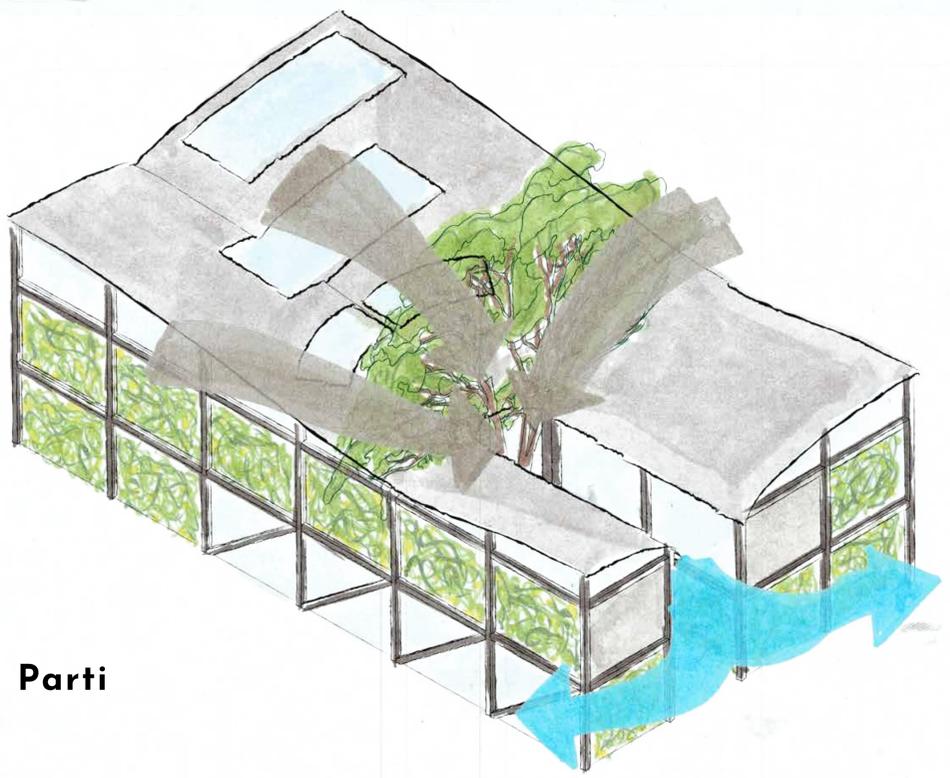




The Entryway

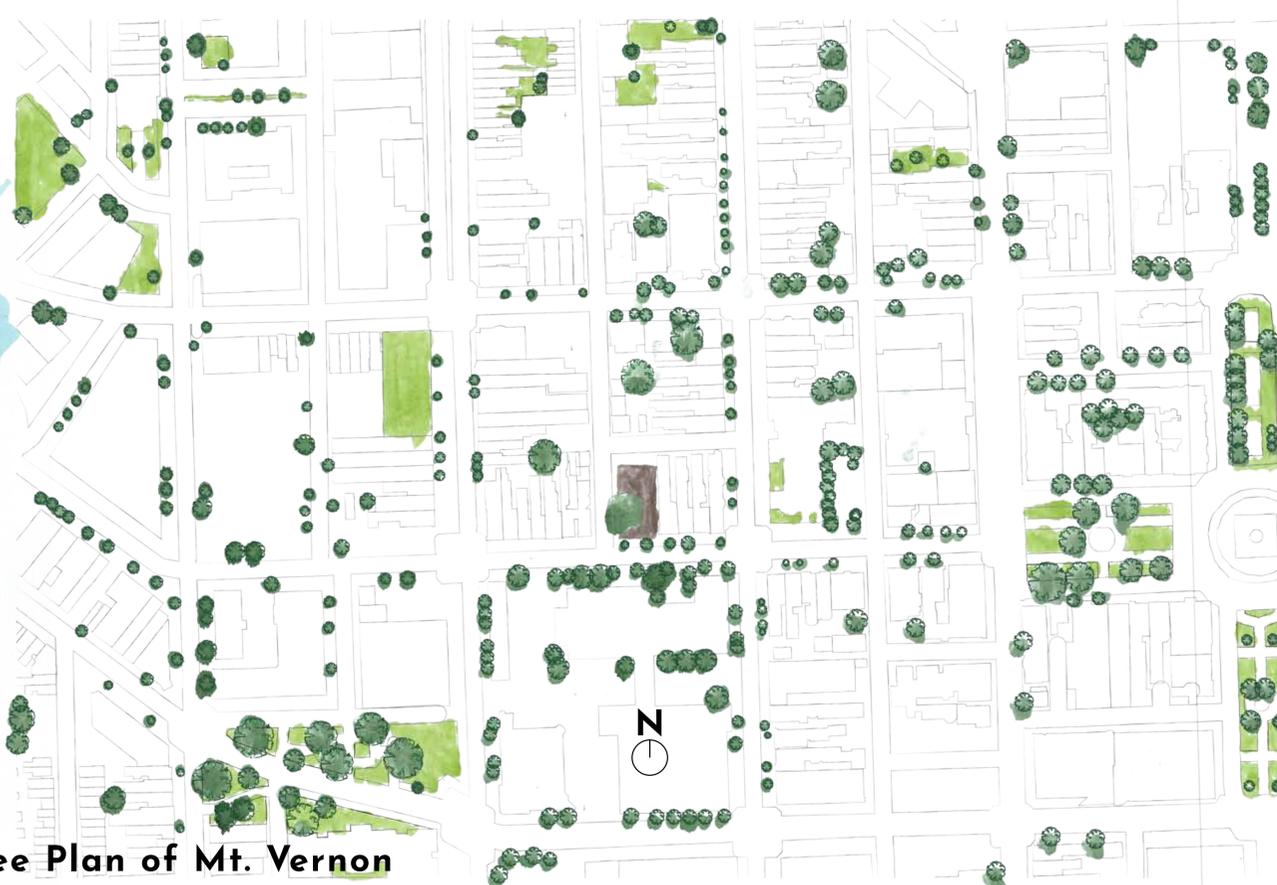


Though energy efficient and net-zero buildings are as important as ever, we are past the point where that is enough. In order to reach the carbon goals that we have set for 2030, we need to become net-positive; creating structures that pull carbon dioxide from the air. This is the idea that this building was formed from: A filter, a living, breathing building that cleans the city of Baltimore, and lets everyone else know that they need to do the same. When visitors are drawn into the entry by the sculptural art that can be seen from the street, a massive tree draws their eyes up towards the educational spaces. Once they have filtered through the exhibit, which will make them aware of the problem, they are already in the perfect location to learn about what they can do to fix it.

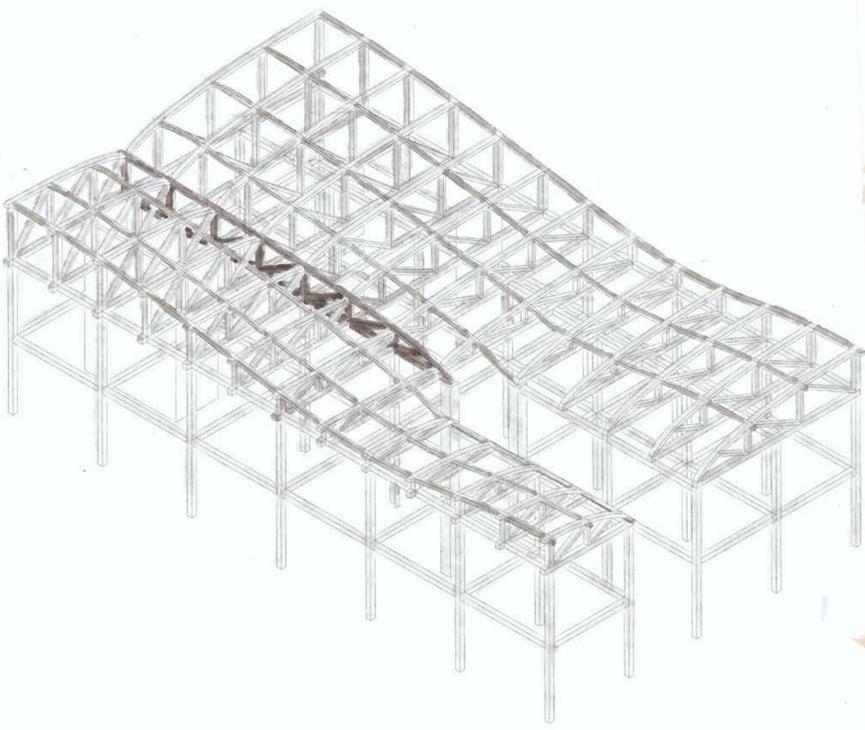


Parti

City Connection



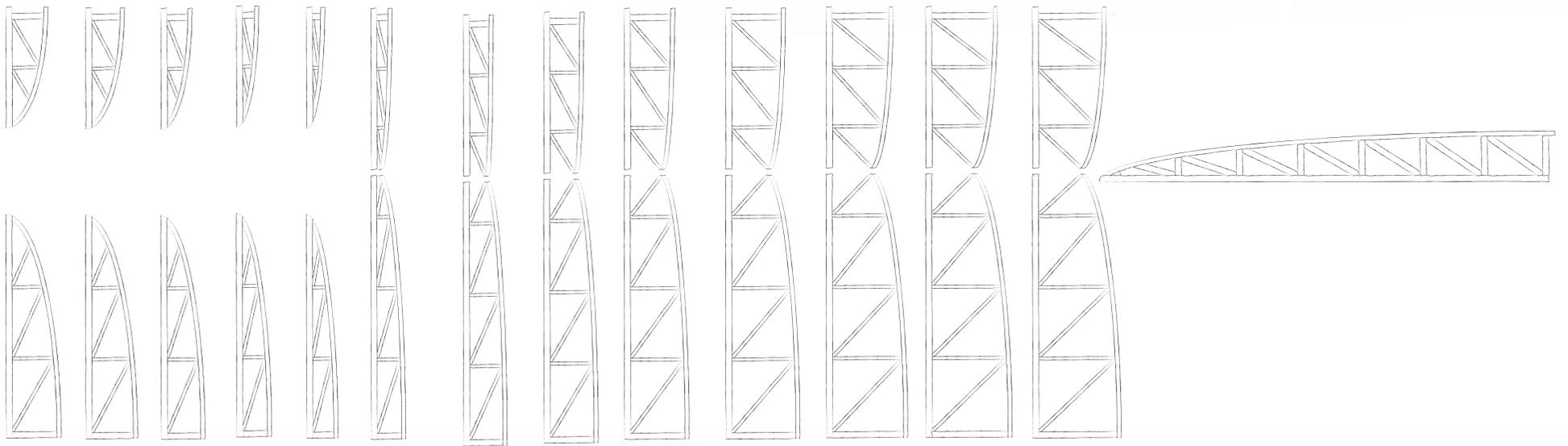
Tree Plan of Mt. Vernon



Shou Sugi Ban Treated Structure



2nd Floor View



Sustainable Systems

Filtration

Roof Form
Funnels water to the center of the building.

Central Tree
Water feeds into the tree, where it is filtered through the roots, aided by a mechanical system.

Green Walls
Trellis system covered in yellow jasmine serves as a shading device for the building while also absorbing carbon from the air.

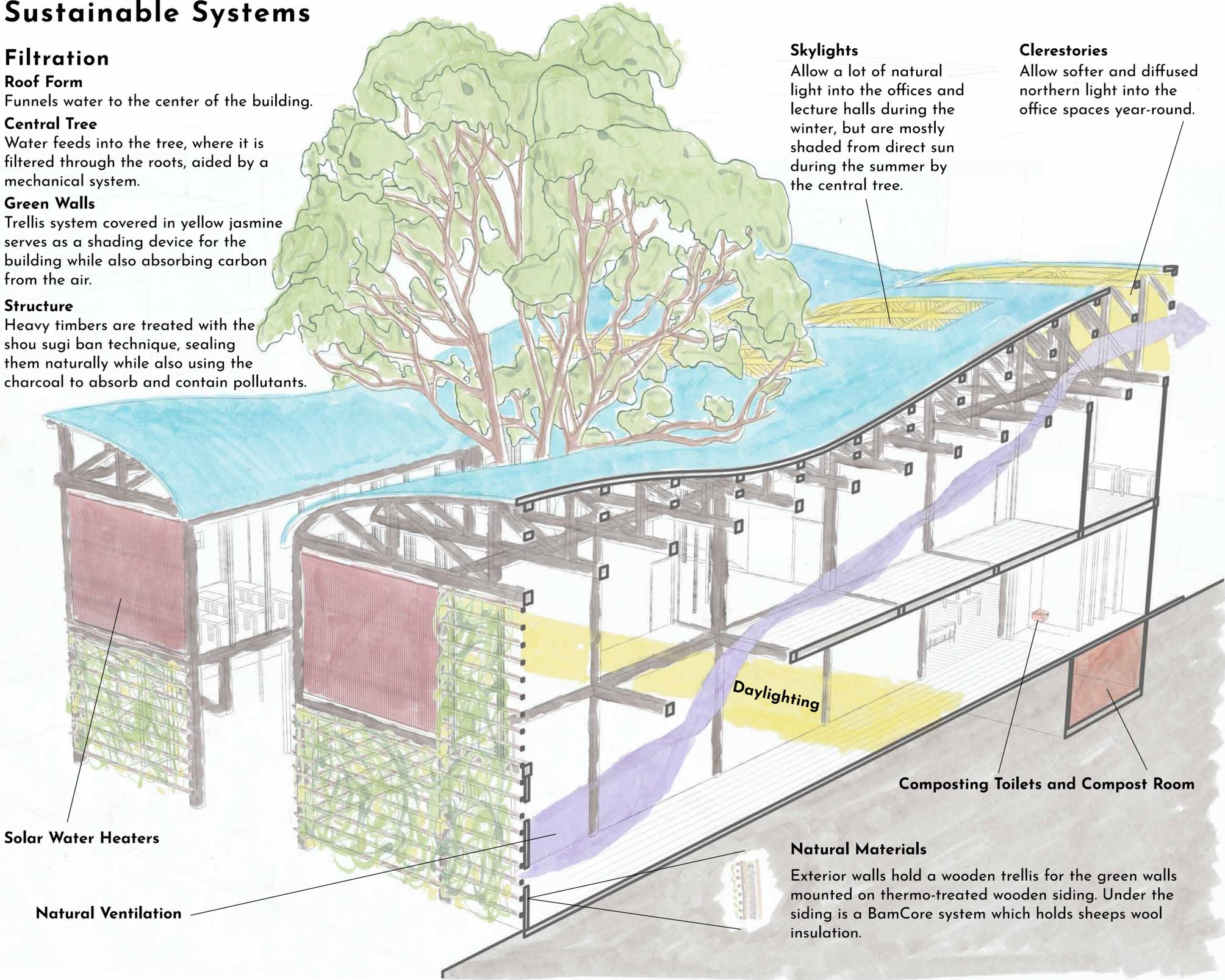
Structure
Heavy timbers are treated with the shou sugi ban technique, sealing them naturally while also using the charcoal to absorb and contain pollutants.

Skylights

Allow a lot of natural light into the offices and lecture halls during the winter, but are mostly shaded from direct sun during the summer by the central tree.

Clerestories

Allow softer and diffused northern light into the office spaces year-round.



Solar Water Heaters

Natural Ventilation

Daylighting

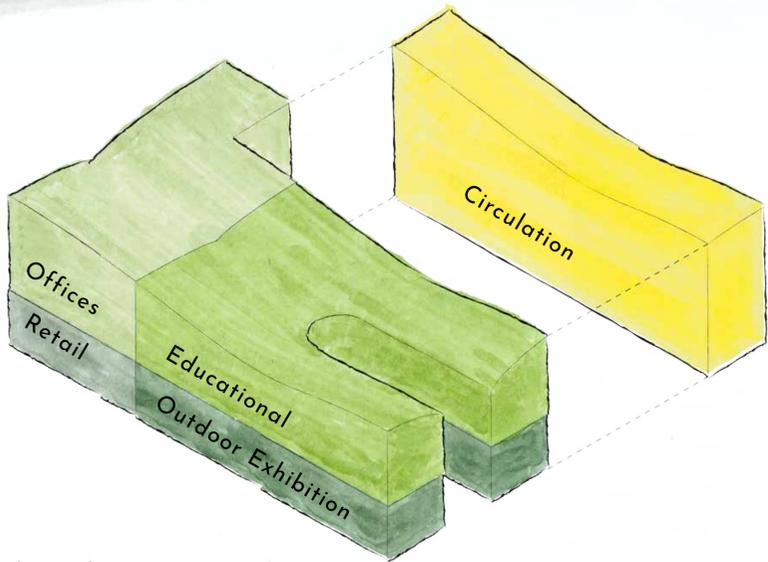
Composting Toilets and Compost Room

Natural Materials

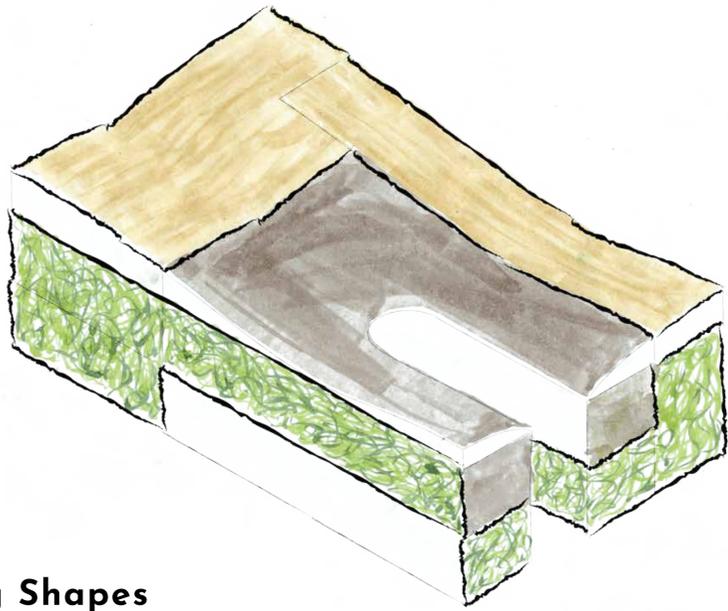
Exterior walls hold a wooden trellis for the green walls mounted on thermo-treated wooden siding. Under the siding is a BamCore system which holds sheeps wool insulation.



Street View



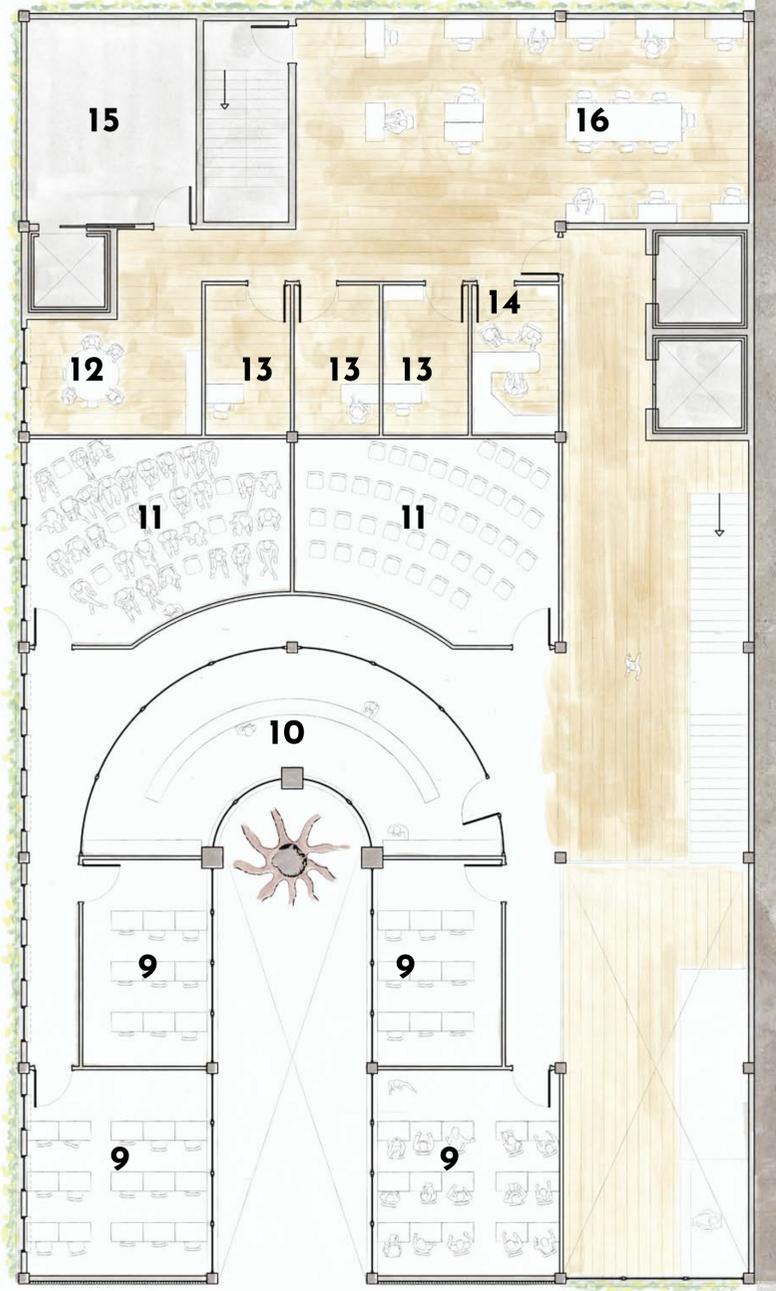
Organization



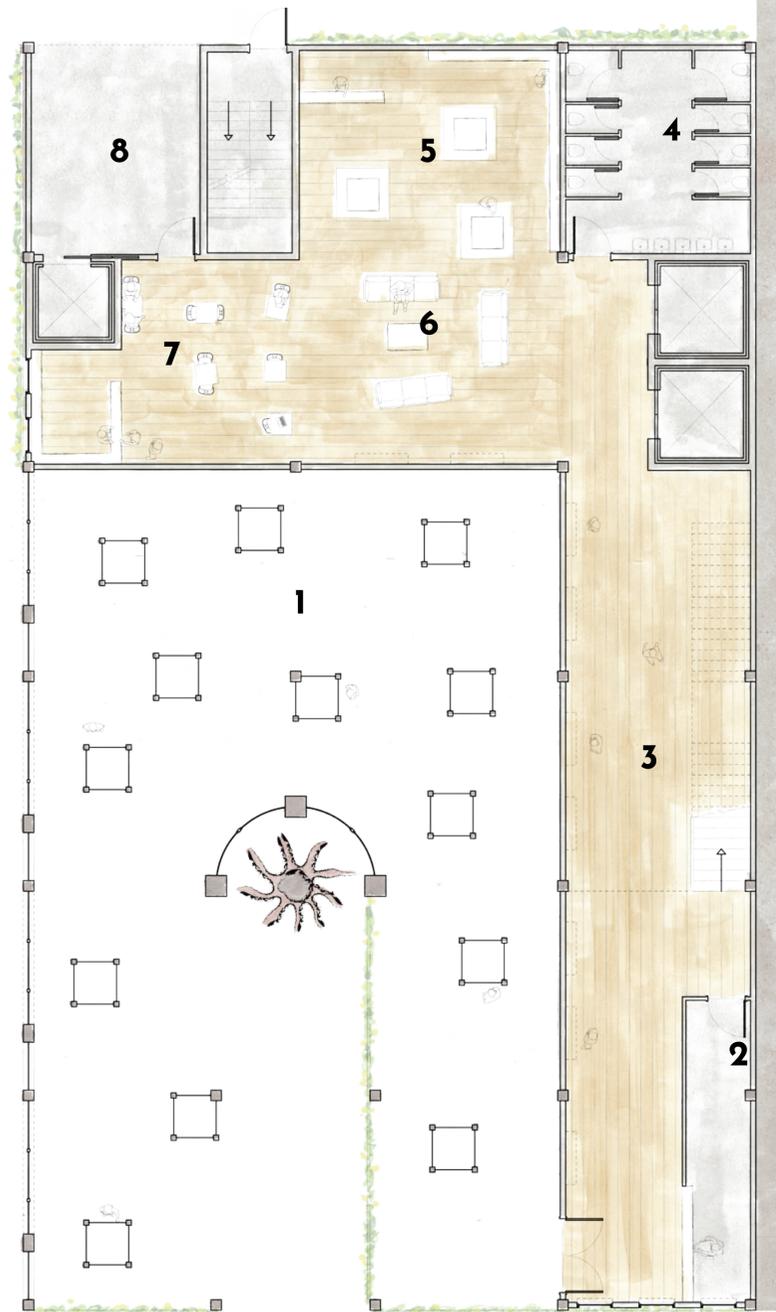
Repeating Shapes

Key

- 1- Sculptural Outdoor Exhibition Space
- 2- Reception and Coat Room
- 3- 2D Interior Exhibition Space
- 4- Restroom
- 5- Retail
- 6- Lobby
- 7- Cafe
- 8- Loading
- 9- Classroom
- 10- Library
- 11- Lecture Hall
- 12- Lounge
- 13- Office
- 14- Executive Office
- 15- Storage
- 16- Open Office



2nd Floor

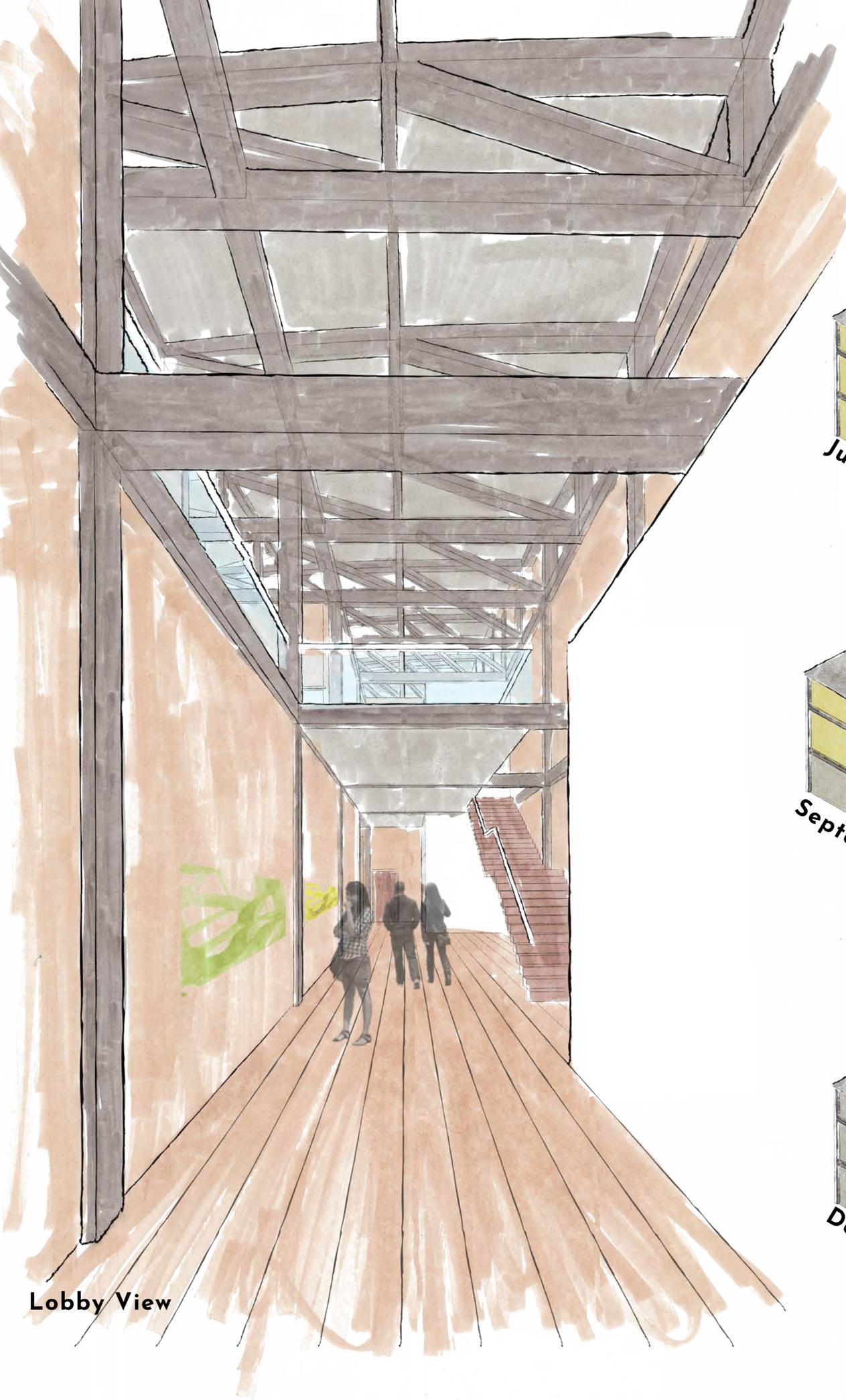


1st Floor

Tyson St.

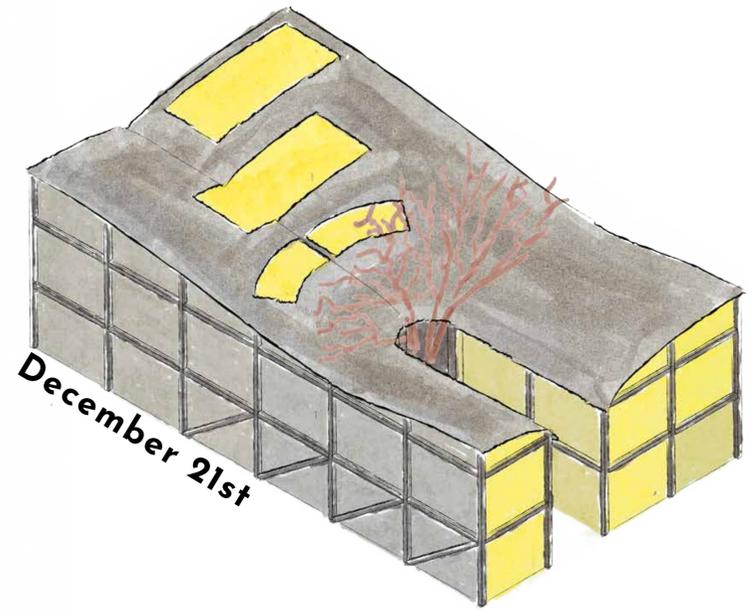
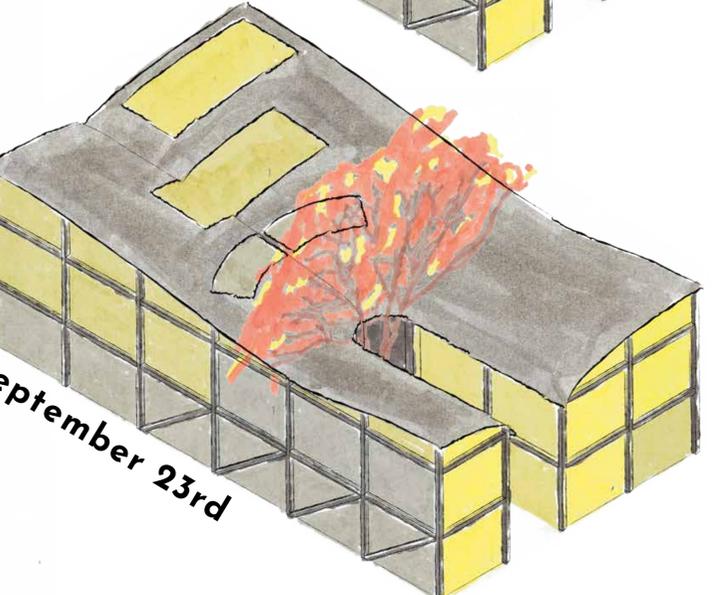
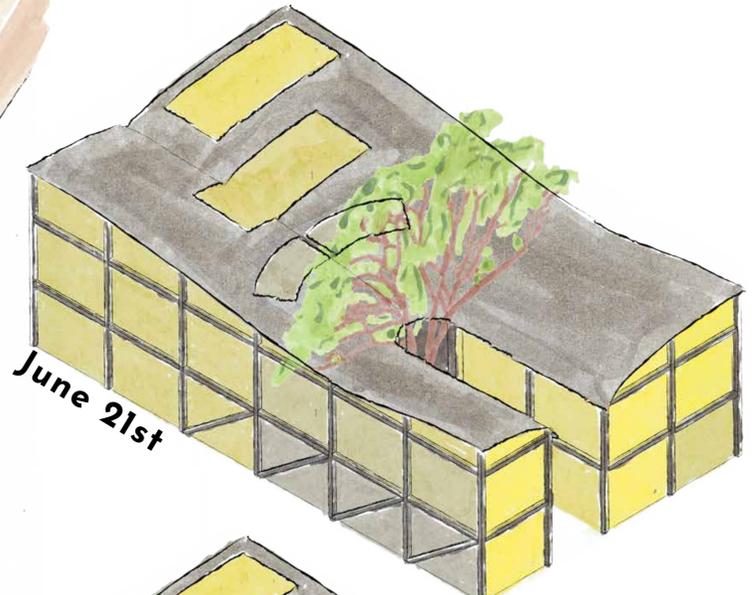
West Monument St.



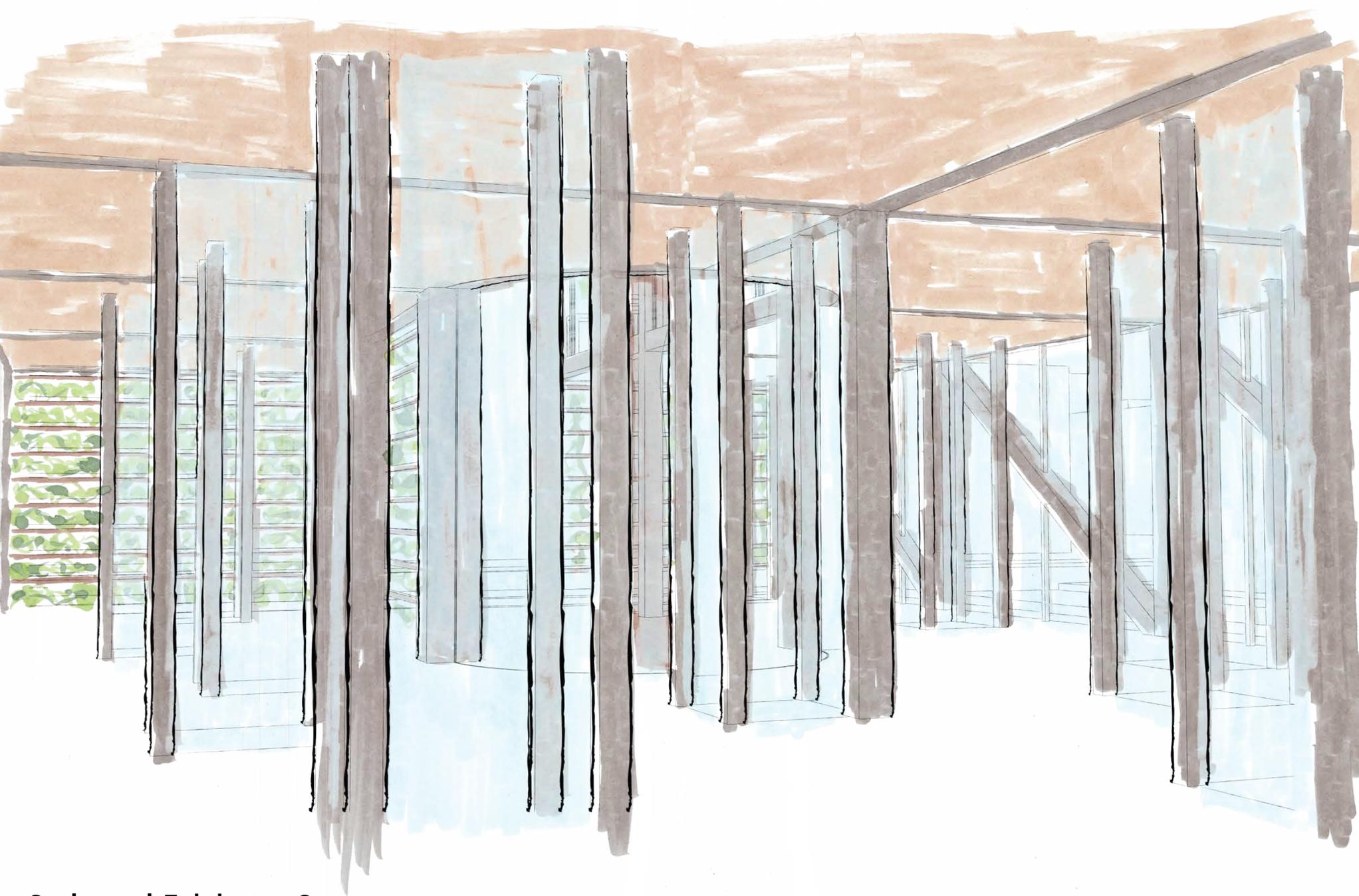


Lobby View

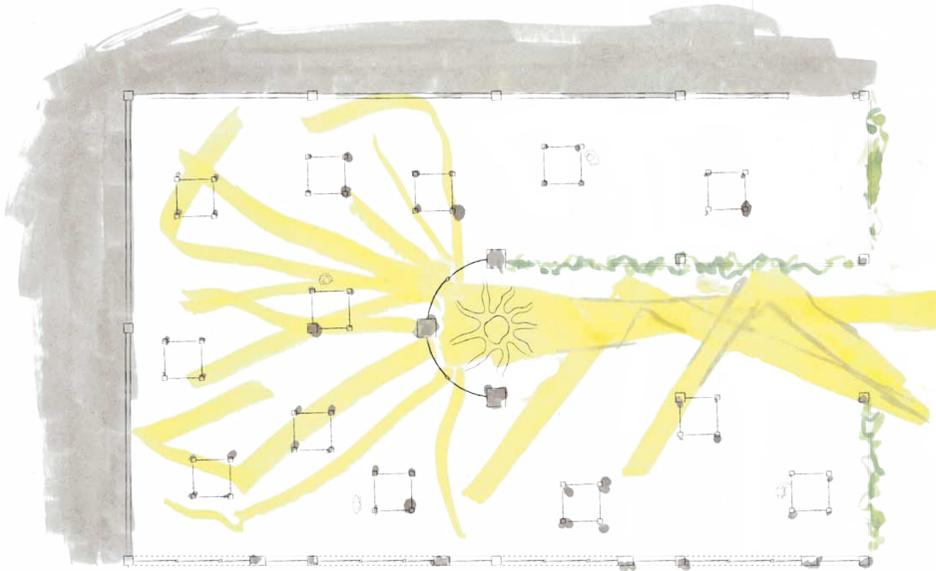
Direct Sunlight Analysis



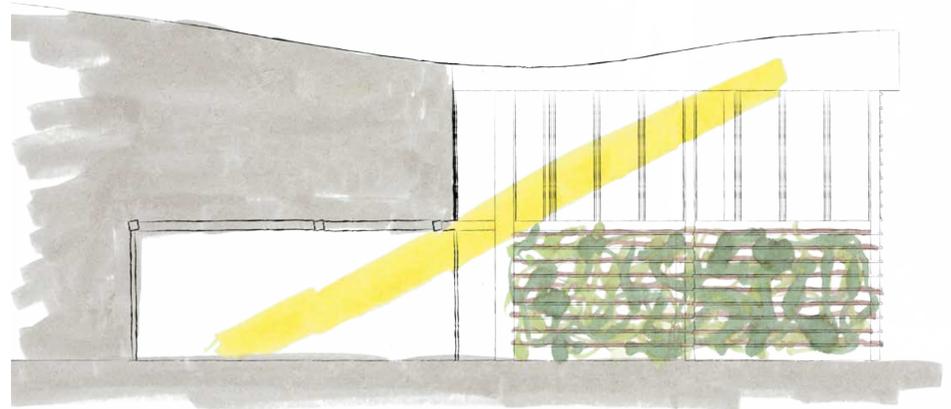
Western Facade



Sculptural Exhibition Space



Exhibition Space Lighting



South Facade



Cross Section