ARCHIVE CLIPPINGS

Carter Horton
Columbia GSAPP

Architectural History is not a collection of stylebooks.

It's an endlessly deep pool of outcomes, the unique **byproducts of political, economic, material, social, and aesthetic conditions.** To study history is to learn how to play the archive like an instrument.

Starting a Masters in Architecture having never heard of Rhino, never opened Photoshop or AutoCAD, having never used a laser cutter or a CNC, having never even held an exacto blade or ripped trace paper was a leap. Admitting me was a testament of the creativity of the admission committee. All I had in my toolbox when I arrived were **clippings from archives** across the country.

I wrote then that the study of history as an experimental practice was **"critical in the development of new architecture, new institutions and new cultures."**

Through these projects I've tried to put the clippings to work imagining **new forms of community, agriculture, mourning and consciousness.**

FINDING AID

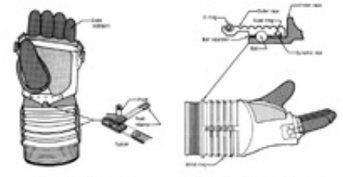


Figure 14.- Glove and wrist assembly.

Figure 15.- Side view of glove and wrist assembly.

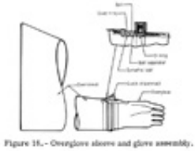


Figure 16.- Overglove sleeve and glove assembly.

WE THE BACTERIA: SURFACE TREATMENT

Prof. Mark Wigley

SITE: Milan Design Triennale, Milan, IT

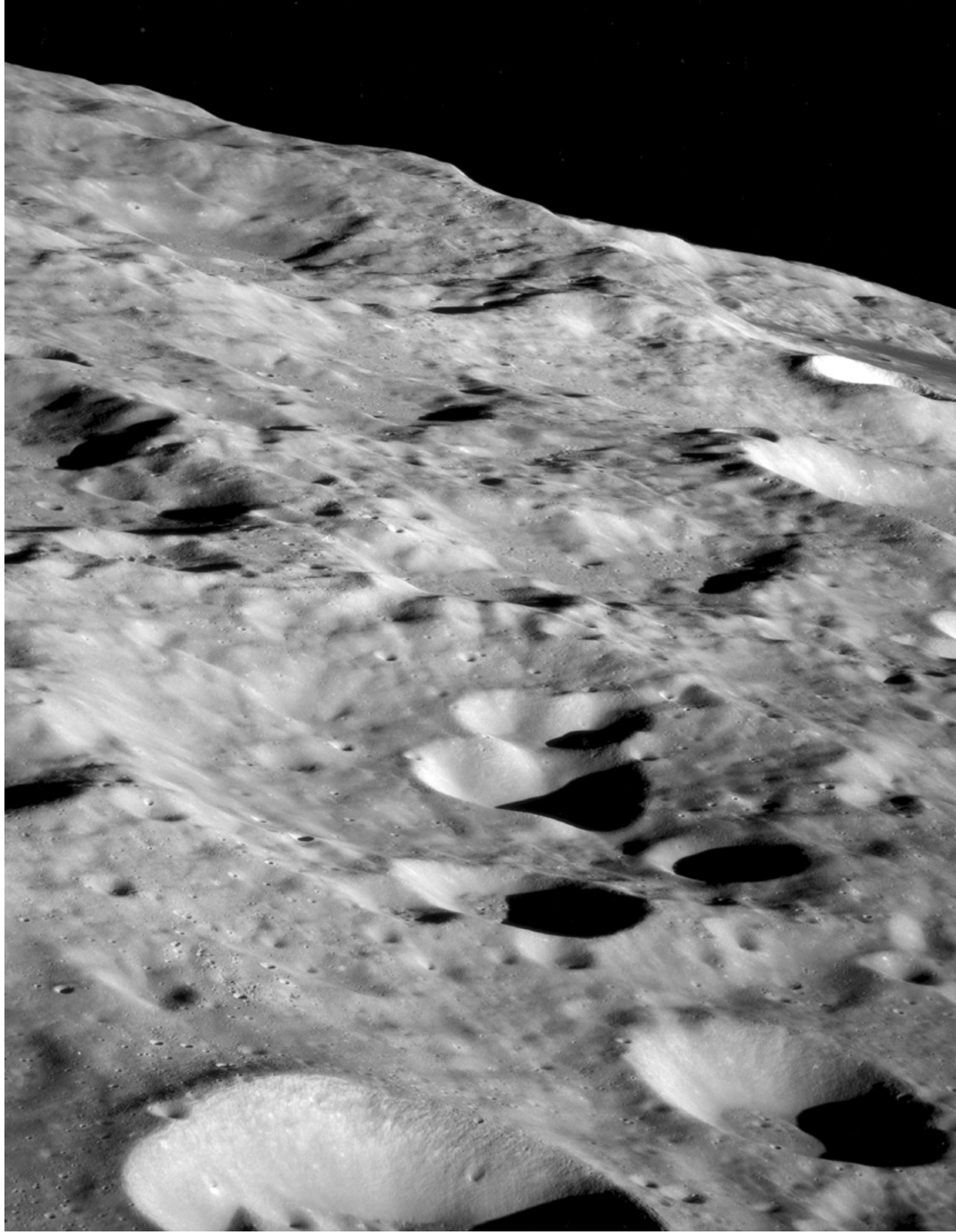
TIME: *FALL 2024-SPRING 2025*

Two central risks of the Apollo 11 Mission were the forward contamination of the Moon by terrestrial microbes and the backwards contamination of the Earth by Extraterrestrial Microbes.

The project, done in anticipation of the upcoming Milan Design Triennale, asks the questions, if there Biosphere is all encompassing, going deep underground and high into the athsenosphere, where are there holes in it?

And have there been punctures in it?

From there a deep investigation into the Sterilization and Quarantining Protocols of the Apollo 11 Mission unfolded. In it the surface treatment of the interior of the container is paramount. For the Astronaut, the space suit and the Isolation Garment provide prophylactic layers, for the lunar sample, a super-sterilizated home in which to be investigated.



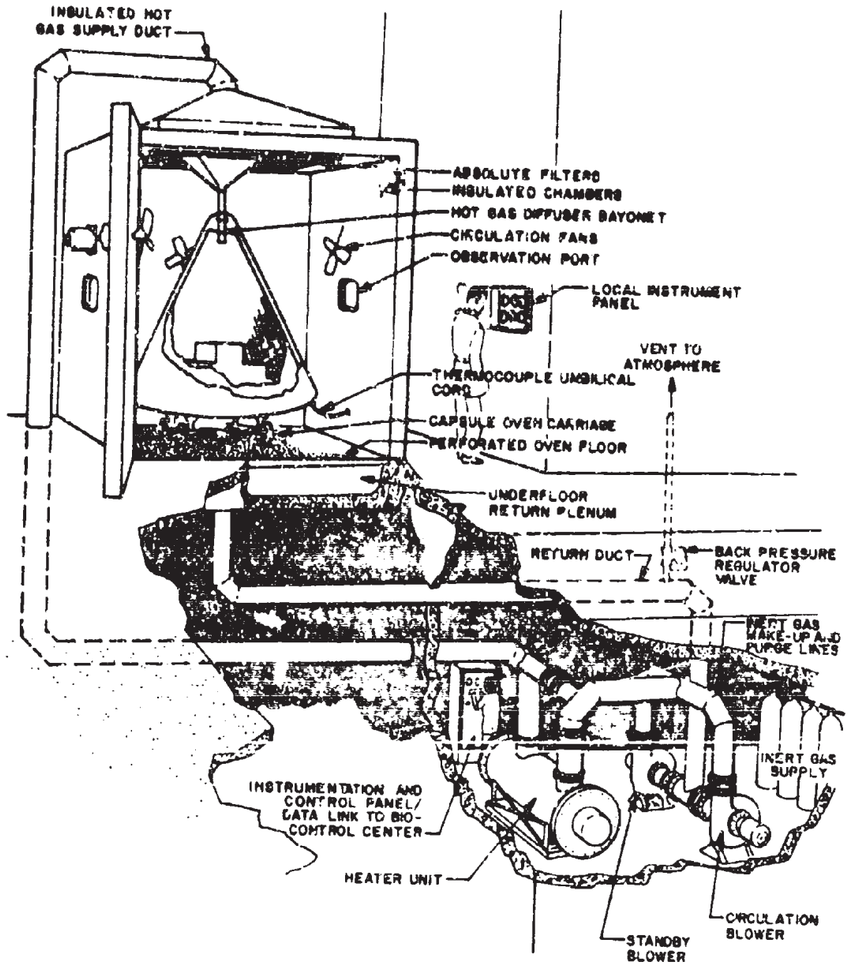


Figure 5. Thermal Heat Sterilization Oven

1966, NASA comissions, from scientists at Baylor University, a study about the potential forwards and backwards contamination risks of collecting Moon rocks

Excerpt from the Baylor Protocols:

“There exists a small but finite probability that lunar substances may be injurious to organisms on Earth. Such biological injury may be due to an inherent toxicity of the material or to the capability of such materials to propogate itself in Earth species.

The toxic materials may be classified as follows:

a. Radioactive materials from the Moon itself. Early studies within the Lunar Receiving Laboratory will explore this possibility
b. Unknown inorganic polymers possibly containing silica, boron, and other inorganic elements
c. Deleterious low-molecular-weight compounds acting as cellular and metabolic poisons, mutagens, irritants, antimetabolites, or anti-vitamirs
d. Unknown metallo-organic compounds, effects on terrestrial organisms unknown.

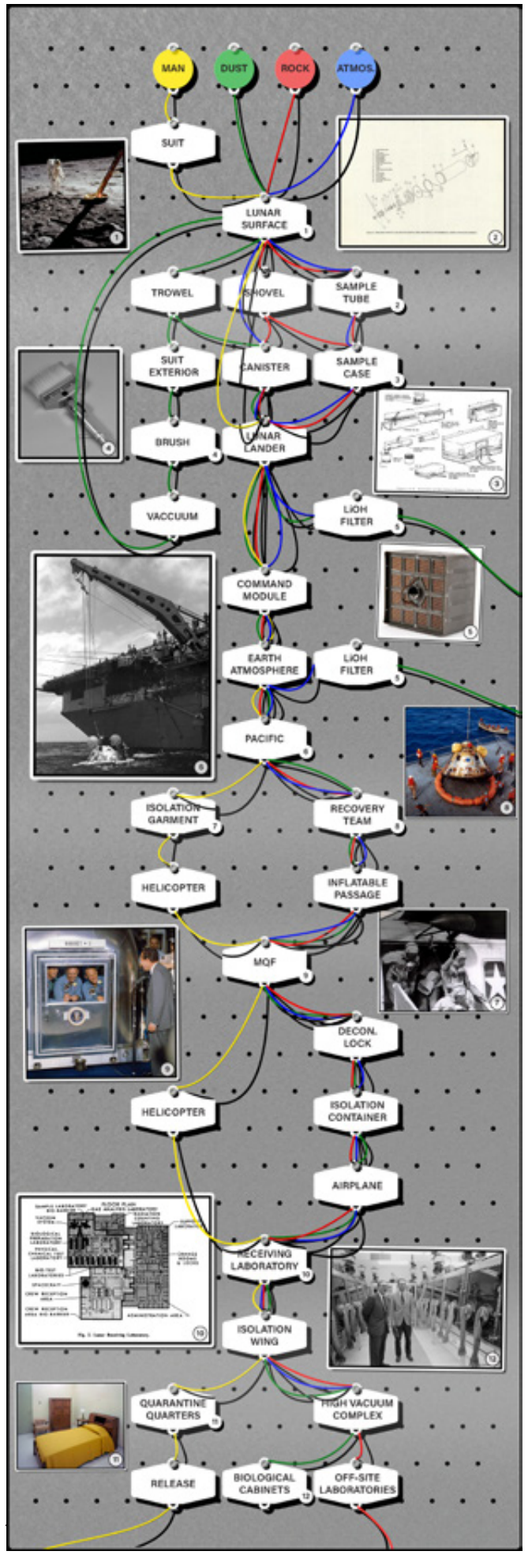
The replicative materials may be classified as follows:

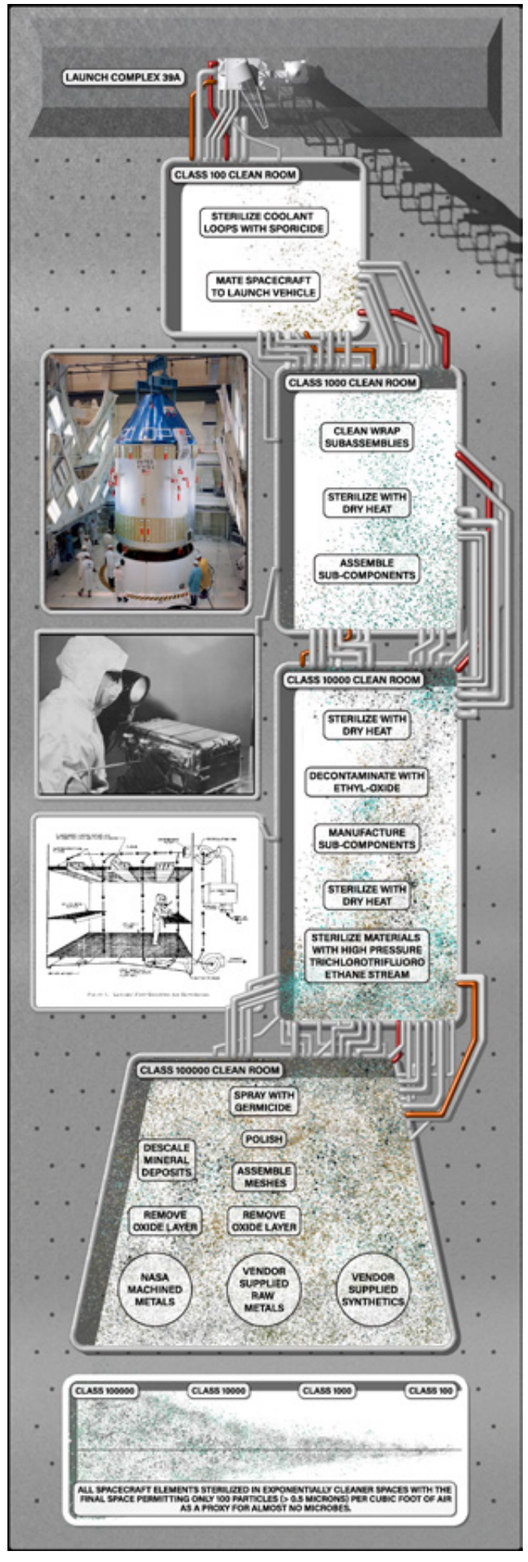
a. Organisms (viral, bacterial, or fungal) taken to the moon, subject to high-incident radiation, and returned unwittingly to Earth. Such organisms have mutated and have no counterpart on Earth
b. Plant materials of lunar origin cpable of reproducing on Earth as autotrophs or heterotrophs in nutrient media, resulting in naturalized forms producing deleterious effects by contact or competition.
c. Xerophilic life forms of lunar origin using as protoplasmic materials elements found in terrestrial organisms such as carbon, hydrogen, oxygen, sulfur, and phosphorus.”

While the act of wrapping and unwrapping materials in quarantine was a gesture of preservation, it’s function was highly ineffective. It is highly likely that streams of air, and therefore microbes, escaped the Spacesuits of

Opposite:
Thermal Heat Sterilization Oven

Left:
Stills from the Film Installation





Armstrong and Aldrin, permanently contaminating the landing site with terrestrial bacteria.

The crew's walk across the deck of the USS Hornet, clad in Biological Isolation Garments which surely leaked, exposed the entire crew and President Richard Nixon to any potential Andromeda strain.

This pursuit of invisible forces required the invention of two counteracting invisible protocols. Negative pressure differentials between Lunar Lander and Command Module ensured a constant flow of microbes through LIthium Hydroxide Filters and into space. After absolute sterility measures cause 6 unmanned Lunar Orbiters to crash, NASA implemented percentage-based bioburden thresholds, that took microbial measurement out of the empirical and into the theoretical. No longer were labtechnicians providing samples to be measured, but were measuring components and projecting microbial presence.

The efficacy of the protocols is a secondary interest of the research project however. More essential to the project is the intense scrubbing and thinking about the invisible phenomenon of the surface. On its journey to the Moon, the interior face of the Lunar Sample Return Canisters were alleged to have been the cleanest surfaces on Earth. This intense sterility mirrors the kind of obesession with cleanliness throughout modernity. With the exhibition we draw parallels between the surface treatment of the modern house, taken to the extreme in the sterility of the Lunar Module, and the surface treatment of a house for extra-terrestrial microbes. If the process of sterilizing and the preserving the sterility of an object was the essential goal, the Apollo Mission was no more successful than the Lazaretto of the 14th century were at preventing the plague. The purpose of the investigation was to signify a specific moments relationship to microbial life, to analyze the specific techniques, paranoias, media choreography and national mythology that was always rooted in the invisible.

Opposite Left:
Diagram detailing the Phases of Quarantining for objects returning from the Moon

Opposite Right:
Diagram detailing the Phases of Sterilization

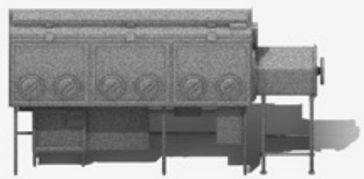
Left:
Images from the Lunar Recovery Process

Biological Isolation Garment

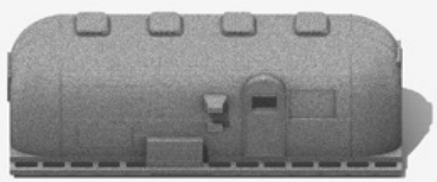
Lunar Sample Return Canister

“Eagle” Lunar Lander

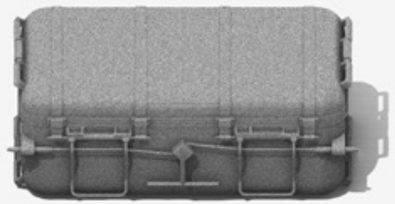
Biological Isolation Cabinetry

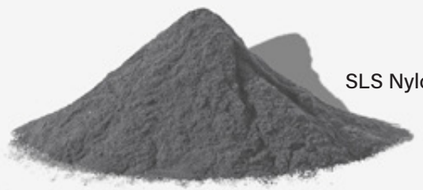


Mobile Quarantine Facility (MQF)



Lunar Sample Return Case

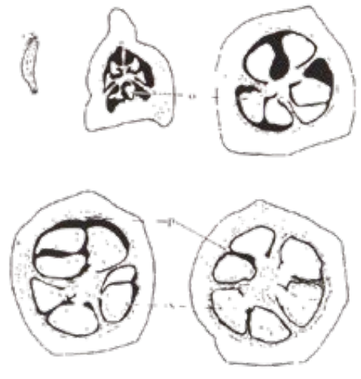




SLS Nylon 12 Powder

Opposite:
Models of Microbial Containers

Left:
Photo of Apollo 11 crew member being lifted out of the Pacific



II.

La Marqueta After Property

Prof. Emanuel Admassu

SITE: E 112 - 114th St,
New York, NY

TIME: *FALL 2024*

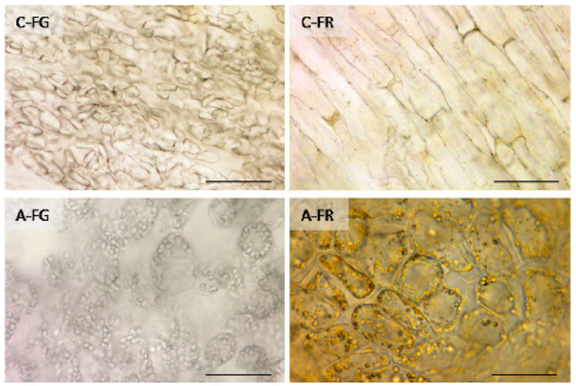
La Marqueta After Property as a project investigates the function of property on Genetic Material, and how markets are fundamental components of a larger global system.

As a building, La Marqueta After Property seeks to add. By fusing the function of a market with the function of a research laboratory, seed bank and reference archive, the site takes on a central role in the coordination between East Harlem and Latin American countries where the produce sold at La Marqueta is grown. The site is part of a speculative system of knowledge remission and is entirely dependent on the decentralization of the "Partner Sites."

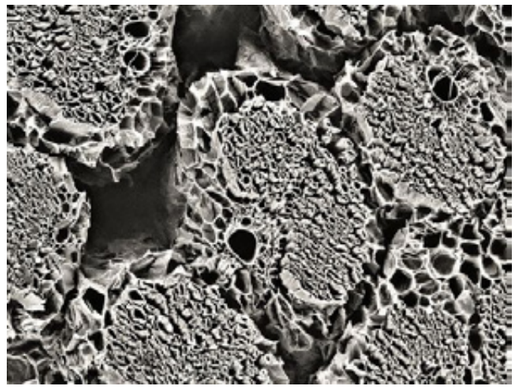
These "Partner Sites," seek to create an alternative model of sourcing produce. Instead of looking to Chiquita Banana, the site enables people to engage directly with scientists locally and farmers abroad.

Opposite: Final Installation/Drawing

a Archival Print, 1860s



b Microphotography of the Banana Peel



c Banana Stalk under a Microscope

d Archival Print, 1901

e Tressel Bridge on Site, 1870s

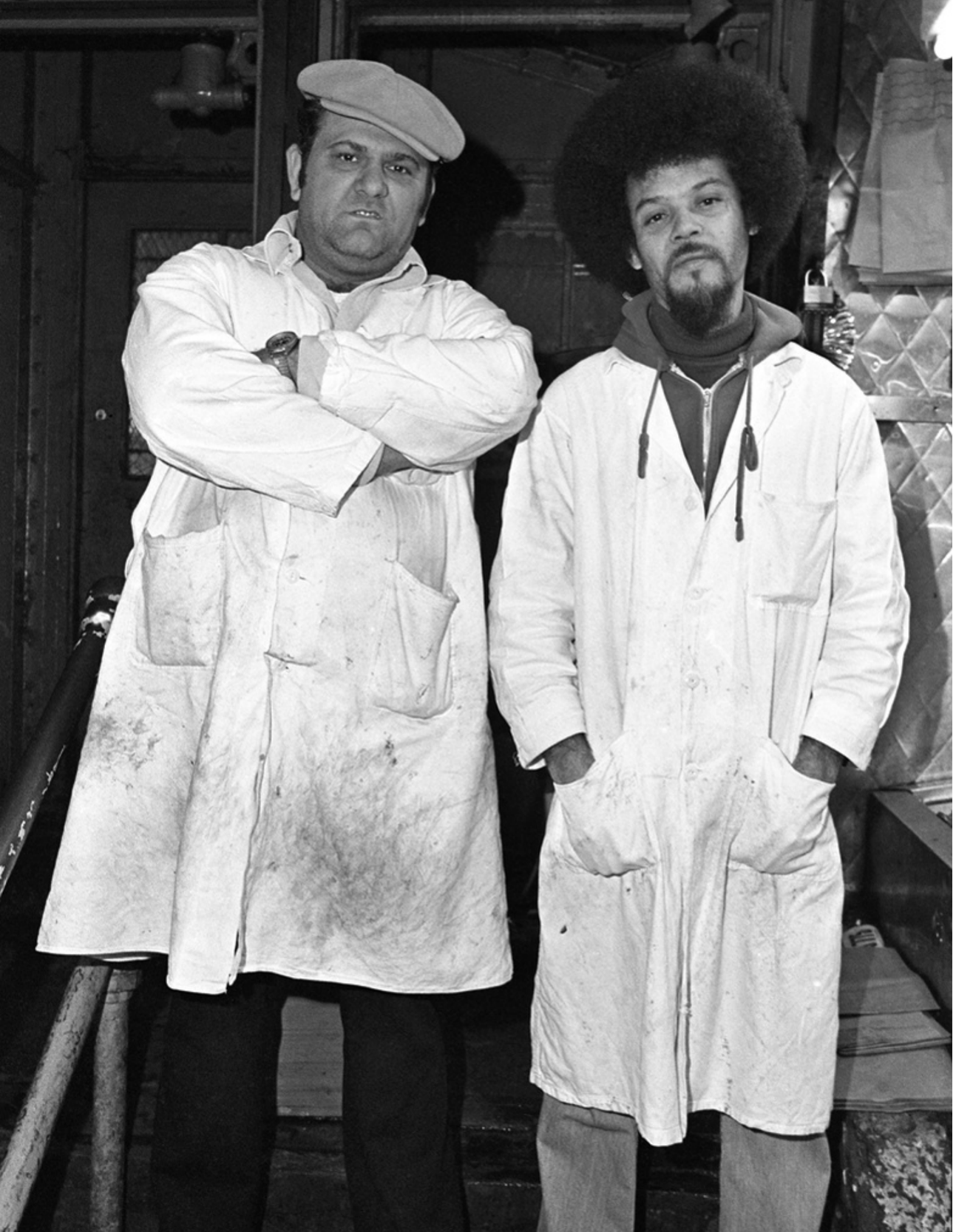
f Archival Print, 1894

Opposite: Archive Clippings

Opposite: Site Photo Collage

Next Page Right:
Facsimilie Records
of Market Components

Next Page Left:
La Marqueta, 1980s



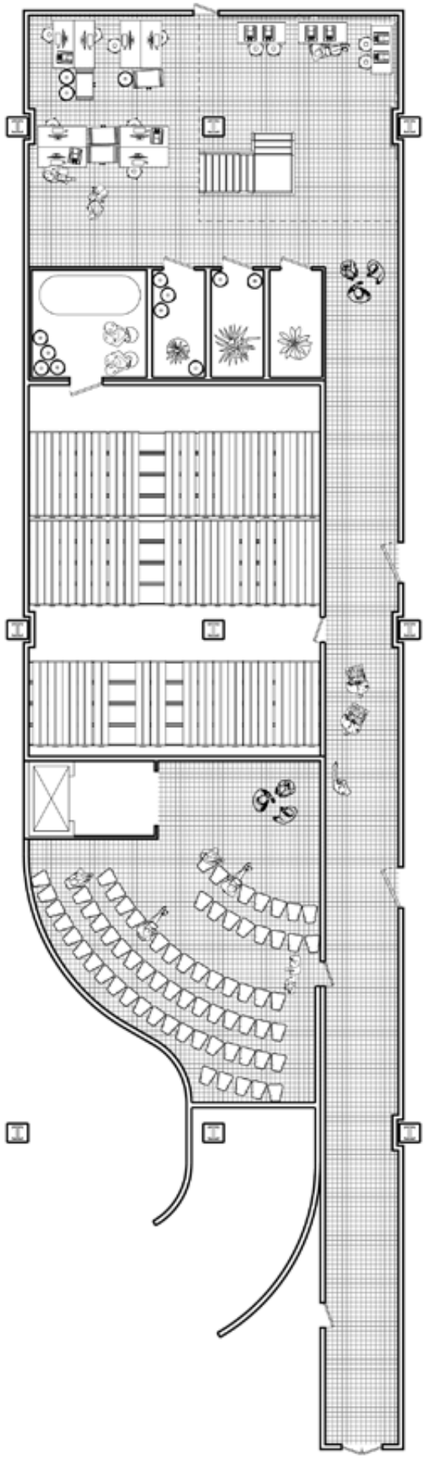

SITE: LA MARQUETA, PARK AVENUE VIADUCT
SUBJECT: UMBRELLA
10

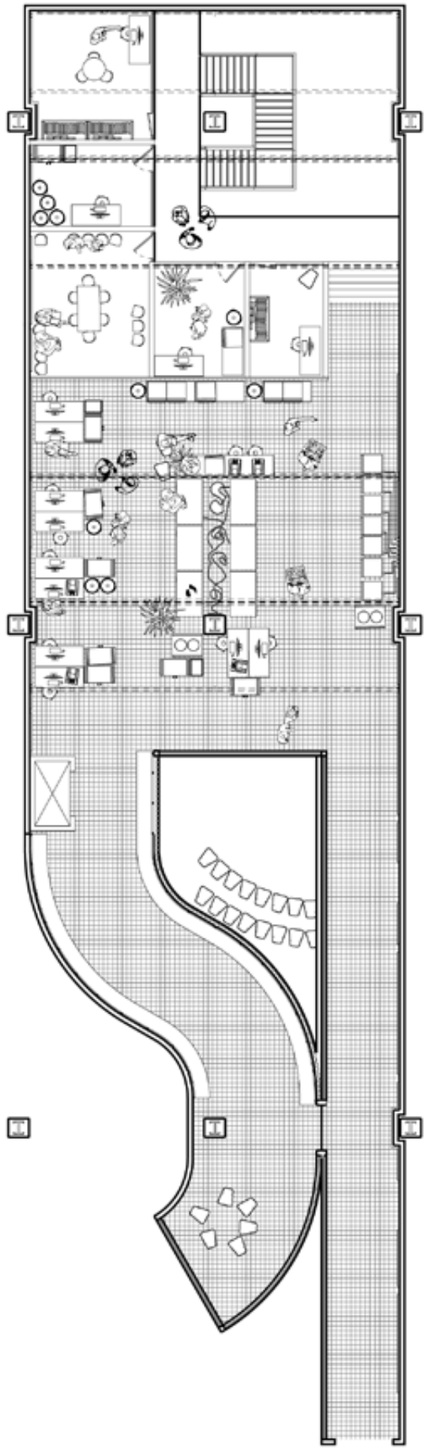

SITE: LA MARQUETA, PARK AVENUE VIADUCT
SUBJECT: MUSCLE CAR.
45


SITE: LA MARQUETA, PARK AVENUE VIADUCT
SUBJECT: MTA TRAIN CAR.
13


SITE: LA MARQUETA, PARK AVENUE VIADUCT
SUBJECT: BARREL
61


SITE: LA MARQUETA, PARK AVENUE VIADUCT
SUBJECT: SCALE
25





Vignettes of daily use:

(a) Storing Seeds in Barrels suspended from above

(b) Waste Collection; Bio-waste from La Marqueta would go into aerobic digesters to produce methane for use on site

(c) Opening up the Facade of the Market Hall

(d) Groups of long-time East Harlem residents

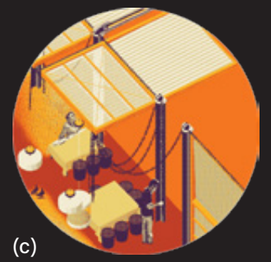
(e) Community Kitchen space used by multiple generations

(f) Reference Library for cross-referencing gene sequences

(g) An Exchange between vendor and local resident

(a)

(b)



(c)

(d)

(e)

(f)

(g)

Opposite: 1st & 2nd Level Floor Plans of Community Kitchen

Above: Vignettes Of La Marqueta

La Marqueta After Property adds a new chapter to the Sites long history as a hub for culture and exchange in the space left over in the creation of the Park Avenue Viaduct.

(1) Building 3 and Lot 4 are currently vacant industrial kitchen and unconditioned storage space

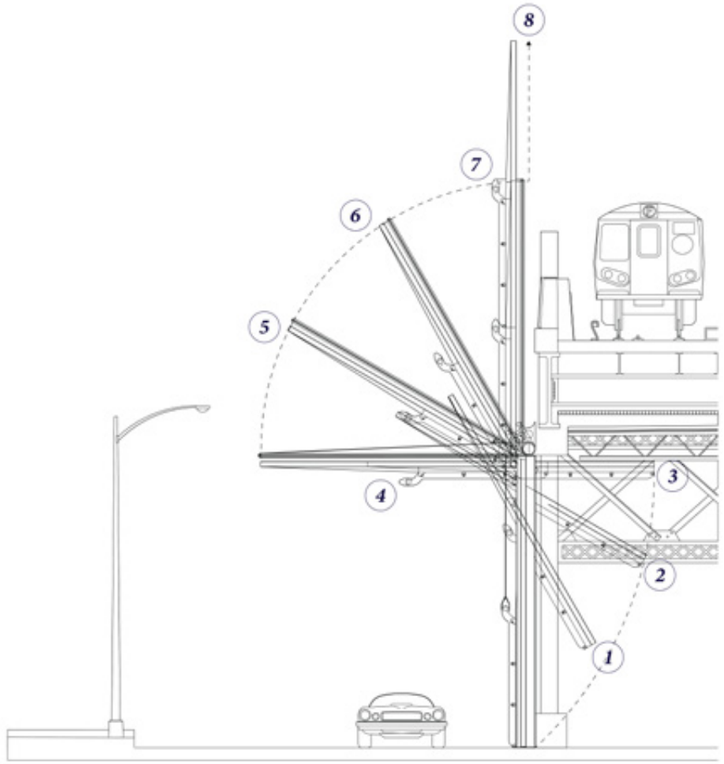
(2) Opening up Building 3 and reusing the CMU

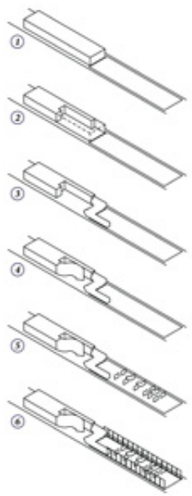
(3) Repositioning Shipping Containers from Lot 4

(4) Adding an Auditorium and Reference Library

(5) Reusing CMU material from Building 3

(6) Installing movable facade panels





Program:

(a) Market Hall

(b) Seed Storage

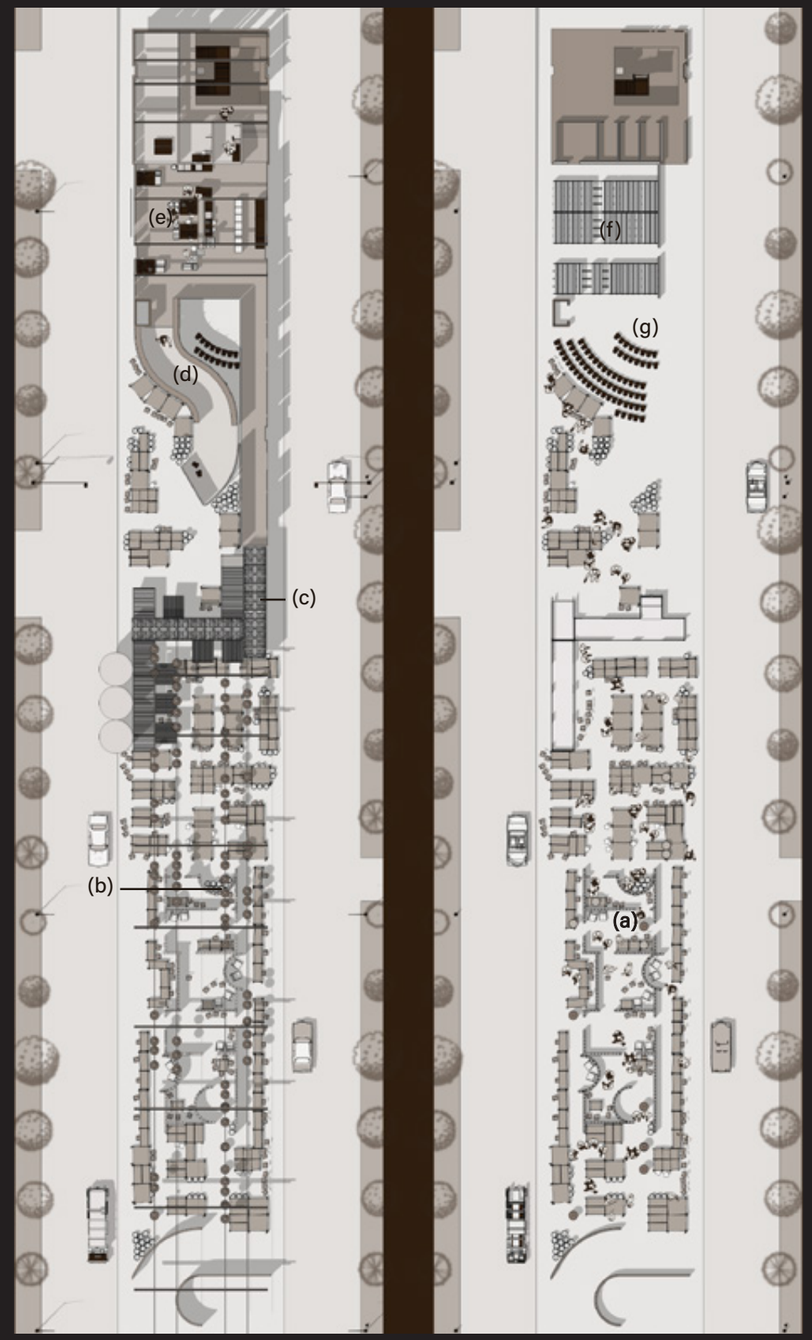
(c) Laboratory Entrance

(d) Reference Library

(e) Community Kitchen/Laboratory

(f) Long-Term Seed Storage

(g) Auditorium



Right: Site Plan

Opposite Left: Building Sequence

Opposite Top: Facade Panel Opening

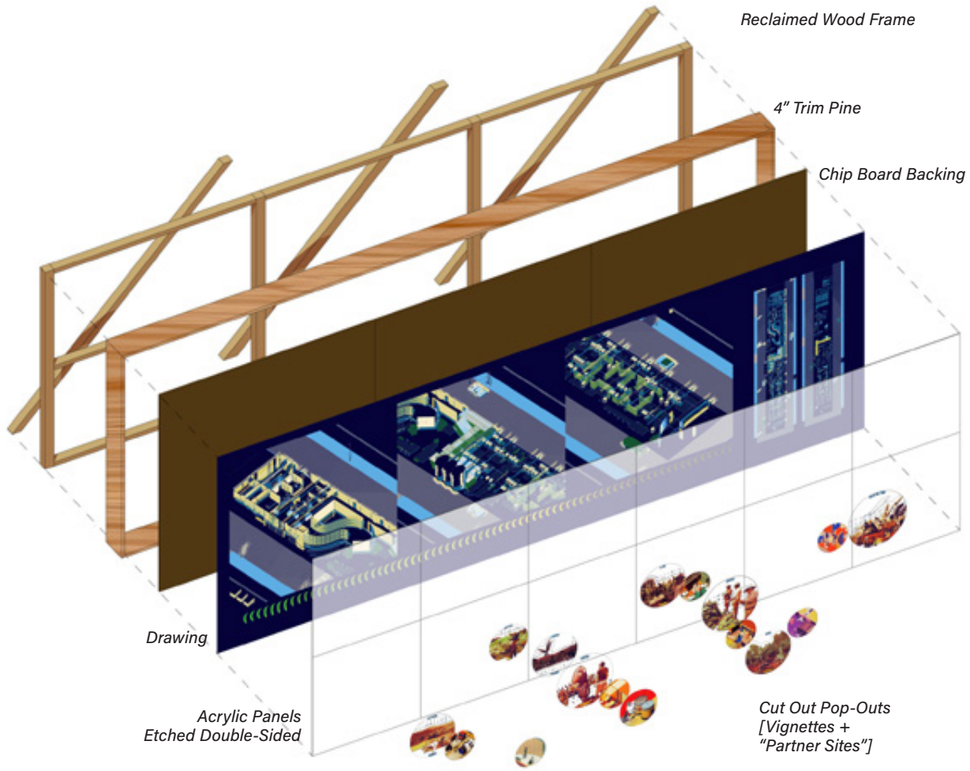
Opposite Below: Photos of La Marqueta, Exterior & Interior

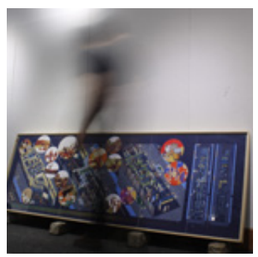
Above: Final Drawing

Left: Speculations on Partner Sites

Opposite Left: La Marqueta 1970s

Drawing Assembly:





Opposite:
Laser Etch Details/Installation Photos

Left:
Installation Photo

Above: Axon of Drawing Assembly

Opposite: Final Installation/Drawing

ARCHIVE OF ROCK CONSCIOUSNESS

Prof. Mark Wasiuta

SITE: Scoglio del Monacona, Capri, IT

TIME: *Spring 2025*

Rock Consciousness is the focused awareness of geological forces affecting you now. Myths are a powerful way of conditioning the psyche to respond to geological forces in specific ways

It occurs in episodes called Conscious Encounters. The definition of a conscious encounter is a media-generated product expressed most poignantly through film.

Because of Capri's centrality to the myth-making genre of movies, i.e. Le Mepris, It Started in Naples, Journey to Italy, it figures as a celebrity rock with a celebrity myth-making history.

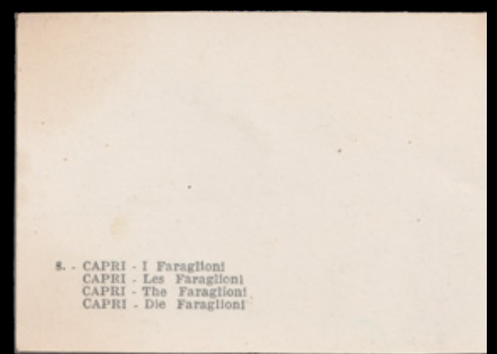
The media archive at Capri is simultaneously an archive of geological films and the venue for the display of geological films. Throughout the complex a series of spatial conscious encounters are deployed, image projected on rock at all scales.

Opposite: Disembarking at the Helipad

a The Cliffs of Anacapri

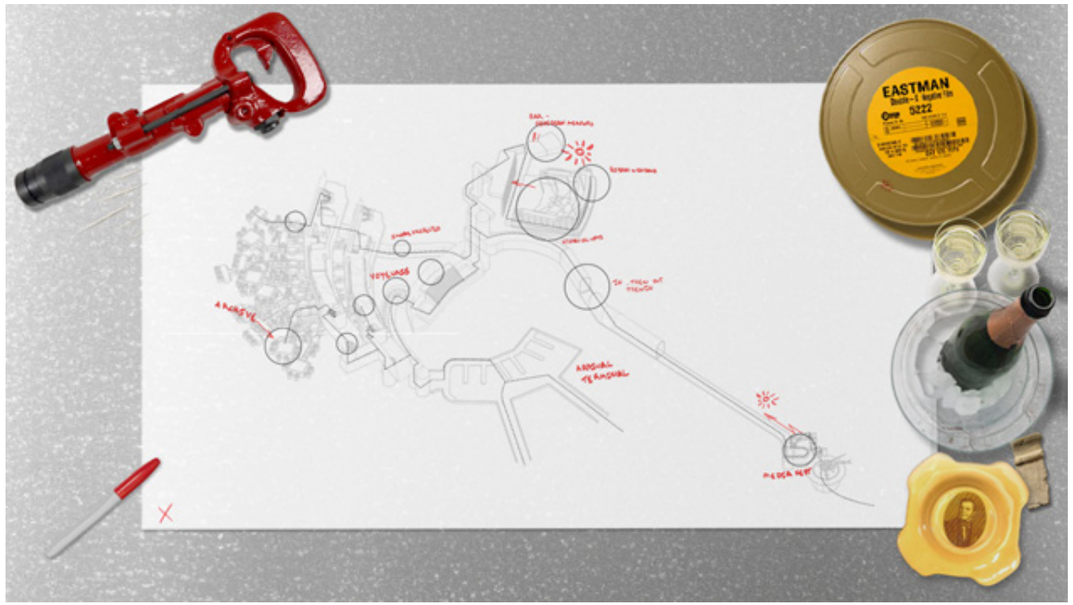
b Faraglioni, 1920s

c 1902 Postcard, Four Languages on reverse



d Approaching the Grotta Azzurra

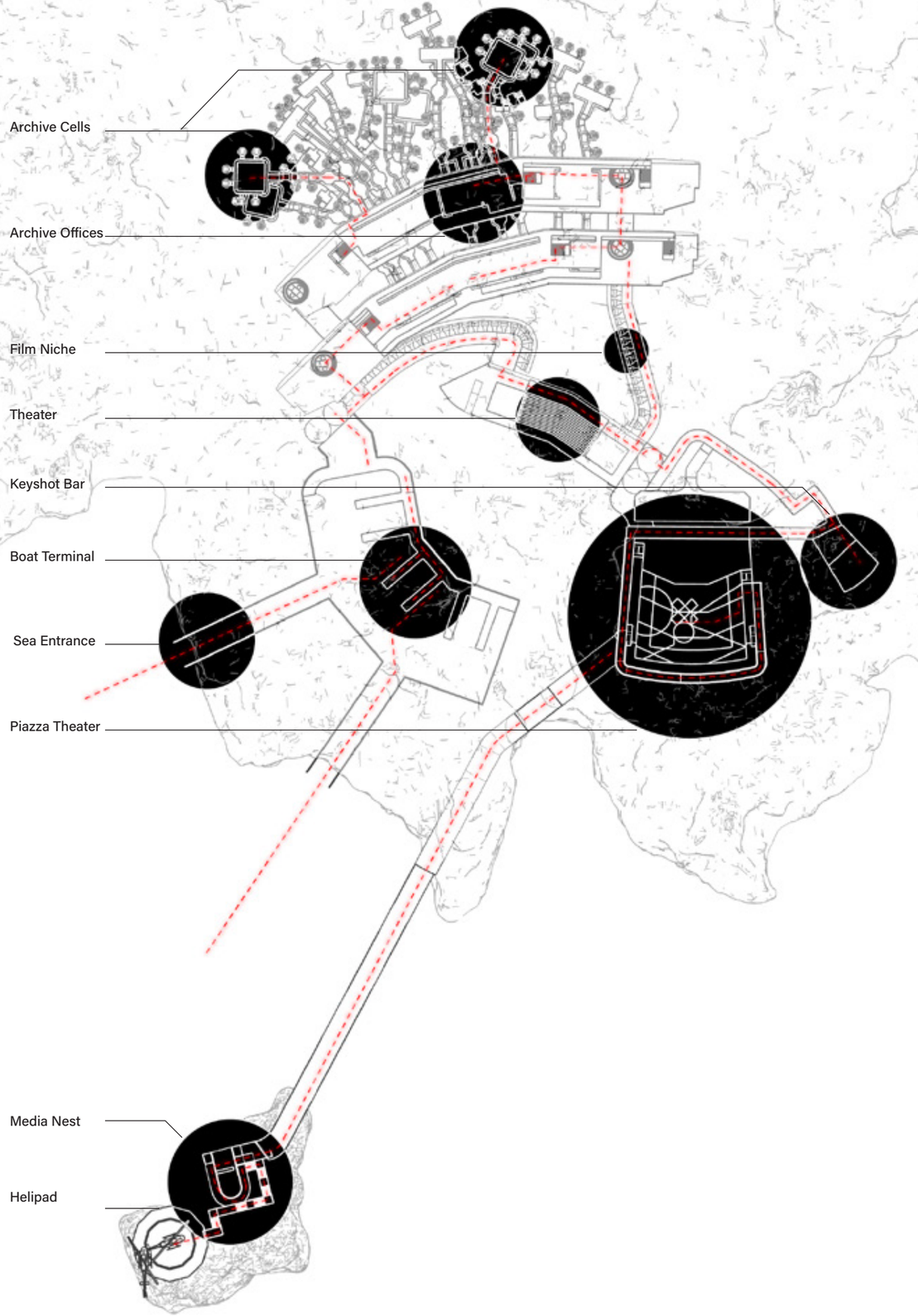
f Capri - Marina Piccola col Faraglioni

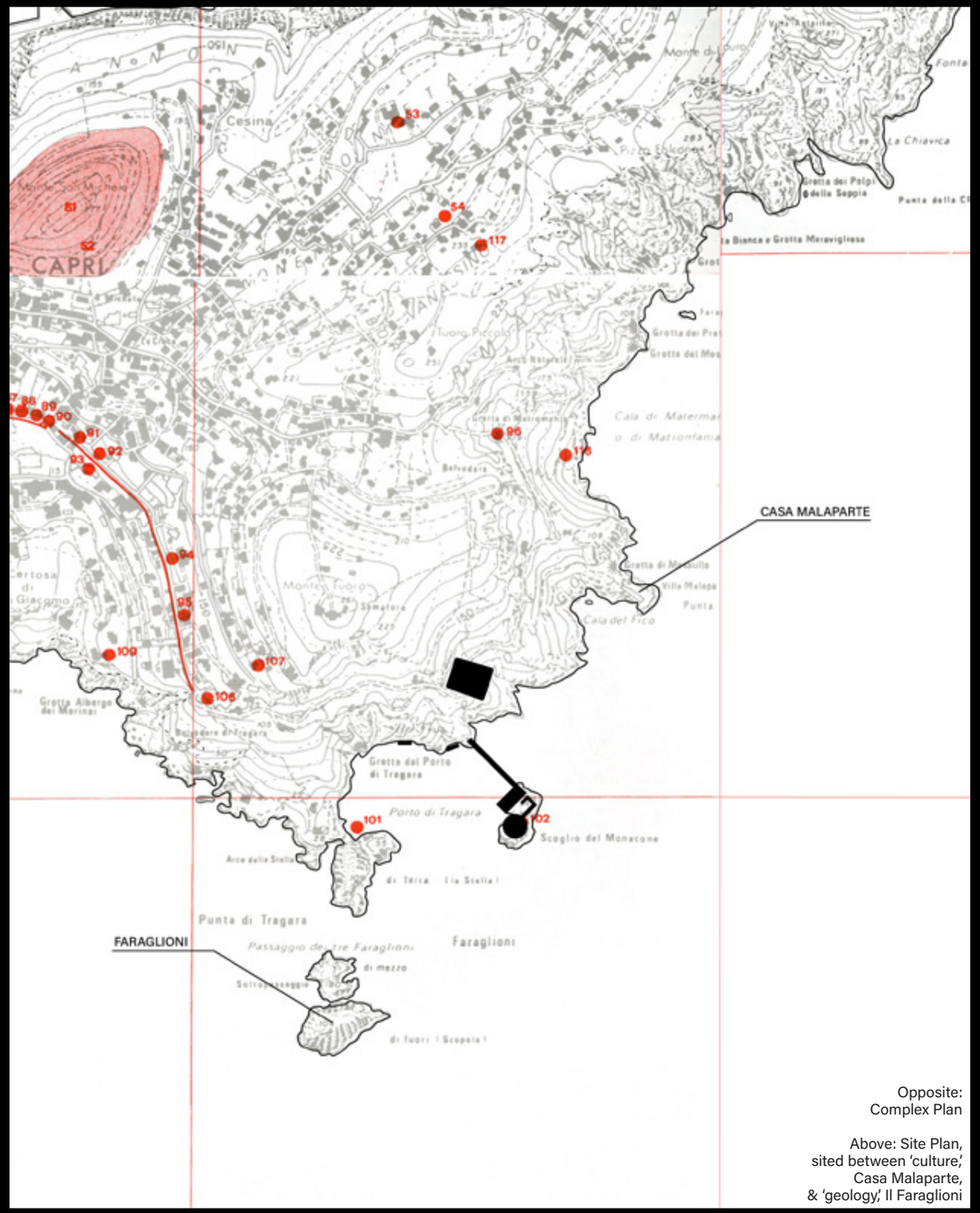


Opposite: Archive Clippings

Top: Research Desk (February)

Above: Research Desk (May)





Opposite:
Complex Plan

Above: Site Plan,
sited between 'culture,'
Casa Malaparte,
& 'geology,' Il Faraglioni

01 . . .approach. . .

02 . . .boat terminal. . .

. . .film niche. . . 03

. . .media nest surrounded by celebrities. . . 04

05 . . .in the Archivists office. . .

06 . . .film reel storage cell. . .

. . .archive desk. . . 07

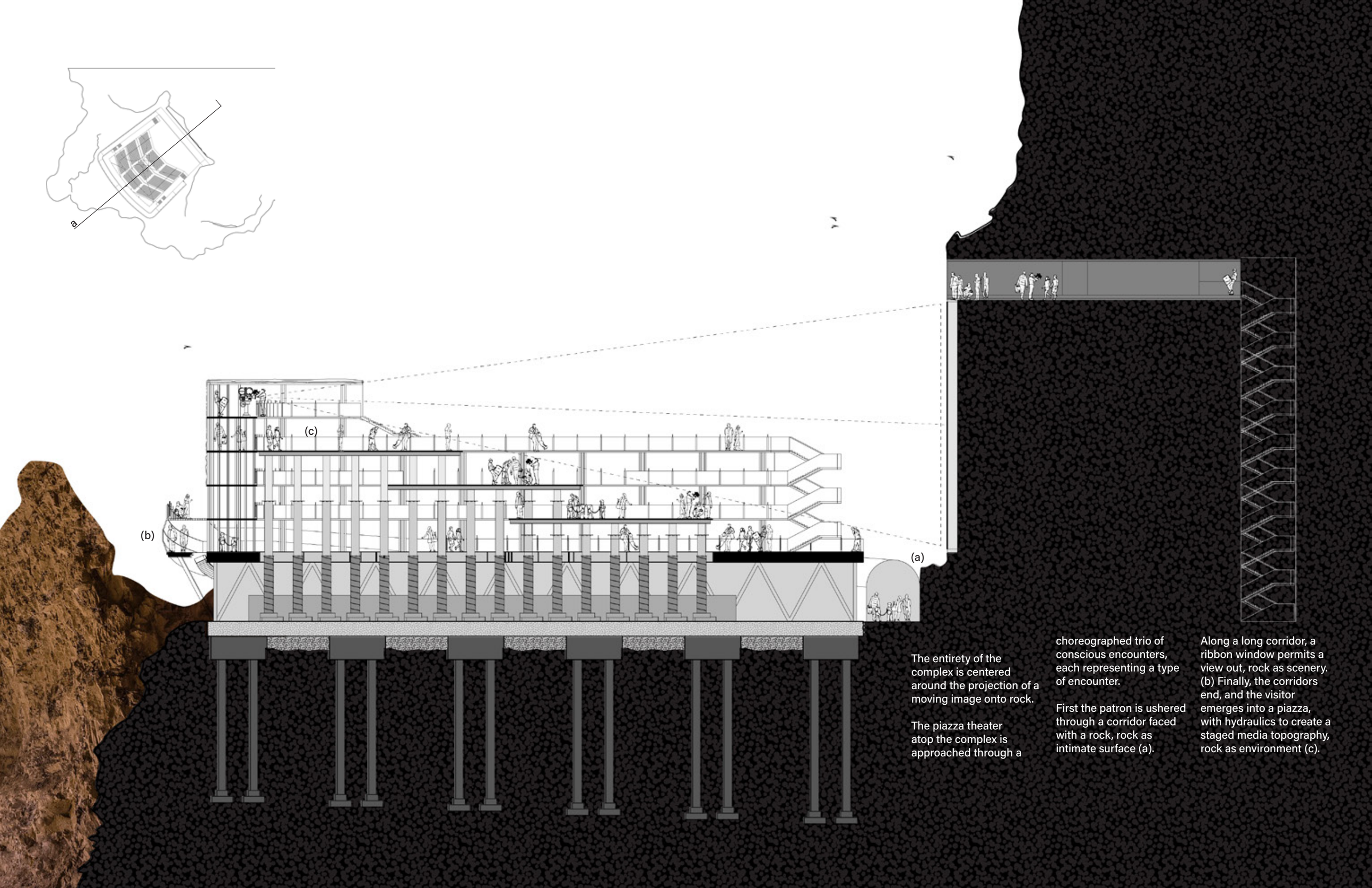
. . .in the Bar surrounded by celebrities. . . 08

09 . . .Piazza Theater. . .

10 . . .ribbon window. . .

. . .Rosi gives remarks. . . 11

. . .The Mattei Affair plays in the Piazza. . . 12



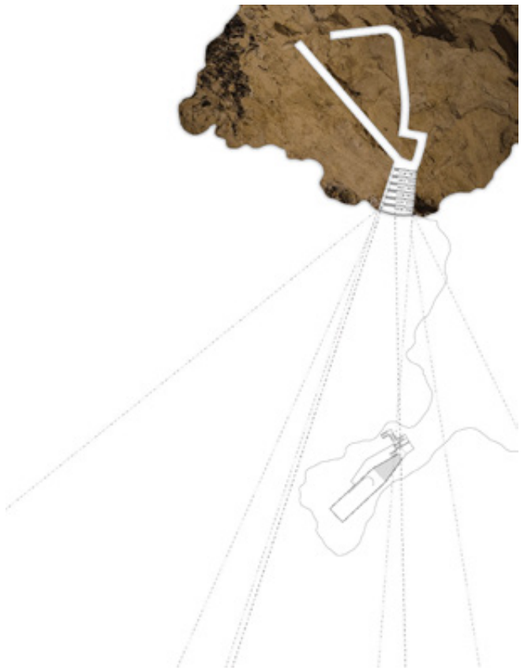
The entirety of the complex is centered around the projection of a moving image onto rock.

The piazza theater atop the complex is approached through a choreographed trio of conscious encounters, each representing a type of encounter.

First the patron is ushered through a corridor faced with a rock, rock as intimate surface (a). Along a long corridor, a ribbon window permits a view out, rock as scenery. (b) Finally, the corridors end, and the visitor emerges into a piazza, with hydraulics to create a staged media topography, rock as environment (c).

Before entering into the corridors to the piazza theater, visitors pass by a Bar pointed directly at the Casa Malaparte, cut into stone beneath the exact location Jean-Luc Godard placed the camera in Le Mepris.

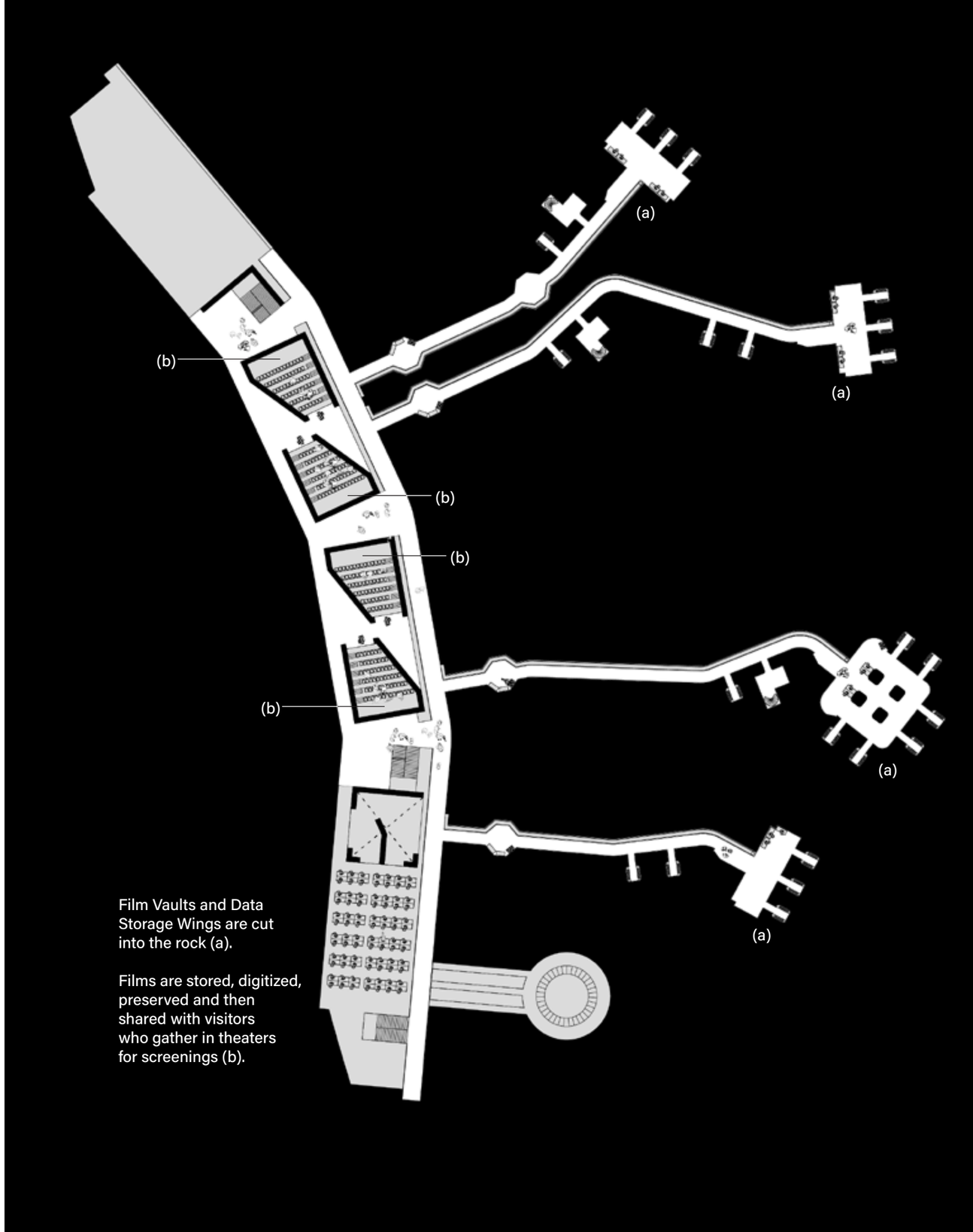
The Bar generates a framed static image, a fourth type of spatial conscious encounter.



Opposite:
Archive Wing Plan

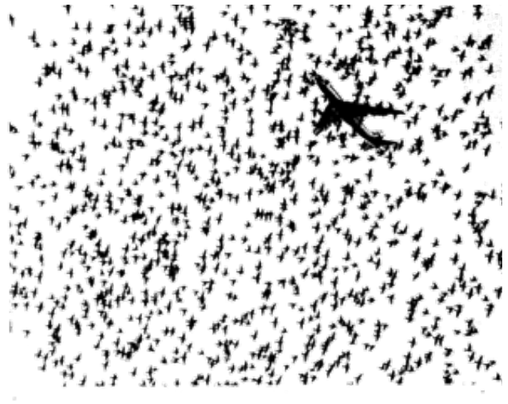
Left:
Bar Section

Above: Diagram of Perspectives Pointing at the Casa Malaparte



Film Vaults and Data Storage Wings are cut into the rock (a).

Films are stored, digitized, preserved and then shared with visitors who gather in theaters for screenings (b).



IV.

HARDLY INVISIBLE

Prof. Feifei Zhou

SITE: FORT TILDEN,
FAR ROCKAWAY, NY

TIME: *SPRING 2024*

Atmospheres are an ecological mixture of visible and invisible phenomena. Actors, like Birds, produce noise and heat. Their presence, while often hidden, is felt.

This site, Fort Tilden, remains churning, full of life, full of noise, a migratory stop between nations for aerial beings of all scales. Airplanes migrate from airport to airport and ingest birds along the way. Geostationary Satellites observe the precipitation of the North Atlantic.

Fort Tilden is a register of nature. It shows the character of a place when birds, not humans, are the central actors.

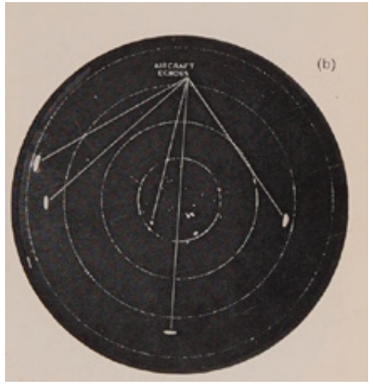
This project seeks to act with restraint, adding a minimal imprint on the site specifically and adding, mostly underground, a small wing to an existing building and providing a framework to protect bird and prevent bird strikes.

Right: Massing Study Model of Chapel

a Nike Missiles, 1960s

b Missiles Loaded on Site, 1960s

c Simulation of Migration along the Atlantic Flyway



d Airplane Echoes with a Moving Target Indicator

e Fort Tilden Beach, Closed for Plovers

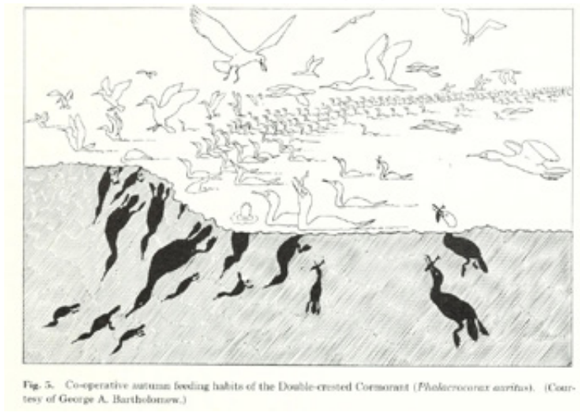
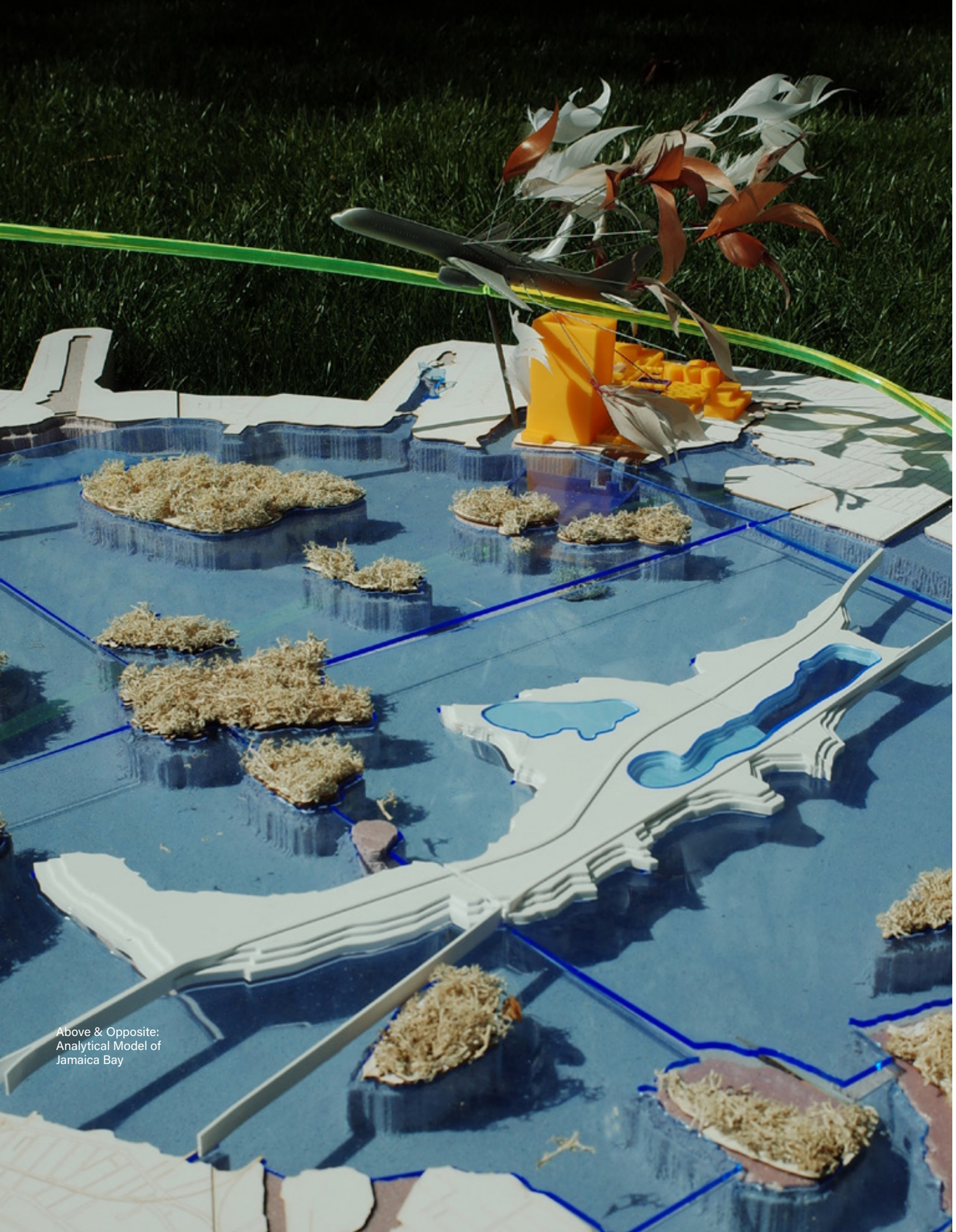


Fig. 5. Co-operative autumn feeding habits of the Double-crested Cormorant (*Phalacrocorax auritus*). (Courtesy of George A. Bartholomew.)

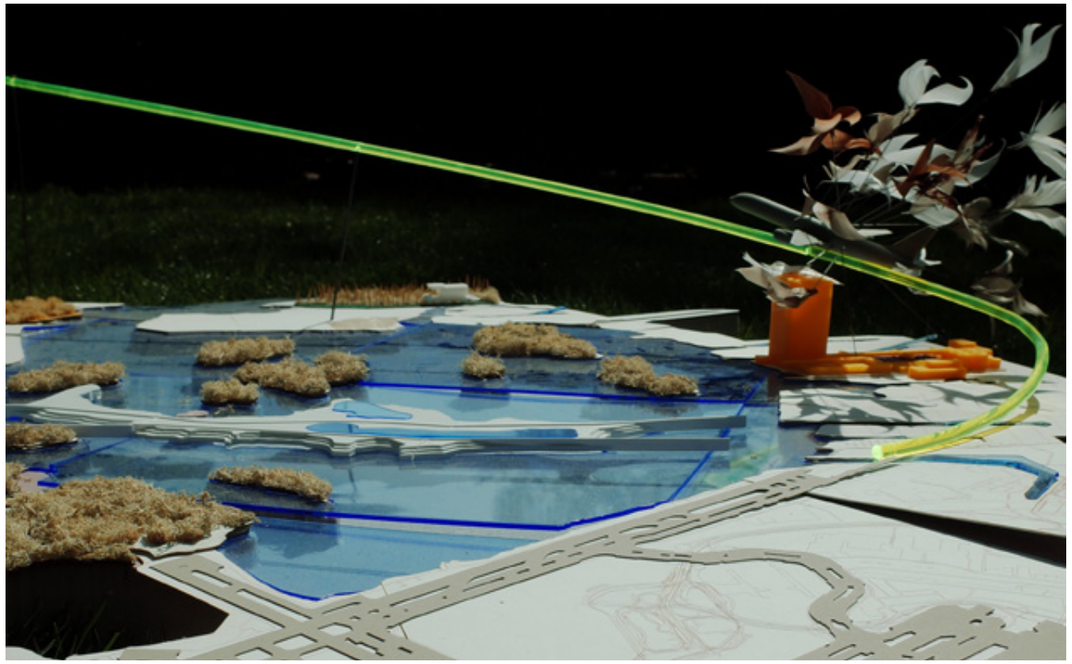
f Fundamentals of Ornithology

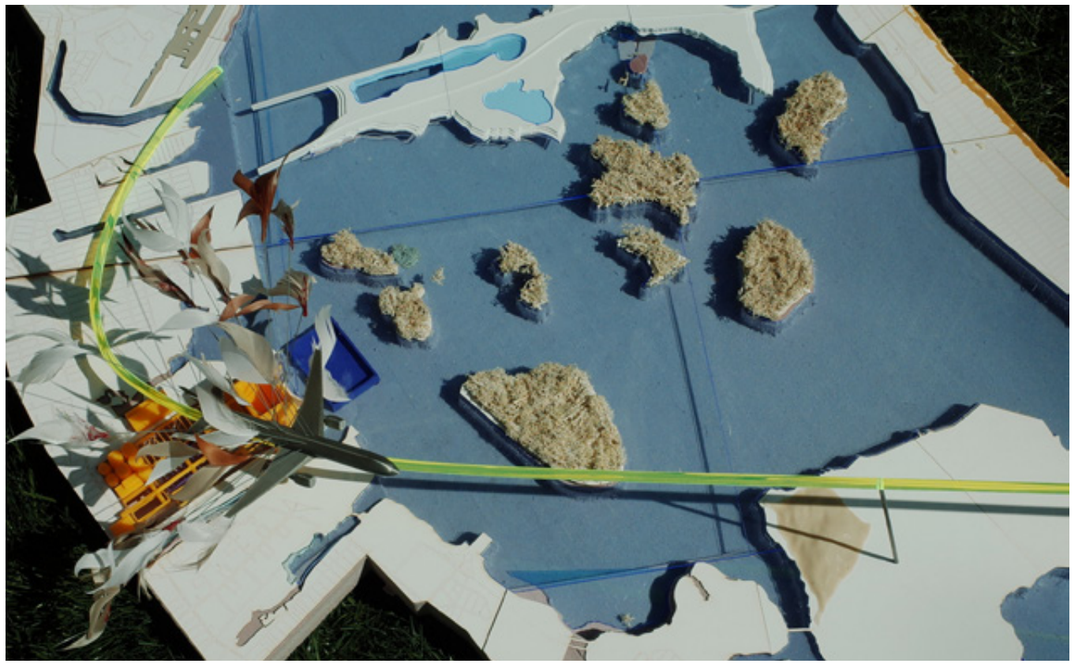
Opposite: Flight Path Plan

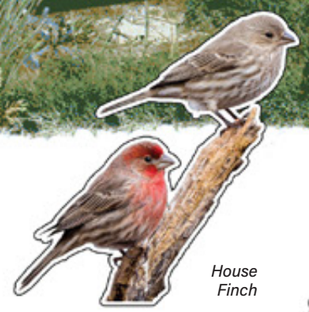
Above: Archive Clippings



Above & Opposite:
Analytical Model of
Jamaica Bay







House Finch

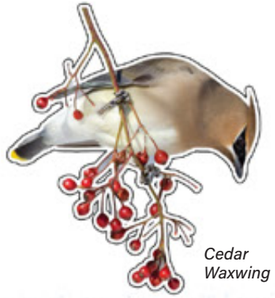
American Black Duck

Butterfly Milkweed

Piping Plover

American Holly

American Searocket



Cedar Waxwing

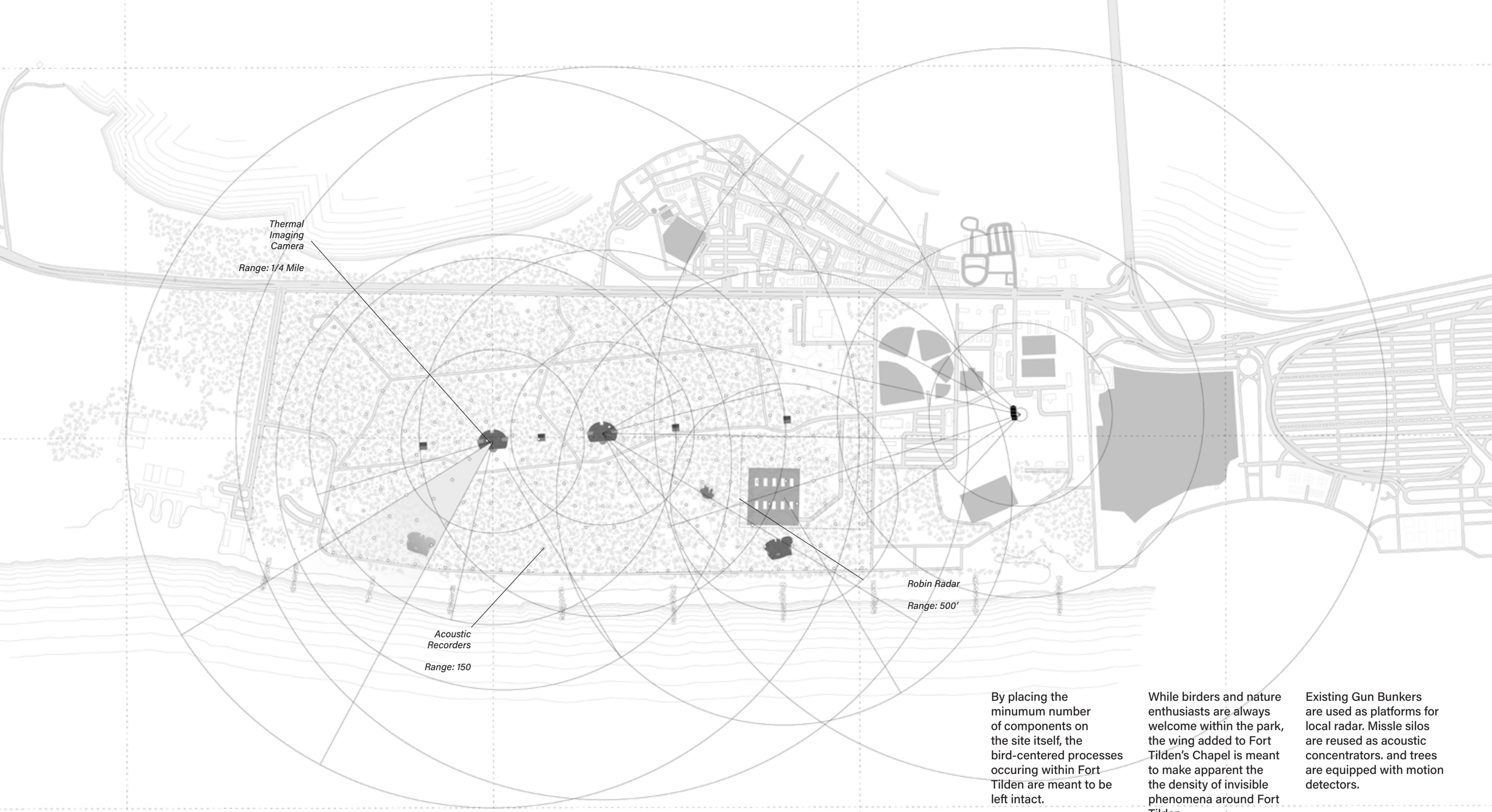
Bushy Rock Rose

Low Scrub Oak

Both pages:
Re-wilding actors
Of Fort Tilden

[Above] Cold War
[Below] Present Day

Above & Opposite:
Section Mapping Bird
Strikes above Fort Tilden

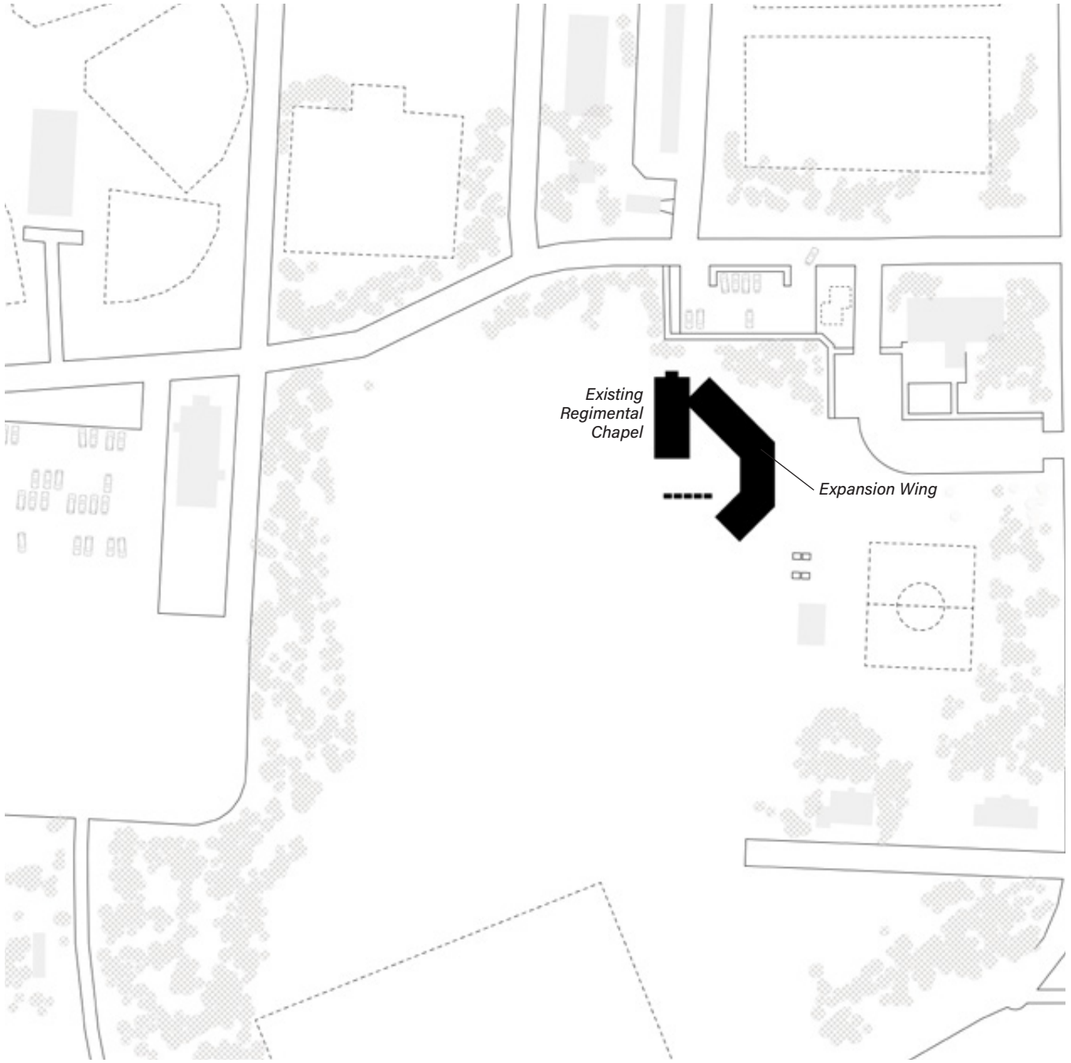


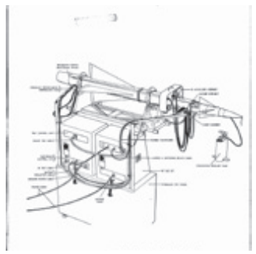
By placing the minumum number of components on the site itself, the bird-centered processes occuring within Fort Tilden are meant to be left intact.

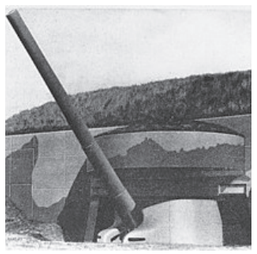
While birders and nature enthusiasts are always welcome within the park, the wing added to Fort Tilden's Chapel is meant to make apparent the the density of invisible phenomena around Fort Tilden.

Existing Gun Bunkers are used as platforms for local radar. Missle silos are reused as acoustic concentrators. and trees are equipped with motion detectors.

Above & Opposite:
Fort Tilden Site Plan



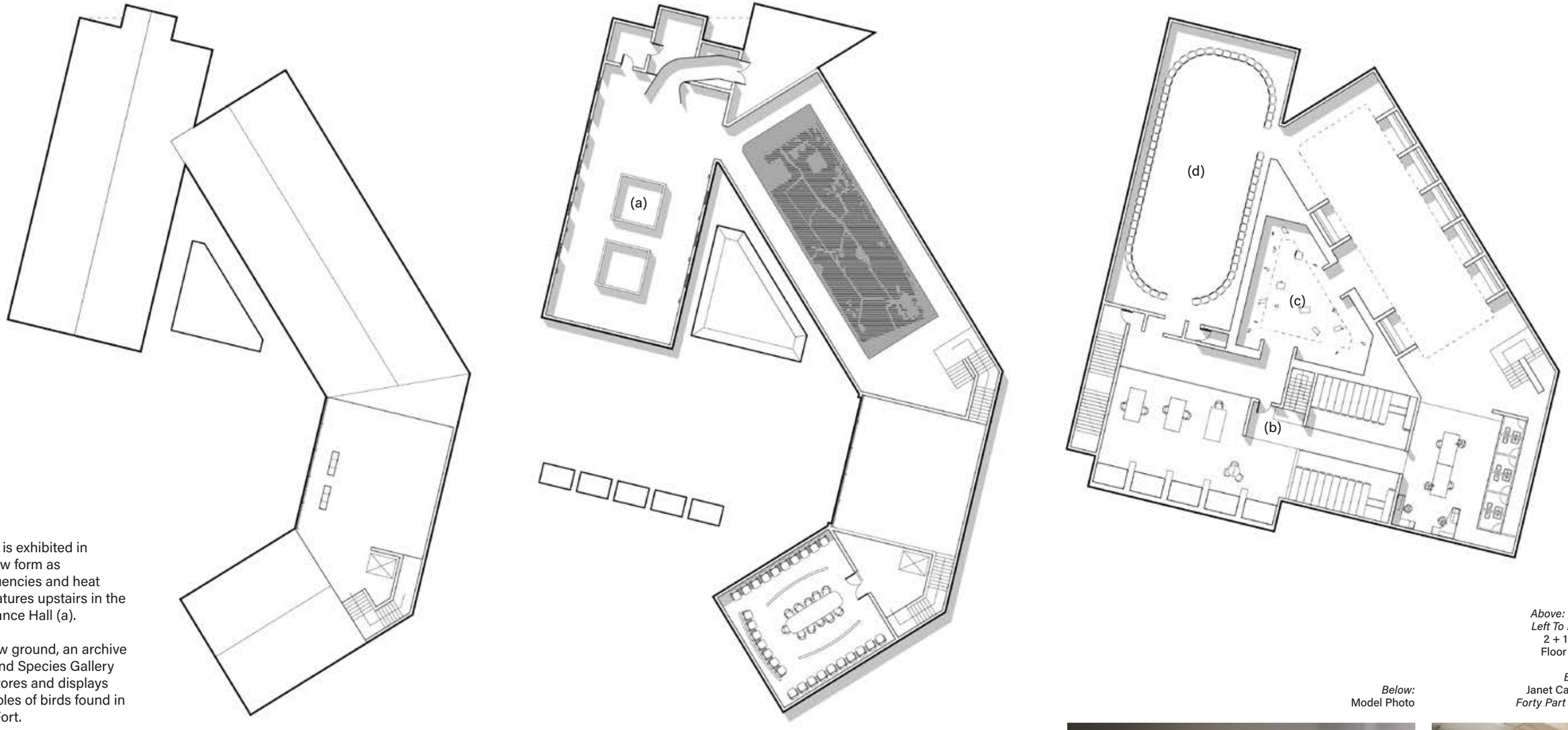




Above: Site Plan around Chapel

Right: Armaments and Fort Tilden Chapel, a "readymade"

Right: Robin Radar on Site



Data is exhibited in its raw form as frequencies and heat signatures upstairs in the Entrance Hall (a).

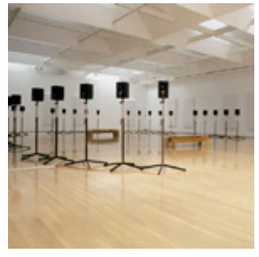
Below ground, an archive (b) and Species Gallery (c) stores and displays samples of birds found in the Fort.

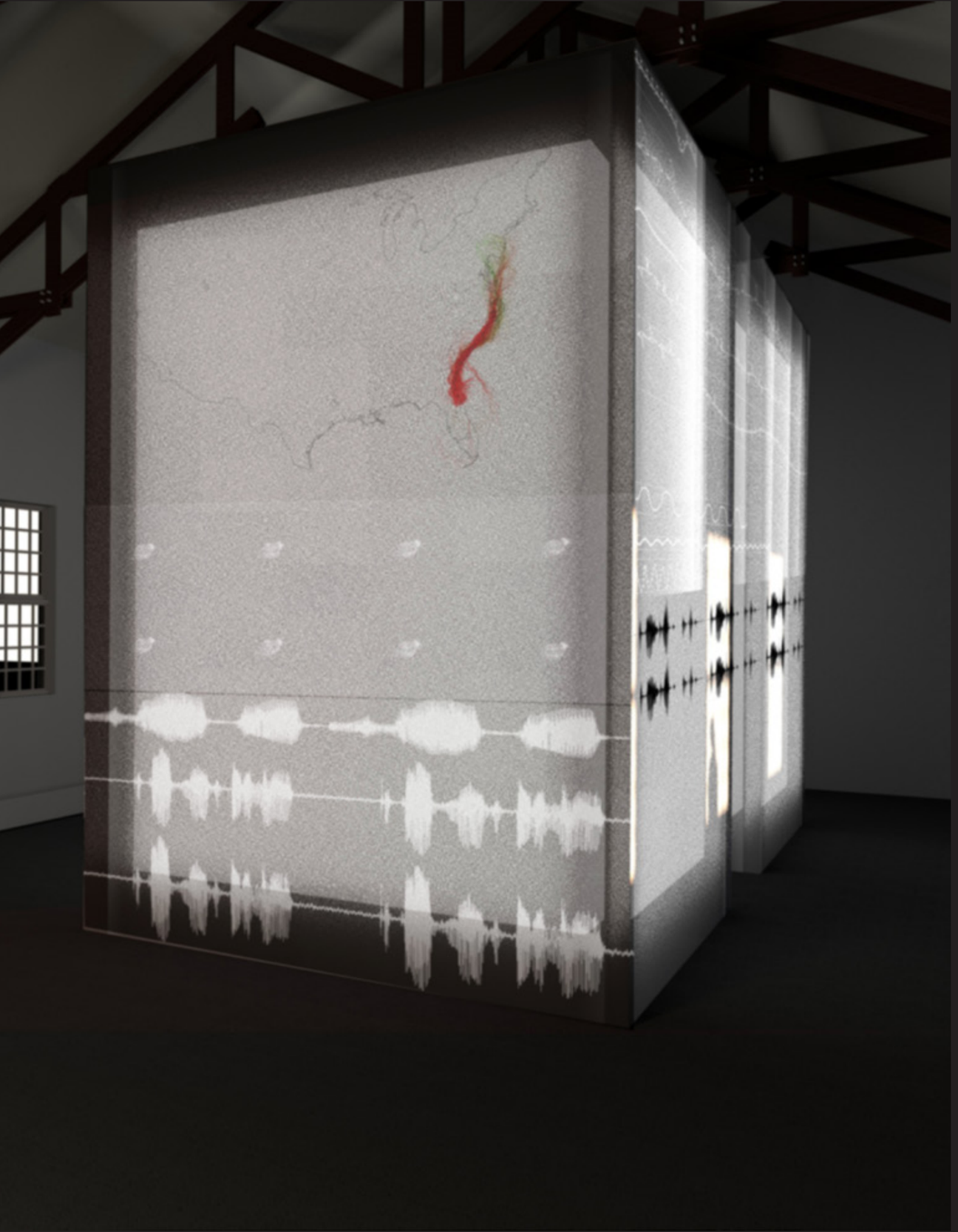
A Sound Gallery (d) features a speakers for each species of bird ever found in Fort Tilden. Each time a bird of that species is identified, their song is played within the gallery.

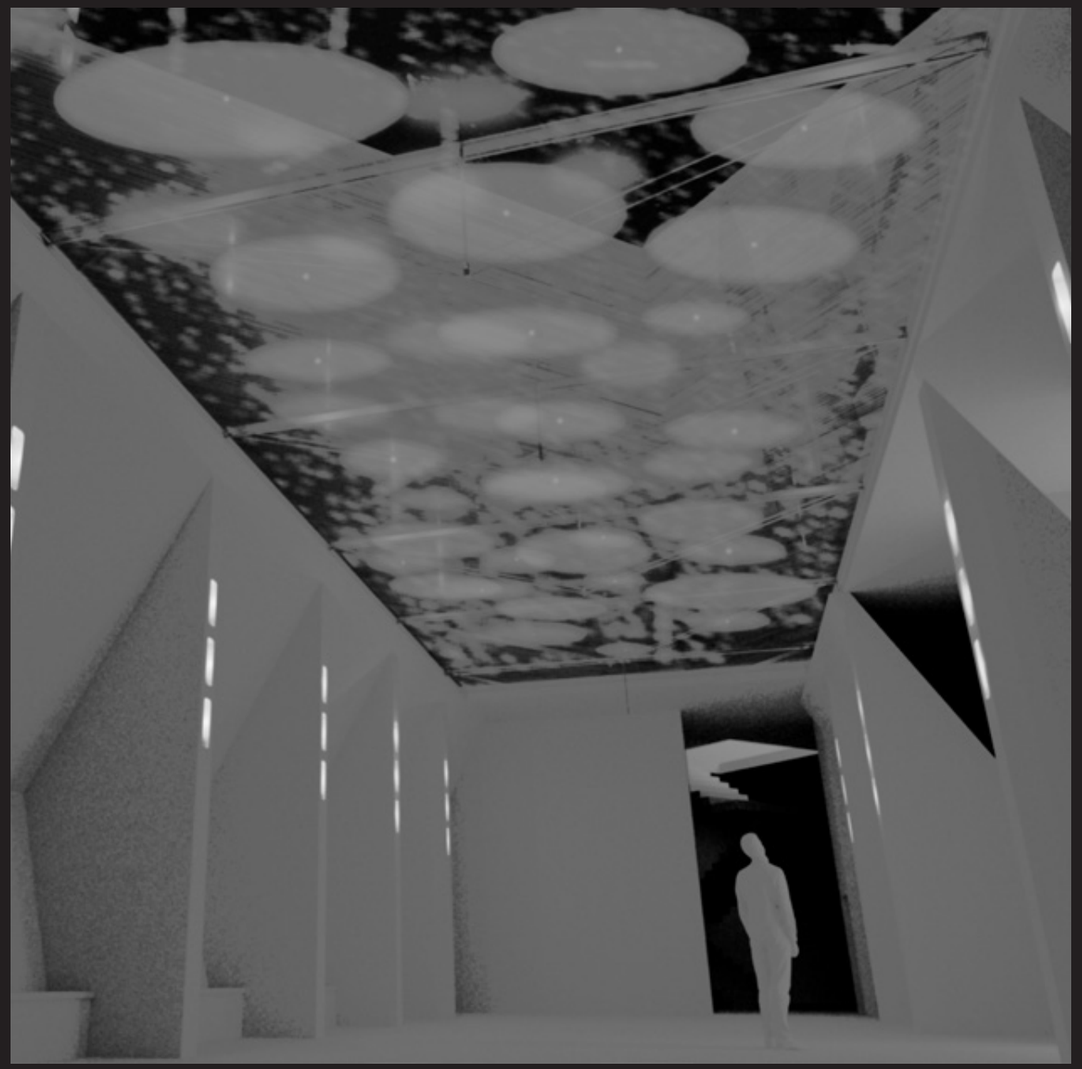
Above: (From Left To Right)
2 + 1 + (-1)
Floor Plans

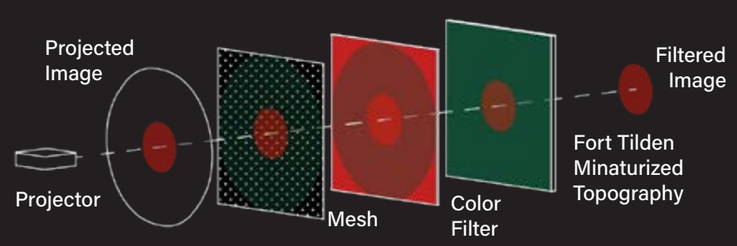
Below:
Model Photo

Below:
Janet Cardiff's
Forty Part Motet







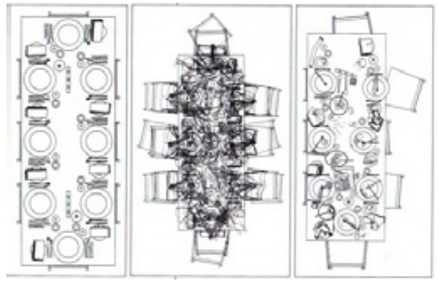


Opposite: Entrance Hall

Above: Fort Topographic Projection Gallery

Left: Projection Gallery Floor Section

Above: Specimen Gallery



V.

HOUSING BY NEGOTIATION

Prof. Gary Bates

SITE:

TIME: *SPRING 2024*

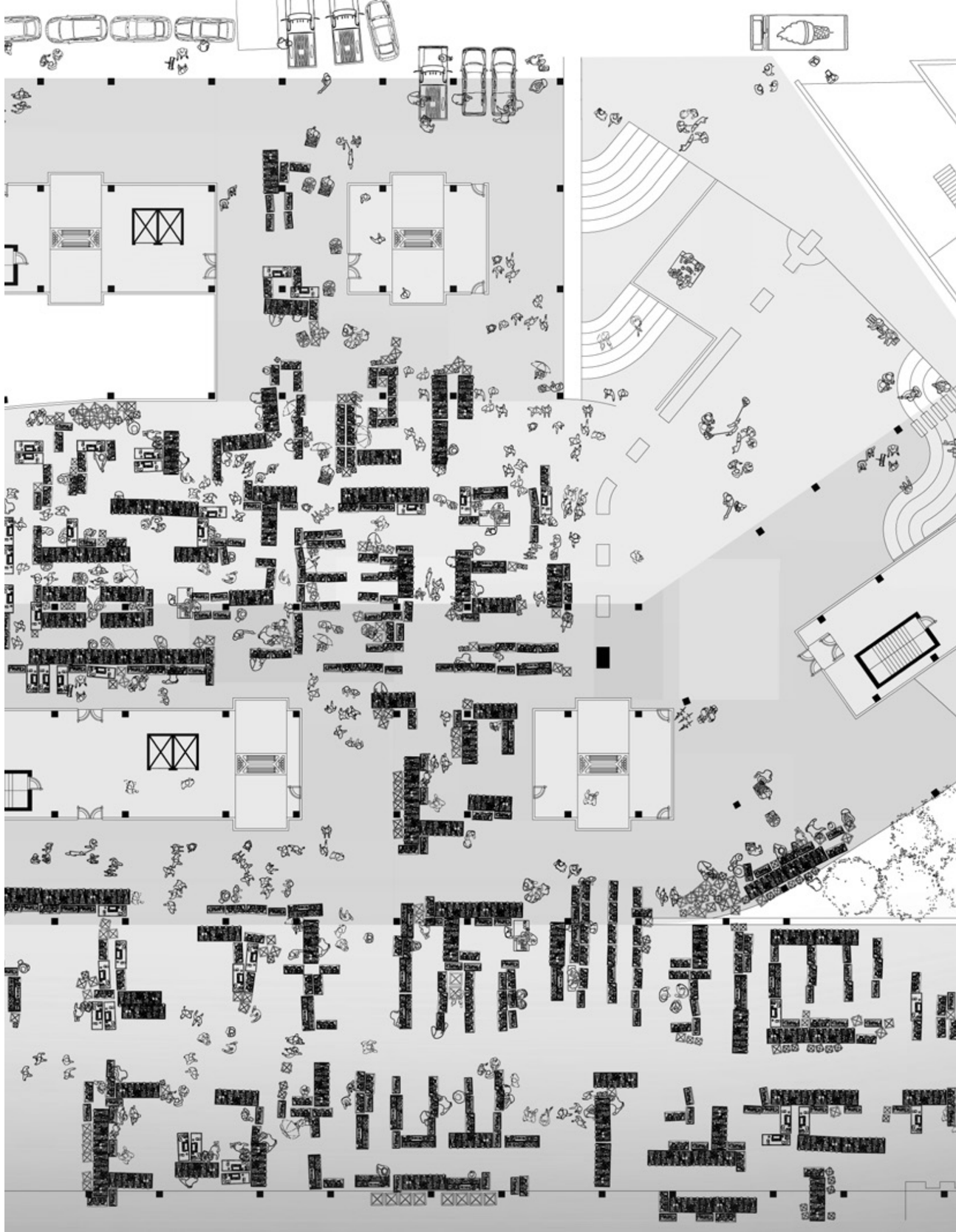
PARTNER: MH ZOWQI

This project occurred in collaboration with MH Zowqi. We produced a housing project centered on the negotiations of space that define domestic life.

In contemporary urban life negotiation is ubiquitous. Core questions we sought to answer were: how can common space be more than hallways, kitchens, and elevators? Can we keep rent affordable forever through solidarity? How do we engage with natural forces in a productive way, allowing us to lower our reliance on powered air-conditioning?

When we engage with these questions we sought to activate the historical themes of urban domestic life, themes of privicity vs publicity, the ability to scale from unit to planet, and the possible doom of flexibility in all urban dwellings.

Opposite:
Ground Floor Plan



a Privicity, photo by Barkley L. Hendricks

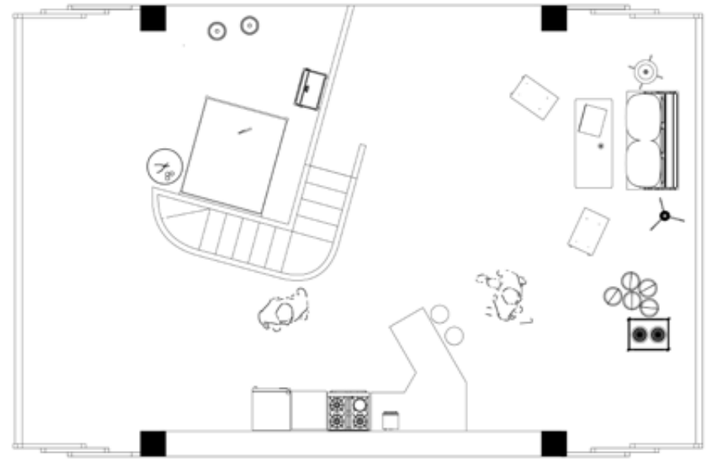
b Publicity, Marion County Hog Days, photo by George Georgiou

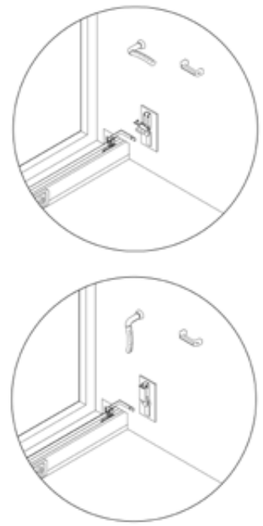
c Care, Herold Hospital, Paris FR, 1888

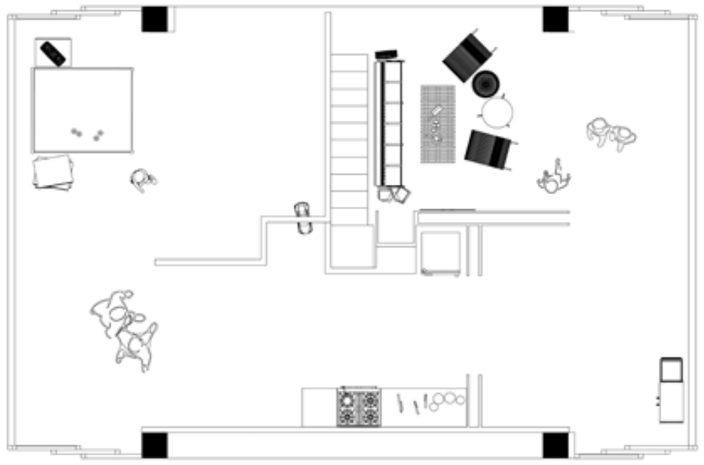
d Scaling, House-to-National Planning, by Louis Kahn

e Flexibility, Alberto Rosselini, Mobile House

f Unit Diagram





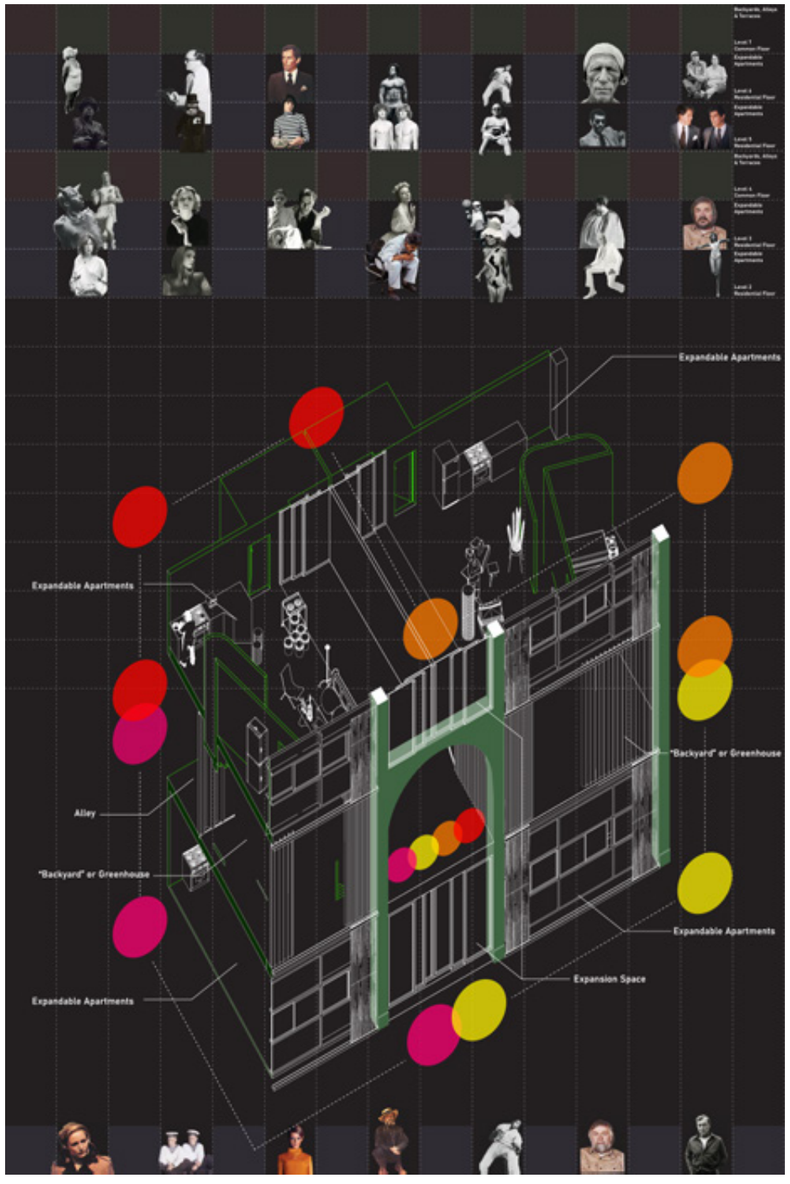


Opposite: Archive Clippings

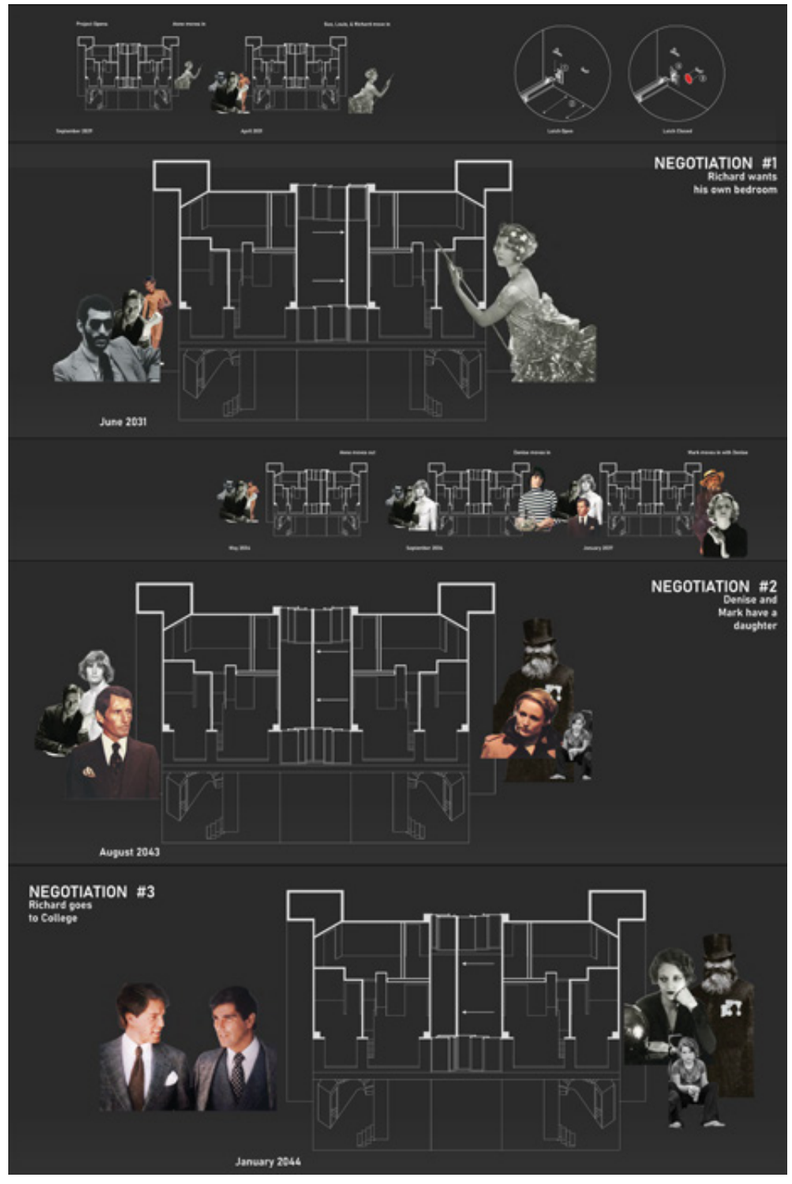
Above: Unit Plans

Above Right:
Expandable Wall Latch,
Register of Negotiations

Negotiation with the City



Negotiation with Extended Neighbors



Negotiation with Immediate Neighbors

Above:
Residential Level Floor Plan

Above:
Common Spaces
Level Floor Plan

Opposite: Dinner

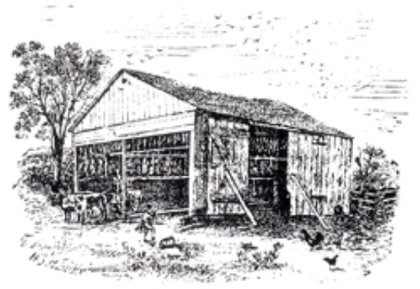
Above: After-Dinner

Opposite: Arriving Home

Above: Neighbor visiting

Below: Waiting for a Call

Above: Taking the Kids



OLD CONNECTICUT TOBACCO SHED.

VI.

TOBACCO [V]ALLEY

Prof. Regina Teng

SITE: N & S MARKET ST,
CHARLESTON, SC

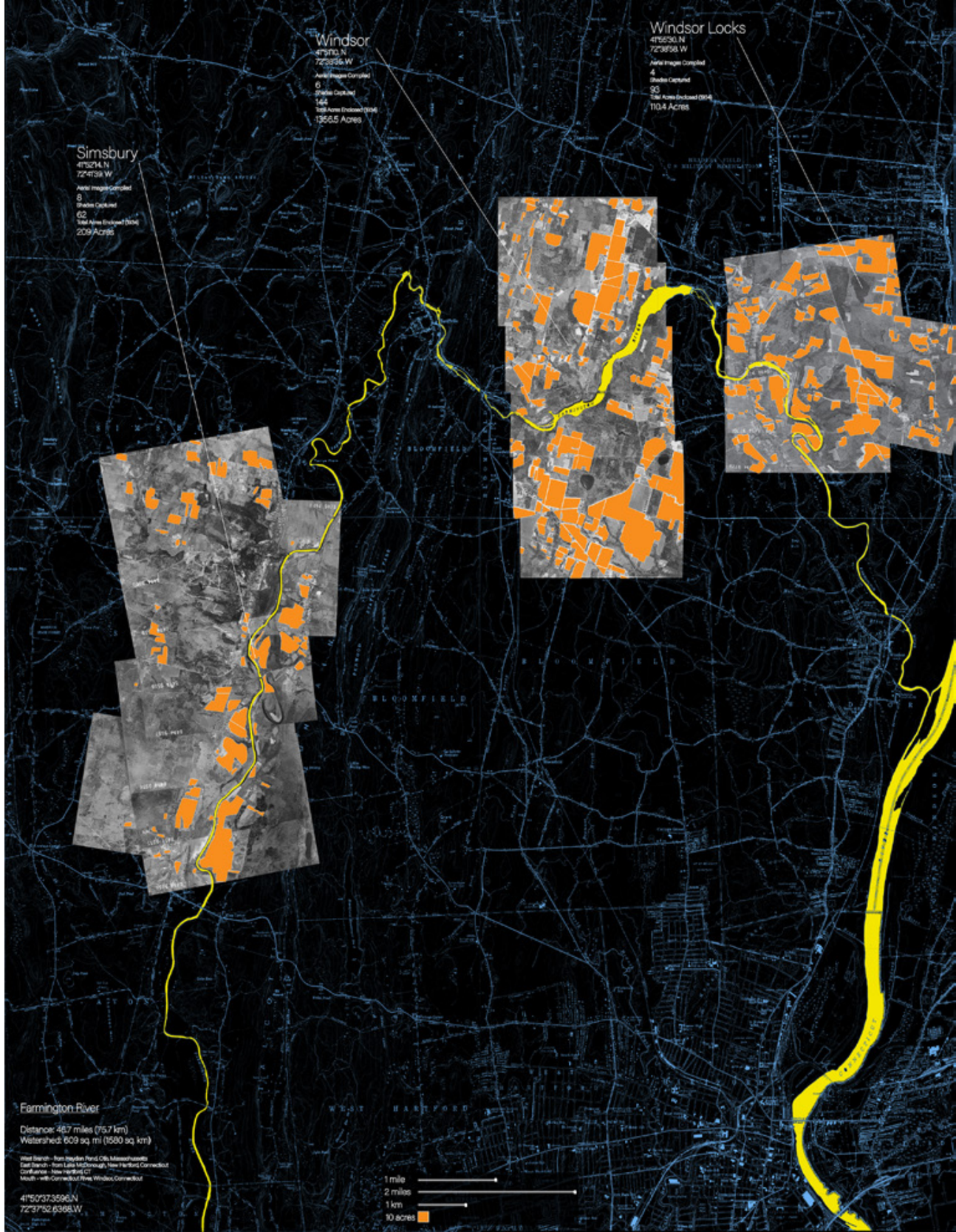
TIME: *SPRING 2023*

North and South Market St's in Charleston, South Carolina are unusable as a pedestrian market.

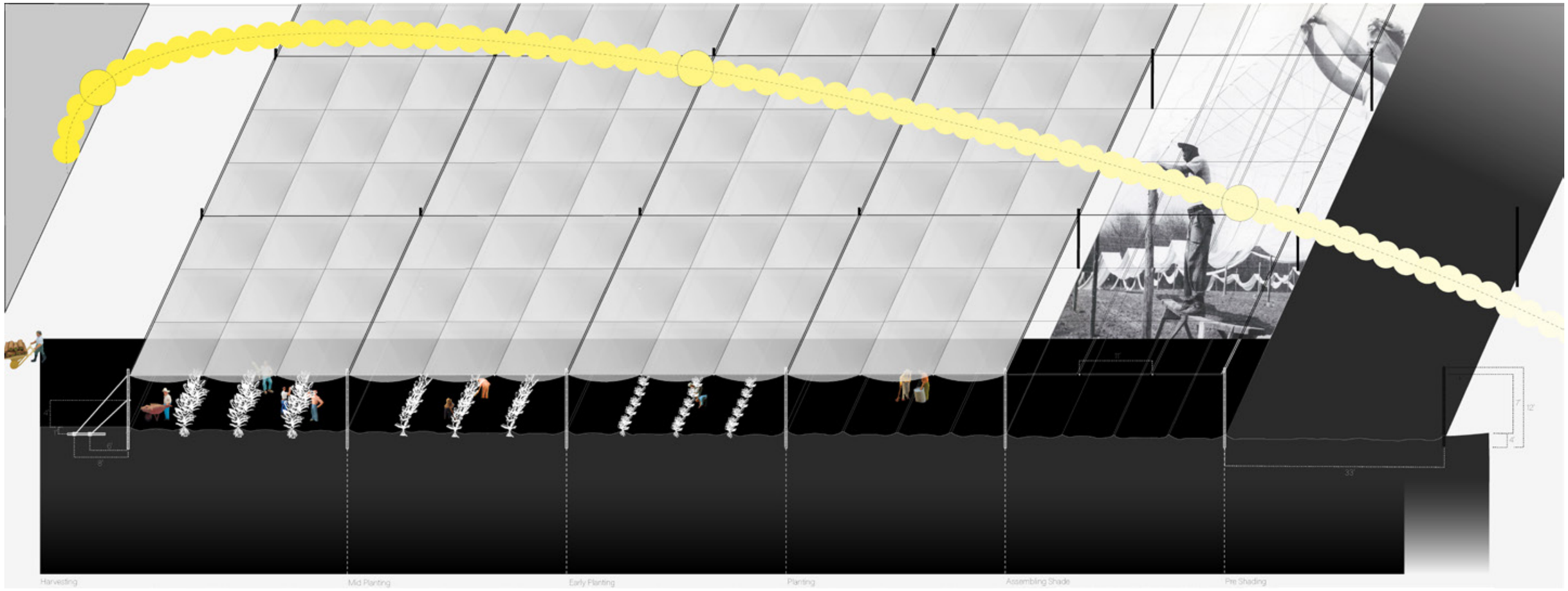
The narrow streets are filled with excrement and horse carriages, Pepsi delivery trucks, broken down untowable cars and crowds of overheated and uncomfortable tourists.

This project, part of a competition entry put out by the Mayor of Charleston, expands the footprint of the market, allowing pedestrians, local vendors and regional farmers to use the space for the sale of useful goods, while enhancing a major cultural hub.

By developing a passive climate control strategy, based on research into tobacco cultivation, and a CLT structure, the project is a case study in public, municipal and sustainable design.



Opposite: Map of Tobacco Valley, CT



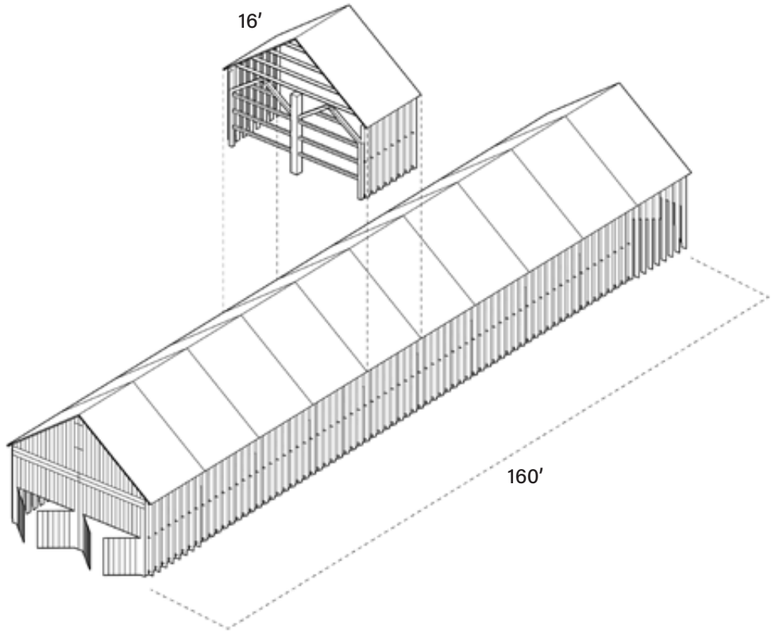
In order to grow tobacco in a Northern climate, like Connecticut, a subtropical environment must be created.

While the rocky soil of the Central Connecticut Valley is critical, the lack of humidity and fluxuation of temperature poses a risk to the tobacco crop.

Two simple structures are made to modify the climate, a shade cloth enclosure, and the tobacco barn. Both are low-tech, yet highly specifically tuned instruments for modulating humidity levels, exposure to wind, exposure to direct sunlight, all factors which, if uncontrolled, could ruin the quality of the tobacco leaf.

The first speculations about an intervention were to apply the climate modulating effects of the shade tent to a pedestrian walkway in Manhattan, atop a variety of bridges.

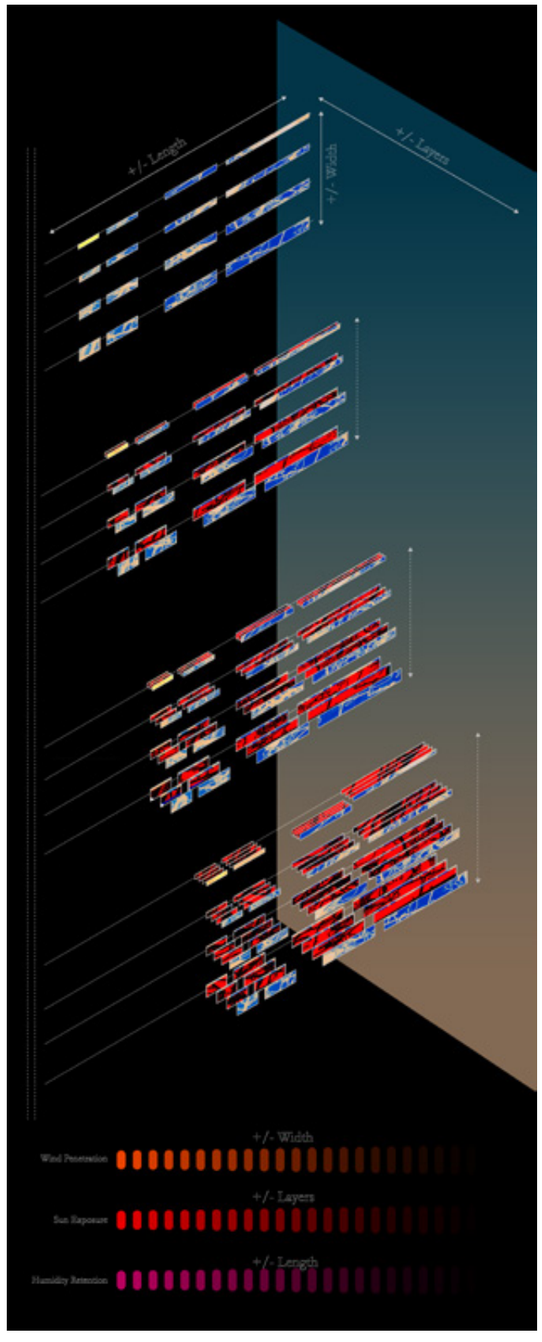
Above: Model Photo

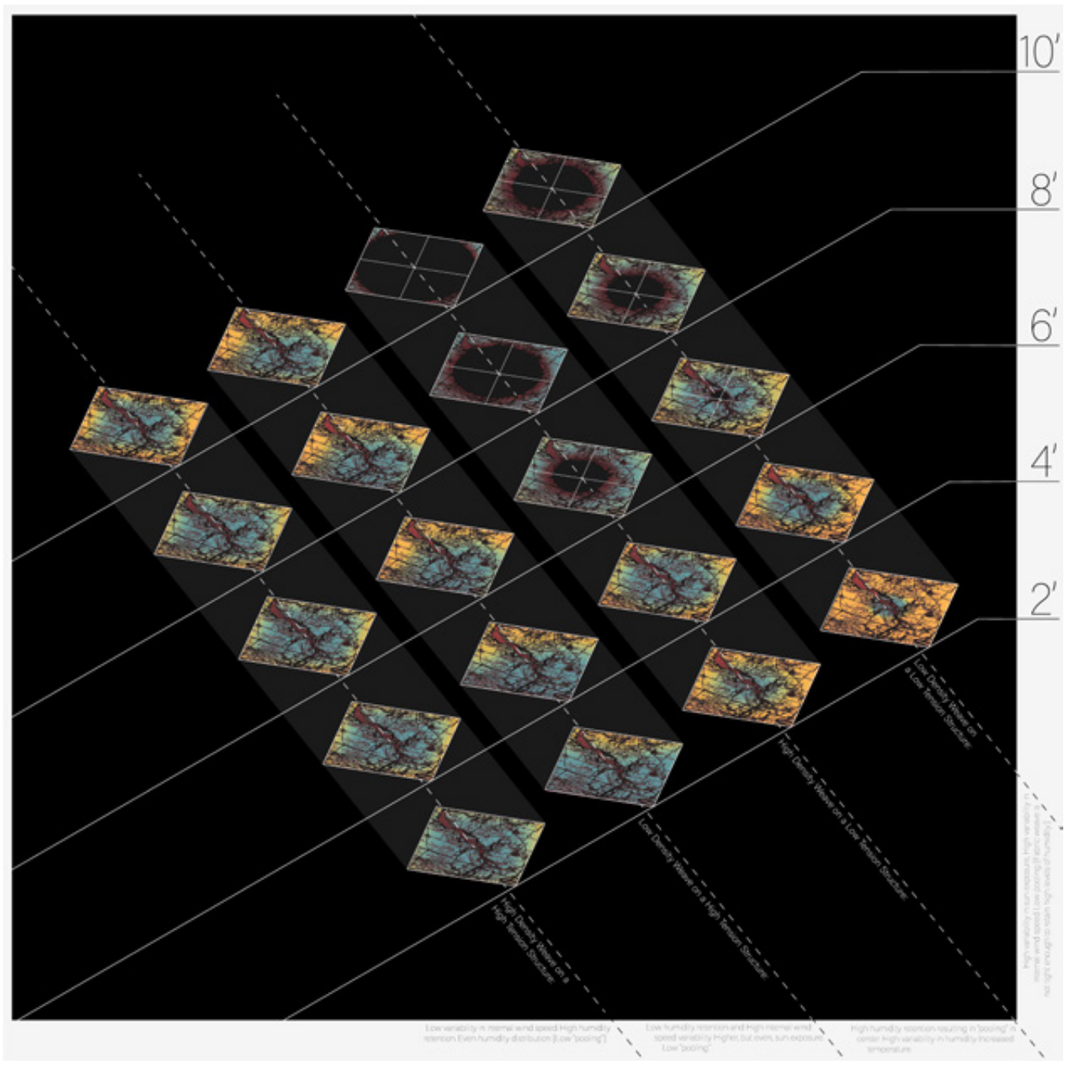


The form of each gable is derived from an in-depth investigation of Tobacco cultivation processes in the Connecticut River Valley.

Tobacco Barns are used to dry out and ferment the gathered leaves. They are finely articulated machines for producing climatic effects. They do so through a series of gradient-based analog devices. Slats along the sides of the barn can be opened and closed to increase or decrease the about of humidity in the barn. The size of each barn is directly related to the size of the adjacent tobacco field. 16 foot units are repeated, usually to a standard 160 foot long barn for 1 acre of tobacco.

Both the Barn and Shade Structure feature analog processes, simple structures that become finely tuned environmental control devices.





Opposite: Shade Structure Diagram

Opposite: Simple Climate Modulating Machine Diagram

Opposite: Shade Tent Weave Diagram

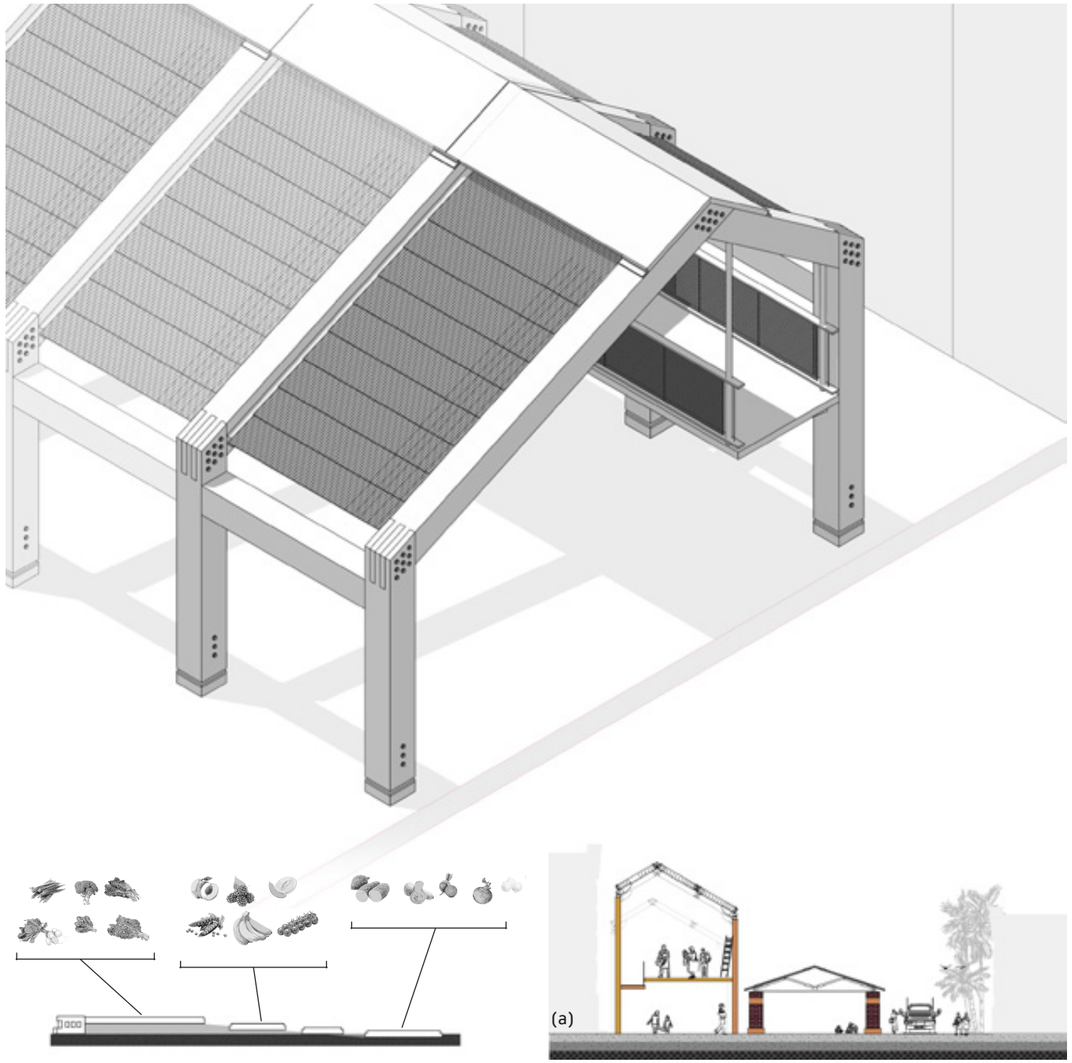
(a)

(b)

Left: Site Plan

Opposite Right:
Axon Gable Detail

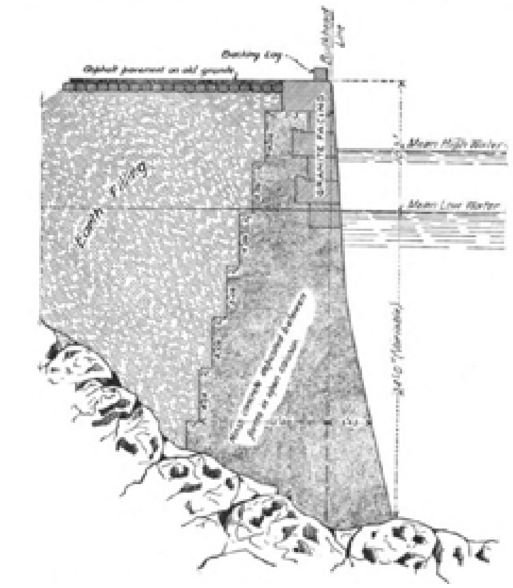
Opposite Bottom:
Longitudinal Sections



CLT Gables support walkways and market stalls. Between each structure is an operable shading panel, each panel has a specific density of layers and opacity of weave to provide a climate calibrated for the sale of specific types of produce.

Vendors can use crankshafts to open and close roof panels to provide more or less sun and catch more or less wind.

Above: Market Perspective


Mean High Water
Mean Low Water
GRANITE FACING
Earth Filling

VII.

SPECTRAL PASSAGE

Prof. Amina Blacksher

SITE: Pier 45,
Hudson River, NY

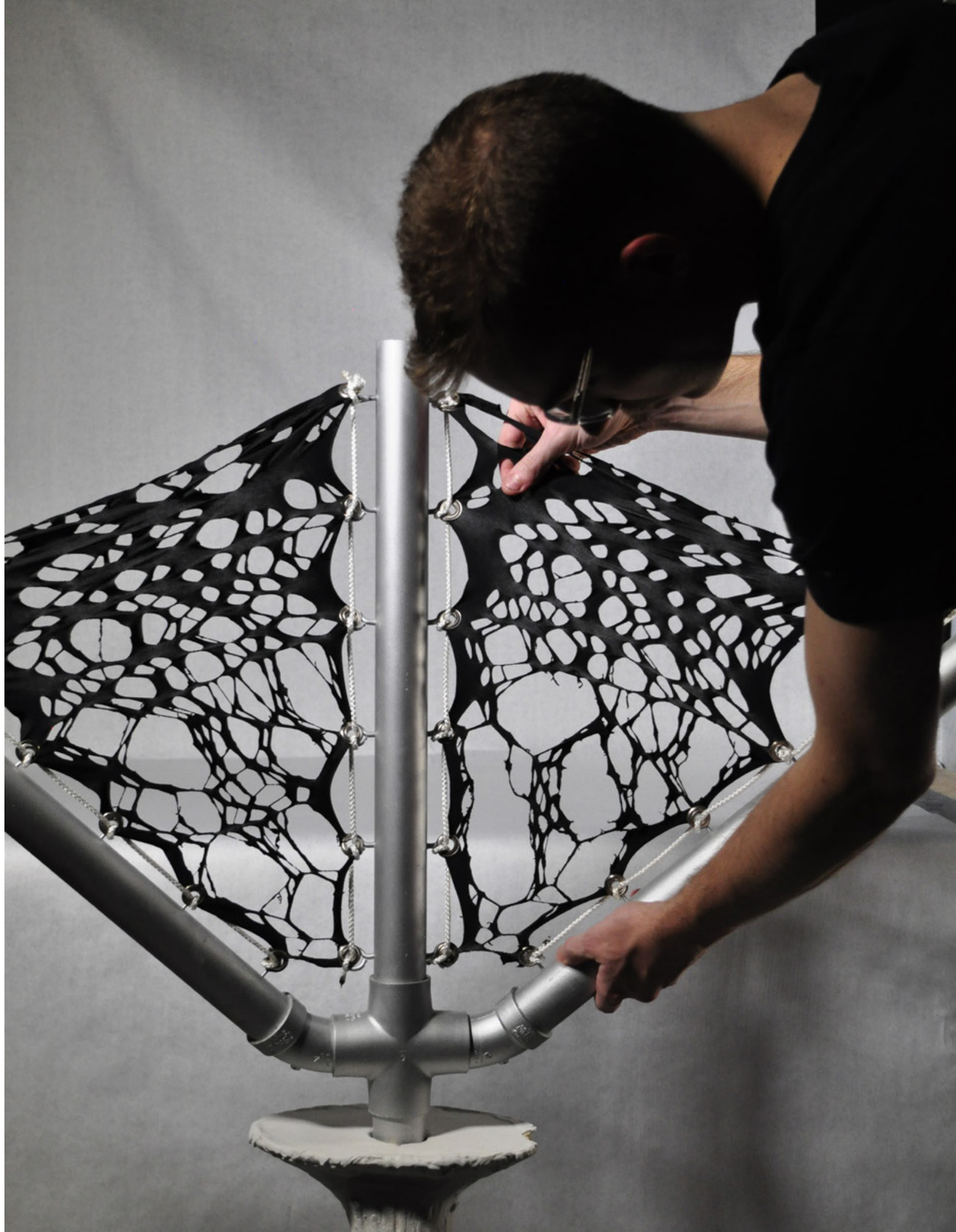
TIME: *FALL 2022*

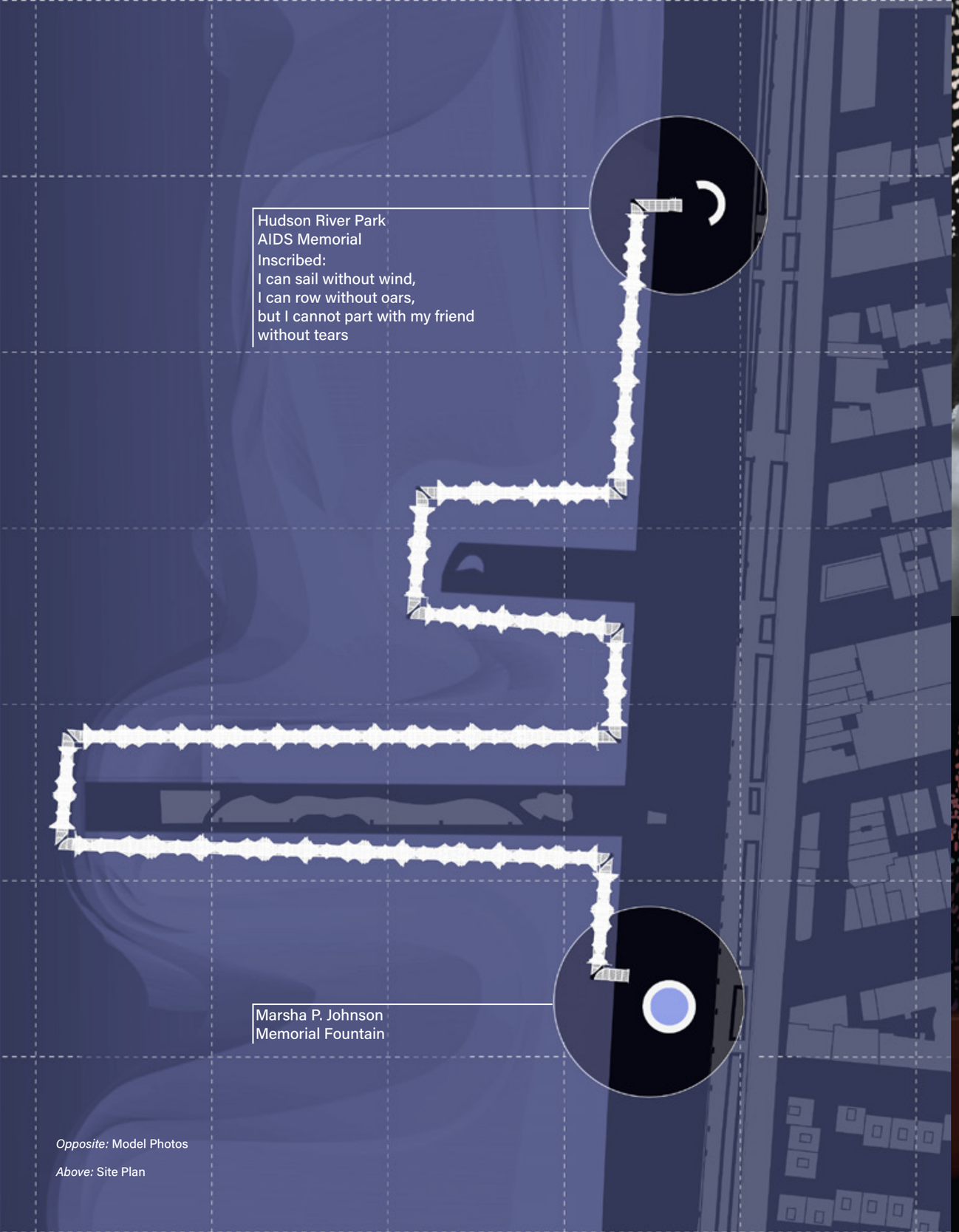
Pier 45 was, and remains, a core space for the gay community of New York. As a hidden space on a post-industrial dock, it offered seclusion and intimacy to a specific public from the 1910s to the 1990s.

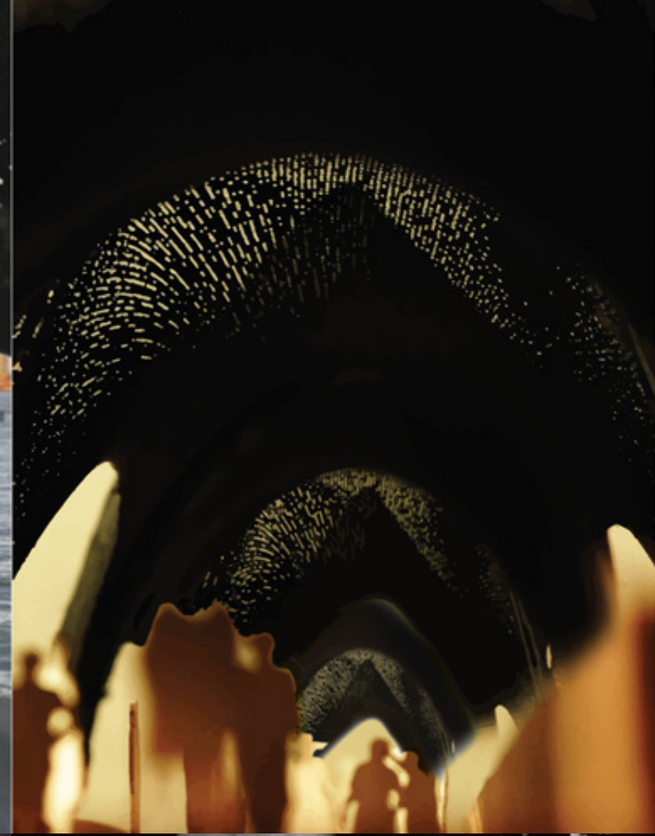
However, as AIDS devasted the gay community, Pier 45 took on a secondary significance, as a site of mass infection, a site of mass death.

Numerous attempts by the city to memorialize the site, its history and the loss of so many have resulted in three memorials, two of which are the focal points of the intervention. By tracing the outline of both Pier 45 and 46, the passage connects the Marsha P Johnson Fountain and the Hudson River Park AIDS Memorial, providing a secluded walkway above the water.

Opposite: 1:1
Model Photo

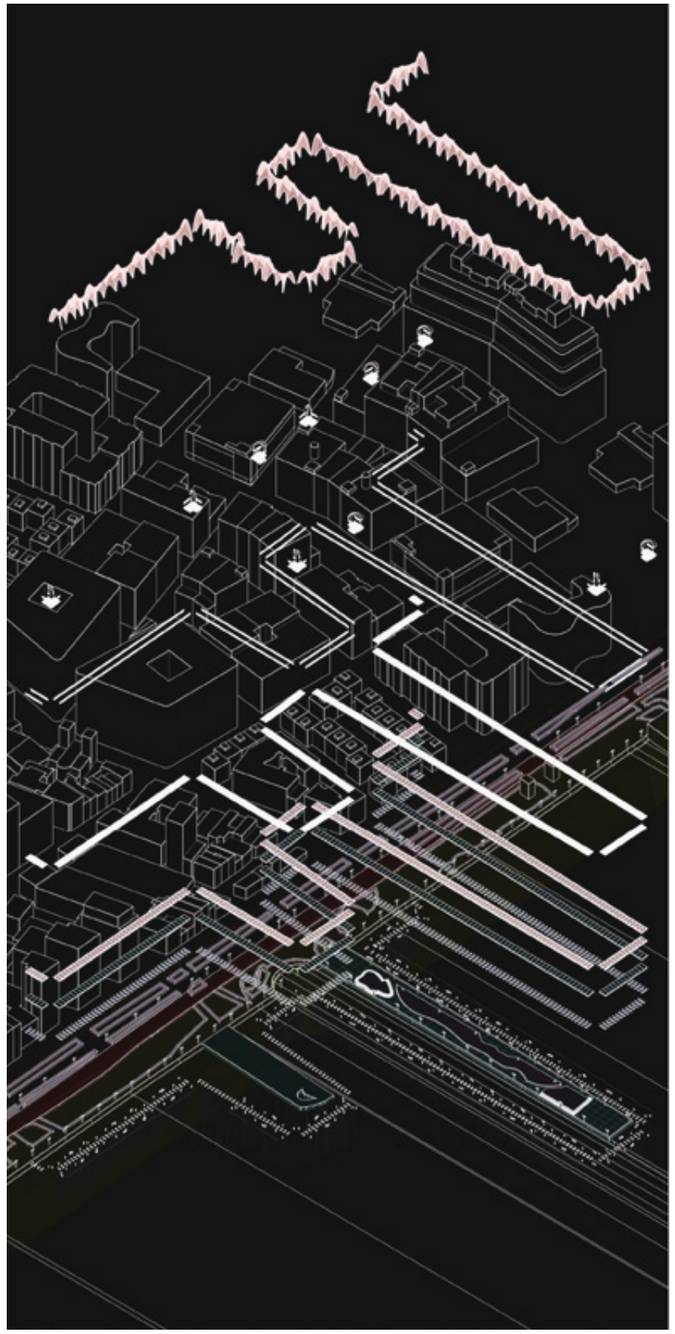






Opposite: Model Photos

Above: Site Plan



The passage is meant to hold the visitor close to the water and at a distance from the pier.

The duration of the walk is meant to encourage contemplation of the sites history and observation of the site today.

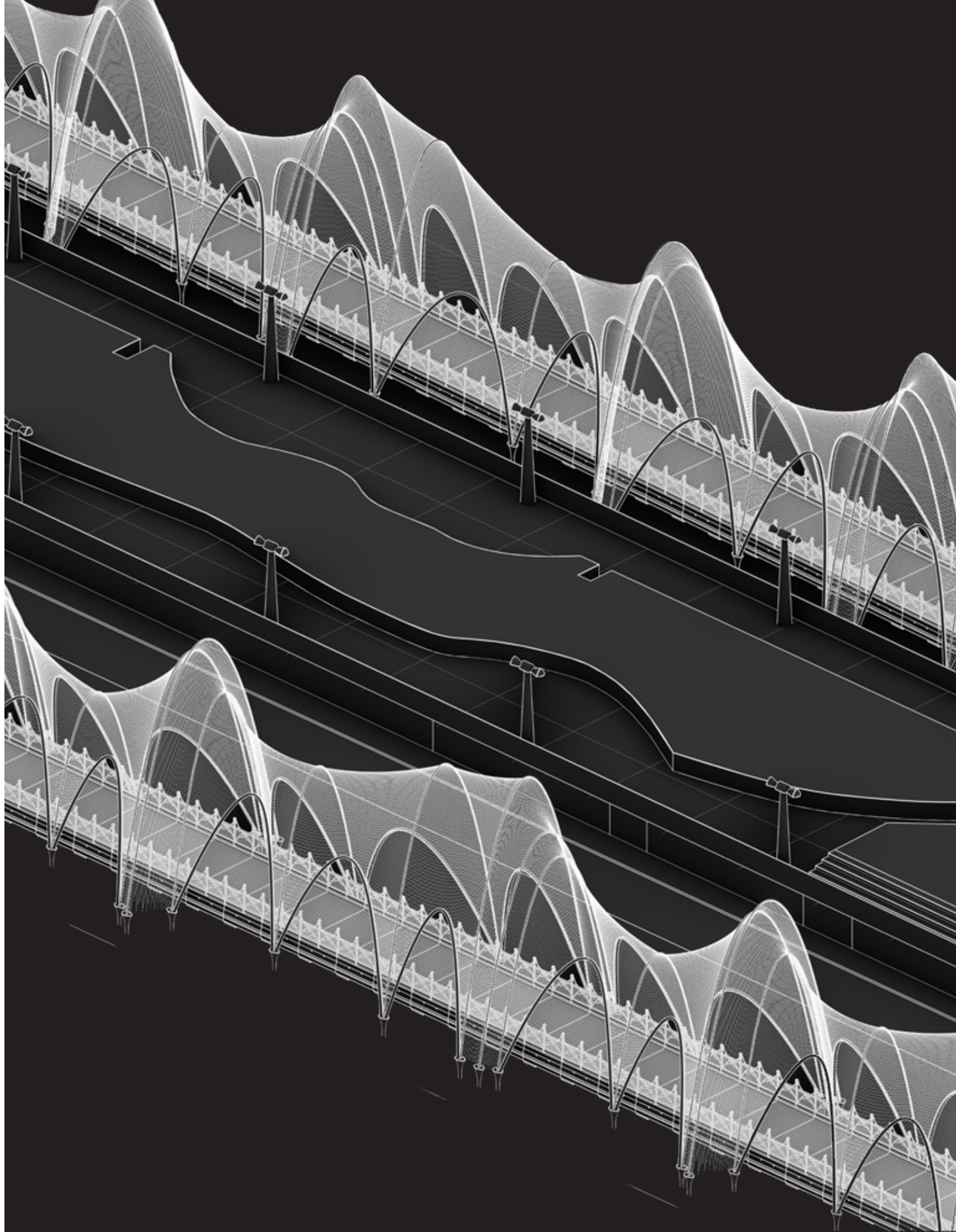
The Passage's lacy canopy slowly decays over time, as the wind blowing up the Hudson River rips it apart.

The subsequent maintenance of the canopy fabric is a symbolic act of repair.

Left: Site Plan

Opposite Right:
Axon Gable Detail

Opposite Bottom:
Longitudinal Sections

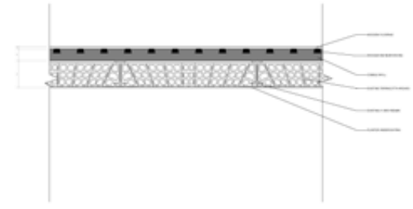


Simple assemblies with grommeted fabric and cables permit the maintenance and repair of the memorial's skin.

Above: 1:1 Model Photo

Left:
Grommet Detail

Opposite:
Process Sketches



VIII.

CLUB MOGADOR

Prof. Berardo Matalucci

SITE: ST. MARK'S PLACE,
NEW YORK, NY

TIME: *FALL 2023*

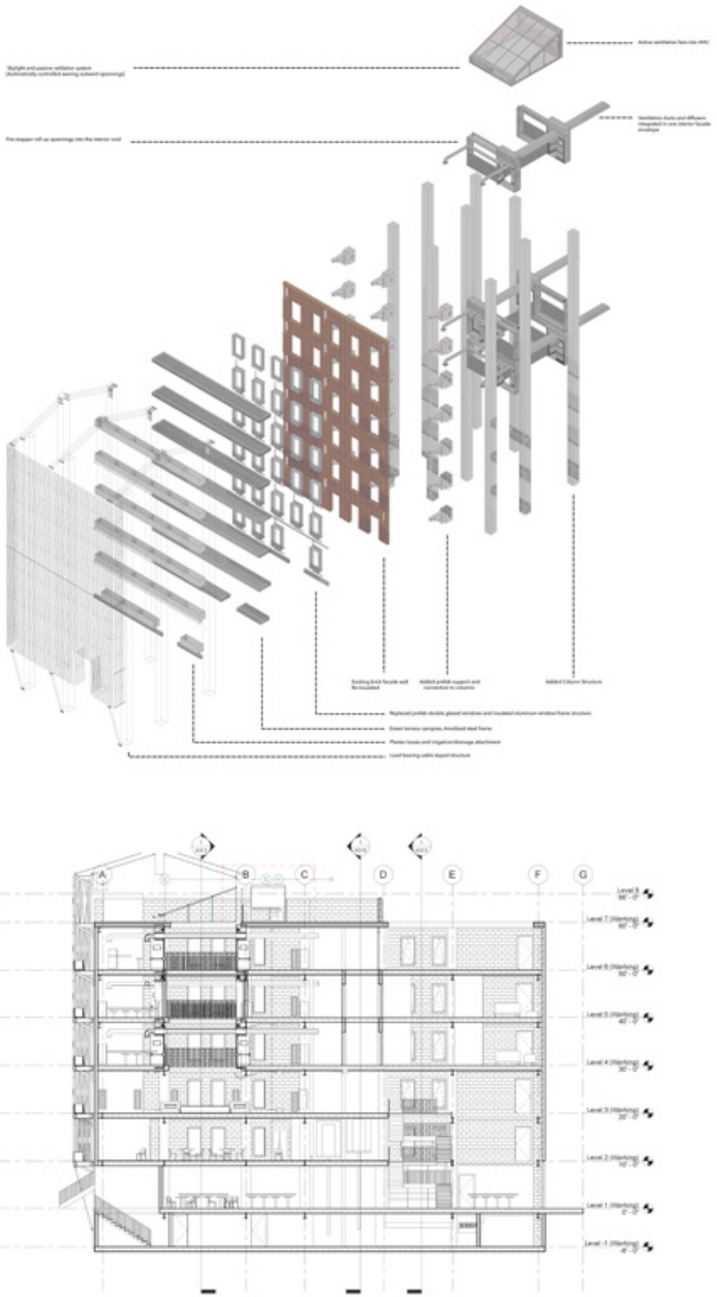
PARTNERS: MH ZOWQI,
BEN VASSAR, XIN HE,
MARC ZHAO, DANA MOR

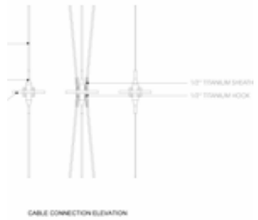
Club Mogador reuses and shifts the activities of a building currently occupied by Cafe Mogador. A neighborhood institution, the Cafe serves as a comforting and inviting environment.

Our project is designed to accentuate the journey through a familiar space, where patrons would arrive independantly, and into a foreign and exciting club space, where they would be participants in a larger community of dancers.

Key in the journey through the building is the entrance through a tensile hung green facade which forms a threshold and public face upon entering, and provides a slightly secluded "garden of Eden" for patrons once they've ascended into the club space.

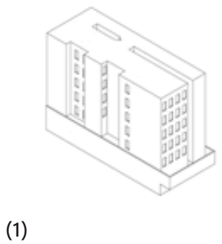
Opposite: Rendered
Section through Central Atrium

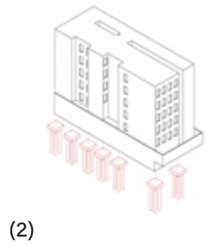


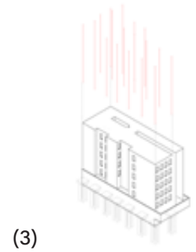


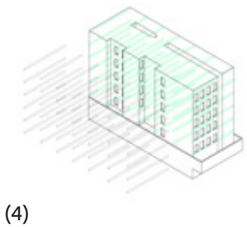
Above:
Exploded Axon of Green Facade

Left: Section


(1)


(2)


(3)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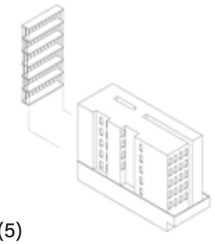
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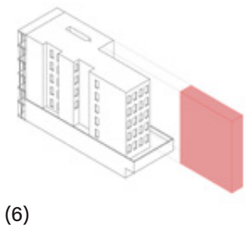
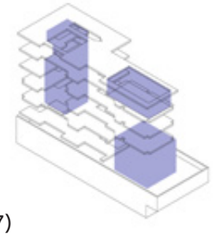
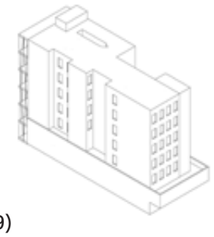

(6)


(7)


(8)


(9)

Structural Alteration Sequence

(1) Existing Condition

(2) Underpinning with New Foundations

(3) New Steel Columns

(4) New Steel Beams

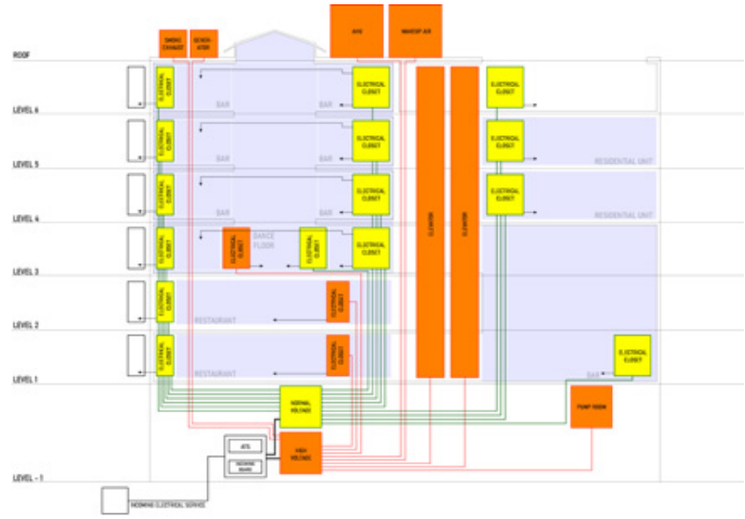
(5) Apply Green Facade

(6) Remove Rear Wing

(7) Remove Floor Material

(8) Add New Fire Stair Tower

(9) Final Condition



Above:
Alteration Sequence

Left: Electrical
System Diagram
(yellow: normal voltage;
orange: high voltage)

XI.

FABRICATION EXPERIMENTS

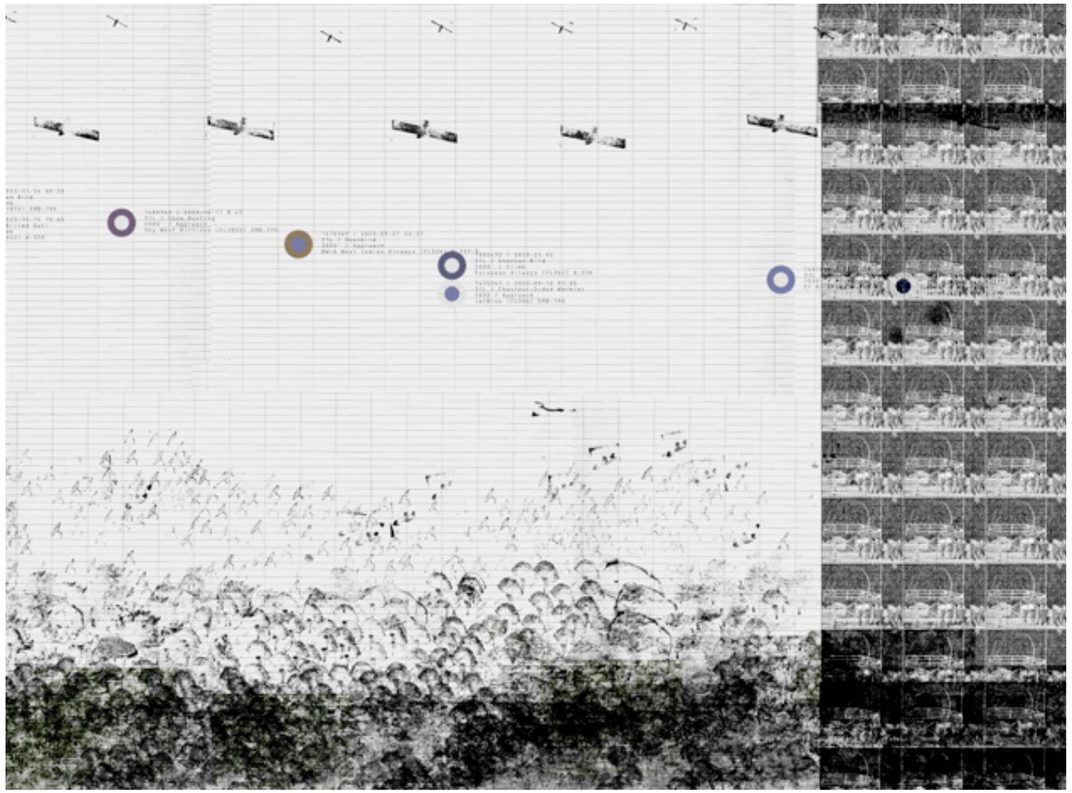
ADV IV STUDIO - PROF. FEIFEI ZHOU - *SPRING 2024*
ART APROPOS ART - PROF. STEVEN HOLL - *FALL 2024*
STRUCTURAL DESIGN - PROF. ZAK KOSTURA - *SPRING 2023*

Each semester I pursue a new technique or greater understanding of an established technique.

Attached to each studio project is the desire to find some new way of misusing materials or incorporating unknown techniques.

GSAPP's Makerspace affords us the opportunity to experiment with different modes of represenation and misuse of familiar materials, like acrylic and fabric.

Because laser cutters and fully fitted out shops are often tied to institutions, this is a fleeting opportunity.



Readymade objects are fundamental to this project. The Fort Tilden Chapel is a readymade, truly generic and ubiquitous.

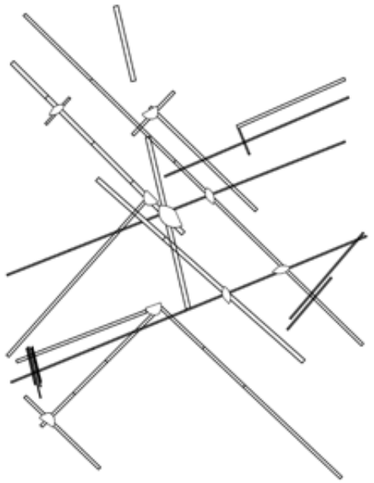
Stamps are functionally identical. They are designed to reproduce a generic image.

By using the heat of the laser cutter as a subtractive process and cutting into the face of the acrylic, the remaining image could be used as a stamp.

Because of its impermeable face, as opposed to rubber, the acrylic stamps produce a fuzzy and less direct translation of the image, much more akin to the way radar translates the physical world into points and movement.

Above: Detail Of Narrative Section

Left: "Stamps"



The challenge of Steven Holl's class was to translate a work of art into architecture.

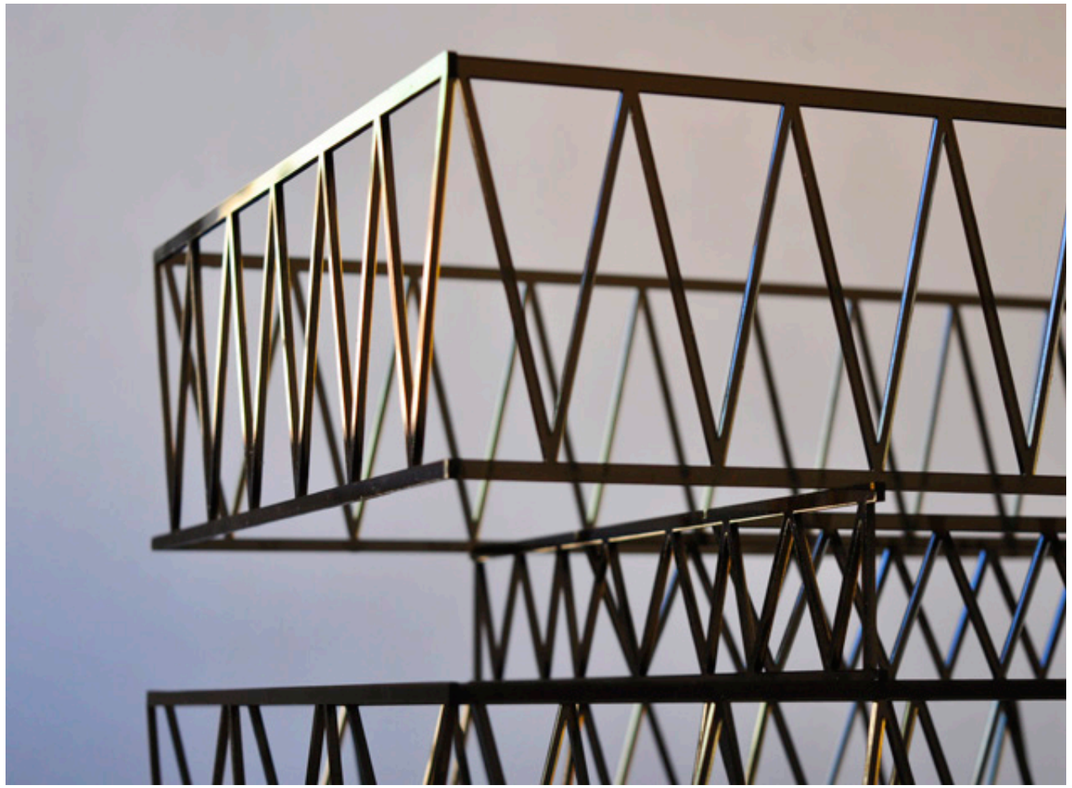
Lyubov Popova's Linear Techtonic is a representation of implied space, with an abstract organization of dashed and solid lines and circles implying depth, movement, and gravity.

This piece takes the radii of each circle, and acrylic half-domes to focus beams of light into a retranslation of Popova's original work, moving it from "implied space" into "real space."

Processes used in this project were shaping and bending acrylic and testing the focusing potential of acrylic half domes.

Above: Model Photo

Left: Plan Of Popova's *Linear Techtonic*



This course of advanced structural design allowed us to select and then mimic a building containing a specific structural system.

Our assigned system was the triangulated truss and for it we selected Christian Kerez's Leutschenbach School in Zurich.

Each floor is composed of four trusses which we mirrored out of acrylic and for which we attempted to copy exactly the dimensions of each strutt in our initial model.

The final model, pictured above, features trusses which are noticeably thinner than Kerez's and result from a short search for the thinnest possible members, 1/8".

Above: Model Photo

Left: Christian Kerez's Leutschenbach School

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Avery Hall

To the many many faculty members, studio critics, teaching assistants, colleagues, librarians, and partners, thank you for guiding me, for opening my eyes and ushering me through so many doors, for granting me access to levels of intellectual sophistication and grit that I had never witnessed before. I am so grateful to have received this education.

Thank you for pushing me, for forcing me to be uncomfortable, and allowing me to relentlessly make the same mistakes. Your patience and guidance allowed me to grow. Your design prowess, questioning, and references always generated an abundance of ideas. My effort, growth, ambition and energy would be nothing without you, and the support of my friends, family, partners, and mentors. To them, and to you, I dedicate this work.

Thank you.

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