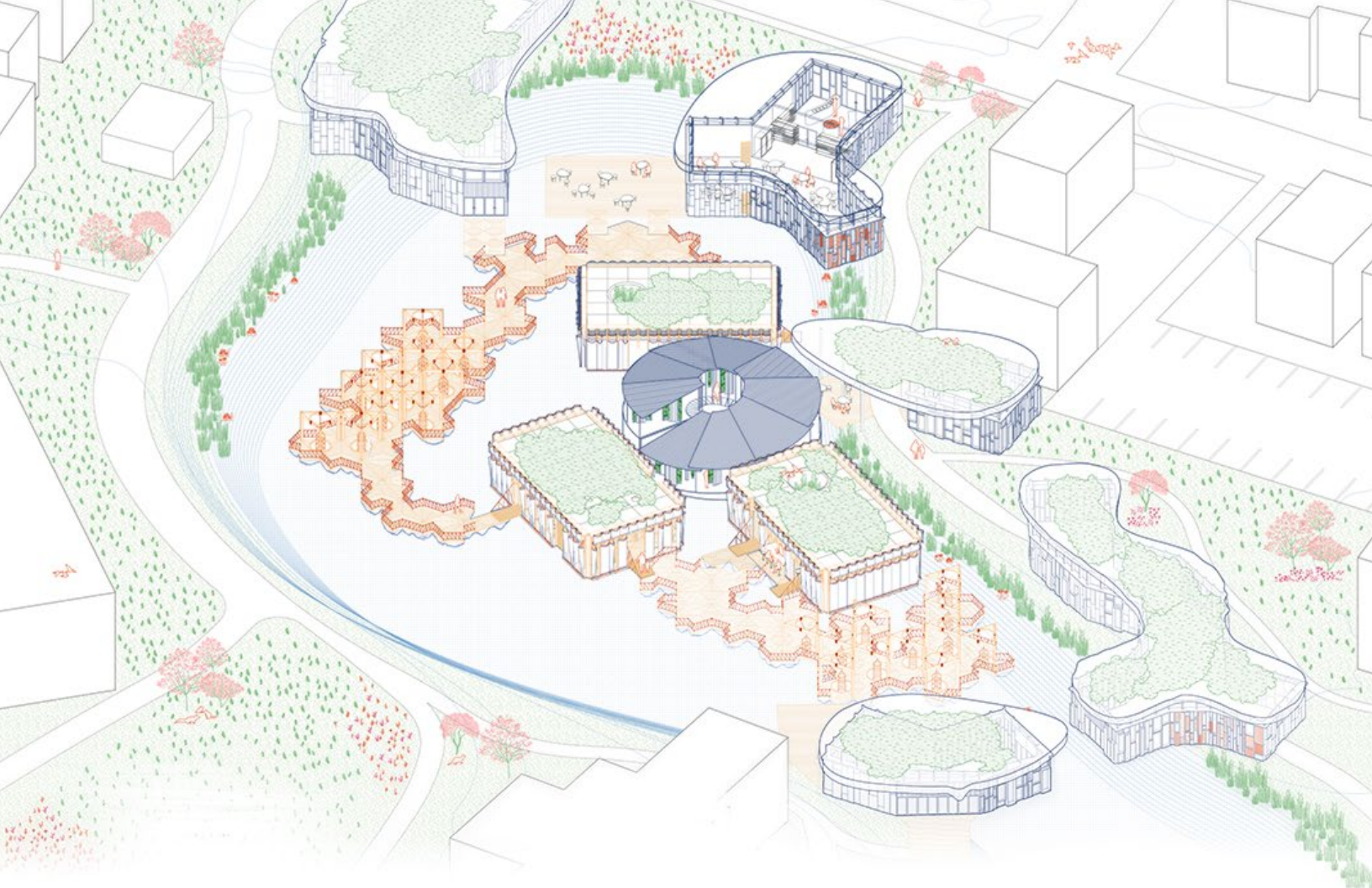


DESIGN PRACTICE

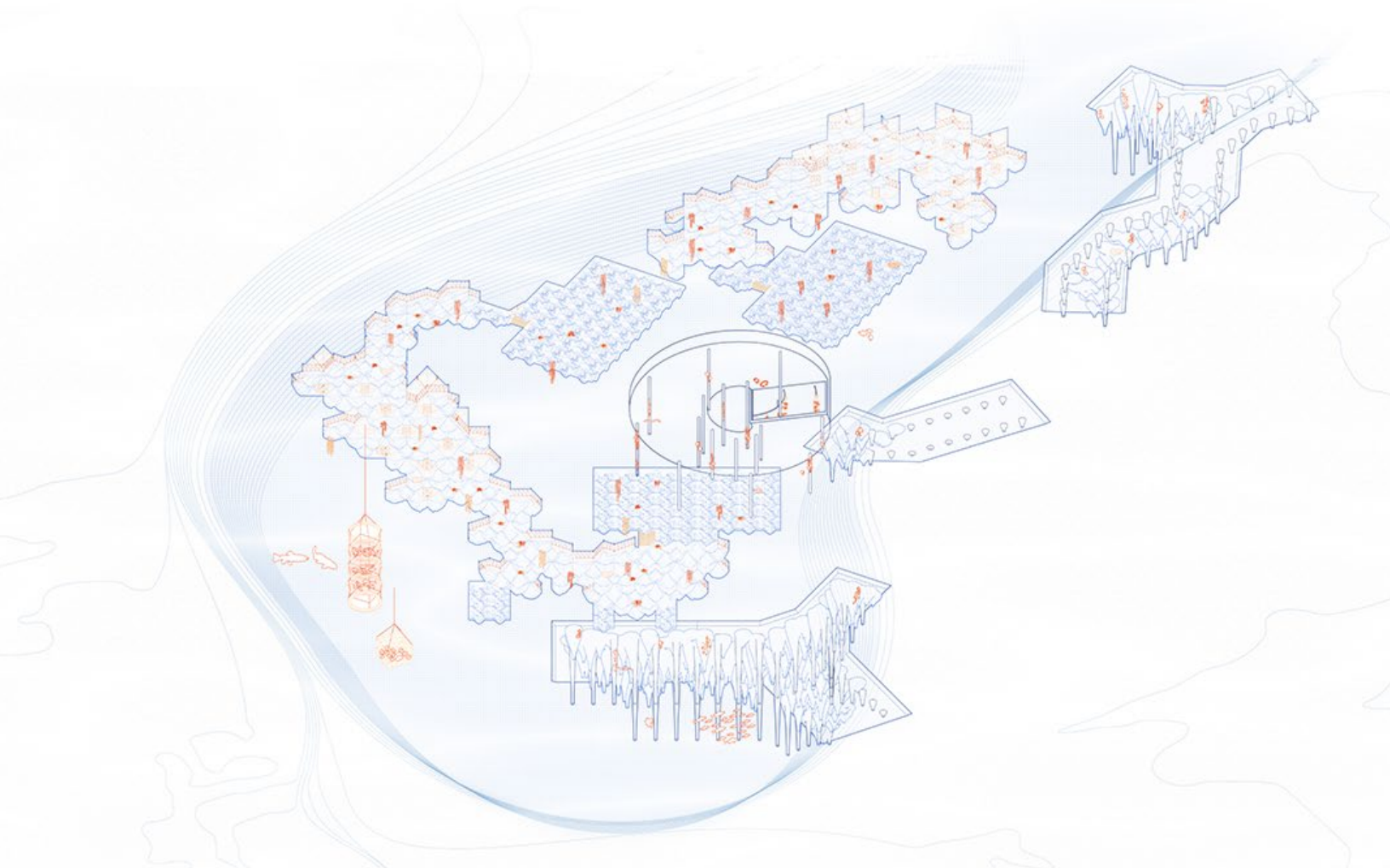
01	Buoyant Commons Advanced IV Rachely Rottem
02	Canopy for Expats Core III Benjamin Cadena
03	Cutie-o's Advanced V Joseph Zeal Henry
04	Sharing Moments, Found and Kept Advanced VI Ada Tolla & Giuseppe Lignano
05	School of Pressurized Chambers Core II Lindy Roy
06	The Interstitial Core I Thomas de Monchaux



Buoyant Commons

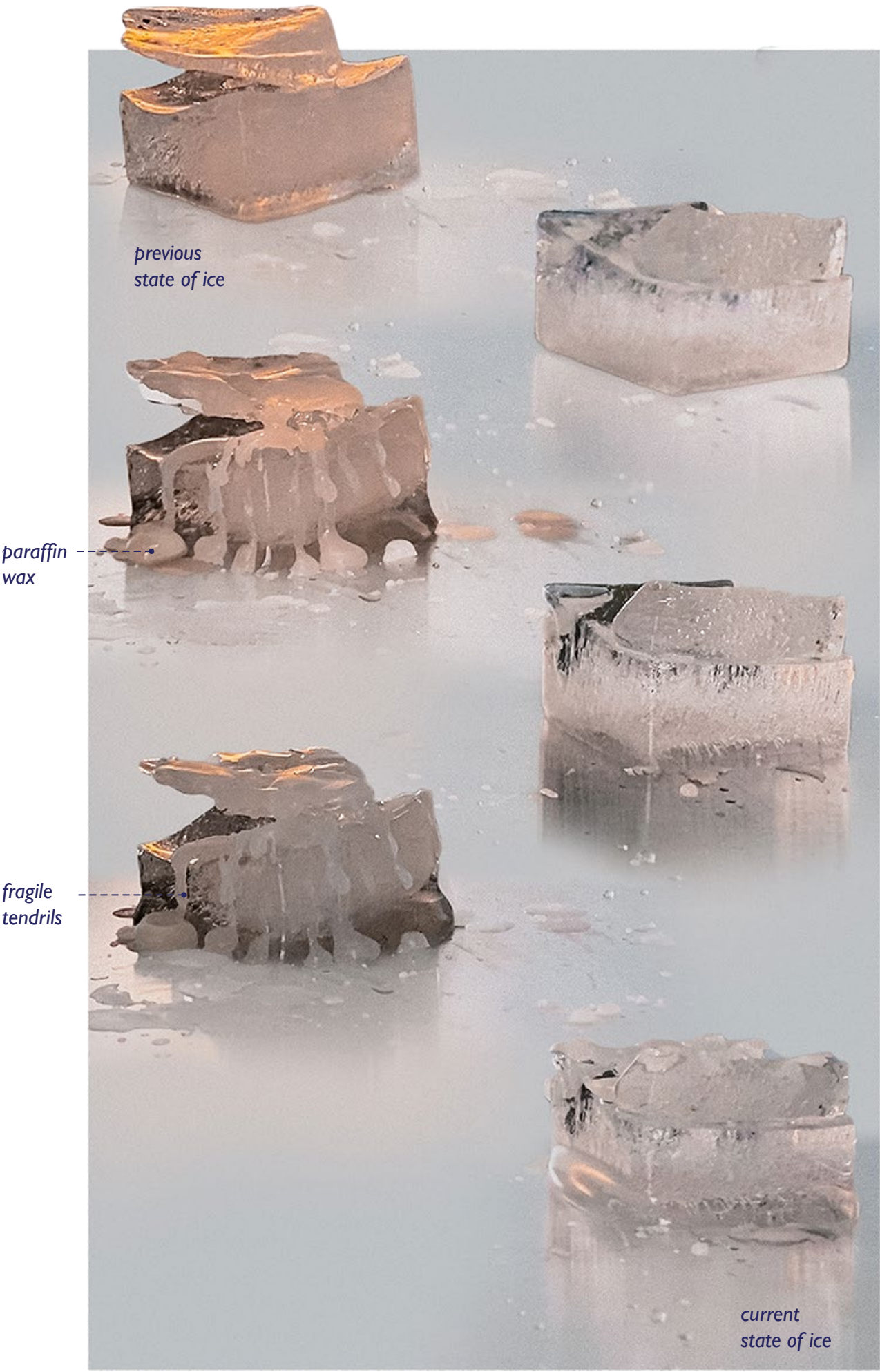
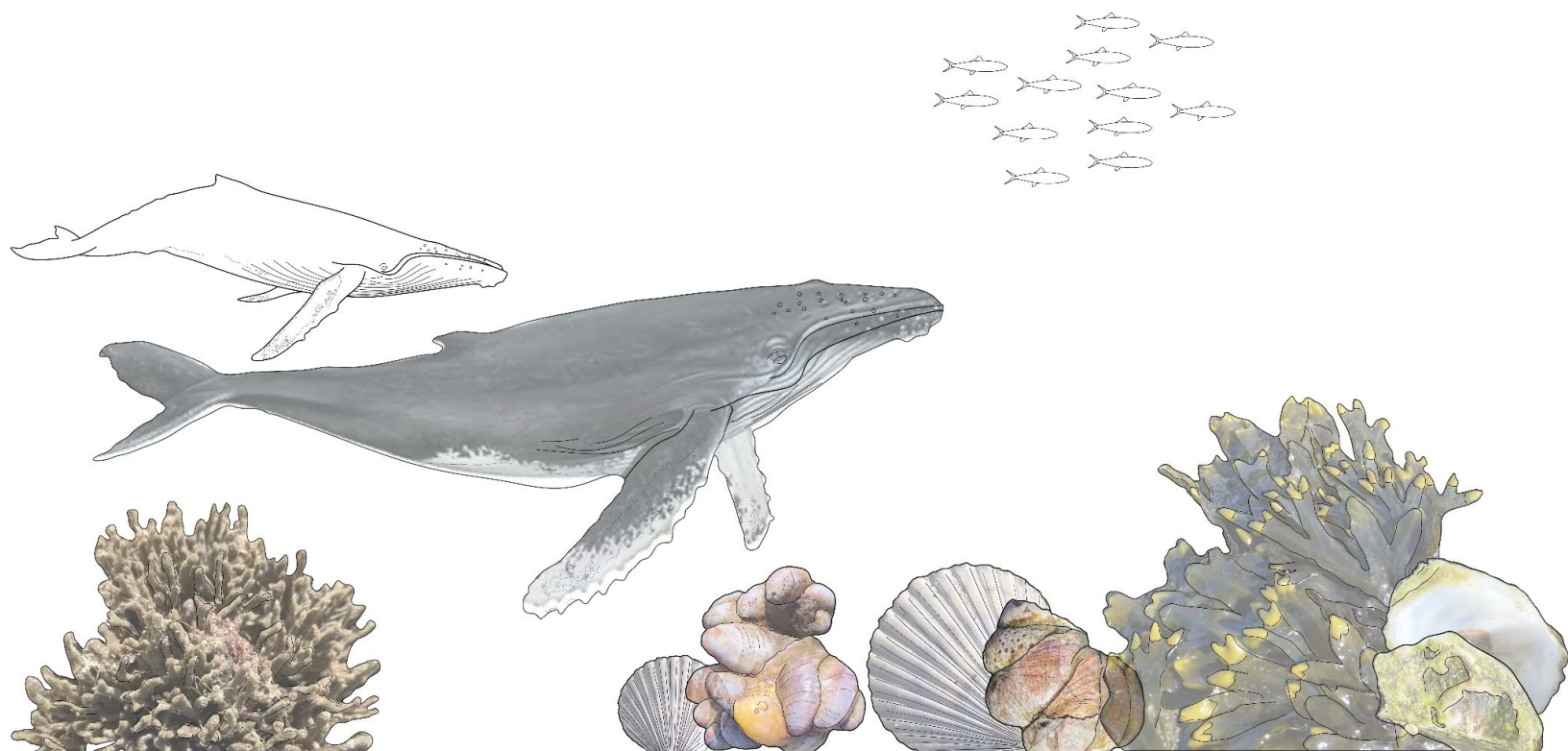
Term	Advanced IV Spring 2023
Professor	Rachely Rottem
Collaborator	Will Cao

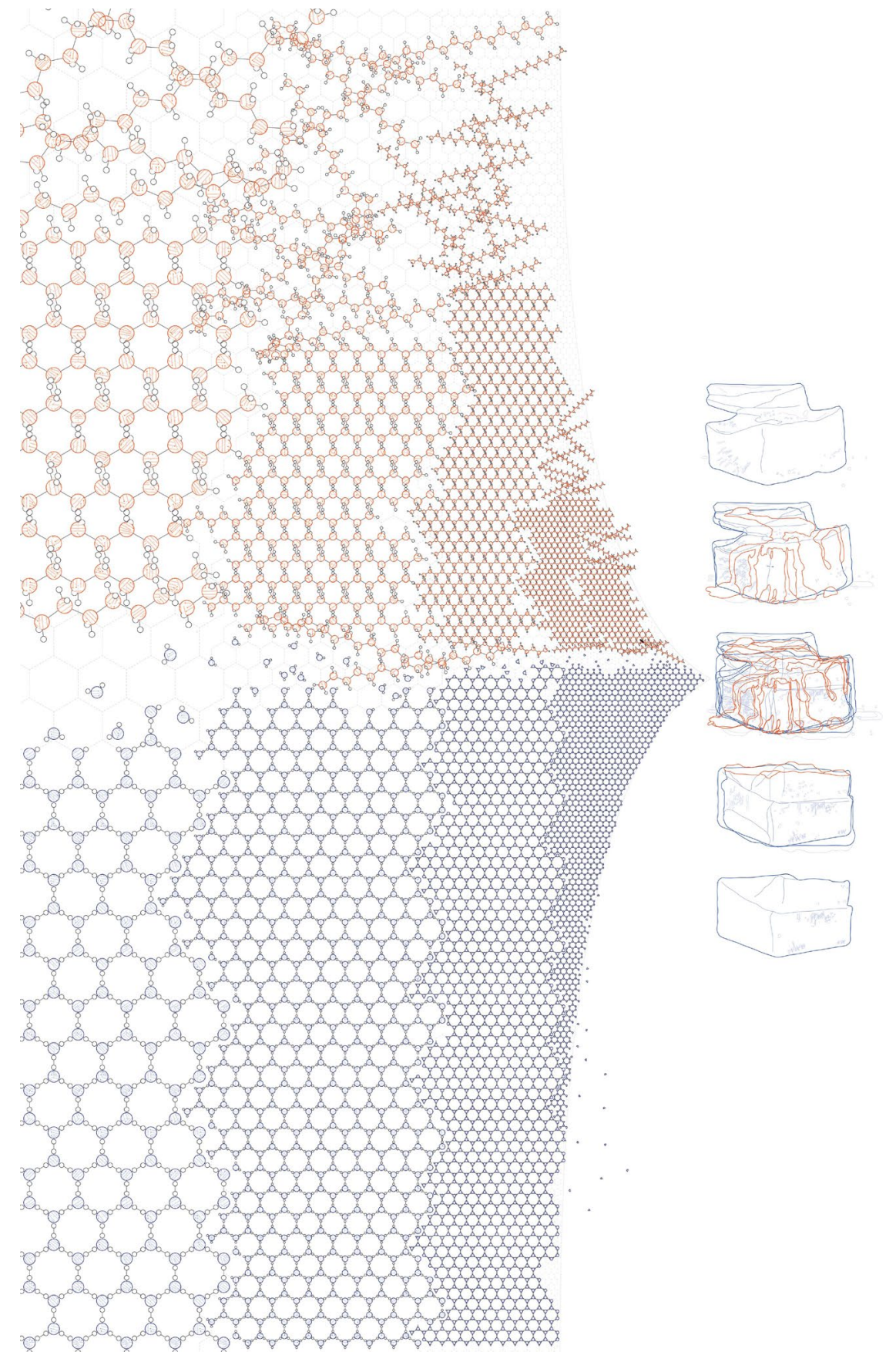
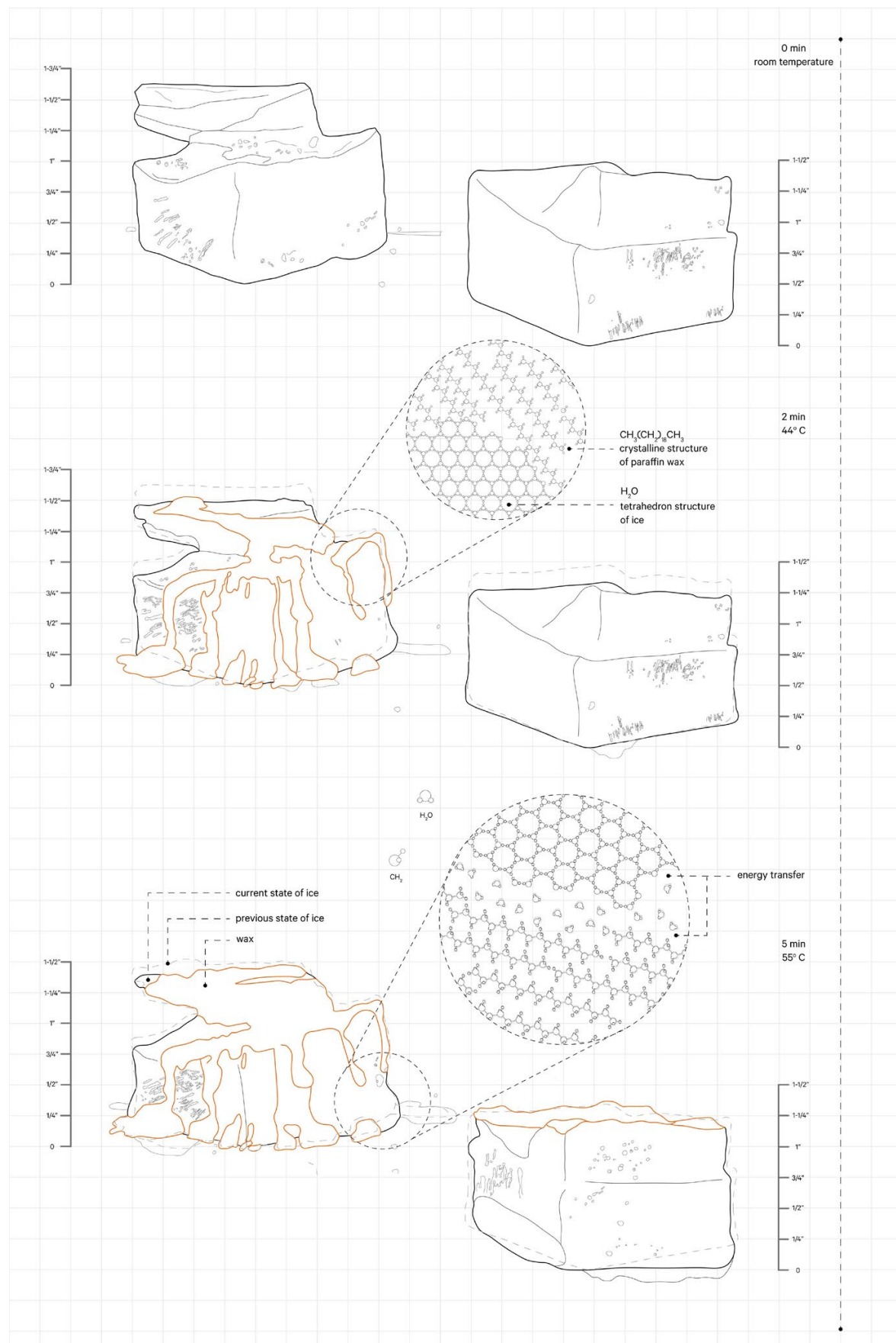
Buoyant Commons aims to respond to the issue of limited access to affordable and nutritious food and lack of connection to nature. The project makes way for soft systems to provide mutually harmonized common habitat both for human use and many other species. New construction will adapt to the uncertainty of the site by using a dynamic system of barges and piers. Spaces of equipment or spaces necessary during emergencies float, evolving based on the water line. Others more flexibly embrace and survive the flood.



Fuel and water were essential to Bridgeport even prior to fossil fuels. The waters of Newfield Harbor allowed Bridgeport to evolve into a significant port from the 18th to 19th century. Before petroleum-based paraffin wax, spermaceti from the whaling industry within Bridgeport was processed into candles, illuminating 19th-century cities across North America and Europe.

In our experiment, water, in the form of ice, provides a formwork for wax to solidify, while heat from the wax liquifies the ice. The two materials are in mutual states of transition and instability. When the ice melts fully, the remaining hardened wax is precarious, supported only by fragile tendrils to the ground.



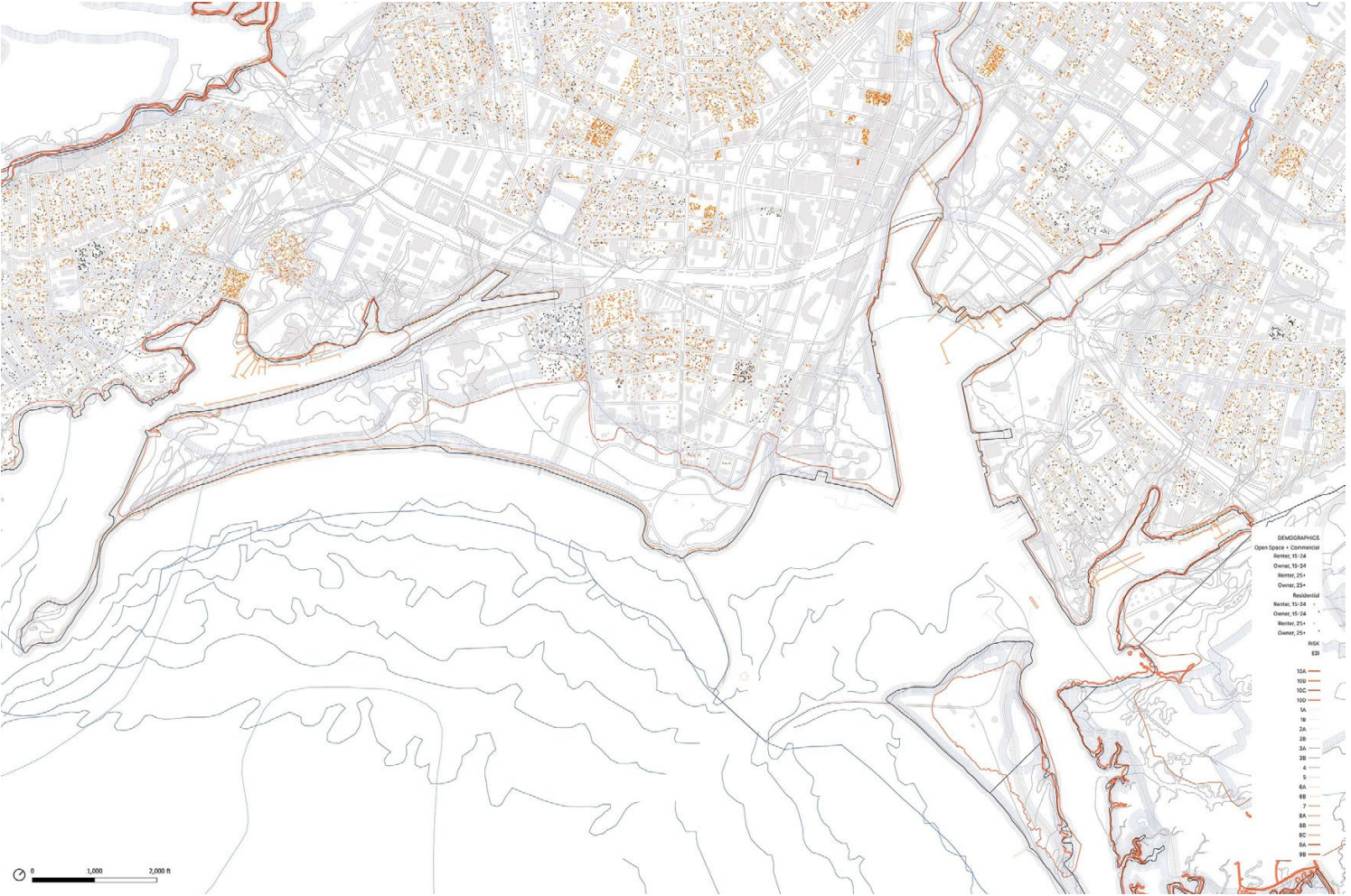
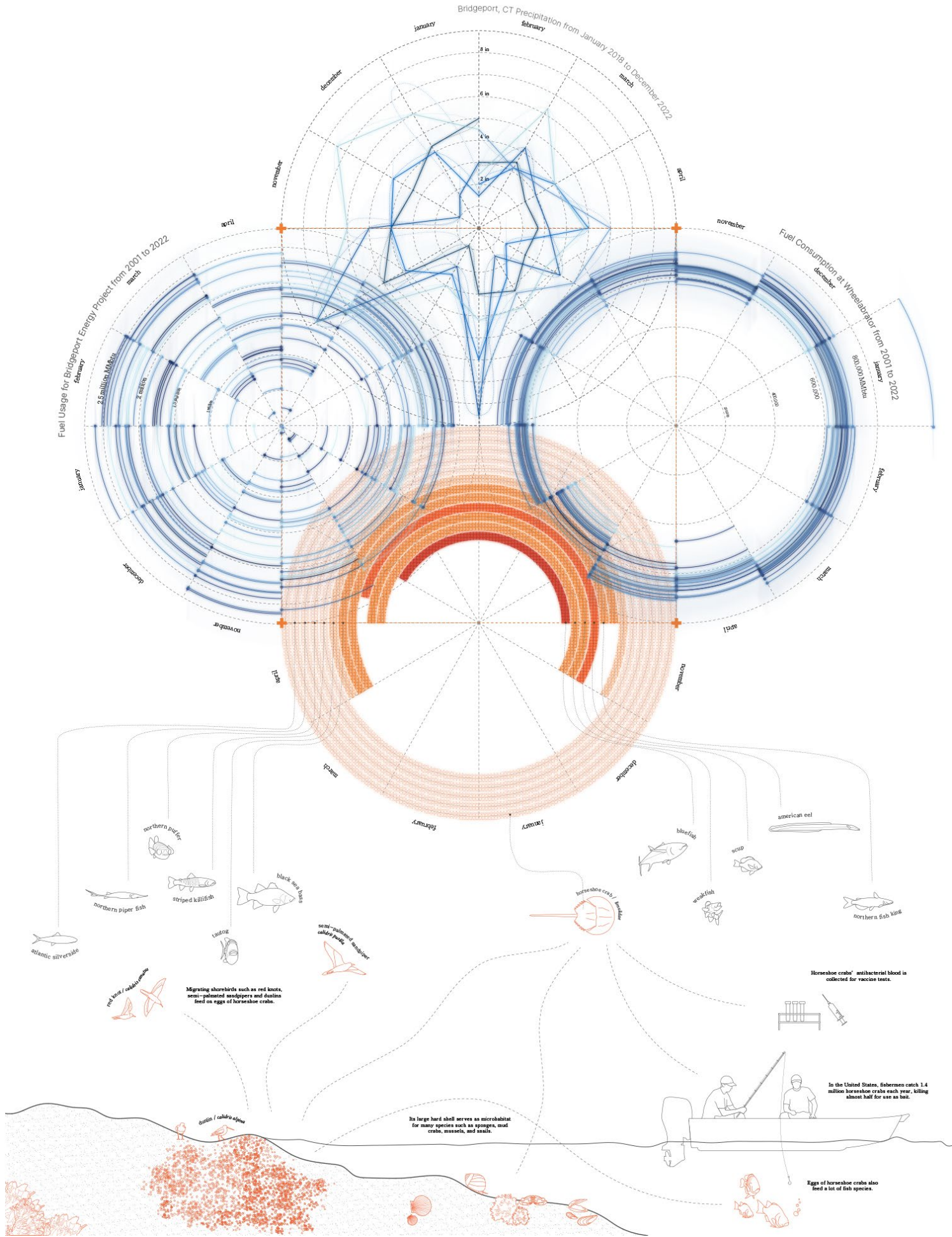


The experiment explores the relationships between static and dynamic, fuel and water, absorbing and adapting, controlled and uncontrolled.

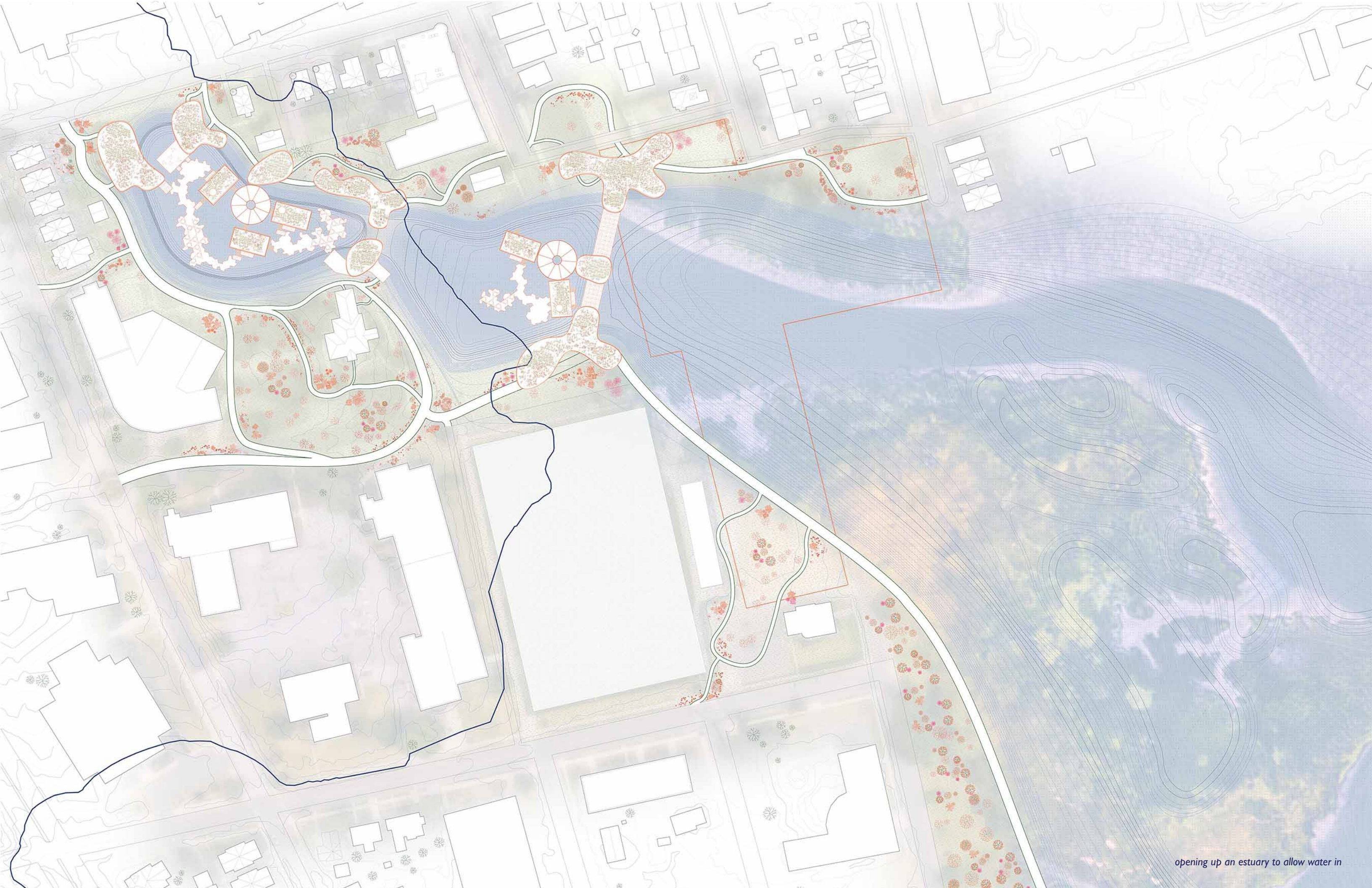
Many uncertainties for the people and ecology of Bridgeport are products of the dialogue between fuel and water. The combination of an obsession with fuel and negligence of water threatens the biodiversity around Bridgeport. Each year, activity at the gas and waste plants coincides with increased precipitation and crucial seasons when marine organisms occupy the waters.

The parking lot where we have situated our project is just a sample of the extensive impervious surfaces across Bridgeport that store and radiate heat and prevent natural reabsorption of water. Nearby, New Bassick High School is set to be constructed within an existing flood zone, leaving a community facility vulnerable to loss to the elements. To reinterpret flood risk as an opportunity, we propose to allow the water in. By opening a creek on the site, we aim to create encounters with ecology and unique opportunities for education that can adapt to the shifting and unstable conditions of the site.

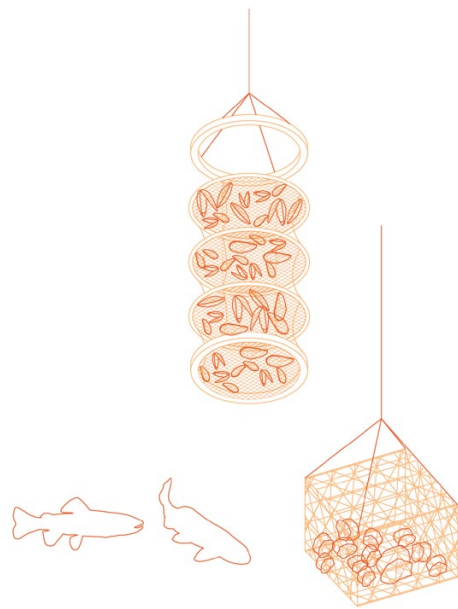
Critical new infrastructure, such as communal and educational kitchens, are placed into barges that adapt, floating to accommodate and evolve with changes in water level and allow for variety of connections between programs. Fixed structures are elevated by the water on piers, providing access and contact with the water. The spiraling greenhouse mediates the elevation and angle change between the pier structures and barges, housing hydroponic farms above water and mycocluture in darker areas below water.



vulnerable population of students in Bridgeport



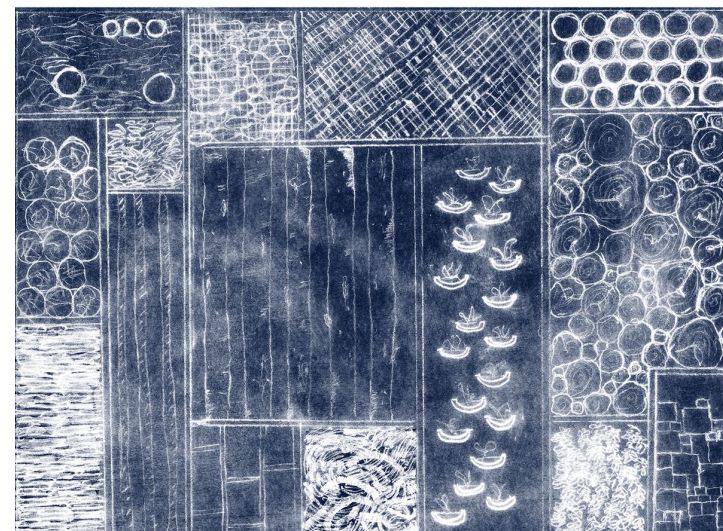
opening up an estuary to allow water in



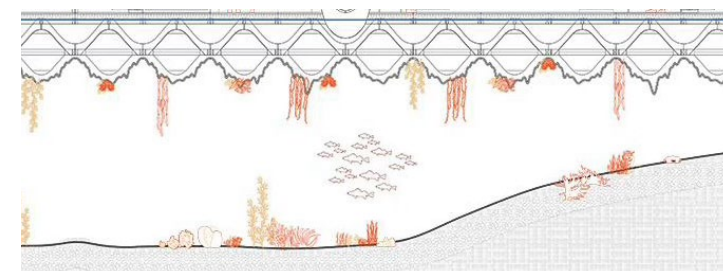
creating access to nature and the waterfront
water



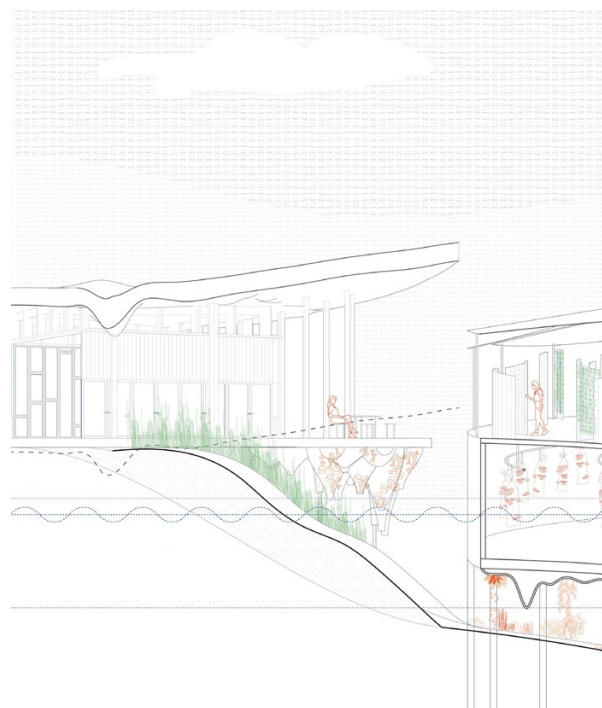
new commons providing access to fresh food
fuel



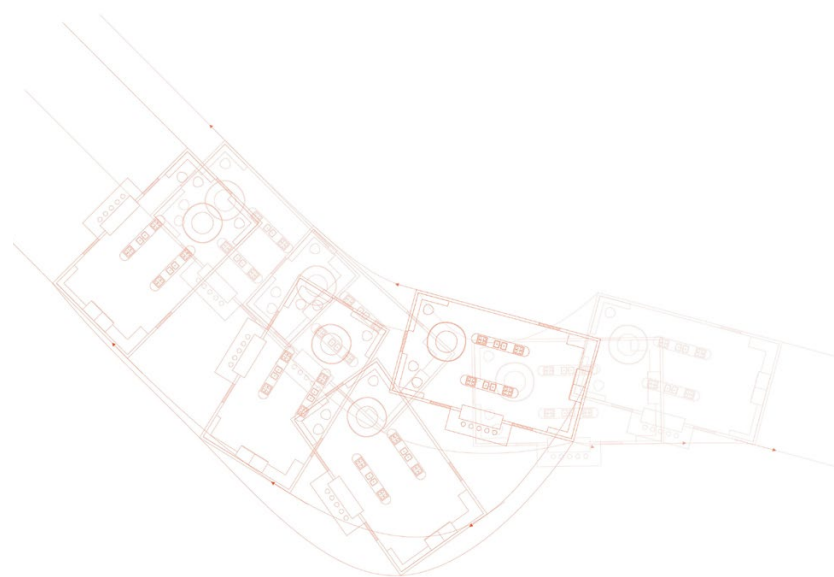
habitat wall
controlled



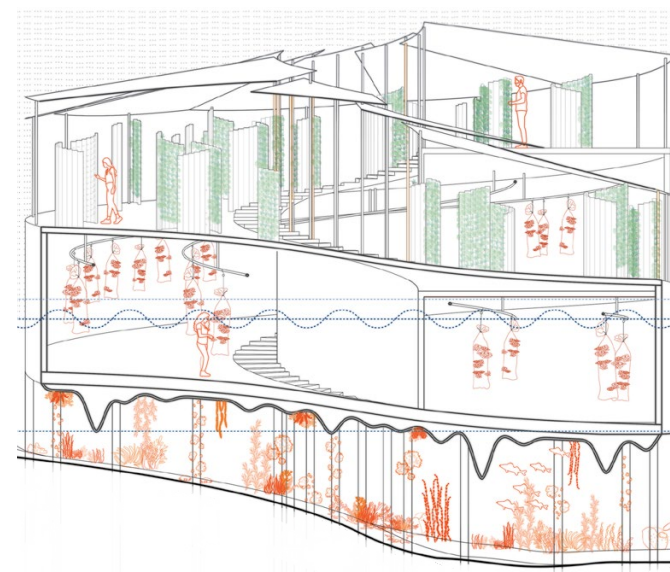
blue green roof and biofouling below water
uncontrolled



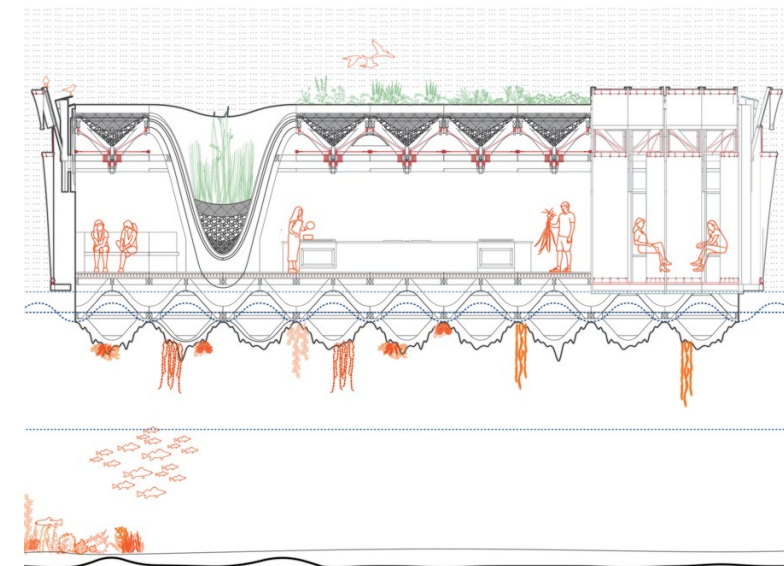
fixed structures
absorb



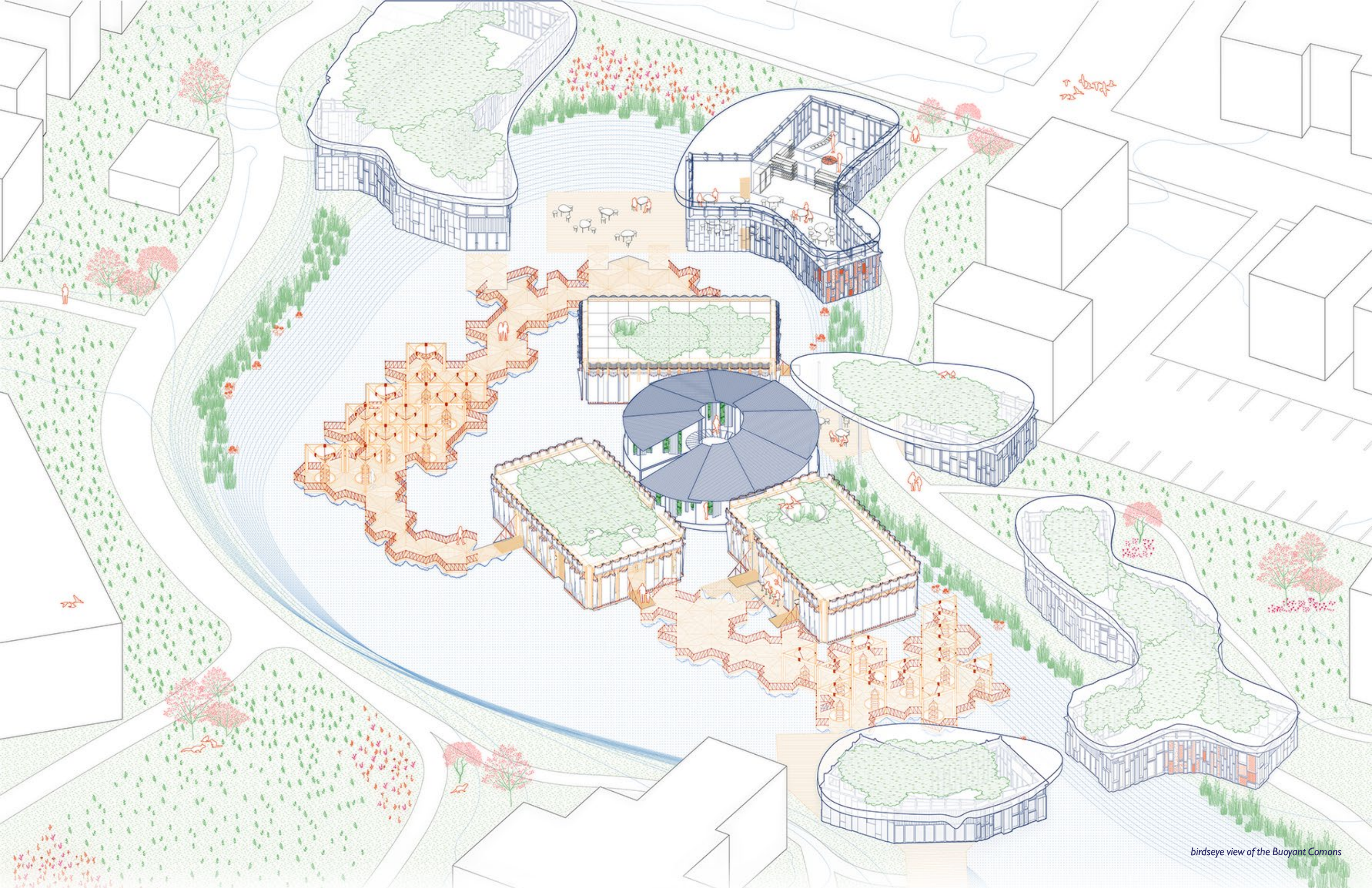
movement of barges
adapt



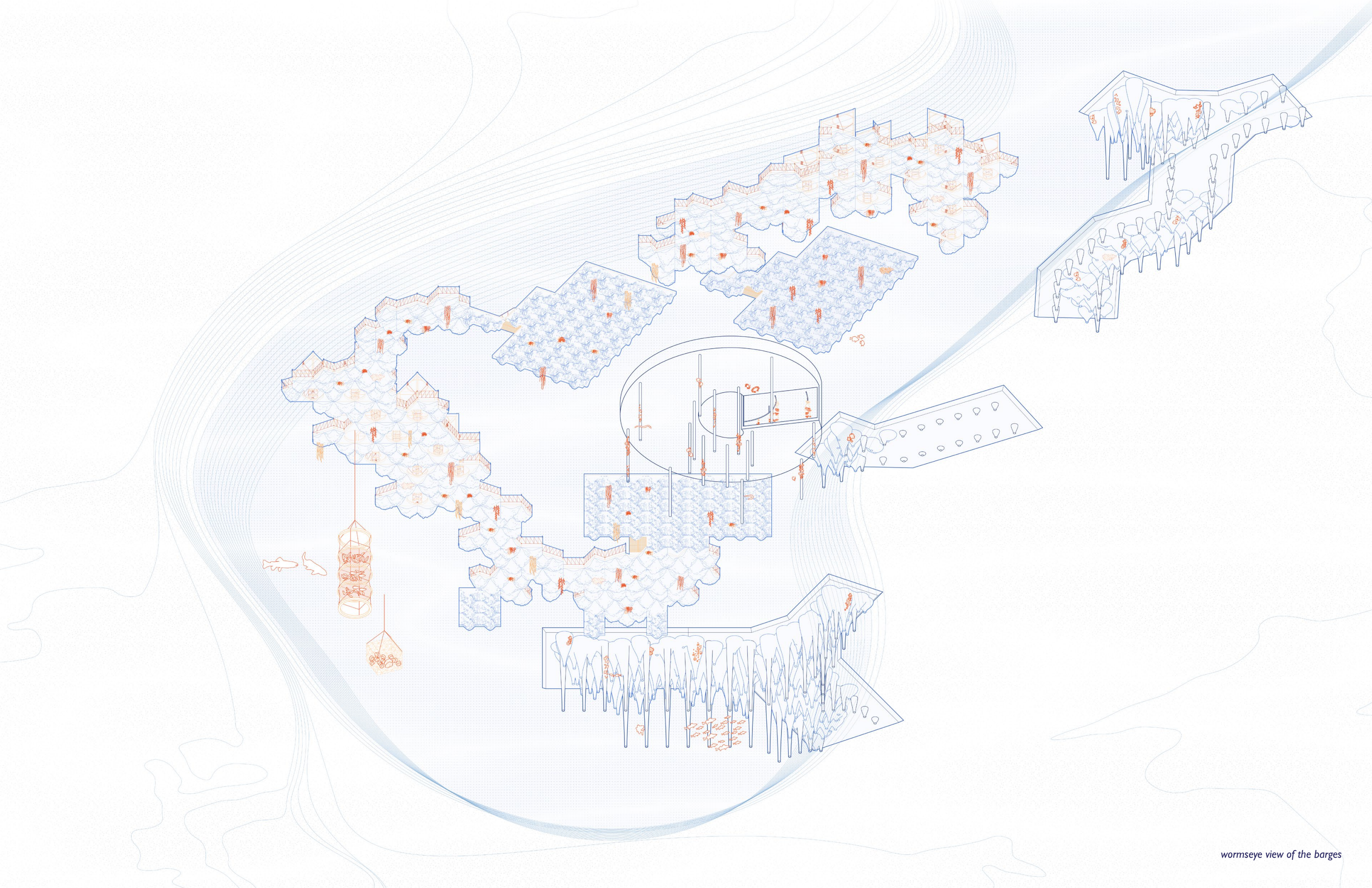
greenhouse
absorb



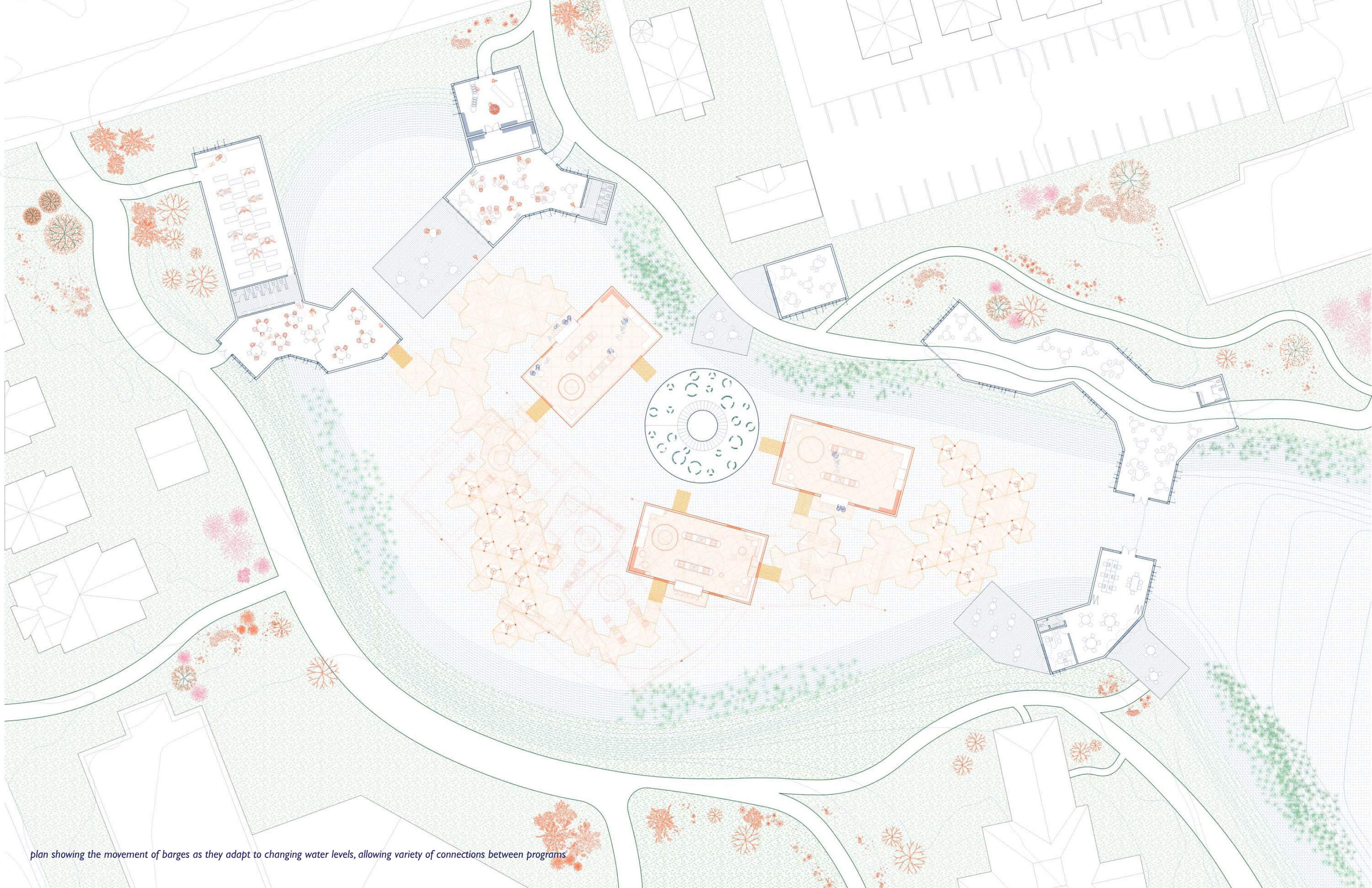
food program
adapt



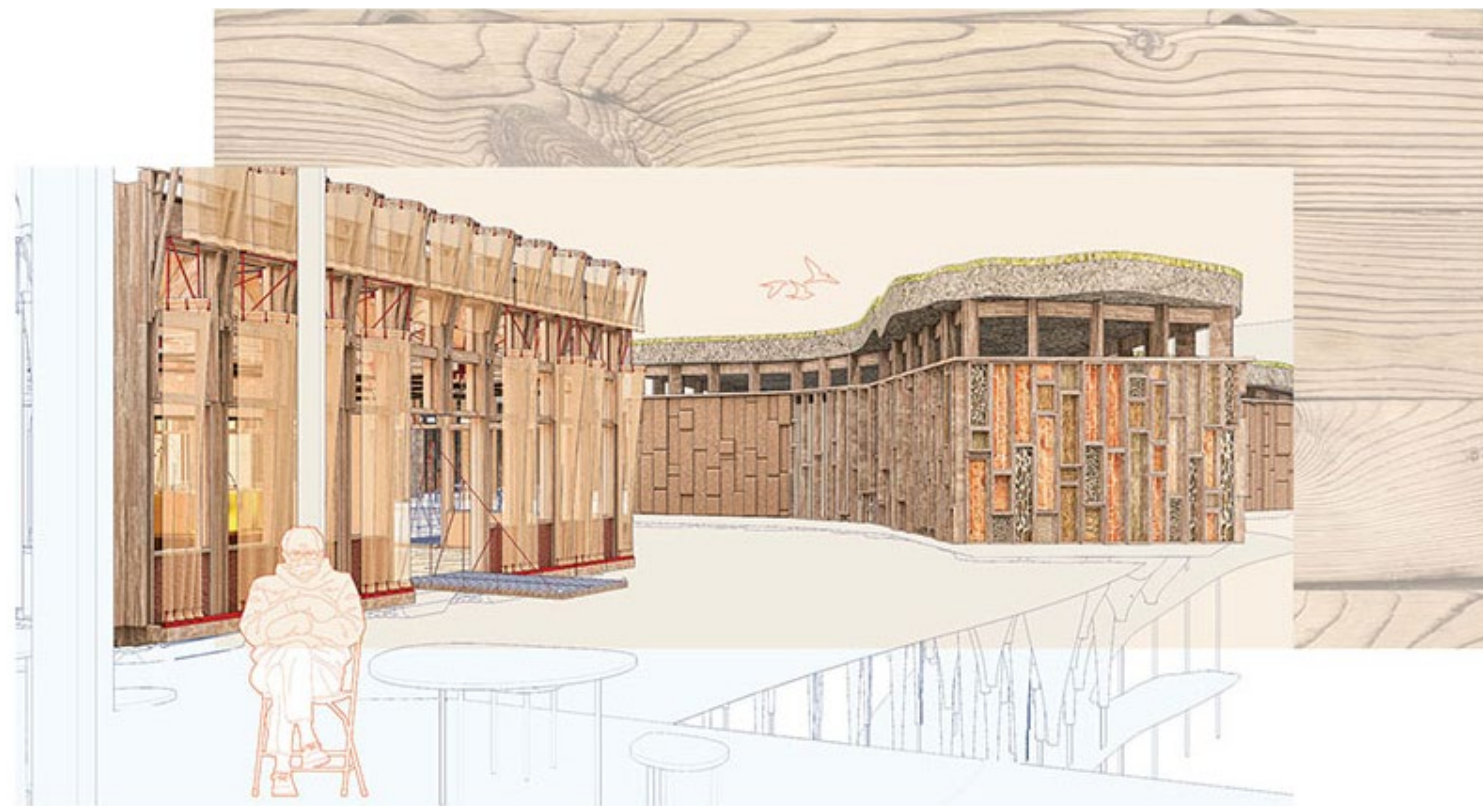
birdseye view of the Buoyant Commons



wormseye view of the barges

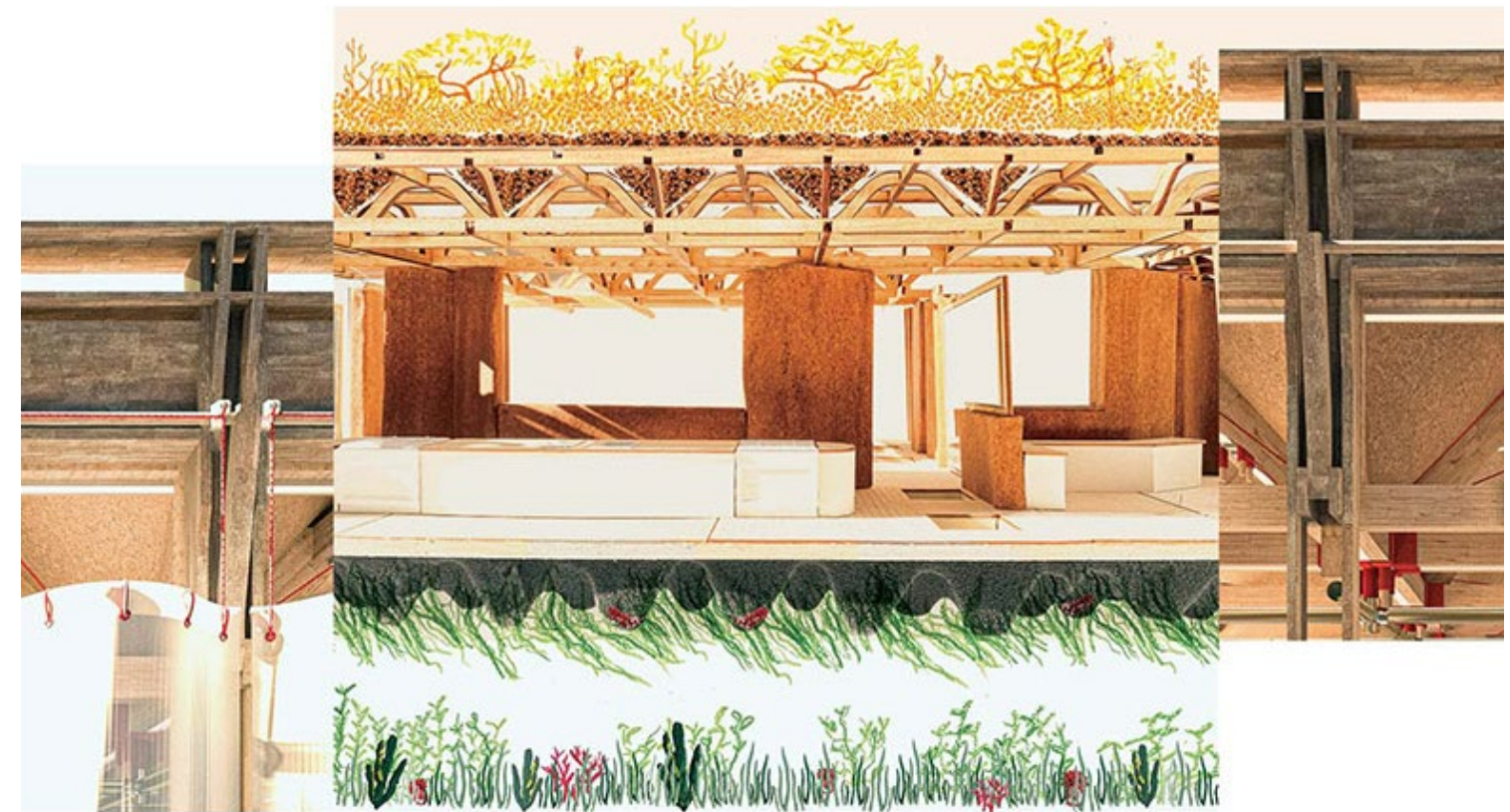


plan showing the movement of barges as they adapt to changing water levels, allowing variety of connections between programs



Habitat walls on the exterior sides of the fixed structures create ecologically diverse cladding compartments to provide homes for birds, bees, bats, and bugs

Barges are open to people. Nurseries and oyster cages can be drawn up, allowing students and community members a further glimpse into the ecology that supports them.



Barges are cast from textured bioresin becoming biofouling surfaces that create microenvironments for diverse organisms to inhabit.

Canopy for Expats

Term Core III | Fall 2022
Professor Benjamin Cadena
Collaborator Anna Kim

This project proposes an urban life that is integrated with nature. The low-rise building brings the expat residents closer to the ground and enables them to be in sync with nature and the community. Housing units cluster around green courtyards without sacrificing density, creating a porous, continuous landscape to circulate. In this landscape, the omnipresence of pedestrian activity strengthens the sense of belonging which helps expats to take root in this community. Reimagining the low-rise housing across South Bronx, this project provides a neighborhood infrastructure with publicly accessible open space, greenery, and a waterfront.



Research on the History of South Bronx

Our initial research focused on the history of immigrants who shaped the growth and development of the piano factories in the South Bronx since the 19th century. We studied how people interact with their environments to take root in a new place and build a community there.



History of Piano Making in South Bronx

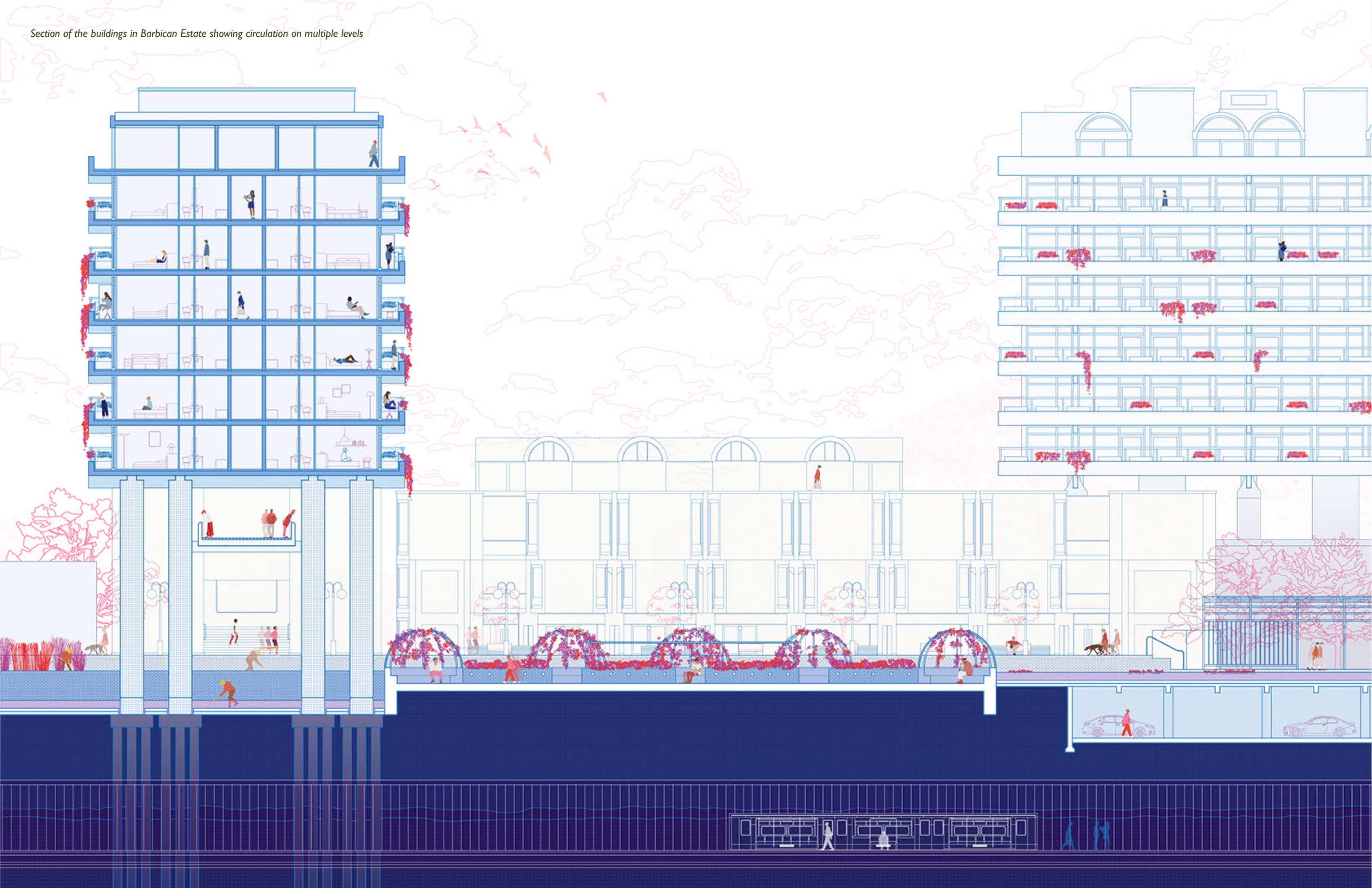
Precedent Study

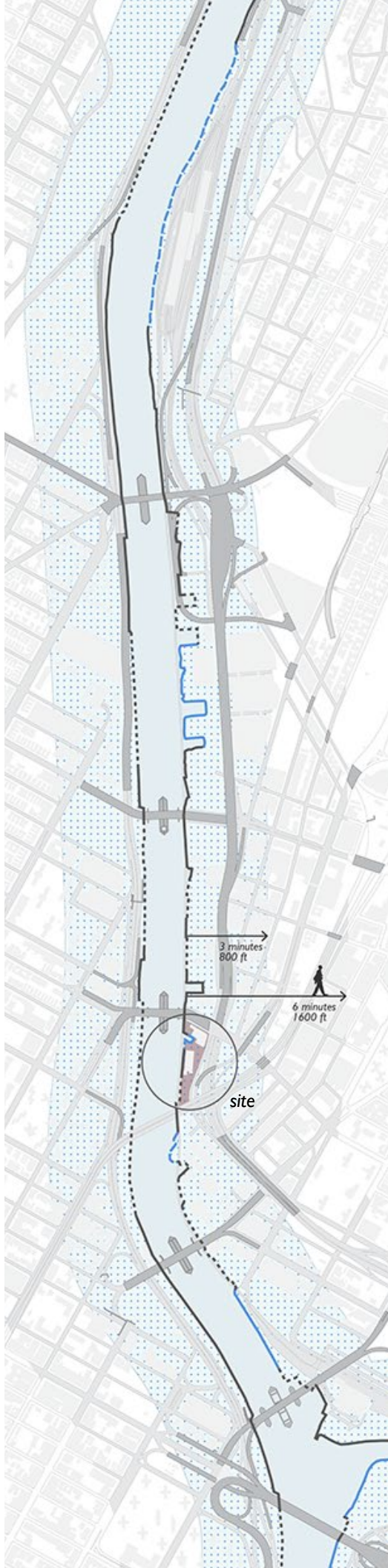
We chose the Barbican Estate in London as a housing precedent that uses the private domain of the home to shape urban life. With its elevated walkways and the water features integrated into the complex, the Barbican gave us the inspiration for responding to the infrastructural problems we faced on our site. We were also interested in the design of the complex which allows for creating a band of life on multiple levels, at different speeds, and temporalities.



Study Model of the Lighting Condition in a Unit at the Barbican Estate

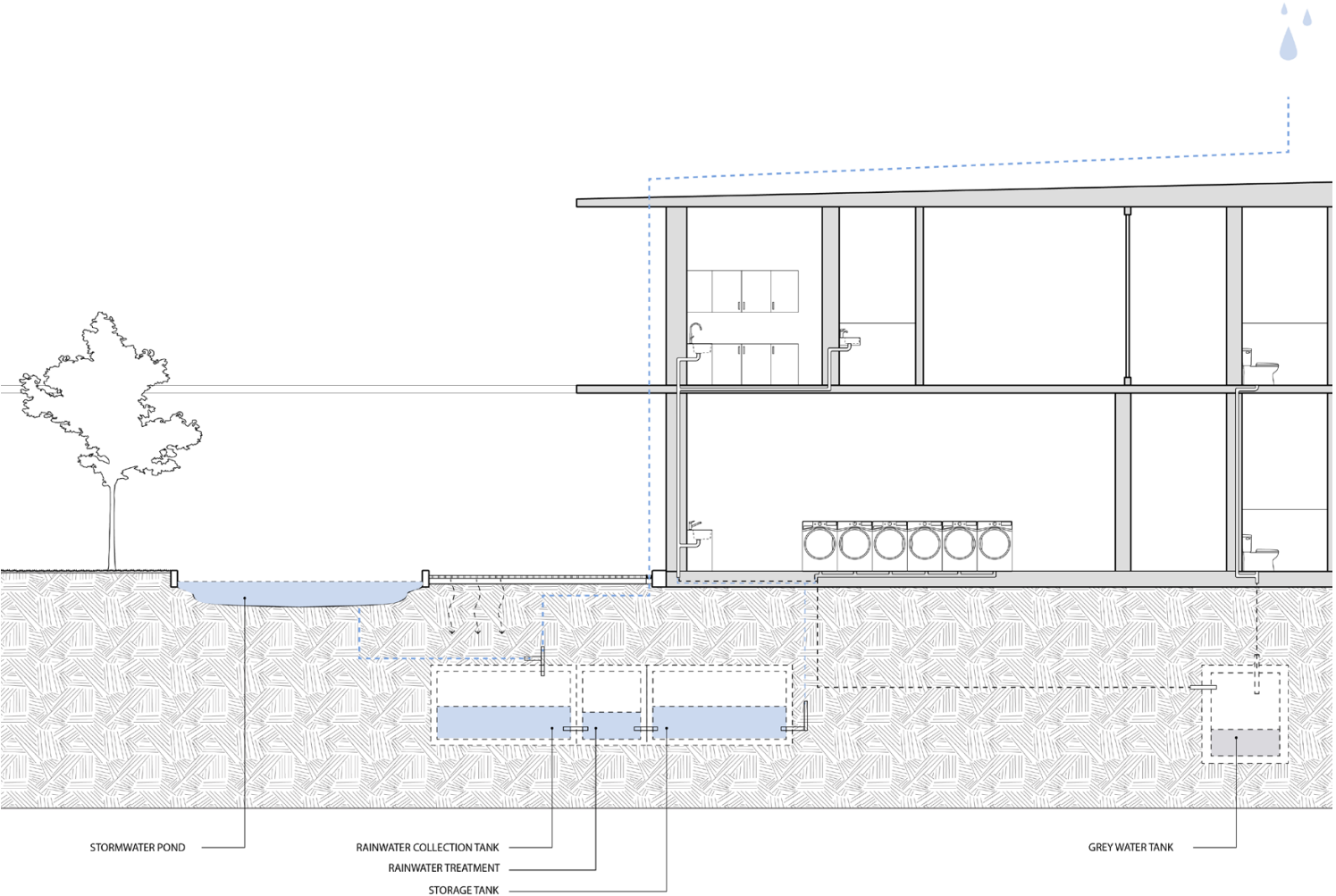
Section of the buildings in Barbican Estate showing circulation on multiple levels



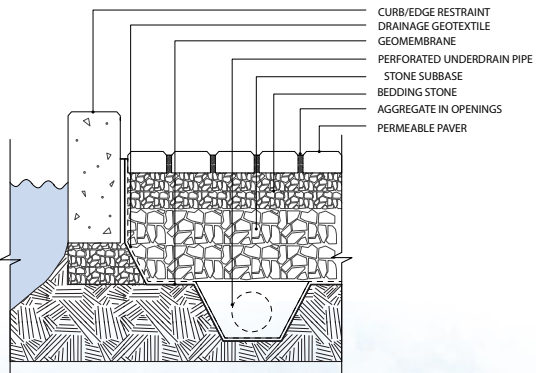


Second part of the research focused on the waterfront along the Harlem River. The neighborhood we are designing for runs next to the Harlem River on the southern end. However, it doesn't have much connection to the water. The shoreline is largely industrial, with access cut off by train lines.

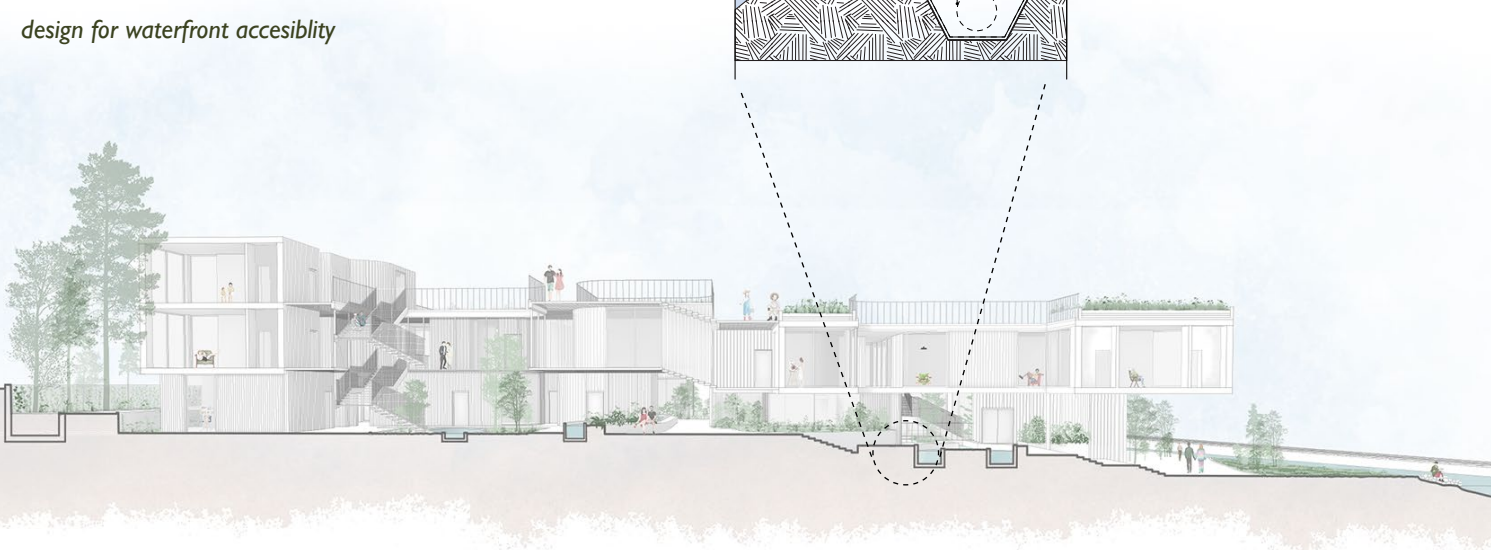
The neighborhood also faces the risk of inundation due to stormwater and drainage issues in the area. Impervious surfaces cover the area, leading to large runoff volumes, pollution of soil and waterways, and a temperature rise. As we did our research, it became very clear that we have to respond to the need for drainage infrastructure and more vegetation cover in the area.

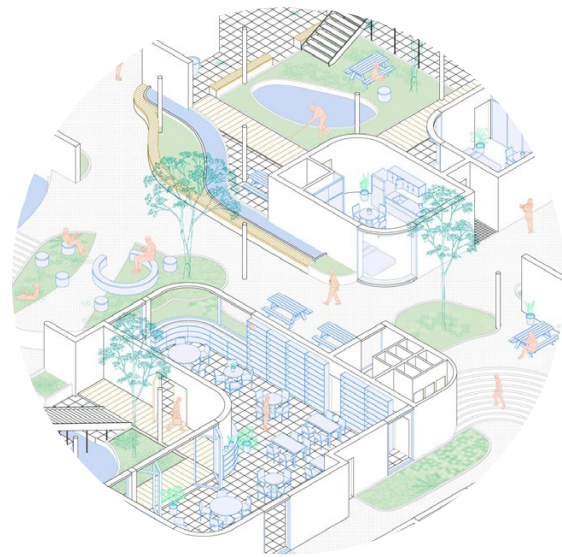


irrigation system

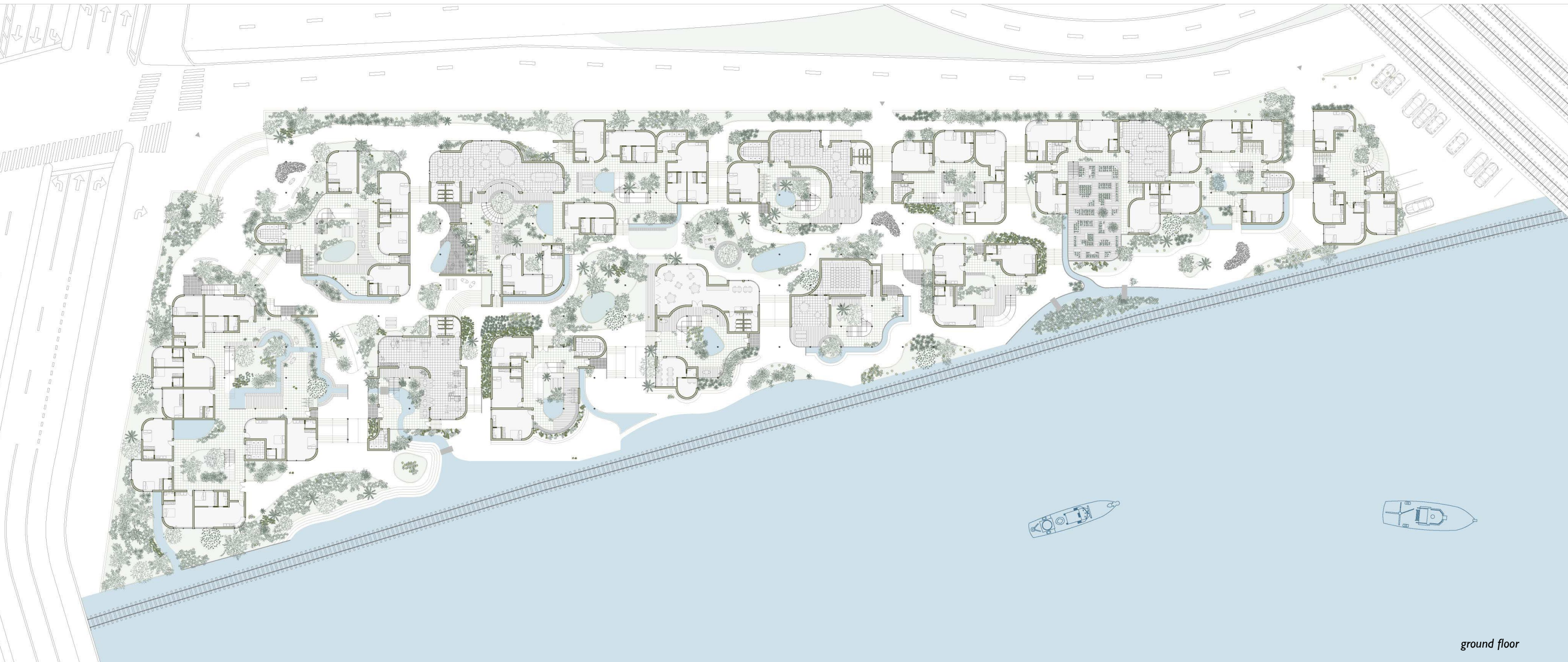


design for waterfront accesibility

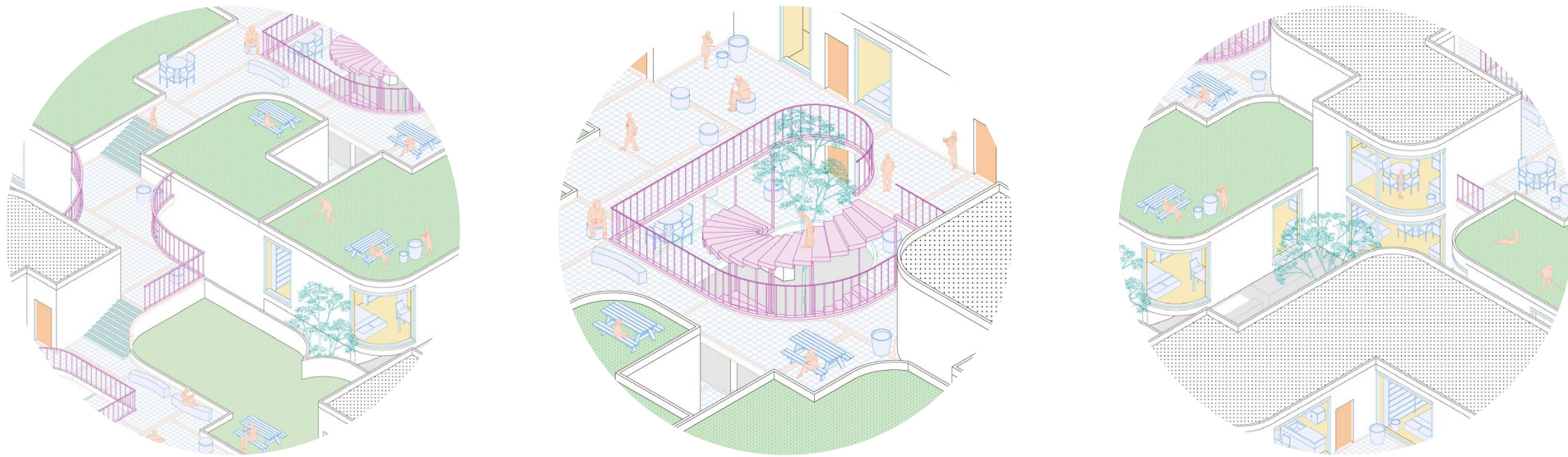




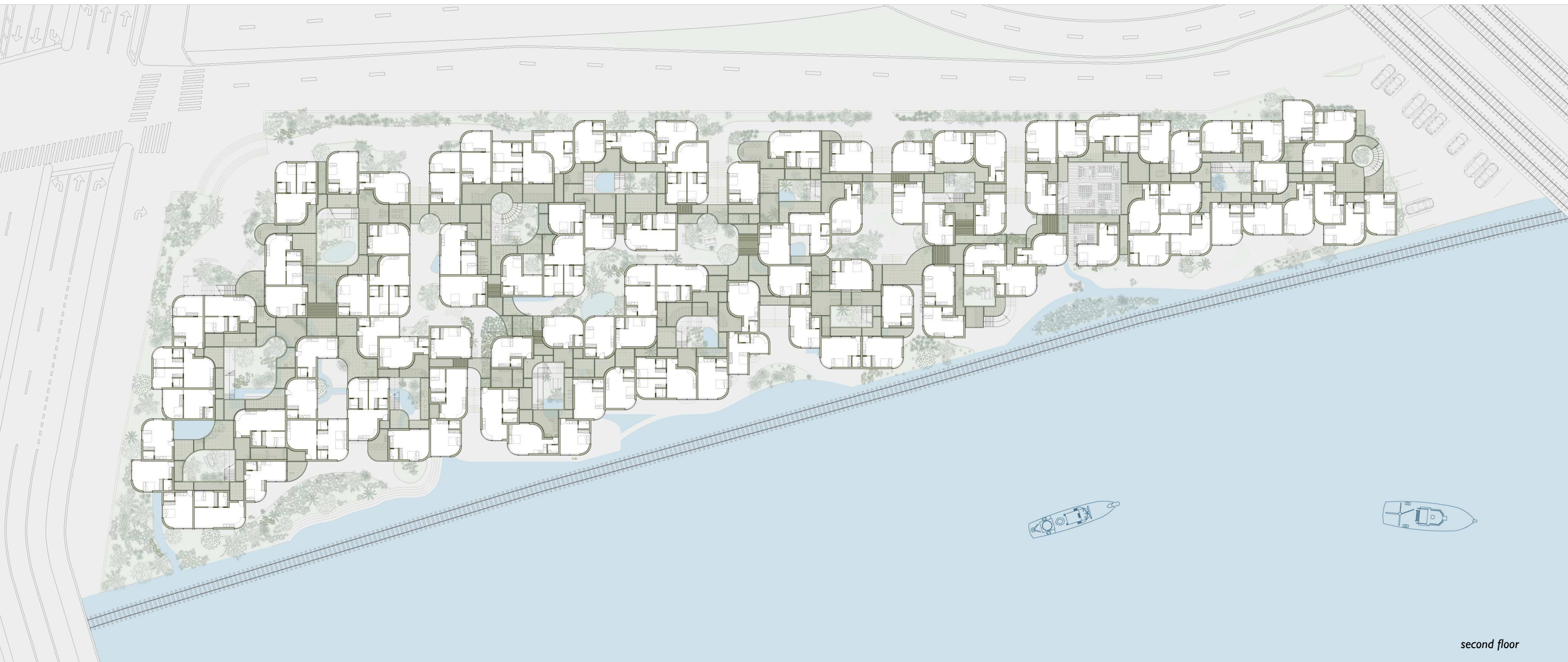
Underutilized stretch of Harlem River waterfront is reimagined as a neighborhood infrastructure with public walkways, parks, and recreational amenities.



ground floor



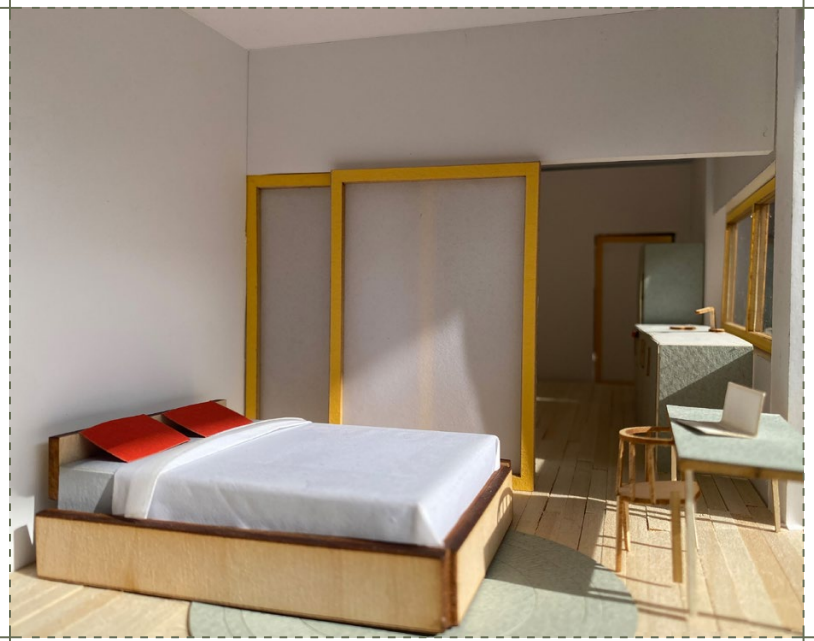
An elevated passageway made of translucent glass blocks enables daylight to reach the ground floor. Continuous circulation and the differentiation between opaque and transparent surfaces mimicks the porosity of the ground floor.





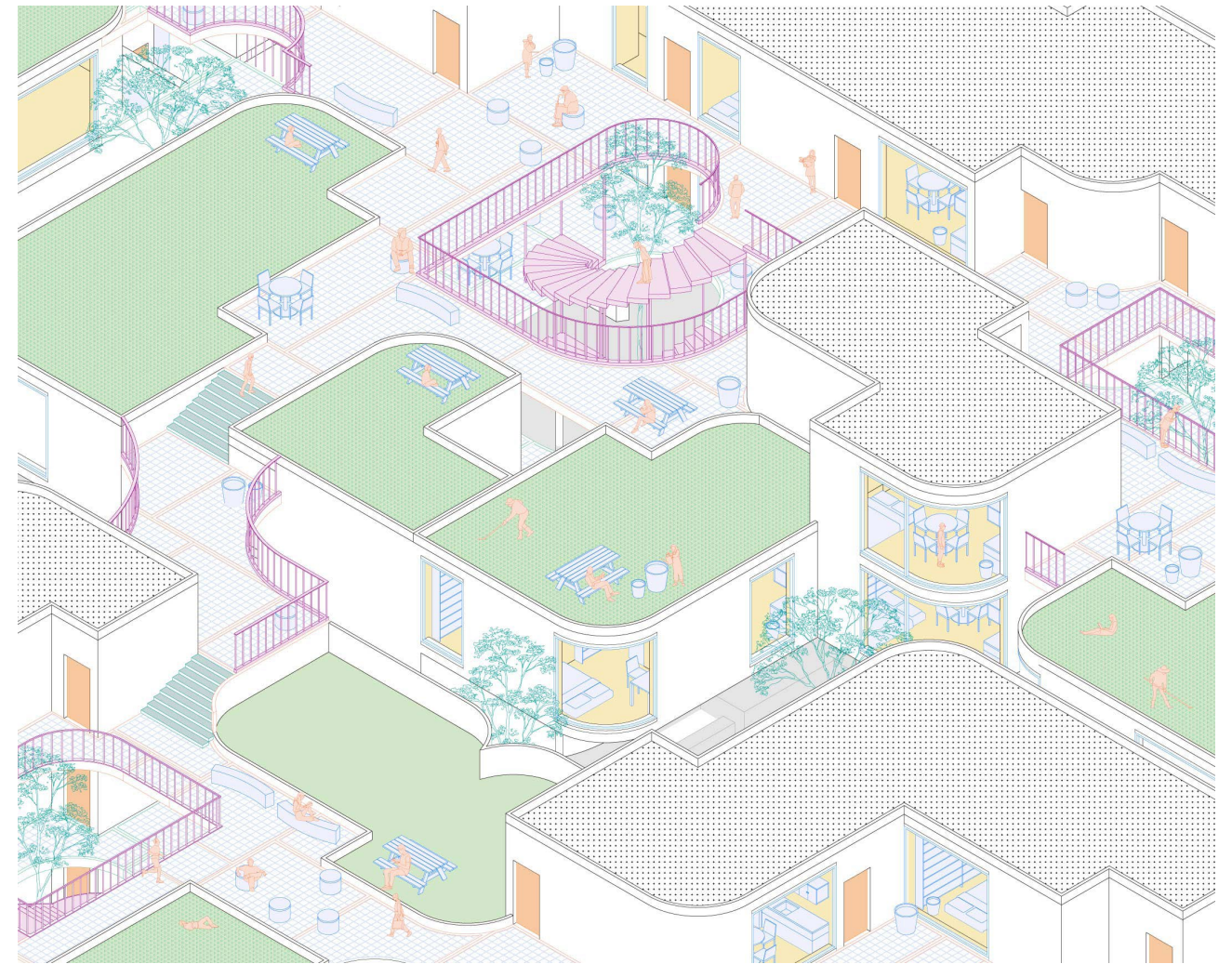
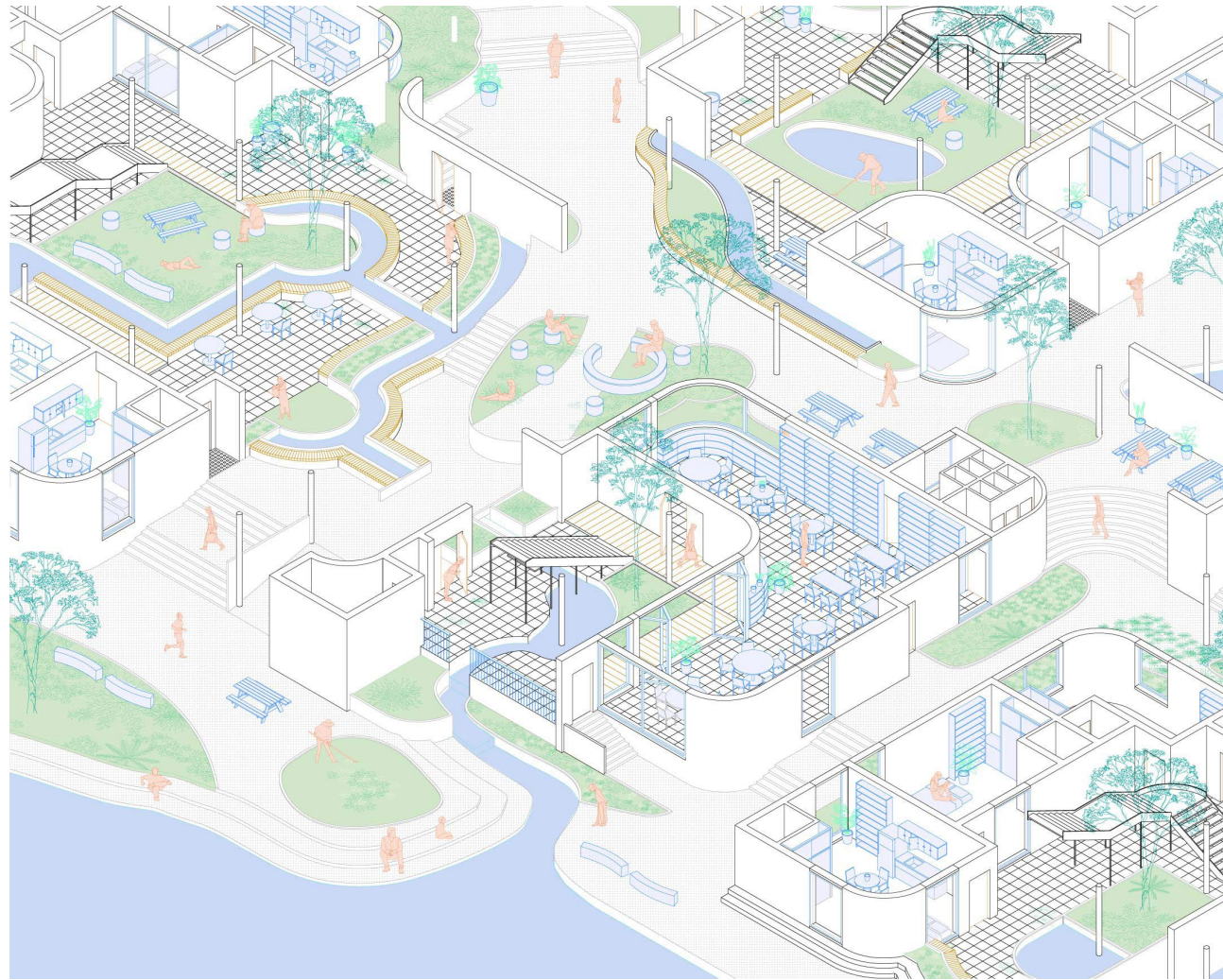
site section

UNIT CATALOGUE



lighting study model for our unit design

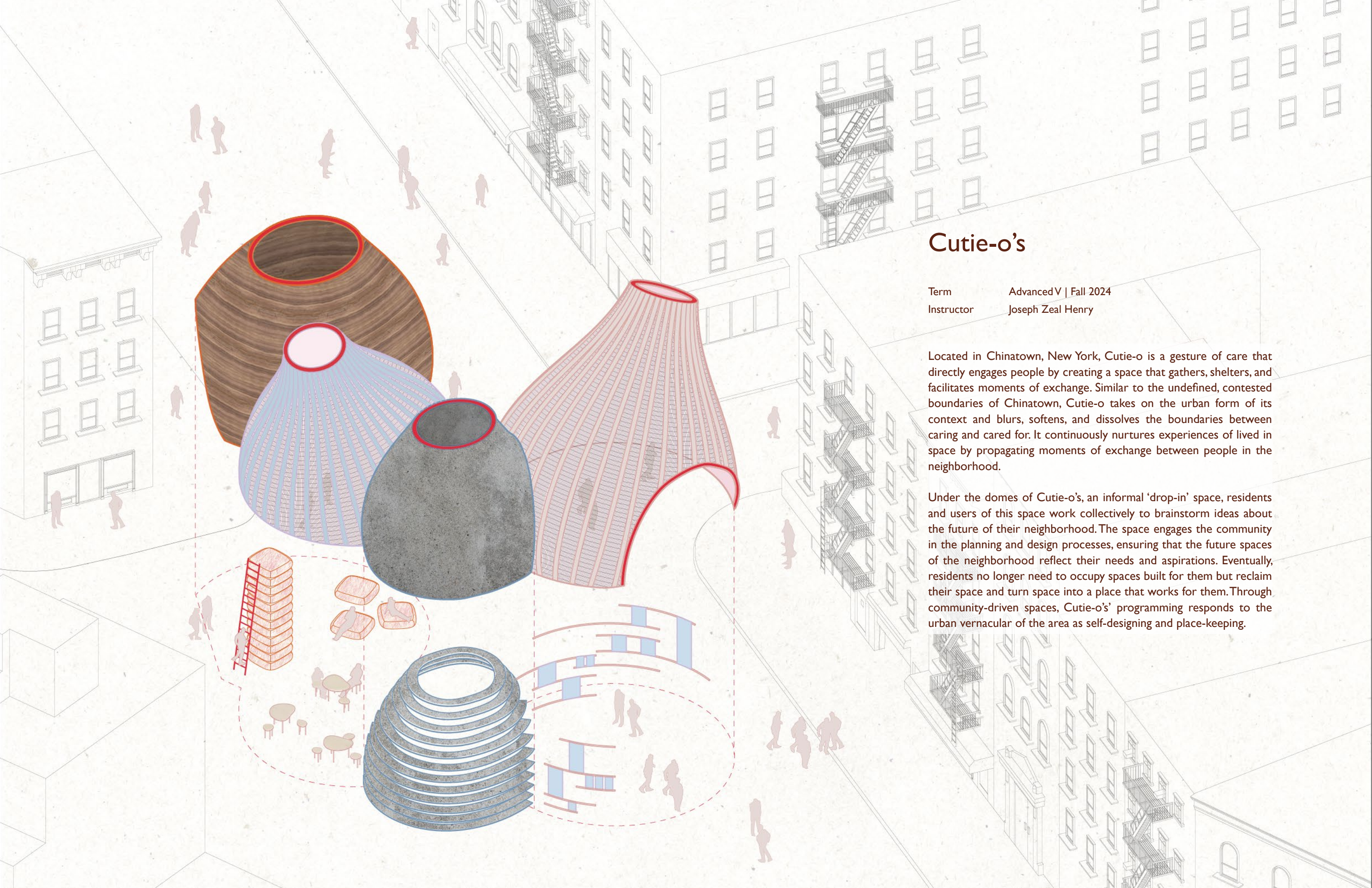




Large windows frame the outside views and give the unit its sense of place within the larger community.



The visual and physical connections enabled by the porosity of the building bring the neighbors closer together.



Cutie-o's

Term Advanced V | Fall 2024
Instructor Joseph Zeal Henry

Located in Chinatown, New York, Cutie-o is a gesture of care that directly engages people by creating a space that gathers, shelters, and facilitates moments of exchange. Similar to the undefined, contested boundaries of Chinatown, Cutie-o takes on the urban form of its context and blurs, softens, and dissolves the boundaries between caring and cared for. It continuously nurtures experiences of lived in space by propagating moments of exchange between people in the neighborhood.

Under the domes of Cutie-o's, an informal 'drop-in' space, residents and users of this space work collectively to brainstorm ideas about the future of their neighborhood. The space engages the community in the planning and design processes, ensuring that the future spaces of the neighborhood reflect their needs and aspirations. Eventually, residents no longer need to occupy spaces built for them but reclaim their space and turn space into a place that works for them. Through community-driven spaces, Cutie-o's' programming responds to the urban vernacular of the area as self-designing and place-keeping.

MANIFESTO FOR RESTORING CARE

I. References

The following individuals worked in varying scales to restore care in our lives.

a. Care for Others
Mierle Laderman Ukeles's Maintenance Art

Highlighting the maintenance work that is undervalued and goes unnoticed is the act of care.

b. Care for the Surroundings
Genpei Akasegawa and Hyperart

When an object deviates from the overall order that surrounds it and no longer serves a function, it becomes art in the presence of an observant eye.

c. Care for Oneself
Byung-Chul Han's Critique of Achievement Society

In today's neoliberal society with a growth mindset or better put by Han as “grindset”, the infinite self-optimization, unrelenting positivity of being-able-to-do-everything, and ever-changing goals and desires only serves to self-compete, self-exploit and self-destruct. Han's critique is that “we turn our hamster wheels by our own volition. Achievement society is millions of people who are intermittently anxious to be all they can be and tired of being all they can be.”

II. How to Cutify the City

Restoring the Perception of Care through Design: Since the perception of care can be contentious, it is a designer's duty to facilitate the way in which people can communicate their act of care in a space.

a. Evoking Kama Muta (moved by love)

Kama muta in Sanskrit is the emotion evoked by exposure to cuteness. Kama muta is an intense, positive feeling that people have when they experience communal sharing and often wish to share with others. Kama muta stimulates a sense of connection, belonging or a feeling of being appreciated and

needed as well as caregiving.

Cute stimuli trigger positive reactions in people evoking social behaviors and eliciting social engagement and desire to connect with others. Objects that display attributes perceived as cute are usually anthropomorphic and bear positive social values, suggesting something to be valued, protected, included or shared with others as a way of including them in the experience of such qualities.

b. The Anatomy of a CUTIE-O

As the perception of cuteness is generally universal across cultures, there are certain aspects that define animate subjects and inanimate objects as being cute.

Large head and eyes, small limbs, plump body, soft skin: exaggerated proportions, amorphic openings, interactive elements, round shapes, soft materials, pastel colors

c. Guide to Creating Pockets of Cuteness

Anthropomorphic architecture can create spaces that change the perception positively and invite people to socially engage and communicate with positive feelings.

III. How to Sustain Care

Spaces of Conversation to Democratize Interactions and Processes of Making and Building: Sustaining care requires spaces that stay in constant dialogue with society, instead of processes staying hidden behind closed doors. The following five spaces of conversation advocate for discursive practices through participation and inspire collective action.

a. Rest-room

We need spaces to decompress. In the neoliberal society of today, the freedom of ‘being able to do everything’ results in overperformance and self-exploitation. In the pursuit of endlessly changing goals, we self-compete. This room is for not to produce or not to perform. It is for

being free in time. A space to be. The rest-room will be a space for the brain to rest. While the body can enjoy its time—stretch, sleep, or play, it is preferable that the brain gets a proper pause.

b. Living Room

We need spaces for discussion. Spaces where we are actively conscious of each other. Spaces to make distinct voices louder. To allow different ways of seeing to be more visible. To engage collectively. To question and challenge collectively. To innovate collectively. The living room will be accessible to all for contribution at will. Water, tea, coffee, wine (or anything stronger) and snacks will be provided by the contributors. This is a space of mutual exchange to converse and innovate. Conversations with people make a living living.

c. War Room

We need spaces for decision-making. To give agency to the contributors of the discussions and to take action on the collective discussions. Unlike what the name could suggest, the war room will be a space of respect (A punching bag can be provided). There will be ideas challenged, disputed against, clashed with. Only to flourish beyond the status quo. To make new systems together.

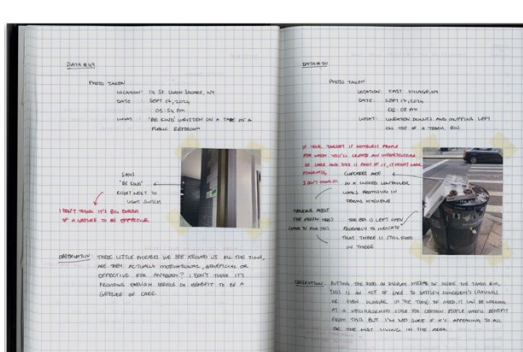
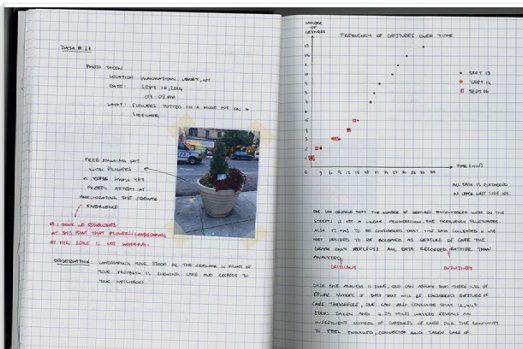
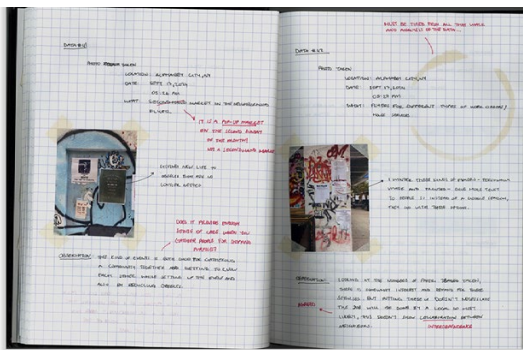
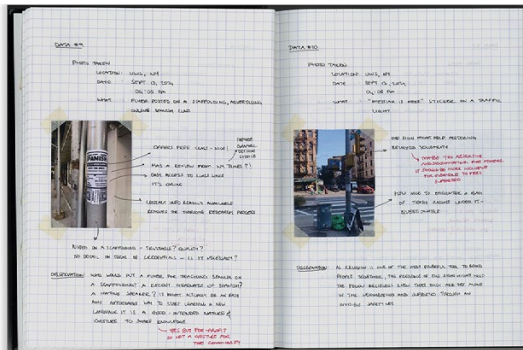
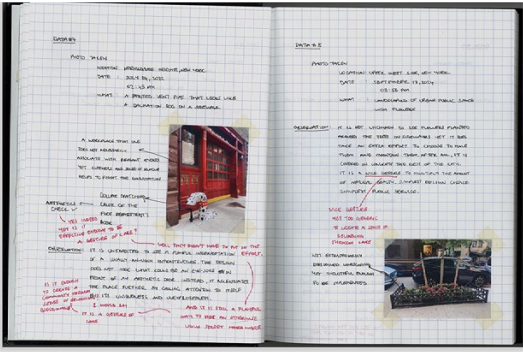
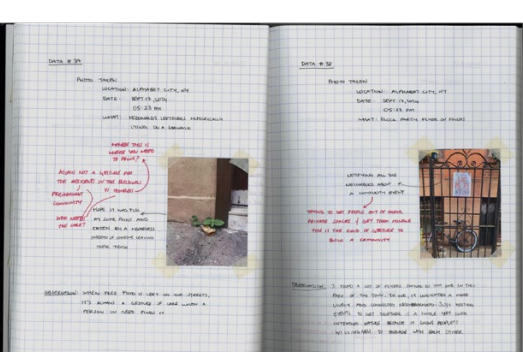
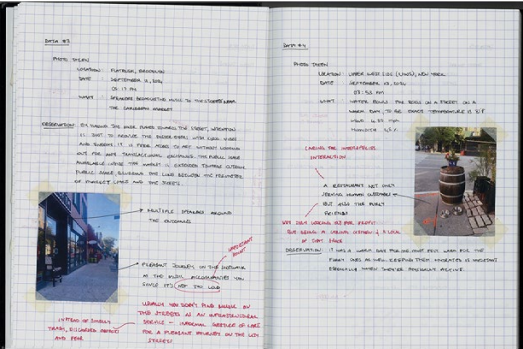
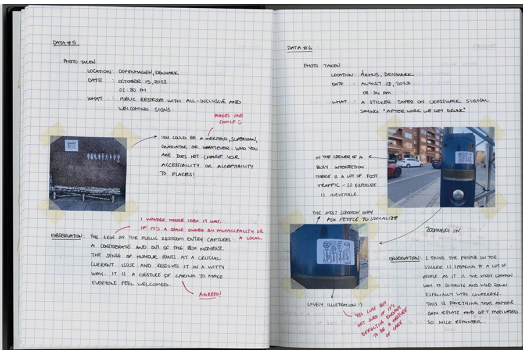
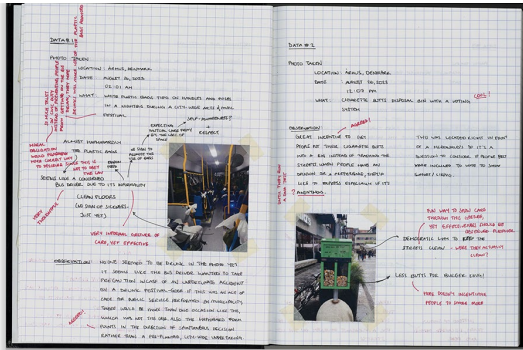
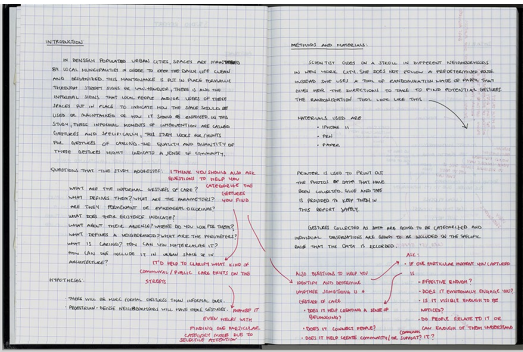
d. Exhibition Room

We need spaces for documentation. To allow for witnessing the process. It should be transparent and accessible. It should be flexible. The exhibition room is not to put the process on a pedestal but to engage the current and future contributors with the latest discussions and decisions. To see and know where to take a step back and choose a different path to follow.

e. Archival Room

We need spaces for storing. To retrieve and consult. To acknowledge that we work within the context of precedents. But also to preserve. It is collective effort and needs care to maintain. The archival room will be a space of research and contemplation where the contributor immerses oneself in the history of conversations.

Studio Report

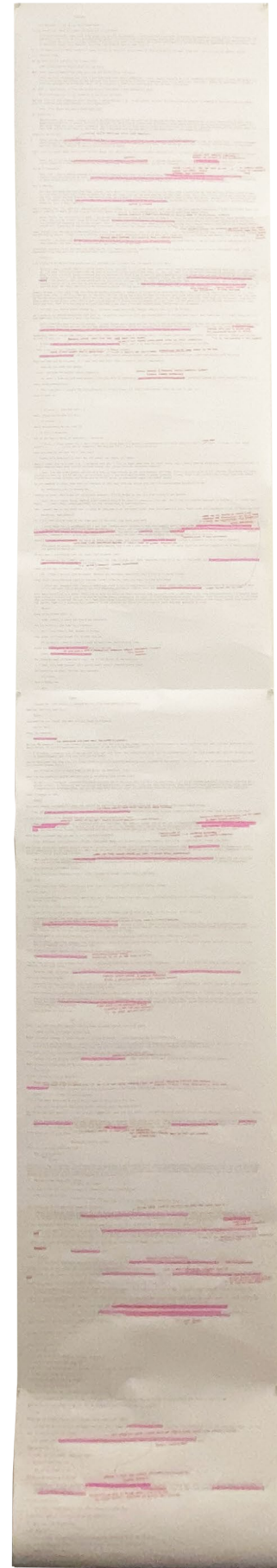


Collecting moments of gestures of care on the streets

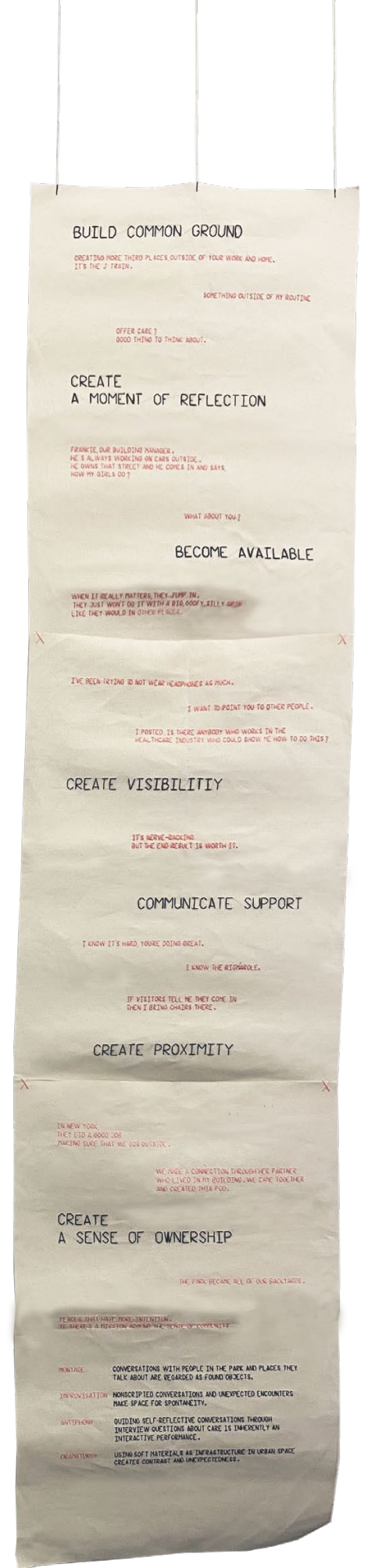


mapping of the gestures

As my own gesture of care, I made interviews with random people on the streets, asking about their understanding of care in the city. Then I embroidered my insights from these interviews, onto fabric which resulted in a delicate and intimate approach to the idea of infrastructure. Strengthening the parts of everyday items that are subject to greater wear as a domestic decorative art for thousands of years, embroidery is an informal, personal, and anonymous process to repair and care for vulnerabilities. The basic necessity to protect the functional parts that are exposed to collective use through decorative art mimics the process of creating care infrastructure for collective experience.



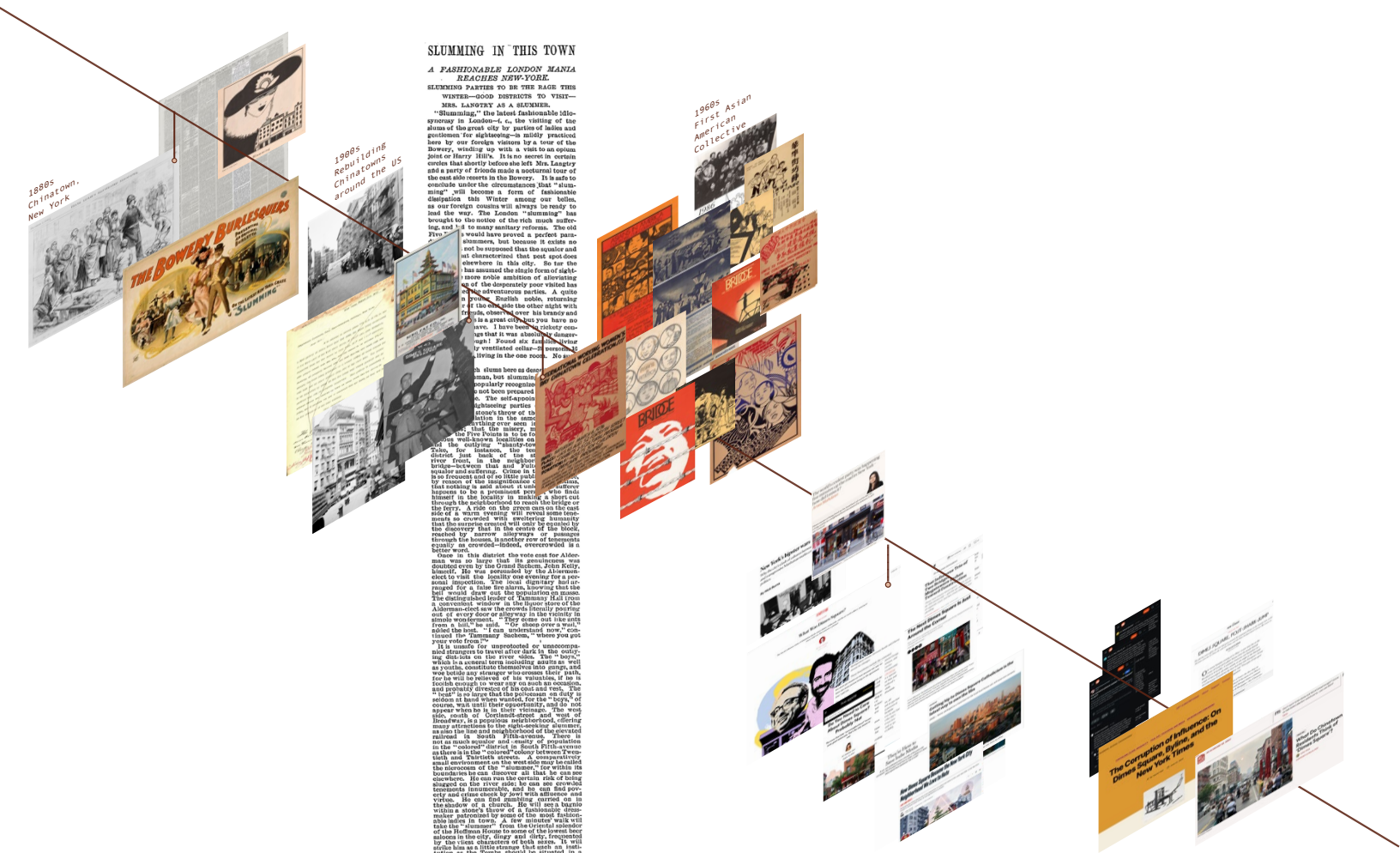
transcribed interviews
highlighted with insights



embroidered fabric

From The History of Placemaking
to The Current Issues of Placemaking keeping

As Chinatown has become a focal point of gentrification in recent years as the area has transformed with an influx of wine bars, boutiques, art galleries, and nightlife venues, specifically in Dimes Square, a contentious hip micro-neighborhood in the city, I chose this area as my site to restore care. Dimes Square’s popularity has led to increased rents, displacing long-term residents and small businesses, many of whom are part of the working-class Chinese-American community. So my research dived into the history of Chinatown, exploring symbols of resilience through thriving Chinese businesses, cultural institutions, and architecture. For the final part of my manifesto, I designed temporary spaces of conversation for Dimes Square to democratize the developments in the area.



On Brink of Sale, Family Shop
in Chinatown Stays in Family

Share full article



The family behind Wing on Wo & Co., which is headed by Nancy, 86, and Shuck Seid, 92, at center. Alex Wroblewski/The New York Times



On one Friday afternoon, I headed down to Chinatown to talk to the residents who have been living there for a long time. I decided to meet the owners of Wing On Wo & Co., a 100 year old antique dealer as they witnessed the change of the neighborhood for the last century. Gary, the father of the owner, happily accepted to have a conversation and we chatted for more than an hour among the Chinese porcelains as the residents of the building were passing by us, greeting Gary and picking up their mails from the mailbox in the entrance of the store. He told me that they owned the 6-story walk-up building. He has been running the business for 44 years and together with his daughter for the last 20 years. He talked about the buddhist approach of the Chinatown residents towards their environment, treating every animate subjects and inanimate objects with care. He also sadly mentioned how this was changing in today's fast-paced urban life. In order to slow down, I enjoyed some yummy noodles in a nearby shop.

Strategies of Placekeeping

engravings of Chinese characters

traditional roofs with tiles usually used for community spaces such as temples, family associations, funeral homes

handwritten signs

accentuation of entryways using columns & decorative elements on the entablature

awnings working with the context to fit in

awnings with different materials and dimensions claiming space on sidewalks & blurring the boundaries of inside & outside

use of brackets for different attachment methods to the existing architecture

Chinese characters integrated into the facade design

collage-like spaces through the diversity of materials

fire escapes used as a retail or service signifier/signage

awnings extending out to public space for maintaining sidewalk activity

lighting up of the sings

traditional lanterns

red painted fire escape matching the color of the signage

awnings decorated with traditional elements

vertical signage for storied shops

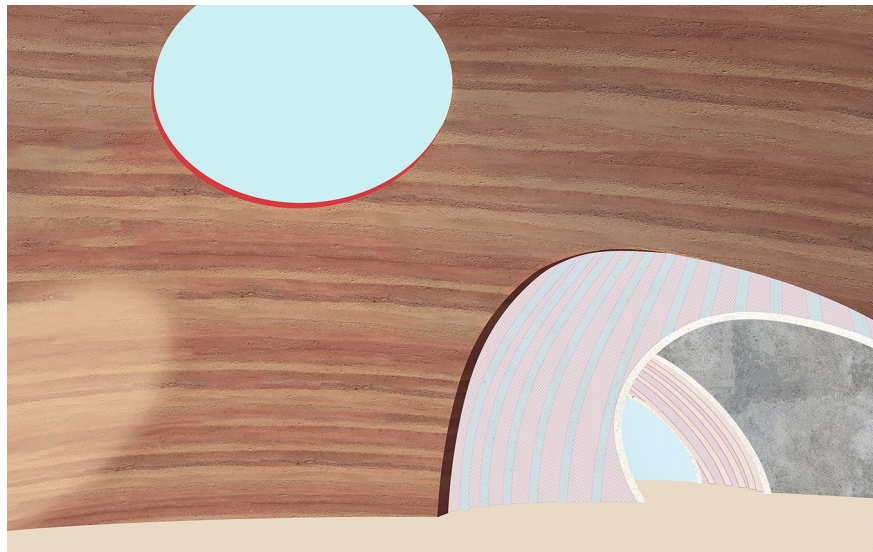
hand-taped signs

Chinese medallions

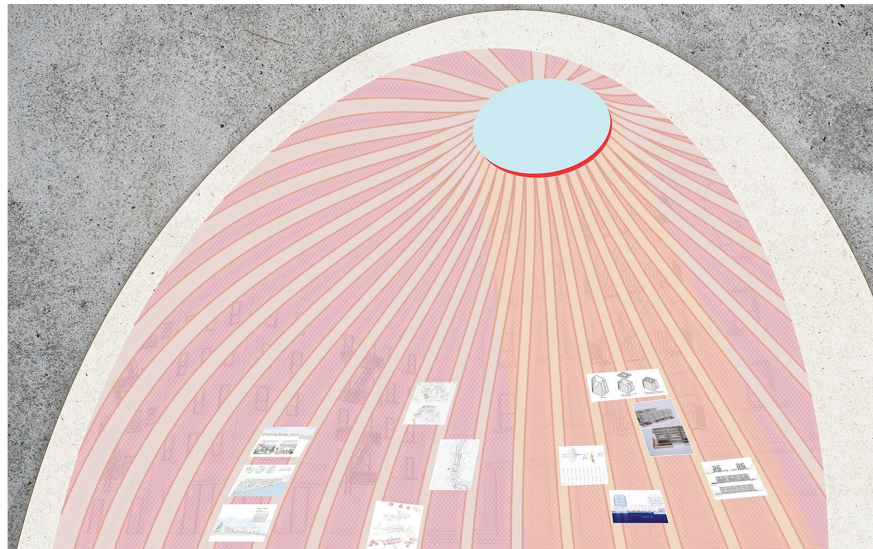
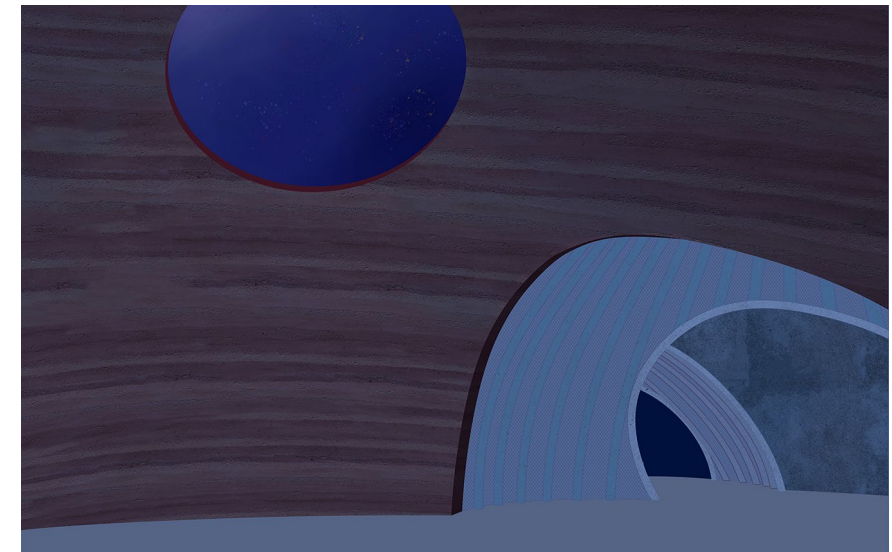
symbol for good fortune

integrating the context into the sign

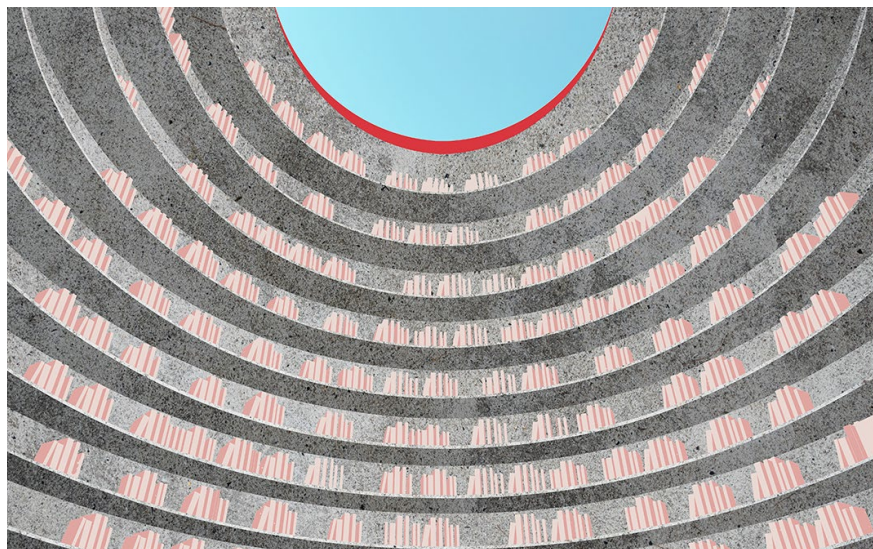
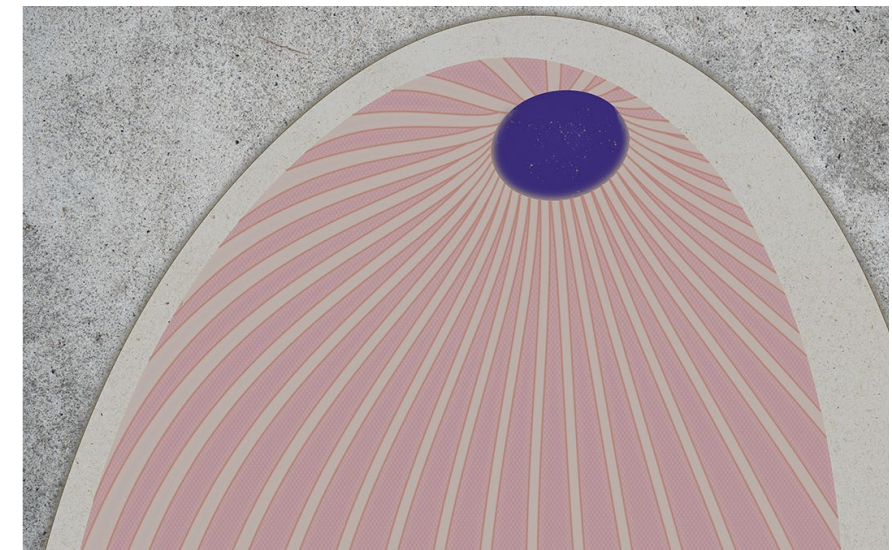
eye-catching, reflective materials



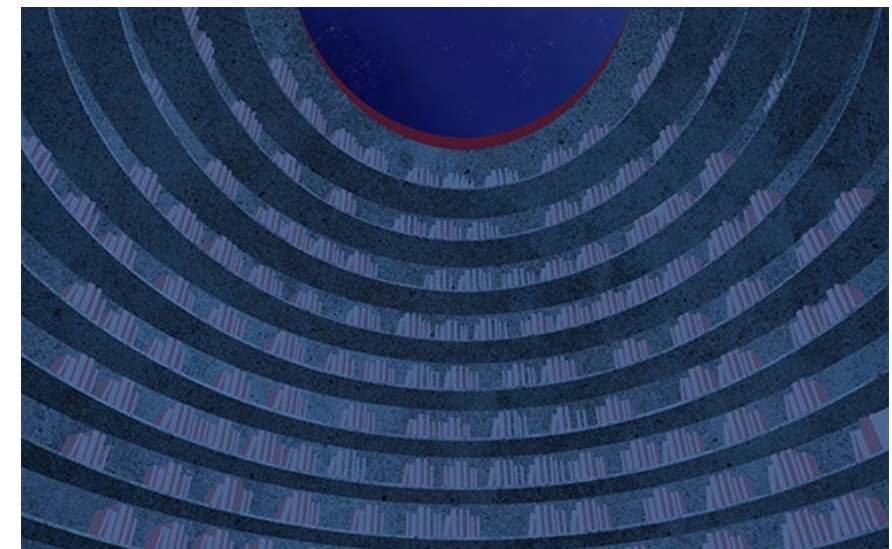
'Rest'room is a space for decompression, for the mind and the body to take a pause and rest before entering the spaces of discussion and reflection.



Exhibition room serves to provide a transparent design process by engaging current and future contributors/community members with the latest discussions and decisions.

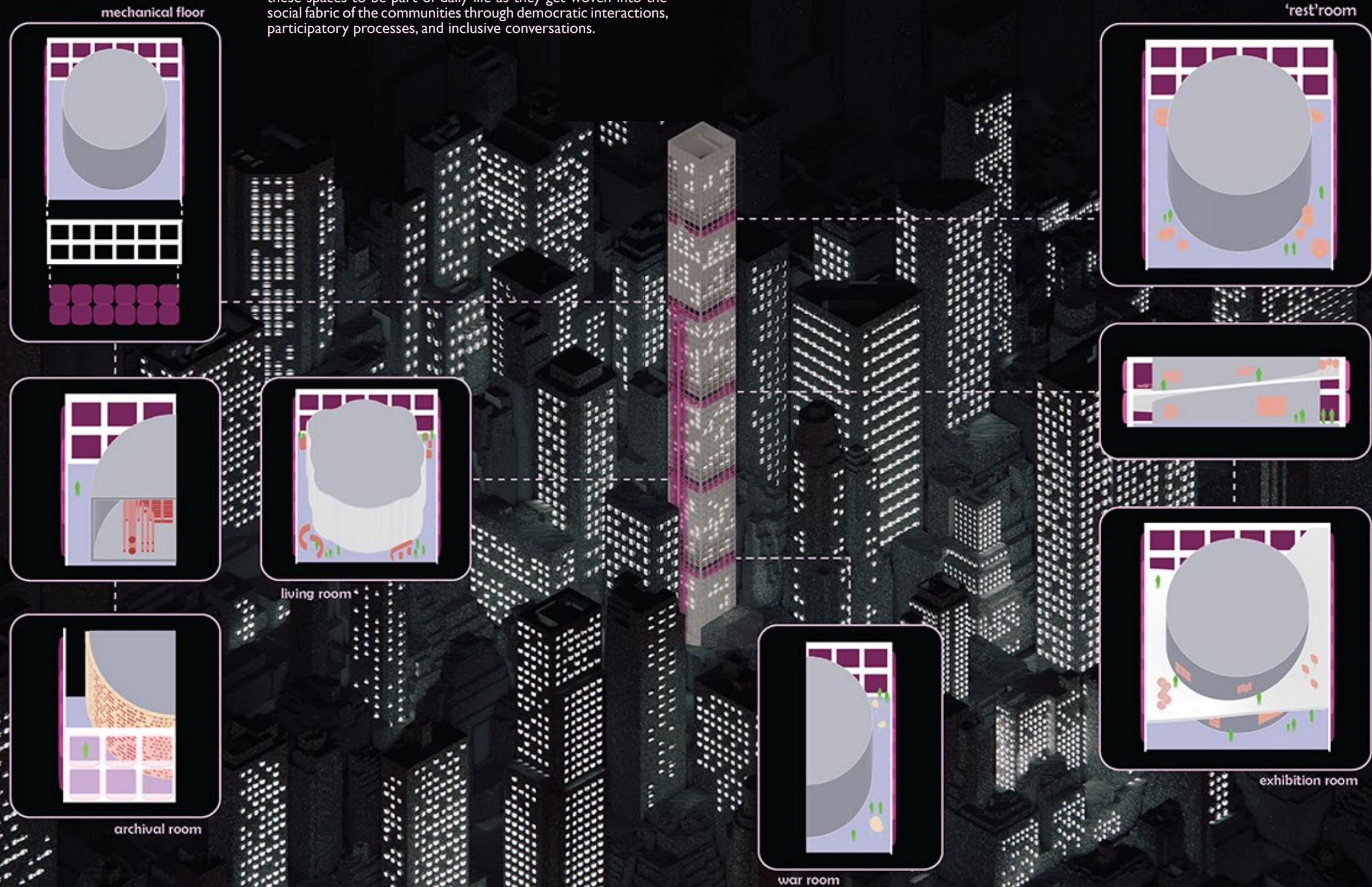


Archival room is a space for documentation and contemplation where contributors immerse themselves in the history of conversations.



In the next speculative step, the project takes a chance at crossing the boundaries of existing systems of economy, ownership, and power by inserting itself into such systems and propagating throughout the city to provide care.

This insertion creates spaces of conversation in unoccupied floors of high-rise residential buildings, provoking alternative ways of occupying the unused spaces in the city and returning these spaces to be part of daily life as they get woven into the social fabric of the communities through democratic interactions, participatory processes, and inclusive conversations.

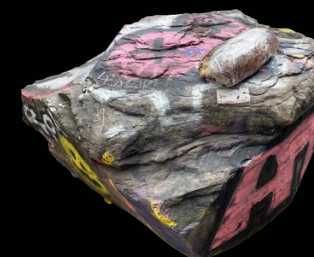




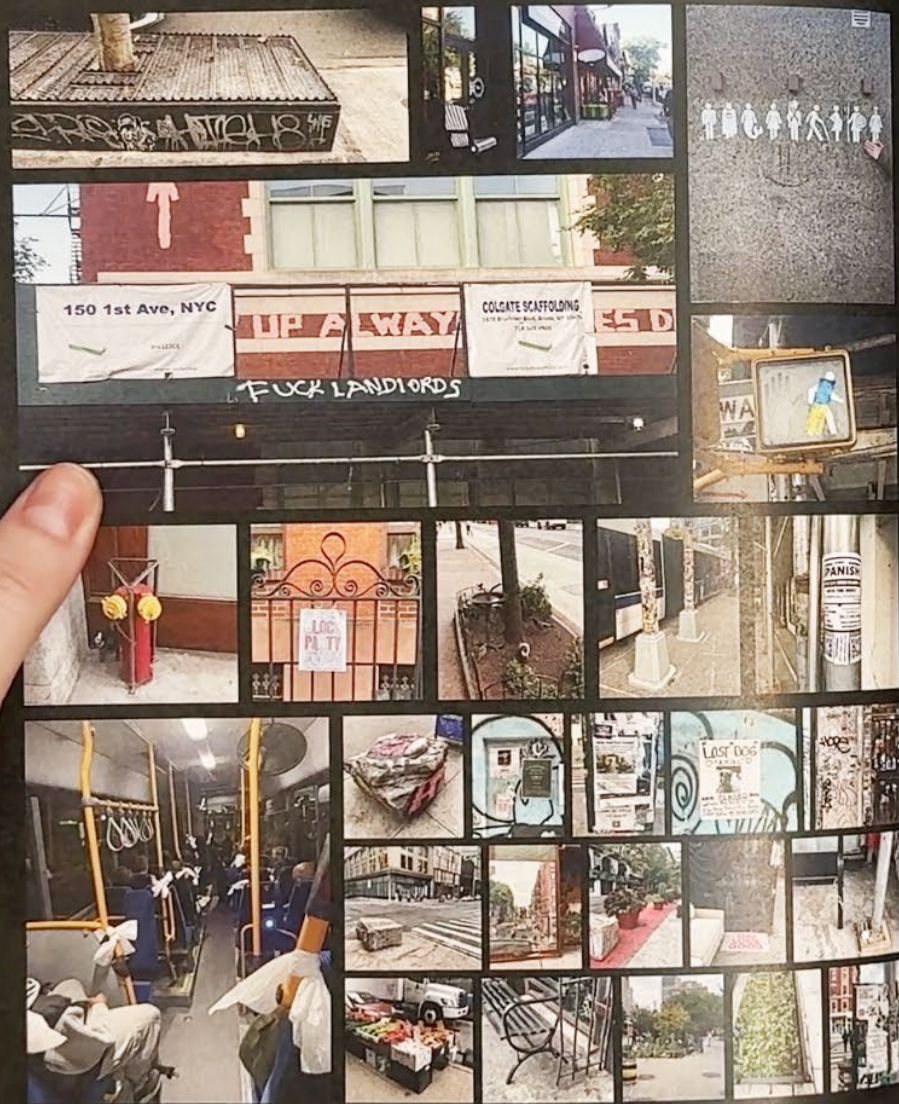
Sharing Moments, Found and Kept

Term Advanced VI | Spring 2025
Professor Ada Tolla & Giuseppe Lignano

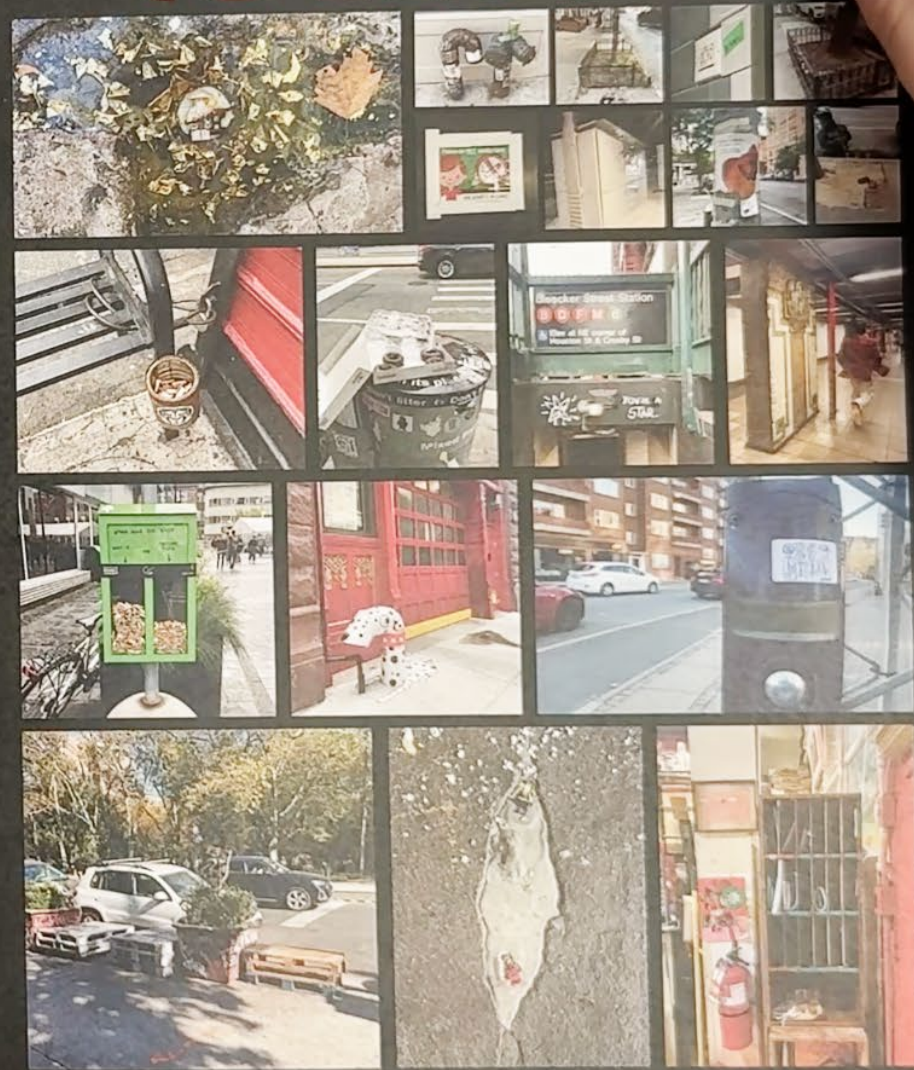
For my final studio in GSAPP, I made a book of my explorations of what I call readymade collages and my practice of owning the ordinary. For me, ready-made collages are informal interventions in the streets or in other public spaces that deviate from the overall order of their context, manipulate the existing, and evoke something beyond the expected. I name them ready-made because the moments I capture are always comprised of found objects isolated from their intended use. How people frame these ordinary objects give the mundane a new meaning, revealing an alternate possibility of perception and existence, and help us all reimagine what these materials mean to us. During this practice, owning the ordinary is crucial as it gives us the chance to see the unique ways people perceive and interact with the things around them, how they manipulate the old, discarded, and disregarded to make them into something new, noticed, and appreciated. I do not consider these words as opposites but rather qualities that we can observe simultaneously. With my work, I try to reveal the ways in which the mundane is extraordinary by bringing some of those simultaneities into our consciousness.



READYMADE

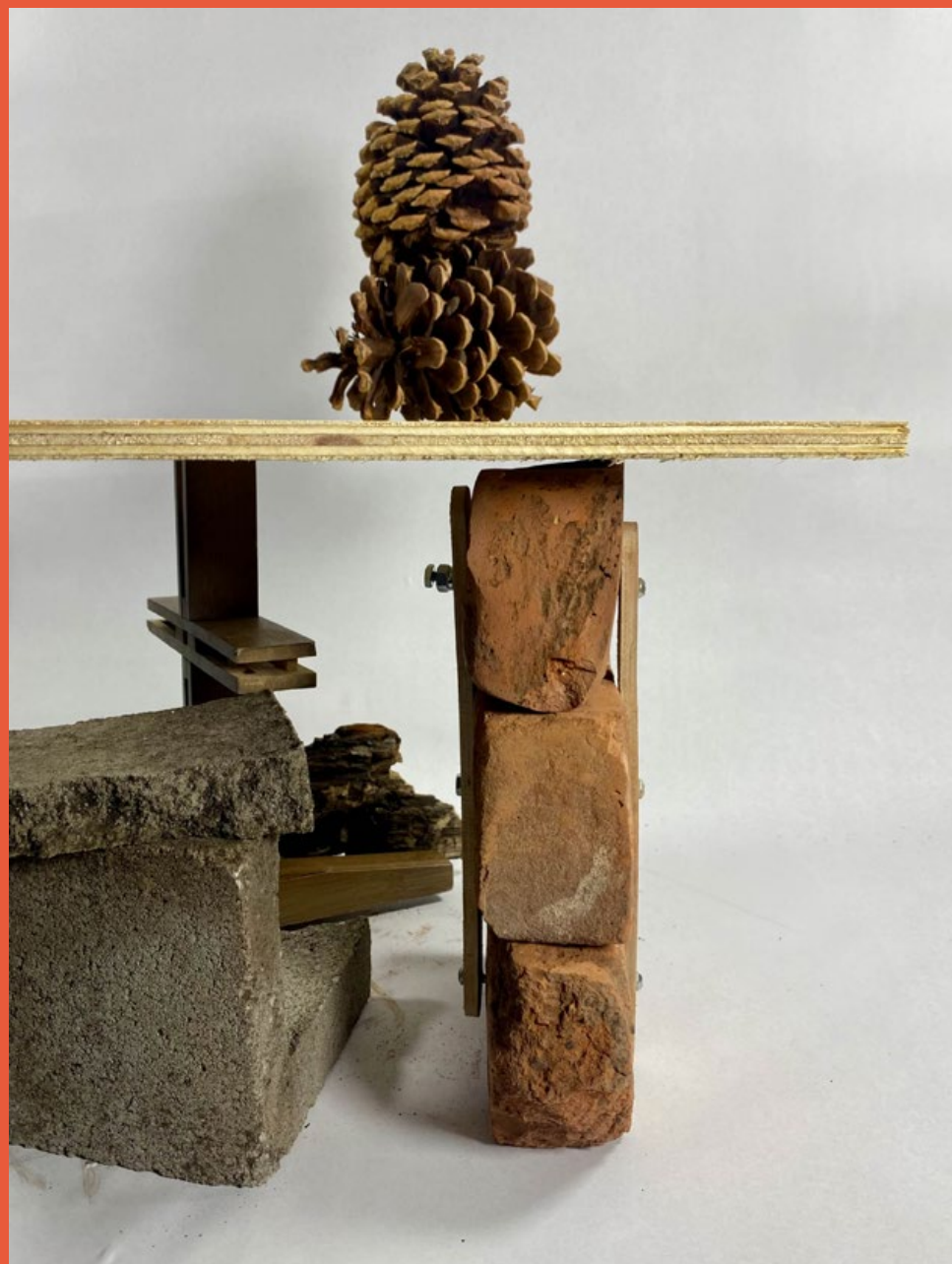


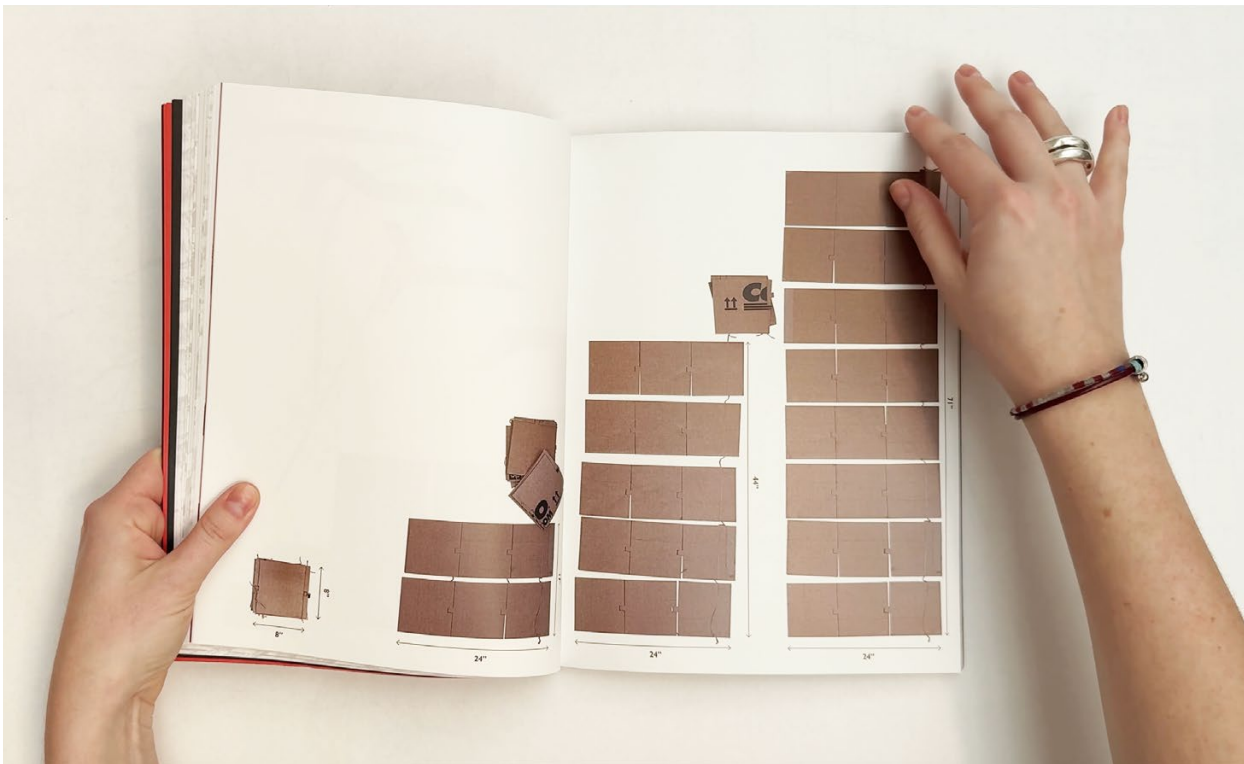
COLLAGES

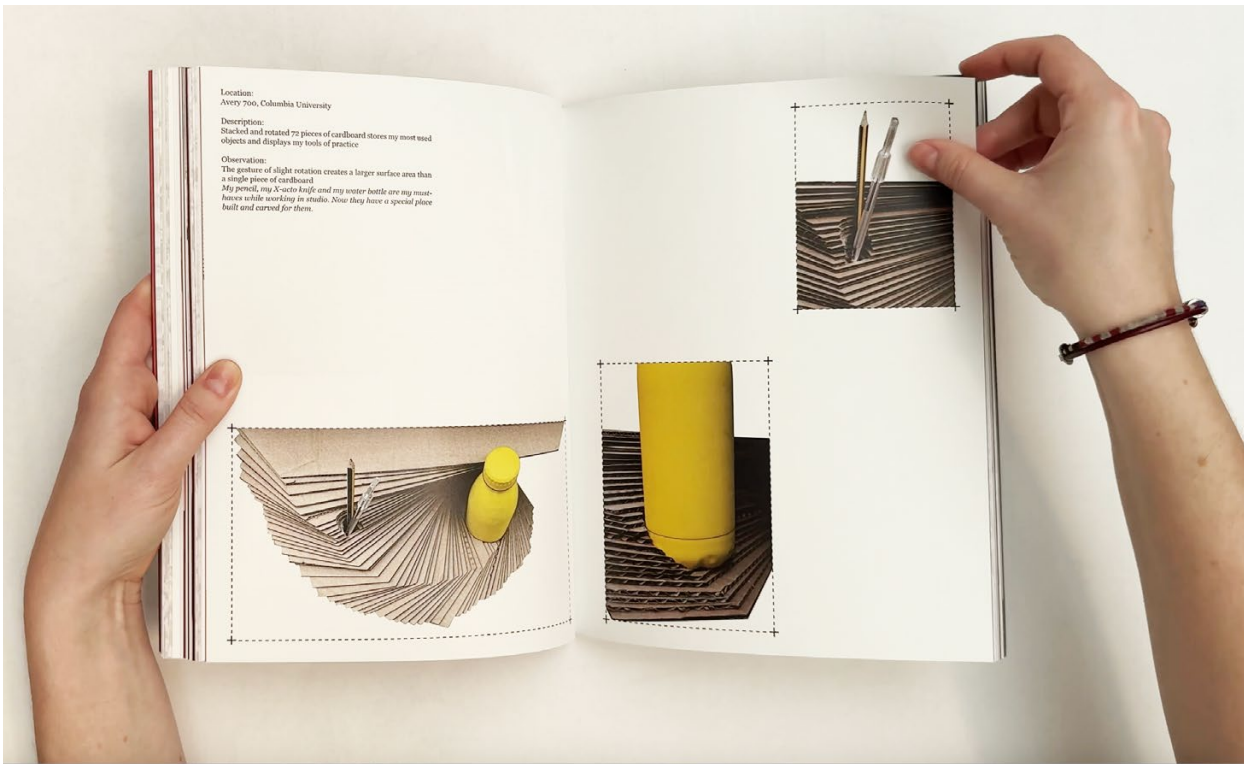
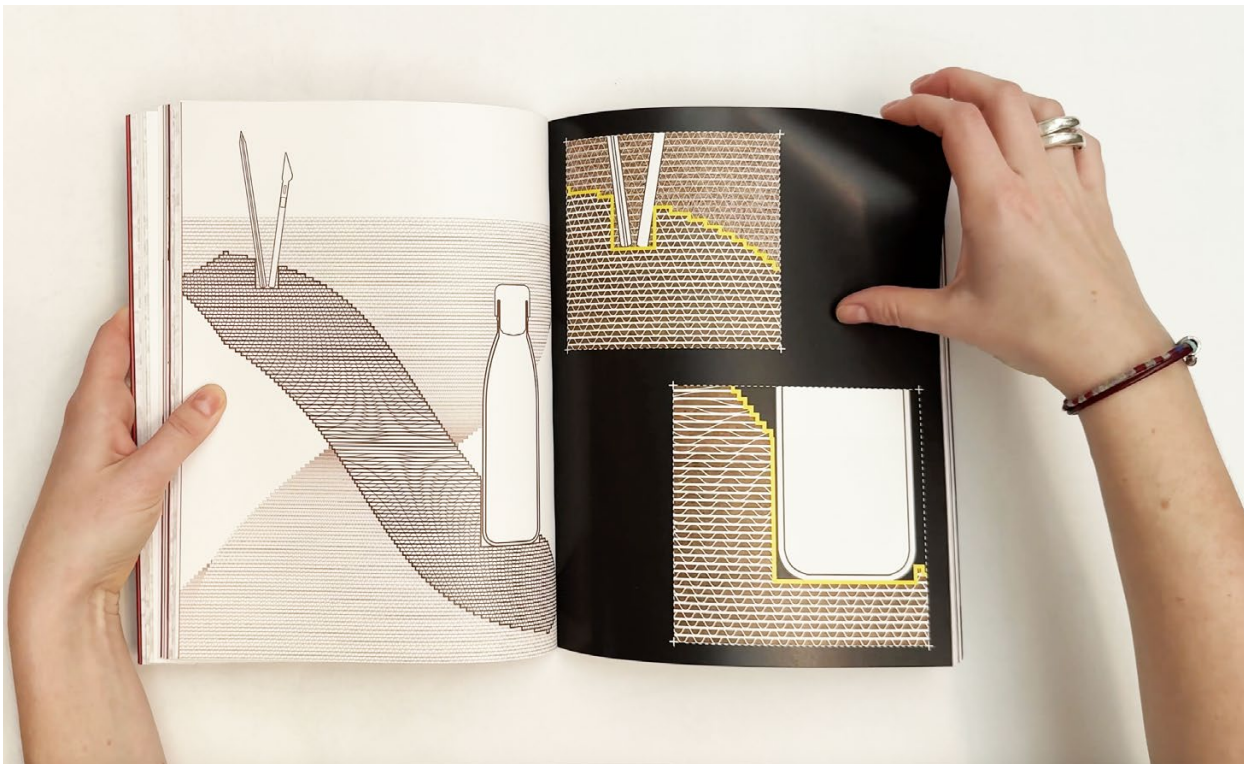








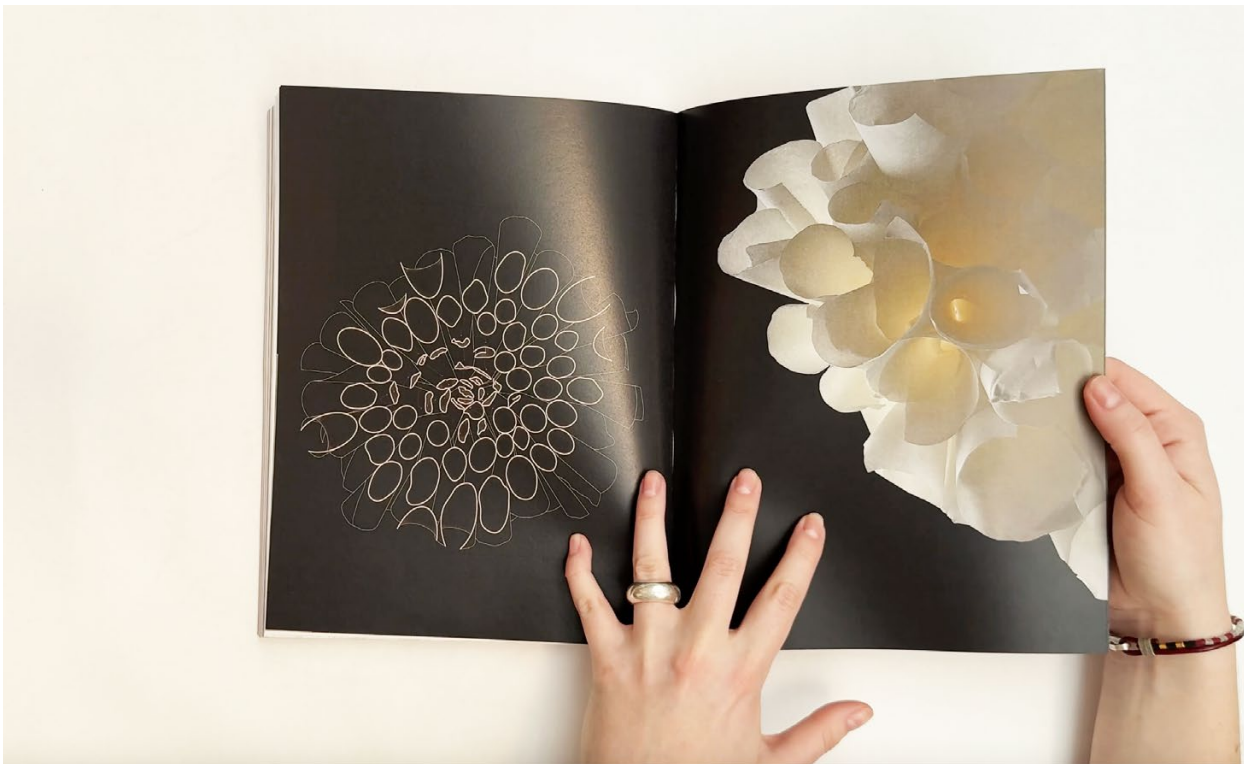
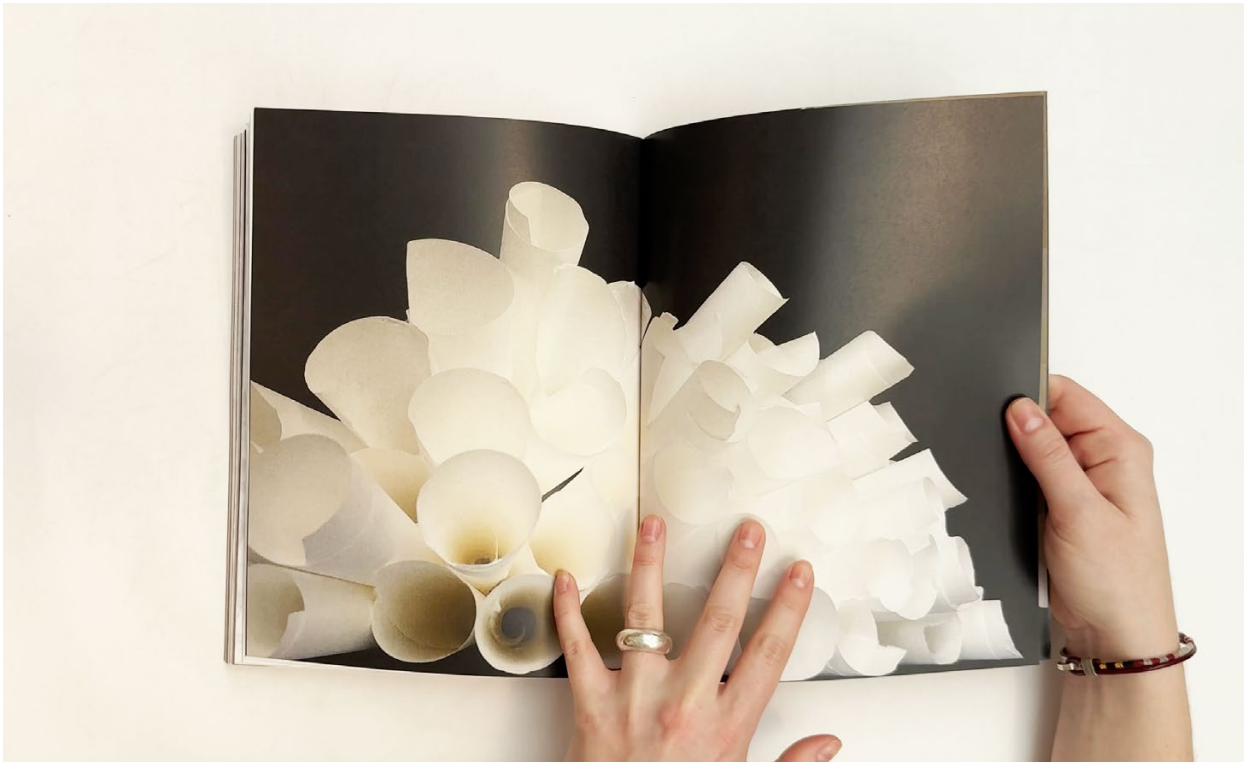












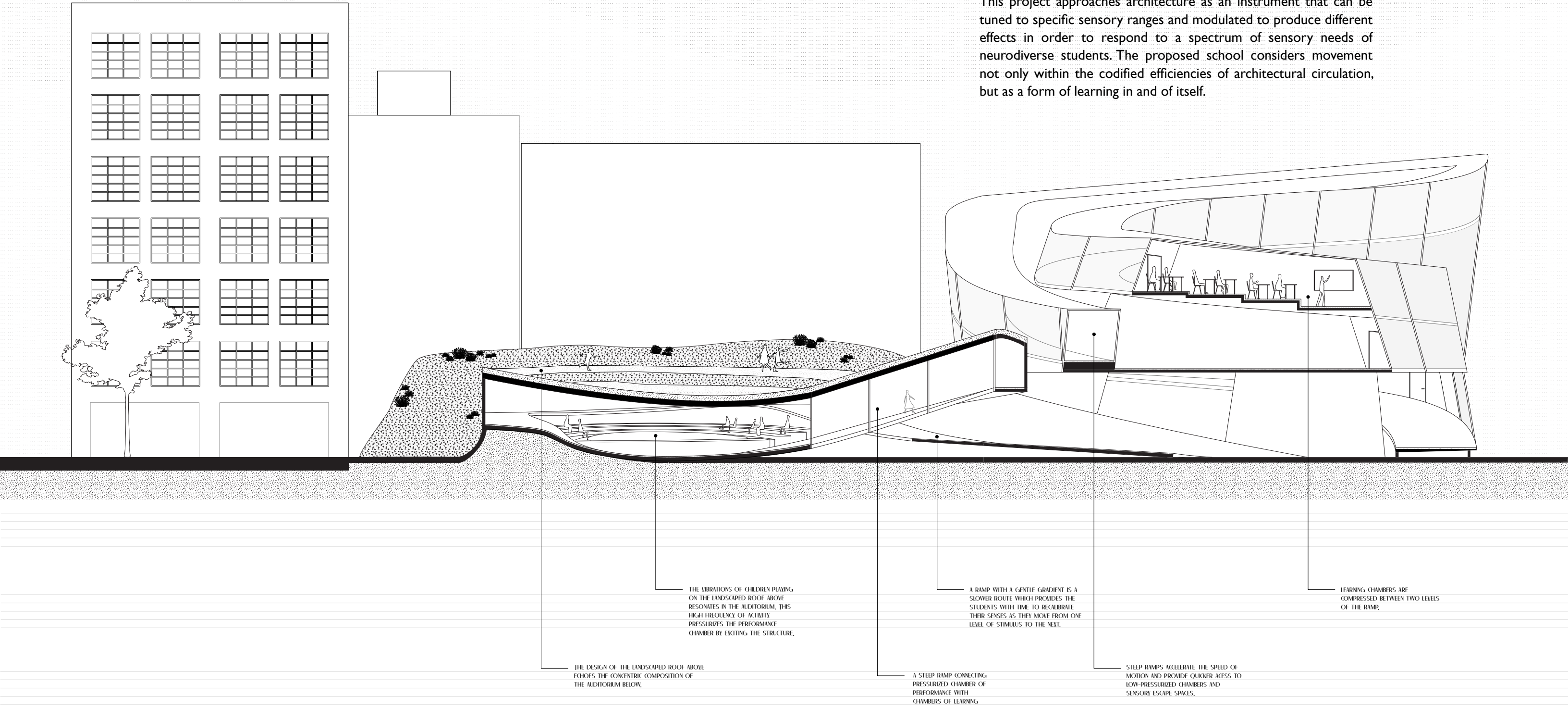


School of Pressurized Chambers

Term Core II | Spring 2022

Professor Lindy Roy

This project approaches architecture as an instrument that can be tuned to specific sensory ranges and modulated to produce different effects in order to respond to a spectrum of sensory needs of neurodiverse students. The proposed school considers movement not only within the codified efficiencies of architectural circulation, but as a form of learning in and of itself.



THE VIBRATIONS OF CHILDREN PLAYING ON THE LANDSCAPED ROOF ABOVE RESONATES IN THE AUDITORIUM. THIS HIGH-FREQUENCY OF ACTIVITY PRESSURIZES THE PERFORMANCE CHAMBER BY EXCITING THE STRUCTURE.

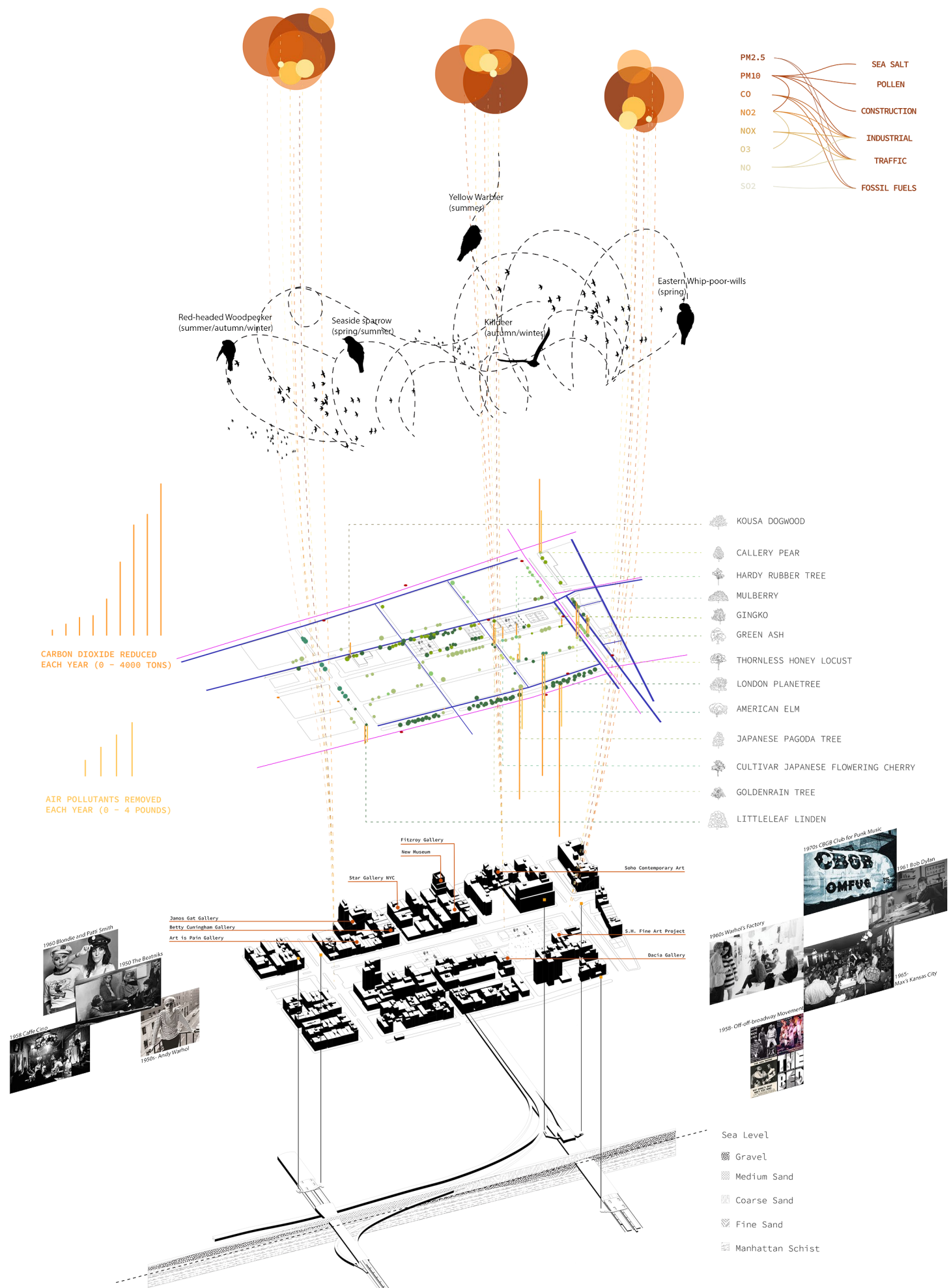
THE DESIGN OF THE LANDSCAPED ROOF ABOVE ECHOES THE CONCENTRIC COMPOSITION OF THE AUDITORIUM BELOW.

A RAMP WITH A GENTLE GRADIENT IS A SLOWER ROUTE WHICH PROVIDES THE STUDENTS WITH TIME TO RECALIBRATE THEIR SENSES AS THEY MOVE FROM ONE LEVEL OF STIMULUS TO THE NEXT.

A STEEP RAMP CONNECTING PRESSURIZED CHAMBER OF PERFORMANCE WITH CHAMBERS OF LEARNING

LEARNING CHAMBERS ARE COMPRESSED BETWEEN TWO LEVELS OF THE RAMP.

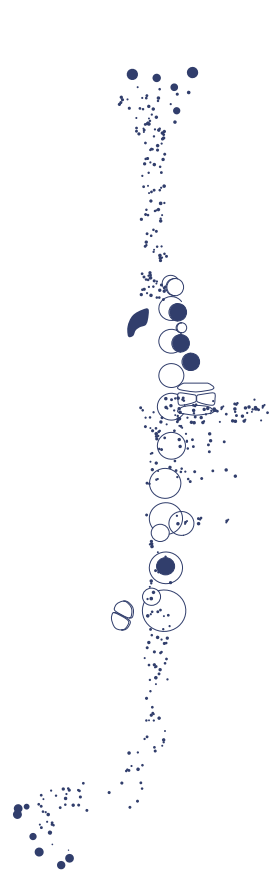
STEEP RAMPS ACCELERATE THE SPEED OF MOTION AND PROVIDE QUICKER ACCESS TO LOW-PRESSURIZED CHAMBERS AND SENSORY ESCAPE SPACES.



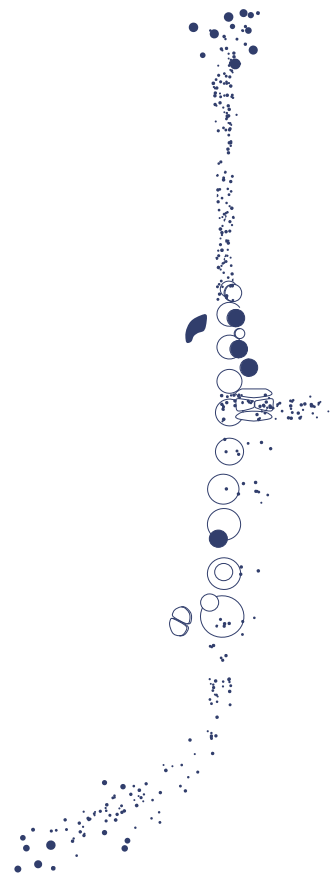
Initial site research informed the design about the tangible context such as physical, spatial and infrastructural conditions as well as the intangible context such as cultural, temporal, historical, sociological, and institutional. Second investigation is informed by the study of an instrument.

The following investigation analyzes the saxophone as an instrument that modulates air particles to a great variety of different musical compositions. The drawings diagram how the instrument generates a range of frequencies through the pressurization of chambers within the saxophone depending on the deflection of the reed. In addition to the variation of frequency due to deflection and pressurization, the movement of air through the body of the saxophone varies depending on different combinations of opened and closed keys. This also creates a variation in the pressurization of chambers and hence the variation in frequency. This study is later applied to the spatial prototype.

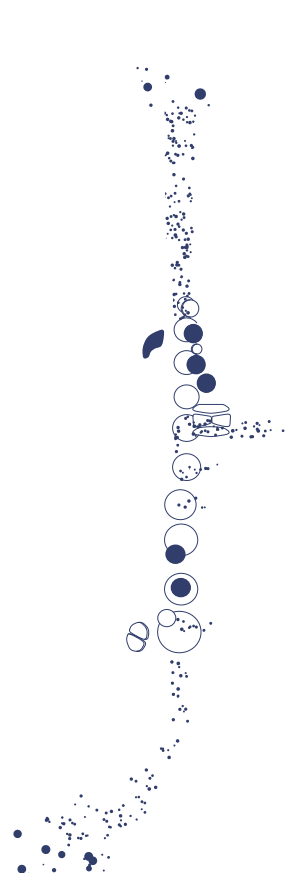
The spatial prototype which produces spatial and sensory variation through the behaviour of the materials and color gradient. When the prototype is deflected, the space between the components expands and contracts, creating a spatial variation and gradation in the frequency of ribbons. This idea of deflection of the prototype is applied to the site. As the long end and the short end of the site starts to deflect, the sidewalk on the long end lifts up and deviates from the grid. The sidewalk turns into the architectural circulation of the school. Circulation becomes a continuous movement as a form of learning in and of itself.



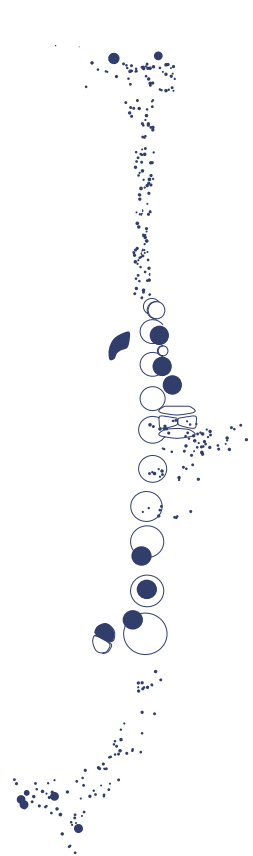
F#



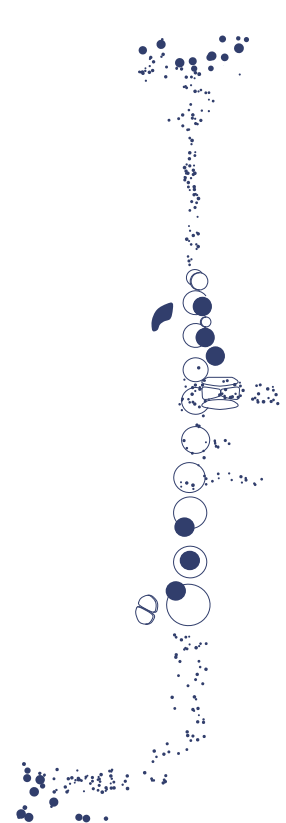
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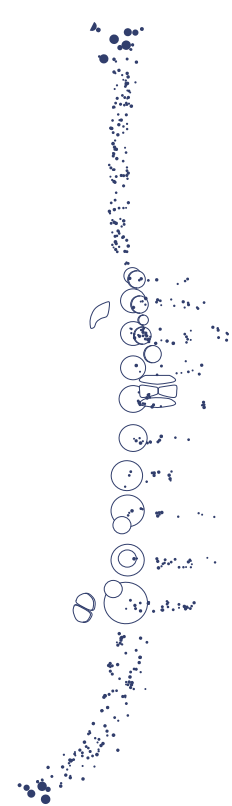
E



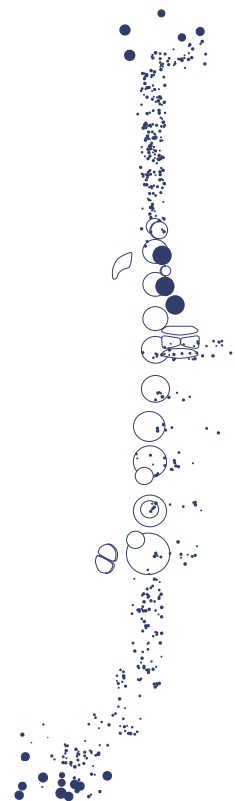
E_b
D#



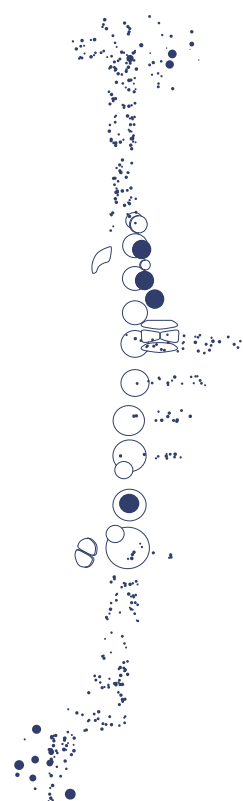
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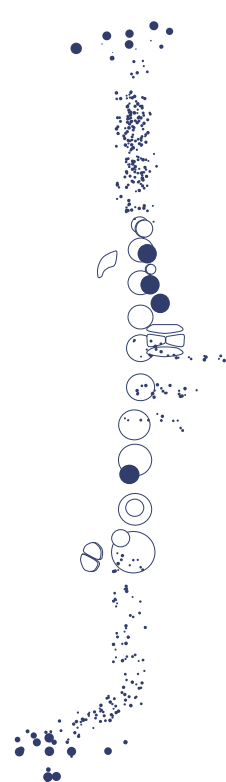
C#



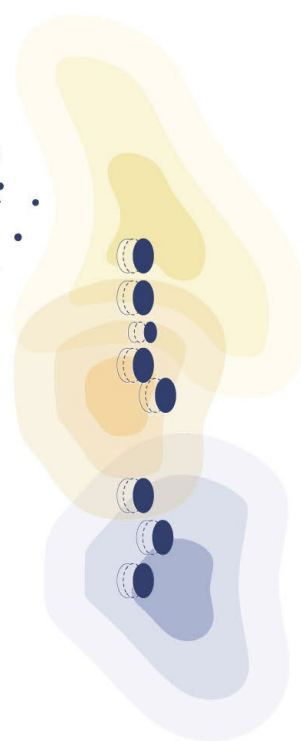
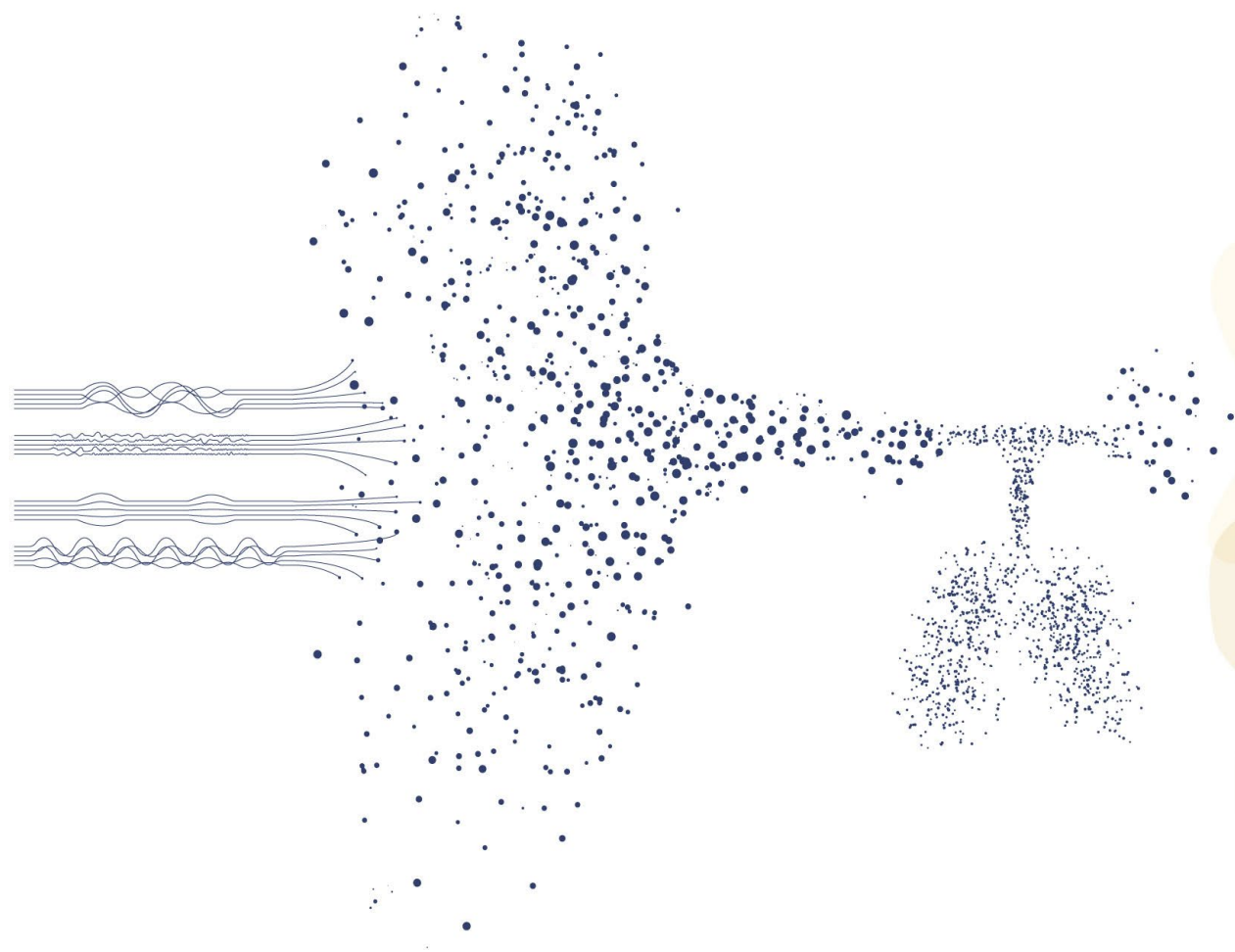
G

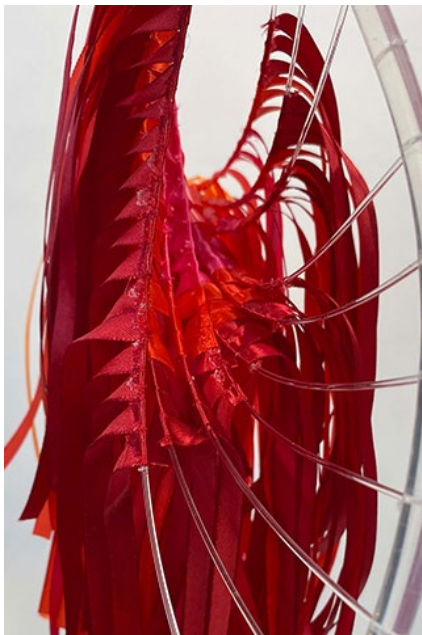
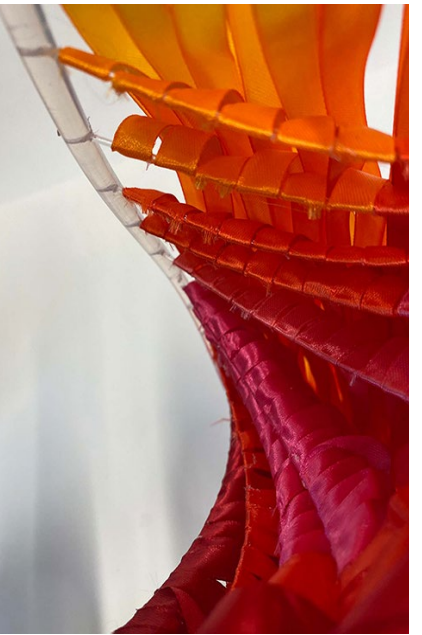
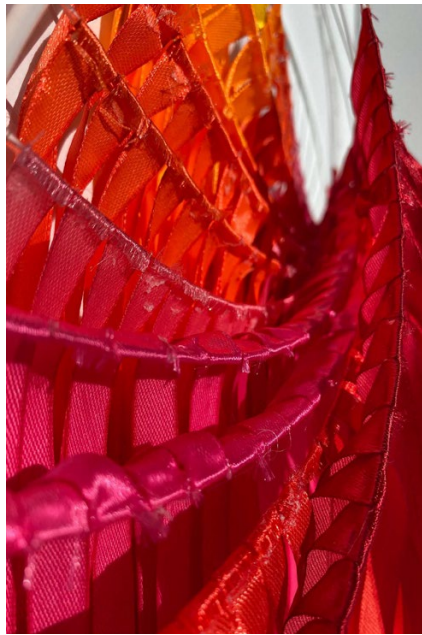


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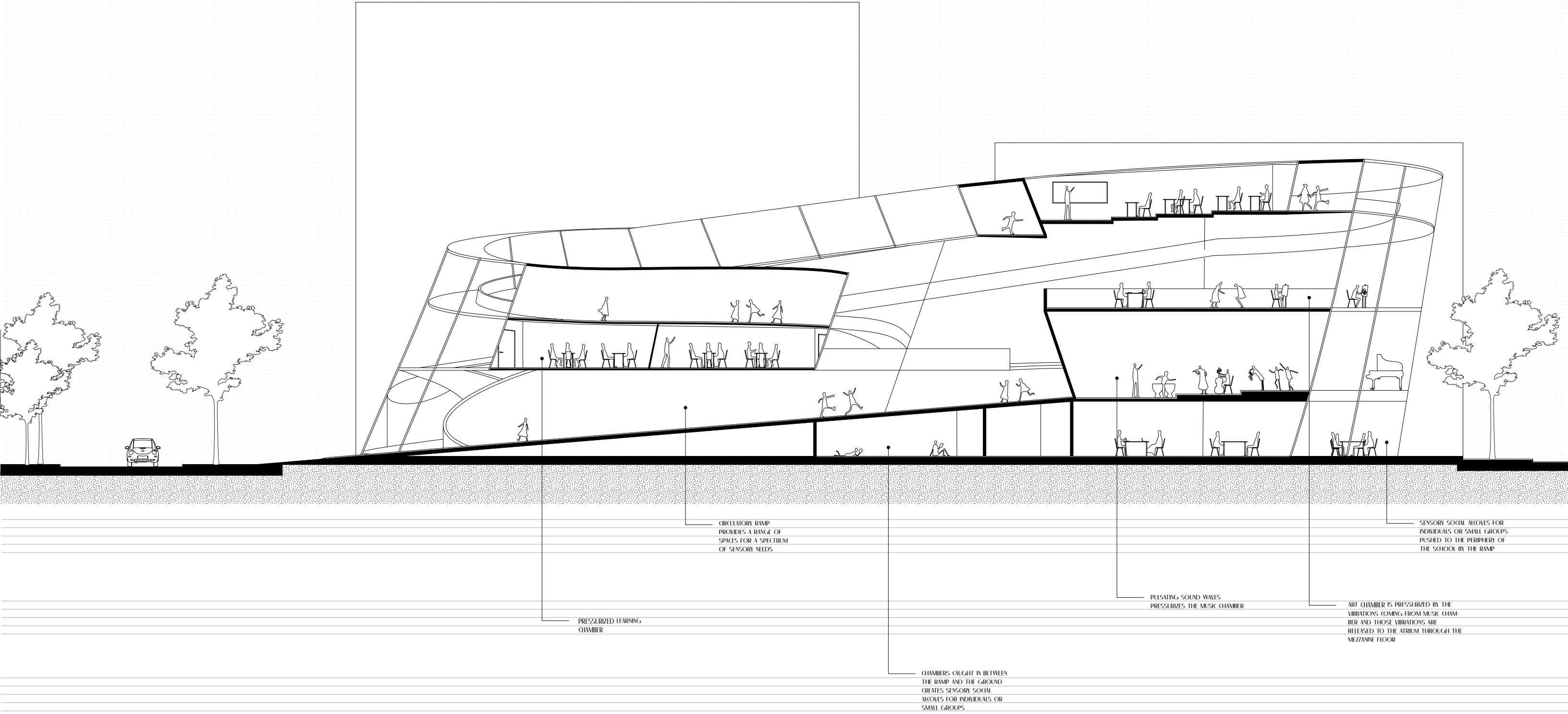
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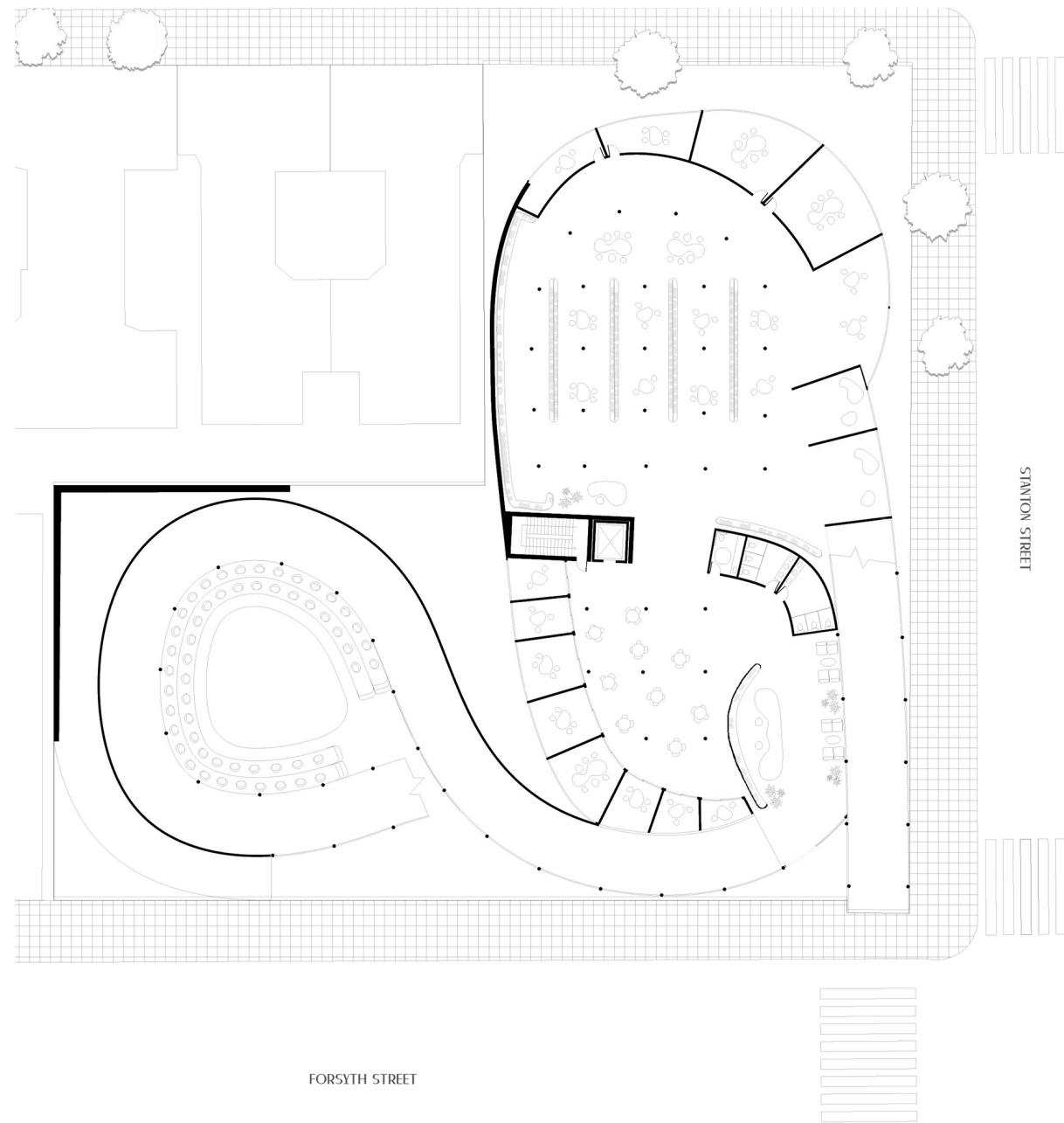




hot glue stick, ribbon, plastic stick

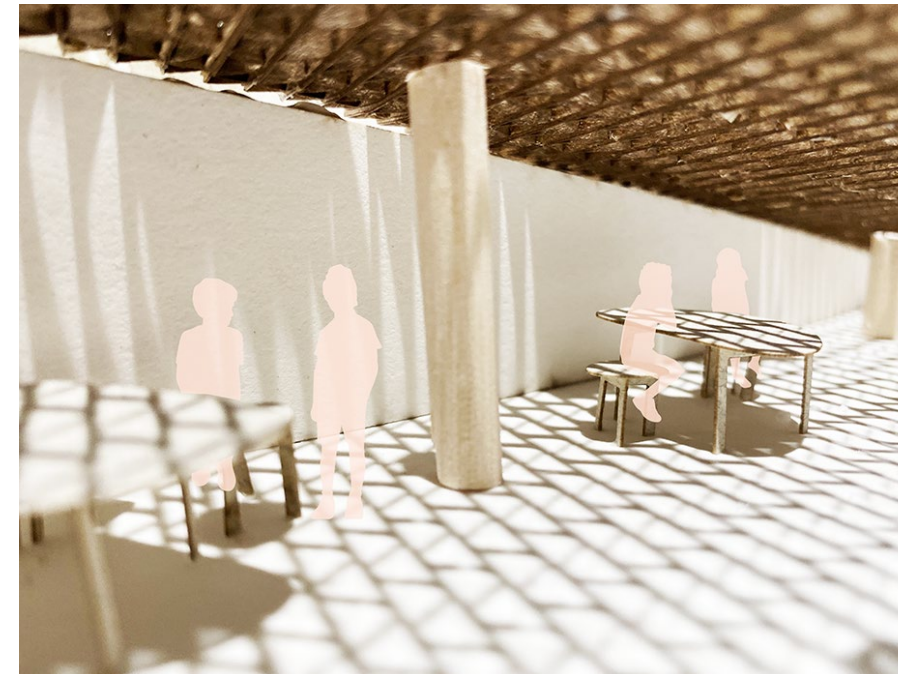
The circulatory ramp serves as the main circulation. The ramp compresses and expands the spaces around it and provides a range for a spectrum of sensory needs. The ramp's changing slope and width generates variation for the chambers and pressurizes their contents. The pressurized chambers are categorized as high and low-pressure according to their stimulus levels as allowed by the extent of the ramp and the frequency of activity inside.





ground floor plan

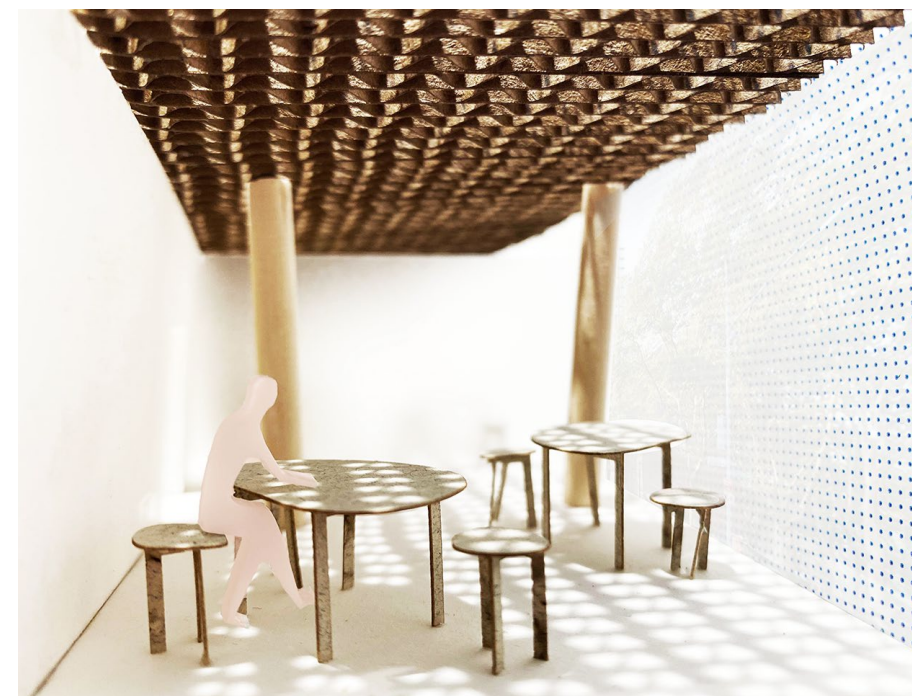
view of the compressed classroom



gentle ramp in the decompressed hallway



view of the low-compression classroom





The Interstitial

Term Core I | Fall 2021
Professor Thomas de Monchaux

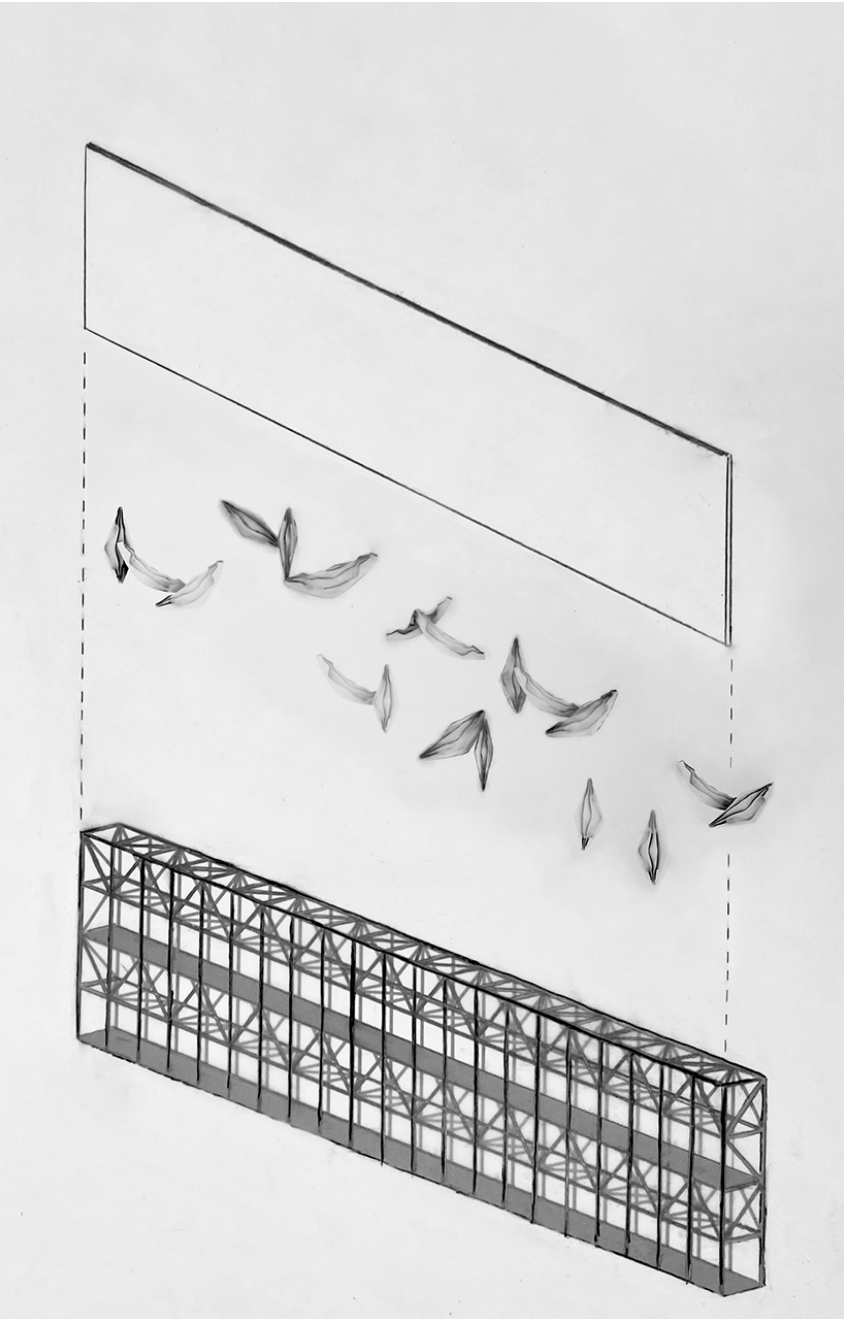
This project explores the potential of overlooked interstitial space by thickening and repurposing it. There is an abundance of interstitial space in Midtown area along Broadway. The space behind billboards is space hidden in plain sight, space that can be reclaimed. The intervention experiments with how we can activate and reclaim interstitial space as a community resource.

In consideration of the economical instability that the pandemic has imposed on people and political concerns that has been created by the proposed changes to the US immigration rules happening around the same time, this intervention attempts to support those affected by these conditions. Through counter-programing what is already existing at the site of this study, this intervention repurposes and upcycles not just the existing interstitial space but also food and other belongings.

The project repurposes overlooked interstitial space by counter-programming whatever is existing down below it. Interstitial space above the restaurant becomes a community kitchen where unsold food surplus from the restaurant below is served to the people who experience food insecurity. Space above the gift shop where mainly textile merchandise is sold becomes a second-hand gift shop. People can donate clothes and people who are in need of clothing can go there and pick up what they need. Space above the theater becomes a library, mainly consisting of play scripts and books, becoming a free accessible resource on theatrical performance.



Section view of the counter-programmed interstitial space



Exploded axonometric showing the scaffolding, partitions, and the billboard

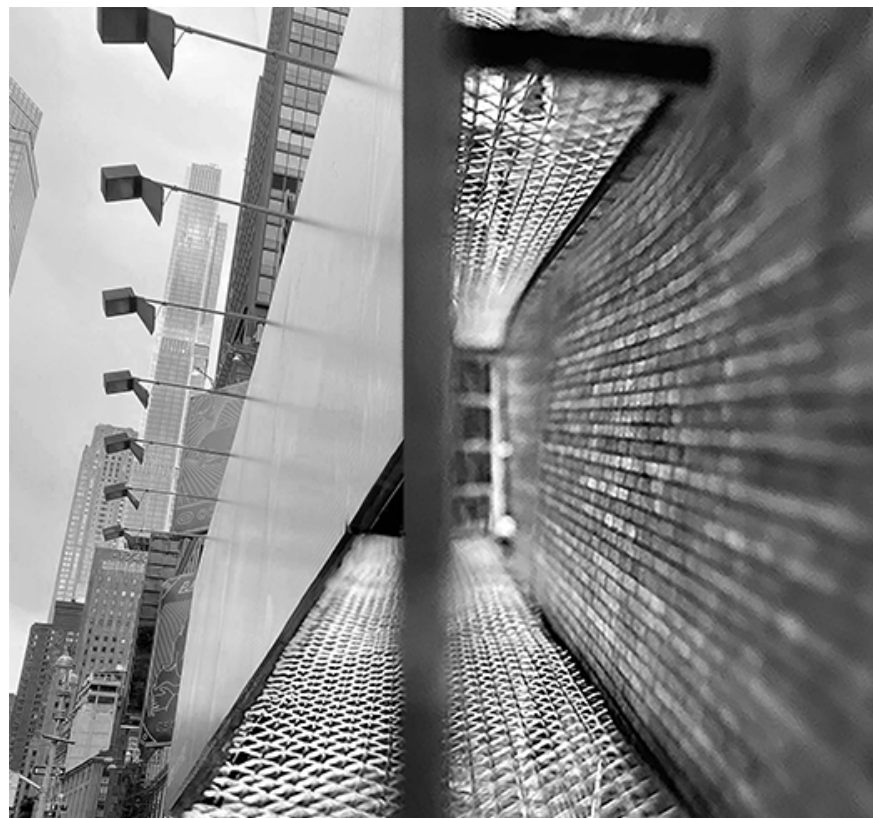


photo collages representing the interior qualities of the interstitial space