Anaïs Halftermeyer

In The Folds Of Terrain

This portfolio showcases a selection of work I've completed at Columbia GSAPP from 2021 to 2025. Thank you to the professors who taught me, and to my peers whom I learned from and worked alongside with. I am immensely grateful to you. Special shoutout to Sina Araya, Rebecca Siqueiros, Sophia Strabo, Erisa Nakamura, Deniz Mahir Dagtekin, Benjamin Vasser, Flora Ng, Hanouf AlFehaid, Kelvin Lee, Adam Fried.

From material matters of steel, questioning perceptions of waste, to rituals with land; much of my work relates to temporal ecological and cultural relationships to terrain. Welcome to the my process of work and journey at GSAPP that has helped defined my position towards architecture.

01 The Mussel At The End of The World

Critic: Michael Wang
In collaboration with Abigail Gaines Zapalac
Advanced Studio V

Although designated a Superfund site in 2010 and restricted as a site of contamination, the Gowanus Canal is a unique habitat for extremophile species. Ribbed Mussels and Pseudomonas putida thrive in this extreme environment, contributing to the canal's "collaborative survival" by metabolizing toxic contaminants. Our project embraces the canal's current state—half-dredged with a mix of old and new—and introduces infrastructure to enhance extremophile habitats. Dock systems cluster near CSO outfalls, ghost stream outlets, and broken edges, circulating oxygen and water to support biochemical reactions by mussels and microbes. Eco-concrete modules, microbial mats, and trans-species columns accelerate metabolization while slowing the human "sanitization" of contamination.

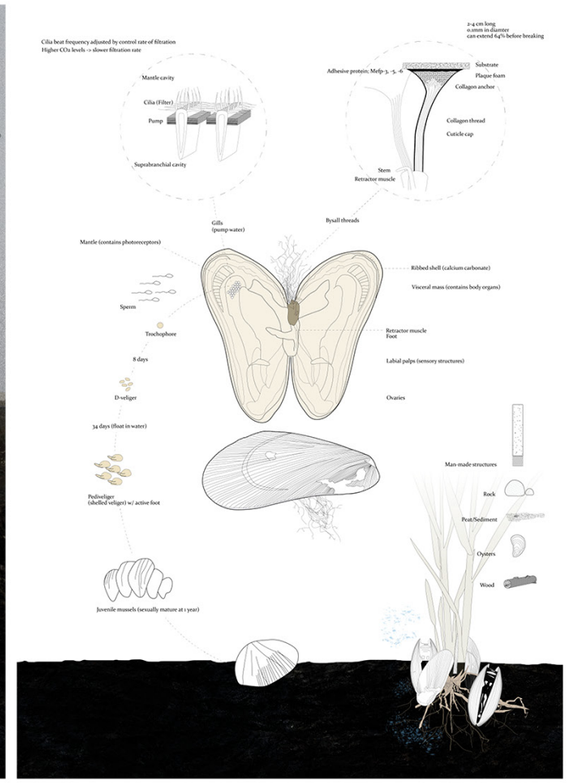
As ribbed mussel and microbe communities grow, our docks expand alongside them, engaging existing infrastructures like the Gowanus Dredgers. Canoe docking and public access reconnect residents with the waterfront and their extremophile co-habitants. Canoes and a modular dock design facilitate future seeding, transporting microbial mats to other parts of the canal. Mimicking the behavior of mussels and microbes, our design grows into a living network. "The Mussel at the End of the World" offers a new perspective on contamination, fostering productive cohabitation between humans and non-humans in New York City.


N2
/CSO outfall
/runoff
/fertilizer
/atmospheric N
inorganic N
[Phytoplankton]
[Bacteria]
O2
[Biodeposits]
organic N
[Bacteria]
O2
[Biodeposits]
organic N
NH3+
Nitrification
NO3-
[Bacteria]
Pseudomones thiobacillus
Micrococeurs dentrificans
low O2 zones
NO3-
Denitrification
N2


CLOSED
PUMPING
AIR-GAPING
PUMPING
AIR-GAPING
PUMPING (4 mm)
CLOSED (0 mm)
HIGH TIDE
SHELL HEIGHT (50.40mm)
LOW TIDE
INUNDATED
EXPOSED
[Degreasers]
Mechanical stimuli-contamination


CLOSED
PUMPING
AIR-GAPING
PUMPING
AIR-GAPING
PUMPING (4 mm)
CLOSED (0 mm)
HIGH TIDE
SHELL HEIGHT (50.40mm)
LOW TIDE
INUNDATED
EXPOSED
O2
O2
O2
[Degreasers]
Mechanical stimuli-contamination


CLOSED
PUMPING
AIR-GAPING
PUMPING
AIR-GAPING
PUMPING (4 mm)
CLOSED (0 mm)
HIGH TIDE
SHELL HEIGHT (50.40mm)
LOW TIDE
INUNDATED
EXPOSED
[Biodeposits]
organic N
[Bacteria]
[Phytoplankton]

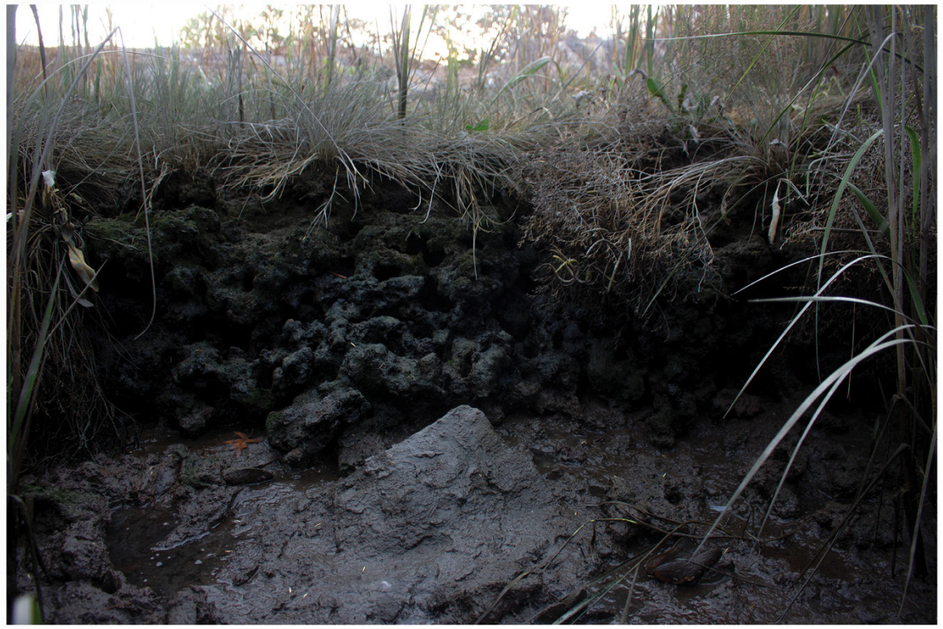

Cilia beat frequency adjusted by control rate of filtration
Higher CO2 levels -> slower filtration rate
Mantle cavity
Cilia (Filter)
Pump
Suprabranchial cavity
2-4 cm long
0.1mm in diameter
can extend 64% before breaking
Adhesive protein: Mefp-3, -5, -6
Substrate
Plaque foam
Collagen anchor
Collagen thread
Cuticle cap
Stem
Retractor muscle
Gills
(pump water)
Byssal threads
Mantle (contains photoreceptors)
Ribbed shell (calcium carbonate)
Visceral mass (contains body organs)
Sperm
Trochophore
Retractor muscle
Foot
8 days
Labial palps (sensory structures)
D-veliger
Ovaries
34 days (float in water)
Pediveliger
(shelled veliger) w/ active foot
Man-made structures
Rock
Peat/Sediment
Oysters
Wood
Juvenile mussels (sexually mature at 1 year)

Understanding the ribbed mussel eco system biochemcial processes and mutualistic relationships with other species at Pelham Bay Park, New York.

Adv V

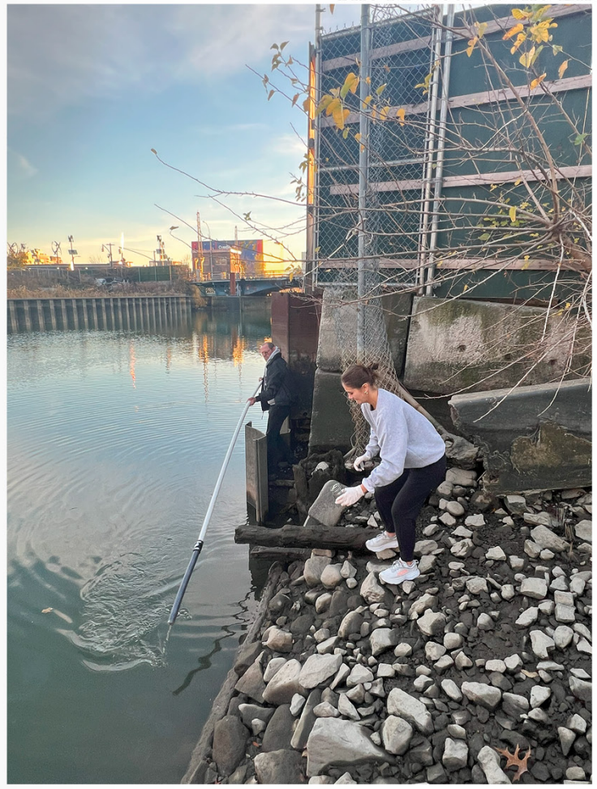
12

13

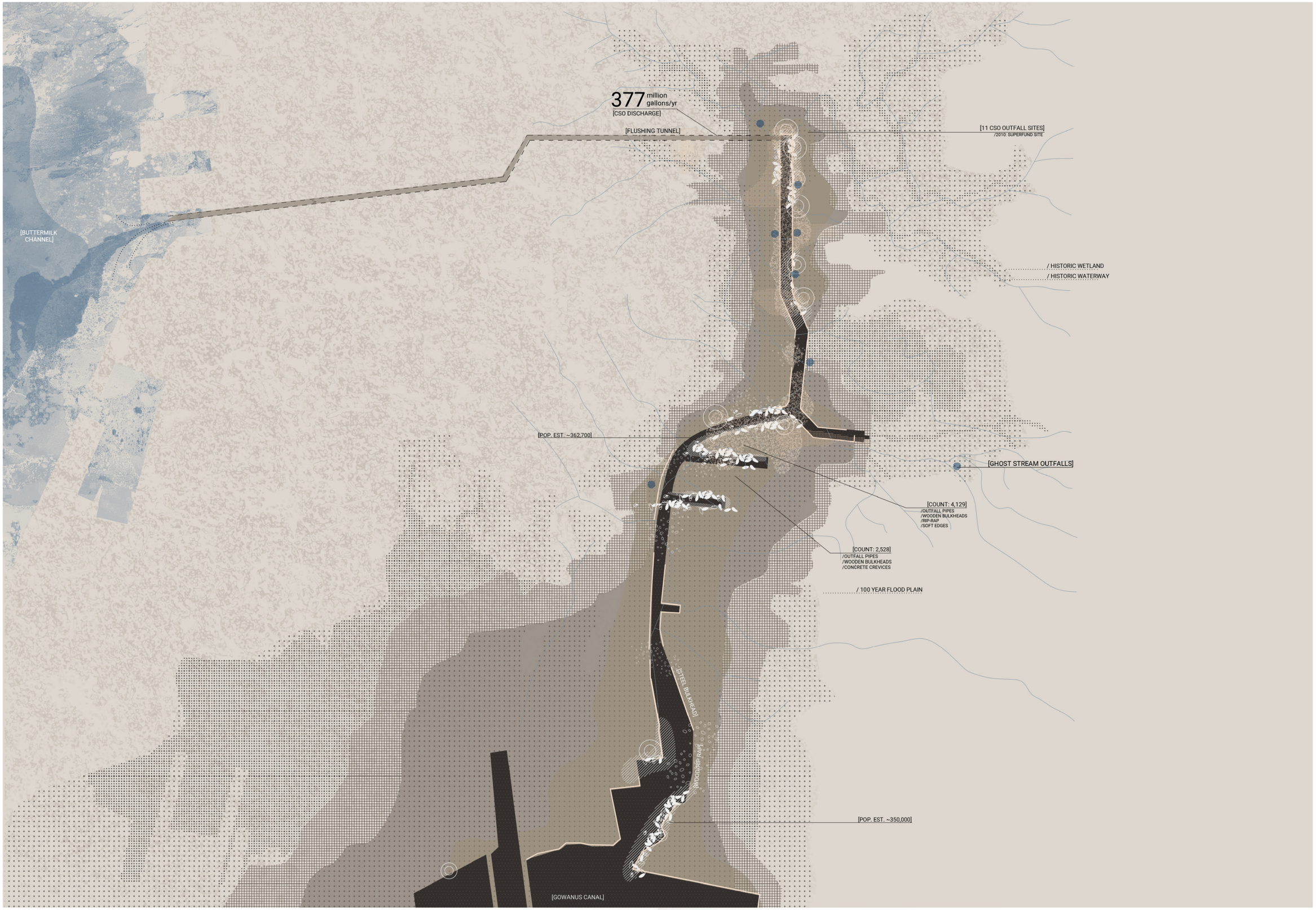


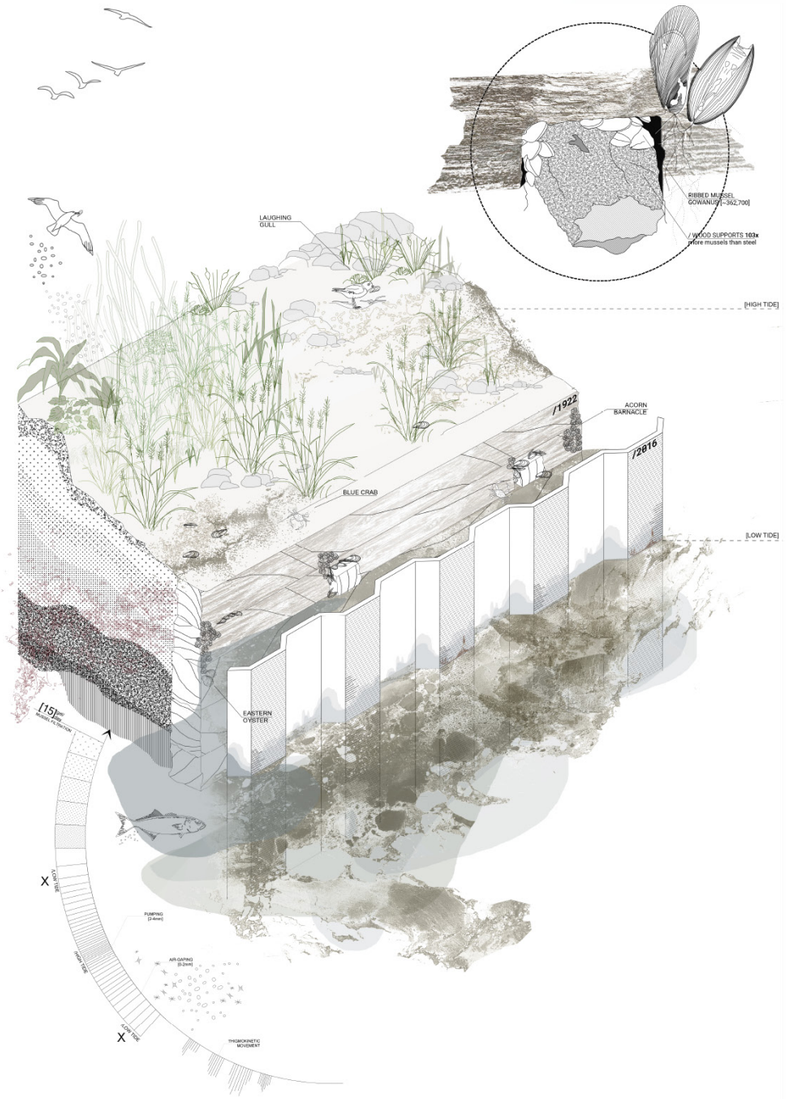
Goose Creek Marsh, Pelham Bay Park, September 2024

Meeting with the Gowanus Dredgers to look at ribbed mussel habitats along the broken edges of the Gowanus Canal, and collect black mayonnaise samples from the bottom of the canal.



bulkheads (left) with visible imprint of tidal waves, coal tar on the surface of the water (right)

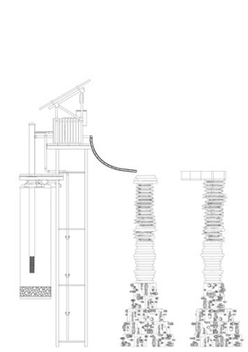

377 million gallons/yr
[CSO DISCHARGE]
[FLUSHING TUNNEL]
[11 CSO OUTFALL SITES]
/2010: SUPERFUND SITE
[BUTTERMILK CHANNEL]
/ HISTORIC WETLAND
/ HISTORIC WATERWAY
[POP. EST. ~362,700]
[GHOST STREAM OUTFALLS]
[COUNT: 4,129]
/OUTFALL PIPES
/WOODEN BULKHEADS
/RIP-RAP
/SOFT EDGES
[COUNT: 2,528]
/OUTFALL PIPES
/WOODEN BULKHEADS
/CONCRETE CREVICES
/ 100 YEAR FLOOD PLAIN
[STEEL BULKHEAD]
[RIP-RAP]
[POP. EST. ~350,000]
[GOWANUS CANAL]



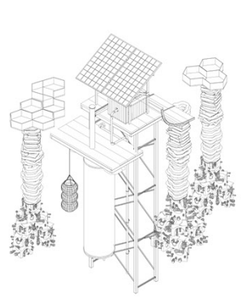
Mapping the canal's industrial history and its accumulation of toxic sediment shows how ribbed mussels and microbes continue to survive, adapting to harsh conditions while contributing to ecological remediation. Microbes feed on the "black mayonnaise"—a dense layer of industrial waste at the canal's bottom—while mussels filter algae and reduce nitrogen levels in the water. Cordgrass growing along broken edges and decaying wooden bulkheads provides essential substrate for mussels, unlike newer bulkheads, which prevent attachment. These small ecosystems consistently appear near fragmented edges, ghost streams, and CSO outfalls, where environmental and infrastructural conditions support their growth.

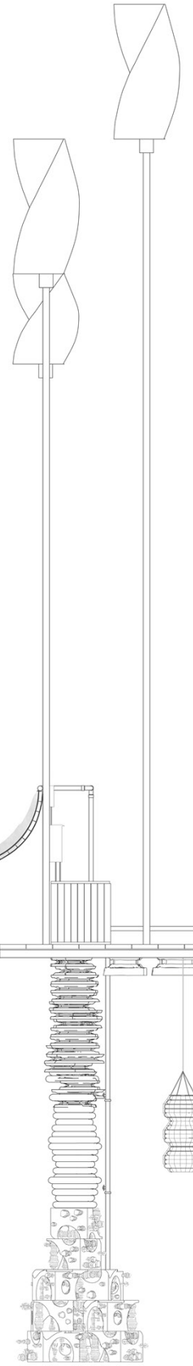
Dock structures are positioned near mussel habitats, ghost stream outlets, and CSO outfalls—typically along broken edges or cut into newer bulkheads to recreate suitable conditions. Powered by wind and solar energy, they aerate and circulate water to support mussels, microbes, and cordgrass.

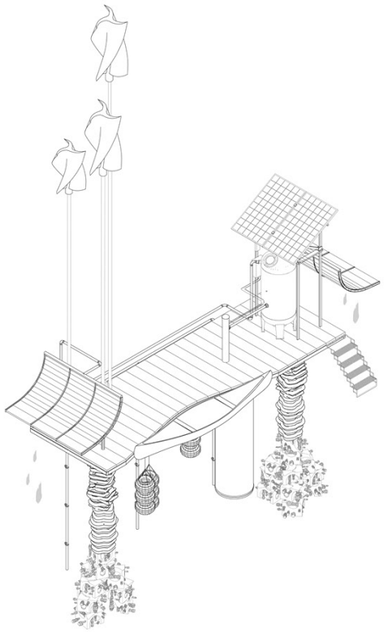
Three dock types—one non-human and two non-human—connect to the canal edge and float with the tide, exposing mussel columns at low tide. Materials like wood, hemp fiber, and concrete support species at different tidal depths; concrete stabilizes the black mayonnaise and encourages microbial growth. Canoes help seed microbial mats throughout the canal, expanding the system's ecological reach.



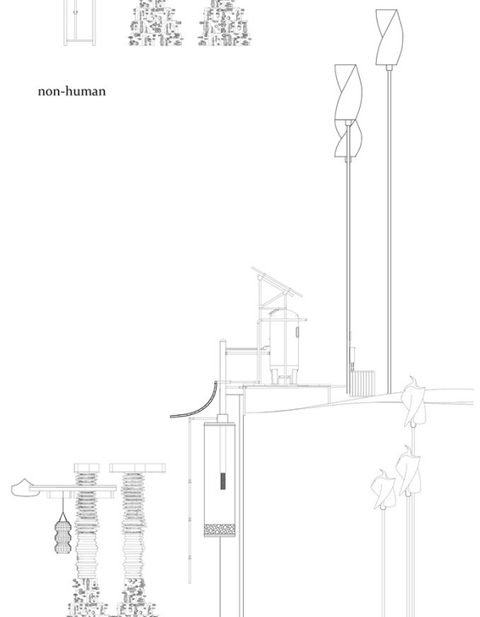
non-human



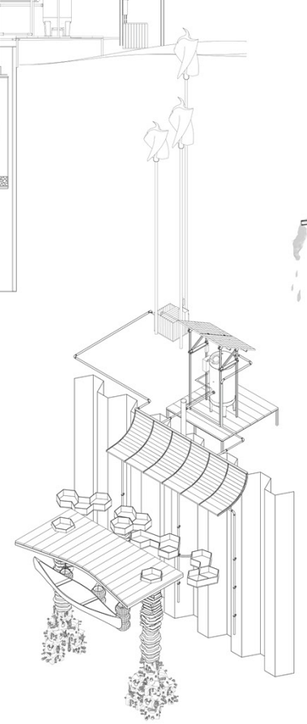


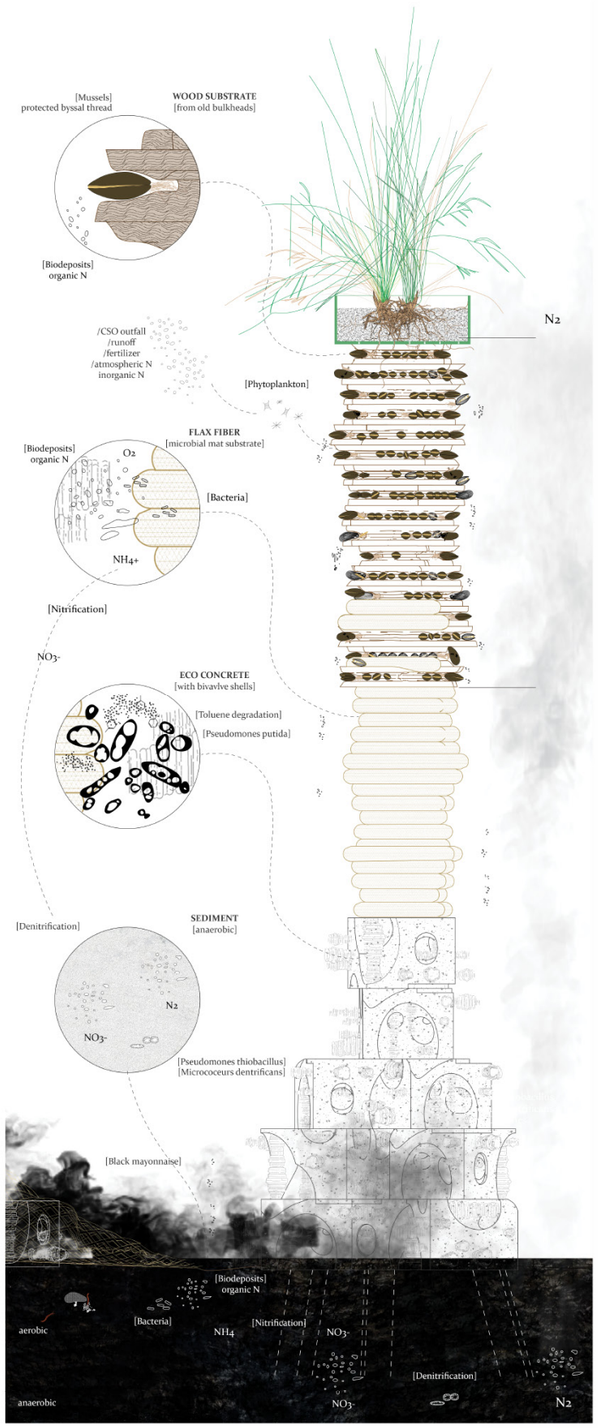


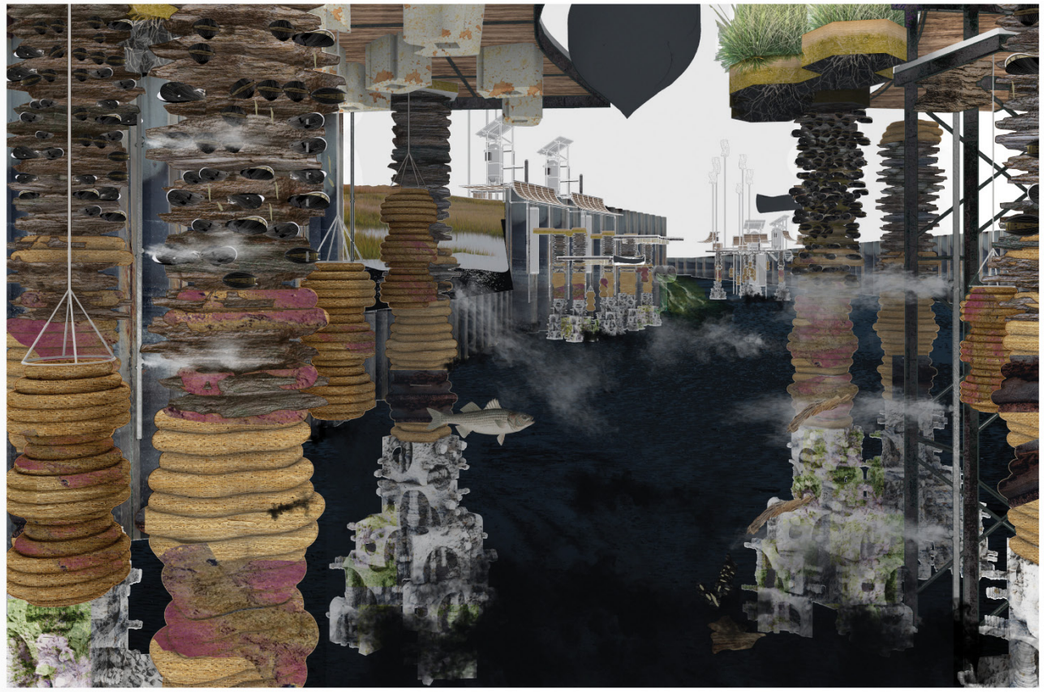
human friendly

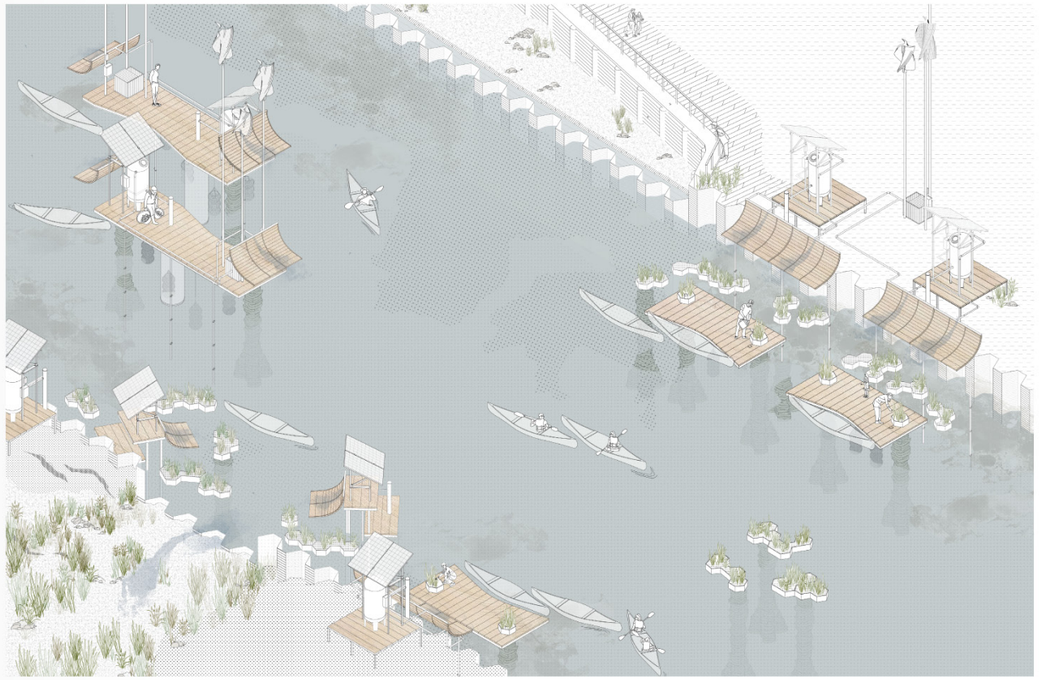


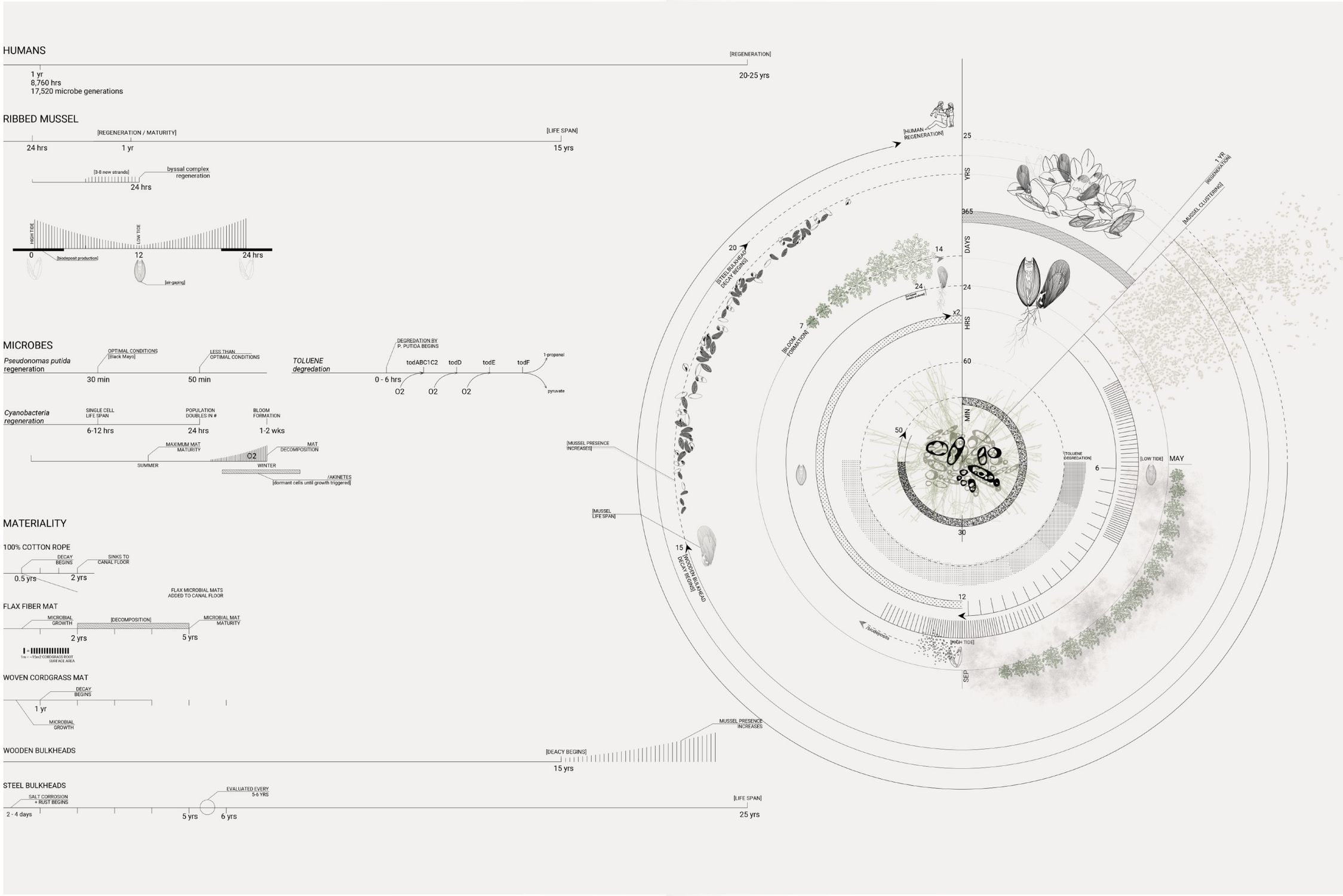
human friendly



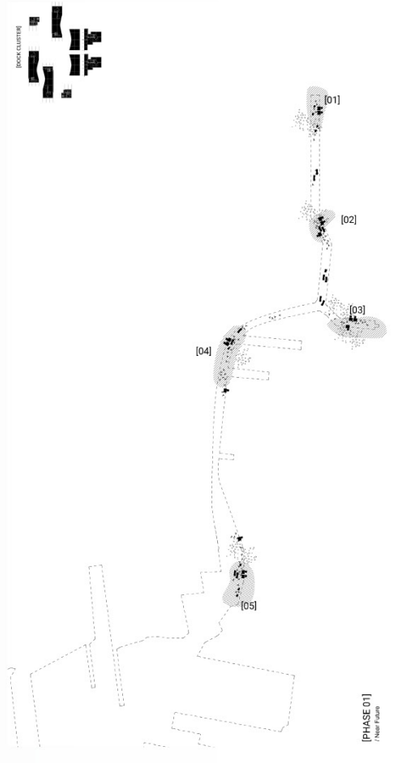

[Mussels]
protected byssal thread
WOOD SUBSTRATE
[from old bulkheads]
[Biodeposits]
organic N
N2
/CSO outfall
/runoff
/fertilizer
/atmospheric N
inorganic N
[Phytoplankton]
FLAX FIBER
[microbial mat substrate]
[Biodeposits]
organic N
O2
[Bacteria]
NH4+
[Nitrification]
NO3-
ECO CONCRETE
[with bivavlve shells]
[Toluene degradation]
[Pseudomones putida]
[Denitrification]
SEDIMENT
[anaerobic]
N2
NO3-
[Pseudomones thiobacillus]
[Micrococeurs dentrificans]
[Black mayonnaise]
[Biodeposits]
organic N
aerobic
[Bacteria]
NH4
[Nitrification]
NO3-
[Denitrification]
anaerobic
NO3-
N2

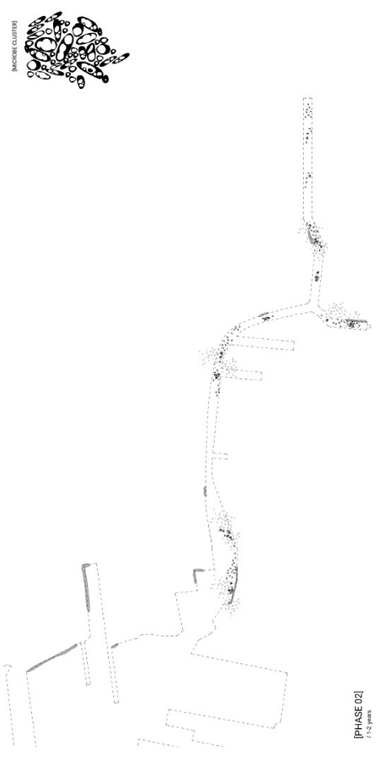





HUMANS
1 yr
8,760 hrs
17,520 microbe generations
[REGENERATION]
20-25 yrs
RIBBED MUSSEL
24 hrs
[REGENERATION / MATURITY]
1 yr
[LIFE SPAN]
15 yrs
[3-8 new strands]
byssal complex regeneration
24 hrs
HIGH TIDE
LOW TIDE
0
[biodeposit production]
12
24 hrs
[air-gaping]
MICROBES
Pseudonomas putida regeneration
OPTIMAL CONDITIONS [Black Mayo]
LESS THAN OPTIMAL CONDITIONS
30 min
50 min
TOLUENE degredation
DEGREDATION BY P. PUTIDA BEGINS
todABC1C2
todD
todE
todF
1-propanol
pyruvate
0 - 6 hrs
O2
O2
O2
Cyanobacteria regeneration
SINGLE CELL LIFE SPAN
6-12 hrs
POPULATION DOUBLES IN #
24 hrs
BLOOM FORMATION
1-2 wks
MAXIMUM MAT MATURITY
MAT DECOMPOSITION
O2
SUMMER
WINTER
/AKINETES
[dormant cells until growth triggered]
MATERIALITY
100% COTTON ROPE
DECAY BEGINS
SINKS TO CANAL FLOOR
0.5 yrs
2 yrs
FLAX MICROBIAL MATS ADDED TO CANAL FLOOR
FLAX FIBER MAT
MICROBIAL GROWTH
[DECOMPOSITION]
MICROBIAL MAT MATURITY
2 yrs
5 yrs
1 m = ~15m2 CORDGRASS ROOT SURFACE AREA
WOVEN CORDGRASS MAT
DECAY BEGINS
1 yr
MICROBIAL GROWTH
WOODEN BULKHEADS
[DEACY BEGINS]
MUSSEL PRESENCE INCREASES
15 yrs
STEEL BULKHEADS
SALT CORROSION + RUST BEGINS
2 - 4 days
EVALUATED EVERY 5-6 YRS
5 yrs
6 yrs
[LIFE SPAN]
25 yrs
[HUMAN REGENERATION]
25
YRS
365
DAYS
24
HRS
x2
60
MIN
50
30
12
6
[LOW TIDE]
MAY
SEP
1 YR [REGENERATION]
[MUSSEL CLUSTERING]
[TOLUENE DEGREDATION]
[HIGH TIDE]
biodeposits
20
[STEELBULKHEAD DECAY BEGINS]
14
24
7
[BLOOM FORMATION]
[MUSSEL PRESENCE INCREASES]
[MUSSEL LIFE SPAN]
15
[WOODEN BULKHEAD DECAY BEGINS]


[MUSSEL CLUSTER]
377 million gallons/yr
[CSO DISCHARGE]
[FLUSHING TUNNEL]
[GHOST STREAM OUTFALLS]
[15 CSO OUTFALL SITES]
/ 2015 SUPERFUND SITE
[POP. EST. ~362,700]
[COUNT: 4,129]
[OUTFALL PIPES
/WOODEN BULKHEADS
/RIP-RAP
/SOFT EDGES
[COUNT: 2,529]
[OUTFALL PIPES
/WOODEN BULKHEADS
/CONCRETE DRIVERS
/ HISTORIC WETLAND
/ HISTORIC WATERWAY
[STEEL BULKHEAD]
[WOOD RIP-RAP]


[DOCK CLUSTER]
[01]
[02]
[03]
[04]
[05]
[PHASE 01]
1 Yr. years


[MUSSEL CLUSTER]
[PHASE 02]
1 Yr. years


[COLUMN CLUSTER]
[PHASE 03]
1 Yr. years


[SYSTEM DENSITY]
[PHASE 04]
1 Yr. years

02 Resonant Lands

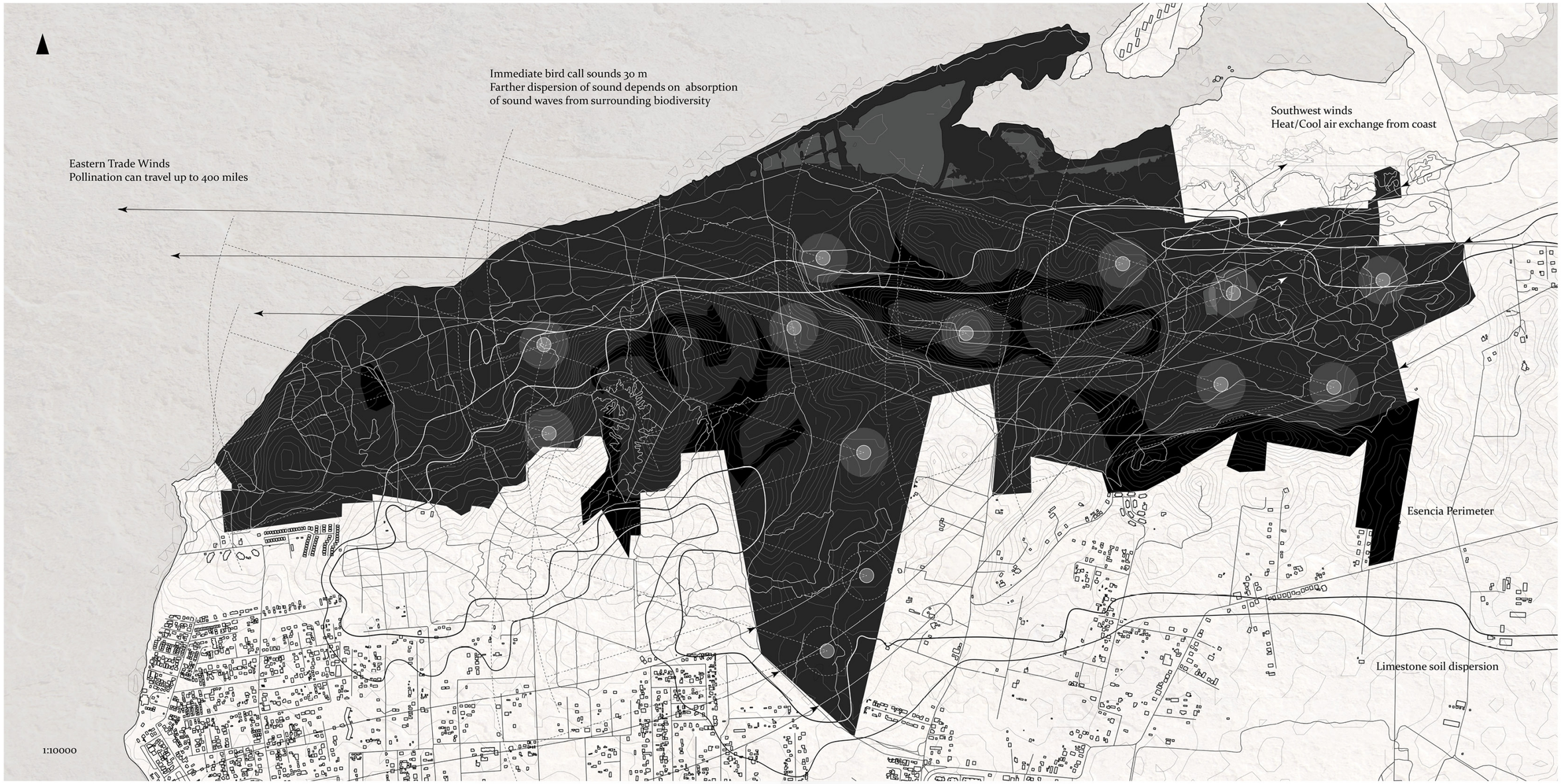
Critic: Mireia Luzárraga
Advanced Studio VI

In January 2025, Bad Bunny released an album that highlighted the entanglement of land, ecology, and displacement in Puerto Rico—foregrounding music as a way of knowing and resisting. This project approaches music as a tool for research, focusing on how rhythm, vibration, and collective sound practices—across genres from bomba to reggaetón—sustain ties between identity, land, and celebration. Activist-led music collectives in Puerto Rico informed a framework where music is not only cultural expression but also spatial practice: one that organizes people, holds memory, and reshapes territory.

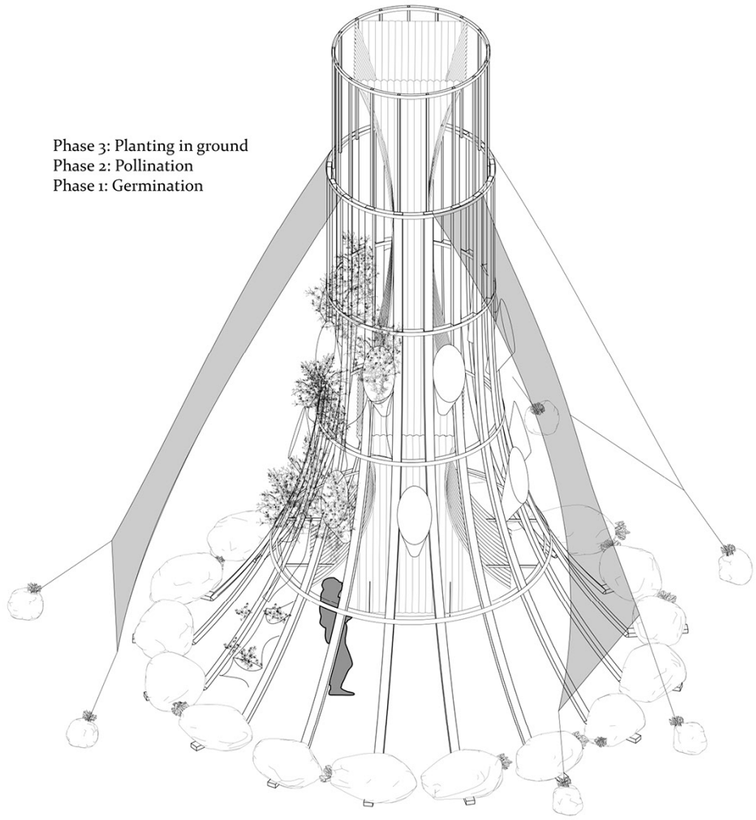
This research led to the finidng of resistance against a mega-luxury development, Esencia, in between two national wildlife refuges in southwest Puerto Rico: Refugio Nacional de Vida Silvestre de Cabo Rojo and Refugio de Vida Silvestre de Boquerón.

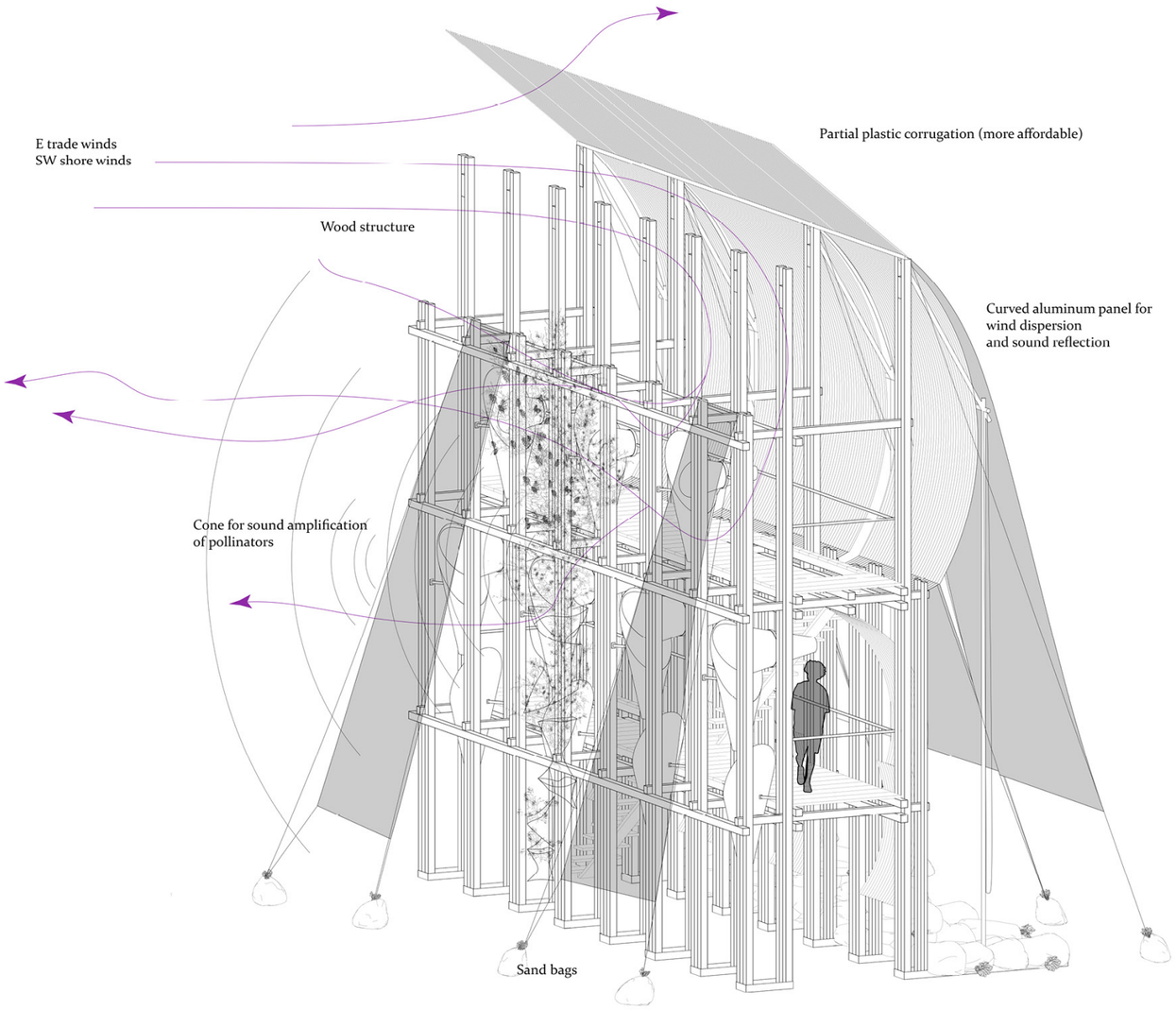
Working with Trichilia triacantha (bariaco), an endangered shrub as a species that could help prevent construction, a set of structures are designed that accelerate the pollination of the plant to reclaim land and dual as musical assembly space.

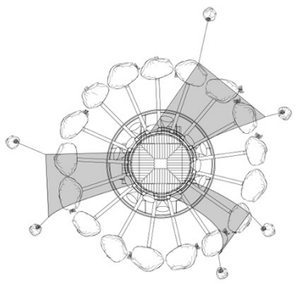
The design draws from the vibrational sensitivities of pollinators, birds, and humans. Frequencies ranging from 12 Hz to 8000 Hz are amplified or dispersed using site materials like sand, soil, or low-tech aluminum and plastic panels. These structures operate through shared acoustics—where vibration becomes a medium of trans-species joy, and sound organizes new social and ecological configurations. Easily assembled and disassembled, the structures adapt to shifting conditions and remain rooted in rhythms of the topography.

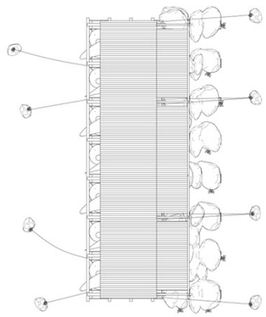


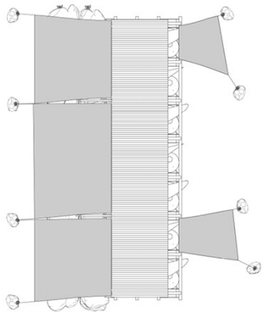
Site plan showing radius of action through wind and vibration at targeted Esencia construction zones. Structures are placed along walking and biking paths.



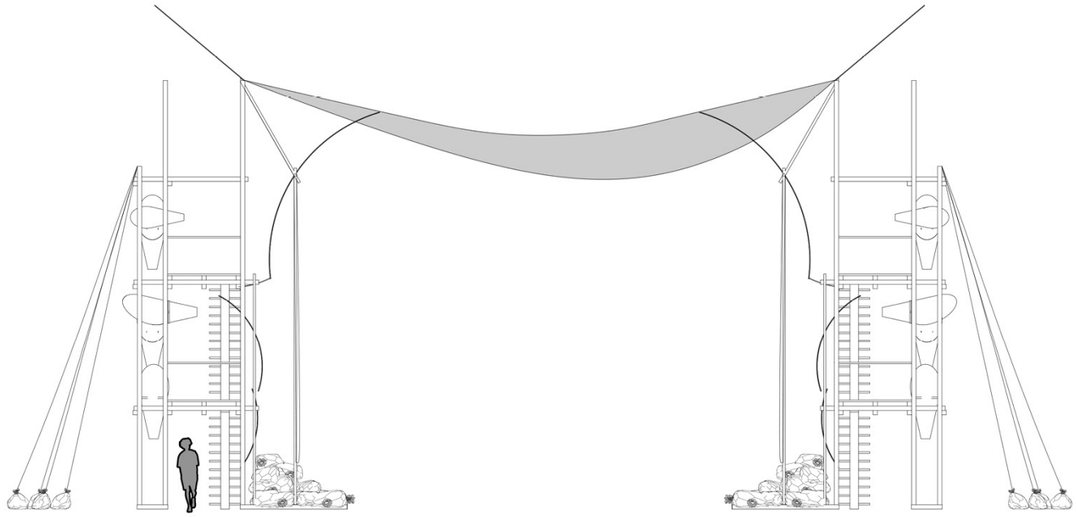


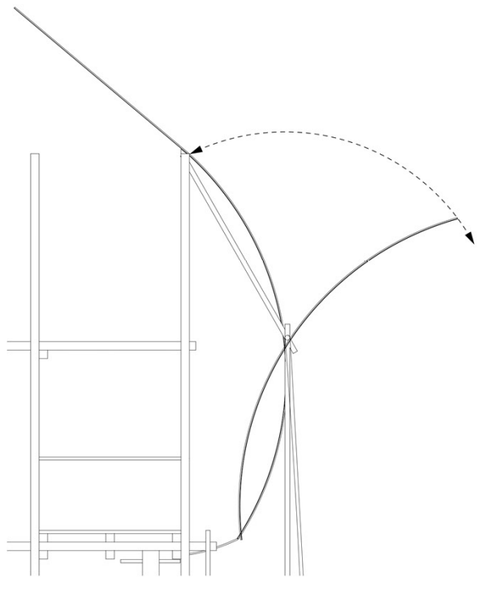




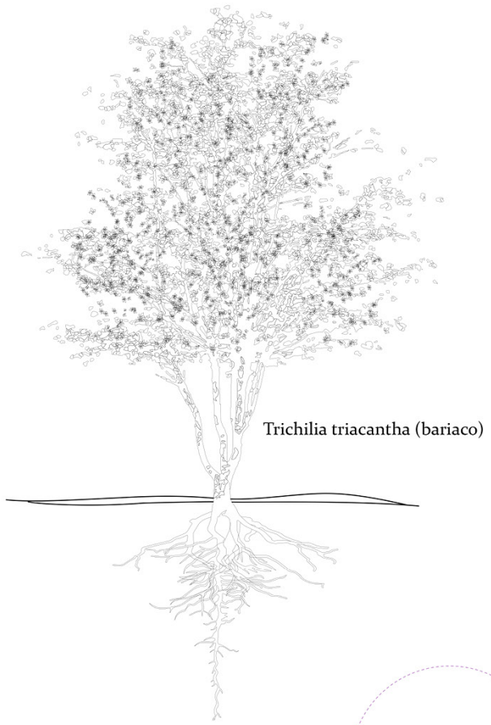


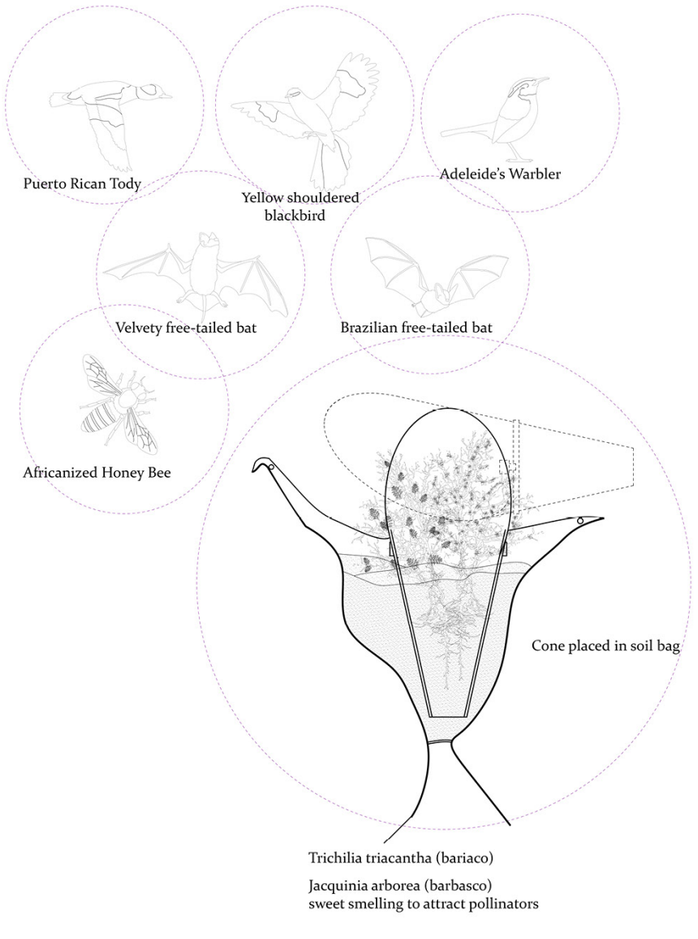
The structures are designed to direct wind and amplify sound to attract pollinators to the Trichilia triacantha (bariaco), specifically targeting species such as the Africanized honey bee (250–300 Hz), the yellow-shouldered blackbird, Puerto Rican tody, and Adelaide's warbler (1,000–8,000 Hz), and the Brazilian and velvety free-tailed bats (12–160 Hz). Aluminum panels guide wind flow and enhance vibrations across these frequencies. Trichilia triacantha are planted in soil bags integrated into the structure at three stages of growth. As they germinate, the plants are elevated to increase wind exposure, then returned to the ground.

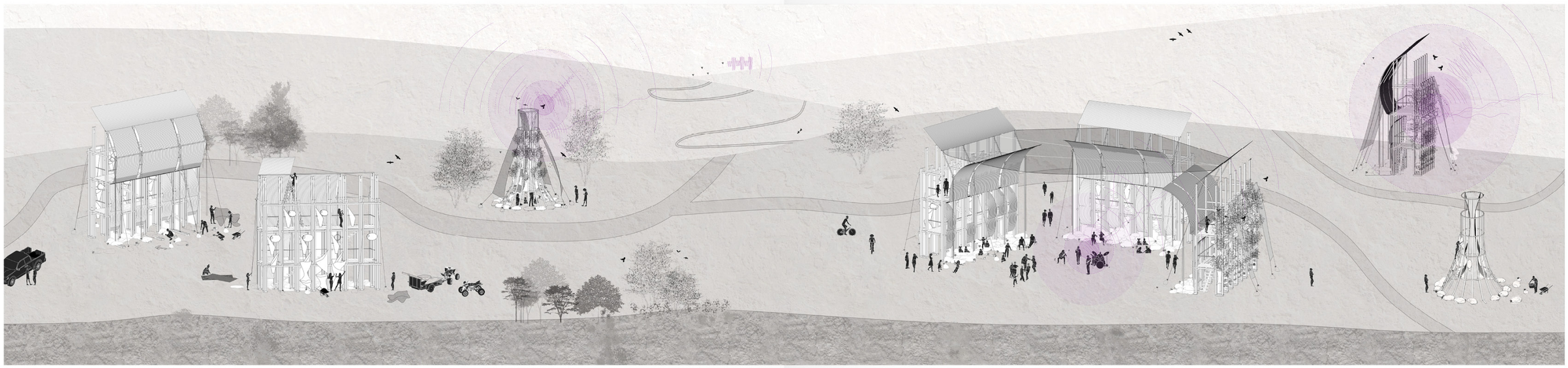


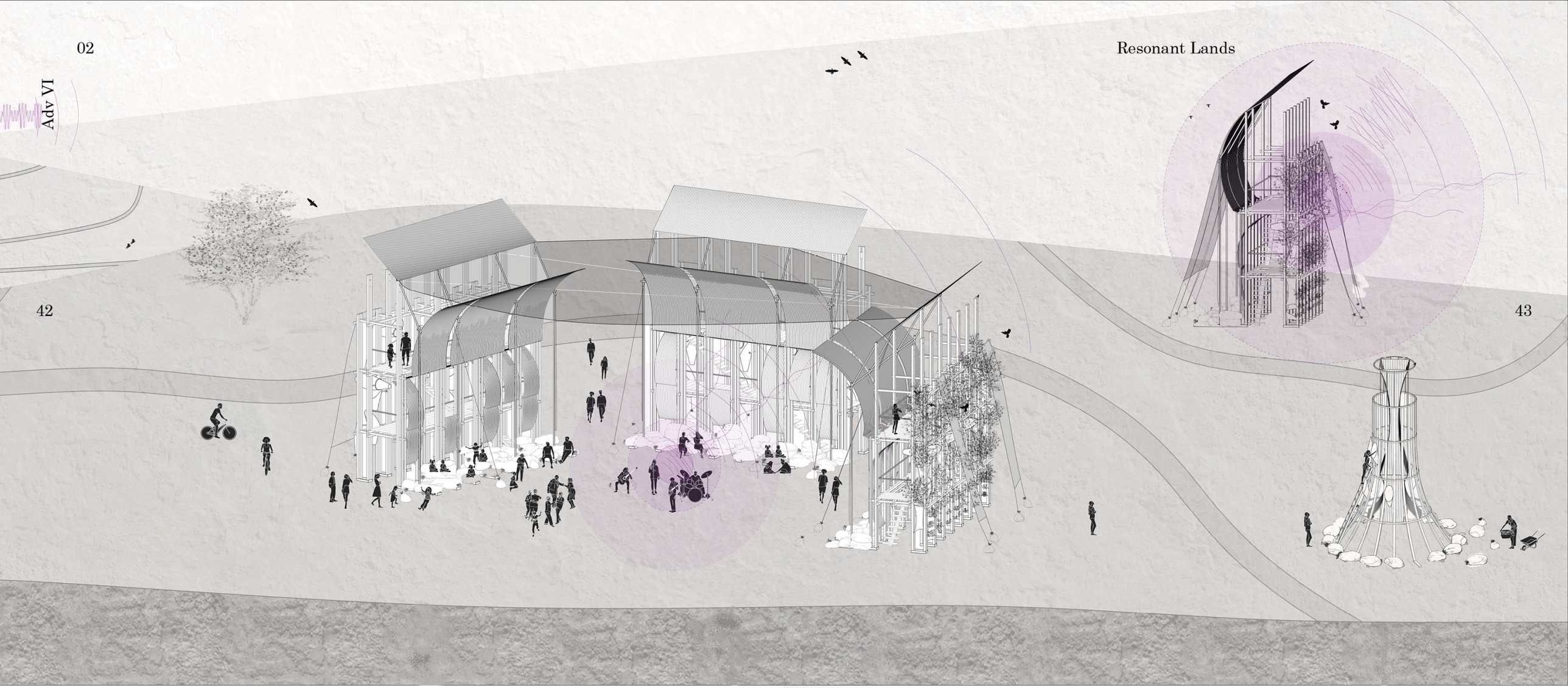


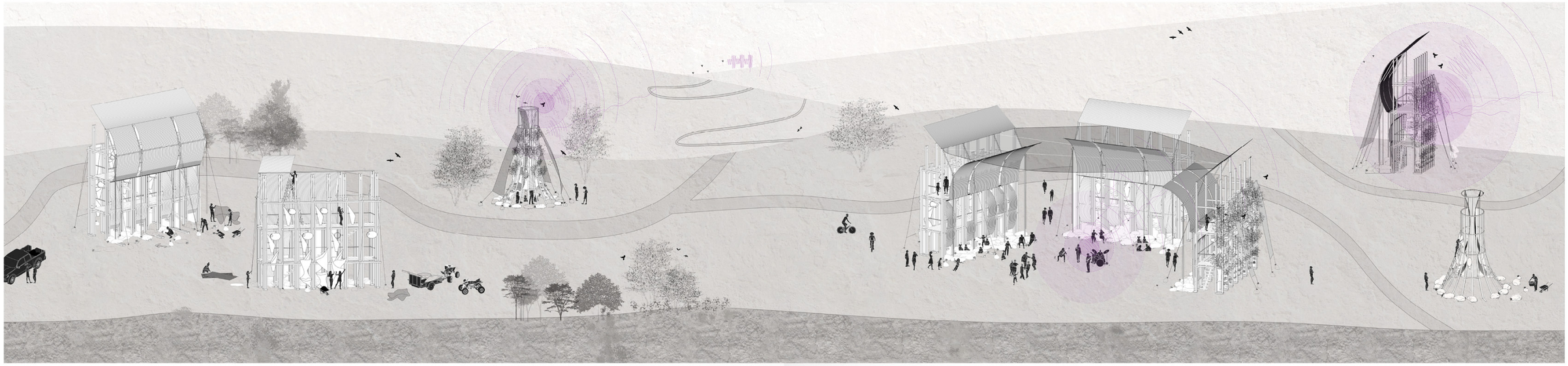
Metal cones in the soil bags amplify the sound of bees. Sandbags throughout the structure can be moved and reshaped to alter the acoustics during performances—sand absorbs sound, while curved, corrugated aluminum panels reflect it. The structure requires no foundation, anchored instead by sandbags. Fabric components absorb excess sound and provide shade. The follies are unprogrammed but can host dance parties, reflection, or education.











03 Towards a Trans-Species Architecture: A Manifesto

Professor: Mark Wigley
Towards a Trans-Species Architecture—Rethinking Lina Bo Bardi

Towards a Trans-Species Architecture: A Manifesto
Anais Halftermeyer

1. **Trans-species architecture is an architecture that accommodates the existence of otherness.**

Architecture is not about buildings, it's about living species that occupy them. If a plant inside a room dies then you are probably dying too. Is there a difference between a fungi, a fish, and a human? Thinking of ourselves as others; we are others to fish and fish are others to fungi, we can attempt to remove human-centric architecture and allow living with otherness when this network of molecules and signals that we all share between these entities of otherness is revealed and focused on above all else.

2. **Death is what allows for living with otherness, its preservation, and protection.**

Humans have sanitized death and decay, but this is what feeds us and begins us. Many other species, like plants, use death as a part of care. Preservation is an act of mutual care and communication. Plants mutually care for each other by networks of communication and death. Death fertilizes the land for each other to grow. They live inside of each other. They live (or the components of which they are made up of that create life) live in animals. They live in us because we eat them. They fertilize each other. We fertilize each other too. Post-human conditions of death and ruin that allow for otherness (other species) to exist in a space can actually exist while humans are still present if this sanitization of death is removed.

3. **Preservation is a matter of transformation.**

Nothing can really be new, only existing concepts that can be altered. New building technologies that are simple in their material and cost effective does not mean they are not complex. For example Lina Bo's use of operability and technicality of a building facade to direct sun, water or wind is resilient with little means. Scaffolding is delicate but complex in its detail, disassembly and material choice. Local architectural practices are hence preserved in their transformation and appearance in Lina Bo's work.

4. **Finding moments of transformation and transition in technical processes of architectural design are where the moments of otherness can exist.**

The interior cannot exist without the exterior and vice versa. The boundary separating the two is a wall or an invisible moment where the non-binary exists. Newness is a movement rather than an invention where the position of something is changed. It can be removed or altered: i.e. transformed. Transitional spaces which are defined as "other" make up a house. The human occupying this space becomes a guest of its material. The human stands between a dissolution of geometry as we move further from the center. If this order becomes more fluid we allow for otherness.

5. Architecture creates binaries and hierarchies in which we perform.

For trans-species architecture to exist a lack of binaries and hierarchies must be present. A logic to the design is maintained while a confusion is introduced between guest and inhabitant, audience and performer, viewer and actor. Is there an interior in the interior? Confusion creates a non-hierarchical experience.

6. Surrealism brings light to the illusion in this performance.

Lina Bo's MASP levitates and Sau Paulo as it is known dissipates when under this building. There is an idea of non-hierarchical experience while the levitation of the building remains god-like. Lina Bo's work of museums and the nature of the experience with the streets inside blurr performances of subject and viewer. Plants on the surface of buildings in her drawings are actually contained and separated from one another. The drawings of the interior of Museum by the Sea and below the MASP create infinite viewpoints and illusion of what is contained. The art in Museum by the Sea looks like it may be on exhibit for the ocean while simultaneously floating in the ocean. The selection of art, such as Guernica by Pablo Picasso, or an image of bombs reflected underneath the MASP, or sculptures that look like they may be tied to local culture all speak to a larger point of "container vs contained" which is "oppression and liberation".

7. An illusion of control in architecture maintains power systems.

You do not need to be inside to be contained. Contained means controlled and tamed. Love is to be controlled and fascism is a form of extreme control therefore can exist with love. Domesticity in the American suburban home is controlled through the elements of the house being tamed. Gender binaries and roles of women are created to maintain the illusion of control within the bounds of the interior. But are men that powerful? The institute of museums control and curate what is exhibited but the layout may give you agency to choose where you are going and what you are consuming.

8. Power is found in the performance of gender binaries; arguments of gender binaries think about architecture.

Feminine sexuality and gender is defined as the energy of mother earth and fertility. Gender is a constructed concept and so begs the question of what feminine or masculine ultimately means. Buildings need foundations as the unstable mother earth moves. "Mother earth" being feminine defines femininity as fluidity; associating the two is an ideological or physical force. If trans is defined as transition or transformed and fluid then trans is mother earth too. Lina Bo encompasses both masculine and feminine gender constructs. The house is a container for the performance of these relationships. Parts of the house are theatrical. Manicured lawns of American suburbia in the 50's concealed hidden black labor. The taming of American domesticity were spaces

of white nervousness and control through an illusion of idyllic domestic family life; white nervousness towards black politics and nuclear war where there was a desperate cling to power.

9. Pop architecture is popular architecture for the population, for the people.

Lina Bo's work is towards pop architecture where there is attention to the buildings being in service to the people. Many of her drawings have a temporality to them where the population holds the power and liberation. It may seem that architecture can allow for spaces of joy, resistance and power to the populus if moments of otherness are revealed.

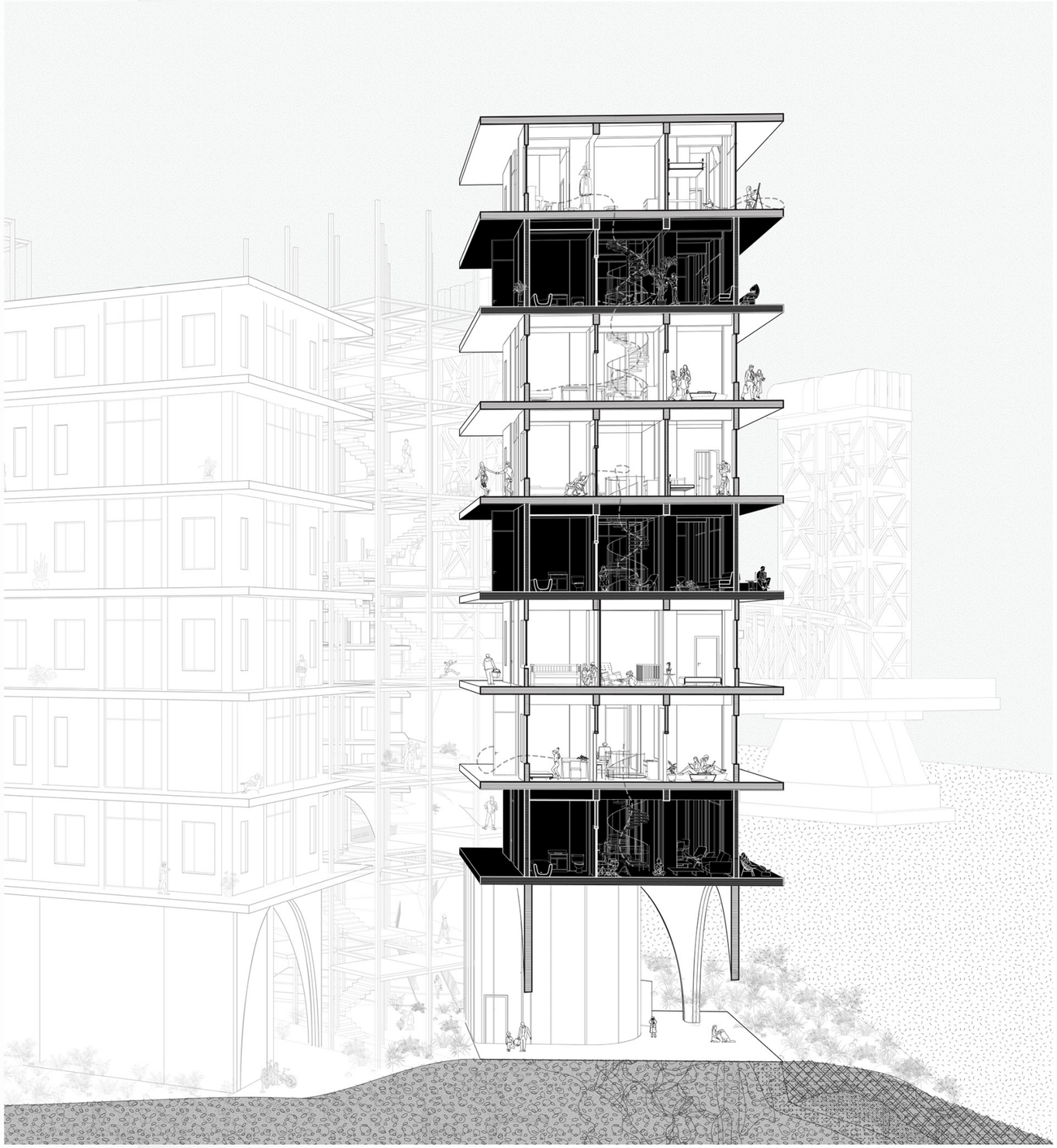
10. Trans-species architecture is pop architecture for the trans species population.

If pop architecture is egalitarian architecture where this otherness is necessary then inherently the trans definition is also necessary and none of successful architecture can exist without it. Trans-species architecture is one that facilitates moments where power is either dissipated or appropriated to trans species without the human at the center.

04 Collective Living

Critic: Esteban de Backer
In collaboration with Rebecca Siqueiros
Core Studio III

This project proposes affordable housing that works towards detoxification of the heavily industrialized South Bronx site and emphasizes a reduction in waste. Through a collective housing design, resources are shared and objects and space divert from privatization. To challenge imposed ways of living through conventional housing plans, we propose individual units that can be configured to adapt to different co-living situations from intergenerational families to throuples, to elderly individuals. Based on research of the site's ecology, the design of the ground floor unites the garden on the east side of the site with the waterfront. Specific plants, such as poplar trees, and flood resilient plants work as phytoremediation agents, absorbing toxicity through their roots and into their cellular structure. These plants have been placed throughout the site based on their resilience to flooding and adaptation to high or minimal light conditions. Residents of the South Bronx are connected to the water and have outdoor space that they can occupy and collectively participate in through programmatic elements focusing on reconstruction, reuse, and detoxification.



CORE III Housing, Fall 2022
Esteban De Backer

NEW STANDARDS

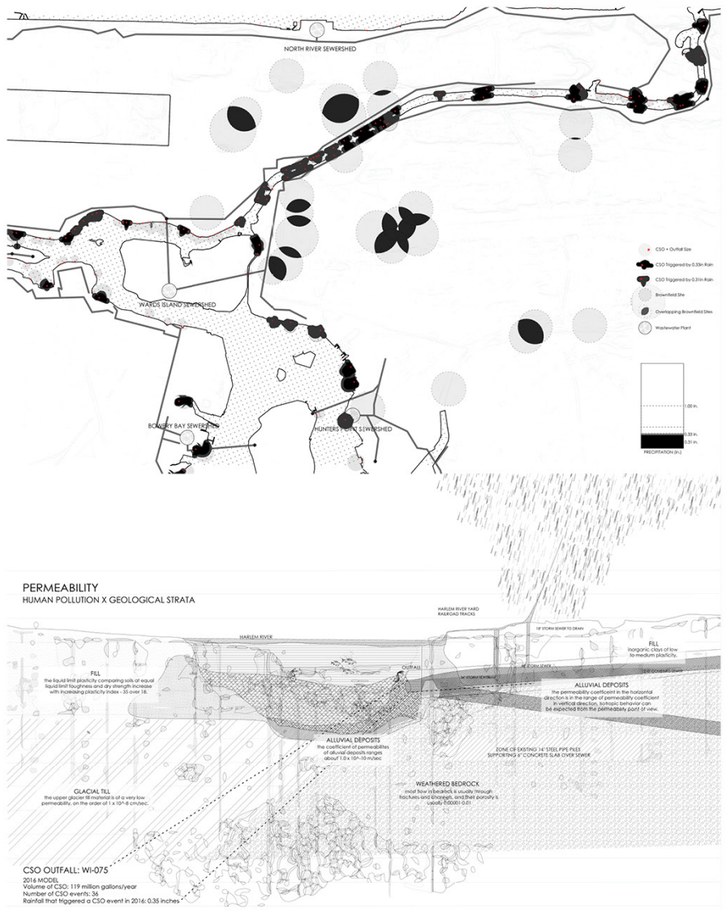
Anais Halfternmeyer
Daniel Li
Duncan Tomlin

Emilie Kern
Jason Li
Lula Chou

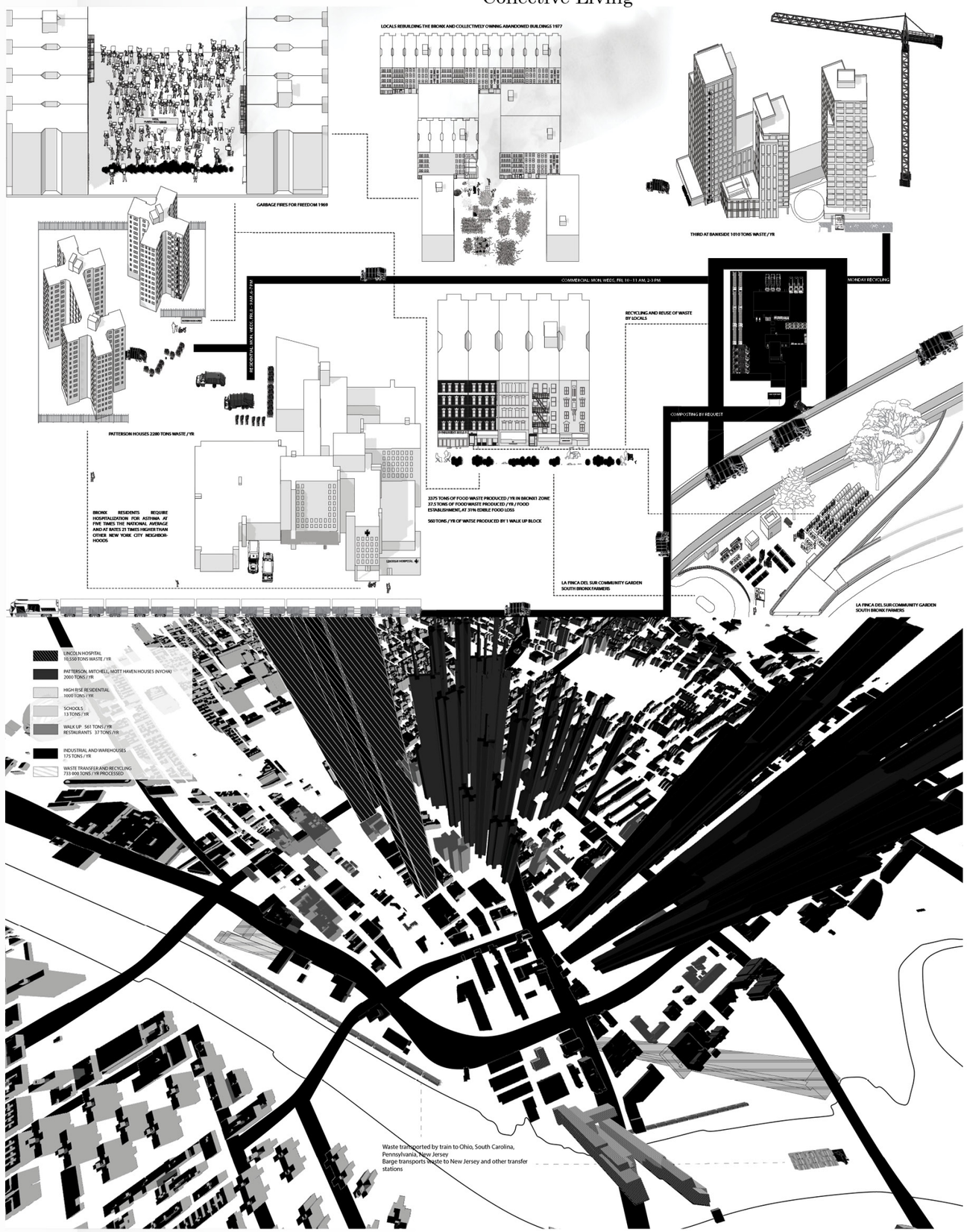
Maura Costello
Rebecca Siqueiros
Sarah Bruce-Frisen

Shiyu Lyu
Steven Gan
Tasha Akemah

Studio collective drawing showing research on traffic, industrialization, consumption, waste generation, CSO outfalls, air pollution, land ownership, flood levels, and community groups or programs. Our site analysis depicted a heavily industrialized area where locals of South Bronx have little access or ownership to healthy outdoor public space.



Research at multiple scales showing geological composition, pollution and waste (city: top left, site: bottom left, street level: top right, borough: bottom left).



Collective Living

Two floors share one collective level. Each building is connected through an open frame inviting the neighborhood to move through the space vertically and engage in the growth and cultivation of the spaces within the frame. All residents have access to a large dining table, outdoor space, libraries, learning space, and daycares. Ground floor spaces break the grid above and extend to a double height, acting as a sacrificial landscape for future flood predictions.

Ground floor plan has four main programmatic elements: detoxification landscape; recycling center/work shop; open market; day care for young and elderly, all with an emphasis on engaging with the landscape.

Common Buffalo Grass (Bouteloua dactyloides).
Detoxifies common agro-chemical residues such as well-known pesticides and herbicides related to atrazine and metalochlor.

Poplar tree (Populus deltoides).
Removes chlorinated solvents such as trichloroethylene, and carcinogenic carbon tetrachloride, with 95% substance removal. Can degrade petroleum hydrocarbons like benzene or paint thinners.

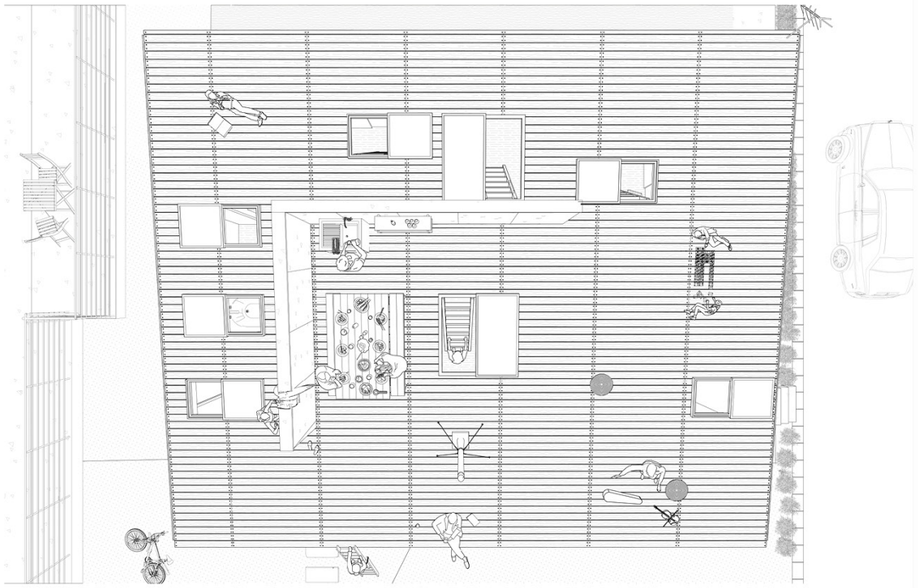
Indian grass (Sorghastrum nutans).
Detoxifies common agro-chemical residues such as well-known pesticides and herbicides related to atrazine and metalochlor.

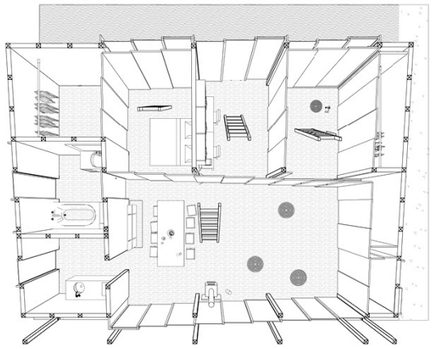
Willow (Salix species).
Roots have demonstrated response of Salix alba L. to heavy metals and diesel viability, accumulating levels of heavy metals: they absorb Cd, Ni, Pb, and mixed heavy metals like diesel fuel polluted sites.

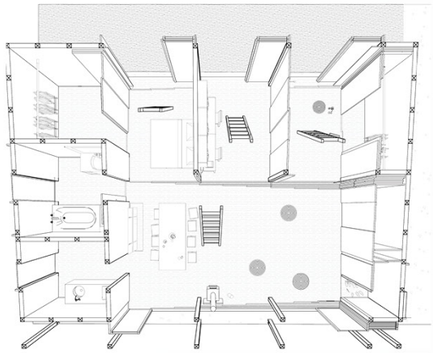
Western Wheatgrass (Pascopyrum smithii P.A. Love).
Detoxifies common agro-chemical residues such as well-known pesticides and herbicides related to atrazine and metalochlor.

Alpine Pennygrass (Noccaea caerulescens).
Removes cadmium, zinc, iron, and manganese. Is able to remove 10 times more cadmium than any other known soil cleaning plant.

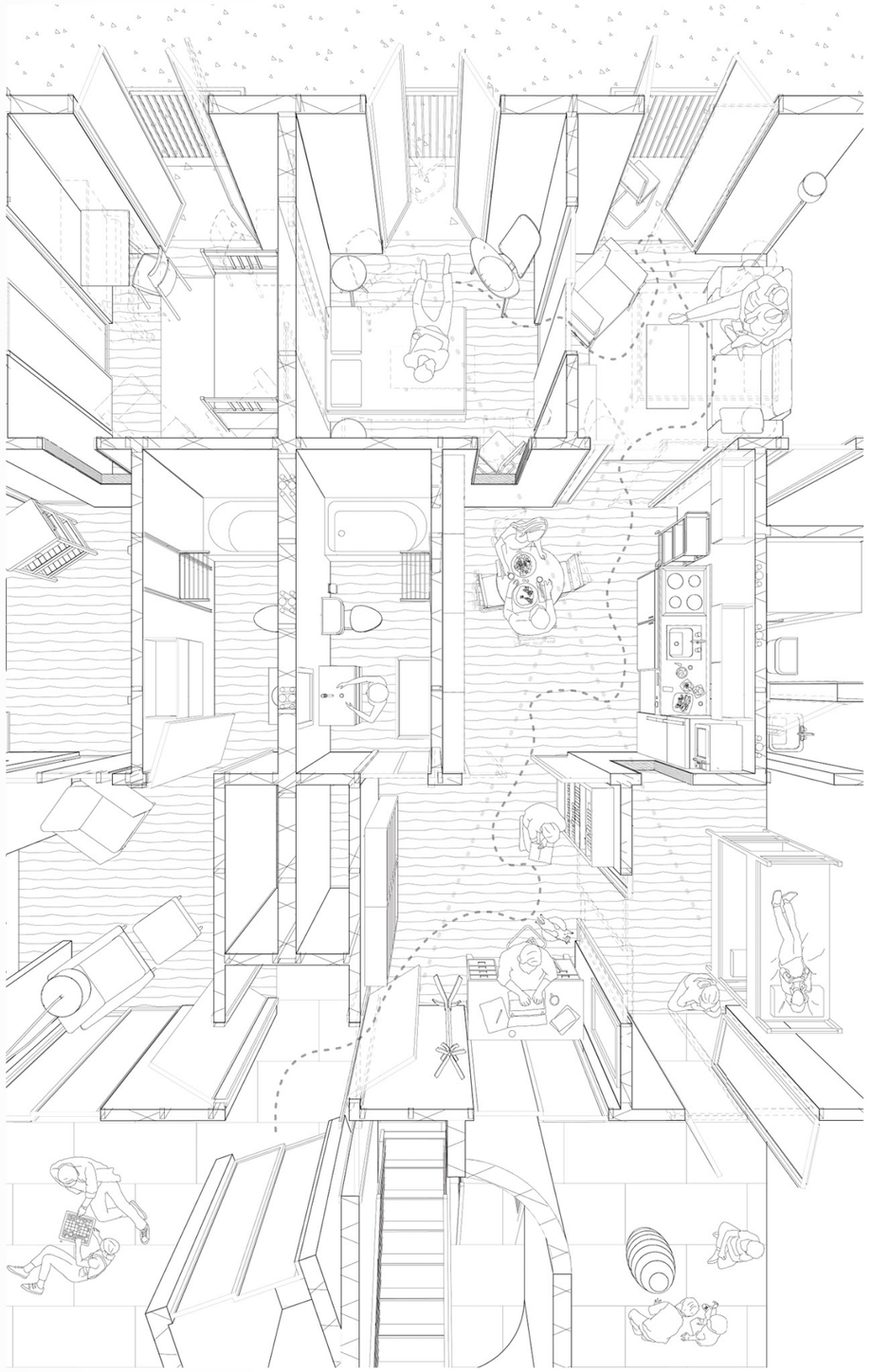
CSO Outfall: WI-075.
2016 Model
Volume of CSO: 119 million gallons/year
Number of CSO events: 36
Rainfall that triggered a CSO event in 2016: 0.35 inches.



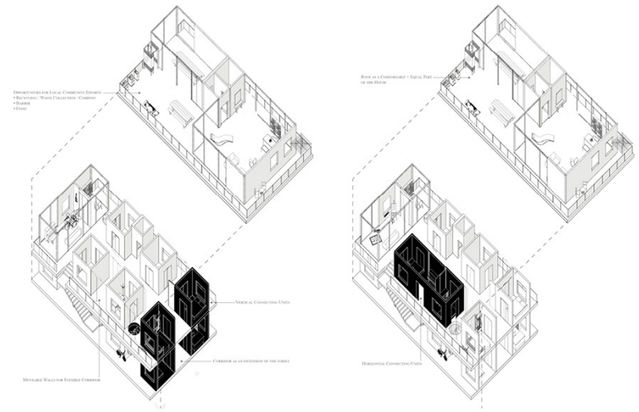


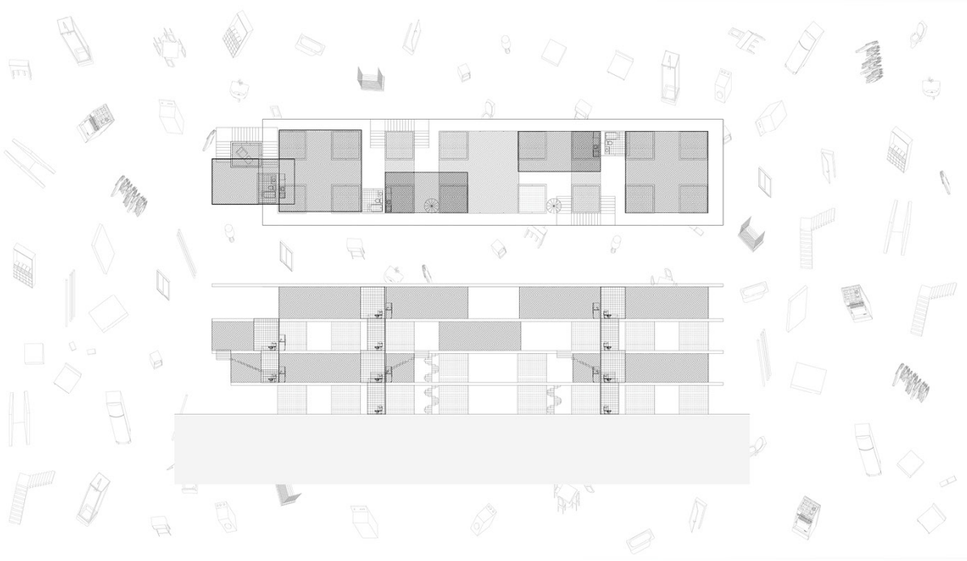


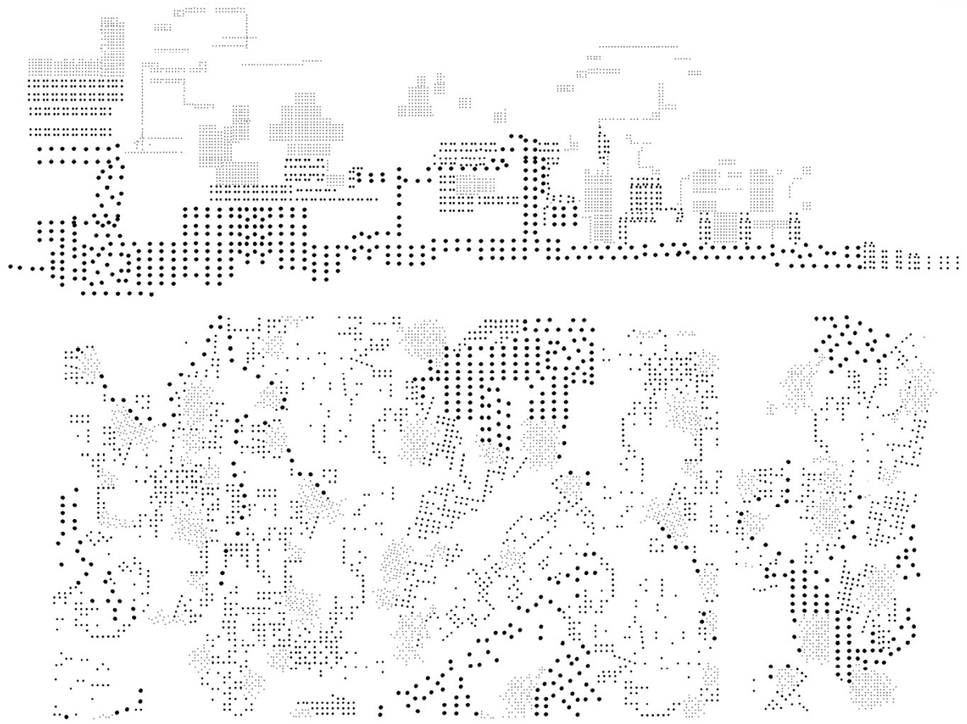
Precedent studies of Roof House by Tezuka Architects, and 110 Rooms by Maio.



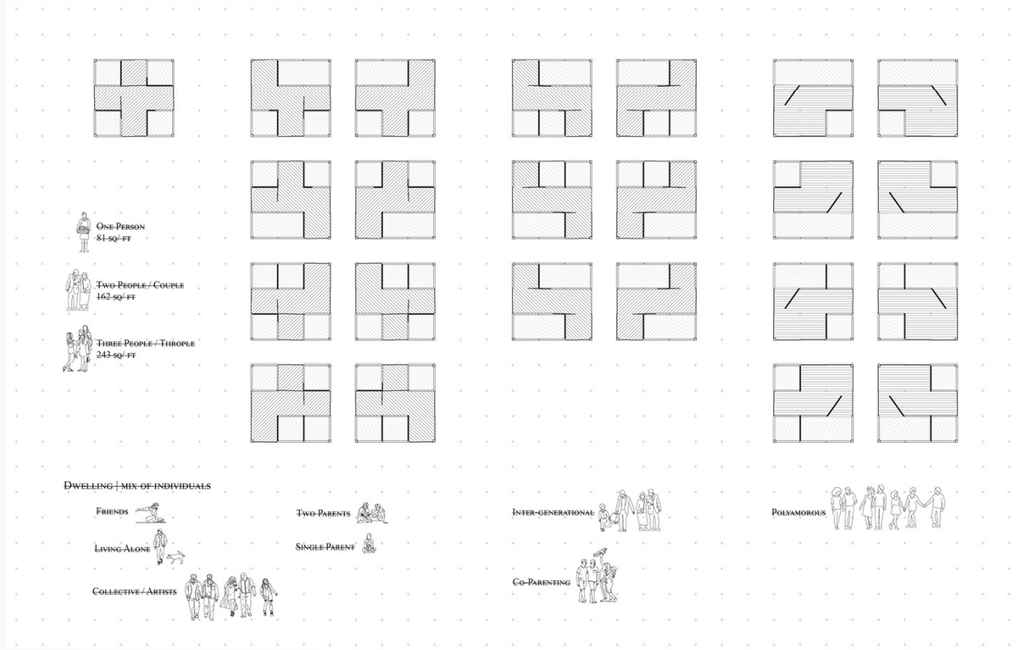
Each unit has an equal amount of collective space that can be appropriated semi-privately at certain times. Families that change over time can acquire rooms and habitate an entire floor.

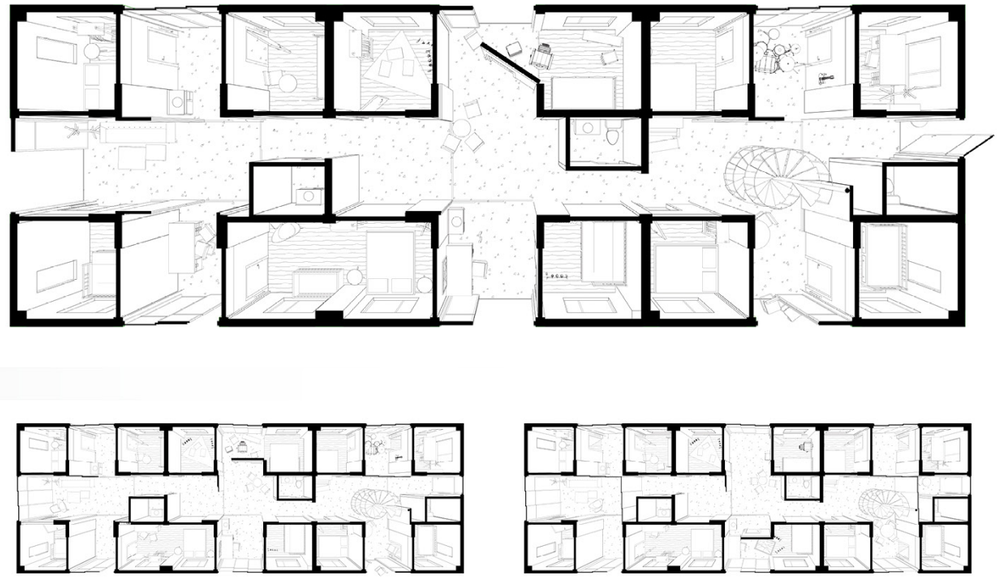


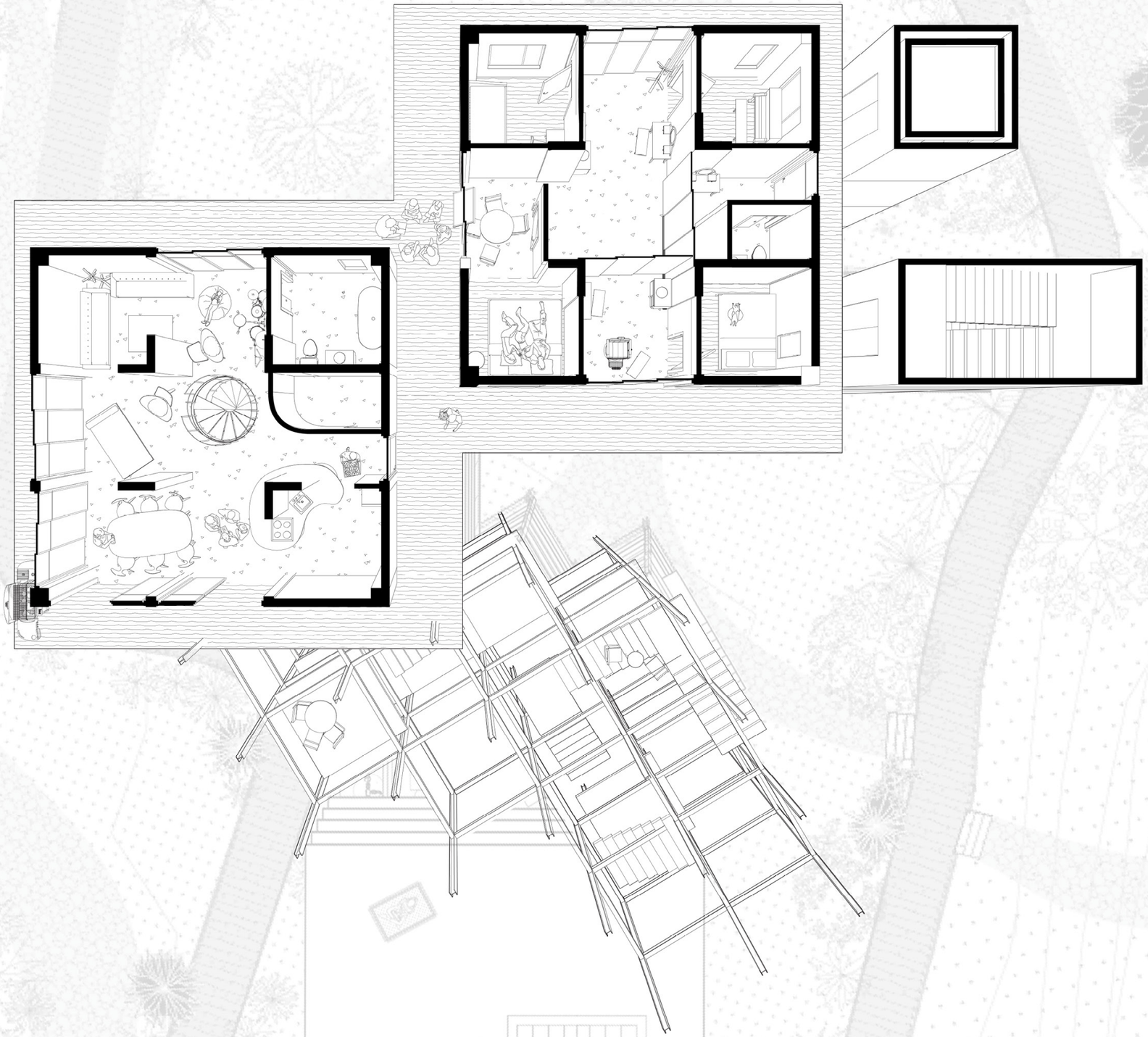


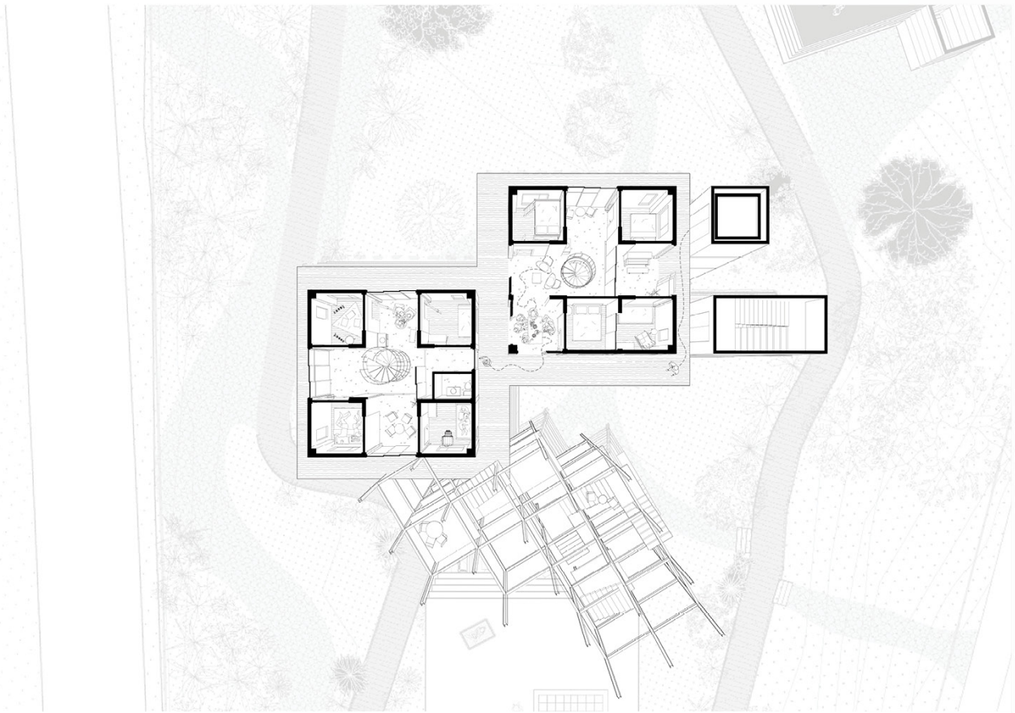


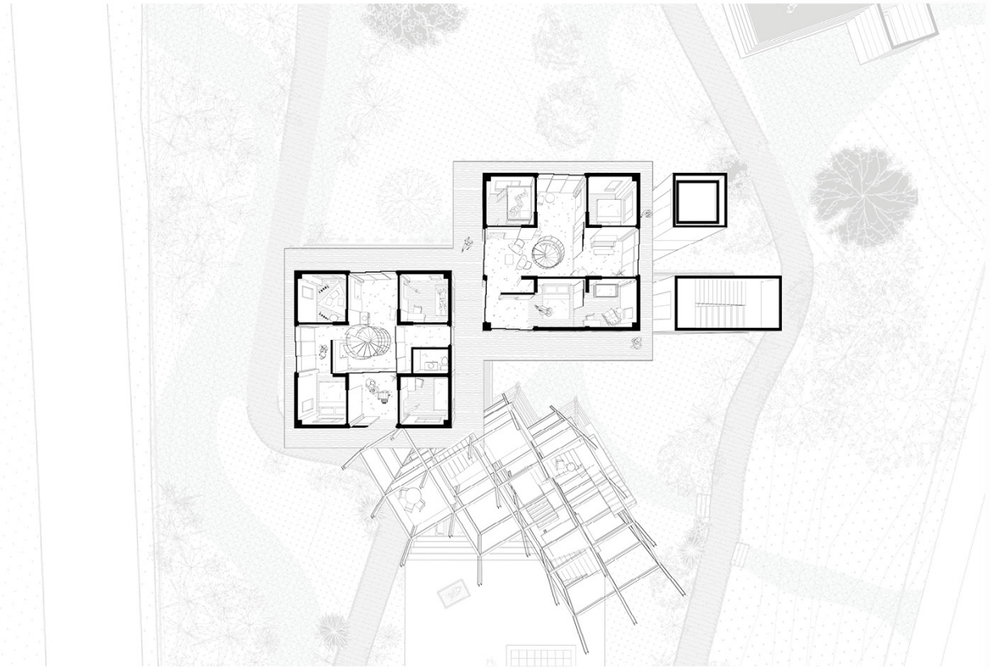
New York HPD guidelines define the minimum sized room based on the inhabitance of two people. Redefining this standard to allow for three people we explored schemes of 9'x9' rooms in sets of 4 to allow for opportunities of combinations that facilitate different living situations of non-traditional families.



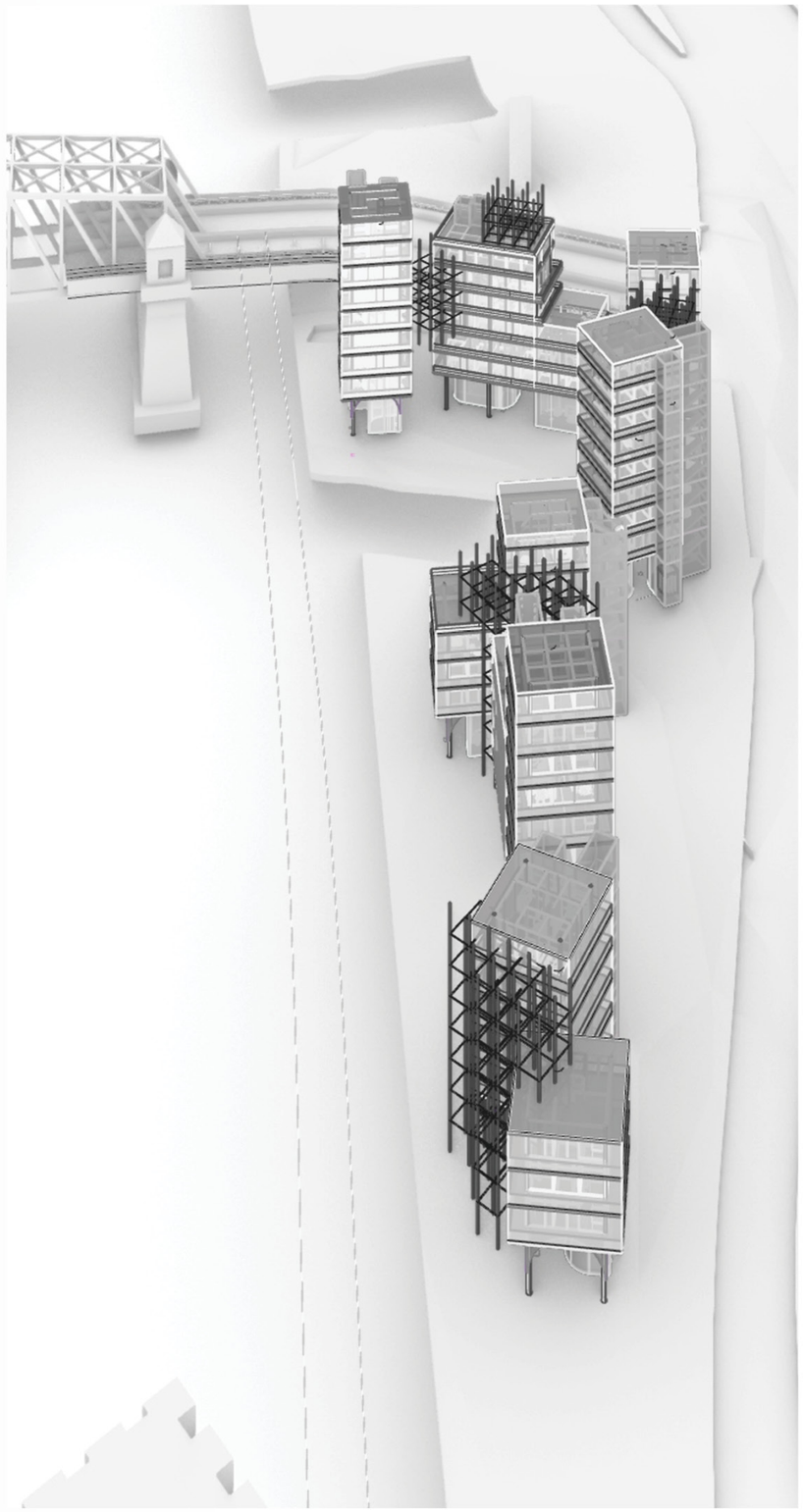








Multiple living situations can be created from the same structure.



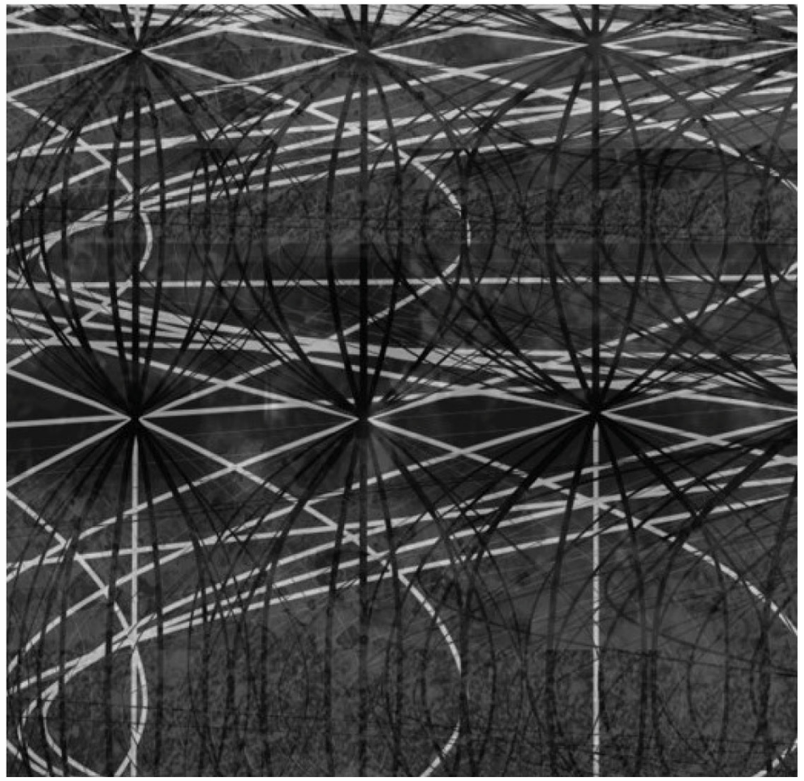
05 School For The City

Critic: Karla Rothstein
Core Studio II

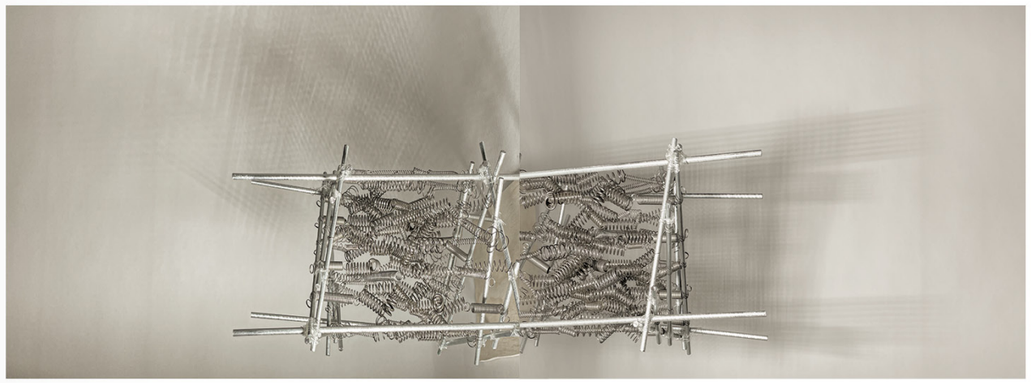
While developing a design for the school, this project evolved from investigating the dynamics of tension and release and consequences of difference within this system.

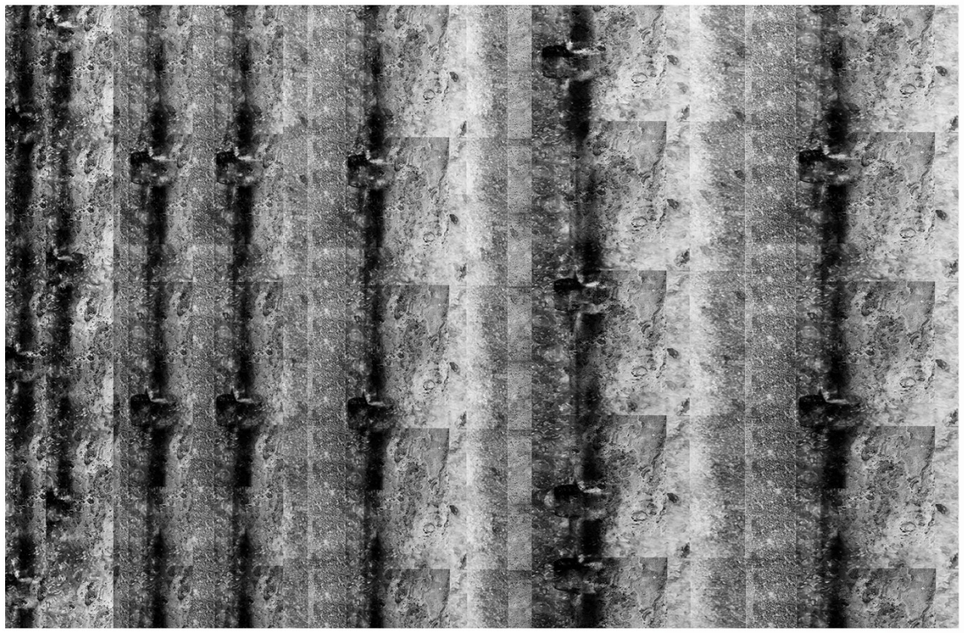
The tensions between events that happen inside a school versus its relationship with the outside and its connection with the surrounding can be explored by considering public schools as civic infrastructure. How can a school be a refuge beyond a space students' can call their own and feel safe in? This project explores a model for a school that is ecologically engaged within the lower east side and essentially is self-sustained in gray water. The school's roof undulates to increase surface area for water collection. Water infrastructure throughout the school is used as opportunity for moments of learning, play, and respite - dictating placement of classrooms.

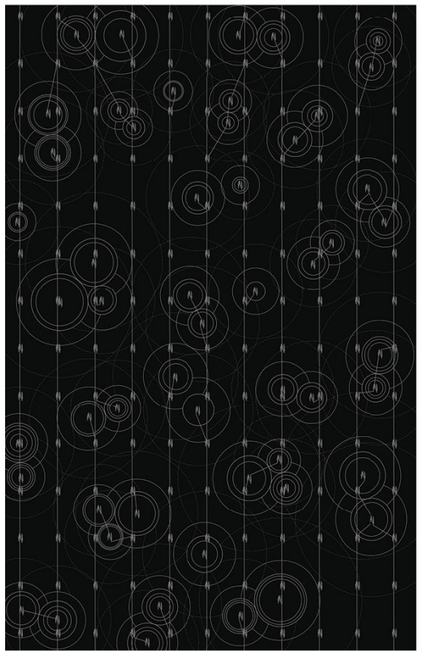
Moments of release were translated into levels of energy that a child or teenager fluctuates in throughout the day. Dictating moments of calmness vs high energy in the design that pair with the program of learning, playing, resting, these moments are intertwined with the infrastructure of the school that engages with city's water.



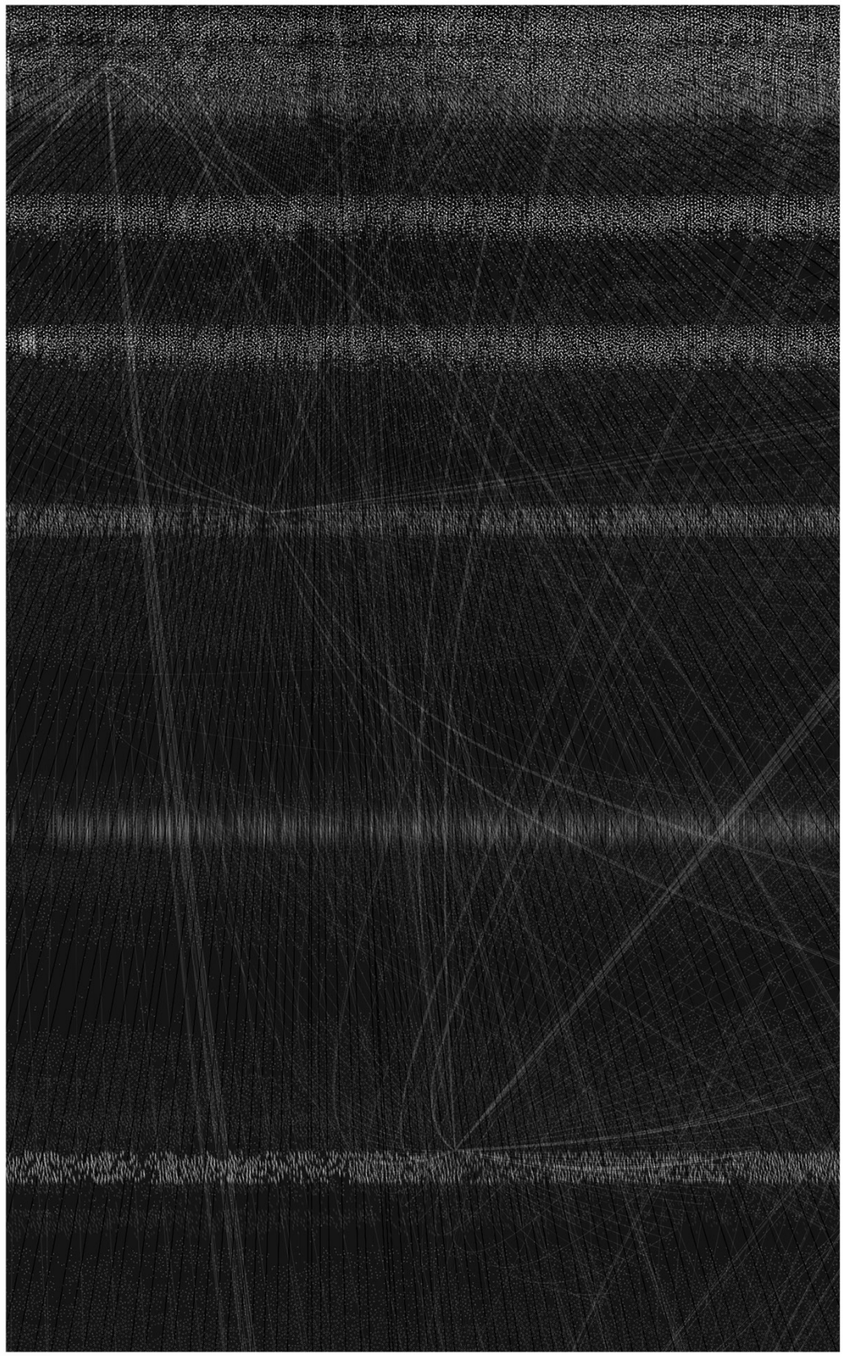
Reconfigurable prototype models exploring tension, absorption, resistance, and torsion where the system's relationships of densities and gradients are altered.



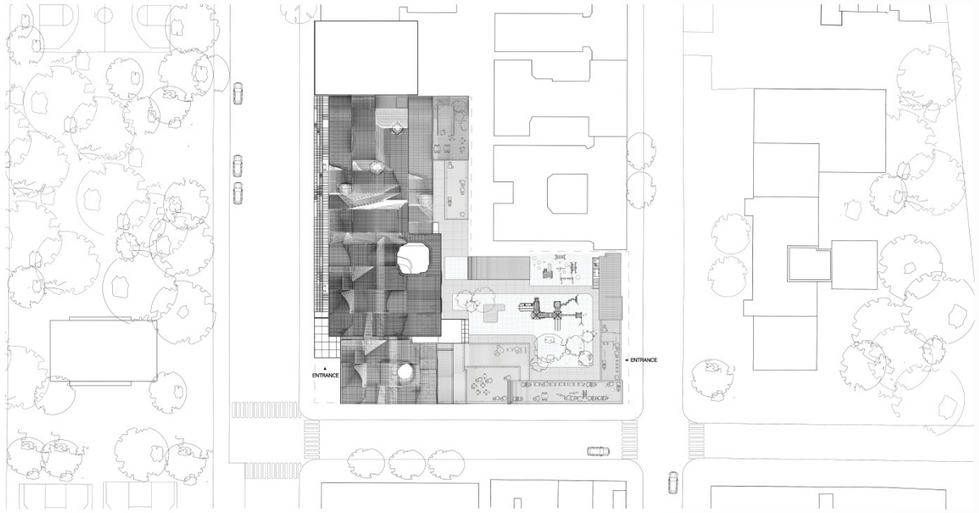




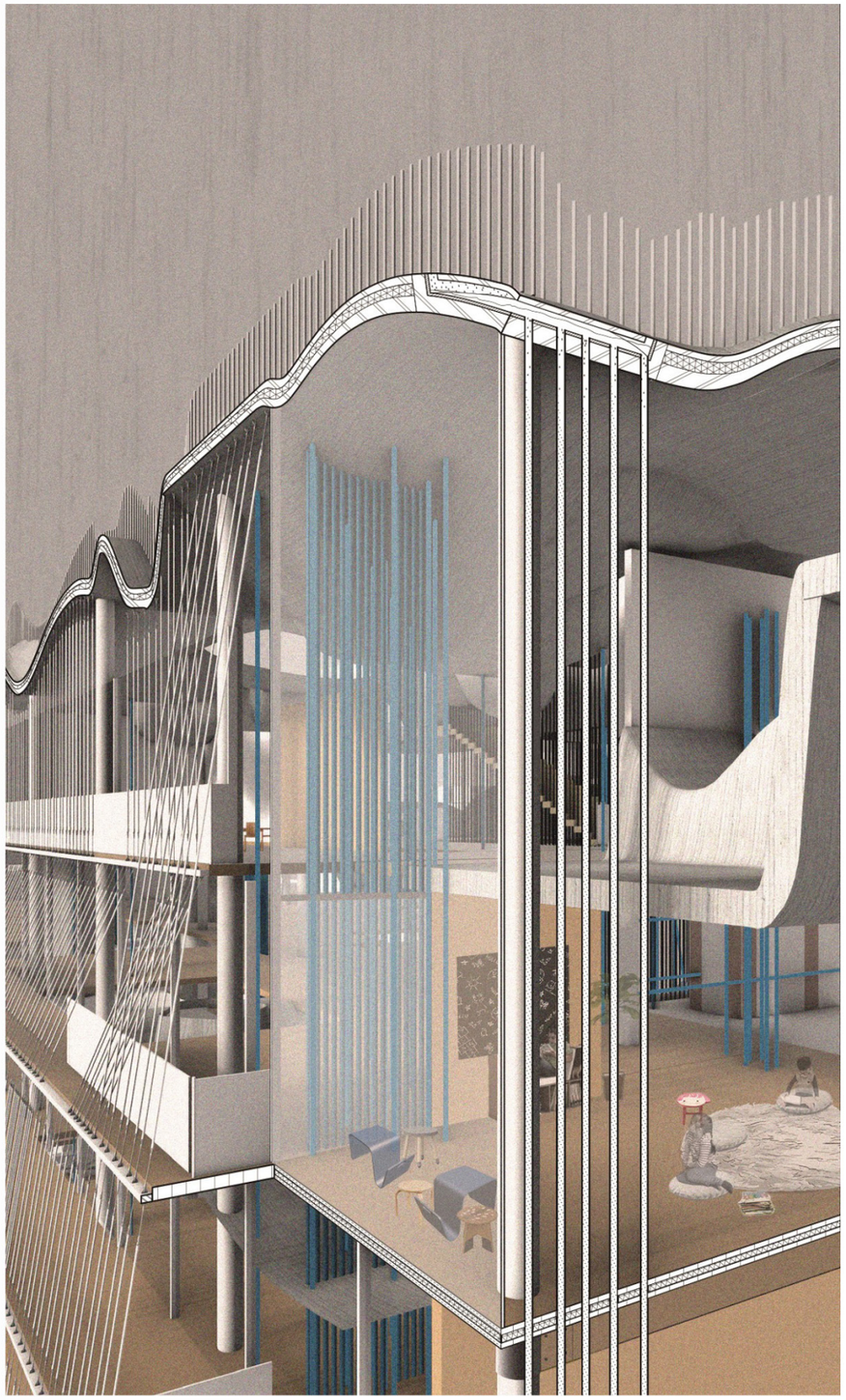

STOP
GUN

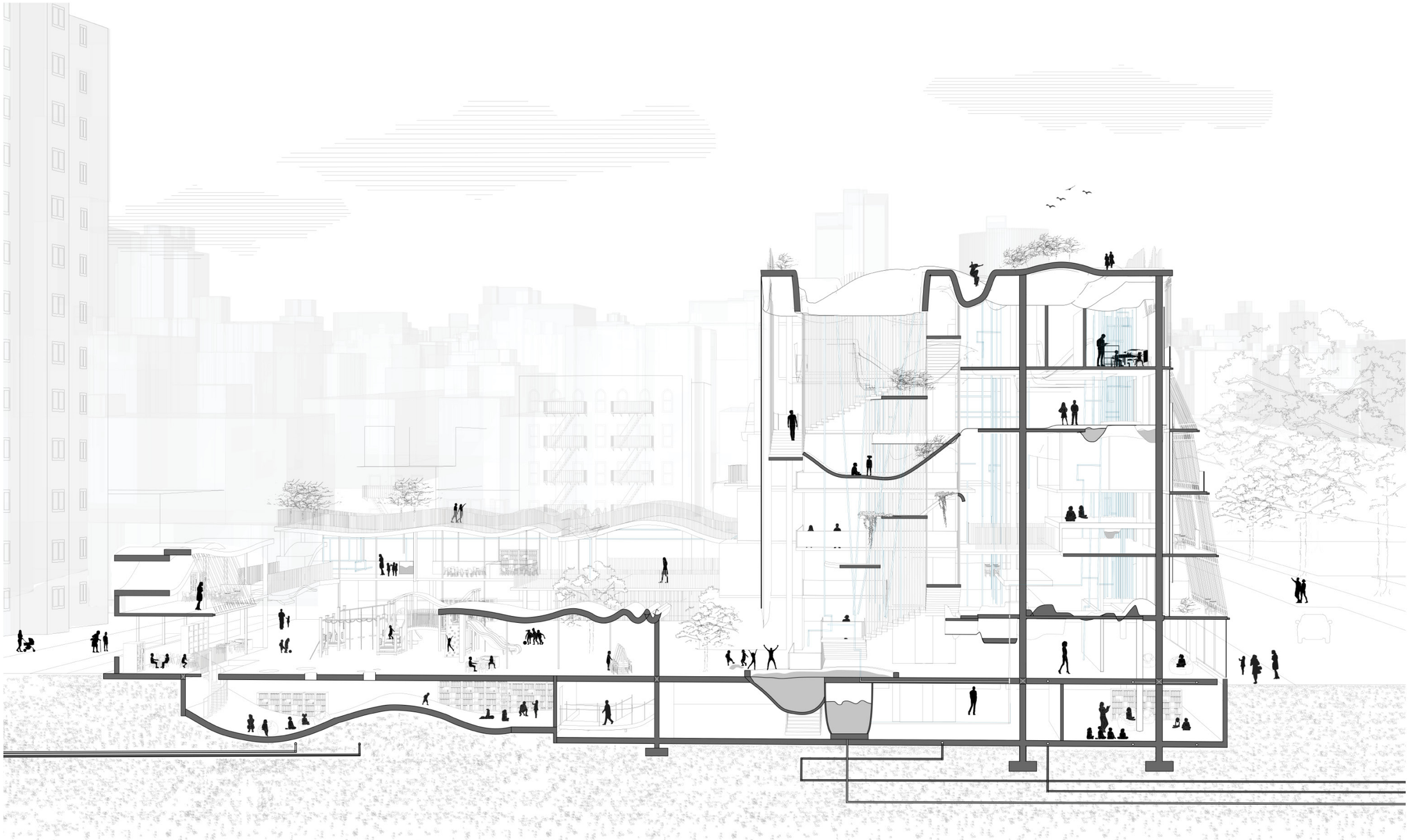


Collective Living



Water piping and infrastructural systems dictate classroom, play spaces, and interaction zones.





06 Make: Transforming the Found Object

Critics: Ada Tolla and Giuseppe Lignano (LOT-EK)
MAKE

reverting processed wood to what it was before

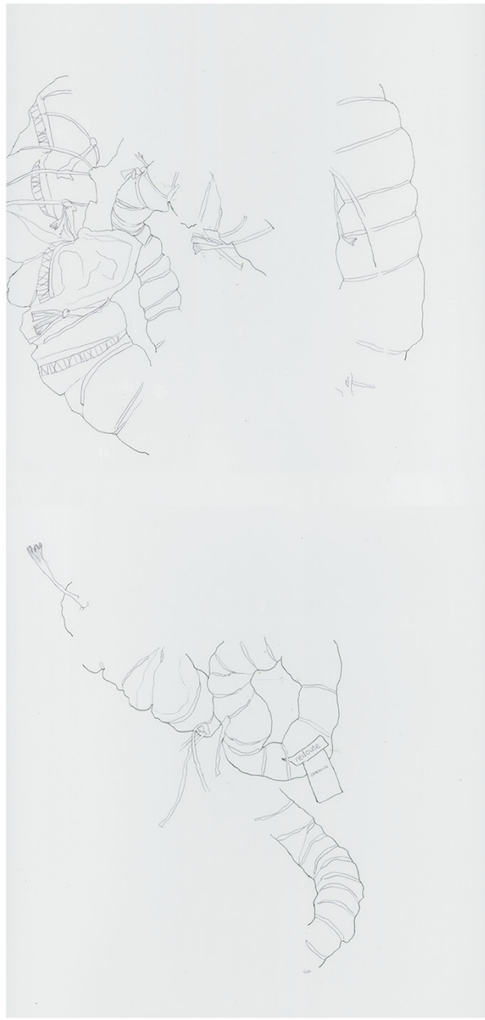
wood from a bookshelf

wood. unused bookshelves from my friend's backyard in greenpoint. reclaimed barnwood. it was sitting there for years, moss accumulating. it's very nice wood. what was the bookshelf in its past life... burning it, torquing it to make it light and float revealing what's below prior to its processed life as a shelf.

one jean jacket, 2 shirts, 2 pairs of pants

fabric from my old clothes

old clothes that i have kept for years to make new clothes out of. rolling and bonding, nothing inside. one of these tops is a tube top that a former roommate gave me. i wonder what life it had before. i never wore it.



flimsy plastic can be structure too

plastic shower curtain from by bathroom (old)

it was time to change my shower curtain. this would otherwise have been trash.
rolling and melting to see what this flimsy plastic could hold up.

the spine of an AC unit

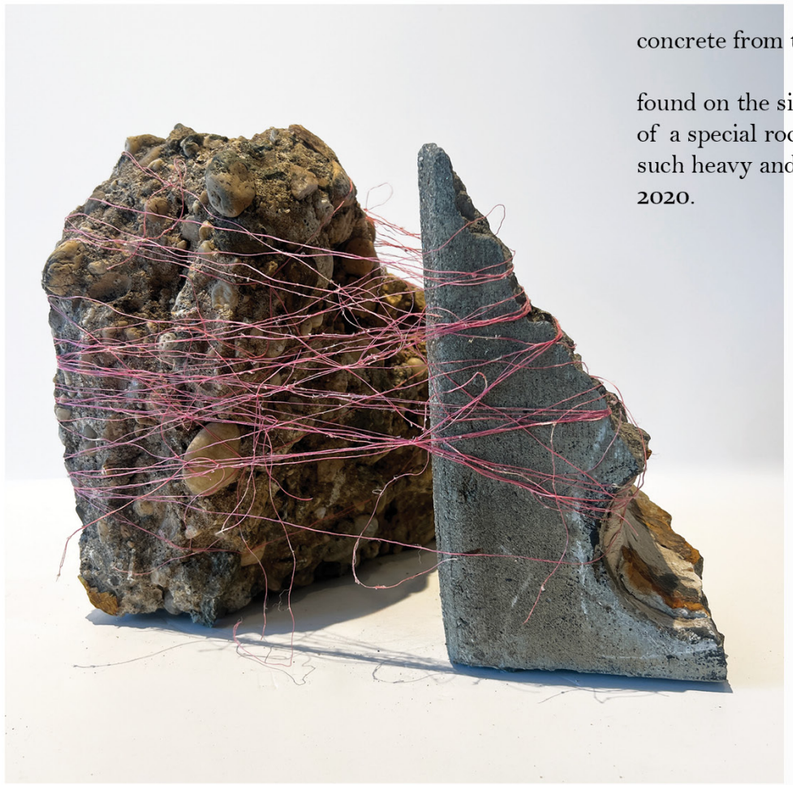
metal from an AC unit at a scrapyard

i asked the workers at a scrapyard in brooklyn if i could take some of their metal scrap. they directed me to a giant pile. i opened up my suitcase and filled it with AC unit parts. back in the shop i sanded and bent, it felt like i was releasing the captured soul of this AC unit.

bonded apart 1 and 2

concrete from the side of the road in harlem

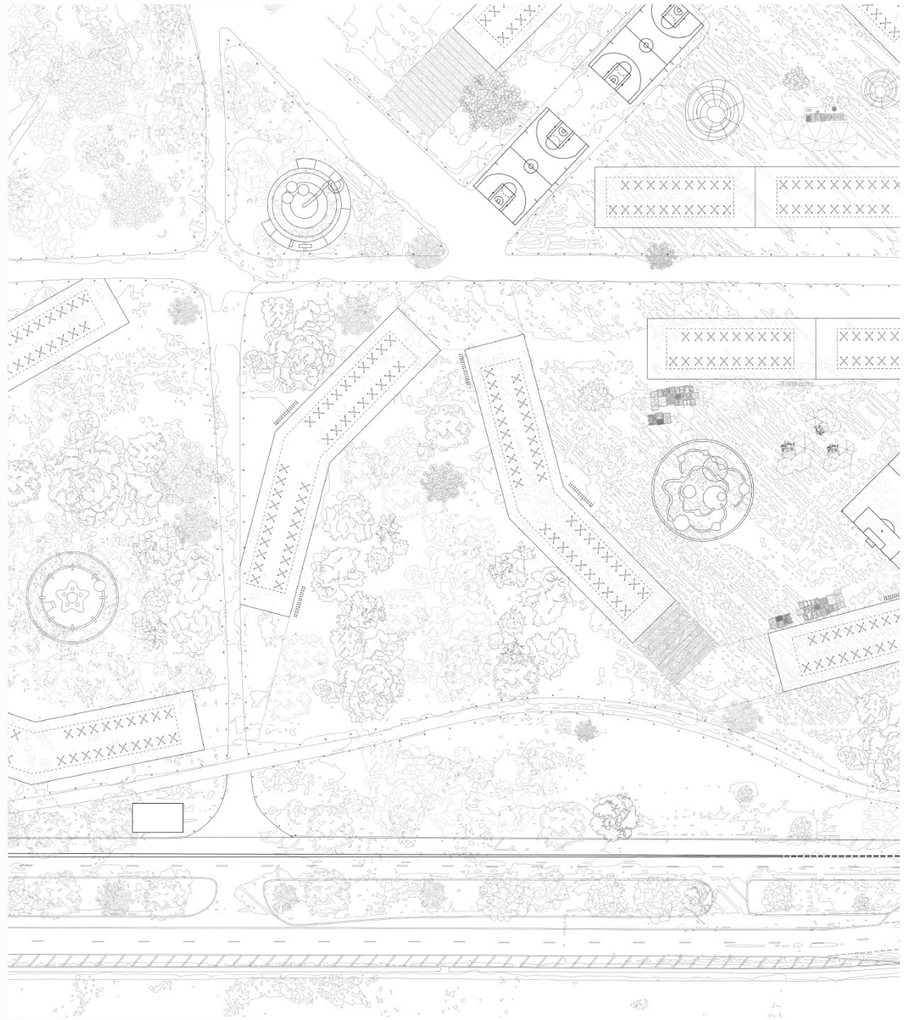
found on the sidewalk in harlem. a woman saw me carrying them and said “that better be a hell of a special rock”. there’s something so uncomfortable about the thinness of the string around such heavy and intimidating material. i found this fishing net on the beach at fire island in 2020.



07 At Home in Transit

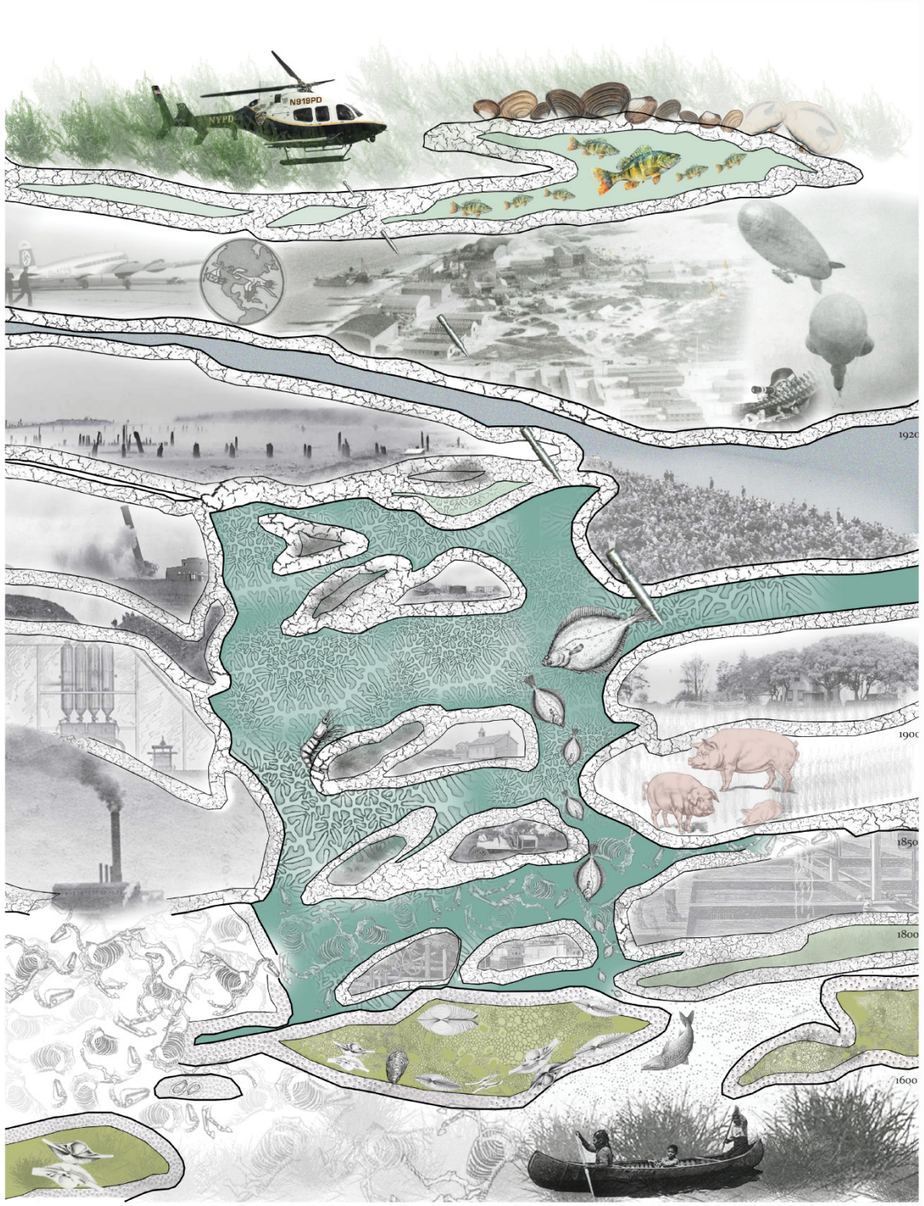
Critic: Håvard Breivik-Khan
In collaboration with Senait Araya
Advanced Studio IV

Climatic and politically motivated displacement are not exceptional events. Displaced persons are often portrayed through numbers; human experiences are quantified, and so are the standards used by international humanitarian organizations like UNHCR and the Sphere project. Our project proposes two systems of dwelling: immediate care for stays up to one week that utilizes an existing hangar adapted for social programs on the ground floor and collective living on the upper levels, and long-term care for transition periods that last weeks, months or even years, newly constructed with wood, recycled brick, and aluminum. Although the conditions are spatially different, they both offer spaces of safety, rehabilitation, and home-making during displacement, and both respond to the climatic conditions of the site.

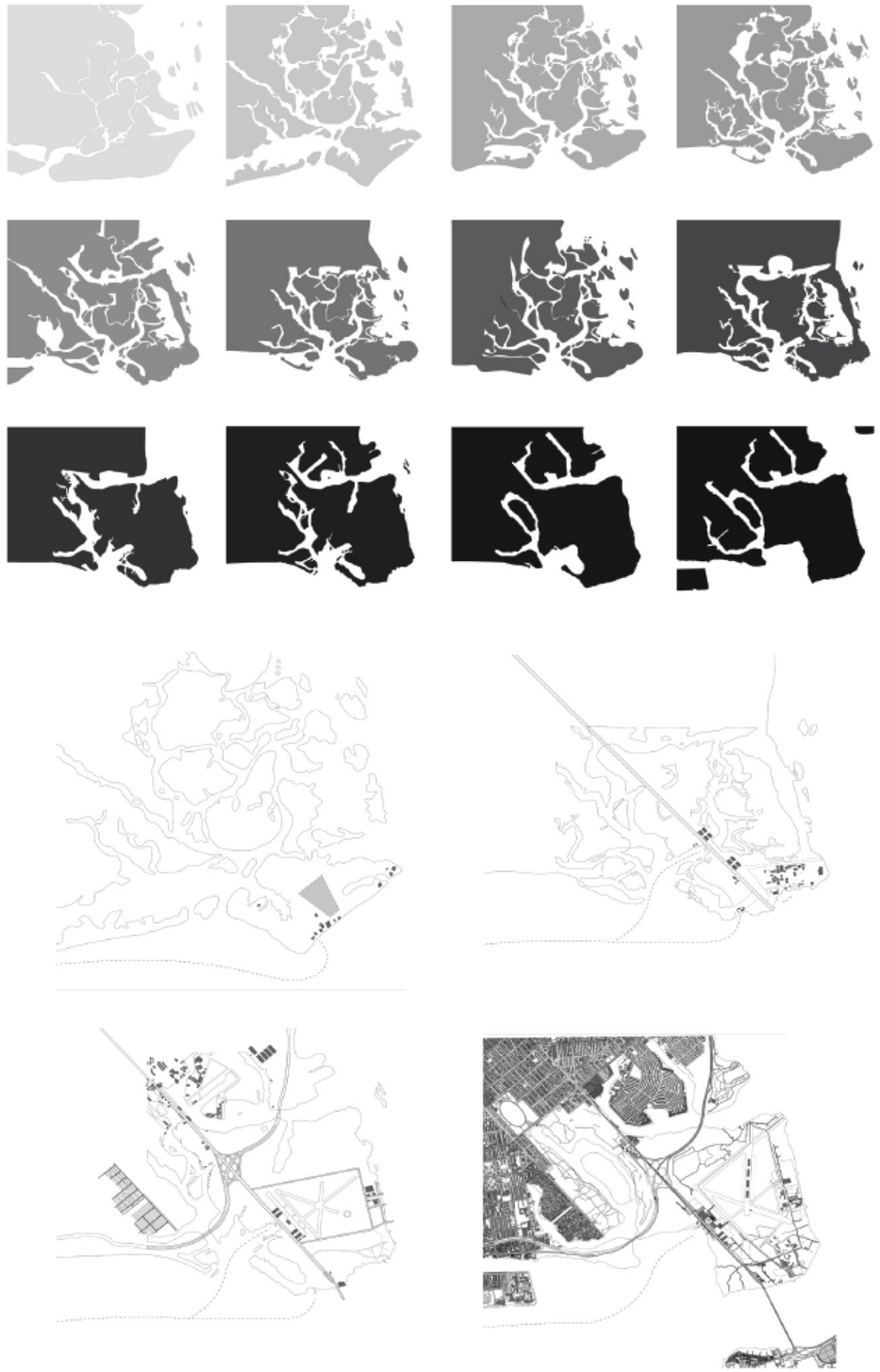


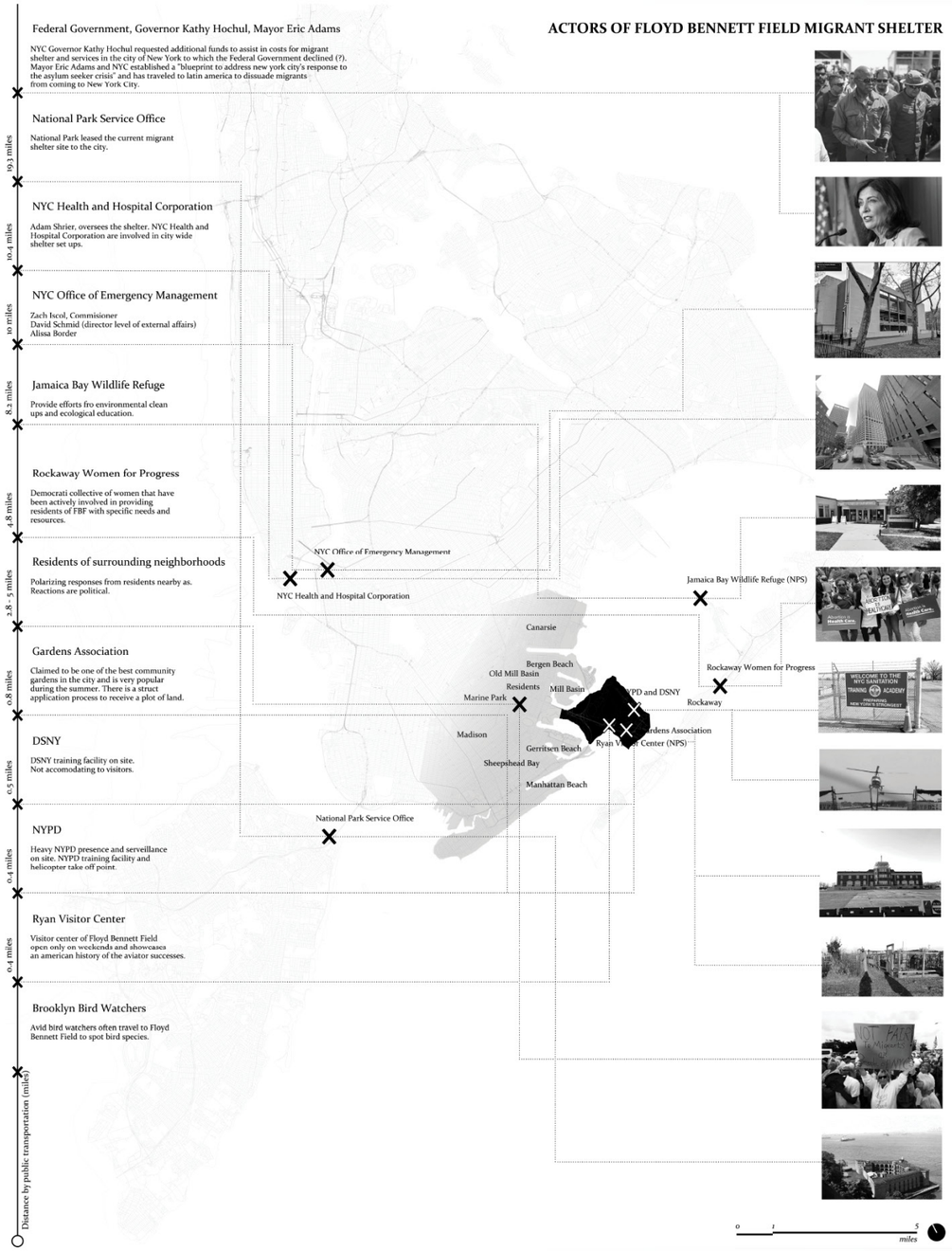
In 2012, New York City housed 6,700 people displaced by Hurricane Sandy; by 2023, it sheltered 95,000 migrants (Department of Homeland Security). We studied displacement patterns and responses. At Floyd Bennett Field, current migrant shelters are overcrowded, unsafe, and isolated—reflecting both historical neglect and the site's ongoing disconnection from the city. This underscores the need for new models of migrant housing that serve both displaced populations and local communities.

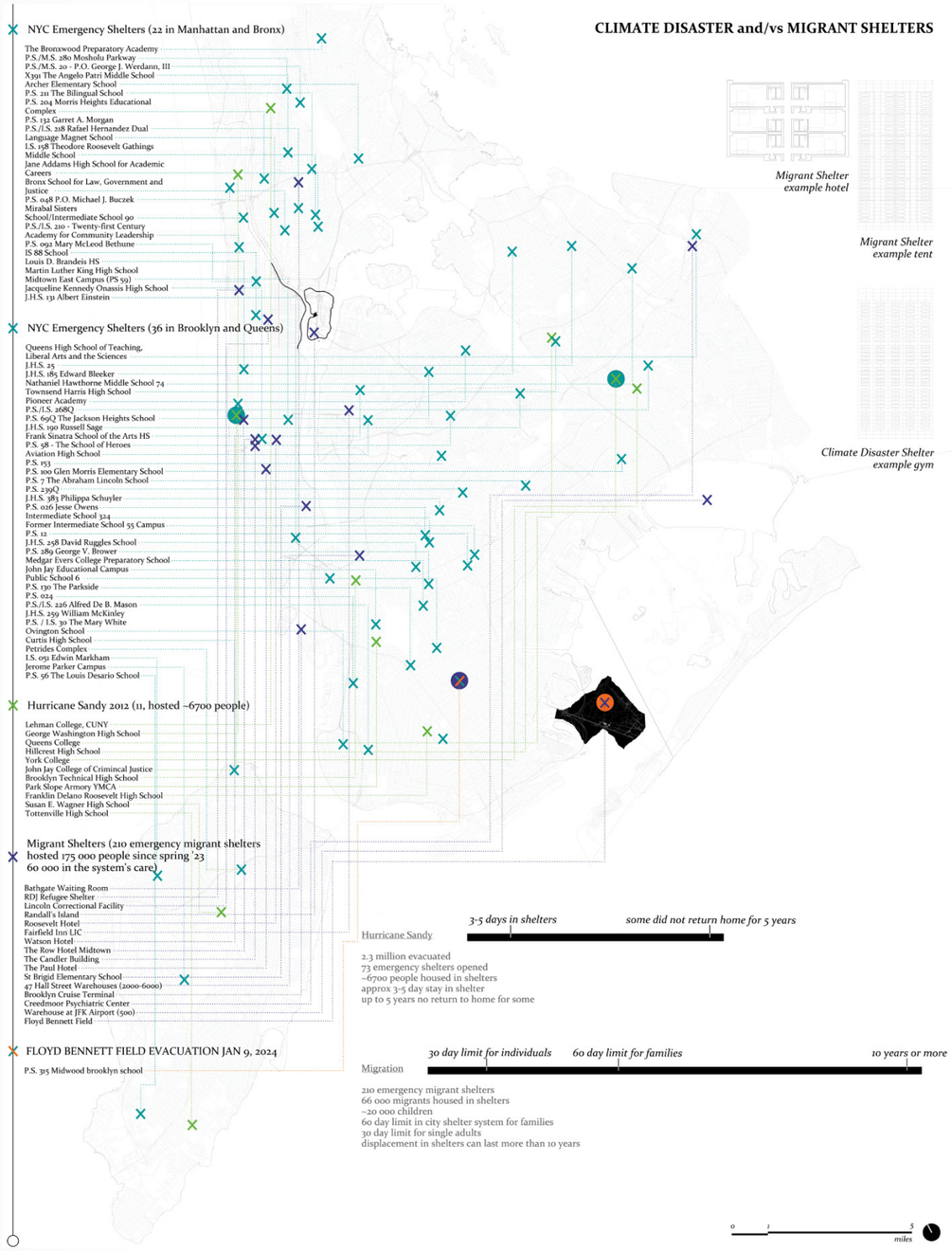
Formerly known as Barren Island, the site was mostly salt meadows in the 1600s. By the 1800s, it became a landfill and home to horse rendering and animal processing plants, inhabited by factory workers. In the 1930s, Robert Moses evicted the population to build a municipal airport, later converted into a Naval Air Station. Today, Floyd Bennett Field is a National Park layered over landfill and buried histories. Its abandoned airport buildings remain, while one runway now holds five large tents sheltering 2,500 migrants.

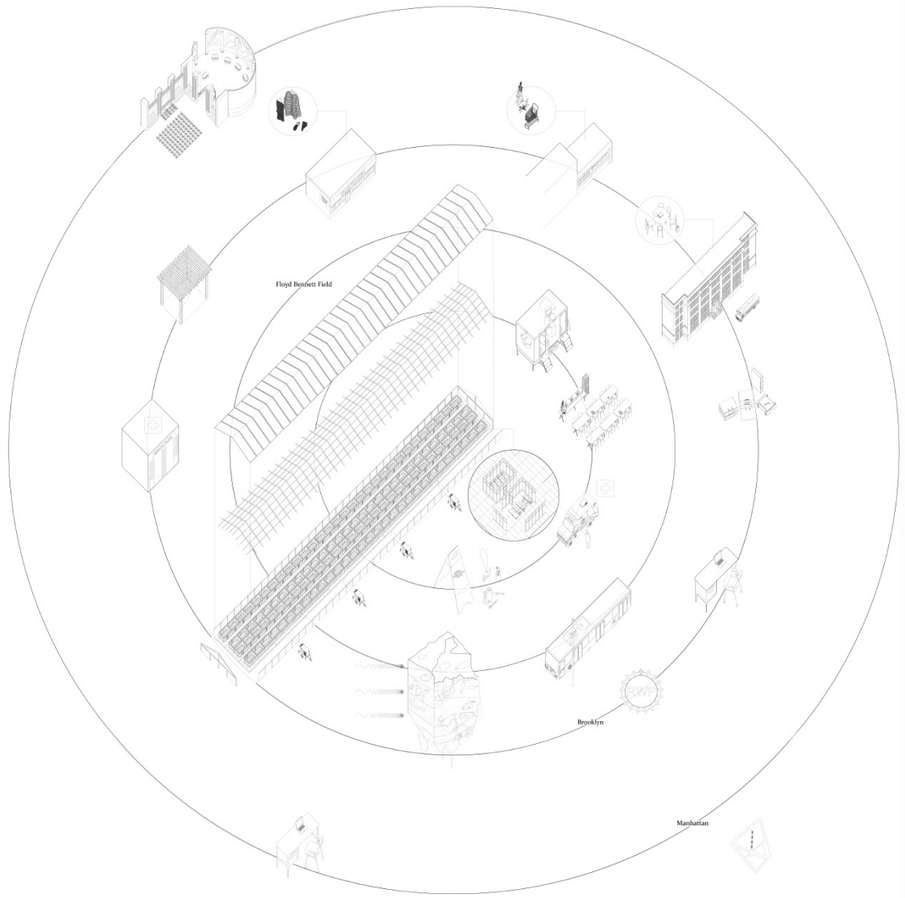


Historical analysis of Floyd Bennett Field looking at social conditions, land change, and accessibility.




ACTORS OF FLOYD BENNETT FIELD MIGRANT SHELTER
Federal Government, Governor Kathy Hochul, Mayor Eric Adams
NYC Governor Kathy Hochul requested additional funds to assist in costs for migrant shelter and services in the city of New York to which the Federal Government declined (?). Mayor Eric Adams and NYC established a "blueprint to address new york city's response to the asylum seeker crisis" and has traveled to latin america to dissuade migrants from coming to New York City.
National Park Service Office
National Park leased the current migrant shelter site to the city.
NYC Health and Hospital Corporation
Adam Shrier, oversees the shelter. NYC Health and Hospital Corporation are involved in city wide shelter set ups.
NYC Office of Emergency Management
Zach Iscol, Commisioner
David Schmid (director level of external affairs)
Alissa Border
Jamaica Bay Wildlife Refuge
Provide efforts fro environmental clean ups and ecological education.
Rockaway Women for Progress
Democrati collective of women that have been actively involved in providing residents of FBF with specific needs and resources.
Residents of surrounding neighborhoods
Polarizing responses from residents nearby as. Reactions are political.
Gardens Association
Claimed to be one of the best community gardens in the city and is very popular during the summer. There is a struct application process to receive a plot of land.
DSNY
DSNY training facility on site. Not accomodating to visitors.
NYPD
Heavy NYPD presence and serveillance on site. NYPD training facility and helicopter take off point.
Ryan Visitor Center
Visitor center of Floyd Bennett Field open only on weekends and showcasea an american history of the aviator successes.
Brooklyn Bird Watchers
Avid bird watchers often travel to Floyd Bennett Field to spot bird species.
19.3 miles
10.4 miles
10 miles
8.2 miles
4.8 miles
2.8 - 5 miles
0.8 miles
0.5 miles
0.4 miles
0.4 miles
Distance by public transportation (miles)
NYC Office of Emergency Management
NYC Health and Hospital Corporation
Jamaica Bay Wildlife Refuge (NPS)
Rockaway Women for Progress
Rockaway
Canarsie
Bergen Beach
Old Mill Basin
Residents
Mill Basin
Marine Park
Madison
Gerritsen Beach
Sheepshead Bay
Manhattan Beach
National Park Service Office
0
1
5
miles


CLIMATE DISASTER and/vs MIGRANT SHELTERS
NYC Emergency Shelters (22 in Manhattan and Bronx)
The Bronxwood Preparatory Academy
P.S./M.S. 280 Mosholu Parkway
P.S./M.S. 201 - P.O. George J. Werdann, III
X391 The Angelo Patri Middle School
Archer Elementary School
P.S. 211 The Bilingual School
P.S. 204 Morris Heights Educational Complex
P.S. 132 Garret A. Morgan
P.S./I.S. 218 Rafael Hernandez Dual Language Magnet School
I.S. 158 Theodore Roosevelt Gathings Middle School
Jane Addams High School for Academic Careers
Bronx School for Law, Government and Justice
P.S. 048 P.O. Michael J. Buczek
Mirabal Sisters
School/Intermediate School 90
P.S./I.S. 210 - Twenty-first Century Academy for Community Leadership
P.S. 092 Mary McLeod Bethune
IS 88 School
Louis D. Brandeis HS
Martin Luther King High School
Midtown East Campus (PS 59)
Jacqueline Kennedy Onassis High School
J.H.S. 131 Albert Einstein
NYC Emergency Shelters (36 in Brooklyn and Queens)
Queens High School of Teaching, Liberal Arts and the Sciences
J.H.S. 25
J.H.S. 185 Edward Bleeker
Nathaniel Hawthorne Middle School 74
Townsend Harris High School
Pioneer Academy
P.S./I.S. 268Q
P.S. 69Q The Jackson Heights School
J.H.S. 190 Russell Sage
Frank Sinatra School of the Arts HS
P.S. 58 - The School of Heroes
Aviation High School
P.S. 153
P.S. 100 Glen Morris Elementary School
P.S. 7 The Abraham Lincoln School
P.S. 239Q
J.H.S. 383 Philippa Schuyler
P.S. 026 Jesse Owens
Intermediate School 324
Former Intermediate School 55 Campus
P.S. 12
J.H.S. 258 David Ruggles School
P.S. 289 George V. Brower
Medgar Evers College Preparatory School
John Jay Educational Campus
Public School 6
P.S. 130 The Parkside
P.S. 024
P.S./I.S. 226 Alfred De B. Mason
J.H.S. 259 William McKinley
P.S. / I.S. 30 The Mary White Ovington School
Curtis High School
Petrides Complex
I.S. 051 Edwin Markham
Jerome Parker Campus
P.S. 56 The Louis Desario School
Hurricane Sandy 2012 (11, hosted ~6700 people)
Lehman College, CUNY
George Washington High School
Queens College
Hillcrest High School
York College
John Jay College of Criminal Justice
Brooklyn Technical High School
Park Slope Armory YMCA
Franklin Delano Roosevelt High School
Susan E. Wagner High School
Tottenville High School
Migrant Shelters (210 emergency migrant shelters hosted 175 000 people since spring '23
60 000 in the system's care)
Bathgate Waiting Room
RDJ Refugee Shelter
Lincoln Correctional Facility
Randall's Island
Roosevelt Hotel
Fairfield Inn LIC
Watson Hotel
The Row Hotel Midtown
The Candler Building
The Paul Hotel
St Brigid Elementary School
47 Hall Street Warehouses (2000-6000)
Brooklyn Cruise Terminal
Creedmoor Psychiatric Center
Warehouse at JFK Airport (500)
Floyd Bennett Field
FLOYD BENNETT FIELD EVACUATION JAN 9, 2024
P.S. 315 Midwood brooklyn school
Migrant Shelter example hotel
Migrant Shelter example tent
Climate Disaster Shelter example gym
3-5 days in shelters
some did not return home for 5 years
Hurricane Sandy
2.3 million evacuated
73 emergency shelters opened
~6700 people housed in shelters
approx 3-5 day stay in shelter
up to 5 years no return to home for some
30 day limit for individuals
60 day limit for families
10 years or more
Migration
210 emergency migrant shelters
66 000 migrants housed in shelters
~20 000 children
60 day limit in city shelter system for families
30 day limit for single adults
displacement in shelters can last more than 10 years
0
1
5
miles



Study of international humanitarian standards, New York City's right to shelter, and housing codes compared to current migrant shelter conditions at Floyd Bennett Field.

Rights that apply to all individuals	Rights which are specific to children or refugees
• The right to life • The right to non-discrimination • Freedom from torture or other cruel, inhuman or degrading treatment or punishment • Freedom from arbitrary arrest and detention • Freedom from enforced disappearance • The right to seek and enjoy asylum • The right to the equal recognition of and protection before the law • The right to an effective remedy • Freedom of movement • The right to family life and principle of family unity • The right to be registered at birth • The right to an adequate standard of living, including adequate food, clothing and housing • The right to work • The right to the enjoyment of highest attainable standard of health • The right to education • The right to participation	• The right to special protection for a child deprived of his or her family environment • Freedom of child abduction and trafficking • Freedom from underage recruitment • The prohibition of child labour • The prohibition of 'refoulement' (forced return of a refugee to country of origin) • The right of refugees to an identity document

Population Categories	Groups with Specific Needs
Boys and girls	Unaccompanied and separated children Children formerly associated with armed forces or groups Child heads of household Child spouses Pregnant girls Child survivors of gender-based violence (GBV)
Youth	Out-of-school and unemployed youth Youth formerly associated with armed forces or groups
Women	Women heads of households, including widows Women without male support Women formerly associated with armed forces or groups Survivors of GBV Pregnant women and lactating mothers
Older persons	Older persons without family or community support and/or with responsibility of children aged under 18
Person affected by sickness, disability or trauma	Sick persons without family or community support Persons with physical disabilities Persons with mental disabilities Persons living with, or at risk of, HIV/AIDS Survivors of torture
Minority groups	Ethnic and national minorities Religious minorities Linguistic minorities Nomadic/pastoral groups Lesbian, gay, bisexual, transgender, intersex (LGBTI) individuals
Men	Disenfranchised youth/men Male survivors of sexual violence Single male heads of households

Indicator	SPHERE	UNHCR	Comment
Minimum requirement of potable water (litres/person/day)	7.5–15	15–20	UNHCR's minimum allocation for survival is 7.5
Minimum distance from individual shelters to water taps and distribution points (metres)	500	200 (or a few minutes to walk)	
Maximum number of people per water tap	250	80	
Maximum number of people per well/hand pump	500	200	
Water available for hand washing at public toilets (litres/user/day)	1–2	1–2	For cleaning public toilets both recommend 2–8 litres/toilet/day
Water supply to health centres and hospitals (litres/patient/day)	40–60	40–60	
Water supply to therapeutic feeding centres (litres/person/day)	15–30	20–30	
Water supply to schools and learning centres (litres/pupil/day)	3	n/a	

Food	Type 1	Type 2	Type 3	Type 4
Maize meal/rice/bulgur wheat	400	420	350	420
Beans	60	50	100	60
Vegetable oil	25	25	25	30
Canned fish/meat	-	20	-	30
Fortified blended food	50	40	50	-
Sugar	15	-	20	20
Salt	5	5	5	5
Total (g/day)	555	560	550	565
Nutritional value of the above rations				
Energy (kcal)	2,113	2,106	2,087	2,092
Protein (g and % kcal)	58 g/11%	60 g/11%	72 g/14%	45 g/9%
Fat (g and %)	43 g/18%	47 g/20%	43 g/18%	38 g/16%

	Type of facility	No./person	Comments
Camp Areas	Total Open Space	30–45 m² per person	
Living Areas	Covered Space	3.5 m² per person	
	Firebreaks	50 metres of empty space every 300 metres of built-up area	
	Water Points	1 per 80-500 people depending on type and flow rate	100-500 metres from any one dwelling; gravity-fed systems on higher ground
	Latrines	1 per household to 1 per 20-50 people	6-50 metres away from house if too far away won't be used, 30 m from water sources
	Washing Facilities	1 per 100-250 people	
	Lighting in - sanitation areas - on walking paths - in child-friendly spaces		To promote protection, ensure safety and permit use of the facilities at night
	Refuse Bins	2 per community	1 100-litre per 10 families where not buried, 100 metres from communal areas

Appendix A

Space Requirements for Shelters for Adults

(1) Every facility shall have space for dining and leisure activities.

(2) Sleeping areas shall not be considered as dining or leisure areas.

(3) Space provided for dining shall be:
  (i) at least 120 square feet in facilities with a certified bed capacity of less than 10 beds;
  (ii) at least 12 square feet for each additional certified bed.

(4) Space provided for leisure areas shall be:
  (i) at least 120 square feet in facilities with a certified bed capacity of less than 10 beds.
  (ii) at least 12 square feet per bed in facilities with a certified bed capacity of 10 or more beds

(5) When not in use, dining space may be used, with written approval from the New York State Department of Social Services ("Department"), as leisure space.

(6) An operator may request Department approval of a waiver to reduce the square footage requirements for dining and leisure space. A waiver shall be granted only upon demonstration by the operator that the food service and the program needs of residents can be met.

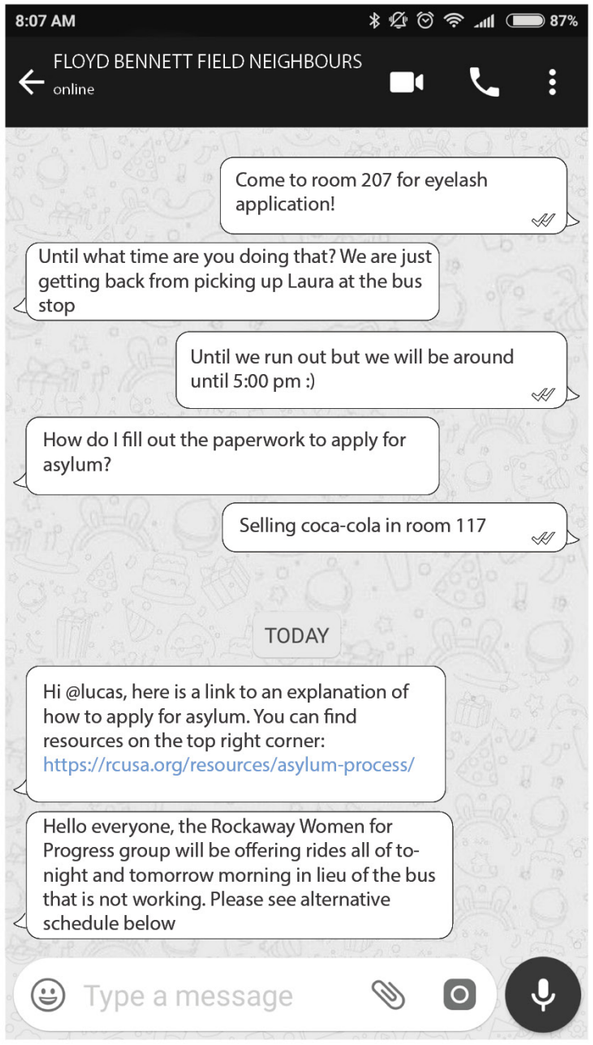
(7) Baths and Toilet Facilities
There shall be a minimum of one toilet and one lavatory for each six residents and a minimum of one tub or shower for each ten residents.

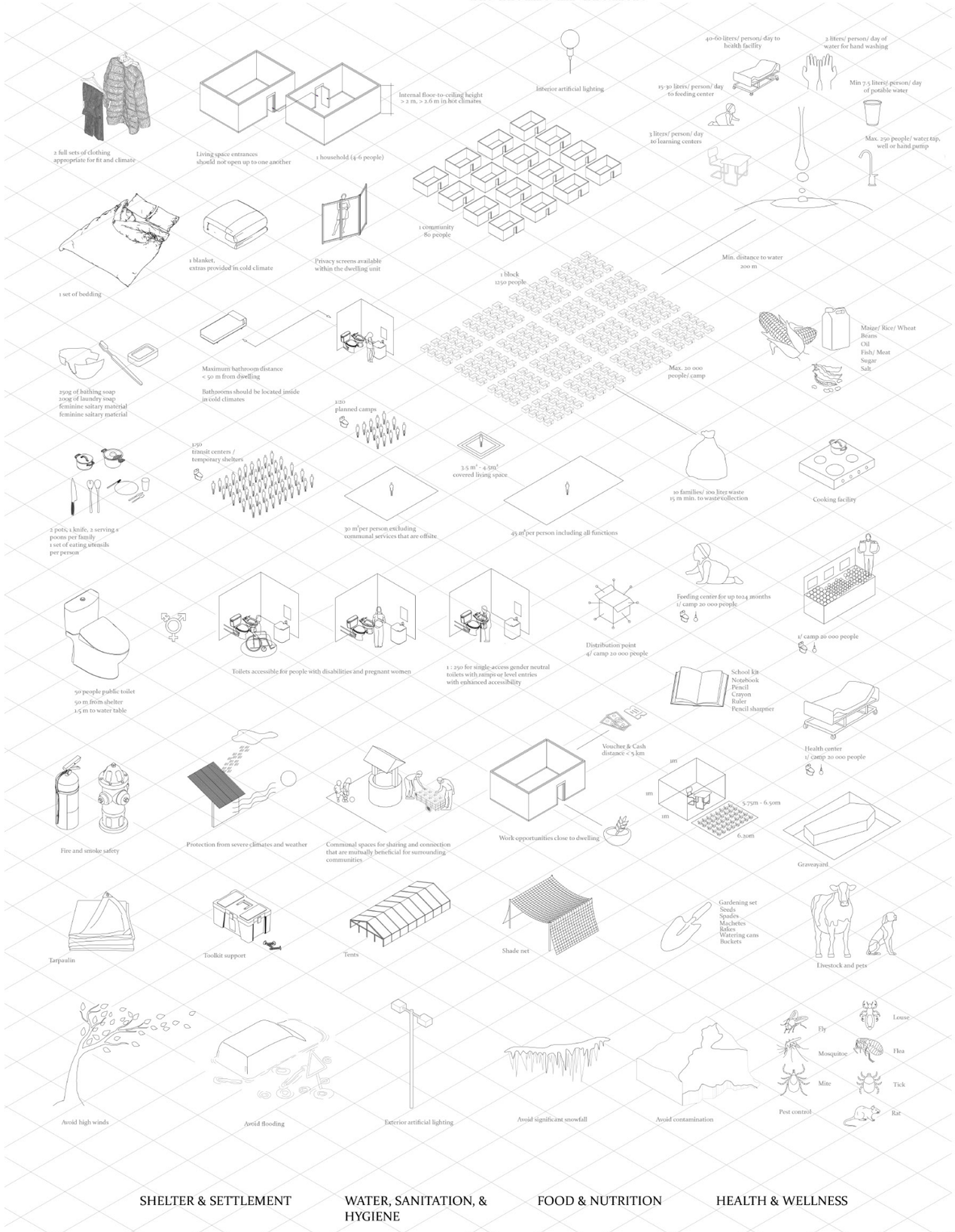
(8) Sleeping Rooms
  (i) In single occupancy sleeping rooms, a minimum of 80 square feet per resident shall be provided;
  (ii) In sleeping rooms for two or more residents, a minimum of 60 square feet per resident shall be provided;
  (iii) A minimum of 3 feet, which is included in the per resident minima, shall be maintained between beds and for aisles;
  (iv) Partitions separating sleeping areas from other areas shall be ceiling high and smoke tight;
  (v) All bedrooms shall be:
    (a) above grade level;
    (b) adequately lighted;
    (c) adequately ventilated;

  (vi) light and ventilation for bedrooms shall be by means of windows in an outside wall;
  (vii) bedrooms shall open directly into exit corridors;
  (viii) bedrooms may not be used as a passageway, corridor or access to other bedrooms.

(9) Adequate storage space for cleaning supplies and equipment shall be provided.

		Time (days)					
Population		1	30	60	90	120	180
500		0.0075	0.225	0.45	0.675	0.9	1.35
1.000		0.0150	0.450	0.90	1.350	1.8	2.70
5.000		0.075	2.250	4.50	6.750	9.0	13.50
10.000		0.1500	4.500	9.00	13.500	18.0	27.00
20.000		0.3000	9.000	18.00	27.000	36.0	54.00
50.000		0.7500	22.500	45.00	67.500	90.0	135.00
100.000		1.5000	45.000	90.00	135.000	180.0	270.00
500.000		7.5000	225.000	450.00	675.000	900.0	1,350.00
1.000.000		15.000	450.000	900.000	1.350.000	1.800.0	2.700.00
Markets	Market	1 per camp (20,000 people)					
	Latrines	1 per 20-50 stalls					
Feeding Centres	Feeding Centre	1 per camp (20,000 people)					
	Latrines	1 per 20-50 adults and 1 per 10-20 children					
	Lighting					To promote protection, ensure safety and permit use of the facilities at night	
Graveyards	Graveyard					30 metres from groundwater sources; determine if space is available within host community	


8:07 AM
87%
FLOYD BENNETT FIELD NEIGHBOURS
online
Come to room 207 for eyelash application!
Until what time are you doing that? We are just getting back from picking up Laura at the bus stop
Until we run out but we will be around until 5:00 pm :)
How do I fill out the paperwork to apply for asylum?
Selling coca-cola in room 117
TODAY
Hi @lucas, here is a link to an explanation of how to apply for asylum. You can find resources on the top right corner: https://rcusa.org/resources/asylum-process/
Hello everyone, the Rockaway Women for Progress group will be offering rides all of tonight and tomorrow morning in lieu of the bus that is not working. Please see alternative schedule below
Type a message


2 full sets of clothing appropriate for fit and climate
Living space entrances should not open up to one another
Internal floor-to-ceiling height > 2 m, > 2.6 m in hot climates
1 household (4-6 people)
Interior artificial lighting
40-60 liters/ person/ day to health facility
3 liters/ person/ day of water for hand washing
15-30 liters/ person/ day to feeding center
Min 7.5 liters/ person/ day of potable water
3 liters/ person/ day to learning centers
Max. 250 people/ water tap, well or hand pump
1 community 80 people
1 set of bedding
1 blanket, extras provided in cold climate
Privacy screens available within the dwelling unit
Min. distance to water 200 m
1 block 1250 people
Maximum bathroom distance < 50 m from dwelling
Bathrooms should be located inside in cold climates
Maize/ Rice/ Wheat
Beans
Oil
Fish/ Meat
Sugar
Salt
Max. 20 000 people/ camp
250g of bathing soap
200g of laundry soap
feminine saitary material
feminine saitary material
1250 planned camps
1-50 transit centers / temporary shelters
3.5 m² - 4.5m² covered living space
10 families/ 100 liter waste
15 m min. to waste collection
Cooking facility
2 pots, 1 knife, 2 serving spoons per family
1 set of eating utensils per person
30 m²per person excluding communal services that are offsite
45 m² per person including all functions
Feeding center for up to24 months
1/ camp 20 000 people
1/ camp 20 000 people
Distribution point
4/ camp 20 000 people
Toilets accessible for people with disabilities and pregnant women
1 : 250 for single-access gender neutral toilets with ramps or level entries with enhanced accessibility
50 people public toilet
50 m from shelter
1.5 m to water table
School kit
Notebook
Pencil
Crayon
Ruler
Pencil sharpner
Health center
1/ camp 20 000 people
Voucher & Cash distance < ½ km
1m
1m
1m
5.75m - 6.50m
6.20m
Graveyard
Fire and smoke safety
Protection from severe climates and weather
Communal spaces for sharing and connection that are mutually beneficial for surrounding communities
Work opportunities close to dwelling
Gardening set
Seeds
Spades
Machetes
Rakes
Watering cans
Buckets
Livestock and pets
Tarpaulin
Toolkit support
Tents
Shade net
Avoid high winds
Avoid flooding
Exterior artificial lighting
Avoid significant snowfall
Avoid contamination
Fly
Mosquitoe
Mite
Louse
Flea
Tick
Rat
Pest control
SHELTER & SETTLEMENT
WATER, SANITATION, & HYGIENE
FOOD & NUTRITION
HEALTH & WELLNESS

SNIPPETS FROM A CONVERSATION WITH RESIDENTS OF THE CURRENT FBF MIGRANT FAMILY SHELTER

Sina & Anais: *What is the most important thing that you need?*

Resident 1: The most important thing for me is to find **work**. I tried to buy a car and they won't let me park it here because it's federal property.

S&A: *How are the bus schedules that they provide in addition to the Q35?*

Resident 1: I don't know why they did not put us over there [points to abandoned hangar]. Even when I get off the bus that drops us right in front of the tents, I need to **walk a far way** to get to my pod. The last bus is also at 5 pm.

Resident 2: I work in Brooklyn and **travel two hours** to get there just to make $50 a day.

Resident 1: When I earn money I usually try to save some of it or to buy some food. My kids aren't used to the **food** they provide here. We are also not allowed to **cook** our own food or have any appliances in our space.

Some kids are playing on the grass nearby

Resident 1: There's no distraction, nothing to be **creative** or places for kids to **play**. We go to sleep in a white box.

SNIPPETS FROM A CONVERSATION WITH ARIANA HELLERMAN, BOARD MEMBER OF ROCKAWAY WOMEN FOR PROGRESS

Sina & Anais: *How is Rockaway Women for Progress implicated in the Shelter at FBF?*

Ariana Hellerman: There are 222 **local organizations** that have been hired to work at FBF. We work on a volunteer basis and were the first group to do a mass distribution. Most recently we did a suitcase campaign and sourced over 400 suitcases for families. We had some funding from a big LGBTQ+ fundraiser at Riis Park.

It would be nice to have **space**. We were **threatened with citations by the police for having a donation that turned into a party with music**. I've been thinking of something similar to summer stage would be a great opportunity for cross cultural events.

S&A: *Where do kids go to school?*

AH: Most kids go to **school** in district 22 in Brooklyn. The bridge was blocked so the Q35 was not running. We've been up all night and early this morning offering rides to people to and from the shelters.

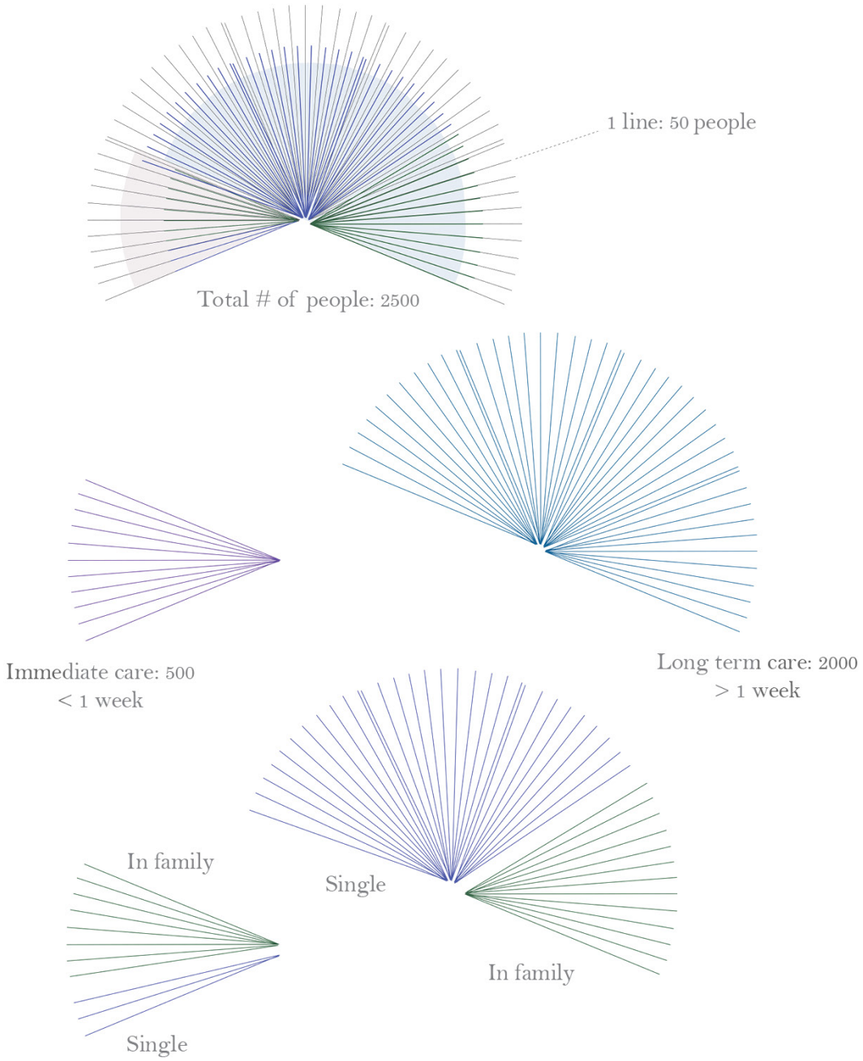
S&A: *How do people create their own networks or communicate to help each other out?*

AH: We gathered 300 phone numbers and started a **whatsapp** group to announce when we would be having events. The **residents have made the group their own and its the top way to communicate** and share when they're doing something in their space, like eyelash applications or selling coca-cola! Or to help each other out with paperwork - it's not intuitive for anyone.

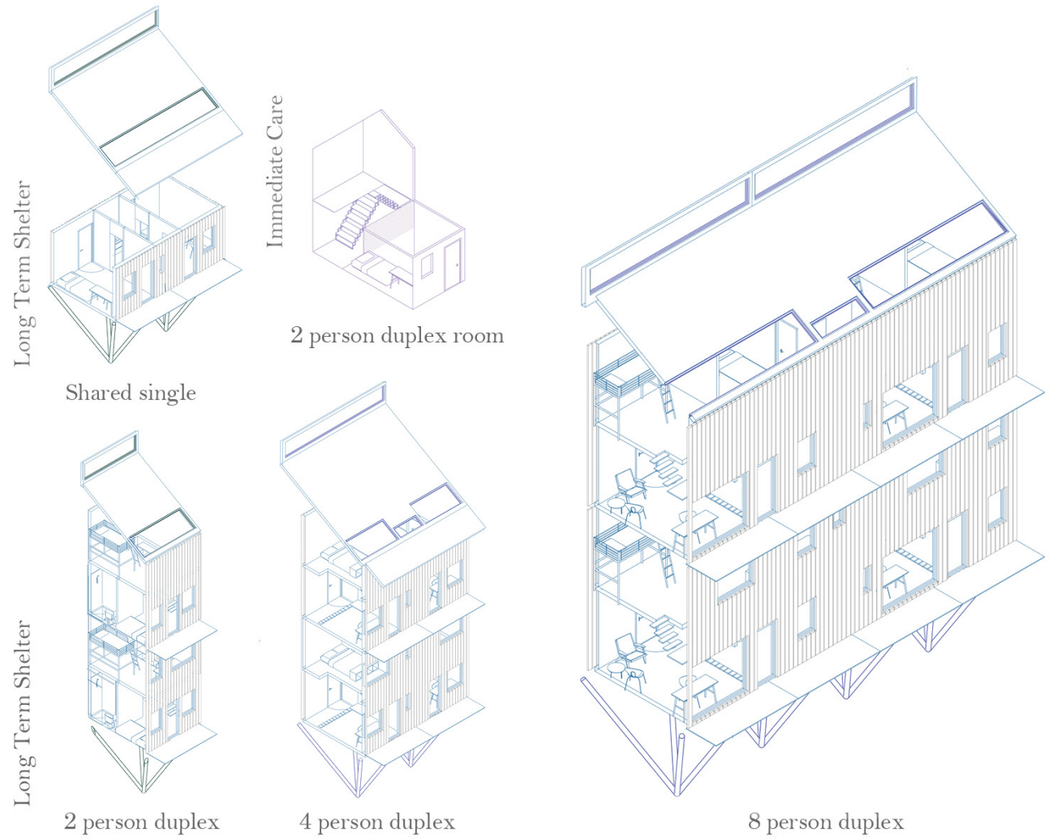
AH: In the past two weeks admin announced that residents can re-apply for shelter at FBF, they do not need to go the Roosevelt Hotel anymore.

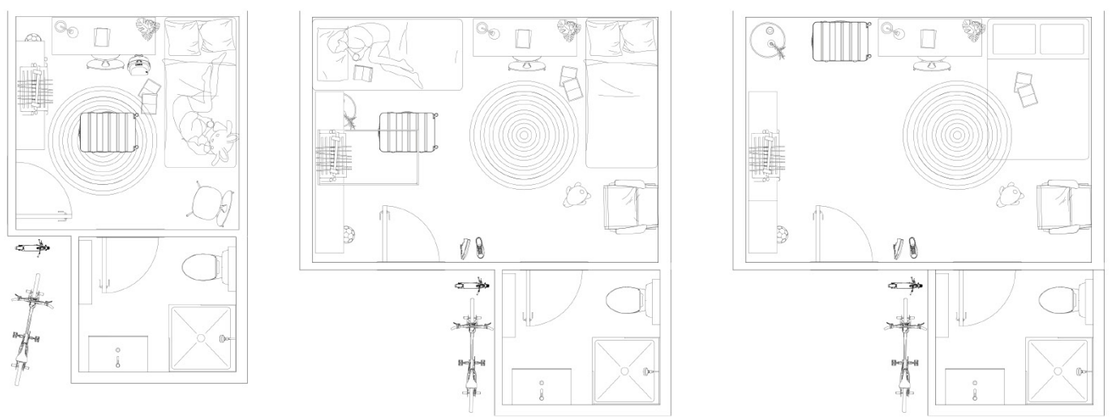
Bathrooms outside, lots of noise, leaks, and high winds that rattle the tents.

Our group gives stipends in forms of gift cards to some families. These families tell us when new families have arrived and we bring them clothes. Recently we've been trying to gather lots of men's shoes...

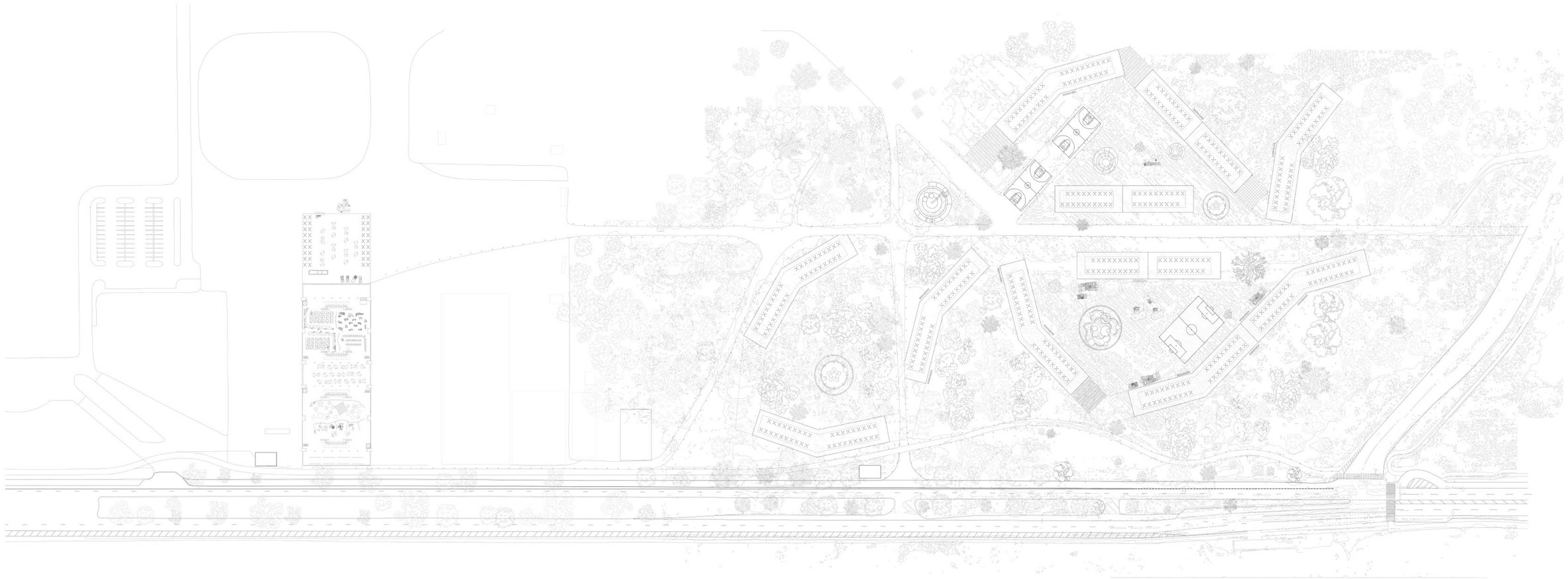


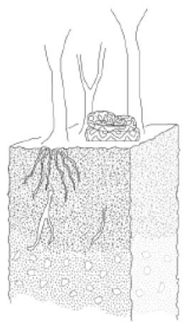
Proposed shelter types based on displacement patterns





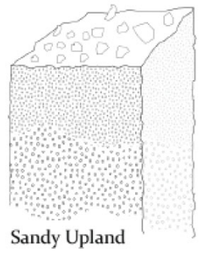
A study of accumulation of a migrant's things and space



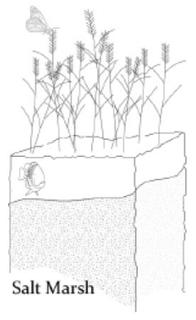


Mixed Woodland

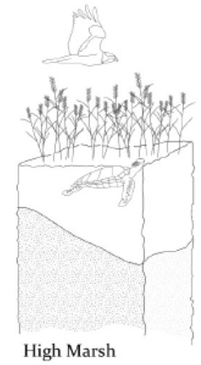
Peatland



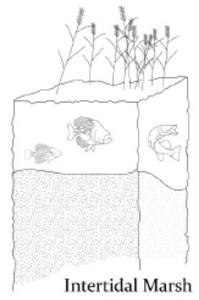
Sandy Upland



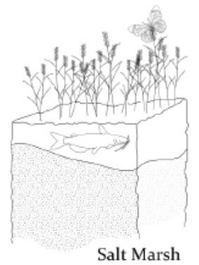
Salt Marsh



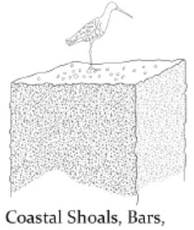
High Marsh



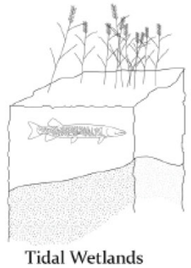
Intertidal Marsh



Salt Marsh

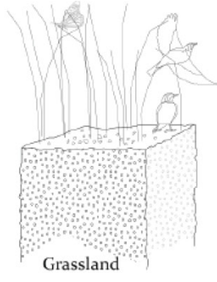


Coastal Shoals, Bars, & Mudflats



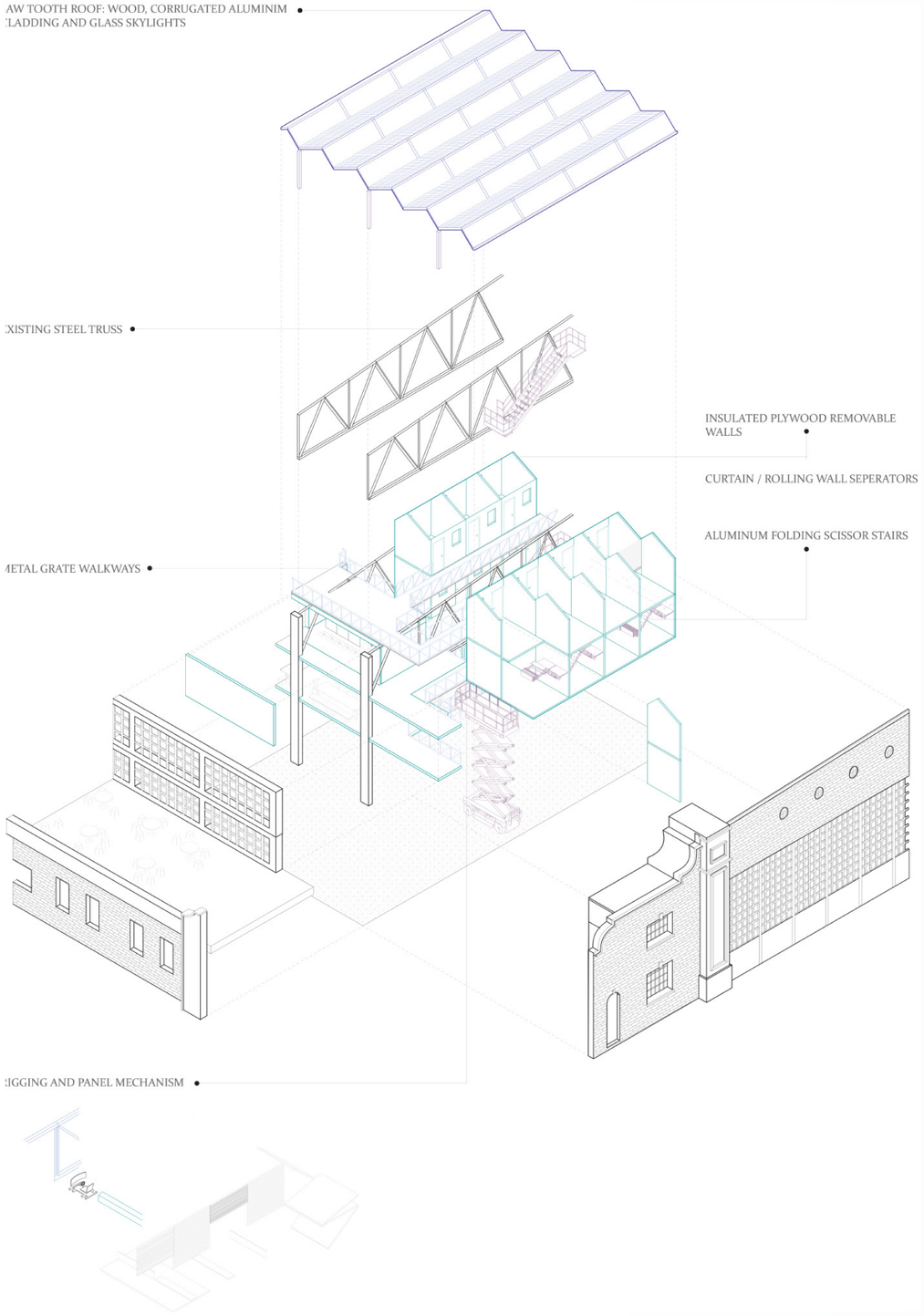
Tidal Wetlands

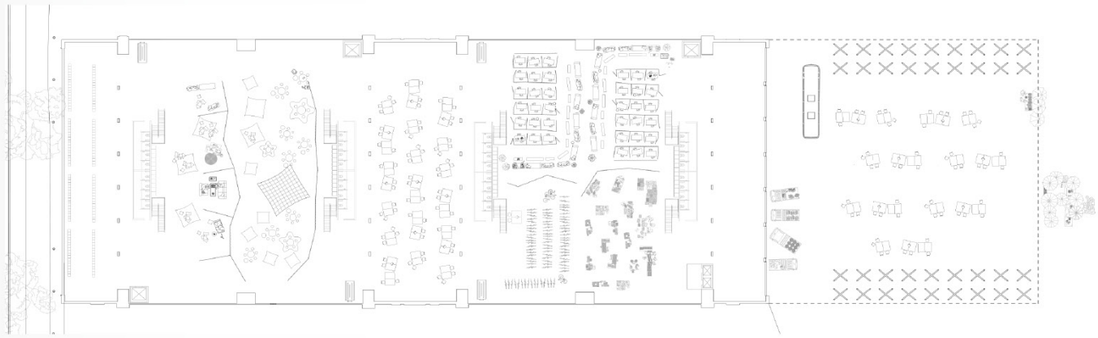
Littoral Zones



Grassland

The site plan reintroduces native plants to restore wildlife in the National Park. Adapted hangars and long-term shelters are connected by social programming and landscaping, forming a gradient of private to public outdoor space.

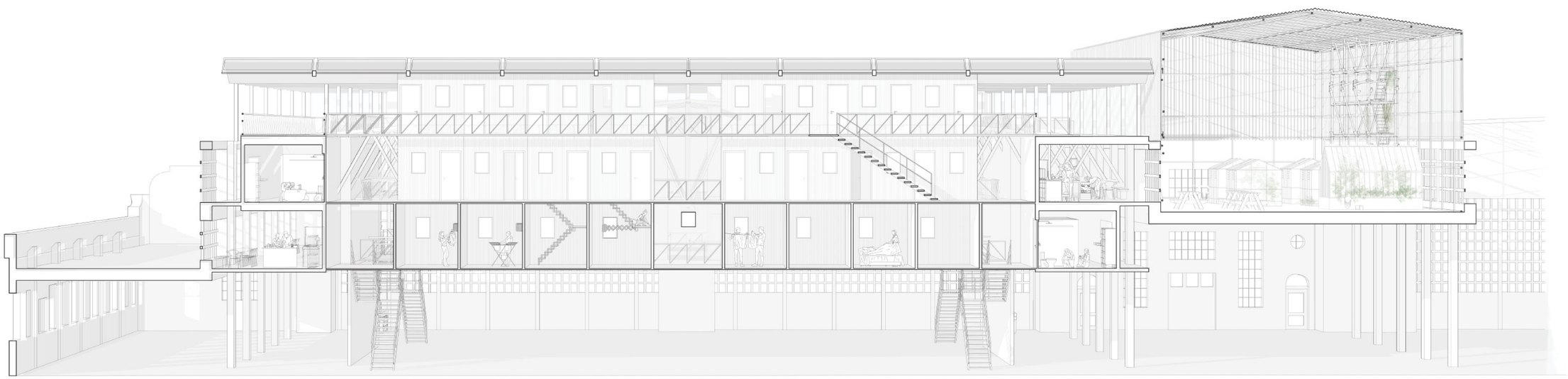


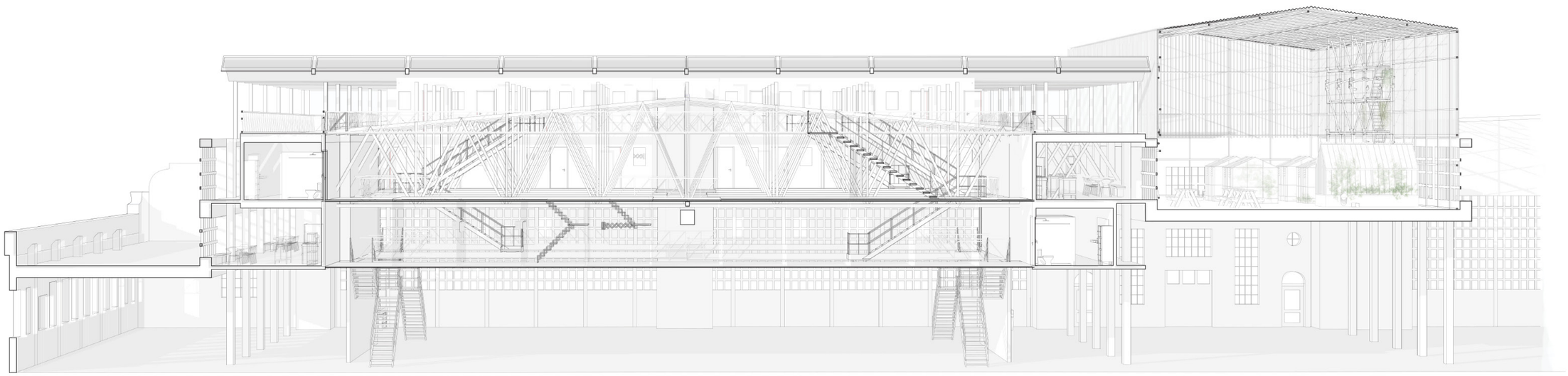


Immediate Care (up to one week) takes place in an adapted hangar with ground-floor social programs and collective living above. It provides emergency shelter during disasters, refuge for vulnerable New Yorkers, and rentable sleeping space during events. Sleeping units are rigged to the existing truss system, with additional units deployable in times of mass displacement.

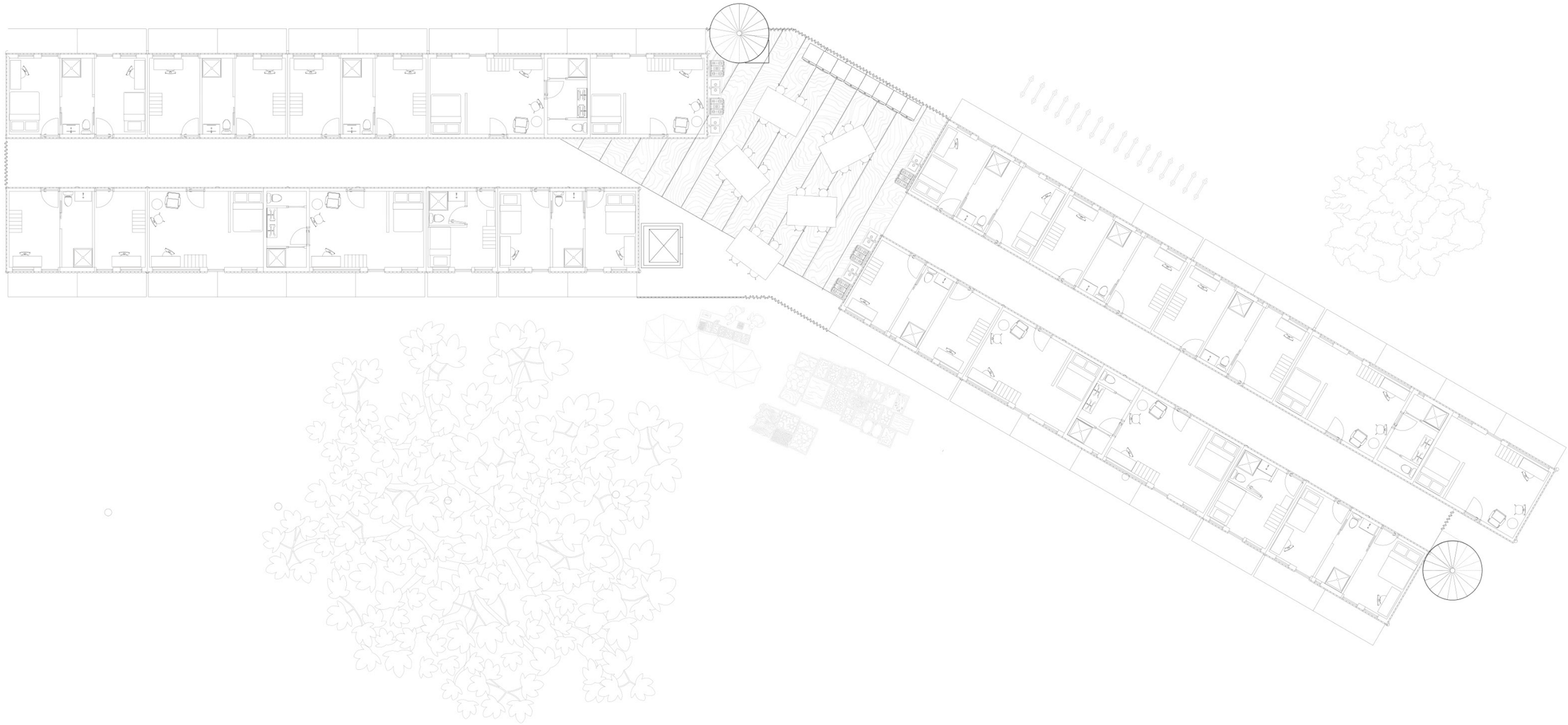
Long-Term Housing (weeks to years) is built from wood, recycled brick, and aluminum, adapted to high winds and flood risks at Floyd Bennett Field. Instead of prioritizing standardized spatial metrics, the duplex system supports non-quantifiable needs—play, intimacy, agency, and emotional well-being. Elevated structures create transitions from public to private, with shared spaces open to local residents.

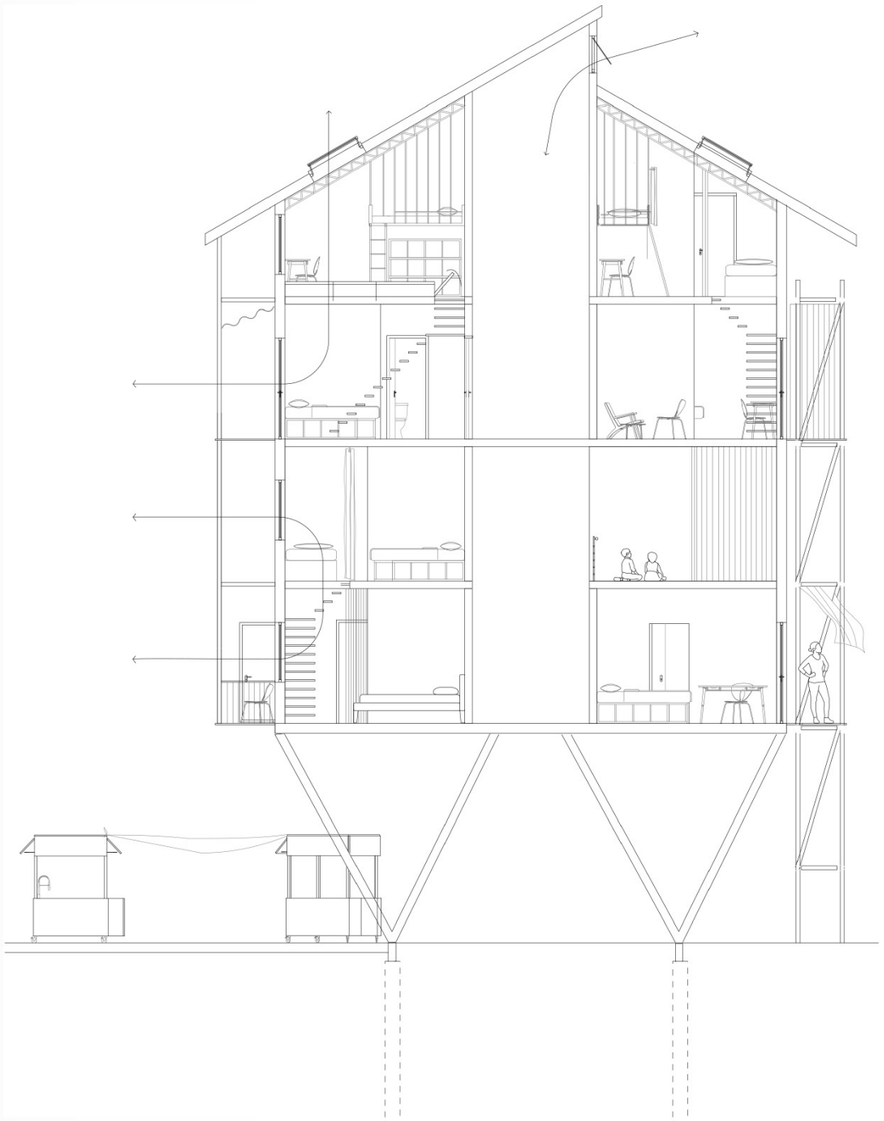
Adv IV





Adaptive reuse of abandoned hangar; active during mass internal displacement,
at rest available to be used as a performance space



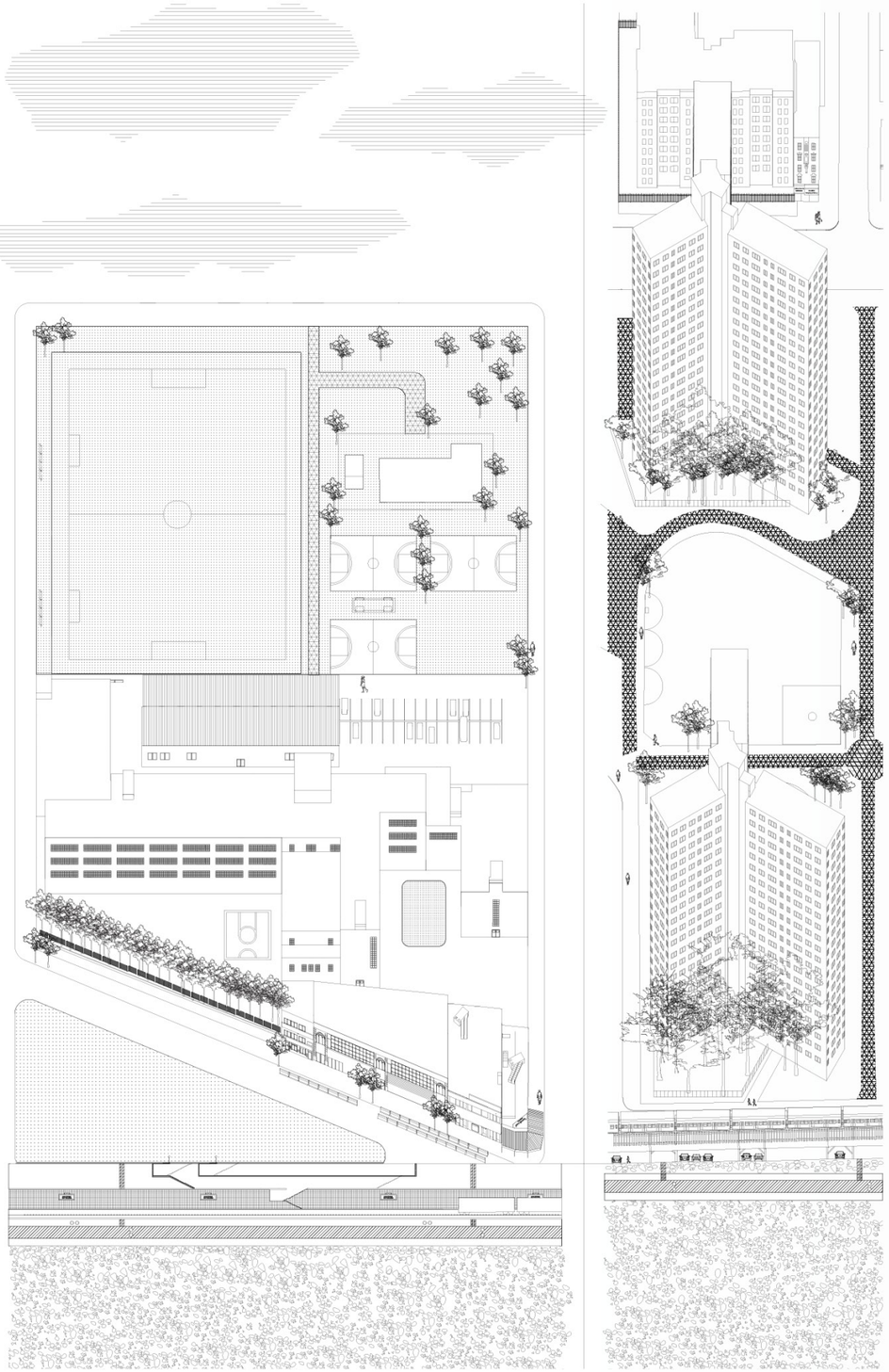


08 Un-fenced Commons

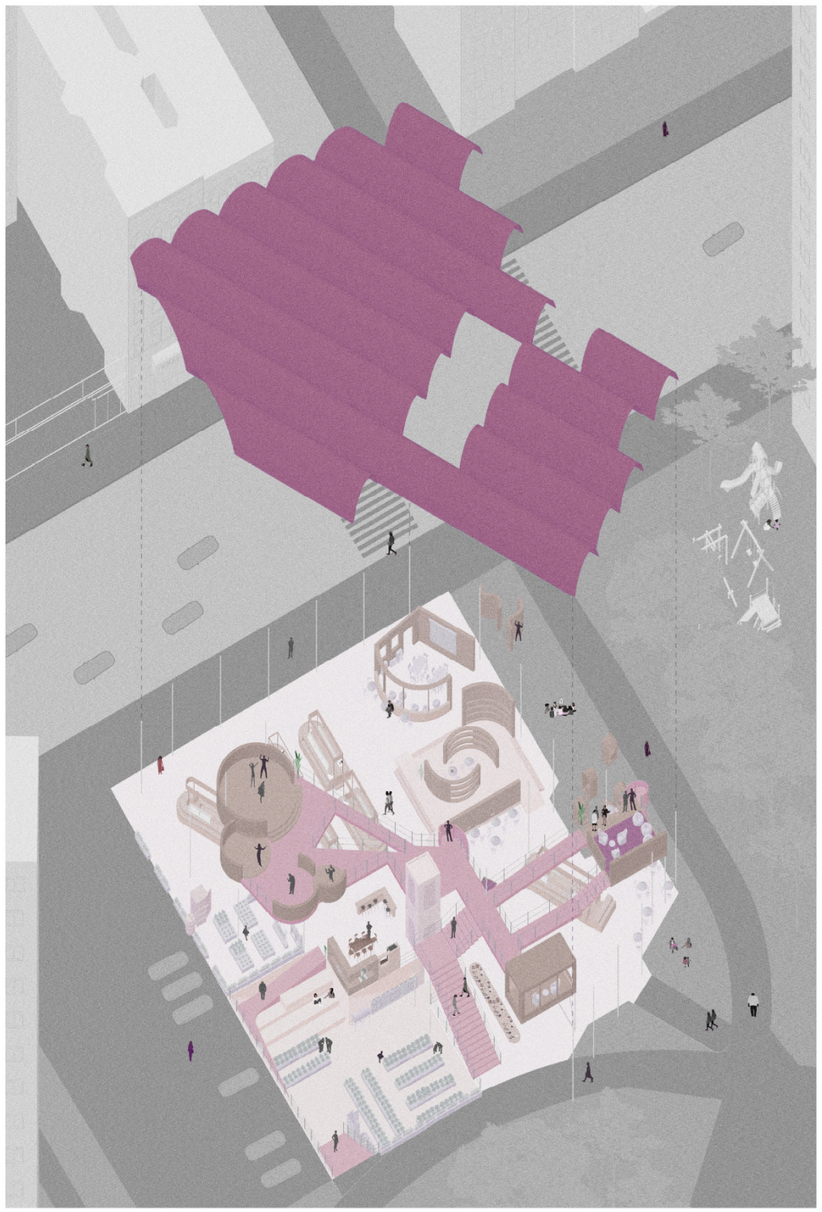
Critic: Alessandro Orsini
Core Studio I

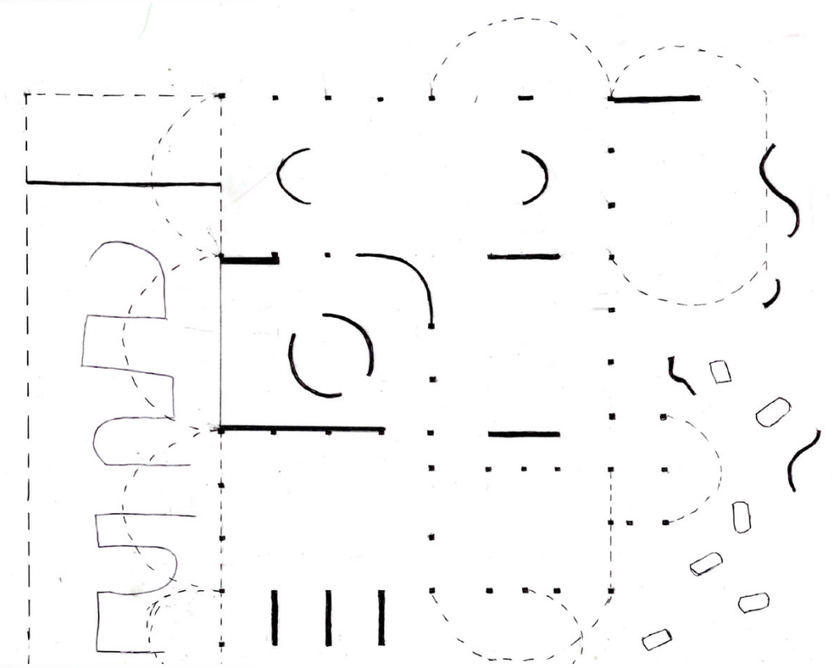
The Manhattanville Food Market reimagines the empty lot nested between the New York City Housing Authority (NYCHA) owned Manhattanville public housing buildings. The lot was previously home to a supermarket before it mysteriously burned down in 2014. This supermarket owned by Lefkas Realty was one of the few accessible means to affordable food for the residents of Manhattanville Houses. While the community suffered unemployment and lost their resource to affordable groceries, Lefkas Realty refused to comment on the fire. Since it's wipe down there has been a plan to build an apartment tower that includes a City Fresh (a mid-range grocery market) on the ground floor, however this was recently omitted from the design, leaving the NYCHA residents with no affordable sources for groceries in the area.

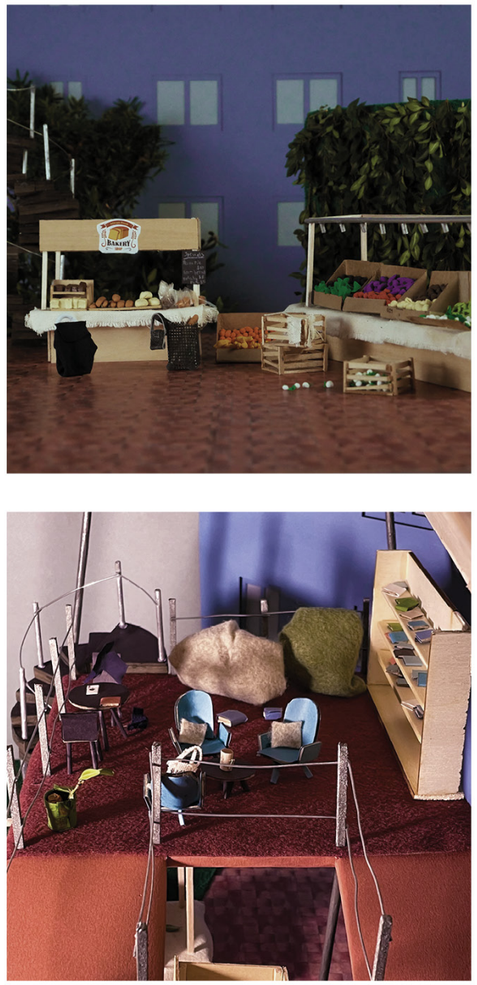
Breaking down the NYCHA fences, this project re-assesses the use of the lot by returning an affordable food market to the residents of Manhattanville Houses. Reimagining the ownership of the food market through collectives and a co-op program. The market is organized on two overlapping grid systems. The design seeks not only to provide accessible food from local sources and meal centers but also to serve as a gathering, and park space.



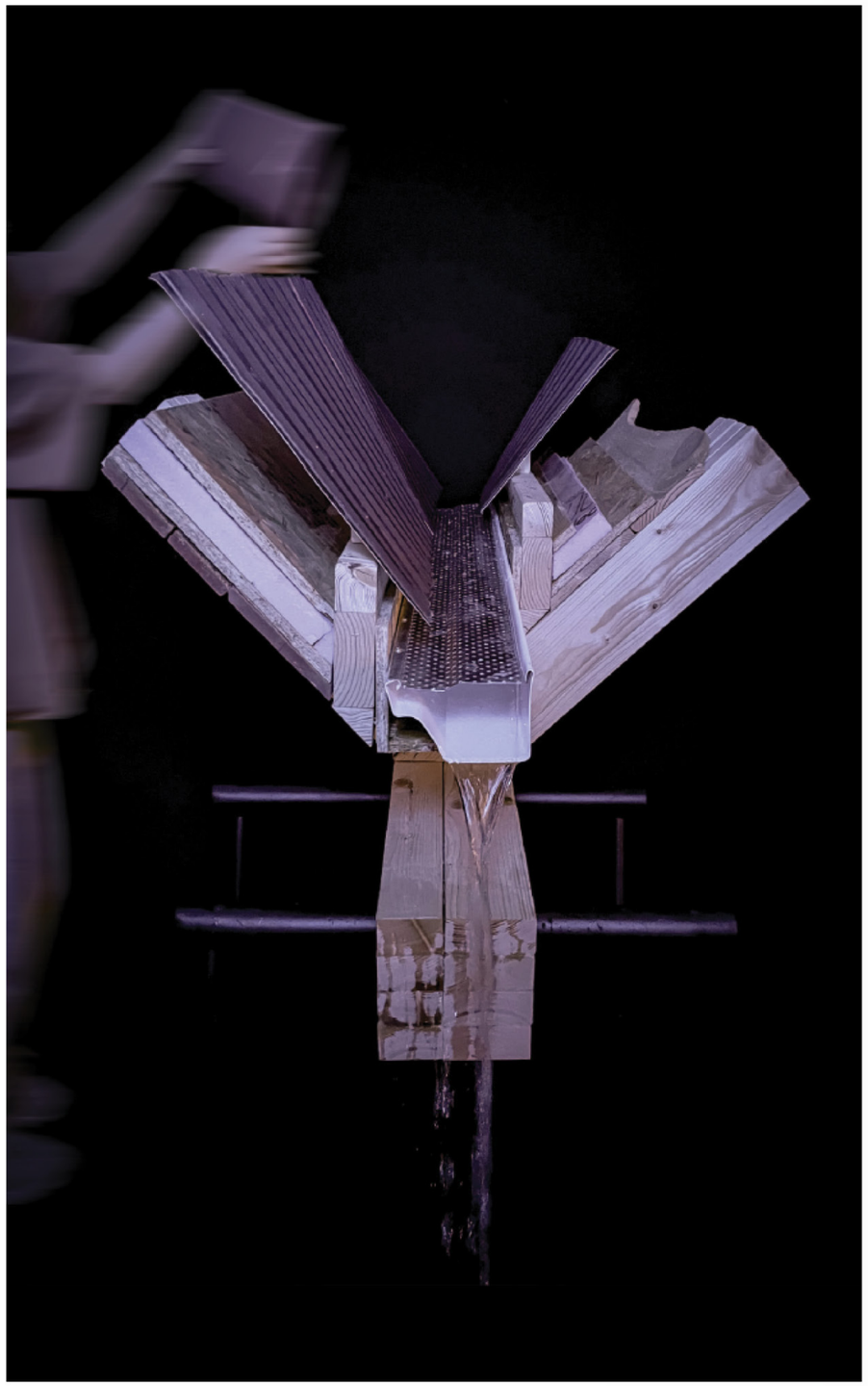
From **1940** to **2019** public landownership and park space increased over time however remain inaccessible to the public.

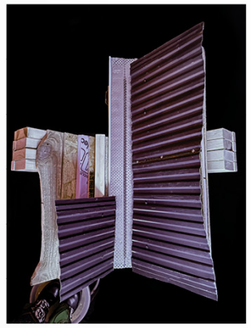


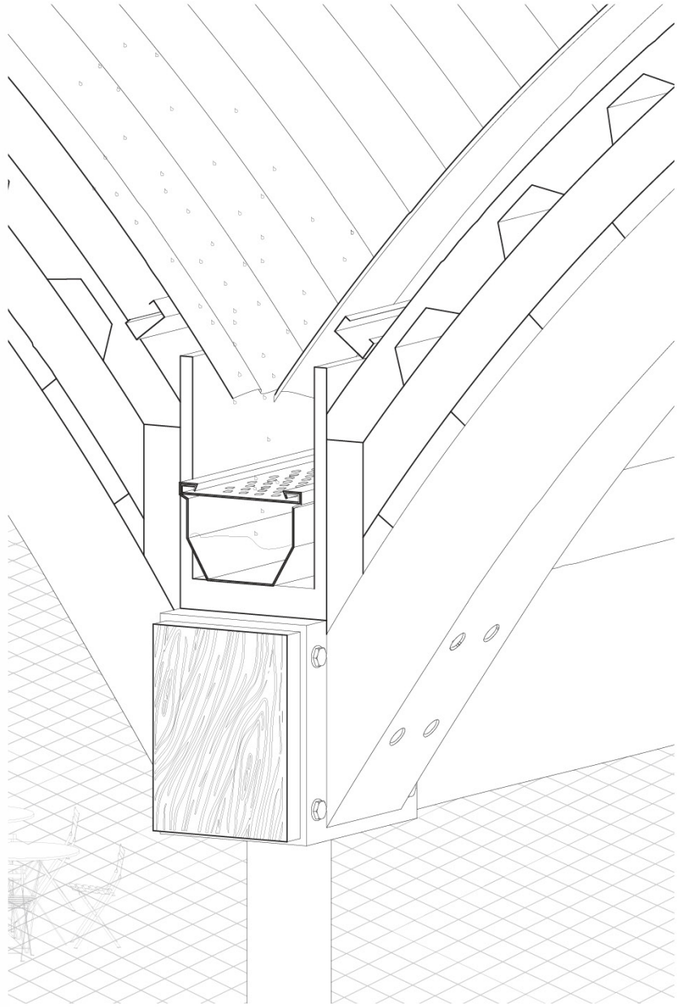





BAKERY





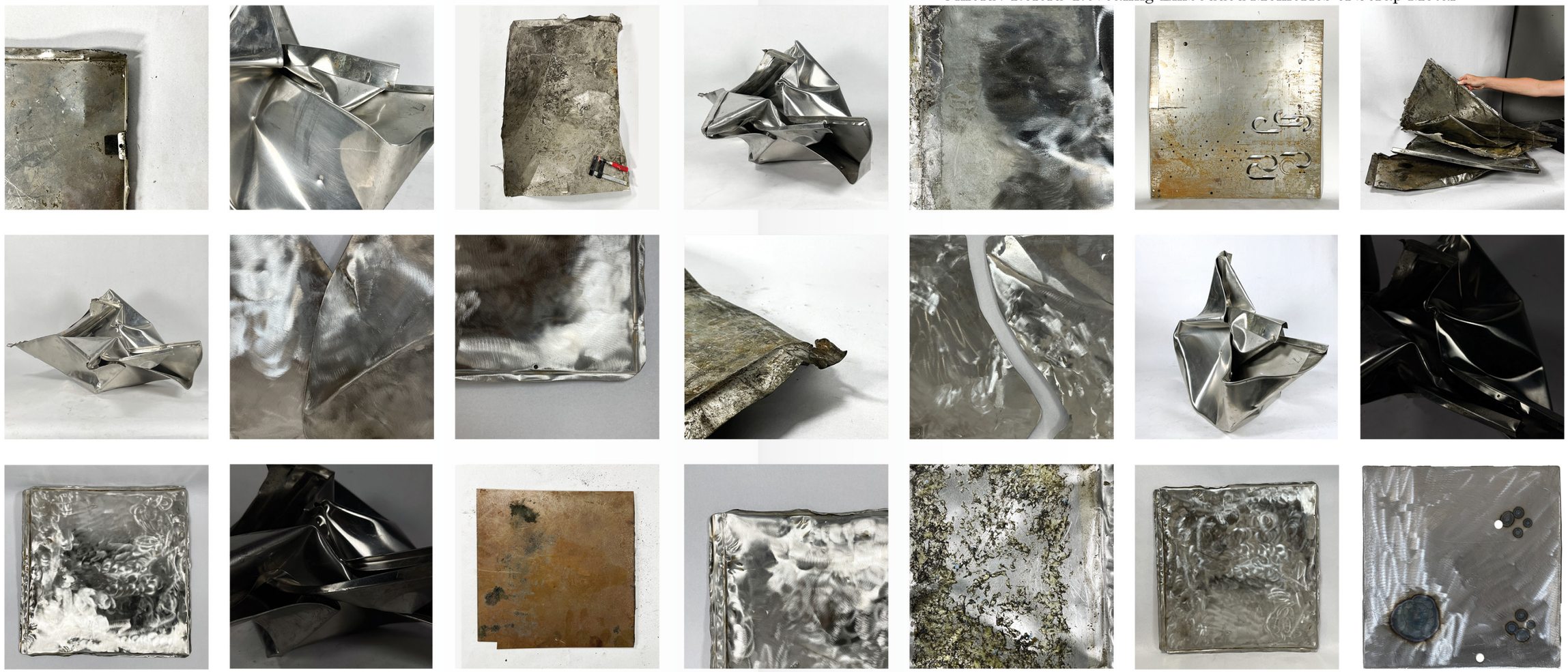


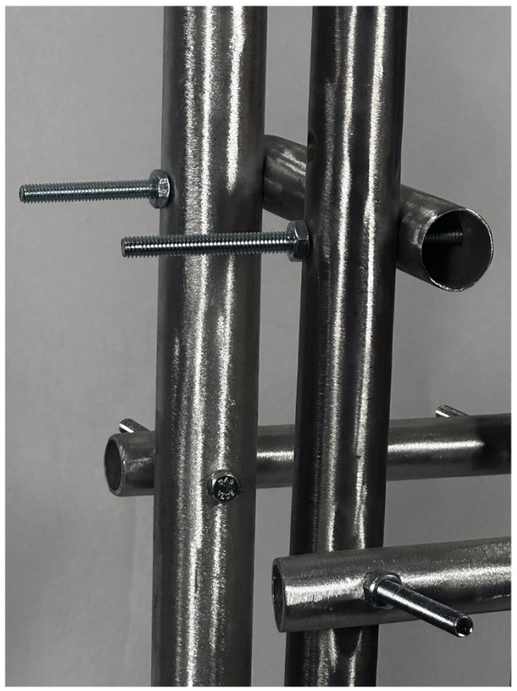
09 Unfold / Refold: Revealing Embedded Memories of Scrap Metal

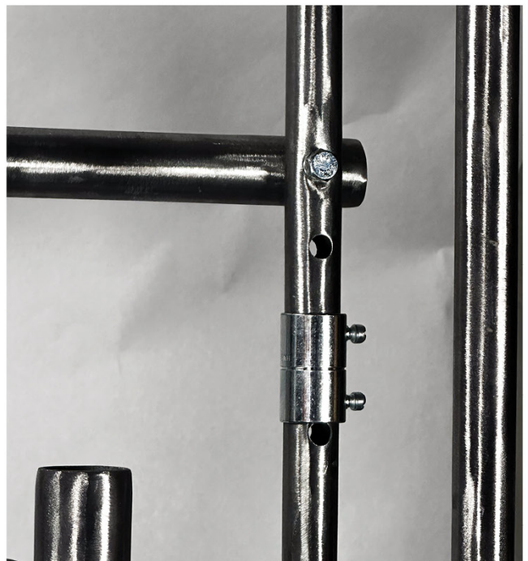
Critic: Zachary E. Mulitauaopele
In collaboration with Yaqoub Hasan

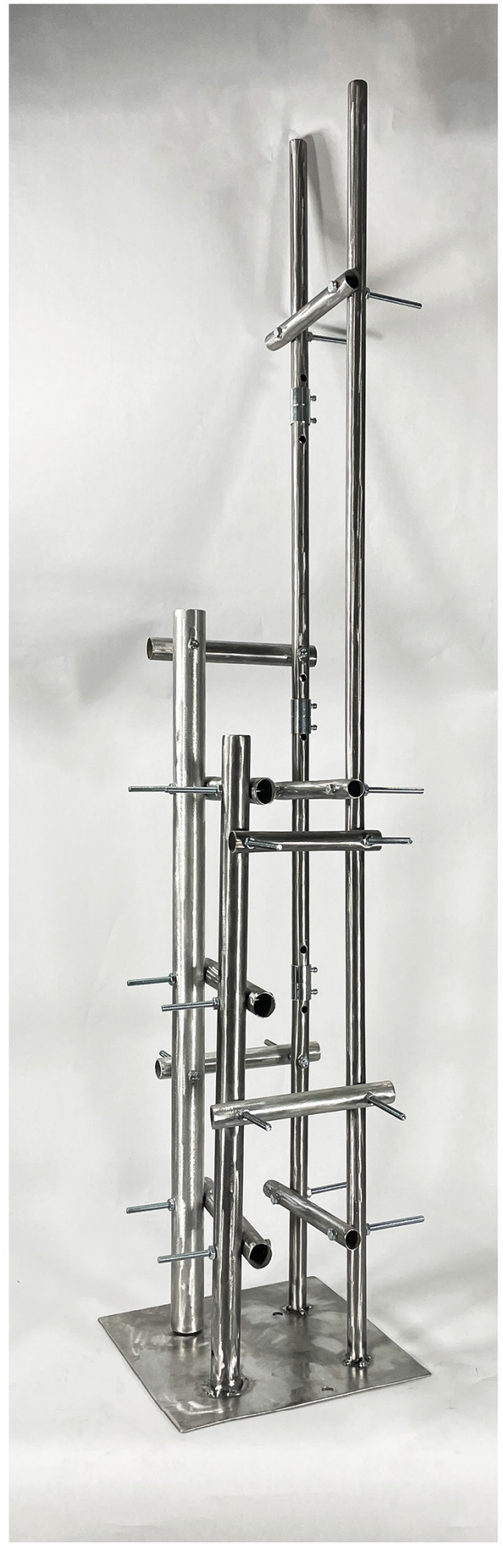
This a story about scrap metal. This is a story of care and memory and wear.

Unfolding sheets from scrap AC units sometimes a rough process, with a hammer, sometimes a soft touch, sanding the chemical coatings to reveal the material below. Using scrap rods of different sizes and metal types: aluminum, steel, stainless steel structure is created for the sheets. Bones and skin. Metal is alive, it is bent, heated, melted. A new life is given to the pieces with their wear and lifelines embedded in their creases.





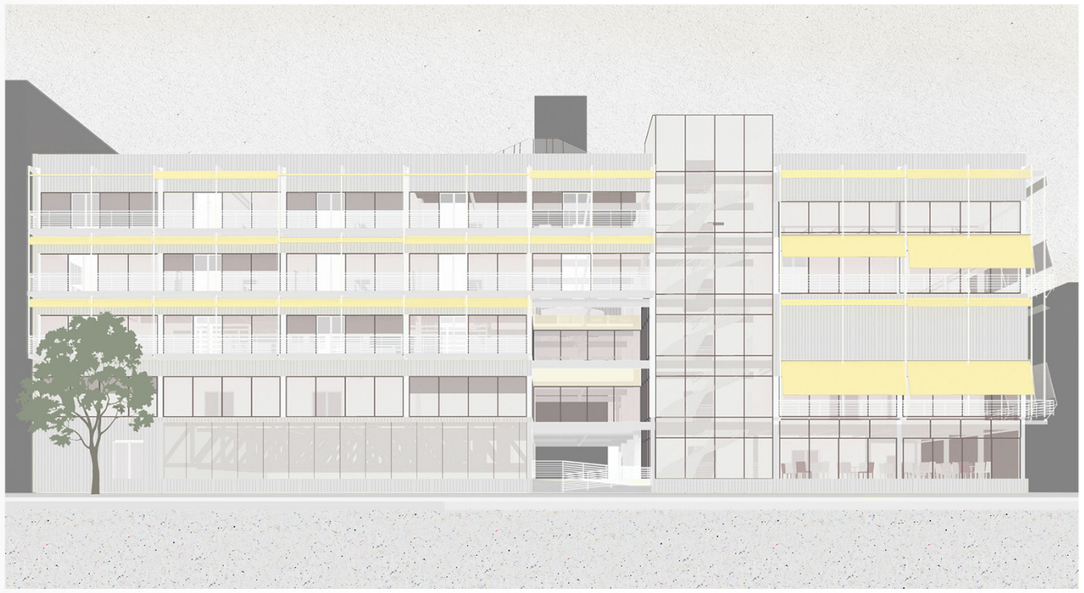


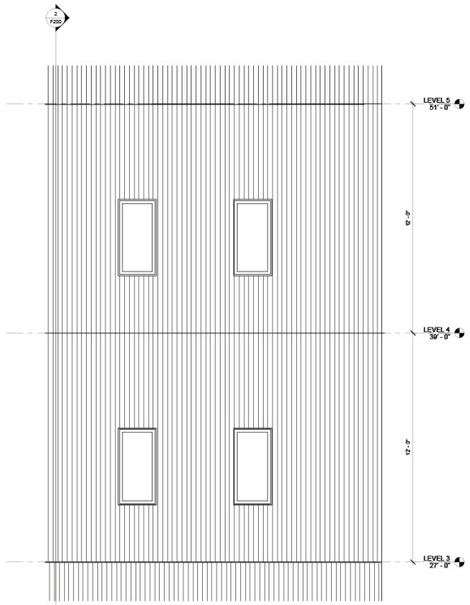


10 Facade For a School About Waste

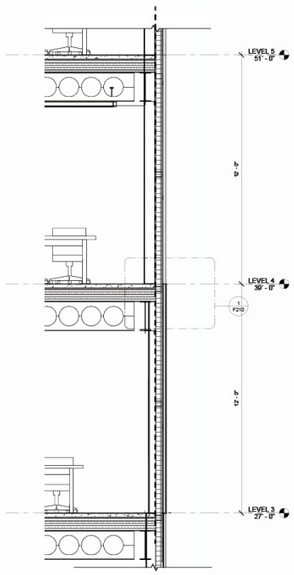
Engineer Critics: Joe Hand, Katherine Chan, Paul Laroque, Sigal Shemesh
In collaboration with Adam Fried, Erisa Nakamura, Kelvin Lee,
Rebecca Siqueiros, Sophia Strabo
Building Science and Technolgy IV/V

A school that is centered around the reduction of waste, addresses waste at different scales from material selection to overall program. Steel frames and CLT slabs allow for longevity of the building and an open framework for adaptability in the future as the building calls for change. Corrugated aluminum panels, glazing with balcony access and operable shading make up the bulk of the enclosure. My work for the group focused on the facade, enclosure structure, details, shading systems, and we developed sustainable facade options that work with the climate.

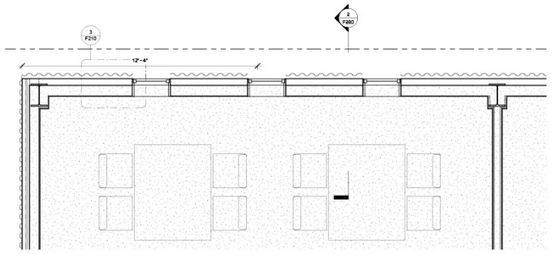




1 ELEVATION - Facade System 1
1/2" = 1'-0"

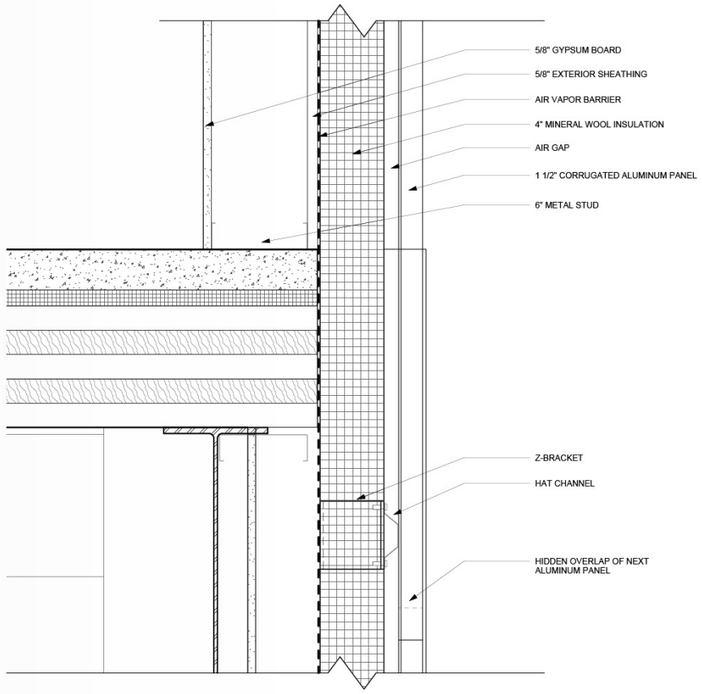


2 SECTION 1 - Facade System 1
1/2" = 1'-0"

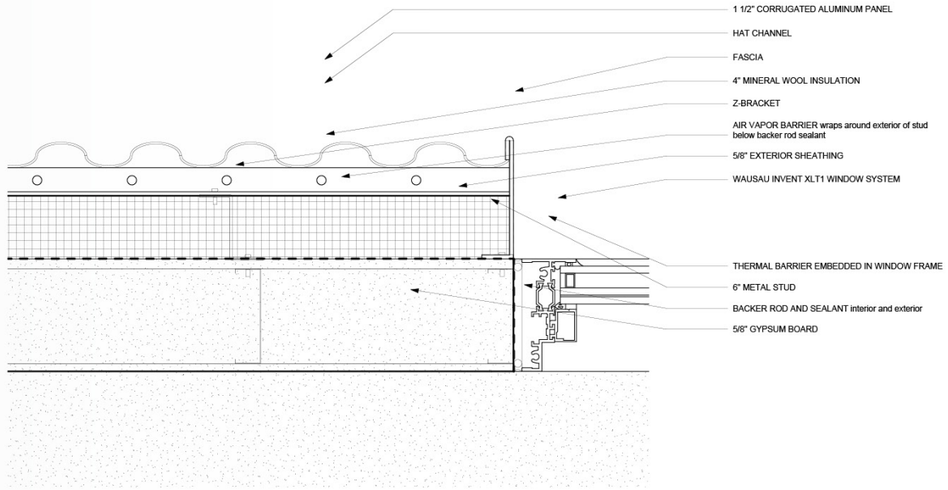


3 PLAN - Facade System 1
1/2" = 1'-0"

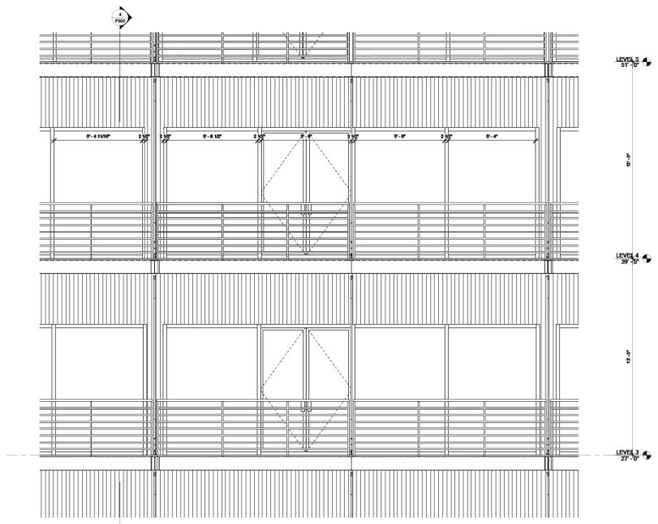
4 3D VIEW - Facade System 1
1" = 1'-0"



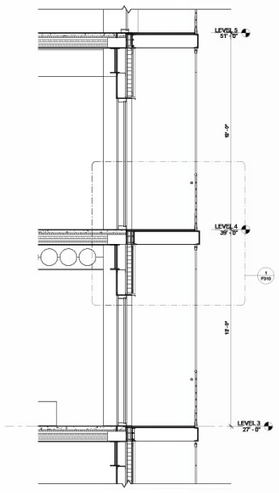
1 SECTION 1 CALLOUT - Facade System 1
3" = 1'-0"



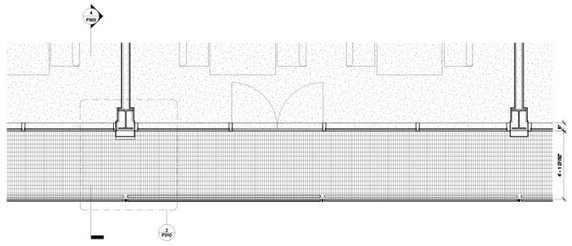
3 PLAN CALLOUT - Facade System 1 Window
3" = 1'-0"



3 ELEVATION - Facade System 2
1/2" = 1'-0"

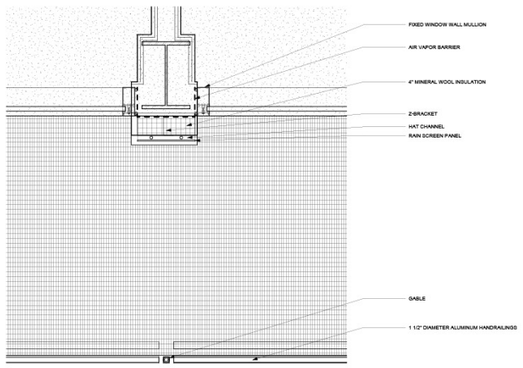


4 SECTION - Facade System 2
1/2" = 1'-0"

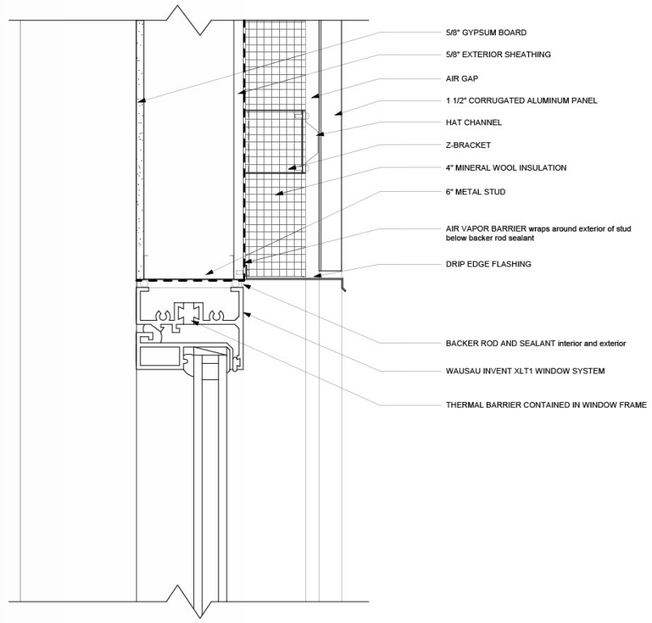


1 PLAN - Facade System 2
1/2" = 1'-0"

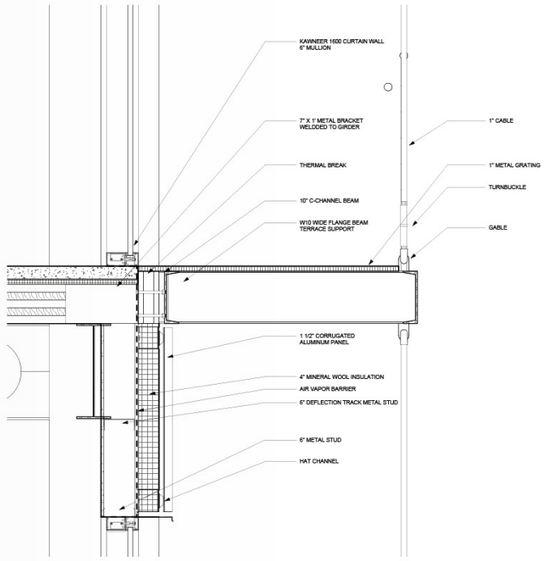
2 3D VIEW - Facade System 2
1" = 1'-0"



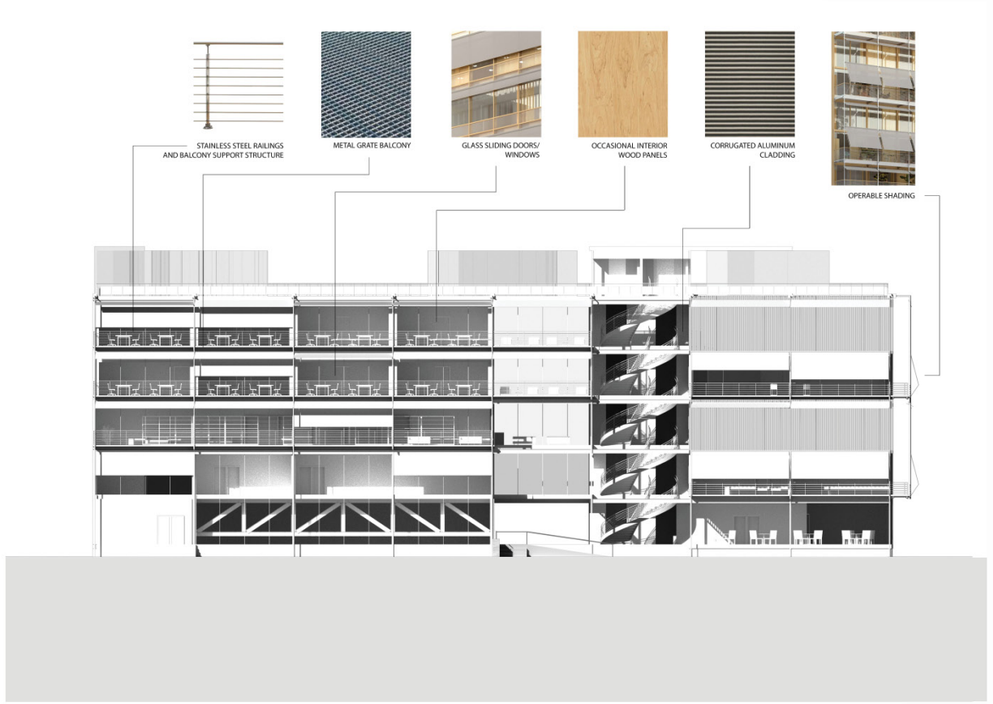
2 PLAN CALLOUT - Facade System 2
1 1/2" = 1'-0"



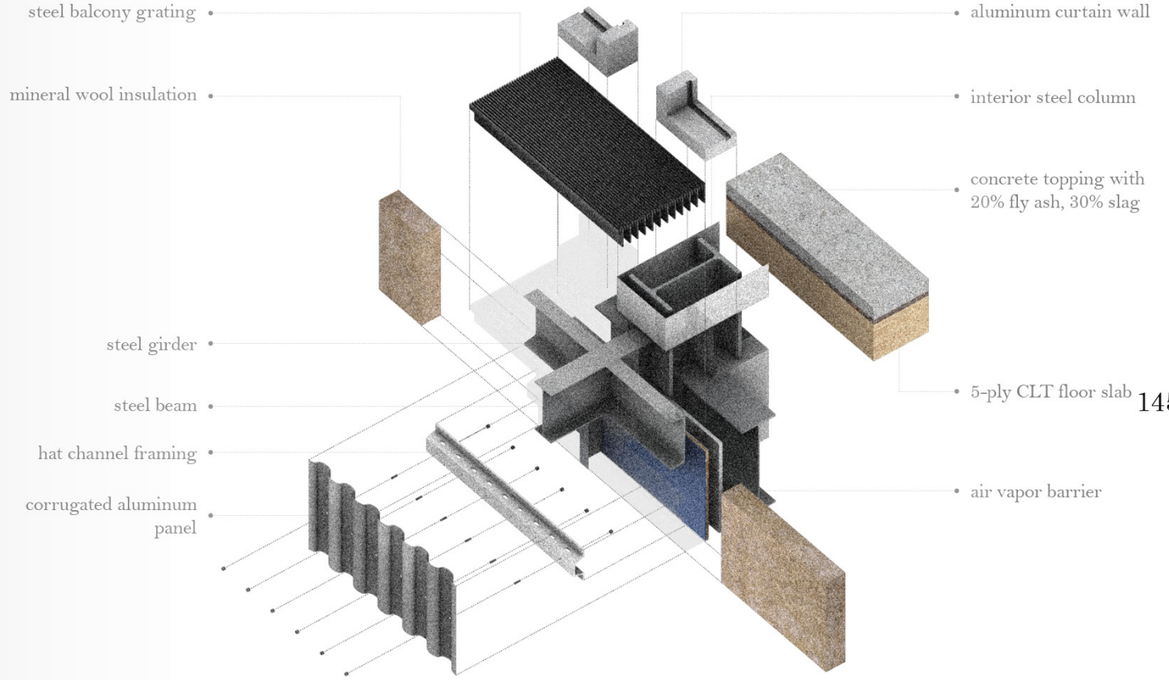
2 SECTION 2 CALLOUT - Facade System 1 Window
3" = 1'-0"

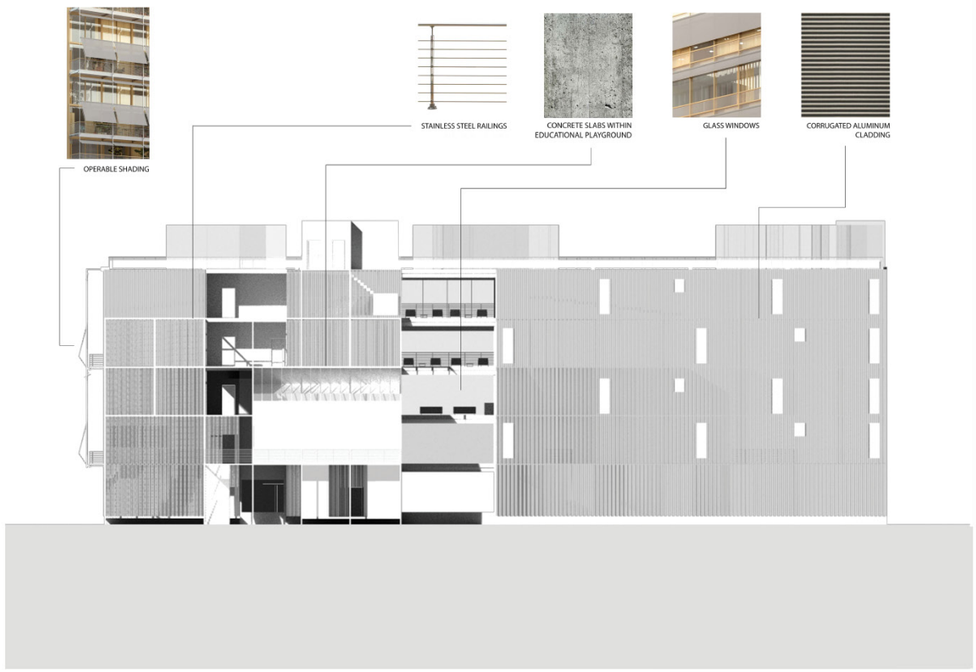


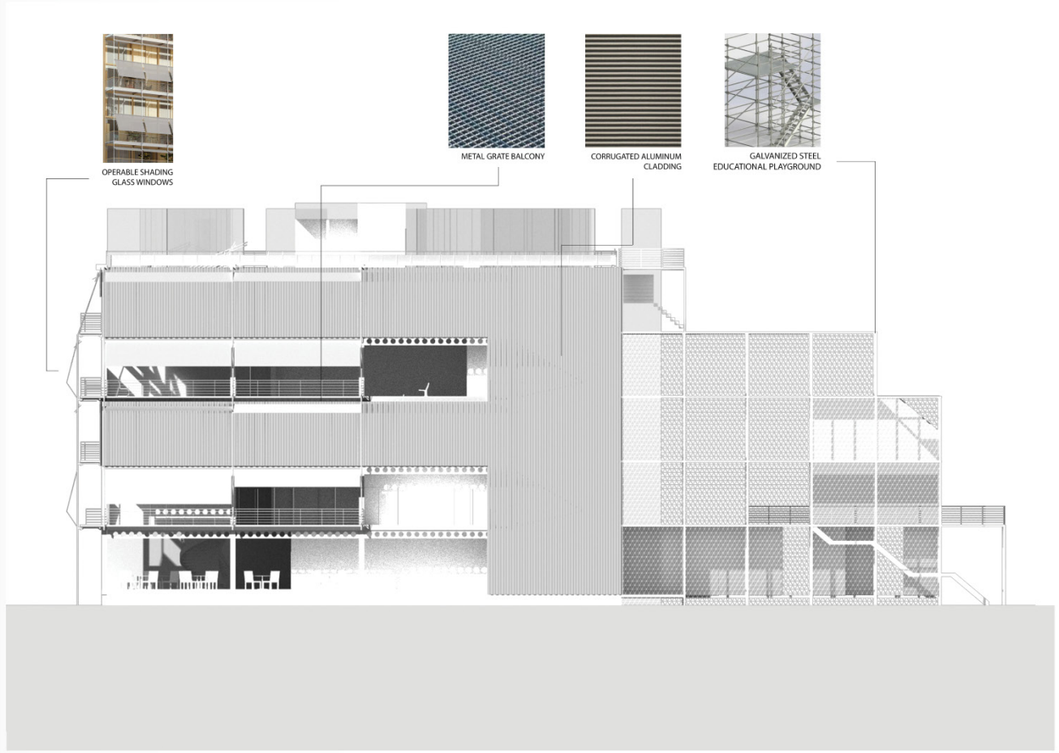
1 SECTION CALLOUT - Facade System 2
1 1/2" = 1'-0"



Facade For a School About Waste



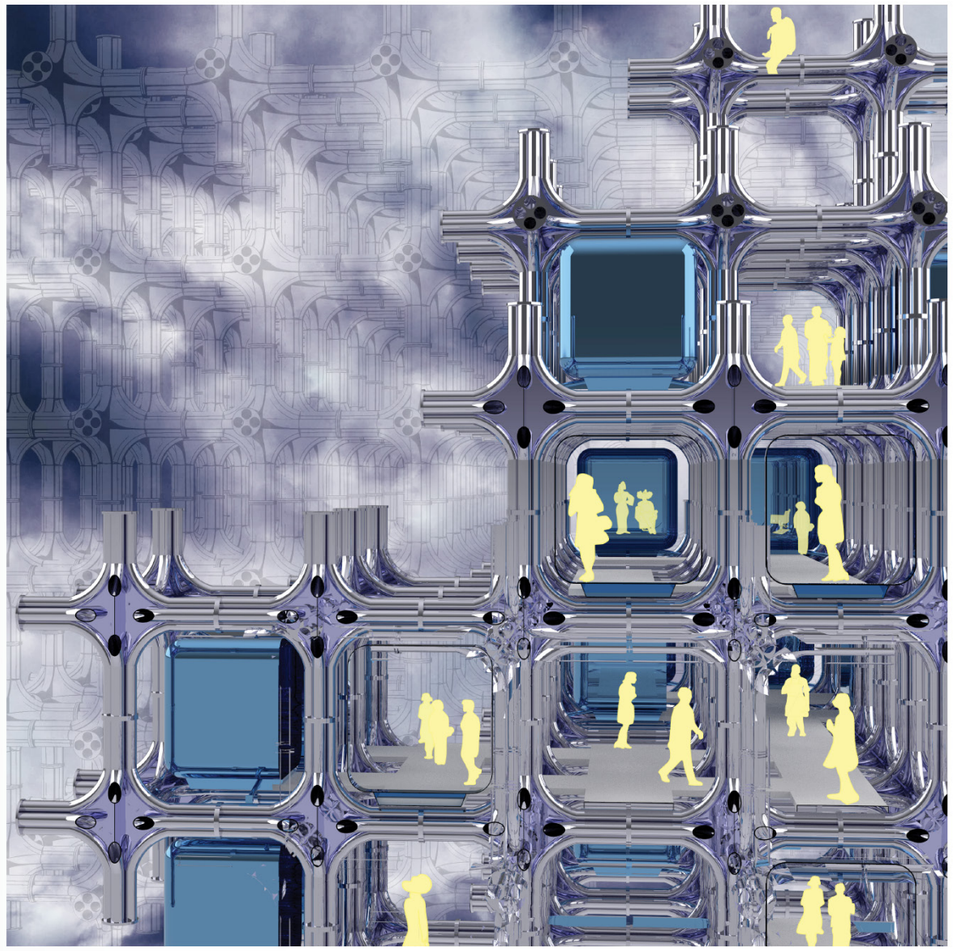


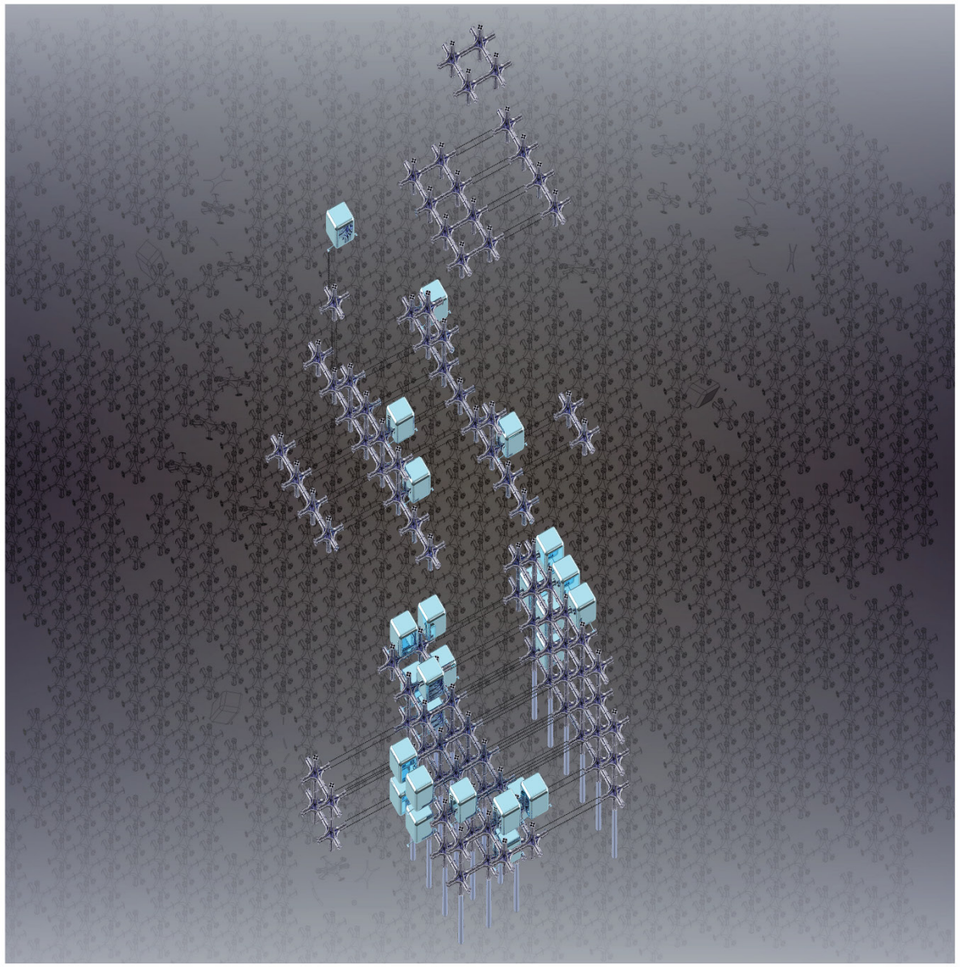


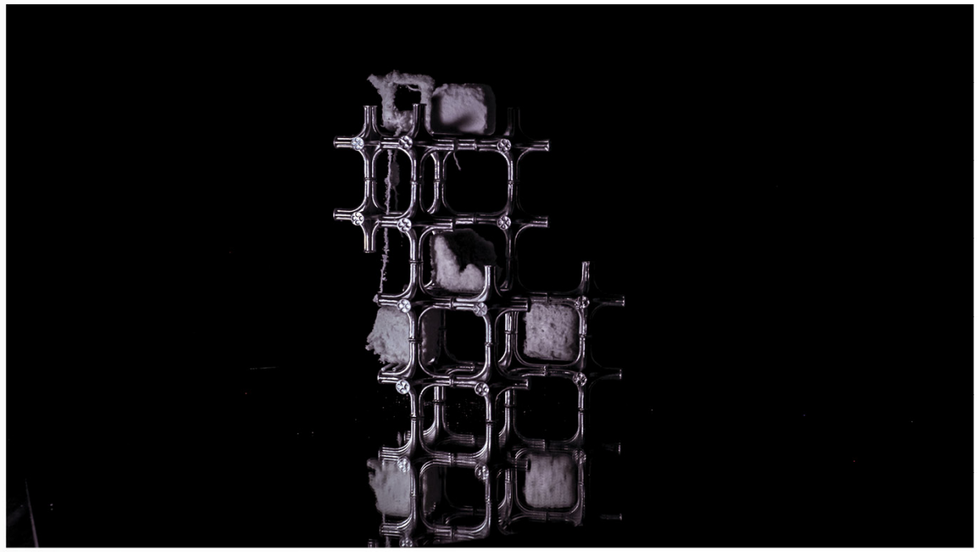
11 Takara Beautilion Pavilion Reinterpretation

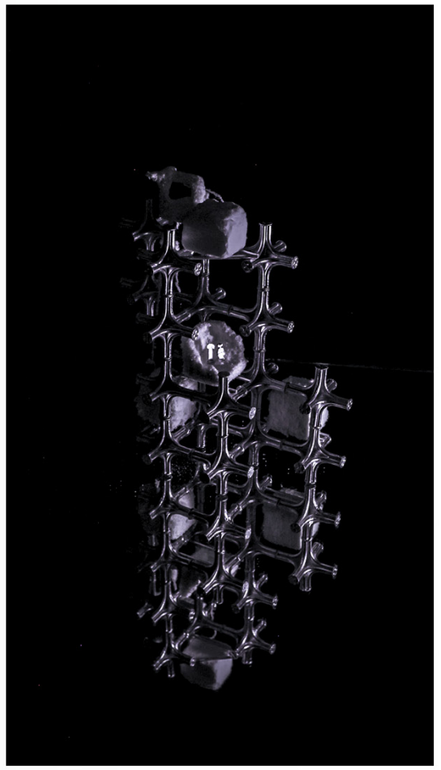
Critic: Jelisa Blumberg
Architectural Drawing and Representation I

Kisho Kurokawa envisioned buildings as living organisms. This model interprets the short lifespan and ephemerality of the Takara Beautilion Pavilion, built for Expo '70 in Osaka, using salt for the inhabitable cubes placed within the alterable structure. The structure has an infinity like effect to emphasize the ever changing possibilities of metabolism over time. Salt is fragile and represents decay. Salt is a large part of Japanese culture especially in the sacred Shinto rituals surrounding death, and symbolizes cleansing, rebirth, and purity.









12 Metal Metabolics

Critic: Michael Wang
Metabolic Materialities

What does your kitchen knife sound like? Removing the shininess of Oneida flatware exposes hidden histories and extraction practices. From patterns inspired by female genitalia in the Oneida commune, to goats falling into open pit chromium mines in South Africa a sound component was created from research of news and interviews that play from the inside of the sculpture.