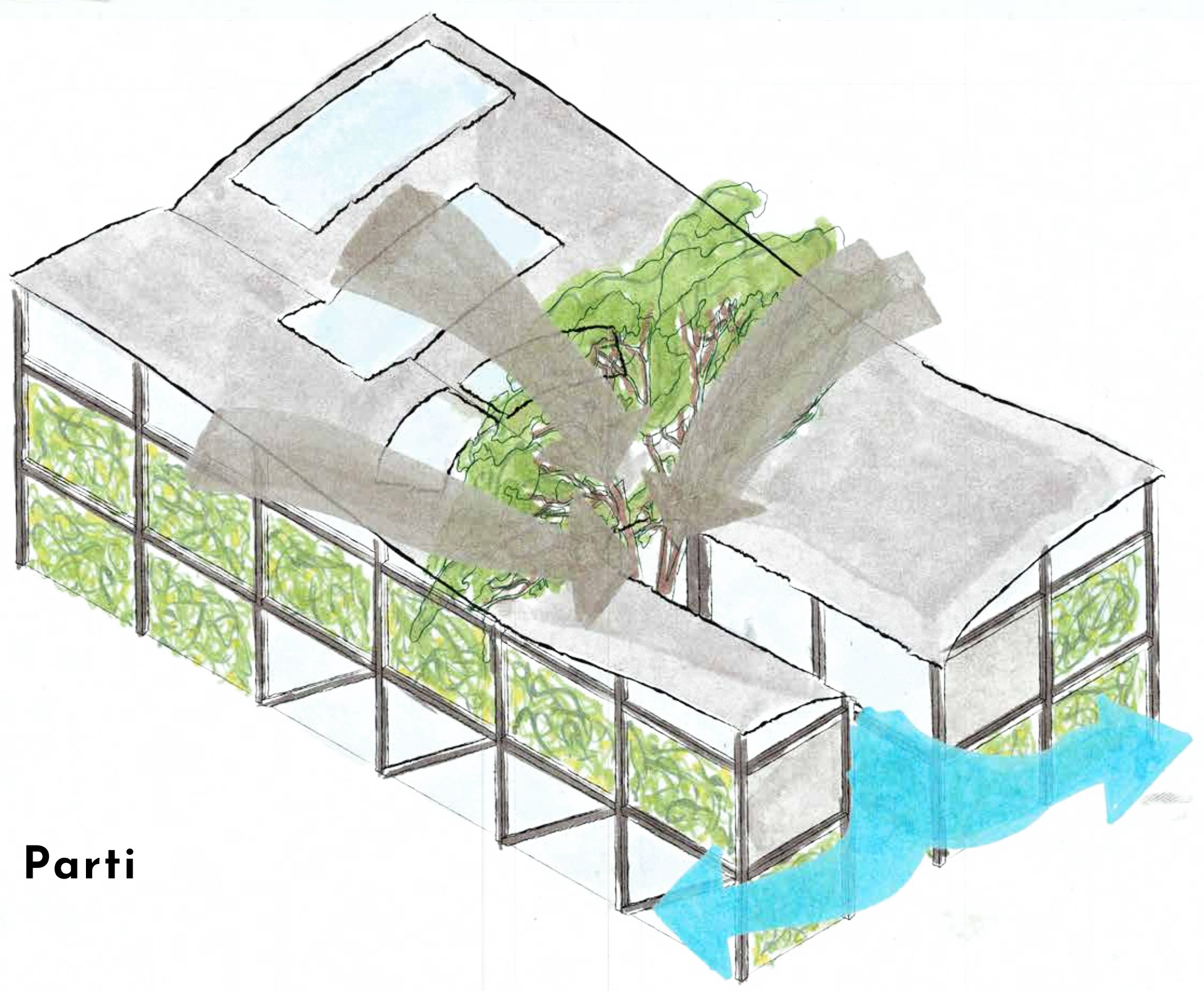




**The Entryway**

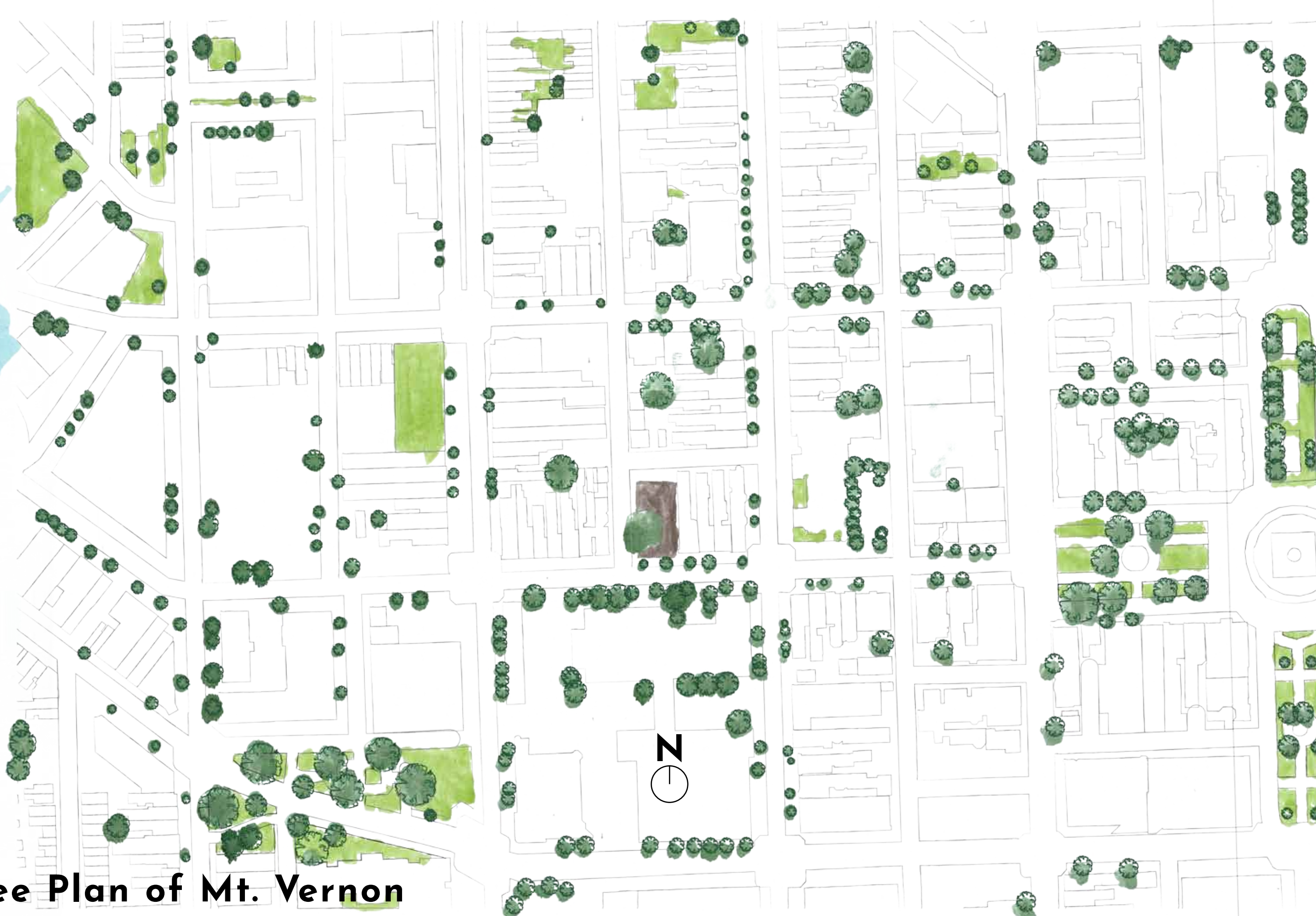


Though energy efficient and net-zero buildings are as important as ever, we are past the point where that is enough. In order to reach the carbon goals that we have set for 2030, we need to become net-positive; creating structures that pull carbon dioxide from the air. This is the idea that this building 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.

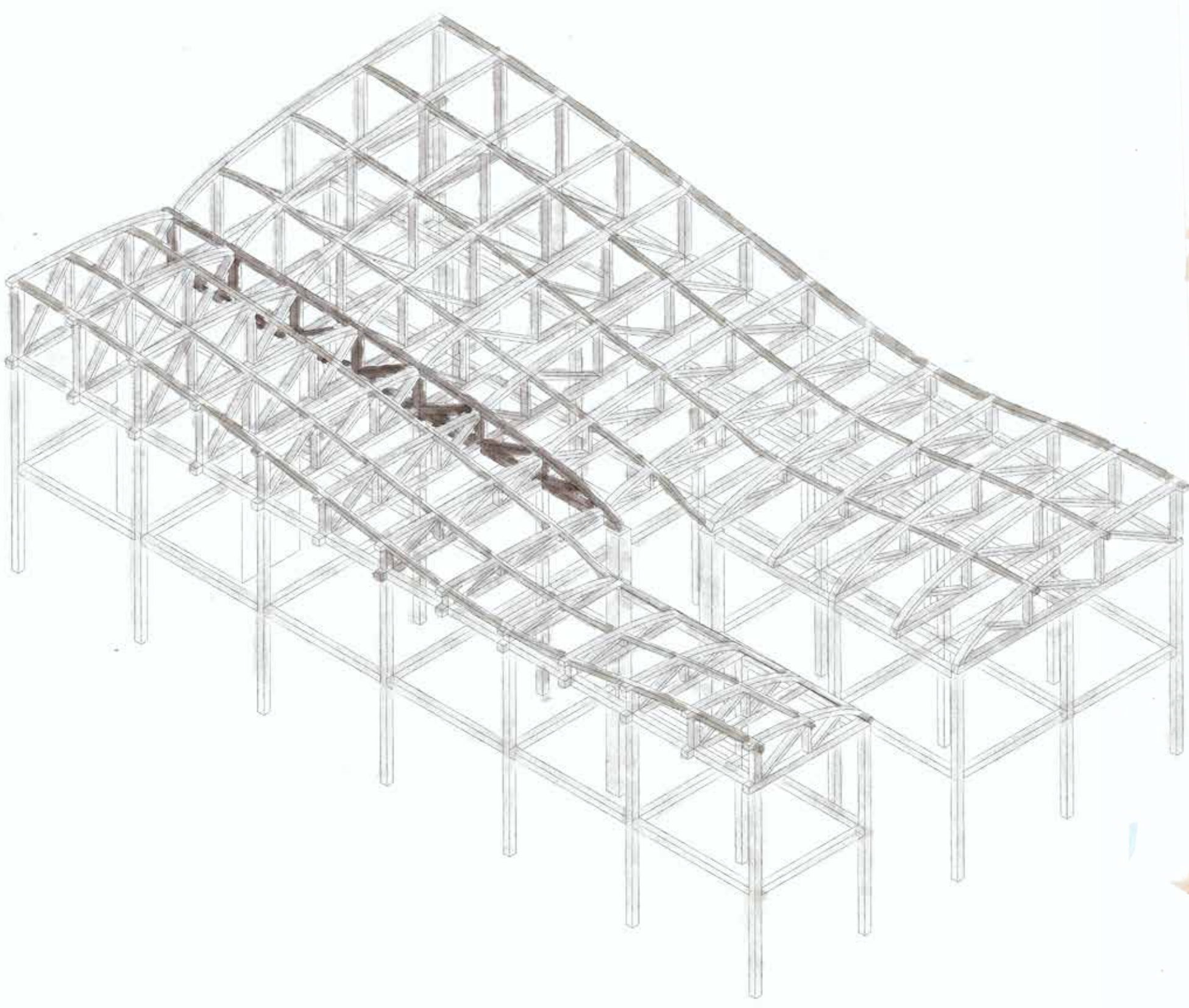


**Parti**

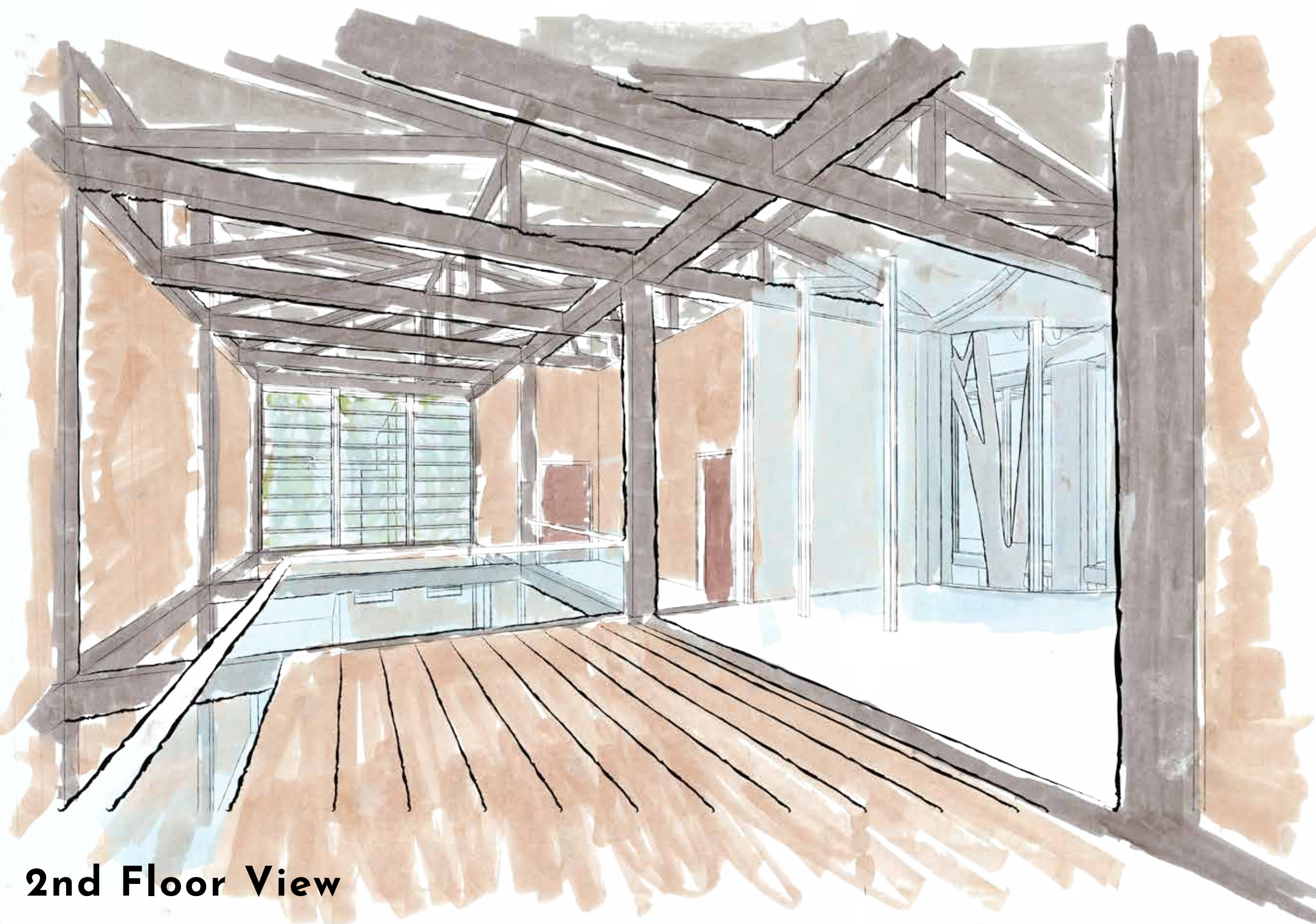
**City Connection**



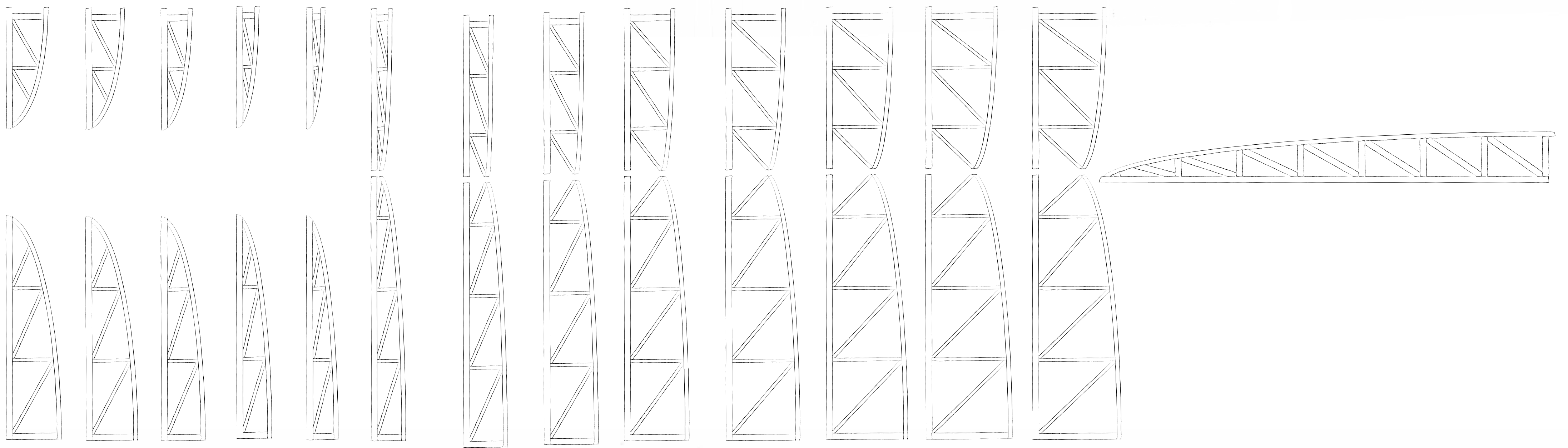
**Tree Plan of Mt. Vernon**



**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.

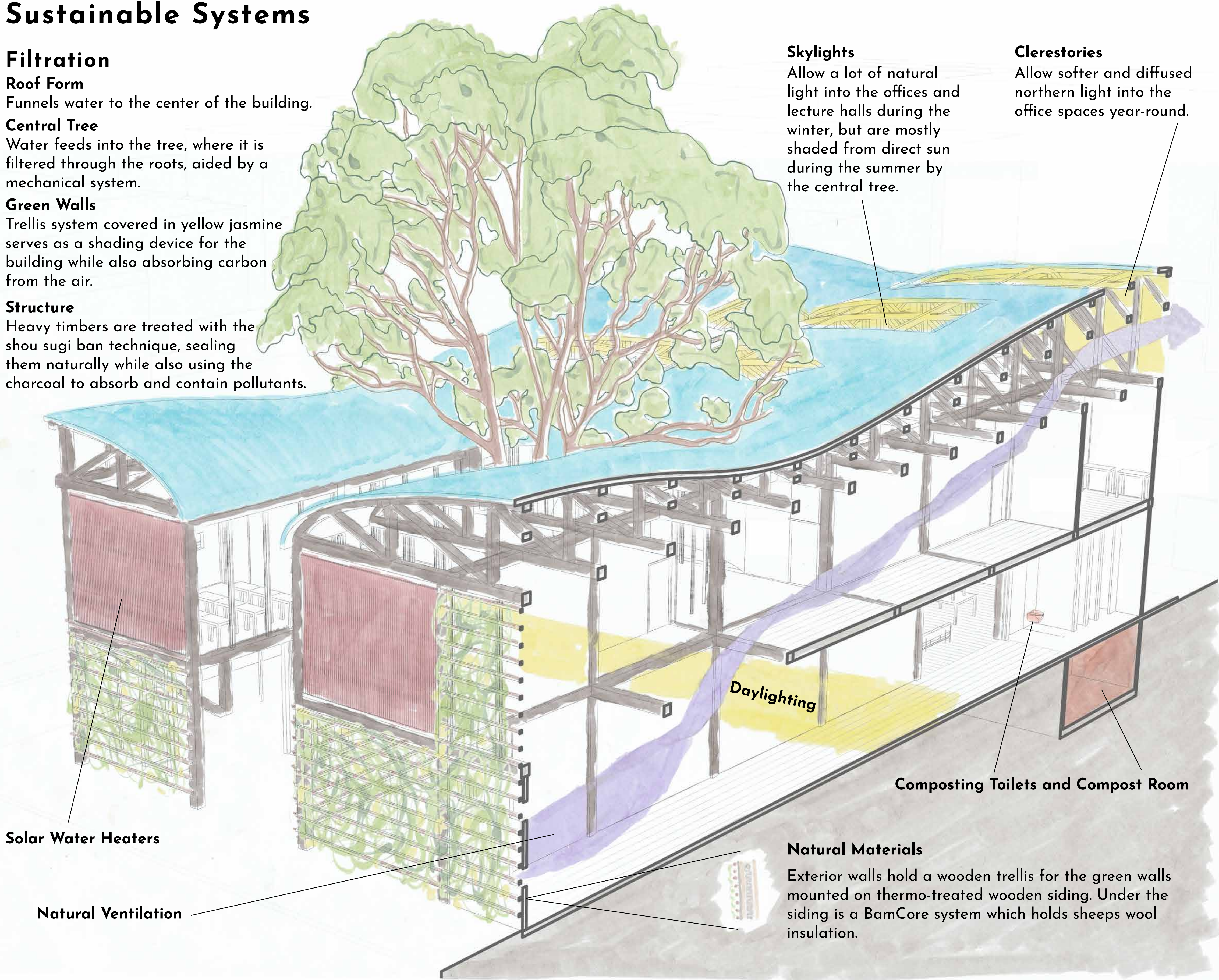
**Structure**  
Heavy timbers are treated with the shou sugi ban technique, sealing them naturally while also using the charcoal to absorb and contain pollutants.

### 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**

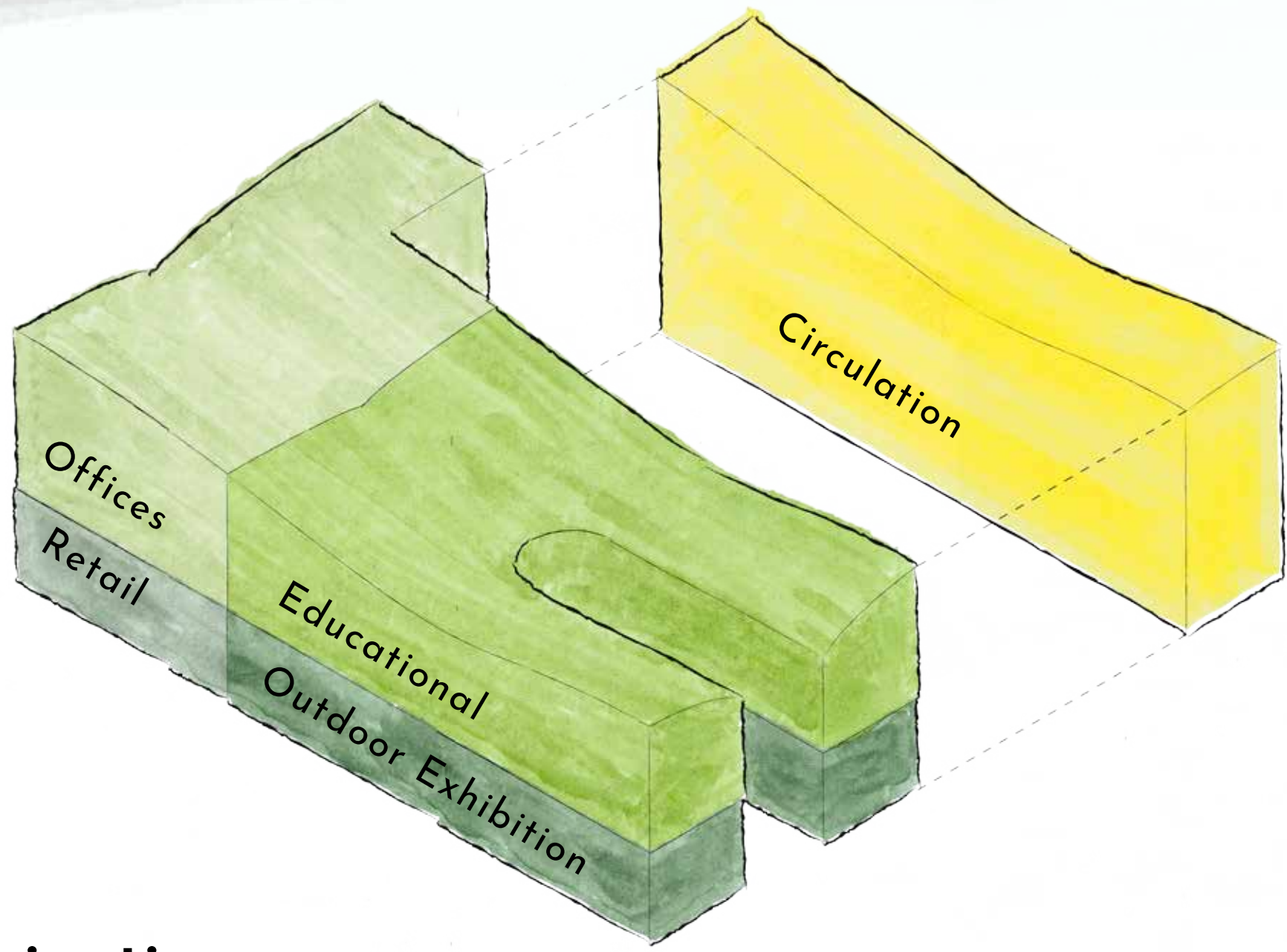
**Composting Toilets and Compost Room**

### Natural Materials

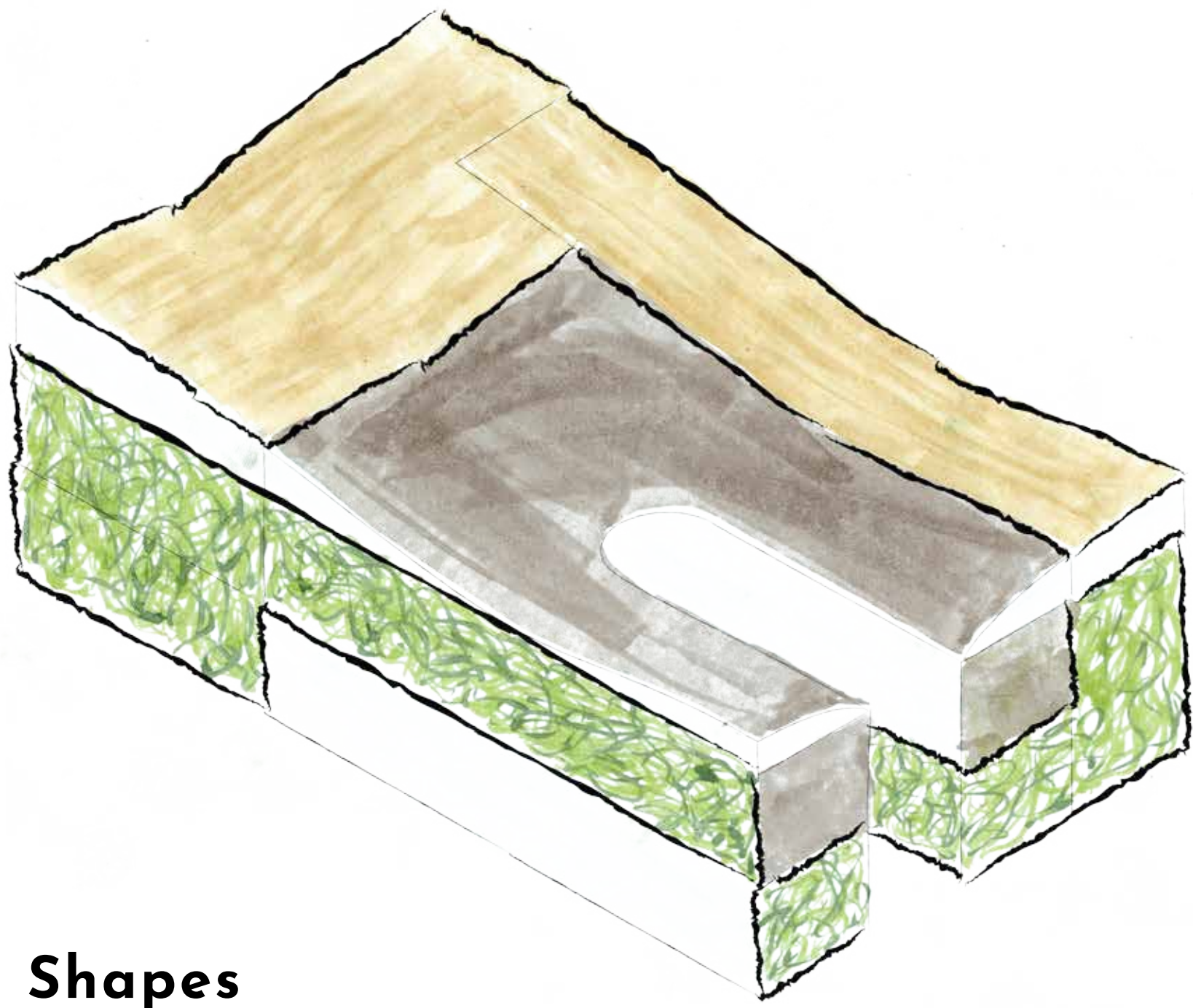
Exterior walls hold a wooden trellis for the green walls mounted on thermo-treated wooden siding. Under the siding is a BamCore system which holds sheeps wool insulation.



Street View



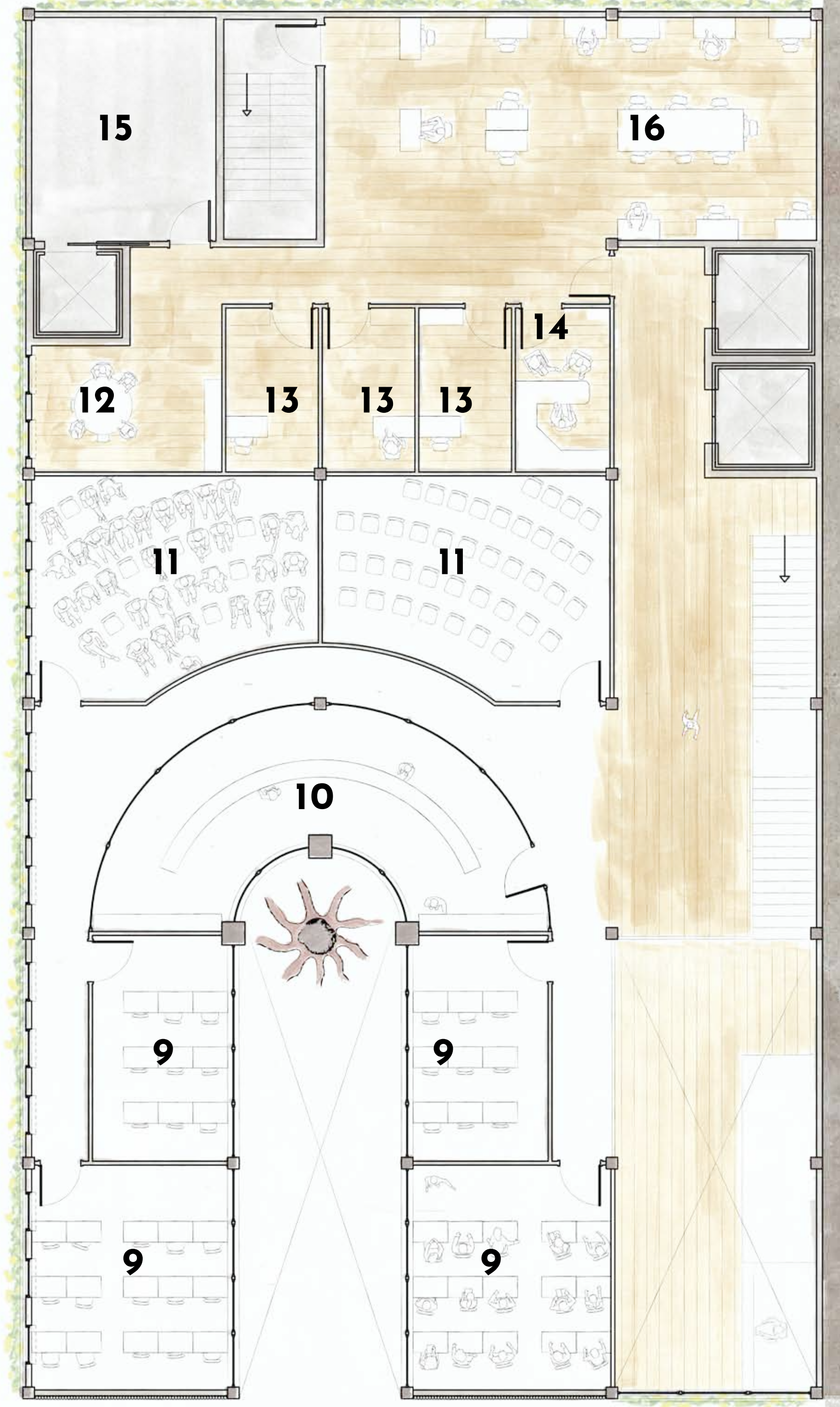
Organization



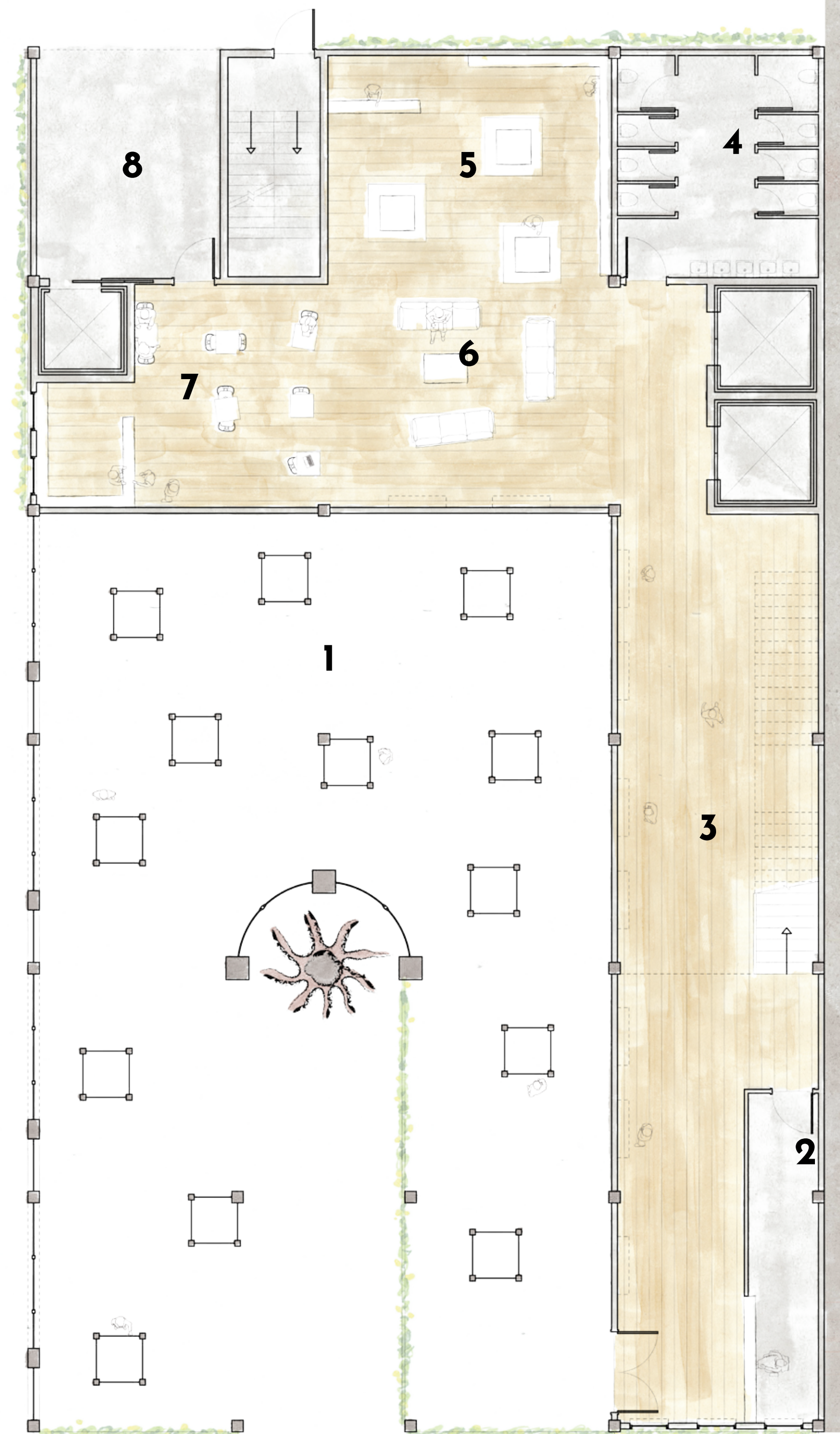
Repeating Shapes

**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

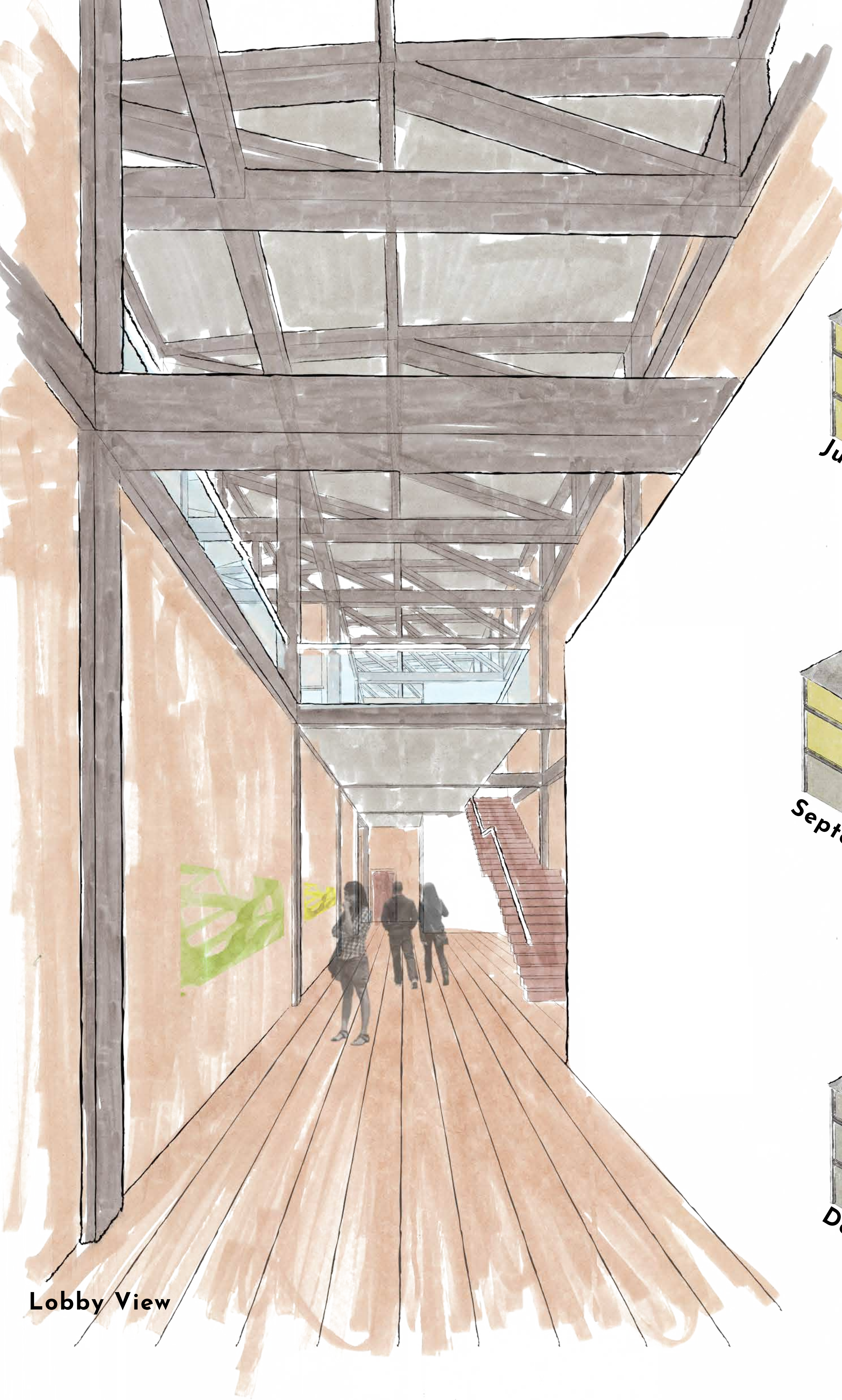


1st Floor

Tyson St.

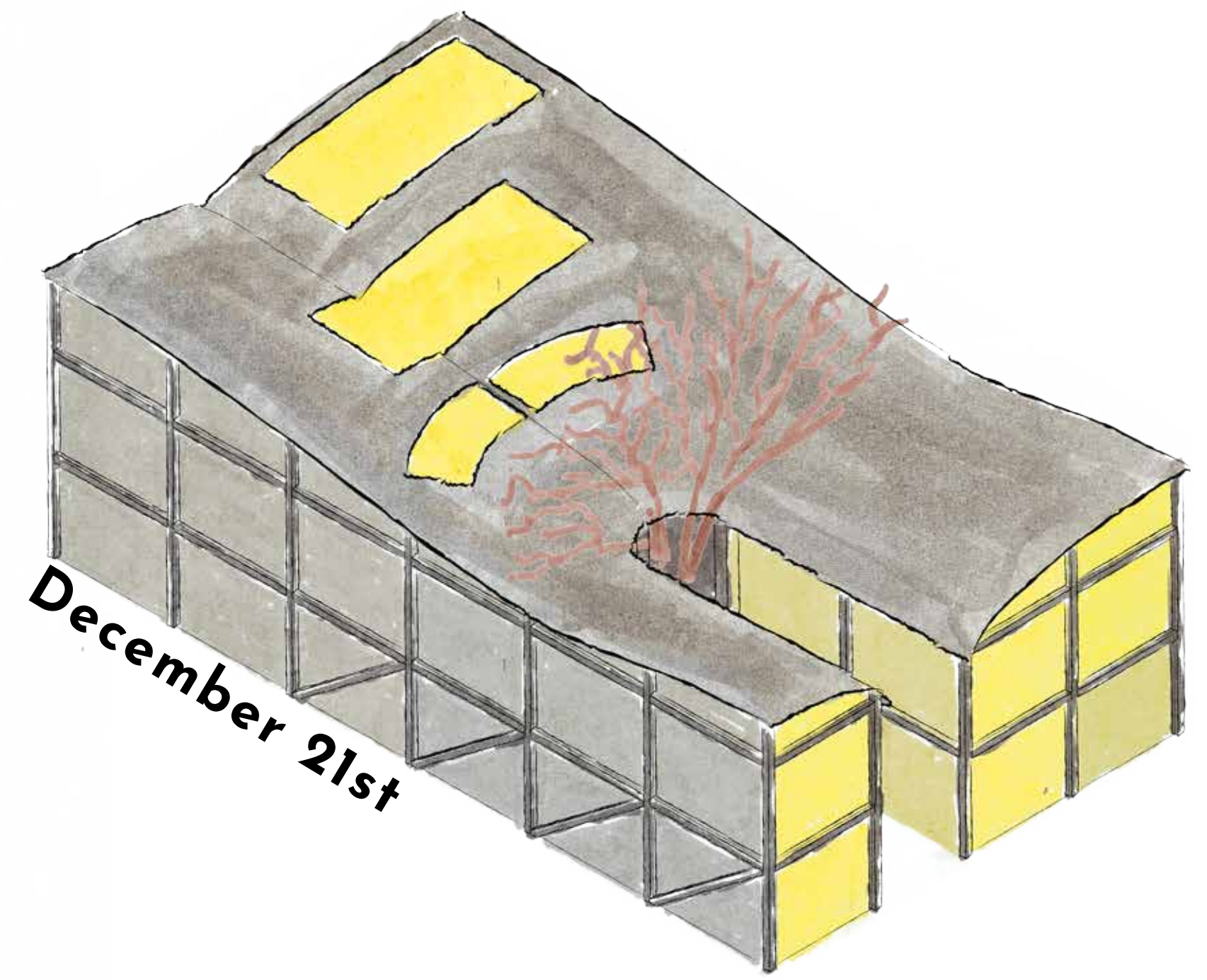
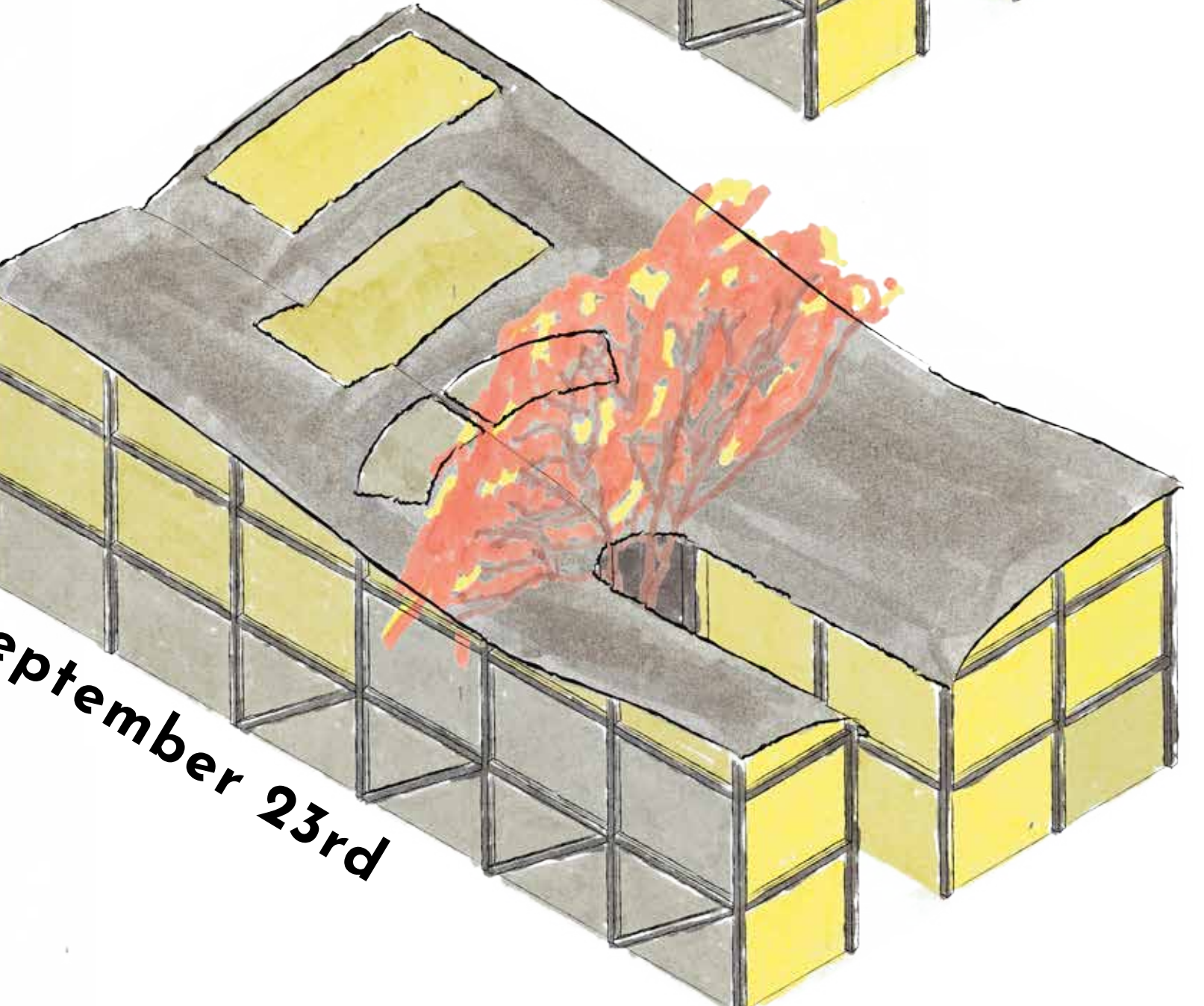
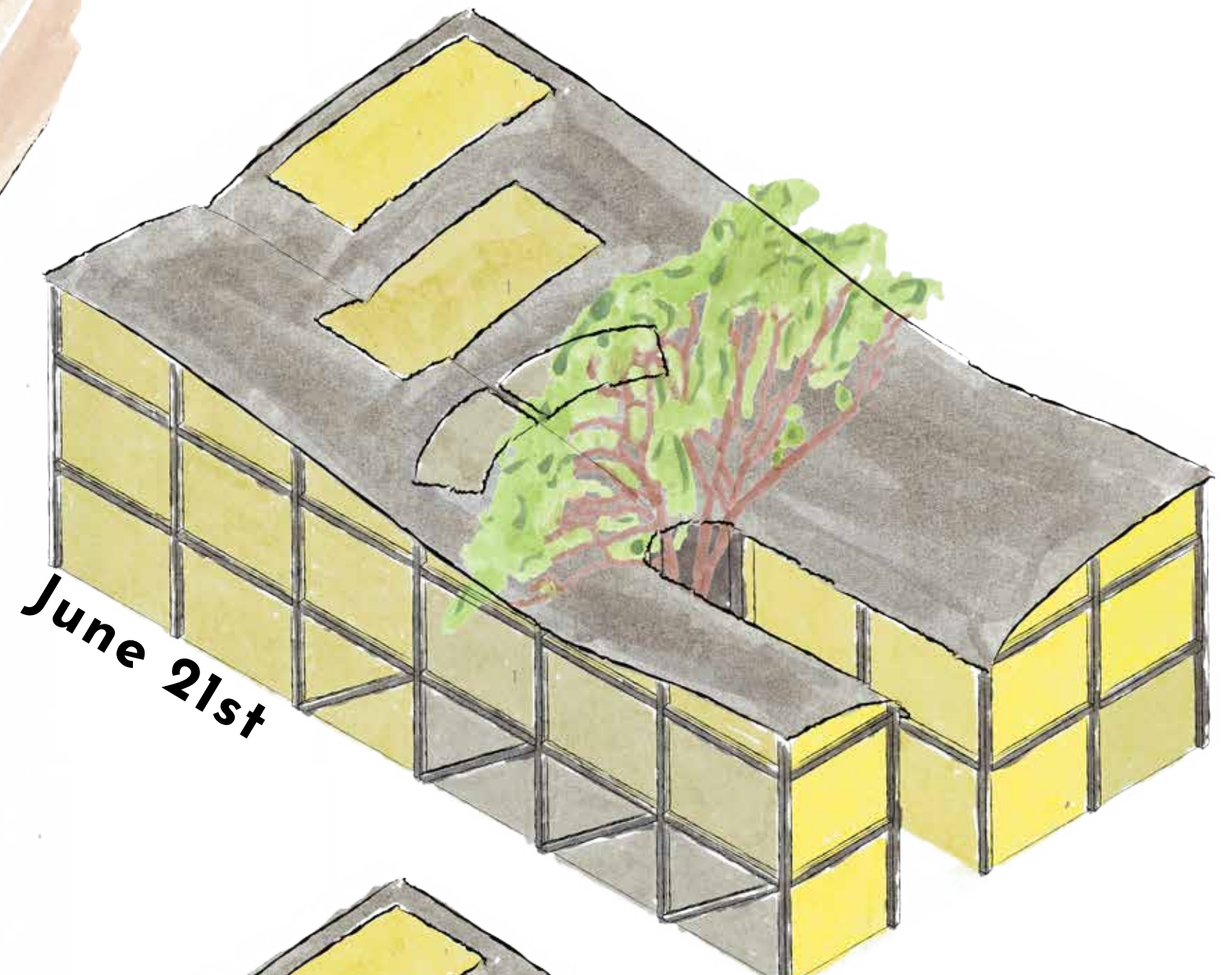
West Monument St.



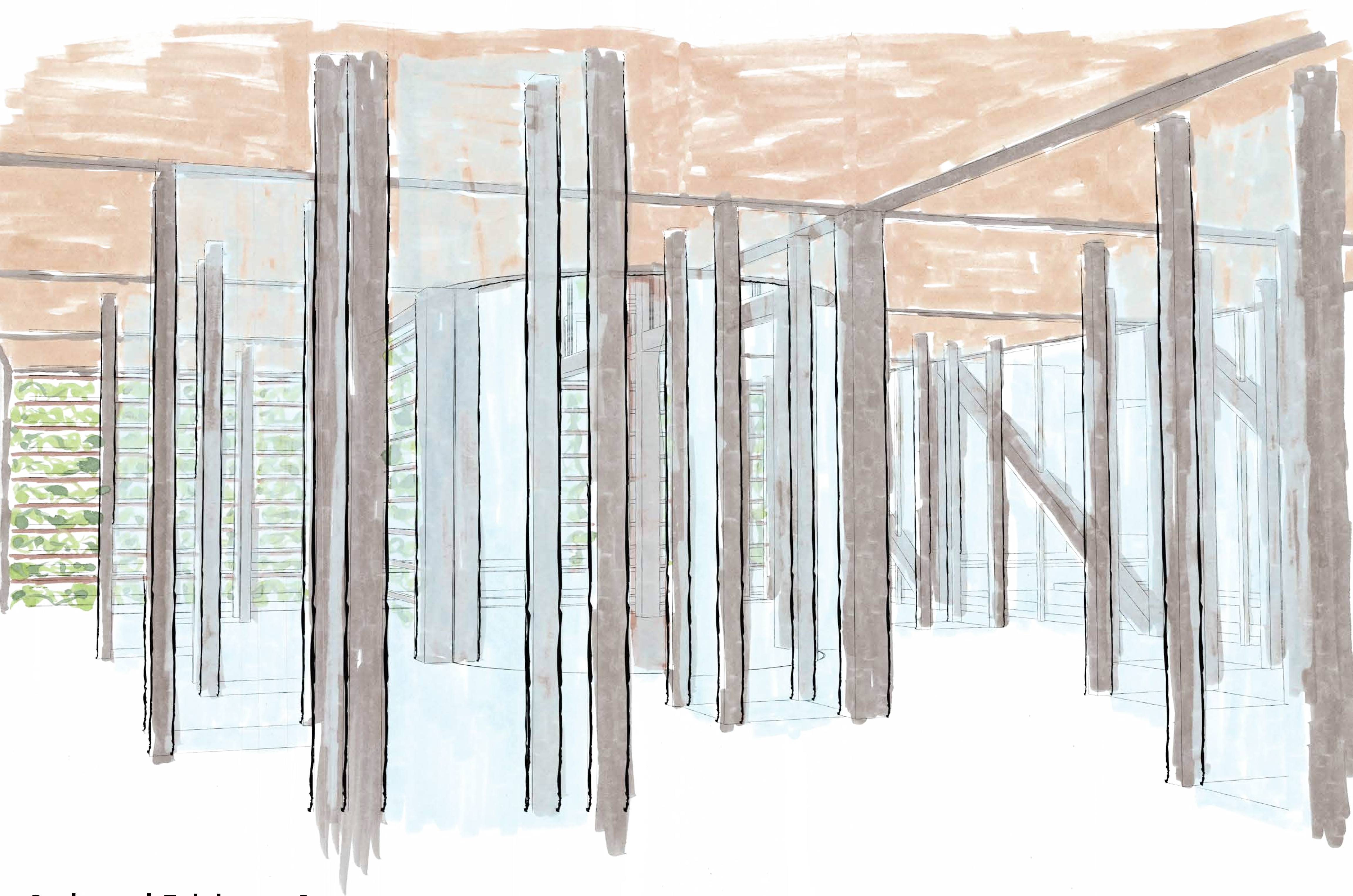


Lobby View

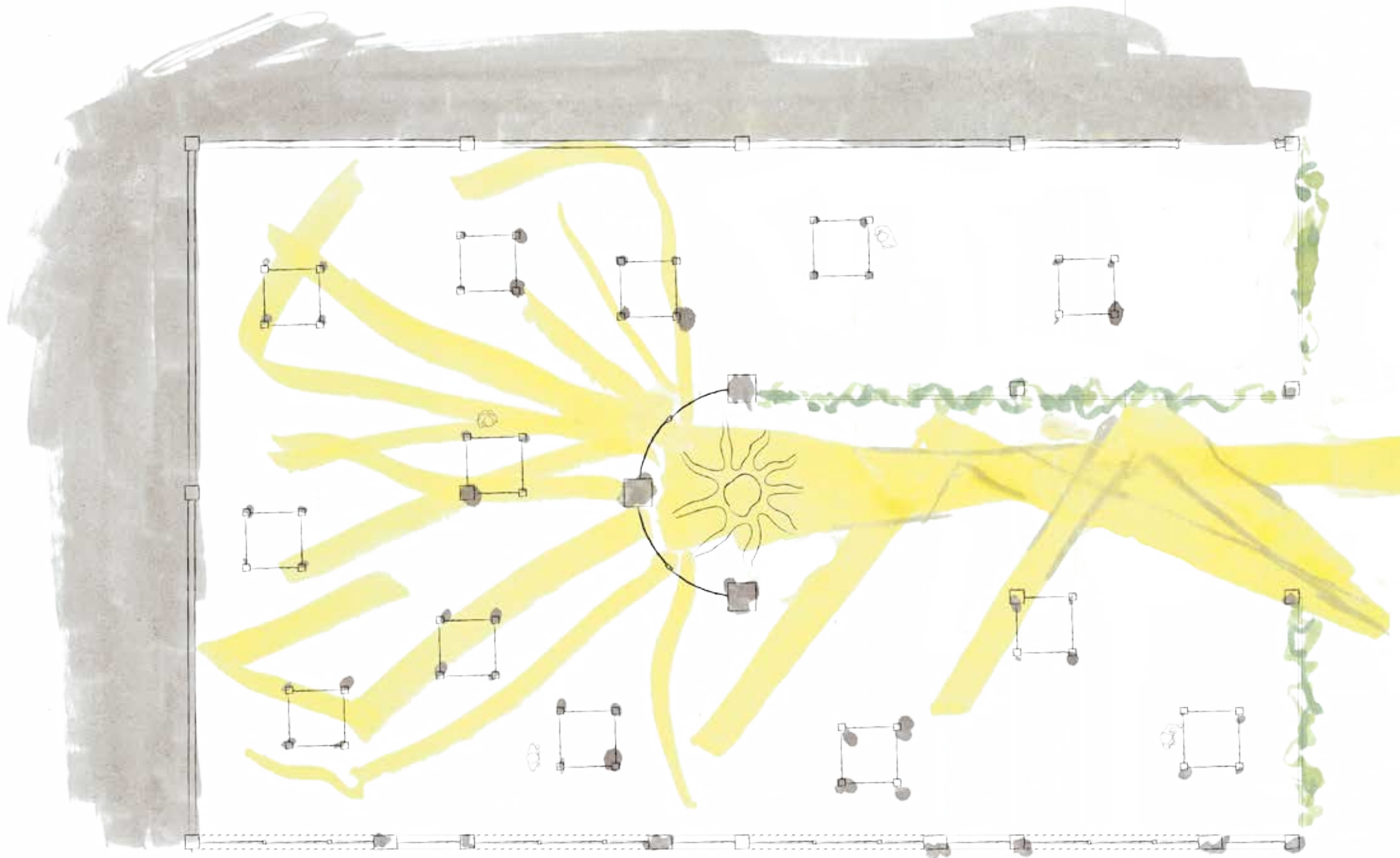
Direct Sunlight Analysis



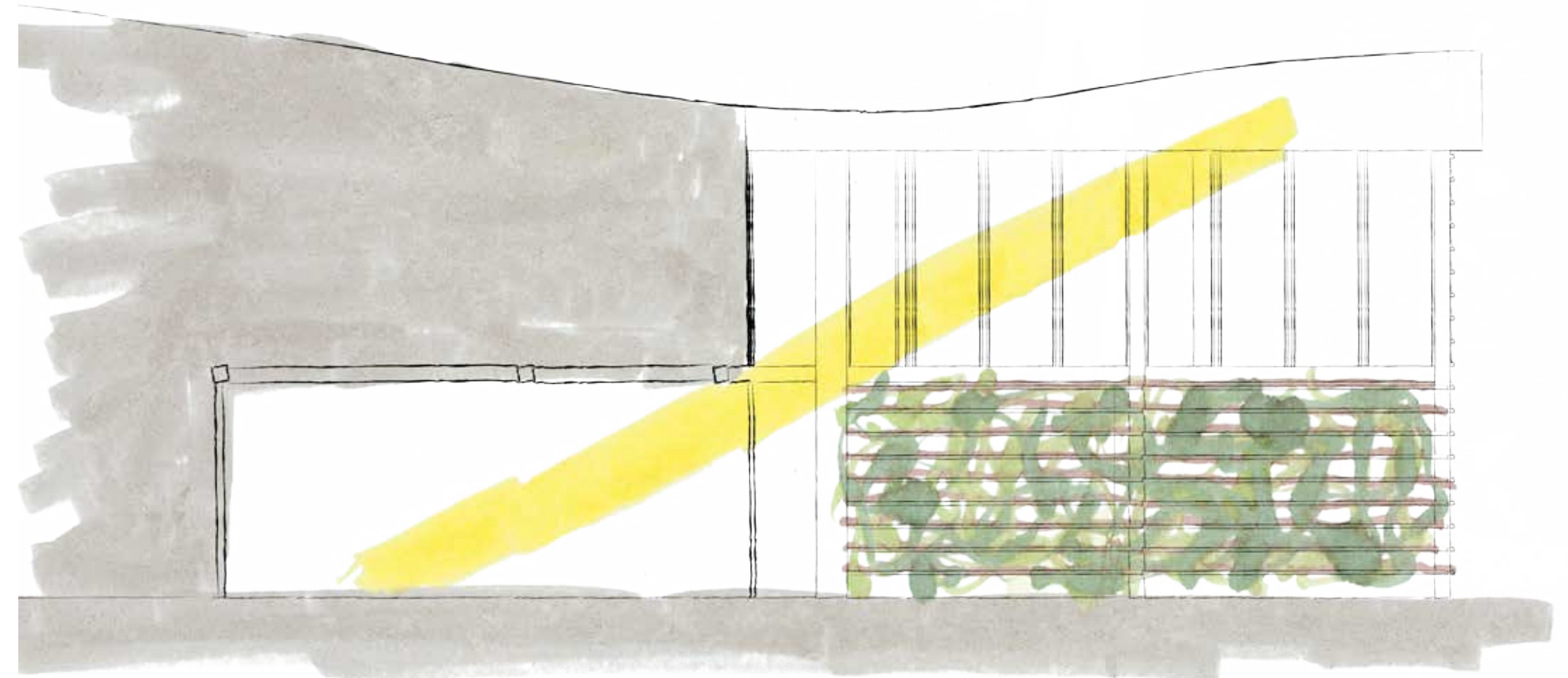
Western Facade



**Sculptural Exhibition Space**



**Exhibition Space Lighting**



**South Facade**



**Cross Section**