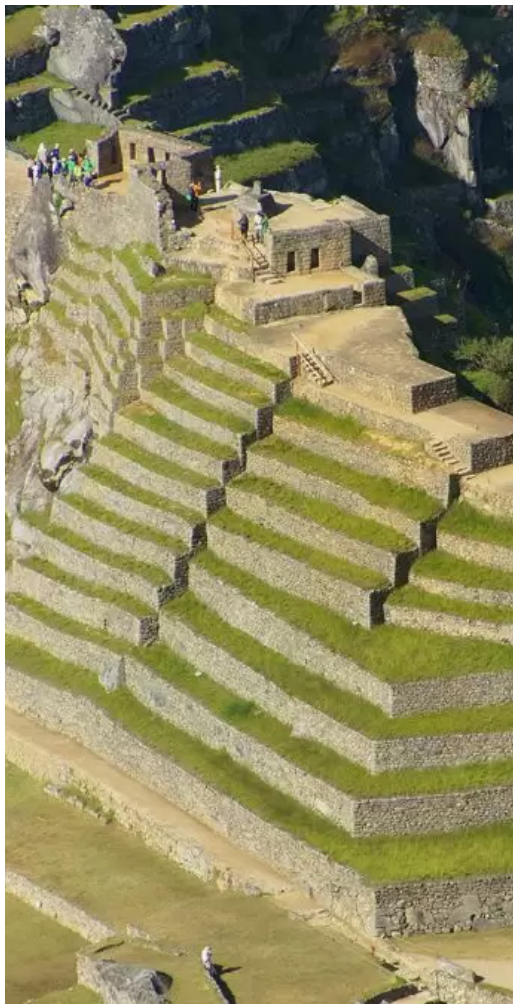


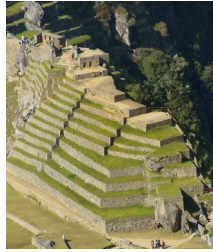
The Rozenpark Pavilion
Reused architecture inspired by Indigenous Building Techniques
P5 Lilani Oei 4848039

A fascination



indigenous building knowledge

Research methodology

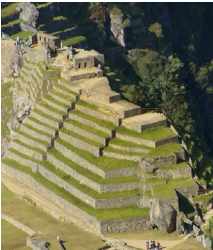


Indigenous

Research methodology



STACKED



WRAPPED



FILLED



SCAFFOLDED

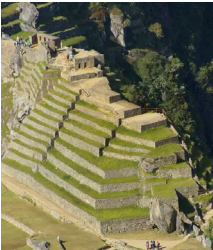


Indigenous

Research methodology



STACKED



WRAPPED



FILLED



SCAFFOLDED



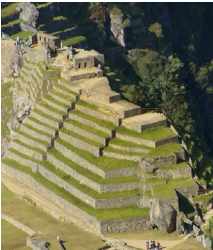
Indigenous

contemporary

Research methodology



STACKED



?



WRAPPED



FILLED



SCAFFOLDED

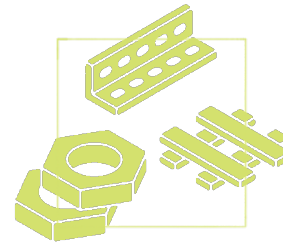


Indigenous

contemporary



local material harvesting
reframing 'local materials'



form follows available resources
innovation born from limitations

Design objective

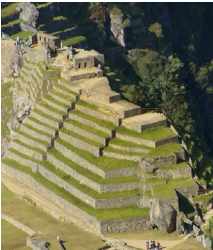
HOW CAN THE TRADITIONAL ECOLOGICAL KNOWLEDGE
EMBEDDED IN INDIGENOUS BUILDING TECHNIQUES INFORM
THE REUSE OF MATERIALS IN CONTEMPORARY ARCHITECTURE?



Research methodology



STACKED



WRAPPED



FILLED



SCAFFOLDED



Indigenous

contemporary

prototypes

Design

Project location



Urban context of Rotterdam

Project location



Museumpark, Rotterdam as a showcase location for the project

History Museumpark



Sparkling fountains, sculptures, live art and cooling down in Museumpark

Museumpark today



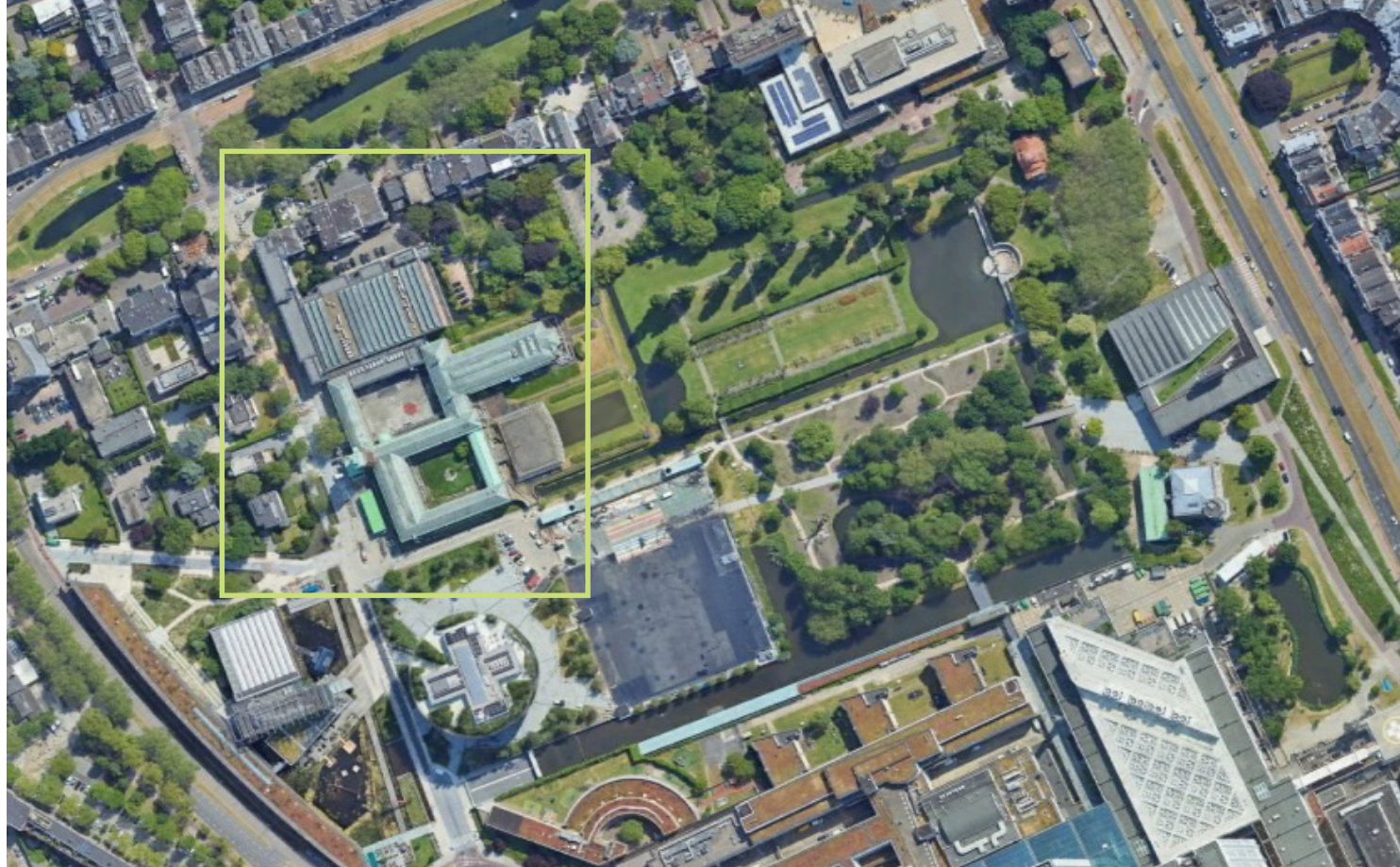
constructions, opens space, no (he)art in the park

Museumpark today



constructions, opens space, no (he)art in the park

Museumpark today



constructions, opens space, no (he)art in the park

Boijmans van Beuningen Museum



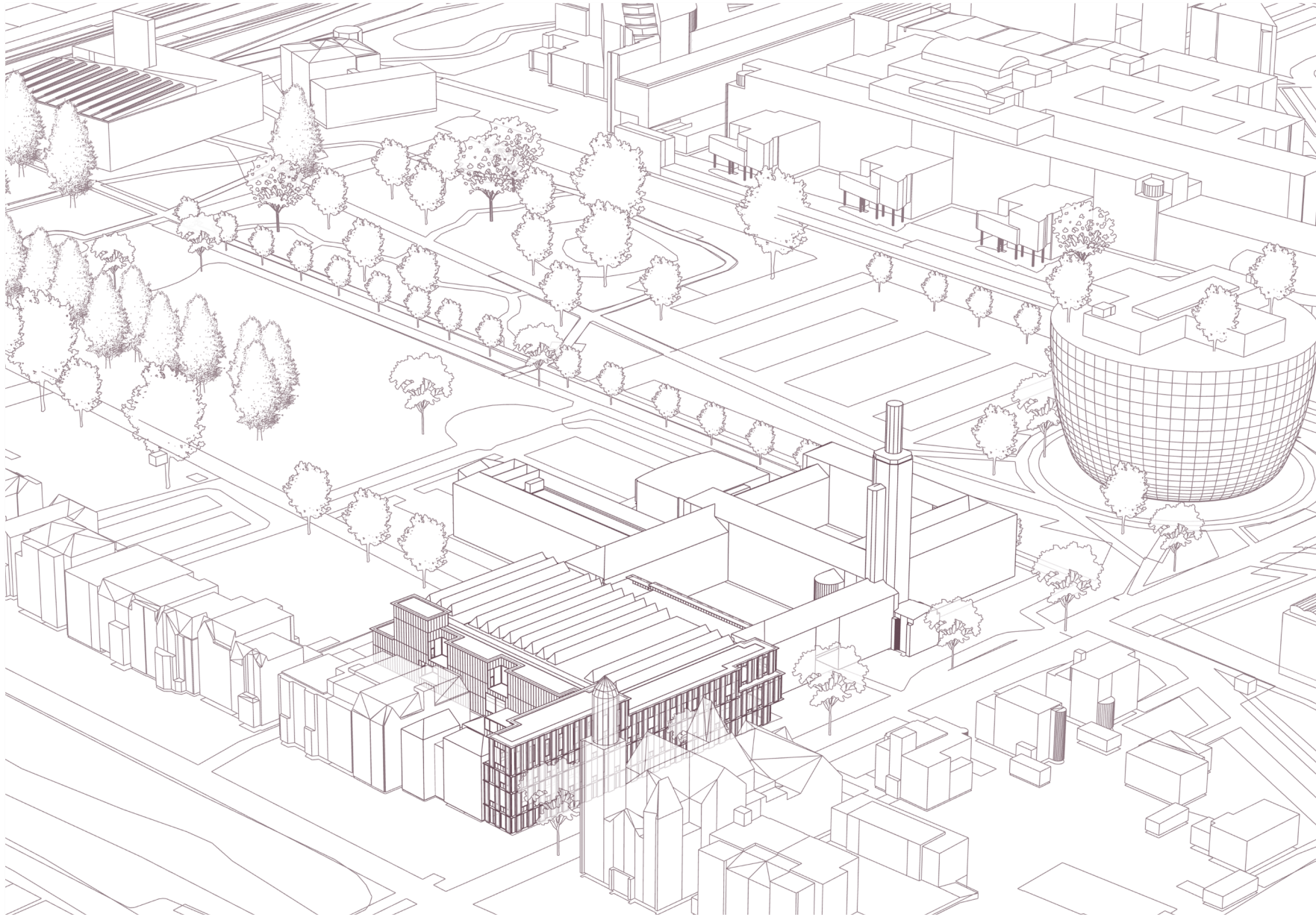
Definitive renovation plans by Mecanoo, December 2025

2003 wing by Robbrecht & Daem



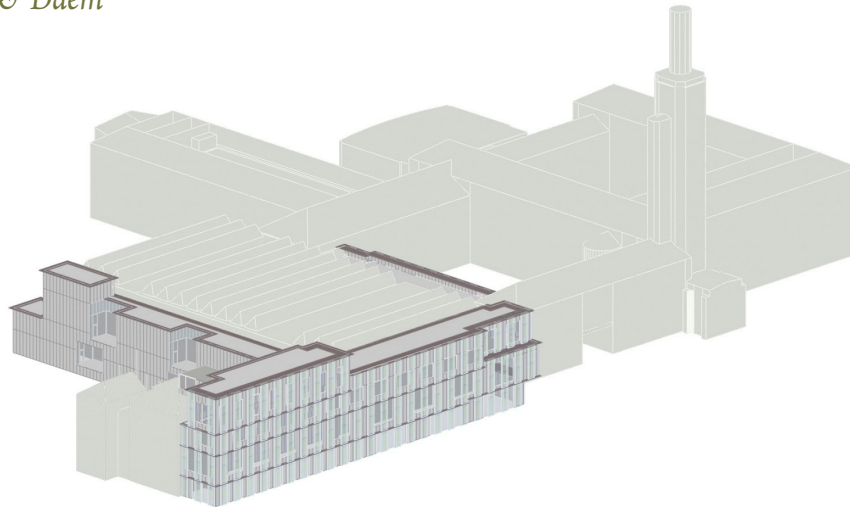
To be demolished wing, in perfect state

2003 wing by Robbrecht & Daem in context



To be demolished wing, in perfect state

Inventarisation of wing by Robbrecht & Daem



axo, north facade (middle), east facade (lower)

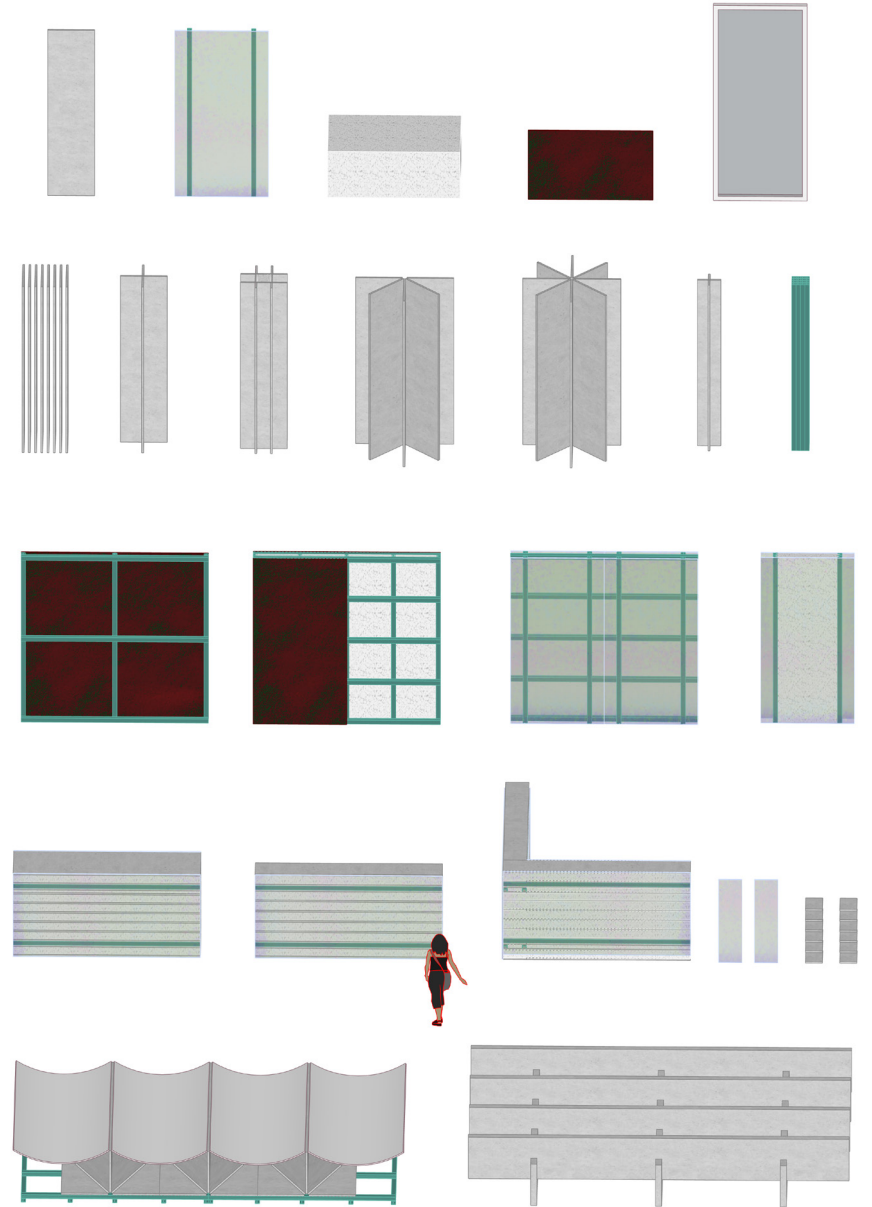
Site visit R&D wing



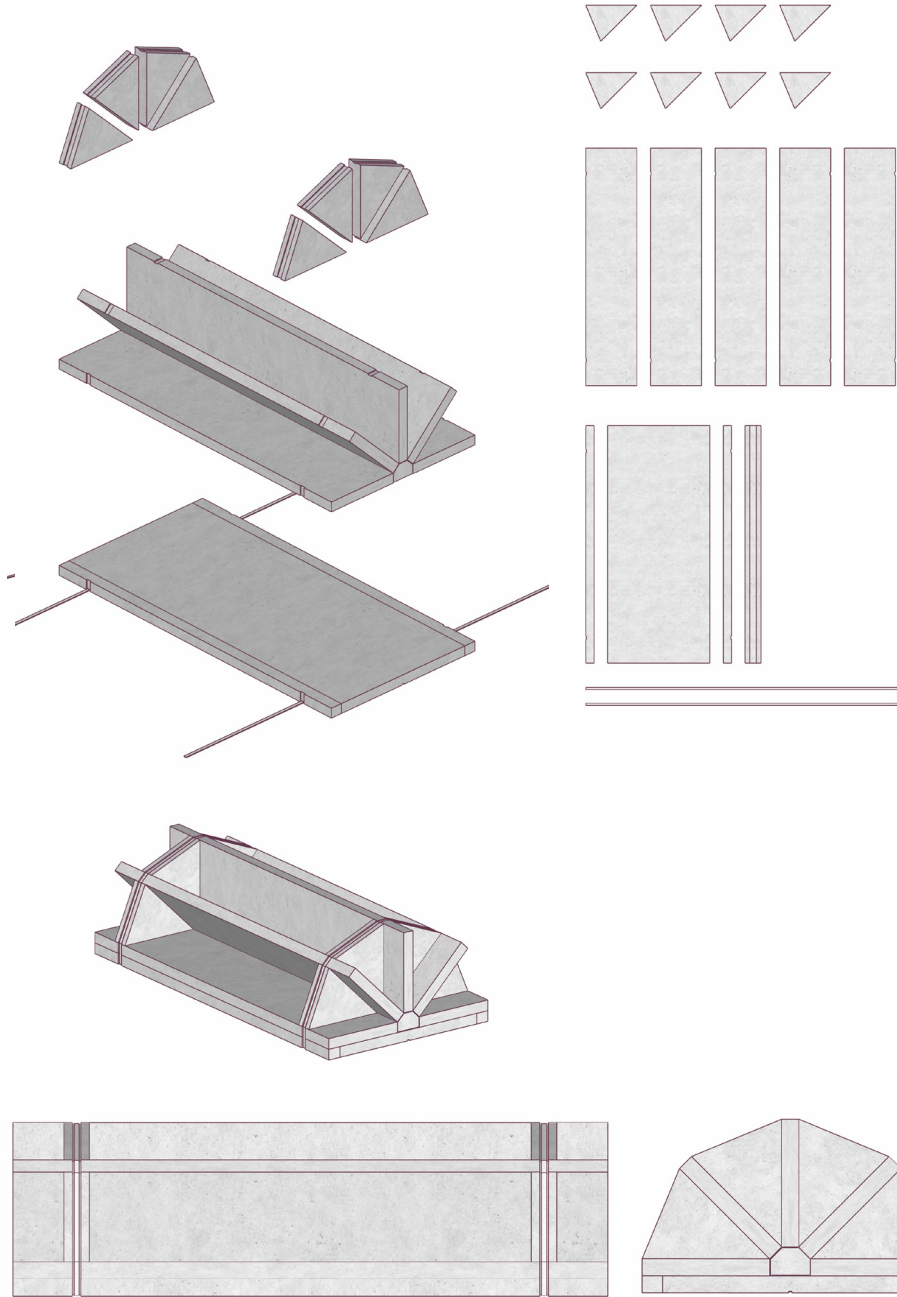
material hunt



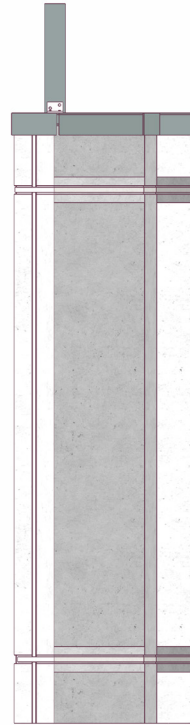
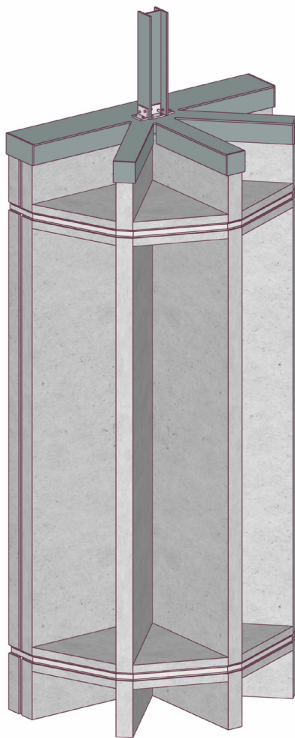
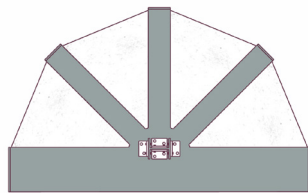
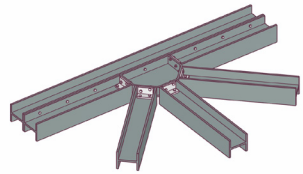
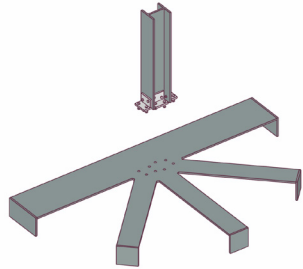
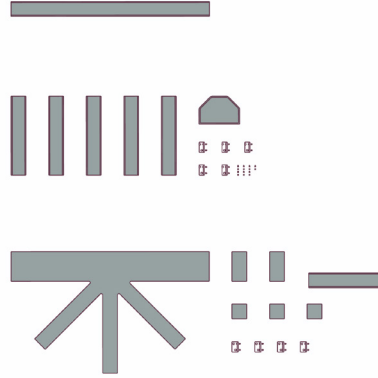
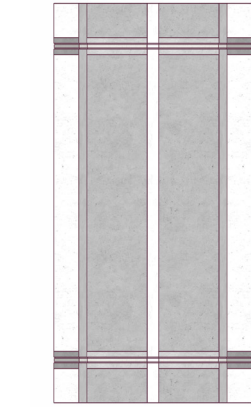
primarily: concrete facade panels, cathedral glass panels + HEA, concrete rubble, steel roof sheets and windows ect.



experimentation : materials to components

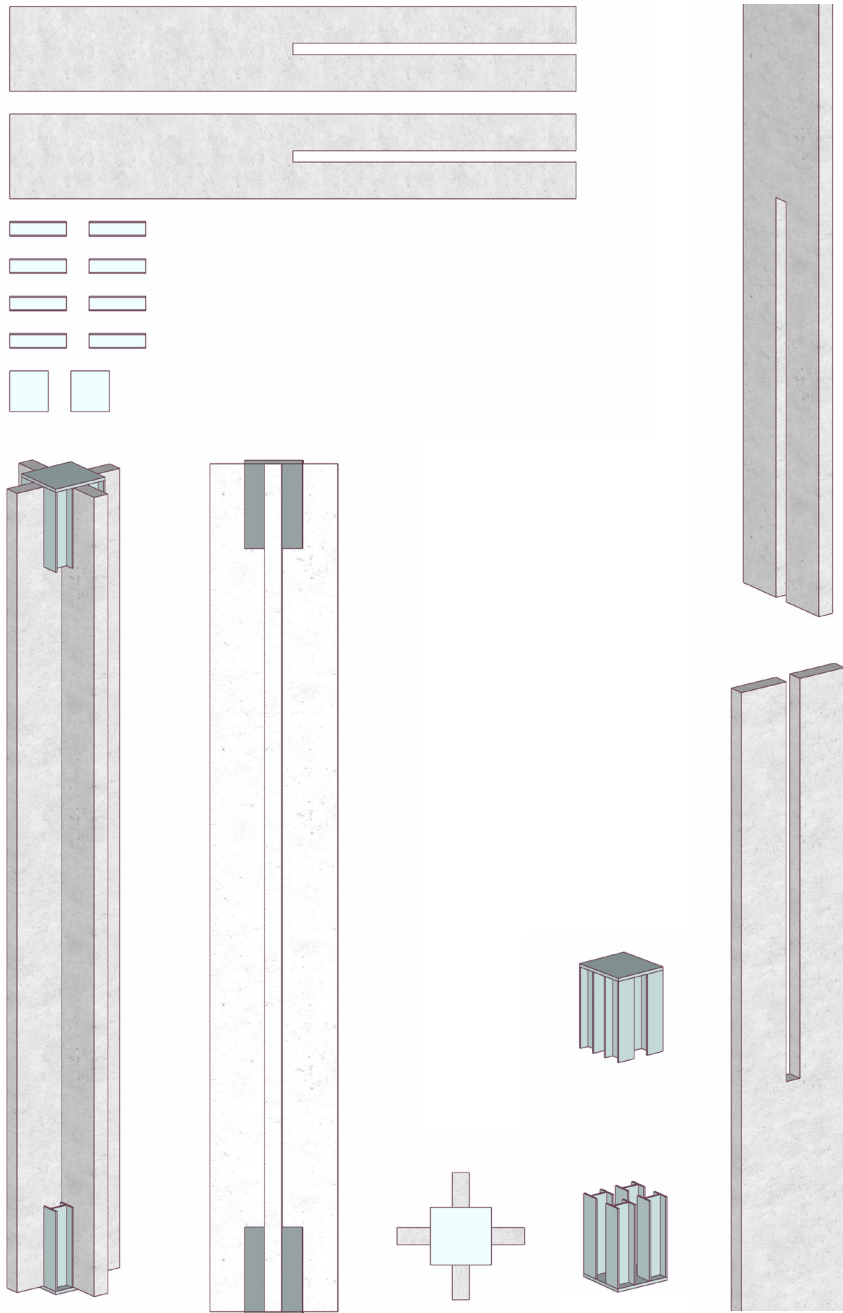


half flower component



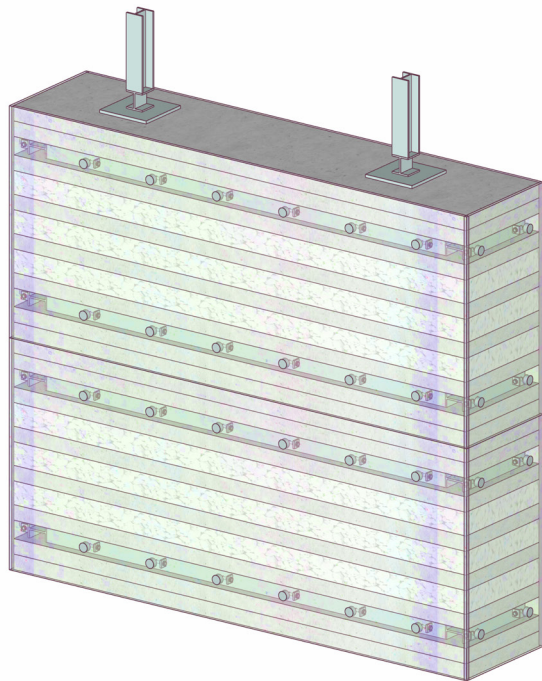
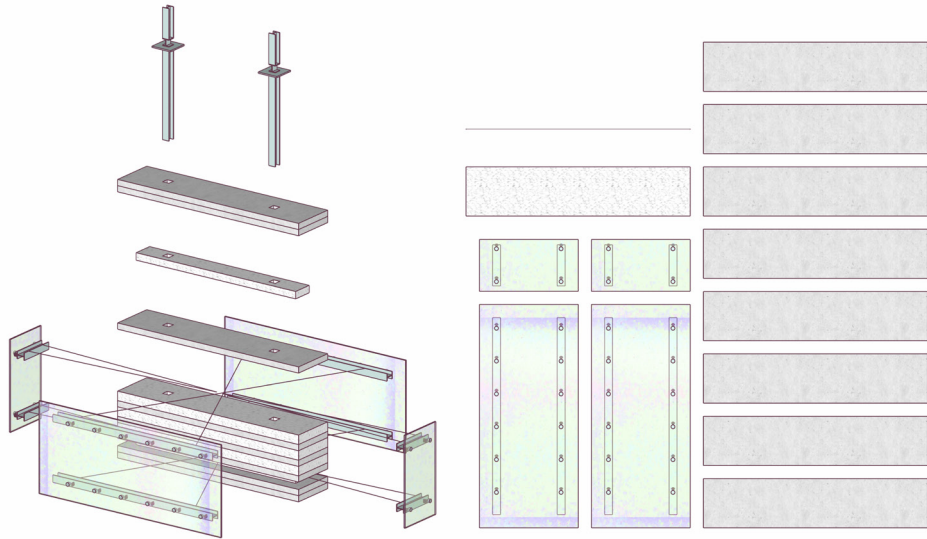
half flower column component

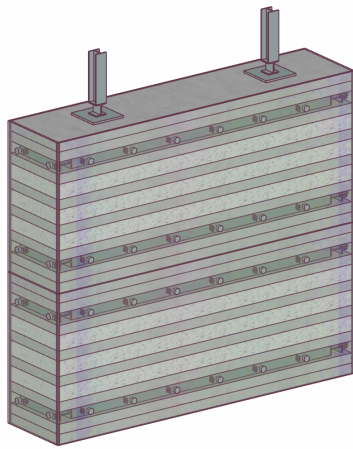




cross column component



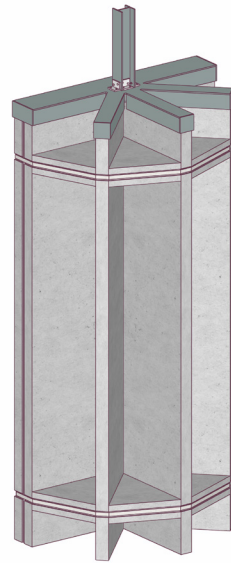




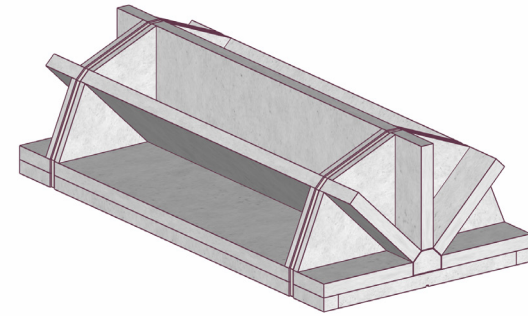
wall



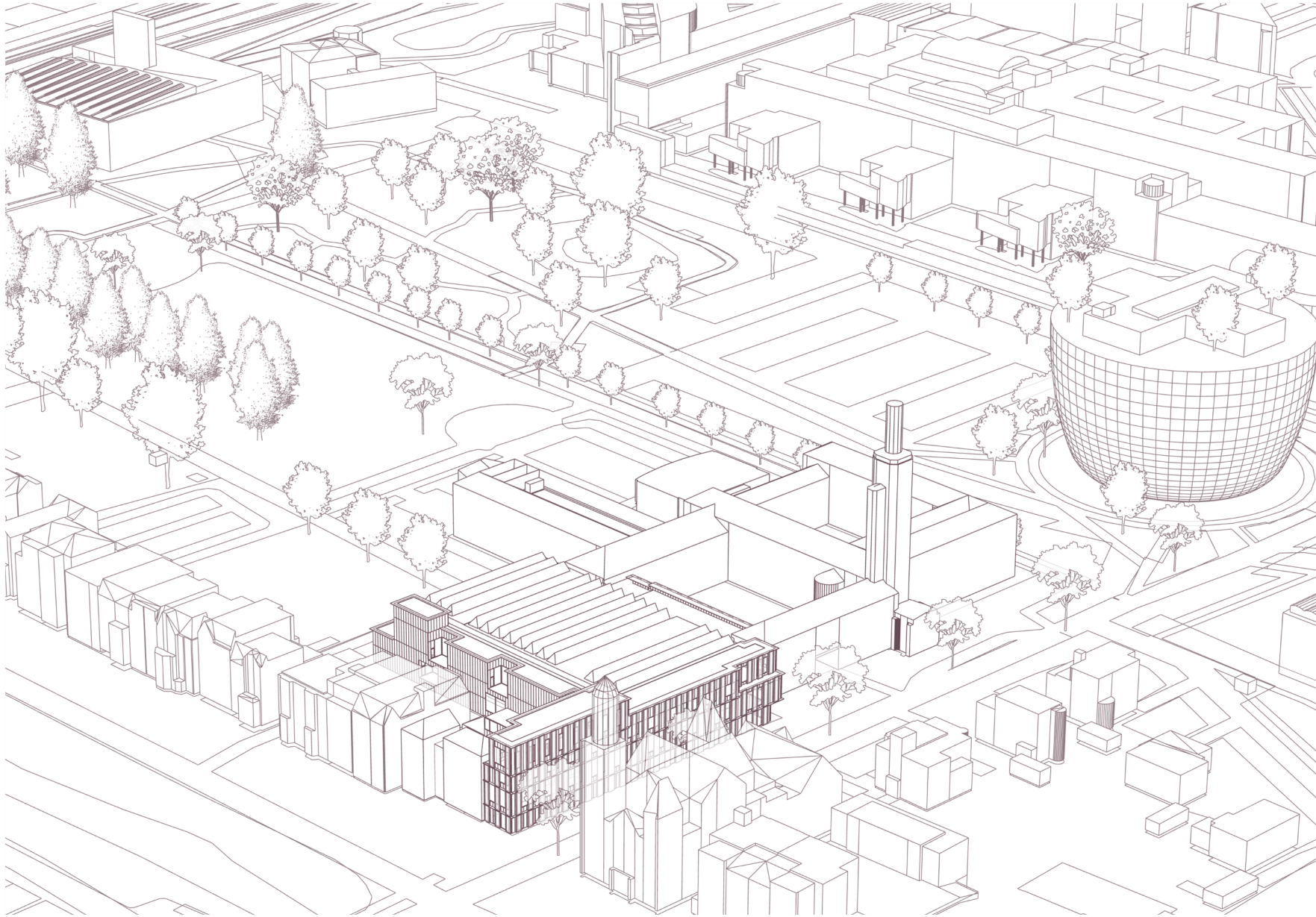
cross column



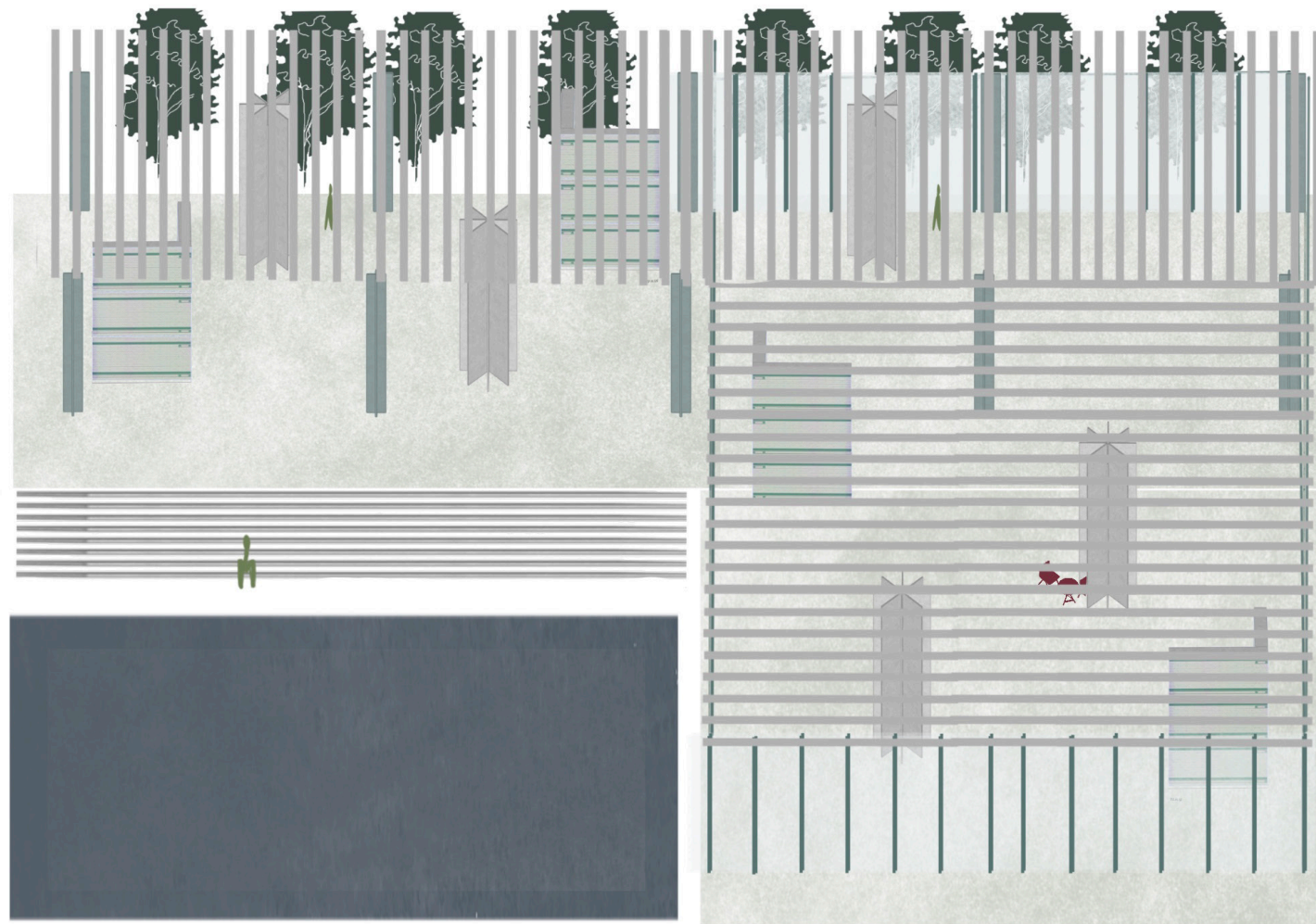
flower column



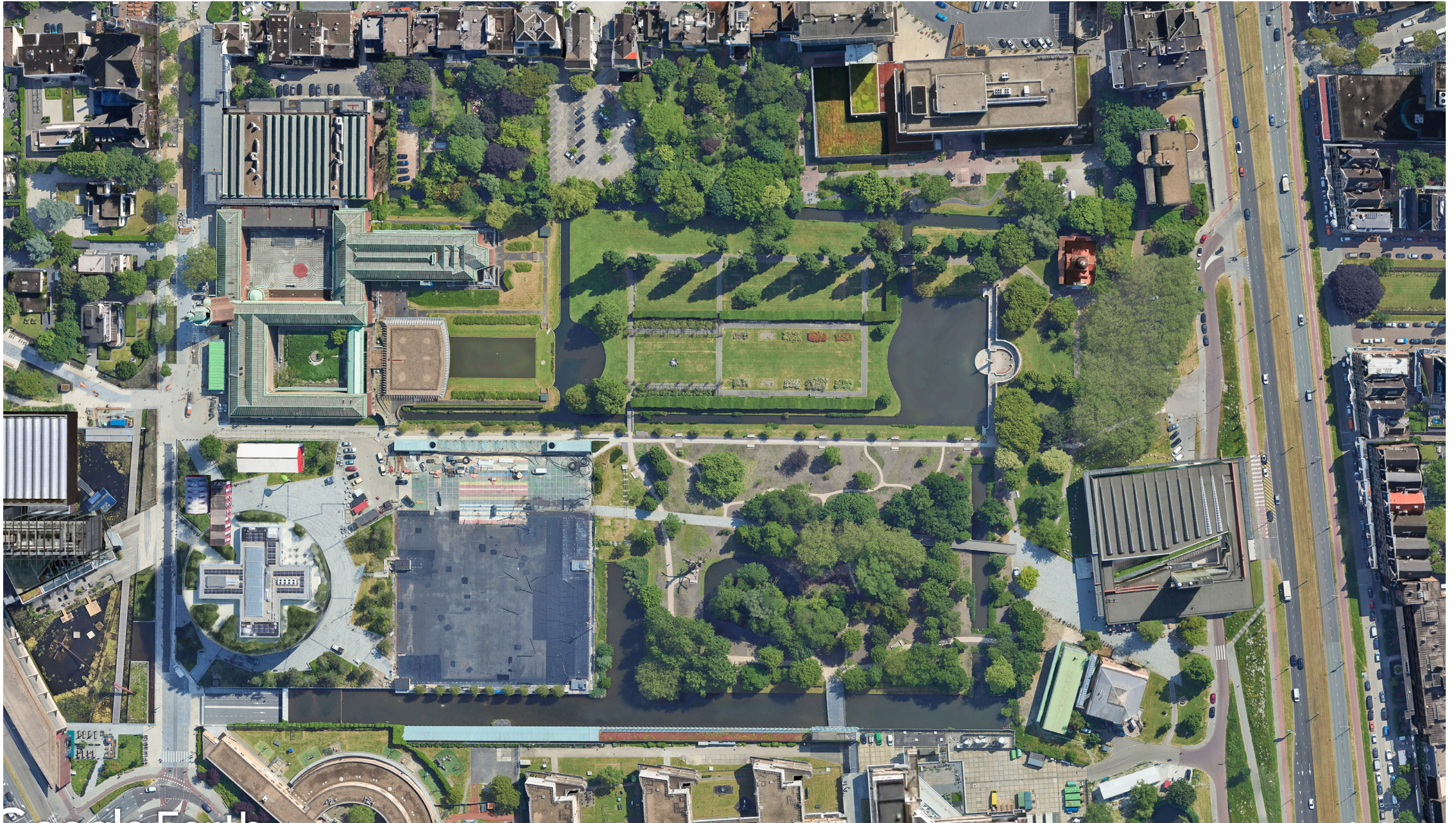
flower component



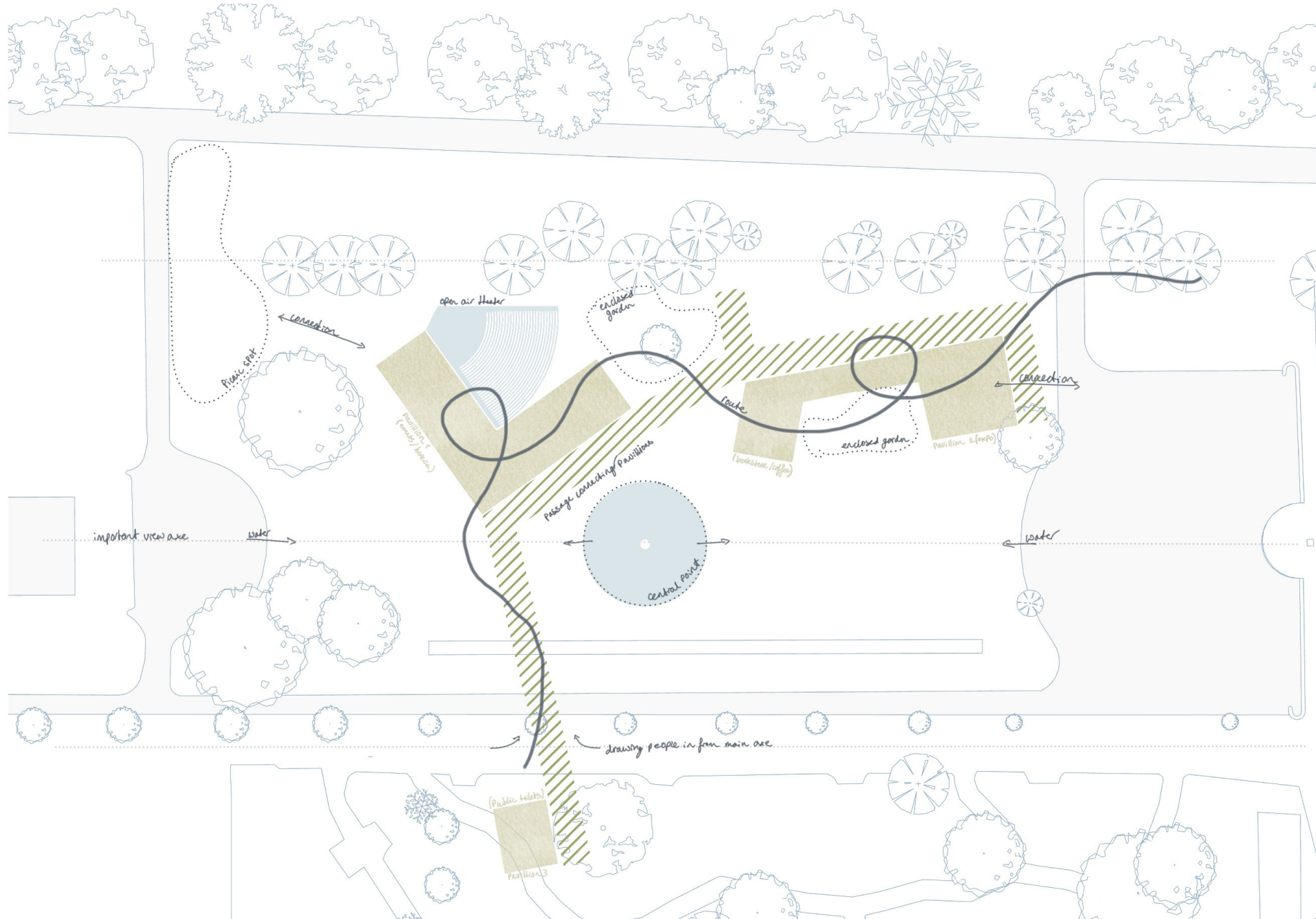
To be demolished wing, in perfect state



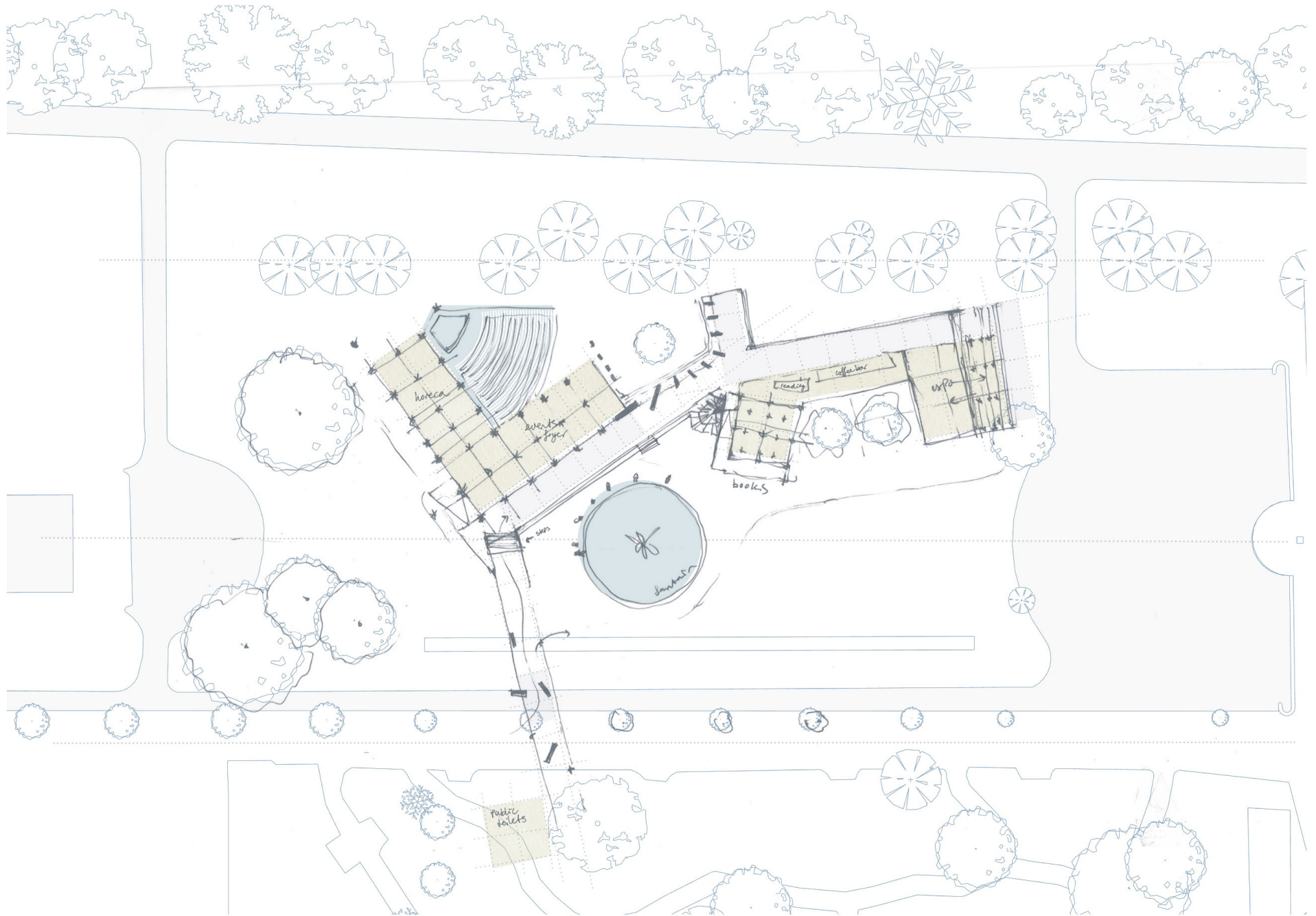
concept collage

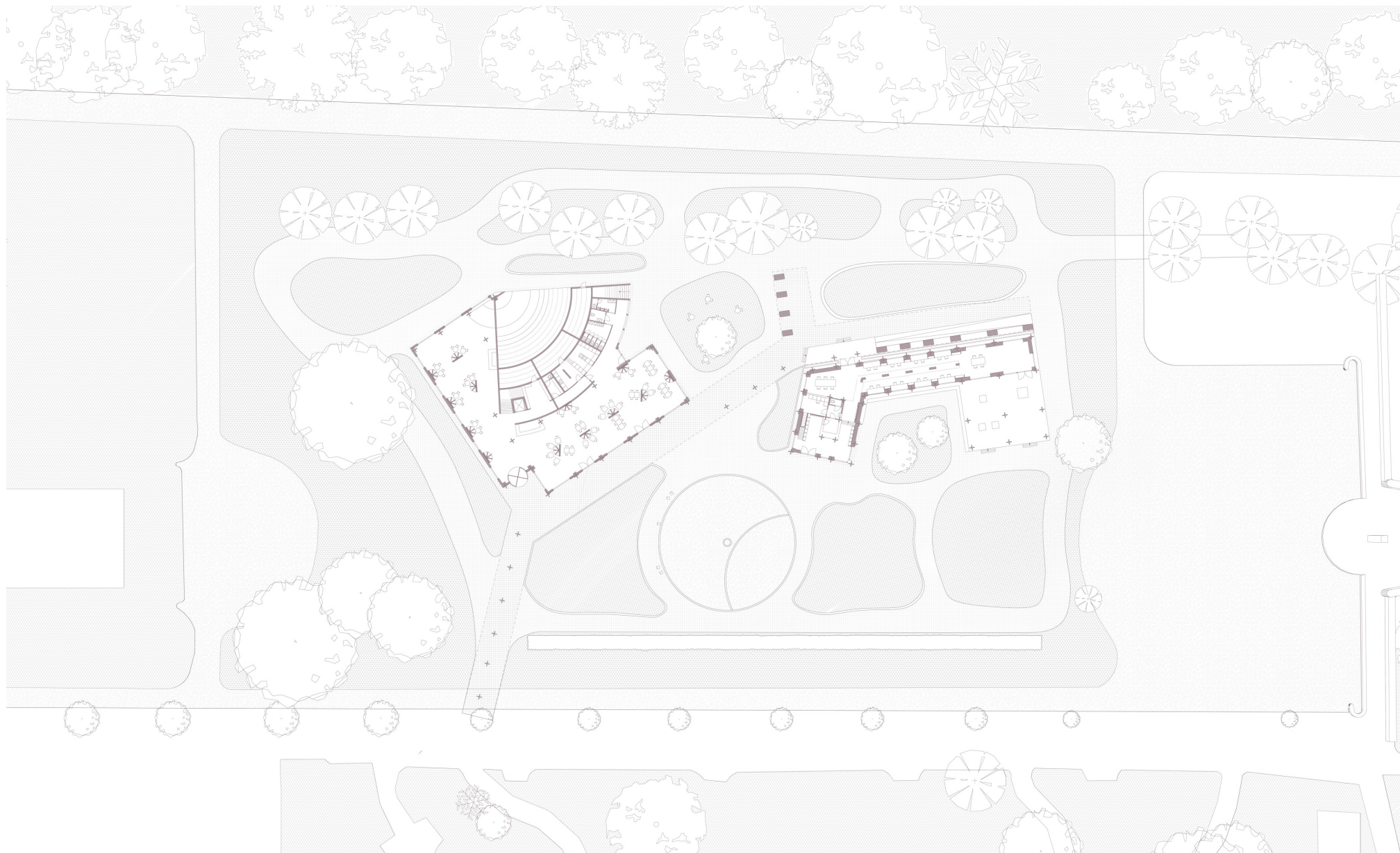




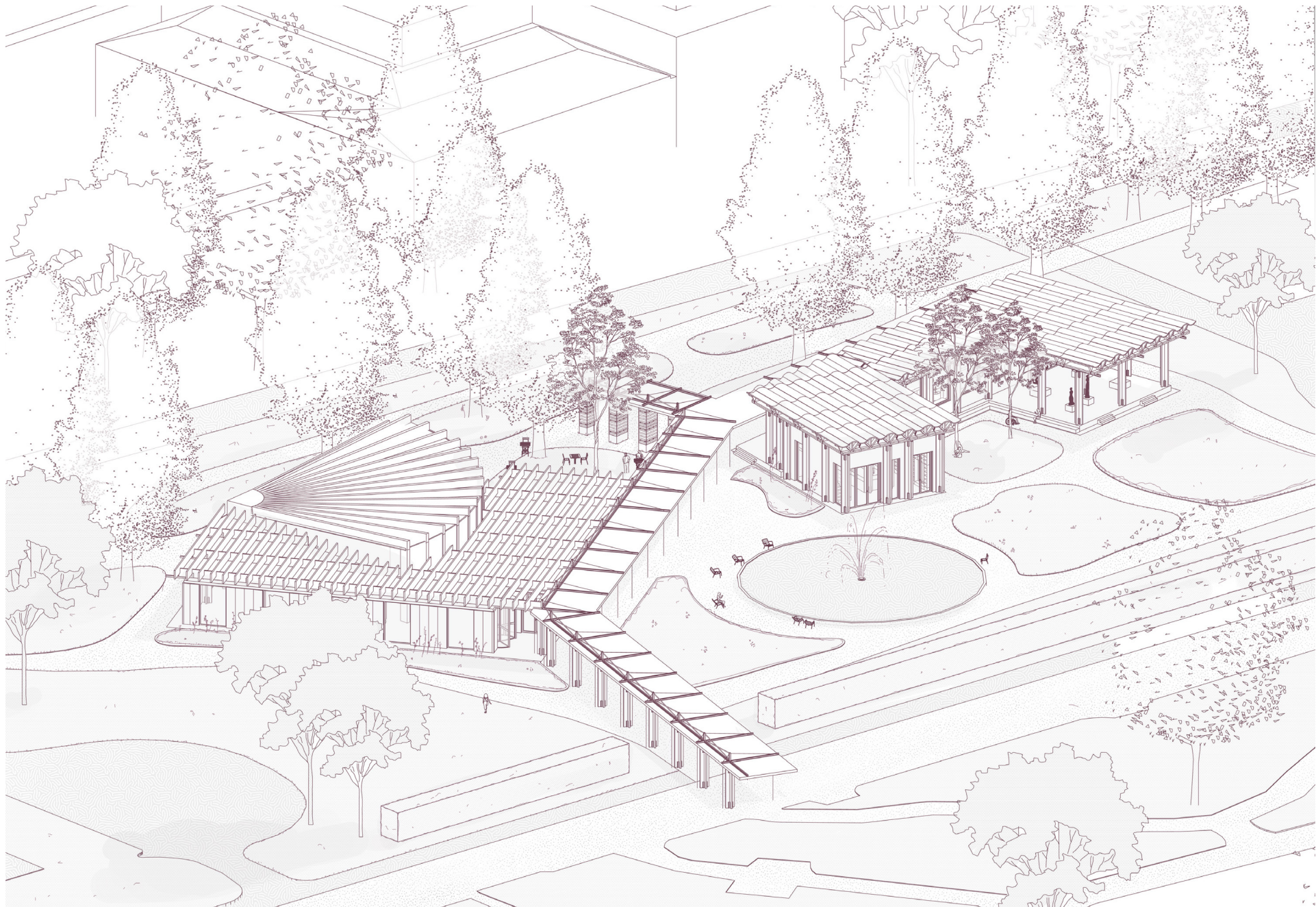


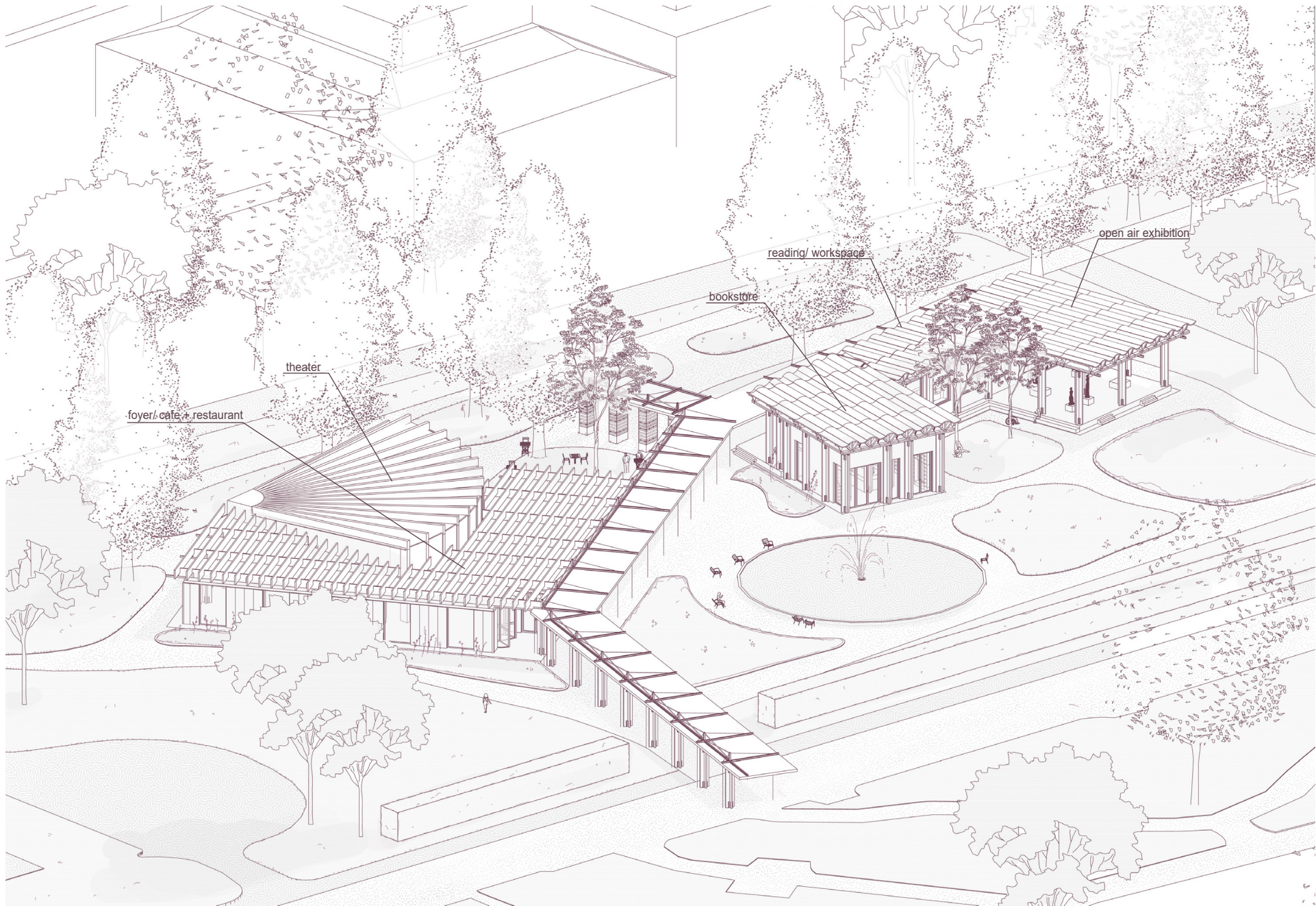
conceptual plan

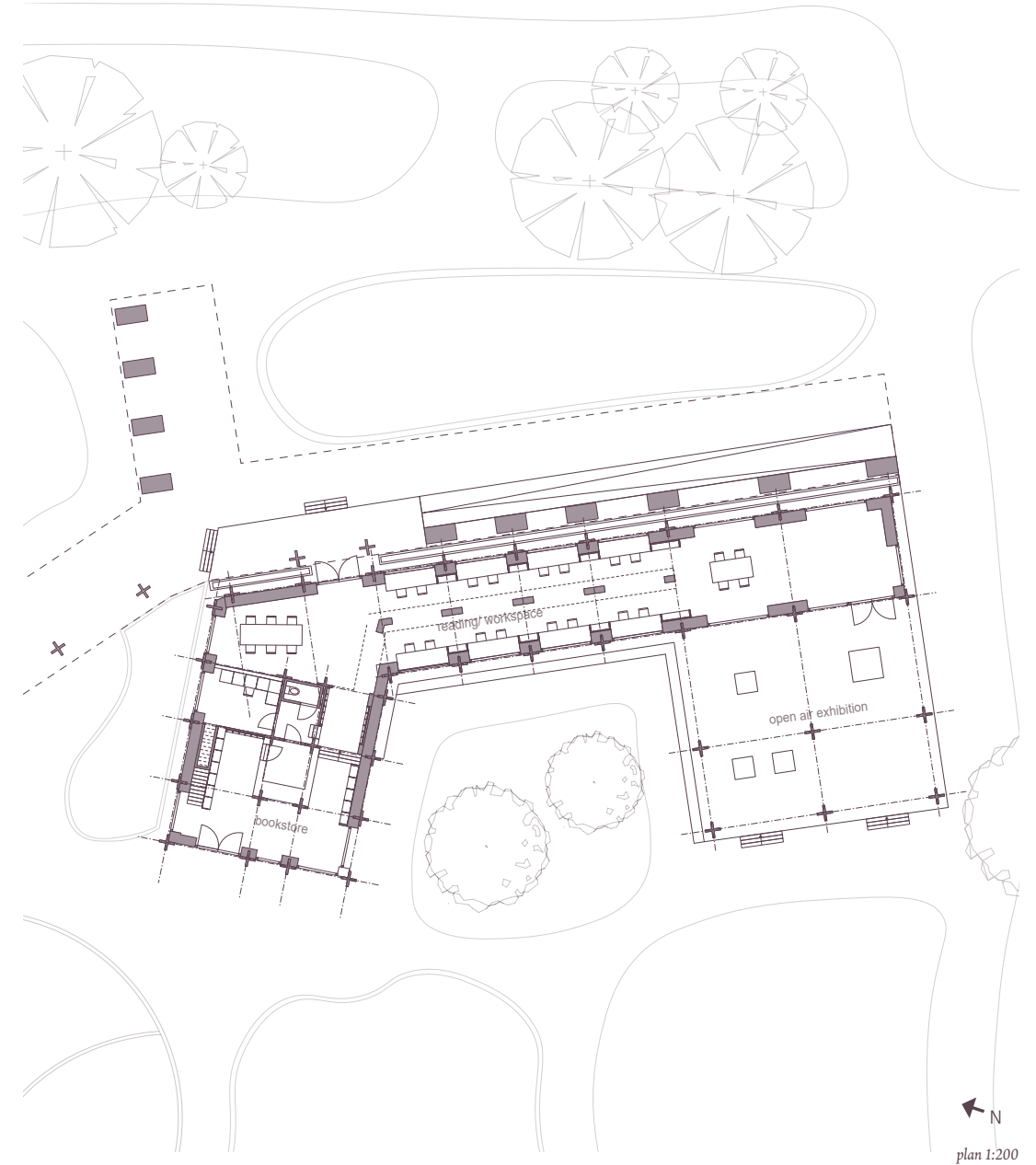
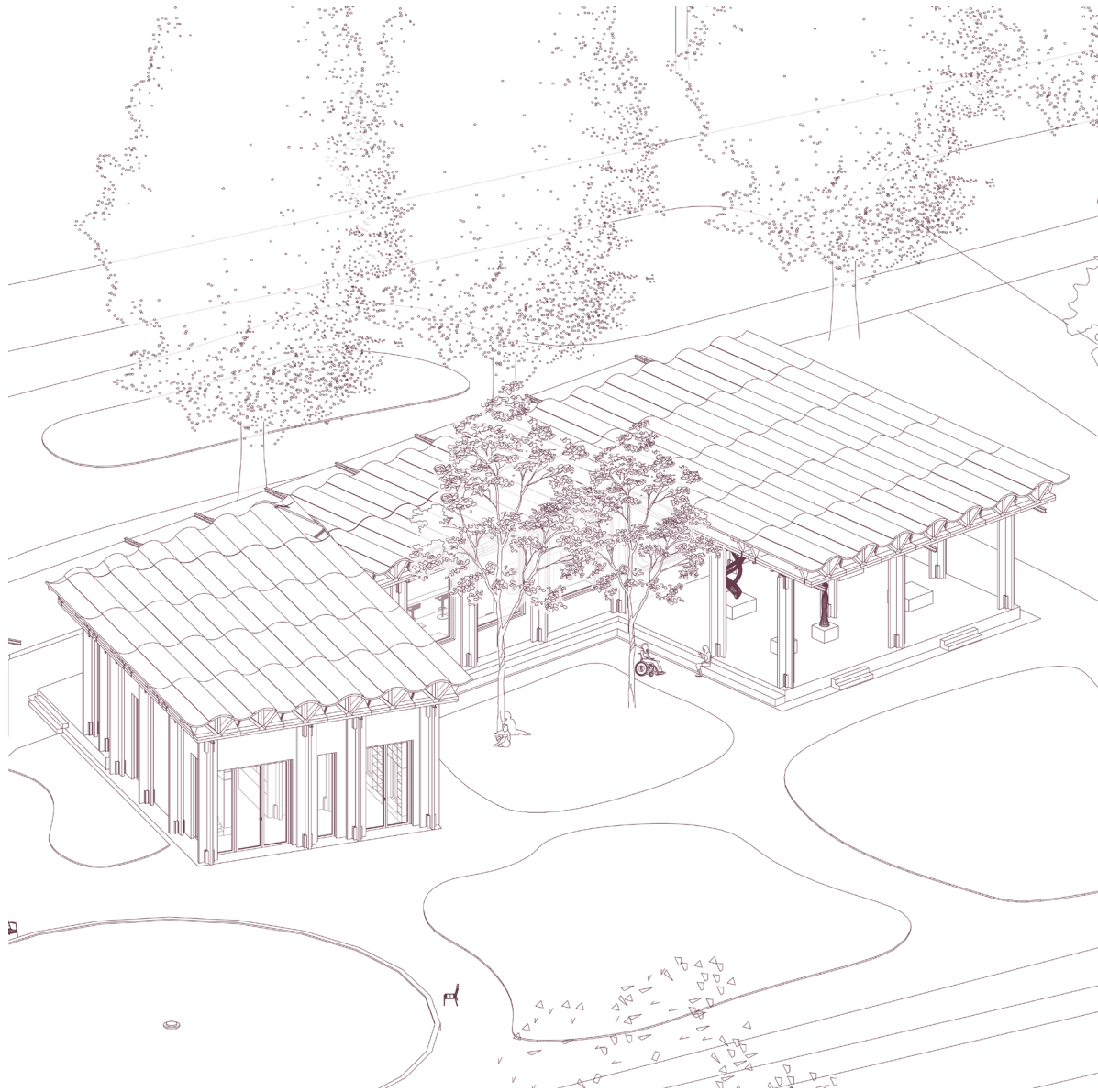


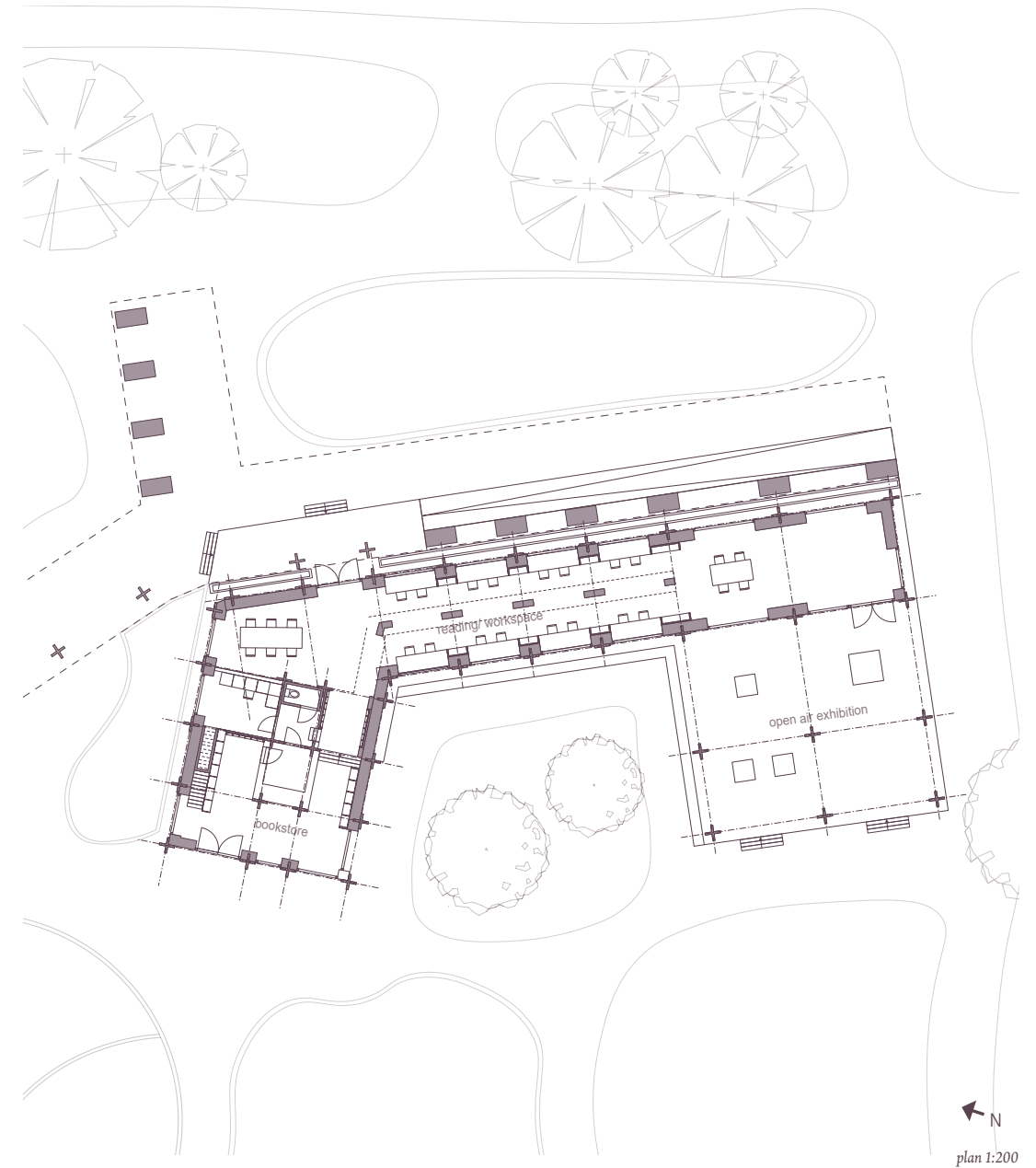


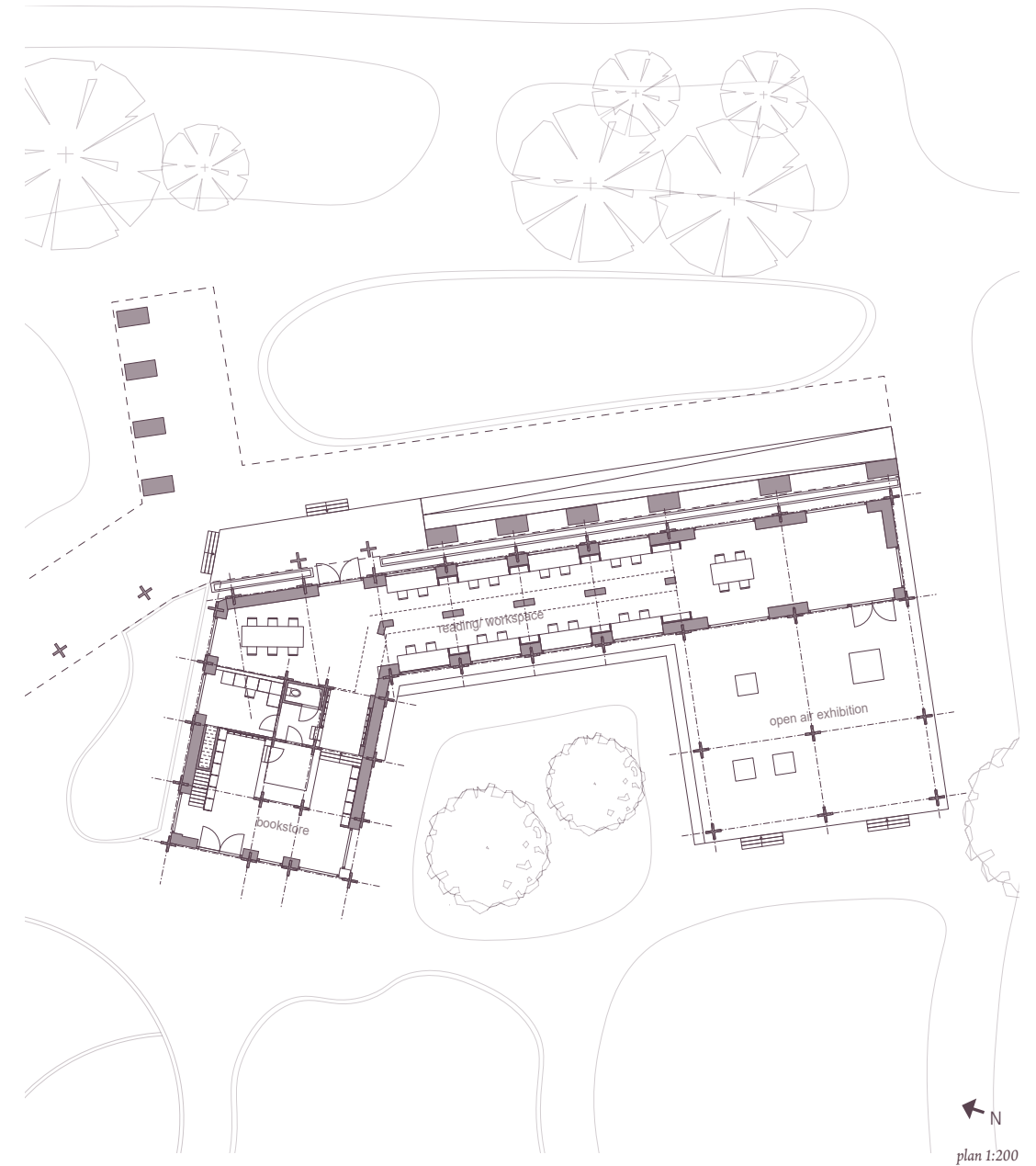
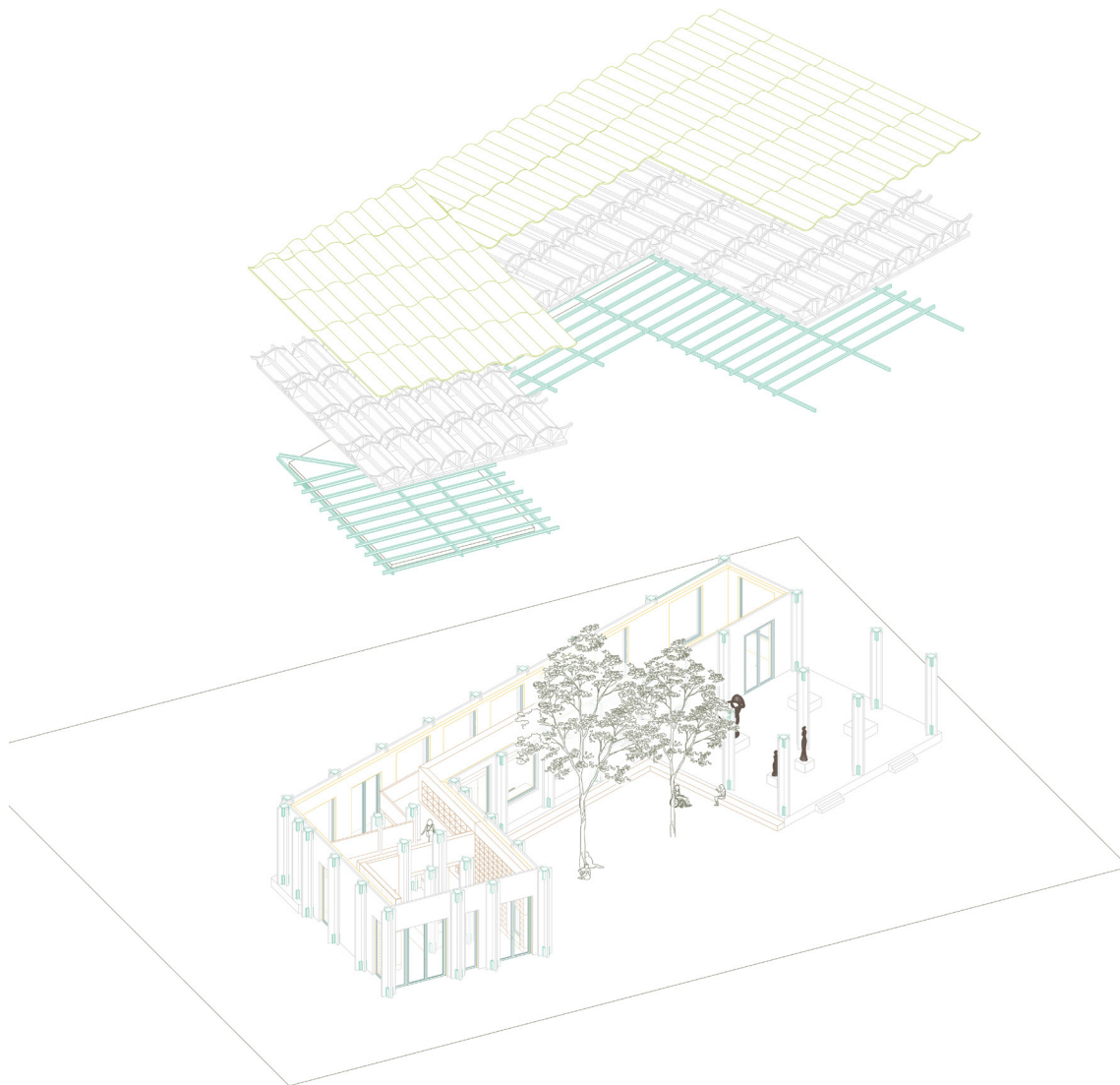
plan 1:200

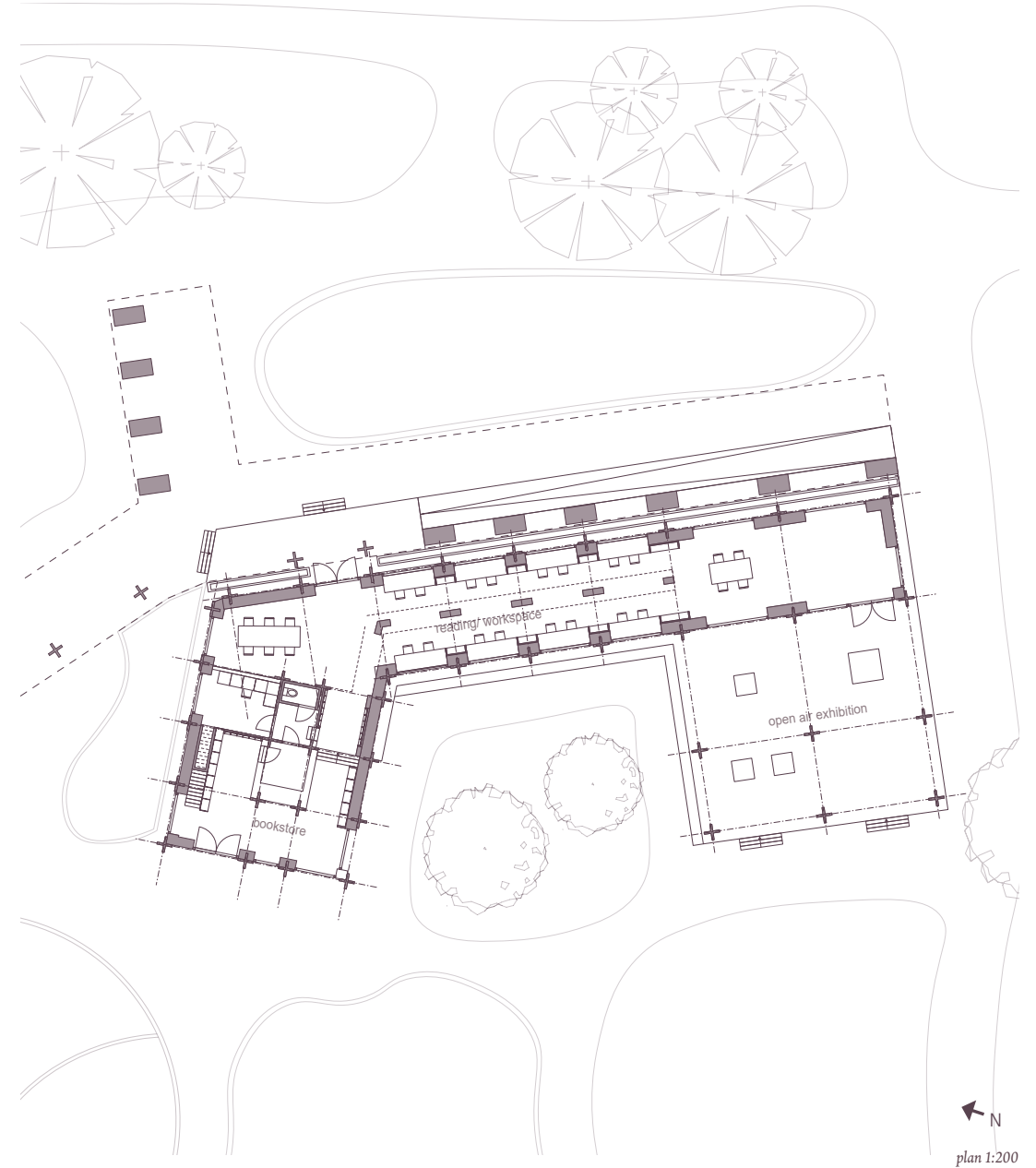


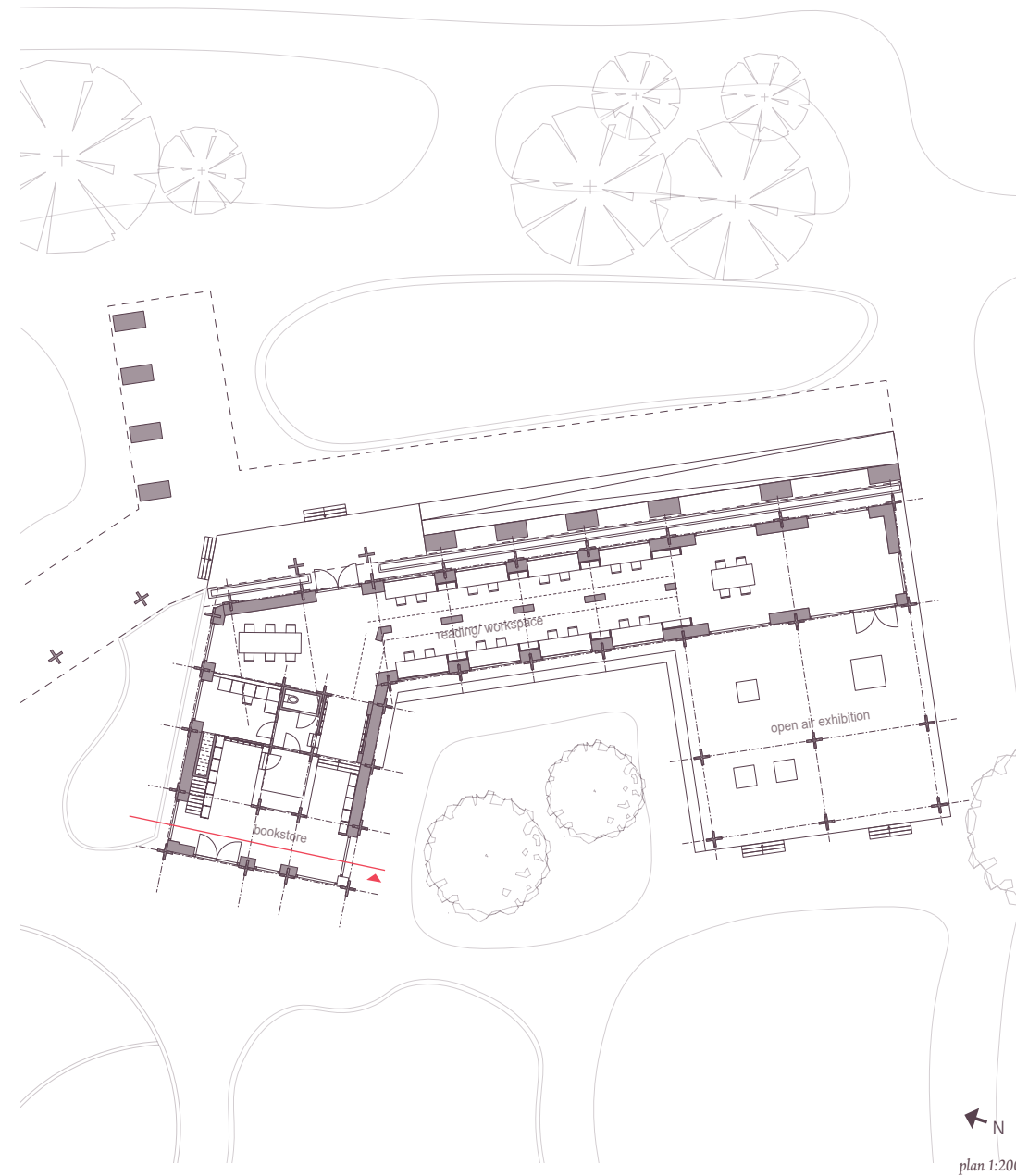


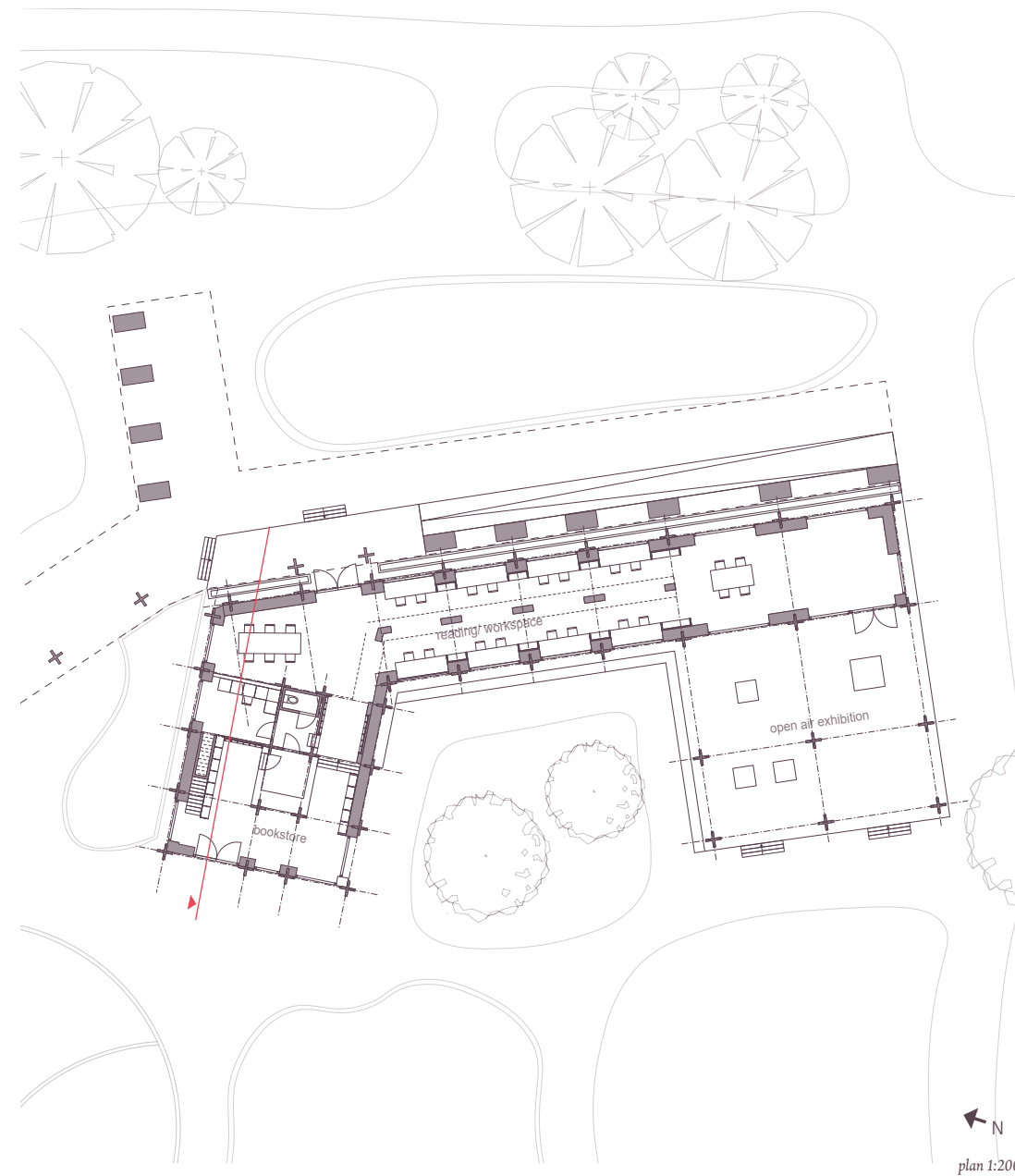


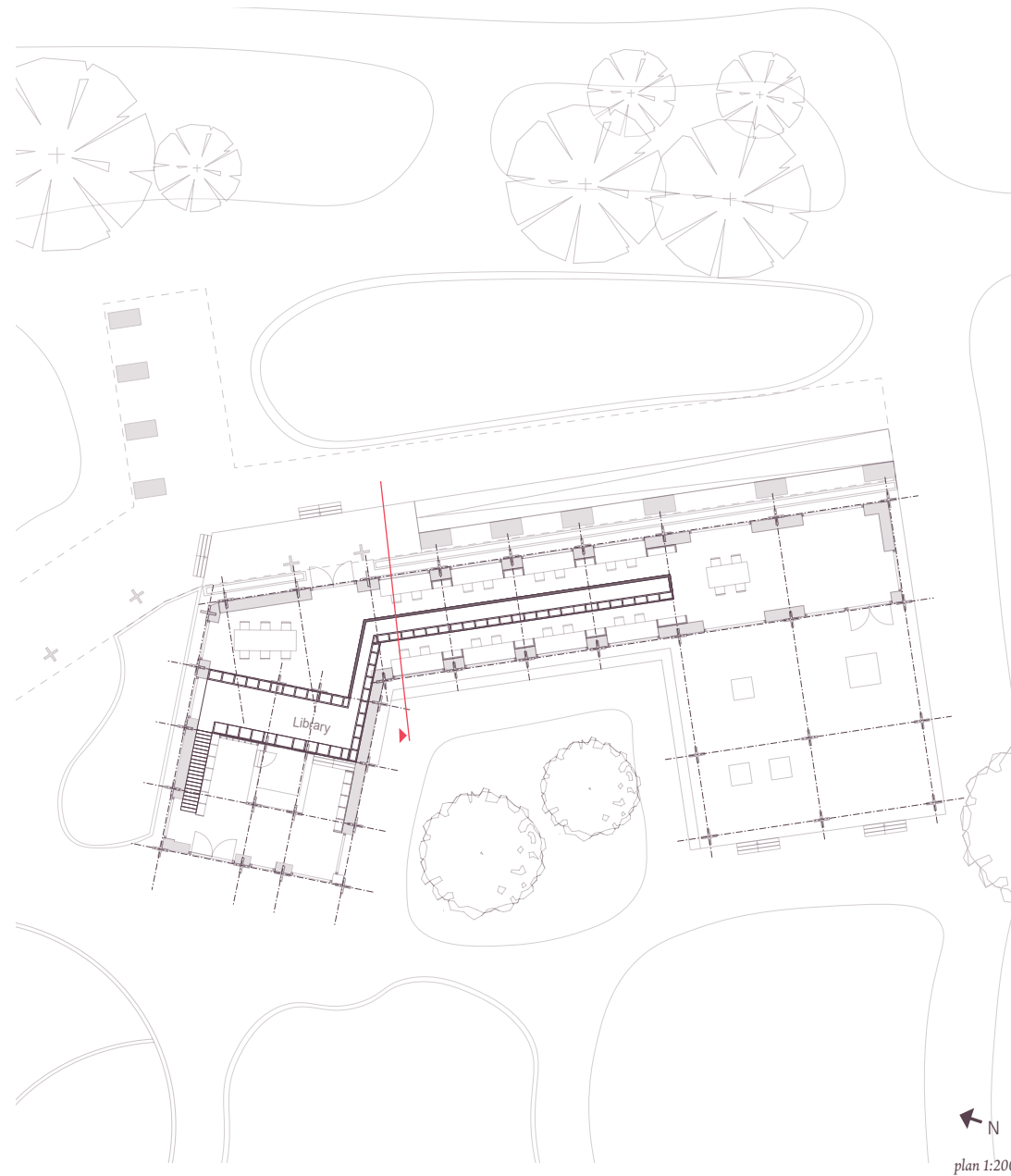
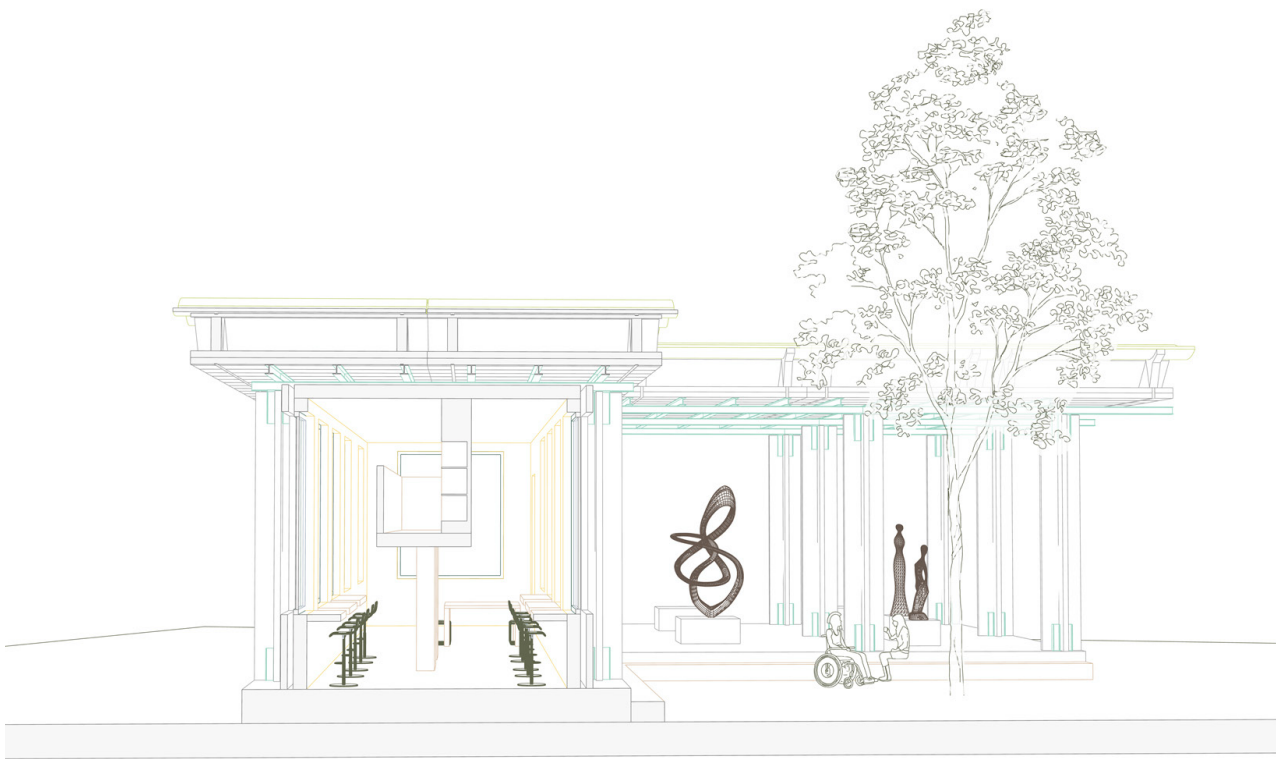


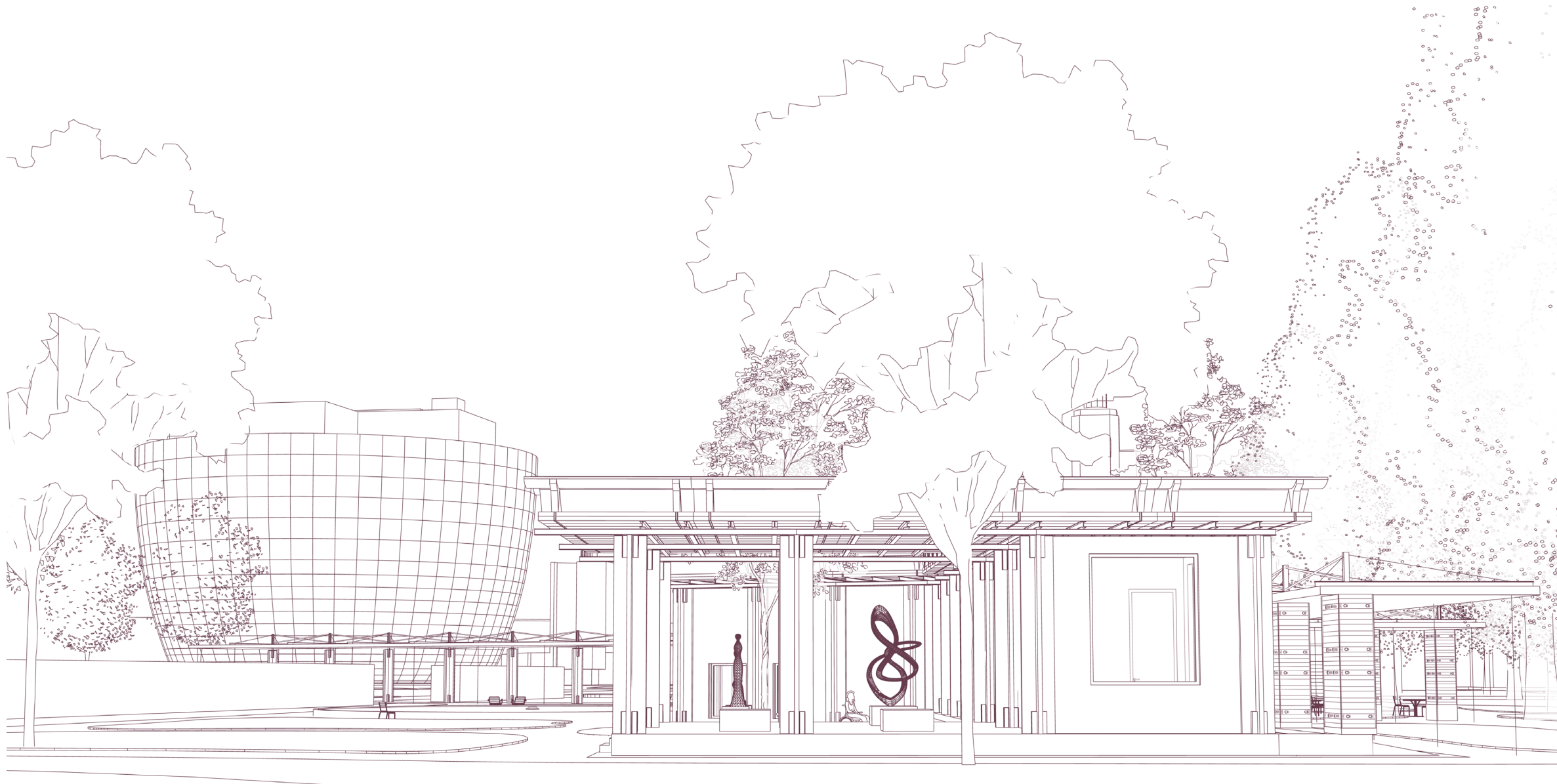




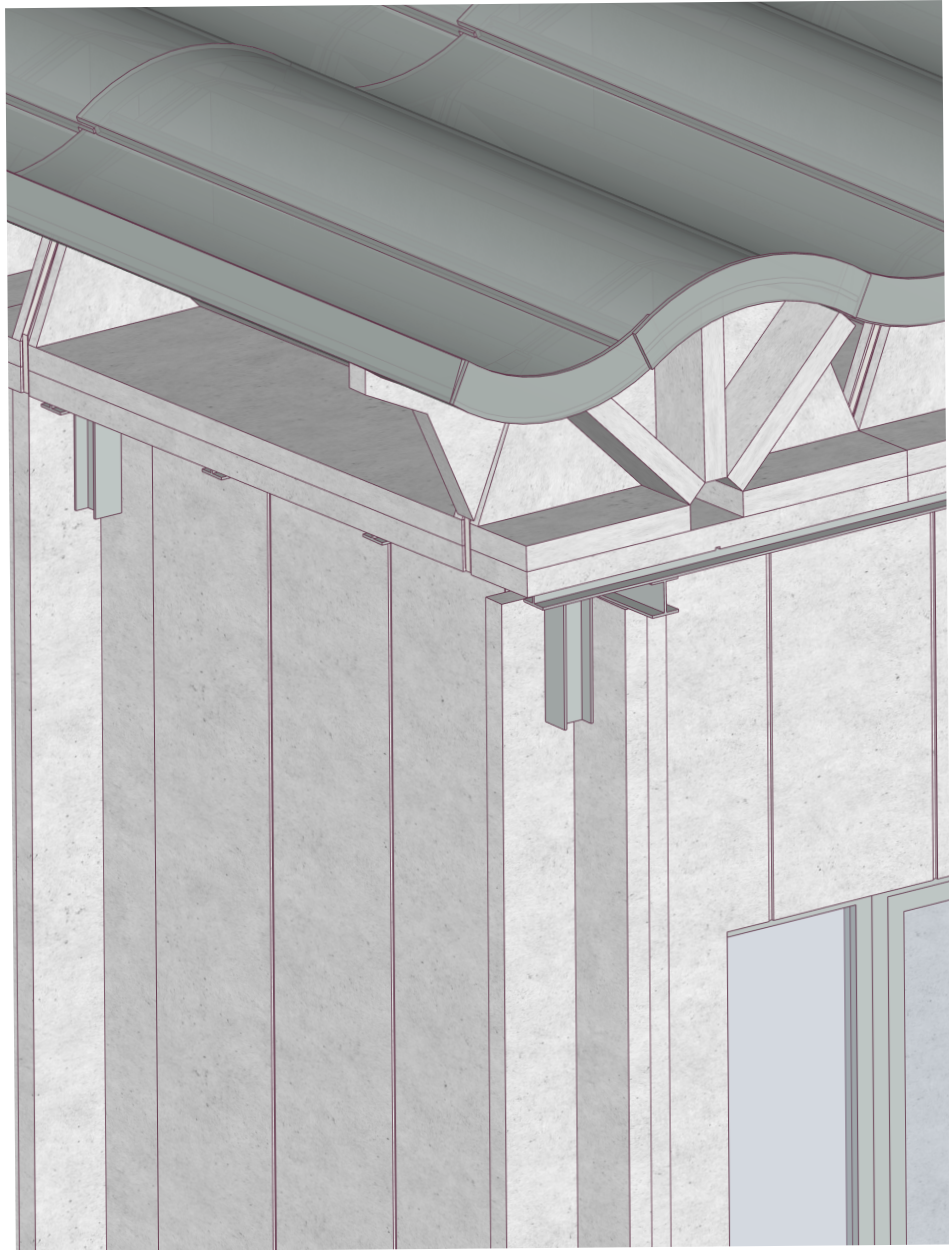




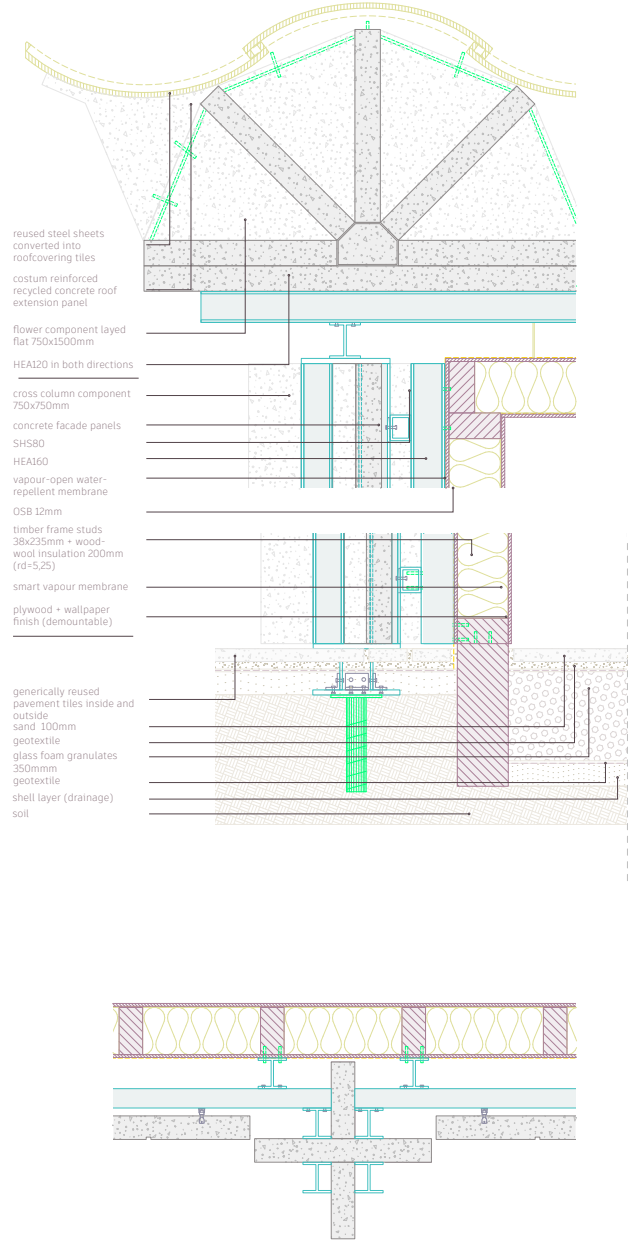




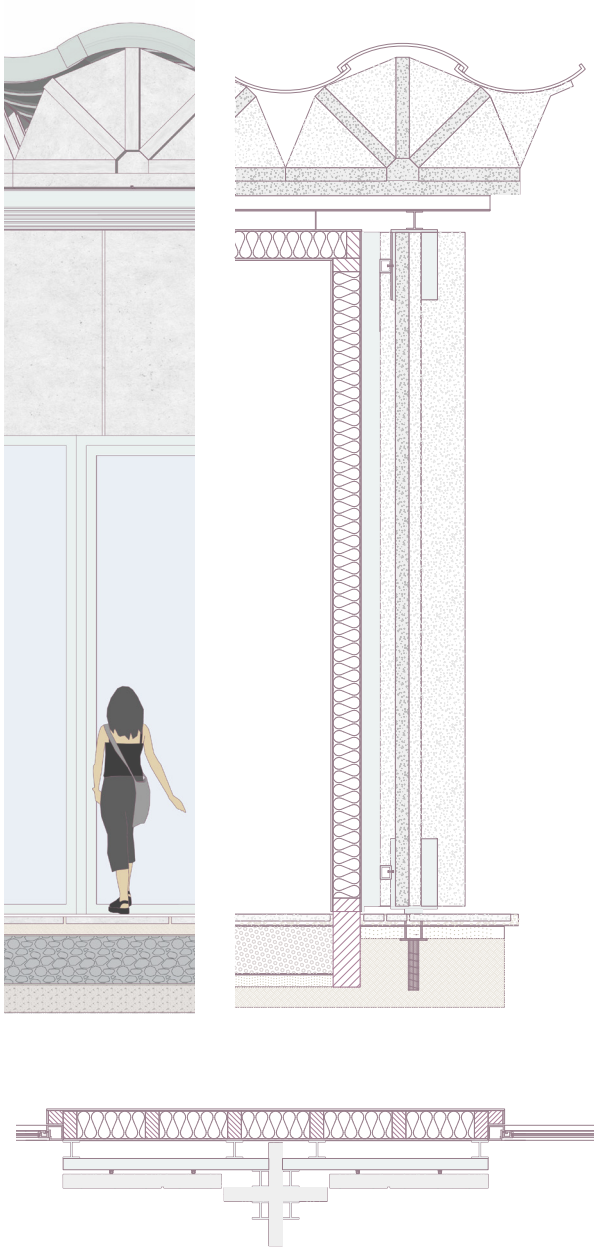
view A



axo close-up fragment



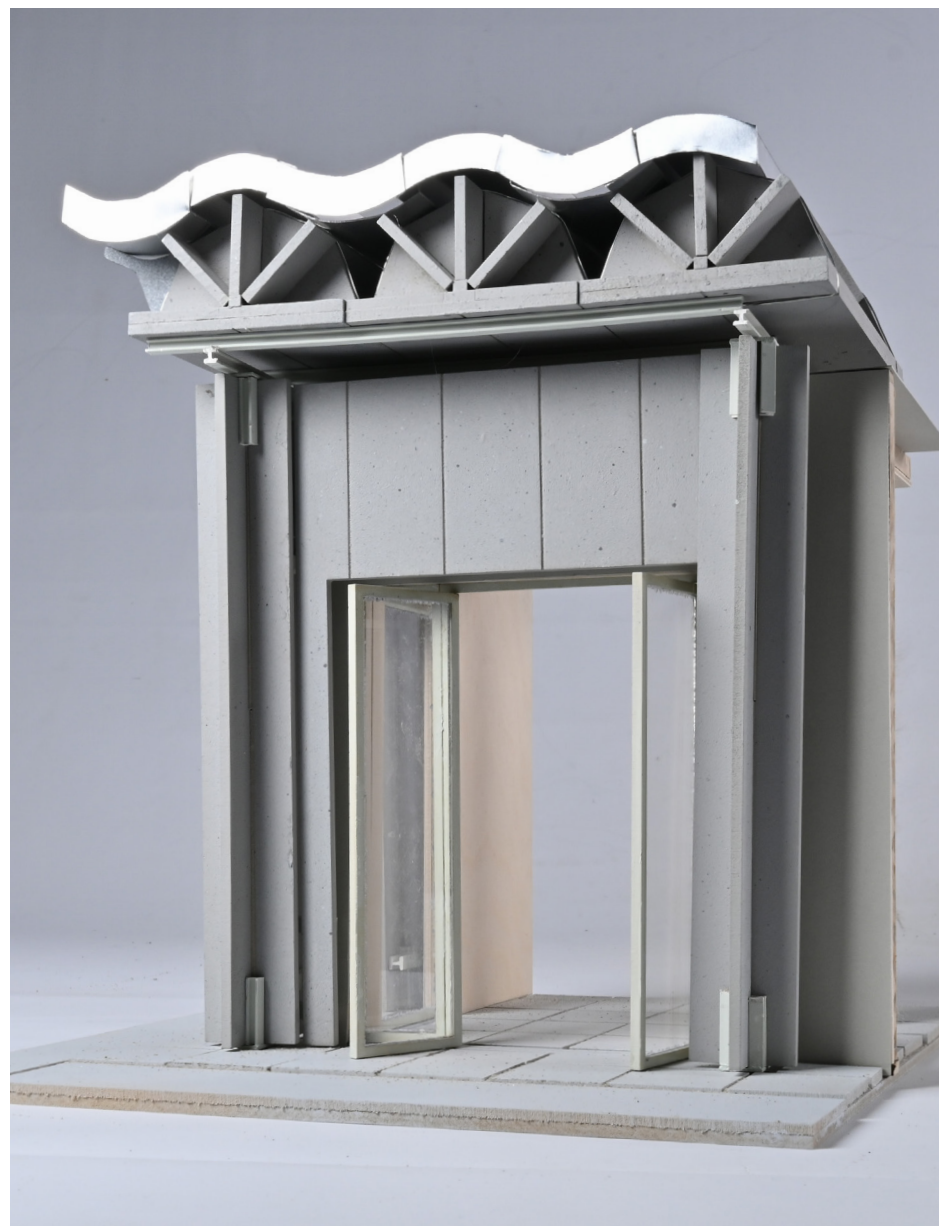
details horizontal + vertical



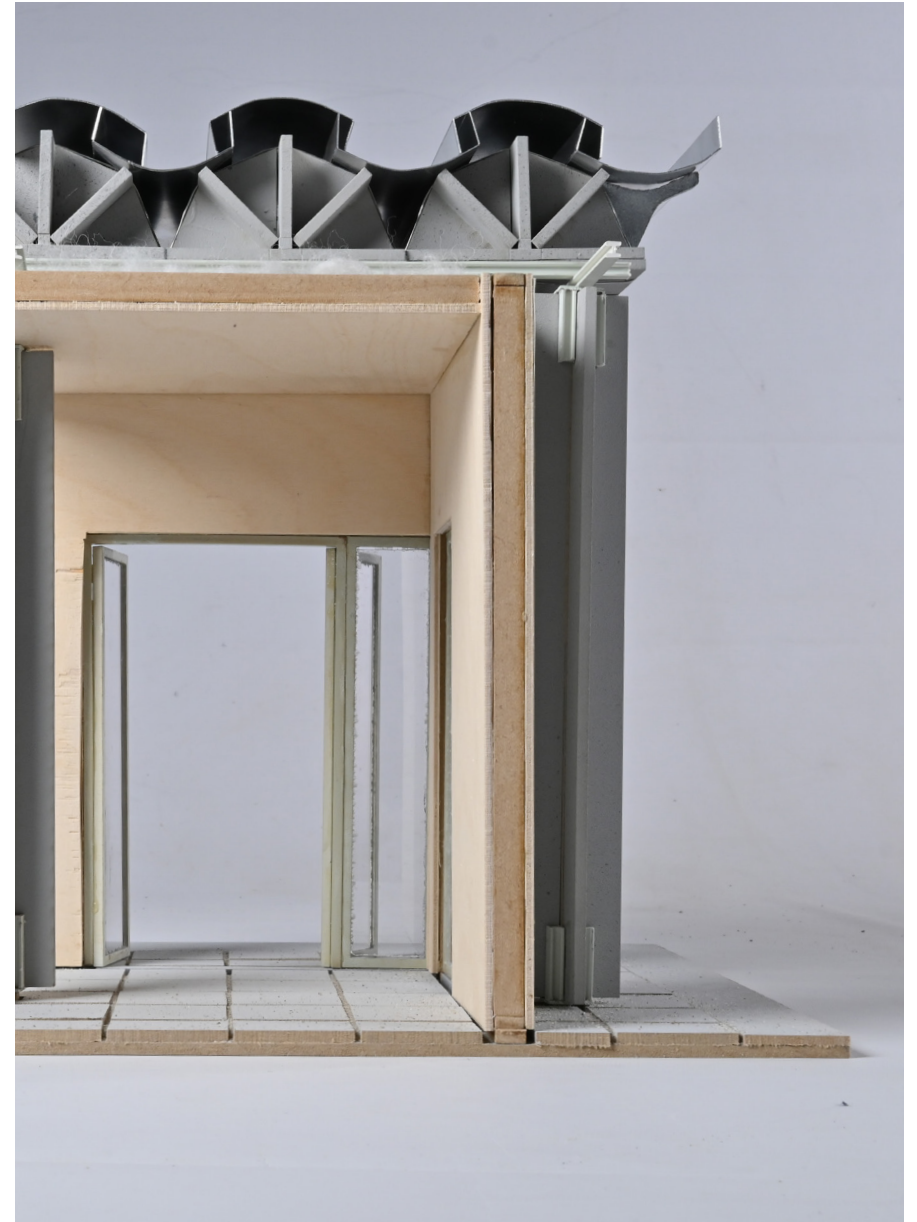
fragment horizontal + vertical



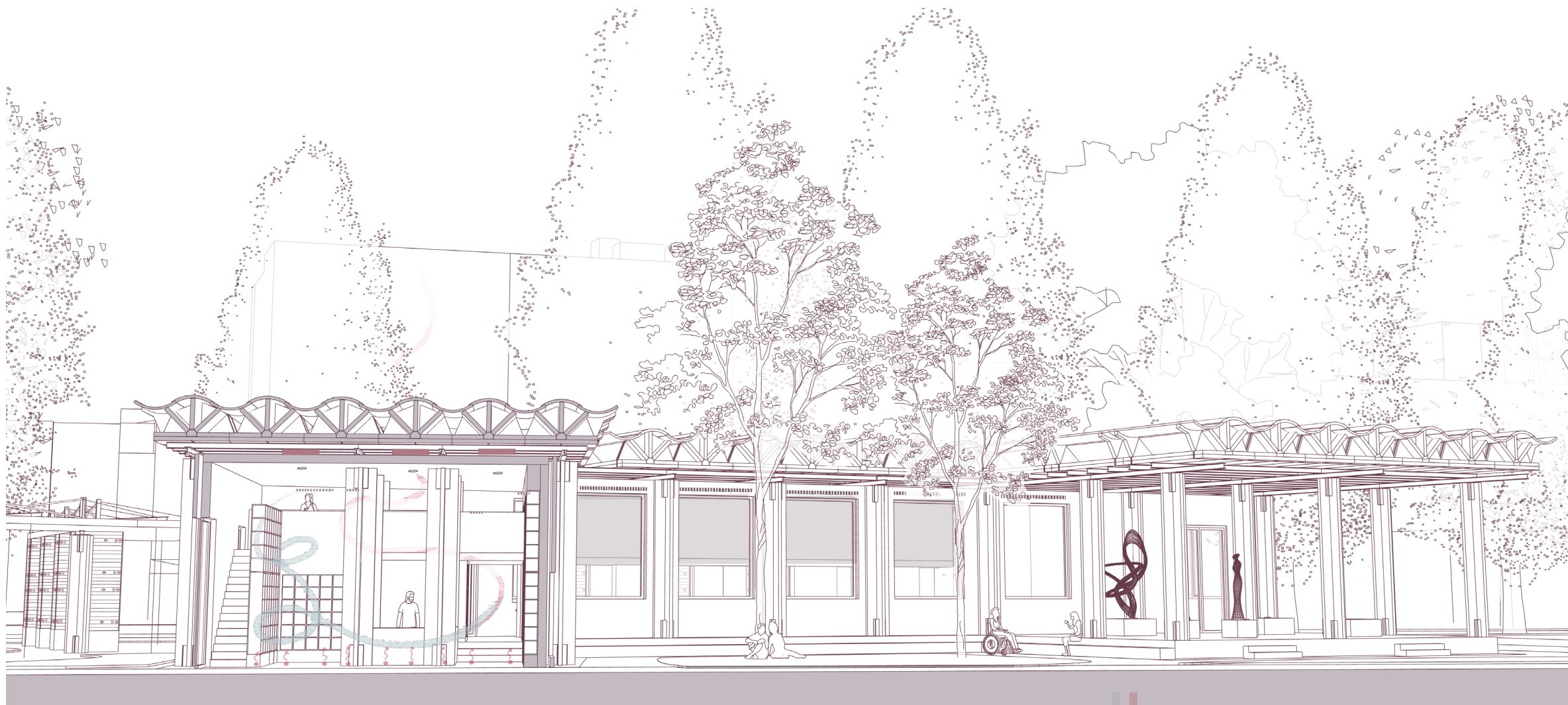
Fragment model - bookstore pavilion



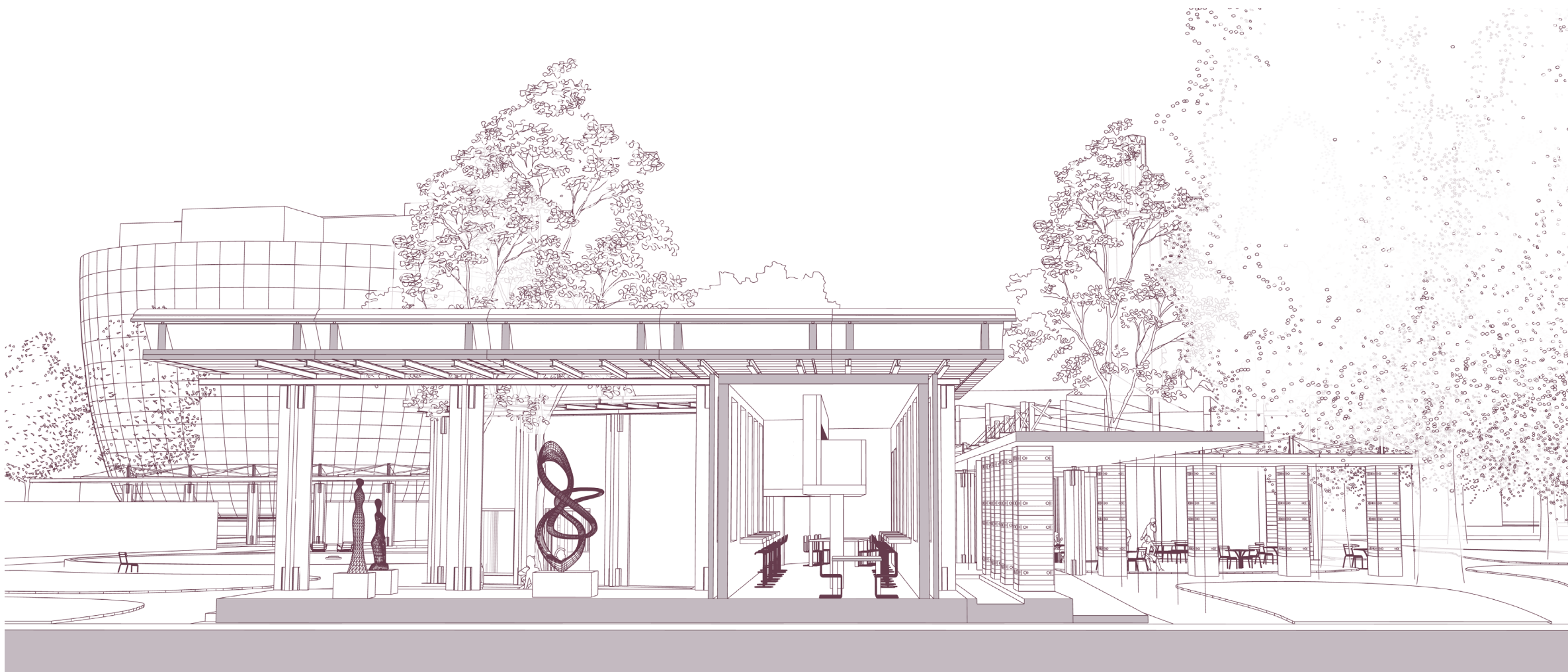
Fragment model - bookstore pavilion



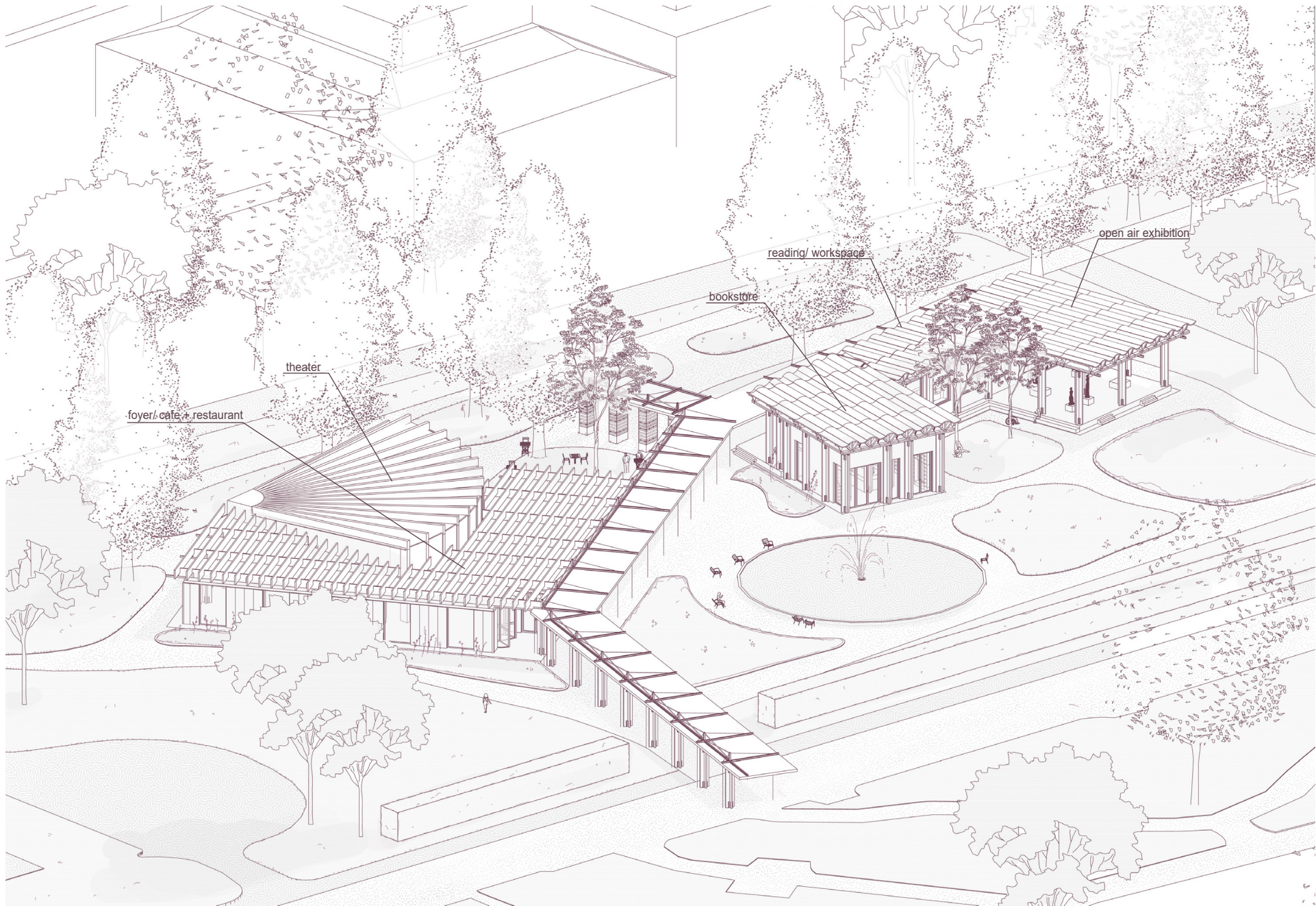
Fragment model - bookstore pavilion

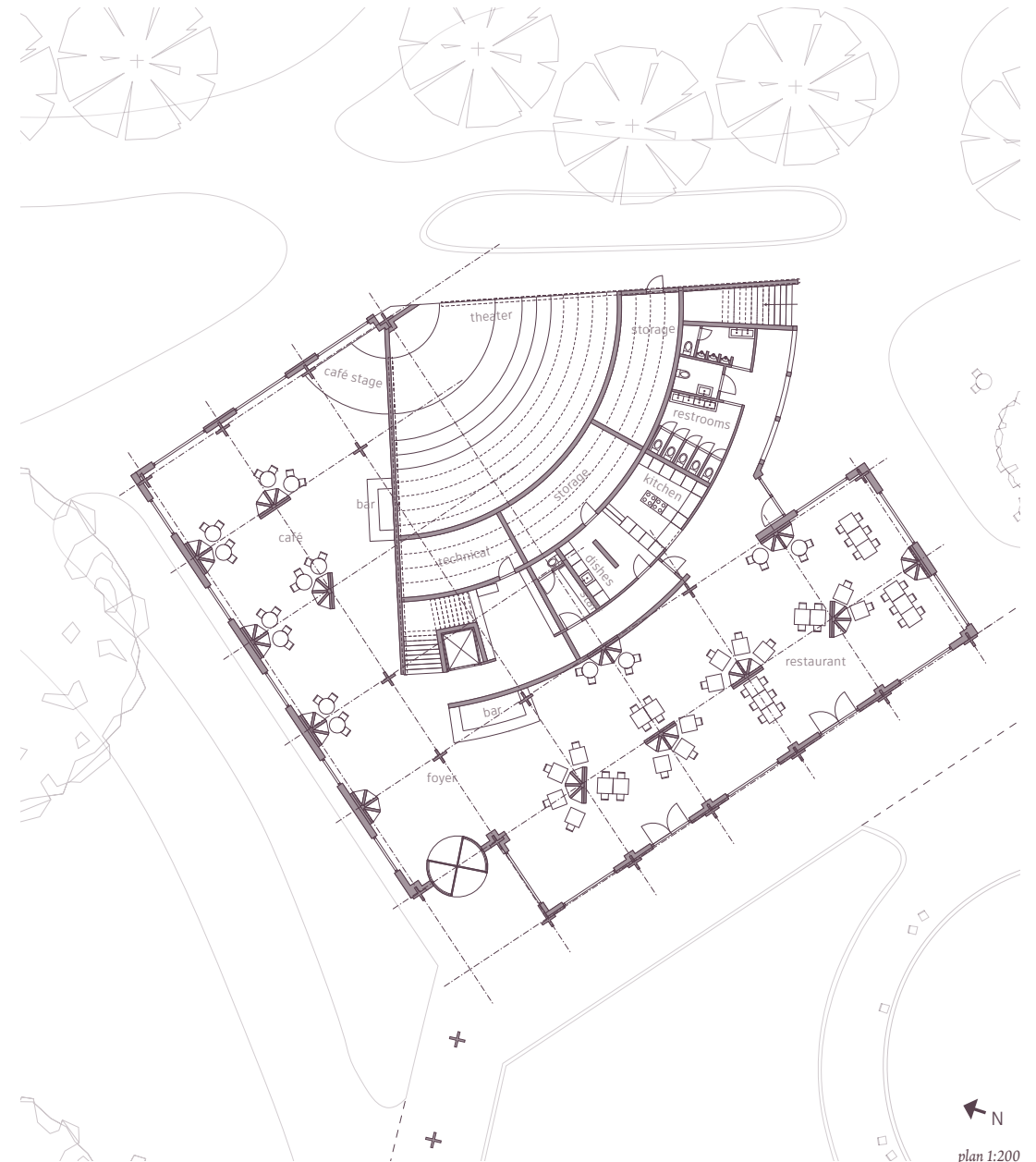
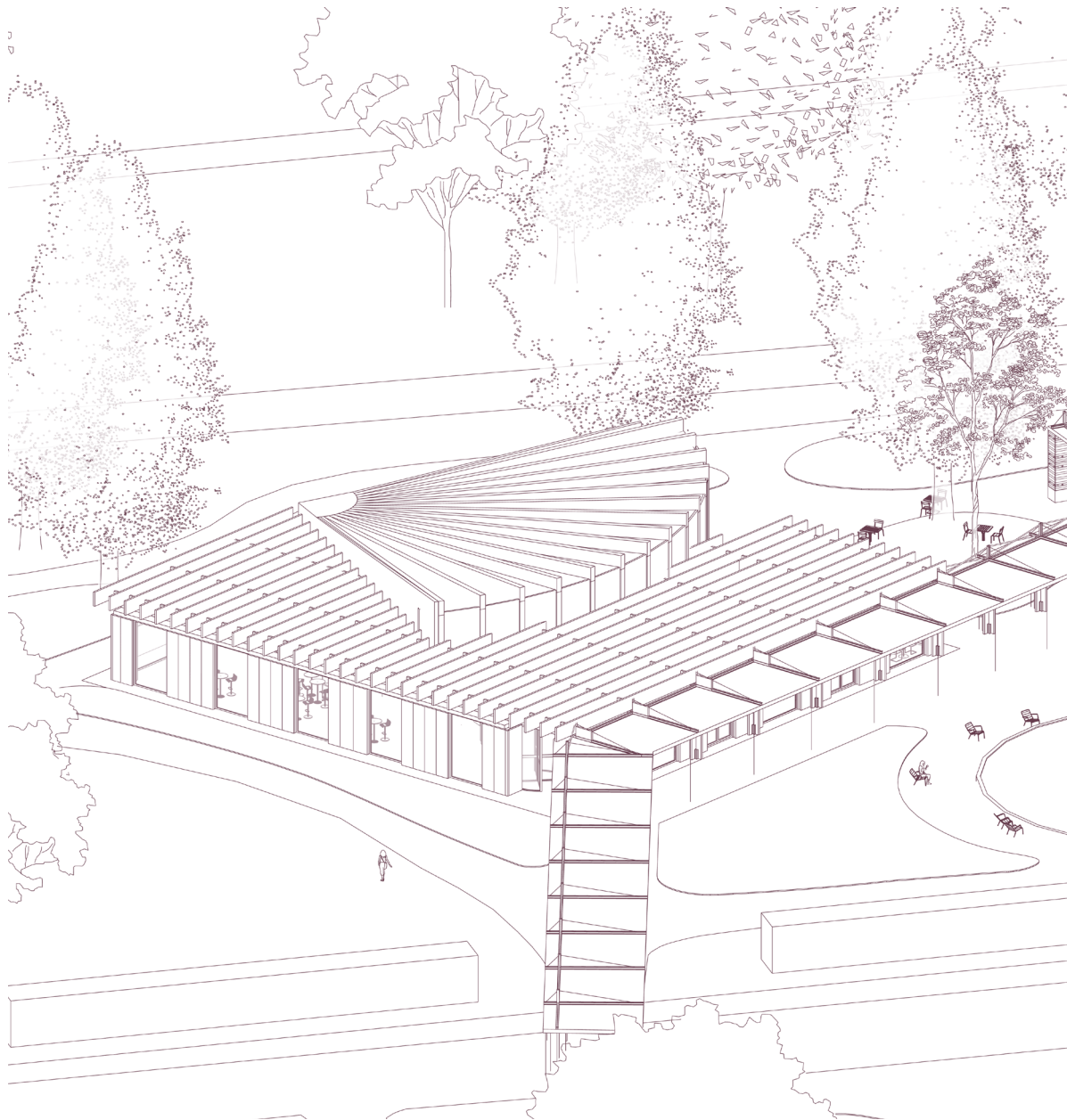


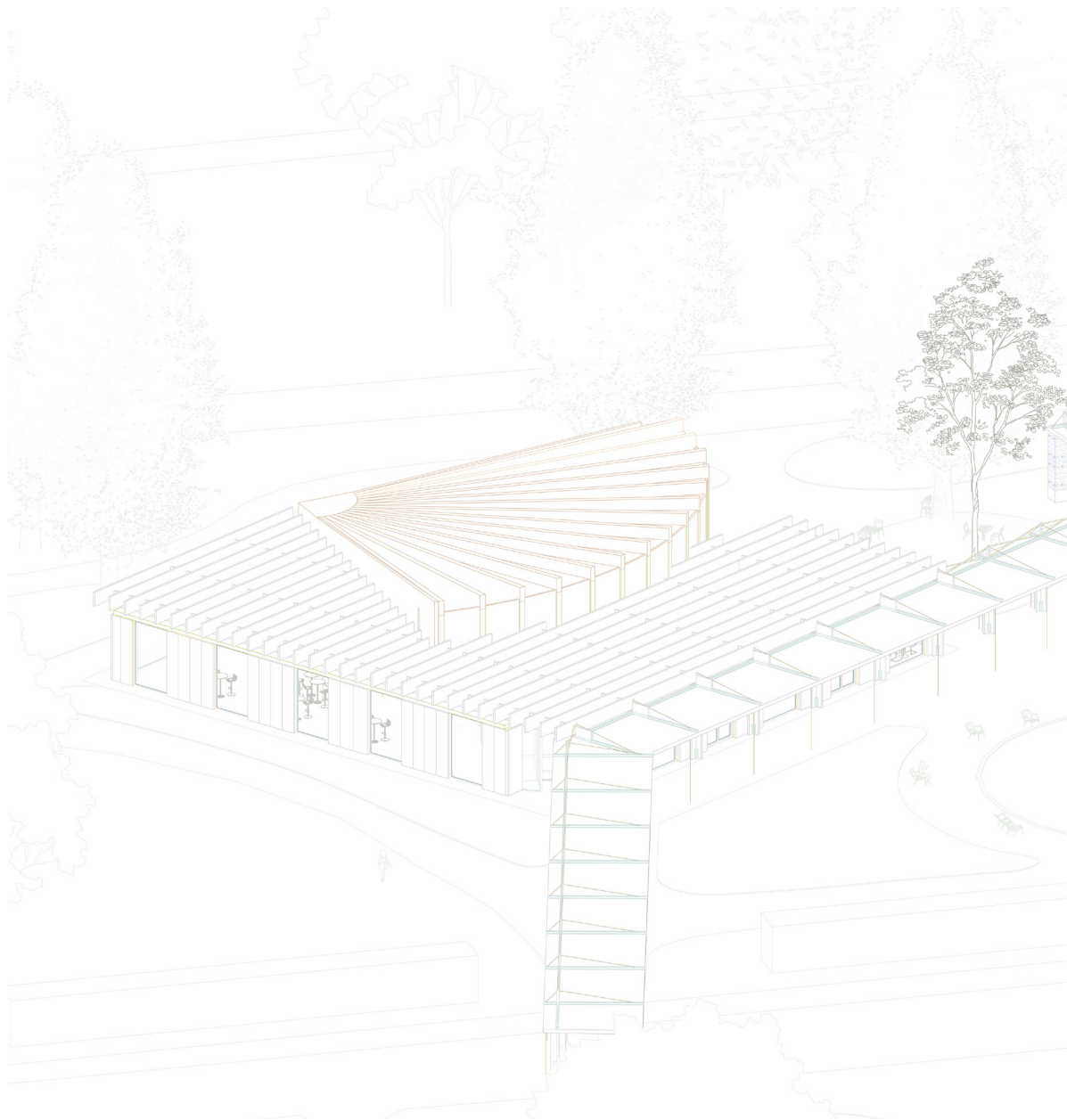
Climate section A

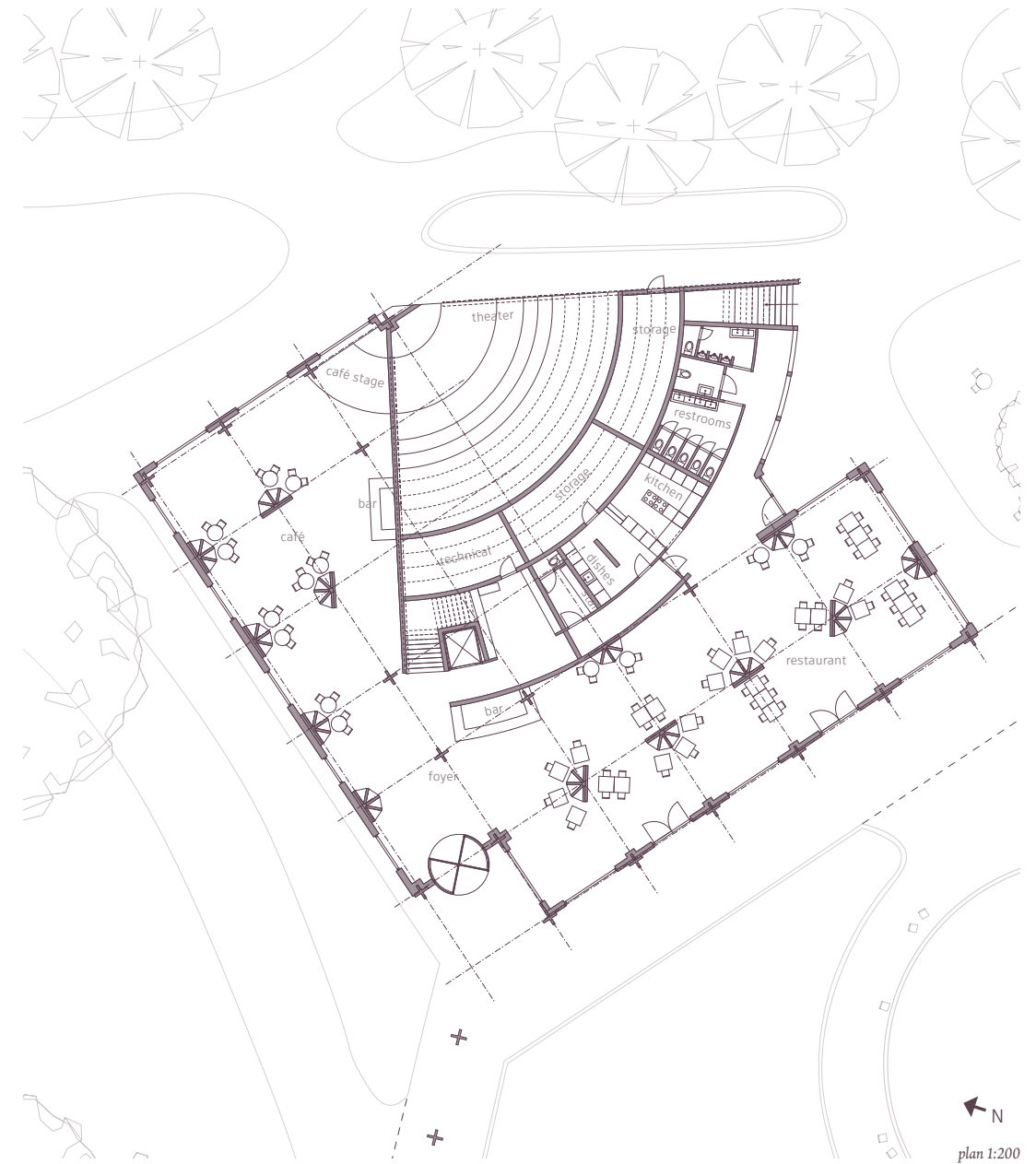
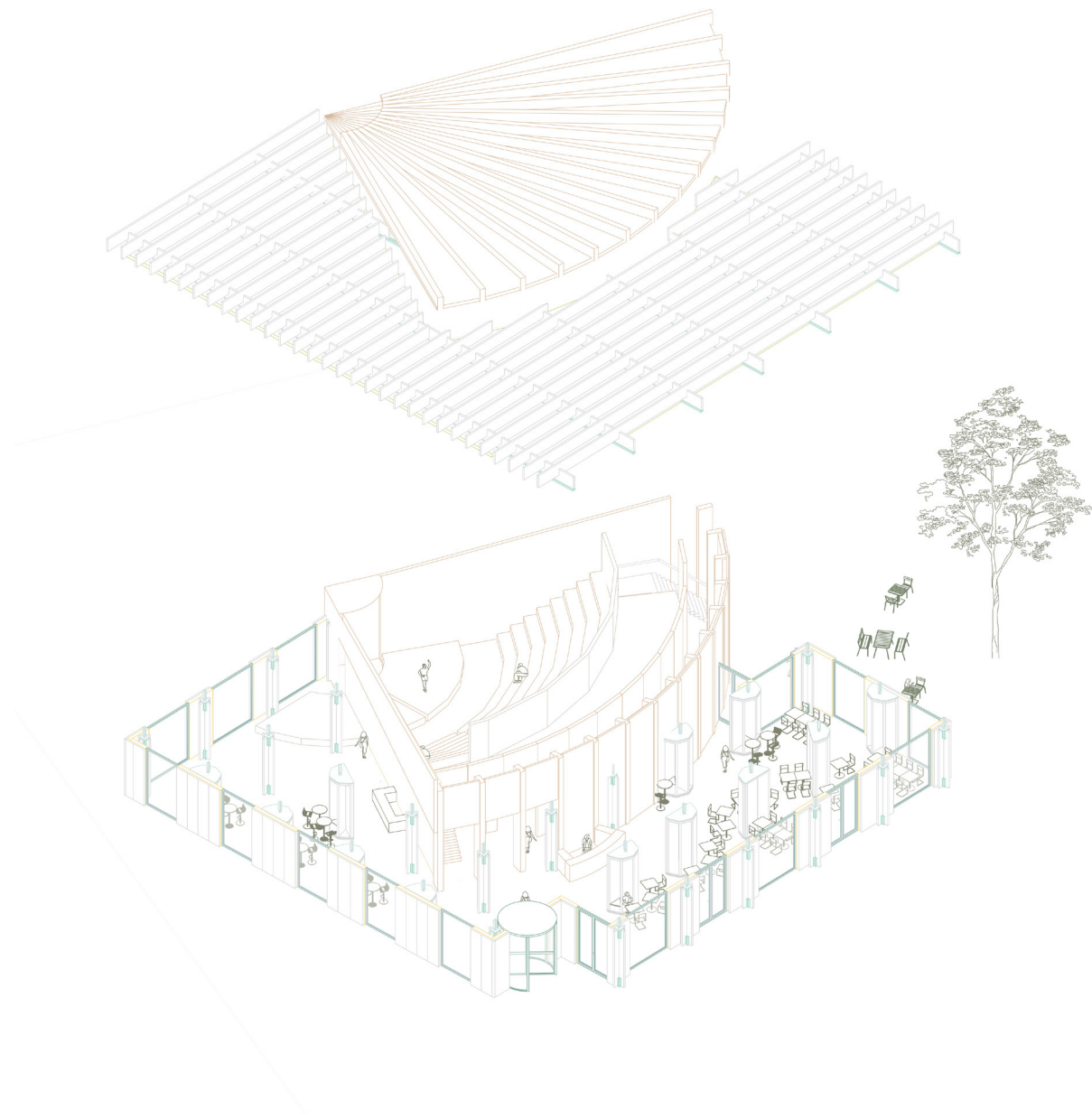


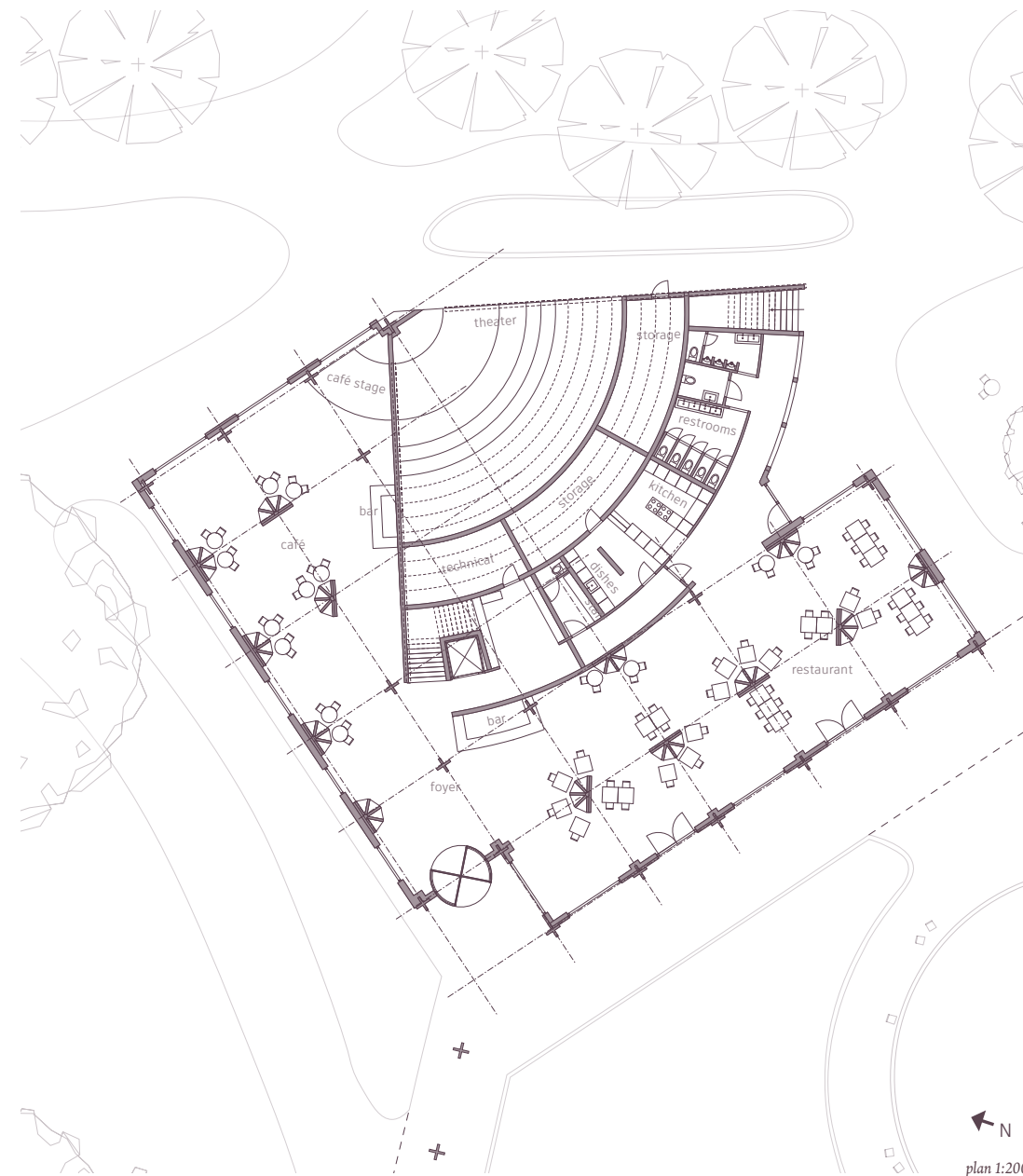
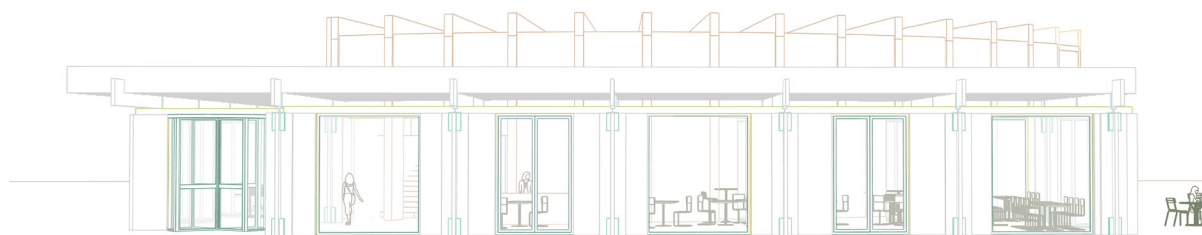
Section through aopen air art exhibition and reading room

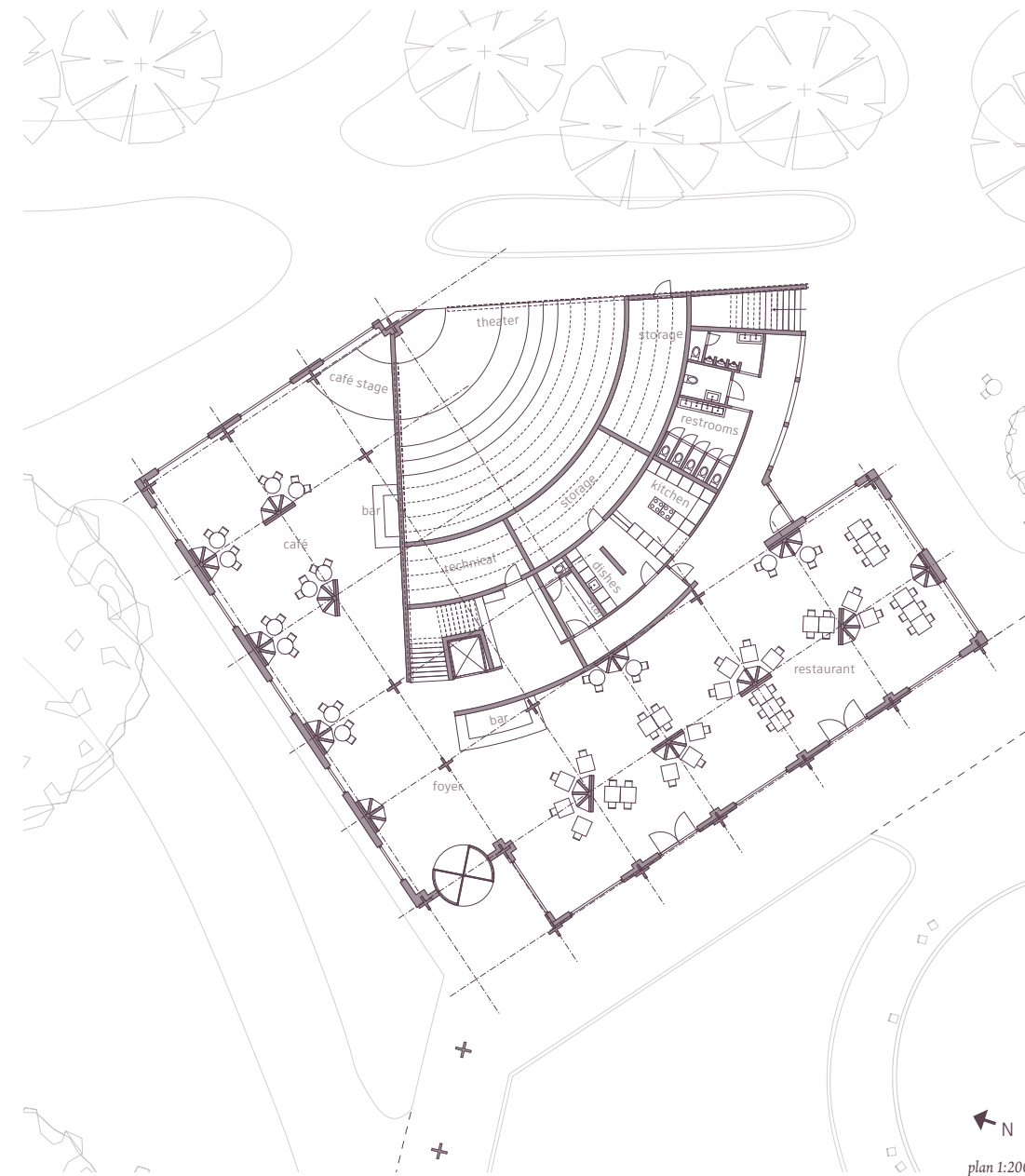


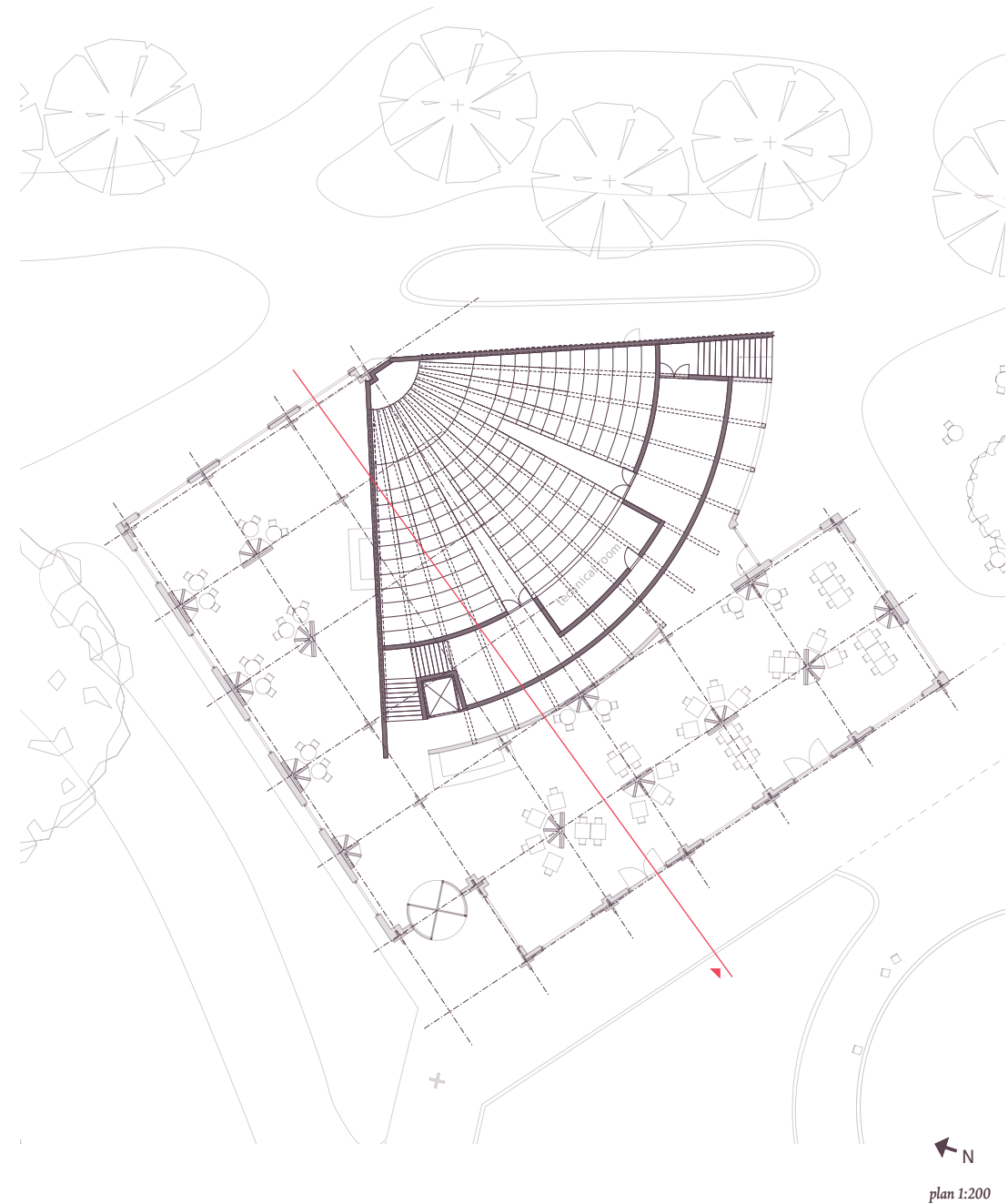


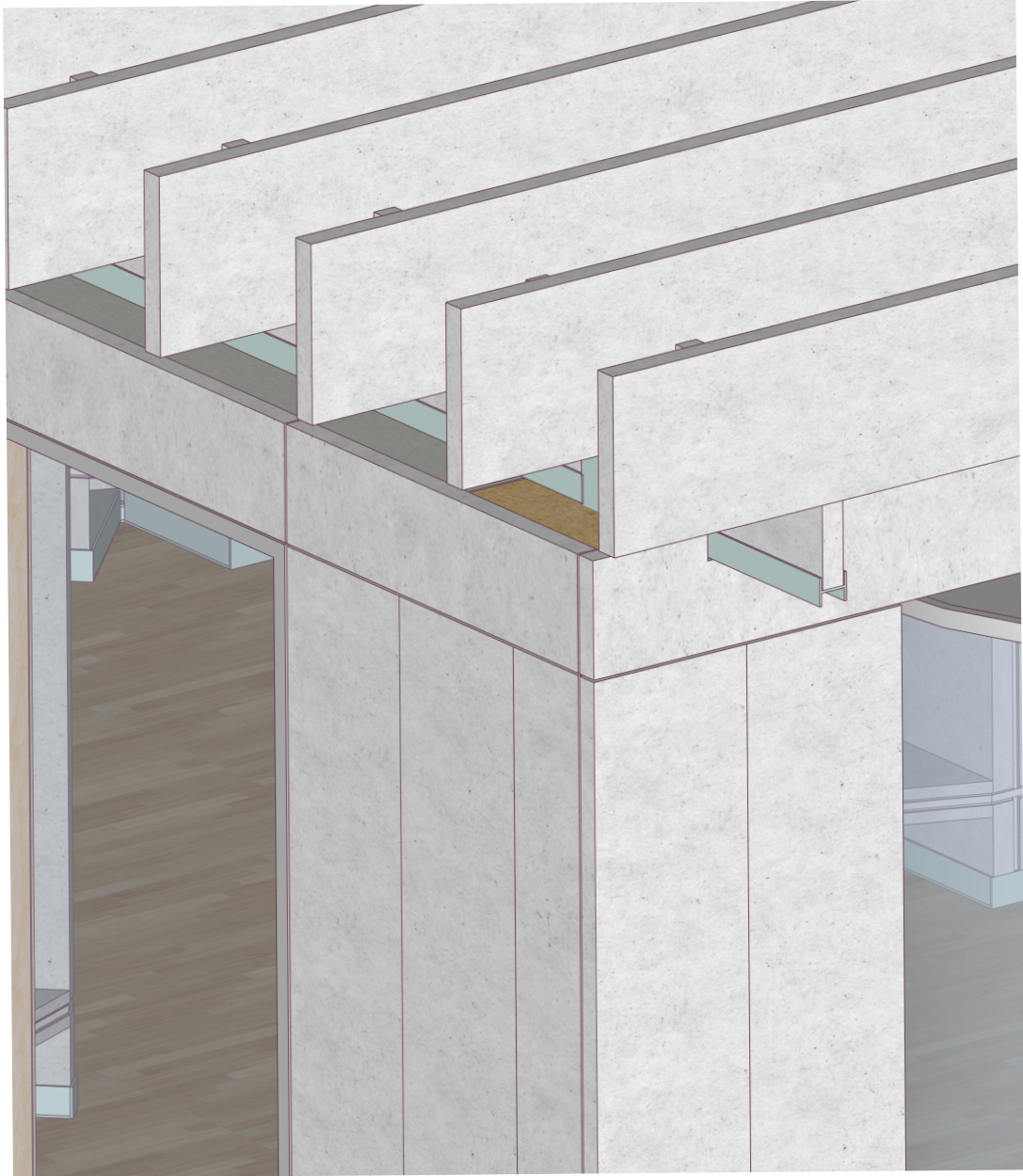






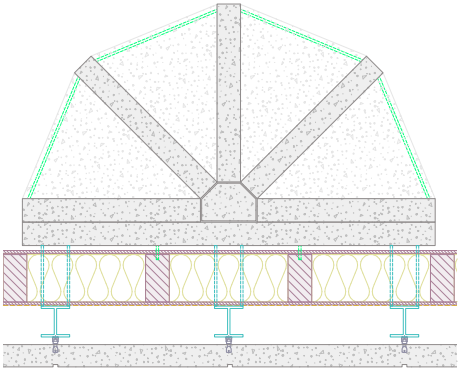
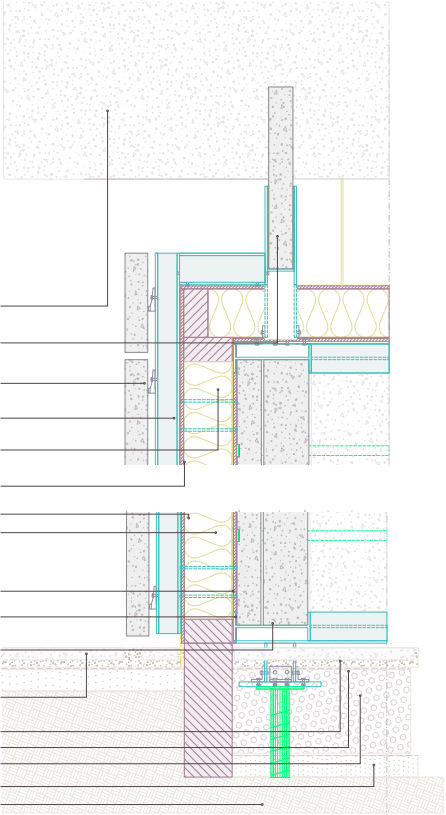




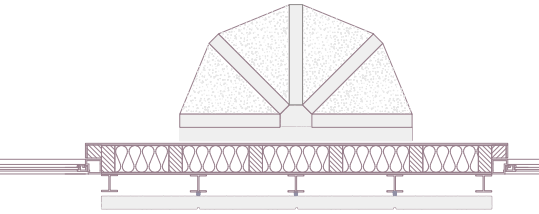
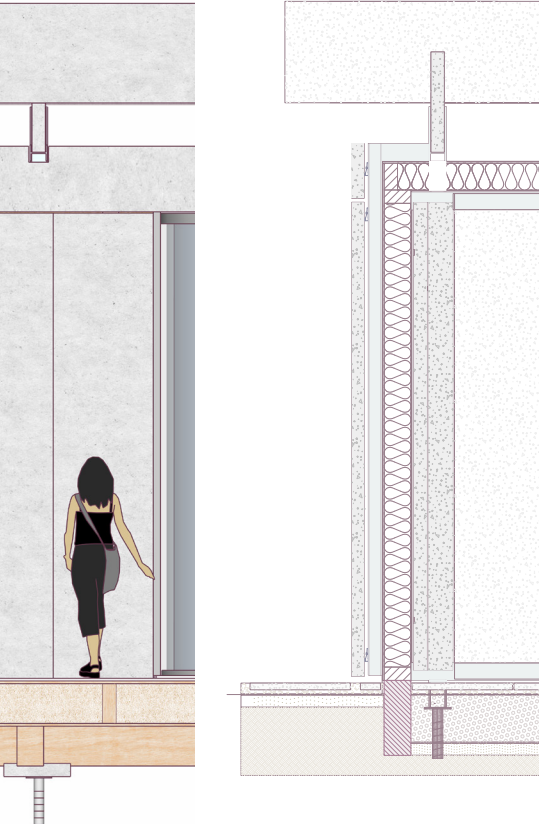


axo close-up fragment

- half-lap interlocking concrete panels
- HEA120 with thermal break plate
- concrete facade panels 100mm
- HEA120 + panel ancors (re-used)
- HEA120 with thermal break plates on both sides
- vapour-open water-repellent membrane
- OSB 12mm
- timber frame studs 38x235mm + wood-wool insulation 200mm (rd=5,25)
- smart vapour membrane
- plywood + wallpaper finish (dismountable)
- flower column component 750x1500mm
- generically reused pavement tiles inside and outside
- sand 100mm
- geotextile
- glass foam granulates 350mm
- shell layer (drainage)
- soil



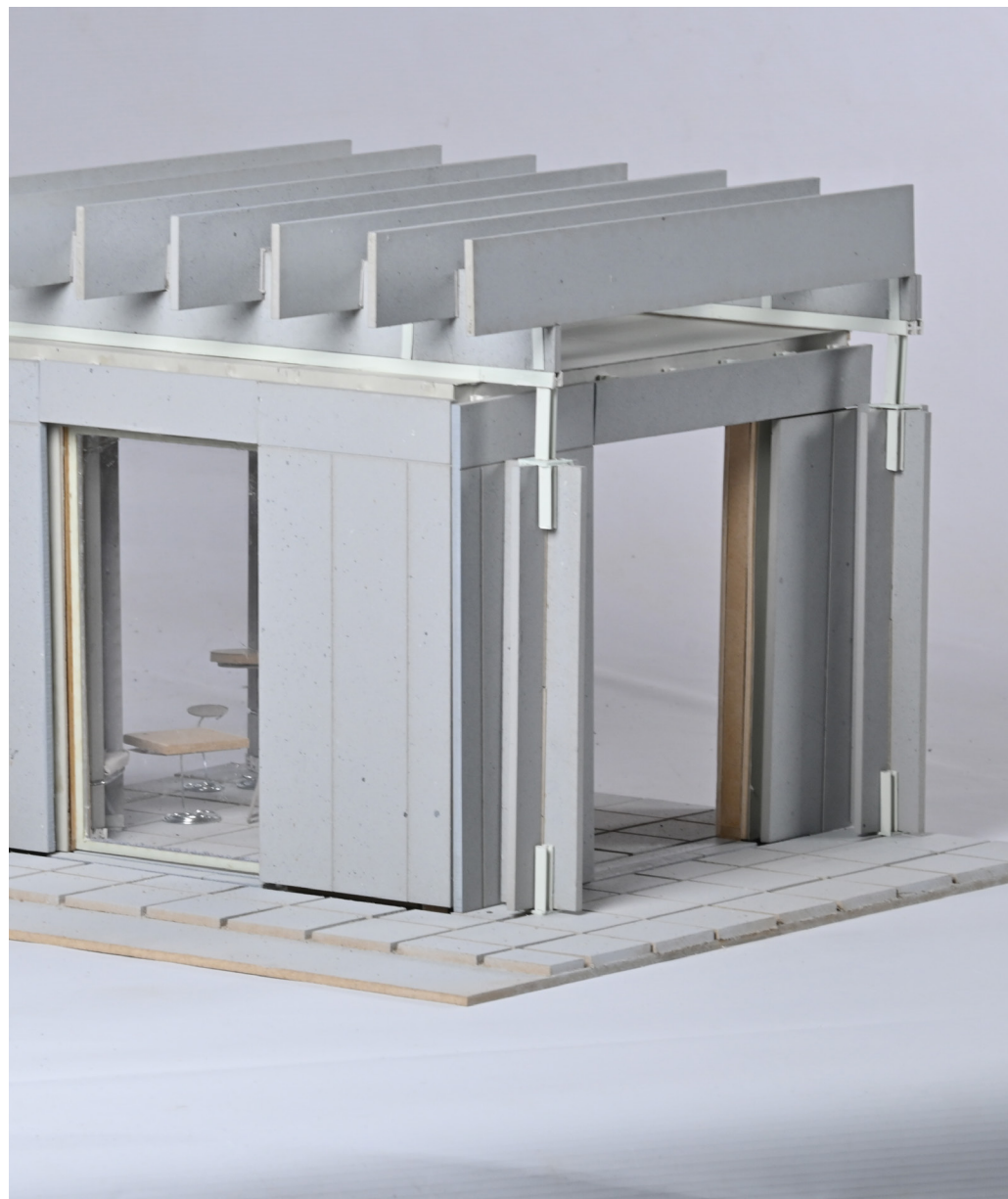
details horizontal + vertical



fragment horizontal + vertical



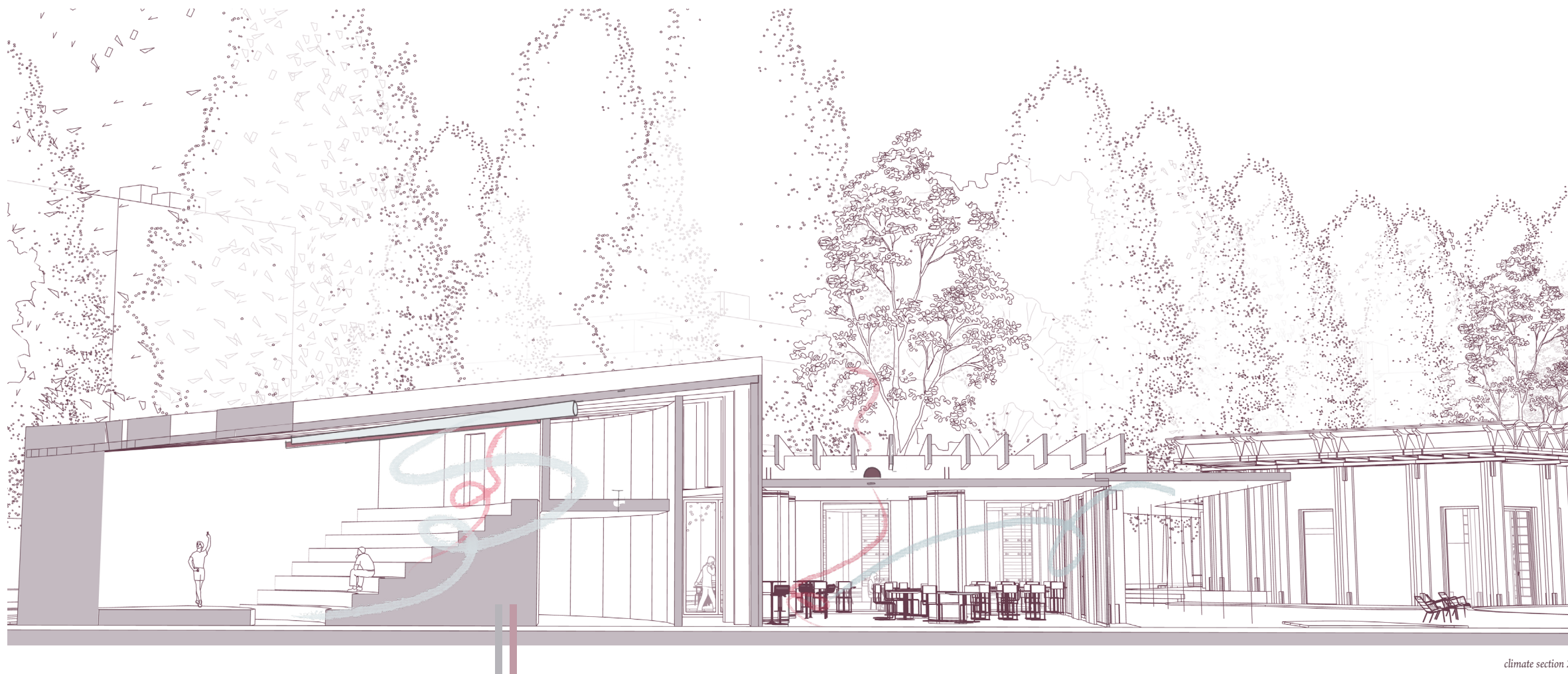
Fragment model - restaurant pavilion



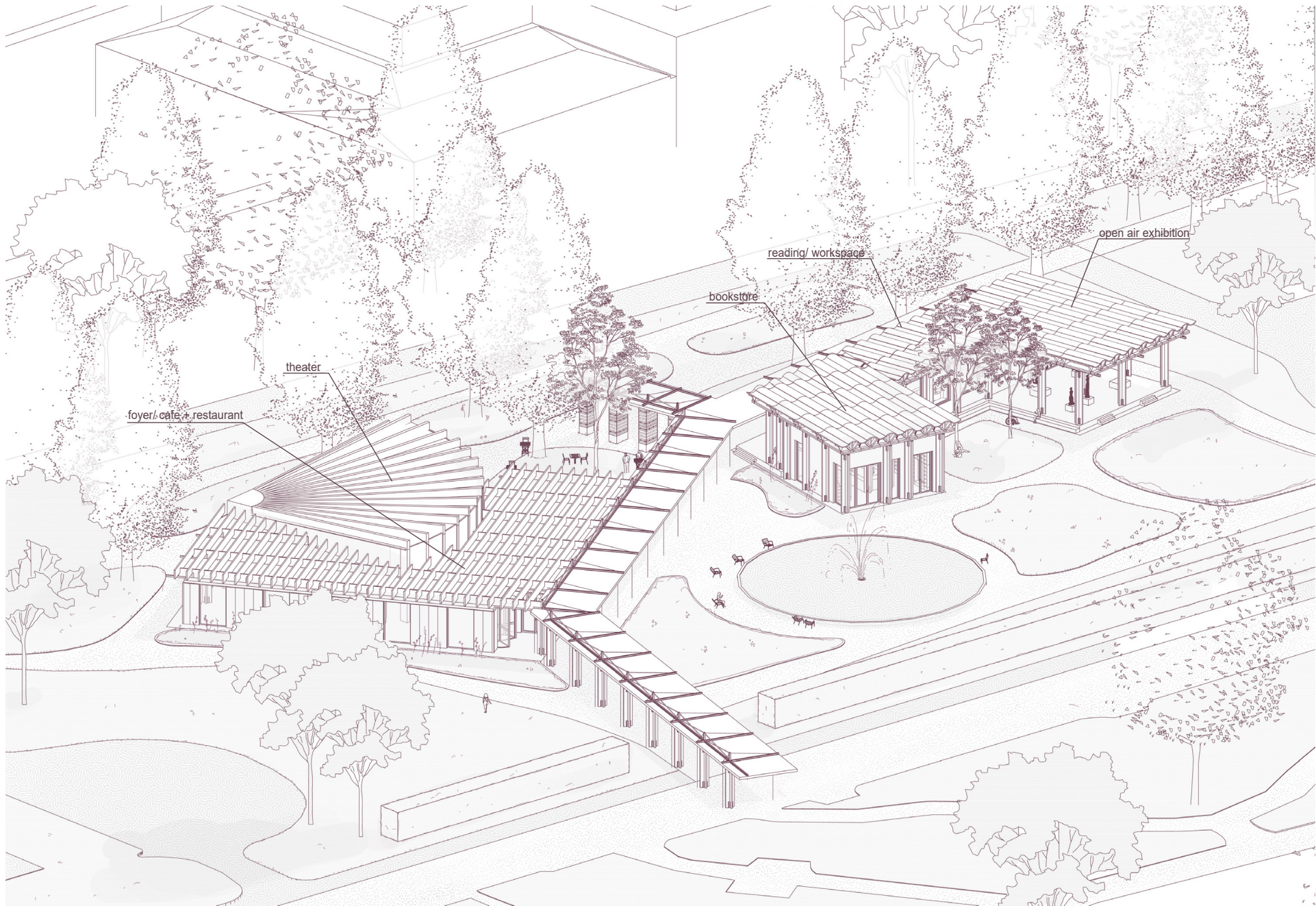
Fragment model - restaurant pavilion

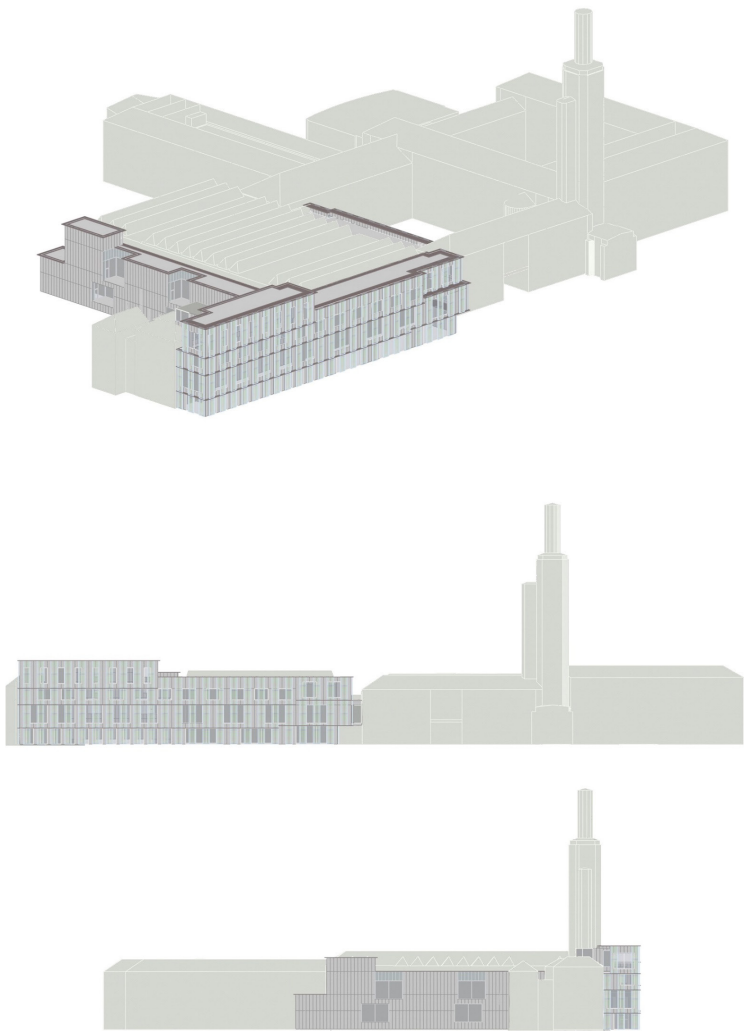


Fragment model - restaurant pavilion

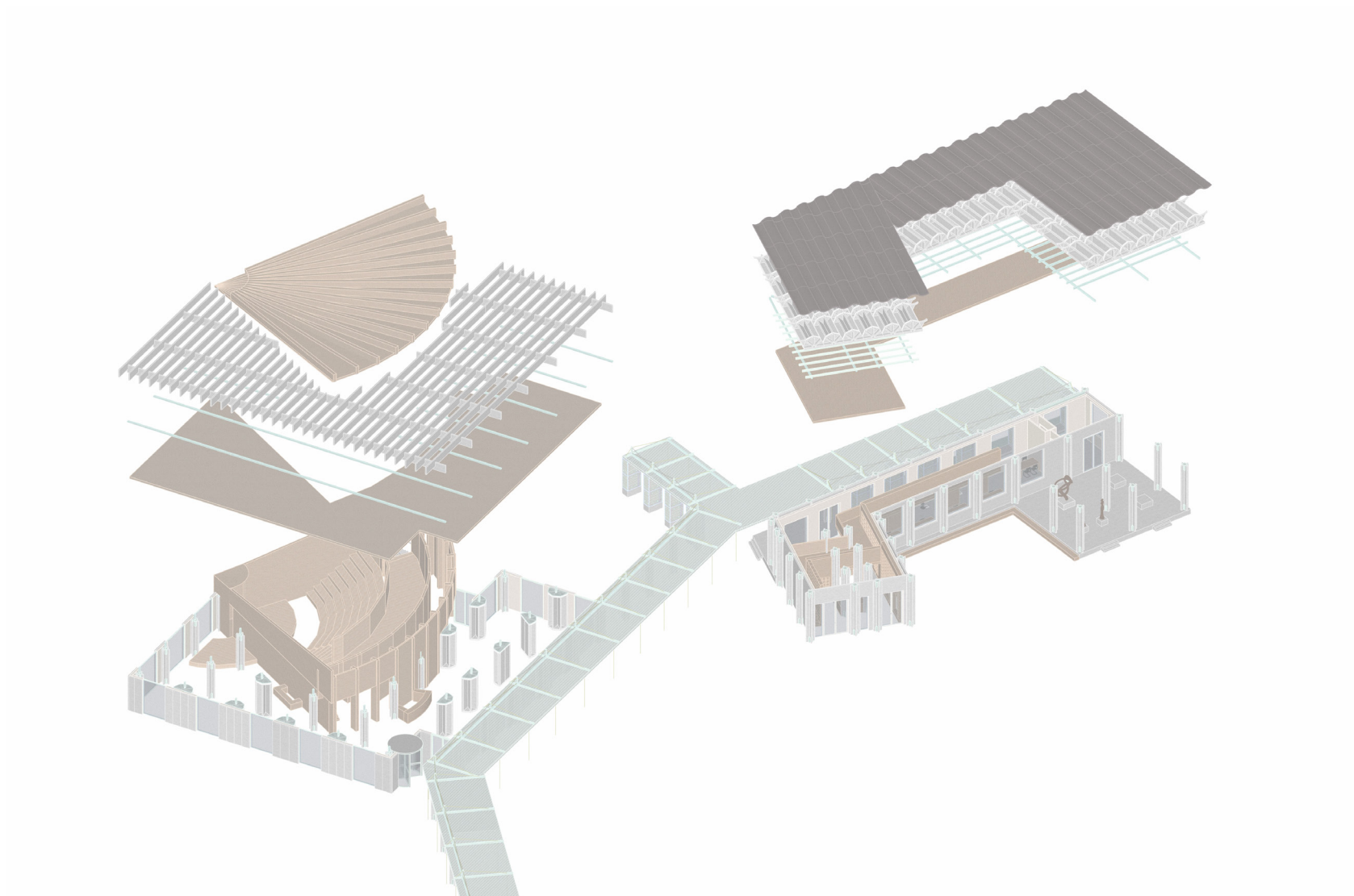


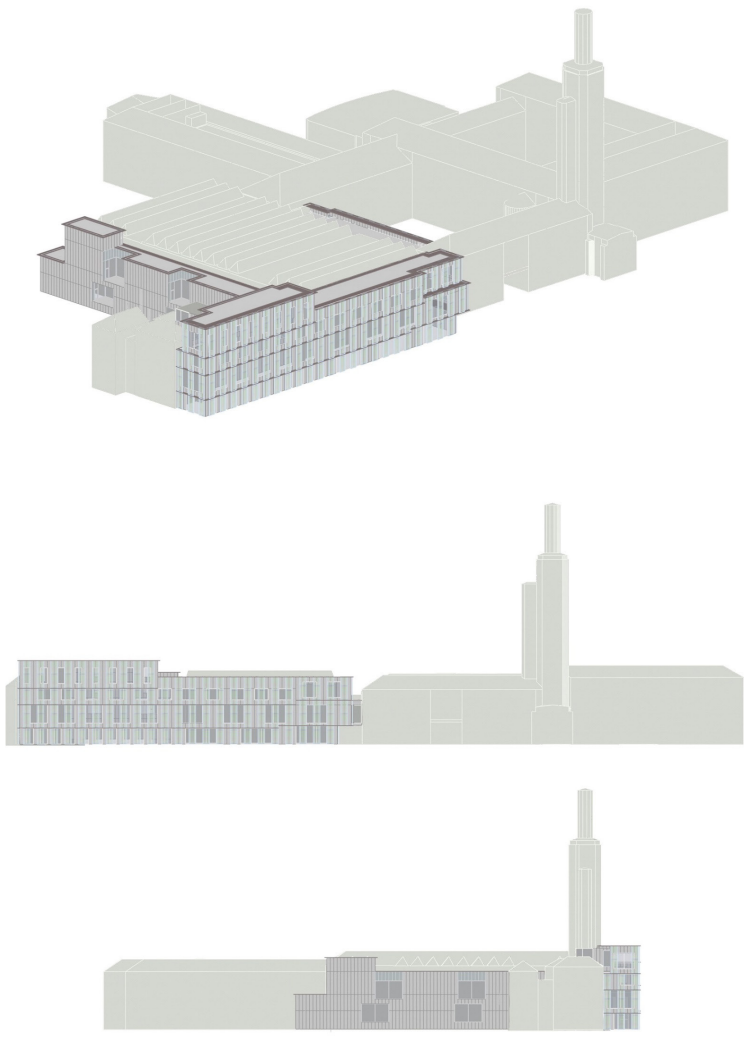
climate section 2



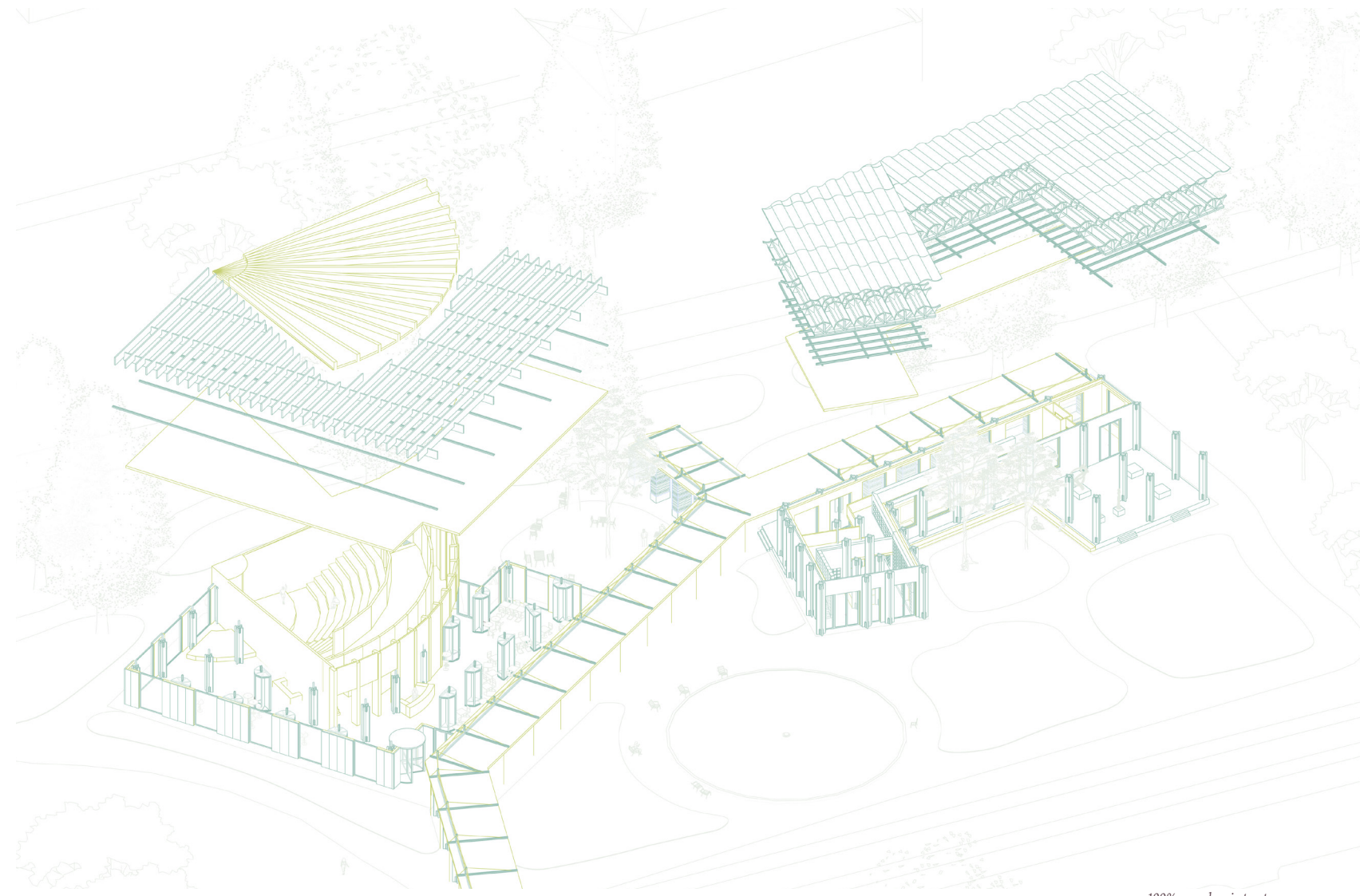


75% of main materials is reused





75% of main materials is reused



100% reused main tructure
biobased and recycled materials as complimentary material



impression 1 of Rozenpark Pavilion



the end, thank you for listening

impression 2 of Rozentuin Pavilion

Concluding:

general approach - applicable to any project

1. *determine local surrounding*
2. *inventarise*
3. *experiment*
4. *design*
5. *implement alternative materials if needed (biobased/ recycled)*



*recognizing material values and rethinking material assembly
for a sustainable and locally-bound architecture*

thank you for listening