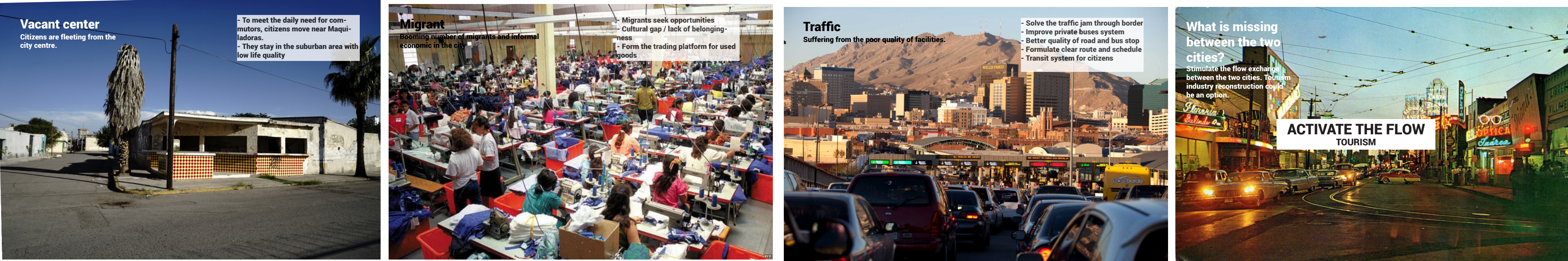
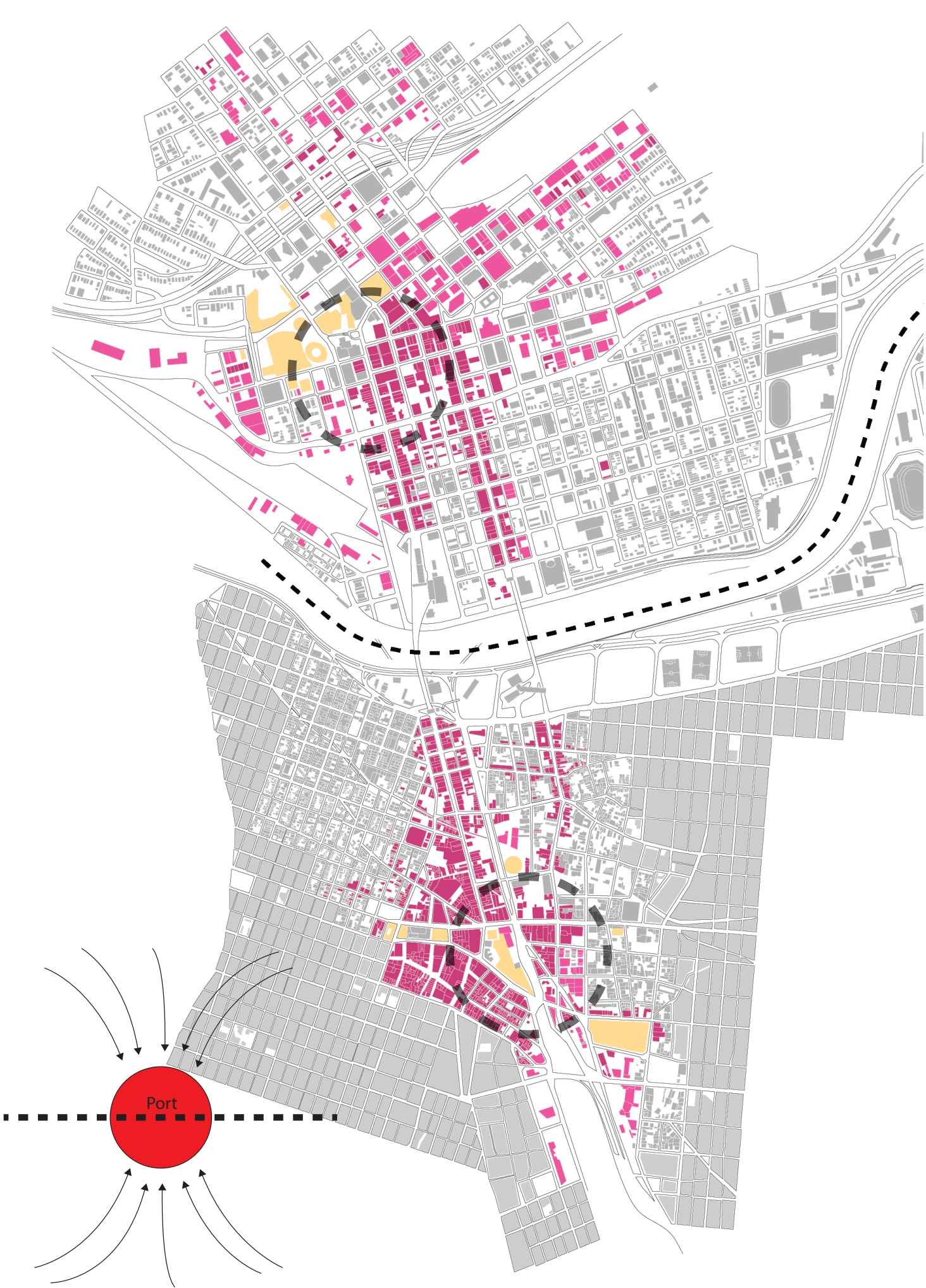


Research Problems



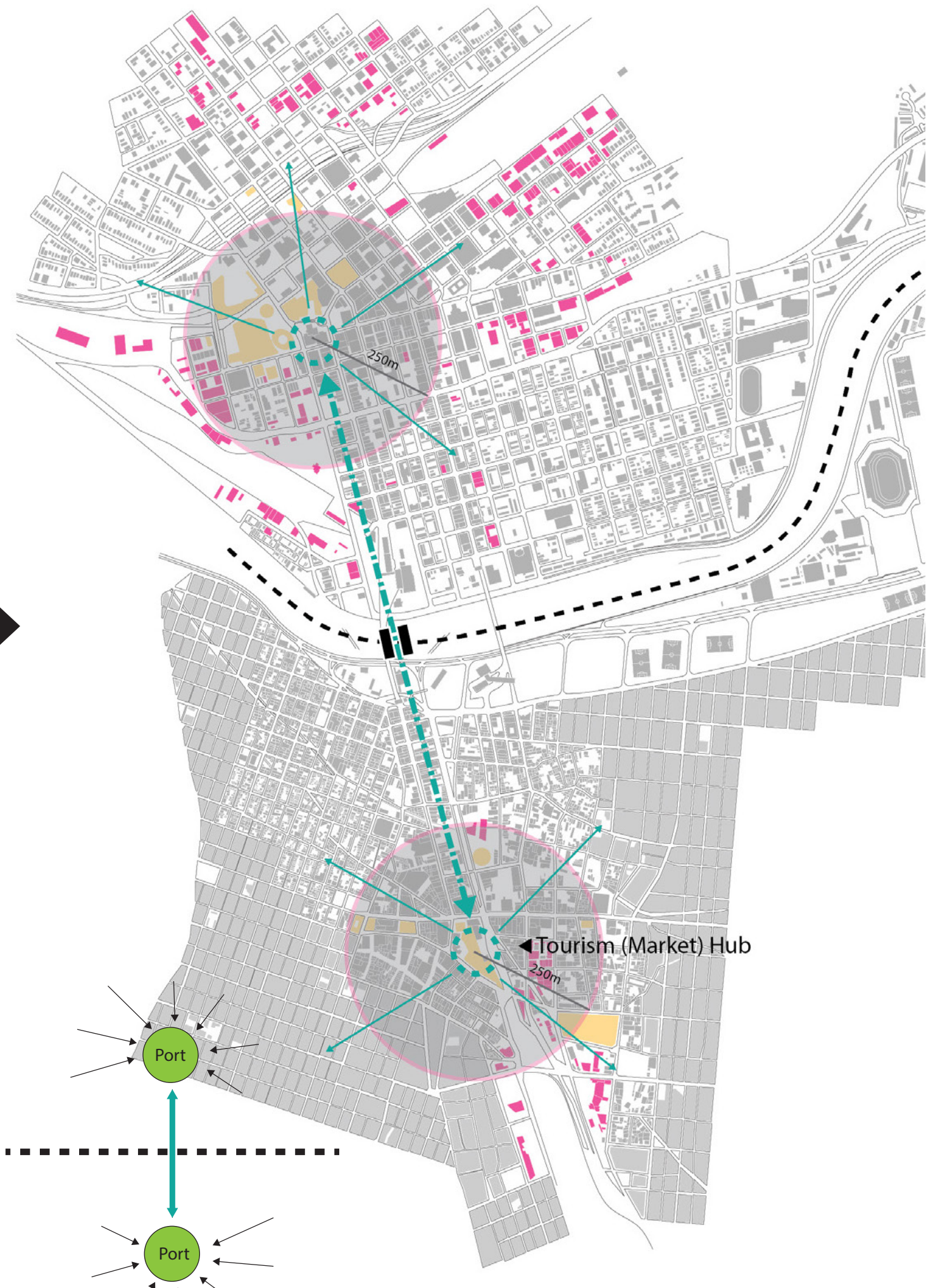
Activating the tourism as the solution for decentralization

Destination for tourist



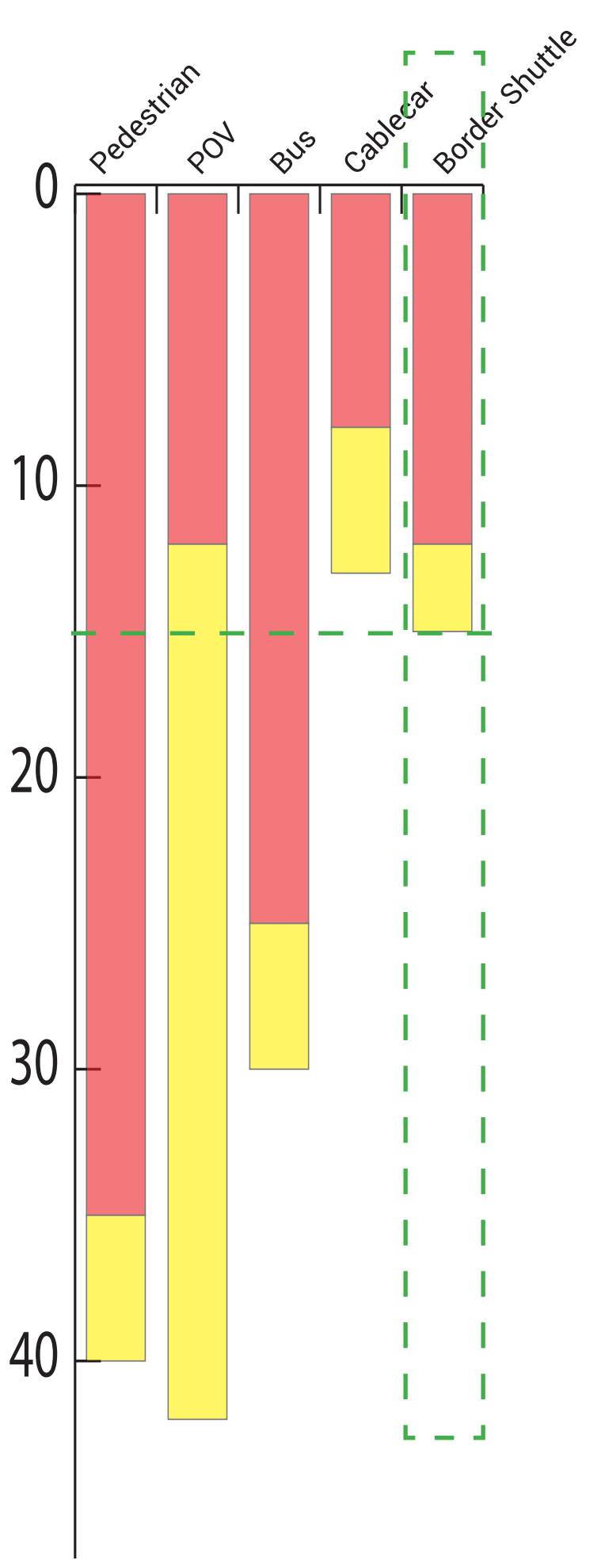
The down town area of both cities. Long border crossing time wasted.

Border crossing strategy

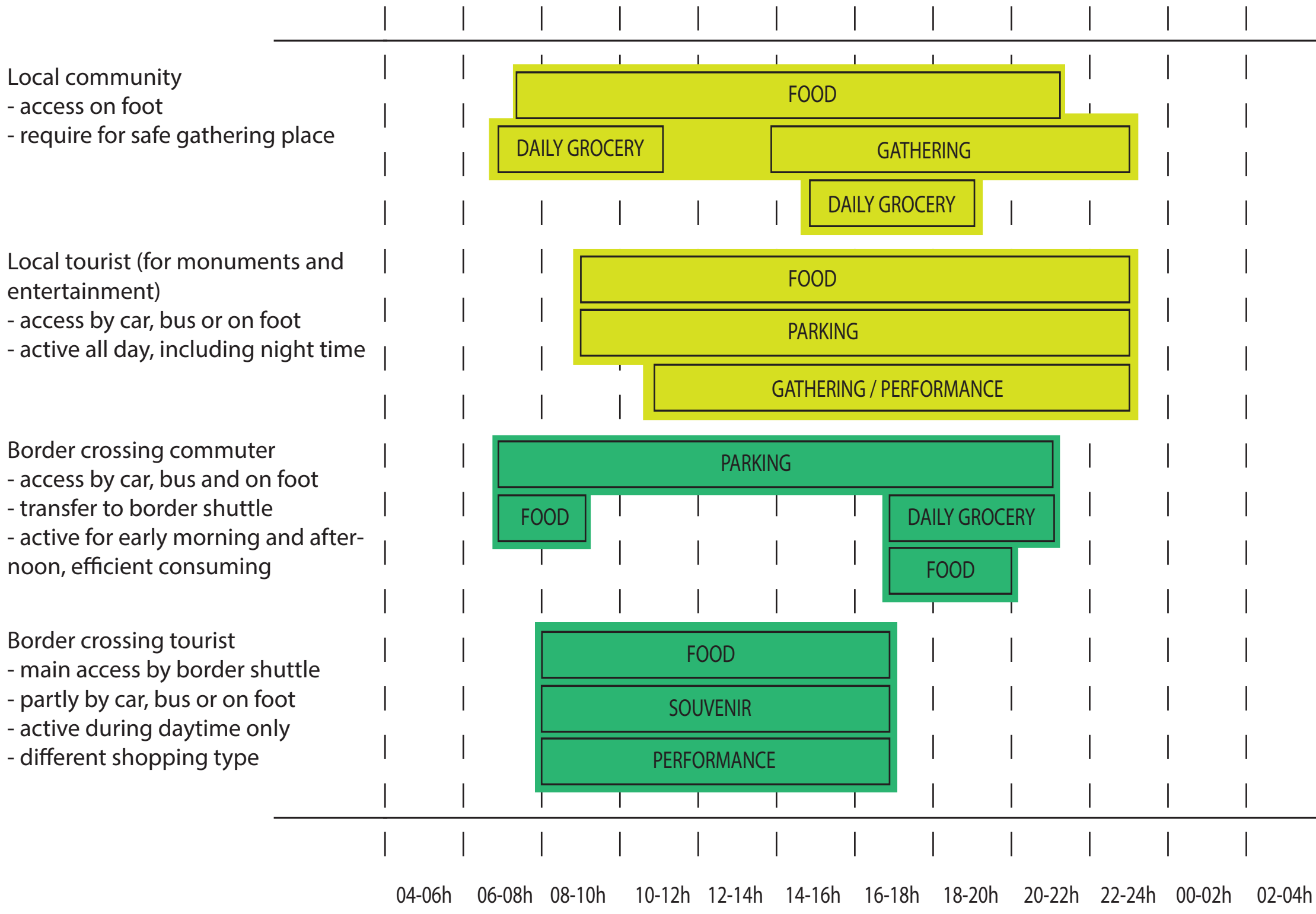


Break the border as two and connect the core area of the cities with rapid transport shuttle. "Shorten" the distance between two city centers.

Crossing time Comparison



Consuming behavior

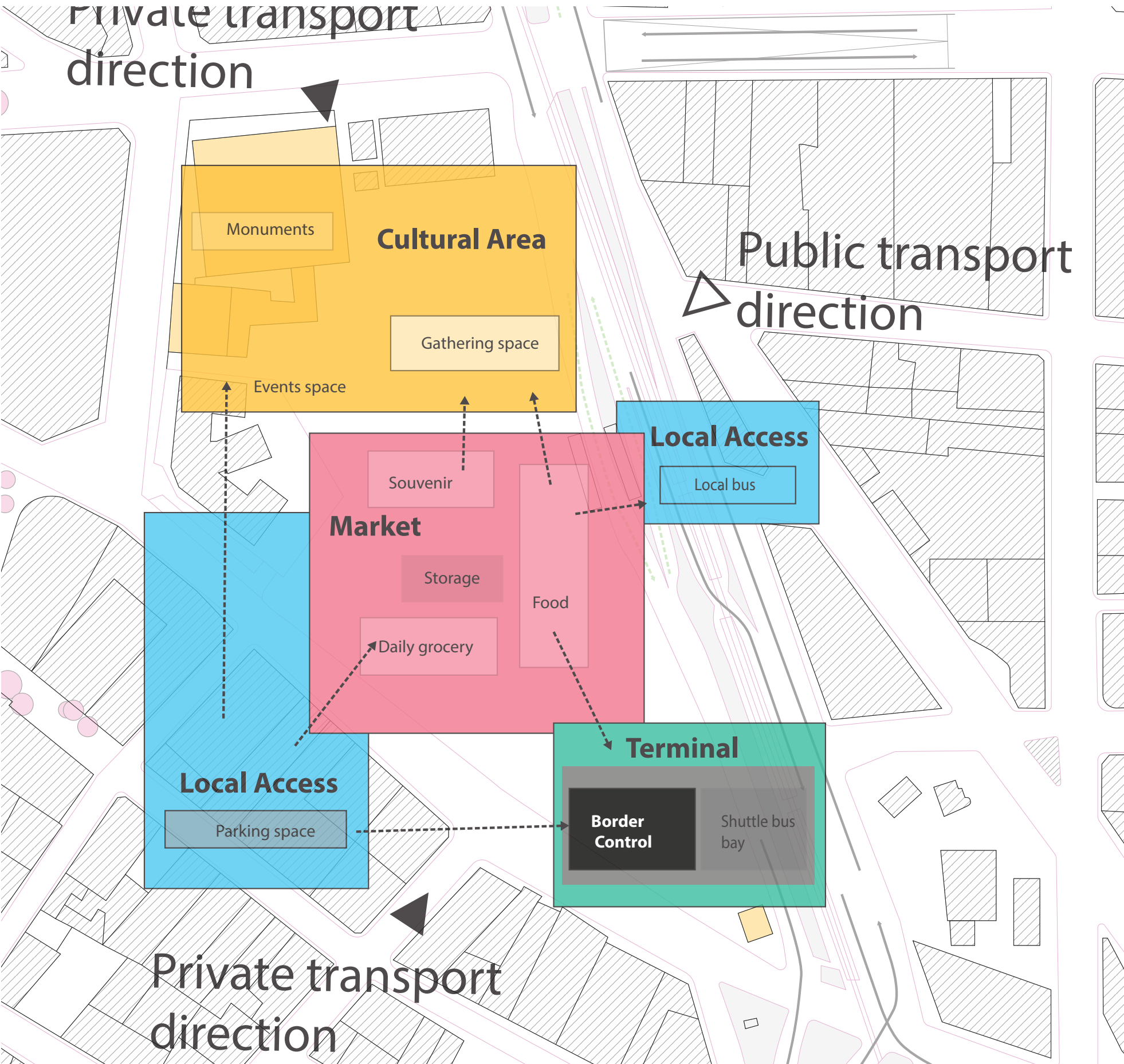


- 1. Cd Juarez have less demand on accomodation.
- 2. Most visitors will consume food, but only during daytime.
- 3. Project can target different groups of people based on different time period.

Market as the cohesion program for the project

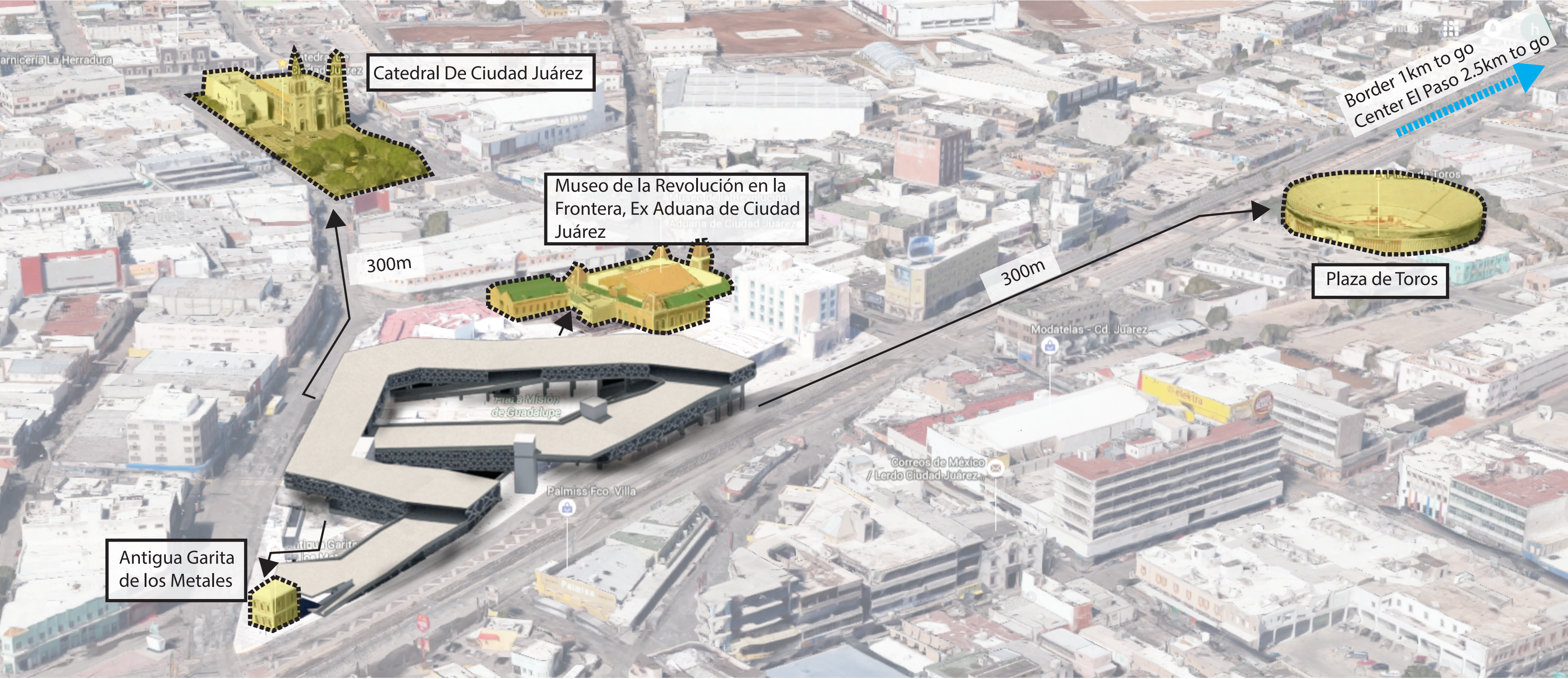
Proposing programs

To design a prototype of urban complex as an attracting point of the city.

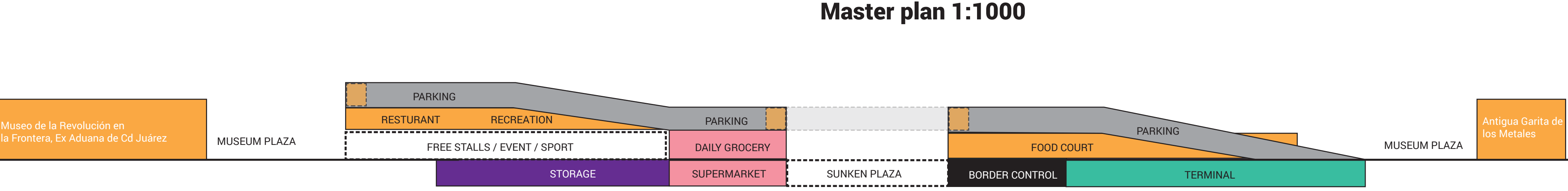
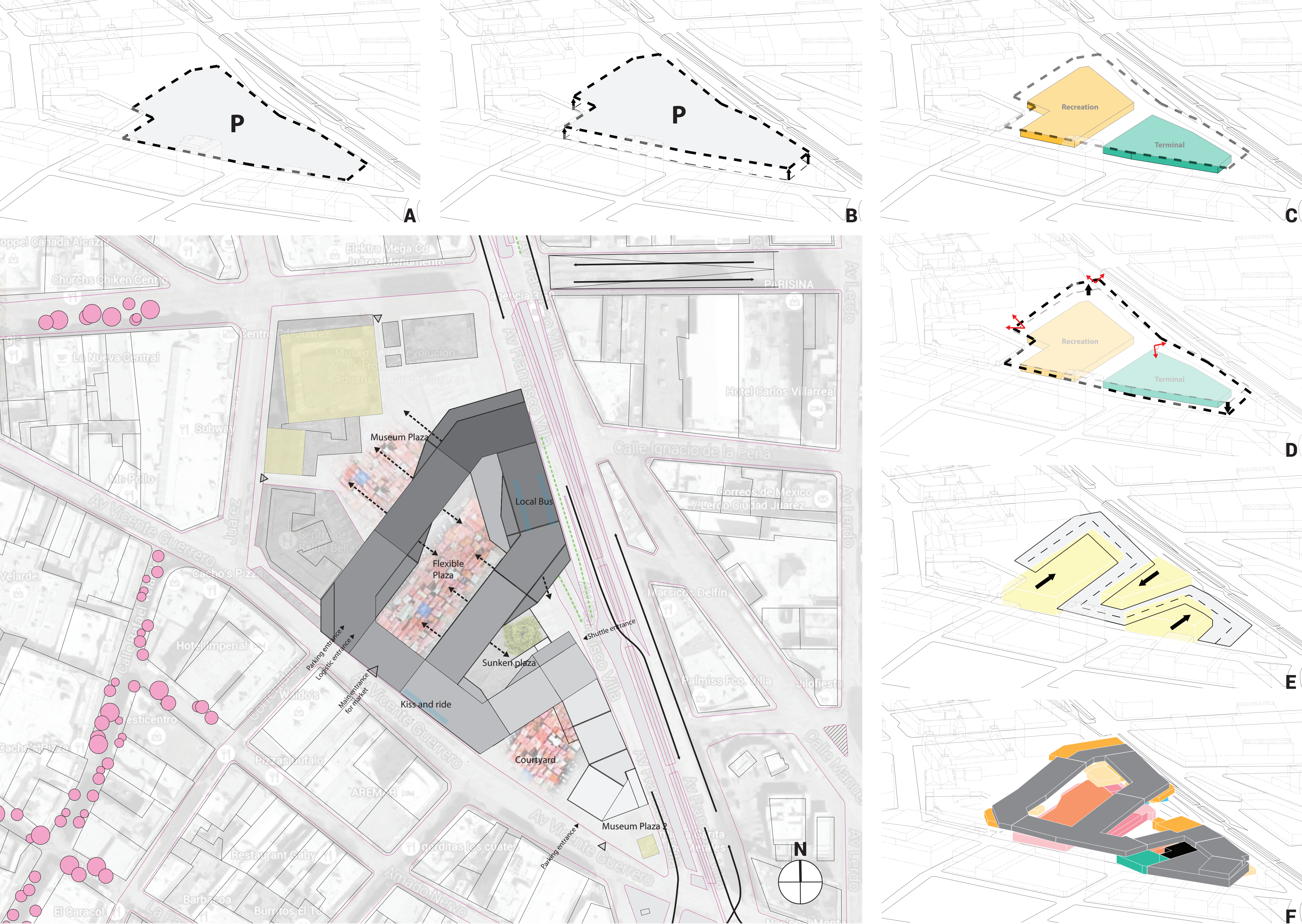


Which can stimulate the binational socio-economic interaction and revitalize the downtown area of both cities, which including a transport terminal to shorten the commuting time and a trading area to bind up the social gap in different level.

Overview

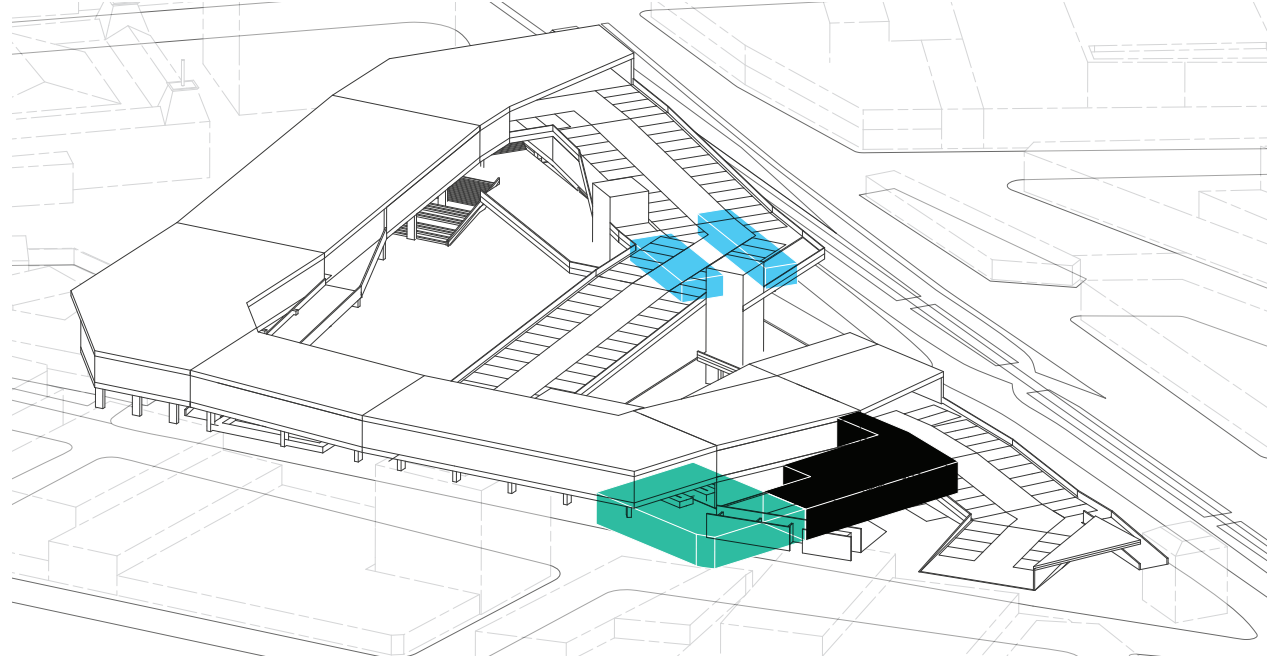
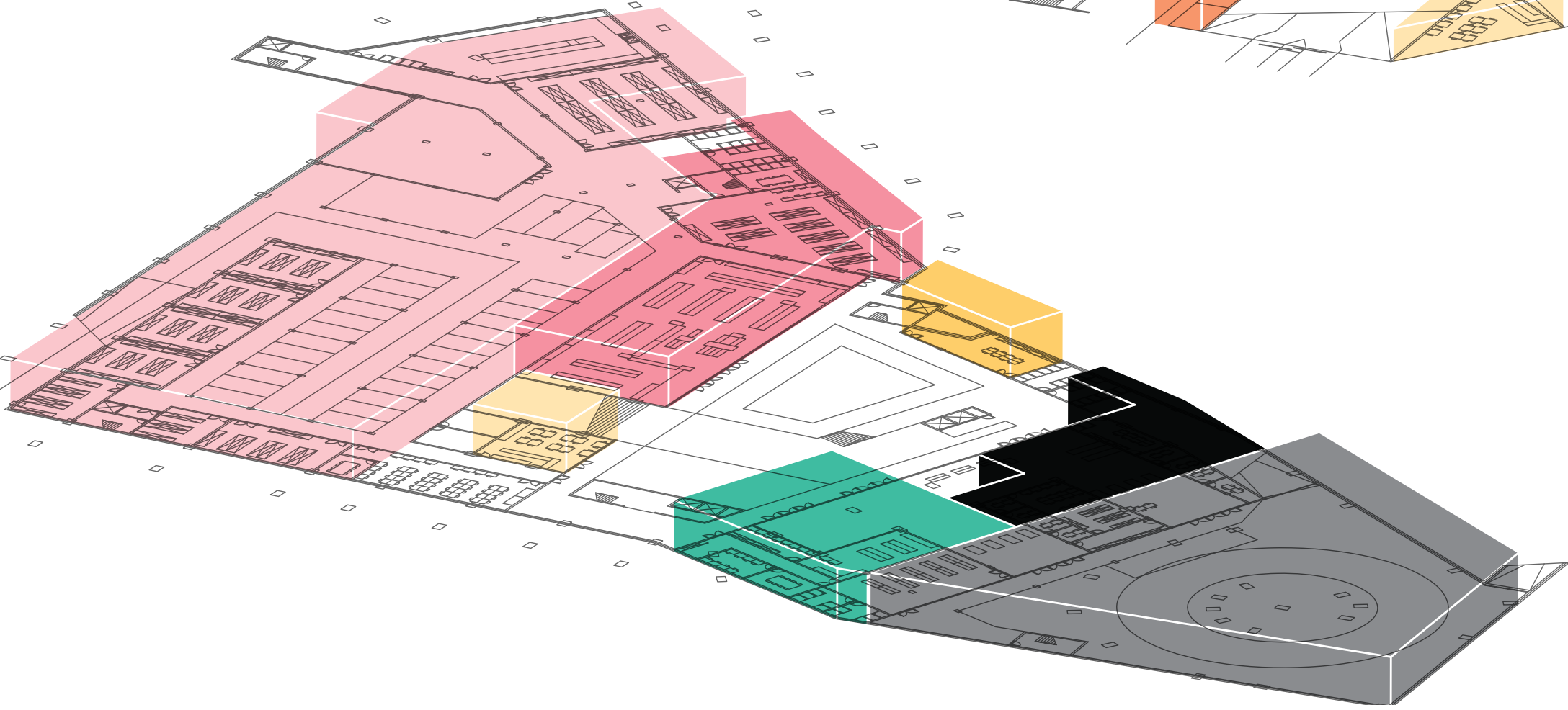
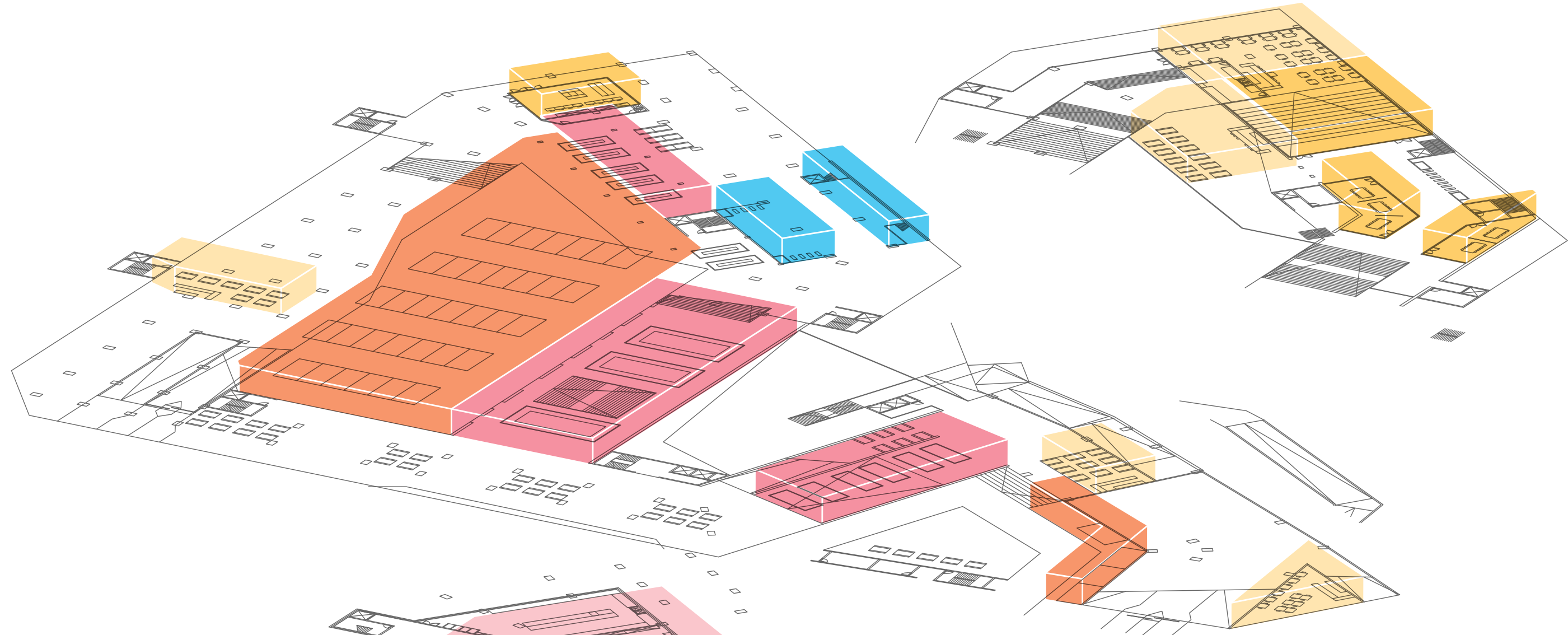
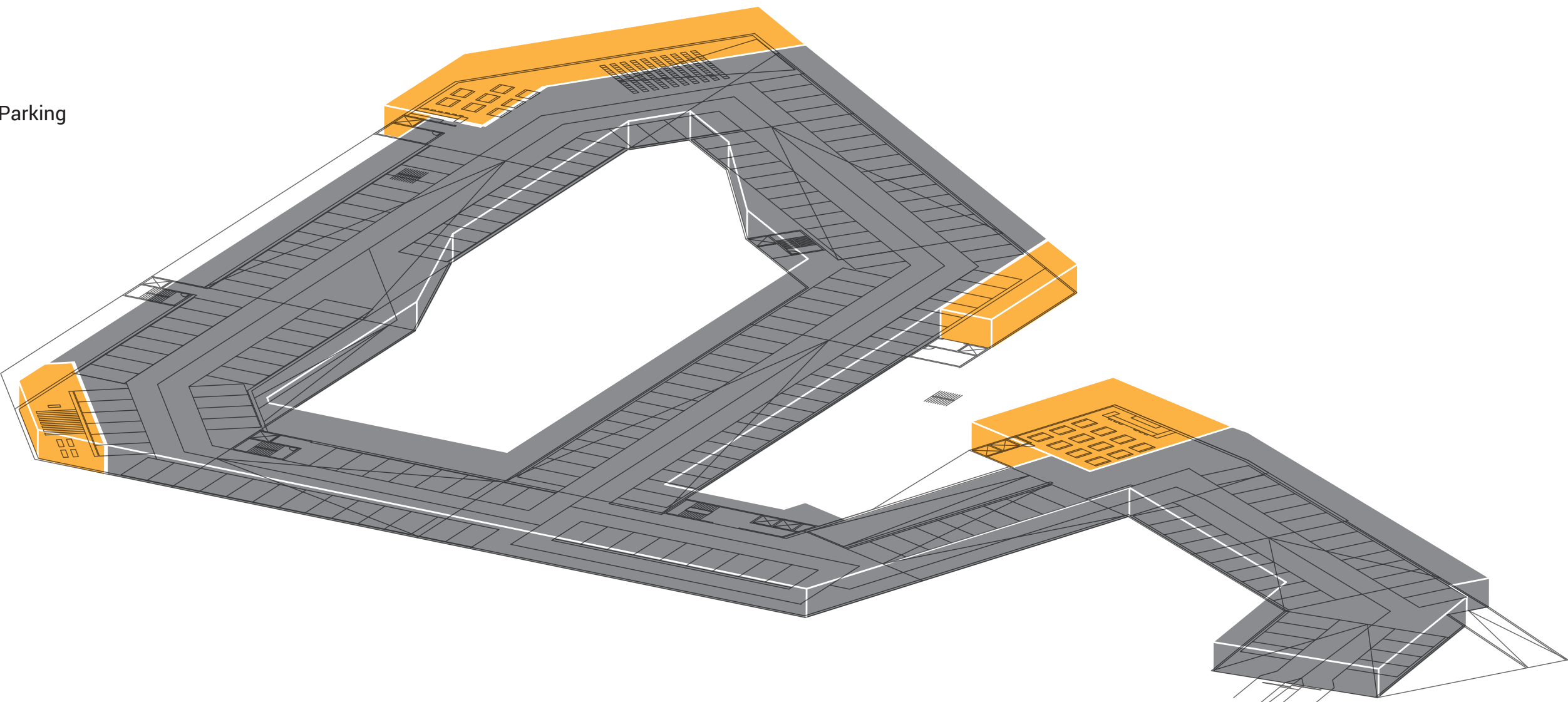


Design process

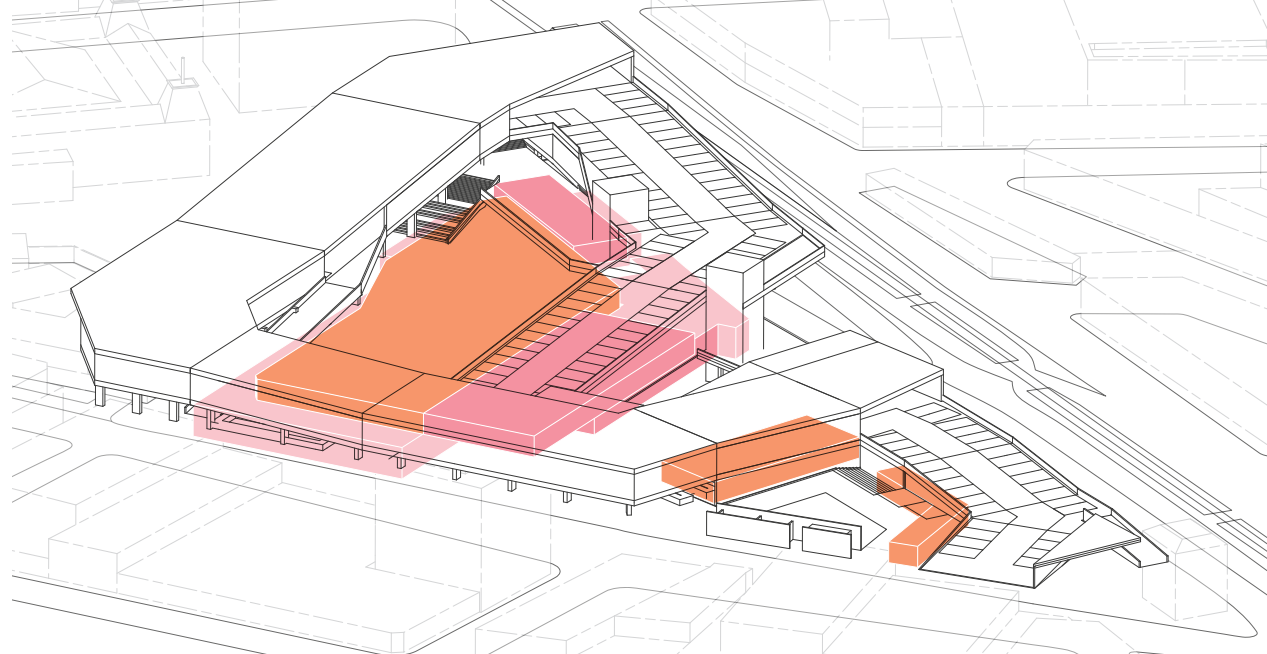


Program Organization

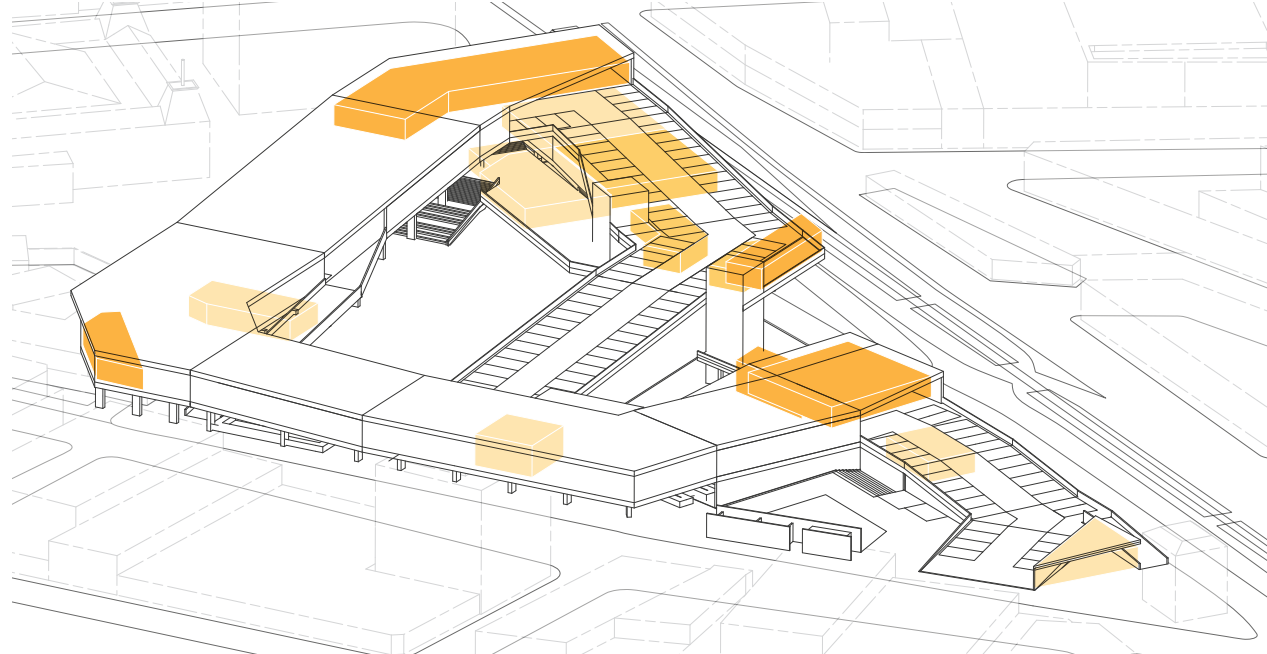
TRANS	Border control	Border Crossing 8%		Terminal 8%		Cultural 20%		Marketing 30%		Parking 34%	
	Terminal+Bus	Pedestrians	170 m2	Local bus	240 m2	Cultural area	1400 m2	Selling area	1600 m2	Parking (local)	3900 m2
	Community	- Entering customs hall	80 m2	- Boarding area	120 m2	- View points	300 m2	- Fixed stall	100*8 m2	Parking (market-30%)	1800 m2
CULTURAL	Resturant	- 5 checkpoints	5*4 m2	- Retail	6*10 m2	- Backstage	100 m2	- Flexible stall	1600 m2	Parking (Terminal-30%)	300 m2
	Event space	- Restrooms	20 m2	Border shuttle	435 m2	- Multifunction room	3*80 m2	Supermarket	800 m2		
	Fixed stall	- Leaving customs hall	30 m2	- Staff office	80 m2	- Restroom	30 m2	Logistic	1800 m2		
MARKET	Logistic	- 1 Checkpoints	4 m2	- Ticketoffice	8 m2	- Auditorium	600 m2	- Storage space	600 m2		
	Open stall	- Inspection rooms	2*10 m2	- Office space	2*10 m2	- Restaurant	600 m2	- Office spaces	10*20 m2		
	Parking	Staff	100 m2	- Meeting space	30 m2	- Kitchen	4*50 m2	- Restroom	150 m2		
		- Office spaces	2*16 m2	- Waiting hall	190 m2	- Eating space	4*100 m2				
		- Meeting spaces	1*20 m2	- Retail	30 m2						
		Other	50 m2	- Restroom	30 m2						
		- Secure Storage space	2*20 m2	- Seating	80 m2						
				- Boarding area	90 m2						
				- Shuttle bus parking bay	75 m2						



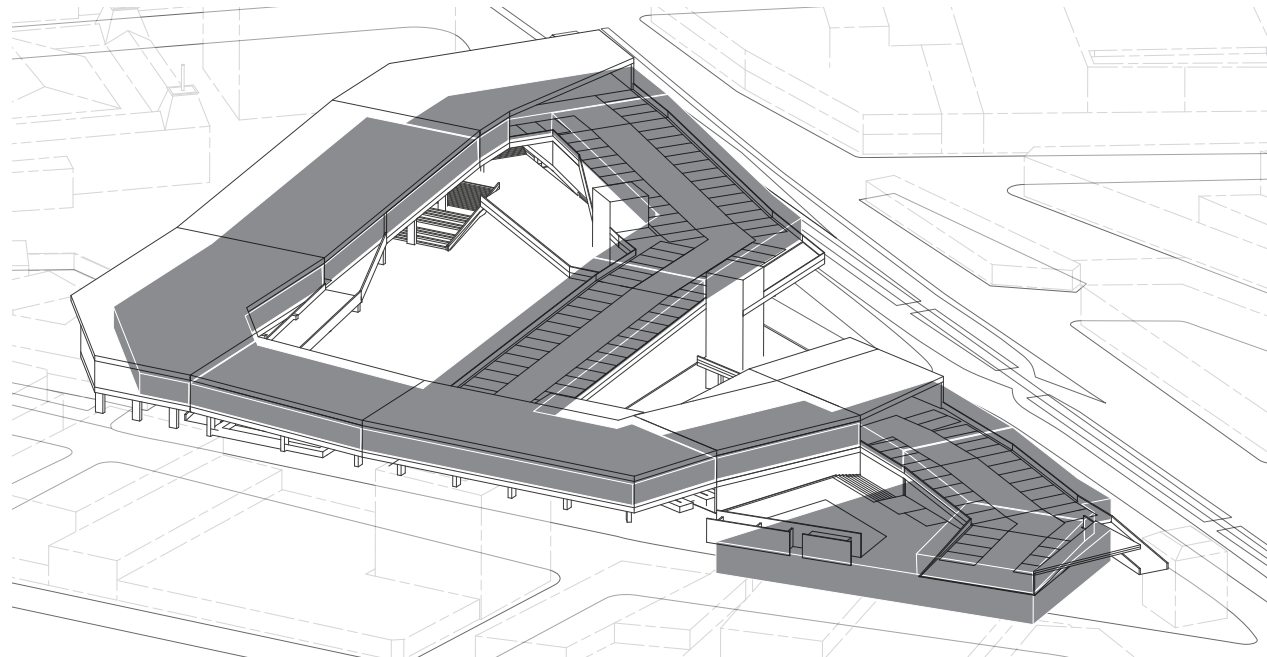
Terminal and local bus



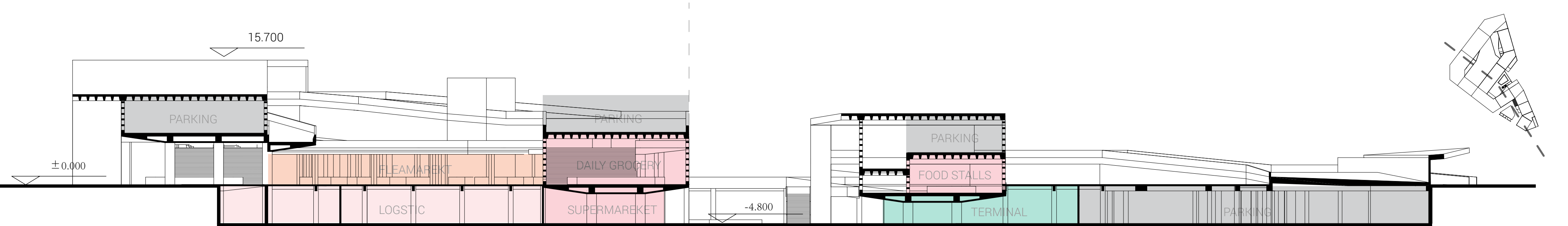
Market Area



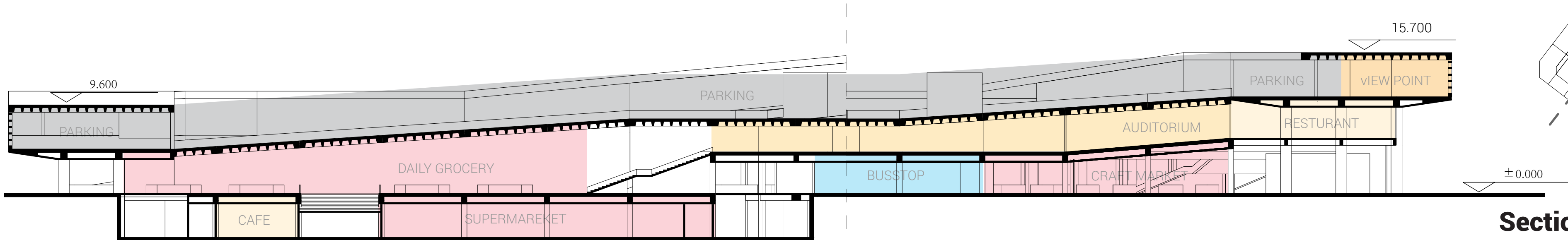
Cultural Area



Parking Area

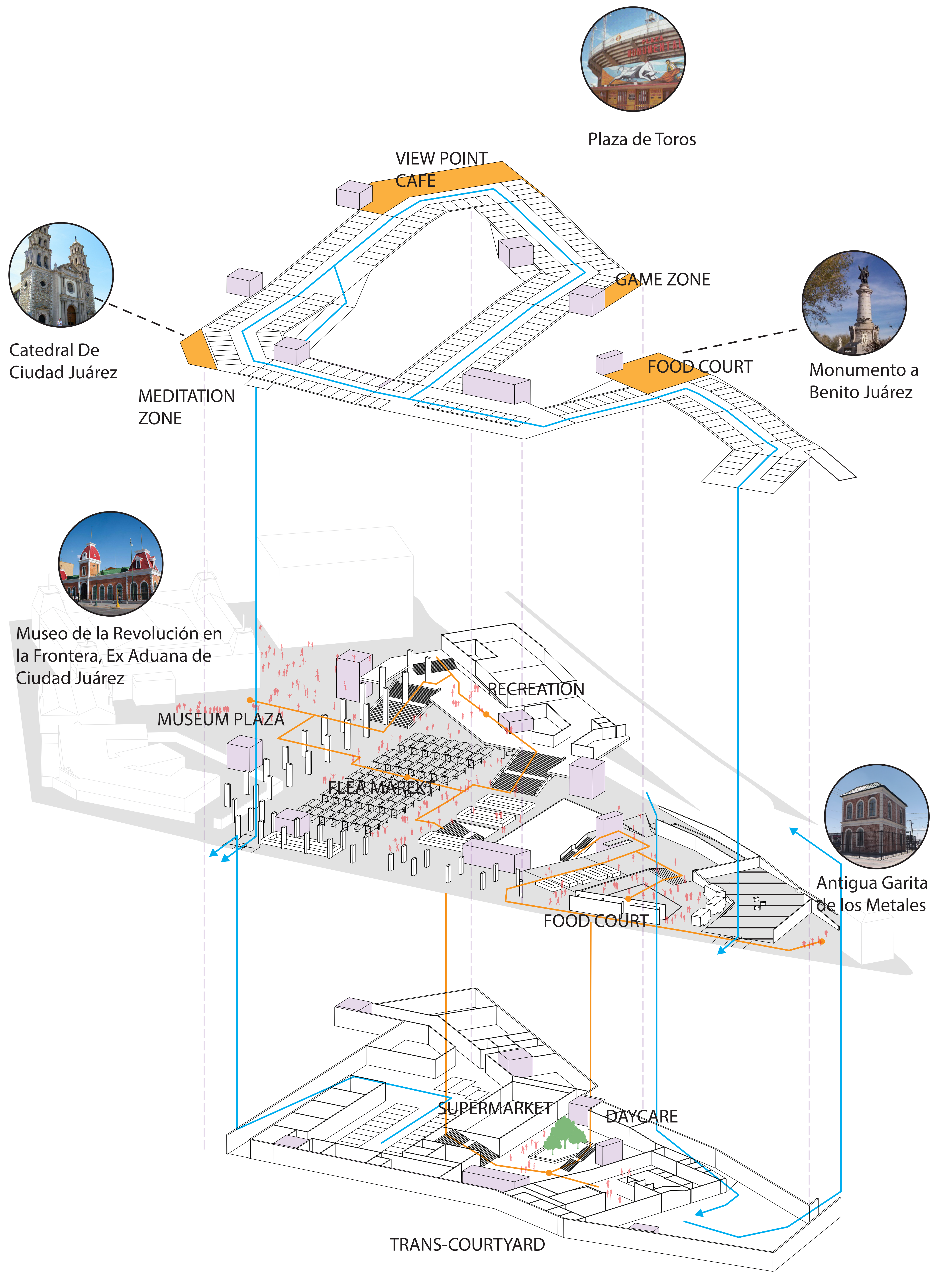


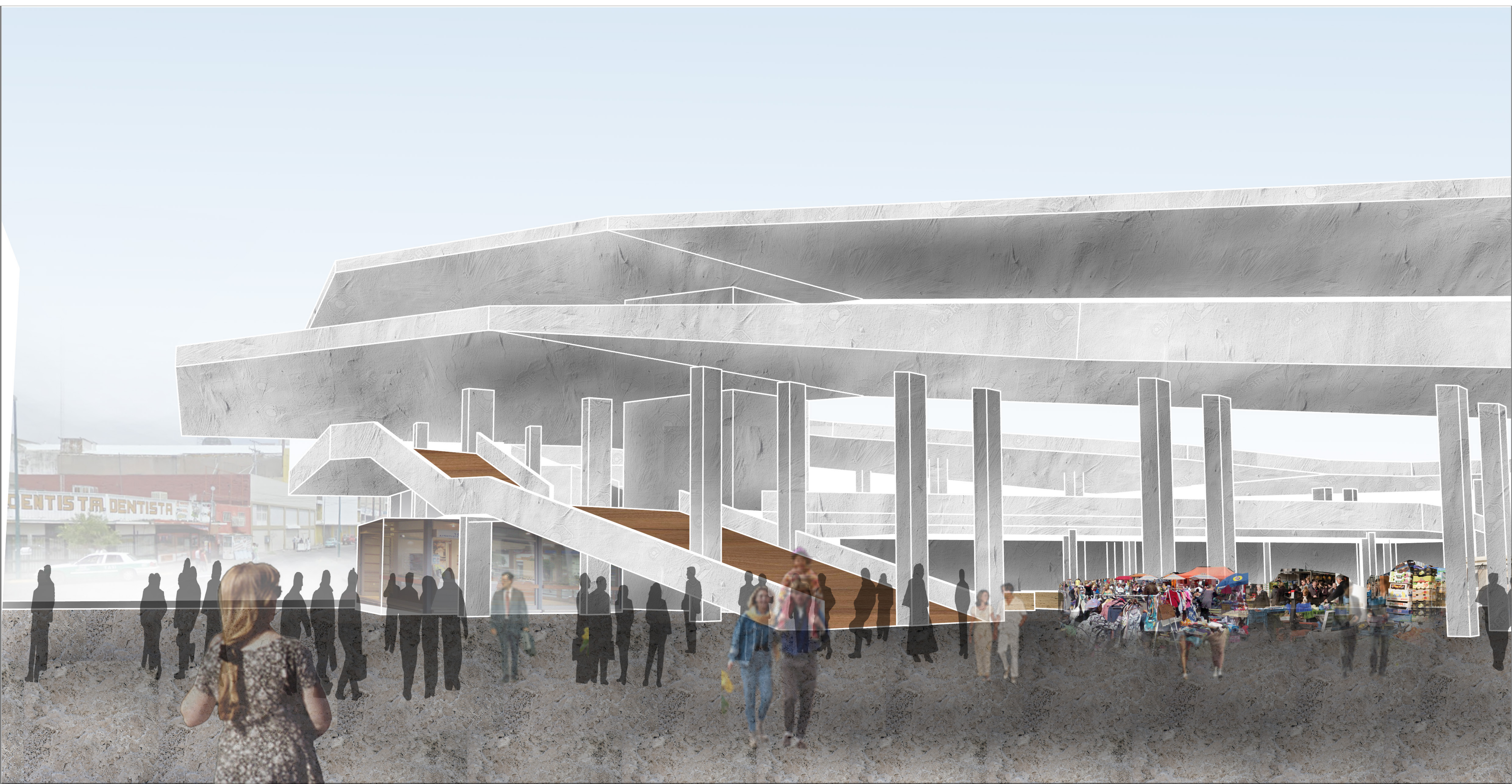
Section 1:400

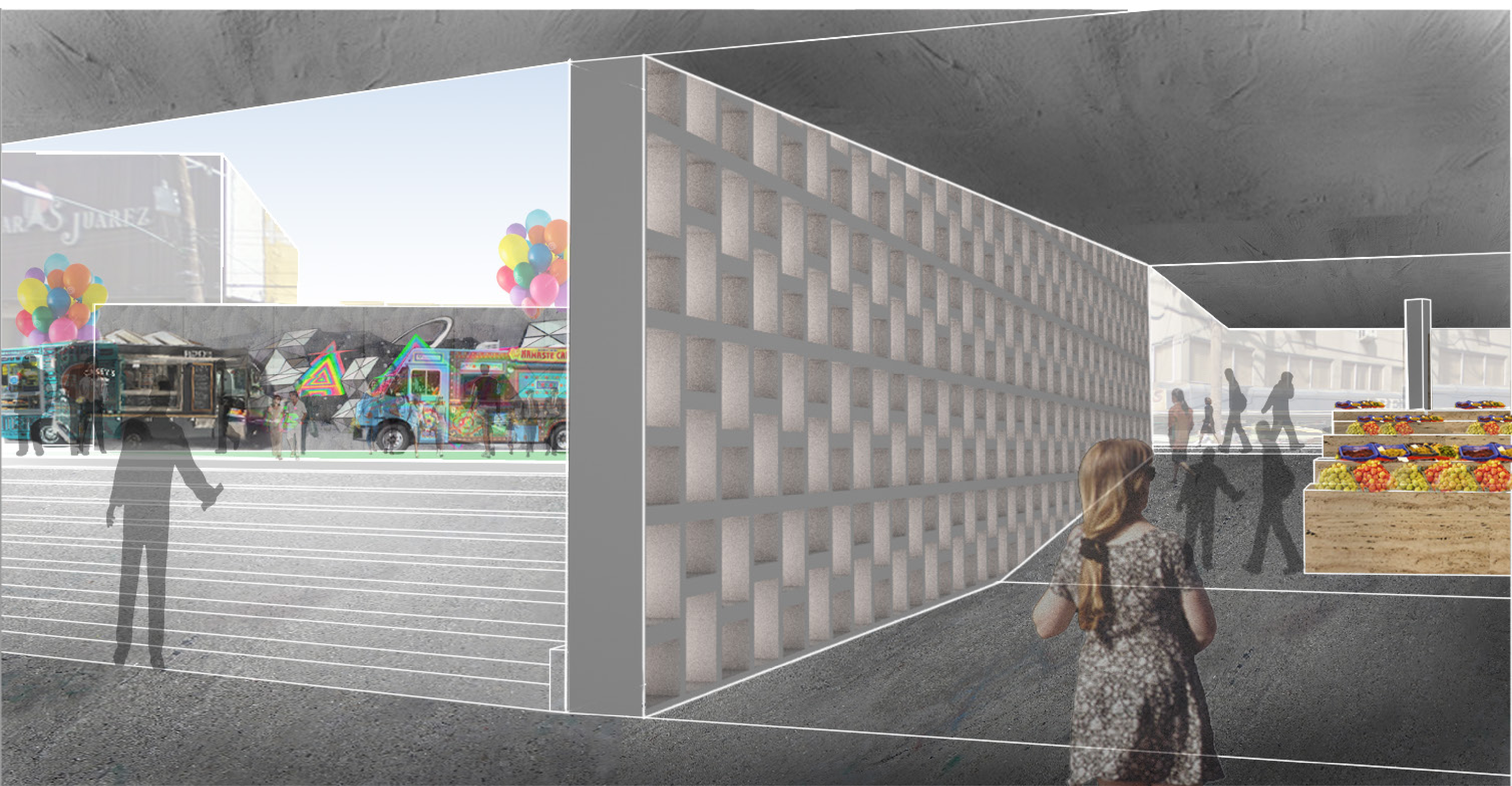


Section 1:400

Circulation

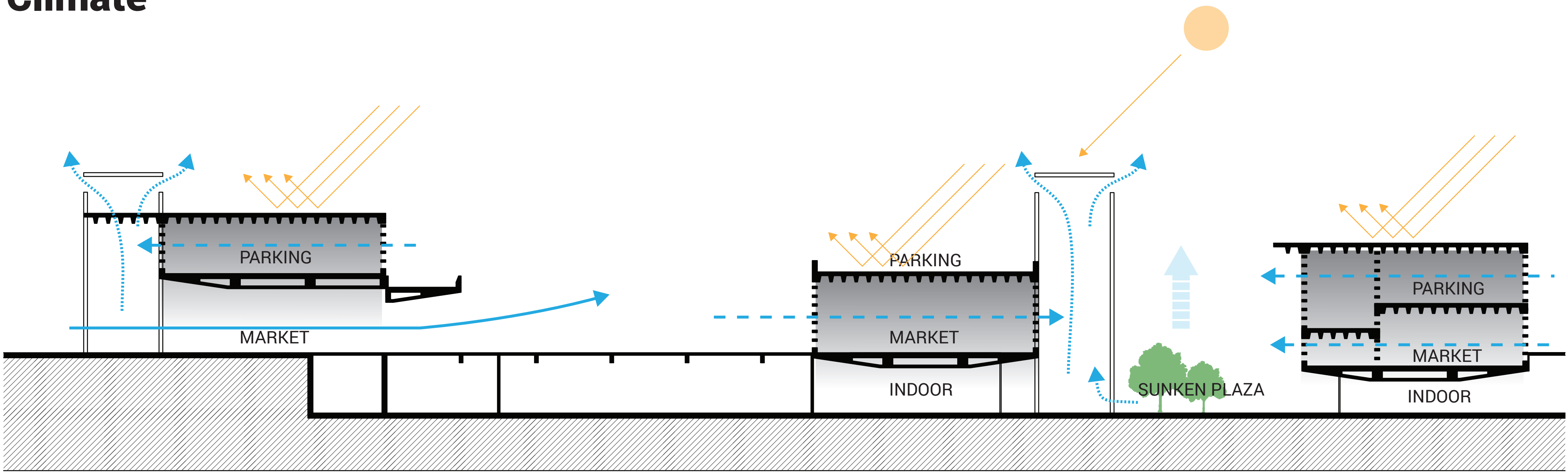




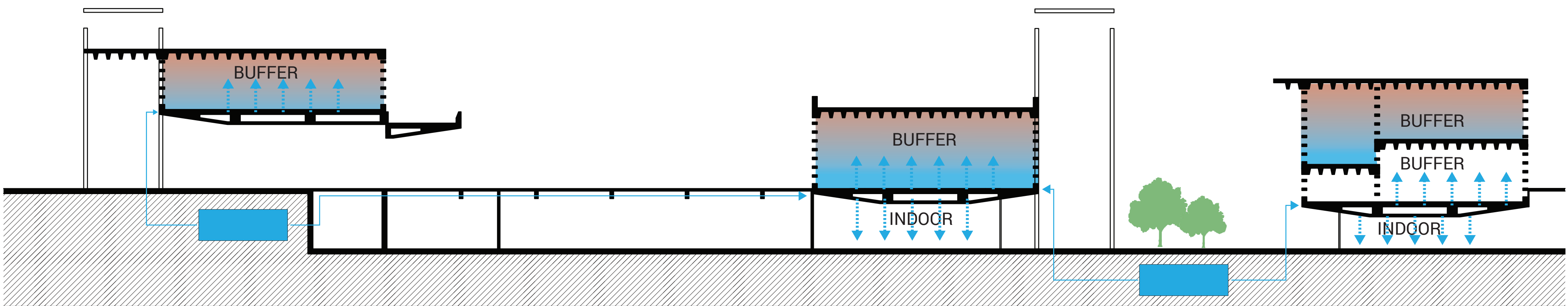




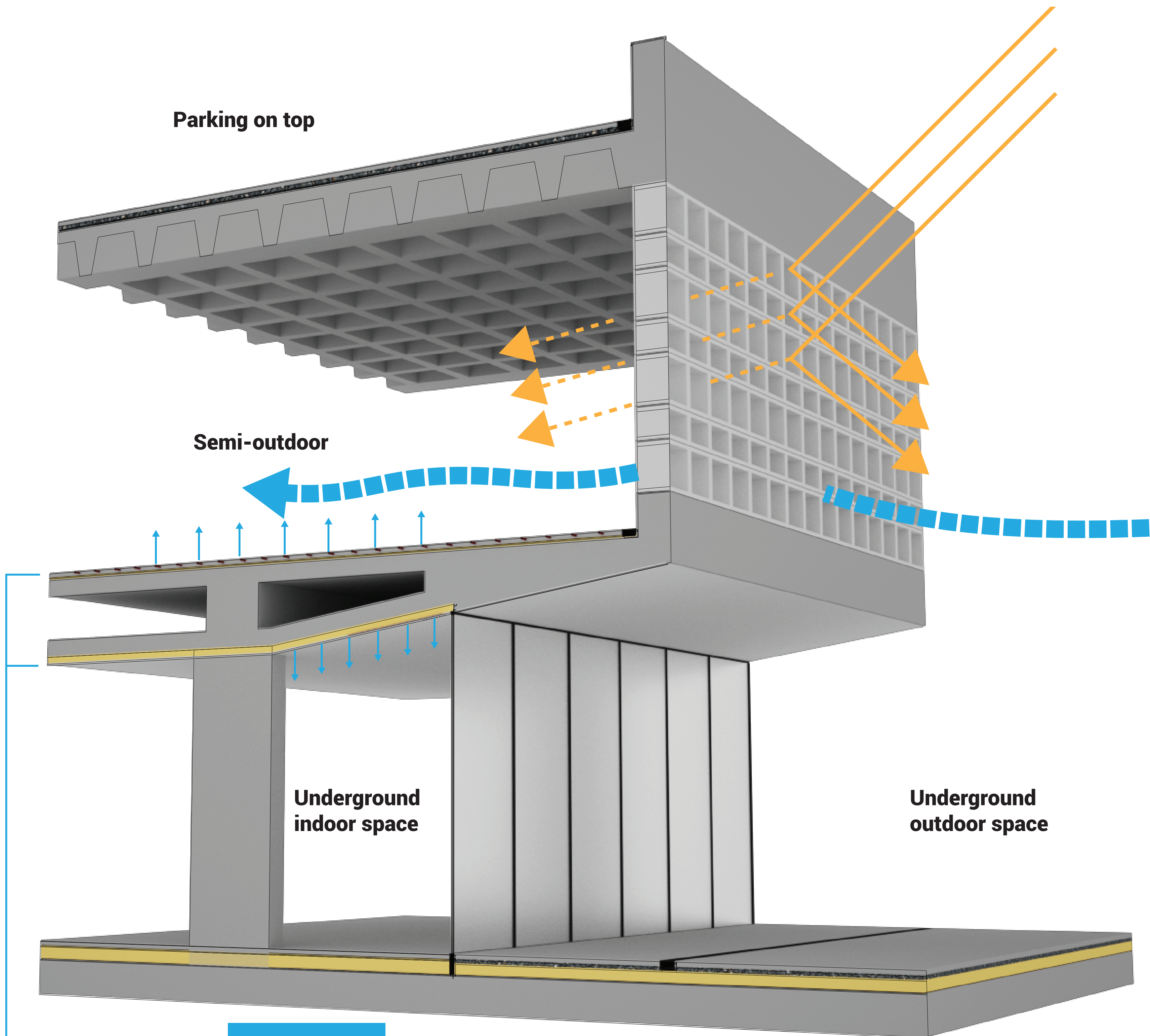
Climate



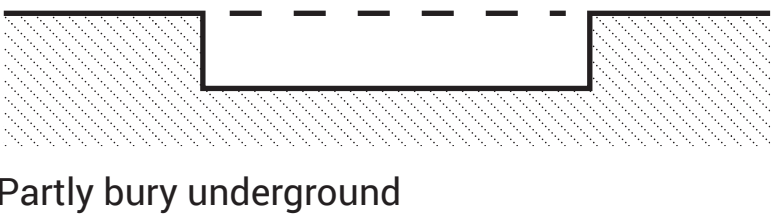
Ventilation system



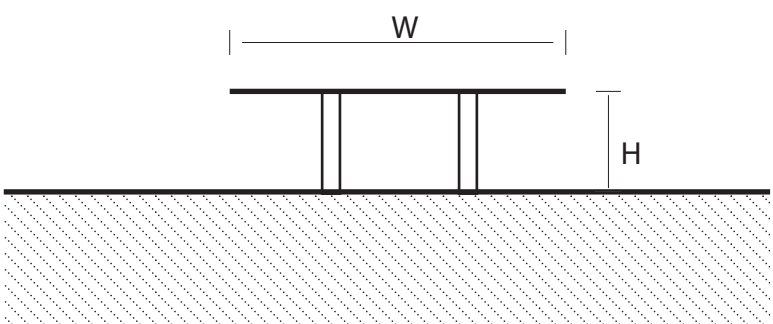
Cooling system



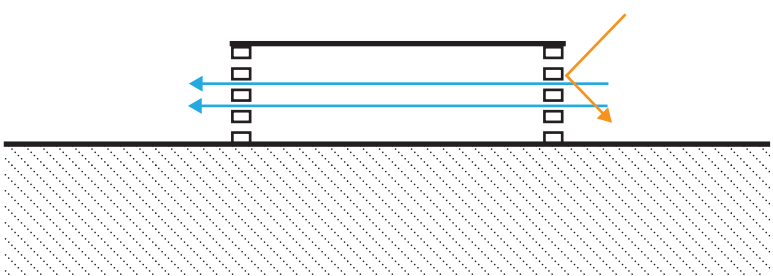
Climate concept



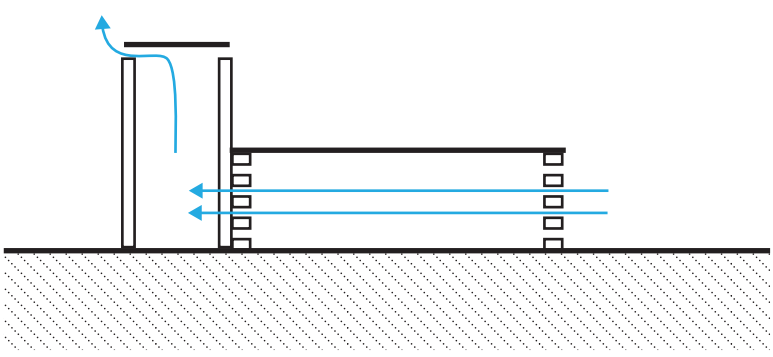
Partly bury underground



Wide Roof to provide shading

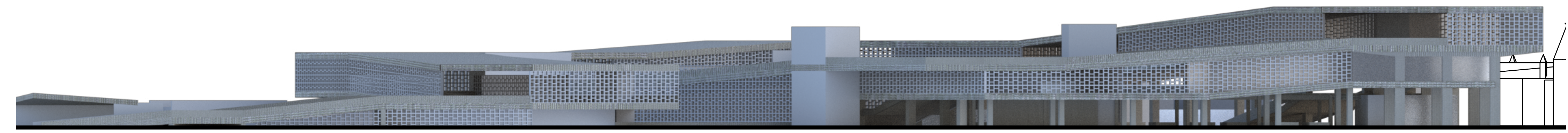
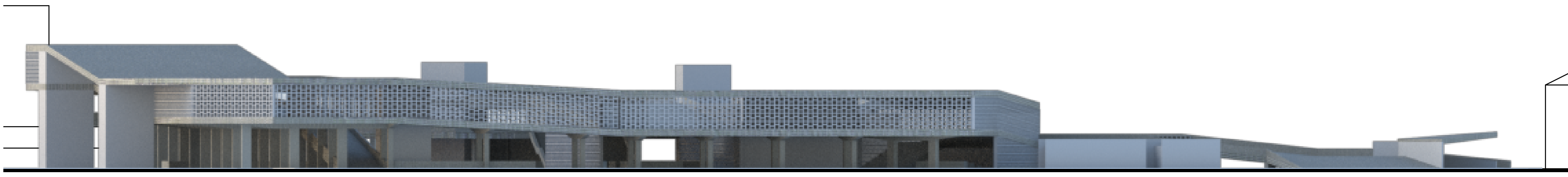
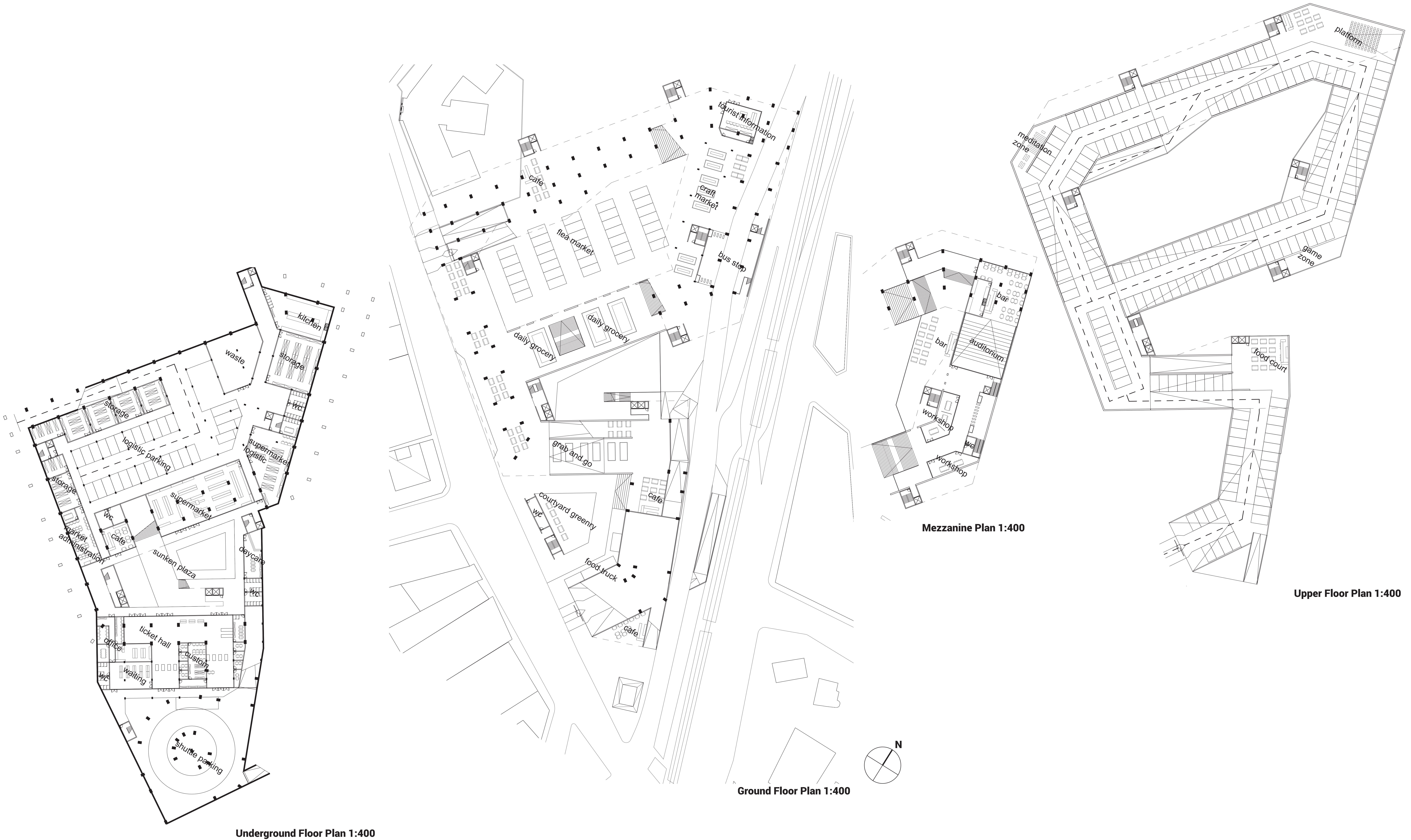


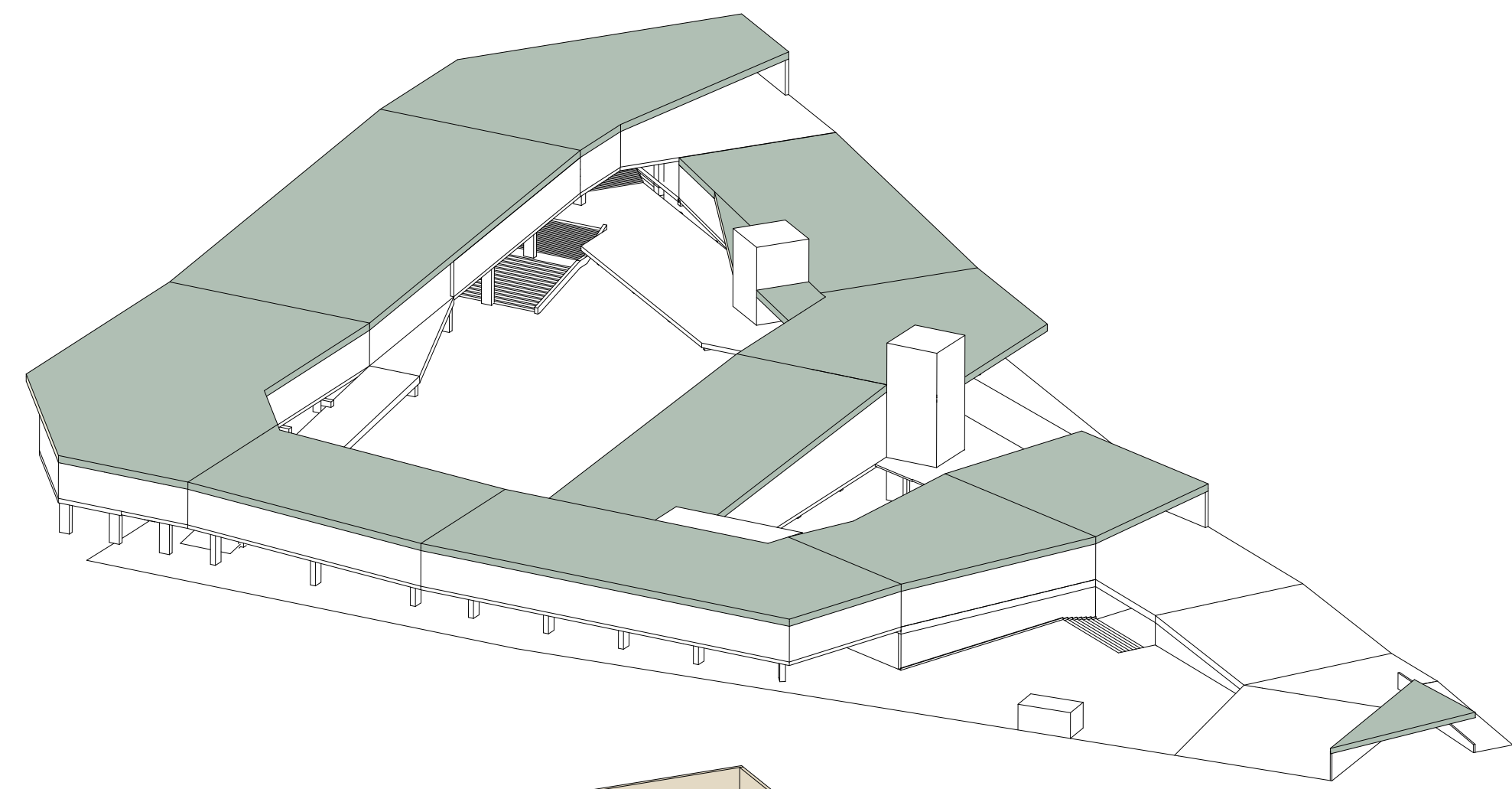
Porous facade for ventilation and shading



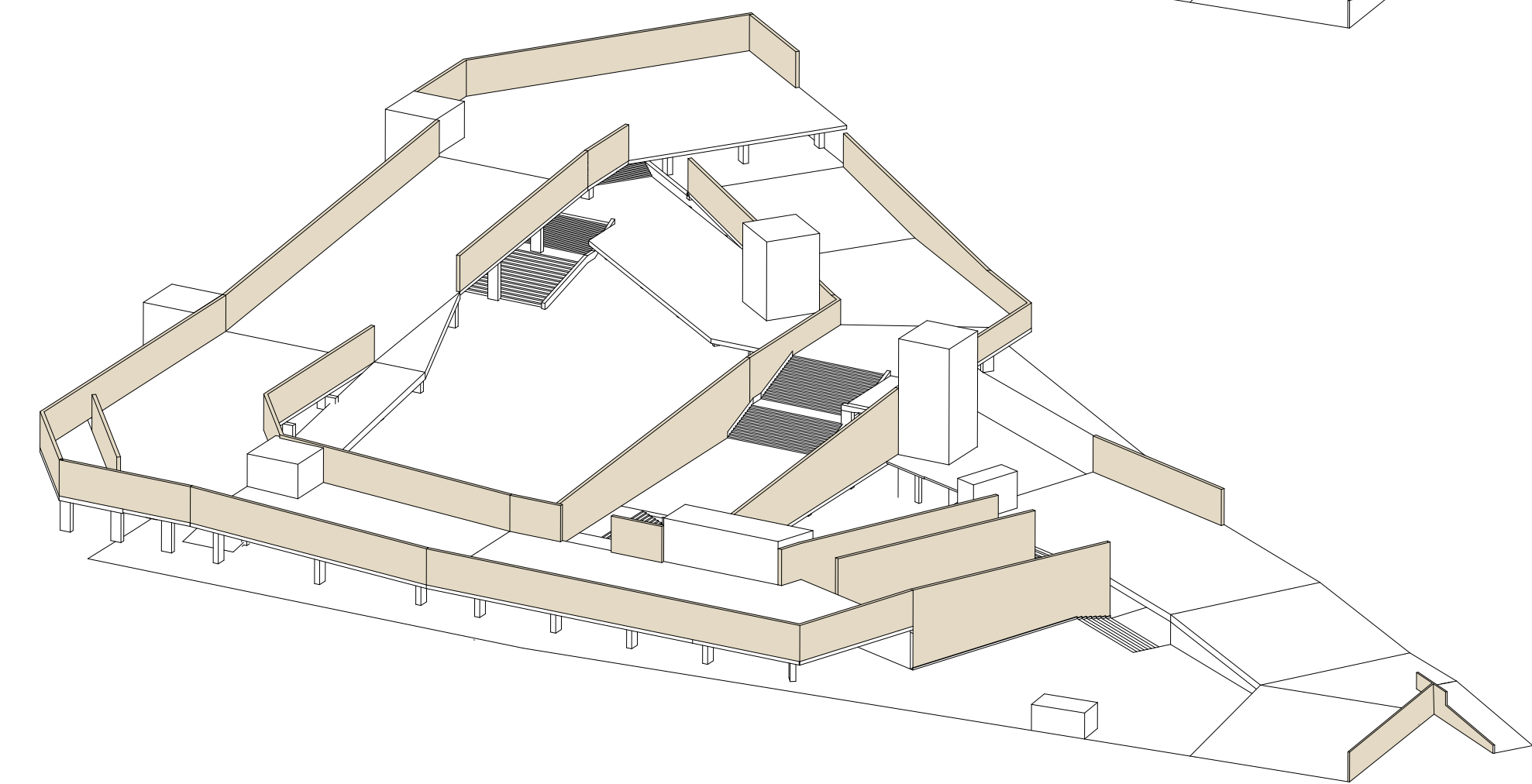
Chiney effect to help ventilation

- 1. Porous facade materials that could aid in passive ventilation, also as the louver for shading
- 2. Building with double roof construction (outdoor and parking on top) to increase ventilation and provide shading (also the porpotion between height and width)
- 3. water cooling slab system

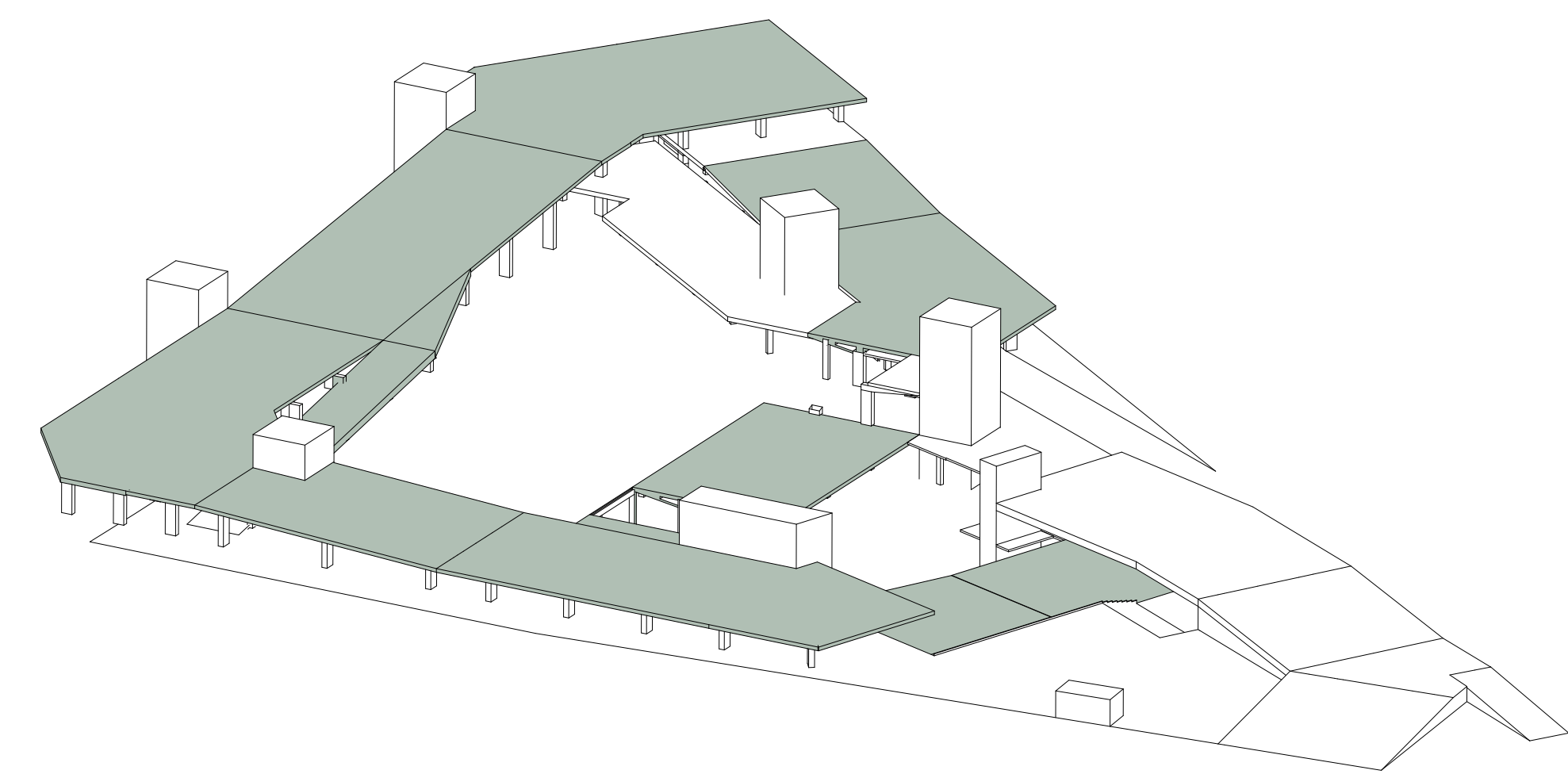




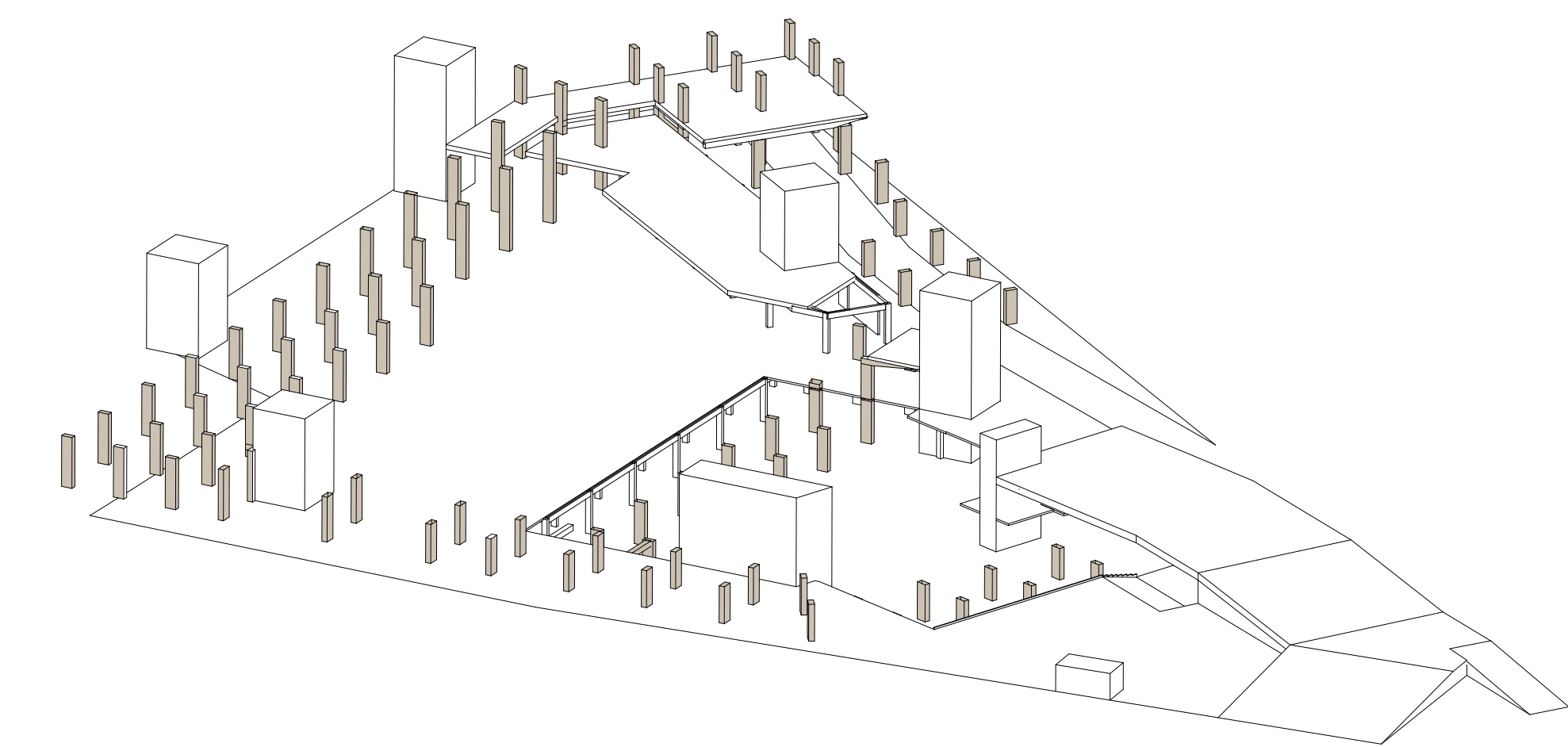
Prefabric Waffle slabs for roof structure



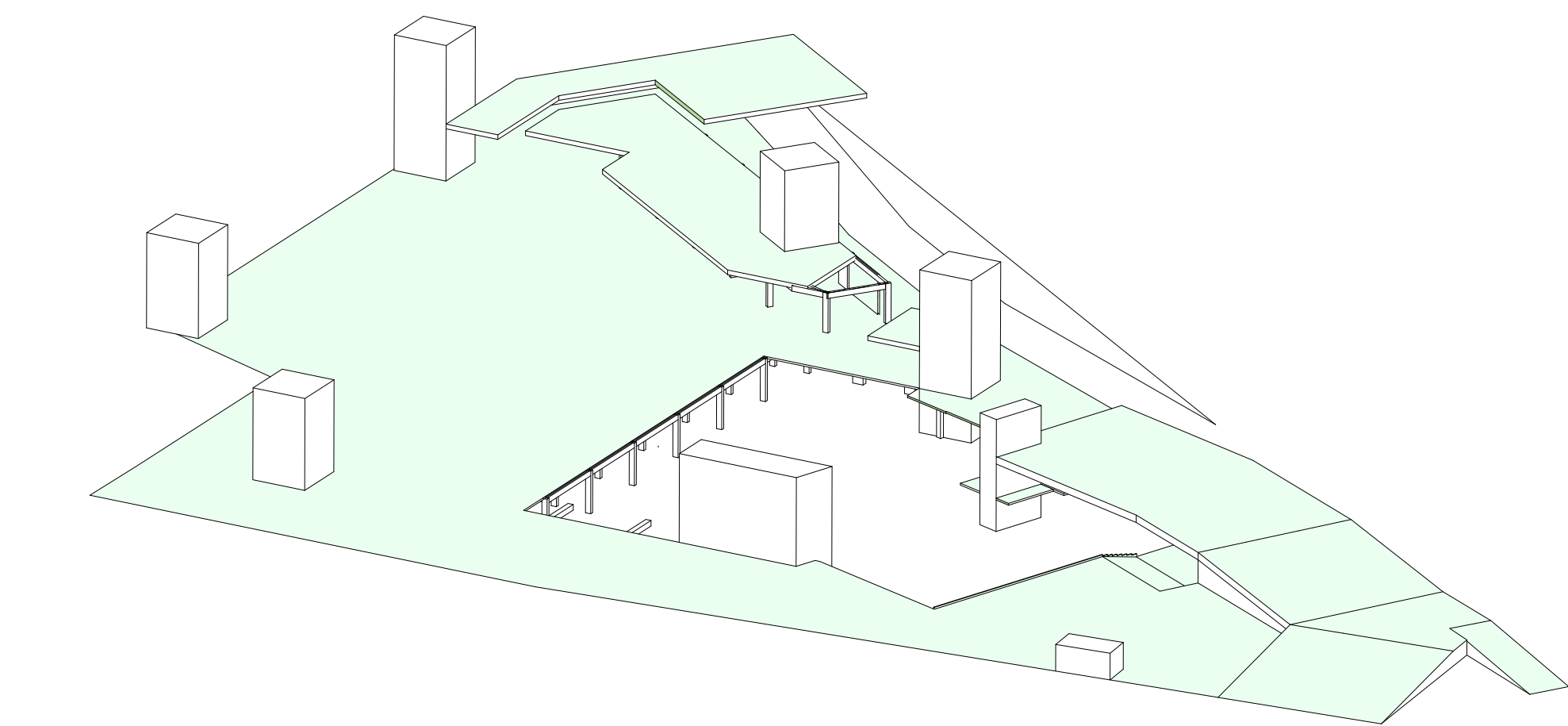
Concrete blocks load bearing wall



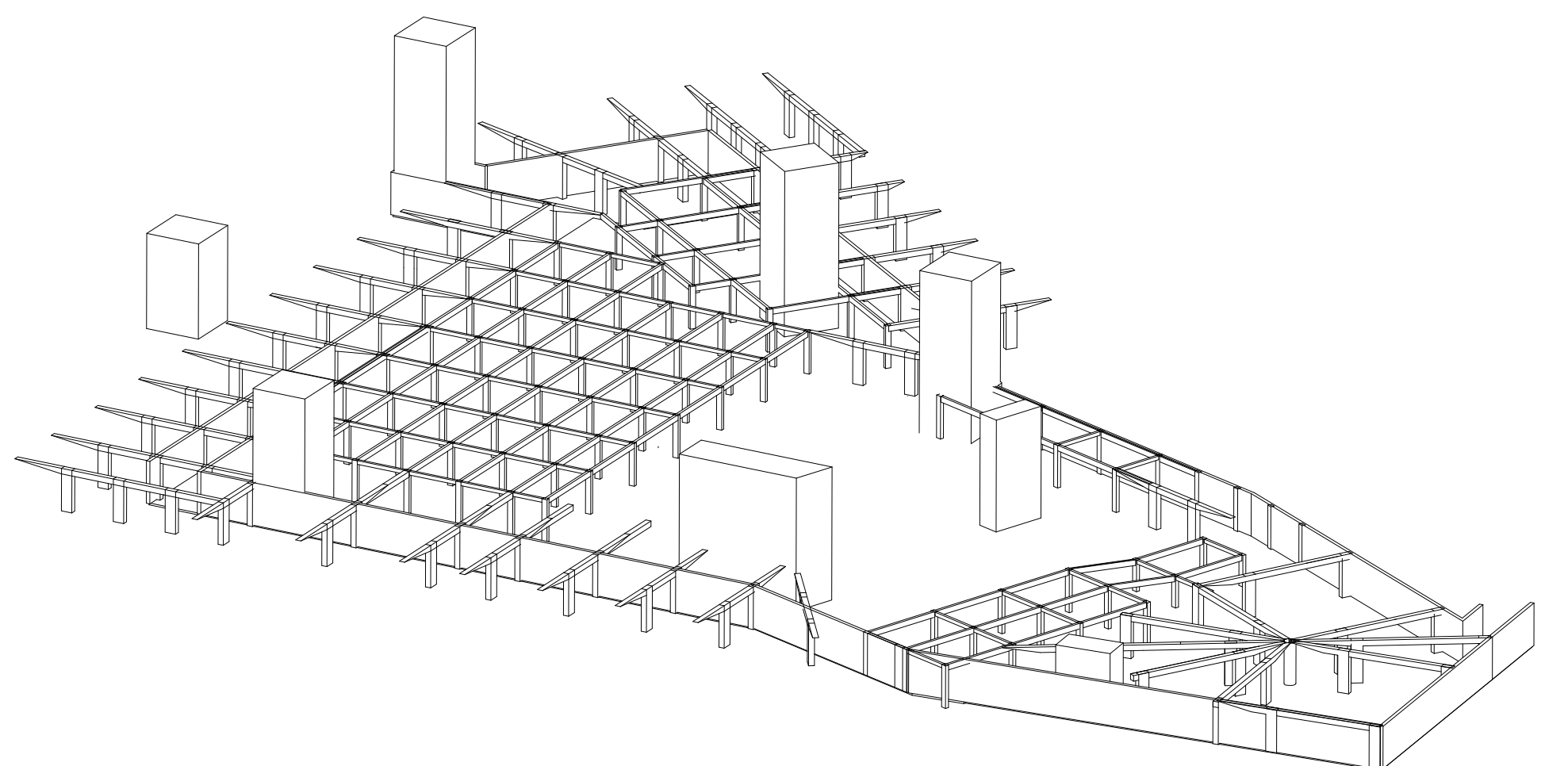
Concrete deck as Vierendeel Truss



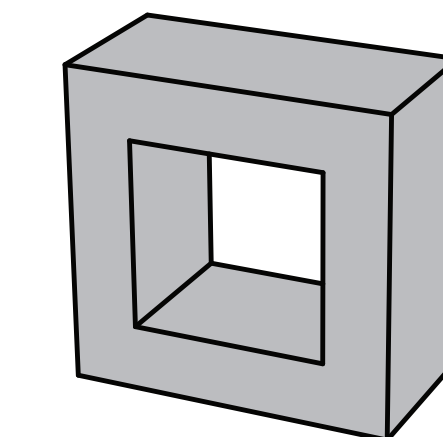
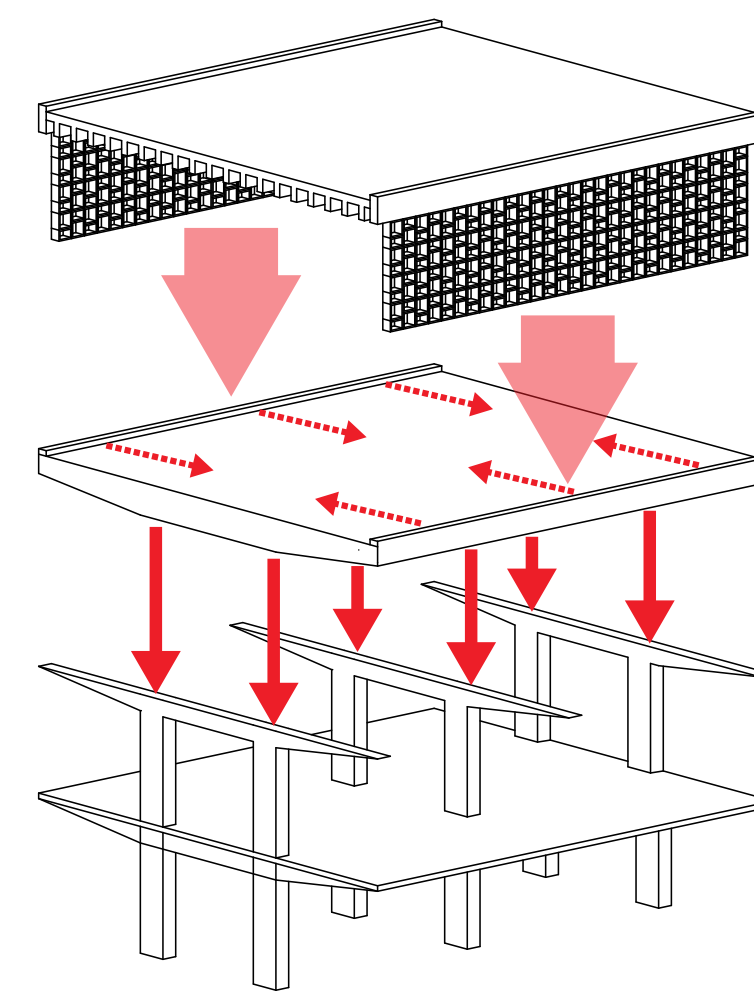
Supporting columns for upper ramps



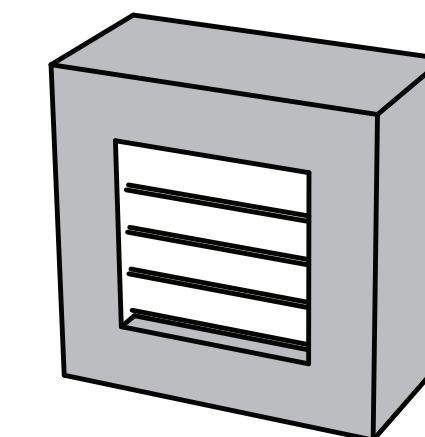
Concrete slab for ground floor



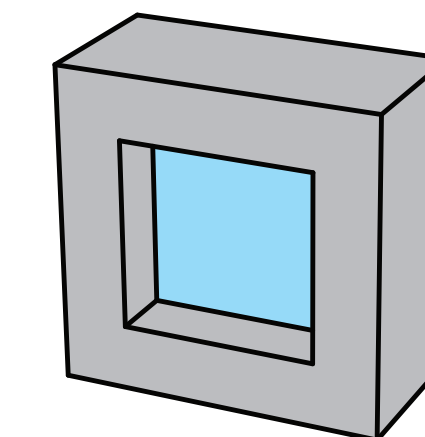
Frame structure for underground level



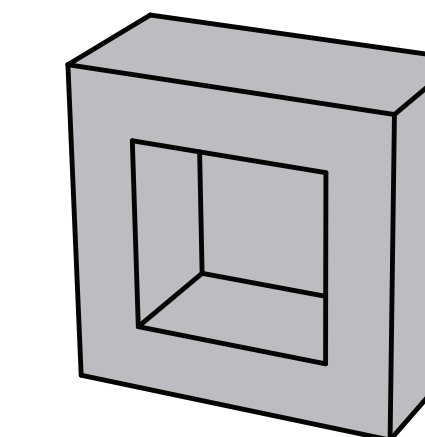
Concrete block module



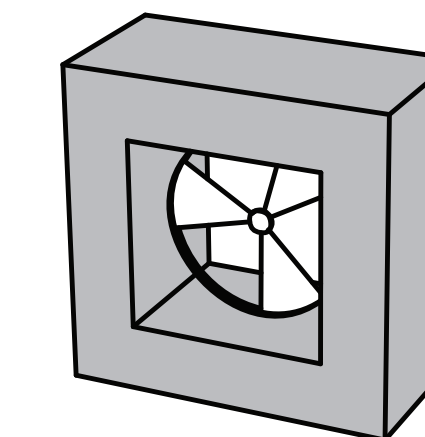
Shading module



Glass module

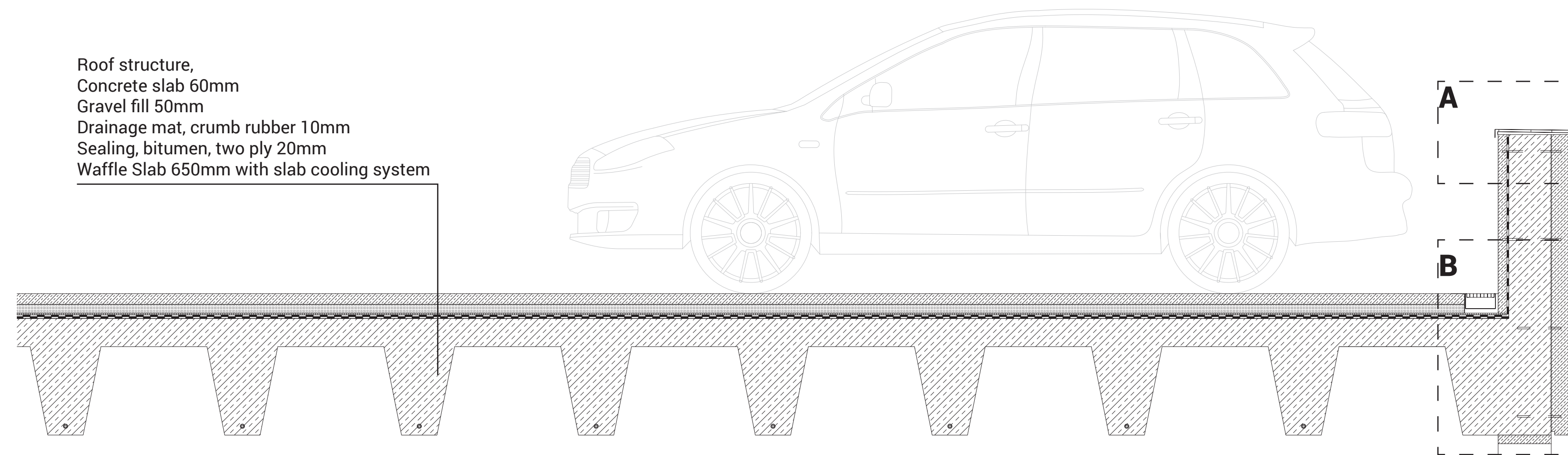


Blocked module

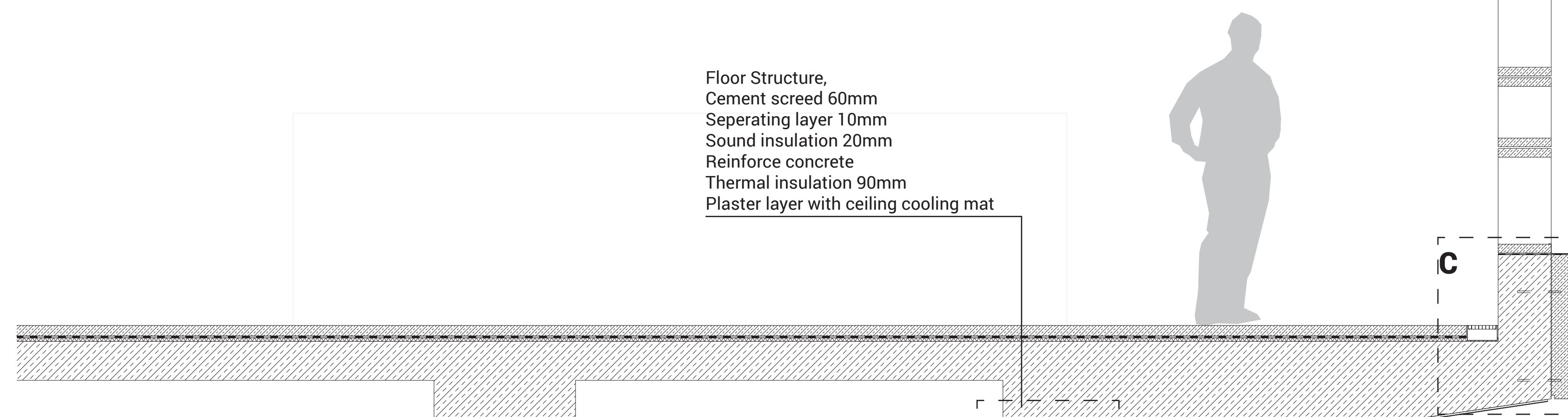


Ventilation module

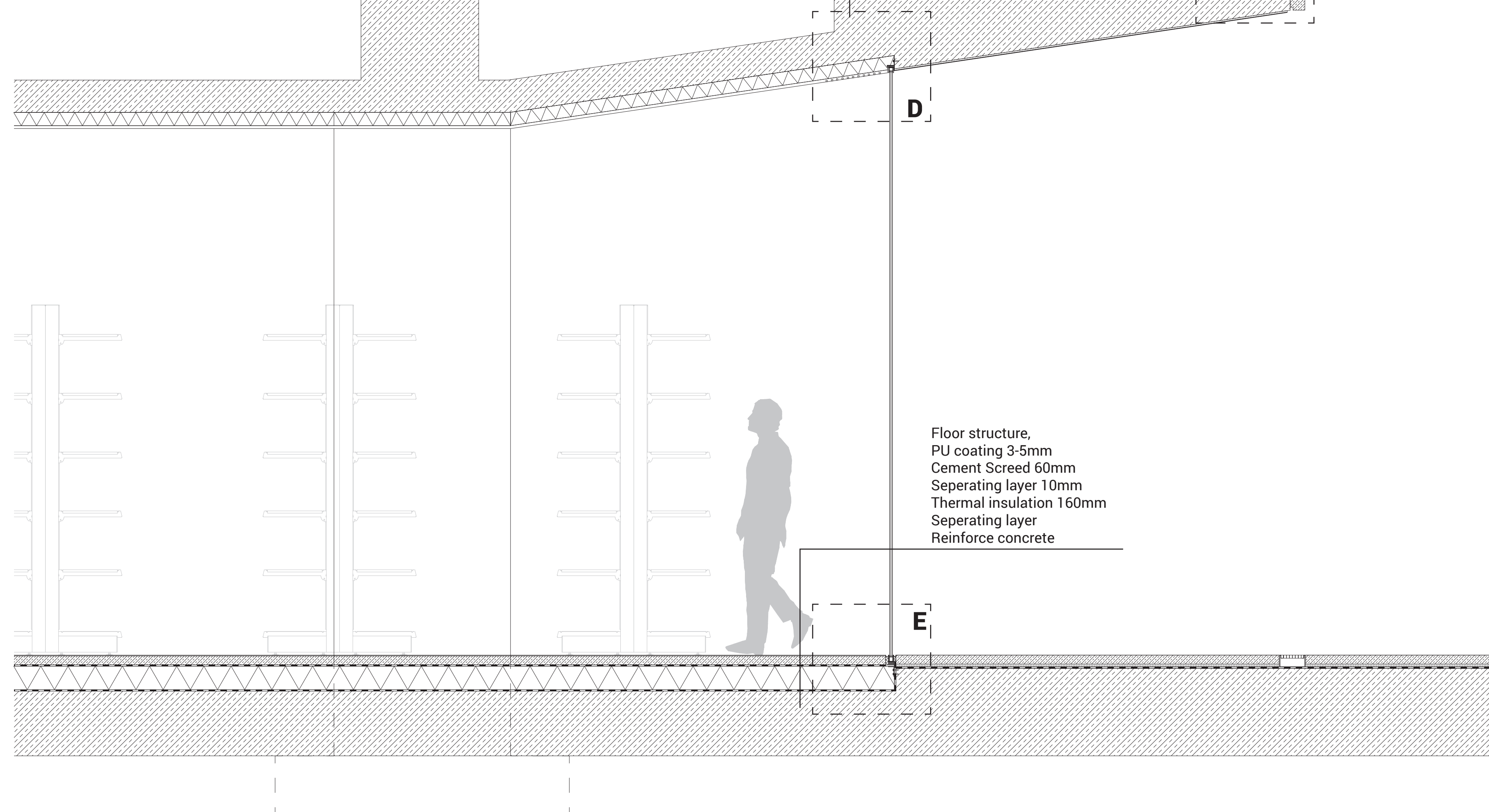
Roof structure,
Concrete slab 60mm
Gravel fill 50mm
Drainage mat, crumb rubber 10mm
Sealing, bitumen, two ply 20mm
Waffle Slab 650mm with slab cooling system



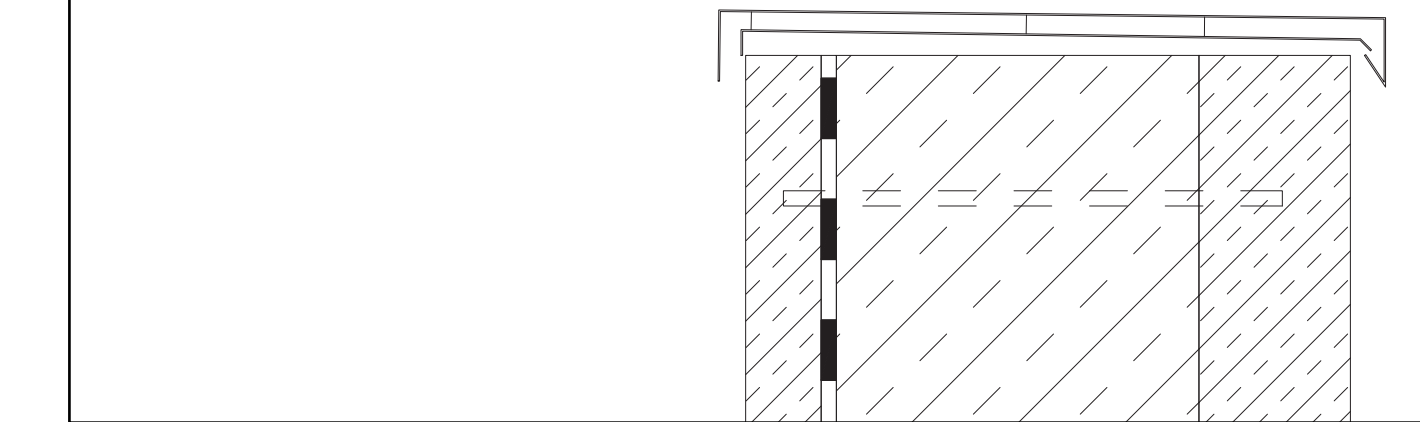
Floor Structure,
Cement screed 60mm
Separating layer 10mm
Sound insulation 20mm
Reinforce concrete
Thermal insulation 90mm
Plaster layer with ceiling cooling mat



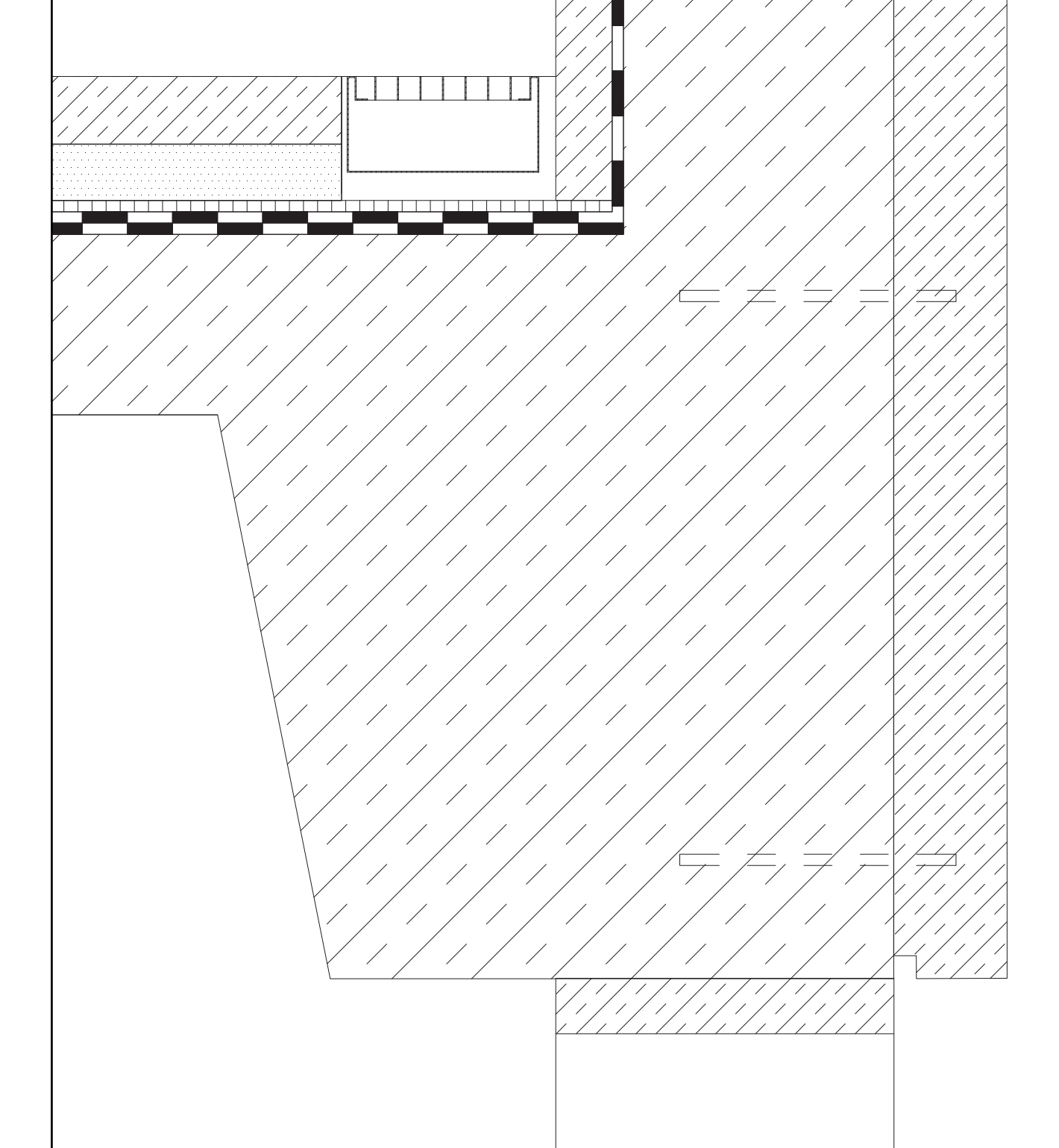
Floor structure,
PU coating 3-5mm
Cement Screed 60mm
Separating layer 10mm
Thermal insulation 160mm
Separating layer
Reinforce concrete



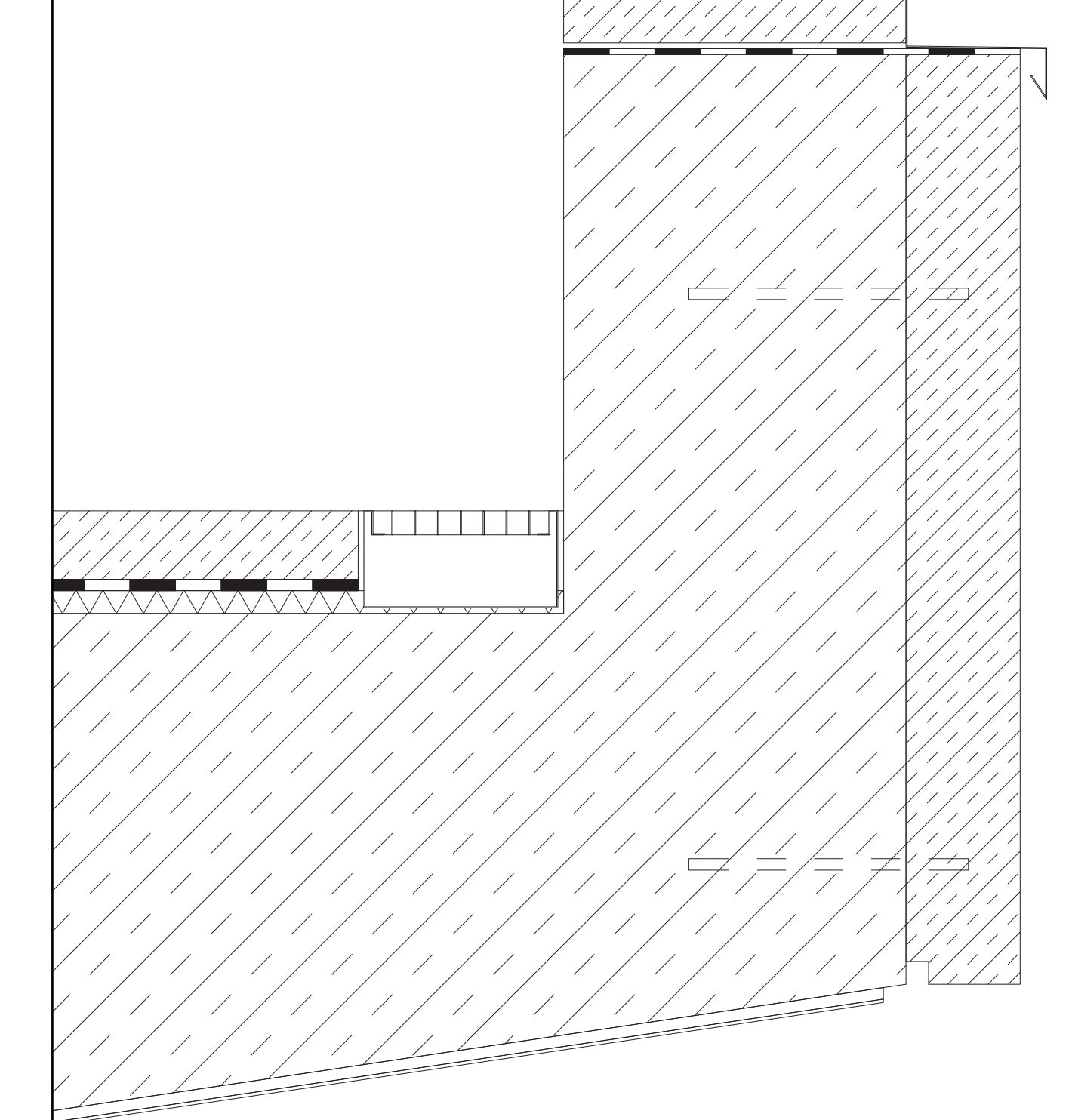
A 1:5



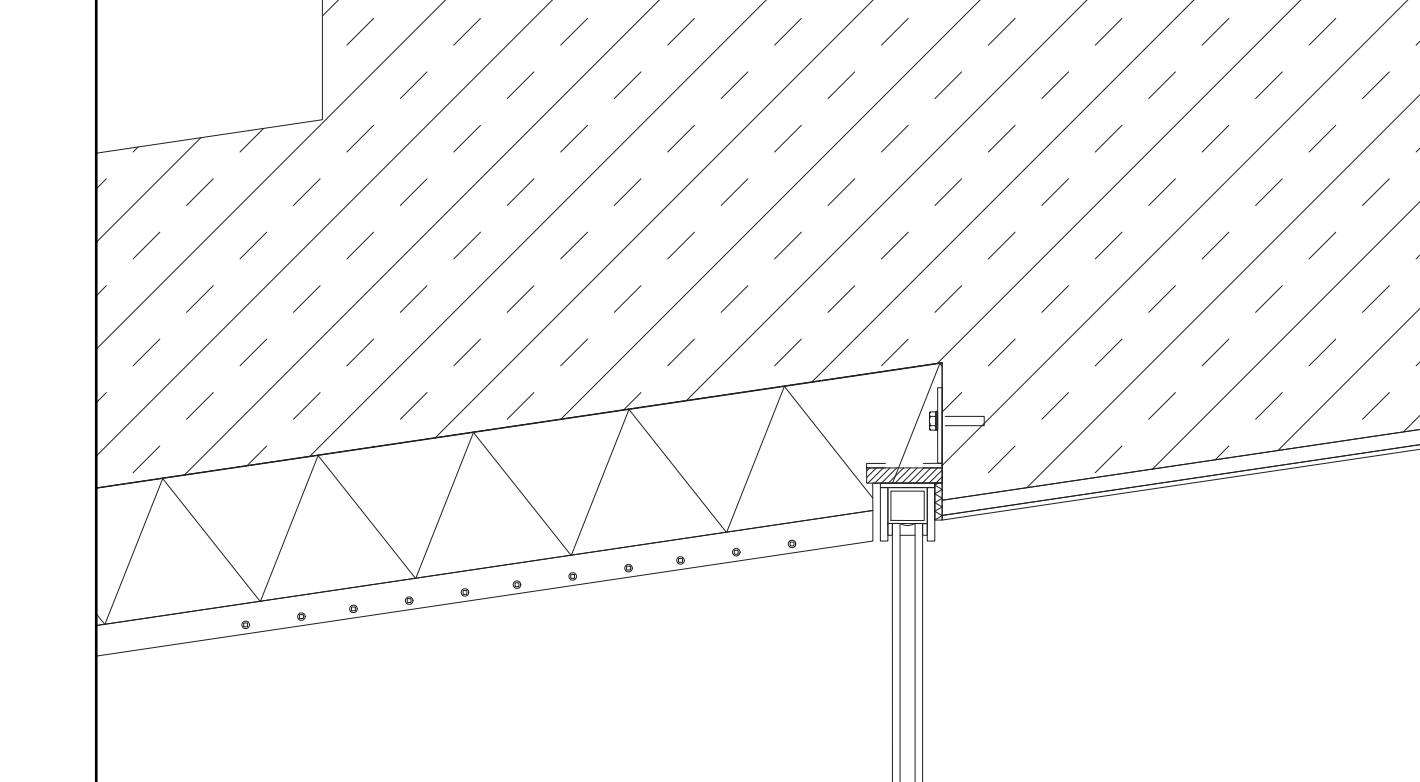
B 1:5



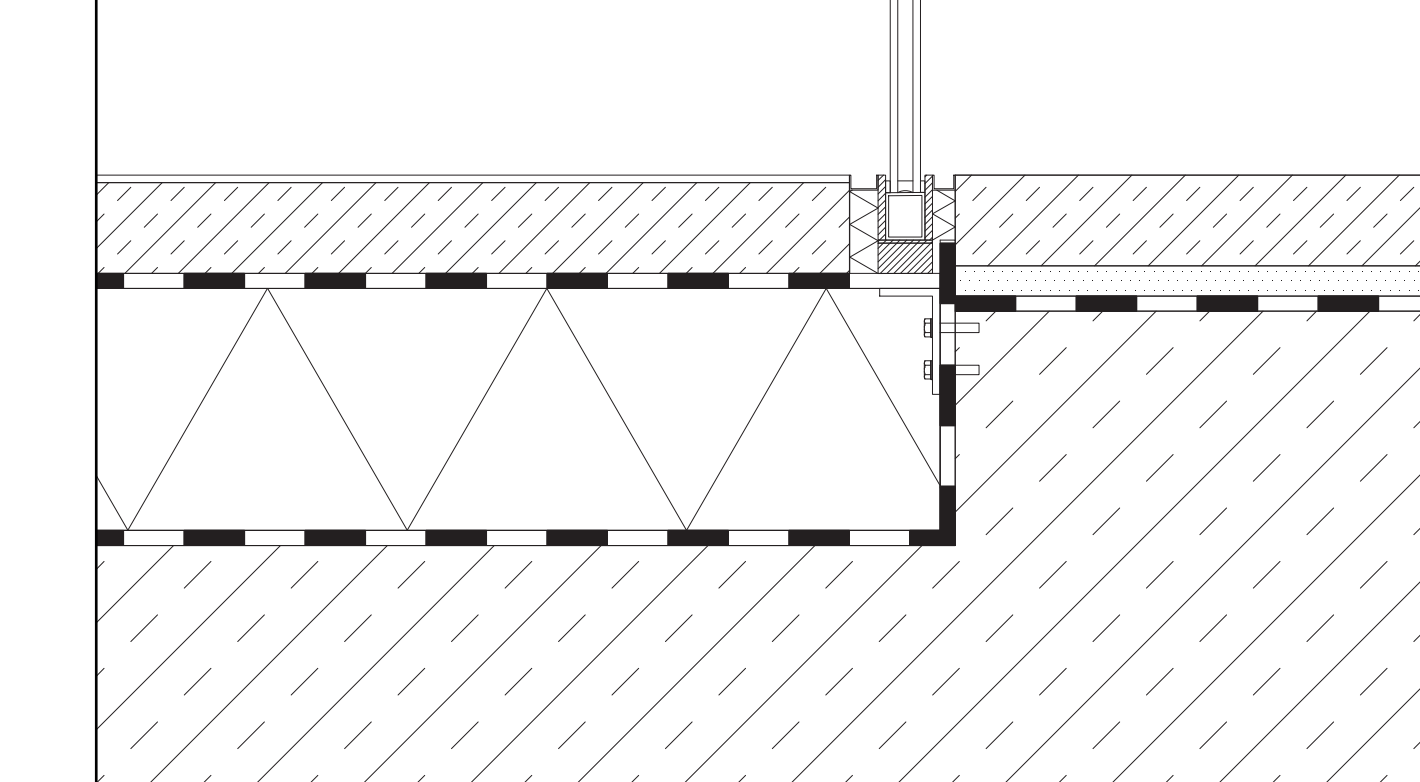
C 1:5



D 1:5



E 1:5



Section 1:20

Details 1:5