

PH

NATURE CENTER



St Francis

Throughout the semester we have been visiting a school in downtown Cincinnati and working with students 3rd through 8th grade.

During this partnership we taught them about design and they shared their opinions about what they would want in a park and how they would design it.



Reconnect and Grow with Nature

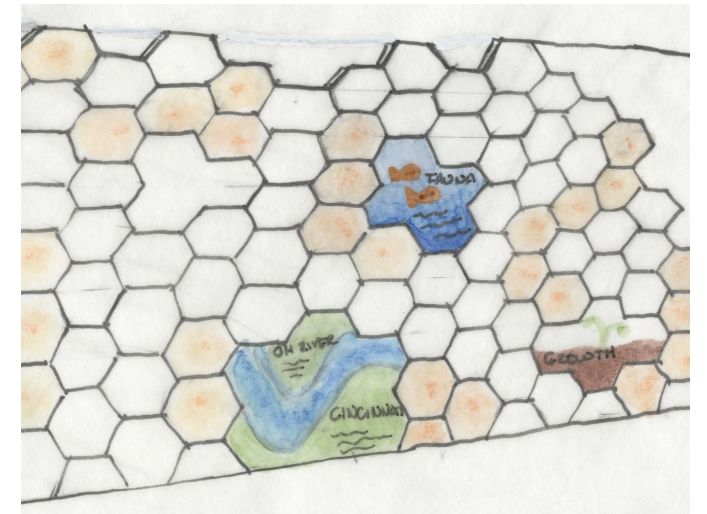
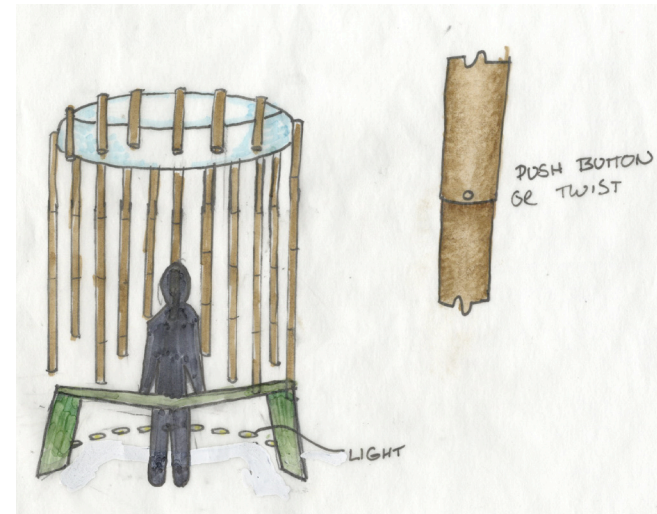
Community • Nature • Sustainability

Goals

- Encourage community and especially children to notice and enjoy nature
- Making Nature easy and interactive for children
- Helping community reconnect with their environment
- Teaching the community how to maintain their environment

Biomimicry

Research on Biomimicry helped me bring Nature into my building in subtle ways that are functional design elements instead of just decorative



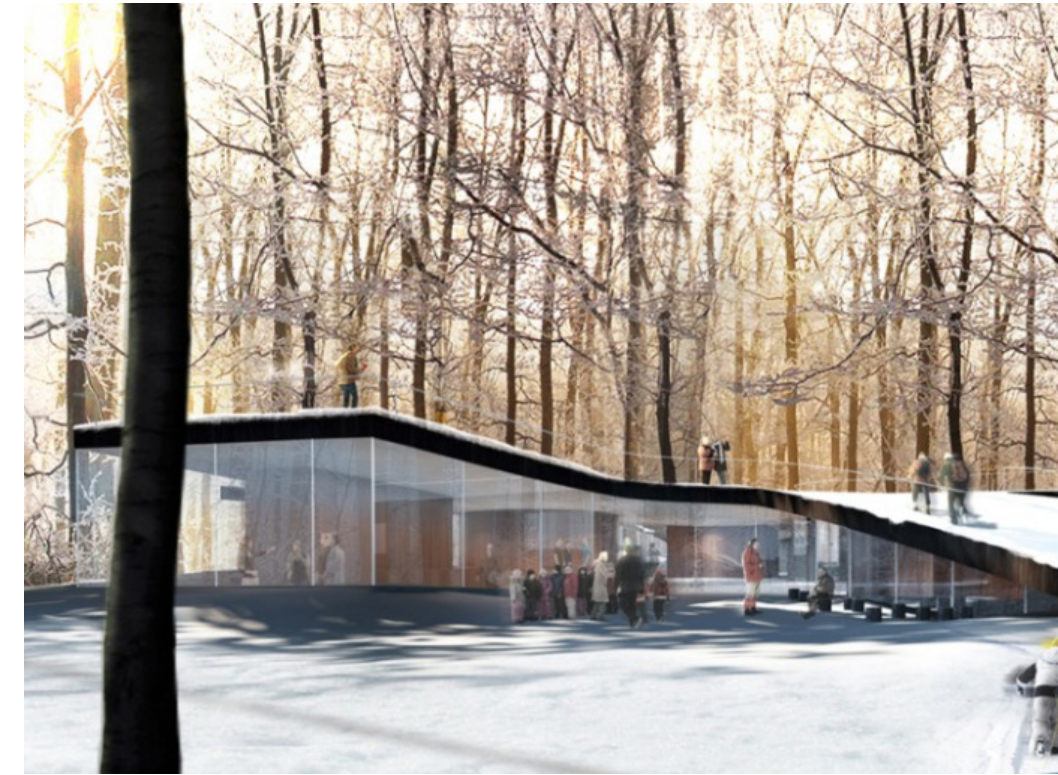
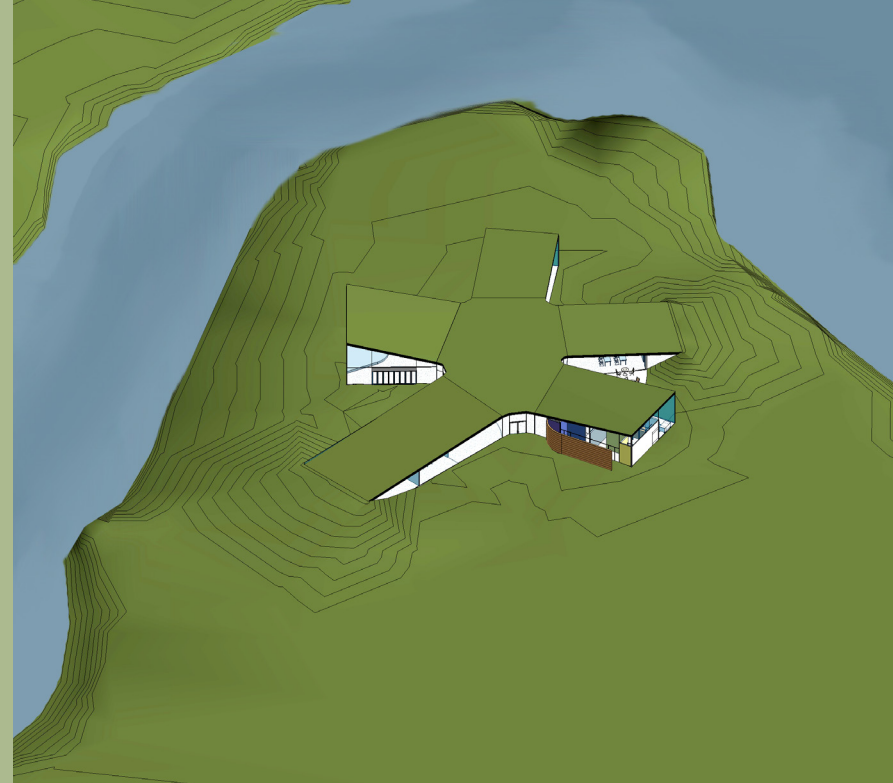
The Building

How the building works with my concept:

-The building was built to have a low visual impact on the landscape with helps it to connect with nature

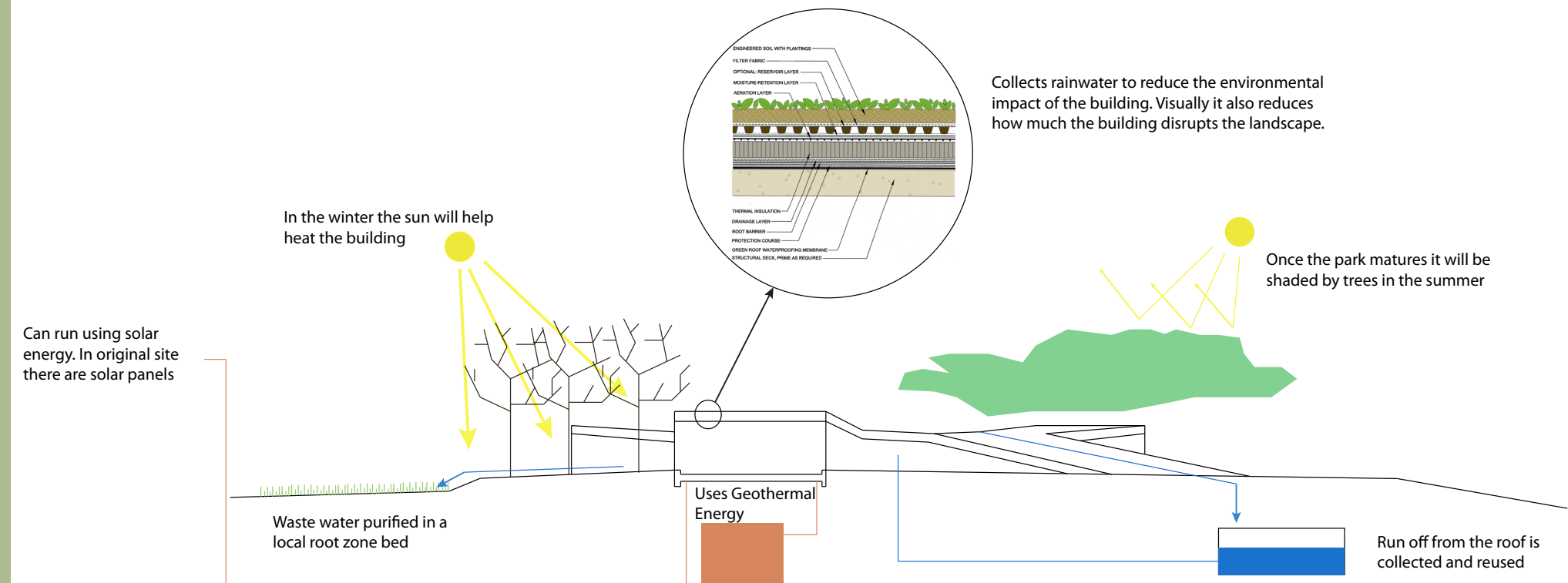
-The building has many indoor/outdoor transitional spaces that make it ideal for blurring the lines between indoor and nature

-The building employs many techniques to have a low environmental impact as well



Designers: EFFEKT
Location: Haeskoven, Denmark

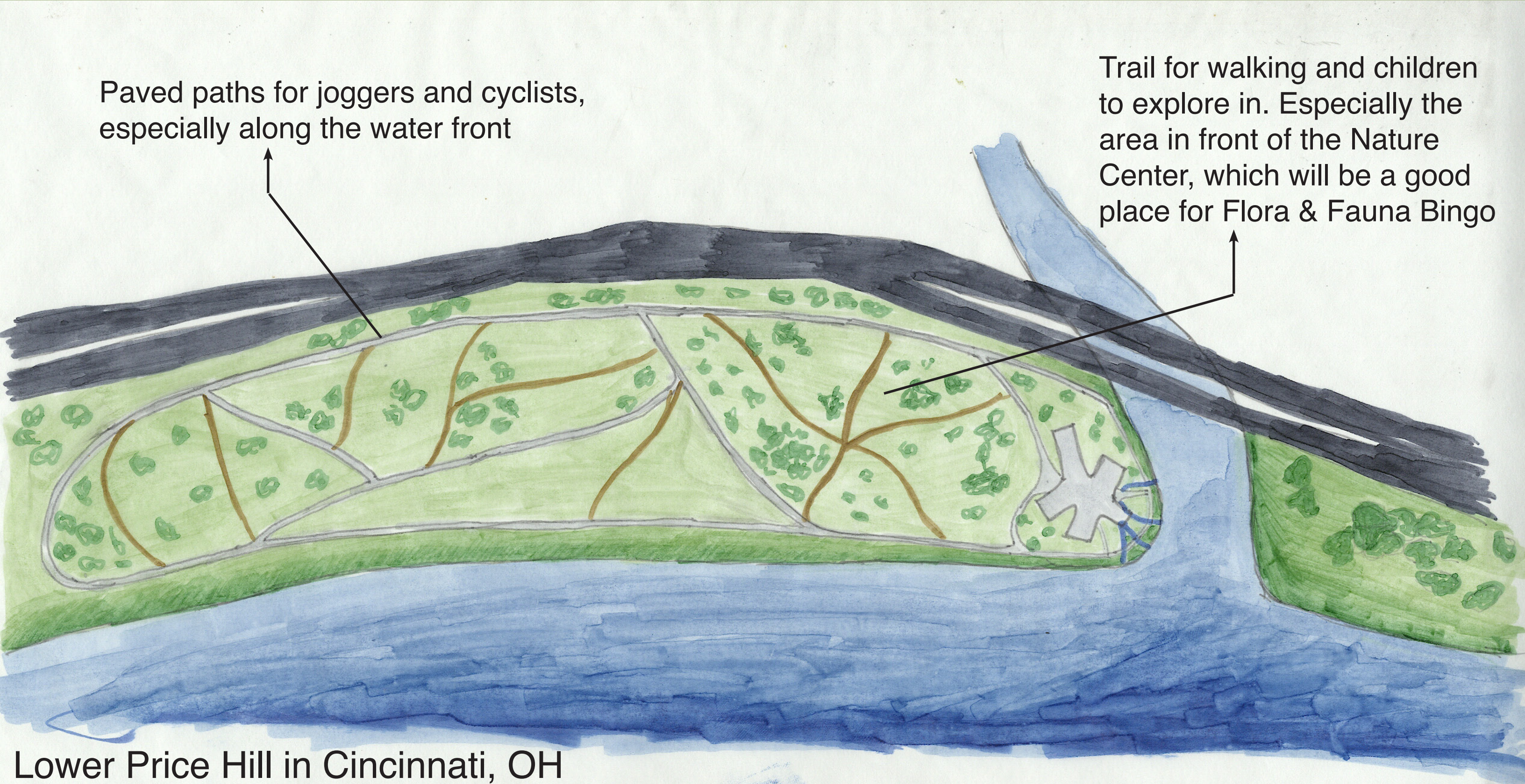
Sustainability



The Site

Paved paths for joggers and cyclists, especially along the water front

Trail for walking and children to explore in. Especially the area in front of the Nature Center, which will be a good place for Flora & Fauna Bingo



Lower Price Hill in Cincinnati, OH

Channels of water from Ohio River and Millcreek River brought up to the building by Archimedes screws



- 1 Entry
- 2 Patio
- 3 Outdoor Classroom
- 4 Garden
- 5 Natural Playground

- 1 Central Area & Info Center
- 2 Classroom
- 3 Multipurpose & Kitchen
- 4 Local Wildlife Exhibit
- 5 Ecological Exhibit

Seasonal & Permanent Activities



- Flora and Fauna Bingo
- Hikes through nature
- Plant a tree/ flower program
- Tending the garden
- Ecology Exhibit & Water testing
- Natural Cycles Exhibit



- Flora and Fauna Bingo
- Hikes through Nature
- Tending the garden
- Ecology Exhibit & Water testing
- Natural Cycles Exhibit
- Local Wild Life Exhibit



- Maple Syrup Making
- Pumpkin Carving
- Harvesting
- Ecology Exhibit & Water testing
- Natural Cycles Exhibit



- Ecology Exhibit & Water testing
- Natural Cycles Exhibit
- Local Wild Life Exhibit

Program & Plan



Nature

This exhibit introduces children to animals that live in the local environment but they may not be away of. It includes a loft area dedicated to birds and different nest types and a cave like space underneath teaching about animals that burrow. The exhibit includes an outdoor activity of Flora & Fauna Bingo that encourages the children to explore the outdoors for animals they just learned about.

Sustainability

Teaches children the importance of reserving the environment these animals live in so that the local fauna can expand and become more diverse.

Local Wildlife Exhibit



Ecological Exhibit

Nature

The Ecology exhibit teaches about the origin of rivers and explains the water cycle. More concretely it focuses on the Millcreek and Ohio river because the building sits on the site where the Millcreek flows into the Ohio. The water that flows into the building will be used for samples for PH testing and looking at what's in the water under microscopes. The exhibit will be more class oriented.

Sustainability

There will be a focus on different types of pollutions in both rivers and how they are being cleaned up or could be in the future. The children will be able to store samples as a class and test the water to see what techniques can be used to clean up the water.

Classroom & Entry



Community

Quieter area of classes to meet and reflect on exhibits. Can also work as a meeting room.

Nature

Connected to outdoor classroom with a small amphitheater built into the topography

Sustainability

Hexagons made of ETFE, which is lighter and stronger than glass as well as very durable so it won't be damaged by the many activities in the Nature Center

Multipurpose & Kitchen



Community

MPR used for lectures and speakers coming for temporary exhibits and events. Community can learn to cook with healthy fruits and vegetables from the garden in the kitchen.

Nature

Buffalo grass covers the play structures that transition the indoor central space to the natural playground.

Sustainability

ETFE Hexagons, Buffalo Grass takes little water and it durable for kids to play on

Info Center & Central Space



Community

The main area is a flexible space that can house an info center for the Nature center, but the wooden rods can be extended or retracted to close or open up the space.

Nature

The skylight brings in natural light to the center as well as connecting people on the green roof visually to the inside

Sustainability

Recyclable or sustainable materials are used throughout the design such as bioglass, wood and recycled concrete

Outdoor Spaces

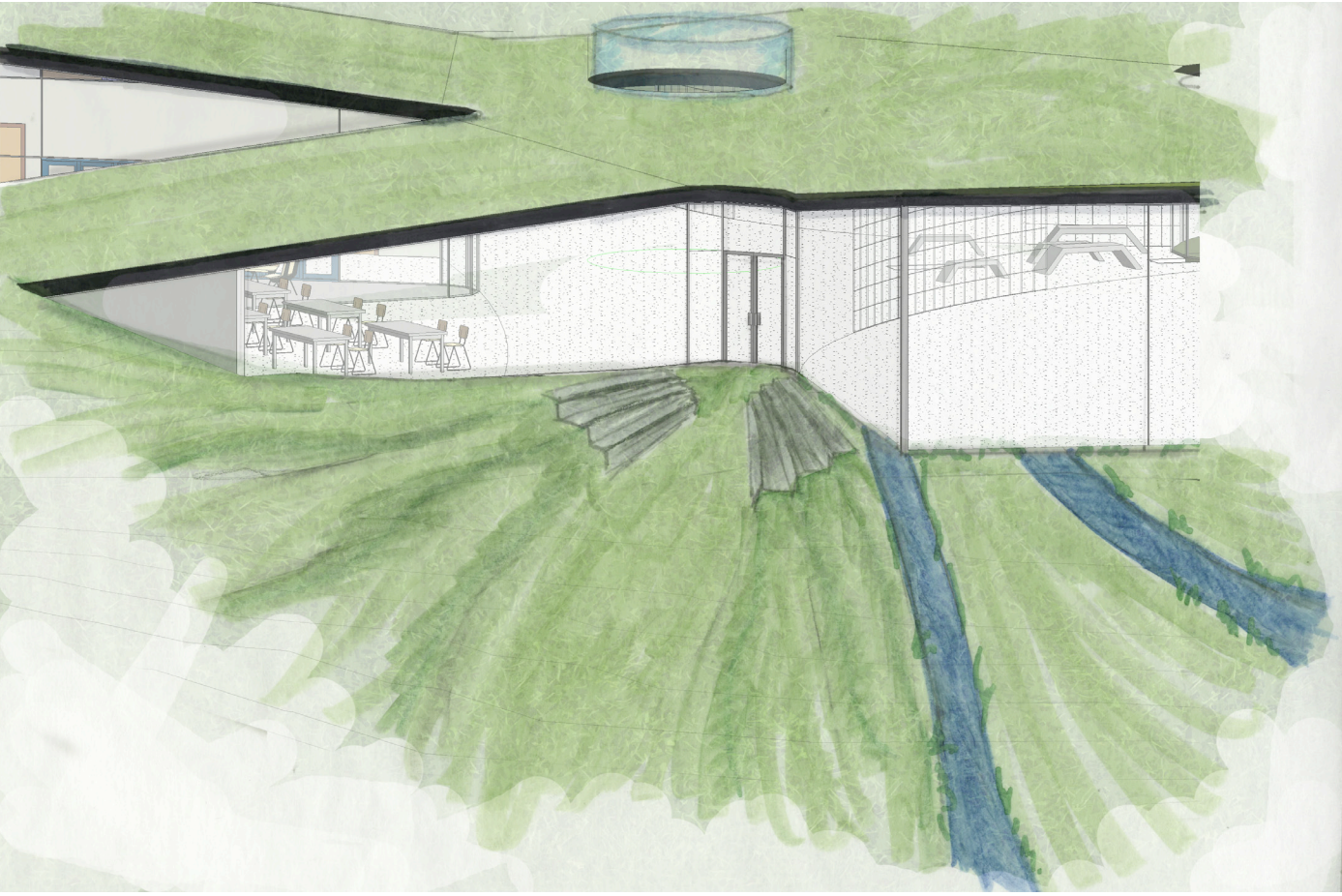
Entry

The entry is the widest angle of my building, open to the rest of the site. behind the curved wooden wall there is an outdoor access to the bathrooms and the terrain makes it clear to the people visiting the Nature Center that the green roof is climable.

Garden

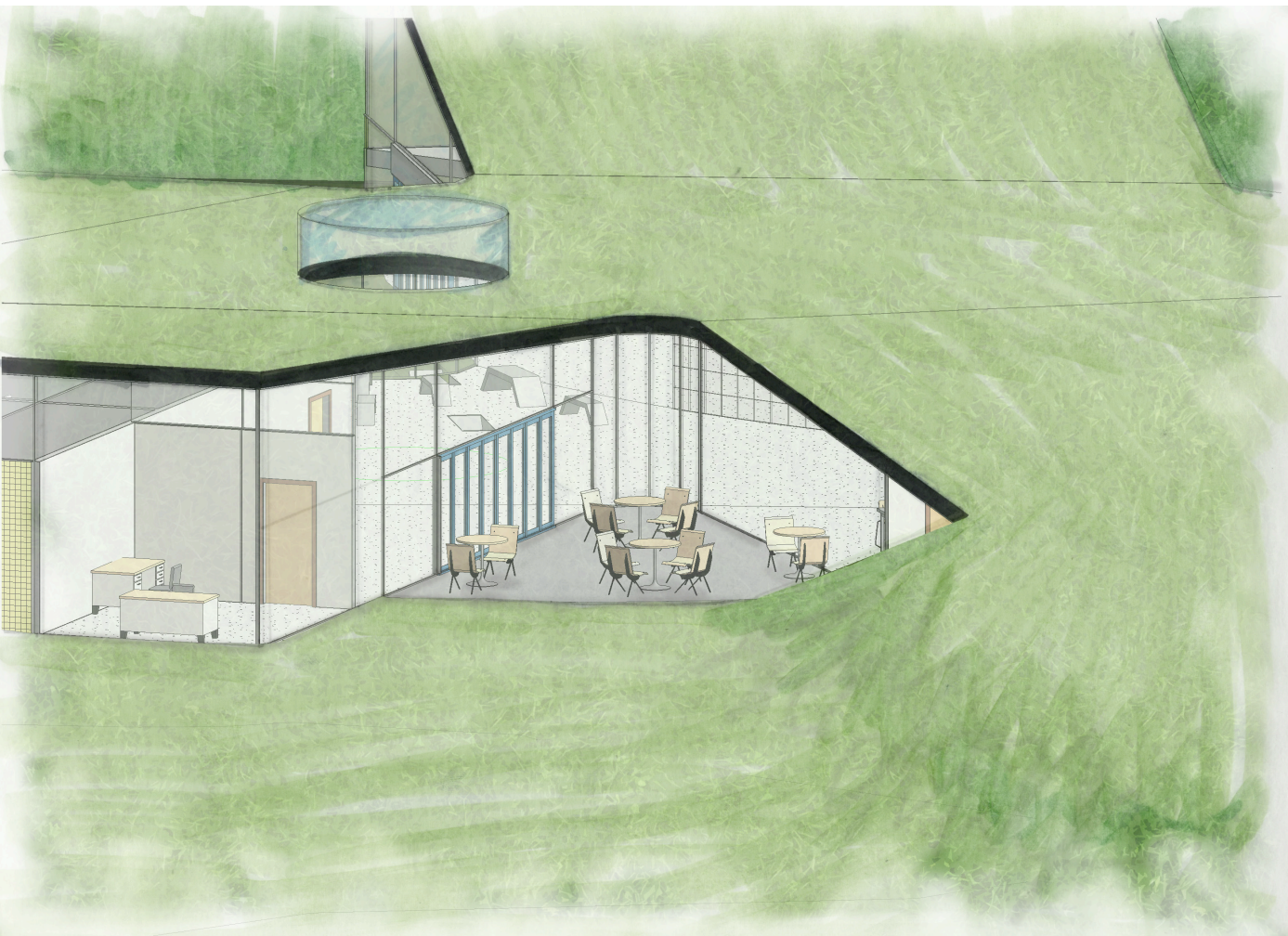
The garden will have fruits and vegetables grown by the community and children in the spring program “Plant a Seed” and they will be responsible for the plants. After the fall harvest the produce will be used in a series of healthy cooking classes.





Outdoor Classroom

The outdoor classroom is adjacent to the classroom and seats students by creating an amphitheater in the terrain. There will also be an opportunity for viewing the speaker from the green roof above.



Patio

The patio provides outdoor seating for lunch and resting. It is a sheltered alcove that still allows for connection with the nature surrounding it and people walking on the green roof above.



Natural Playground

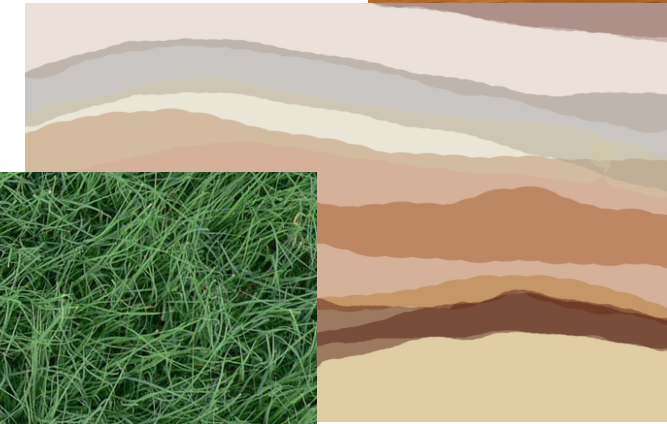
The natural playground includes a slide built into the green roof and natural play elements. The ribbon like play structure on the inside connect the outdoor space to the central area indoors.



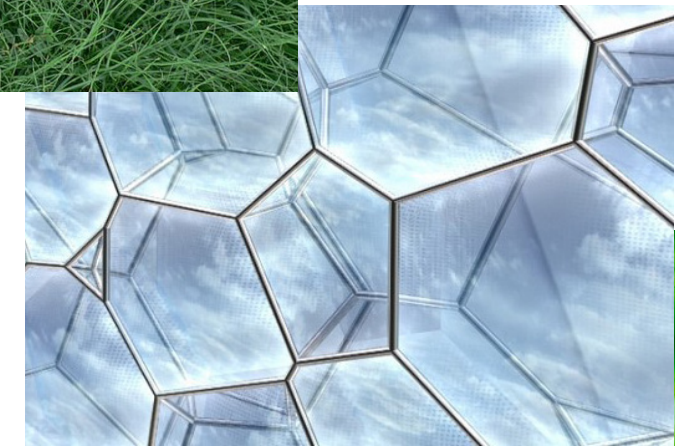
Glulam
Wood



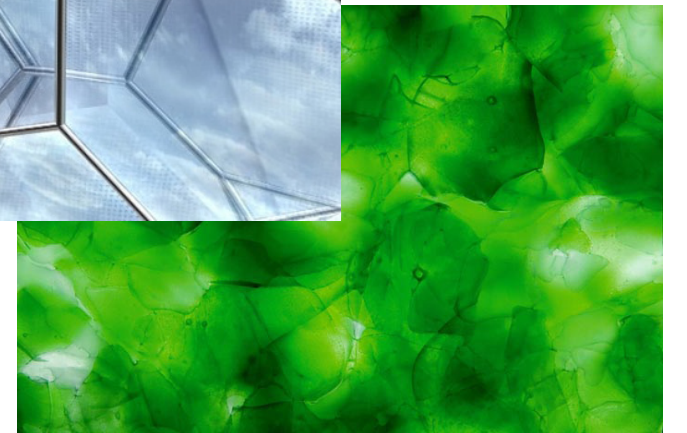
Recycled
Concrete



Buffalo
Grass



ETFE



Bioglass

Materials & Colors