

WORKS FROM MY JUNK DRAWER



000_CVPG_001
One more addition to the drawer

Blake Matthew Kem
Columbia GSAPP
2020_2023

In most places and especially in the Midwestern United States where I grew up, it is very common for families to have a cabinet drawer near (or in) their kitchen overflowing with a collection of miscellaneous objects – old keys, loose buttons, forgotten batteries – referred to colloquially as the “junk drawer.” This compilation of works is *my* junk drawer: an eclectic grouping of text, images, collages, models, and drawings that attempt to rationalize, catalogue, and explain the messiness of my thoughts, or my never-seizing process of researching, analyzing, collaborating, making, testing, and revising my critique of the built world. My efforts, progress, and humble successes would be nothing without the assistance and guidance of my mentors, professors, peers, and family. To them, I owe this drawer of junk.

– B.M.K.

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Columbia University GSAPP, M.Arch, 2023

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Graduate Portfolio

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009

All Roads Lead to Labadi

Civic Negotiations, Infrastructure, and Repair at the International Trade Fair, Accra

Constructed between 1962 and 1967 on land dispossessed from the Ga peoples of La/Labadi, the site of the International Trade Fair is re-imagined by extending and stitching back together the community with its agricultural hinterland, with particular focus on a new campus of schools, a soccer academy, and an appropriate public space.

081

RE: P.S. 64, Learning at 64 Scales

A Civil Postscript for Urban Institutions of Education

The last 40 years of dormancy at the site of P.S. 64 is a testament to the political failures of local government and further, the importance of the school building to the community of the East Village and Tompkins Square Park.

035

33 Thomas / Re-Wired

The Power of Translucency and the Adaptation of AT&T's Long Lines Building

First a muddy swamp, next the city's first major medical institution (ca. 1800), then 17 separate cast-iron and brick warehouses, shops, and lofts (ca. 1894) were all consecutively erased from the site of 33 Thomas Street for the realization of what stands today, a late Modernist sculptural indulgence.

097

Come to Hudson for the Cranberries

A Guide for the Decommodification of Suburban land, Small-Town Tourism, and Communal Boarding

This project challenges the popularity of weekender Airbnb/hoteling, flexible work-home relocations from New York City, and small-town tourism in Hudson, New York as a means of proposing a new social model for life in the suburbs.

063

Productive -Urbia

A Model for Regenerative Housing and Urban Production

This new urban housing model synthesizes diverse urban realities into one architectural whole, centering agricultural production at the heart of the way we live to address the ancestral past of local immigrants and resituate underutilized urban space as a productive asset.

117

This is a Space-in-Progress

Restructuring Terracotta Processes and Democratic Space

This exhaustive research of the terracotta facade of Liberty Tower (built 1907) in New York's Financial District resulted in a daring architectural project which questions material extraction, civic space in the city, what it means to build, and much more.

141

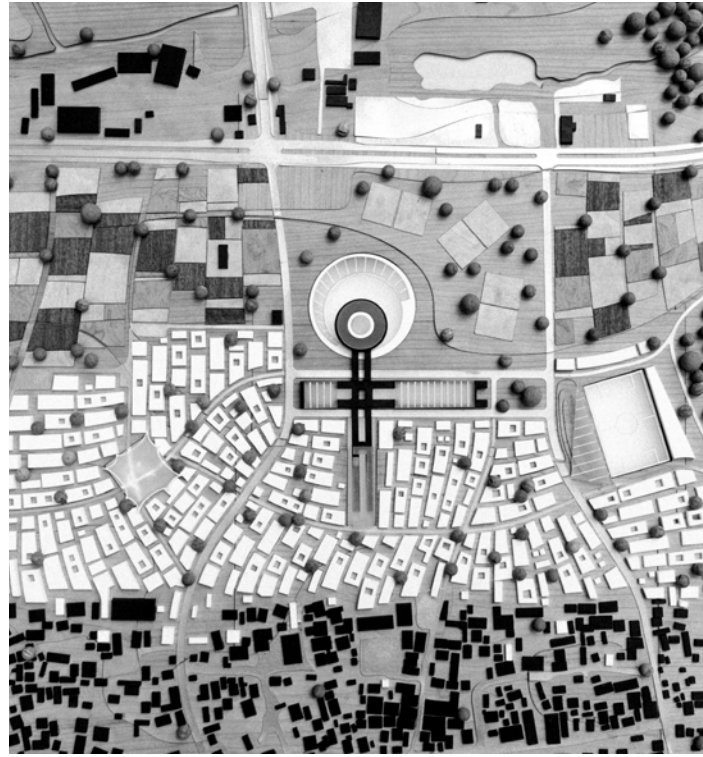
avery.SPOT

That Floating Cloud above Avery Plaza

This floating cloud was the product of a collaboration amongst students, architects, engineers, and designers to design, build, and program a temporary commencement pavilion on Columbia's campus in Avery Plaza.

147

Curriculum Vitae



009_ARLL_101
Dispossession reparation

All Roads Lead to Labadi

Civic Negotiations, Infrastructure, and Repair at the International Trade Fair, Accra

*La Road, Accra, Ghana
Academic Project, Unbuilt
Spring 2023, ADV VI
Instructor: Gary Bates
Team: Blake Kem + Samuel Bager*

One of the greatest urban struggles in Accra today is the pervasive struggle for space between a now formalized, post-colonial governmental body and its pre-colonial, native populations. Especially for those historic communities living in Labadi, the Ga peoples, urban “dispossession has had a particularly devastating effect on the neighborhood... with some estimating that the community has lost 80 percent of its land to expropriation.” Unfortunately, most of this claimed land has been from the Labadi agricultural hinterlands, meaning the ability of the community to expand at an urban level and engage in agricultural livelihood activities has been greatly compromised by the construction of major nation-building projects, such as the Kotoka International Airport, large estates for visiting diplomats, and the site of the International Trade Fair (ITF).

Constructed between 1962 and 1967, the ITF was a unique project precipitated by the government of Ghana’s first president, Kwame Nkrumah aimed at realizing Ghanaian nationhood via an imported model of Modernist architecture, supplied by a joint Yugoslavian-Ghanaian coalition of architects and urban planners. Plans for slum-clearance and a new international fair grounds were eventually developed in the early 1960s in the eastern outskirts of the growing city, in the once agricultural lands of Labadi. Since the 1970s, the site’s importance in the city has fluctuated, but as obsolescence overcame the traditional model of the trade fair, small business owners began to appropriate the voids in between pavilions and the existing infrastructure itself. At 10:00 pm on February 16th, 2020, two bulldozers and armed police officers began demolition of those facilities without official notice to prepare for a masterplan project, funded by the Singaporean real estate investor Stellar Holdings and designed by Adjaye Associates. The Ghanaian government has since admitted its unjust eviction of the small business tenants and even sought to mend their relationship with the chiefs and locals of La for the wrongful dispossession of the land of the ITF with formal financial compensation.

This new site strategy seeks to extend this confession by proposing a slow, meticulous, and calculated site re-development project aimed at negotiating civic space and existing infrastructure. By rerouting the highway which cut Labadi from its agricultural land, we critique the masterplanning project. By extending Labadi’s density across that once strong threshold, we question the idea of what it means to be a ‘slum.’ By stitching horizontal voids back together and dedicating 50% of the land to agriculture, we mend a broken community and restore a condition of localized livelihood. By re-purposing the remnants of the ITF as a campus of schools, we seek to address a struggling national and local educational system.



The **1. International Trade Fair** in Accra can be understood as a unique nation-building project precipitated by the government of Ghana's first president, Nkrumah. By importing modernist Yugoslavian architectural expertise, Nkrumah and his successors activated a tradition of realizing Ghanaian nationhood via late modernist excess, spectacle, and urban cleansing. At the expense of the local, plans developed in the early 1960s for a trade fair masterplan in the eastern outskirts of the growing city, in the once agricultural lands of the Ga peoples of Labadi. For the sake of nation, never-realized slum clearance plans were developed by a joint Ghanaian-Yugoslavian coalition aimed at radically redefining the image of historic Labadi urbanism. After the settlement of the Gold Coast region by indigenous peoples like the Ashanti, Ga, and Akwamus, the oldest colonial settlements in Accra were located around **2. Jamestown Harbour** and Christiansborg, to the east. Like the **3. Accra Central Station**, completed in 1910, the harbor is tied directly to the founding mission of Accra's inception, the economic exploitation of West African land and the propagation of the Christian religion in the region by external influencers. With the arrival of the bubonic plague to the city in 1908 and growing congestion in the city, the residential quarter of **4. Adabraka** was formed to house African-only Muslim populations separate from those colonials. Today, the harbor is the outpost of desperate local fishermen and barterers who exploit the plentifully active and fluctuating tides of the city's oldest colonial cove. Fish is bought, processed, and sold on the beach of the harbor, a strategic adjacency that mimics the phenomenon of imported cocoa being sold on the same abandoned land of the railway. Since the 1950s, train traffic through Accra greatly declined until it was completely suspended in 2011. The station site slowly transitioned until being consumed by market traders and those searching for housing in abandoned train cars.

Markets and street life pervade the city and activate the spatial voids between formal boundaries of the city. For example **5. Makola Market**, once referred to on colonial maps as the "Seweryn Market," is the bustling heart of the city that fluctuates from inactive urban plaza to dense market in a matter of moments with great consistency. **6. Oxford Street**, an old colonial thoroughfare that once connected missions north of town with the coastline, shares urban similarities to Makola with advertisements, buses, and kiosks activating its dense network of commercial and social exchange.

On February 28, 1948, three Ghanaian World War II veterans, Sergeant Adjetej, Corporal Attipoe, and Private Odartey Lamptey, were killed at the hands of the then British police superintendent Colin Imray for peacefully marching in an attempt to claim their promised pensions. In addition to wounding 60 other ex-servicemen, this event led to the eventual transition to independence of the Ghanaian state from British

occupation and rule. The site of the event, **7. Osu Castle**, originally known as Christiansborg Castle, was built by Scandinavians (Danes/Norwegians) as a colonial fort and later occupied by the Portuguese, Swedish, the Akwamu, and eventually the British as their respective seats of government rule and as the center of trans-Atlantic slave trade of the Gold Coast region. When the Ghanaian state gained its independence in 1957 and became a republic in 1960, it was reclaimed as the seat of the president by Kwame Nkrumah until it was vacated in 2007 and replaced by the new presidential palace, the **8. Jubilee House**, which was inaugurated in 2008. Like the castle, the ground on which Jubilee sits has a historical past beginning with the colonial government. Circa 1927, the British colonial government determined a large rectangular area outside the inner ring of Accra would be ideal for a new seat. On this land, they built the colonial state's newest governmental complex. When Ghana gained its independence, the land was transformed into a zoo until its eventual transition to the highest seat of the state. In this transitory period of nation building, **9. Black Star Square** in 1961 to host the visit of Queen Elizabeth II and all future civic and military parades. It lays on land directly abutting Accra's contemporary inactive coastline, preserved by Nkrumah for a never fully realized quarter for global Ghanaian governance in the Modern era, complicated by the period of major economic decline in the region from 1961 through the 1980s.

By isolating nine contentious fragments of Accra, this map elicits the obscured cultural and political logic of the city, originating most explicitly by its three disparate colonial formations, which have been highlighted in light grey fill. Some overtly cultural sites, such as the Osu Castle, Black Star Square, and the Jubilee House are thwarted by such historical complications, rendering them civic-less except for those privileged by their respective formalities. Quite the opposite, Makola Market, Oxford Street, and the Railway Station are active harbingers of informality, where the open public space becomes an interwoven, complex temporal network of exchange and chaos. These nine urban, architectural, and human-scaled decentralized pieces of Accra paint a fragmentary logic to the city which lacks any formal modernist planning axes or sustained separation of uses. Formal infrastructural thoroughfares are constantly possessed, dispossessed, and repossessed by the life of the street and the informality of the city. This form of urbanity evokes the city's colonial heritage of institutional bureaucracy, external centralization, and ad hoc planning tendencies formulated for the sole purpose of becoming an economic nexus for the emergence of global trade (of goods and people) in the Gold Coast. The city has grown since, consuming itself and negotiating its remaining open space with unprecedented contention.



Key Map:

Shell Station, 1994	Geolocated Tweets
Flood Boundary	Informal Enclosure
Former Rail	Informal Enclosure
Existing Rail	Formal Enclosure
Formal Connections	Building Footprint

CIVIC, COLONIAL, AND CONTENTIOUS:

Nine Scales Stories of Urban Possession and Spatial Informality in Accra

1200 600 300 0

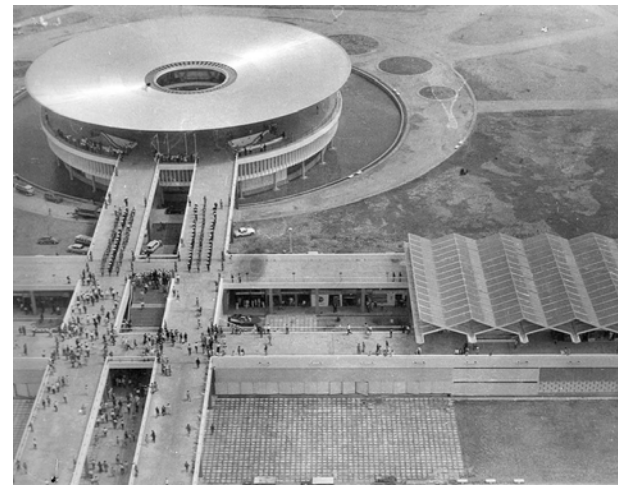
How civic is a lake? The most important stake for the lake property owner is their claim on the surface of the water itself, creating a unique metaphorical and physical tension between stakeholders. At the same time that the collective is seeking more and more control of the surface of water, their actual knowledge of it remains superficial. Have you ever seen the bottom of a lake? The water surface becomes a fundamental backdrop for the life of the lake regardless of its imperceivable dimension. Crafts disrupt its crystalline surface to exert their command of its imperceivable boundaries and nondescript ownership while remaining completely oblivious to the real nature of its composition.

This chamber has been conceptualized to a similar effect. Four people are asked to stand around it and insert their hands slowly into its openings with caution of its content. **The goal? To completely understand its limits in order to better understand our own.**





009_ARLL_105
Slum clearance masterplan, mid-1960s, Peter Turkson (chief planner), Grazyna Jonkajts-Luba, Jerzy Luba Stanek, Lukasz. *Architecture in Global Socialism: Eastern Europe, West Africa, and the Middle East in the Cold War*



009_ARLL_106
Crowds gathering at the International Trade Fair Centre, circa 1970



009_ARLL_107
Masterplan aerial view by Adjaye Associates



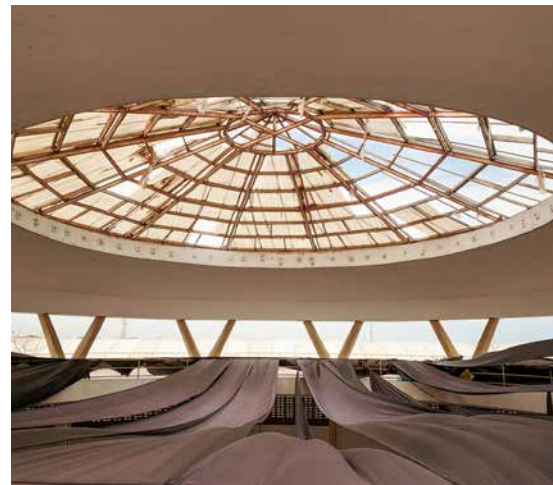
009_ARLL_108
Demolition of over 2,100 small businesses, 10:00 pm on February 16th, 2020



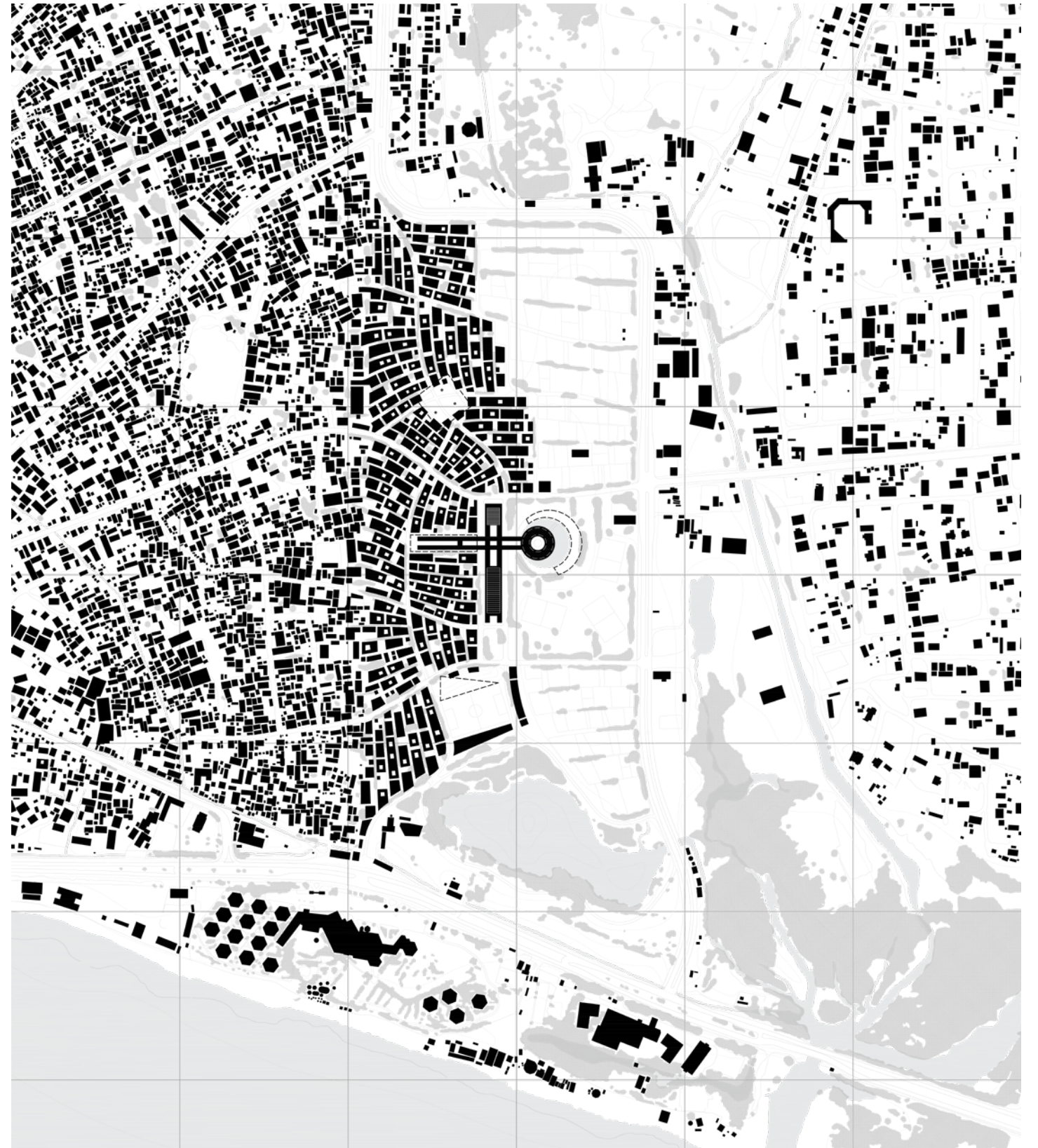
009_ARLL_109
Round pavilion and access ramp in disrepair, March 2023



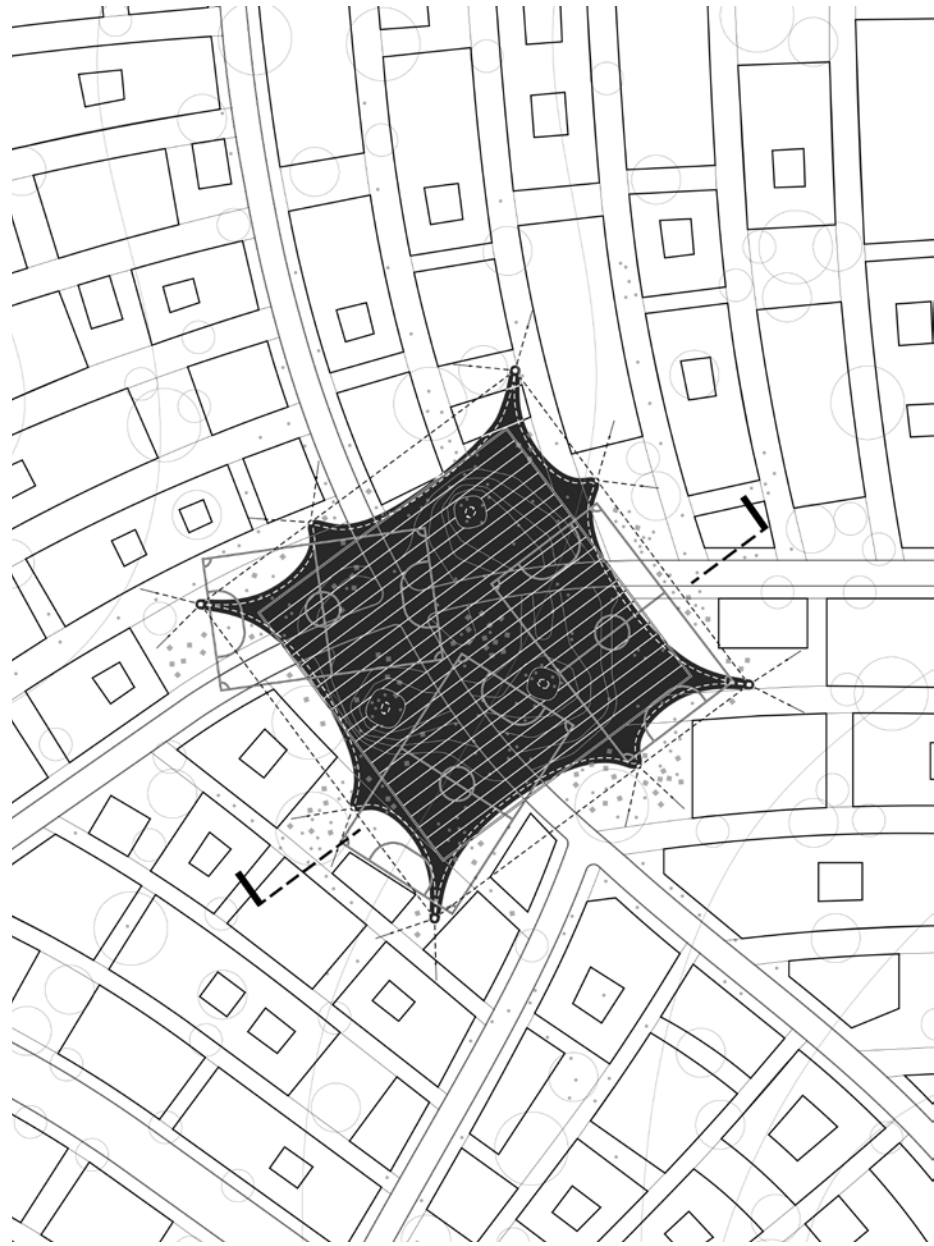
009_ARLL_110
Pavilion A exterior, March 2023



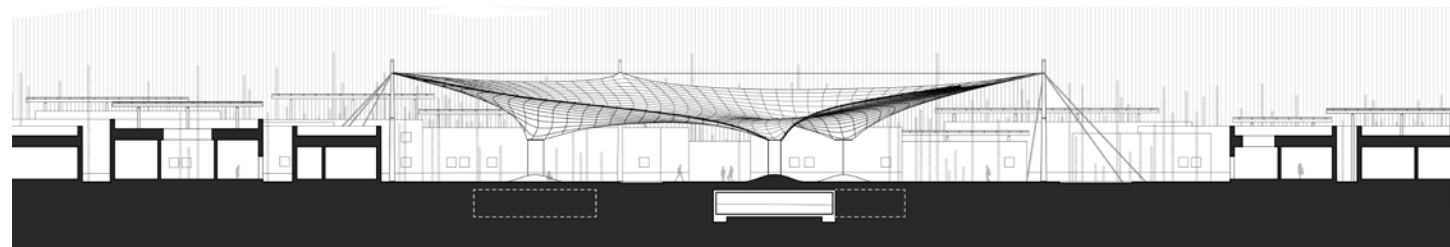
009_ARLL_111
Interior of round pavilion, March 2023



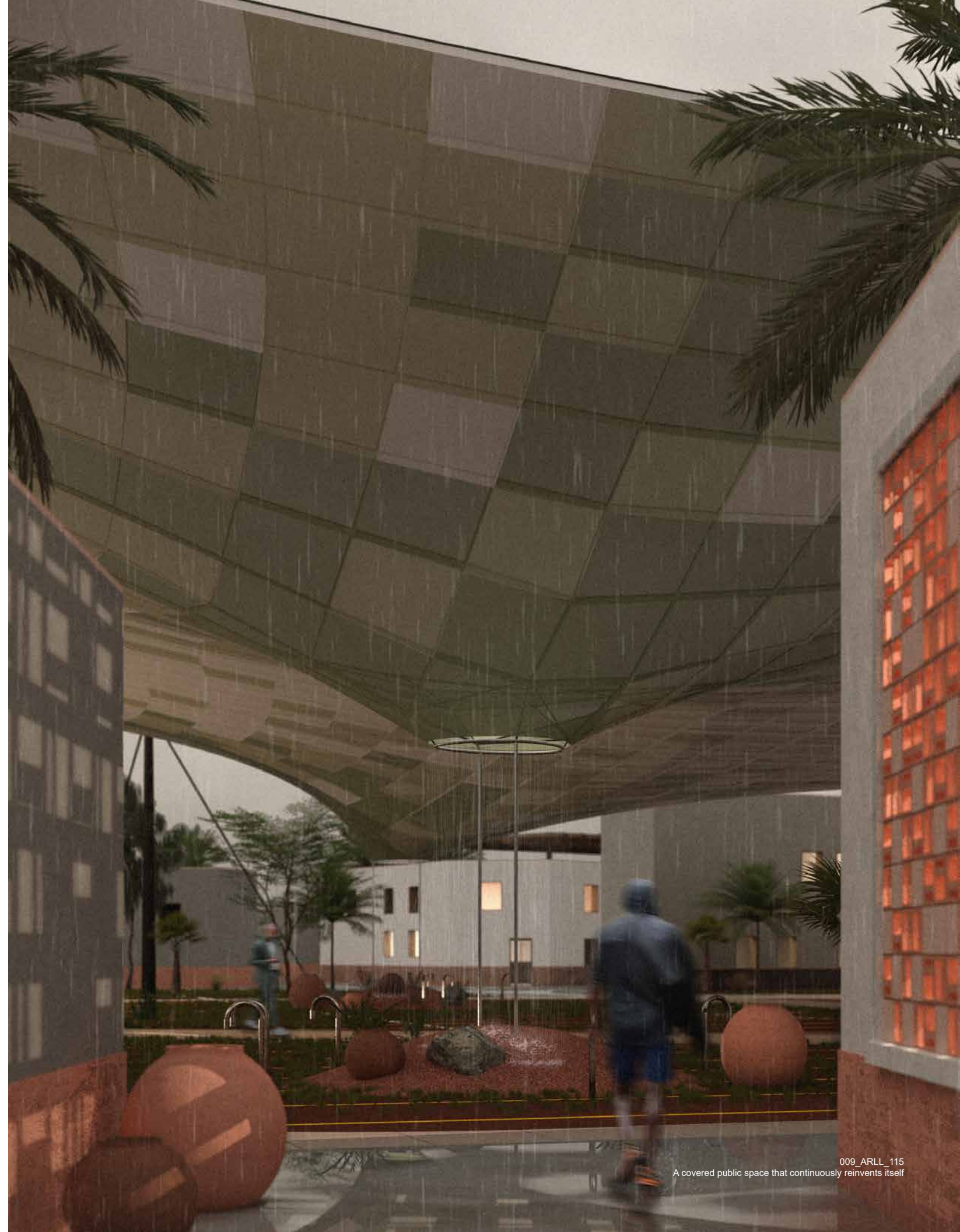
009_ARLL_112
Re-route, extend, stitch, and re-purpose



009_ARLL_113



009_ARLL_114
A centralizing water hole

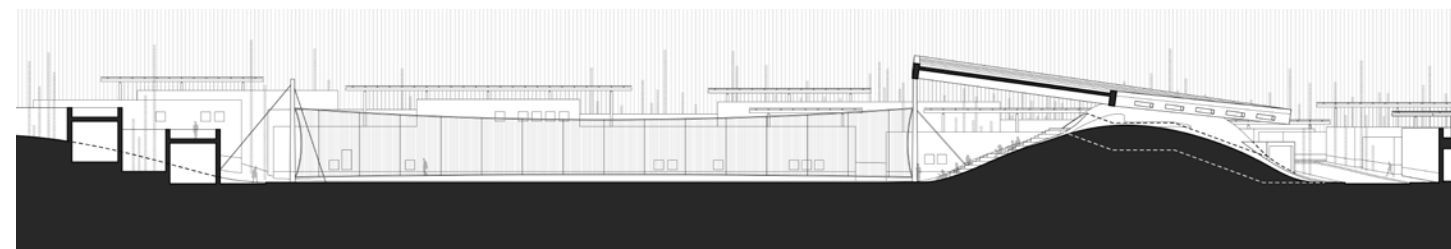


009_ARLL_115
A covered public space that continuously reinvents itself



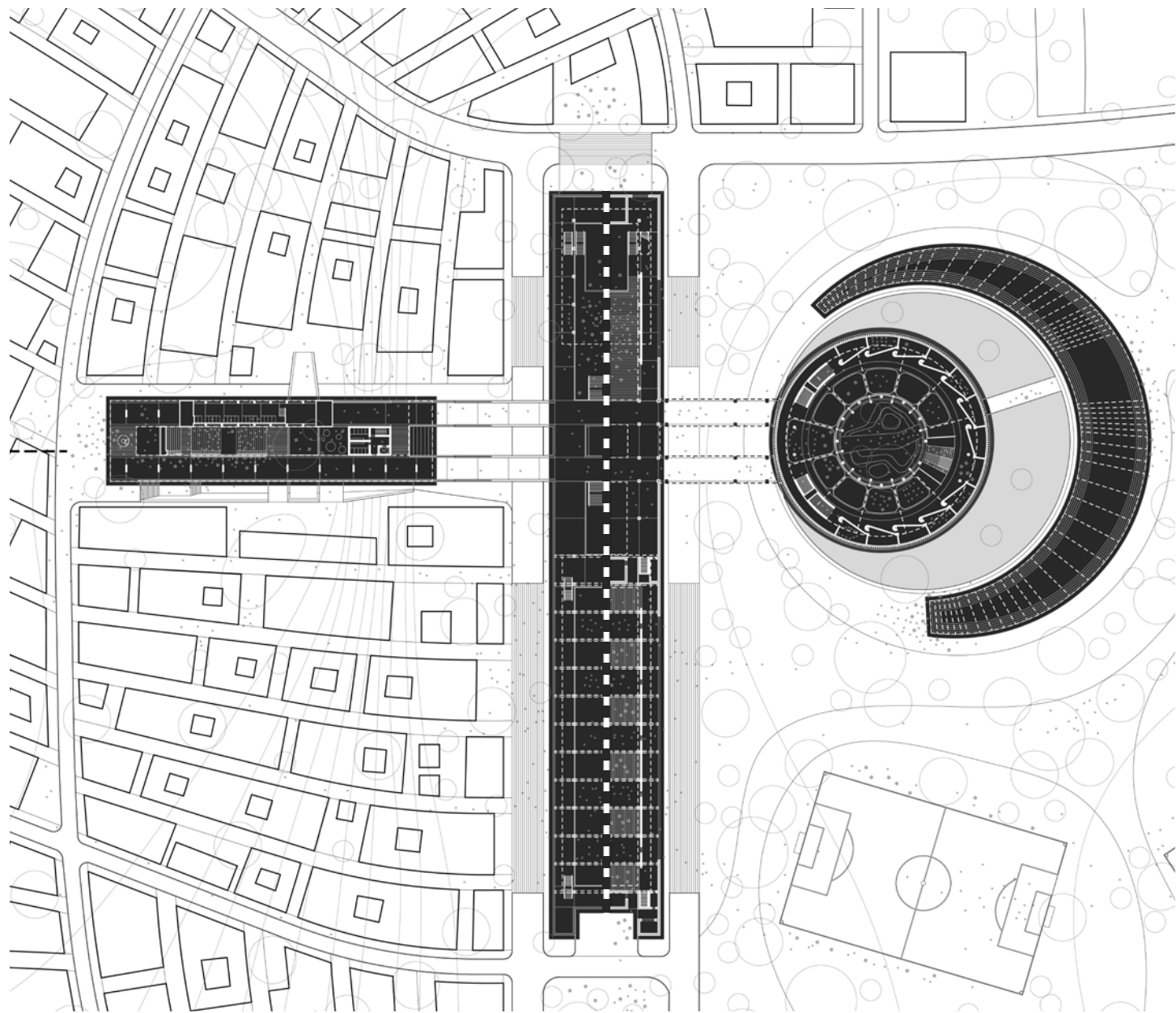


009_ARLL_117

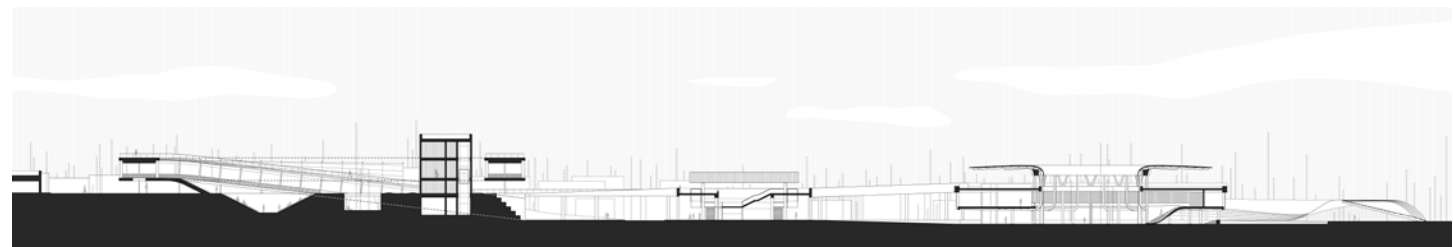


009_ARLL_118
An appropriable mound





009_ARLL_120



009_ARLL_121
A campus of schools at the nexus of agriculture and mixed density







009_ARLL_124
Walking through the central market, Tamale



009_ARLL_125
Ibrahim Mahama at Red Clay Studios, Tamale



009_ARLL_126
Re-purposed airplane at Red Clay
Photo by Nicolas Nefiodow



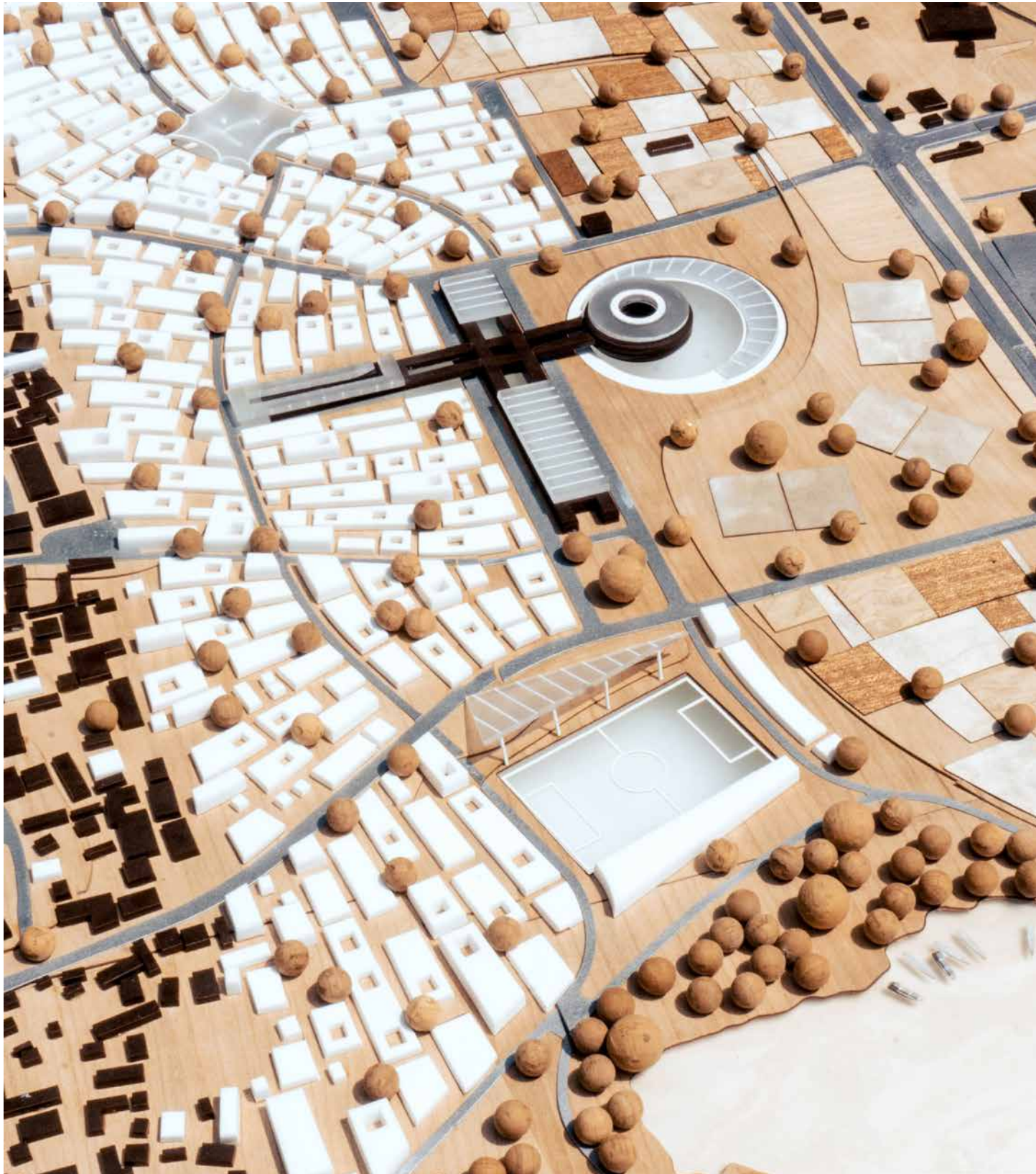
009_ARLL_127
Complete spatial hybridization occurs in La, spaces for living and working, the front porch or back alley, and public and private are questioned, compromised, and conflated



009_ARLL_128
Assistant in the workshop of Serge Attukwei
Clottey cutting petroleum-based plastic water jugs



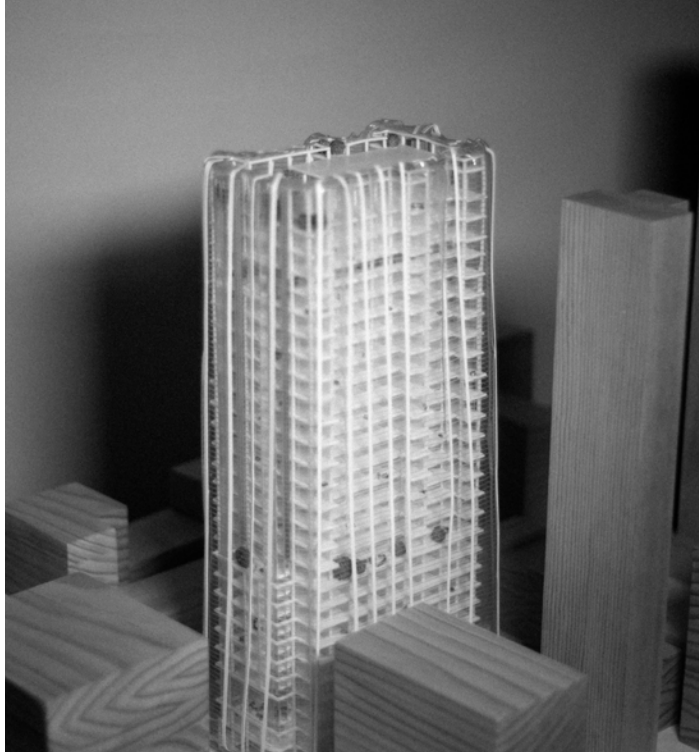




009_ARLL_131
A campus of schools, a soccer academy, and a appropriable public space at the nexus of housing, small business, and agriculture



009_ARLL_132
Slow, calculated, and meticulous urbanism



035_33T_101
Re-wiring solidity

33 Thomas / Re-Wired

The Power of Translucency and the Adaptation of AT&T's Long Lines Building

33 Thomas Street, New York, NY

Academic Project, Unbuilt

Fall 2023, ADV V

Instructor: Wonne Ickx

Team: Blake Kem + Samuel Bager

First a muddy swamp, next the city's first major medical institution (ca. 1800), then 17 separate cast-iron and brick warehouses, shops, and lofts (ca. 1894) were all consecutively erased from the site of 33 Thomas Street for the realization of what stands today, a late Modernist sculptural indulgence. In 1975, John Carl Warnecke & Associates' finished construction on their windowless skyscraper at this address in Tribeca and until today, the purity and impenetrability of the AT&T's Long Lines Building has ubiquitously captivated the general public and art critics alike. While exuding previous language as a firm dedicated to the architectures of Humanism, Warnecke & Associates proclaimed that this building was anything but one conceived for the habitation of the human kind: "This is a skyscraper to be inhabited by machines... As such, the design problem becomes the search for the 20th Century fortress, with spears and arrows replaced by protons and neutrons laying quiet siege to an army of machines within." The building radically embodied this original design intention by realizing this unfathomable carbon sink, complete with over 24-inch thick exterior walls housing the long lines wires, 1,400 foundation piles reaching bedrock depths beyond 140 feet, and floors engineered over double to triple the average office floor capacity. Bolstered to even support a potential nuclear fallout, 33 Thomas is a monument to keep those privileged within – the machines – safe from the city, without.

Today, we have entered a crisis of materials, carbon, and equity – cementing a world in which indulgent forms of architecture for the sake of high art is each moment inversely proportional to the growing tons of carbon dioxide expelled into our atmosphere. We have entered an era in which the literal and figurative gravity of our material and conceptual decisions as architects have become ever more important to the future of our own very existence. 33 Thomas / Re-wired imagines the calculable and carbon-conscious execution of the seemingly impossible: plugging affordable housing and a robust social infrastructure program into 33 oversized floors of a windowless office building in one of the city's most financially privileged neighborhoods. The first act was simple – questioning "Why can't doing less be doing more?" – we have rotated alternating pre-cast facade panels to the interior and re-purposed the facade of a select few floors, at once flooding daylight onto the building's interior for the first time in its history and created stacked opaque bathroom cores for perimeter units. Then, by sandwiching affordable housing units to the north and south between alternating public programs on every floor, we have imagined the continuous vertical negotiation of program, light, and space. New mixed public and private vertical circulation cores cling to the east and west faces of the building's structure, while a light, tensile, and operable ETFE skin is draped over the building's new form to provide essential climatic performance and render the building a ghost of its former self. New layers of material transparency at every level of adaptation radically invert the building from solid granite sculpture to habitable, translucent monolith.



035_33T_103



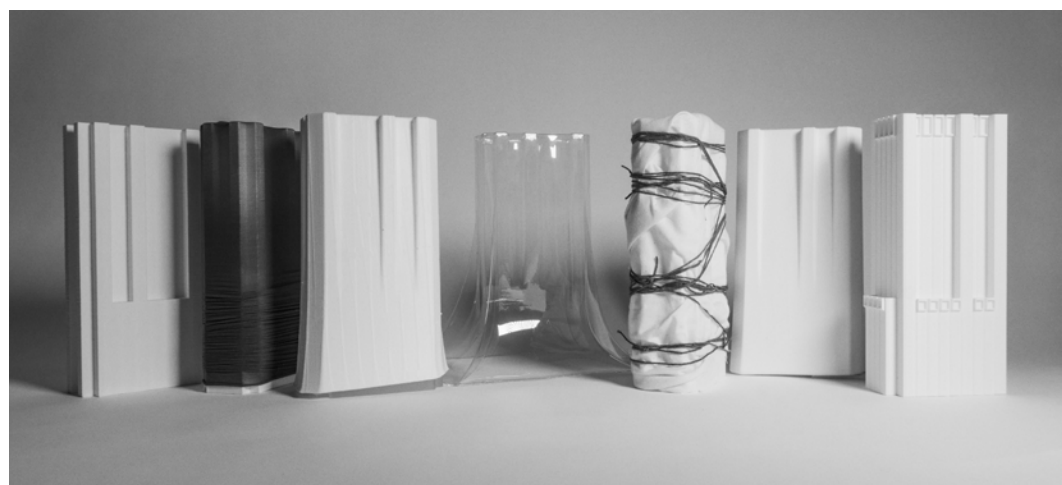
035_33T_104



035_33T_105



035_33T_106



035_33T_107
Massing study models

AN ARCHITECTURE OF GOVERNANCE, PURITY, AND IMPENETRABILITY

33 Thomas's construction (1969 - 1975) coincided with a dramatic miniaturization of Long Lines technology and a transitional phase of its gendered workforce

Before After

A thick, carbon-embodied poche of redundant, opacity

- 1 Granite Slabs
- 2 Precast Concrete
- 3 Insulation
- 4 Terracotta Block
- 5 Steel Column
- 6 Concrete Encasement
- 7 Concrete Block
- 8 Telephone Cable

x1078

A second, never-completed phase was planned but soon after deemed unnecessary because of rapid, space-saving computational technology

An architectural enclosure with the unique ability to withstand a potential nuclear fallout and enough provisions to sustain 1,500 persons as a self-contained city for two weeks

Government-sponsored NSA surveillance at an AT&T server base, code-named 'TITANPOINTE' in New York City, is confirmed in leaked documents from 2011 and 2013

18' 300 psf

120'-0"

Deep floor plates (typ. 120'-0" clear) and tall floor-to-floor heights (typ. 17'-6") are optimal for cable server layouts, but imperfect for efficient, residential planning

First a muddy swamp, next the city's first major medical institution (ca. 1800), then 17 separate cast-iron warehouses, shops, and lofts (ca. 1894) were all consecutively erased for Warnecke's AT&T

ca. 1894

NORTH STREET CHURCH STREET

To sustain the foundations of the site's historically swampy marshlands, 1,475 piles reach depths between 140 and 180 feet below the building's lowest cellar

AN ARCHITECTURE OF TRANSLUCENCY

SEALED

Buckminster Fuller and Thomas C. Howard's 1959 proposal, **Dome Over Manhattan**, for a 3-kilometer-diameter geodesic domed city sealing Midtown Manhattan

SUSTAINED

The Environment-Bubble
Transparent plastic bubble dome inflated by air-conditioning output

François Dallegret with Reyner Banham 1965 project, **The Environment-Bubble**, conceives the most basic 'standard-of-living' package

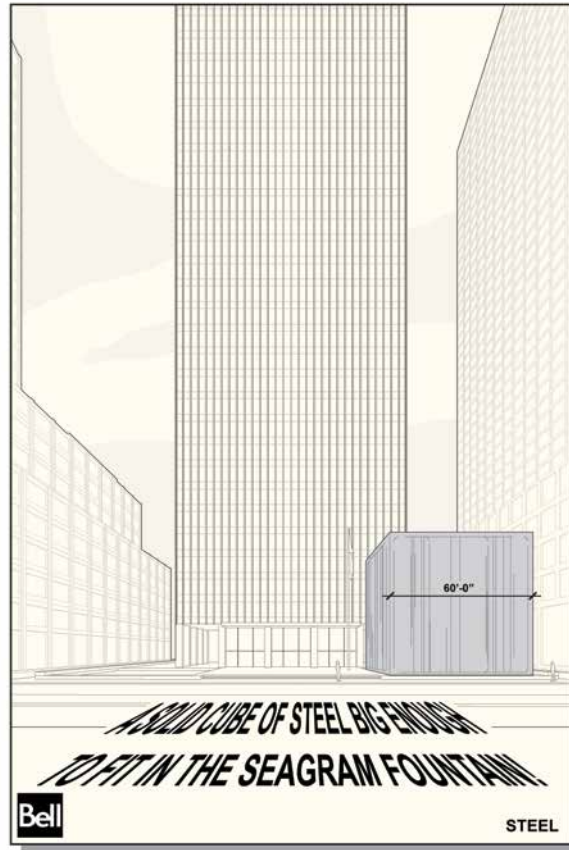
REVEALED

Mon dessin ne représentait pas un chapeau. Il représentait un serpent boa qui digérait un éléphant

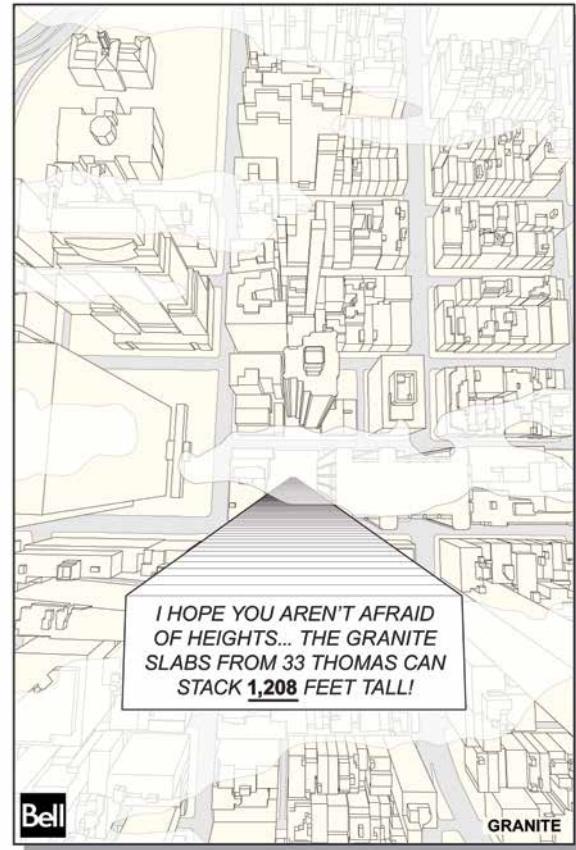
J'ai alors dessiné l'intérieur du serpent boa, afin que les grandes personnes puissent comprendre. Elles ont toujours besoin d'explications

Like the final act of any good trick, the prestige, in Antoine de Saint-Exupéry's **Le Petit Prince**, 1943

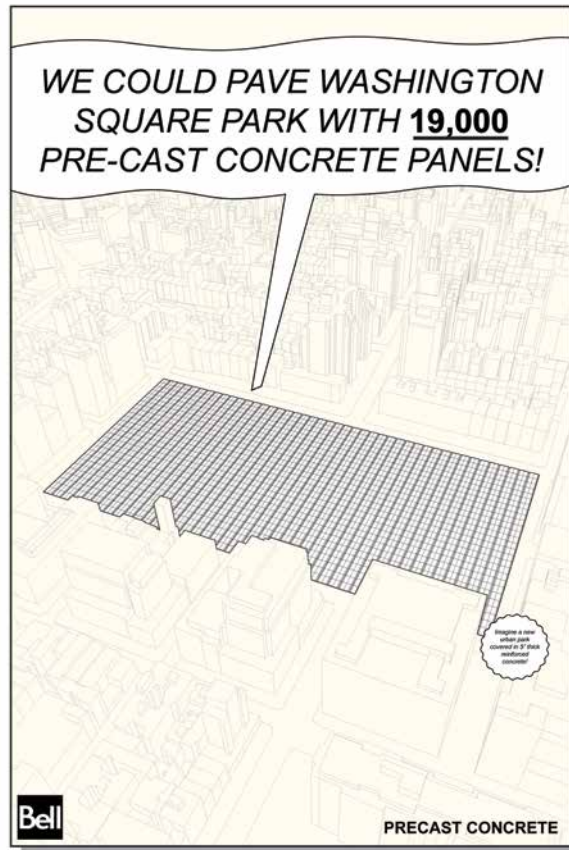
035_33T_108
Analyzing the historical data



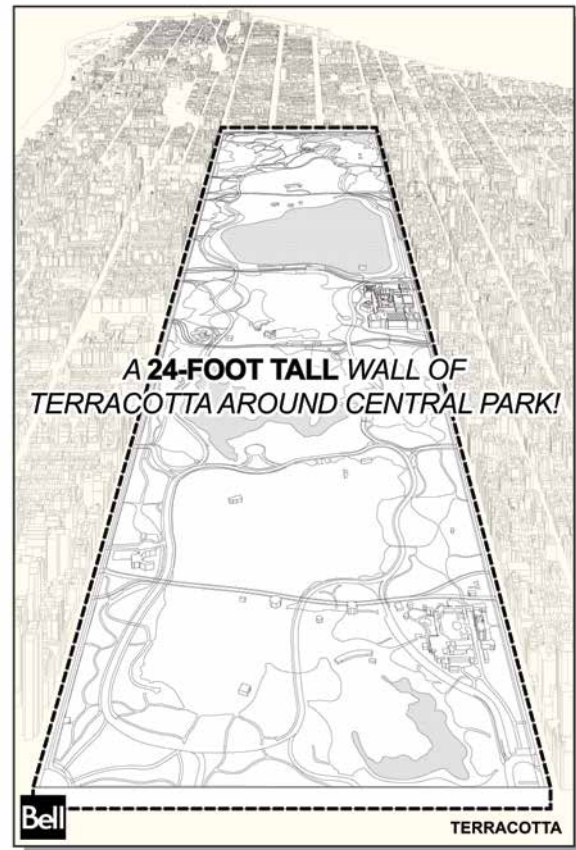
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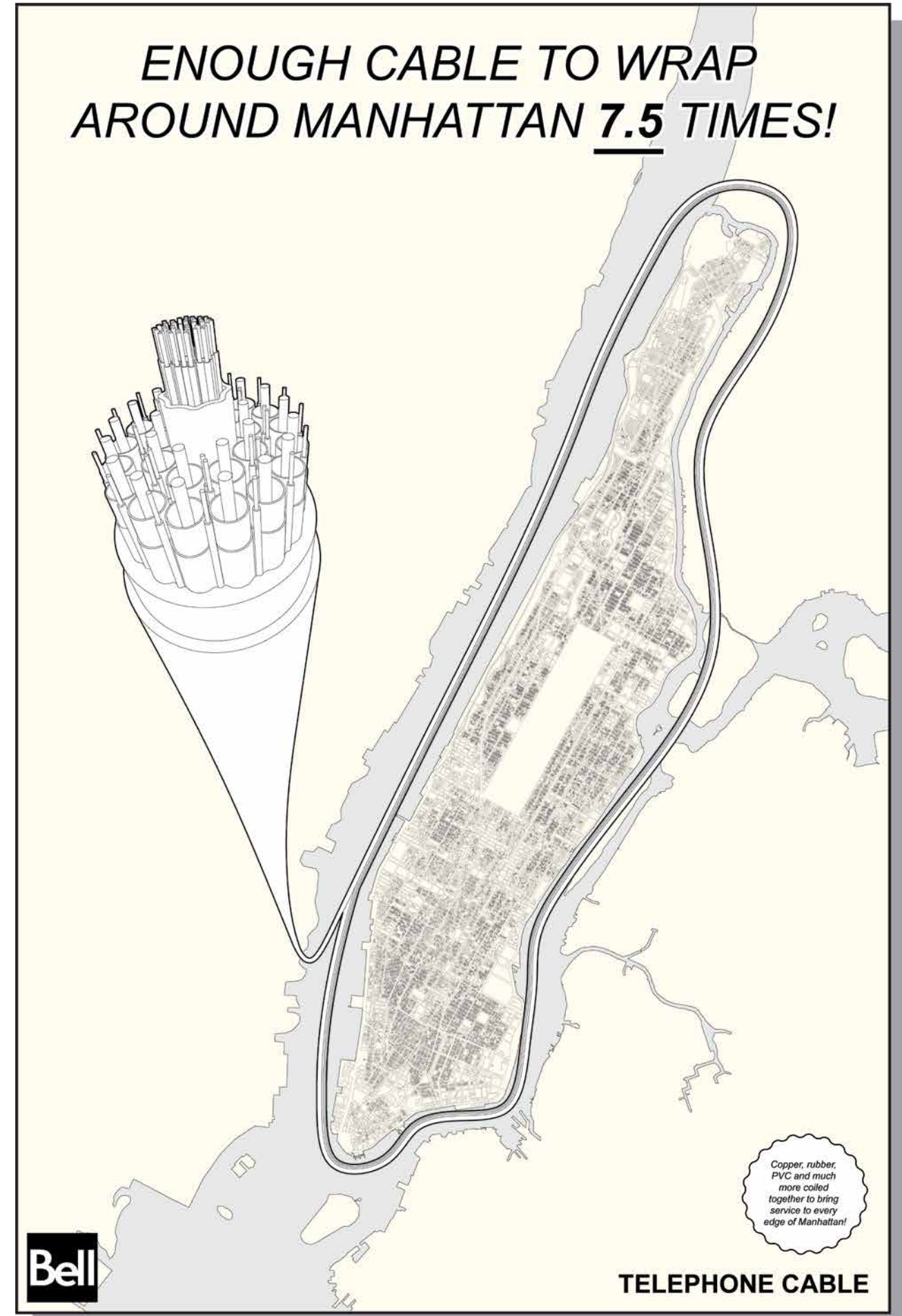
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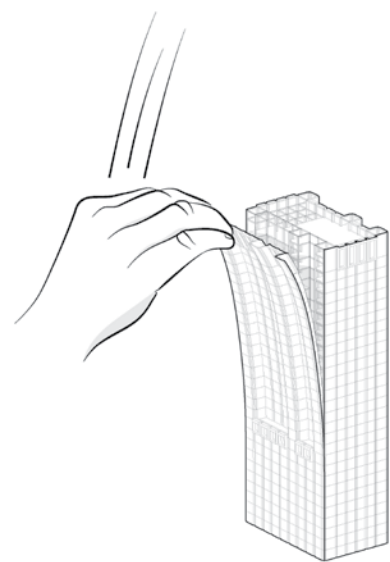
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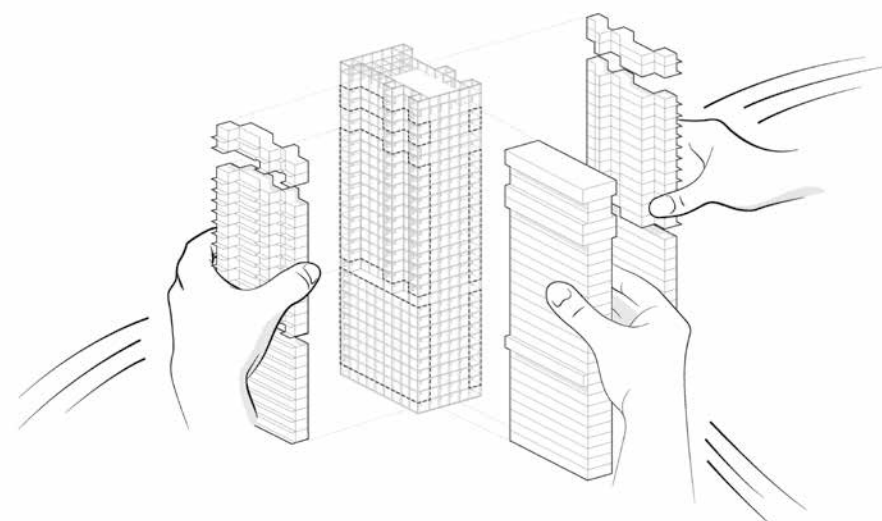
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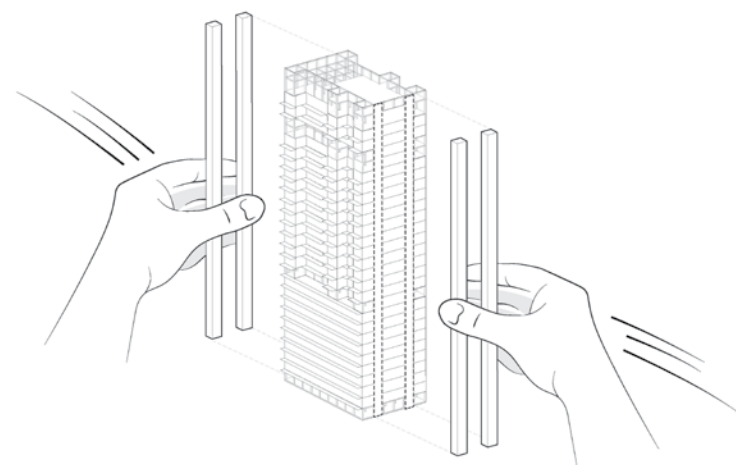
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How much material?



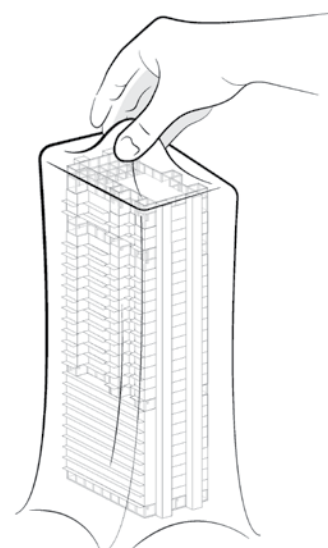
035_33T_114
1.0_Reorganize



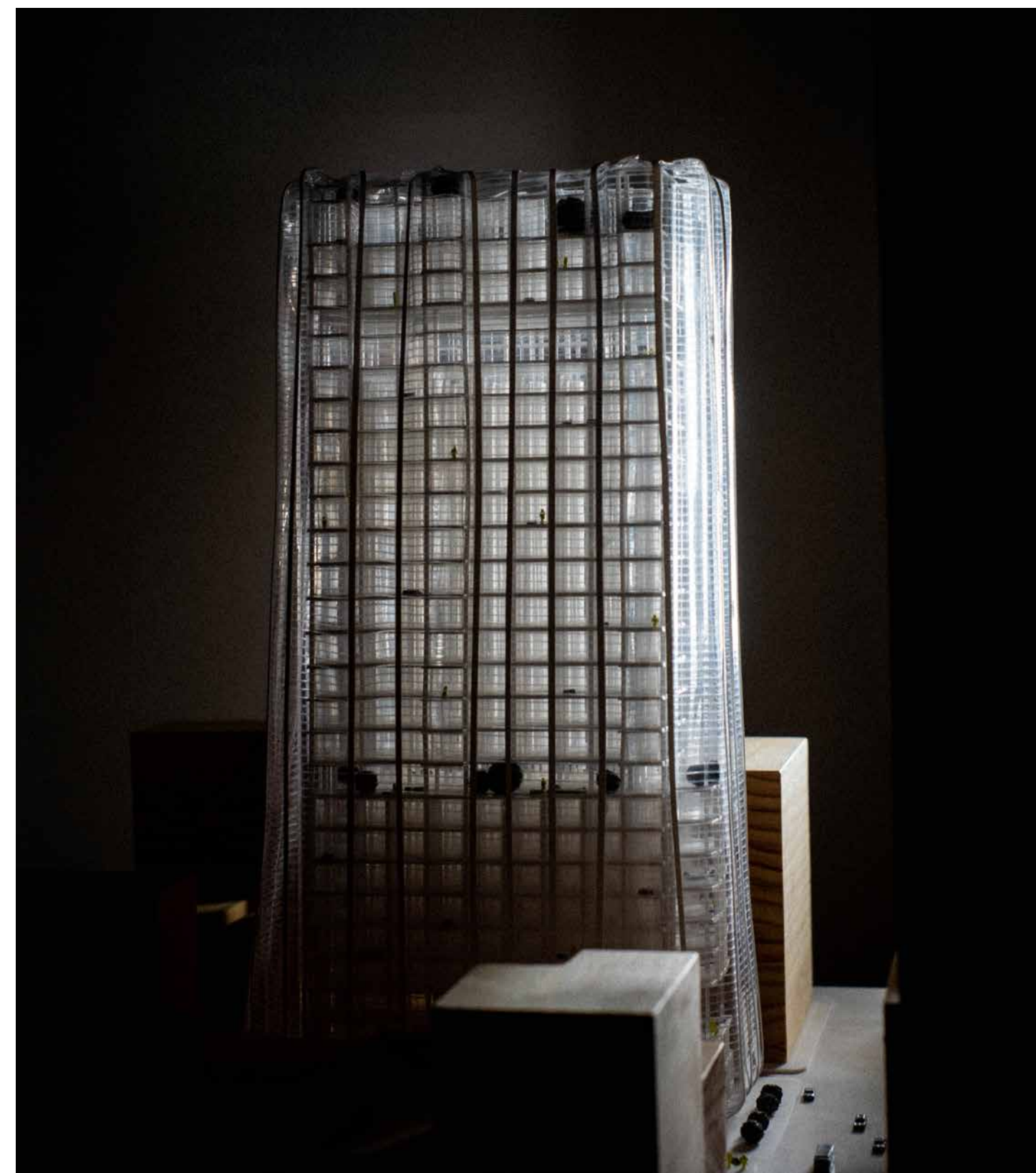
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2.0_Sandwich



035_33T_116
3.0_Upgrade



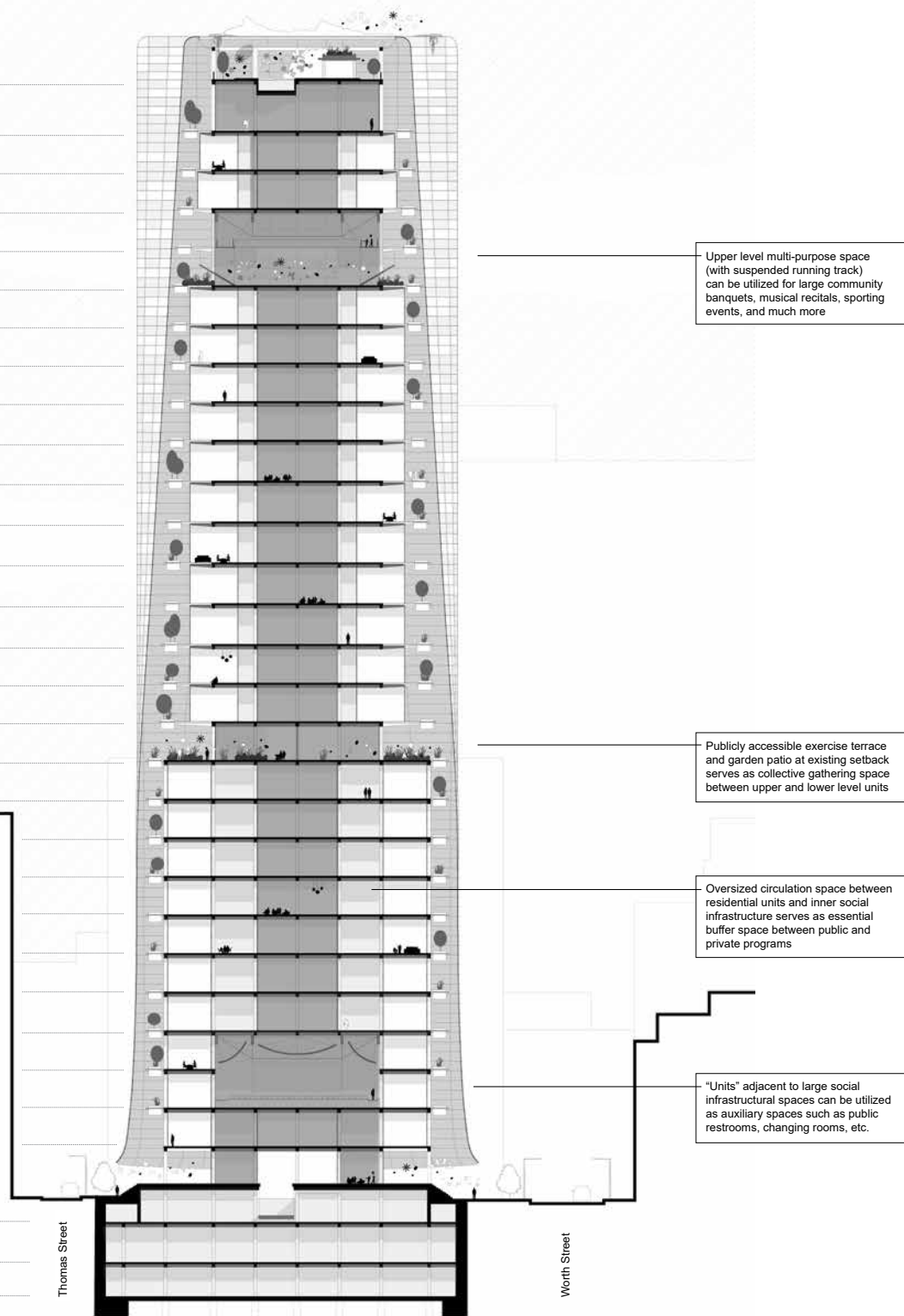
035_33T_117
4.0_Drape



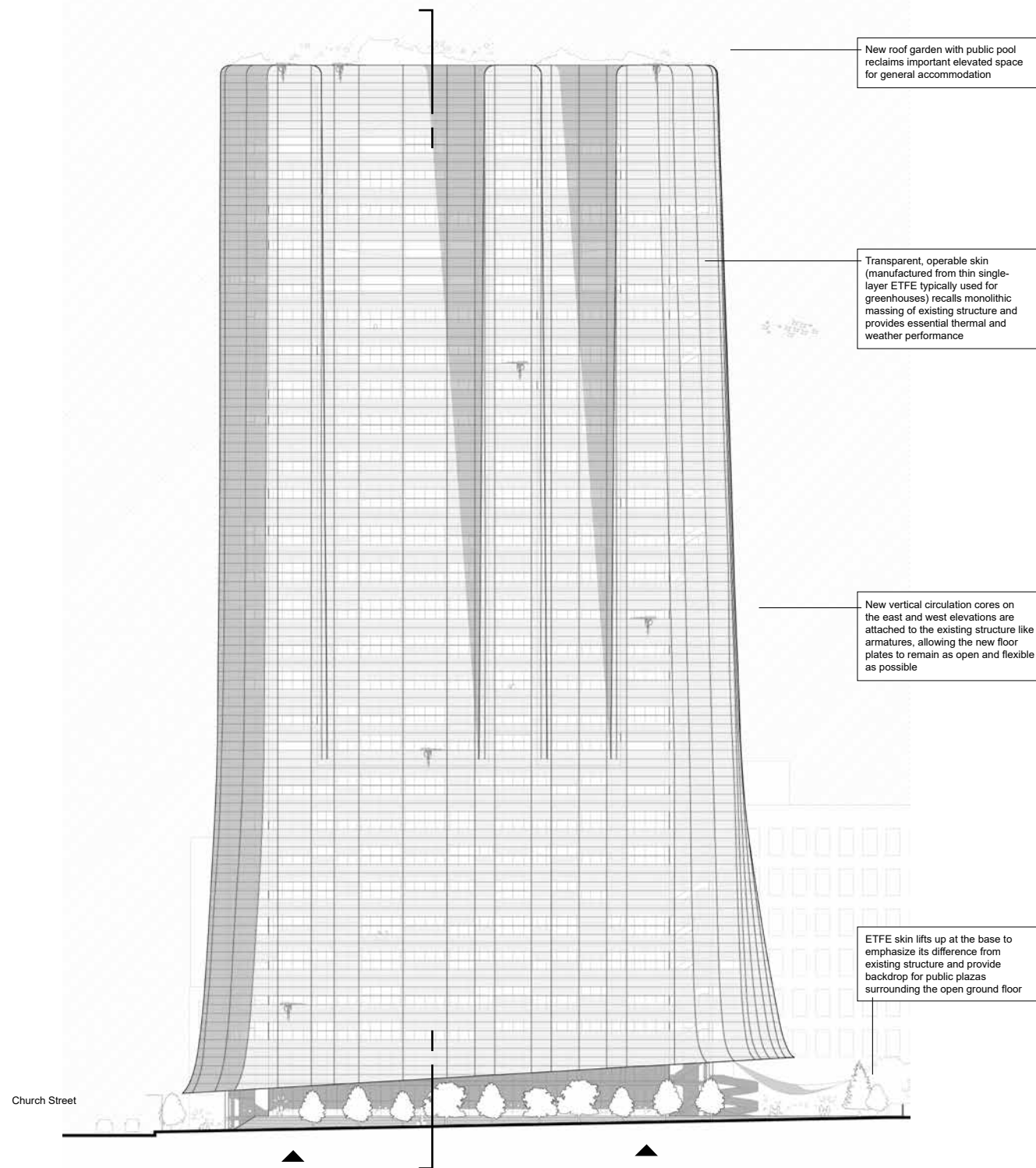
035_33T_118
Exposed structure and translucent skins



- L29 (Pool Deck)
Elev. 538'-0"
- L28 (Lounge + Lockers)
Elev. 515'-0"
- L27 (Mechanical)
Elev. 497'-6"
- L26 (Dance Halls)
Elev. 480'-0"
- L25 (Mezzanine)
Elev. 462'-6"
- L24 (Multi-Purpose Space)
Elev. 445'-0"
- L23 (Office)
Elev. 427'-6"
- L22 (Co-Work)
Elev. 410'-0"
- L21 (Co-Work)
Elev. 392'-6"
- L20 (Social Atrium)
Elev. 375'-0"
- L19 (Medical Administration)
Elev. 356'-6"
- L18 (Medical Waiting)
Elev. 338'-0"
- L17 (Social Atrium)
Elev. 319'-6"
- L16 (Lounge)
Elev. 300'-6"
- L15 (Laundry)
Elev. 283'-0"
- L14 (Mechanical)
Elev. 265'-6"
- L13 (Kindergarten)
Elev. 248'-0"
- L12 (Exercise Terrace)
Elev. 230'-6"
- L11 (Library)
Elev. 213'-0"
- L10 (Library)
Elev. 195'-6"
- L09 (Social Atrium)
Elev. 178'-0"
- L08 (Art Studio)
Elev. 160'-6"
- L07 (Exhibition Space)
Elev. 143'-0"
- L06 (Social Atrium)
Elev. 125'-6"
- L05 (Theatre BOH)
Elev. 108'-0"
- L04 (Theatre Mezzanine)
Elev. 90'-6"
- L03 (Theatre)
Elev. 73'-0"
- L02 (Pre-Function + Restaurant)
Elev. 55'-6"
- L01 (Community Room)
Elev. 38'-0"
- B01 (Parking + Mechanical)
Elev. 17'-6"
- B02 (Parking + Mechanical)
Elev. 0'-0"
- B03 (Parking + Mechanical)
Elev. -15'-6"



035_33T_120
Cross Section



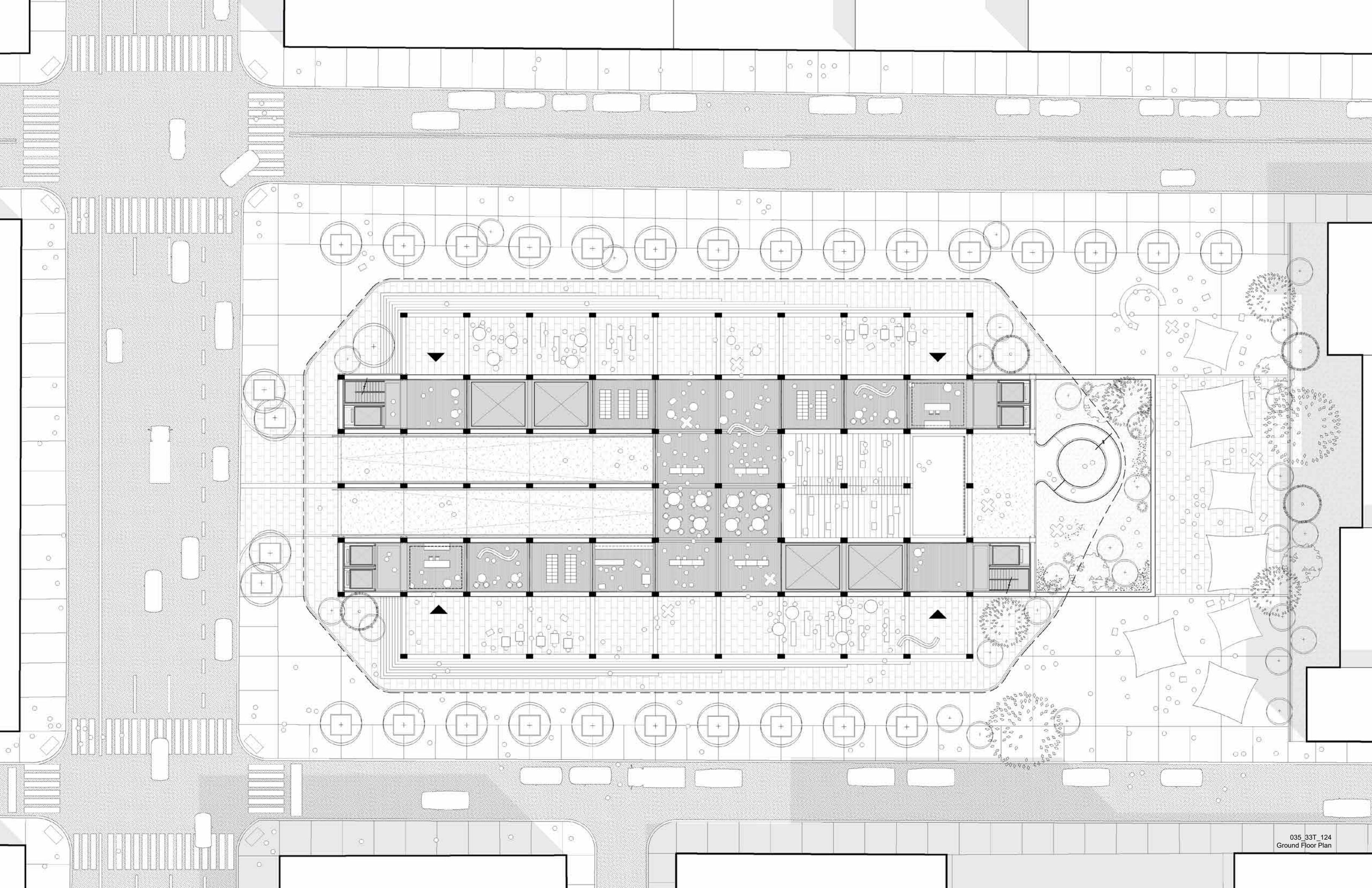
- Elevator Entry 1
- Community Room Entry 2
- Collective Stair 3
- Urban Plaza 4
- Elevator Core 5

035_33T_121
South Elevation



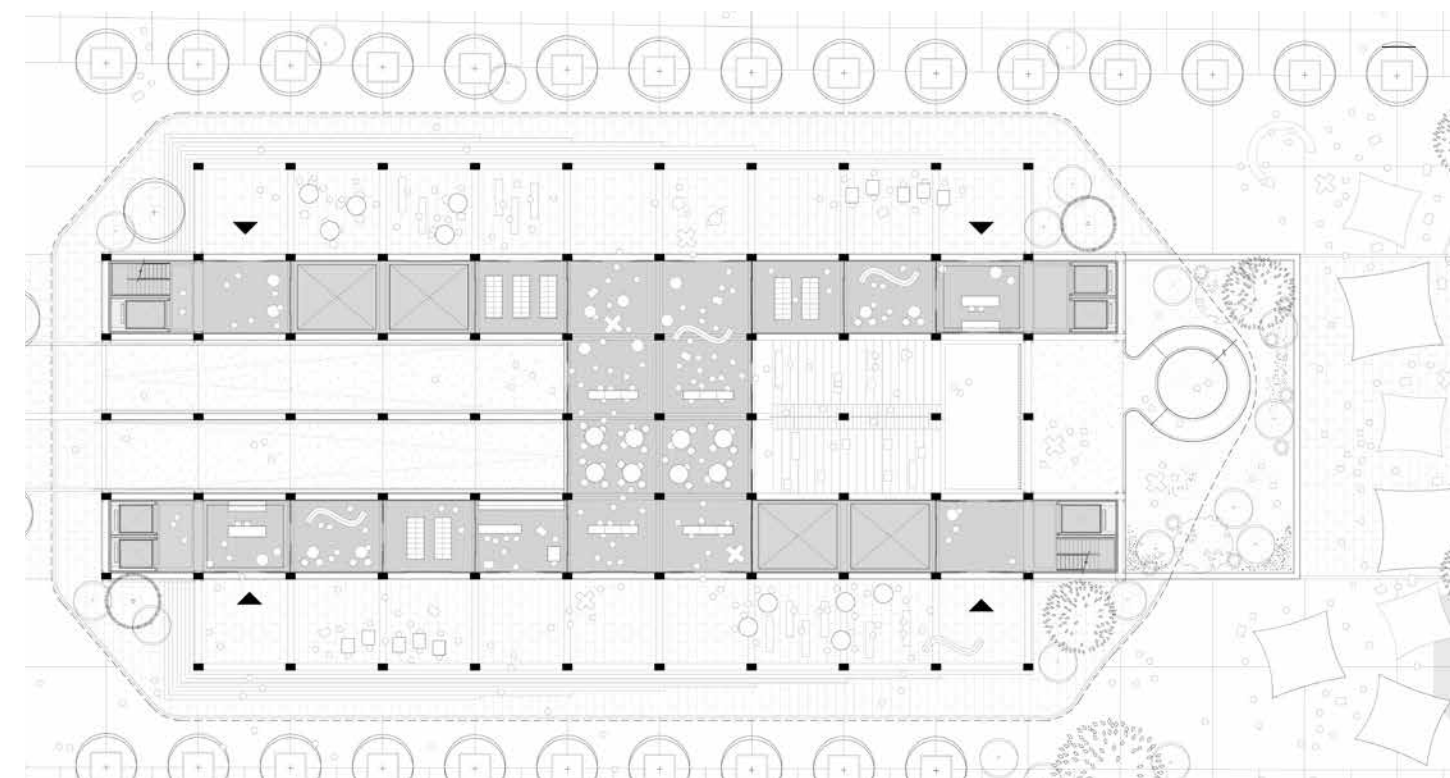
035_33T_122
Extension of the unit



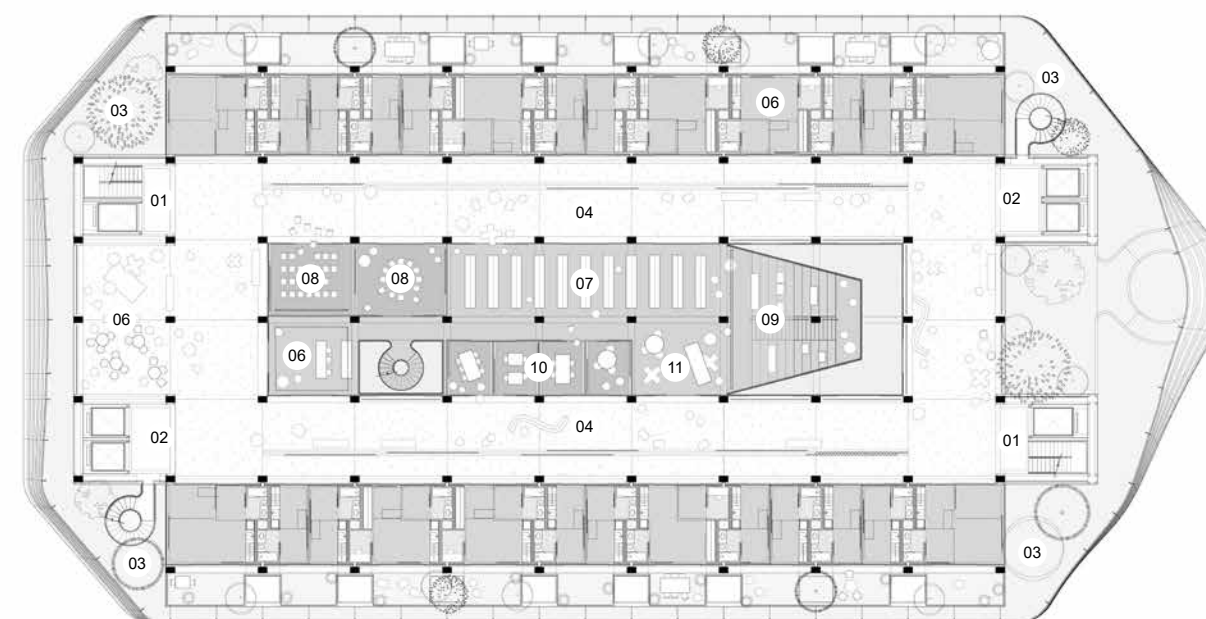




035_33T_125
A Translucent Monolith

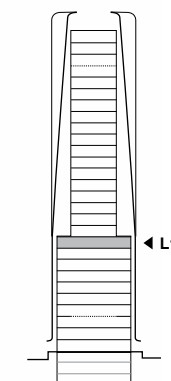


035_33T_126
Ground Floor Plan



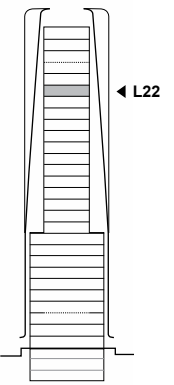
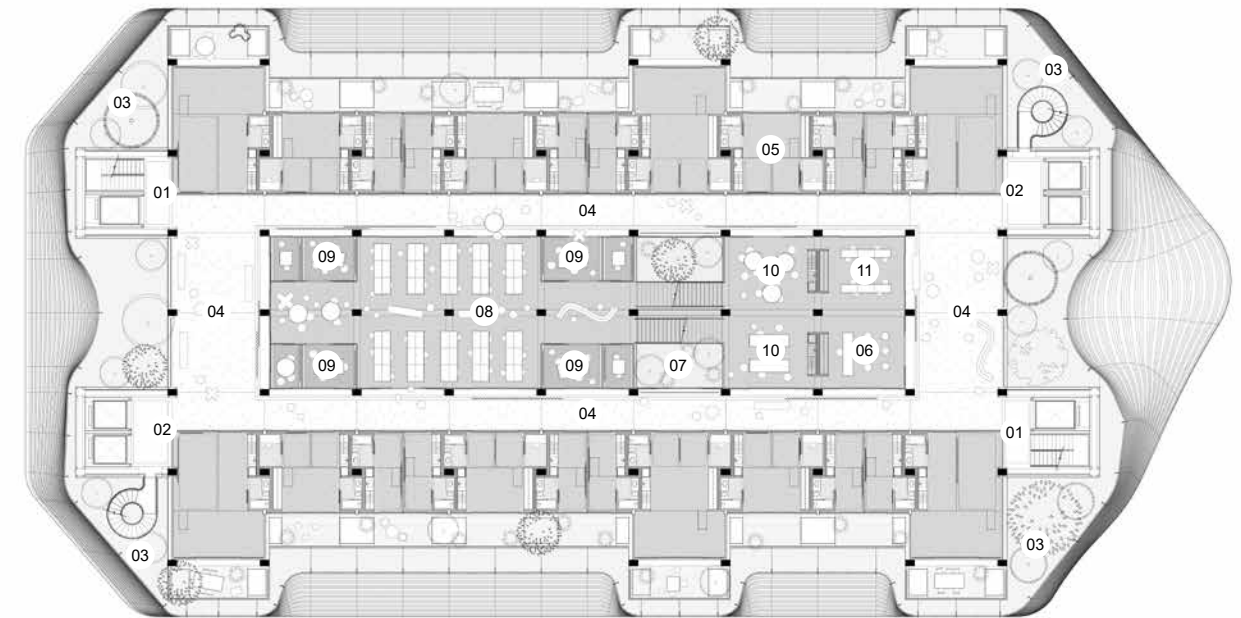
- Service Core 01
- Passenger Core 02
- Hanging Garden 03
- Circulation Loop 04
- Public Restroom 05
- Lobby 06
- Book Stacks 07
- Class 08
- Tiered Seating 09
- Meeting Room 10
- Flex Space 11

035_33T_127
Typical Lower Level Plan

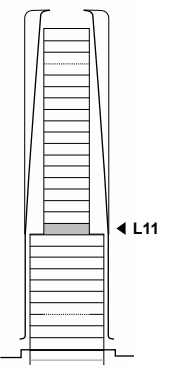
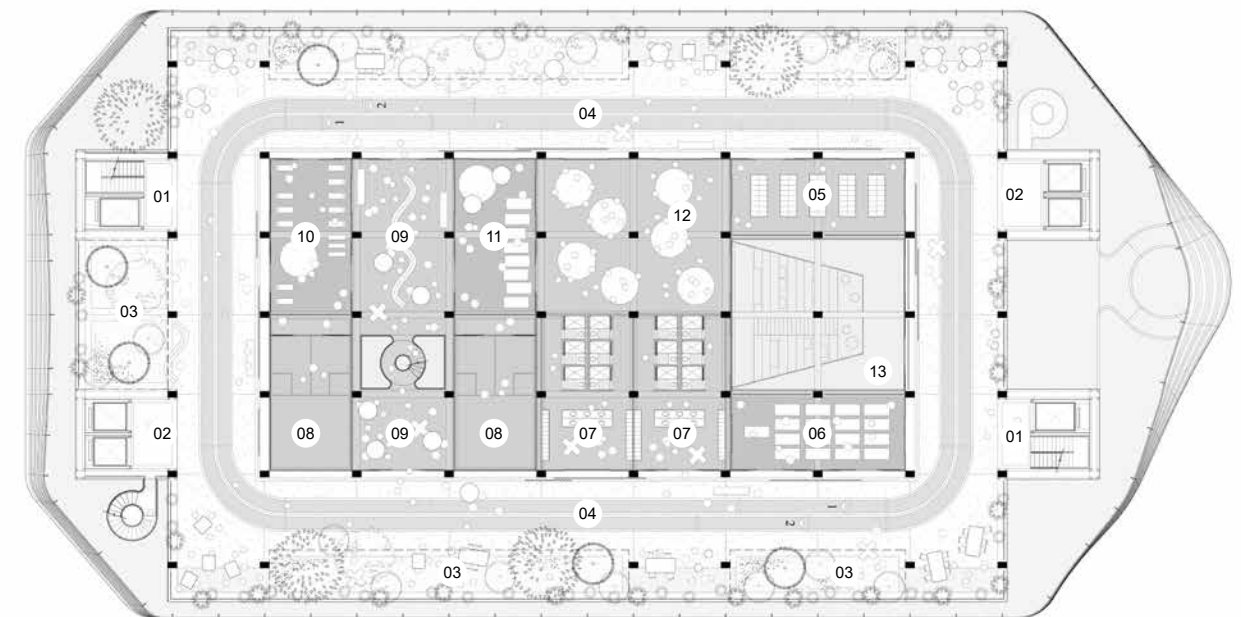




035_33T_128
An open space, upstairs



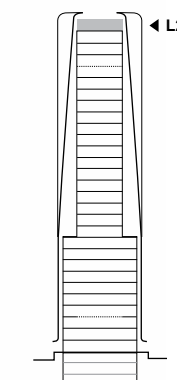
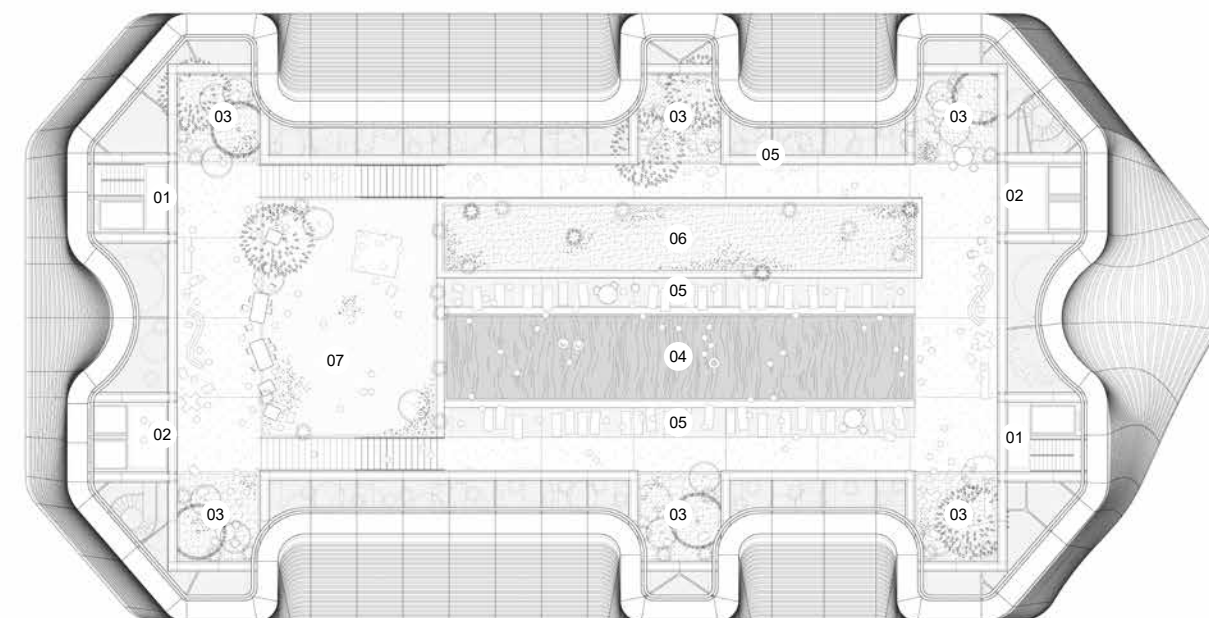
- Service Core 1
 - Passenger Core 2
 - Hanging Garden 3
 - Circulation Loop 4
 - Public Restroom 5
 - Lobby 6
 - Atrium 7
 - Workspace 8
 - Meeting Room 9
 - Canteen 10
 - Collaboration 11
- 035_33T_129
Typical Upper Level Plan



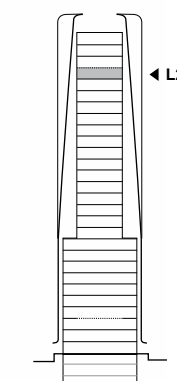
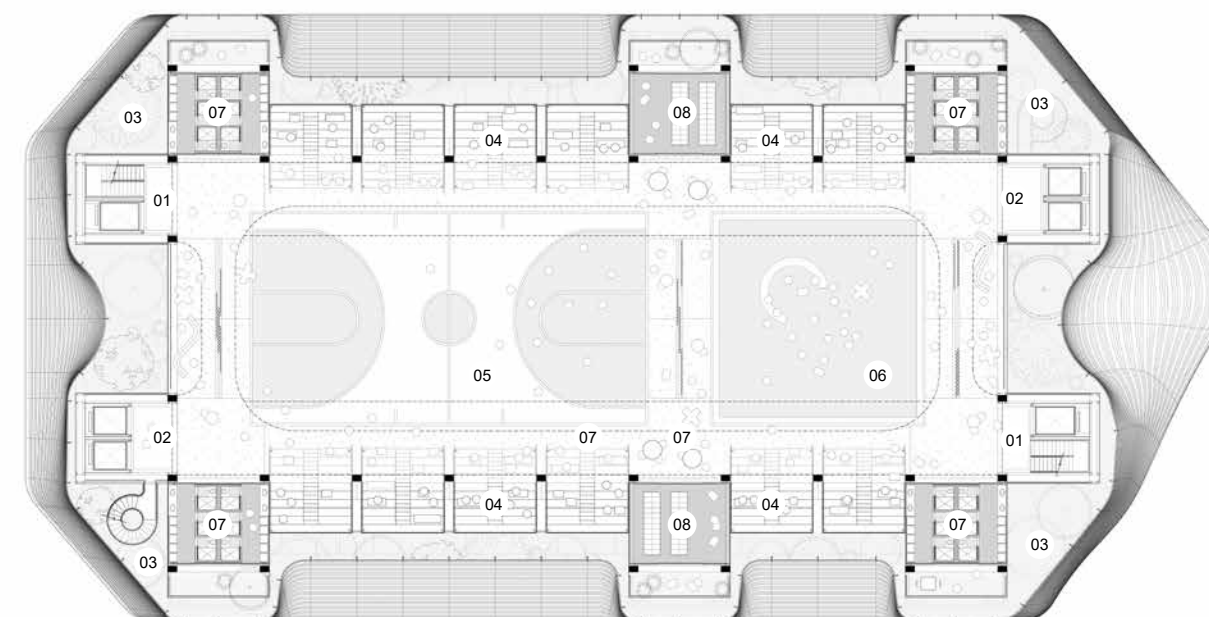
- Service Core 01
 - Passenger Core 02
 - Garden 03
 - Exercise Loop 04
 - Storage 05
 - Yoga 06
 - Lockers 07
 - Squash 08
 - Lobby 09
 - Weight Room 10
 - Exercise Room 11
 - Dance Hall 12
 - Atrium 13
- 035_33T_130
Terrace Plan



035_33T_131
The public pool, on the roof



- Service Core 1
 - Passenger Core 2
 - Garden 3
 - Public Pool 4
 - Deck 5
 - Pavilion 6
 - Lawn 7
- 035_33T_132
Roof Plan



- Service Core 1
 - Passenger Core 2
 - Hanging Garden 3
 - Suspended Seating 4
 - Primary Event Space 5
 - Secondary Event Space 6
 - Public Restroom 7
 - Storage 8
 - Lobby 9
- 035_33T_133
Gymnasium Plan

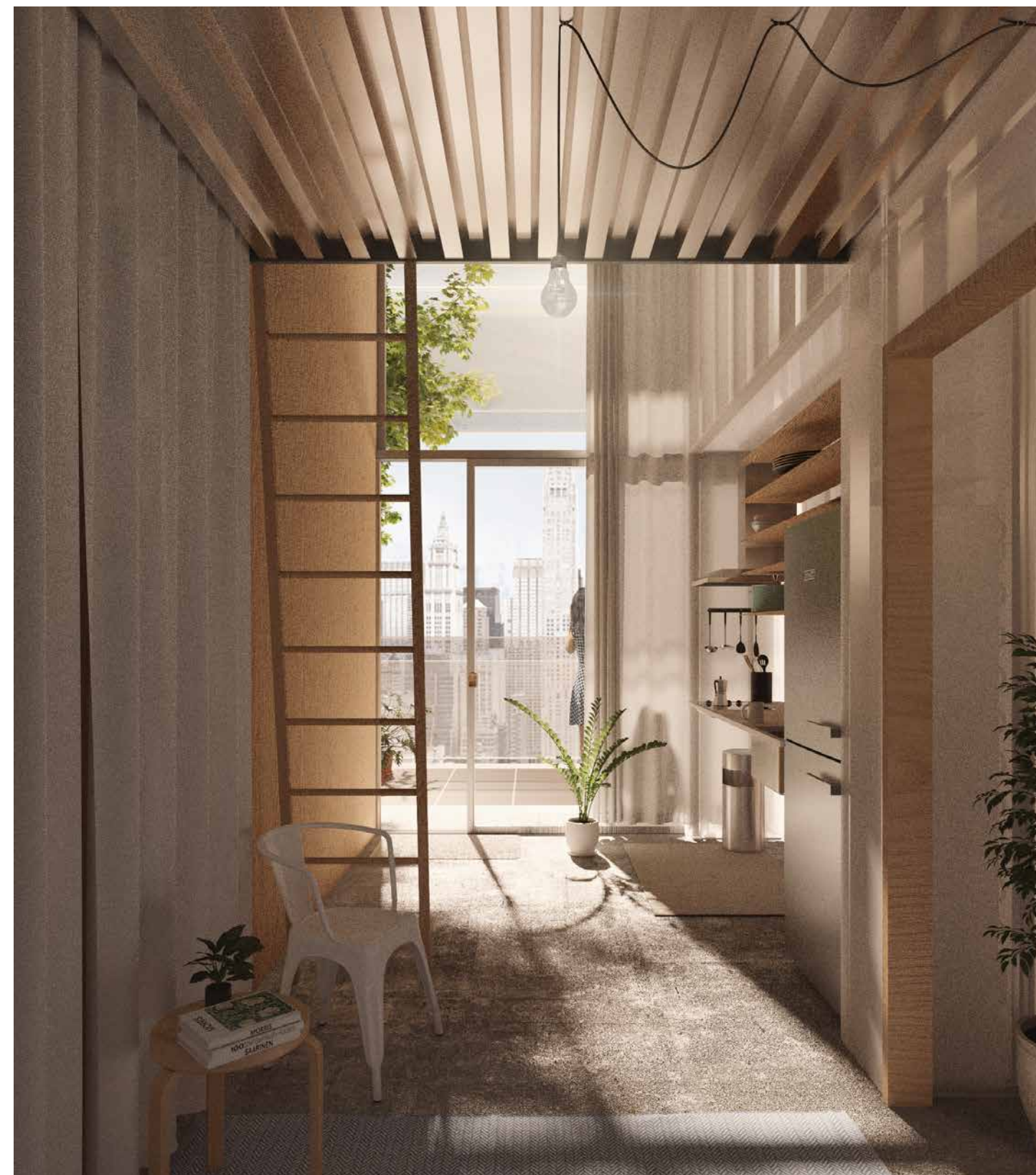




035_33T_135
His bedroom, here



035_33T_136
Operability



035_33T_137
Her apartment, here



063_PU_101
Collective void space

Productive –Urbia

A Model for Regenerative Housing and Urban Production

Block 2398, between E 151 & E 152 ST, Bronx, NY

Academic Project, Unbuilt

Fall 2021, CORE III

Instructor: Esteban de Backer

Team: Blake Kem + Min Soo Jeon

From the turn of the 20th century until the eve of the Great Depression, the Bronx welcomed a six-fold population boom. Jewish, Germans, Irish, French, Polish, and Italian immigrants escaped the perils of dense Manhattan to seek better opportunities and the simple pleasures of an idealized rural Arcadia. Although, New York City's unrelenting growth quickly consumed these rural visions of the Bronx. The seminal social, geographical, economic, and physical history of the Bronx's urban history, like the late 1970s era of vacancies, demolitions, and fires, are displayed today across its varied urban landscape. Historical chapters are demarcated by varying scales of urban space: tall slender housing projects in the park with desolate intermediate spaces are followed by tight, street-facing homes and mixed-use affordable apartment buildings. This new urban housing model synthesizes these many urban realities into one, centering agricultural production at the heart of the way we live to address the ancestral past of these immigrants and re-situate underutilized urban space as a productive asset. Furthermore, this model of urban production and affordable housing seeks to undo the spatial, social, and historical inequities of the contemporary Bronx, proposing alternative solutions for joblessness, food accessibility, and affordable housing and eroding the city's reliance on its hinterlands as the sole producer of its sustenance (an important conclusion of Rem Koolhaas and Samir Bantal's exhibition, Countryside, The Future).

The architectural solution addresses these concerns by situating production at the center of the model of the way urbanites live. In addition to the large urban farm occupying the inner void of the block, community-centered programs in large, flexible storefronts at the street level act as producers of a safe, social, and urban neighborhood. The units floating above are each supported by a productive service wall, allowing universal access to water, electricity, and mechanical along its entire length from corridor to living spaces to façade, where a system of hanging planters shade the interior spaces and provide optimal space for planting. The terrace of the podium, with its integrated service slab, acts as the culminating spatial facilitator between public and private with ample space provided for a market, celebration space, playground, and much more. The intermediate space between each vertical layer of the urban realm and the existing buildings at large are stitched together by simple pre-tensioned concrete slabs, providing a basic, open framework for a highly efficient, yet flexible mix of targeted housing units.



063_PU_103
Antecedents of food production on site



063_PU_104
South Bronx Community Garden, adjacent to site



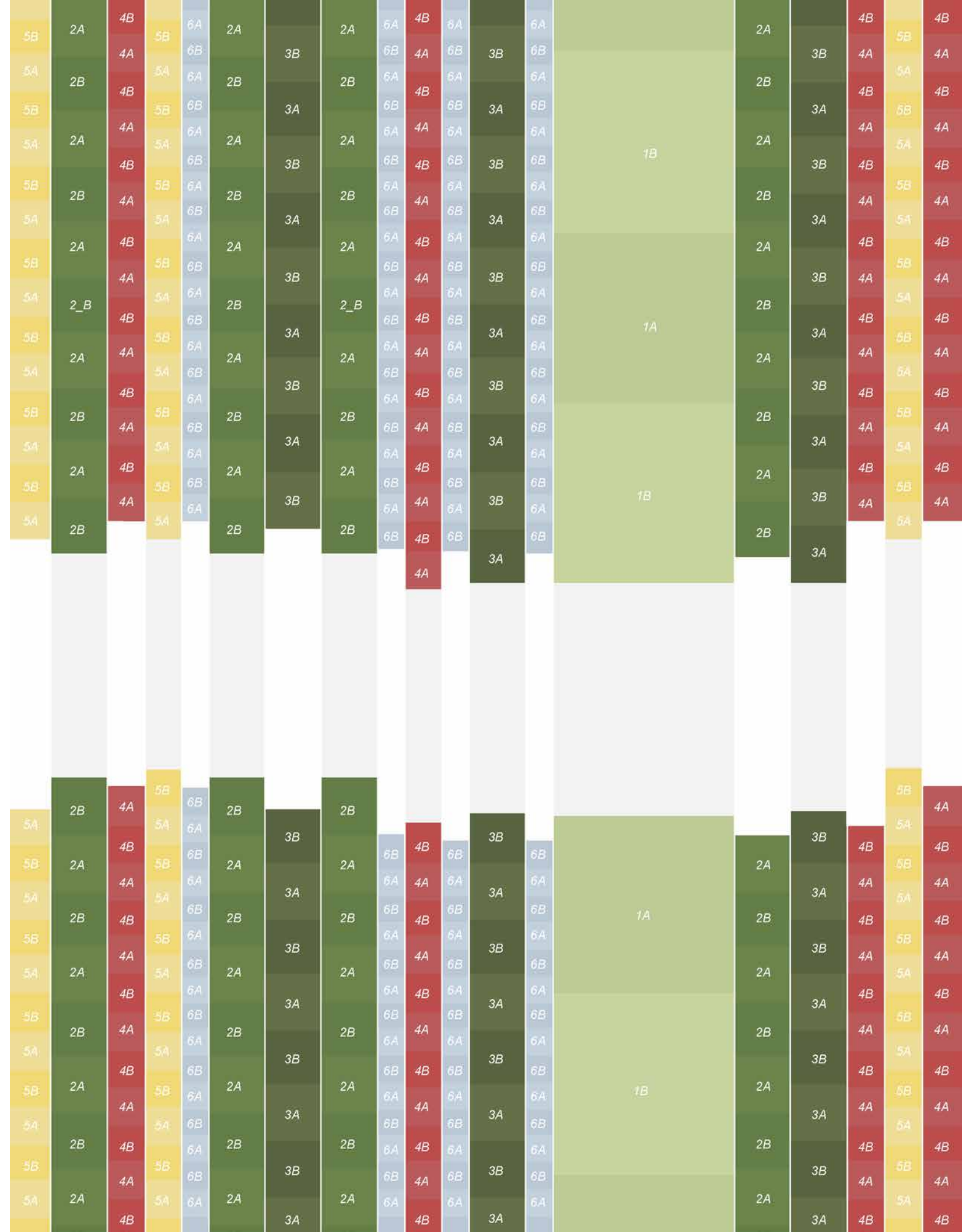
063_PU_105
Countryside, the Future (2020)



063_PU_106
Mishka Henner, "Centerfire Feedyard", *Feedlots*, 2012-2013



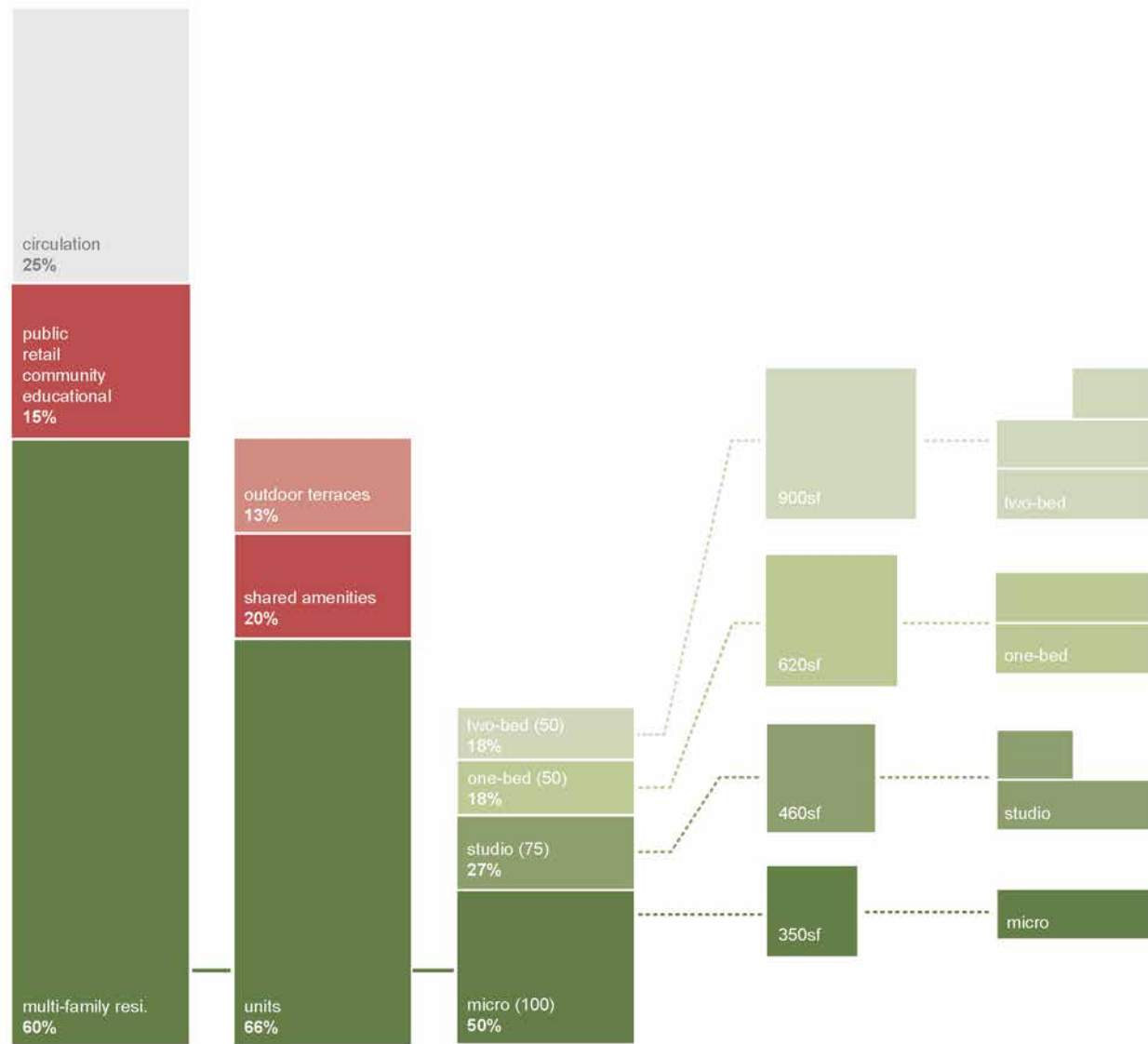
063_PU_107
Mishka Henner, "Wrangler Feedyard", *Feedlots*, 2012-2013



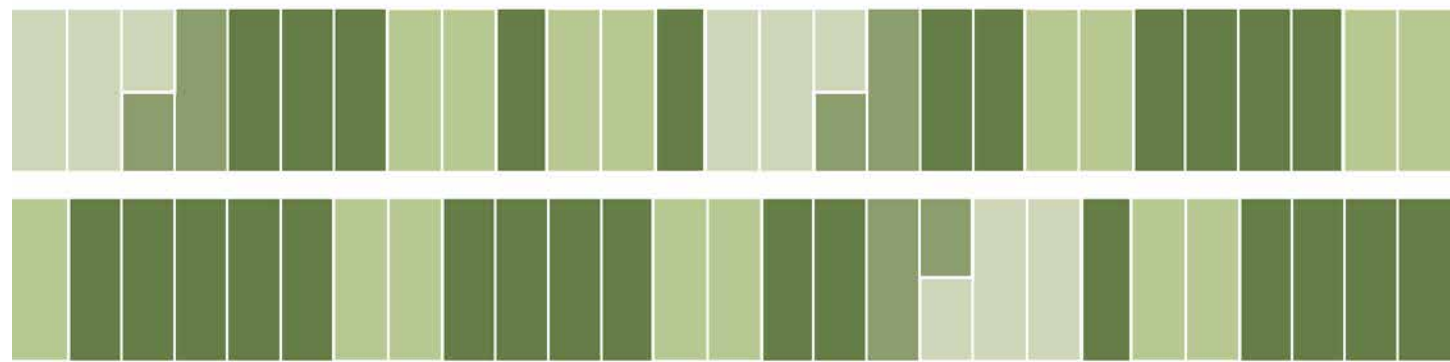
“An ‘irreparable rift’ (rupture) emerged in the metabolic interaction between humans and the earth, one that was only intensified by large-scale agriculture, long-distance trade, massive urban growth, and large and growing synthetic inputs (chemical fertilizers) into the soil. **The pursuit of profit sacrificed reinvestment in the land, causing the degradation of nature through depleting the soil of necessary nutrients and despoiling cities with the accumulation of waste as pollution. The metabolic rift was deepened and extended with time, as capitalism systematically violated the basic conditions of sustainability on an increasingly large scale (both internally and externally), through soil intensification and global**

transportation of nutrients, food, and fiber.

To make matters worse, the ongoing development of capitalism continues to intensify the rift in agriculture and creates rifts in other realms of the society-nature relationship... food production has increased through expanding agricultural production to less fertile land – depleting the nutrients in these areas – and through the incorporation of large quantities of oil used in the synthesis of chemical fertilizers and pesticides, contributing to the carbon rift.”



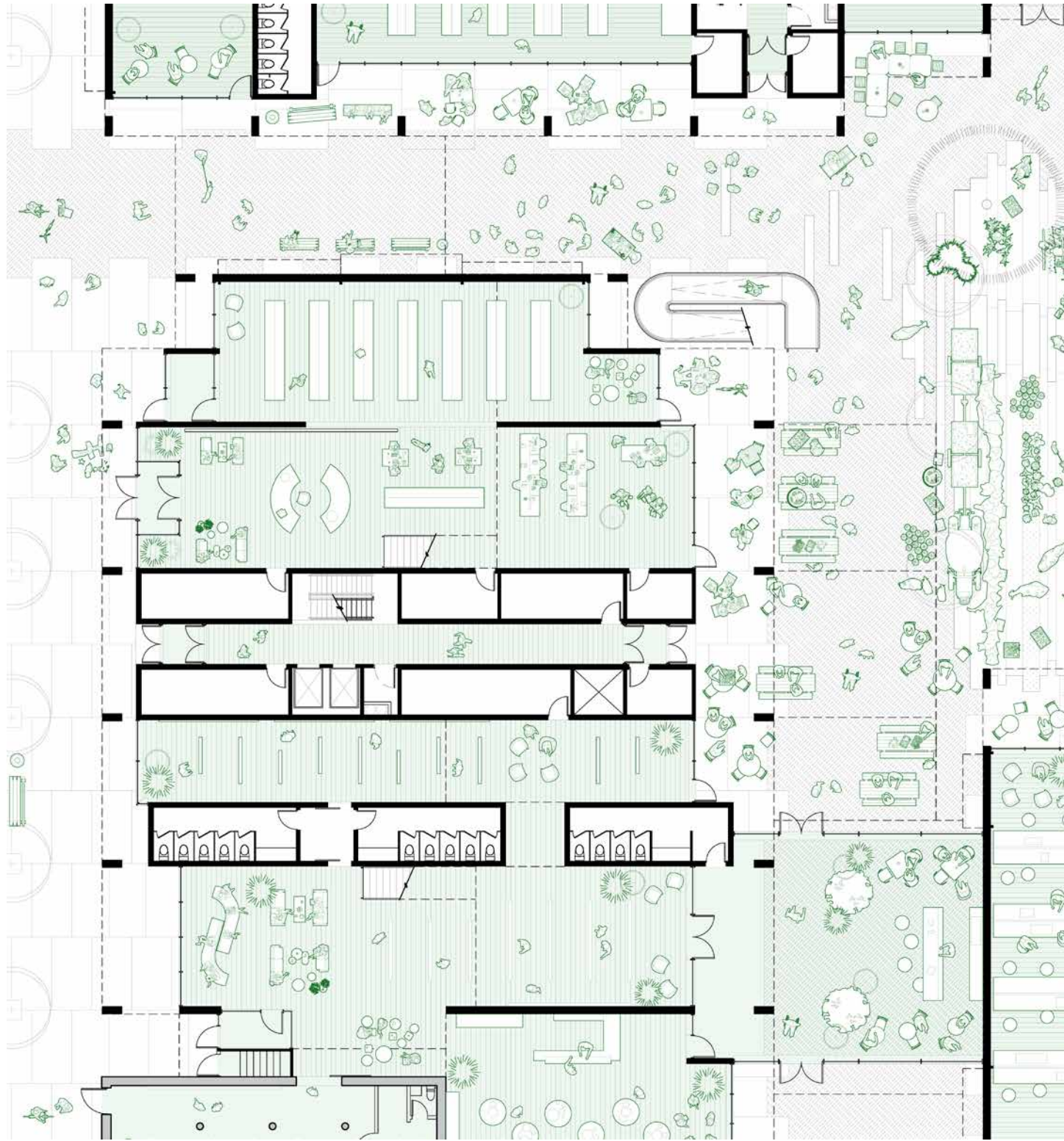
063_PU_109
Program bar



063_PU_110
Rational aggregation of diverse units into an efficiently ordered bar







063_PU_113
Infrastructural service spaces connecting street and inner block



063_PU_114
A productive, affordable unit



063_PU_115
A productive podium for exchange and culture







081_PS64_101
Suspended solid, interconnected voids

RE: P.S. 64, Learning at 64 Scales

A Civil Postscript for Urban Institutions of Education

350 E 10th St, New York, NY
 Academic Project, Unbuilt
 Spring 2021, CORE II
 Instructor: Benjamin Cadena

At the same time that P.S. 64 physically resembles other schools built in New York City at the turn of the century, the building has been “formally” vacant since 1977 when the public school closed its doors due to economic turmoil and budget cuts. Since then, the property has changed owners, sold at auction, and been occupied by various groups, eventually becoming the Charas/El Bohio Cultural Center in the late 1990s and later, an informal shelter for many homeless individuals. The last 40 years of dormancy is a testament to the political failures of the local government and further, the importance of the building to the community of the East Village/Tompkins Square Park. In a similar vein, the basic spatial design of the classroom and the school has remain unchallenged in the United States for over a century. Institutions of education around the country, even after decades of spatial explorations like the “open-classroom” phase of the 1970s, continue to propagate the long-held spatial model of regularly arranged 20 to 30 person classrooms designed for the traditional pedagogical model of didactic instruction. Students are generally passive listeners and neither the content nor the knowledge of the teacher are questioned. This homogeneous model has and continues to underestimate the neurodiversity of the modern child and more specificity, the racial diversity of a neighborhood like New York’s East Village.

RE: P.S. 64, a new school for Pre-K through 8th graders, considers most earnestly the generative powers of difference and diversity. It deeply questions the traditional distinctions we find in modern institutions of education including the power struggles between teacher and pupil, classroom and corridor, school and its surroundings. The architectural solution acknowledges the local memory of the existing load-bearing masonry shell by constructing programmable cross-laminated timber (CLT) volumes within, around, and through the existing shell. The interior volumes, along with a inclined circulatory path, are arranged like an intricate three-dimensional puzzle to realize diverse spatial relationships and continuously question the defined boundaries of the traditional school, upending the traditional distinction between class and corridor and the power struggles that come along with. Now, students are welcome to learn, play, and teach in the irregular spaces created as a result of the programmed volumes, the absence of building and the buffer between corridor and classroom being the most radical and constructive space for the contemporary school and neurodiverse child. The volumes are clarified from the street by new, transparent window frames and rely on new concrete frames for structural support and façade stabilization. With new urban plaza designs along 9th and 10th streets, with more programmable volumes emerging from the depths of the neighborhood theatre in the basement, the project becomes a statement on questioning the modern school in, out, and around the void of this highly-treasured West Village artifact.

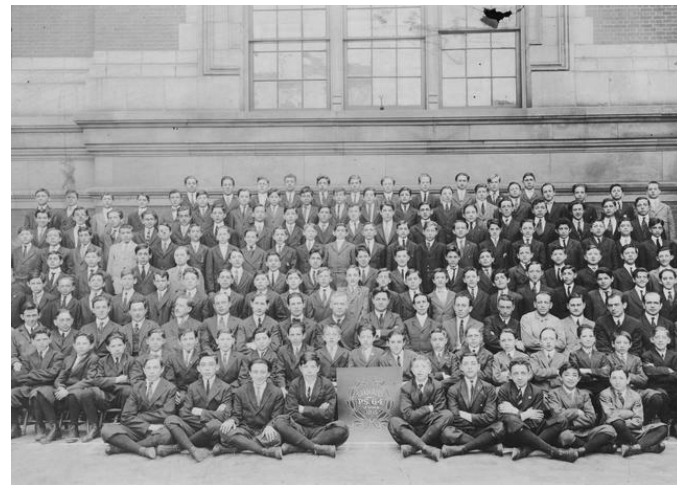




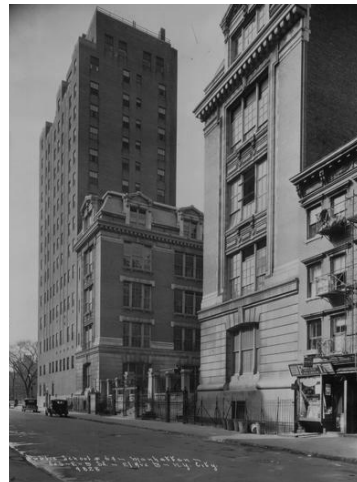
081_PS64_103
C.B.J. Snyder, 1900



081_PS64_104
Finishing touches on a new school, 1906



081_PS64_105
School assembly, 1915



081_PS64_106
Development, 1920



081_PS64_107
El Bohio occupation, 1977



081_PS64_108
New developer plans, 2006



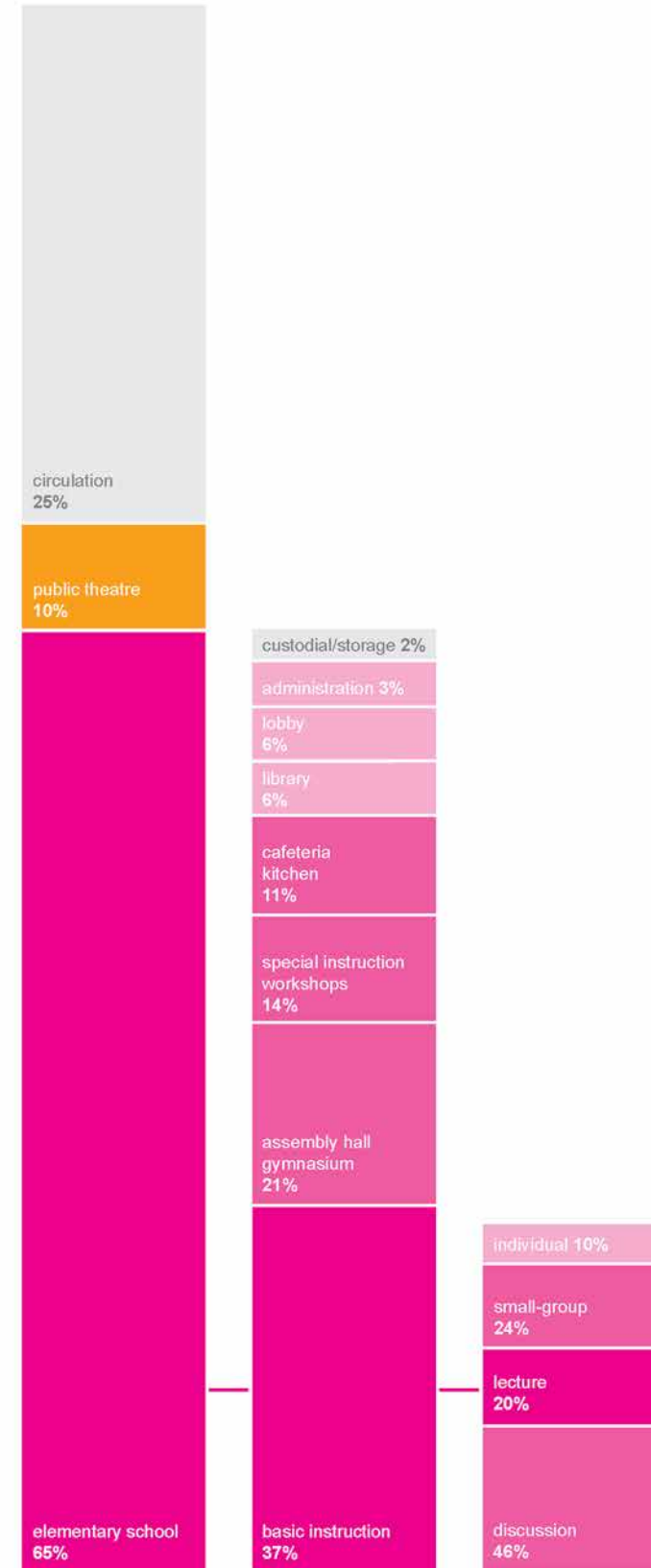
081_PS64_109
Today from the street, 2021



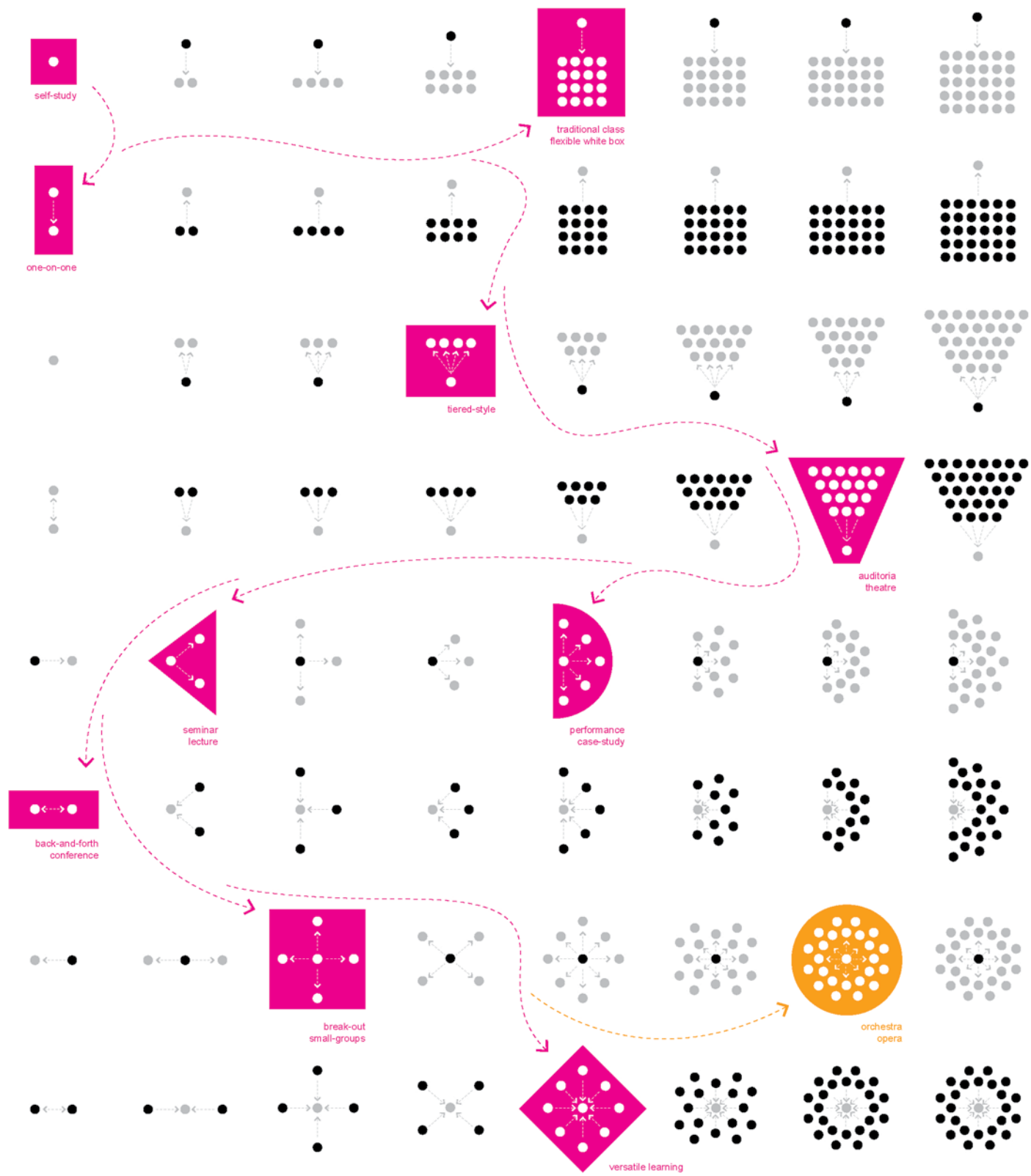
081_PS64_110
Who has walked these steps?, 2021



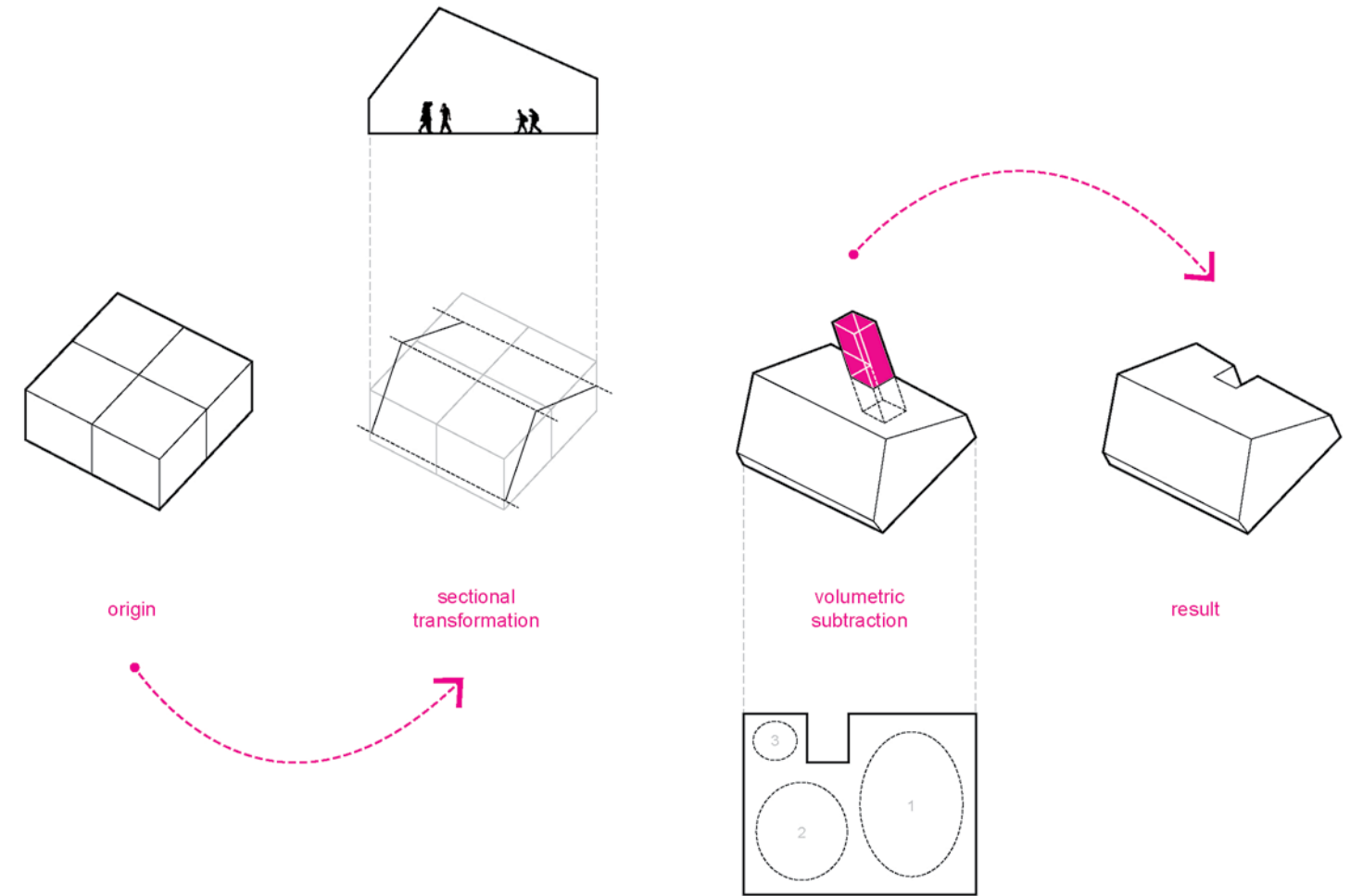
081_PS64_111
Ball park after a rain, 2021



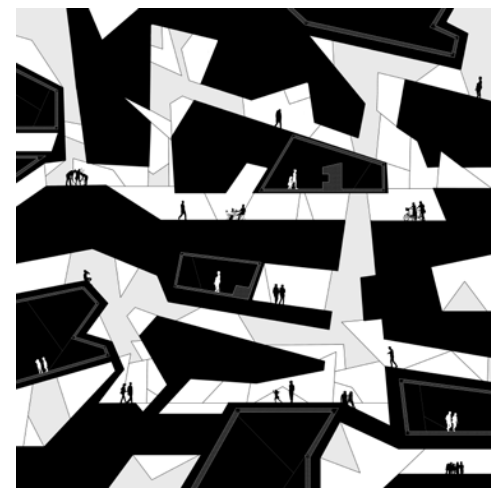
081_PS64_112
Space defined by program



081_PS64_113
Spatial matrix at 64 scales



081_PS64_114
Spatial hierarchy of plan and section

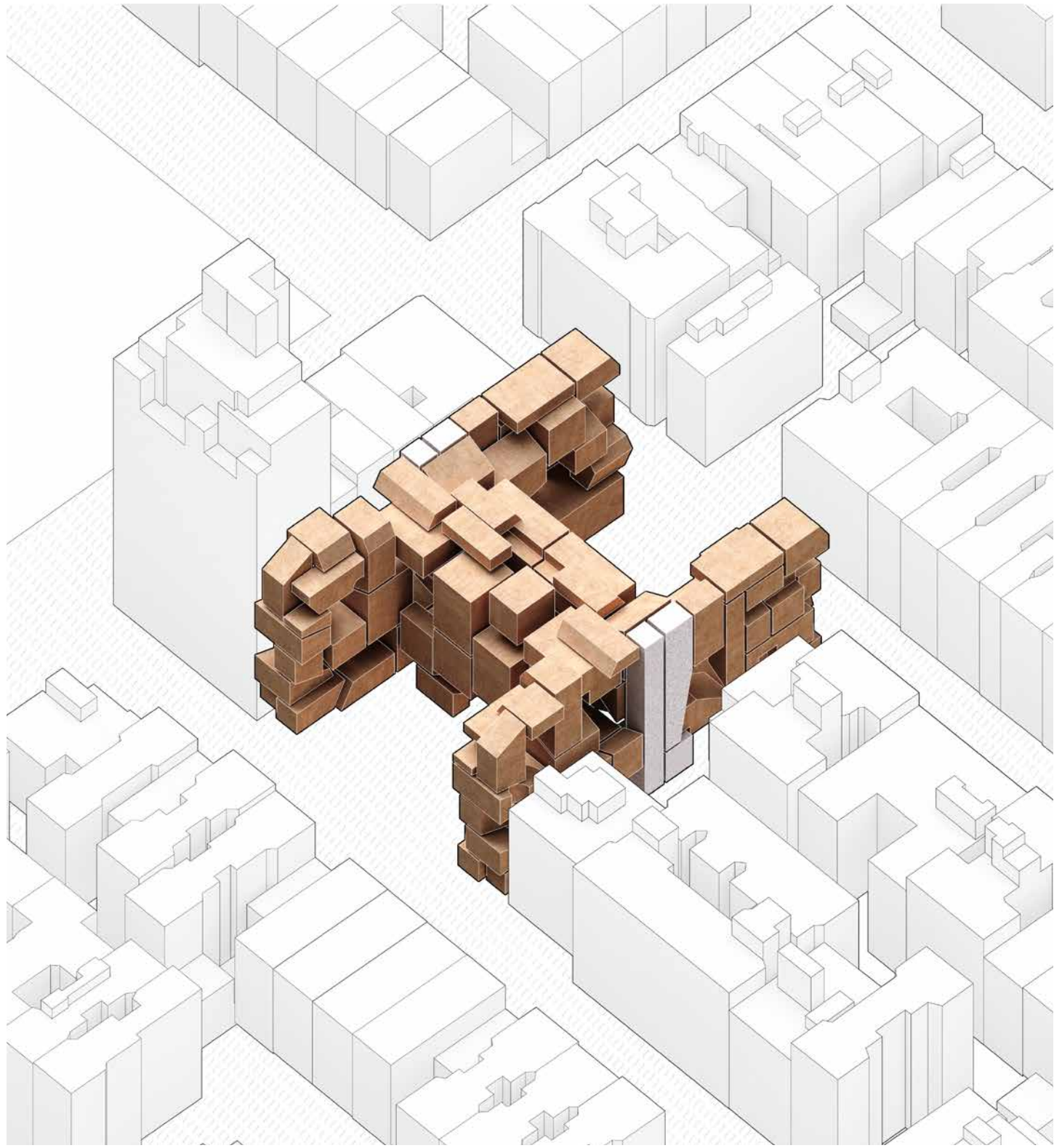


081_PS64_115
A spatial prototype

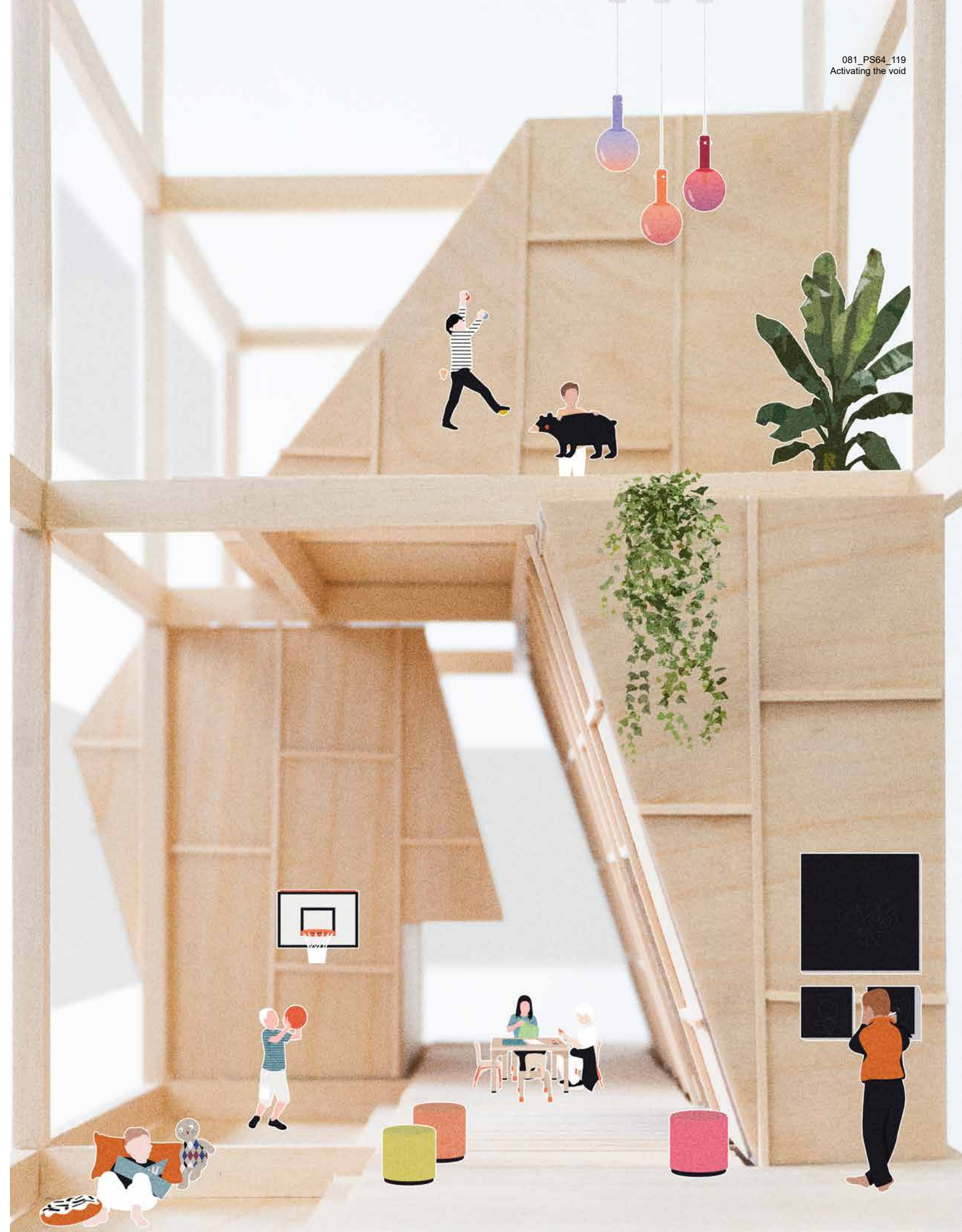


081_PS64_116
Dry-stacked, suspended blocks





081_PS64_118
Assembly on site





081_PS64_120
The mask



081_PS64_121
Revealing the insides



081_PS64_122
Naked blocks



081_PS64_123
Corridor vs. class, back



081_PS64_124
Corridor vs. class, front



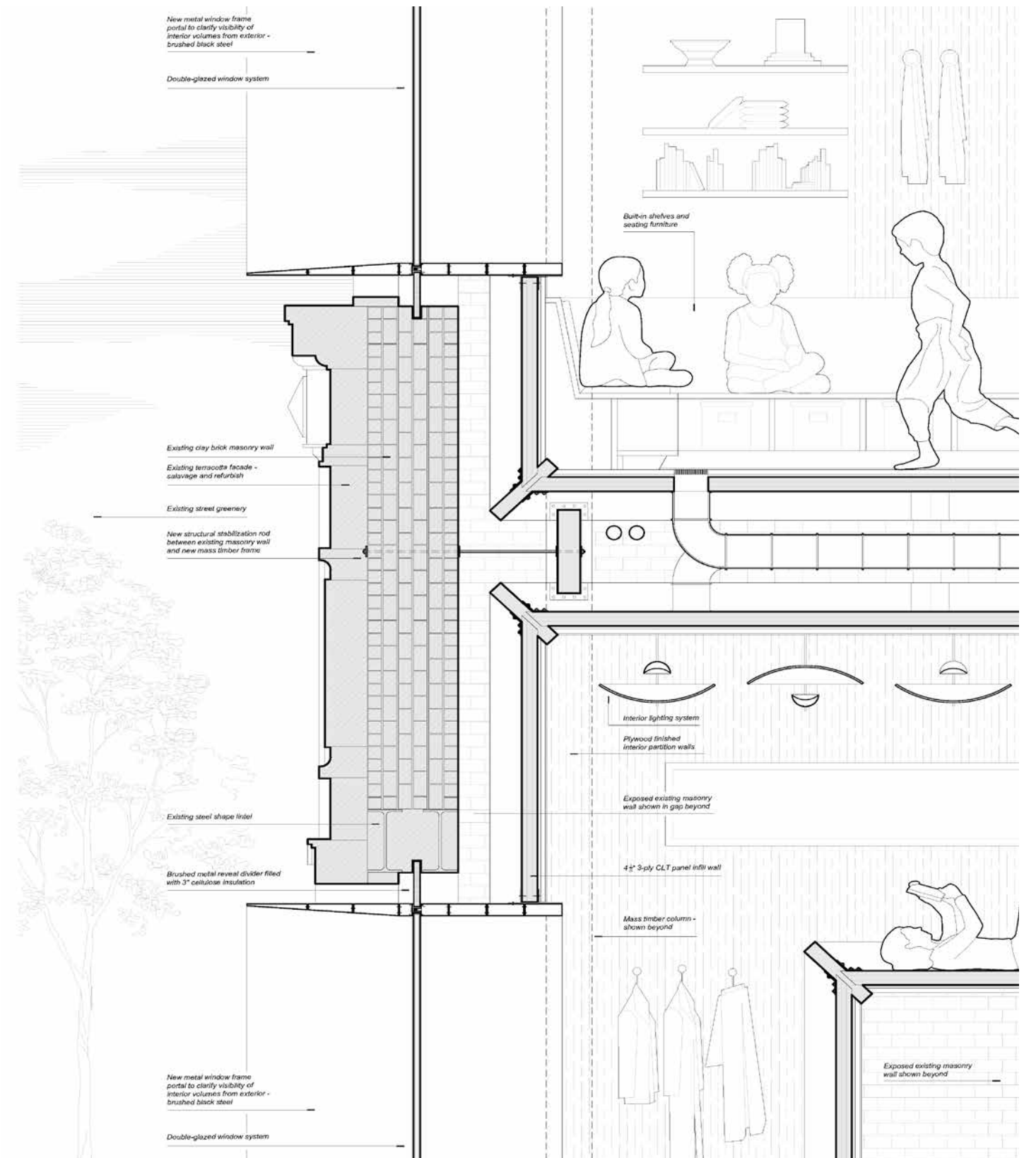
081_PS64_125
The corridor is also a classroom



081_PS64_126
The in-between and around



081_PS64_127
A unique sectional experience



081_PS64_128
A tectonic solution





097_CH_101
Suspended solid, interconnected voids

Come to Hudson for the Cranberries

A Guide for the Decommodification of Suburban land, Small-Town Tourism, and Communal Boarding

*Multiple Sites, Hudson, NY
Academic Project, Unbuilt
Spring 2022, ADV IV
Instructor: Alessandro Orsini*

The array of vacant infrastructure, persistent historical homes, and unproductive ecological assets in the urban core of Hudson, New York provide a clear lens to understand the city's historical transformation from productive mercantile waterfront to small town tourist destination. Once the harbinger of an elite class of whalers, an underground red light district, and the region's most affluent housing stock, Hudson fell victim to the most destructive eras of mid-century suburban sprawl and later, urban renewal. Promoted by its picturesque views of the river, relative distance from major urban centers in New York state, and strong culture of antiquing, the city today has seen a complete population resurgence since the strongest waves of the recent pandemic. A new commons of communal work and boarding seeks to undo decades of suburban commodification and modern tourism-fueled gentrification by providing universal access to shelter (through boarding), food (through sustainable land cultivation), education (through ecological stewardship), and work (through craft workshops) to re-situate the productive, suburban human within a process of revival, cohabitation, and engagement. As a result, this long-term model of intervention seeks to promote decommodified forms of land tenure, cooperation, and care, demoting the disengaged, homogeneous, and gentrified culture of small town tourism.

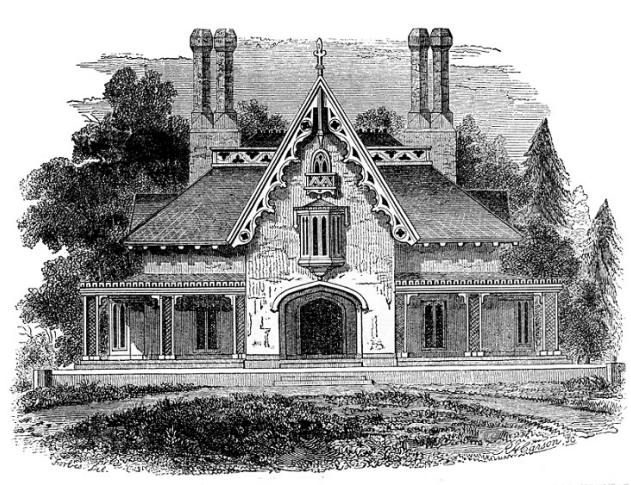
Principally, the architectural solutions holistically address the transience phenomenon in Hudson by creating a new "labor house" program, a synthesis of the boarding house and artist housing types, and configuring scaffolds amongst existing commercial structures, domestic homes, and vacant land to address the uncompromising popularity of weekender Airbnb/hoteling, flexible work-home relocations from New York City, and Hudson's unmitigated economic reliance on small-town tourism. The labor house promotes new interactions amongst daily, monthly, and long-term guests, encouraging diverse forms of suburban living and unlocking the under-appreciated ecological resources of Hudson as productive assets of a new suburban commons. Six tool kits at varying sizes, scales, and levels of intervention were developed as a universal guide for Hudson's decommodification. At their core, each scaffolding intervention seeks to dissolve the hierarchies of the traditional suburban spatial layout by radically relegating private space, providing universal access to an open-air central hall, promoting communal living spaces, and offering cooperative space for work. The "frame" logic explored differently in each toolkit intervention seeks to define a flexible model for user appropriation while preserving a consistent design aesthetic. The flexibility of the labor house typology itself is designed to react to future fluctuations in Hudson's patterns of settlement and work, engendering a long-term counteraction against the proprietary logic of suburban land, returning it to a basic, inalienable right of the commons.



097_CH_103



097_CH_104



097_CH_105



097_CH_106



097_CH_107



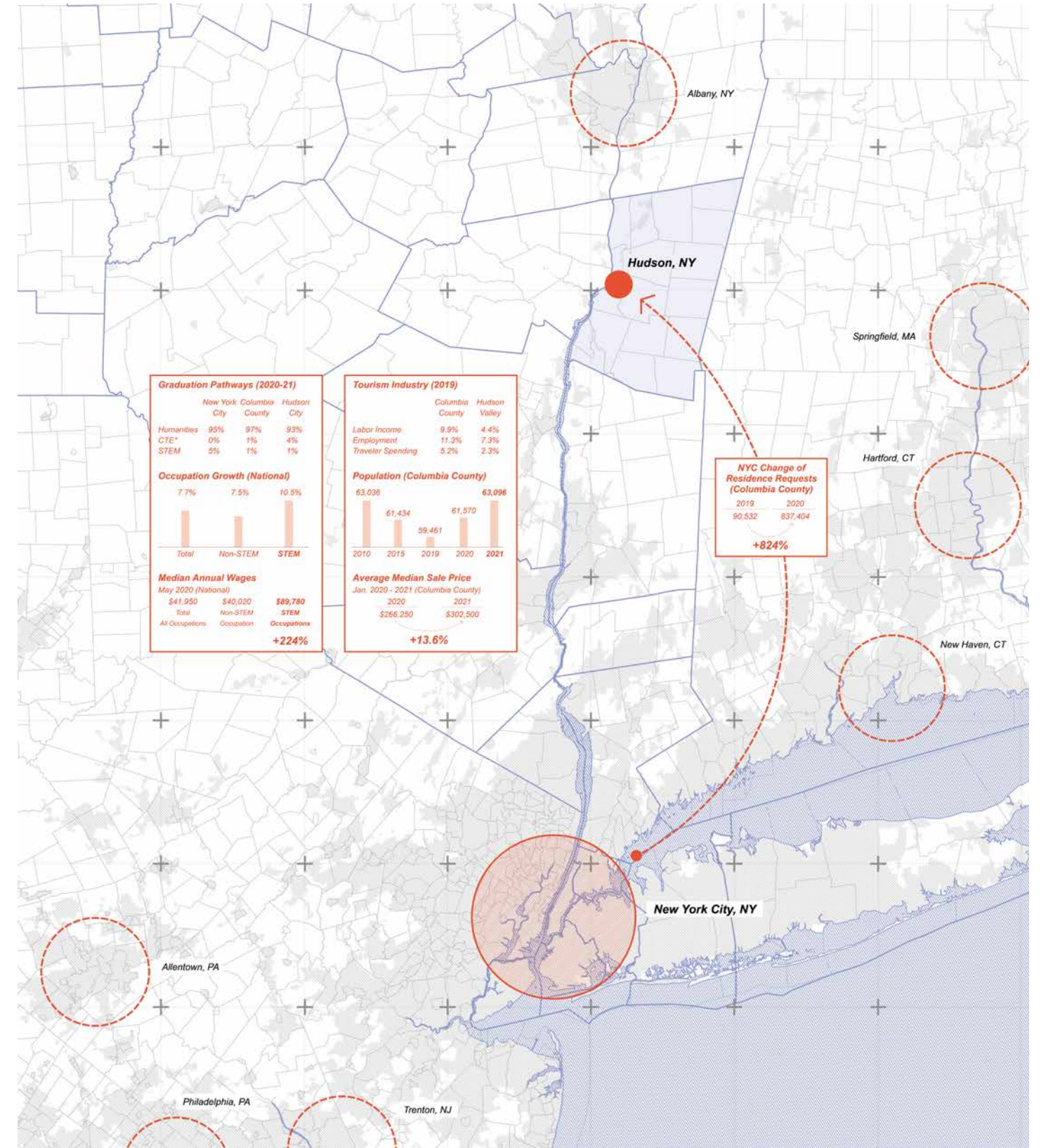
097_CH_108



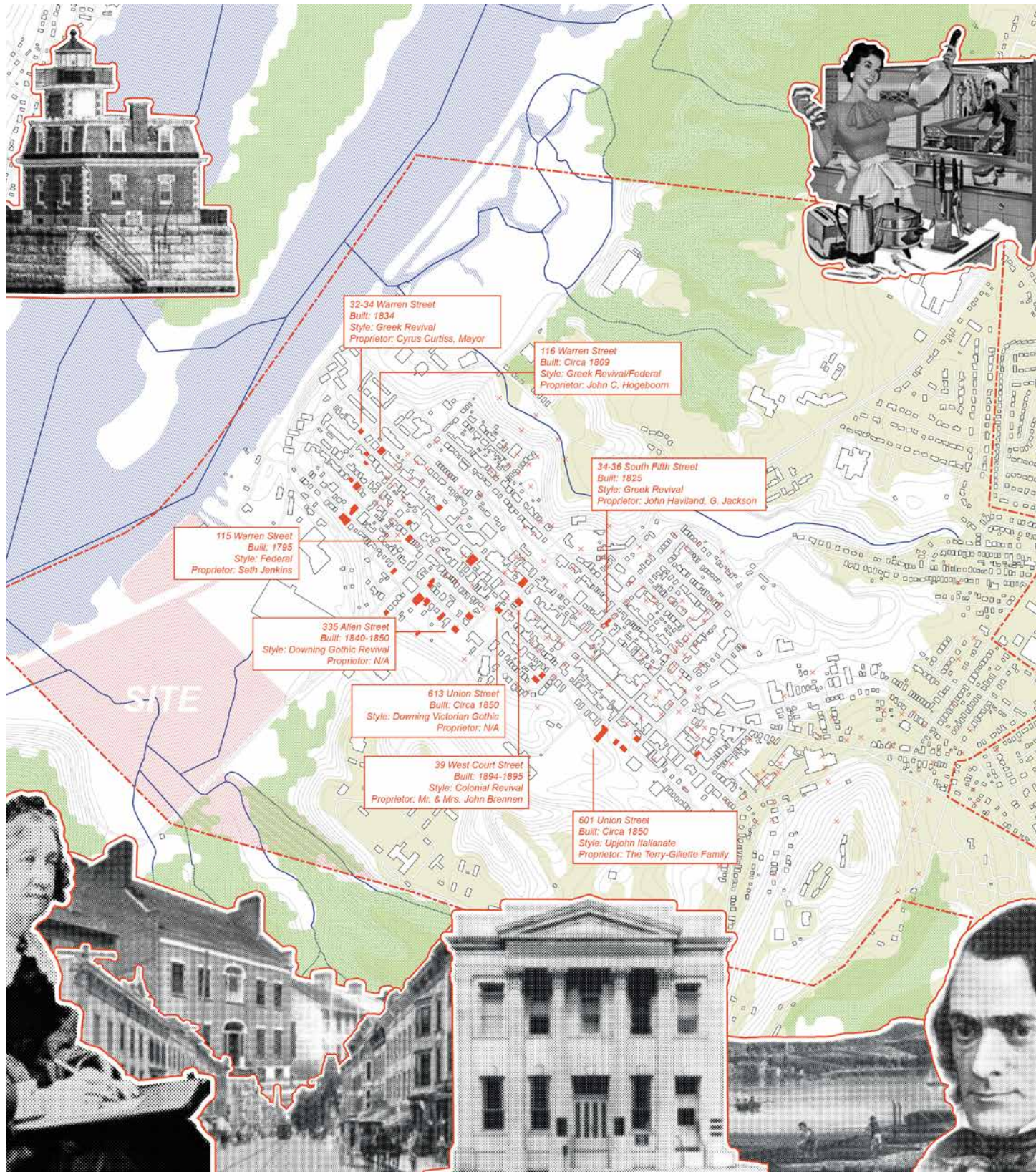
097_CH_109
Study model of empty frame



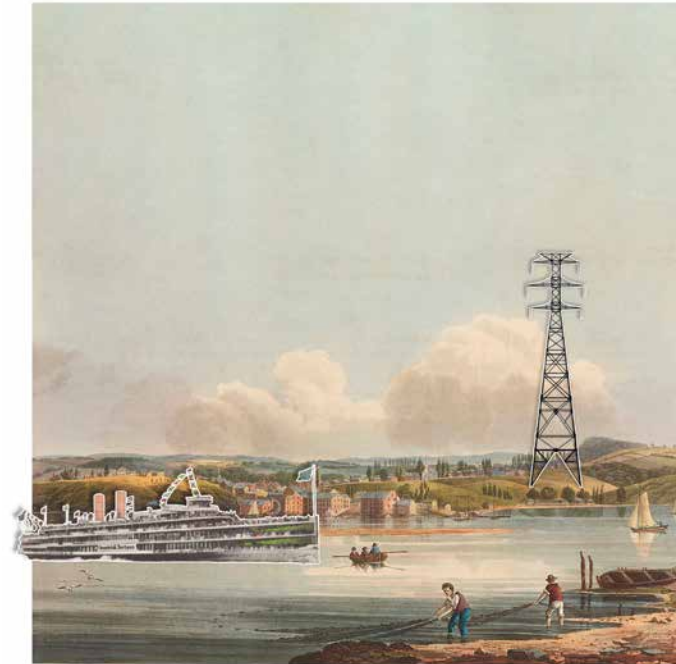
097_CH_110
Study model of volumes



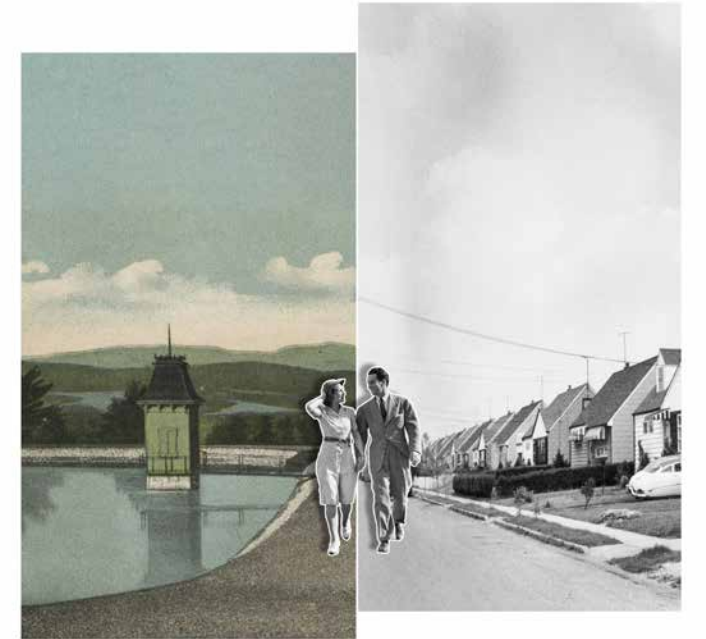
097_CH_111
Hudson Valley Transience



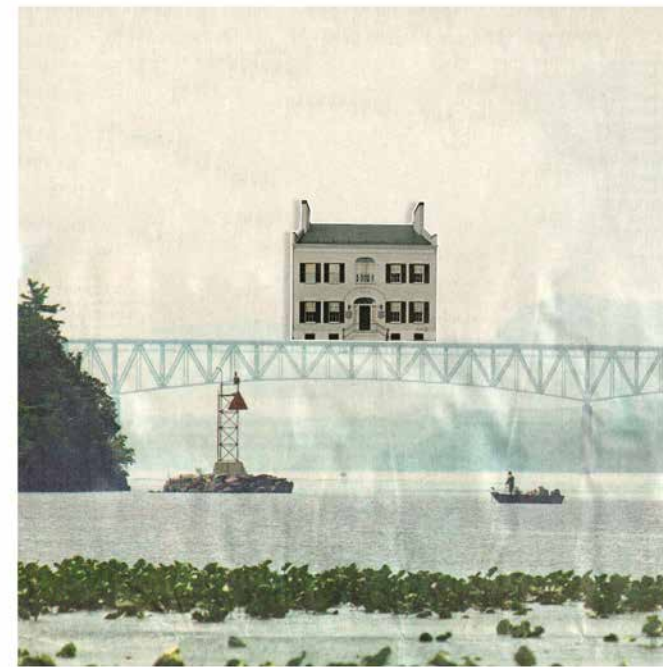
097_CH_112
Study model of empty frame



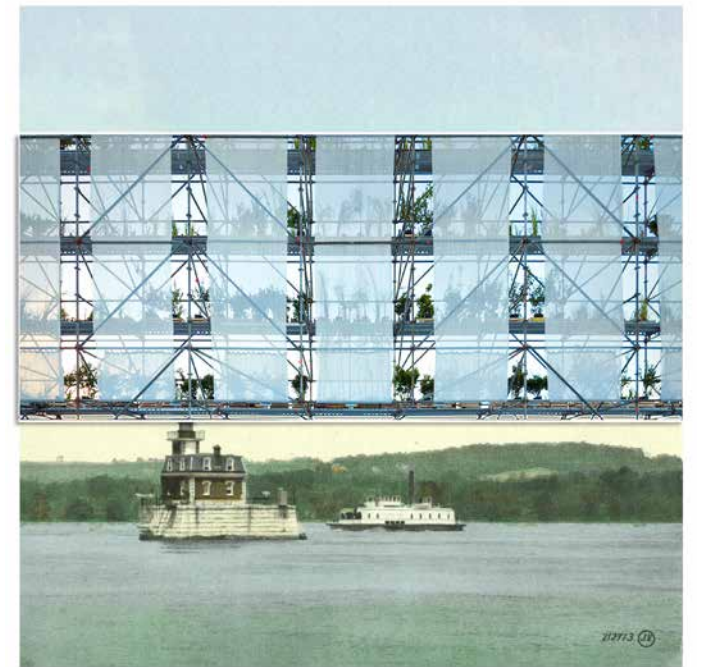
097_CH_113
200 years of Hudson river production



097_CH_114
The transition to homogeneity



097_CH_115
What does it take to build a suburb?



097_CH_116
An ecological scaffolding

Fomented once again by Rem Koolhaas and Samir Bantal's exhibition, *Countryside, The Future*, and further reinvigorated by the side effects of the pandemic, the romantic views of the hinterlands still prevail today in the mind and hearts of all urbanites. The *Countryside* exhibit was most successful at reminding urban dwellers that the countryside, since its turn to industrialization, has been conceived of as a supportive and productive appendage to the city. Leo Marx historicizes this idea quite clearly in the literature of America's most famous writers like Hawthorne, Whitman, Twain, and Hemingway in *The Machine in the Garden*. He writes, **"The soft veil of nostalgia that hangs over our urbanized landscape is largely a vestige of the once dominant image of an undefiled, green republic, a quiet land of forest, villages, and farms dedicated to the pursuit of happiness."**

The beginnings of an industrialized rurality is described best by Dolores Hayden in

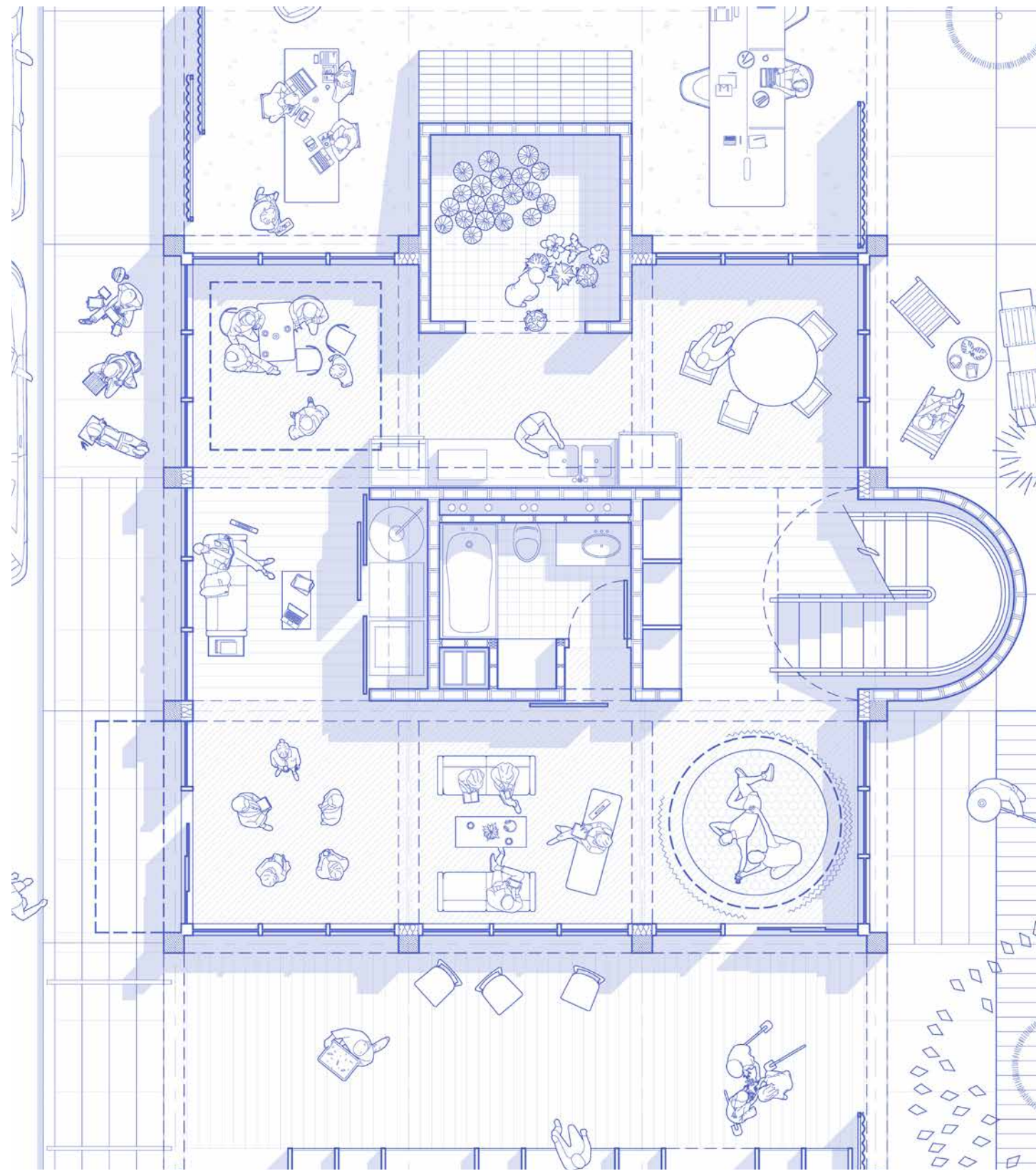
Building Suburbia (2004). She chronicles the beginning of the nineteenth-century as setting the stage for a massive urban exodus and the romantic views of the hinterlands, as diametrically opposed to the life of the city. Propagated by popular early texts like Andrew Jackson Downing's *Treatise on the Theory and Practice of Landscape Gardening* (1841) and Catharine and Harriet Beecher Stowe's *The American Woman's Home* (1869), the hinterlands were a physical and moral escape from the perils, uncleanness, and congestion of the city, providing pure air, access to gardens, meadows for children to play, lanes for women to walk safely, and trees for summer shade. The complete commodification of suburban land developed later when the advent of novel modes of transportation (omnibus, horsecars, steamboats, and steam locomotives) shortened the commuting distances of domestic families seeking both refuge in the suburbs and work in the city. As Downing explains, the commodification of land and

the moral benefits of owning a 'significant' home were deeply intertwined: "a good house (and by this I mean a fitting, tasteful, and significant dwelling) is a powerful means of civilization."

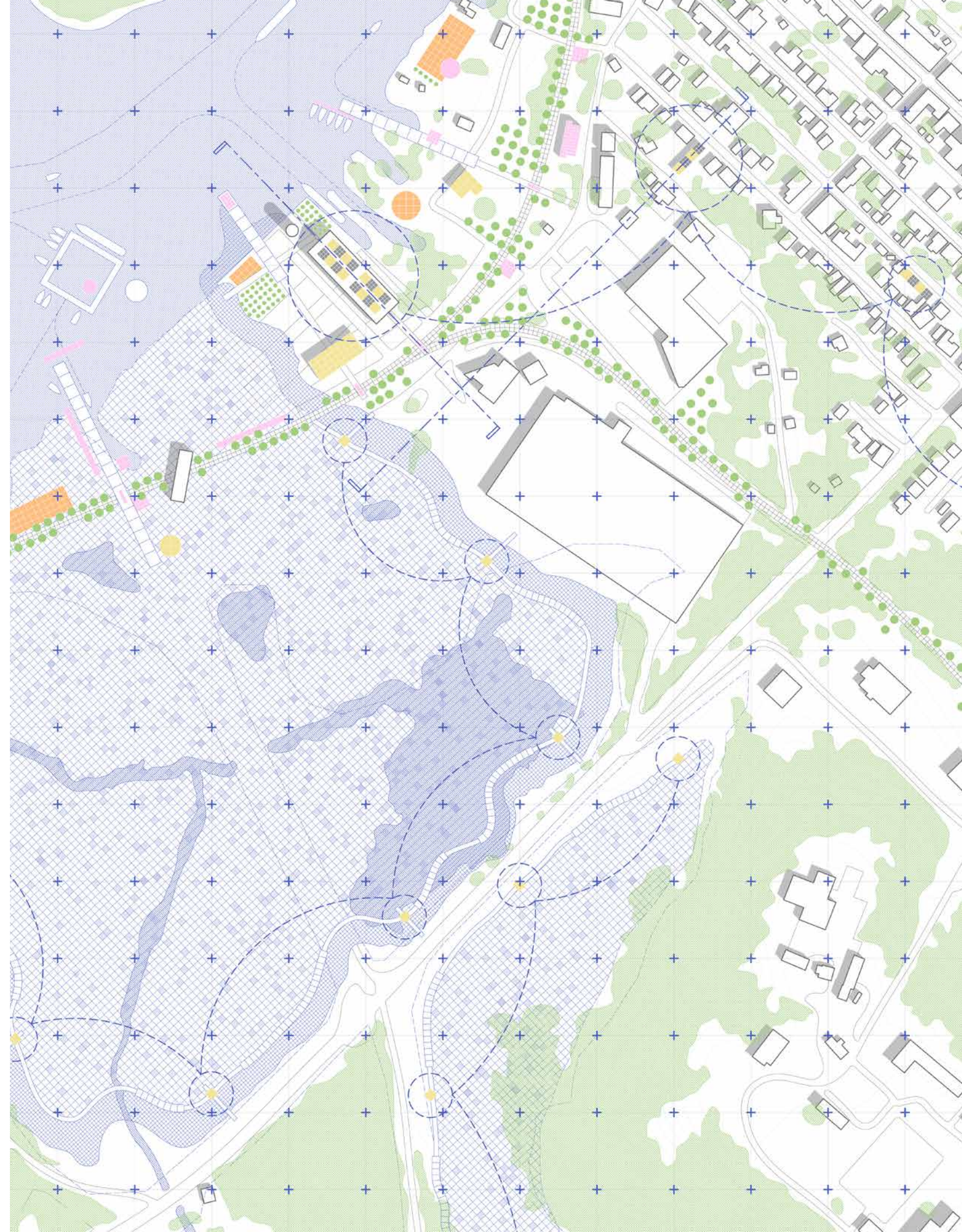
The powerful means of the original suburbs was rooted in the idea of a triple dream: house, land, and community - the criteria for the development of the earliest suburban communities, called 'picturesque enclaves.' Whereas Downing and Beecher had naively imagined the future borderlands as large, expansive rural estates, the quick popularization of rural life incentivized early land speculators to conceive of the earliest suburban developments, dedicating substantial space to harmonious association and cooperation: "These were entire new communities with curving roads that followed irregular local topography. Houses were sited amid heavy planting adjacent to shared parks and other common spaces so that they appeared to be wrapped in greenery." However, profit-driven

land exploitation, a housing crisis, government incentivized programs of the pre-war and inter-war periods, and post-war economic boom culminated in a homogeneous model of suburban domestic settlement, optimized by the iconic suburban model of Levittown in 1947.

Hudson's strategic position at the crossroads of major urban centers, especially its seclusion from New York City, has allowed it recently to develop into a haven for tourists, bolstered by a strong tradition of antique shopping on its popular 'main street' with an array of instragammable bars, restaurants, hotels, and picturesque river views. Even more recently, the global pandemic influenced another, quite different, wave of transients to populate the city with many seeking short-term and long-term stays in the 'safe, open, and clean' rural hinterlands of the Hudson Valley. Especially Columbia County, the home of Hudson, saw a dramatic 824% increase in relocations from New York City in 2020.



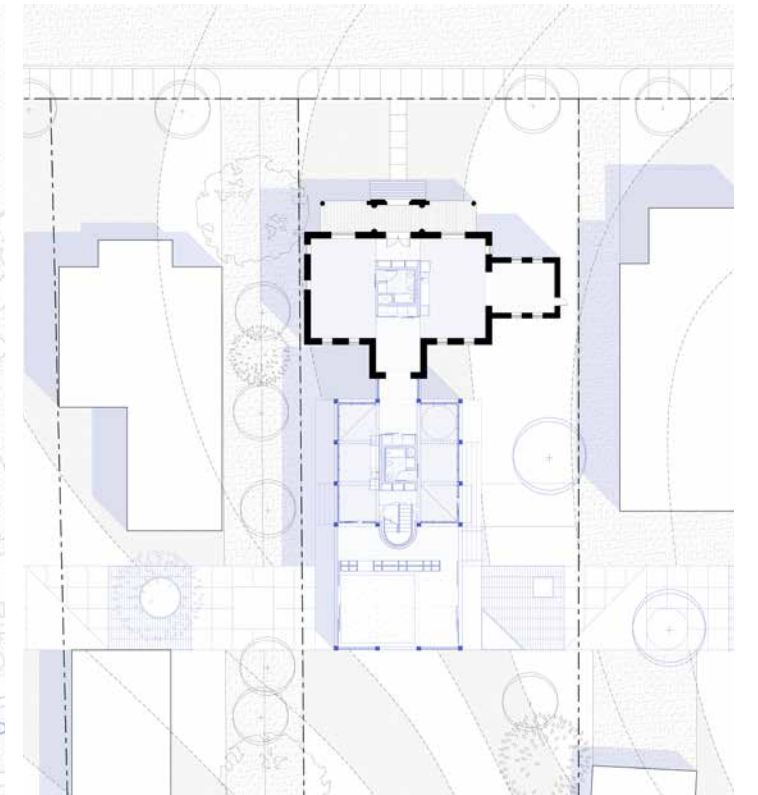
097_CH_117
The boarding model



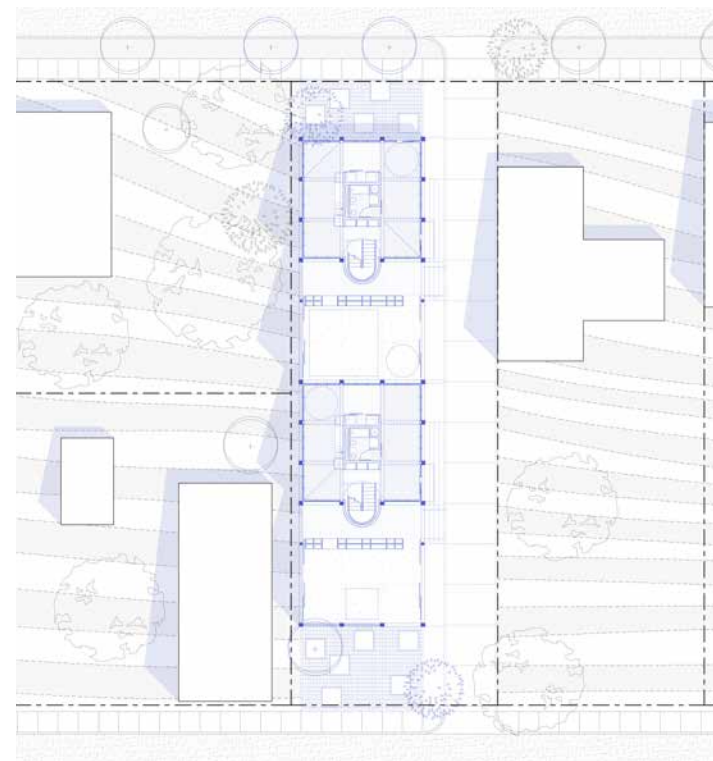
097_CH_118
An shared urbanism of boarding houses



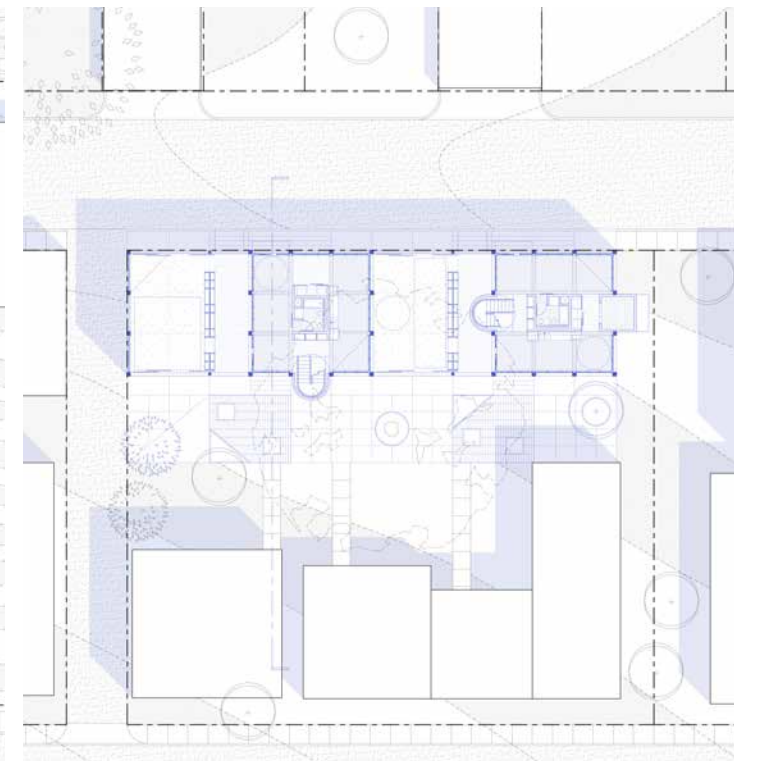
097_CH_120
3 Broad Street, Adaptive Re-Use



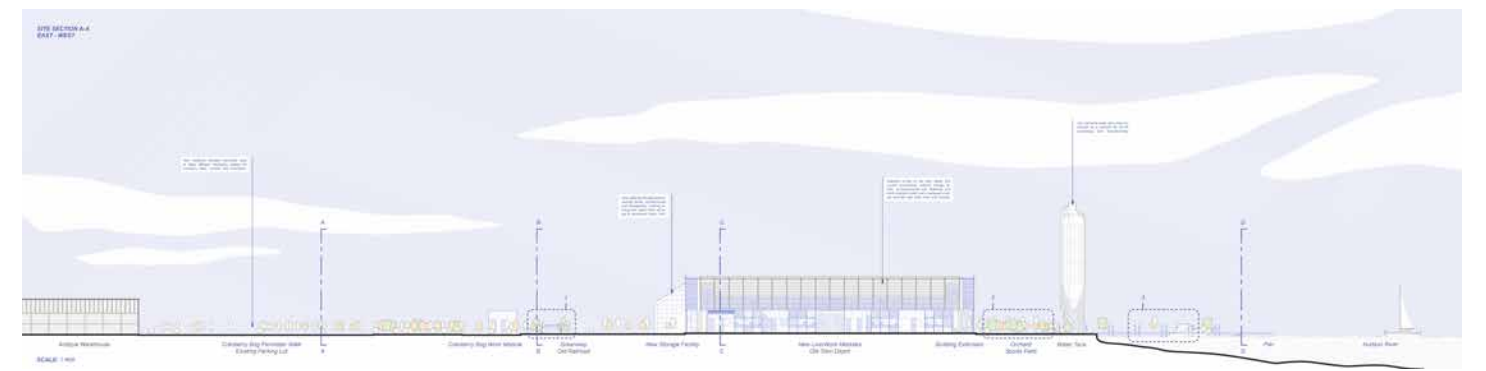
097_CH_121
329 Allen Street, Single-Family Addition



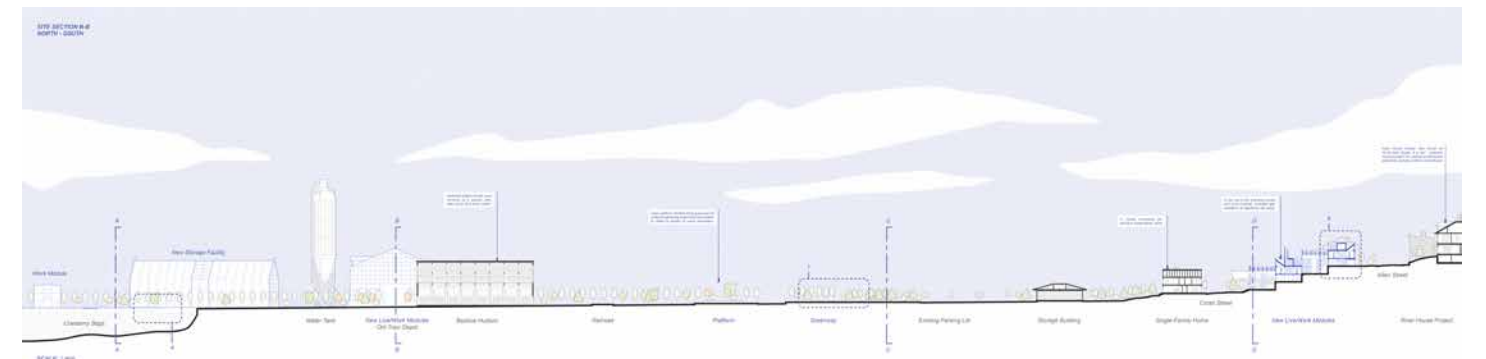
097_CH_122
35-37 Allen Street, New Build



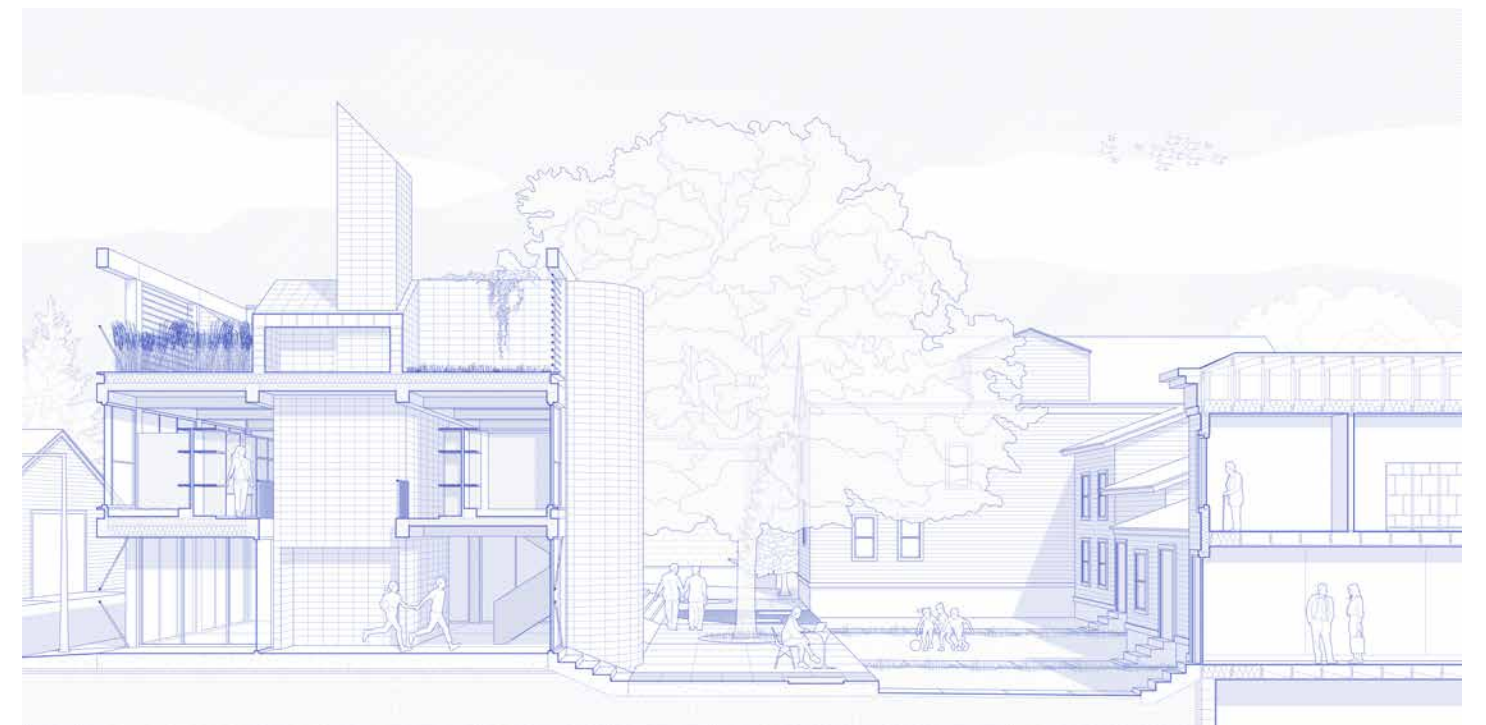
097_CH_123
Partition Street, Attached Dwelling Unit



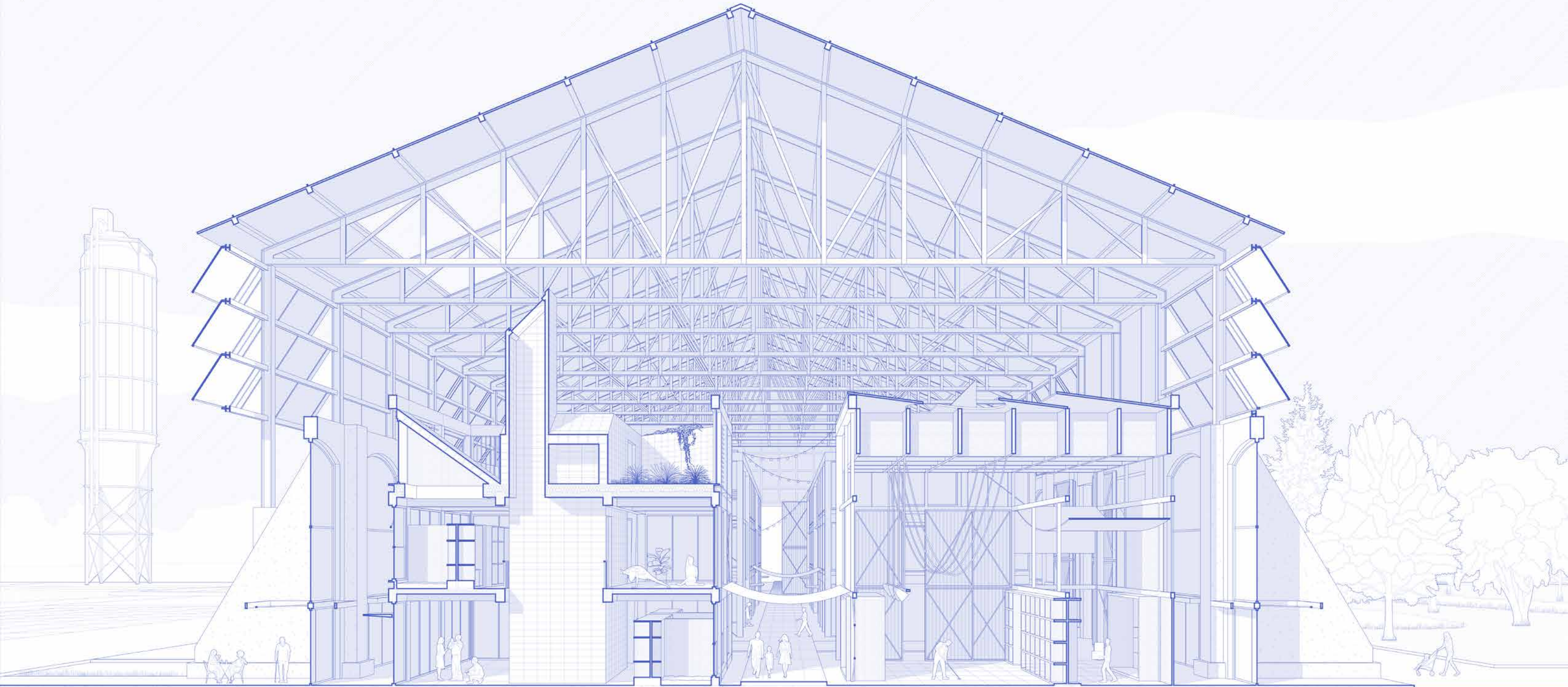
097_CH_125
North to South



097_CH_126
East to West



097_CH_127
Shared property lines







117_SIP_101
Politicized details



This is a Space-in-Progress

Restructuring Terracotta Processes and Democratic Space

*Liberty Tower, 55 Liberty St, New York, NY
Academic Project, Unbuilt
Fall 2020, CORE I
Instructor: Lindsey Wikstrom*

Historically, the space of the urban realm has been viewed as a flat plane, inherently reinforcing the stratified hierarchies of the Financial District's business culture. The project began by seeking to re-frame our interpretation of the city as a three-dimensional, connected circuitry. The point of departure was an extensive analysis of the 1907 Gothic high-rise Liberty Tower and specifically, its white terracotta cladding facade. A thoughtful critique of historical and contemporary terracotta material processes was precipitated by material origin research, focusing on terracotta as a material embedded in its form through the tediousness of its craft, grossly oversimplified by the plague of industrial, reproducible production. Similar issues precipitated a questioning of the ethics of modern building culture, specifically the way in which architecture can be seen as endless accumulations of material on a singular site over time. This perspective repositioned existing materials as wonderful opportunities for reuse, theoretically becoming explicit in the form of an architecture.

In this architectural solution dedicated to material reorganization, a framework for regenerative design and material processes was conceptualized that recognizes and designs for the transformation of terracotta in three stages. First, residential vacancies due to the pandemic are identified in the tower and returned to the urban realm as basic resources of the commons. Terracotta is then collectively removed from the building's exterior, rotated and stacked on the building's interior, conceptualizing a much more expressive, ephemeral, and improvised poche on the building's interior. The last stage, on the building's exterior, adapts a structural form with reinforced concrete support to most honestly and clearly describe the ability of terracotta to be molded and casted into a sculptural form. The program for the building becomes a holistic response to the pandemic, a phenomenon that has only further alienated our society into the virtual realm. This Center for Civil Discourse, its construction and ownership formulated by three local debate and discourse organizations, reinforces and incentivizes the human love for informal interactions, providing space for public debates, lectures, meetings, and much more. At every corner, the project reinforces the hallmarks of the commons, material re-use, and carbon-neutral design embedding it in the craft of design, molding, and assembly, eloquently expressed in this ephemeral state of architecture.



117_SIP_103
The predecessor to Woolworth



117_SIP_104
Vertical banks of carbon



117_SIP_105
A modern supplier



117_SIP_106
Gargoyles from Perth Amboy, New Jersey



117_SIP_107
The firing process



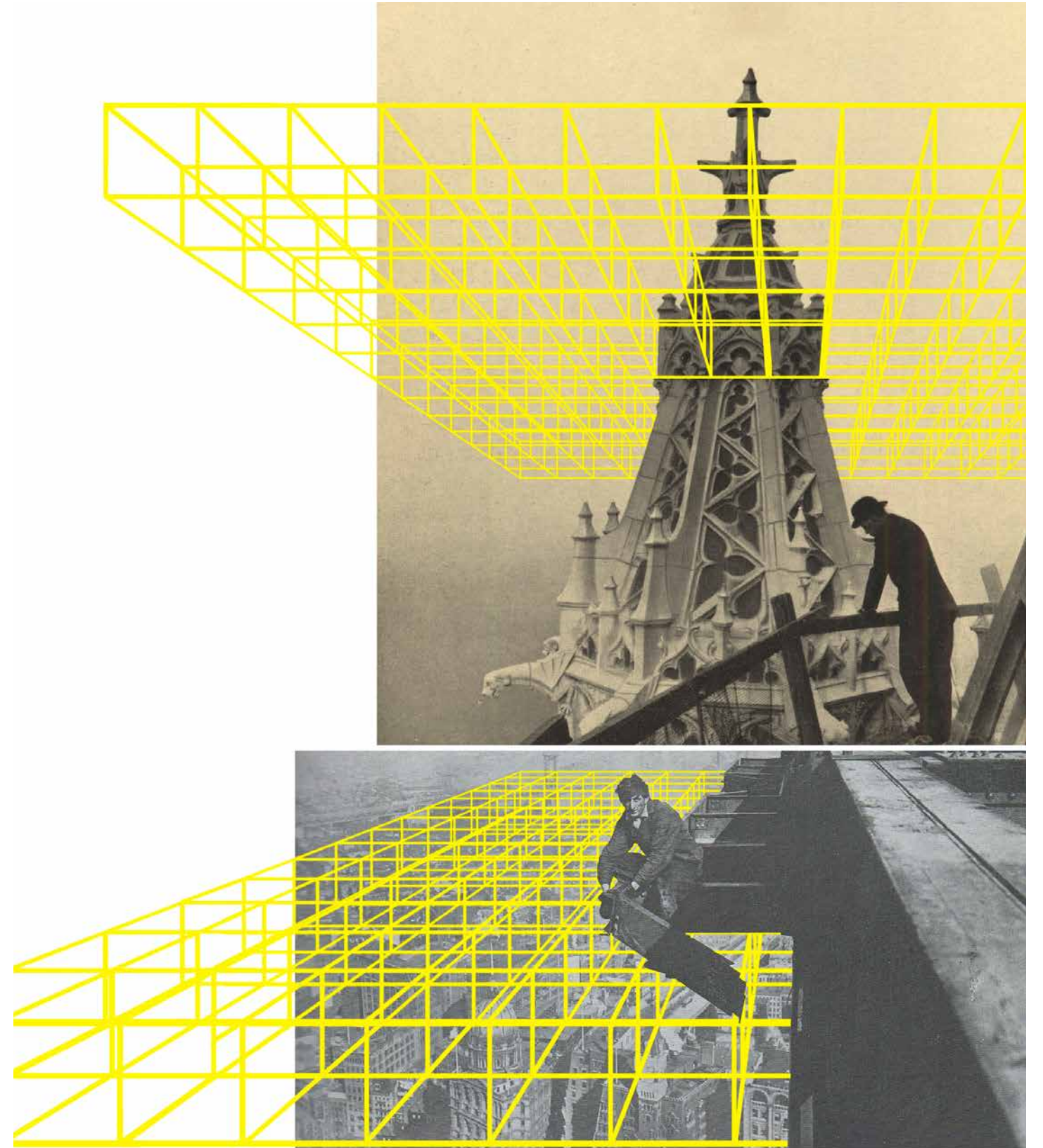
117_SIP_108
Gordon Matta-Clark, *Bronx Floor: Threshole*, 1972



117_SIP_109
Urs Fischer, *You*, 2007



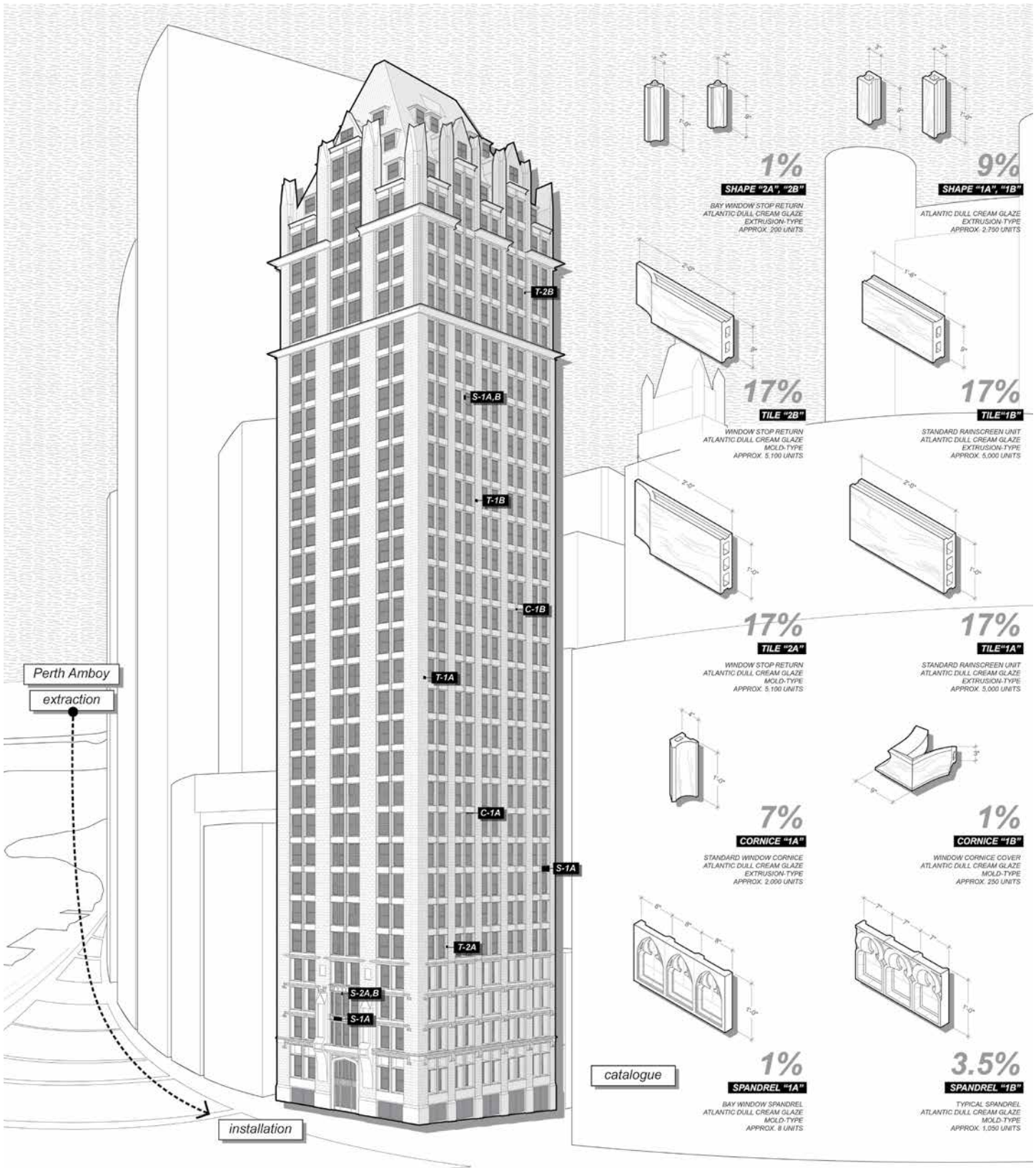
117_SIP_110
Robert Smithson, *Non-site: Line of Wreckage*, 1968



117_SIP_111
Recognize that the foundation on which you stand was constructed by another

“Symptomatic of the disassociation between the choice of a design solution and its material reality, this detachment ensures a retreat from the responsibilities of the real world. Yet the inexorable association between architecture and its geologic genesis is plain to see as the materiality of the built world relies on extraction. **It is highly necessary to politicize details and components** in order to connect them to contemporary forms of resource extraction and appropriation, as well as, ultimately, to rethink the production of our infrastructure, our cities, our homes, and our lives.”

Excerpt from "The Devil is in the Details: 'Who is that the Earth belongs to?'" (2021) Charlotte Malterre-Barthes



Who built it? Who will build it?

Where were these materials harvested? Was it sustainable?

Can we reshape economies by selecting more equitable and sustainable materials?

Is there a **natural relation** between a product and its constructor?

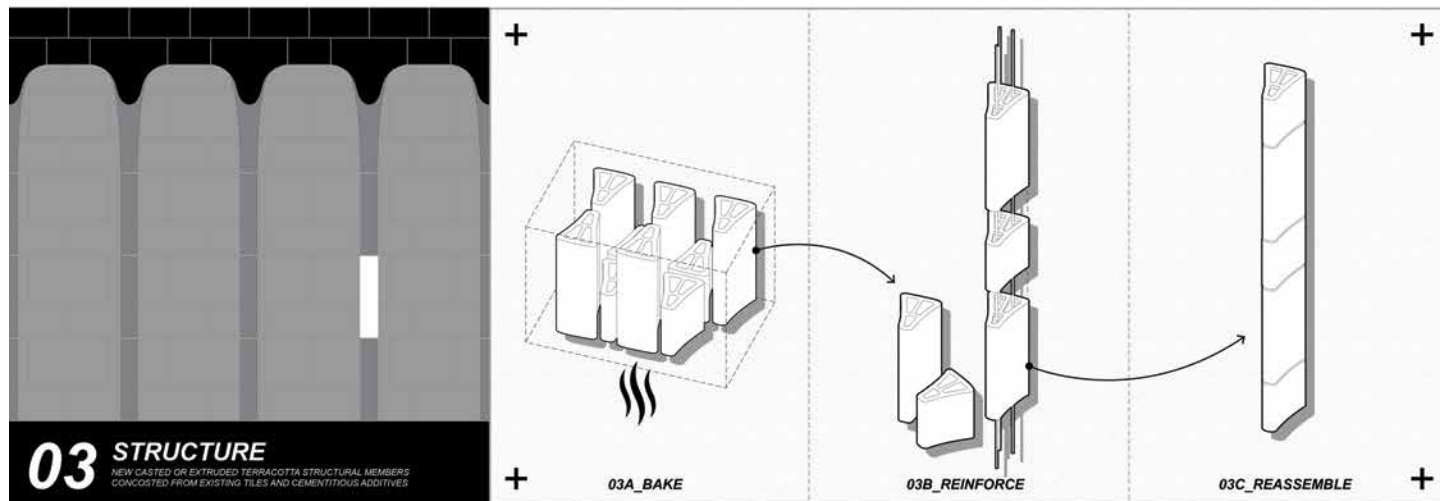
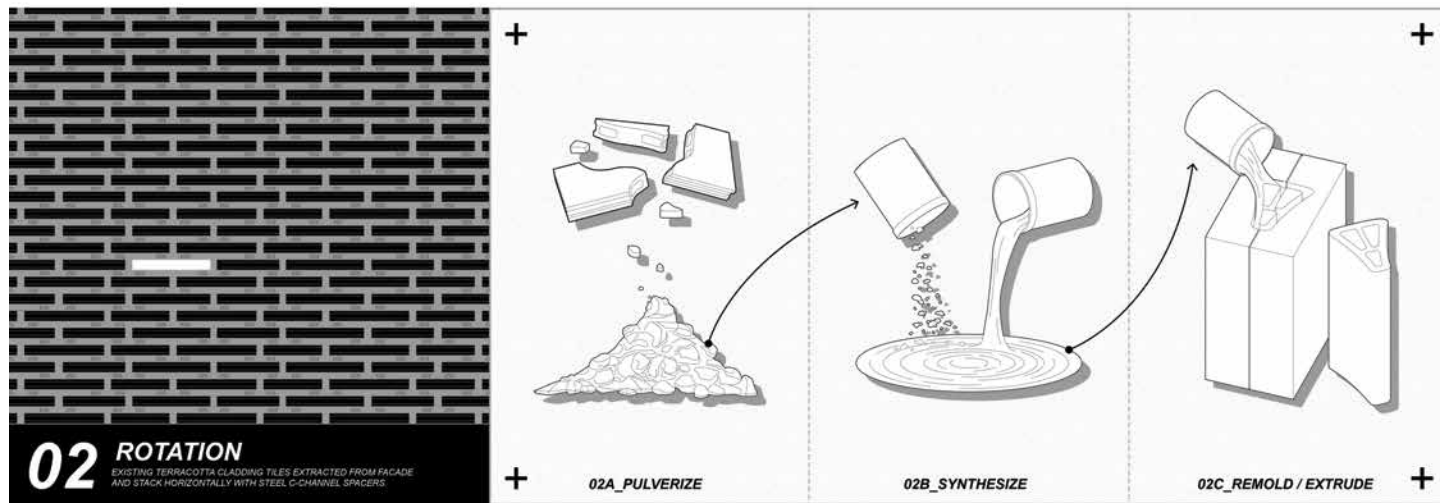
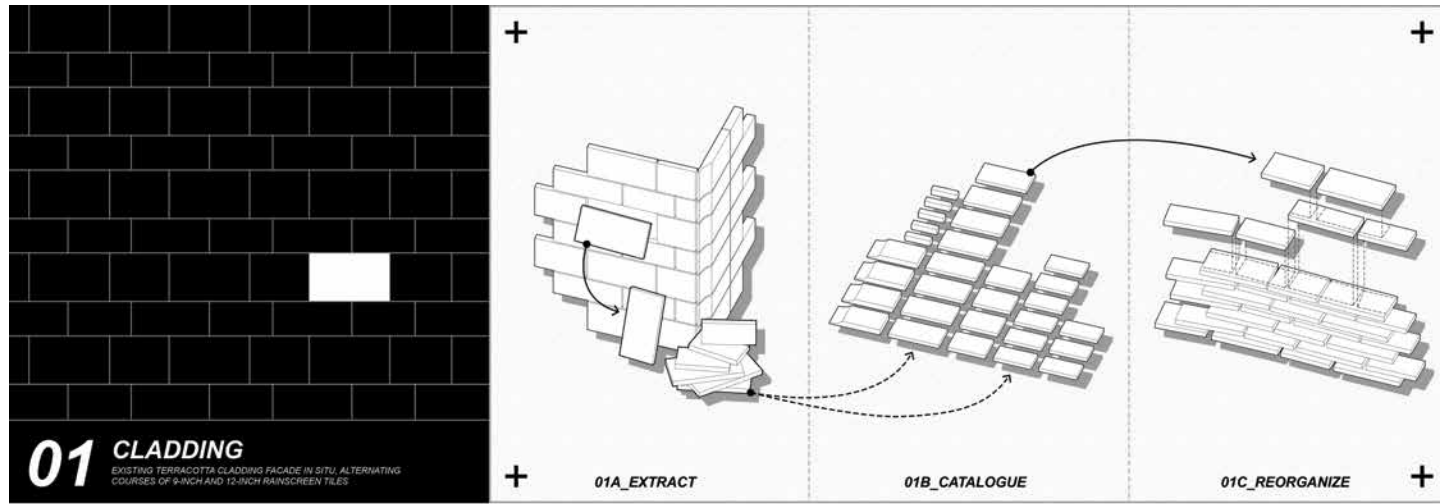
Can an architecture of self-construction and **improvisation** promote equity?

Could a disastrous event like a pandemic be utilized to reclaim private space for public benefit?

What if our public spaces were arranged more **three-dimensional,** like a networked circuitry?



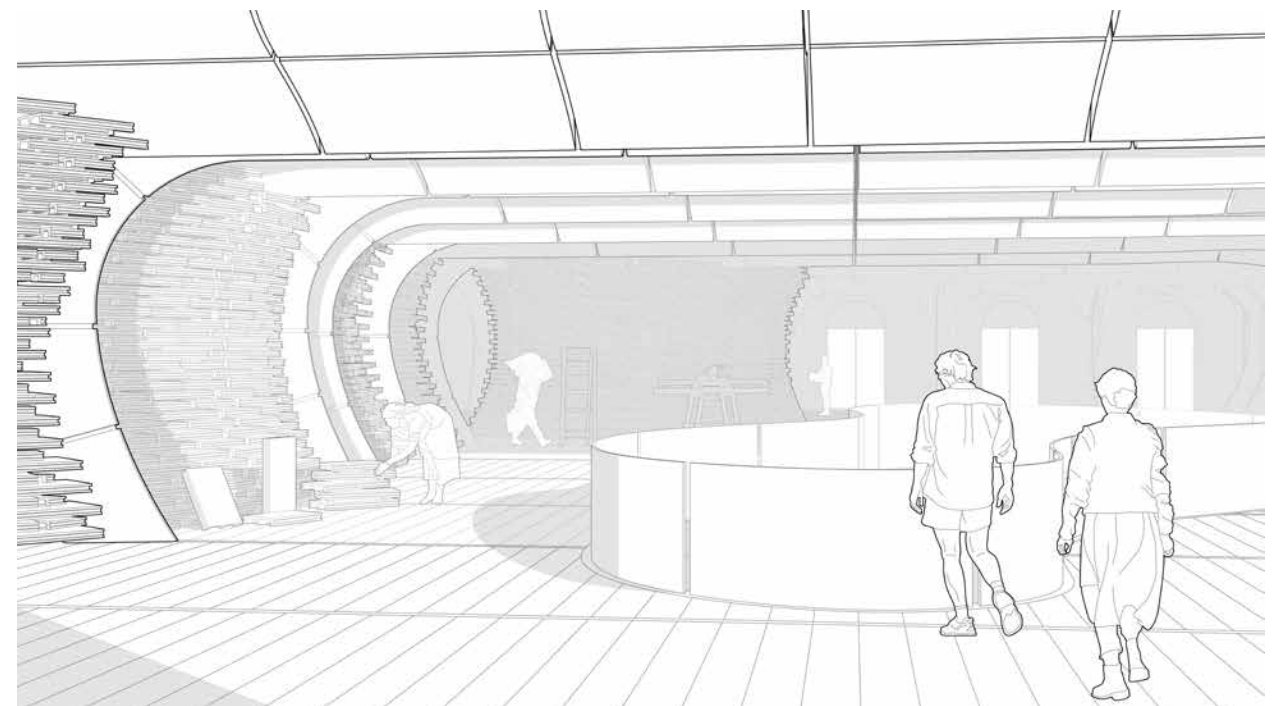
117_SIP_113
Messy molds



117_SIP_114
A guide for deconstruction and reinvention



117_SIP_115
An interior of informality, debate, and the unexpected



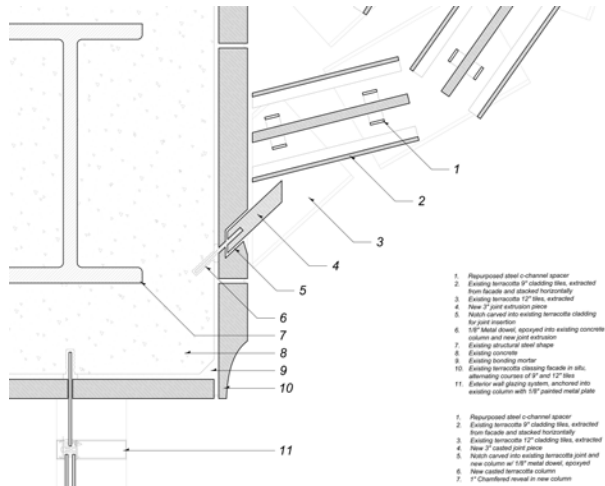
117_SIP_116
A public facade of movement, circulation, and exchange



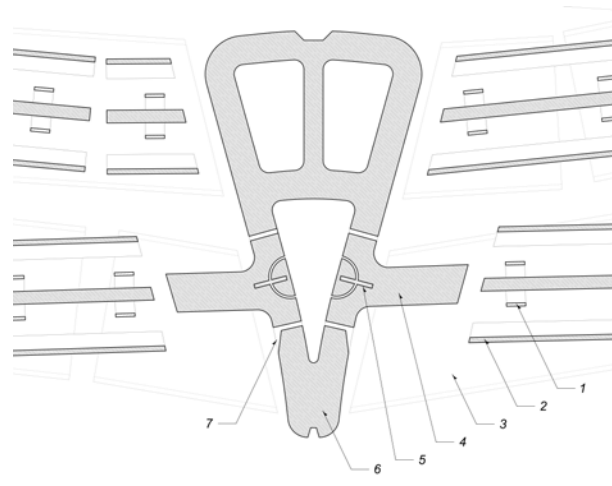
117_SIP_117
Origins of the discursive loop at Aristotle's Lyceum
The School of Athens (1509–1511) by Raphael



117_SIP_118
A Section of woven planes



117_SIP_119
Detail 1



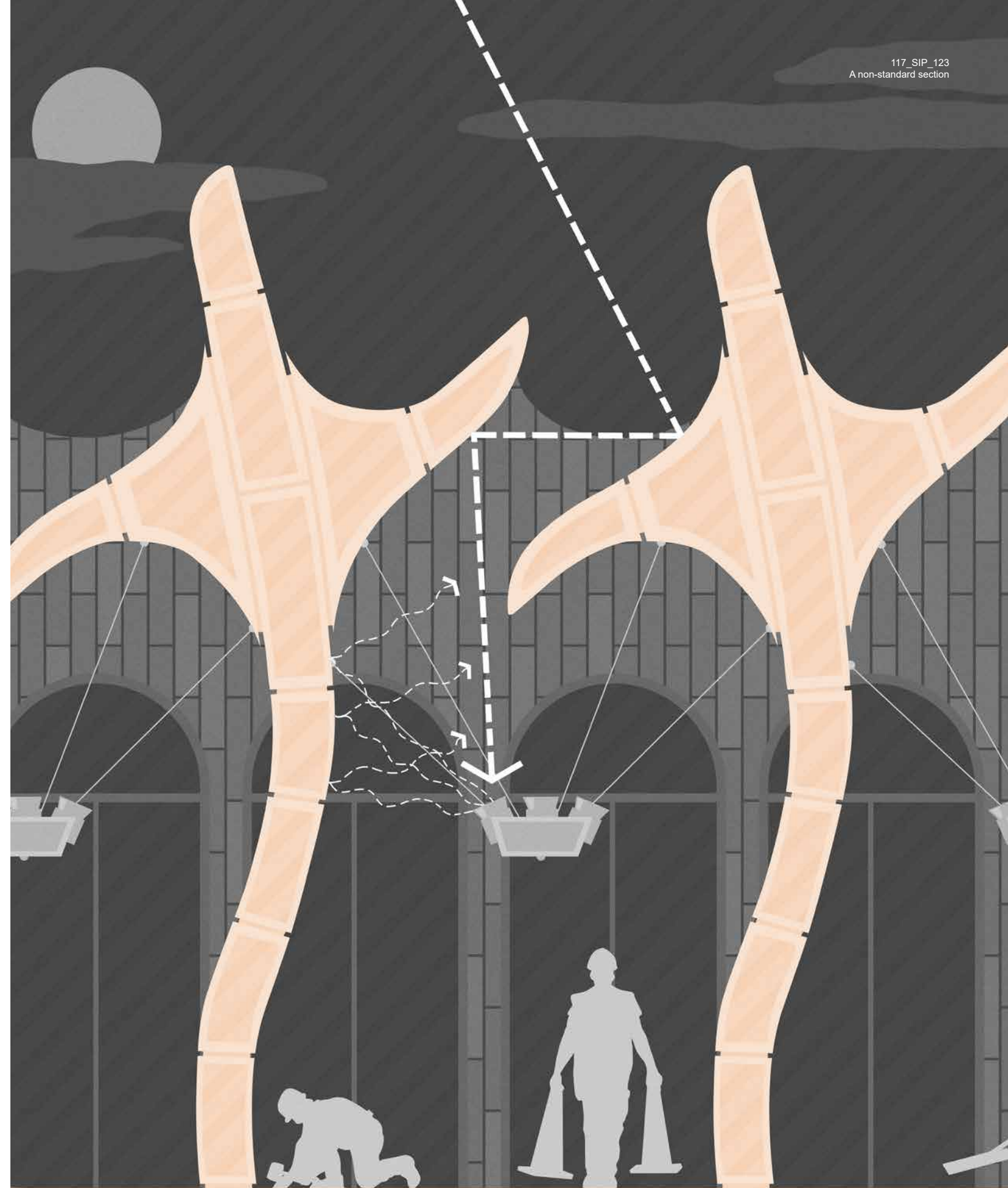
117_SIP_120
Detail 2



117_SIP_121
Terracotta becoming poche space

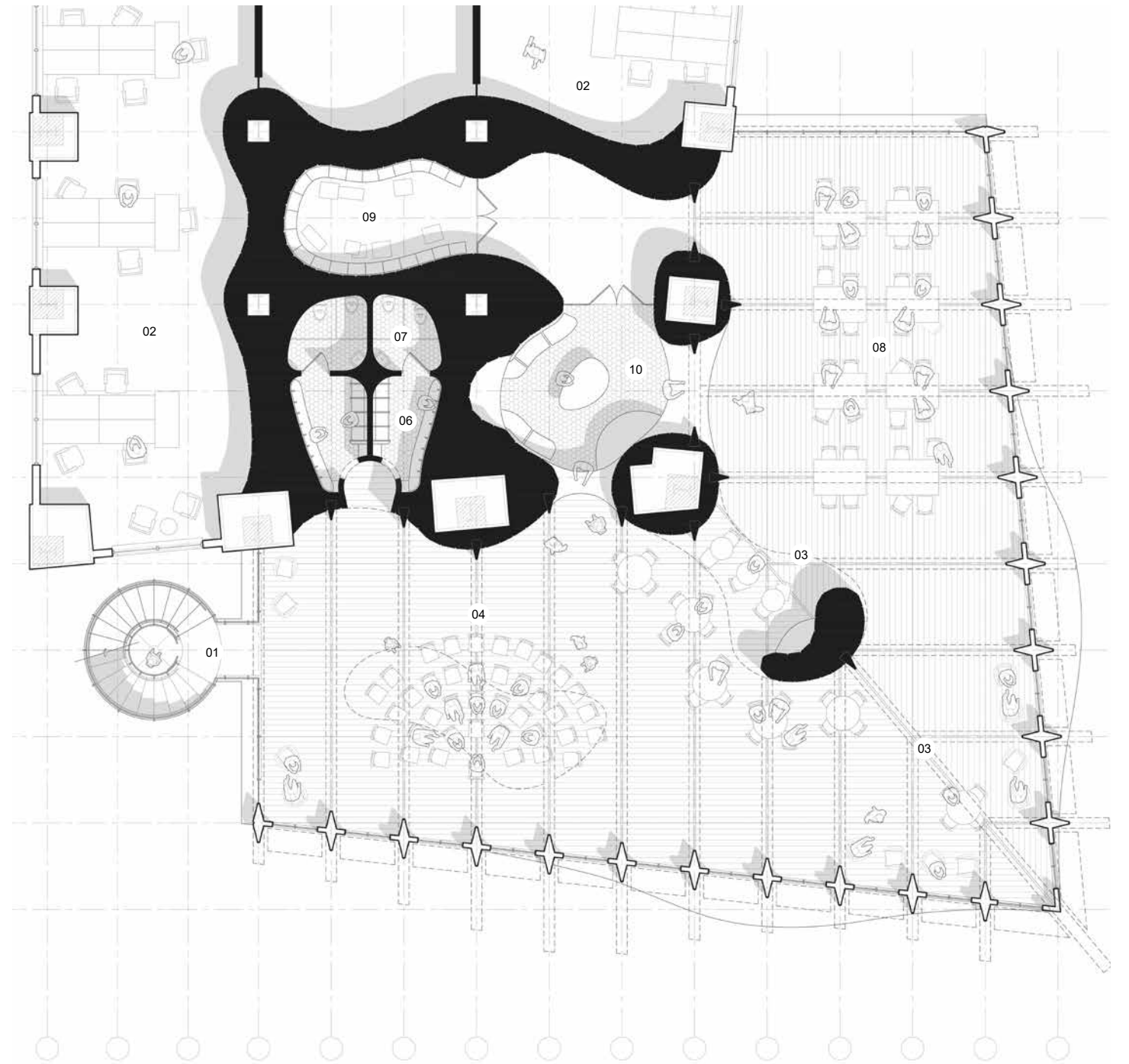


117_SIP_122
Terracotta becoming structure





117_SIP_124
Robert Smithson, *Gravel Mirror Corner Piece*, 1968

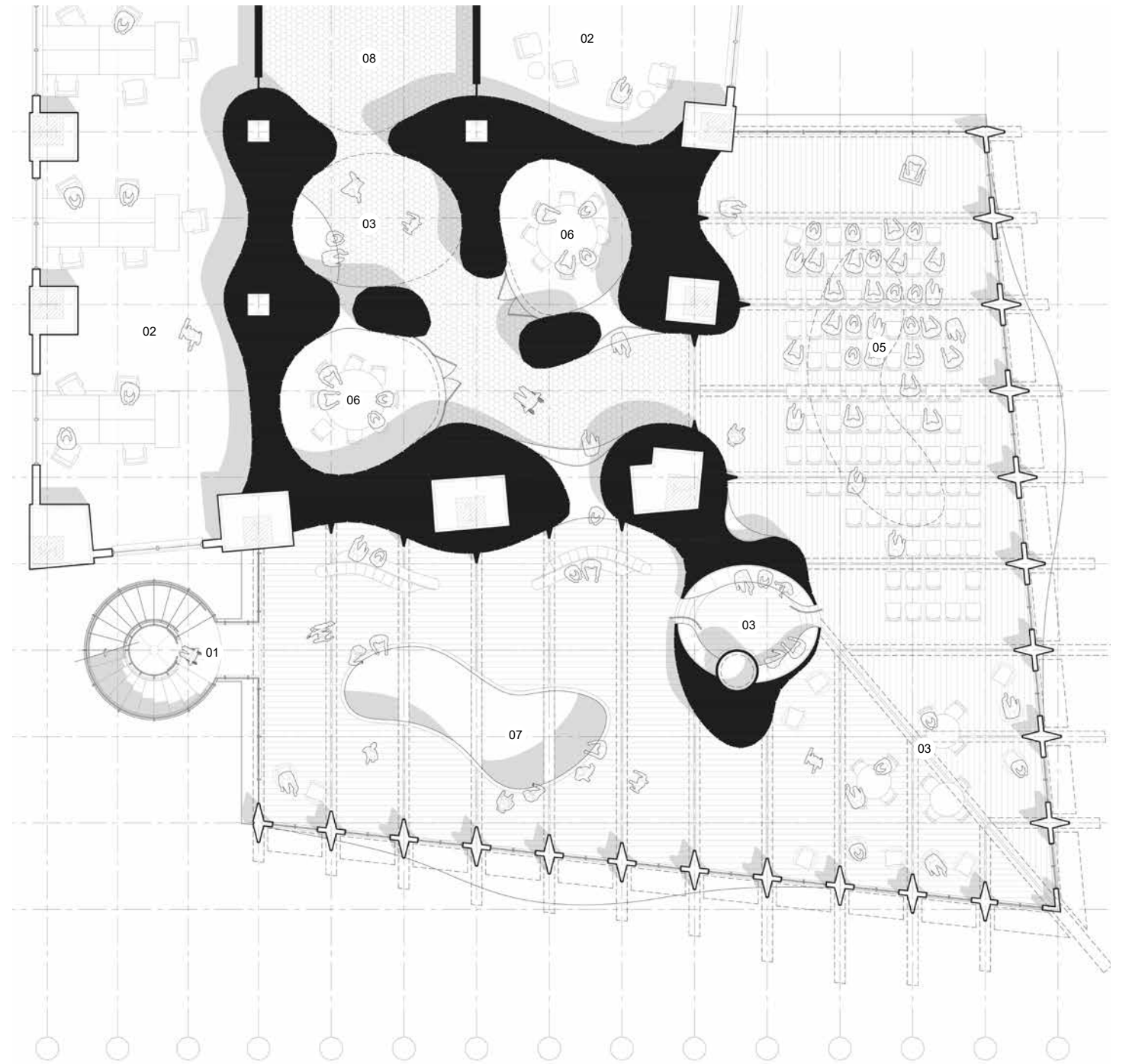


- Street Access 01
- Existing 02
- Lounge 03
- Small Lecture 04
- Big Lecture 05
- Lockers 06
- Restroom 07
- Cafe 08
- Storage 09
- Kitchen 10

117_SIP_125
First Floor Plan



117_SIP_126
Robert Smithson, *Nonsite (Essen Soil and Mirrors)*, 1969

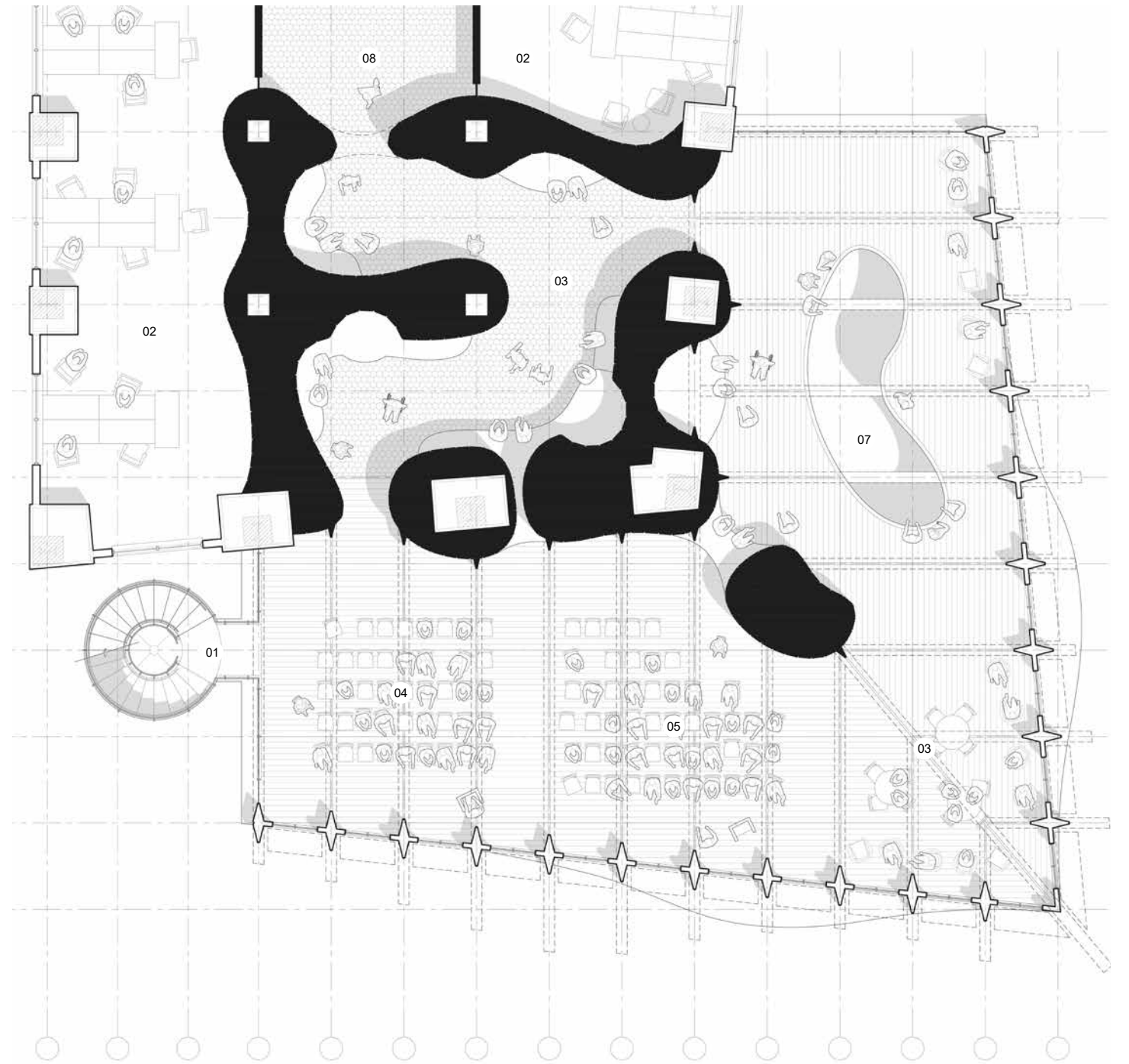


- Street Access 01
- Existing 02
- Lounge 03
- Small Lecture 04
- Big Lecture 05
- Meeting 06
- Open to Below 07
- Corridor Access 08

117_SIP_127
Second Floor Plan



117_SIP_128
Robert Smithson, *Gravel Mirrors with Cracks and Dust*, 1968



- Street Access 01
- Existing 02
- Lounge 03
- Small Lecture 04
- Big Lecture 05
- Meeting 06
- Open to Below 07
- Corridor Access 08

117_SIP_129
Third Floor Plan



117_SIP_130



117_SIP_131



117_SIP_132



117_SIP_133



117_SIP_134



117_SIP_135



117_SIP_136



117_SIP_137



117_SIP_138





117_SIP_140



117_SIP_141



117_SIP_142



117_SIP_143



117_SIP_144



117_SIP_145



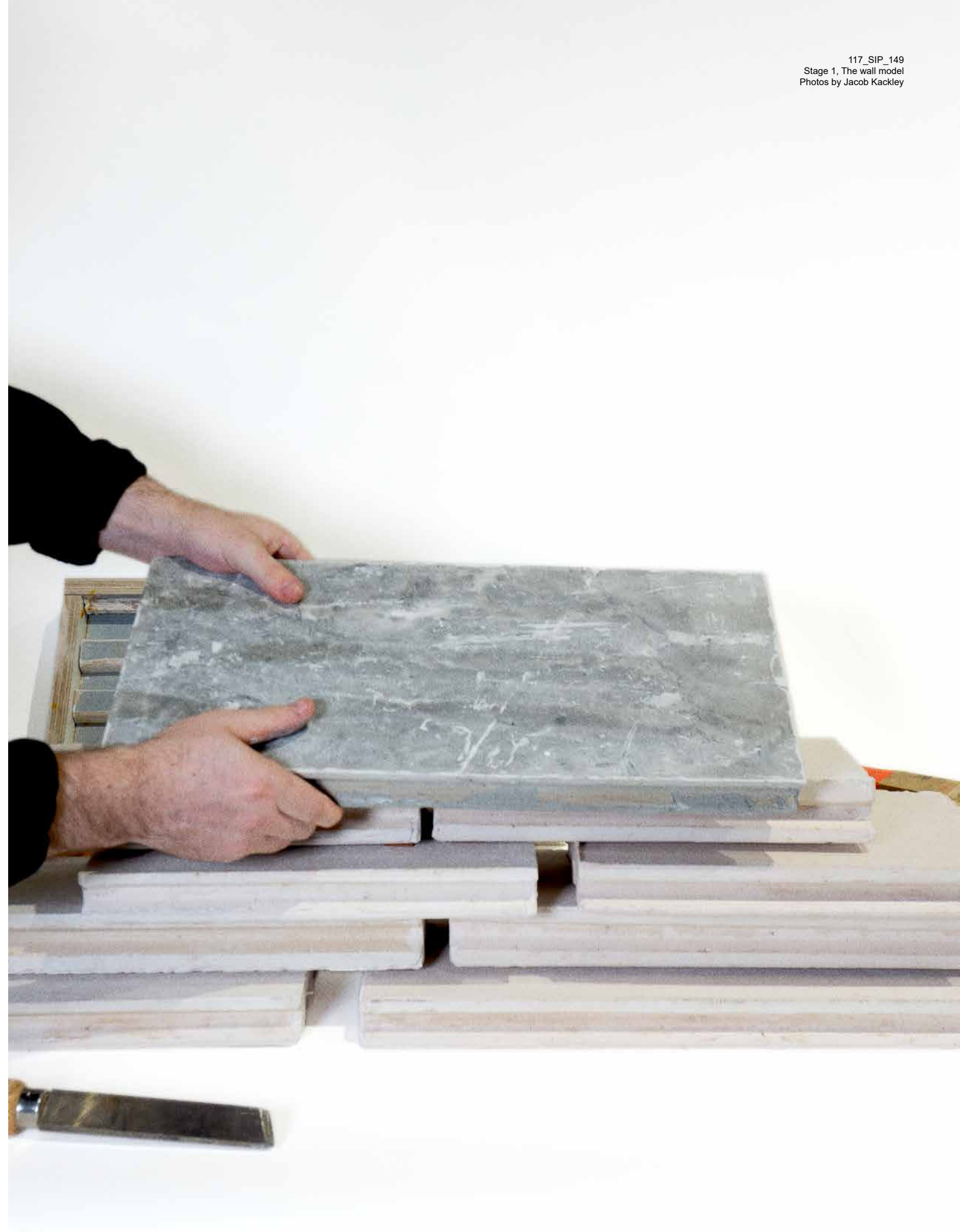
117_SIP_146



117_SIP_147



117_SIP_148





141_AS_101
Lift Day

avery.SPOT

That Floating Cloud above Avery Plaza

Columbia University, New York, NY

Academic Project, Built

Spring 2021, The Outside Project

Instructors: Laurie Hawkinson, Galia Solomonoff

Team: Zina Berrada, Sylvester Black, Eleanor Birle, Jiyong Chun, Marie Christine Dimitri, Yonah Elorza, Anays Gonzalez Sanchez, Laurie Hawkinson, Lin Hou, Nanjia Jiang, Joshua Jordan, Cecile Kim, Kim Langat, Cassandra Lee, Alex Mann, Cherry Xinyi Qu, Astrid Sardinias, Galia Solomonoff, Vera Montare Savory, Tristan Schendel, Lauren Scott, Kaeli Alike Streeter, Mark Taylor, Taylor Urbshott, Xindi Wang, Eunjin Yoo, Elie Zeinoun

In the Spring of 2021, this seminar course led by Laurie Hawkinson and Galia Solomonoff, was a collaborative initiative amongst students, licensed architects, engineers, and designers to design, build, and program a temporary commencement pavilion in the campus plaza bordered by St. Paul's Chapel (south), Avery (west), Fayerweather (east), and Schermerhorn (north) Halls. The process for the realization of the project began with research of pavilion precedents and progressed into design development, feasibility studies, structural and mechanical consulting, fabricator coordination, project management, budget management, and final construction.

During the day, the inflatable acted as a floating white canvas, a back-drop to the events of graduation. At night, its presence was morphed by its internally strung LED strips, instantaneously altering this atmospheric cloud into a color-changing, omnipresent glowing back-drop for dance, loud music, and late-night parties. A wood stud-framed platform below the inflatable was constructed to enhance the pavilion's presence in the plaza and construct a flat service for the pavilion's diverse programs. A feature rain chain diverts water that accumulates on the inflatable's roof, routing it underneath the platform and away from users standing above. A series of social distancing circles, colored in three different arrangements are routed into the plywood surface of the platform to accommodate and reference the three major programs: causal meetings, outdoor seminars, and formal lectures. A stand and large screen were built from wood and welded steel to ensure the use of the platform for virtual events related to university and school commencement. Three, mobile live-edge cedar benches blend into the base of the pavilion and help contrast with the artificial PVC-coated fabric of the pavilion's floating inflatable. My major contributions to the project included design development during the competition phase, furniture design and construction, steel beam erection in Avery and Fayerweather Halls, and hoisting of the inflatable.



141_AS_102
Arrival day



141_AS_103
Steel erection



141_AS_104
Material tests



141_AS_105
Live edge



141_AS_106
Platform



141_AS_107
Under the cloud



141_AS_108
Float



141_AS_109
Laurie and I say hello



141_AS_110
Event day

Blake Matthew Kem

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EDUCATION

Columbia University *New York, NY* 2020 - 2023
GSAPP, Master of Architecture

Miami University *Oxford, OH* 2016 - 2020
Bachelor of Arts in Architecture
Bachelor of Arts in Spanish
Summa Cum Laude
GPA: 3.99/4.00

WORK EXPERIENCE

Office for Metropolitan Architecture *New York, NY* May 2022 - Sept. 2022
Architectural Intern

Kohn Pedersen Fox Associates *New York, NY* June 2018 - Aug. 2021
Architectural Intern

Collaborated on mixed-use architectural projects in Boston, San Francisco, and New York City
Generated numerous design studies collaborating directly with lead designers and principals
Met directly with clients and industry consultants to inform design process
Prepared schematic design packages for city and client approval
Drafted architectural models synthesizing 3D printing and hand modeling techniques

Kelty Tappy Design, Inc. *Fort Wayne, IN* August 2015 - Feb. 2018
Architectural Intern

Met with clients in schematic design phase
Developed first-phase marketing drawings
Researched and analyzed international building codes and local zoning laws
Created final draft construction documents for state approval and construction bidding

EXTRACURRICULAR

Graduate Studio Teaching Mentor *Spring 2022, Fall 2023, Spring 2023*
Makerspace Monitor *Spring 2021 - Spring 2022*
“New Conceptions”, Symposium Panelist *January 2021*
Verm Fictvm, Graphic Designer and Editor *2020*
Undergraduate Teaching Assistant *Fall 2019*

AWARDS + ACHIEVEMENTS

Architecture Top of Class, Department of Architecture + Interior Design *Spring 2020*
Miami University Outstanding Seniors Medallion Recipient *Spring 2020*
Department of Energy Solar Decathlon Attached Housing Division, Undergraduate First Place *Spring 2019*
Howard E. Gartner Scholarship, Award for Academic Excellence *2017, 2018, 2019*

STUDY ABROAD

Miami in Spain *Gijón, Spain* Summer 2015
Indiana University Honors Study Abroad Program *León, Spain* Summer 2017

