

RECIPROcity



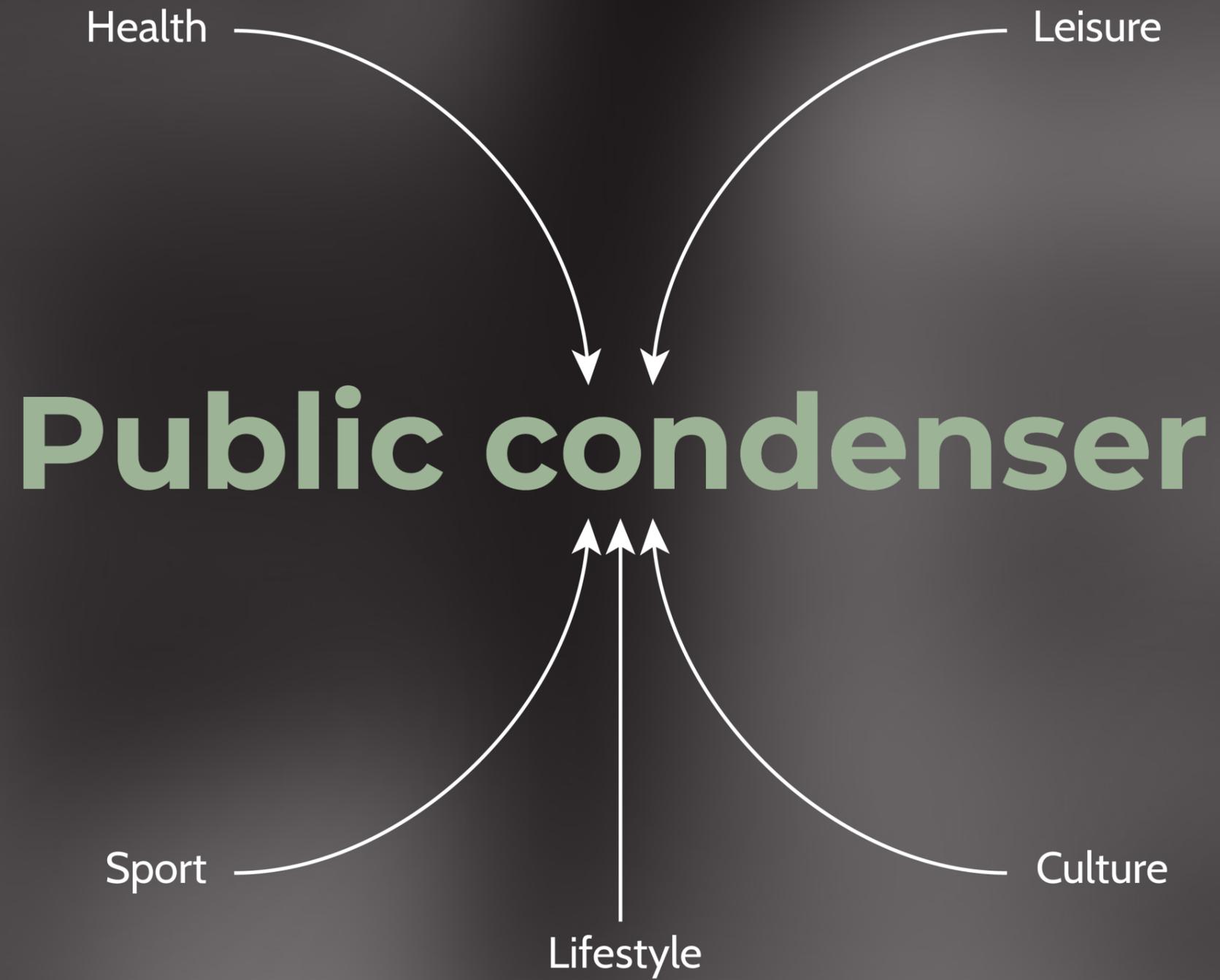
Turning space into place to enhance mental wellbeing in Bispebjerg

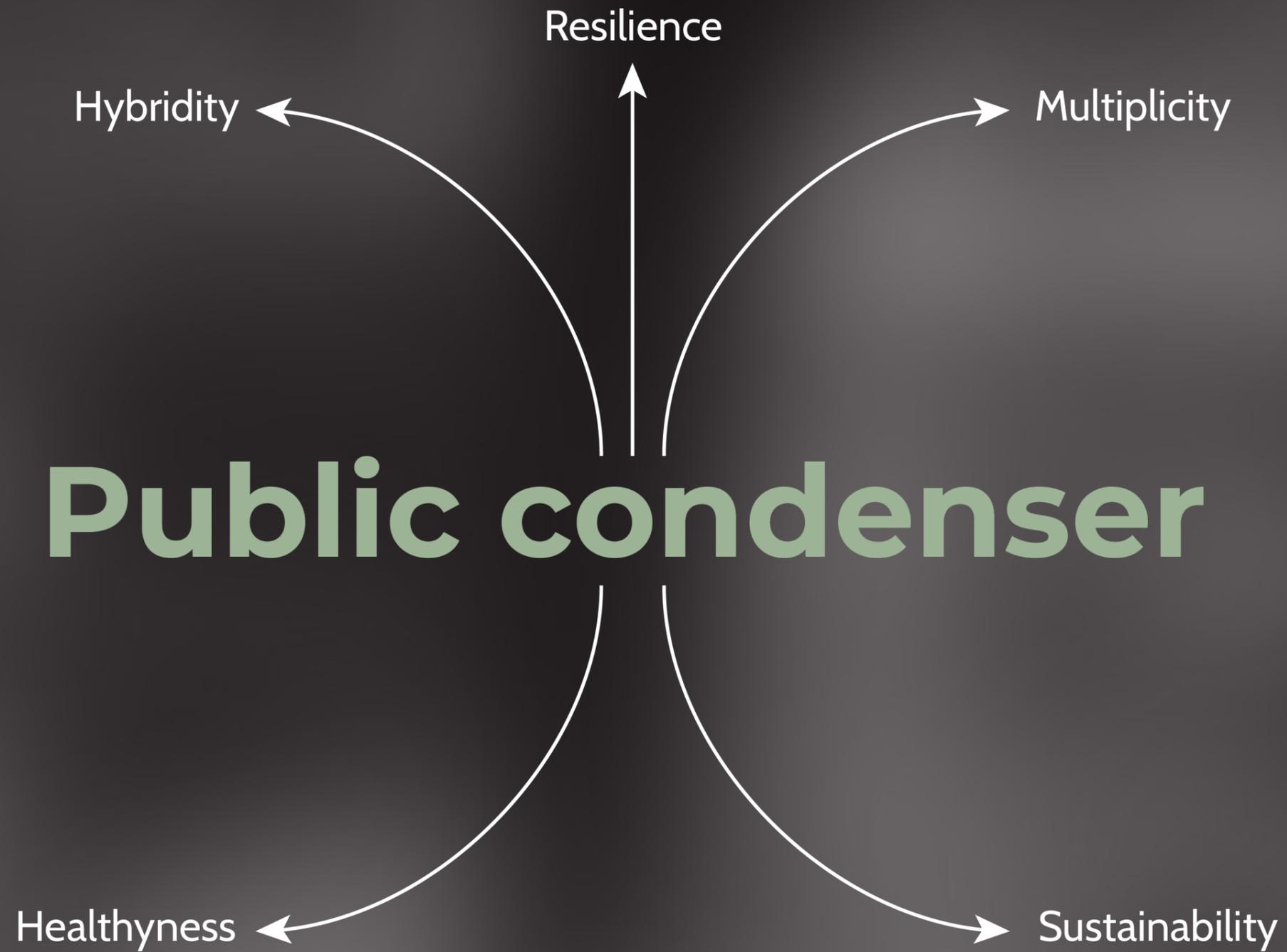
Tutor 1
Ir. P. Kuitenbouwer
Tutor 2
Ir. E. Karanastasi
Tutor 3
Dr. Ir. S. Corbo

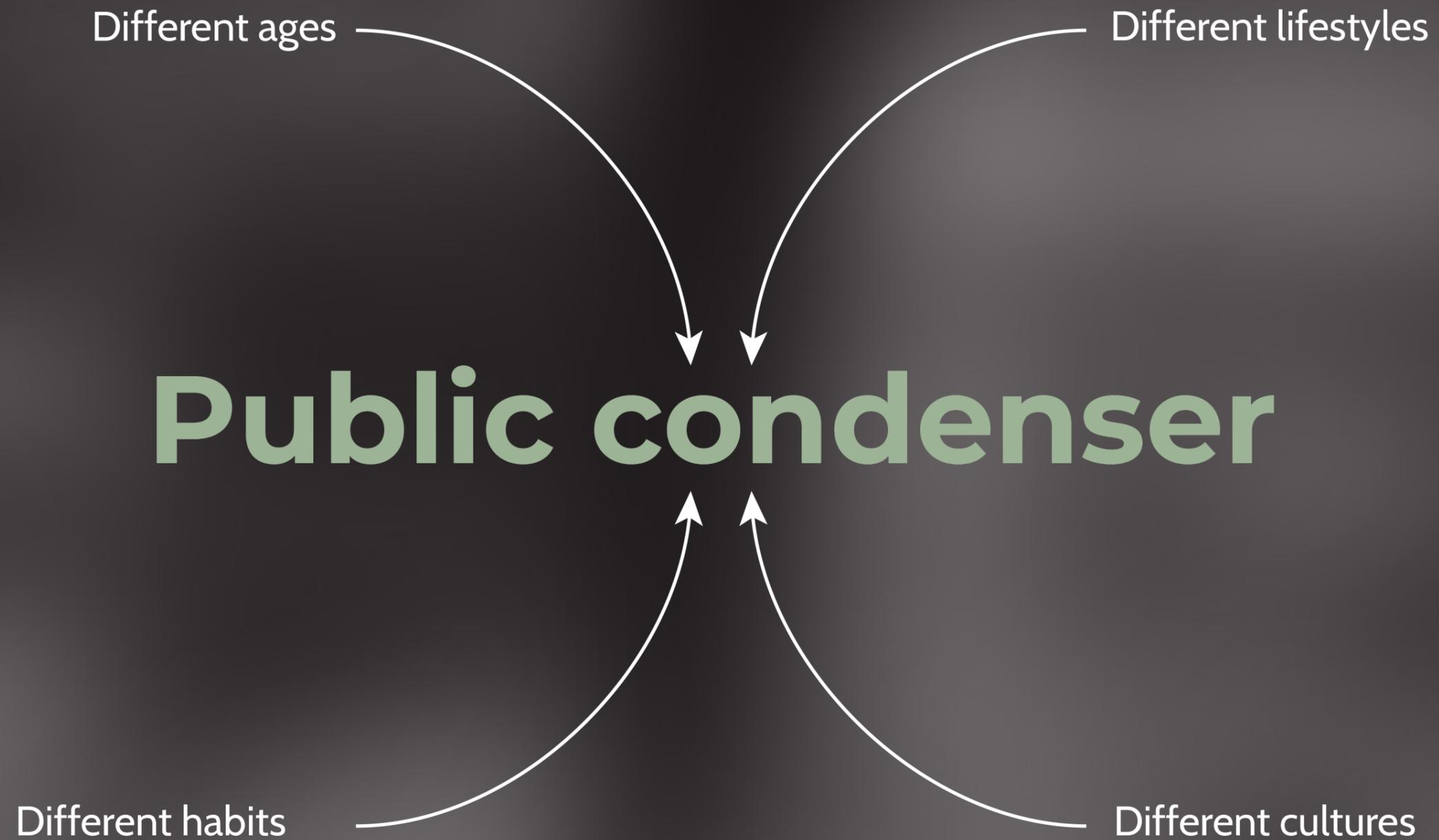
AR3AP100 2024-25
Public Building Graduation Studio

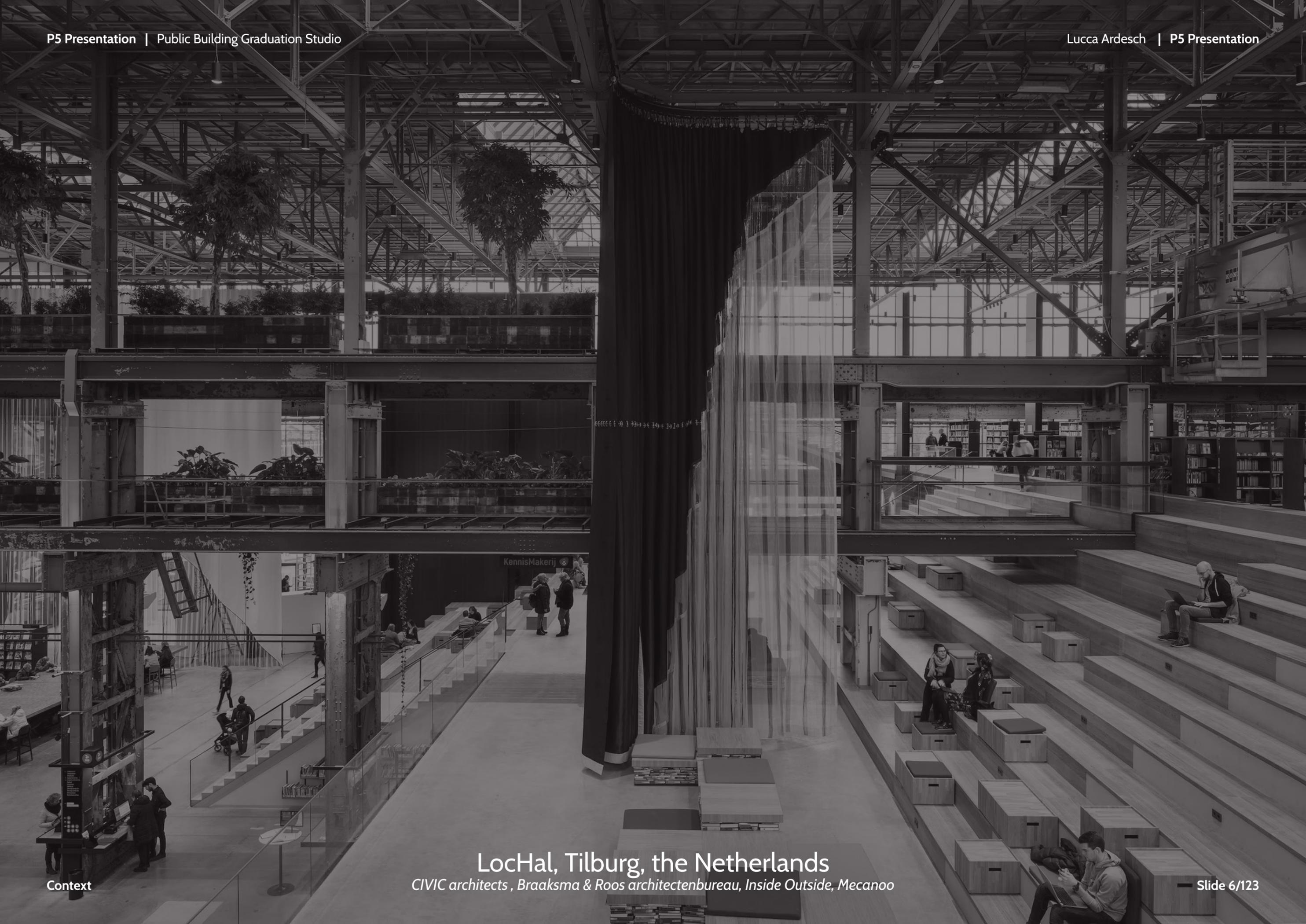
Contents

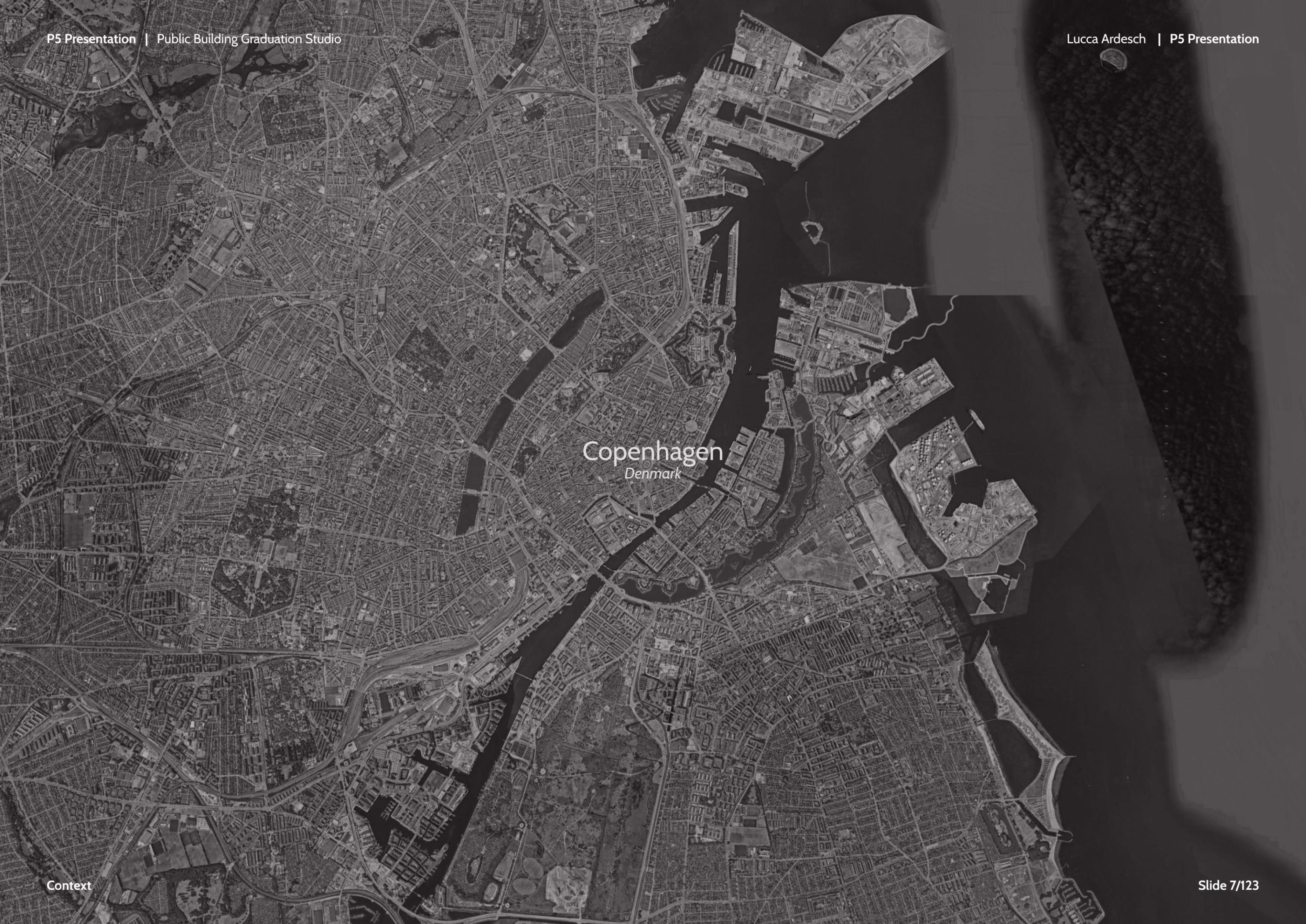
1. Context
2. Bispebjerg
3. Research
4. Building configuration
5. Building structure
6. Climate
7. Conclusion











Copenhagen
Denmark



Bispebjerg Bakke
Site area 1



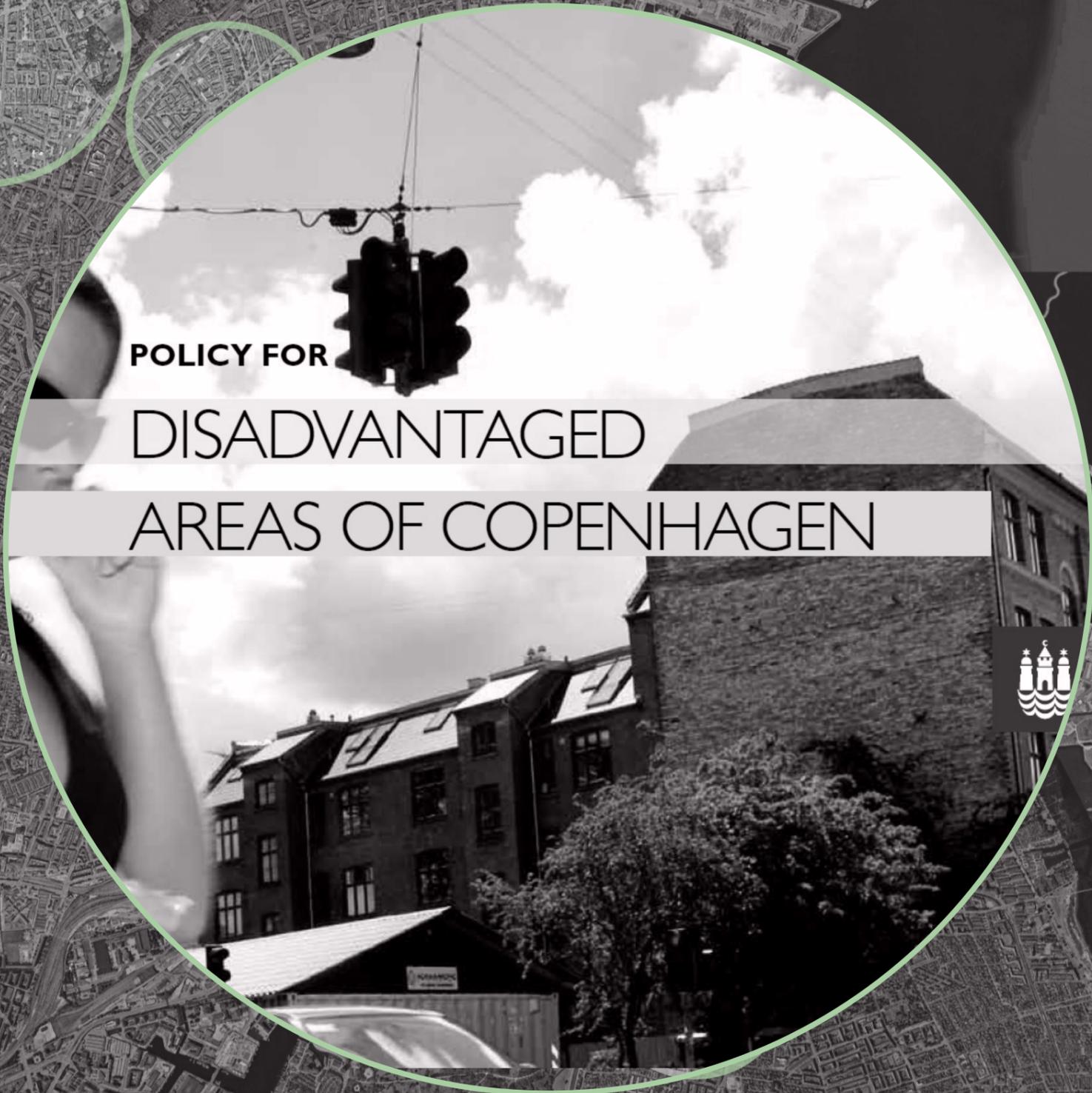
Ydre Nørrebro
Site area 2

Copenhagen
Denmark

Amager Vest
Site area 3



Bispebjerg Bakke
Site area 1



POLICY FOR
DISADVANTAGED
AREAS OF COPENHAGEN



Bispebjerg Bakke
Site area 1

Sport

Culture

Lifestyle



Asia Australia Middle East Africa Inequality Global development

How Denmark's 'ghetto list' is ripping apart migrant communities

Copenhagen and other cities are planning mass housing evictions in a 'social experiment' to encourage integration



Bispebjerg Bakke
Site area 1



Ydre Nørrebro
Site area 2

Copenhagen
Denmark

Amager Vest
Site area 3



Bispebjerg Bakke
Site area 1



Copenhagen
Denmark



Bispebjerg
Copenhagen

Local fear of crime t rest of Copenhagen



Survey reveals: This is
Citizens live with a cri
three places are getting

Copenhagen Police establishes two search zones

Where do Copenhageners live with sta
records? This is revealed by brand new
Denmark, which CopenhagenLIV has
particular stand out in the statist

As one of several tools to curb the current conflict between
Police are introducing a

Survey: Here Copenhageners are unsafe

safety survey shows that more people are afraid at
pecially in northwest Copenhagen.



Visitation establishe Nørrebro Northwes

The Conent

to create security in bjerg

els safe in ghetto a

northwest quarter is located in the
visitation zone. Still, Mia Agersko
fe in the Copenhagen ghett

Relative poverty



Municipality of Copenhagen, Data Packages for Bispebjerg: Local Committee. Economic Management of the Municipality of Copenhagen, 2022.

Health, loneliness & stress



Municipality of Copenhagen, *Data Packages for Bispebjerg: Local Committee*. Economic Management of the Municipality of Copenhagen, 2022.

Life expectancy



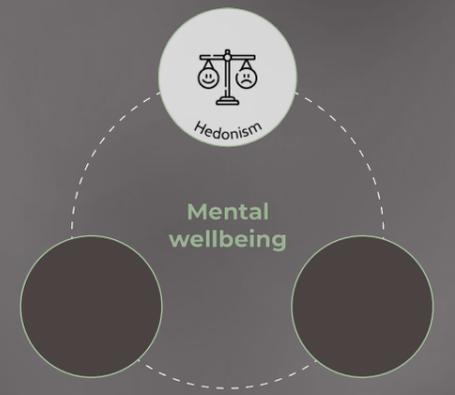
Municipality of Copenhagen, *Data Packages for Bispebjerg: Local Committee*. Economic Management of the Municipality of Copenhagen, 2022.

“ **How can architecture contribute to improving well-being in Bispebjerg, Copenhagen?** ”

“ **How can architecture contribute to improving well-being in Bispebjerg, Copenhagen?** ”

Hedonic | Social | Eudaimonic







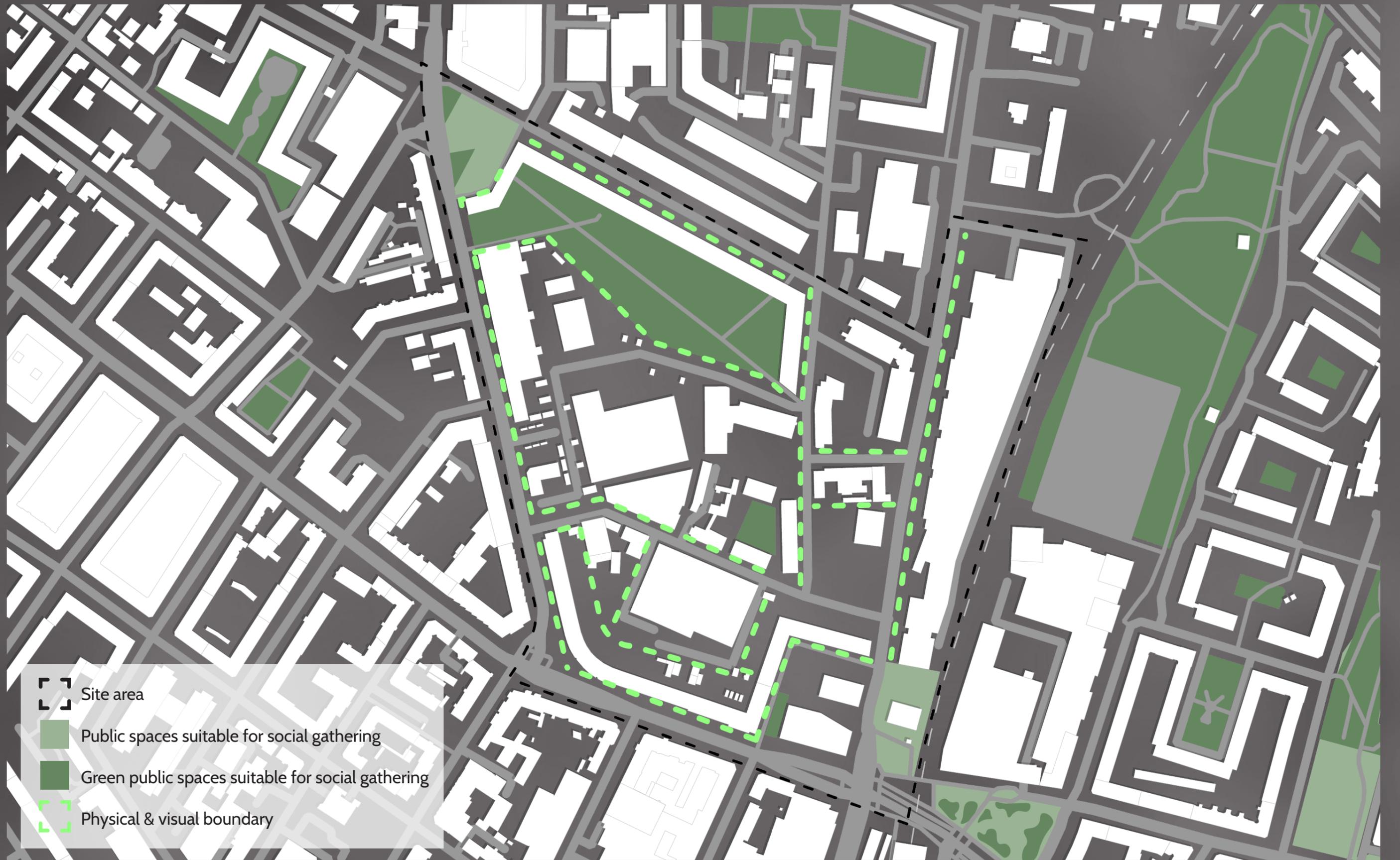




Anonymous character & lack of meeting spaces



Anonymous character & lack of meeting spaces



Anonymous character & lack of meeting spaces



Lack of diverse functions

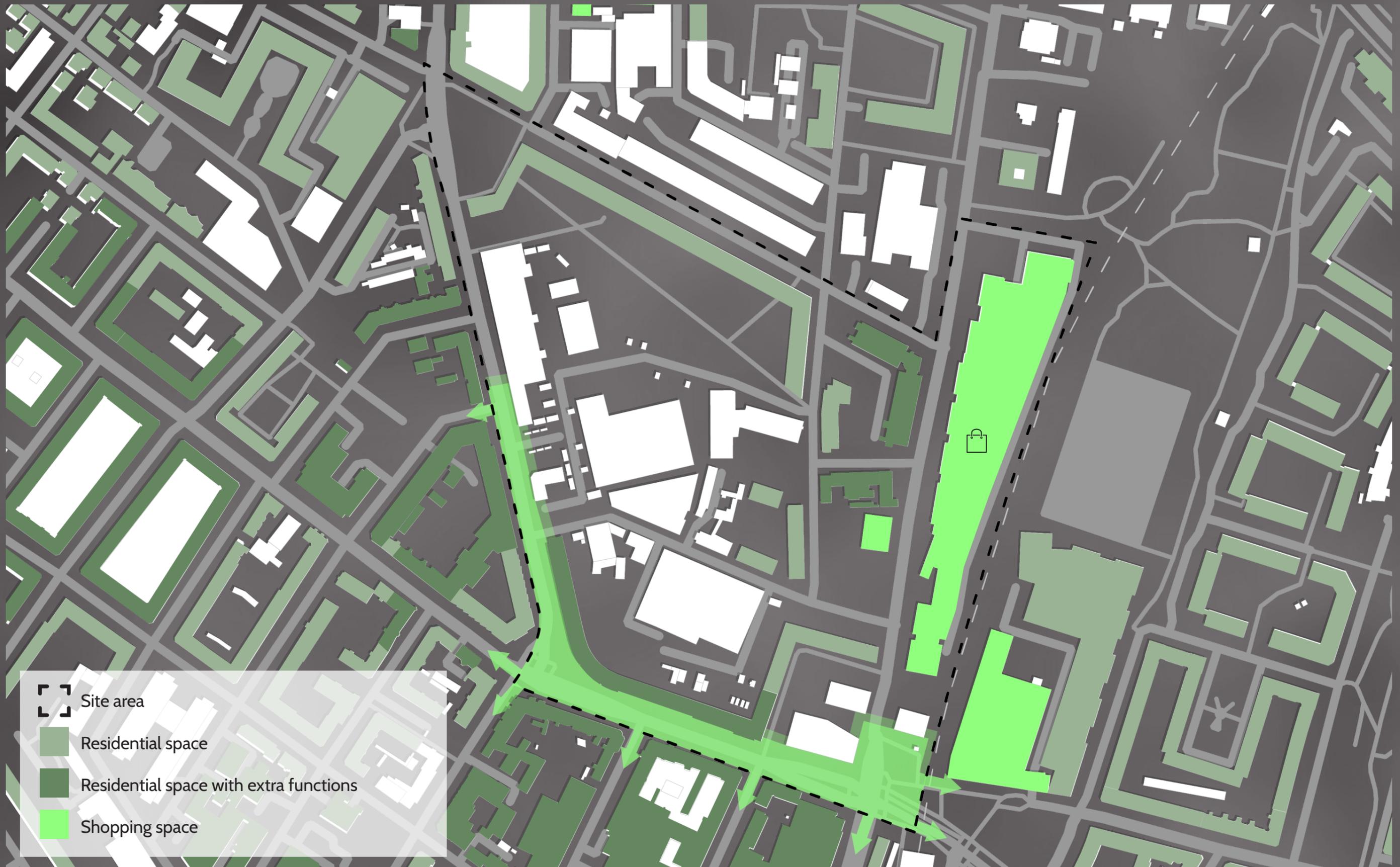


┌ ┐ Site area
└ ┘
■ Office space

Office space



Residential space



Shopping



Car-centric environment



Traffic noise & accidents



Site area

Parking space

Space for the cars, not the people



Just space, not place



Activity during work hours



Site area

High pedestrian activity

Low pedestrian activity

Activity during weekends



Activity during evenings





Daylight



Pedestrian-orientedness



Beauty



Active places



Fitting, mixed-use functions



Public (green) spaces



Lack of noise pollution



Lack of air pollution



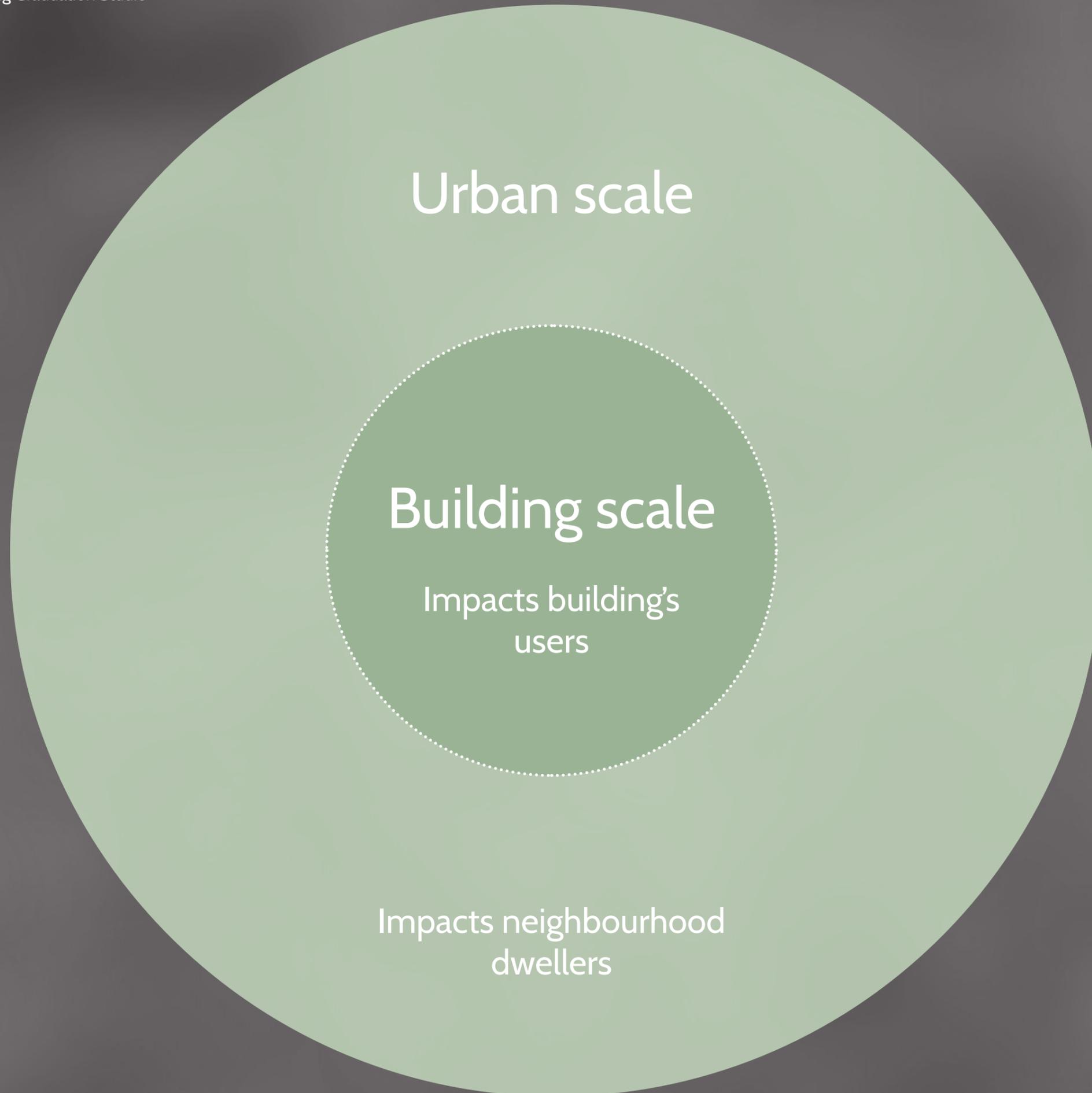
Social support & interactions



Eyes on the street

Van Der Wal et al. 2021. "Advancing Urban Mental Health Research: From Complexity Science To Actionable Targets For Intervention". The Lancet Psychiatry 8 (11): 991-1000.
Swiss Federal Office of Culture. The Davos Declaration 2018 – Towards a High-quality Baukultur for Europe. Swiss Confederation, 2020.
World Health Organization. Health Promotion Glossary of Terms 2021. World Health Organization, 2021.

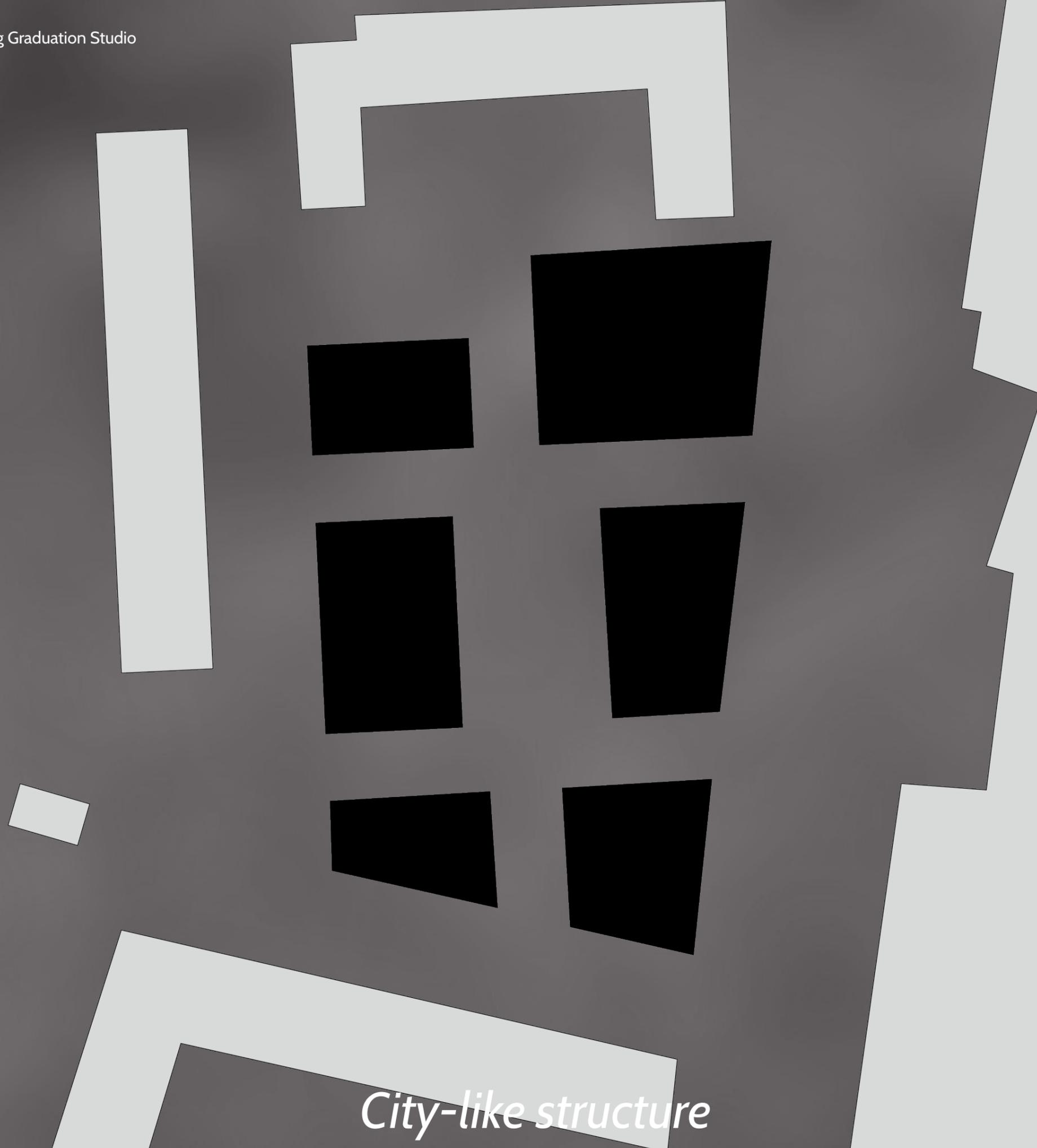


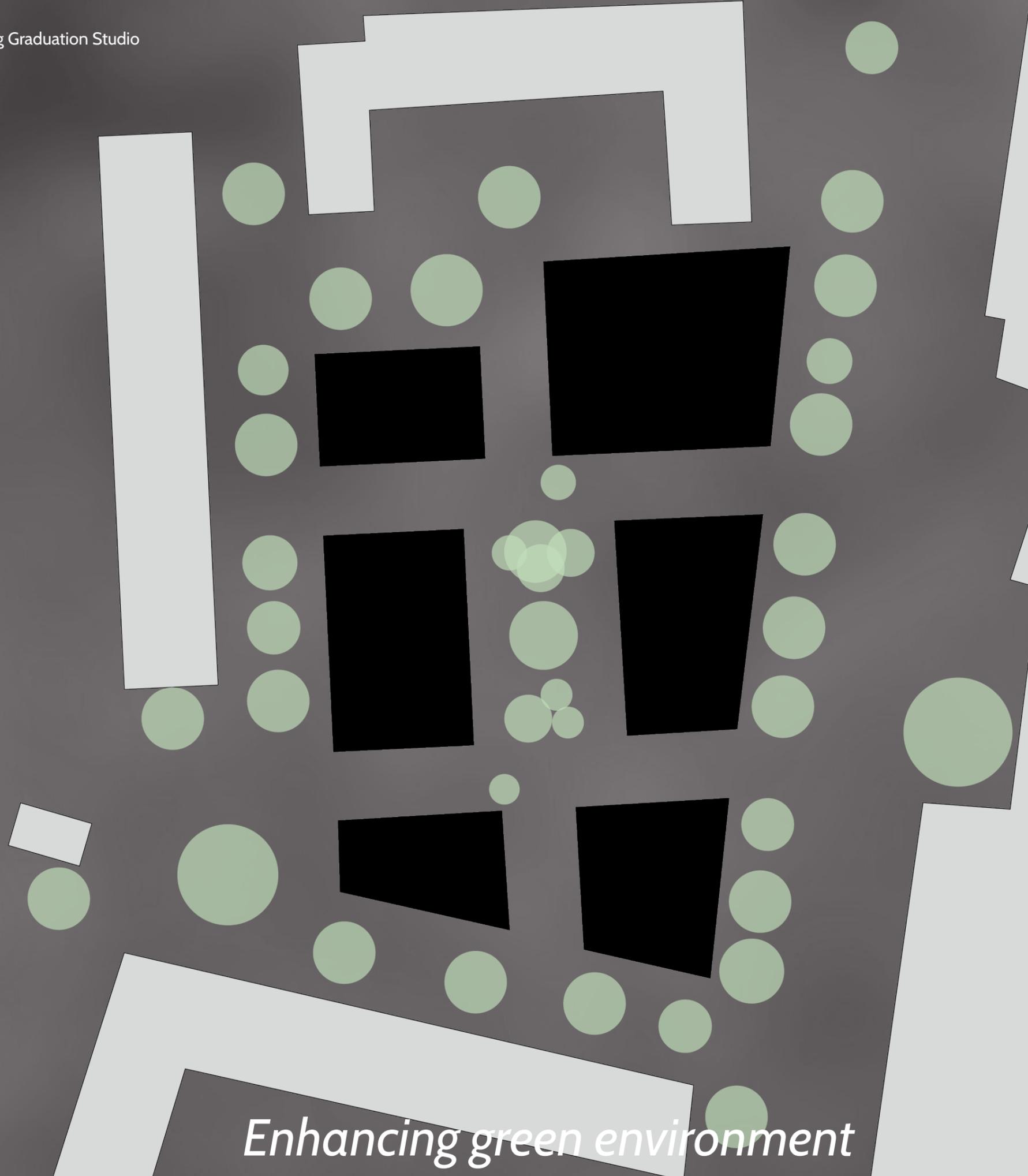


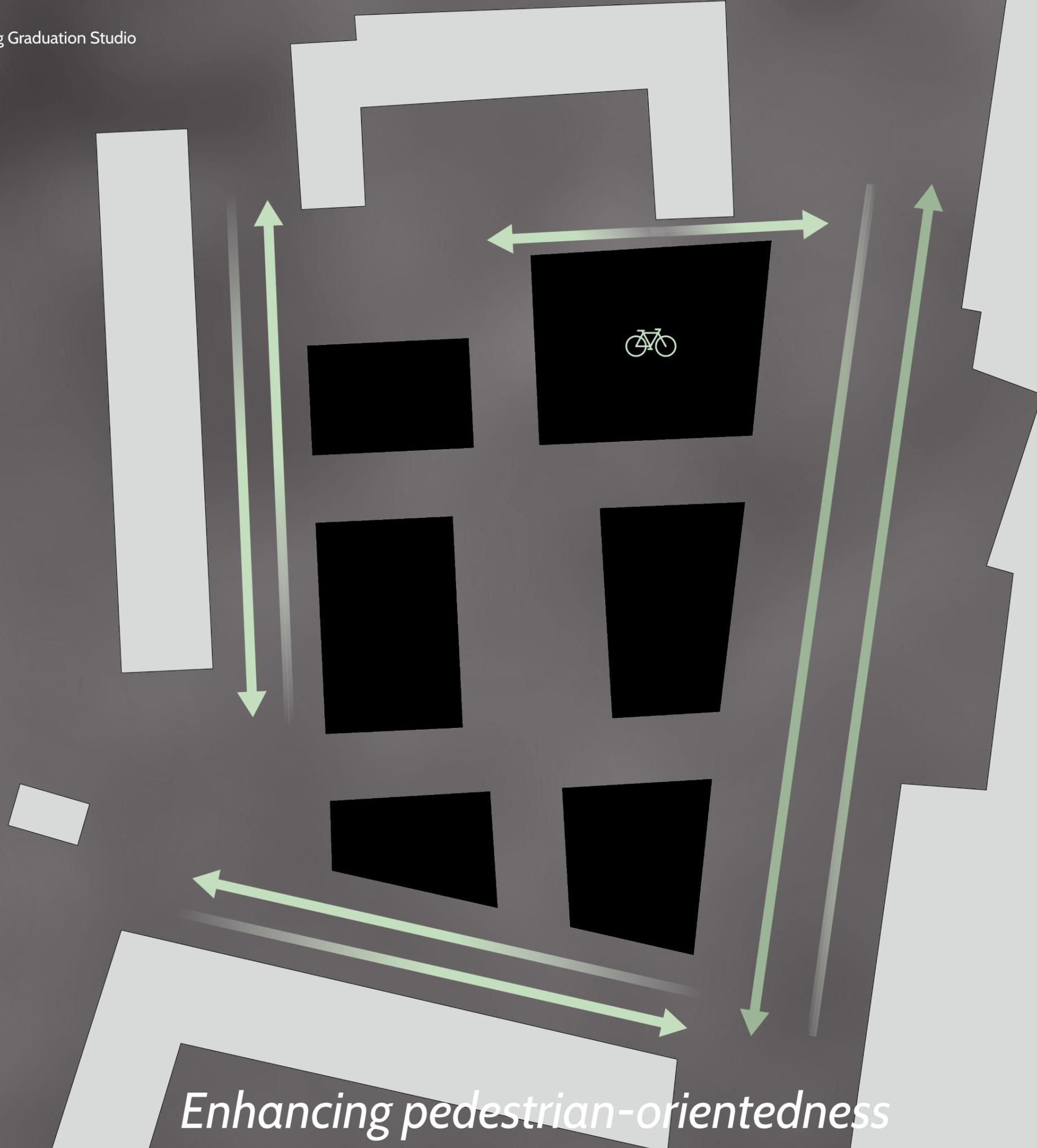
	Hedonic aspect	Social aspect	Eudaimonic aspect
Urban public space	✓	✓	
Interior public spaces			
Interior specific functions			

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Urban public space	✓	✓	
Interior public spaces	✓	✓	✓
Interior specific functions			

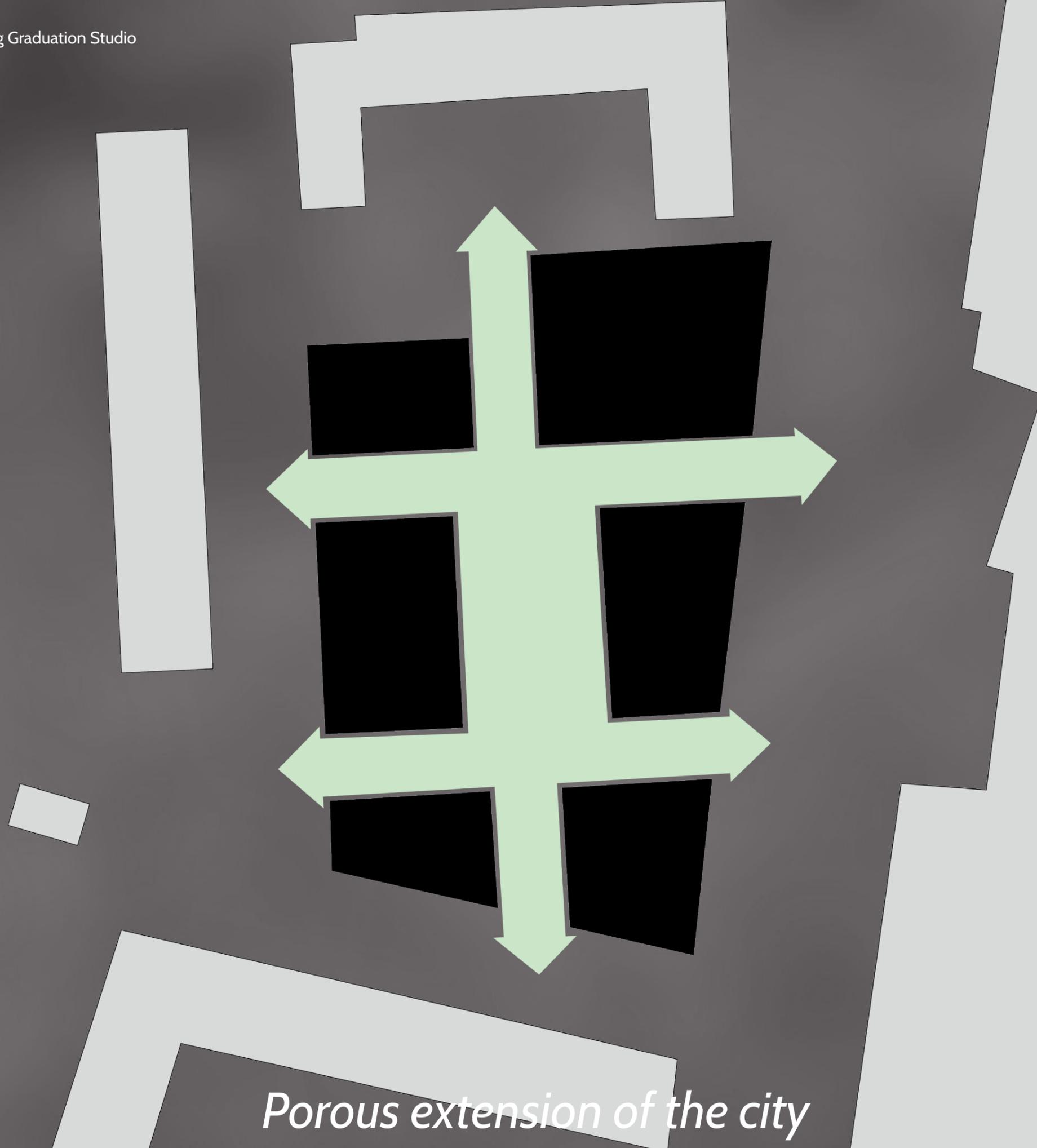
	Hedonic aspect	Social aspect	Eudaimonic aspect
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Interior public spaces	✓	✓	✓
Interior specific functions	✓	✓	✓

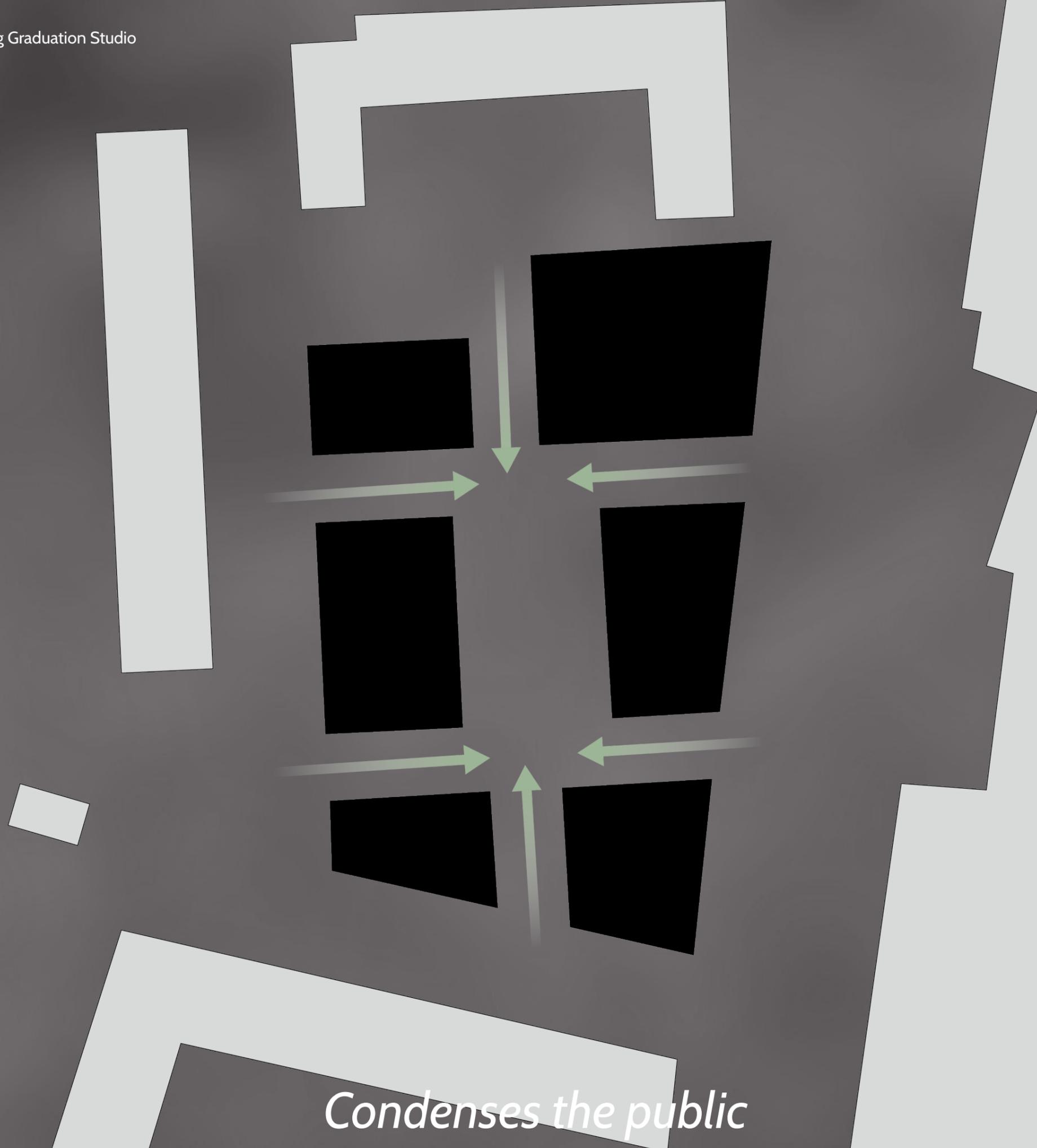




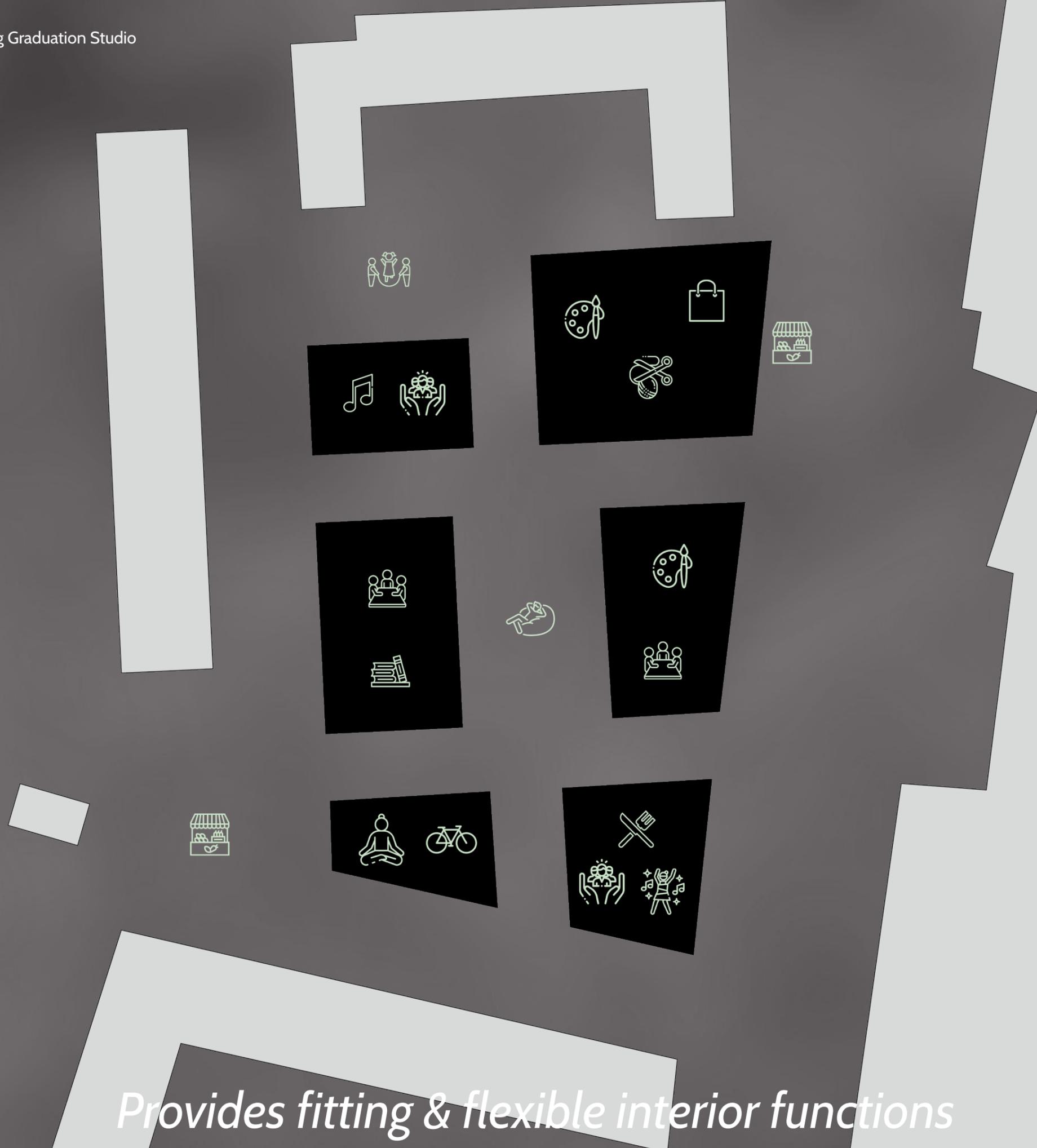


Enhancing pedestrian-orientedness

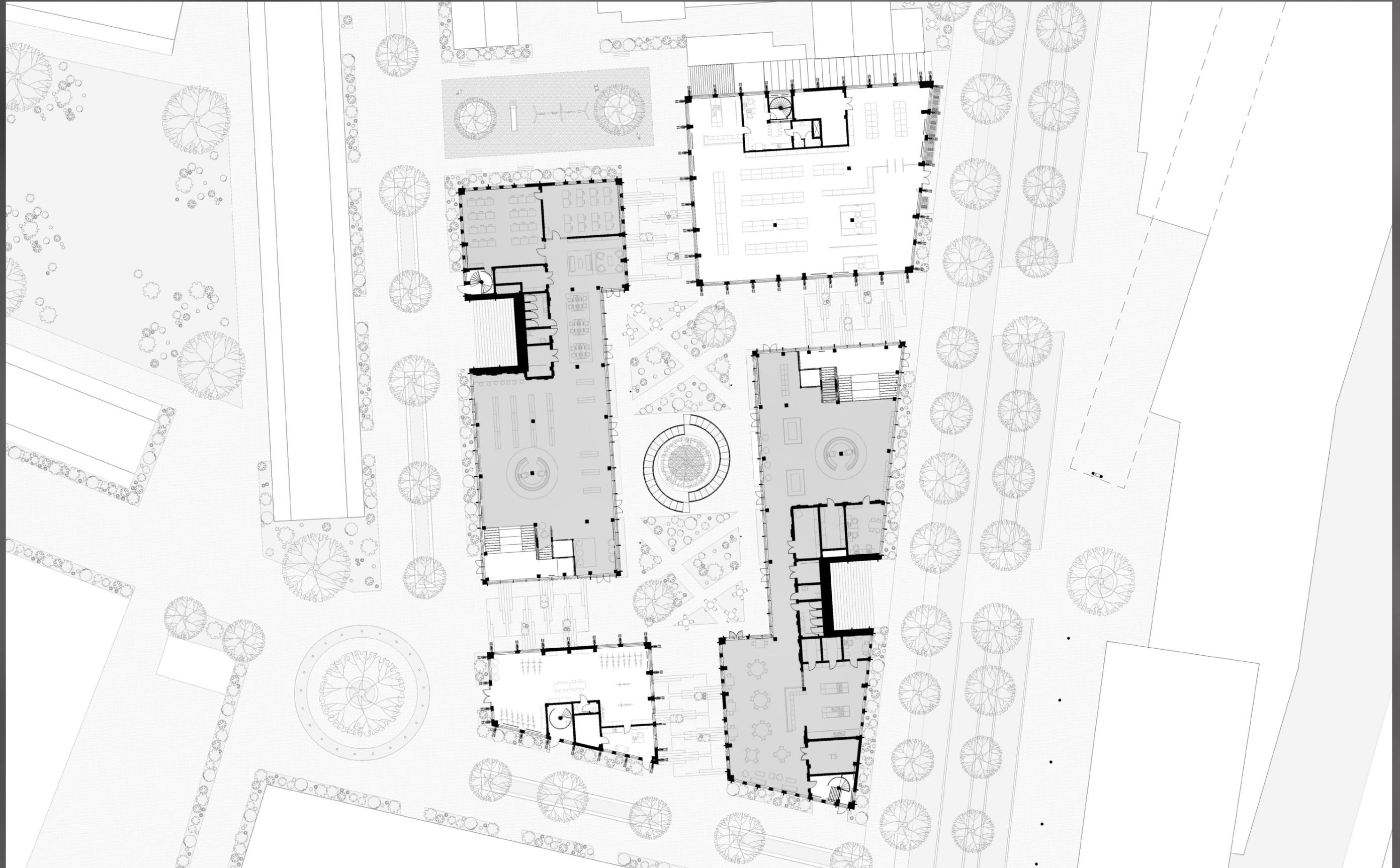




Condenses the public



Provides fitting & flexible interior functions









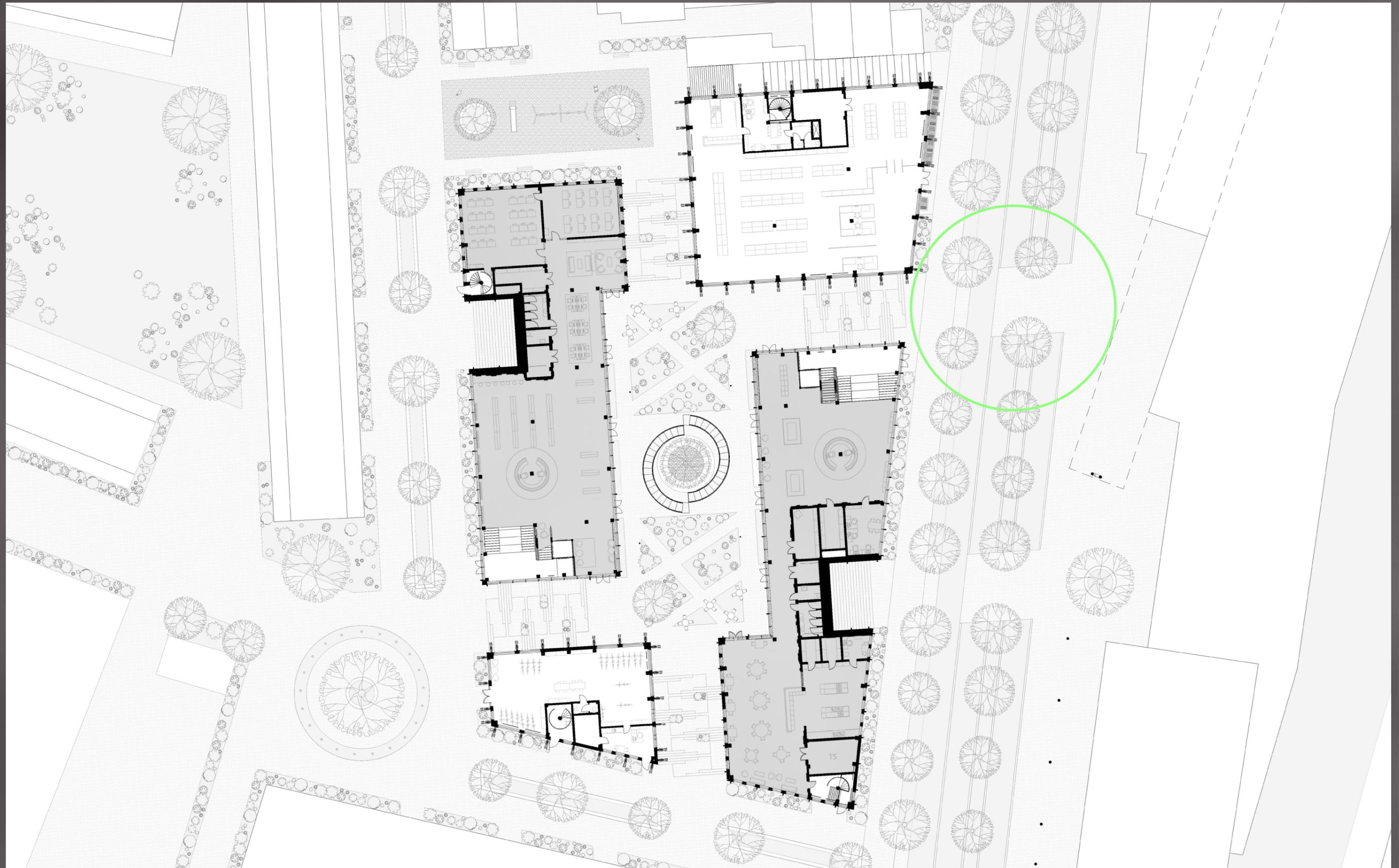
New playground



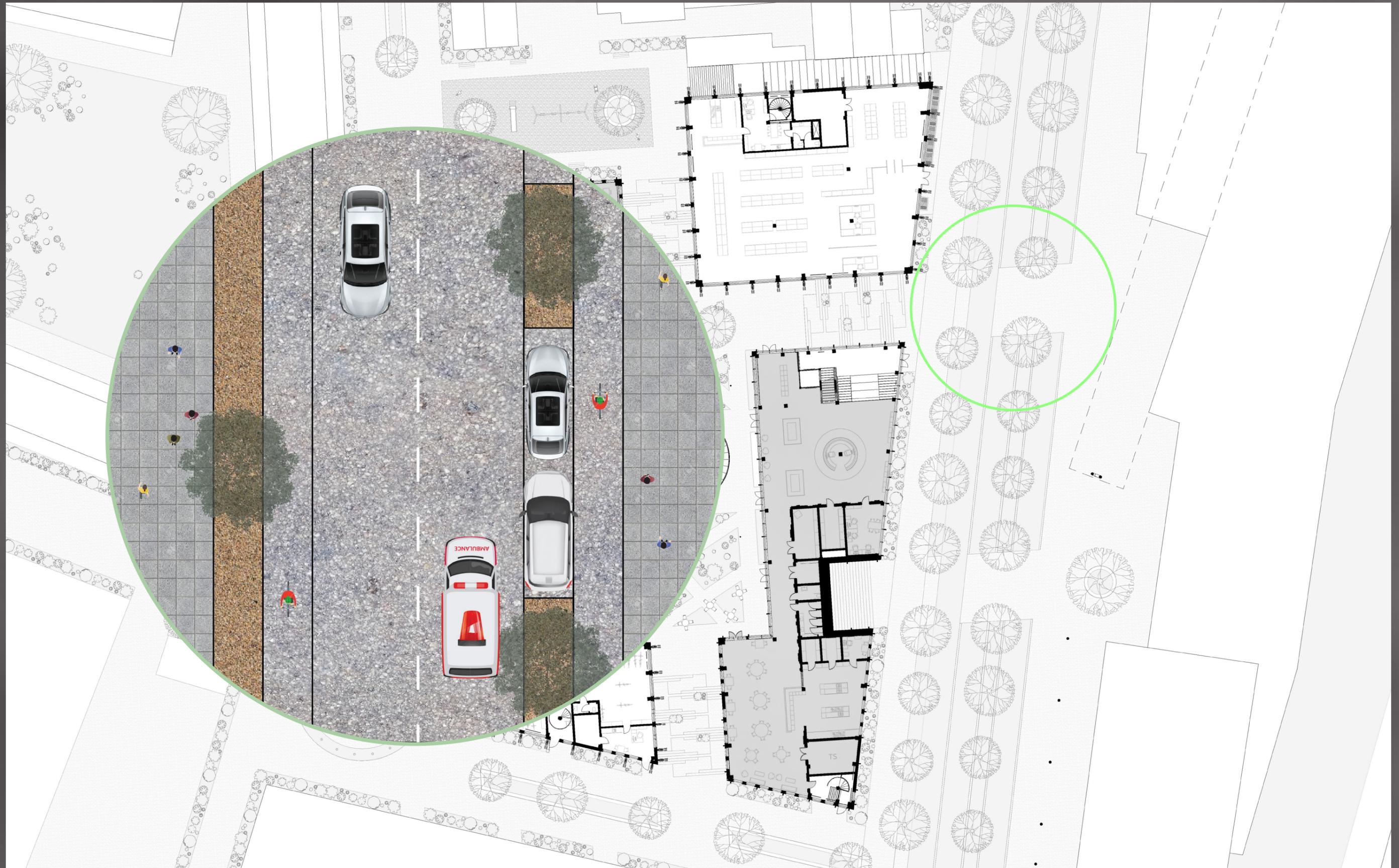
New playground



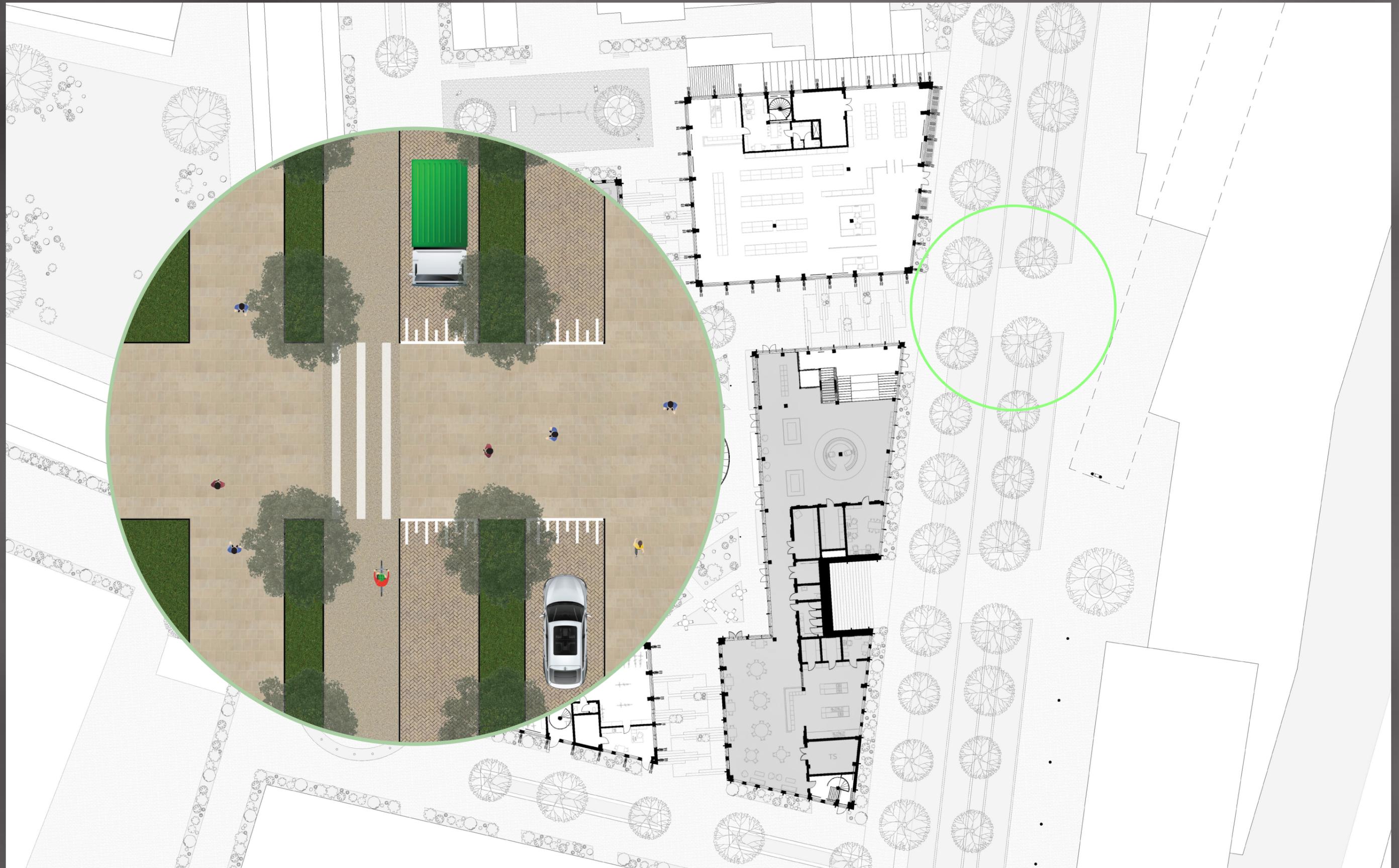
Car-free small streets



Mitigating traffic & pedestrian-friendliness



From concrete, car-heavy streets...





Clear connections in urban fabric





Invitations from all sides



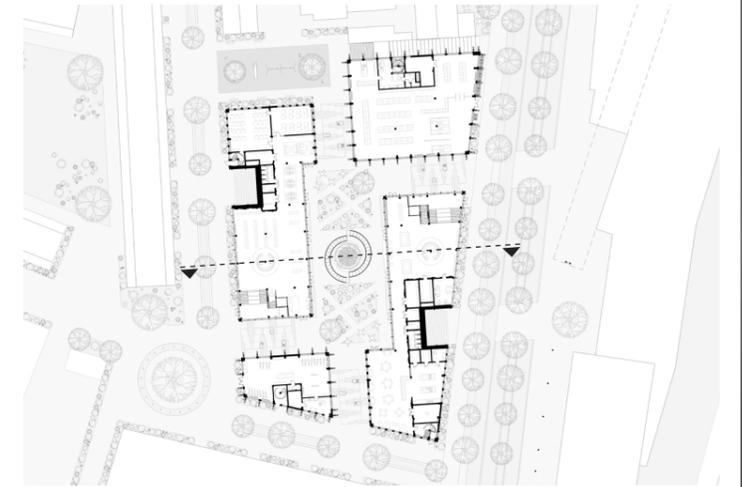
Wheelchair accessible, playful stairs



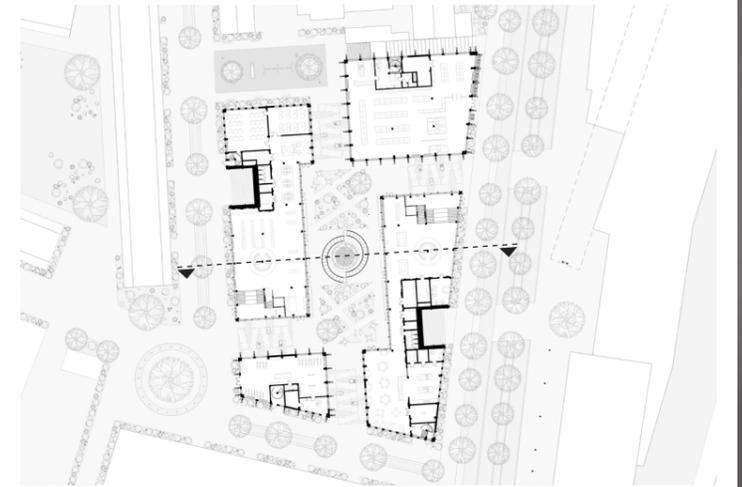
Street access to upper levels



Street access to upper levels



Keeping buildings low for daylight



Equal access to 2/3 floors



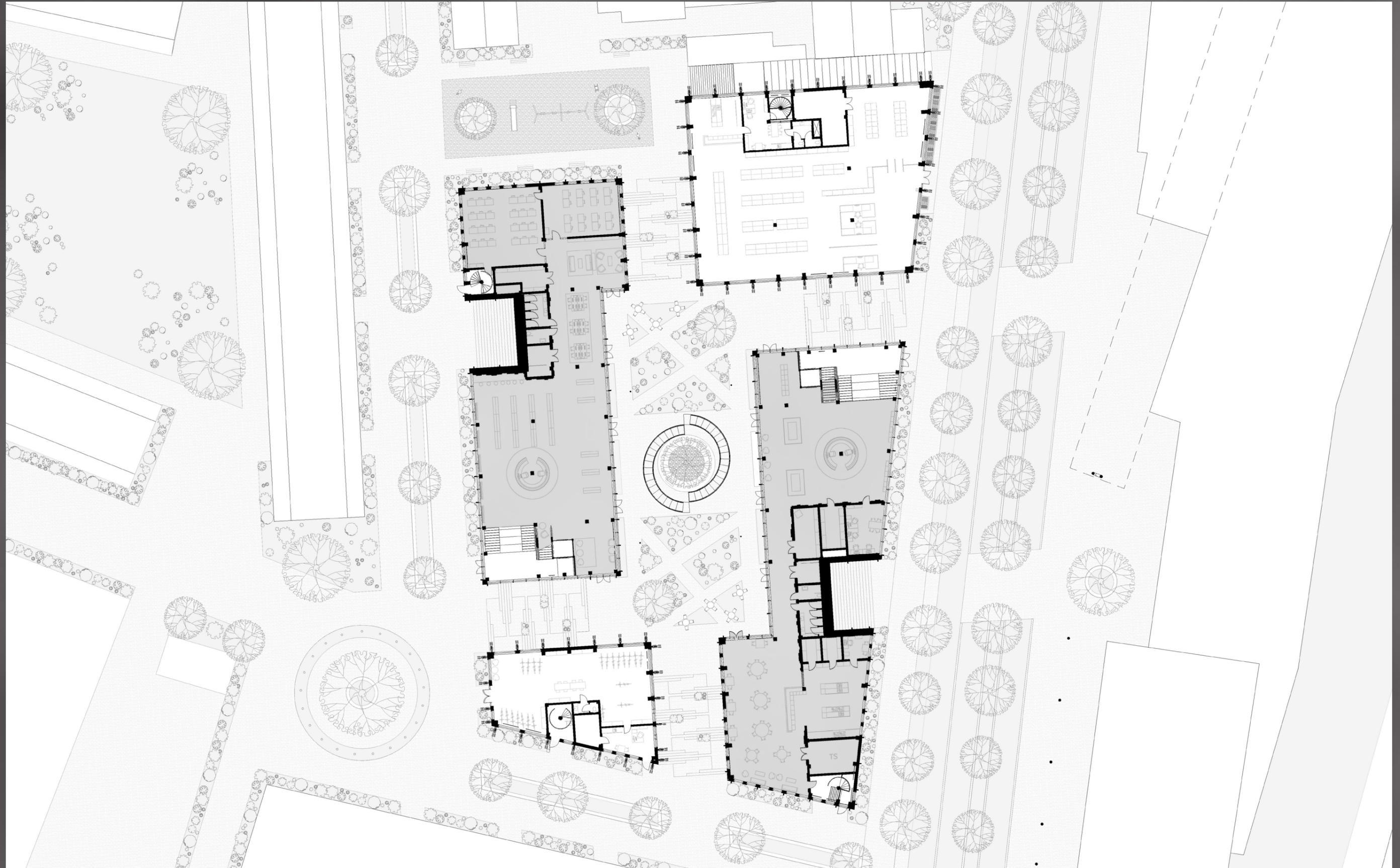




Building façades amplify natural environment

	Hedonic aspect	Social aspect	Eudaimonic aspect
Urban public space	✓	✓	
Interior public spaces			
Interior specific functions			

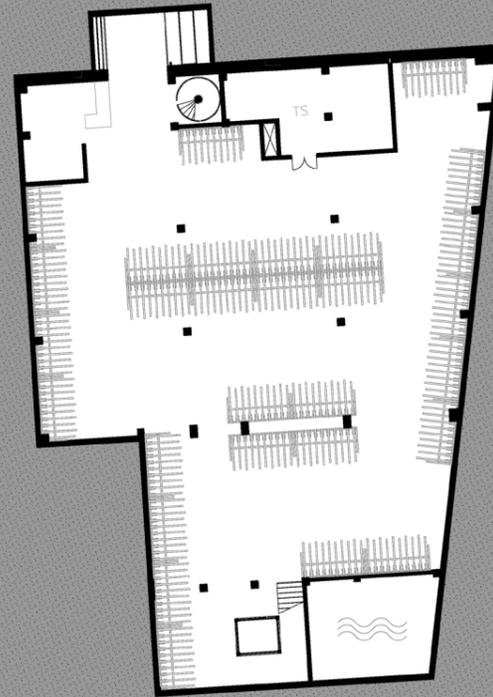
Playful, social, green environment

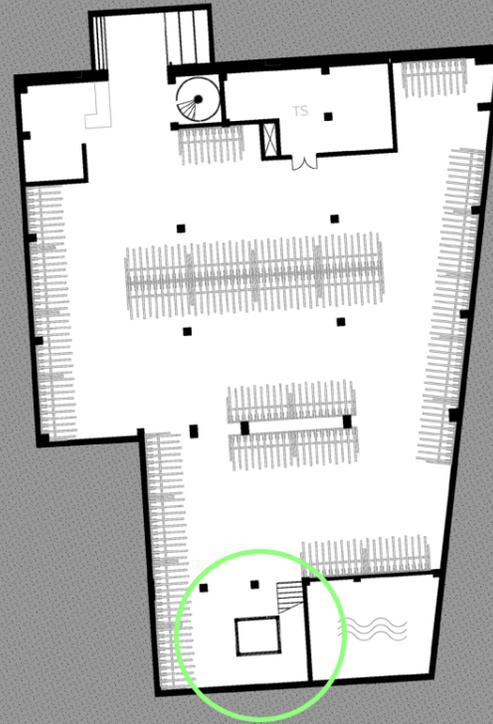


Area is bikeable and walkable

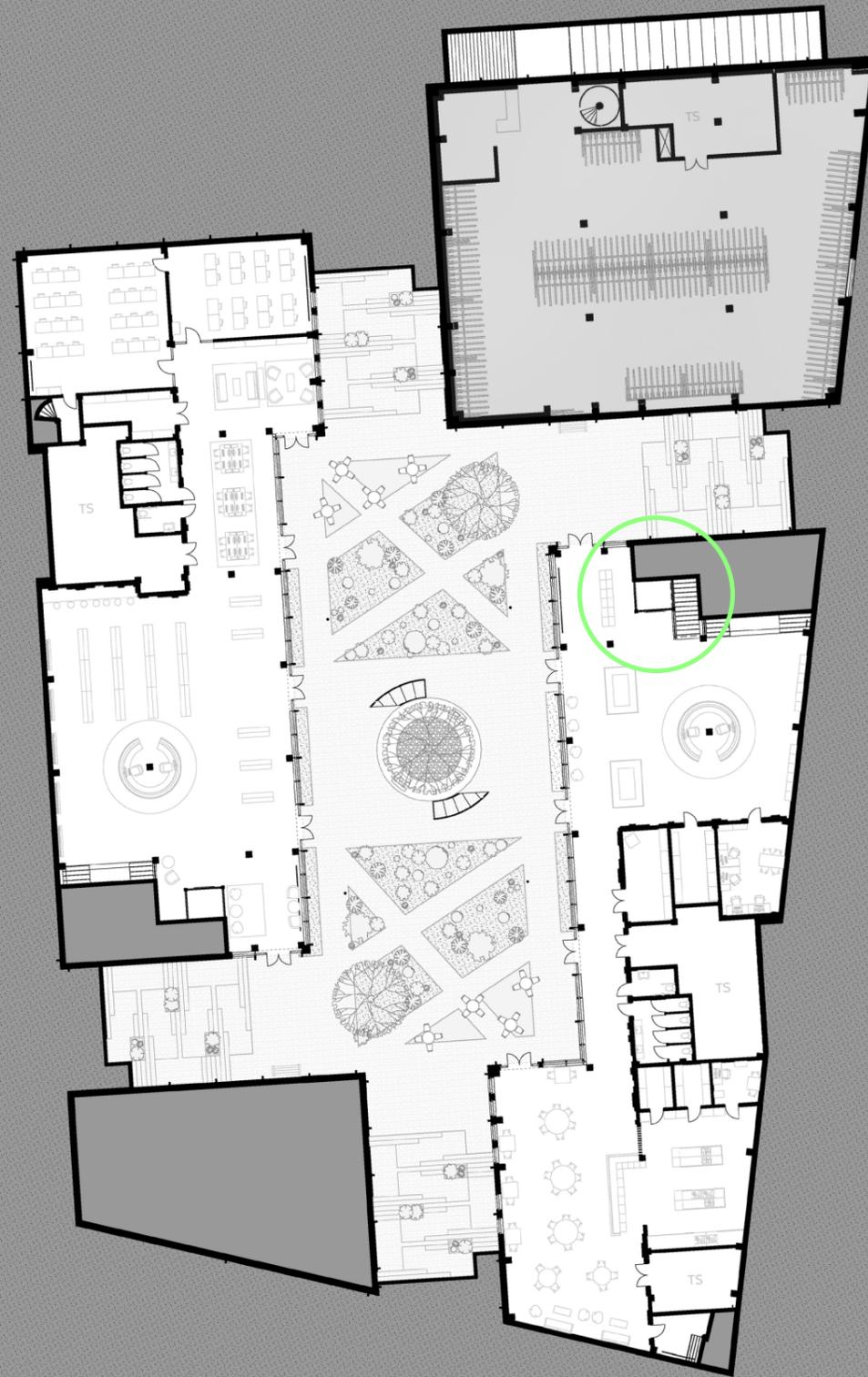


Access to new bike parking





Access into the building



Access into the building



Access into the building



Street access





Accessible entrance



- 1. Lygten Bazar
- 2. Bike workshop

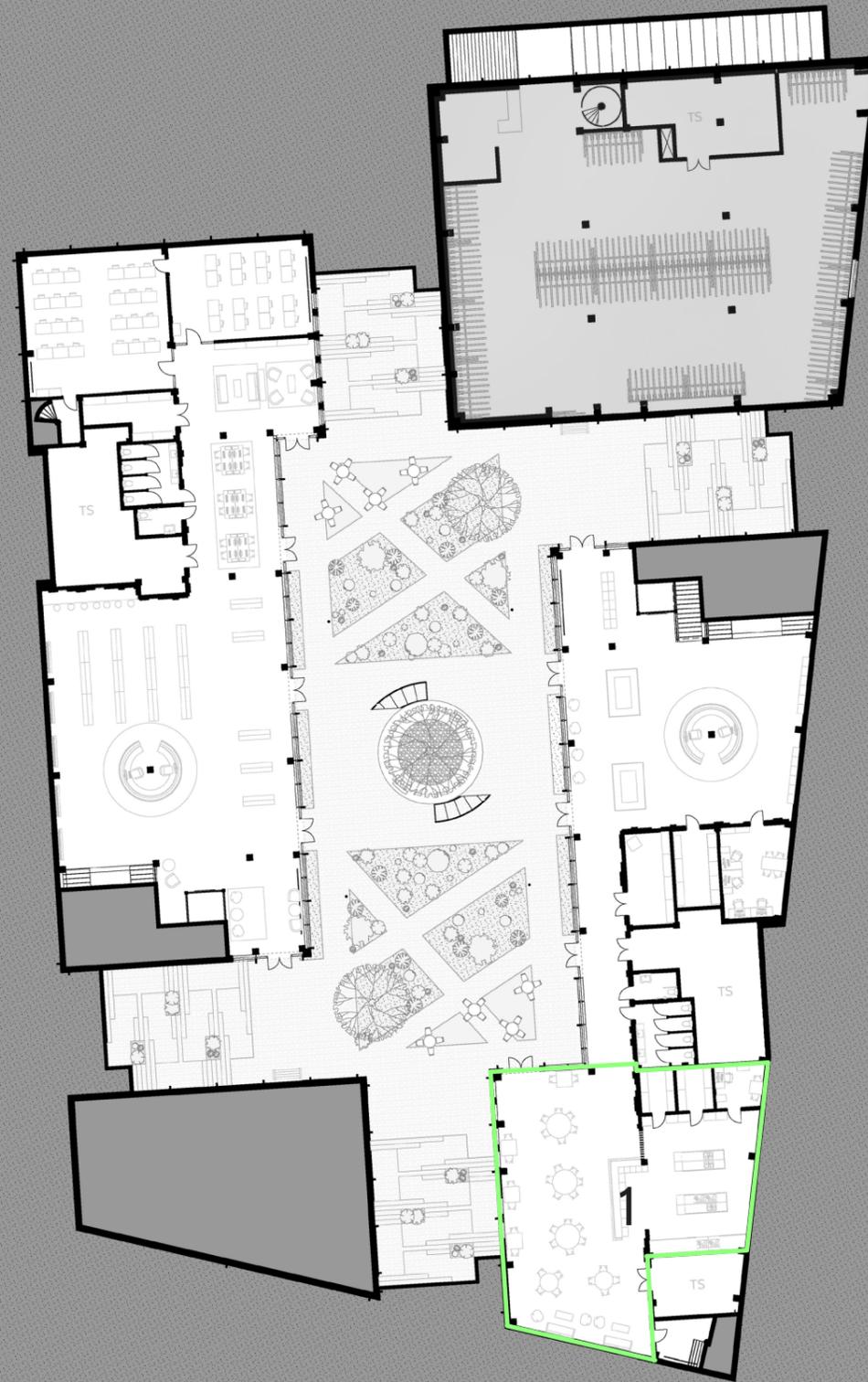
Functions with street access



Bike workshop with social work program



Restaurant with social work program



1. Restaurant

Restaurant with social work program



- 1. Computer space
- 2. Library
- 3. Reception & Public information
- 4. Restaurant

Public spaces



Computer space



- 1. Classroom
- 2. Restaurant

Specific functions



- 1. Study lounge
- 2. Event space

Public spaces



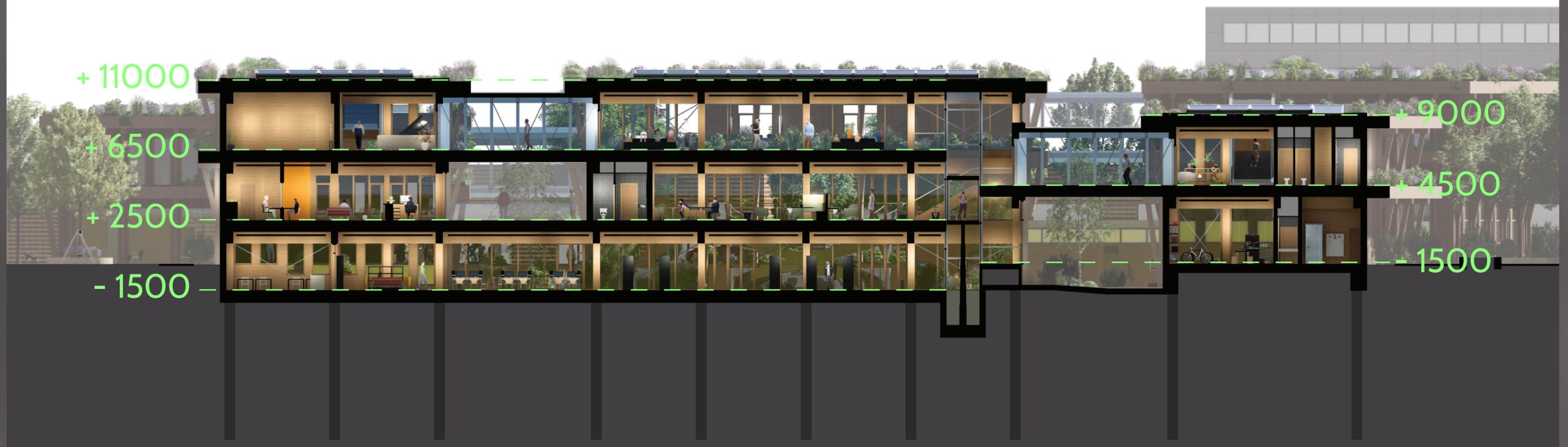
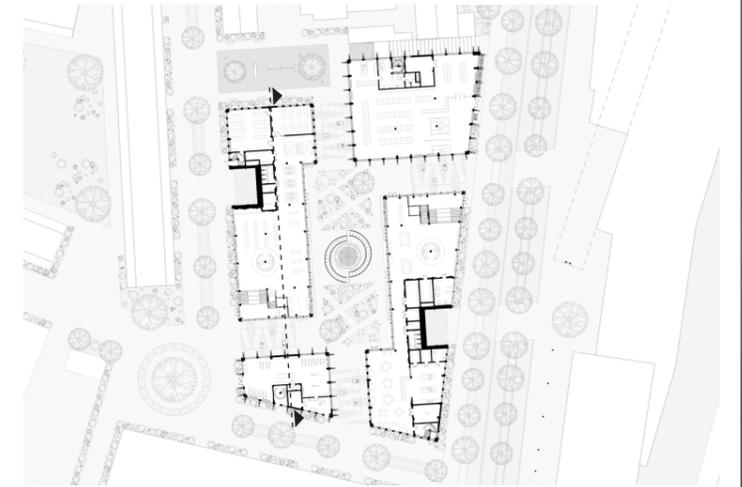


- 1. Legal help centre
- 2. Meeting rooms
- 3. Family relations centre

Specific functions



Legal help centre



Split-level construction



Skybridges





- 1. Games lounge
- 2. Meeting lounge

Public spaces



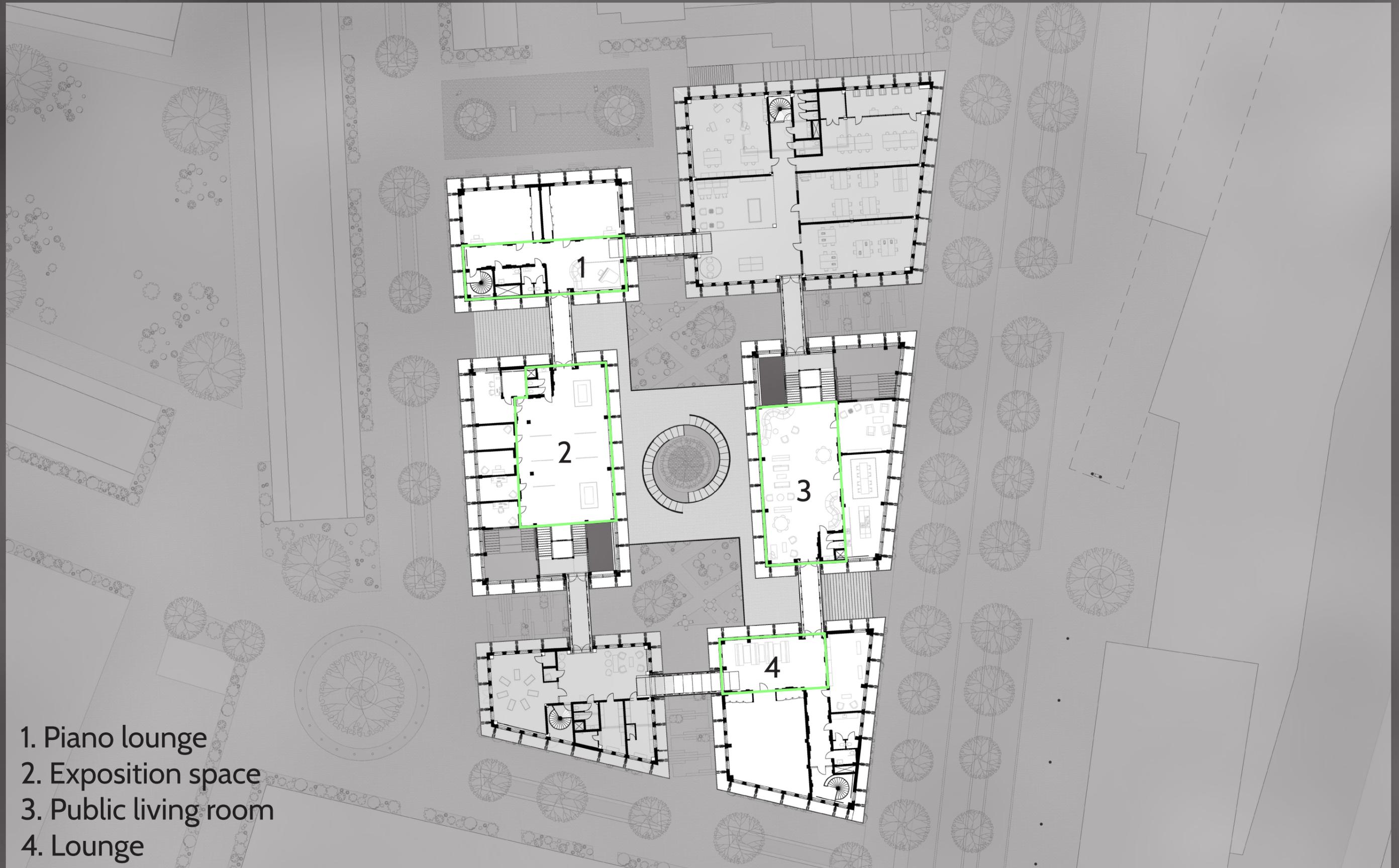


- 1. Painting & drawing
- 2. Wood & metalworking
- 3. Makerspace
- 4. Sewing
- 5. Yoga
- 6. Changing rooms

Specific functions



Yoga space



- 1. Piano lounge
- 2. Exposition space
- 3. Public living room
- 4. Lounge





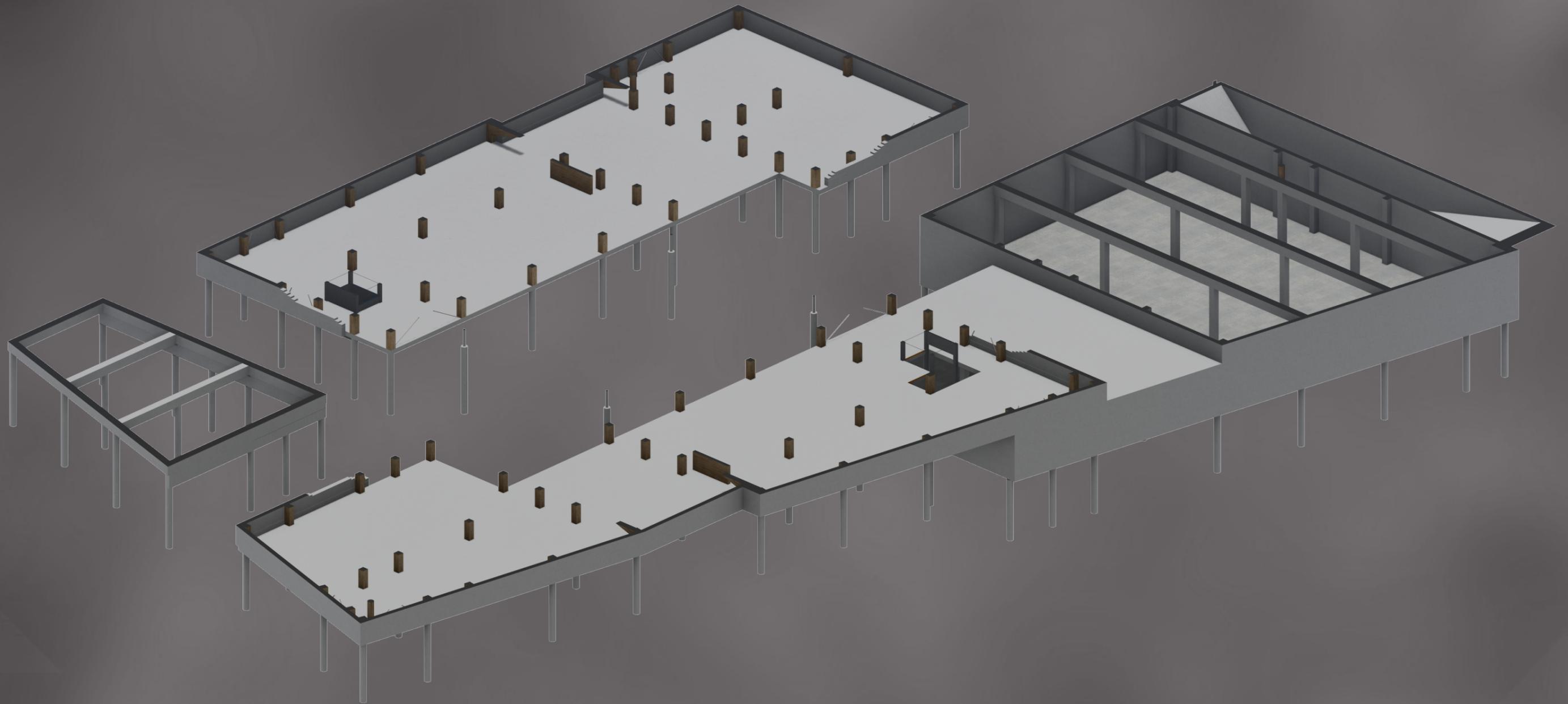
- 1. Repetition space
- 2. Recording studio
- 3. Guitar studio
- 4. Piano studio
- 5. Editing studio
- 6. Senior's lounge
- 7. Public kitchen
- 8. Multi-faith room
- 9. Dance studio



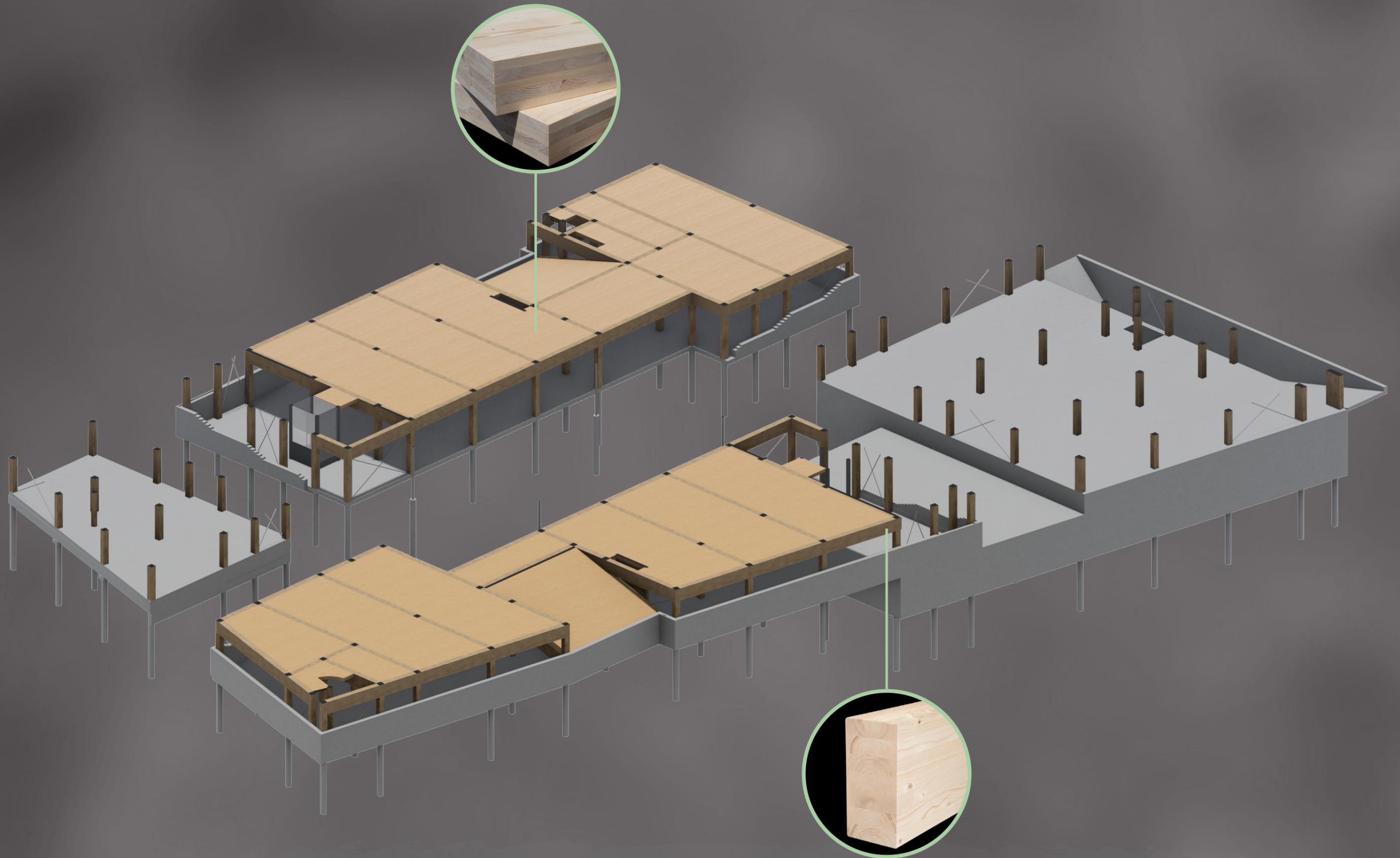
Exhibition space

	Hedonic aspect	Social aspect	Eudaimonic aspect
Urban public space	✓	✓	
Interior public spaces	✓	✓	✓
Interior specific functions	✓	✓	✓

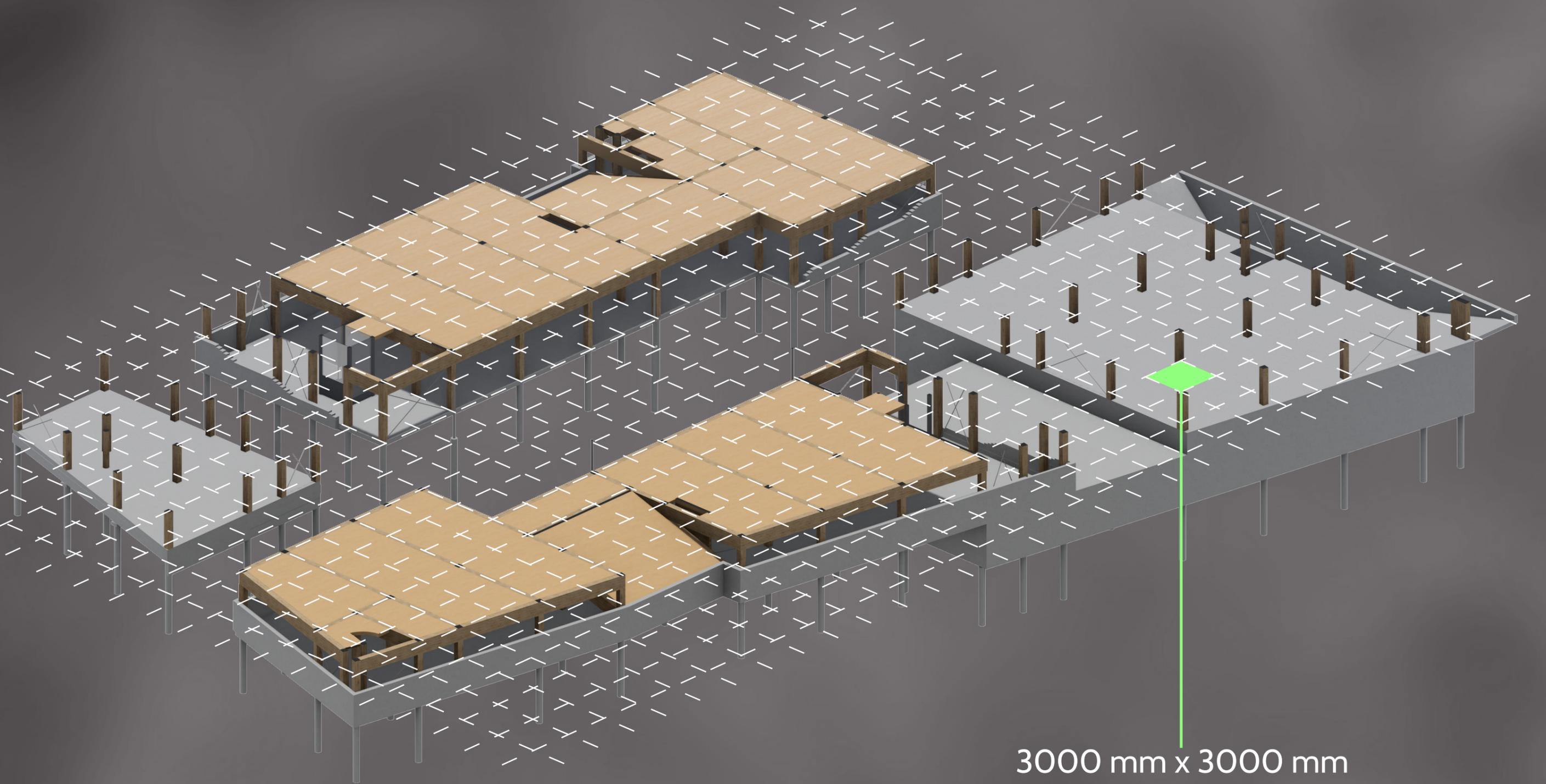
Need for flexibility



Concrete pile foundations & basement

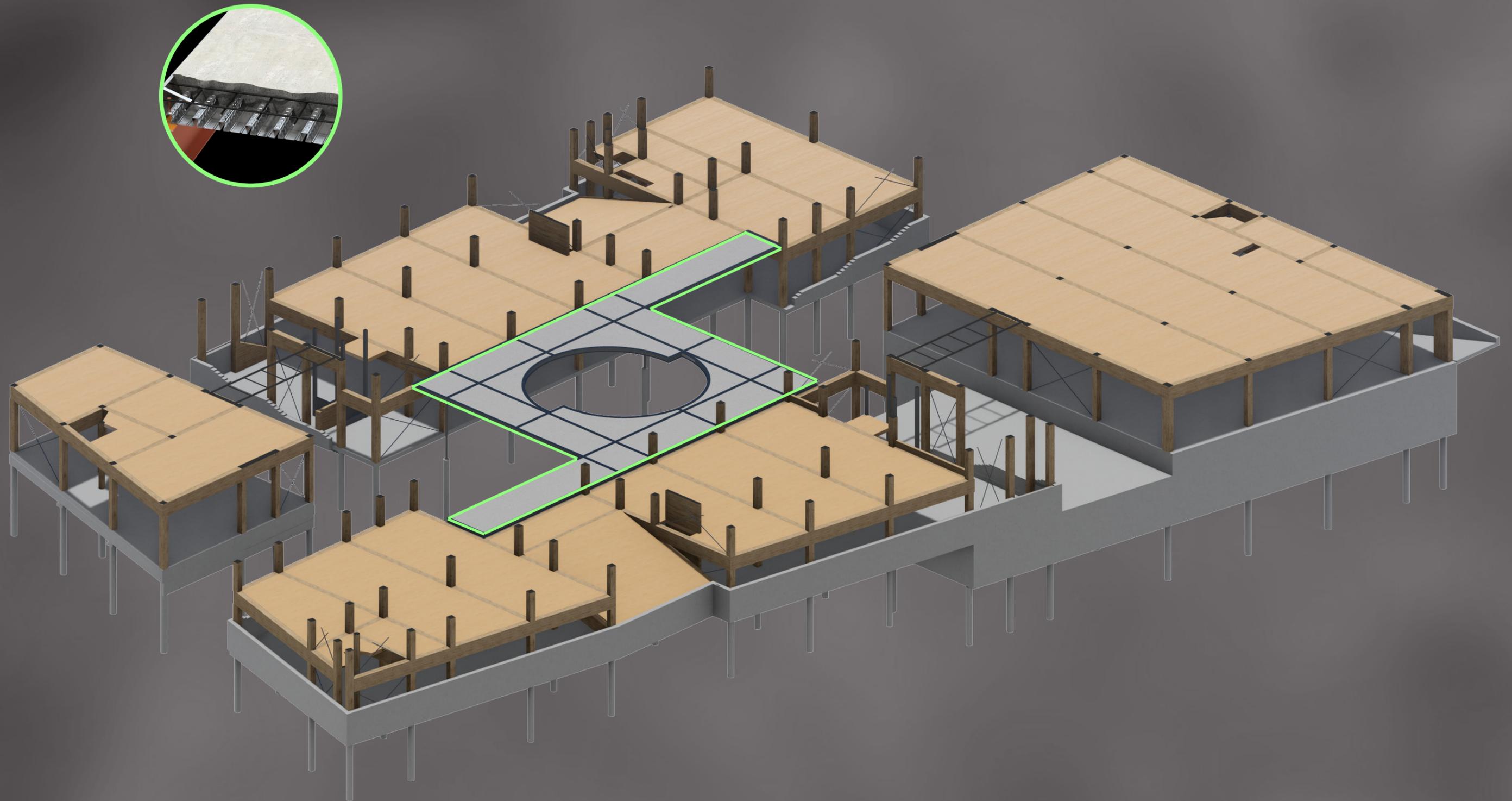


Wooden structure of glulam beams & CLT

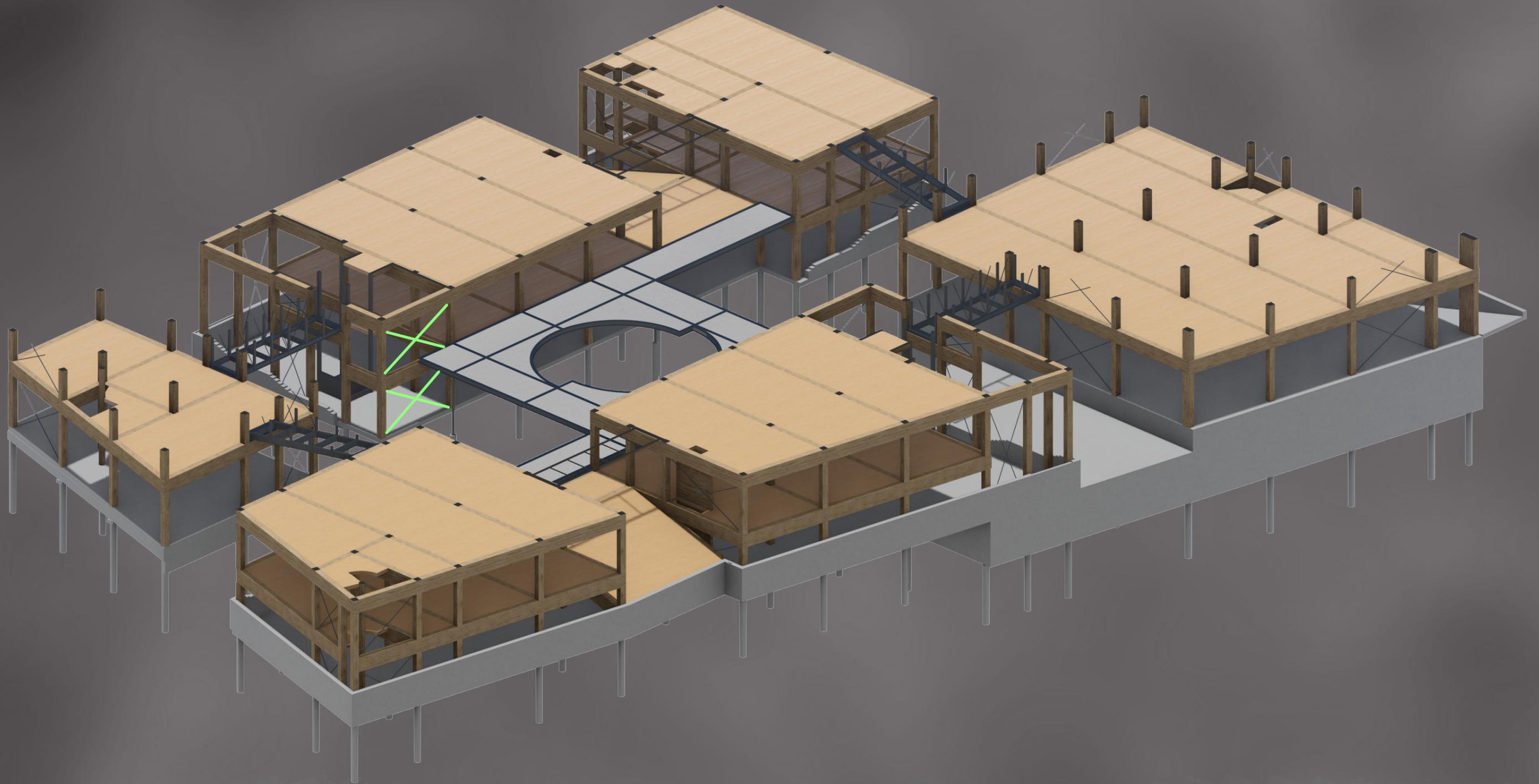


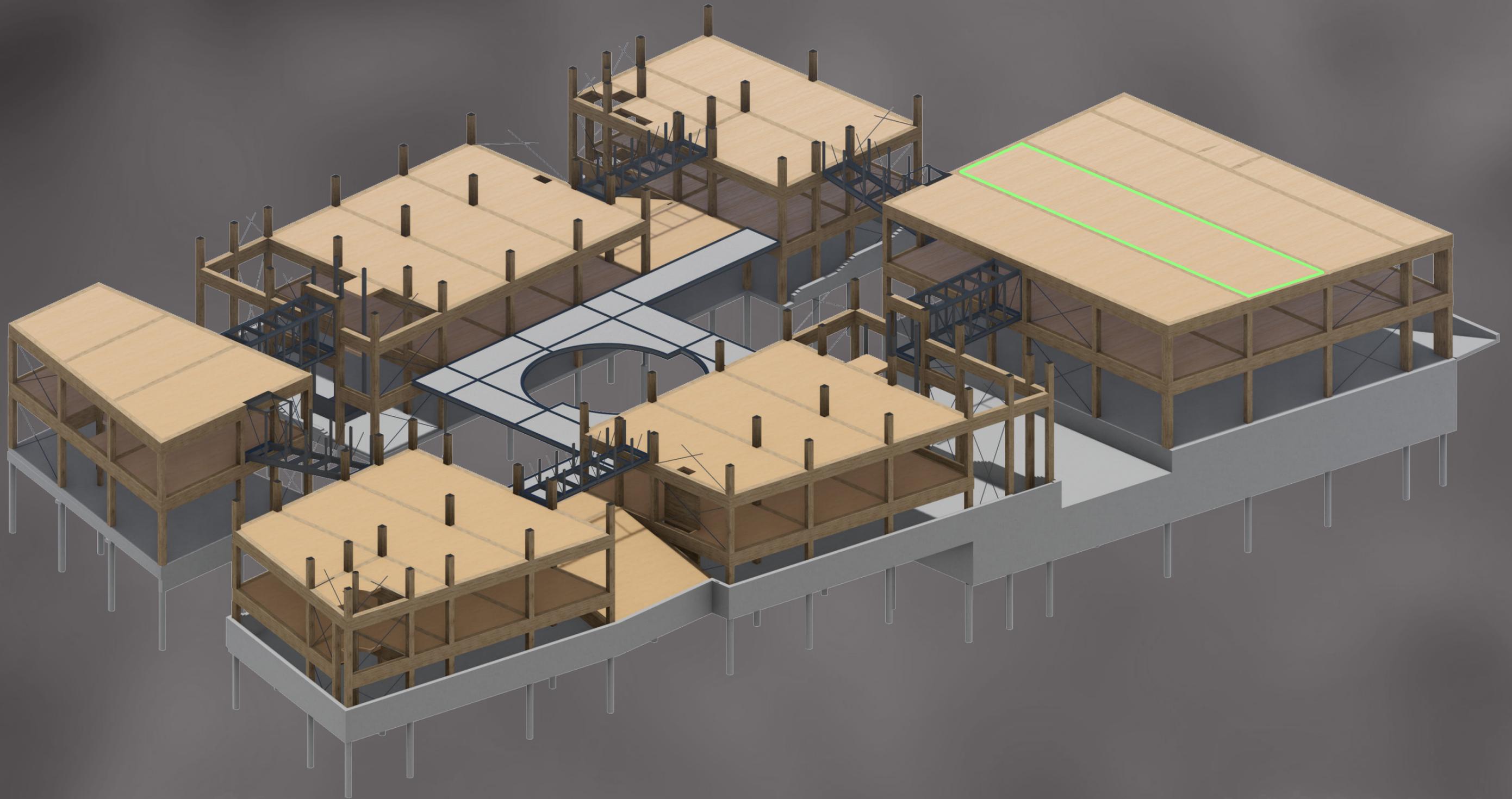
3000 mm x 3000 mm

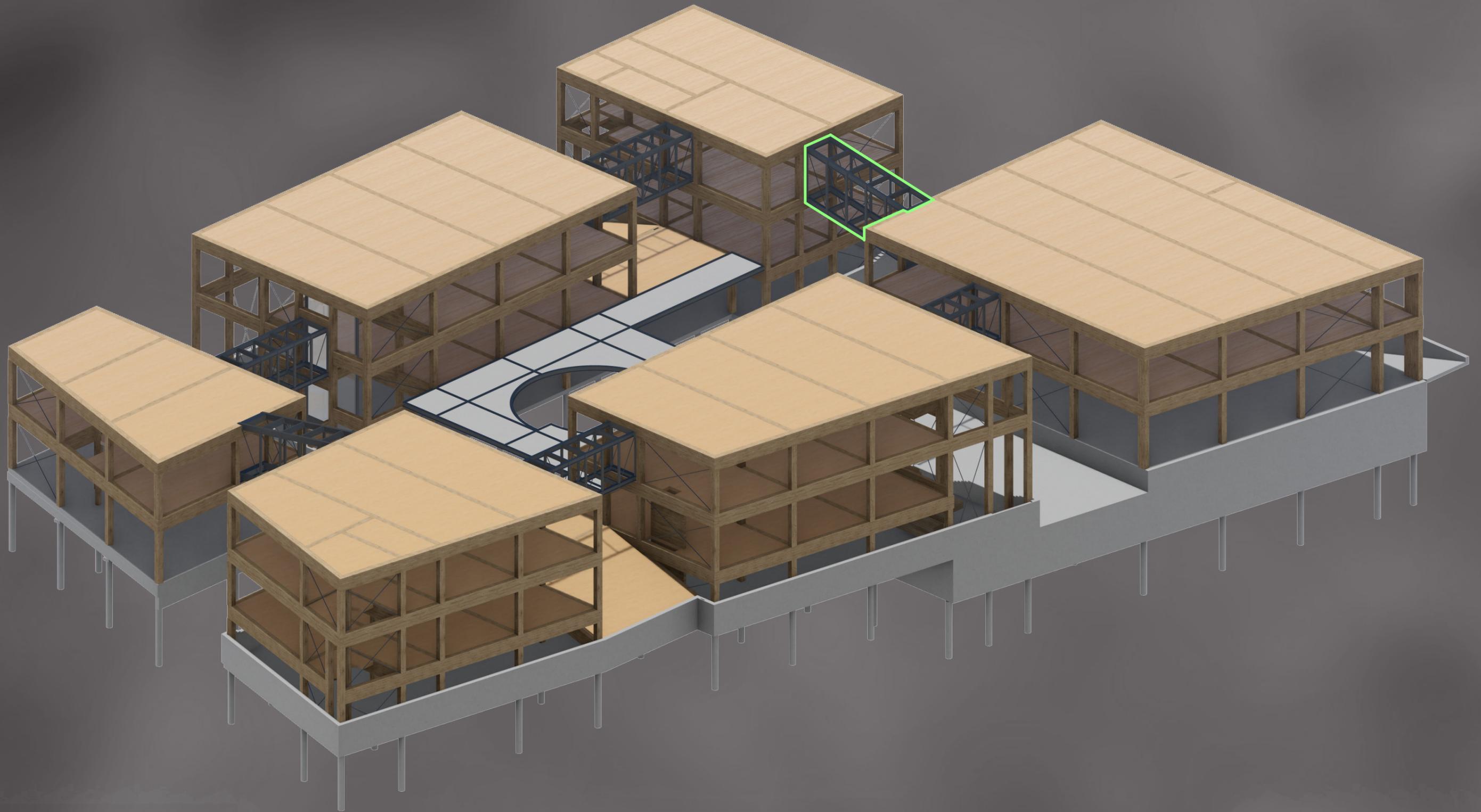
Structural grid



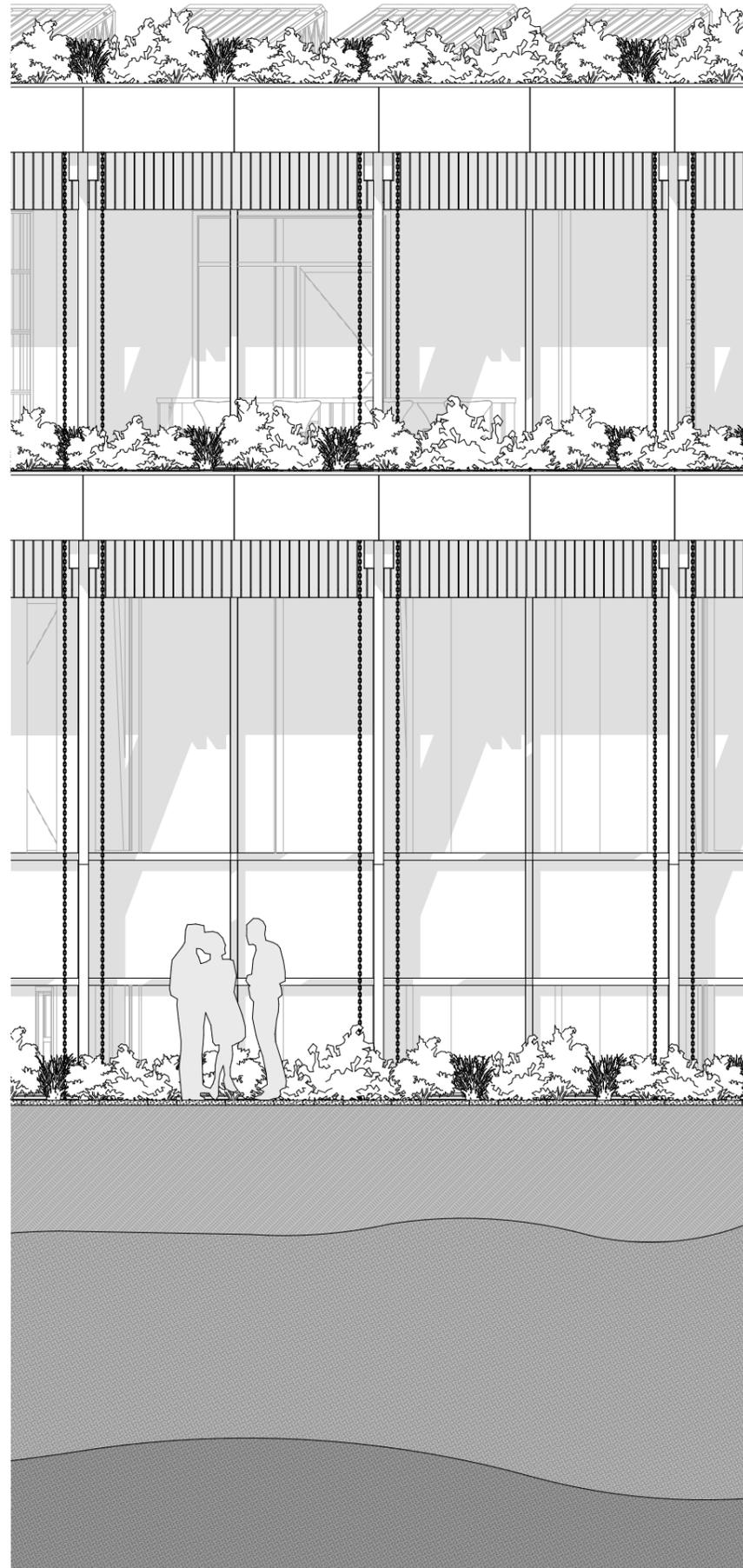
Concrete & galvanized steel upper street



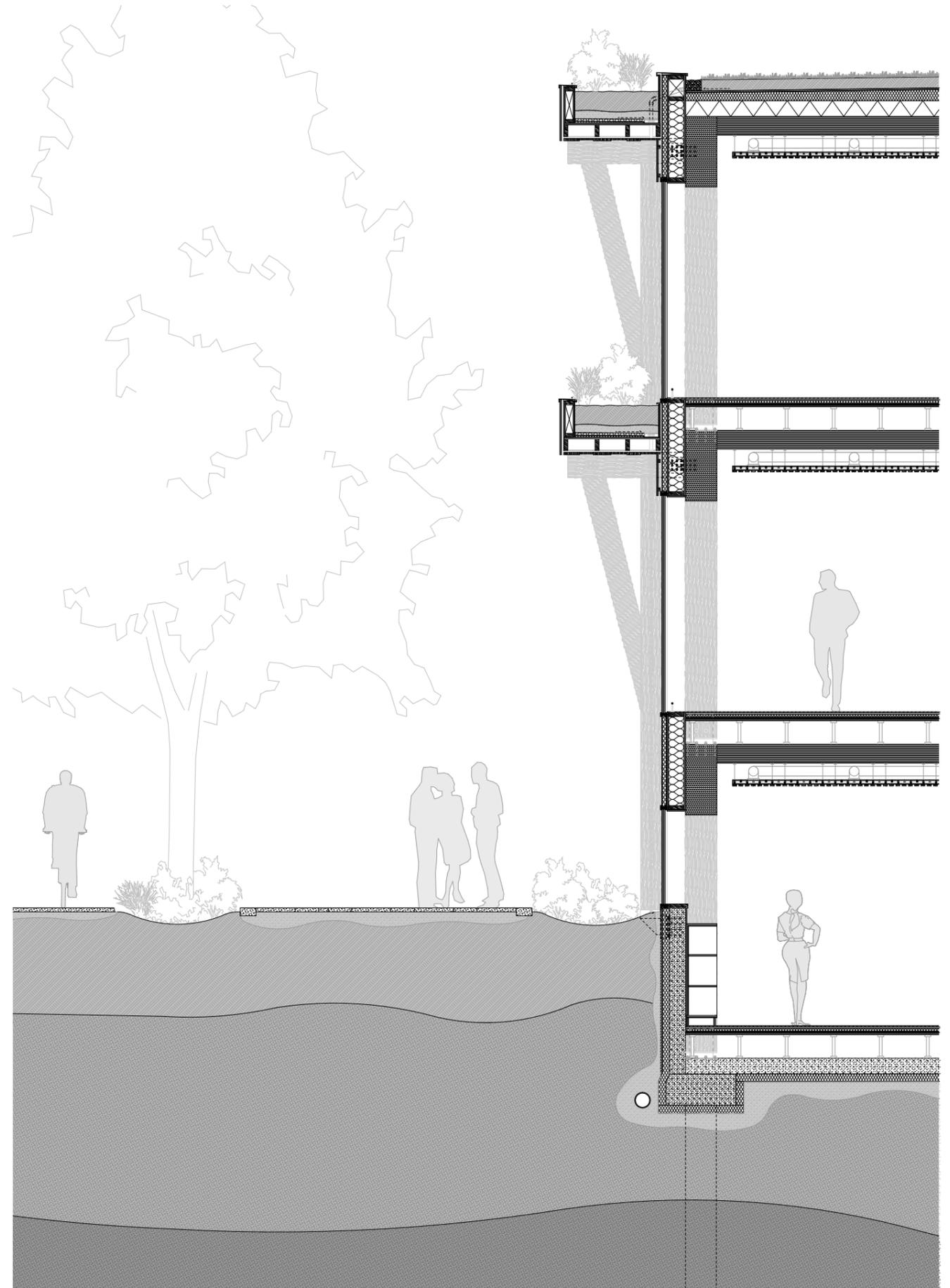








Structure



Slide 113/123

- Basement wall
- Drainage layer
 - Water repellent layer
 - PIR hard foam insulation 150 mm
 - Reinforced concrete 250 mm
 - Wooden finish 18 mm

Fermacell GV-85 demountable floor system

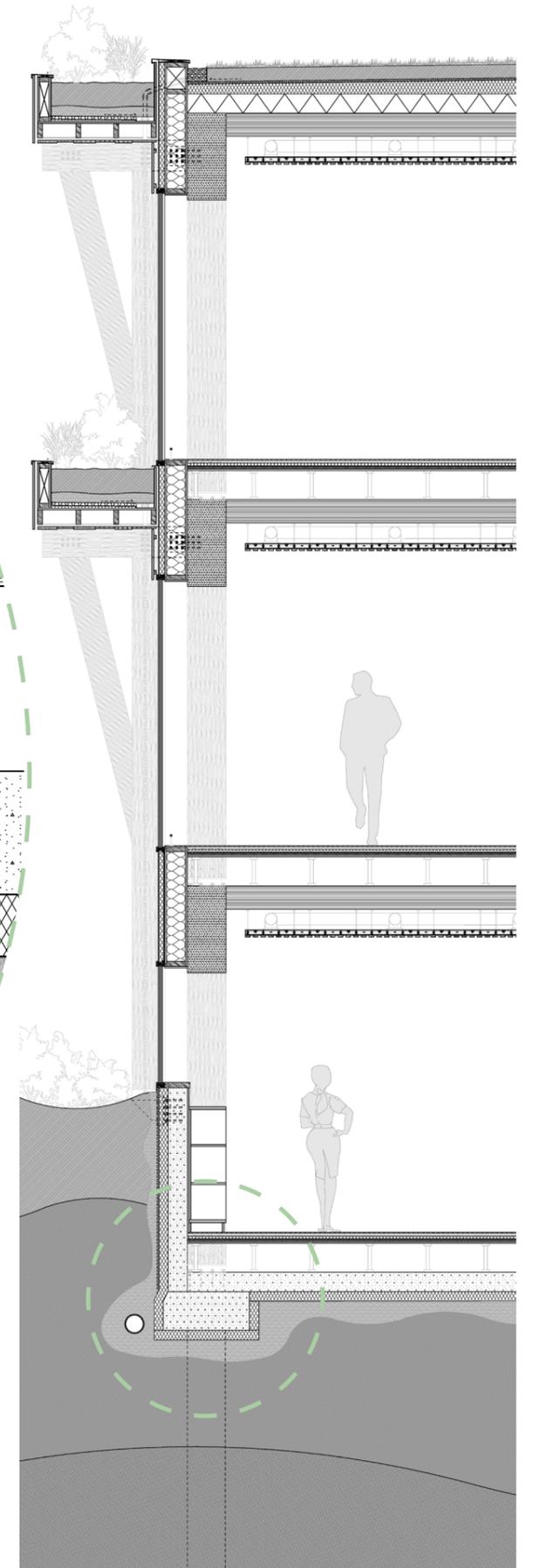
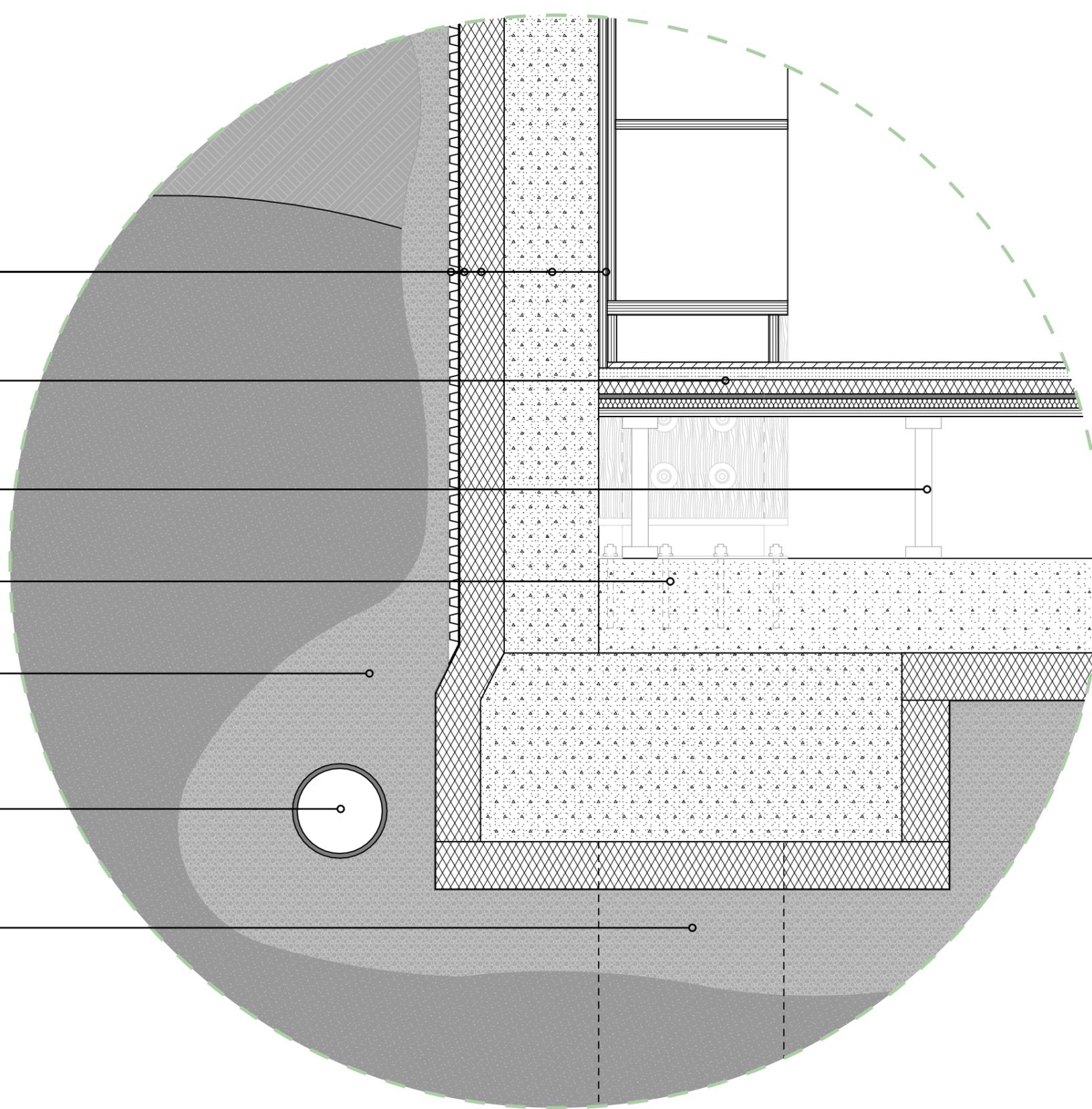
Raised flooring for flexible electrics and plumbing

Connection piece concrete-wood column

Aggregate drainage layer

Drainage pipe to water storage

Foundation pile



WICTEC panel with reflective finish

Wooden column 400x400 mm

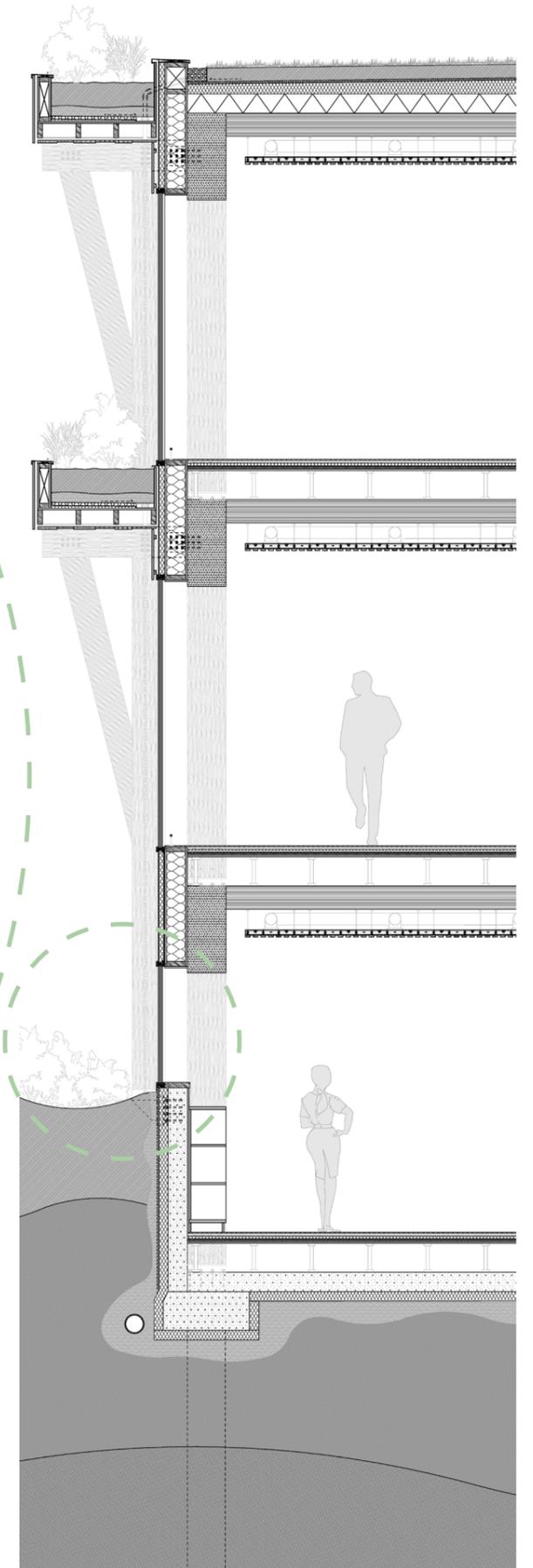
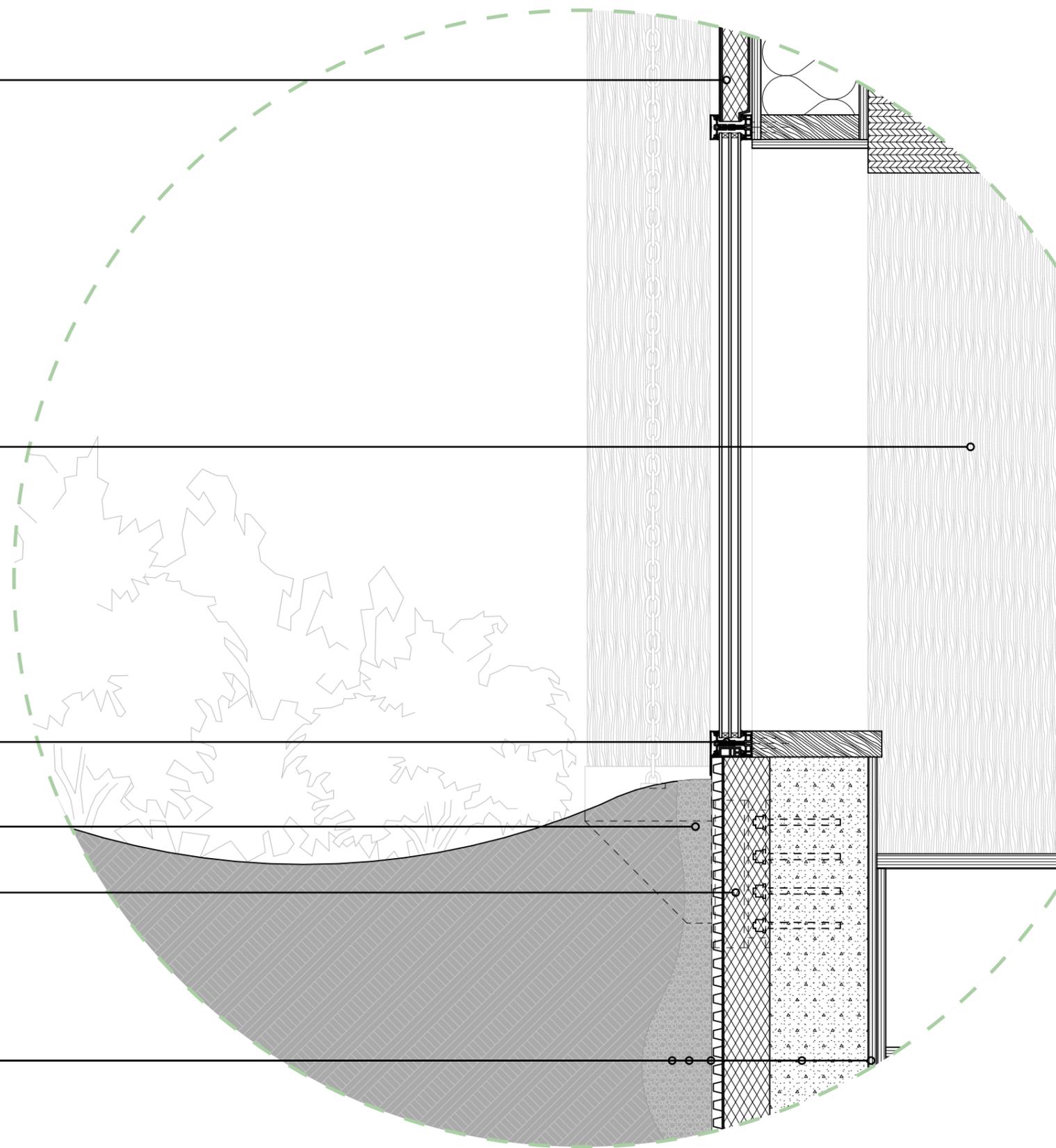
WICTEC-50 façade system

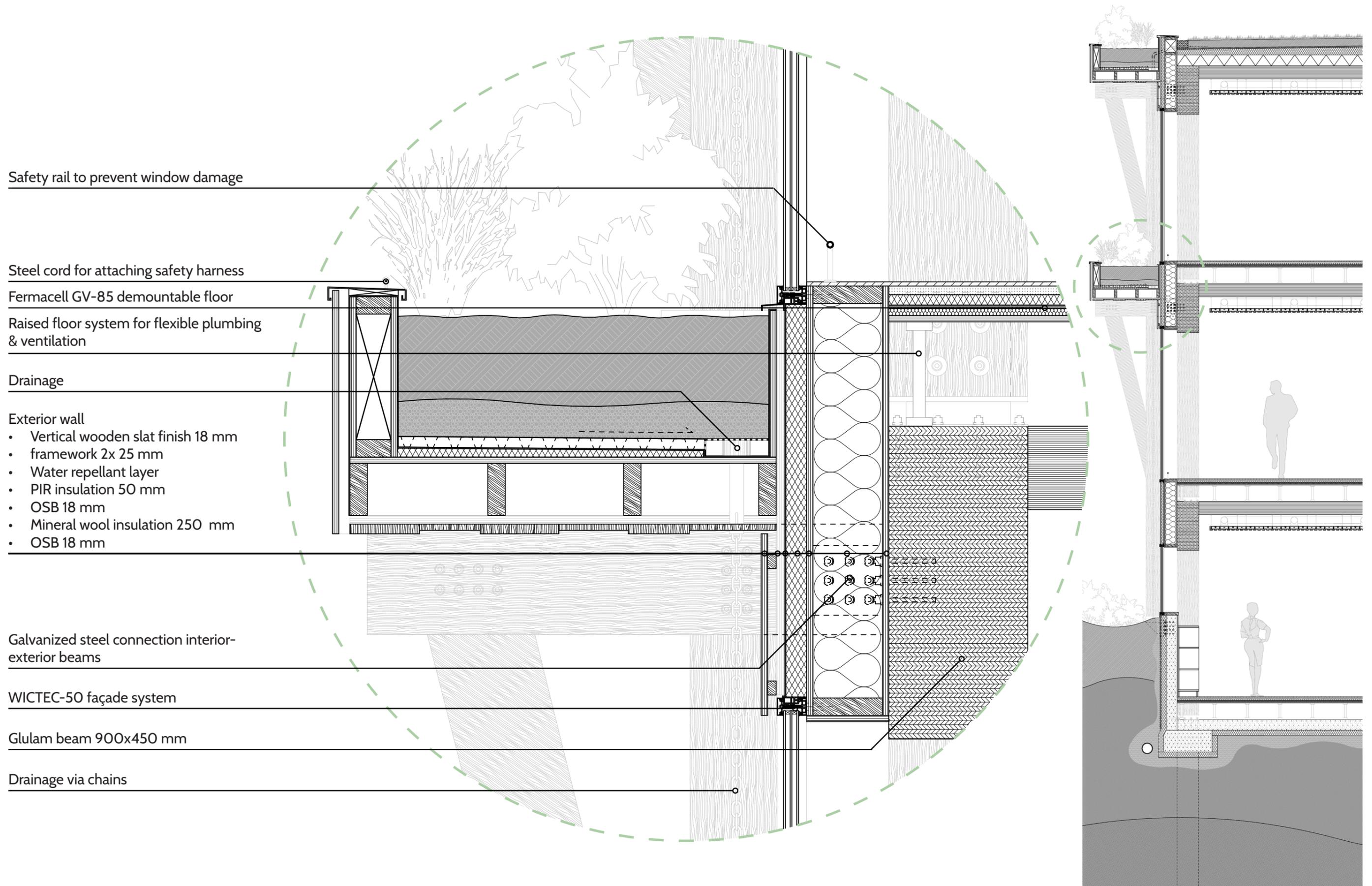
Aggregate drainage layer

Steel brace with thermal decoupling for bearing wood façade structure

Basement wall

- Drainage layer
- Water repellent layer
- PIR hard foam insulation 150 mm
- Reinforced concrete 250 mm
- Wooden finish 18 mm





Safety rail to prevent window damage

Steel cord for attaching safety harness

Fermacell GV-85 demountable floor

Raised floor system for flexible plumbing & ventilation

Drainage

Exterior wall

- Vertical wooden slat finish 18 mm
- framework 2x 25 mm
- Water repellent layer
- PIR insulation 50 mm
- OSB 18 mm
- Mineral wool insulation 250 mm
- OSB 18 mm

Galvanized steel connection interior-
exterior beams

WICTEC-50 façade system

Glulam beam 900x450 mm

Drainage via chains

- Interior wall
- 18 mm wood finish
 - 45 mm insulation + installation layer
 - 100 mm CLT panel
 - 45 mm insulation + installation layer
 - 18 mm wood finish

Wooden column 400x400 mm

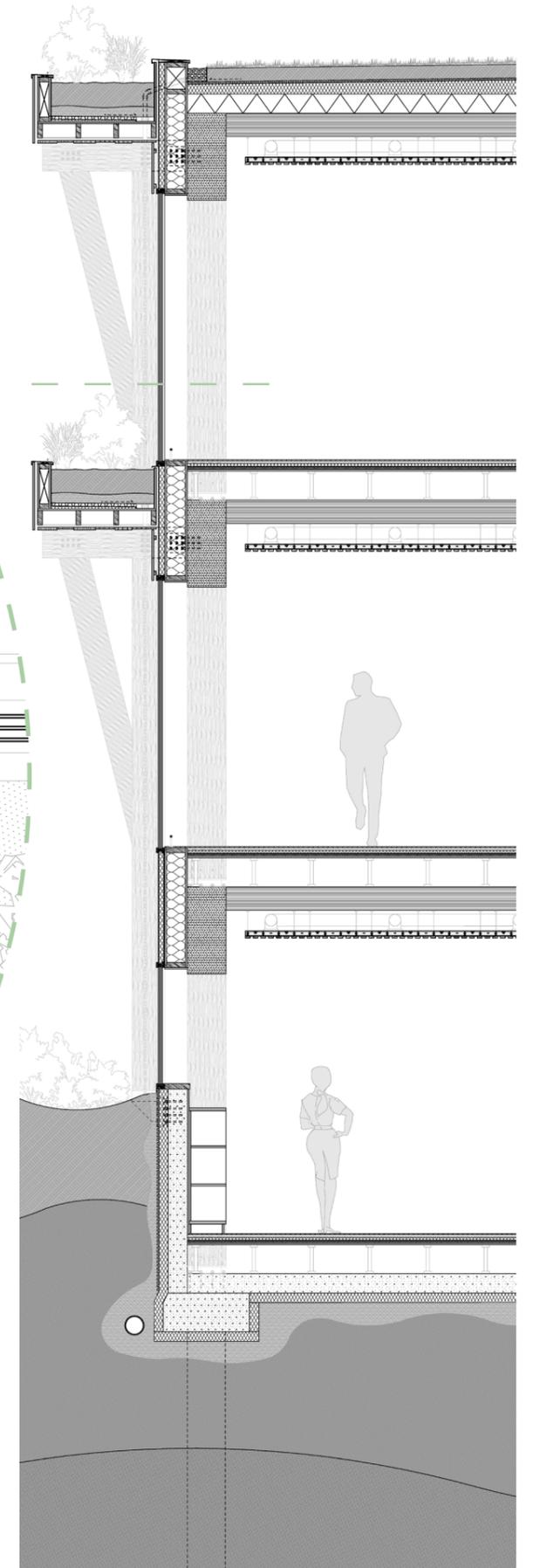
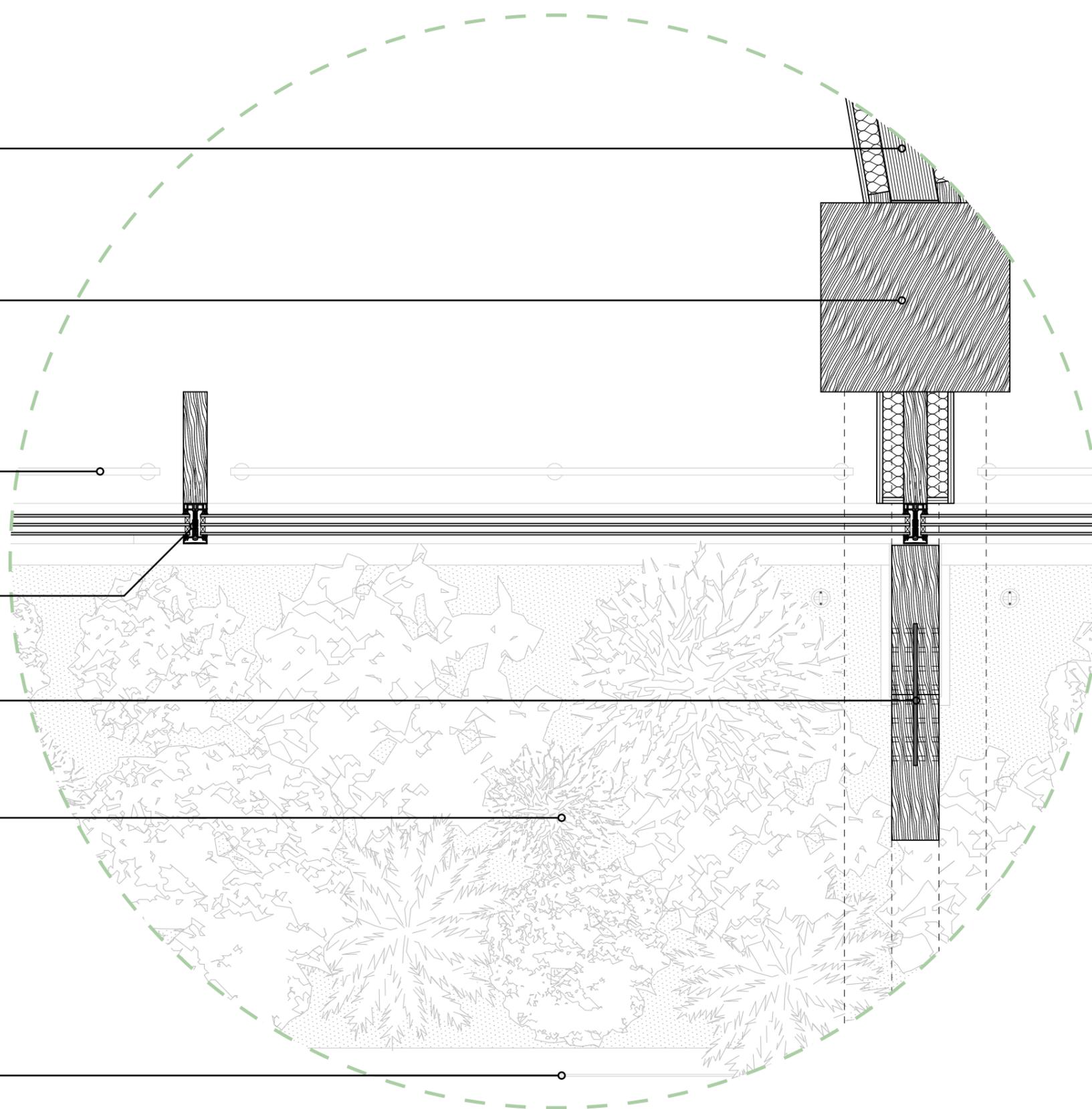
Safety rail to prevent window damage

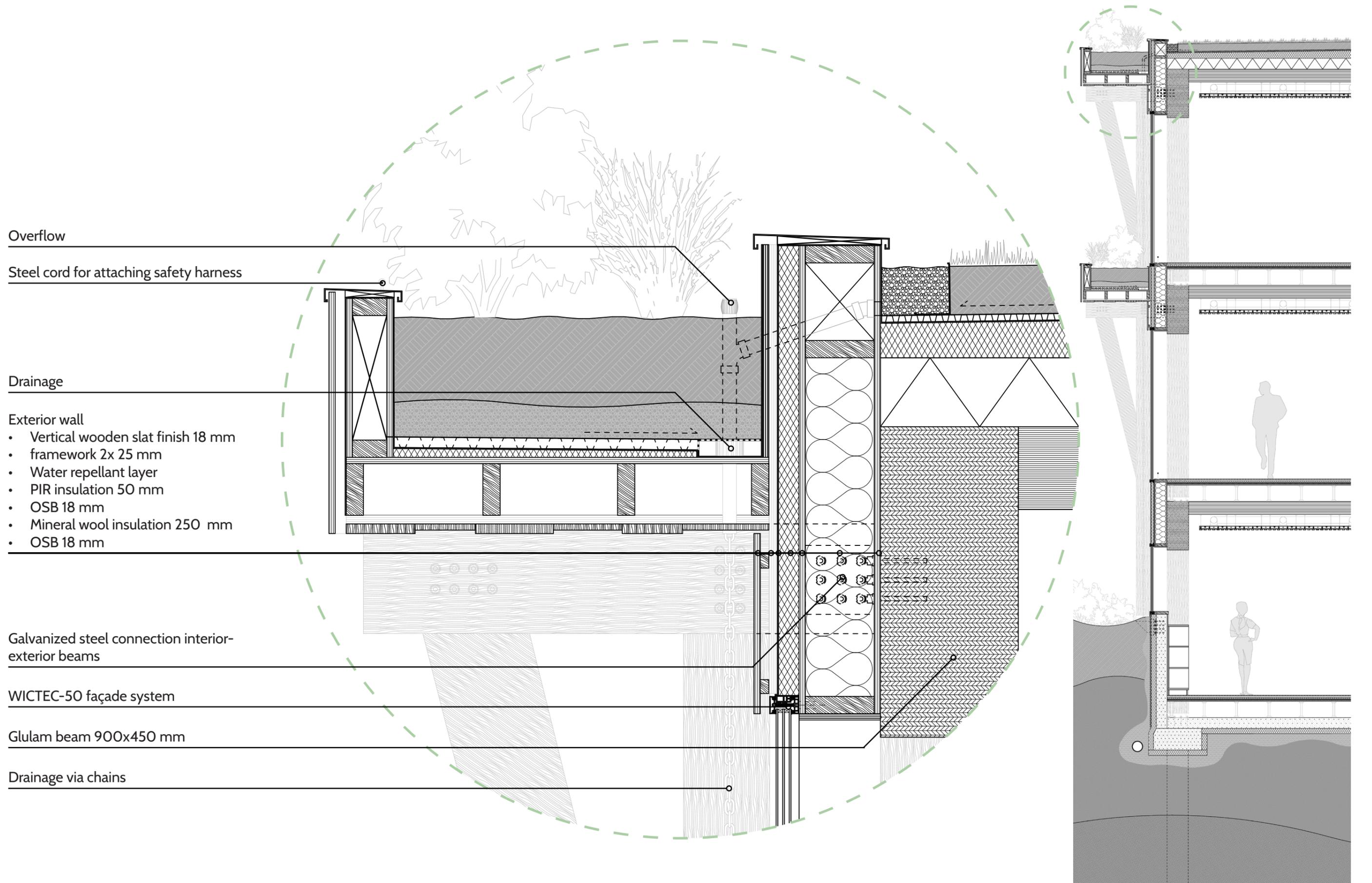
WICTEC-50 façade system

Planter-bearing façade structure
300x100 mm connected with dowels

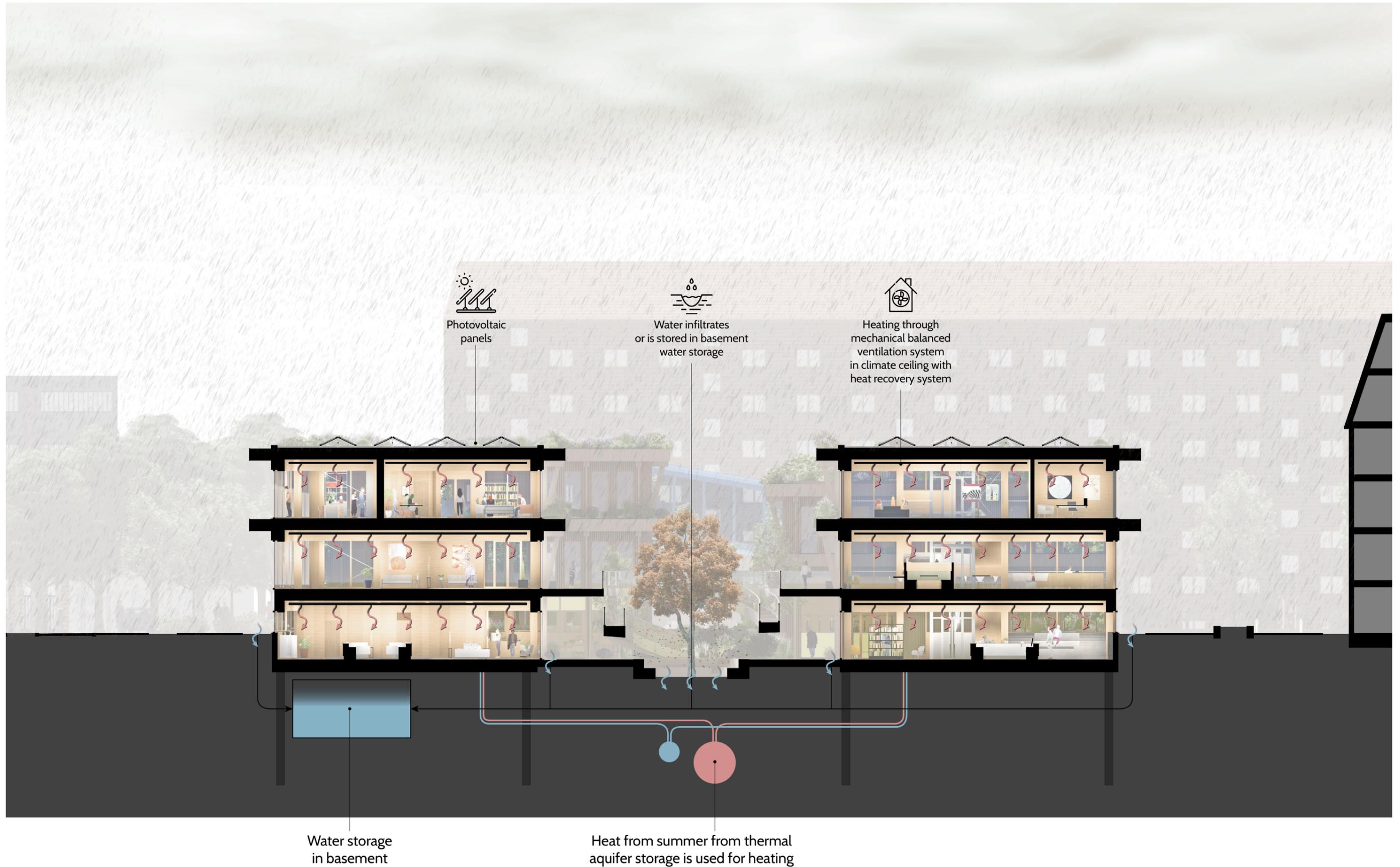
Exterior planter

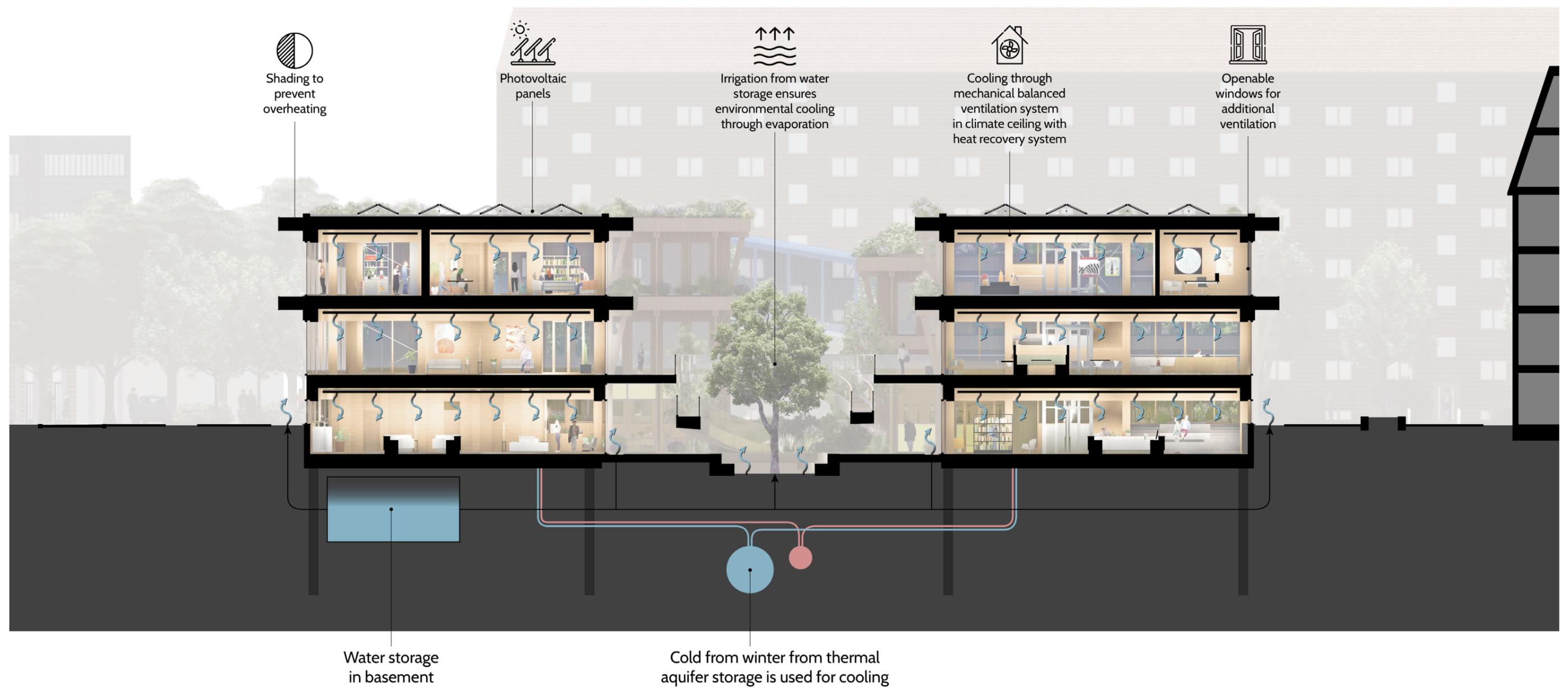
Steel cord for attaching safety harness











	Hedonic aspect	Social aspect	Eudaimonic aspect
Urban public space	✓	✓	
Interior public spaces	✓	✓	✓
Interior specific functions	✓	✓	✓

RECIPROcity



Turning space into place to enhance mental wellbeing in Bispebjerg