

Jordan Trager

A Way Of Looking

Columbia GSAPP  
2020-2023



01

**ANABEL TERMINAL**

Advanced VI: Spring 2023. Critics: Laurie Hawkinson

02

**TEATRO VERDE**

Advanced V: Fall 2023. Critics: Jorge Otero-Pailos & Mark Rakatansky

03

**MELROSE COMMUNITY HOUSING**

Core III: Fall 2022. Critic: Erica Goetz

04

**A MUSEUM WITHIN A MUSEUM**

Bard College Museum of Biodiversity

Advanced IV: Spring 2022. Critic: Robert E. Marino

05

**FABRICS AND TYPOLOGIES**

Fall 2022. Critic: Richard Plunz

06

**BROADWAY STORIES**

Reimagining NYCHA

Core1: Fall 2020. Critic: Anna Puigjaner

07

**ARCHITECTURAL TECHNOLOGY V**

Construction Systems: Commercial Curtain Wall

Spring 2022. Critic: Nicole Dosso



## Anable Terminal

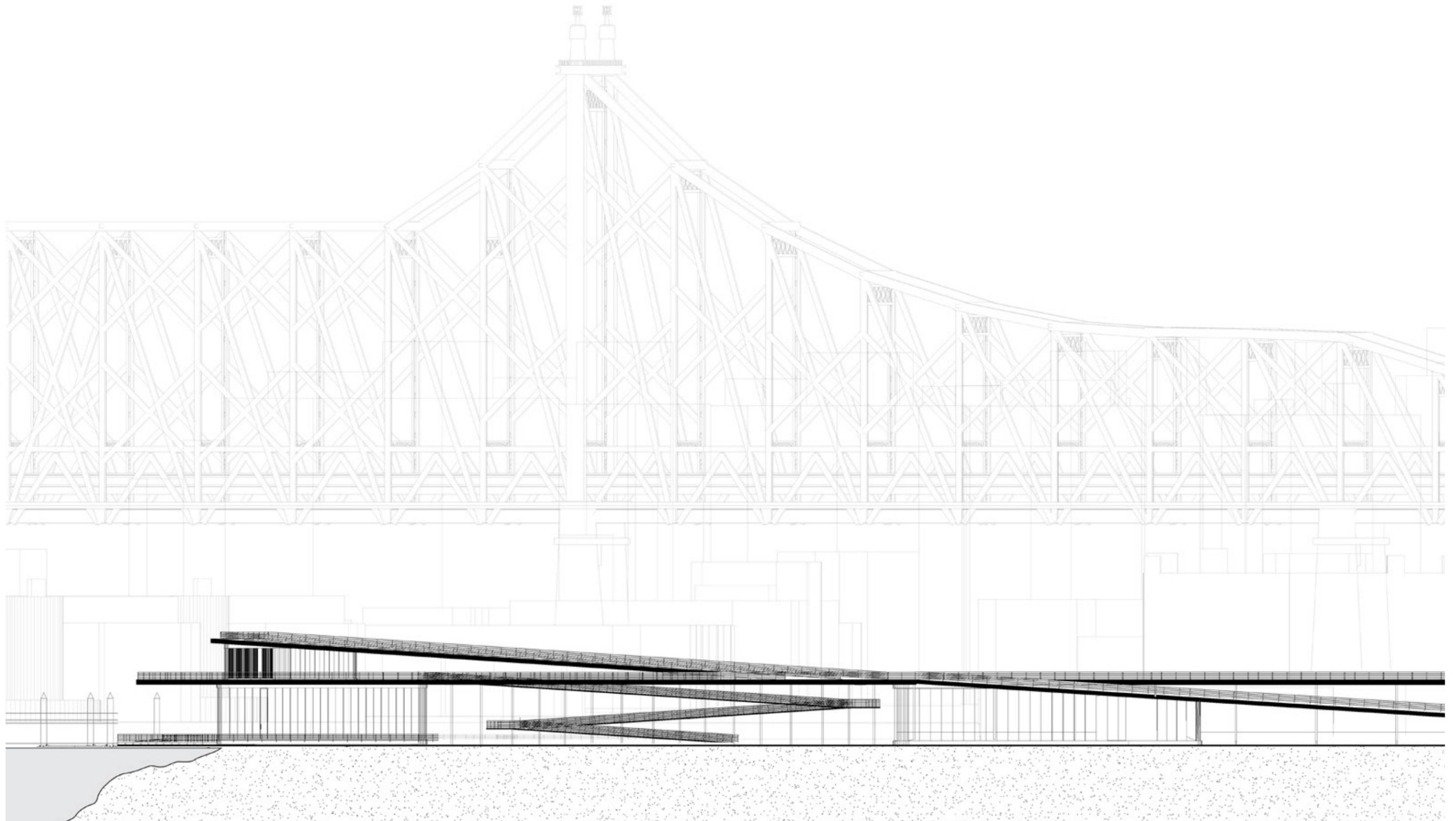
Long Island City, NYC.

New York City is facing an increasing demand for public transportation outside of Manhattan, implemented an ambitious plan during the tenure of its previous Mayor to establish a fleet of city-owned ferry boats. This initiative aimed to connect all five boroughs and alleviate the overburdened subway trains. With a budget of over \$325 million, it represents one of the most significant investments in boats as a mode of mass transit worldwide. Since its inception in 2017, the ferry service has successfully transported over 2.5 million passengers annually, comparable to San Francisco's ferry system.

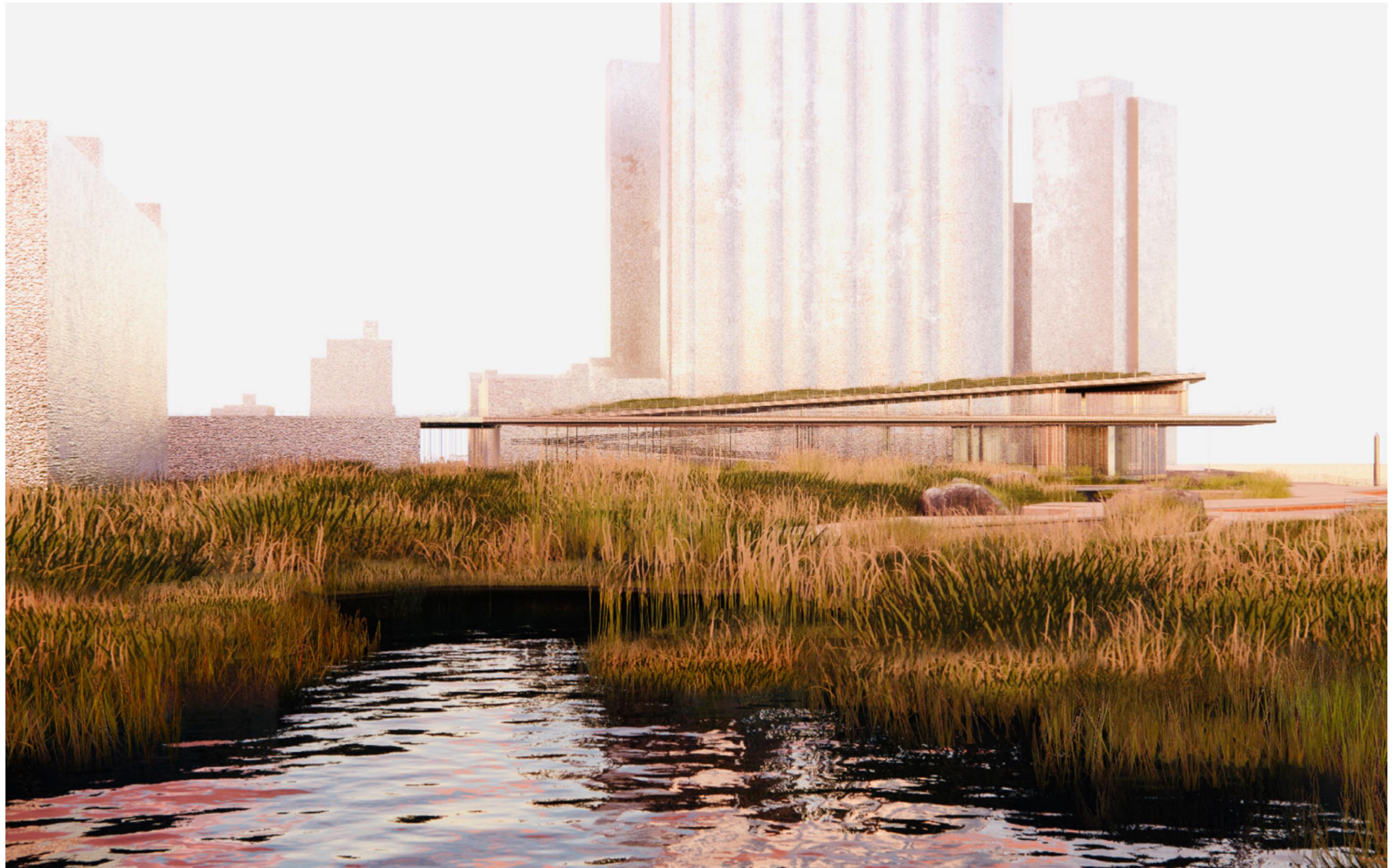
However, the construction of new ferry terminal sites poses additional challenges, particularly in areas that are vulnerable to flooding, as indicated by FEMA maps and modeling data. These locations are also designated as transportation deserts, exacerbating accessibility issues in these areas.

To address these issues, the Anable Basin Terminal, located in Long Island City, Queens, aims to establish a transportation hub that enhances the efficiency of public transportation and facilitates access to the existing transit network. The terminal will serve as a multi-purpose public transportation facility and a public waterfront park, promoting holistic approaches to transportation and environmental sustainability. The project also includes the transformation of the coastal property into a native tidal wetland, which will help restore the local ecology and establish a nature-based resiliency system to mitigate coastal flooding.

In summary, this project aims to mitigate accessibility disparities between the boroughs by establishing an integrated transportation hub that considers the needs of both human and ecological systems, promoting sustainable and resilient approaches to urban planning.



Northern Section .





## Teatro Verde

Venice, Italy.

The joint M.Arch and Historic Preservation studio between Columbia GSAPP and Fondazione Giorgio Cini Onlus embarked on a semester-long partnership to research and prepare design proposals to reimagine the Teatro Verde on the island of San Giorgio Maggiore in Venice, Italy. The studio was granted full access to the site of Luigi Vietti's outdoor amphitheater and the rich archive collection of the Giorgio Cini Foundation to guide their work. The studio presented various design iterations in Venice and New York to provide thoughtful design interventions that addressed the entanglements of climate change and the socio-political histories of the island.

The proposed design seeks to curate an experience at Teatro Verde that connects visitors to the rich history of traditional Benedictine horticultural practices on Isola San Giorgio Maggiore. The lush landscape of the existing theatre and the surrounding island provides a unique typology that the proposal seeks to reimagine as a "Green Theatre," emphasizing the horticultural history of the Benedictine Island. By employing historically appropriate landscaping and architectural design, the proposal aims to create a site-specific experience that celebrates the Benedictine monks' relationship with nature and the spaces they created for personal refuge and social gathering.

The design aims to craft contemplation, respite, and socialization spaces for visitors at Teatro Verde. In addition, the proposed intervention seeks to create a contemporary interpretation of the social spaces curated by the monastic architecture of the Benedictine monks to realize a contemplative and contextually appropriate experience. Overall, the proposal highlights the island's rich history and unique landscape while addressing contemporary challenges such as climate change and socio-political histories to create a thoughtful and immersive experience for visitors.

Venetian Maze

Herb Garden & Bar

Cicchetti Bar

Cloister Garden

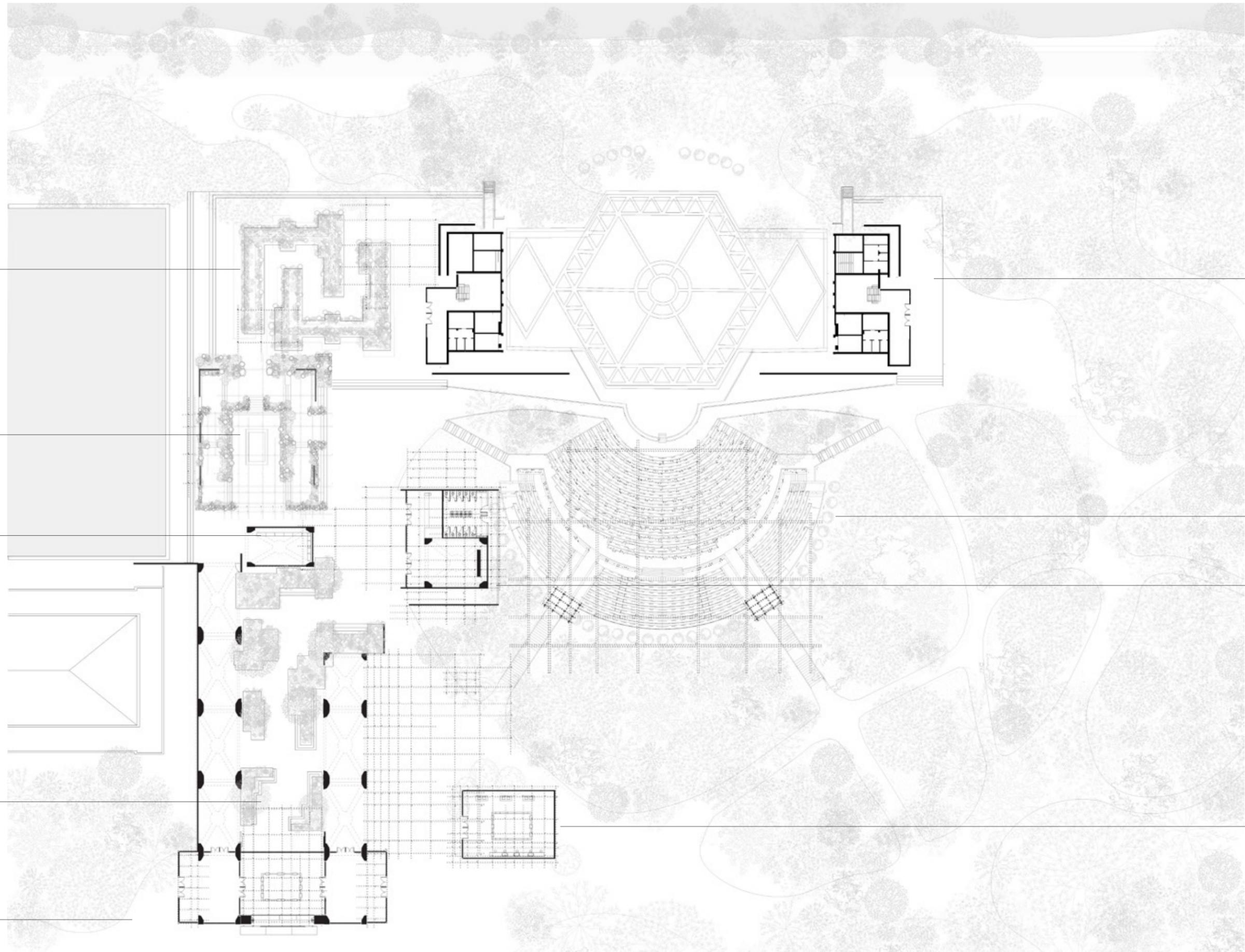
Lobby

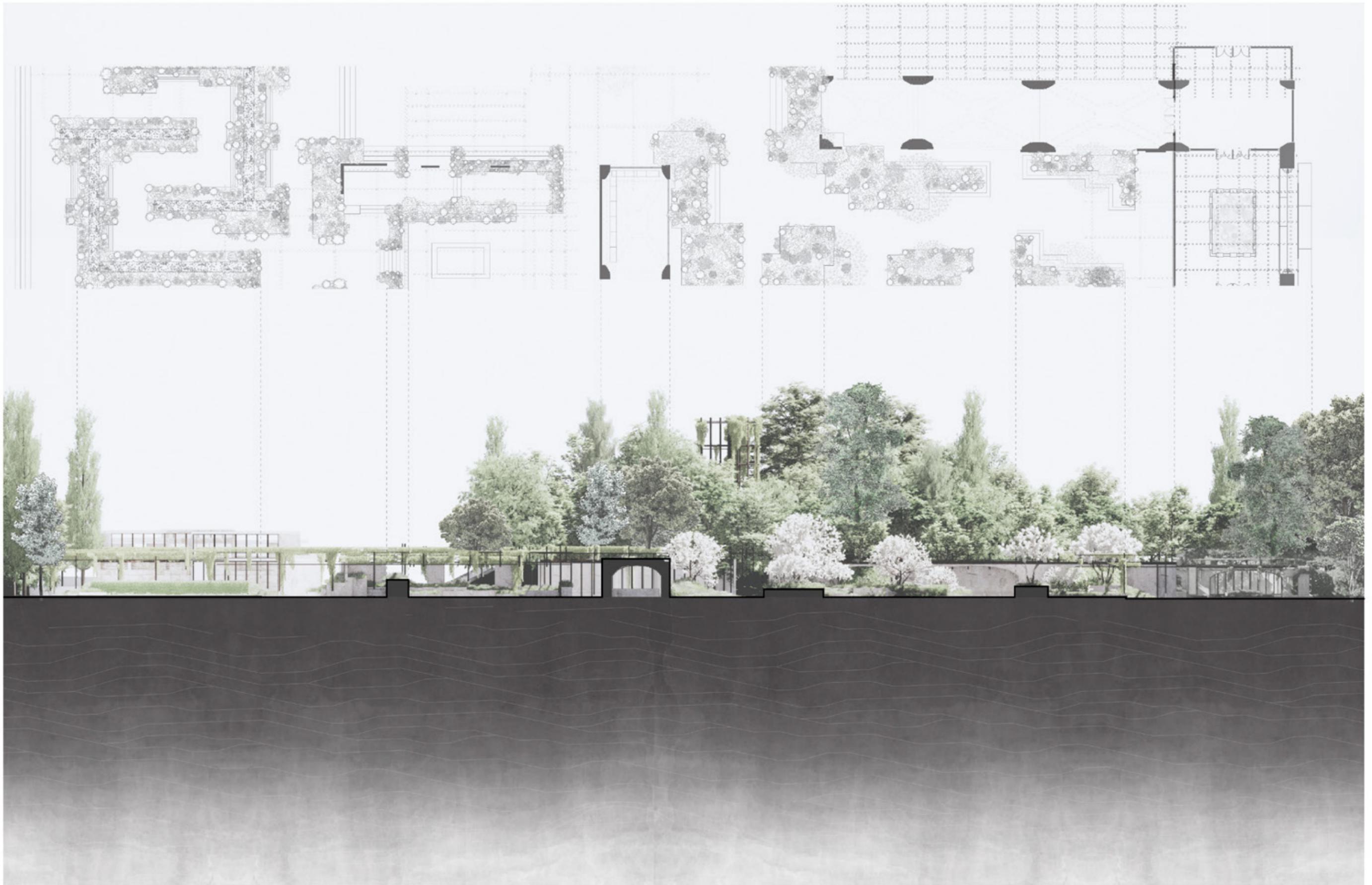
Dressing Rooms

Teatro Verde

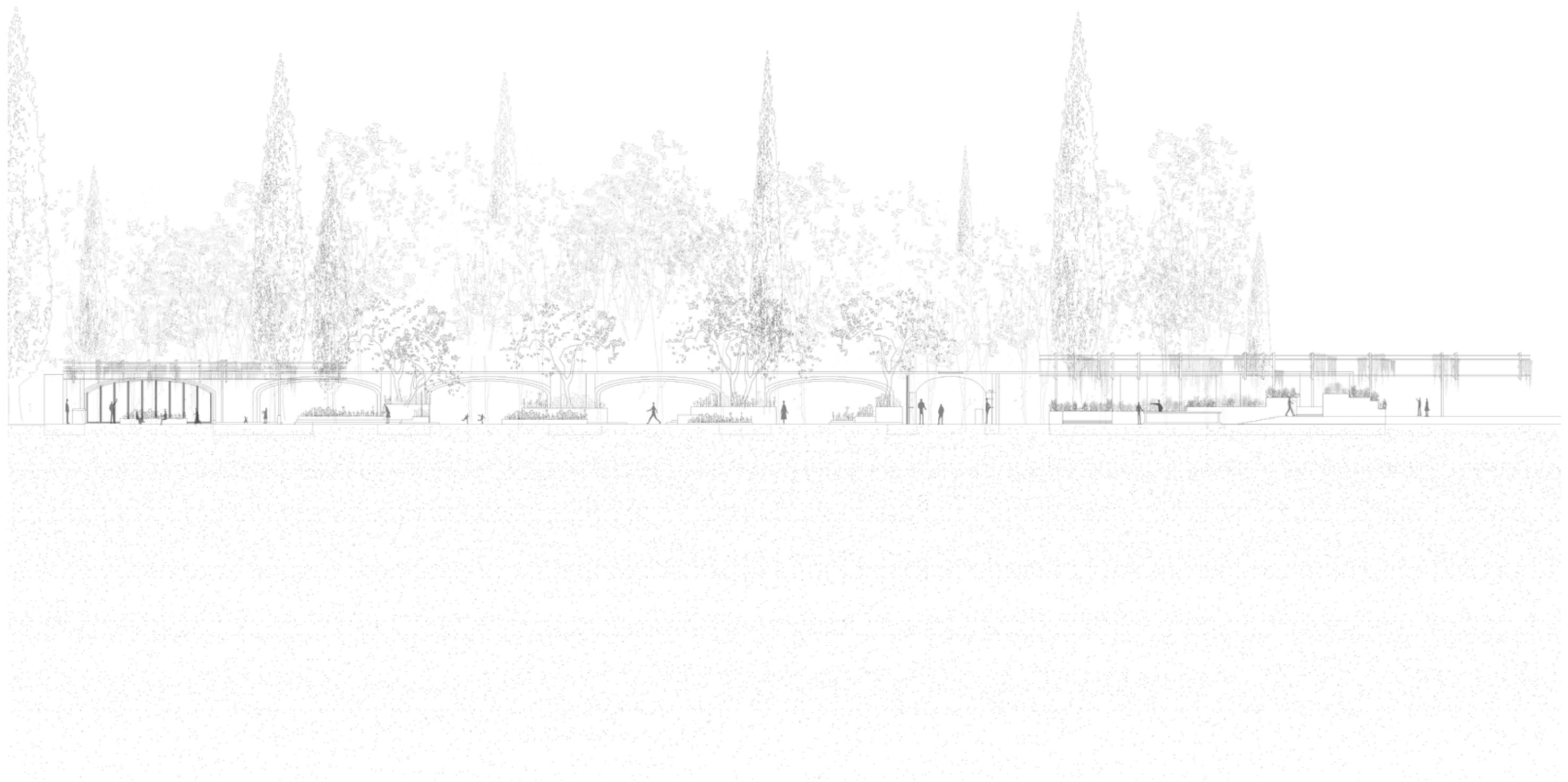
Bathrooms/Shop

Botanic Library





Western Interior Section Elevation & Corresponding Plan.



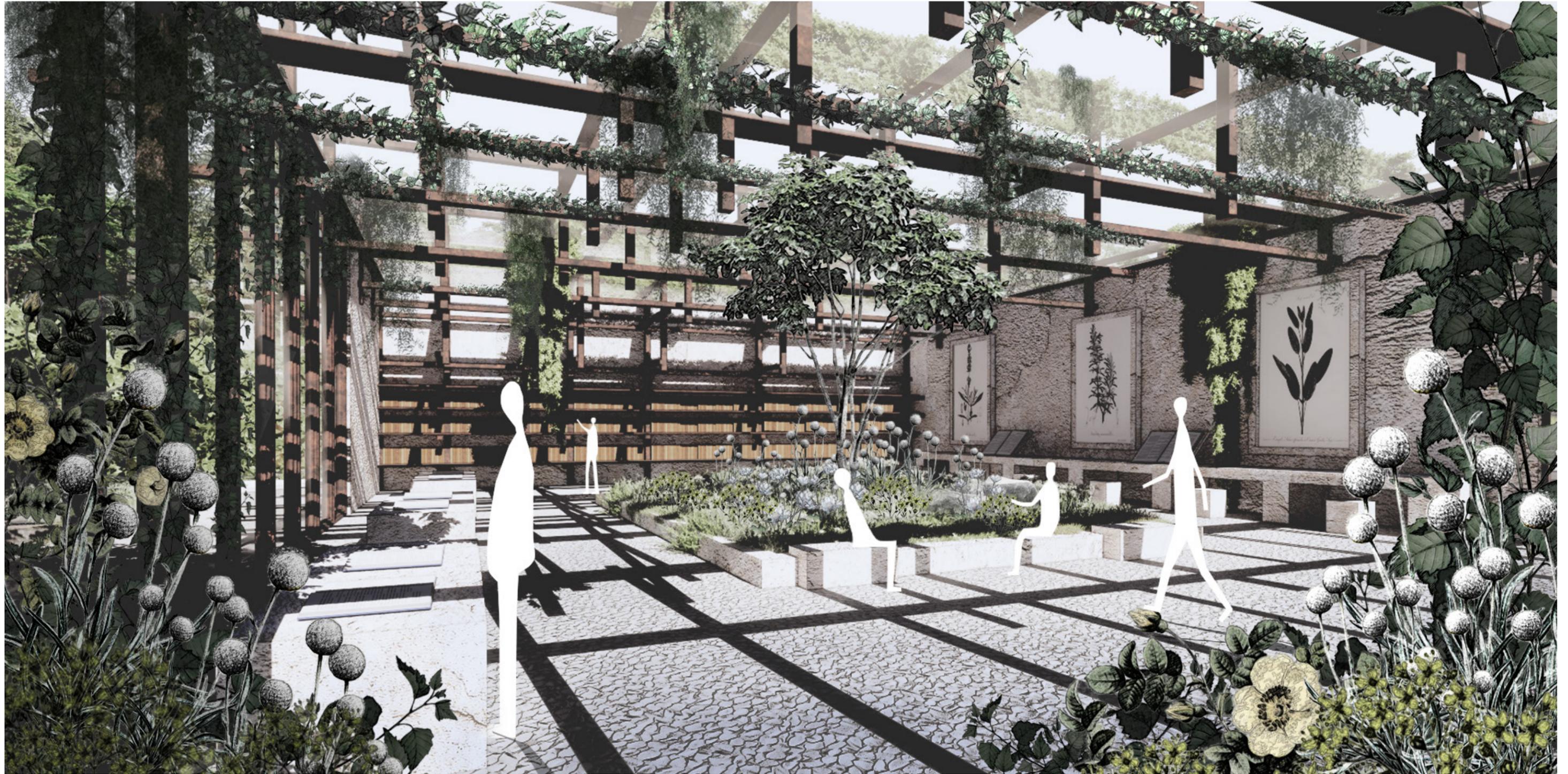
Eastern Interior Elevation, Including Lobby, Cloister, & Herb Garden Bar



Section Perspective of Cloister Garden



The Cloister Garden is a manifestation of the perspective of its creators, evoking the daily rhythms and customs of the Benedictine monks who once centered their lives around the abbey garden. Its landscaping showcases a selection of Benedictine plants once cultivated on the Island of San Giorgio Maggiore, lending a timeless quality to the garden and immersing visitors in a contemplative and historically resonant atmosphere.



The Botanic Library represents an essential extension of the Cini Foundation's vast archive of literary and historical treasures, serving as a veritable crossroads for cultures and ideas in line with the Foundation's mission. The Botanic Library plays a crucial role in perpetuating the legacy of the Benedictine abbey and the Island of San Giorgio Maggiore while also upholding the Cini Foundation's overarching mission to promote the dissemination of knowledge and the proliferation of cultural exchange.



The incorporation of the vault design in this architectural composition served as a tribute not only to the vernacular style of the Benedictine monks but also as a homage to the distinguished Andrea Palladio. His revolutionary engineering of the triumphant vaults at San Giorgio Maggiore remains a remarkable feat that firmly established his eminence in the field of architecture.

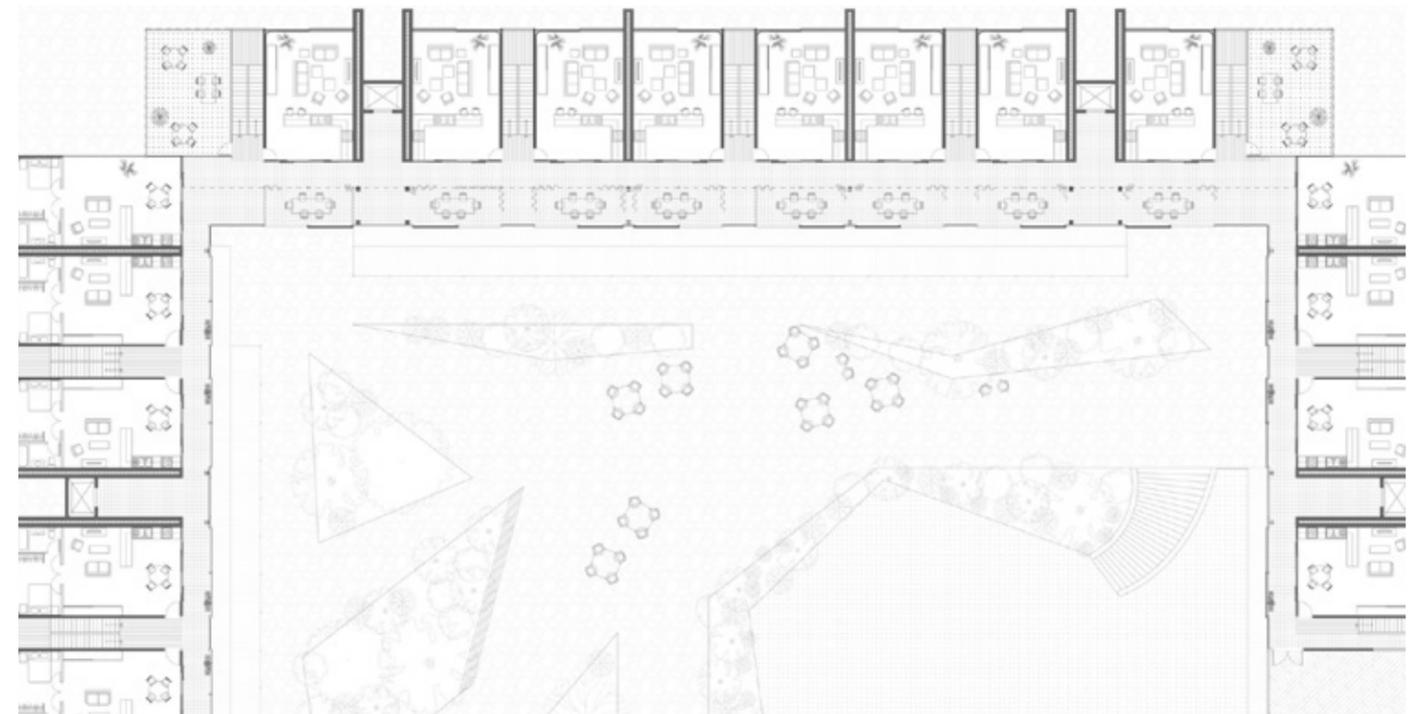
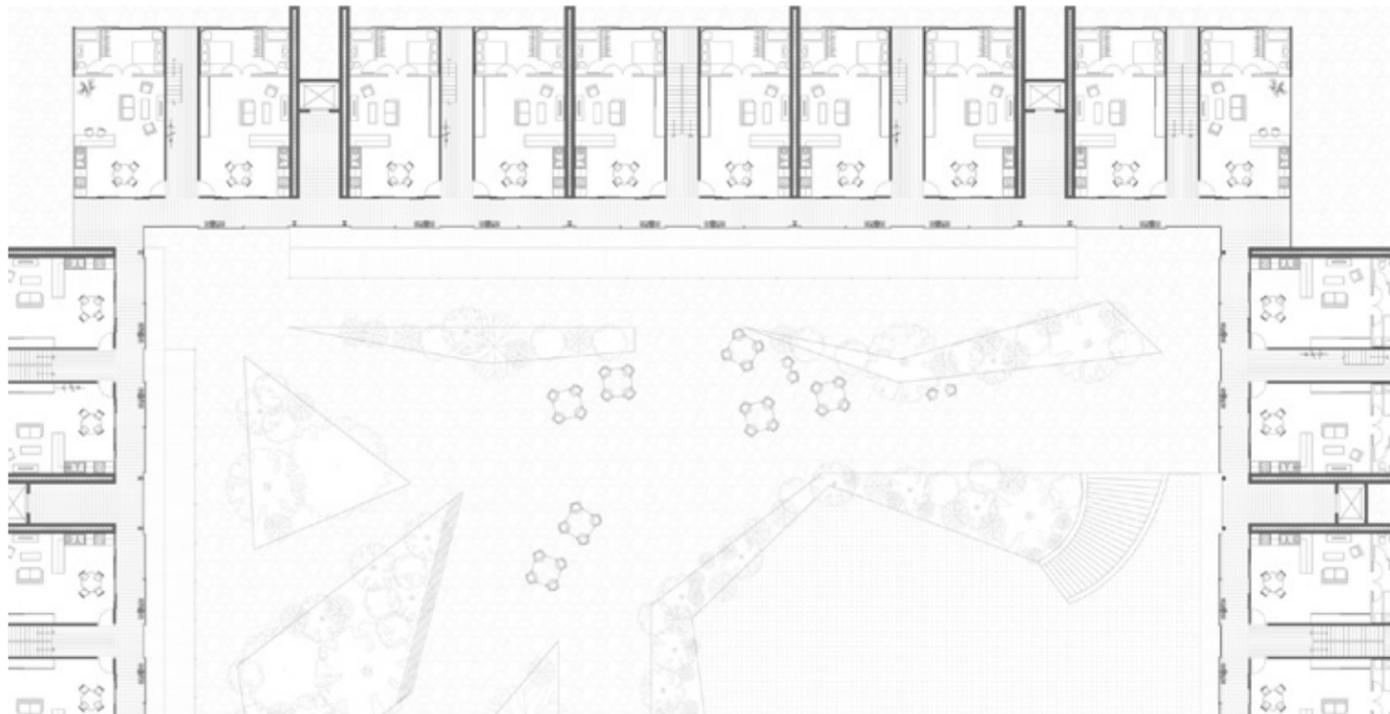
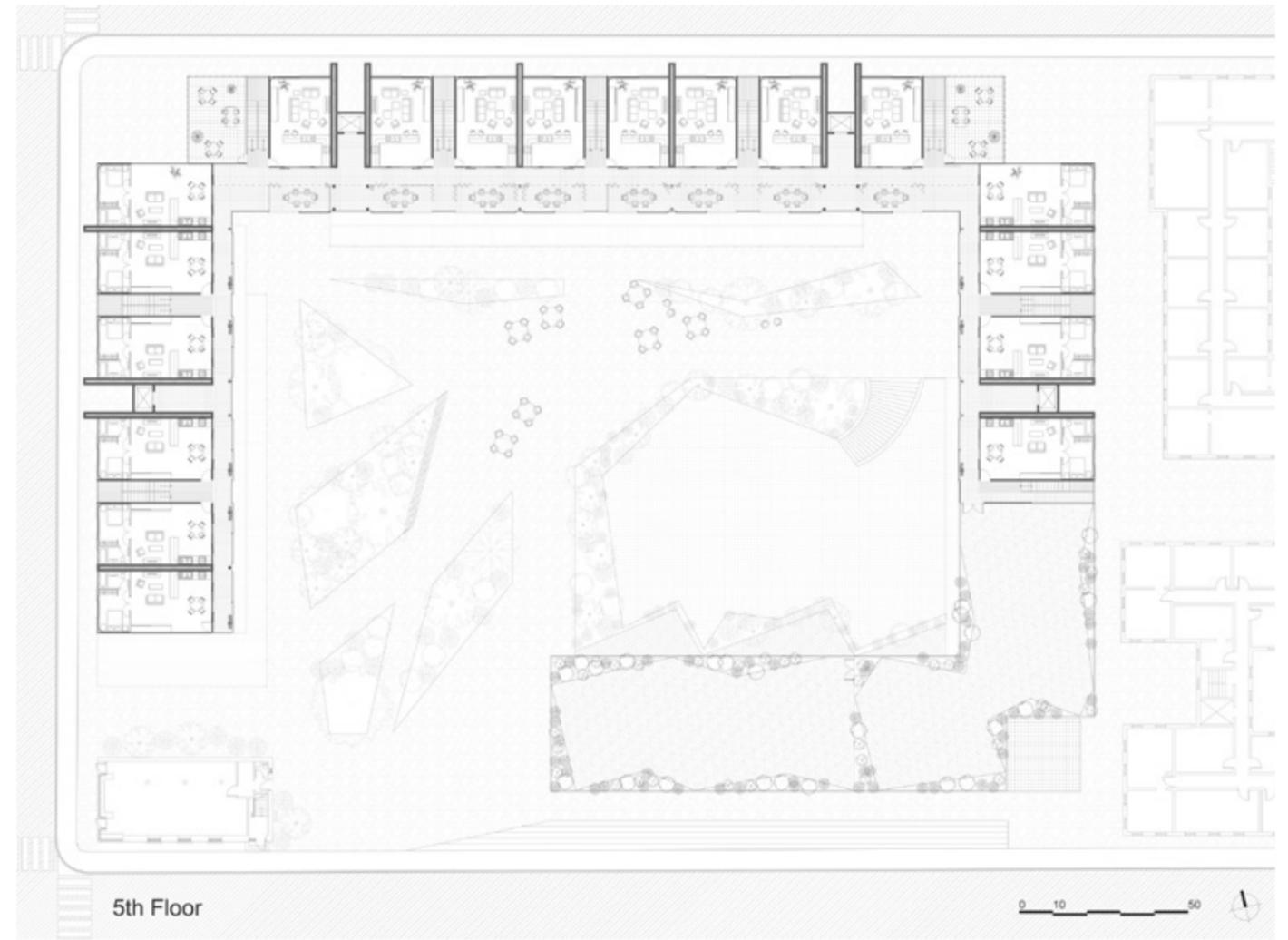


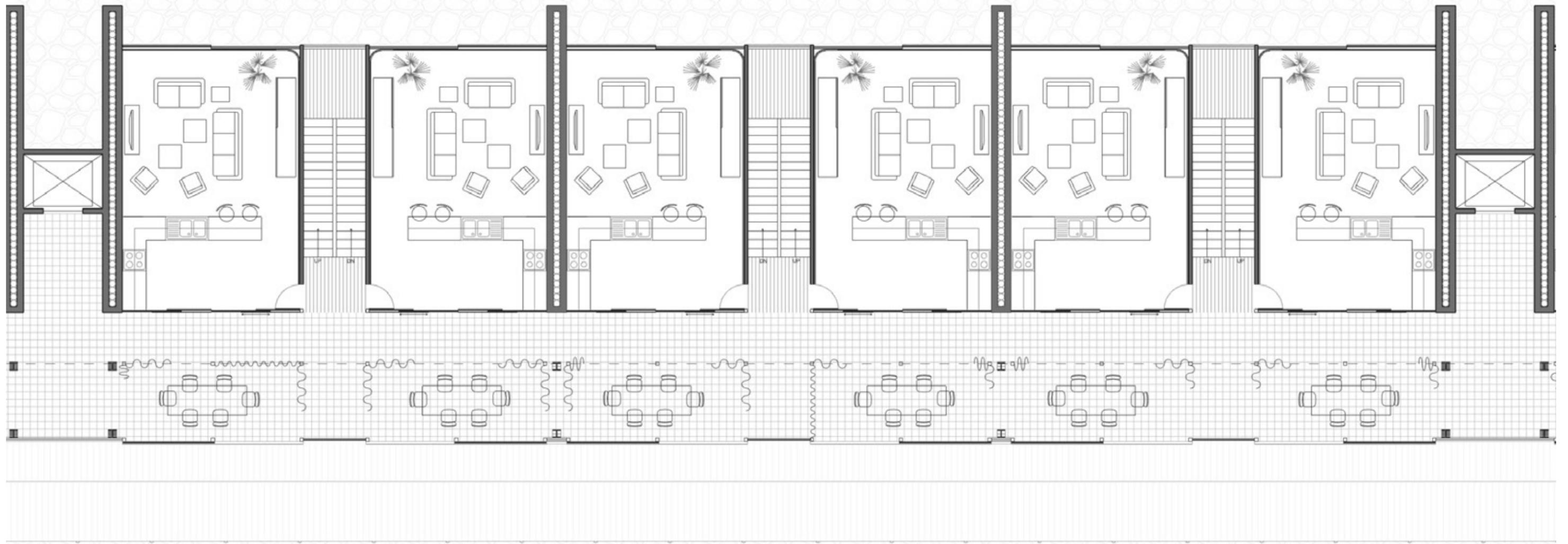
## Melrose Community Housing

The Bronx, NYC.

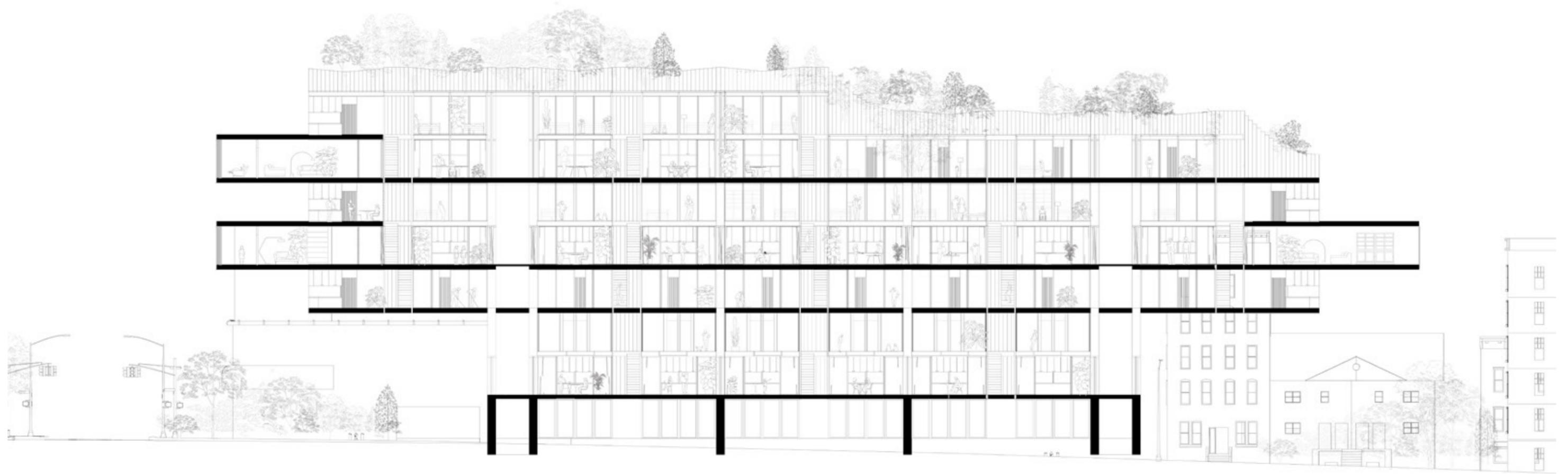
This visionary project embodies how creativity and forward-thinking in passive design can yield a living environment that is not only aesthetically appealing but also healthy, energy-efficient, and sustainable. It showcases a revolutionary approach to building design, providing a blueprint for a better future for the environment and its occupants. The project incorporates cutting-edge techniques, including a system of fixed cores and flexible units that create adaptable spaces, allowing occupants to regulate their climatic comfort. In addition, using passive design techniques reduces the building's reliance on energy-intensive heating, ventilation, and air conditioning (HVAC) systems, resulting in lower energy consumption, carbon footprint, and operating costs.

This project takes the principles of passive design to new heights, utilizing a floor-through apartment system that maximizes the exposure to optimal solar and ventilation conditions, allowing for natural and effective ways to regulate the temperature of the living spaces. The project also integrates principles of Passivhaus design, whereby the party walls between neighboring apartments serve as thermal mass, enabling the absorption and release of solar radiation and contributing to the efficiency of the heating and cooling systems. The resulting space offers a harmonious balance between sustainability and luxury, promoting a healthy and comfortable environment for occupants.





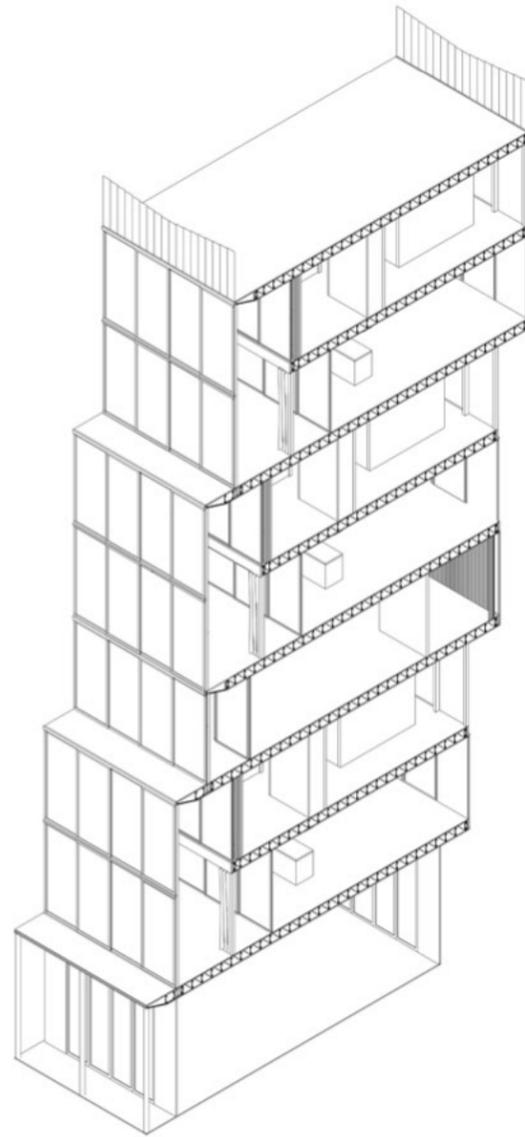
The social solar corridor, which activates the circulation corridor as a shared social space, can be tailored to meet each resident's unique preferences, whether they seek privacy or social interaction. Each apartment comes equipped with its own designated seating area within the corridor, complemented by customizable curtain partitions. This allows residents to exercise optimal choice and control over their surroundings, promoting a sense of comfort and well-being.



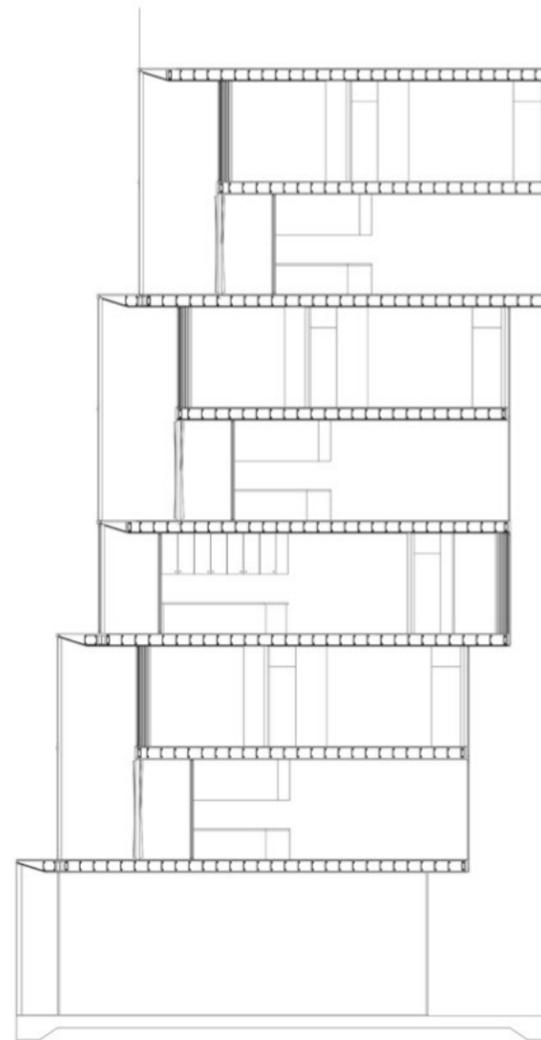
Southern Elevation



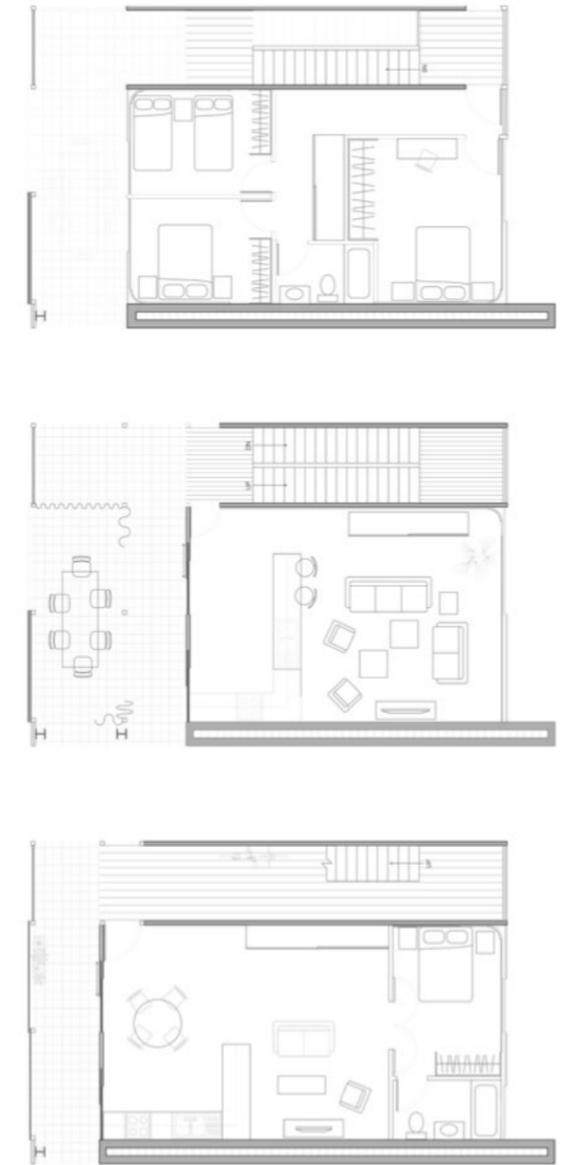
Unit Cluster Elevation



Unit Cluster Isometric Section



Unit Cluster Section Elevation

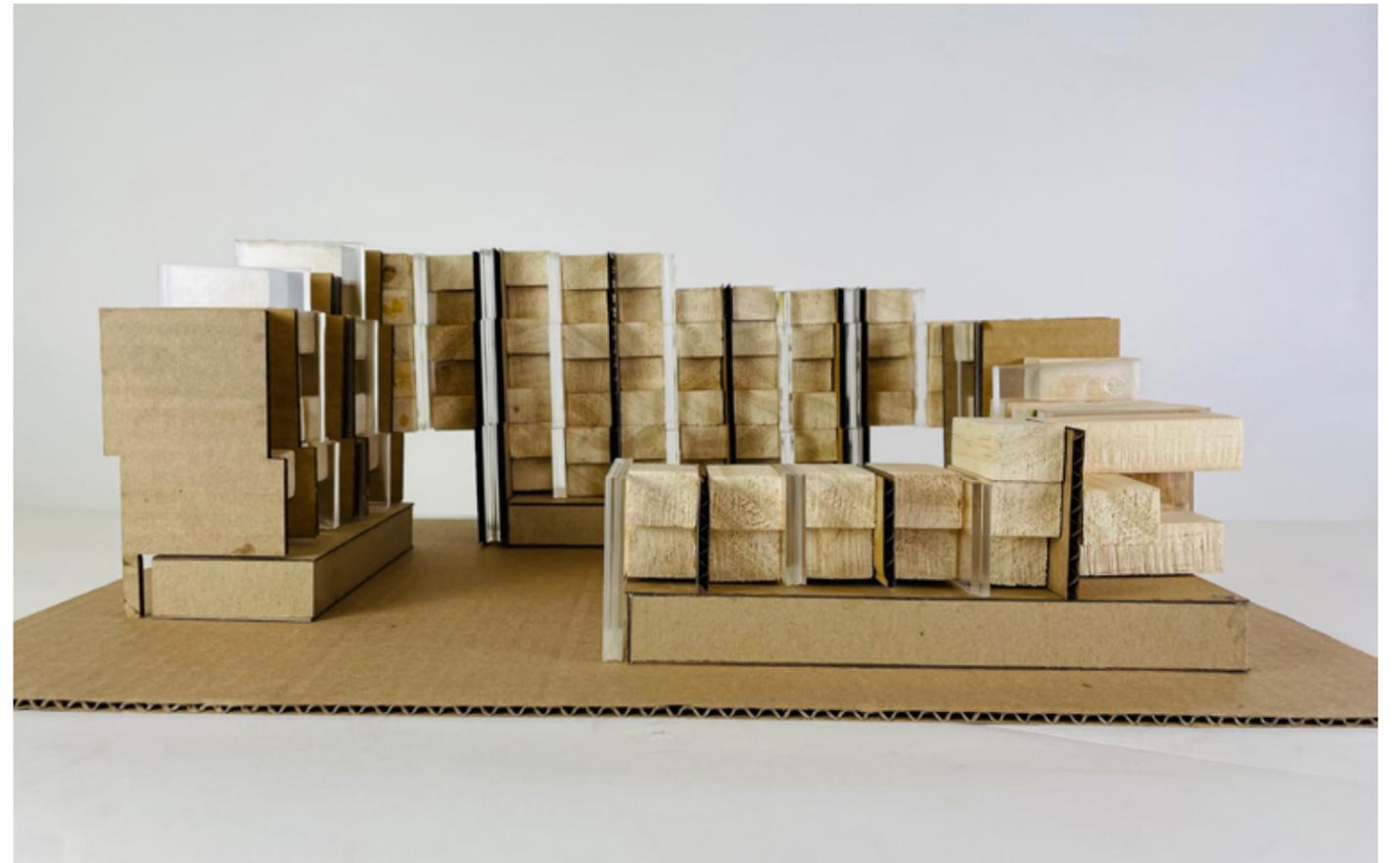


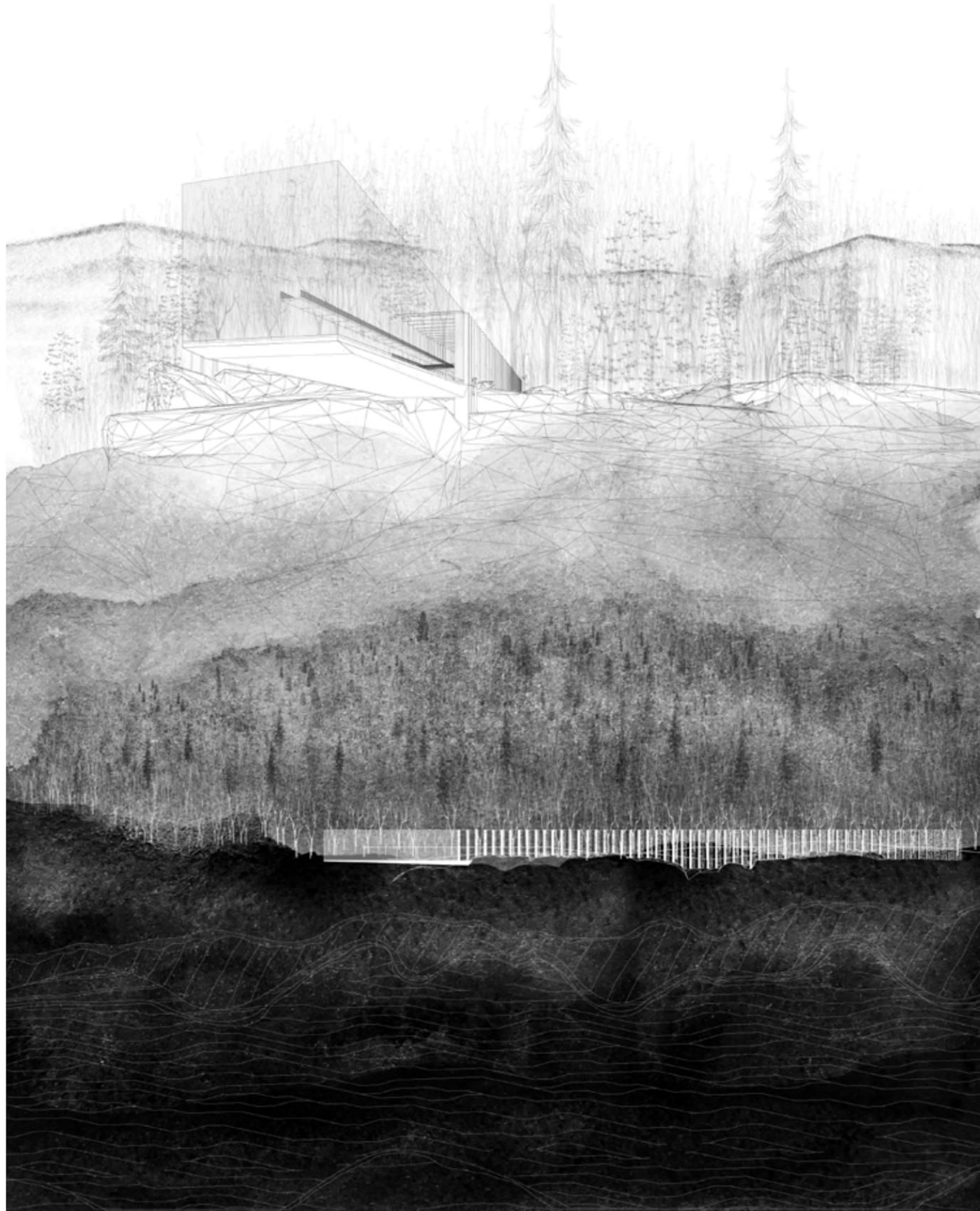
Typical Unit Arrangement











## A Museum Within a Museum Bard College Museum of Biodiversity

Annandale on Hudson, New York.

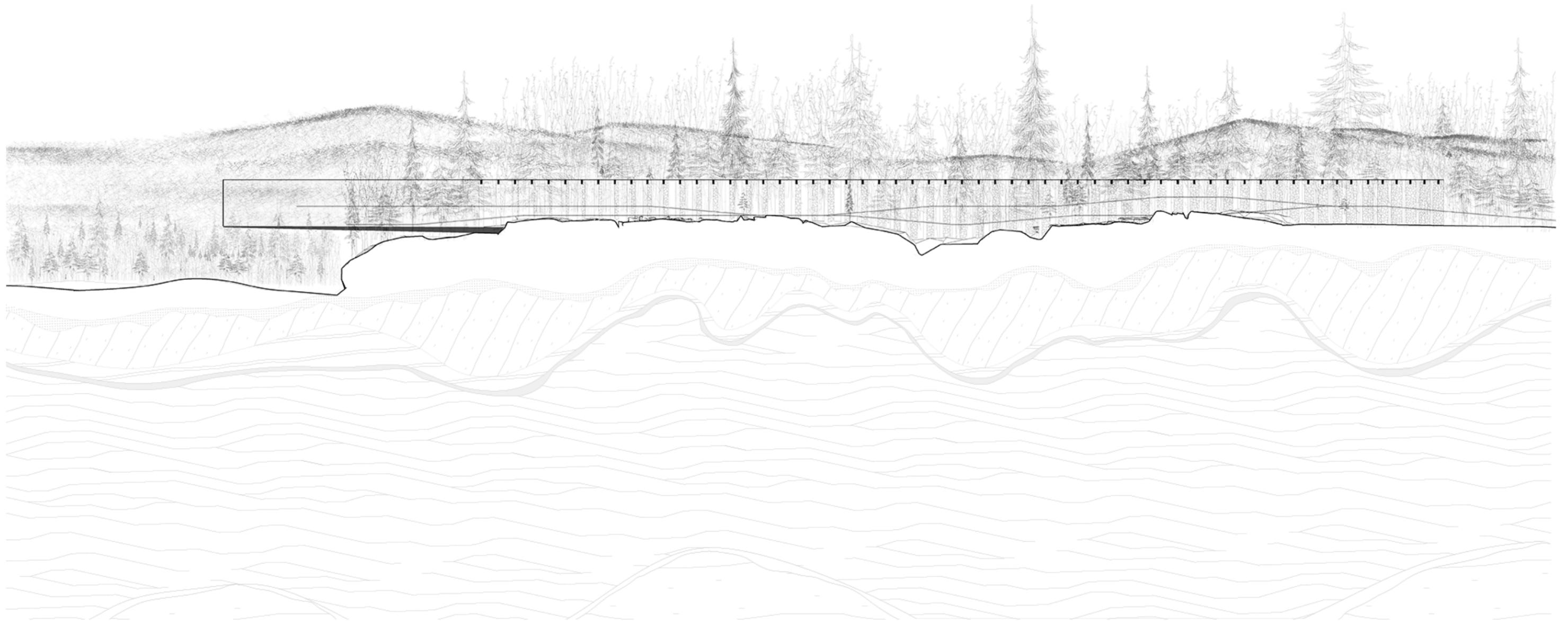
The Museum of Biodiversity at Bard College is a unique design proposal for an extension of the Bard College Environmental Field Station located in Annandale on Hudson, New York. This proposal is the result of a collaboration between Columbia GSAPP and the Hudsonia Institute, where a team of experts undertook extensive and thorough research on the Hudson Valley ecosystem to create a new and innovative typology for a biodiversity museum.

The intention of this proposal is to create a “museum within a museum” that celebrates and showcases the richness, historical significance, and vulnerability of the Hudson Valley tree species. The proposed museum is composed of two parallel rows of imposing stone piers, each one gradually turning outward towards the Hudson River and culminating in a striking cantilevered glass extension. The design of this structure draws inspiration from the ancient fieldstone walls of the Hudson Valley and New England region. These walls once used to mark boundaries for livestock, now serve as a substrate for the flourishing of diverse flora and fauna within dense woodlands.

The proposed museum takes cues from these stone structures and reimagines them as a new modality for environmental protection and the proliferation of the Hudson Valley ecosystem. Overall, the Museum of Biodiversity at Bard College represents a forward-thinking and innovative approach to ecological preservation and education. Through its unique design, the museum hopes to inspire visitors to appreciate the natural world's beauty and importance and take active steps toward its preservation.



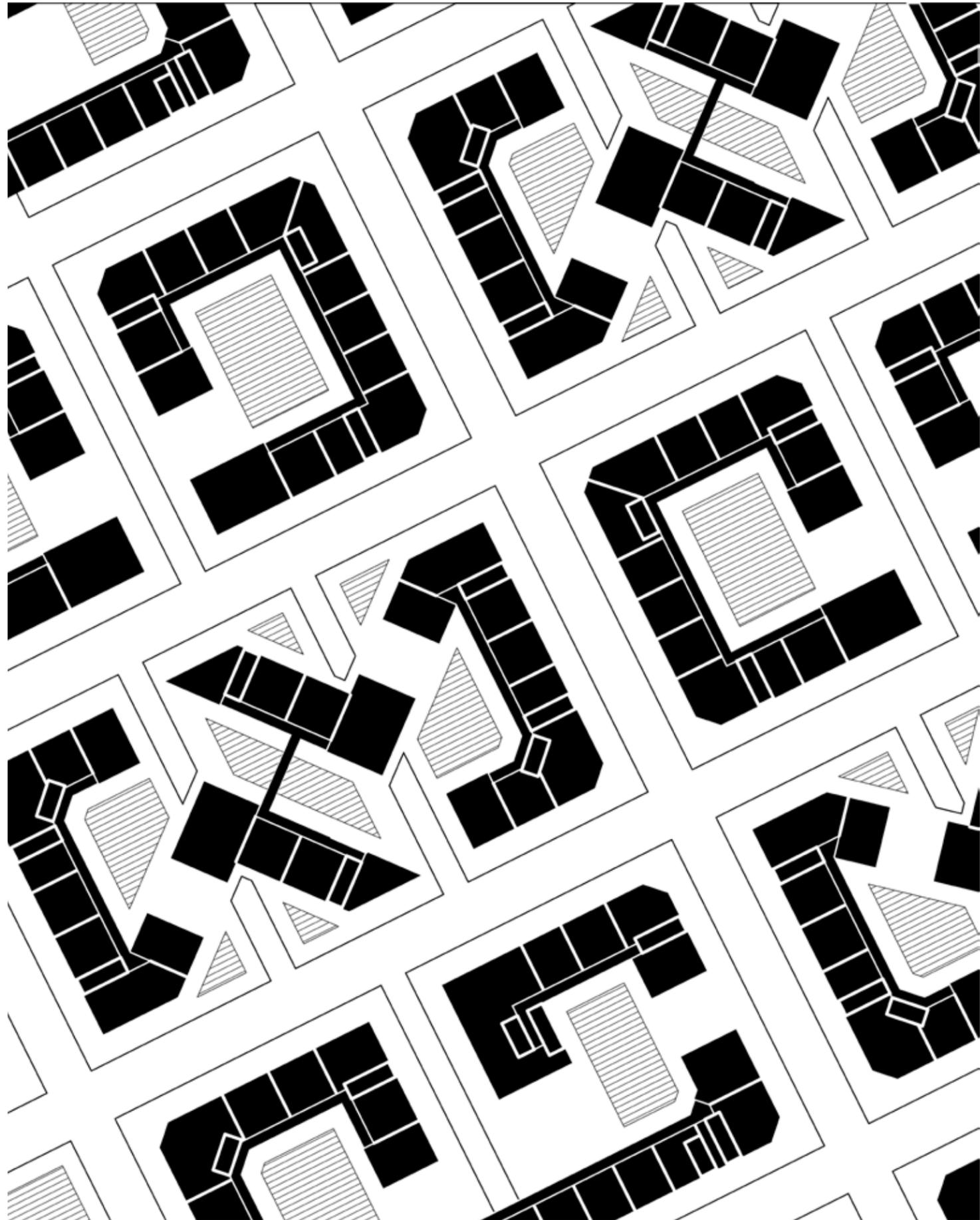
Site Plan



Longitudinal Section



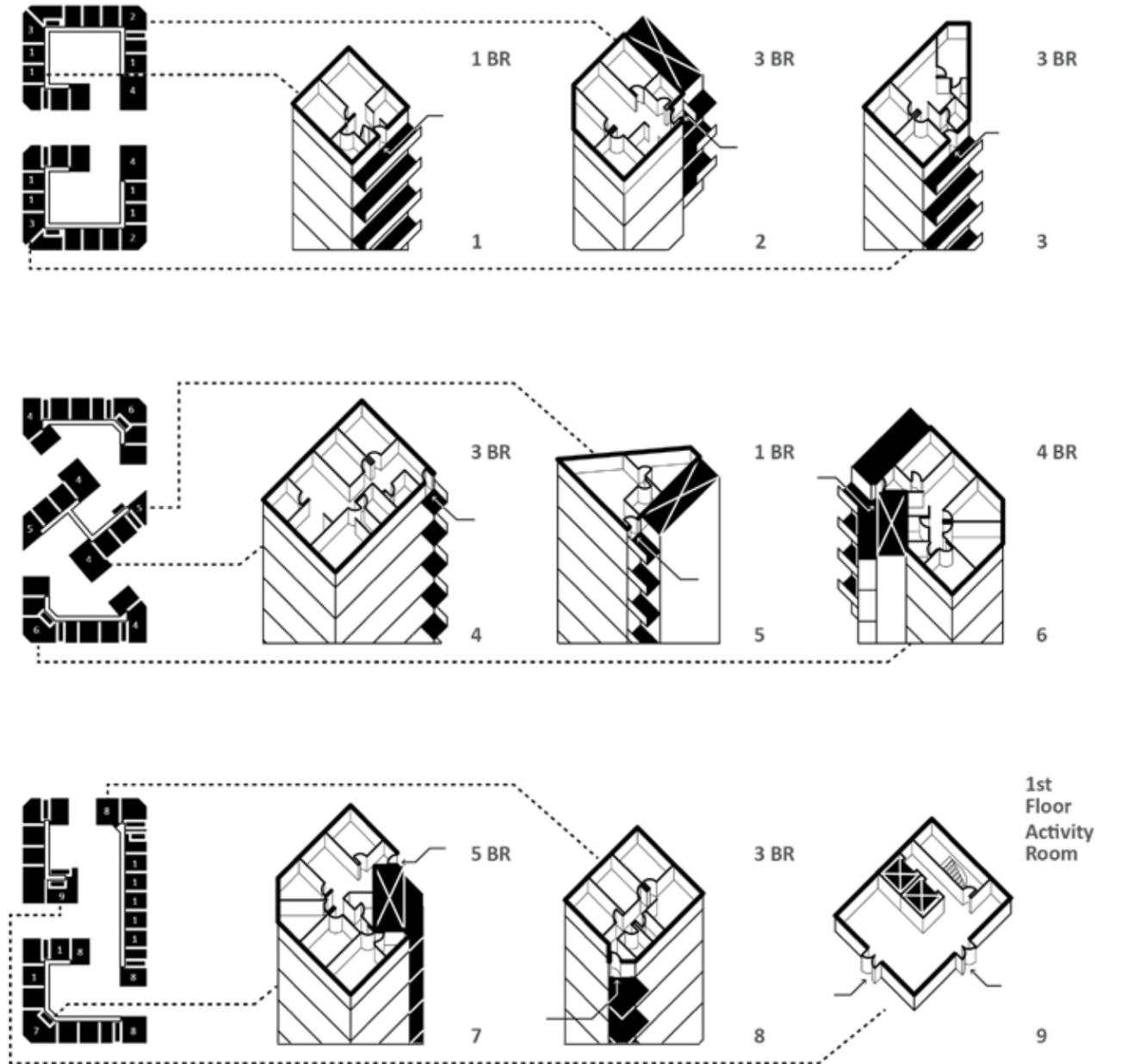
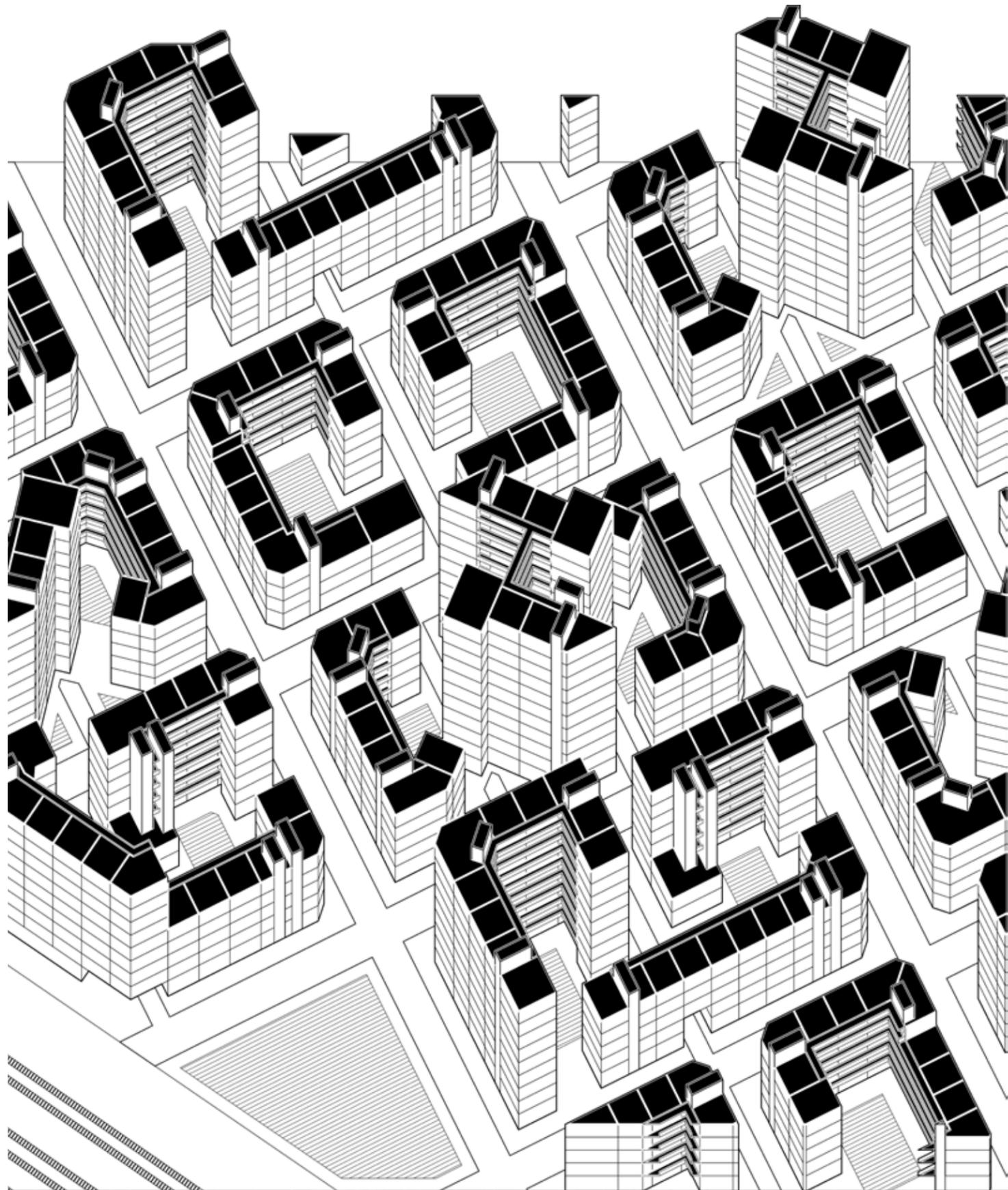
1/4" Scale Model



## Fabrics & Typologies

Amsterdam, Netherlands.

The intention of the Amsterdam School housing typology constructed in the outskirts of the city center was to provide low-cost housing that promoted healthier living arrangements, contrasting the medieval conditions of the dense old city. This housing typology intends to facilitate social benefits to empower the working-class individual. By creating a balance between a vibrant, commercial street and private open space, these housing typologies intend to revolutionize and challenge the concept of dense urban housing. Amsterdam's existing fabric varies in geography, significantly impacting the form and density of housing. Our proposal intends to maintain high-density living in the Spaardandammerbuurt neighborhood of Northern Amsterdam while providing adequate open space to promote sociability and natural ventilation. This proposal intends to reimagine the existing urban fabric to enable a typology that incorporates equal access to open space for all residents and a system that promotes interaction between each structure. Each structure is positioned around open green space, built independently without completely enclosing the usable open space. By eliminating the courtyard typology, the new proposed system allows for direct access from the street into the social realm of the housing development, connecting the structures and their inhabitants more directly to the housing community and surrounding city.

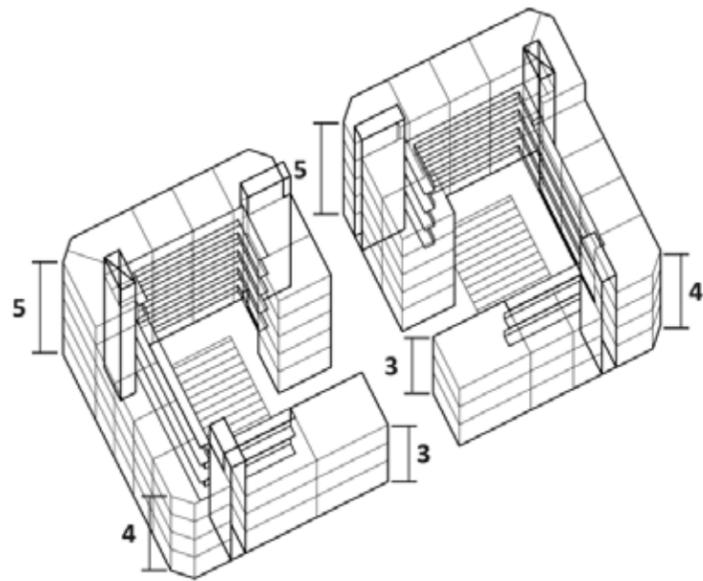


Offering a range of unit sizes in low-income housing creates a diverse and inclusive community, allowing residents from different backgrounds and family structures to live together. This promotes socialization, fosters a sense of belonging, and creates a support system within the community, regardless of household size, age, or income. Providing a variety of unit sizes ensures residents can choose a unit that meets their unique circumstances and lifestyles, creating a welcoming, supportive, and inclusive environment.

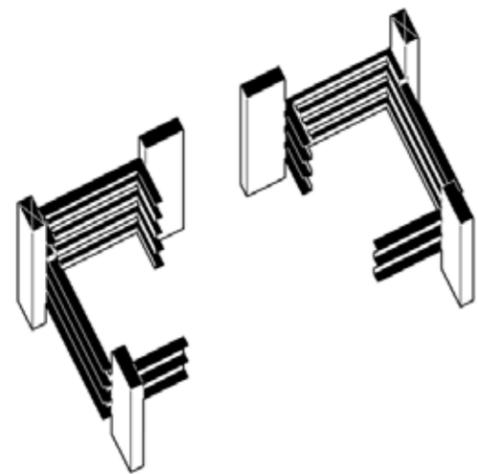
## COURTYARD TYPE 01

Number of Floors: 3 - 5

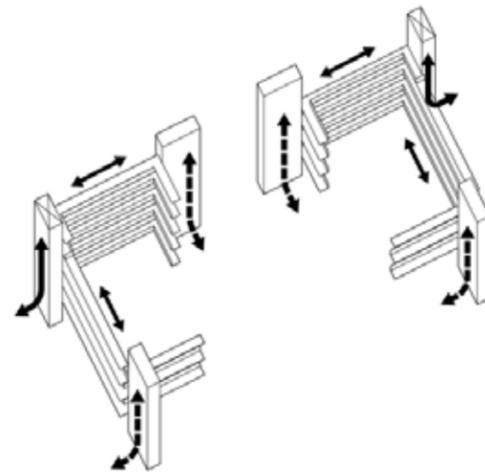
Two identical masses facing each other offers greater connectivity to the surrounding area while maintaining the inner courtyard as a designated social space for the residents. The height of the two buildings decreases towards the southeast to allow for optimal daylight conditions.



Massing Composition



Circulation System

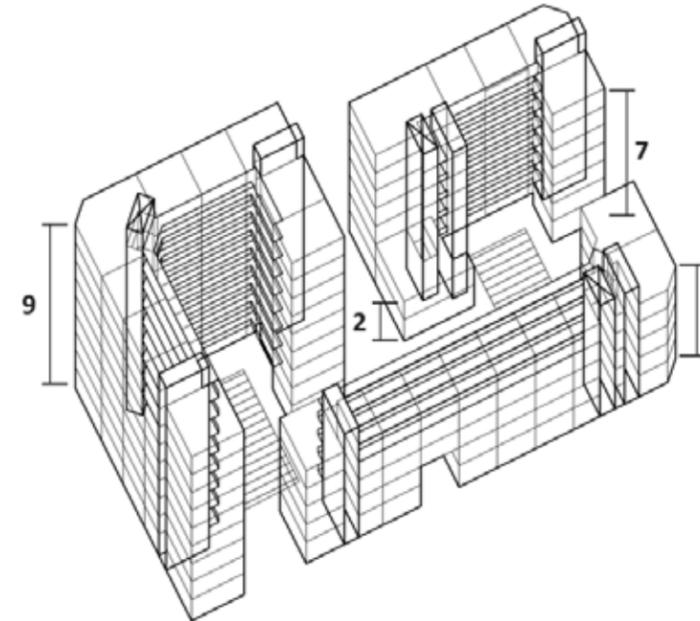


Circulation Path

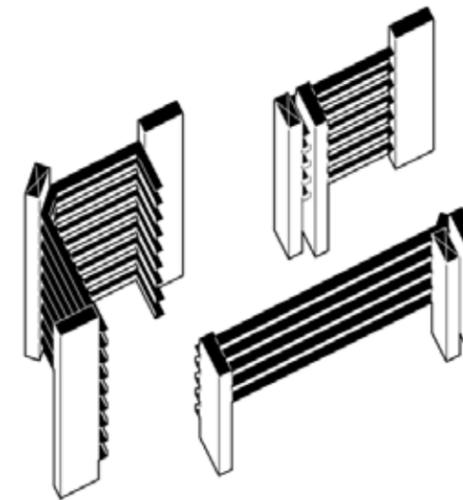
## COURTYARD TYPE 02

Number of Floors: 2 - 9

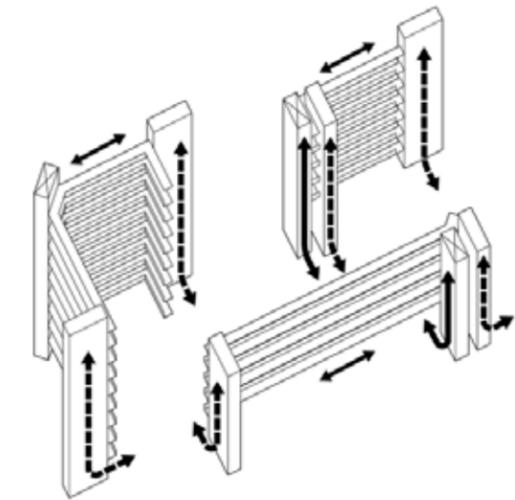
The structure's mass gradually slopes from the southwest corner to the northeast, facilitating optimal daylight exposure. In addition, the community center, which spans two stories, is situated at the heart of the courtyard, promoting social connectivity among the local community.



Massing Composition



Circulation System



Circulation Path



# Broadway Stories

## Reimagining NYCHA

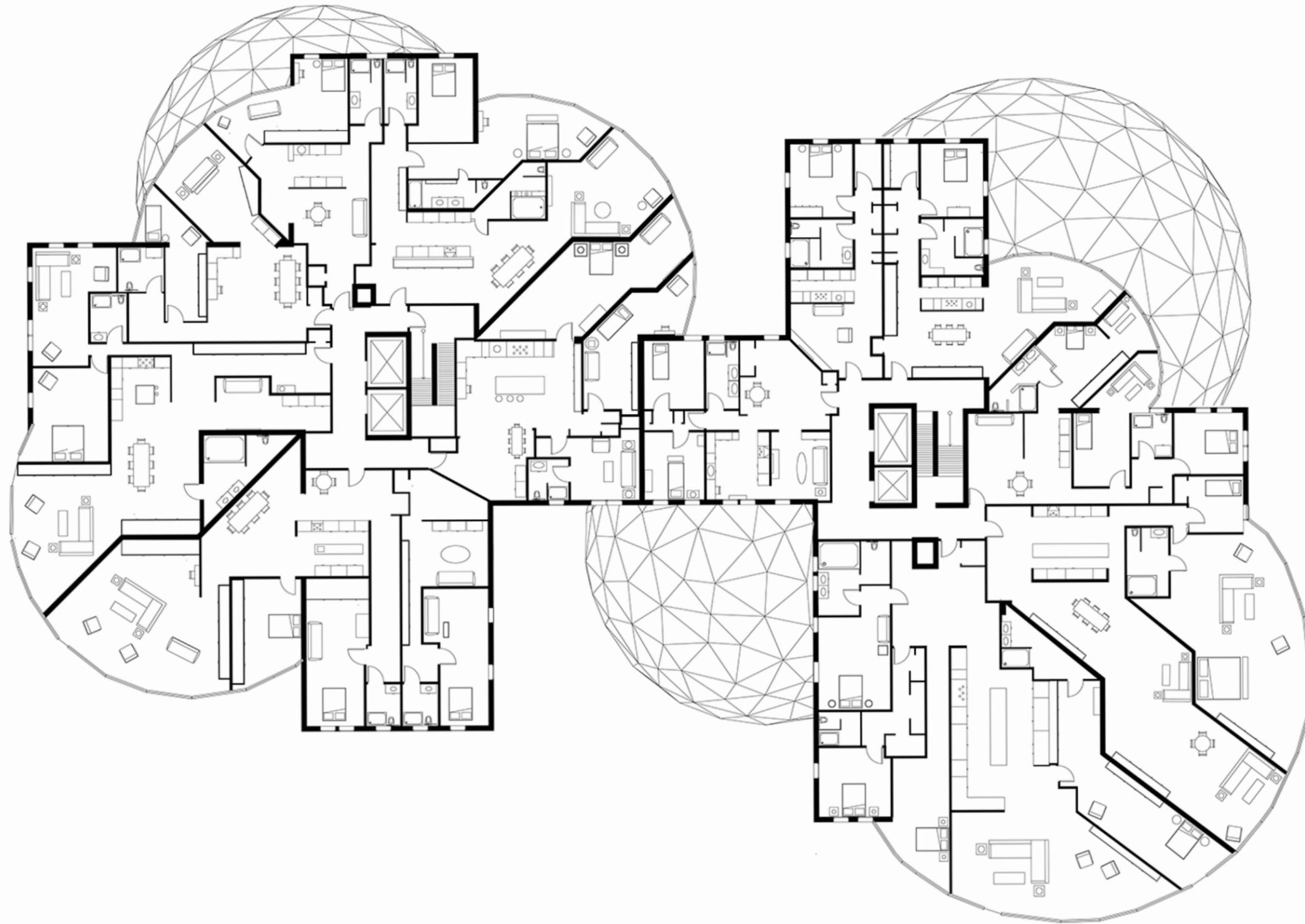
Manhattan, NY

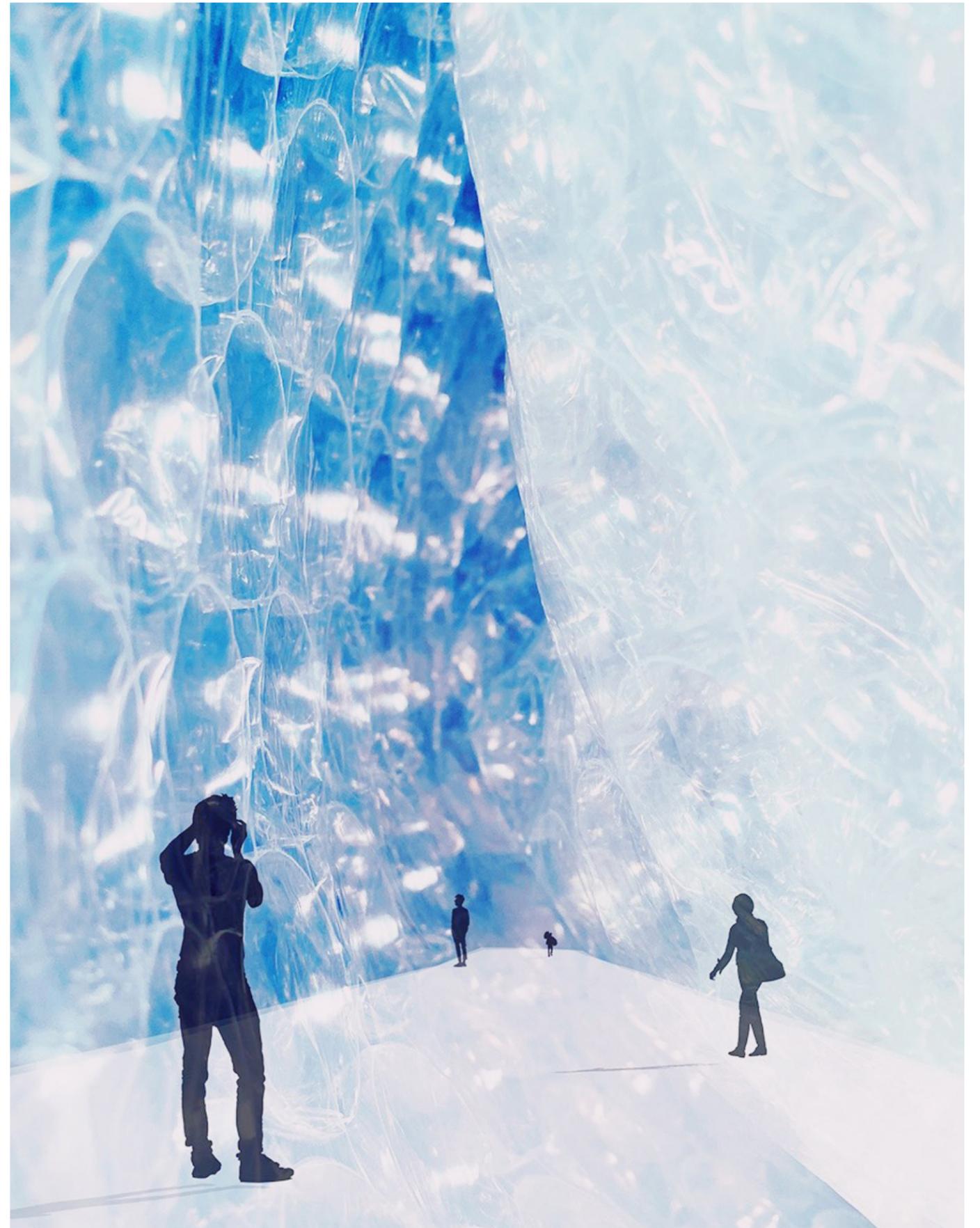
After analyzing the dynamic neighborhood of the Upper West Side, my research focused on the local environment of the New York City Housing authority's Amsterdam Houses complex. This exploration is centered around the Tower in the Park housing typology of NYCHA and its unintended, passive design benefits- contributing to environmental equity within a racially diverse housing complex.

This exploration of Tower in the park highlights the housing typologies' unique integration of permeable, green space within a dense urban environment. The dense canopy of London Plane Trees within the Amsterdam Houses complex is the main inspiration for my analysis of the property. This unique landscape provides the complex with the luxury of accessible green space, fresh air, passive cooling benefits, and mass water retention through permeable surfaces. This green space offers immense passive benefits to a diverse population of residents in a low-income housing typology.

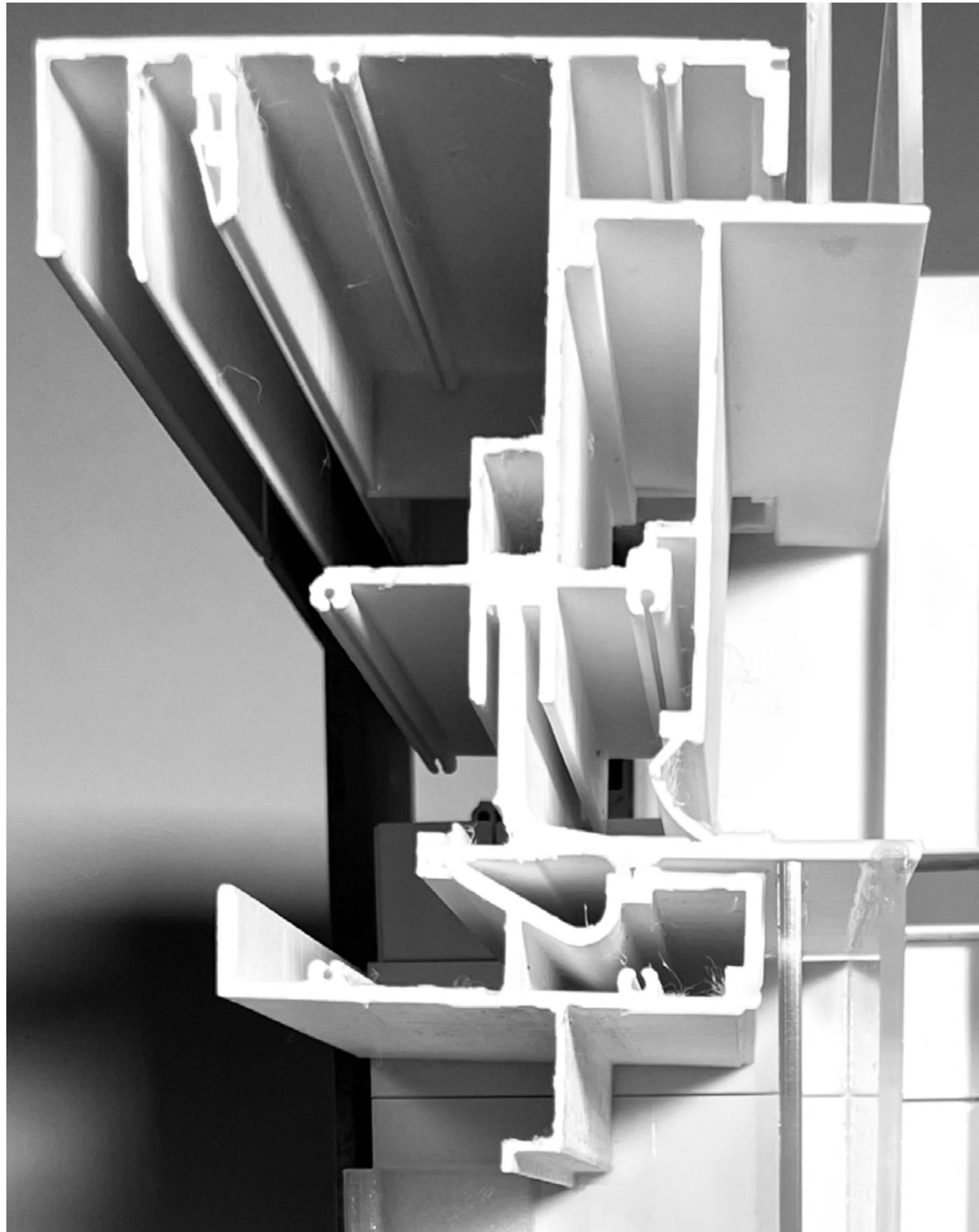
Careful, in-depth analysis rendered a design intervention that prioritizes increasing exposure to natural light and ventilation within residential units. These structures form geodesic bubbles, expanding existing floor plates to cantilever outward toward the exterior landscape. My intervention includes a comprehensively designed perforated skin extended from the inner glass structure to mitigate the intensity of the summer sun from heating the bubble like a greenhouse. This skin acts as a shield, reducing the amount of light entering the structure enough to create optimal interior climates. Considering the majority of the Amsterdam houses are six stories tall, the mature London plane trees provide natural shading for the bubbles, facilitating passive cooling processes.







Model made with 12mm staples, bubble wrap, and dehydrated Hydrangea stems.



## Architectural Technology V

Commercial Curtain Wall

Analysis & Chunk Model

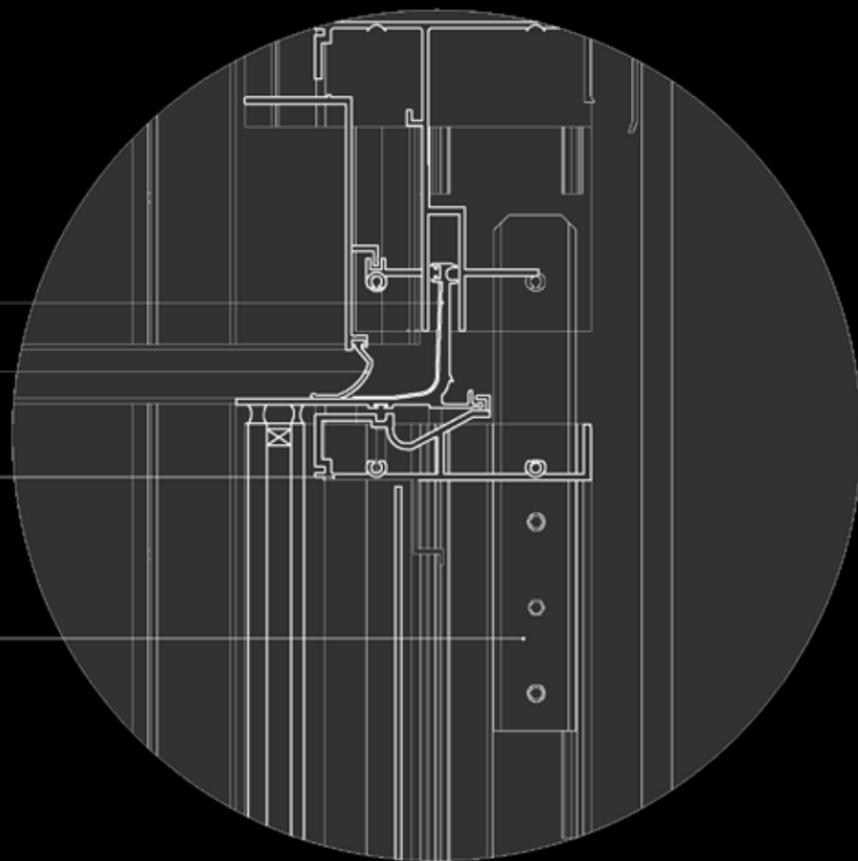
Within the Master of Architecture program, the architectural technologies sequence incorporates a semester-long project focused on enhancing students' understanding of architectural facade systems and their construction and development processes. The project requires students to conduct precedent analysis and research on various facade systems through detailed drawings and fabrication of a scale chunk model of their assigned system. In summary, the purpose of the semester-long project is to provide students with a hands-on, in-depth understanding of various architectural facade systems and the processes involved in their construction and development.

chickenhead  
*with silicone boot*

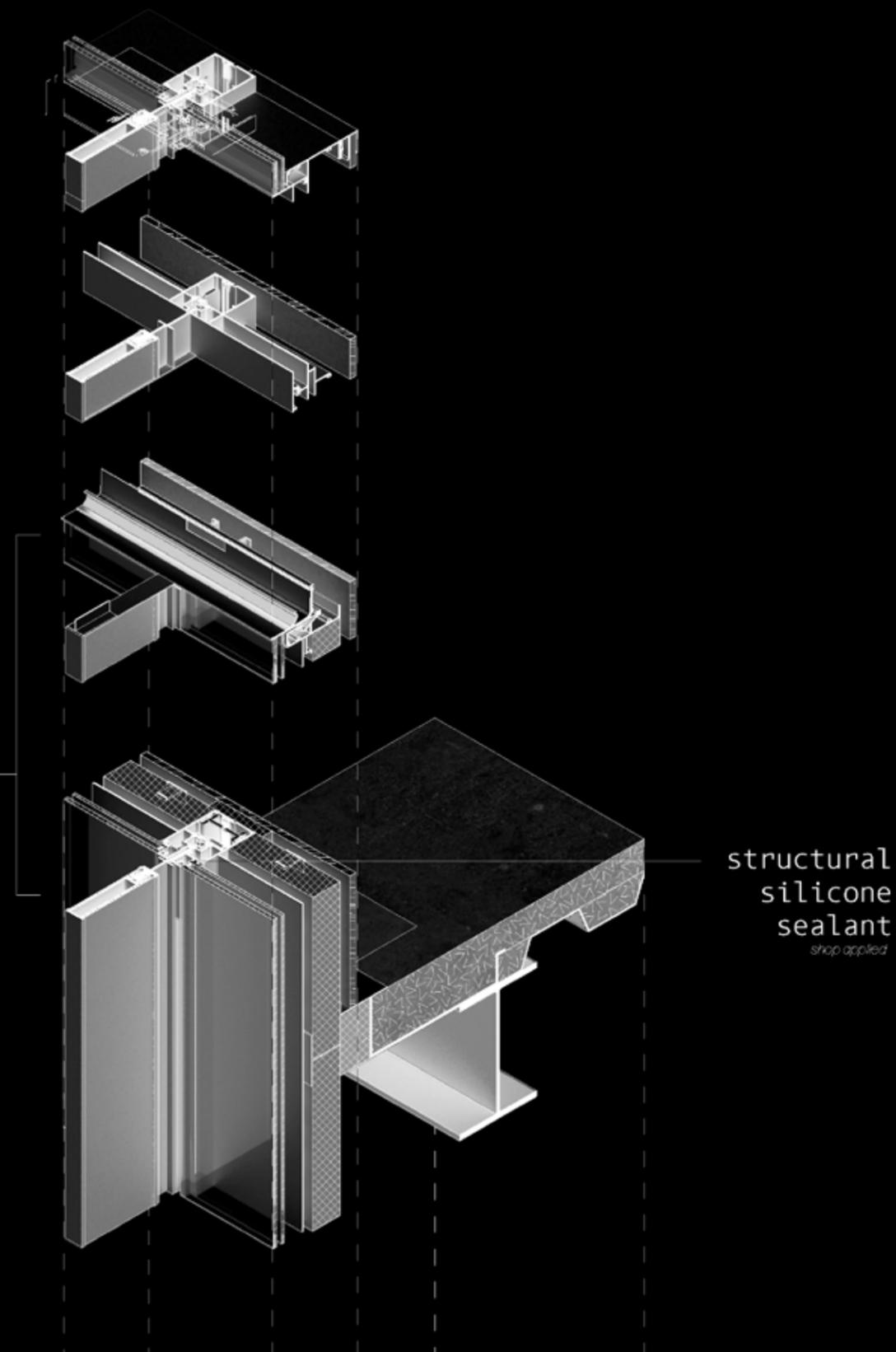
rainscreen gasket  
*silicone*

horizontal mullion

unit lift



*Stack Joint Section View  
Through Vertical Mullion*



structural  
silicone  
sealant  
*shop applied*

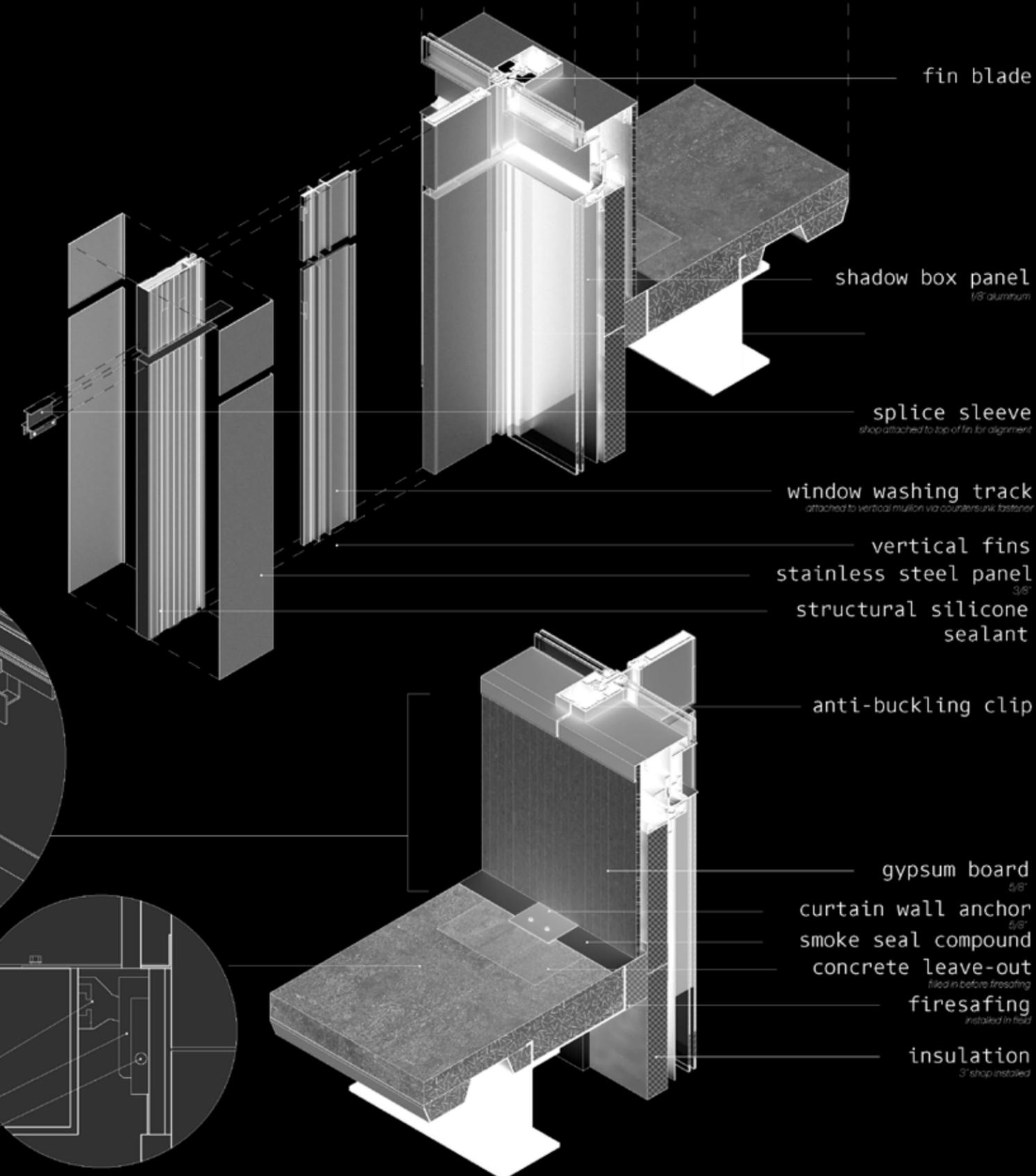
insulation fastener  
 mullion wrap  
 with foil wrap, installed after smoke seal  
 fist anchor  
 connected to hook anchor

metal backpan  
 anchor base plate

pin carrier  
 hook anchor  
 steel pin

Floor Plate Connection  
 before Insulation, Firesafing,  
 Gyp Board, Smoke Seal, Mullion Wrap

Floor Plate Connection  
 Section View w/o Firesafing



fin blade

shadow box panel  
 1/8" aluminum

splice sleeve  
 shop attached to top of fin for alignment

window washing track  
 attached to vertical mullion via countersunk fastener

vertical fins  
 stainless steel panel  
 3/8"  
 structural silicone sealant

anti-buckling clip

gypsum board  
 5/8"  
 curtain wall anchor  
 5/8"  
 smoke seal compound  
 concrete leave-out  
 filled in before firesafing

firesafing  
 installed in head

insulation  
 3" shop installed

