

YUAN CHEN

Portfolio

CONTENTS

01	SHED & SHELTER PEACE CENTER FALL 2020 DWIGHT T. BLACK MEMORIAL SCHOLARSHIP (4TH YEAR) RECIPIENT
02	A MYSTERIOUS BOX PUBLIC LIBRARY FALL 2019
03	SEAM SCHOOL SCHOOL OF ARCHITECTURE FALL 2021
04	SKETCHES, INTERNSHIP WORK

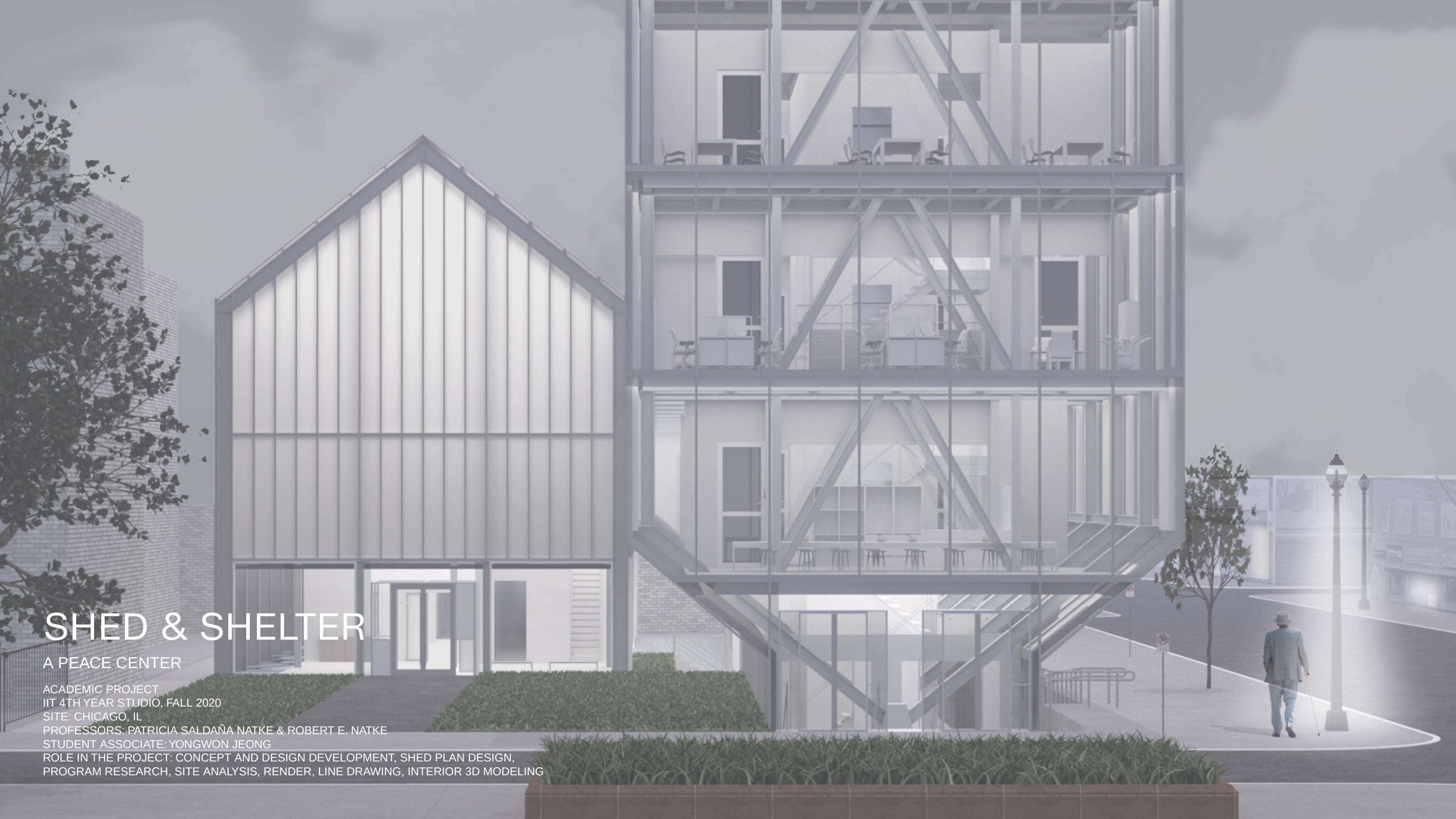
SHED & SHELTER

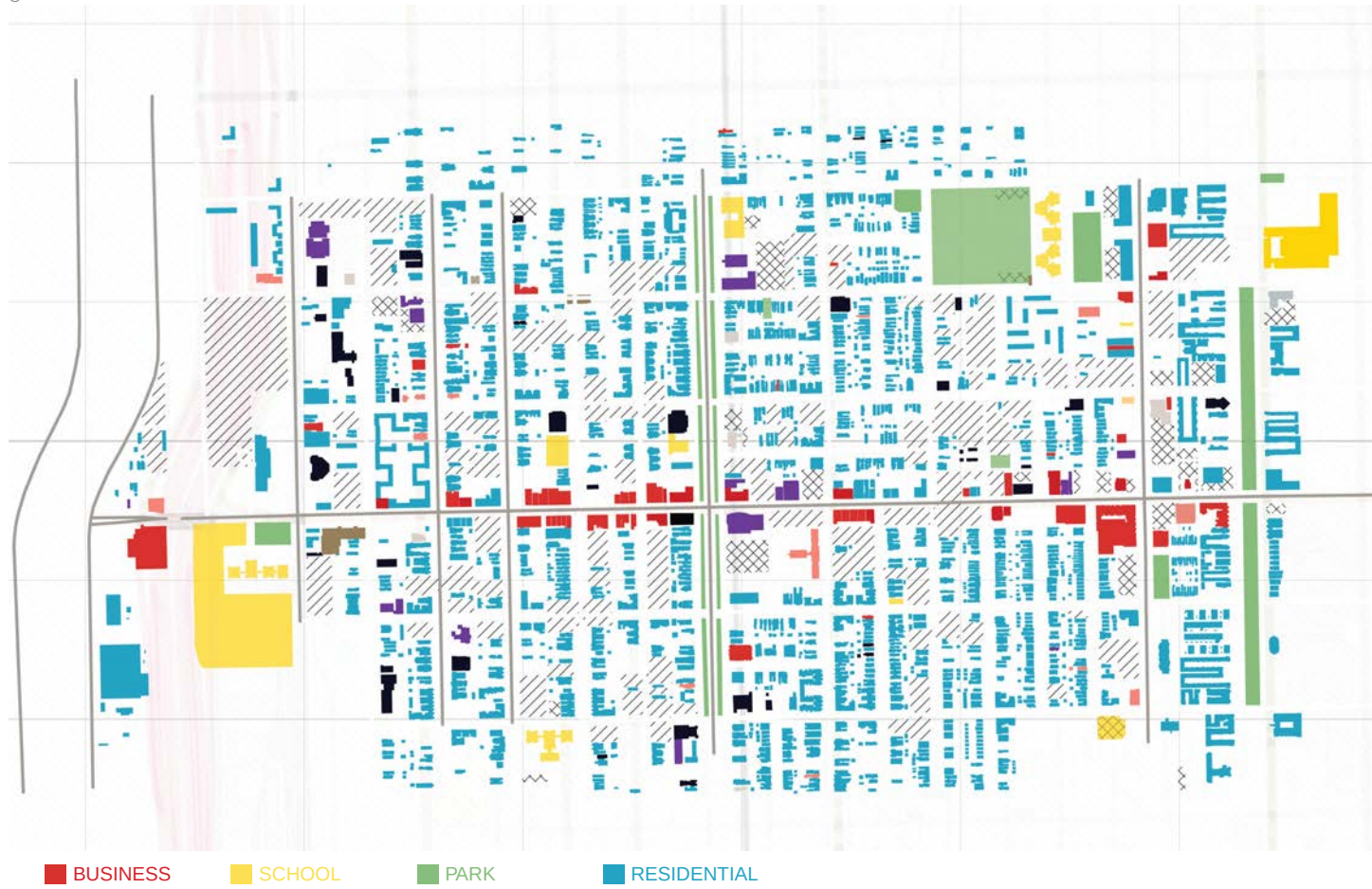
A PEACE CENTER

ACADEMIC PROJECT
IIT 4TH YEAR STUDIO, FALL 2020

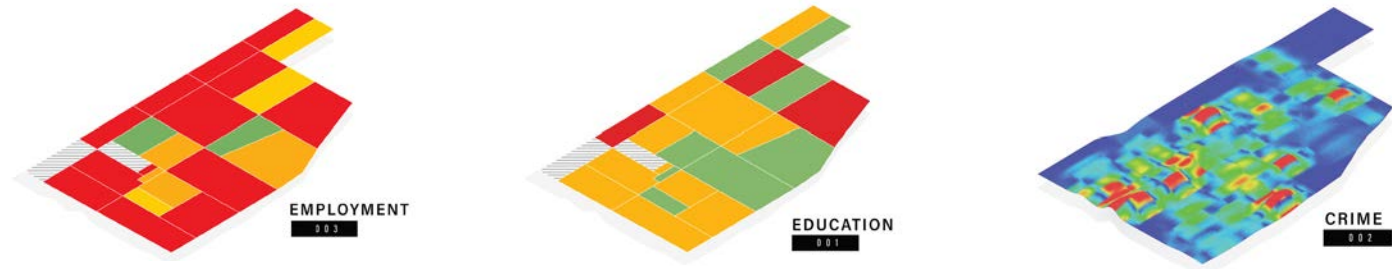
SITE: CHICAGO, IL
PROFESSORS: PATRICIA SALDAÑA NATKE & ROBERT E. NATKE
STUDENT ASSOCIATE: YONGWON JEONG

ROLE IN THE PROJECT: CONCEPT AND DESIGN DEVELOPMENT, SHED PLAN DESIGN,
PROGRAM RESEARCH, SITE ANALYSIS, RENDER, LINE DRAWING, INTERIOR 3D MODELING





This assignment required us to design a Peace Center for the Bronzeville community on an assigned site in Chicago, Illinois. The Peace Center will be an impactful community catalyst aimed at addressing Chicago's largest societal challenges: violence in our communities, poor economic opportunities, inadequate mental health services, homelessness, and safety. After studying the Greater Bronzeville Community Action Plan, we found our solutions. We decided to focus on trauma informed care and education for individuals, and community connection and workforce development to solve the violence issue in the community.



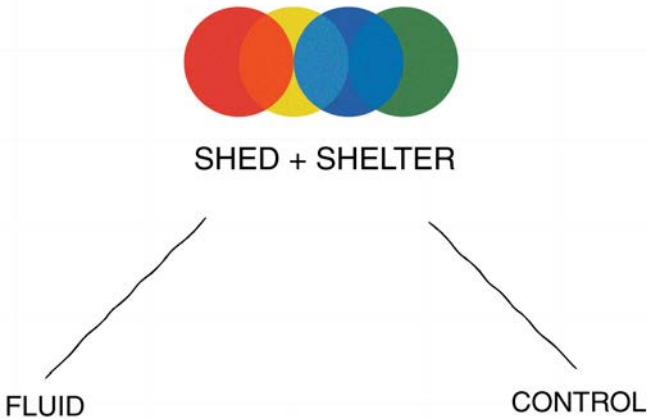
Greater Bronzeville Community Action Plan

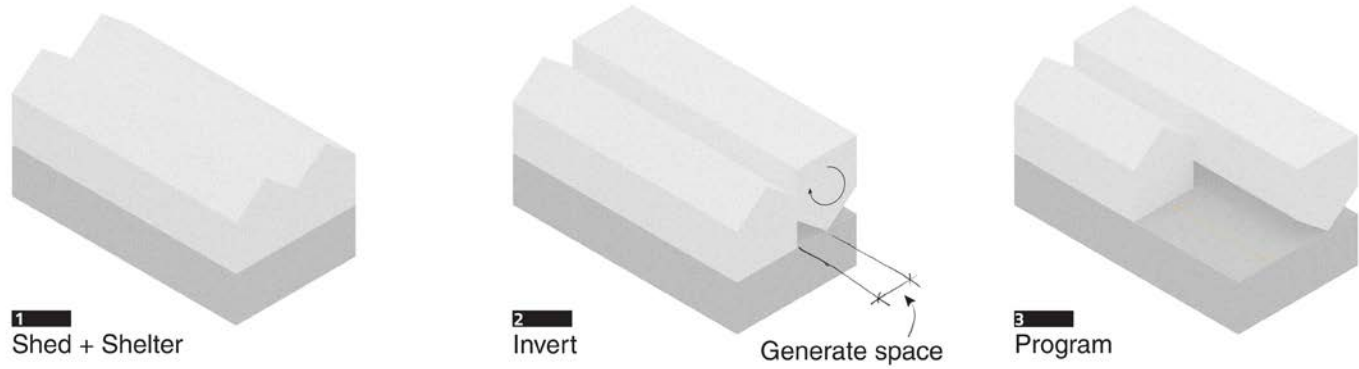


Youth Education & Community Violence

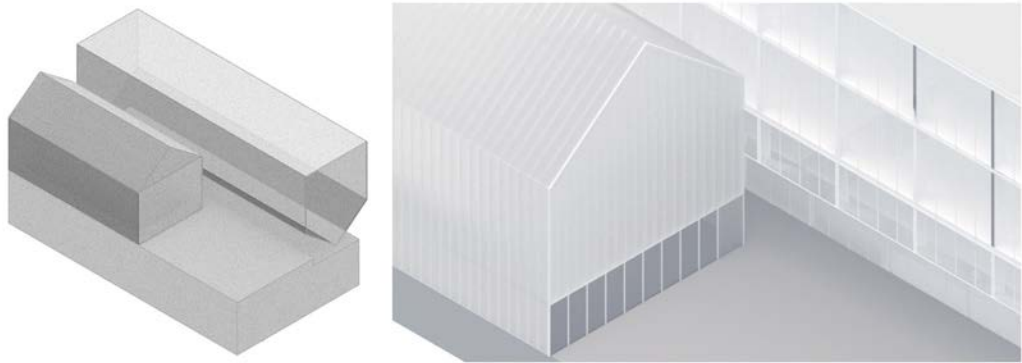


Solution

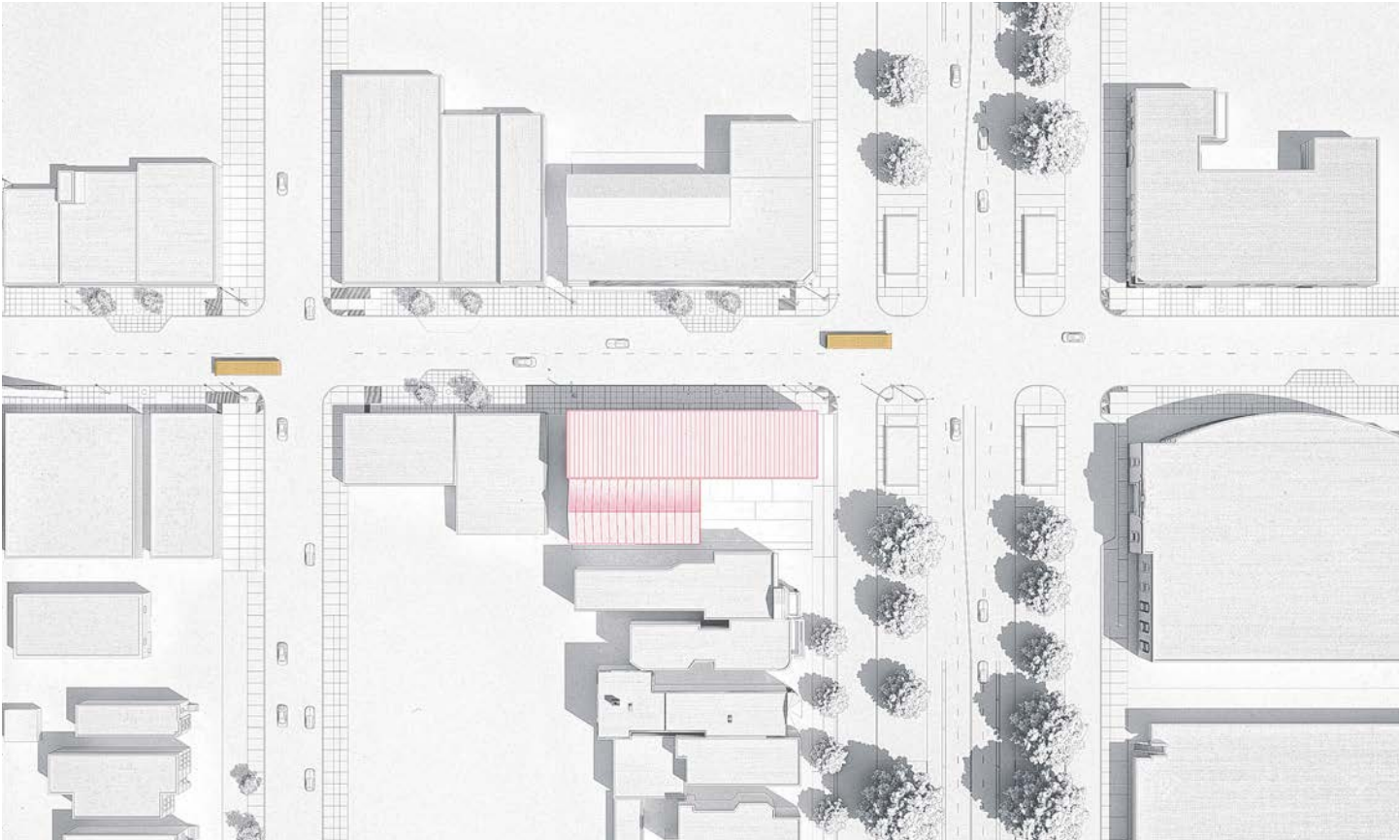




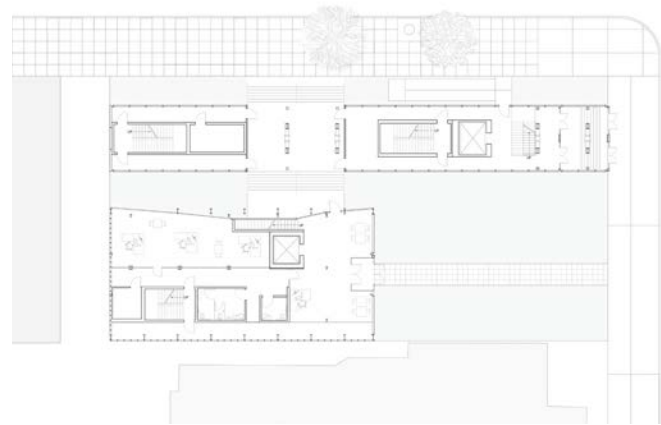
The building is formed from two parts: Shed and Shelter. Shed is for community connection and workforce development. Shelter is for trauma informed care and education. We started with a geometric shape that usually represents houses with gable roofs and inverted one of them to form the entire building. The reason why we chose this geometric shape is because we wanted the people who visit to feel secure and warm, like their home. Since Shed is a service for the community and shelter is a service for individuals, the programs and the spatial features for both buildings are entirely opposite. We wanted to address the contrast in their spatial form and materiality.



CONTRAST
Glass vs. Polycarbonate



Site Plan



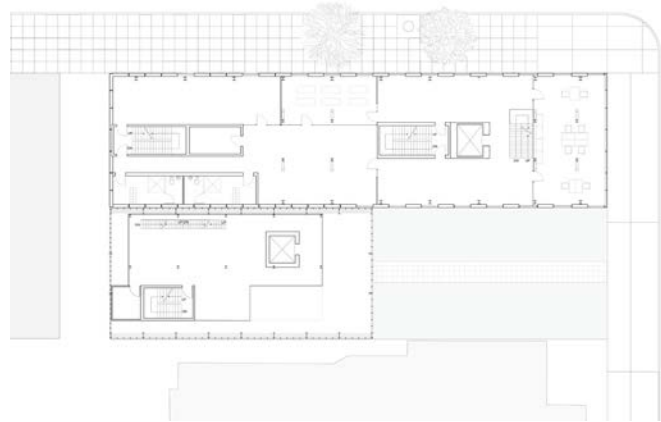
First Floor

Shelter: office, lobby Shed: lobby



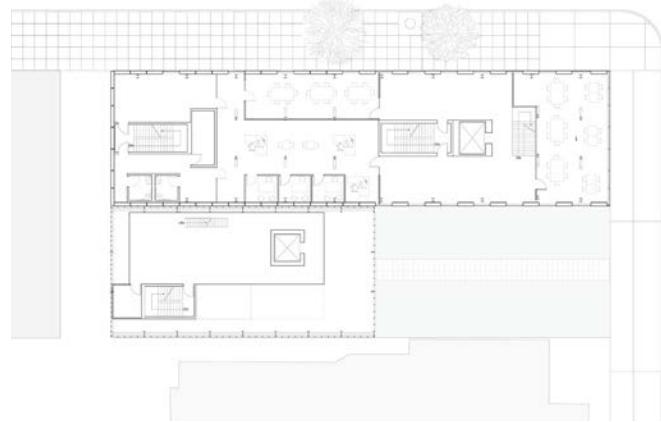
Second Floor

Shelter: counseling Shed: child care, art room



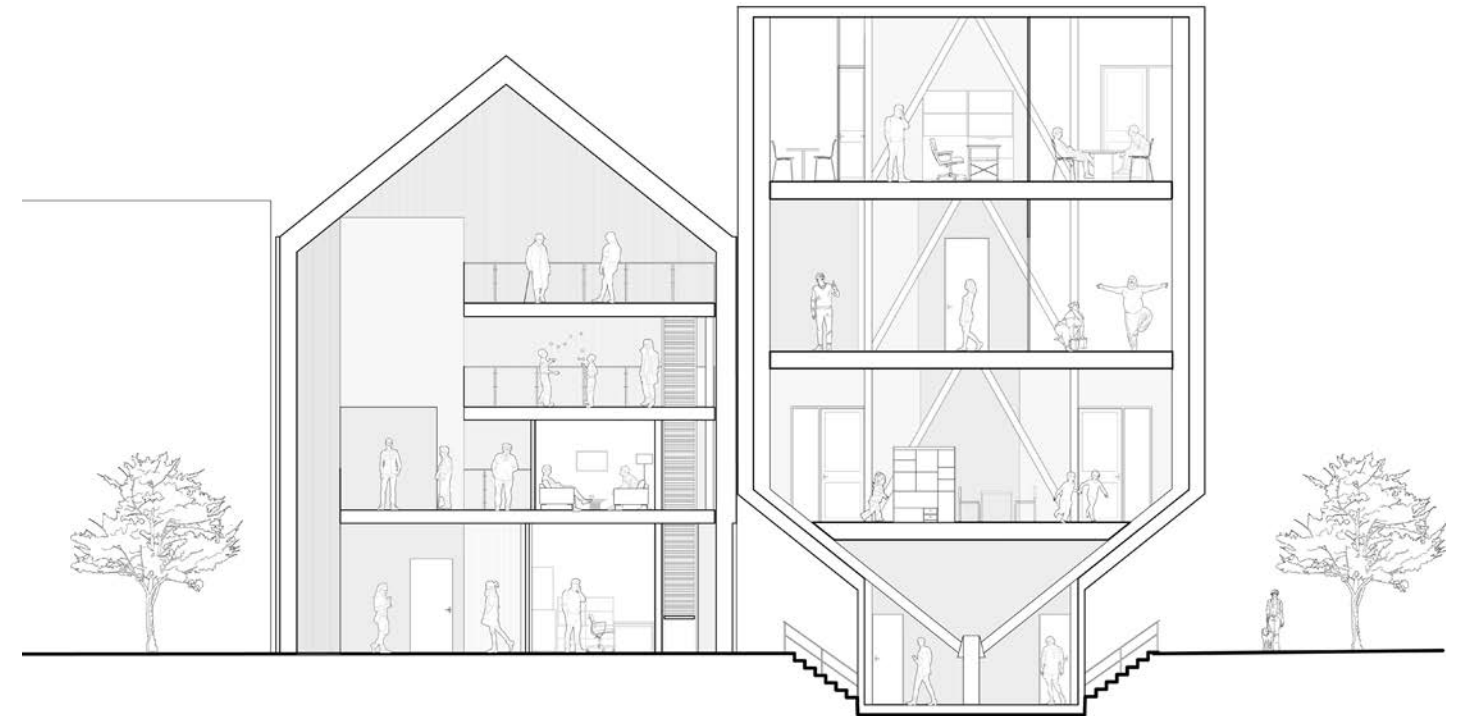
Third Floor

Shelter: multi-purpose Shed: office, yoga, dance studio



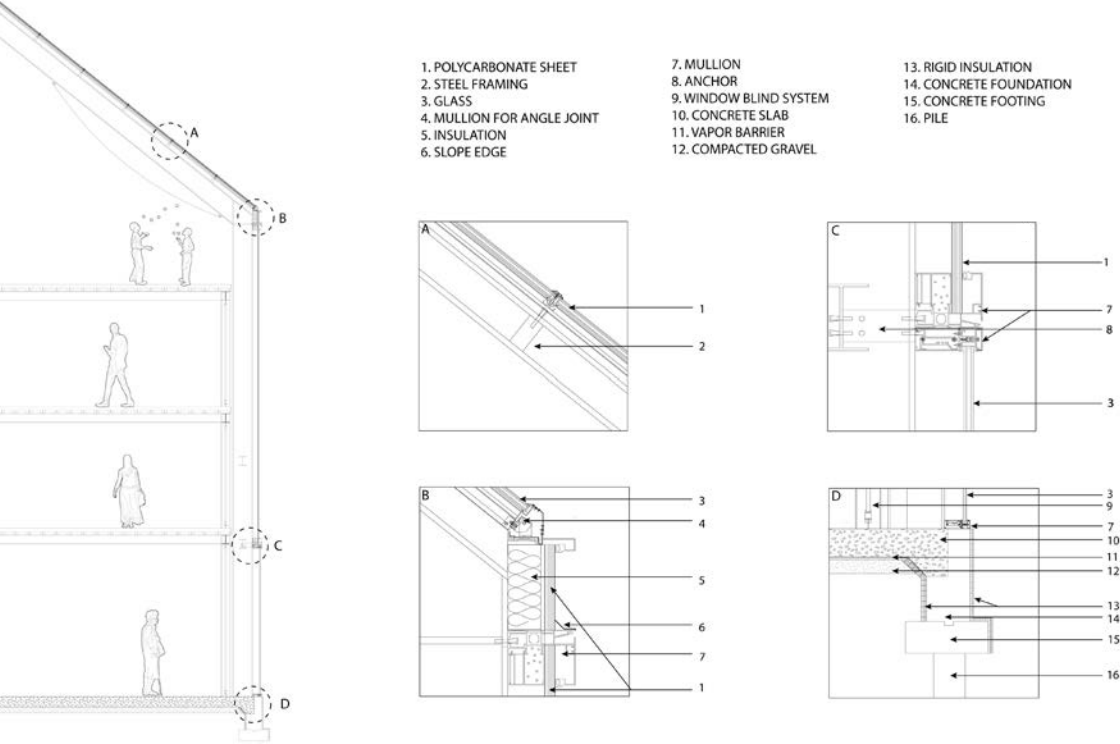
Fourth Floor

Shelter: multi-purpose Shed: community room, career center

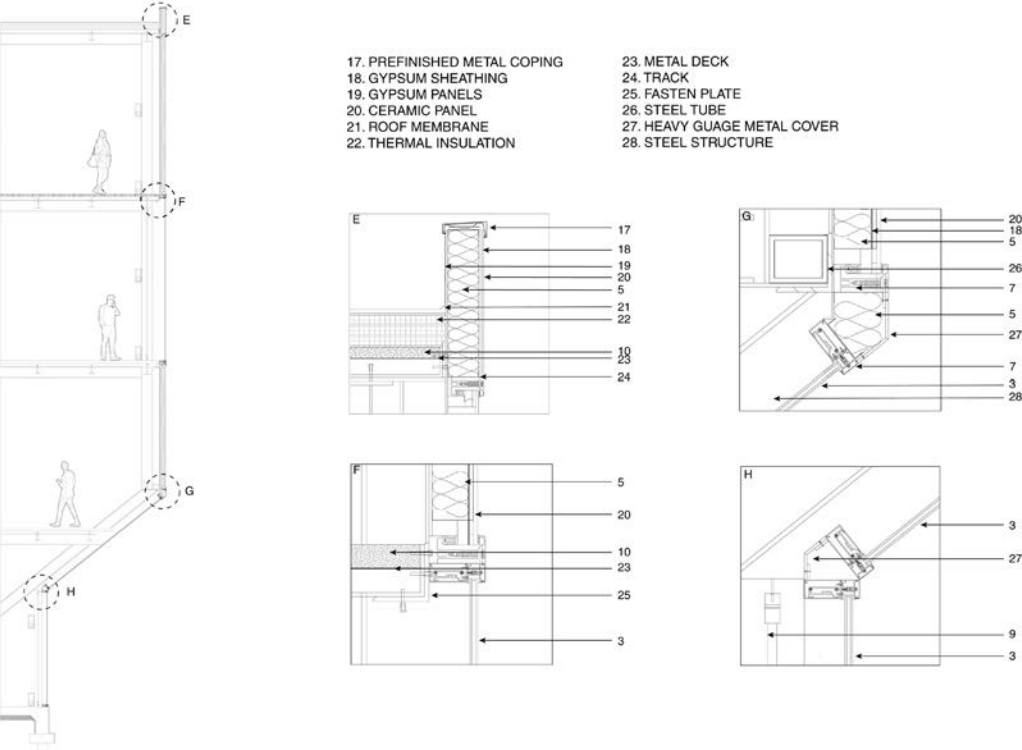


Short Section

*Shed: floor level gets higher, floor area gets bigger
Shelter: floor level gets higher , floor area gets smaller*



Shelter: Structure Detail



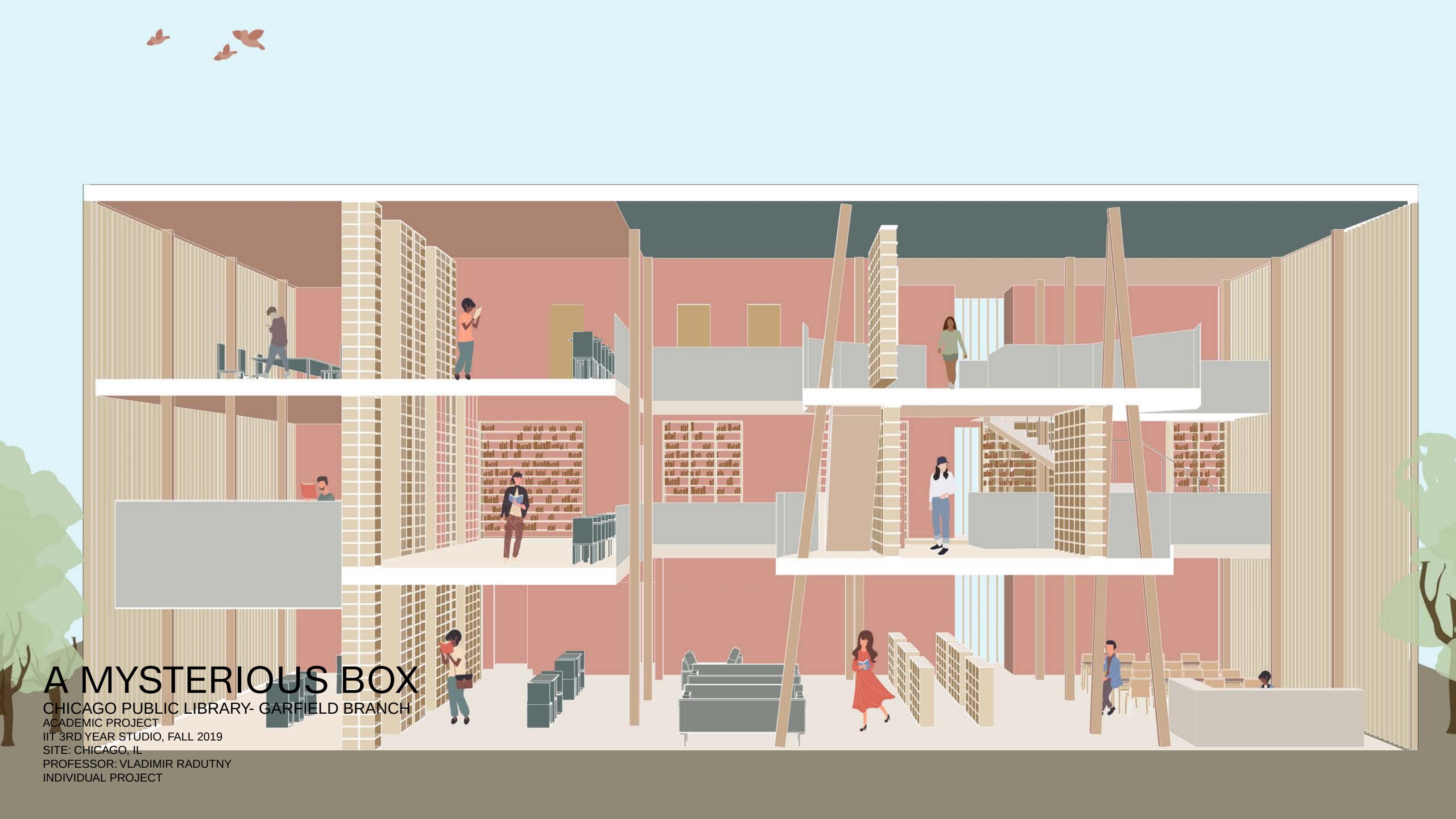
Shed: Structure Detail



Interior Render : Shed



Interior Render : Shelter



A MYSTERIOUS BOX

CHICAGO PUBLIC LIBRARY- GARFIELD BRANCH

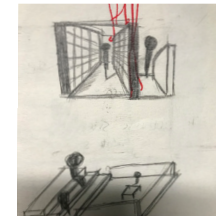
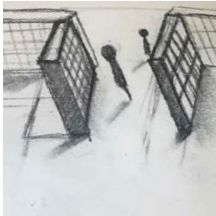
ACADEMIC PROJECT

IIT 3RD YEAR STUDIO, FALL 2019

SITE: CHICAGO, IL

PROFESSOR: VLADIMIR RADUTNY

INDIVIDUAL PROJECT



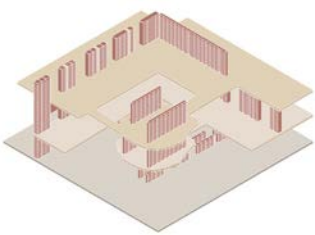
Sketches: Exploring various library spaces

This assignment required the design of a Chicago Public Library Branch facility with a Mass Timber structural frame on an assigned site in Chicago, Illinois.

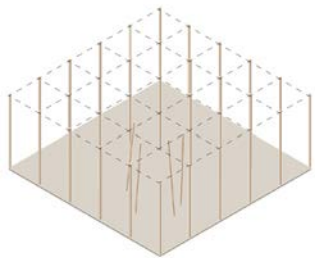
The new library required the creation of various program spaces , each with different spatial qualities for different group users. The concept of the project was that it is the “Book” that guides us through the whole experience in the library. In addition, bookshelves act as walls to create different spaces.

All the floors are following the 16ft x 16ft structural grid. However, the middle part of the building breaks the grid rule of the building and forms an irregular shape like a sculpture in the center of the building which creates a strong contrast with the other parts of the building. The contrast makes this building more dynamic in terms of architecture.

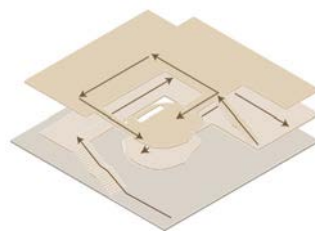
The site is next to the green line Garfield train station. The library is not placed parallel to the site. The library is rotated in 22 degrees to use the perimeter of the building to divide the site into three parts so the landscape of the site can be planned accordingly into three different parts. In addition, since it is rotated, when people walk on the street some parts of the building you can not see from outside, which encourages people to come explore the building.



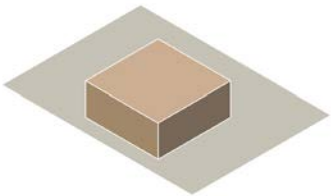
Bookshelves make spaces



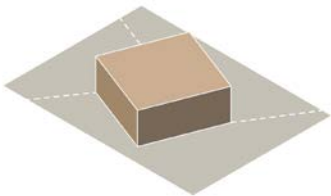
16x16 feet structural grid



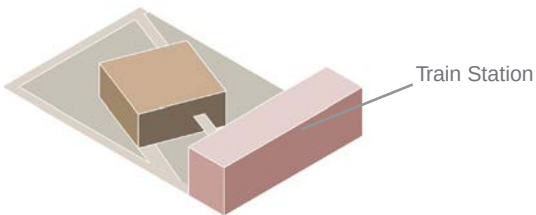
Fluid Circulation



Placing the library on the site



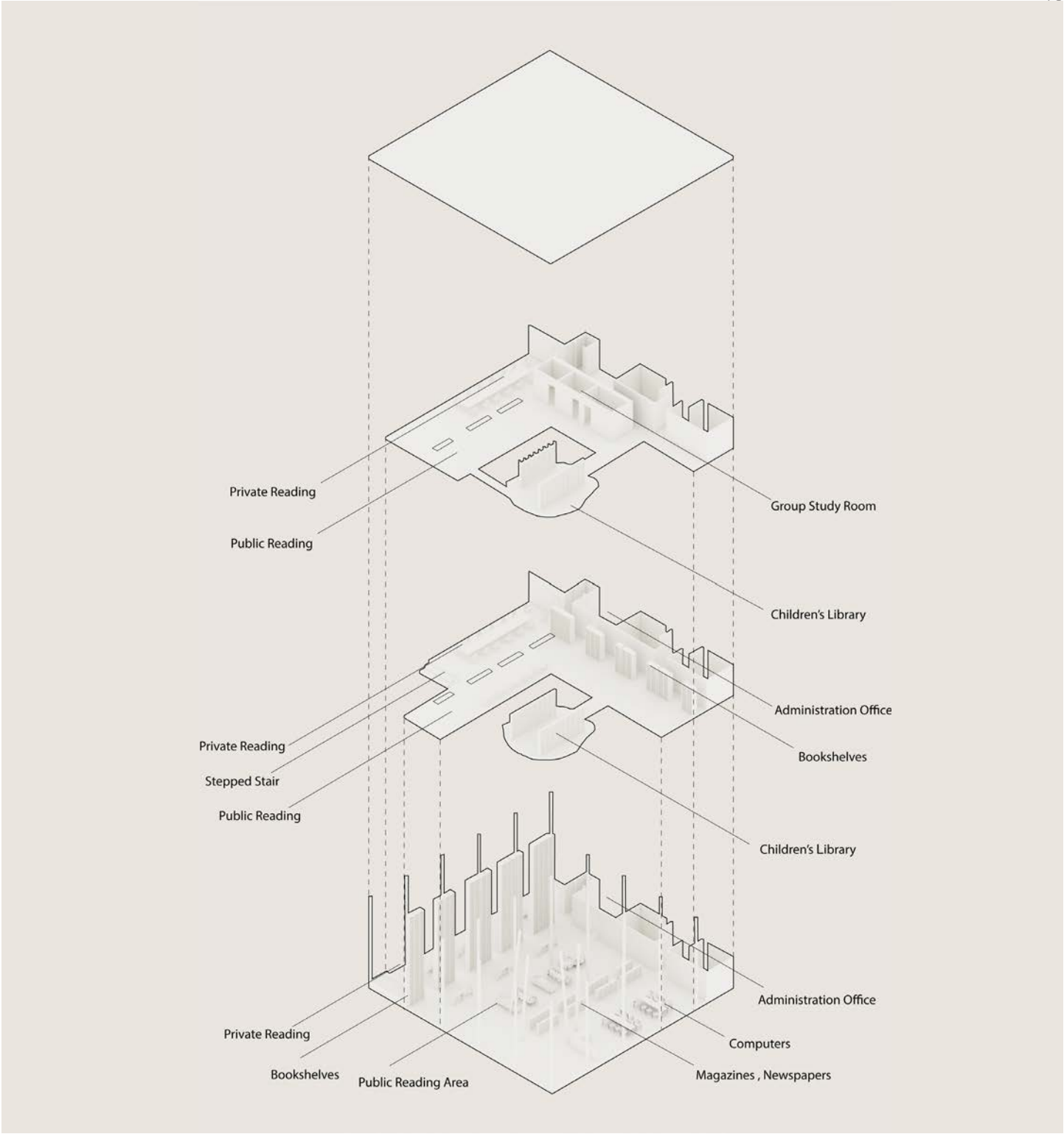
Rotating the library to divide the site



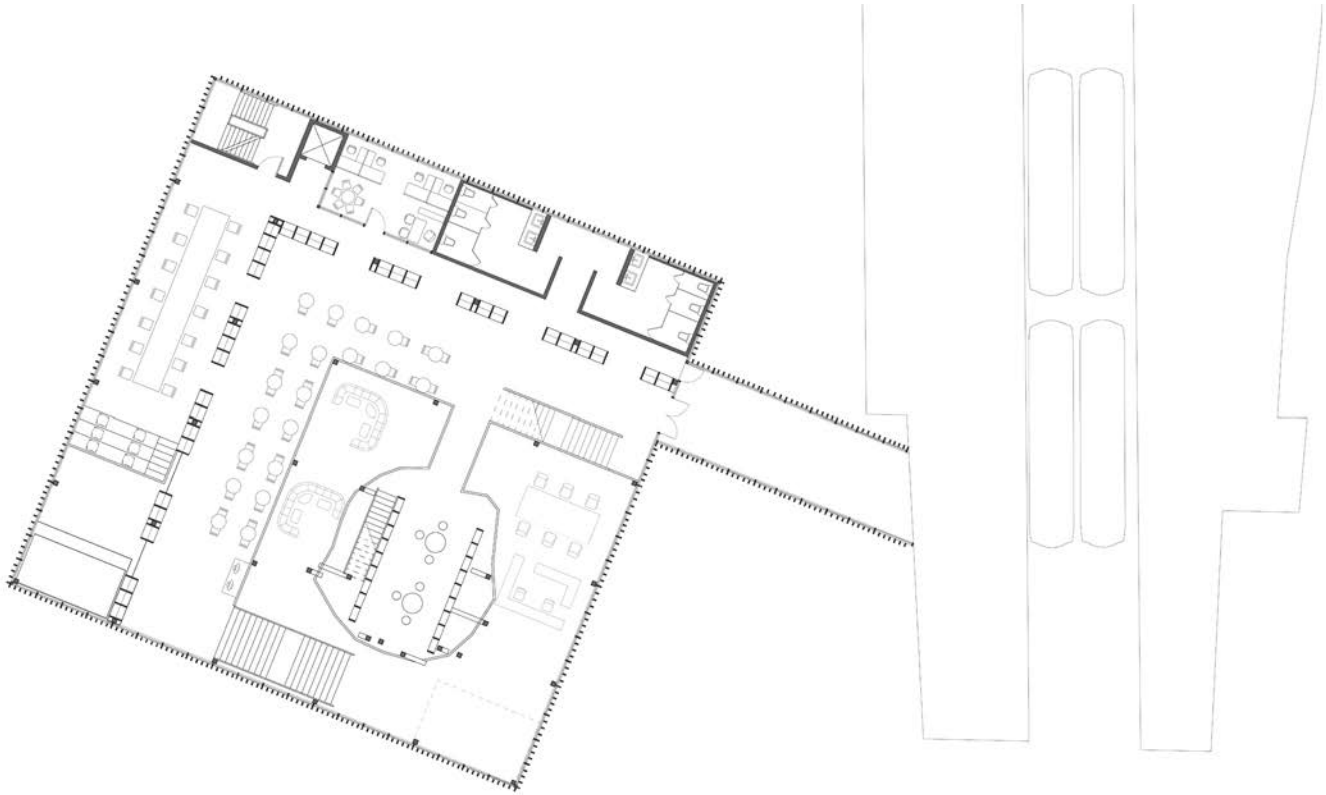
Connecting with the train station and sidewalks



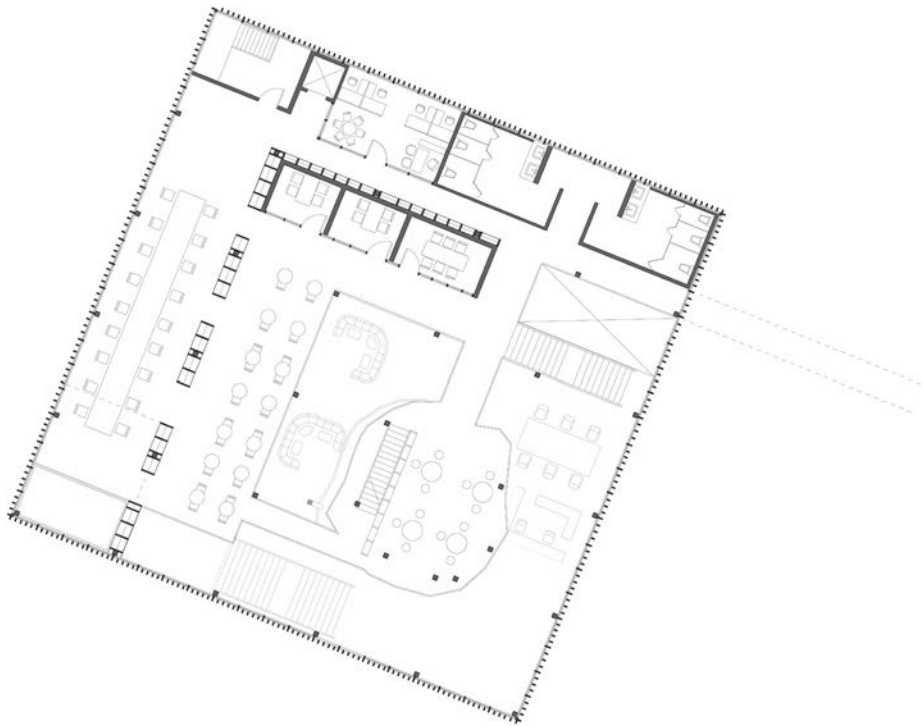
Site Plan + First Floor Plan



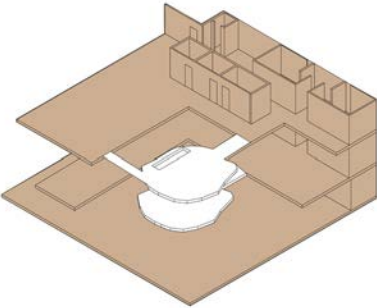
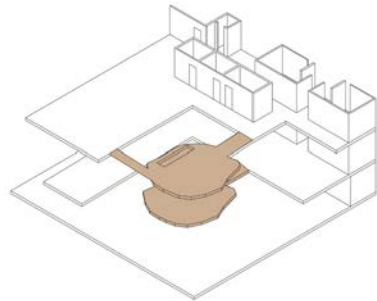
Exploded Program Diagram
Every floor has both private and public reading areas in order to serve people with different needs



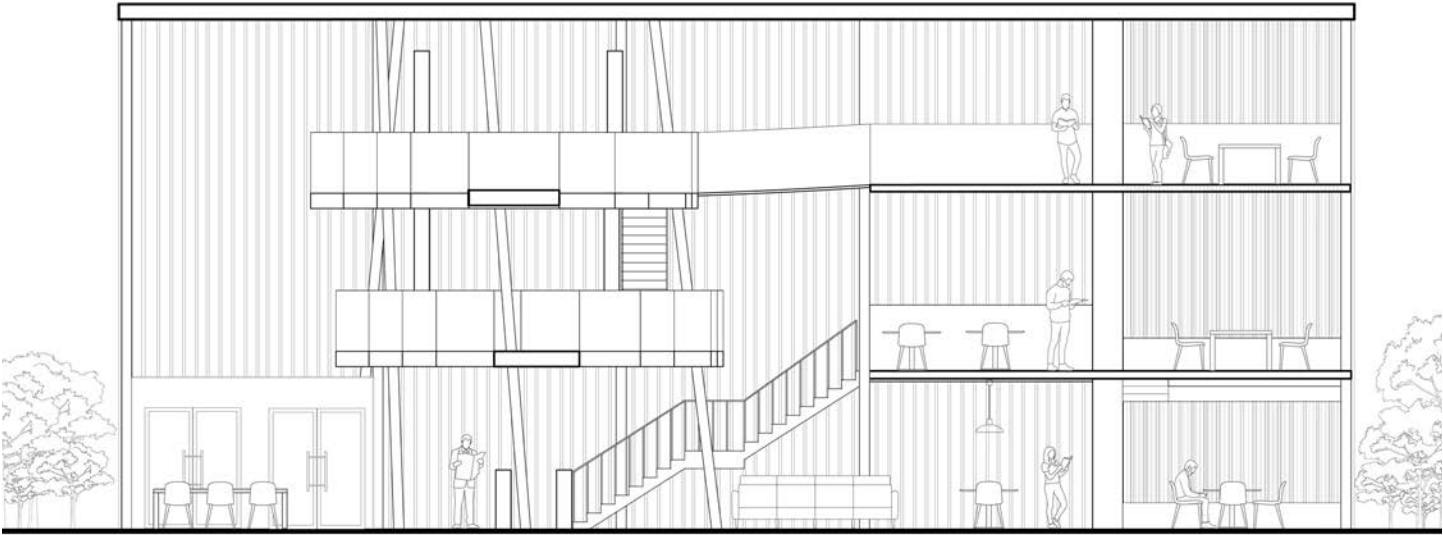
Second Floor Plan



Third Floor Plan



Irregular vs Regular



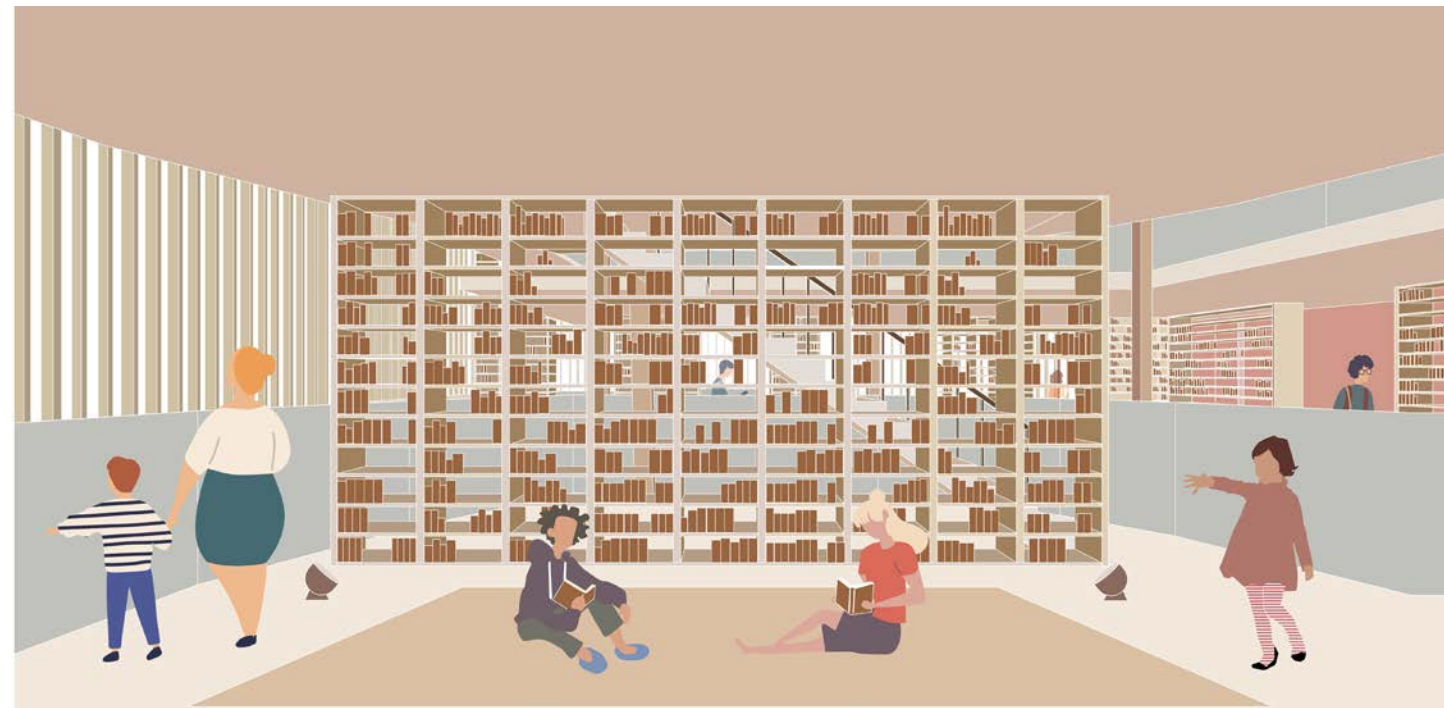
Section AA



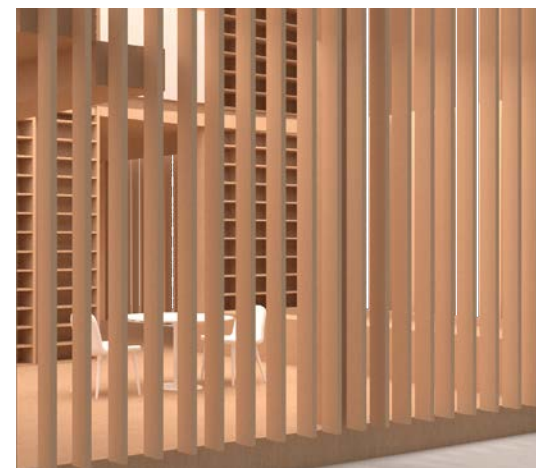
Interior render of the entrance



Interior render of the private reading area
Bookshelves served as a wall to divide spaces but also it connects the spaces by books



Interior render of the middle "sculpture" part of the library, serves for children's library



The facade is made with wood fins and glass to provide shades for the interior and block some views from the exterior. When people walk around the building, different parts are visible according to where people stand outside of the box.



SEAM SCHOOL

AN ARCHITECTURE SCHOOL

ACADEMIC PROJECT
IIT 5TH YEAR STUDIO, FALL 2021

SITE: CHICAGO, IL

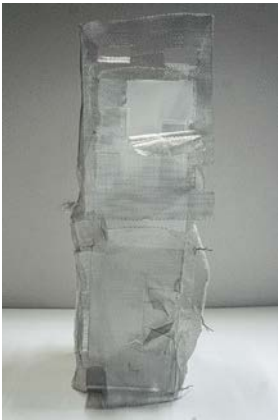
PROFESSOR: JOHN RONAN

STUDENT ASSOCIATE: YONGWON JEONG TIFFANY CHANG

ROLE IN THE PROJECT: CONCEPT AND DESIGN DEVELOPMENT, SITE ANALYSIS AND DESIGN,
PROGRAM RESEARCH, SITE RENDER, 3D MODEL, PHYSICAL MODEL



Exterior Render

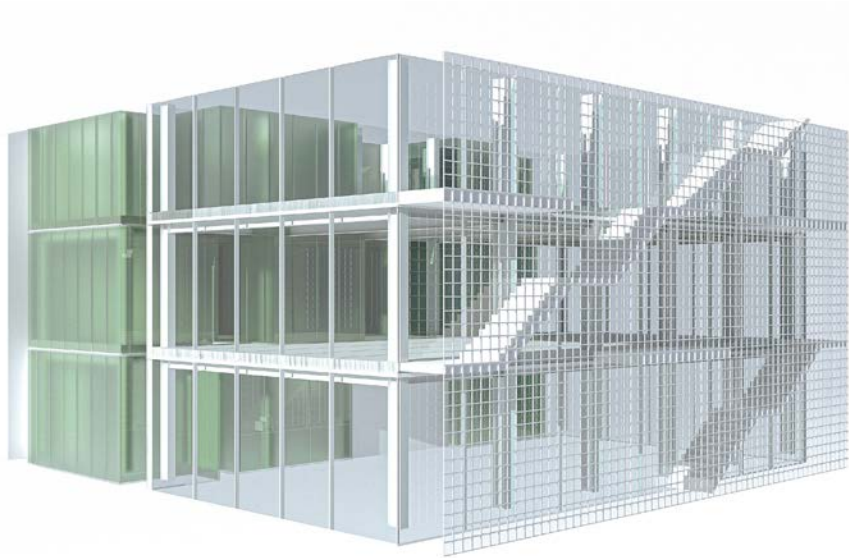


Spatial Icon(Concept Model)

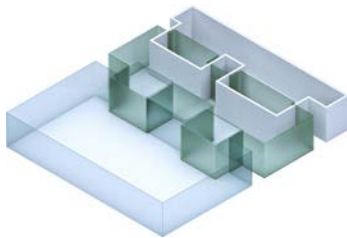
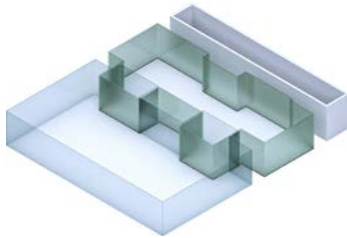
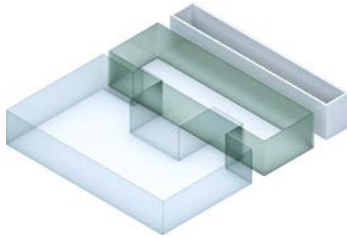
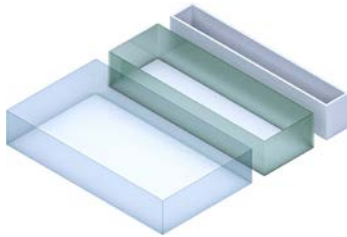


Spatial Icon(Concept Model)

This project explores the architectural concept of layering. Layers of materials merge and separate, creating distinct spatial zones that accommodate the school's educational activities. An architectural education is about the process of layering new skills and experiences over the course of five years. Young architects learn to think critically, to communicate ideas, and to develop a creative process. These core skills are layered with unique educational experiences - career development, travel, peer learning – to prepare them for a career in architecture. Our design encourages students and faculty to explore and rethink relationships between studio, making, research, and classroom learning.



Critical Section

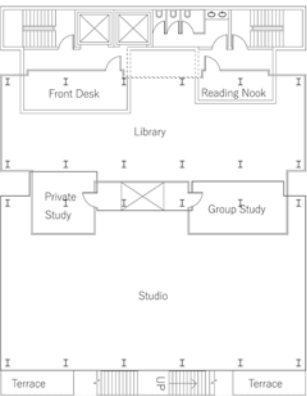


Concept Diagram



Section Perspective

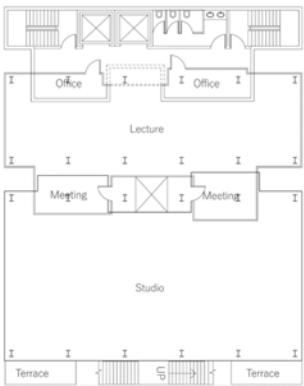
The building is divided into three primary spatial zones defined by material layers that vary in opacity. The studio, which needs abundant daylight, is located in the southernmost zone and enclosed in clear glass. Learning resources, such as the model shop and library, occupy the middle zone and are enclosed in translucent glass for privacy, acoustic separation and daylight needs. Building support functions are located in the northernmost zone abutting an adjacent structure, and are enclosed in concrete.



Library Floor Plan



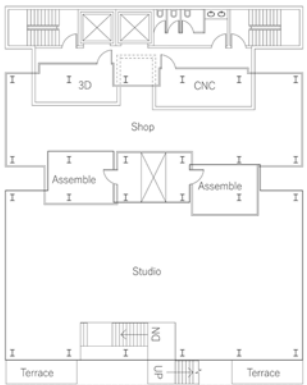
Library Interior Render



Studio Floor Plan



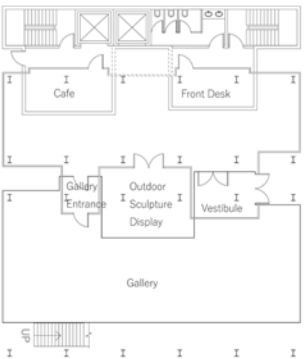
Studio Interior Render



Wood Shop Floor Plan



Wood Shop Interior Render



Gallery Floor Plan



Gallery Interior Render



Seam Render

When looking down from central bridge on each floor, users see the layering of the seam spaces all the way down to the ground level. At these seams, the building's structure and systems are exposed to view, where students can see the inner workings of the building; thus, the building is transformed into a learning tool.



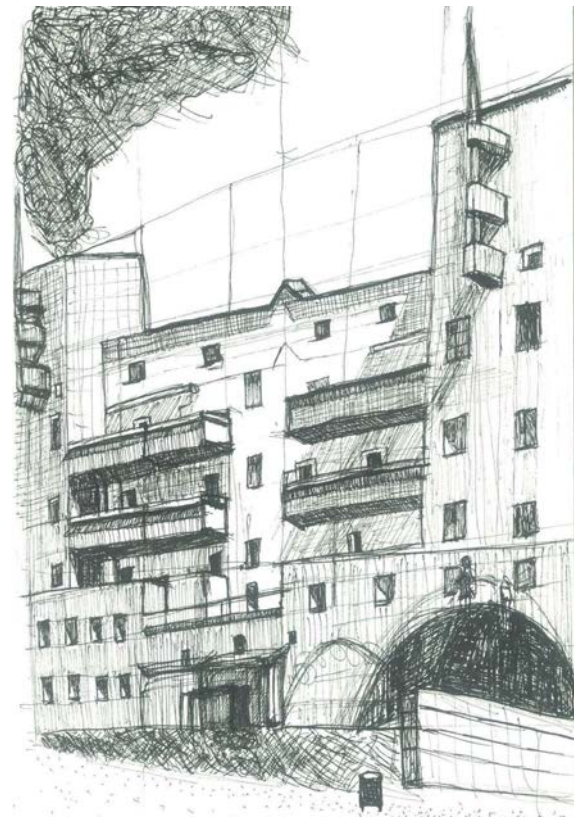
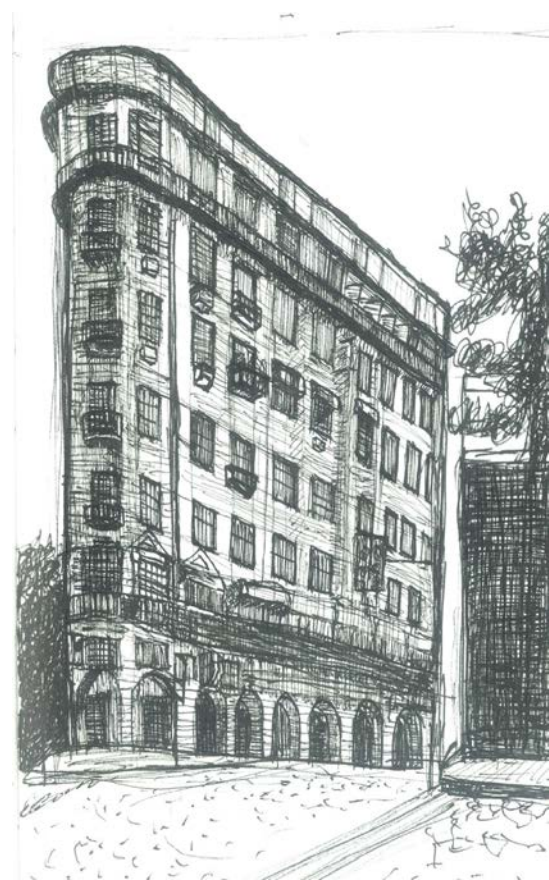
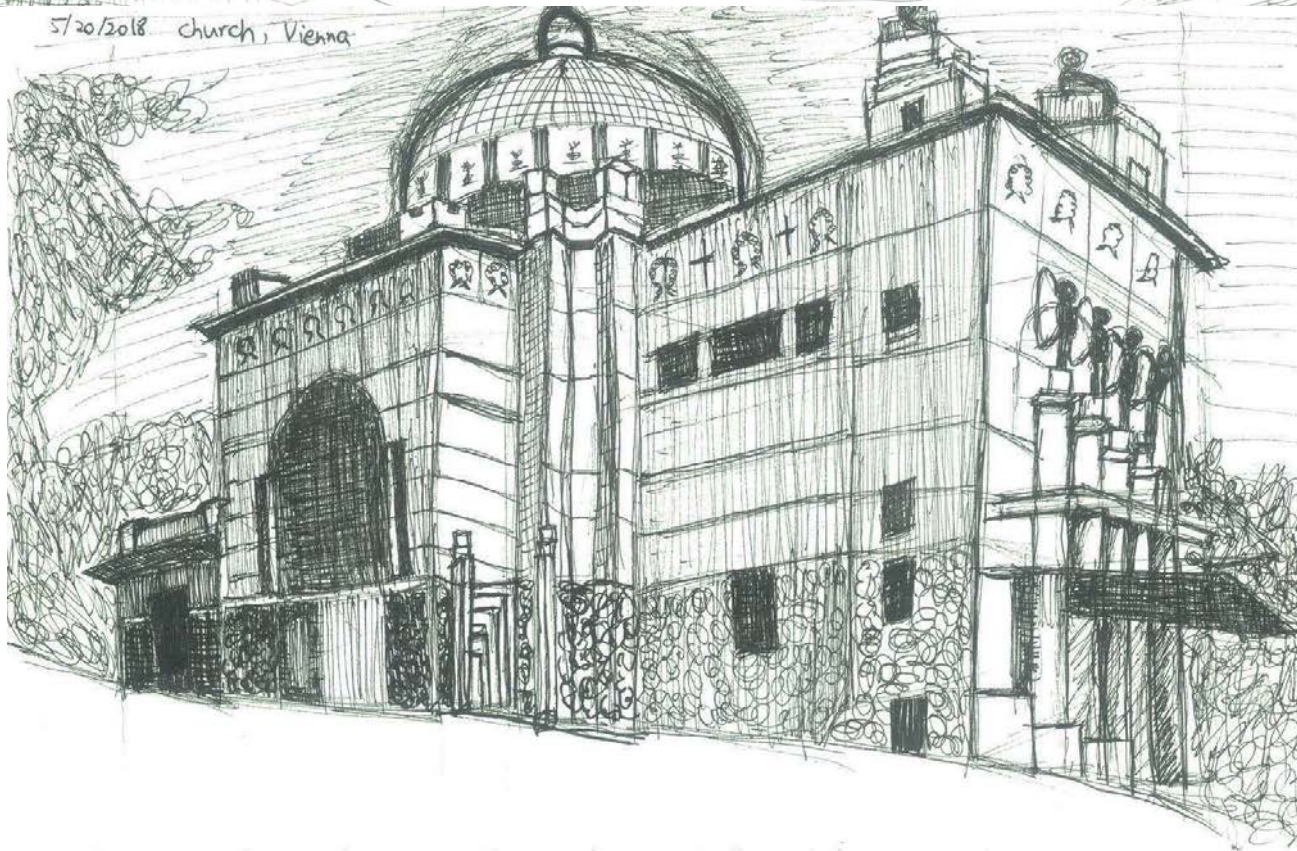
Section Model

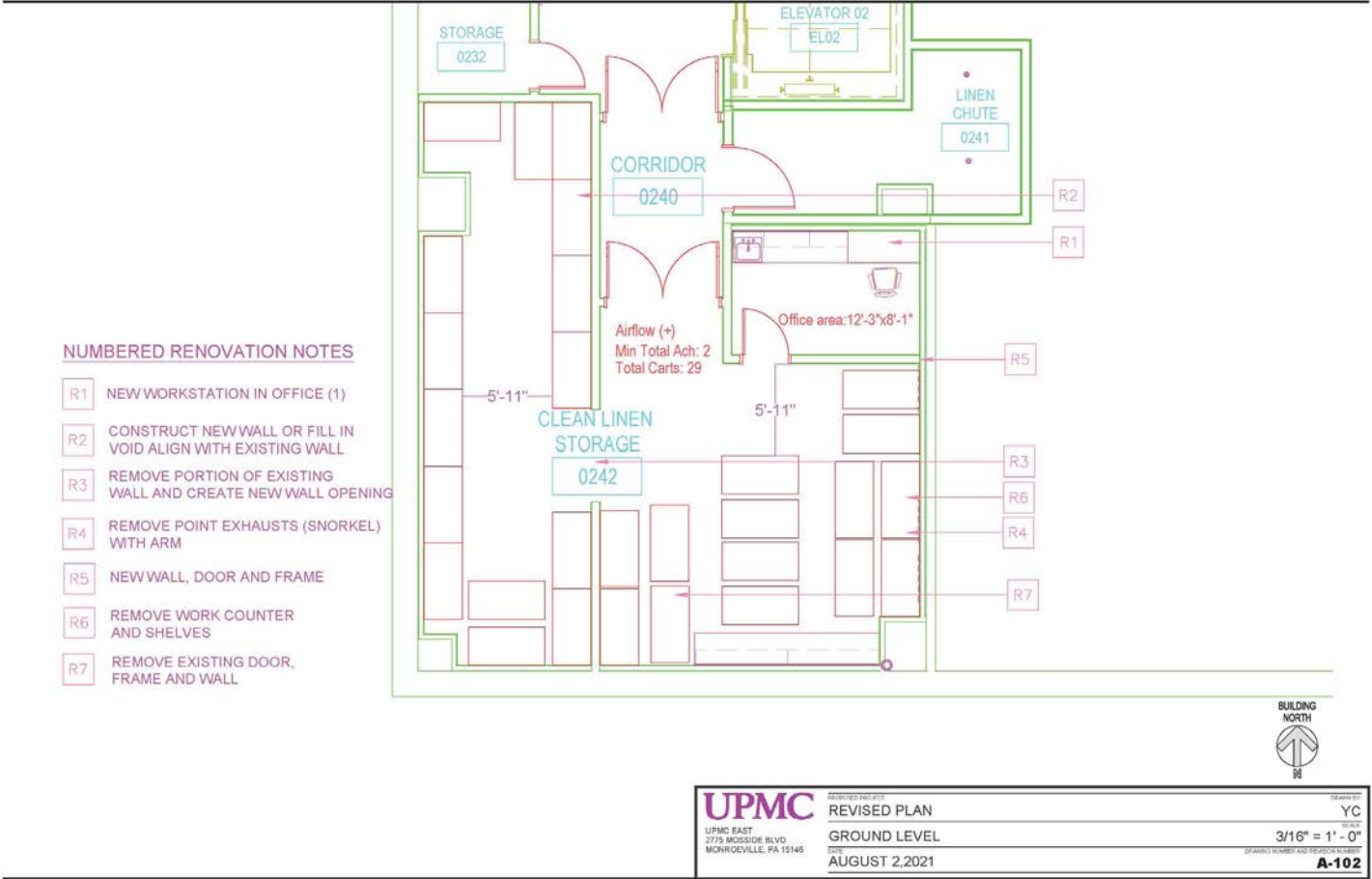
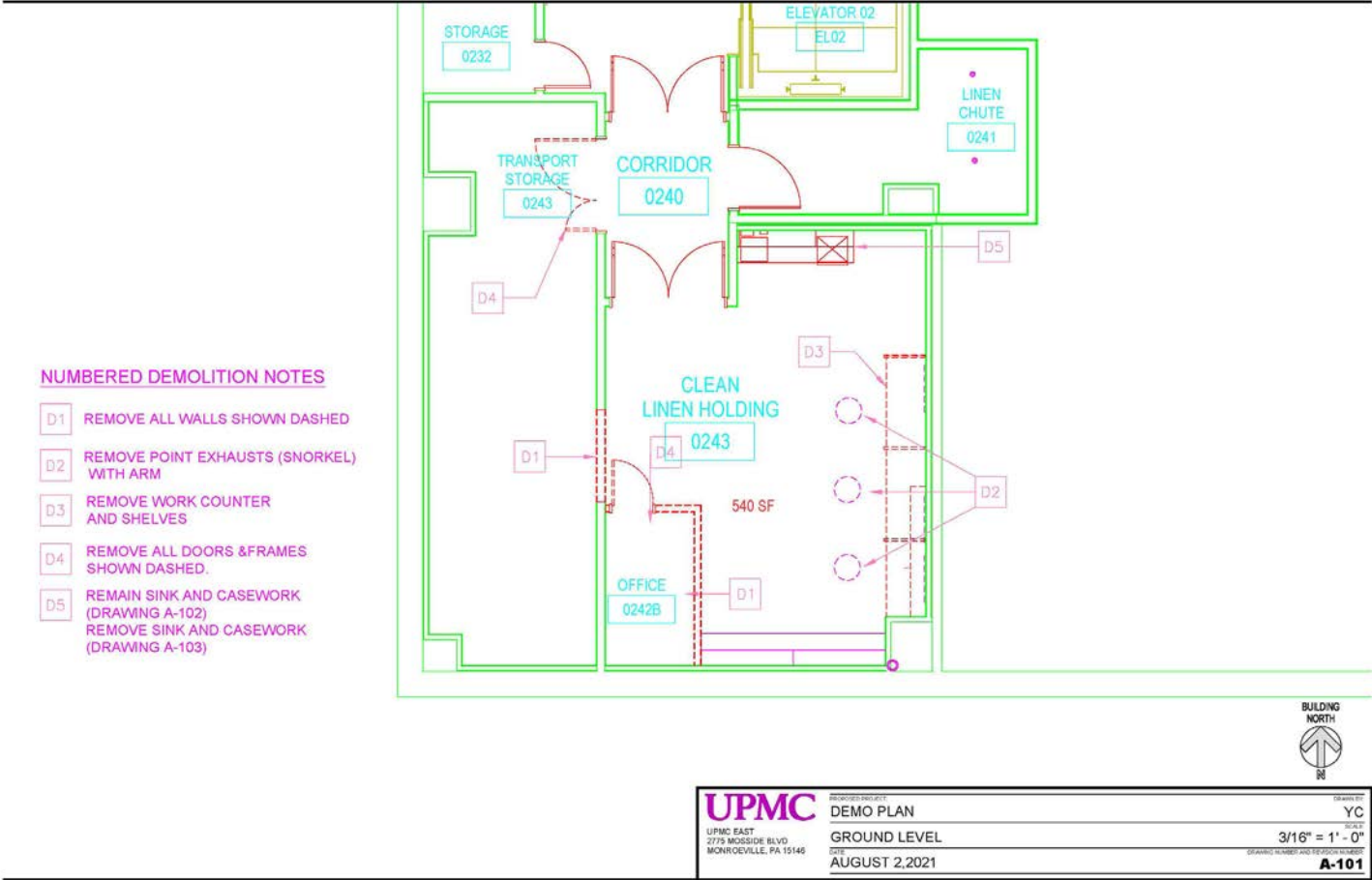
The material and spatial layering within the school extends out to the city on the building's southern edge, where exterior stairs and balconies on the south facade form a seam between the building and the city. This seam connects the studios vertically, while providing students a space to experience the city without leaving the building.

5/22/2018



5/20/2018 church, Vienna





Thank you!