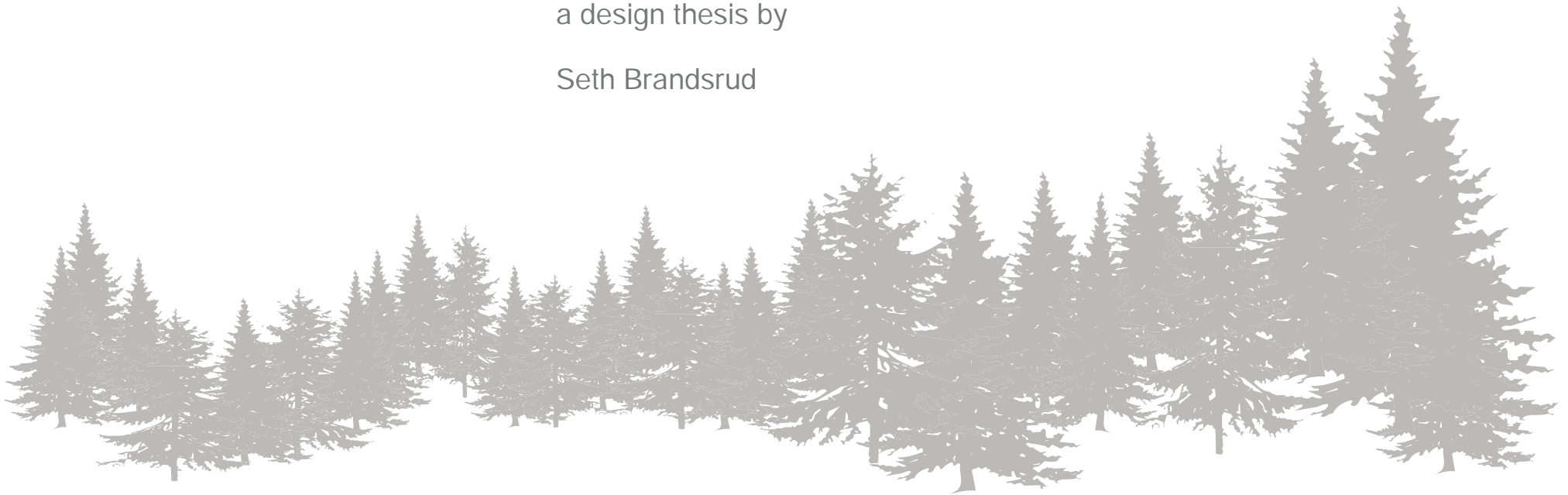


Enviornmental Synergy

The Black Hills National Forest Visitor Center

a design thesis by

Seth Brandsrud



ABSTRACT

This thesis researches and examines the impact that an environmental education center would have on the public in a wilderness setting. The public lacks an educational facility that can model a more sustainable way of life by offering environmental guidance and a research station focused on how to better coexist with nature. Right now, the Black Hills are beginning to show evidence of the inability to sustain its inhabitants, and the entire forest ecosystem needs to be turned around and set on a positive future.

A community based research and education center near Custer, SD should be implemented so the public has a place to go where they can learn how to coexist with their environment. This project will specifically focus on how architecture can use sustainable design and materials so that we can abide in nature without disrupting its natural cycles. Successful completion of this project will provide a model of how it's possible for architecture and nature to mutually benefit and exist together.

Key Words: Wilderness, Coexist, Sustainable Lifestyle



What's The Problem



Can architecture help people coexist
with nature in a forest wilderness setting?

Project Typology

National Park Welcome, Education and Research Center

Claim

The public is in need of education to understand how they can coincide with nature within a wilderness environment.

Premise 1

The public lacks an institution for research and education on leading a sustainable local lifestyle that could help human and nature coexist.

Premise 2

The businesses, residents, and tourists all need a place to go where they can be educated and inspired to aid the forest environment they are in.

Premise 3

Many of the every day and long term choices people make can affect the environment they are in, thus affecting the ability for those to continue working, living, and playing in that environment safely.

Premise 4

Ongoing research on how we affect the environment with our actions will allow us to have better judgement as we abide with nature.

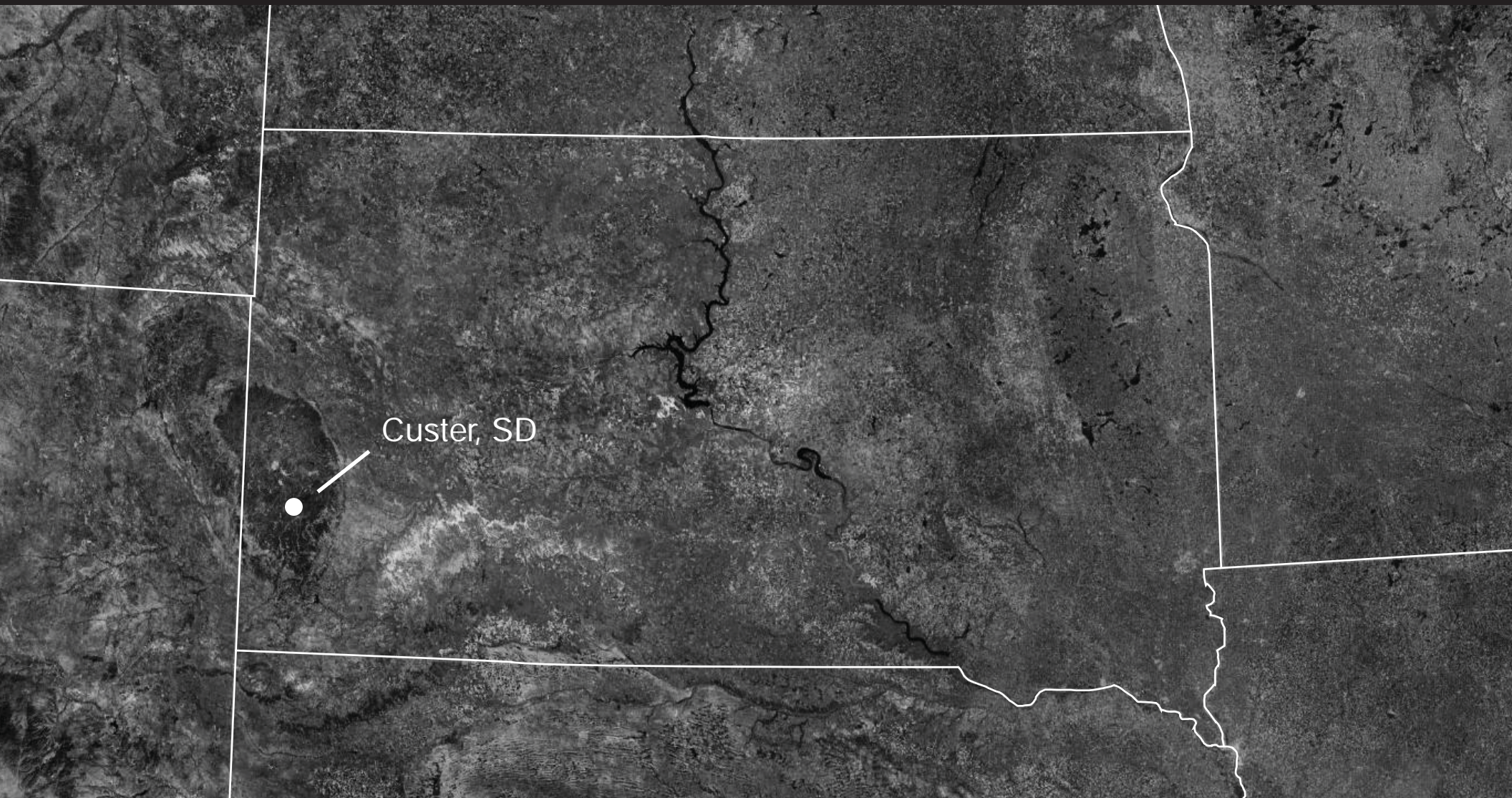
Theoretical Premise/Unifying Idea

A community based research and education center should be implemented so the public has a place to go where they can learn how to coexist with their environment, thus allowing both parties to benefit.

Justification

Experts predict that in the near future, the Black Hills will not be able to supply enough water to meet its demand. Forestry and mining interests continue to make poor decisions when harvesting resources. Those that decide to live in the hills have no knowledge of how their lifestyle and residence will affect the environment. The entire forest ecosystem needs to be turned around and set on a positive future.





Custer, SD



Custer

Site

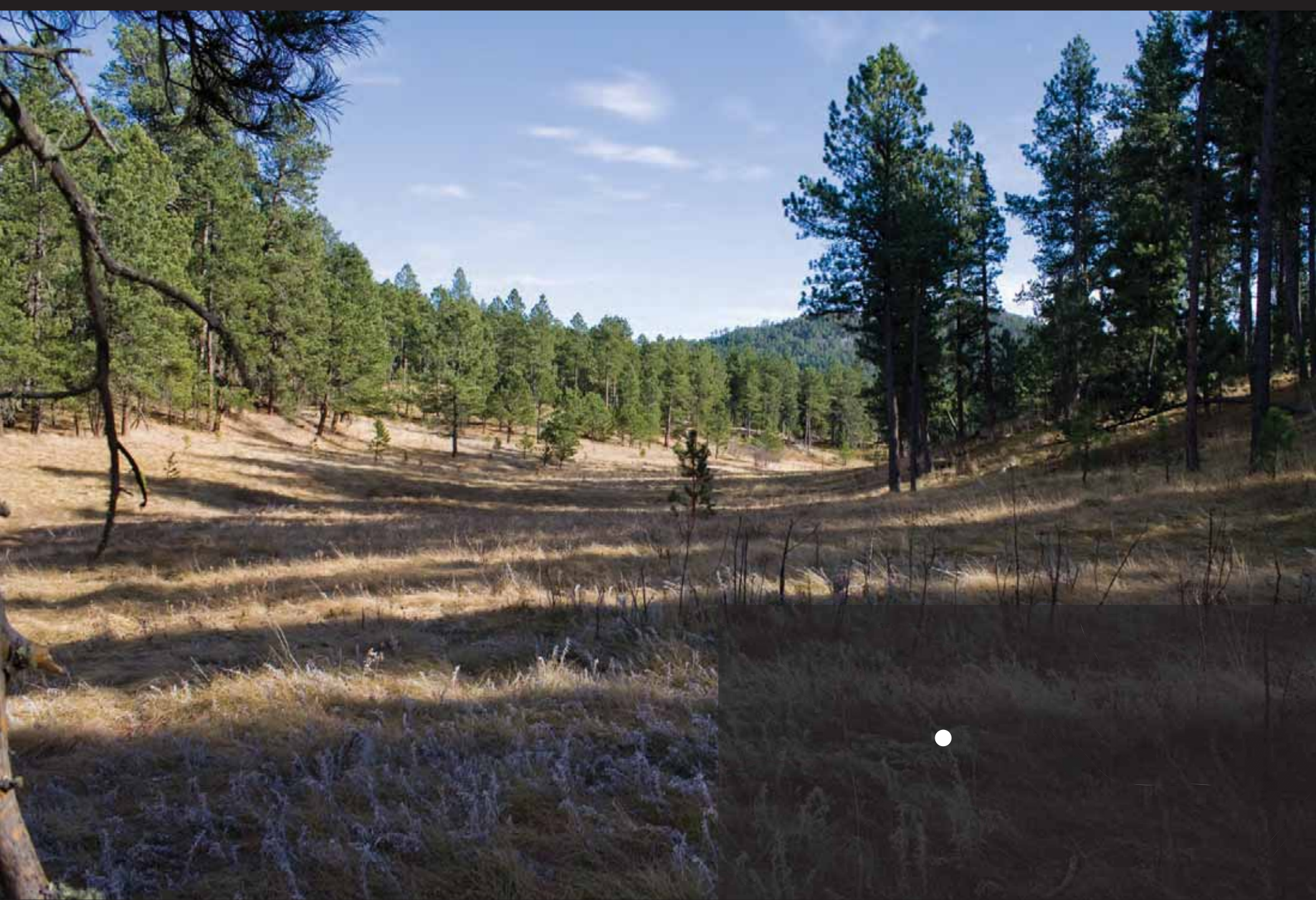


Bismarck Lake

US Highway 16

Stockade Lake











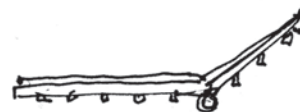
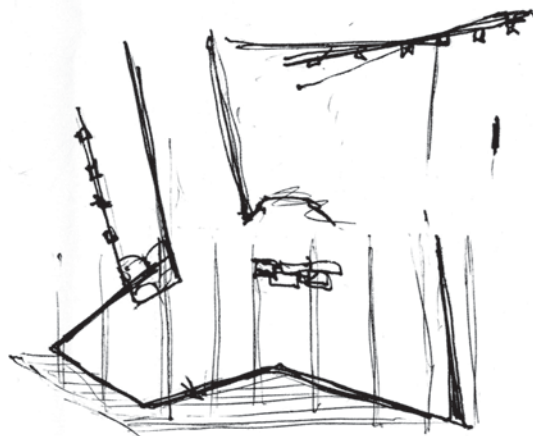
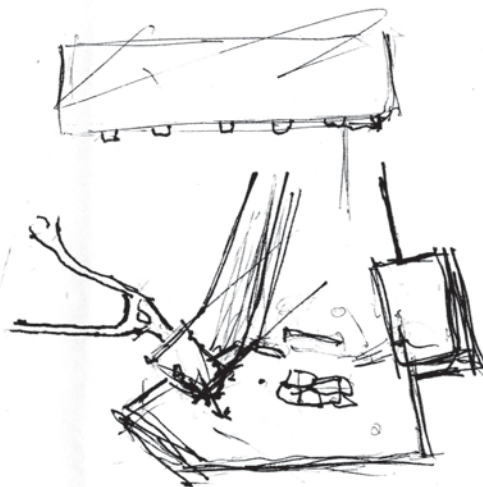
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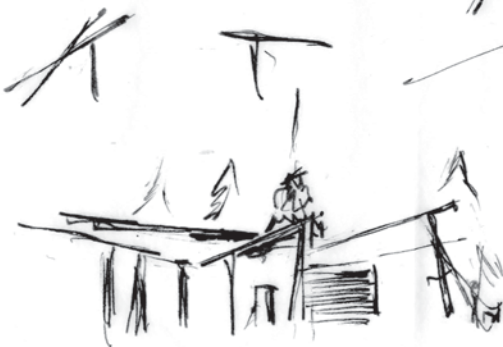
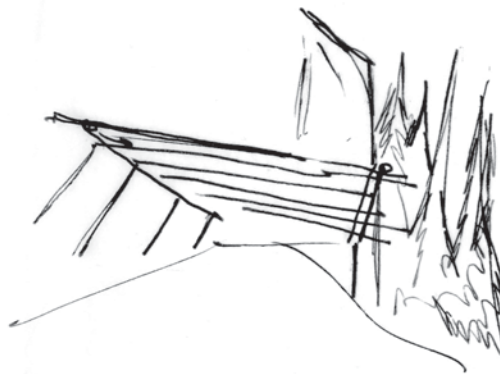
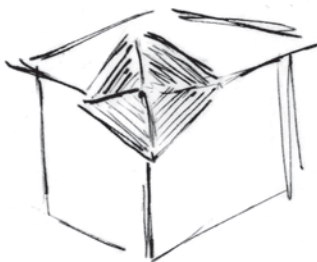
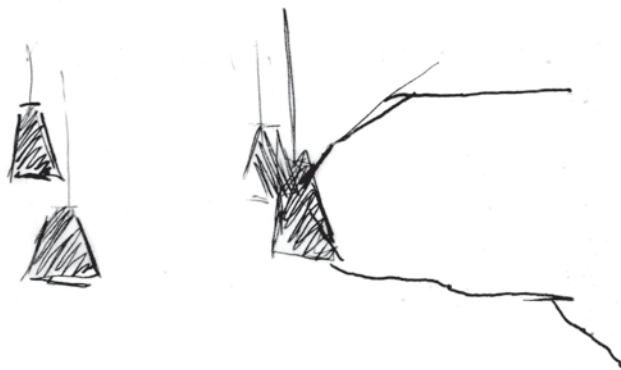
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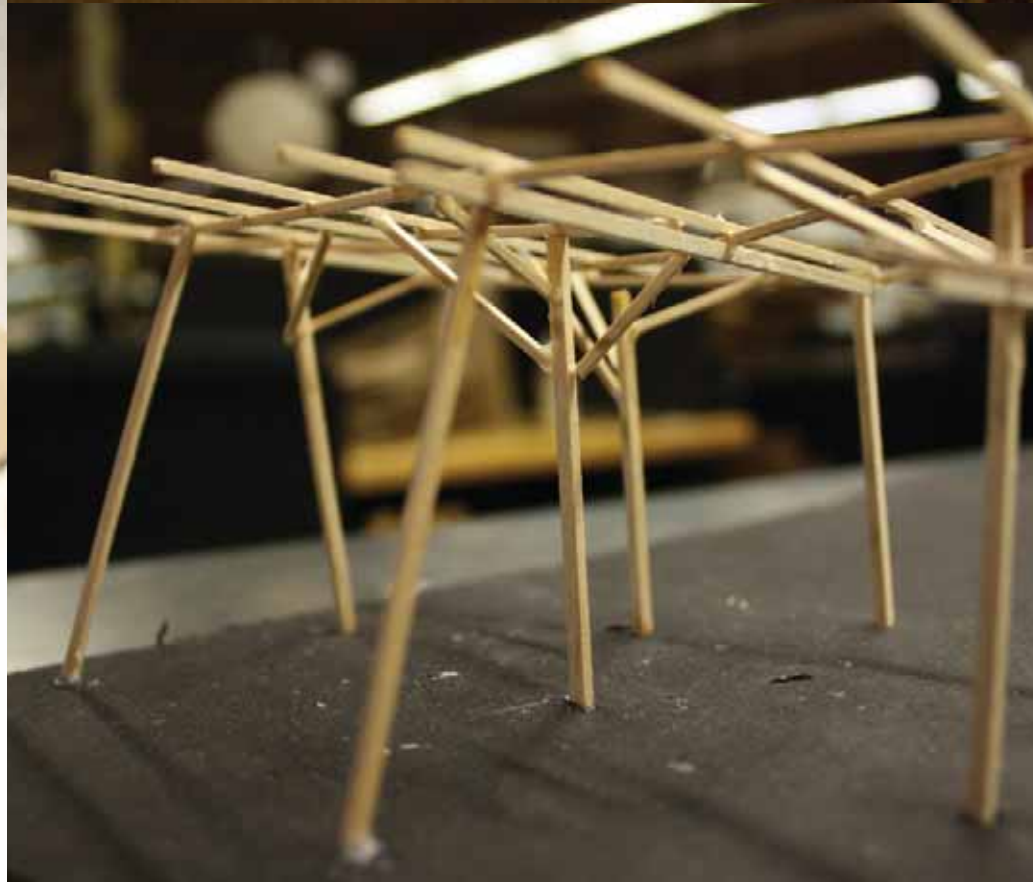


January 17, 2013

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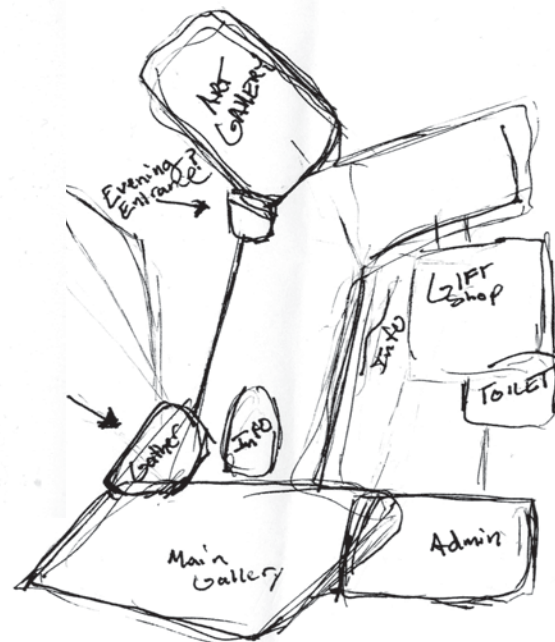
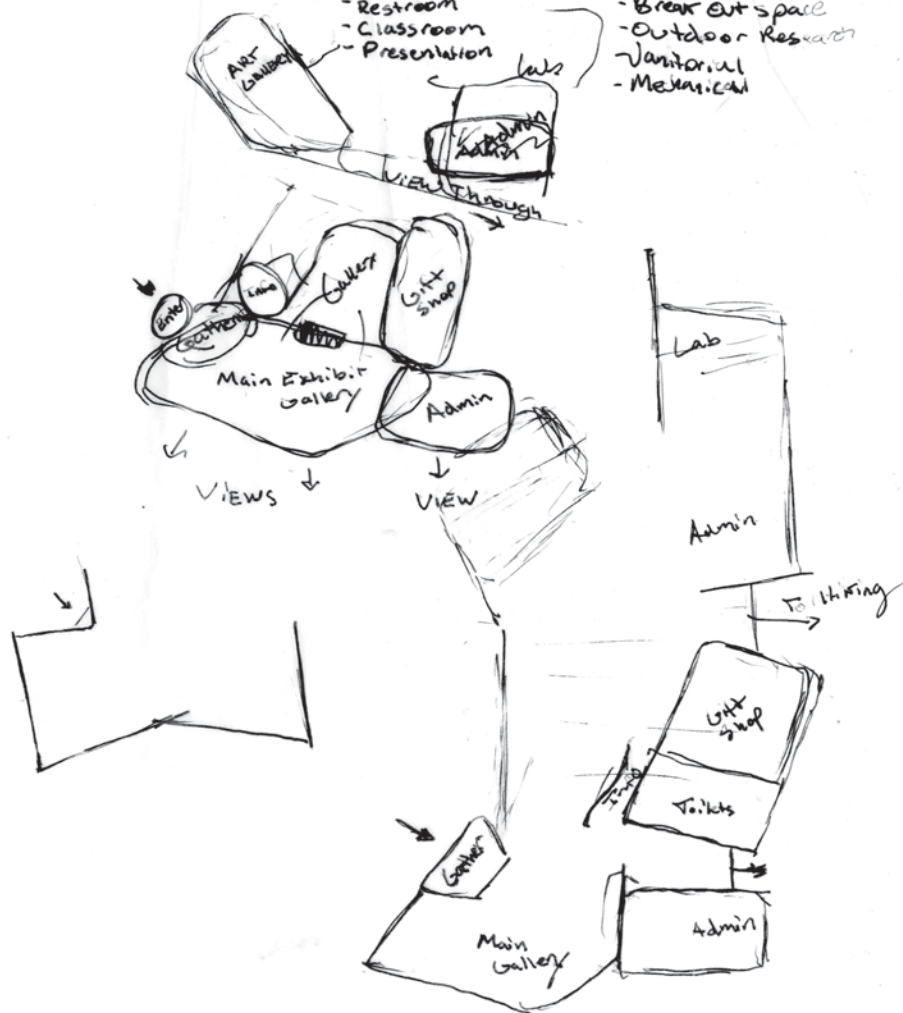
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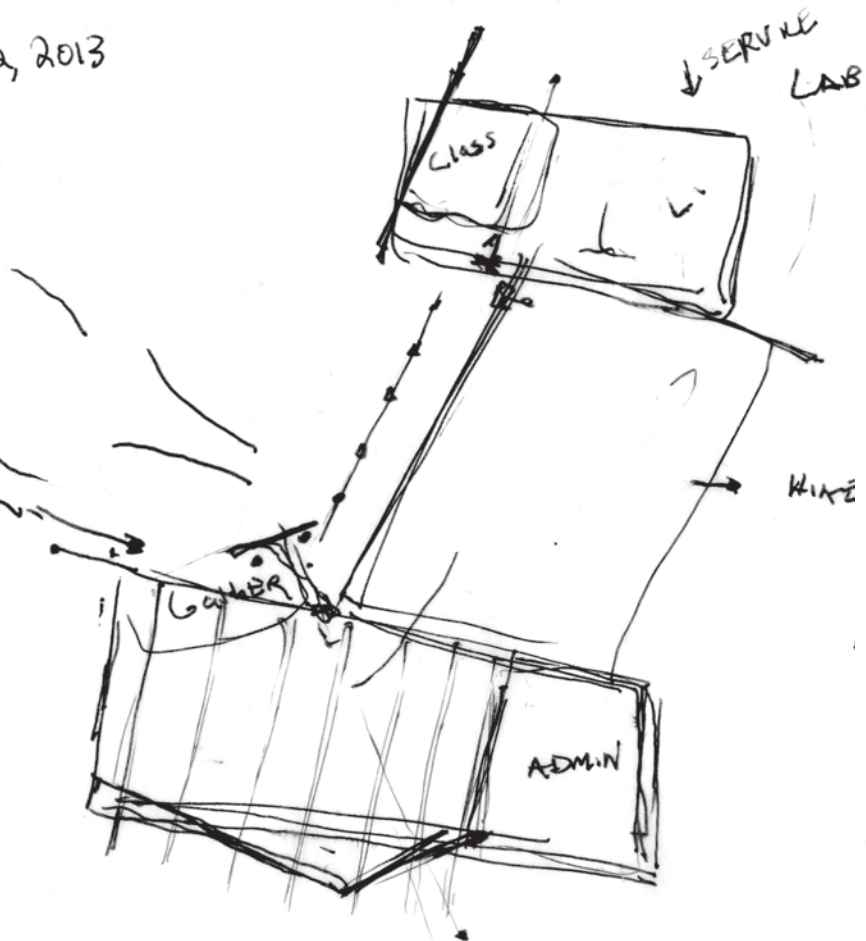
Public

- Entrance
- Gallery
- Art Gallery
- Information kiosk
- Gift shop
- Restroom
- Classroom
- Presentation

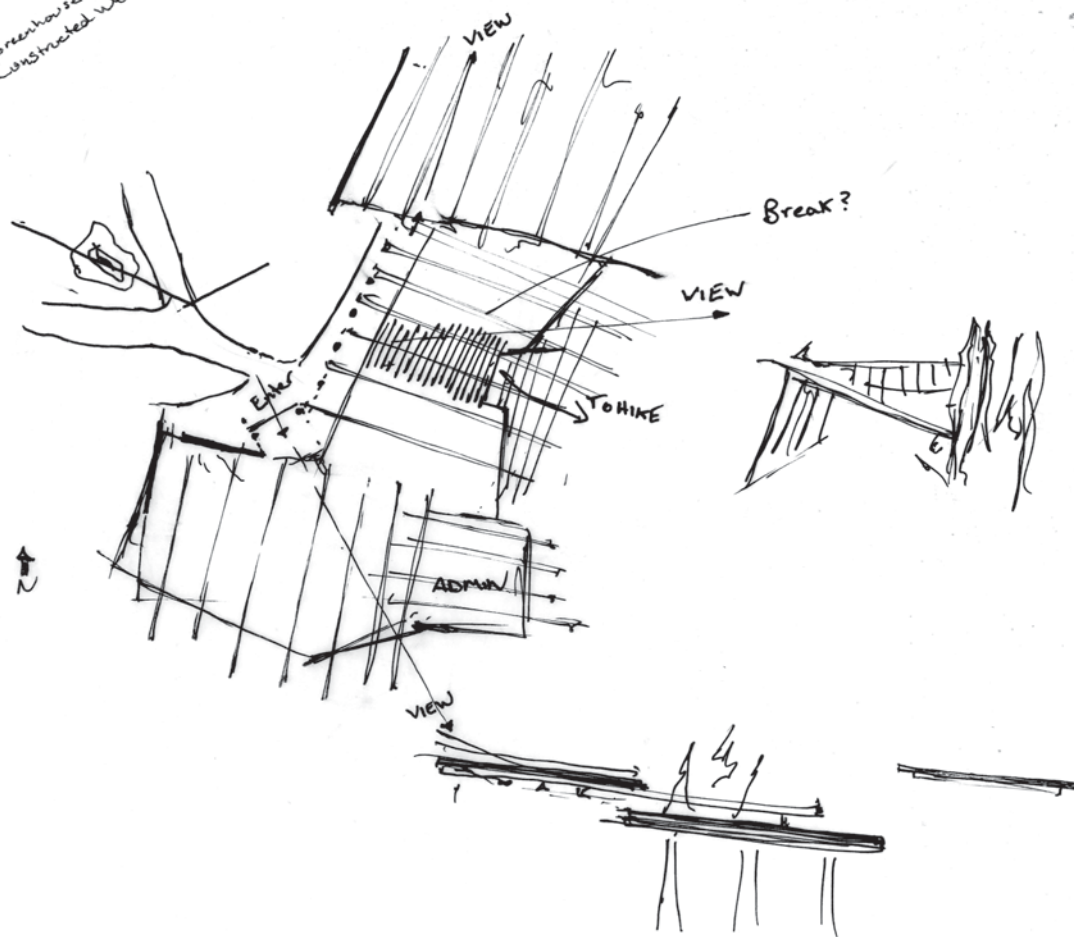
- Administrative offices
- Research lab
- Lab offices
- Conference room
- Break out space
- Outdoor Research
- Janitorial
- Mechanical

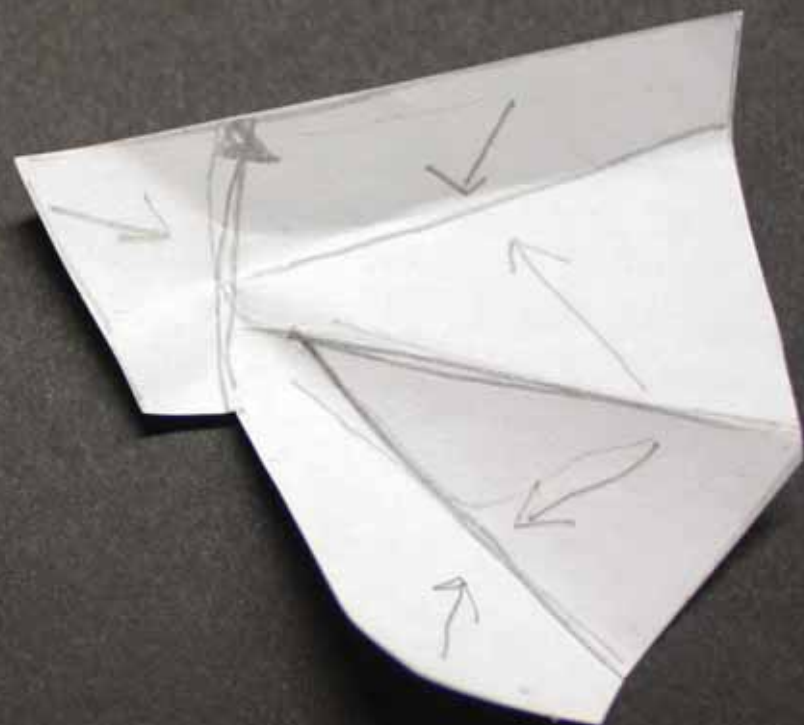
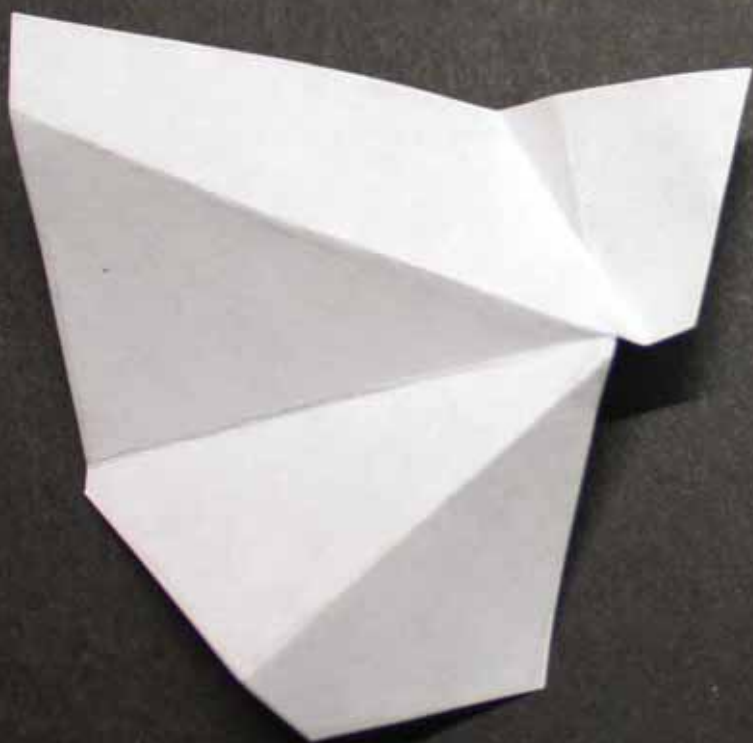


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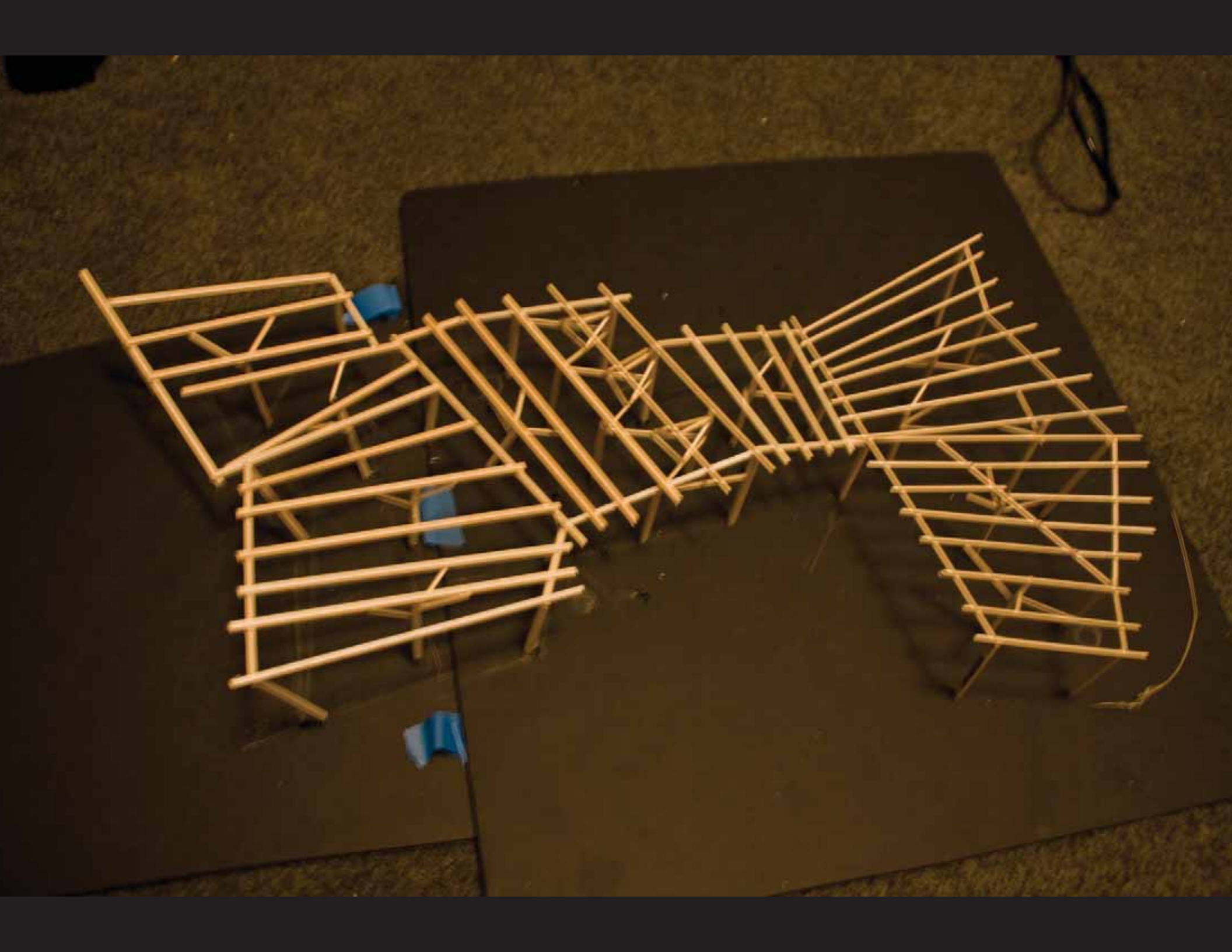


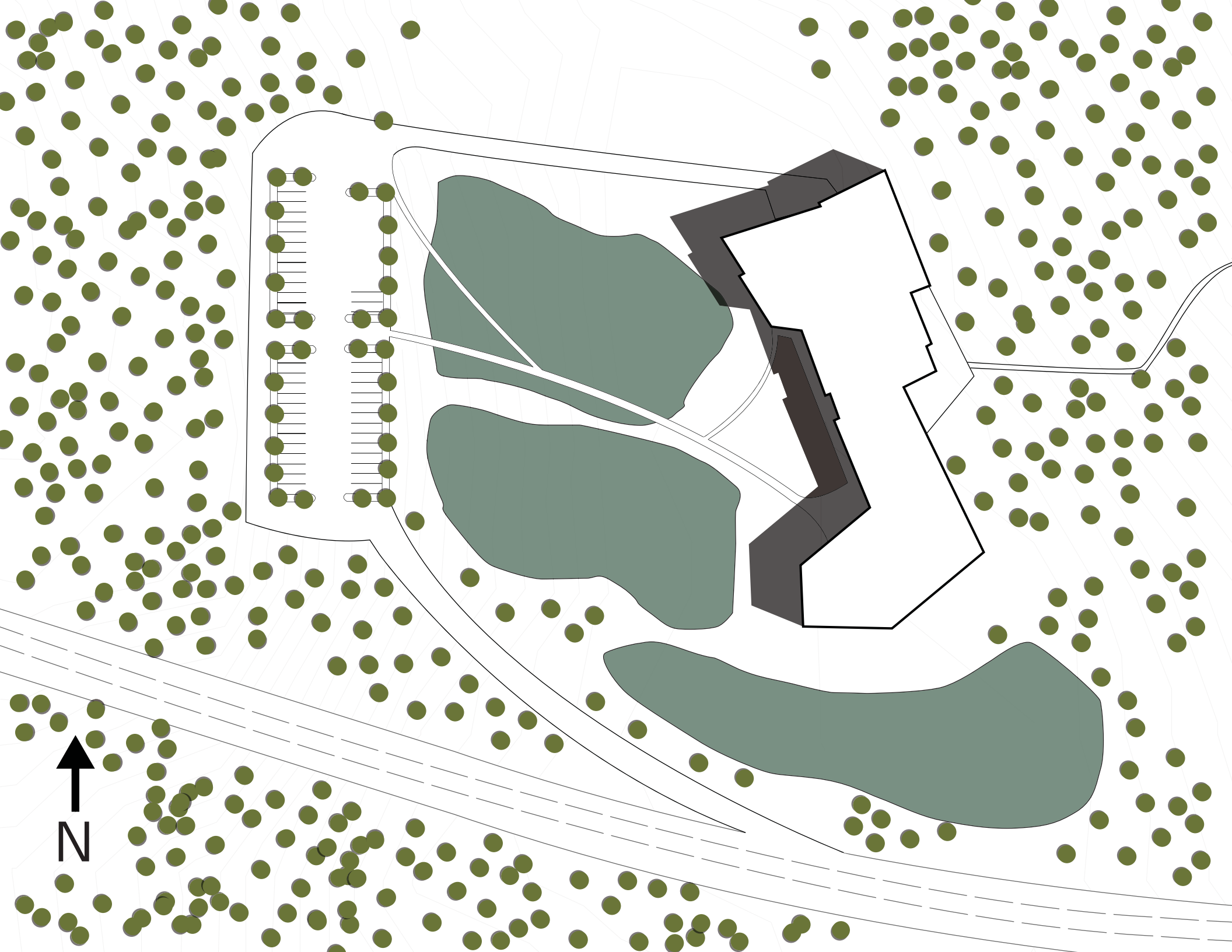
- Greenhouse
- Constructed Wetlands

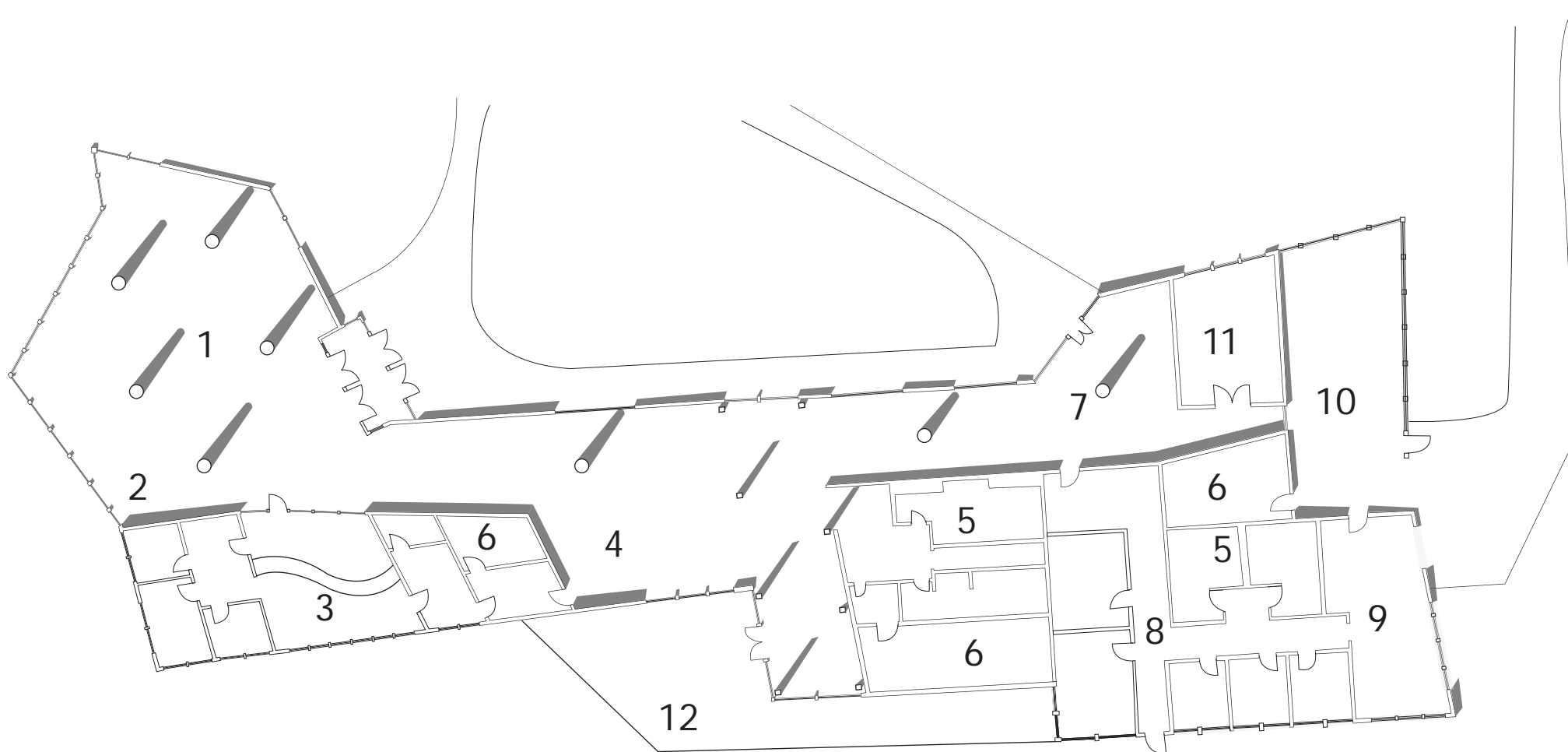








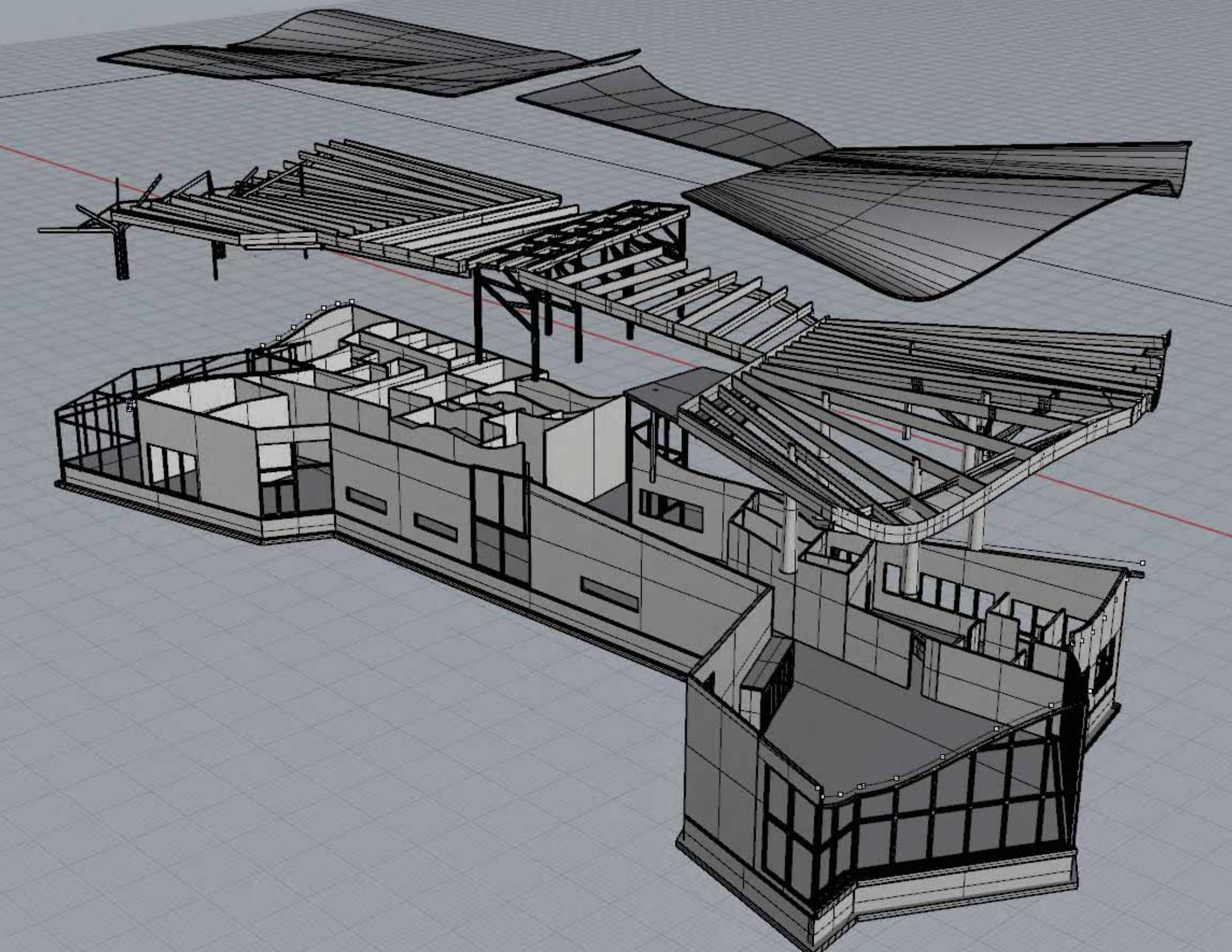


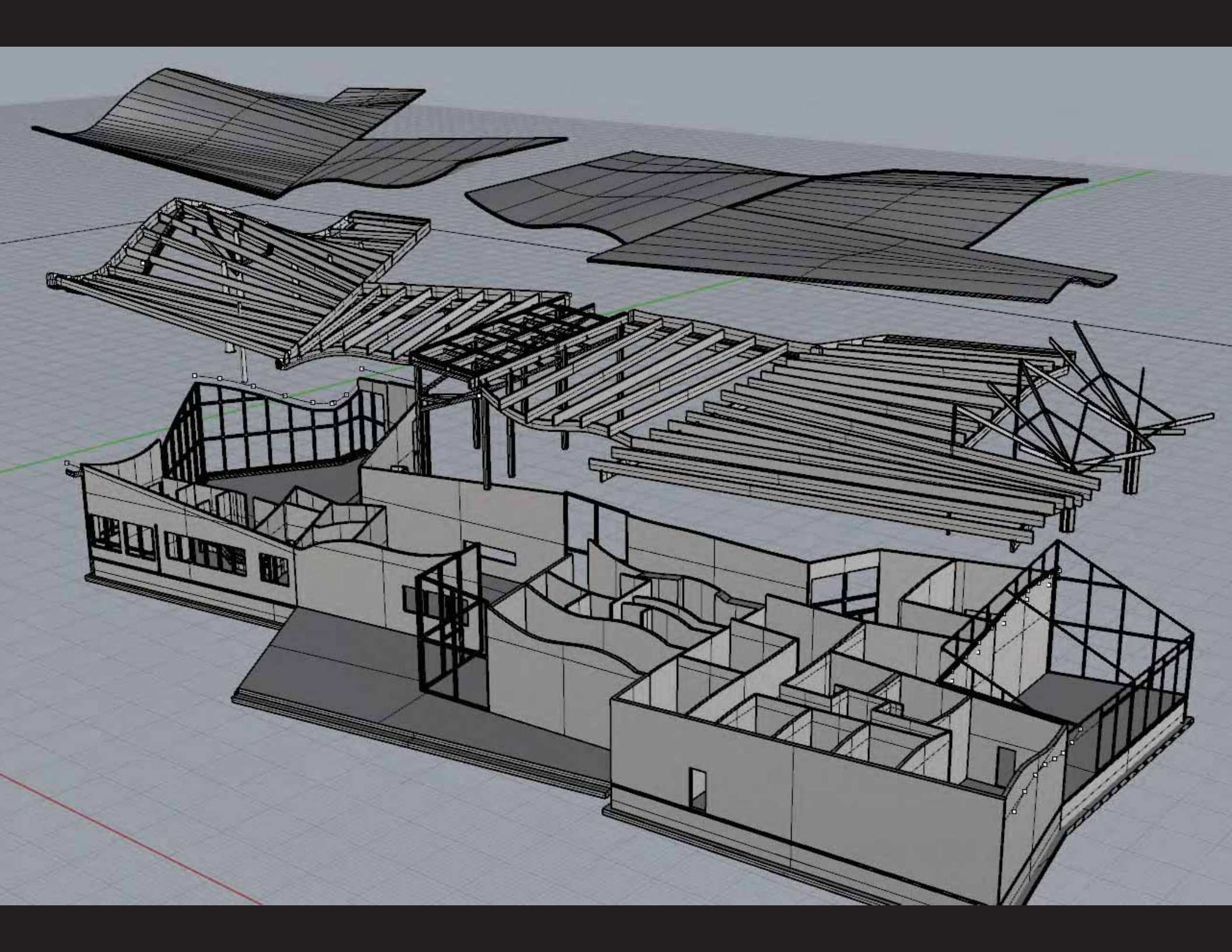


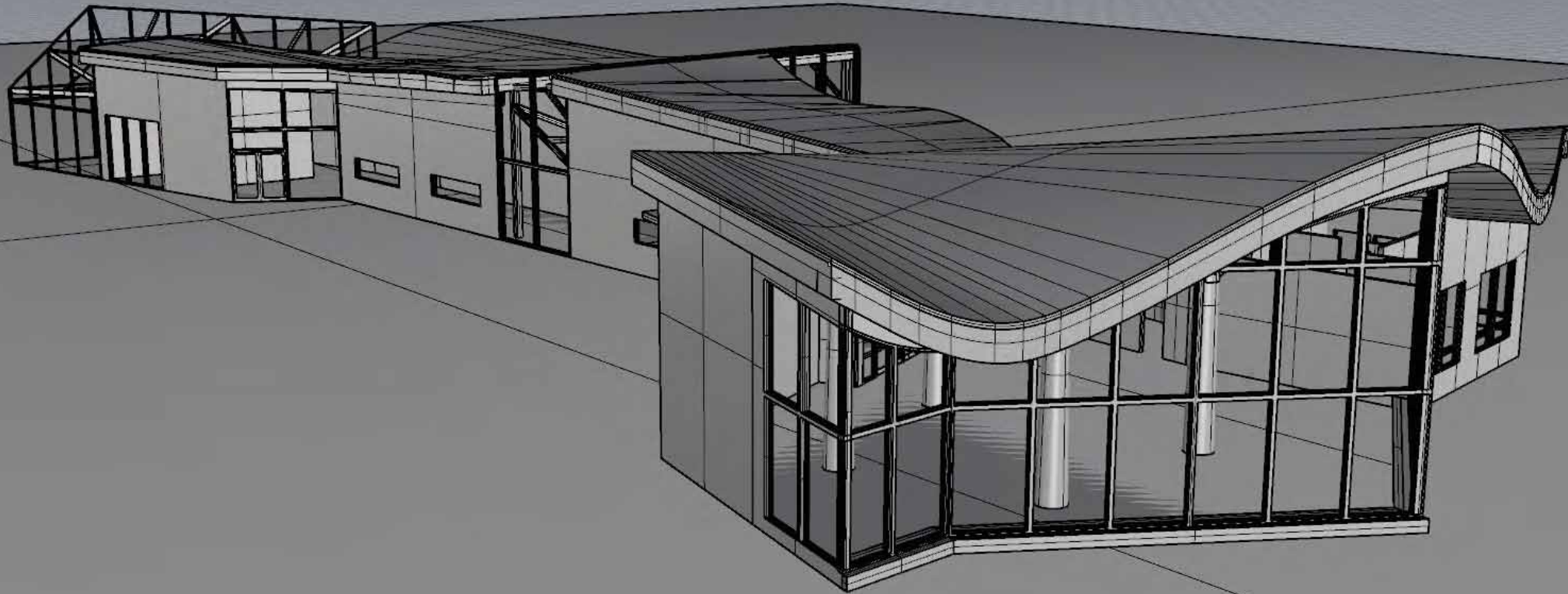
- 1. Gallery
- 2. Information
- 3. Administration
- 4. Bookstore
- 5. Restrooms
- 6. Mechanical

- 7. Art Gallery
- 8. Lab Offices
- 9. Lab
- 10. Greenhouse
- 11. Class Room
- 12. Trail Head Deck

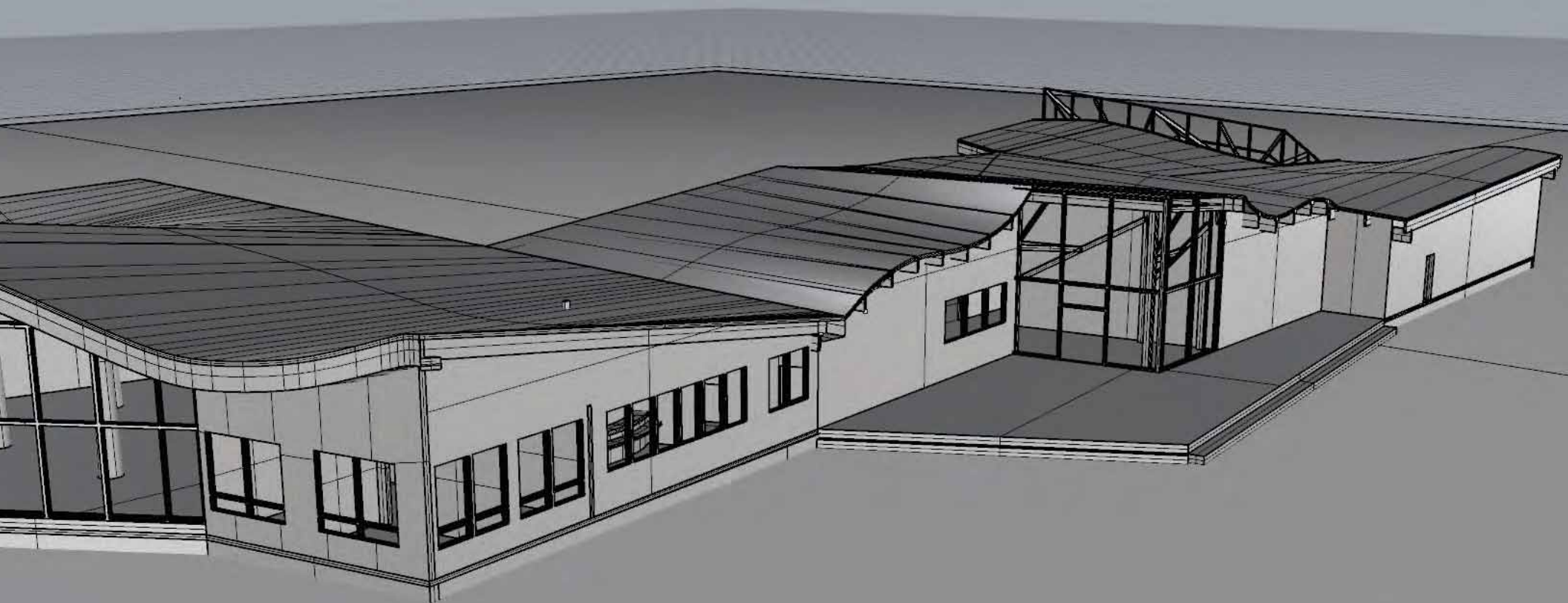






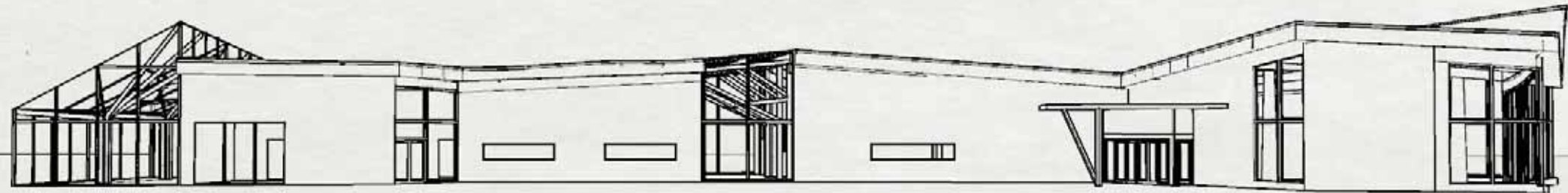
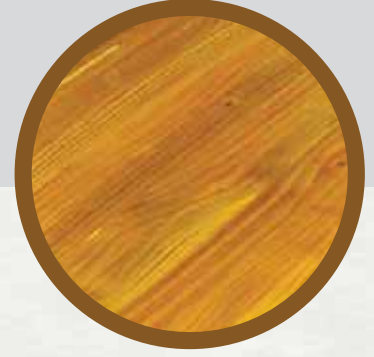
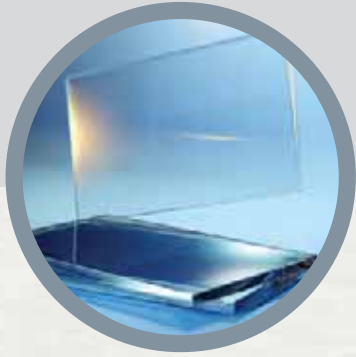


Perspective



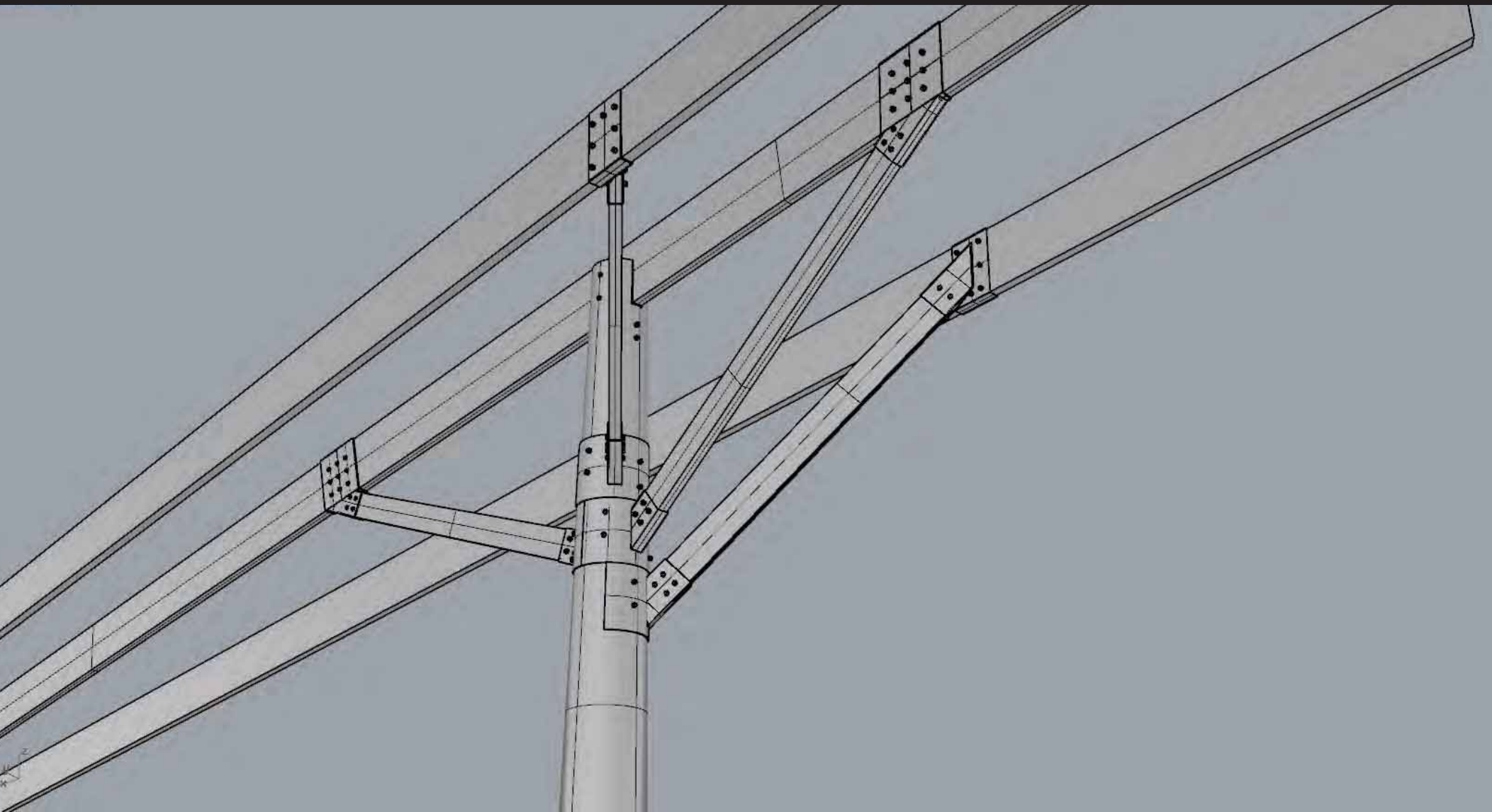
Perspective ▾

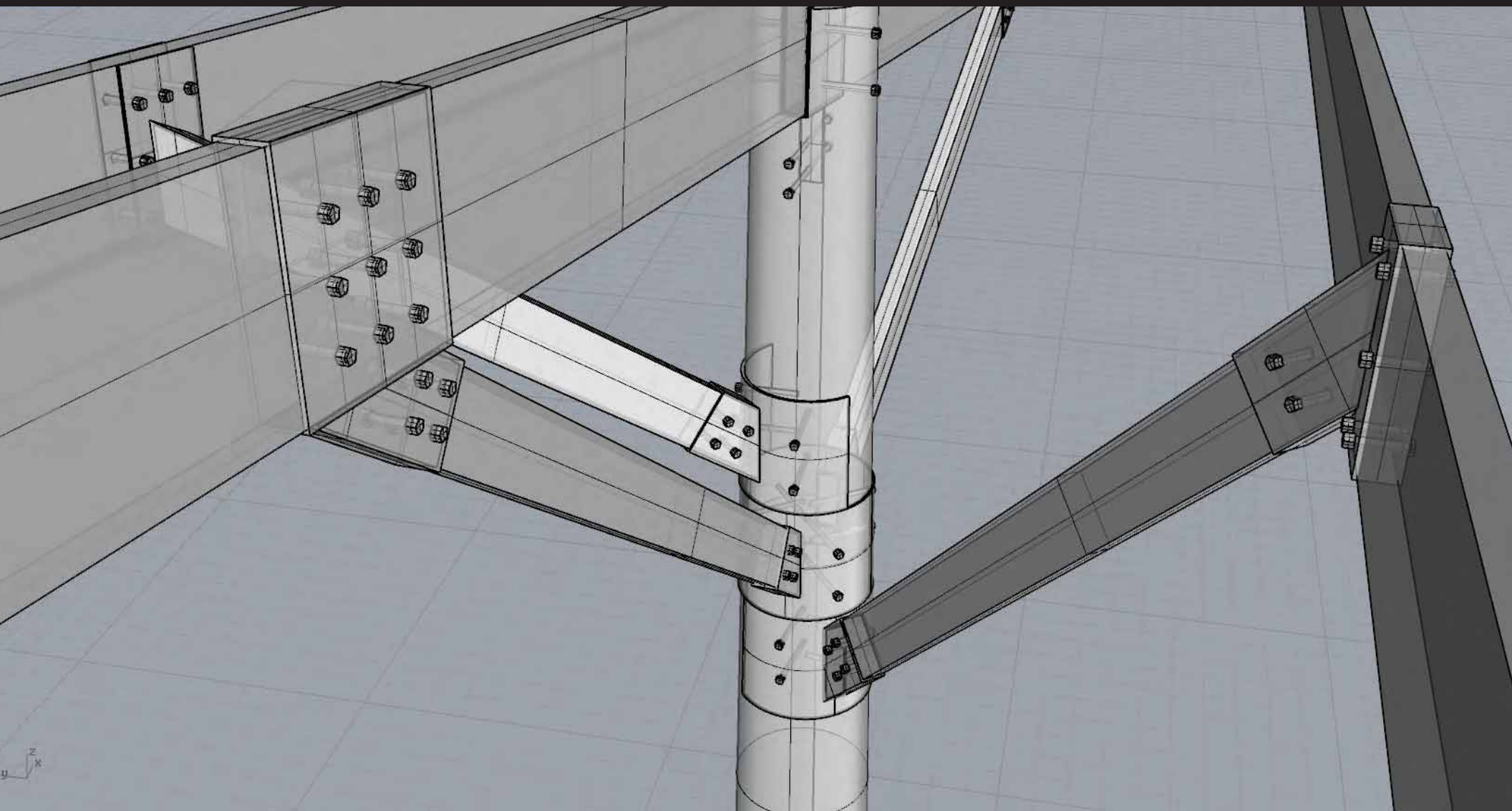




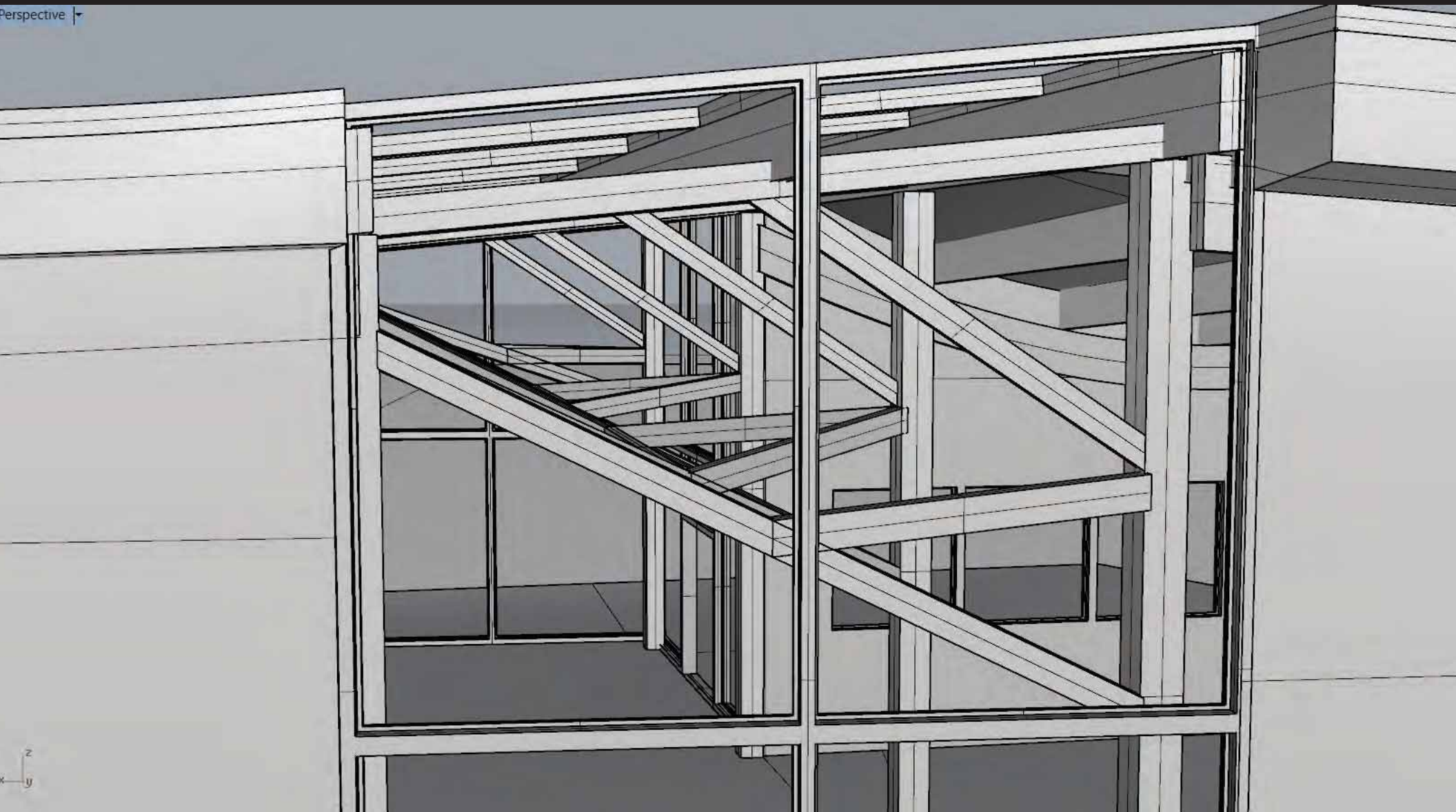
Perspective



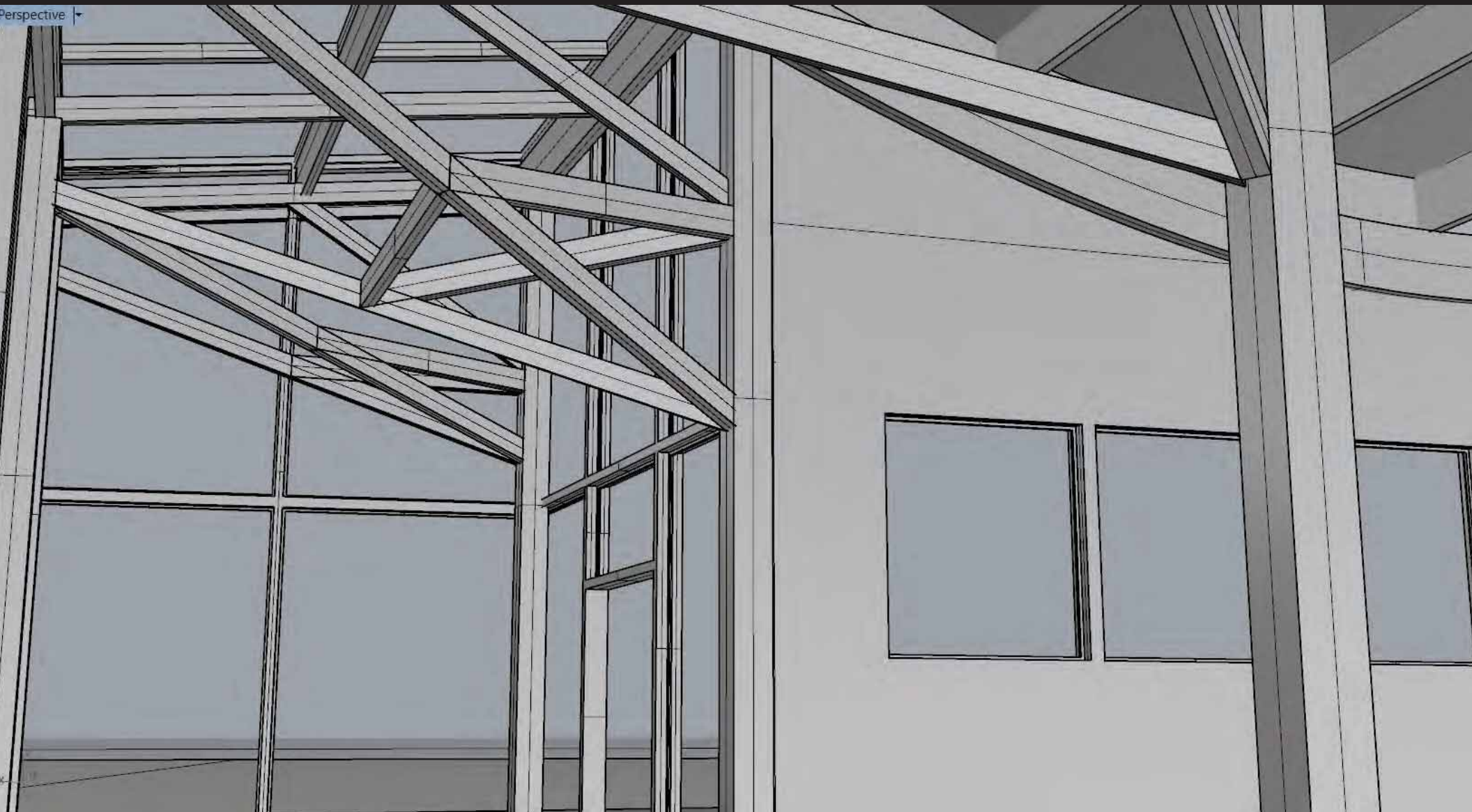




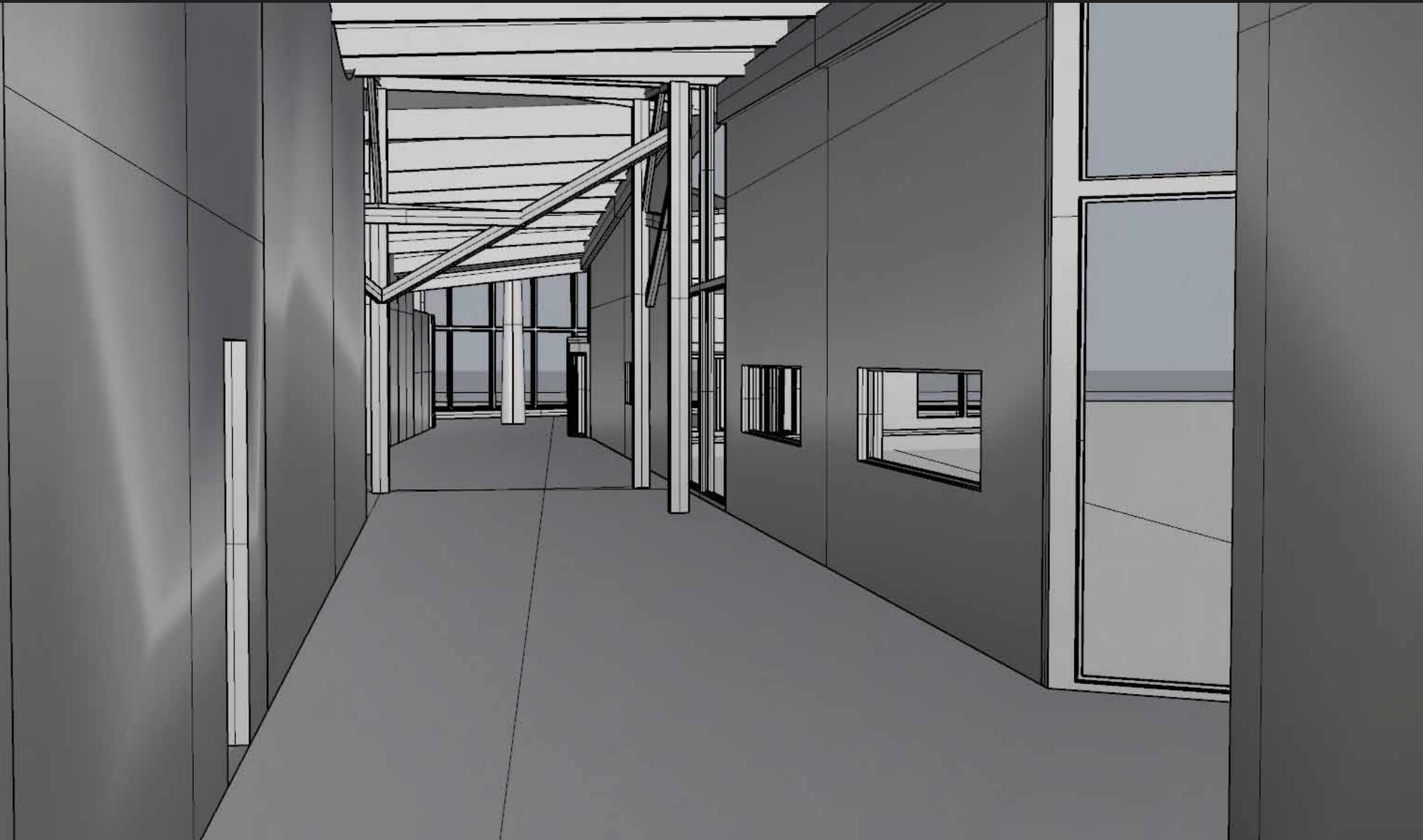
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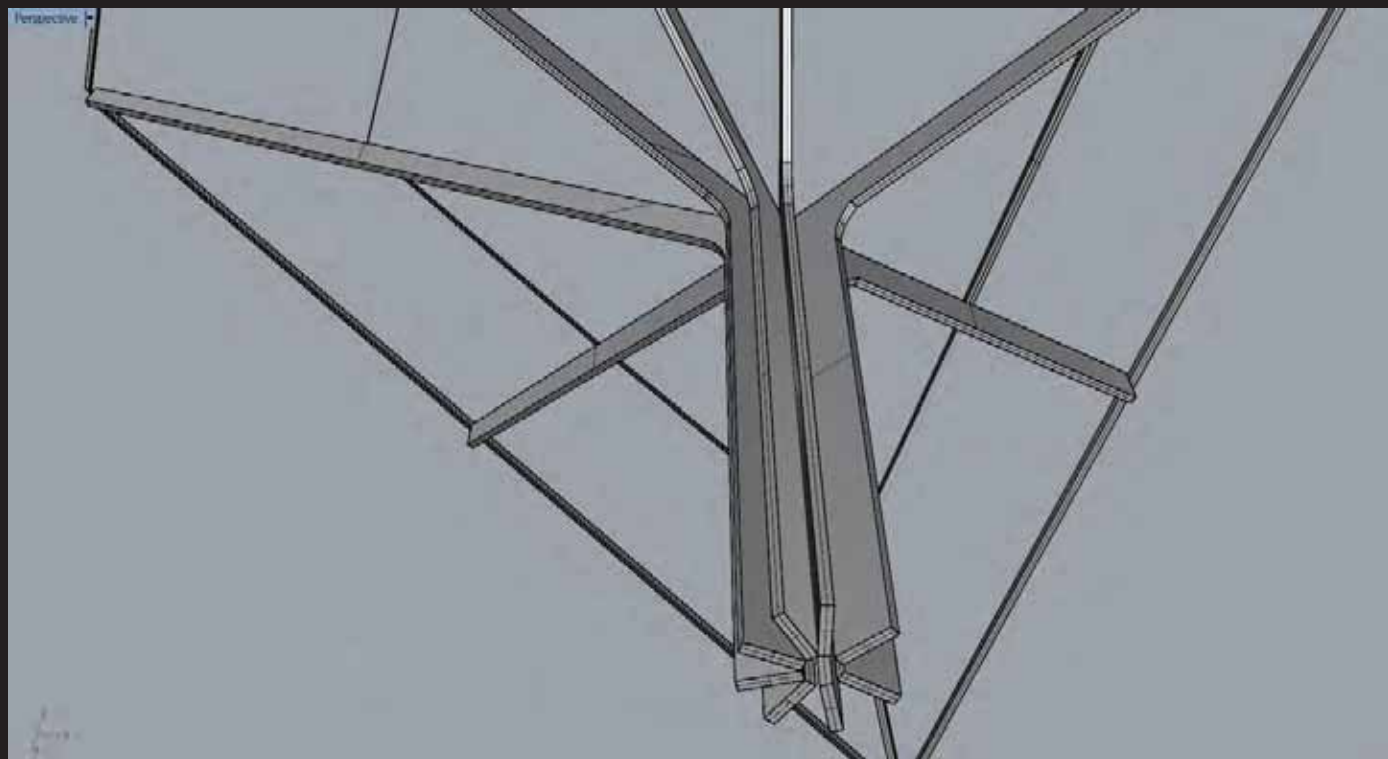


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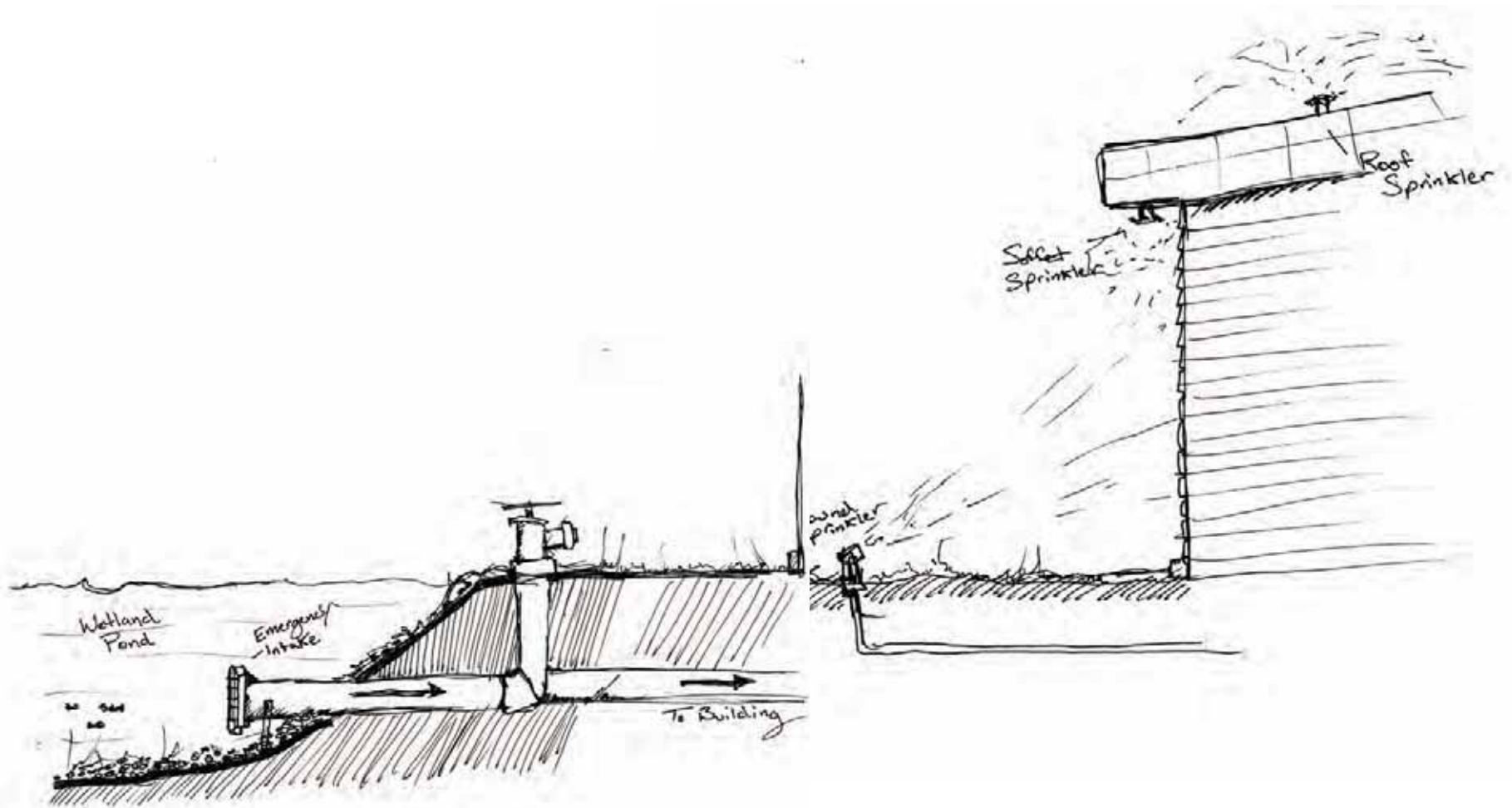
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Thank you!