Future Food Supply Chain

An exploration and implementation of a new urban food typology.

The Hague. The Dutch city with the most traffic congestion of all cities. Cities are growing and urban mobility is getting worse. The amount of freight going in cities is ever increasing.

The way food is grown, distributed and consumed has been changed over the years. Technologies in mobility changes - think of the impact of the railroad - the behaviour of the people changed, restaurants emerged and gigantic supermarkets have a huge impact on thousands of cities. What is the impact of these trends and innovations on the built environment and how will the city respond to the next trend?

With the rise of online orders, the spatial requirements our cities already changed. Within the food industry, there is a rapid increase in online grocery purchases. Picnic is the fastest growing company in the Netherlands. This trend results in an increase of movements in and out of the city. Leading to even more congestion.

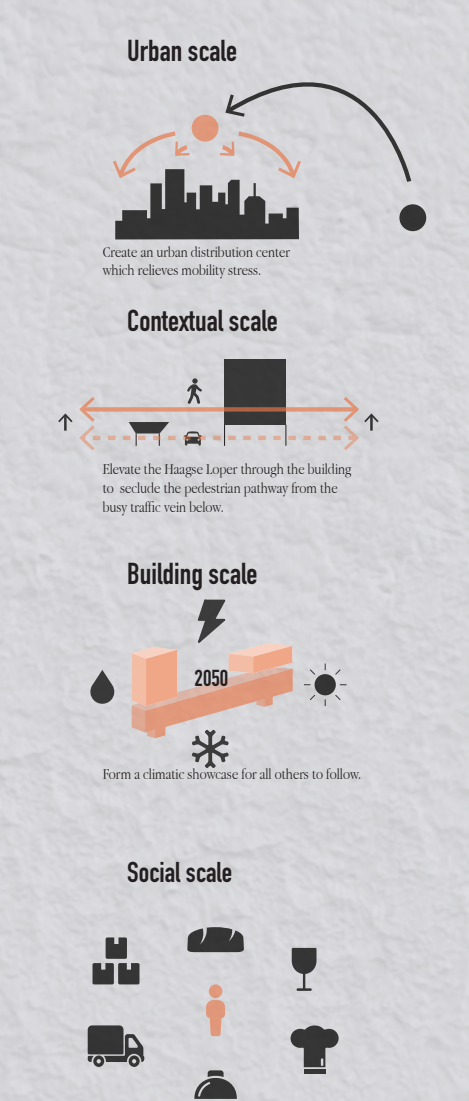
In the first half year of my graduation I researched the effects, the flows, the spatial requirements and the energy demand of a new proposed urban distribution centre. This distribution centre is supplied at night by cargo trams using the unused tram network. The groceries are distributed during day by an electric fleet with the shortest action radius as possible.

So firstly the project creates a m ore efficient system to the the large scale mobility problem by functioning as an urban distribution centre. This results first hand in a decrease of the amount of movements within the city and the amount of motorized covered kilometres.

Secondly, the building host several food related functions such as a bakery, brewery and a fully public food court. A clear synergy within the food chain is made which is totally transparent and visible for all the passers-by. To fully show the new future food supply chain, the main pedestrian pathway is elevated, avoiding the busy intersection below the building, going through the building and connecting the city centre of The Hague with its business district.

So even when the food chain is digitalising and thus getting more distant to human this project shows all the processes and logistics behind your daily consumption. To get us a little bit more connected to this fast and complex chain.

The project becomes a link in the city by optimising and destressing urban mobility, a link in its context by connecting two districts and a link in the food supply chain by showing the processes and background of your daily consumptions. Bon appetit.



Urban scale

Create an urban distribution center which relieves mobility stress.

Contextual scale

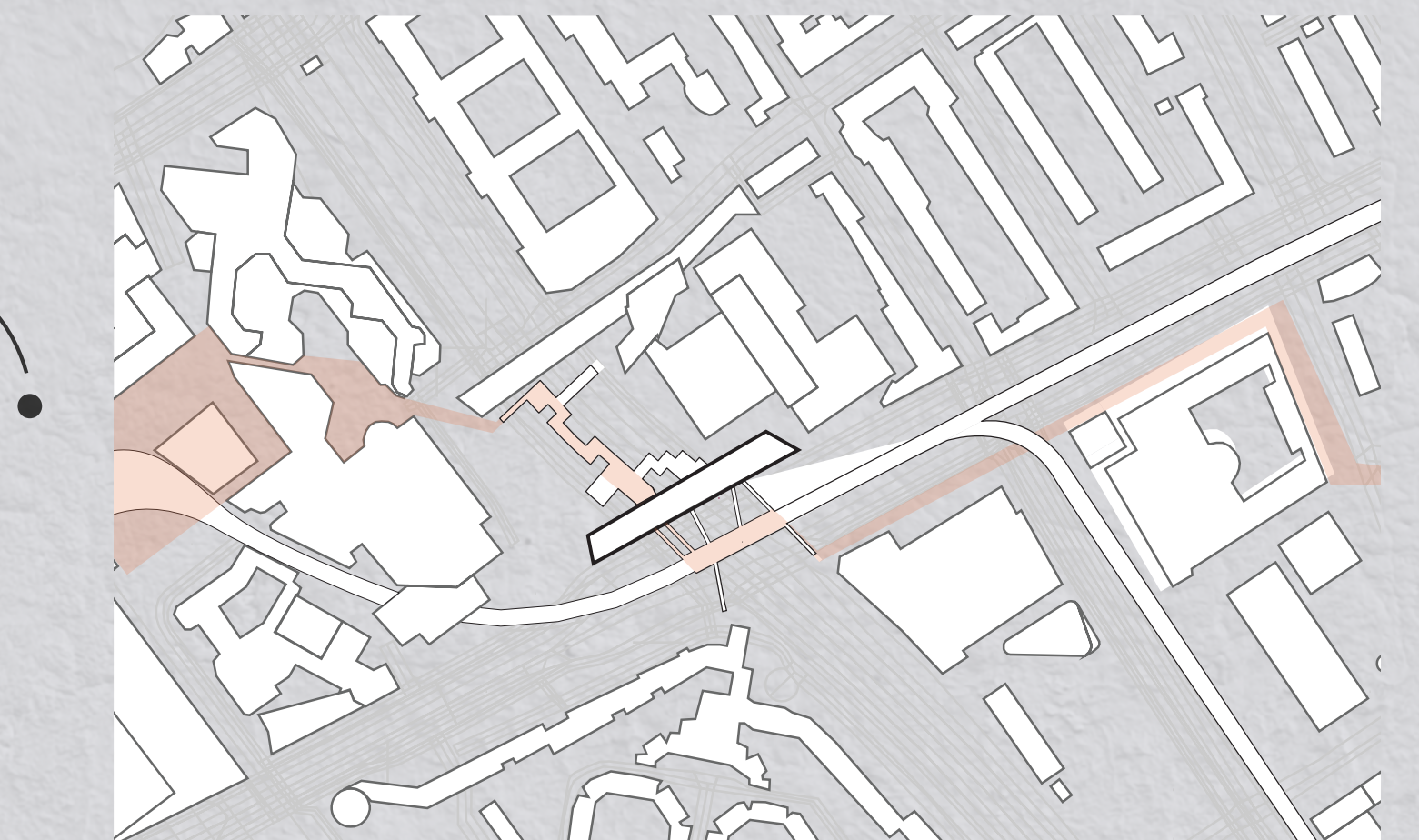
Elevate the Haagse Loper through the building to seclude the pedestrian pathway from the busy traffic vein below.

Building scale

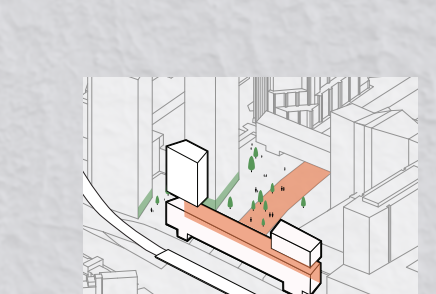
Form a climatic showcase for all others to follow.

Social scale

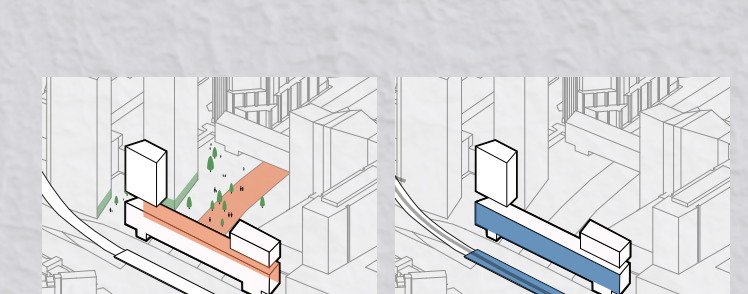
Mix different food function for efficient flow streams. Show the processes of the whole food chain to reconnect people with it.



The New Haagse Loper | 1:2000

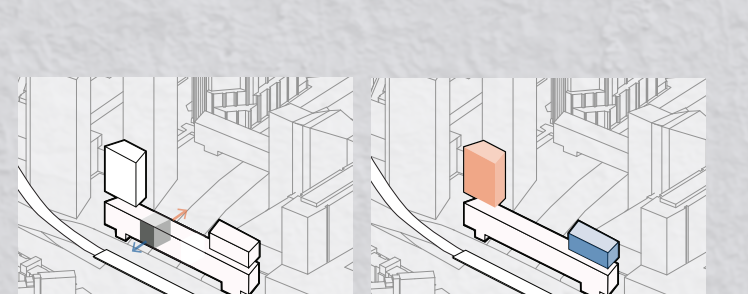


Park side

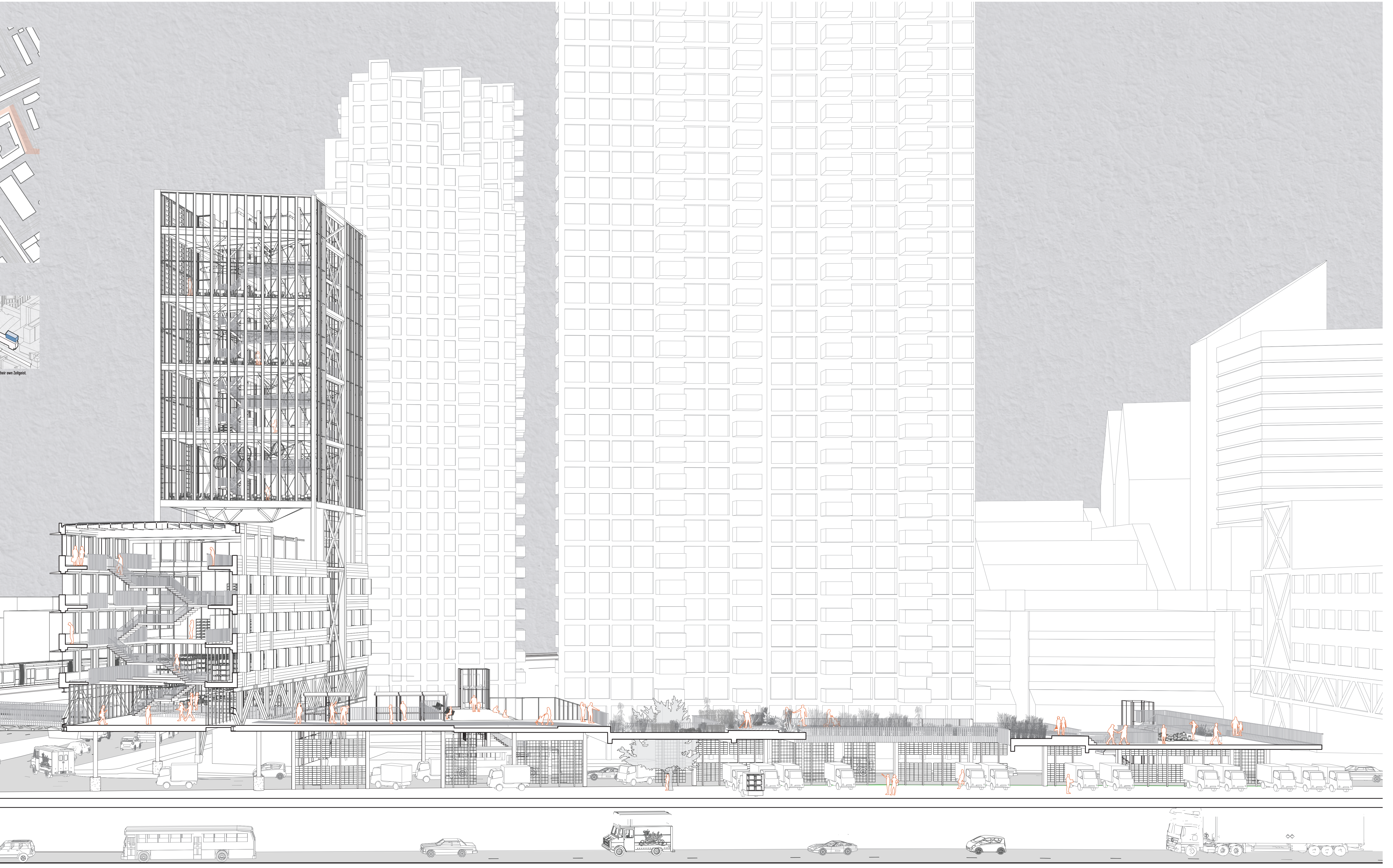


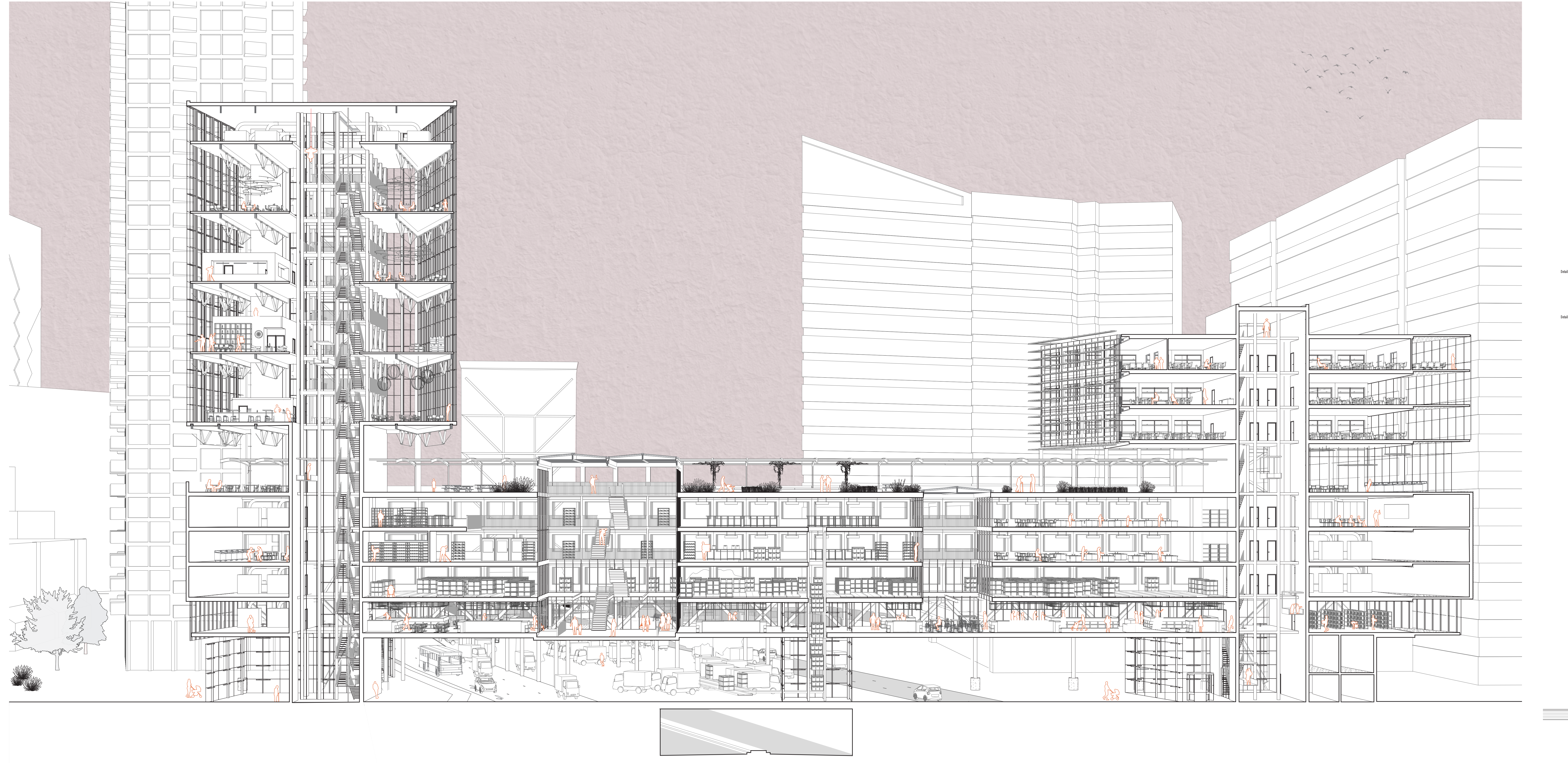
Transit side

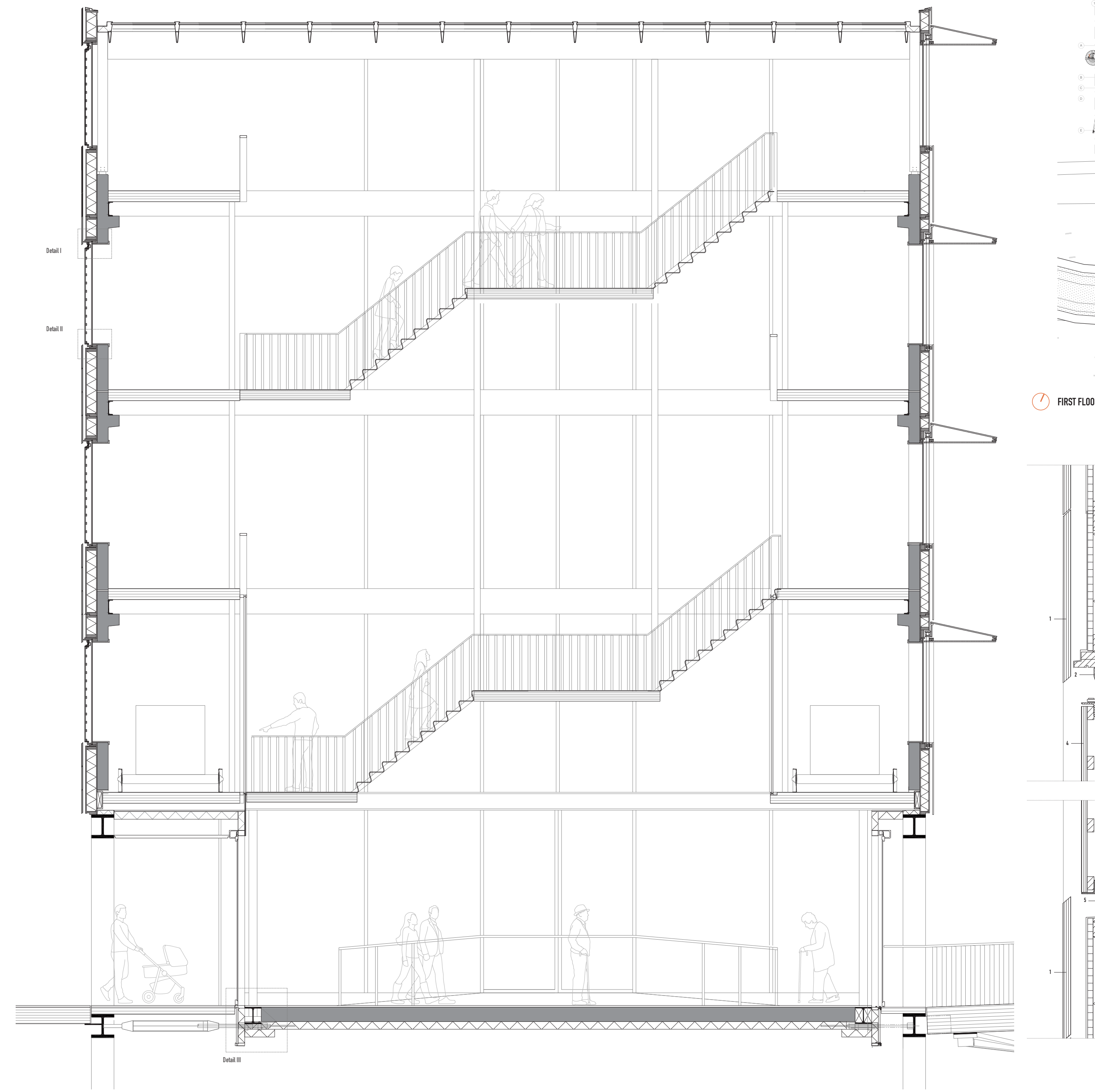
Connecting passage



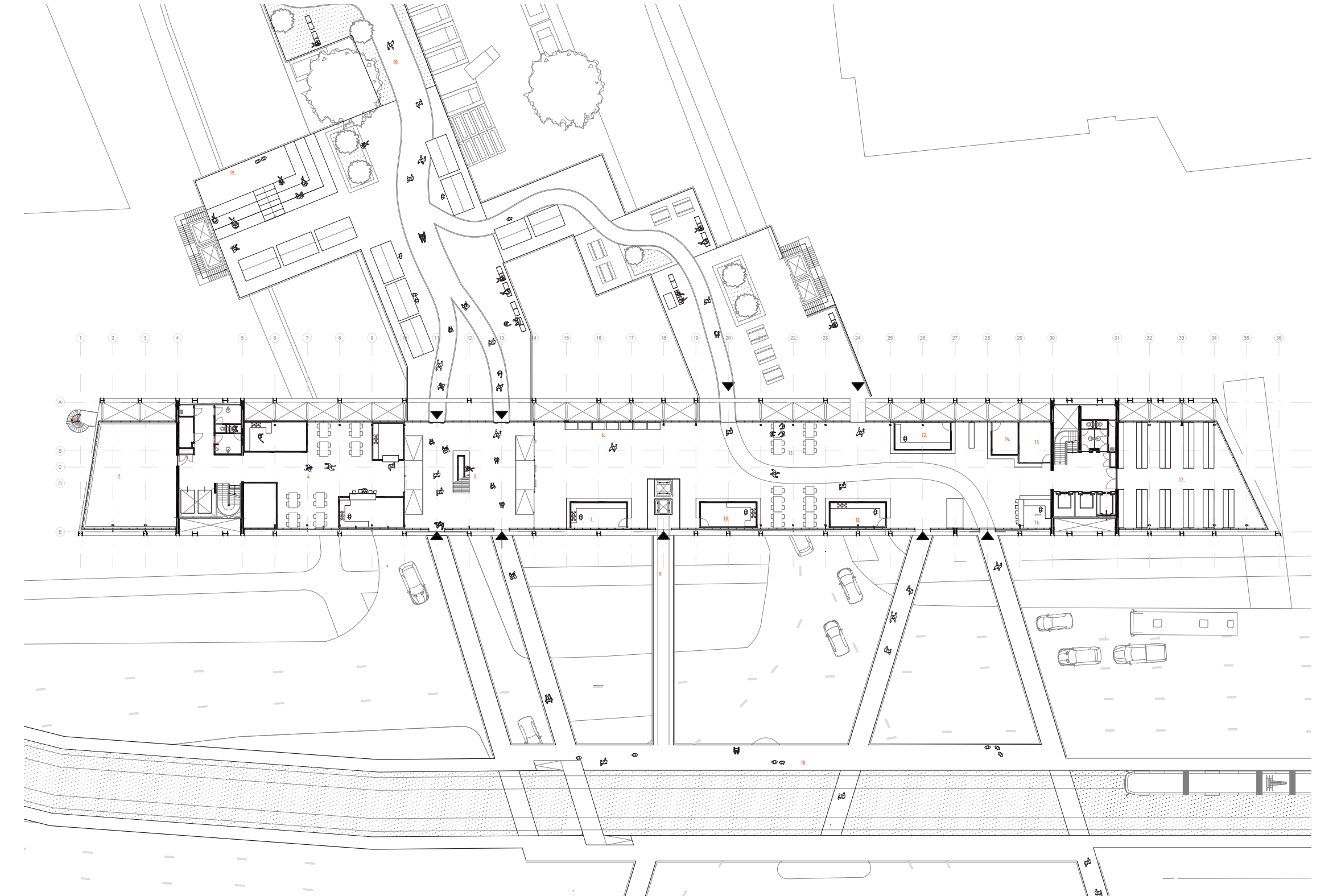
Two pavilions. Both showing their own Zeitgeist.





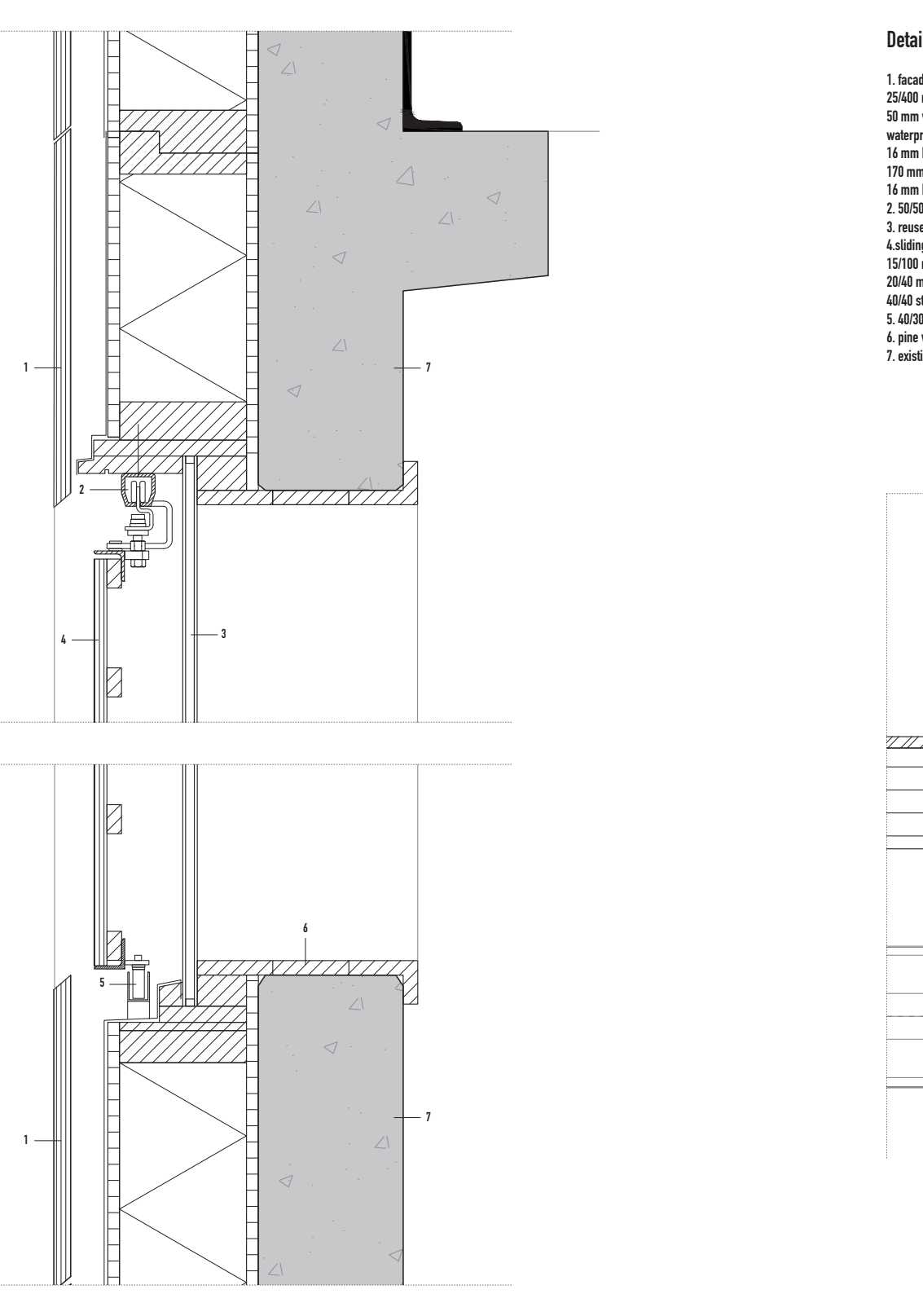


SECTION CUT C-C' | 1:20



FIRST FLOOR. | 1:200

1. Fire exit
2. Techincal room
3. Restrooms
4. Food court
5. De Passage
6. Self scan desks
7. Sushi
8. Vertical conveyor
9. Conveyer bridge
10. Grill
11. Dining area
12. Vega
13. Cheese and sandwiches
14. Coffee
15. Vegetarian
16. Pizza
17. Storage
18. Tram station
19. Traffic spotting place
20. Park

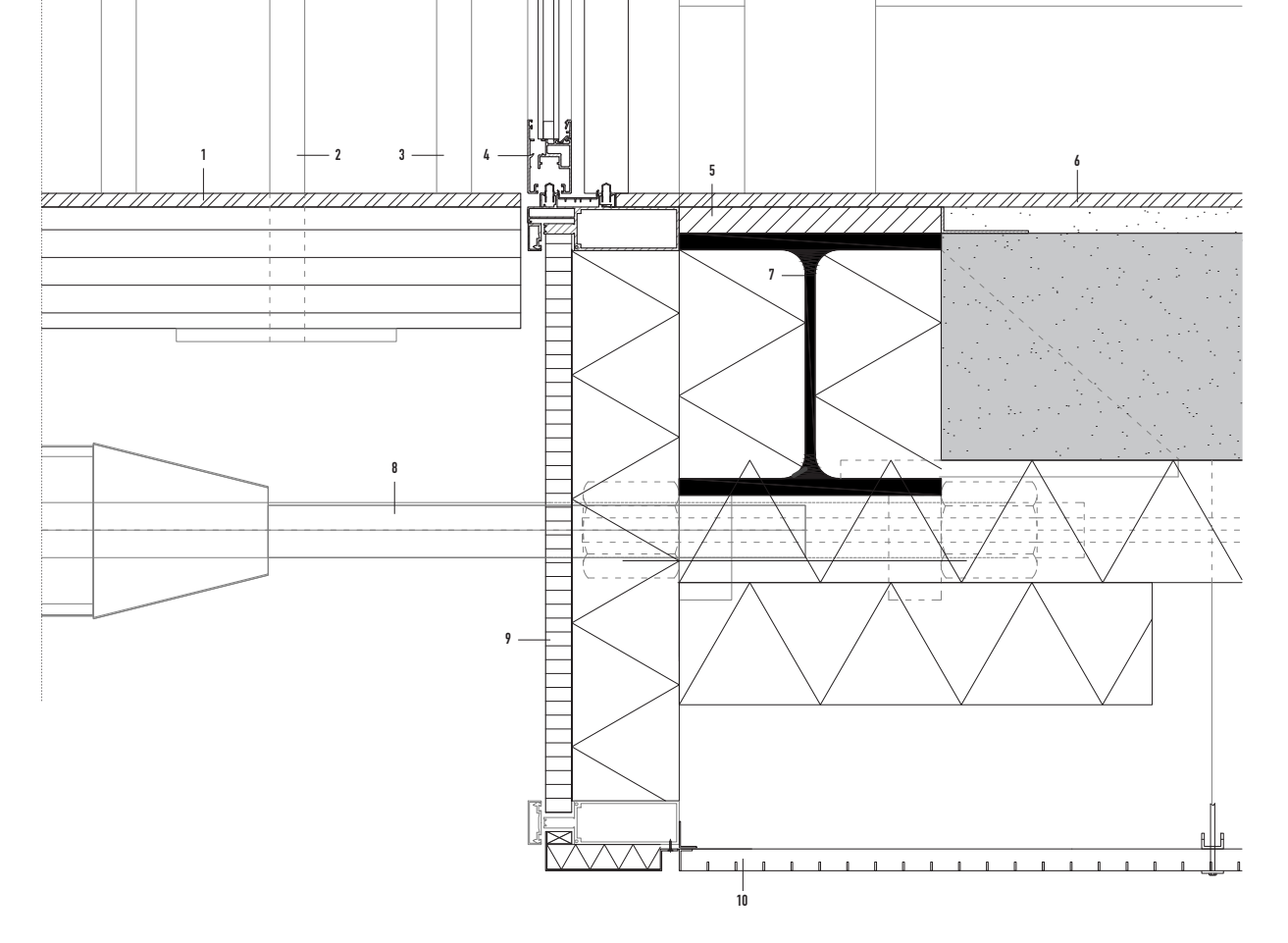


Detail I and II

1. facade panel:
25/400 mm silver fir boarding, untreated
50 mm ventilated cavity
waterproofing membrane
16 mm boarding
170 mm insulation
16 mm boarding
2. 50/50 mm steel channel guide rail
3. reused glass panel of existing facade, double glazing
4.sliding folding shutters:
15/100 mm burned wood boarding on
20/40 mm wooden battens in
40/40 steel frame, galvanised
5. 40/30 mm steel channel guide rail
6. pine wood finish windowsill
7. existing prefab concrete facade element

Detail III

1. floor:
20 mm reused brick tiles
140 mm CLT
2. 40 mm steel cable
3. 40/140 mm pine wooden baluster, treated
4. insulated aluminium sliding door, automatic
5. wooden boarding
6. Floor:
20 mm reused brick tiles
40 mm concrete topping
260 mm hollow canal plate floor
140 mm insulation
7. HB300B existing steel beam
8. GEWI anchor rod
9. lower piece of curtain wall:
wooden boarding, treated
120 mm insulation
120 mm curtain wall profile
10. existing steel grate



DETAILS | 1:5