

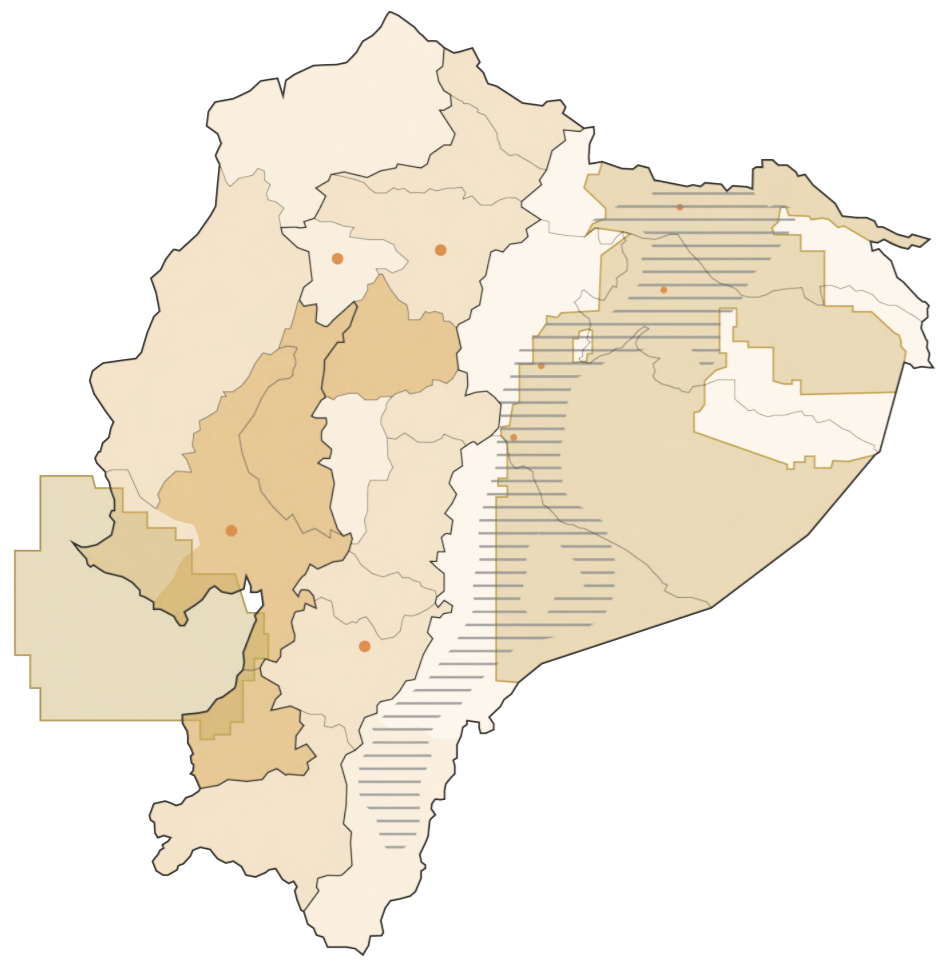




Panoramic view of Tena. Photo courtesy of Arch. Pablo Maita Zambrano (2023).

CITY ANALYSIS

DATA



- Oil Extraction Blocks
- Levels of Education
- Main Cities
- Deforestation

ILLNESSES



OIL EXTRACTION

DEFORESTATION

WATER POLLUTION

LACK OF EDUCATION

ECUADOR



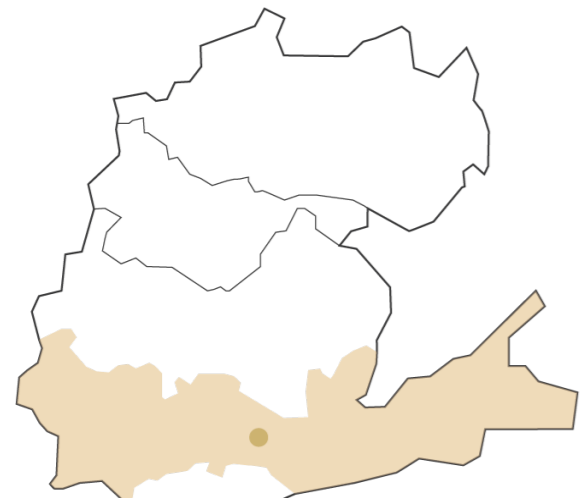
Data
Population: 17640000 Extension: 283560 km²
Density: 42 /km² Height: 0 - 6267m

AMAZON REGION



Data
Population: 740000 Extension: 120000 km²
Density: 2 /km² Height: 300 - 500 m

NAPO REGION

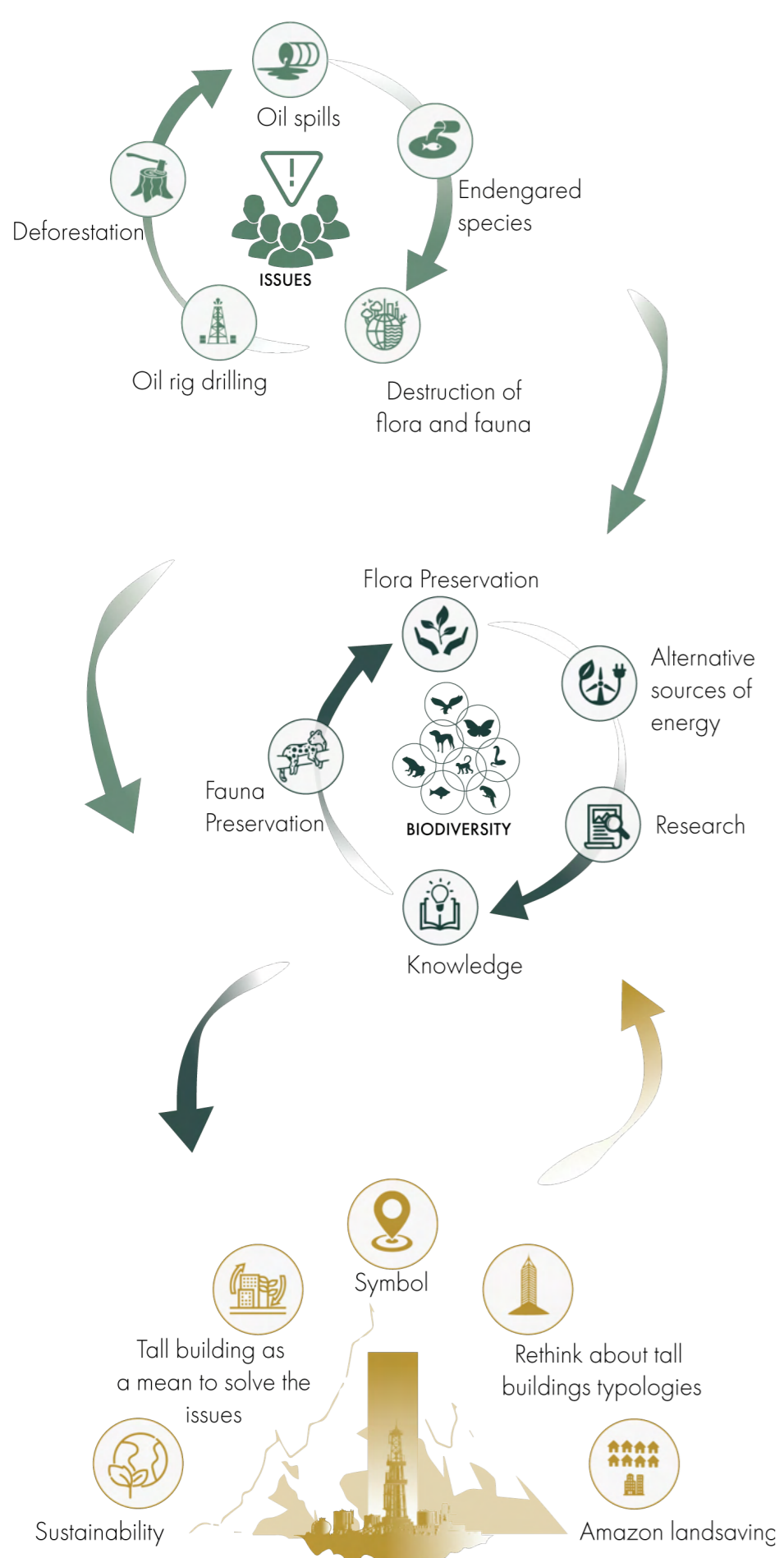


Data
Population: 133705 Extension: 12542 km²
Density: 8.3 /km² Height: 450 - 1372 m

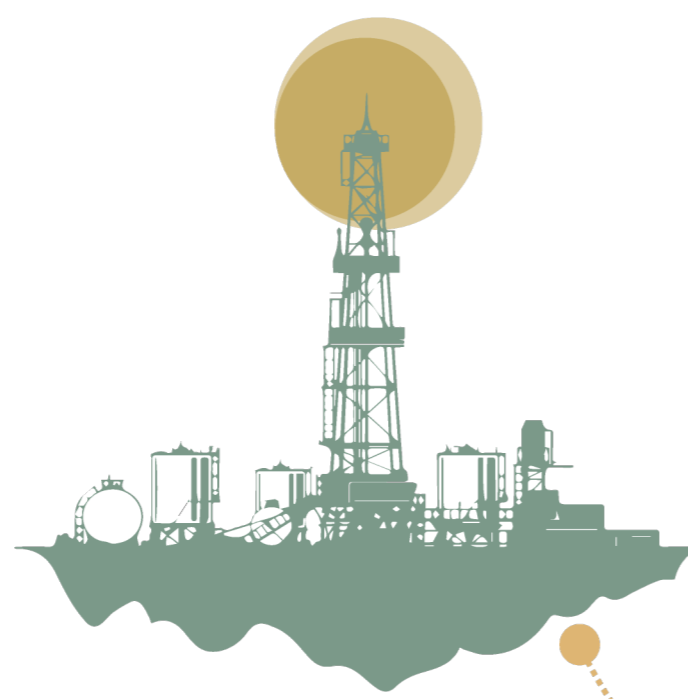


Data
Population: 60,880 Extension: 3904 km²
Density: 5.6 inh/km² Height: 510 m

Scale 1:20000



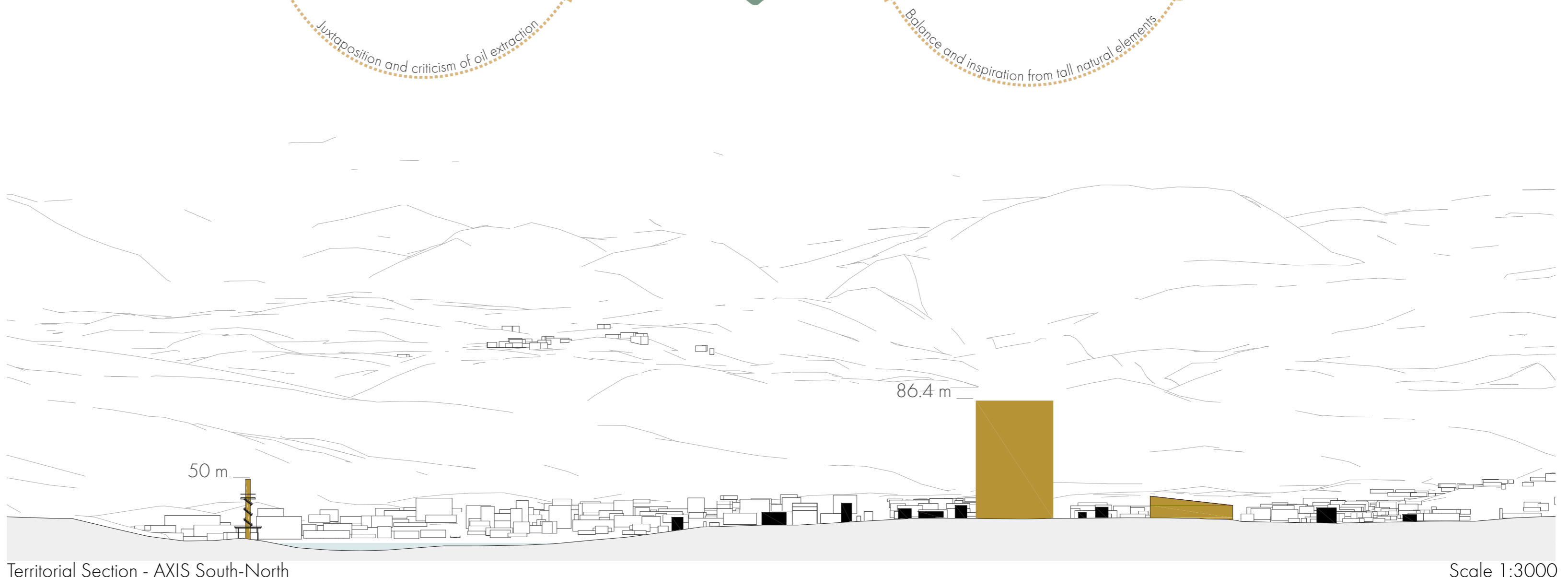
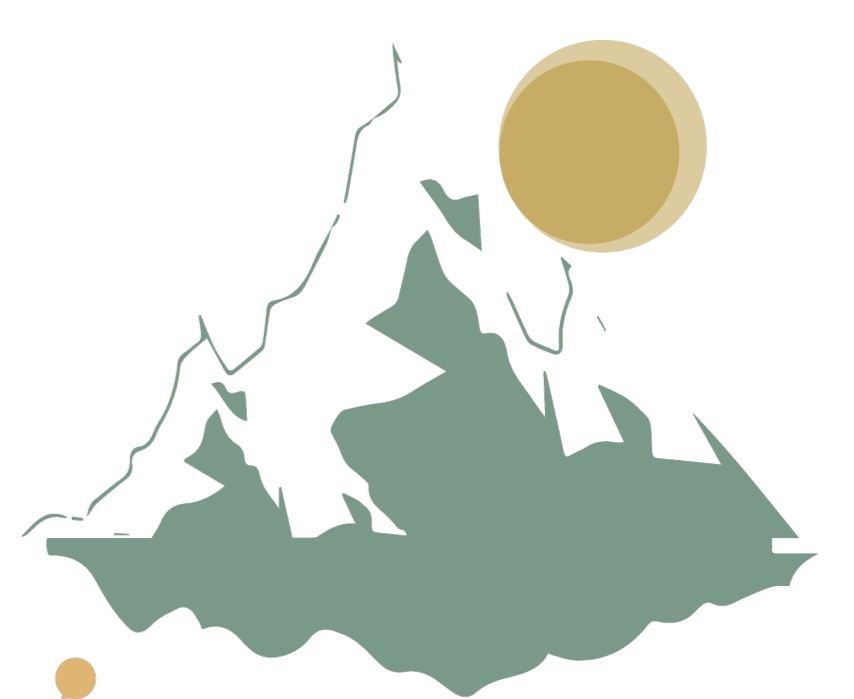
OIL DRILLING RIG



NEW TALL BUILDING

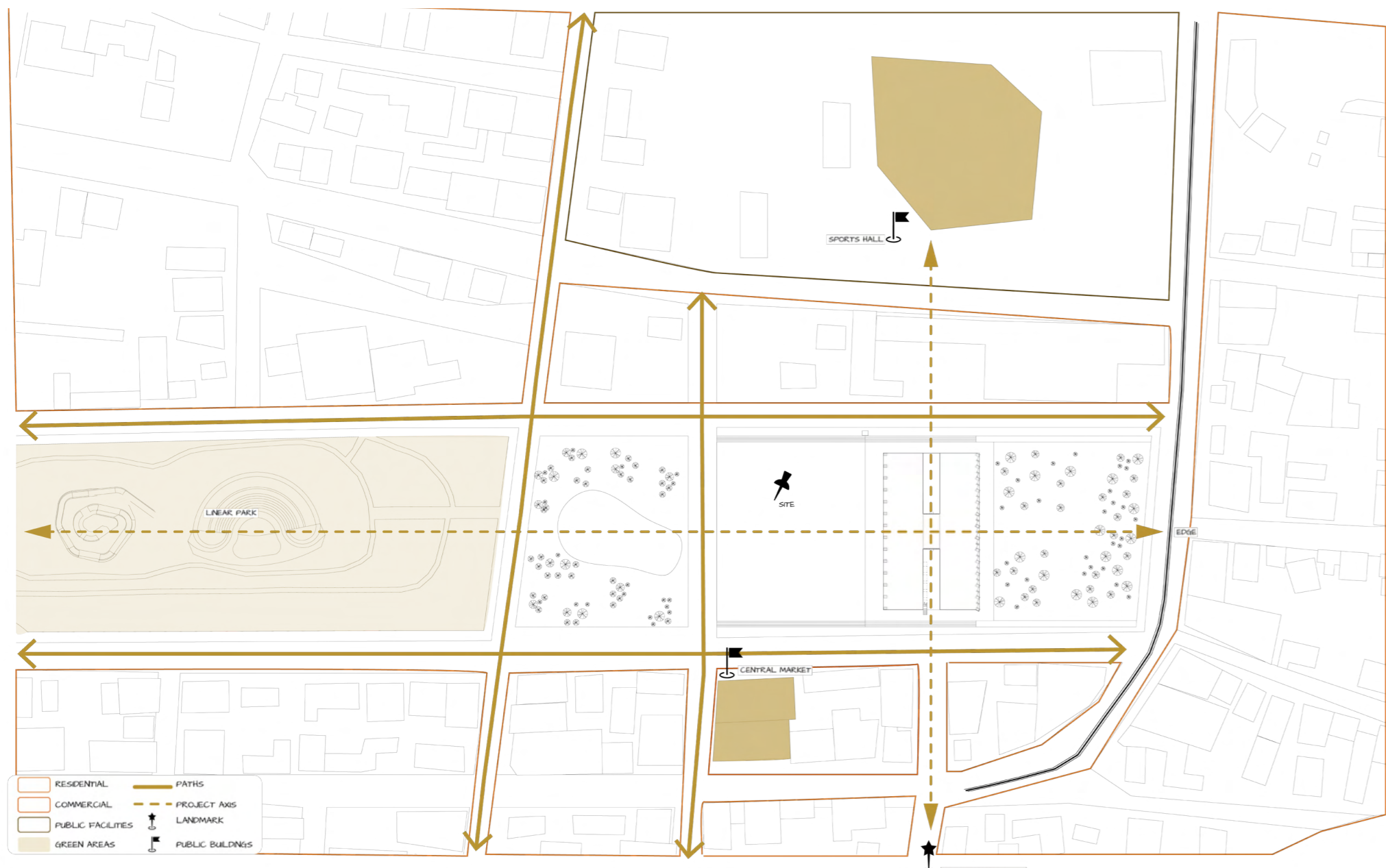


MOUNTAINS AND PEAKS



Scale 1:3000

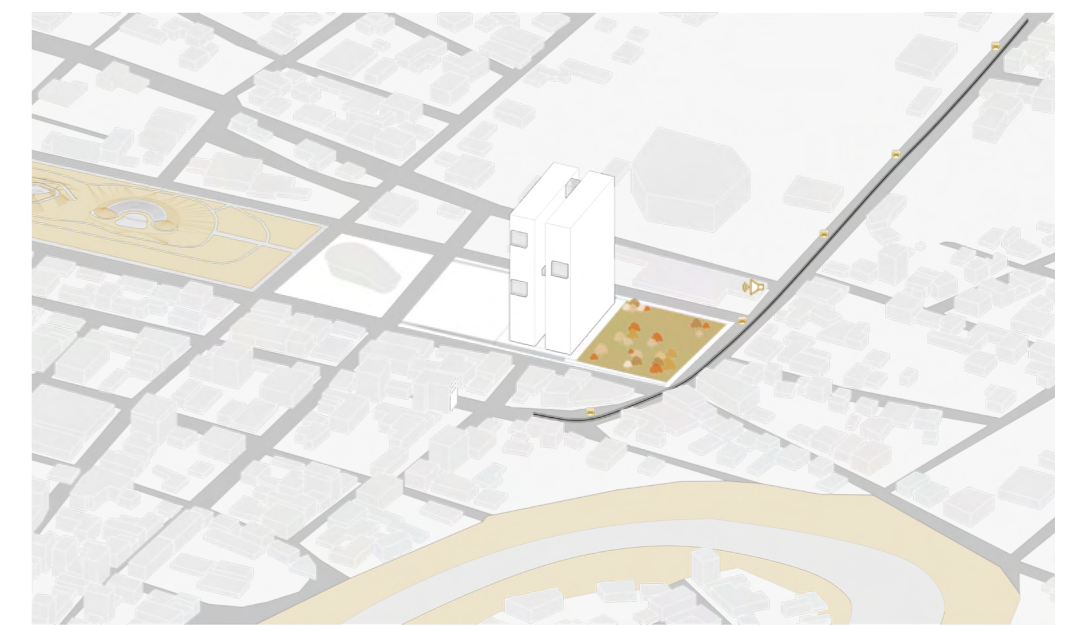
SITE ANALYSIS



SYNTHESIS MAP



VISUAL CONNECTIONS



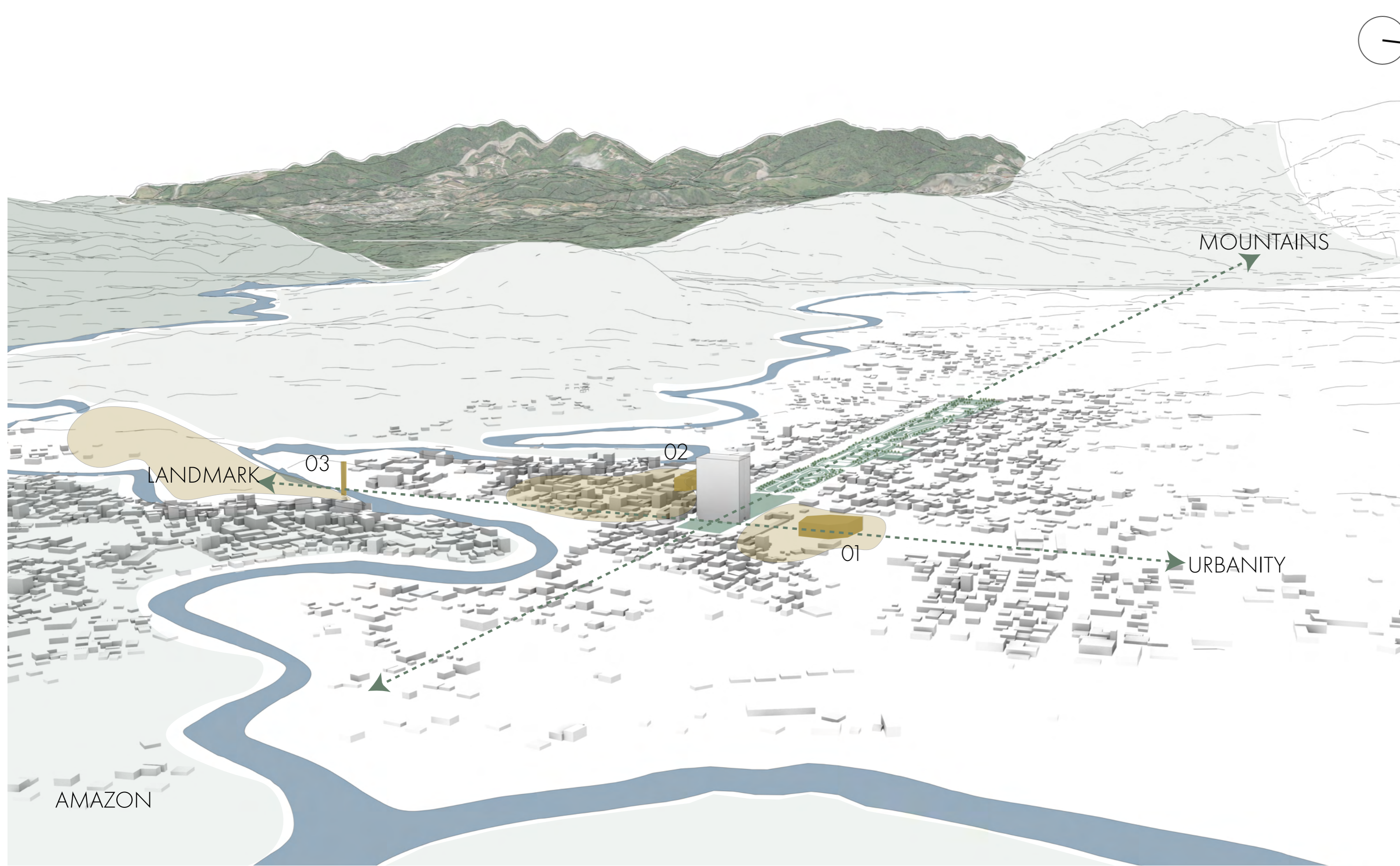
THE BUFFER ZONE



THE GATHERING PIAZZA



THE CITY AUDITORIUM



AXIS S/N - Urban, from landmark to new urbanity
 AXIS E/W - Nature, from mountains to Amazon rainforest

→ Main axis 01 Sports Hall 02 Market 03 Observation Tower ■ Natural edge ■ Project Site ■ Linear Park



MOUNTAINS



URBANITY

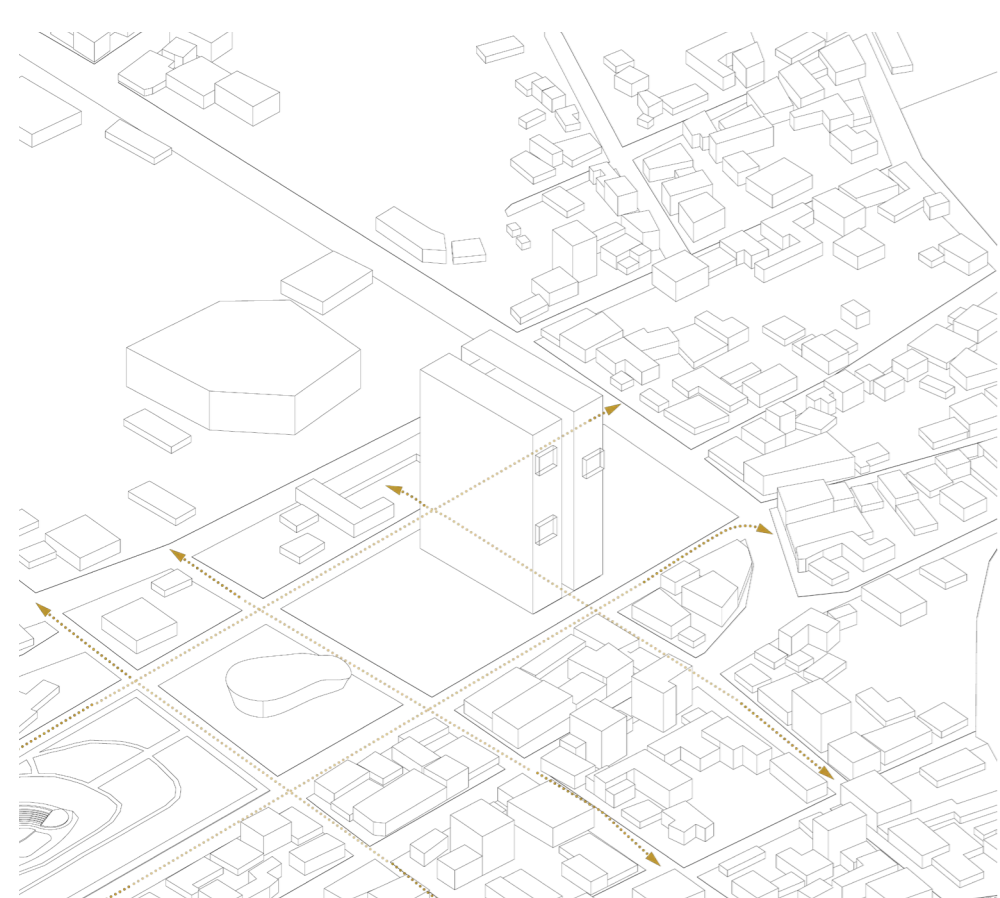


LANDMARK

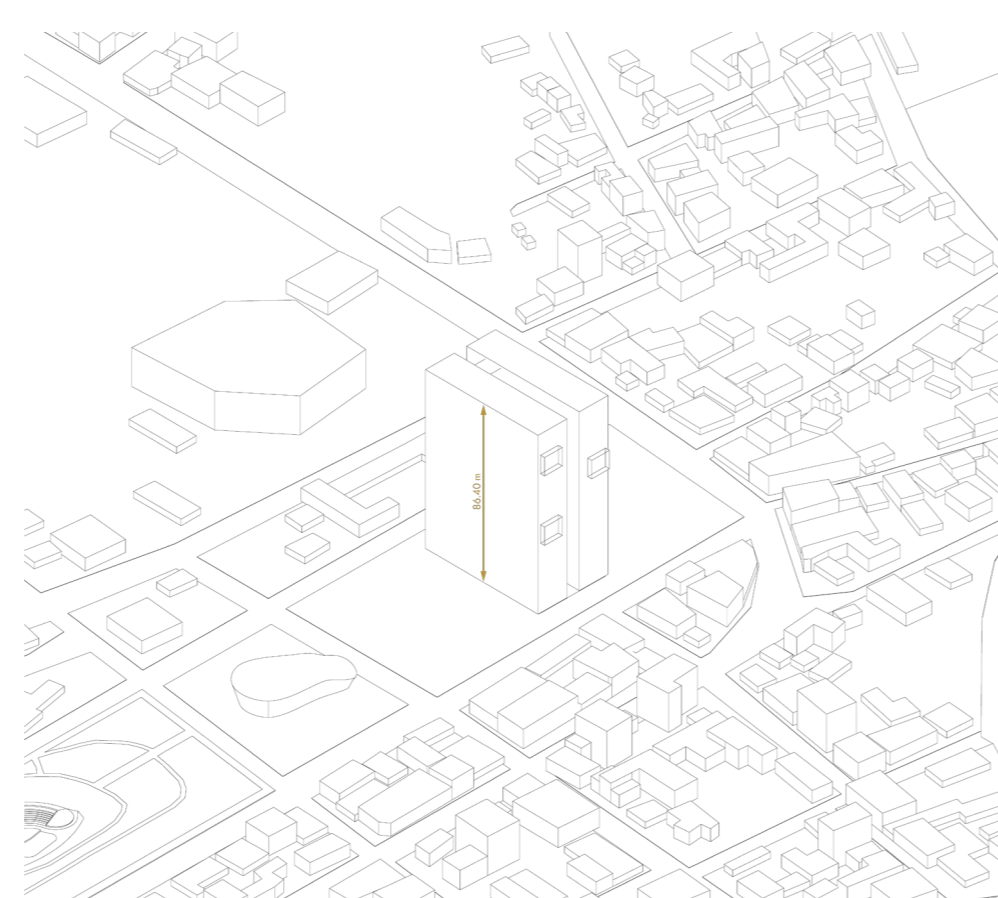


AMAZON

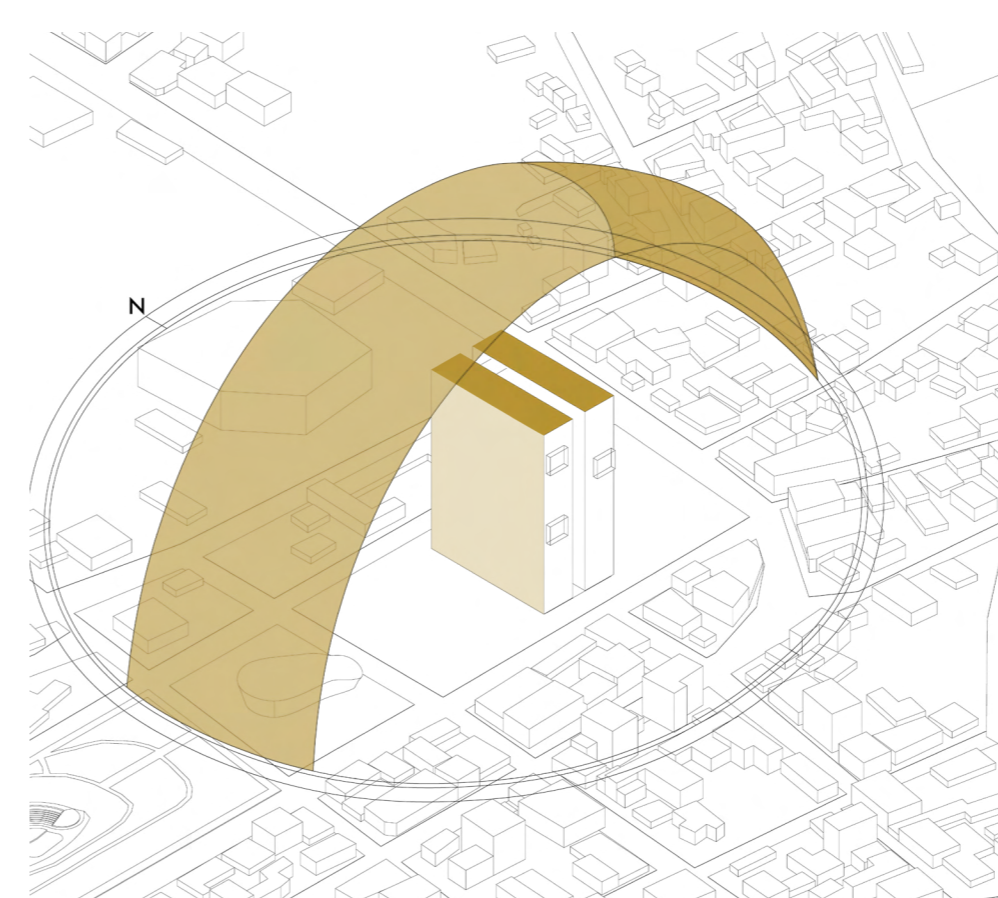
GENERATIVE AXIS MAP



ACCESSIBILITY



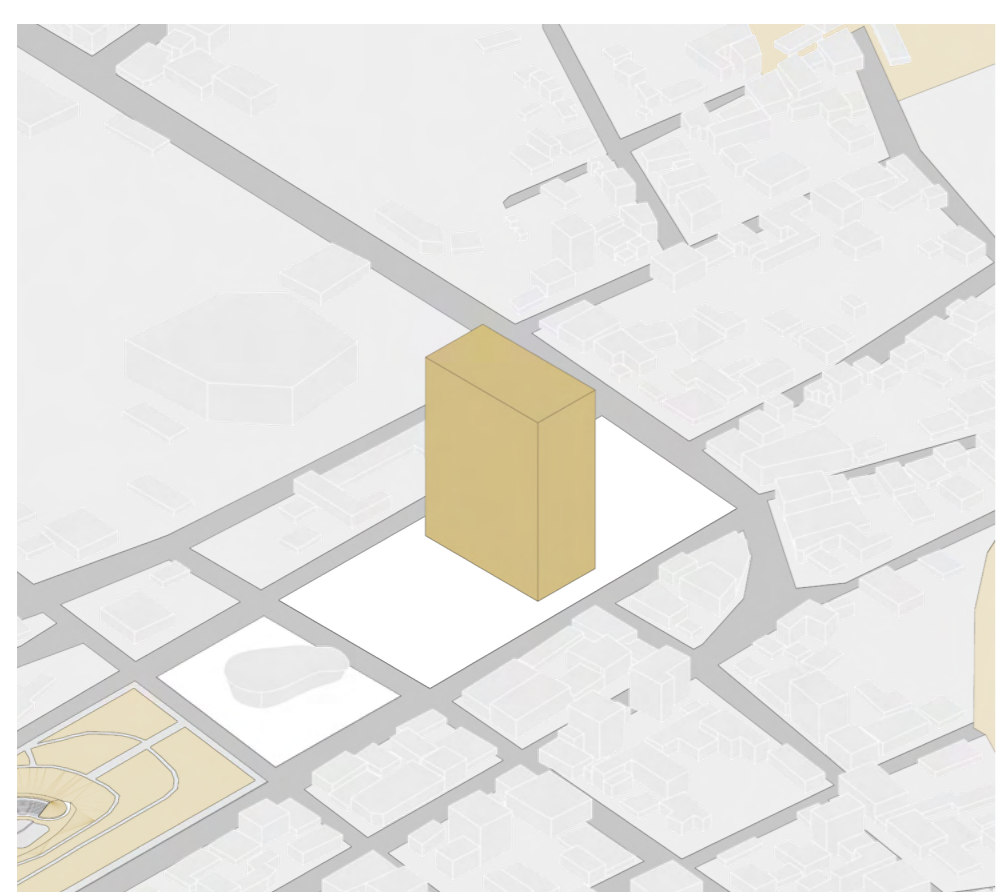
RELATION IN HEIGHT



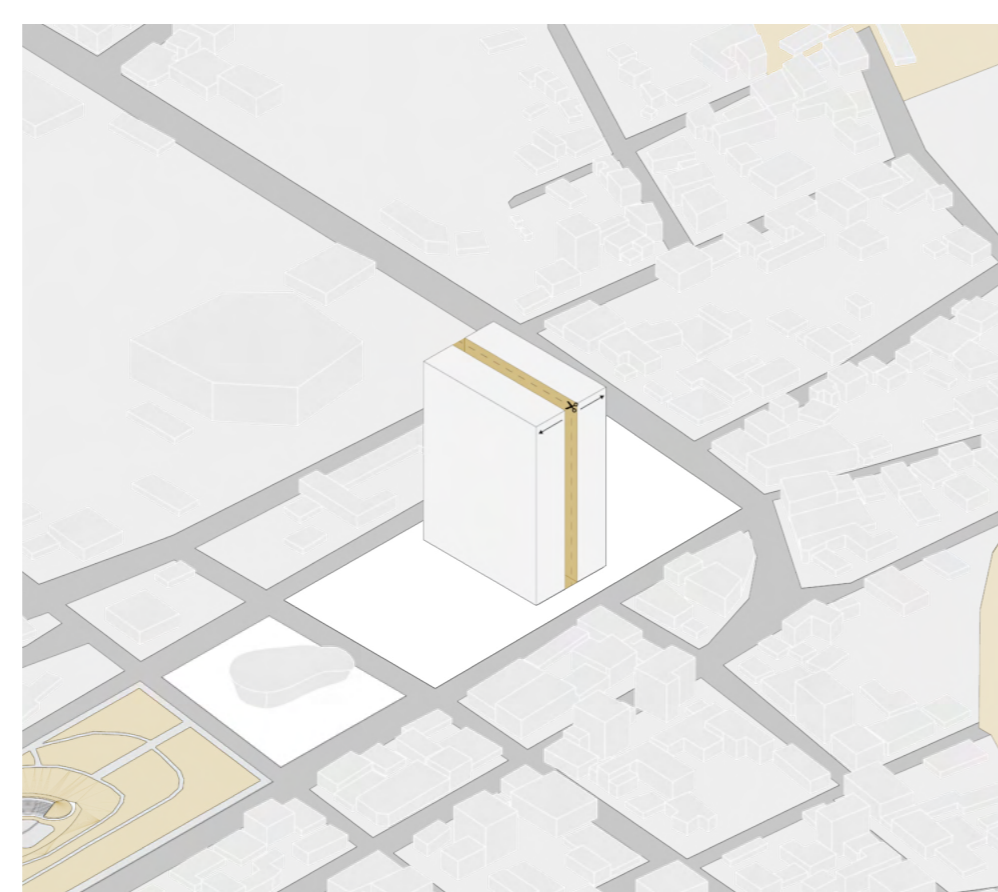
SUN PATH



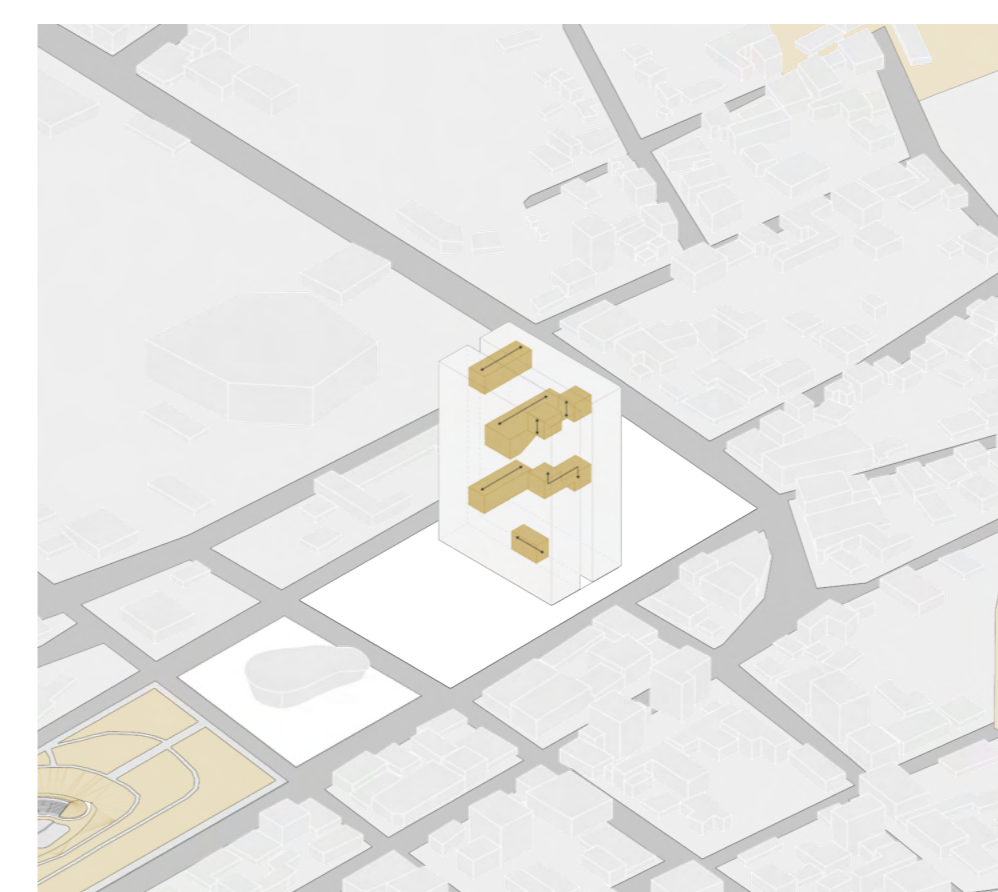
WIND



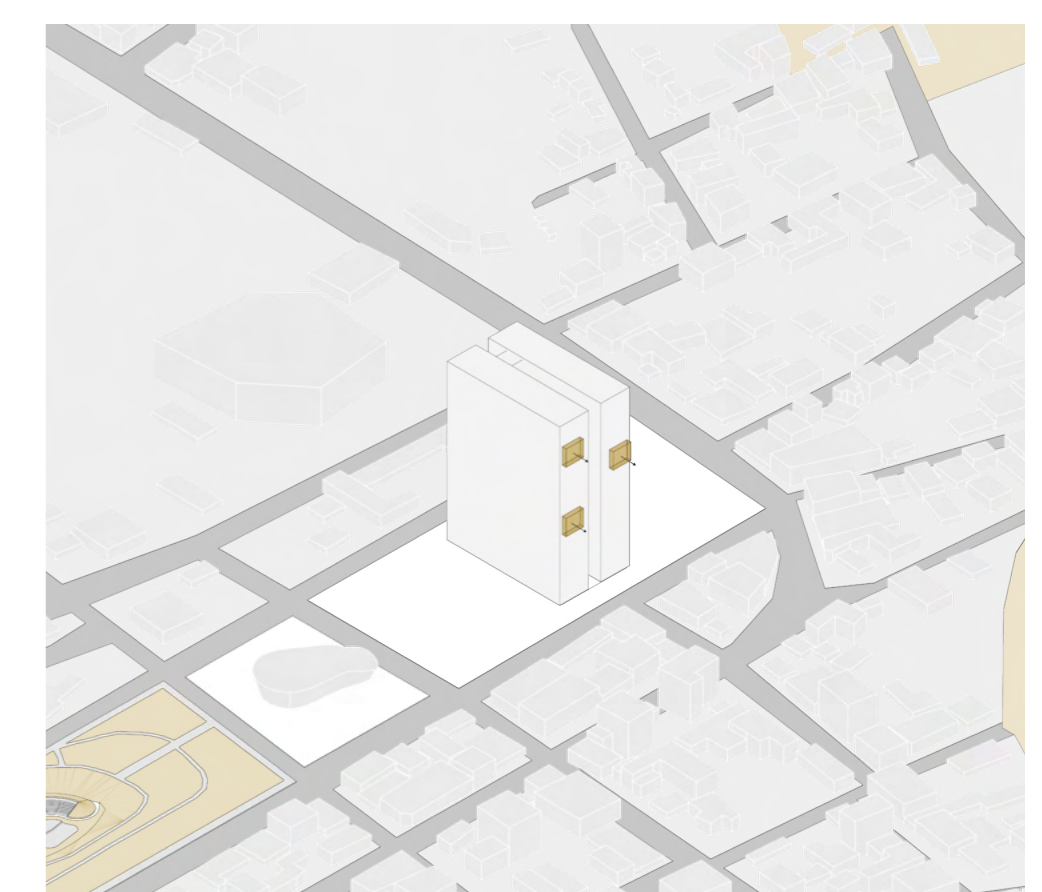
TALL BUILDING AS A BIG SCREEN



FROM ONE BUILDING TO TWO

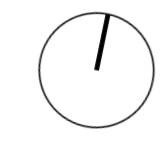
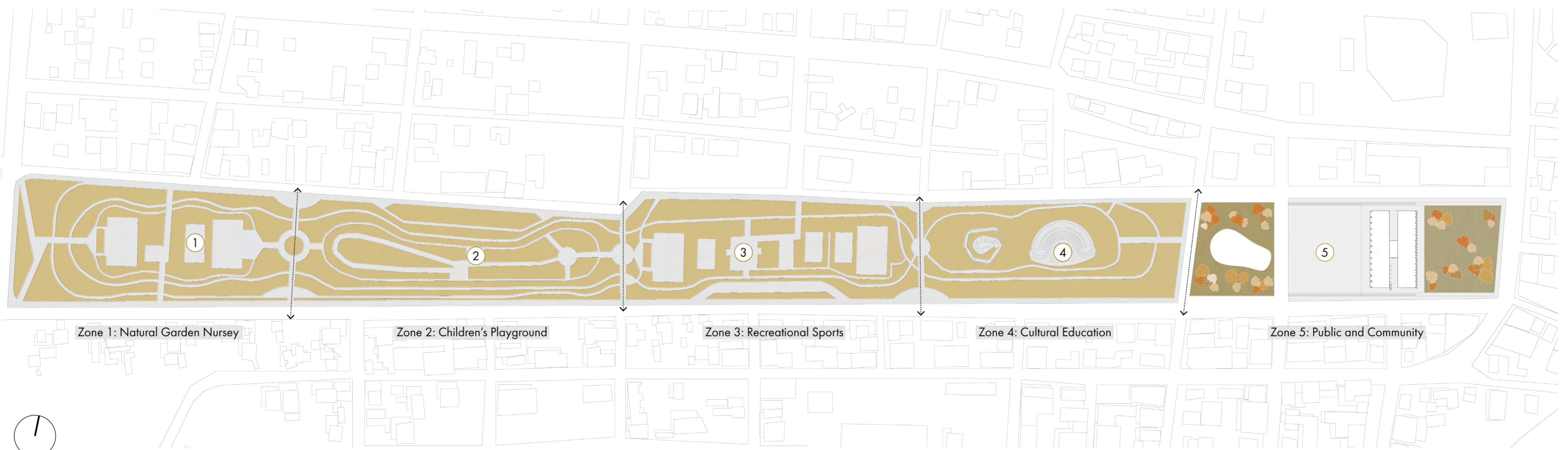


SPECIAL SPACES THAT CONNECTS TWO

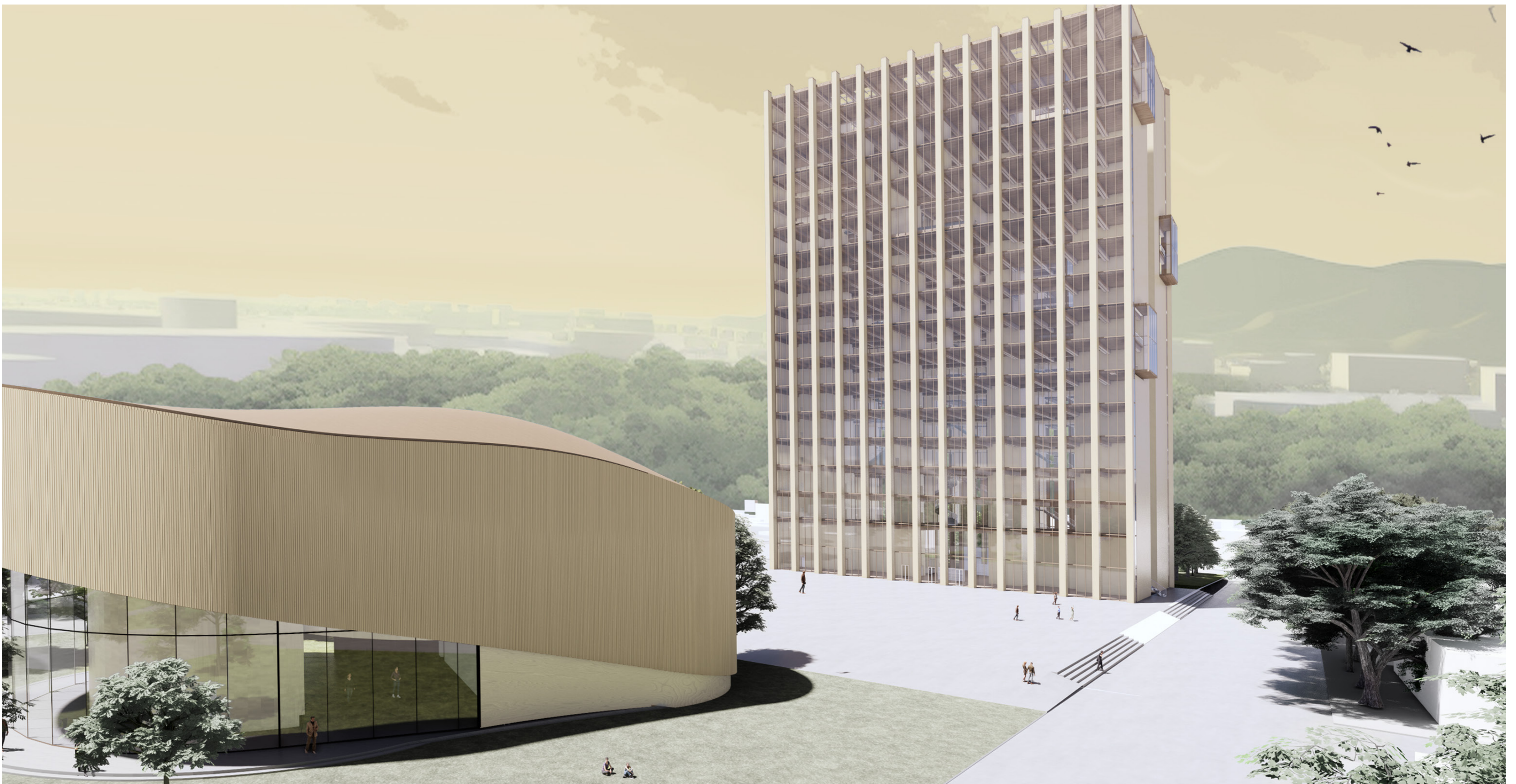


BOW WINDOWS FOR VIEWS

TENA LINEAR PARK



SEQUENCE OF SPACES - MASTER PLAN



SUSTAINABLE FOREST MANAGEMENT IN AMAZON RAINFOREST

WHAT IS FOREST MANAGEMENT?

Sustainable forest management is an approach to managing forests in a way that ensures their long-term health and productivity while also addressing social and economic considerations.

"A single piece of wood can be reused and recycled through a succession of different products, reducing the volume of virgin wood that needs to be harvested from forests. This, combined with clean manufacturing technologies and innovative product designs, can deliver low carbon products with less pressure on forests."

WWF Global Forest Practice



It is home to **350** ethnic groups

17% of the forest cover has been lost in the last 50 years

The Amazon river is over **6600 km** long

Amazon Rainforest houses at least **10%** of the world's known biodiversity

The Amazon biome is **2 times** the size of India

WHY DO WE NEED TO CUT TREES?

In 2016, the Food and Agriculture Organisation of the United Nations said that wood products would help tackle global warming, but only if made from sustainably managed forests.

Using wood means avoiding other, more energy-intensive materials, such as PVC, aluminium, concrete and steel. As the report explains, 'the carbon footprint of a wooden building is only half that of a concrete structure'.

Logging and replanting - selective logging of mature trees ensures that the rainforest canopy is preserved. This method allows the forest to recover because the younger trees gain more space and sunlight to grow. Planned and controlled logging ensures that for every tree logged another is planted.

WHAT IS SUSTAINABLE LOGGING?

Sustainable logging is a subset of sustainable forest management that specifically focuses on the responsible extraction of timber and other forest products with practices of

- Selective Harvesting
- Reduced Impact
- Reforestation and Regeneration
- Protection of Sensitive Areas
- Certification with Standards

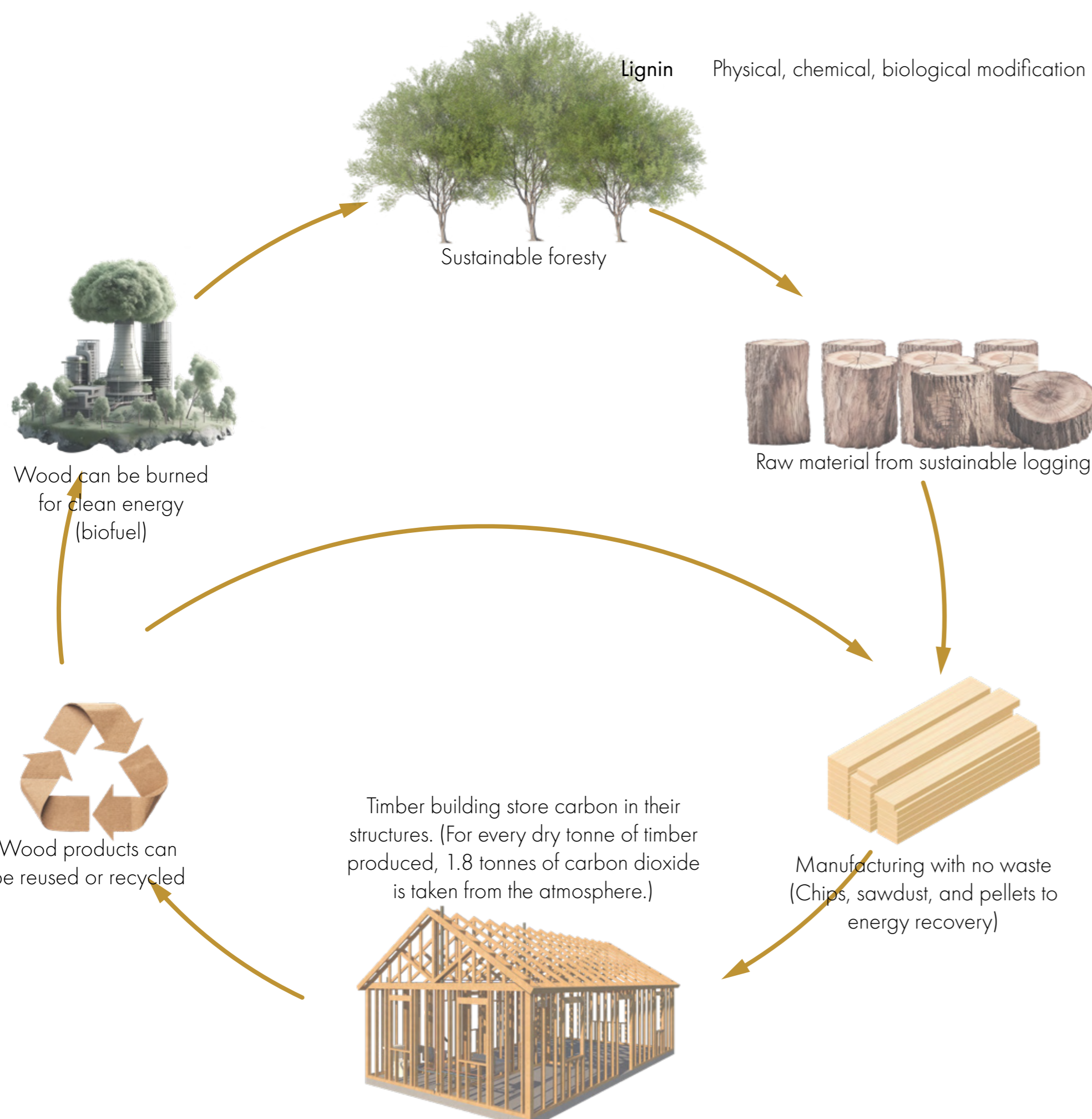


SUSTAINABLE LIGNIN BASED ADHESIVE

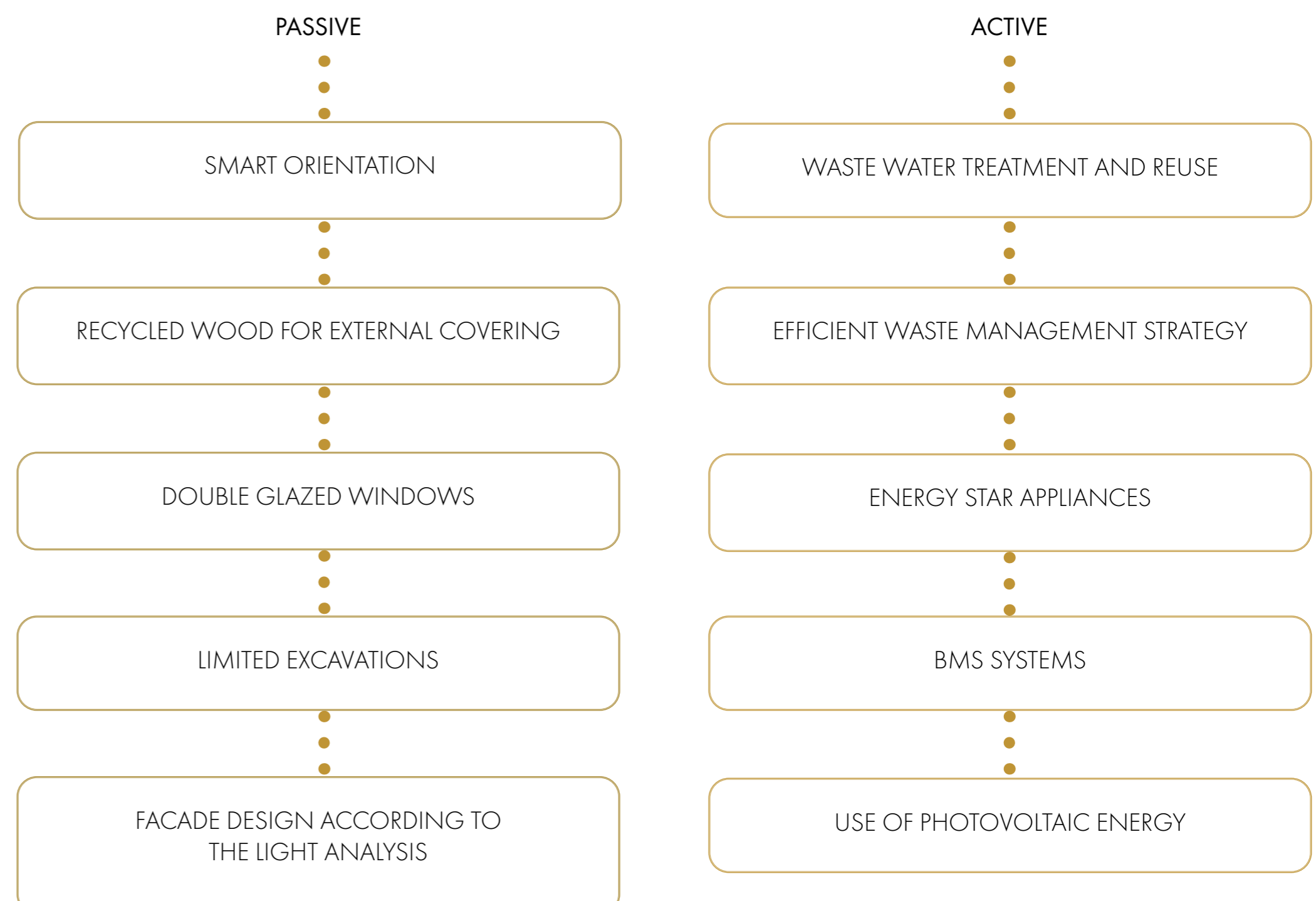


WHY ENGINEERED WOOD ?

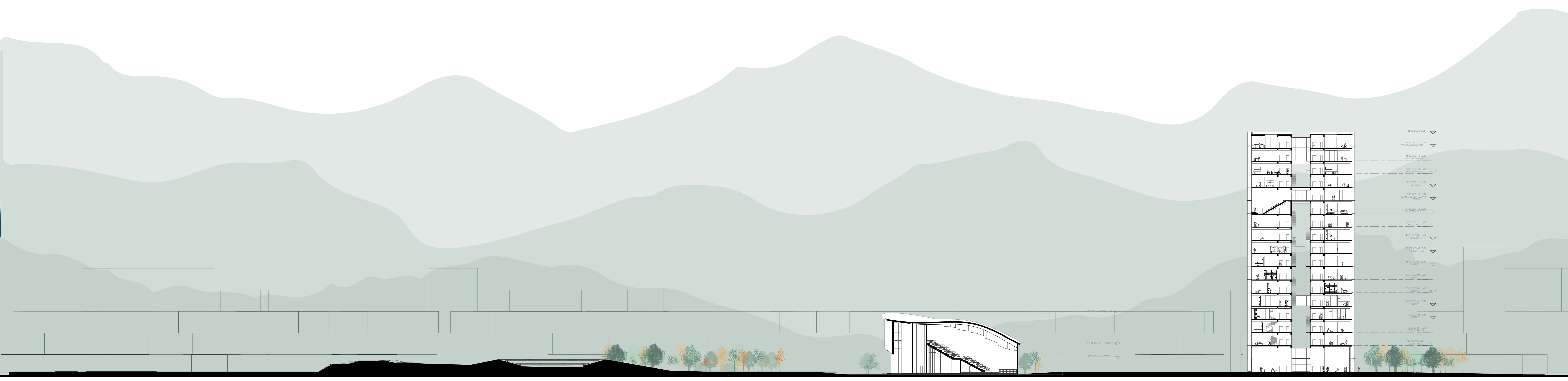
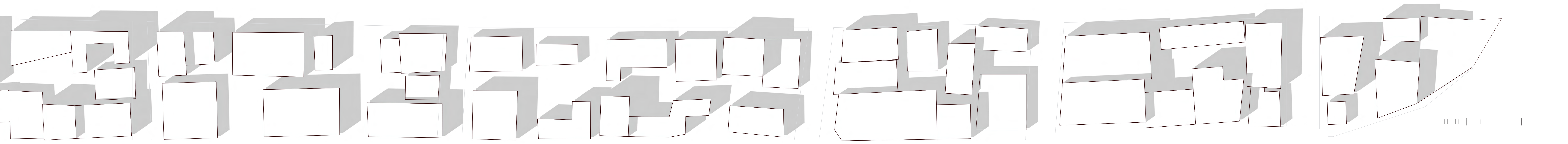
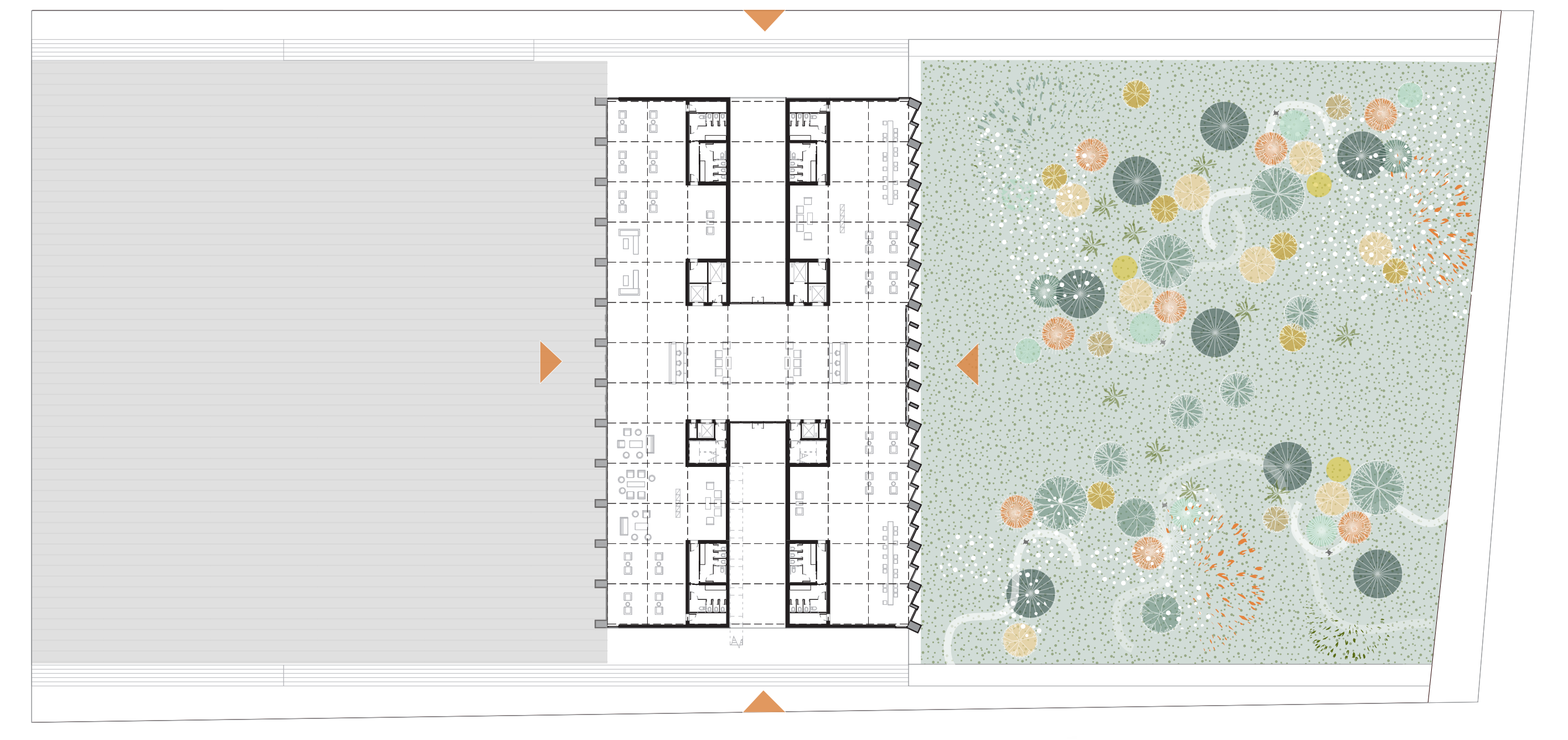
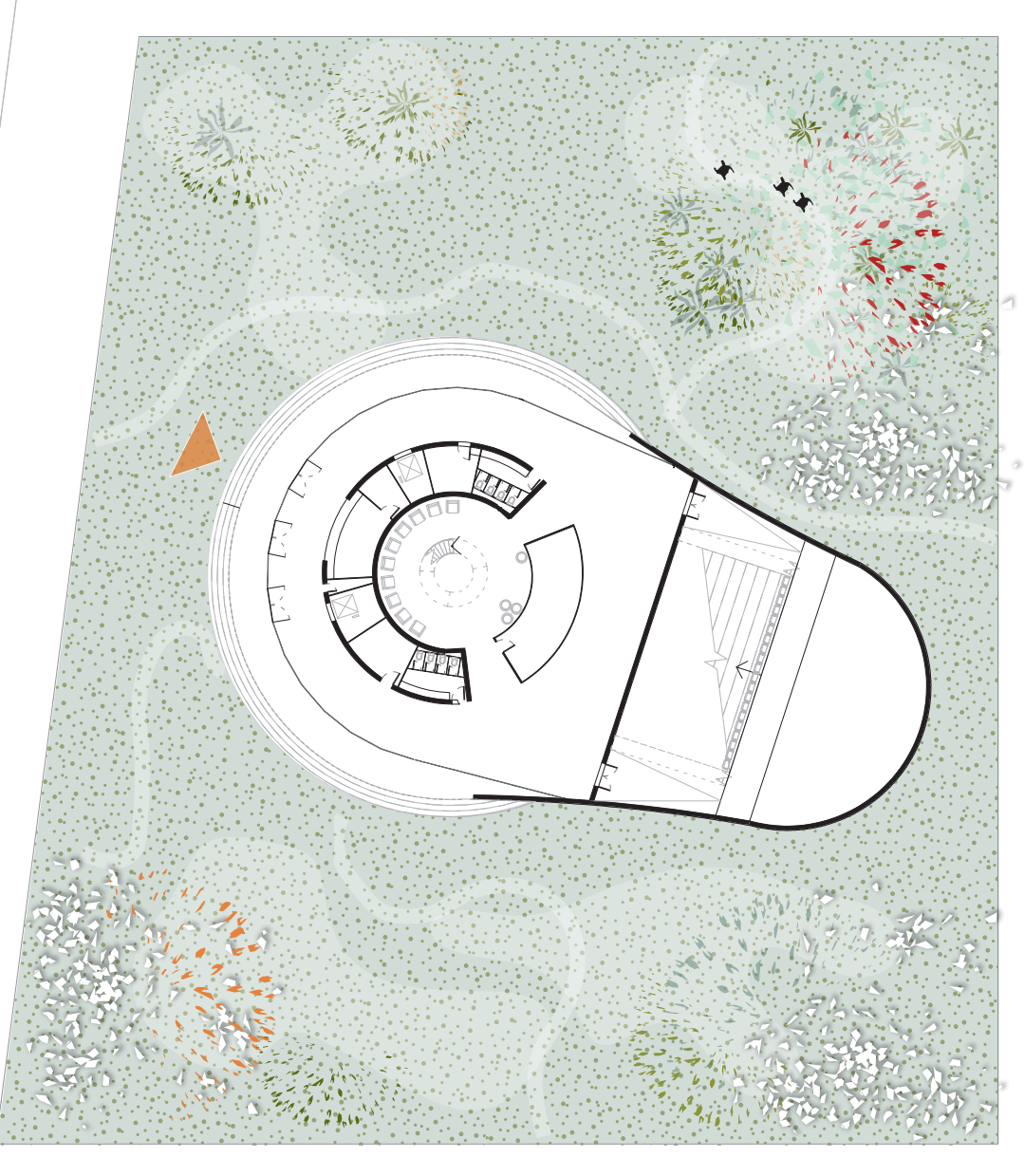
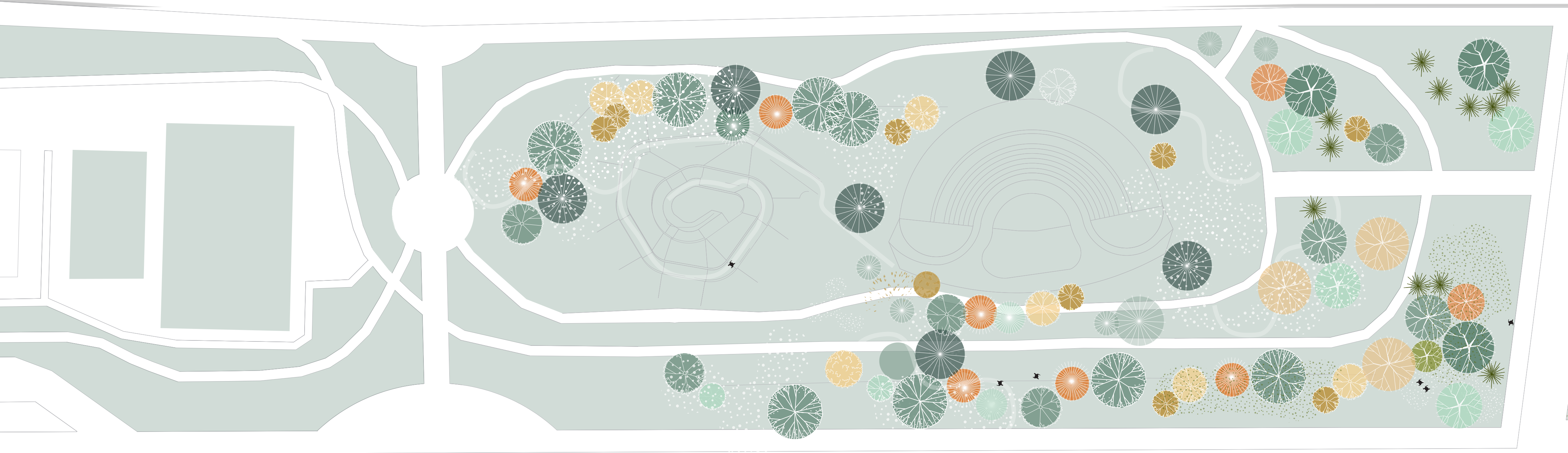
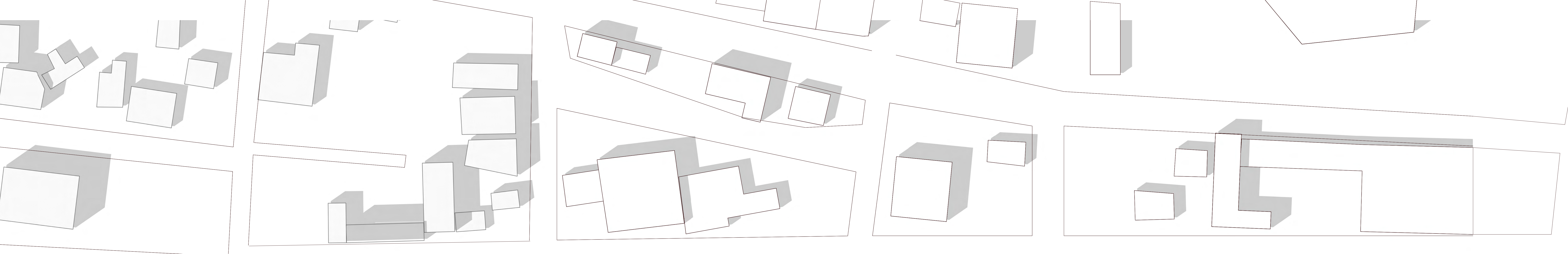
"According to CORRIM Life Cycle Assessment study, wood is better for the environment than steel or concrete in terms of embodied energy, global warming potential, air emissions, water emissions and solid waste production. Wood products require much less energy in manufacturing them compared to the other industrial raw materials and act as carbon sinks." - World Conference of Timber Engineering



OTHER SUSTAINABILITY ACTIONS





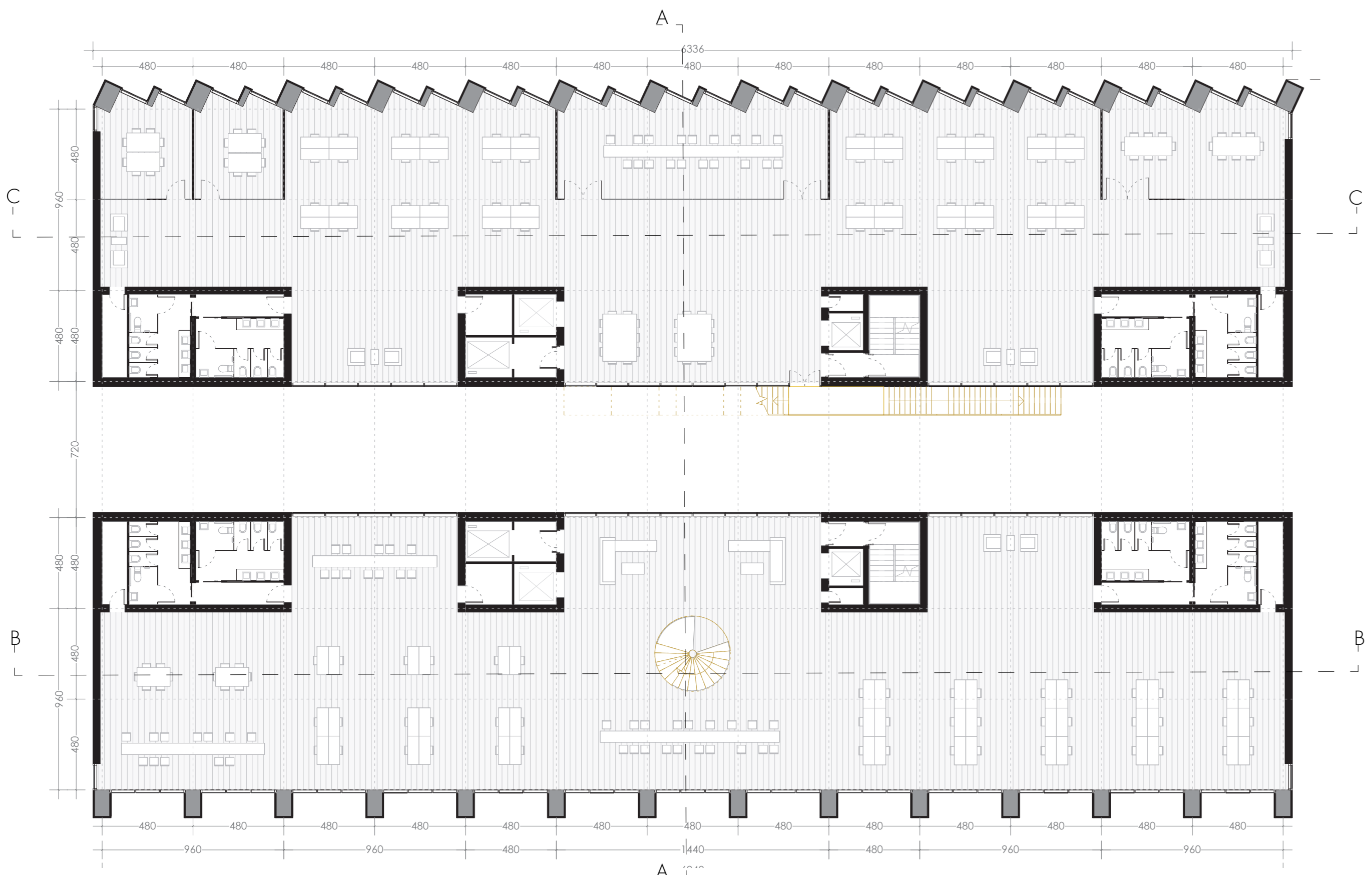




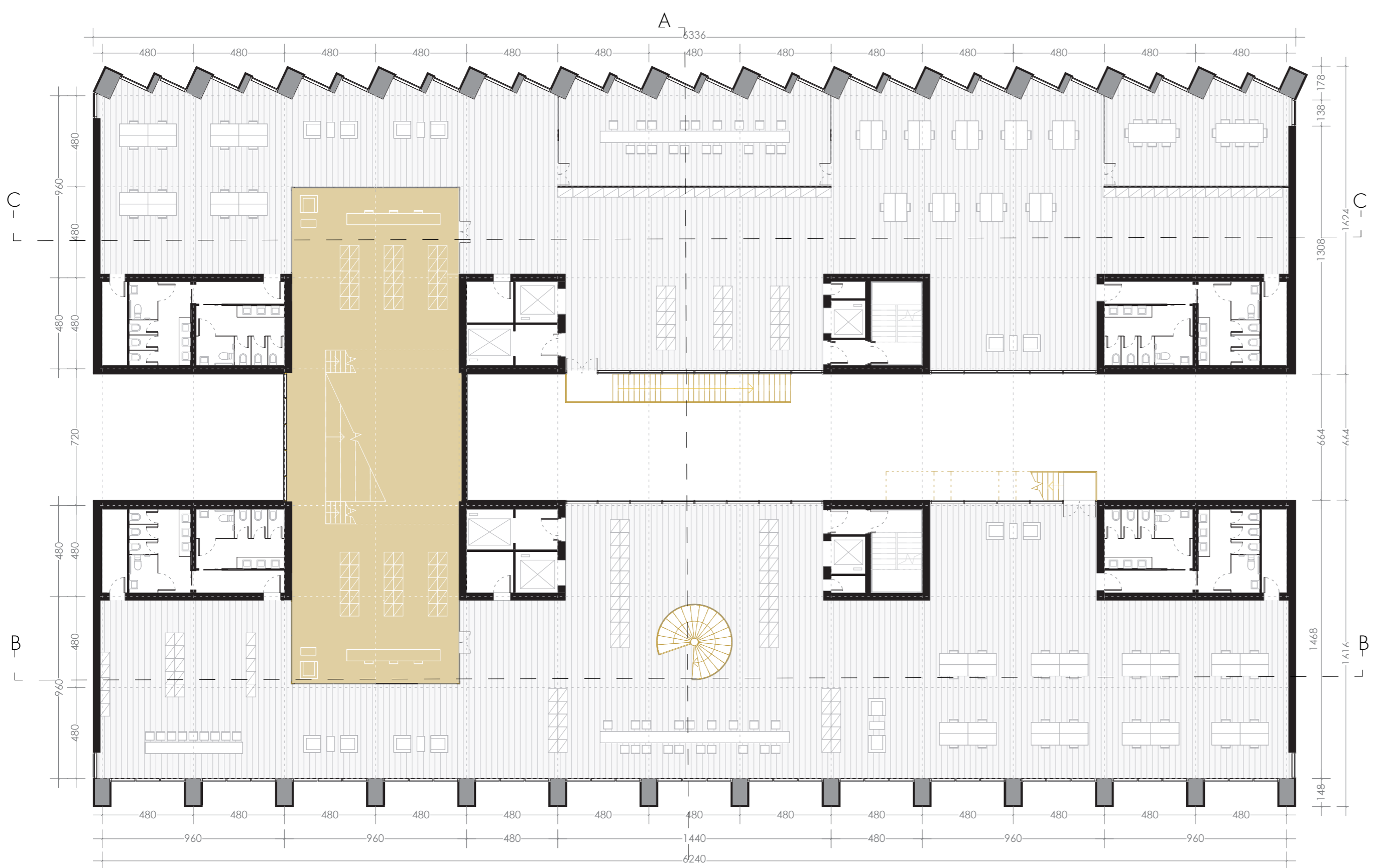
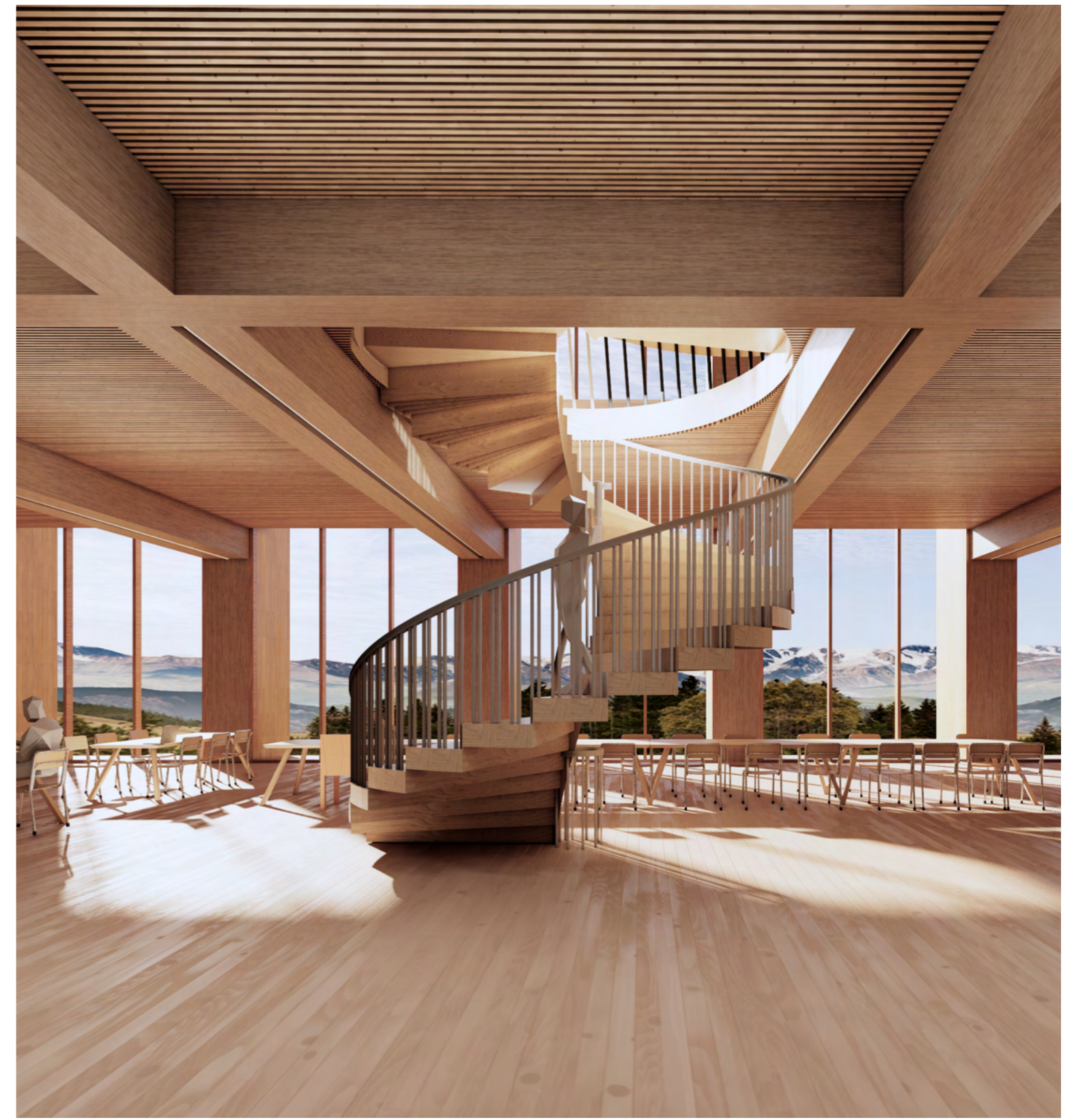


GROUND FLOOR

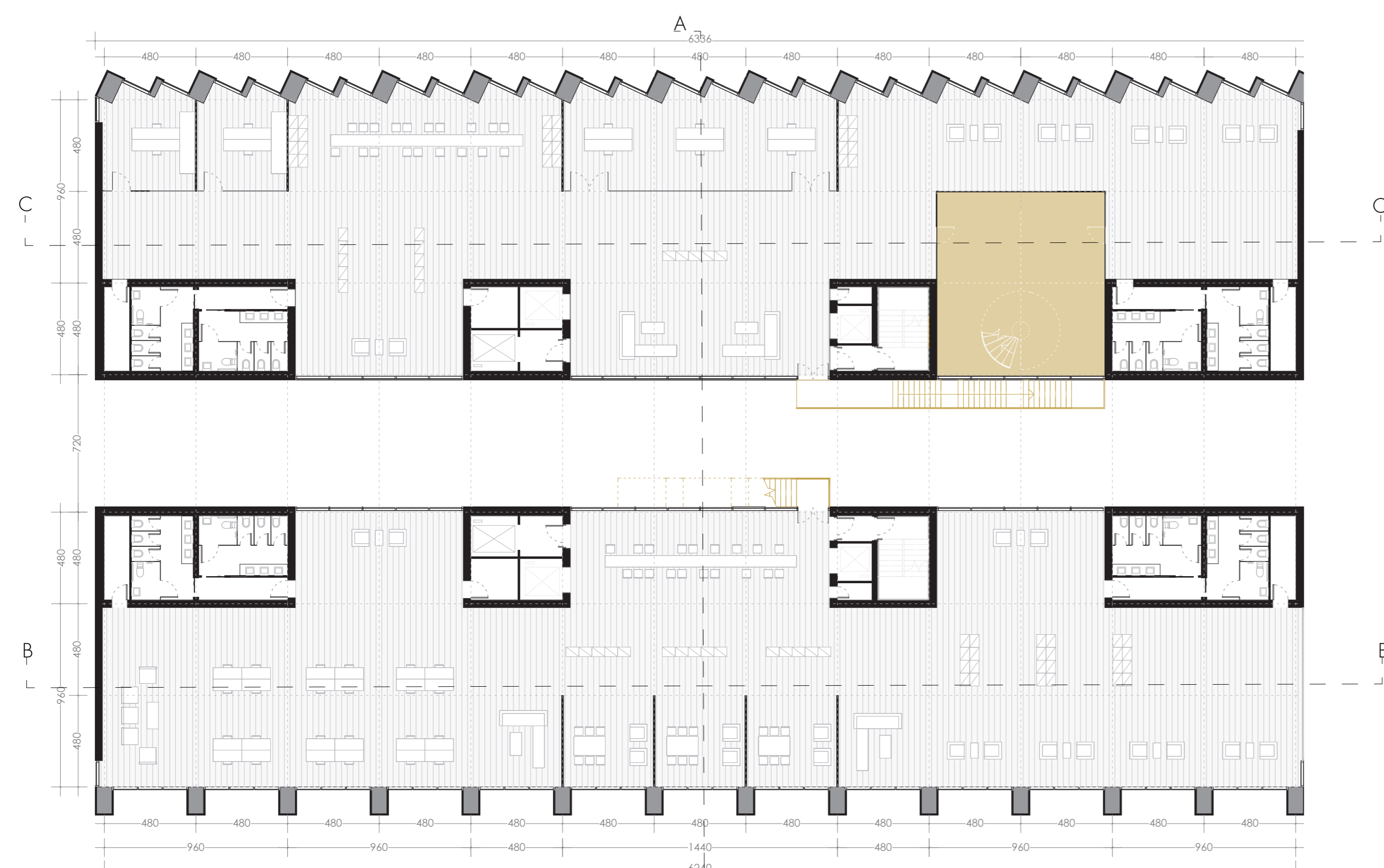




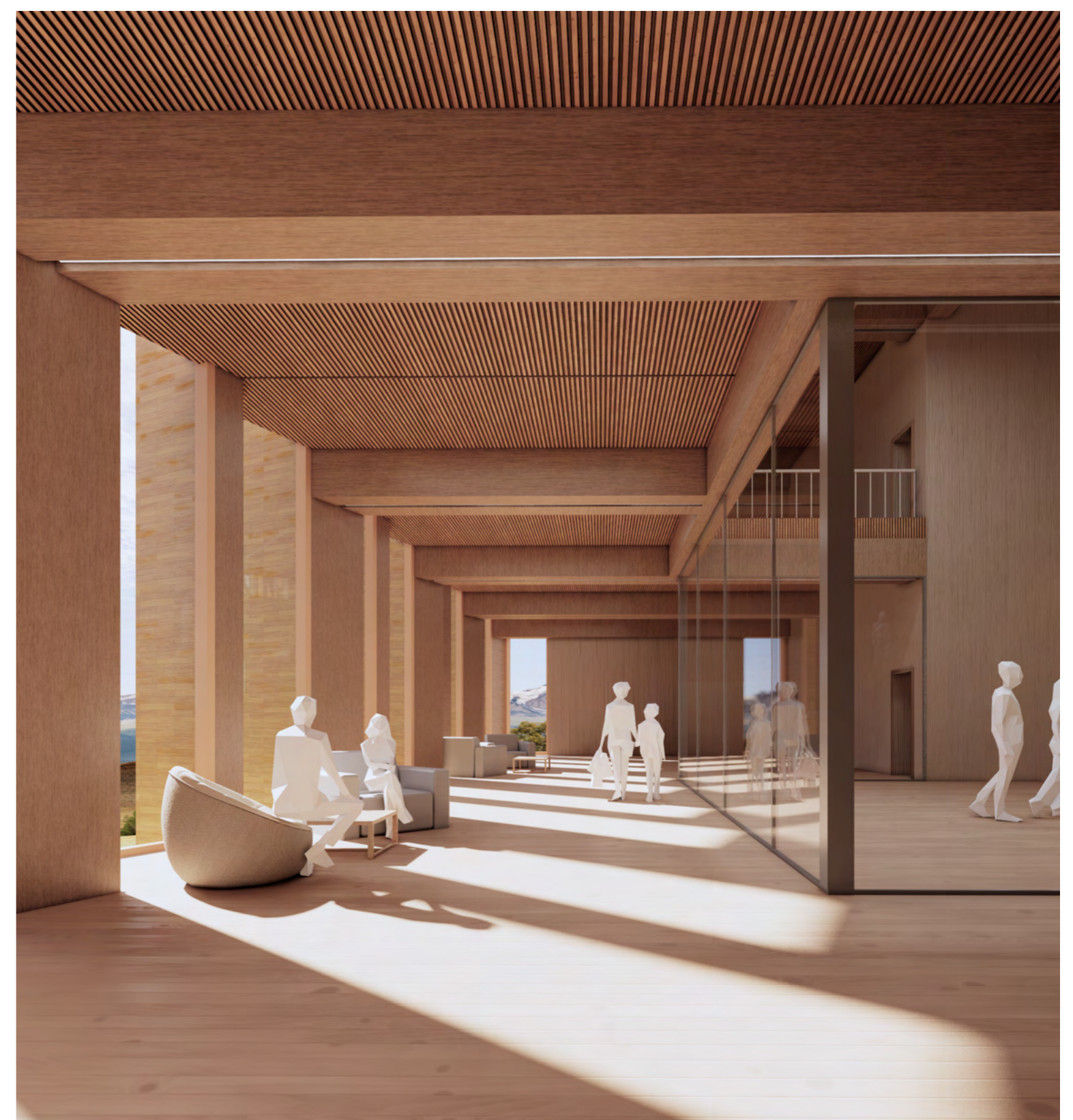
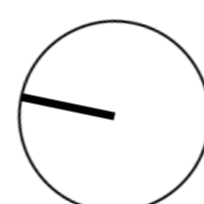
PLAN LEVEL 1 | Co-working Space
+ 9.60 m



PLAN LEVEL 3 | Library
+ 19.20 m

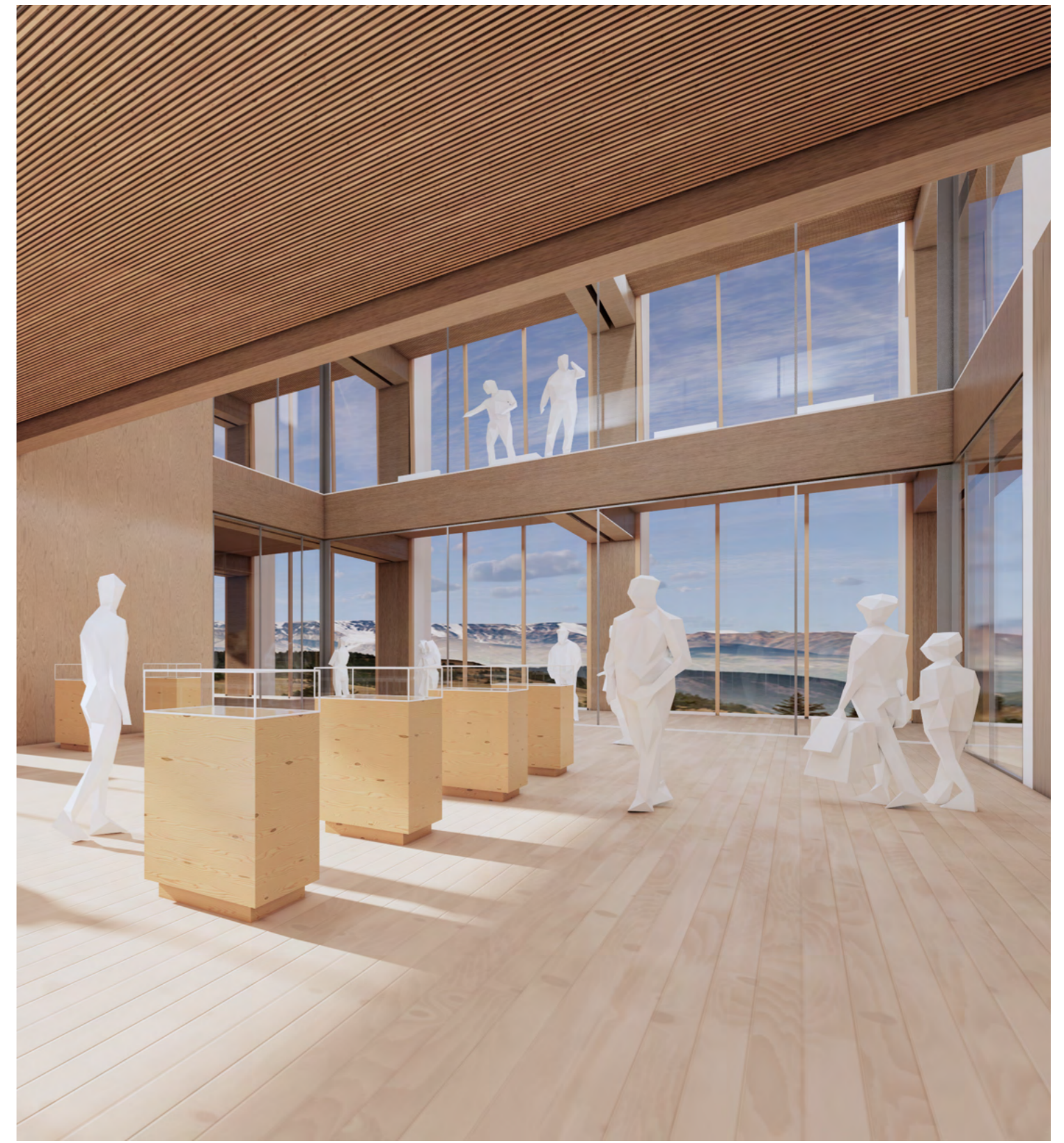


PLAN LEVEL 7 | Library
+ 38.40 m

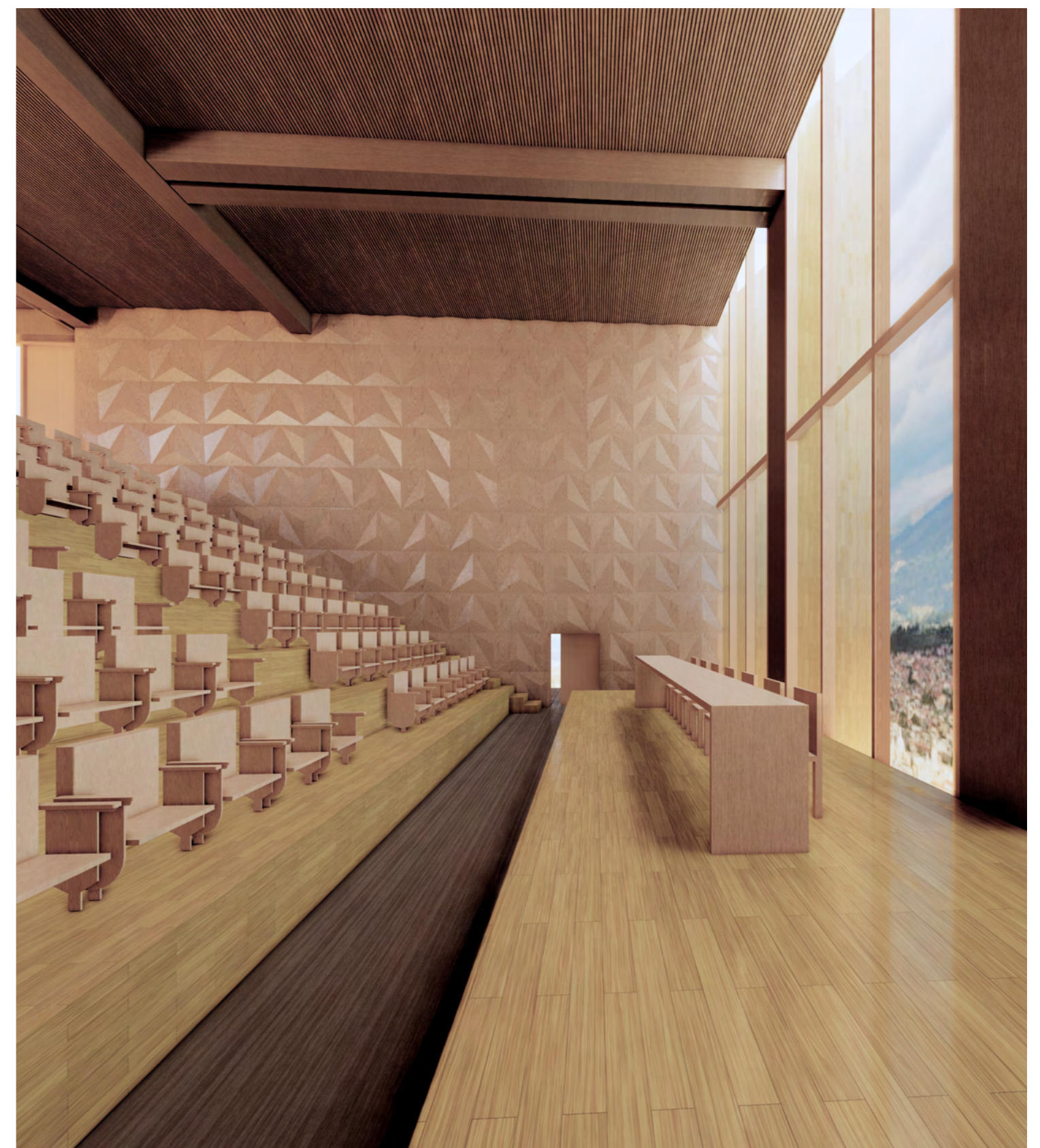




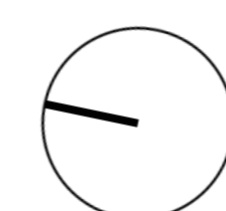
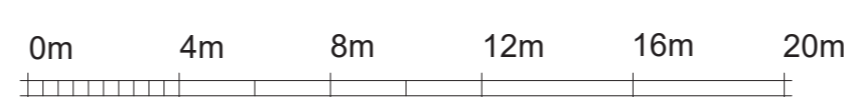
PLAN LEVEL 8 | Exhibition Space
+43.20 m



PLAN LEVEL 11 | Conference Space
+57.60 m

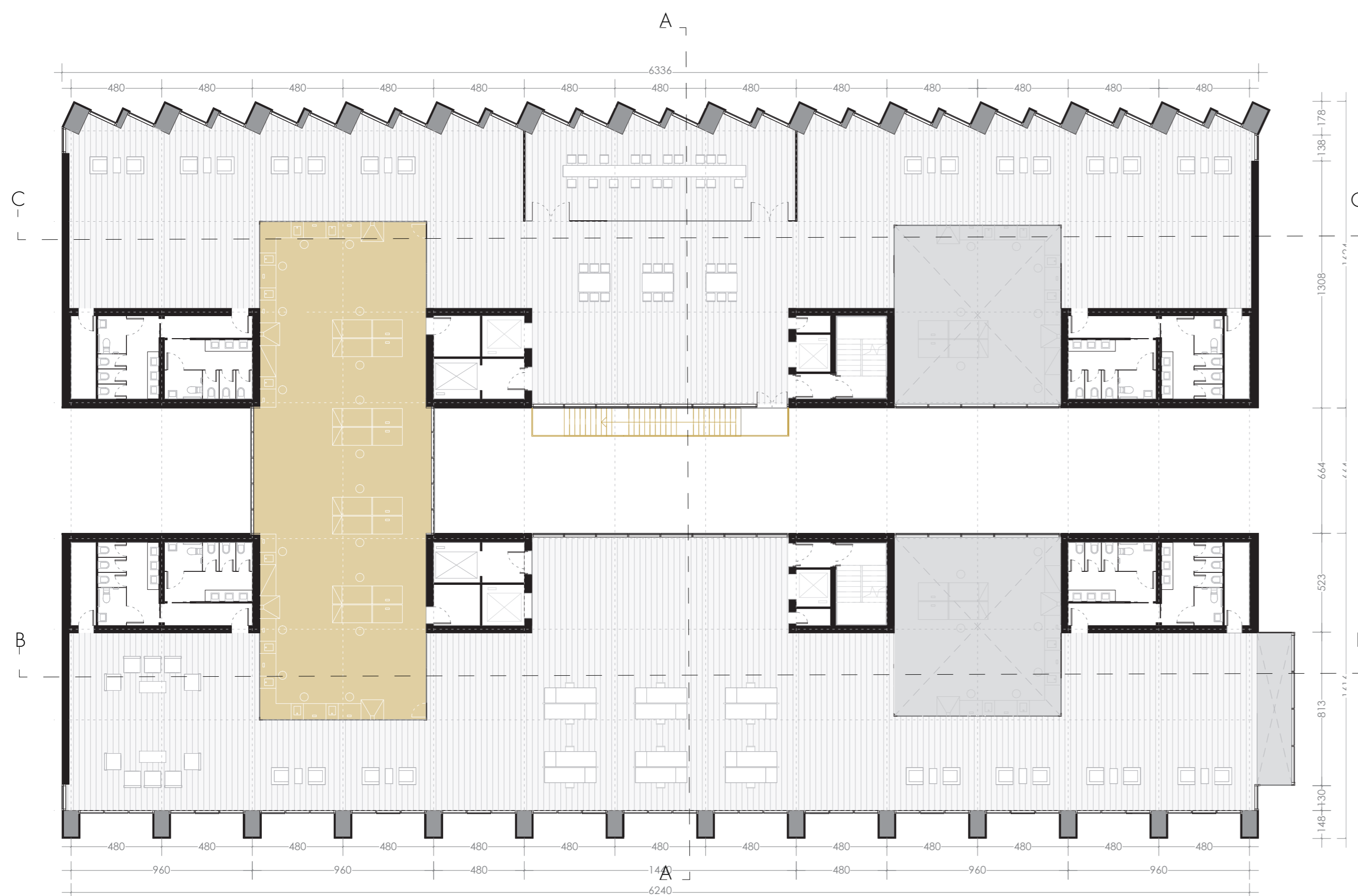


PLAN LEVEL 12 | Conference Space
+62.40 m

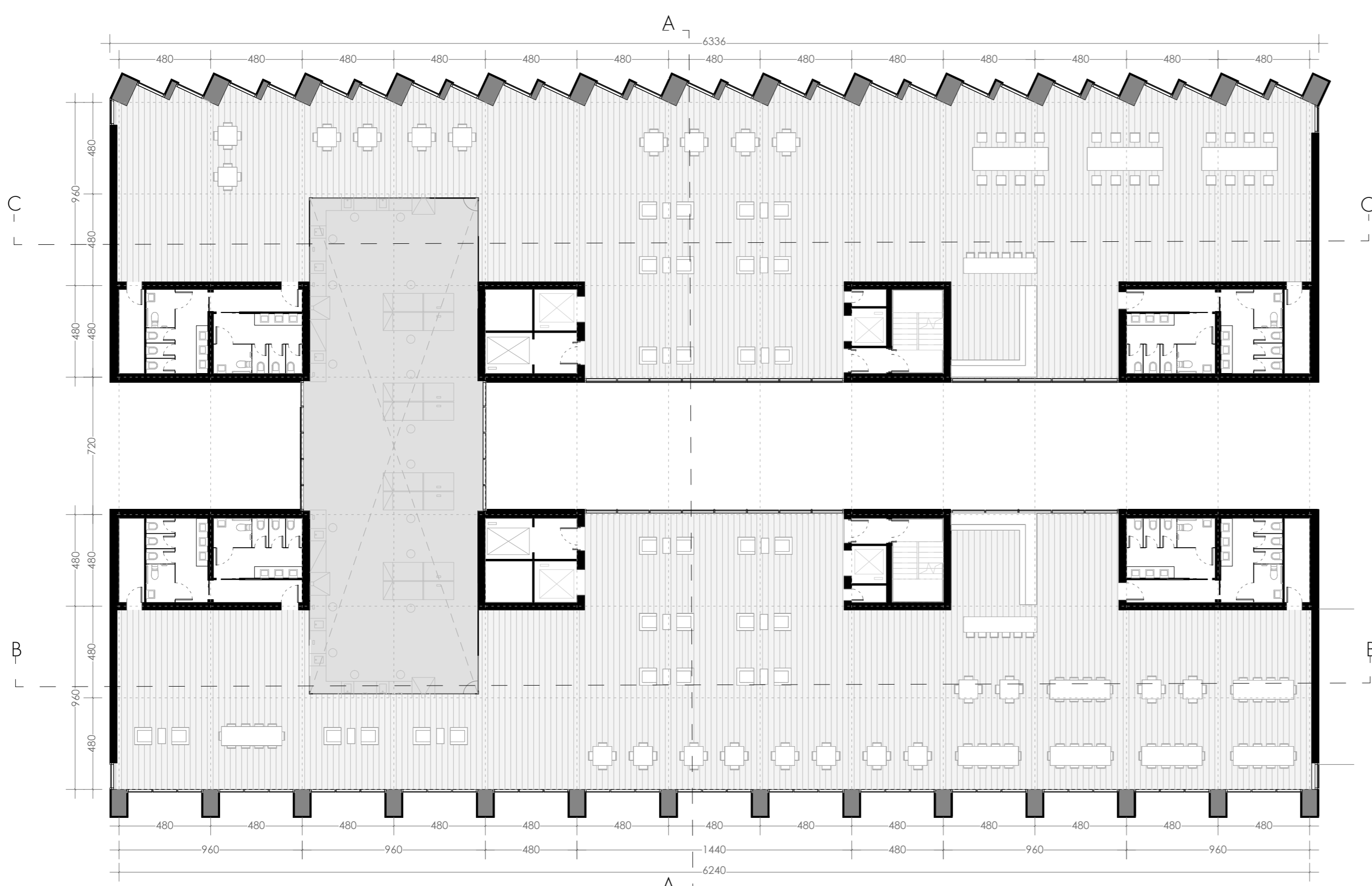




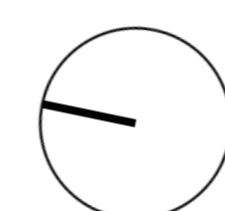
PLAN LEVEL 14 | Labs & Research Centre
+72.00 m



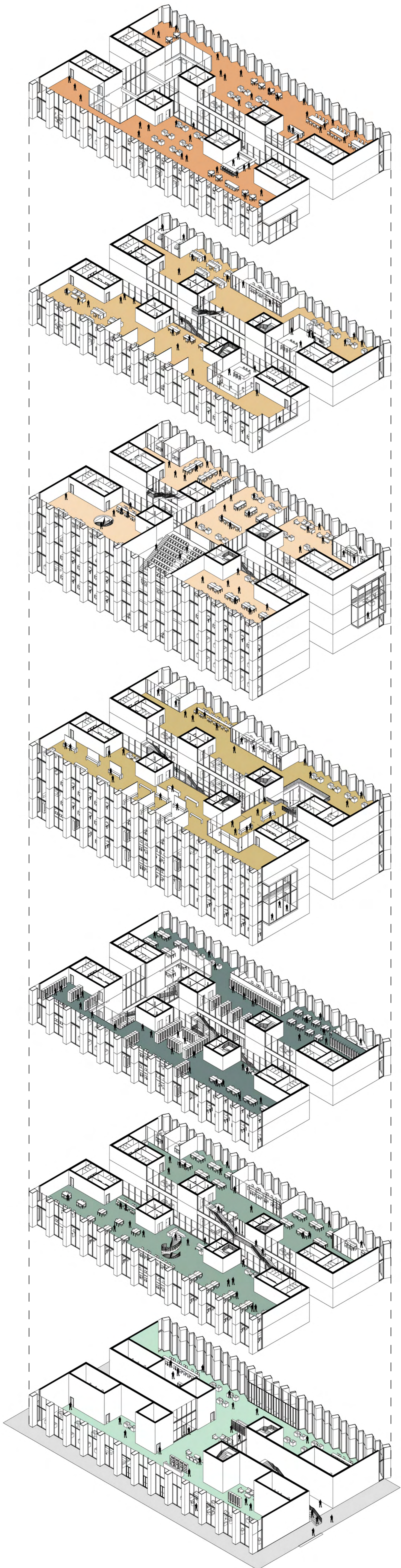
PLAN LEVEL 15 | Labs & Research Centre
+76.80 m



PLAN LEVEL 16 | Cafe & Observatory
+81.60 m



PROGRAM



LEVEL 16 (+86.40 m)
Observatory & Cafe
1588 m²

LEVEL 14 (+76.80 m)
Research Labs & Offices
3116 m²

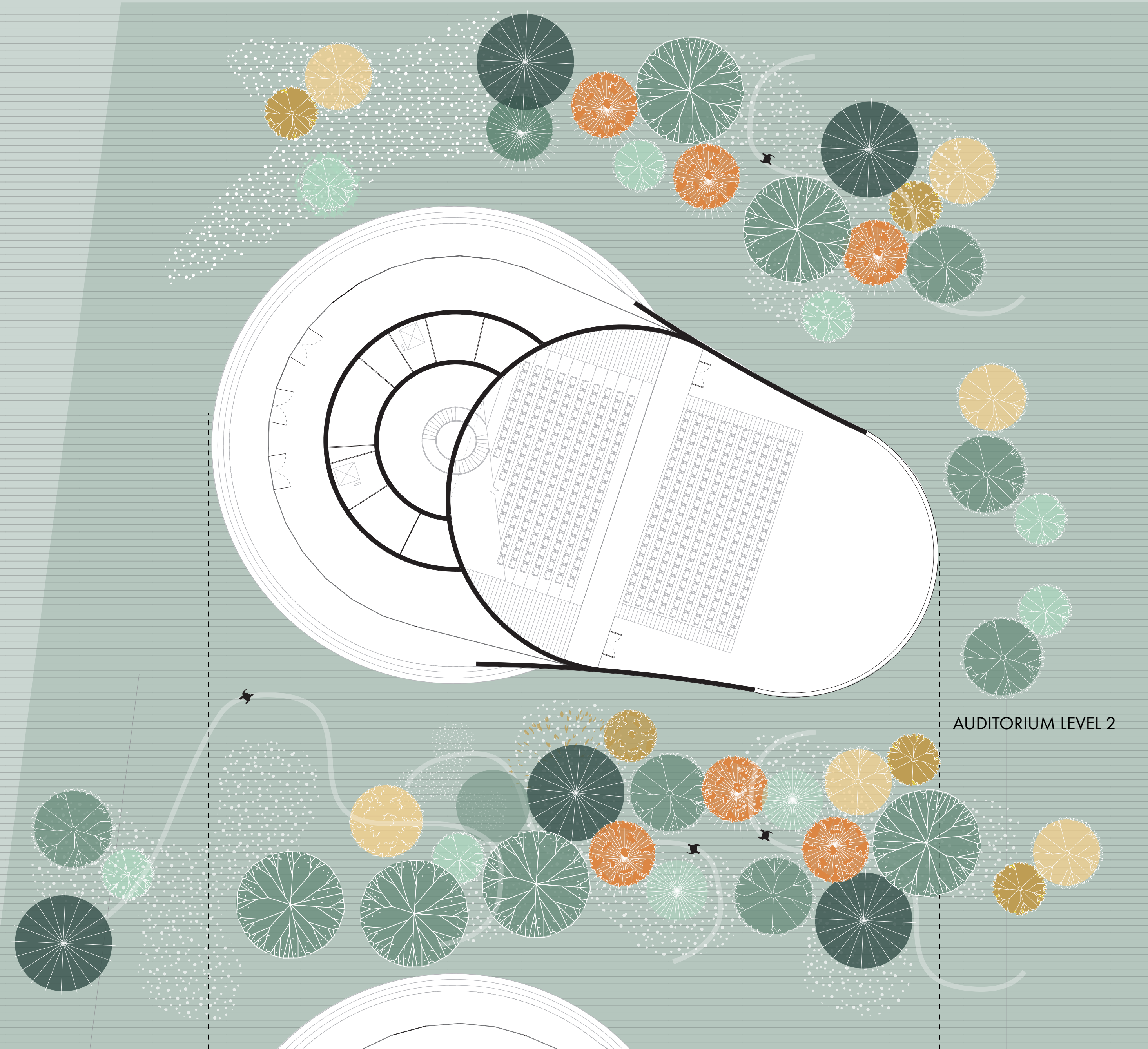
LEVEL 12 (+67.20 m)
Conference Room
4943 m²

LEVEL 8 (+48.00 m)
Showroom and Arts & Crafts
4656 m²

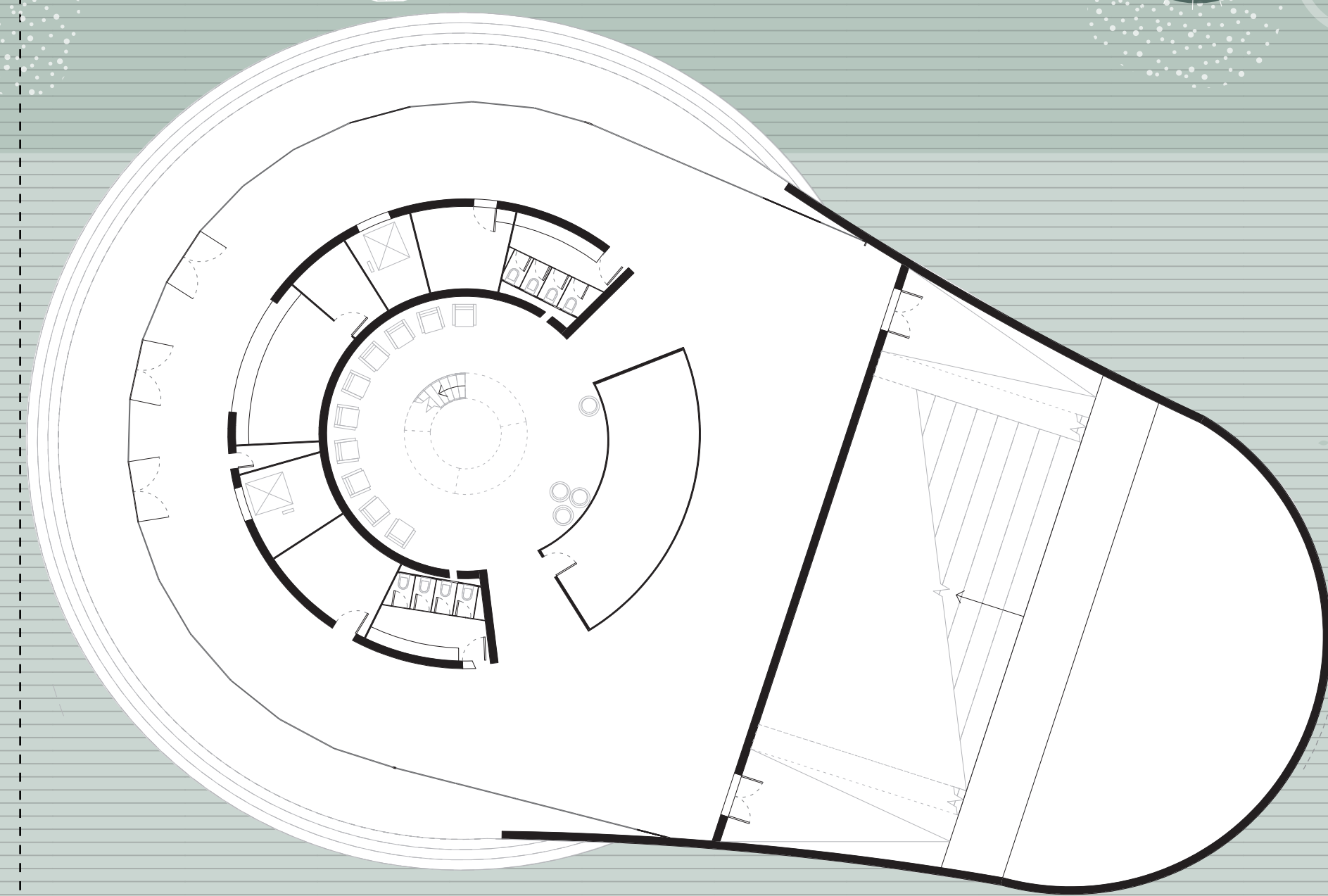
LEVEL 4 (+28.80 m)
Library & Reading Room
7704 m²

LEVEL 2 (+19.20 m)
Co-working Areas
3076 m²

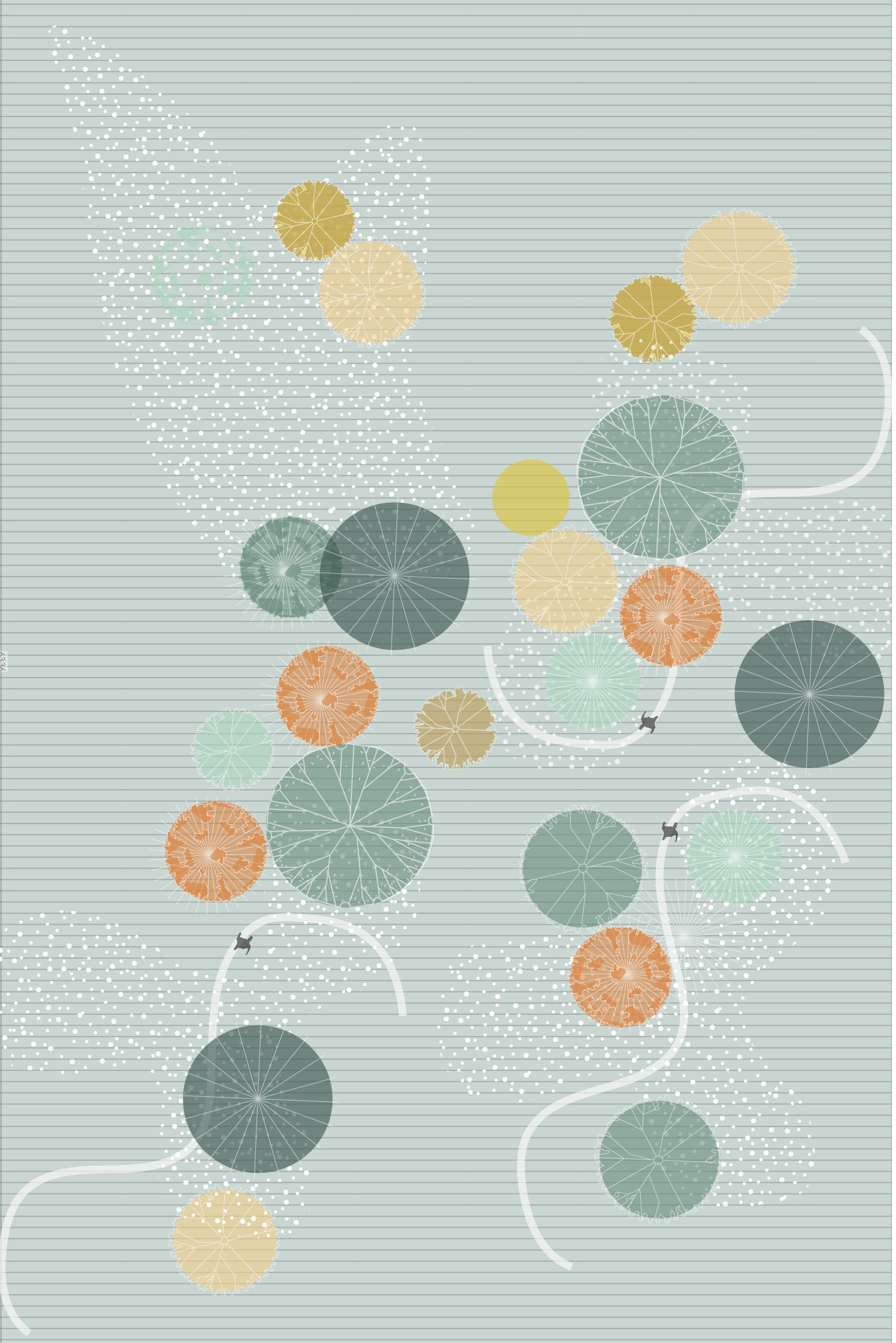
GROUND LEVEL (+0.00 m)
Entrance with Lobby
1887 m²



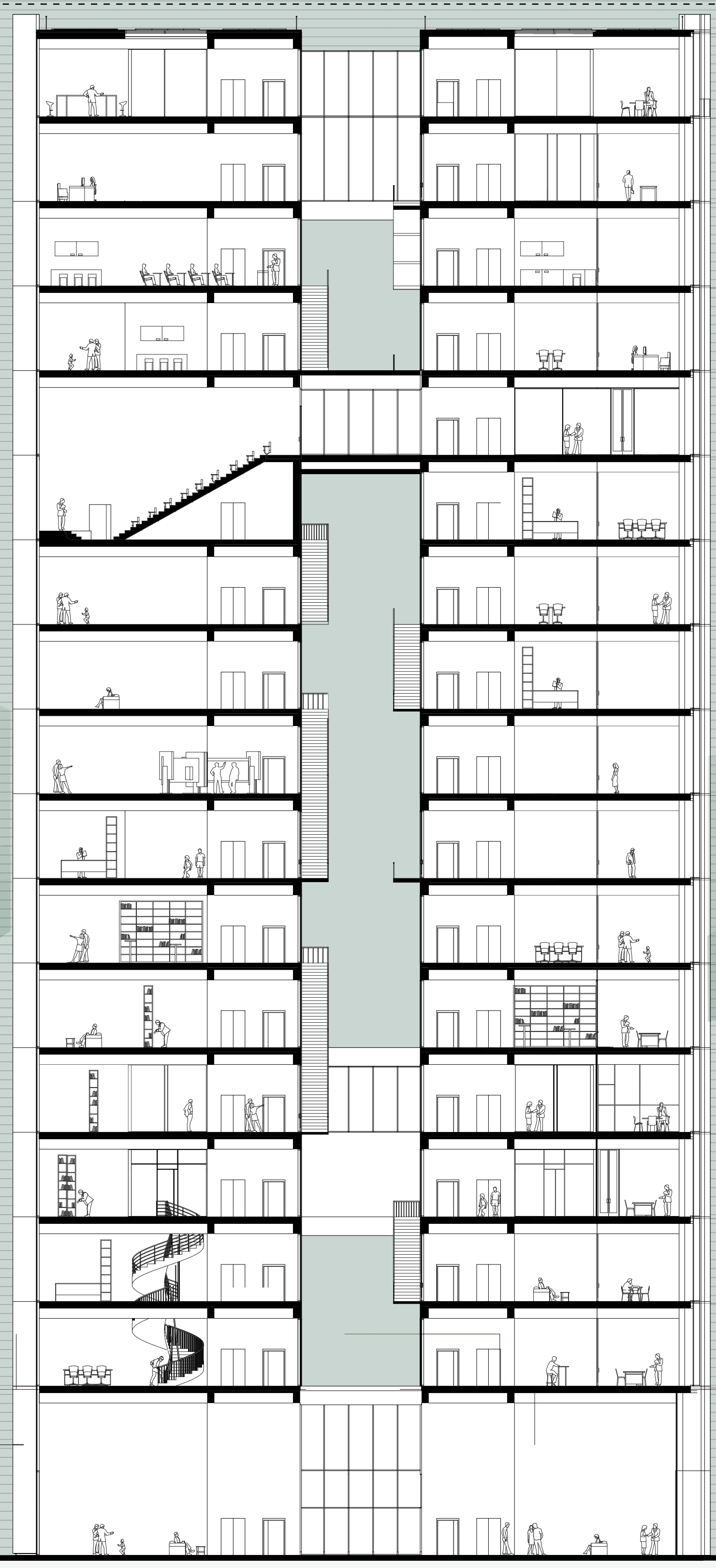
AUDITORIUM LEVEL 2



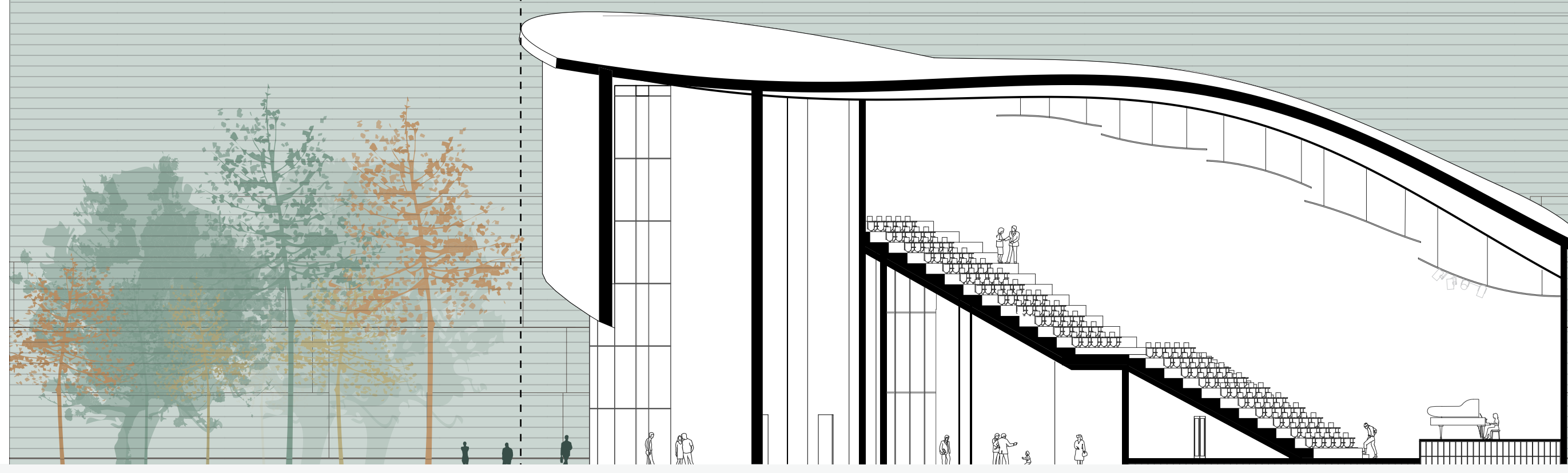
AUDITORIUM LEVEL 1



0m 4m 8m 12m 16m 20m



- 8640.000 ROOF
- 8160.000 16 LEVEL OBSERVATION&CAFE
- 7680.000 15 LEVEL RESEARCH&LABS
- 7200.000 14 LEVEL RESEARCH&LABS
- 6720.000 13 LEVEL OFFICES
- 6240.000 12 LEVEL CONFERENCE ROOM & OFFICES
- 5760.000 11 LEVEL CONFERENCE ROOM
- 5280.000 10 LEVEL ART&CRAFTS
- 4800.000 09 LEVEL ART&CRAFTS
- 4320.000 08 LEVEL SHOWROOM
- 3840.000 07 LEVEL LIBRARY
- 3360.000 06 LEVEL LIBRARY
- 2880.000 05 LEVEL LIBRARY
- 2400.000 04 LEVEL LIBRARY
- 1920.000 03 LEVEL LIBRARY
- 1440.000 02 LEVEL COWORKING
- 960.000 01 LEVEL



1920.000 AUDITORIUM L2

960.000 AUDITORIUM L2

480.000 AUDITORIUM L1