

Marcelo Orrego  
Bachelors Portfolio

# Marcelo A Orrego Cuenca

## CONTACT

- 347- 932-0398
- marceloorrego14@gmail.com
- Bronx, NY 10461

## CAREER OBJECTIVE

CONTACT Motivated student with excellent communication and interpersonal skills looking to gain valuable experience in a professional setting. Reliable worker with excellent communication, time management, and computer skills. A driven and detail-oriented individual with a desire to use analytical and problem-solving skills to meet goals.

## EXPERIENCE

December 2022 - February 2023

### Construction Worker

Private Company, New York, NY

- I had the opportunity to work in the construction site, doing carpentry finishes such as cabinet building, as well as installing doors, locks and doing floor finishes.

June 2018 - September 2022

### Lifeguard

New York City, Bronx, NY

- Worked as a City Lifeguard for 5 years making sure people safely enjoying of the city pool where was assigned
- Had the pleasure to interact with people, and make sure they felt safe and listen to.

April 2019 - June 2021

Iowa Sports Management, Iowa Sports, New York, NY

- Worked as a front desk worker as well as a Lifeguard for this company
- Made sure people swimming and using the facility felt safe, and had a clean environment to exercise.

## EDUCATION

Expected Graduation May 2023

### Bachelor Of Science (B.S.) In Architecture Candidate

University at Buffalo, Buffalo, NY

Completed coursework towards Coursework Construction TechnologyEnvironmental Systems  
US

## SKILLS

- AutoCad
- Measurement and Calculation Accuracy
- OSHA Standards and Codes
- Adobe Program
- Rhinoceros
- Revit
- Lumion

## CERTIFICATIONS

- OSHA Safety Training 40 Hour Certificate

## Table of Contents:

Project 1: Affordable Housing Project\_\_\_\_\_4-13

Project 2: Sports Community Center\_\_\_\_\_14-21

Project 3: Stretchy Boat House\_\_\_\_\_22-29

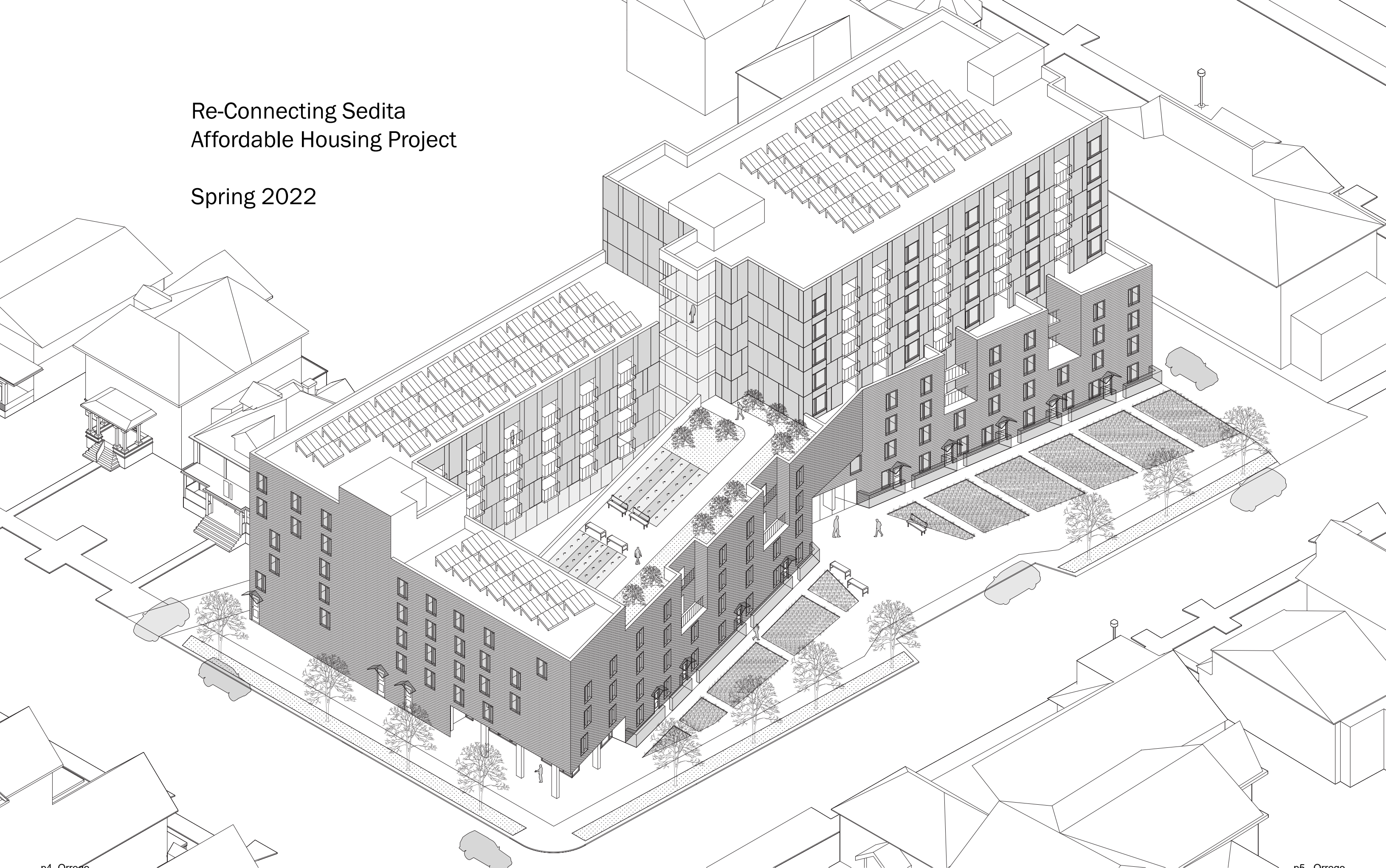
Project 4: Shizen Building\_\_\_\_\_30-35

Bonus: Construction Technology Class Drawings\_\_\_\_\_36-39



Re-Connecting Sedita  
Affordable Housing Project

Spring 2022





# Project 3: Re-Connecting Sedita

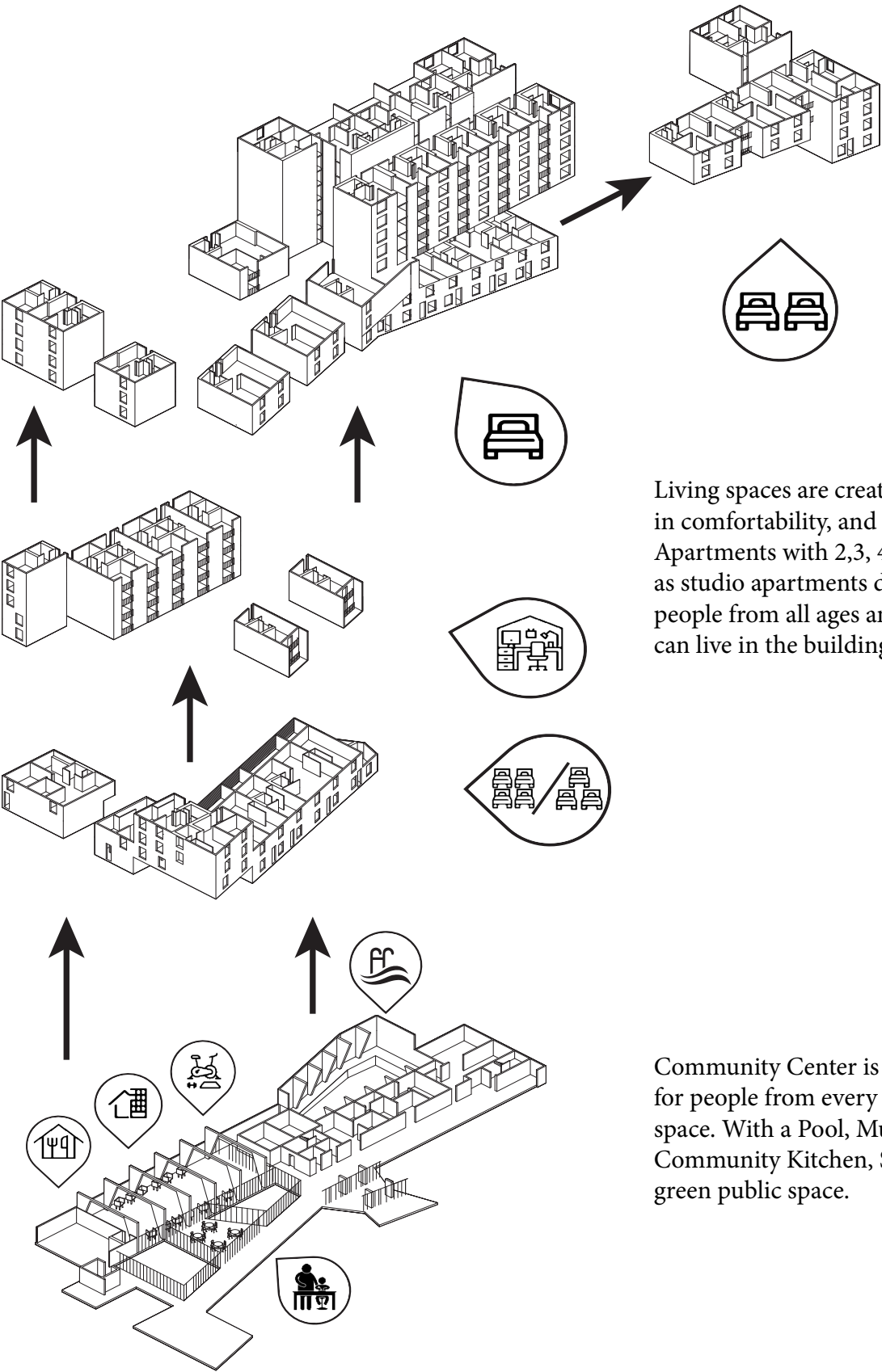
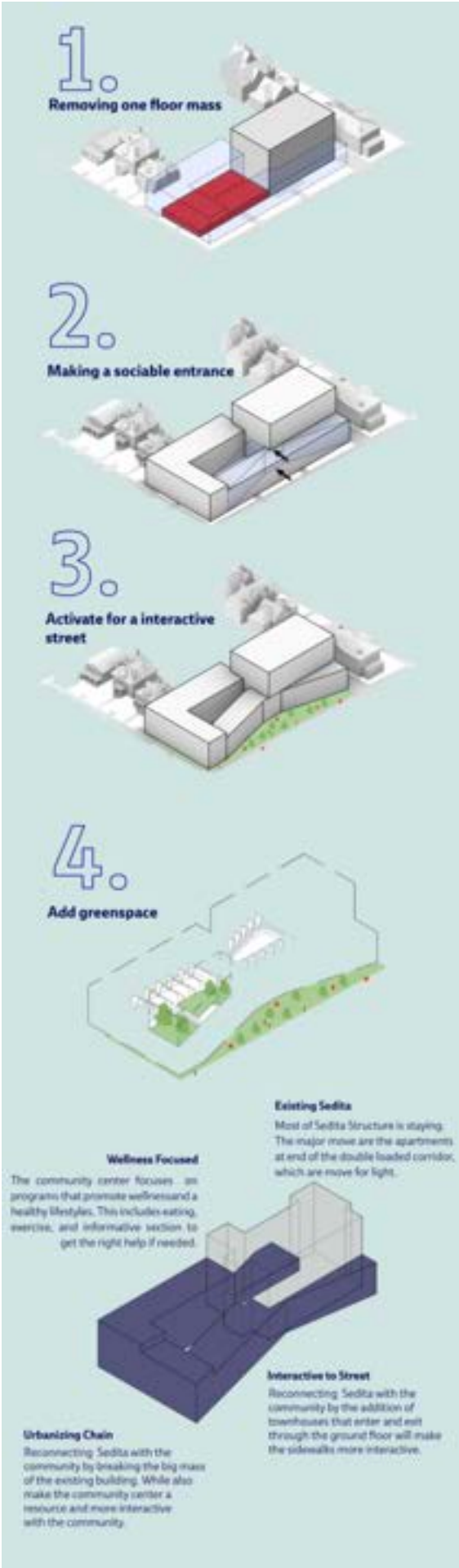
Fall 2022

Professor: Erkin Ozay

Partner: Dariel Paulino

At the start of the semester, the studio as a group did a research on affordable housing coming to a conclusion that the Buffalo area lacks affordable housing. The group project Re-Connecting Sedita follows the idea that to make more affordable housing, there is no need to destroy what is already there.

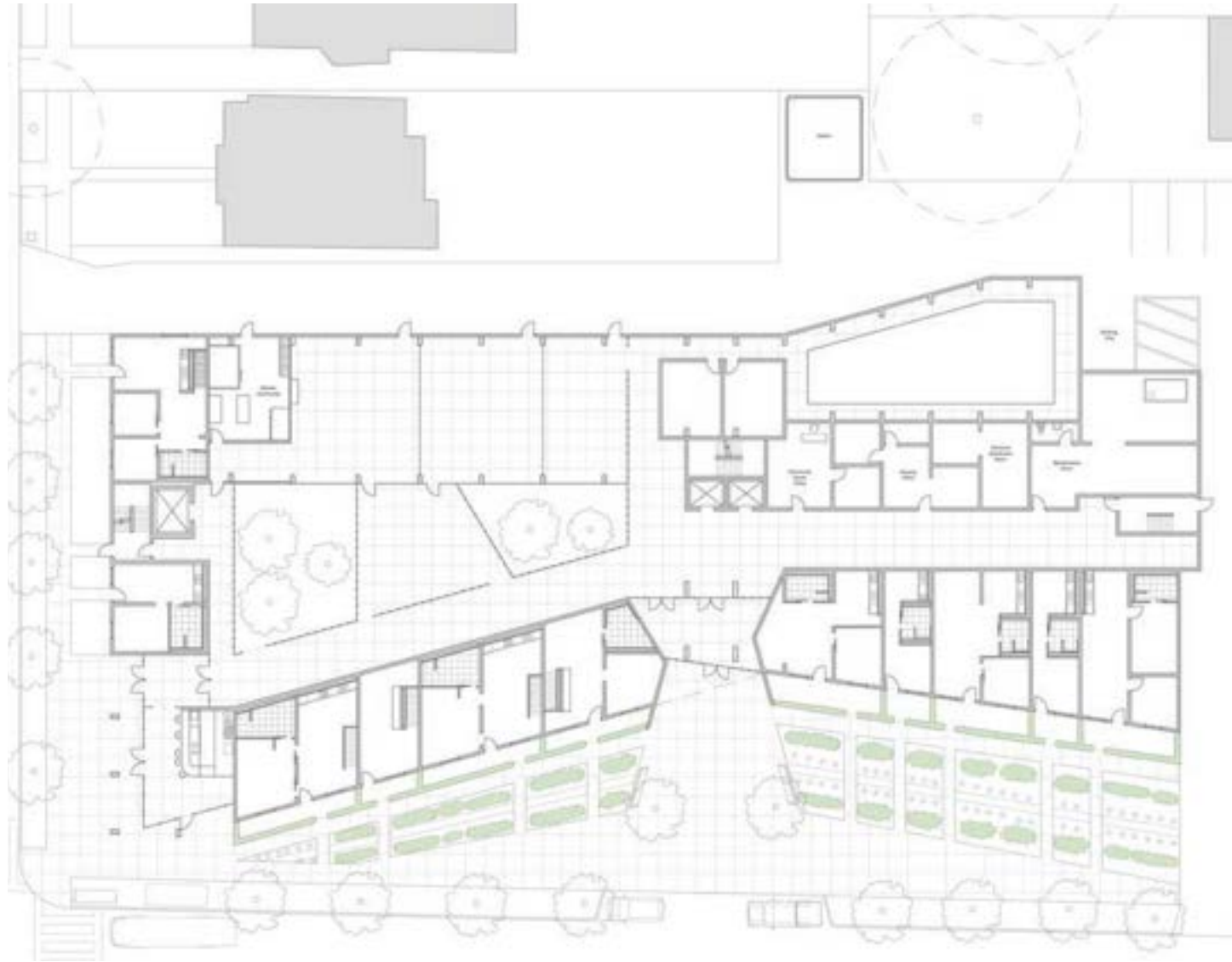
During the semester, we fix Sedita which is a existing housing project, we made sure major issues were solved and added 100 extra apartments considering the inclusion of more public areas to bring residents together, as well as addition of green spaces, better suited egress and more comfortable spaces for the people. Different unit types as well as the introduction of activities in the space where there was once a community center allow for a more active community. Lastly the addition of solar panels, a water collection system, gardening and spaces that are exposed to sunlight make this a housing which is both affordable to the Buffalo Community as well as comfortable and better for people of all age groups.



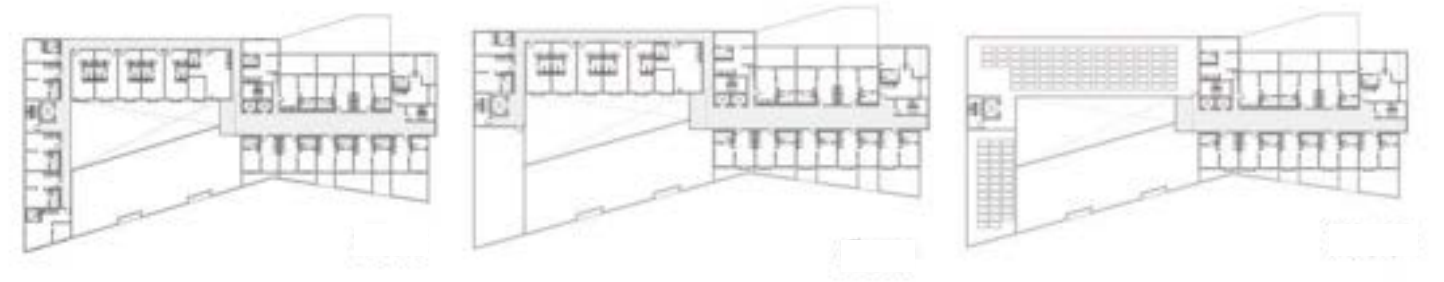
Living spaces are creating while thinking in comfortability, and opportunity. Apartments with 2,3, 4, bedrooms as well as studio apartments design to make sure people from all ages and all size families can live in the building.

Community Center is created as a space for people from every age to use the space. With a Pool, Multi-Purpose gym, Community Kitchen, Study Space and green public space.

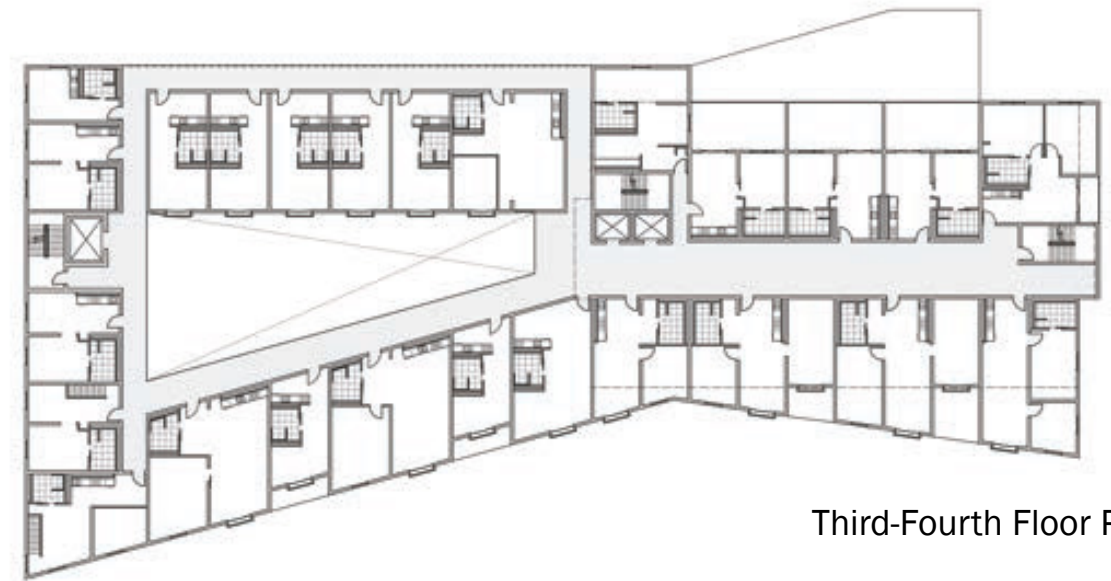




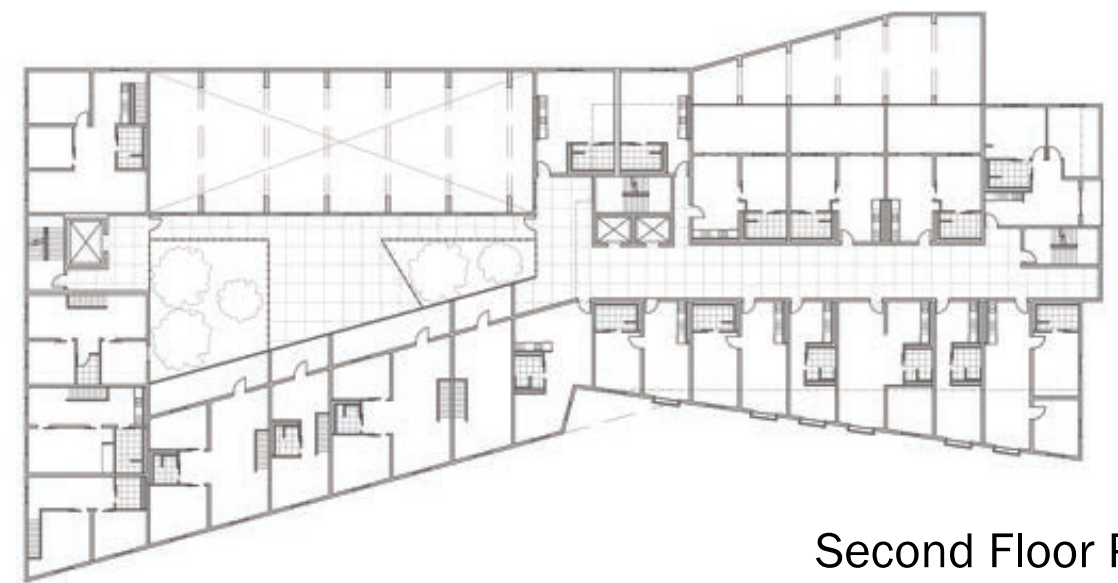
Site Ground Floor Plan



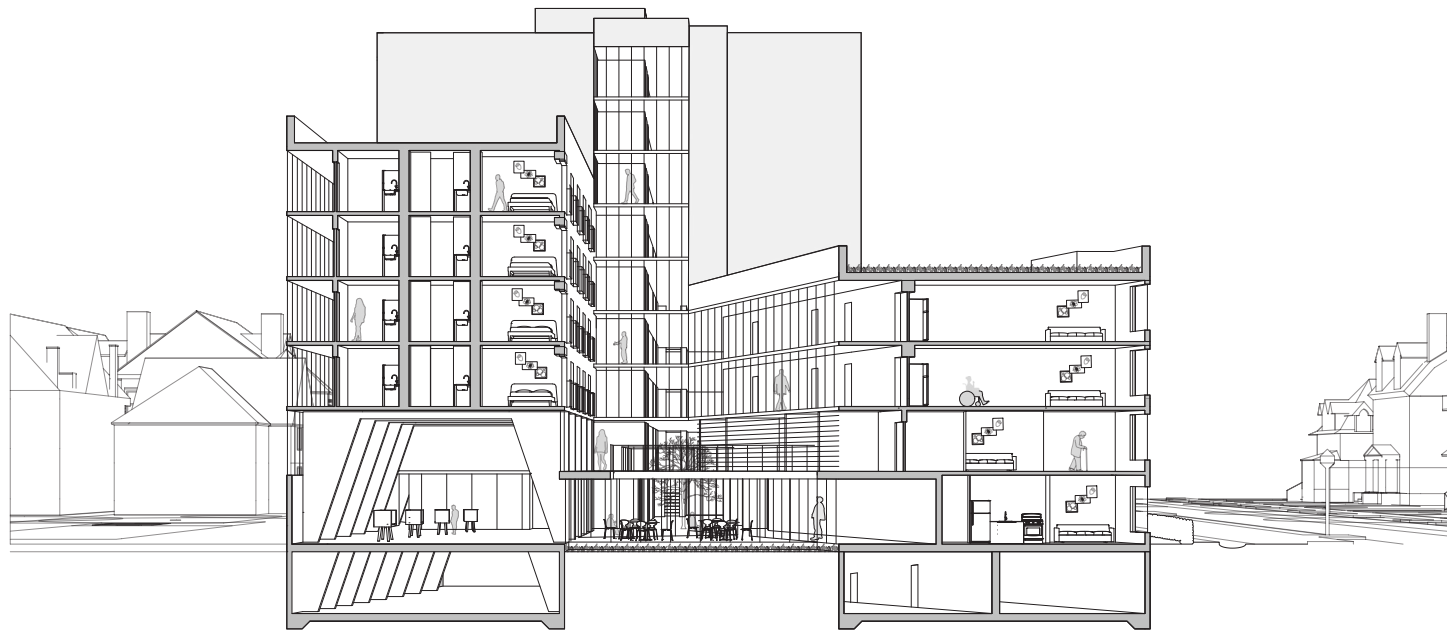
Fifth-Seventh Floor Plans



Third-Fourth Floor Plans



Second Floor Plan



Section Perspective Drawing



**Street View Summer ST.**

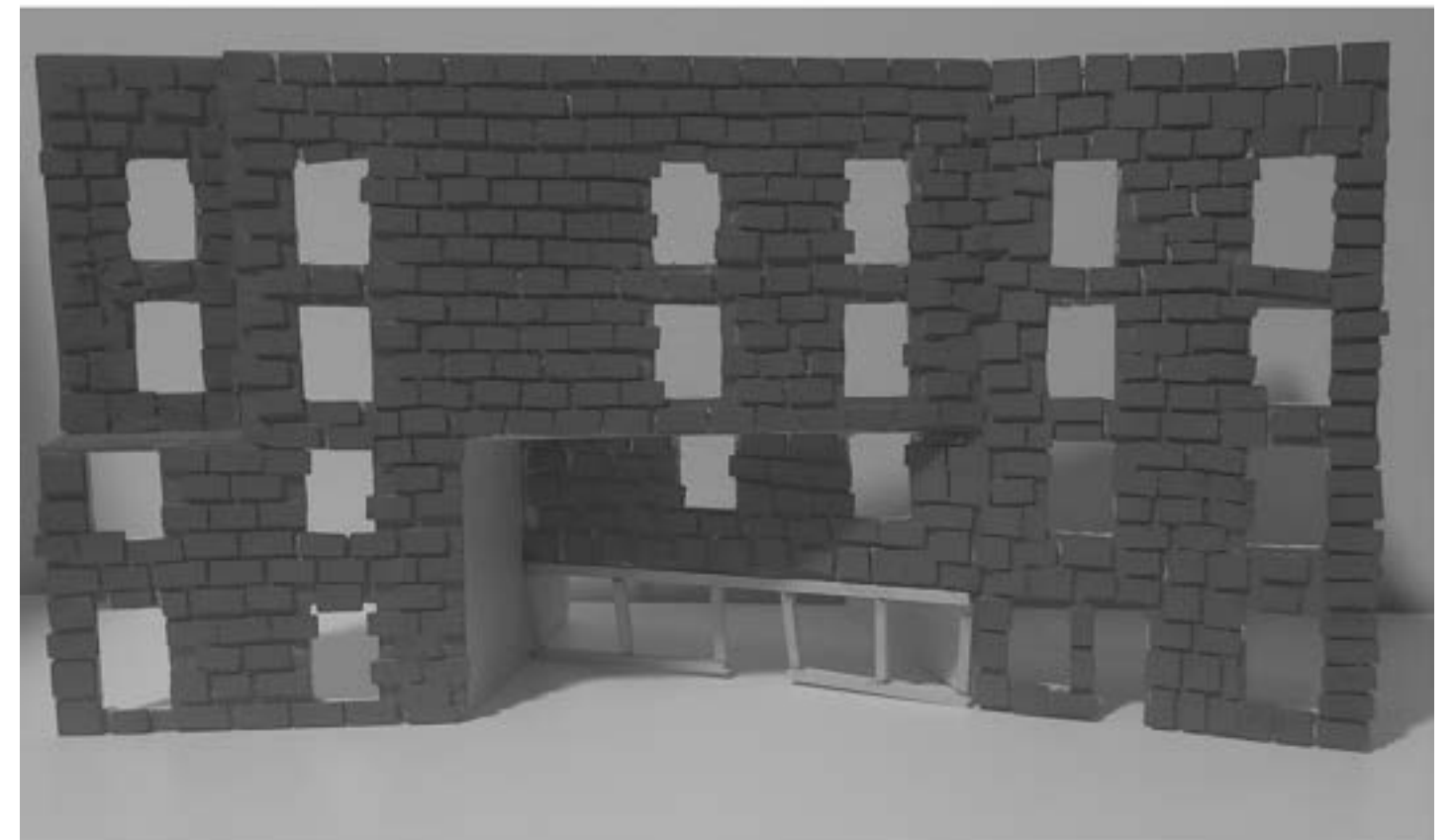
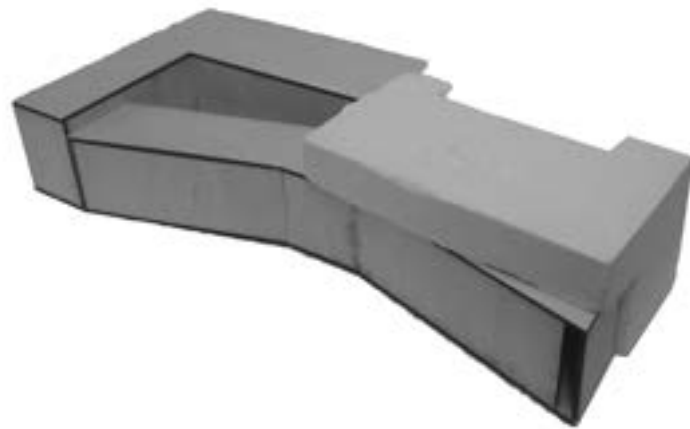


Street Elevation



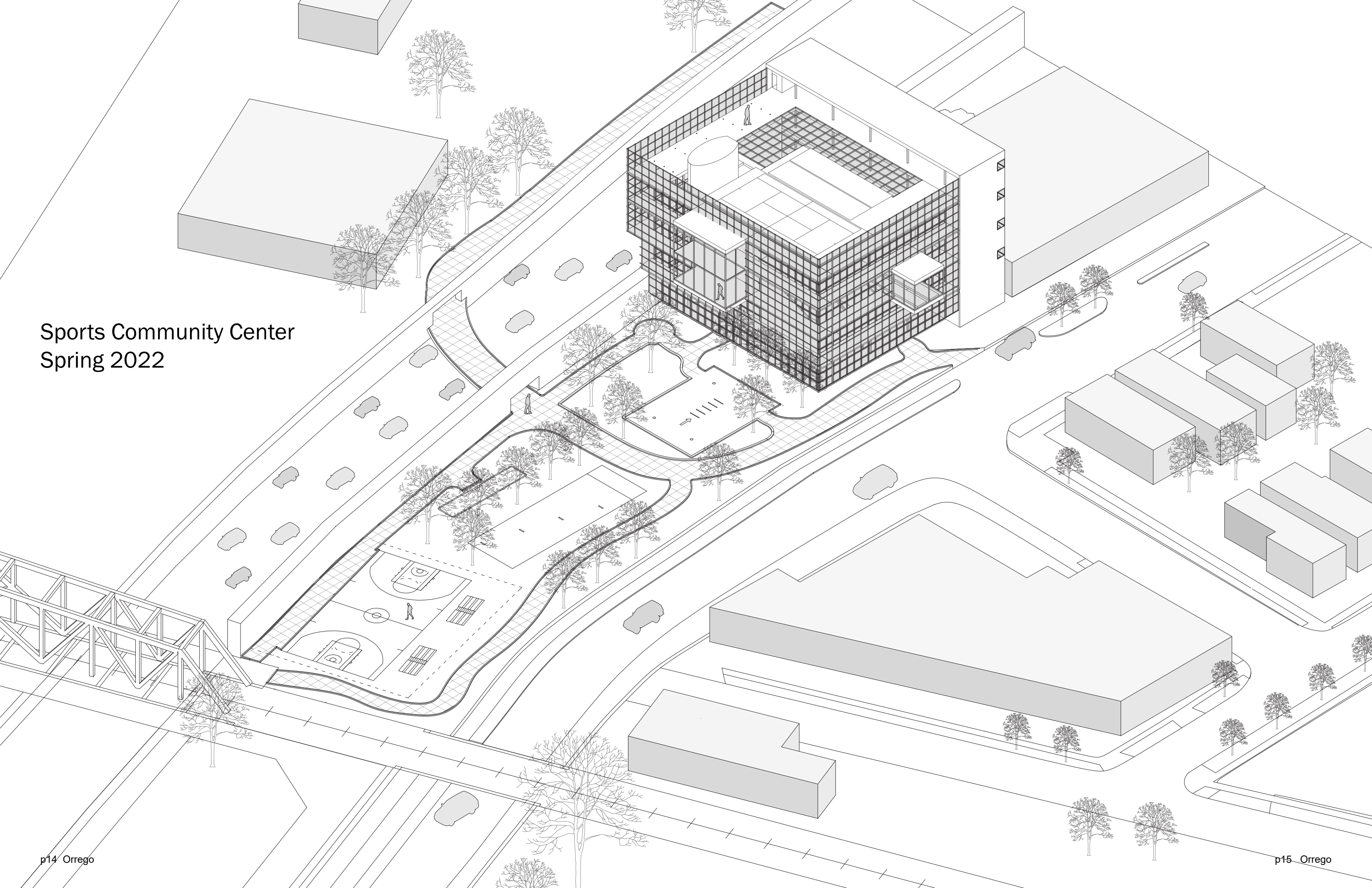
**Street View Richmond Ave.**







Sports Community Center  
Spring 2022





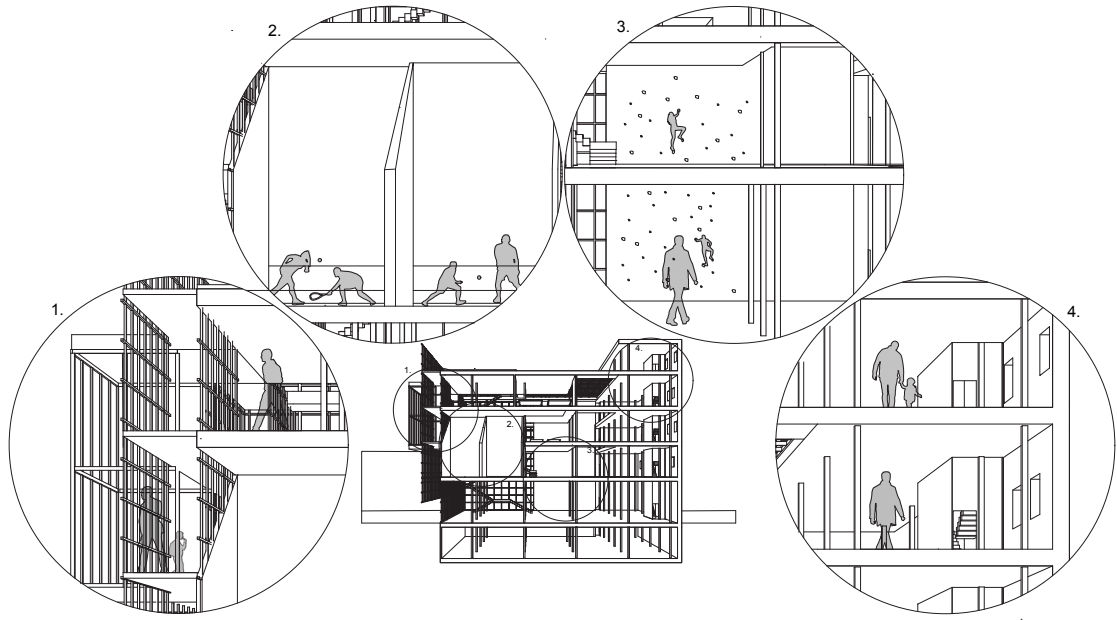
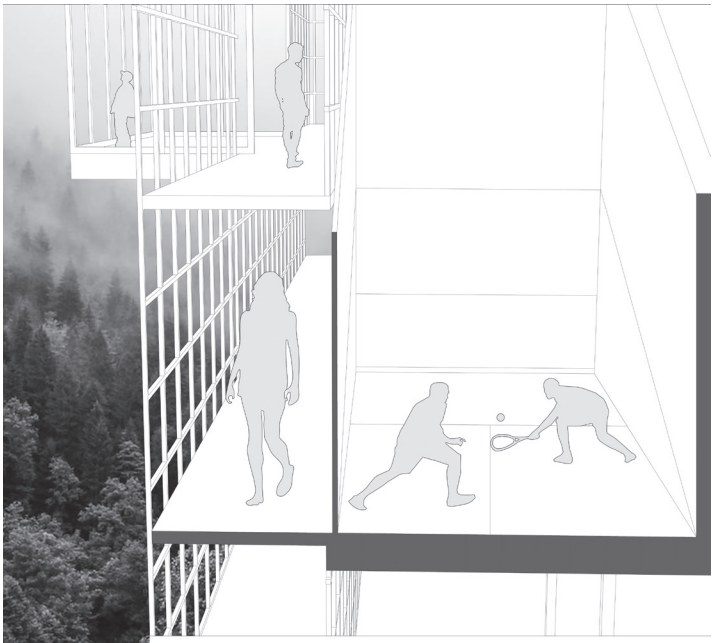
# Project 1: Sports Community Center

Spring 2022

Professor: Bradley Wales

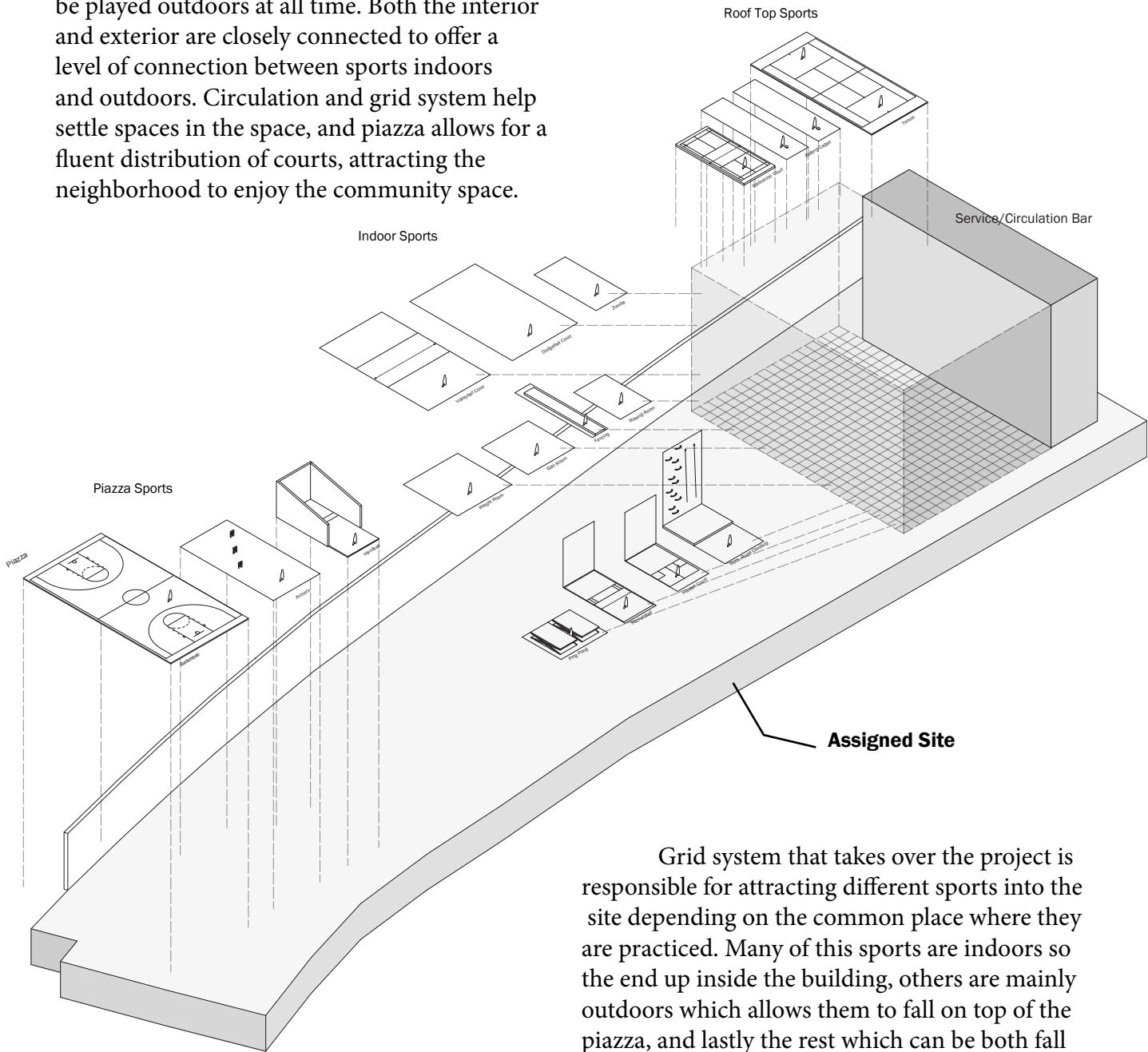
The Sports Community Center is a project focused on the idea of attracting people to the space with the introduction of Sports. The grid system that takes part of the project allows for different types of sports to bring themselves into different spaces.

Following the 120 foot limitation set by the faculty, the interior space brings in sports that allow people to participate in them no matter the weather. The rest of the site is used to encourage people to use the exterior space left in the project. And the idea of introducing a service block is to allow for a separation between activities and private spaces such as egress and bathrooms. Lastly, a double skin facade is created to allow for easy circulation for the people in the interior as well as a clear view to the outdoors piazza.

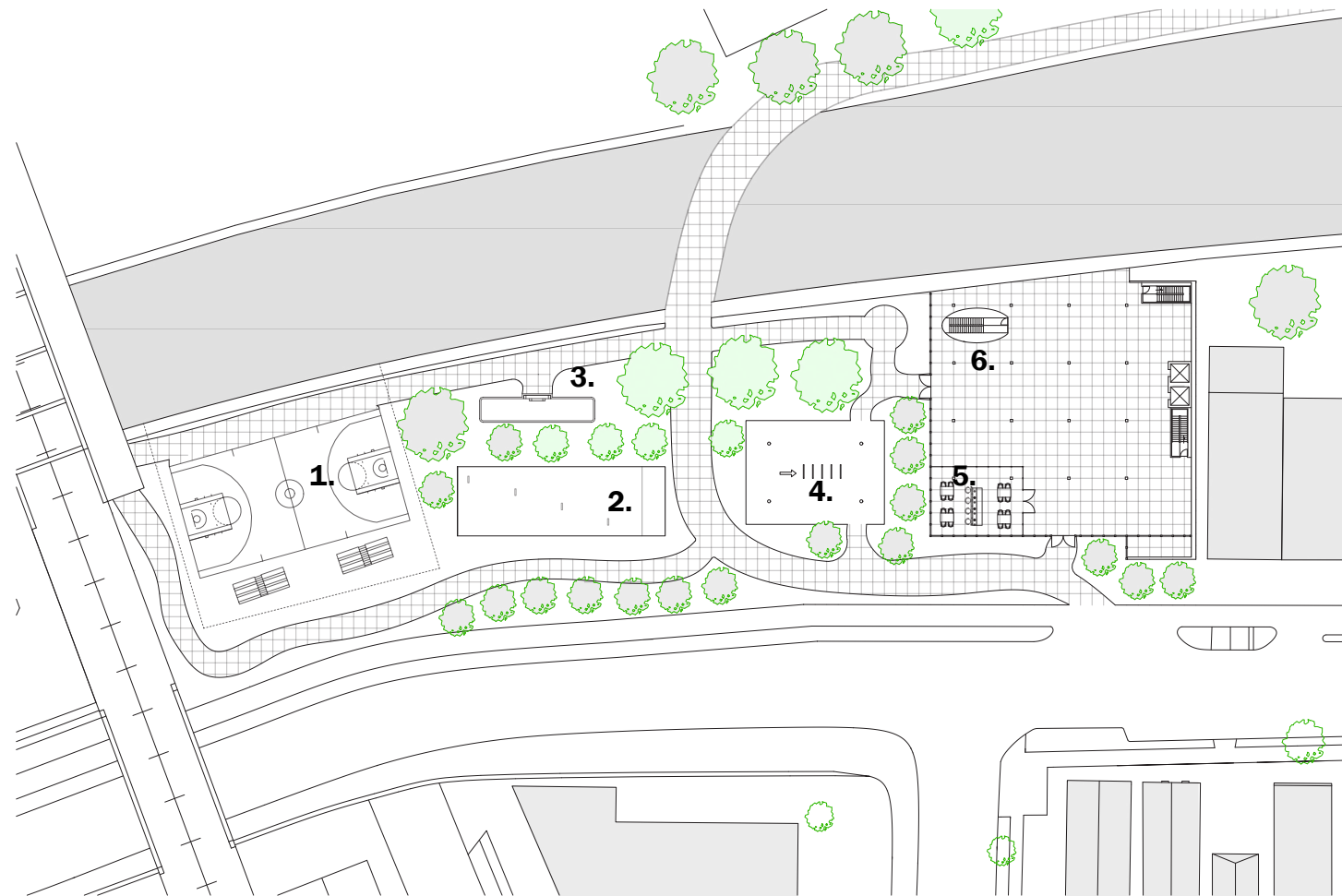


## Sports Organization Diagram

Site gives a limit of 120 feet for building space, in result, sports are distributed in terms of what needs to be indoors and what could be played outdoors at all time. Both the interior and exterior are closely connected to offer a level of connection between sports indoors and outdoors. Circulation and grid system help settle spaces in the space, and piazza allows for a fluent distribution of courts, attracting the neighborhood to enjoy the community space.

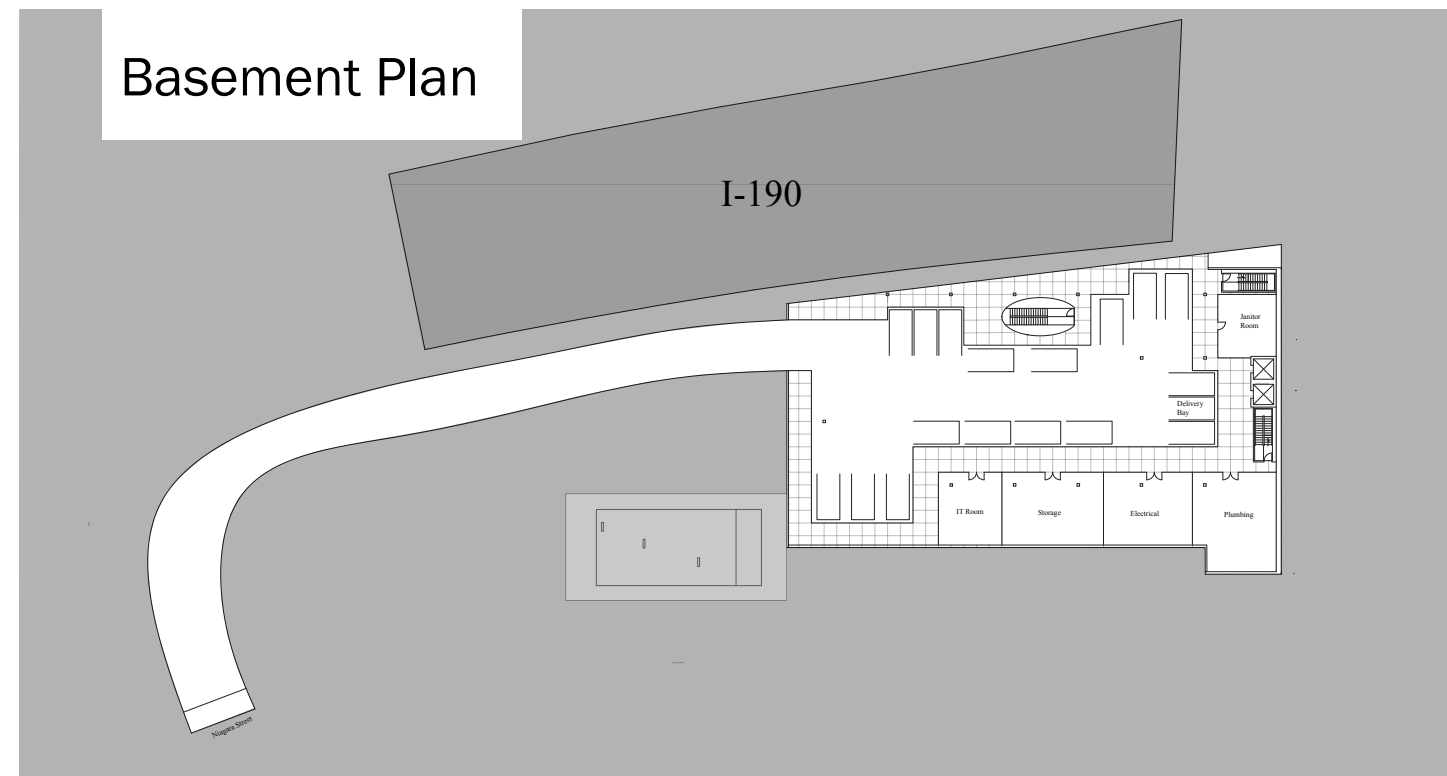


Grid system that takes over the project is responsible for attracting different sports into the site depending on the common place where they are practiced. Many of this sports are indoors so the end up inside the building, others are mainly outdoors which allows them to fall on top of the piazza, and lastly the rest which can be both fall in the terrace of the building.

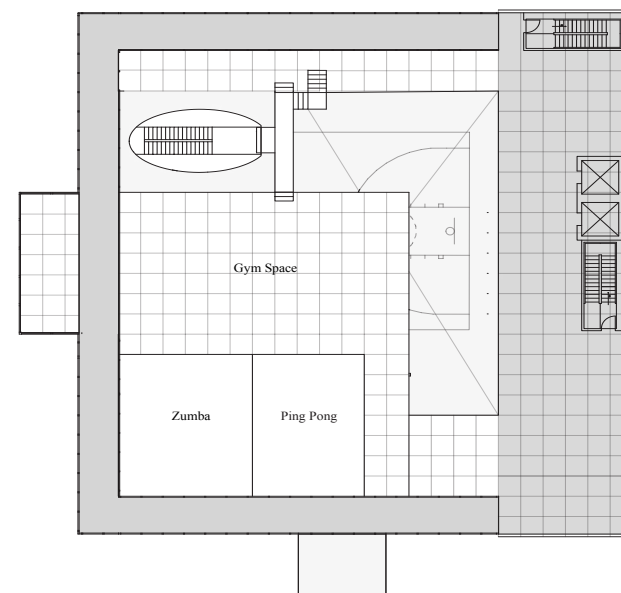


- Key:**
- 1. Basketball Field
  - 2. Archery Field Underground
  - 3. Lap Swimming Pool
  - 4. Sprinklers
  - 5. Main Core
  - 6. Stair

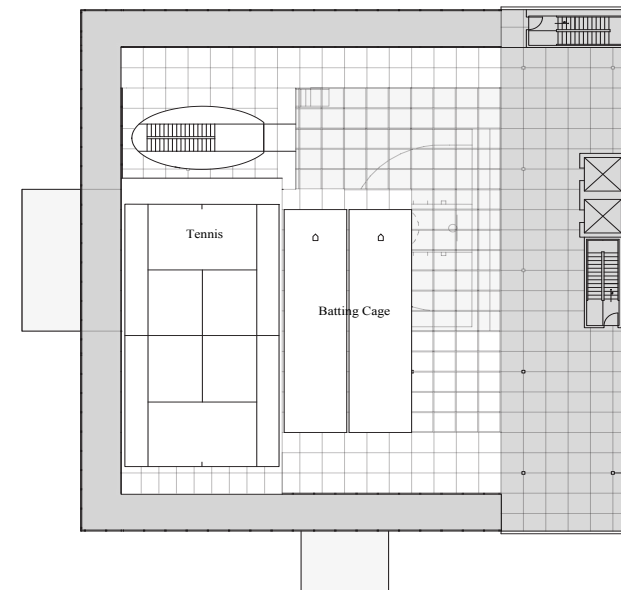
Site Ground Floor Plan



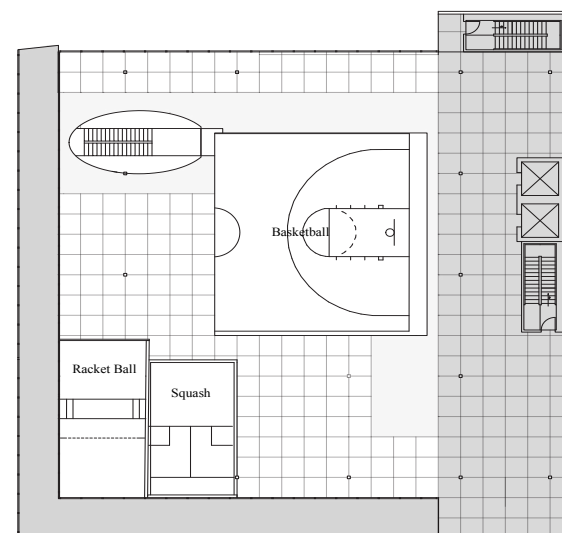
Basement Plan



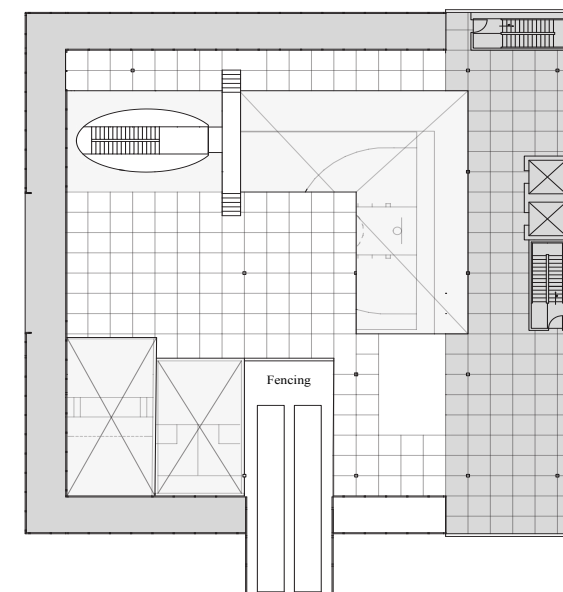
Fourth Floor Plan



Fifth Floor Plan

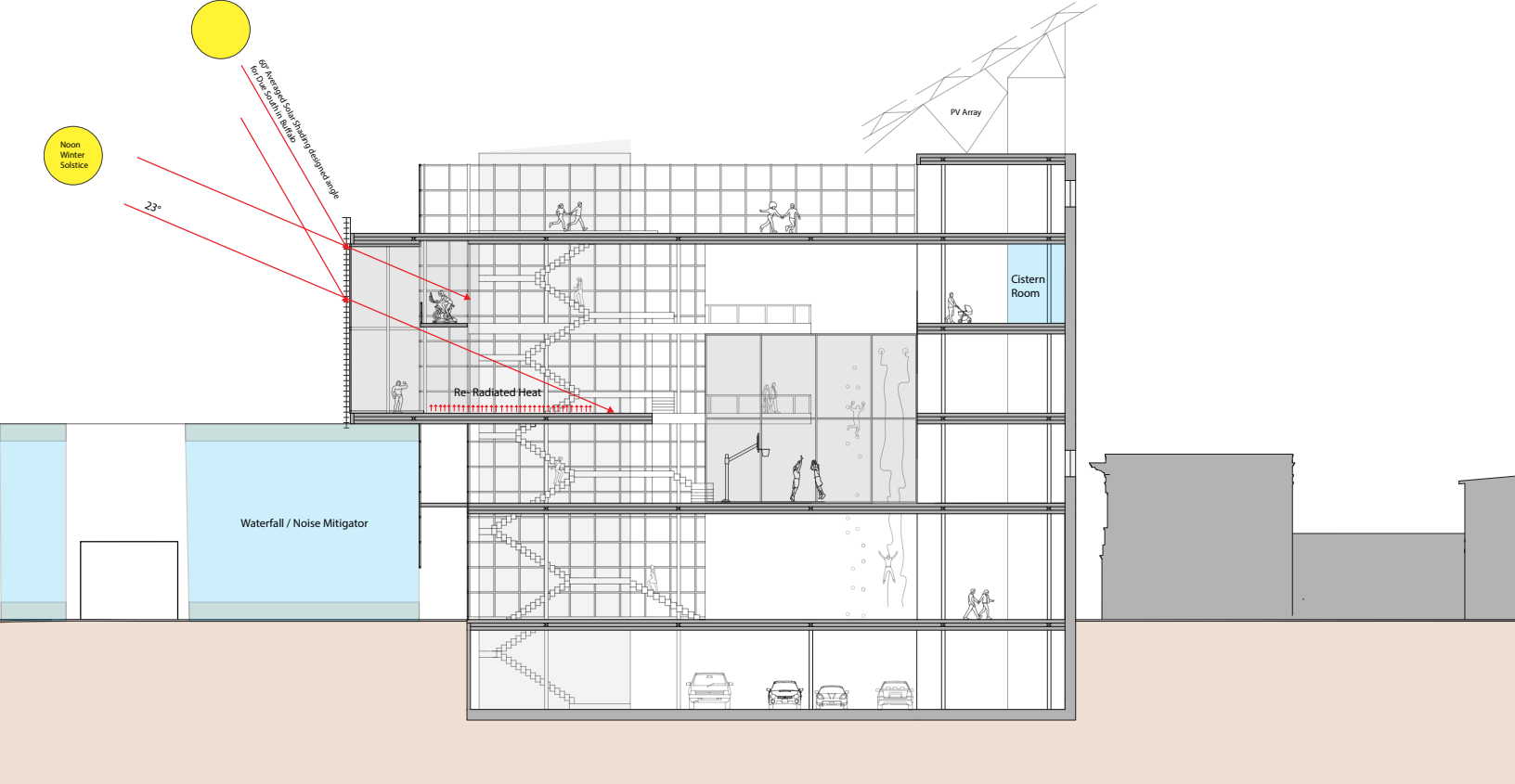


Second Floor Plan

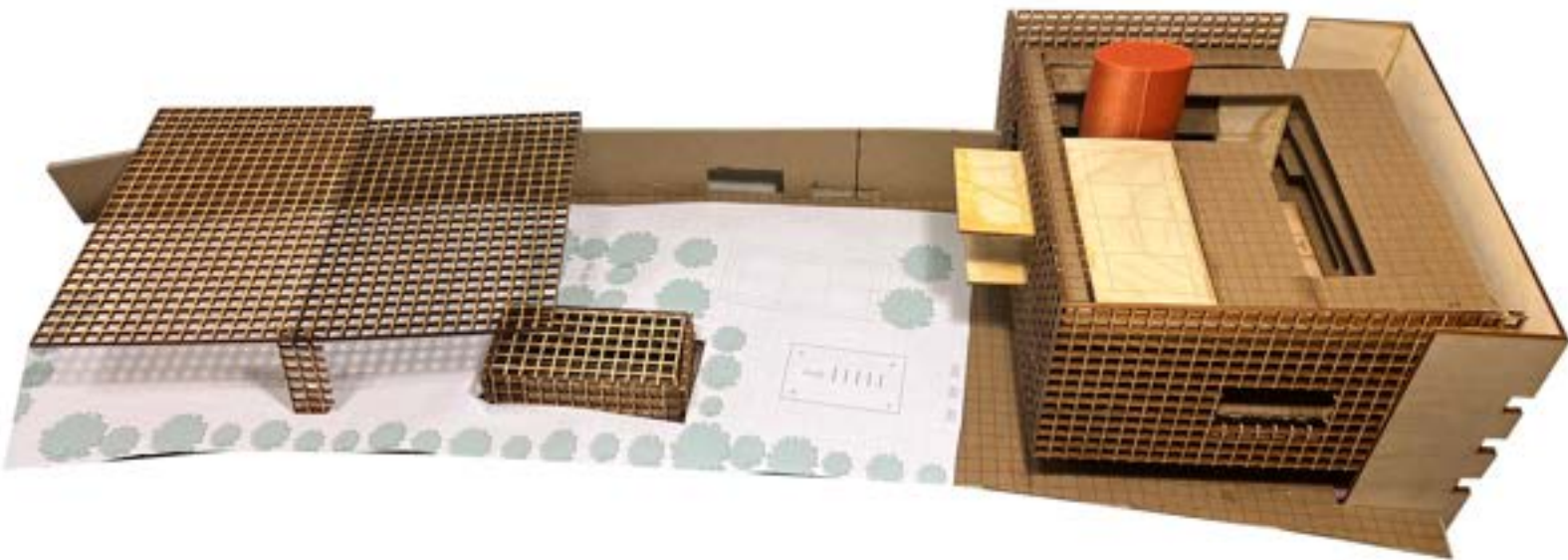
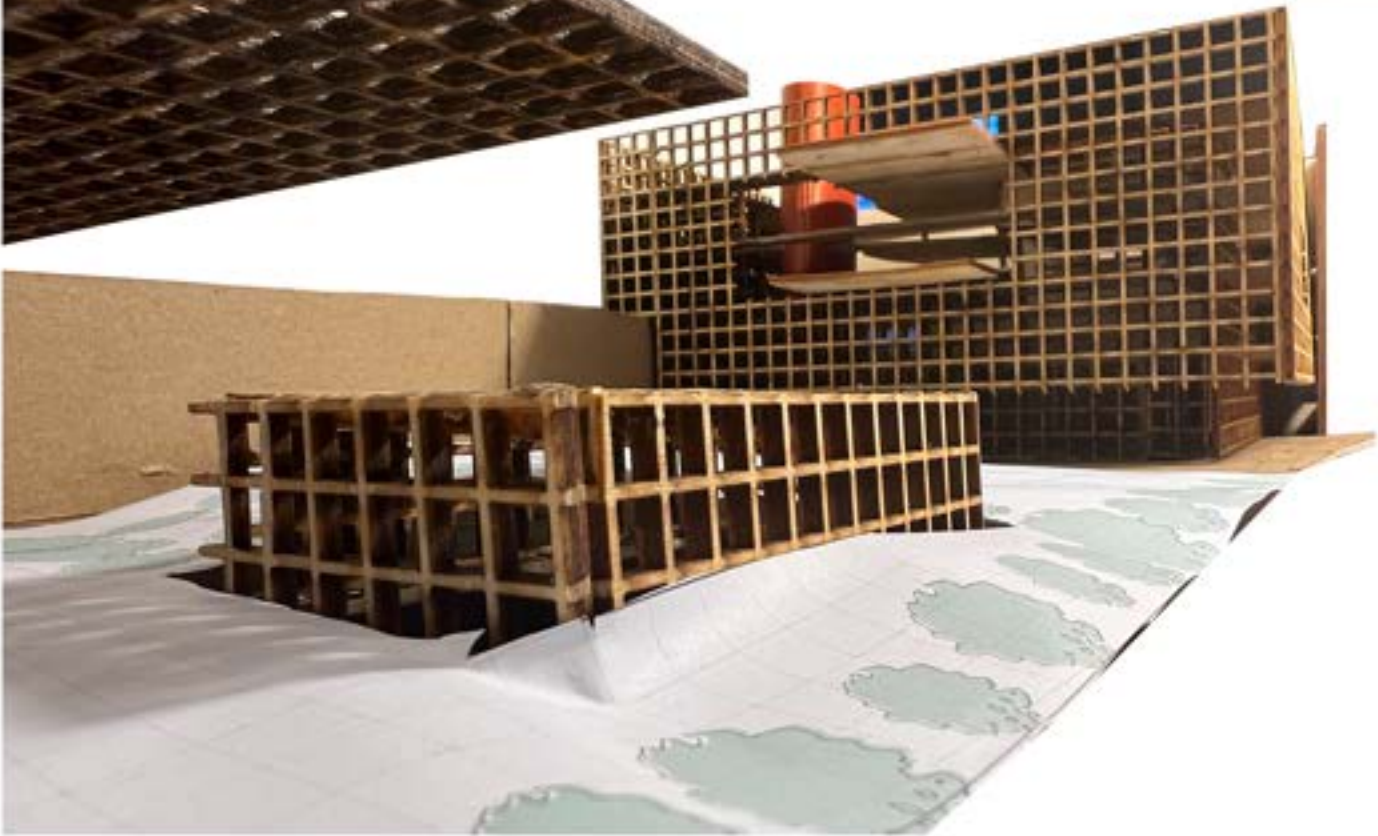
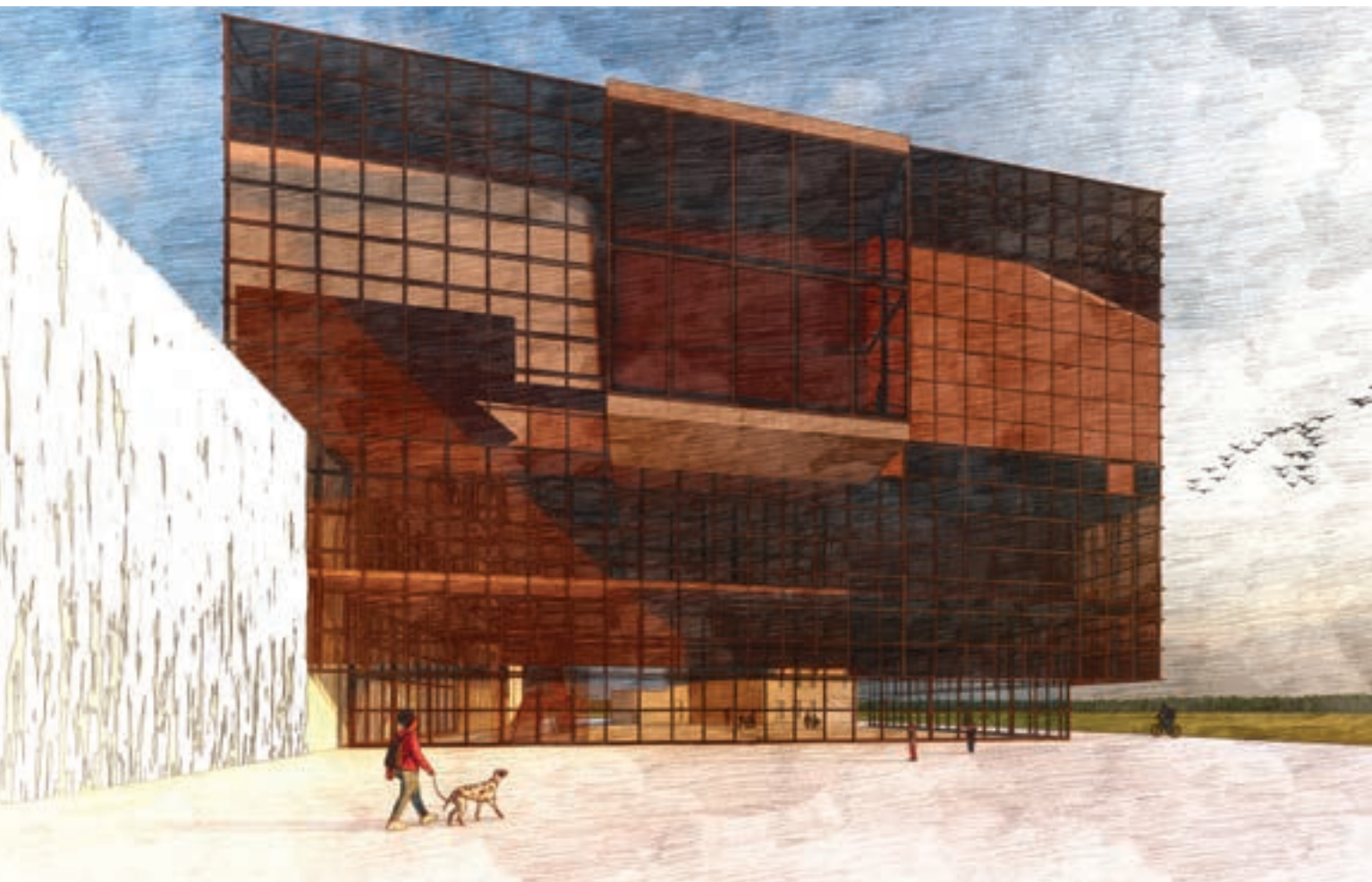


Third Floor Plan



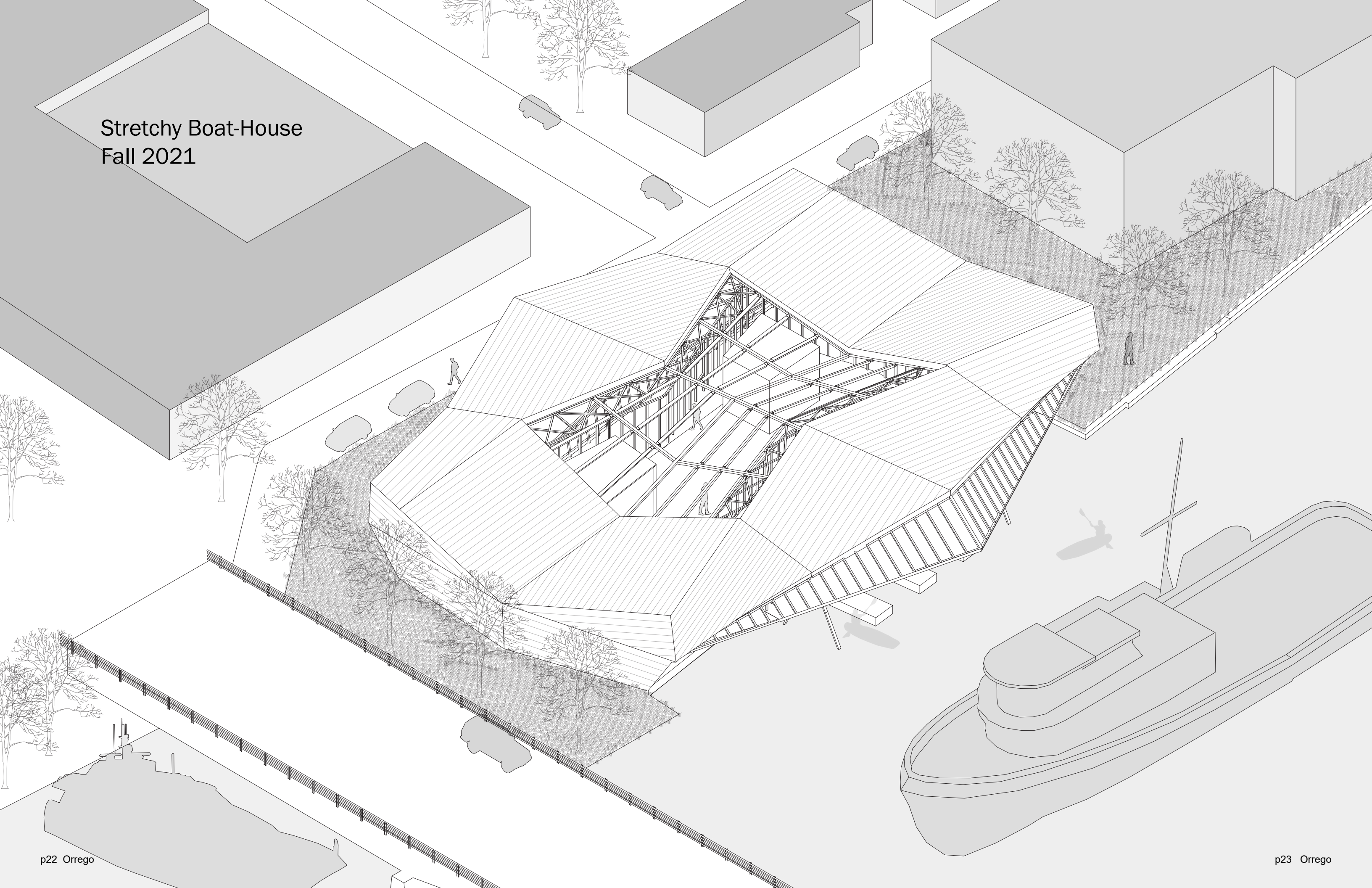


Jagged Longitudinal Performance Section  
Showing Passive Systems





Stretchy Boat-House  
Fall 2021





# Project 2: Stretchy Boat-House

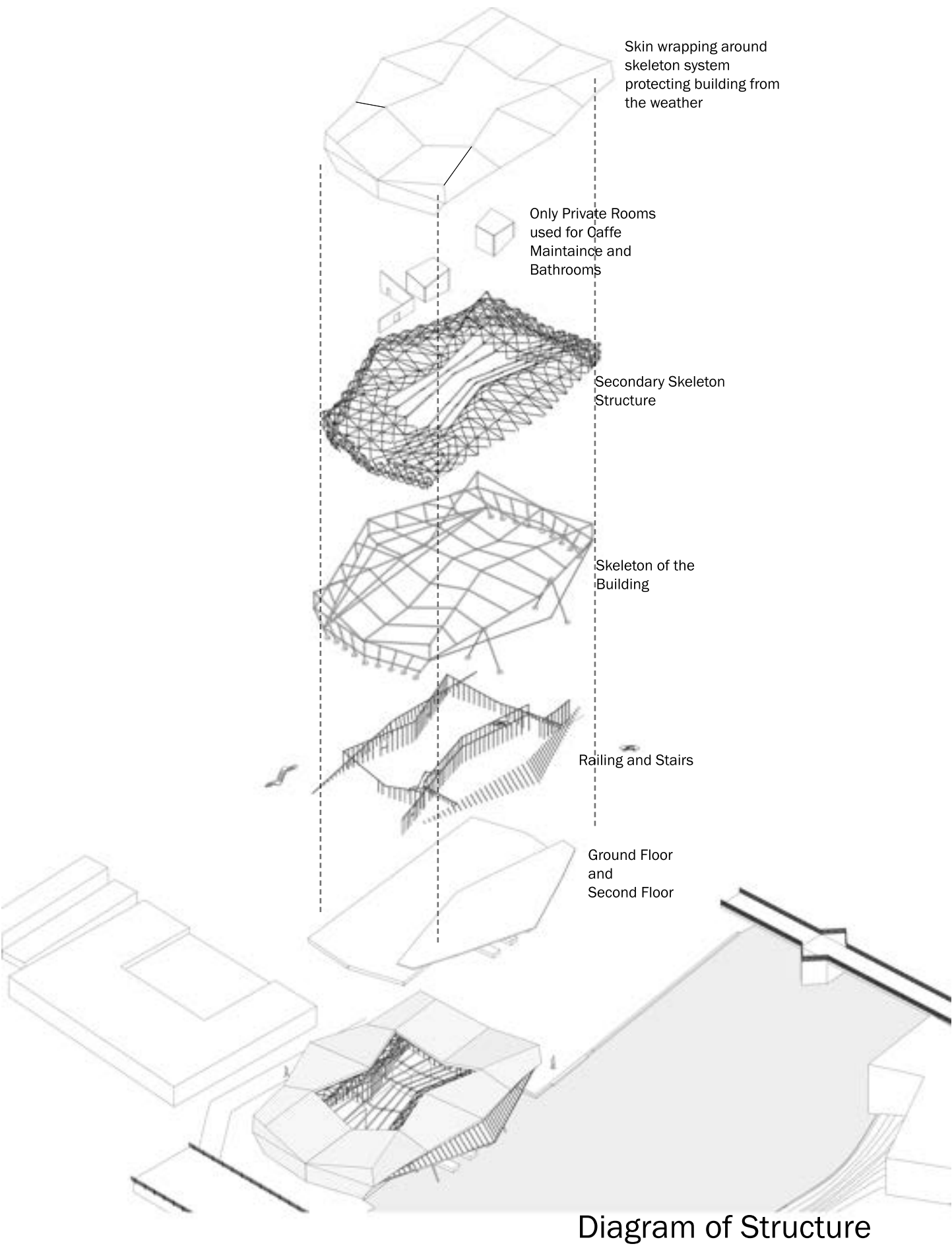
Fall 2021

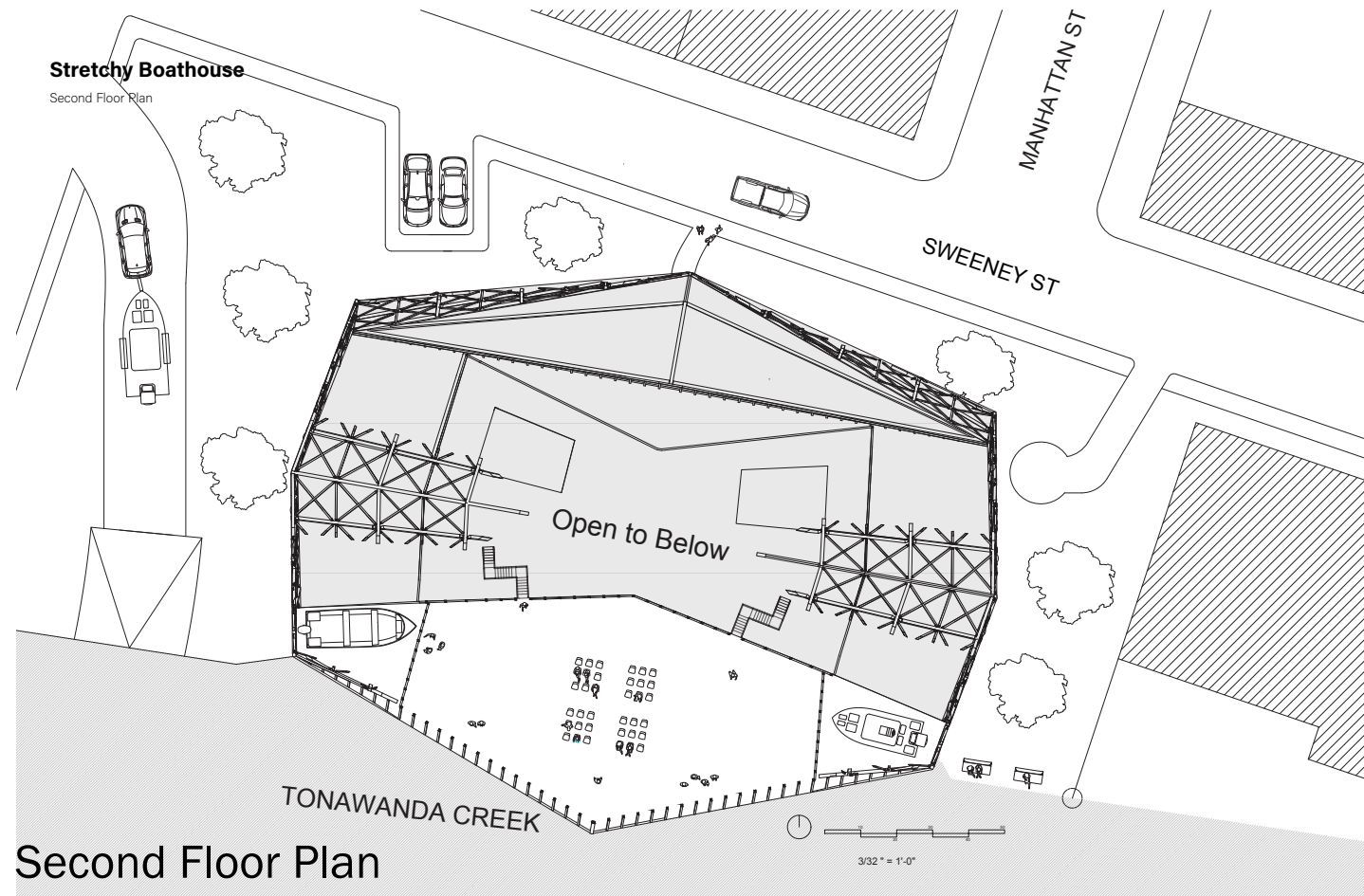
Professor: Elaine Chow

The Stretchy Boat-House is a place designed following the idea of creating a place in which boat building can be possible while other activities such as kayaking take place.

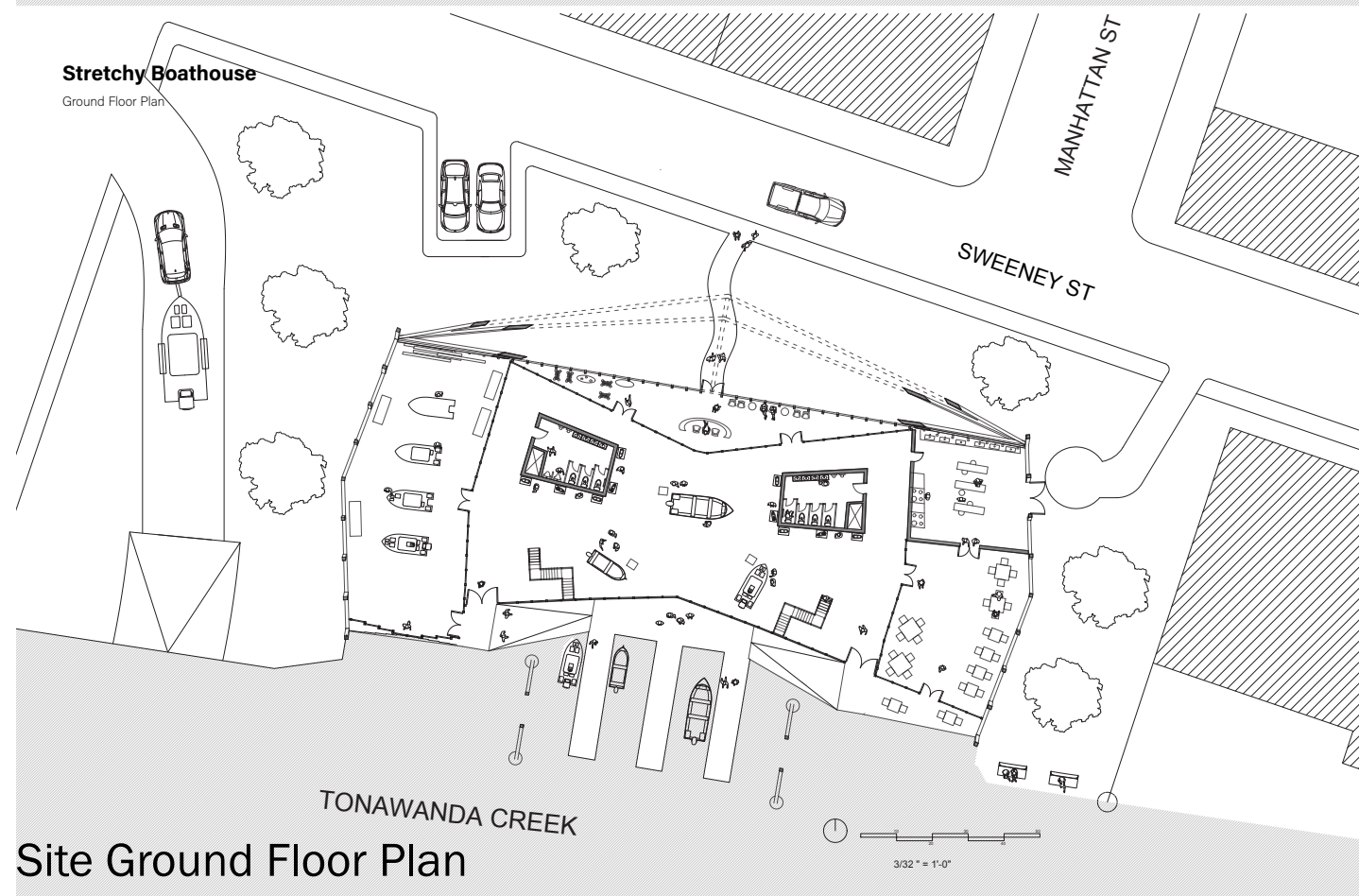
The name stretchy comes from the word stretched which is why the design tries to follow the idea of the outdoors skin following the interior skeleton of the building. Different spaces are created and some of the programs that come to be in the interior are exhibition spaces, a building shop as well as a Cafe, and a clear view to the local river.

The building is designed with exposed trusses that make it possible for the people in the interior of the building to enjoy looking at the skeleton of the building, this following the idea of man built boat which makes the skeleton of the boat visible when the people come into it.

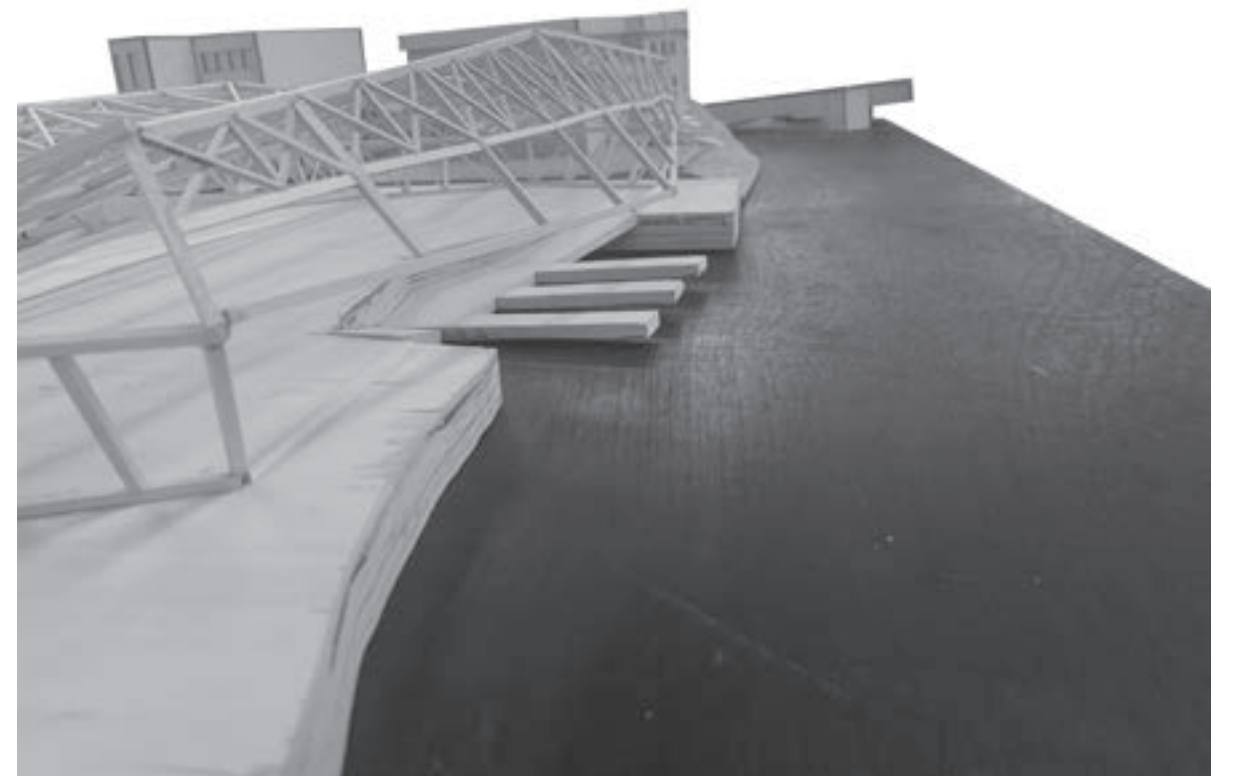
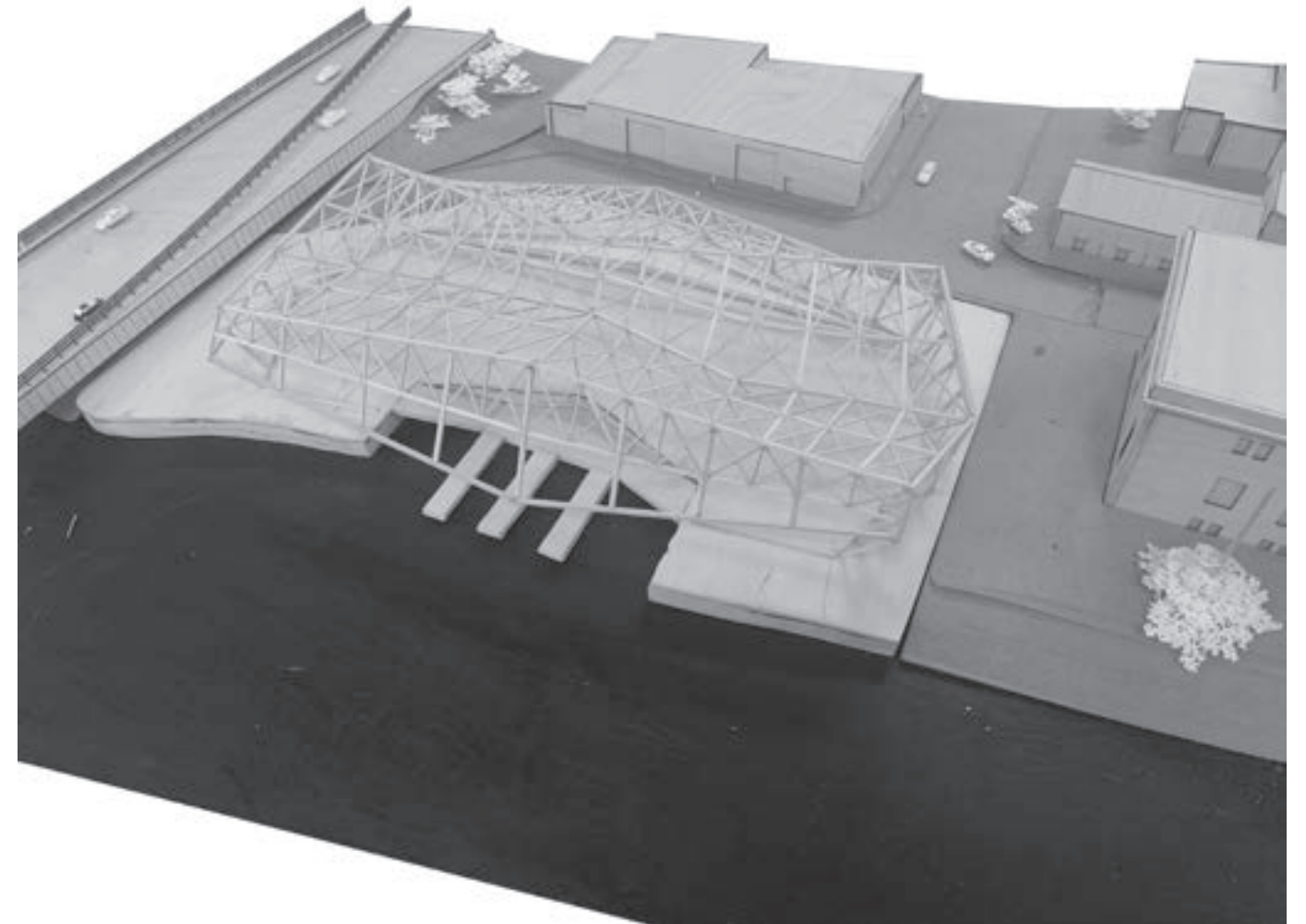




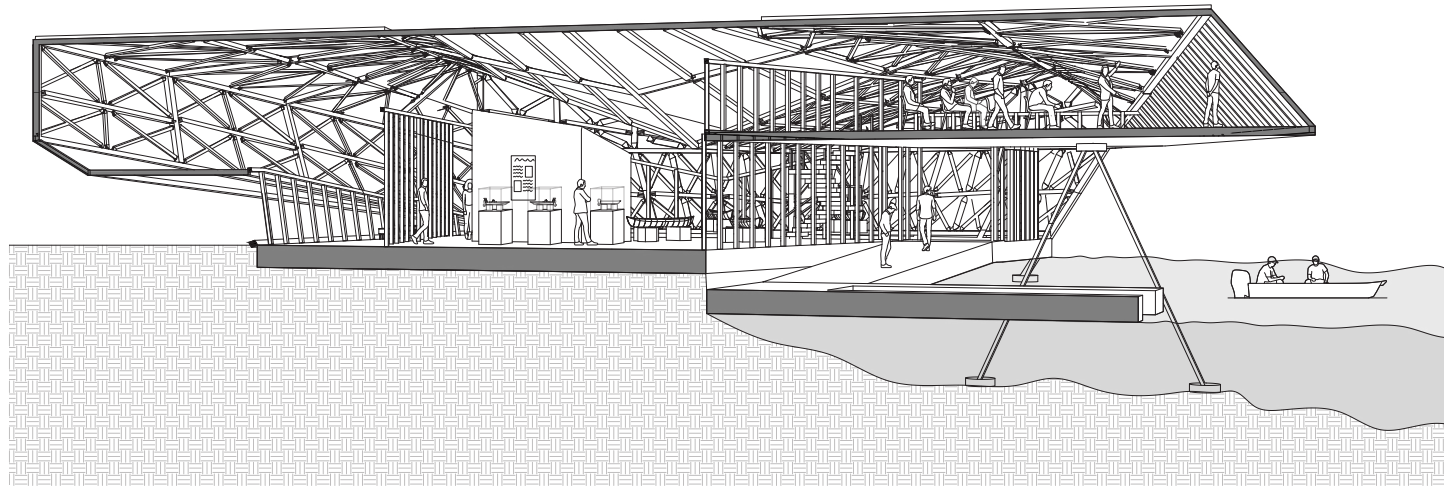
Second Floor Plan



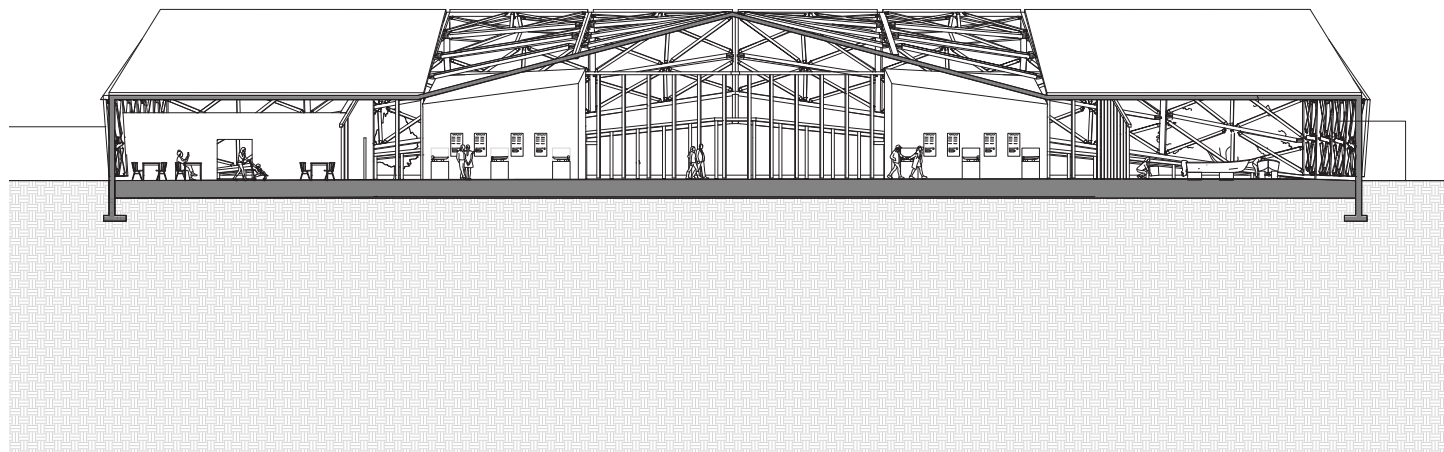
Site Ground Floor Plan







Section Perspective

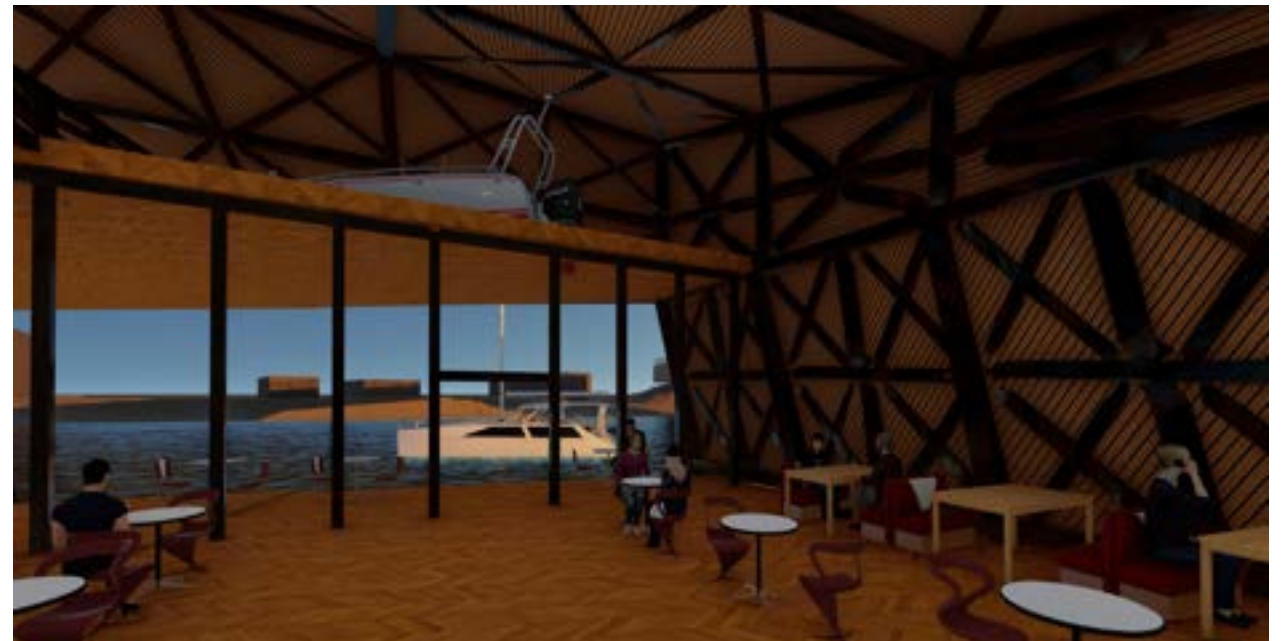


Frontal Elevation



Following physical model was created as one of the main requirements of the final review presentation which was a model representing structure of the building and how it would fit in the assigned site.

For this model made by hand, I create the three different truss systems used by the structure of the building. I called this part of the model the skeleton which would be covered by a wood skin for protection against the weather, but the skeleton was designed in a way that it would serve as a boat, where all the structural part of the object is from the interior, and the exterior just keeps the water out. The main truss system is the one responsible for creating the overall shape of the building, the secondary truss system created divisions in which the direction of the skin changes angles, and the third truss system adds extra support to the other two bigger structures, adding stability to the structure in general.





SECTION  
AXONOMETRIC



# Project 4: Shizen Building

Fall 2021

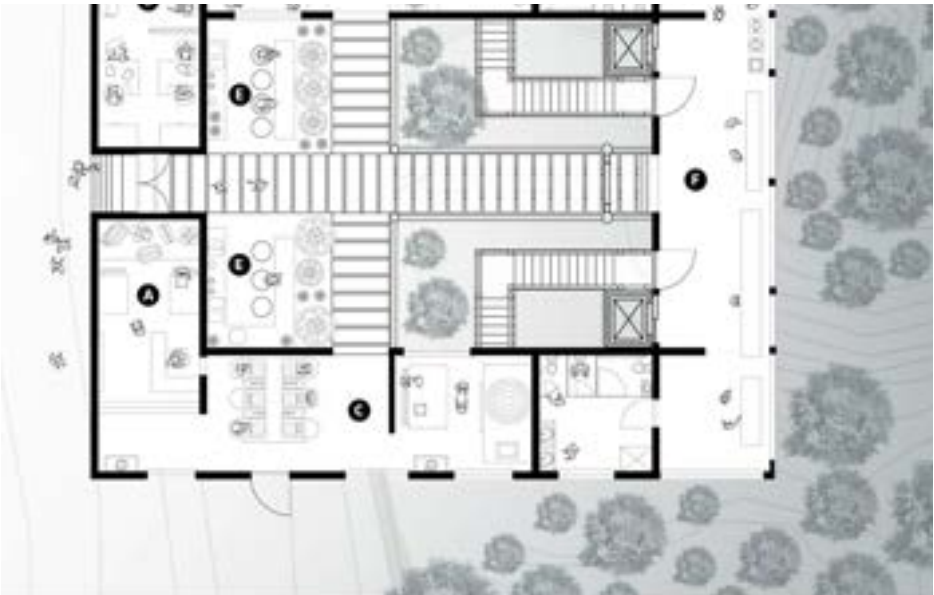
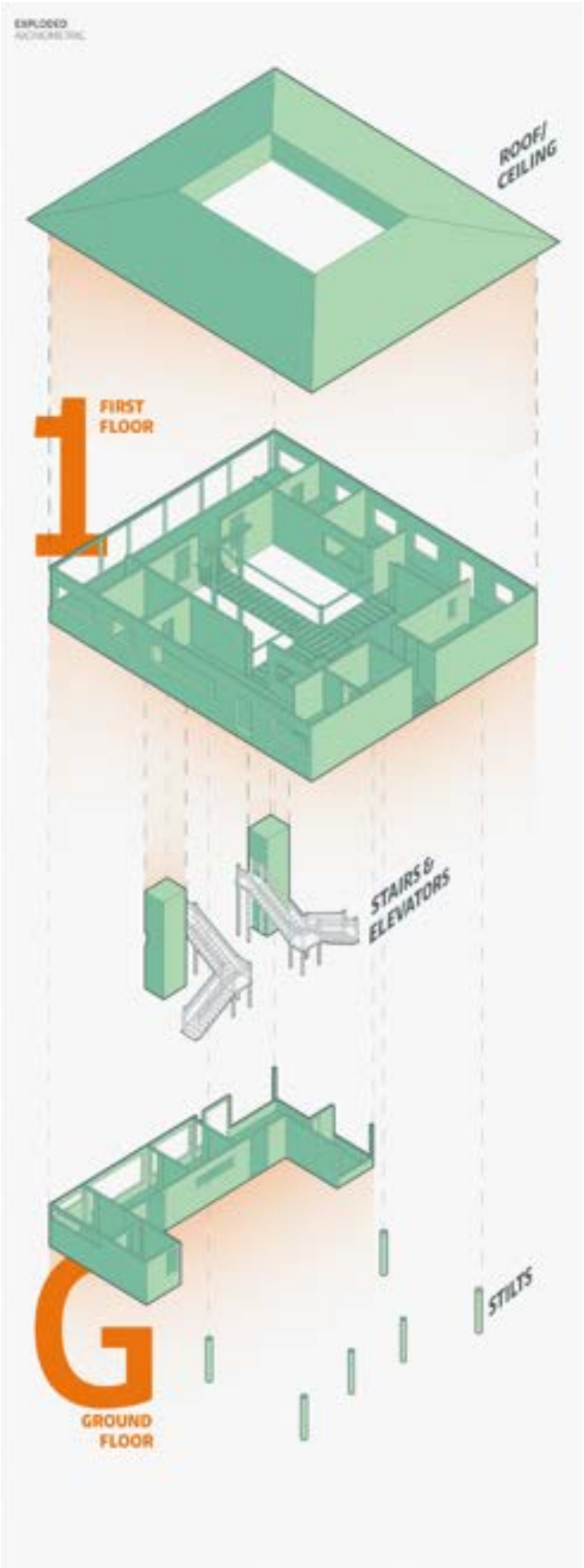
Professor: Adam Thibodeaux

Partners:

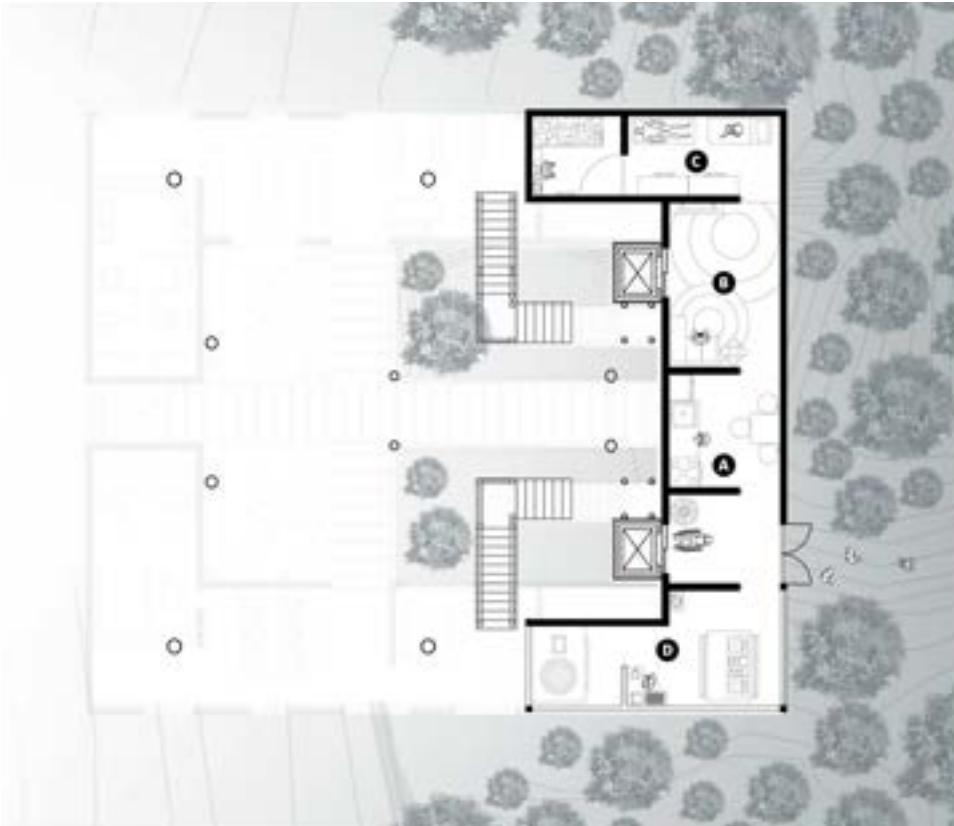
Jonah Mathew  
Fazal Khan

This being the first group project during the covid era, students were assigned to research different complex architectural project. Our group was assigned to research the Ise-Grand Shrine in Japan, and to study its very long history. A building was created following the overall shape of the Shrine with a few changed to be able to fit in around the typical Bufffalo Neighborhood.

For the second half of the semester we were assigned a program to populate the created building, in this case it was a seramics studio, which we populated with a common area Cafe, a goods purchase area, Exhibition Area, and last but not least a housing for students interested in living inside the building while studying deeper into the history of ceramic making.

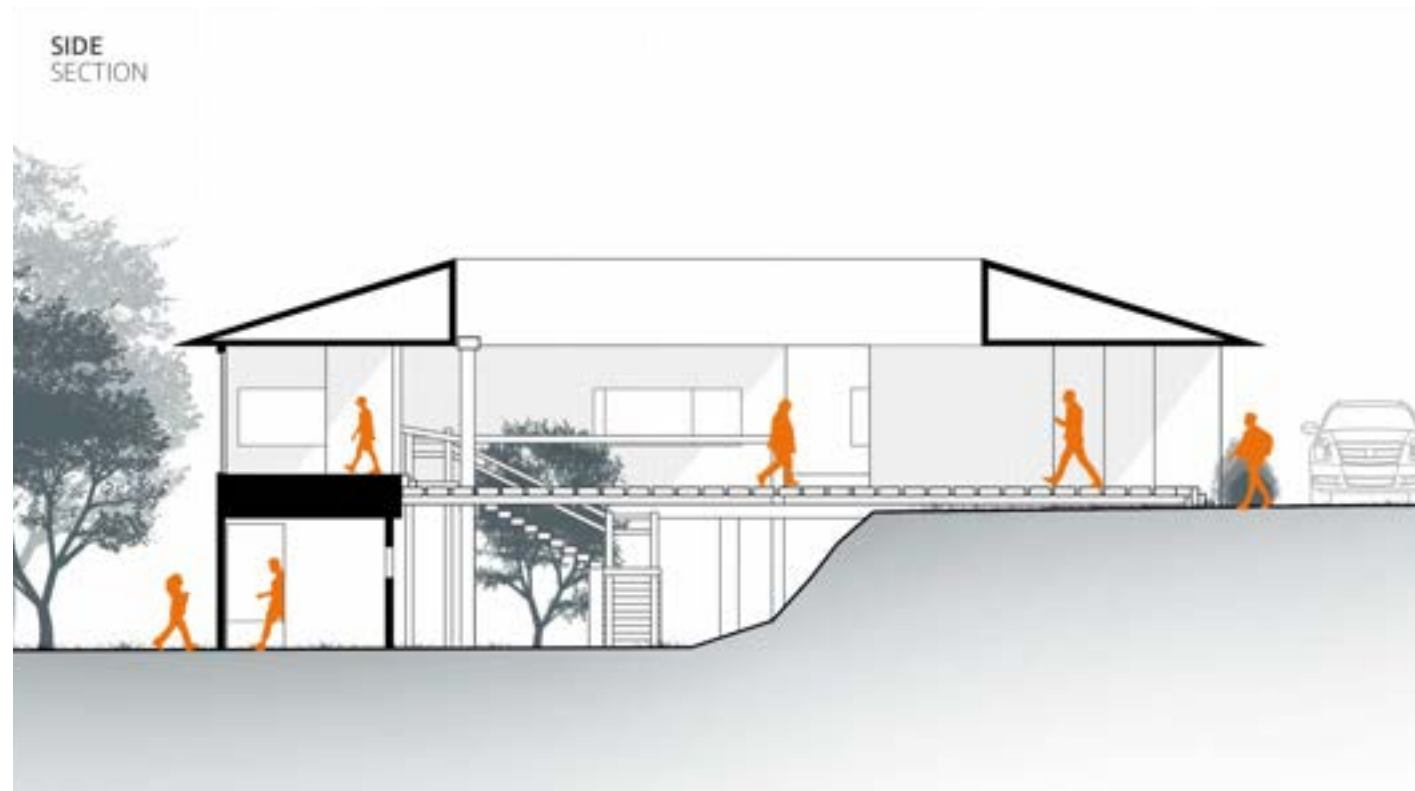


Site Ground Floor Plan



Site First Floor Plan



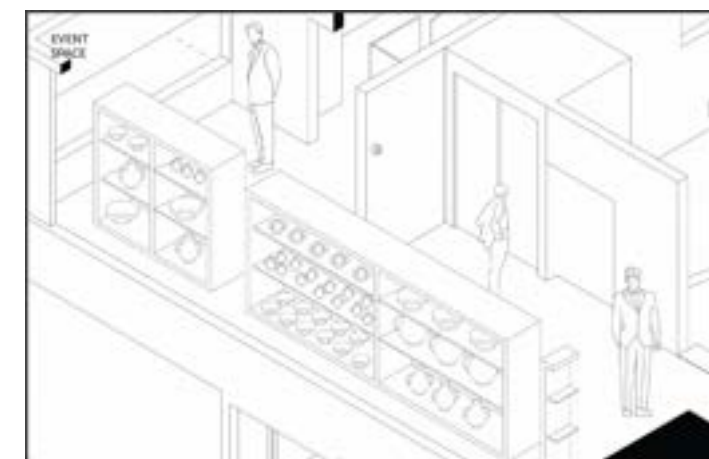


Public space in the left part of the page shows the main entry way, walkaway and cafe space provided to workers and visitors to eat or drink while enjoying the many programs in the building. Mainly focus on keeping students

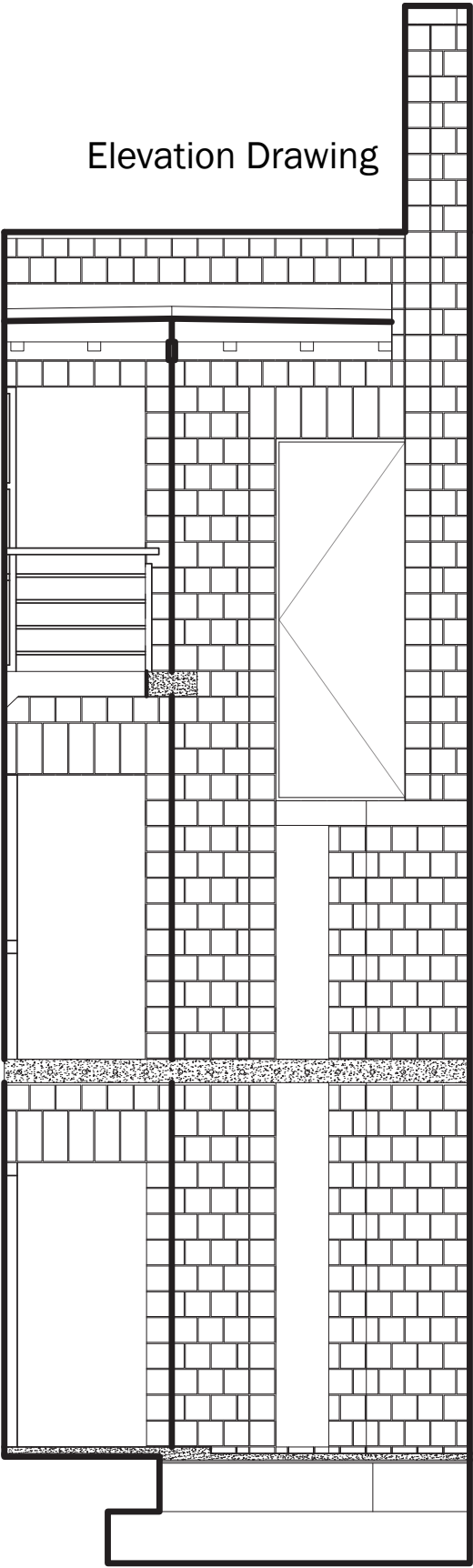
Space was creation for the purchase of products created by workers from the ceramics studio as well as students that live in the provided living spaces in the lower floor. Office space is also available for the public to schedule workshop or tour in the site such as school filed trips as well as community visits.



Last but not least is the ceramics exhibition space, provided for the display of the most succesful pieces of ceramics made by students, as well as a lecture space for the presentation of new projects, final reviews of students and presentations of the history behind the design of the building to all visitors.



Elevation Drawing

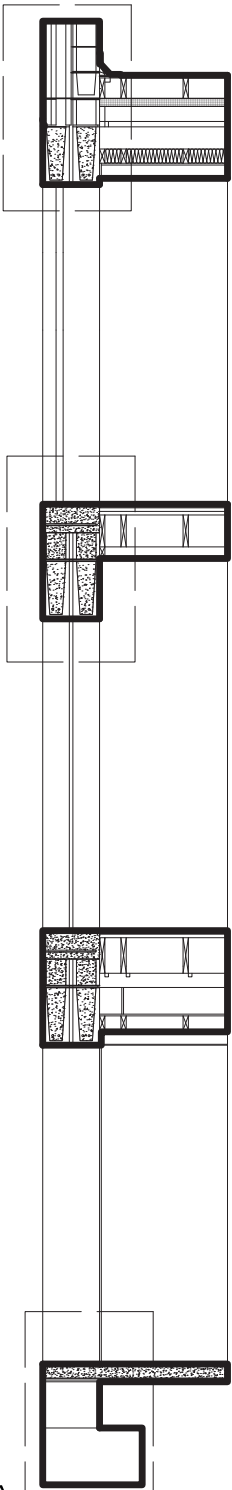


C

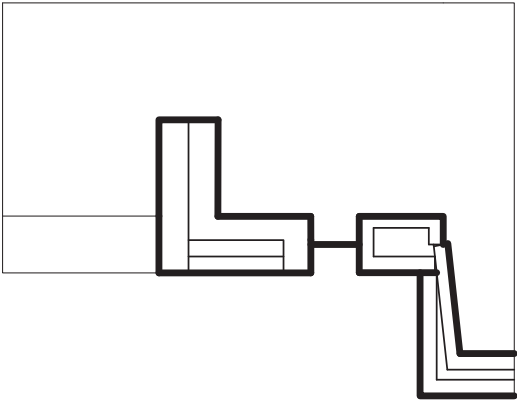
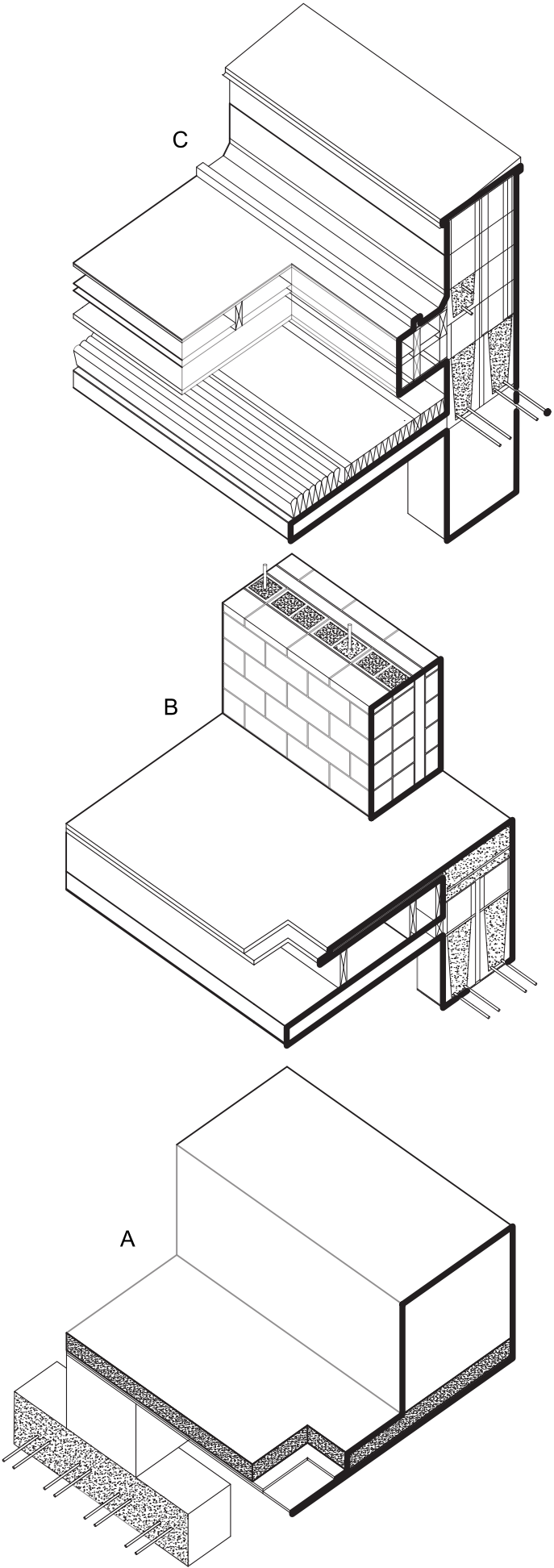
B

A

Section Drawing

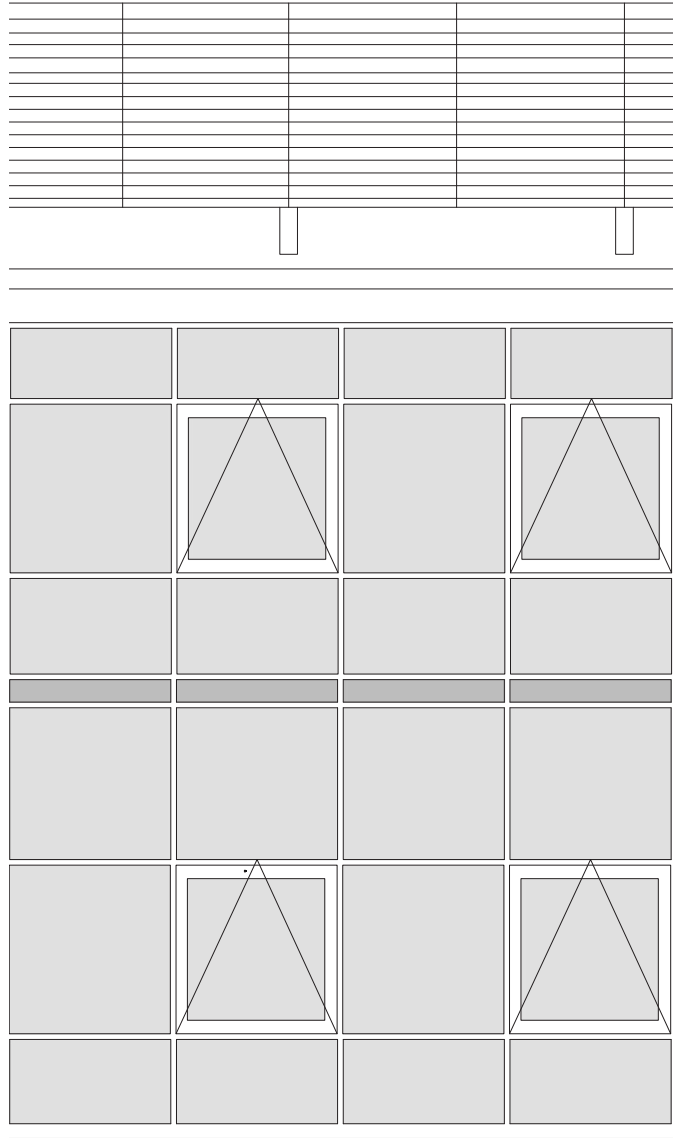


Axons

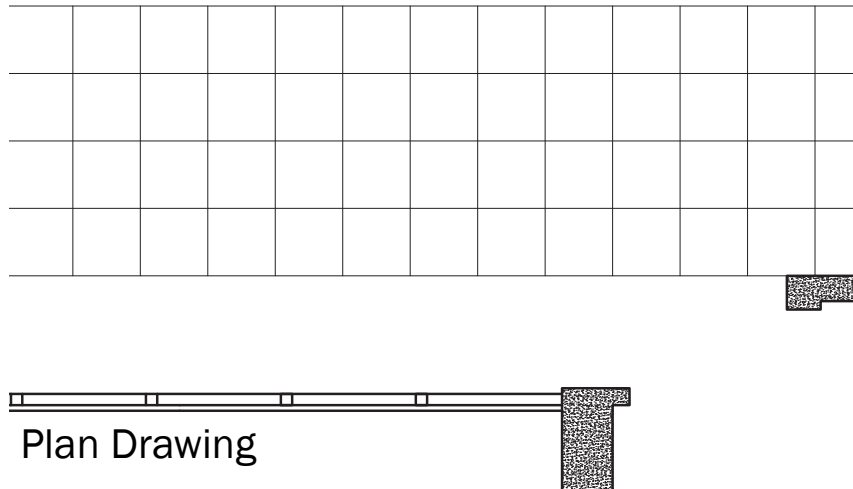


Plan Drawing

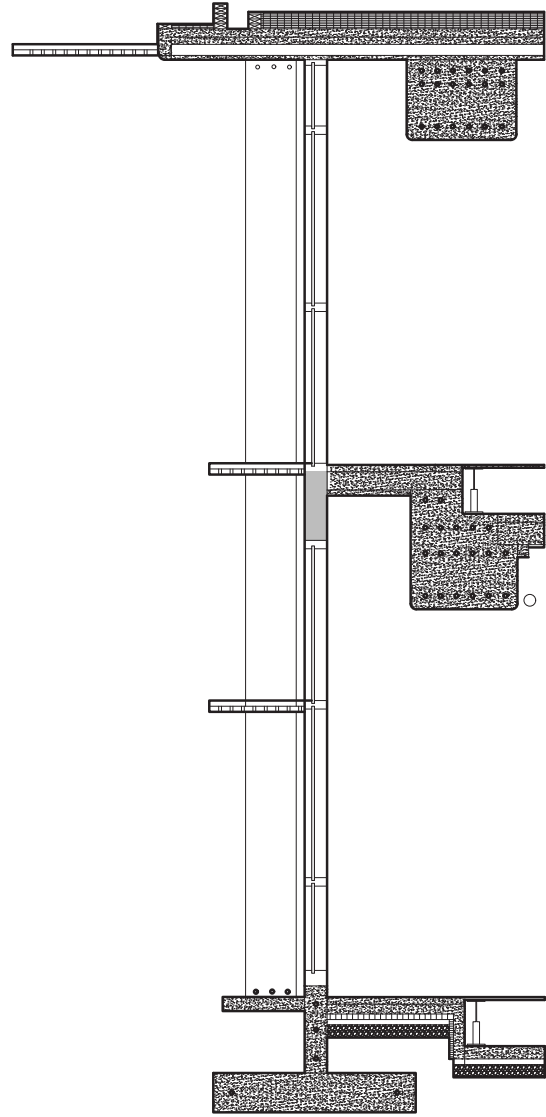




Elevation Drawing

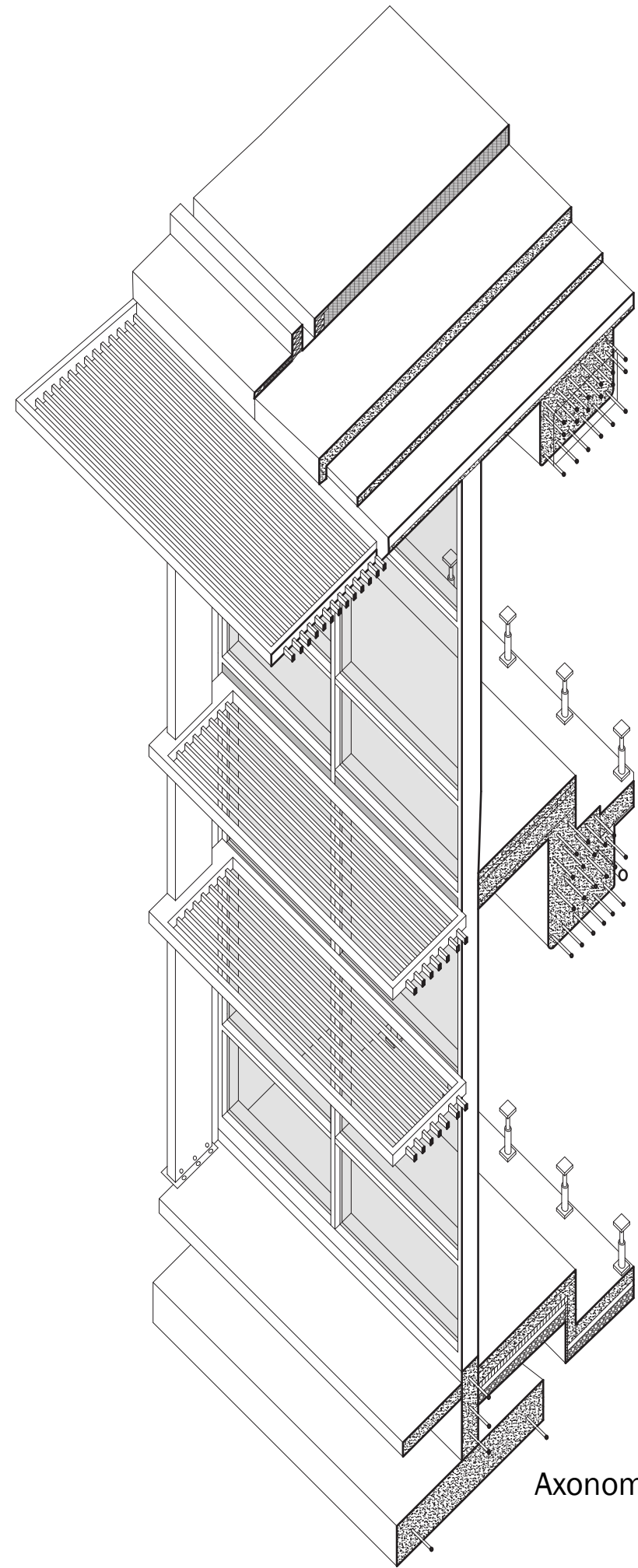


Plan Drawing



Section Drawing

PIERCE COUNTY  
ENVIRONMENTAL  
SERVICES  
OFFICE BUILDING



Axonometric Elevation

