



ARCHITECTURE STUDENT CONTEST
20th INTERNATIONAL EDITION, NORD ISÈRE 2025

RHODE ISLAND SCHOOL OF DESIGN

VOICI LES PAPILLONS



ALEXANDER DAVIDSON CARROLL



MAGNOLIA MOSKUN



HUIYUN QIU

VOICI LES PAPILLONS



VILLEFONTAINE SITE CONTEXT



LOCAL GREENSPACE



SITE AREA



PRIMARY ACCESS

SURROUNDED BY FOREST AND BIODIVERSITY

LOCAL CONTEXT



LOCAL PISÉ (RAMMED EARTH)
CONSTRUCTION



HYBRID MASONRY AND WOOD



PIGEONNIER TOWER

GOAL: DEVELOP PASSIVE SOLUTIONS WITH LOCAL VERNACULAR

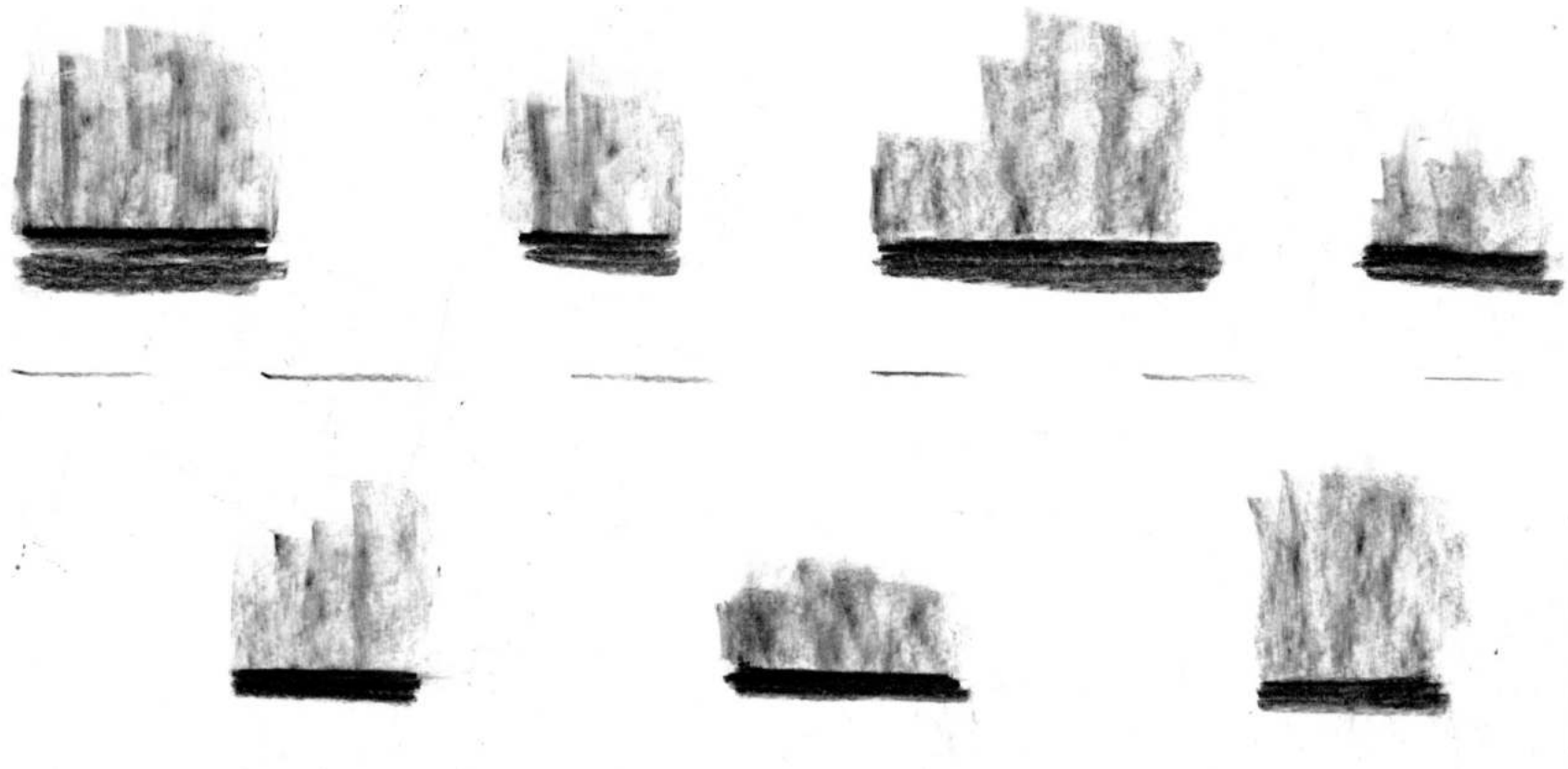
FELIX TROMBE



A Trombe wall is a passive solar building strategy based on the principle of indirect gain, in which sunlight first strikes a solar collection surface in contact with a thermal mass of air. The thermal mass absorbs the sunlight, converts it into heat, and gradually transfers that heat into the living space.



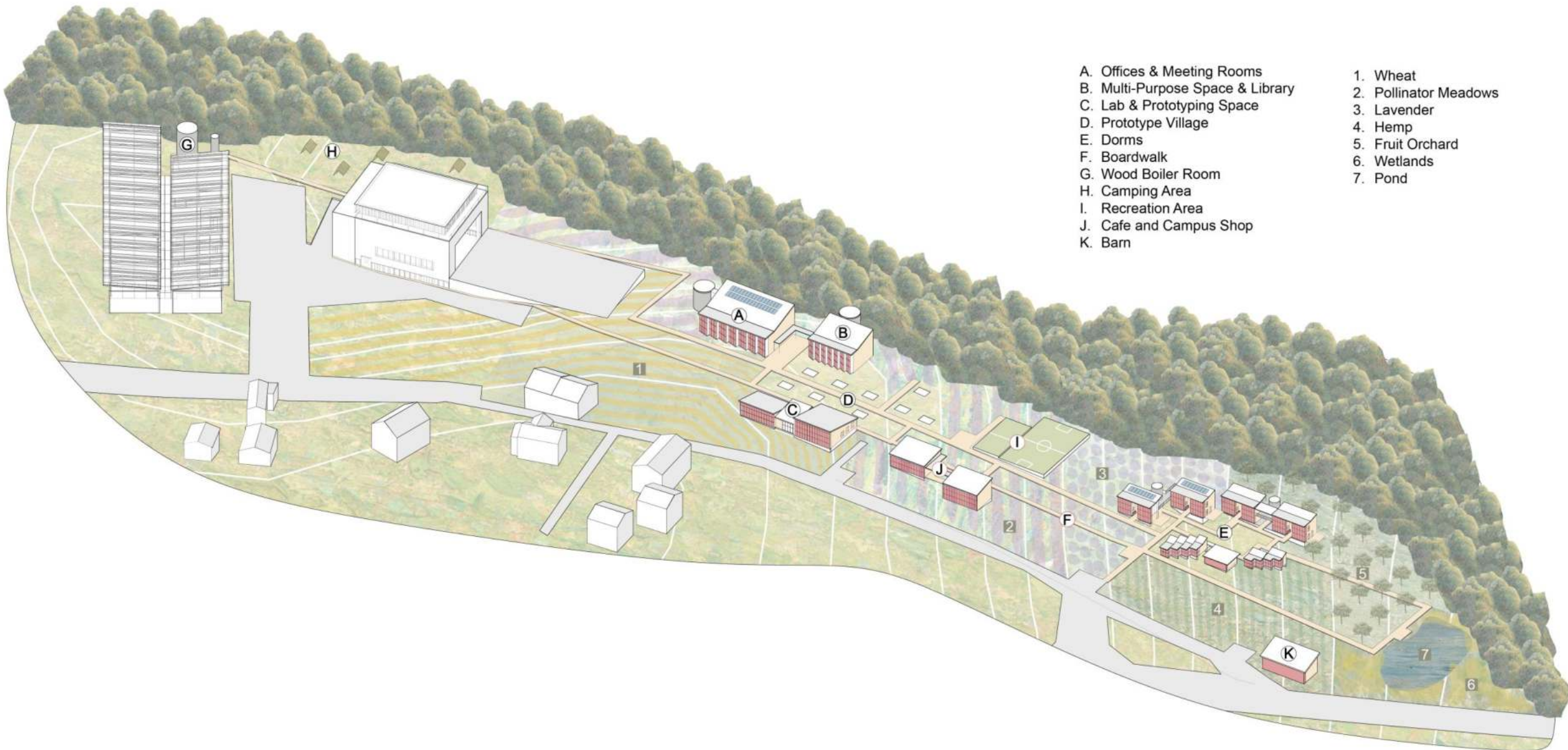
CONCEPT



CONCEPT

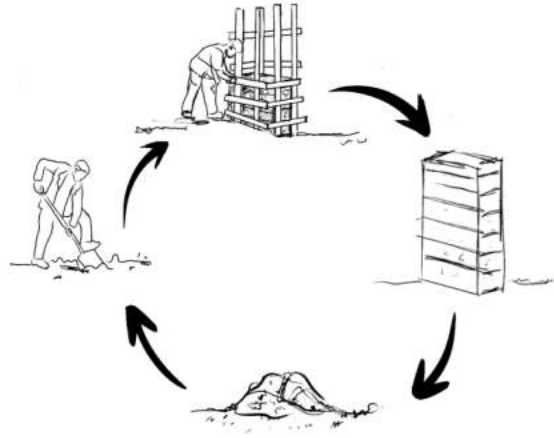


MASTER PLAN

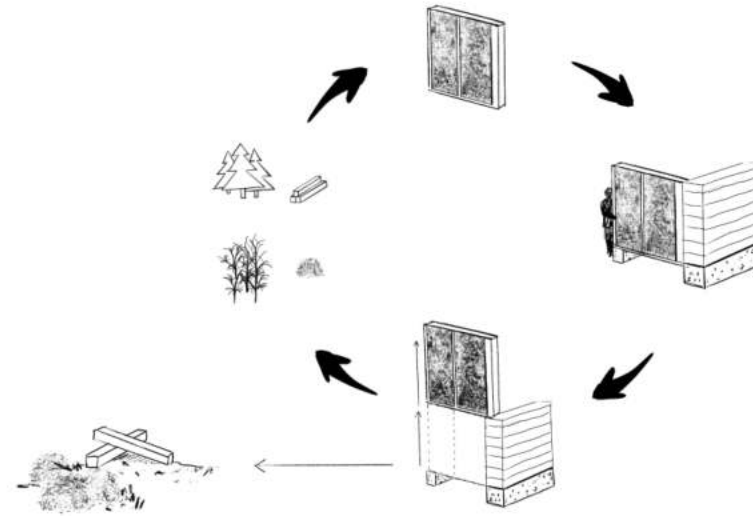


- A. Offices & Meeting Rooms
 - B. Multi-Purpose Space & Library
 - C. Lab & Prototyping Space
 - D. Prototype Village
 - E. Dorms
 - F. Boardwalk
 - G. Wood Boiler Room
 - H. Camping Area
 - I. Recreation Area
 - J. Cafe and Campus Shop
 - K. Barn
- 1. Wheat
 - 2. Pollinator Meadows
 - 3. Lavender
 - 4. Hemp
 - 5. Fruit Orchard
 - 6. Wetlands
 - 7. Pond

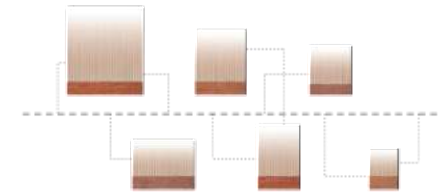
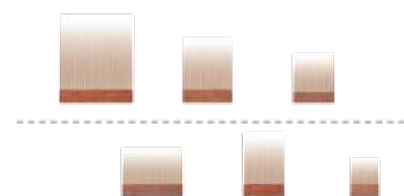
CIRCULATORY CONSTRUCTION STRATEGIES



RAMMED EARTH WALLS



MODULAR WALL PANEL



UPPER CAMPUS ELEVATION

OFFICE, LABORATORY, MULTI-PURPOSE, LIBRARY

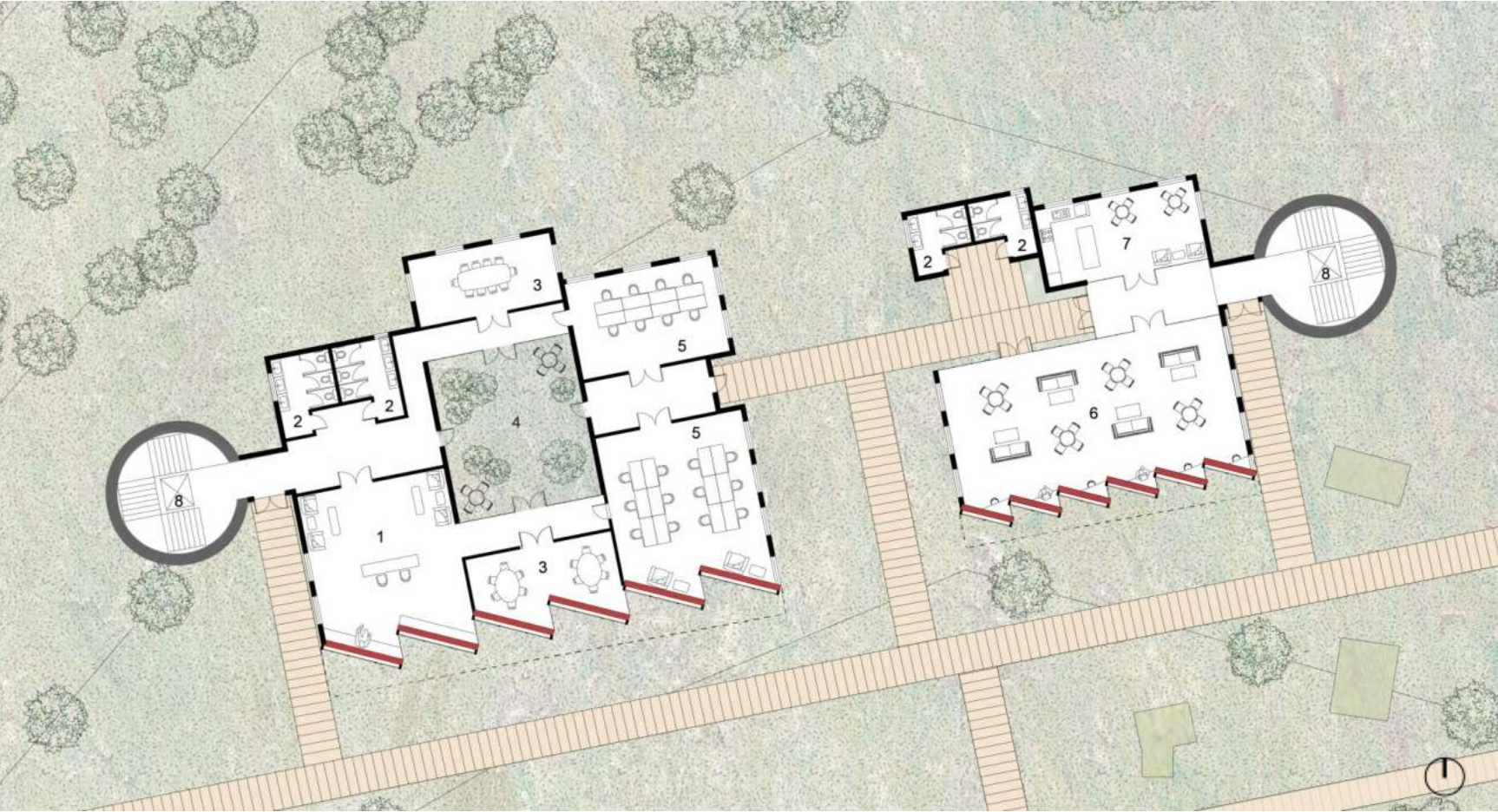


GROUND FLOOR PLAN

OFFICE, MULTI-PURPOSE



- 1. RECEPTION
- 2. RESTROOM
- 3. MEETING ROOM
- 4. QUARTYARD
- 5. OFFICE
- 6. MULTI-PURPOSE AREA
- 7. KITCHEN
- 8. ELEVATOR
- 9. LOUNGE
- 10. LIBRARY

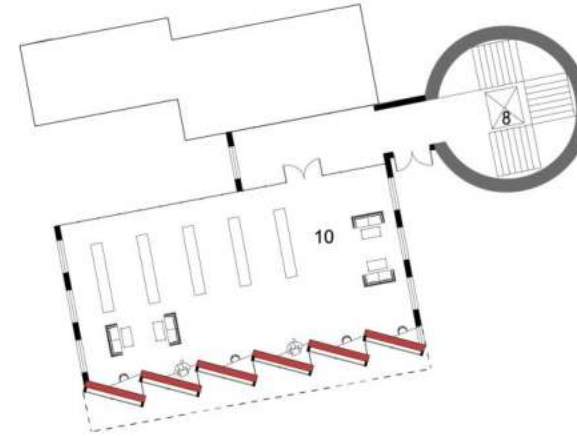
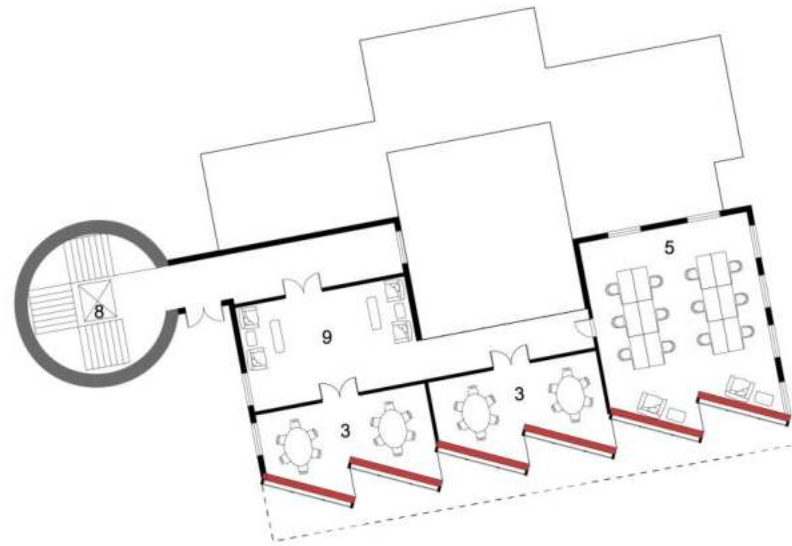


SECOND FLOOR PLAN

OFFICE, LIBRARY



1. RECEPTION
2. RESTROOM
3. MEETING ROOM
4. COURTYARD
5. OFFICE
6. MULTI-PURPOSE AREA
7. KITCHEN
8. ELEVATOR
9. LOUNGE
10. LIBRARY



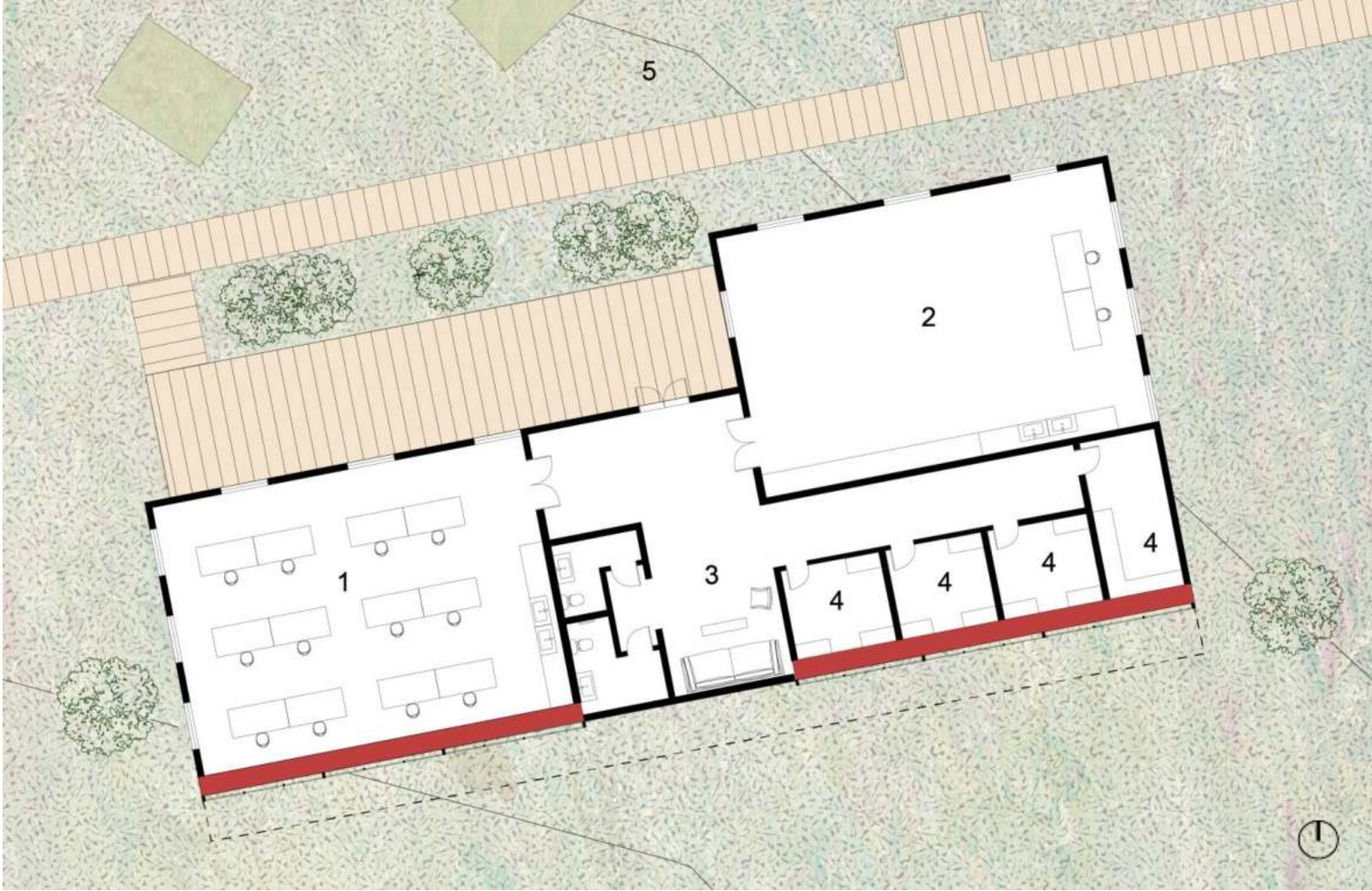


GROUND FLOOR PLAN

LABORATORY

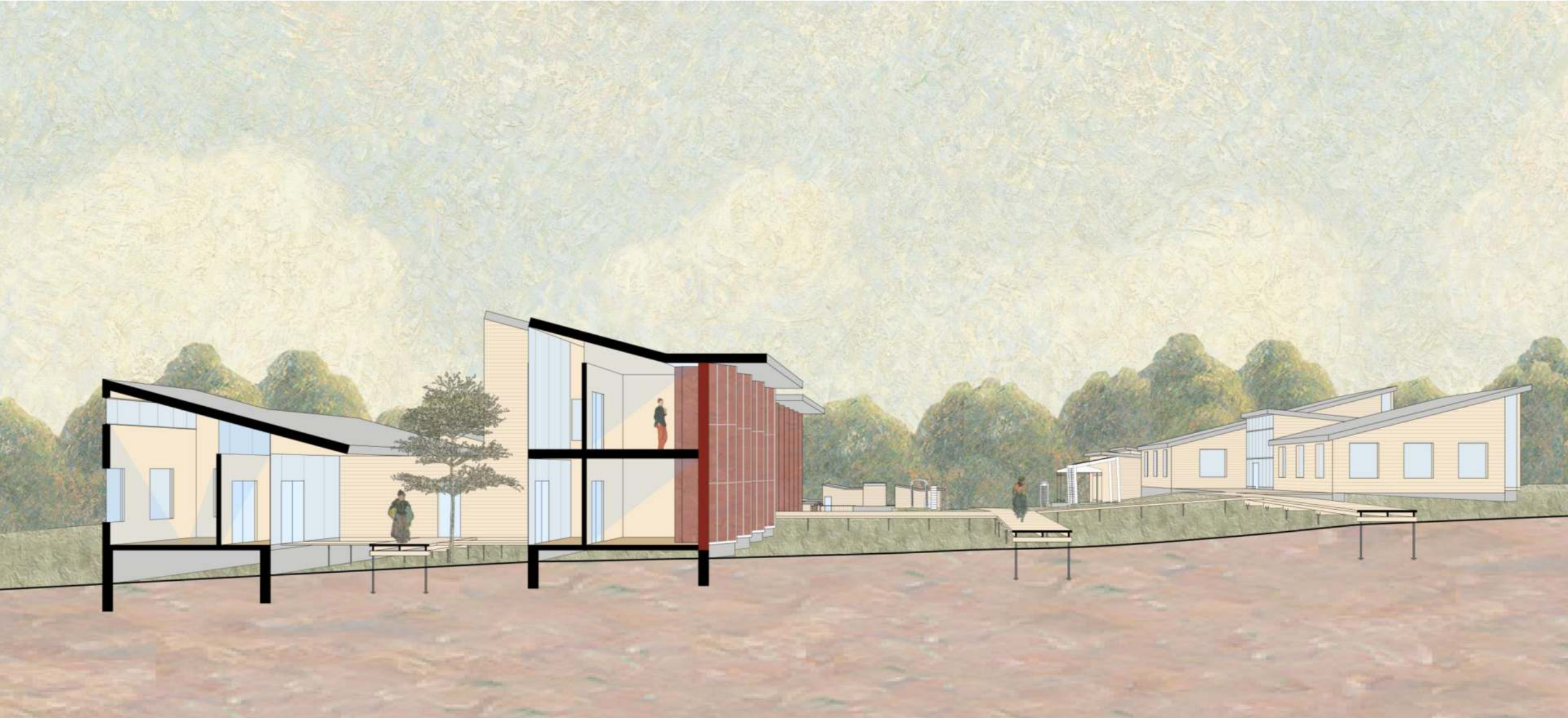


- 1. LABORATORY
- 2. PROTOTYPING AREA
- 3. LOUNGE
- 4. MACHINE ROOM
- 5. PROTOTYPING VILLAGE



CROSS SECTION

MULTI-PURPOSE, LIBRARY, LABORATORY



LOWER CAMPUS ELEVATION

DORMITORY

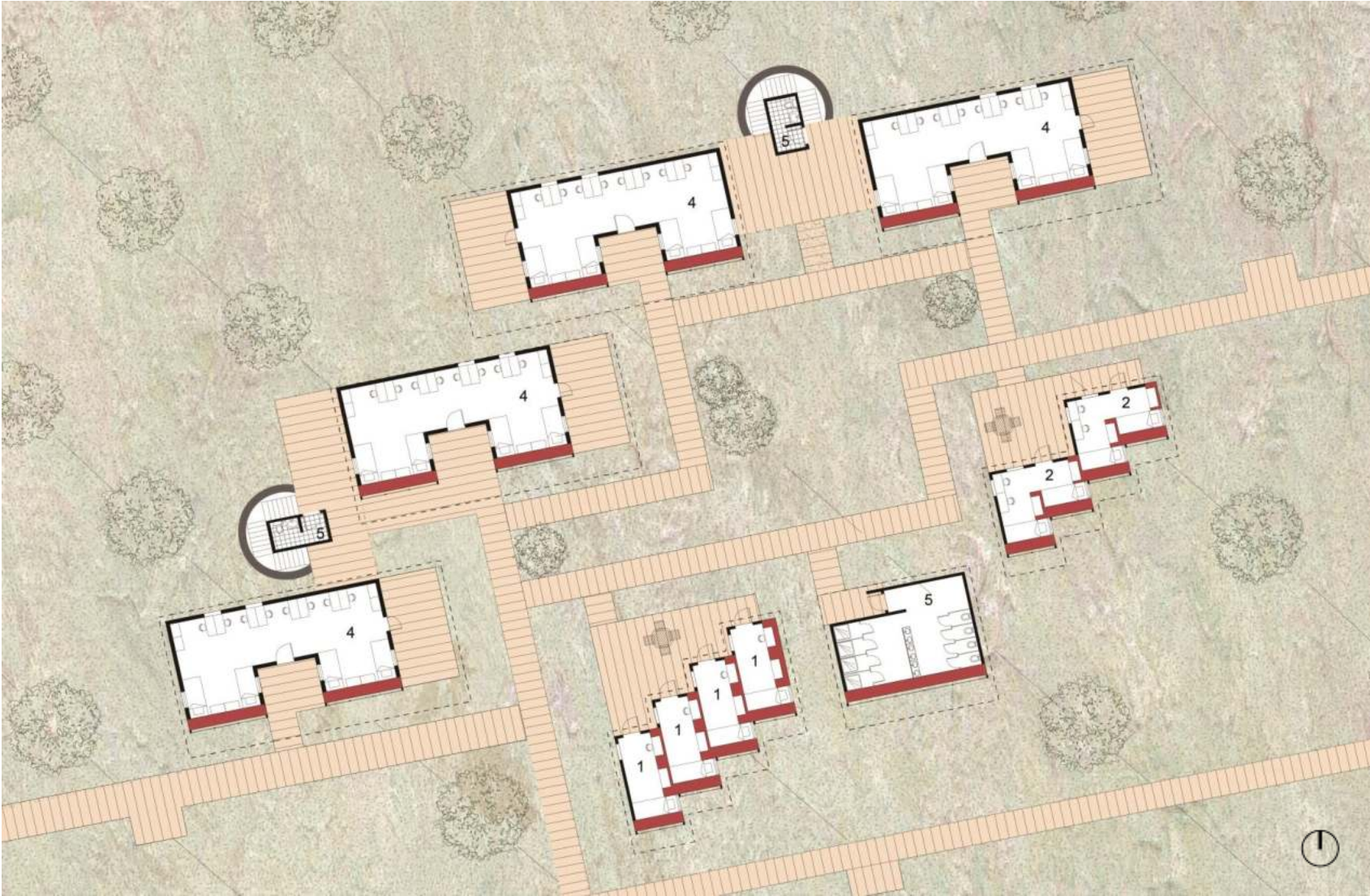


GROUND FLOOR PLAN

DORMITORY



- 1. SINGLE ROOM
- 2. DOUBLE ROOM
- 3. 6 BEDS
- 4. 8 BEDS
- 5. BATHROOM
- 6. SUNROOM

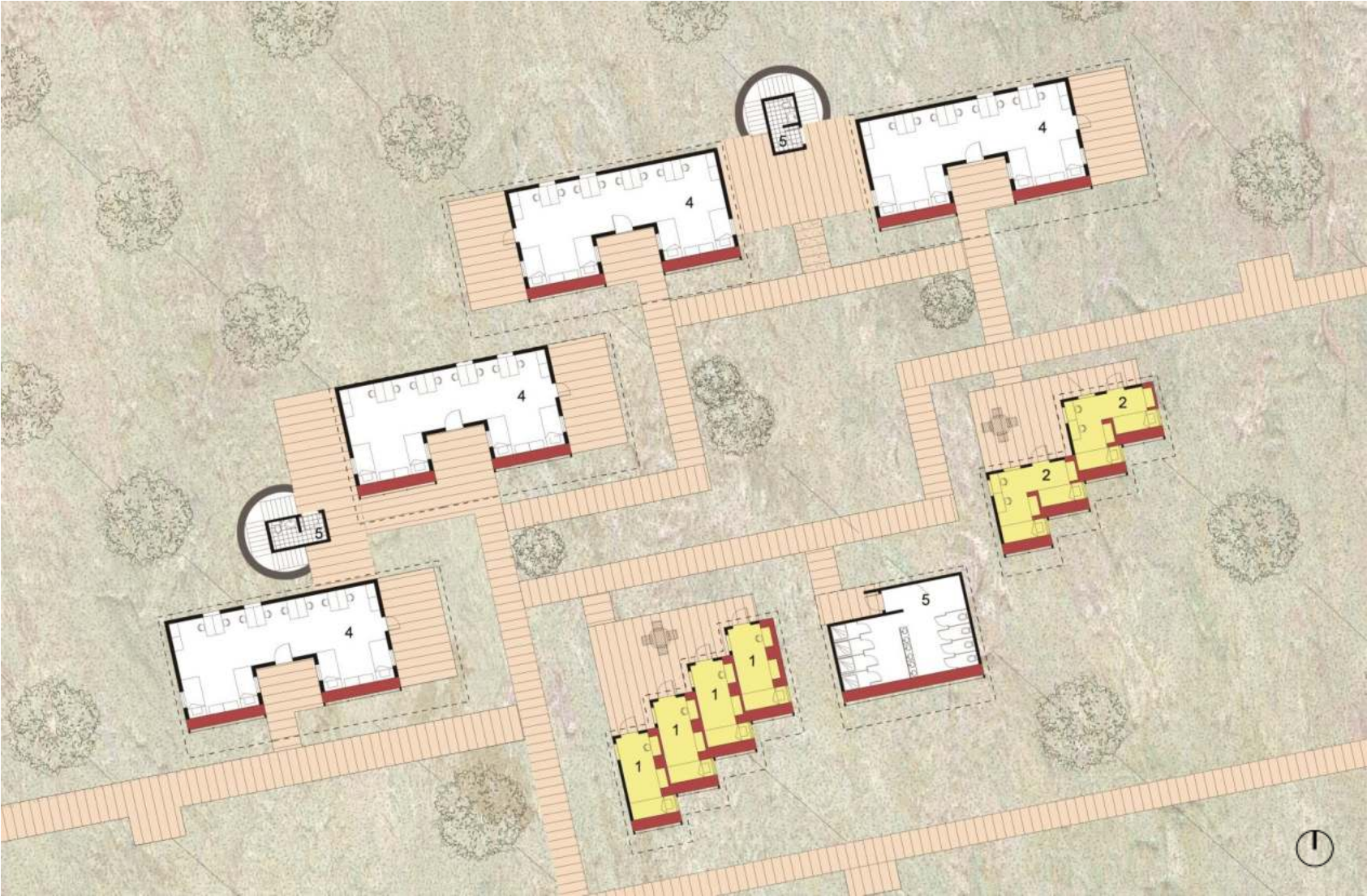


GROUND FLOOR PLAN

DORMITORY



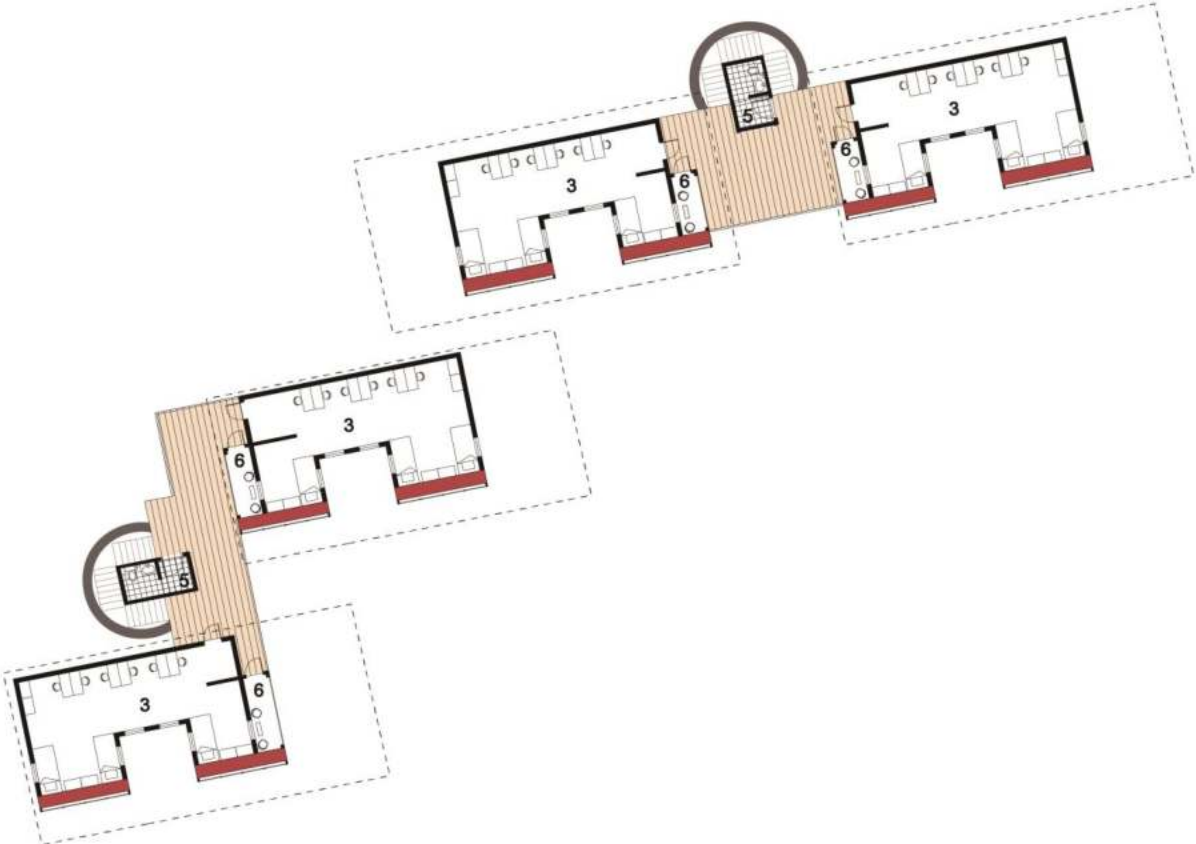
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SECOND FLOOR PLAN

DORMITORY

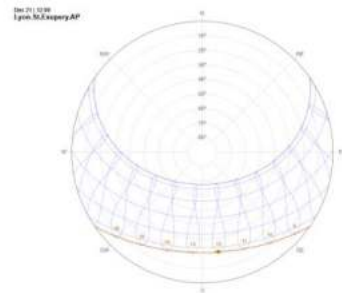
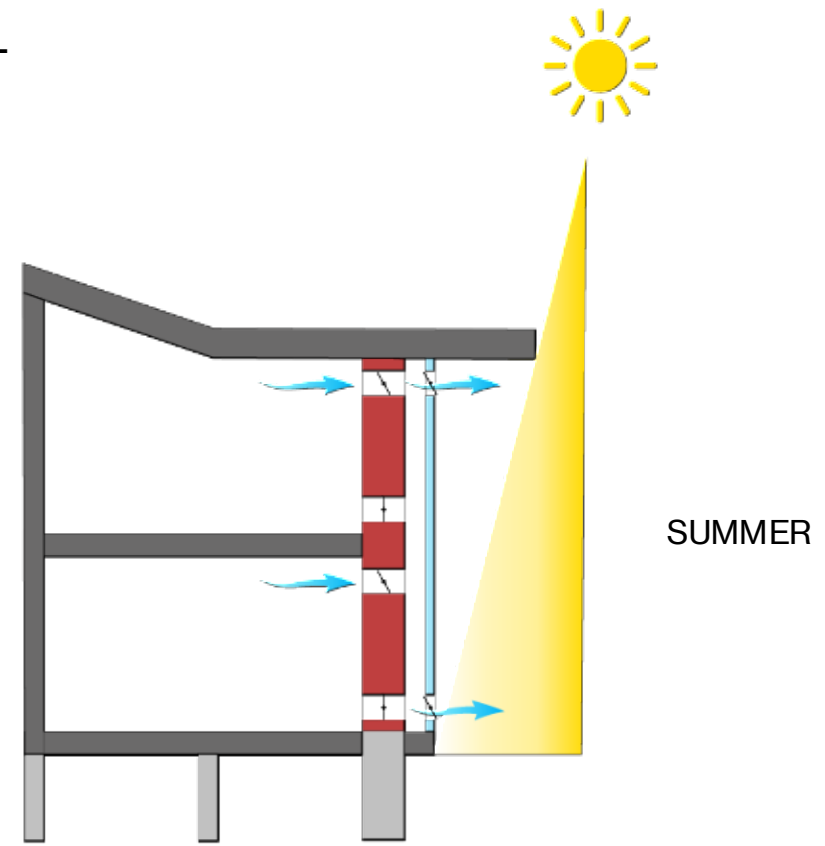
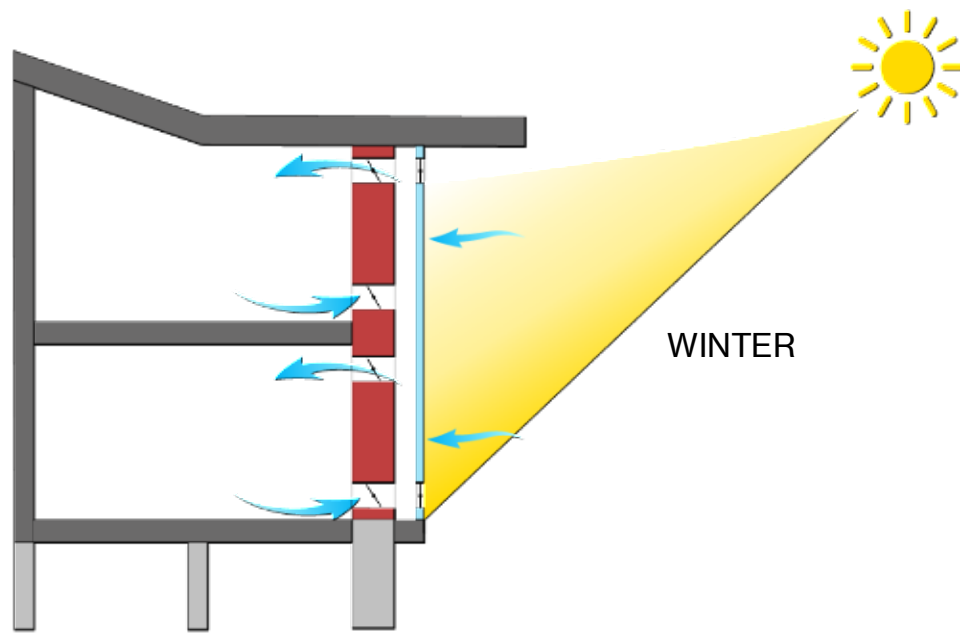
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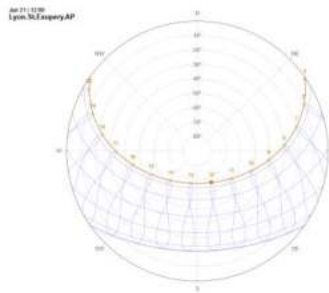
CROSS SECTION



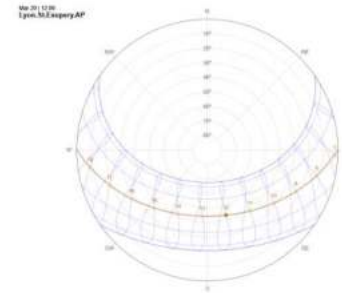
TROMBE WALL



SUMMER SOLSTICE



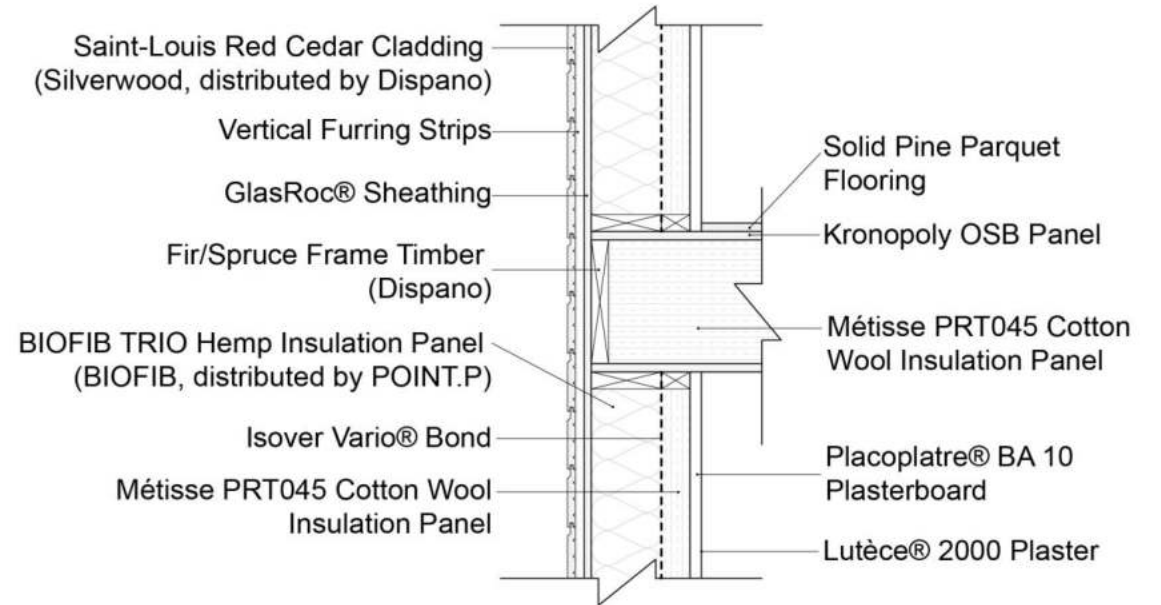
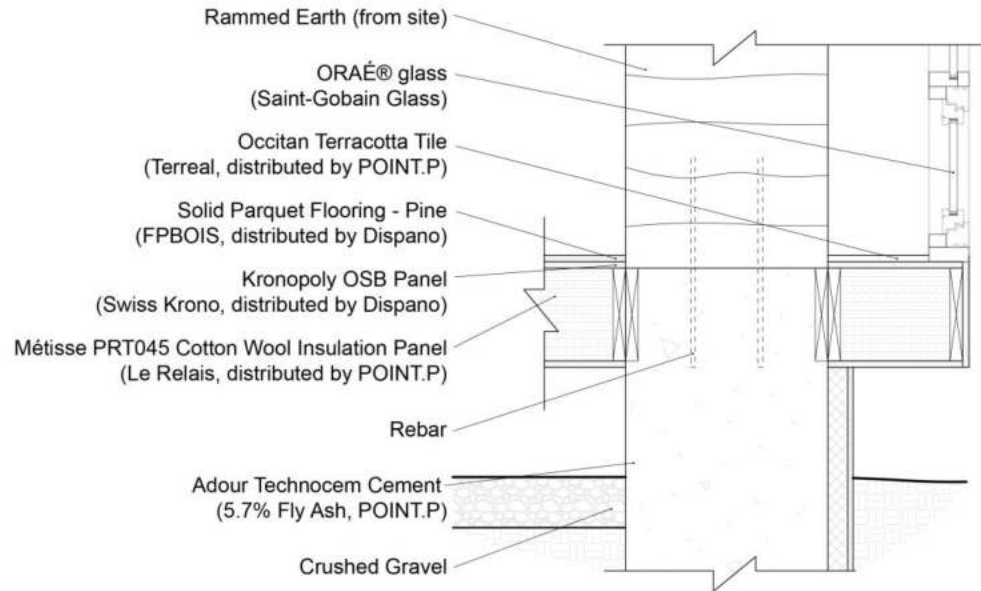
WINTER SOLSTICE



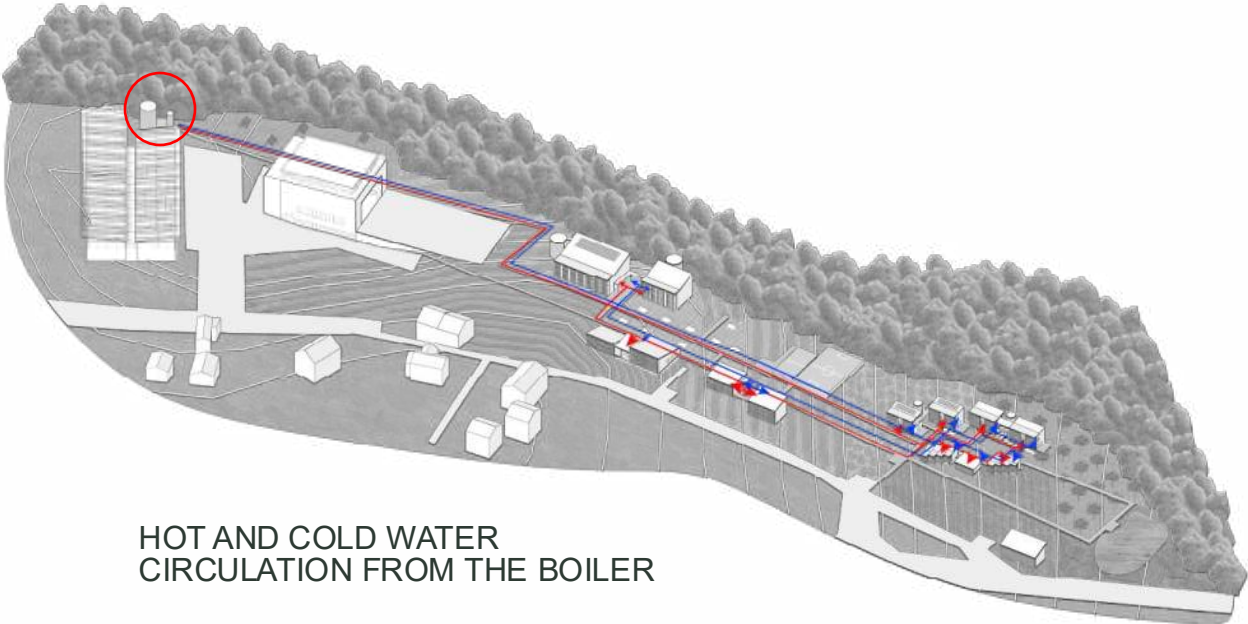
VERNAL EQUINOX

WALL SECTION DETAILS

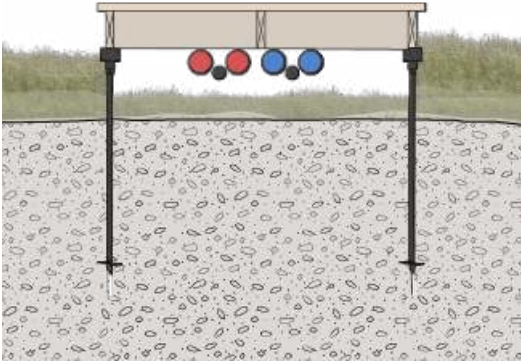
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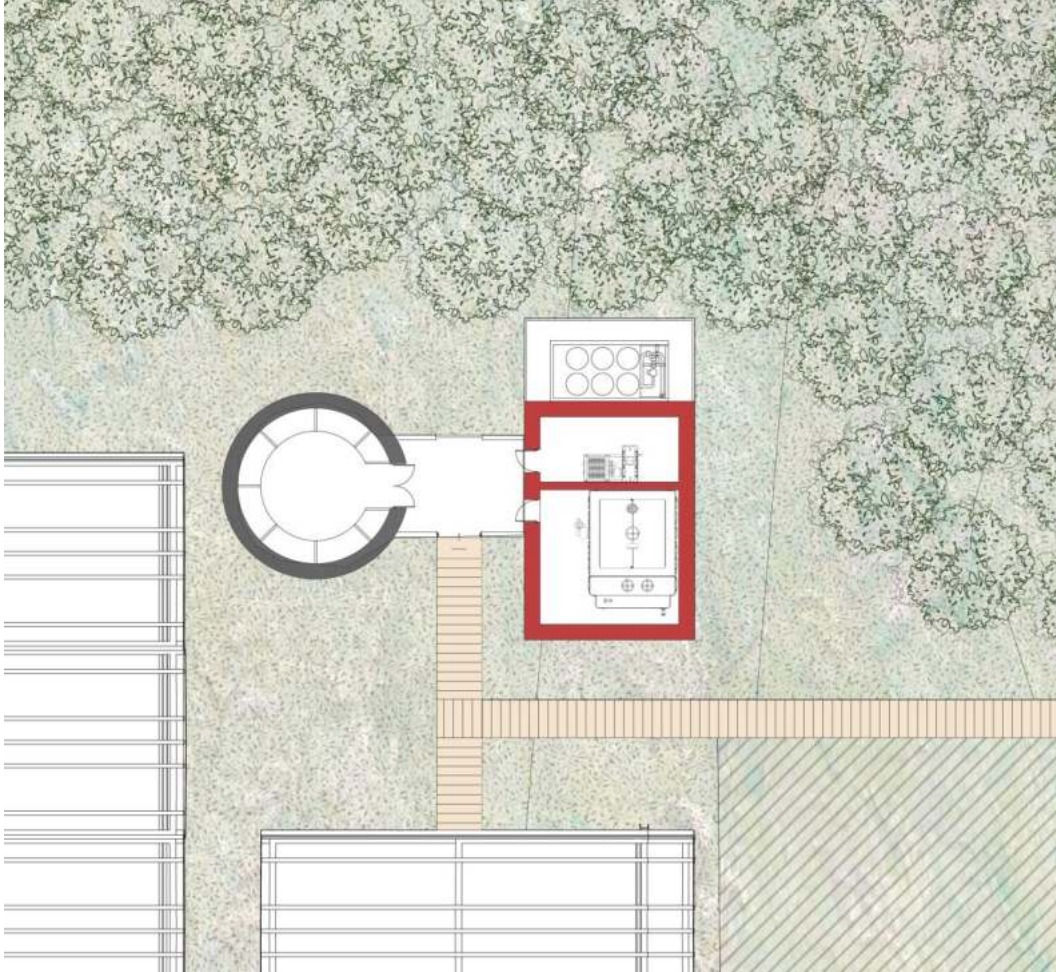
UTILITY DISTRIBUTION



HOT AND COLD WATER CIRCULATION FROM THE BOILER

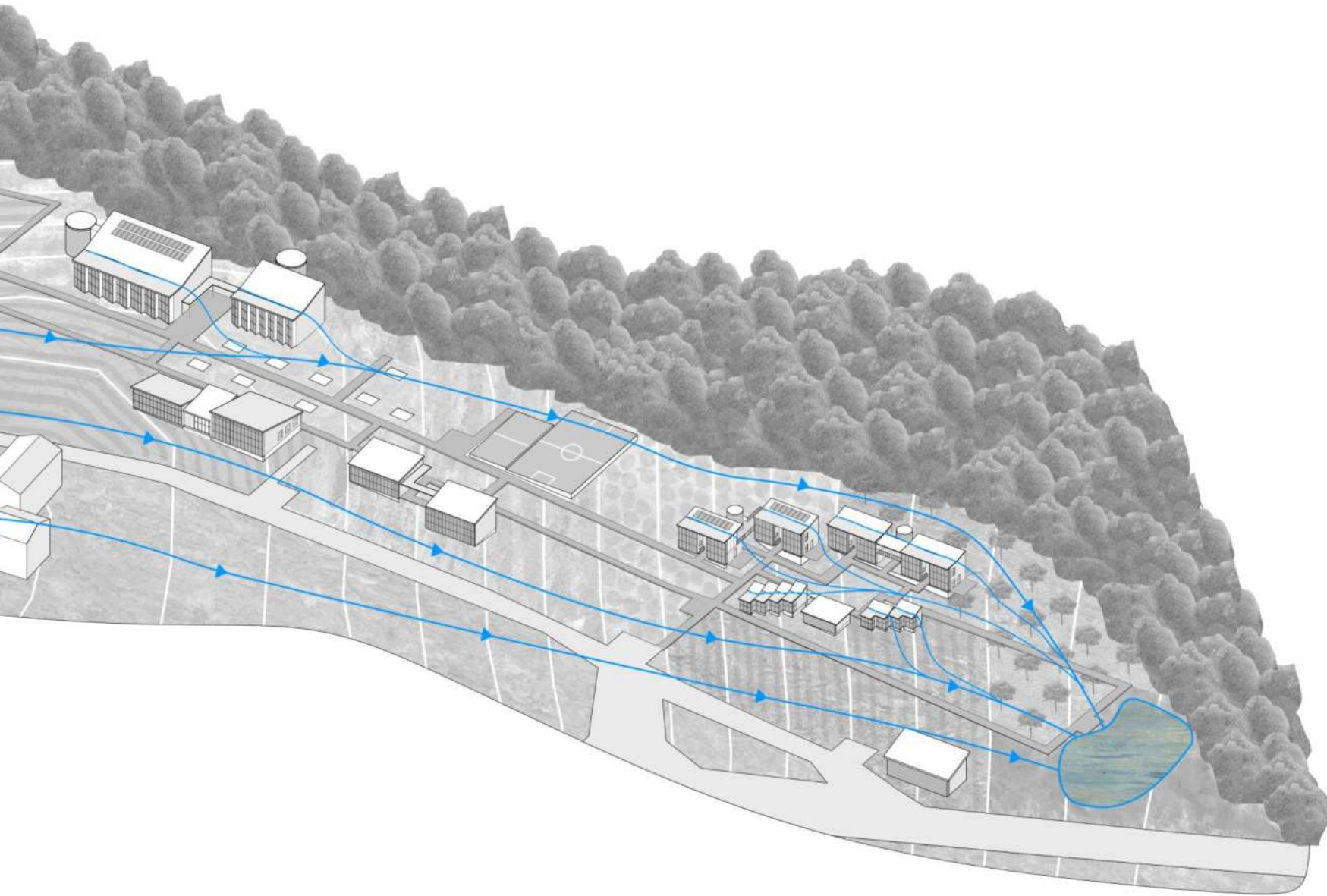


EASY ACCESS TO WATER AND ELECTRICAL UNDER BOARD WALK



BOILER ROOM PLAN

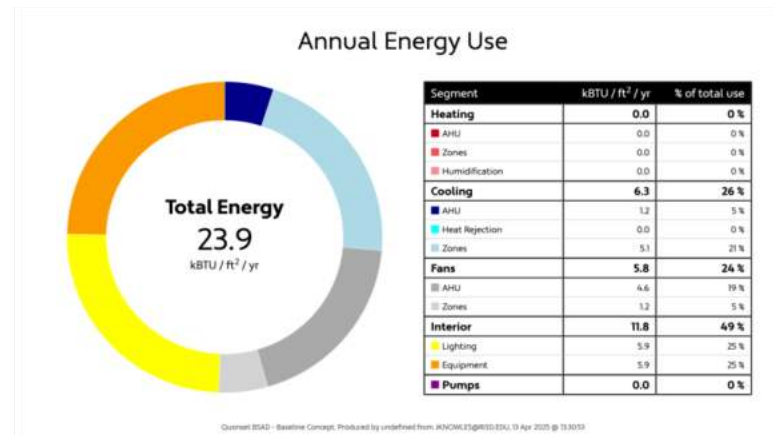
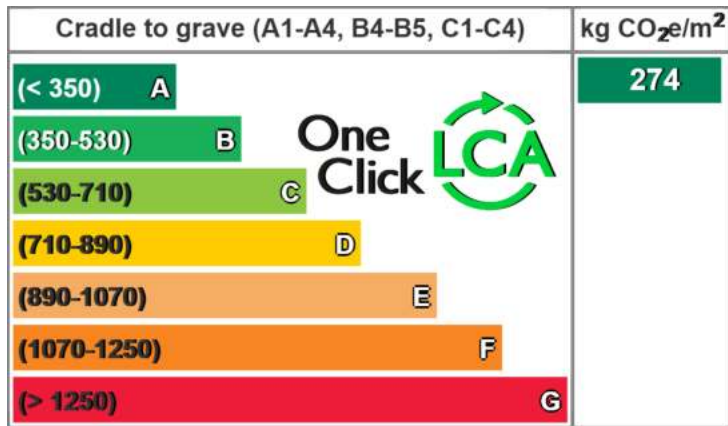
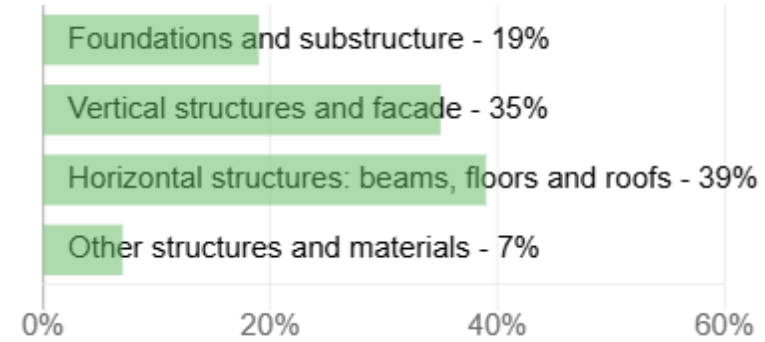
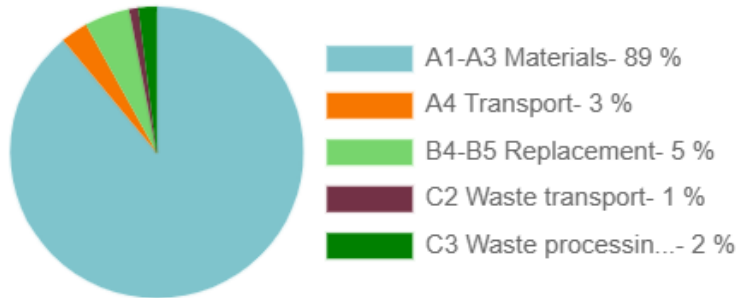
STORM WATER SYSTEM



ON CONTOUR PLANTED SWALES
PREVENT EROSION

RAIN WATER COLLECTS IN
RETENTION POND FOR
IRRIGATION

ENERGY EFFICIENCY & LIFE CYCLE ASSESSMENT



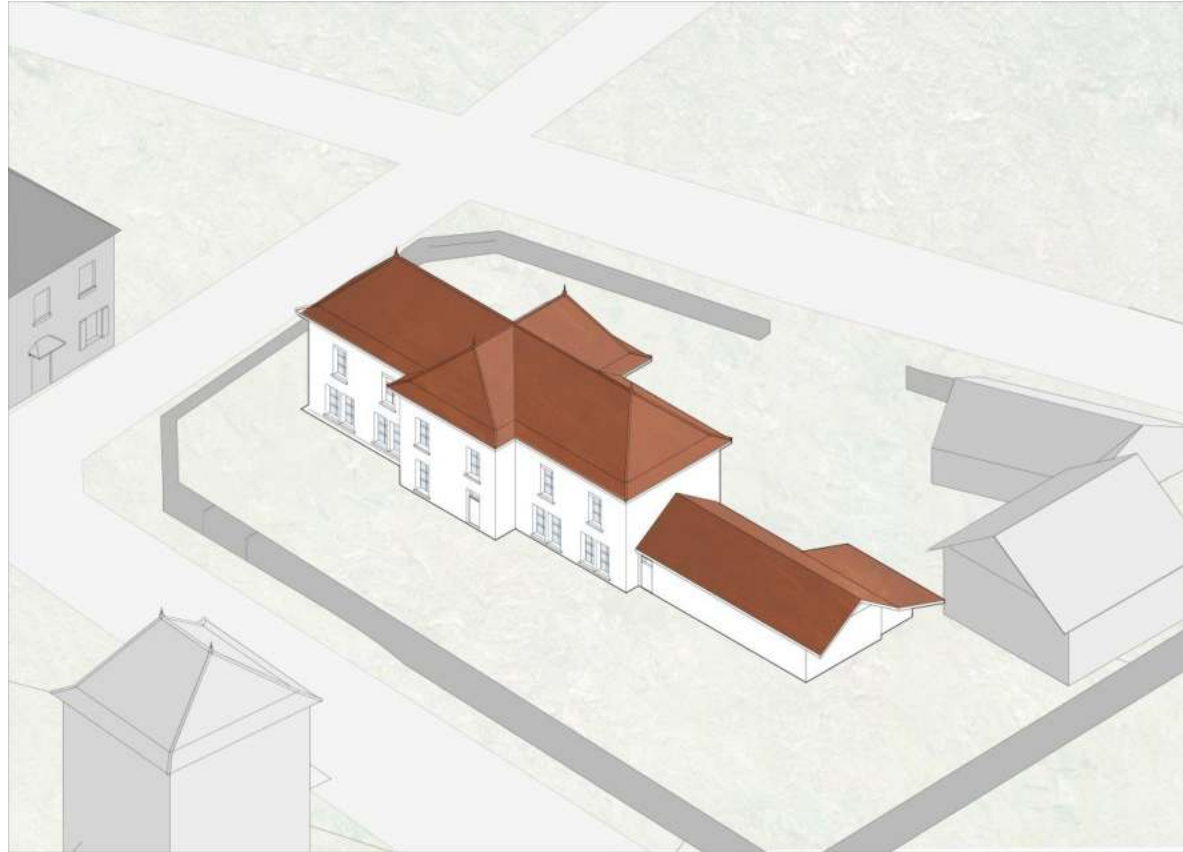
BASED ON THE TWO STORY DORM BUILDING, BY ADDING A SOLAR ARRAY WITH AN AVERAGE AREA OF 4m² PER BUILDING, WE ACHIEVE AN EUI OF 0.

CHIMILIN RENOVATION



AXONOMETRIC VIEW

RENOVATION

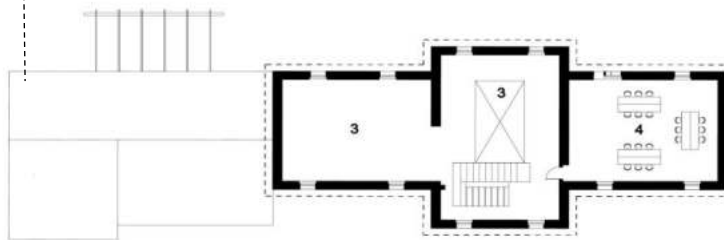
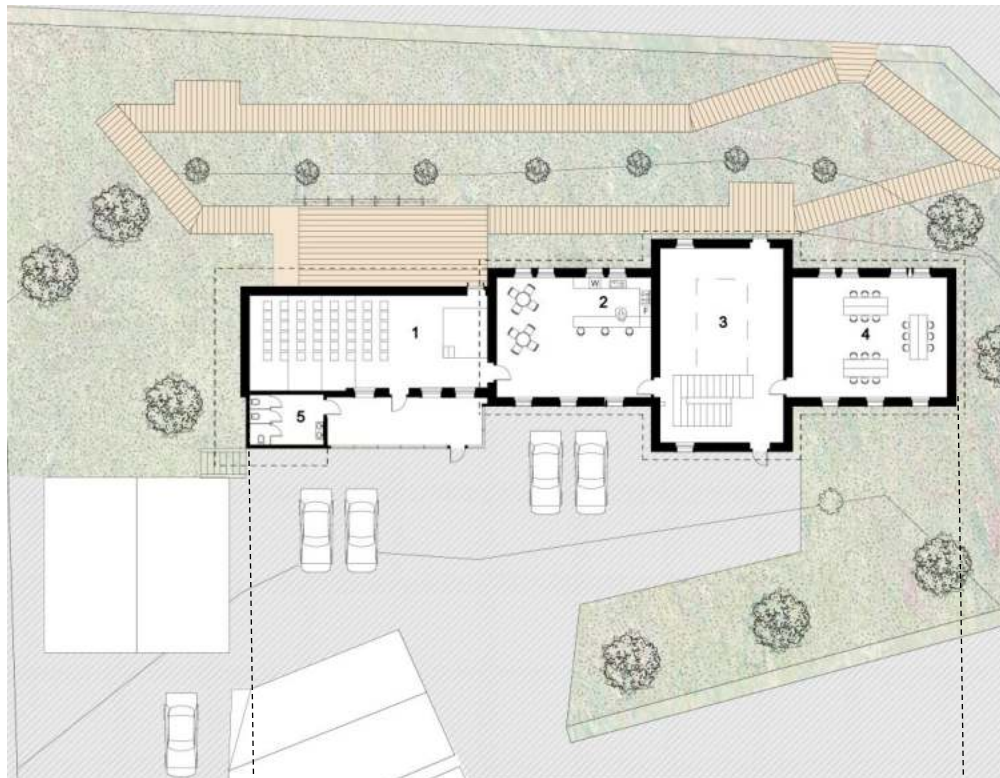


APPROACH: CONTINUE DIALOGUE BETWEEN HEAVY AND LIGHT BY EXPOSING INTERIOR FRAMING, RAISING ROOF FOR COMMUNITY CENTER AUDITORIUM AND INCREASE STREET ACCESS THROUGH FLOATING BOARDWALK.

GROUND & SECOND FLOOR PLAN

RENOVATION

- 1. AUDITORIUM
- 2. CAFÉ
- 3. GALLERY
- 4. MEETING ROOM
- 5. BATHROOM



SECTION

RENOVATION

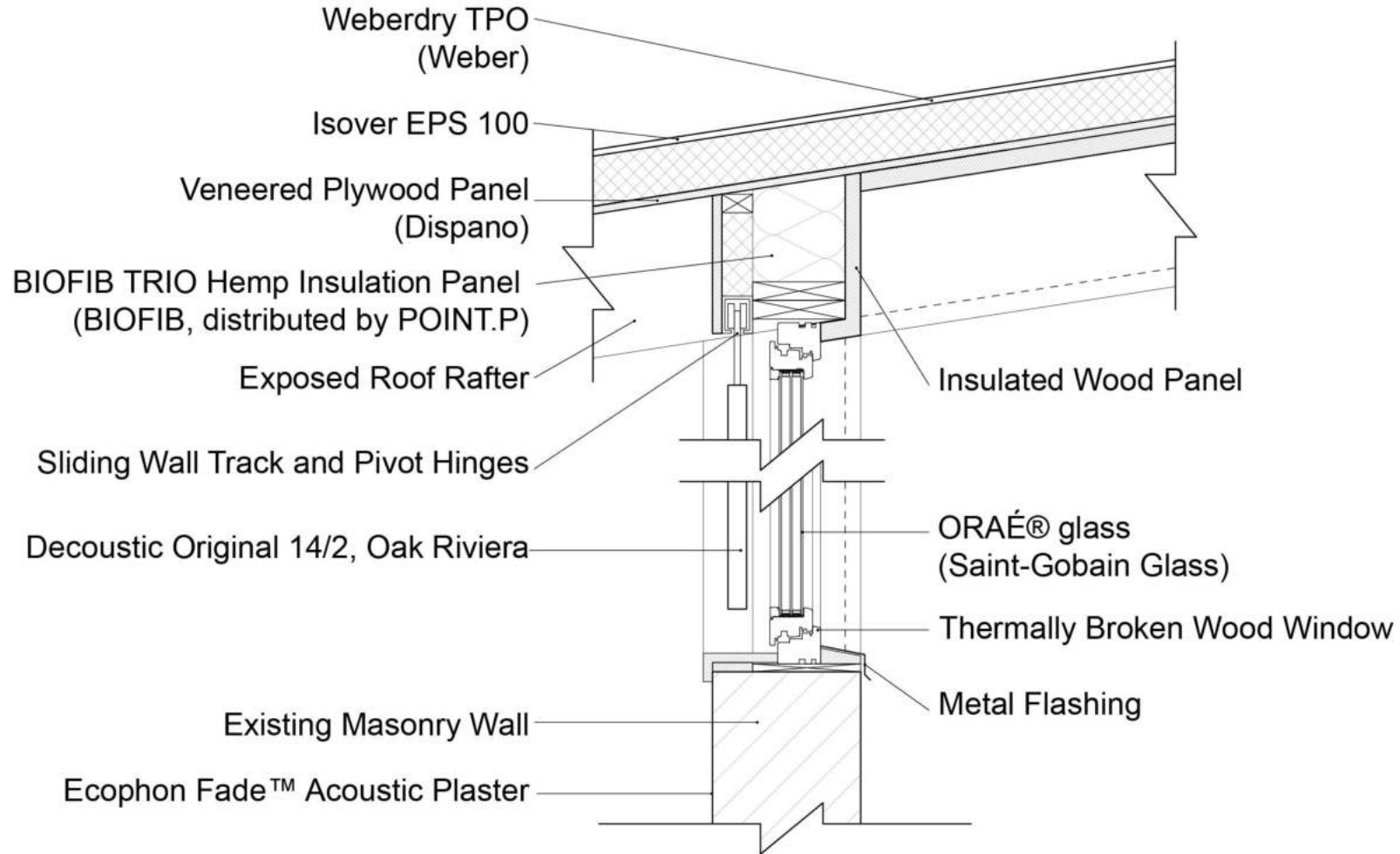
Remove ceiling to expose existing lightweight framing.

Raise roof with new lightweight framing system.

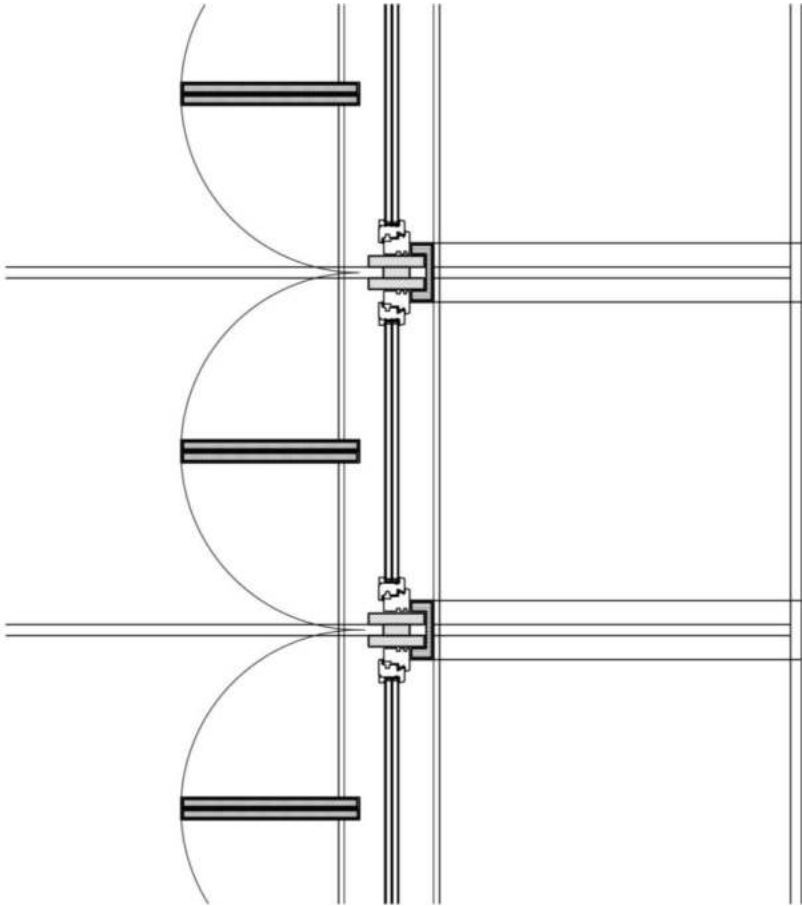


WALL SECTION DETAILS

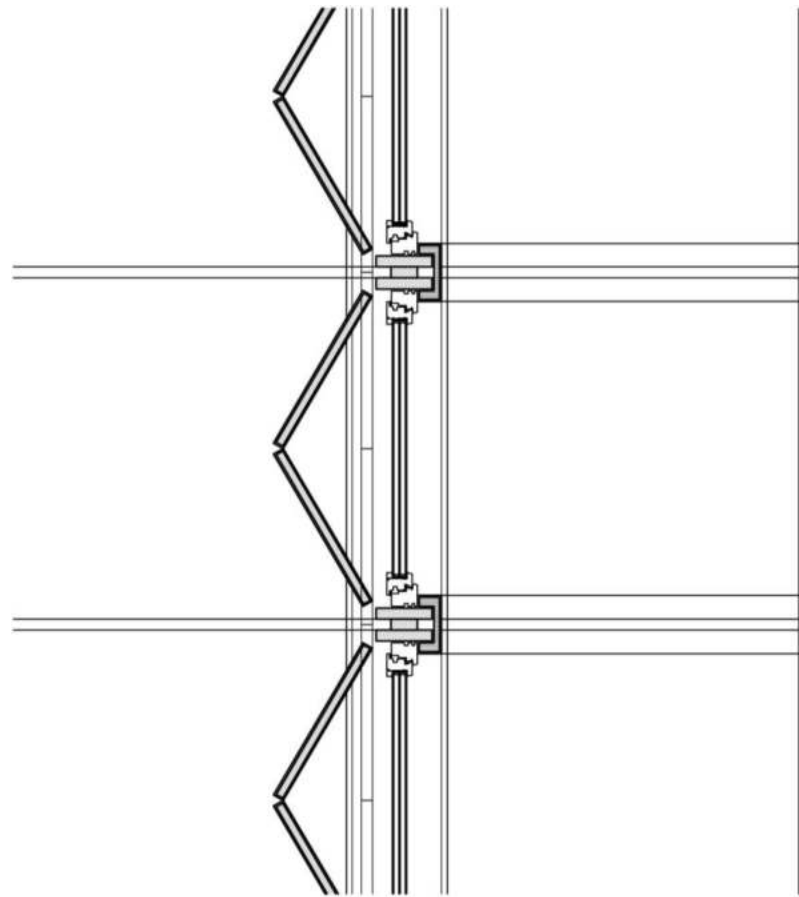
RENOVATION



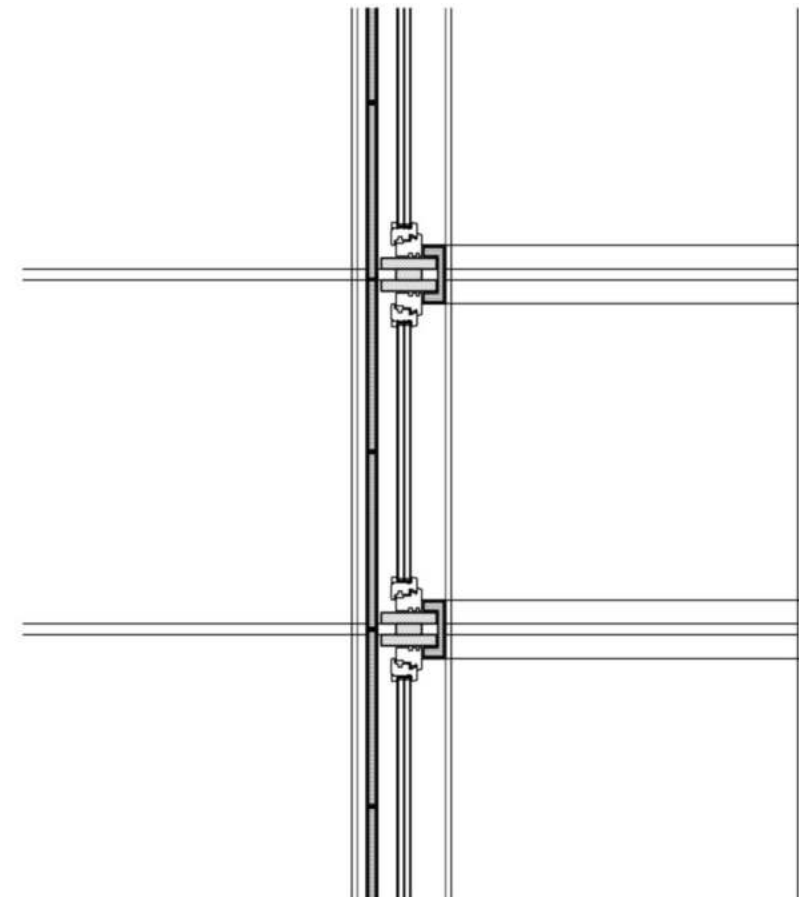
AUDITORIUM ACOUSTIC & LIGHTING SHUTTERS OPERATION



OPEN



HALFWAY



CLOSED



THANK YOU!

