

## GLEN FALLS NATURE CENTER

*A Nature Center Based on MIT Building 20*

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MIT BUILDING 20  
 “THE MAGICAL INCUBATOR”  
 1943-1998, DON WHISTON



Site Plan

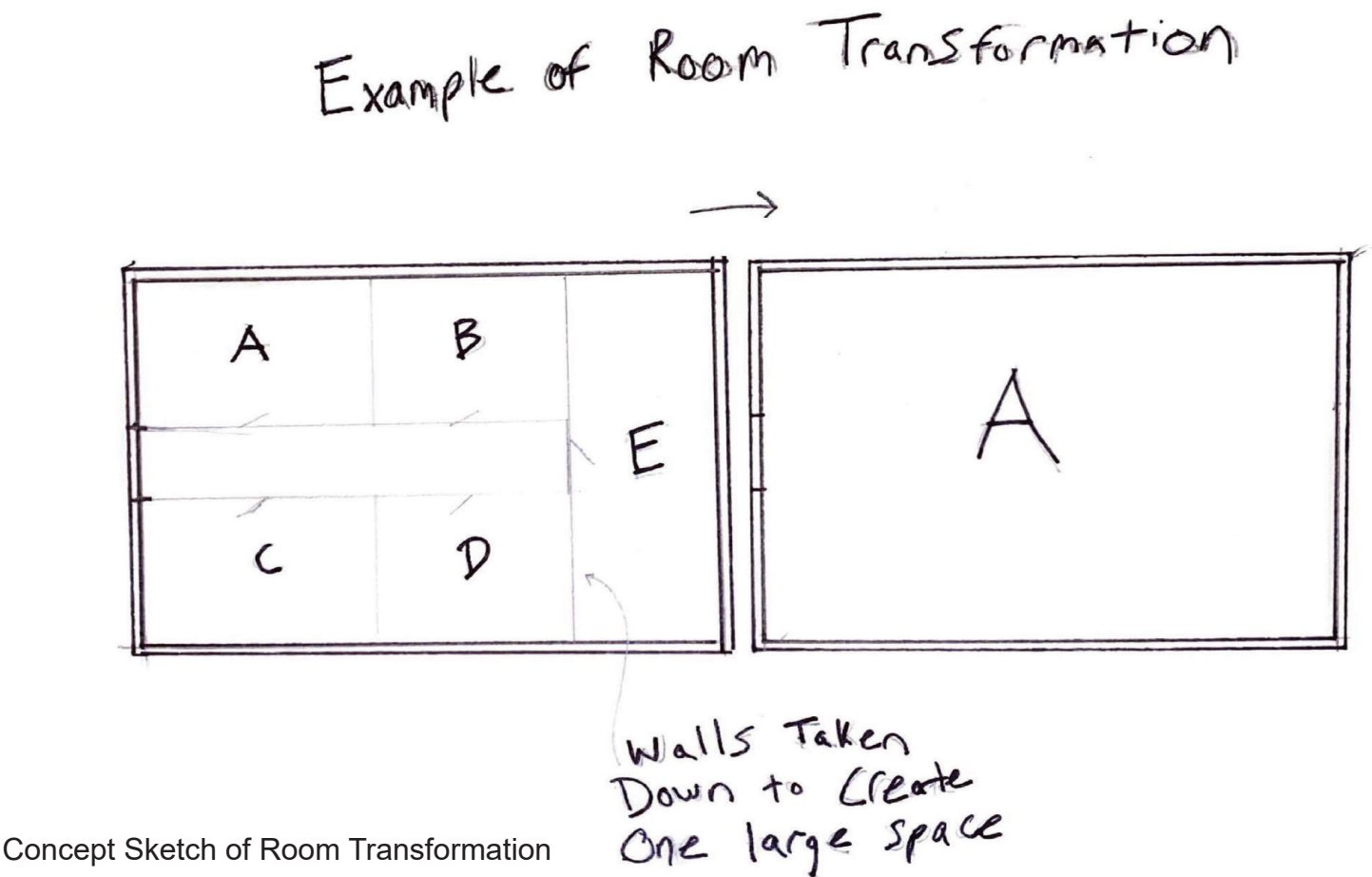
#### MIT Building 20 - Precedent to Projection

**“If you want to bore a hole into the floor to get a little extra vertical space, you do it. It’s the best experiment building ever built.”**  
**- Albert Hill, MIT Professor**

The first section of the semester involved choosing a precedent building, and trying to figure out how and why it “stood the test of time”. Our group selected MIT’s Building 20. This structure was hastily constructed during WWII to be a temporary home of the MIT Radiation Laboratory. As a result of this expedited construction, the space was poorly ventilated, violated fire code, and had many leaking pipes. Yet Building 20 was still beloved by many of the groups that inhabited it. We began to look at why people still enjoyed the space, and how we could incorporate that into our design.



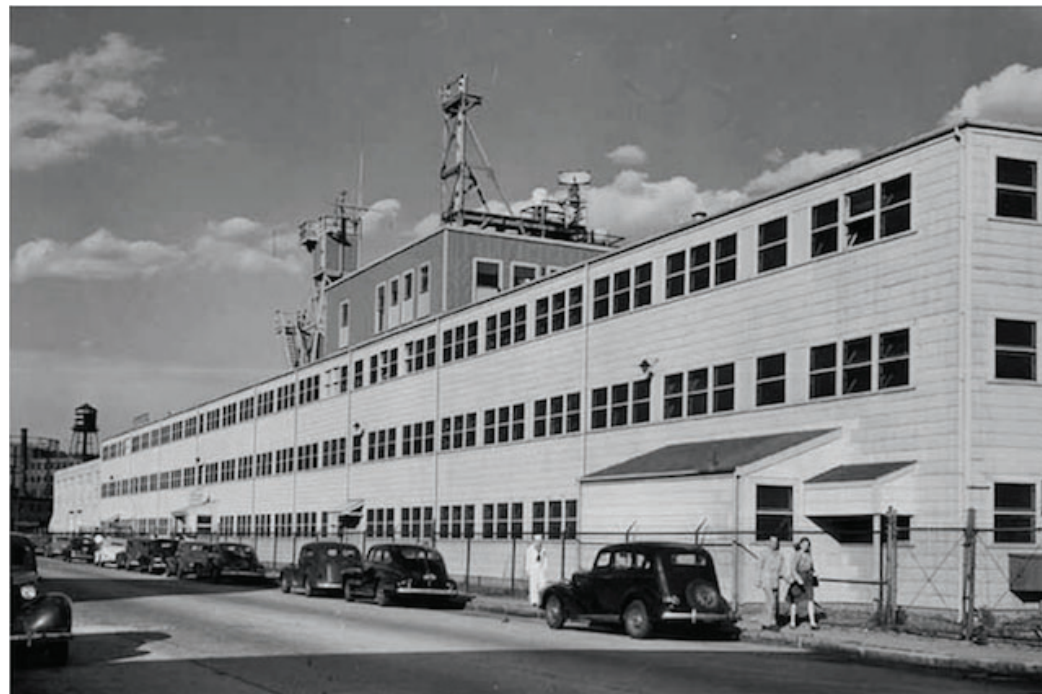
Dark Hallways with Exposed Pipes



Concept Sketch of Room Transformation

### Exploration of Building 20's malleable walls and exposed utilities



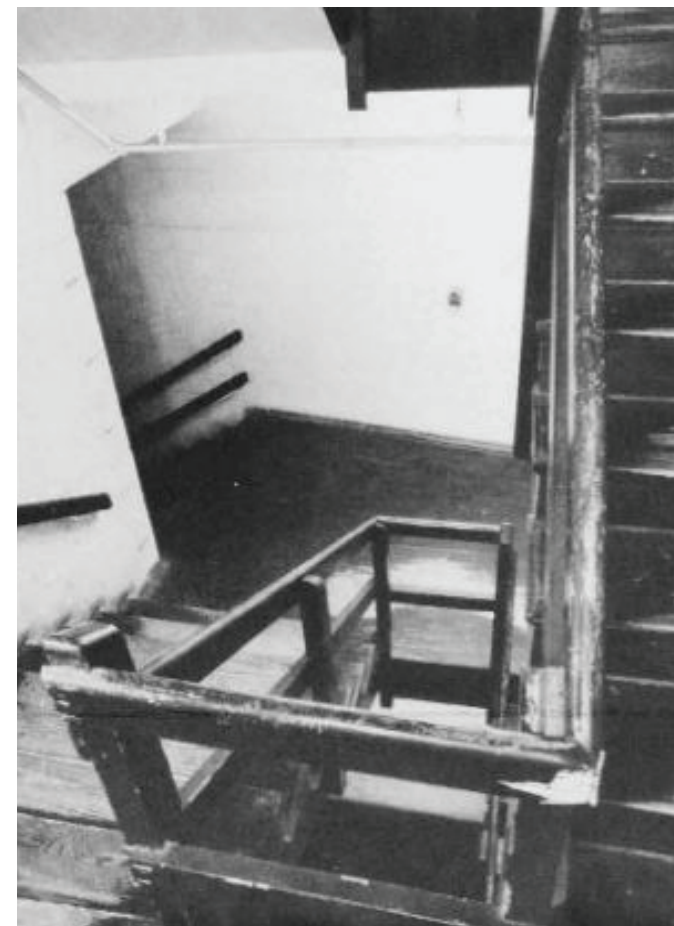


Building 20, c. 1945



Building 20, c. 1995

Exploration of how Building 20's physical apperance changed over time



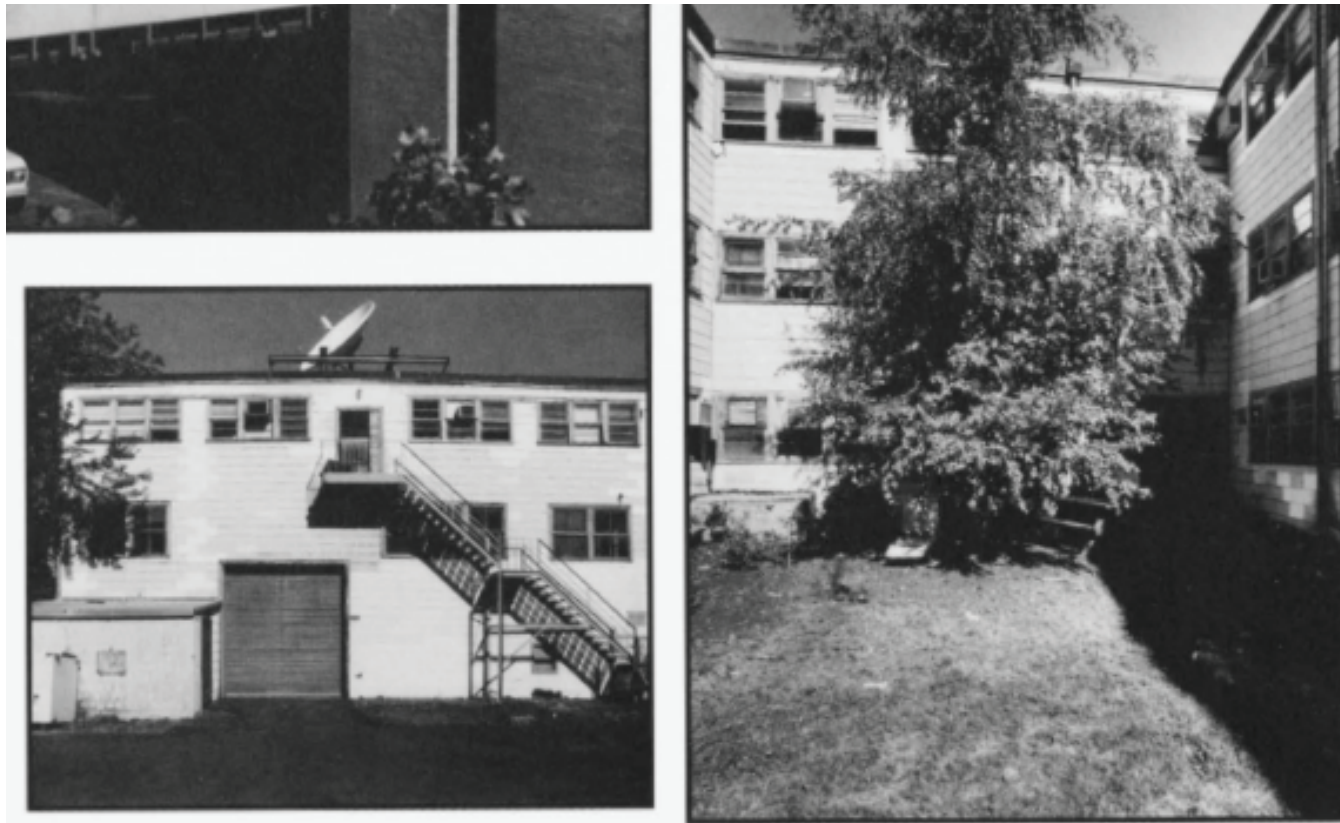
Constricted staircase



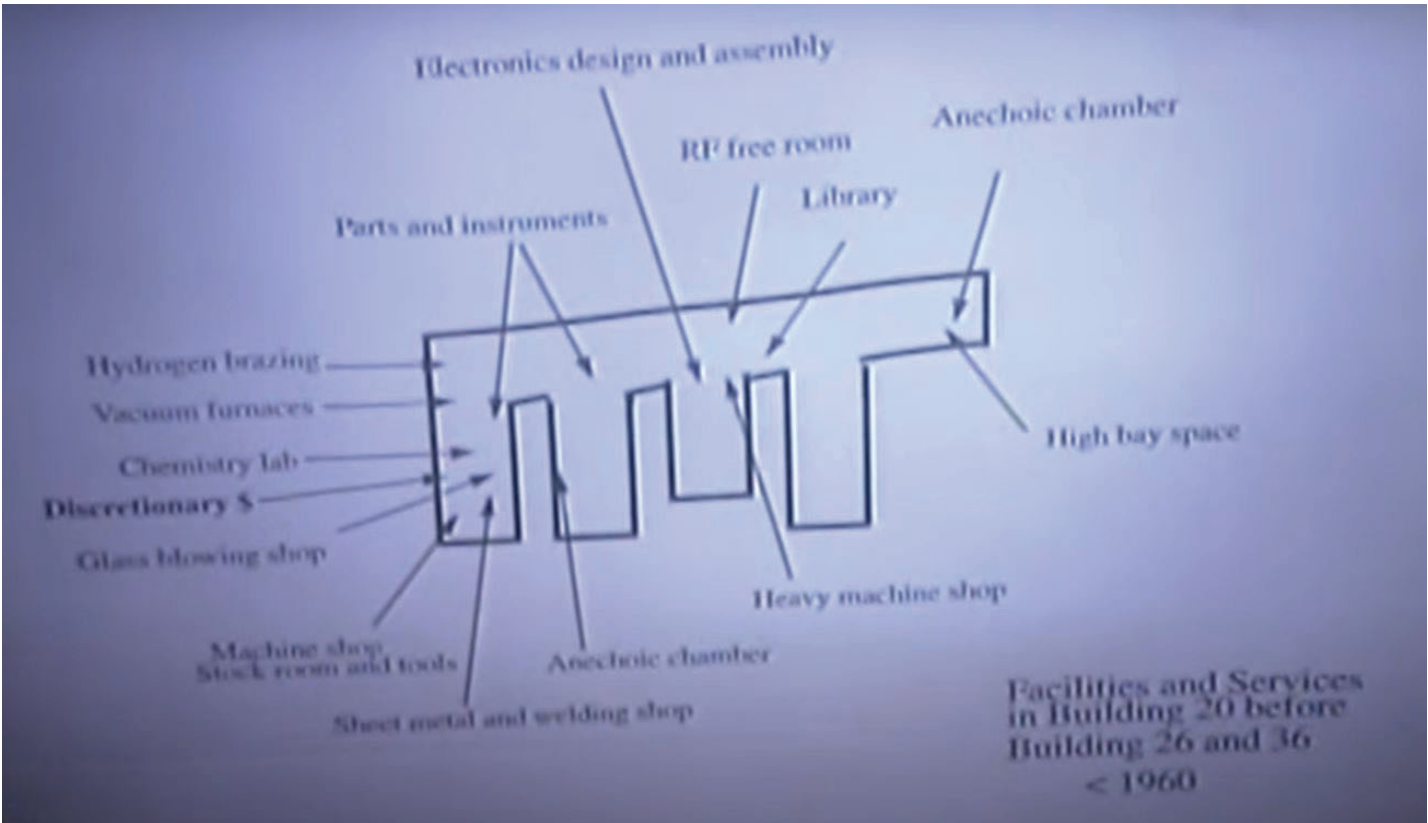
Inter-department Collaboration

Exploration of how the constricted corridors and stairwells encouraged collaboration



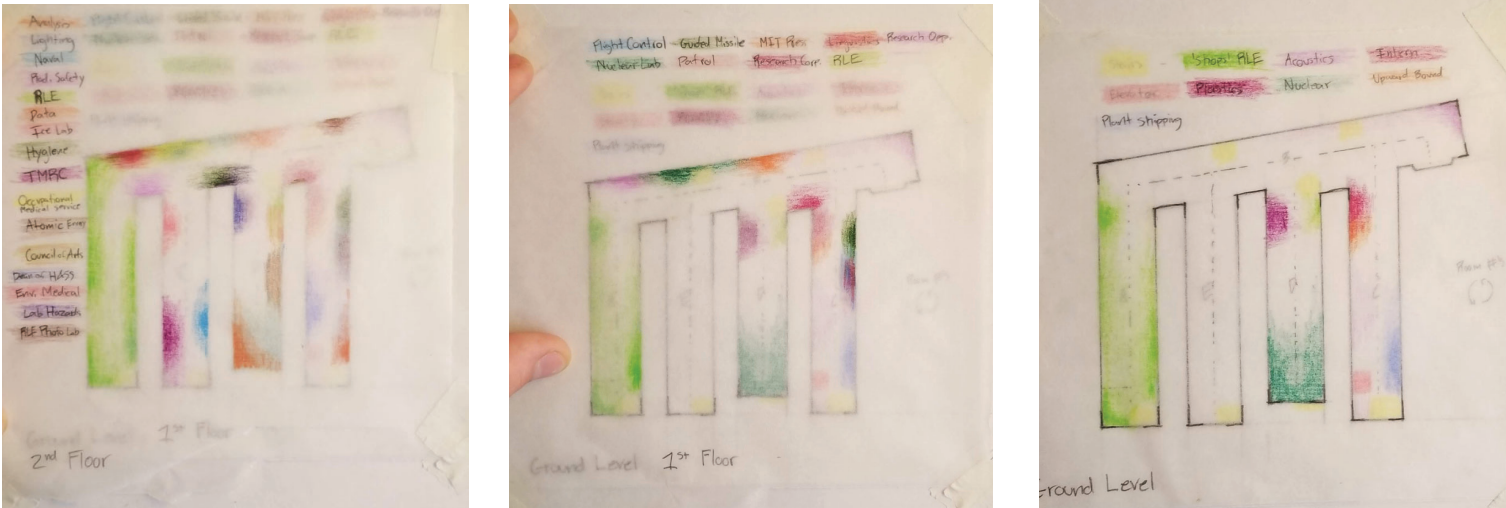


Unassuming Façade (left), Impromptu Courtyard Space (right)

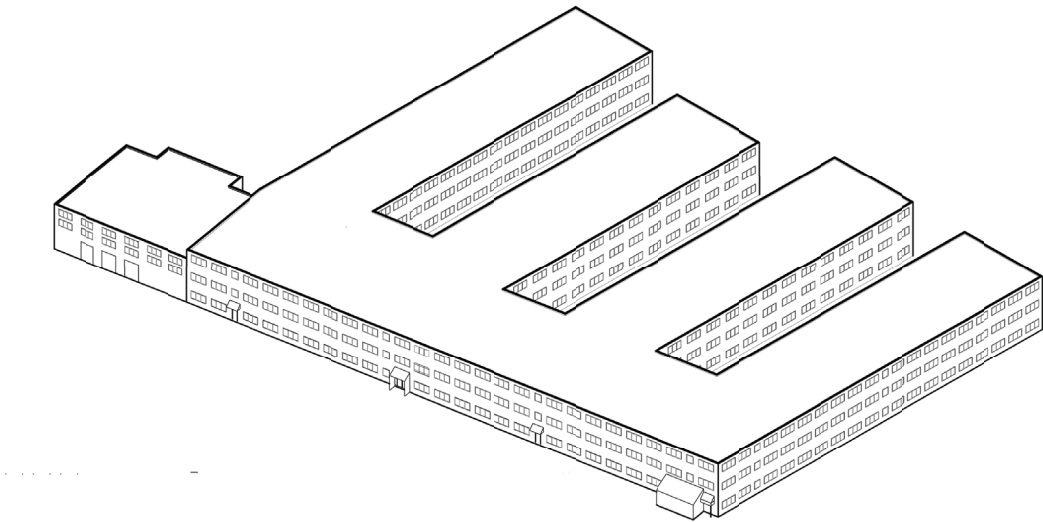


Programic Layout, c. 1960

Exploration of Building 20’s plethora of programatic uses



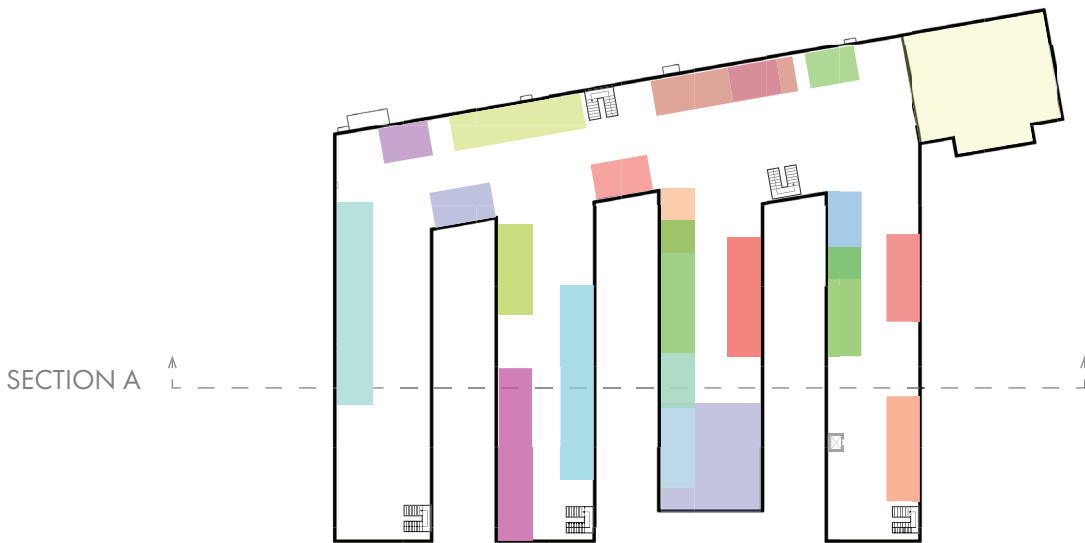
Concept Sketches of Programatic Uses



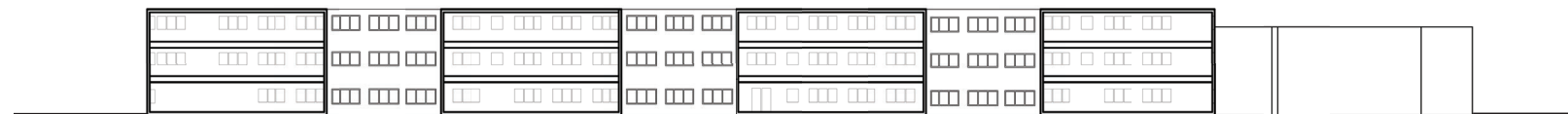
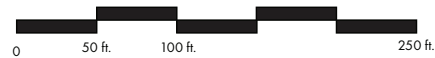
Axonometric Drawing  
1/64" = 1'-0"



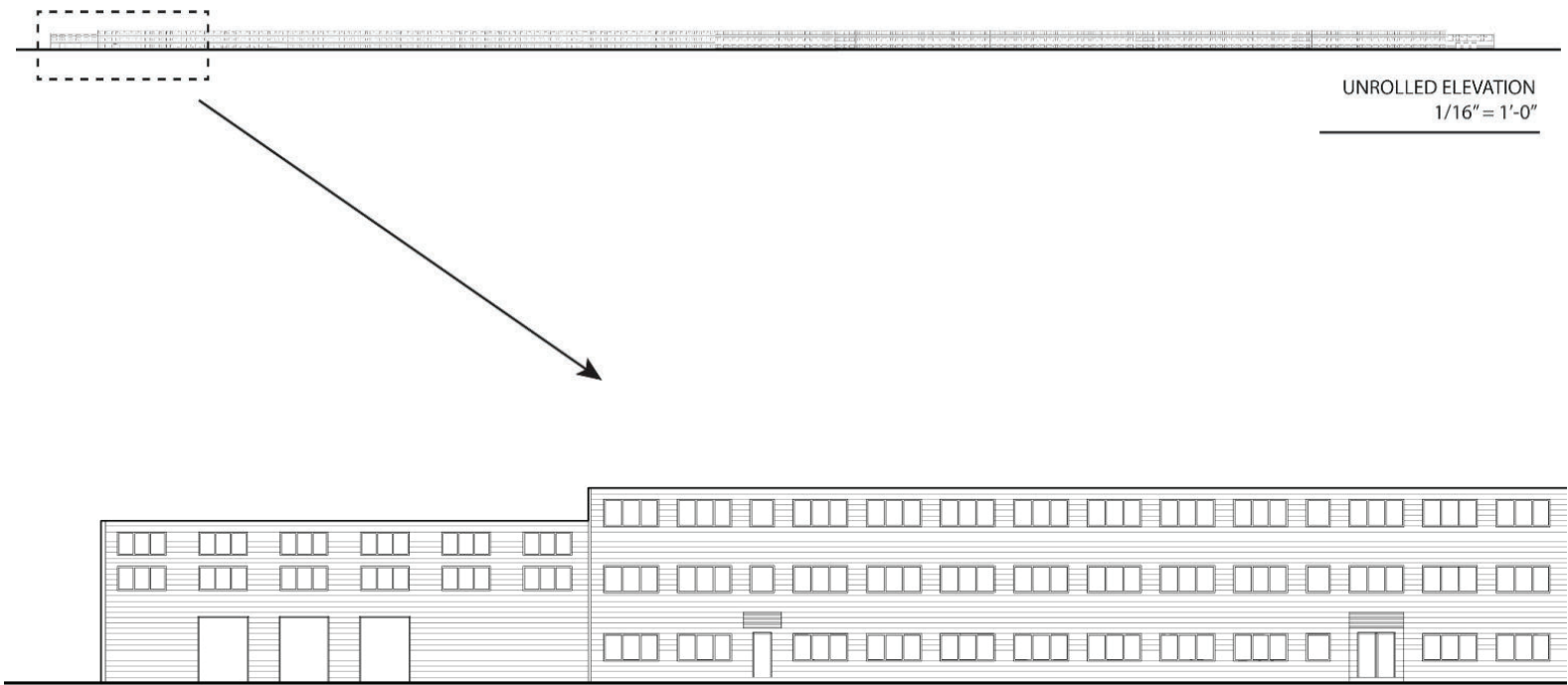
Front Elevation  
1/32" = 1'-0"



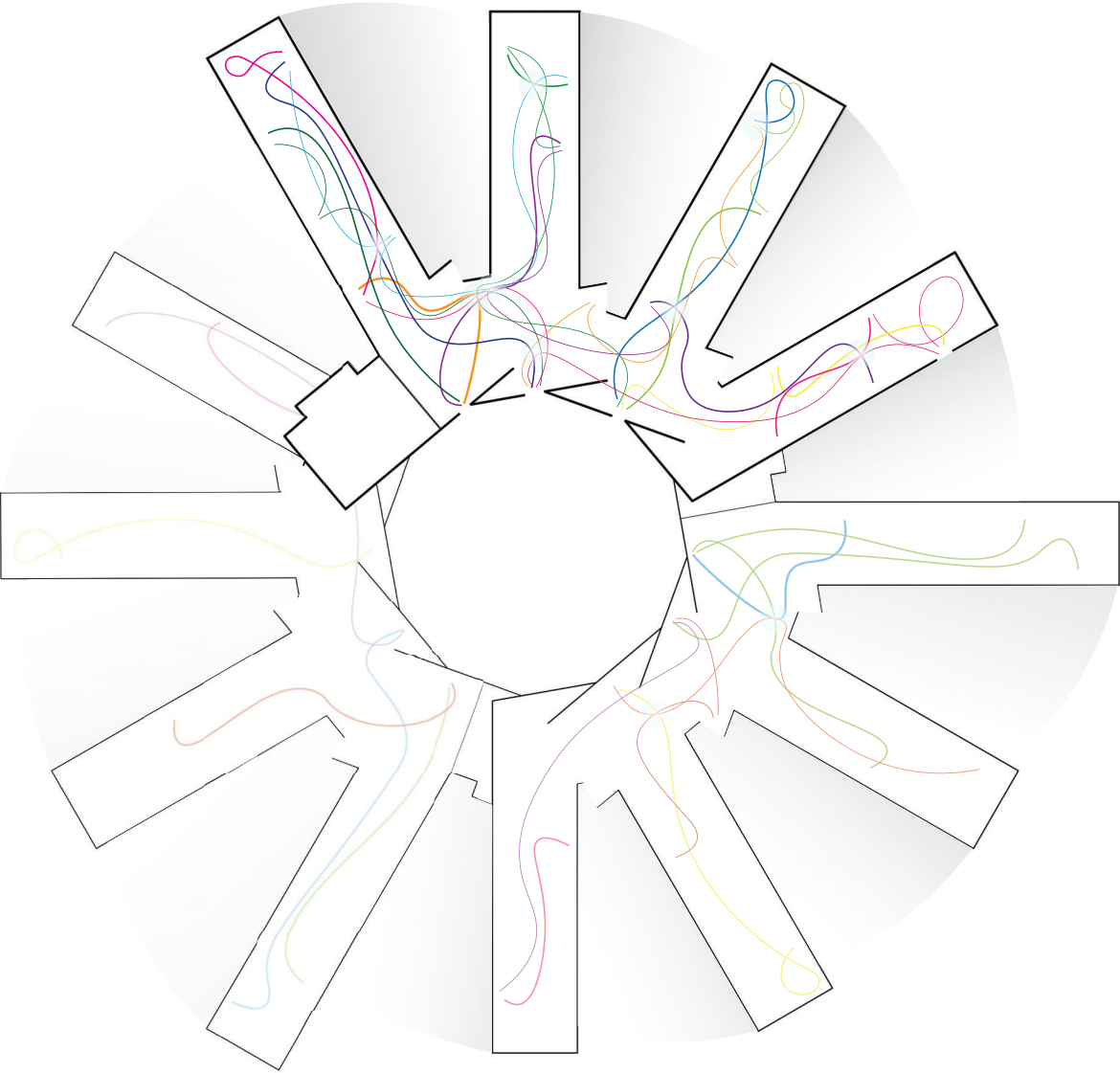
PLAN  
1/64" = 1'-0"



Section A  
1/32" = 1'-0"

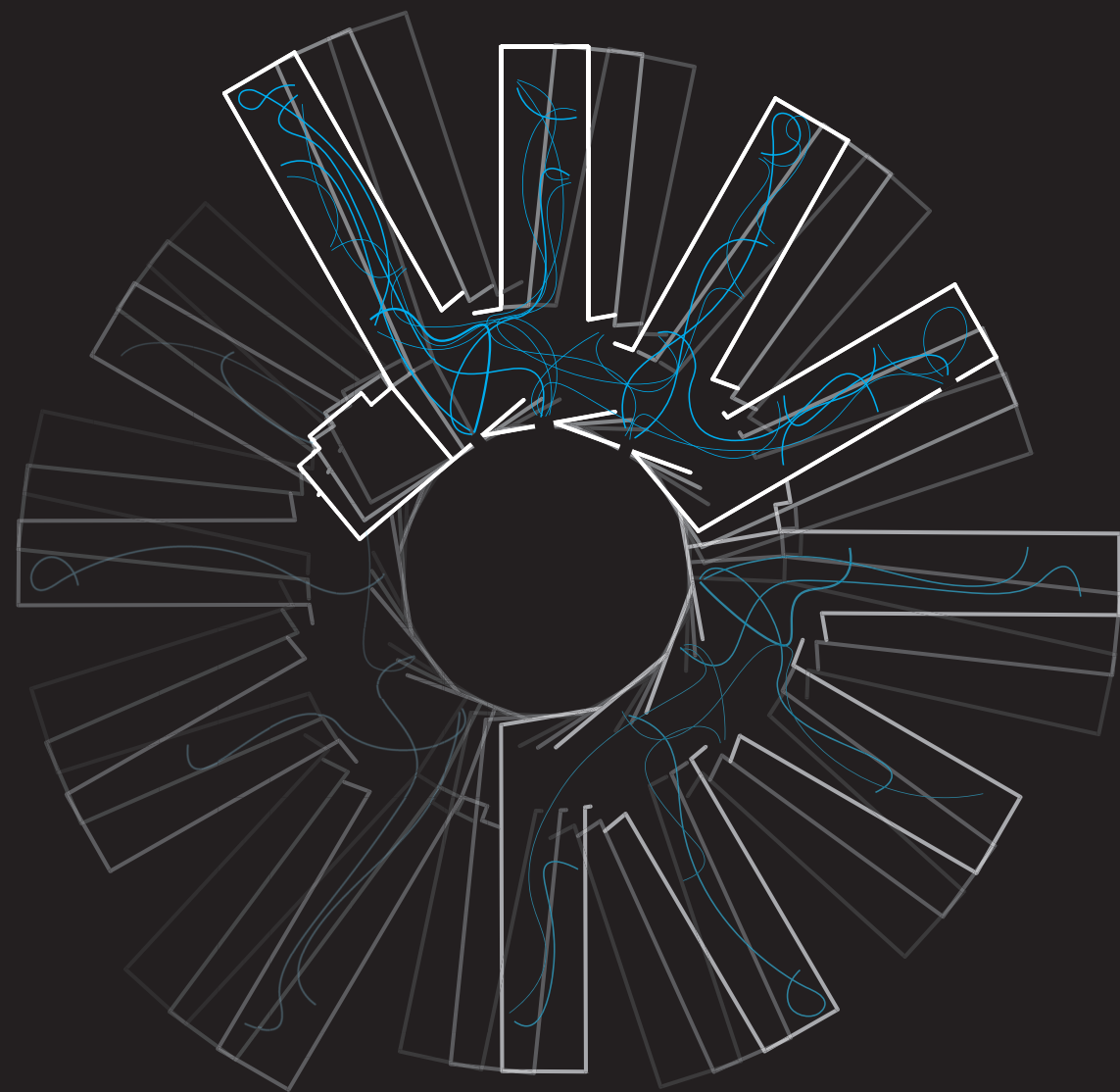


Firm Diagram

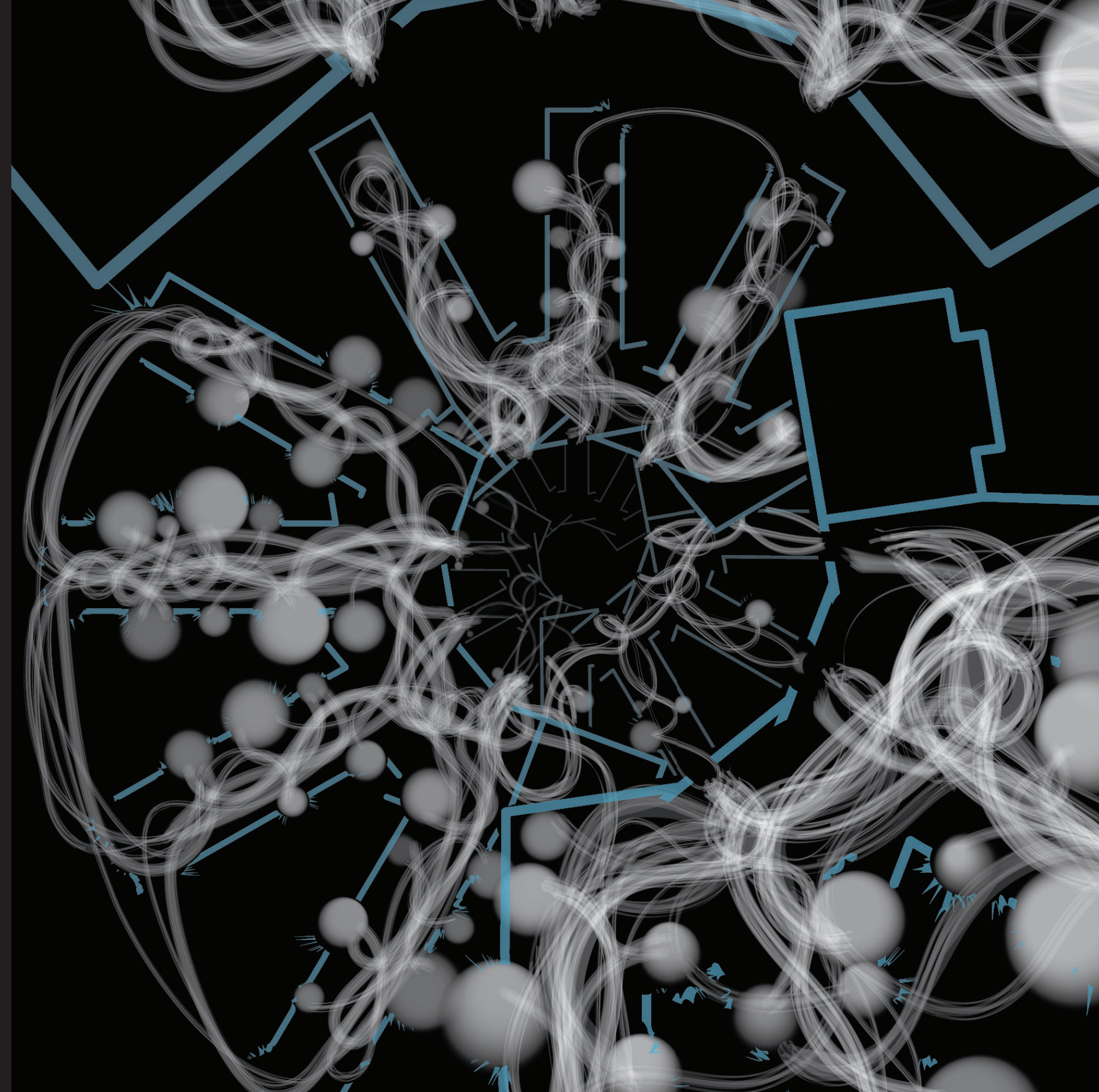


Transformative Diagram, v.1





Transformative Diagram, v.2



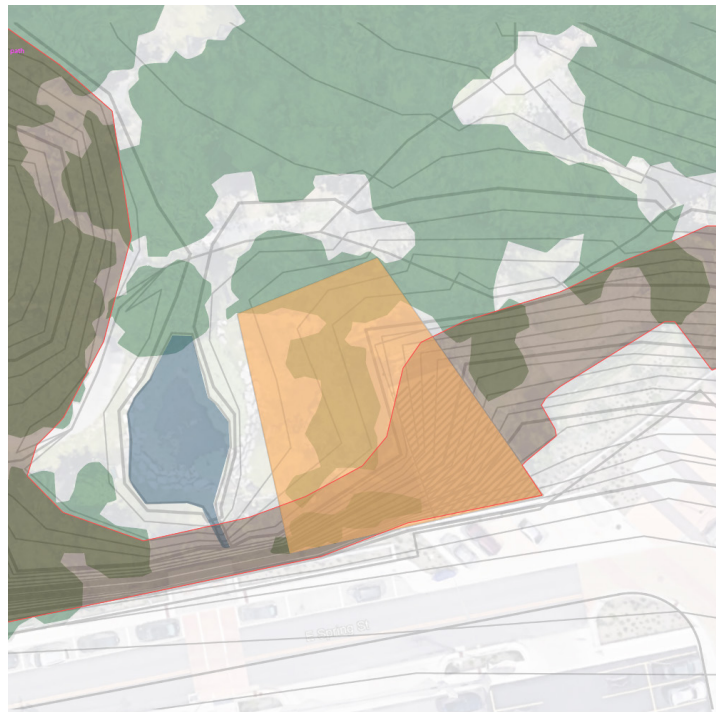
Projection Drawing



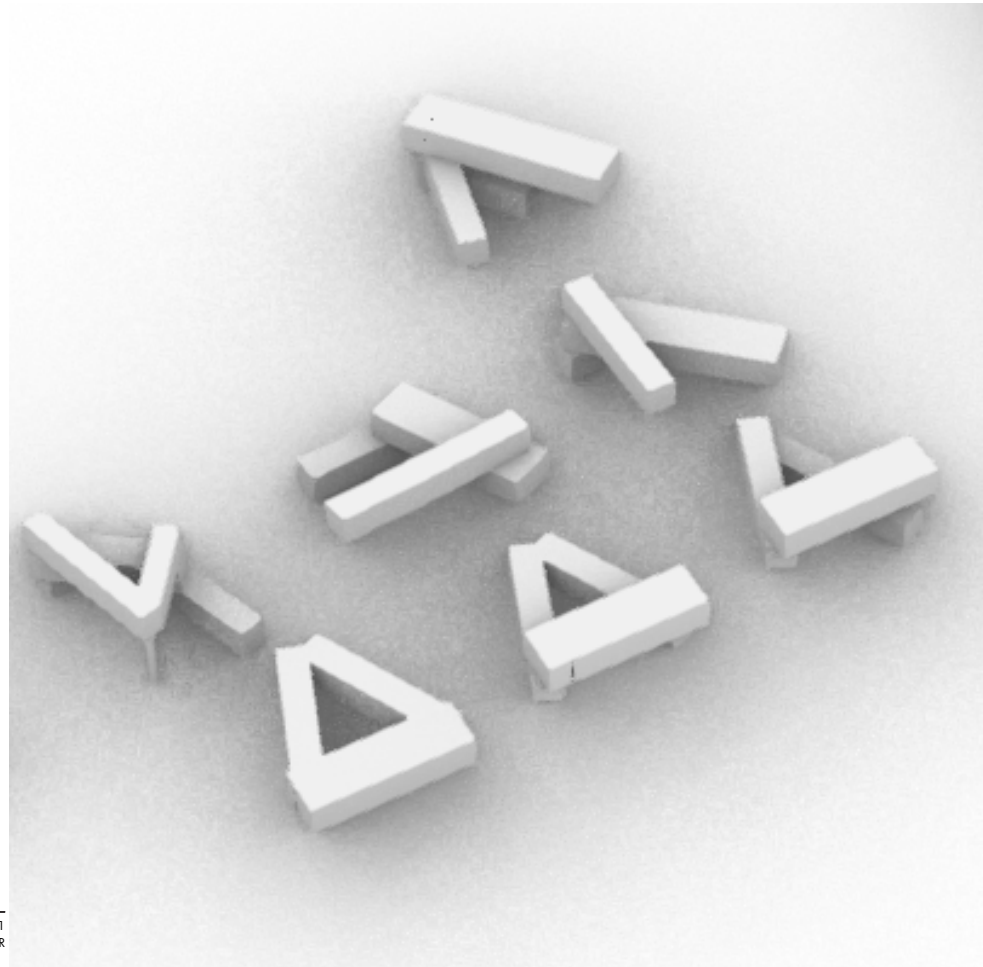
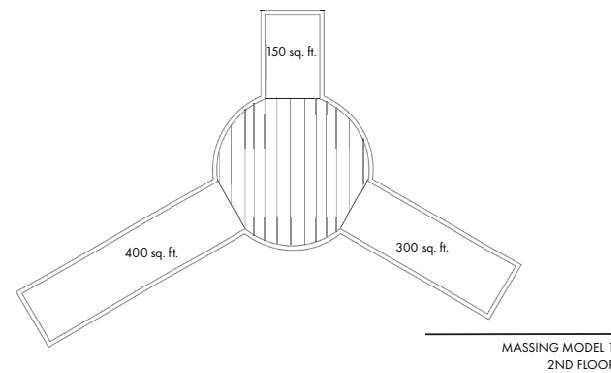
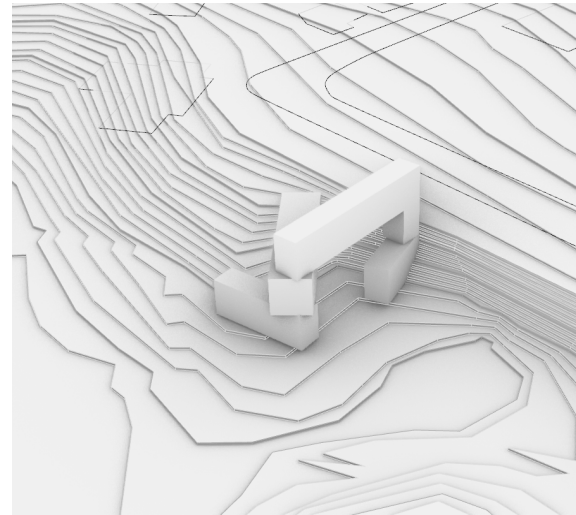
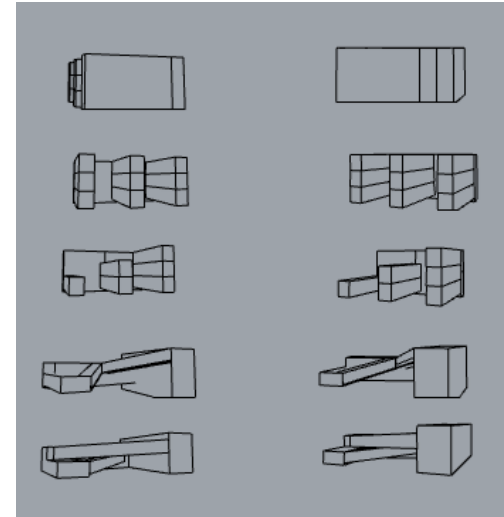
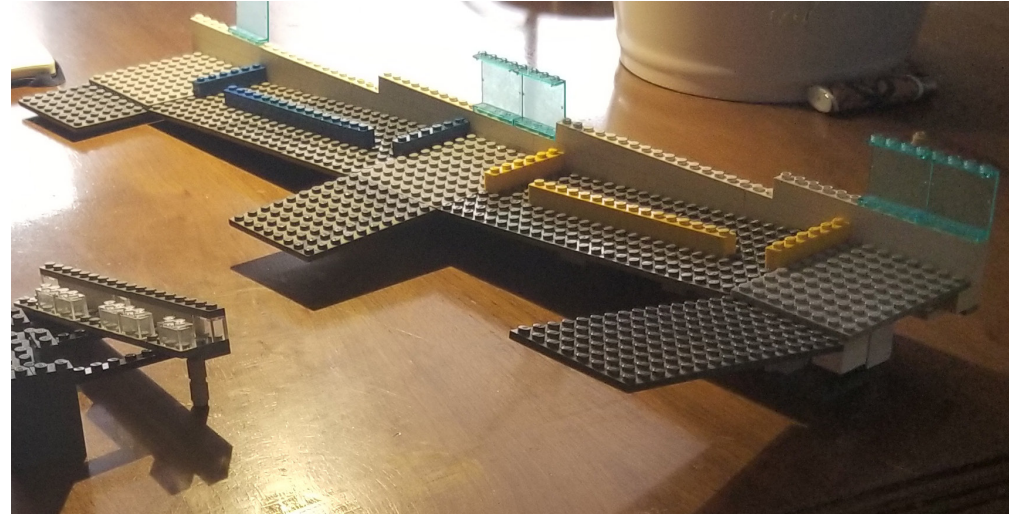


## Glen Falls, Buffalo - Reinventing Building 20

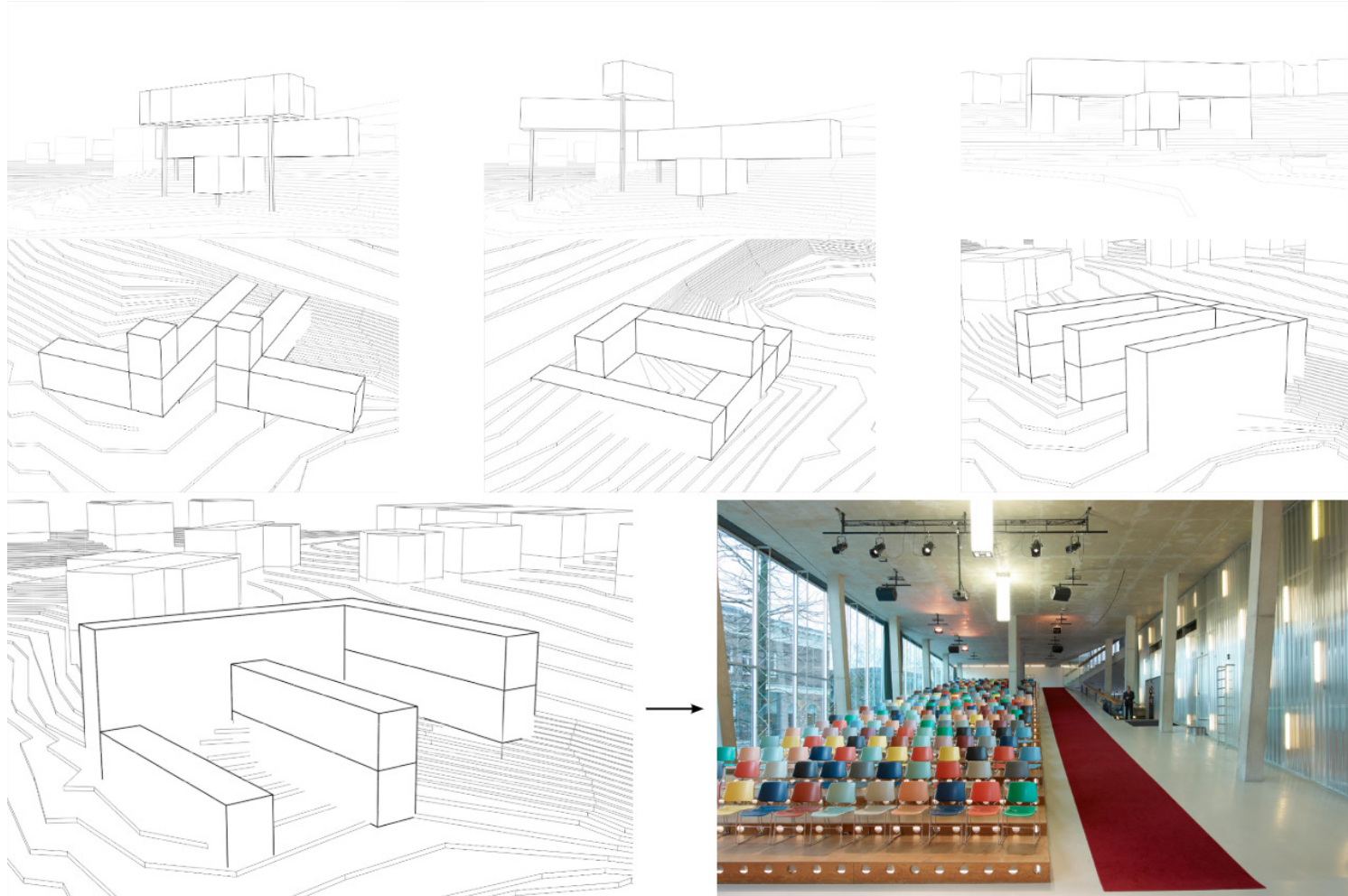
Our next project this semester focussed on applying key concepts from our precedent, to a new site and structure. As we were also given no program, we decided to use circulation as a primary driver of our design, looking to the MIT Building 20 for additional inspiration. After several rounds of massing models, we considered a smooth transition from street to park another core idea, leading into our refinement process. The result was a series of stacked, ramped, circulation sticks, that puncture through three, stepped, monolithic volumes, creating a centrally connected building.



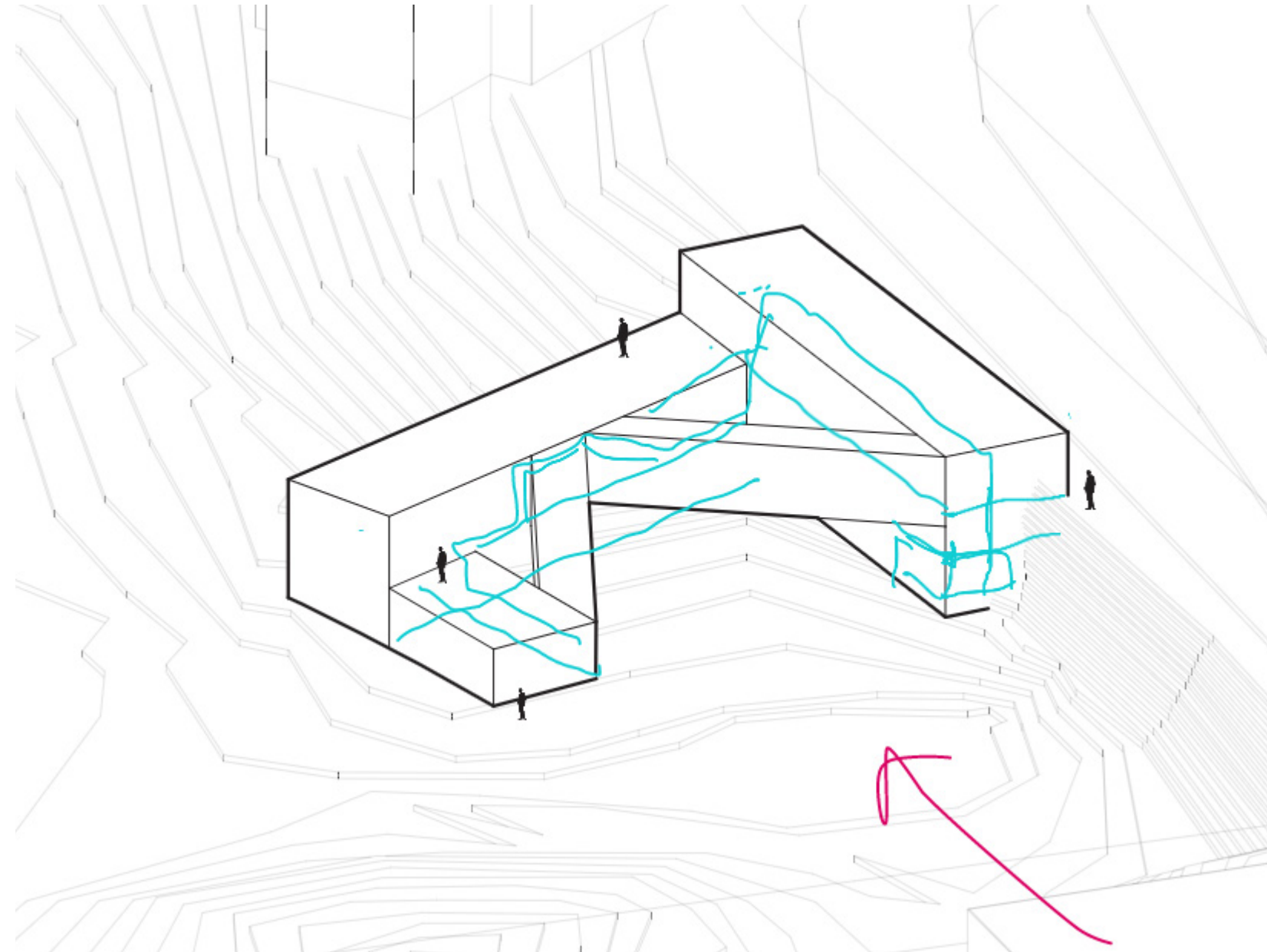
## Early massing studies



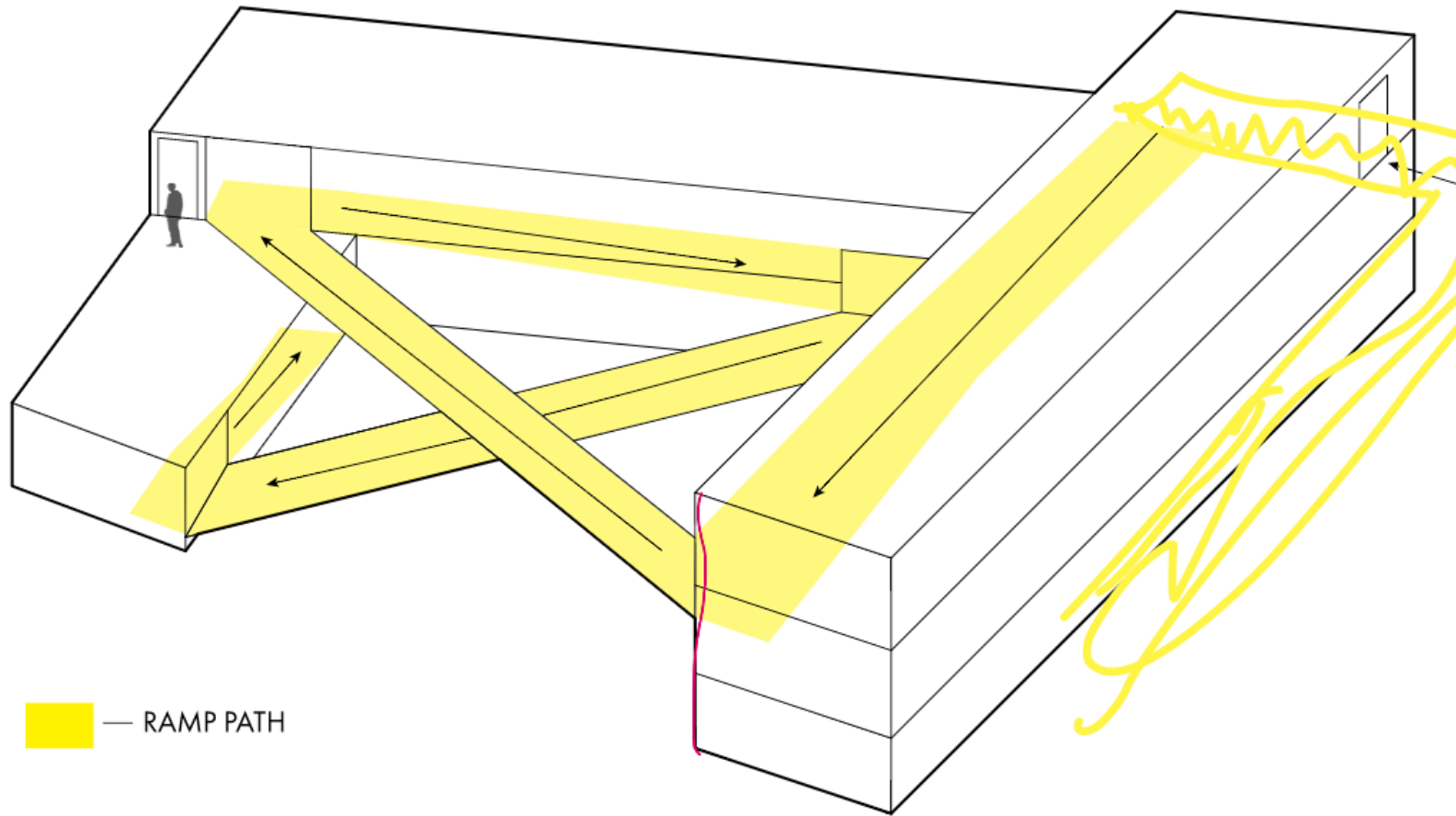




**A series of studies showing a shift to simplistic, Building 20 like forms. Additionally, a reference of the Kunsthal Rotterdam by OMA**

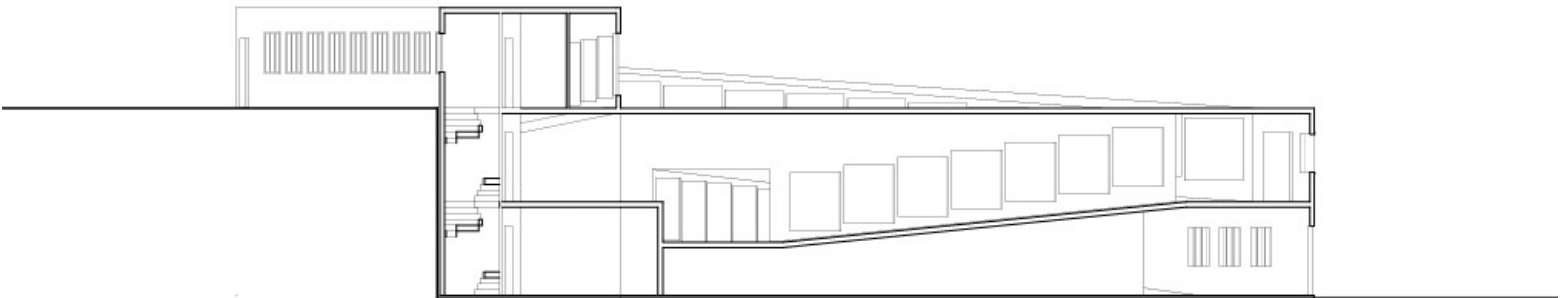
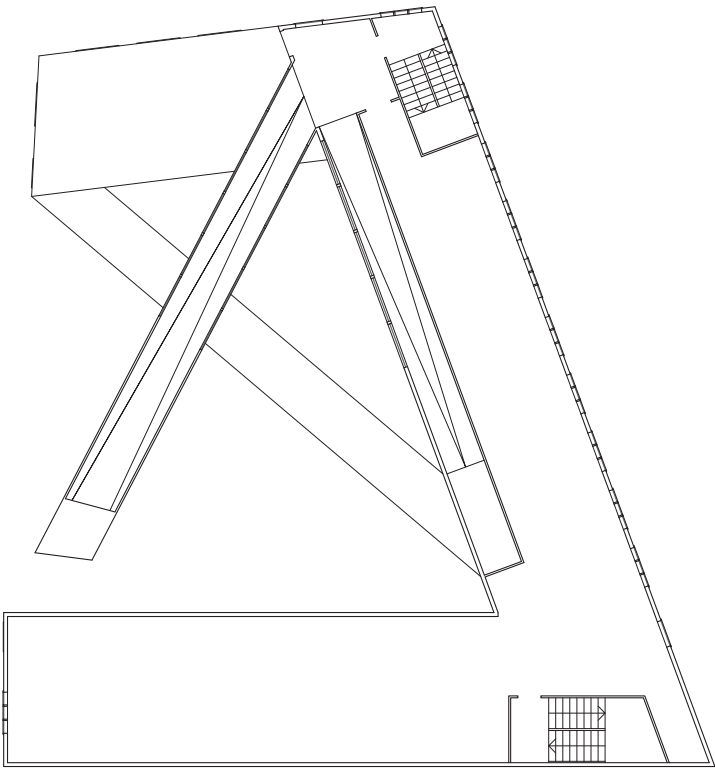


**An early ramped model, used to begin ramp calculations.**



A revised model, offering longer ramps to adhere to ADA guidelines.

PLAN  
and  
SECTION

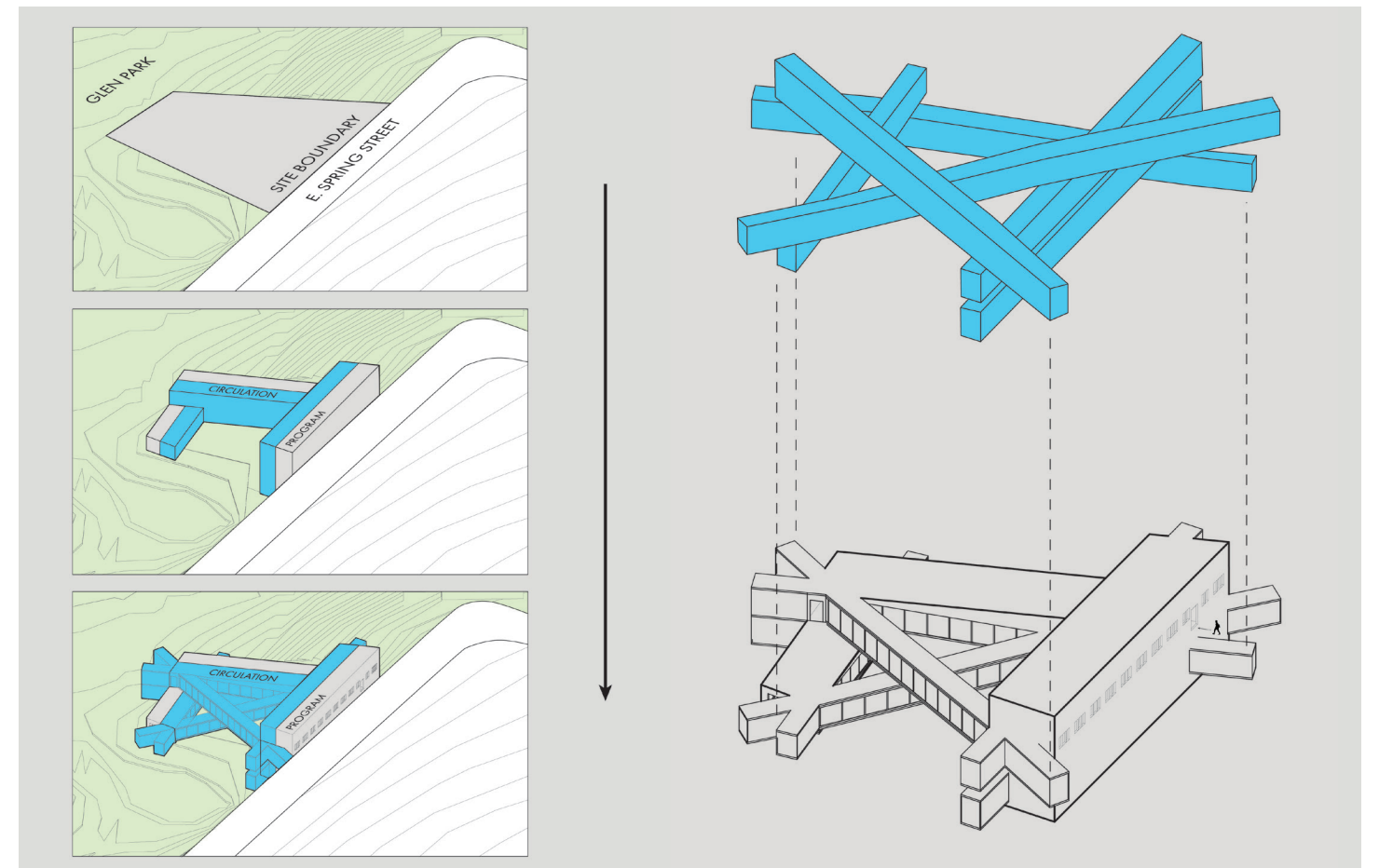
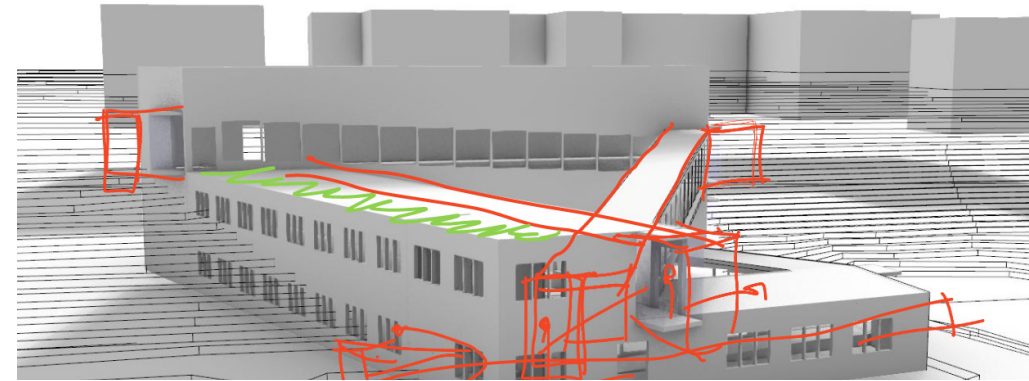




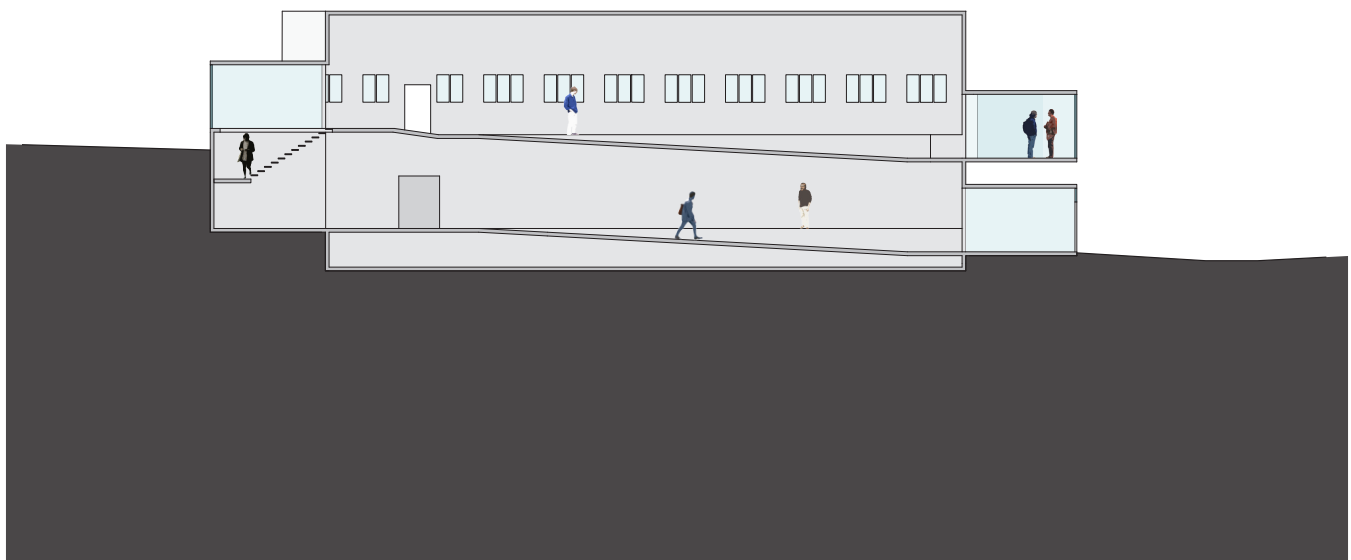
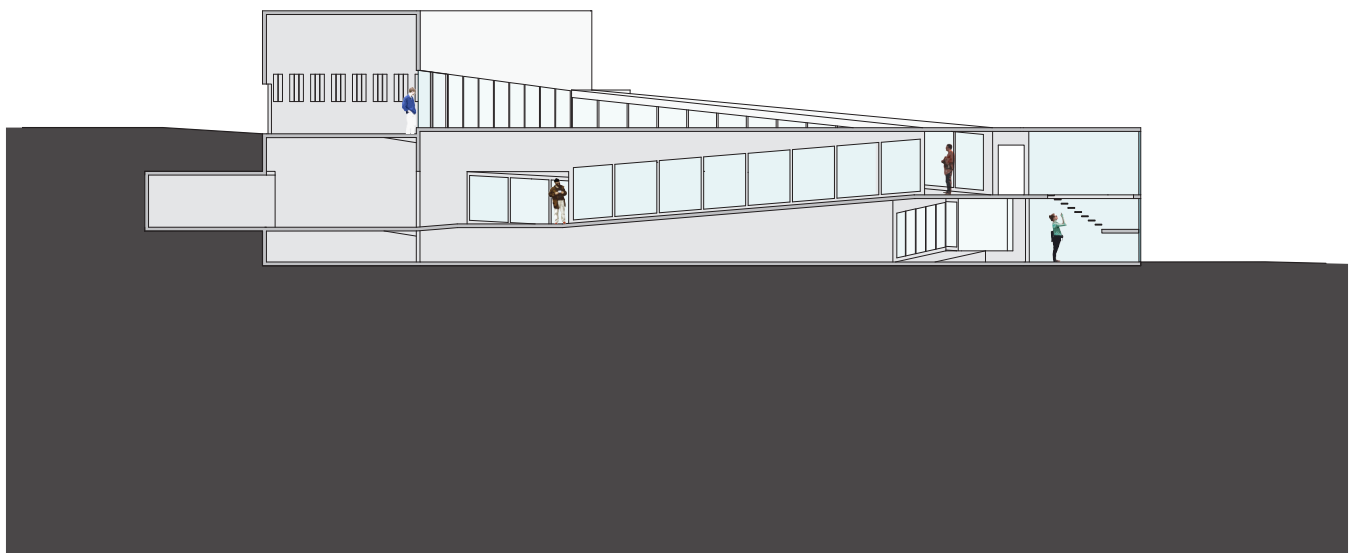
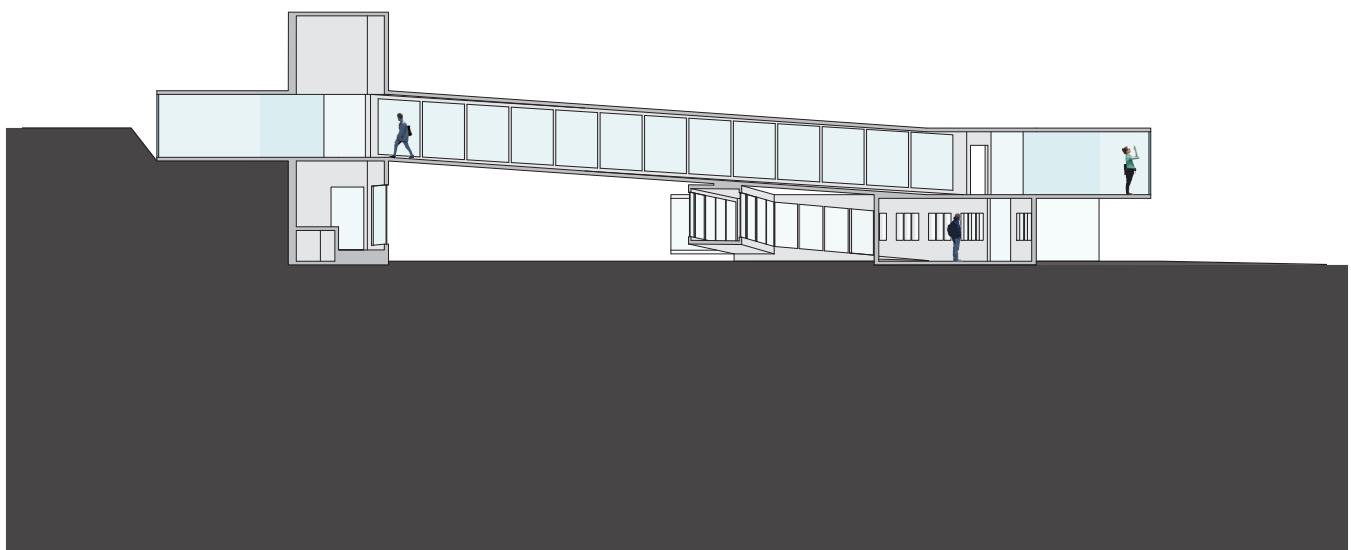
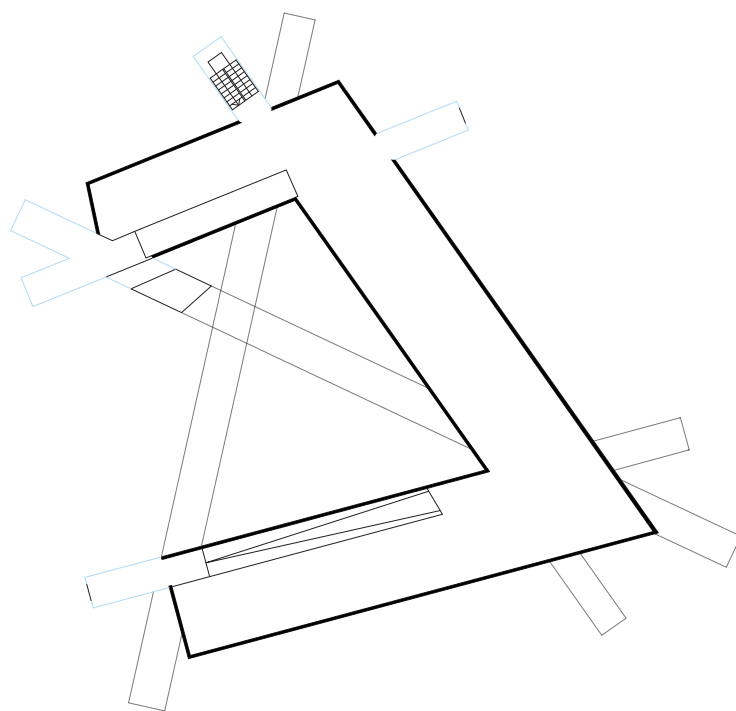
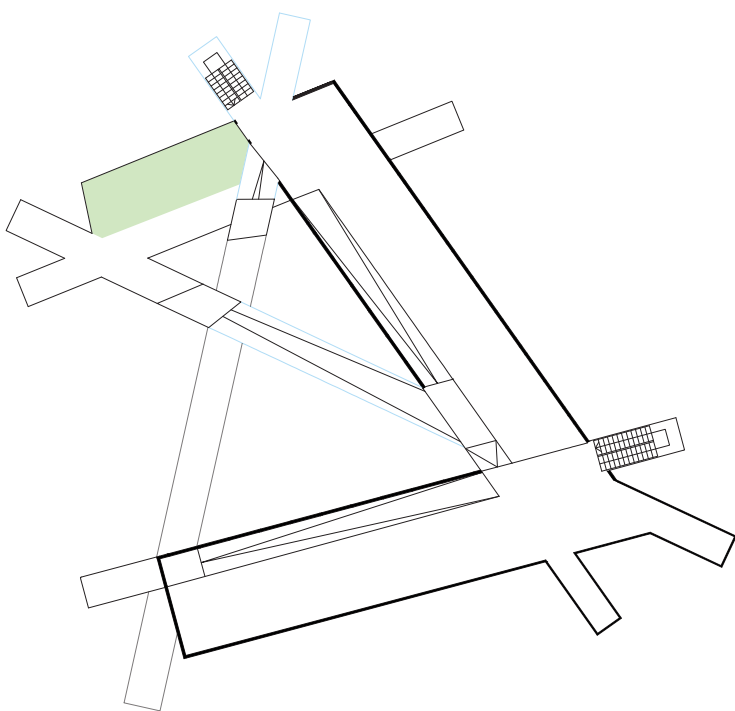
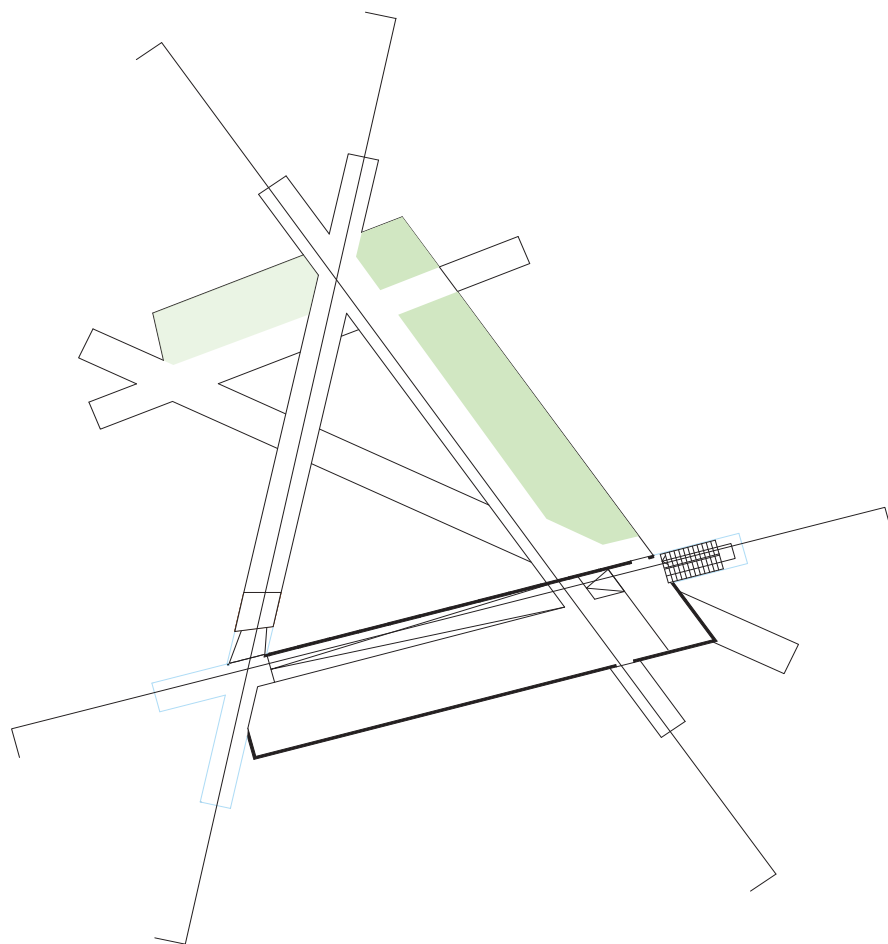
## Interior Perspectives



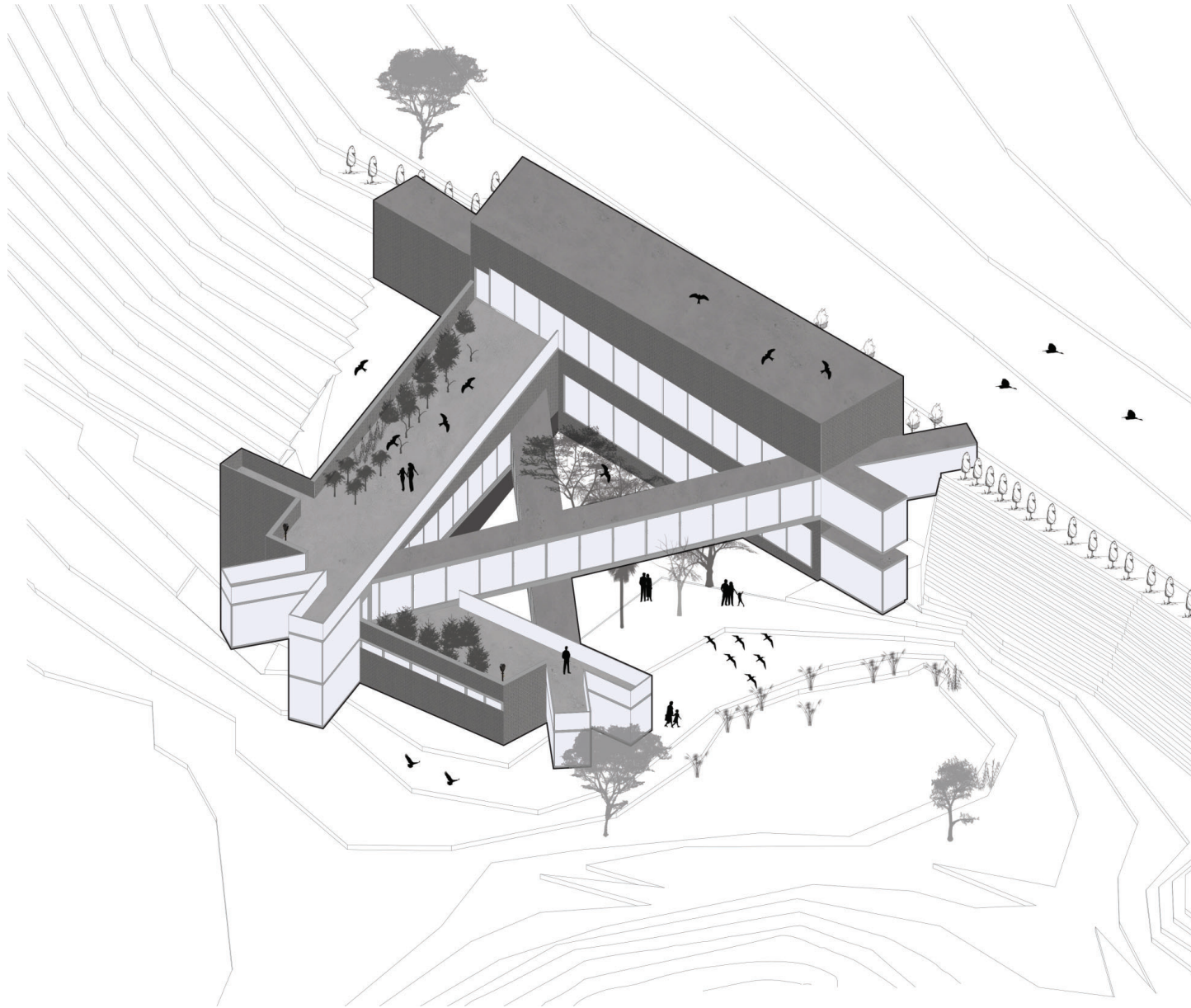
## Our process of extending circulation hallways to 'break through' the final building form.



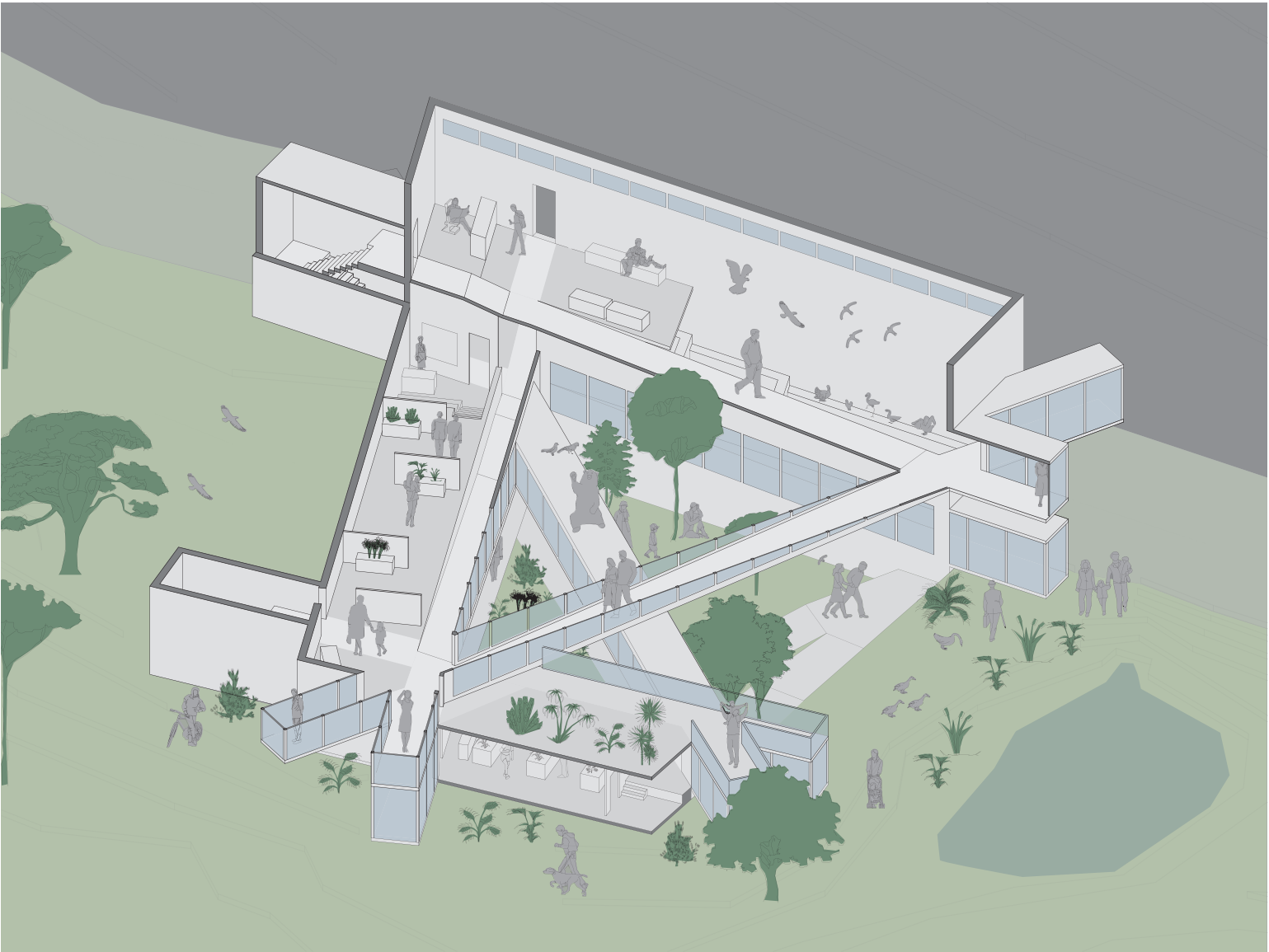
PLANS  
and  
SECTIONS







Exterior Inhabited Isometric



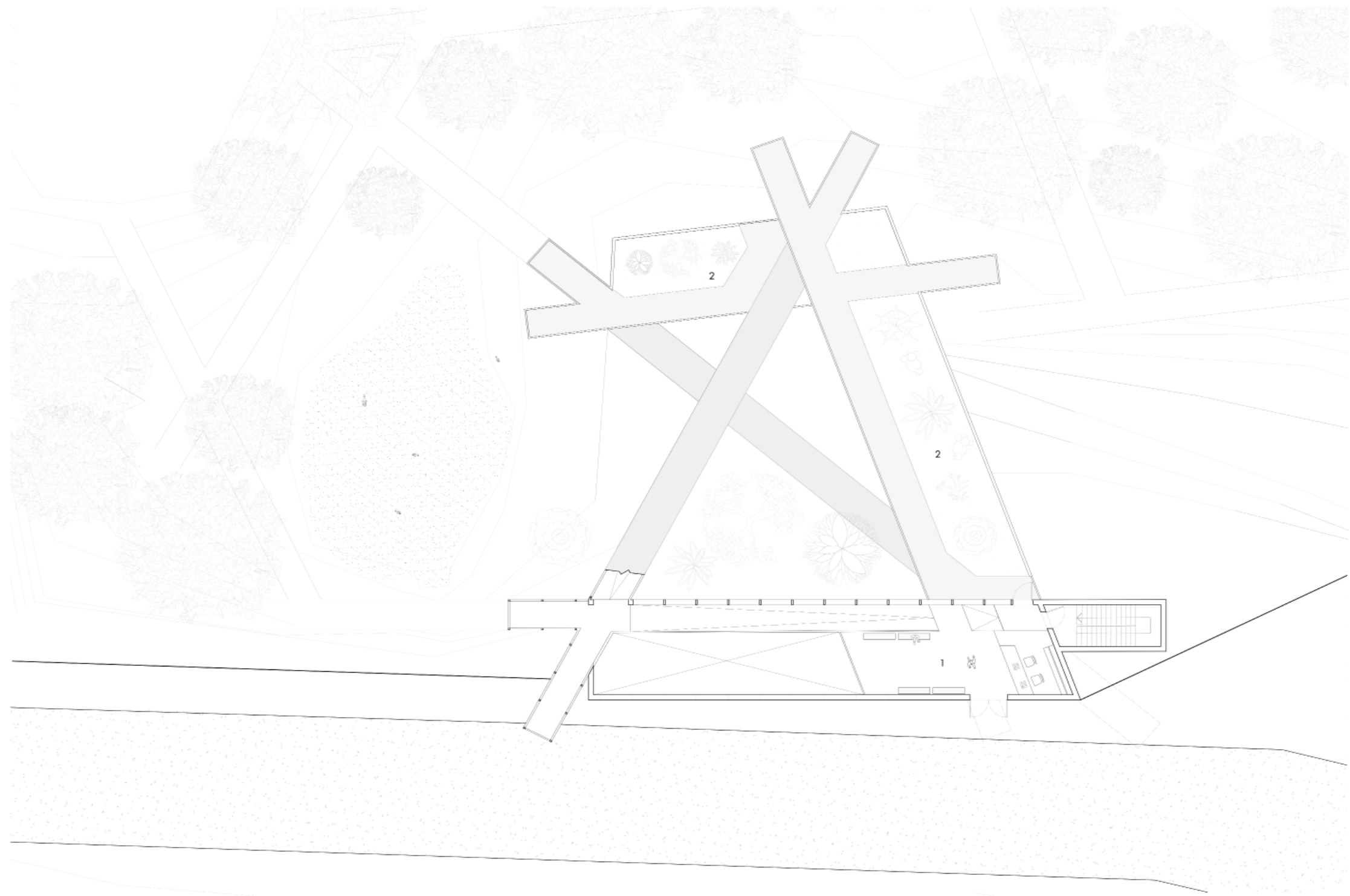
Interior Inhabited Isometric

### Reuse

**“How does the program of Nature Center change the form of our building? How does the unique form of our building influence the program of a Nature Center?”**

Having settled on a form that met our criteria, we were finally given a program for our building: a Nature Center. With this, we tried to solve two questions: 1) How does the program of Nature Center change the form of our building? 2) How does the unique form of our building influence the program of a Nature Center? In addition, we were asked to consider the impact that the current COVID-19 Pandemic has on the use of our space as a center for learning.

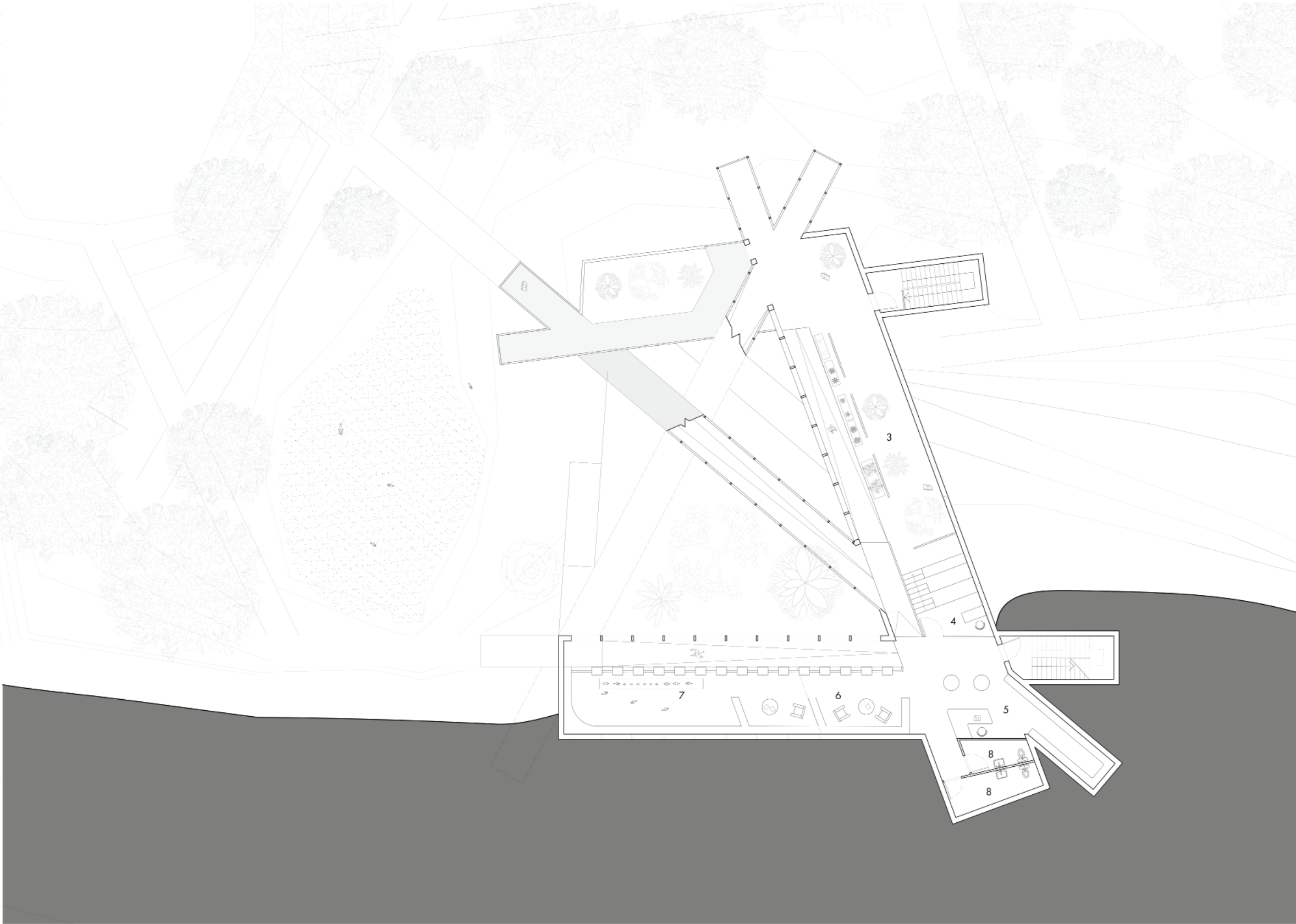
- Program Key:**
- 1: Entrance/Reception
  - 2: Exterior Terraces
  - 3: Plant Display
  - 4: Lecture Space
  - 5: Gift Shop
  - 6: Library
  - 7: Taxidermy Display
  - 8: Bathrooms
  - 9: Science Lab/Classroom
  - 10: Cafe/Kitchenette
  - 11: Employee Office
  - 12: Storage/Archive



Street Plan



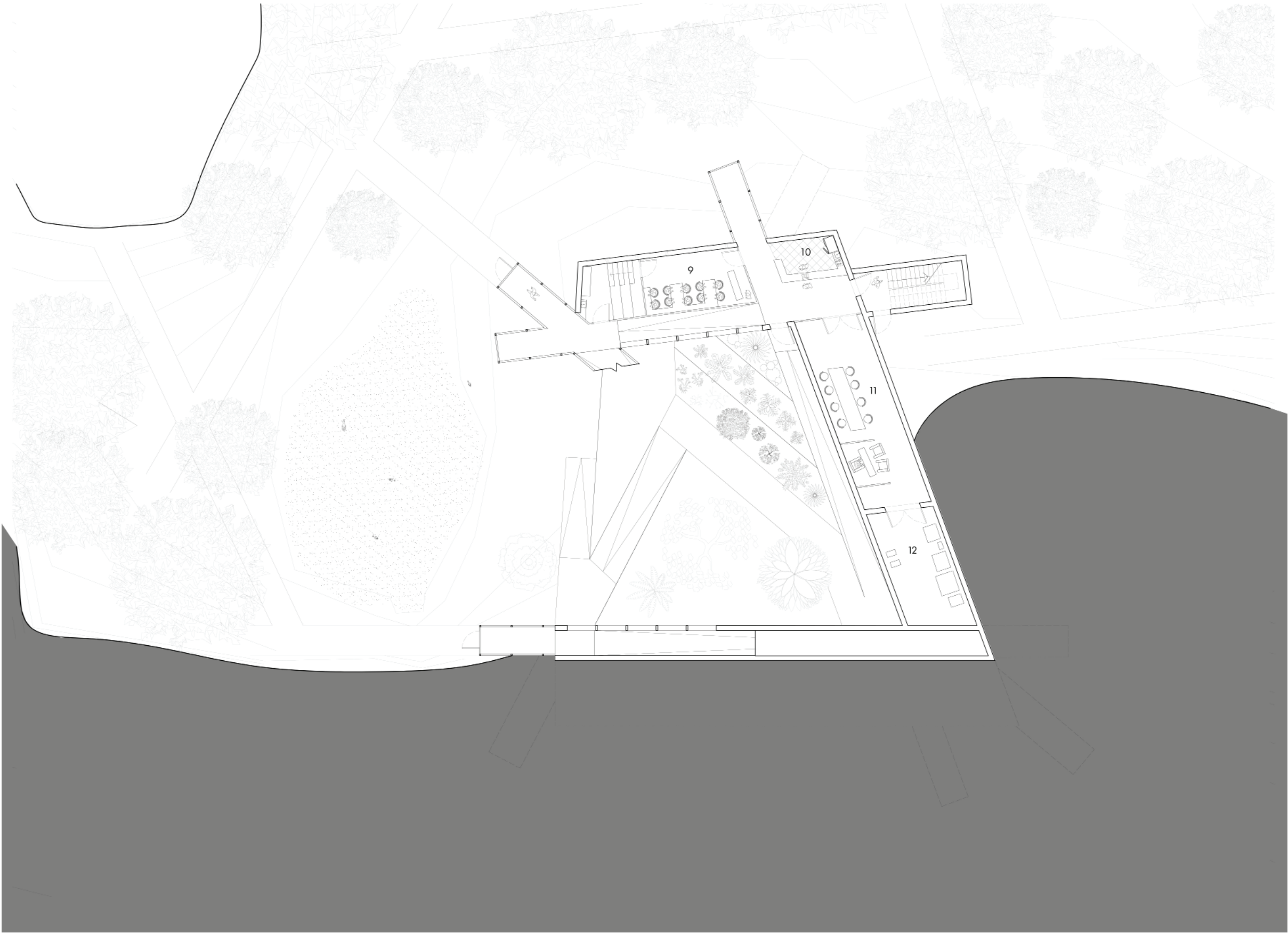
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Mid-Level Plan

**Program Key:**

- 1: Entrance/Reception
- 2: Exterior Terraces
- 3: Plant Display
- 4: Lecture Space
- 5: Gift Shop
- 6: Library
- 7: Taxidermy Display
- 8: Bathrooms
- 9: Science Lab/Classroom
- 10: Cafe/Kitchenette
- 11: Employee Office
- 12: Storage/Archive



Park Plan





Section A



Interior Perspective - Taxidermy Display



Section B



Interior Perspective - Plant Display



Interior Perspective - Science Lab/Classroom

## Pandemic Option

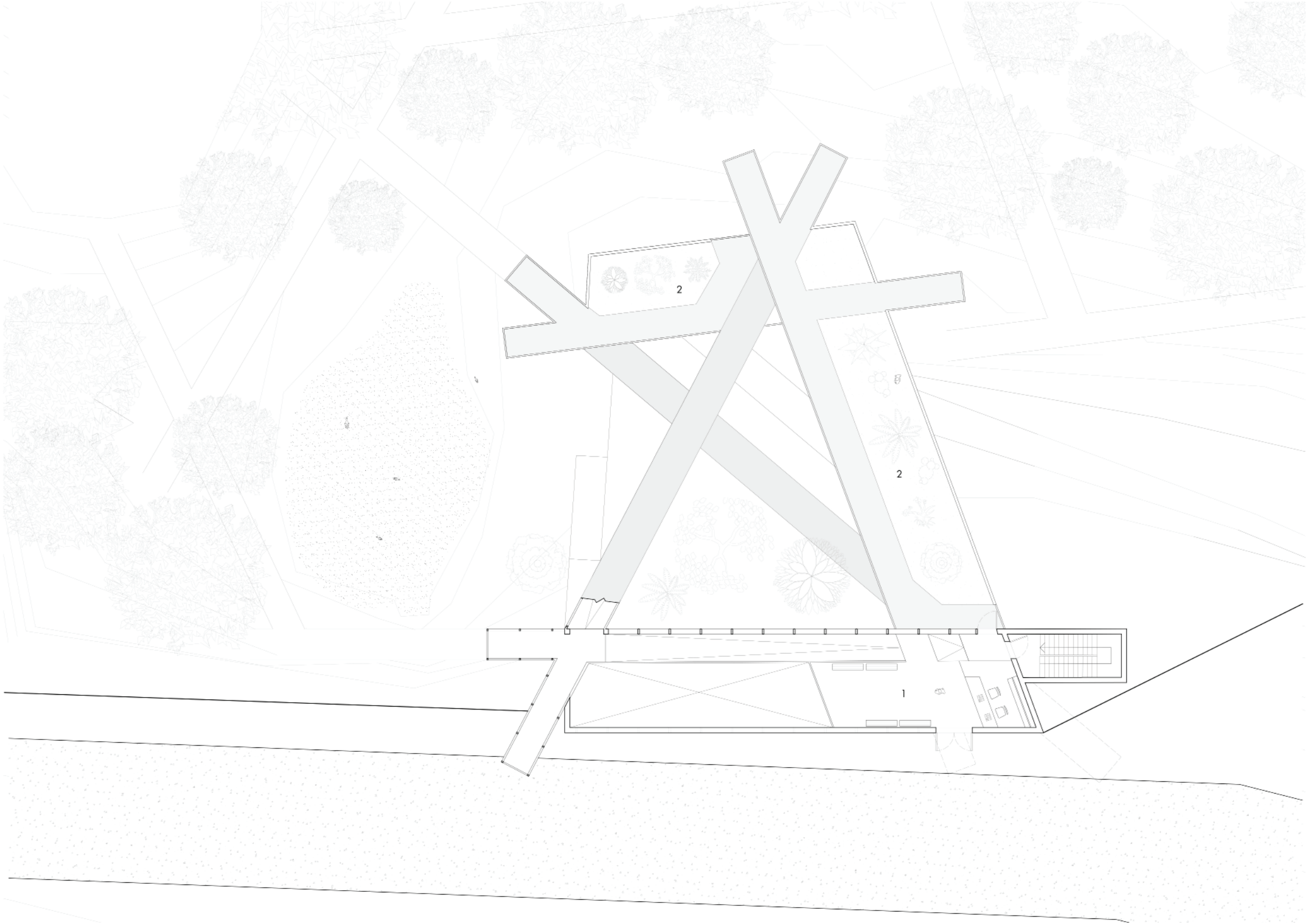
When considering the Pandemic option, we took a step back and looked at our thesis: using a series of interconnected ramps to connect spaces. Visitors are allowed to enter the building, but only on the exterior terraces and circulation ramps, which now only travel in one direction: down to park.

Our displays have been repositioned to run adjacent to the ramp, giving visitors a chance to still learn about the local nature. In addition, our program spaces have now been turned into nursery/prep areas, where workers can prepare new displays for viewing while distanced from visitors.

Once visitors reach the bottom, they can either exit directly into the park through one of two exits, or continue into the courtyard, which allows them to repose while socially distant and outdoors.

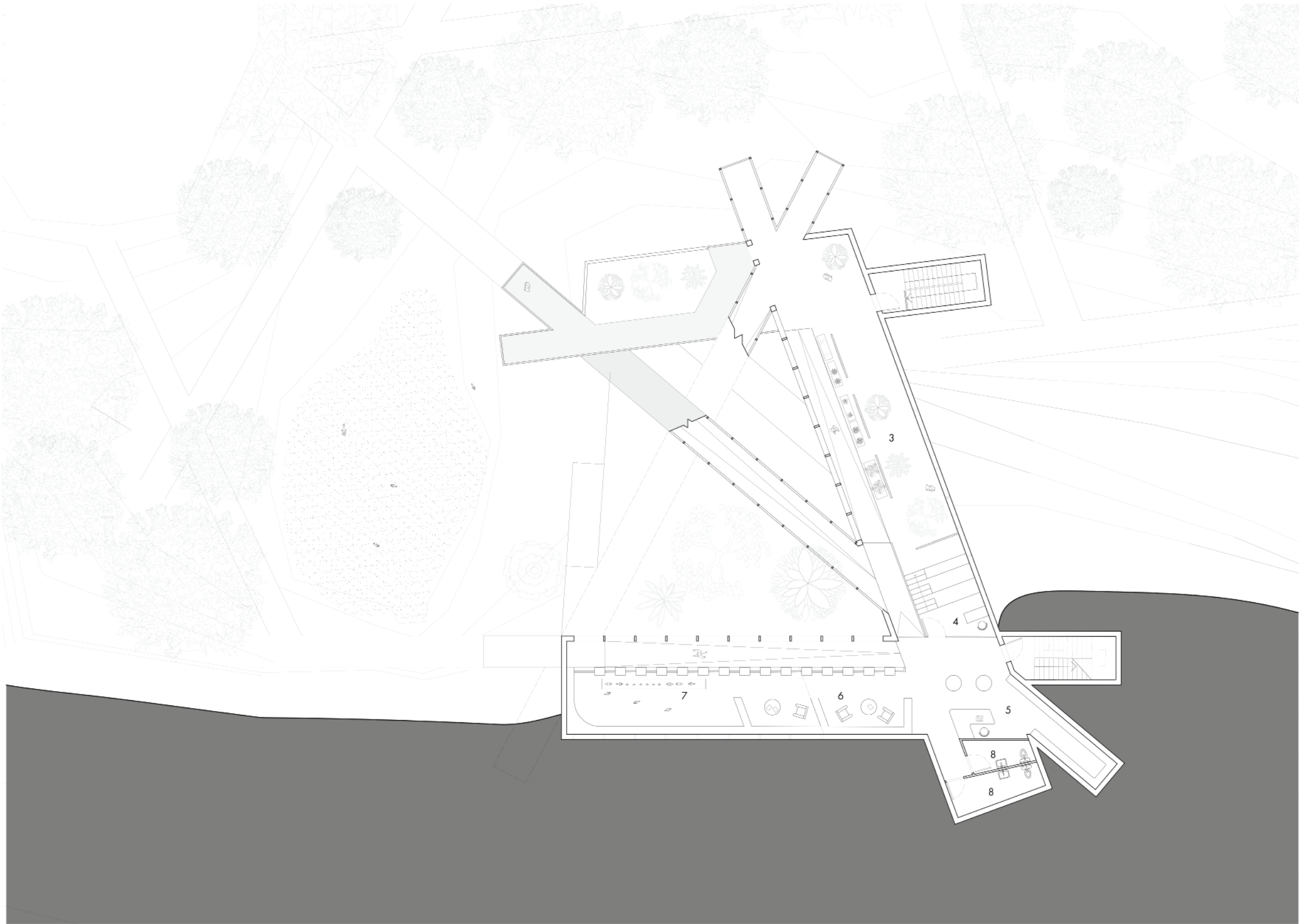


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Street Plan - Pandemic

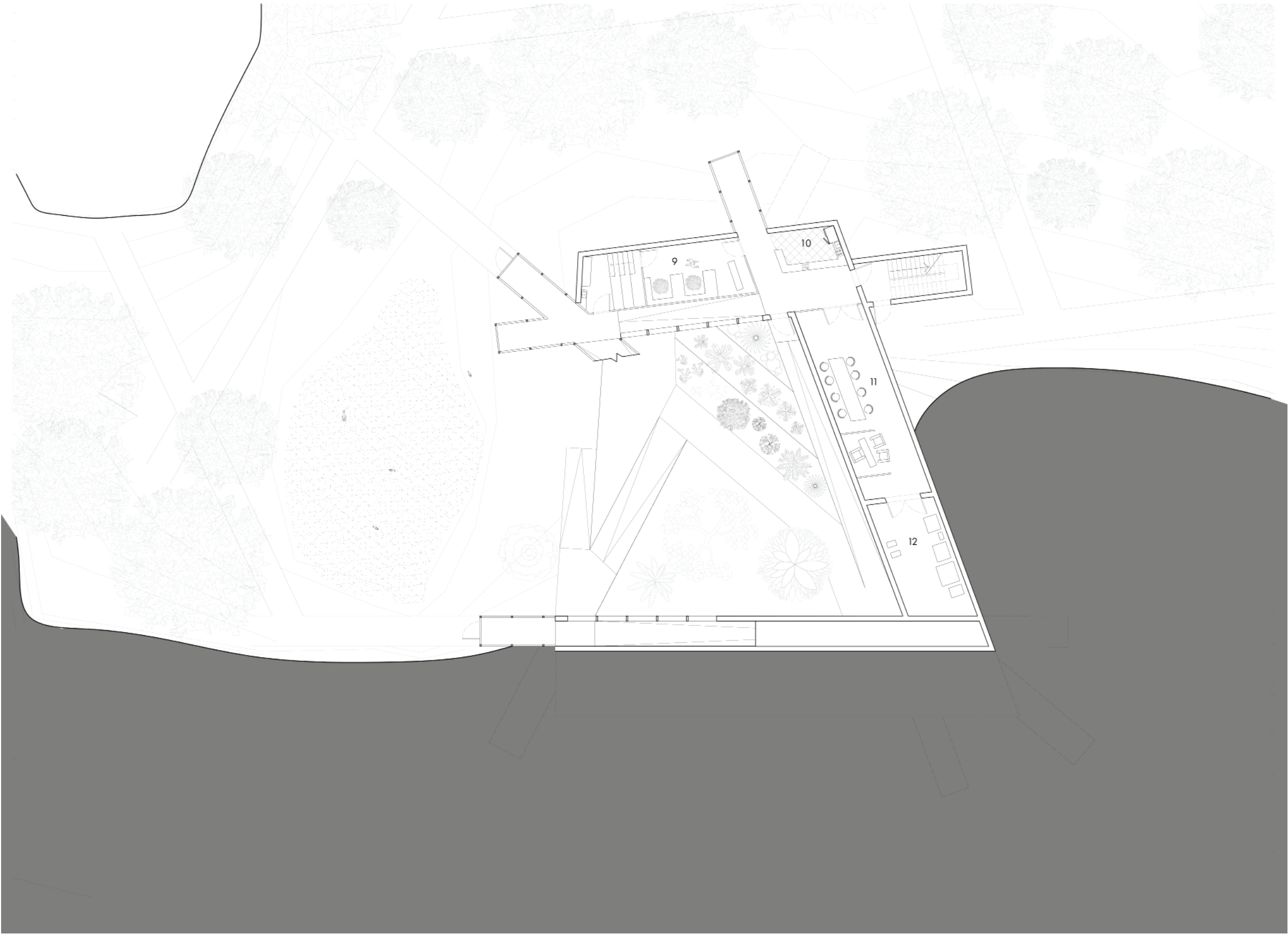
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Mid-Level Plan - Pandemic

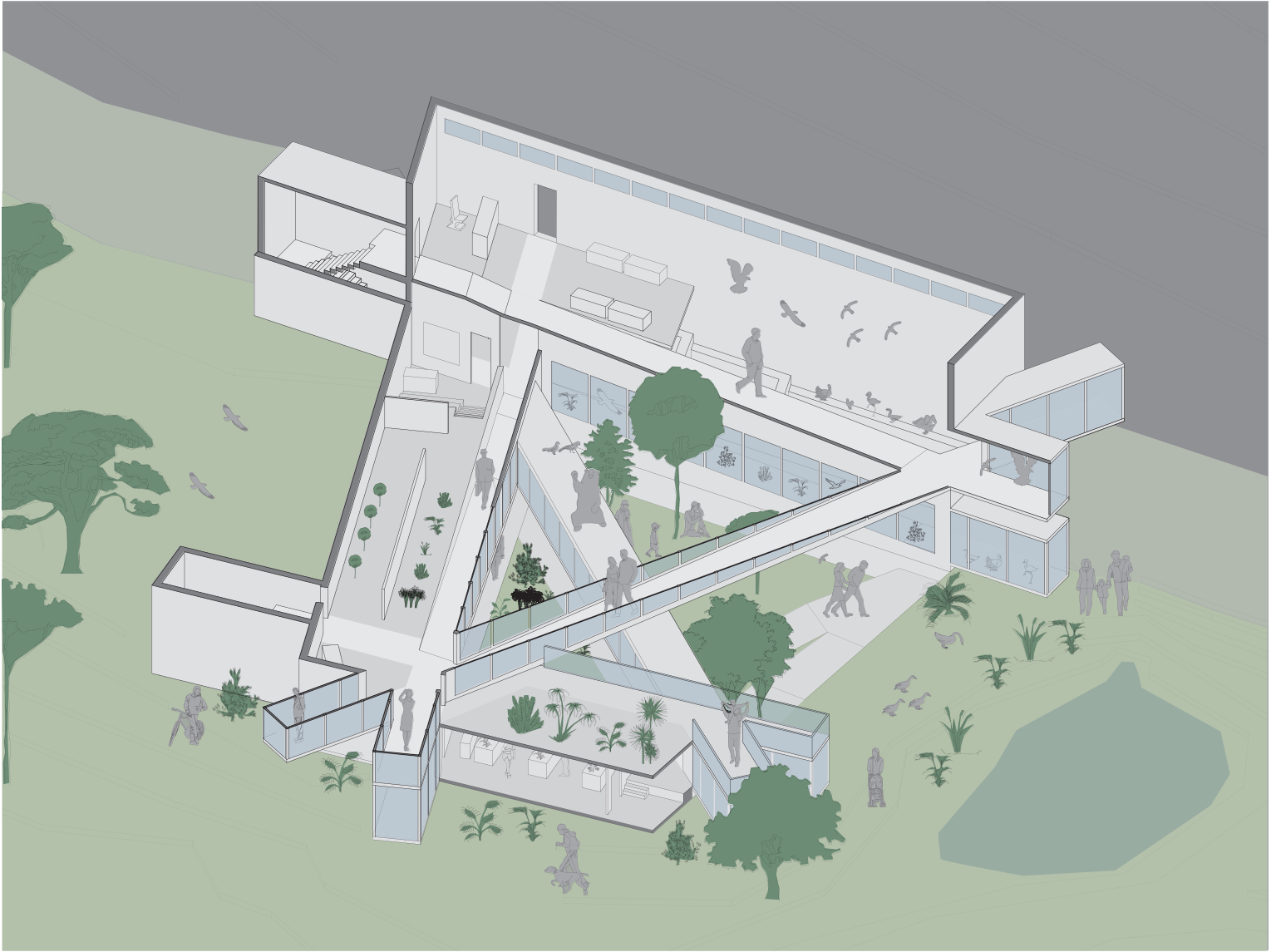


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Park Plan - Pandemic





Interior Inhabited Isometric - Pandemic