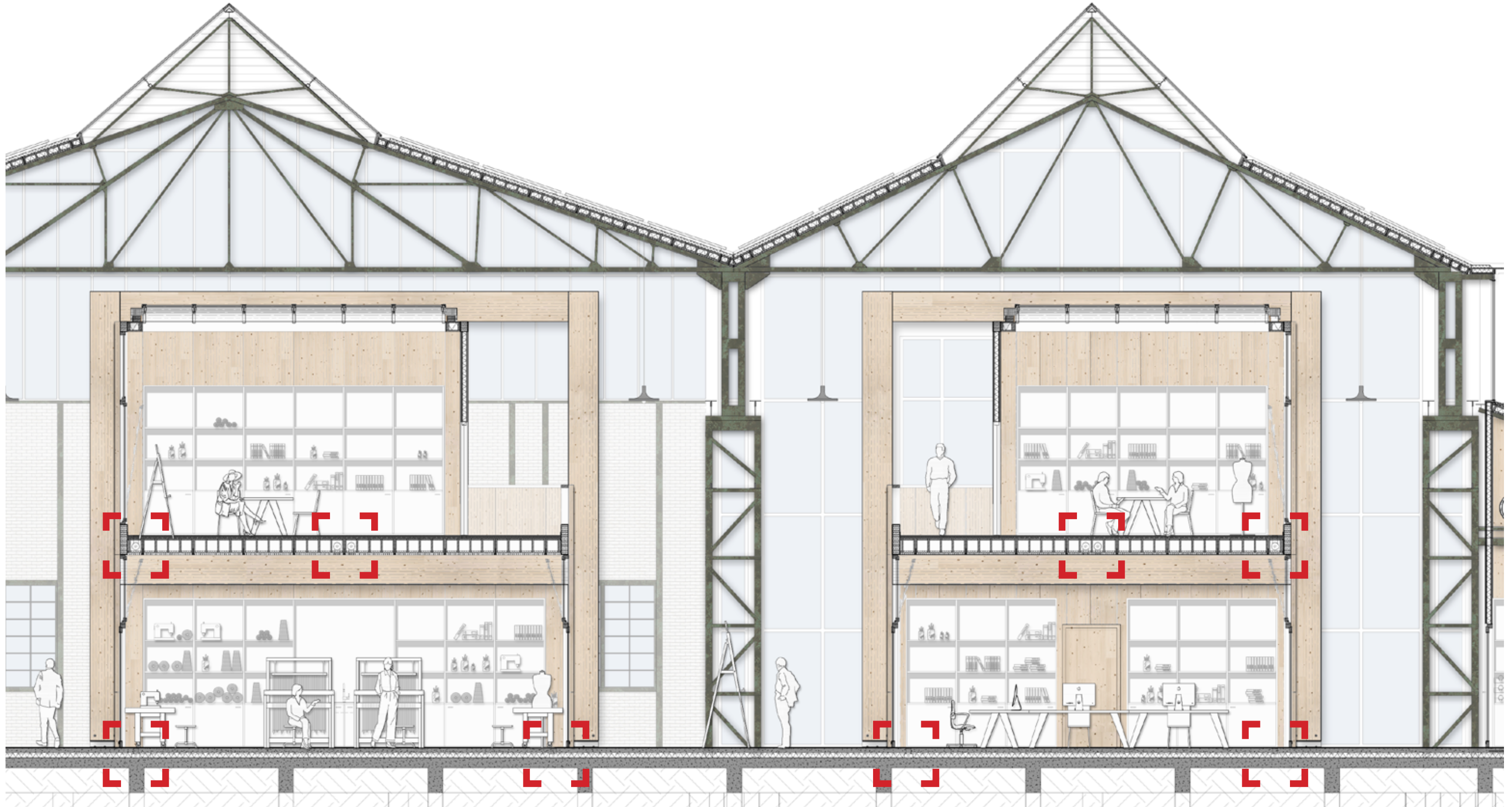
8. Hybrid floor heating/cooling system
9. Seasonal thermal energy storage (or STES)
10. Natural air exhaust
11. Solar Photovoltaic & Thermal energy system (PVT)
12. Used air exhaust
13. Green roof
14. Used car batteries for electricity storage

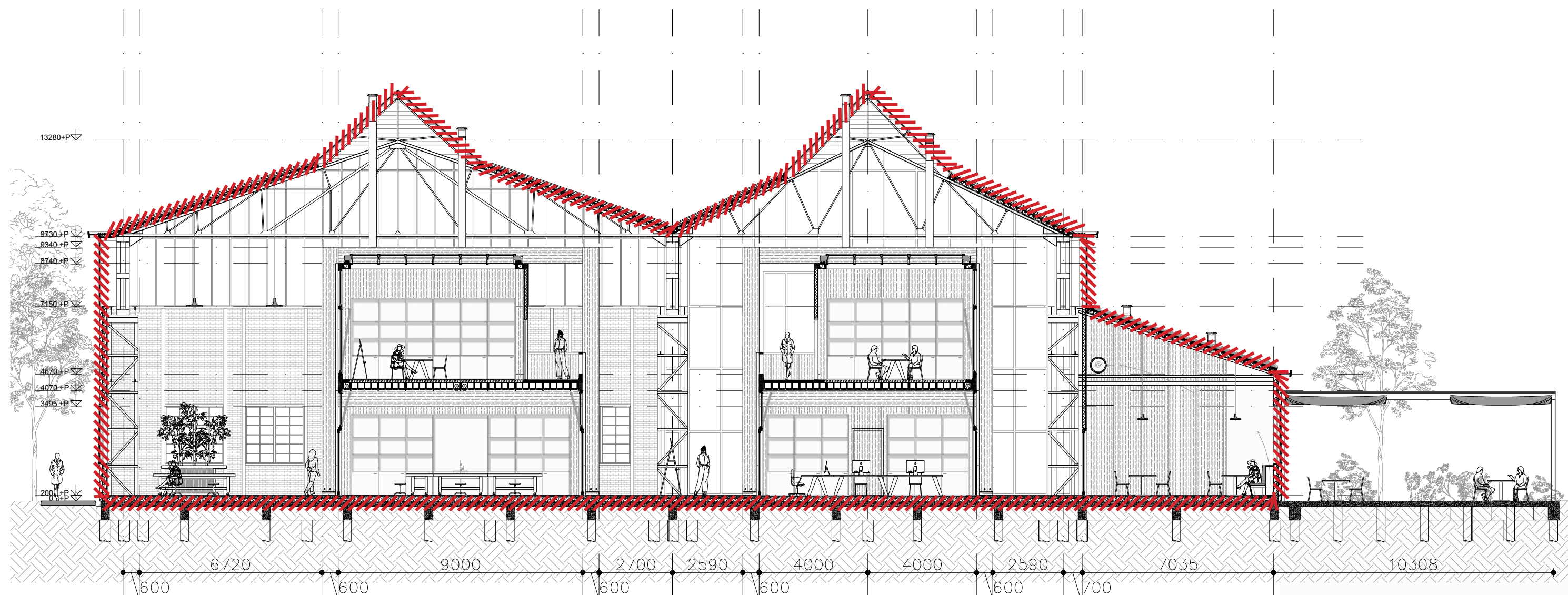






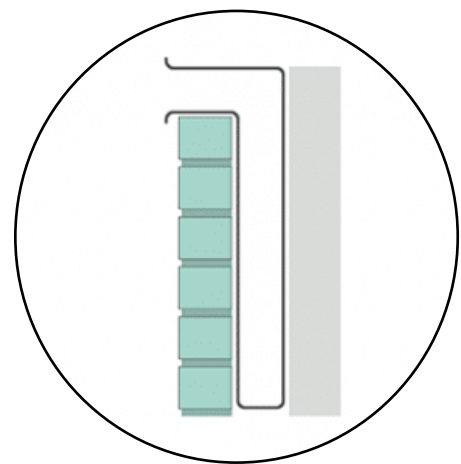




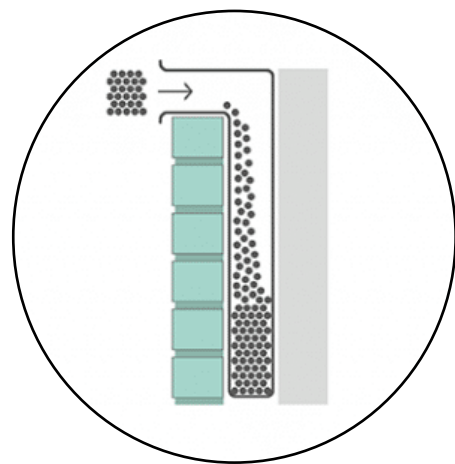


Machine Hall—Section 1:100

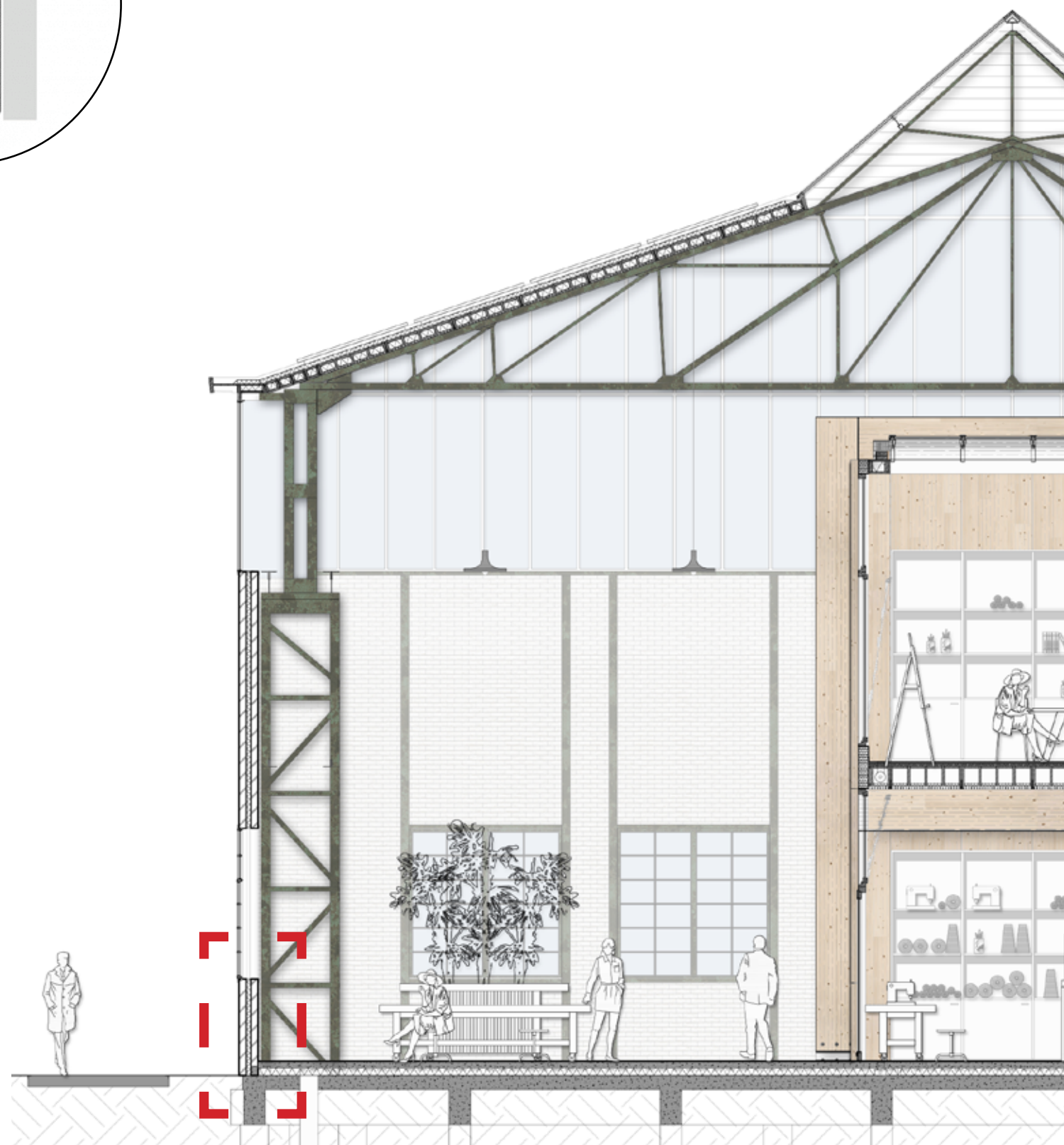
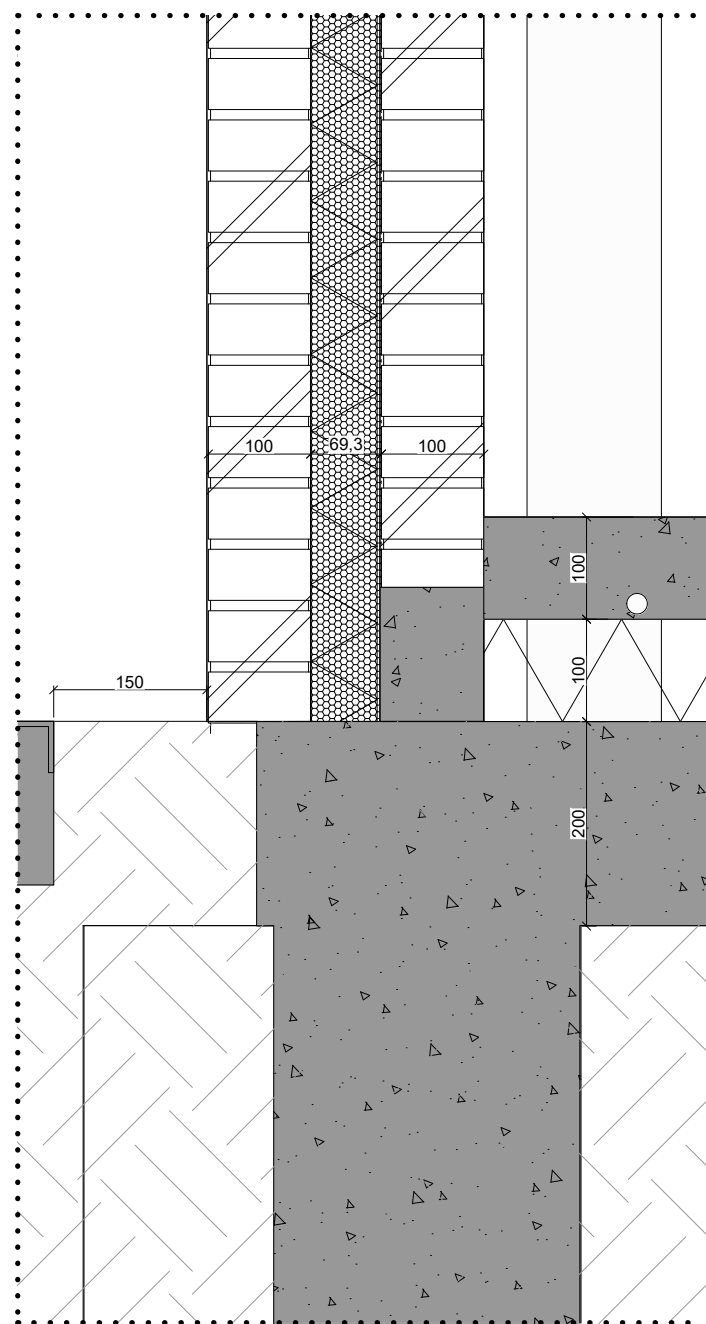
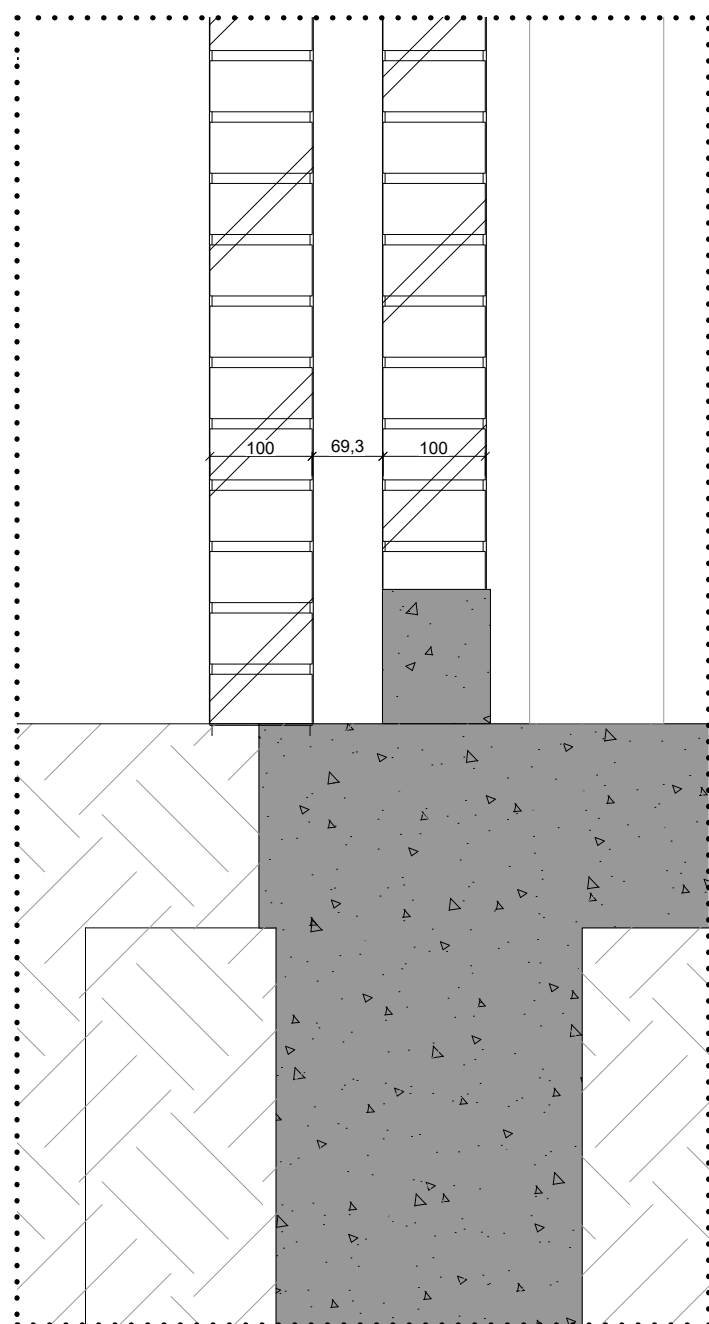
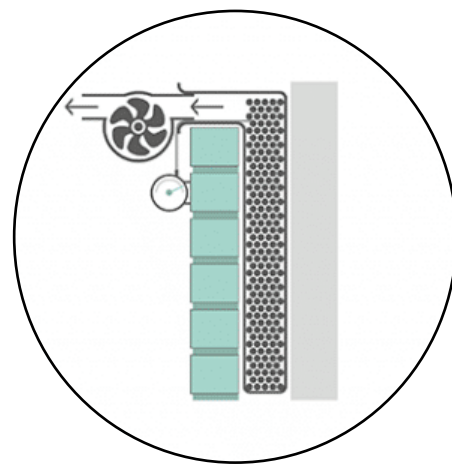
Design Insulating cavity



Existing



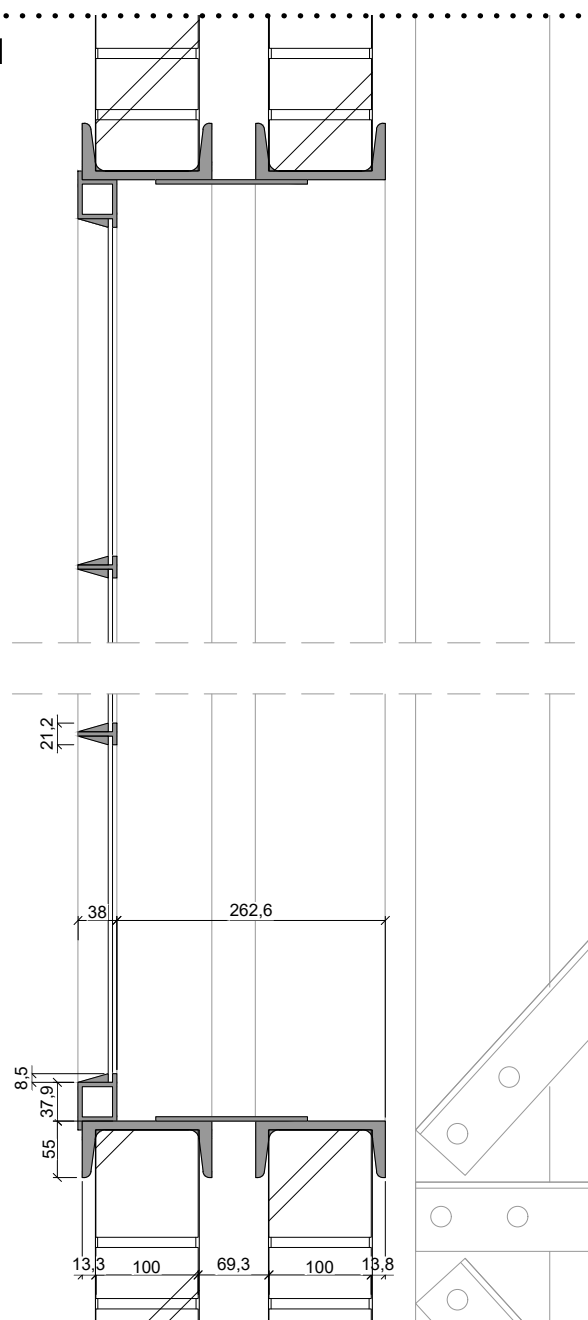
New



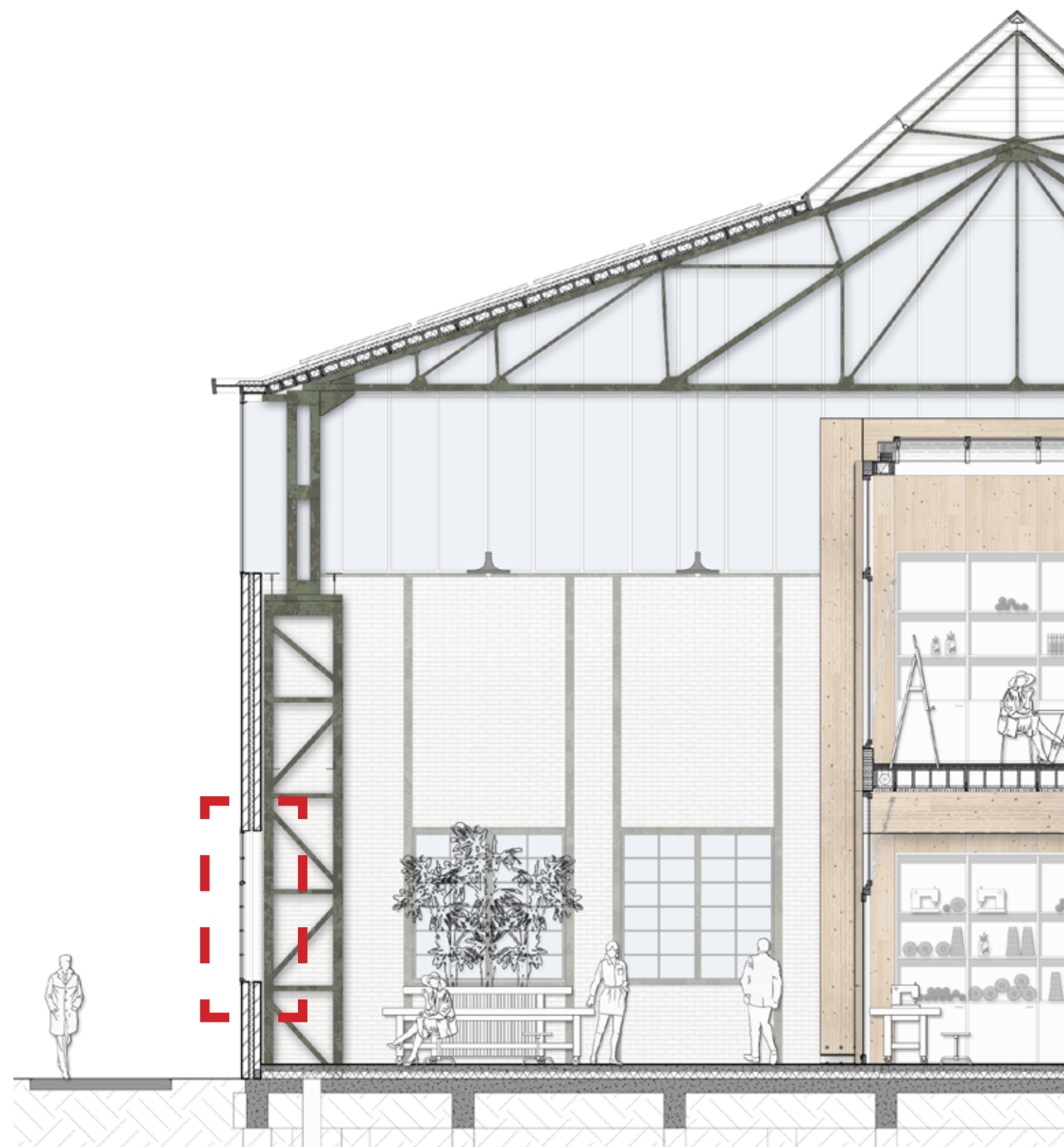
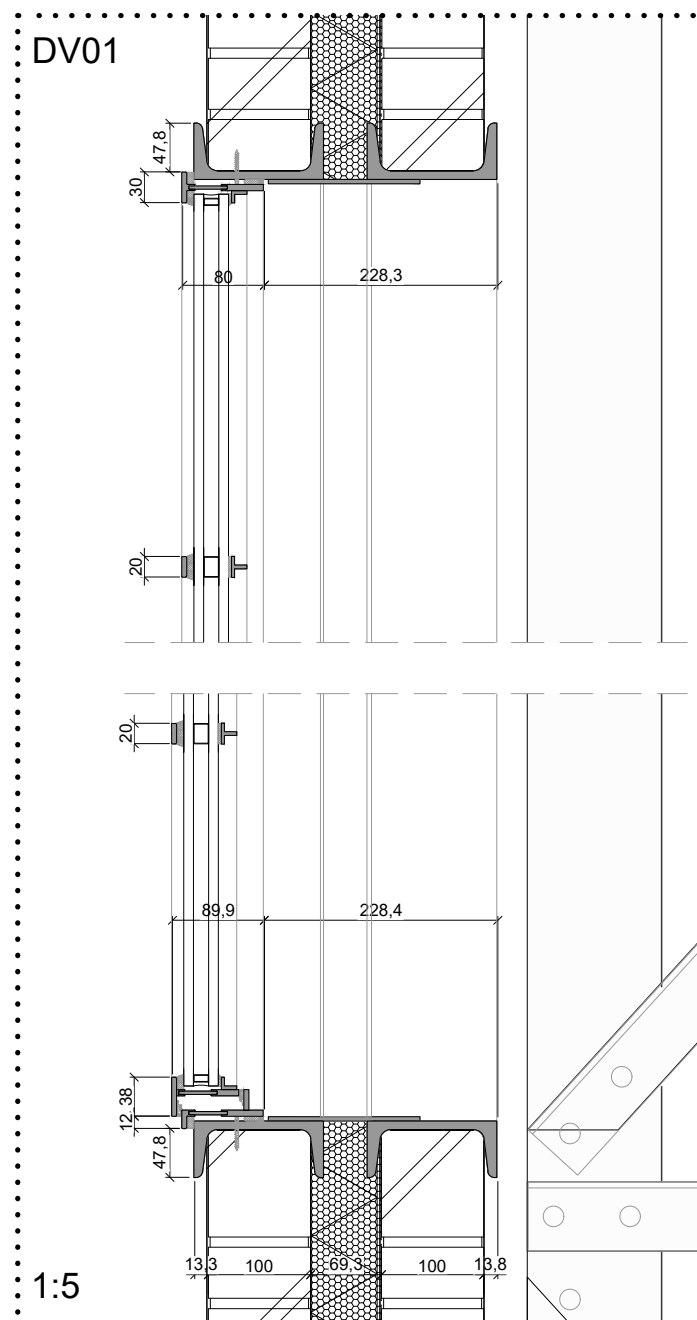
New steel insulating windows

Existing

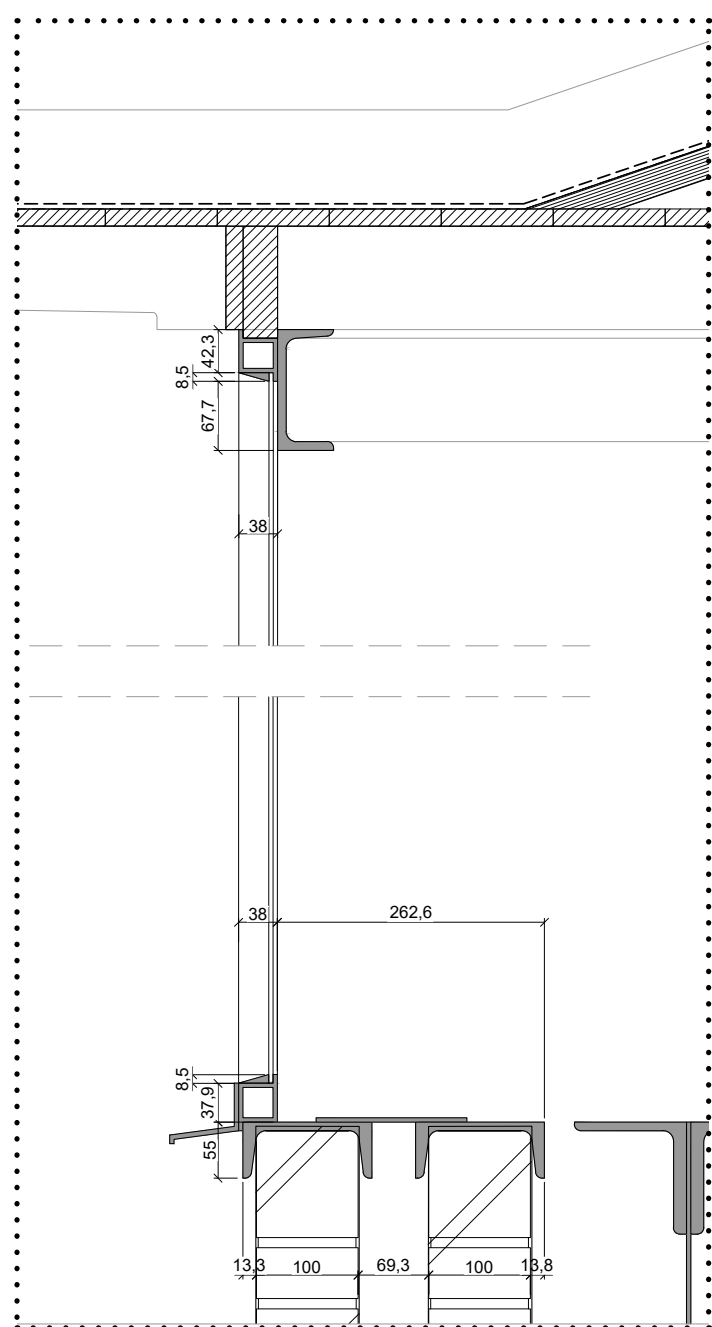
DV01

New

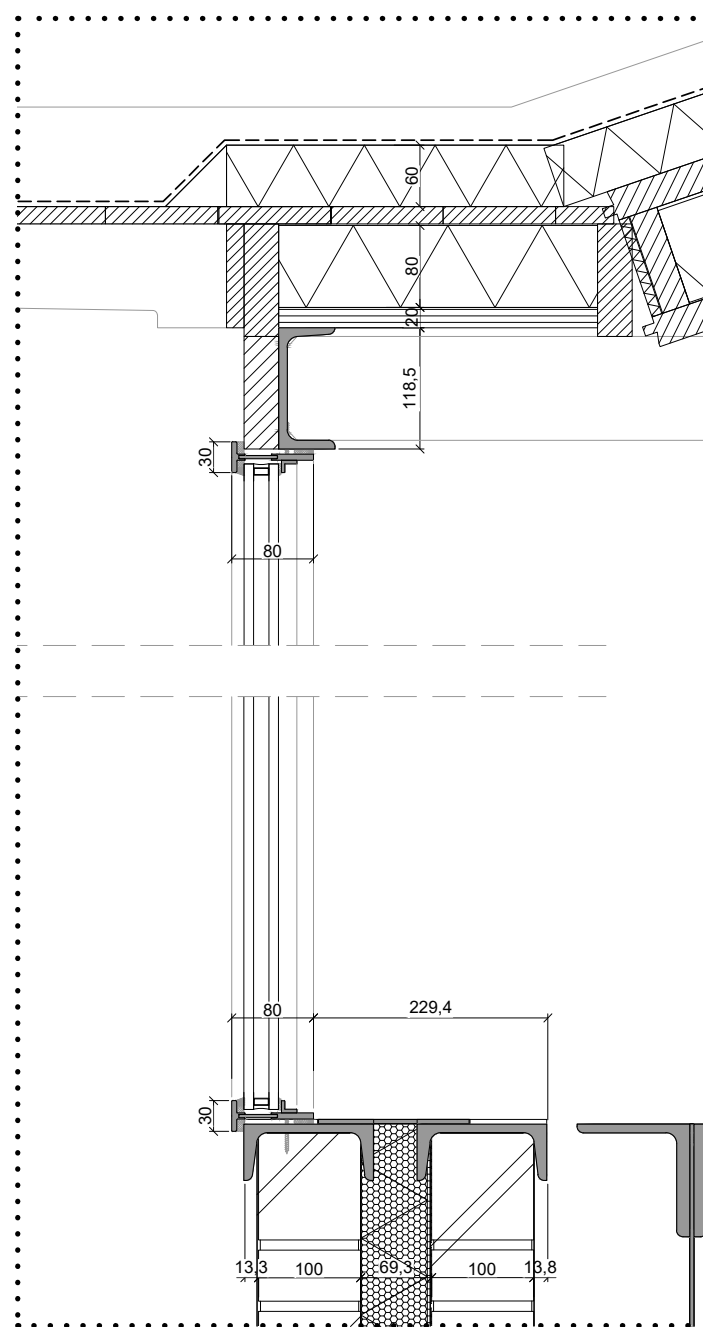
DV01



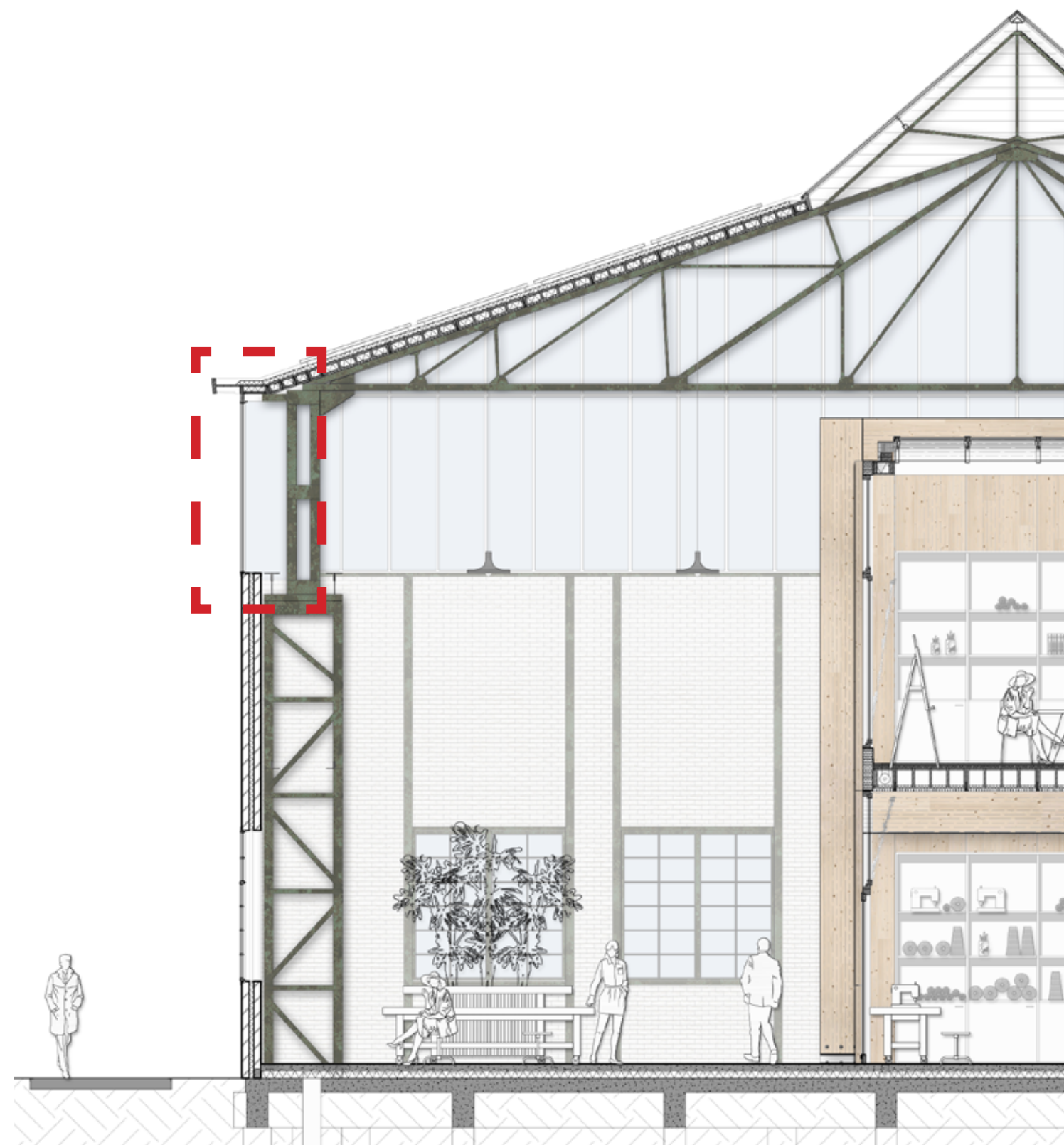
New steel insulating windows

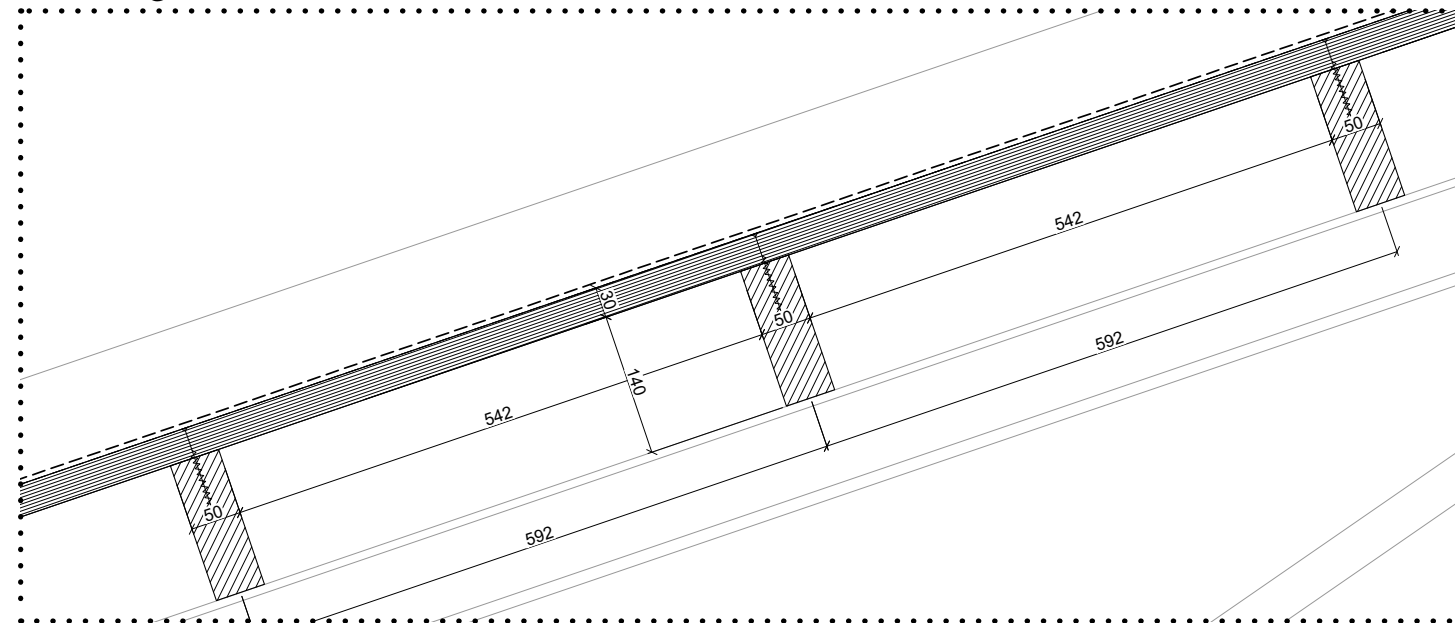
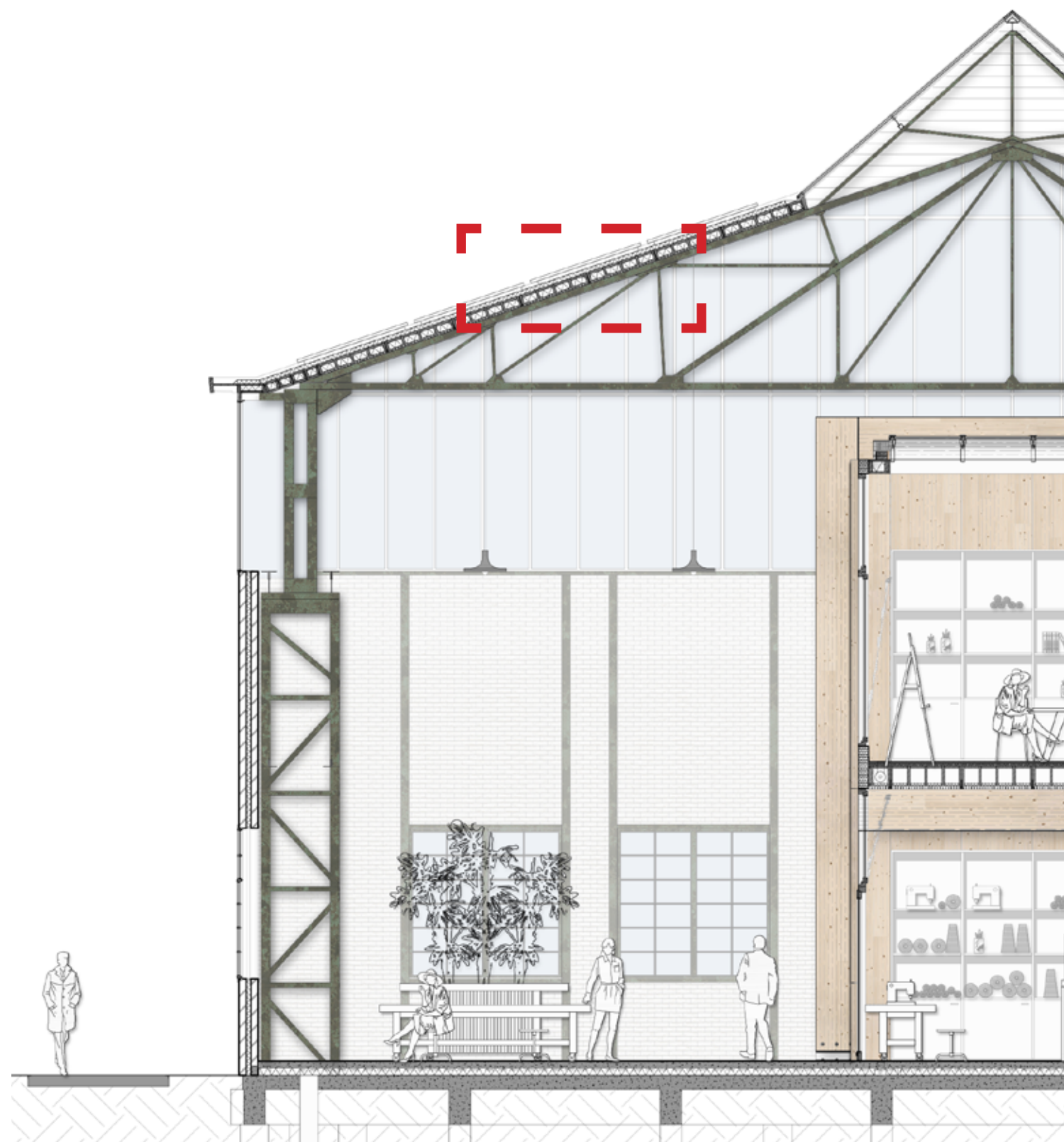
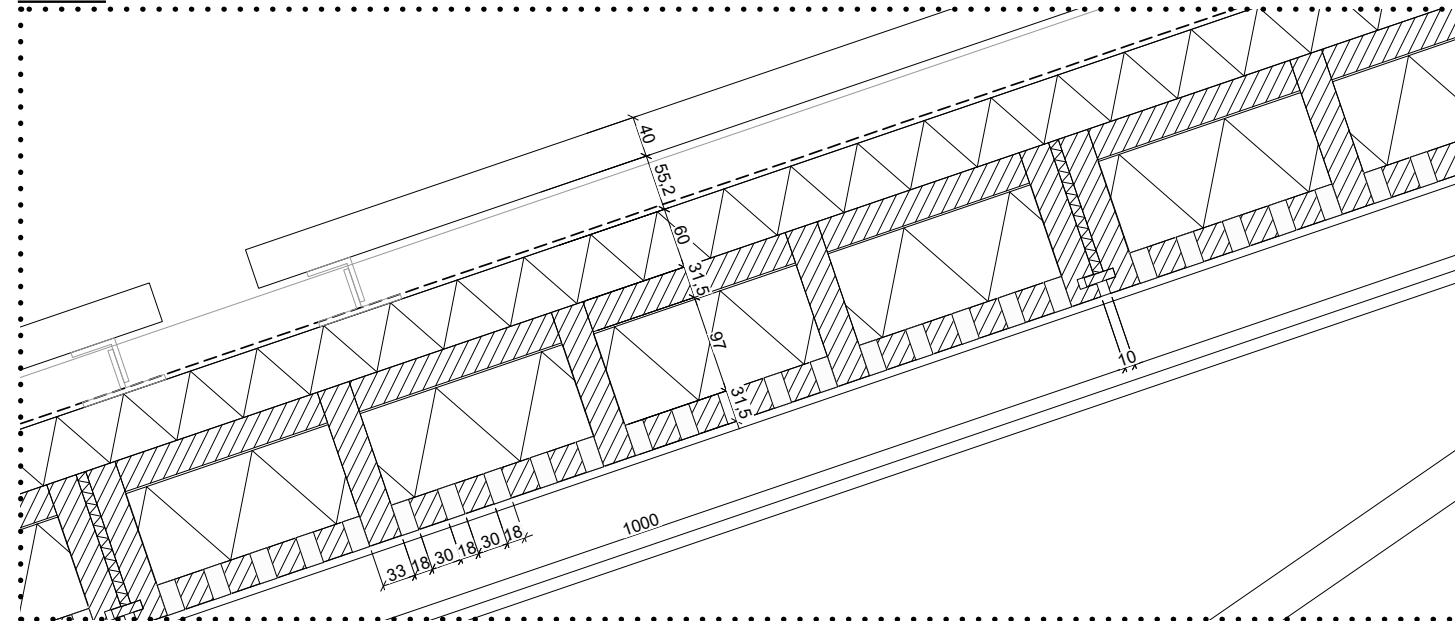


Existing

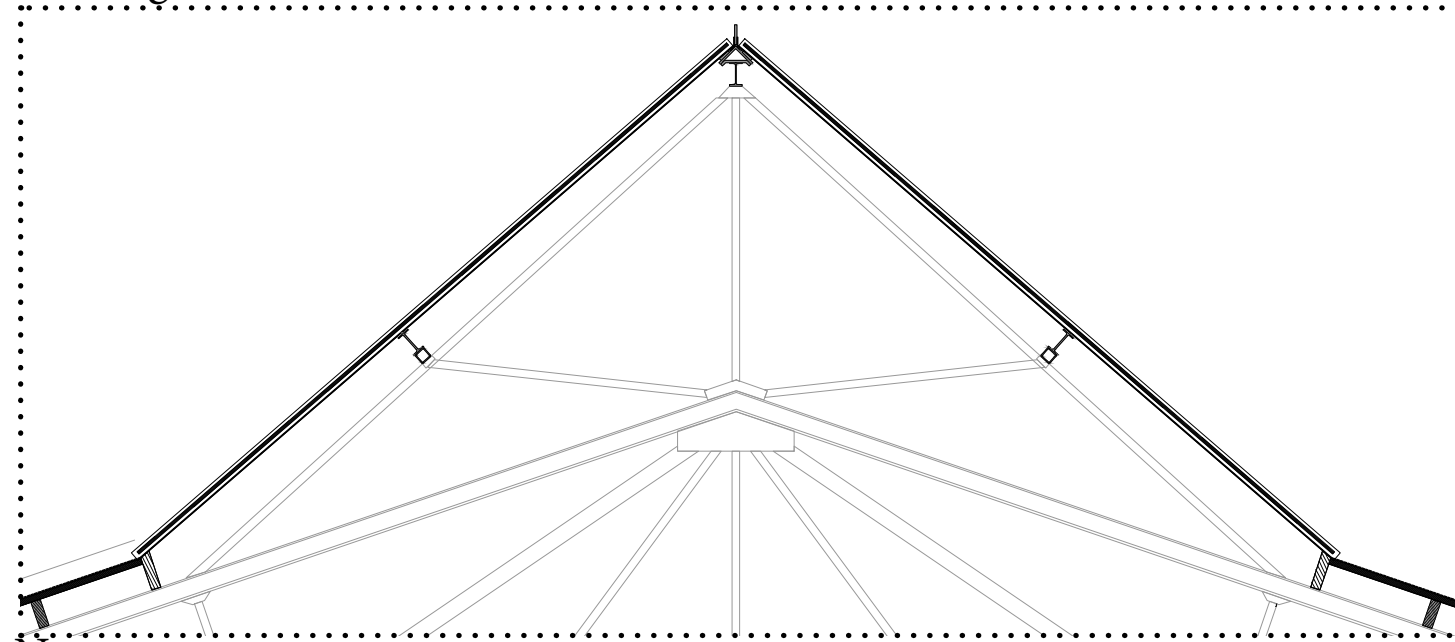


New

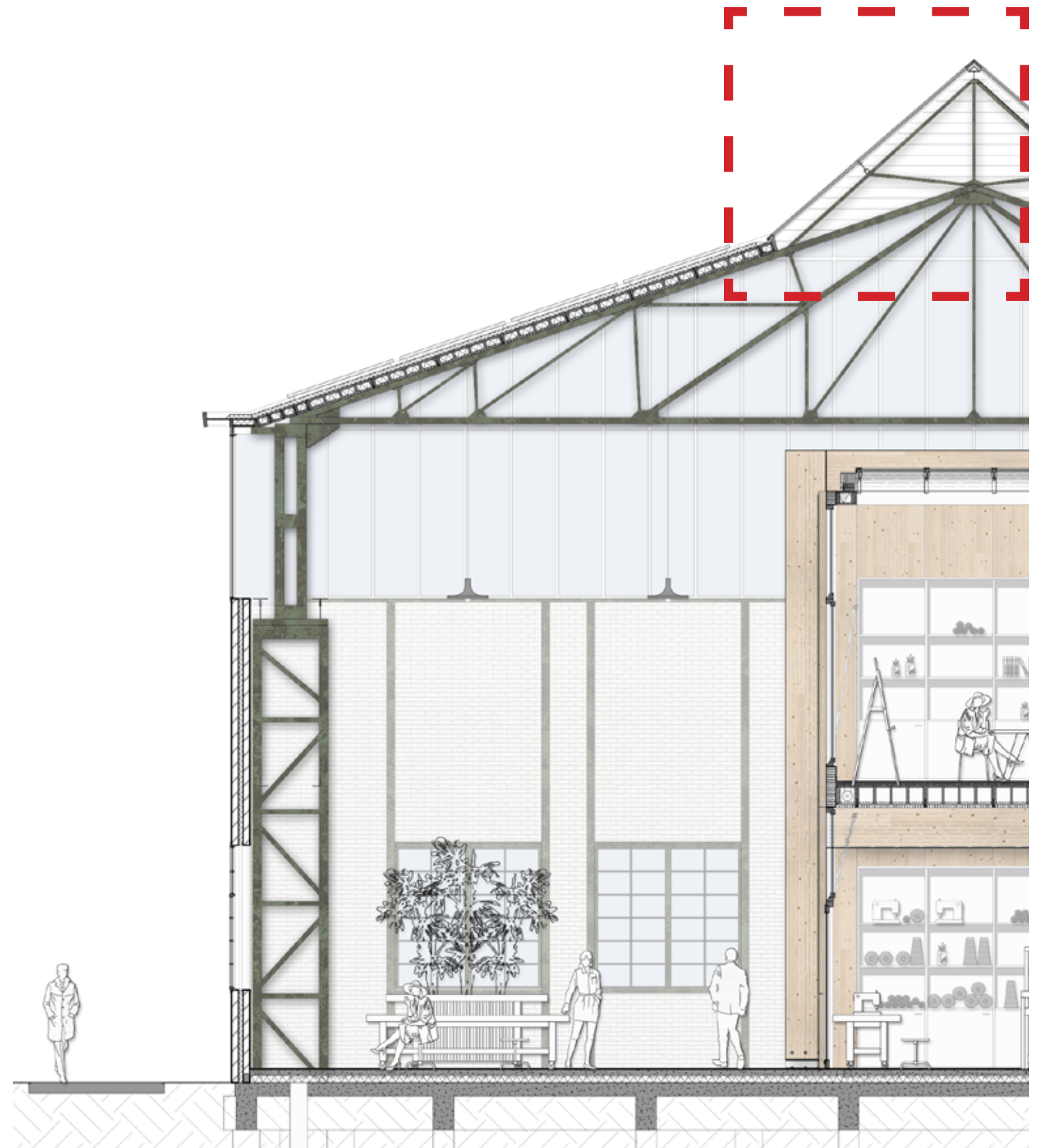
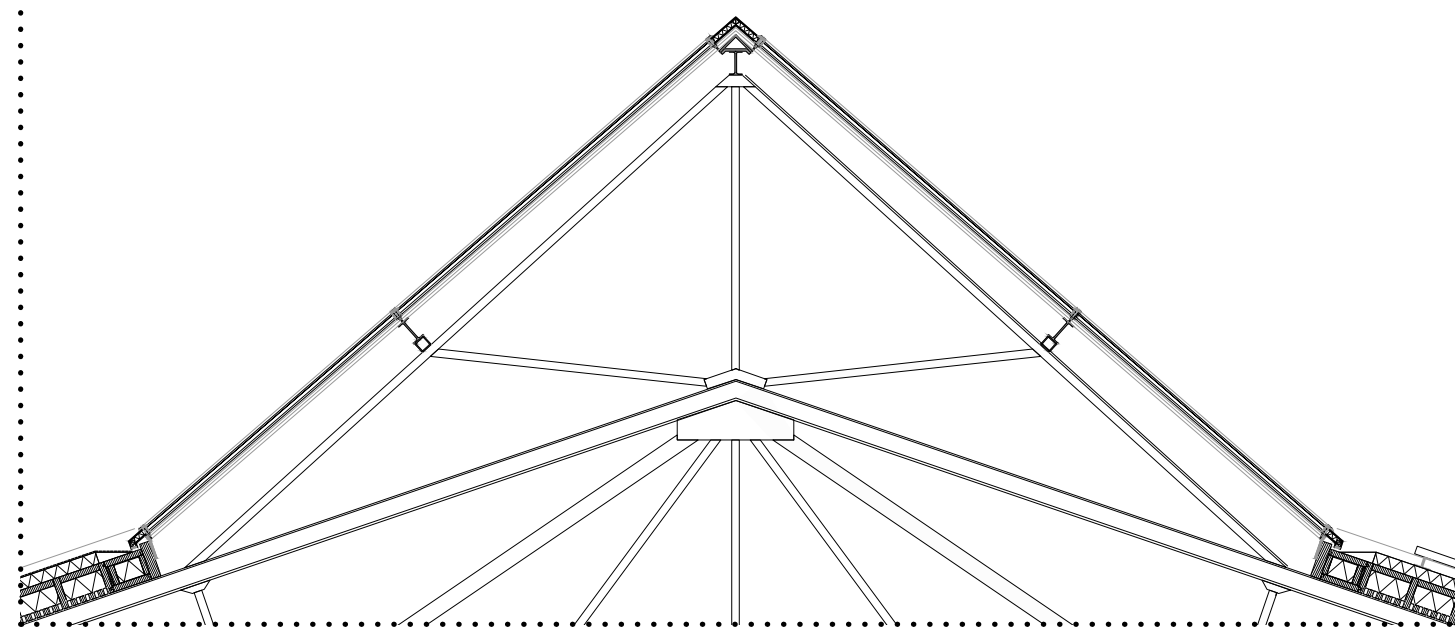


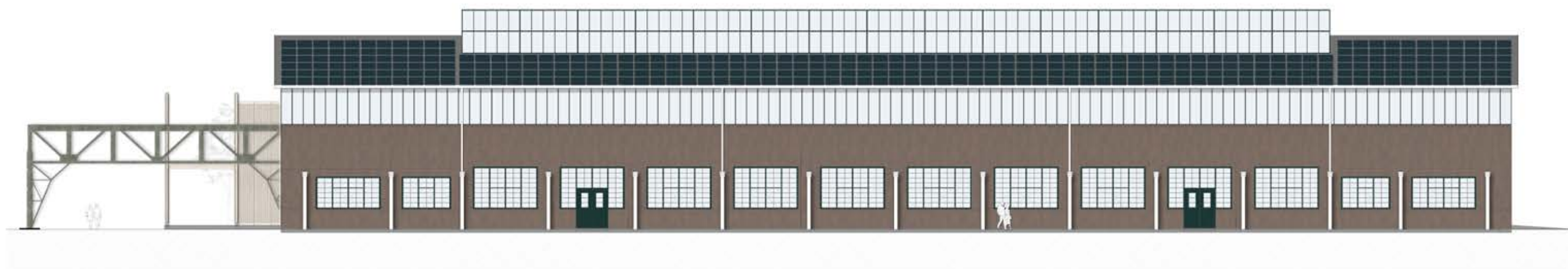
ExistingNew

Existing

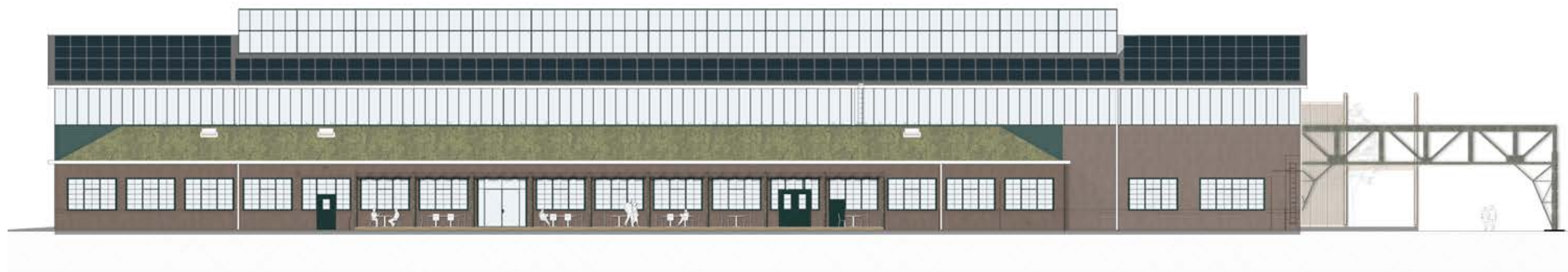


New





e Hall-East facade: 1:100



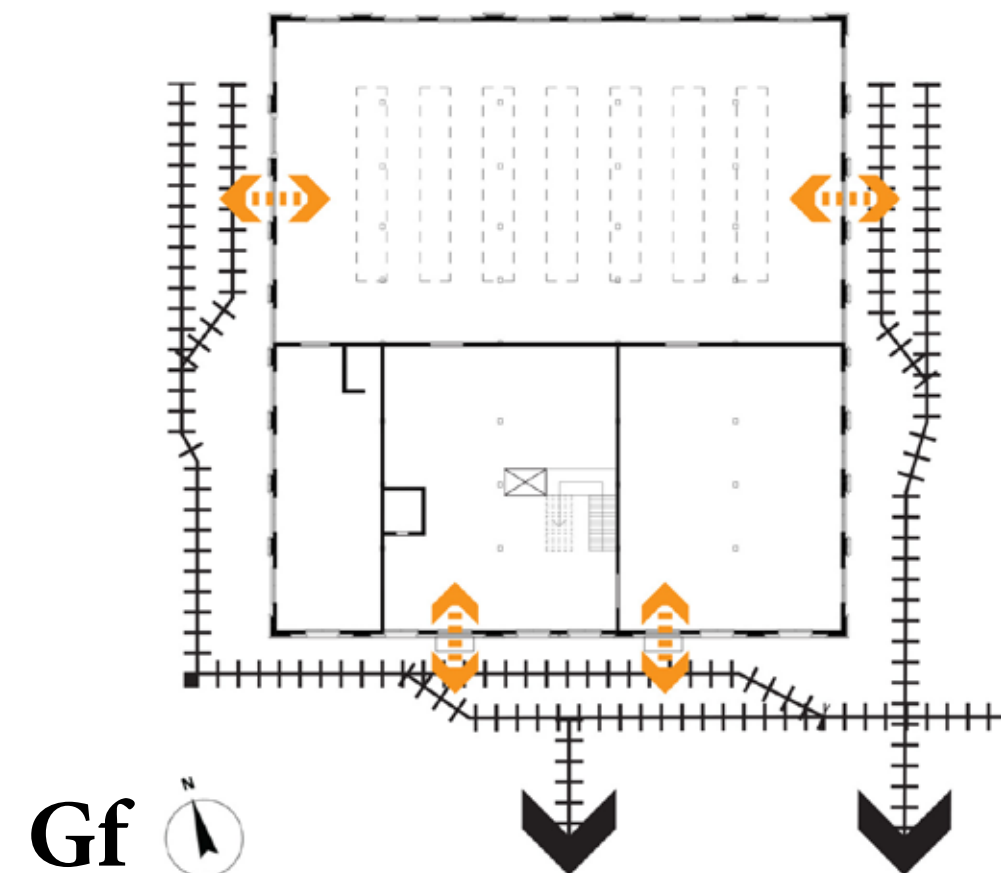
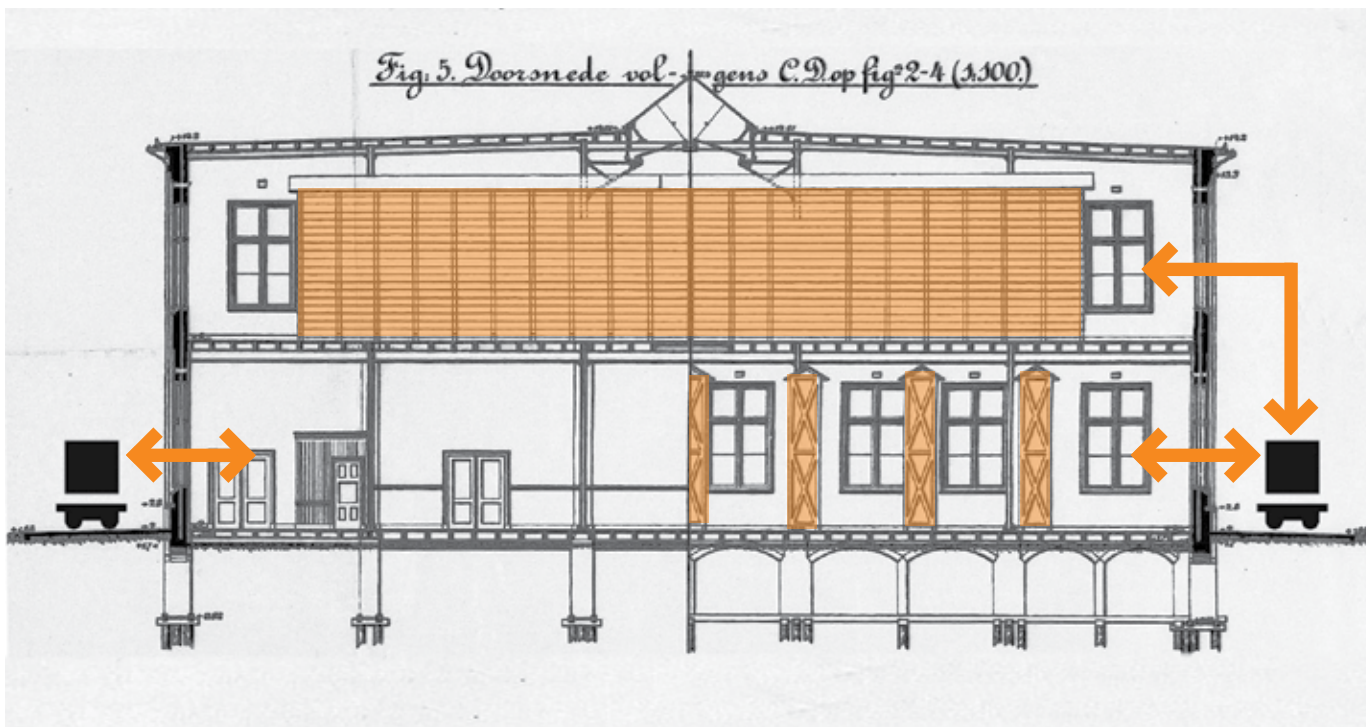
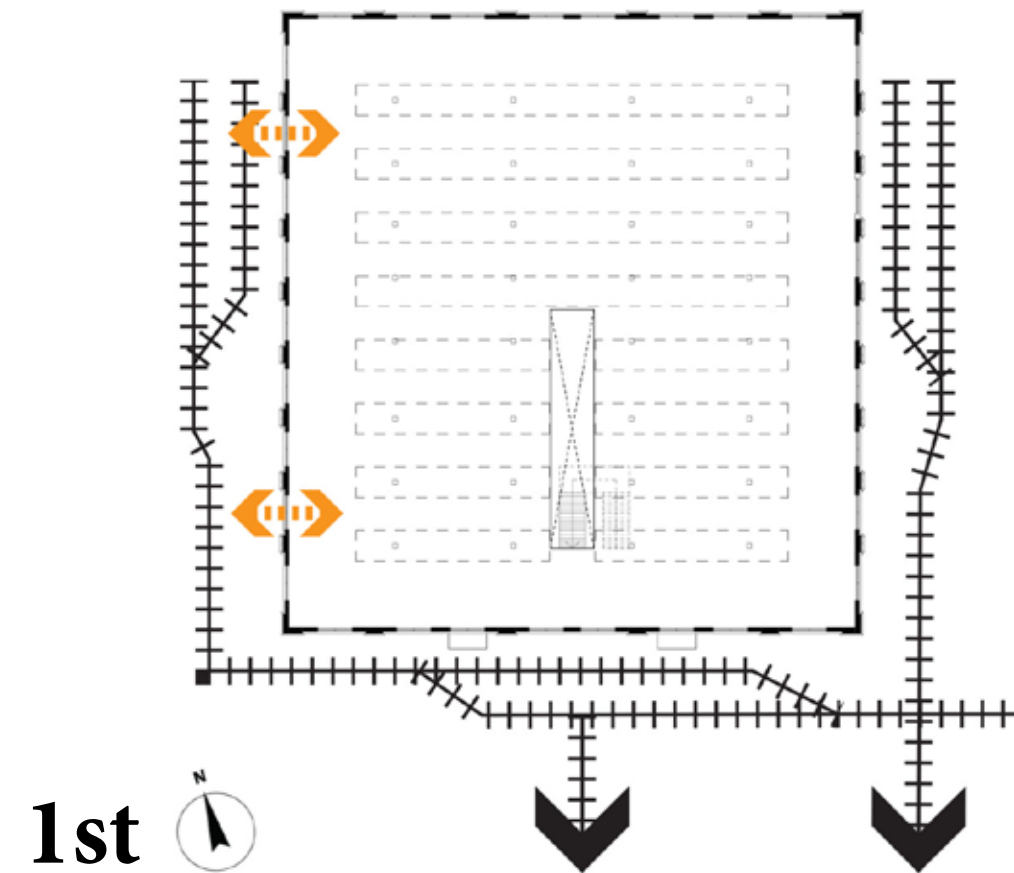
e Hall-West facade: 1:100



Current condition

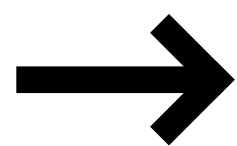


Original function

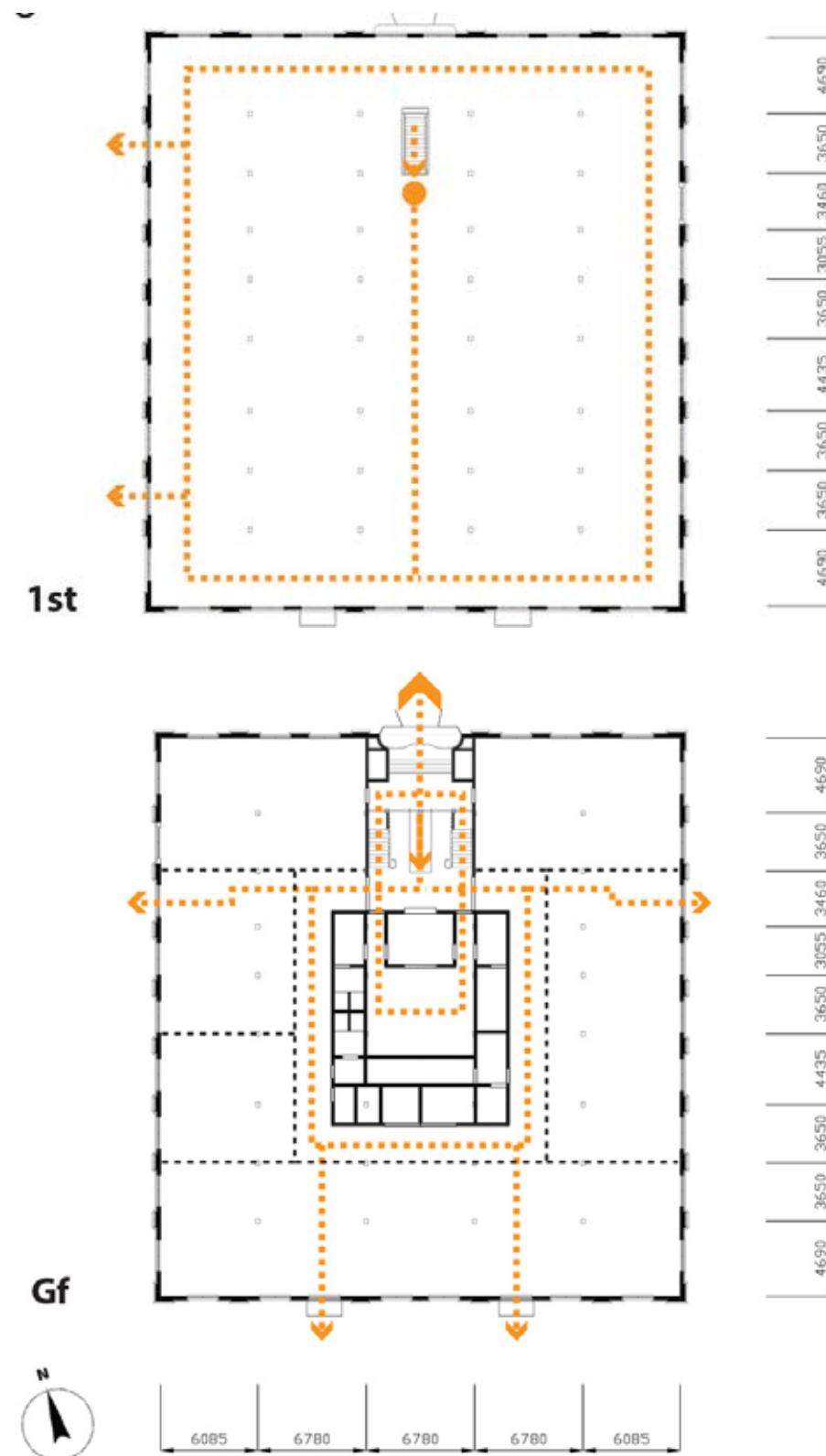
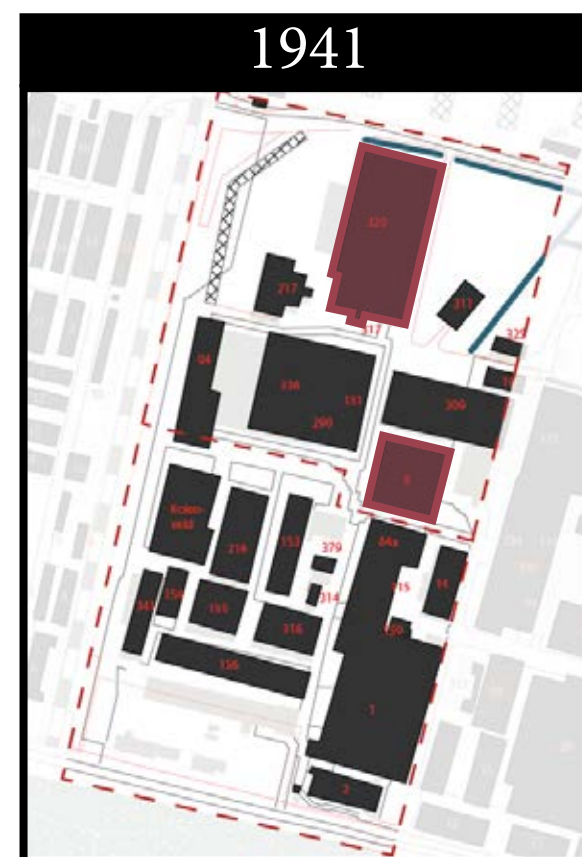
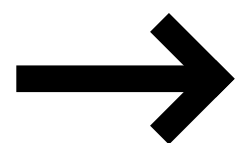
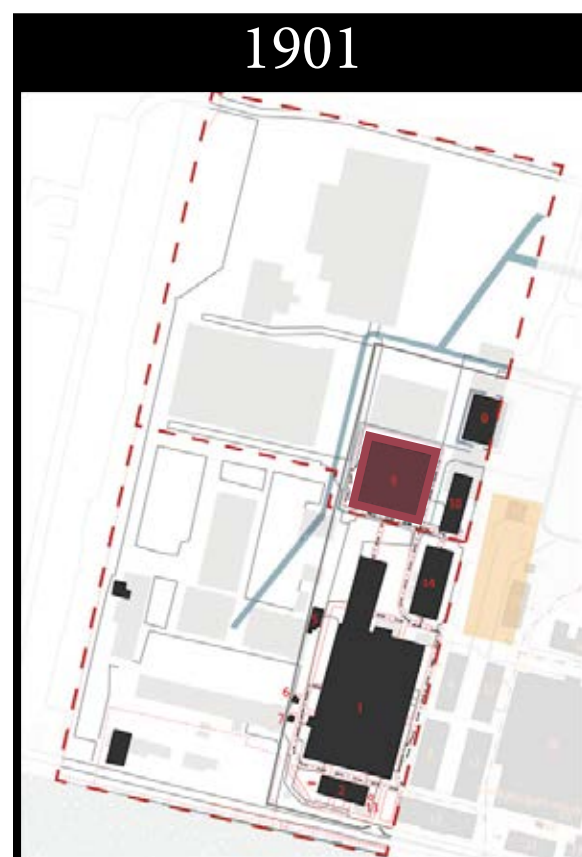


Changing function

Weapon
depot



Headquarters
machine factory

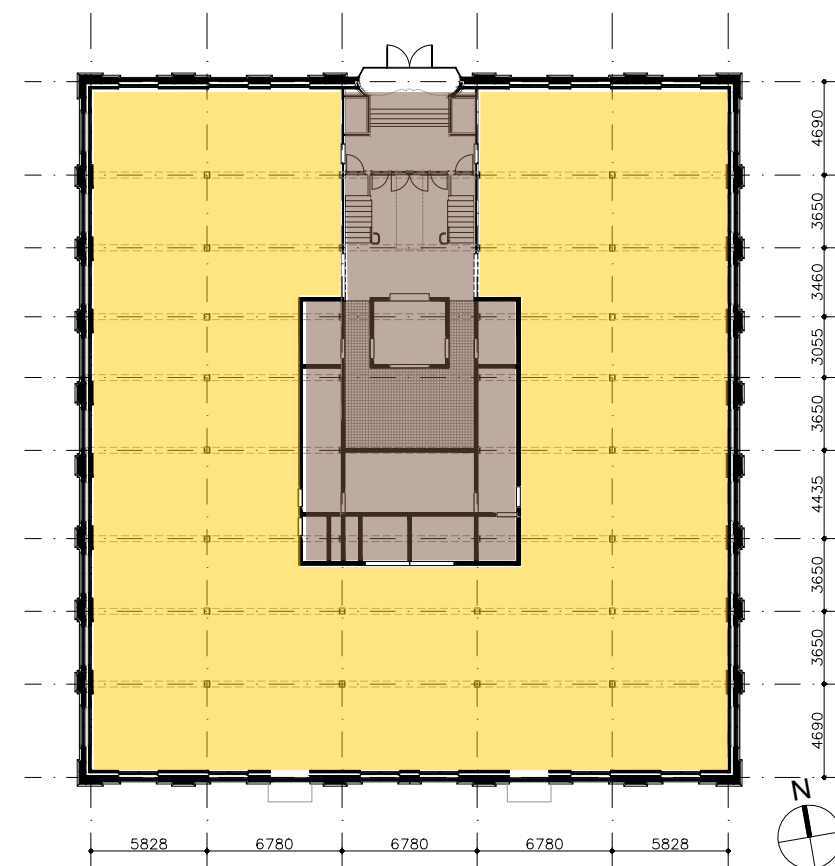
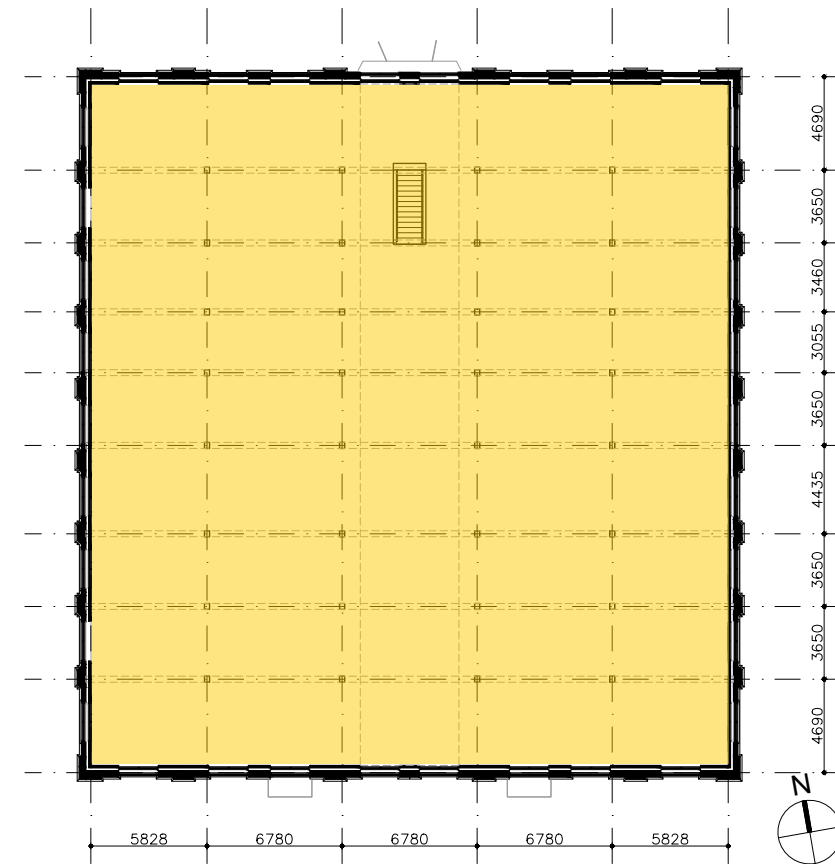
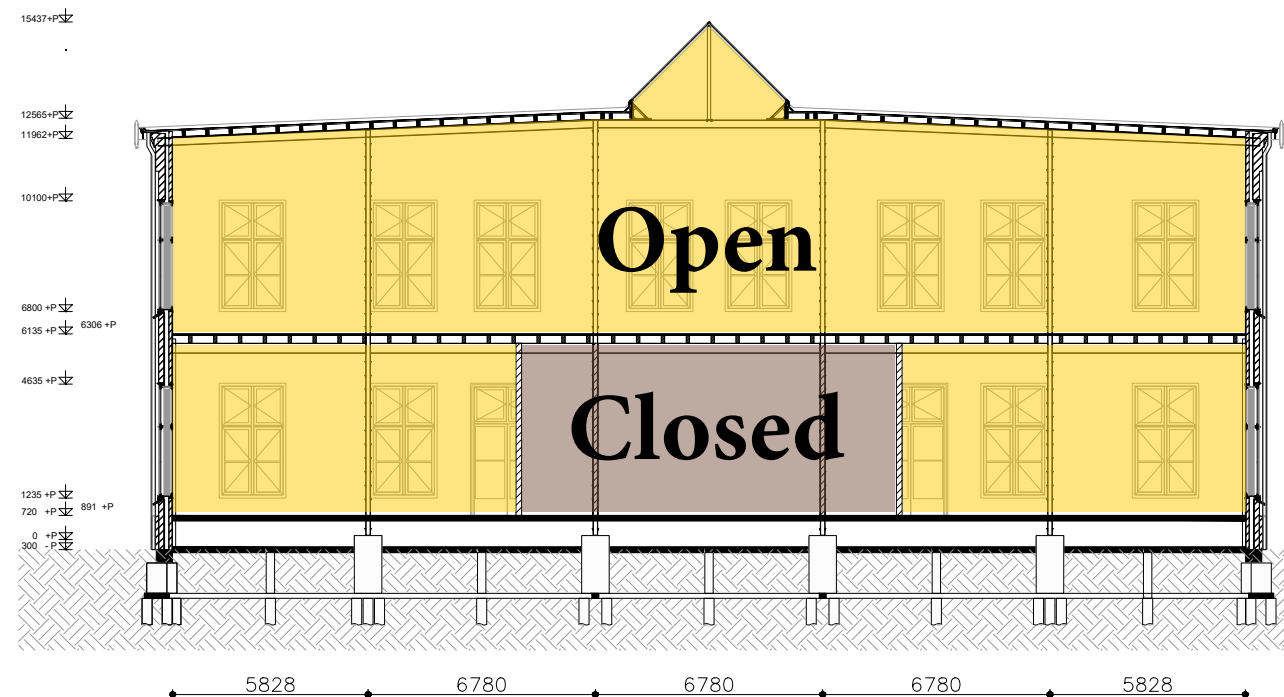


Poor condition



Recently renovated



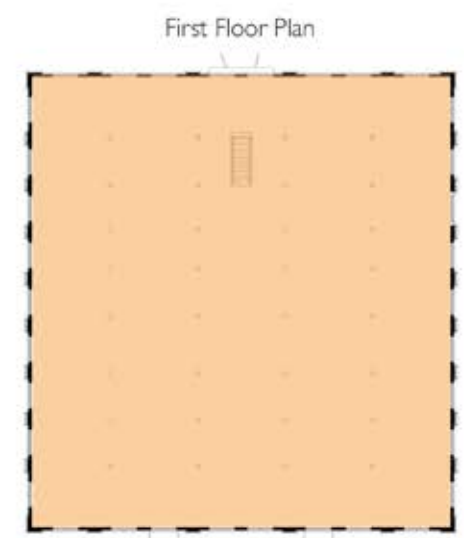
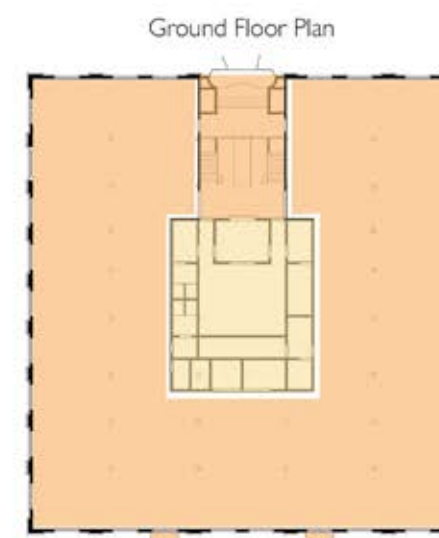
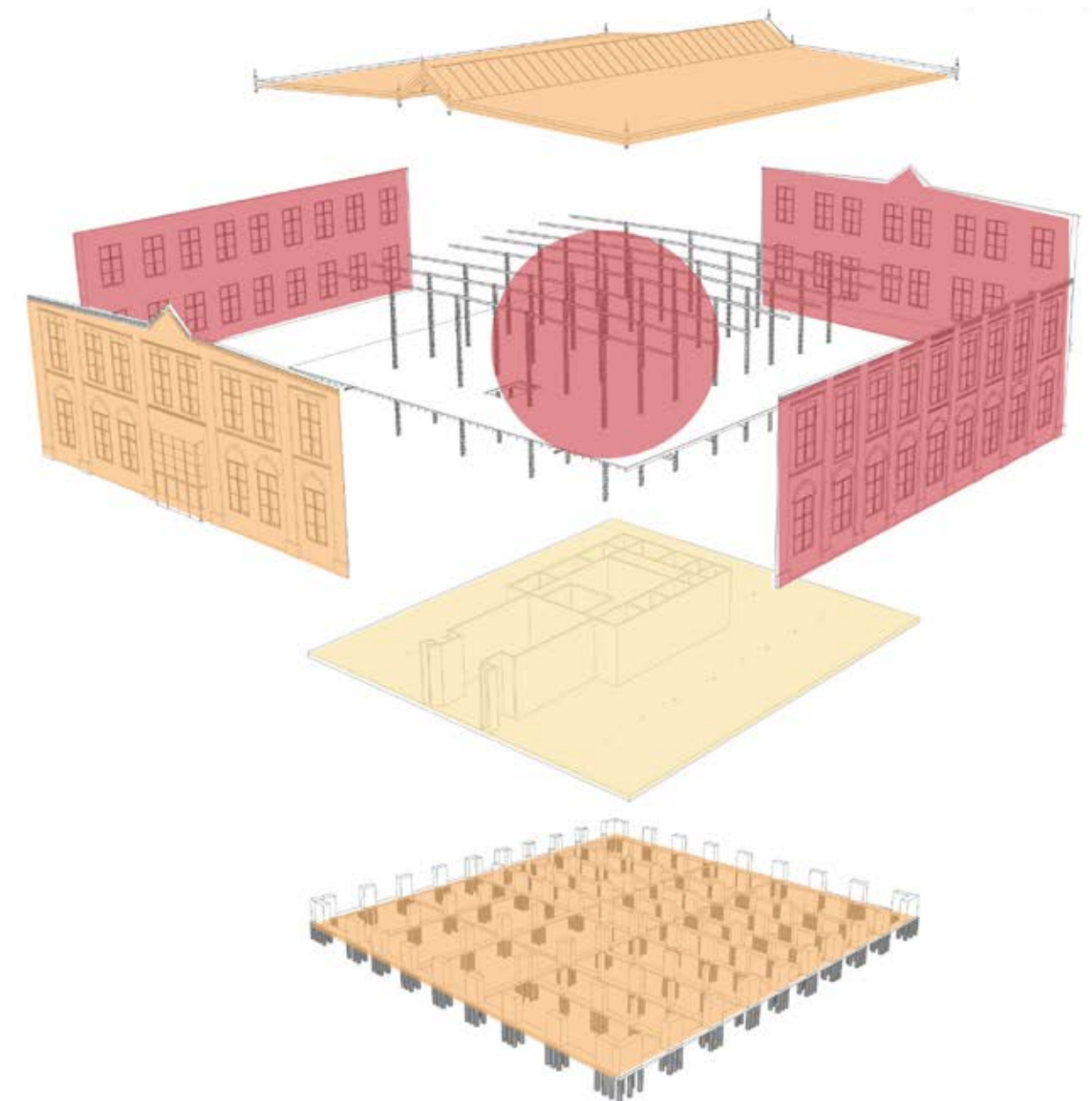


Most valuable aspects

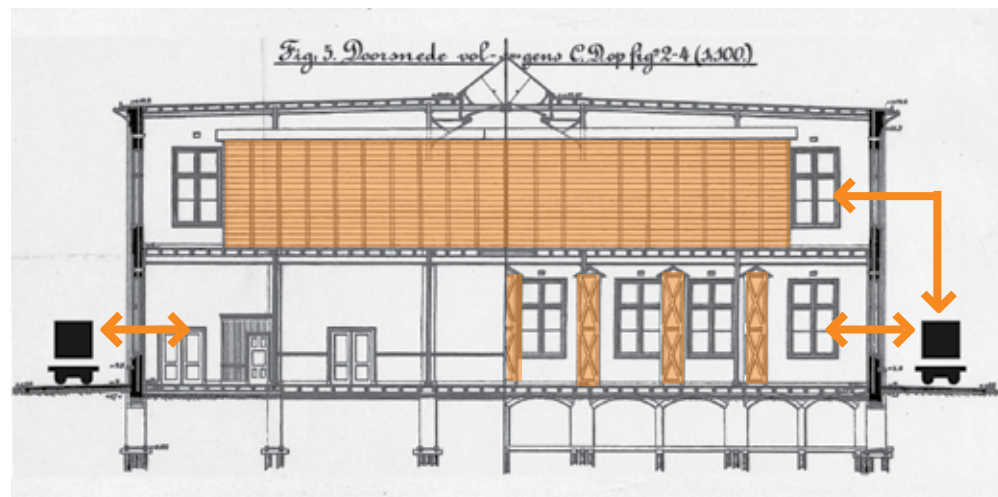
Representative Facade (Neo-Renaissance style)

Spatiality (open)

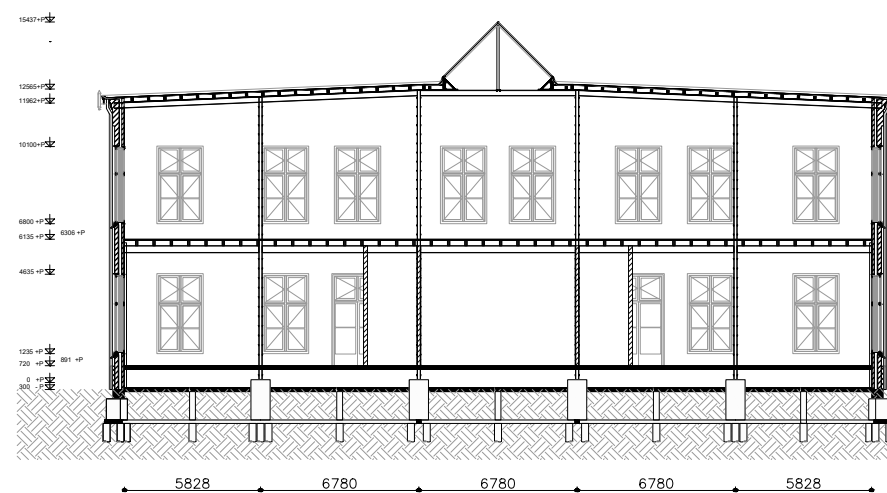
Thin steel structure



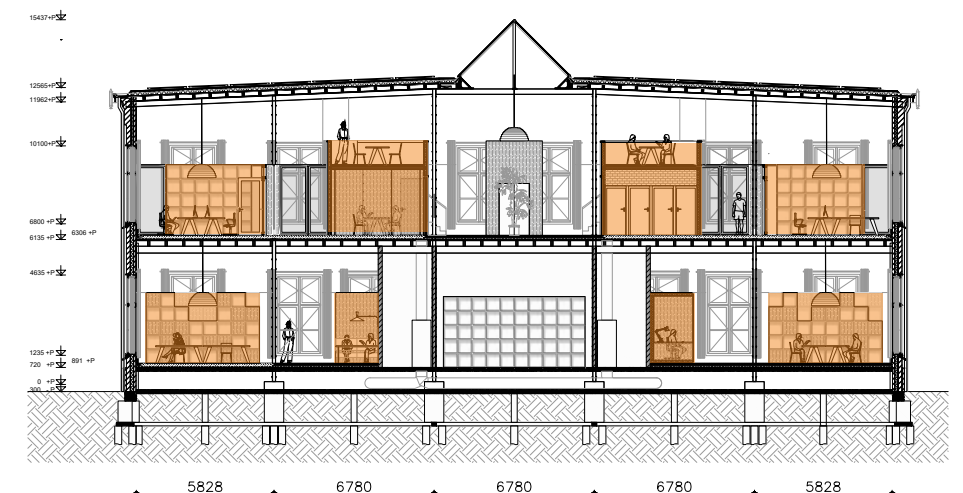
Past



Present

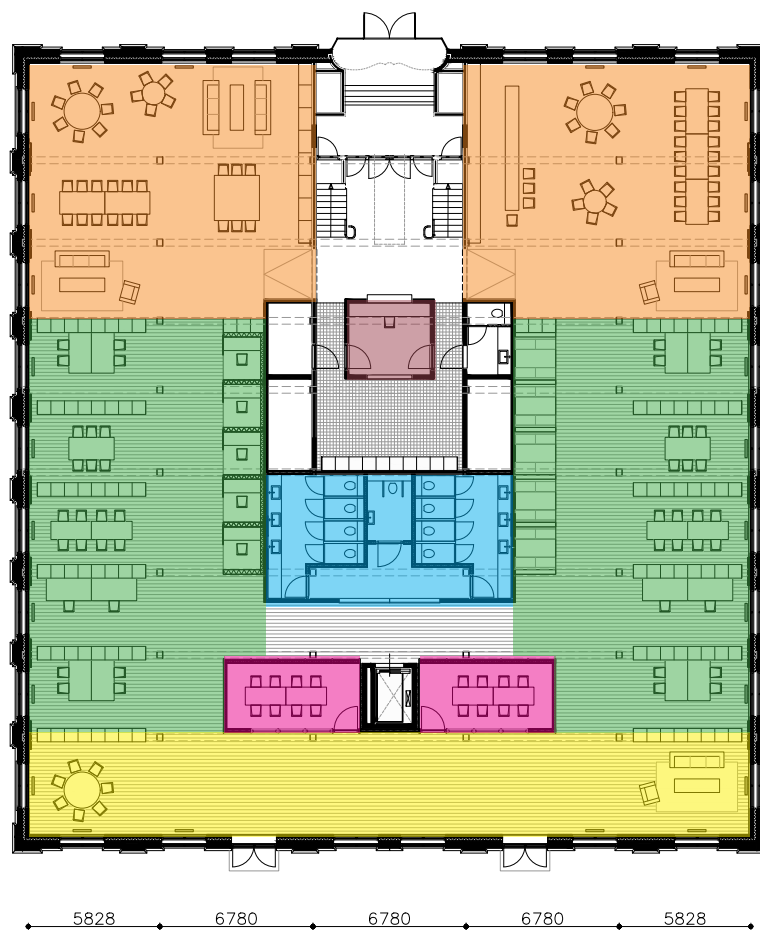


Future



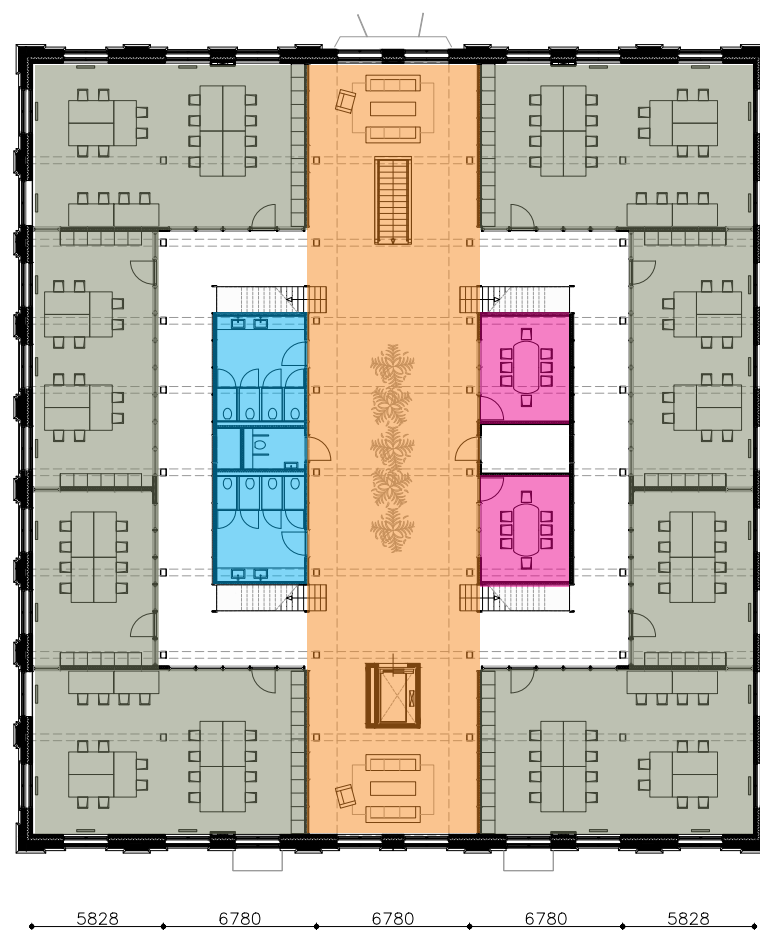
0

- Service desk
- Social space
- Flexible workplaces
- Meeting rooms
- Event space
- Toilets



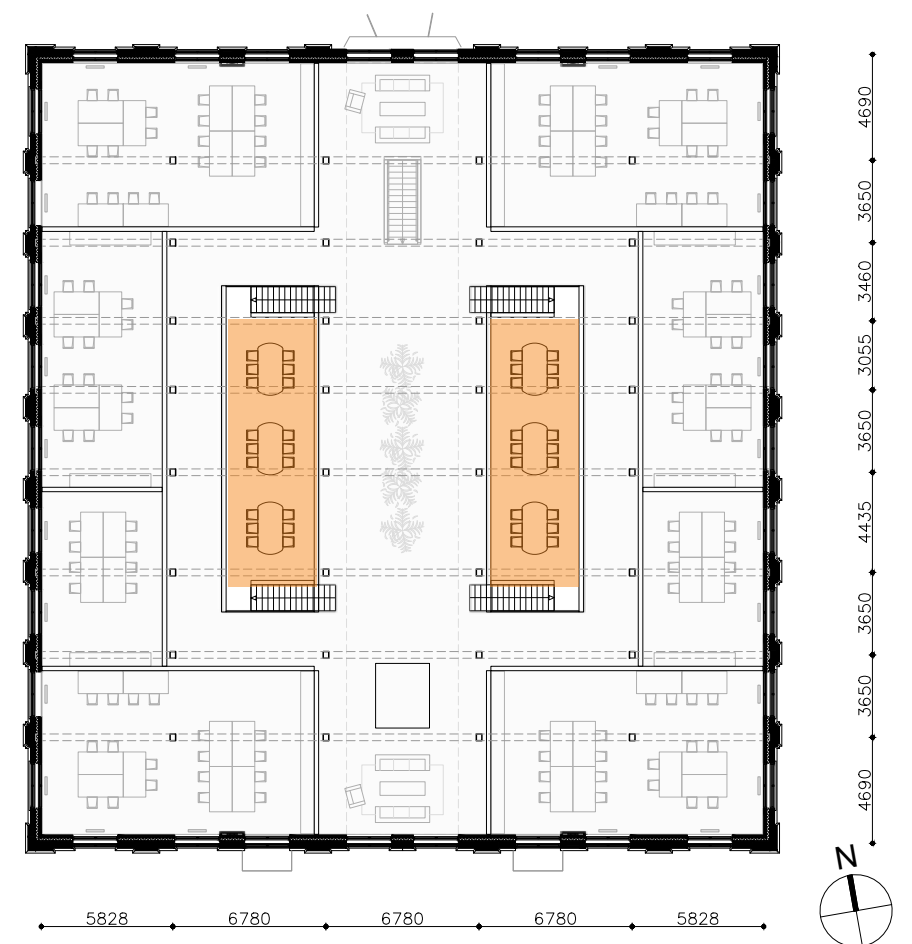
1

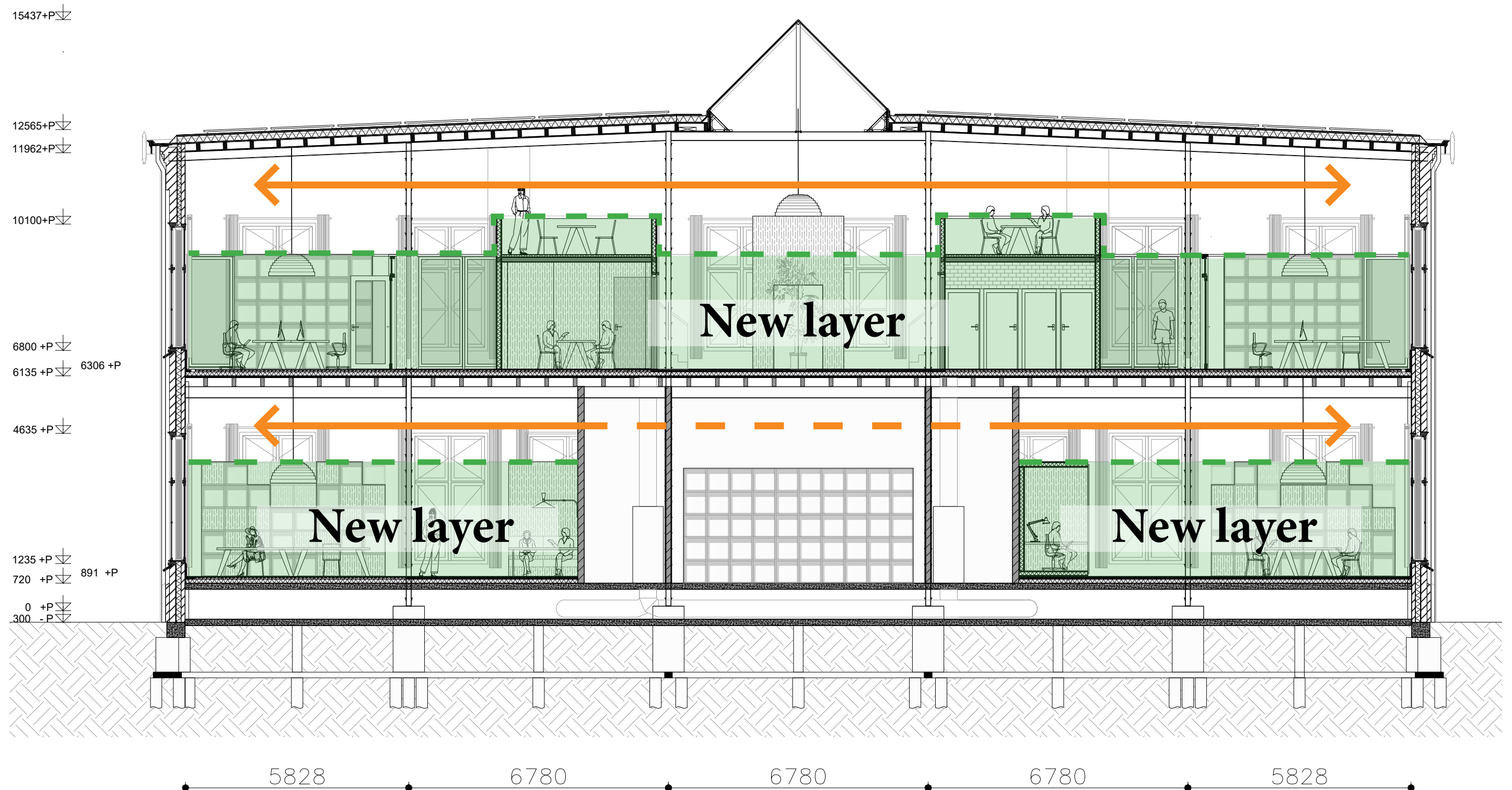
- Social space
- Fixed offices
- Meeting rooms
- Toilets



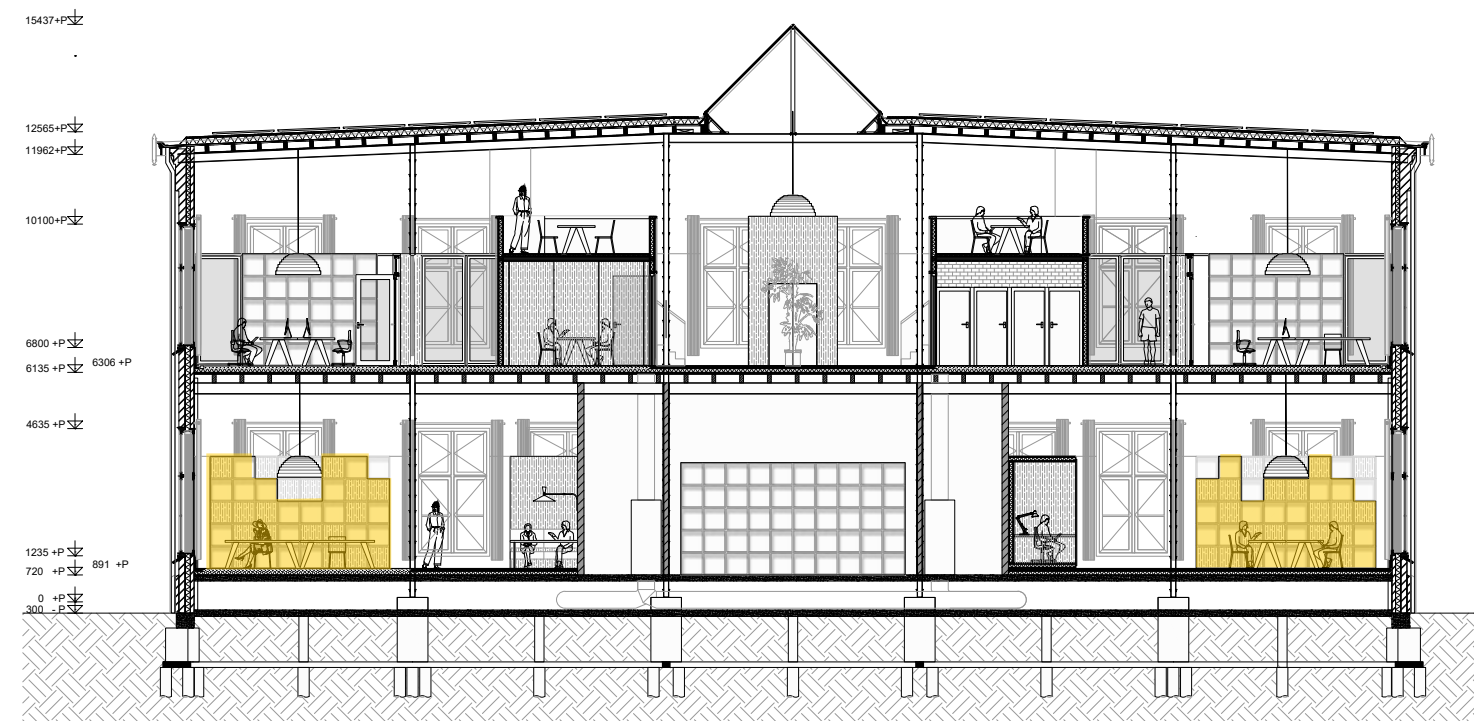
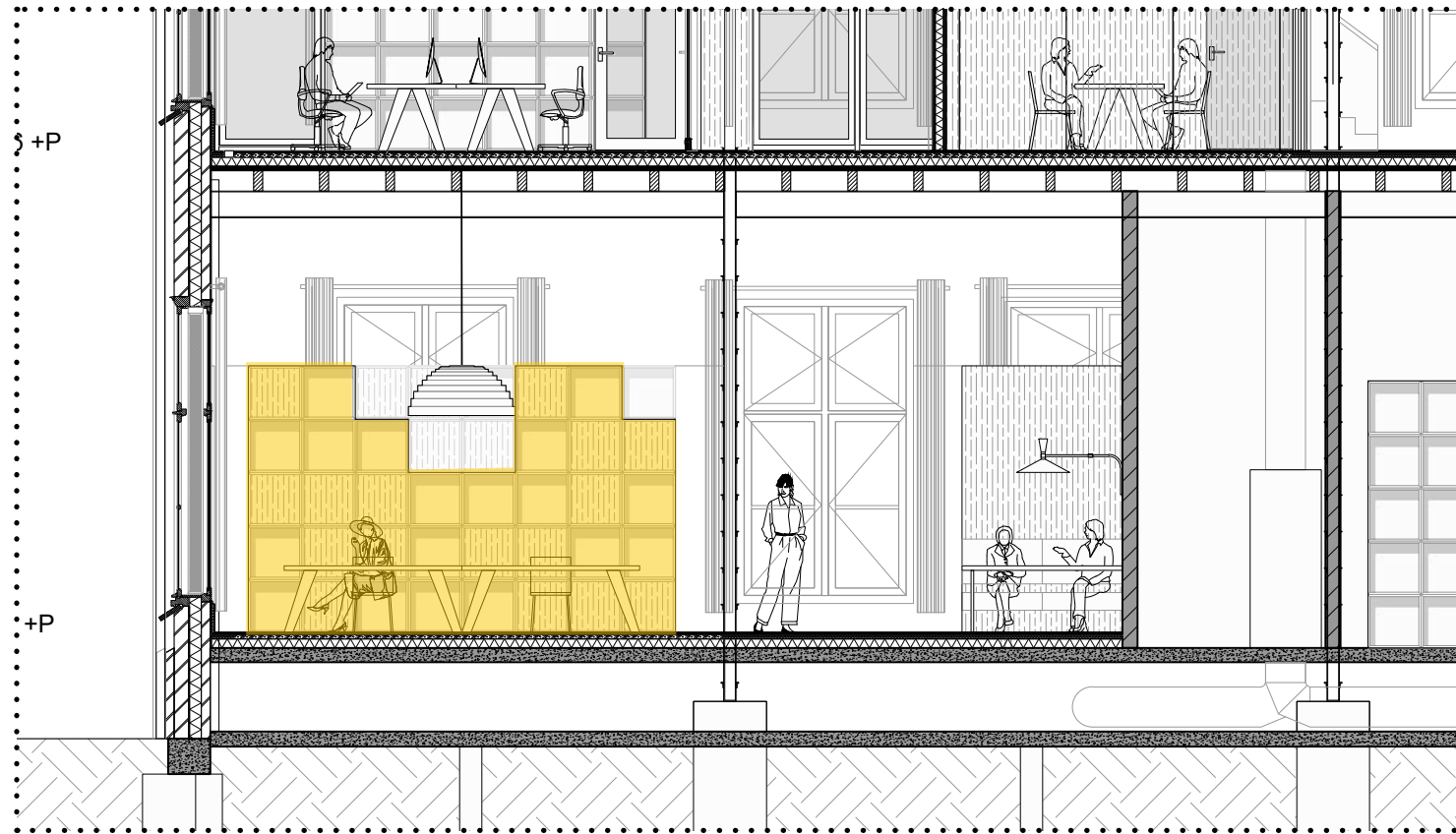
2

- Collective workspaces/social space

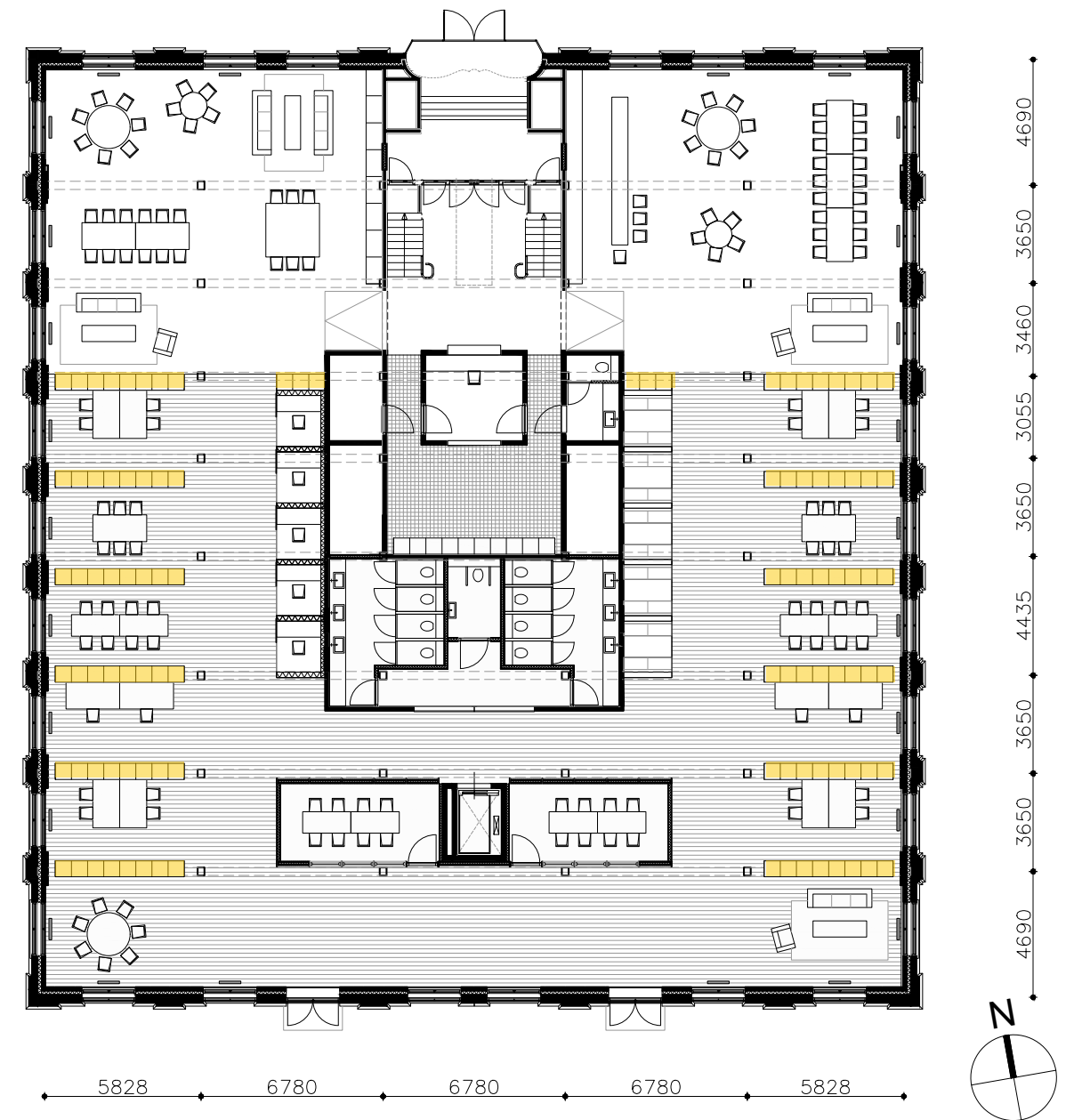




Design New storage racks

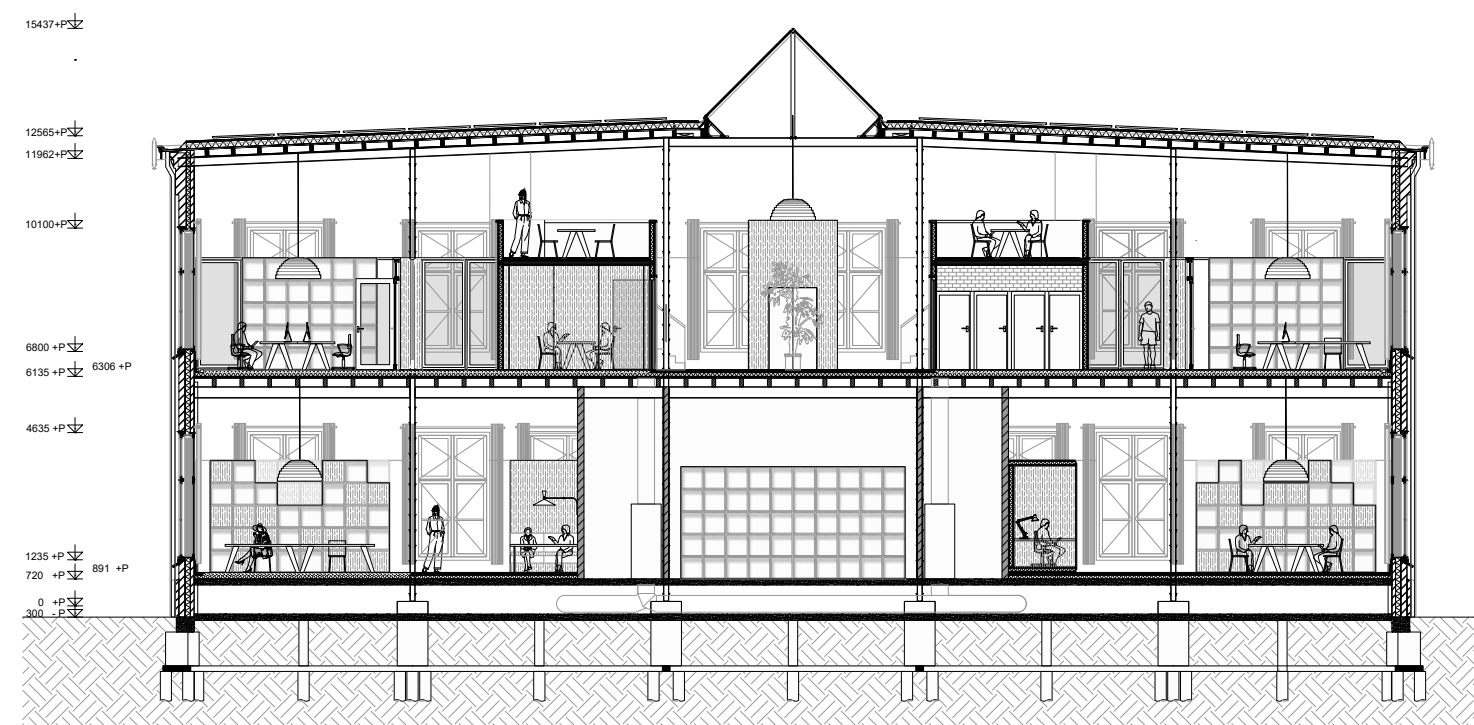
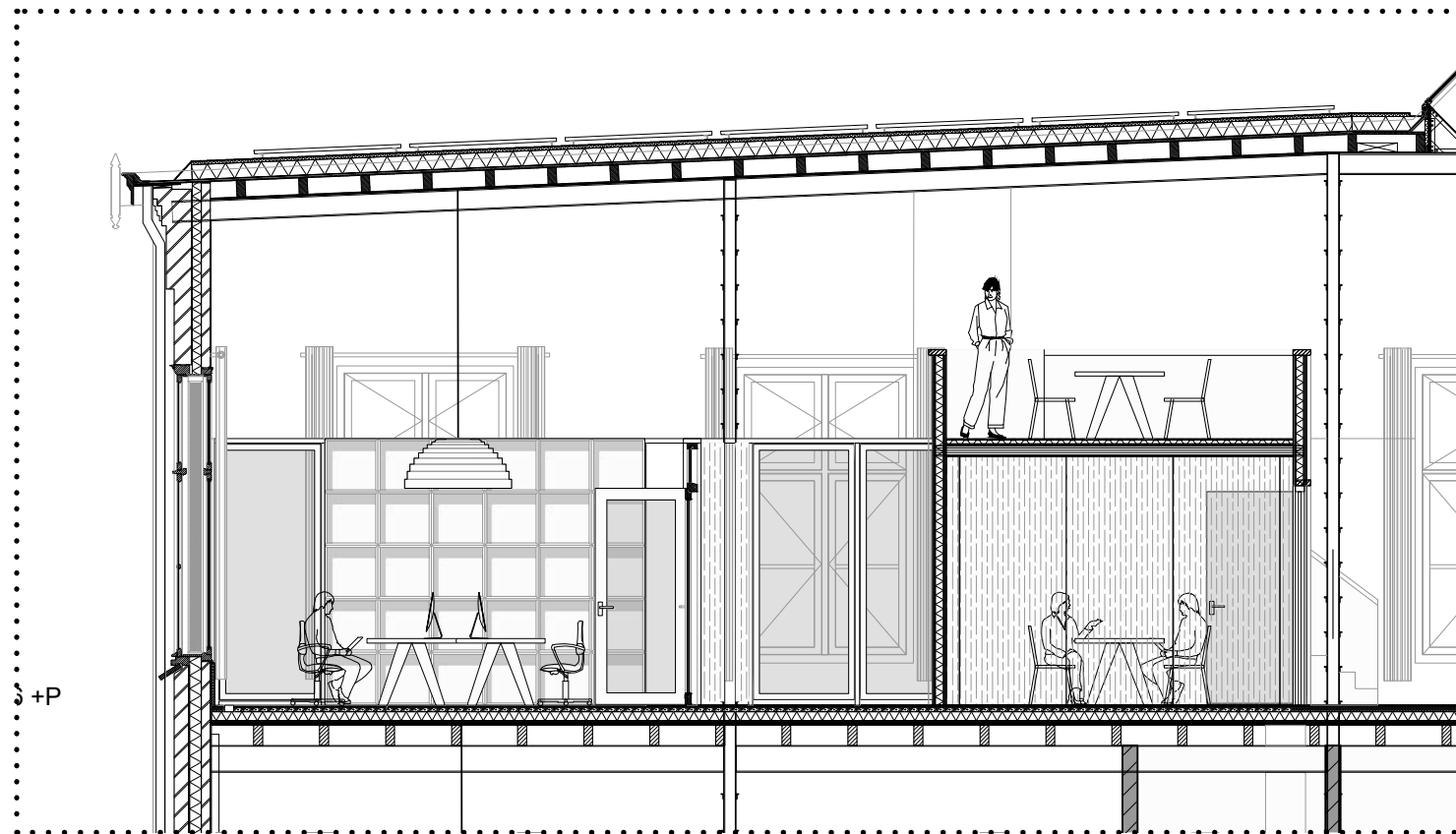


Ground floor

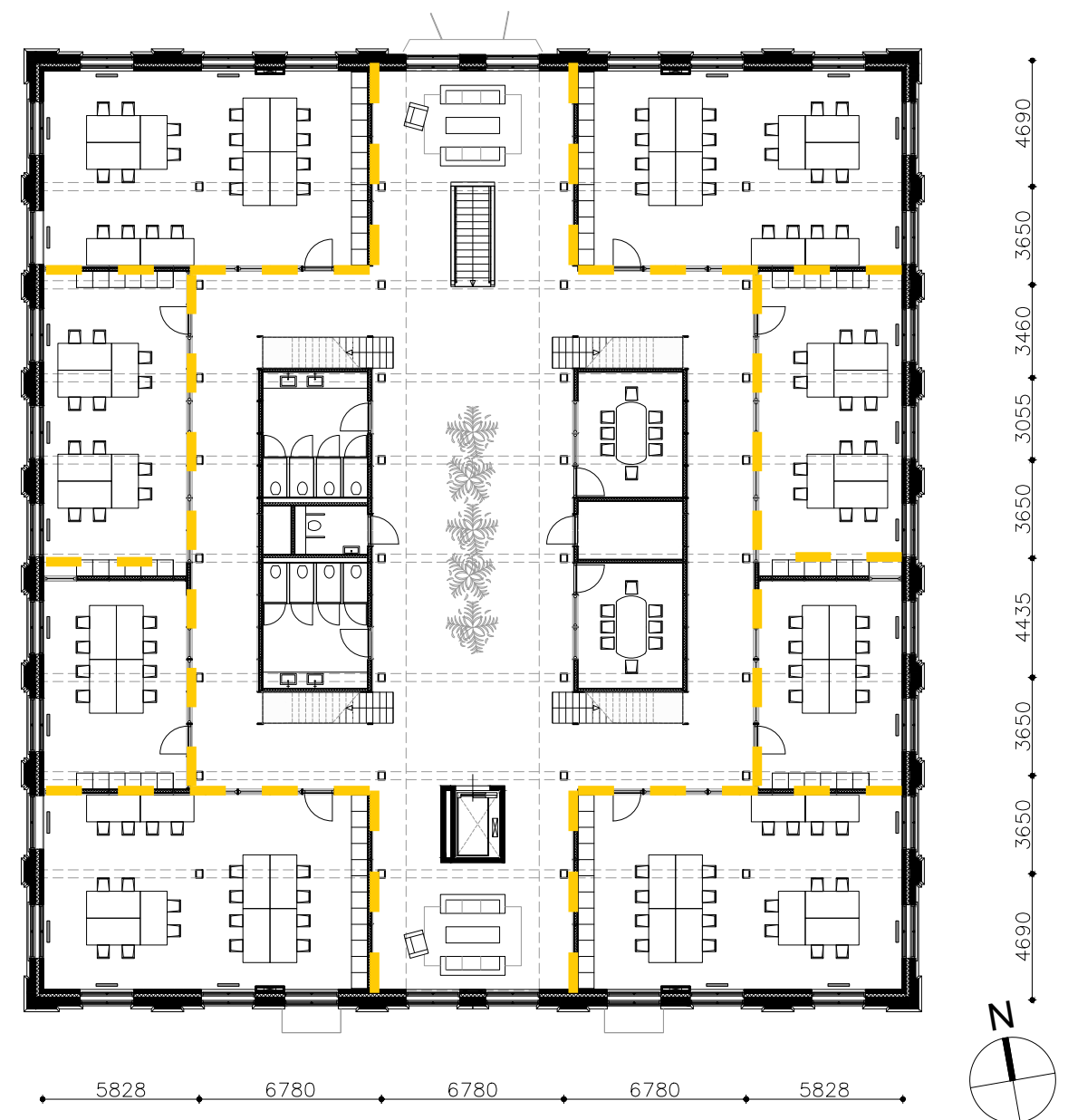


Flexible work space

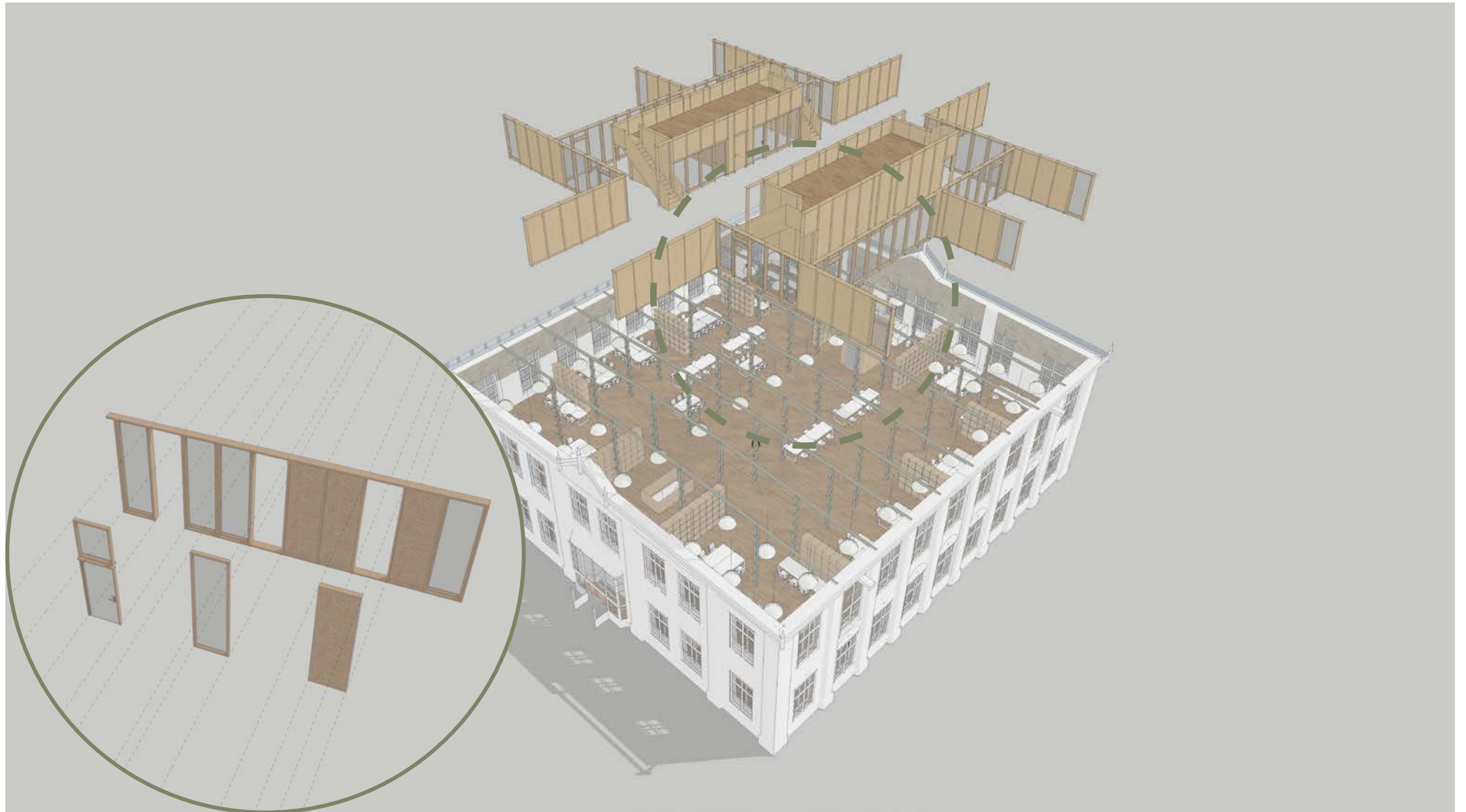




First floor

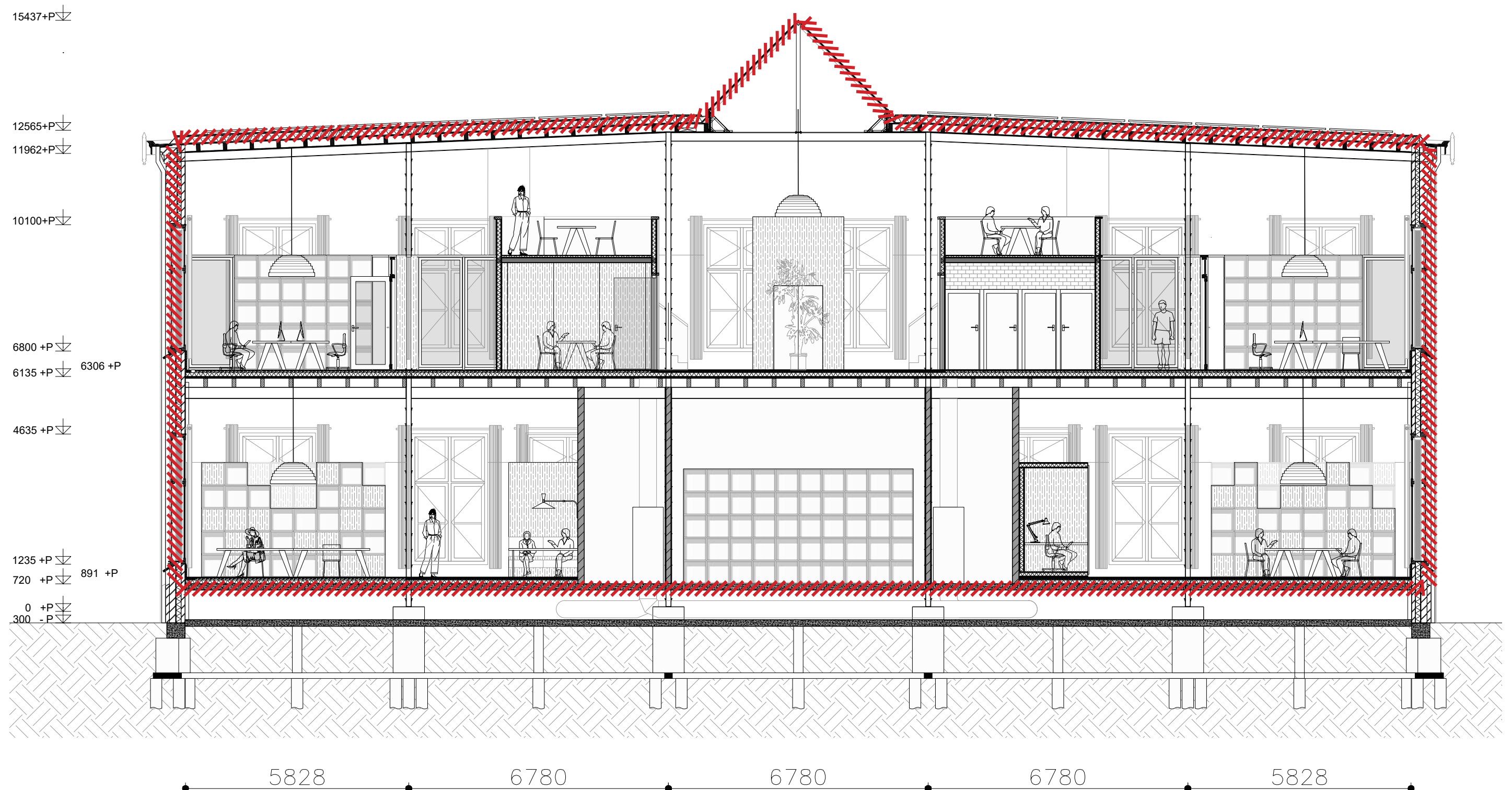




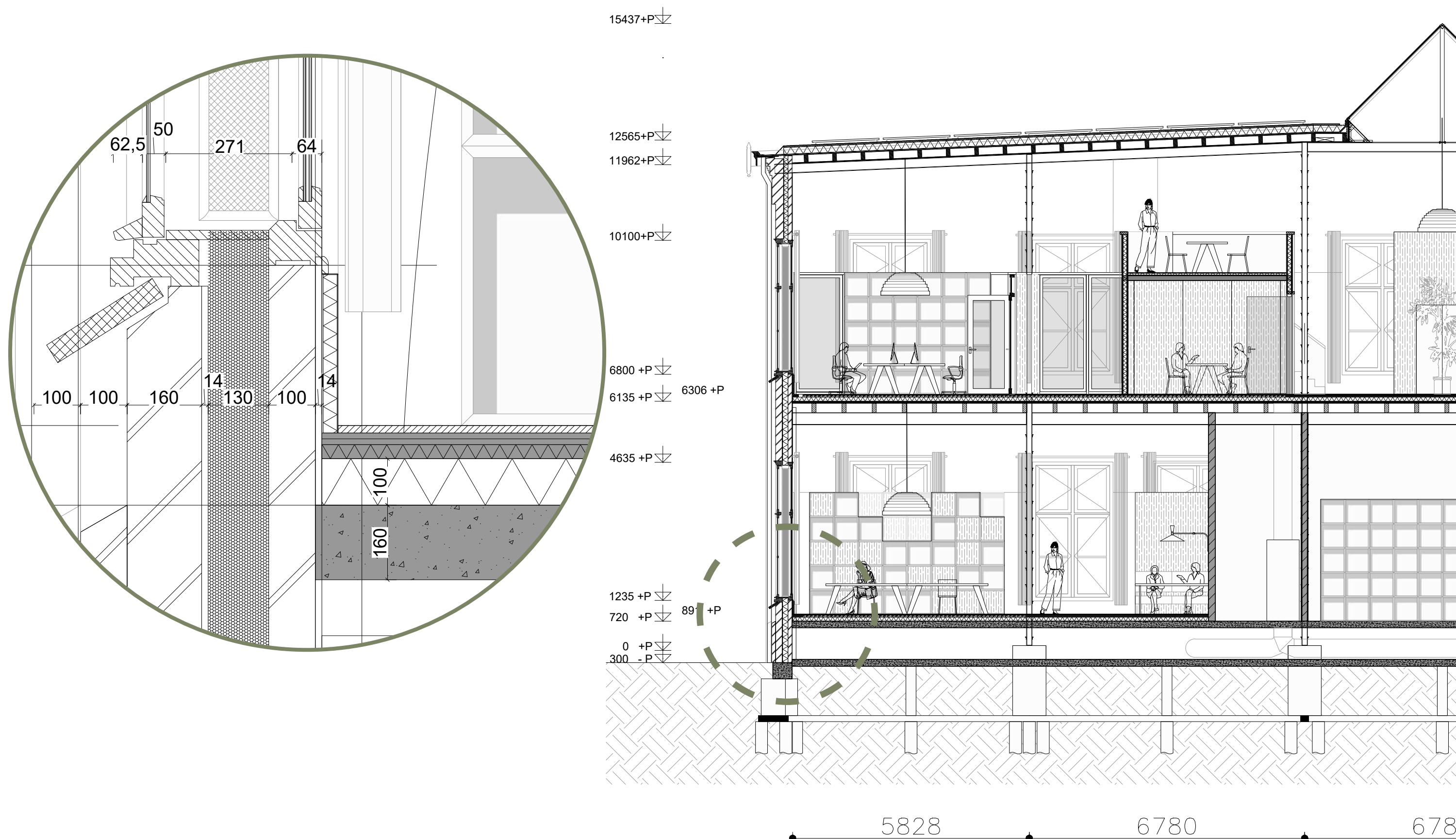


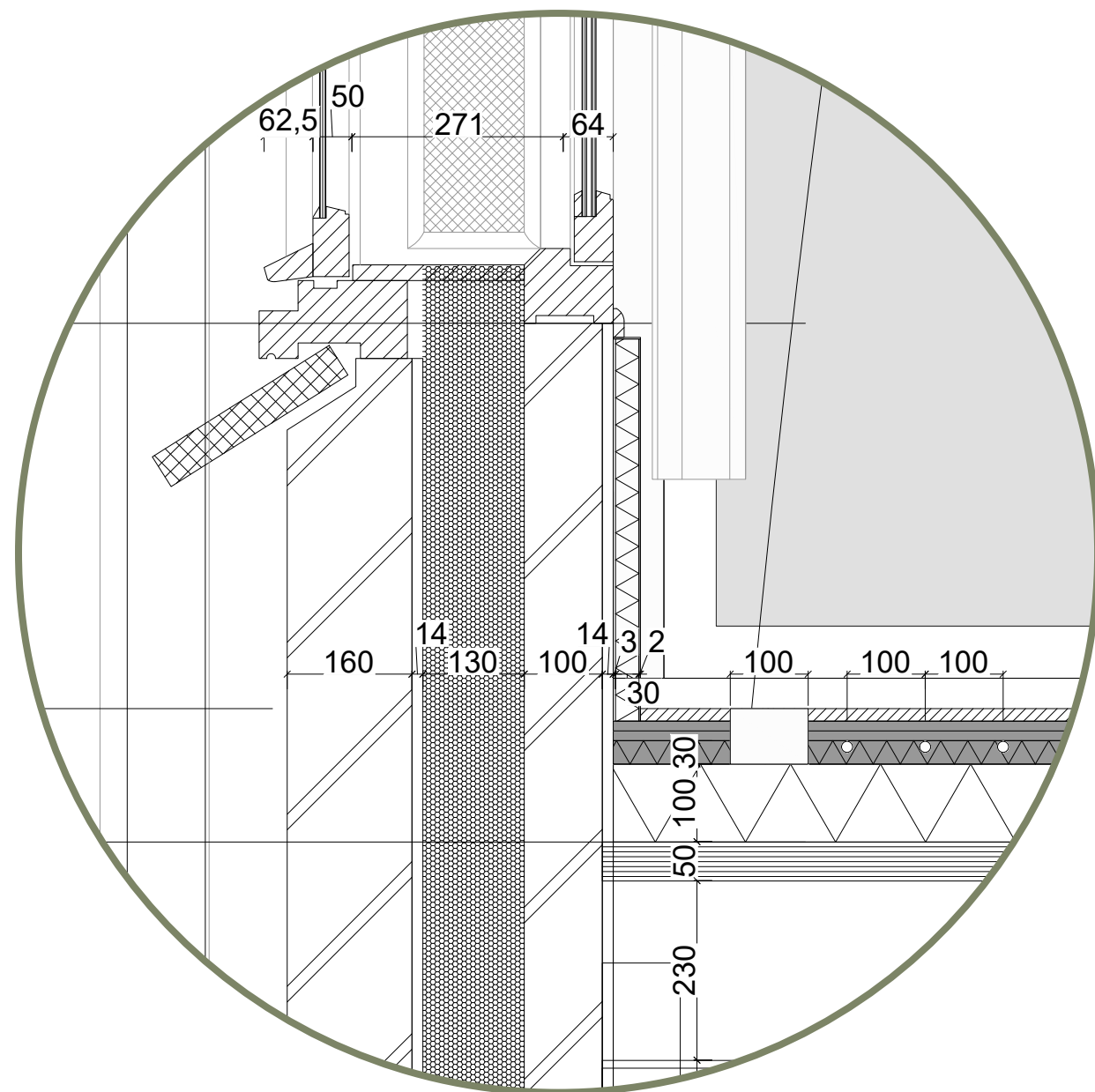
2 Design Insulating existing skin

111/121



Design Insulating existing cavity





15437+P

12565+P

11962+P

10100+P

6800 +P

6135 +P

4635 +P

1235 +P

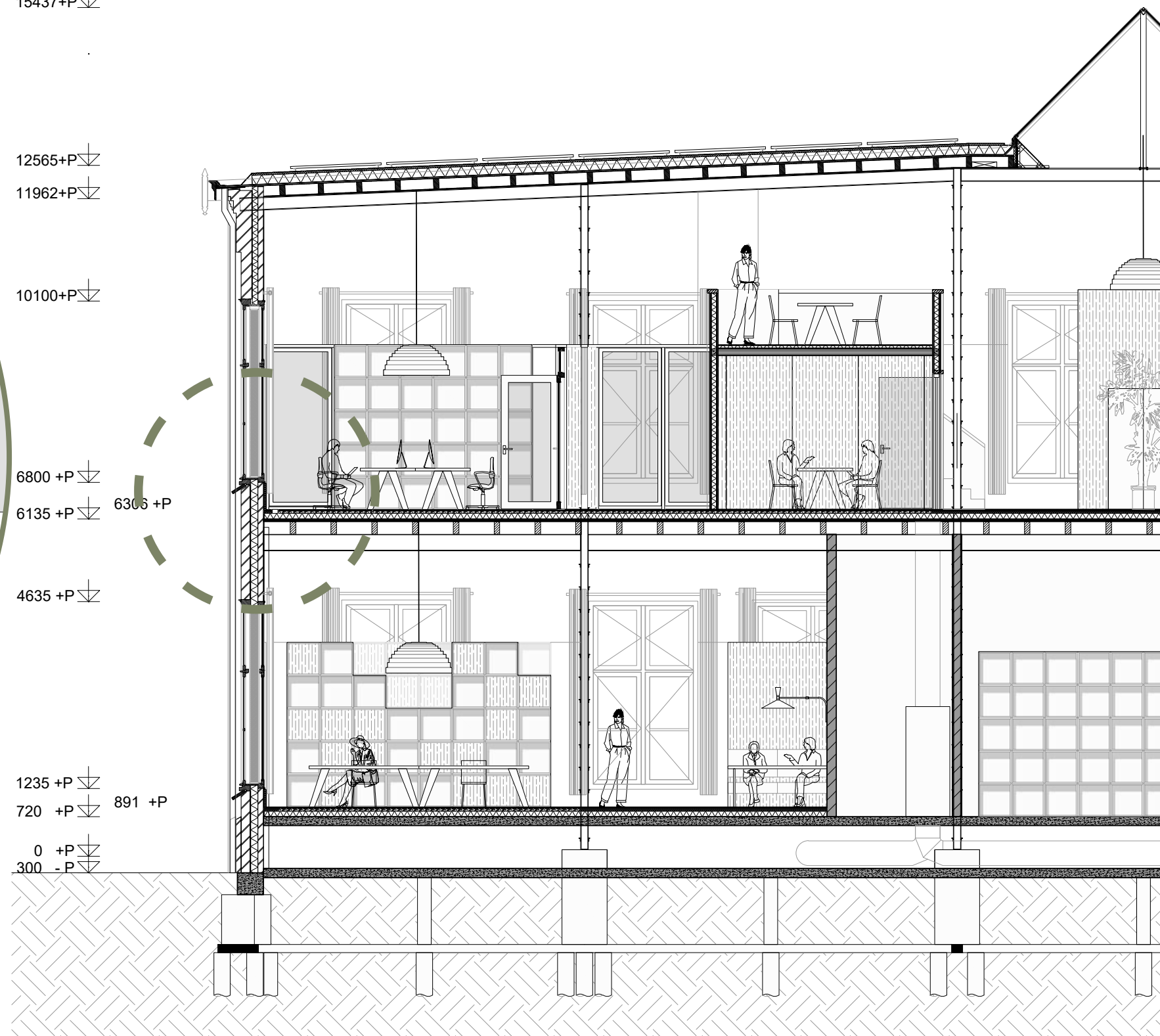
720 +P

0 +P

300 -P

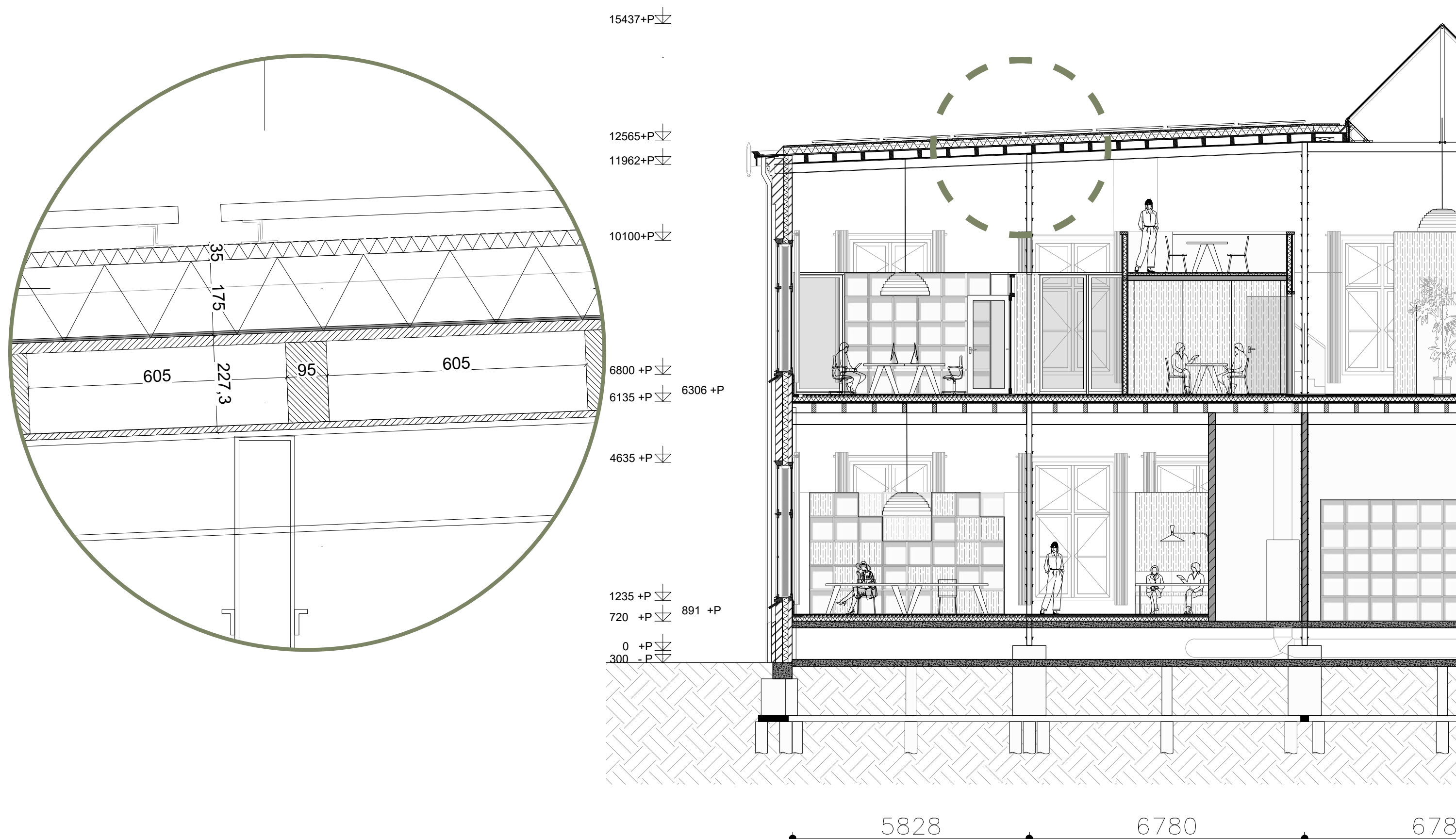
6306 +P

891 +P

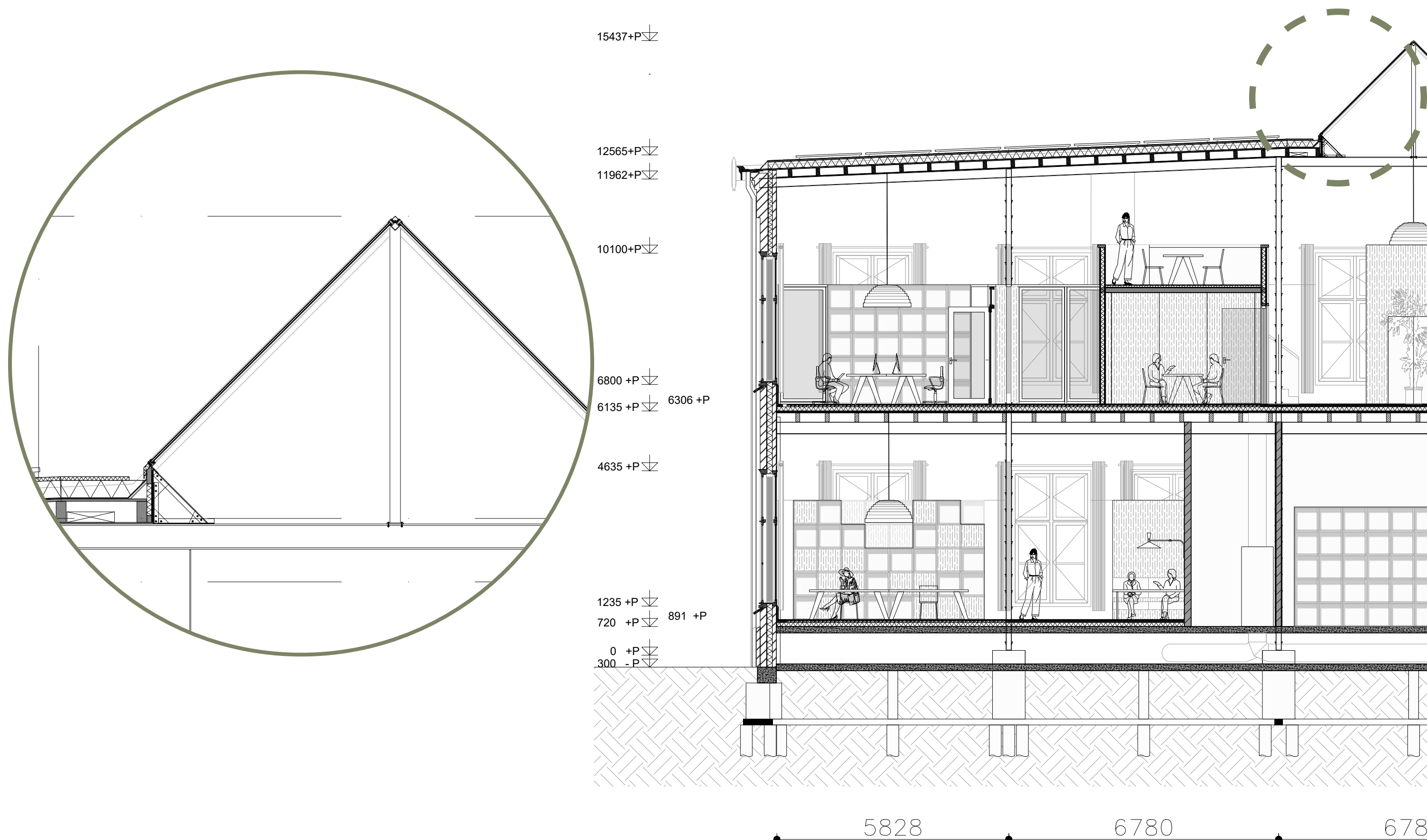


2 Design Insulating existing roof

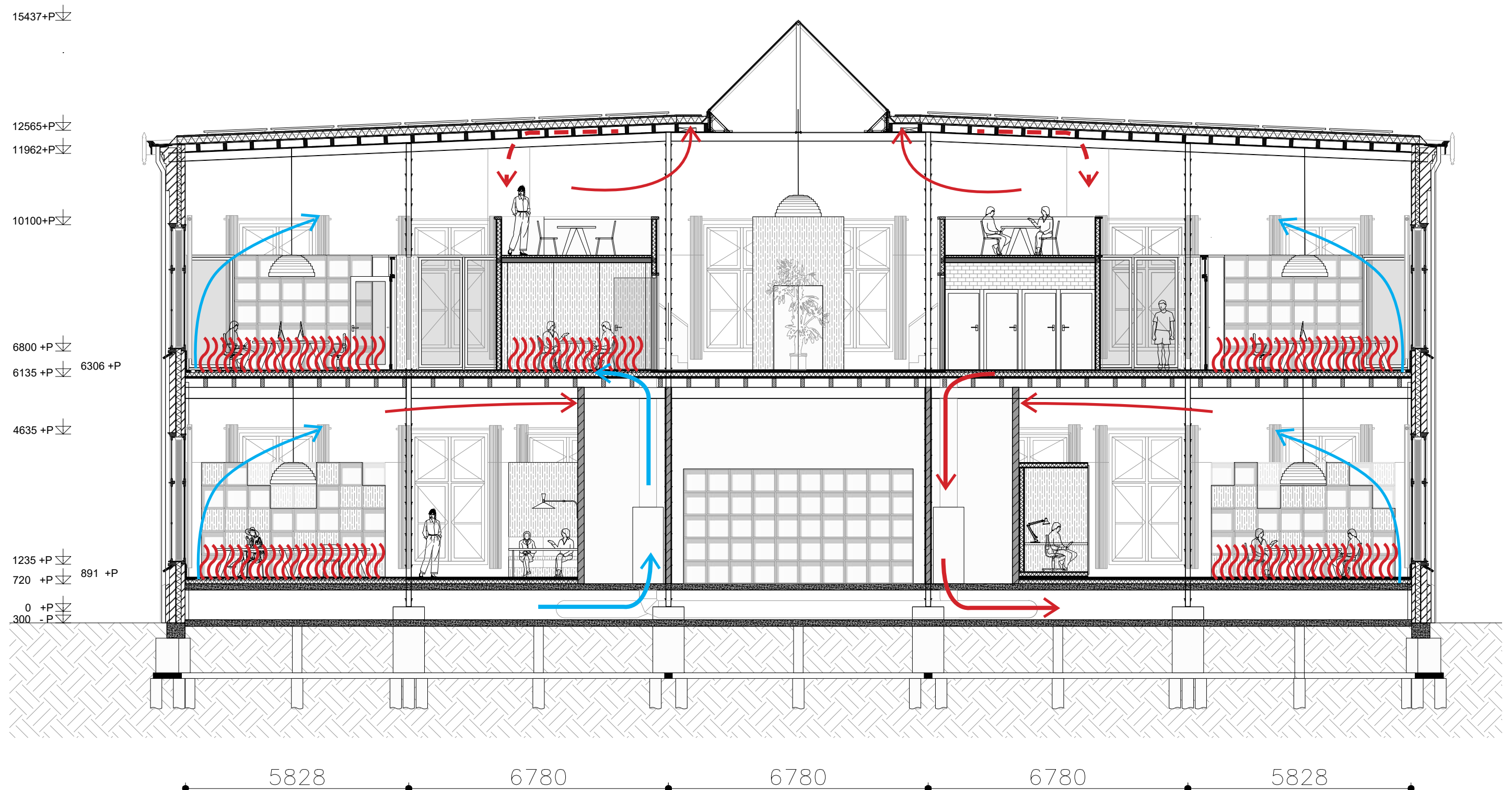
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Design Insulating existing skylight







Content

1. Analysis

Contextual analysis

Campus North analysis

Building analysis

2. Design

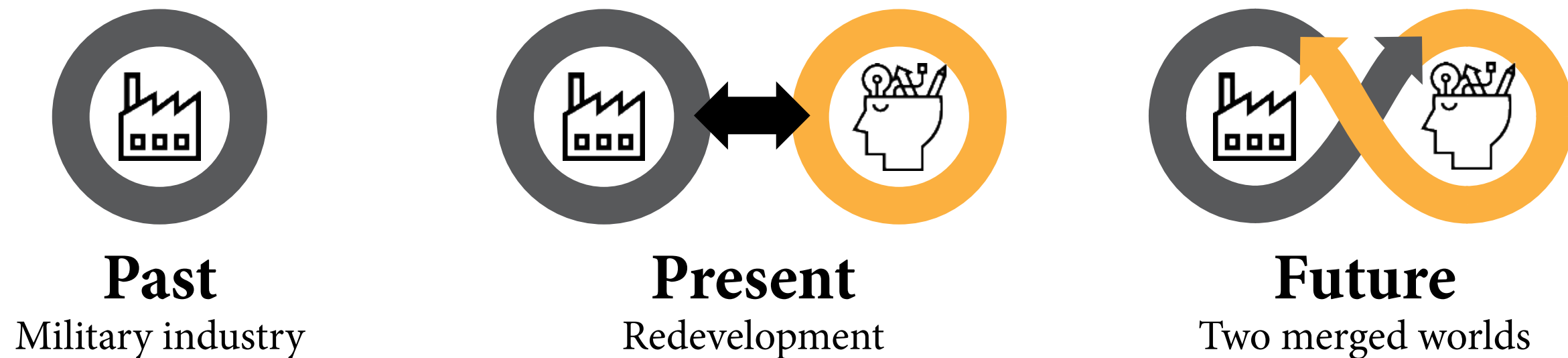
Master plan Campus North

Machine hall

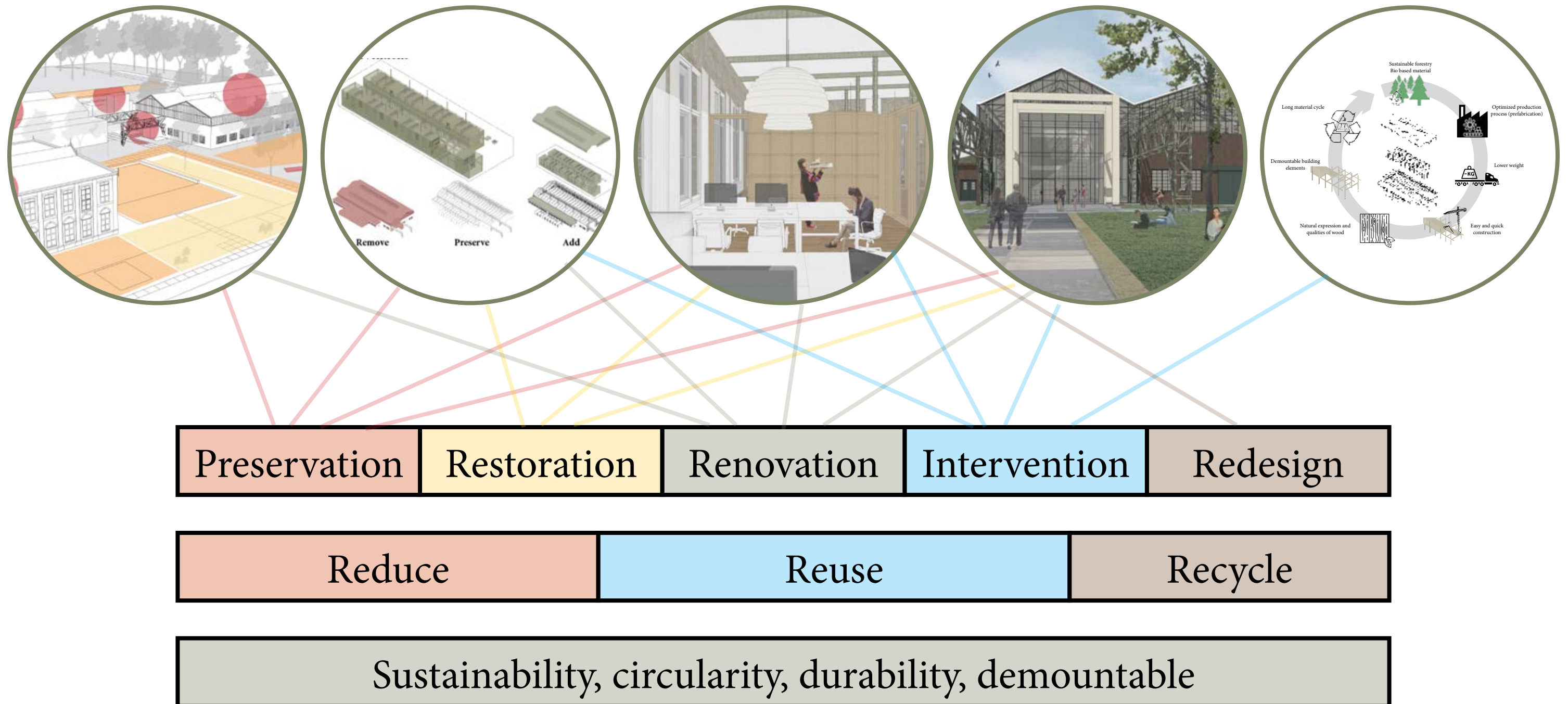
Weapon depot

3. Reflection

Research question



“How could my design interventions stimulate the transformation of the former military industrial site into the art, craft and design center of Amsterdam and the Zaan region without losing the valuable historical character of Hembrug?”



Preservation: preserve as much as possible - historic valuable elements– demolish only when necessary

Restoration: appreciation of the existing – cleaning and repair

Renovation: making existing elements more future proof

Intervention: the new added intervention will derive from the existing and should be removable

Redesign: using existing elements in another way

