

# PORTFOLIO

SHAHZADI PADDA

2022-2024

EDUCATIONAL, PROFESSIONAL, and PERSONAL WORKS

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ABOUT

I am passionate about designing community spaces and civic centers, with a focus on sustainable practices, materiality, and biome response. I look forward to broaden my understanding of these disciplines and integrating them into my future endeavors.

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[shahzadipadda.wixsite.com/portfolio](http://shahzadipadda.wixsite.com/portfolio)



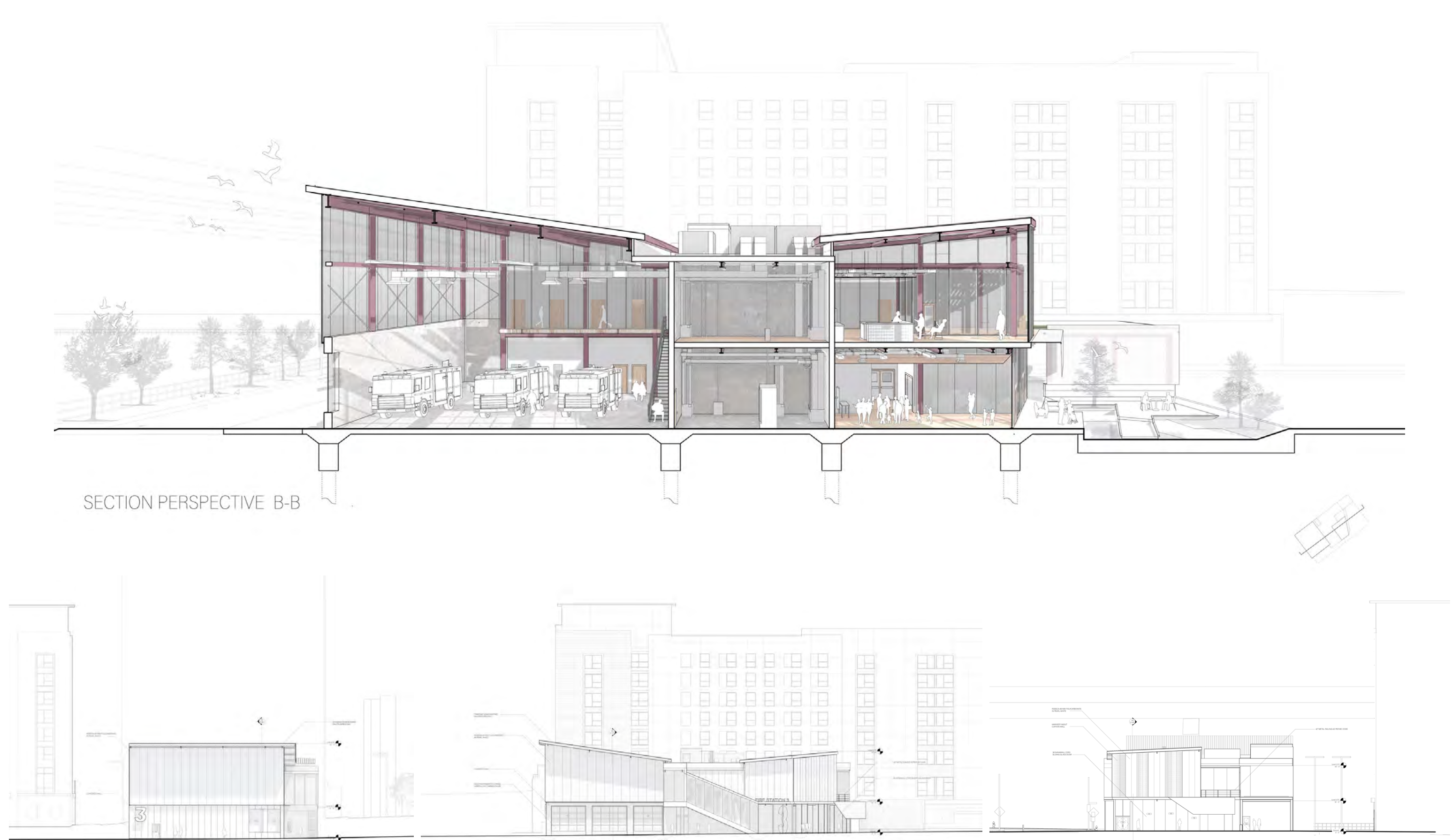
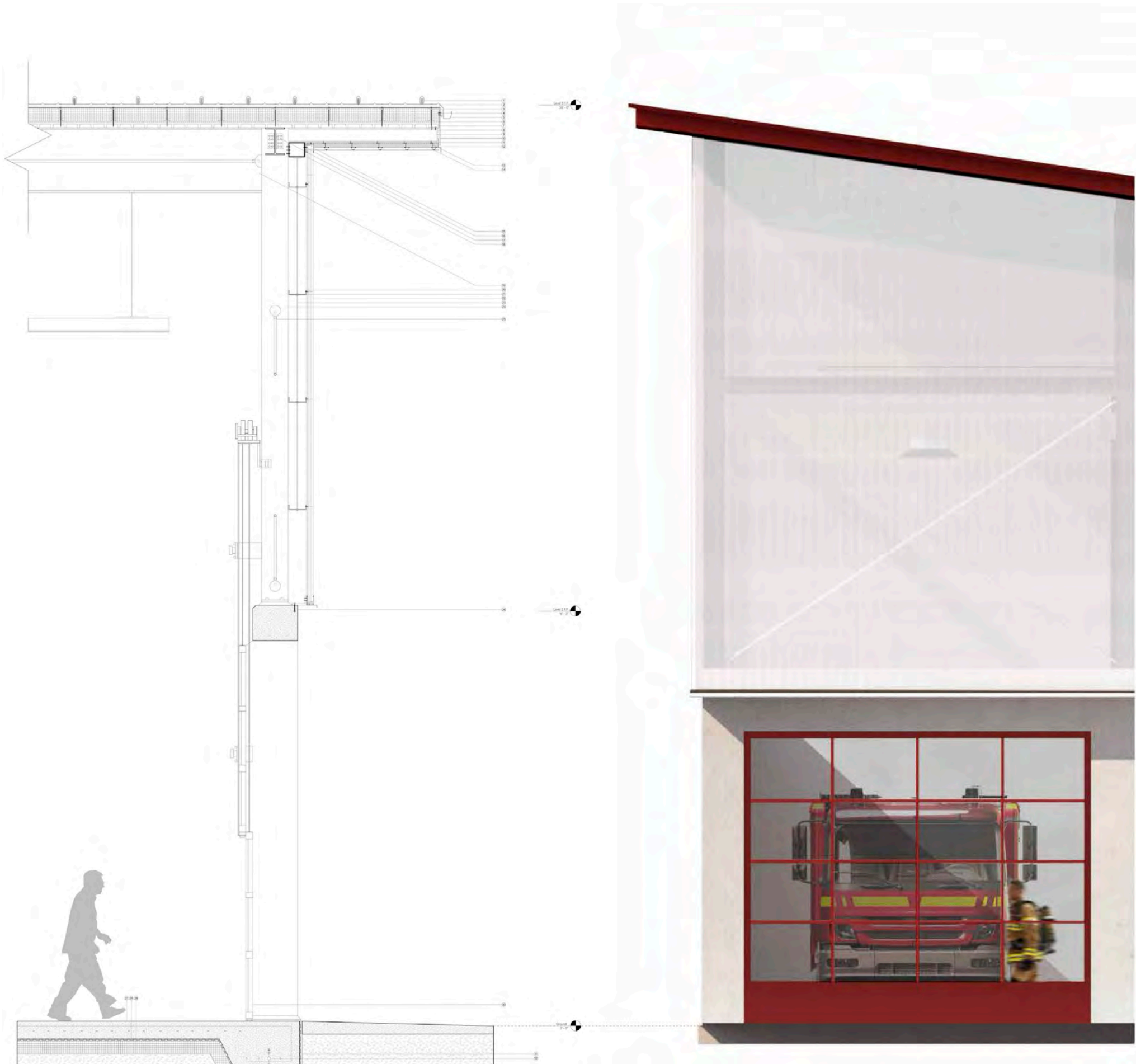
# FOURTH-YEAR

FALL 2024

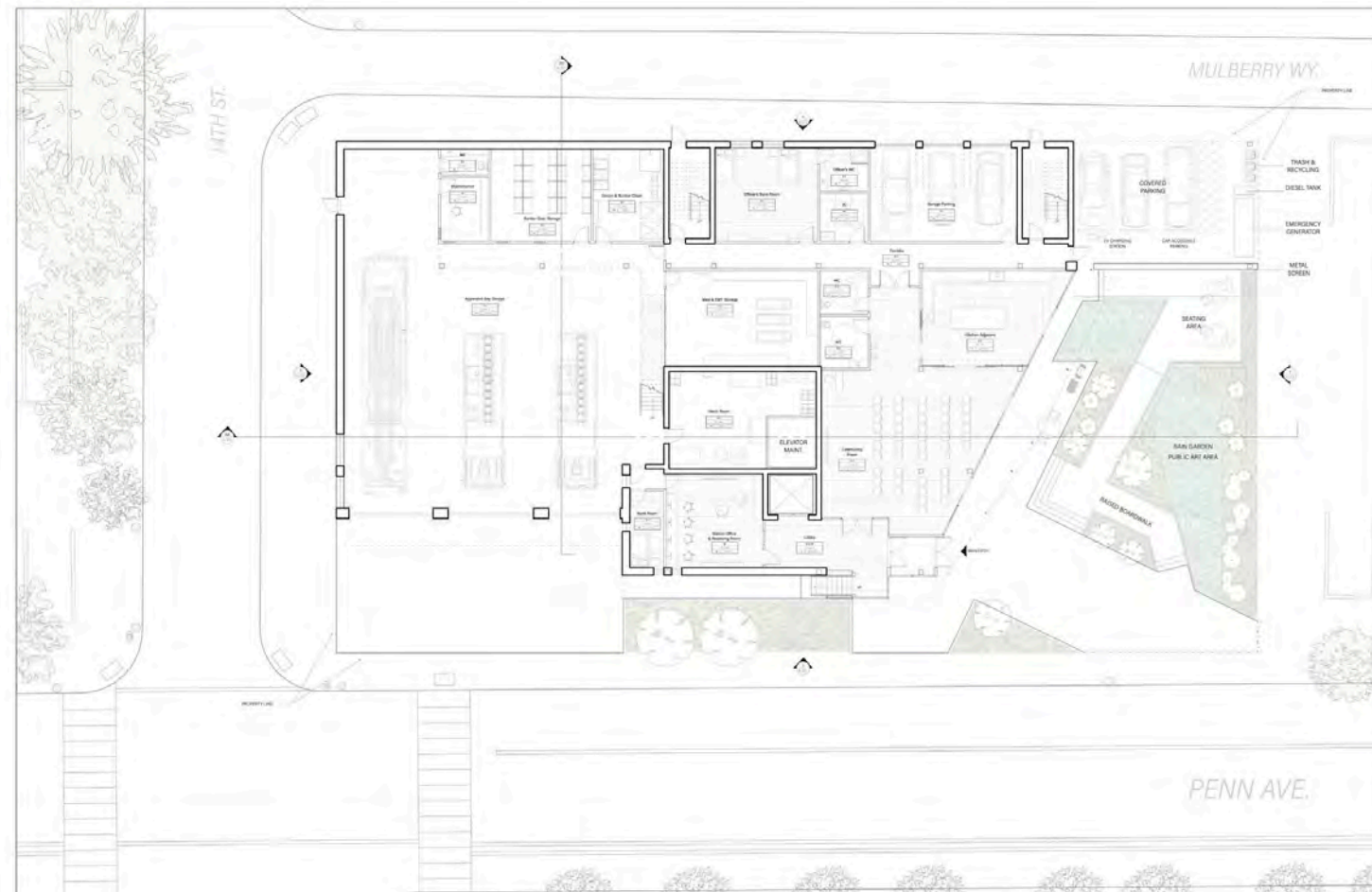
## FIRE STATION NO.3

In the evolving landscape of the Strip District, where private development thrives with commercial spaces and residential units but leaves little room for community engagement, the design for this fire station emerges as a beacon of connection. Designed with transparency and accessibility in mind, it features flexible spaces for public programs, inviting residents to gather and collaborate. An outdoor lunch spot and meeting areas blend seamlessly with indoor facilities, fostering a sense of common ground. This fire station not only serves as a critical service but also as a vibrant community hub, bridging the gap between public amenities and private spaces, celebrating accessibility amidst the tension of development.

IN COLLABORATION WITH:  
ELLA MAXWELL, DELANEY RICE, & BELA SALAZAR-HARPER

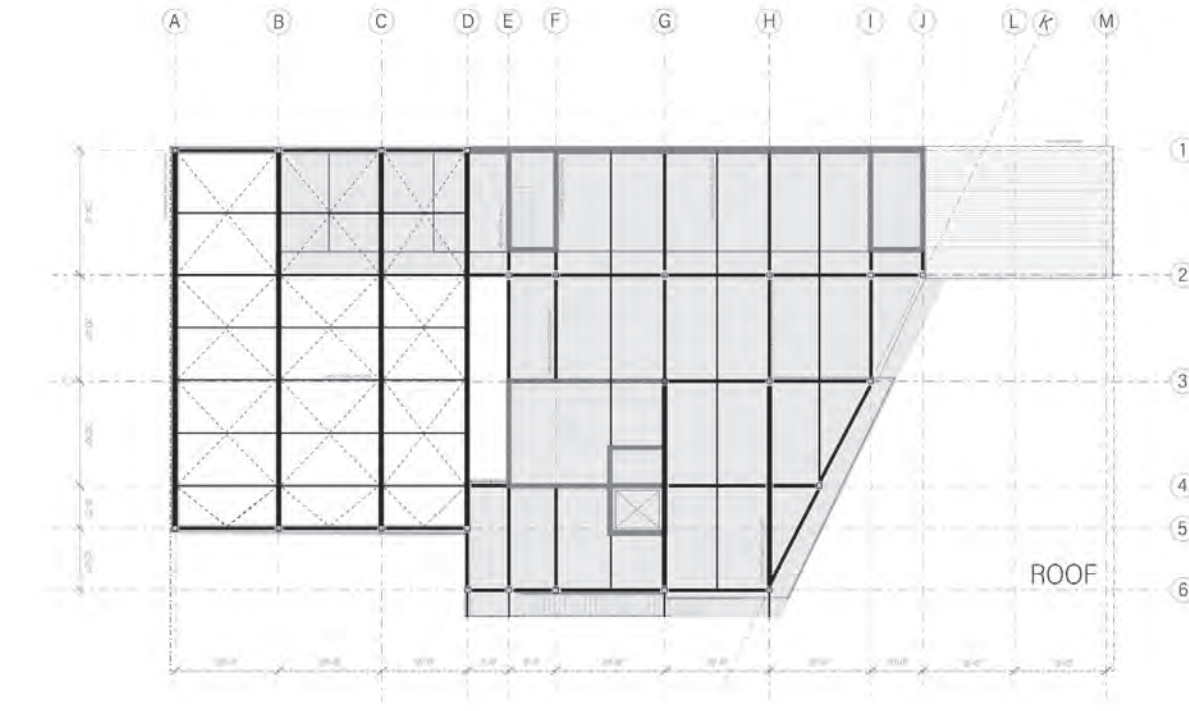
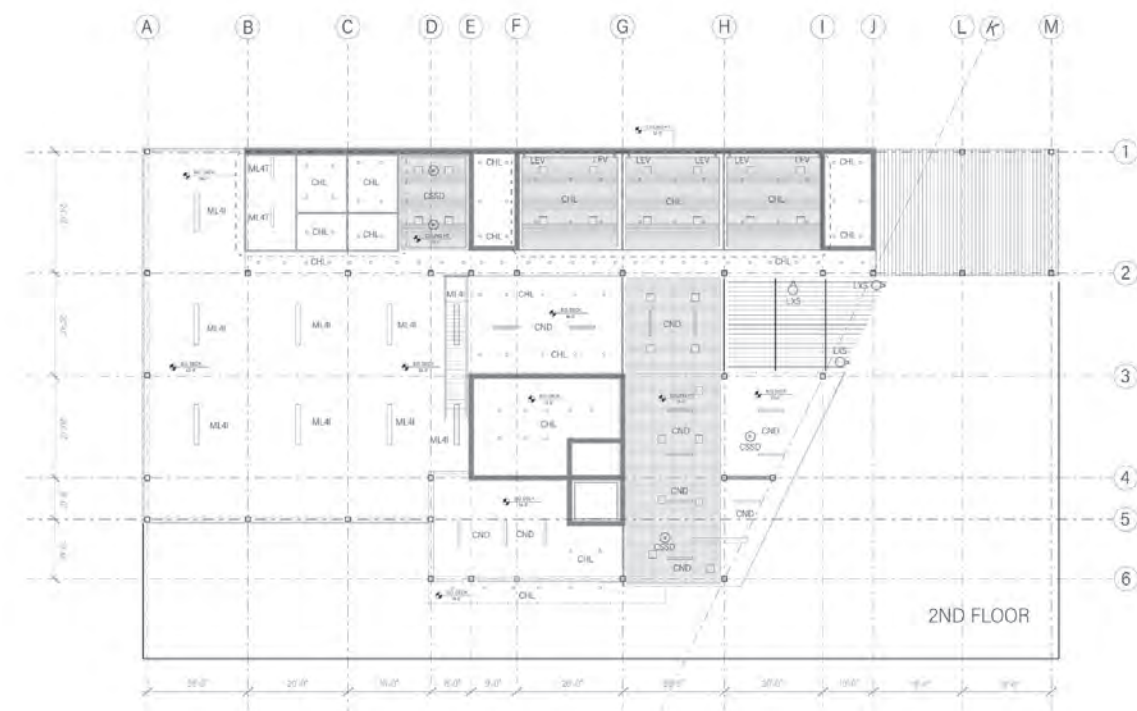






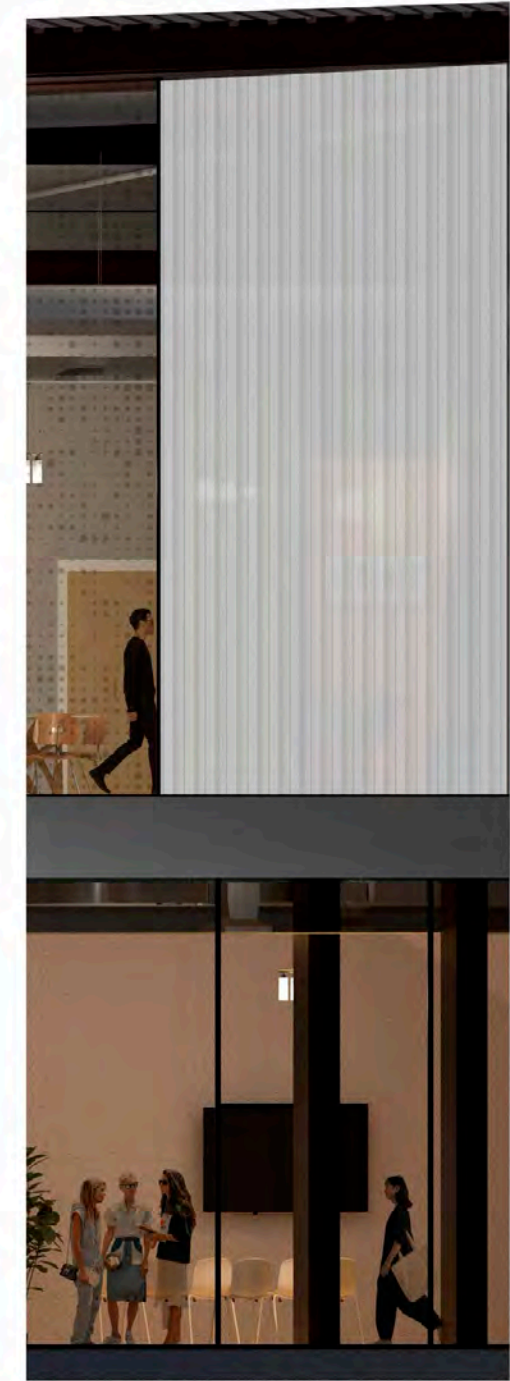
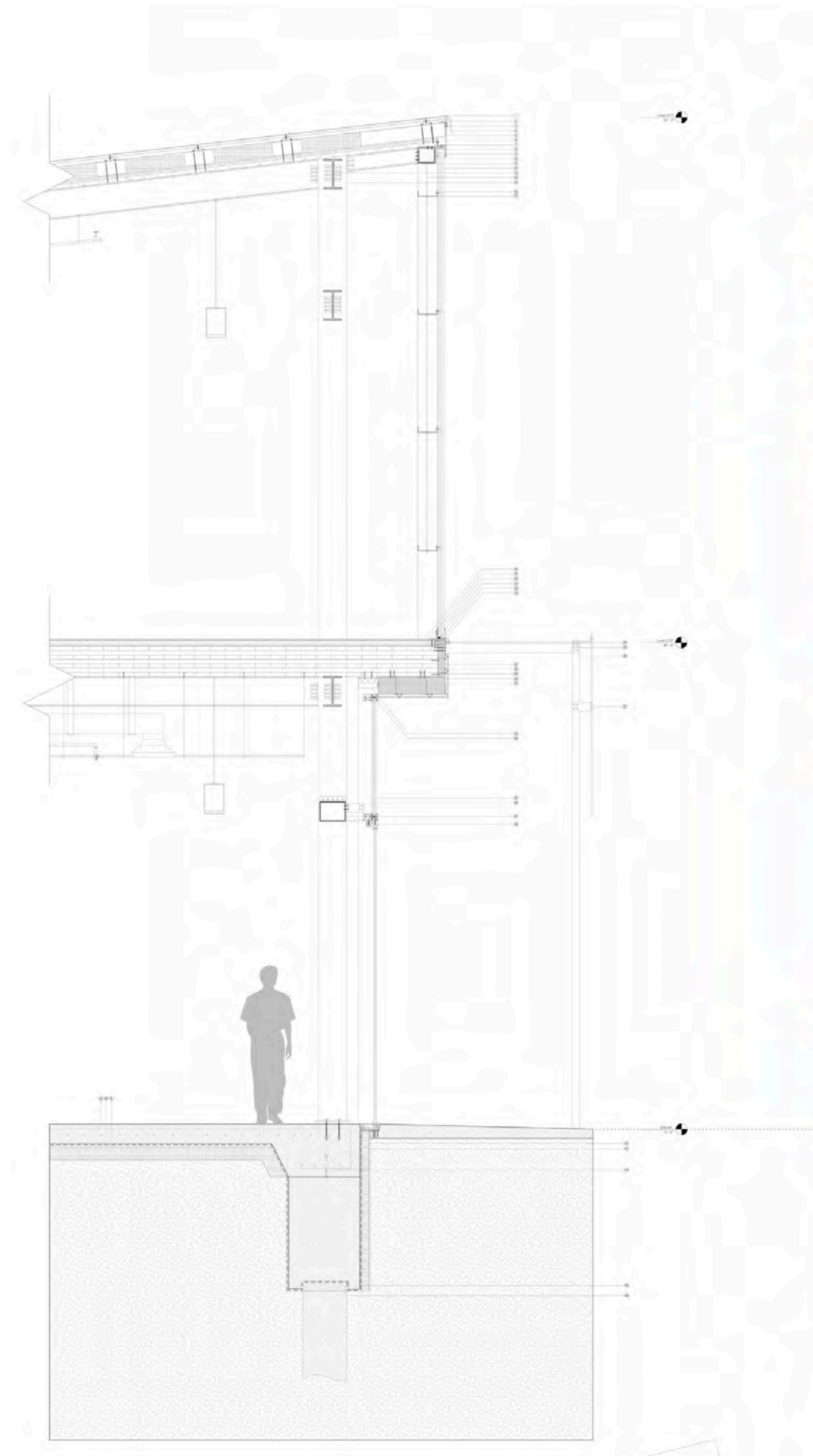
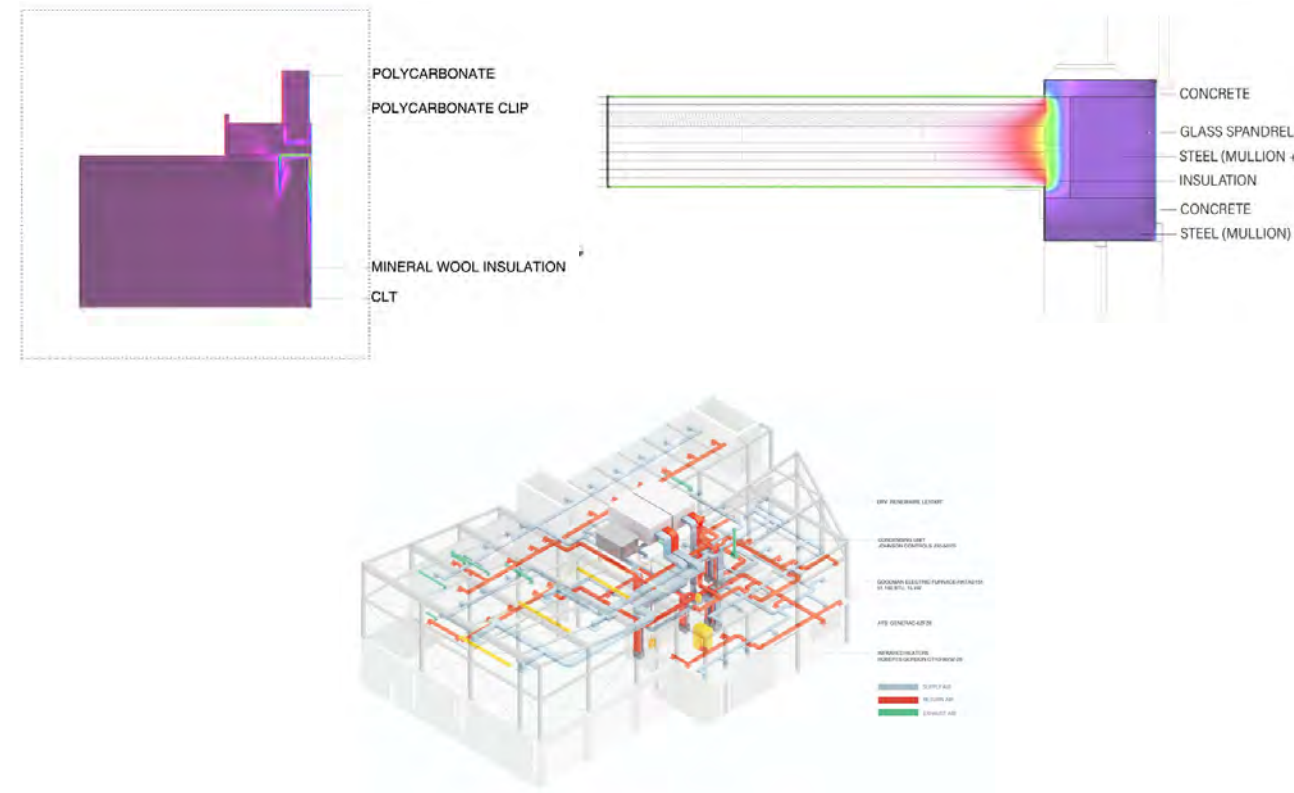
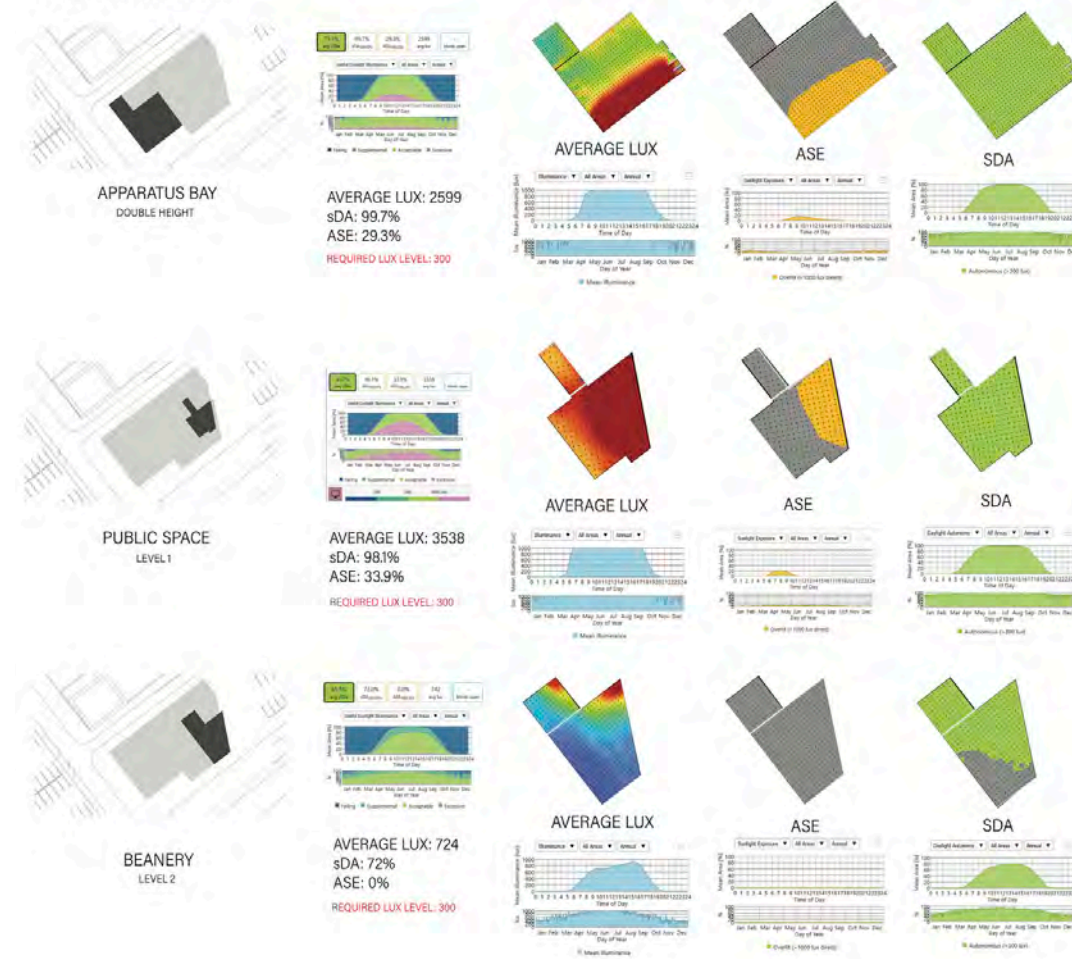
PERMANENT CHAPTERS BY MEANS OF EXPRESS									
OCCUPANCY TYPE	OCCUPANCY LOAD TOTAL	EXITS REQUIRED	DOOR WIDTH	MIN (DST)	MIN (DST)	MAX TRAVEL DISTANCE	COMMON PATH OF EXGRESS	SEASIDE CORRIDOR	SEASIDE CORRIDOR
RE	30	2	MIN (DST)	MIN (DST)	250'	75'	50'		
R	36	1	MIN (DST)	MIN (DST)	300'	100'	50'		
S-1	37	1	MIN (DST)	MIN (DST)	250'	100'	50'		
A	228	2	MIN (DST)	44'	250'	75'	50'		

PERMANENT CHAPTERS BY MEANS OF EXPRESS		
OCCUPANCY TYPE	OCCUPANCY TYPE	REQUIRED FIRE SEPARATION (SPRINKLED)
A-2	S-1, B, R	110'
R	S-1, B, A-2	110'
S-1	B	None



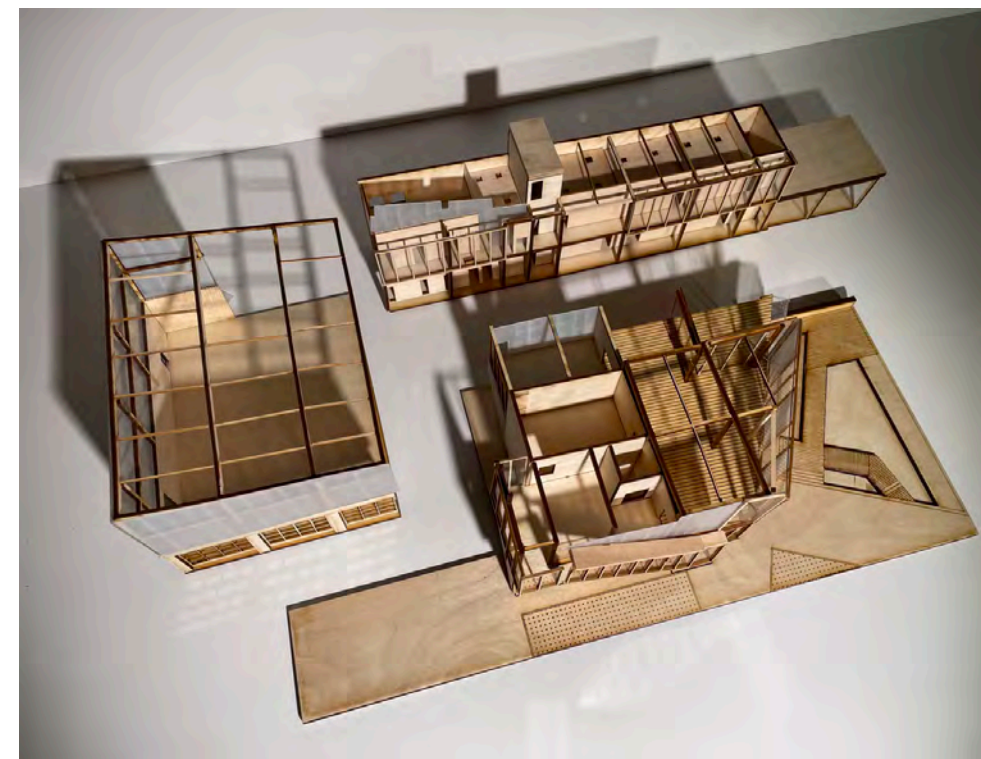
MATERIAL PERFORMANCE ANALYSIS

AREAS OF ANALYSIS



- 1. STANDING SEAM ROOFING: DALTON SERIES 1000
- 2. MET CHANNEL
- 3. CASCADE CLIP: FIBERGLASS THERMAL SPACER 4"
- 4. EAVE FLASHING
- 5. STEEL BRACKET
- 6. SQUARE RISER SUPPORT
- 7. SQUARE RISER COLUMN
- 8. SQUARE RISER COLUMN
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- 46. SQUARE RISER COLUMN





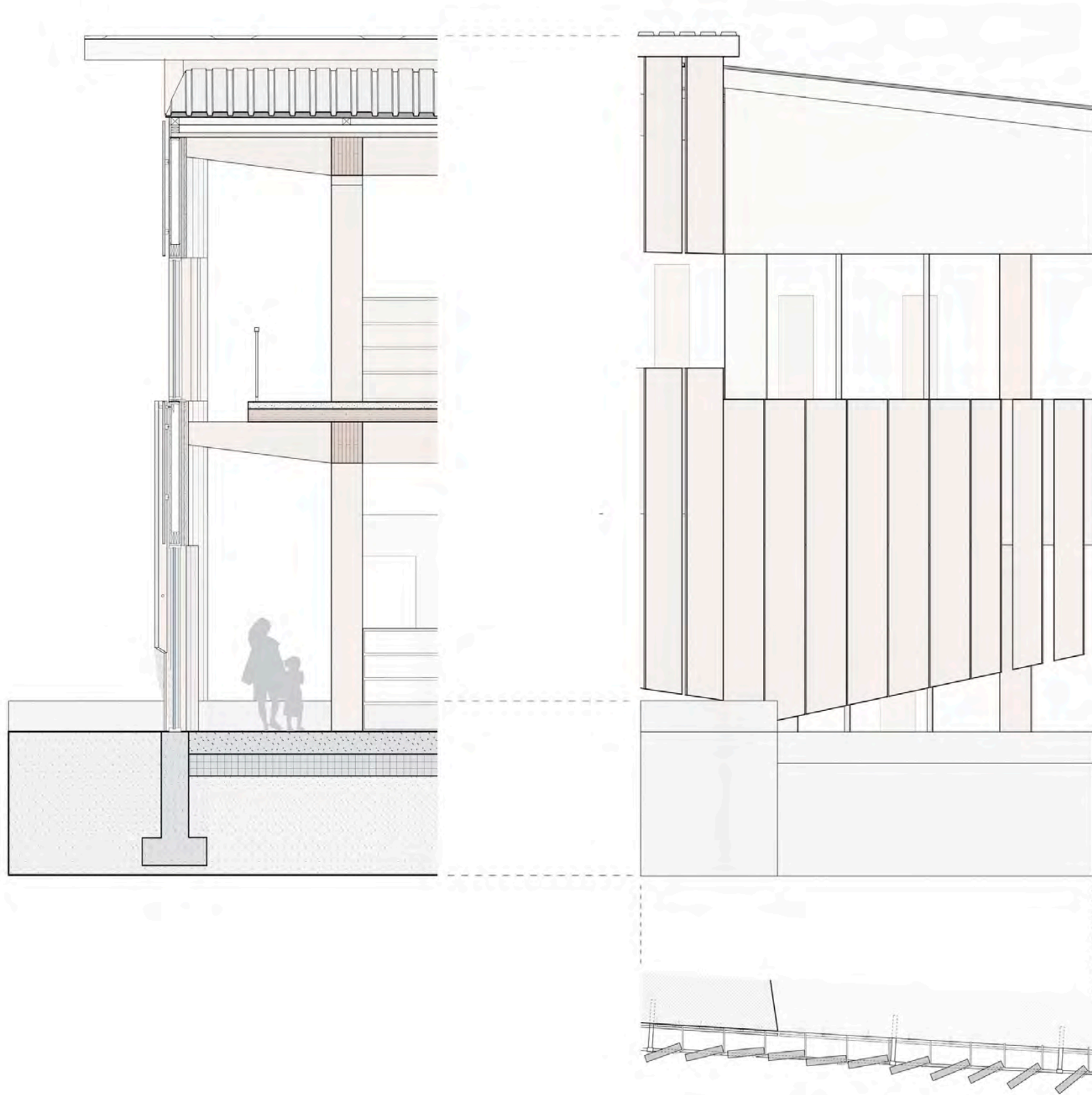
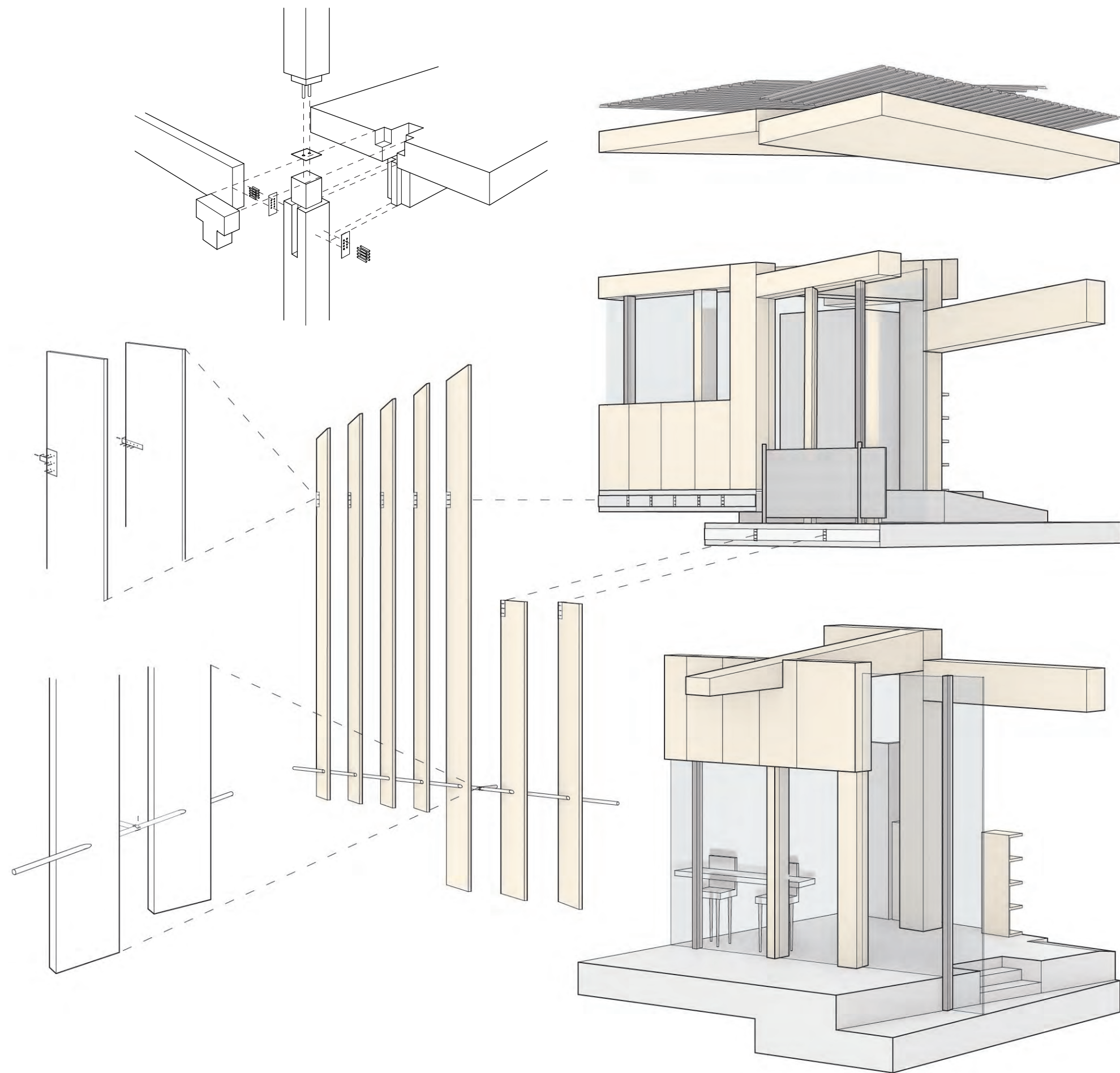


# THIRD-YEAR

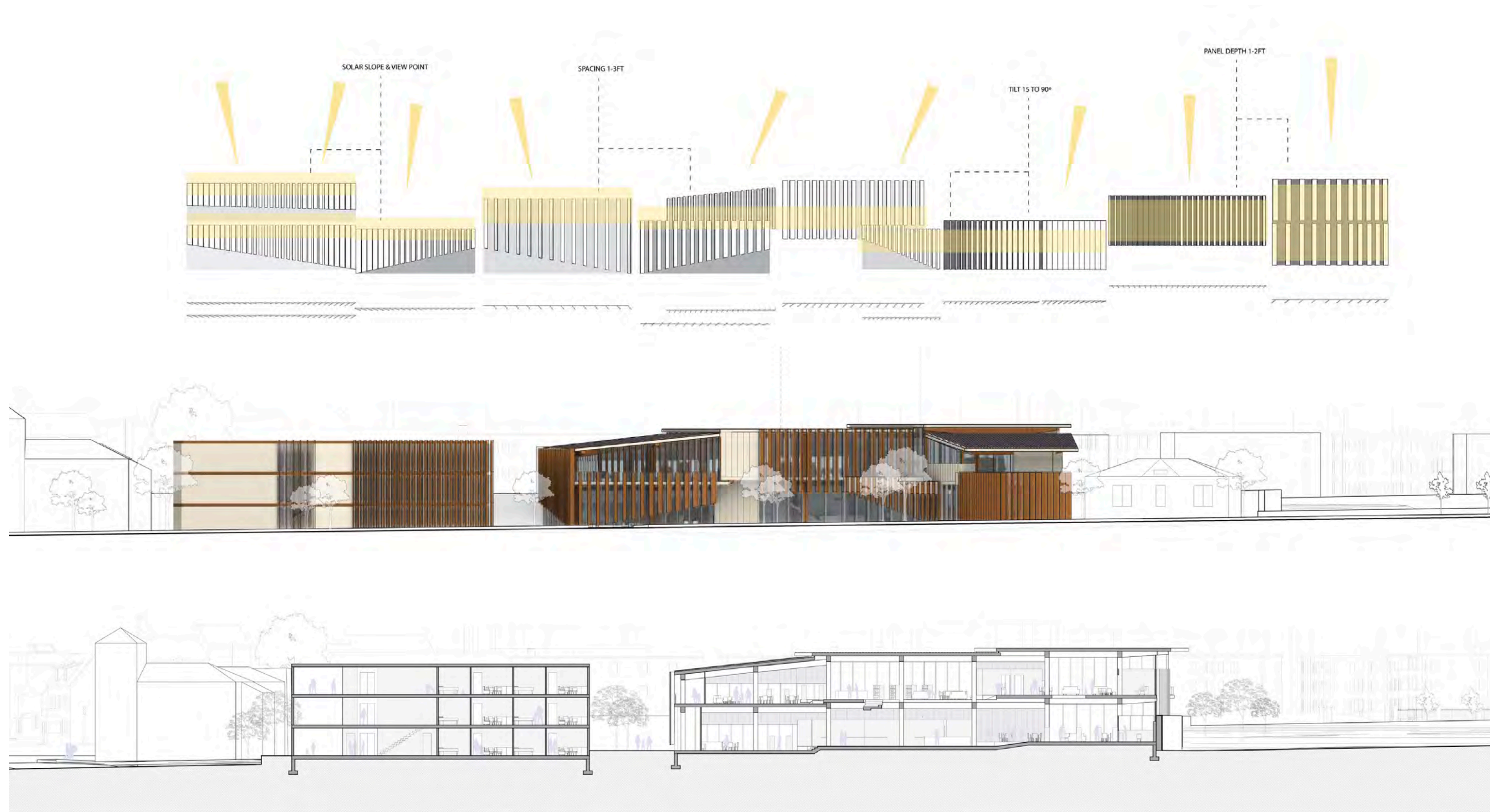
SPRING 2024

## COMMUNITY PAGES

Community Pages Library of Upham's Corner is a space dedicated to celebrating social, cultural, and educational life. This design works to combat the significant absence of green and public exterior programming in Upham's Corner by allocating a large plaza and quiet green spaces, while simultaneously enhancing public services provided by the library's interior. Here, the diverse communities of Upham's Corner converge for cultural, social, and educational events, celebrating connections with one another and fostering a sense of belonging and unity. Community Pages Library is designed as a beacon of collaboration and connection, enhancing urban life and community spirit while providing a vibrant junction where cultures collide and memories intertwine.









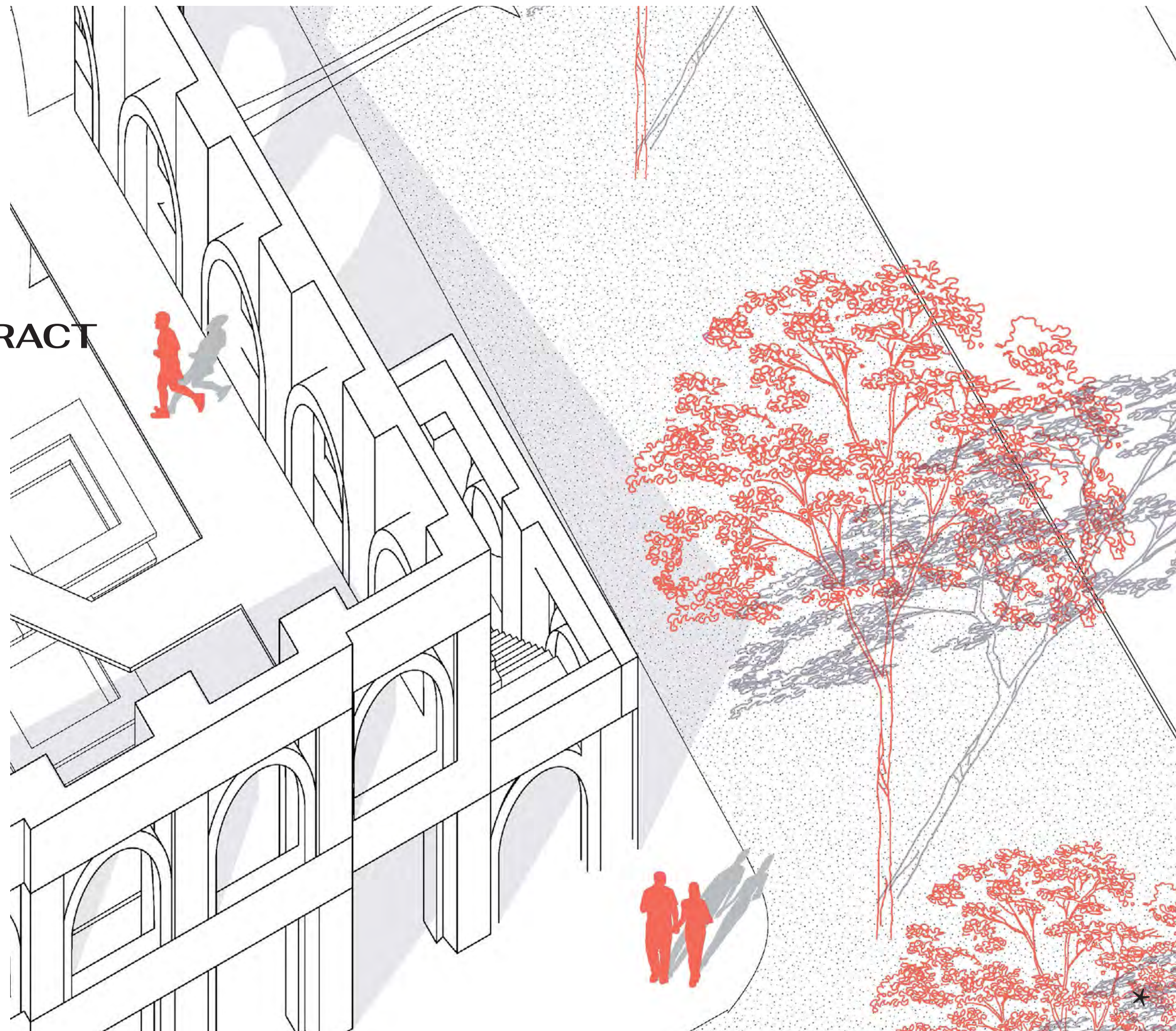
# THIRD-YEAR

FALL 2023

## PAUSE, CONNECT, INTERACT

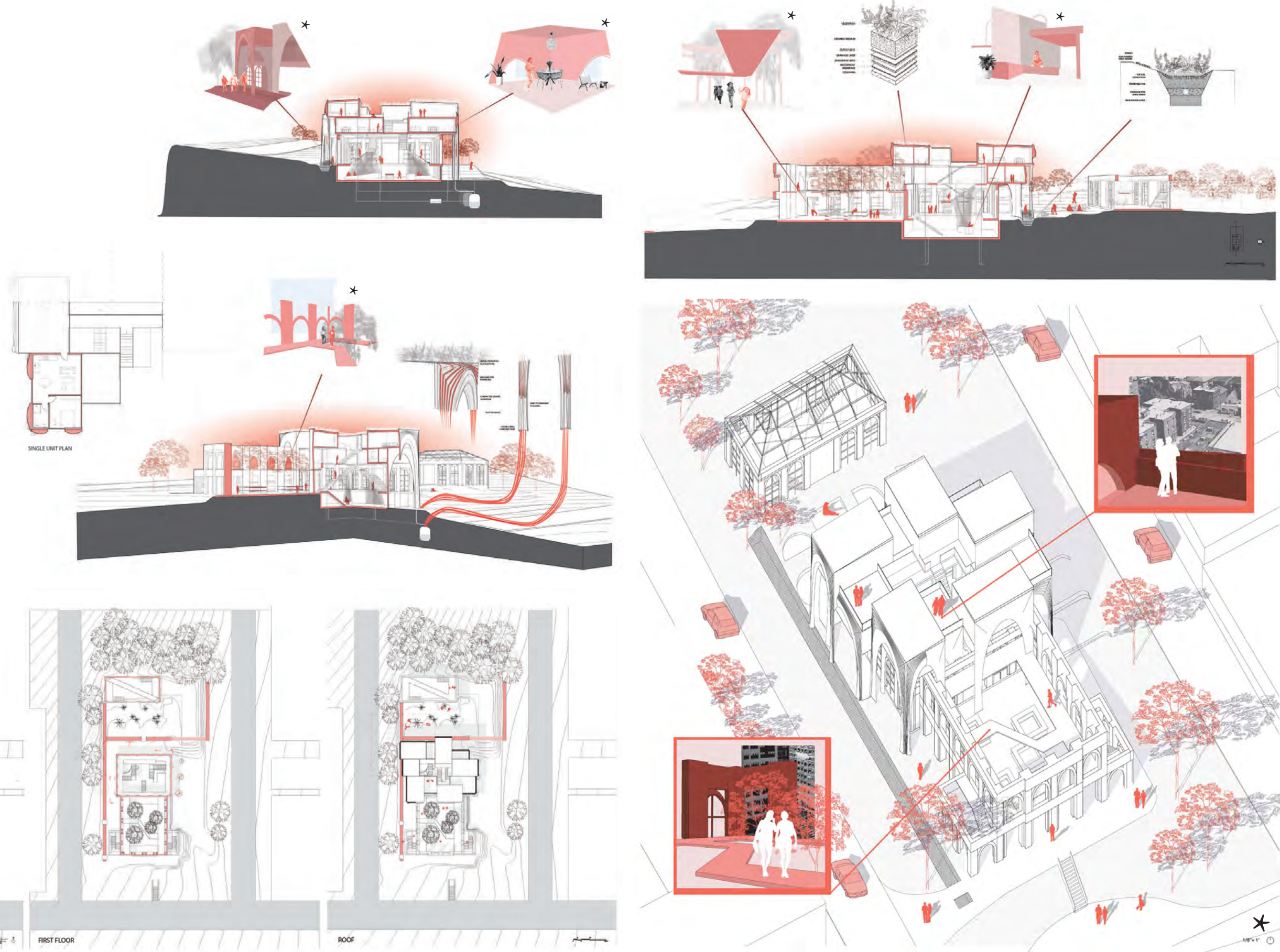
This project seeks to address Pittsburgh's lack of public and community-oriented space through the establishment of neighborhood nodes that embrace the key historical and cultural aspects of each site. Focusing on the Strip District, North Oakland, and downtown neighborhoods, we aim to establish urban pauses that build a network of social infrastructure and provide a curated set of urban resources which encourage public engagement and challenge existing degrees of public space. Our hope is for this project to inspire the expansion of similar public spaces throughout the rest of the city and to strengthen the social and cultural fabric of Pittsburgh.

IN COLLABORATION WITH:  
BELA SALAZAR HARPER (\*)  
ALL VIGNETTES & MAIN OVERVIEW AXONS

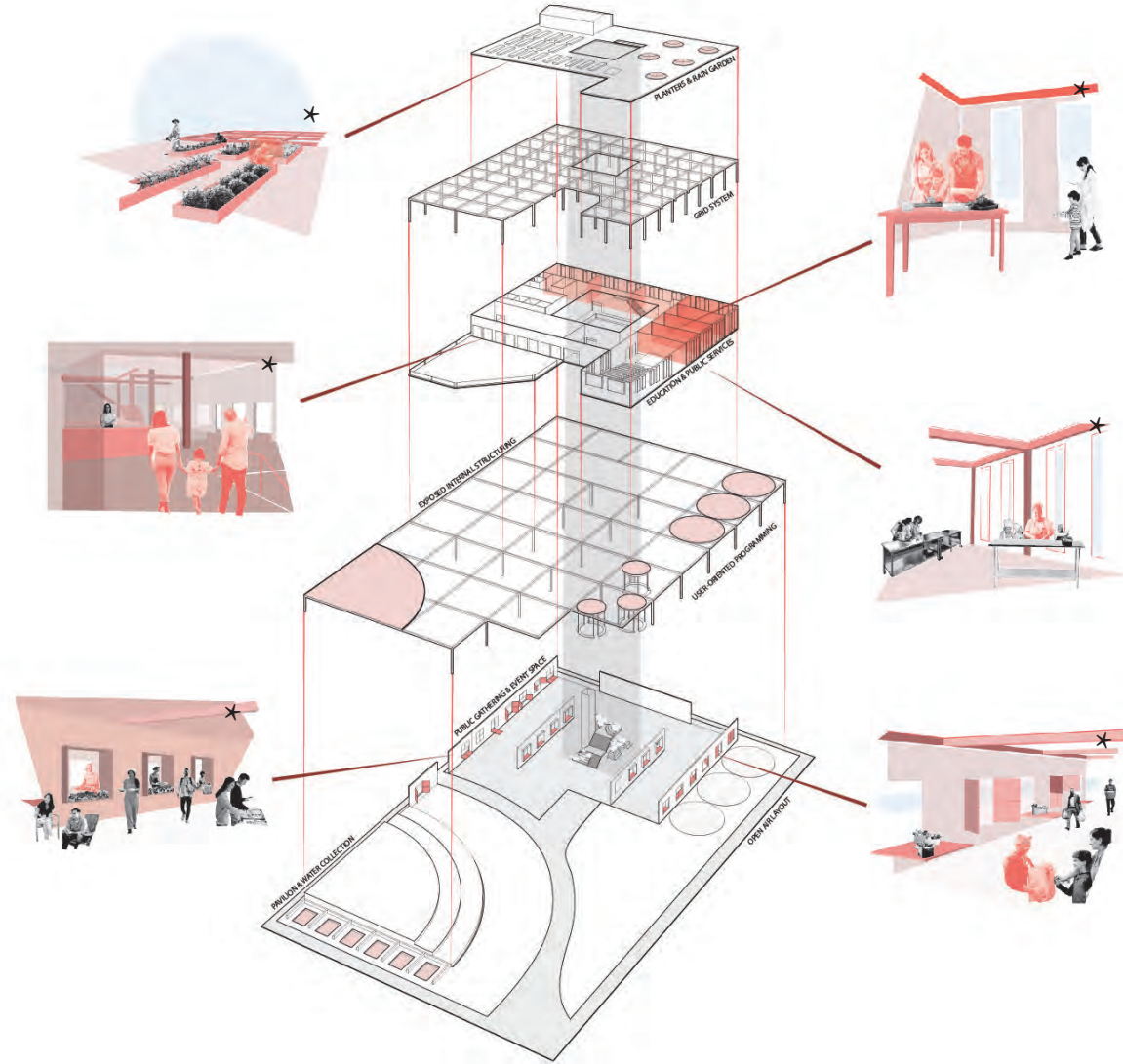
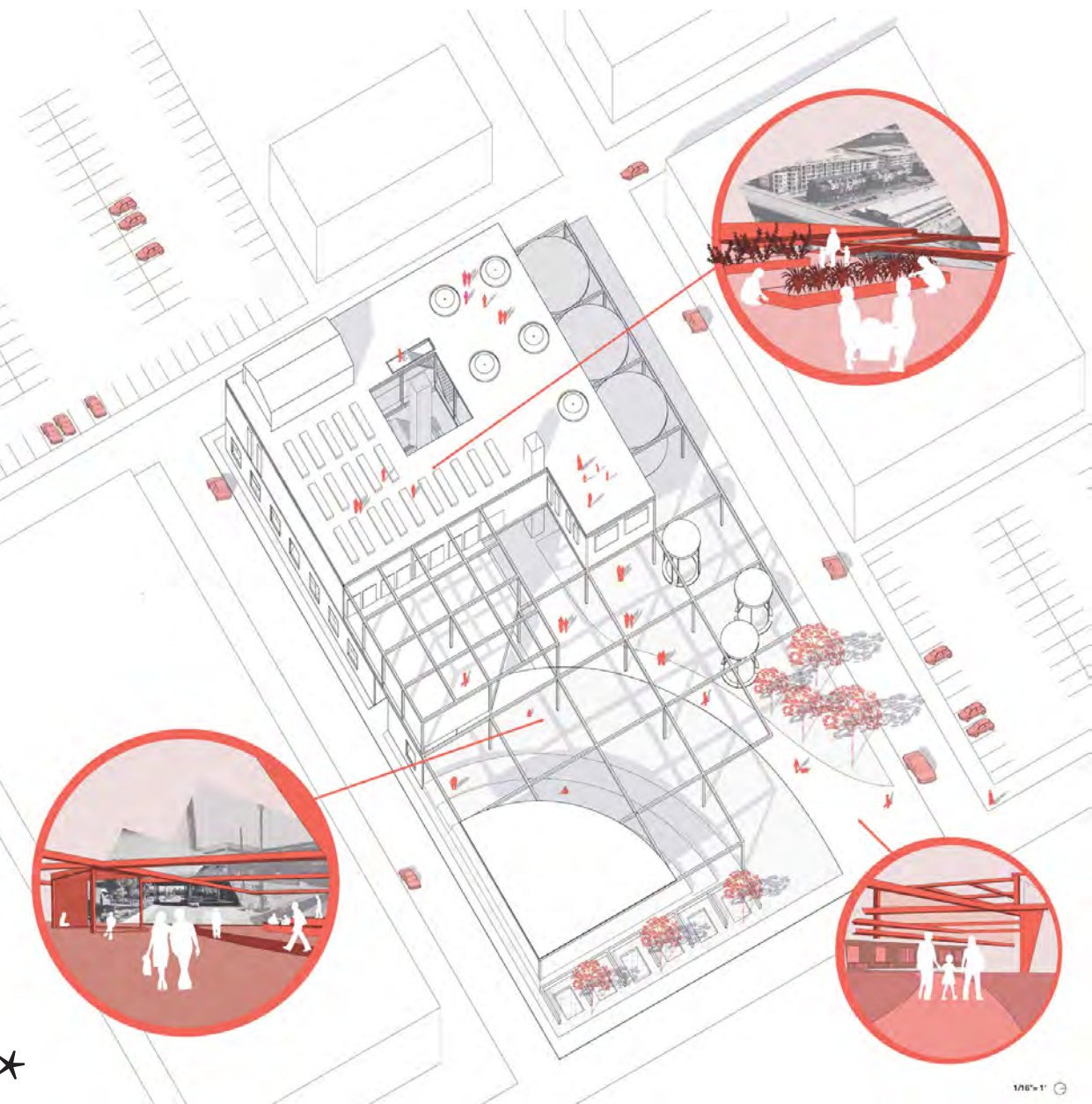
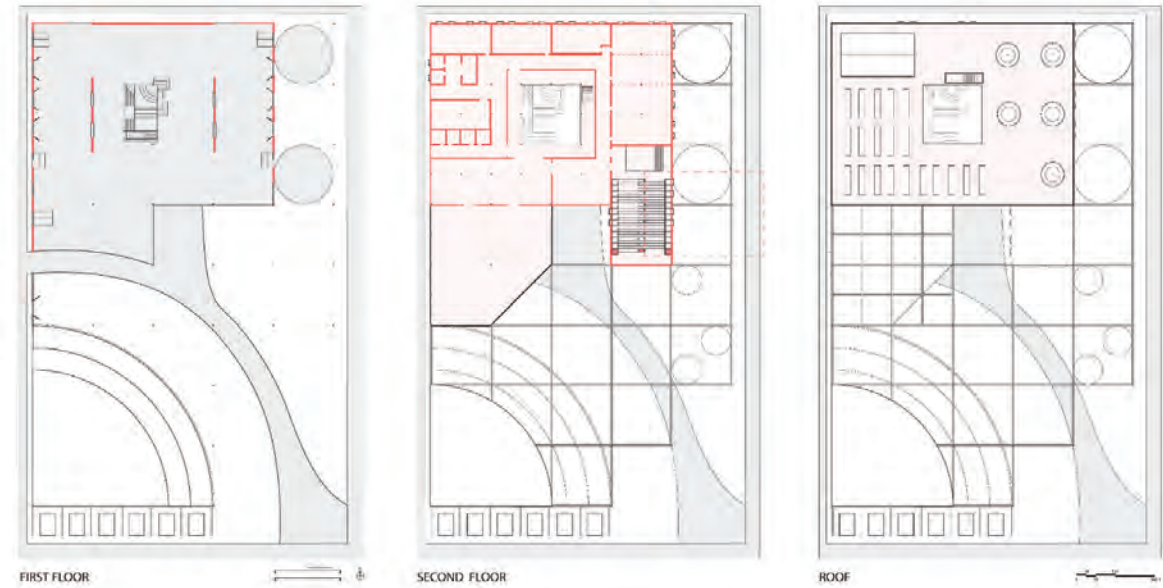


## HERRON HILL HOUSING & COMMUNITY SPACE

Herron Hill was instrumental in distributing water to the surrounding neighborhoods of the Hill District and Squirrel Hill. The original architecture reflects Pittsburgh's initiative towards a more transparent public infrastructure through its architecture. Creating a space which allows for establishing a community area is one of the most vital pieces missing from the North Oakland neighborhood. By combining housing and a complex water collection system, we hope to address Pittsburgh's need for better water-management infrastructure while also creating transparency in the process, encouraging neighbors to become knowledgeable and more involved in their community. The incorporation of landscaping invites participation in the ongoing of the water recycling facility and provides space for public enjoyment with the gardens and greenhouses.







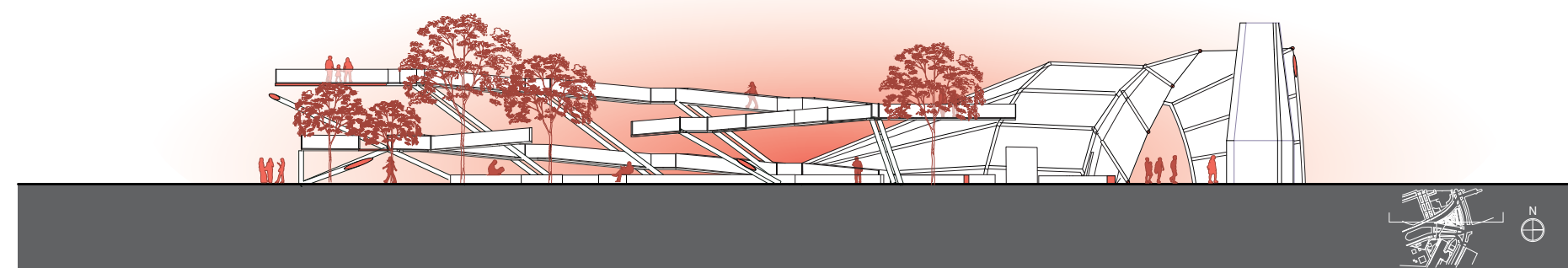
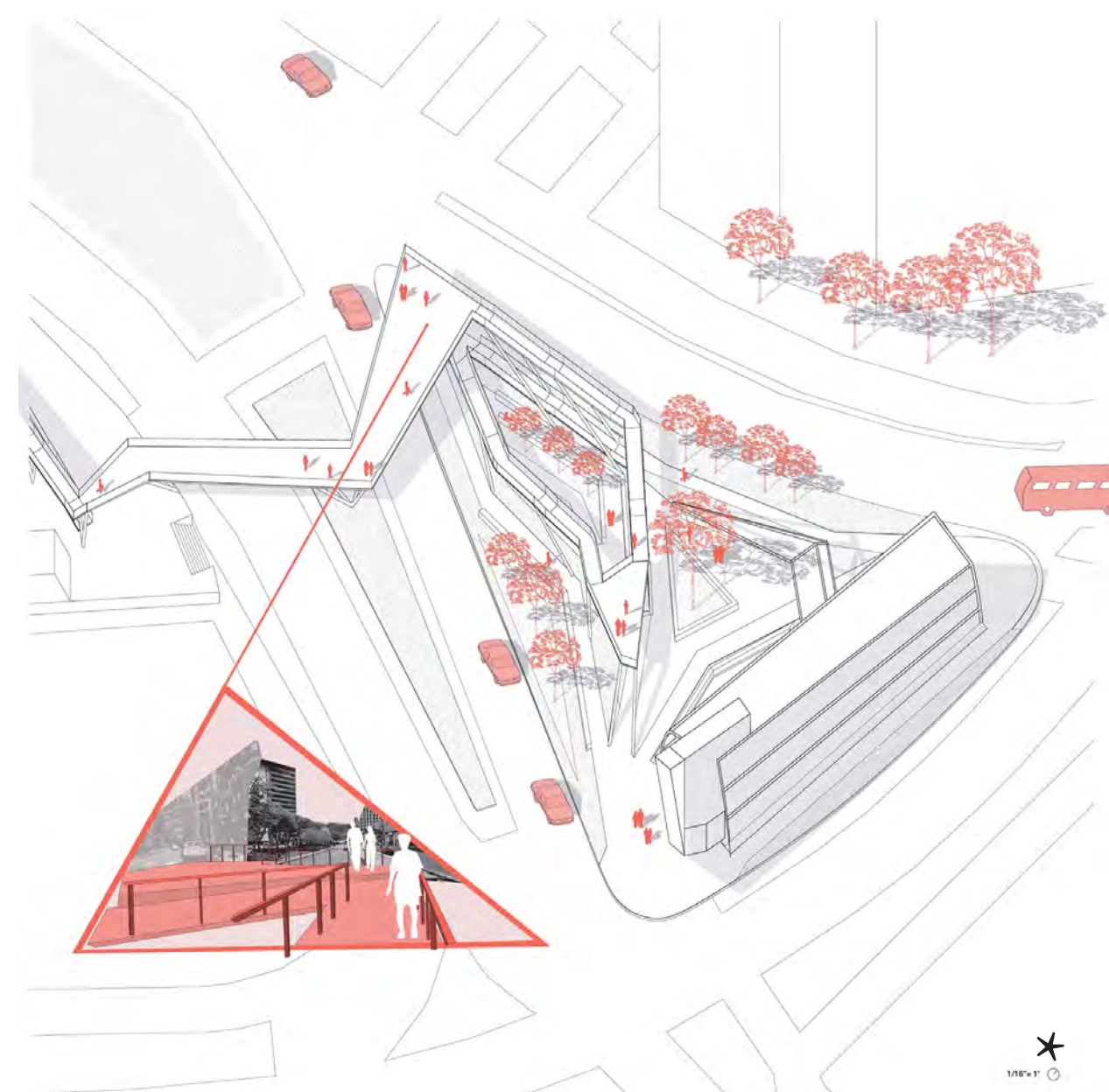
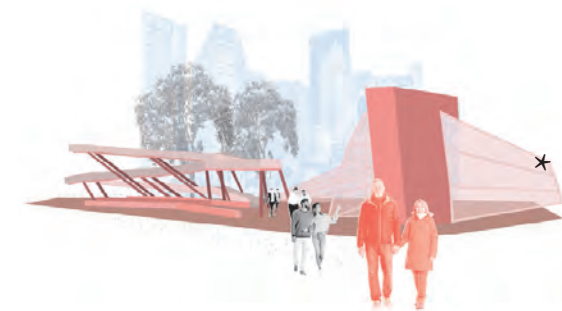
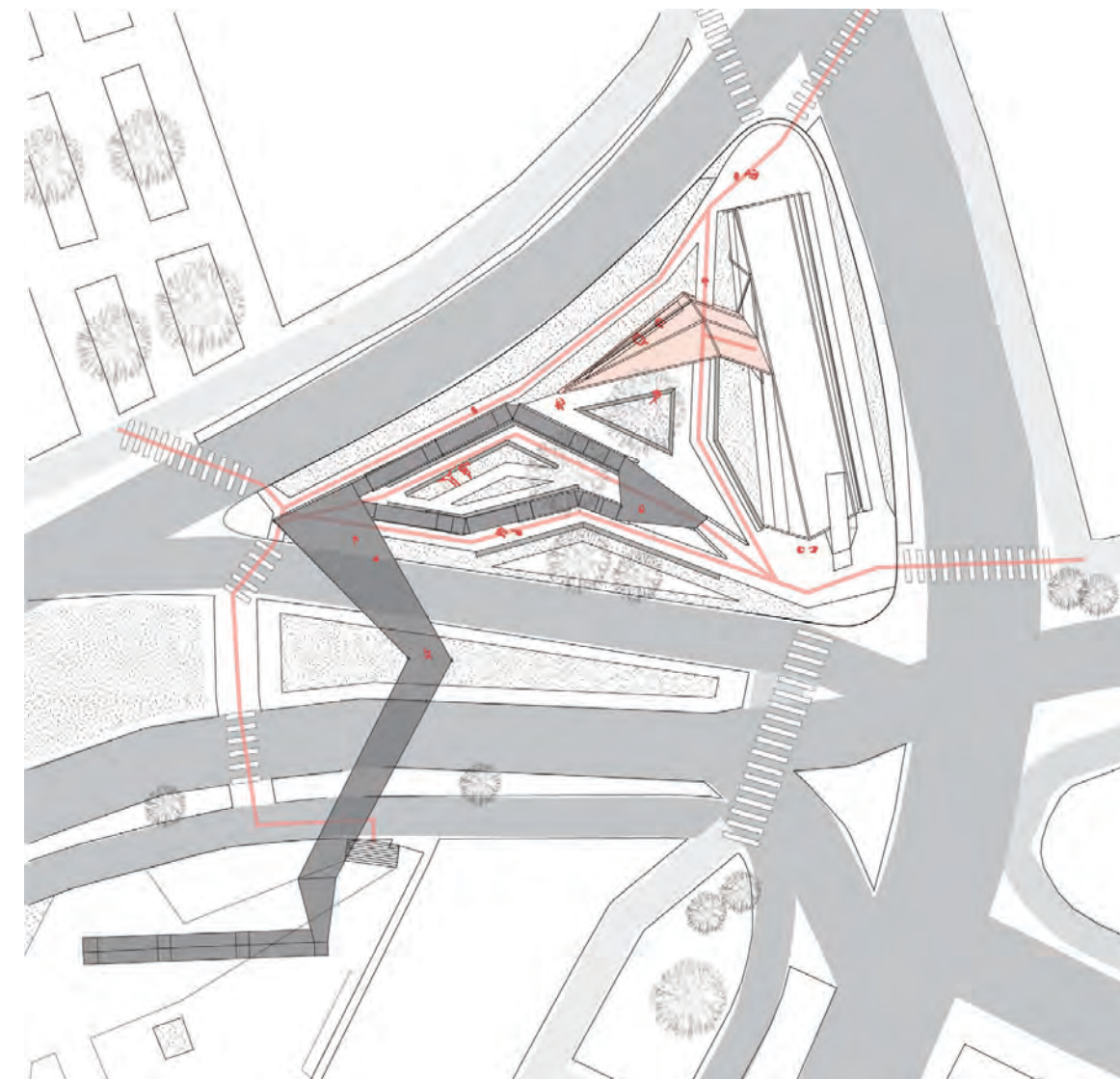
## STRIP DISTRICT FOOD & EDUCATION CENTER

We propose the development of the site previously occupied by the Federal Cold Storage Building at the intersection of 15th St. and Smallman St. This building has a rich cultural history, originally serving as a distribution center for Pittsburgh's imported fruits and vegetables, and later converted into a storage facility for Wholey's Fish Market. Though there was pushback, the building was demolished in 2022 to create space for new housing developments.

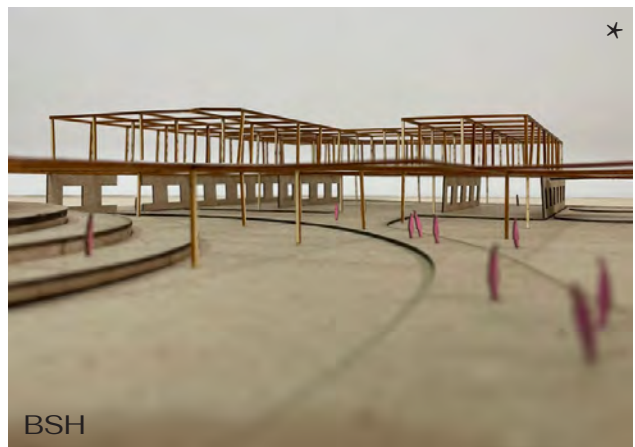
As we have recognized a lack of public gathering space in the Strip District, we would like to design a space that incorporates greenery, a public plaza, and educational opportunities. Connecting to the building and area's history, we aim for local food vendors to host events such as farmer's markets & workshops to showcase their cultural and gastronomic diversity. Educational spaces will create opportunities to host large events such as food banks, aiding the surrounding communities in need. When not in use, we hope this space is established as an area to pause and relax within the shared spaces that allow for the intersection of community bonding and cultural exchange.

## GATEWAY STATION & PARK VIEW

To bolster the community and encourage the use of public transportation, we are proposing an advancement of the connection between Gateway Station and Park to one another as well as the surrounding populace. We aim to create opportunities for urban pause within the busy city. Gateway Station is already a very significant transportation hub, so creating more opportunities for visitors and locals alike to observe the city through organized viewpoints and enjoy the peaceful environment will greatly improve the interaction one has with the landscape of downtown Pittsburgh. We also plan to utilize the design of green spaces and rain gardens as a means to create more of a contrast between the immense quantity of built environment to greenery.

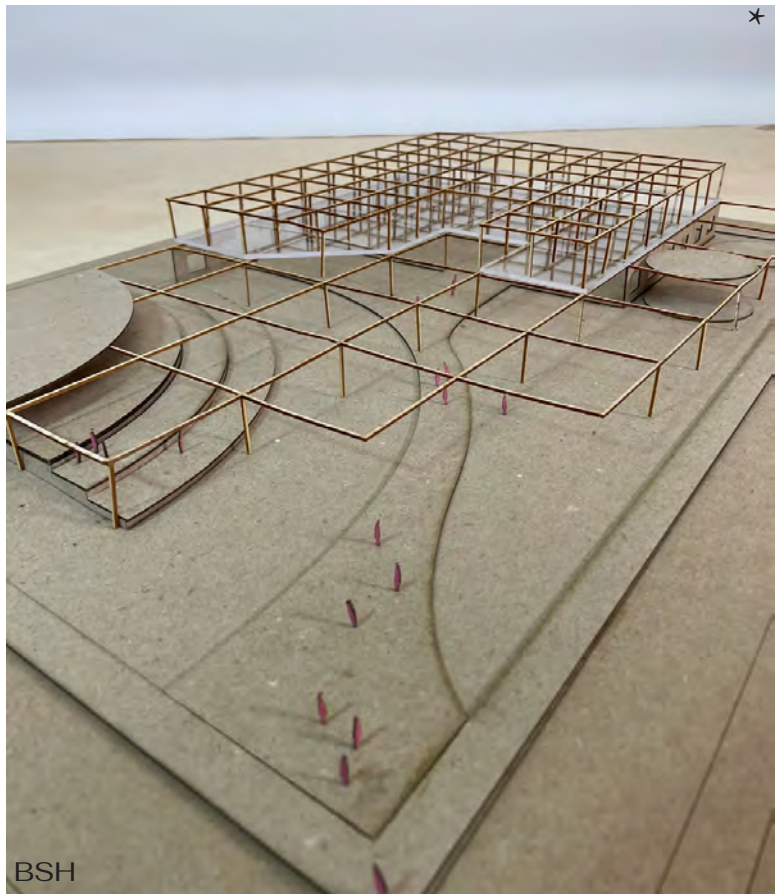






HERRON HILL

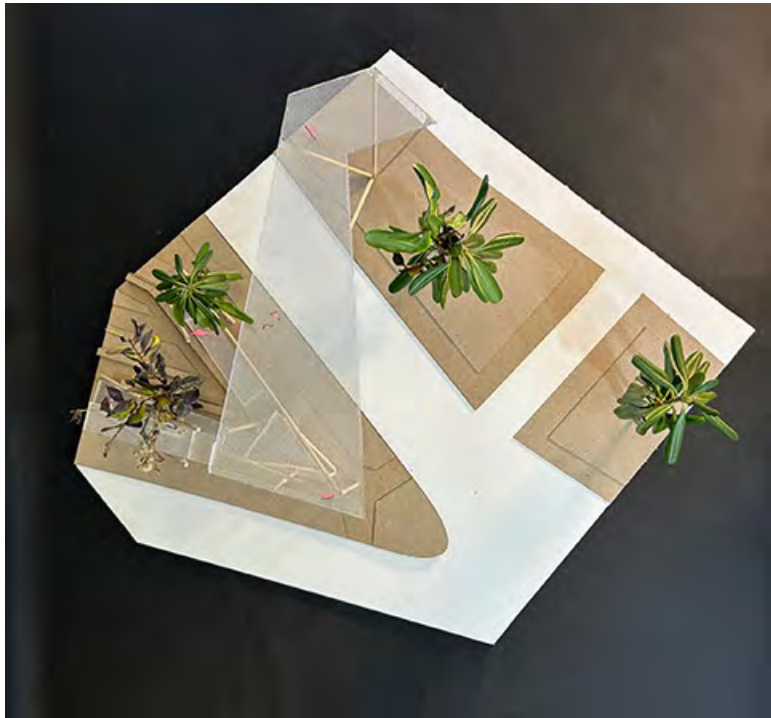
STRIP DISTRICT



BSH



GATEWAY STATION



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# RESEARCH

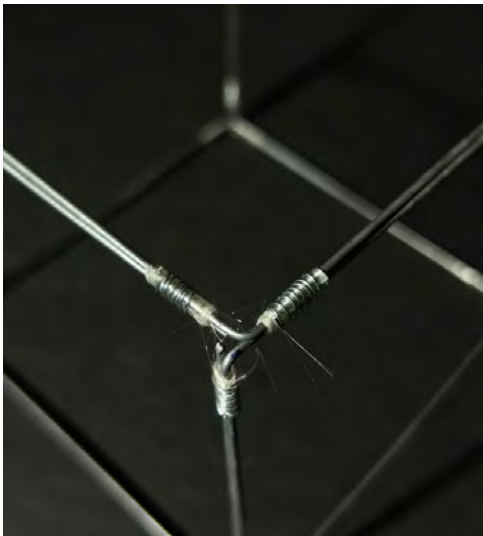
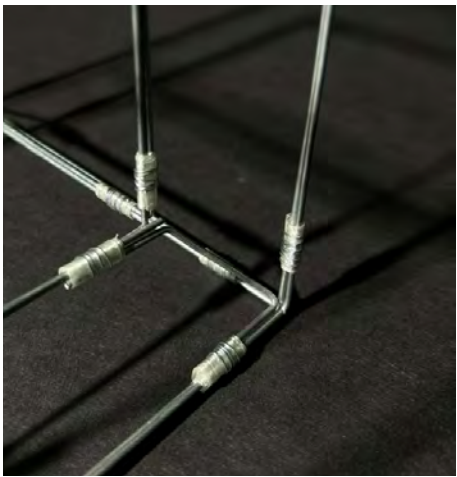
FALL 2024 - CURRENT

## COMPUTATIONAL DESIGN & DIGITAL FABRICATION

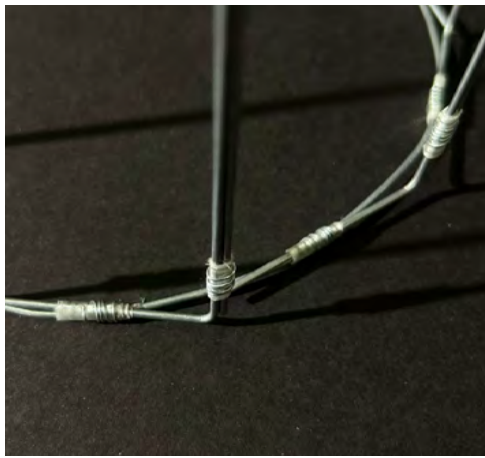
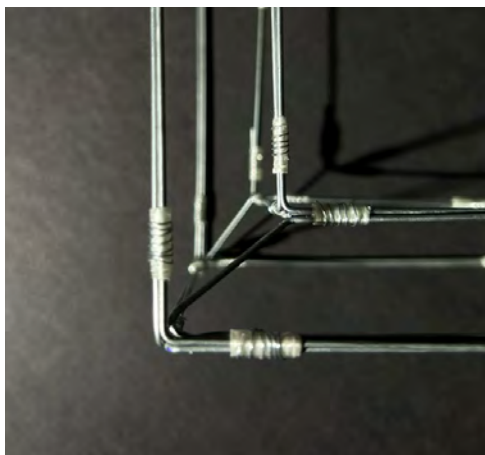
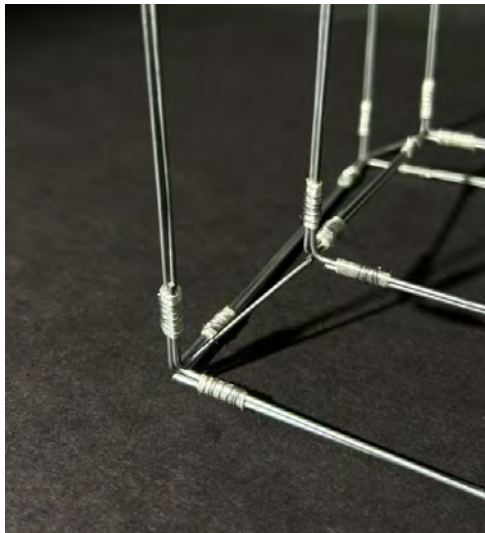
This research consists of the design and construction of 3D forms and primitives using methods in the craft tradition of wire-bending in Trinidad and Tobago and digital design and fabrication. We are exploring complex forms and automated methods that include Grasshopper and Rhinopython while examining the art of building.

**Materials:**  
8 gauge wire  
32 gauge wire (connection reinforcement)  
1/2in strapping tape

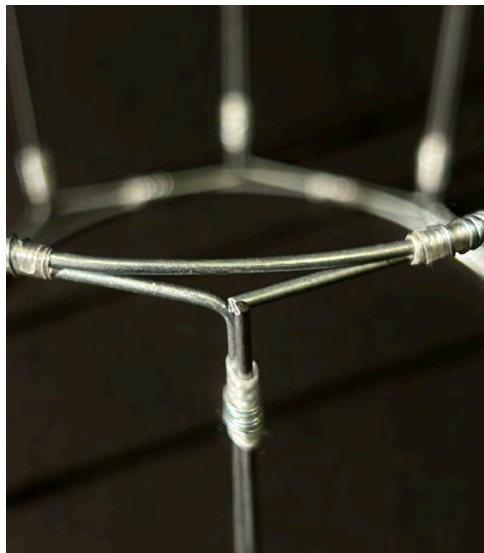
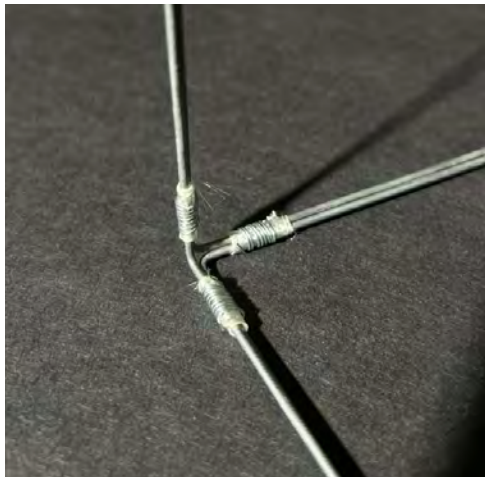
**ACADEMIC SUPERVISOR:**  
VERNELLE A. A. NOEL, PH.D  
SITUATED COMPUTATION + DESIGN LAB, CARNEGIE MELLON UNIVERSITY



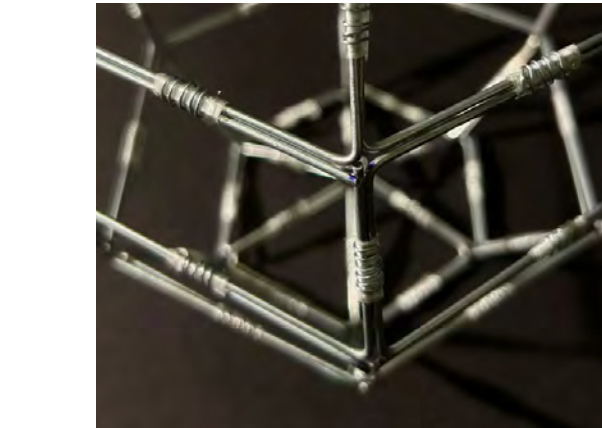
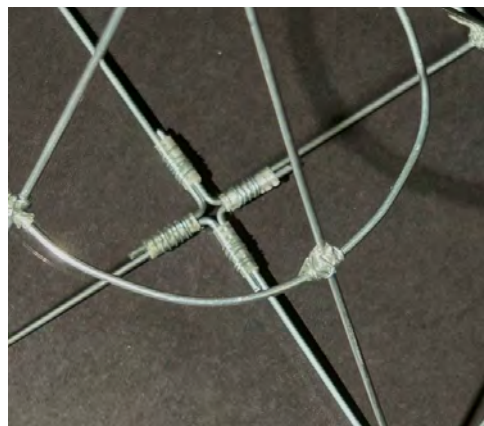
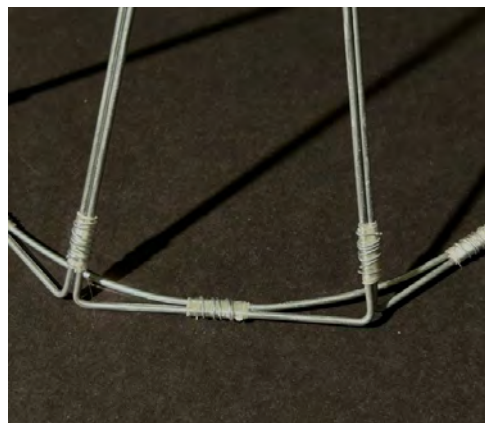
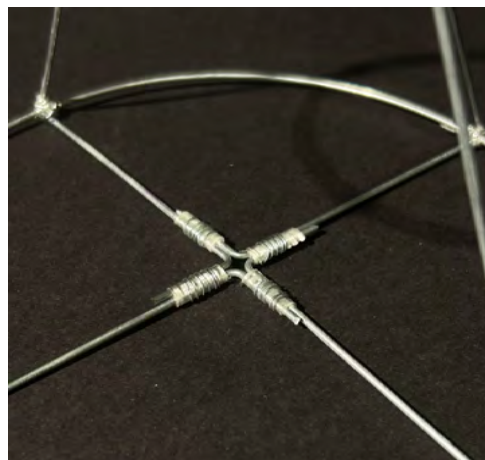
CUBE



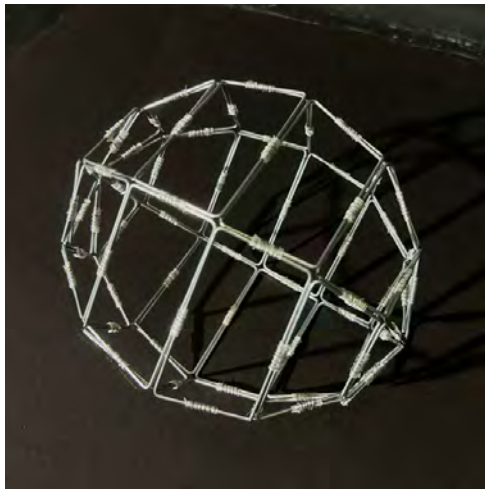
CYLINDER



CONE



SPHERE



The process consists of hand sketching and planning the primitives and then moving to the digital realm. In Rhino, we extract wireframes and manipulate units and joints through scaling, adjusting U/V points, and abstracting faces.

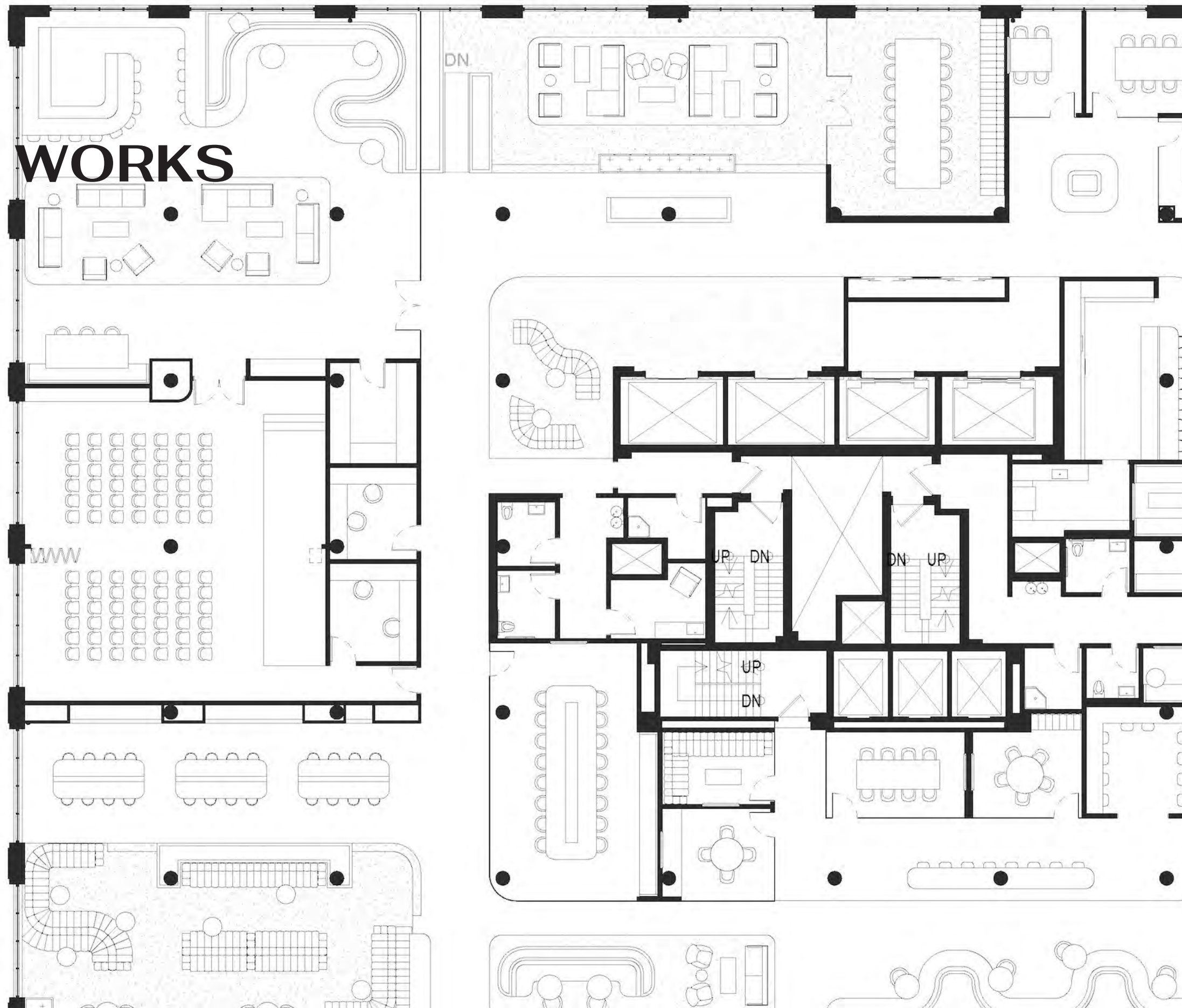
Something I have been interested in was the use of a singular wire to create either the completed form or a large facet of it. It confronts the idea of material use and waste as well as upholds traditional wire bending practices in many parts of the world.

The abstraction of the shapes into its most basic form to maintain the expression of the primitive also stems from this iteration of singular elements.



# PROFESSIONAL WORKS

INTERNSHIPS - SUMMER 2023 & 2024



## ARCHITECTURE + INFORMATION (A+I)

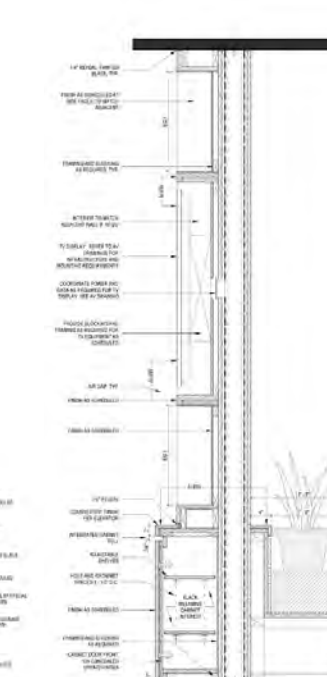
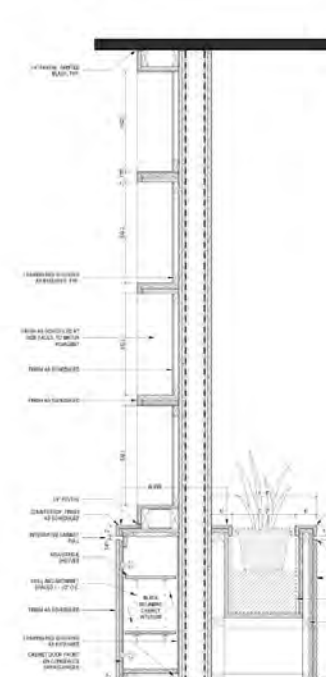
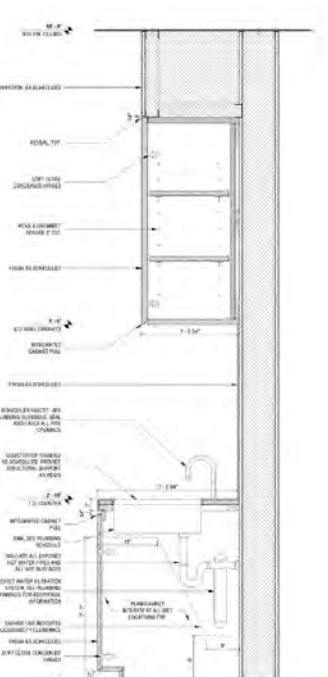
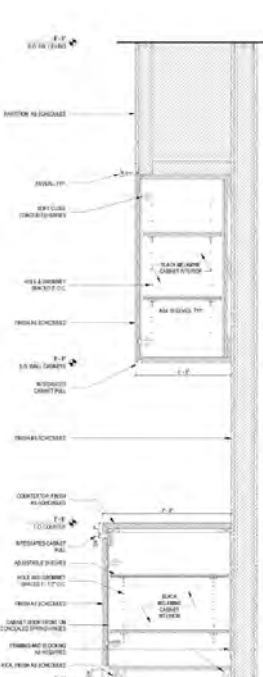
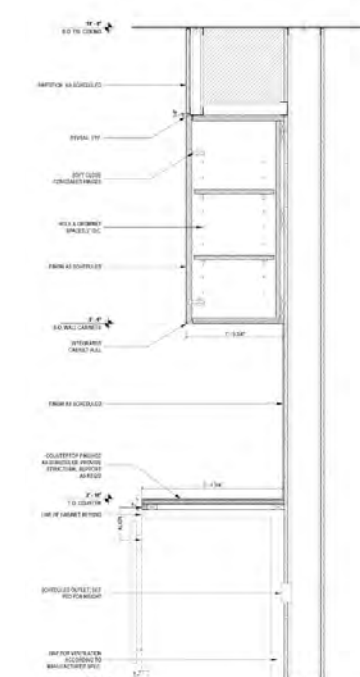
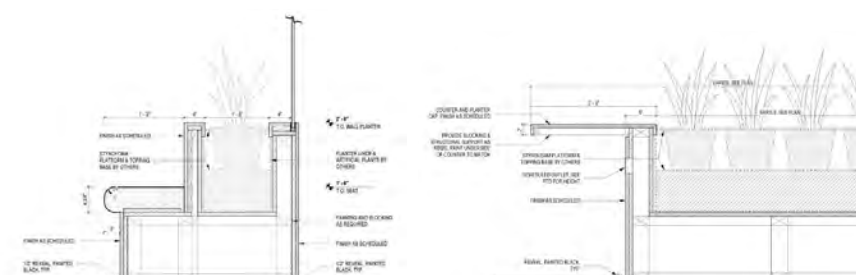
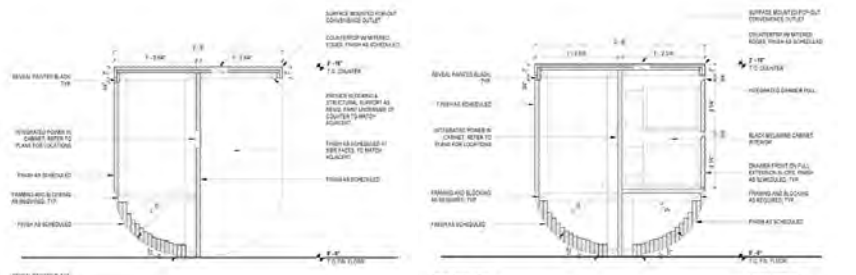
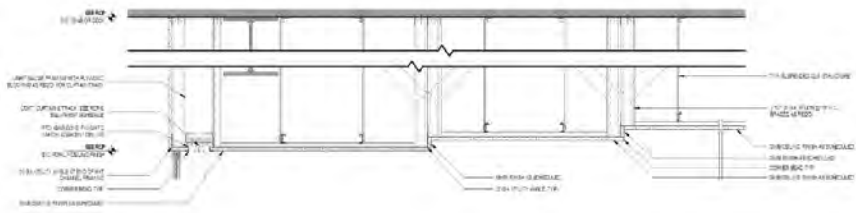
FLATIRON DISTRICT, NYC

### DETAILS

441 9th AVE - PREBUILT PROJECT

I was delegated the task of creating shop drawings for some of the custom furniture designed for this office space. These pieces included planters, benches, desks, pantry spaces, and ceiling features.

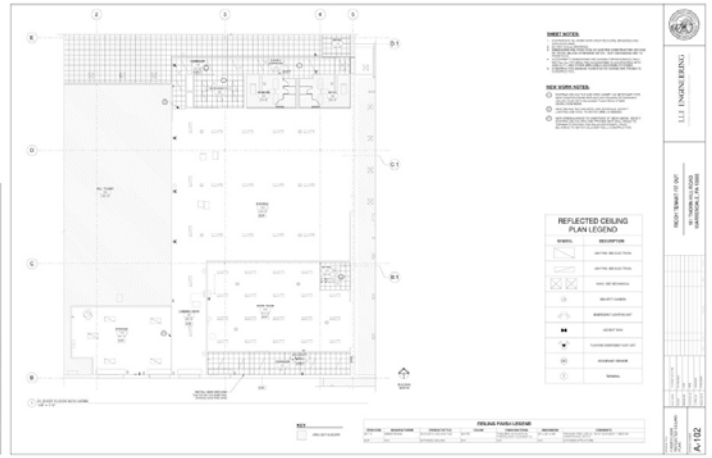
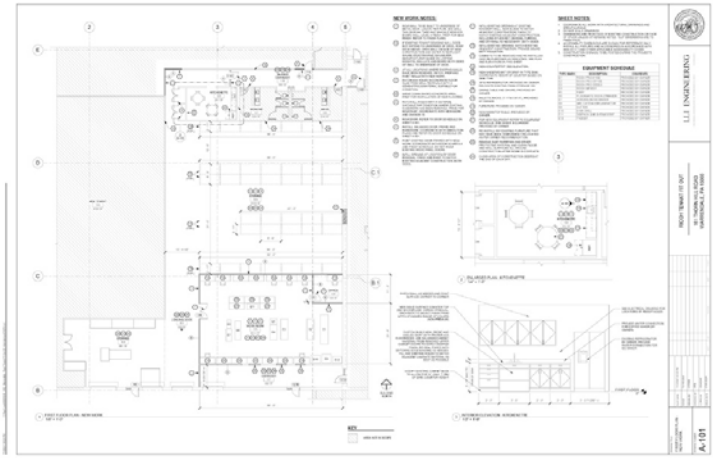
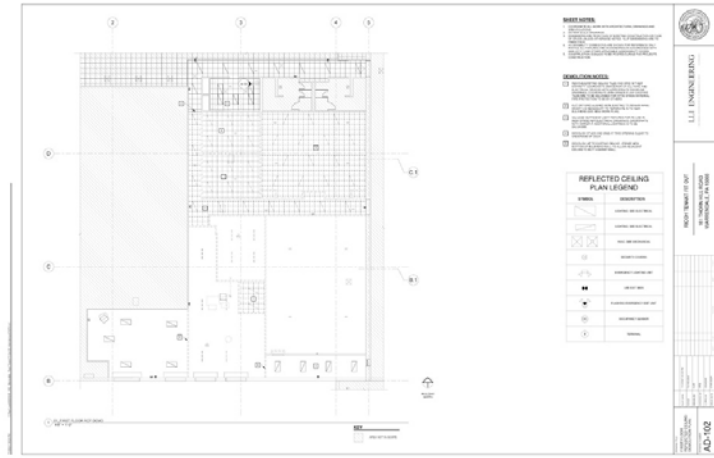
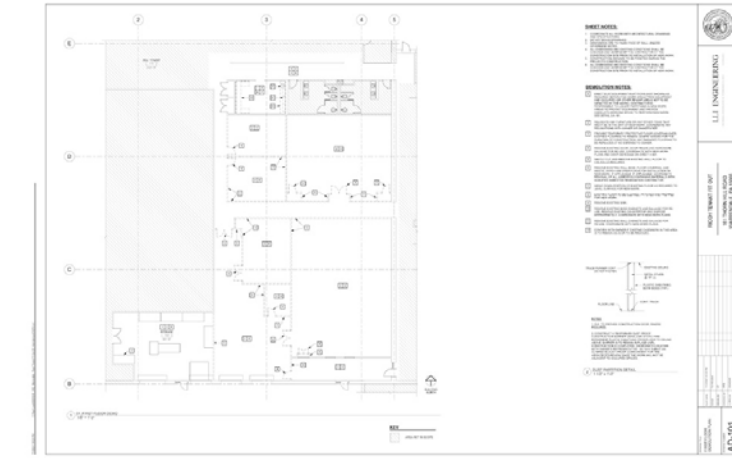
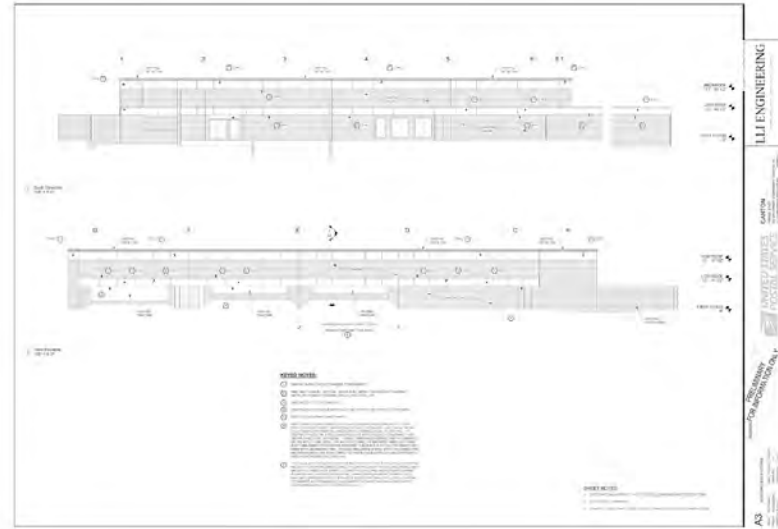
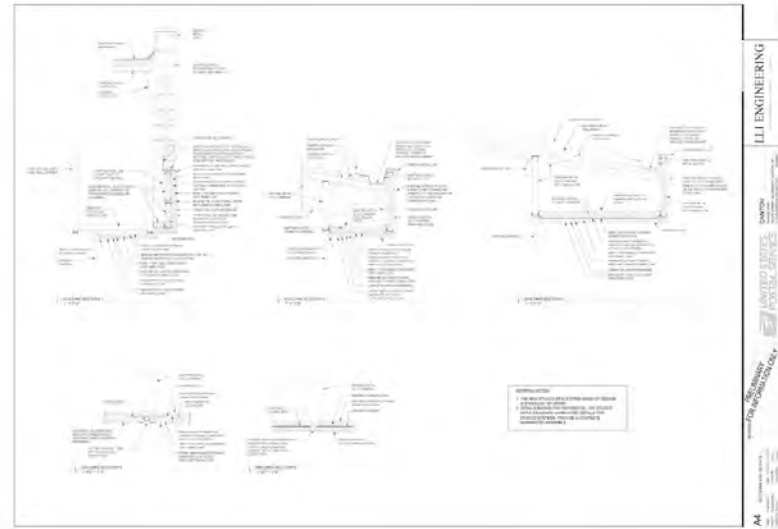
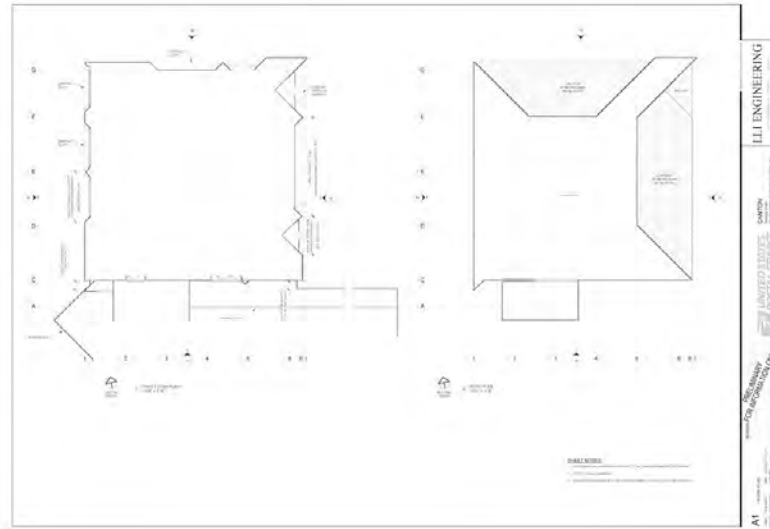
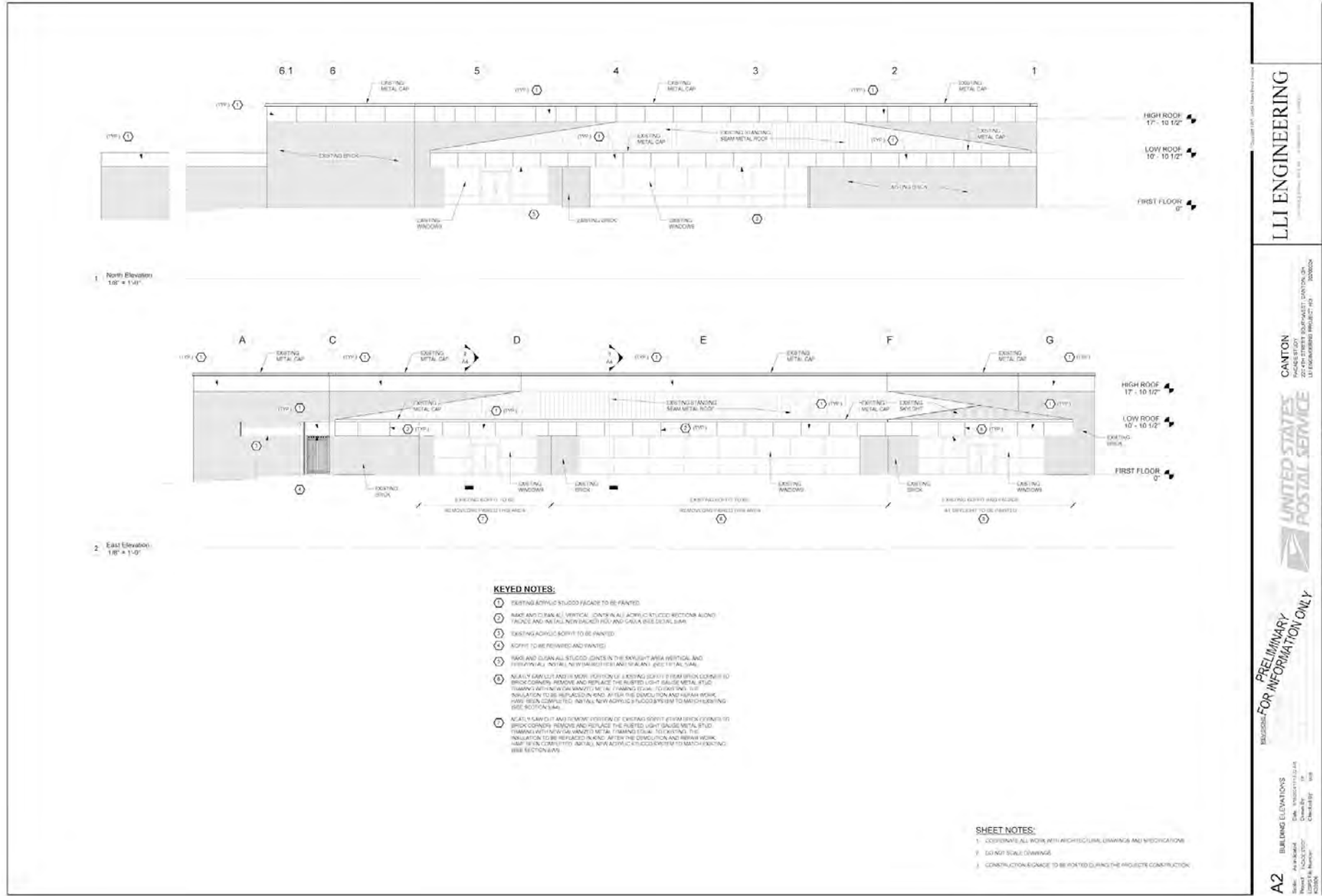
\*\*plan done by 441 team





USPS FACADE RESTORATION  
CANTON, OH

I modeled the facade of the building in Revit using an existing drawing set from 1985. I learned how to create call outs and detail wall sections specific to a facade job. This also helped me understand the construction process of such facade systems as well as their typical failure instances.



RICOH - TENANT FITOUT  
WARRENDALE, PA

I conducted the architectural survey for this space. The field work included areas that were going to be renovated to fit the function of the new tenants. I then created the demo and new drawings for the architectural set of the work.

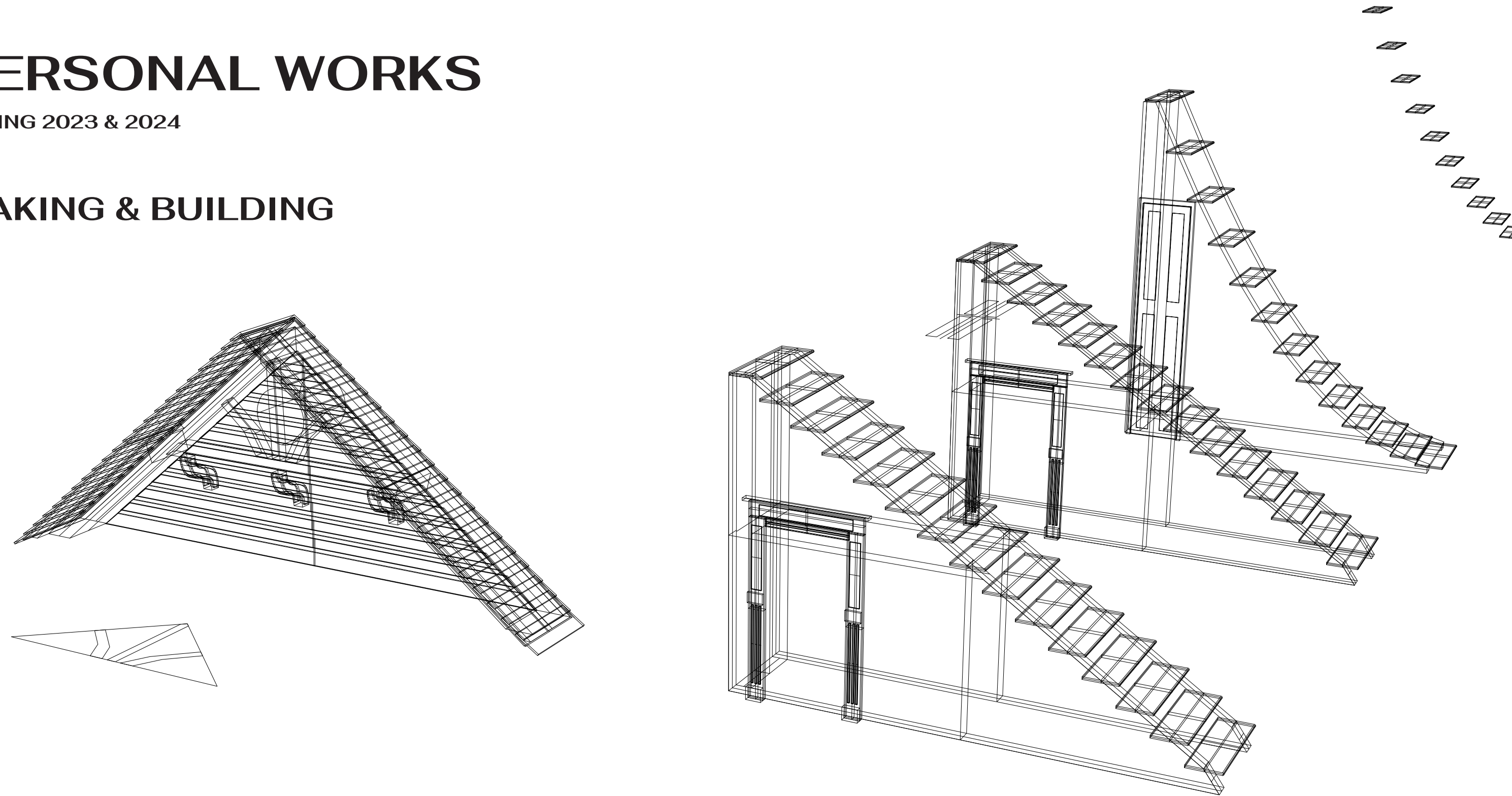




# PERSONAL WORKS

SPRING 2023 & 2024

## MAKING & BUILDING



## A SECOND HOME THE MATTRESS FACTORY



COURTESY OF INSTAGRAM PAGE @mattressfactory



This project was commissioned by Dennis Maher for display in his exhibit at the Mattress Factory in Pittsburgh, PA. The idea was to design individual pieces of a home such as those that make up a doll-house. These pieces were then arranged together in a sort of abstract doll-house.

My pieces are reminiscent of some of my childhood memories such as the fear of running up the stairs at night and the roof pediment of my old house.



# **NOMAS PAVILION 2023** **CARNEGIE MELLON CARNIVAL WEEK**

This pavilion was designed to be the entrance to the 2023 Carnegie Mellon Spring Carnival. It was created entirely from bamboo and held together using traditional binding methods and assembly strategies. I was part of the design & fabrication team and aided in the building, installation, and disassembling of pavilion. This project required hands on work with the use of powertools and heavy machinery.



# **NOMAS PAVILION 2024** **CARNEGIE MELLON CARNIVAL WEEK**

This pavilion was designed to be the entrance to the 2024 Carnegie Mellon Spring Carnival. It was constructed from a scaffolding system that held triangular canvas panels. These pieces formed a geometric interior space and featured custom prints representing each of the on-campus organizations.





**THANK YOU!**

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**REFERENCE MY PERSONAL WEBSITE FOR MORE  
IN-DEPTH DESCRIPTIONS & ADDITIONAL PROJECTS**

[WWW.SHAHZADIPADDA.WIXSITE.COM/PORTFOLIO](http://WWW.SHAHZADIPADDA.WIXSITE.COM/PORTFOLIO)