2022 MERIT

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LYCEUM

A traveling fellowship in Architecture

A PORTAL AND TWO WALLS

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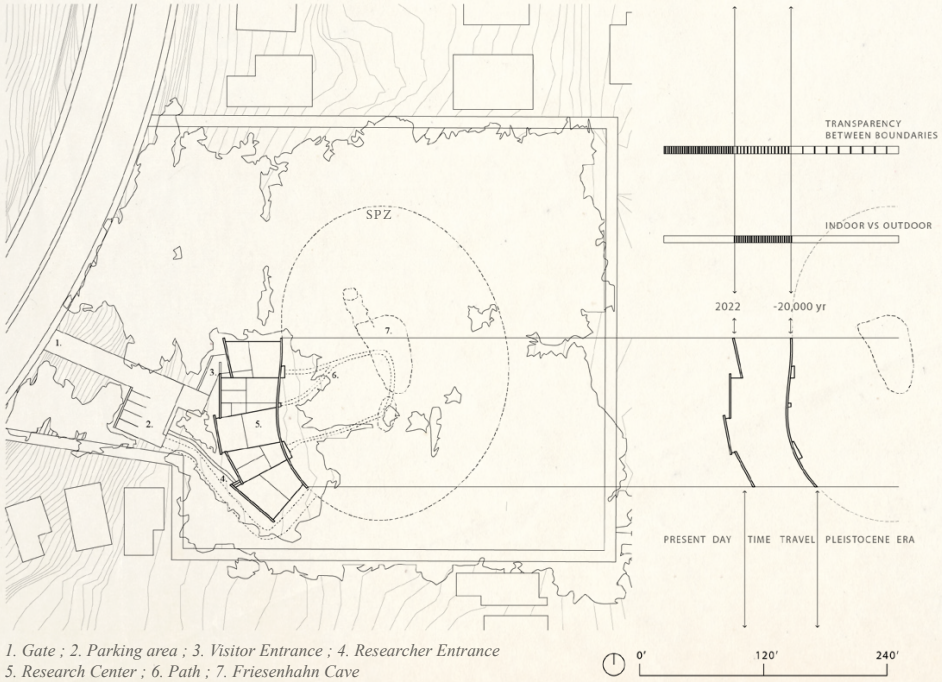
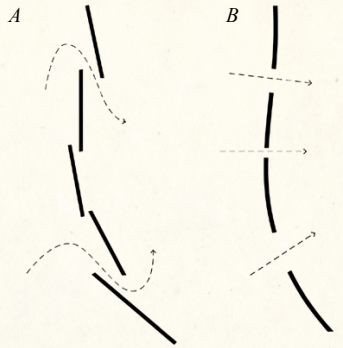
It is no coincidence the oldest mysteries stay preserved because of their ability to stay hidden. Overlooked by the common eye, they wait for the time when stars align such that by chance they are uncovered by an unexpecting traveler. This is the first discovery.
The journey back is more meticulous, since objects found along the way are marked as milestones. One miscue and the opportunity to return vanishes.
A Portal And Two Walls is inspired by this journey, using sequence as the primary driver in its design. Its markers, two walls that form boundaries between the modern suburban sprawl and the deep time of the cave, are placed in reference to the site conditions. One wall reacts to the site condition of the Subterranean Preservation Zone (SPZ), while the other closes the building from the street side. The programs are placed between the walls, allowing the building to become part of the journey from the arrival to Friesenhahn Cave.



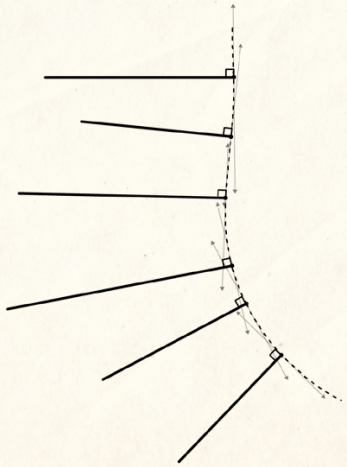
1. Gate ; 2. Parking area ; 3. Visitor Entrance ; 4. Researcher Entrance
5. Research Center ; 6. Path ; 7. Friesenhahn Cave

Upon arrival of the gate, the street-side of the building is absent of a clear entry. Visitors are encouraged to appraoch it further, where with closer inspection one will find the path to a new dimension.

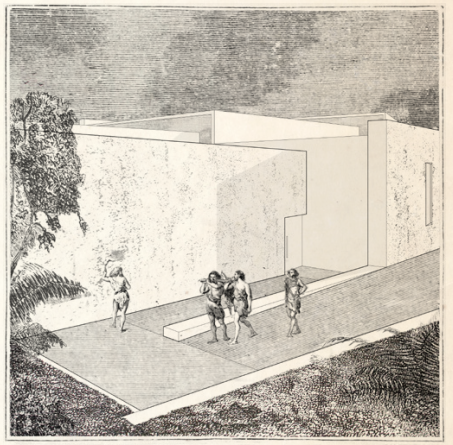
1. Drop-off ; 2. Main Entrance ; 3. Lobby ; 4. Classroom ; 5. Public restroom ; 6. Utilities ; 7. Offices ; 8. Library ; 9. Storage ; 10. Archive ; 11. Lab ; 12. Washing Stations ; 13. Field-house ; 14. Friesenhahn Cave



Primary exterior walls control movement across the boundary.
A: Entry is defined by secrecy, thus the user must walk around.
B. Once inside, the building-cave transition is fluid.



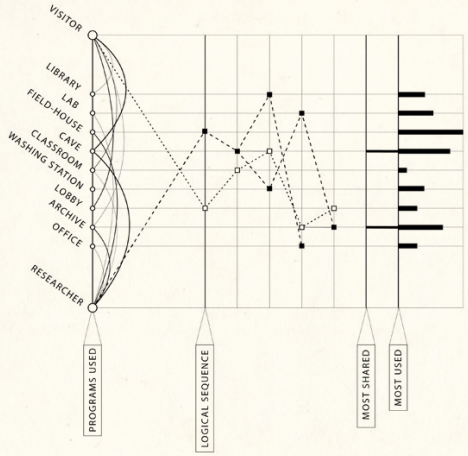
Secondary interior walls are organized along the Normal Line (the perpendicular lines to the tangency of the SPZ boundary)

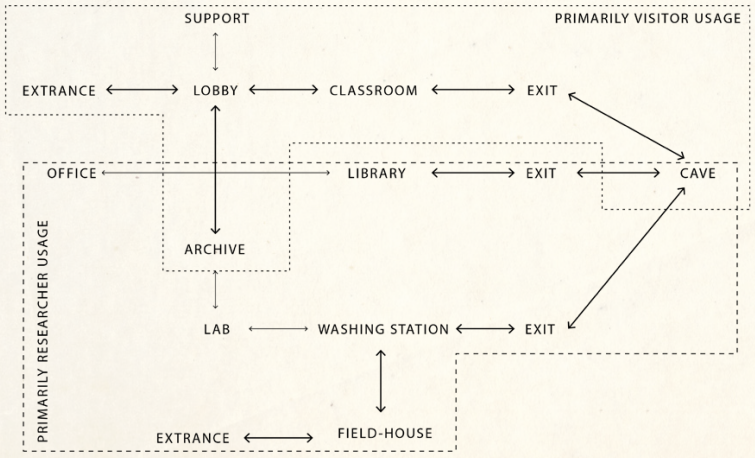


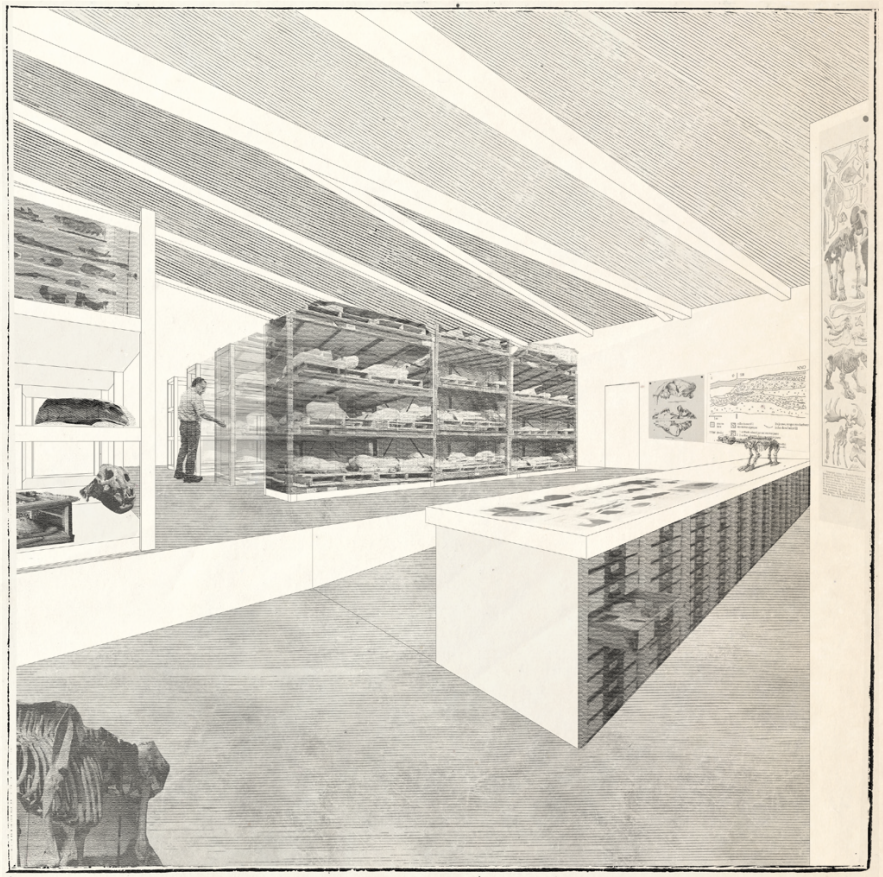
Main Entrance: Descent into the earth mimics the prehistoric entry into Friesenhahn Cave. Limestone materiality symbolizes reversal of time.

Interior walls are "cut-away" to allow movement between rooms. (bristol board study model shows openings in interior walls)

To determine program locations, likely sequences of activities were outlined depending on the user (visitor/ researcher). Commonly shared programs were made most accessible in the building, while programs used by only one group, for example, the field-house, were placed near the edge. The sequence between programs also intends to elevate the user's experience, at times becoming inherent to the cave's path as if a ritual when moving from one space to the next.



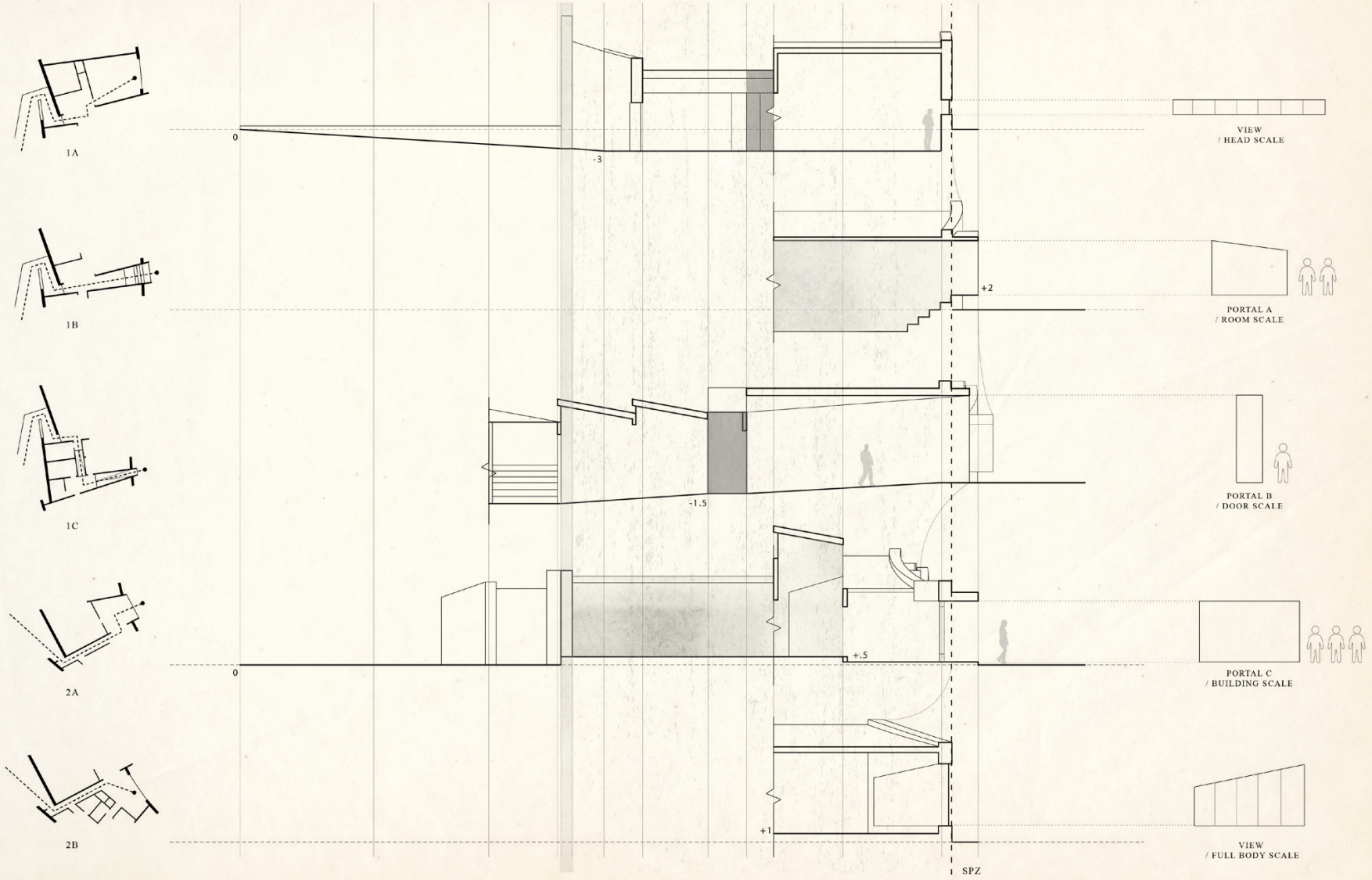




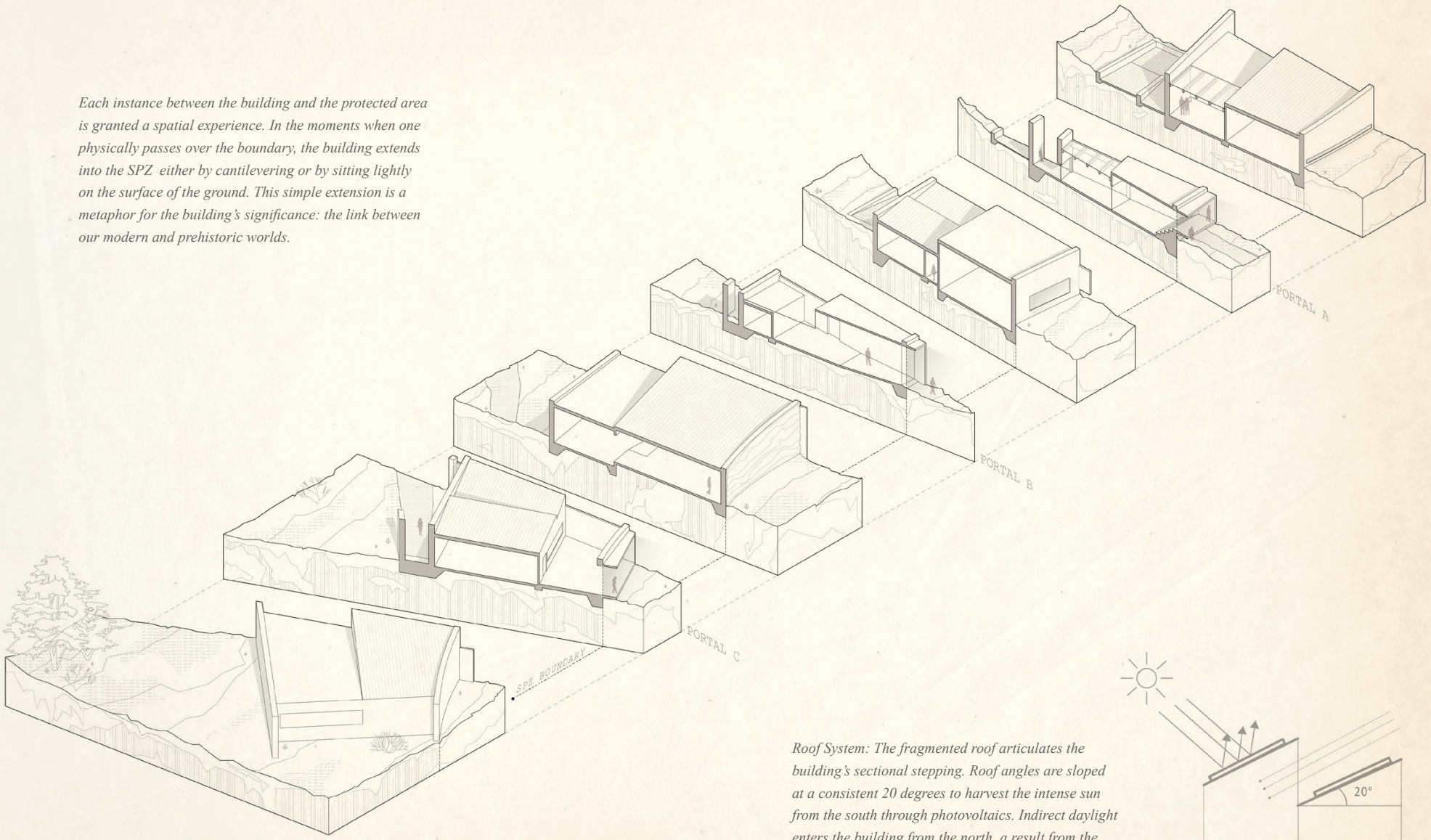
The Archive acts as the primary shared program between the visitors and researchers and therefore is located at the center of the building.

UNFOLDED SEQUENTIAL SECTION

Various routes are defined not only by program but by the architecture. Instances where walls tighten, the ceiling rises, and a sudden expansiveness from the ensuing space resembles the feelings of cave exploration.

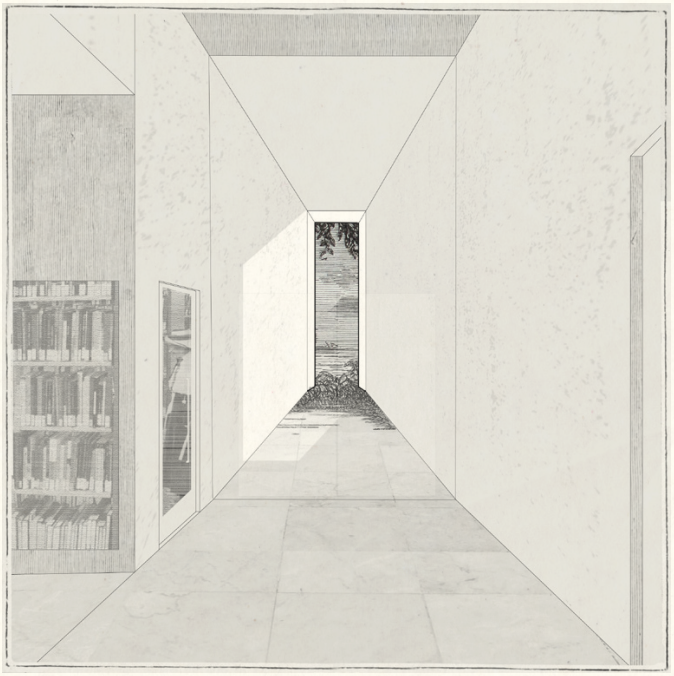


Each instance between the building and the protected area is granted a spatial experience. In the moments when one physically passes over the boundary, the building extends into the SPZ either by cantilevering or by sitting lightly on the surface of the ground. This simple extension is a metaphor for the building's significance: the link between our modern and prehistoric worlds.

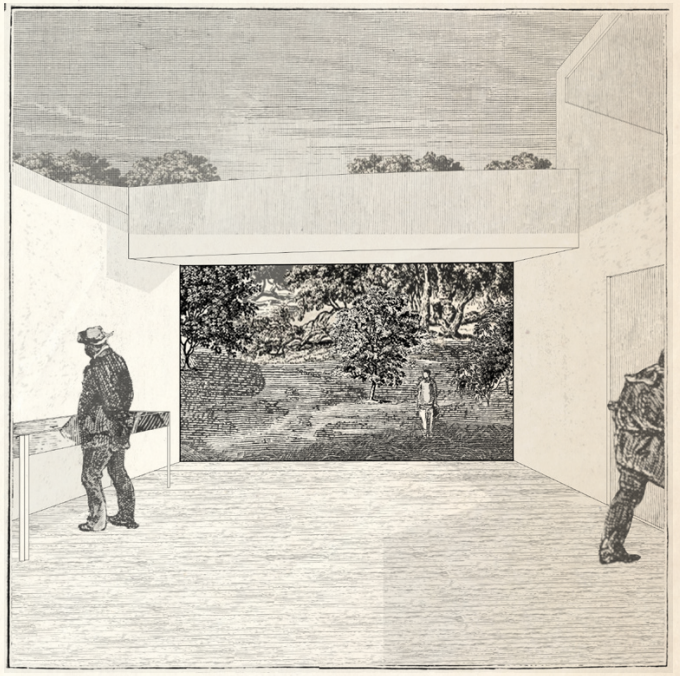


Roof System: The fragmented roof articulates the building's sectional stepping. Roof angles are sloped at a consistent 20 degrees to harvest the intense sun from the south through photovoltaics. Indirect daylight enters the building from the north, a result from the stepping quality.

View of Portal A, through the skylight lobby.

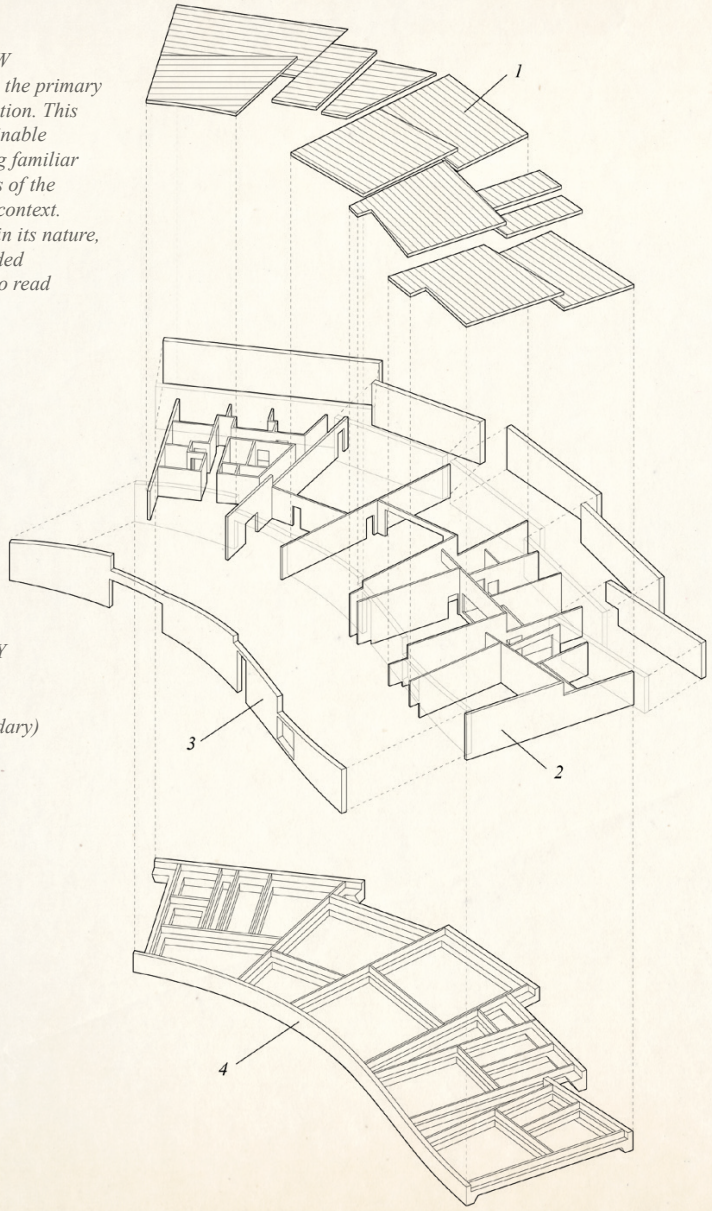


View of Portal B, adjacent to the library and archive rooms.



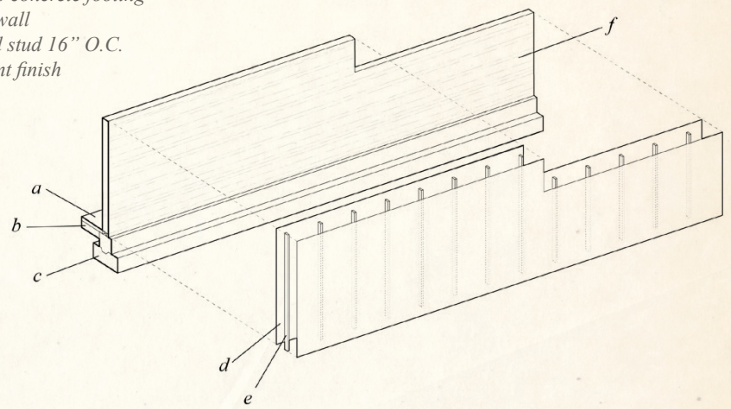
View of Portal C, joined with the open-air washing area.

MATERIAL OVERVIEW
Wood framing becomes the primary tectonic in the construction. This choice maintains sustainable practice while reflecting familiar construction techniques of the surrounding suburban context. While wood feels light in its nature, exterior walls are cladded with limestone veneer to read heavy, connecting the building to the ground.

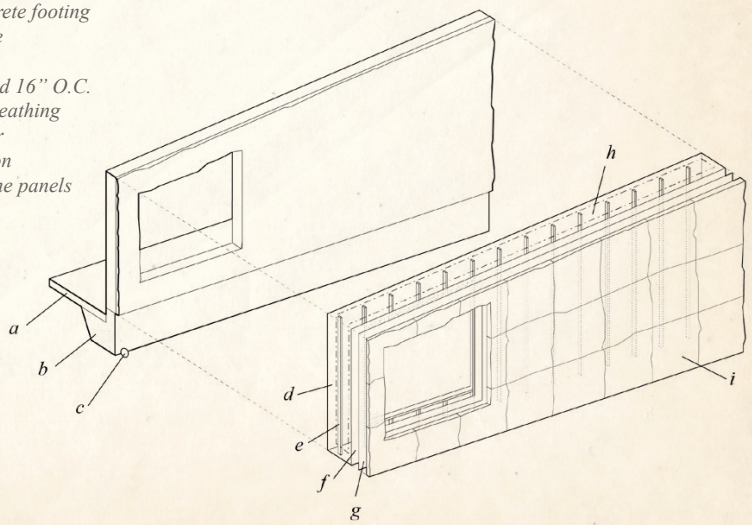


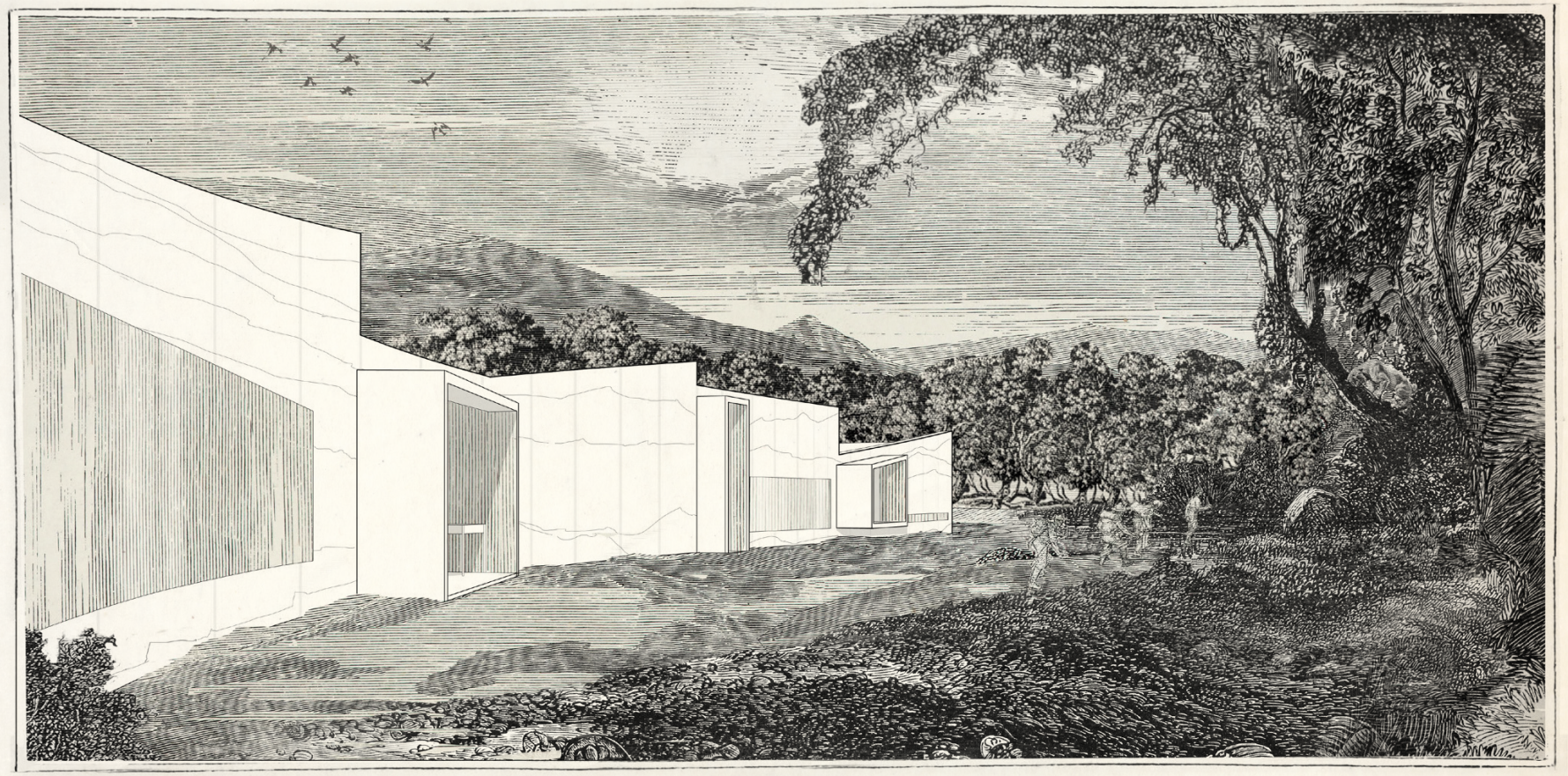
BUILDING ASSEMBLY
1. roof system
2. interior walls
3. exterior walls (boundary)
4. foundation

TYPICAL INTERIOR WALL ASSEMBLY
a. 2” precast concrete tiling
b. 4” concrete slab on grade
c. 2’6” deep concrete footing
d. 3/4” drywall
e. 2x4 wood stud 16” O.C.
f. white paint finish



TYPICAL EXTERIOR WALL ASSEMBLY
a. 4” slab on grade
b. 4’ deep concrete footing
c. 6” drain pipe
d. 3/4” drywall
e. 2x4 wood stud 16” O.C.
f. 3/4“ wood sheathing
g. water barrier
h. batt insulation
i. 4‘x4’ limestone panels





"Into the underland we have long placed that which we fear and wish to lose, and that which we love and wish to save" - Robert Macfarlane