



CINCINNATI CHILDREN'S DISCOVERY CENTER
LOWER PRICE HILL PARK



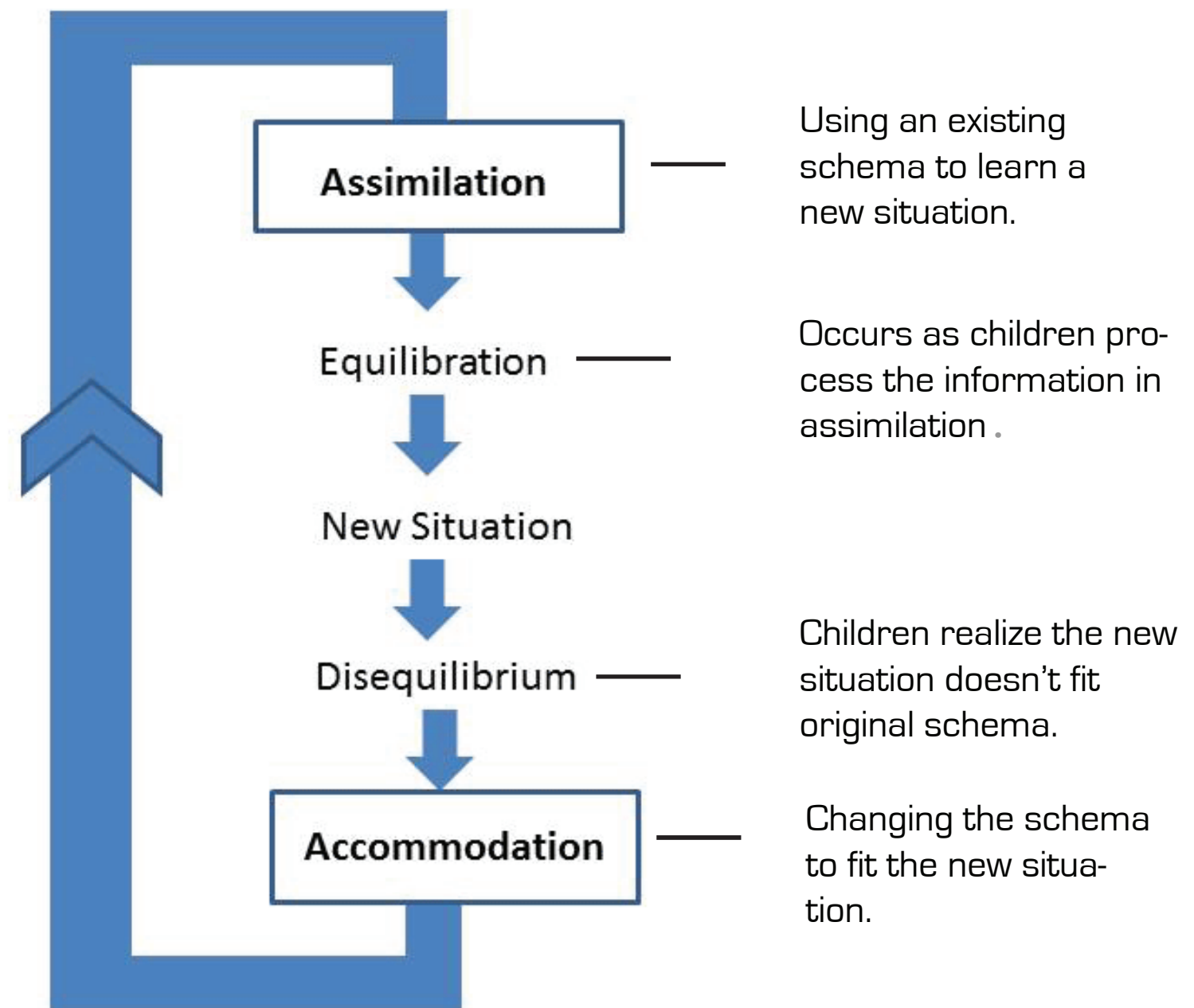
JEAN PIAGET'S INTELLECTUAL GROWTH THEORY

STAGES OF DEVELOPMENT

1. ages 0-2; Sensorimotor; object permanence.
2. ages 2-7; Pre-operational; Egocentrism.
3. ages 7-11; Concrete Operational; Conservation.
4. ages 11+; Formal Operational; Manipulate ideas in head/ Abstract Reasoning.

SCHEMA = A way of organizing knowledge through a linked set of mental representations of the world (including actions and visual ideas).

ex: Schema of a restaurant: You go somewhere, look at a menu, order, get your food.



PROBLEM

Teaching children about nature in a way that is educational and interesting to children while addressing the desires of the city. Many of the children will have never experienced nature before, so it will be necessary to create exhibits that they understand.

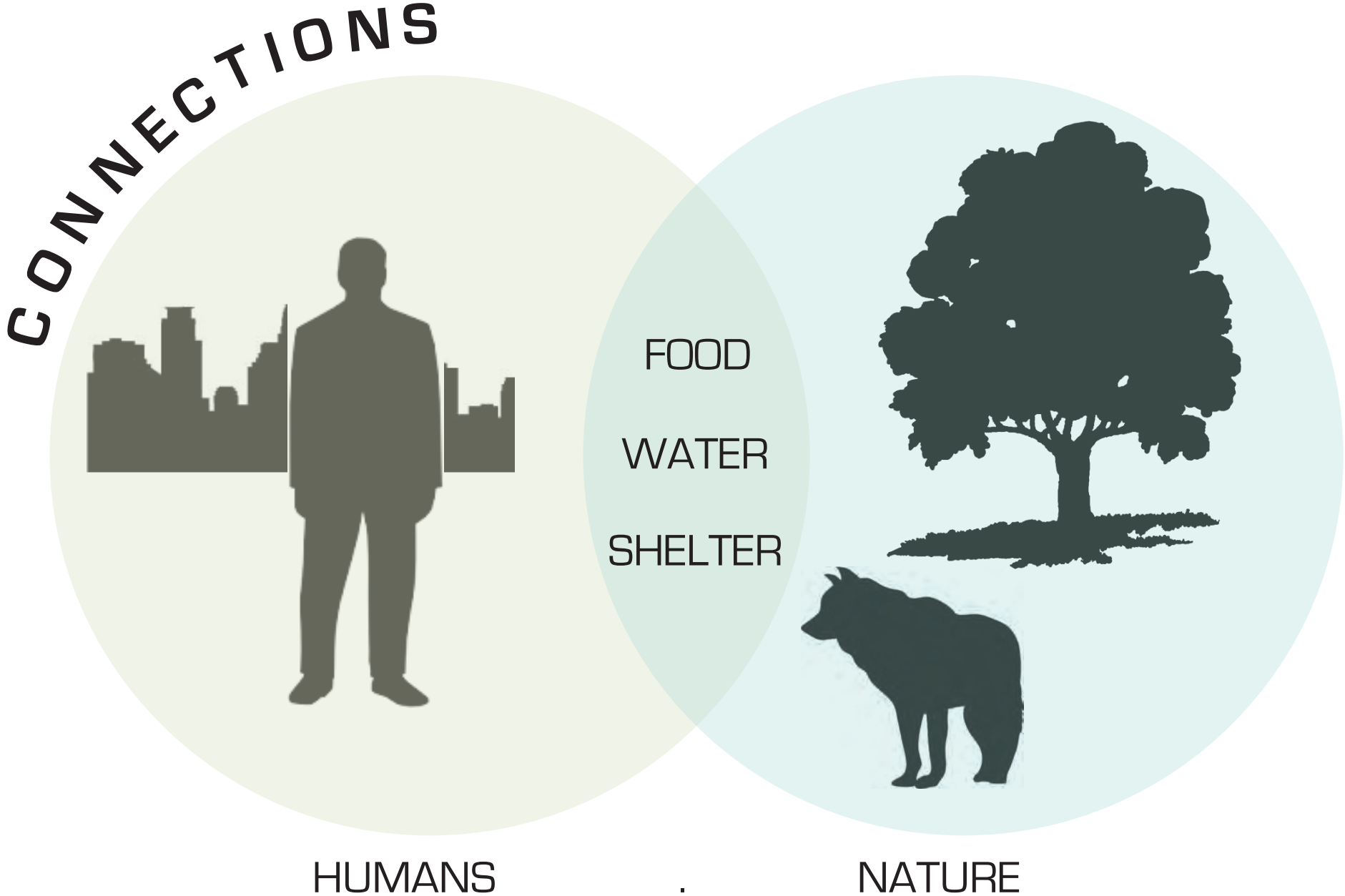
SOLUTION

Teaching children that the beauty of nature can be found in other places in their everyday lives, this way they can relate to it and recognize it daily.

STRATEGIES

Establish relatable relationships between inner city life and nature through...

- 1. Using nature to show children how elements of their lives work (where their food comes from, what else water is used for, etc.)
- 2. COMFORT, CONTROL, MOVEMENT, COMFORT: Using Piaget's theory of "schemas" to facilitate learning.
- 3. Using modern technology (i.e. holographics, digital screens, etc.) to help children truly "experience" different natural environments and systems.



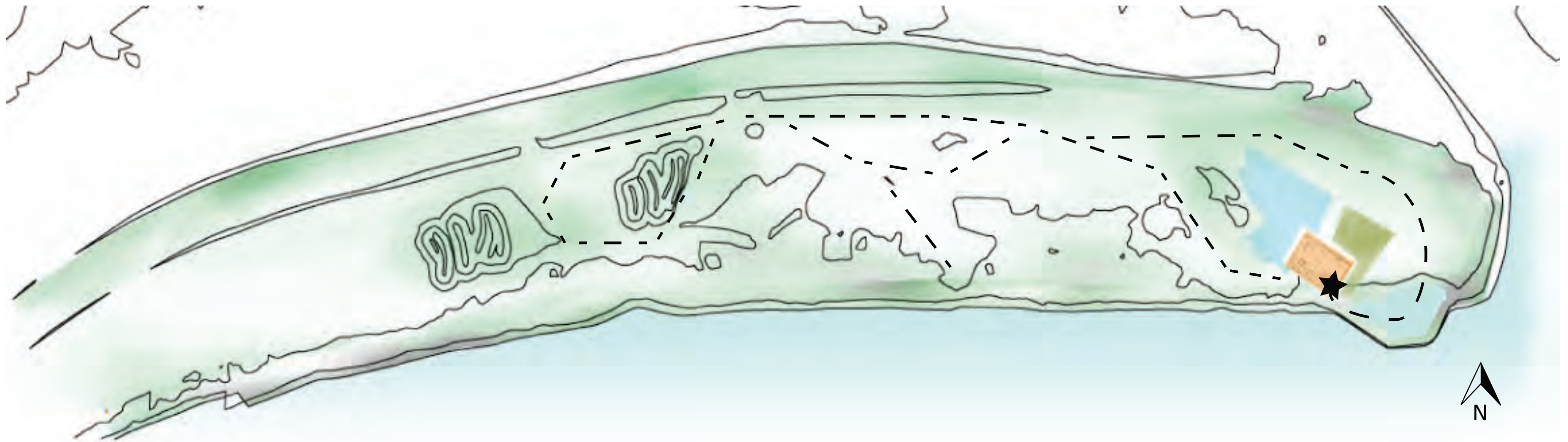
CONCEPT



Prahran Hotel, Prahan, Australia

A pub and function space using traditional brick architecture, and connecting it with old industrial elements, resulting in an engaging, modern building. I chose the building because the combination of styles fits perfectly with the site (combining old brick architecture like in Cincinnati/ Over the Rhine, and the industrial site of the park), and the architectural elements connect nature and human construction.

SITE PLAN



- ① OUTDOOR GARDENS
- ② WOOD EXHIBITS
- ③ MAIN BUILDING
- ④ WATER ACCESS
- NATURE PATHS



1 LOBBY COMFORT

Includes front desk and seating, with a reclaimed wood venir wall behind the front desk. It acts as an introduction to natural materials and aesthetic.

2 TREE OF LIFE CONTROL

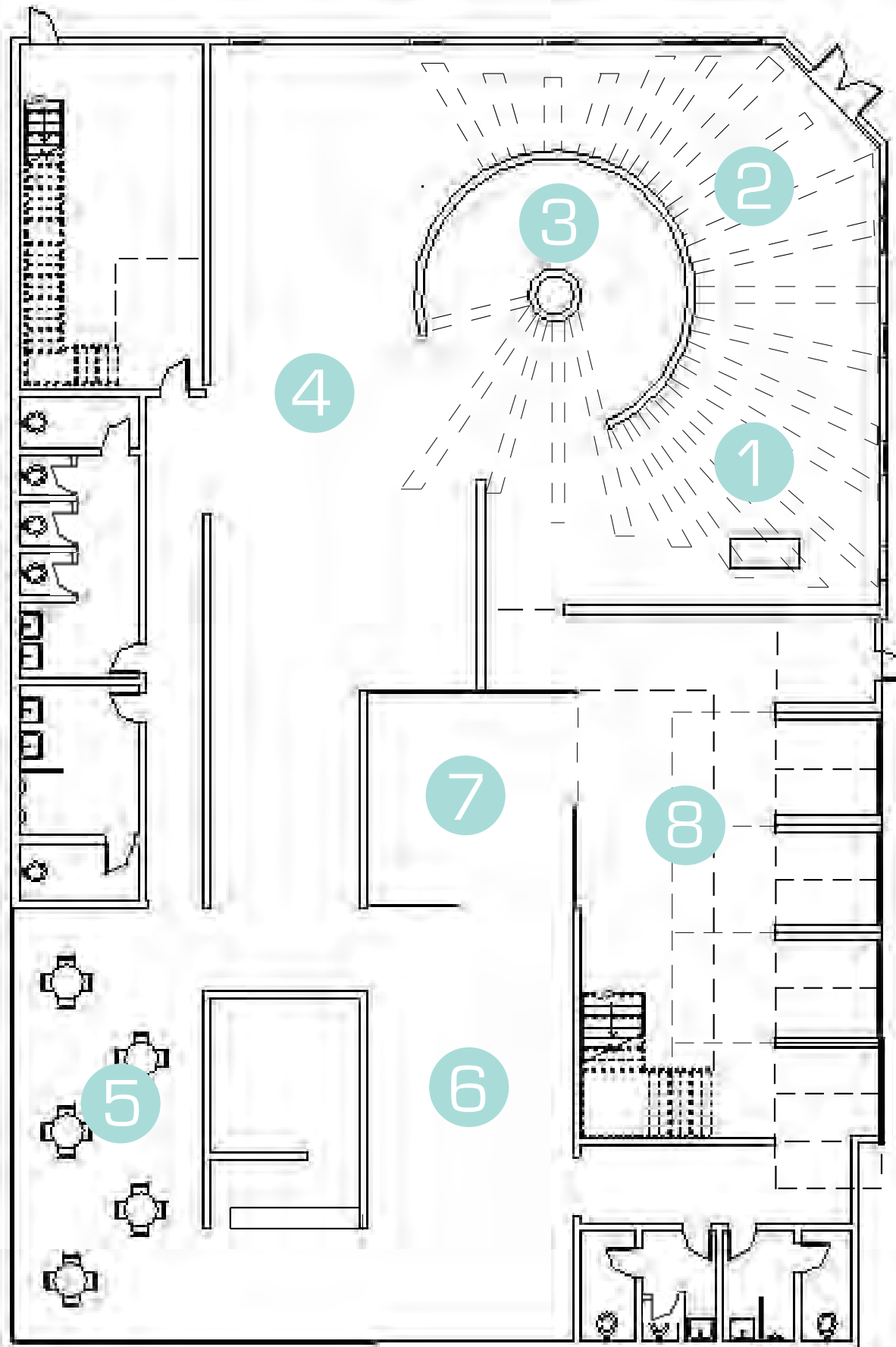
Tree sculpture with interactive holographics depicting full-sized moving animals. Helps children experience nature and animals they have never seen before.

3 DIGITAL TUNNEL COMFORT

Introduction to the three elements of food, water, and shelter which are necessary for nature and human survival.

4 WATER EXHIBIT MOVEMENT

Interactive exhibits exploring the properties of water and how it is used by humans and nature. Includes a holographic demonstration of the water cycle.



5 CAFE

Trays have sheets showing where you food was locally grown, etc. so that children understand the idea of where food comes from.

6 FOOD CHAIN

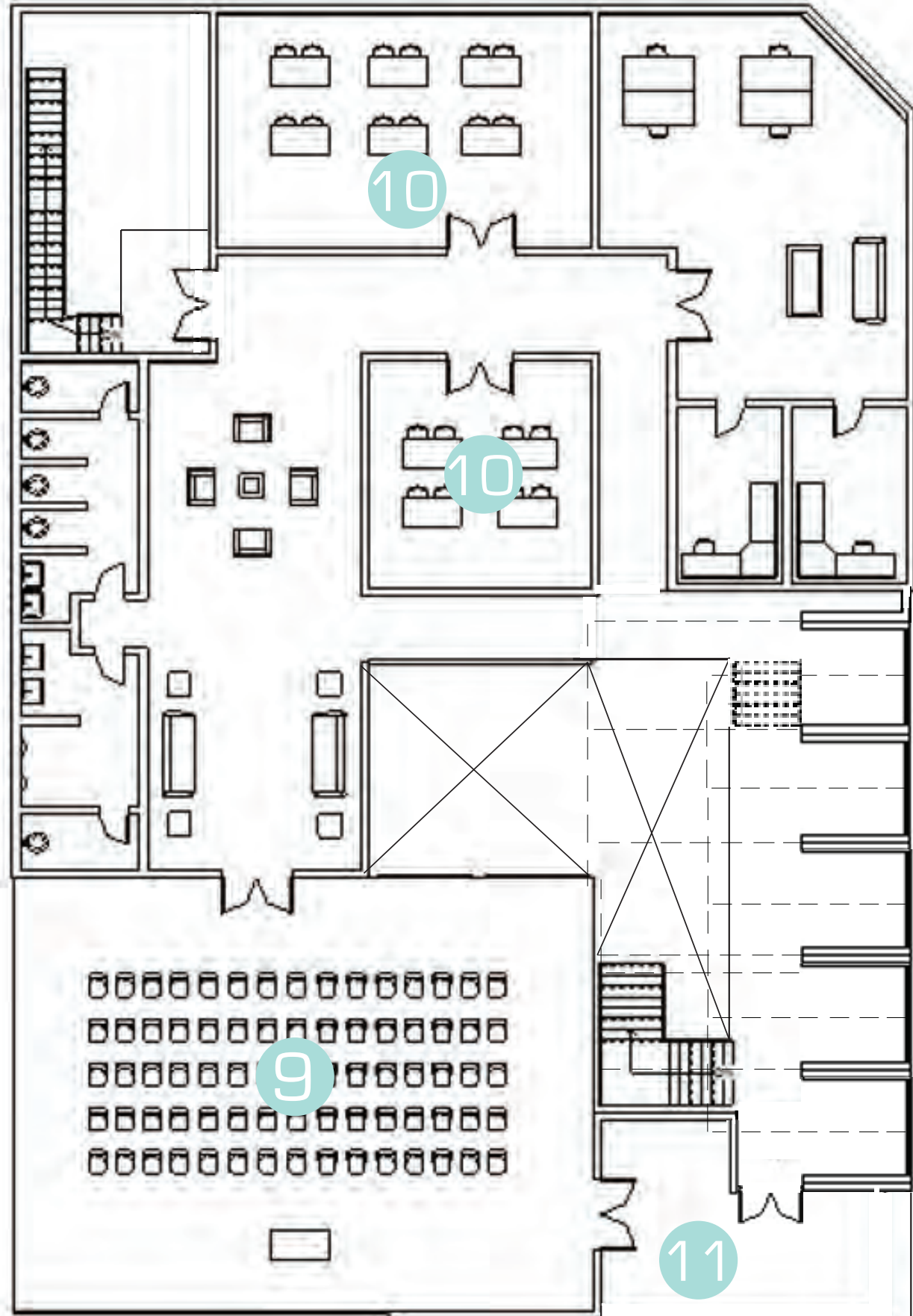
Digital “mural” overlooking predator and prey.

7 CITY GARDEN MOVEMENT

Demonstration of how they can incorporate nature and home-grown food into their everyday lives at home.

8 SHELTER/ ENVIRONMENTS MOVEMENT & COMFORT

The most interactive exhibit in the space, it is made up of a number of inhabitable tubes. Each tube is a multisensory experience mimicing the living environments of different animals in different climates. Moving through the essentially allows children to live as the animals would, and each of the mini-exhibits would also be scaled to the children’s size.



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LECTURE HALL

Ideal for visiting exhibits or speakers. Can be blocked off for private events, but has access to the outdoor patio.

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CLASSROOM AND LAB

These areas are primarily meant to be labs to test water from the ohio river, but they can also be used as meeting spaces for field trips.

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OUTDOOR PATIO

Another example of an outdoor space, but not enclosed in an atrium as the one in the center of the building is.

OUTDOOR EXHIBITS

Suburban/Rural Garden



MOVEMENT & CONTROL
A large outdoor vegetable garden will allow children to have hands on experience with nature and learn where their food comes from. It would be open year round, so they could see how the landscape changes with the seasons.

Flower Garden



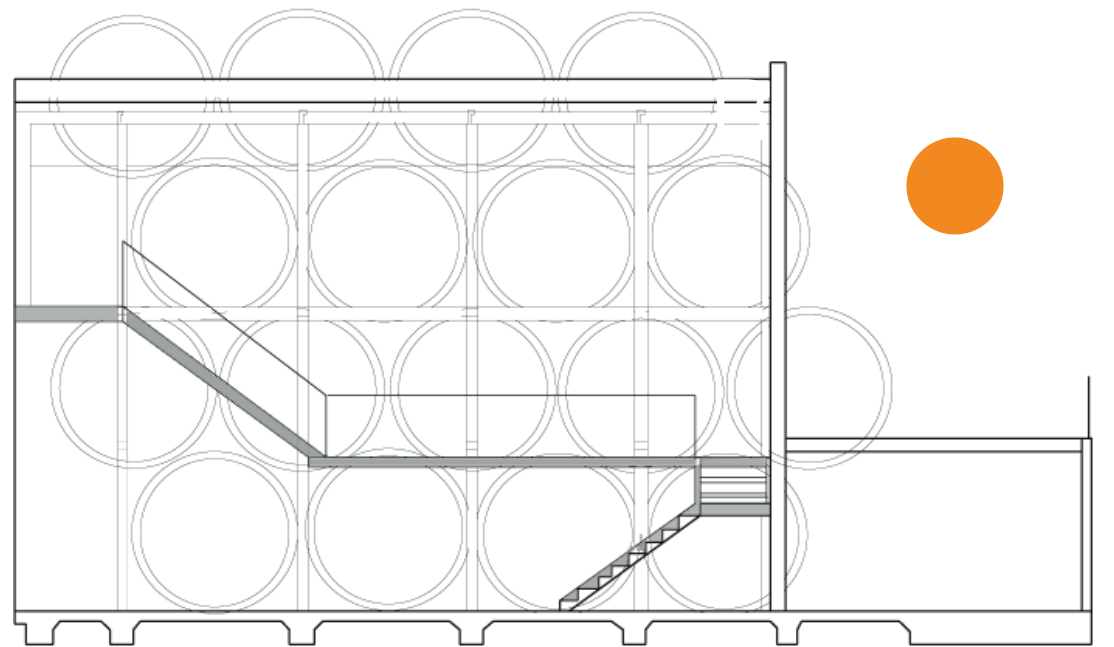
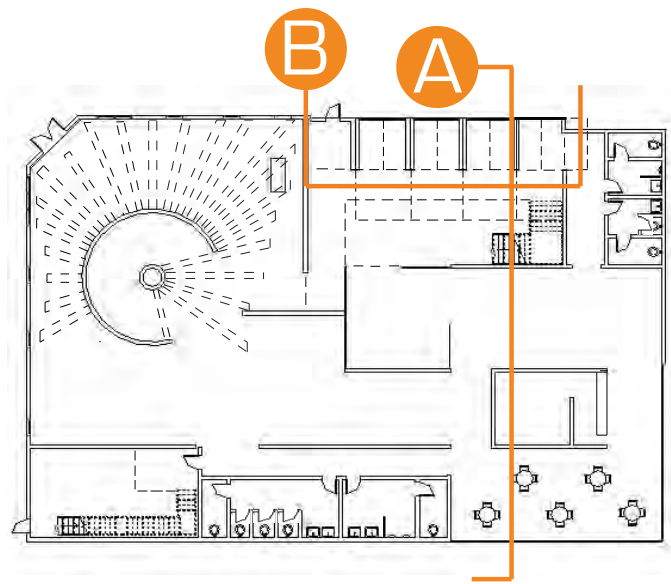
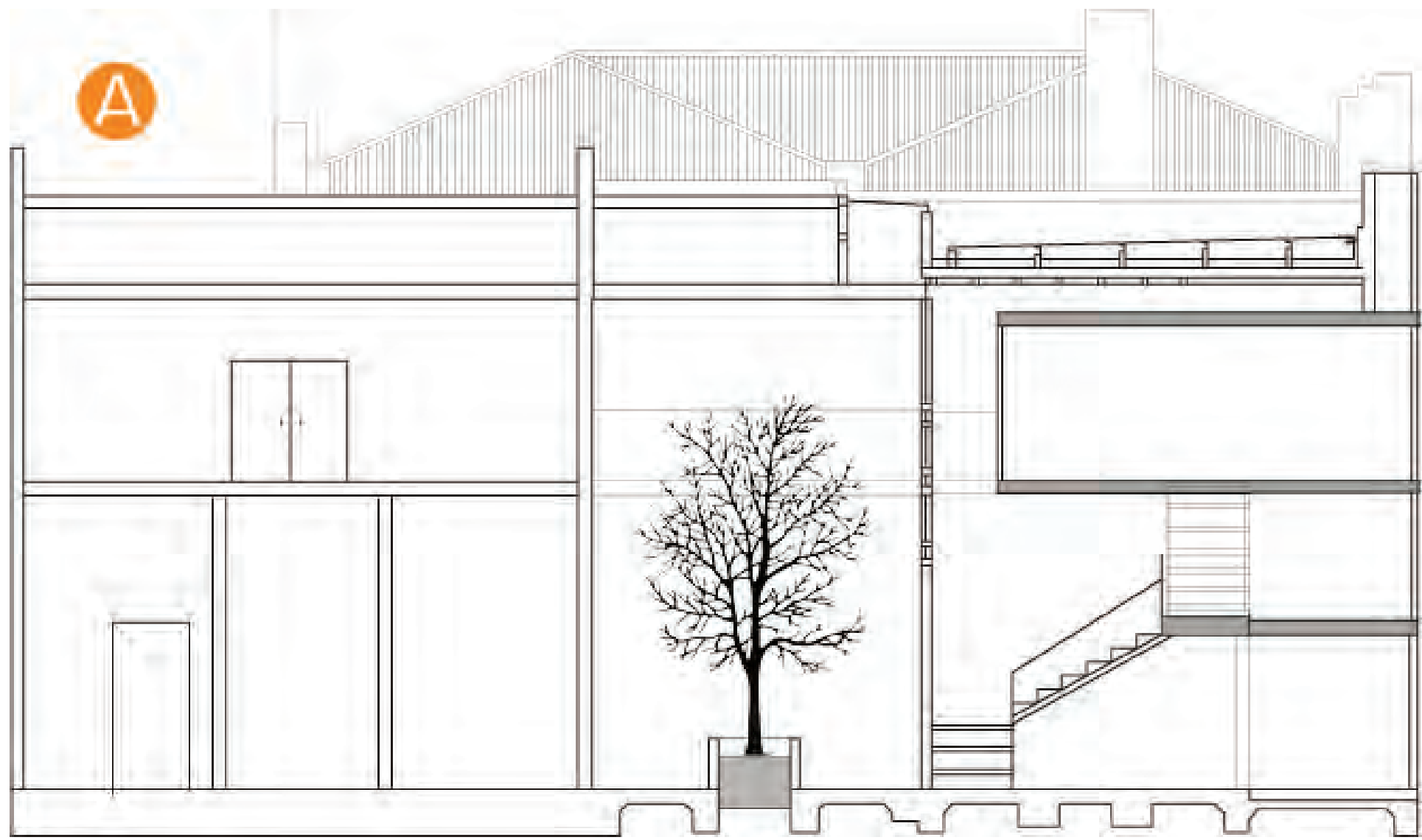
Adjacent to the vegetable garden, the flower garden will show the beauty aspect of gardens rather than just their use. It will also help children see how it can provide different necessities for insects and animals.

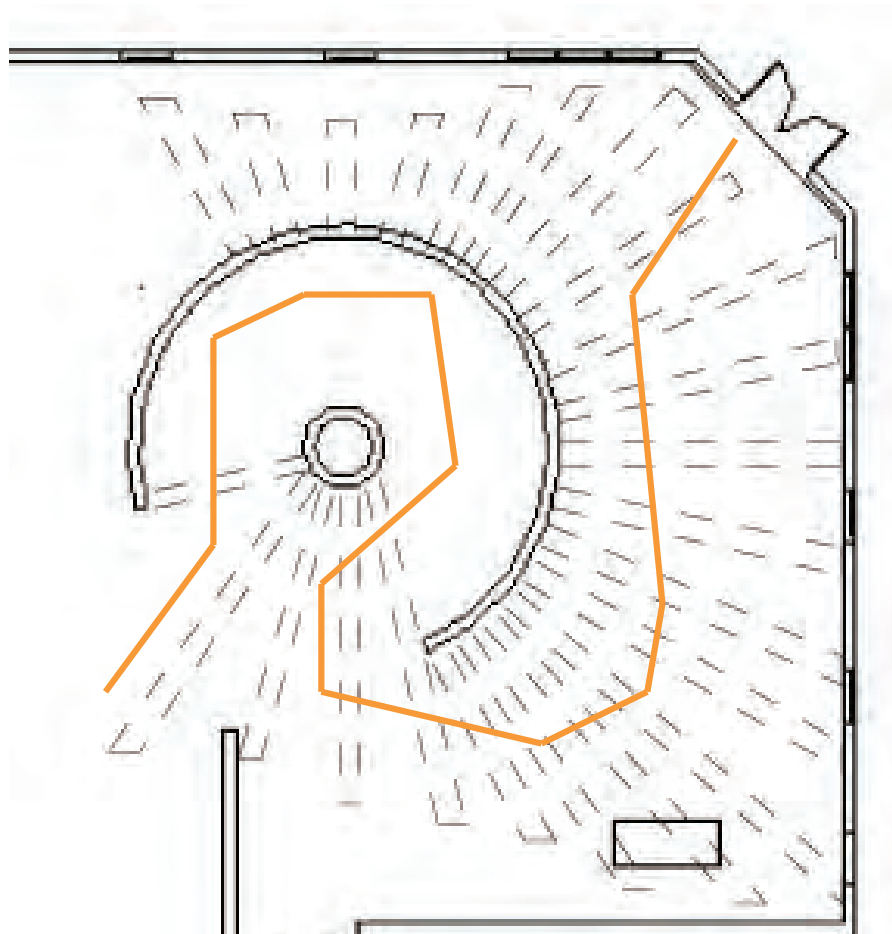
Treehouse



MOVEMENT
Educational exhibit that explores tree environments and helps children see the world from a "birds eye view." It would provide a view of the gardens so they could see how the different elements of the gardens work together.

SECTIONS



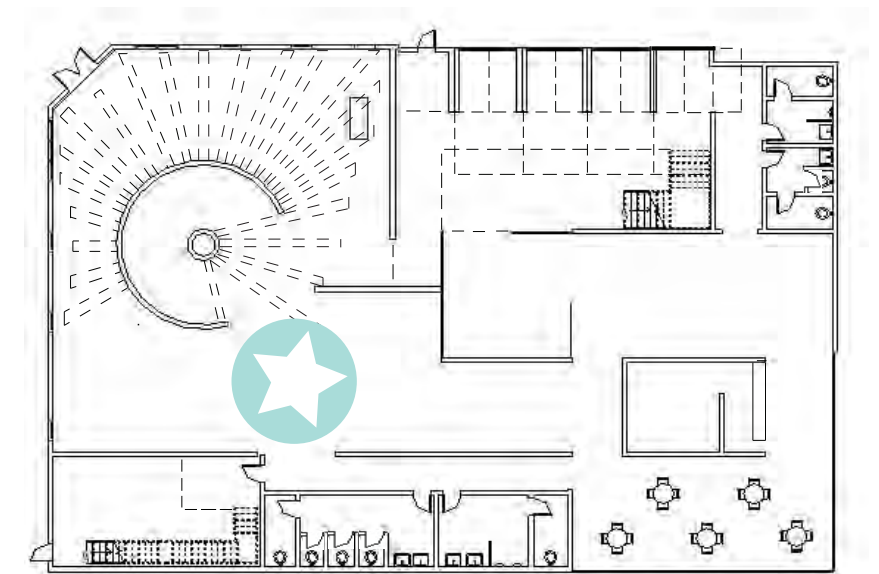


Tree of Life

The entry to the Children's Museum is marked by a large sculpture representing the tree of life. Each of the extensions of the tree has a projection at the end, which projects holographic, full sized animals into the lobby area. This gets the children excited for the experience of the museum, while allowing them to interact with full-sized animals that they otherwise would never get to see.



The water exhibit of the museum will include interactive water tables, which are proportioned in a way that multiple children can use it at the same time. The water exhibit will also include a holographic and multi-sensory water cycle, which allows the children to understand how it works rather than just memorizing the steps of the cycle. The combination of activity and sensory stimulation facilitates learning in children.

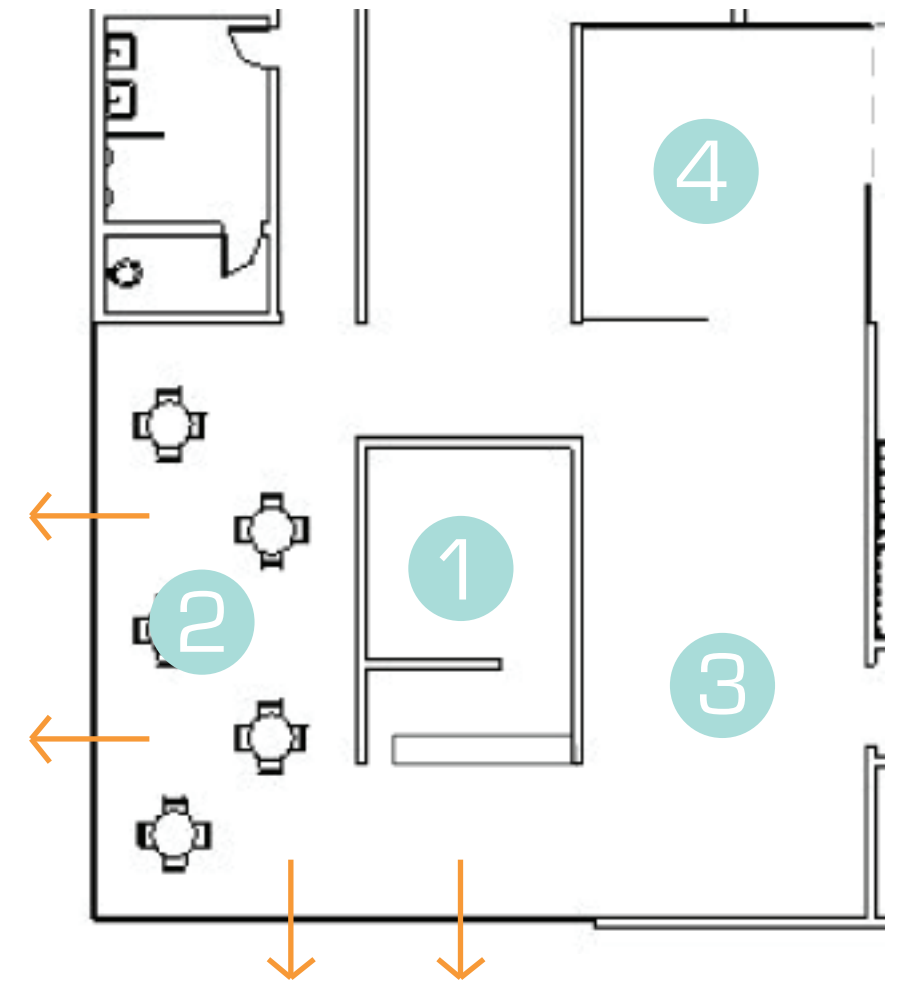


WATER EXHIBIT



FOOD EXHIBITS

Each of the food focused exhibits are meant to work together. The cafe uses food made from local farms and markets, and each of the trays shows where the meals come from. The walls open up to outdoor gardens to make the connection between where food comes from. The predator and prey exhibit explores nature's food chain.

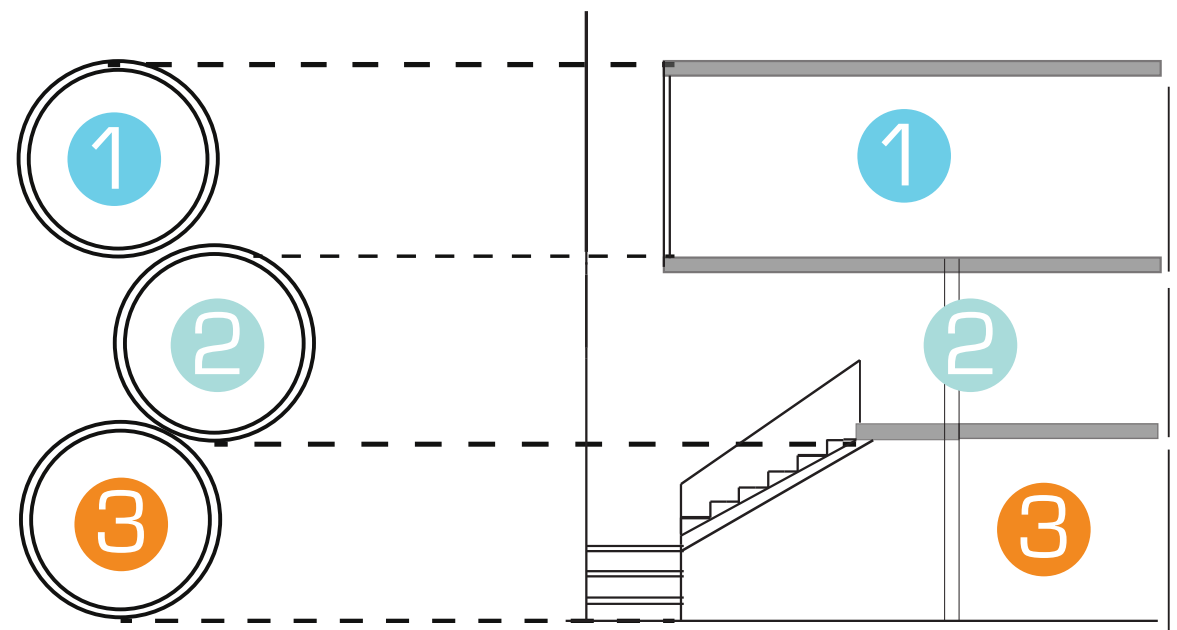
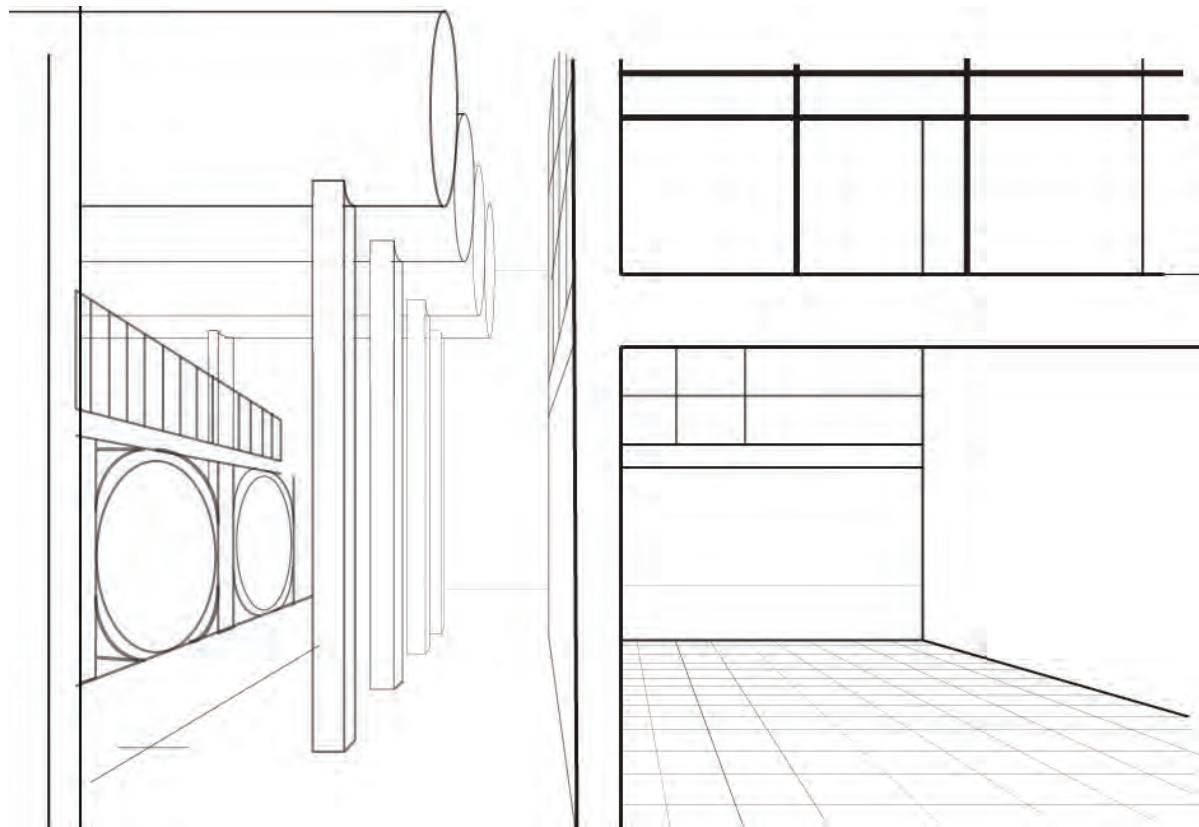


① KITCHEN / CAFE COUNTER

② CAFE SEATING

③ PREDATOR VS. PREY

④ CITY ATRIUM



STAGGERED TUBE DIAGRAM

TUBE ENVIRONMENTS

As the most interesting part of the building, I wanted the concrete tubes on the south facade of the building to be utilized in an equally interesting way. As part of the “shelter” exhibit, each of the tubes will create a different multi-sensory environment where children can experience the ways that different animals live.