

An architectural rendering of a modern campus courtyard. The scene is set under a bright blue sky with scattered white clouds and several birds in flight. In the foreground, a wide, light-colored paved path leads from the bottom center towards the background. To the left of the path is a lush green lawn with several young trees planted in circular concrete pits. To the right is a modern building with a prominent balcony. The balcony has a glass railing and a wooden floor, with a man in a light blue shirt standing on it. The building's facade is a mix of light wood paneling and large glass windows. Through the glass, people are visible inside, including a man in a dark vest and a woman in a light-colored suit. In the middle ground, a man in a blue t-shirt and shorts is jogging towards the viewer. Further back, a woman in a red shirt and blue jeans is walking away from the viewer, holding the hand of a small child in a striped shirt. Other people are scattered throughout the courtyard, some sitting on wooden benches, others walking. In the background, more campus buildings are visible, including a large structure with a high, vaulted roof supported by a network of steel beams. The overall atmosphere is one of a vibrant, active, and modern educational or community space.

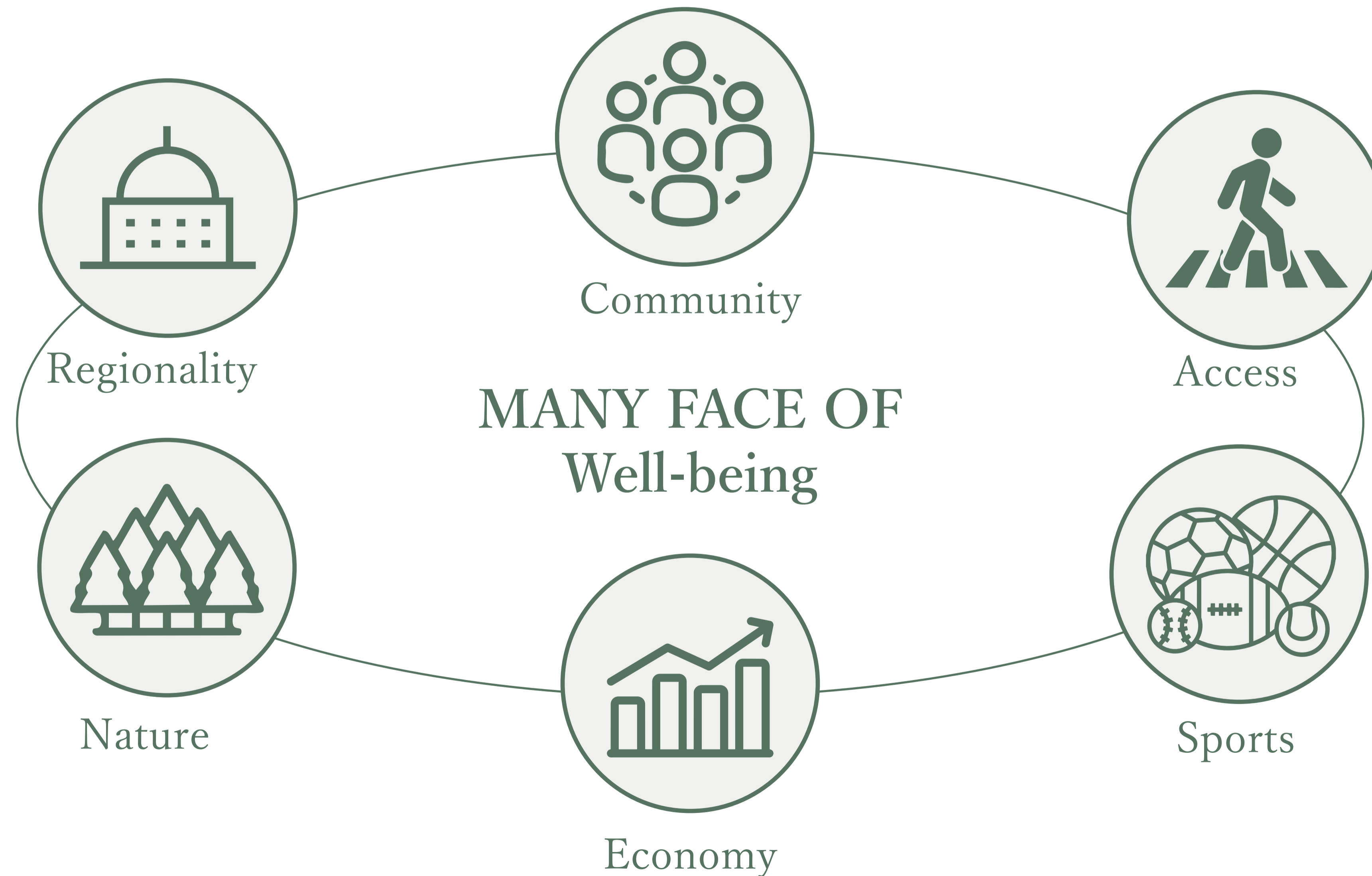
MANY FACE OF...

# What is “MANY FACE OF ...” ?

## MANY FACE OF ... Belgrade ? Well-being ? Architectural Space ?

Concept

“MANY FACE OF ...” represents the diverse facets inherent in a phenomenon. By discovering the many faces of Belgrade and experiencing its diverse spaces, Well-being can be achieved. To this end, we propose a Well-being index unique to Belgrade.



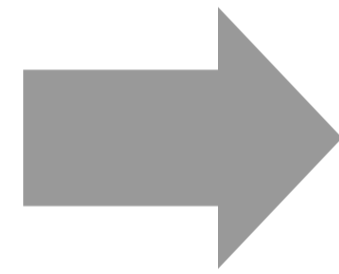
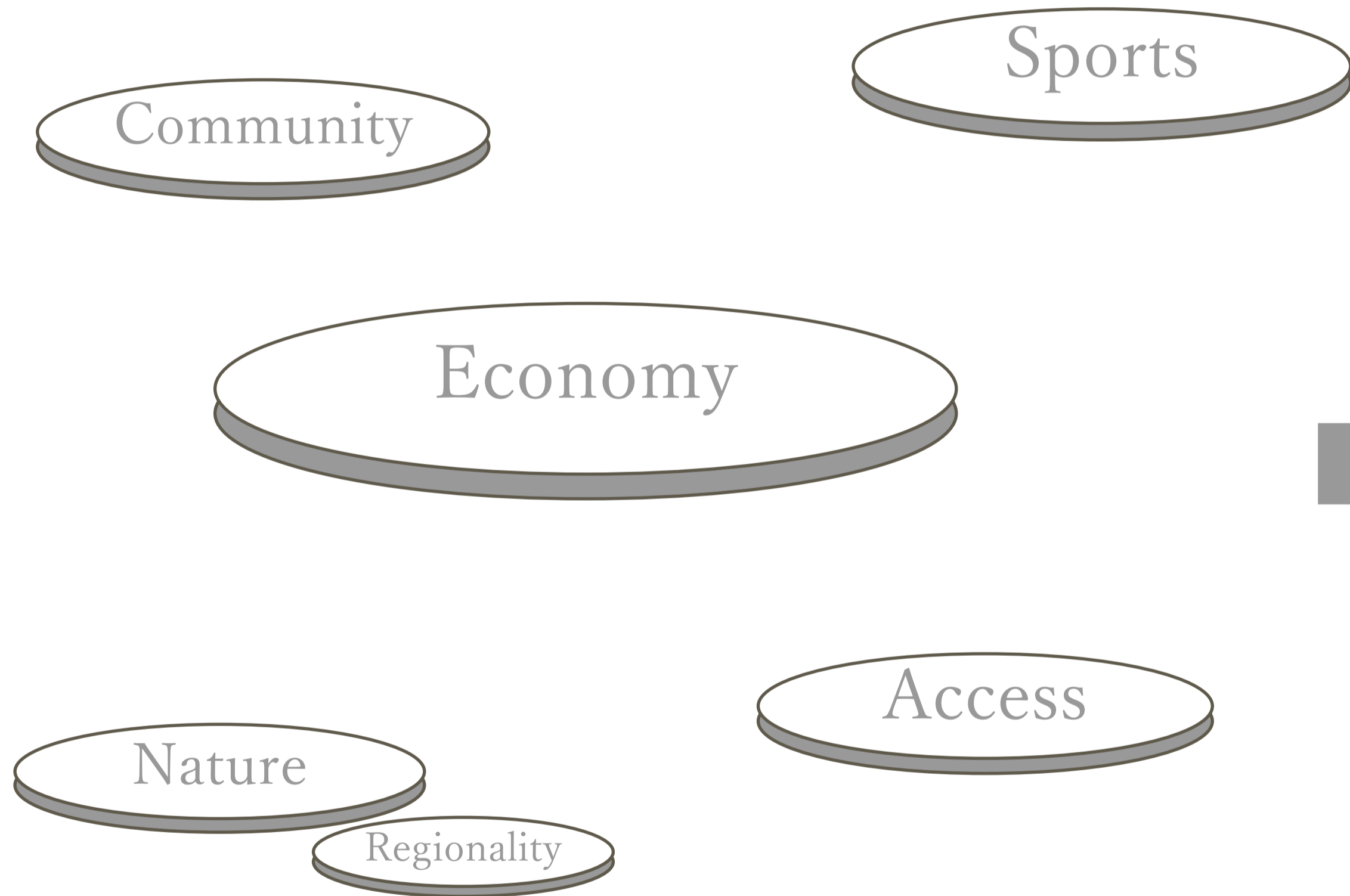
Six Original Themes for Achieving Well-being in Belgrade

# Creat "MANY FACE OF ..."

Concept

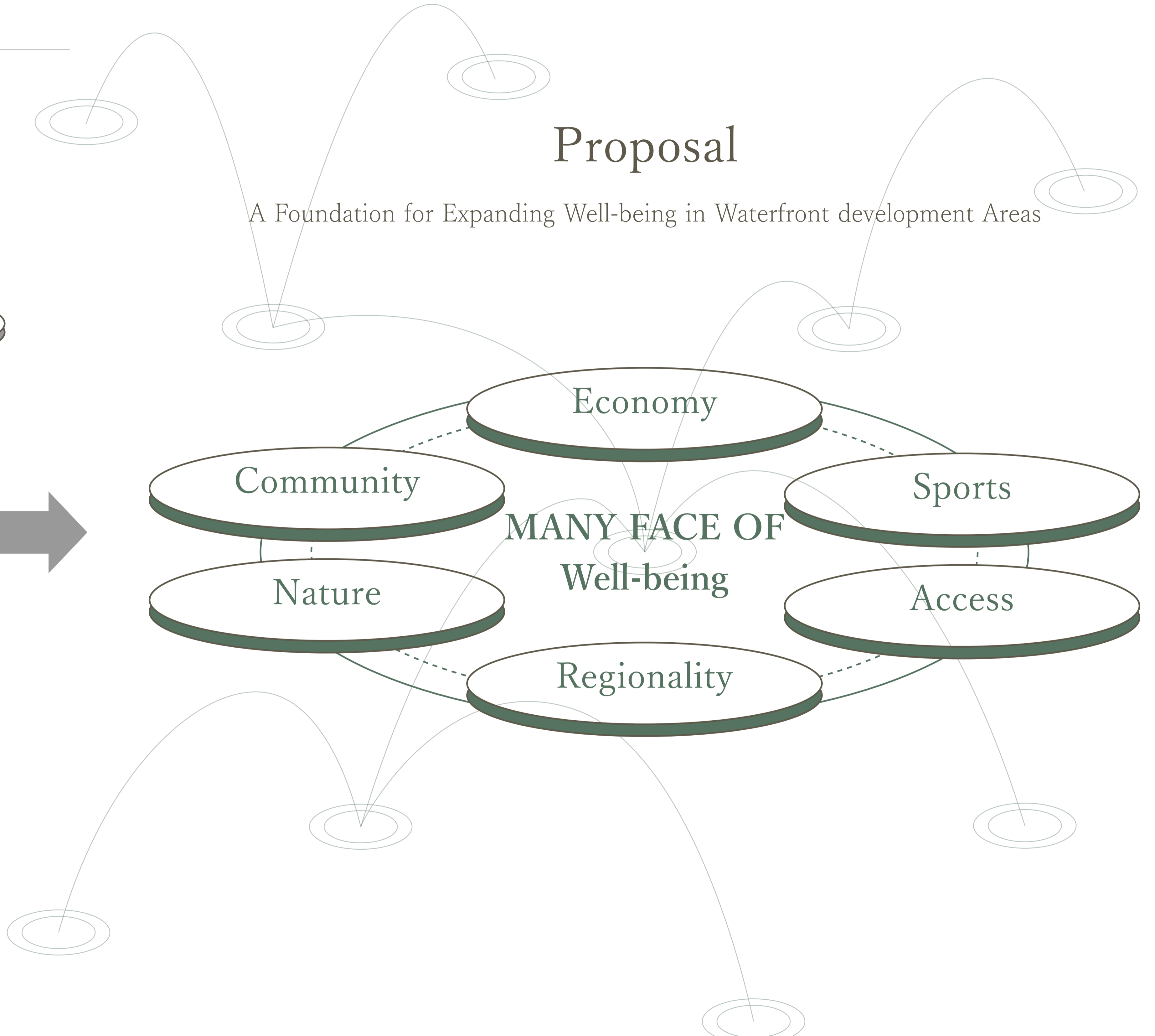
## Current situation

Well-being in Waterfront development Areas



## Proposal

A Foundation for Expanding Well-being in Waterfront development Areas



# Target area: Serbia, Belgrade

Belgrade, the capital of Serbia, is located at the confluence of the Sava and Danube rivers and is one of Europe's leading cities in terms of urban development.



## Belgrade Waterfront

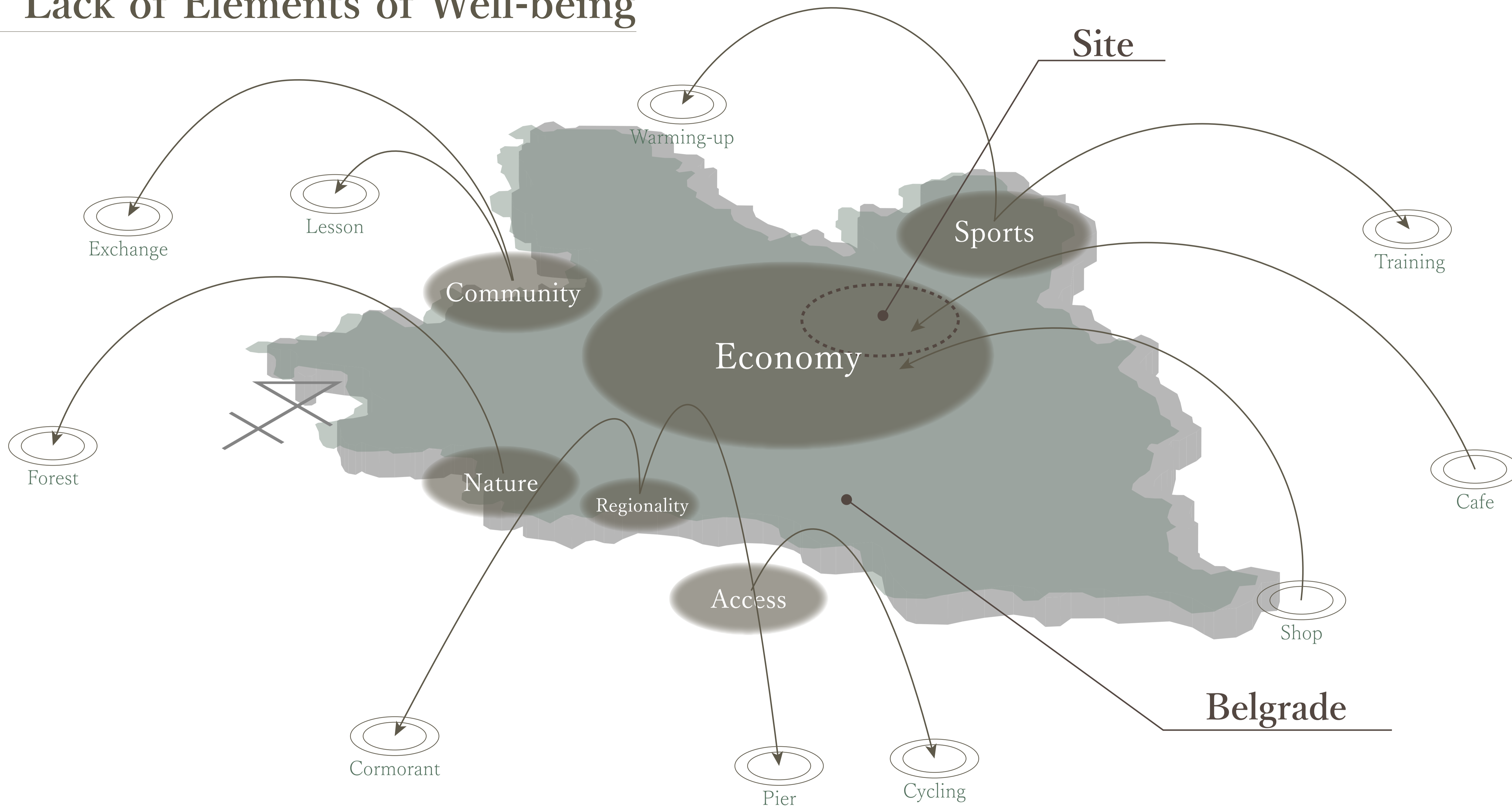
The project site is located in the Belgrade Waterfront redevelopment area along the Sava River. The project aims to transform the former riverside area into a public waterfront; however, its location within a protected ecological corridor requires careful consideration of the local ecosystem, as well as enhanced pedestrian and bicycle connectivity.

Belgrade

Serbia

# Lack of Elements of Well-being

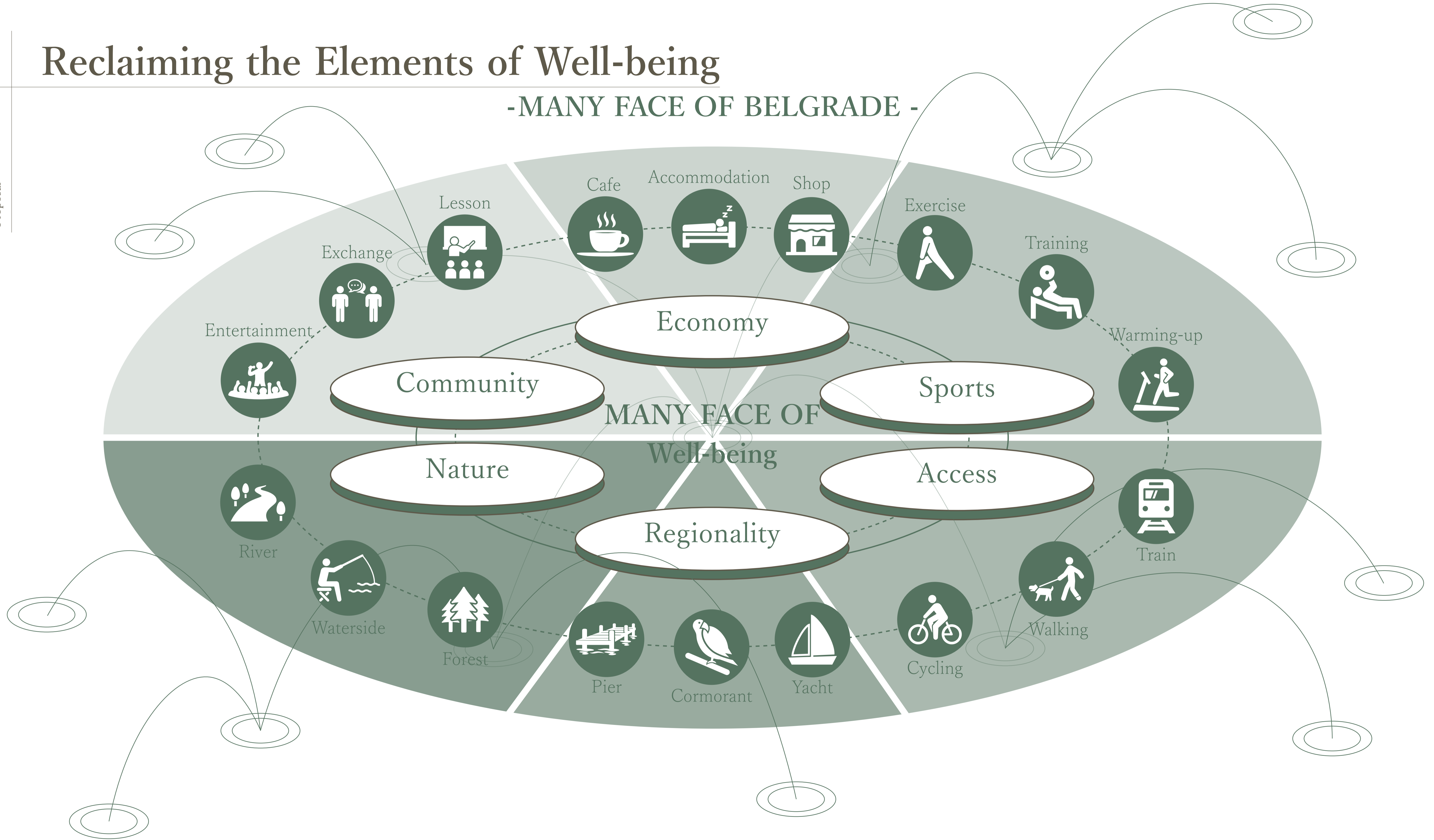
Problem



# Reclaiming the Elements of Well-being

-MANY FACE OF BELGRADE-

Proposal

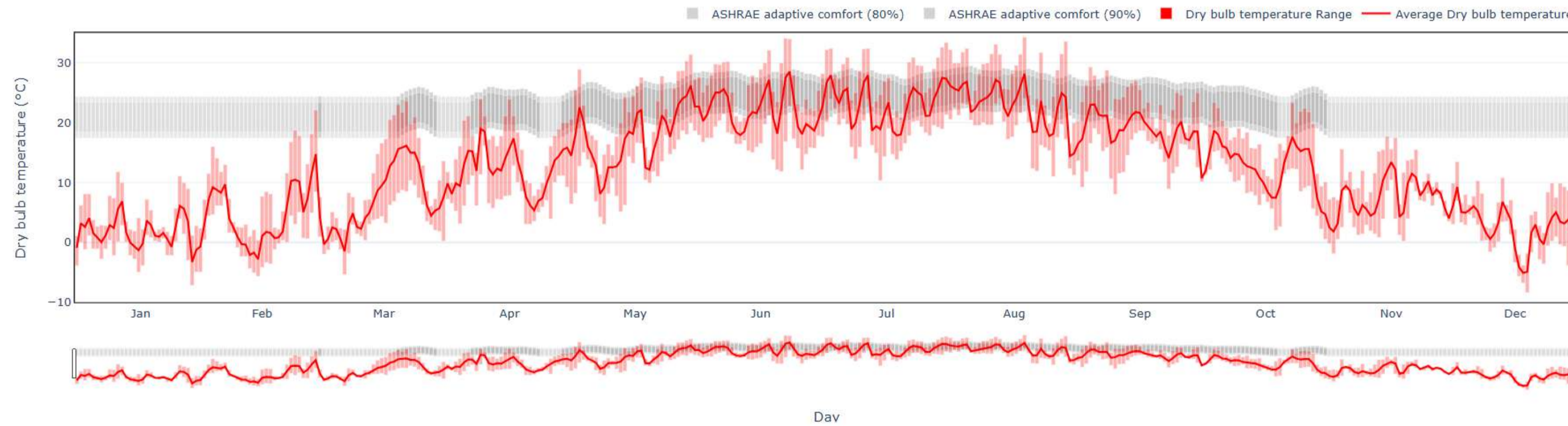


# Continental Climate and Flood Risk

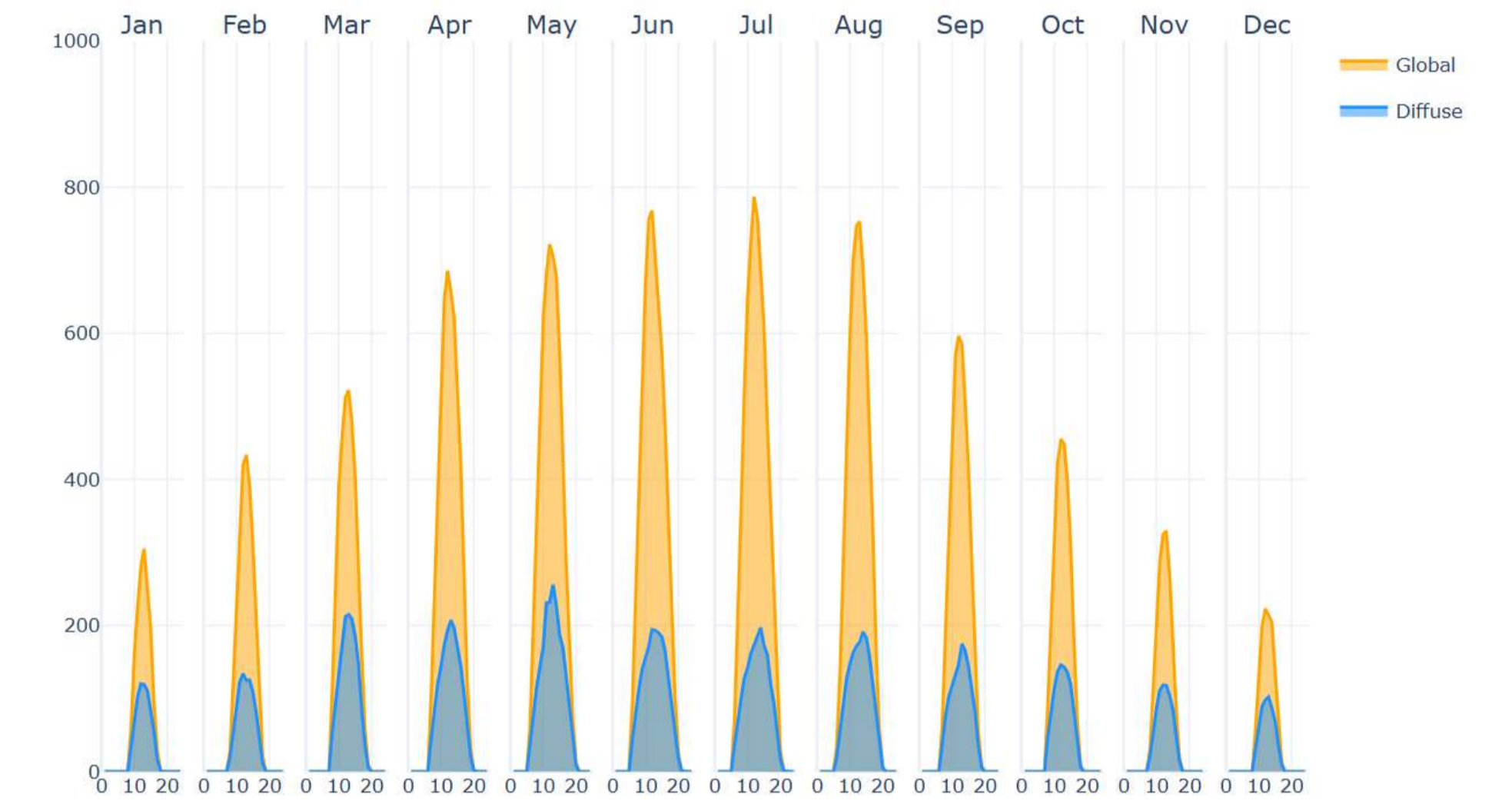
Climate Date

Belgrade has a continental climate and, like Japan, has four seasons. Autumn is generally considered to be longer than spring, with periods of clear, warm weather tending to last longer. In addition, droughts and floods occur in succession, and heavy rains often cause damage to infrastructure, particularly in low-lying areas and along rivers.

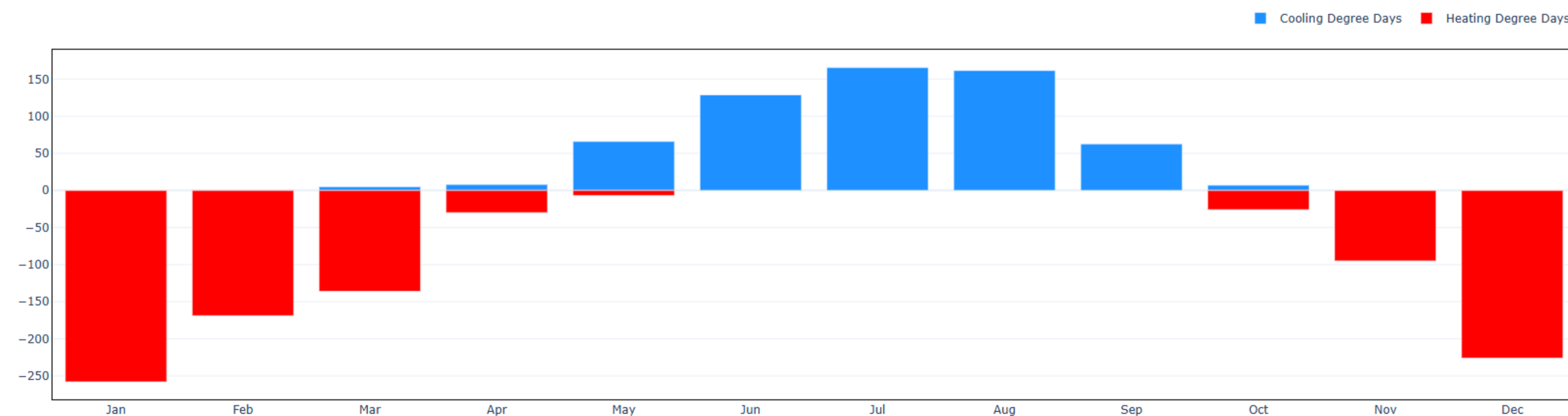
## Dry Bulb Temperature



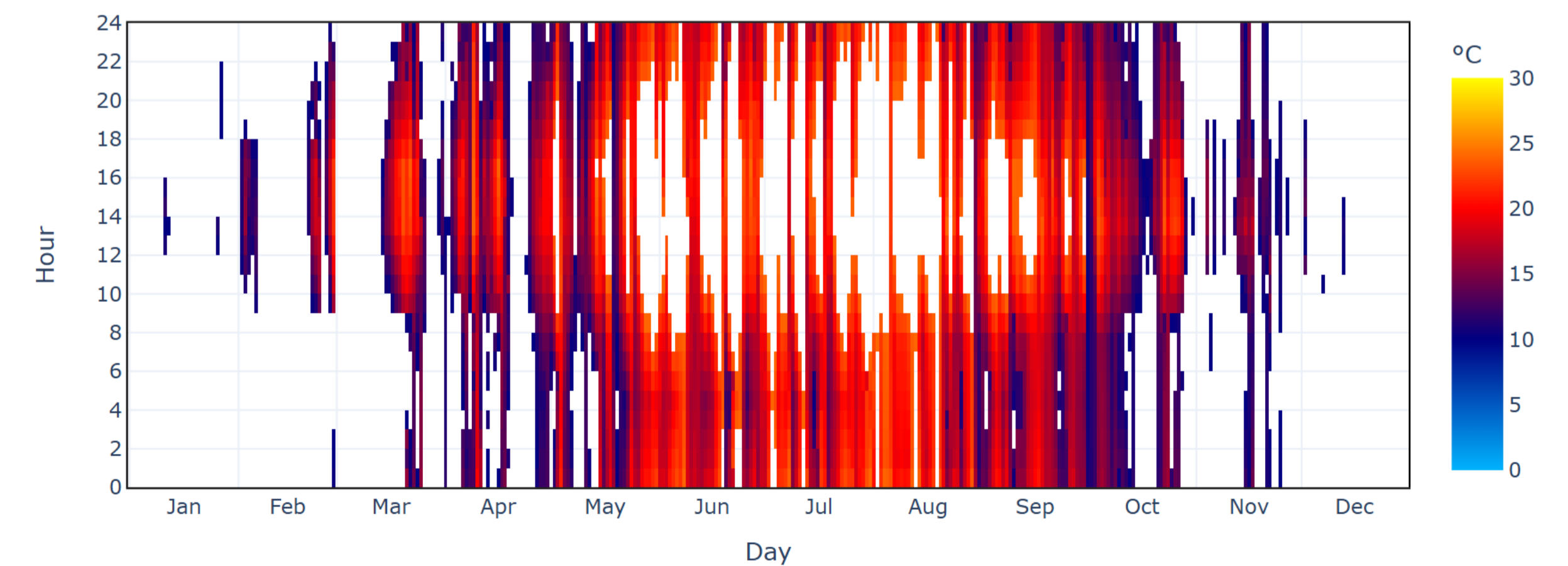
## Global and Fiffuse Horizontal Solar Radiation (Wh/m<sup>2</sup>)



## Heating and Cooling Degree Days



## Natural Ventilation Potential



Hours when the Dry bulb temperature is in the range 10 to 24°C

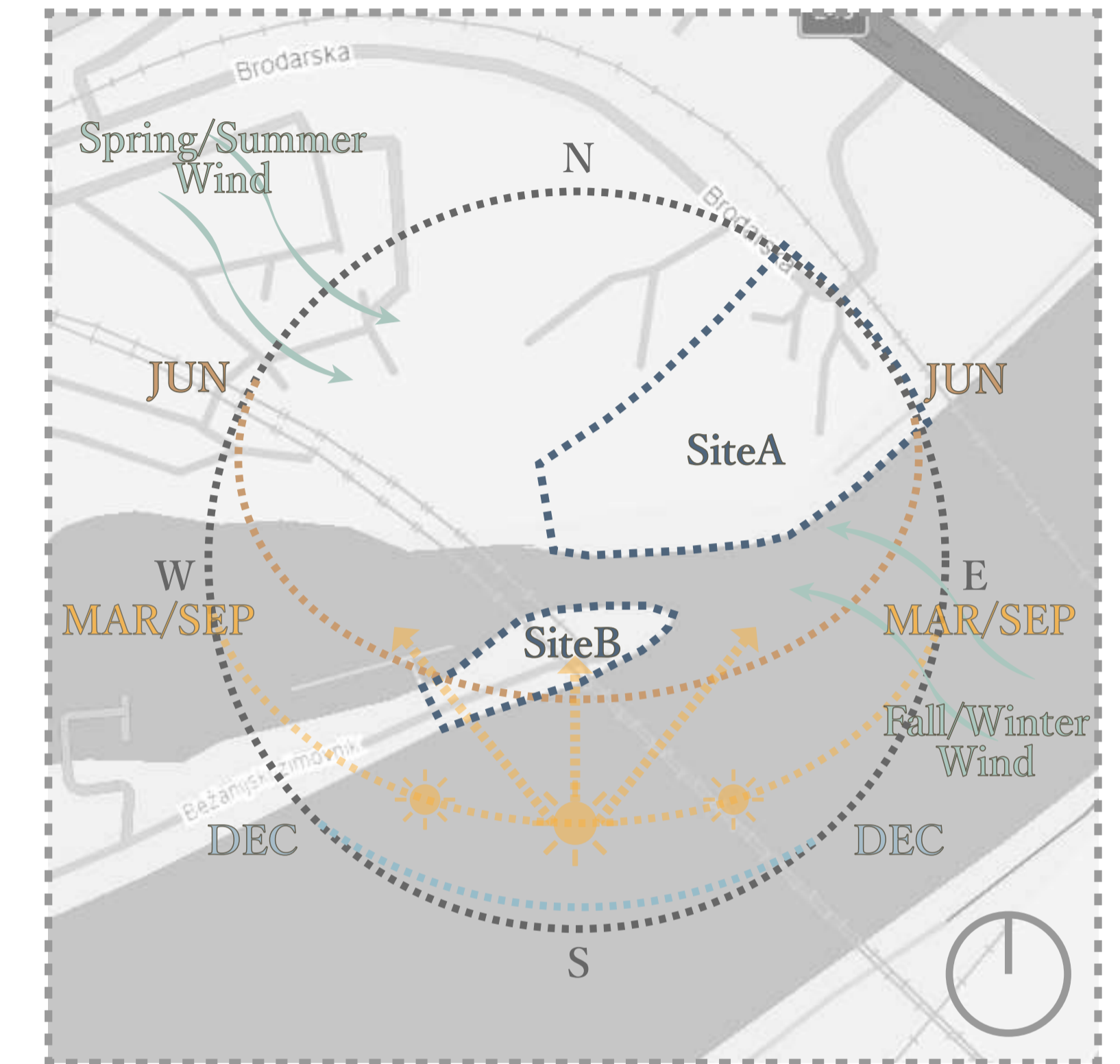
# The Environmental Potential of Belgrade's Climate

In Belgrade, architectural designs must respond to the seasonal climate. In summer, deep eaves, louvers, pergolas, and vegetation are used to create shade and block intense solar radiation, thereby preventing the indoor environment from overheating.

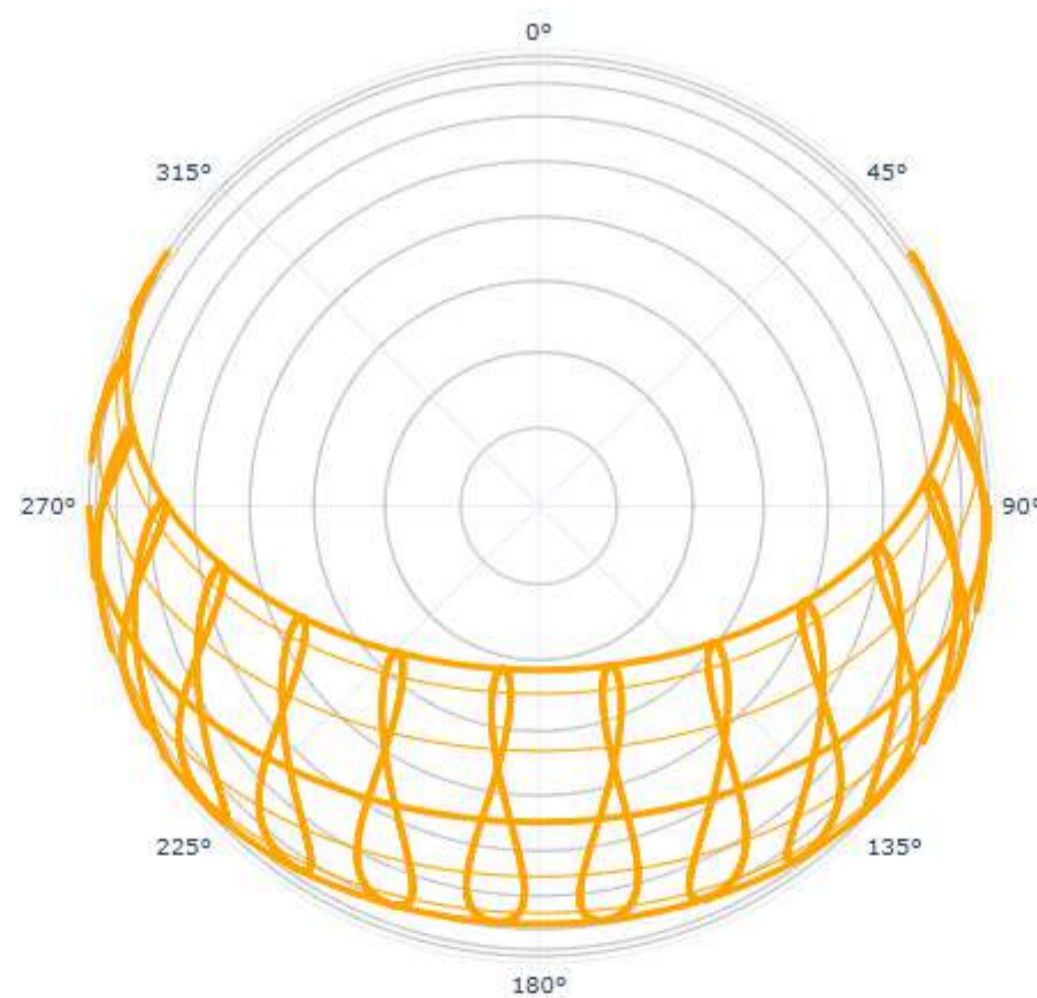
Conversely, in winter, it is important to actively capture solar heat while reducing the heating load through a highly insulated and airtight building envelope. During the transitional seasons, natural ventilation is promoted through the placement of openings, dual-sided lighting, and the use of atriums, ensuring comfort without relying on mechanical systems.

These measures create spaces with diverse microclimates, contributing to improved well-being.

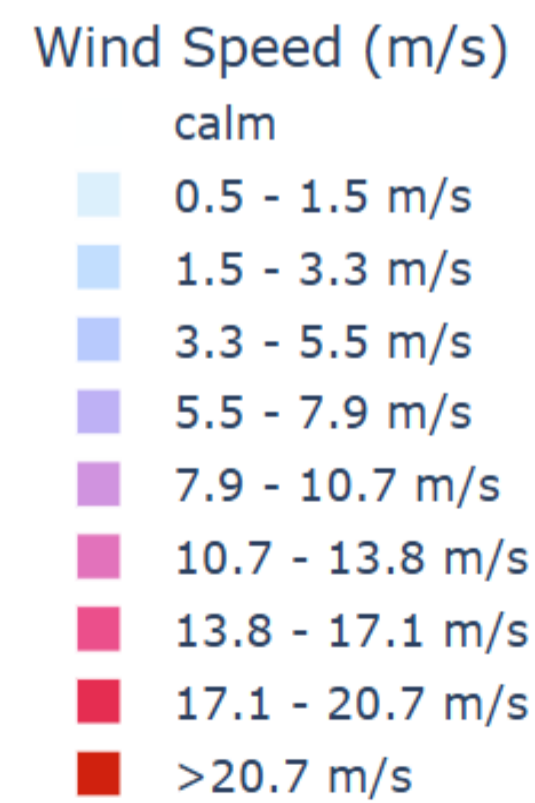
## Analysis of sun and wind directions



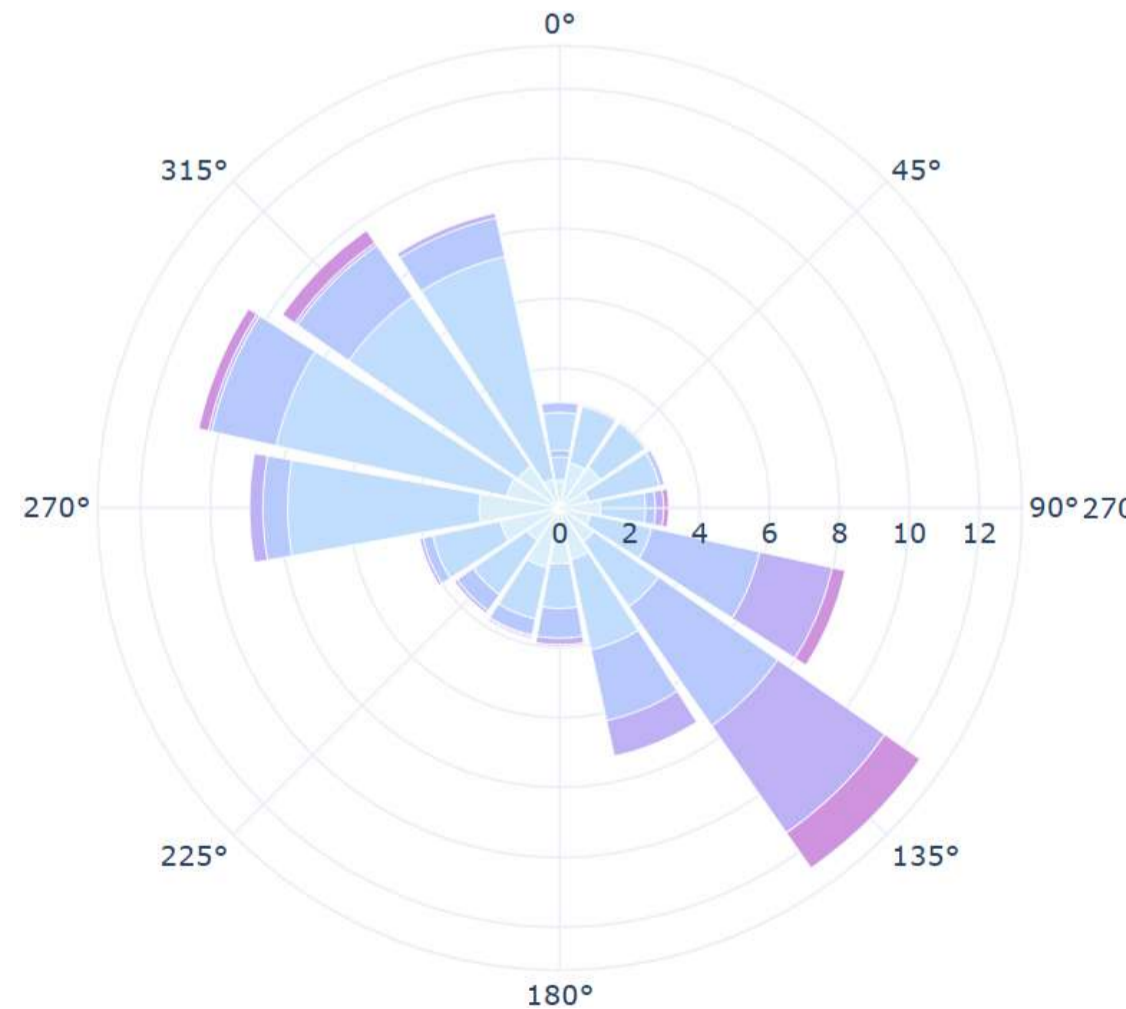
Sun Path



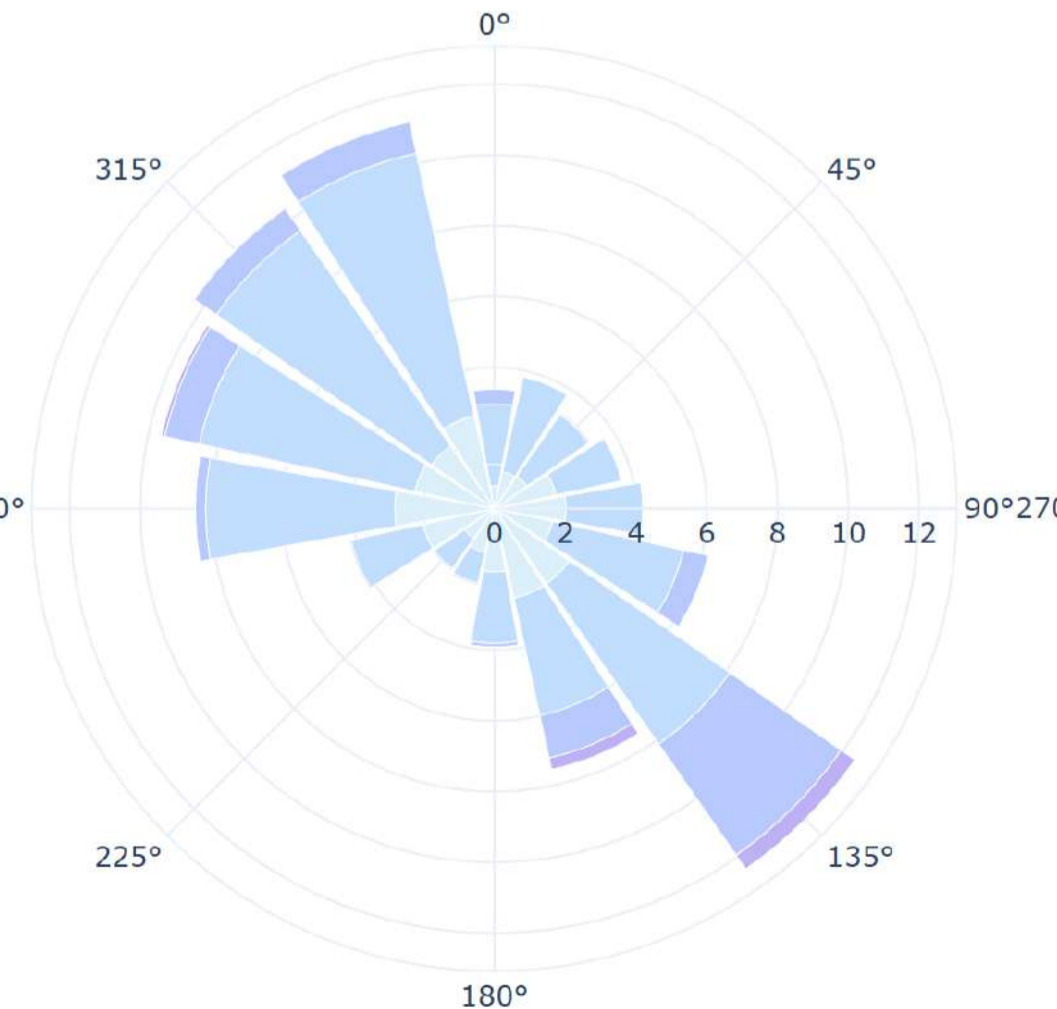
Annual Wind Rose



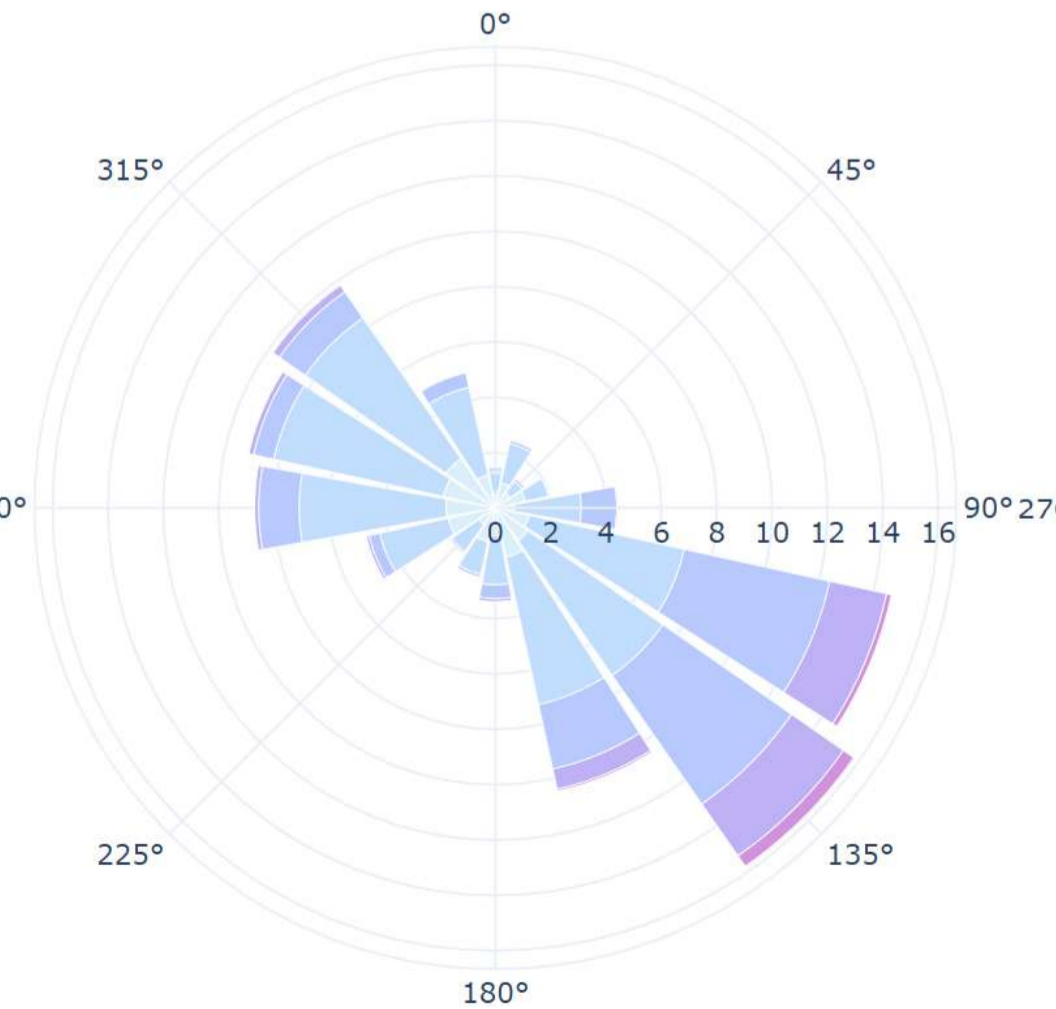
Spring



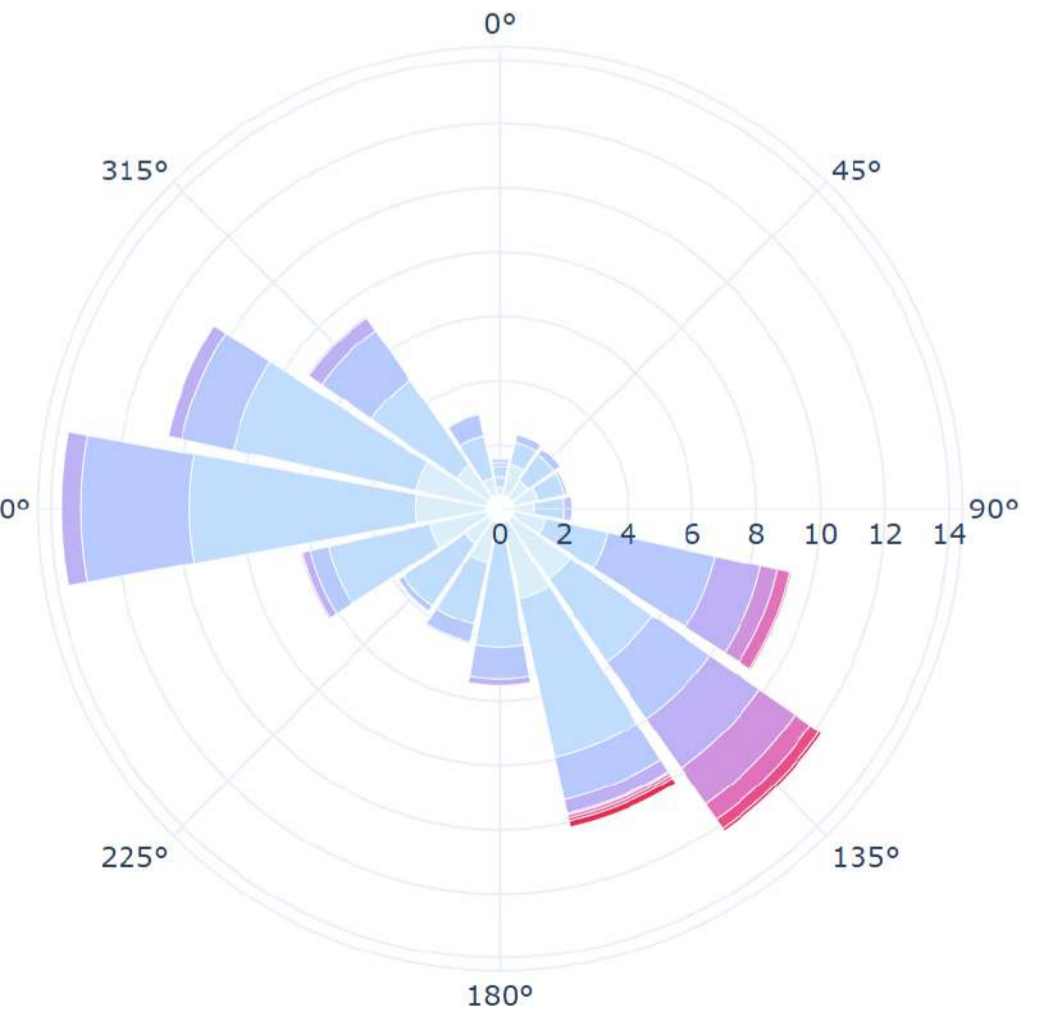
Summer



Fall

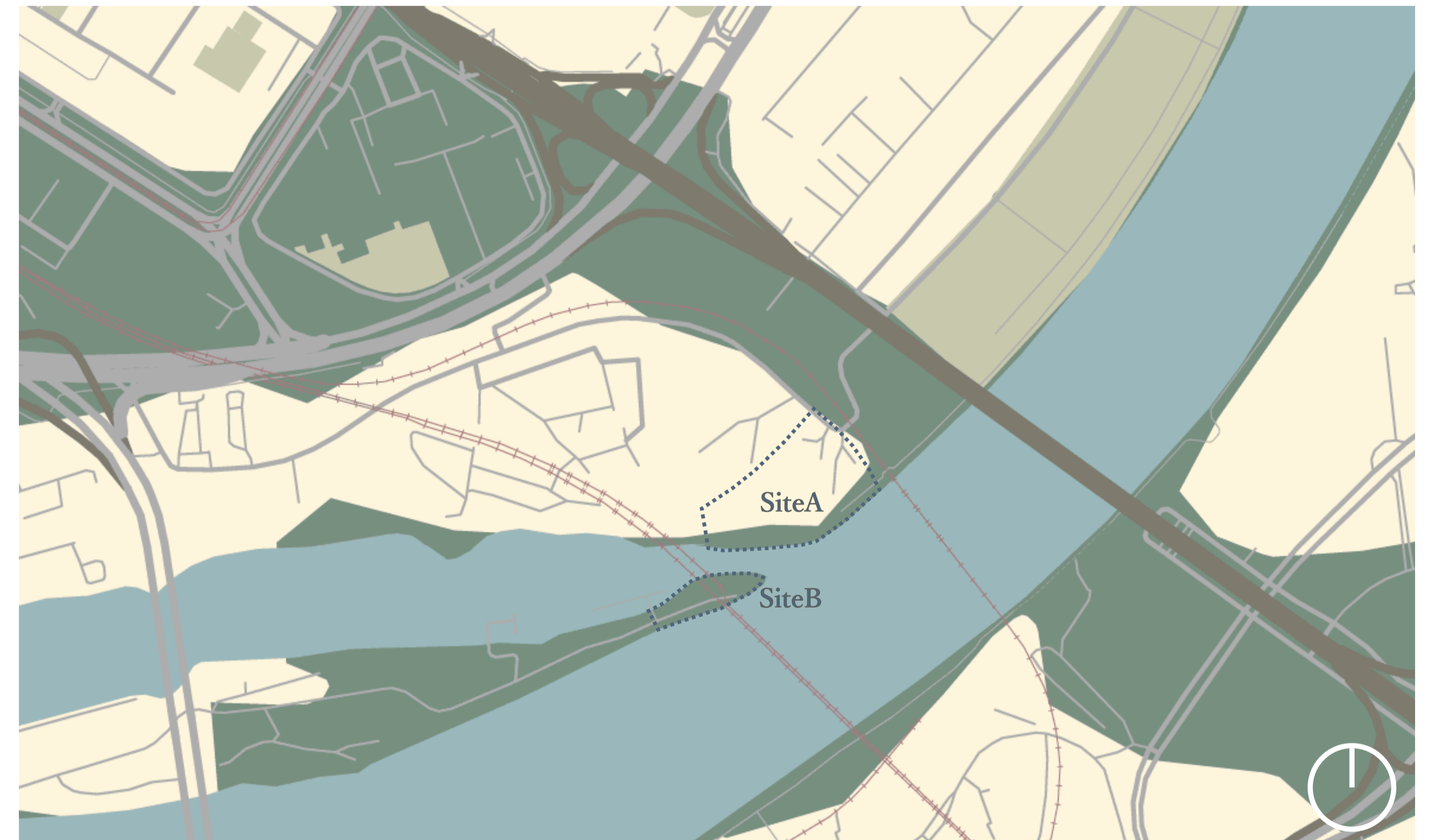
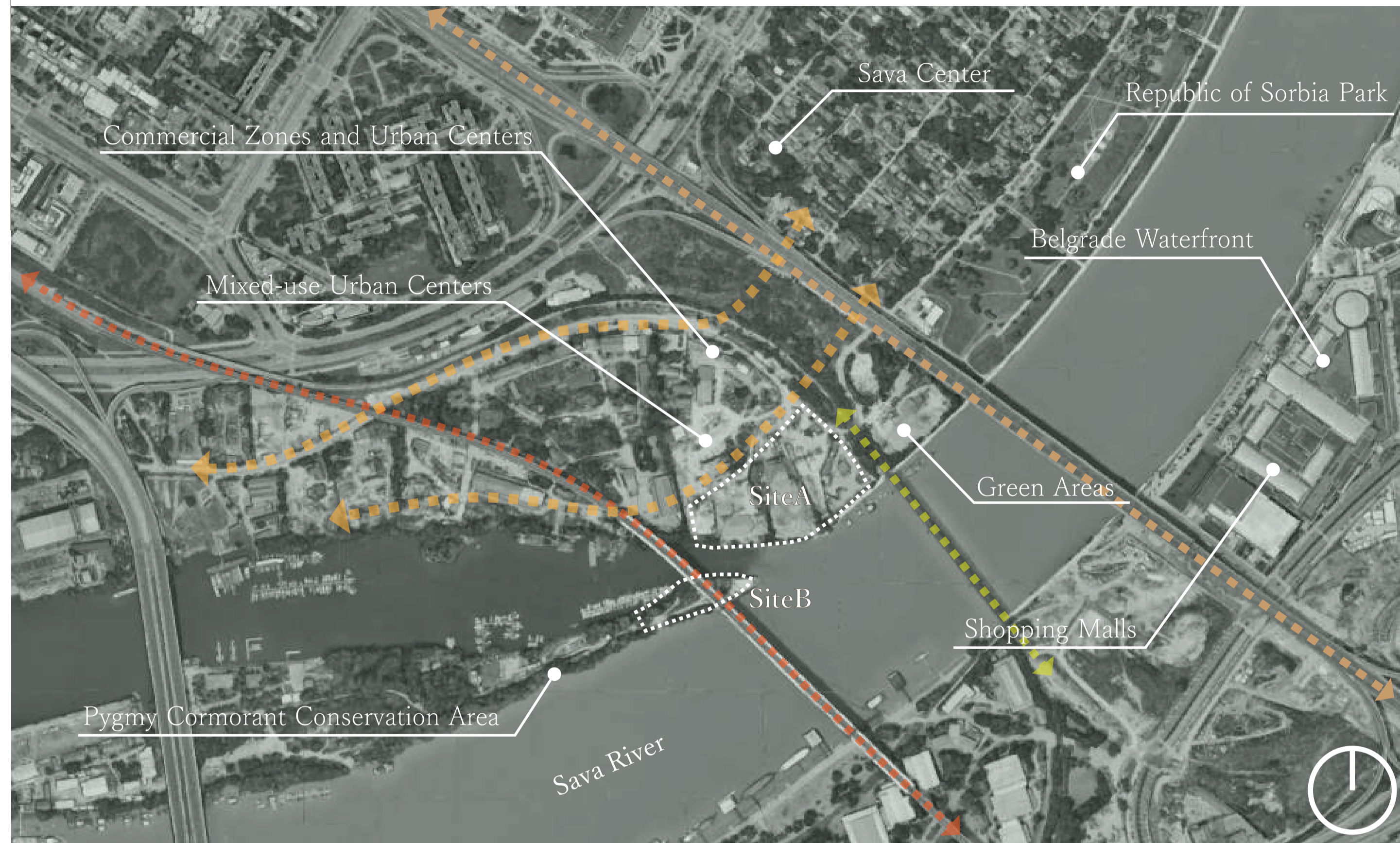






Winter


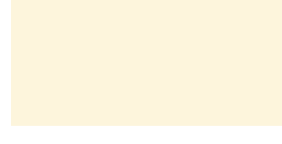






# Urban and Environmental Data

Urban Date



-  Transit
-  Highway Road
-  Plans for a new road
-  Scheduled to be converted into a pedestrian bridge

-  Landscape Nature
-  Landscape Park
-  Landscape Ground
-  Sava River
-  National Road
-  Highway Road
-  Transit
-  Site

# How to Gain Well-being

This project integrated new construction and renovation into a unified system for the Sava riverfront, enhancing pedestrian and bicycle connectivity, green spaces, public space, and waterfront facilities to propose a new direction for the redevelopment of Belgrade Waterfront.



# Master Plan

Program

Mix-used urban centers 

Fitness center 

Accommodation (2nd floor) 


Laboratory 


Parking 

Sports area 

Accommodation in the forest 

Green areas 


The forest of the Pygmy Cormorants 

Accommodation nearby the river 

Cafe 

Plaza 

Bicycle road (Extension of an existing contract) 

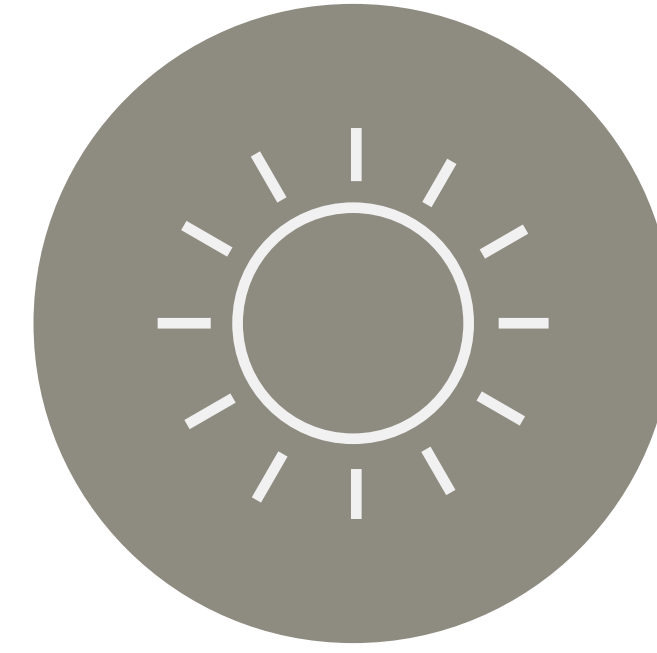
Yacht club 



Air



Comfort



Light

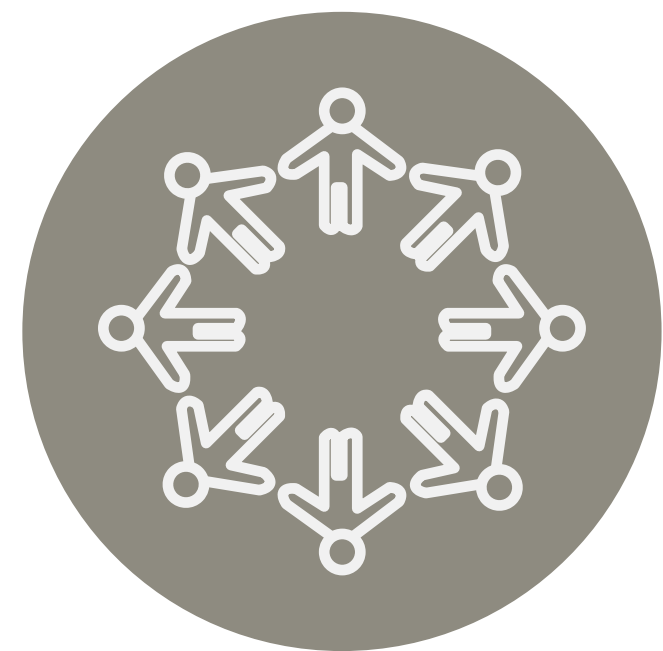


View



Nature

## Well-being for Architectural Design



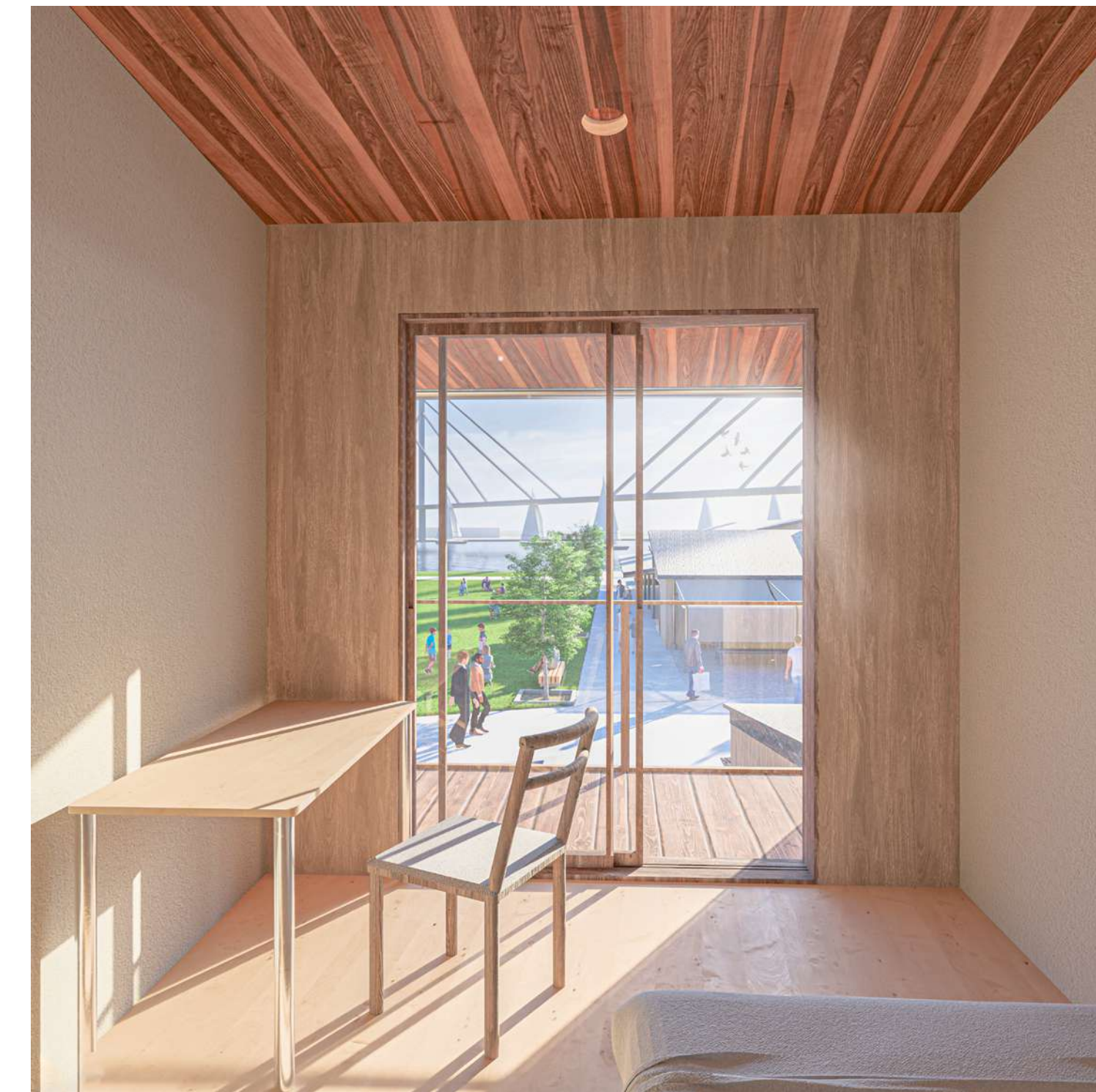
Community



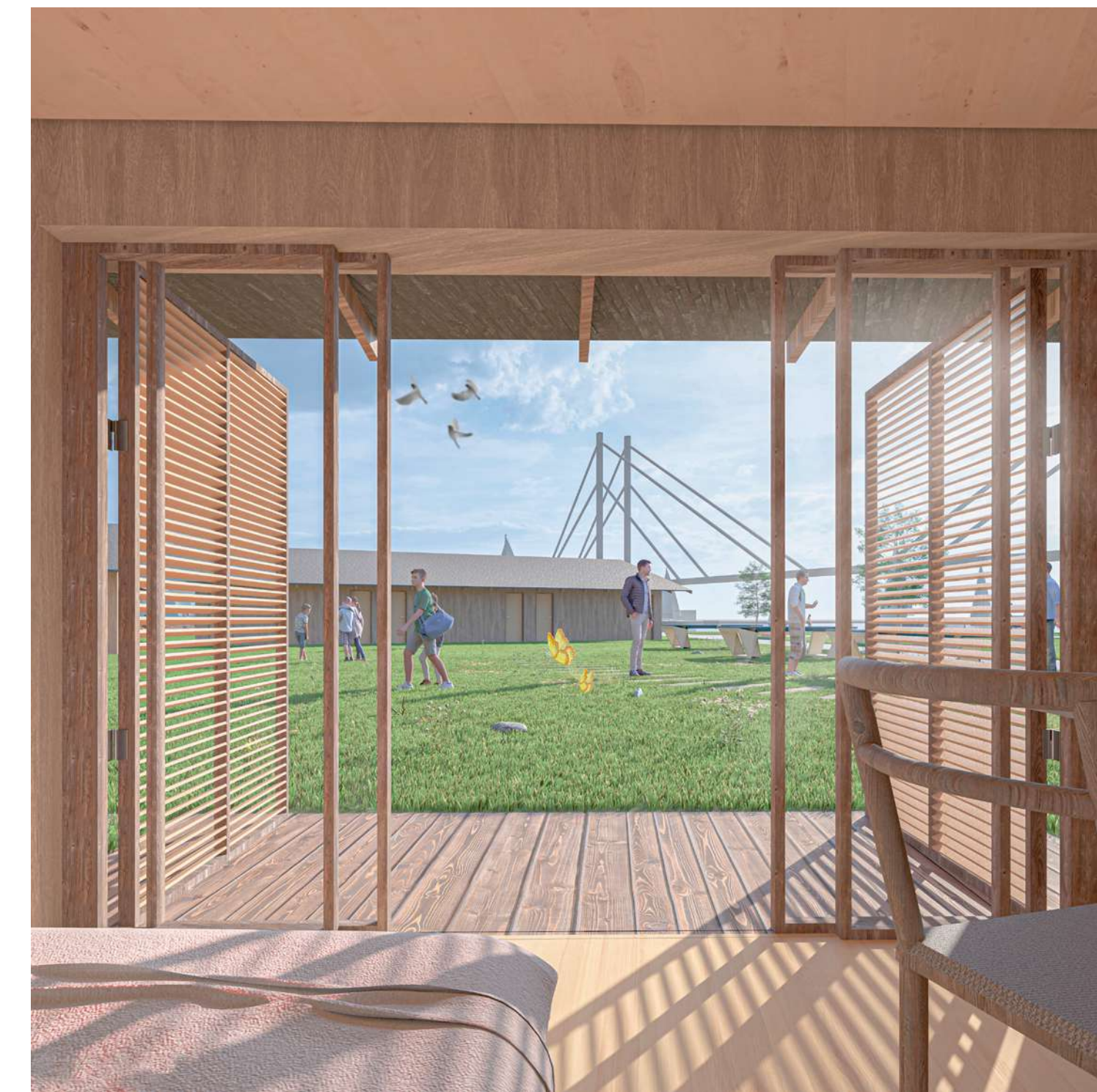
Equity



Social Interaciton

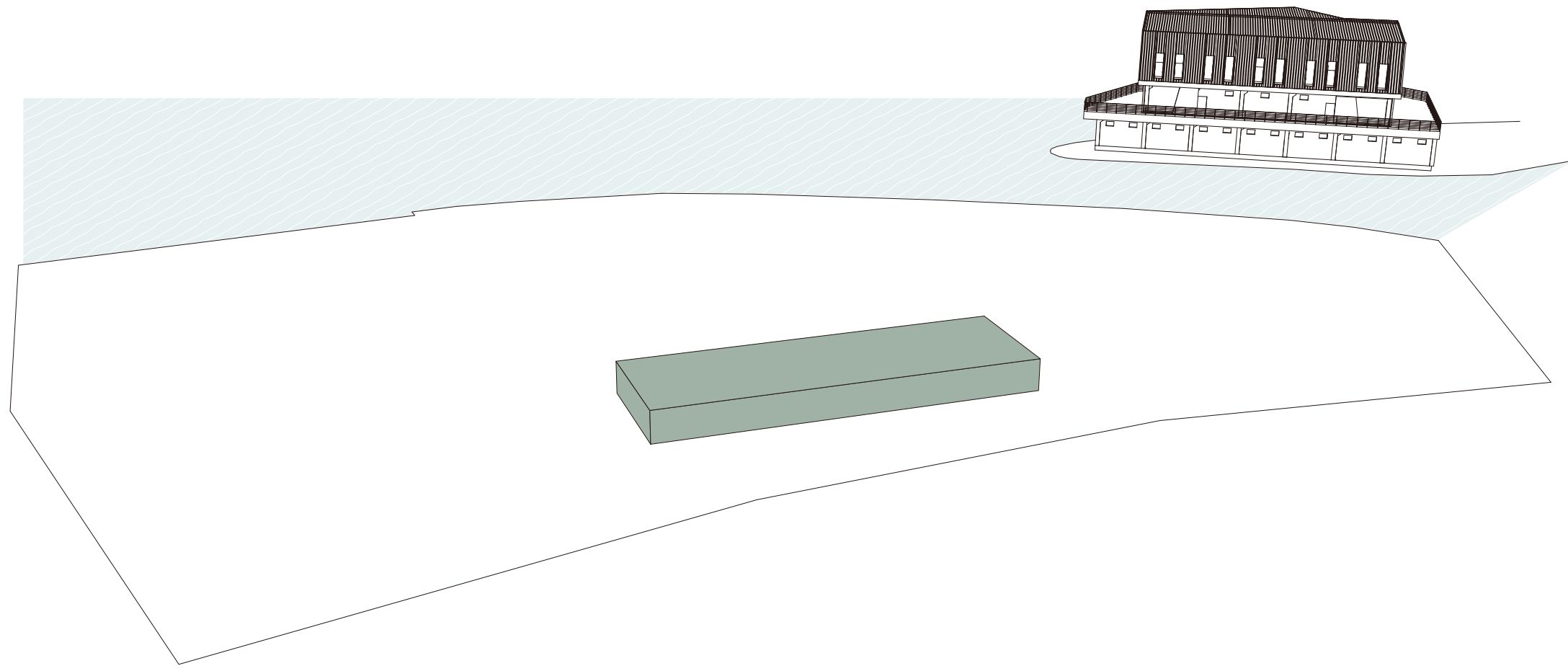


MANY FACE OF  
Accommodation

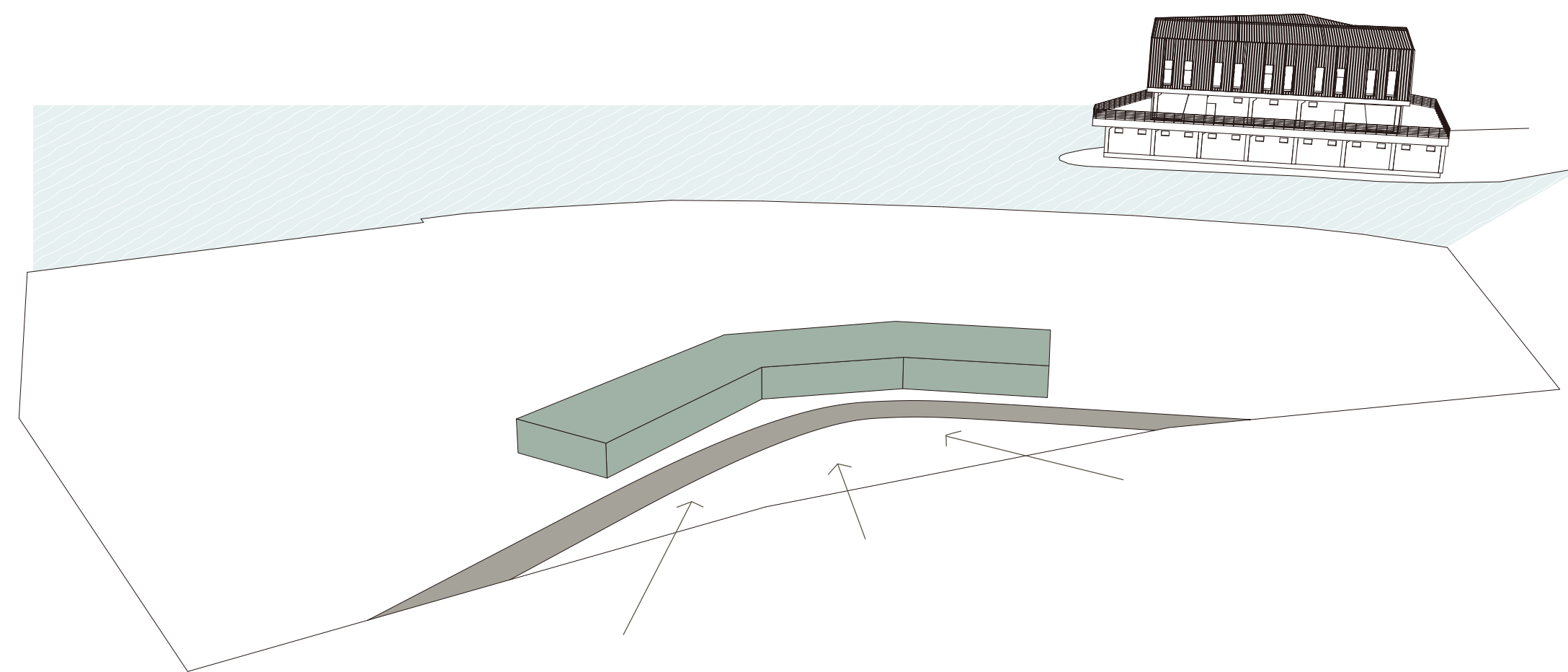


# Design Flow Diagram

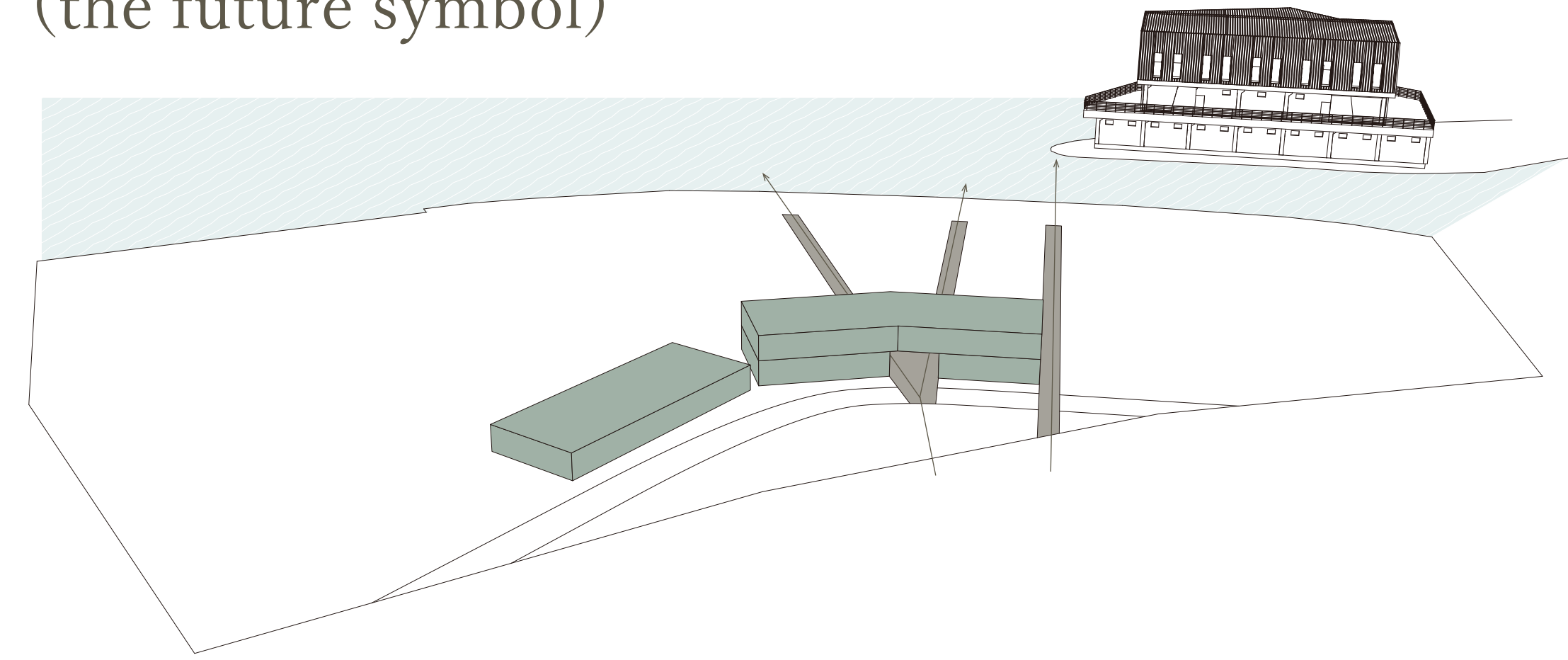
1. Launch the volume



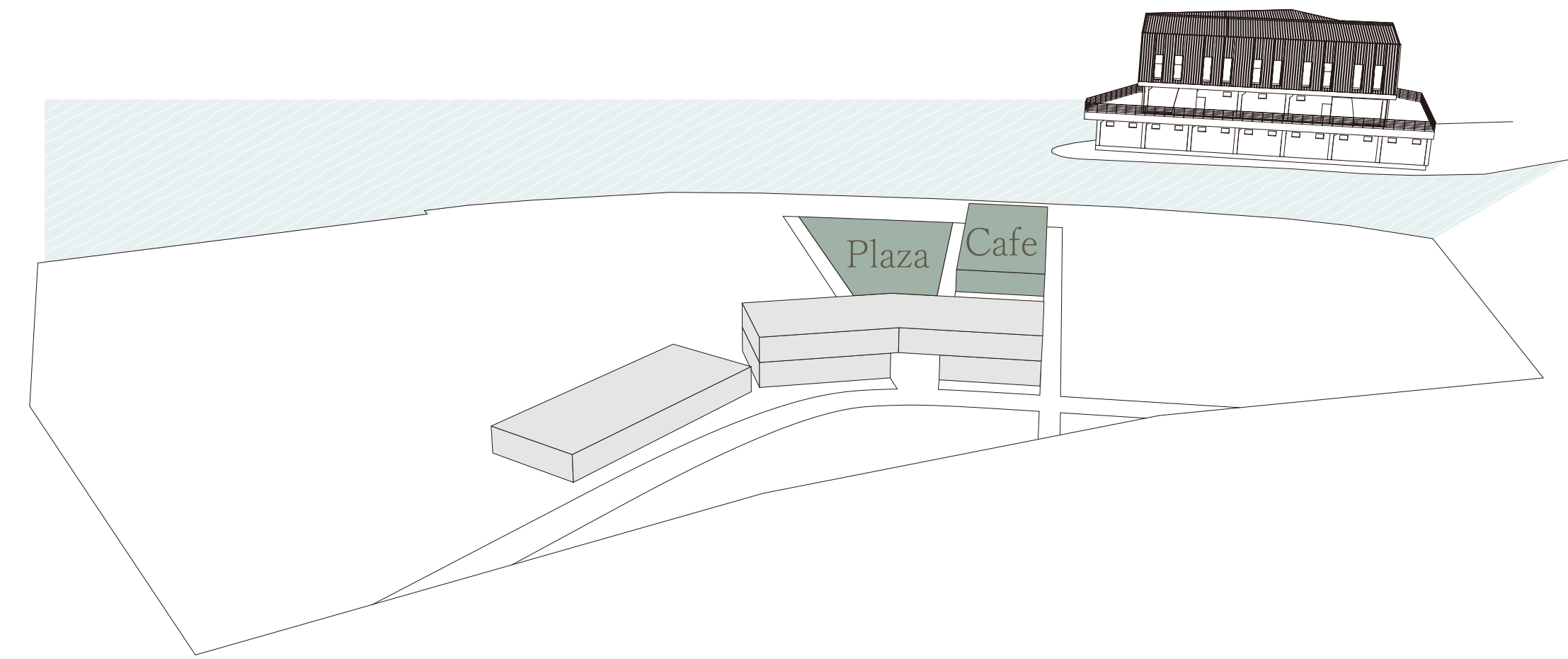
2. Landscape and architecture that welcome visitors



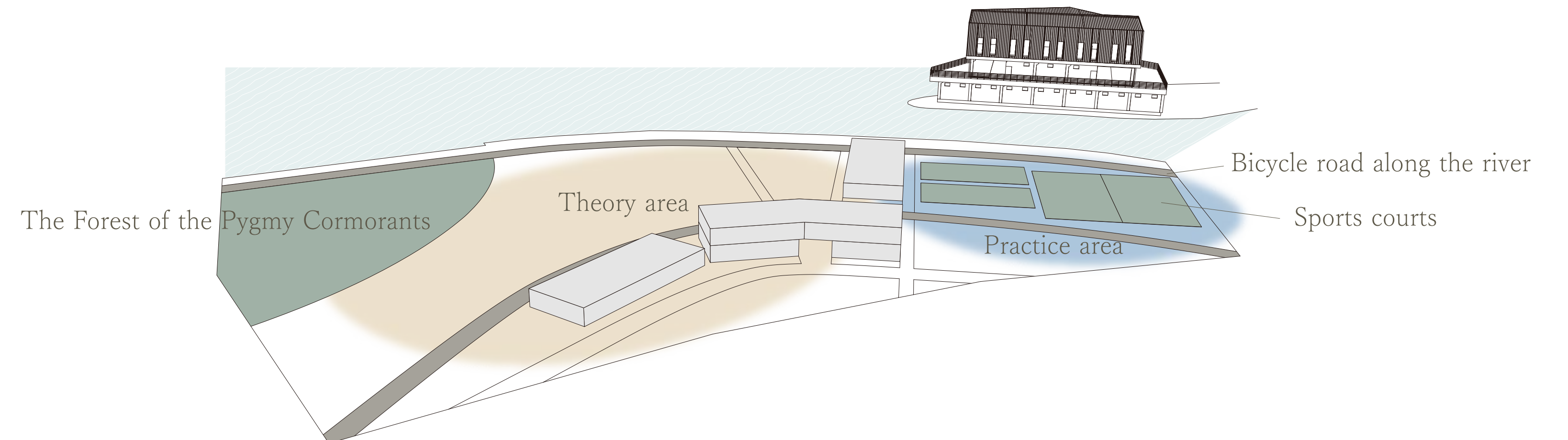
3. The axis leading to the river and the yacht club (the future symbol)



4. A plaza and a cafe between the axis

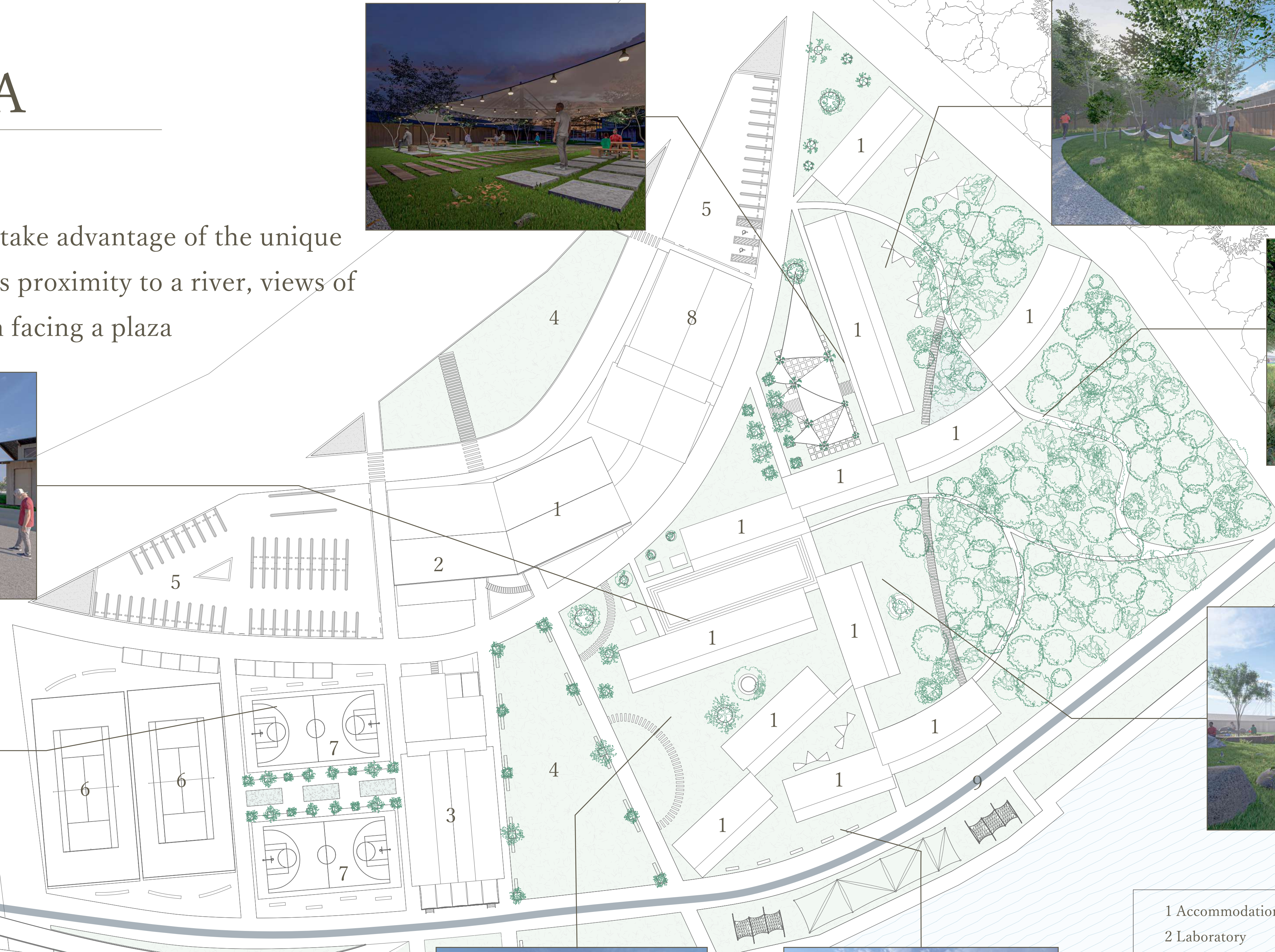


5. The path connecting theory and practice area



# Master Plan : SiteA

A variety of guest rooms designed to take advantage of the unique characteristics of each location, such as proximity to a river, views of the forest, or a location facing a plaza

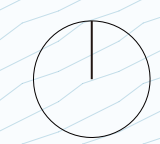
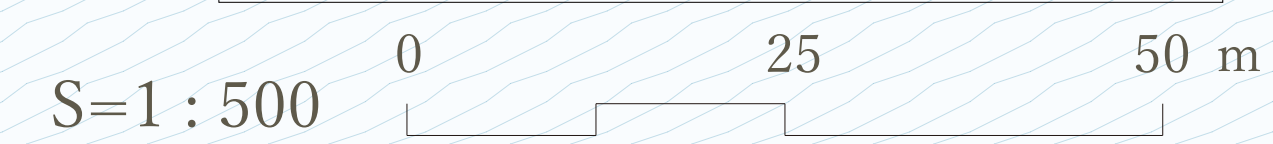


The bike path runs alongside the river, passing through a variety of activities, allowing users to enjoy the changing scenery.

The bridge connecting to the yacht club follows the line of the existing bridge to preserve the landscape.



- |                    |                     |
|--------------------|---------------------|
| 1 Accommodation    | 10 Kitchen          |
| 2 Laboratory       | 11 Rest room        |
| 3 Cafe             | 12 Common Space     |
| 4 Plaza            | 13 Multi-purpose    |
| 5 Parking          | 14 Lounge           |
| 6 Tennis court     | 15 Shower & Laundry |
| 7 Basketball court | 16 Recovery room    |
| 8 Fitness centre   | 17 Meeting room     |
| 9 Cycling road     |                     |



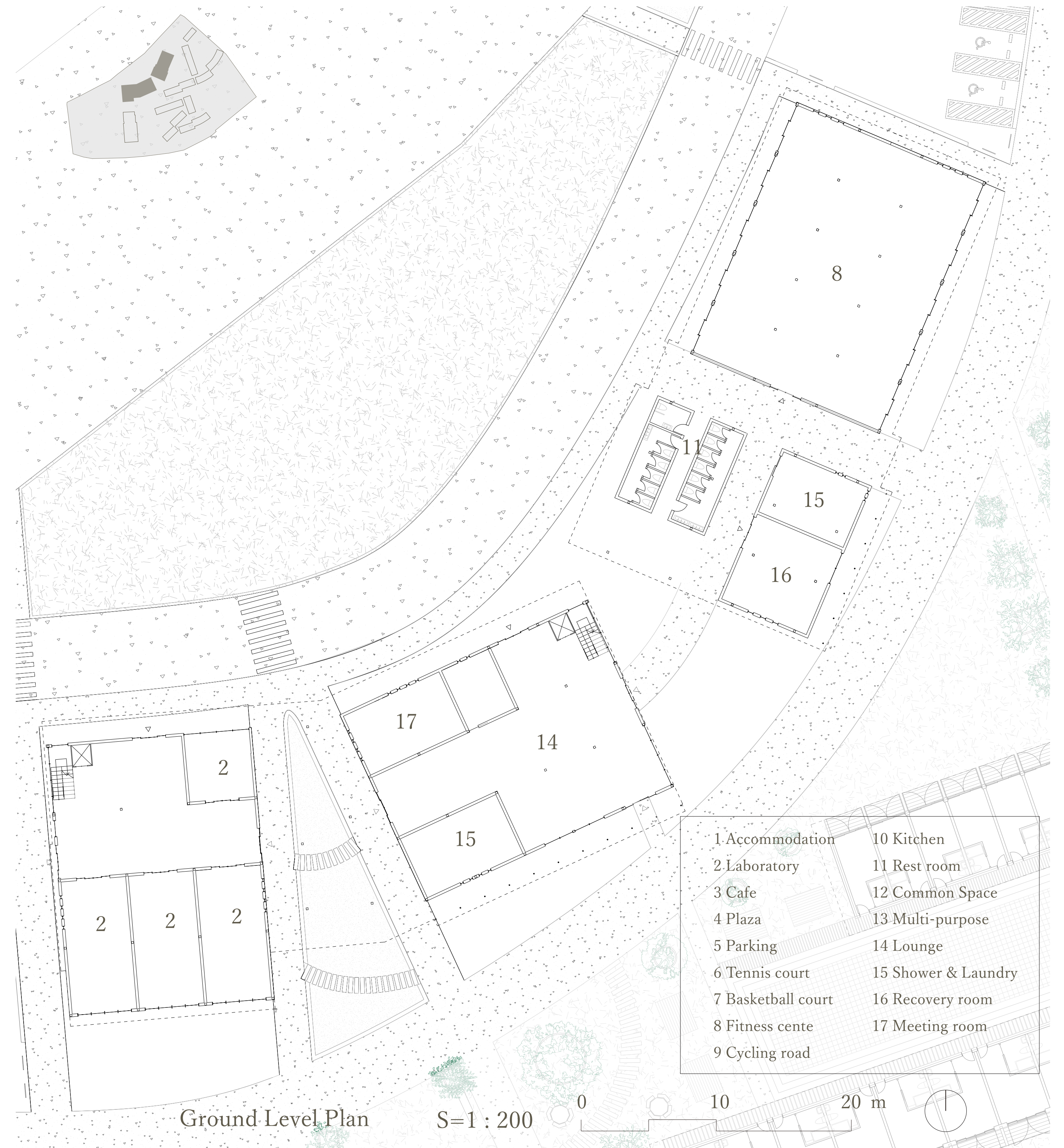
# Main Building



Social Interaciton



Public squares and cafes will be located along the axes leading toward the river and the yacht club, encouraging lively activity among visitors.



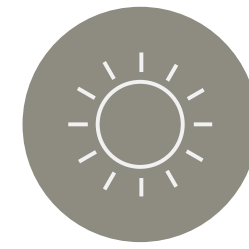
# Main Building -Accommodation Room-



View



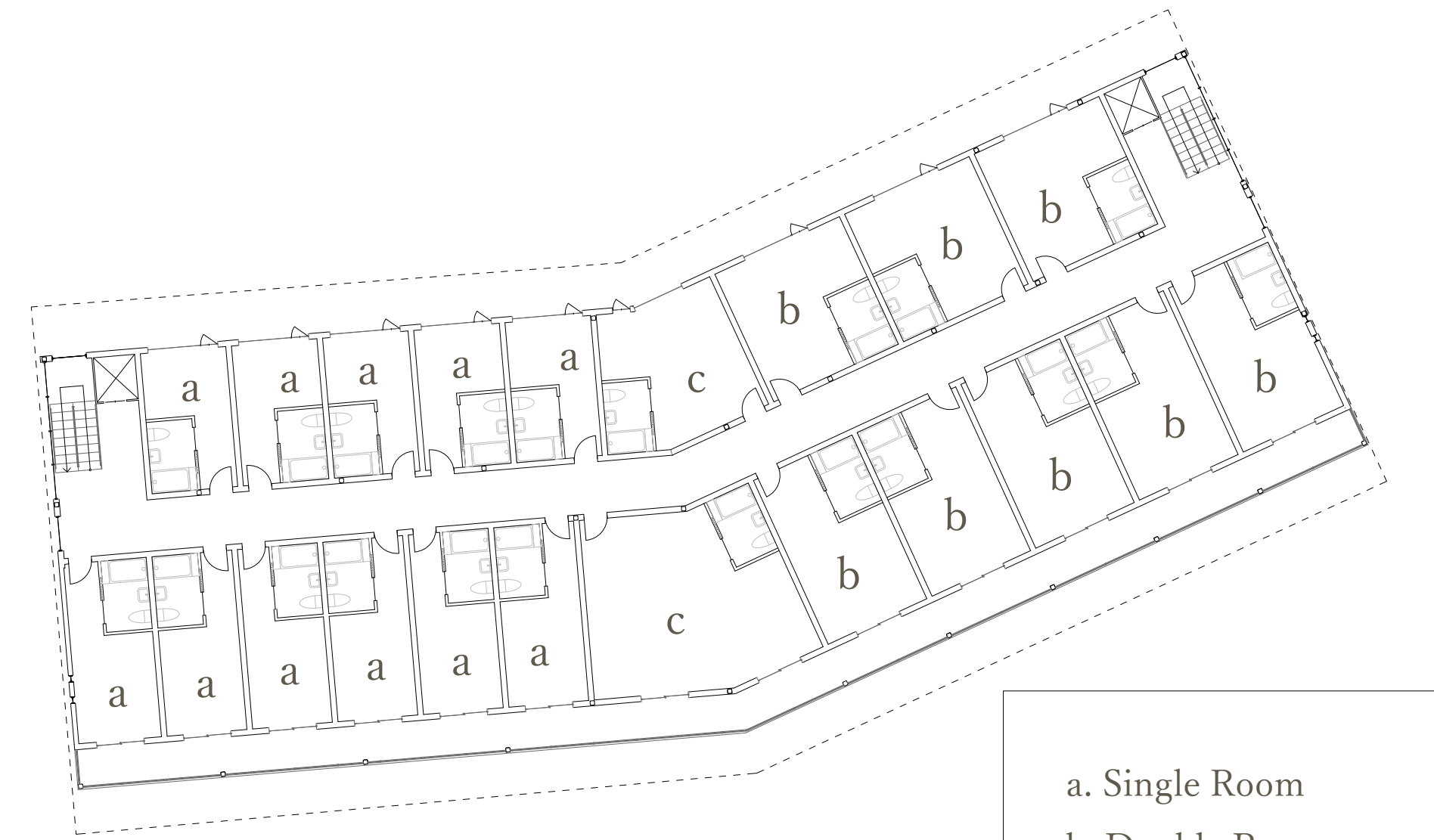
Equity



Light

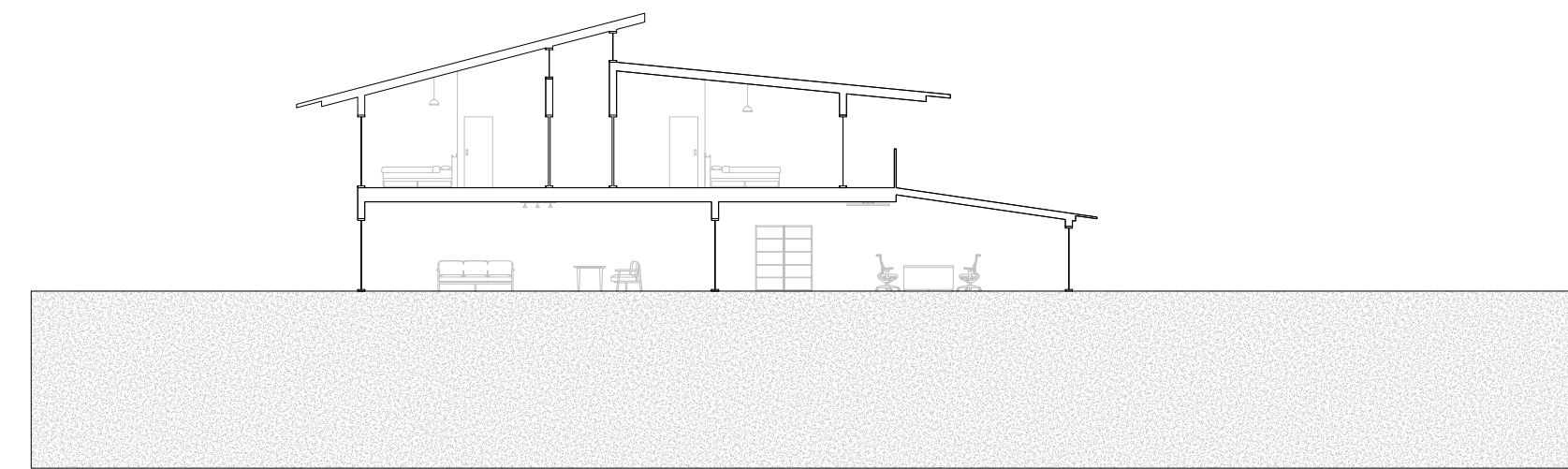


-For those who want to see a lively scene-  
Enjoy the sights of Belgrade, including the river and the yacht club



- a. Single Room
- b. Double Room
- c. Accessible Room

1st Floor Plan



Section



# Main Building -Cafe-



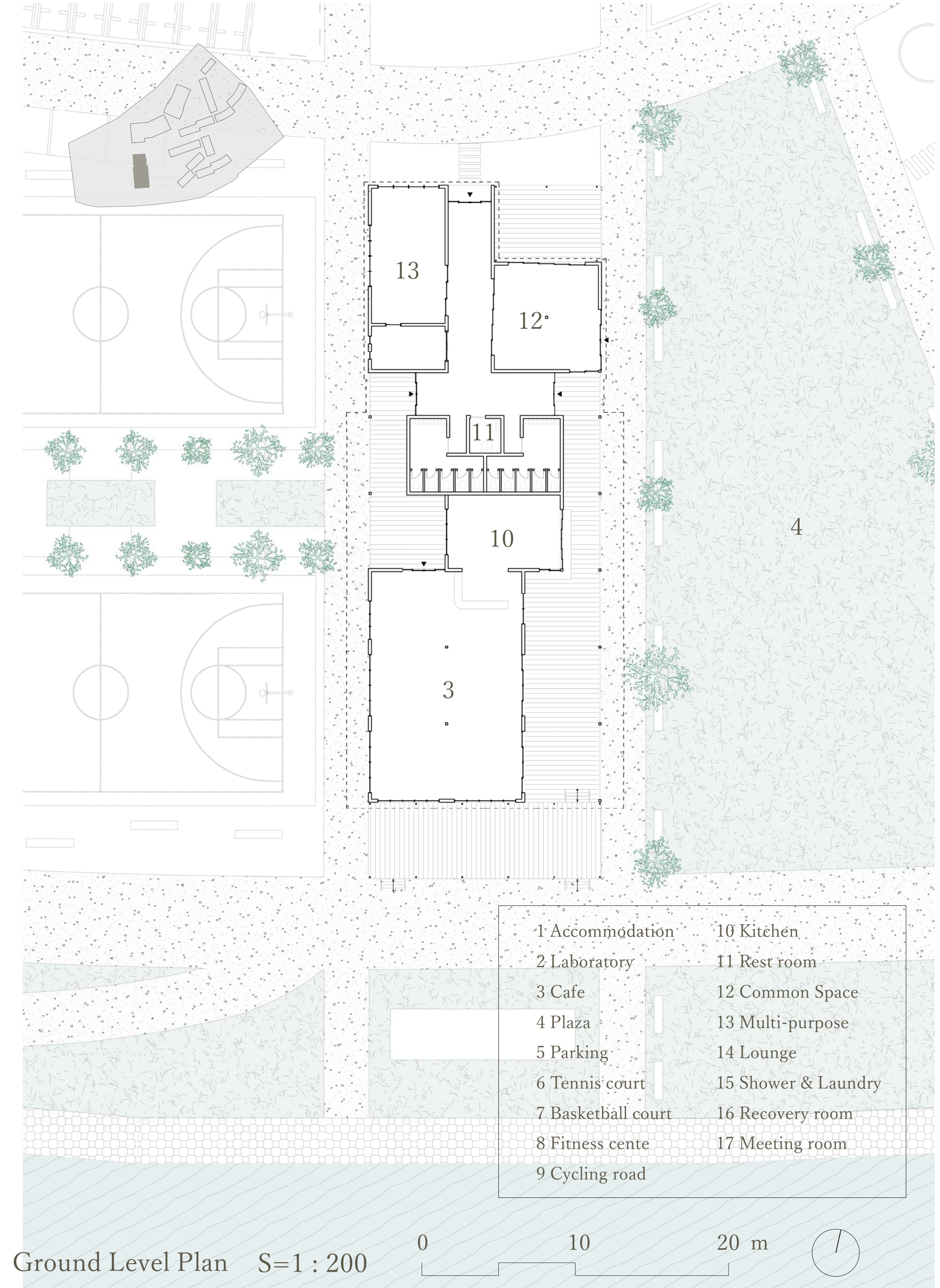
Social Interaciton



View



By connecting the space under the cafe's eaves with the plaza, the design creates a living space that shields visitors from summer sun and rain while allowing takeout service to extend into the plaza during pleasant weather.



# Accommodations -Surrounded nature-



Nature



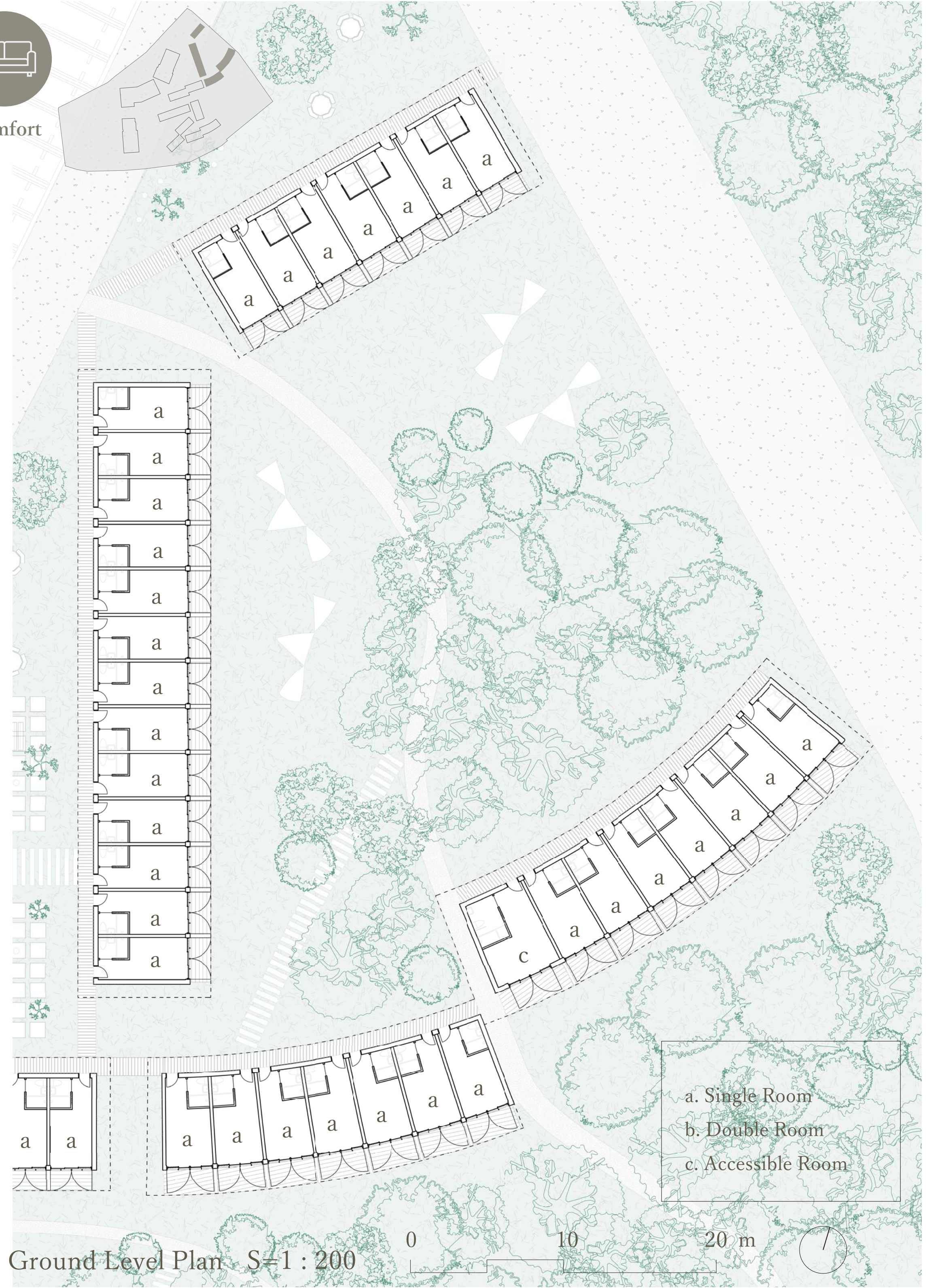
Light



Comfort



-For athletes who value their privacy-  
Spending time quietly gazing at the forest



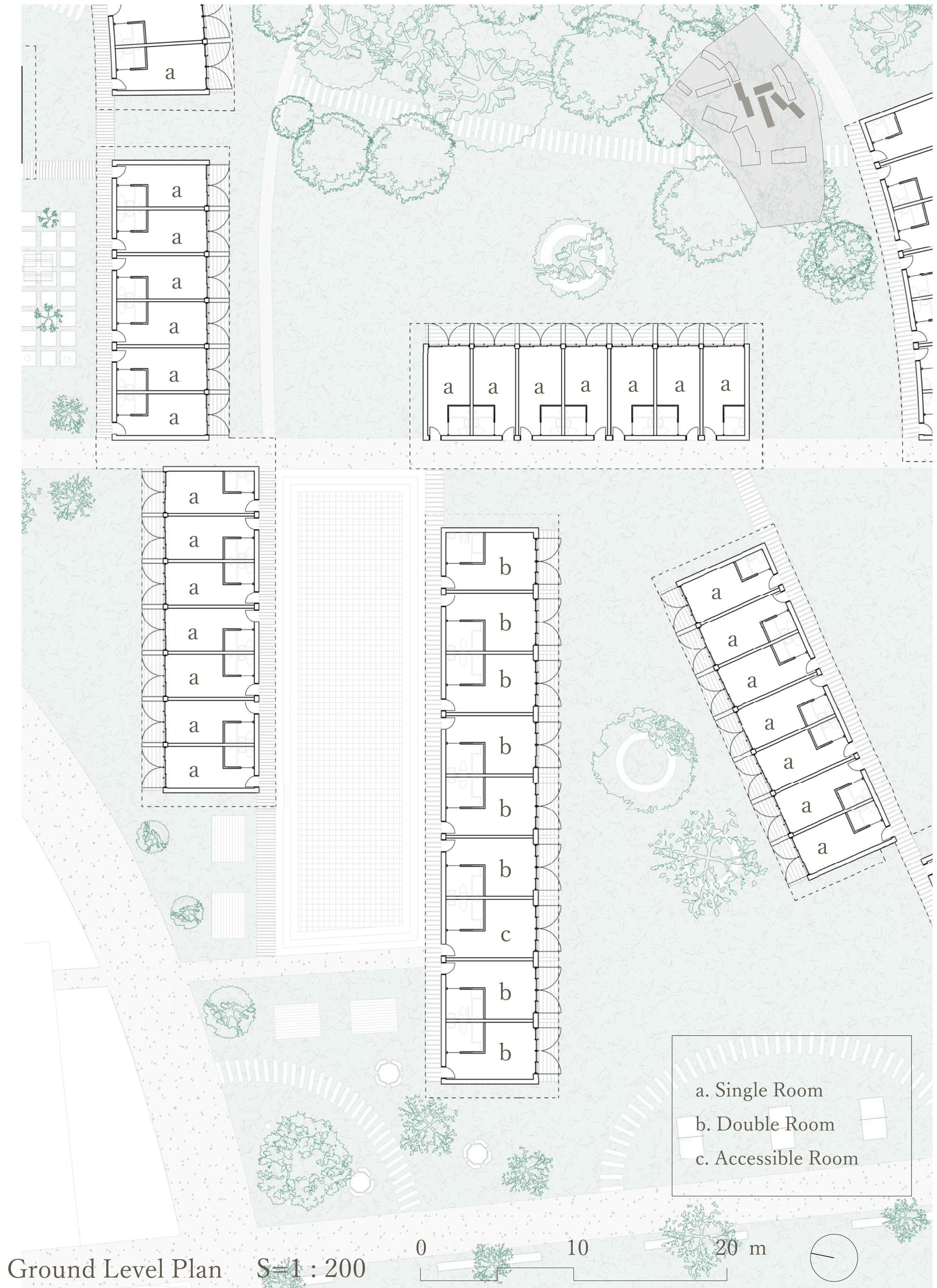
# Accommodations -Communication-



Community



-For organizations and team members-  
Joining the team's activities and access the main building easily



# Accommodations -Legacy of Belgrade-



View



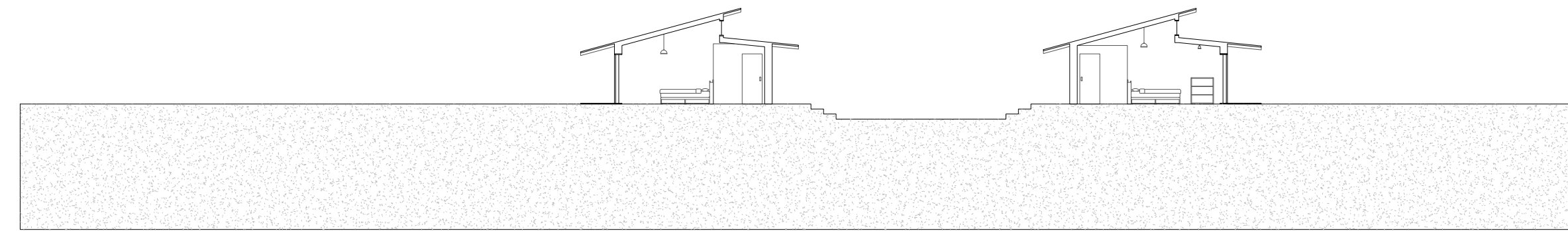
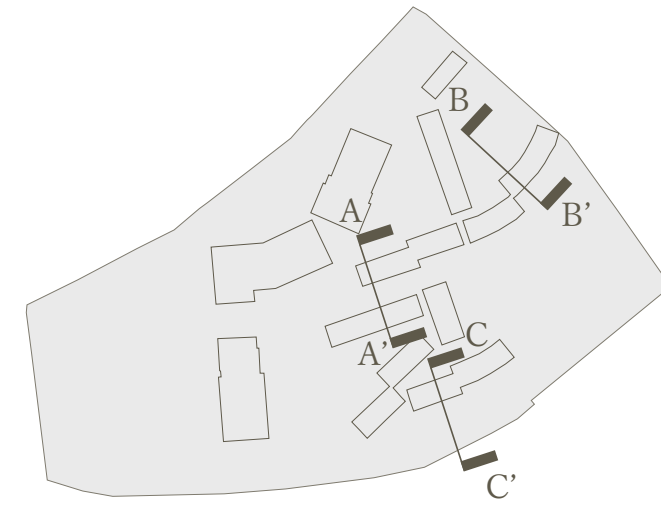
Social Interaction



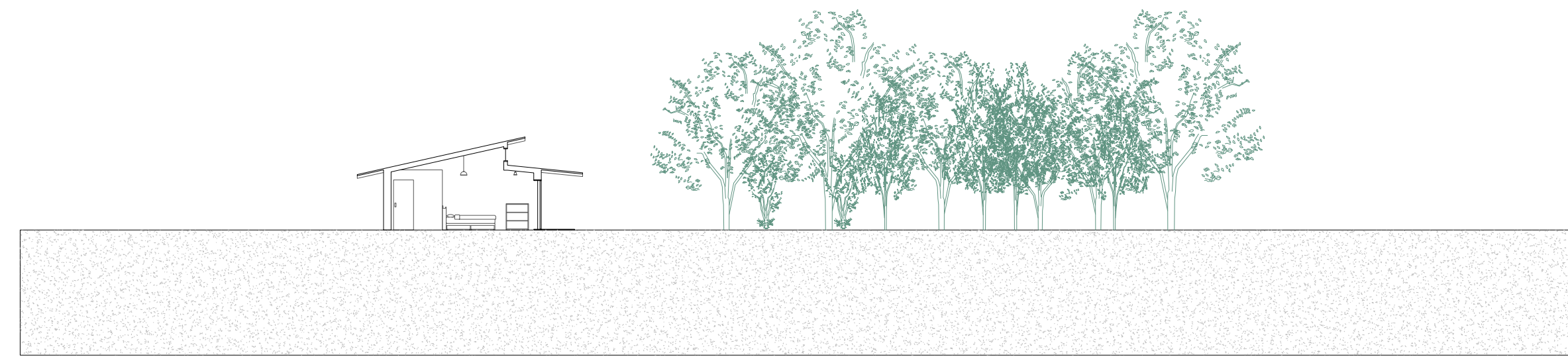
For People who want to spend time in an open space by themselves  
Gazing at the rivers and yachts that are a legacy of Belgrade



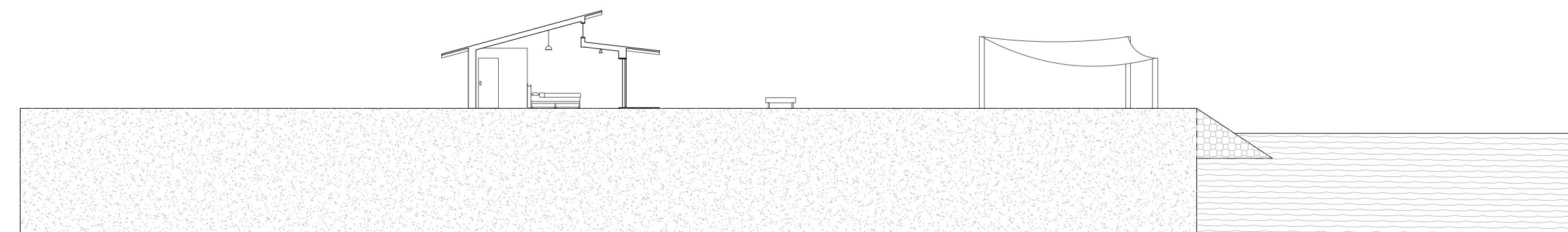
# Accommodations -Section-



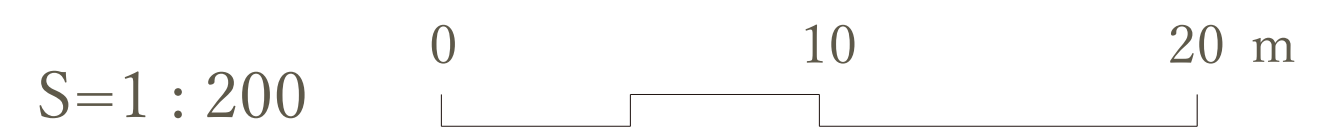
SectionA-A'



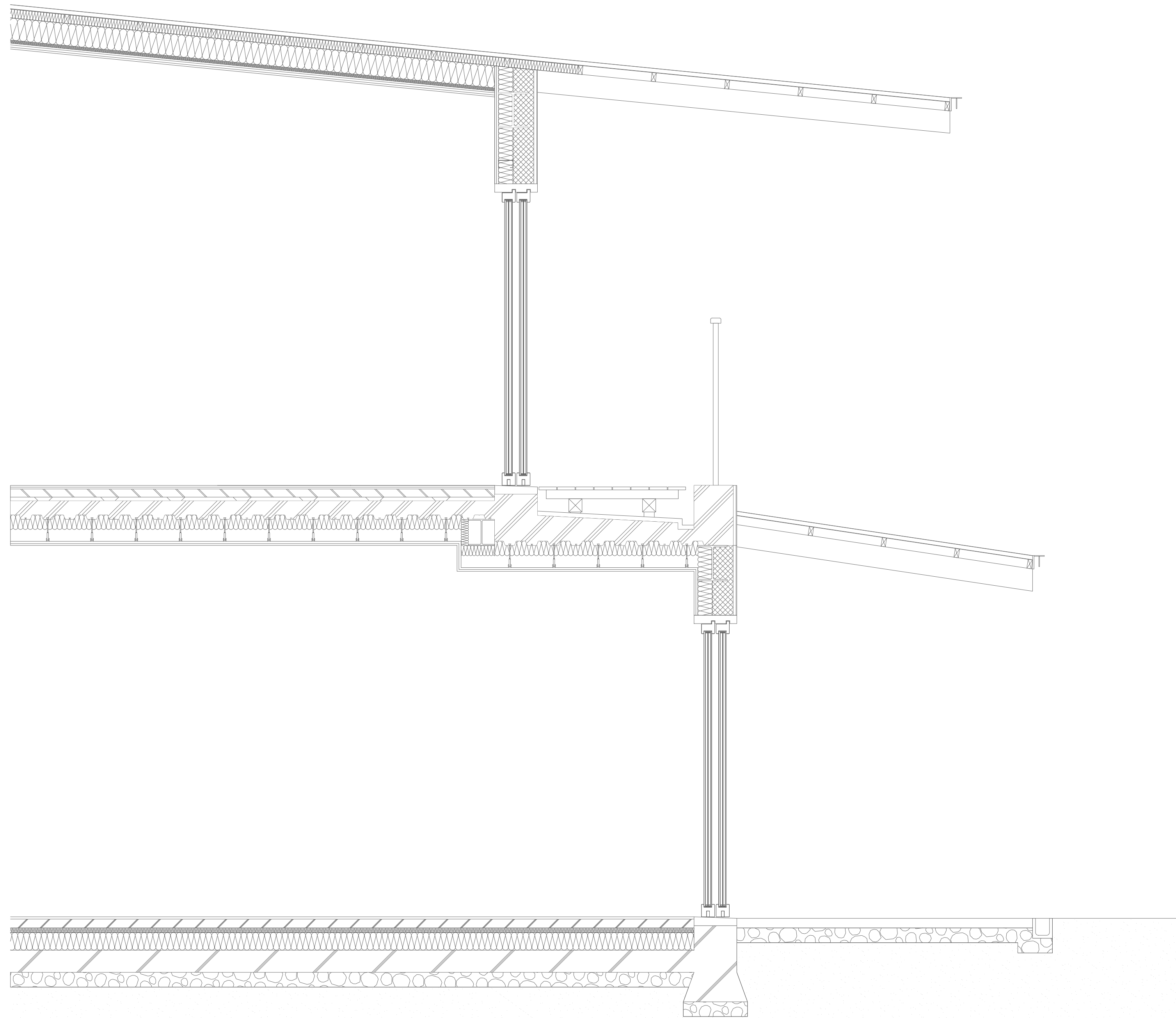
SectionB-B'



SectionC-C'



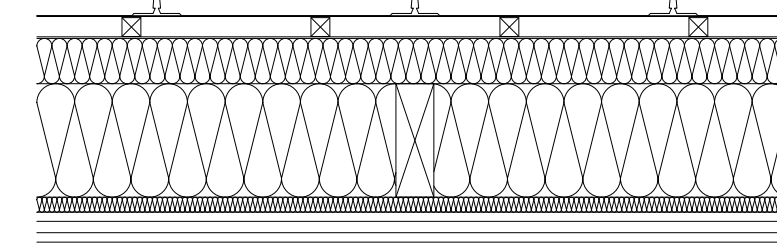
# Detailed Section -Main Building-



S=1:20 0 1 2 m

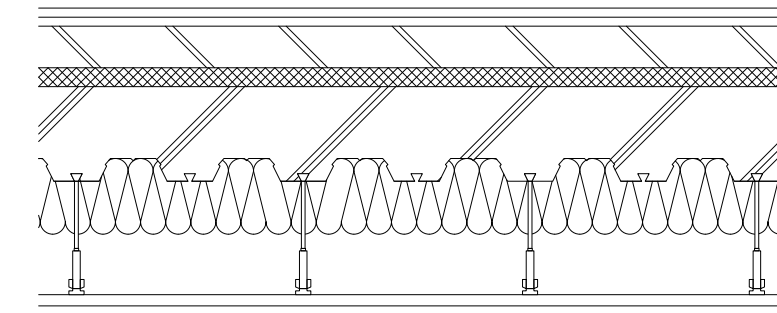
**Pitched roof**

Standing seam metal roofing	0.5 mm
Ventilated cavity/Longitudinal wood laths (30×30)	30 mm
Breather membrane	1 mm
ISOVER Integra Réno Sarking/Horizontal wooden slats (60×30)	60 mm
ISOVER Comfort/Wood rafters(150×50)	150 mm
ISOVER Vario Xtra	1 mm
Service cavity / ISOVER Comfort (light infill)	20 mm
Resilient channel	12 mm
Placo Lisaflam BA15	15 mm
Placo Phonique acoustic board	12.5 mm



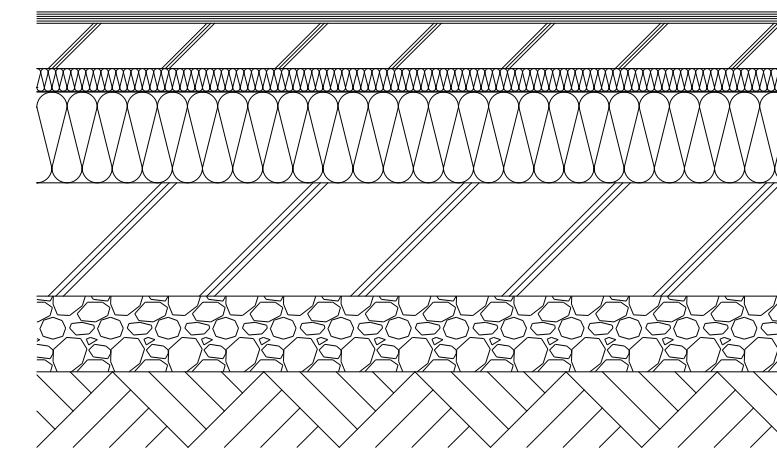
**Floor slab**

Floor finish wood	12 mm
weberfloor easi screed	55 mm
ISOVER T-N	25 mm
Composite steel deck slab (low-carbon concrete, CEM II)	125 mm
Resilient hanger system (Placostil)	
Service cavity	150 mm
ISOVER Akustic SSP2	100 mm
Placo Lisaflam BA15	15 mm
Placo Phonique BA13	12.5 mm



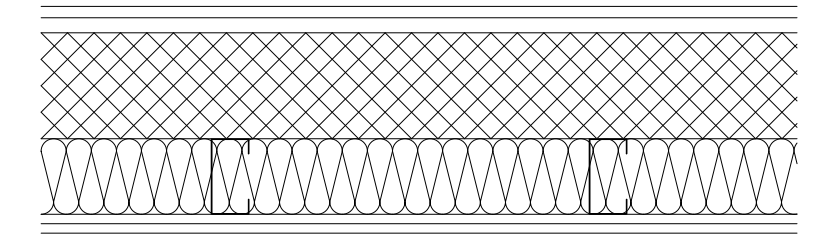
**Ground slab**

Floor finish wood	15 mm
weberfloor easi screed	60 mm
ISOVER T-N	30 mm
Polyethylene separation layer (PE film)	0.2 mm
ISOVER Comfort	120 mm
Low-carbon reinforced concrete slab (CEM II)	150 mm
Capillary break layer (gravel)	
Ground	



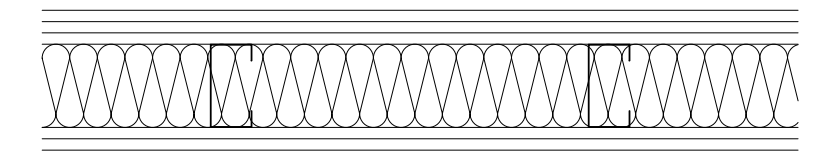
**External wall**

EXT	
Weber webertherm base / weberpas Silikatputz / weberpas topDRY	35 mm
ISOVER Isover Fassade	140 mm
ISOVER Akustic SSP2/Structural frame	100 mm
ISOVER Vario® XtraSafe / Vario KB1	1 mm
Resilient hanger system	
Placoflam BA13	15mm
Ecophon Advantage	13 mm
INT	



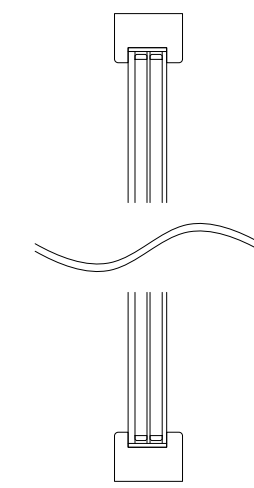
**Internal wall**

Placoflam BA15	15 mm
Placophonique 15	15 mm
Resilient hanger system (Placostil)	15 mm
M90 stud/ISOVER Akustic SSP2	90 mm
Resilient hanger system (Placostil)	15 mm
Placophonique 15	15 mm
Placoflam BA15	15 mm



**Window**

EXT	
SGG COOL-LITE XTREME 60/28	6 mm
Argon gas (90%)	16 mm
SGG PLANICLEAR	4 mm
Argon gas (90%)	16 mm
SGG STADIP SILENCE 44.2	9 mm
INT	



# Detailed Section -Rainwater & Geothermal-



Nature

## Roof Shape

The sloped roof design allows for efficient rainwater collection. By channeling, filtering, and reusing rainwater, this system reduces reliance on municipal water supplies and enhances resilience.

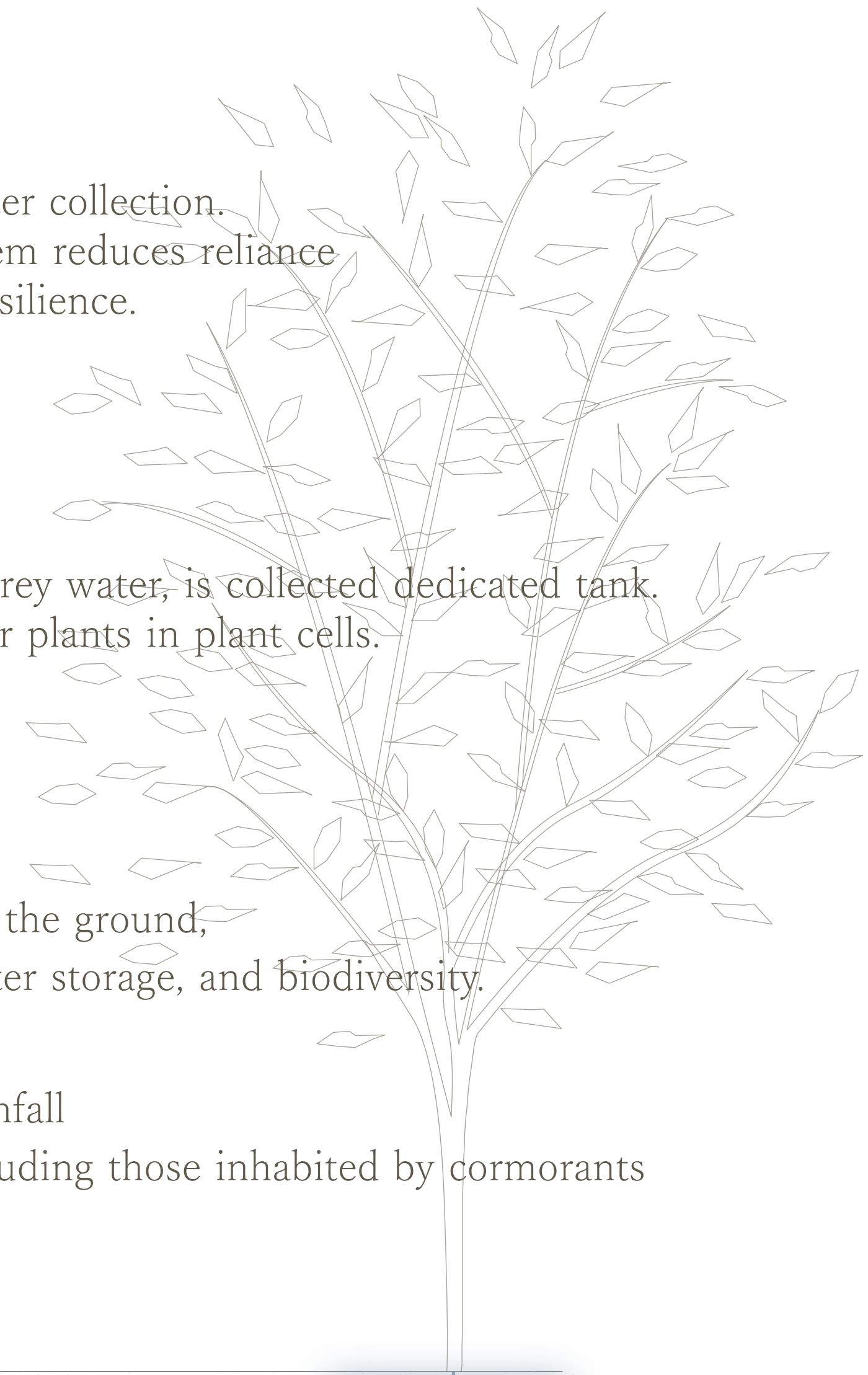
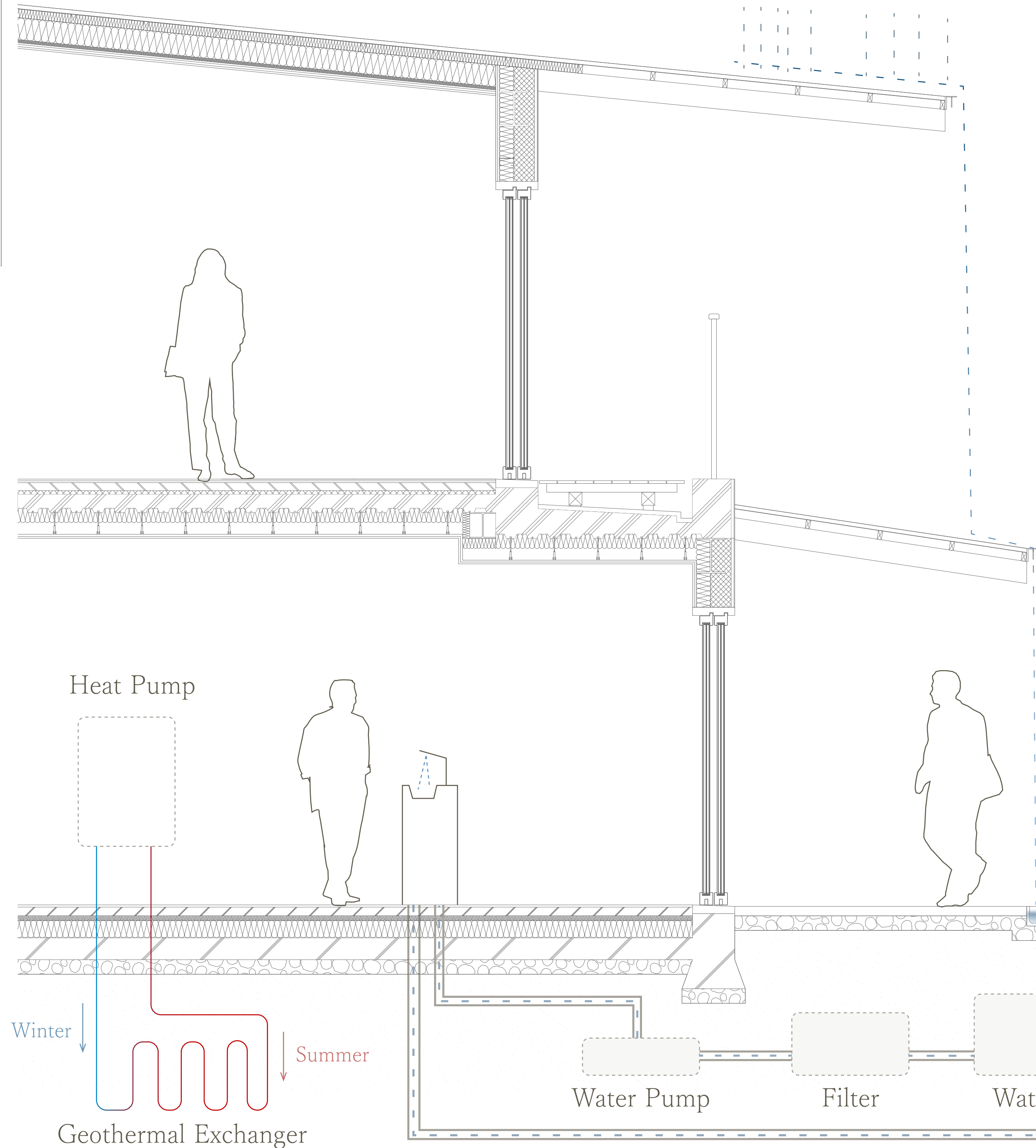
## Rainwater Harvesting

Water from the sink and shower in the accommodation, called grey water, is collected in a dedicated tank. After being filtered, grey water is reused to water plants in plant cells.

## Rain garden system

Rain gardens allow rainwater to infiltrate the ground, serving as a foundation for irrigation, water storage, and biodiversity.

- Irrigation: Reduces water usage
- Water storage: Helps manage heavy rainfall
- Biodiversity: Preserves ecosystems, including those inhabited by cormorants

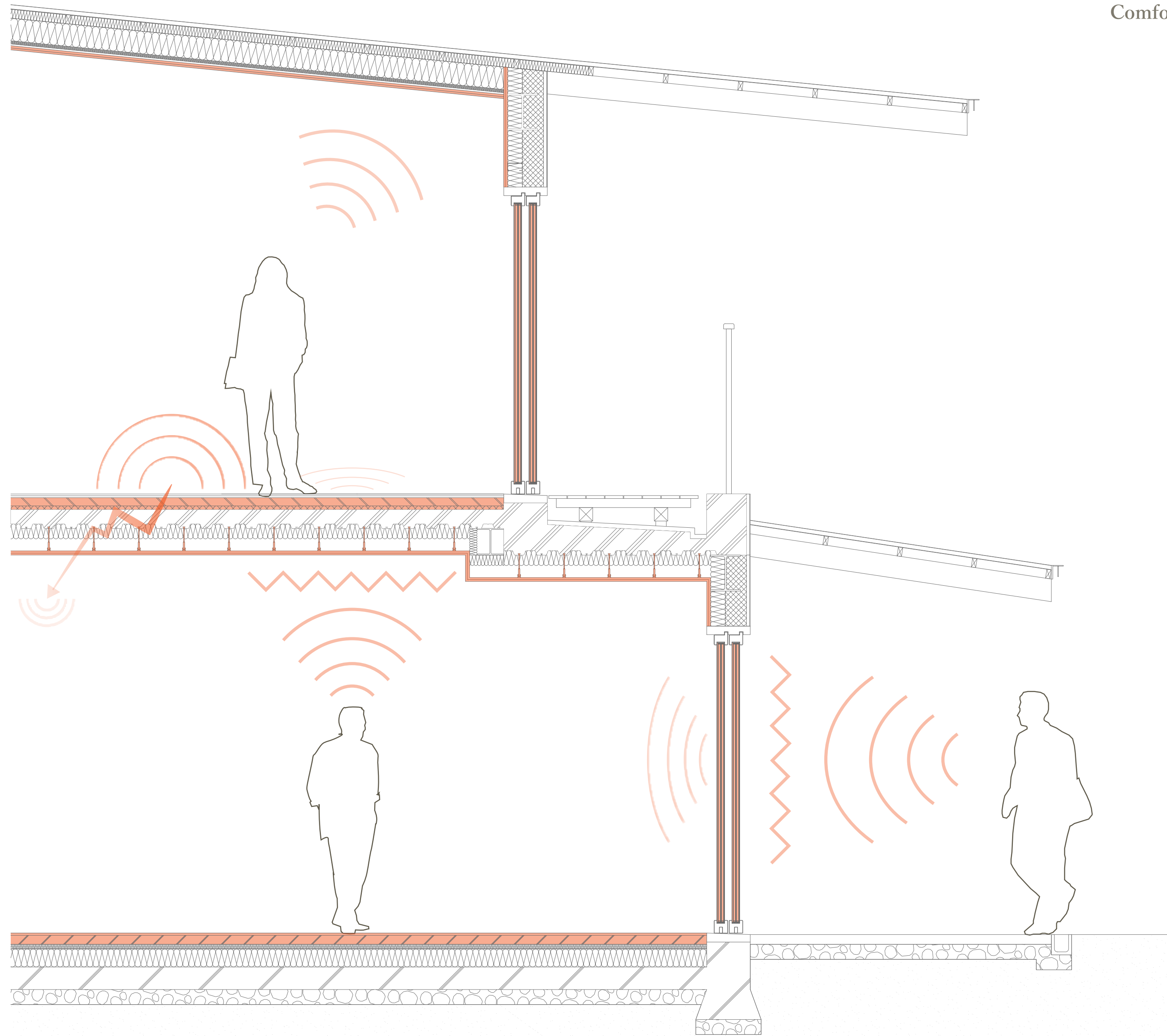


S=1:20 0 1 2 m

# Detailed Section -Sound & Comfort-



Comfort



## Acoustic Comfort

Wall between units (Airborne noise)  
**60dB** ≥ 53dB

Ceiling between floors (Airborne noise)  
**58dB** ≥ 53dB

Ceiling between floors (Impact noise)  
**56dB** ≤ 58dB

Since the first floor is designated for research facilities and the second floor for lodging, it is essential to clearly separate the acoustic environments of the work areas and rest areas.

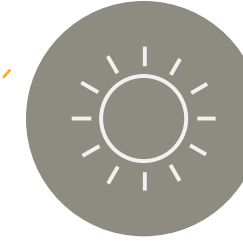
By incorporating sound insulation into the walls, floors, and ceilings, we have minimized the transmission of airborne noise and impact noise—generated by research activities and foot traffic—to the lodging spaces on the upper floor.

In this building, where different functions are stacked vertically, the cross-sectional design itself ensures a balance between a focused research environment and a quiet living environment.

S=1:20

0 1 2 m

# Detailed Section -Light & Ventilation-



Light



Air



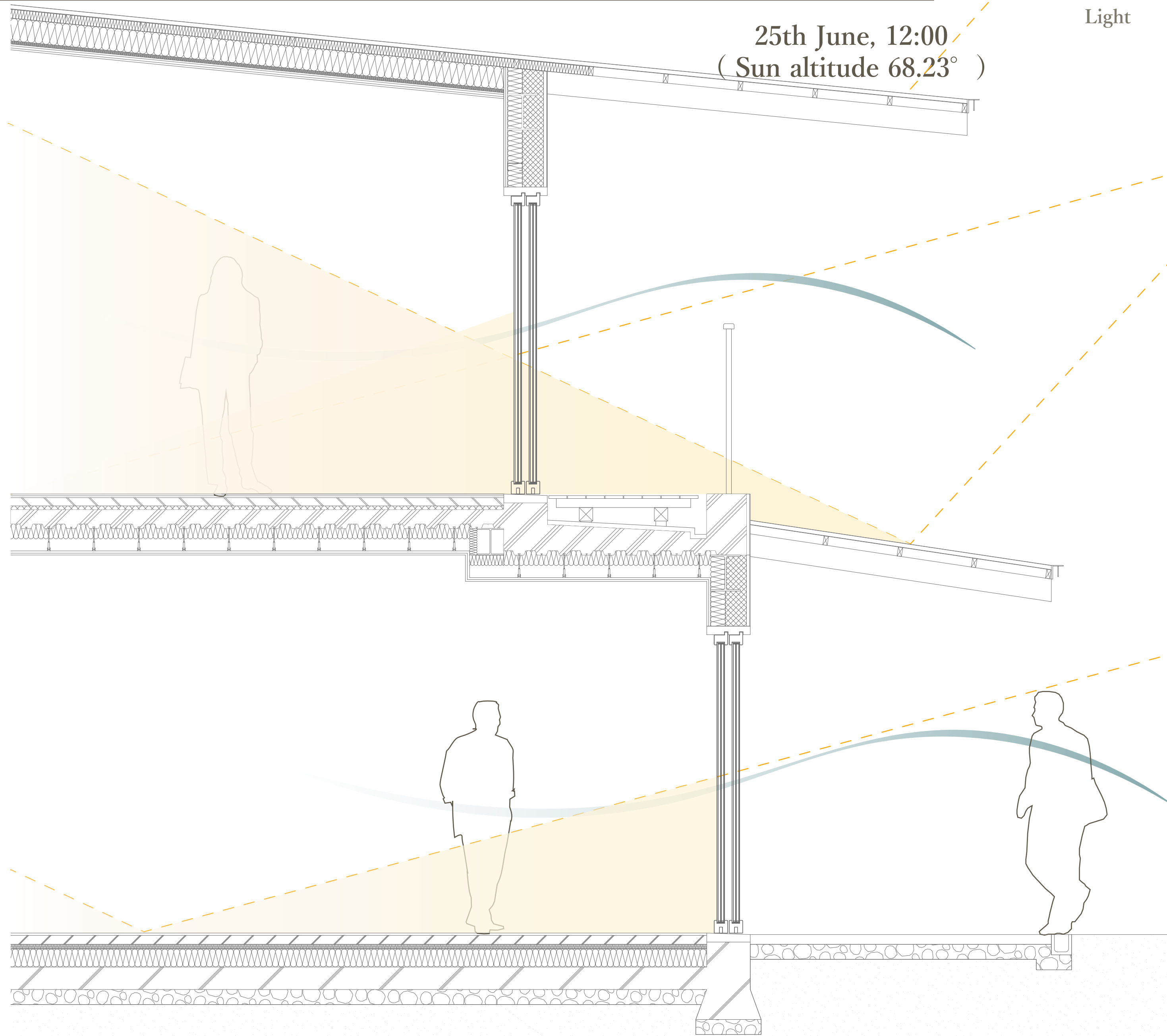
Comfort

25th June, 12:00  
( Sun altitude 68.23° )

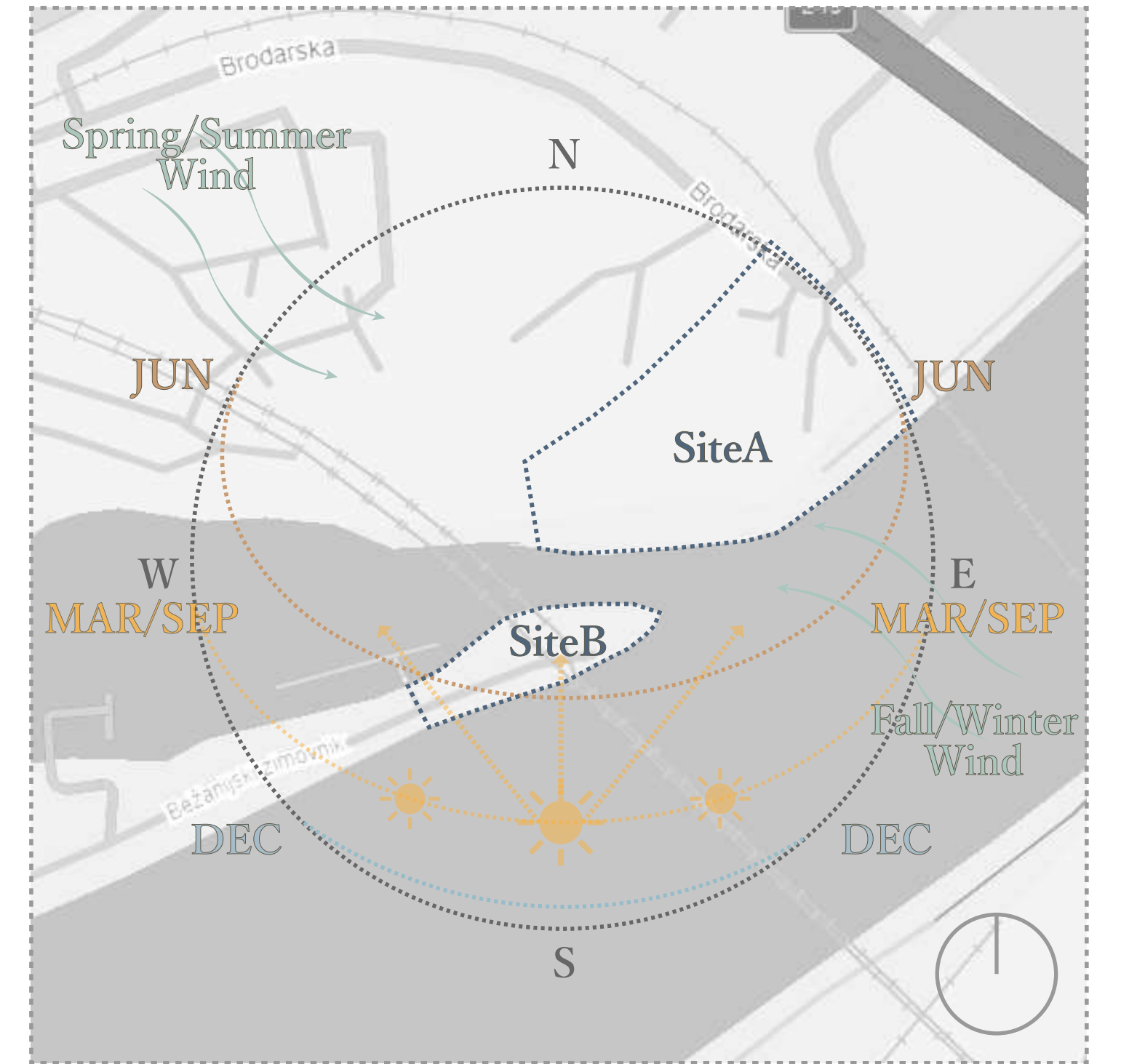
25th June, 12:00  
( Sun altitude 68.23° )

25th December, 12:00  
( Sun altitude 21.62° )

25th December, 12:00  
( Sun altitude 21.62° )



S=1:20



## Lighting and Ventilation Comfort

The aim is to create a comfortable indoor environment that adapts to the seasons.

The design features eaves that block intense summer sunlight while allowing low winter sunlight to penetrate deep into the interior. Additionally, the layout utilizes the placement of windows and variations in ceiling height to promote natural ventilation.

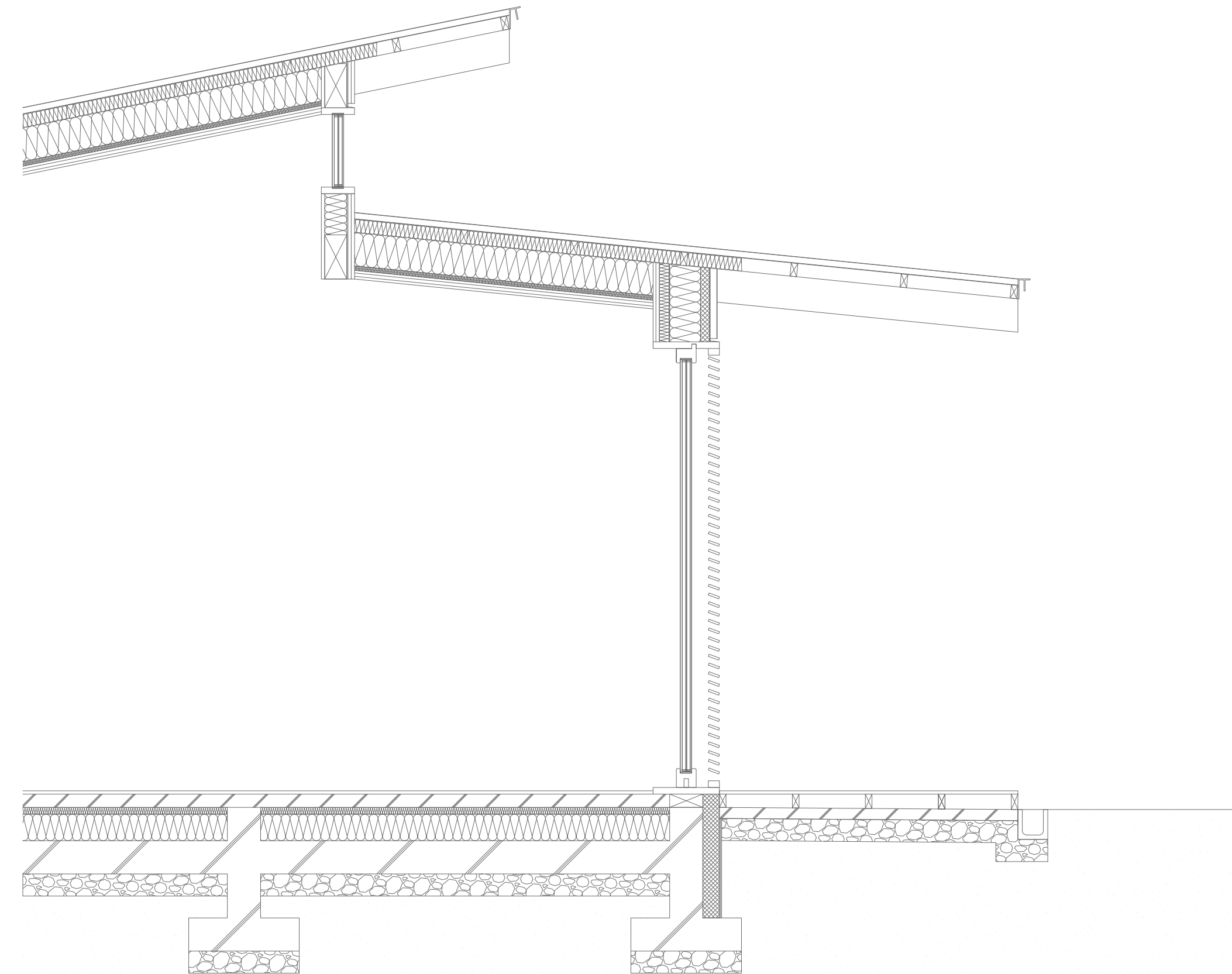
This enables passive climate control by reducing solar heat gain in summer and maximizing solar heat gain at floor level in winter.

# Detailed Section -Accommodation Building-

This plan ensures superior airtightness through the following measures

- Continuous airtight layer (Vario Xtra)
- Minimization of penetrations via service cavities
- Integrated airtight design for roofs and walls
- High-performance window and door details (sealed with airtight tape)

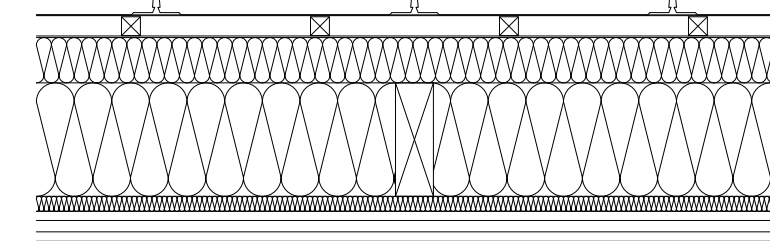
Based on the above, the design meets the requirement of  $q_4 < 0.6 \text{ m}^3/(\text{h}\cdot\text{m}^2)$



S=1:20  
0 1 2 m

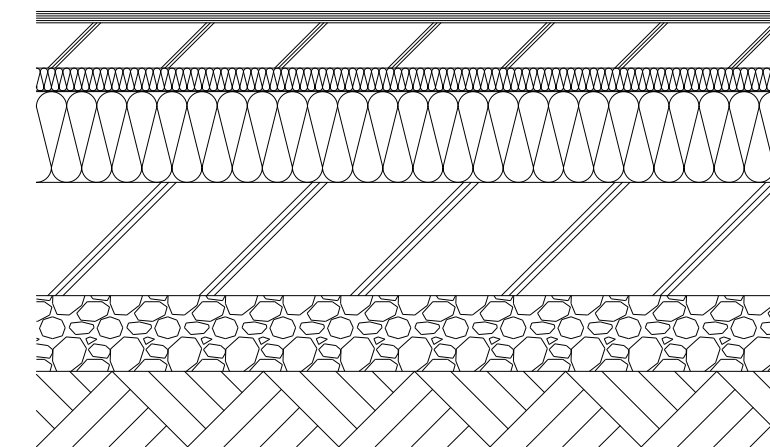
**Pitched roof**

Standing seam metal roofing	0.5 mm
Ventilated cavity/Longitudinal wood laths (30x30)	30 mm
Breather membrane	1 mm
ISOVER Integra Réno Sarking/Horizontal wooden slats (60x30)	60 mm
ISOVER Comfort/Wood rafters(150x50)	150 mm
ISOVER Vario Xtra	1 mm
Service cavity / ISOVER Comfort (light infill)	20 mm
Resilient channel	12 mm
Placo Lisaflam BA15	15 mm
Placo Phonique acoustic board	12.5 mm



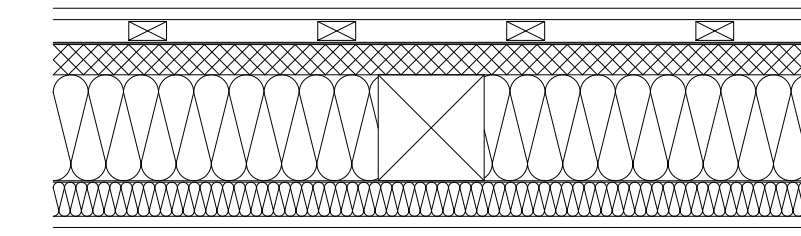
**Ground slab**

Floor finish wood	15 mm
weberfloor easi screed	60 mm
ISOVER T-N	30 mm
Polyethylene separation layer (PE film)	0.2 mm
ISOVER Comfort	120 mm
Low-carbon reinforced concrete slab (CEM II)	150 mm
Capillary break layer (gravel)	
Ground	



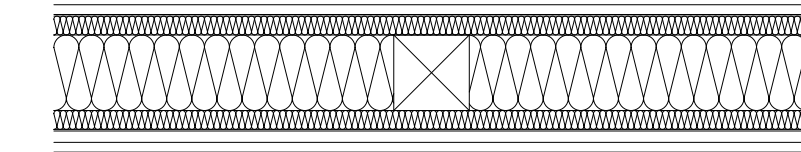
**External wall**

EXT	
Vertical cladding (wood)	15 mm
Ventilated cavity/Counter batten (30x50)	30 mm
weber.therm armadura base + weber.therm 310	15 mm
ISOVER facade wind barrier board	40 mm
ISOVER glass wool insulation/Load-bearing frame	140 mm
ISOVER Vario Xtra	1 mm
Service cavity / ISOVER Comfort	45 mm
Placo Lisaflam BA15	15 mm
Placo Phonique acoustic board	12.5 mm
INT	



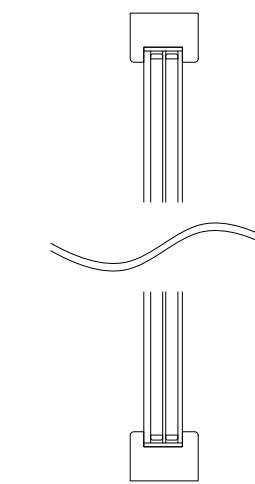
**Internal wall**

Placo Phonique acoustic plasterboard	13 mm
Resilient channel	
Service cavity / ISOVER Comfort	25 mm
Structural column / stud / ISOVER Akustic SSP2	90 mm
Service cavity / ISOVER Comfort	25 mm
Resilient channel	
Placo Lisaflam BA15	15 mm
Placo Phonique acoustic plasterboard	13 mm



**Window**

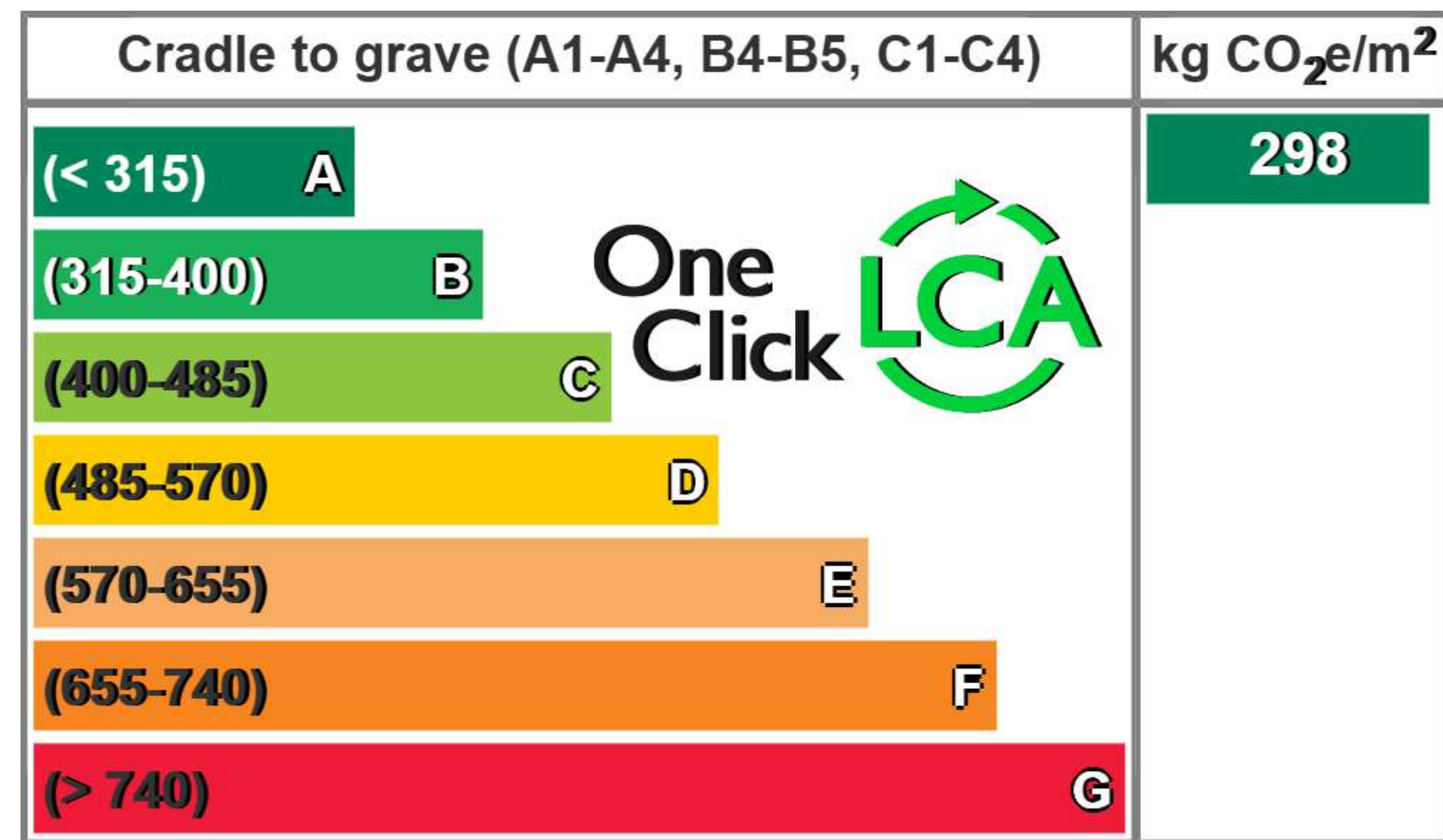
EXT	
SGG COOL-LITE XTREME 60/28	6 mm
Argon gas (90%)	16 mm
SGG PLANICLEAR	4 mm
Argon gas (90%)	16 mm
SGG STADIP SILENCE 44.2	9 mm
INT	



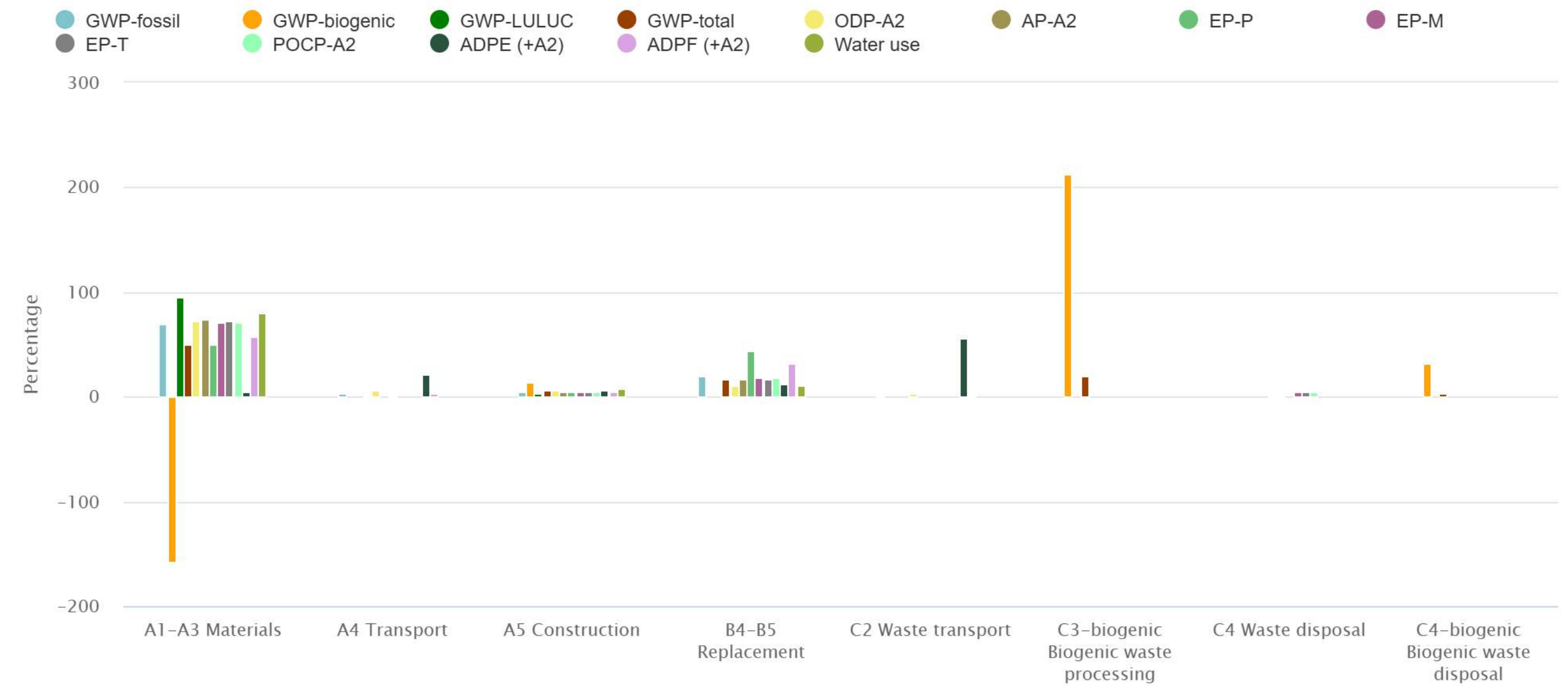
# Life Cycle Carbon Assessment -Accommodation Building-

## Design Strategies for CO<sub>2</sub> Reduction

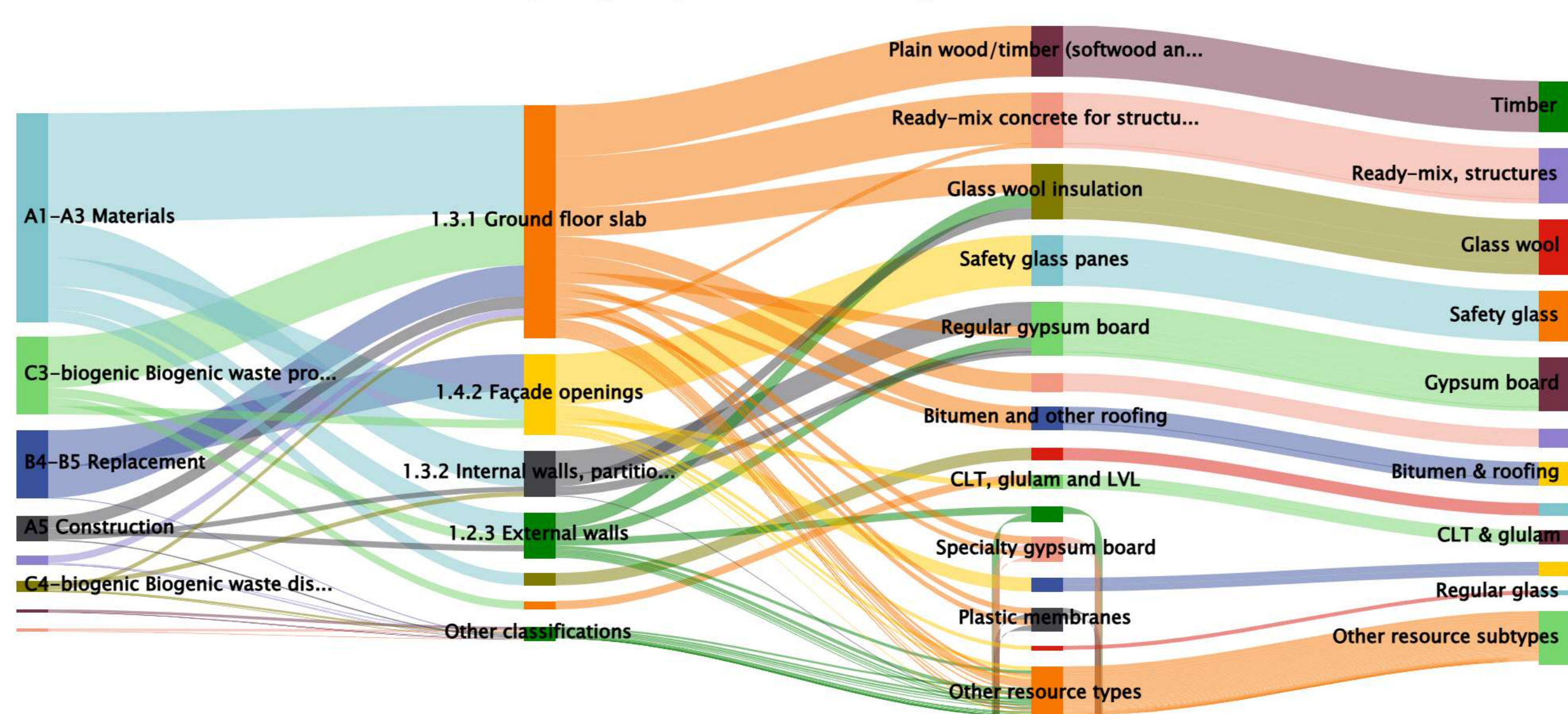
- Significantly reduce material-related CO<sub>2</sub> emissions through the use of low-carbon concrete
- Achieve carbon sequestration and a low environmental impact through the active use of wood
- Minimize the use of petroleum-based materials and replace them with insulation materials that have a lower environmental impact
- Ensure optimal environmental performance by selecting products based on EPD data
- Reduce material usage and construction-related environmental impact through the adoption of dry-construction and lightweight construction methods



## Results by life-cycle stage

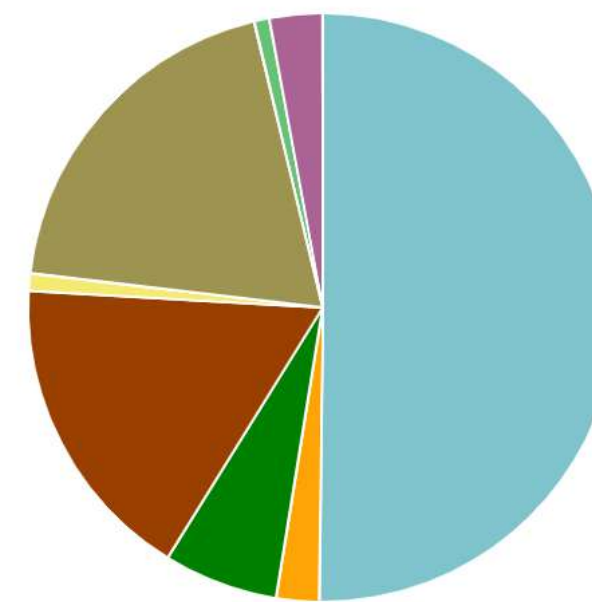


Sankey diagram, Global Warming Potential total



Global Warming Potential total kg CO<sub>2</sub>e - Life-cycle stages

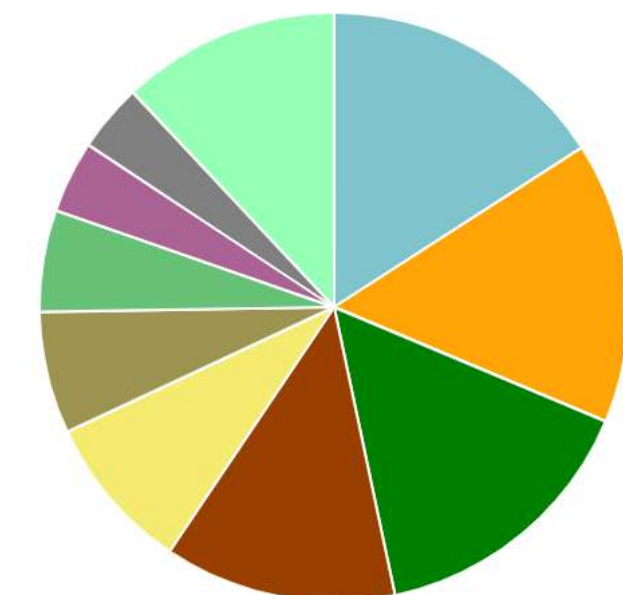
- A1-A3 Materials - 50.2%
- A4 Transport - 2.4%
- A5 Construction - 6.3%
- B4-B5 Replacement - 17.1%
- C2 Waste transport - 1.0%
- C3-biogenic Biogenic waste processing - 19.4%
- C4 Waste disposal - 0.9%
- C4-biogenic Biogenic waste disposal - 2.9%



Global Warming Potential total kg CO<sub>2</sub>e - Resource types

This is a drilldown chart. Click on the chart to view details

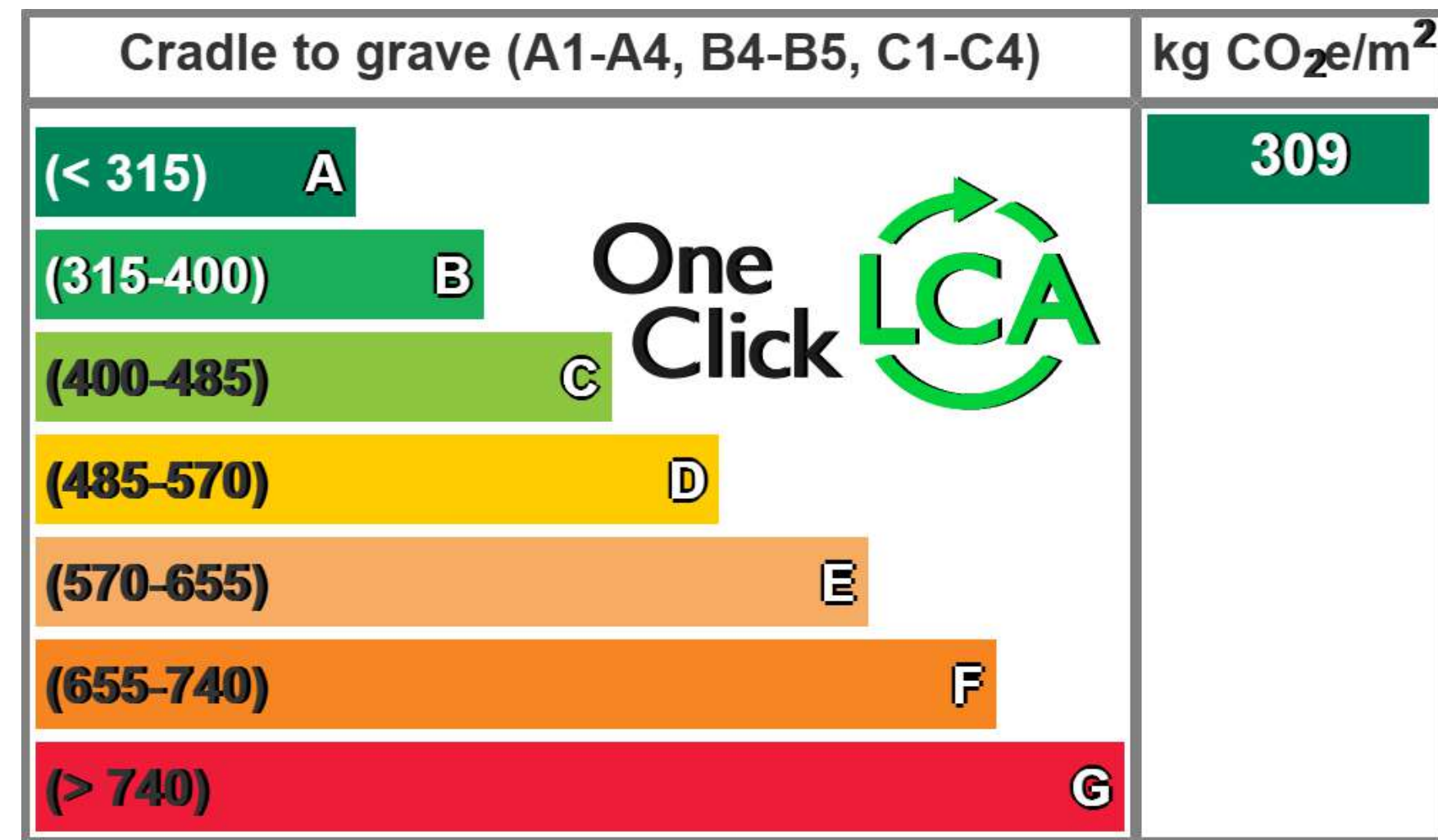
- Regular gypsum board - 15.9%
- Ready-mix concrete for structures (beams, columns, piling) - 15.5%
- Glass wool insulation - 15.3%
- Safety glass panes - 12.7%
- Plain wood/timber (softwood and hardwood) - 8.6%
- Bitumen and other roofing - 6.7%
- Ready-mix concrete for external walls and floors - 5.6%
- Specialty gypsum board - 4.0%
- Ready-mix concrete for foundations and internal walls - 3.7%
- Other resource types - 12.0%



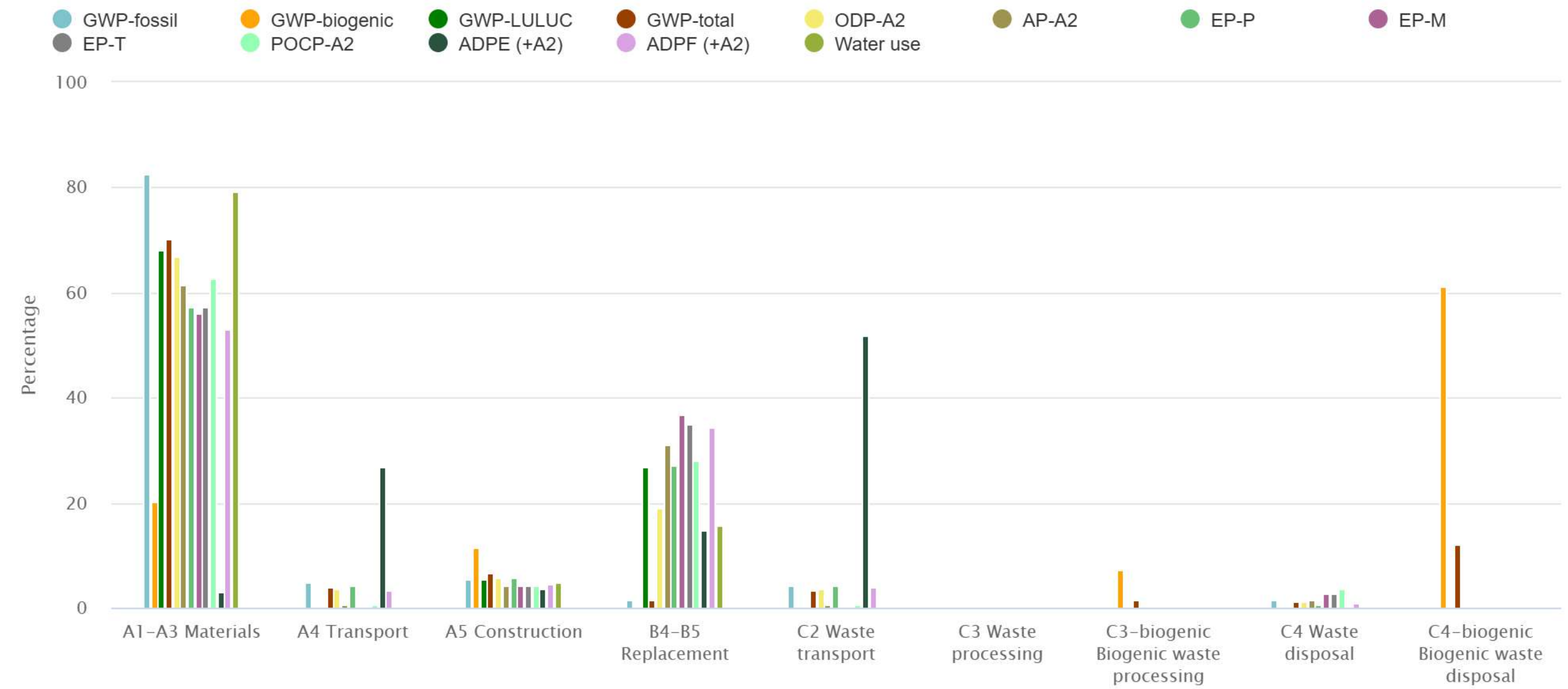
# Life Cycle Carbon Assessment -Main Building-

## Design Strategies for CO<sub>2</sub> Reduction

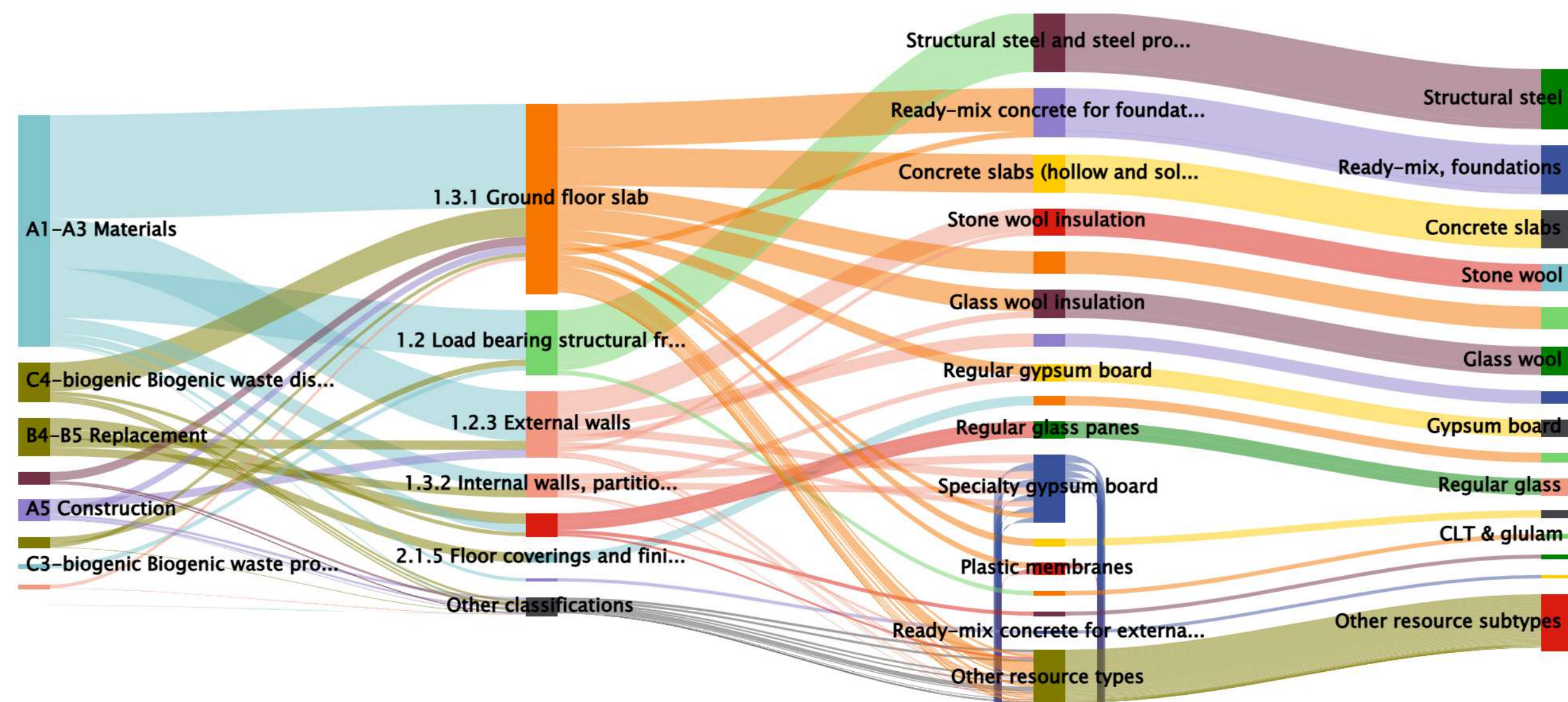
- Creating carbon stocks through the use of wood
- Offsetting a portion of emissions through the use of bio-based materials
- Optimizing the balance with high-emission materials (steel and concrete)
- Reducing operational energy consumption through improved thermal insulation
- Minimizing lifecycle CO<sub>2</sub> emissions through material selection



## Results by life-cycle stage

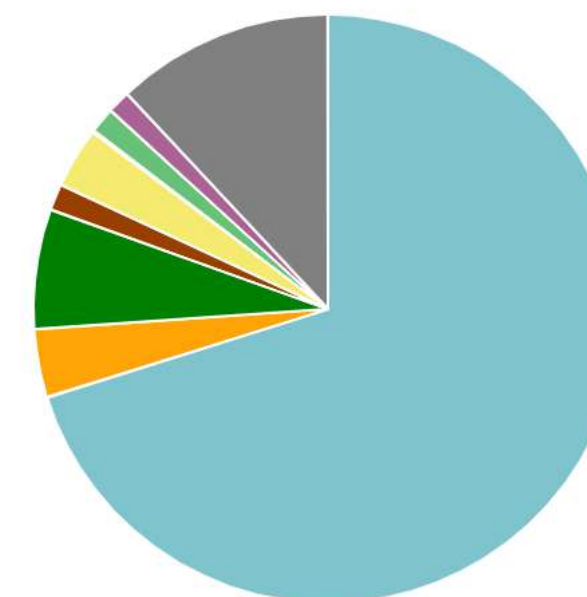


## Sankey diagram, Global Warming Potential total



## Global Warming Potential total kg CO<sub>2</sub>e - Life-cycle stages

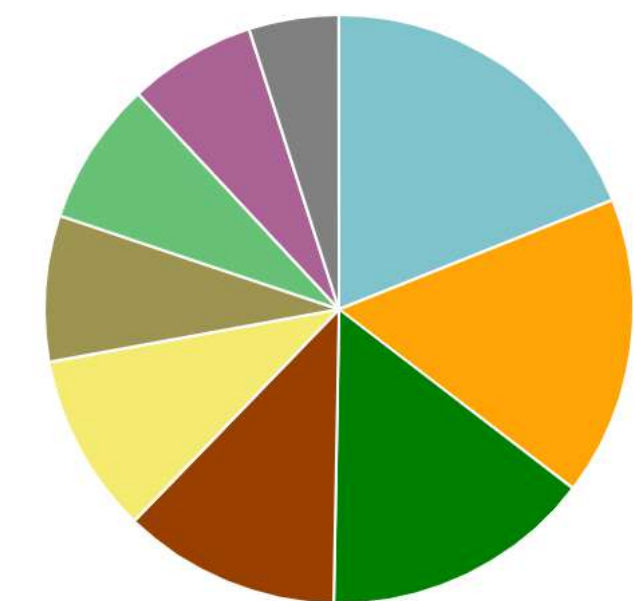
- A1-A3 Materials - 70.1%
- A4 Transport - 3.8%
- A5 Construction - 6.6%
- B4-B5 Replacement - 1.4%
- C2 Waste transport - 3.3%
- C3 Waste processing - 0.1%
- C3-biogenic Biogenic waste processing - 1.4%
- C4 Waste disposal - 1.3%
- C4-biogenic Biogenic waste disposal - 11.9%



## Global Warming Potential total kg CO<sub>2</sub>e - Resource types

This is a drilldown chart. Click on the chart to view details

- Structural steel and steel profiles - 19.0%
- Ready-mix concrete for foundations and internal walls - 16.4%
- Specialty gypsum board - 14.9%
- Concrete slabs (hollow and solid) - 11.9%
- Glass wool insulation - 9.9%
- Bitumen and other roofing - 8.0%
- Stone wool insulation - 7.9%
- Regular gypsum board - 7.0%
- Regular glass panes - 4.9%



# U-Value

Roof	Material	Thickness(m)	Thermal conductivity(W/m · K)	Thermal resistance(m <sup>2</sup> · K/W)
External heat flux				0.0400
Finish	Standing seam metal roof	0.001	0.1600	0.0063
Ventilation	Ventilated cavity	0.030	0.1700	0.1765
Waterproofing	isover ÉCRAN INTEGRA	0.001	0.2300	0.0043
Thermal insulation	Mag roll	0.060	0.0380	1.5789
Thermal insulation	Isover Comfort	0.150	0.0380	3.9474
Airtight	Isover Barrio Extra	0.001	0.2300	0.0043
Service cavity	Magroll	0.020	0.0380	0.5263
Support	Resilient channel	0.012	0.5000	0.0240
Support	Placo Lisaflam BA15	0.015	0.2500	0.0600
Support	Placo Phonique	0.013	0.2500	0.0520
In side				0.0900
Total		0.3030	1.9040	6.5100
U-value(W/m <sup>2</sup> · K)				0.1536

Steel exterir walls	Material	Thickness(m)	Thermal conductivity(W/m · K)	Thermal resistance(m <sup>2</sup> · K/W)
External heat flux				0.4000
Finish	Vertical cladding	0.0150	0.1400	0.1071
Ventilation	Ventilated cavity	0.0300	0.1700	0.1765
Support	webertherm base + webertherm mesh	0.0050	0.7000	0.0071
Waterproofing	Weber thin coat render	0.0050	0.7000	0.0071
Waterproofing	ISOVER wind barrier board	0.0400	0.0350	1.1429
Thermal insulation	ISOVER glass wool insulation	0.14000	0.0380	3.6842
Airtight	ISOVER Vario Xtra air & vapor barrier	0.0010	0.2000	0.0050
Thermal insulation	ISOVER insulation	0.0450	0.0380	1.1842
Support	Placo Lisaflam BA15	0.0150	0.2500	0.0600
Support	Placo Phonique	0.013	0.2500	0.0520
In side				0.1300
Total		0.2790	2.5210	6.8262
U-value(W/m <sup>2</sup> · K)				0.1465

Wooden exterior walls	Material	Thickness(m)	Thermal conductivity(W/m · K)	Thermal resistance(m <sup>2</sup> · K/W)
External heat flux				0.4000
Waterproofing	webertherm system	0.0200	1.0000	0.0200
Thermal insulation	ISOVER Fassade	0.1400	0.0350	4.0000
Thermal insulation	Isover Comfort	0.1200	0.0380	3.1579
Airtight	ISOVER Vario® XtraSafe	0.0002	0.1700	0.0012
Ventilation	Ventilated cavity	0.0250	0.1700	0.1471
Support	Placo Lisaflam BA15	0.0150	0.2500	0.0600
Support	Placo Phonique	0.013	0.2500	0.0520
In side				0.1300
Total		0.3032	1.9130	7.9681
U-value(W/m <sup>2</sup> · K)				0.1468

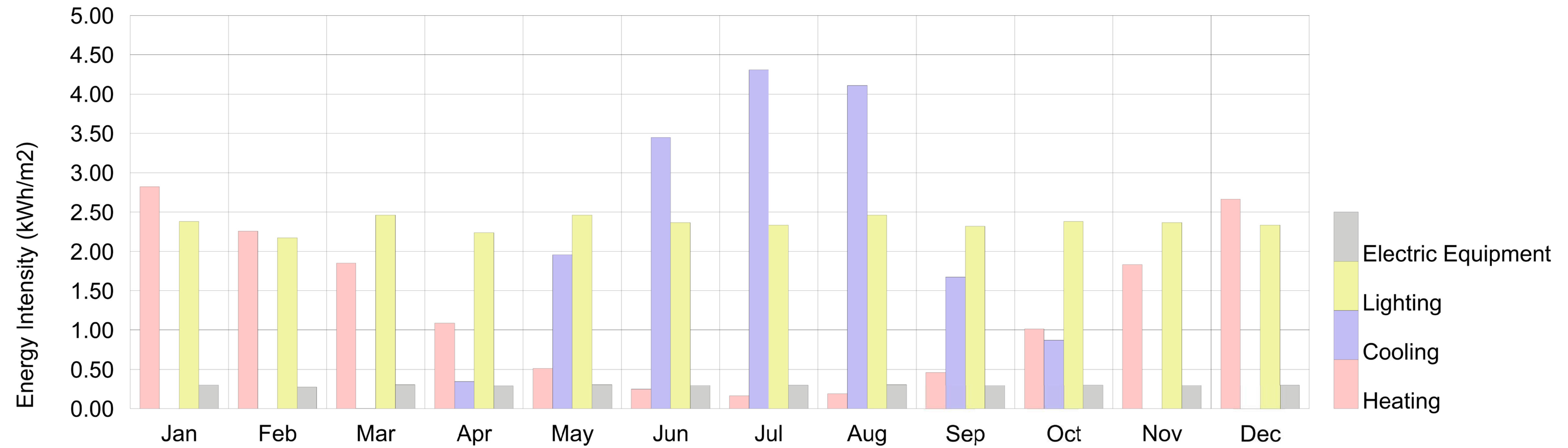
Floor slab	Material	Thickness(m)	Thermal conductivity(W/m · K)	Thermal resistance(m <sup>2</sup> · K/W)
In side				0.1500
Finish	wood	0.015	0.2000	0.0750
Support	weber.floor rapid 4160	0.060	0.4300	0.1395
Thermal insulation	Isover TDPT	0.030	0.033	0.9091
Airtight	PE sheet	0.0002	0.4	0.0005
Thermal insulation	Isover Comfort	0.200	0.0380	5.2632
Support	Low-carbon concrete	0.150	1.7500	0.0857
soil				0.1500
Total		0.4552	1.7880	6.7730
U-value(W/m <sup>2</sup> · K)				0.1476

### Average U-value(W/m<sup>2</sup> · K)

Steel-Frame Buildings	0.1492
Wooden Buildings	0.1494

Window	Thickness(m)	Thermal conductivity(W/m · K)	Thermal conductivity(W/m · K)	material	area(m <sup>2</sup> )	performance(w/k)
External heat flux			0.04	Out side		
SGG COOL-LITE XTREME 60/28	0.006	1	0.006	Glass	4.69	2.40
argon gas layer	0.016	0.017	0.941	argon gas layer		
SGG PLANICLEAR	0.004	1	0.004	SGG PLANICLEAR		
argon gas layer	0.016	0.017	0.941	argon gas layer		
SGG STADIP SILENCE	0.009	1	0.009	SGG STADIP SILENCE		
In side			0.013	Sash	0.56	1.12
Total			1.954	Length(m)		
U-value(W/m <sup>2</sup> · K)			0.512	spacer	13.34	0.40
				In side		
				U-value(W/m <sup>2</sup> · K)		0.75

# Energy Intensity



Annual Average Heating Energy Intensity : 14.6(kWh/m<sup>2</sup>)

# Yacht Club

SiteB : Renovation



# Concept

## A Hub for Local Activities Centered around Sailing Culture

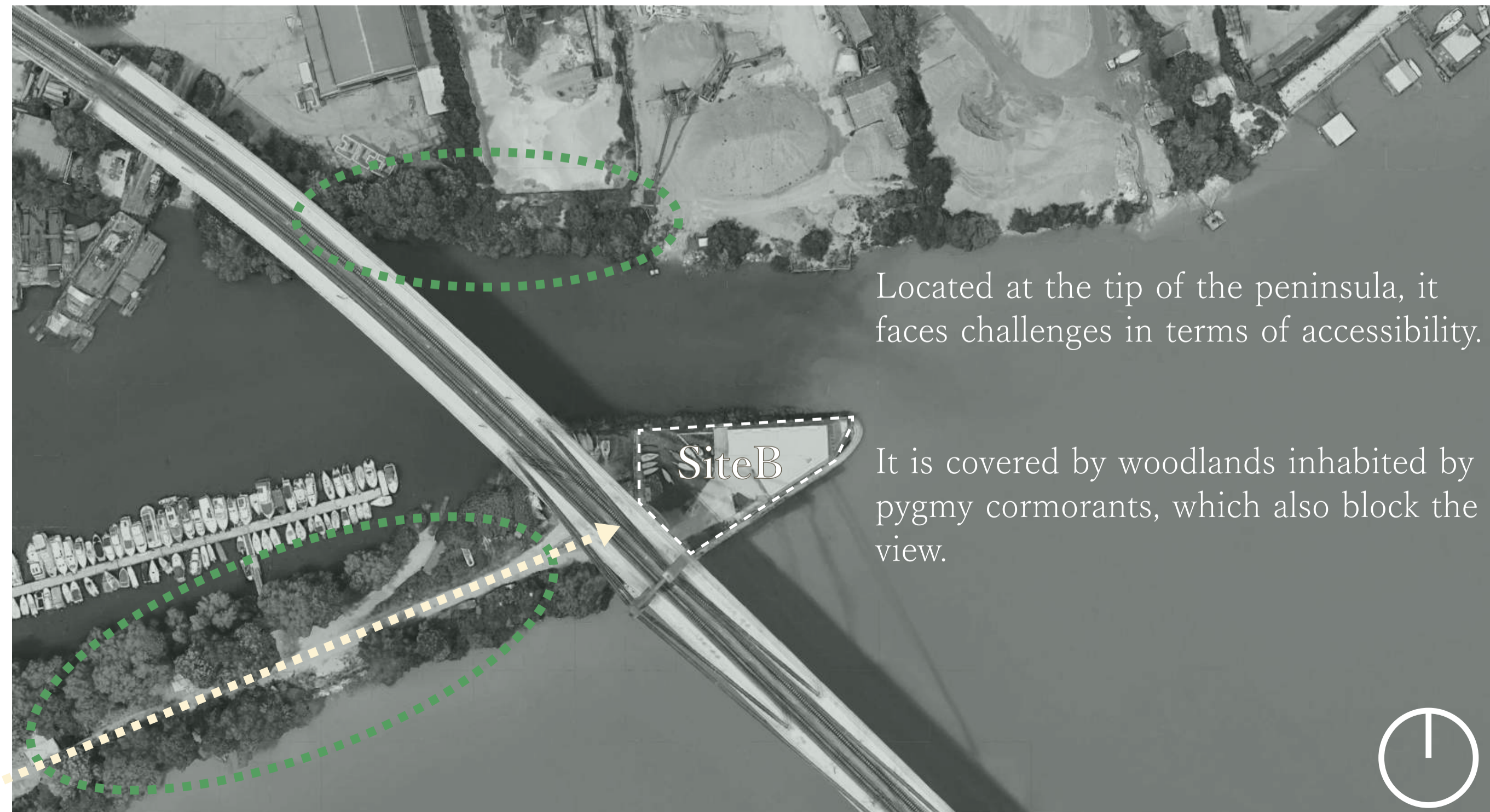


Founding of the Academic Yachting Club Belgrade

The club relocated following the construction of a bridge over Lake Ada Ciganlija

With around 100 members, it serves as a hub for competition and education, yet its new building remains underdeveloped

This is part of a redevelopment project aimed at transforming the area into a Sports and Recreation Hub.

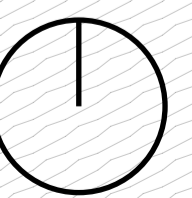
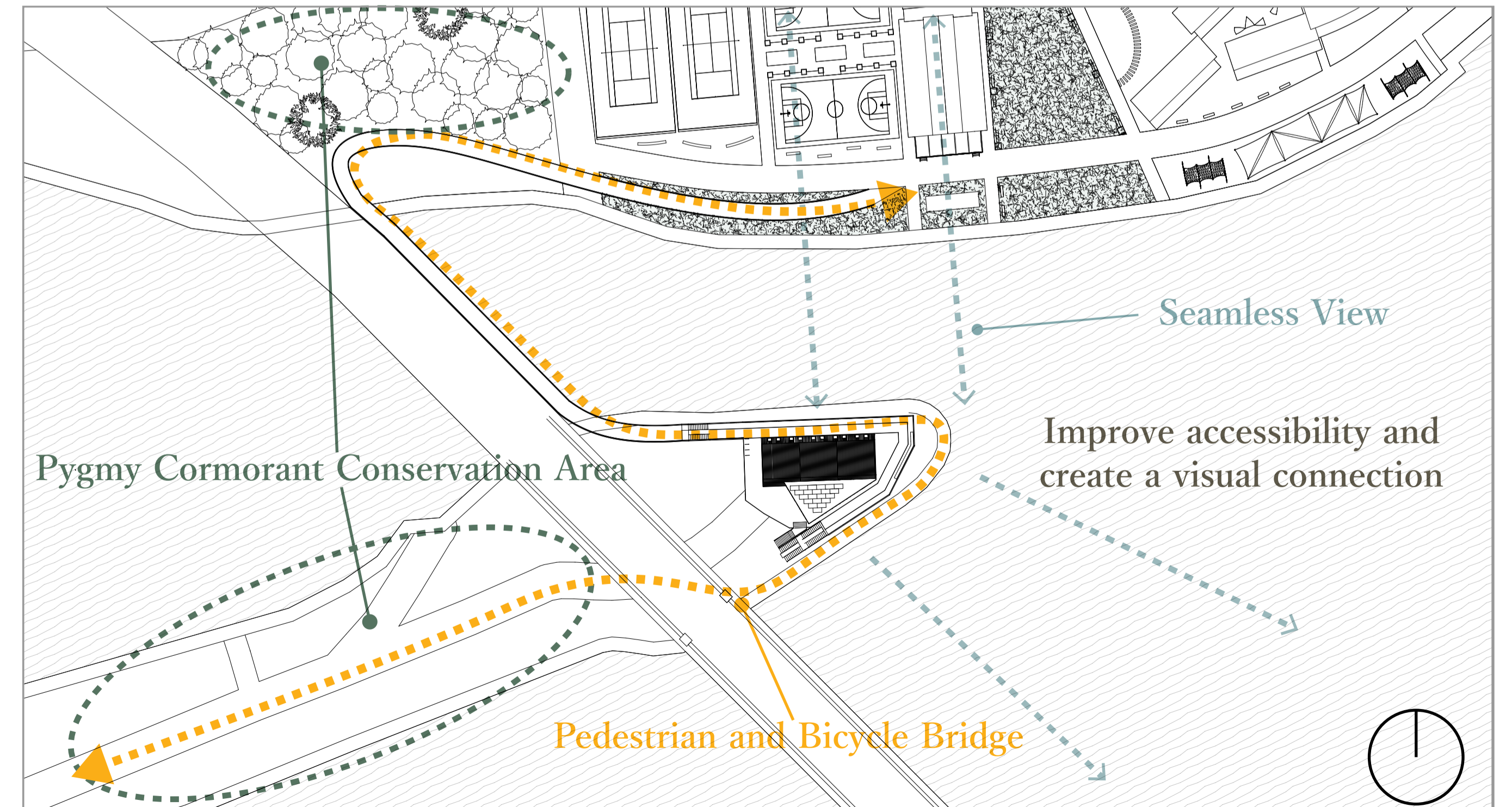
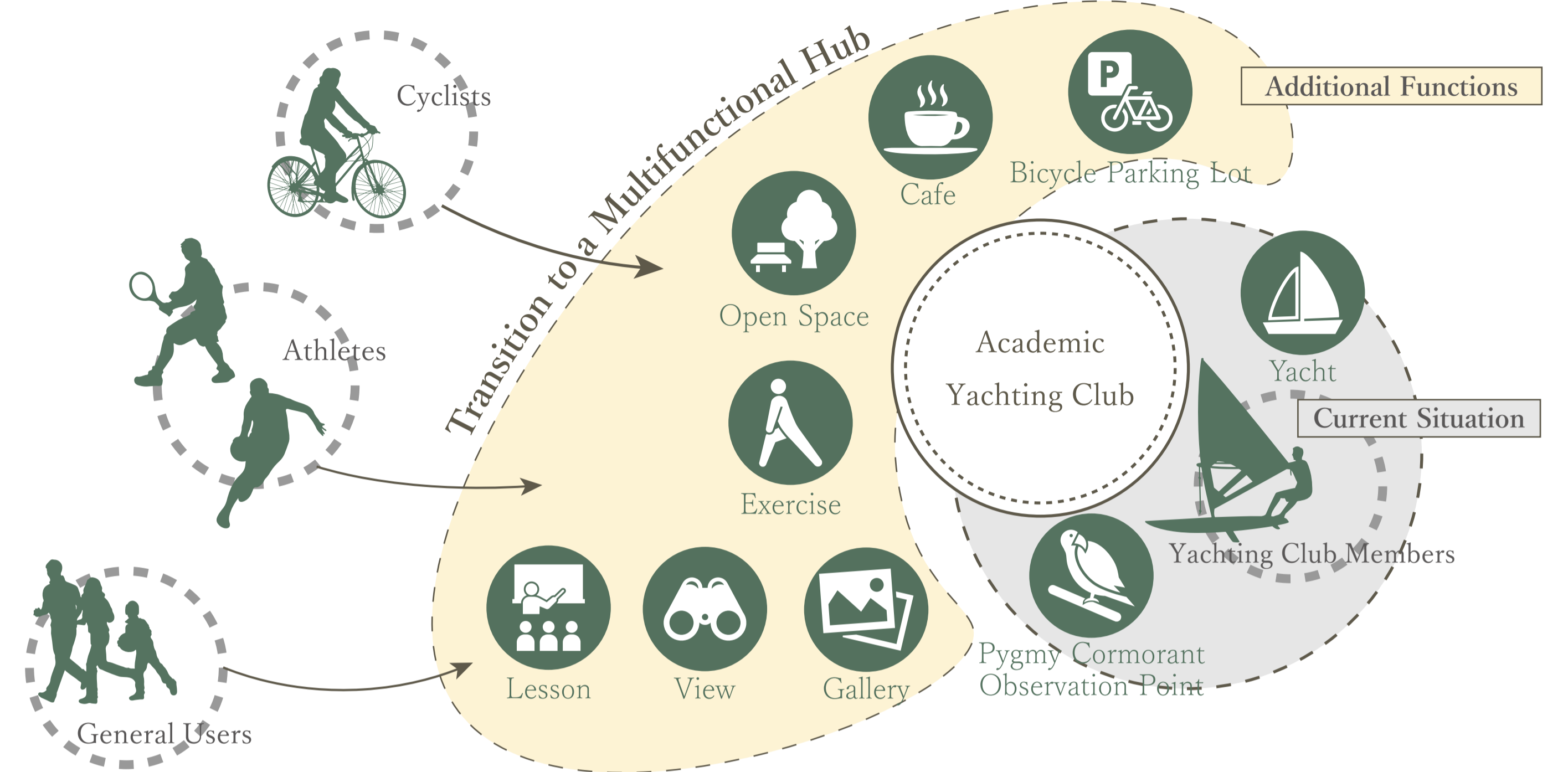


Located at the tip of the peninsula, it faces challenges in terms of accessibility.

It is covered by woodlands inhabited by pygmy cormorants, which also block the view.

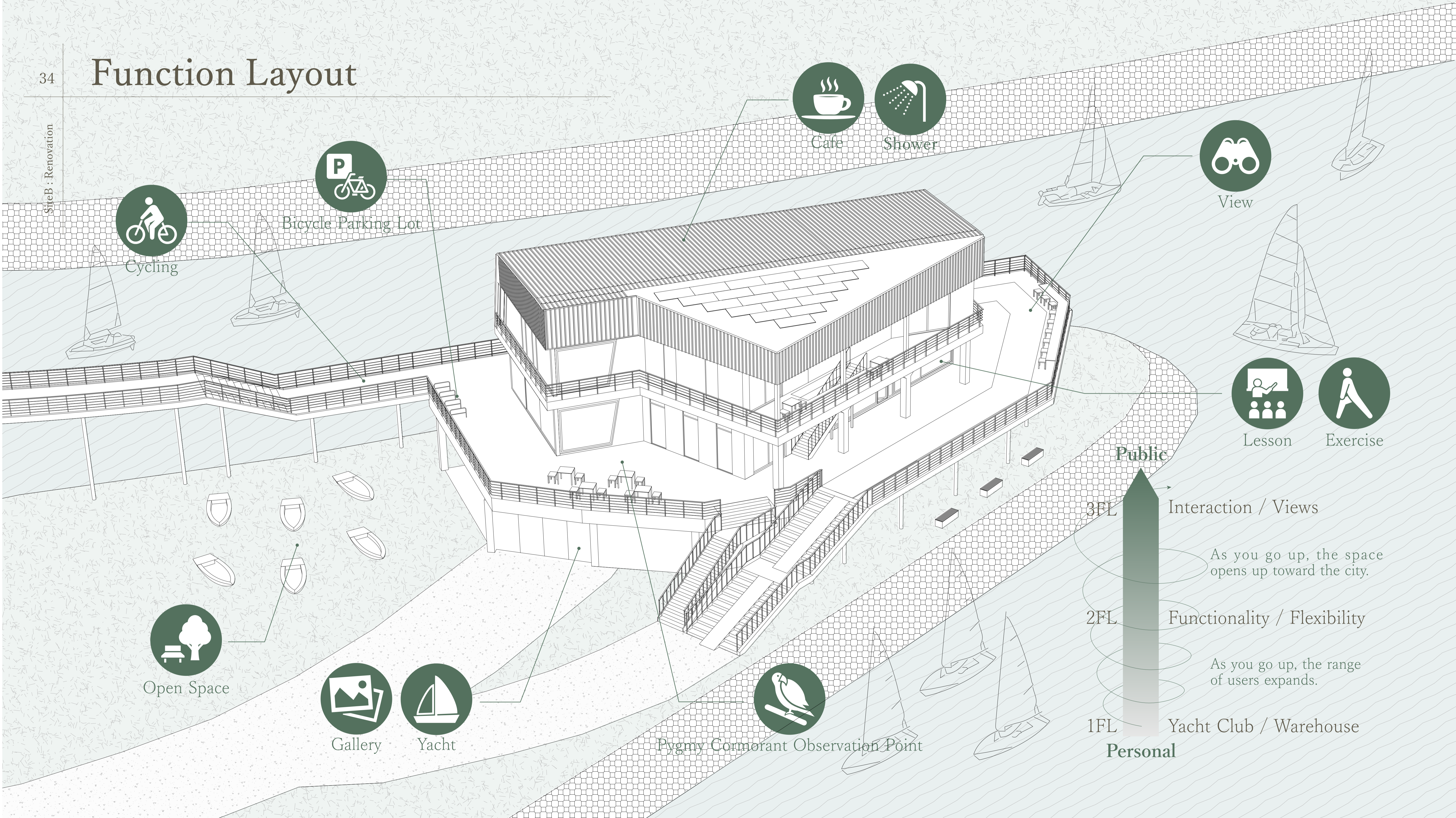


Given limited users and homogeneous activities, this project creates a hub for daily use and diverse activities by introducing public functions. As a result, users engage with the yacht club's culture through everyday use.



# Function Layout

Site B : Renovation



# Renovation

Site B : Renovation

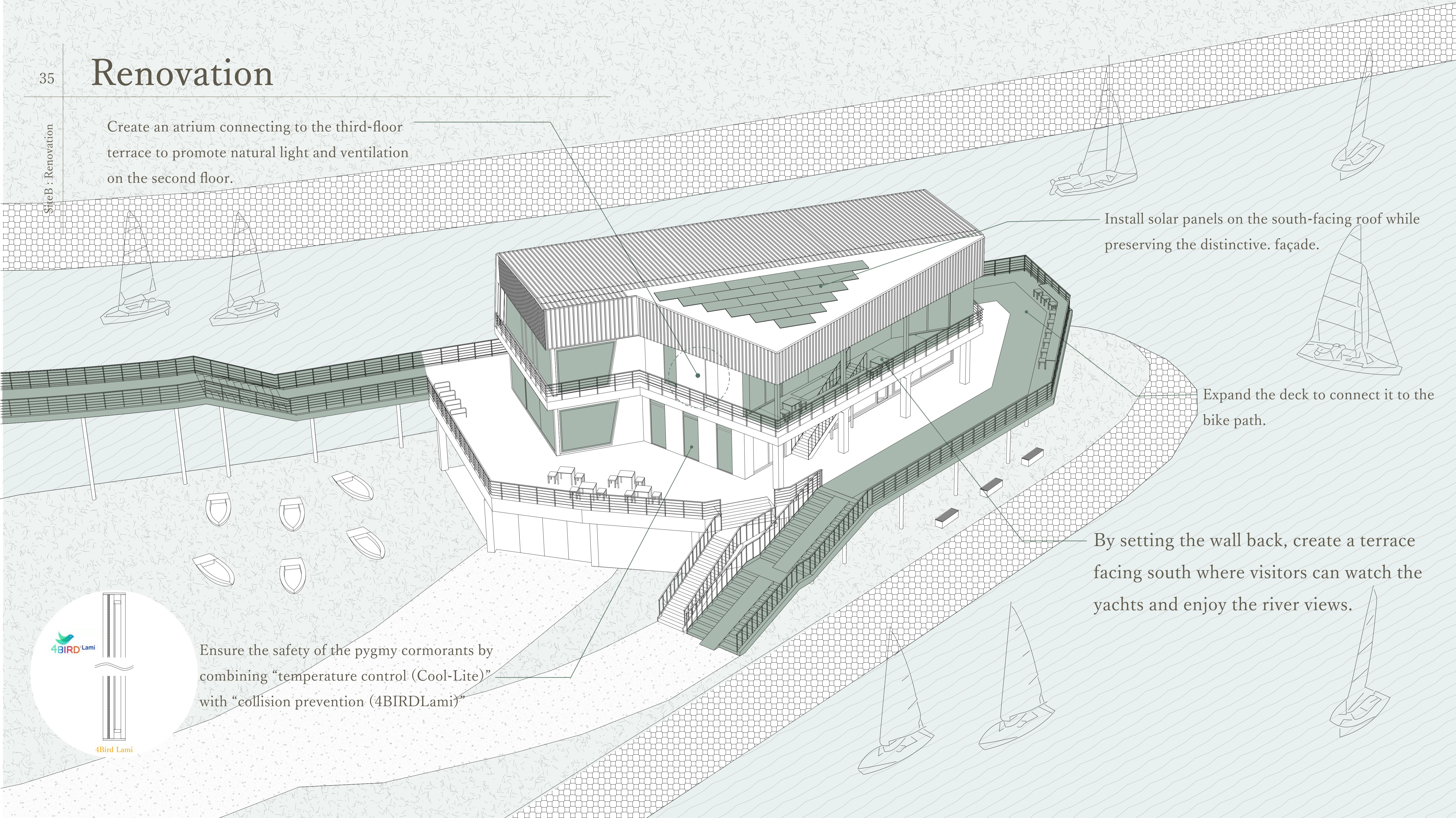
Create an atrium connecting to the third-floor terrace to promote natural light and ventilation on the second floor.

Install solar panels on the south-facing roof while preserving the distinctive façade.

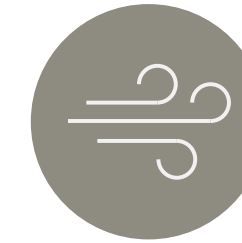
Expand the deck to connect it to the bike path.

By setting the wall back, create a terrace facing south where visitors can watch the yachts and enjoy the river views.

Ensure the safety of the pygmy cormorants by combining "temperature control (Cool-Lite)" with "collision prevention (4BIRDLami)"

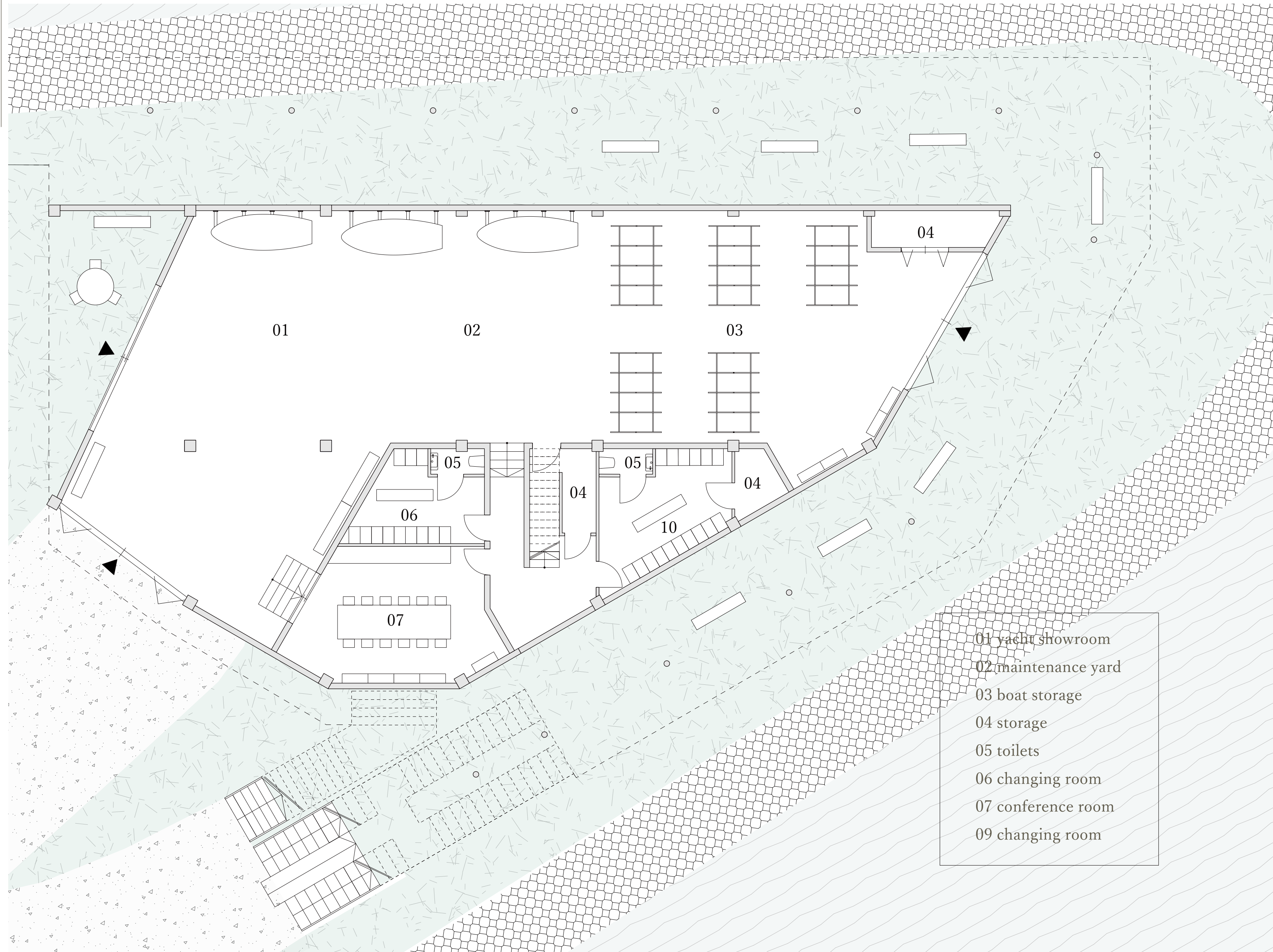


# Ground Floor Plan -Yacht Storage & Yacht Display-



Air

SiteB : Renovation



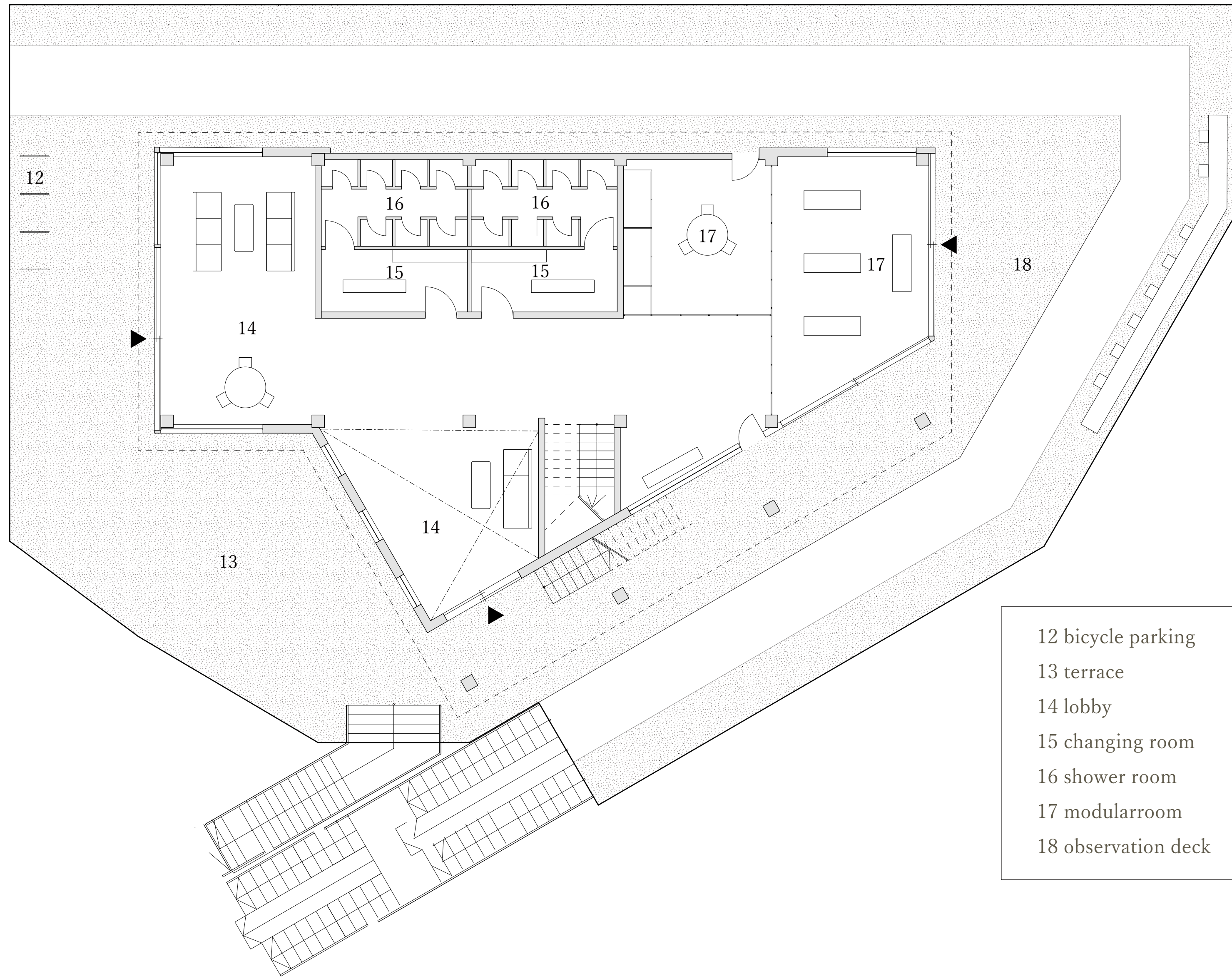
The facility combines practical storage functions as a yacht club with the role of a gallery that showcases the appeal of sailing.

# 1st Floor Plan -Shower Room, Modularroom & Bicycle Deck-



Social Interaciton

View



- 12 bicycle parking
- 13 terrace
- 14 lobby
- 15 changing room
- 16 shower room
- 17 modularroom
- 18 observation deck



Directly connected to the bike path, it supports a variety of activities with showers and a multipurpose room.

# Modular Room

The multipurpose room, equipped with retractable panel partitions, is a flexible space that can be easily adapted for both club meetings and community events such as yoga classes and social gatherings. It allows the yacht club's activities to coexist with the daily lives of local residents, enabling the room to be divided or fully opened up depending on the time of day and specific needs.



Yacht Club Meeting Monday 16 December 9:00



Yoga Class Sunday 11 May 17:00

# 2nd Floor Plan -Cafe & Terrace-

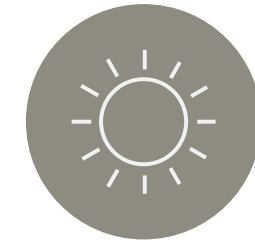
SiteB : Renovation



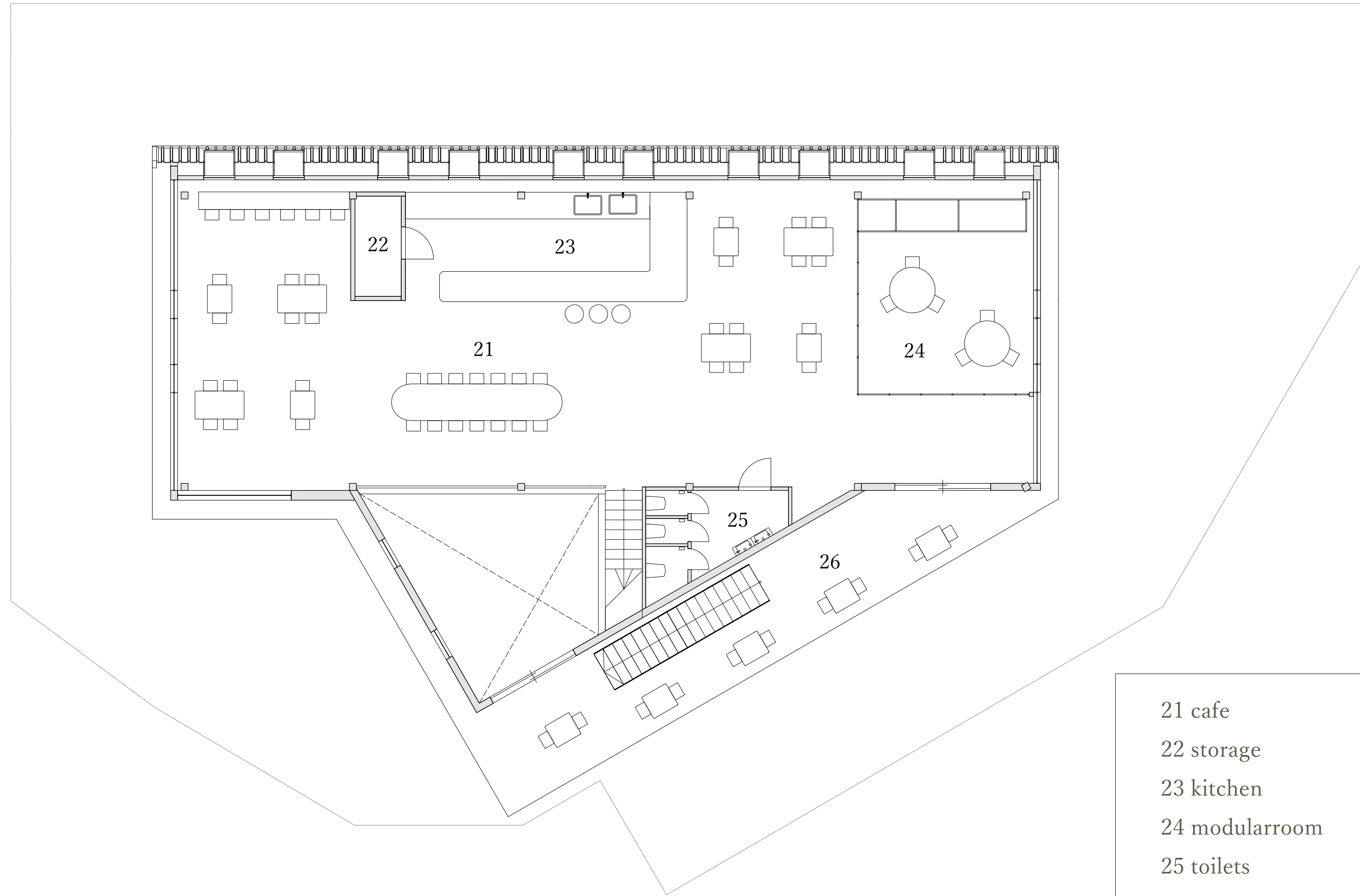
View



Social Interaction



Light



- 21 cafe
- 22 storage
- 23 kitchen
- 24 modularroom
- 25 toilets
- 26 terrace



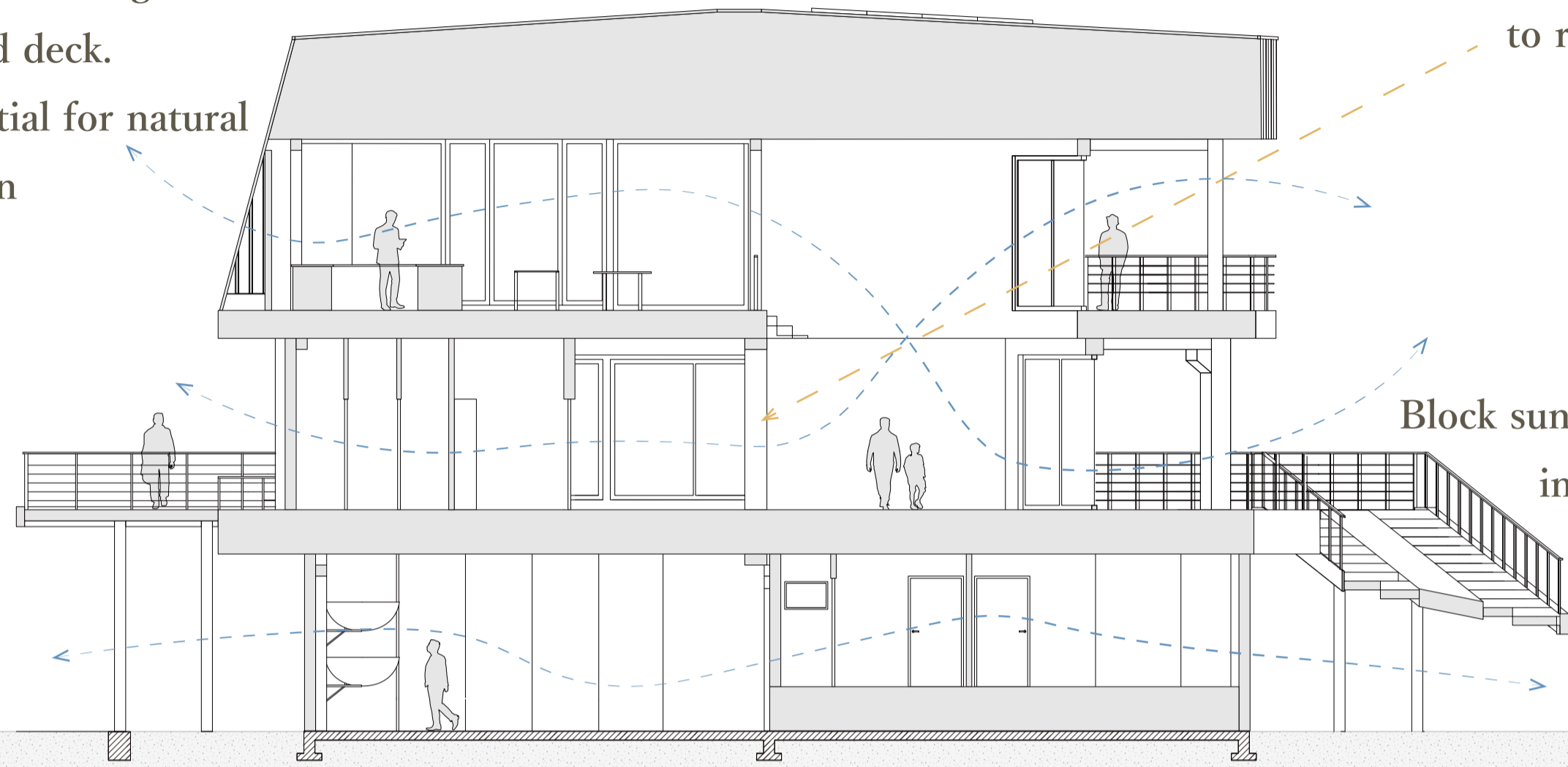
From everyday café visits to parties throughout the entire building, we can accommodate a wide range of needs.

# Section & Elevation -Vertical Connection-

Allowing air to flow through the atrium and deck to maximize the potential for natural ventilation

The atrium allows natural light to reach the 1st floor.

Block sunlight and ensure good ventilation in the yacht storage facility.



S=1 : 100 0 5 10 m



