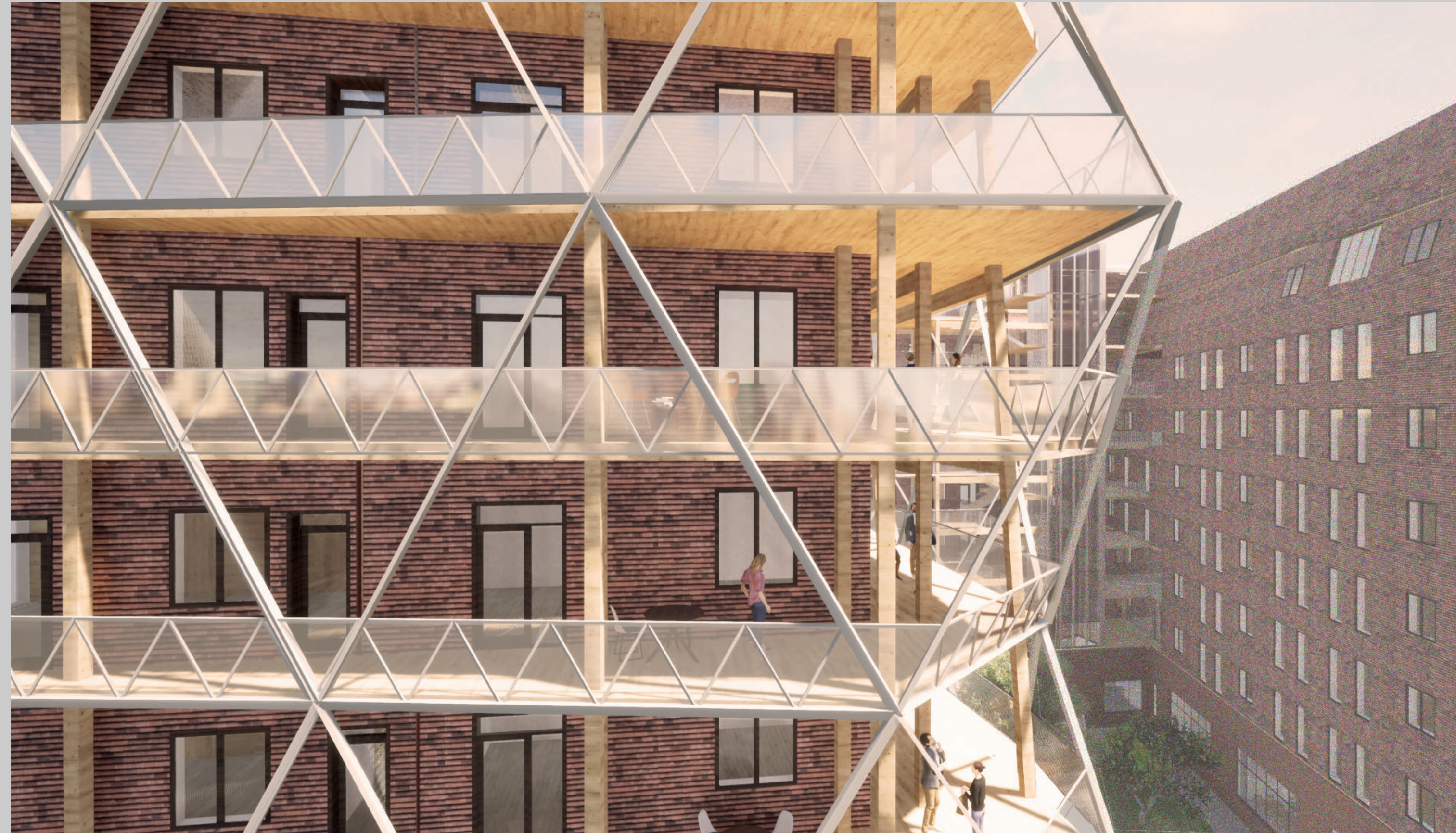


The Middleground

Challenging Asymmetric Membranes







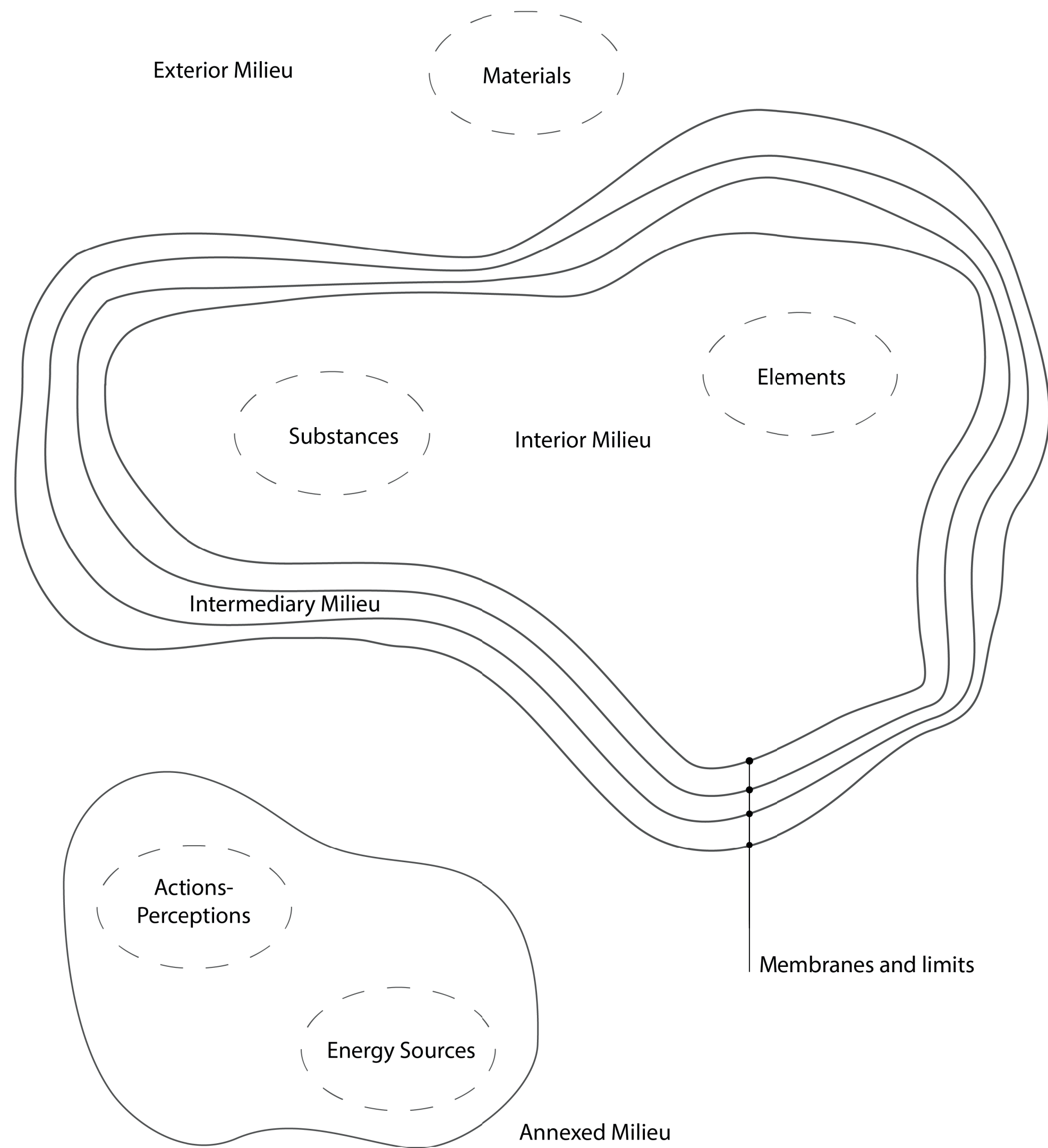
Top 10% richest Londoners own
42,5% of London's net wealth¹

Image source; iStock

1) Trust for London (2021) Londons Poverty Profile 2021 - COVID19

27% of Londoners are living in poverty after housing costs¹



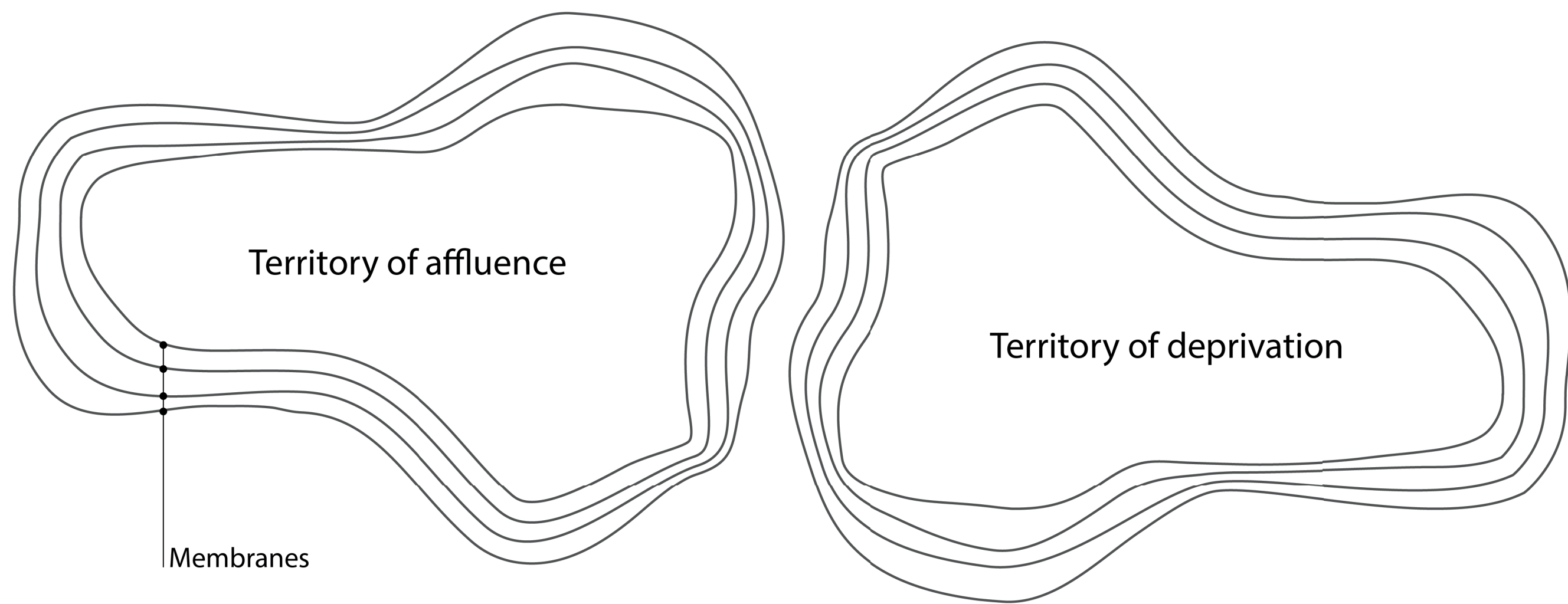


Territory of deprivation - characterised by an unreasonably large disadvantage

Territory of affluence - characterised by an unreasonably large advantage

An assemblage, in its multiplicity, necessarily acts on semiotic flow, material flow, and social flows simultaneously [...]

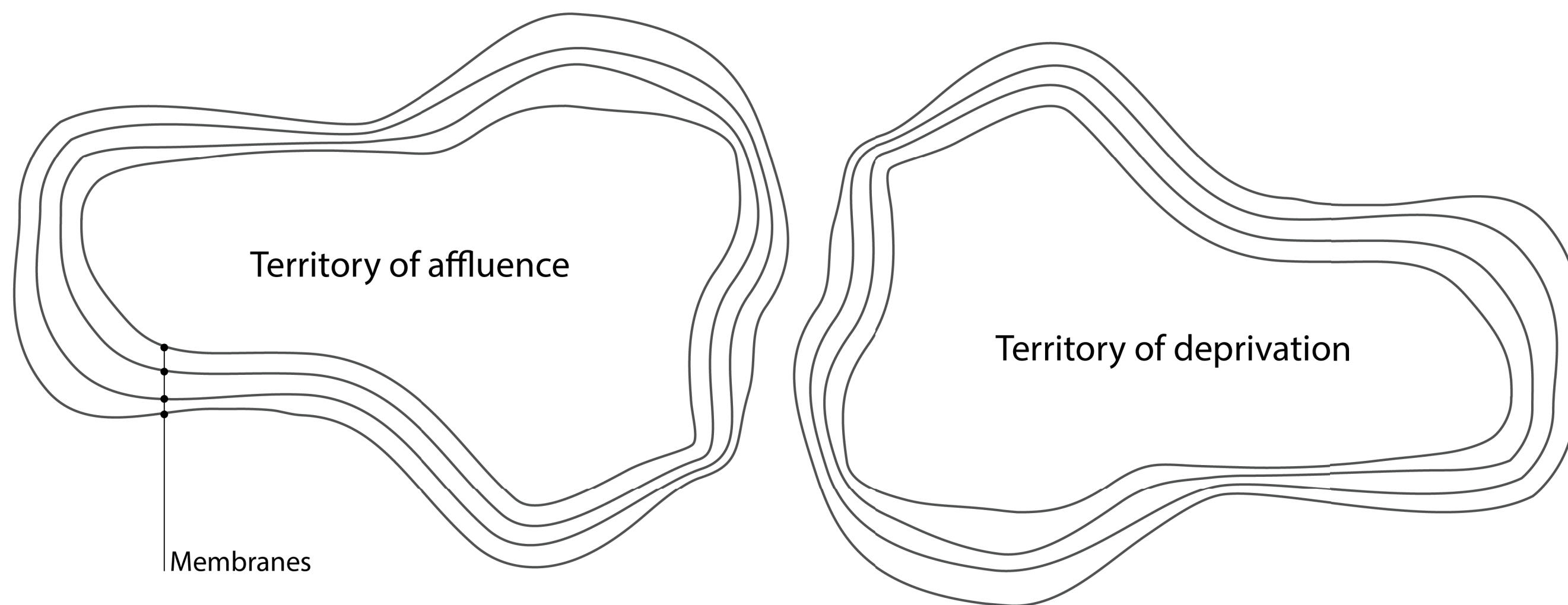
(Deleuze & Guattari, 1987, pp. 22-23)



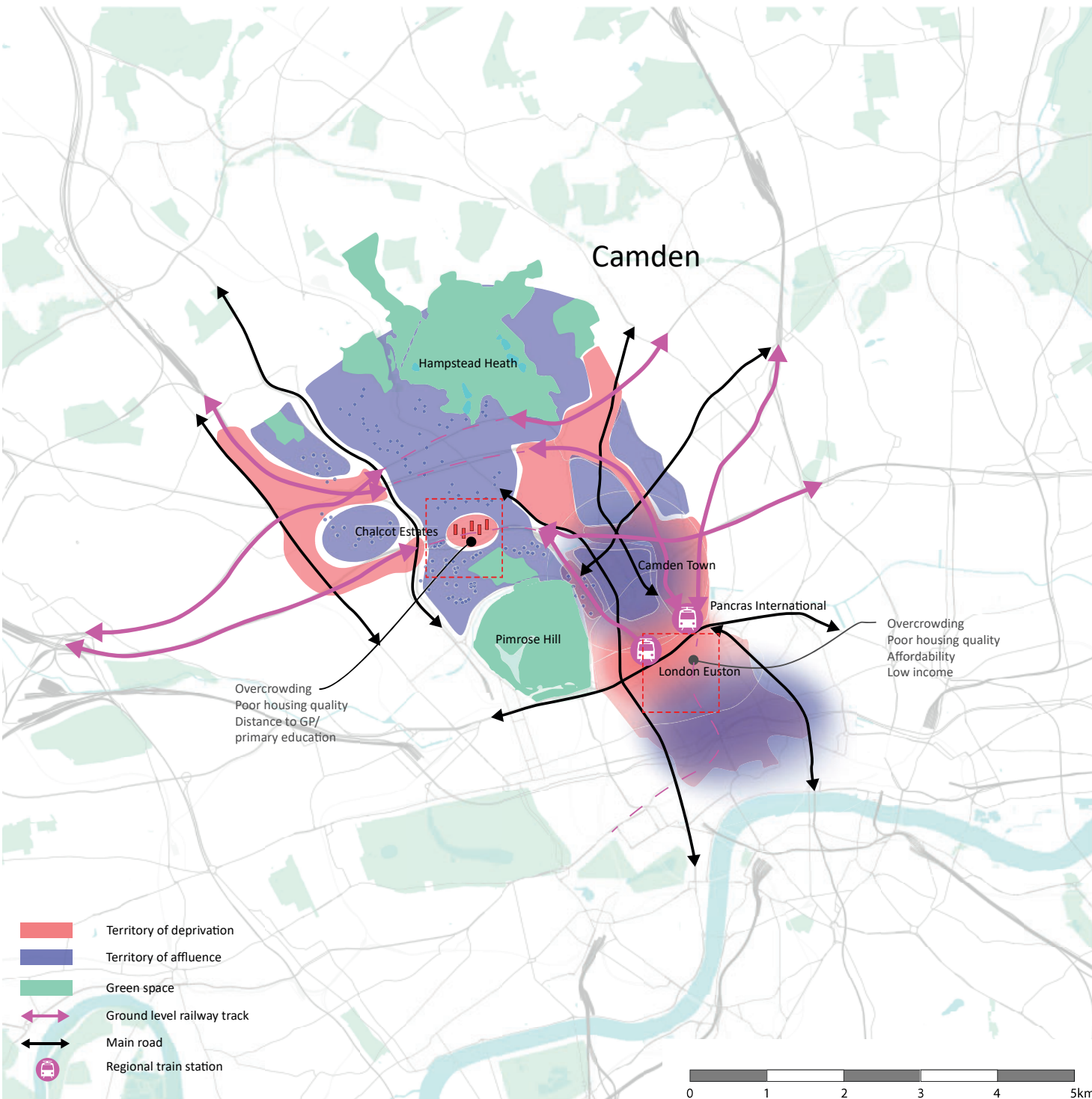
Territory of affluence

Territory of deprivation

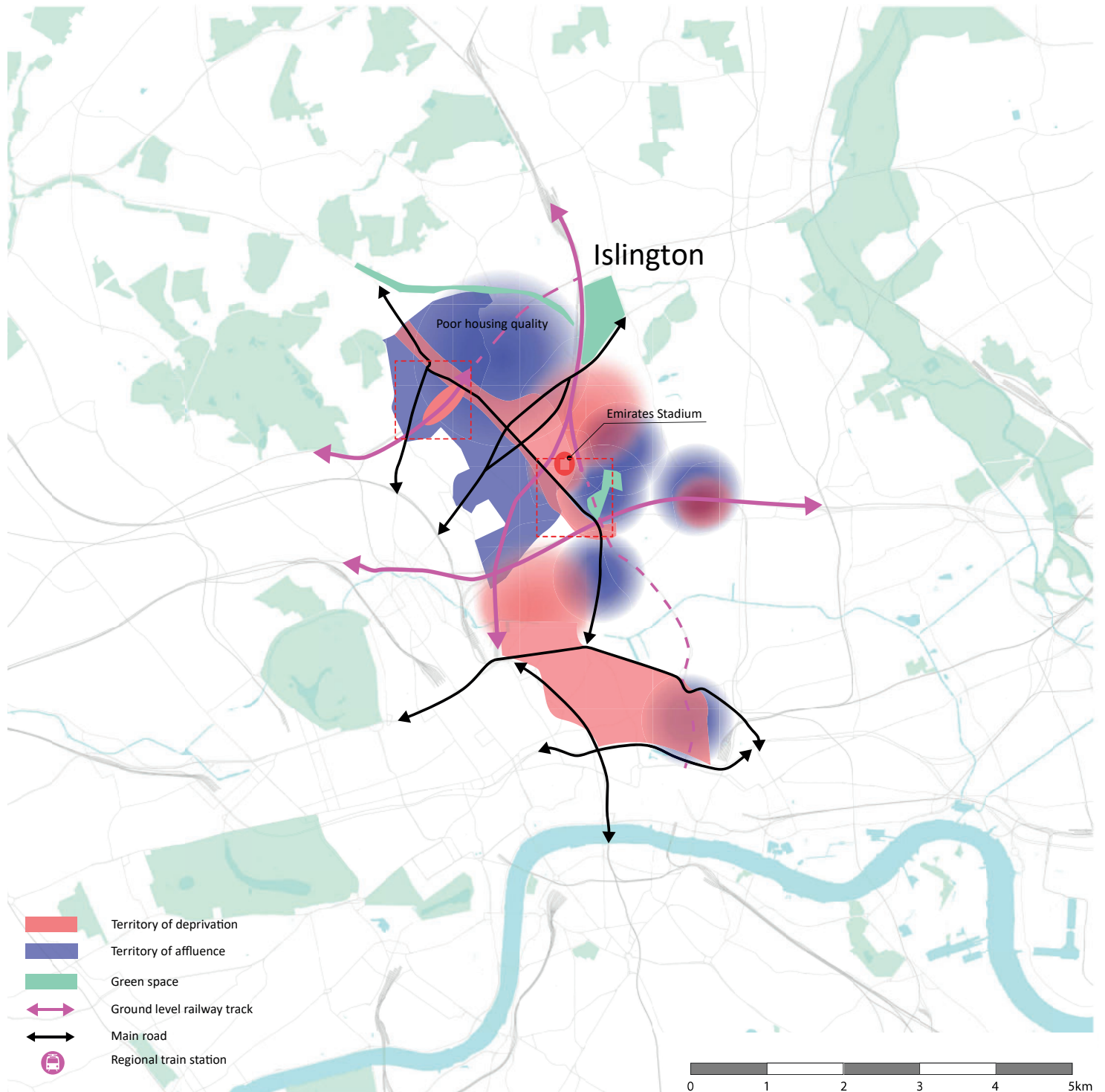
Membranes



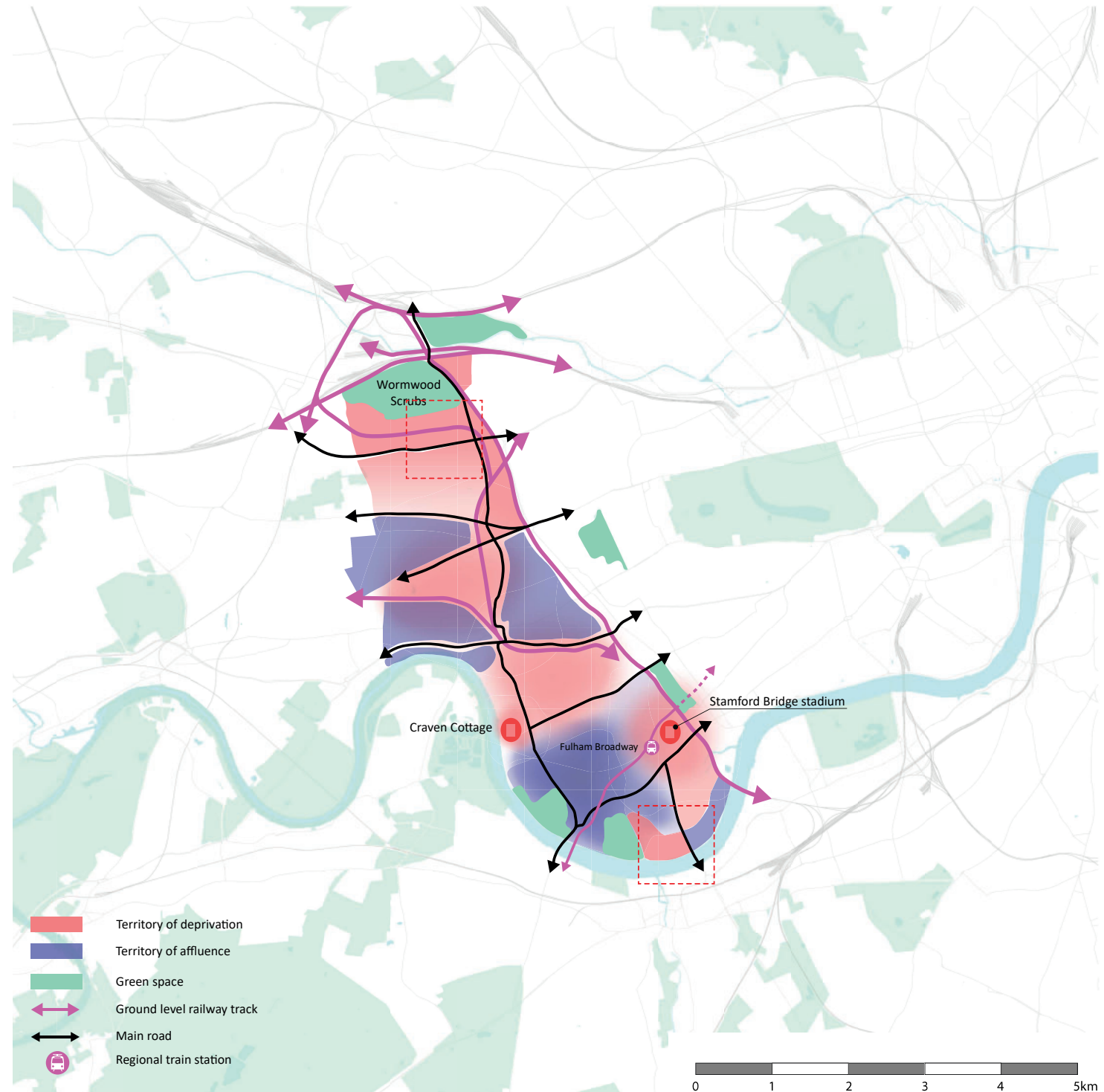
Indicator	Territory of affluence	Territory of deprivation	Source
Median income	50.000,- GBP or higher	35.000,- GBP or lower	LSOA 2011 data
Education level	University level degree or equivalent		IMD, 2019
Proximity to amenities	Distance to primary schools and GP practices < 400 meters	Distance to primary schools and GP practices > 800 meters	IMD, 2019
Road traffic accidents		More than 1,5 accidents per 1000 residents	IMD, 2019
Housing in Poor Condition ⁵		More than 15%	IMD, 2019
Housing Affordability		Above index 3,4	IMD, 2019
Overcrowded		More than 45%	IMD, 2019



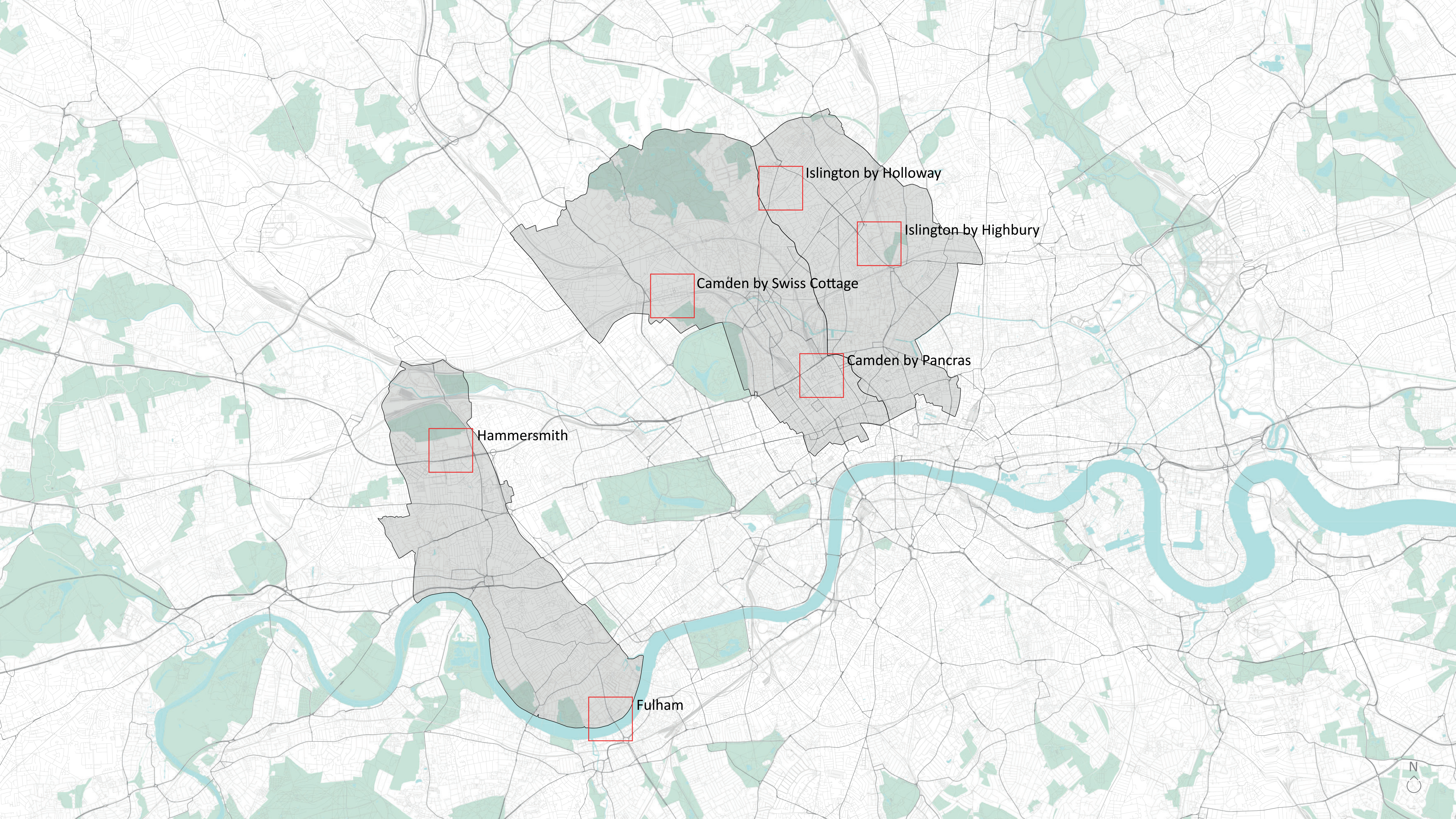
Territories of affluence and deprivation in Camden



Territories of affluence and deprivation in Islington



Territories of affluence and deprivation in Hammersmith and Fulham



Islington by Holloway

Islington by Highbury

Camden by Swiss Cottage

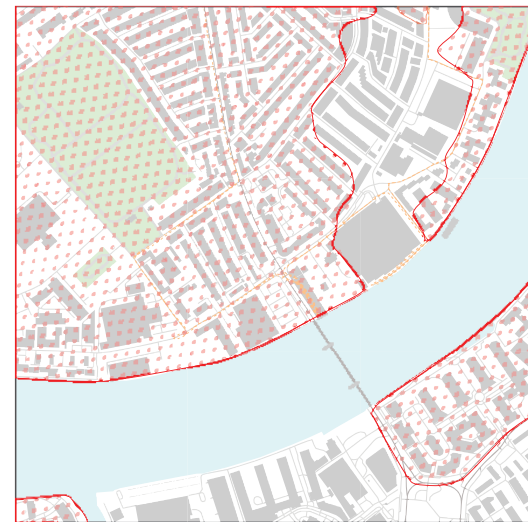
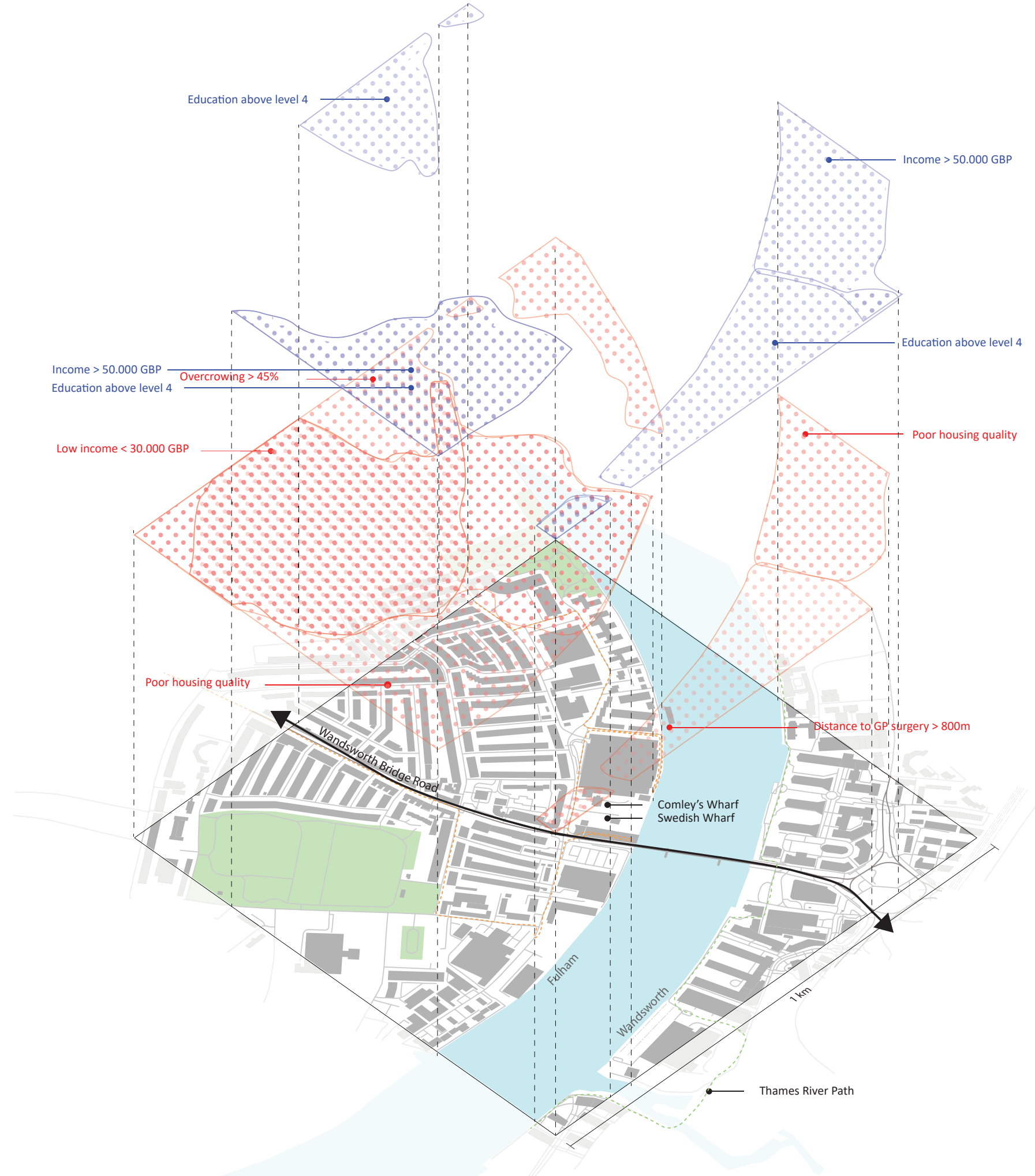
Camden by Pancras

Hammersmith

Fulham



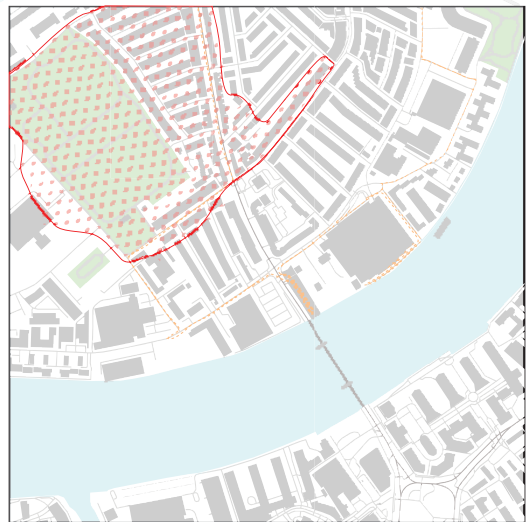
Fragmented territories of affluence



Poor housing quality >15%



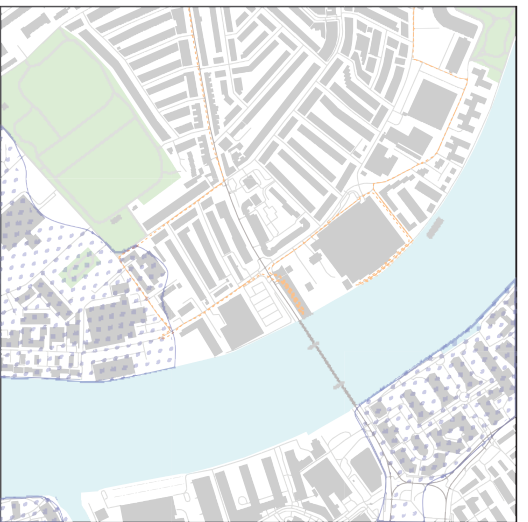
Low income < 35,000 GBP



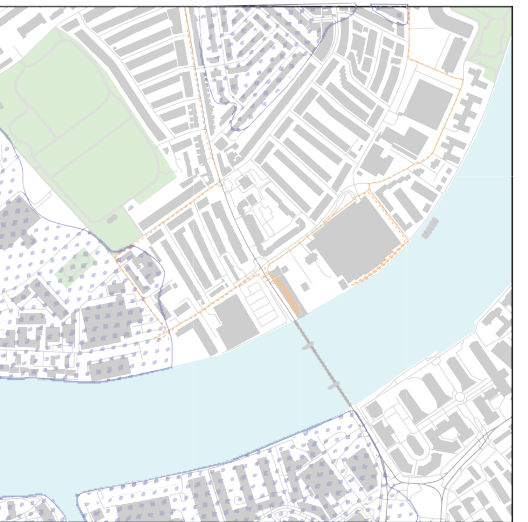
Overcrowding > 40%



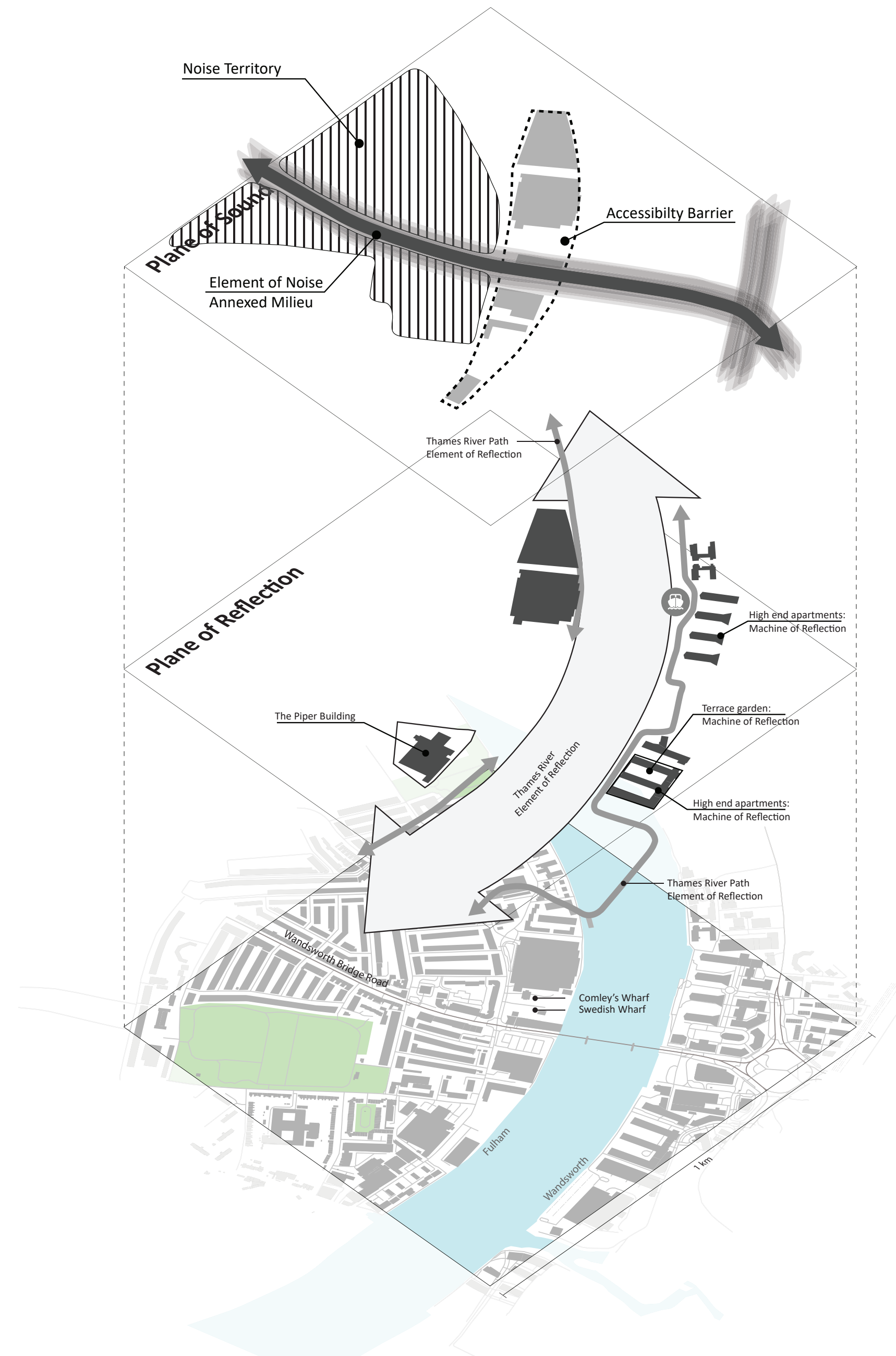
Distance to GP surgery > 800m



Income > 50,000 GBP

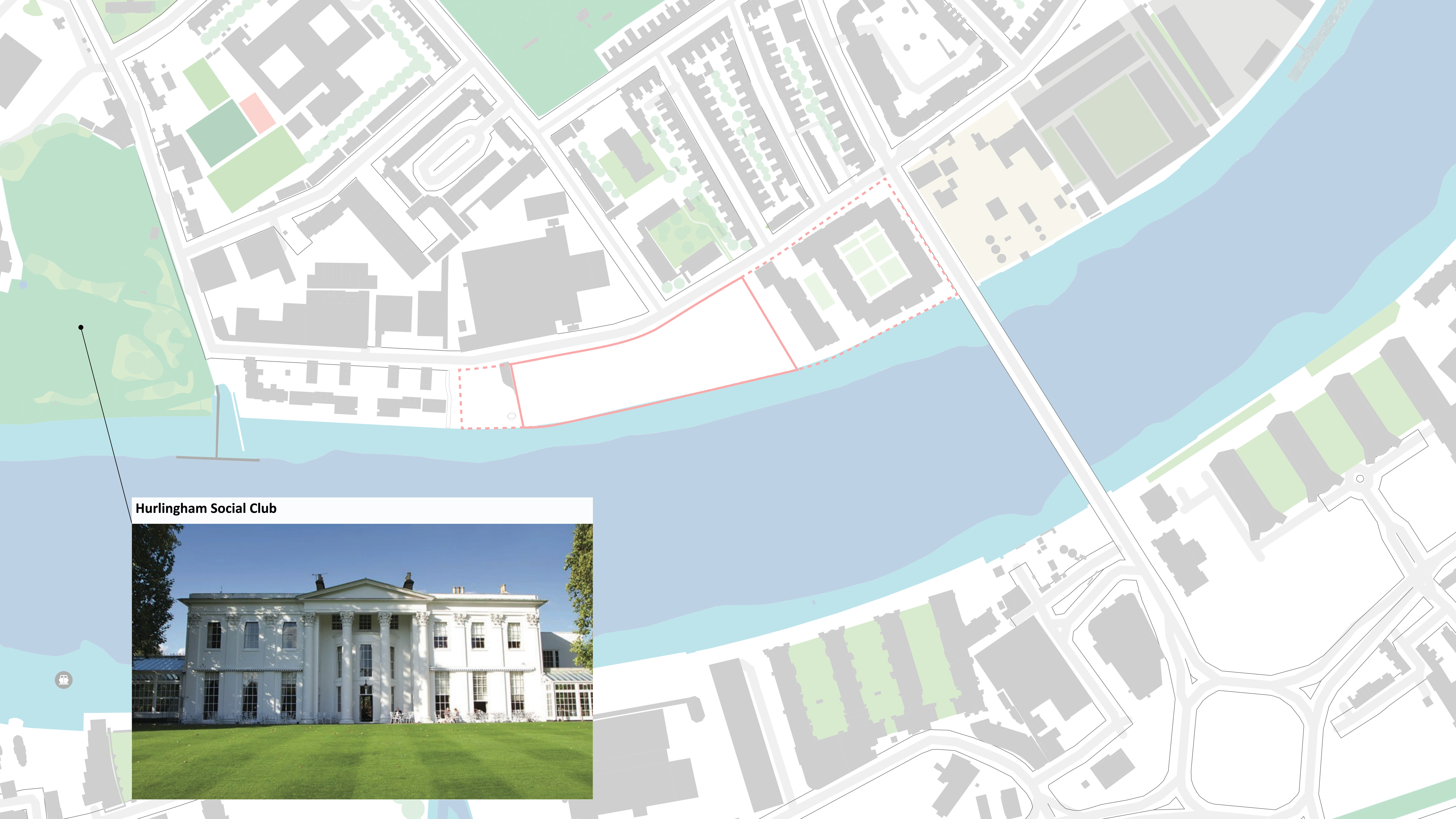


Education > level 4



Membranes

- Knowledge of high-brow activity
- Proximity to social club
- Financial to social club
- Visual
- Social networking
- Proximity
- Walkability
- Cyclability
- Public transport range
- Accessibility by car



Hurlingham Social Club

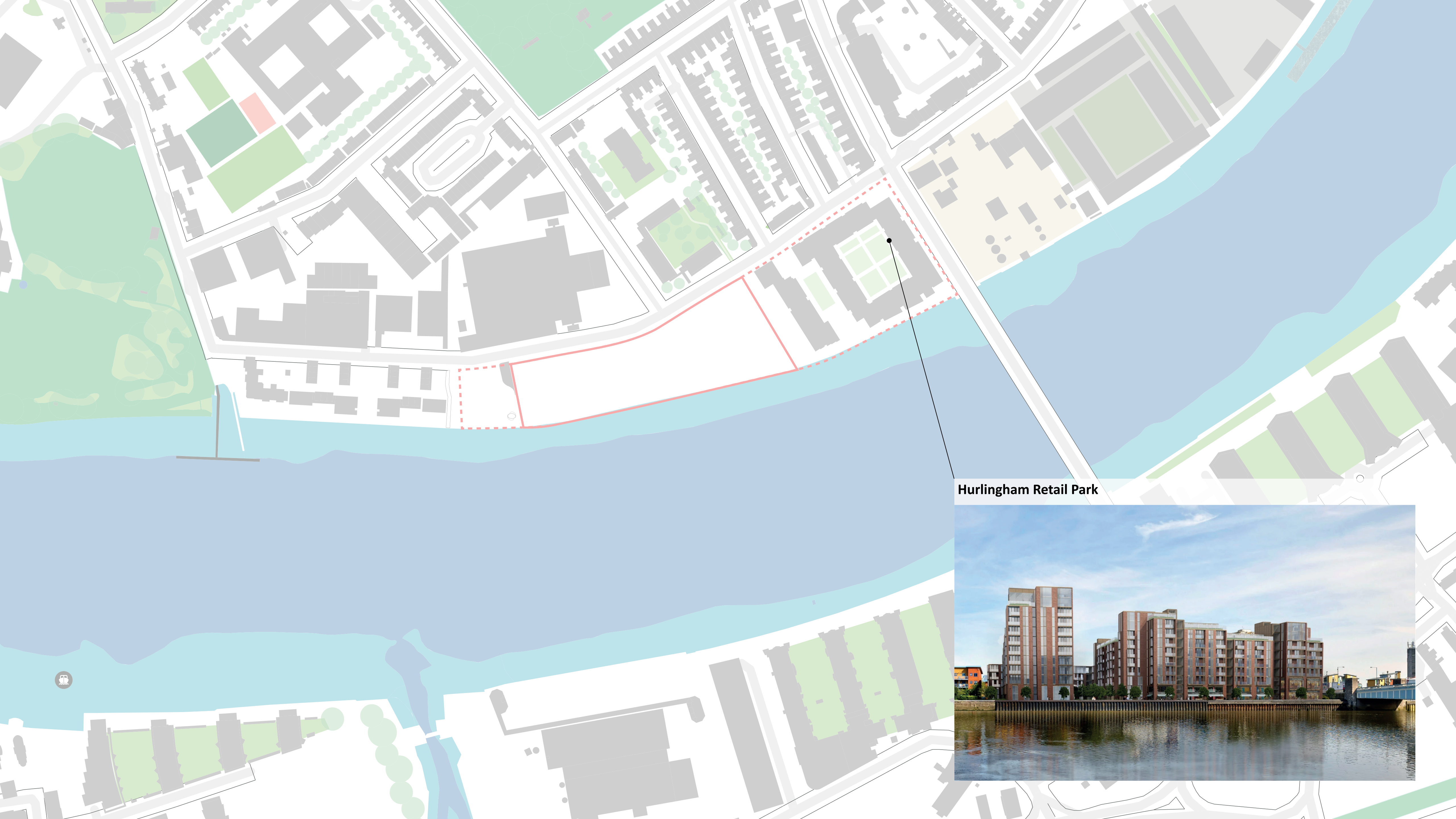




Hurlingham Social Club

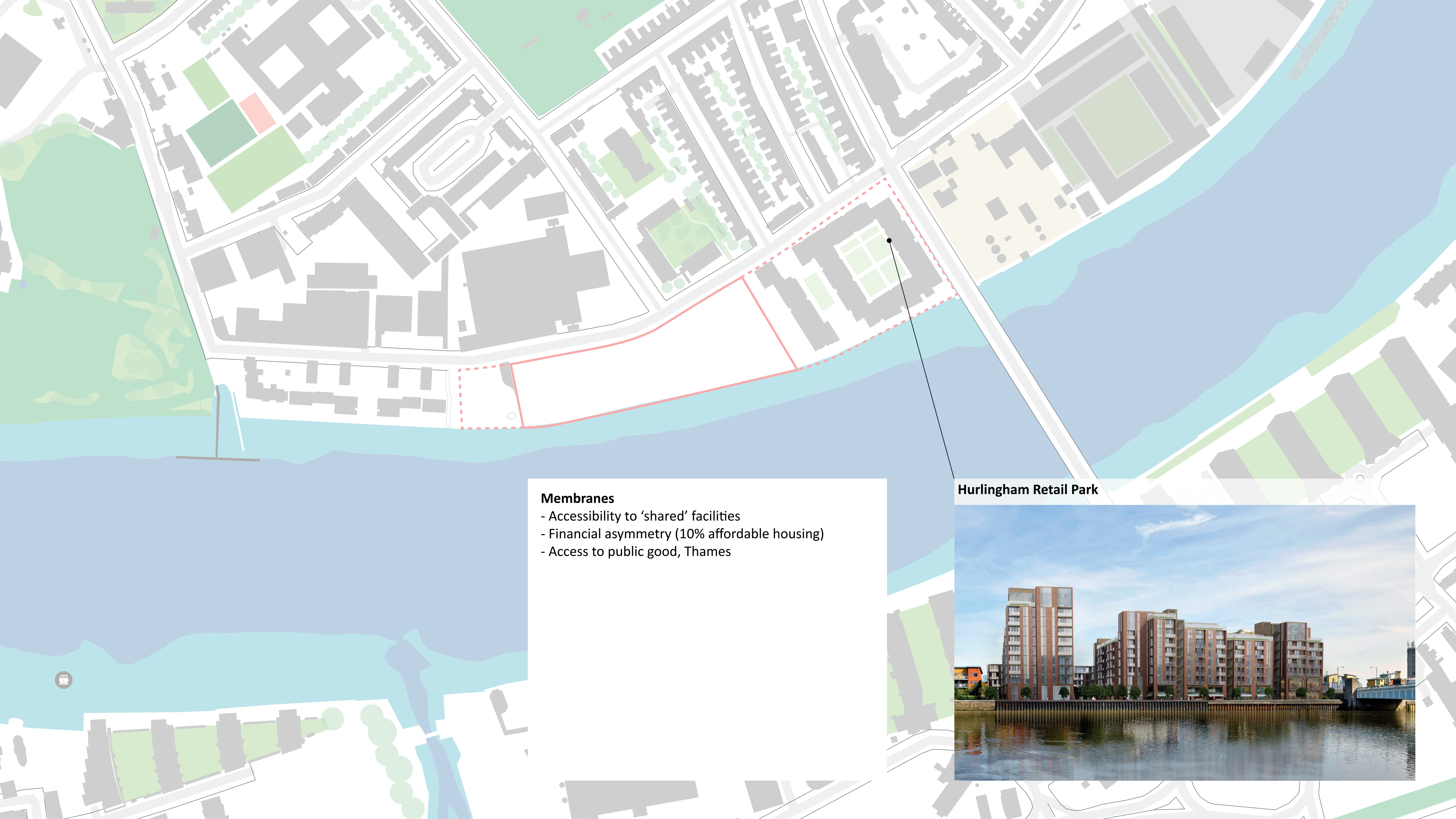


- Membranes**
- Knowledge of high-brow activity
 - Time waitlist
 - Financial
 - Visual
 - Social networking
 - Proximity
 - Walkability
 - Cyclability
 - Proximity
 - Public transport range
 - Accessibility by car



Hurlingham Retail Park





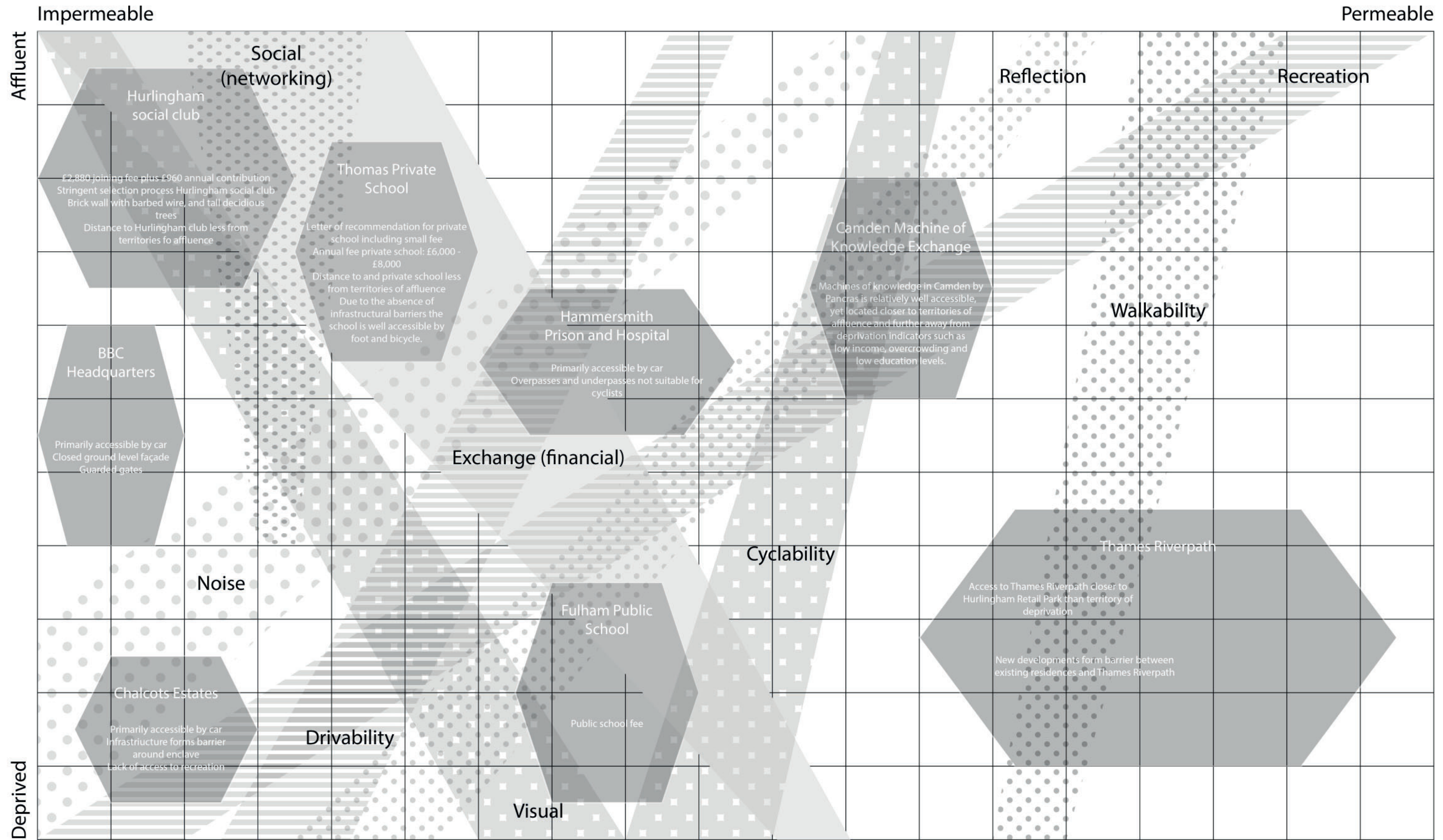
Membranes

- Accessibility to 'shared' facilities
- Financial asymmetry (10% affordable housing)
- Access to public good, Thames

Hurlingham Retail Park

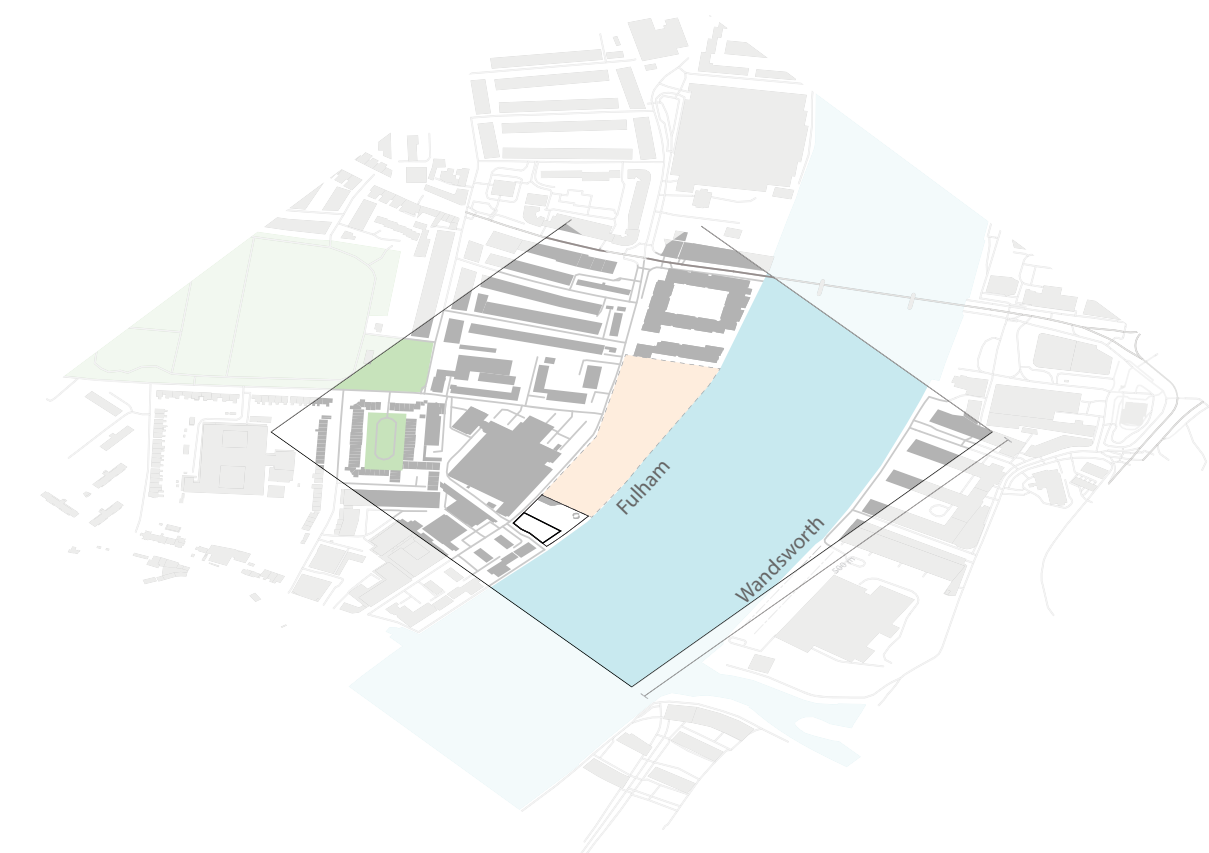


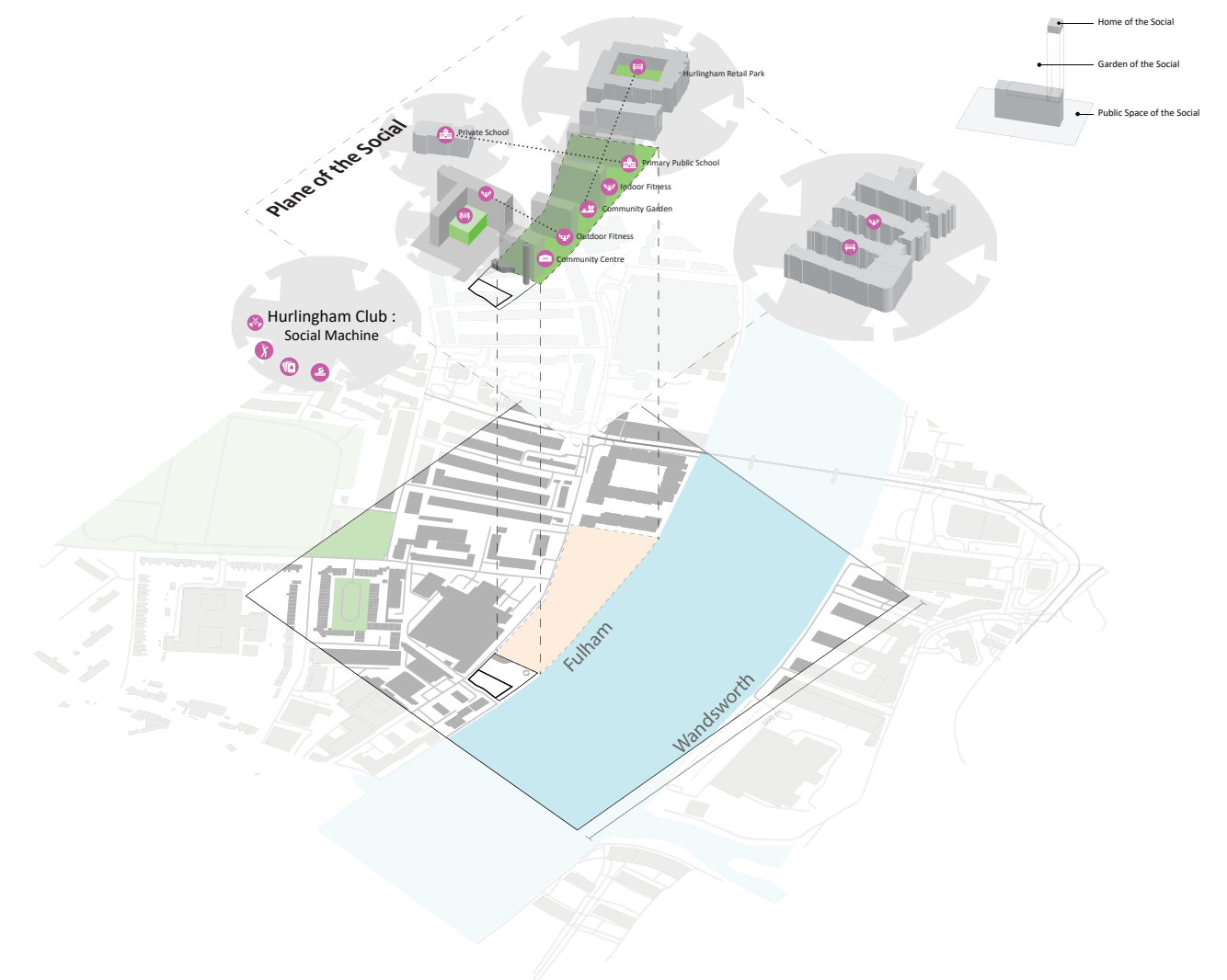
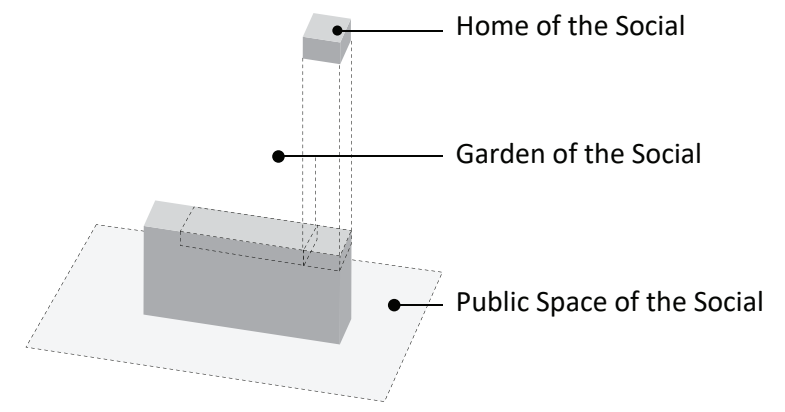
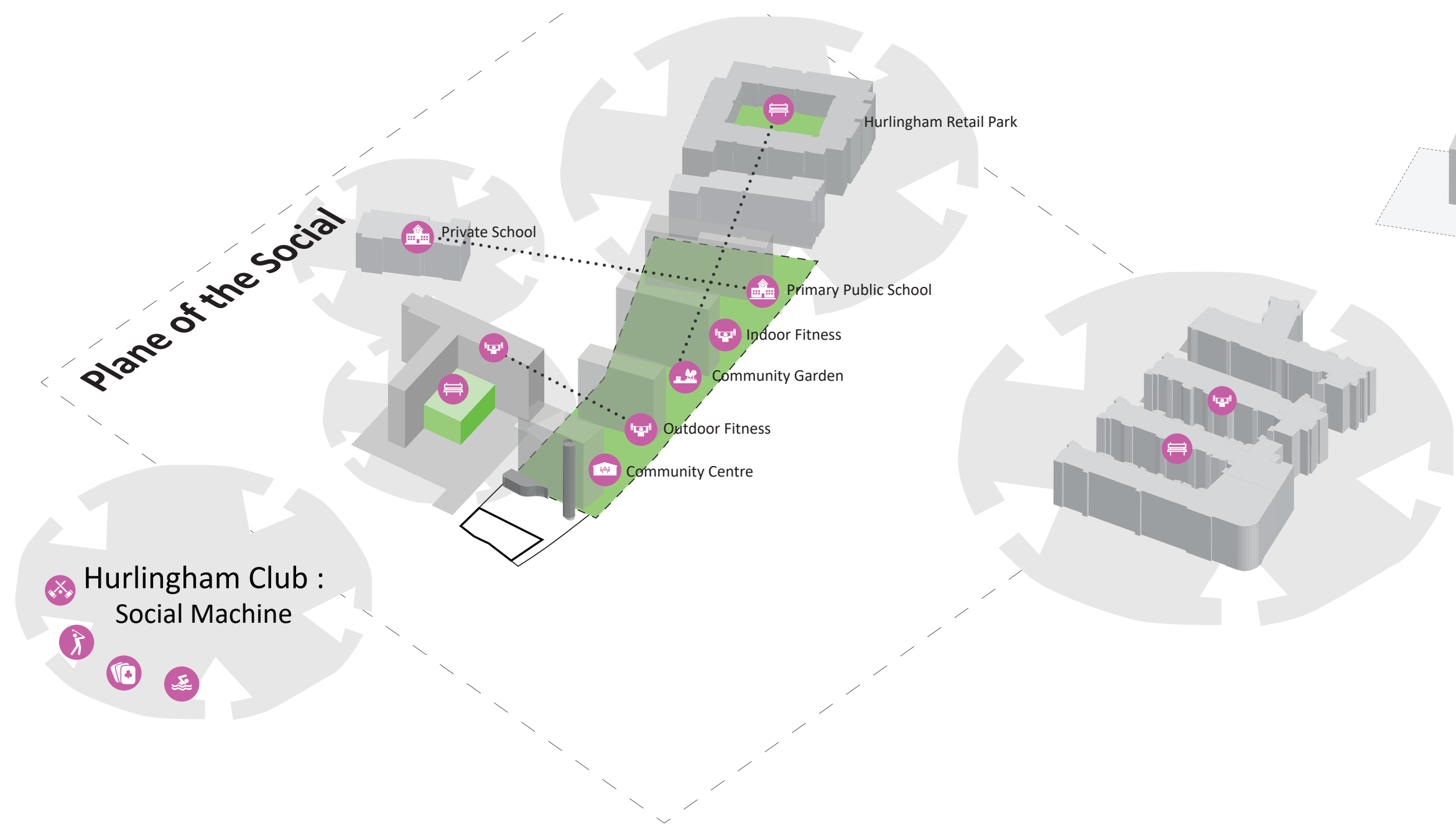
Membrane Asymmetry

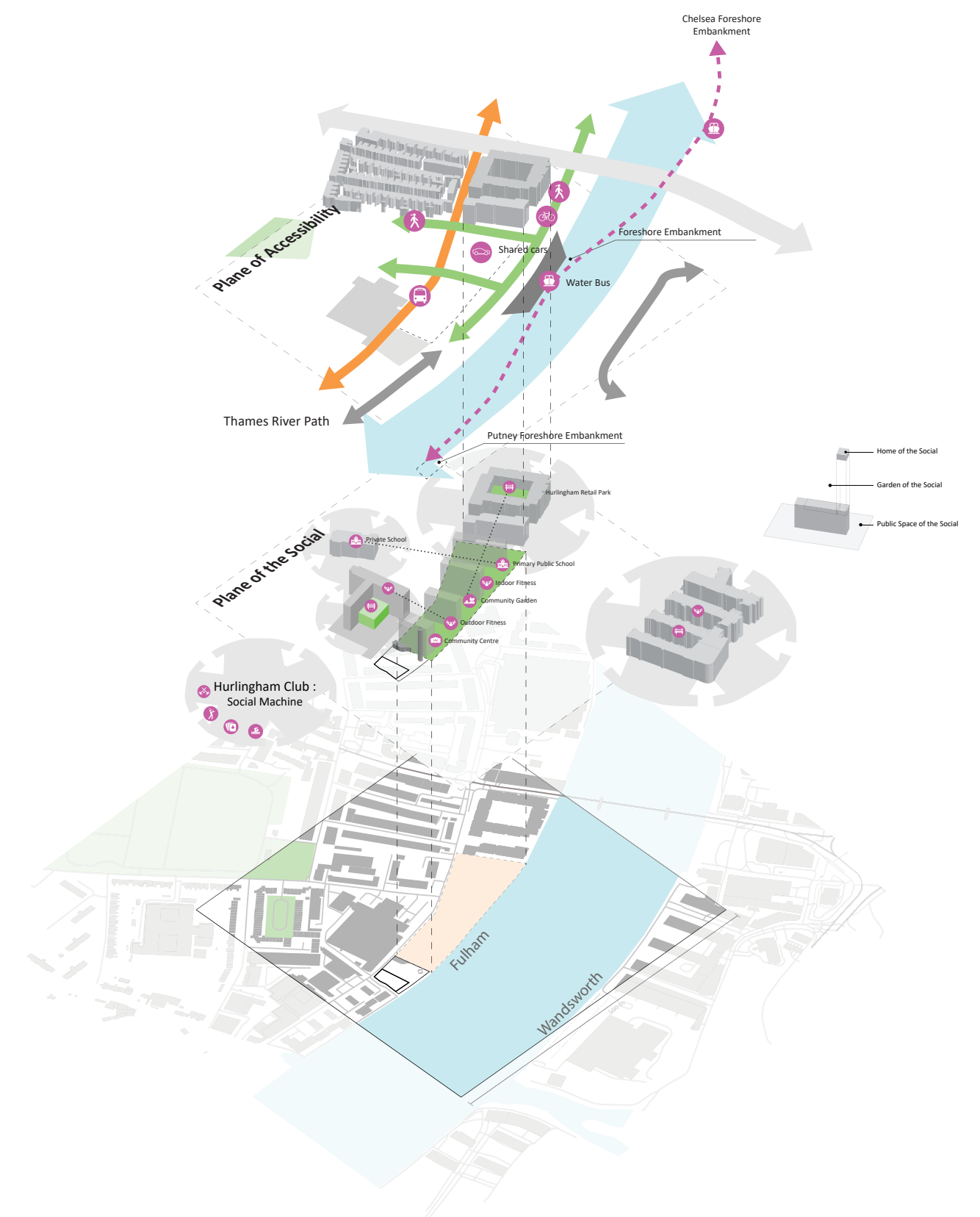
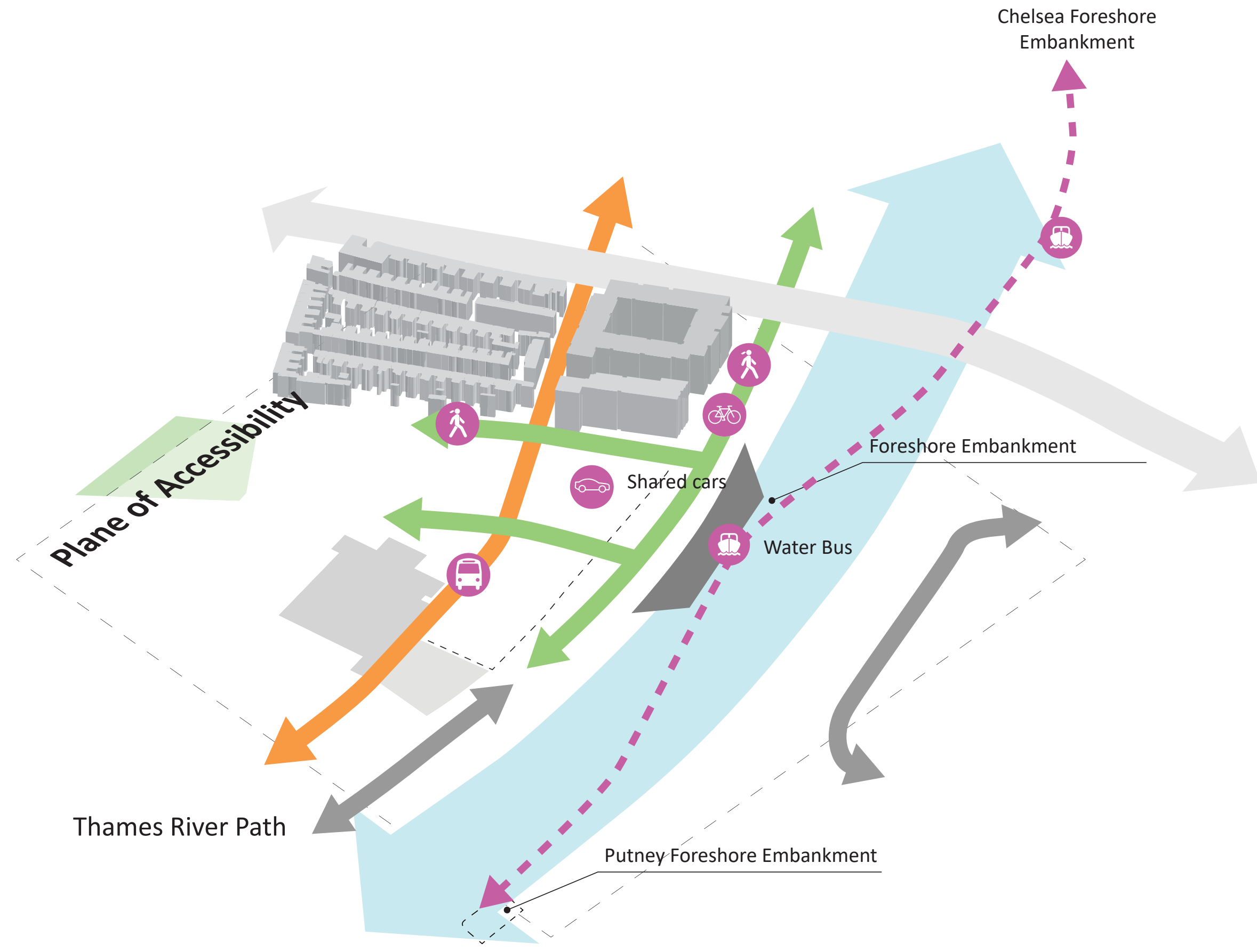


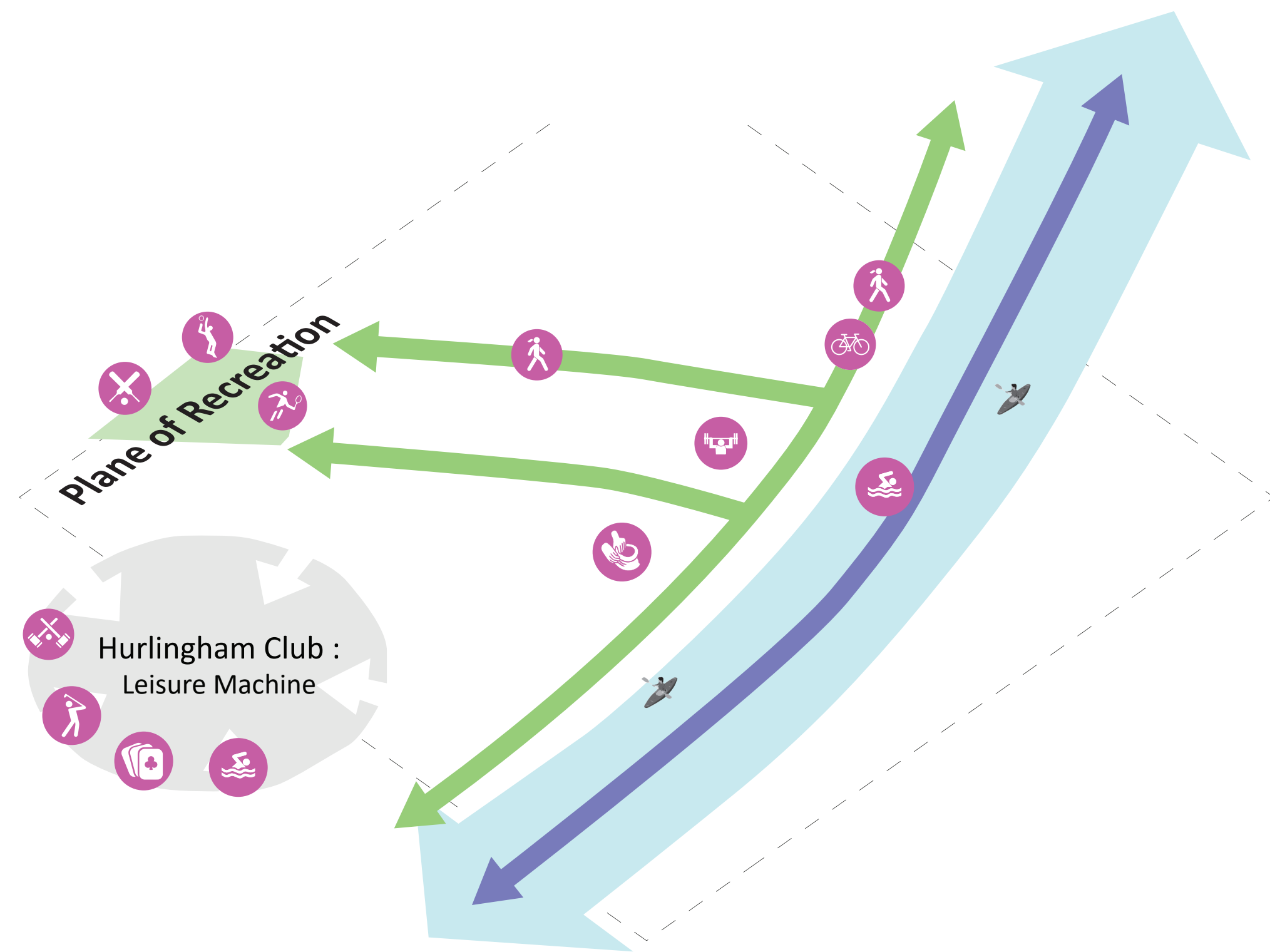
Middleground concept

The intent of the design is to address the existing dichotomy and polarity between territories of affluence and deprivation, to challenge asymmetric membranes that perpetuate deep-rooted disparities. The middleground acts as its own agent, its own territory, that provides continuous impulses challenging existing disparities.

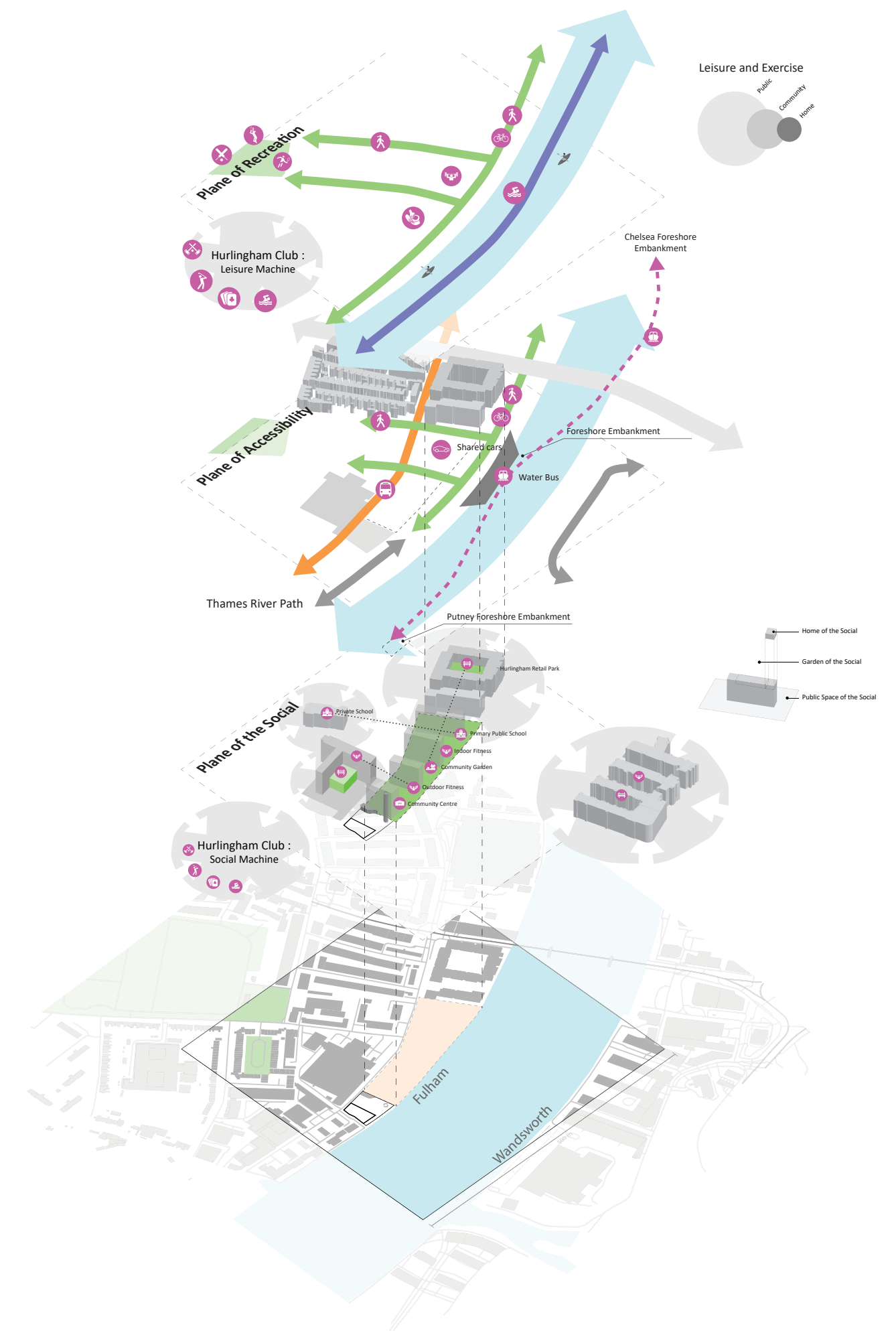
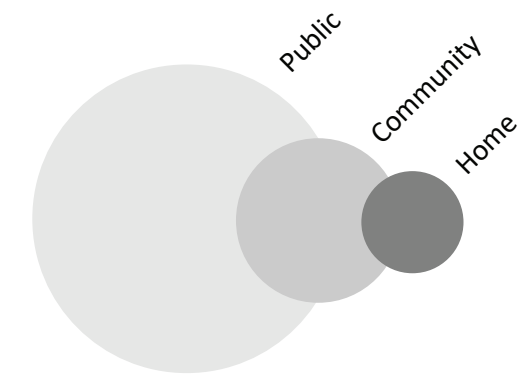


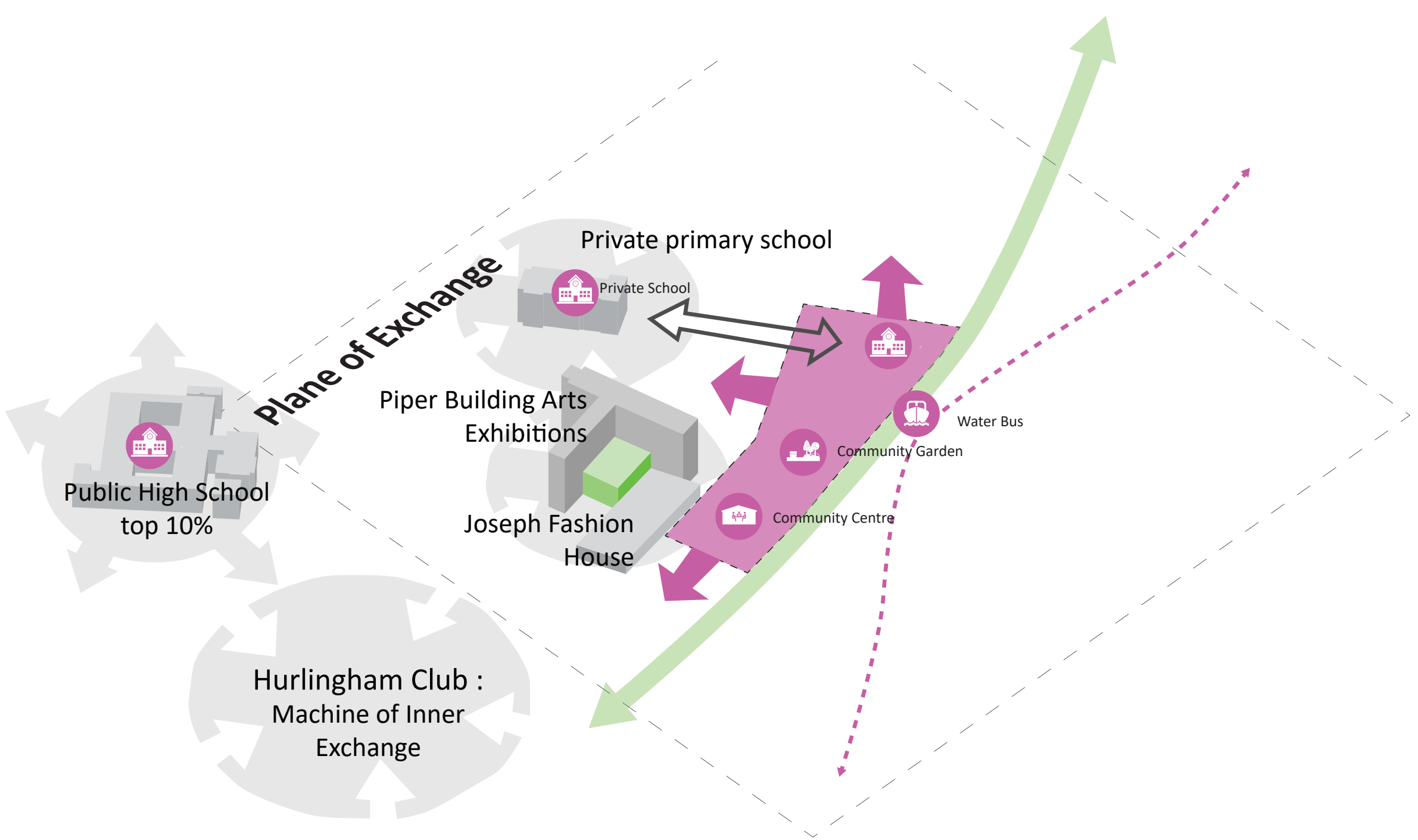




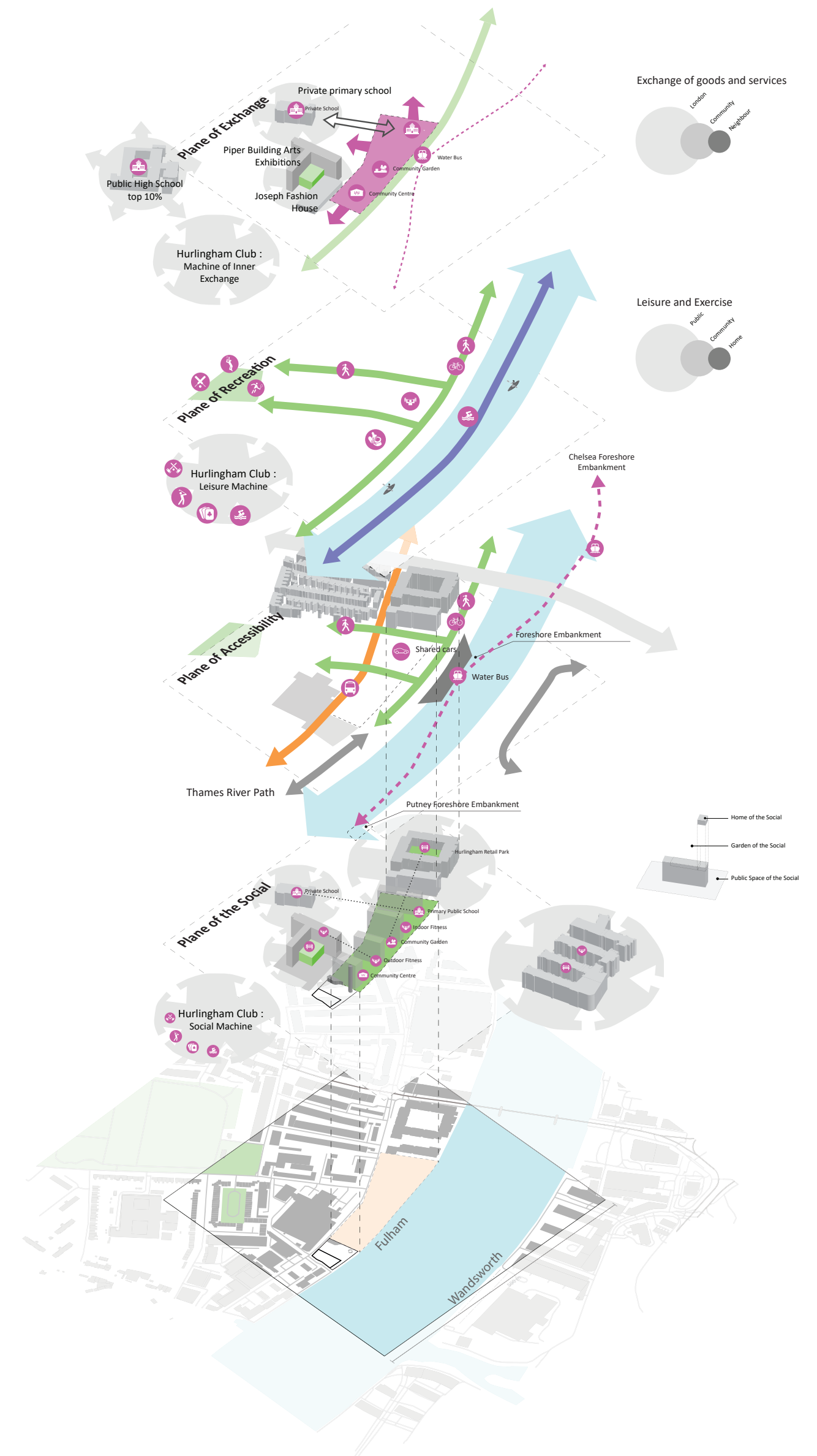
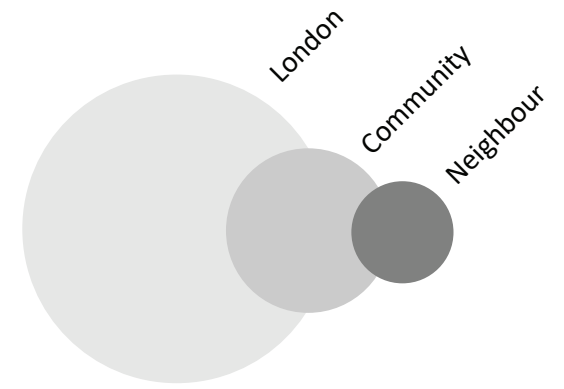


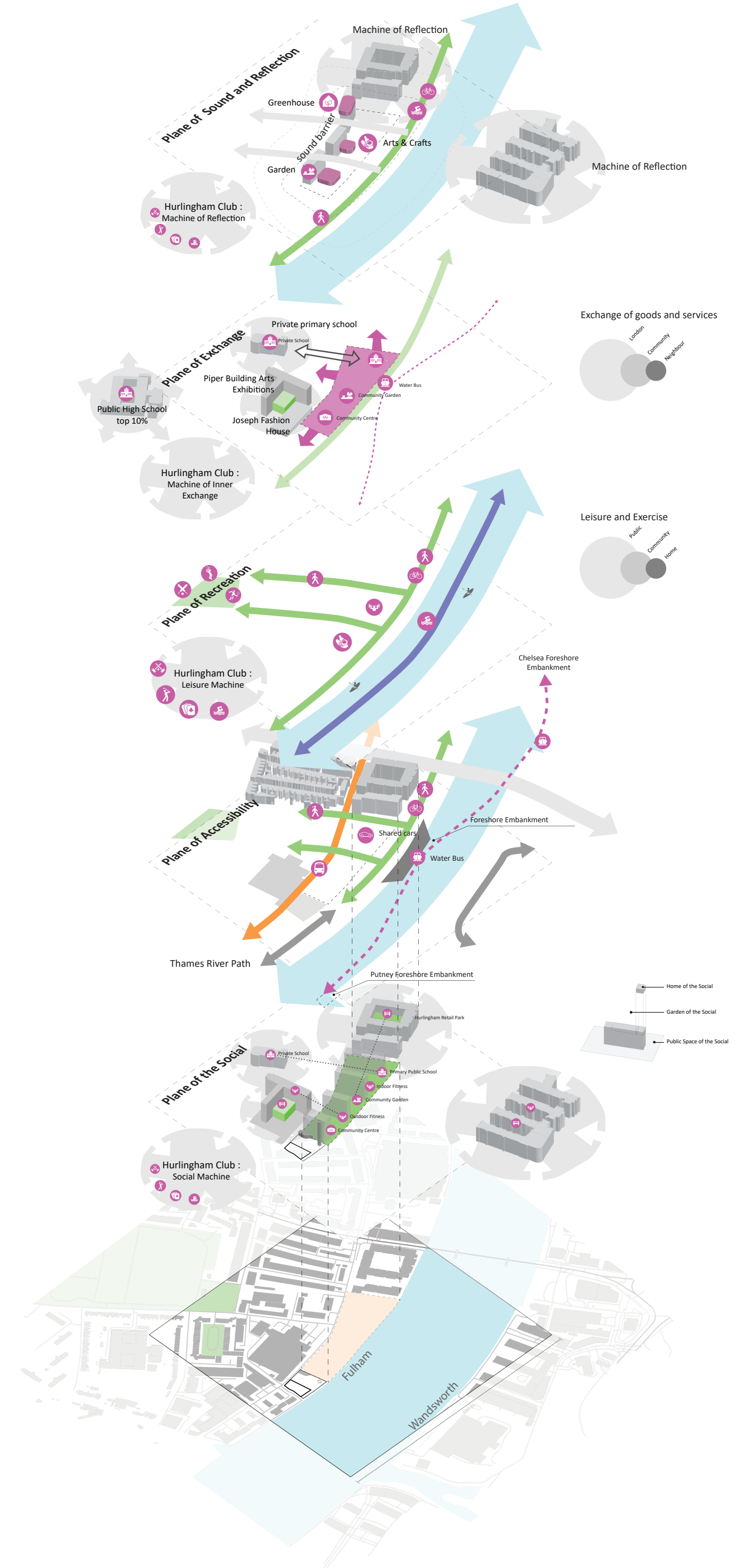
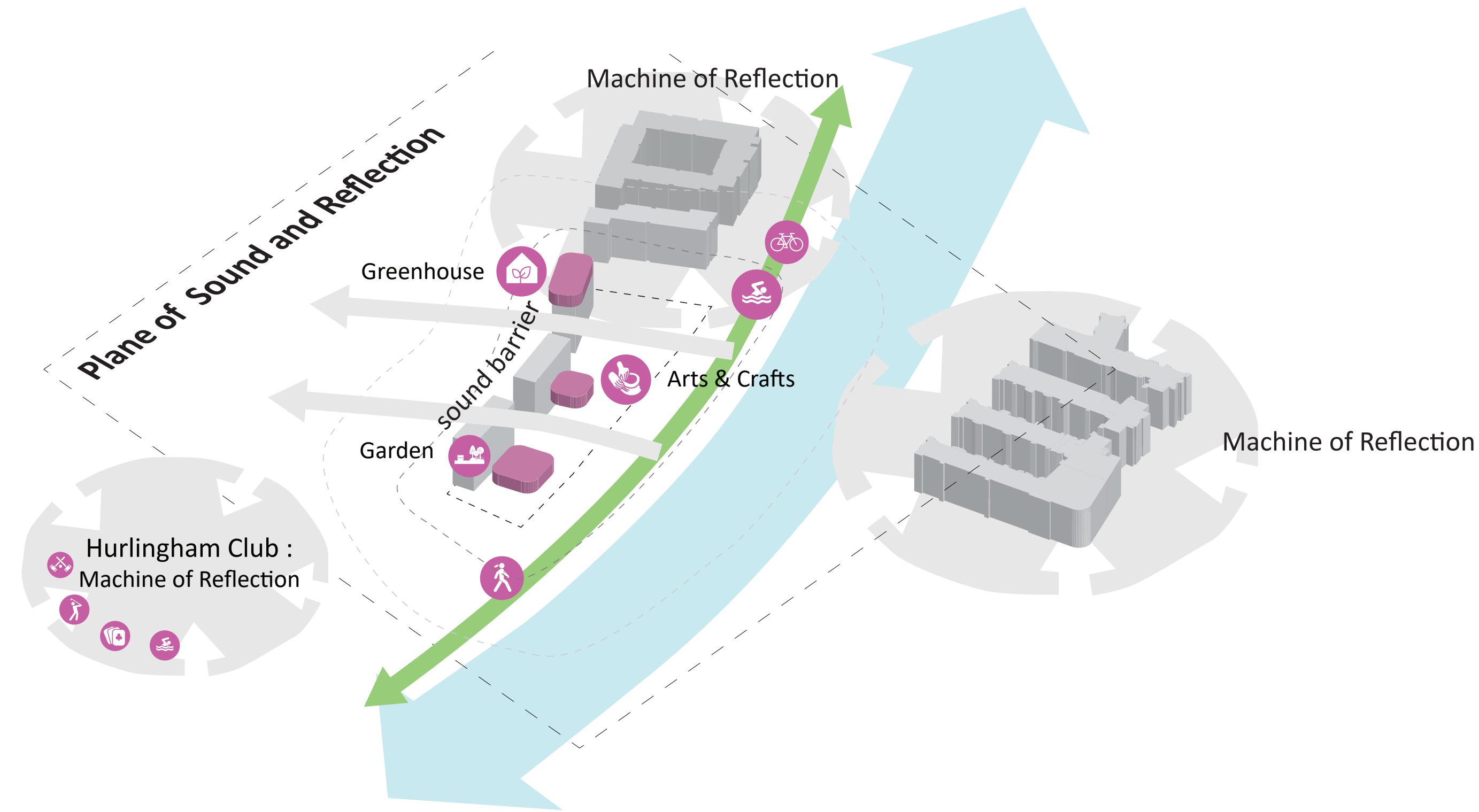
Leisure and Exercise





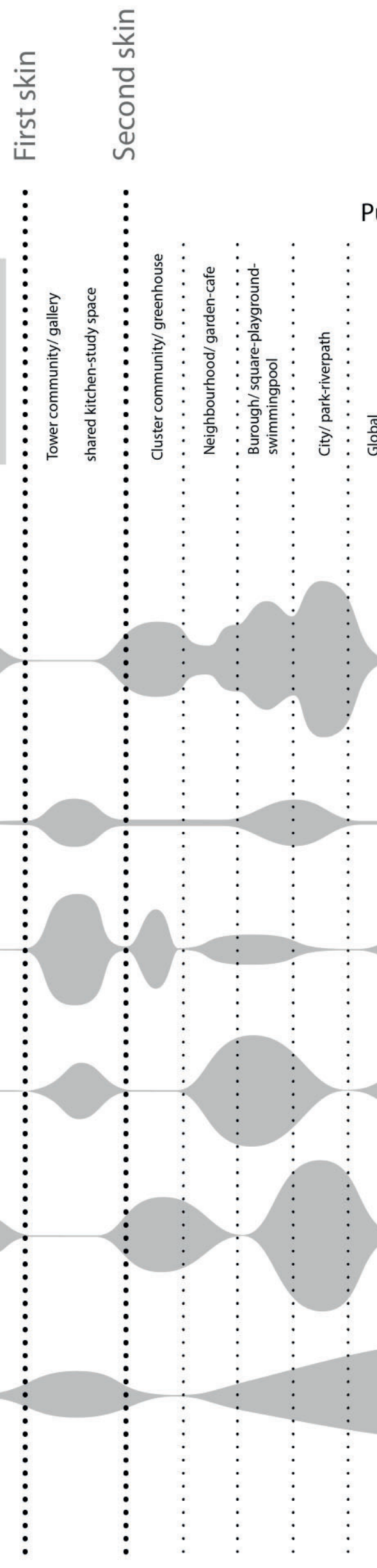
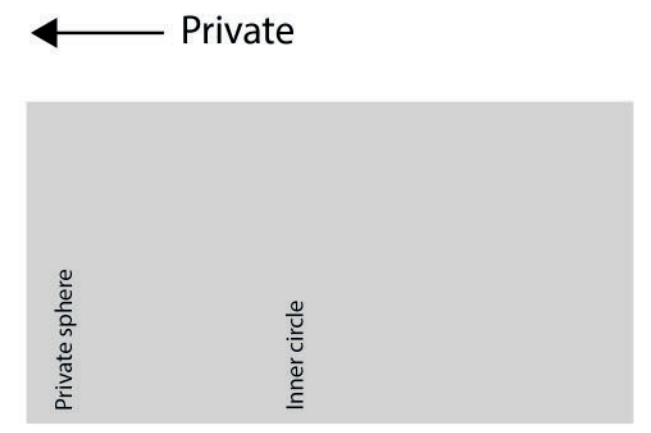
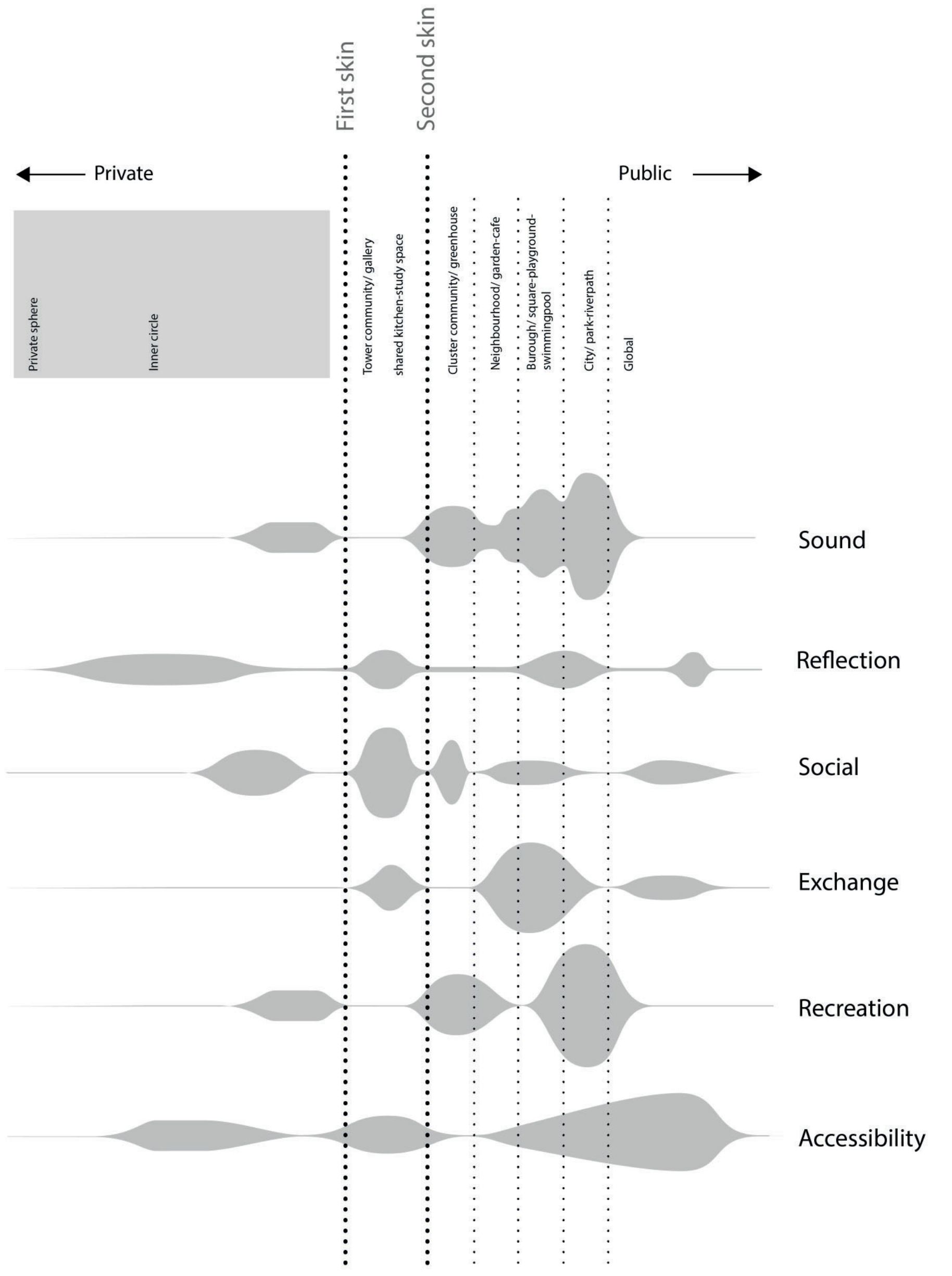
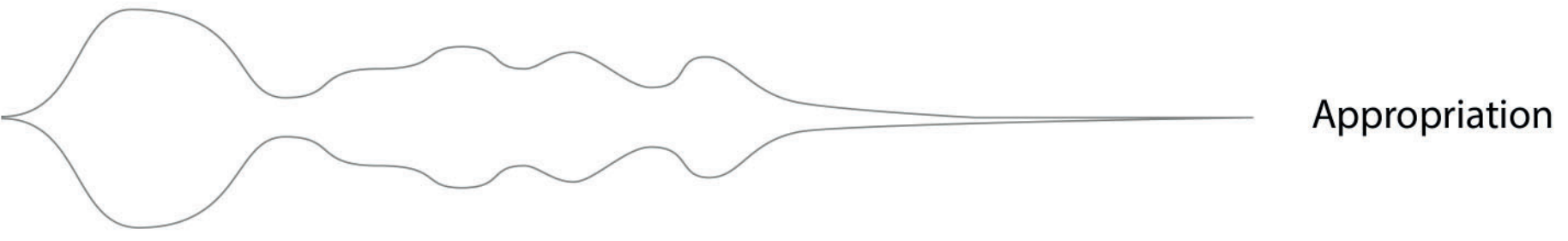
Exchange of goods and services





The middle is by no means an average; on the contrary, it is where things pick up speed. [It is] a transversal movement that sweeps one and the other away, a stream without beginning or end that undermines its banks and picks up speed in the middle.

(Deleuze & Guattari, 1987, p.46)



Appropriation

Sound

Reflection

Social

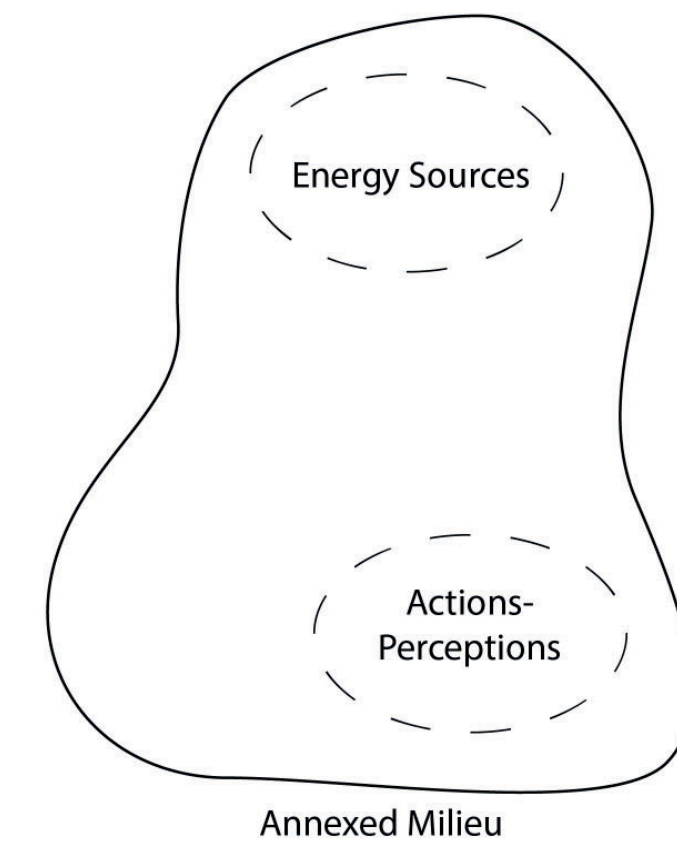
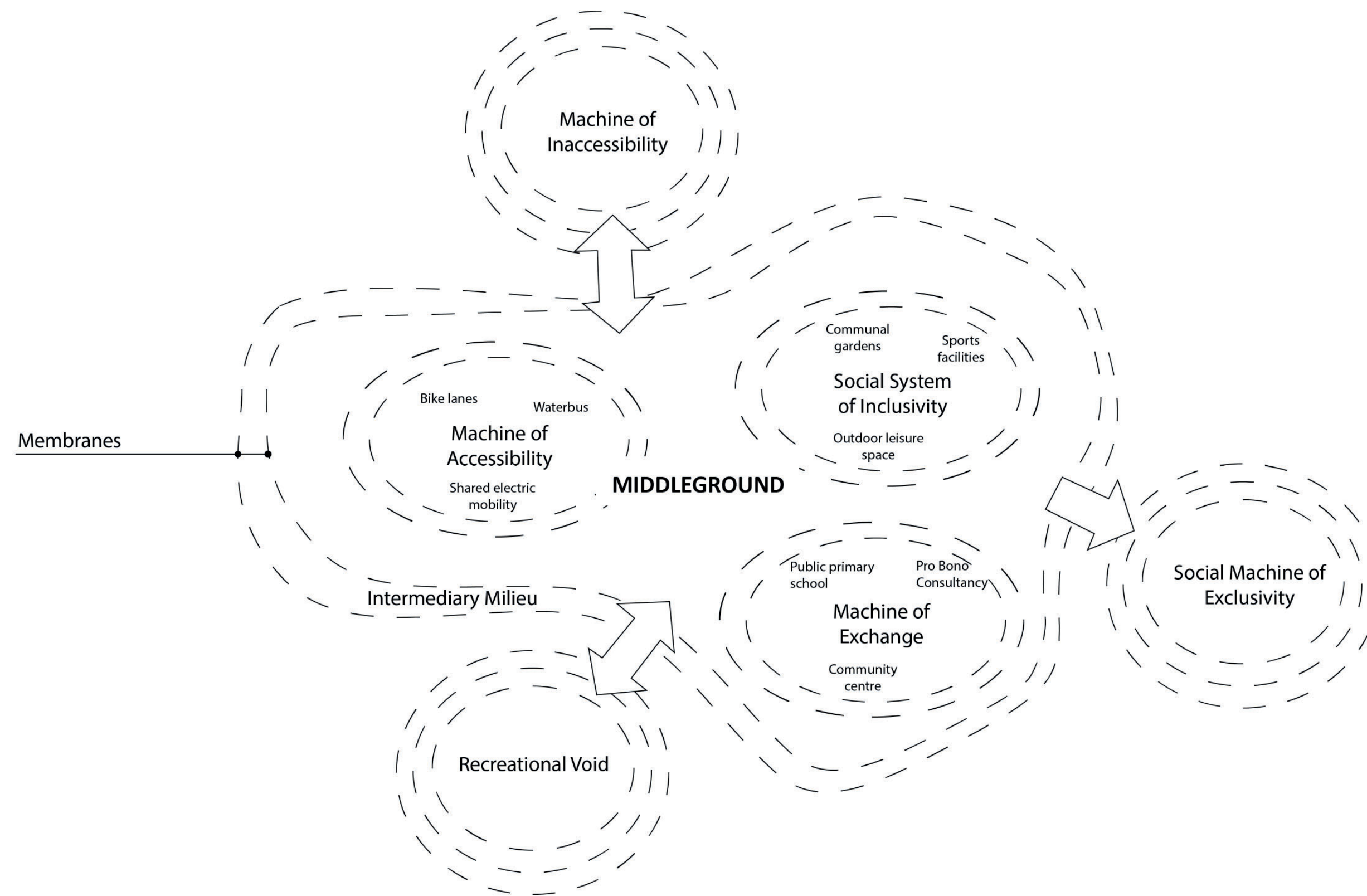
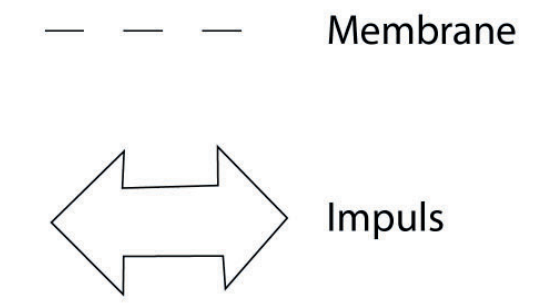
Exchange

Recreation

Accessibility

Midground Concept

Allow (social) mobility across strata through membrane permeability





Ventilation building

Land available for development

Noise enclosure

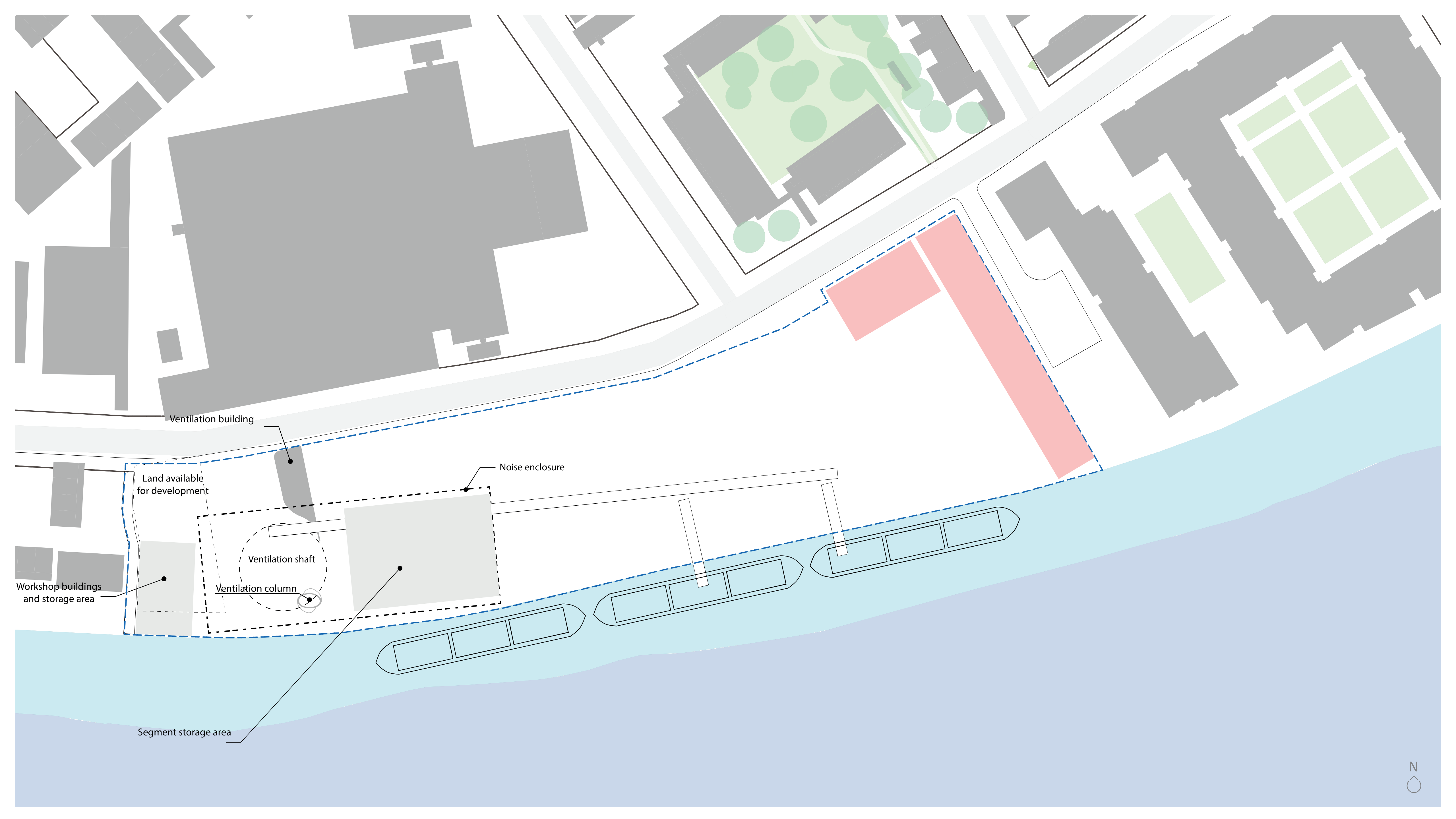
Workshop buildings and storage area

Ventilation shaft

Ventilation column

Segment storage area





Ventilation building

Land available for development

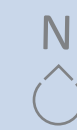
Noise enclosure

Ventilation shaft

Ventilation column

Workshop buildings and storage area

Segment storage area





Social

Accessibility

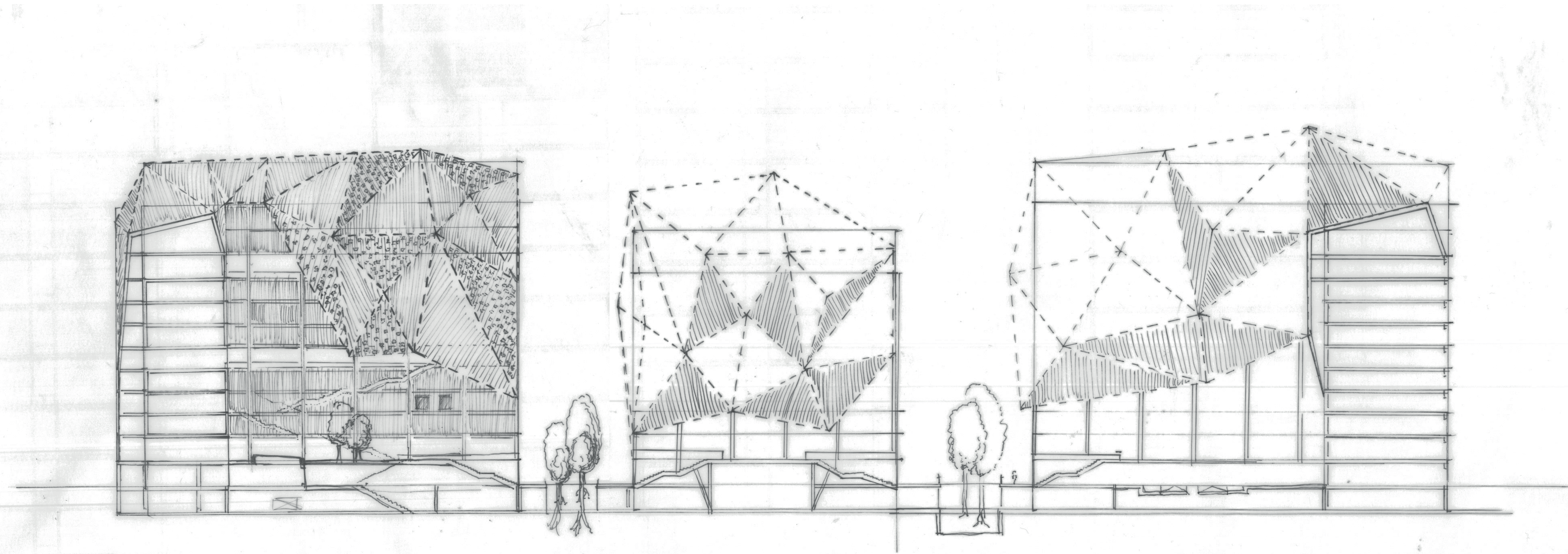
Recreation

Exchange

Sound

Reflection





Social

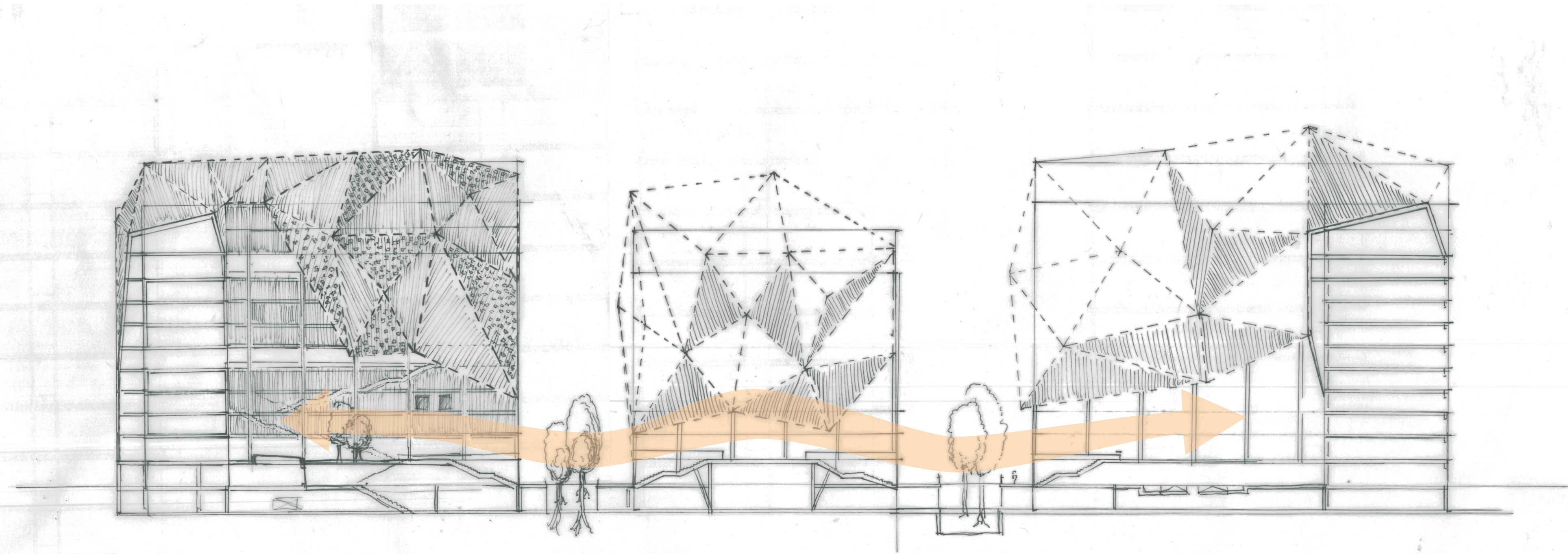
Accessibility

Recreation

Exchange

Sound

Reflection



Social

Accessibility

Recreation

Exchange

Sound

Reflection



Social

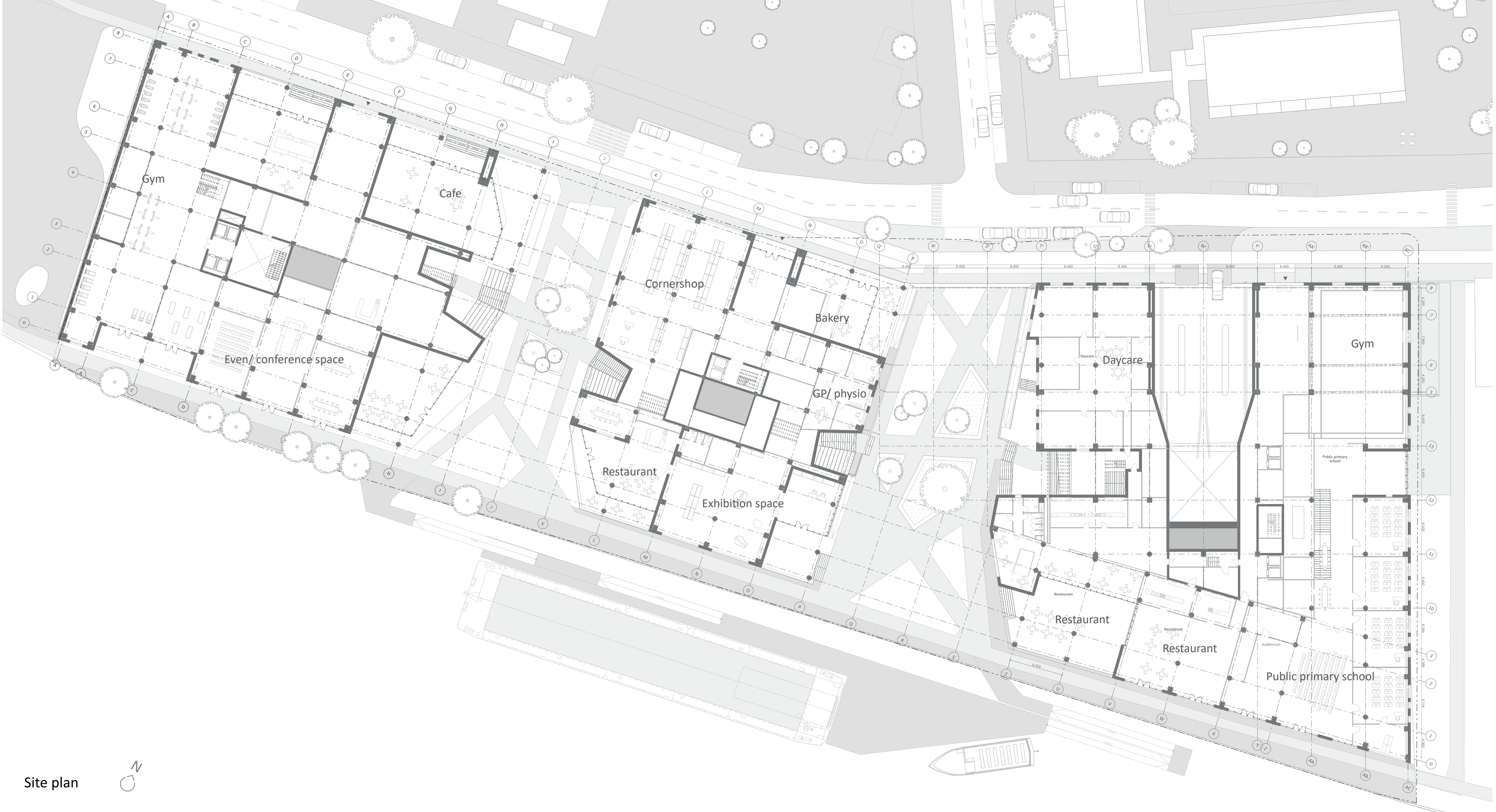
Accessibility

Recreation

Exchange

Sound

Reflection



Site plan

Social

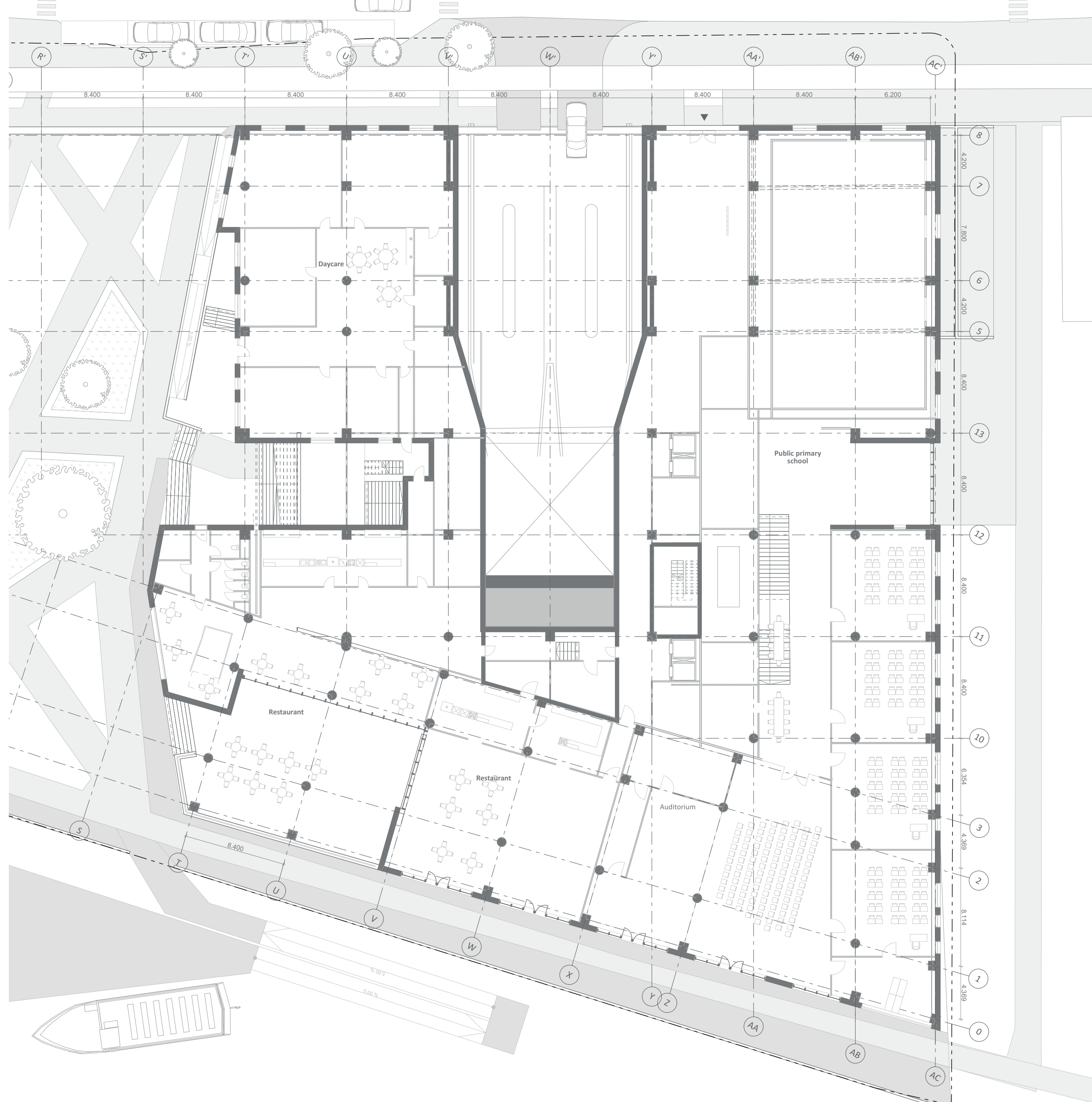
Accessibility

Recreation

Exchange

Sound

Reflection



Ground floor



Social

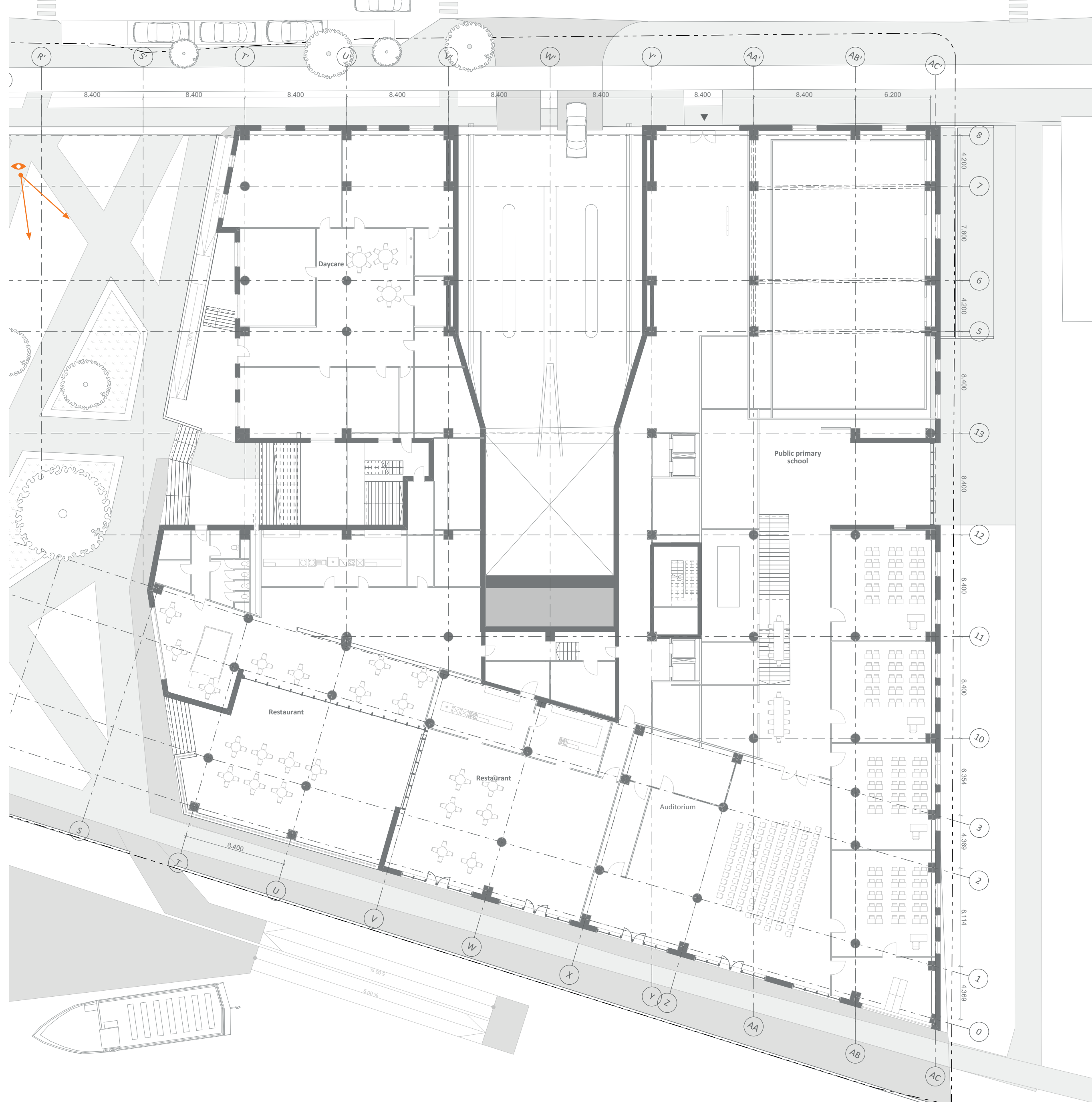
Accessibility

Recreation

Exchange

Sound

Reflection



Ground floor



Social

Accessibility

Recreation

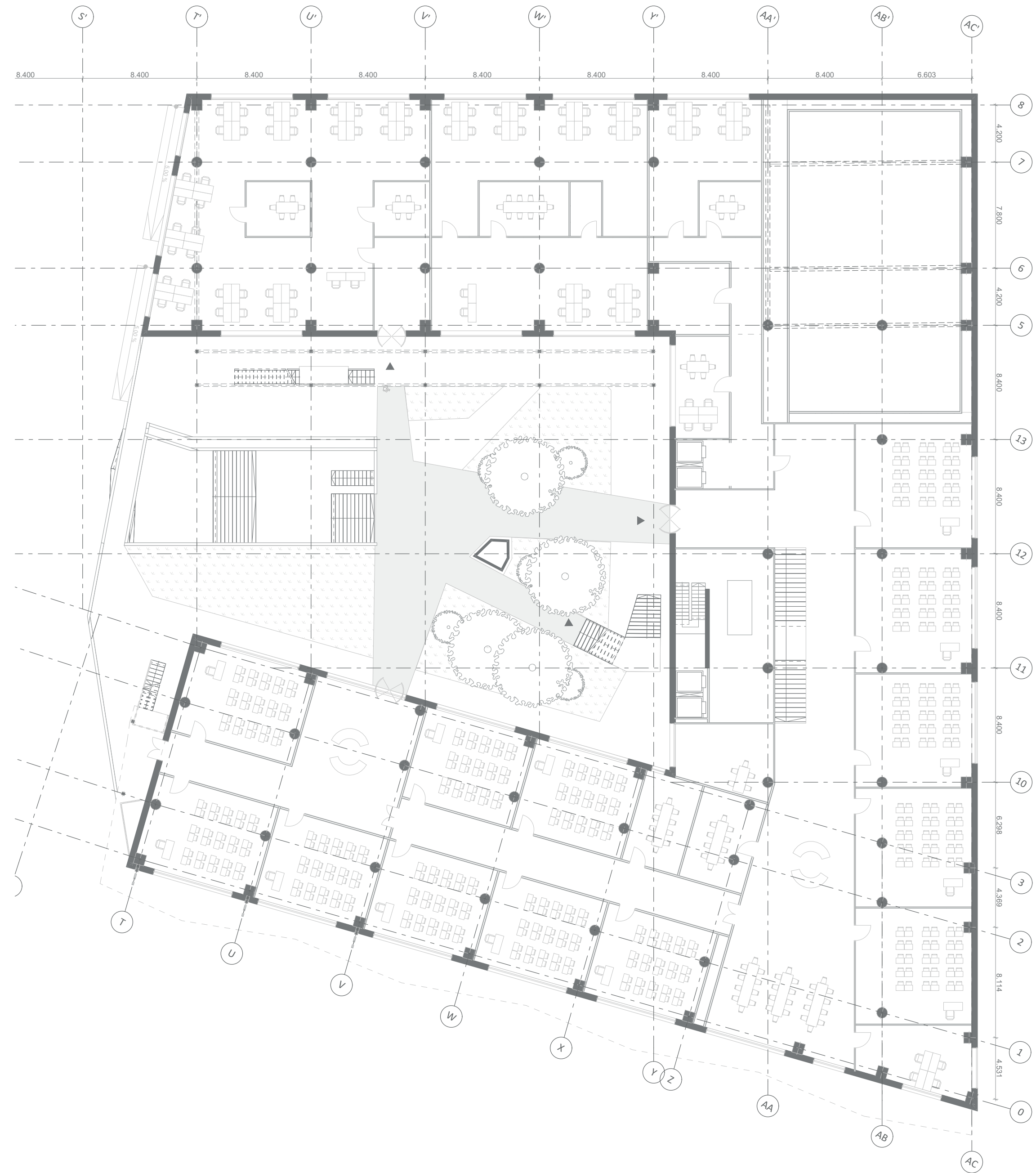
Exchange

Sound

Reflection







1st floor



Social

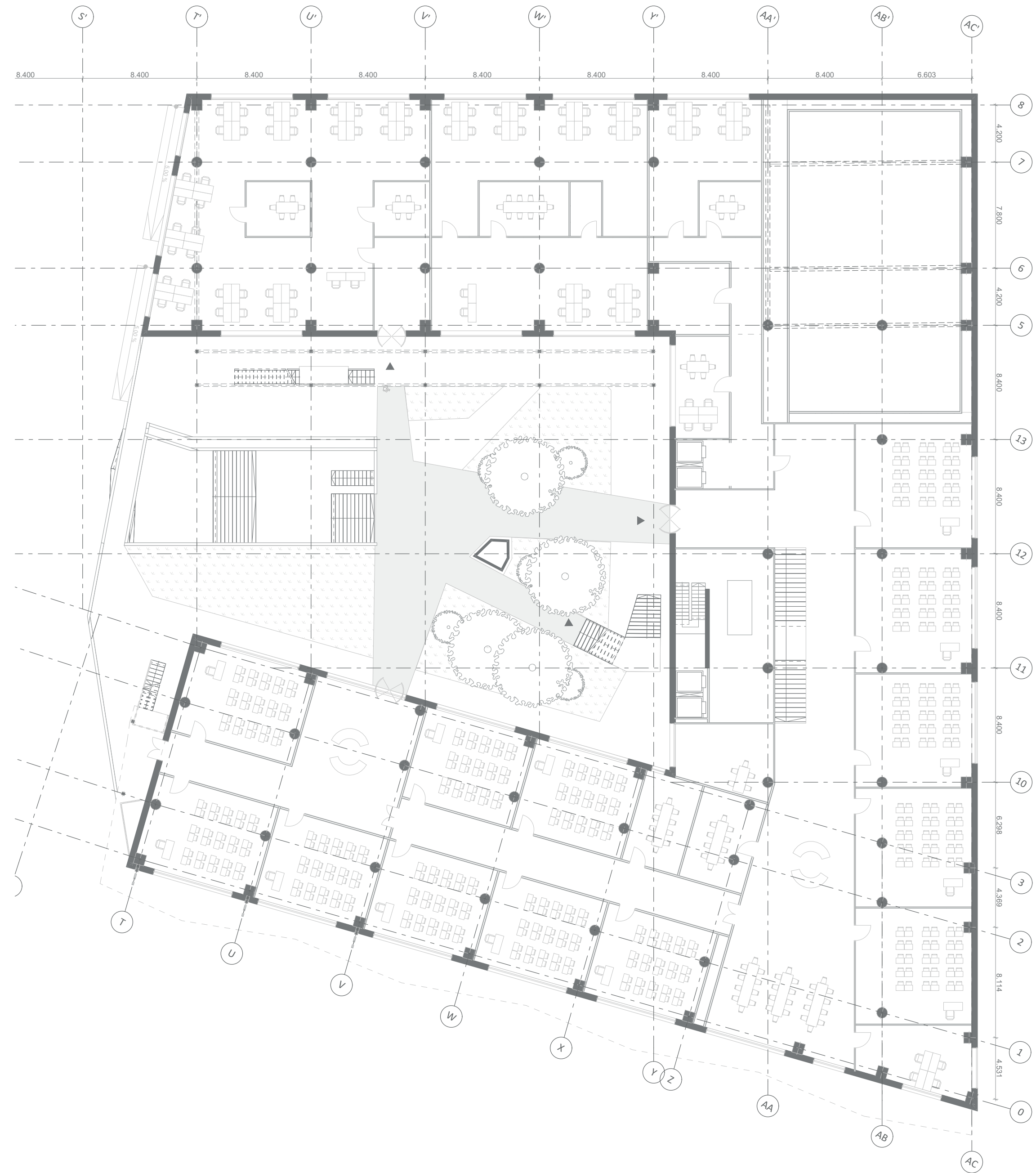
Accessibility

Recreation

Exchange

Sound

Reflection



1st floor



Social

Accessibility

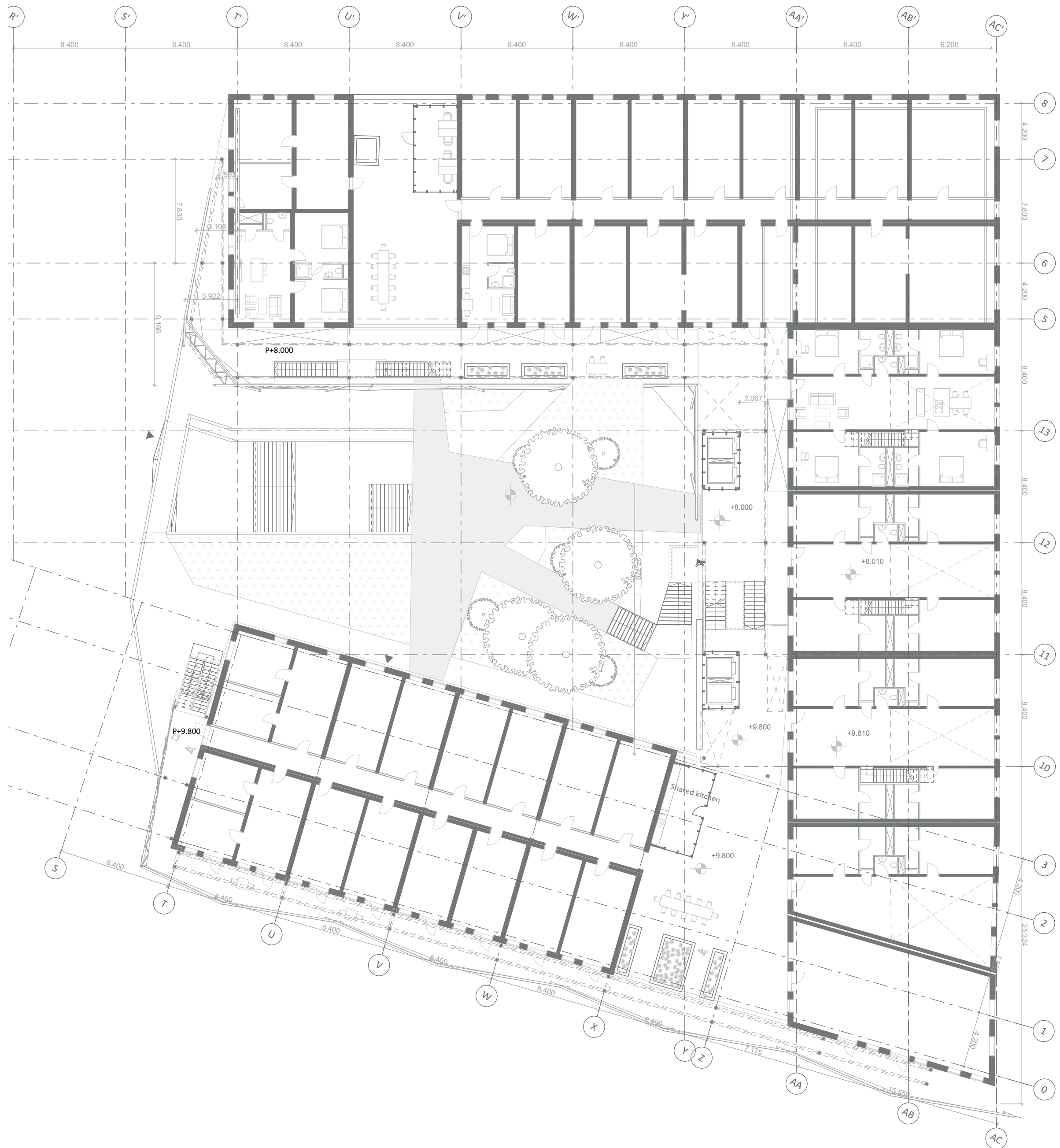
Recreation

Exchange

Sound

Reflection





2nd floor



Social

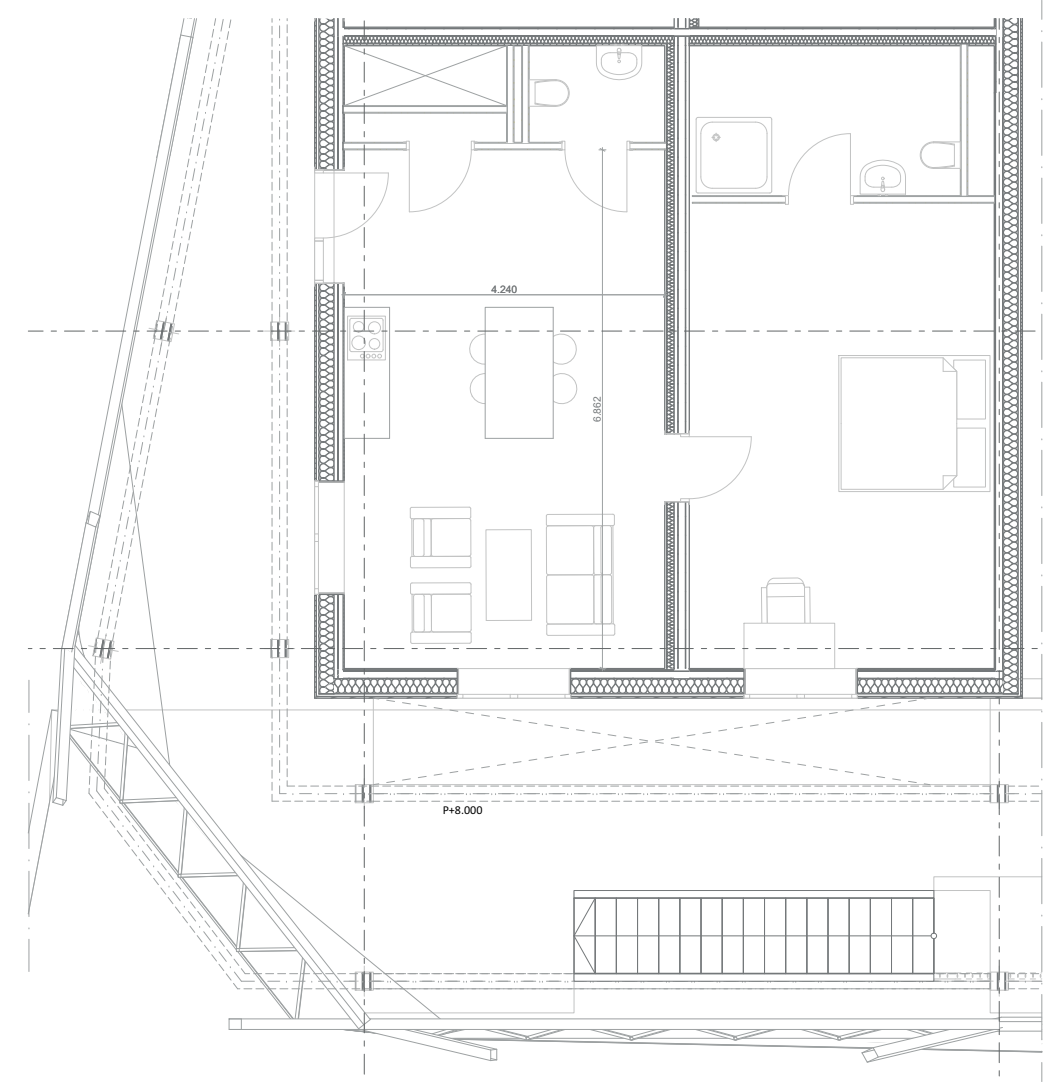
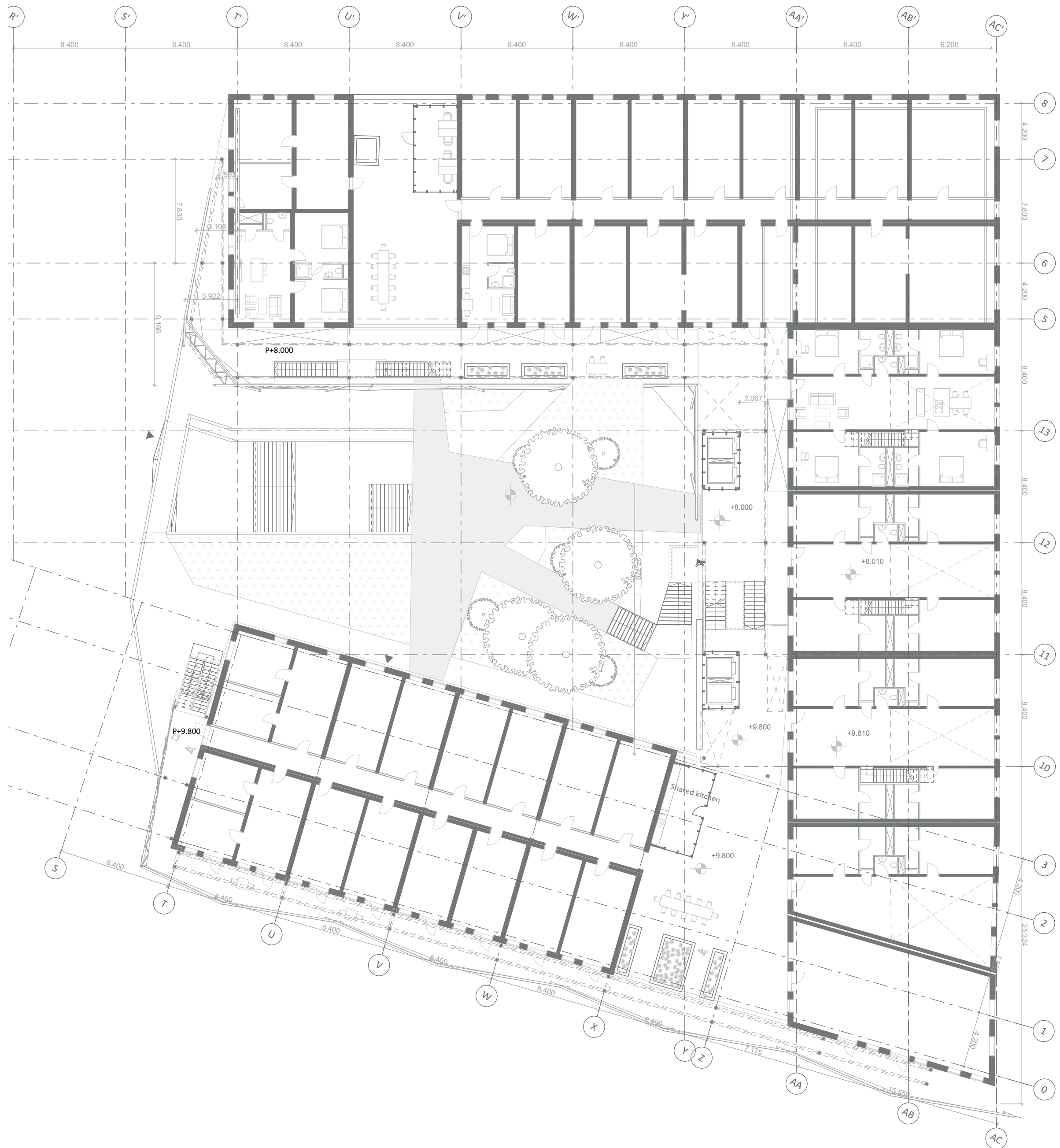
Accessibility

Recreation

Exchange

Sound

Reflection



2nd floor



Social

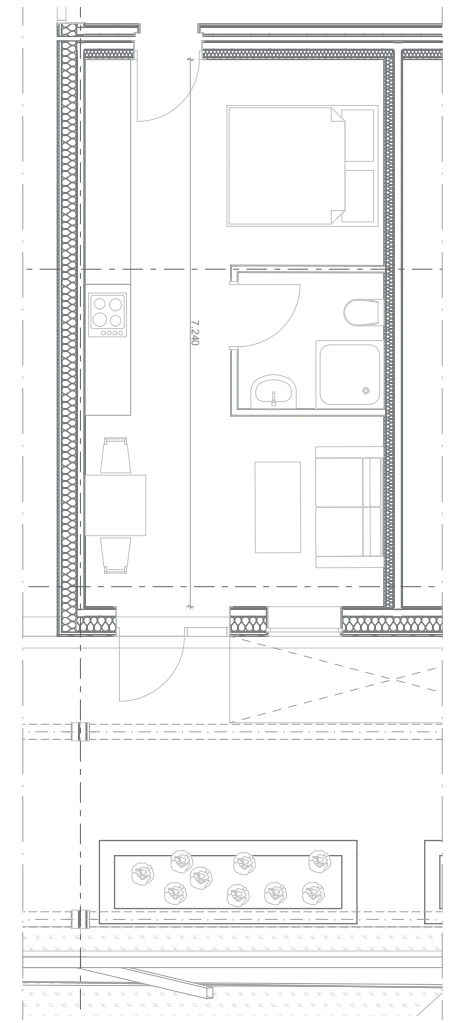
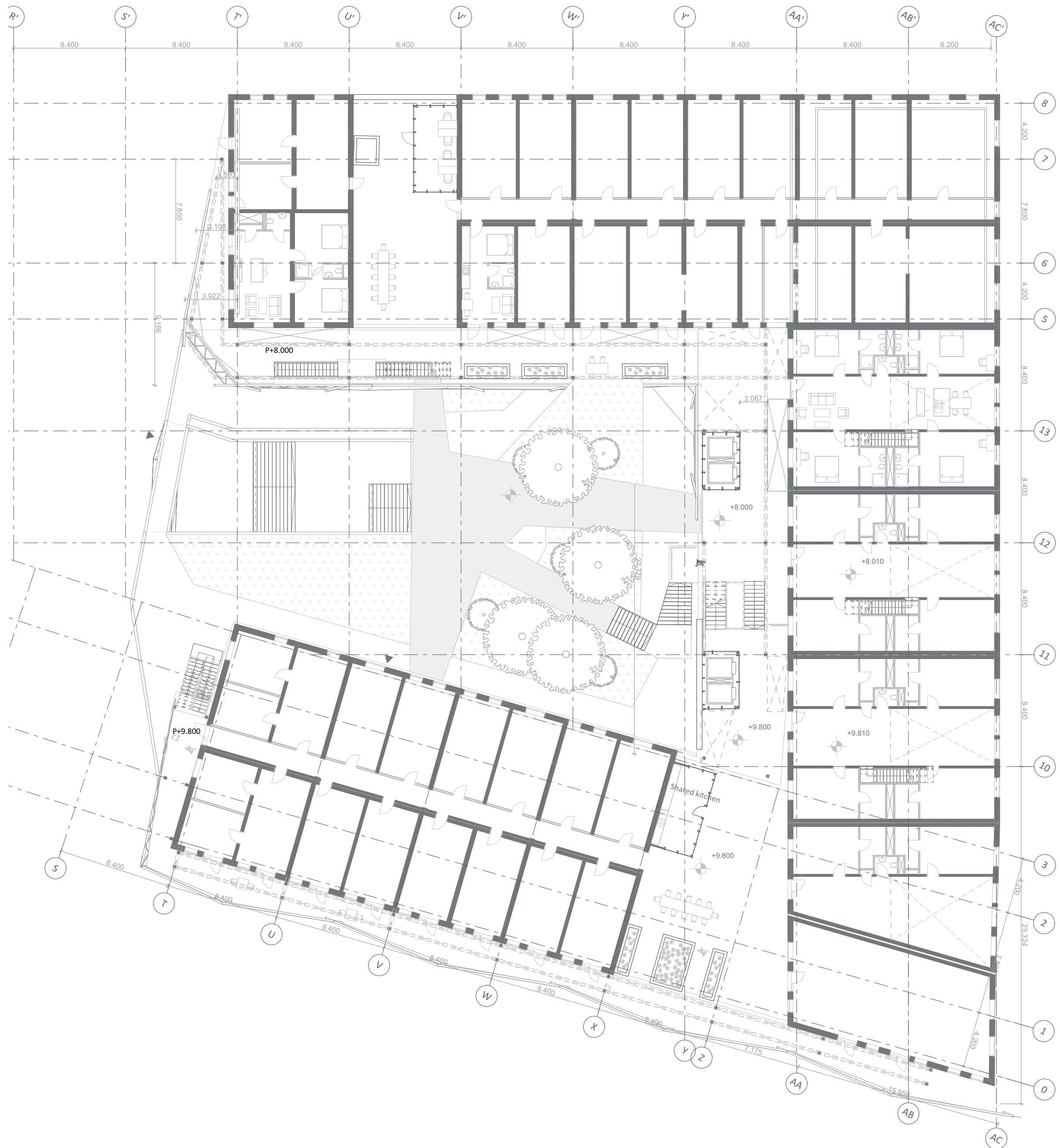
Accessibility

Recreation

Exchange

Sound

Reflection



2nd floor



Social

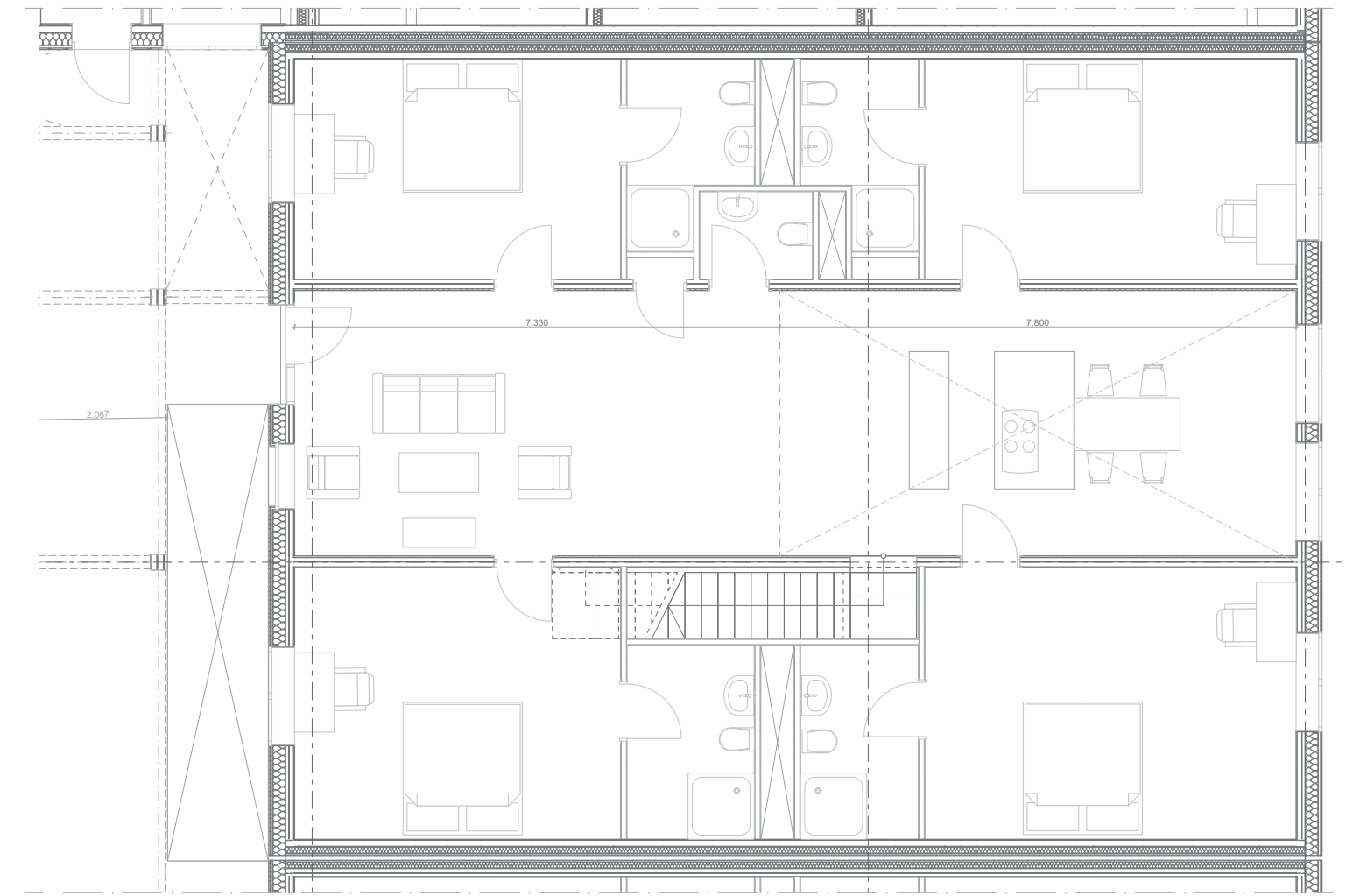
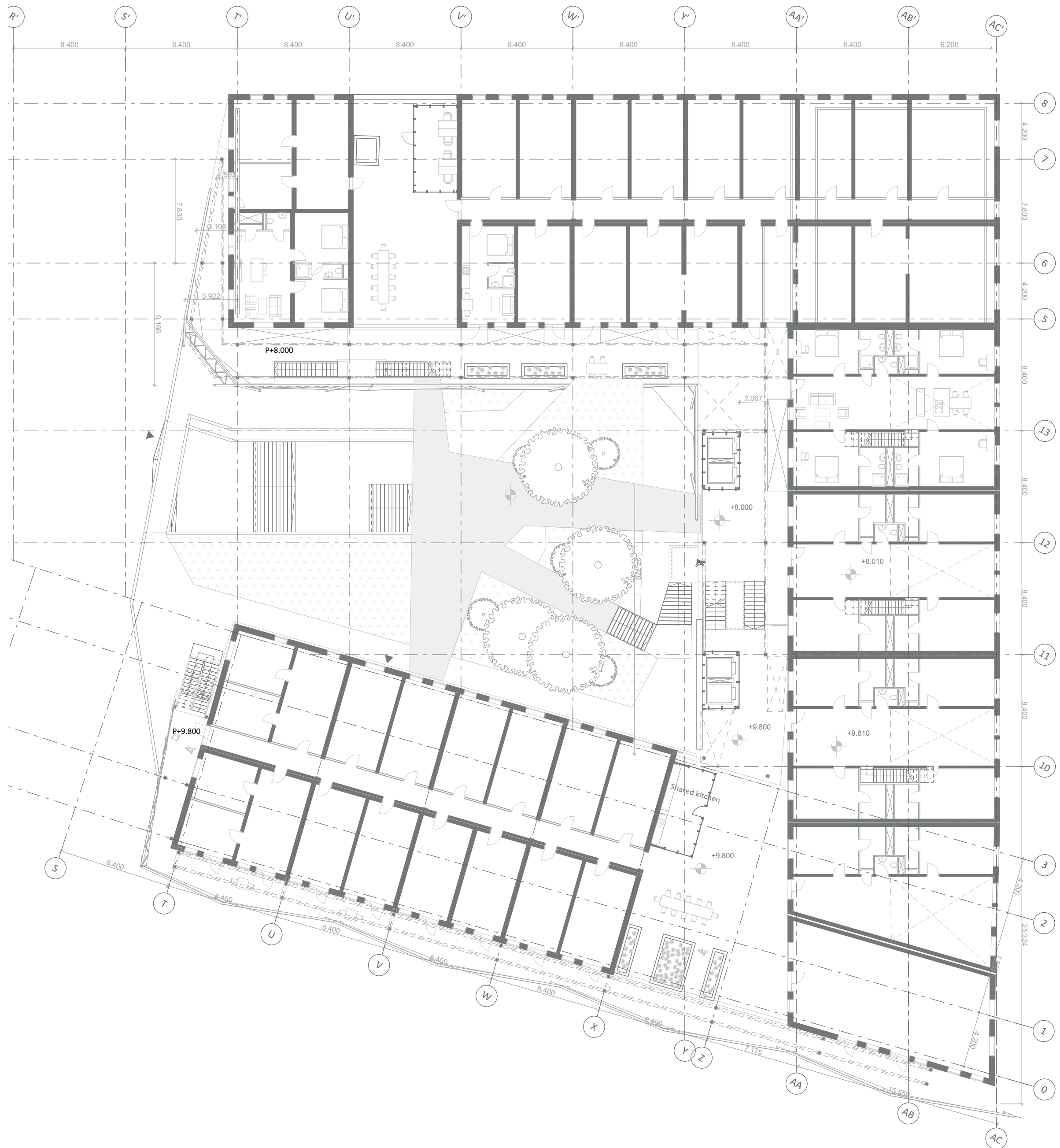
Accessibility

Recreation

Exchange

Sound

Reflection



2nd floor



Social

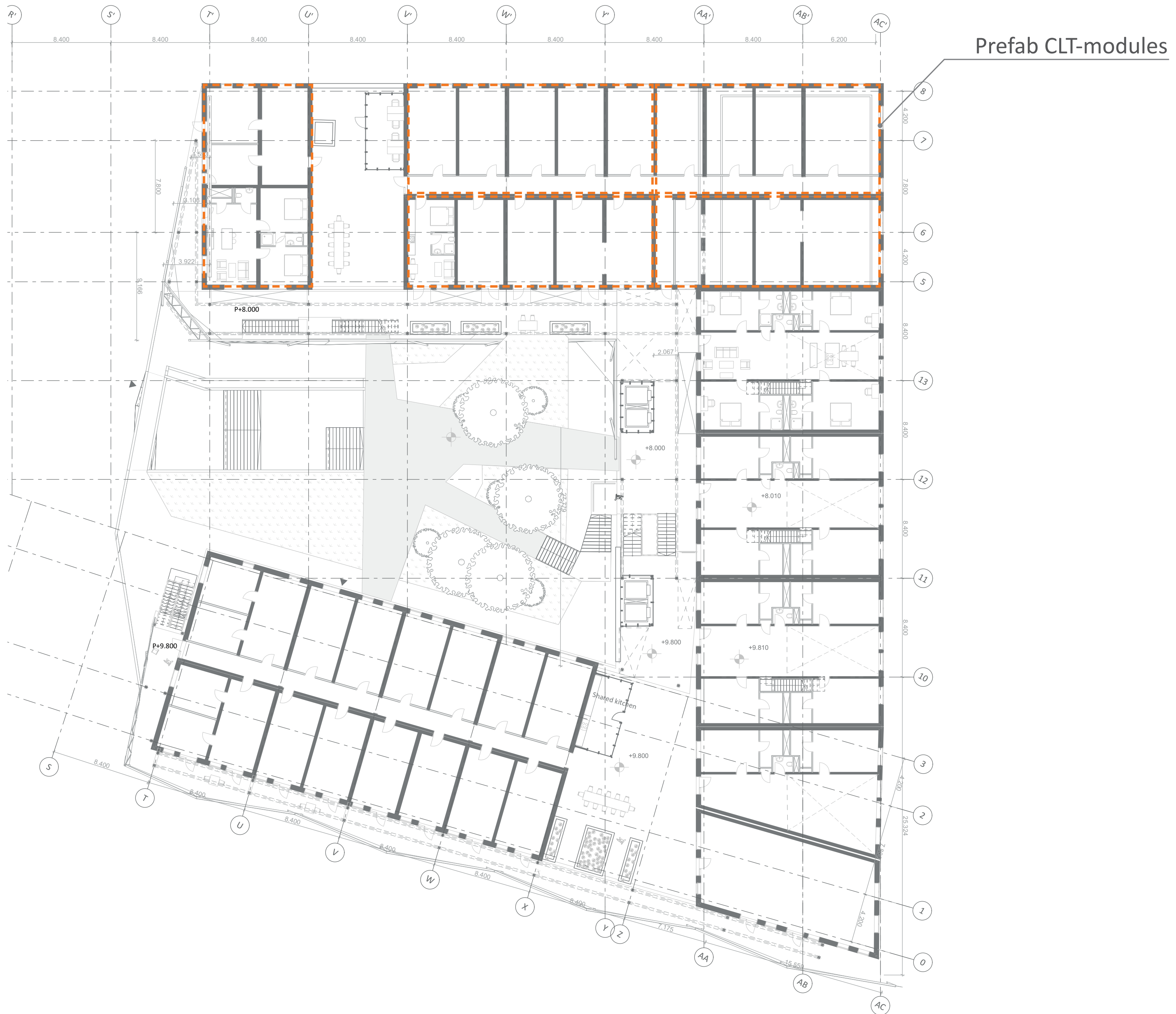
Accessibility

Recreation

Exchange

Sound

Reflection



2nd floor



Social

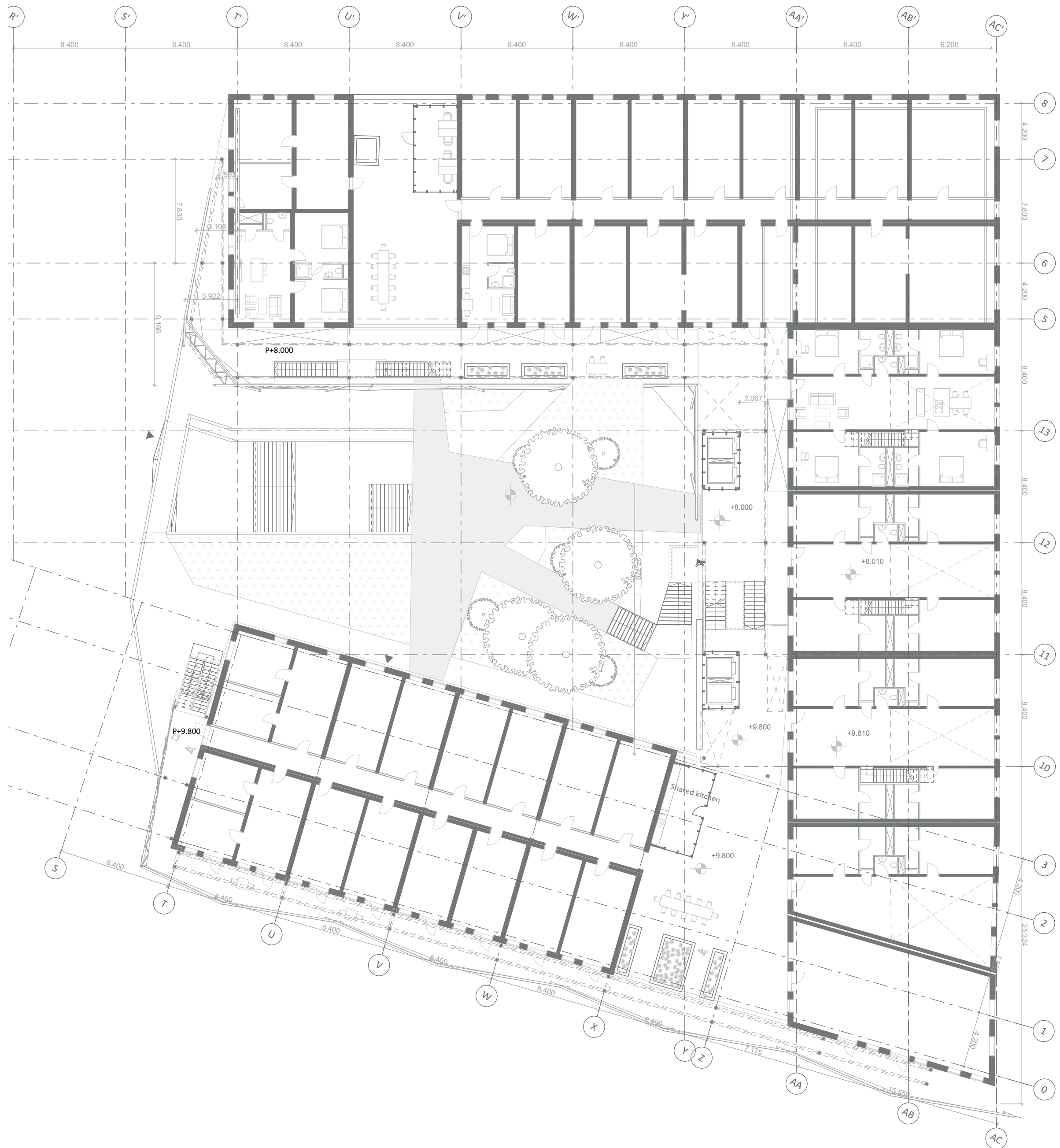
Accessibility

Recreation

Exchange

Sound

Reflection



2nd floor



Social

Accessibility

Recreation

Exchange

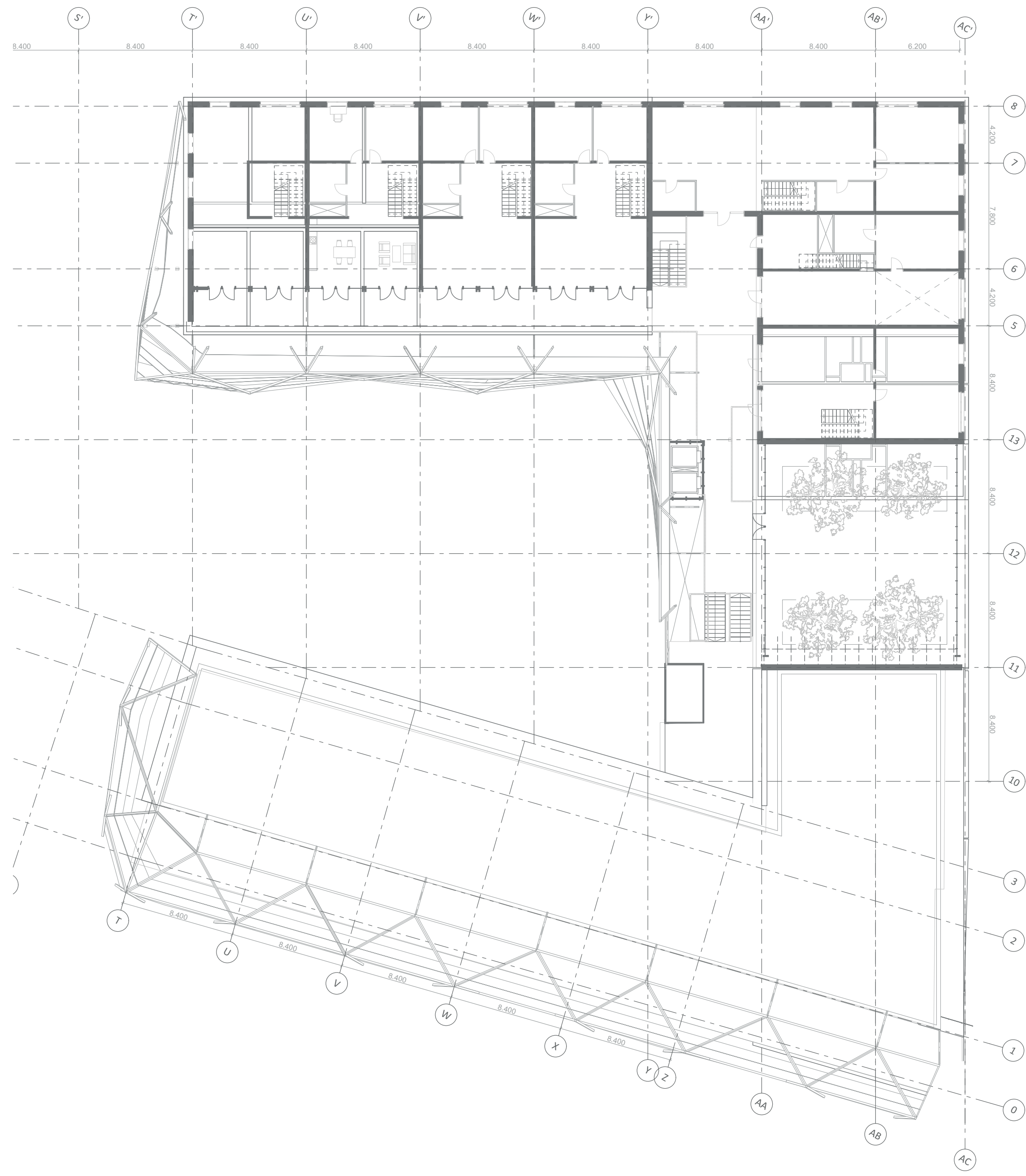
Sound

Reflection



GATE
GALLERY

New exhibition
April - 15 September



10th floor



Social

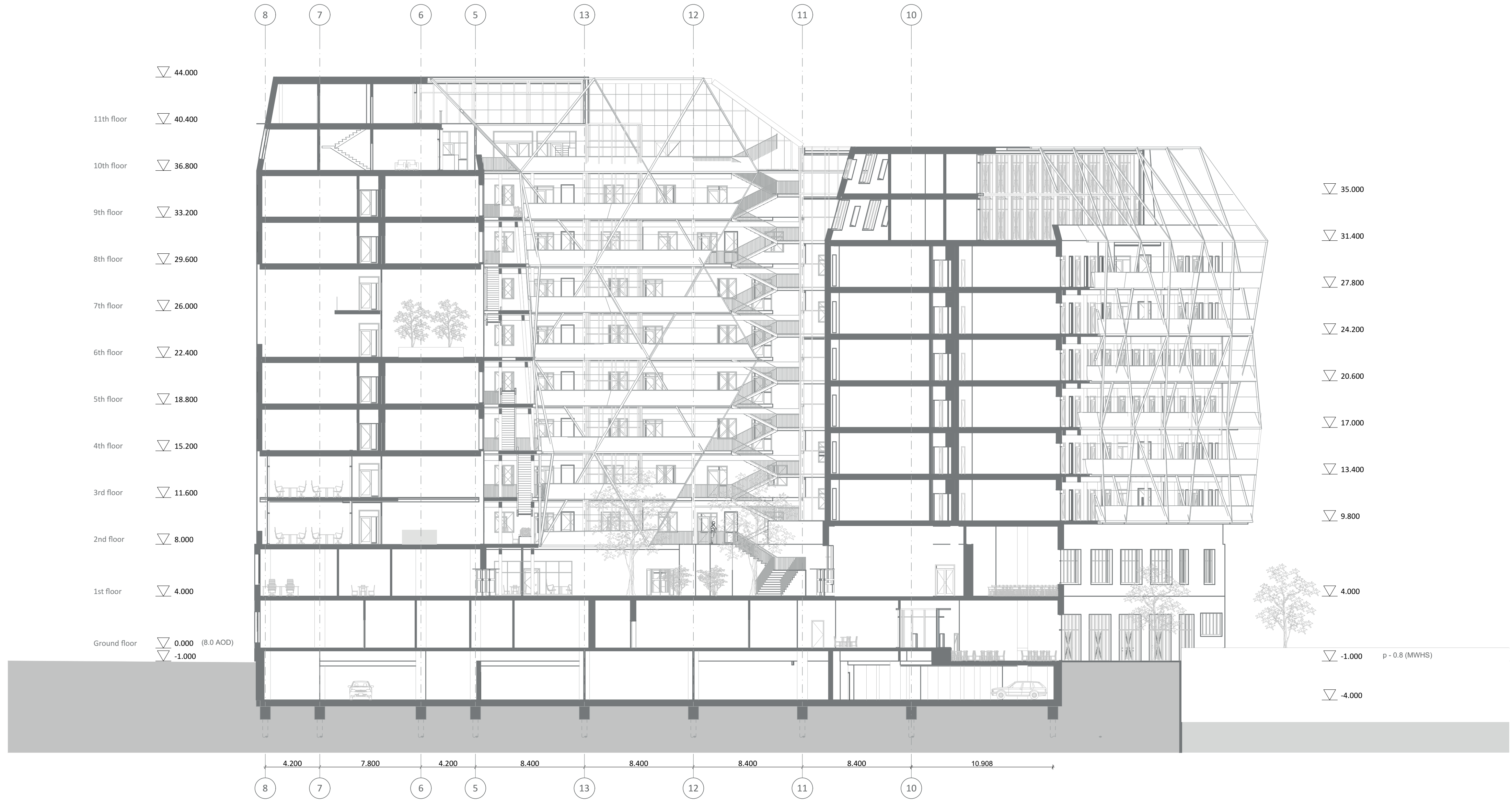
Accessibility

Recreation

Exchange

Sound

Reflection



Social

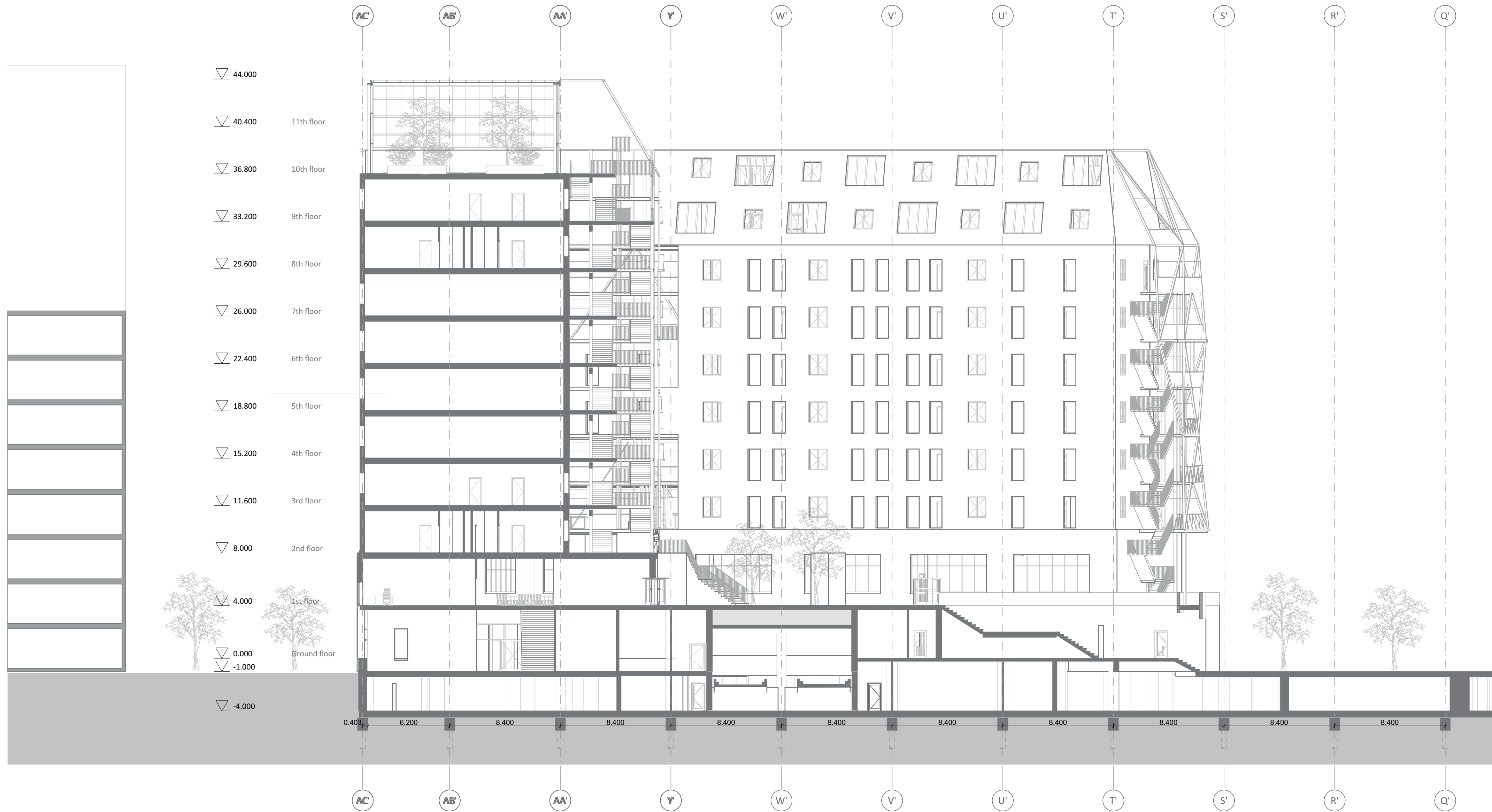
Accessibility

Recreation

Exchange

Sound

Reflection



Social

Accessibility

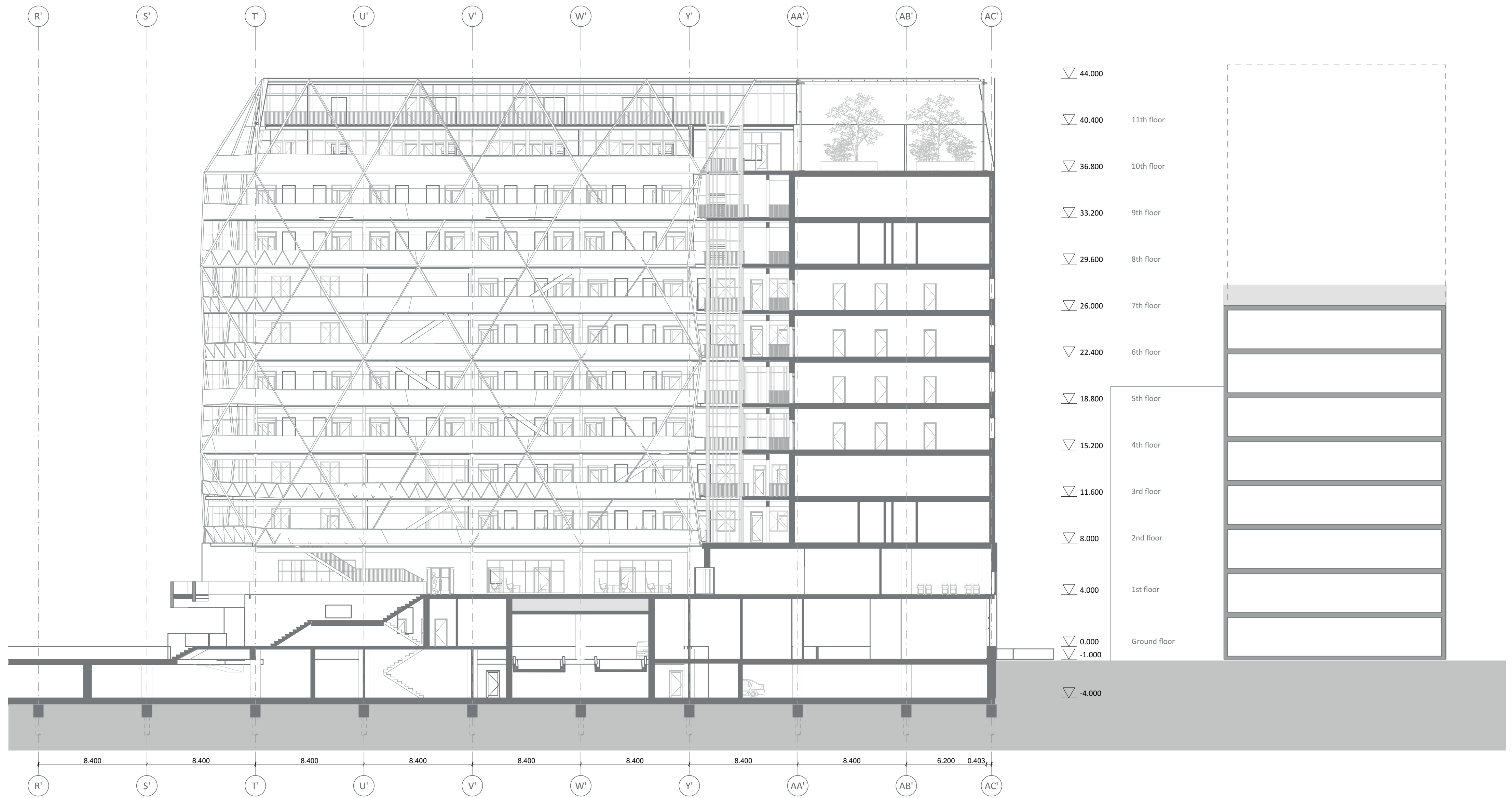
Recreation

Exchange

Sound

Reflection





Social

Accessibility

Recreation

Exchange

Sound

Reflection



Sloped roof with photovoltaic and thermal solar panels. Since the project contains a large number of dwellings there will be a larger heat demand than cooling demand. In order to balance the Aquifer Thermal Energy Storage, thermal solar panels are integrated in the roofscape.



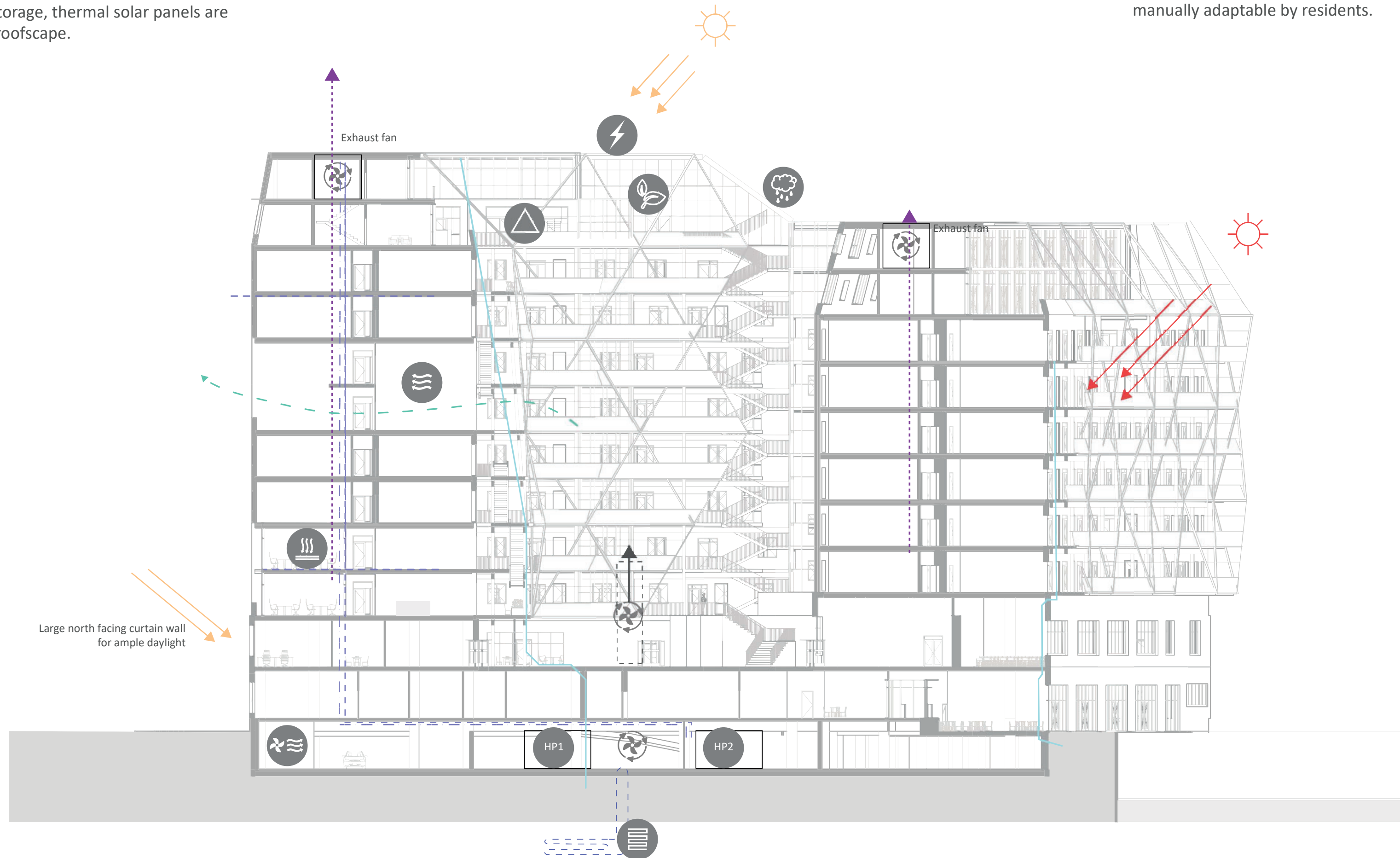
Plants growing in the buffer zone cool the building through evaporative cooling



Rain water collected in barrels to be used by resident to water plants.



Semi transparent membrane creating an adaptable space for appropriation. Moreover, it acts as a wind breaker for London's strong southwest winds. The membrane is a partially active shading device - manually adaptable by residents.



Aquifer Thermal Energy Storage supplying high-temperature cooling in summer. The energy is storage in a deep sand layer. Due to the amount of residences the heat demand is larger than the cooling demand, the system will therefore be balanced using solar thermal integrated in the roof.



Decentralised mechanical ventilation in workspaces, kitchen and other common areas. The apartments are ventilated with CO2-controlled air inlet valves integrated in exterior windows. The return air is mechanically extracted using a fan on the roof.



The amenities on the ground floor such as the primary school, daycare and restaurants are mechanically ventilated with supply and exhaust integrated in the landscape/ plateau design.



CO2 heat pump for domestic hot water increasing the temperature supplied by the Aquifer Thermal Energy Storage to be sufficient for domestic hot water



Rain water collection and filtration



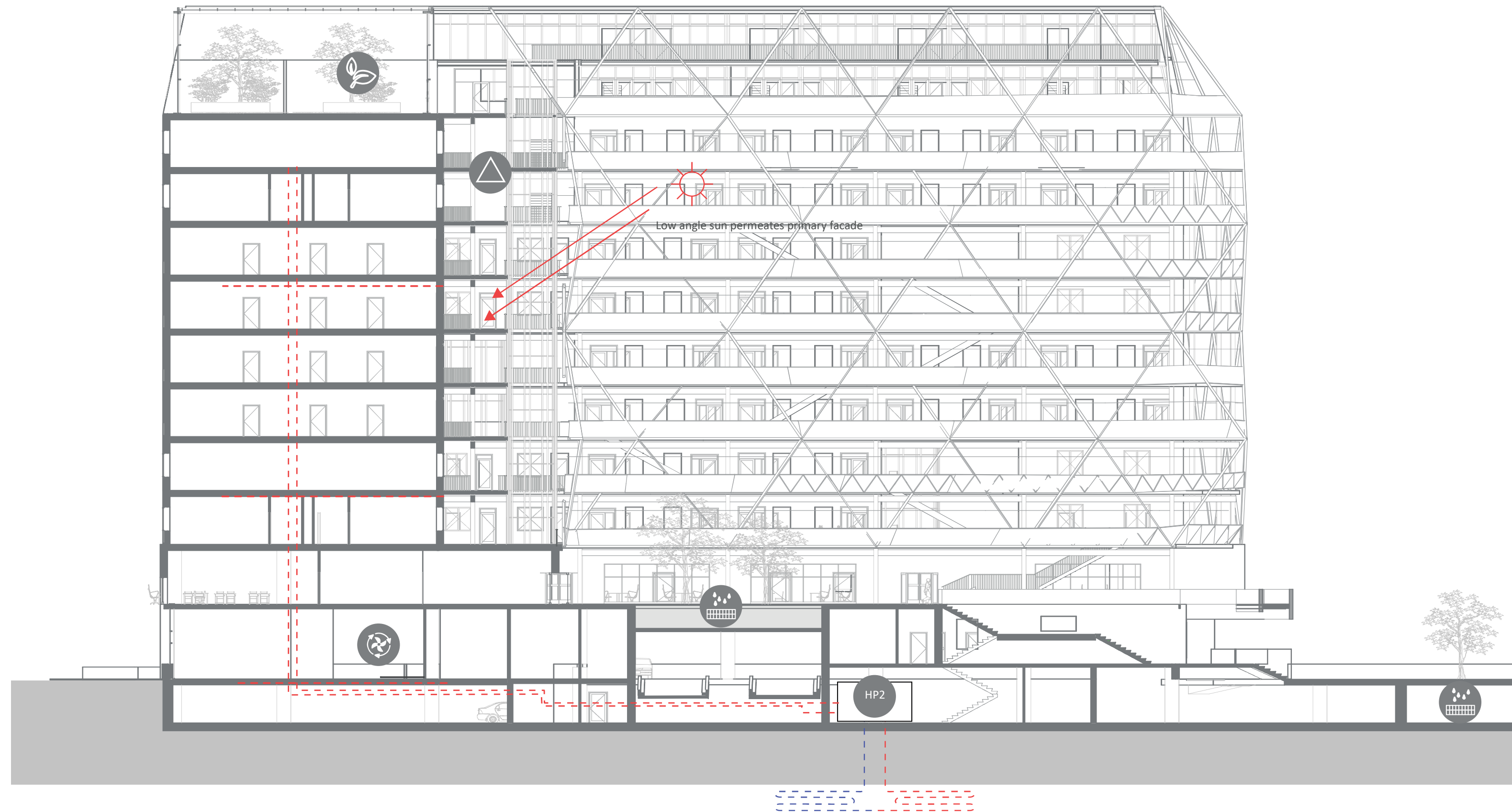
The outdoor common areas are naturally cross-ventilated. Public functions in the plinth are cross ventilation for pre-cooling and daytime natural ventilation in summer and shoulder season.



Natural ventilation/ fan-assisted cross-ventilation in basement. Ventilation openings are provided on ground level in brickwork



In the winter situation the membrane can become more impermeable by moving the panels. The buffer zone turns into a winter garden.



A coolant is distributed through the floors utilising the thermal mass of concrete floor or the gravel in the dry deck floor.



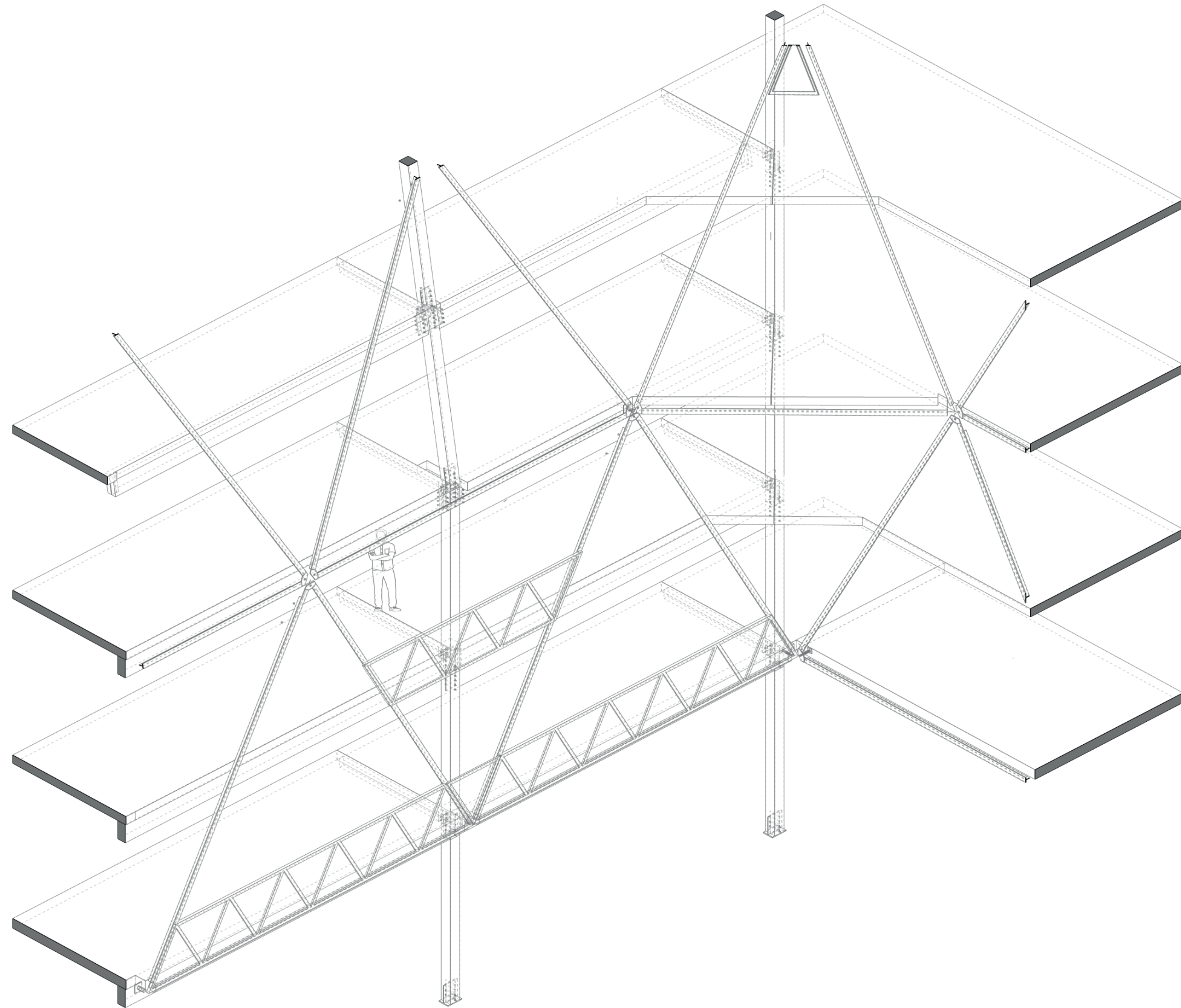
Floor heating is used both in the residential, commercial and public spaces.

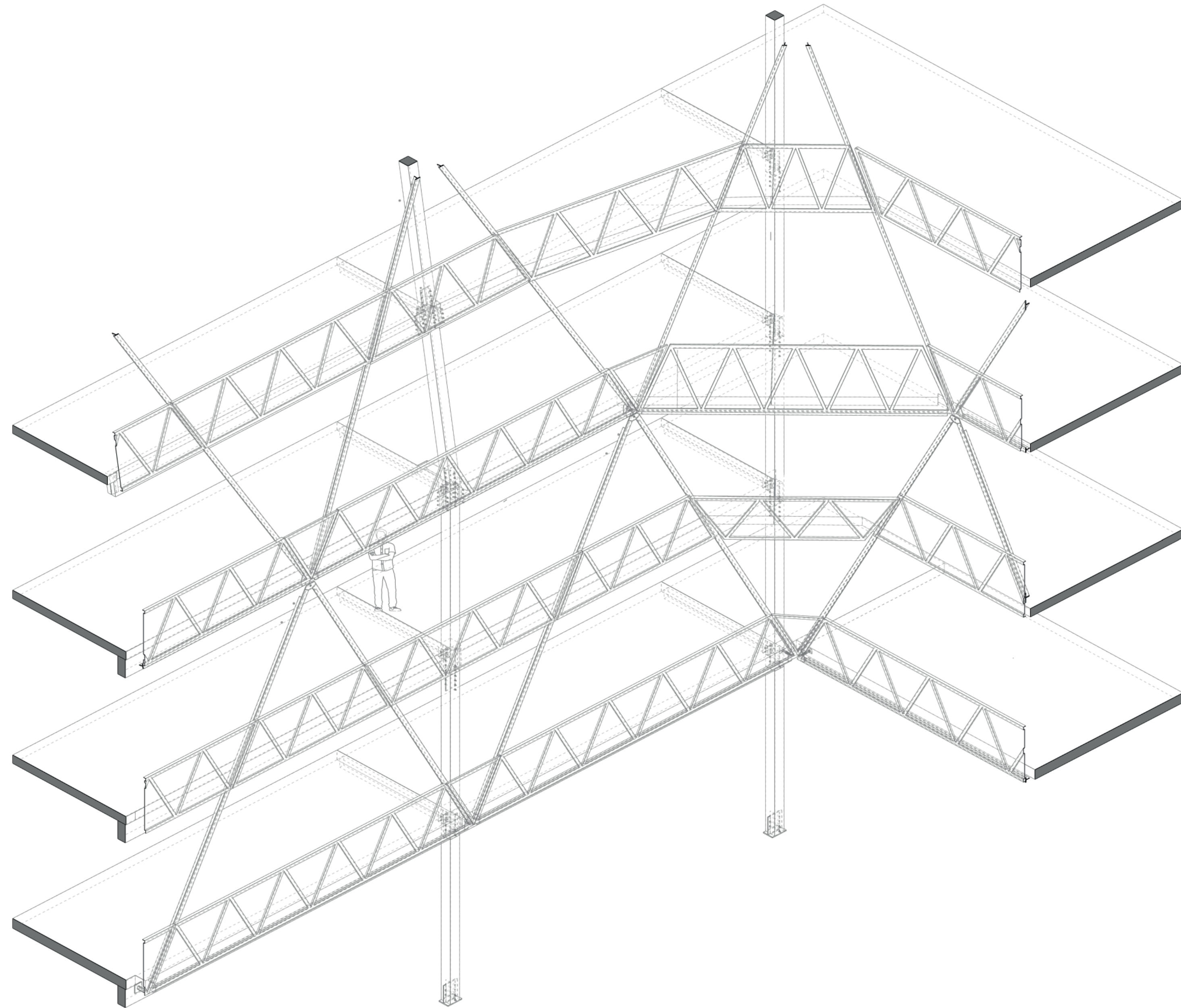


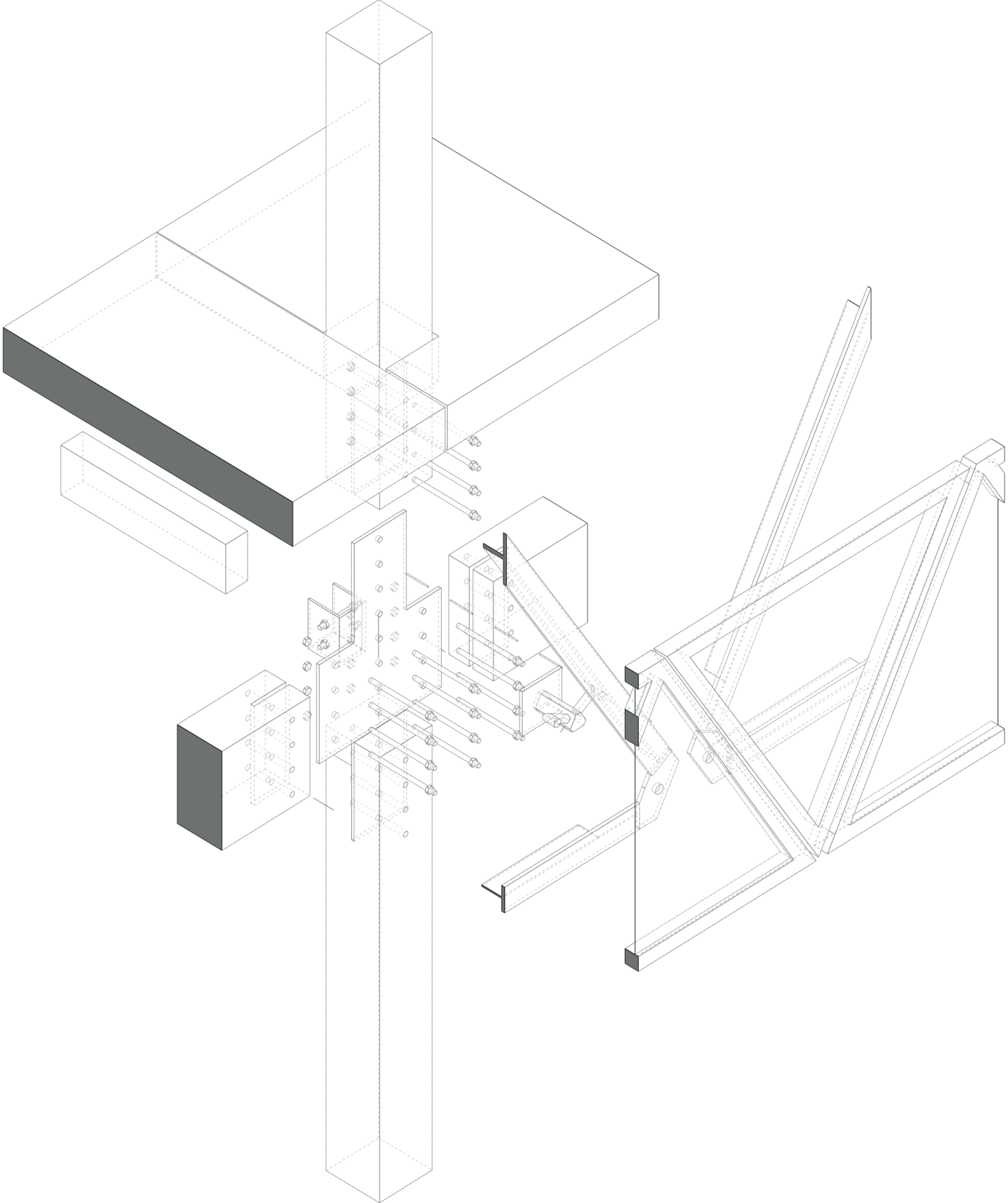
Rainwater is collected, filtrated, and buffered in green spaces on site, reducing the load on the sewage system in the event of heavy rainstorms.

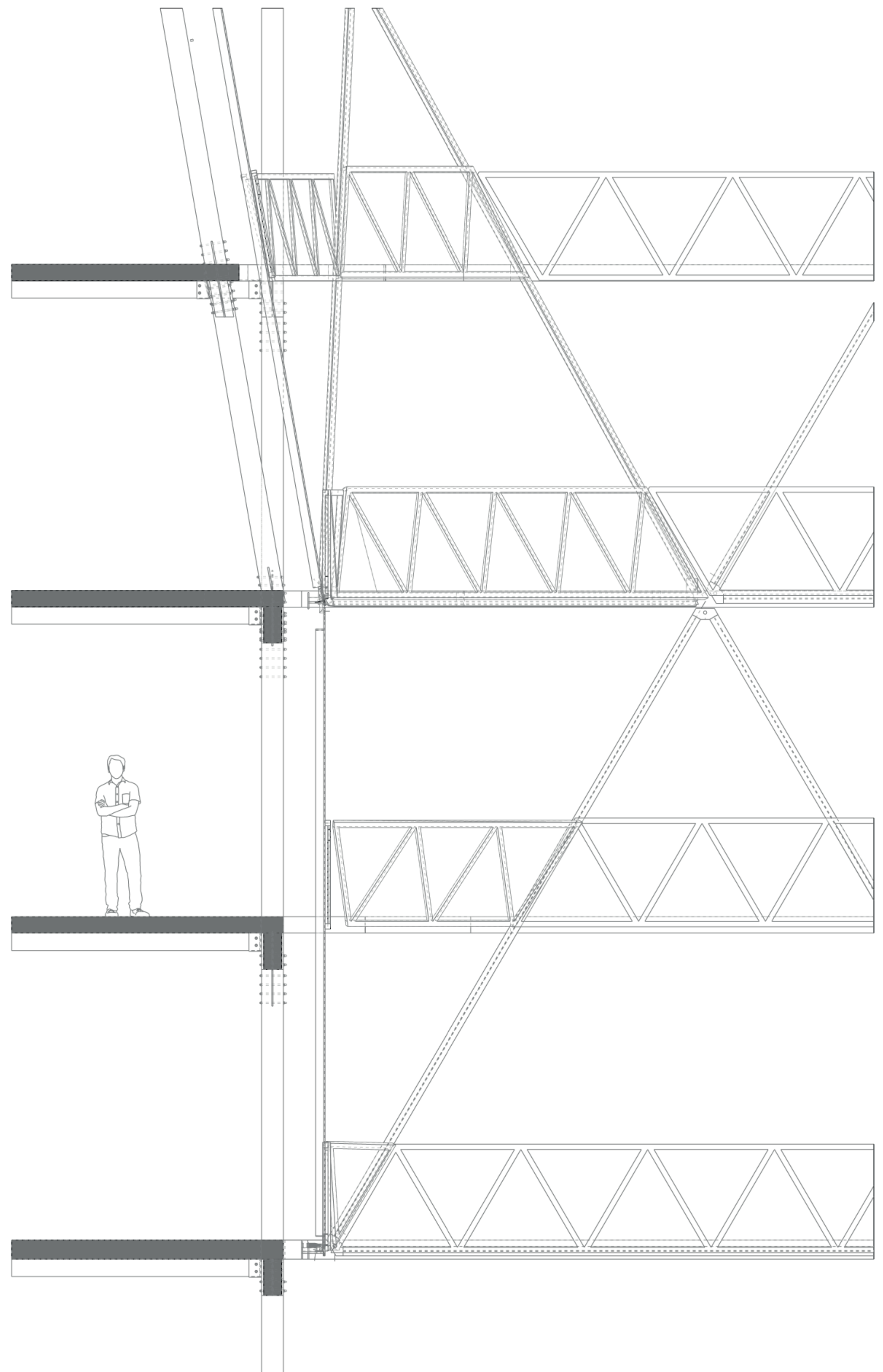


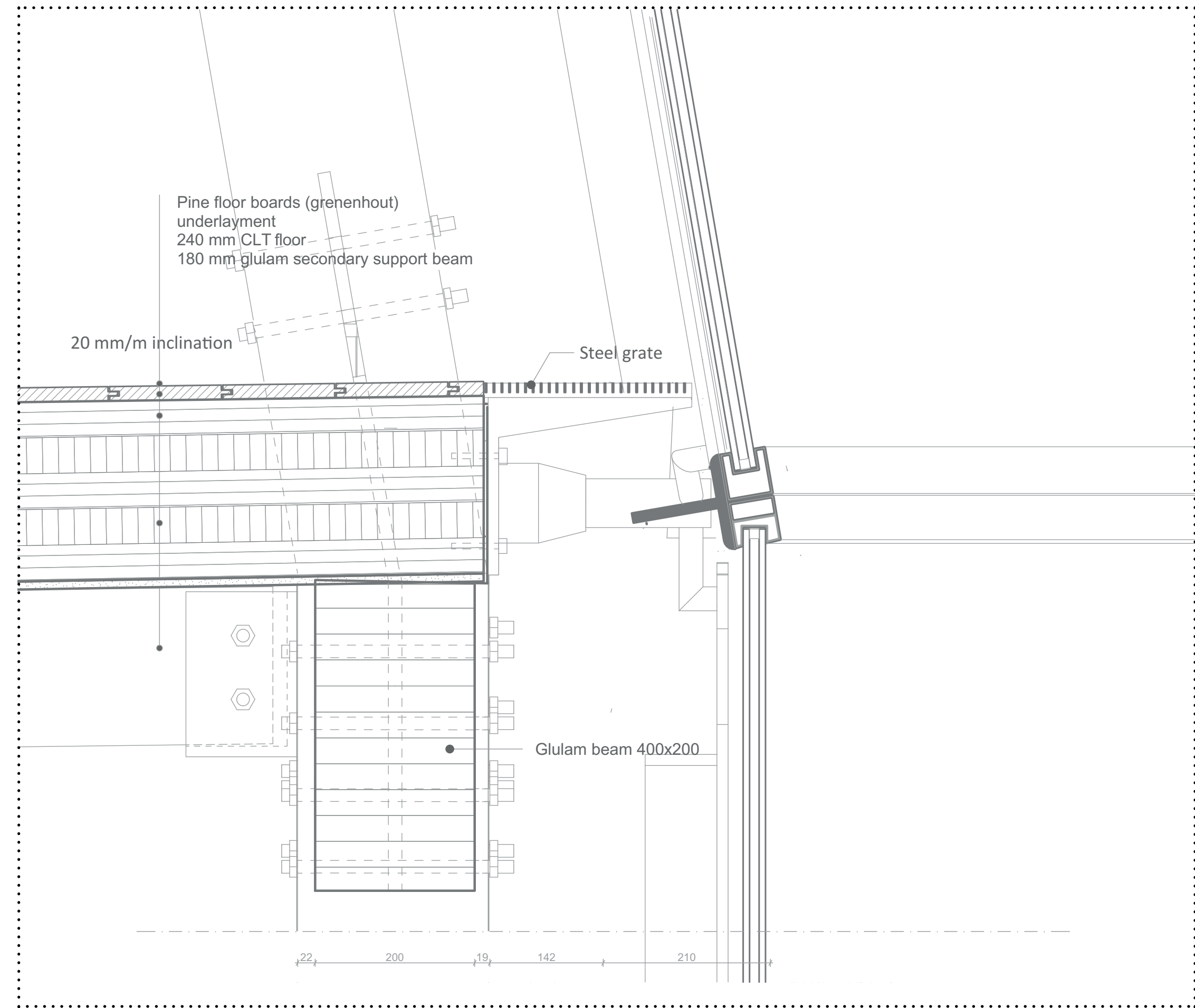
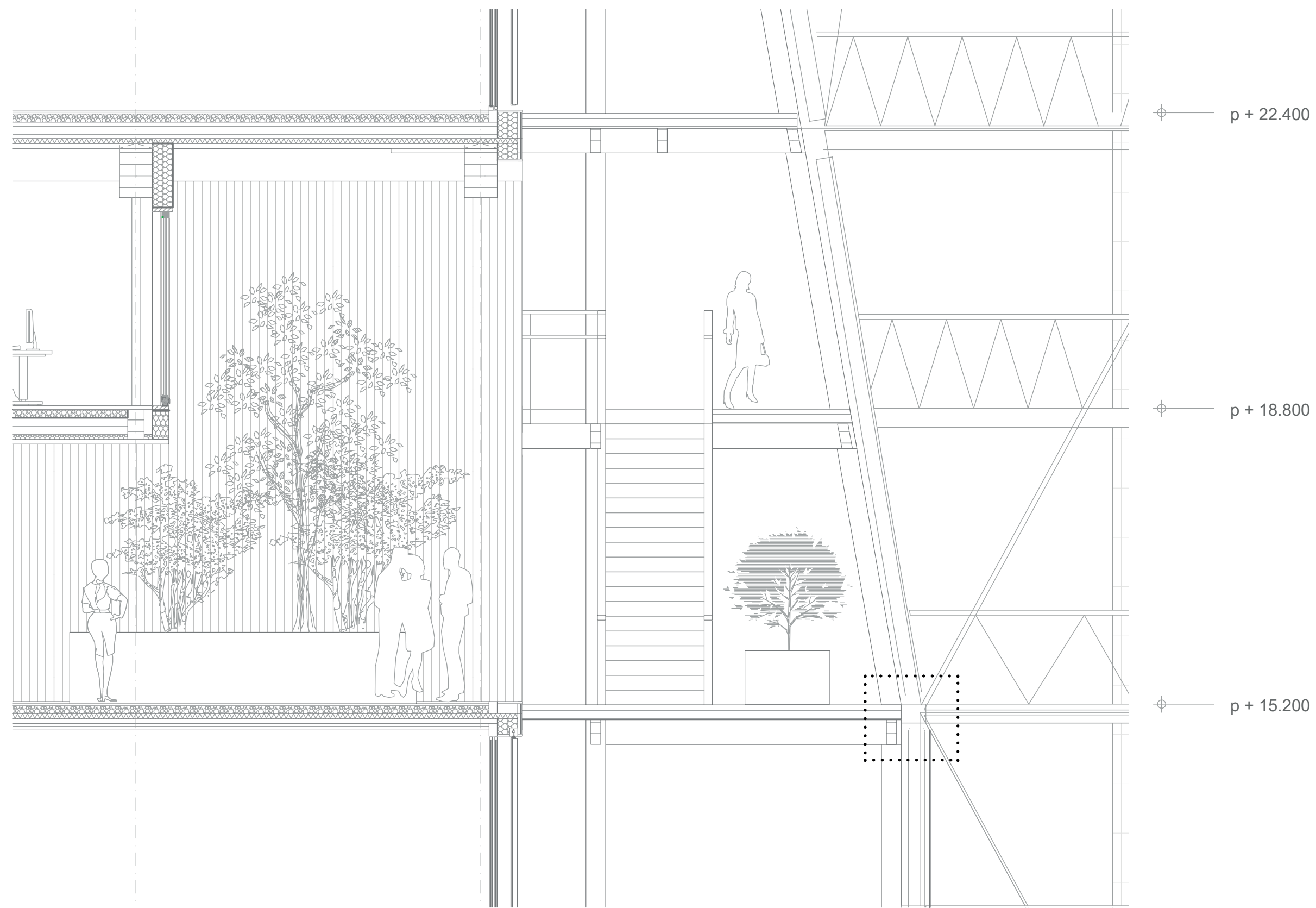
Heat pump for low temperature heating/ low temperature cooling

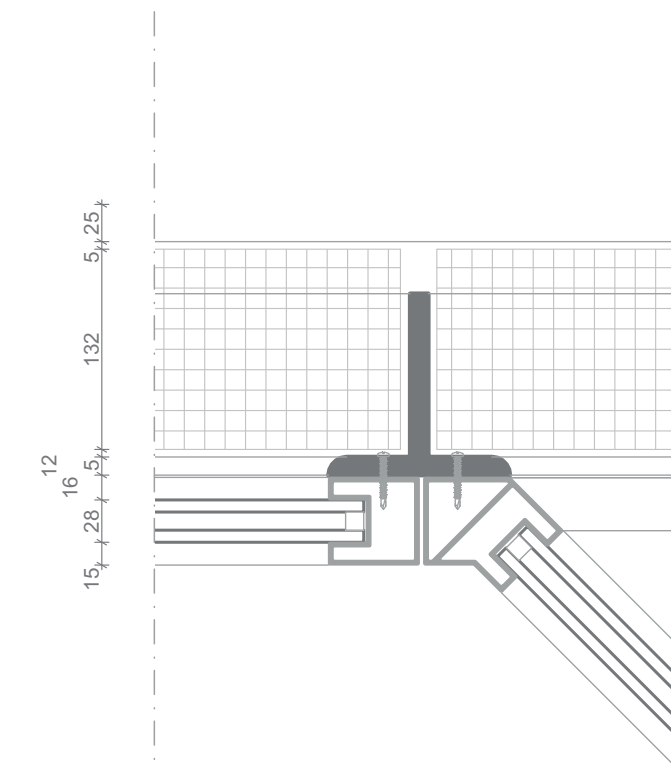
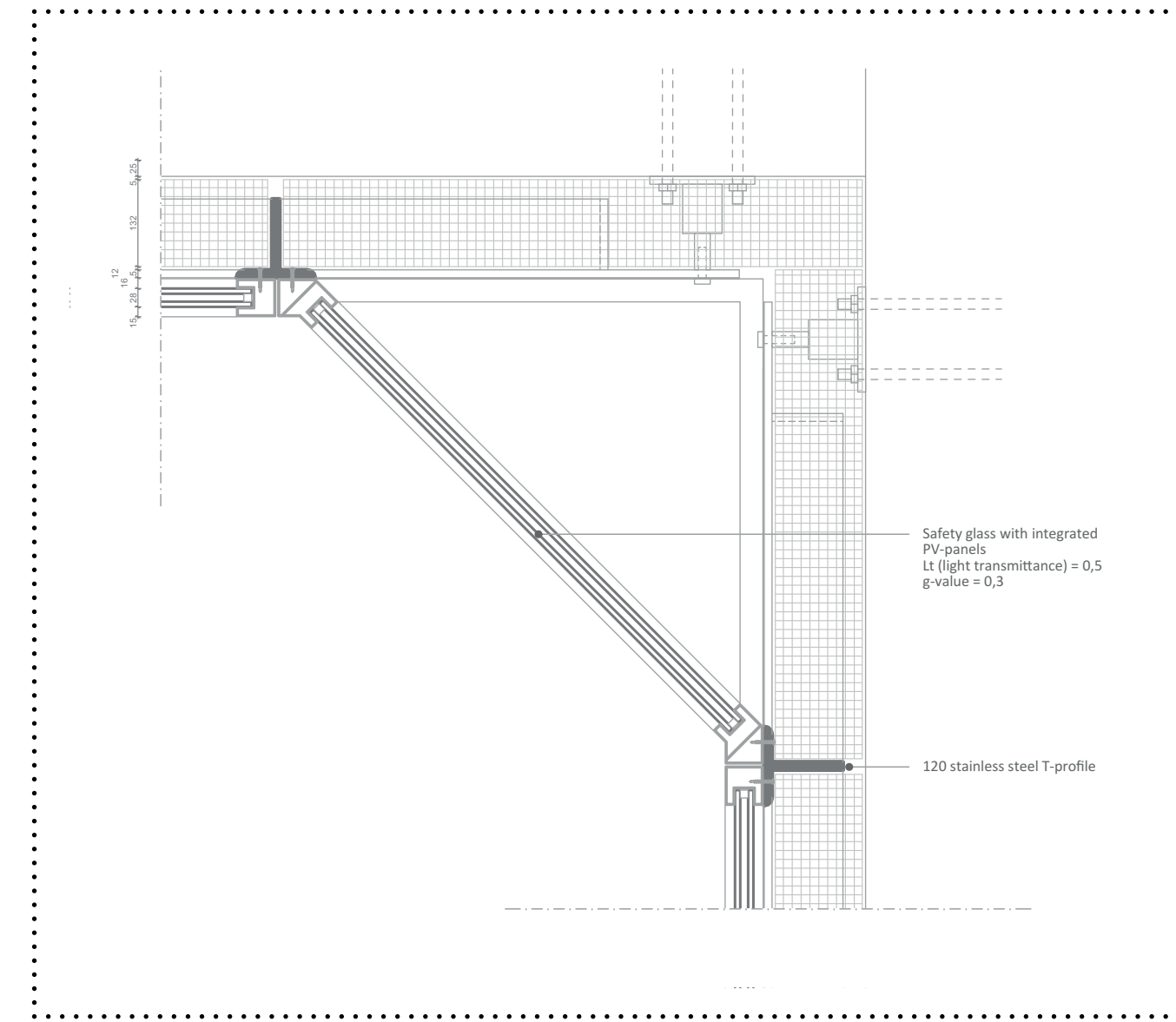
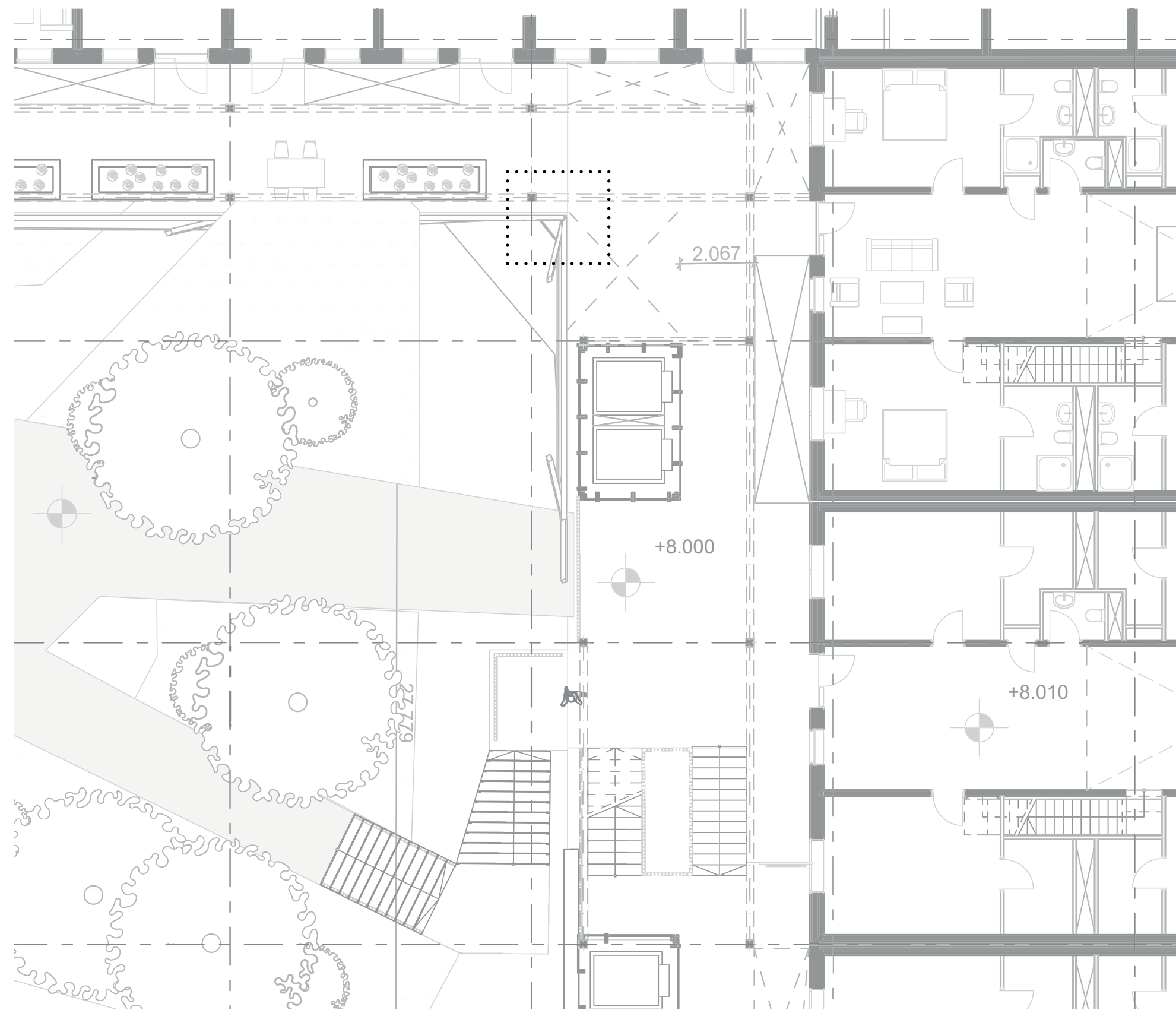


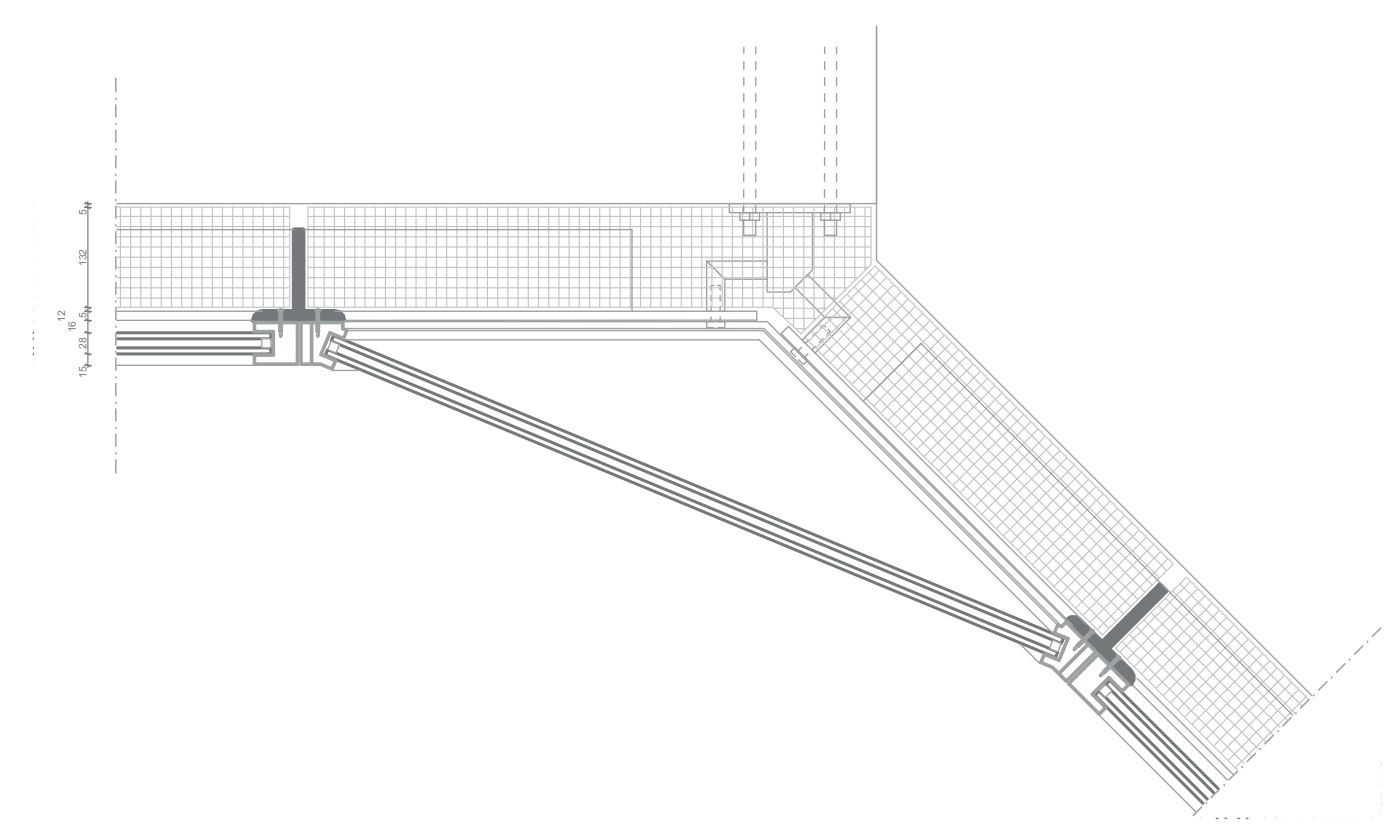
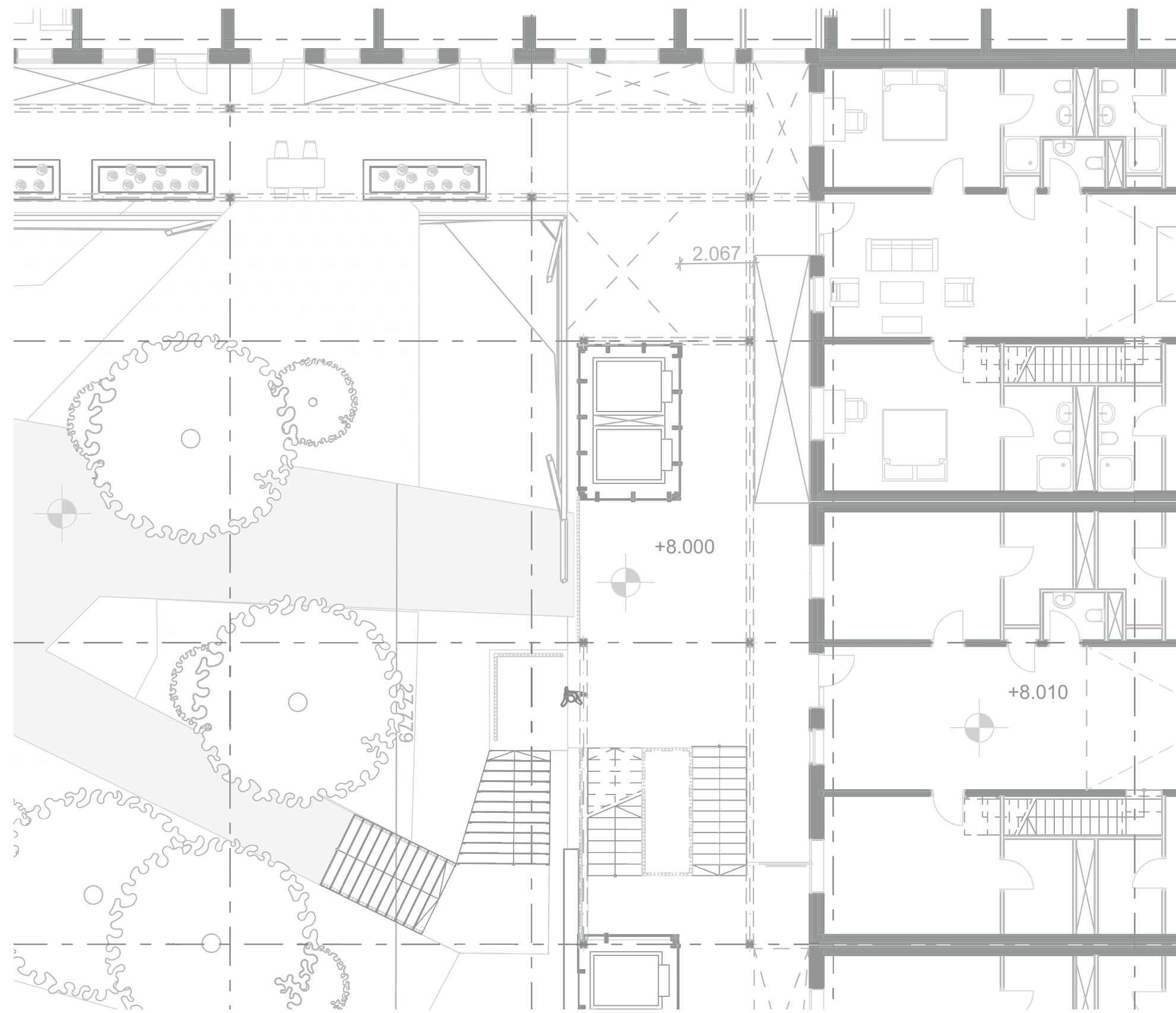


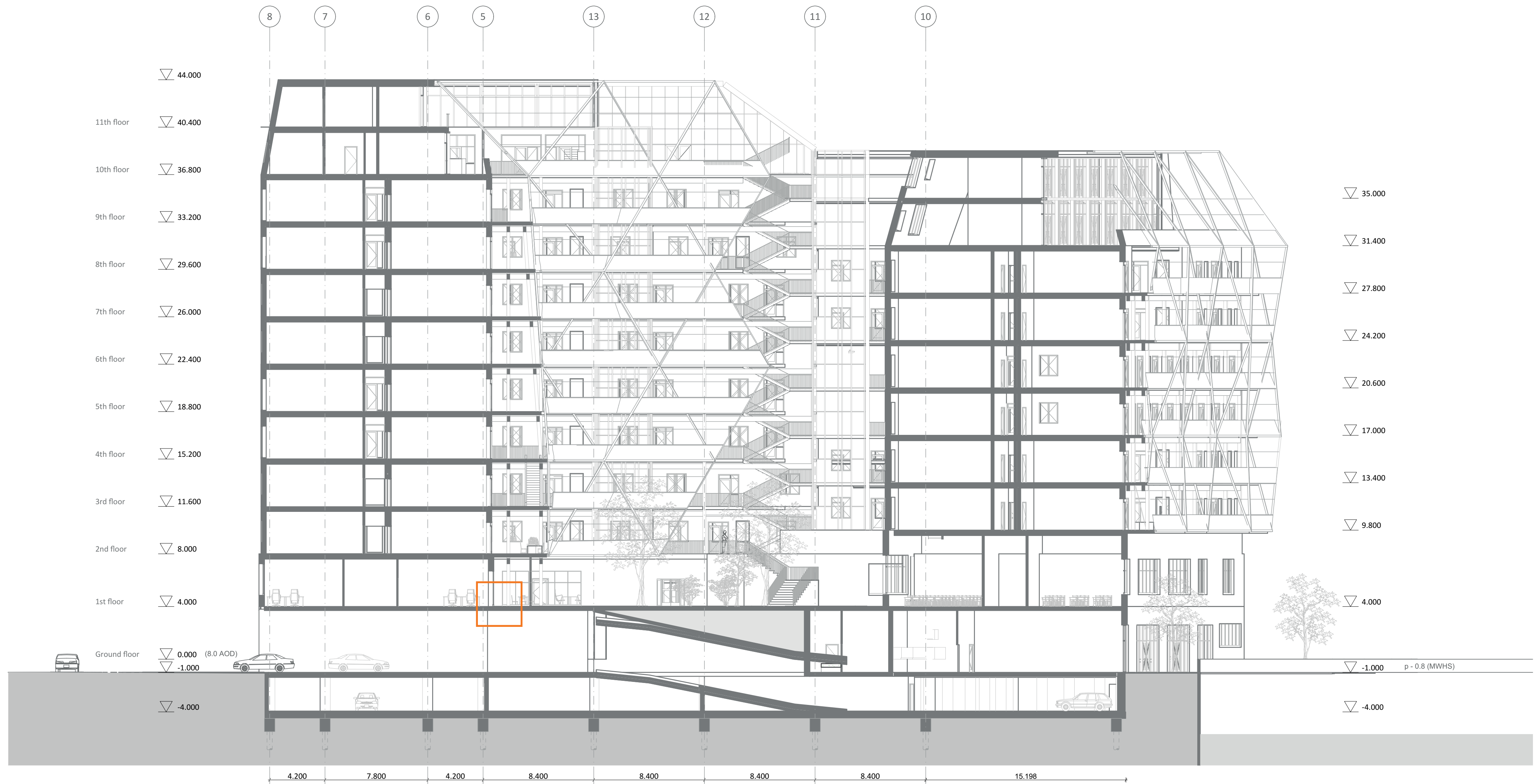


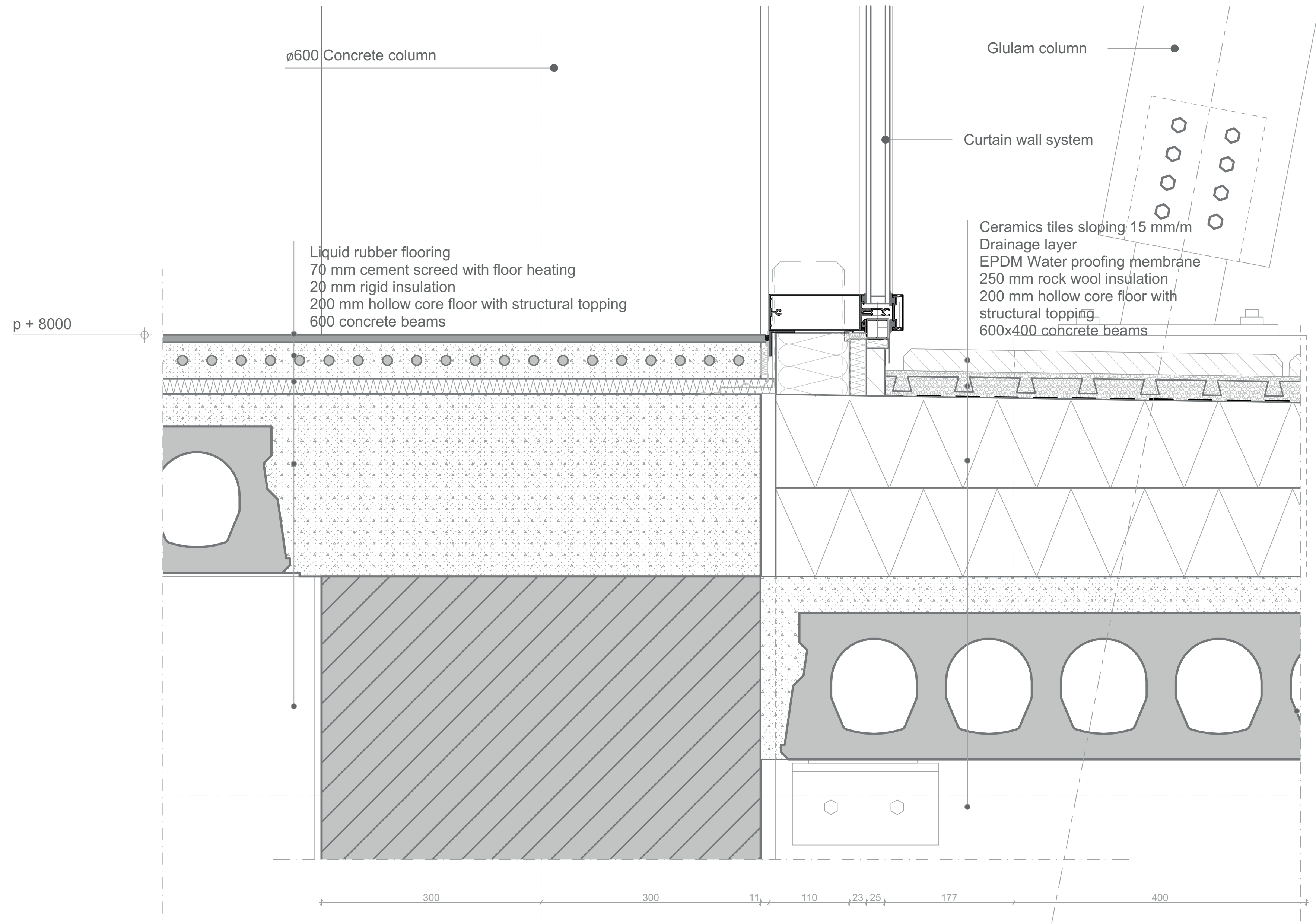












ø600 Concrete column

Glulam column

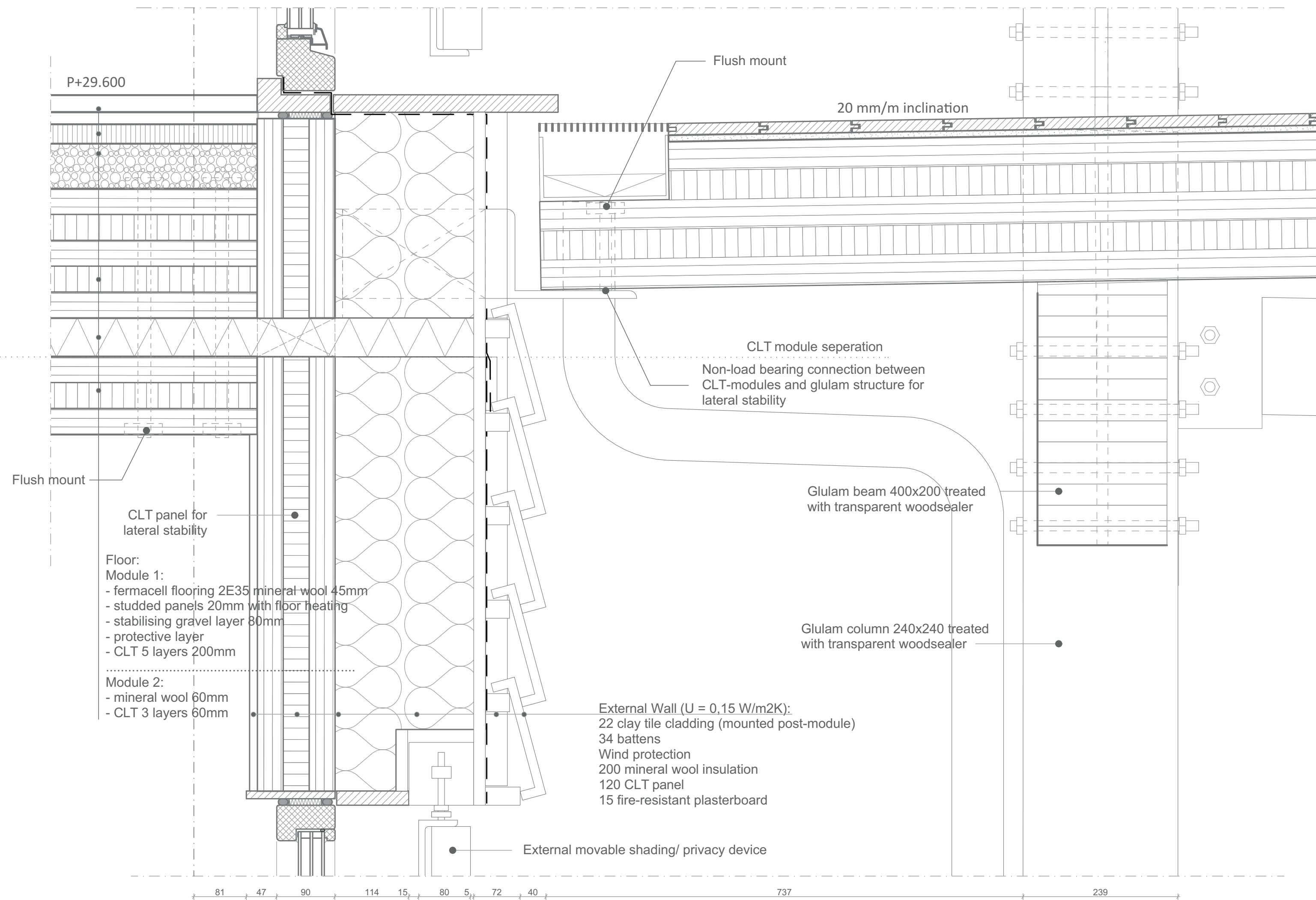
Liquid rubber flooring
 70 mm cement screed with floor heating
 20 mm rigid insulation
 200 mm hollow core floor with structural topping
 600 concrete beams

Curtain wall system

Ceramics tiles sloping 15 mm/m
 Drainage layer
 EPDM Water proofing membrane
 250 mm rock wool insulation
 200 mm hollow core floor with structural topping
 600x400 concrete beams

p + 8000

300 300 11 110 23 25 177 400



The Middleground

Challenging Asymmetric Membranes

