

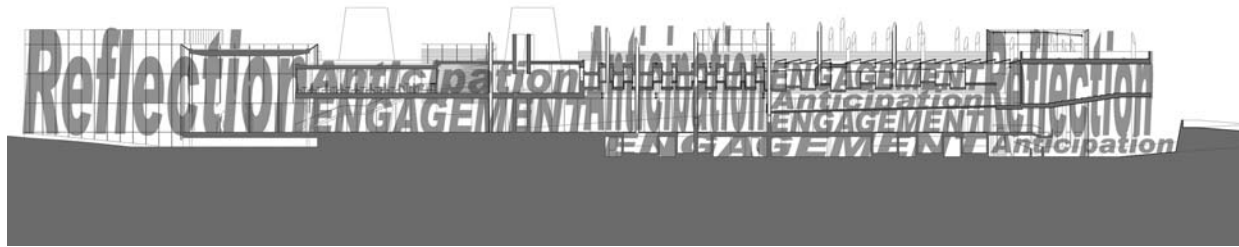
Perceptions of Comfort: Anticipation, Engagement, Reflection

A Center for Reptiles and Amphibians at the Knoxville Zoo



Rob Bundy

*So. The Spear-Danes in days gone by
and the kings who ruled them had courage and greatness.
We have heard of those princes' heroic campaigns.*



Narrative

Beowulf serves as the primary vehicle guiding the theme of the proposed design. It is one of the most widespread works of in the English Language both because of its history and its identifiable story. Beowulf is the earliest known manuscript of the English language. It tells the story of the Scandinavian hero Beowulf, who defeated foes and saved two countries. The defeated dragon is the reptilian representation of evil.

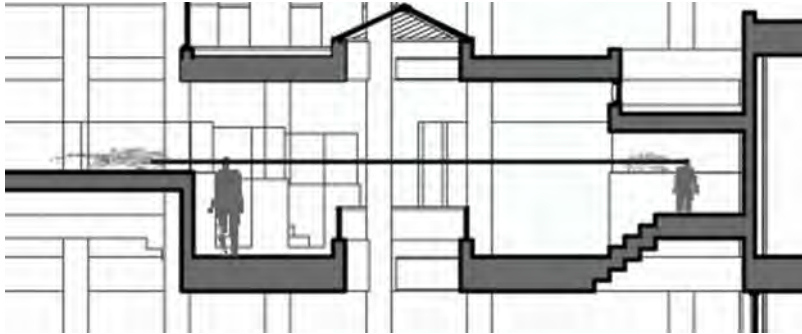
Beowulf builds up progressively to very linear and fast paced sequences of events followed by long and slow periods of reflection, whether in celebration and mourning, that make the whole composition cyclical. The periods of celebration must have occupied relatively short periods of actual time when compared to the journeys in the epic, yet more of the poem is devoted to them, emphasizing the importance of rest and reflection throughout the poem. The action sequences are no less important, yet fewer words are used to tell of these events in order to emphasize their intensity. The reptile center interprets these sequences spatially to create cyclical periods of anticipation, moments of engagement, and pauses for reflection as the visitor progresses through the building.

Perception

Position and Vision

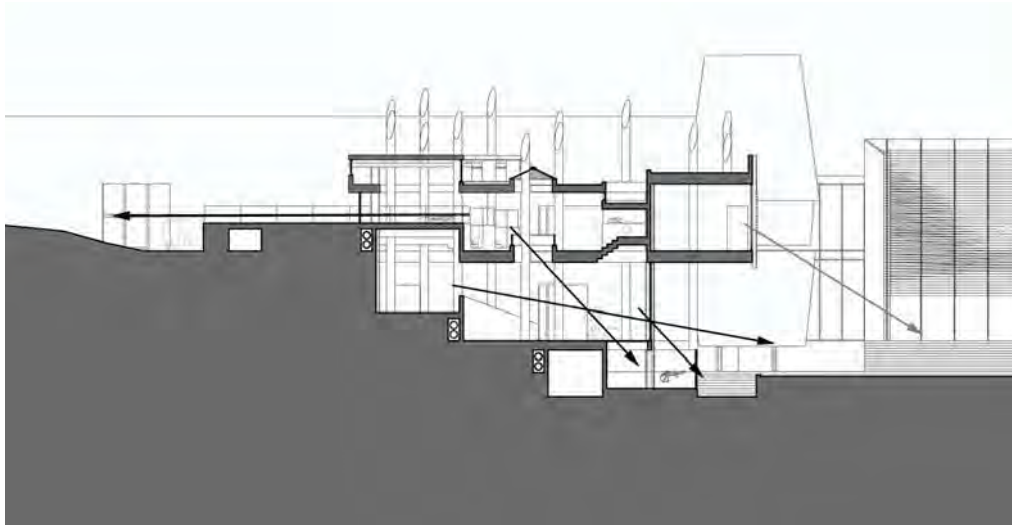
I can feel myself under the gaze of someone whose eyes I do not even see, not even discern. All that is necessary is for something to signify to me that there may be others there. The window if it gets a bit dark and if I have reasons for thinking that there is someone behind it, is straightway a gaze. From the moment this gaze exists, I am already something other, in that I feel myself becoming an object for the gaze of others. But in this position, which is a reciprocal one, others also know that I am an object who knows himself to be seen.

-Jacques Lacan



Humans and Animals are placed at the same eye level.

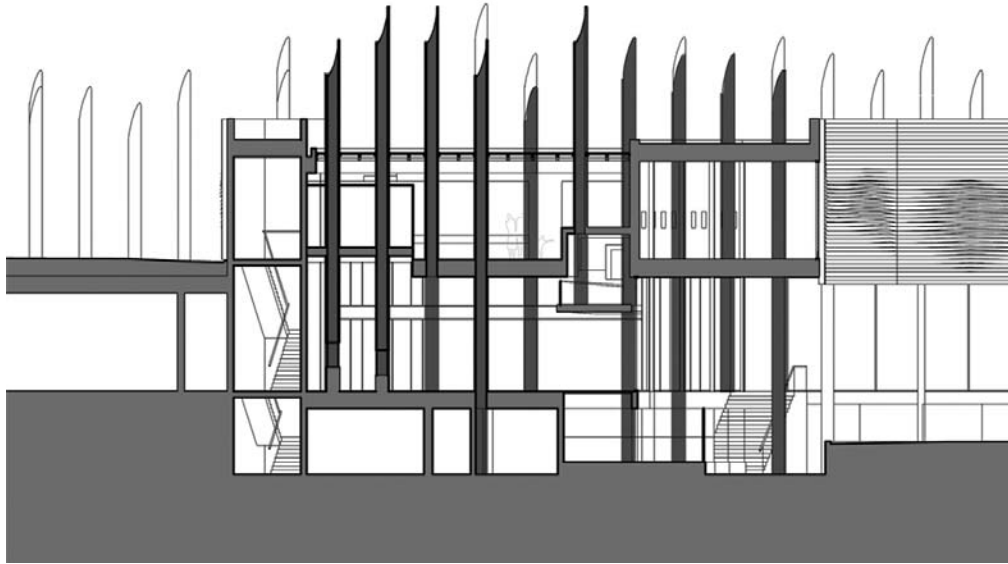
The relationship between reptiles and humans has been a tense one throughout human history. The Bible uses a serpent as the representation of evil from its outset. Beowulf continues this idea of reptiles being evil through the Middle Ages, and Harry Potter books promulgate this notion in the present day. Even if they are not regarded as evil, reptiles' appearances alone are enough to make most people uncomfortable. Reptile houses at zoos tend to display reptile in aquarium-like cages which comfort visitors in knowing that there is absolute security in the separation between them and the animals. The reptile center at the Knoxville Zoo will place humans and animals in relationships that will create positions of control, power, and security for one and inferiority and subjection for the other. Instead of always placing the human in the position of power, the building will create moments of uneasiness for the humans, perhaps keeping them inferior in some way to the animal, even when in the positions of control. The position of the humans and the animals will be experienced throughout the entire facility in a variety of ways that subvert the expected level of comfort and make the visitor hyper-aware of their environment.



Openings between the various levels of the Reptile Center provide specific views throughout the building.

Vision, both of the animal and the human is exploited in the Center for Reptiles in order to subvert the expected condition to achieve a condition that is more conducive to understanding the reptile. Reptiles generally have a very wide, horizontal sight line that, like their eyes is low to the ground. The eye level of the human is generally higher than the reptiles. Because reptiles are often prey and have the corresponding sightlines, it is psychologically unhealthy for them to be looked down upon. In order to achieve a better condition, the sight lines of both are placed at equal levels, providing for both children and adults.

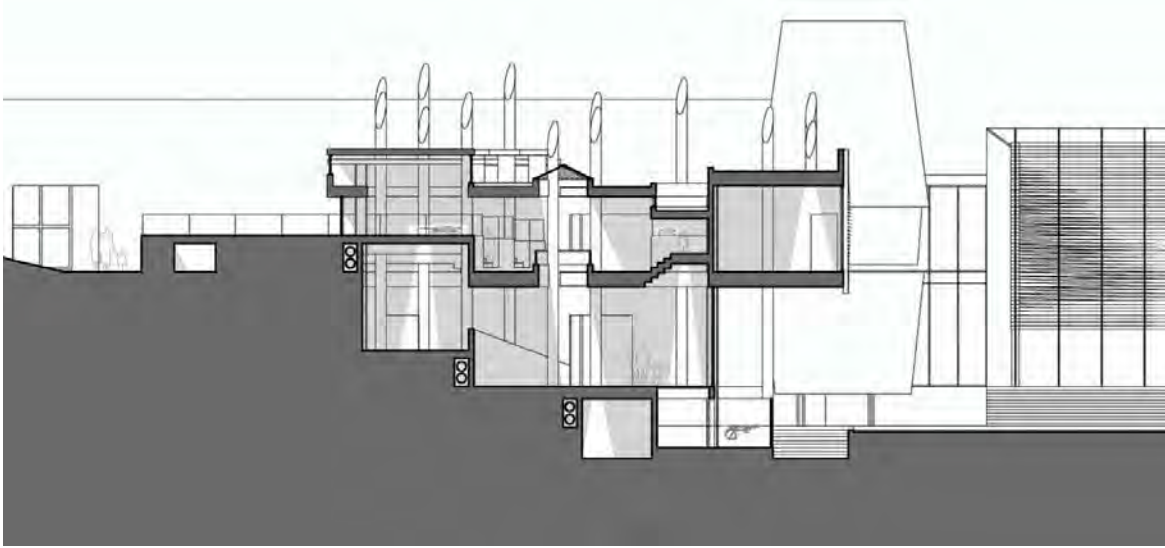
Views to other areas of the building are also controlled, providing glimpses only to certain parts of the building or to a particular level, such as to only someone's eyes or feet. Reserve areas of the building are kept private by providing natural light either through the concrete tubes or by having the windows obstructed with louvers.



The concrete “trees” and animals habitats get denser in the engagement areas of the center.

Density

As the visitor moves through the building, changes in density and separation provide much of the difference between the anticipation and engagement spaces. The anticipation spaces tend to be less dense and more systematic, whereas the animals in the engagement spaces are more numerous and in varying and unpredictable locations. The change in density is also experienced through changes in light quality and the speed of the users' journey.

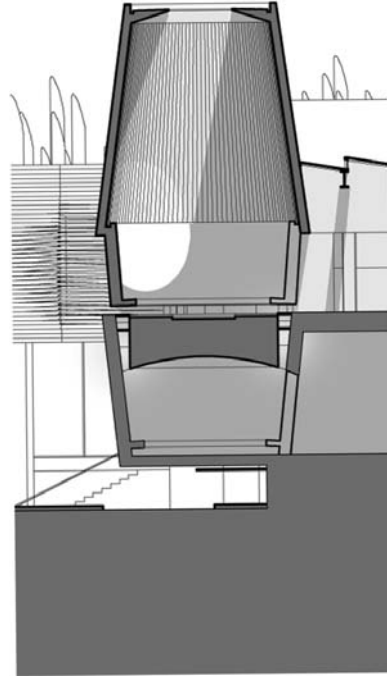


Light penetrates the building through various means, allowing for natural lighting in most of the building.

Light and Temperature

Natural light is utilized in the Reptile Center as much as possible. Reptiles and amphibians need ultraviolet rays in order to remain healthy. Roofs and windows are constructed of UV transmitting acrylics where applicable. The concrete tubes bring light through the building in order to illuminate even the lowest depths of the facility.

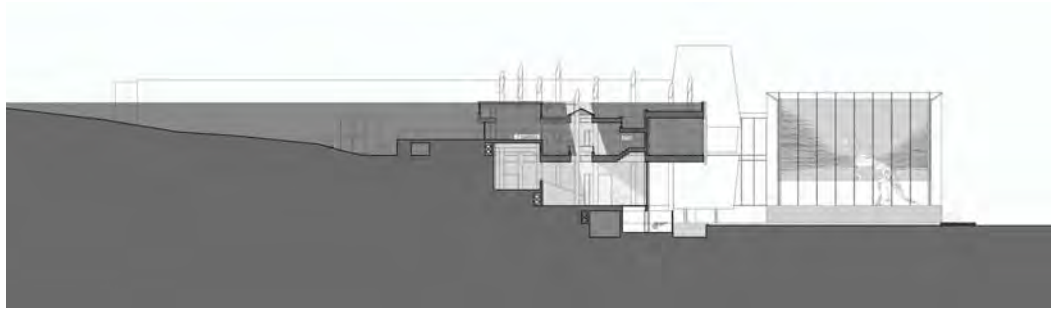
Visitors moving through the Reptile Center will experience thermal changes that reflect the conditions of the animal that they are viewing at the time. Many reptile houses keep separate systems for the humans and the animals in order to maintain comfort, but here the goal is for the human to experience the temperature changes that are so evident for cold-blooded animals.



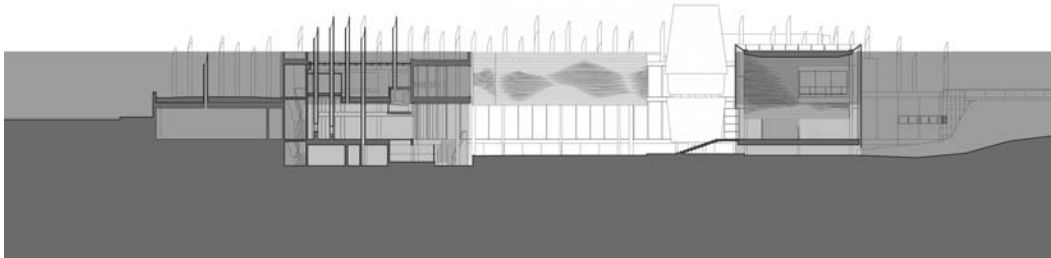
The Basking Rock and Humid Room provide visitors with a heightened sense of light, temperature, and time.

Time

Many reptiles have life spans that rival that of humans, and some that double that of humans. Al, the Knoxville Zoo's oldest Aldabran tortoise, is well over 100 years of age, and will likely outlive many of us. Reptiles are also unique in that so they have survived on the planet for so long, not only in the form of dinosaurs, but many in the same form in which we find them today. Awareness of time is explored in the reptile center through changing light conditions and speeds. The materials of the building also allow a reading of time: wood and metal that will patina over the years and gravel that produces a rhythm as it is walked upon.



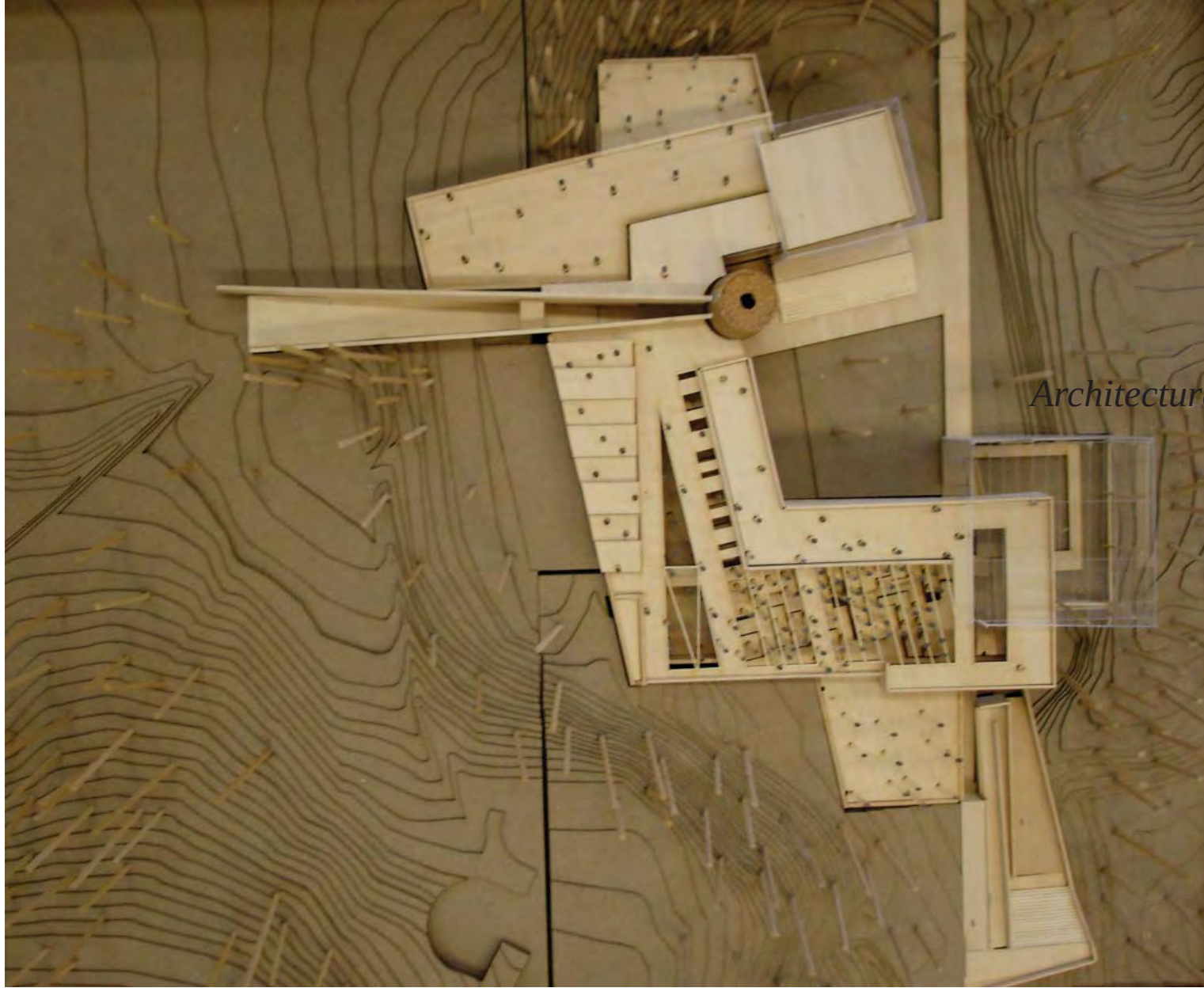
The top level of the Reptile Center recalls earth, the middle water, and the lower level, air. Light, water, and the concrete “trees” penetrate all layers to relate them to one another.



The building, like the landscape, surrounds and focuses on the wetlands in the middle.

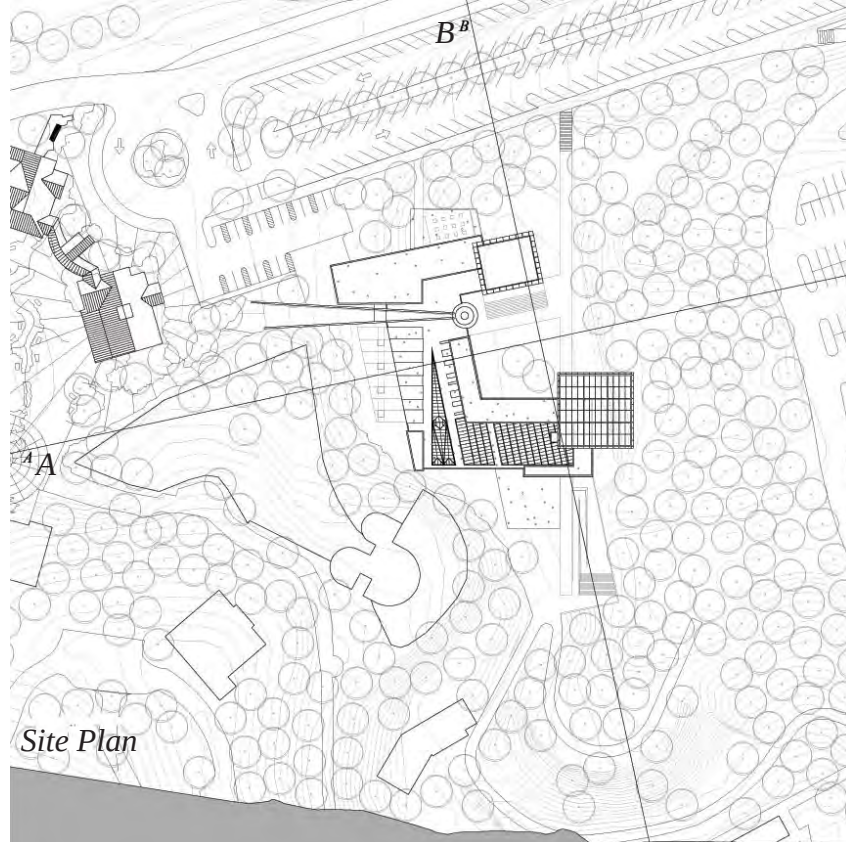
Site

The site for the Reptile Center was conceived as a constructed landscape. The new building will become a part of a wetland landscape on an old grandstand used by the fairgrounds. The arena floor will become the wetland and the hillside and berms of the old stands will serve as a dam for the water. The building and the trees of the site will form a ring around the basin that focuses views towards the center and across to the other end of the building. The building is conceived as three layers representing earth water and sky. Subverting the normal order, the earth is the top layer and maintains a relationship with the exterior of the site. The water and sky layers are below and maintain a connection to the middle of the site. The form then morphed as the elements conceptually sought to return to their normal location. Each layer also corresponds with the animals located on each level: animals in dry environments on top, amphibians in the middle and aquatic reptiles at the lowest level.



Architectural Drawings and Model

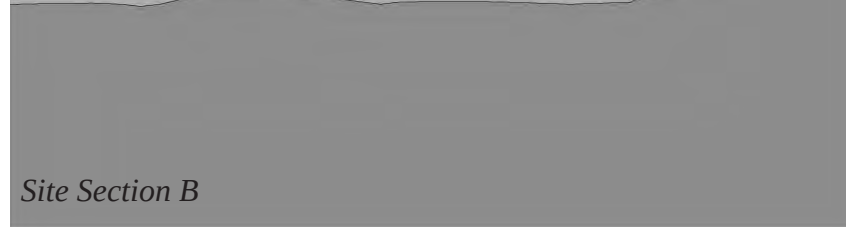
Plans



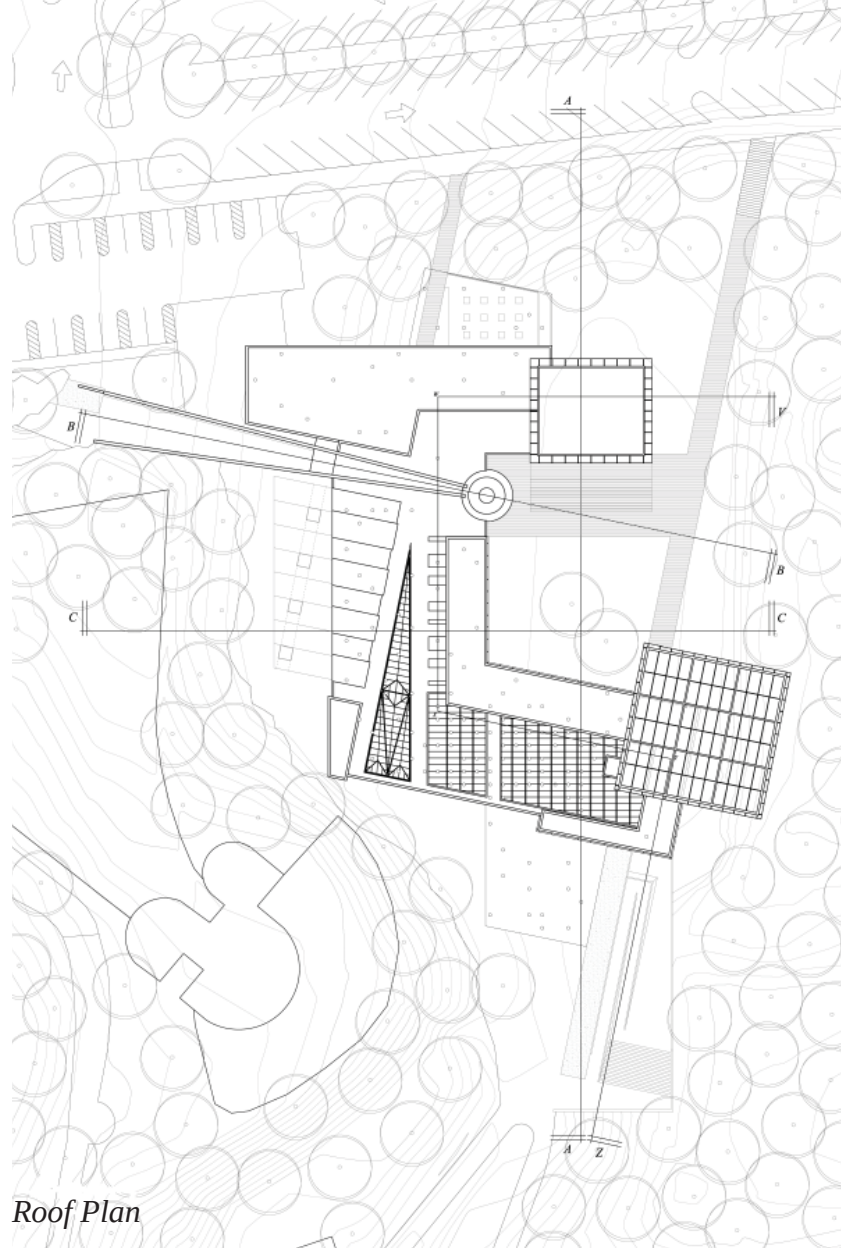
Site Plan



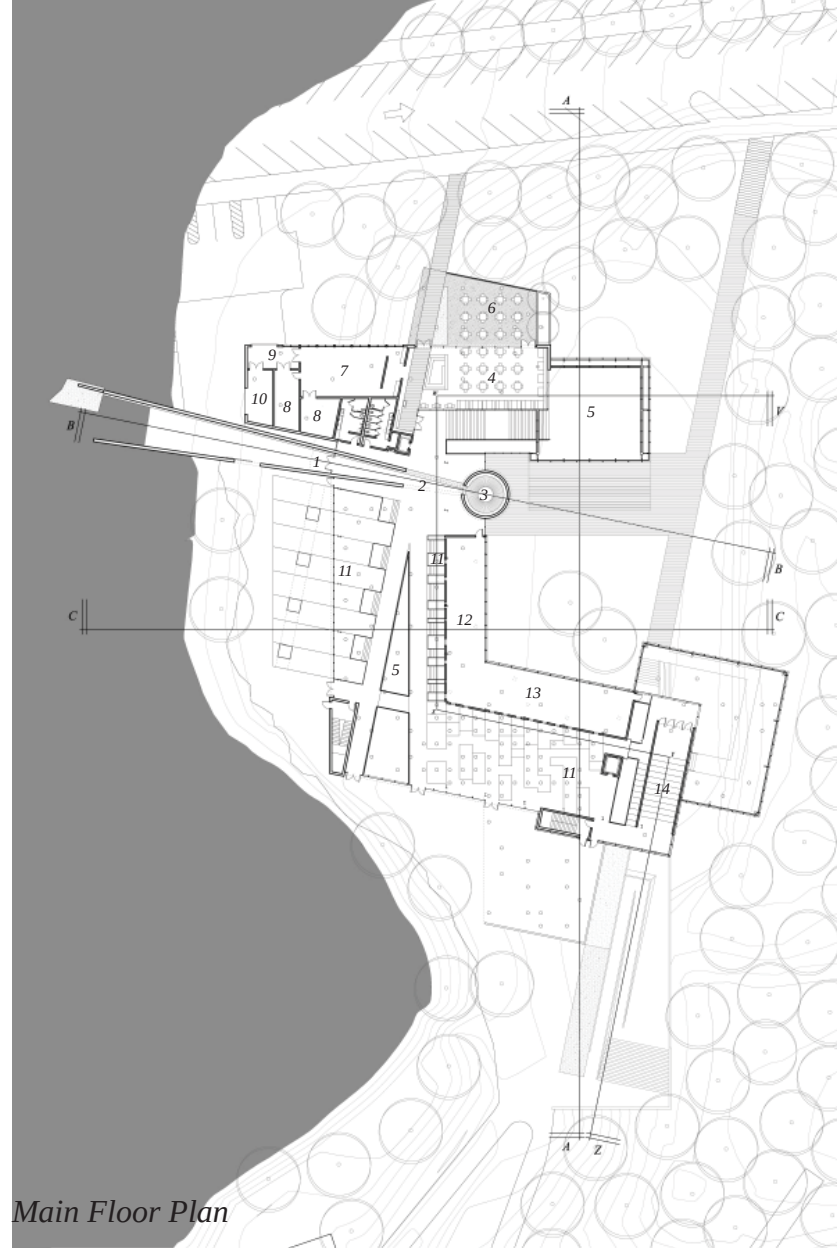
Site Section A



Site Section B

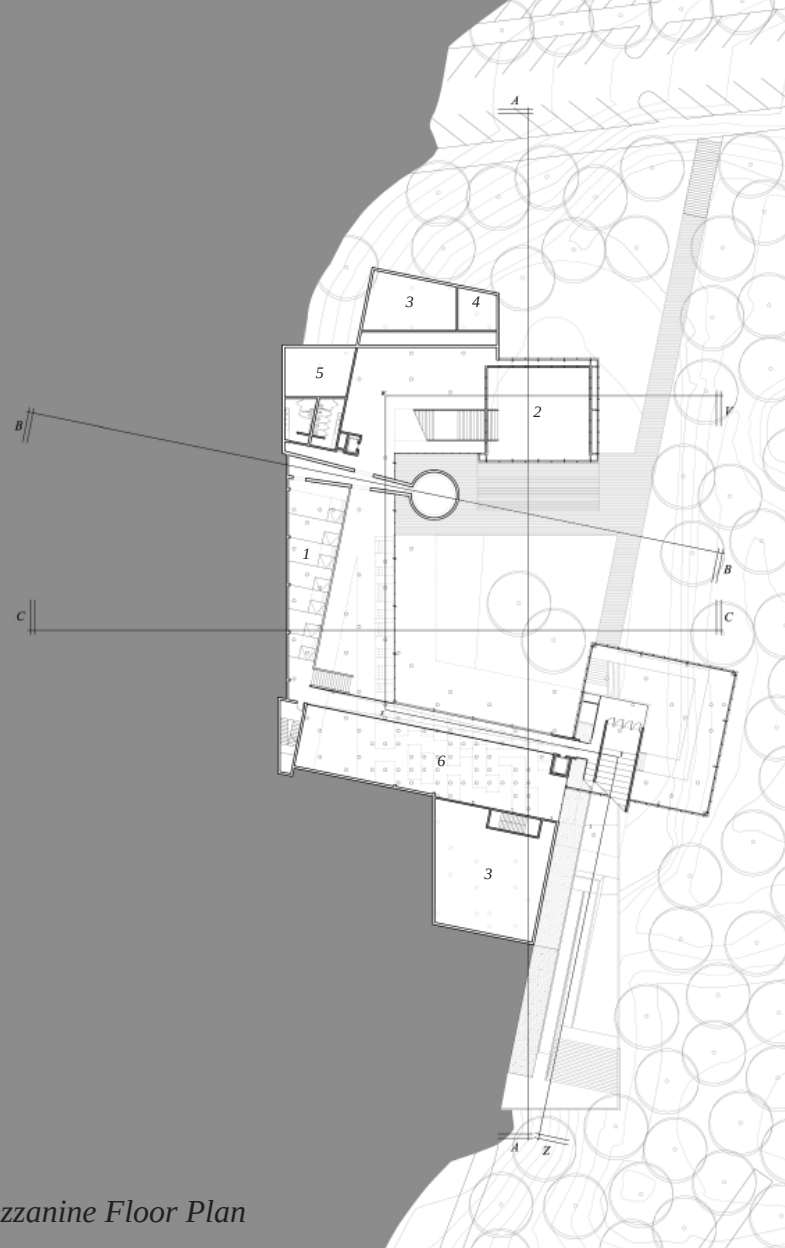


Roof Plan



1. Entrance
2. Exhibits
3. Basking Rock
4. Restaurant
5. Open to Below
6. Outdoor Dining
7. Kitchen
8. Storage
9. Loading
10. Mechanical
11. Animal Habitats
12. Tortoise Reserve
13. Snake Reserve
14. Auditorium

Main Floor Plan



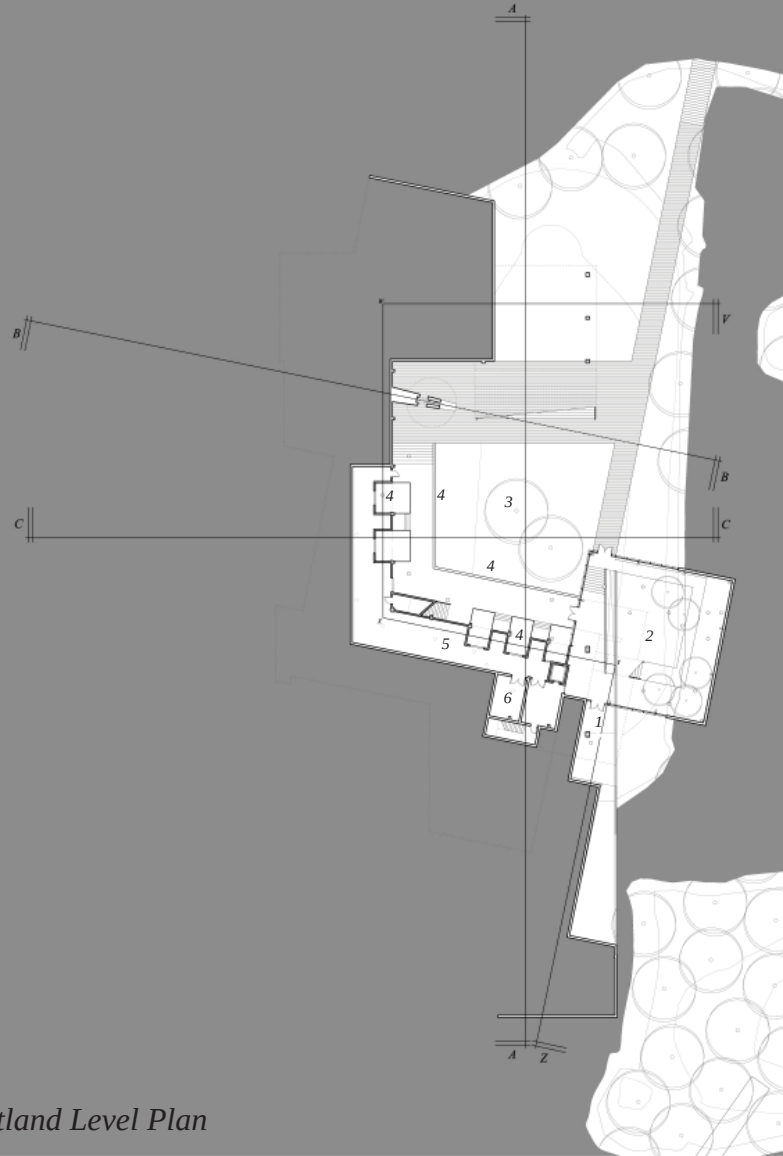
1. Exhibits
2. Great Hall Below
3. Reserve Below
4. Office Below
5. Storage Below
6. Habitats Below

Mezzanine Floor Plan



1. Great Hall
2. Nature Exchange
3. Office
4. Turtle Reserve
5. Storage
6. Flexible Exhibit / Habitat
7. Animal Habitats
8. Lizard Reserve
9. Hibernaculum
10. Cool Reserve
11. Feeding Room
12. Mechanical
13. Water Feature

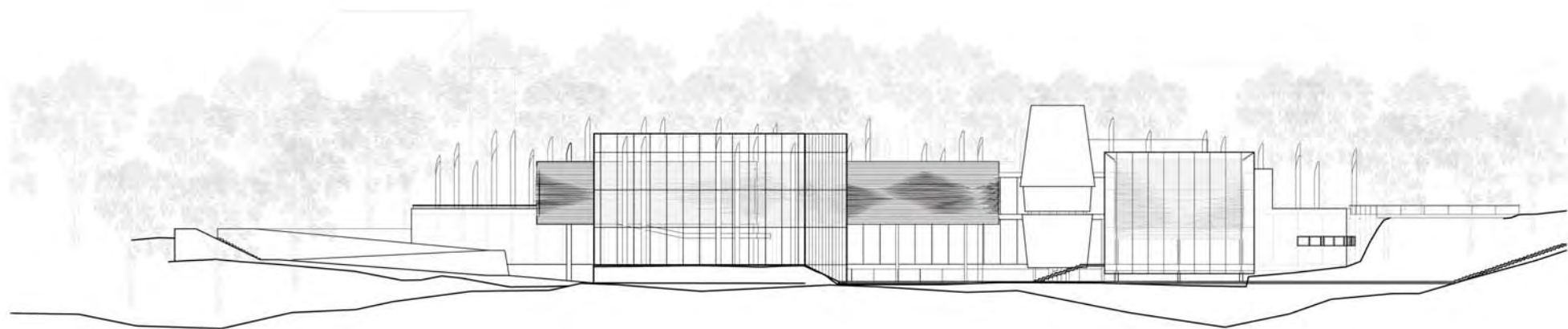
Lower Floor Plan



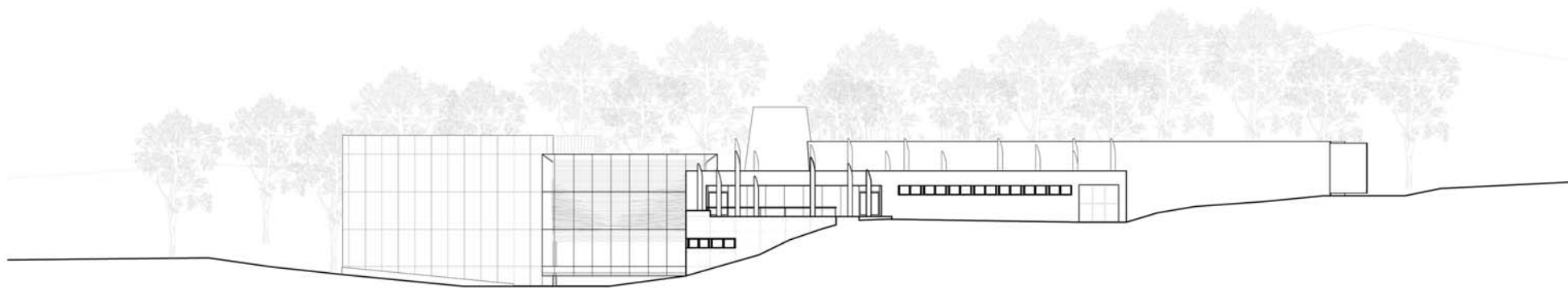
1. Entrance
2. Enclosed Wetland
3. Wetland
4. Animal Habitats
5. Zookeeper Access to Habitats
6. Storage

Wetland Level Plan

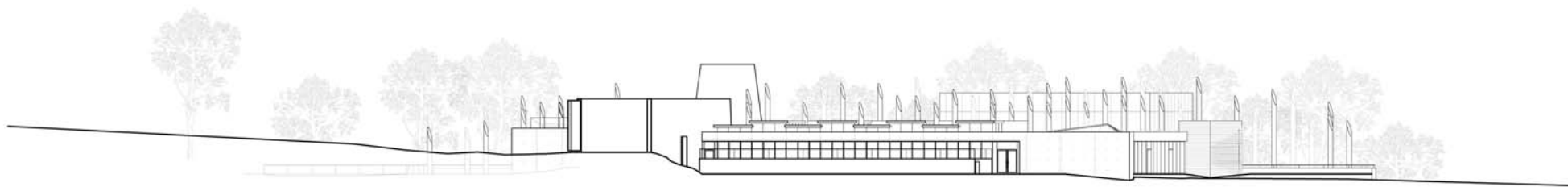
Elevations



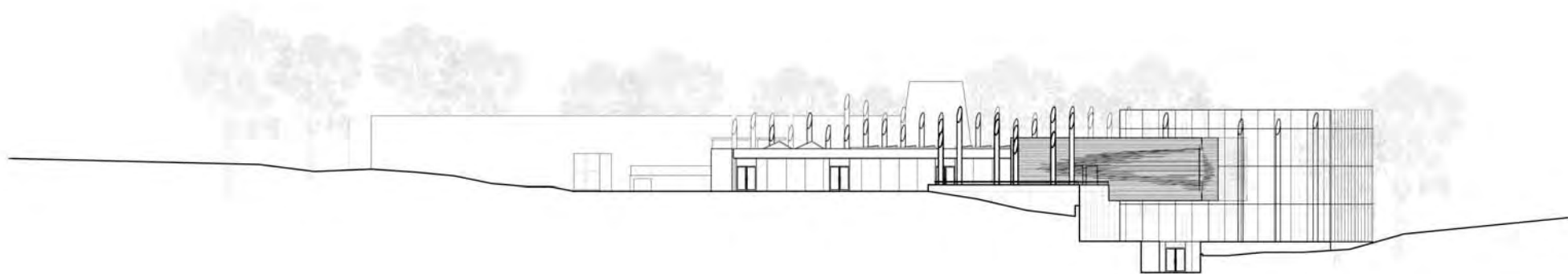
East Elevation



North Elevation

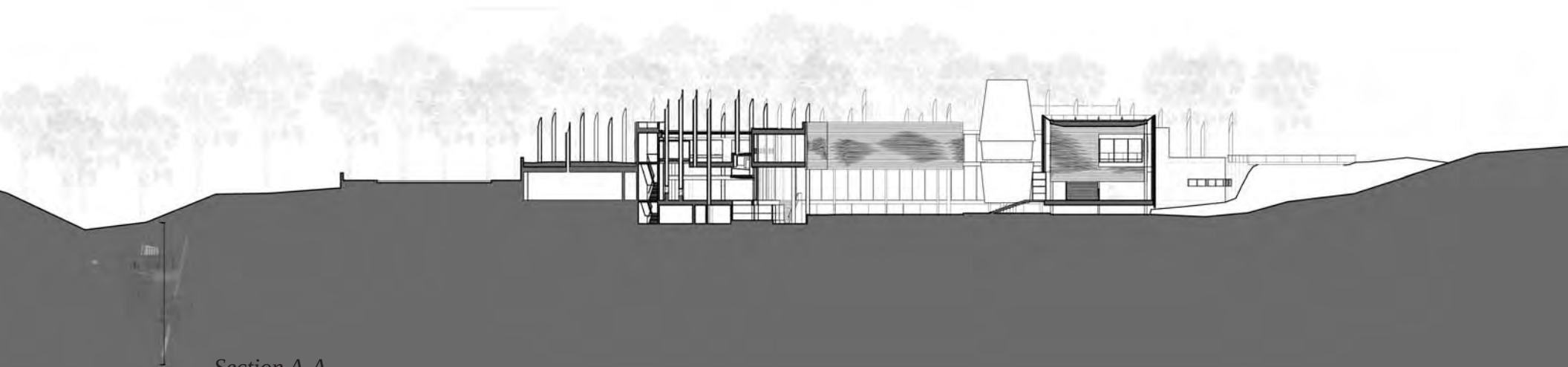


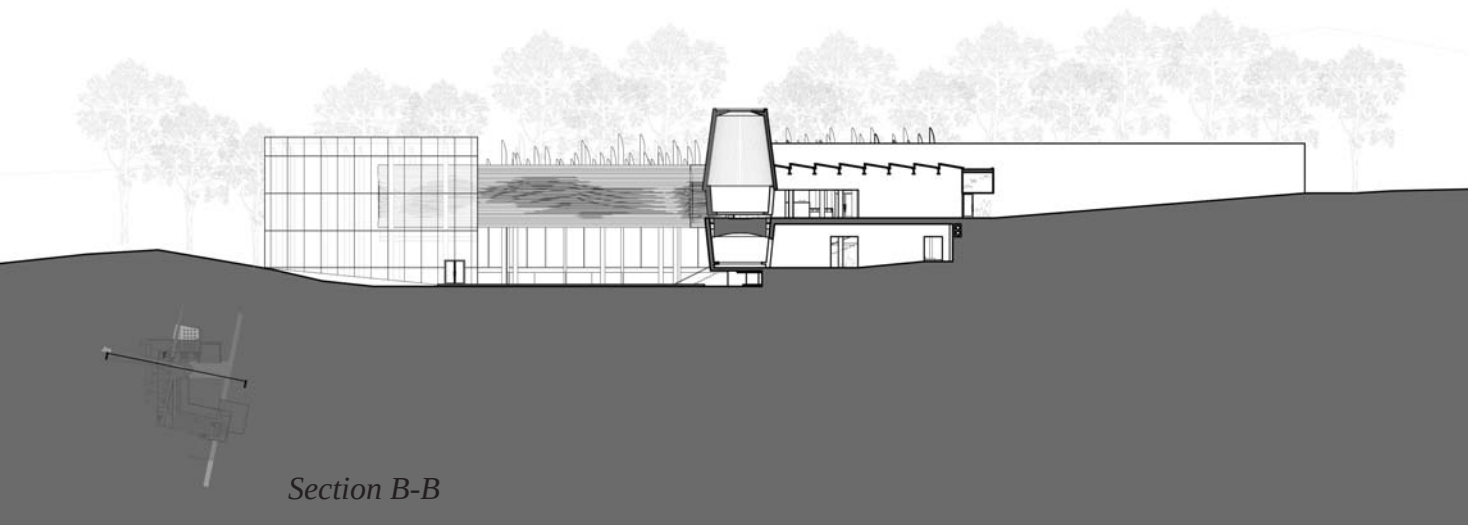
West Elevation



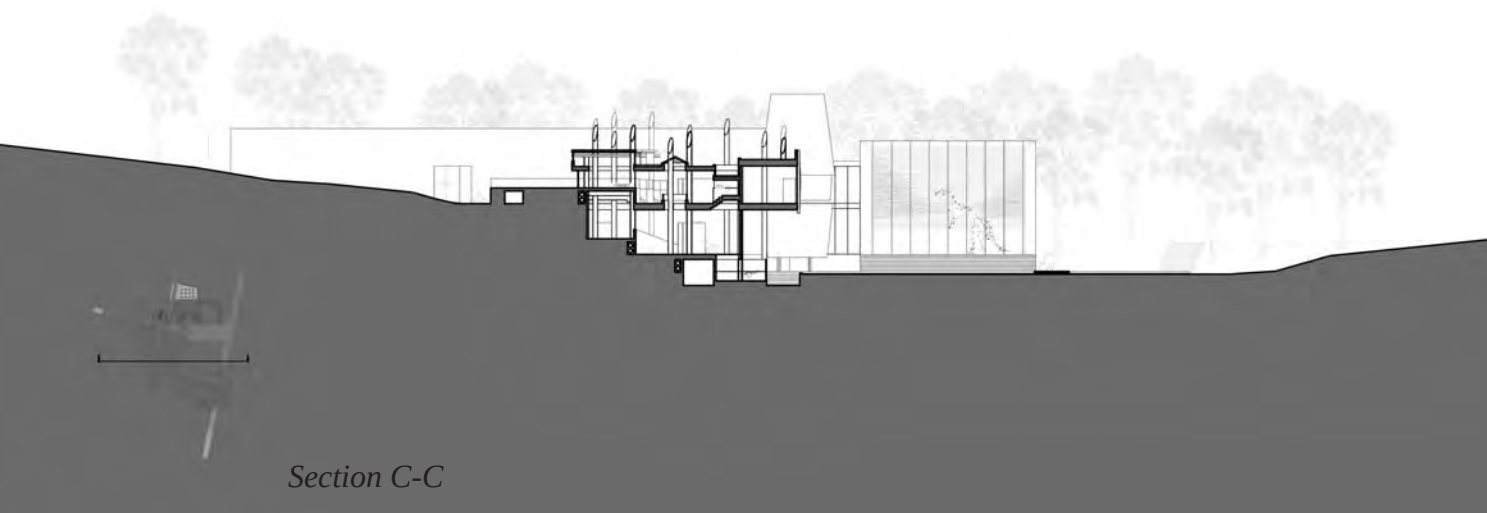
South Elevation

Sections



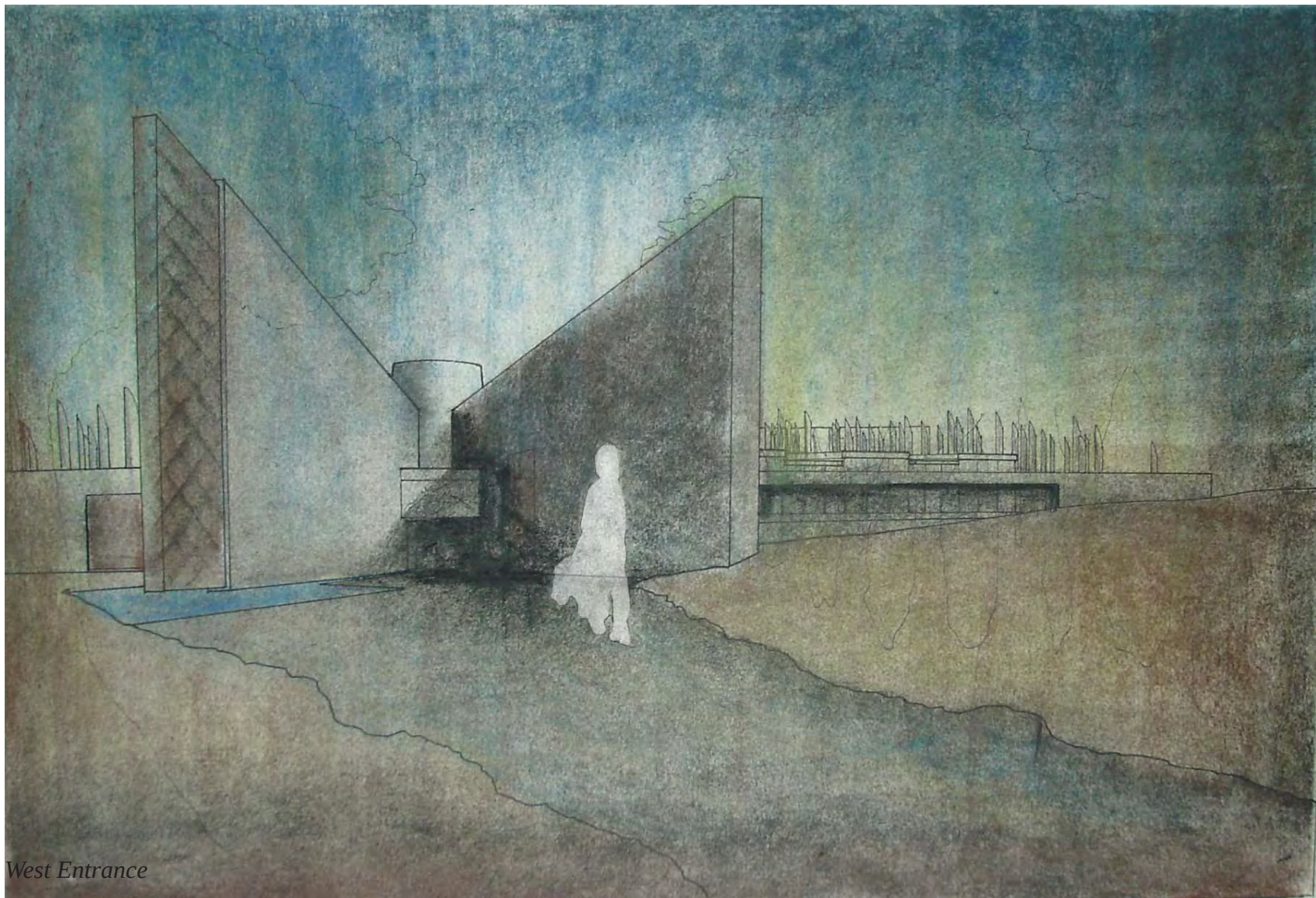


Section B-B





Perspectives



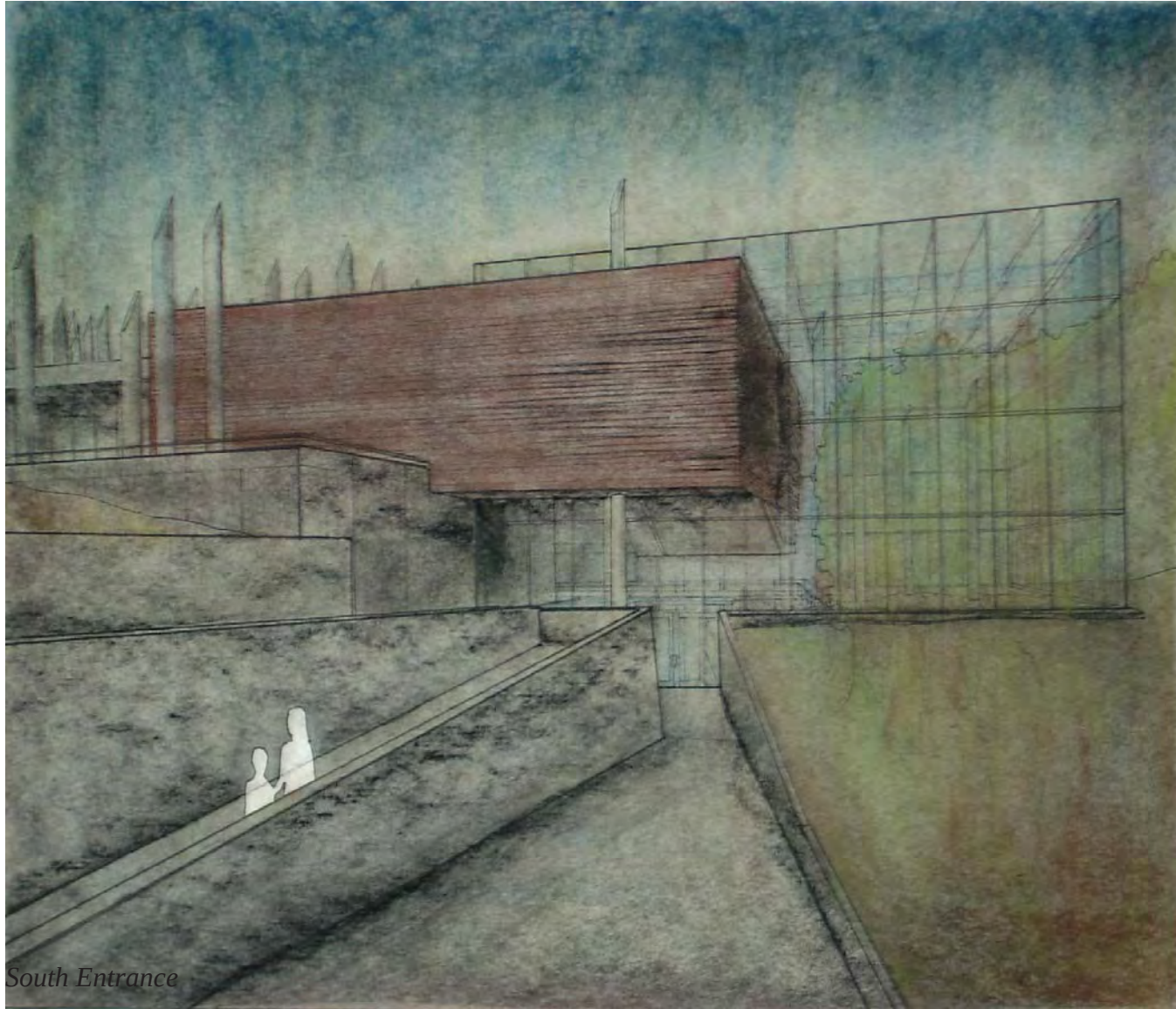
West Entrance



Anticipation Space - Main Level

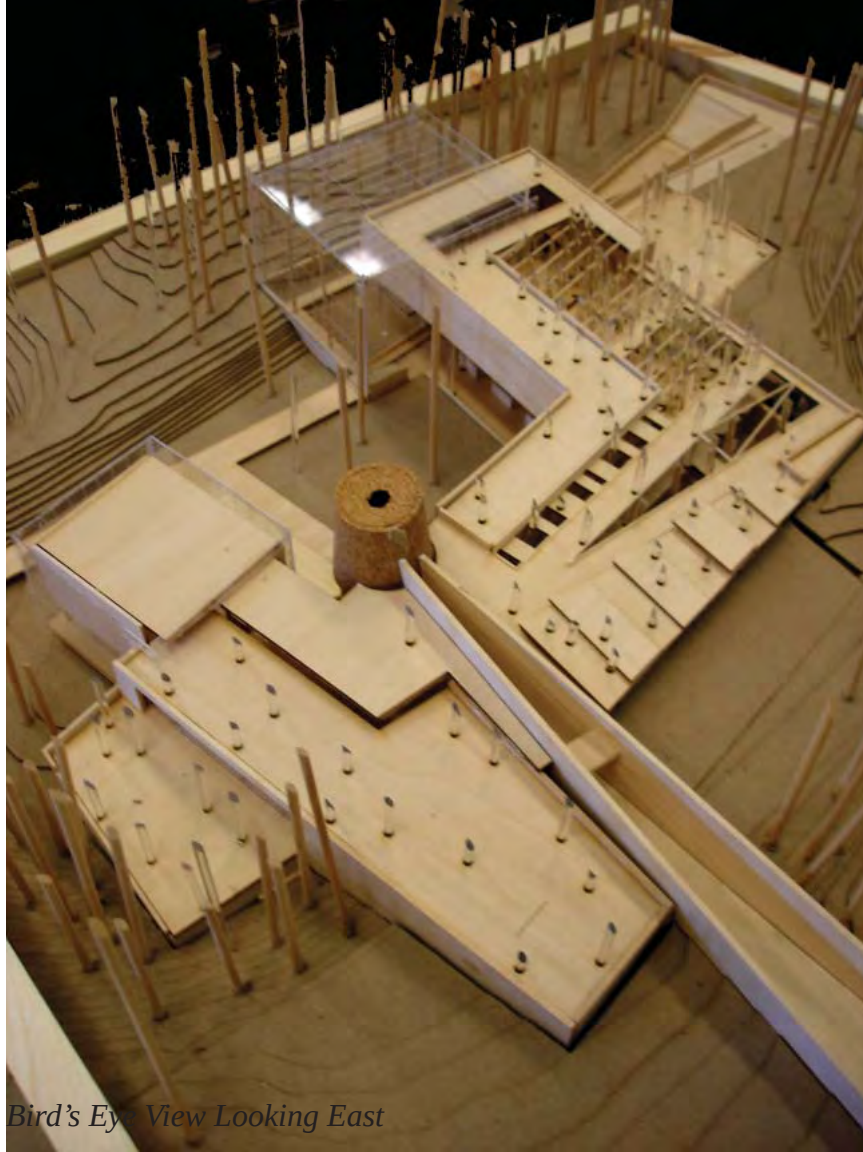


Section Showing Engagement Spaces



South Entrance

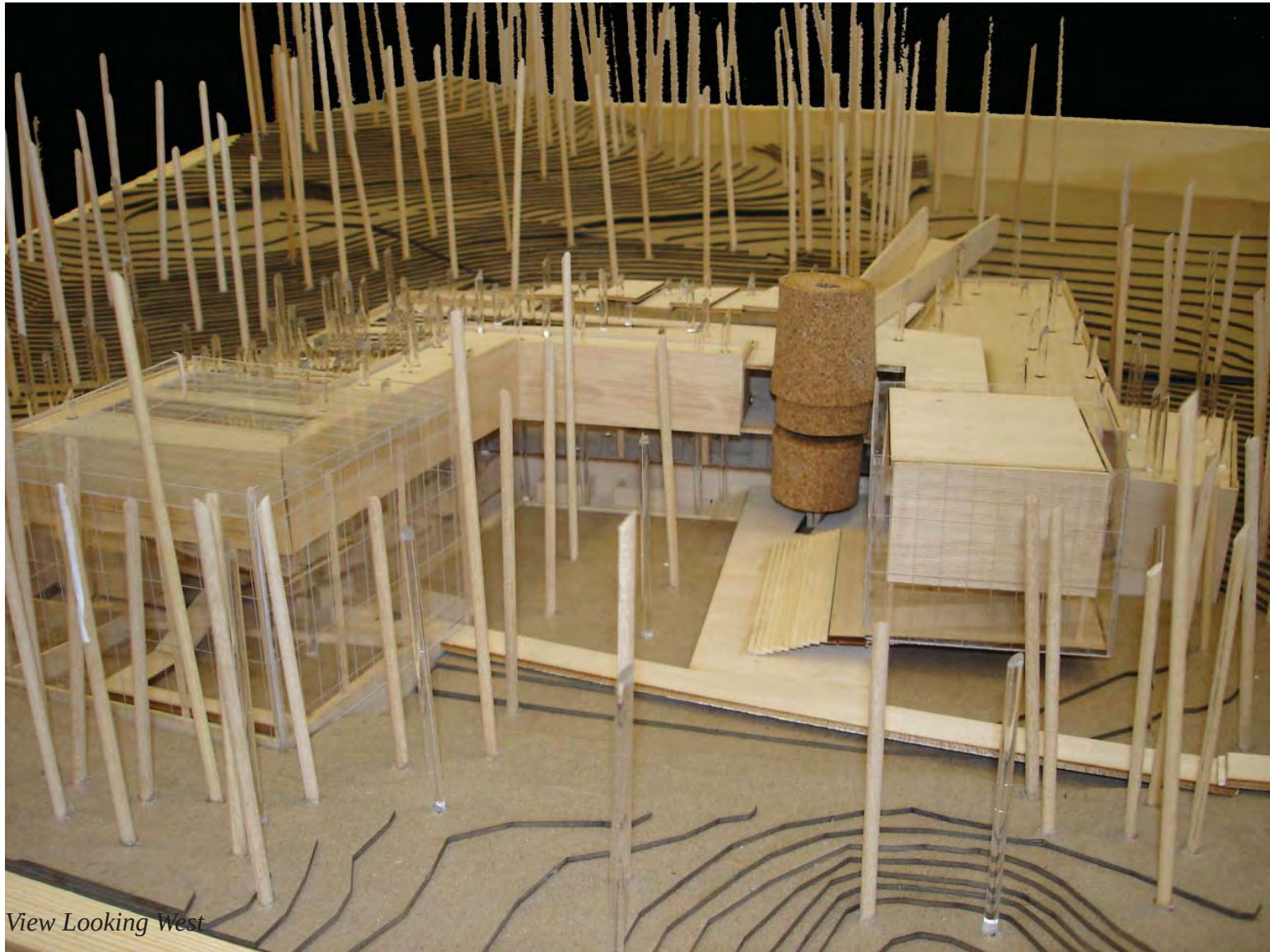
Model



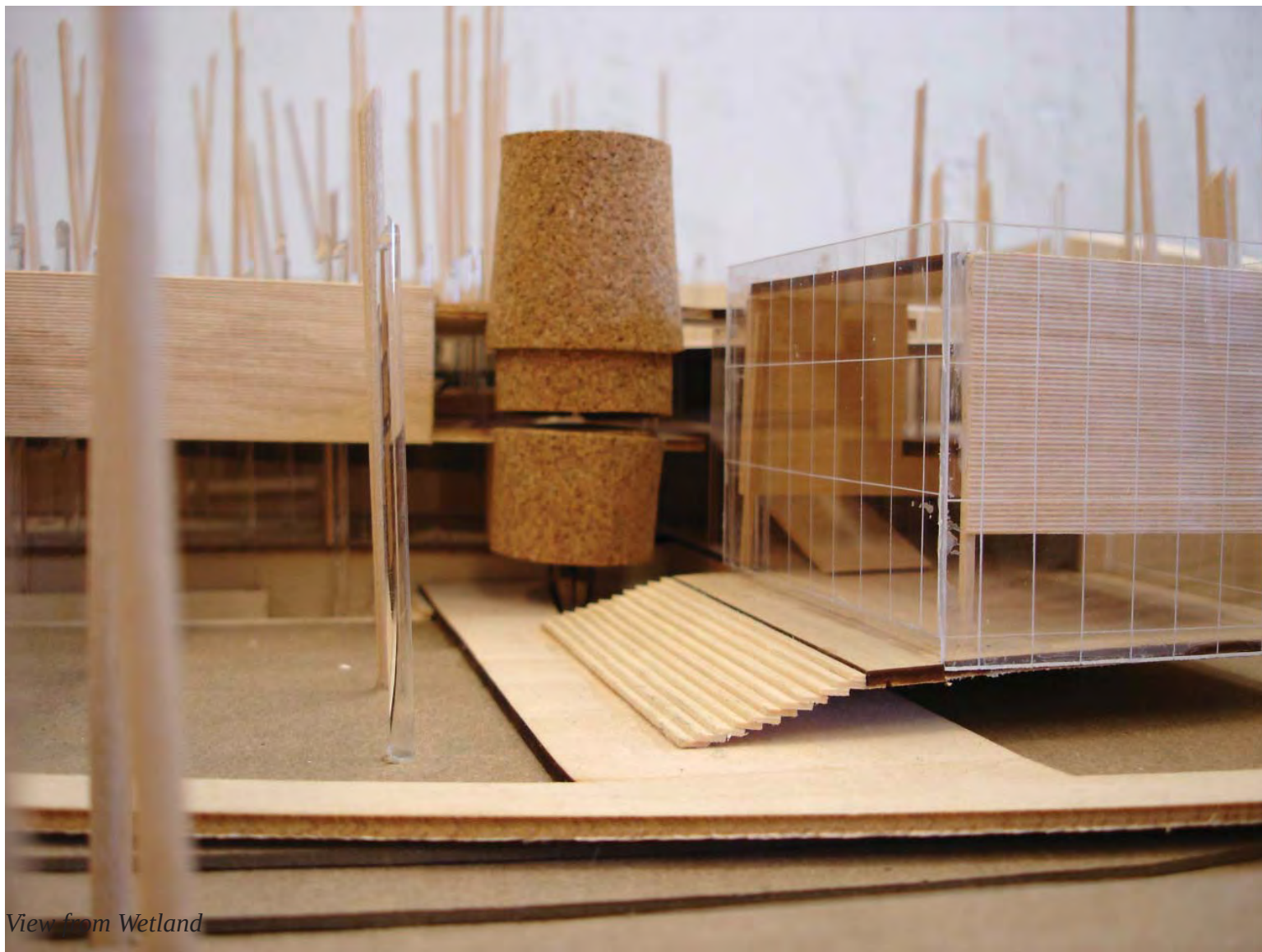
Bird's Eye View Looking East



Bird's Eye View Looking Northwest



View Looking West



View from Wetland

*To Professors Brian Ambroziak
and Tracy Moir-McClean, for your
guidance, insight, patience, and
criticism, thank you.*