

Stories of an International Architecture Student



Vir g i n I s l a n d s

M a r y l a n d

N e w Y o r k



Hidden Truths

Transformed

No Boundaries

Shared Spaces

Marine Center

125th Stories

Wetropolis

Rural House

Life's Tapestry

Floating
Development

Virgin Islands

New York

Maryland

Hidden Truths

Museum & Community Hub



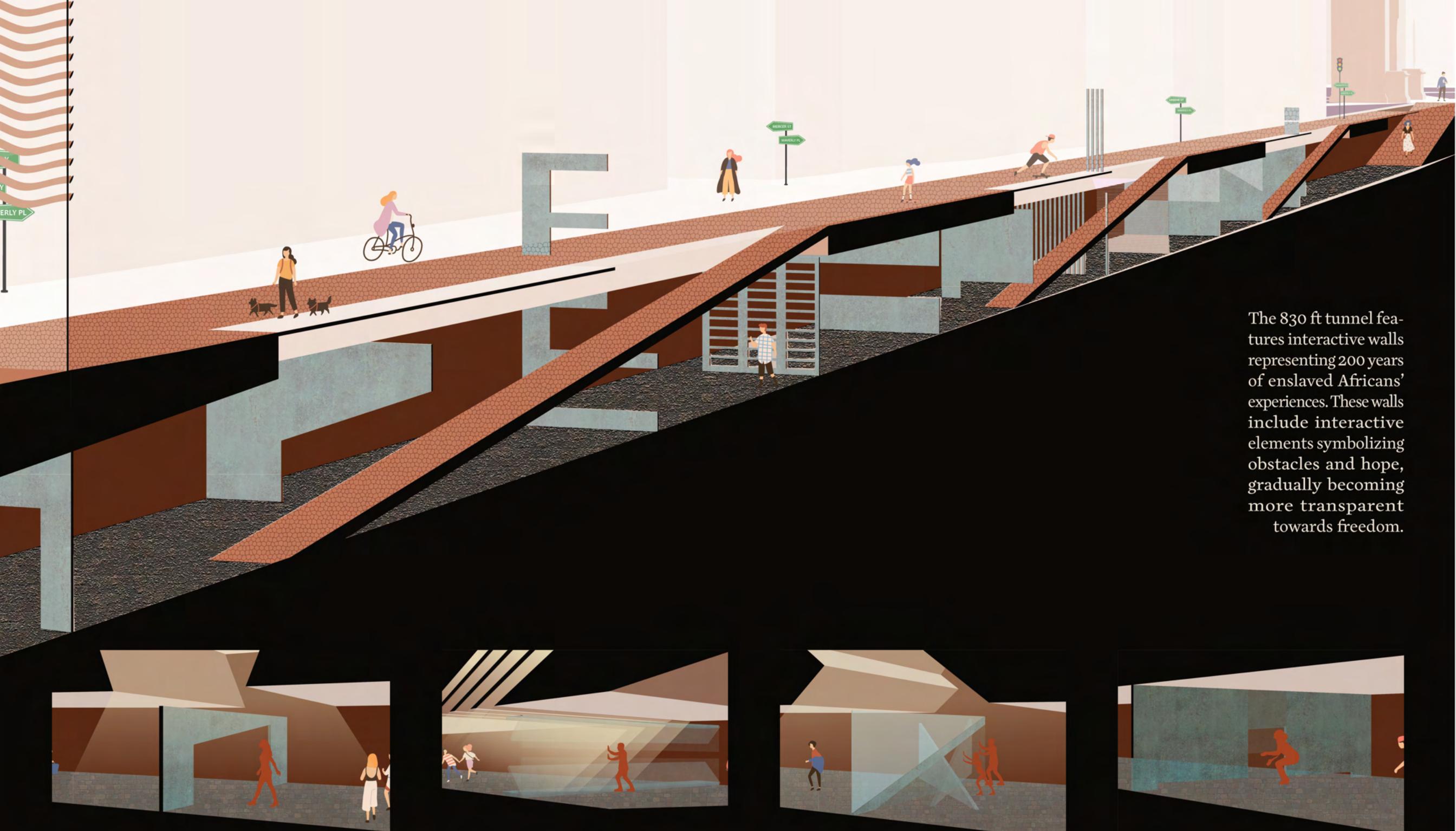
The Hidden Histories Museum & Community Hub brings the public together to experience the past while building for a better future. The project is a 16,250 square foot Museum and Hub that was developed from the study of the interactions enslaved Africans had or were prohibited from having with public spaces. In addition to the building, the project includes a 23,000 square foot underground tunnel that immerses an individual in the museum through the length of Waverly Place.

Amina Blacksher

Fall '21



Section Perspective from Washington Square Park to Broadway



The 830 ft tunnel features interactive walls representing 200 years of enslaved Africans' experiences. These walls include interactive elements symbolizing obstacles and hope, gradually becoming more transparent towards freedom.

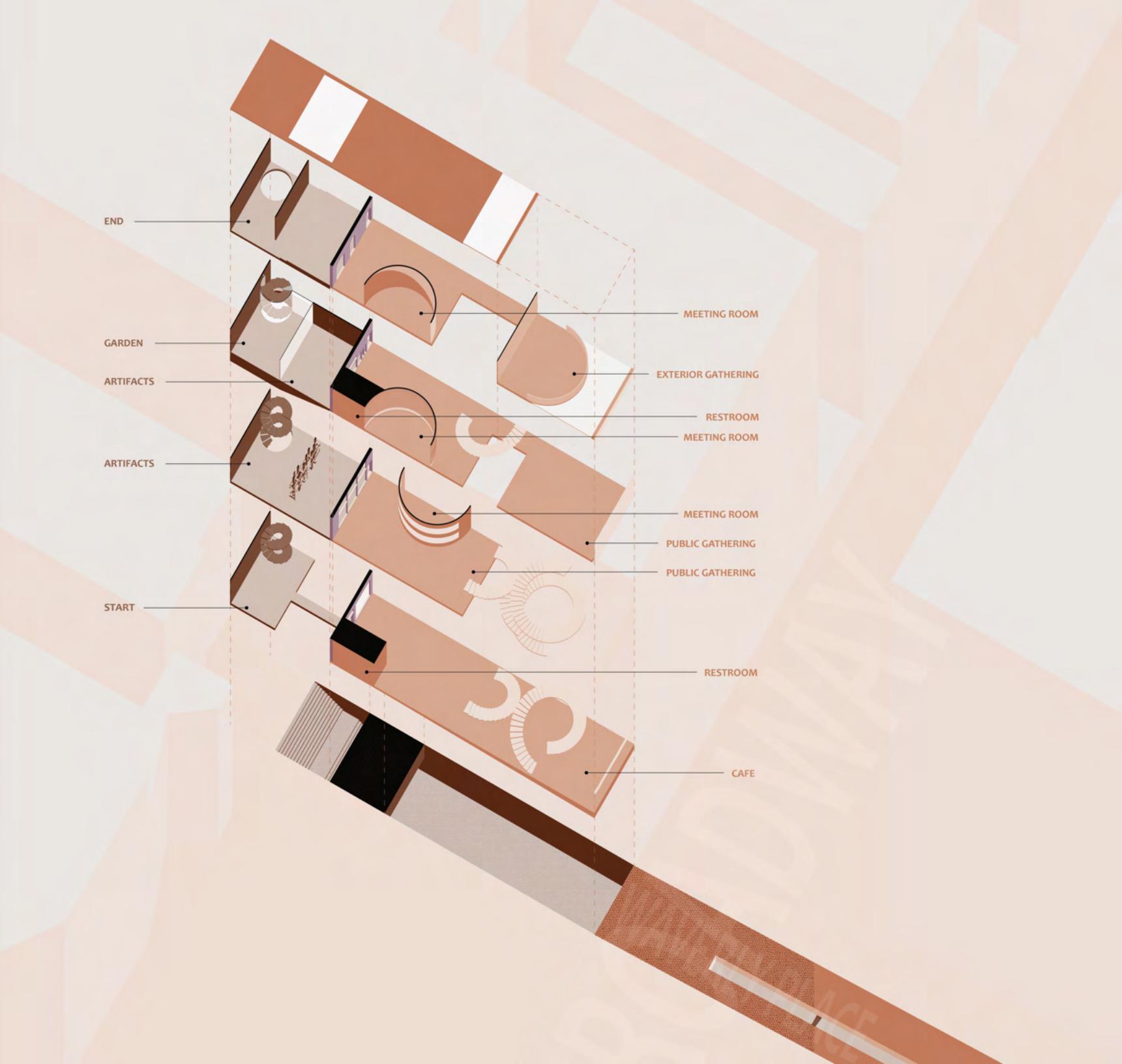


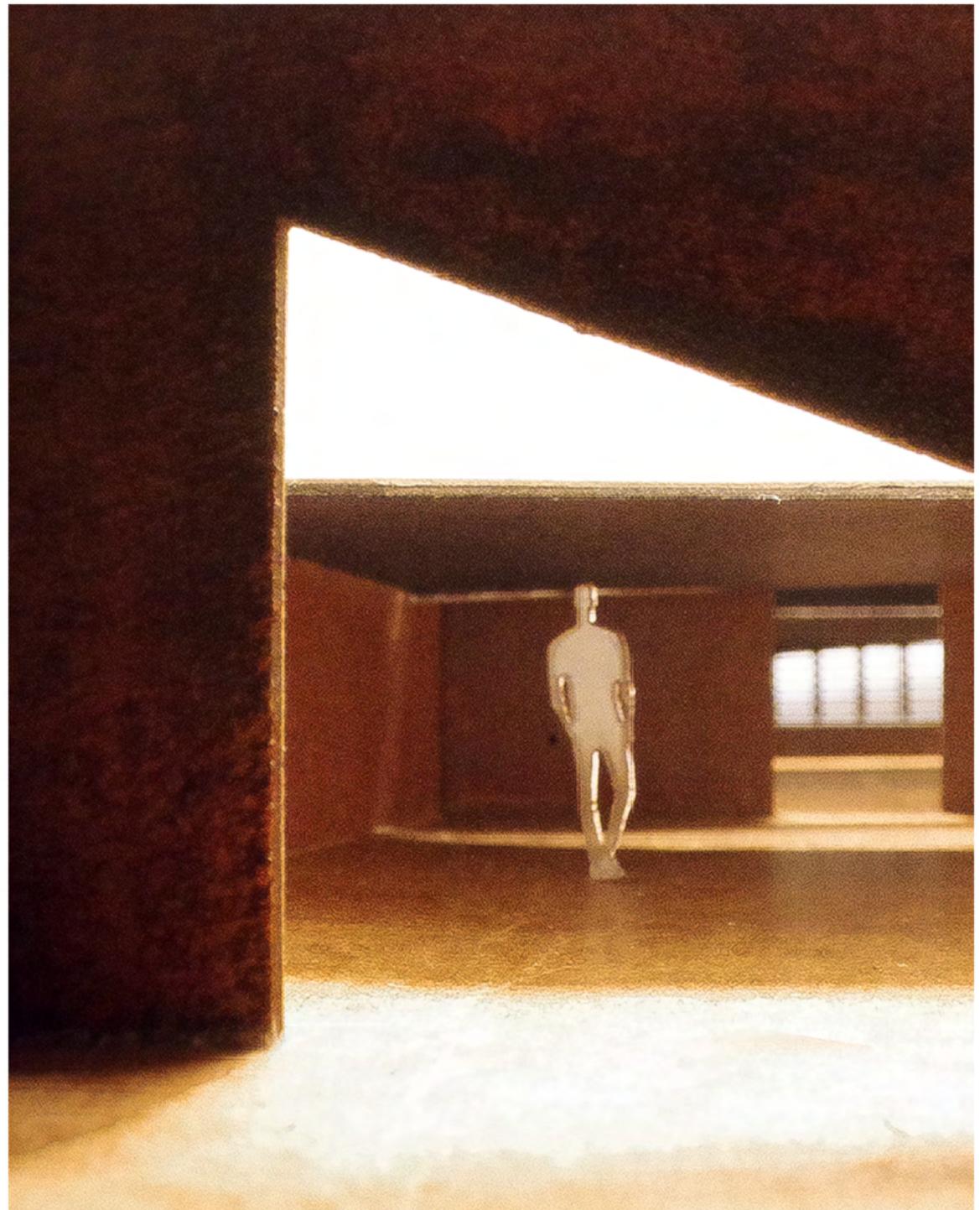
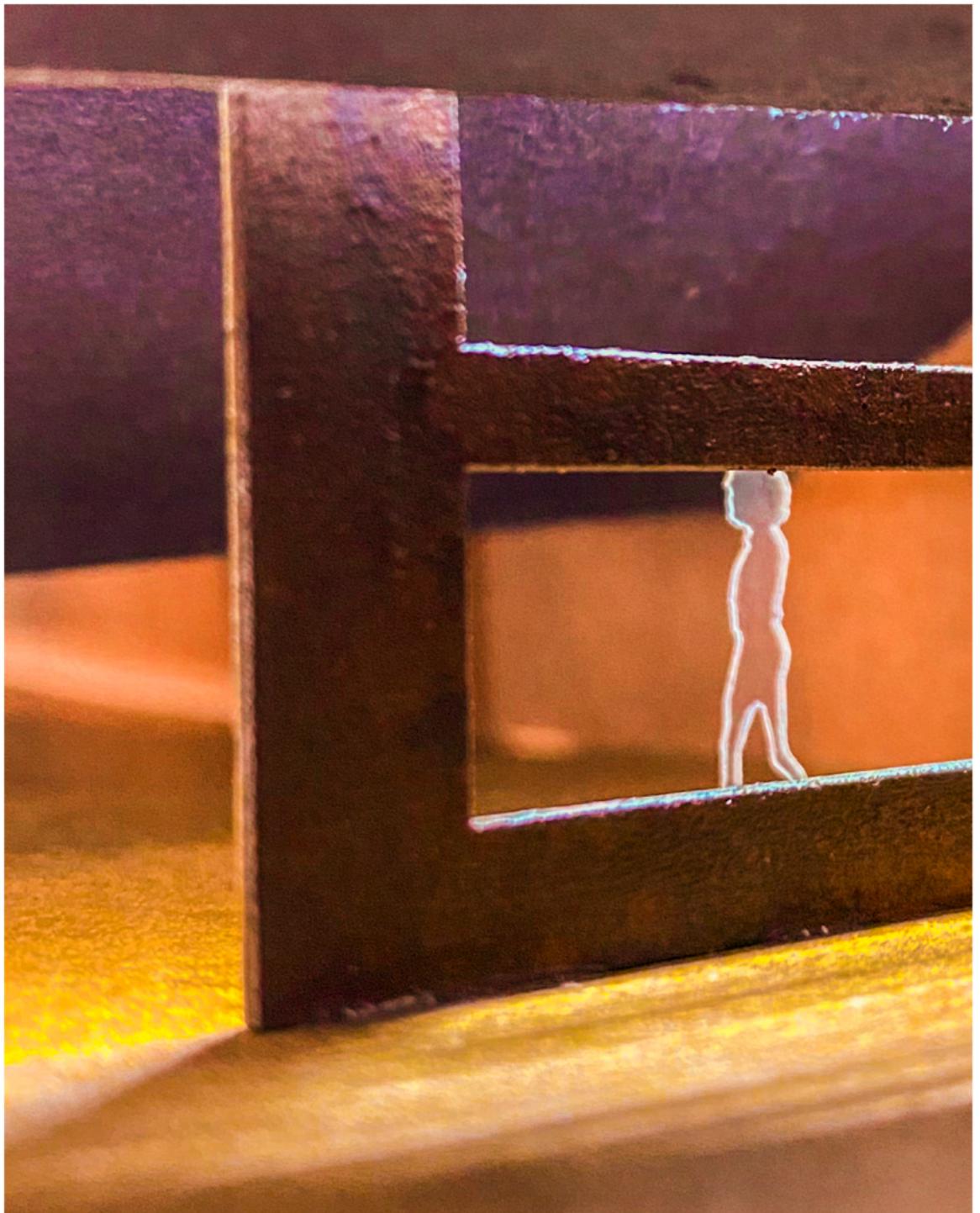
Community Hub Co-working Space

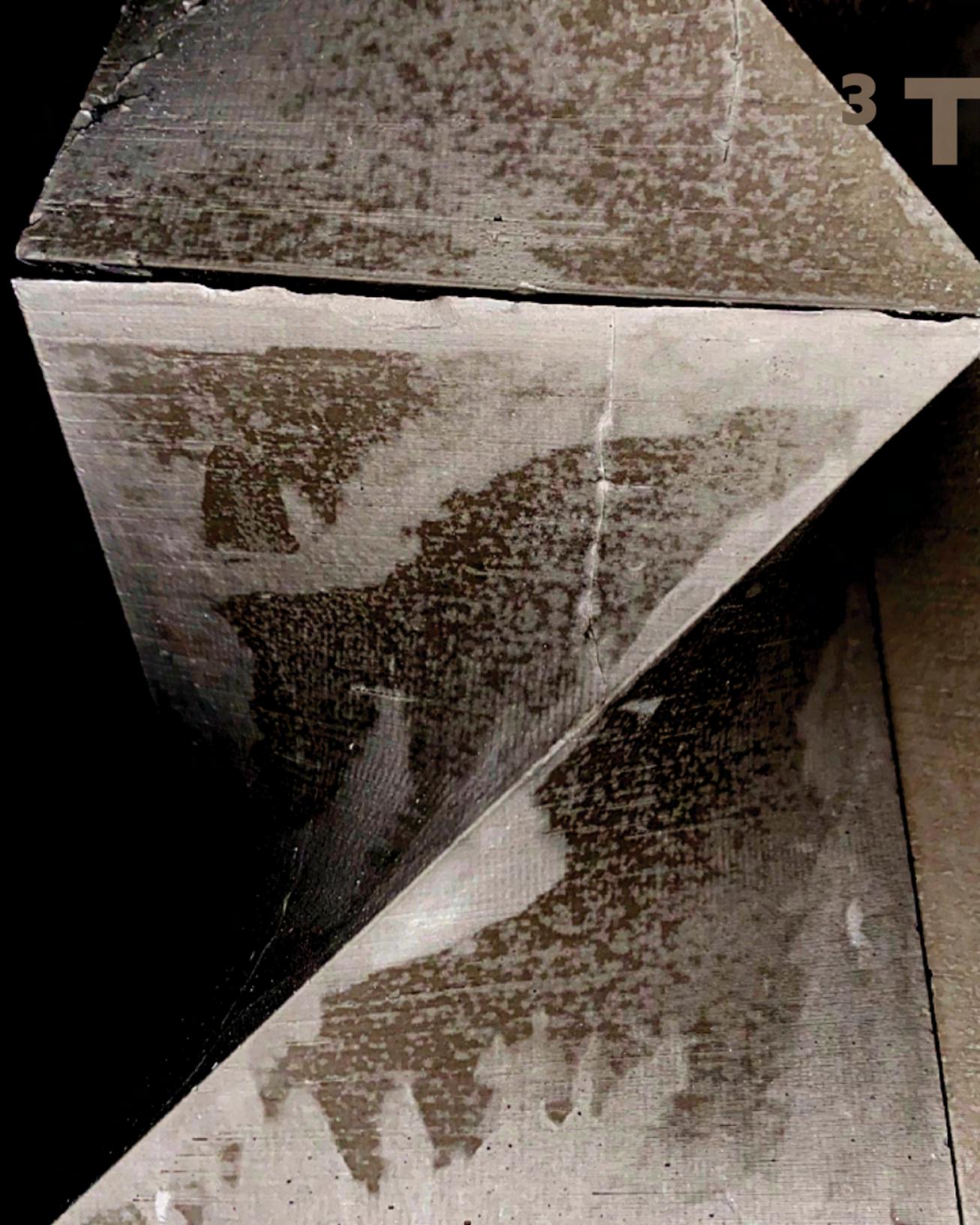


WALL OF 11 SLAVES

Museum: Wall of 11 slaves dedicated to the slaves who were granted land in Little Africa only to have it revoked at the change of the government.



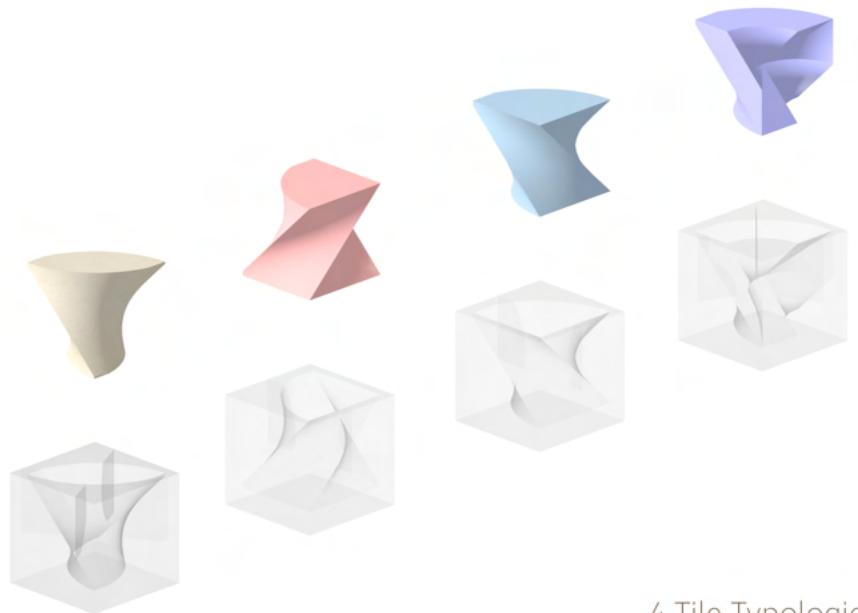
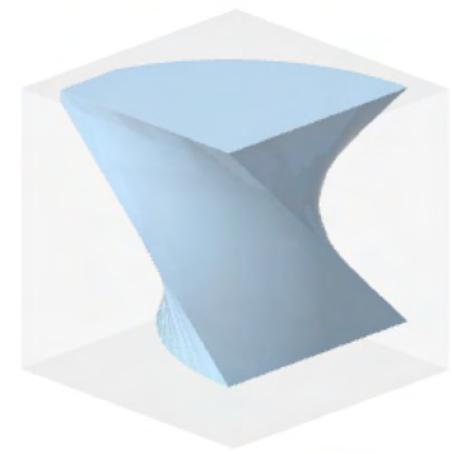
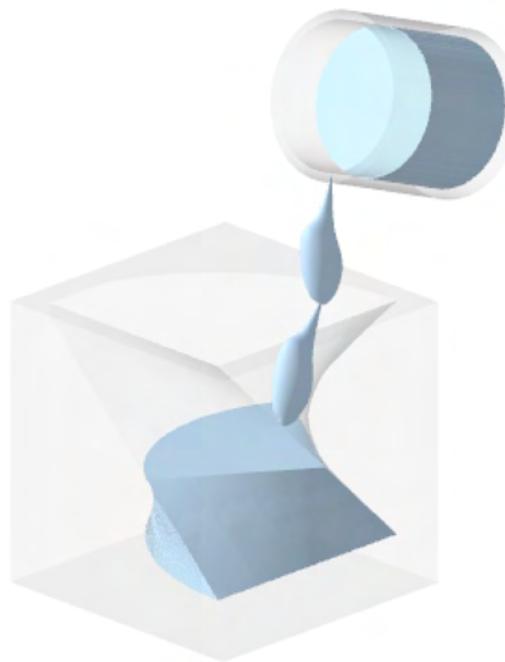
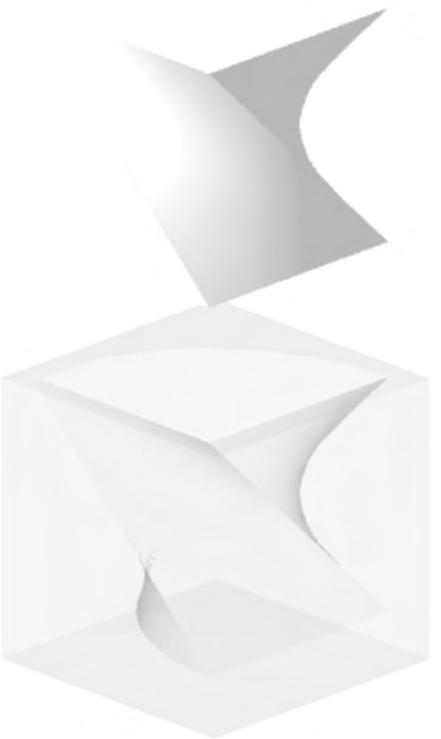
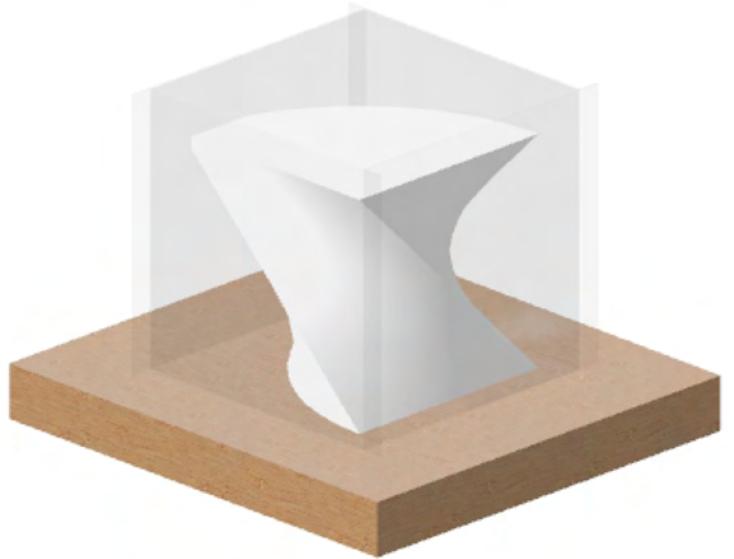




3 Transformed

Transitional Geometries

Josh Jordan
Fall '21



Tile Making Process

4 Tile Typologies





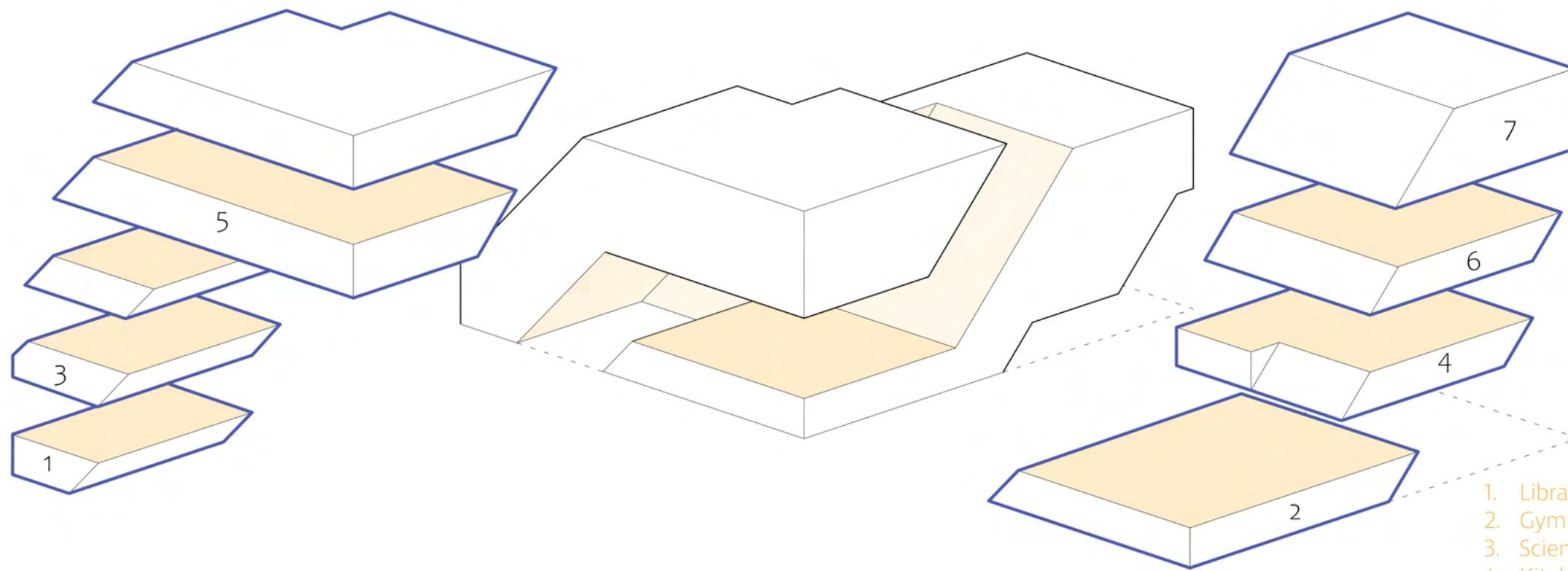
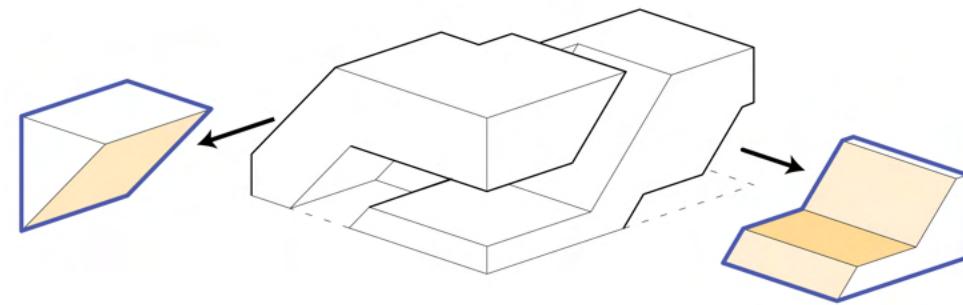
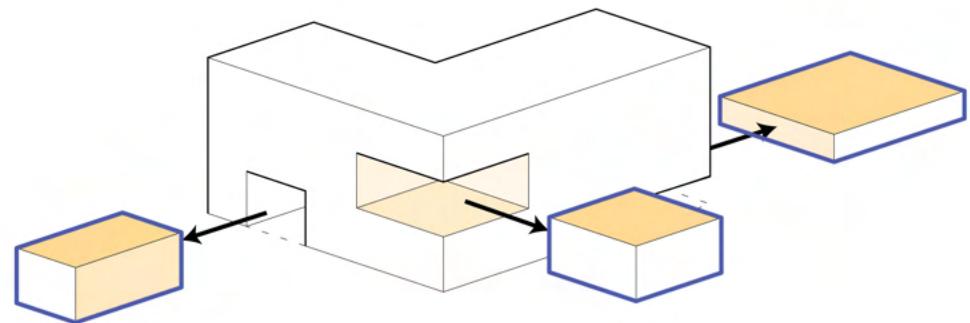
No Boundaries

Forsyth School

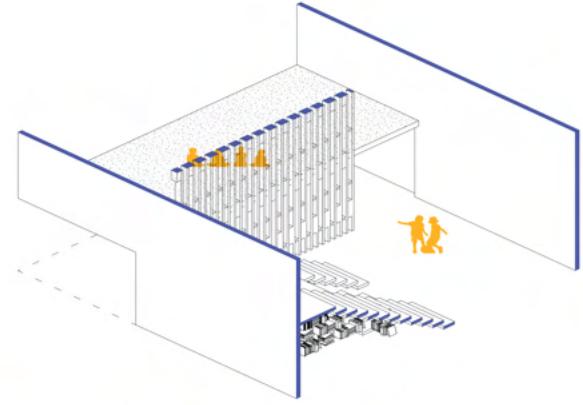


The school design encourages cross-pollination among students by creatively configuring modular spaces. Flipping and rotating repeated modules within classrooms create social hubs for diverse interactions. Integrated academic, recreational, and professional spaces foster interdisciplinary learning and community engagement. This approach prioritizes inclusion, offering specialized areas and promoting empathy through active experiences.

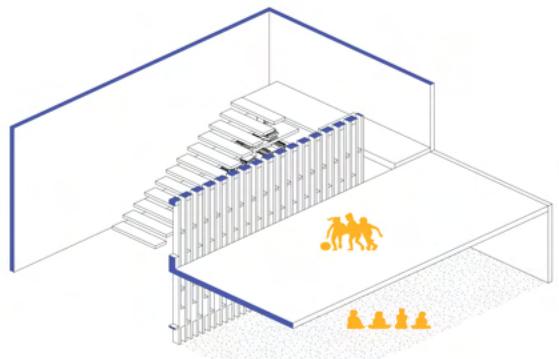
Carlyle Fraser
Spring '22



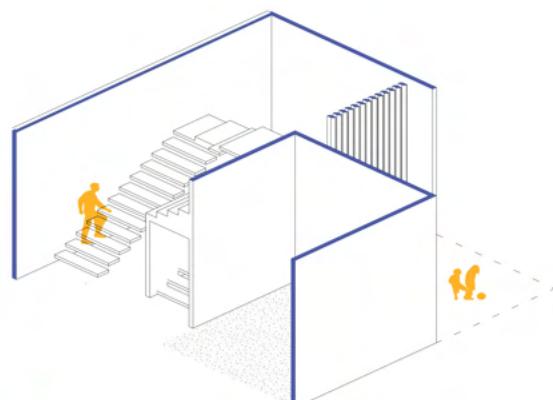
1. Library & Admin
2. Gymnasium
3. Science Labs
4. Kitchen & Cafeteria
5. Classrooms
6. Art & Music
7. Auditorium



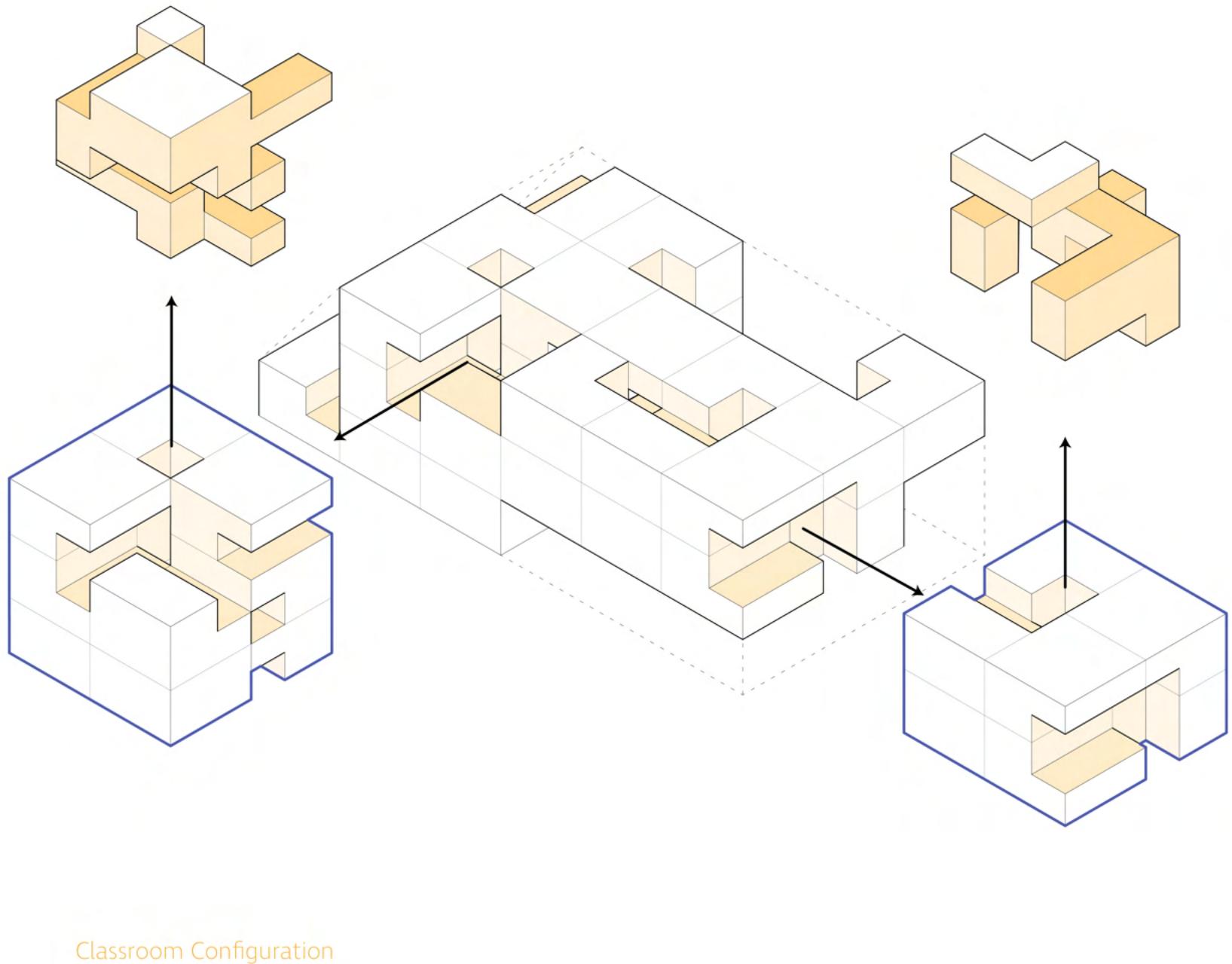
Classroom Typology 1

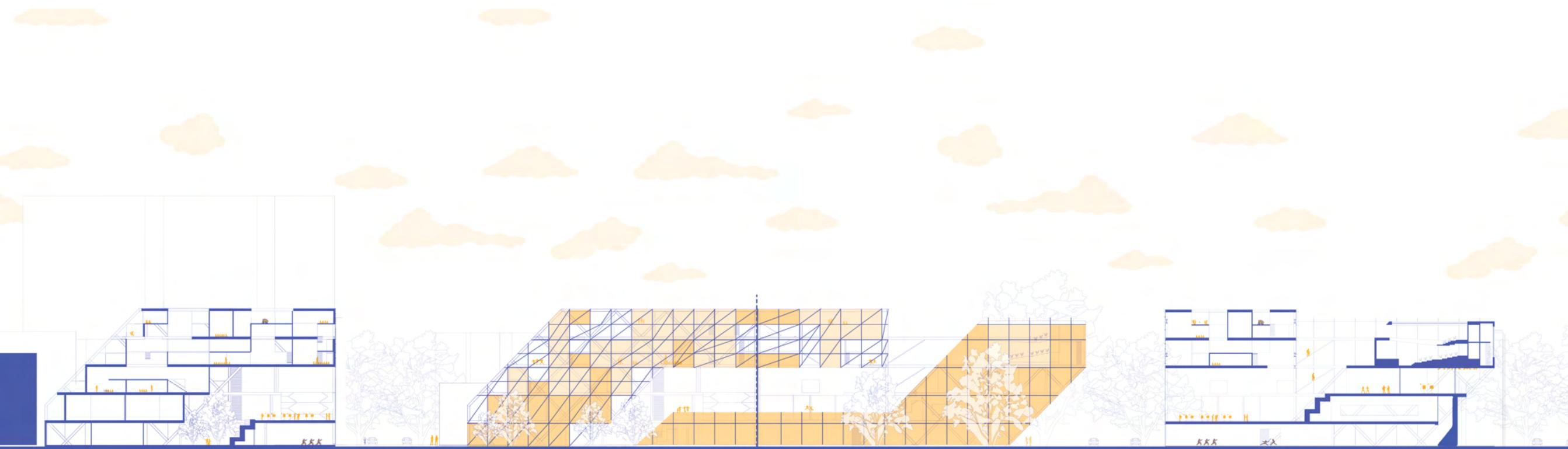


Classroom Typology 2

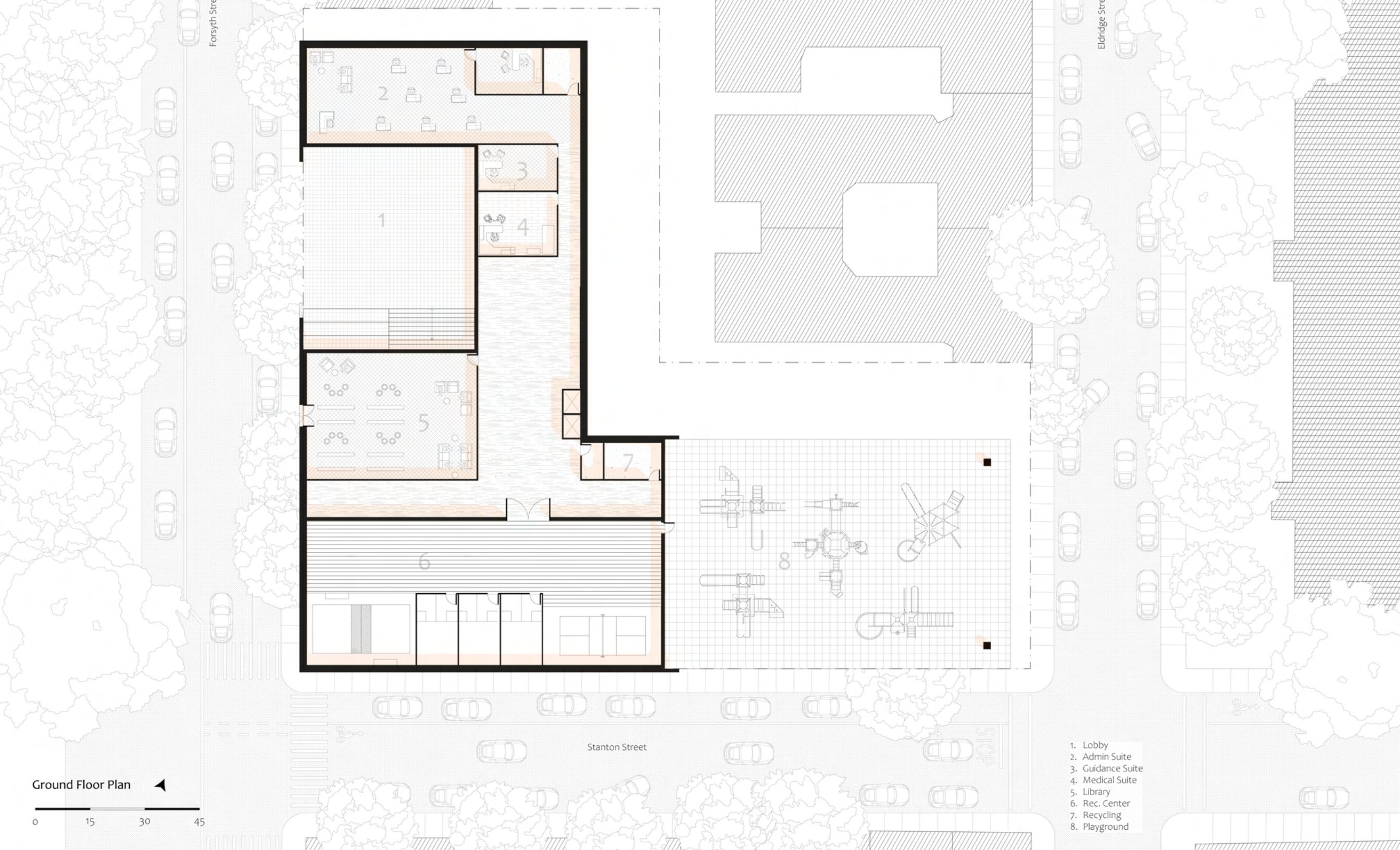


Classroom Typology 3





Sections and Elevations



Ground Floor Plan

0 15 30 45

Forsyth Street

Stanton Street

Eldridge Street

1. Lobby
2. Admin Suite
3. Guidance Suite
4. Medical Suite
5. Library
6. Rec. Center
7. Recycling
8. Playground

Shared Spaces

Bronx Housing Project

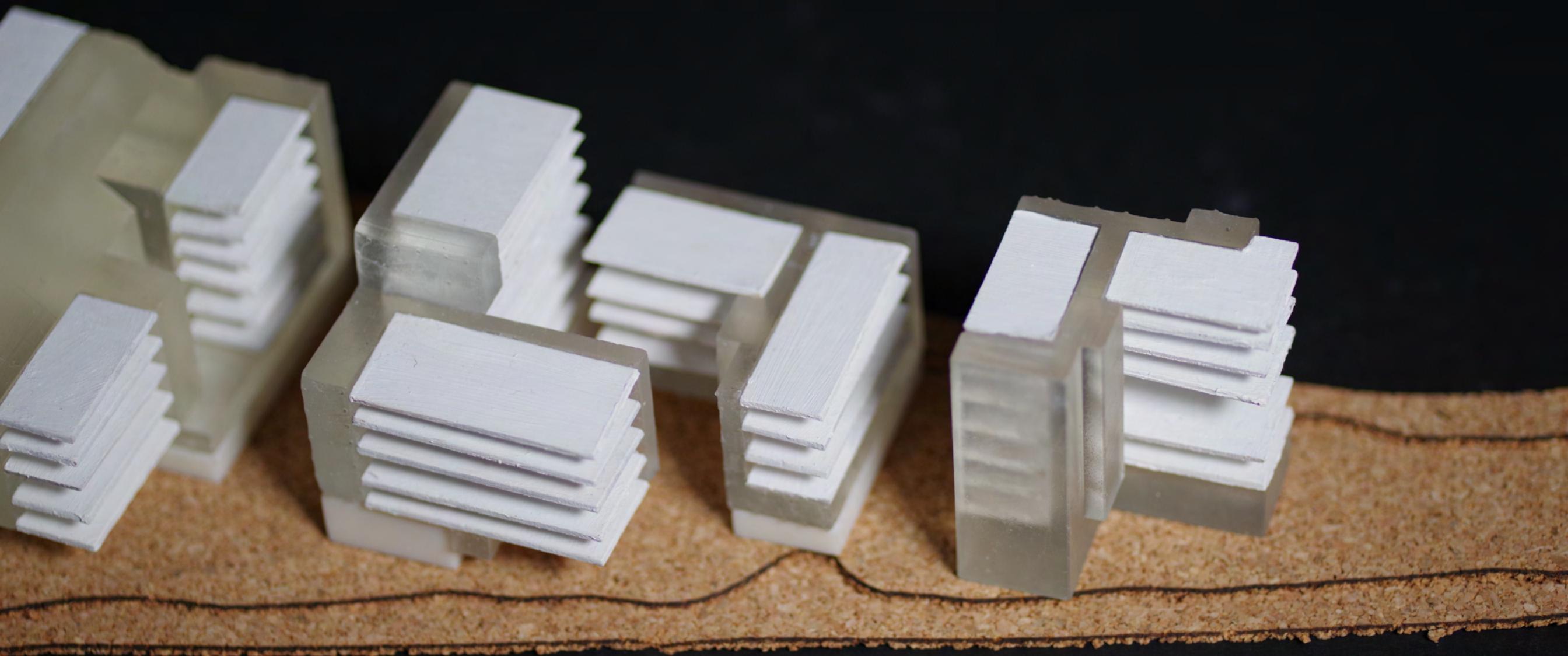


Our housing project in the Bronx innovatively merges public ground floor access with shared communal living spaces. By integrating missing neighborhood programming, we aim to establish a vibrant hub, fostering social interaction and community engagement. This project seeks to redefine urban living by prioritizing connectivity, inclusivity, and the creation of a dynamic neighborhood focal point.

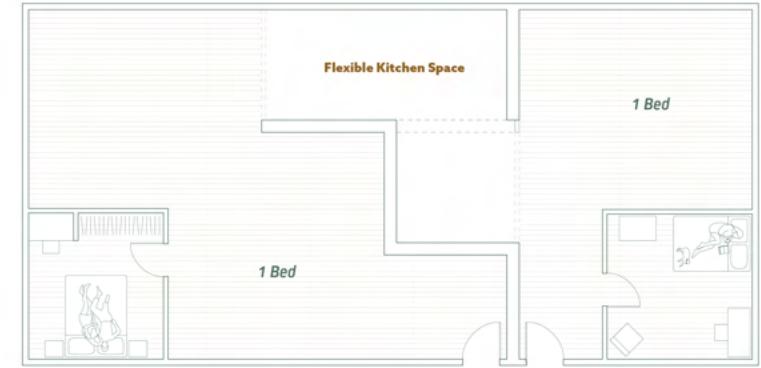
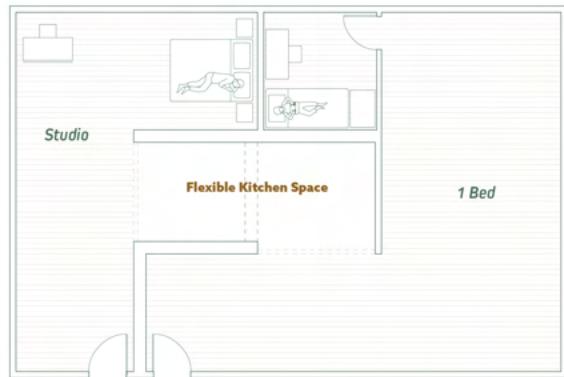
w/ Syeeda Simmons
Mimi Hoang
Fall '22



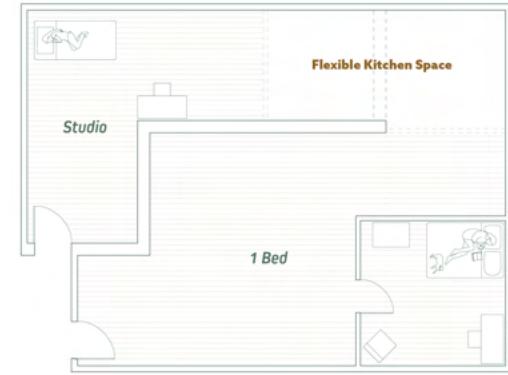
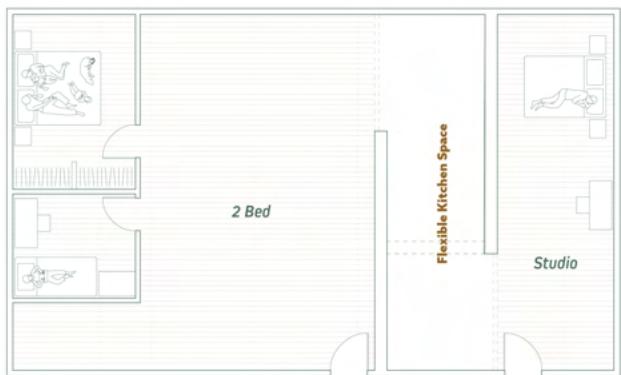


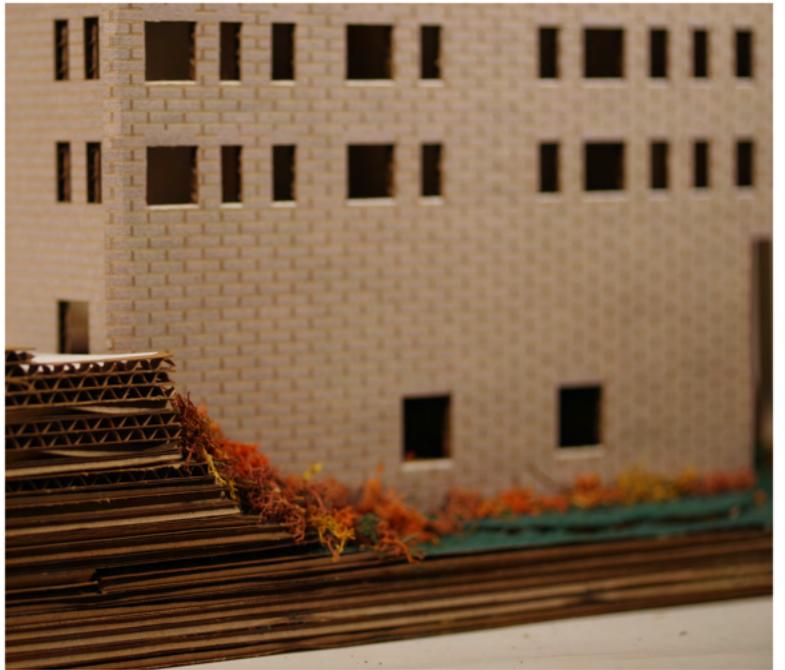


Massing Model - showing shared program spaces as a translucent mass



Unit Configurations

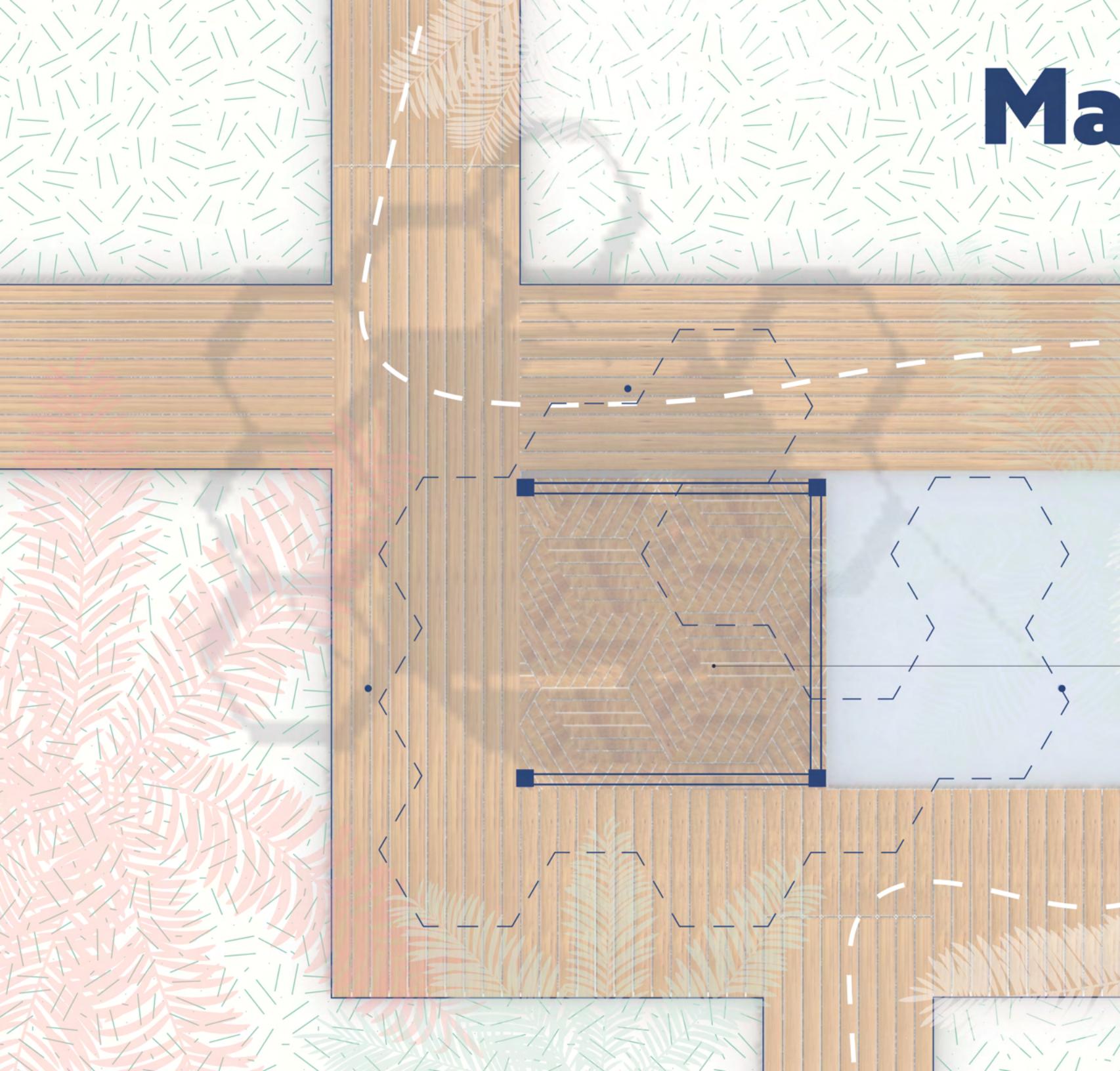




Marine Center

Centro Resiliencia Costero

The project aims to establish a Center for Coastal Resilience on Culebra Island, Puerto Rico. Community engagement and coastal studies informed the proposal, which includes educational and recreational spaces alongside protective policies. The physical design focuses on Cayo Pirata, featuring a marine biology lab, nurseries for coral reefs, mangroves, and sea grass, as well as educational and recreational facilities.



w/ **Emily Padilla-Chicas**
Pedro Rivera
Spring '23



Our vision is to create a sustainable, resilient Culebra that is capable of withstanding the impacts of climate change, while fostering community and environmental autonomy.

Figure 1: An aerial perspective of Sargassum seaweed present on a beach in Culebra.
Picture taken by Emily Padilla-Chicas

Proposal Vision



Key Objectives

- Educate Culebrenses on coastal resilience.**
Develop and implement educational initiatives to increase awareness and understanding of coastal resilience, including the measures that can be taken to enhance resilience to natural hazards and climate change impacts.
- Preserve and protect coastal ecosystems and enhancing public access to the coast.**
Enhance ecological health of coastal ecosystems while providing recreational opportunities for locals and visitors.

Key Outcomes

- Construction of Research Center.**
To improve the local marine environment's health and resilience through research, restoration techniques, and education for restoration practitioners.
- Create a community-based program.**
To empower communities to protect and manage their coastal resources, promote sustainability, and preserve biodiversity and ecosystem services.
- Policy Implementation to protect coastal ecosystems.**
Preserving the ecological integrity of coastal environments and ensuring public access to these areas. By implementing policies that safeguard natural ecosystems and improve public access, the negative effects of privatization can be mitigated, benefiting both the environment and society.

Community Engagement

During our community engagements on coastal resilience and coastal conditions in Culebra, we met with local residents, environmental organizations, and government officials to discuss the impacts of climate change on the island's coasts and explore potential solutions to mitigate its effects. Through these conversations, we gained a deeper understanding of the challenges facing the community and the urgent need for collaborative action to protect and preserve the island's fragile ecosystems and ensure a sustainable future for generations to come. As a result of our community engagements, we identified several key areas where action is needed to address the impacts of climate change on Culebra's coasts.

One recurring theme that emerged from these discussions was the need to educate Culebrenses on coastal resilience and the importance of preserving and protecting natural coastal ecosystems. Many community members expressed their concern about the lack of awareness and understanding of these issues among the general public and the potential

negative impacts on the island's environment and economy. Additionally, enhancing public spaces on the coast was also discussed as a crucial aspect of coastal resilience. Community members emphasized the importance of creating safe, accessible, and inviting spaces for residents and visitors to enjoy the island's natural beauty and cultural heritage. They highlighted the potential benefits of such efforts, including improved community well-being, increased tourism, and a stronger sense of community pride and identity.

Overall, our engagement with the Culebra community exposed the complex and interdependent relationship between ecological, cultural, and historical factors that shape the island's identity and sustainability. We recognized the need for collective efforts to protect the island's delicate ecosystems from the adverse effects of climate change. These valuable insights informed our approach in seeking collaborative and impactful solutions to the challenges confronting Culebra's coasts.



“

Protecting and restoring is so important because conserving a quarter of the planet is not enough.

Sammy Suleimán-Ramos
Sociedad Ambiente Marino



“

Hurricanes not only affect the island directly with the wind but also it impacts transportation, food imports and energy.

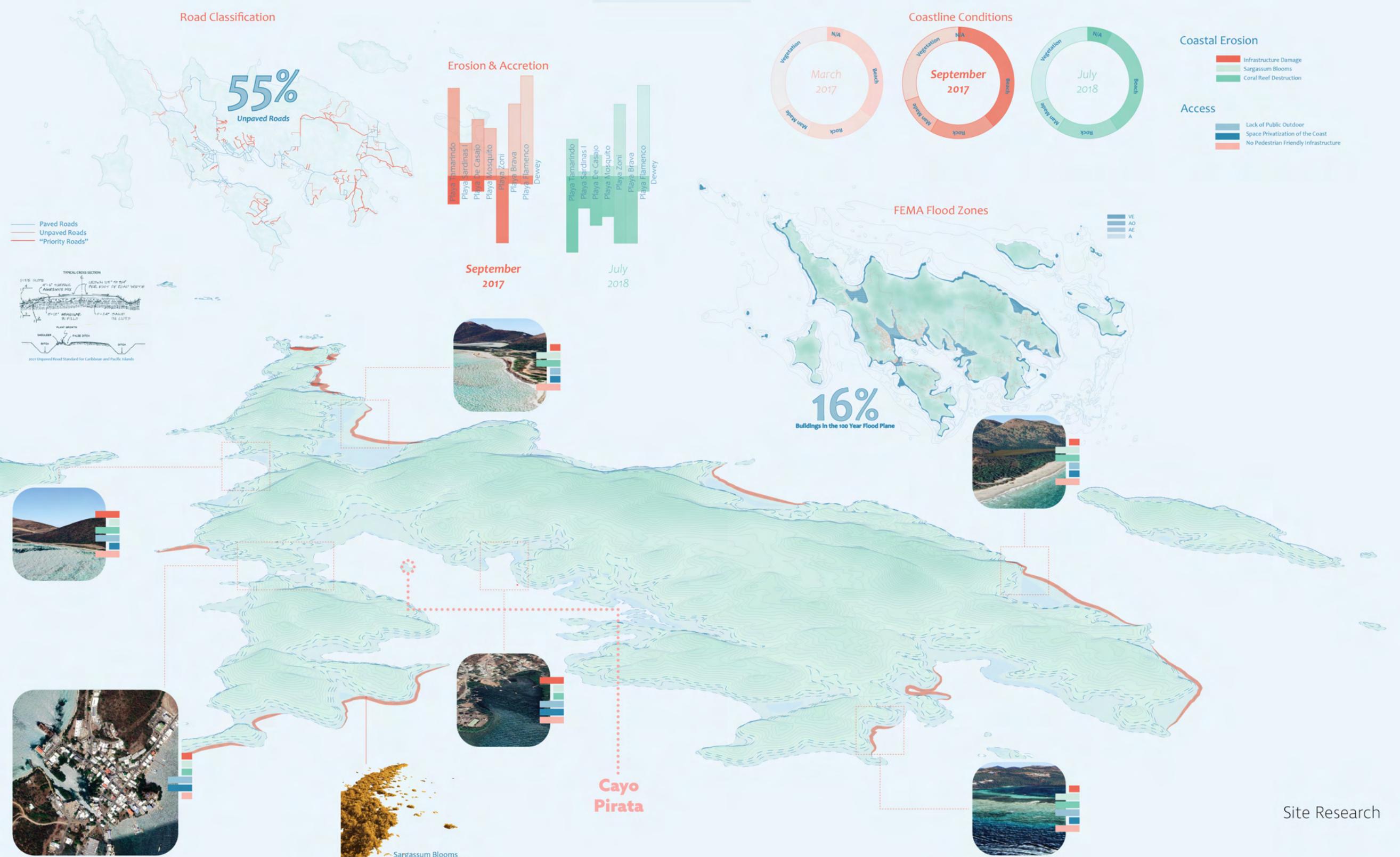
Dulce del Río-Pineda
Mujeres de Islas



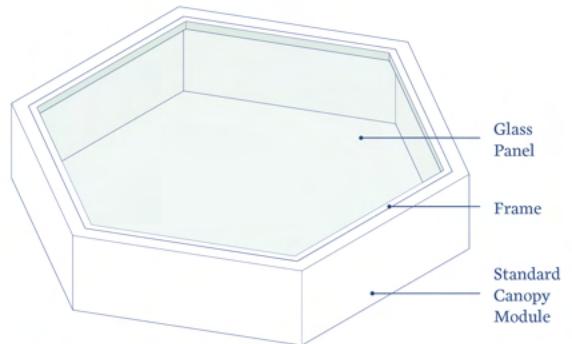
“

Mangroves to Culebra are equivalent to what the levees are to New Orleans

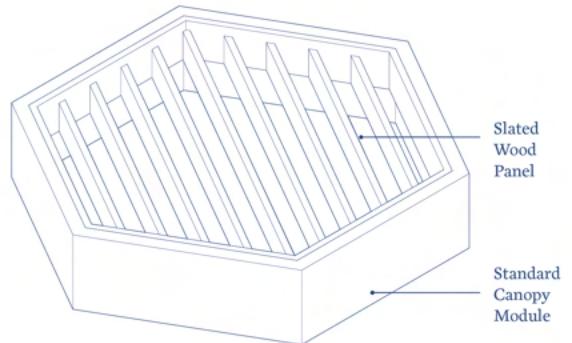
Mary Ann Lucking
CORALations



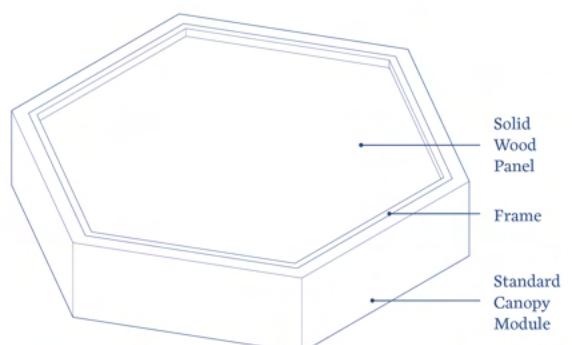




Glazed Canopy Module



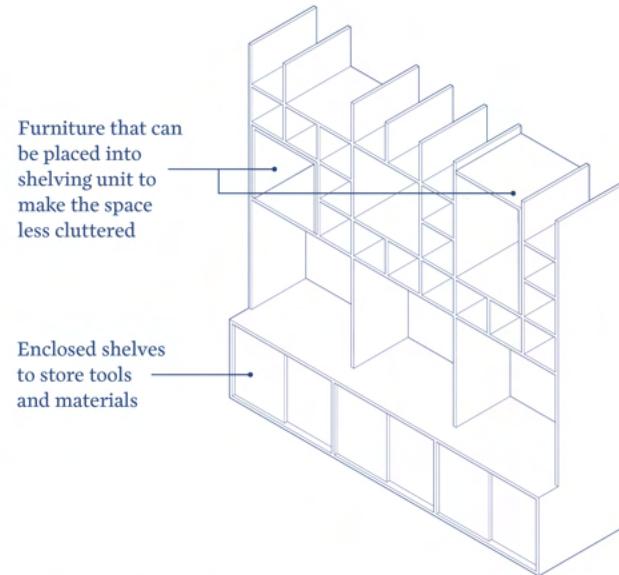
Slated Canopy Module



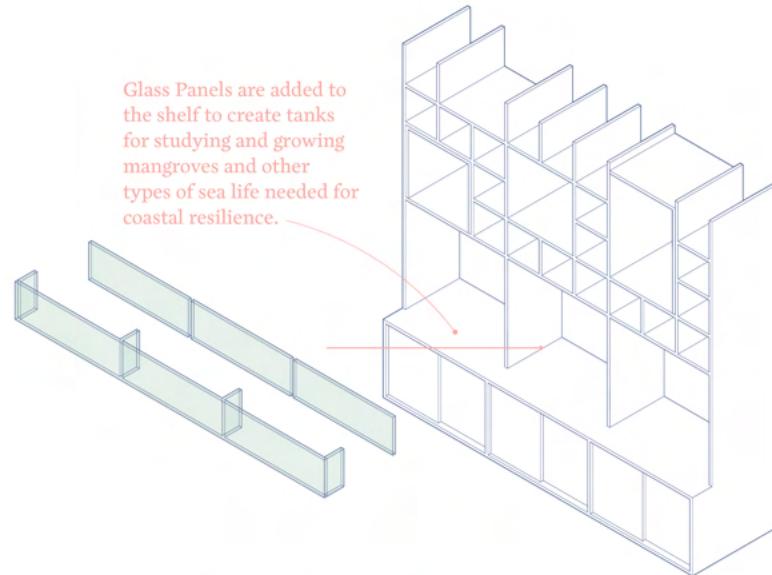
Solid Canopy Module



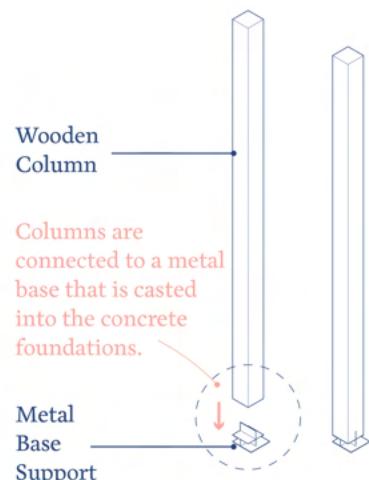
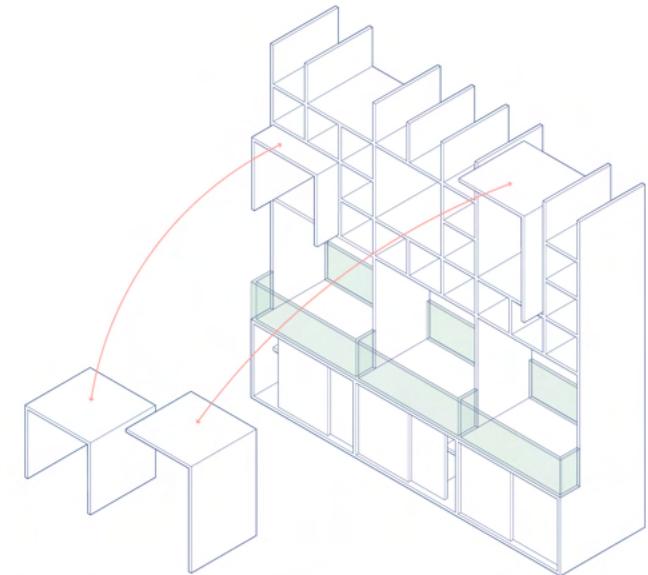
3 Point Sun Study



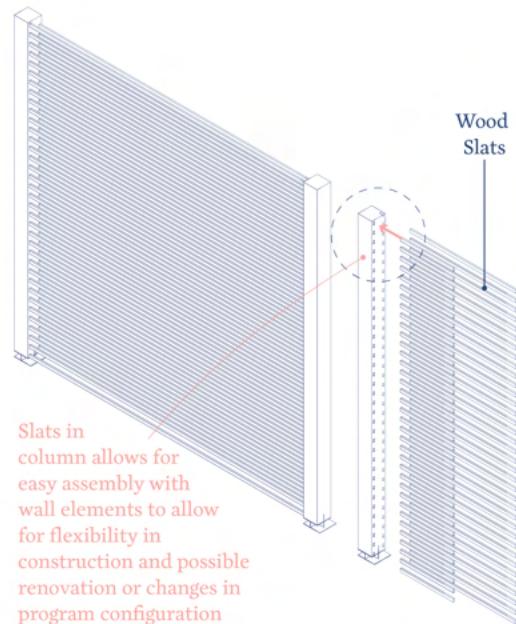
Nursery Shelving Unit



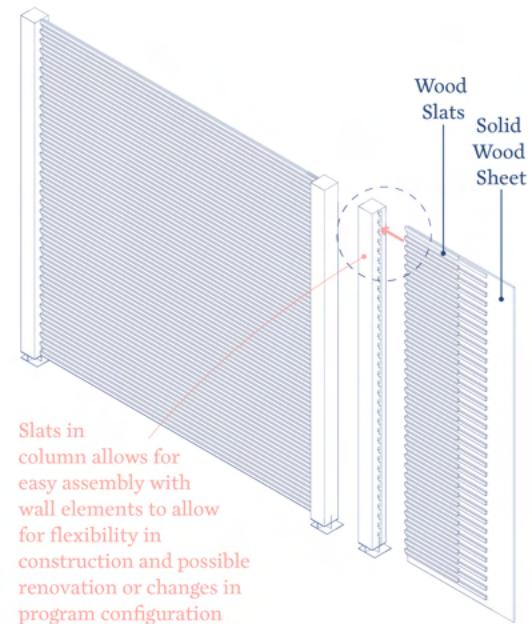
Glass for Small Scale Nurseries



Column Assembly



Open Air Wall Panel



Solid Wall Panel



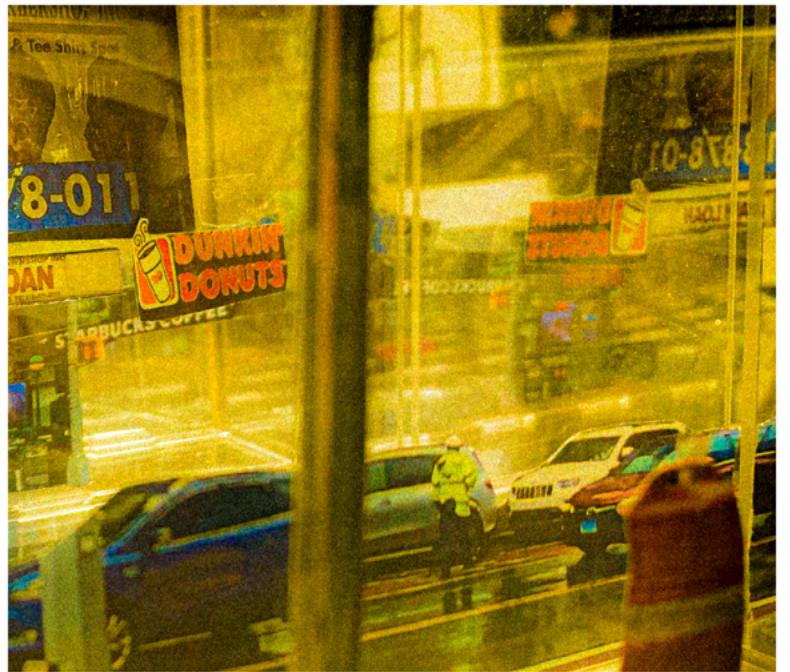


125 Stories

Model Photography Series

This project studies the layers on intricacy that exist within black Harlem. Focusing on 125 street as a complex ecosystem of moments and interactions. This ecosystem is multifaceted and intricate as it holds a lot of history and trauma rooted in the black Harlem experience and it is valuable to document these things with the changing environment.

w/ Eric Hagerman
Jelisa R. Blumberg
Spring '23





FTH FTH

X-1 HARLEM
ARMED COLLECTIVE DEFENSE

TRANSIT

BUS LANE
BUSES ONLY
RIGHT TURNS

100
M
P
E
T
O
L
Y

718-878-011

CASH LOAN

STARBUCKS COFFEE

STREETS

125 Street & 5 Avenue

Wetropolis

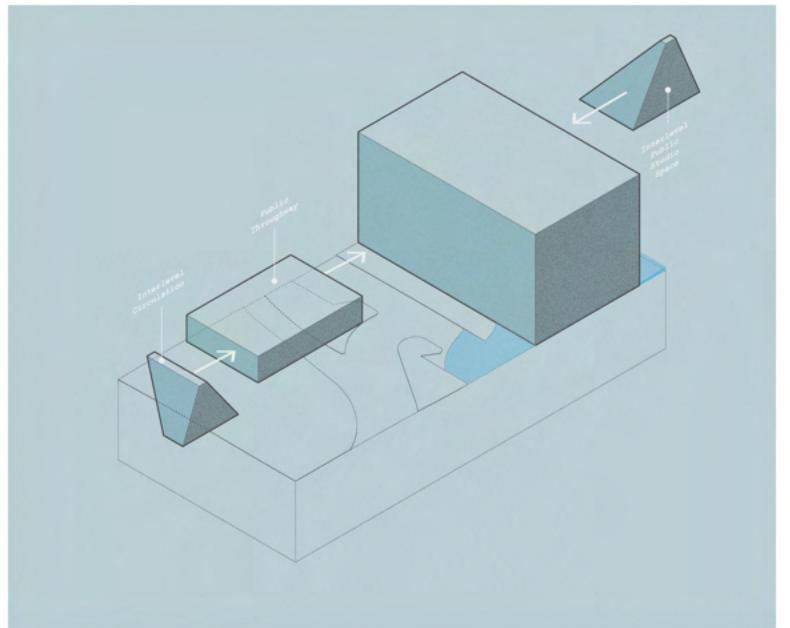
Public Film Theatre

The project aims to address NYC's increasing flood risk by adapting the Spring Studio building's program to withstand future inundation. Public spaces like the Flex Area and Screening Room are strategically placed on higher floors, with service spaces on the third level and a potential fourth-floor addition. The design features a floating platform system on the ground floor to manage floodwaters, ensuring continuous building use despite rising water levels.

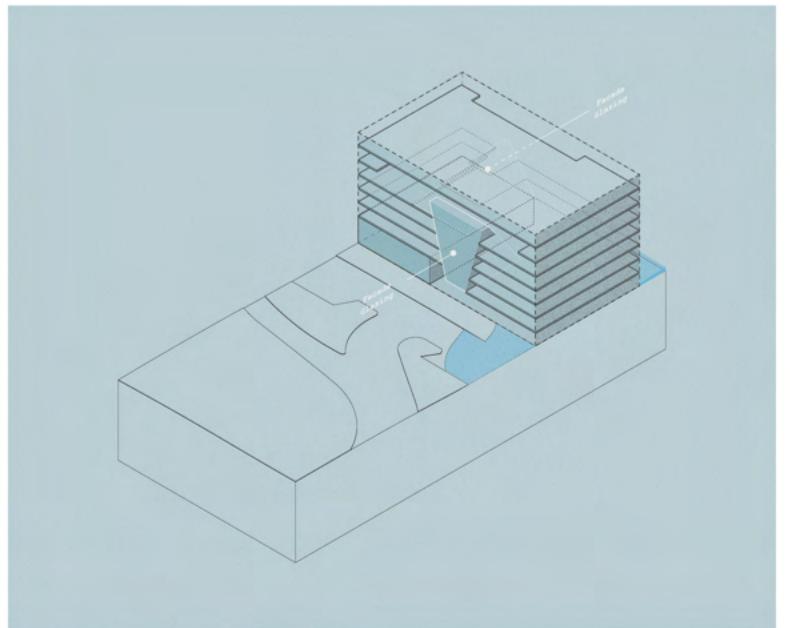


Amina Blacksher

Fall '23



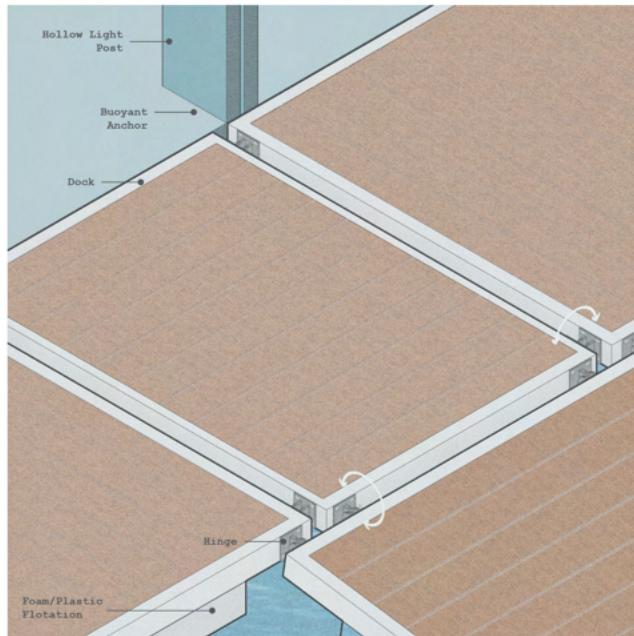
Massing & Program



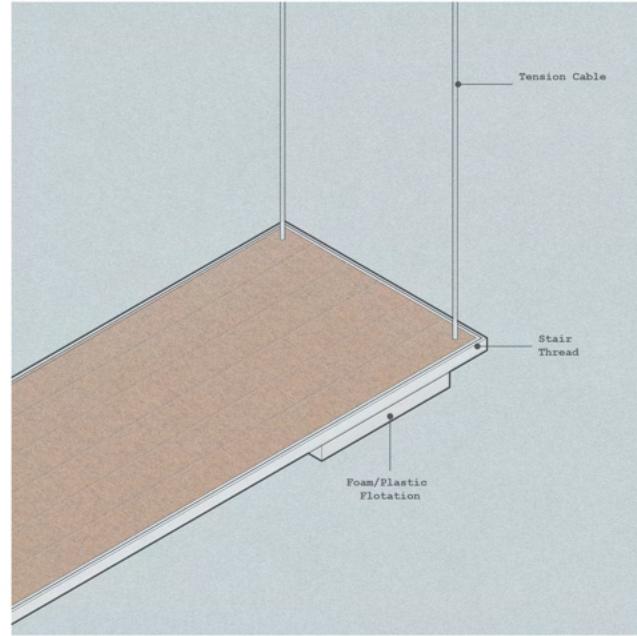
Massing after Manipulation



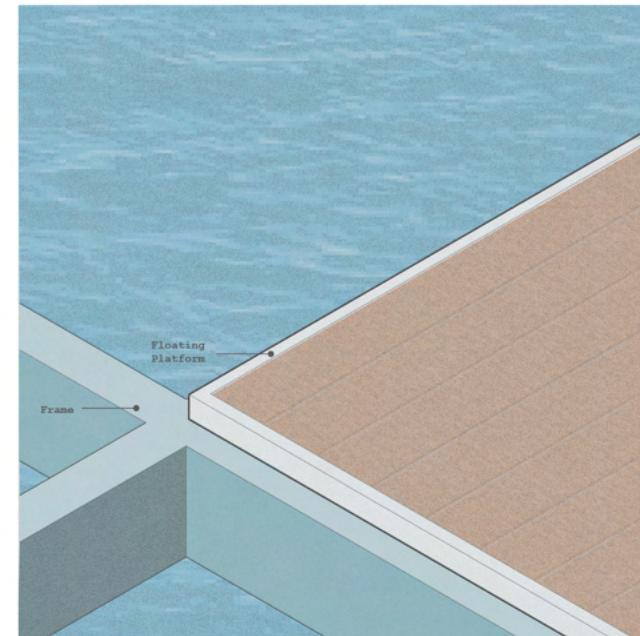
Before Flooding



Dock System

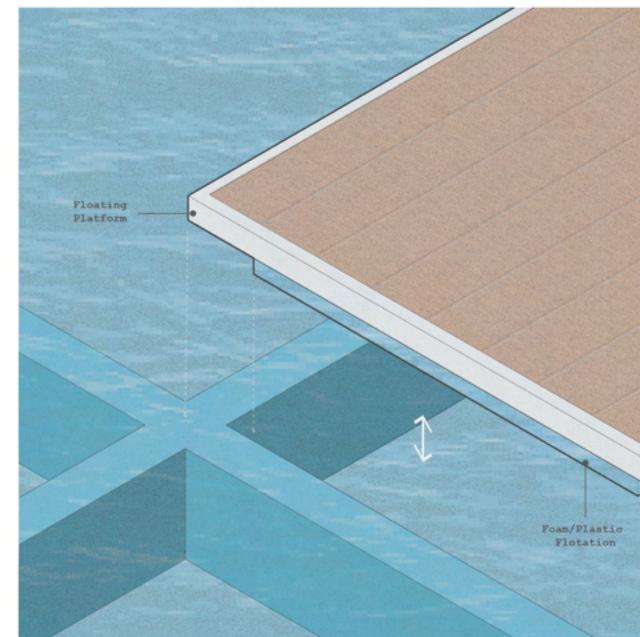
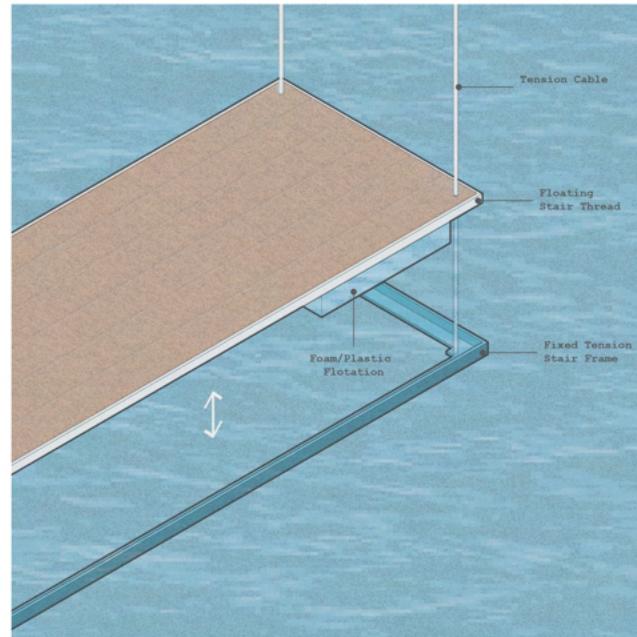
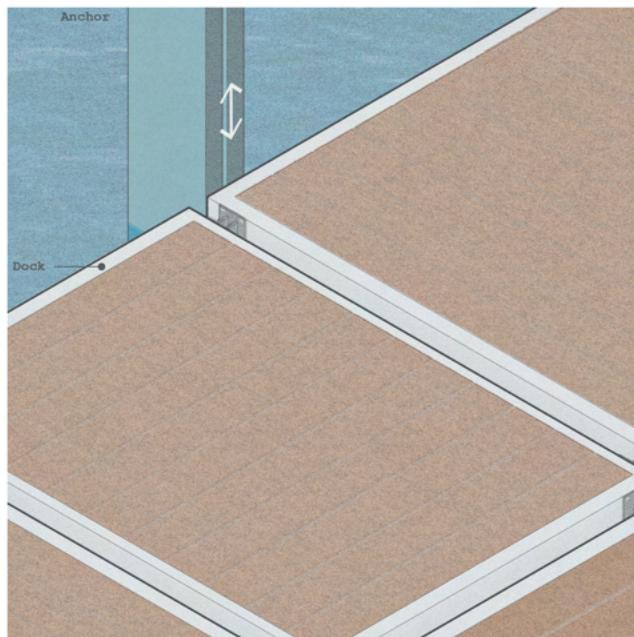


Stair System



Floor System

After Flooding





Section with Varying Floor Levels

Rural House

A Solution for Rwanda

The project aims to establish a Center for Coastal Resilience on Culebra Island, Puerto Rico, integrating education, recreation, and coastal protection policies. The proposed site plan for Cayo Pirata includes facilities like a marine biology lab, nurseries for coral reefs, mangroves, and seagrasses, along with recreational and educational gazebos to revitalize and protect the island's coast.



w/ Isaiah Graham
Fatou Dieye
Fall '23

Company Mission & Values

Our Mission

At Parsons | Graham our mission is to empower rural communities through affordable, locally sourced housing, fostering self-reliance, sustainability, and prosperity.

Empowering Communities for Prosperous Living.

Their Model

- Development**
Developed a plant-based varnish that contains locally-sourced materials available within walking distance of house.
- Recruitment**
Identified local masons to become micro-franchisees and train them to construct their housing product.
- Construction**
Constructs their housing product by sourcing and treating locally available materials using their techniques.
- Profit**
After monitoring micro-franchisees for a four year period, they shift to just selling the varnish through those relationships they built.

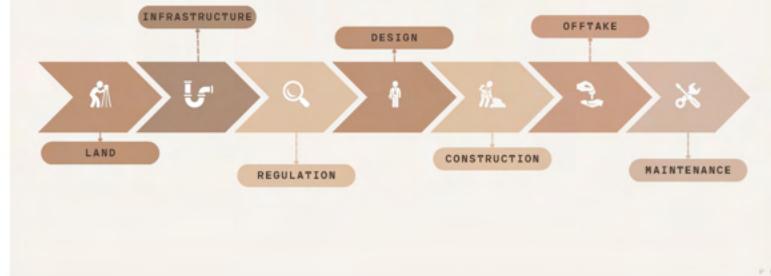


Our Model

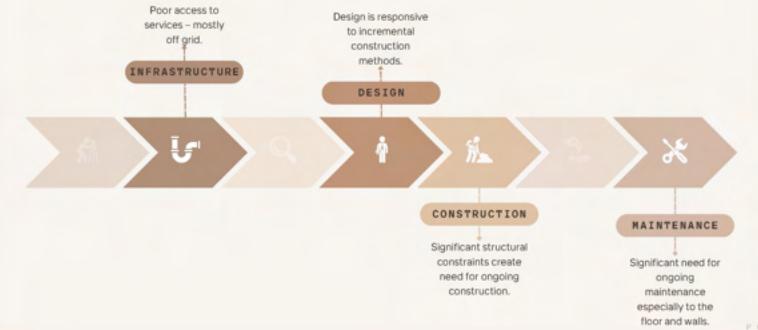
- Provide Base Structure**
We provide design for base housing model that includes static foundations and other infrastructure elements.
- Recruiting Skilled Masons to Execute Construction**
We then recruit skilled labor from the community to execute the construction of this prototype.
- Rooms or Owner Executes**
We allow for the possibility for **self-build** by allowing the homeowner or a room finish the walls with existing materials that are readily available.
- Revenue Generation**
This incremental construction method allows for **income generation for the mason** through the use of the savings of the base prototype also provides spaces to house **income generators for homeowners**.



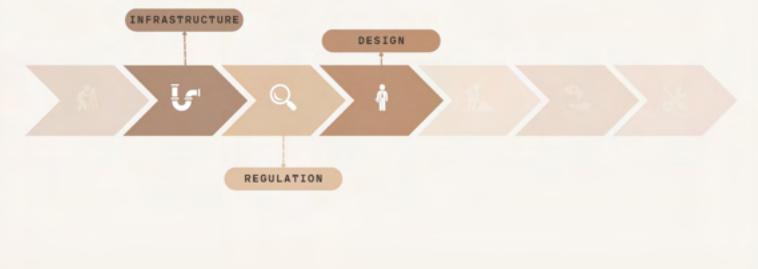
Value Chain

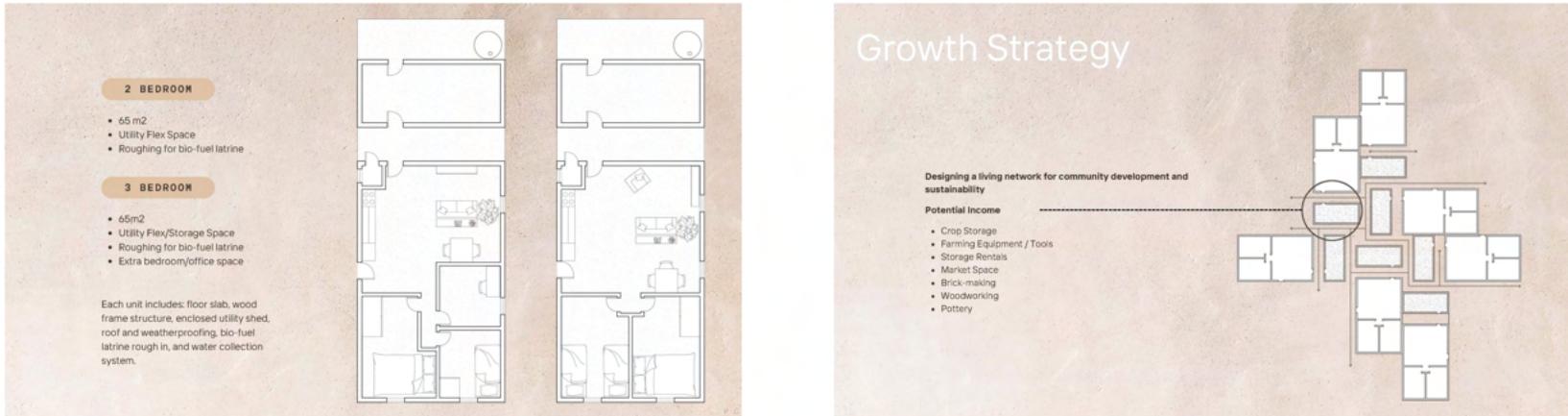
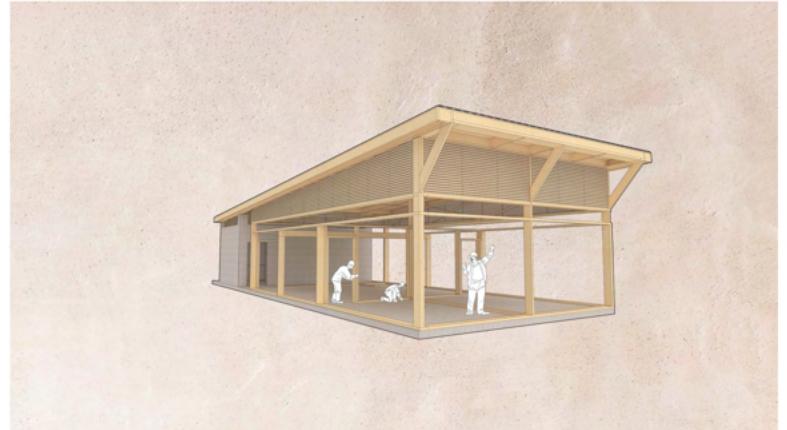
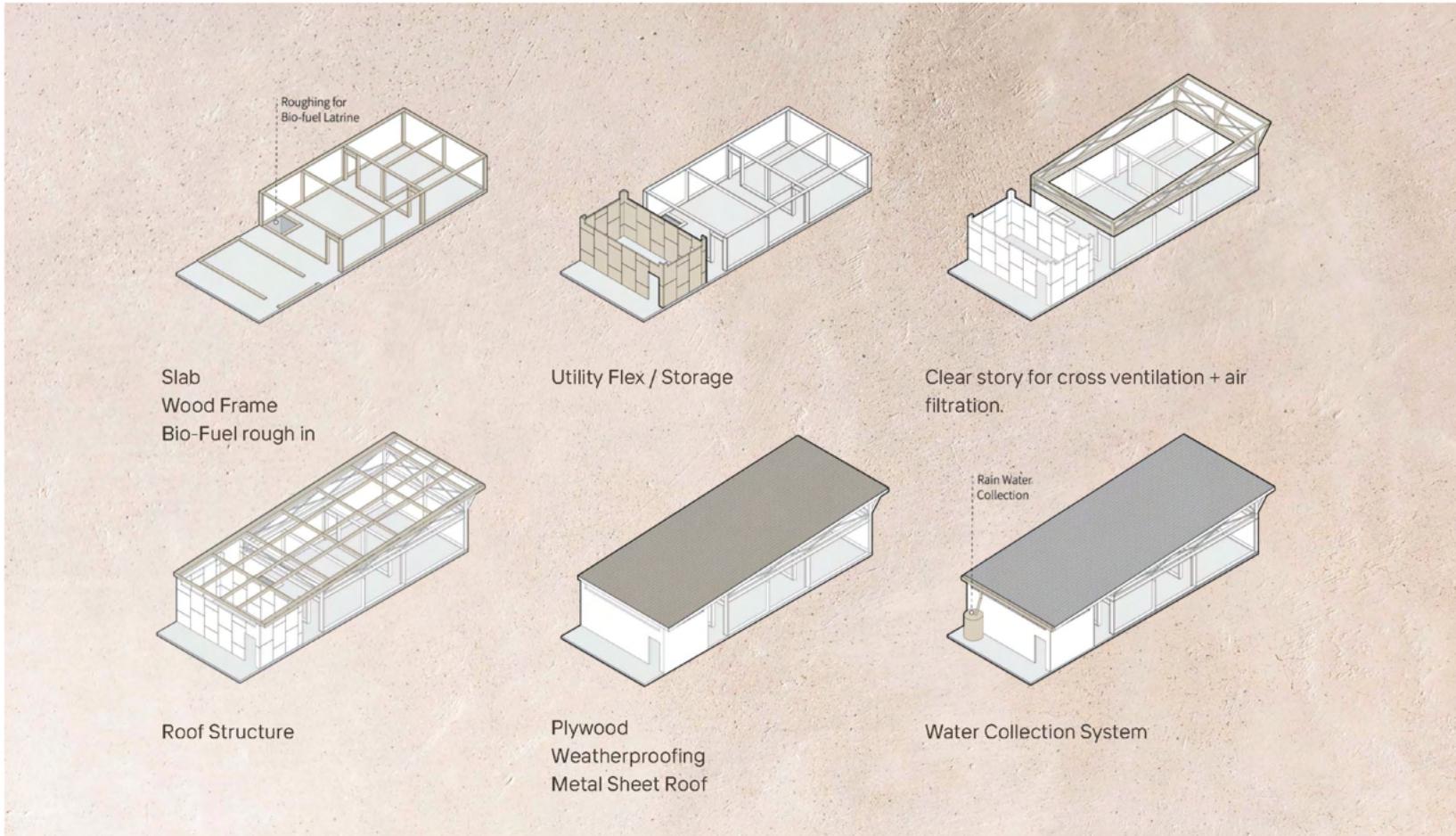


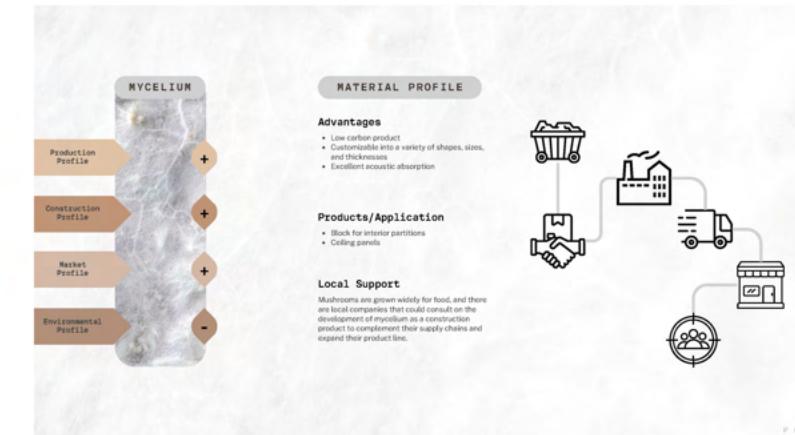
Broken Links



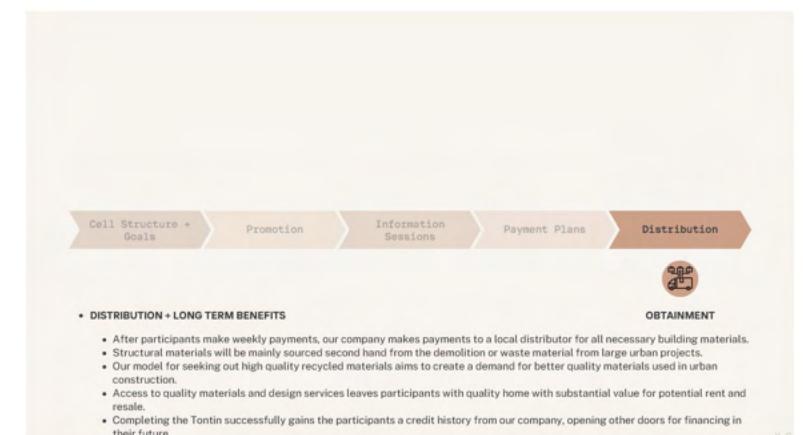
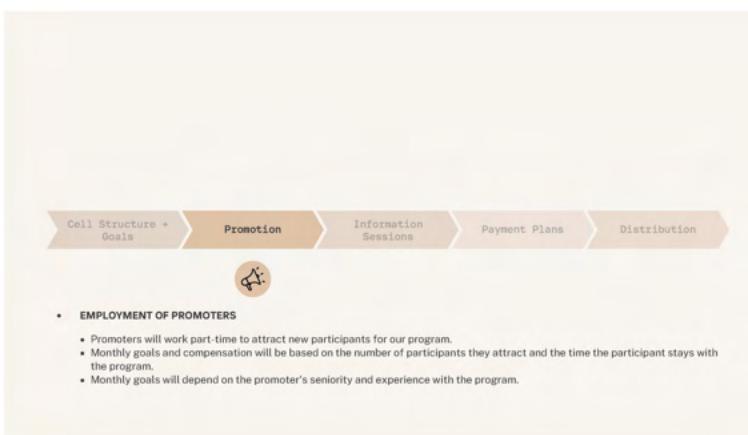
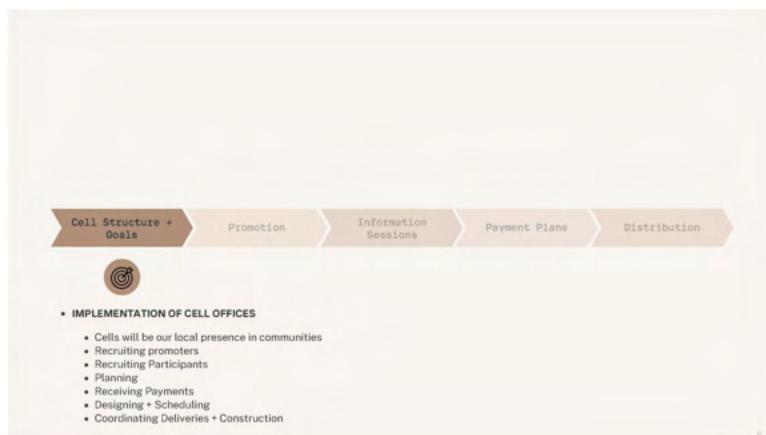
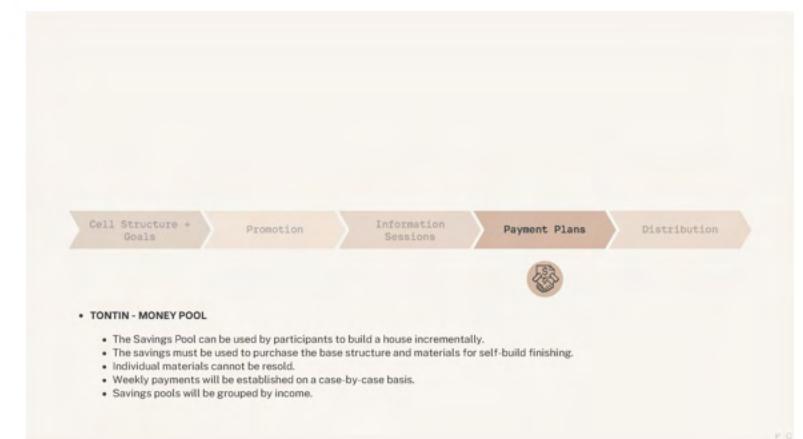
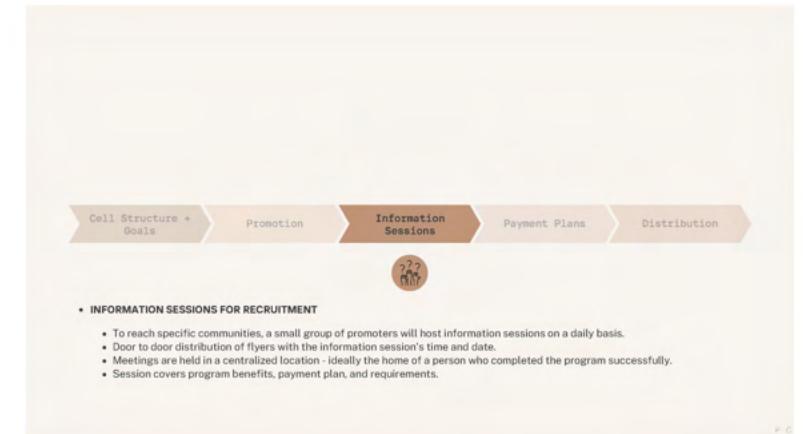
Points of Opportunity

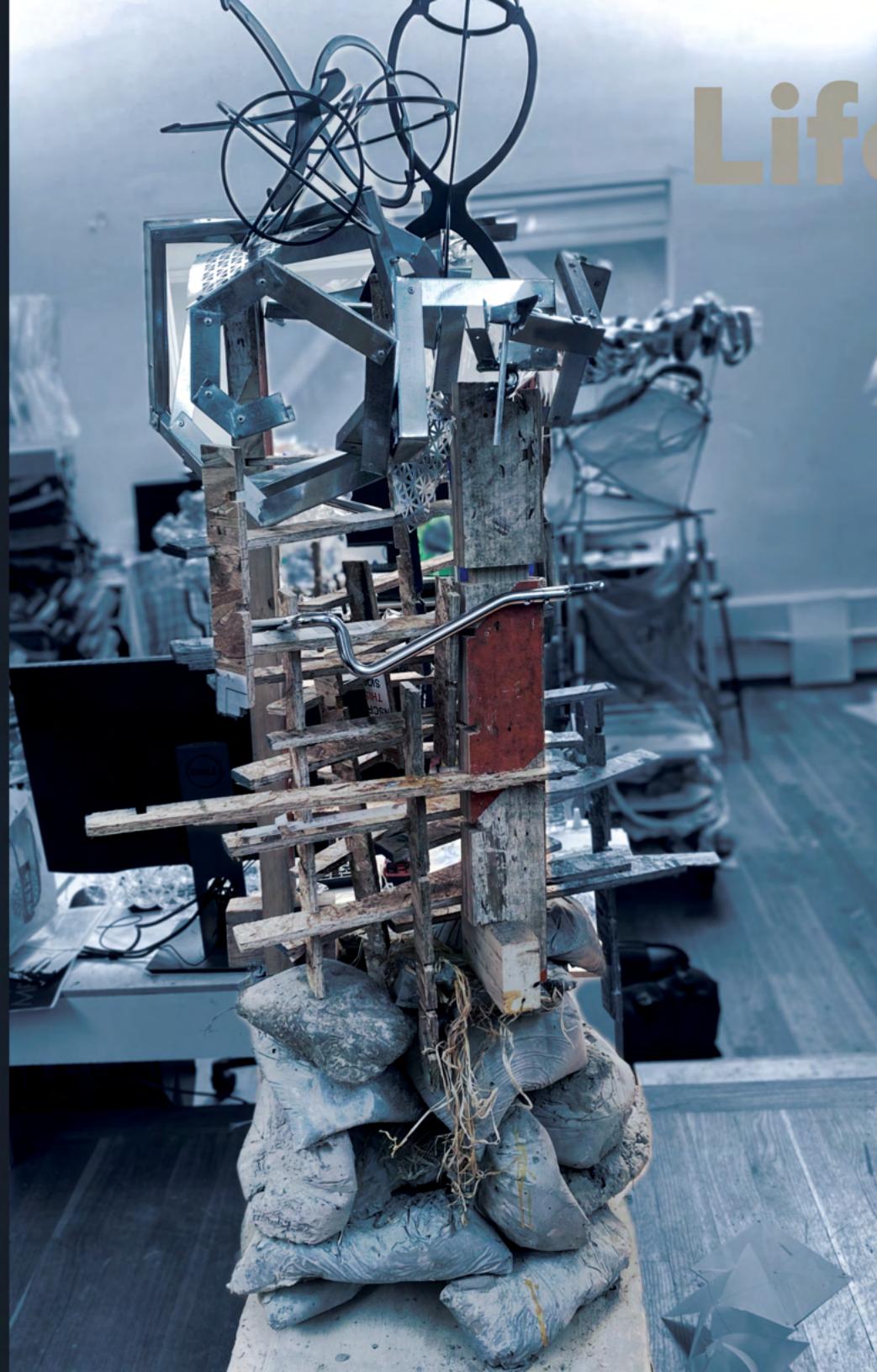
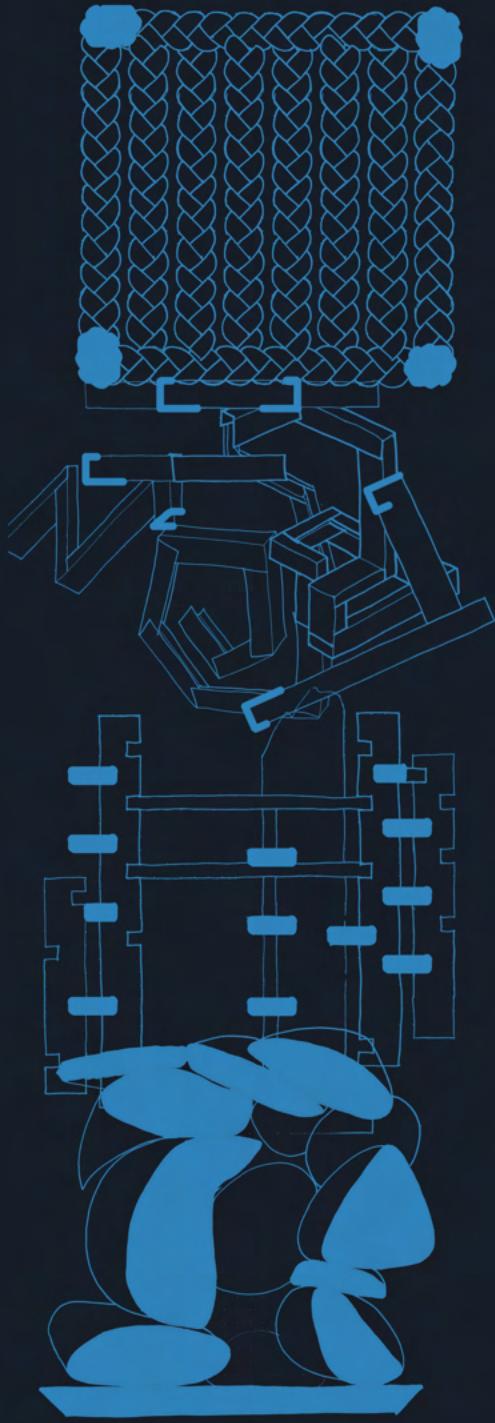






Scaling-Up Strategy





Life's Tapestry

*Crafting Memories,
Creating Moments*

You're invited to witness the unfolding of a life, my life, one layer at a time. Join me on this artistic odyssey, where the art of experience meets the canvas of introspection, creating a narrative as unique and dynamic as my story.

*Ada Tolla
Giuseppe Lignano
Spring '24*

RE

COLLECTING

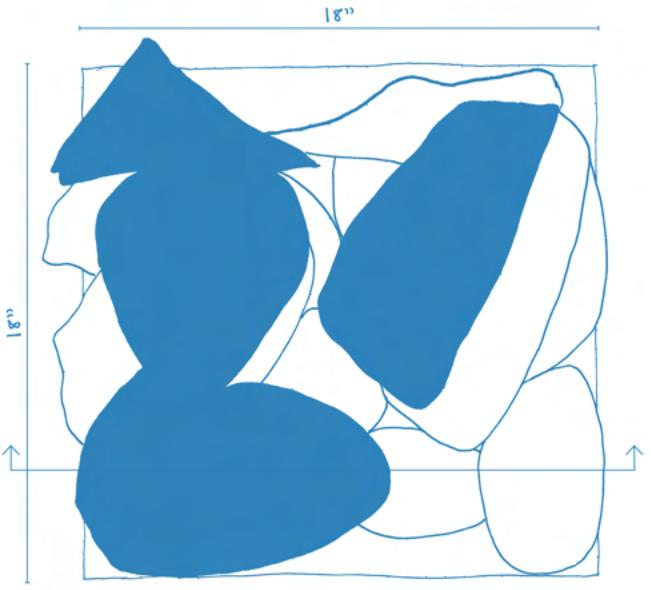
The first half of this Monograph collects and documents snapshots of moments in my story. Times in my life that mean a lot to me and to who I have become and will continue to become. Remembering where I've come from and the pivotal points in my journey is important to me and my life's projection. The documentation of periods in my life from childhood to present day, allow you, the reader an opportunity to gain a glimpse into my life. Understanding what inspires me and the ideas and moments that inspired the **MAKING** that follows.

MAKING

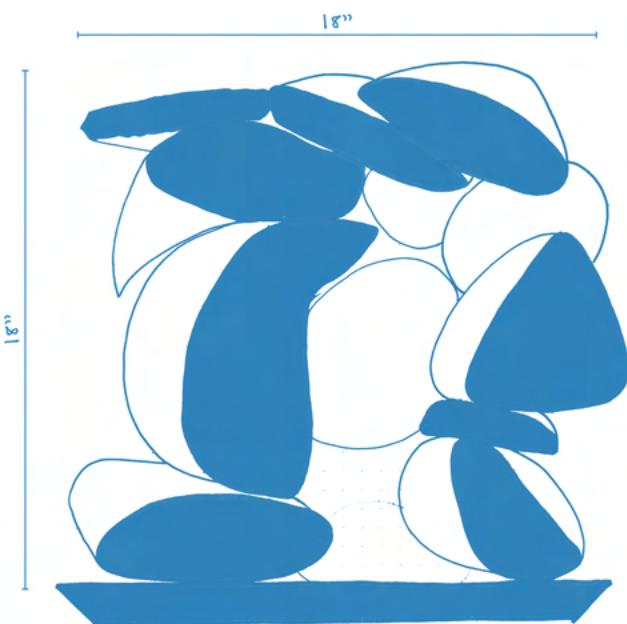
MAKING

In the next chapter of this Monograph, I invite you into the realm of making, the process where moments become tangible creations. Building upon the **COLLECTING**, join me in unraveling the genesis of these sculptures. Discover the interplay between personal narrative and artistic expression as we explore the evolution of moments and memories that shape my creative journey. Together, let's unveil the layers of meaning behind each creation, offering insights into the artistry inherent in the act of **MAKING**.

MAKING



Masonry Plan



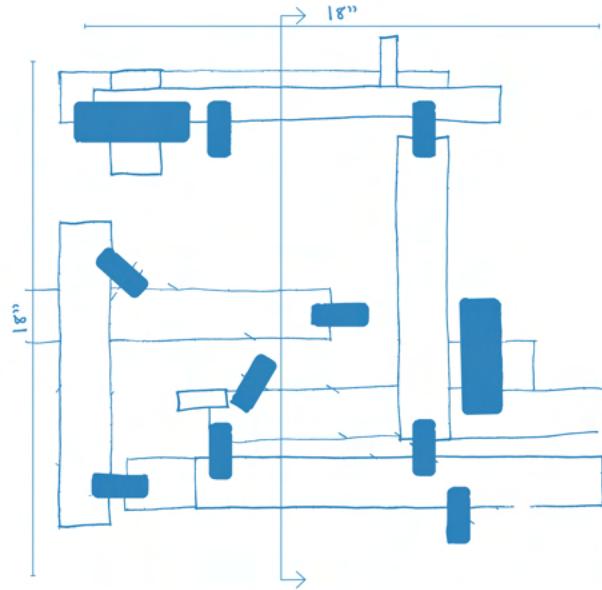
Masonry Section



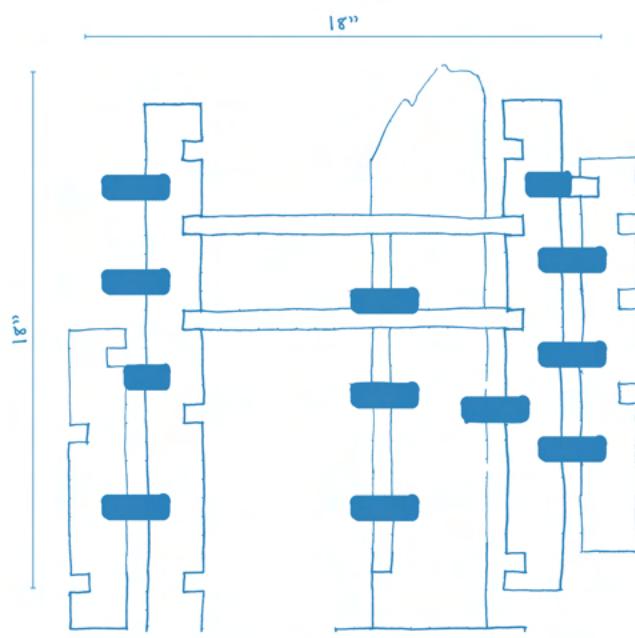
“Soft” Foundations

My physical representation of this feeling is something that represents roots. Like the roots of the mangroves protect the coast, the British Virgin Islands protects me and is my safe haven. The inspiration for these modules where the comfort of a pillow coupled with the strength and stability of heavy masonry constructions. This work was created through a very disjointed creative process. But the process was fun and allowed the opportunity for me to explore a making technique that I have wanted to try for a some time.

ahbhabfhb



Wood Plan

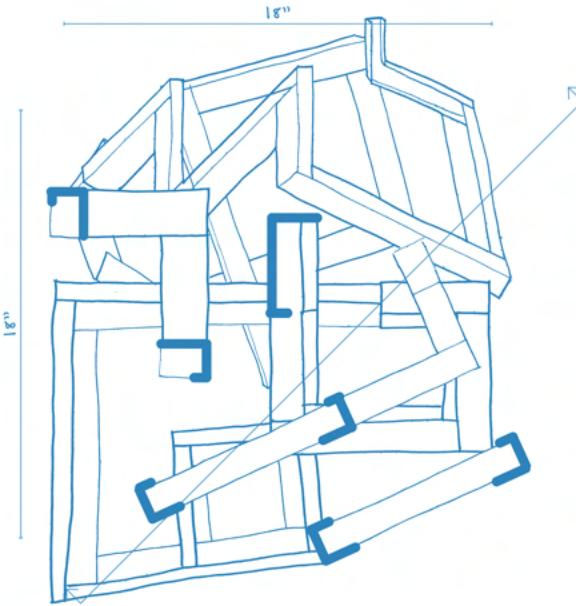


Wood Section

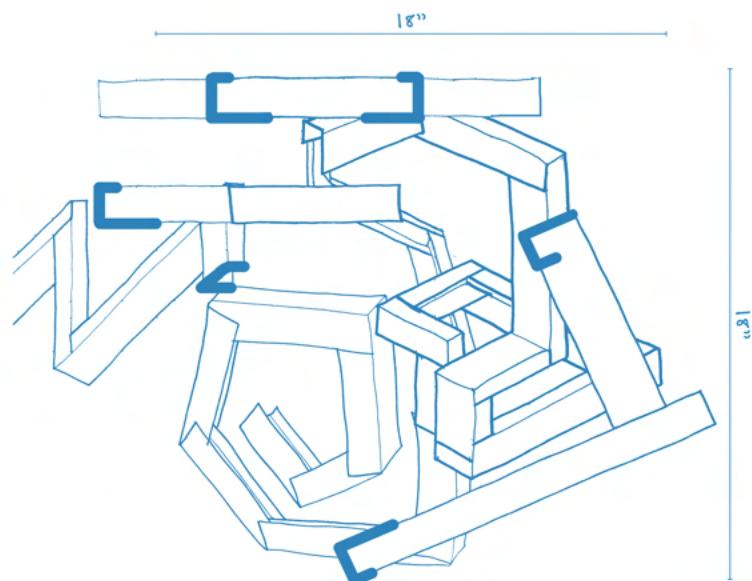


Joint of Discovery

Wood joinery is a technique I have known since I was in 9th grade. After looking at the images of my childhood home with the joinery of the deck being exposed by way of destruction, I was inspired to use found and degraded wooden elements and carefully cut and notch to create the structure of the wooden piece.



Metal Plan



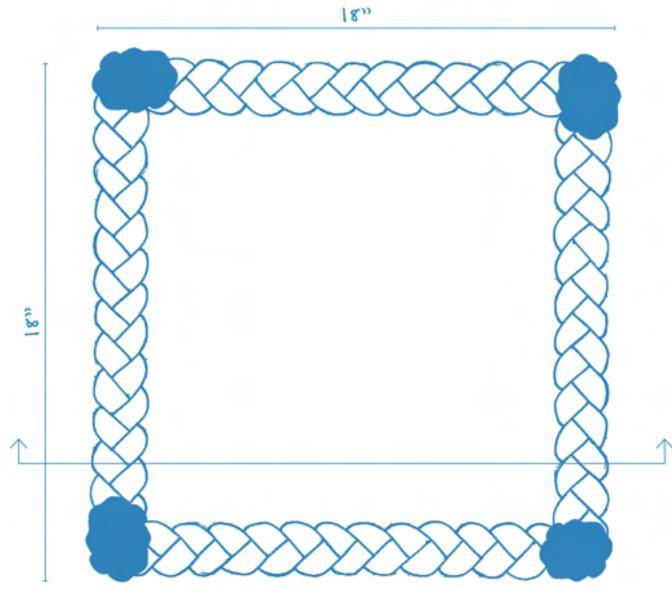
Metal Section



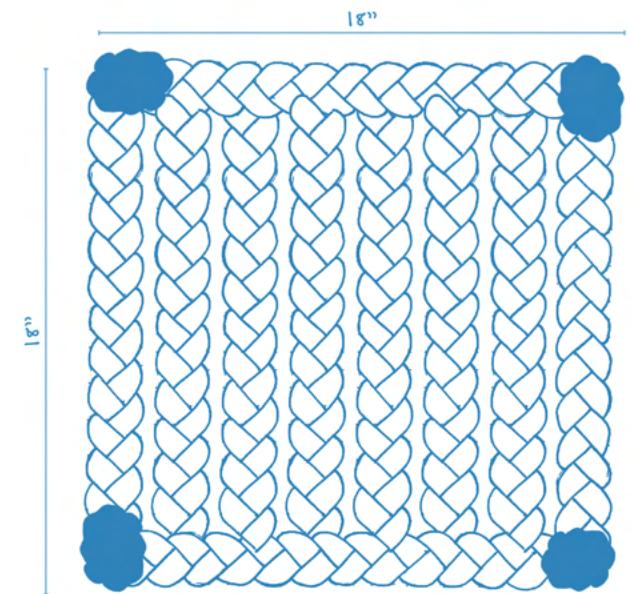
Flexible Rubble

This segment of my piece embodies the hope and interconnectedness that I feel as I reminisce upon the hurricane's destruction. The channels serve as tangible remnants—solid pieces of rubble meticulously cut, bent, and pieced together to form unique elements, each captivating in its own right. These elements are then harmoniously brought together, mimicking the synergy of the whole, much like how I remember moments and memories within the wreckage of my grandmother's house.

ahbhabfhb



Plastic Plan



Plastic Section



Braided Frame

This piece is an attempt at taking this activity that I admire and created a sculpture that allowed me to enjoy the process just as much as the final product. Standing strong and tall like OUR HAIR does, this sculpture is an embodiment of everything black hair is and a physical representation of something I have always enjoyed.

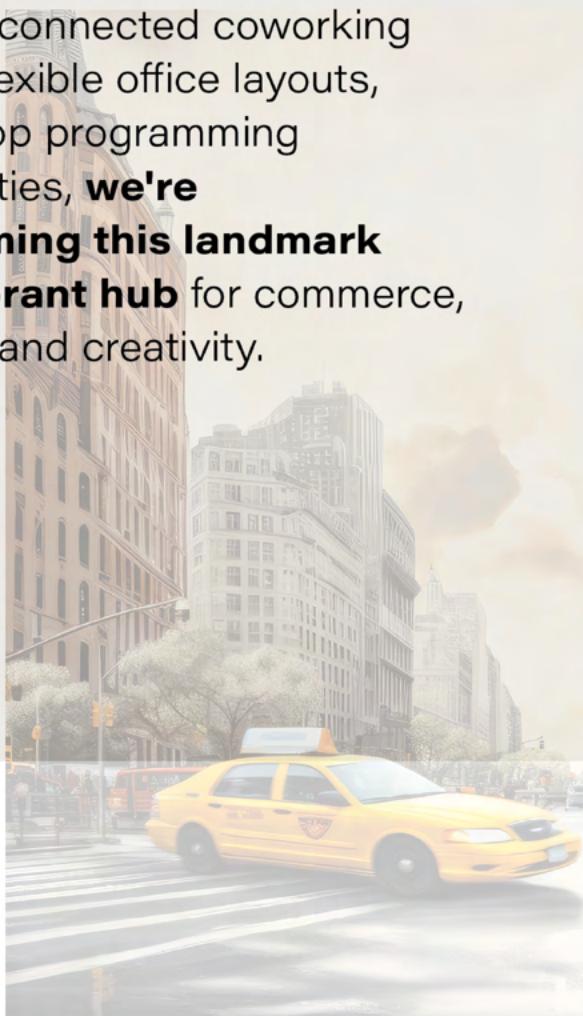
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RE
COLLECTING
MAKING

NEW FLATIRON

175 5th Ave

With interconnected coworking spaces, flexible office layouts, and rooftop programming opportunities, **we're transforming this landmark into a vibrant hub** for commerce, wellness, and creativity.



Project Deal Book

Patrice Derrington
Spring '24

EXECUTIVE SUMMARY

8,650 SF	211,505 SF	\$375 M	\$87.5 M
Developable Lot Area	Development Gross Area	Total Development Costs	Equity Needed from LP

\$913M	35.73%	6.03X	90%/10%
Total Development Profit	Equity IRR	Equity Multiple	LP/GP Split

Introduction to Development Project

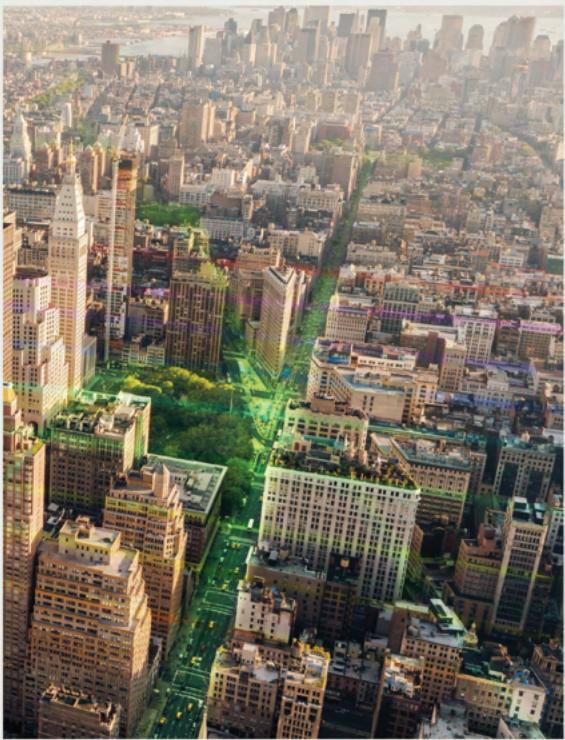
We are pleased to present an exciting investment opportunity in the heart of the flatiron district, the iconic **Flatiron Building**. This premier development project aims to transform a historic icon into a thriving new office and interactive retail property, offering lucrative returns for investors.

Project Overview

The project entails the development of the Flatiron Building comprising **2 retail floors, 2 health and wellness floors, 4 coworking floors and 13 floors of creative office** and approximately **206,991 square feet** of leasable space. Situated in a high-demand area, the development promises to capitalize on the growing demand for new office stock and more creative and experiential retail in the city properties.

Market Opportunity

The creative office and experiential retail market in New York is experiencing robust growth, driven by the increase in the desire for individuals to return to the office and those who work from home or have unconventional employment having the desire to work in flexible work environments. This presents a prime opportunity to leverage the demand for modern, strategically located real estate assets.

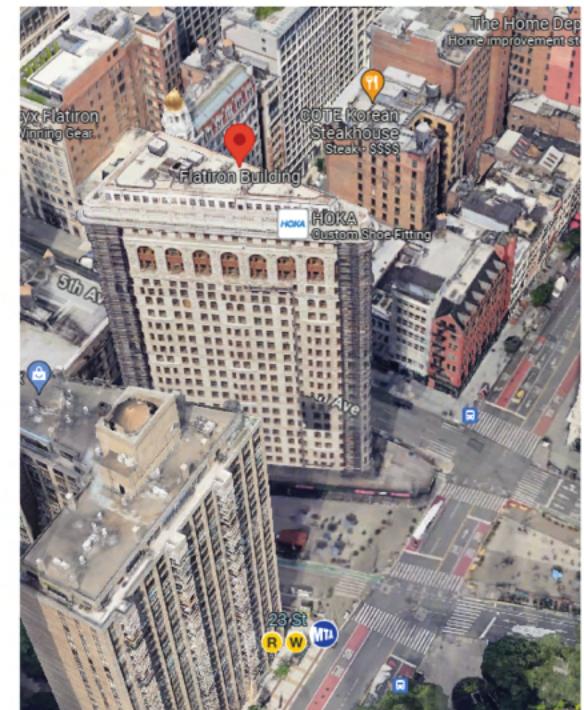


Investment Highlights

- Prime Location:** Located in a highly desirable neighborhood with easy access to major transportation hubs and amenities.
- Revenue Potential:** Projected attractive rental yields and potential for capital appreciation.

Financial Projections

- Total Project Cost:** The total project cost is estimated at **\$375M** including acquisition, construction, and development fees.
- Return on Investment (ROI):** We anticipate a projected ROI of 47.44% over 10 year hold period.
- Cash Flow Analysis:** The project's projected cashflows shows a 4 year steady growth in revenues until stabilization post construction completion



Conclusion

This real estate investment opportunity represents a compelling chance to participate in a transformative project poised for success in Flatiron district. Join us in capitalizing on the thriving market and unlocking the potential of the Flatiron Building for attractive returns.

ZONING & PLANNING

Property Information

- Property Address: **175 5th Ave, New York, NY 10010**
- Parcel Number: **851**
- Zoning District: **C6-4M**
- Current Land Use: **Commercial & Office Building**



Land Use Requirements

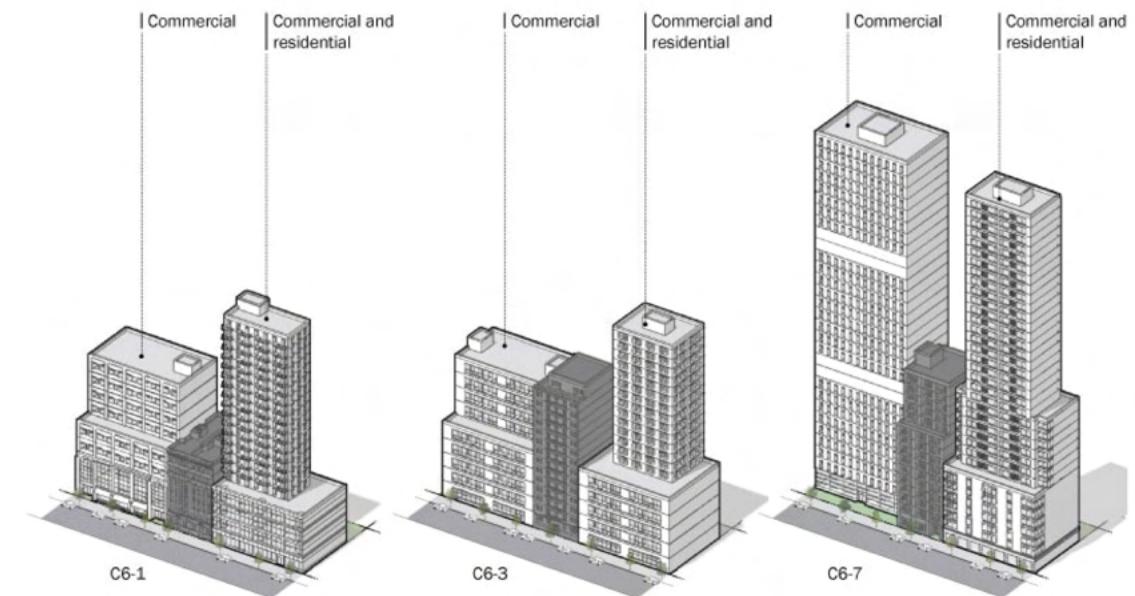
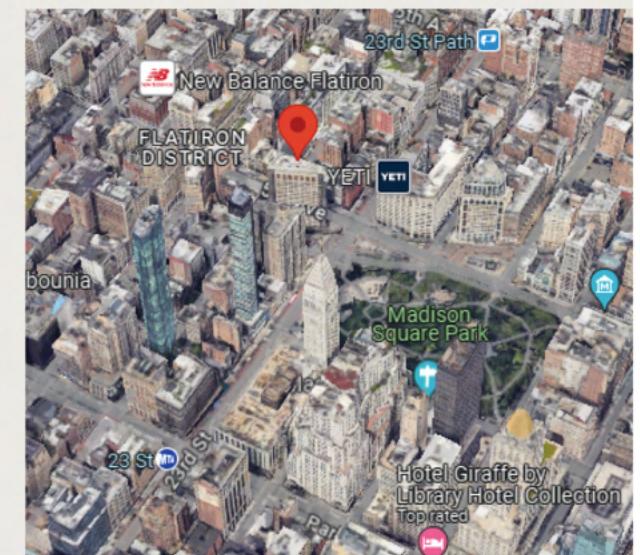
The Flatiron Building is located within the C6-4M district, which serves as the development and redevelopment guide for the site.

- Buildings under 70,000 square feet are subject to different residential conversion regulations compared to larger buildings.
- Larger buildings face restrictions on converting non-residential space to specific residential uses.
- Permitted uses in the specified building include household or machinery repair shops, small machine shops, packing/crating establishments, trucking terminals, warehouses, and wholesale establishments with unrestricted accessory storage.

Summary of Findings

Given that the Flatiron Building is a designated landmark, any alterations required for residential conversion must be approved by the Landmarks Preservation Commission. Additionally, a maintenance program ensuring the building's preservation must be established and endorsed by the Landmarks Preservation Commission.

While these waivers provide an avenue for residential development, they are contingent upon meeting density requirements for landmark preservation as outlined in city regulations. The City Planning Commission evaluates such proposals to ensure minimal adverse effects on existing building uses and the surrounding area.



PROJECT OVERVIEW



Mezzanine Levels: By combining the ground and second floors, the proposal creates a series of mezzanine levels. This not only optimizes the use of space but also adds visual interest and variety to the building's interior layout.

Outdoor Throughways: Portions of the street level would be gutted to create outdoor throughways within the building's shell. This innovative approach enhances connectivity and circulation, inviting pedestrians to explore the building's interior while maintaining its historic facade.

Buffer Zones: The self-care and spa programming on the 2 floors act as a buffer between the bustling commercial corridor and the office spaces above. This spatial arrangement ensures privacy and tranquility for wellness activities while fostering a harmonious environment throughout the building.

Coworking Spaces: The first 4 floors of office programming are dedicated to coworking spaces, interconnected through a network of staircases and atriums near the facade. This design not only promotes collaboration and interaction but also maximizes natural light penetration, creating a bright and inviting workspace.

Flexible Office Spaces: The office spaces on the upper levels feature large floor plates, accommodating different sizes of creative office space. This flexibility caters to the diverse needs of tenants and promotes adaptability in space utilization.

Roof Programming Opportunity: The top floor with low ceiling height presents a unique opportunity to incorporate rooftop programming. This additional amenity enhances the building's appeal and provides a panoramic view of the surrounding cityscape, further maximizing its development potential.



PROGRAM

1 Retail

- The ground floor would hold a **large retail space** with a Mezzanine level on the corner of the site.
- Small **boutiques and coffee shops** will line the retail storefront along the North perimeter of the site.
- The proposal includes a **retail through way** that would create intimate outdoor space and slow building program entry.
- The idea is that the tenant of the creative office space can benefit from the retail.

14,793 sf

2 Wellness

- The third and fourth floors will feature an **upscale gym** equipped with **state-of-the-art facilities**.
- Incorporation yoga studios, Pilates, Cross Fit, and traditional gym spaces..
- A **spa** area will offer rejuvenating services, enhancing the wellness offerings for tenants and visitors alike.
- **Membership benefits** include exclusive gym and co-working discounts integrated into lease agreements.

26,210 sf

3 Workspace

- Four stories of **co-working spaces** cater to modern professionals, encouraging collaboration and innovation.
- **Creative office** spaces on upper floors cater to NYC startups, featuring standard floor plates and rooftop access.
- Flexible usage options offer daily access to amenities based on statistical usage patterns.
- **Rooftop terrace** provides panoramic city views, accessible to employees and building members for engagement.

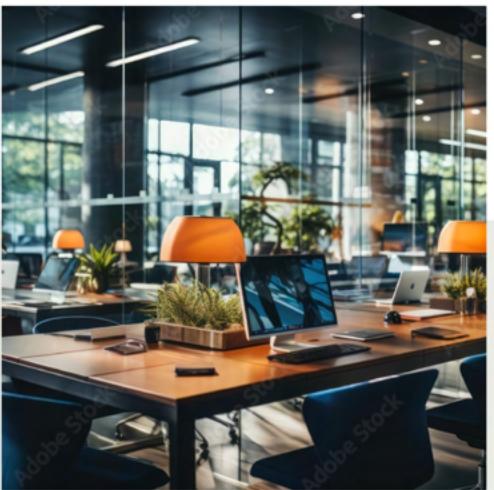
170,501 sf

AMENITIES

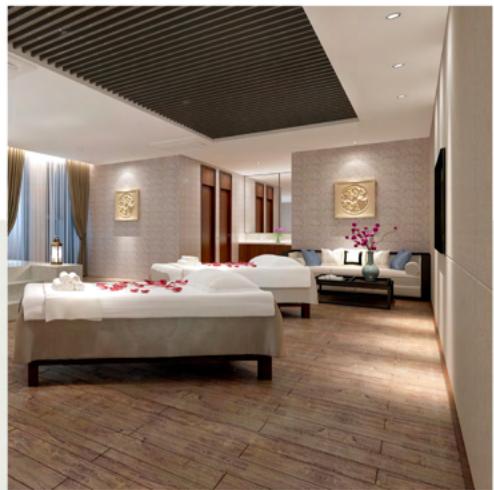


The overall provision of these amenities are to encourage work life balance. The introduction of an active retail ground floor and the health and wellness programming allow for the occupants of the offices and the members of the co-working space the convenience of having outdoor space and other necessary amenities.

CREATIVE OFFICE | CO-WORKING



AMENITIES



FINANCIAL FEASIBILITY ANALYSIS

SOURCES + USES

10 YEAR	4 YEAR	\$280.94 M	\$169.21 M	\$183.45 M
Hold Period	Pre-Dev. + Const.	Total Development Cost	Acquisition Cost	Total Construction Costs

EXIT STRATEGY

10 YEAR	3 YEAR	\$1.903 M	4.5%	\$169.21 M
Hold Period	Hold Post Stabilizat.	Total Sale Price	Cap Rate	Total Construction Costs

Sources & Uses			
Construction Loan			
	Sources		
Senior Mezz Equity	\$ 281,559,152 -	Acquisition Hard Costs	\$ 161,028,867
	93,853,051	Soft Costs	146,759,200
		Capitalized Interest	36,689,800
		Closing Costs	20,000,000
			10,934,336
Total Sources	\$ 375,412,202.67	Total Uses	\$ 375,412,202.67
	Perm Loan		
	Sources		Uses
Senior Mezz Equity	\$ 192,332,890 -	Refi Closing Costs	\$ 306,741,616
	46,067,997		6,943,715
Total Sources	\$ 238,400,887.11	Total Uses	\$ 238,400,887.11

The proposed development project entails a 10-year hold period with 4 years of operation post-construction completion. The total development costs are estimated at \$280.94 million, comprising \$169.21 million for acquisition and \$183.45 million for construction. Within the construction costs, hard costs amount to \$146.759 million, covering direct expenses like materials and labor, while soft costs total \$36.689 million, encompassing indirect expenditures such as design fees and permits.

10%/90% **\$84.5 M**
GP/LP Contribution Total Equity from LP

Financing Structure

The capital structure for this project involves a 25% equity investment and 75% debt financing. This equates to a total equity contribution of \$93.8 million and debt financing split between a \$281.55 million construction loan and a \$192 million permanent loan.

To assess the financial feasibility of this project, we conducted a detailed Return on Investment which project a **47.44% Total Project IRR**. This is based on a projected annual **Property Net Operating Income of \$120,049,326** that is stabilized up until the sale in year 10. at sale the property will be **valued at \$1,903,888,716**.

This provided clear insights into the expected profitability of the investment for you the Limited Partner. We know the importance of investing in something worthwhile.

Additionally, a comprehensive cash flow analysis projected a stabilized net cash flows over the 10 year hold period, factoring in operational expenses, debt service payments, rental income, and potential sales proceeds. The Debt Service Coverage Ratio is projected to be able to cover a **\$1,153,133 Debt Service** with a **Loan Repayment of \$156,657,994** in Year 10.

We evaluated key profitability metrics such as a **Net Present Value of \$1,123,566,525** and Internal Rate of Return, as mentioned previously to assess the investment's attractiveness relative to market benchmarks.

Furthermore, our risk assessment identified and addressed potential market risks, construction challenges, and regulatory factors. Mitigation strategies will be further examined to enhance the project's financial resilience and optimize returns.

By conducting a rigorous financial feasibility analysis with the provided data, we confidently made informed decisions regarding the investment potential and profitability of this real estate development project. This analysis served as a strategic guide for maximizing returns and navigating potential risks effectively.

LEVERED RETURNS SUMMARY

47.44%	\$913 M	\$438 M	6.03X	\$438 M	35.73%
Project IRR	Development Profit	LP Profit	LP Equity Multiple	LP Ptofit	LP Levered IRR



K a y l a
A l a u n a
P a r s o n s