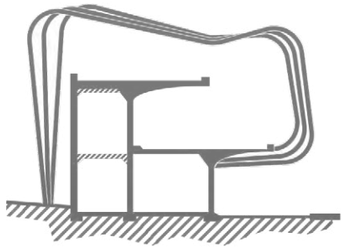
ANDREW MAGNUS

THE RECYCLING BIN

Seven Stories of Re-use

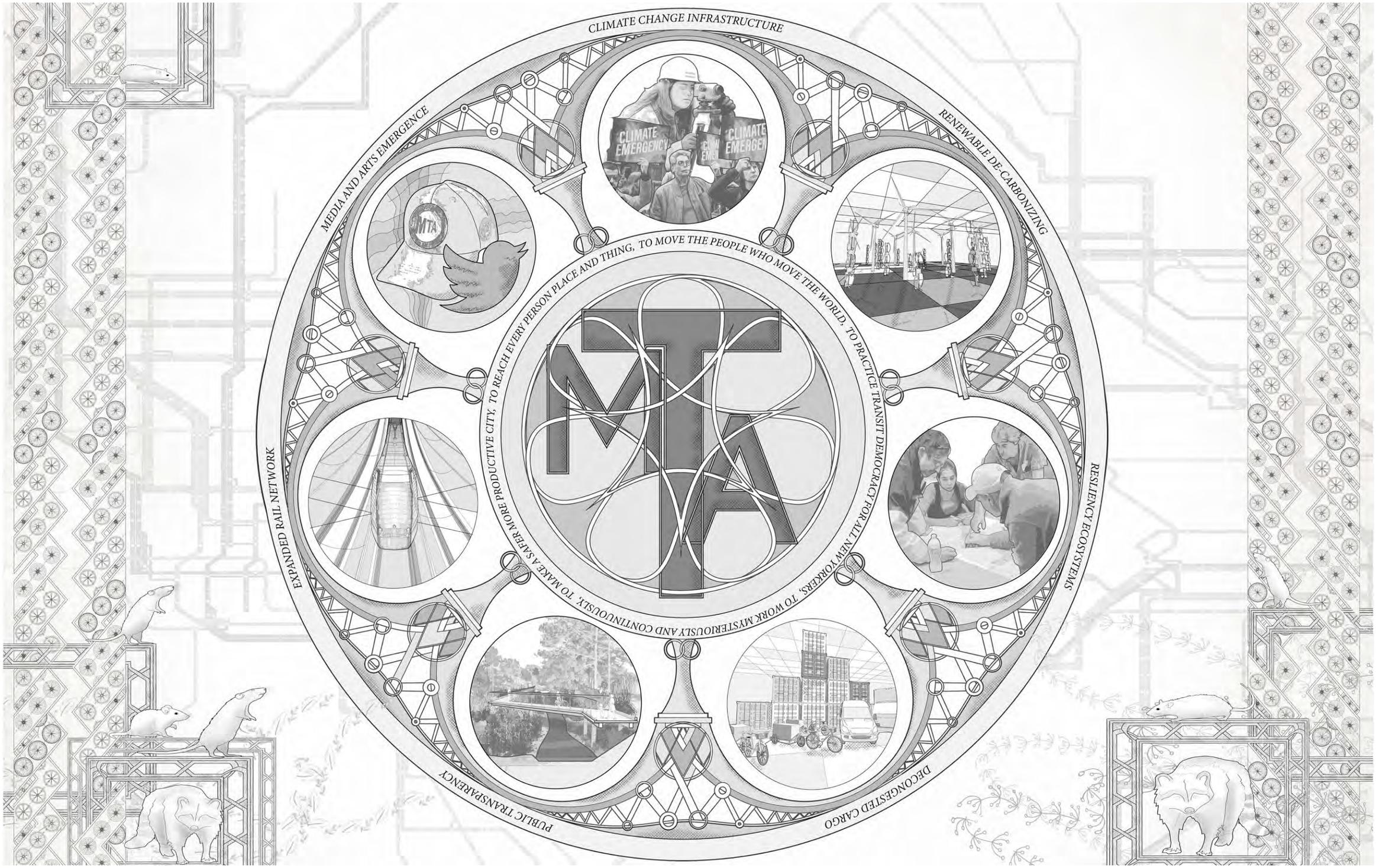
Andrew Magnus



01. The Cathedral to the MTA

A transportation hub for a congestion-priced-out city; a last mile green delivery hub; a mosaic studio for public consumption.

ADV V / Laurie Hawkinson / FA2021


CLIMATE CHANGE INFRASTRUCTURE
RENEWABLE DE-CARBONIZING
RESILIENCY ECOSYSTEMS
DECONGESTED CARGO
PUBLIC TRANSPARENCY
EXPANDED RAIL NETWORK
MEDIA AND ARTS EMERGENCE
TO MOVE THE PEOPLE WHO MOVE THE WORLD, TO PRACTICE TRANSIT DEMOCRACY FOR ALL NEW YORKERS, TO WORK MYSTERIOUSLY AND CONTINUOUSLY, TO MAKE A SAFER MORE PRODUCTIVE CITY, TO REACH EVERY PERSON PLACE AND THING,
CLIMATE EMERGENCY
MTA

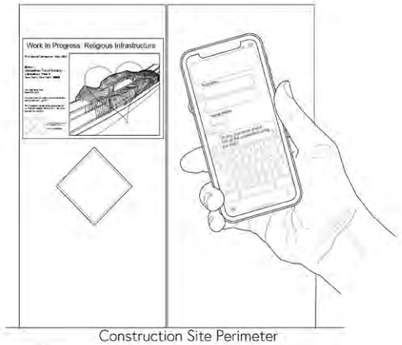
External Experience

Floor Plan

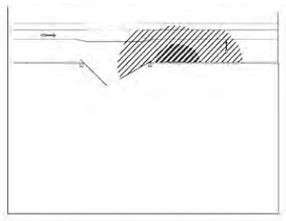
Active Participation

Passive Engagement

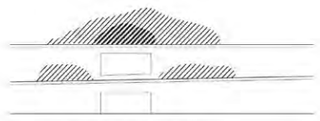
(Inter) Personal



Construction Site Perimeter



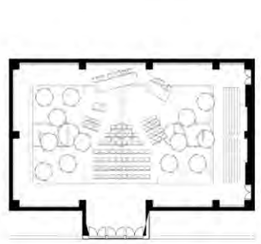
Localized, Passive Only

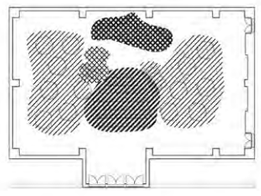


Localized, Passive Only

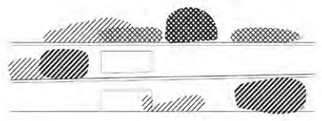
Borough Basis

Brooklyn Heights Montessori: CB-2

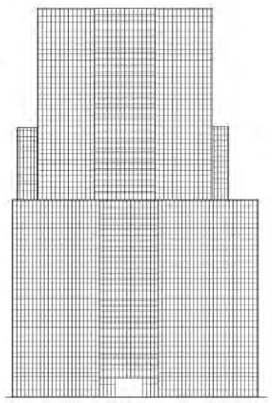




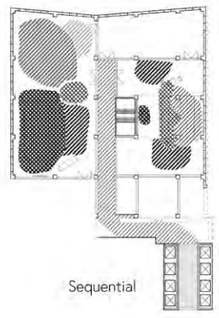
Passive + Active Clusters



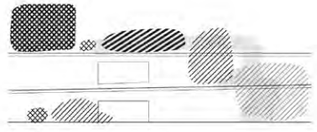
Passive + Active Clusters



2 Broadway Building: MTA HQ



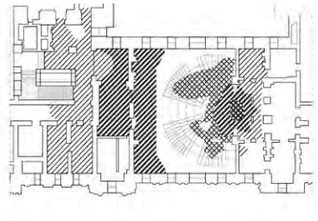
Sequential



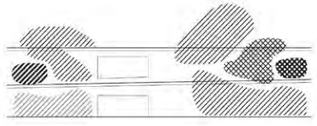
Sequential

The State

State Assembly, Albany

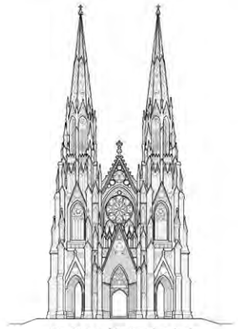


Divided Passive / Active

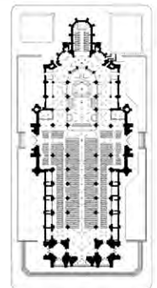


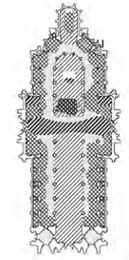
Divided Passive / Active

The Spritual Universe

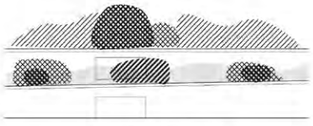


St. Patrick's Cathedral

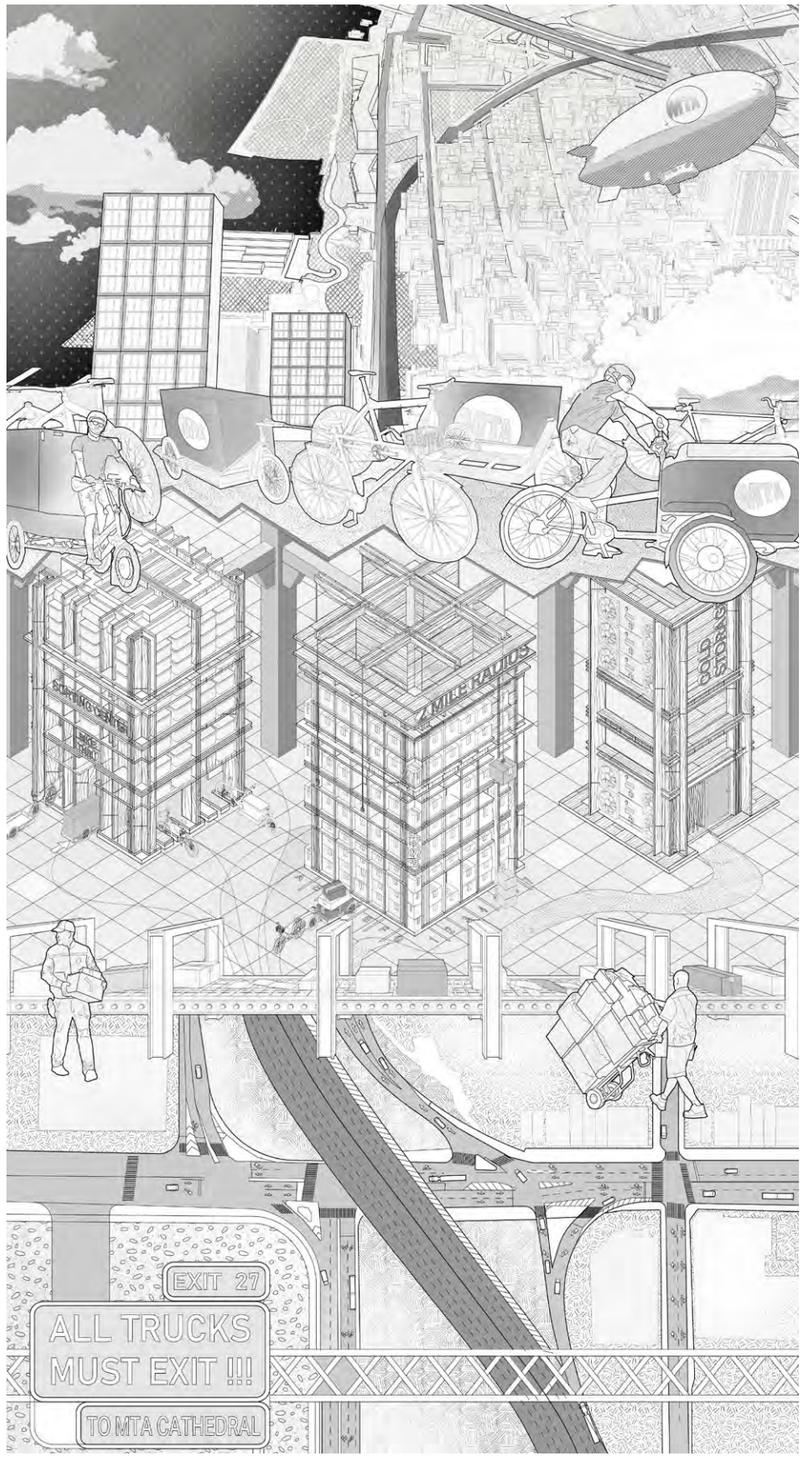


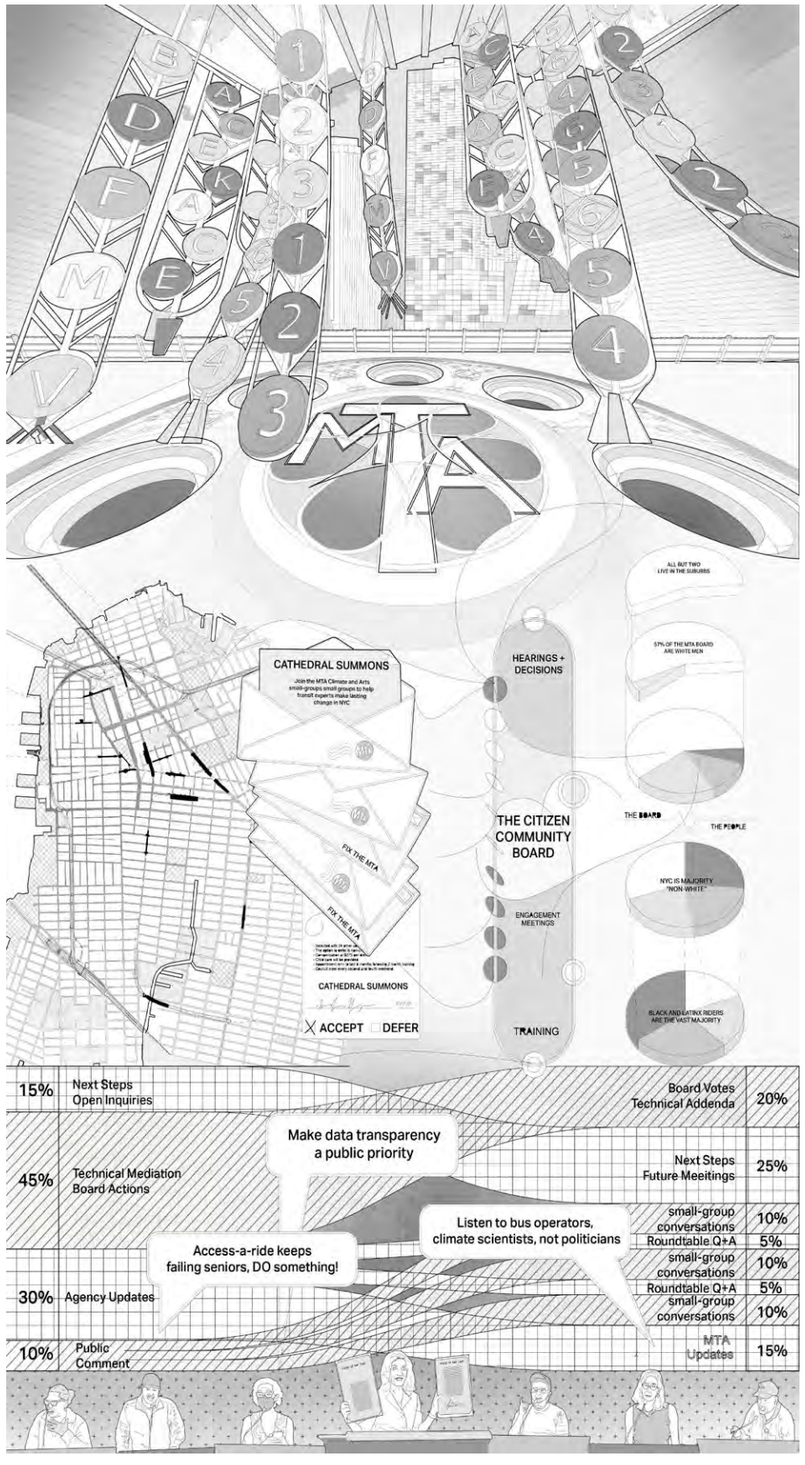


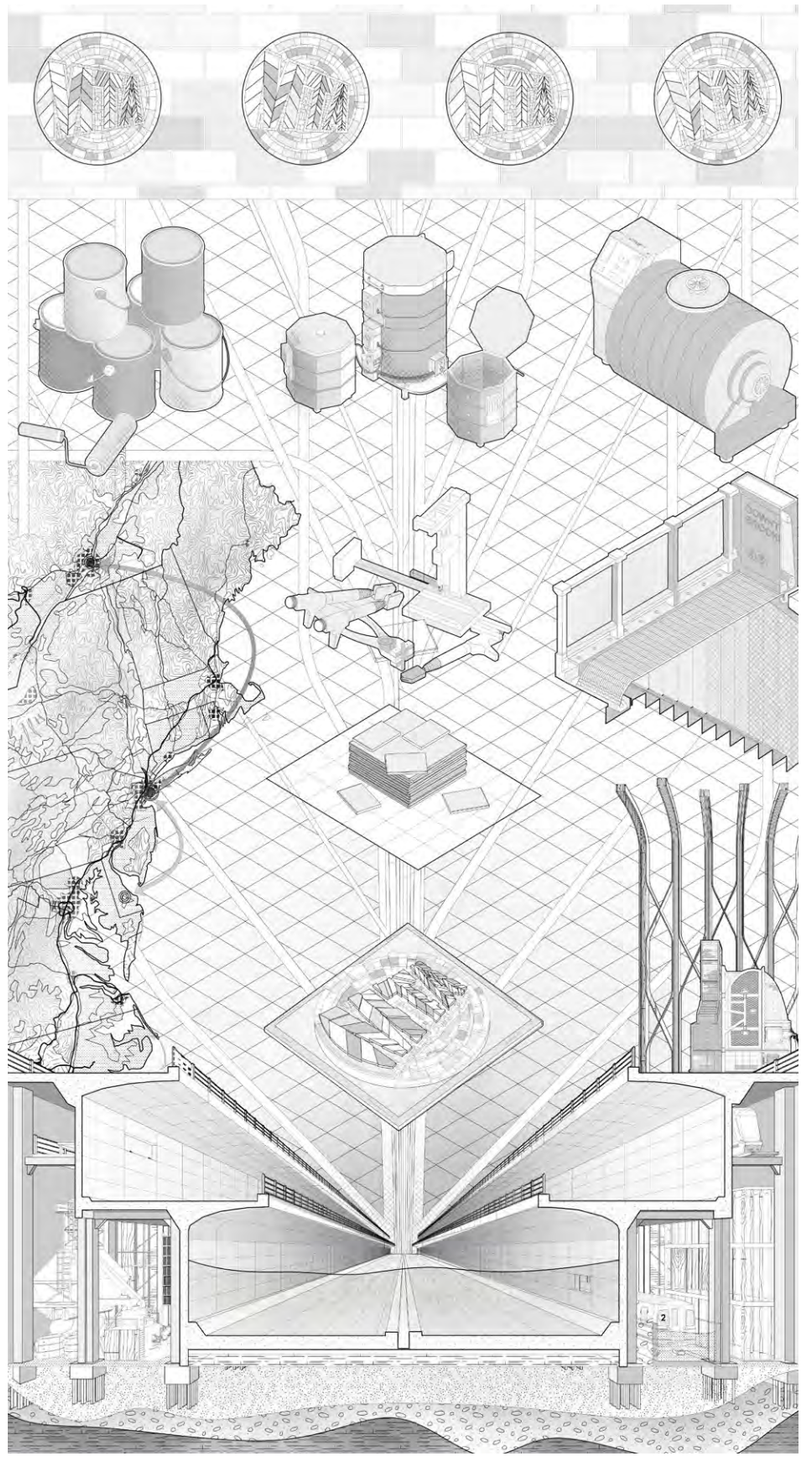
Layered, Multiple Nodes

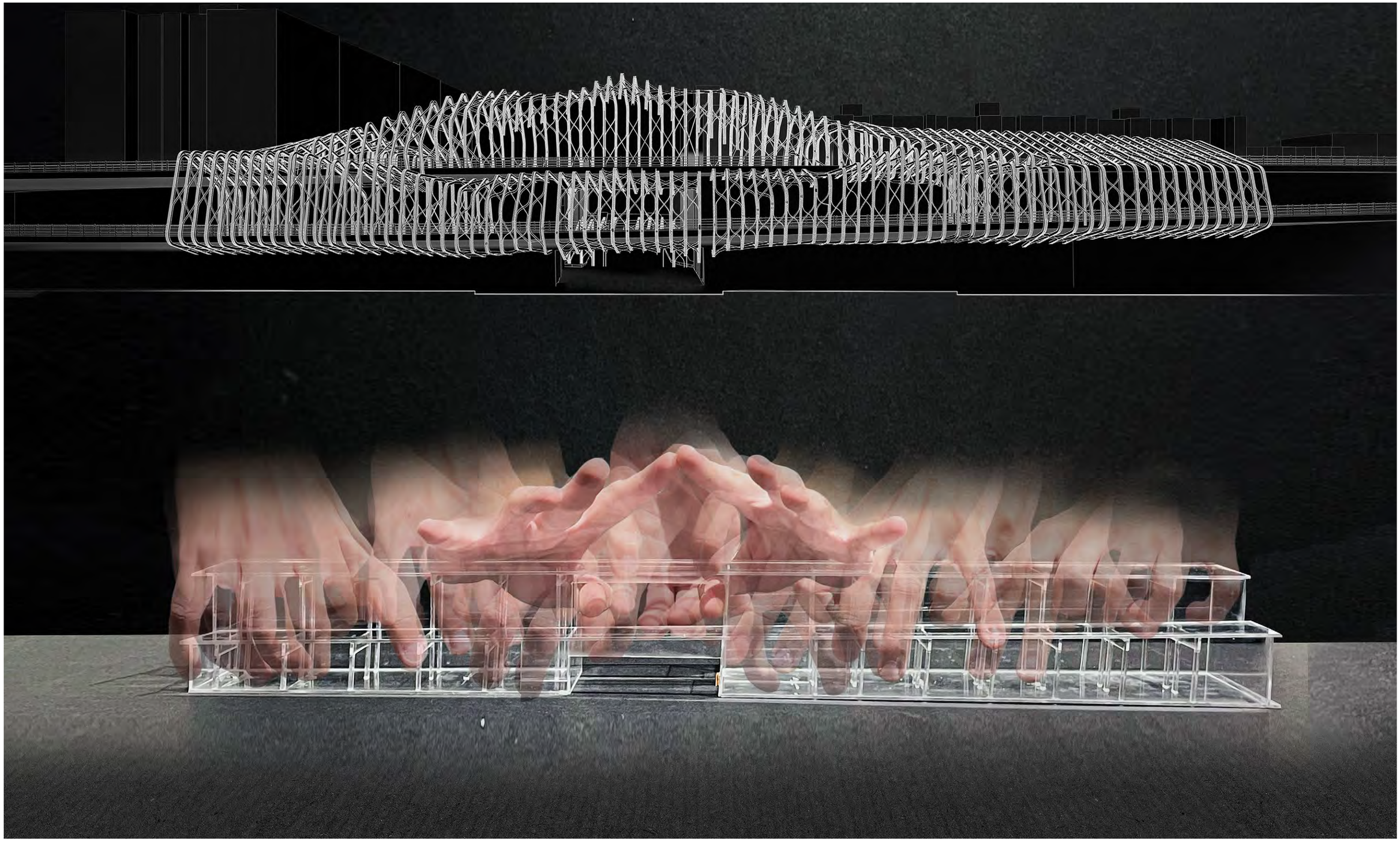


Layered, Multiple Nodes

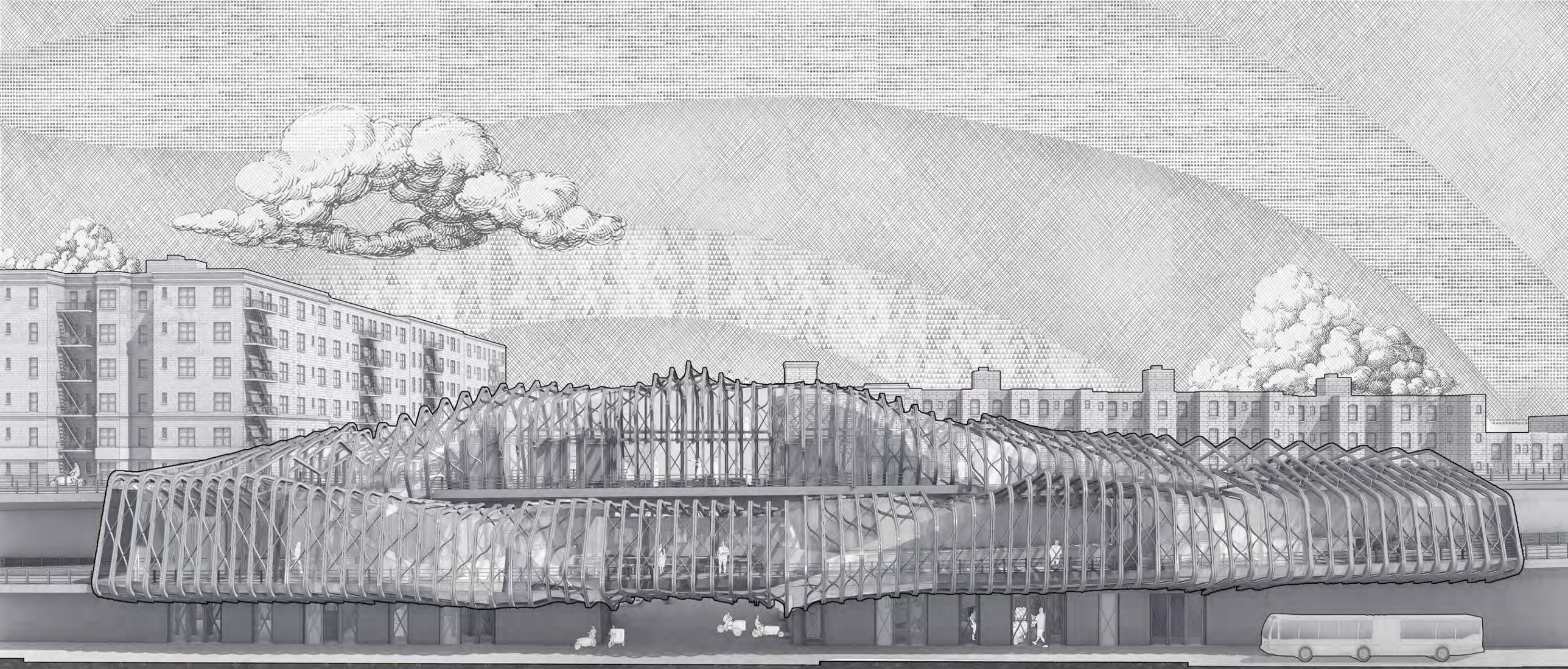

EXIT 27
ALL TRUCKS
MUST EXIT !!!
TO MTA CATHEDRAL
4 MILE RADIUS


CATHEDRAL SUMMONS
Join the MTA Climate and Arts small-groups small groups to help transit experts make lasting change in NYC
FIX THE MTA
CATHEDRAL SUMMONS
ACCEPT
DEFER
HEARINGS + DECISIONS
THE CITIZEN COMMUNITY BOARD
ENGAGEMENT MEETINGS
TRAINING
ALL BUT TWO LIVE IN THE SUBURBS
57% OF THE MTA BOARD ARE WHITE MEN
THE BOARD
THE PEOPLE
NYC IS MAJORITY "NON-WHITE"
BLACK AND LATINX RIDERS ARE THE VAST MAJORITY
15% Next Steps Open Inquiries
45% Technical Mediation Board Actions
30% Agency Updates
10% Public Comment
Make data transparency a public priority
Access-a-ride keeps failing seniors, DO something!
Listen to bus operators, climate scientists, not politicians
Board Votes Technical Addenda 20%
Next Steps Future Meeitings 25%
small-group conversations 10%
Roundtable Q+A 5%
small-group conversations 10%
Roundtable Q+A 5%
small-group conversations 10%
MTA Updates 15%





Model



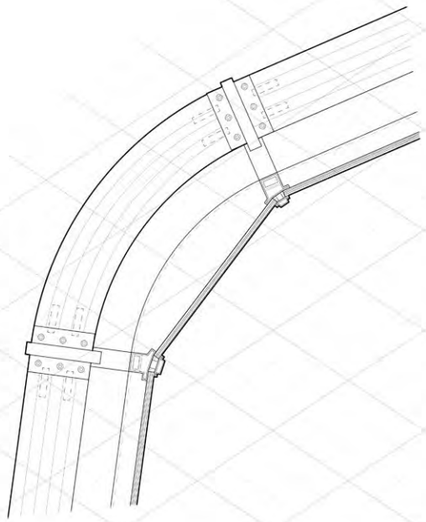
The cathedral to the MTA seeks to be the city's new seat for equity in infrastructure decision-making by centering participatory design.

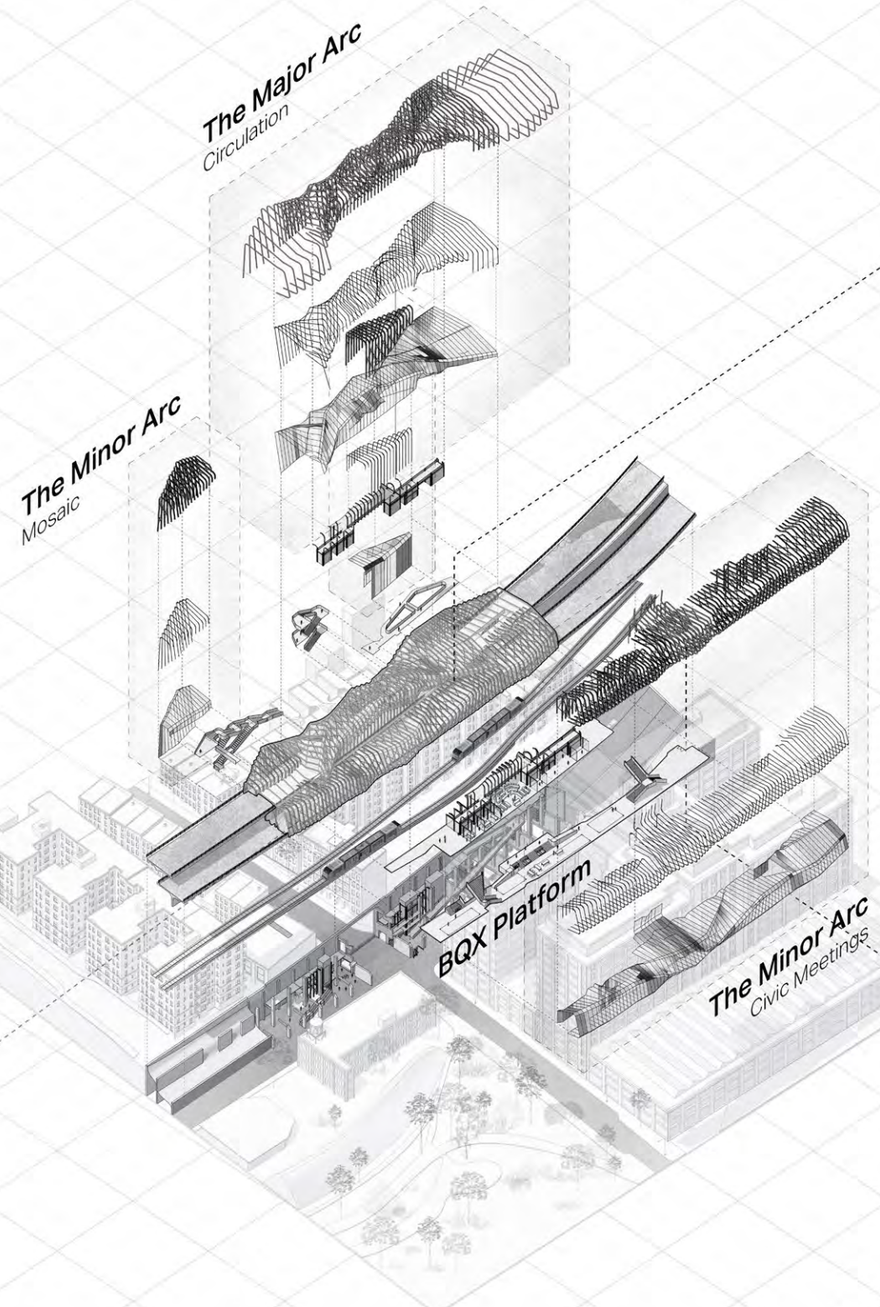
The legacy of the BQE is one of intense fragmentation - it disconnects neighborhoods here and throughout Brooklyn, and makes some of the best resources in this area inaccessible or inhospitable to residents and visitors alike. The engineering marvel of the BQE is arguably not the cantilever, but the miles of tunnels and support spaces underneath: 12 tunnels houses, 10 escape exits, 4 fan vents, two substations a pump house, are all woven into the structure, at the triple cantilever, the MTA hides in plain site.

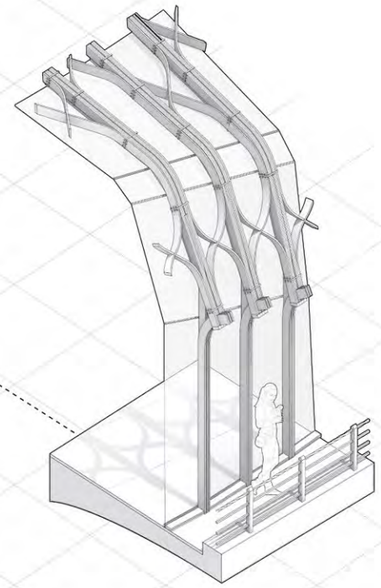
This constitutes a different way to think about how we make decisions about infrastructure. Here, at different scales of decision from personal to state, we can see how spatial orientation tries to optimize efficiency, order, or in the case of the MTA, the status quo. I argue that we should adopt a model of engagement like a cathedral, where participation is nuanced, personal yet communal, and multi-layered concentrically.

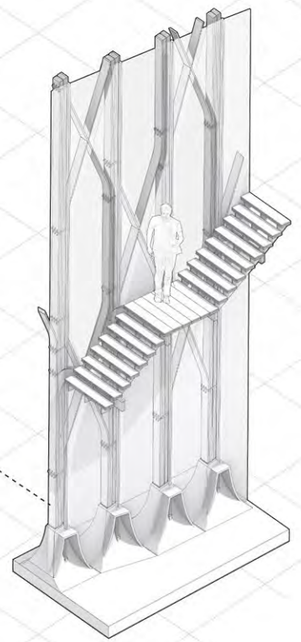
Programmatically, a cargo-to-ebike transfer station would dovetail with the various futures of congestion pricing, a car-free-BQE, and a low-carbon last mile delivery solution for New York. At the scale of the city this is the last exit before Manhattan, where delivery companies will try to avoid future congestion pricing tolls due to razor-thin margins. These e-bikes can operate ten 2-mile trips each day; five and a half bikes can transport the average goods of local delivery van, and the result is a modality that is more efficient than today's amazon vans with fewer emissions. Lastly, the BQX tramway currently proposed along the dashed route into the cantilevers of the BQE, as it would offer additional connectivity, and more access to

Elevation




The Major Arc
Circulation
The Minor Arc
Mosaic
BQX Platform
The Minor Arc
Civic Meetings





Once the MTA is properly funded, we should align its working objectives with climate goals, namely electrification with green energy, arts and media, and clean cargo. Now informed by our spatial constraints and future needs, we can synthesize an architecture for the city's benefit. This triptych focuses on three elements: first the transfer of goods that happens below the structure of the BQE to support deliveries on the ground, second the equitable space created on top of the cantilever structure will sponsor small groups, offer community meetings and resident MTA positions by sortition, and reconceptualize the makeup of the MTA, and lastly, the story of a new mosaic fabrication space that will specialize in large scale fabrication.

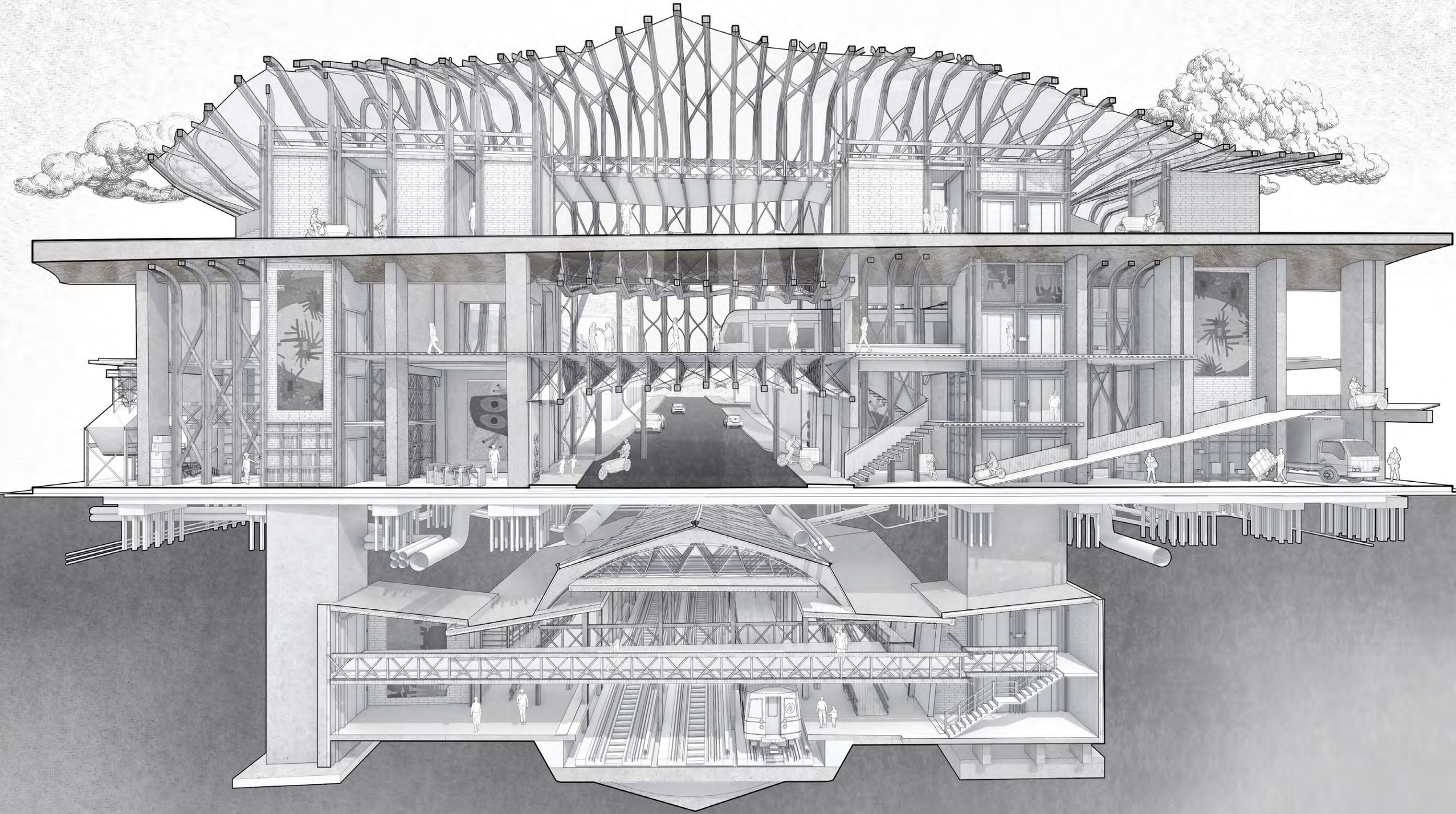
How can we support the BQE? Quite literally, it involves a series of compound piers made of Dowel-Laminated Timber that enclose volumes around the concrete structure and anchor programming. The exoskeletal form of the cathedral, which reaches around the cantilevers, gives new life to the structure. The construction of the cathedral is made of minor arcs, which are glazed with programming, and major arcs, which wrap around the BQE. The exoskeletal structure is NLT and DLT, and uses the existing concrete to tether new volumes. The cathedral creates a fantastical gateway to the brooklyn heights neighborhood that invites visitors and residents to go up above and under the structure. The main cathedral space makes good use of the views of Manhattan to push a progressive climate-backed infrastructure agenda.

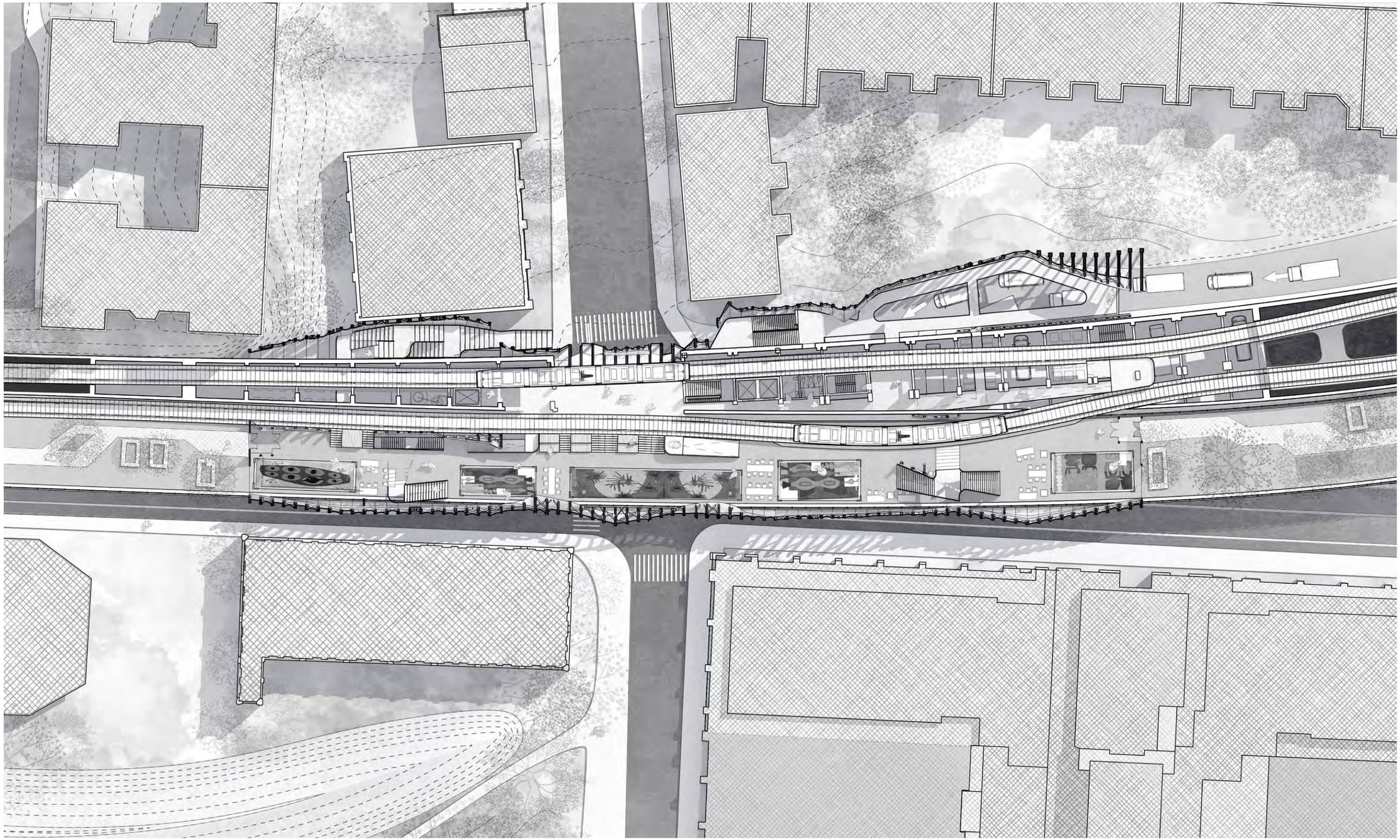
Inside, on the Manhattan-Bound level of the old Brooklyn Queens Expressway, the main cathedral space makes good use of the views of the downtown skyline to push a progressive climate-backed infrastructure agenda. Framing of participatory design is recreated as an active savior of the city's most valued and vain aspects in the face of climate change. At the same time, underneath the BQE, the existing cavity is converted into a busy transfer center with ramps for bikers, trams, and storage for goods. The bowels of the system of the new Cathedral to the MTA both create a financial lever for its creation, but also bring people through the space in a self-perpetuating architectural experience.

The programs are stacked sectionally. At the upper level along a new continuous pedestrian accessway shared by all projects in the studio, the main cathedral space and meeting rooms wind along the path of the existing asphalt. Underneath the top layer, public transit like the BQX station and subway to elevators create a new node of accessibility in Brooklyn. And below that, the borough's first cargo to bike transfer station and mosaic fabrication studio use the full height of the BQE's catenary caverns to make the things that make New York City function. Finally, underground, a new subway station for the 4 and 5 trains creates a multi-level node. Taken together, a thick sections approach to ontologies create new alignments for public engagement by proximity and entangling programs. The Cathedral is a place for people in a space where cars once idled in traffic.

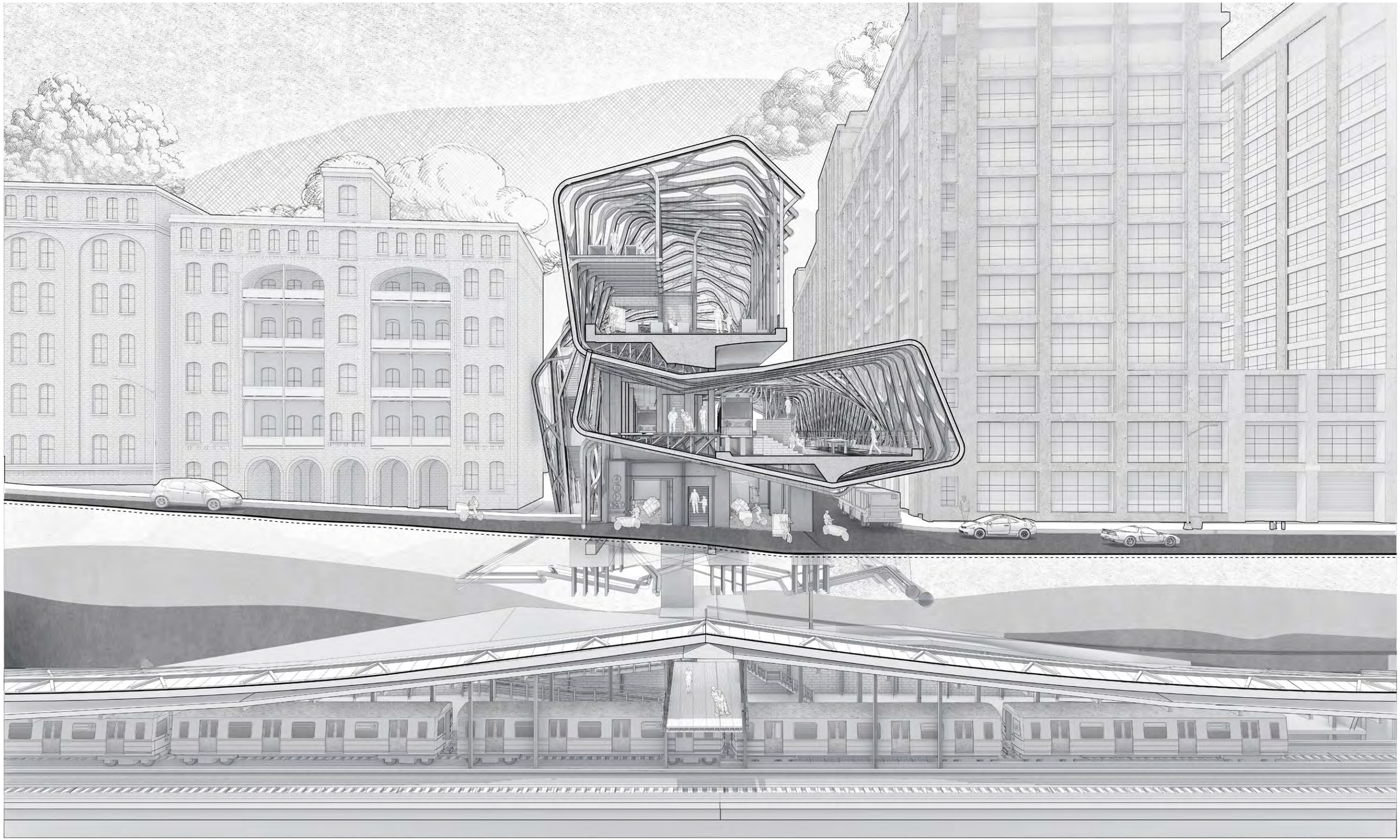
Interior - the Main Cathedral

Exterior - From Brooklyn Bridge Park

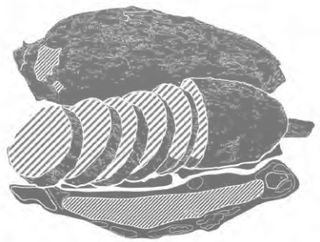




Middle Level Plan



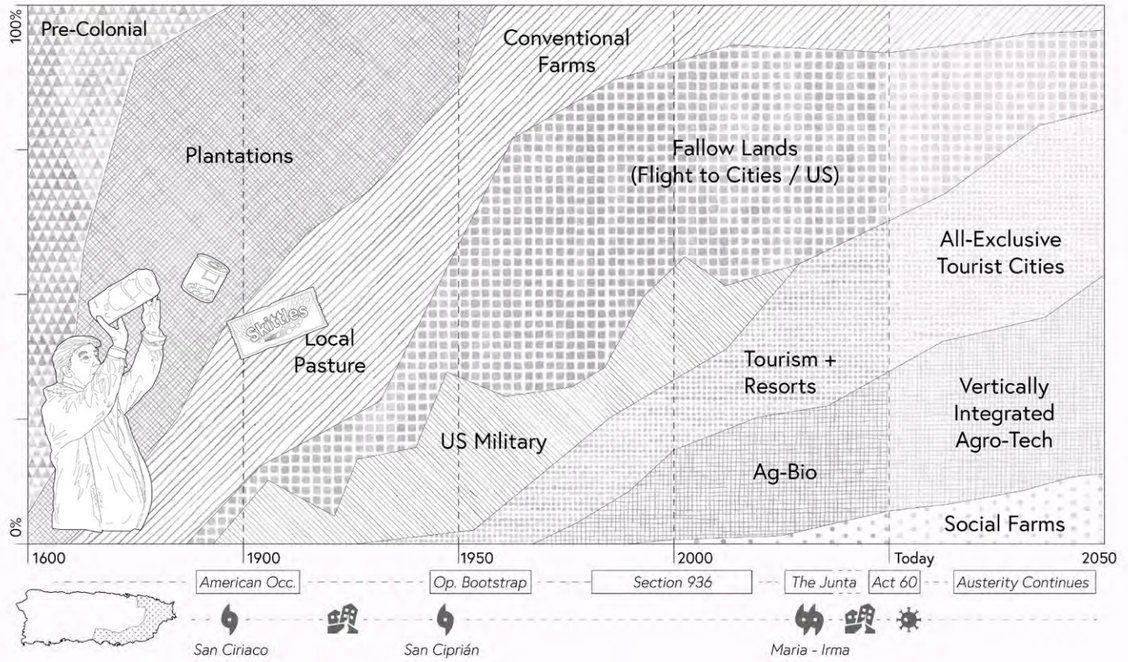
Site Section

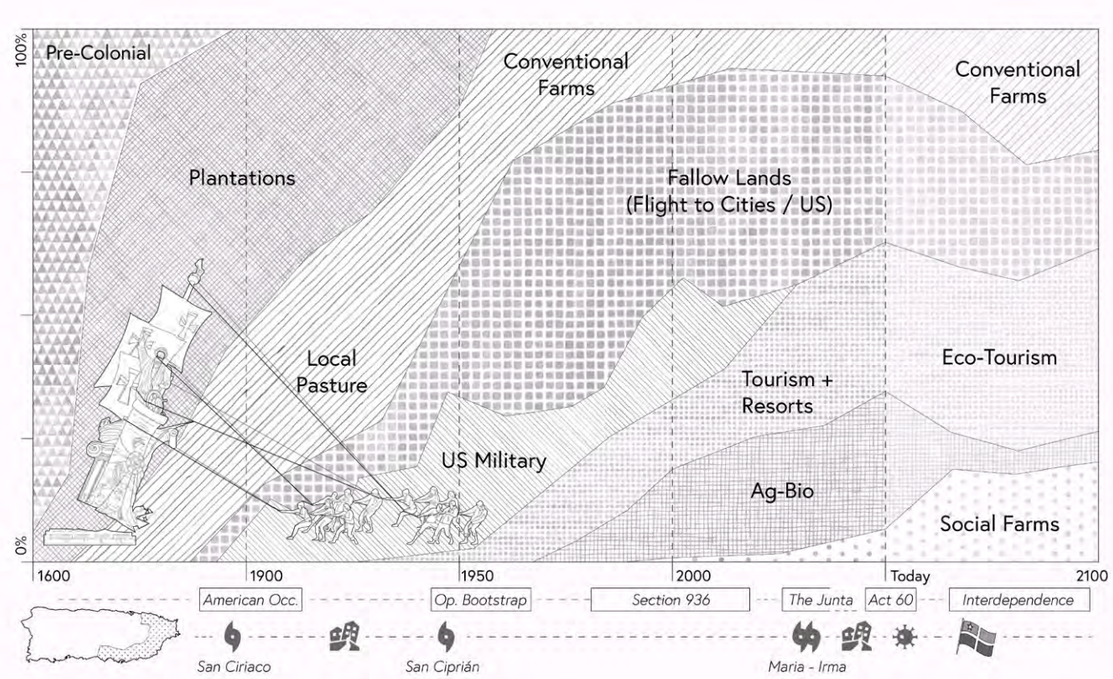


02. Land After Luxury

Agroecologies of post-capital land-scapes; queering the Puerto Rican Golf Course typology; a new kind of small farm for food sovereignty

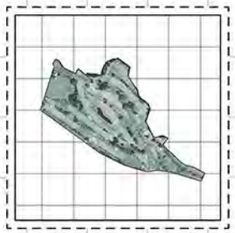
ADV VI / Justin G. Moore / FA2021





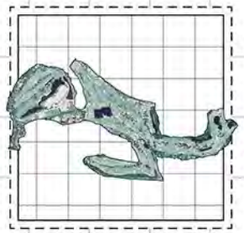
Speculative Land-Use Diachrons


Univ of Iowa
Monsanto
Syngenta
Monsanto
Monsanto
Bayer Seed Science
Monsanto
Corteva AgScience
Encanto Tree Cannabis
N
O
E
S
chlorpyrifos
atrazine
drifting insecticides
glyphosate
dicamba
proprietary toxins
ethylene
copper oxalate
off-gassing
soil stabilizers

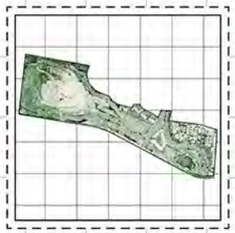


Fort Buchanan

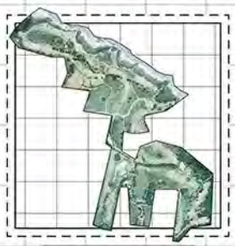
Villas del Golf



Dorado Beach East

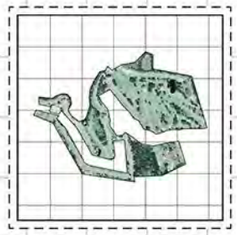


The Sugarcane

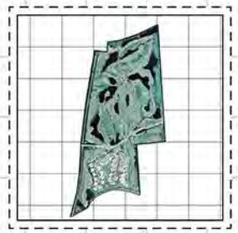


Royal Isabella

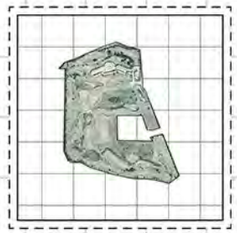
Punta Borinquen



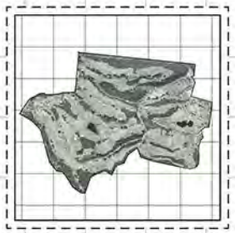
Club Deportivo Oeste



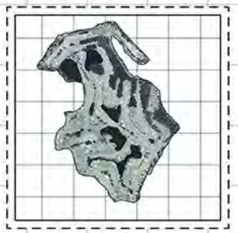
Costa Caribe



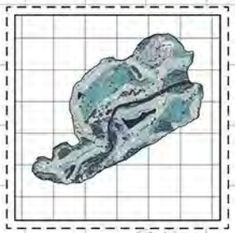
Chi Chi Rodriguez



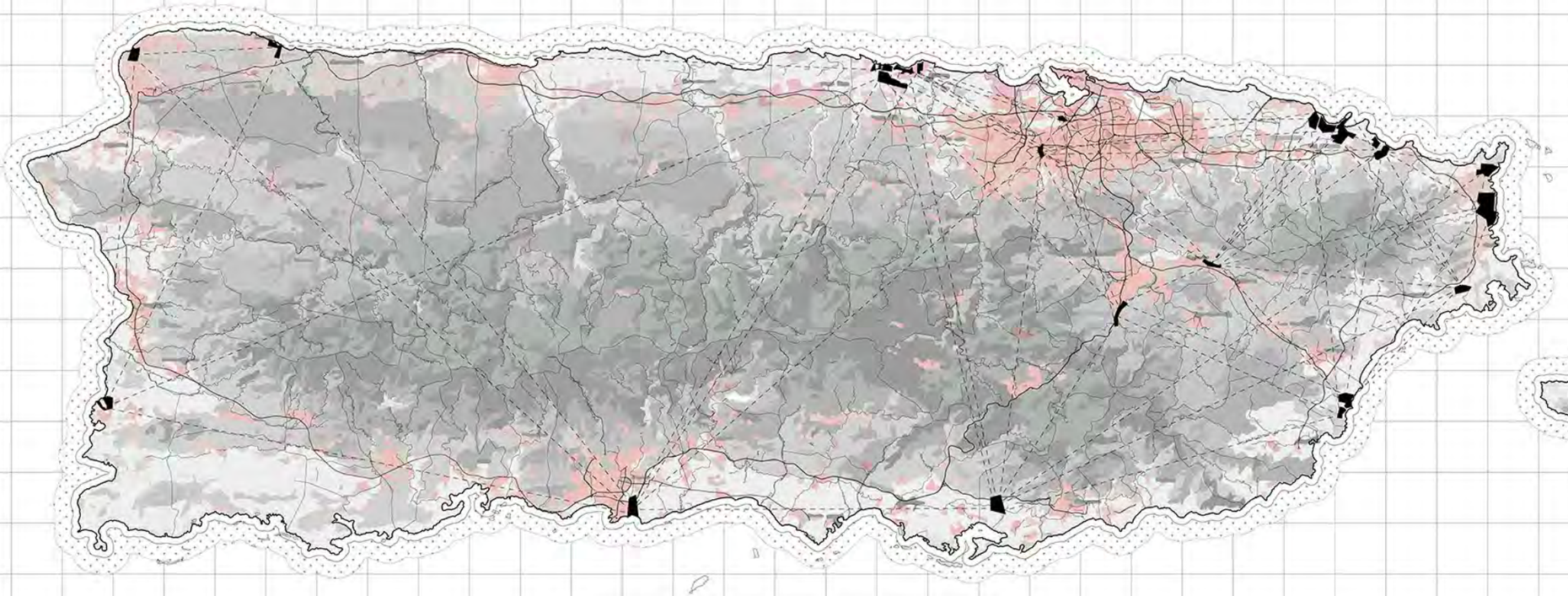
El Conquistador

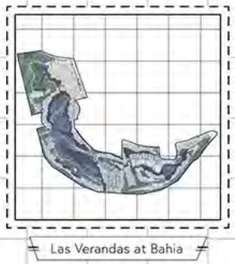


Wyndham Gran Rio

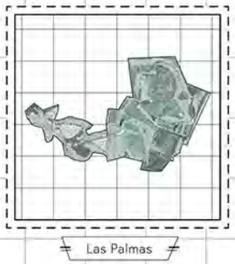


Wyndham Rio Mar



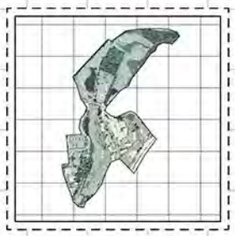


Las Verandas at Bahia

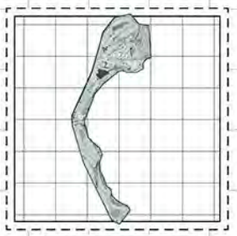


Las Palmas

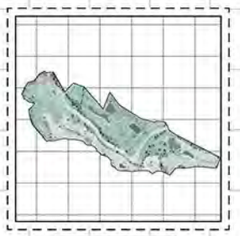
Golf Courses of Puerto Rico



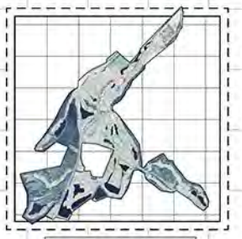
Palmas Wyndham



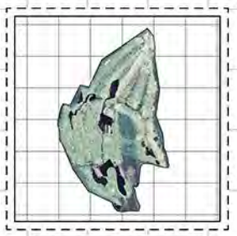
Caguas Real Club



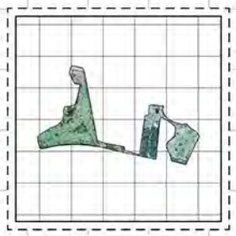
Las Bambuas



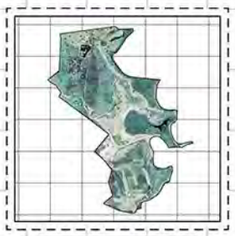
Coco Beach



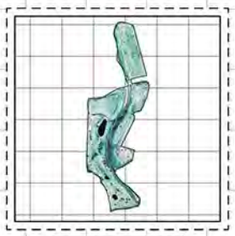
Berwind Country Club



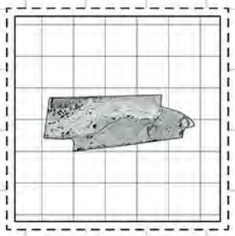
Mata Redonda



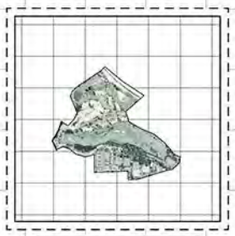
Resort Caya Largo



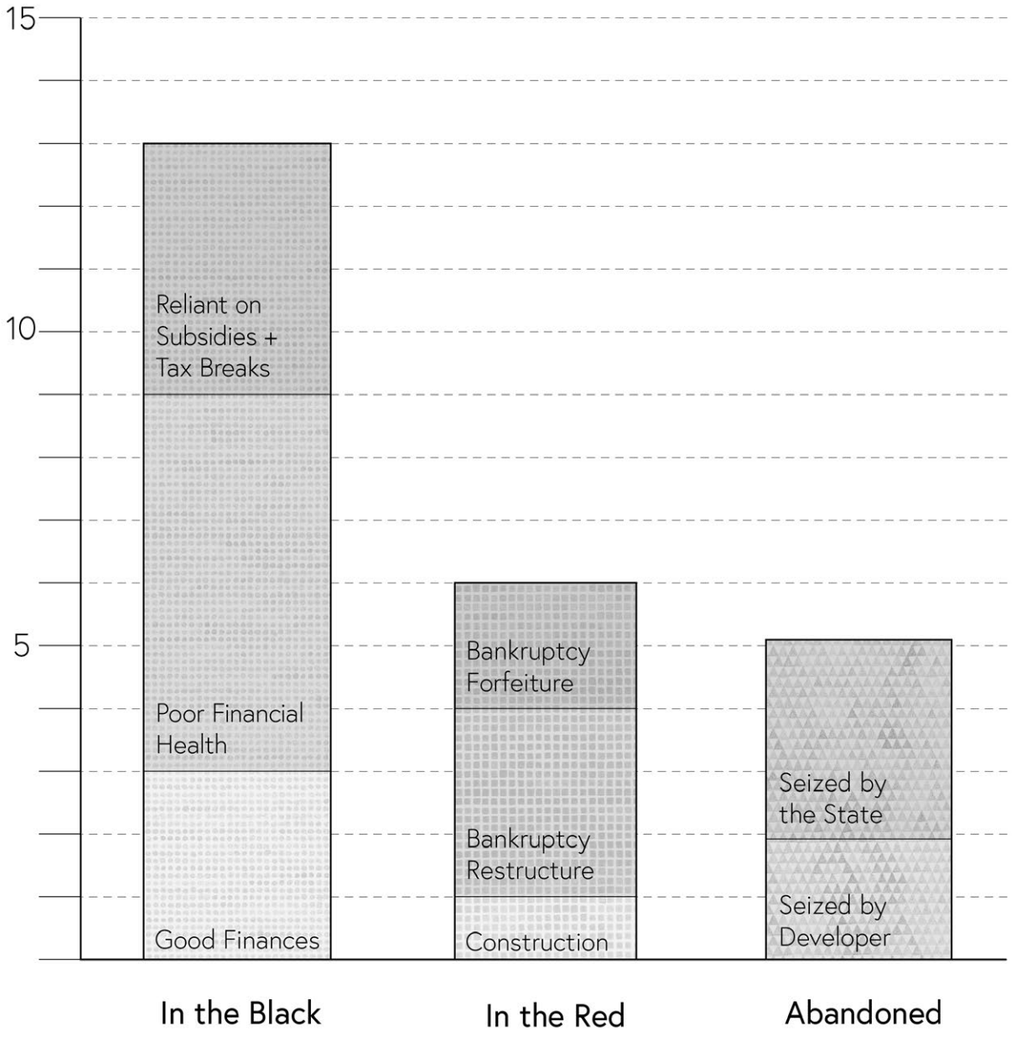
Rio Bayamon

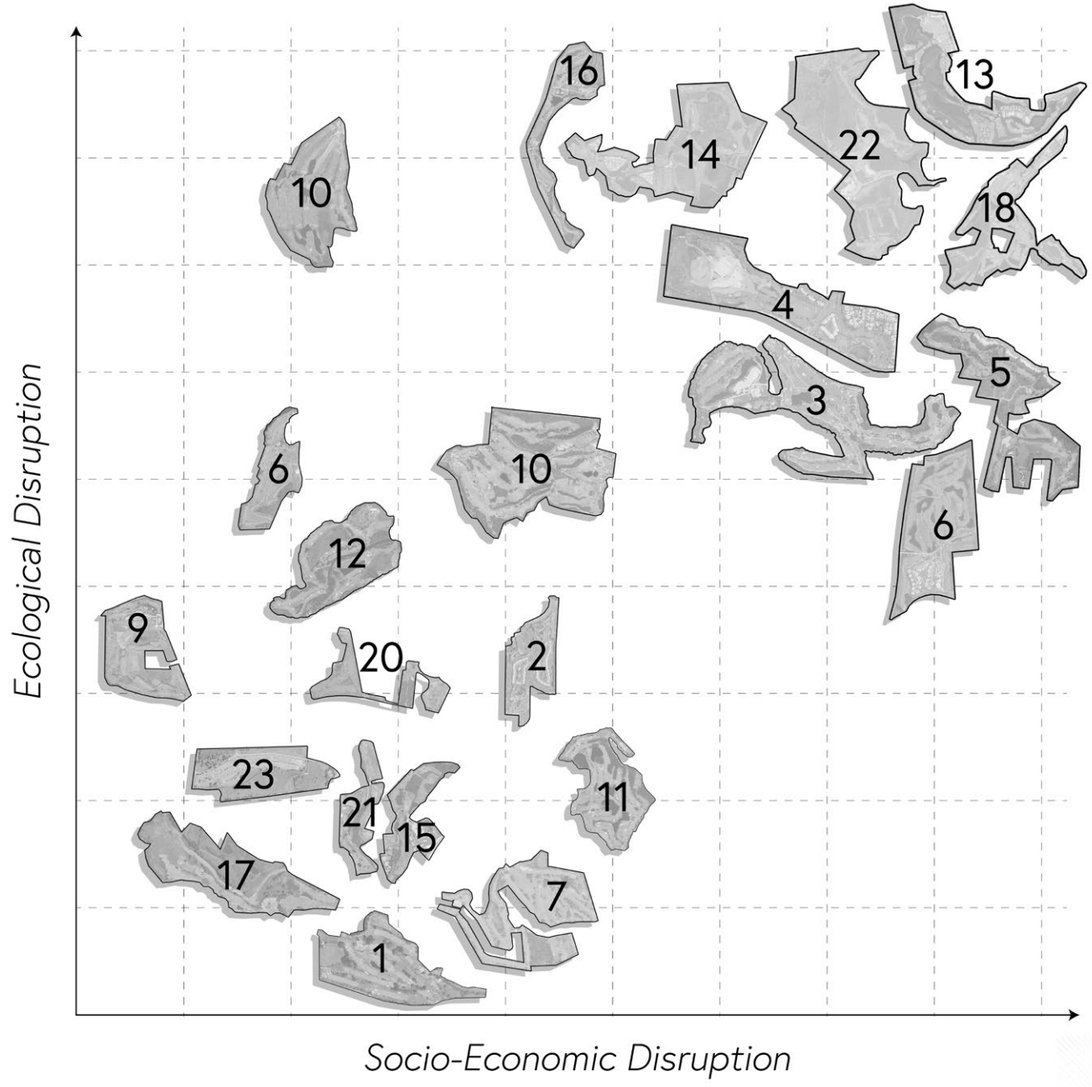


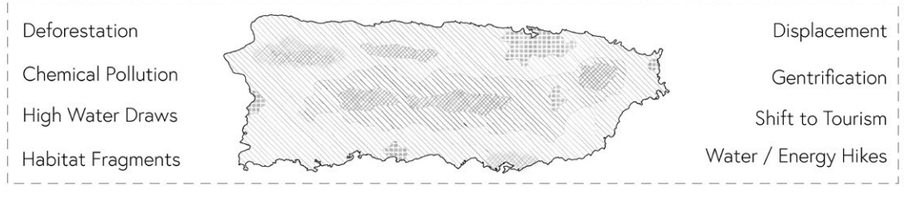
Roosevelt Roads

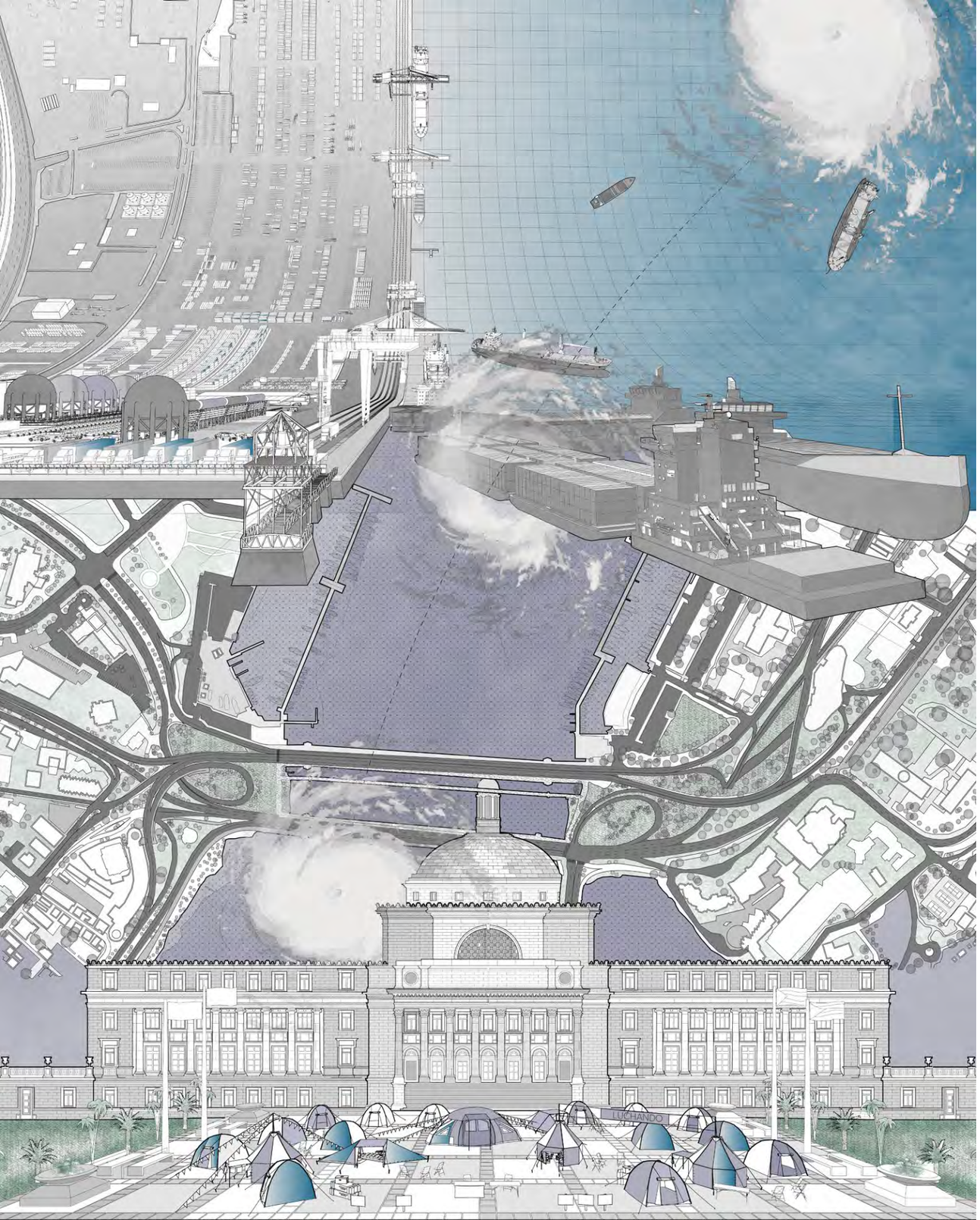


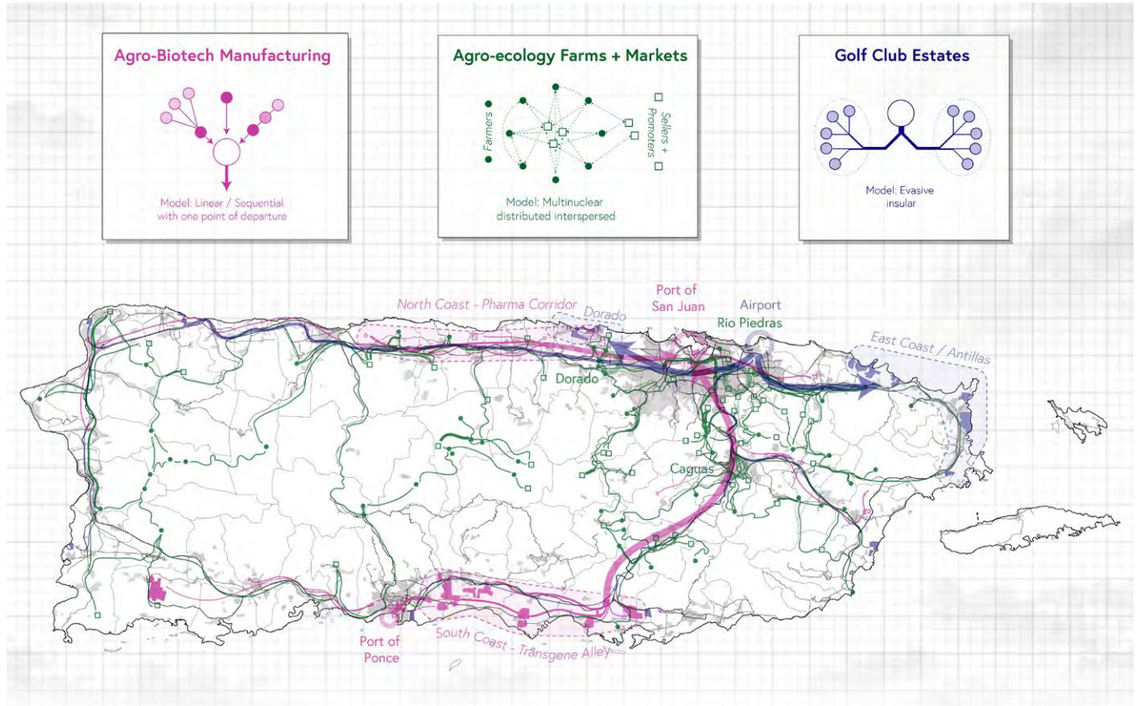
Centro Roig Humacao

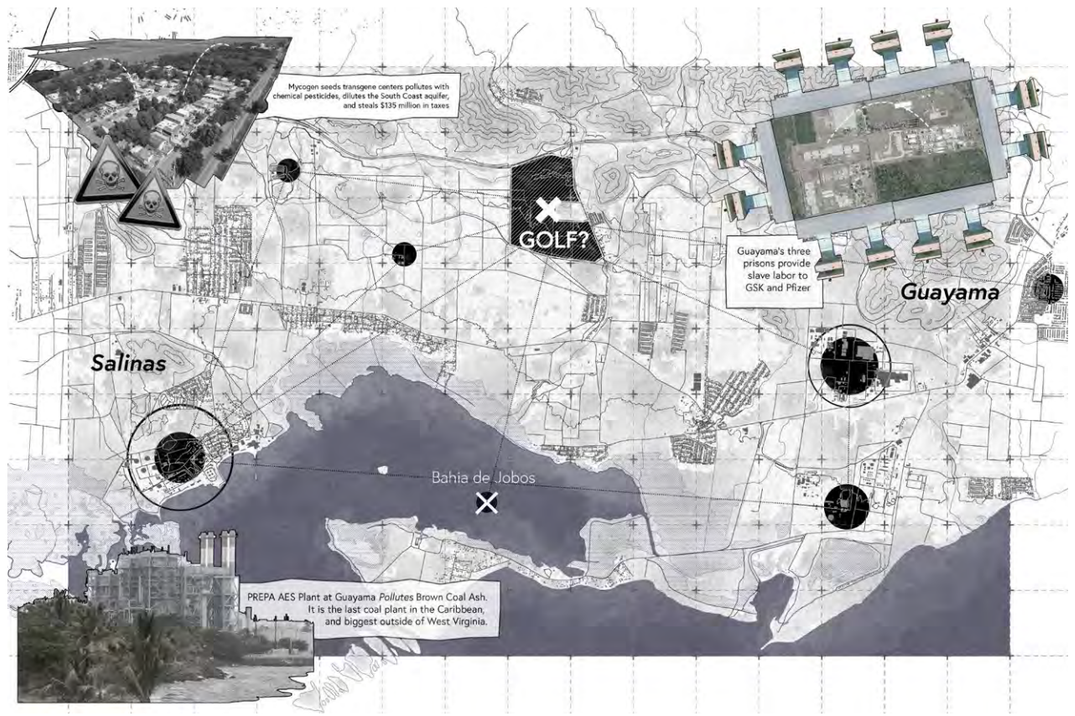

15
10
5
Reliant on Subsidies + Tax Breaks
Poor Financial Health
Good Finances
Bankruptcy Forfeiture
Bankruptcy Restructure
Construction
Seized by the State
Seized by Developer
In the Black
In the Red
Abandoned
Chapter 11 Bankruptcy

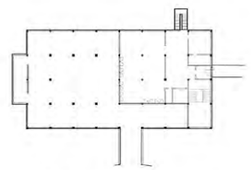

Ecological Disruption
Socio-Economic Disruption
16
13
14
22
10
18
4
5
3
6
10
12
6
9
20
2
23
11
21
15
17
7
1


Deforestation
Chemical Pollution
High Water Draws
Habitat Fragments
Displacement
Gentrification
Shift to Tourism
Water / Energy Hikes

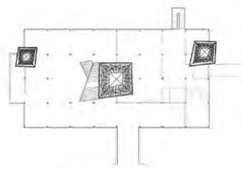

LUCHANDO


Agro-Biotech Manufacturing
Model: Linear / Sequential
with one point of departure
Agro-ecology Farms + Markets
Farmers
Sellers + Promoters
Model: Multinuclear
distributed interspersed
Golf Club Estates
Model: Evasive
insular
North Coast - Pharma Corridor
Dorado
Port of San Juan
Airport Rio Piedras
East Coast / Antillas
Dorado
Caguas
Port of Ponce
South Coast - Transgene Alley

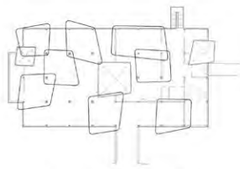

Mycogen seeds transgene centers pollutes with chemical pesticides, dilutes the South Coast aquifer, and steals $135 million in taxes
GOLF?
Guayama's three prisons provide slave labor to GSK and Pfizer
Guayama
Salinas
Bahia de Jobos
PREPA AES Plant at Guayama Pollutes Brown Coal Ash. It is the last coal plant in the Caribbean, and biggest outside of West Virginia.



Existing Structure

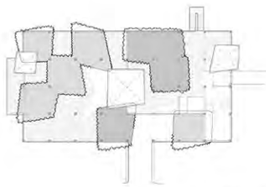


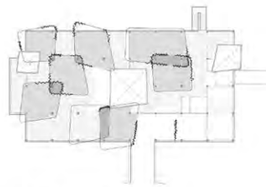
Perforations



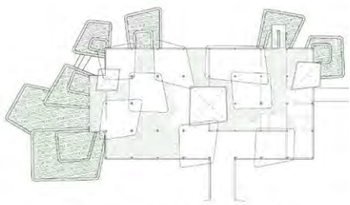
Curtain Rod Grid

Negative Space Planted





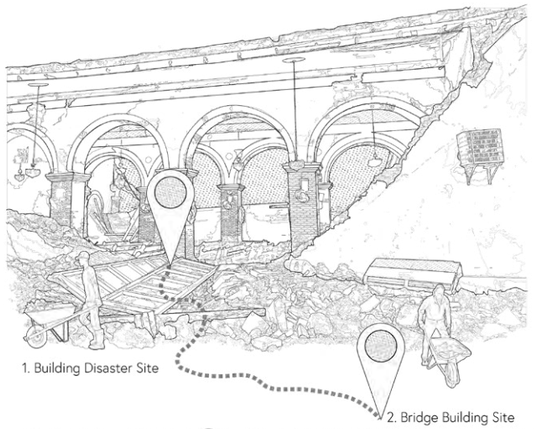
Multiplicity of Space Sizes and Adjacencies

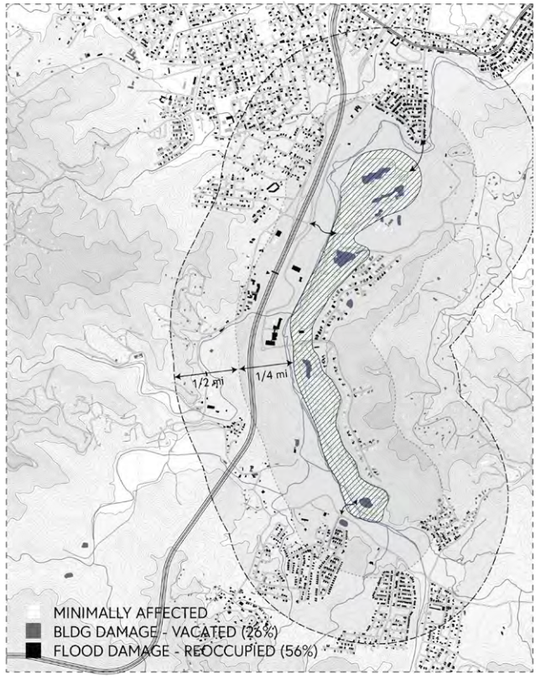


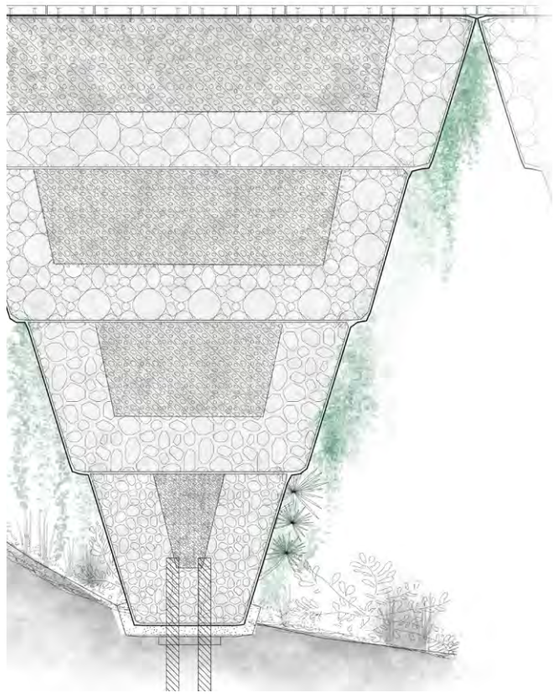
Expand to take over Surroundings

The New Clubhouse - Section

A Rubble Reconstruction

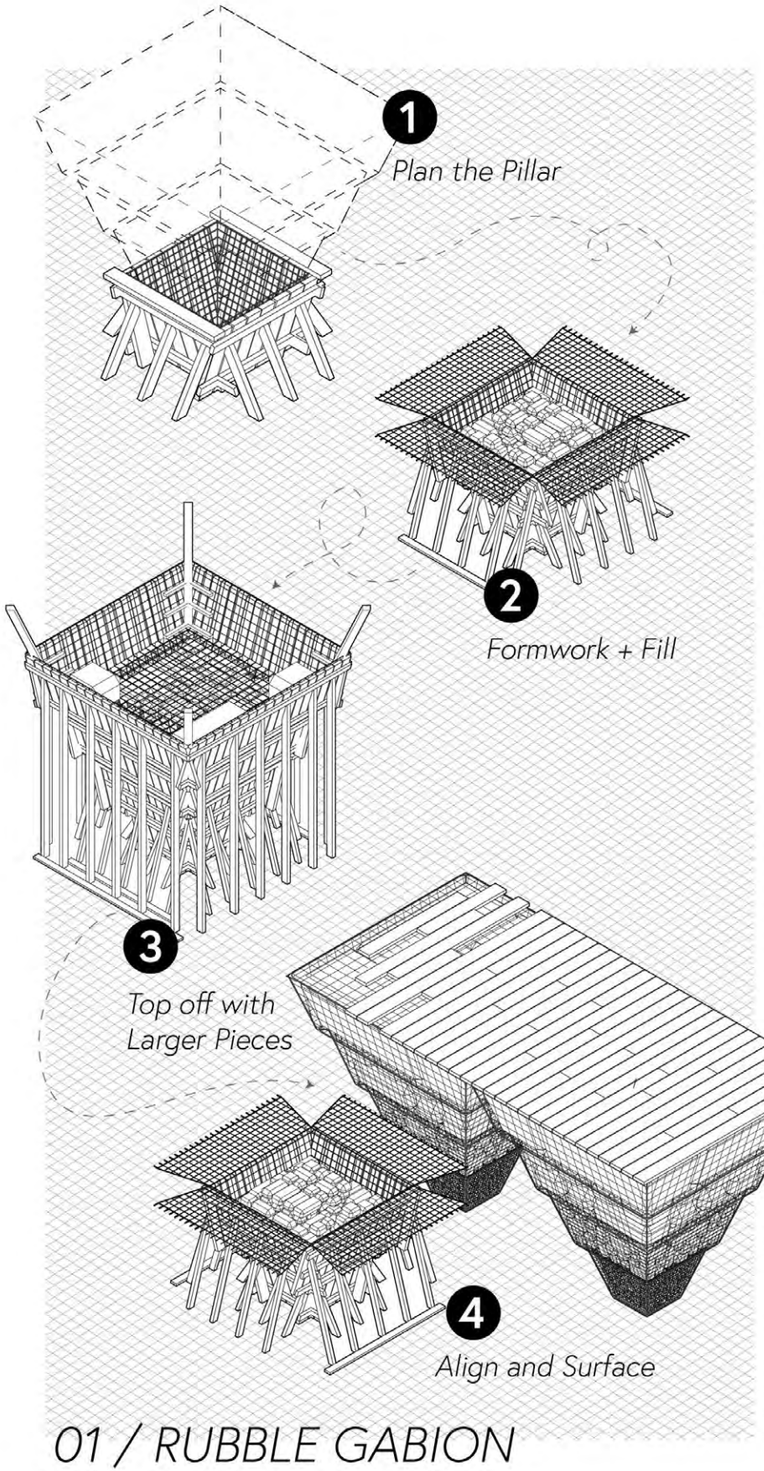




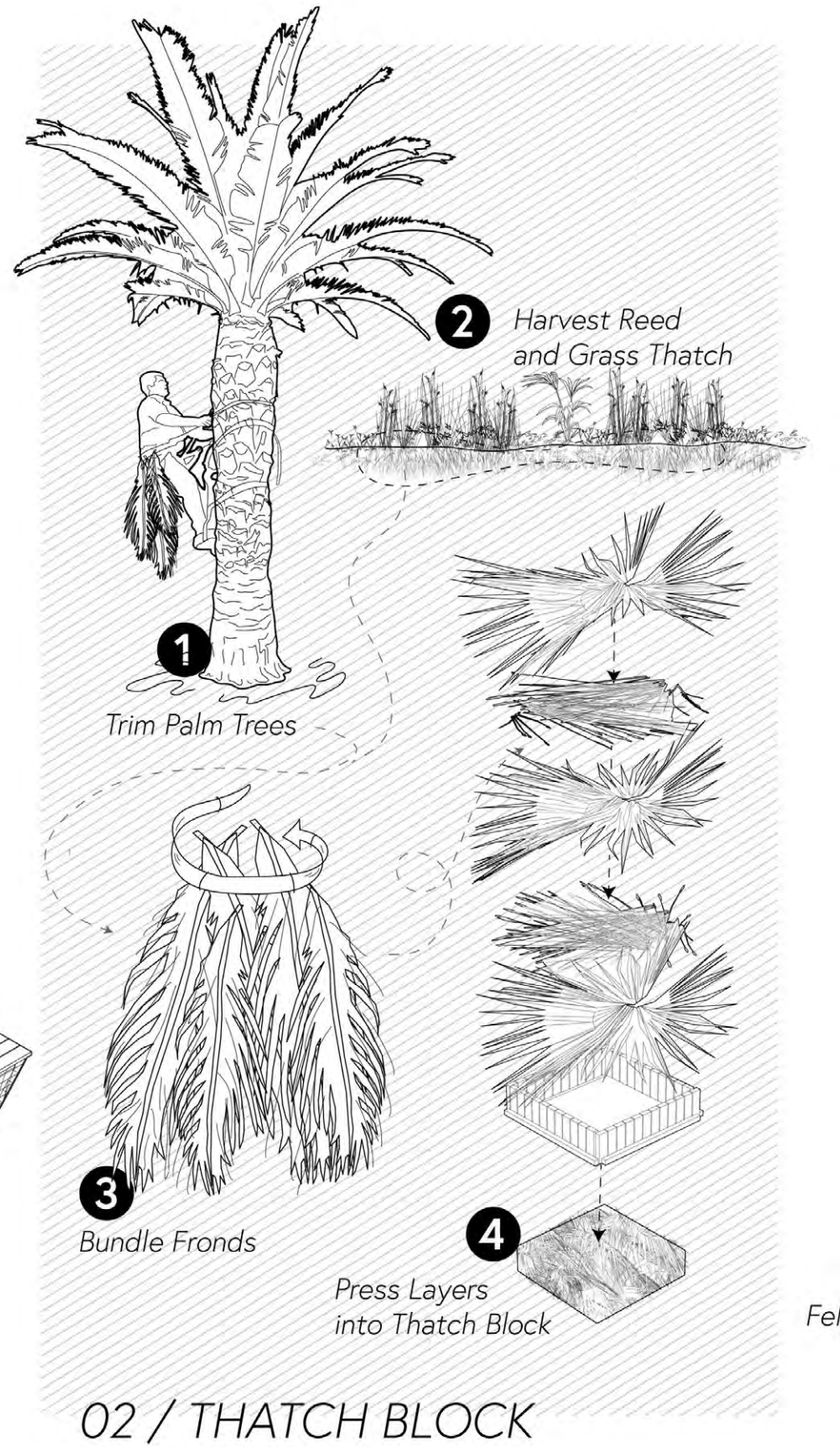


Golf Courses, though not technically farms, occupy a huge and oversaturated presence on the Island's luxury and tourism spheres. In Puerto Rico, many developers claim bona-fide farm status to secure subsidies, get free water, and avoid paying taxes. There are a lot of golf courses, all are private ventures. The health of golf course capitalism is interesting - almost half of these courses are in-dept, default, or have been abandoned. Additionally, because golf courses are designed as the ultimate colonial leisure activity, they are usually built in ecologically sensitive areas where pesticide and vehicle use have outsized impact, and have a displacing effect because they take up so much land. The selected site was the Caguas Real golf club, which is just south of the city center, and was opportune to play out how to make this place an agroecological haven that performs distributed food justice.

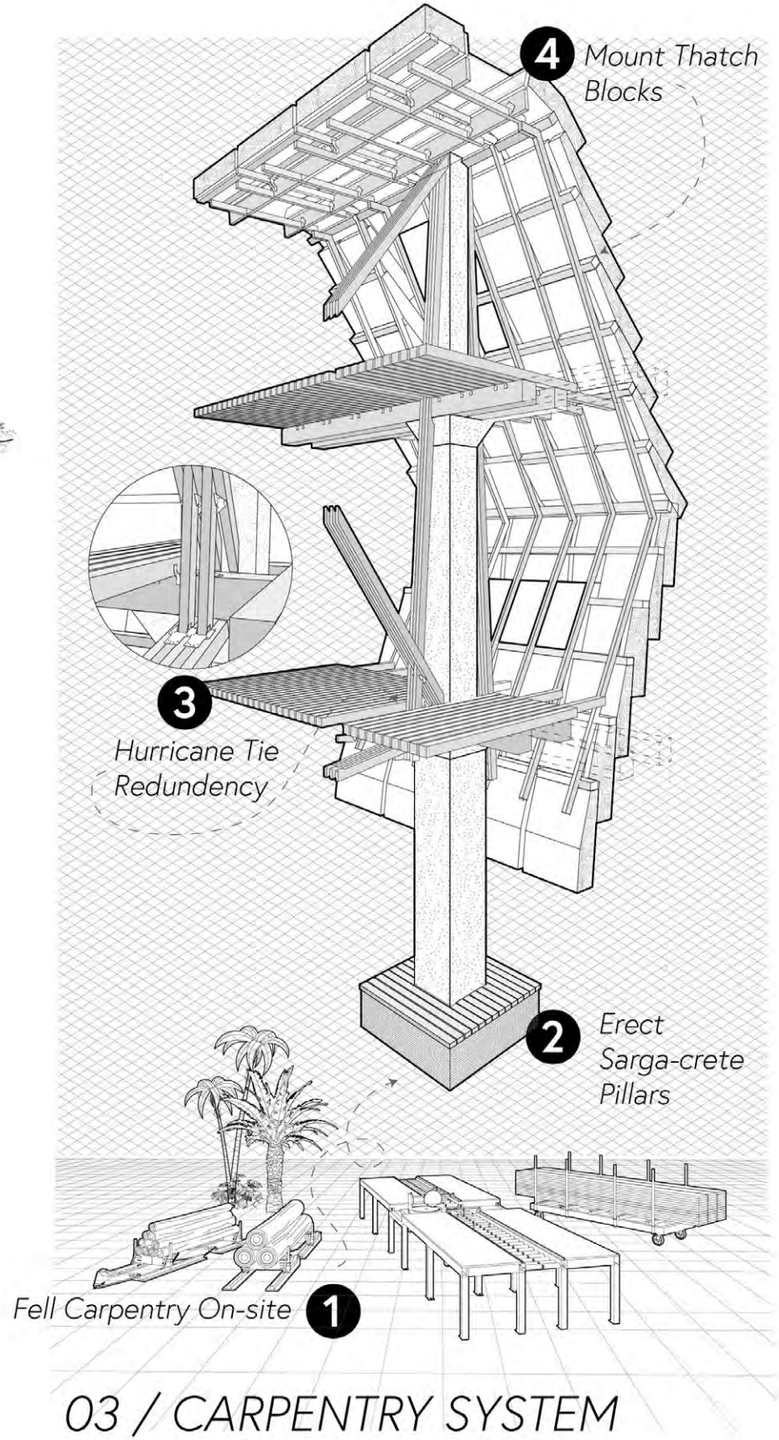
Gabion-Making



01 / RUBBLE GABION

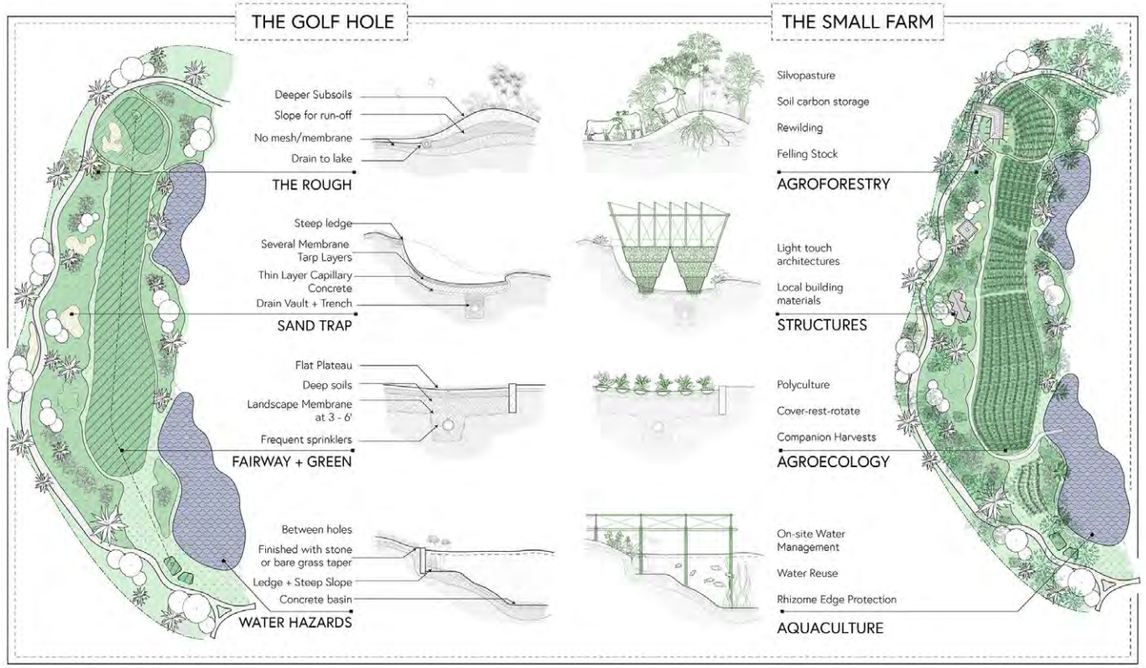


02 / THATCH BLOCK



03 / CARPENTRY SYSTEM

A New Land Bridge over the Turabo River

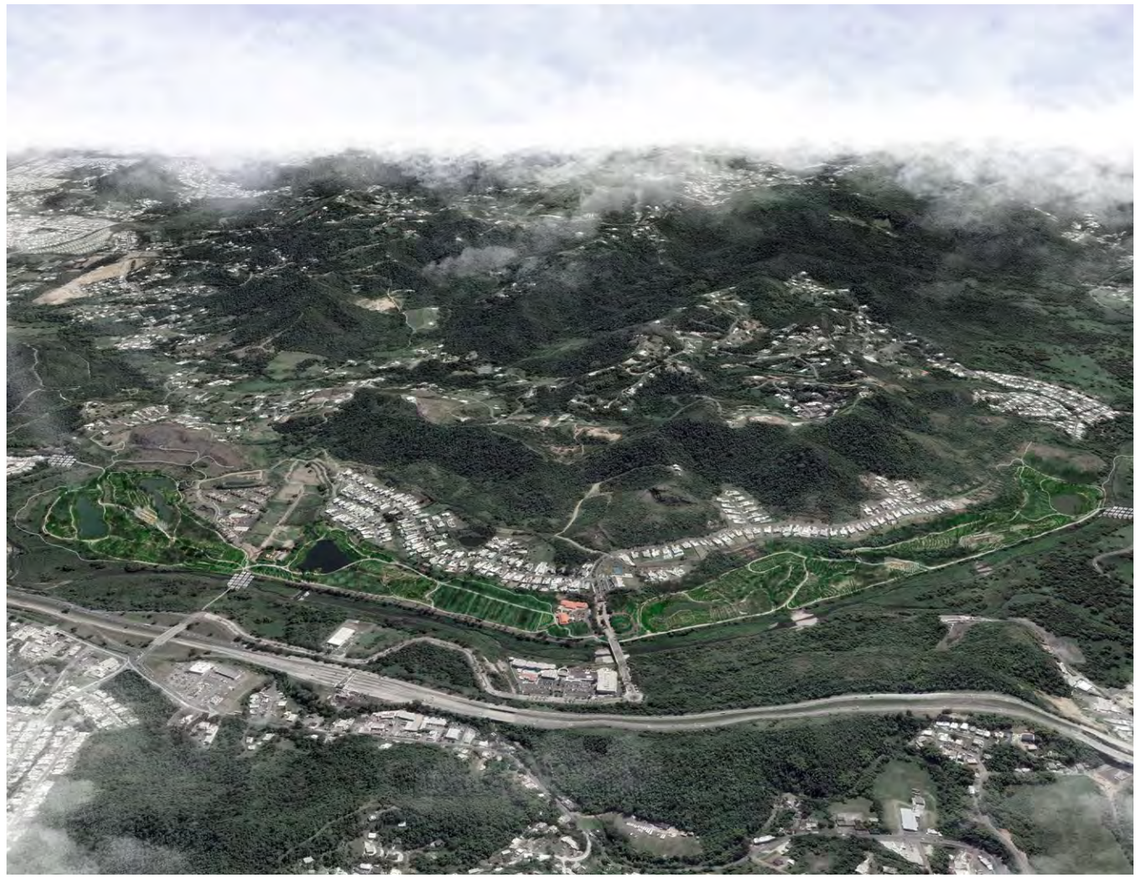

THE GOLF HOLE
Deeper Subsoils
Slope for run-off
No mesh/membrane
Drain to lake
THE ROUGH
Steep ledge
Several Membrane Tarp Layers
Thin Layer Capillary Concrete
Drain Vault + Trench
SAND TRAP
Flat Plateau
Deep soils
Landscape Membrane at 3 - 6'
Frequent sprinklers
FAIRWAY + GREEN
Between holes
Finished with stone or bare grass taper
Ledge + Steep Slope
Concrete basin
WATER HAZARDS
THE SMALL FARM
Silvopasture
Soil carbon storage
Rewilding
Felling Stock
AGROFORESTRY
Light touch architectures
Local building materials
STRUCTURES
Polyculture
Cover-rest-rotate
Companion Harvests
AGROECOLOGY
On-site Water Management
Water Reuse
Rhizome Edge Protection
AQUACULTURE


FINCA MALANGA
on old hole no. 6
01 / Housing / Living
02 / Sapling House
03 / Classroom
04 / Tool Shed
05 / Grindery
06 / Planning Tower
01.
02.
03.
04.
05.
06.

Housing the Small Farm - Section

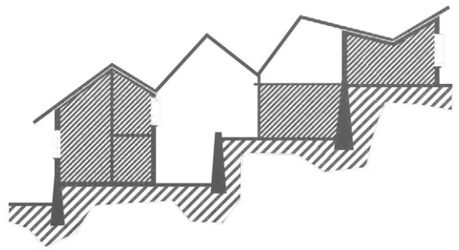
Lastly, the proposal speculates a new typology for the small farm that embodies the goals for food sovereignty. Building off of the rubble reconstruction, we can create a new material construction library for assembly and deployment around the various sites, including thatch and timber. Fundamentally, the kind of small farms that may come from the golf holes are not like the existing corporate structure, instead of moving goods off site to modify and sell, we can imagine a circular economy that locates most production, packaging, innovation, and eating on site. Because golf holes are all similar in their construction, the various transformations can be parameterized for the best future use cases that transform or return as much land as possible with minimal earth-moving. A standard golf hole could be stewarded by a group of young people from Caguas that are interested in agroecology but dont have the capital or experience to farm outright. They would be set up their space here, perhaps to create a farm that celebrates malanga, and need things like furnace, storage shed, and want a classroom to teach local schools about the important cultural heritage of the tuber, and innovates for things like the highly valuable

Housing Interior



Site Plan - Twenty Years Out

gluten free flour market, or working with local kitchens. A series of architectural operations to explode the clubhouse, create multiscalar, multiuse spaces, and maximize the area available for sapling nursery. The result, in section, reconnects the practice inside to the earth below, and opens the structure on either side to accept the new possibilities of landscape. This creates a symbiotic fabric of small farms that network and reinforce each other, while offering a significant part of the land to rewild. Because we are building within the realm of food sovereignty, we should try to construct in a way that supports water and energy independence as well, and this building is technically considered to maximize these goals. In the main housing construction, approaching the entrance, we can read the materiality and the value gained by showcasing the mechanism of water and material assemblage. This begs the question - can this lesson be applied across the island? Because golf is such a regularized and codified system, it enables a robust framework for reestablishing a connection to the land and landscape that can be adapted based on climate, local partner organizations, and the willingness of municipalities to engage.

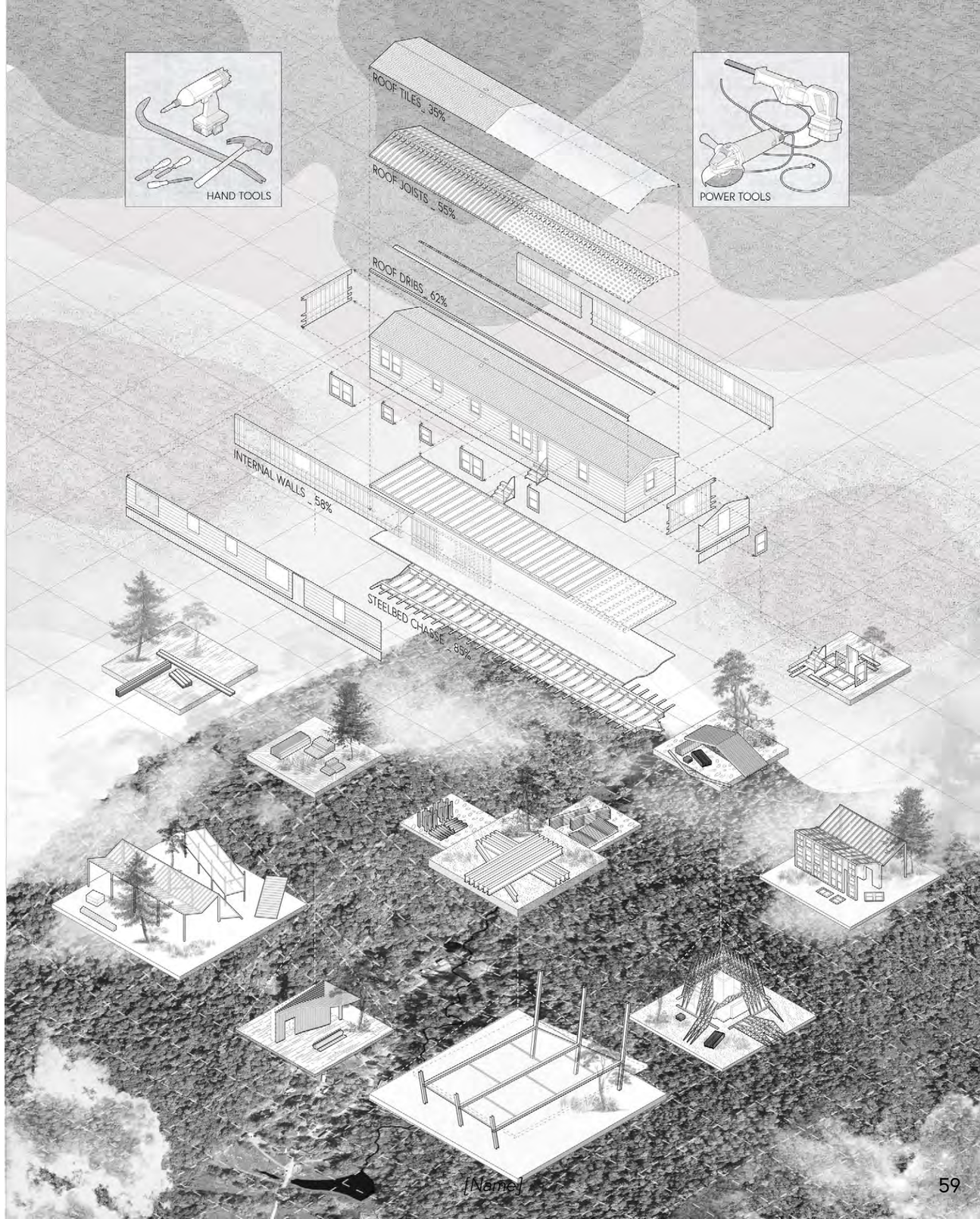


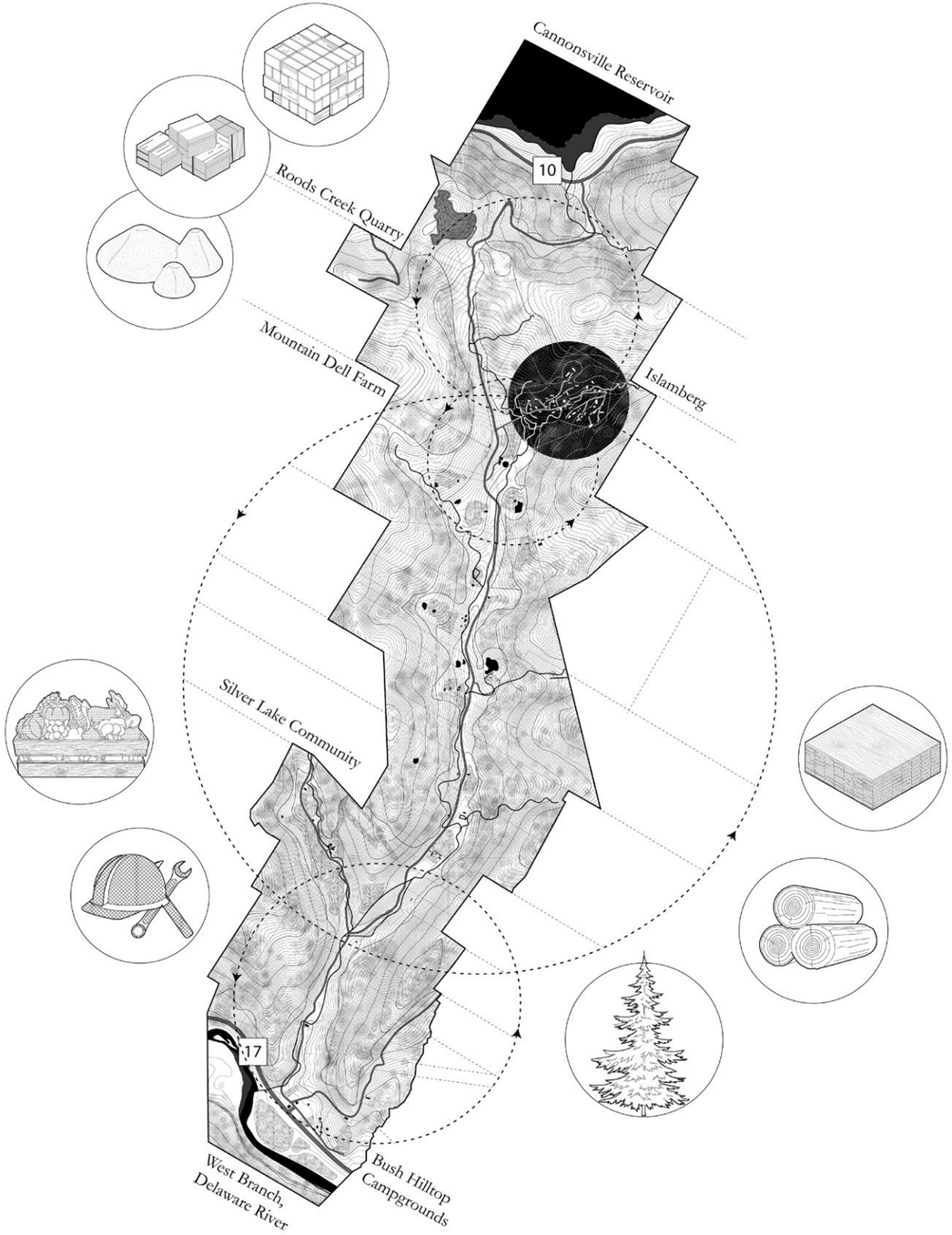
03. Waqf - Watershed

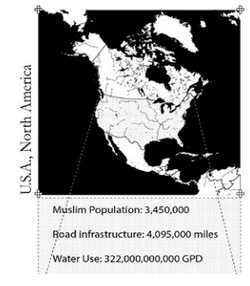
A spiritual reclaiming of land, water, and pre-fab structure; a new bridge across generations; a topo-conscious housing typology.

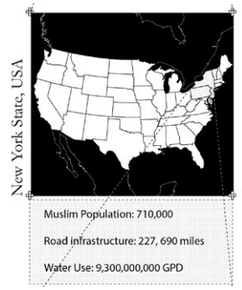
with Yi Liang

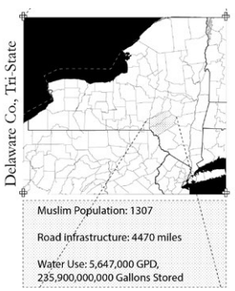
ADV IV / Ziad Jamaleddine / SP2021

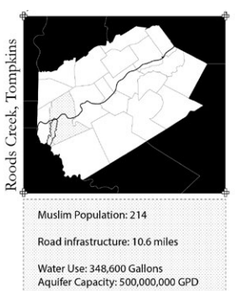


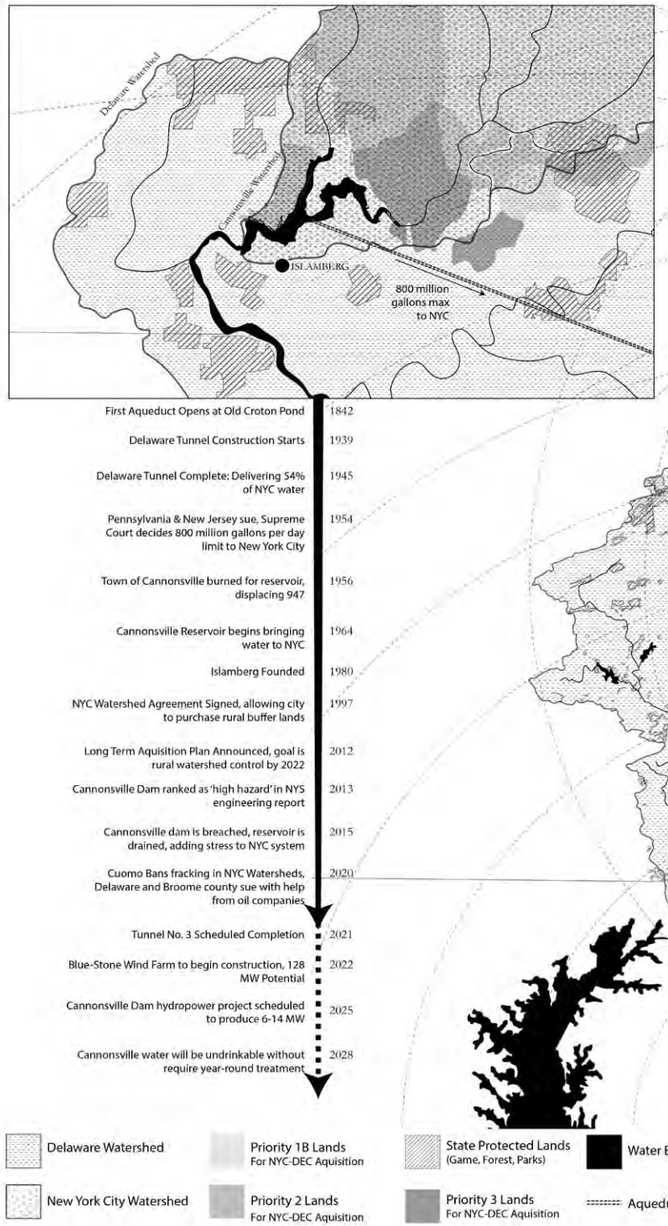








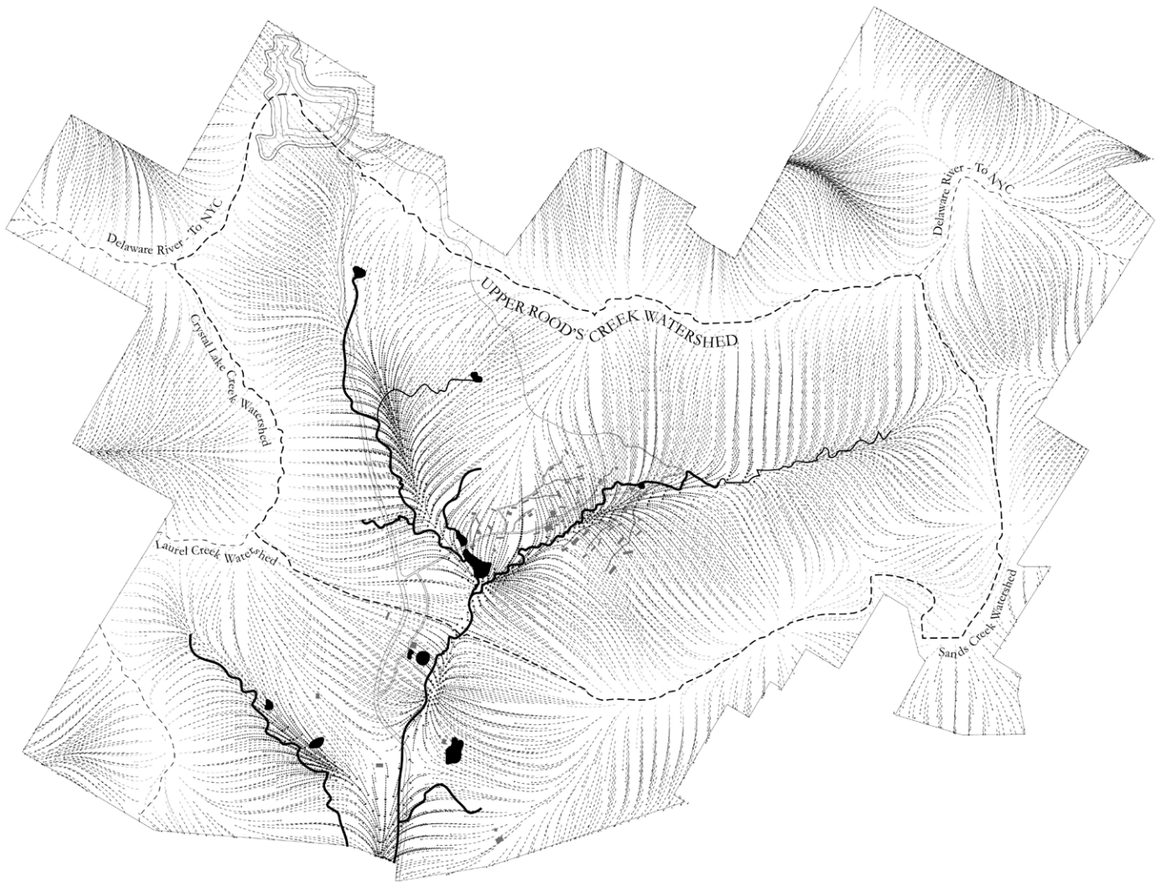




Delaware Watershed
New York City Watershed
Priority 1B Lands For NYC-DEC Aquisition
Priority 2 Lands For NYC-DEC Aquisition
State Protected Lands (Game, Forest, Parks)
Priority 3 Lands For NYC-DEC Aquisition
Water Body
Aqueducts

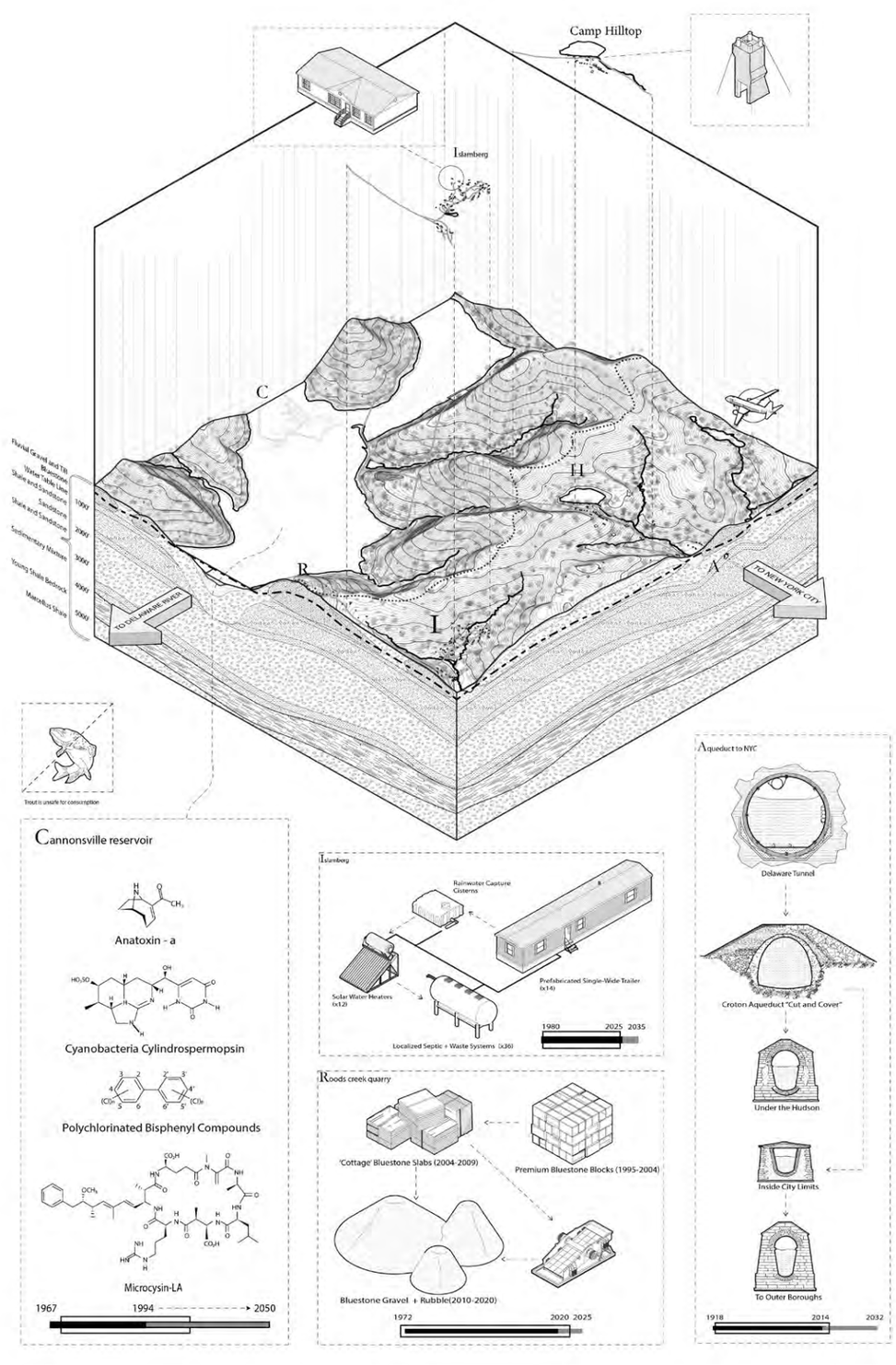
The Waqf Watershed proposes a reconstruction process along the central creek of Islamberg, a rural Muslim hamlet in New York State. Giving rural America a religious re-reading, we aspire to create a self-autotomizing way of life around that re-orients water to follow religious habits.
In each step of the town's social hierarchy, water is a social currency that mediates relationships to family, neighbors and spirituality. To create autonomy within Islamberg, especially water autonomy, we first needed to understand the specific basins and micro-watersheds that flow through the town.

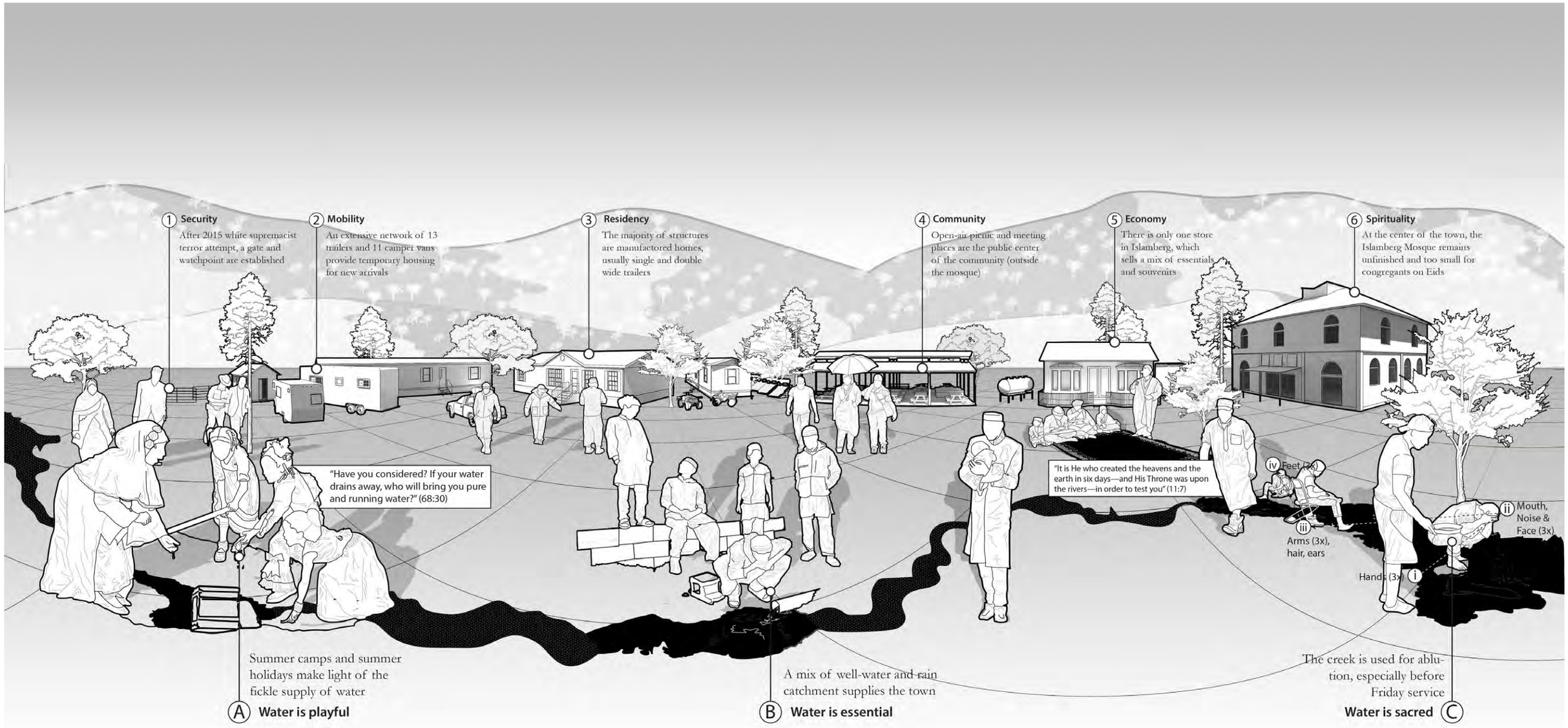
Below is identified the local basin, which we are calling the Roods Creek Watershed. Next, we want to establish a land conservatorship for

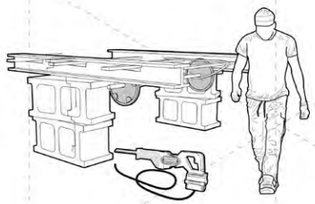


this area, in a way that protects Islamberg and the ecosystem for future generations. To do this, The Waqf Watershed proposes a reconstruction process along the central creek of Islamberg, a rural Muslim hamlet in New York State. Giving rural America a religious re-reading, we aspire to create a self-autotomizing way of life around that re-orients water to follow religious habits.

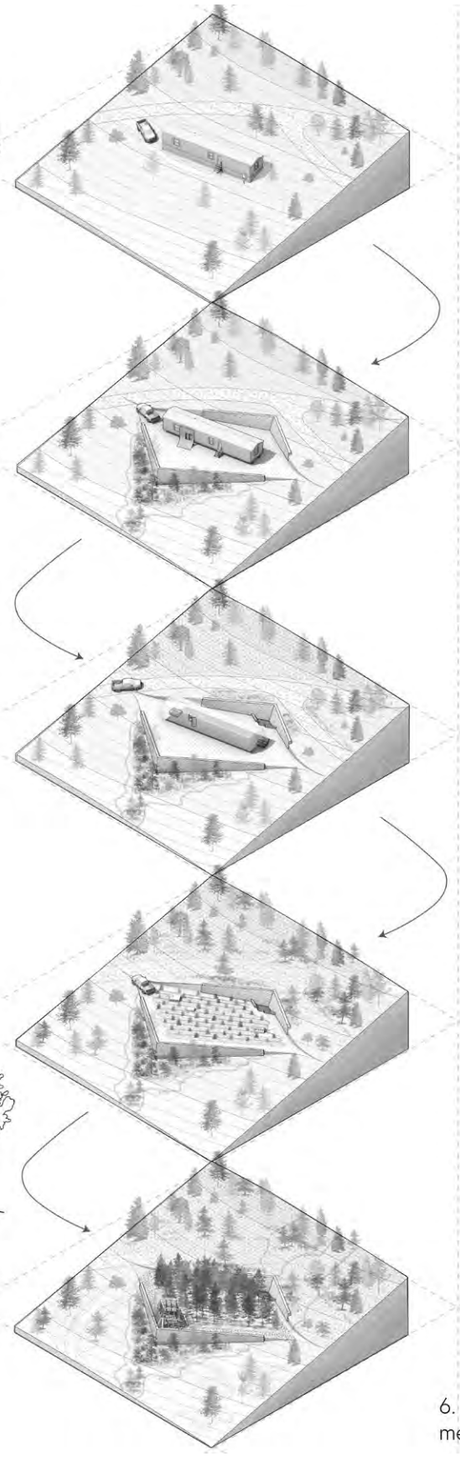
In each step of the town's social hierarchy, water is a social currency that mediates relationships to family, neighbors and spirituality. To create autonomy within Islamberg, especially water autonomy, we first needed to understand the specific basins and micro-watersheds that flow through the town; Waqf, when a mosque takes care of the land in the name of god in perpetuity.

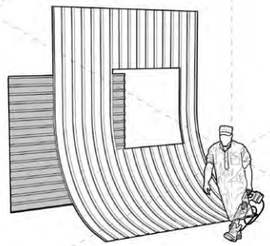



1 Security
After 2015 white supremacist terror attempt, a gate and watchpoint are established
2 Mobility
An extensive network of 13 trailers and 11 camper vans provide temporary housing for new arrivals
3 Residency
The majority of structures are manufactored homes, usually single and double wide trailers
4 Community
Open-air picnic and meeting places are the public center of the community (outside the mosque)
5 Economy
There is only one store in Islamberg, which sells a mix of essentials and souvenirs
6 Spirituality
At the center of the town, the Islamberg Mosque remains unfinished and too small for congregants on Eids
"Have you considered? If your water drains away, who will bring you pure and running water?" (68:30)
"It is He who created the heavens and the earth in six days—and His Throne was upon the rivers—in order to test you" (11:7)
iv Feet (3x)
iii Arms (3x), hair, ears
ii Mouth, Noise & Face (3x)
Hands (3x) i
Summer camps and summer holidays make light of the fickle supply of water
A Water is playful
A mix of well-water and rain catchment supplies the town
B Water is essential
The creek is used for ablution, especially before Friday service
Water is sacred C

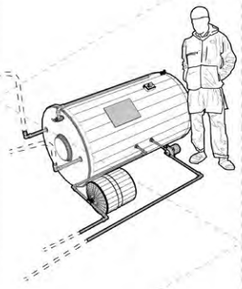


1. Remove CMU blocks and prepare wheels/axle



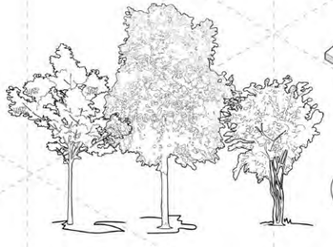


2. Strip vinyl siding, brimming, and exterior fixtures

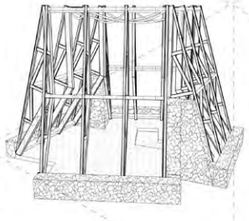


3. Reorient water heater and cistern to soilbed

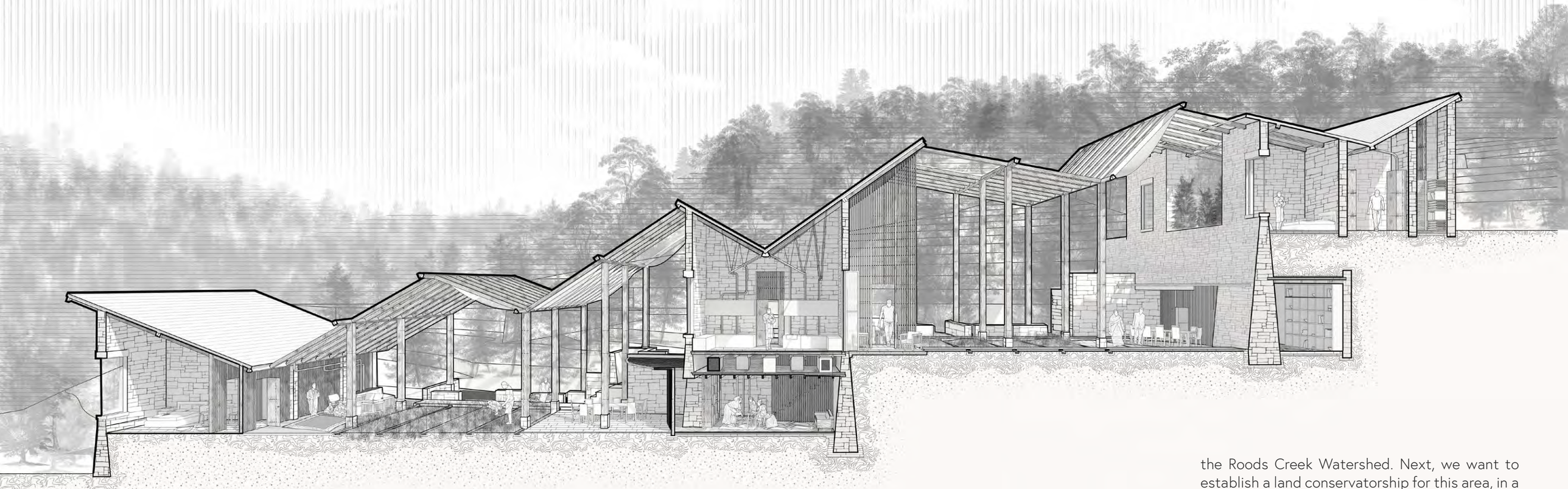
4. Direct septic drainbed to diamond landscape



5. Plant spruce, pine, and fir to dimension lumber for future building



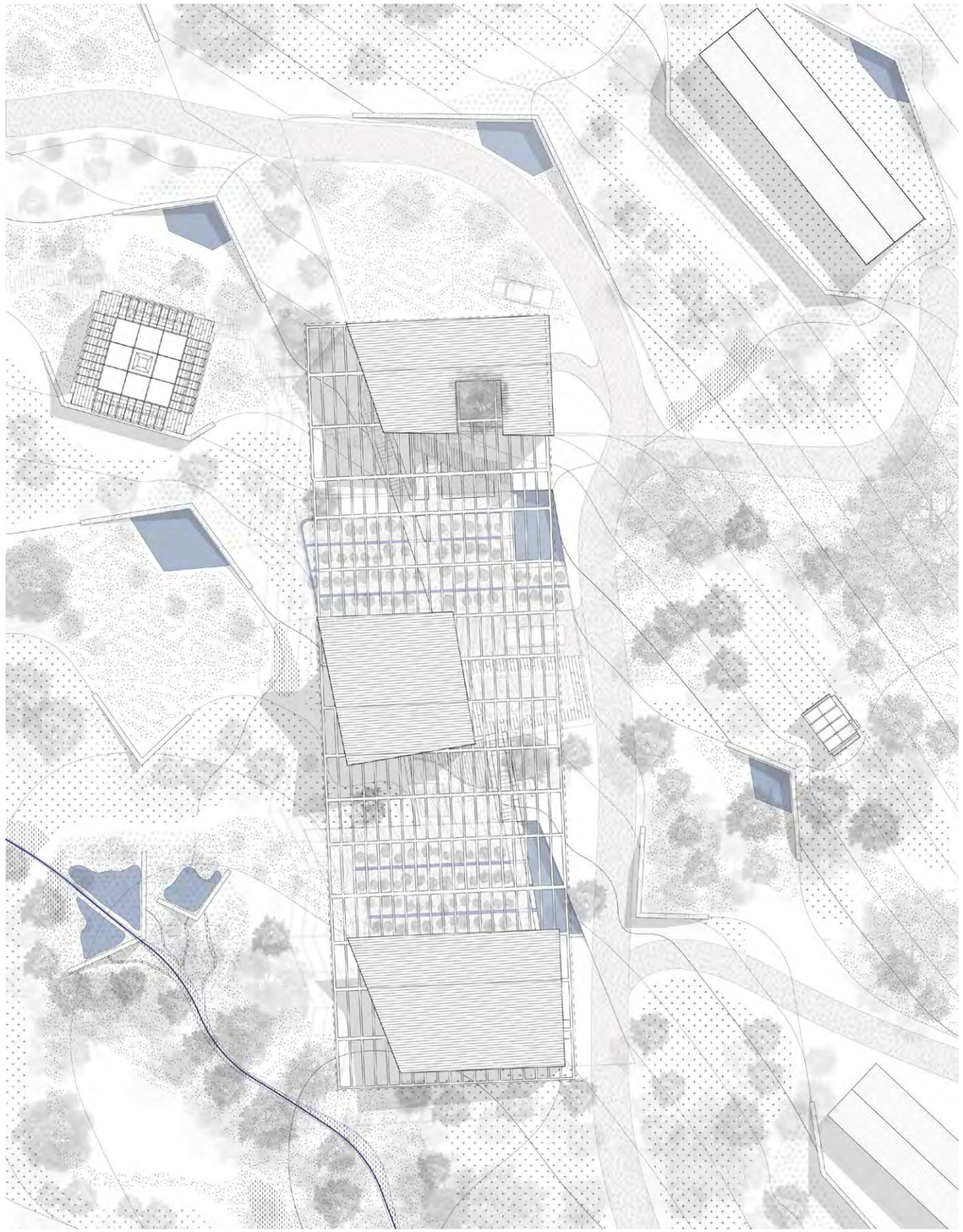
6. Build medidative observary that memorializes mobile home

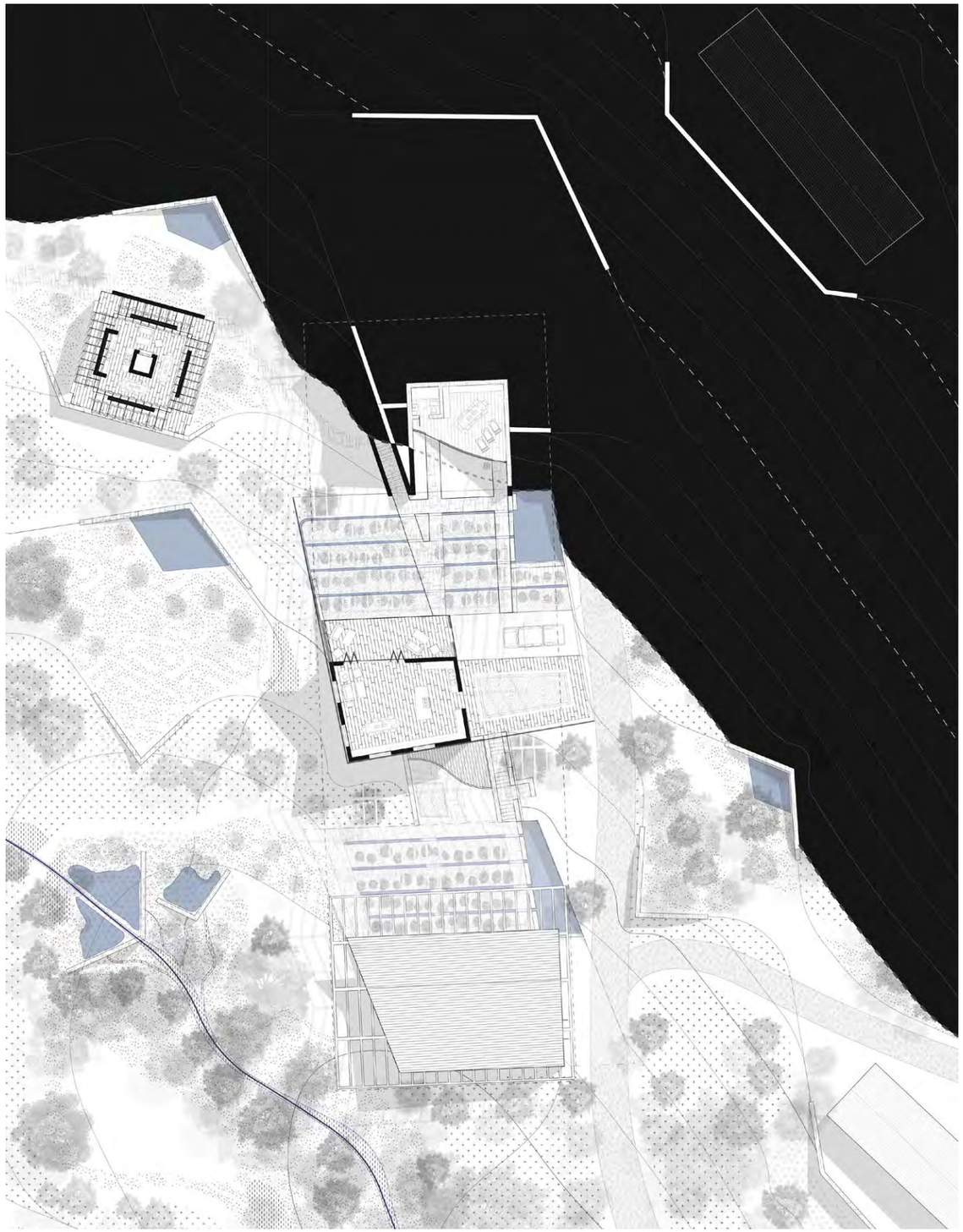


Some conditions of this model of conservatorship include a lack of profit - any income created from the property must go to future maintenance or improvements.

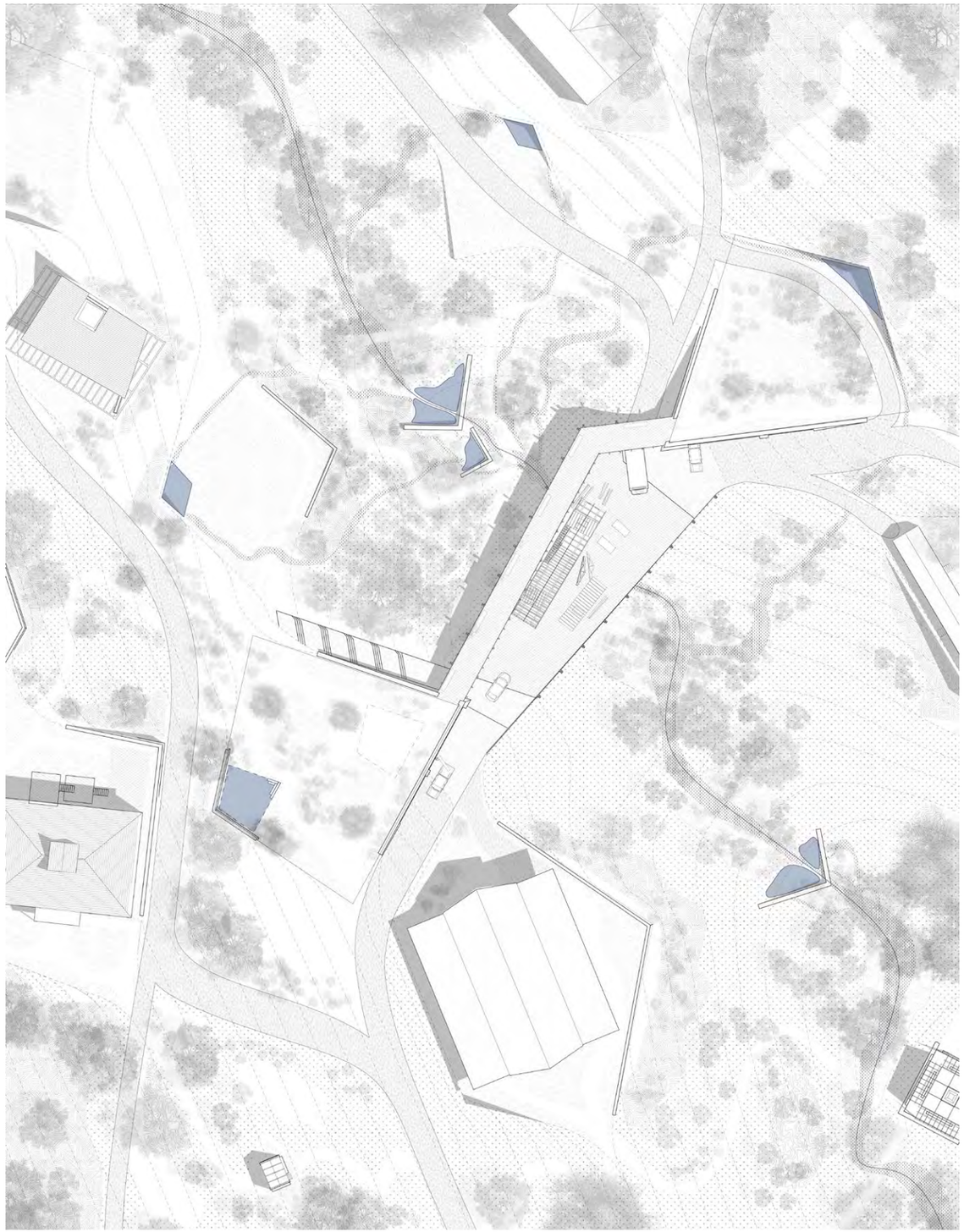
To create autonomy within Islamberg, especially water autonomy, we first needed to understand the specific basins and micro-watersheds that flow through the town. Here we identified the local basin, which we are calling the Roods Creek Watershed. Next, we want to establish a land conservatorship for this area, in a way that protects Islamberg and the ecosystem for future generations. To do this, we employed a type of land ownership called Waqf, where the mosque takes care of the land in the name of god in perpetuity. Some conditions of this model of conservatorship include a lack of profit - any income created from the property must go to future maintenance or improvements.

At best, residents live with ambivalence for the creek as a natural feature, and at worst, residents' lives are negatively affected by the spills, freezes, and floods that disrupt their daily



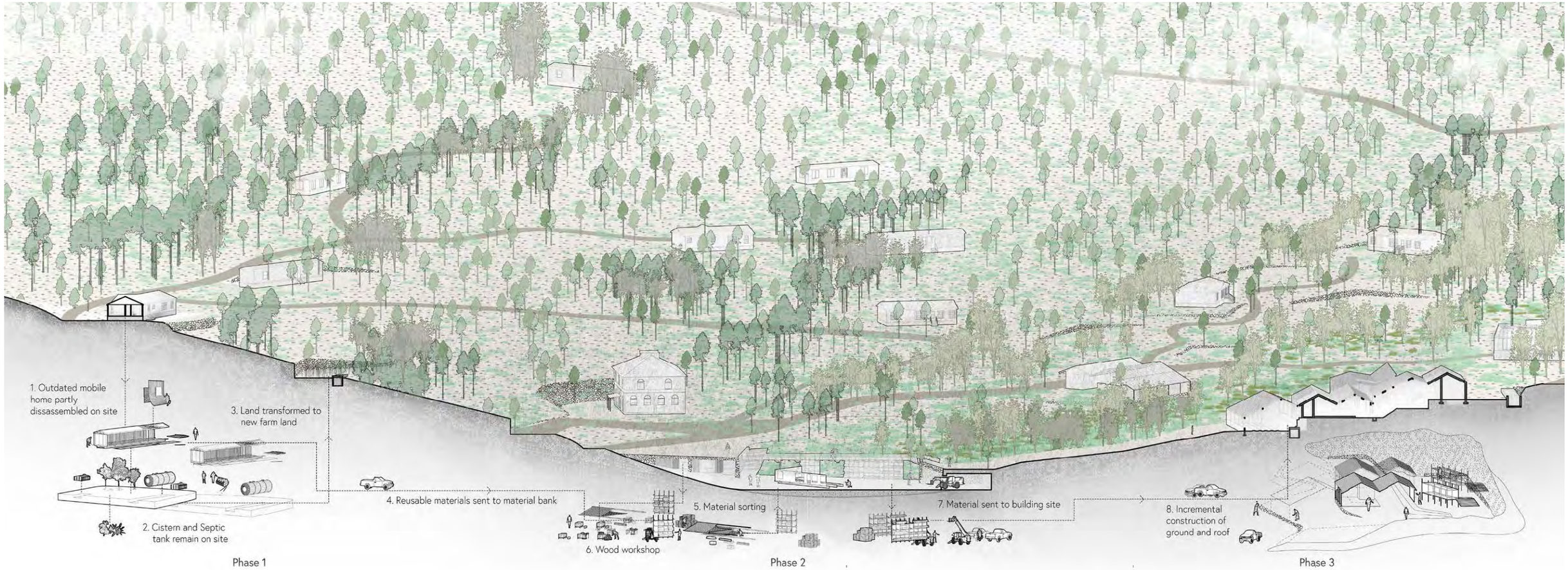


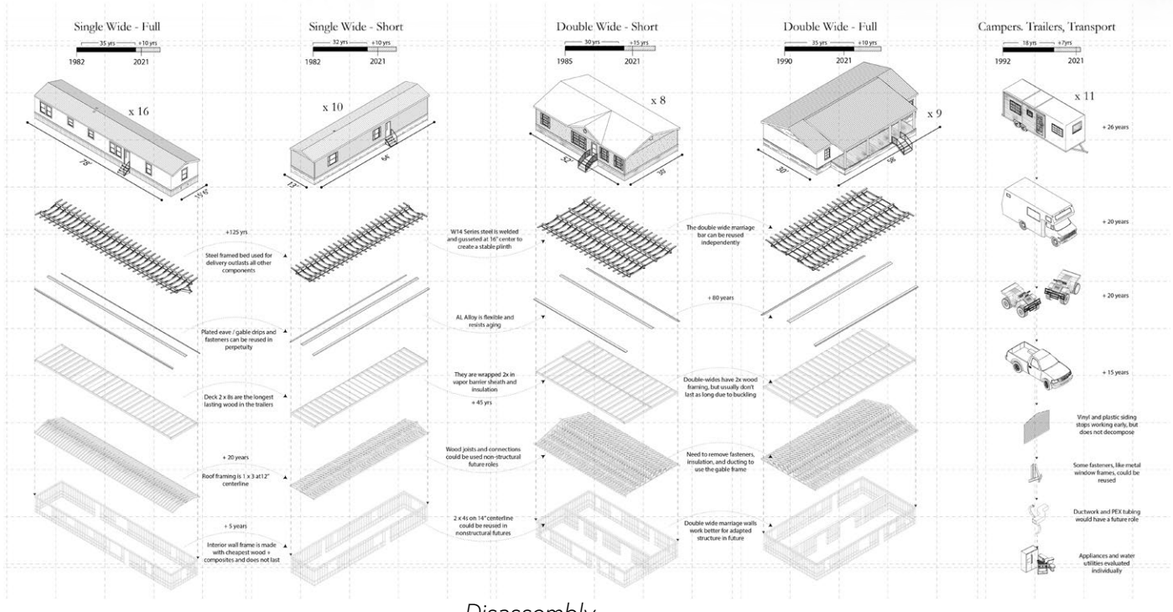
and spiritual lives. Because Islamberg is so rural, we wanted to be smart about the parameters of new construction. We noticed that the overwhelming majority of buildings are manufactured homes (mobile homes are misnomers for these immovable structures), which typically last 30 years, or 45 years with excellent care. This is common in rural America, but it also presents an opportunity to give these buildings a second life in the watershed. By overlaying a new living water infrastructure over the existing religious structure in place, we enable the town to reinforce people's mystic relationship with the natural world.

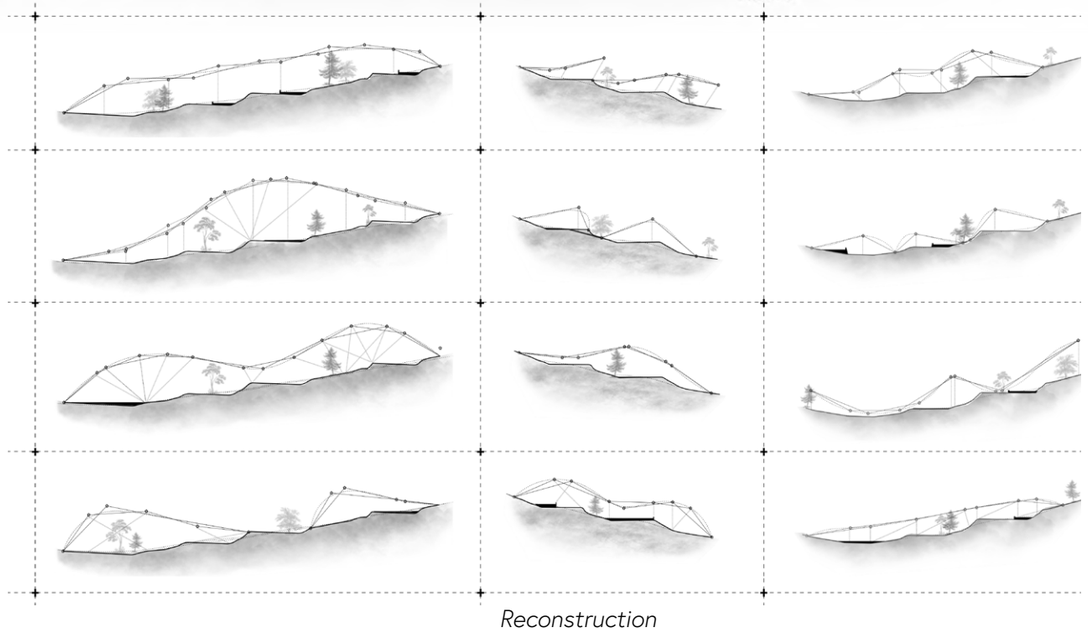


The bridge, the river, and the mosque

Under the Bridge - Storage and Assembly


1. Outdated mobile home partly dissassembled on site
2. Cistern and Septic tank remain on site
3. Land transformed to new farm land
4. Reusable materials sent to material bank
5. Material sorting
6. Wood workshop
7. Material sent to building site
8. Incremental construction of ground and roof
Phase 1
Phase 2
Phase 3


Single Wide - Full
1982
2021
x 16
Single Wide - Short
1982
2021
x 10
Double Wide - Short
1985
2021
x 8
Double Wide - Full
1990
2021
x 9
Campers, Trailers, Transport
1992
2021
x 11
+125 yrs
Steel framed bed used for delivery outlasts all other components
Plated eave / gable drips and fasteners can be reused in perpetuity
Deck 2 x 8s are the longest lasting wood in the trailers
+ 20 years
Roof framing is 1 x 3 at 12" centerline
+ 5 years
Interior wall frame is made with cheapest wood + composites and does not last
W14 Series steel is welded and gusseted at 16" center to create a stable plinth
Al. Alloy is flexible and resists aging
They are wrapped 2x in vapor barrier sheath and insulation
+ 45 yrs
Wood joists and connections could be used non-structural future roles
2 x 4s on 14" centerline could be reused in nonstructural futures
The double wide marriage bar can be reused independently
+ 80 years
Double-wides have 2x wood framing, but usually don't last as long due to buckling
Need to remove fasteners, insulation, and ducting to use the gable frame
Double wide marriage walls work better for adapted structure in future
+ 26 years
+ 20 years
+ 20 years
+ 15 years
Vinyl and plastic siding stops working early, but does not decompose
Some fasteners, like metal window frames, could be reused
Ductwork and PEX tubing would have a future role
Appliances and water utilities evaluated individually

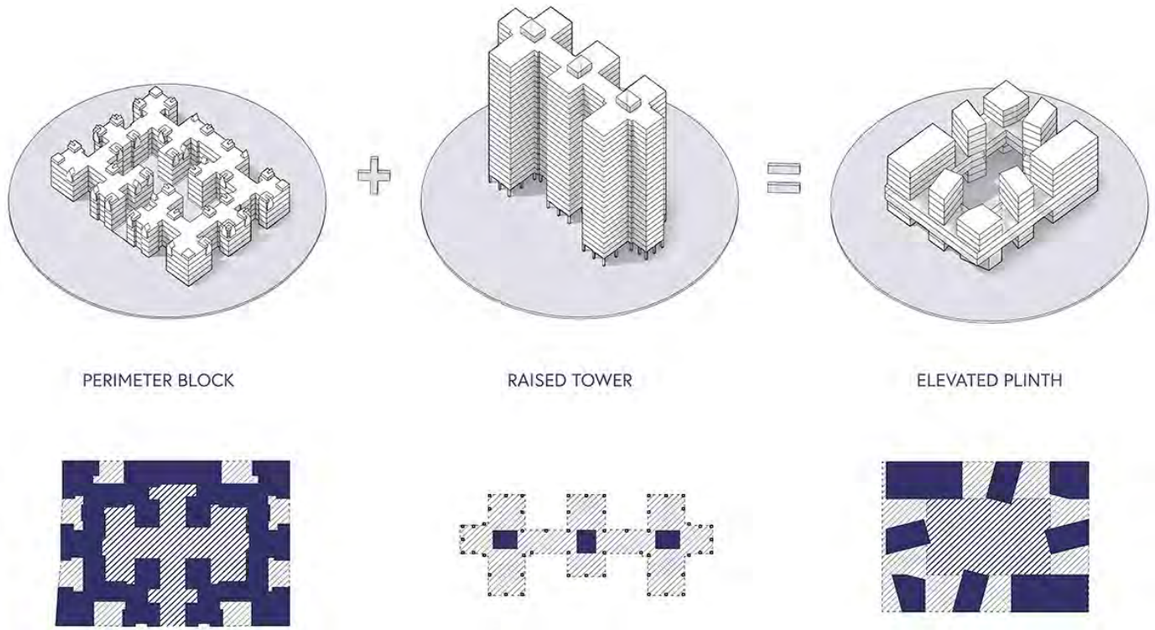


04. Bronx Bridge Housing

Rebuilding the block for seniors, services, and stairways; a new home for a historical center

with Alexa Greene

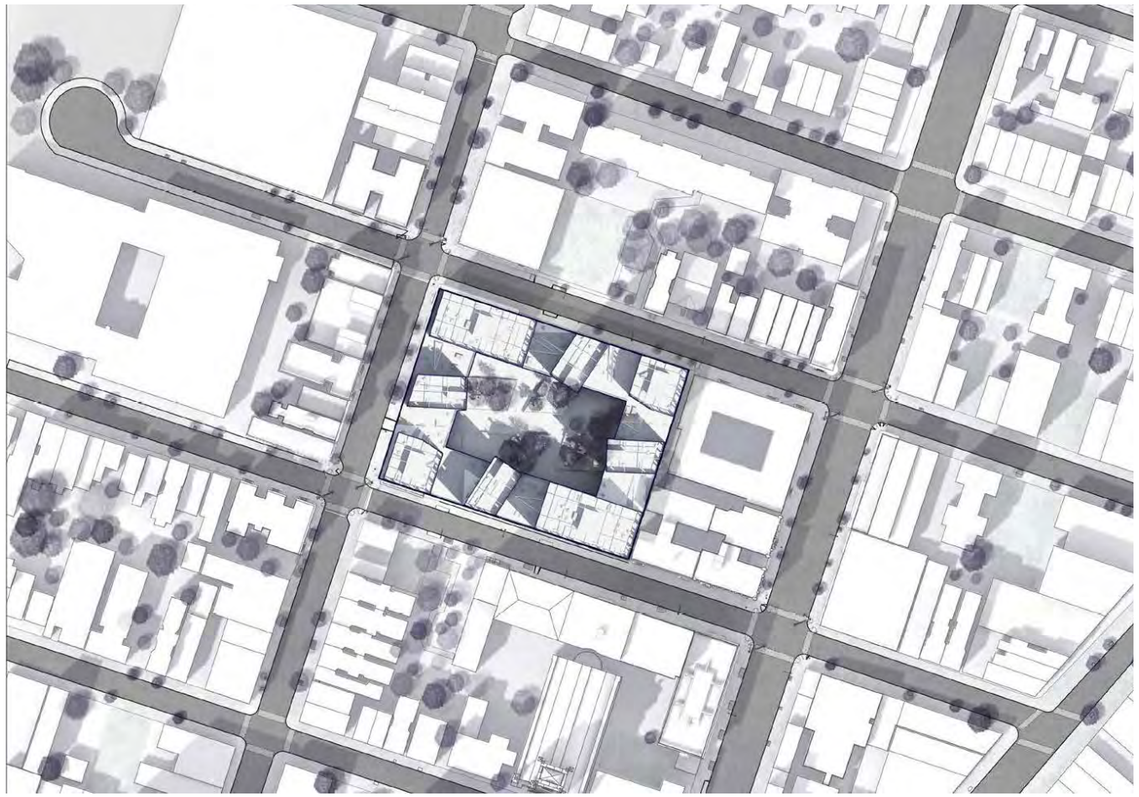
CORE III /Eric Bunge / FA2020



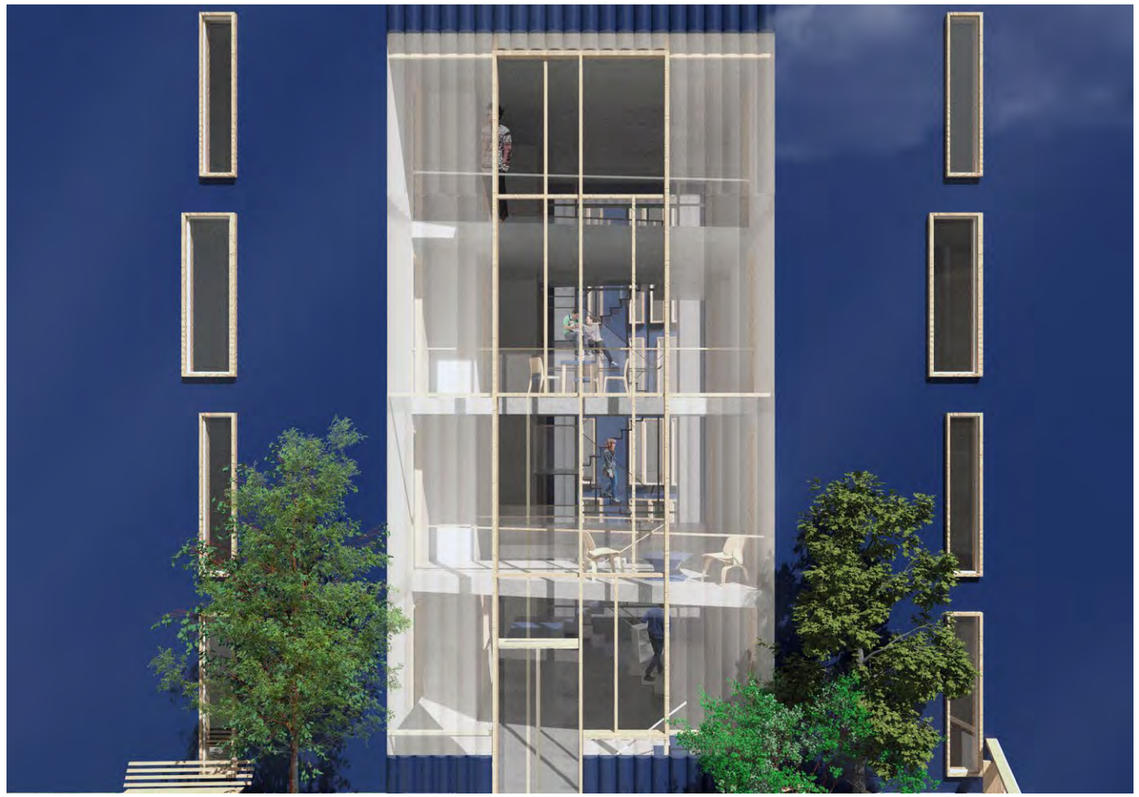
The Bronx Bridge proposes a hybrid typology for housing meant to enrich the lives of local Melrose residents. The design links towers of microunits and flex-able apartments with senior and resident services. In this hybrid geometry, eight towers share a plinth and semipermeable courtyard, creating a microcosm of, and echo-chamber for, urban life on the block.

When looking for successful cooperative communities in the Bronx, two distinct types emerge from the vast city fabric. The perimeter block style, like the garden apartment United Worker Corporation in Allerton that allows access to graded outdoor spaces, and the modernist elevated tower, was successful due to its density as it embedded systems of democracy, childcare, and healthcare, in Coop City. Our hybrid bridges smaller towers with an elevated plinth to satisfy residents living within and among nature, but still promises a density of cultural amenities and social complexity. At the site, we are rehousing the Bronx Documentary Center, a cultural staple in an unfortunate building, at the same corner of 151st street and Courtland Avenue.

The plinth plan shows how services, like healthcare, dining, and education, are woven into the block. At the typical upper floor plan, multifamily flex-able units are found at the corners, and microunit towers in between. Because each tower has a unique system of private occupancy and public movement, systems of room and armature are coordinated in concentric bands at the flex-able tower. We found that by pressing as much dense functional utility into a central armature zones plumbing, storage, public

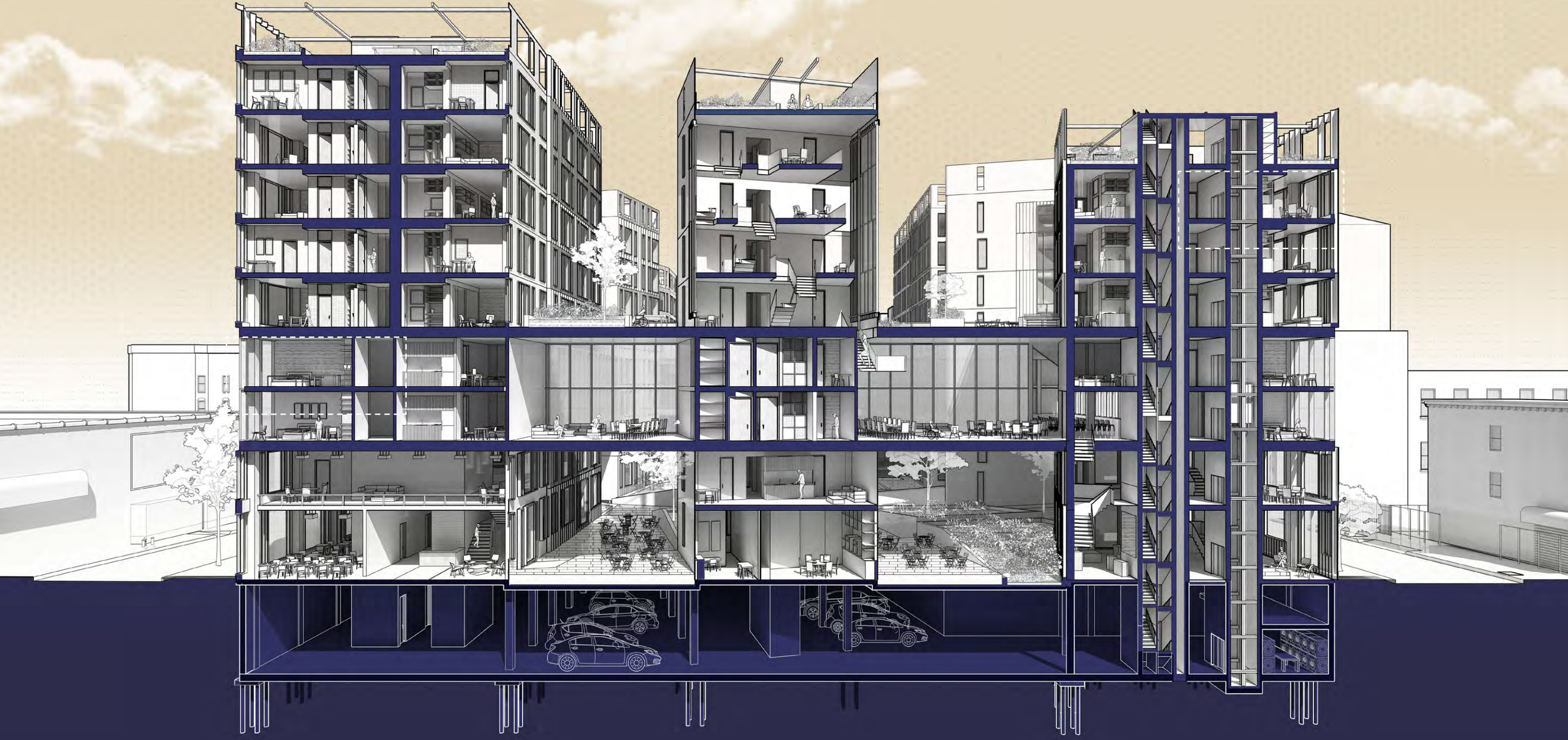


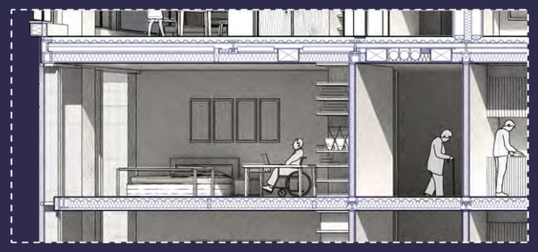
Site Parti

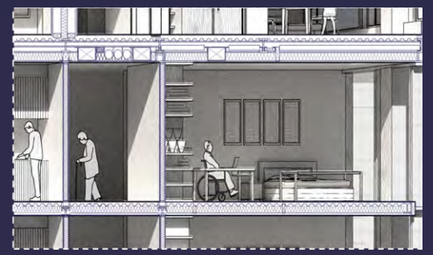


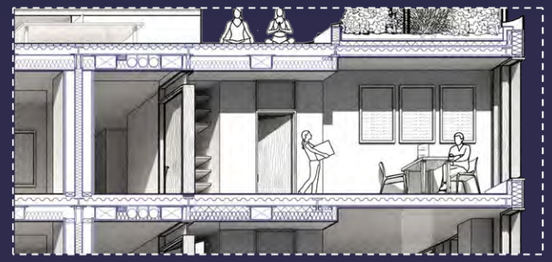
Micro-unit Tower


Bronx Doc. Center
2
Senior Living
4
Microunits
6
8
Microunits
Bronx Doc. Center
1
Senior Living
3
Microunits
5
Microunits
1









Building Section / Room Details

[Name]

circulation, we were allowed more freedom at the outer ring to freely experiment with rooms and combinations of living arrangements. In these living spaces, we imagine move-able walls, with minimal effort for installation, that would be better suited to changing extended family structures that exist in the Bronx already. For microunit towers, a non-linear accessory stair doubles as a meeting space. Senior living units are more defined by specific parameters due to limitations by HPD and SARA (Senior Affordable Rental Apartments) qualifications. The design allows for aging in place, by ensuring a sliding scale for different care needs.

Inside the buildings, the design employs an accessory stair as a social armature to connect between the different typologies, starting at the left side (the BDC entrance at Cortlandt and 151) we can travel to different microunit towers, and connect through the plinth to any tower. The unit distribution is layered by typology, and offers 438 beds. It has an FAR of 3.92 per city limit, and an OSR of 40.5%.

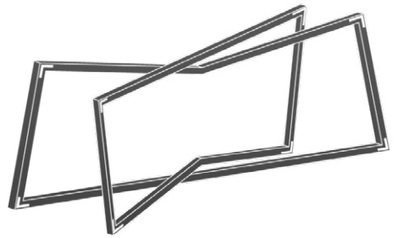
When looking for successful cooperative communities in the Bronx, two distinct types emerge from the vast city fabric. The perimeter block style, like the garden apartment United Worker Corporation in Allerton that allows access to graded outdoor spaces, and the modernist elevated tower, was successful due to its density as it embedded systems of democracy, childcare, and healthcare, in Coop City. Our hybrid bridges smaller towers with an elevated plinth to satisfy residents living within and among nature, but still promises a density of cultural amenities and social complexity. At the site, we are rehousing the Bronx Documentary Center, a cultural staple

From the street, at Cortlandt and 151, the commercial and BDC face is peeled back and more open to pedestrian traffic. Similarly, the plinth band is sheathed in a opalux translucent material that glows at night but allows for privacy from the street face. Here, the plinth is a beacon and living advertisement to the new possibilities of intergenerational living.

Inside the buildings, the design employs an accessory stair as a social armature to connect between the different typologies, starting at the left side (the BDC entrance at Cortlandt and 151) we can travel to different microunit towers, and connect through the plinth to any tower.

We found that by pressing as much dense functional utility into a central armature zones plumbing, storage, public circulation, we were allowed more freedom at the outer ring to freely experiment with rooms and combinations of living arrangements. In these living spaces, we imagine move-able walls, with minimal effort for installation, that would be better suited to changing extended family structures that exist in the Bronx already. For microunit towers, a non-linear accessory stair doubles as a meeting space. Senior living units are more defined by specific parameters due to limitations by HPD and SARA (Senior Affordable Rental Apartments) qualifications.

The design allows for aging in place, by ensuring a sliding scale for different care needs.The plinth plan shows how services, like healthcare, dining, and education, are woven into the block. At the typical upper floor plan, multifamily flex-able units are found at the corners, and microunit towers in between. Because each tower has a unique system of private occupancy and public movement, systems of room and armature are coordinated in concentric bands at the flex-able tower.



05. The Extinction Rebellion School

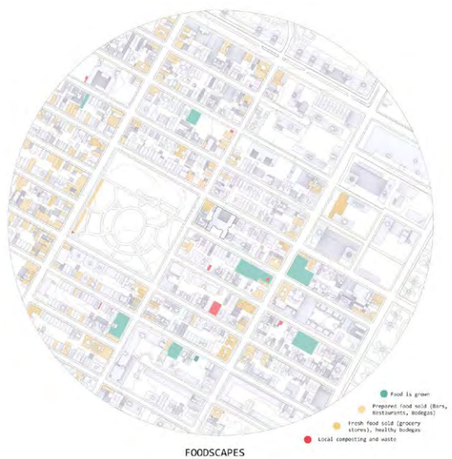
An island for pedagogical eco-futurisms; a new bridge between art and activism

CORE II / Gordon Kipping / SP2020

From East 9th Street

PUBLIC TRANSIT

FLOODPLAIN



FOODSCAPES

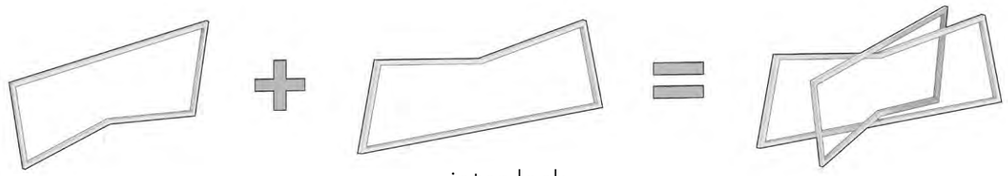
Activism, in all its forms, is fundamentally about healing injustice. This implies that health and healing are radical practices, and architectures which promote healing should be built to enable these transformations. The XR school encourages student activism by proximity with nature to engender a sense of environmental responsibility. Meant to bridge a traditional structure with more radical community involvement, the existing wings of a school currently in neglect are interjected by woven mass-timber bridge structures. The result is a strong dichotomy that reflects the need to depart from business-as-usual in the realms of architecture and pedagogy.

The site at Old P.S. 64 in the East Village is sited precariously in time and in space. The building itself is flood prone and isolated in a food desert. This project affirms farming as medicine in three ways. Firstly, produce from the farming plots along the roof and the buildings terraces can provide key nutrients to students and the community. Secondly, gardens can act meditatively and have been shown to lower cortisol levels in children and adults alike. And finally, by acting as a third space for families, the farm can strengthen social bonds in a way that also prepares students and their guardians to become excellent stewards of the planet.

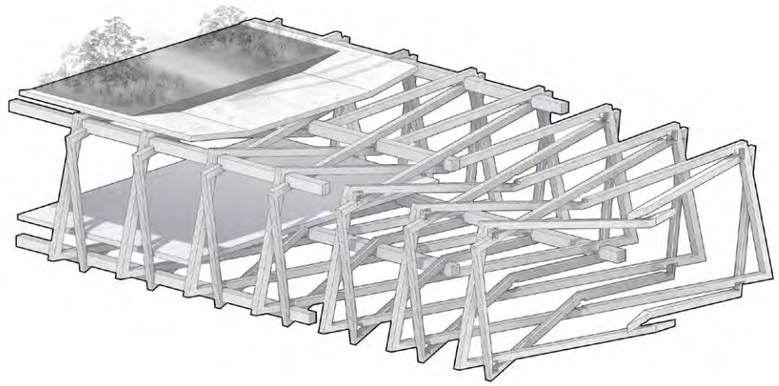
The addition establishes a dynamic axis for occupants - community activities at the center operate year round, while school activities at the wings offer more specialized programs - and terraced platforms persuade both students and community members to embrace stacked vertical farms. The result is an elevated system of urban farms that reflect the community garden network of the surrounding streets, and act as a nucleus for the growing

of an extinction-rebellion-style environmental advocacy network.

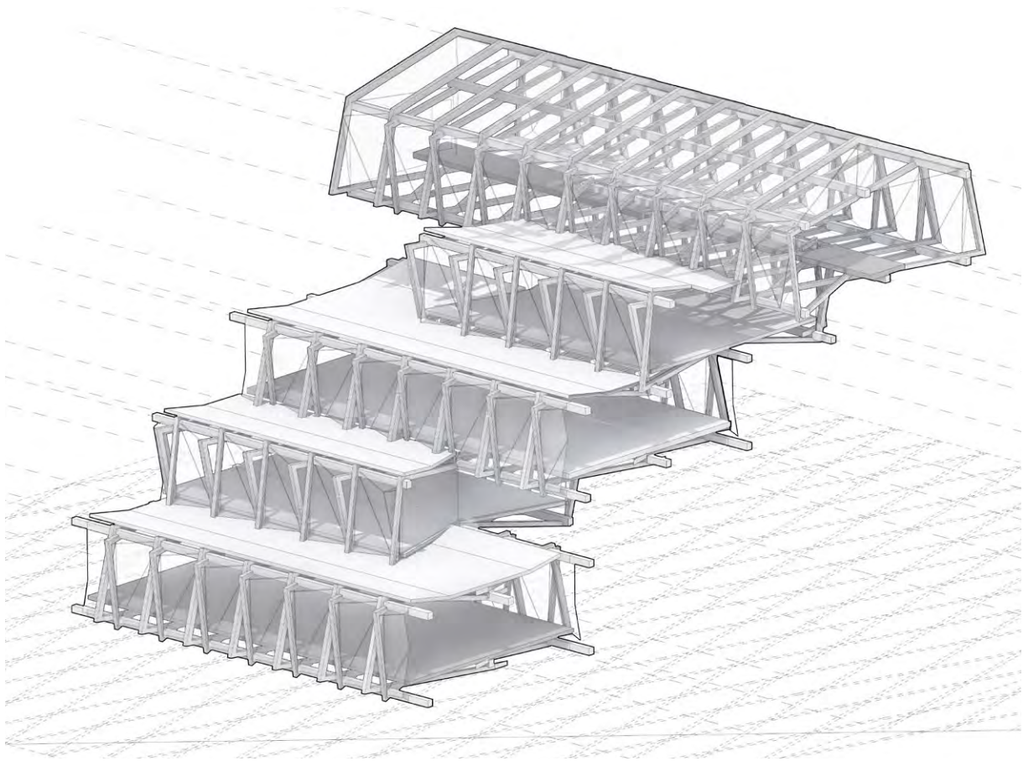
Two types of classrooms reflect the two main types of gardens throughout the school. Traditional walled classrooms for younger students look onto courtyards where teachers can tailor the growing season to the curriculum. Also, flexible canvas partitions enable creative combinations of spaces to cross-pollinate interdisciplinary approaches across ages and backgrounds. The actual structure of the intervention, inspired by basket-weaving paddleford truss mass timber of covered bridges, anchors into the existing wings of the school and is a self-stabilizing frame to allow for large column free spans. This operations opens a new central space as an inverted atrium, where the school becomes a shelter, open to 8th and 9th streets, to bridge the more programmatic demands of a school within a community on the front-lines of climate risks. Activism, in all its forms, is fundamentally about healing injustice. This implies that health and healing are radical practices, and architectures which promote healing should be built to enable these transformations. The XR school encourages student activism by proximity with nature to engender a sense of environmental responsibility. Meant to bridge a traditional structure with more radical community involvement, the existing wings of a school currently in neglect are interjected by woven mass-timber bridge structures. The result is a strong dichotomy that reflects the need to depart from business-as-usual in the realms of architecture and pedagogy.

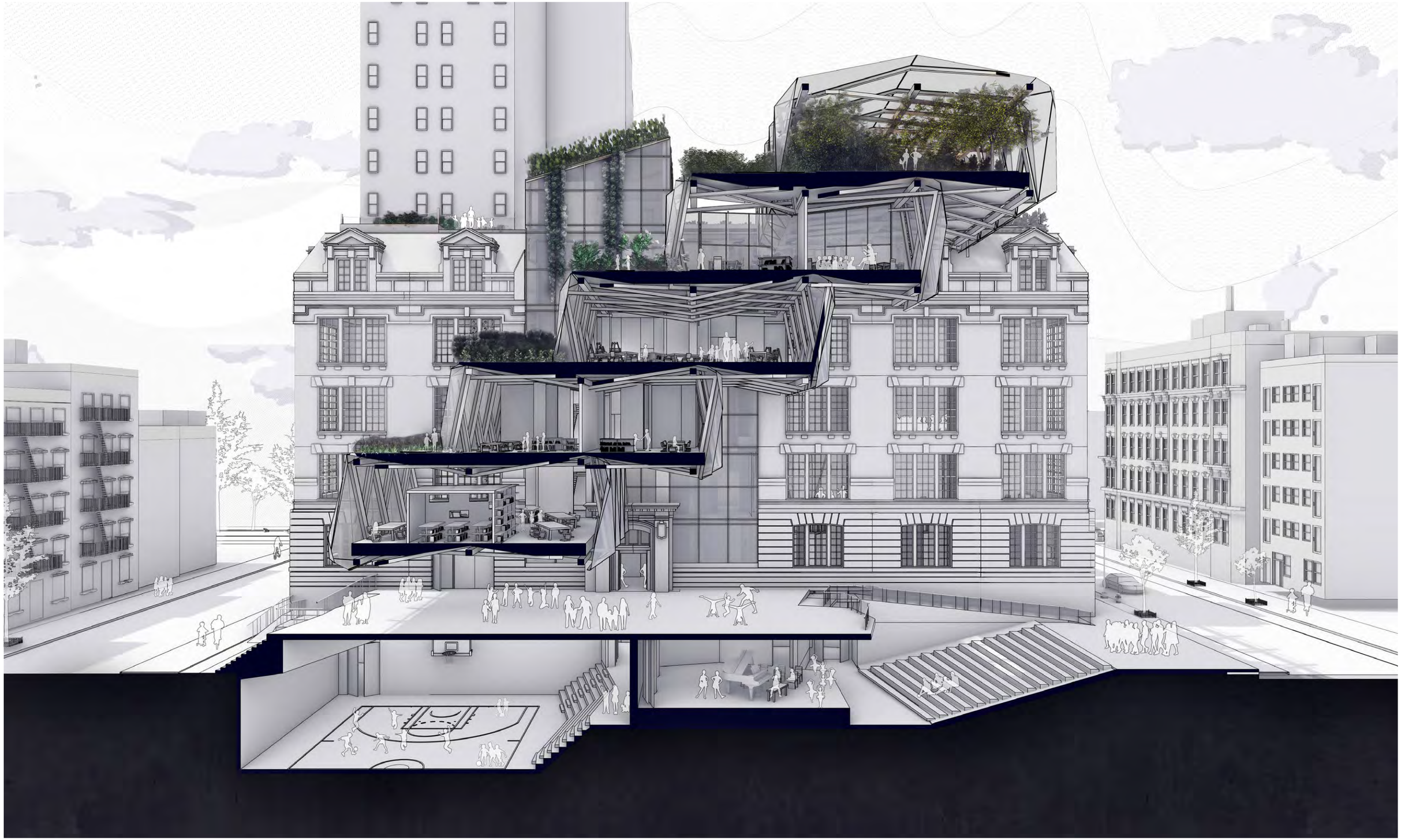


inter-lock

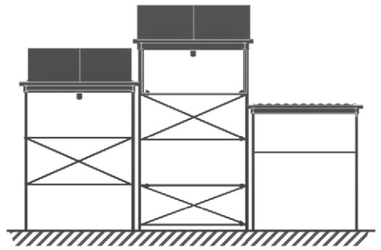


inter-weave





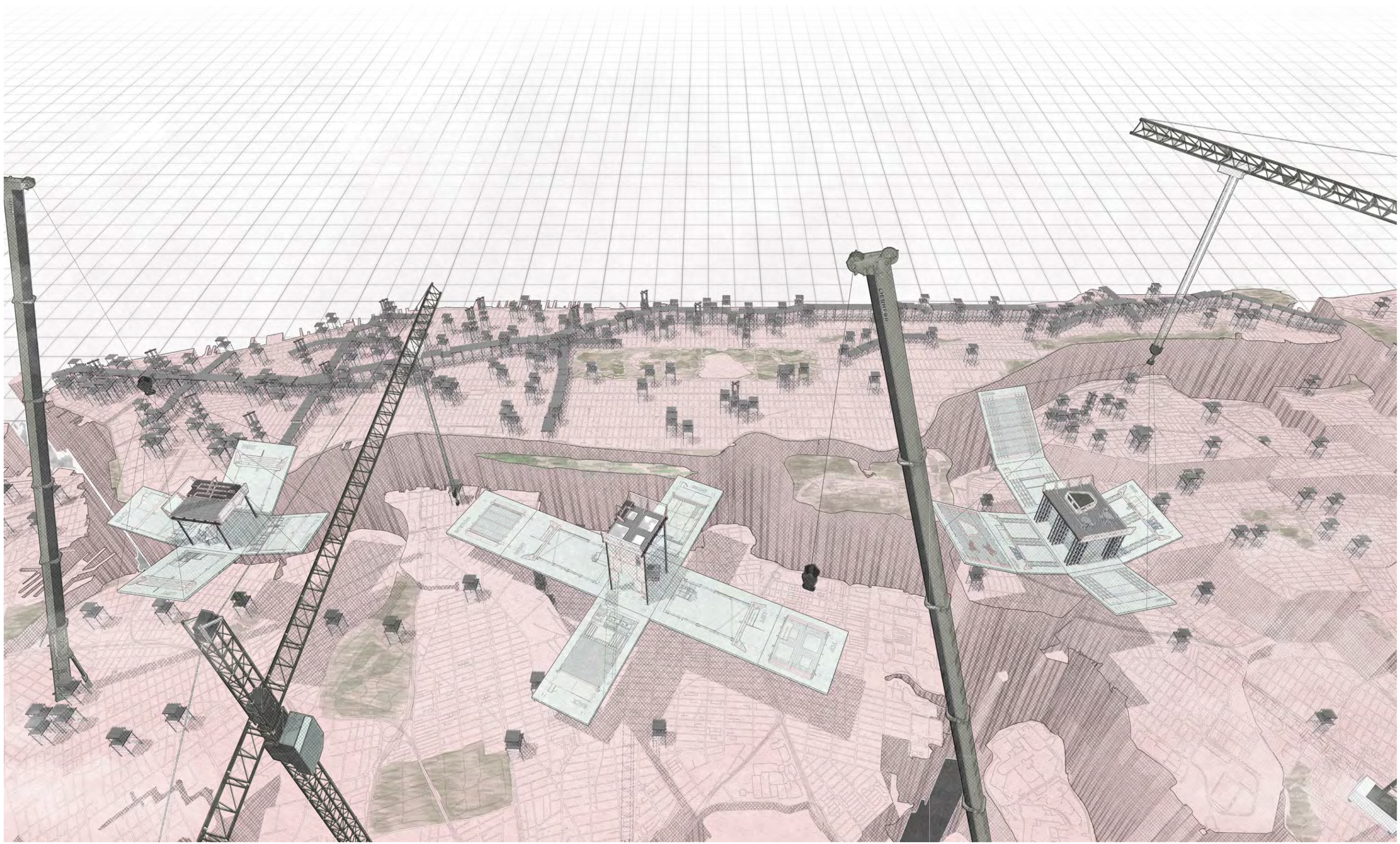
Section Perspective

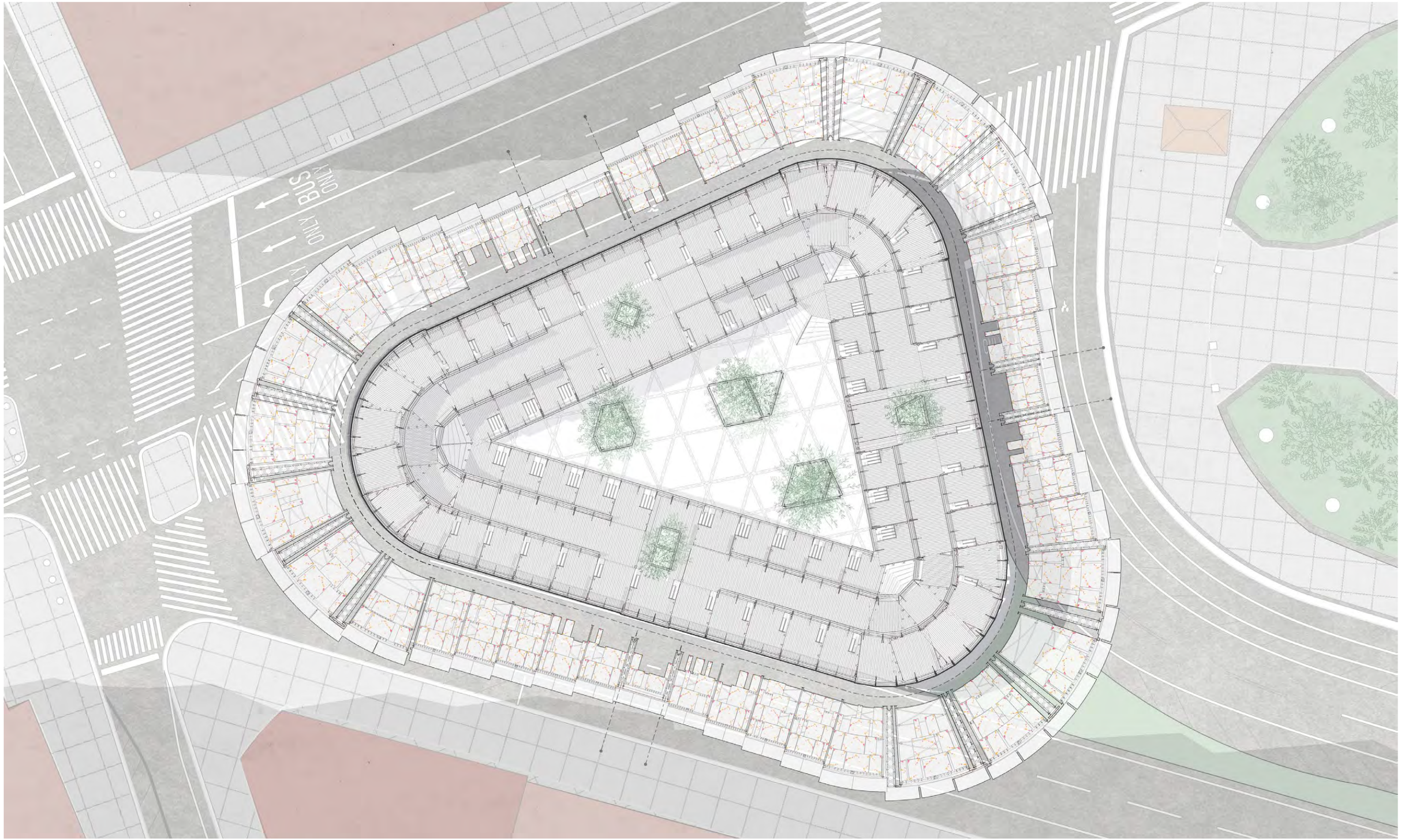


06. MARKET ARCADES

A flexible street-market built piece-meal from a Manhattan classic; a cloister of construction and habit-changing tactility.

CORE I / Lindsey Wikstrom / FA 2019





Site Plan and Elevation

Market Arcades installs a fresh food market at the intersection of Broadway and Park Row, adjacent to City Hall Park. The assembly of structures, made of sidewalk-shed scaffolds from around the city and movable panels, celebrates the entire life cycle of food and demystifies the growth, consumption, and waste process for New Yorkers. Moving counterclockwise, Market Arcades features an urban greenhouse, food storage, a market, and a composting center.

These forces revolve around a new pedestrian intersection, sheltered under repurposed sidewalk shed, to create a vibrant node between the Financial District and its adjacent neighborhoods. At a closer level, panels hanging from horizontal pipes are made of plastic-bag-reinforced-concrete, and use three plastic bags for every square foot of panel. For the 600+ panels in the structure, more than 10,000 plastic bags will be used in the tensile loops and decorative finishes that remind consumers of their waste practices as they shop at the market. By pairing the right to fresh food with an agile construction typology that is quintessentially New York, Market Arcades offers new life to this luxury food swamp.

What will happen to the millions of square feet of sidewalk shed when a NYC proposal further regulates their use? Each year, the Department of Buildings entertains up to five propositions that limit the extent and frequency of sidewalk decks and scaffolds. While this might improve storefront traffic or push landlords to improve conditions in a more timely manner, the eminent influx of industrial scale aluminum alloy beams offer unique opportunities to build volumes. Following the flow of the extant turning lane at the intersection of Park Row and Broadway, the building is

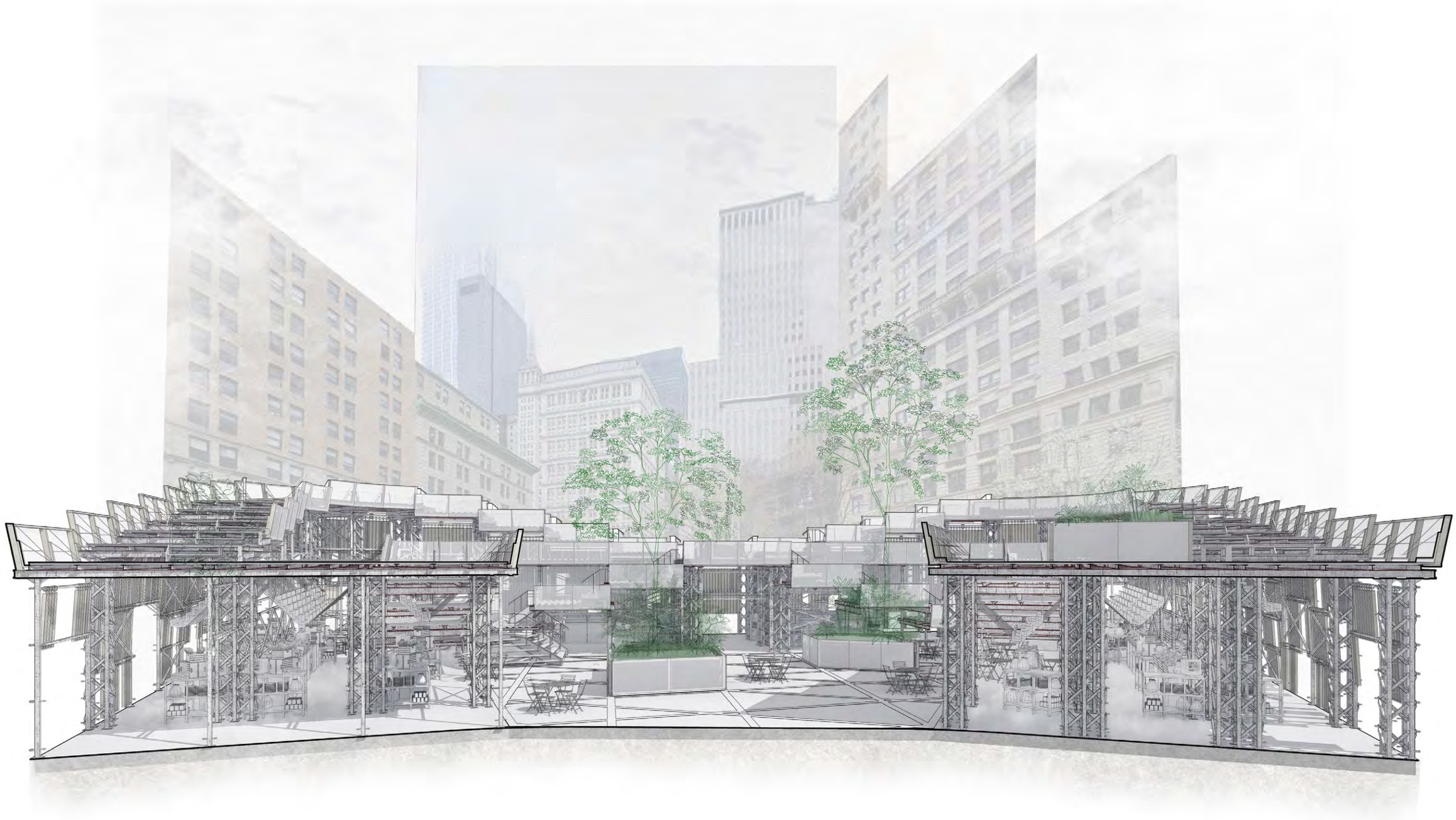
programmed counter-clockwise, from a greenhouse hosting new growth, distribution and storage volume, consumption inside a market hall with restaurant above, and finally a waste via garden compost volume. Market Arcades questions current New York City policies on green markets, green carts, and compost by framing the human right to fresh food as a platform to bring more people in close proximity to our legislators. Greenmarkets, popular and prevalent in FiDi, are only available a few hours every week and only a few stalls provide basic produce without added artisanal frill and cost. Green Carts, an initiative offering fresh fruits and vegetables in Harlem, the Bronx, and Queens, is not allowed South of Houston, even though no grocery store alternatives can compete with the prices and quality in the region.

The 'food waste' process, meant to capture the resultant waste, is an unpredictable and less-than-regulated system that captures less than 20% of waste. Using the sun to delimit the height of the structure, the staggered heights of the building ensure that no shadow will cast onto the adjacent park. The structure maximizes solar exposure toward and emphasizes the importance of our existing natural resources.

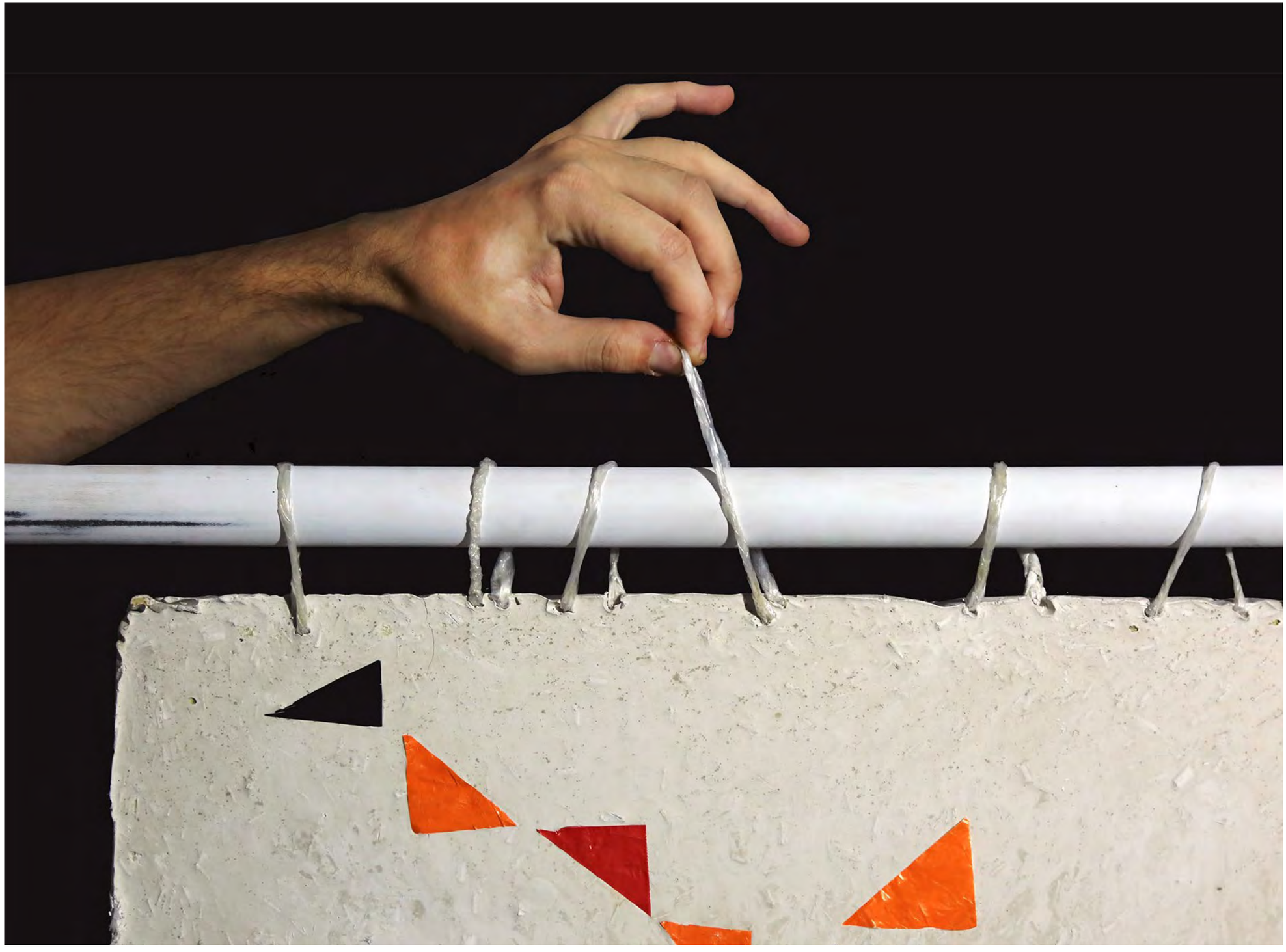
By bringing together a respect for existing natural resources, an emphasis on the everyday pedestrian experience, and the ability to engage in the small-scale experience of food processes through the lens of political membership, Market Arcades offers a new typology that elevates the importance of physical and social health in an urban context.

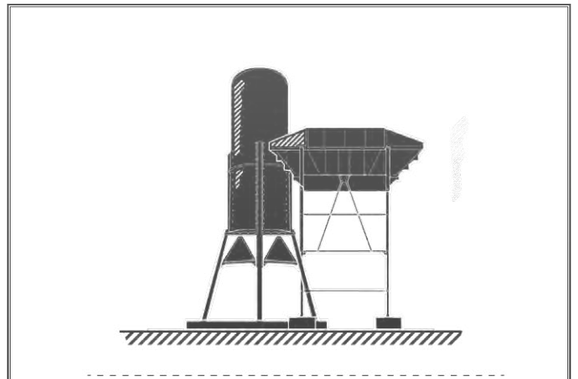
Market Scaffold Entrance

Inside the Arcades



Section Perspective





07. Decoding Dirt

Archives and aspirations under Concrete Plant Park in the Bronx. Excerpt developed during History Seminar *Archives of Toxicity*

Archiving Toxicity / Mark Wasiuta / FA2021

Ground as Record and Recompense:
Decoding Dirt at Concrete Plant Park

Concrete Plant Park, the newest green space in the Bronx, has been hailed as a successful example of bottom-up transformation to create a greener city-scape. While the narrative of Concrete Plant Park is traditionally told through the lens of environmental justice and community building in the face of an apathetic city, we can read the physical transformation of the soil as a proxy for the battle between a progressive bureaucracy and poisoned history. Embedded in the remediation of dirt lies the community's aspirations for public space, but also the city's limited willingness to improve the earth for its worse-off constituents. By analyzing technical documents, instead of the more public correspondence which frequently builds an anthropological of sociographic argument of actors, we can retell the story of this park's creation in molecular terms with the story of its toxic soil. Said another way, by ditching the examination of grass-roots activism for an examination of the soil in which those grass roots grew, we can combat the dominant narrative of activists, rather than chemical actors, to explain why one remediation project failed but another succeeded. Concrete Plant Park, when viewed as a case study in storied soil, complicates our understanding of the urban frontier. In doing so, the explication of dirt invites more questions about the consequences of the traditional downstream hand-off of toxic commodities to poorer and poorer communities. It also clarifies what is meant by aesthetically salvageable in a post-industrial or industrial zeitgeist, and offers a more generalizable framework to address the validity of success of other post-industrial remediation projects.

A brief history of Concrete Plant Park is required to understand the layered relationship between soil, bodies, and the state. The park lies on the Bronx River, just north of the Hunts Point neighborhood, and is bounded by the Bruckner expressway to its south, the Amtrak railway to its West, the Westchester Road and elevated Pelham Bay Line to its north, and the river to its East. The land itself is thin, half a mile long but only 187 feet across at its widest point. The earliest significant use of the site was for a concrete batching plant by the inconspicuous name of Transit-Mix Corp., which specialized in large-scale infrastructural construction projects since its opening in the early 1940s.[1] During its operation the plant mixed the cement and poured the asphalt for hundreds of miles of highways that crisscrossed the Bronx, Harlem and Westchester, and, in doing so, polluted the ground with excesses of petroleum byproducts and heavy metals. The site became abandoned in 1981 as a result of insolvency, largely due to the owner facing criminal charges for price-fixing and racketeering, which we can interpret as extralegal involvement with mafia, as was the typical criminal procedure during the Giuliani administration. By 1987 the site defaulted and was given to the city, where it faced an uncertain future.

Against the backdrop of this ambiguity, there was a coalescing group of community leaders who hoped to create more green space, especially along the Bronx River. In the conventional retelling of events, as a triumphant example of bottom-up planning, the story follows a series of coincidences. The 'activation' of local residents by opposing of series of 79.9 mW generators, solid waste transfer stations, and a truck route at the site happened to perfectly overlap with new sources of funding. These seed grants, earmarked in $10,000 packages by then park's commissioner Henry Stern who declared 2000 the "year of the Bronx River" were meant to bolster participation in whiter, wealthier north Bronx neighborhoods to clean the areas around the Bronx Zoo and Botanical Gardens. It then follows that by some chance, a coalition of residents from the groups Youth Ministries for Peace and Justice (YMPJ), the Point CDC, and Sustainable South Bronx (SSB) were awarded one of the grants and decided to hire a design firm to bring their community's vision of a green patch to life.[2] Then, in a near frictionless relationship with the City Parks department and the State Environmental Protection Agency, the project was green-lit for redevelopment to become a park. The narration then concludes that the park, which is almost finished construction, worked miraculously to connect life-long residents of the south Bronx to their river for the first time, and nourished a new generation of Bronxites with a medicinal food-way that runs through the park.

Before getting into further specifics, we should frame the ontology of the ground as precisely as possible given the context of the myriad actions happening on its

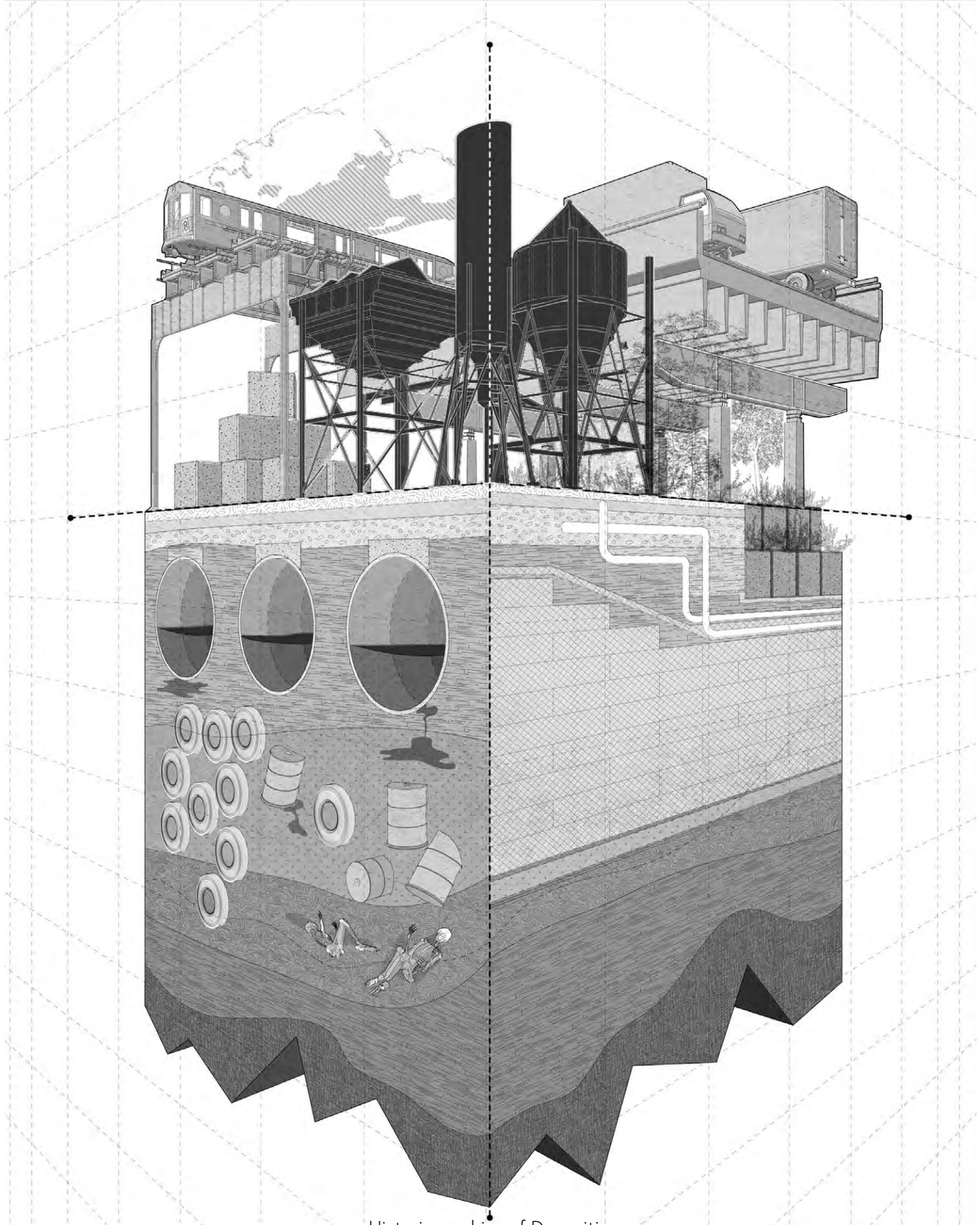
1. Pratt Institute, and Joan Byron. Transforming the Southern Bronx River Watershed: Walk21-V Cities for People Conference, June 9-11th 2004, Copenhagen, Denmark. 2004. 2. According to the Bronx River Alliance, the microgrant funds went toward a partnership between the aforementioned community groups and the firm Inhabit the Earth (website accessible at http://inhabit.earth/concrete-plant-park/), who designed the foodway for the first time and actively presented it to the parks department for adoption. The name "Inhabit the Earth" fits uncannily with the theme of rehabilitation at this site, as we through engineering or architectural interventions, try to inhabit the chemical complexities of the earth at this spot.

surface. This reading of ground, or dirt, or soil, or earth seeks to marry the physicality of the archaeological survey (a classical form of archive by catalogue), with the implicit human actions that resulted in the composition and sedimentation of chemical stories. It is important to remember the twin truths that the ground is alive, and it is used by and for the living. To clarify, the ground is alive at many scales – both in the colonies of anaerobes within the soil layers that are invisible to the human eye, and the plate tectonics that prove imperceptible except at a geological timescale. The spirit of dirt is mirrored, at times contradictorily, by its use as a singular surface by those living above and among it, where the use of architectural building volumes or city planning reflexively changes some of the ground's properties.

Given the sort of elemental compartmentalization of our narrative reframing, it is useful to bring about an approach which explicates the ground in an anthropocentric context. For this, I turn to the precedent laid by Horn, who argues that such "a phenomenological method means to conceive of the air not as an object distinct from its observer but as something in-between, connecting and encompassing, entering and exiting any living beings."[3] There is a similar logic to unravel the complexities of the soil: it is not a flat layer, but something inexplicably deep, complicated, alive (or deadened by mis-use), non-monolithic yet global, constituted by natural and man-made processes, time specific and ever diffusing. As John Durham Peters argues in the marvelous clouds, these elements components of media are "vessels and environments, containers of possibility that anchor our existence and make what we are doing possible." To bring this logic underground, we could say that soil is not merely the material basis of life and living, but that it constitutes a sense of grounded-ness, legitimacy to occupy a space, and creates the foundation for an infrastructure of place-making.

At the site of Concrete Plant Park, the dirt is conceived largely in two camps. First, the dirt is a symbolic arena, where people linguistically or phenomenologically connect to the grounding of community by connection to the earth, and second, the ground is a chemical matrix, where it is analyzed and dissected with the goal of being invisibly reconstructed to create a seamless park-scape.
In the public sphere, the ground was discussed in largely pacifying terms that seemed to emphasize the bureaucratic process of remediation (as if there is anything normal

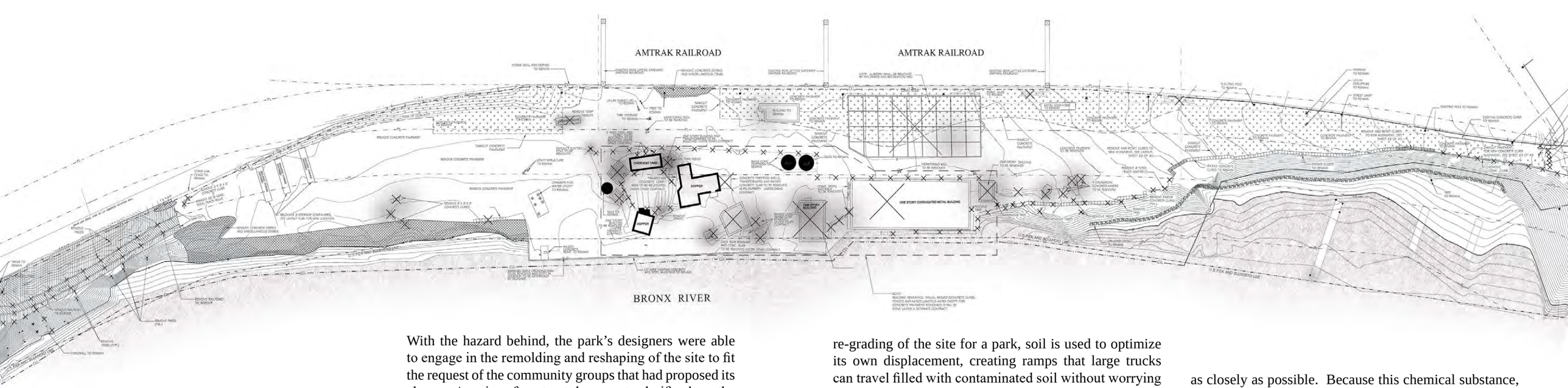
try to inhabit the chemical complexities of the earth at this spot.
3. Horn, Eva. *Air As Medium*. Grey Room. 6-25. 2018
4. See Reichl "Manufacturing Landmarks in New York City Parks" for a comparison of 'park making' by various city agencies in New York City.
5. Rebecca Blythe Pryor, "Manifested Stories. An Alternative Narrative to the



about a fifty-year saturation of chemical pollutants so intense that the top three to five feet of earth need to be trucked away for the safety of occupants). Jim Mituzas, the Parks and Recreation employee who designed the park, proclaimed that it was an extremely cheap park to build, given that of its nearly $10 million budget, more than 90% of budget went to contamination remediation.[4] The Highline, a similar sized park completed at around the same time, cost nearly $153 million to design and complete. For concrete plant park, this is not some assurance of the natural beauty of the old concrete plant park as much as it is a scarcity of resources that would be worth spending on the area; this is simply a brownfield with new soil that fulfills the green space needs of the borough. Mituzas describes the process of the remediation as 'refreshing' the soil to allow for the edible food-way, which ignores the thousands of hours of labor spent to bring the soil to acceptable standards of chemical composition, and the years of illicit activity that made the soil unacceptable in the first place. The phrase refreshing does a lot of work to comfort the fears of residents who mistrust the city's intentions as it implies both a state of relaxation to a natural calm and order, as well as something that is fertile or 'fresh'. The anthropomorphizing of the ground did not stop there: in a series of public meetings, Mituzas stressed over and again that he and his team had changed the grade of the soil to make the park more friendly and inviting, which posits that the soil was the antagonistic spatial element instead of the previous users of the site who had walled off the waters edge to make room for petrol tanks and concrete wash-out.

The soil sampling and analysis, a spatially and temporally mediated archive maintained by Lawler, Matusky, and Skelly Environmental Engineers, was a procedurally standard approach when dealing with a suspected toxic or Superfund site. The team drilled and exhumed soil cores from various locations around the park, and ran a series of electrophoretic analyses of these samples to ascertain the chemical makeup and concentration of volatile organic compounds (VOCs), metals, pesticides, and diesel range organics (petrochemical byproducts).[5] Using highly technical language, the report dictates the scope of work – seven piezometers were dispersed, and recovered three previously unknown underground storage tanks at 550 gallons each. The report banally recites the procedure: 3-inch outer-diameter split spoons drive by a

5. Since 2010, EPS has been the de-facto method for NYC Parks to make new earth, especially to create topographic features like berms and ridges. However, in the 10 years since its widespread deployment, more parks are seeing water seepage that enters and fills the EPS bricks, which can wash out during storms. In the future, these bricks will all need to be replaced, likely



300-lb hammer falling thirty inches collected soil in 2-ft increments; immediately upon opening the spoon, sample were scanned with an HNU photoionization detector to determine chemical composition, and between each test, the spoons were decontaminated with non-phosphate detergent, deionized water, and air-dried.

The dirt, now fully decoded and compartmentalized into several camps, is sorted for dispatch based on the threat to human and ecological health. As a critique of many waste-management 'solutions,' the administratively correct course of action doesn't diminish the threat of harm, but merely pushes it to another place where it will harm fewer people, or with less power to organize and resist such activities. If there is any community that should be so sensitive to the supposed utilitarian approach to hazardous waste mitigation, it is this neighborhood that rejected dumps on the basis of their inundation across the Hunt's Point peninsula, yet few of the activists seemed concerned where the waste was headed. Interestingly, there was a limited but vocalized fear in reducing the travel distance and number of trips for the sake of asthma rates from truck exhaust; representatives from the Bronx Watershed Coalition verbalized repeatedly to the Parks department that the fewer trips made to create the park, the better the long-term health of the borough would be.

With the hazard behind, the park's designers were able to engage in the remolding and reshaping of the site to fit the request of the community groups that had proposed its change. A series of contract documents clarifies how the planning of a park is again a selective process of archiving, albeit one to maximize the comfort of the visitor instead of minimize the harm to a resident. The construction explores three facets of design in its technical data: how the earth should be shaped at this spot, what should stand upon it (and how structures should be connected through the ground), and what should sit below the surface.

The first exploration, how to effectively earthwork the site, is the easiest to understand. The landscape plan attempts to calm the sharp cliffs and hardscape on the surface of the cement batch site with rolling hills that gracefully connect the river's edge to the adjacent roadways. This urge to smoothness might be mistakenly read as a yearning for the pastoral, or an Olmstedian want to re-create a topography of the natural. The park designers insist that this kneading of the earth is not an aesthetic desire (they stress again that the budget would not permit any superfluous design elements) but instead is meant to allow the moving of contaminated soil out of the concrete batching site and new soil into the park. At the previous grade, when the Transit Mix Corp was not worried about access from the outside world, large cliffs of hardscape and terrain embankments maximized the workable area for batch-mixing and offered a crater to shield the curious eyes of the city from observing any dubious extra-legal work happening at the plant. In the re-grading of the site for a park, soil is used to optimize its own displacement, creating ramps that large trucks can travel filled with contaminated soil without worrying about sliding back down the walls of the pocket. By expediting its own demise, the components of the park's toxic past are strategically positioned to destroy any record of ill-health.

This leads to the final technical investigation of the dirt, a study of its modern replacement. Given the attention and funding dedicated to remediation of the unearthed, it may be logical to assume the contaminated dirt was replaced with clean dirt, as if in a one-to-one swap. Instead, the current park is largely dirt-free beneath a few spare inches of top soil or sod. The park designers, with an eye for efficiency of scheduling and cost, replaced the unpredictable and contaminated soil with a twentieth century swap: expanded polystyrene foam (EPS). The chemical, molecularly identical to Styrofoam insulation, replaces dirt as far down as 19 feet below a laid façade of grass. The process to create the material on site is violent – a polymer goo is poured into a mold and heated until it pops like a corn kernel, and the resulting rectangular brick of air, often six to ten feet wide, is light enough to carry by only one person. The geofoam, bound by "geotextile" and a "biomat erosion control blanket" to protect the new earth from the elements, is topped with borrowed fill, topsoil and sprinkles with planting.[6] The carefully crafted section ensures that the new earth, untenable in the real world without several layers of protection, should resemble its contaminated predecessor as closely as possible. Because this chemical substance, an unregulated possible carcinogen according to the EPA , make up a huge volume of the new ground, we should change the narrative of the park's remediation to one that swaps a 20th century toxin with a 21st century one.

The subsequent set of drawings, succinctly called the removals plan, details the fate of each built object on the park. For the determination of archive and relationship to the ground below, this is the clearest example of a selective archiving driven by an aesthetic romanticism for the industrial ruin. The plans, with giant exes, call for the demolition of several buildings on the site, as well as many other elements like concrete walls, a nursery, a string of eight-foot-tall fencing, three railroad ties, and more than fifty trees that sit in the contaminated soil. The transformation renders the modern parkscape follies unrecognizable from the factory that created them. The hoppers, sorters, and tanks that are strewn randomly through the park today used to be deeply embedded by a deeply linear history of manufacturing. For example, at the center of the site a nearly circular ring of eight structures is reduced to four, and the rows of buildings that connect the hoppers to silos a few hundred feet away are removed, leaving the iron structures as sculptural elements that are more isolated by the excision of their neighboring processes than by a fifty-year lapse in their usefulness. The structures that exist in the park today are the result of a surgical process of elimination to

by a new polymer material with a better tolerance for salinated storm water.

6. Interestingly, the "borrowed fill" came from other construction sites around New York that were excavated during the foundation of construction. The story of the mere inches of dirt that arrived in Concrete Plant Park can be traced to a clean soil bank, specifically the Forbell Street Stockpile in Brooklyn that claims to "bring climate equity to soil movement by offering free deposit and pickup, you just pay for the trucking."

7. The contract documents are ill-resolved here on an architectural level; on the pages that plan for the concrete-blocks new life as a riverine bulkhead, the notations admit that the designers do not know how many cubes of concrete exist, the condition that they are in, their usability as a water-front feature due to cracking, and the actual ability to bolt and fasten a string of gabion baskets and plantings to the outer face.

8. A coda to this story should make mention of the in-progress Sheridan Connector, a diesel flyover above the site that connects the Sheridan Expressway to Hunts' Point Terminal Market. The dirt, in an ironic twist of fate given the careful consideration of park planners, had been excavated for the right-of-way for the connector, and will be replaced with pylons and casing. This comes as an interesting finale to the story because it replaces the earth, currently a mixture of

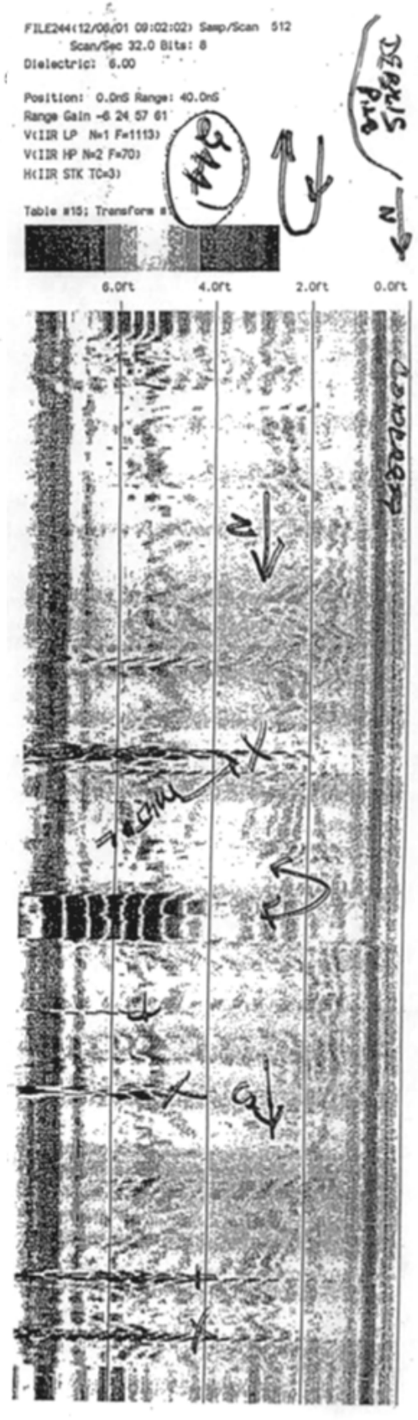


Photo-ionization of Soil, Annotated

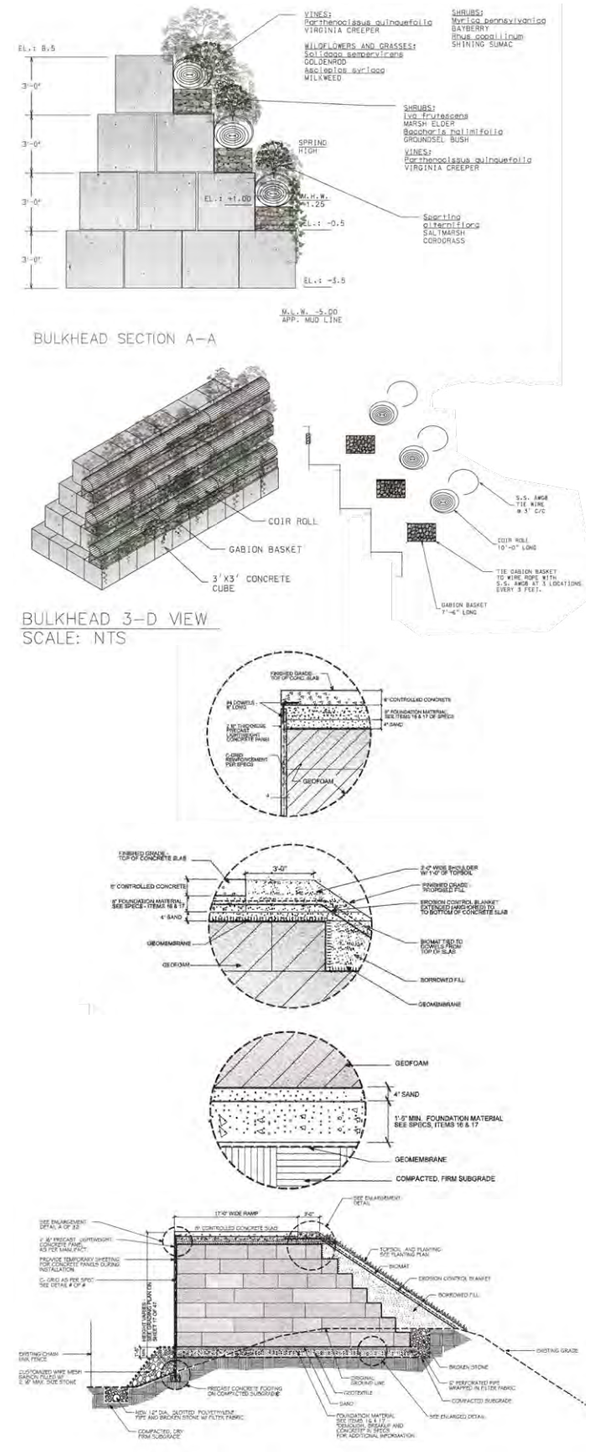
thoroughly separate the toxic horror of the sites past life from the current art object in the field. Additionally, the changing of the terrain and slope means that these multi-level structures loom even larger than they would have historically, and in fact require new concrete footings beneath the legs of the structure to make up for the almost two feet of lost dirt.[7] Structures, now perched on Halprinesque shoes, secure the main feature of the park to the soil in a way more permanent than the builders of the concrete plant had intended. The follies are now cured into the foundation of the park site below, trapped in a novel casing of cement that they did not create and embedded in a soil that is not original to this place.

Since one of the more salient goals of the park planners and community leaders was to create an edible food-way that followed the main axis of the linear park, we should consider the role of soil in making this vision possible. The issue of food security for the area – a food desert next to the largest produce distribution center on the planet – brings to the focus the concept of gardening as autonomy. The ability to produce healthy, and even medicinal plantings requires soil that will not transfer the contaminants and toxins from the ground, through the xylem and phloem of the plant to the human body. In this way, the medicinal herb becomes a contentious space, especially when the growth of the plant is on unsteady chemical ground. Likewise, the action of gardening medicinally, in effect re-producing planting habits that tend to revive native American regimes of remedy, and intended for a group of people without adequate access to doctors, pharmacies, and hospitals, are explicitly attempting to exit the western bio-political view of chemical prescription. Still, using the food grown in this new soil requires a high level of trust in the city planners and contractors who were paid to swap the bad dirt for group, largely the same parties that community organizers blamed for the poisoned soil in the first place.

The new ground at Concrete Plant Park is not only comprised of usable landscape, but also of a hardscape riparian buffer built of three-foot cubic concrete blocks. These so called “mafia blocks” are the result of end-of-day washout from the concrete batching trucks that have accumulated on the site for nearly fifty years. These elements of ground are a less visible than the architectural hopper structures, but are much more contested due to the connection to the previous regime of toxicity. Again, the community forces pushing for the redesign of the park were well reminded of their air-born threat of diesel inhalation as a result of reshuffling the ground-scape. If thousands of the blocks, each weighing 4,050 pounds, were transported from the site, it would require hundreds of truck trips, which, in the words of community members, would be an acute reminder that the resolution of toxicity at this space of green privilege requires that young people in the area pay with even higher incidences of asthma and pertussis. They suggested that the blocks, which are poor quality by any standard due to their production, be used to manicure the waters edge and be intentionally overrun with the natural to create a terrace of vines and wildflowers. The result would be a hardscape softened by dirt, a low sight-plane, and excesses of green, where one could literally step over the baggage of the past on the way to the river.[8]

Ultimately, the dirt at Concrete Plant Park is the invisible feature that underwrites the success of its transformation from brownfield to green oasis. By looking largely at technical documents that were never intended for public view, but nonetheless became objects of public scrutiny, we can begin to understand the ability of the ground to be archived. The environmental engineering report displays a beautiful abstraction of chemical consequence that hides the harm of heavy metals and VOCs behind colorful bands of ‘soil anomalies,’ and the architectural contracts display the granular level of control that the agency tried to exert over the planned re-deposition of dirt at the site. Taken together, these reports from the city parks bureaucracy, which were only a small fraction of the documents needed to create the park, display a deeper willingness to engage with the original goals of South Bronx residents than is typically told in the history of this park’s creation. Yet, the technical documents also profess their flaws – using cheap filler materials to make new land, or only sampling the worst looking areas of the site to avoid further remediation findings – can be read as the incomplete engagement with the archive of soil. The environmentally conscious designer, notes Menard, must tread a dichotomous line to express the aesthetics of ruinous decline, but at the same time surround the ruined sublime with the perennial belief in beauty as a ecological solution set. At Concrete Plant Park, this dichotomy is clearly expressed in its passive follies and active plantings, although connecting these narrative threads is only a thin blanket of dirt that must refute its past toxicity as much as honors it.

soil, foam, and bedrock, once again with infrastructural concrete, and introduces pollution above the site in the form of diesel exhaust vapors, replacing the historic deposition of diesel byproducts below the topsoil layer. Perhaps this site, in a tug-of-war between city and state, will be truly grounded.



Detailing Chemical Relationships

THE RECYCLING BIN

D N A

W E R

G A M

S U N