

Selected Works -
Christopher Kumaradjaja

1. UNDERGROUND

2. THE CUT

3. GLACIERS

4. TRAILS OF MEMORY

5. MUSEUM OF WATER

6. LIGHTHOUSE



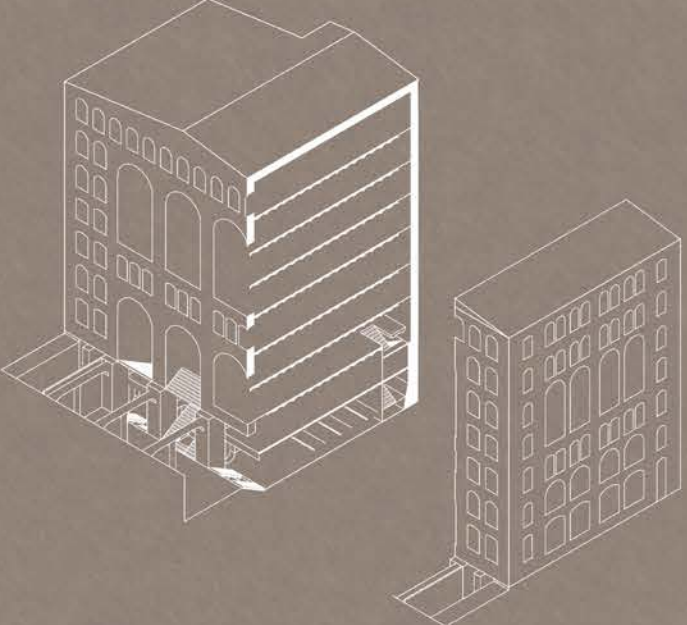
Here, "UNDERGROUND", visitors are compelled to examine the interface between material, soil, and debris at a part of a building most don't see: the cellar. At the bottom of the historic De Vinne Press Building, a public events space with catwalks divides the horizontal datums into five. As an event space outfitted for fashion shows, both performers and spectators are separated into different heights and engage with the material environs in different ways.

"UNDERGROUND"

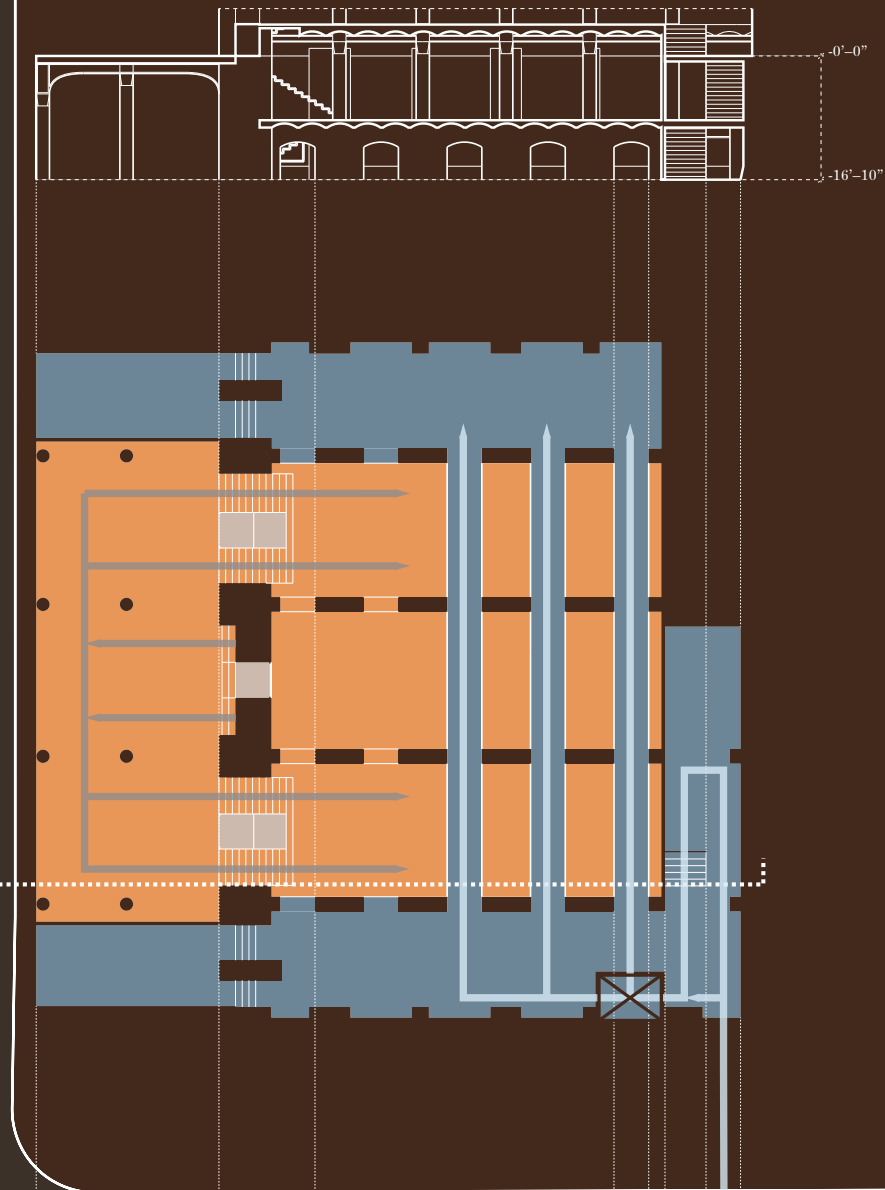
Performance Venue
NoHo, New York
September - December 2021
CORE Studio I
Critic: Amina Blacksher



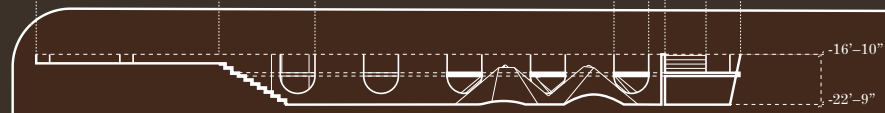
Historically, the sidewalk vault, although not currently existing, was part of the building's original 1886 proposal. By bringing light into the underground, the added space allows a grand entry into the cellar. The cellar's internal structure allows for stratification of circulation. The inverted arches push the catwalks up five feet from the audience datum.



Lafayette Street

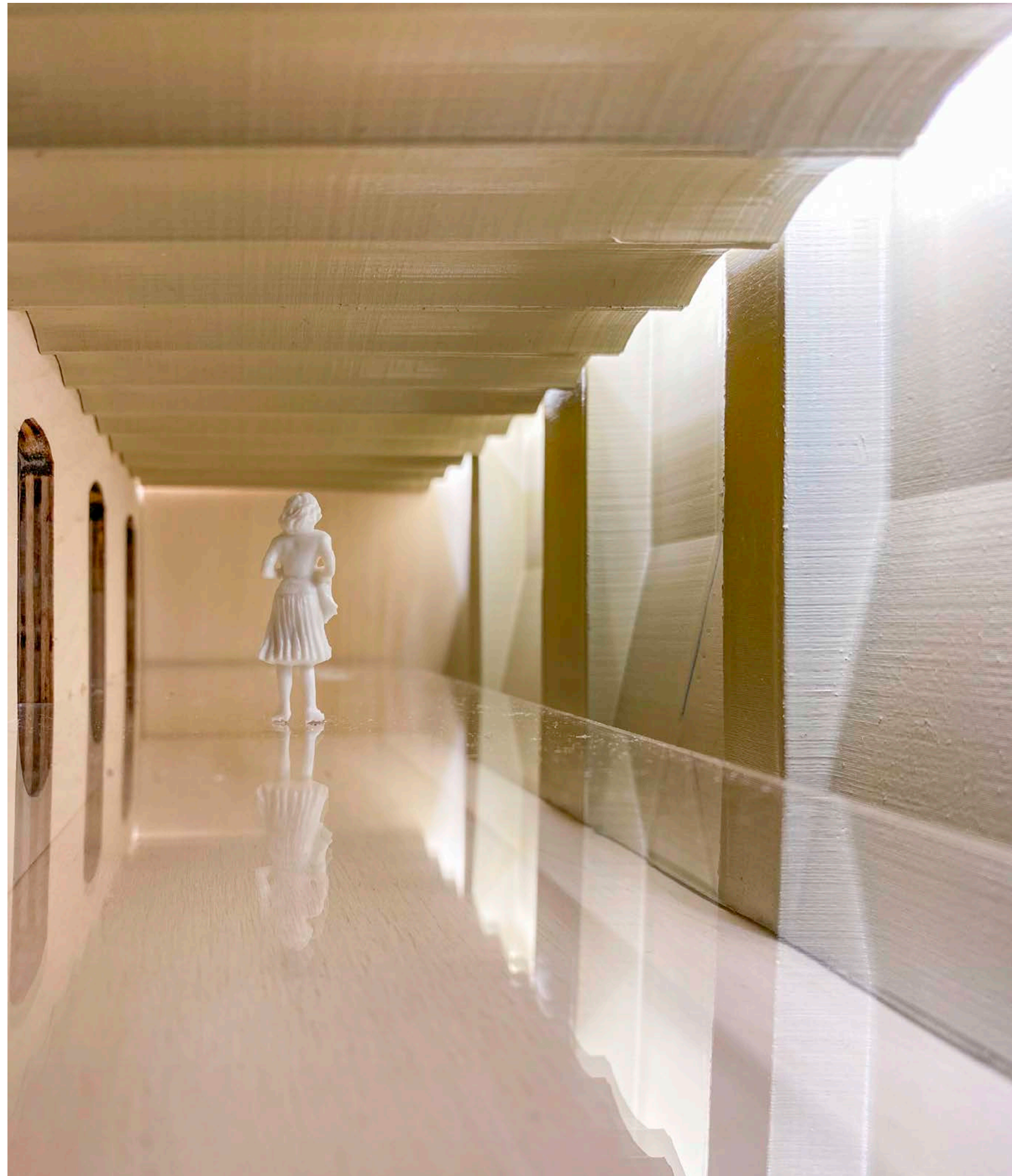
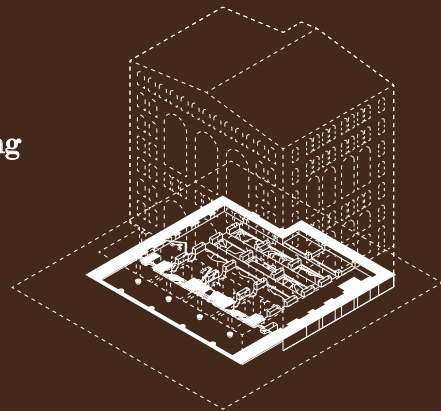


East 4th Street



— Audience Flow
— Performance Flow

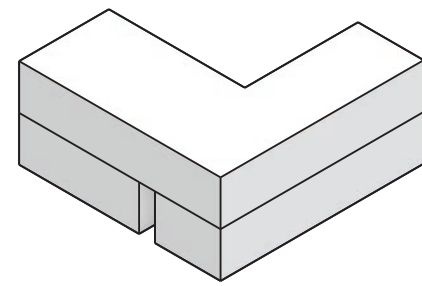
The hierarchy of structure, the girders and vaulted ceilings, and the load bearing piers divide the space into two axes, two grains. The performance grain emerges from the back of the house, while the audience rushes in from the front.



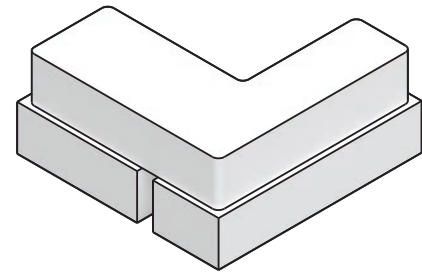


"THE CUT"
K-8 School
Lower East Side, New York
January - April 2022
CORE Studio II
Critic: Esteban de Backer

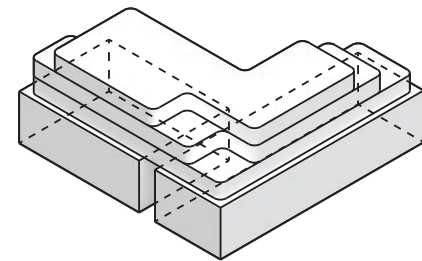
The trademark of this school is the passageway. Drawing inspiration from architectural styles during the early days of steel frame construction, which was the predominant type of construction during the Snyder era of public schools, this school engages with the ever-changing Lower East Side neighborhood. This school employs setbacks with a novel, parametrically designed painted metal facade on the top of the base.



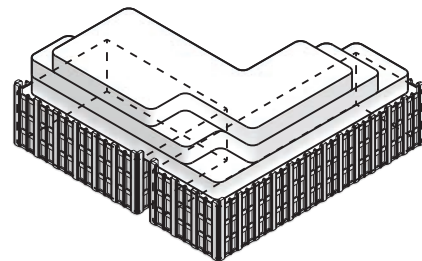
THREE-PART MASSING



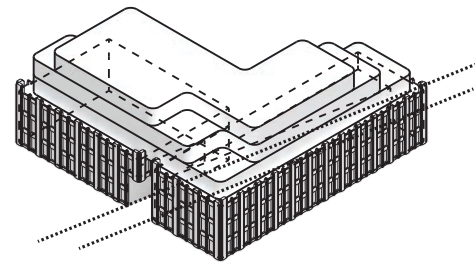
BEVEL



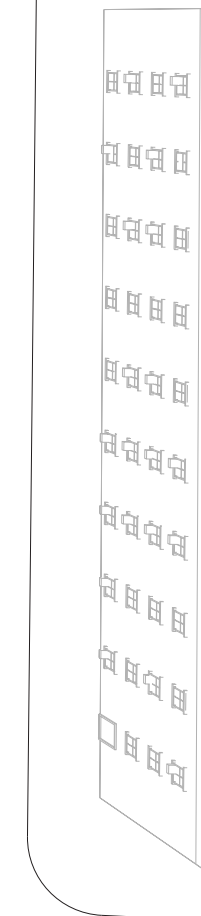
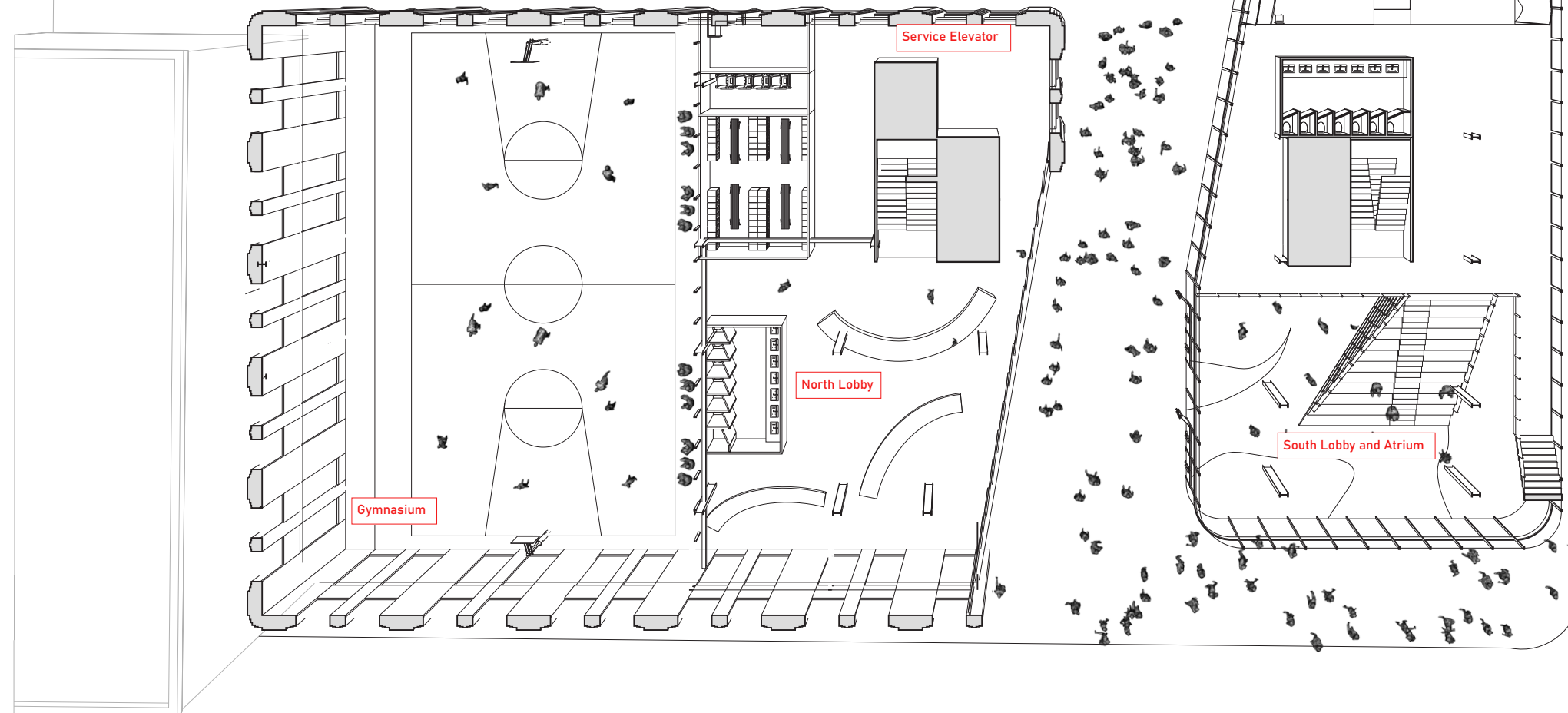
SETBACK

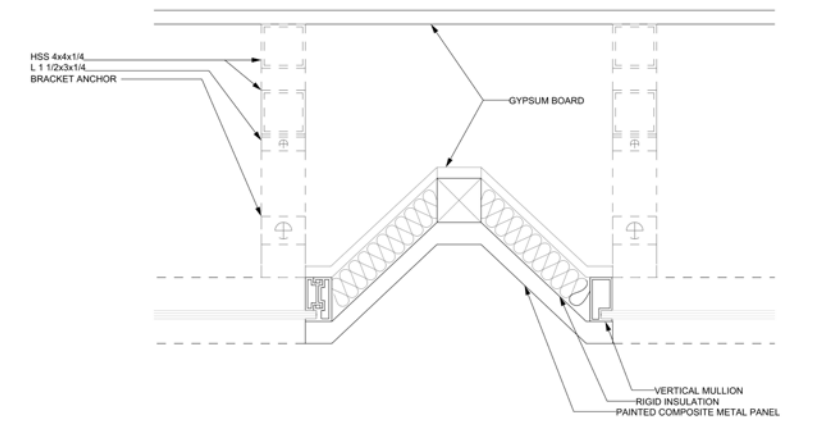
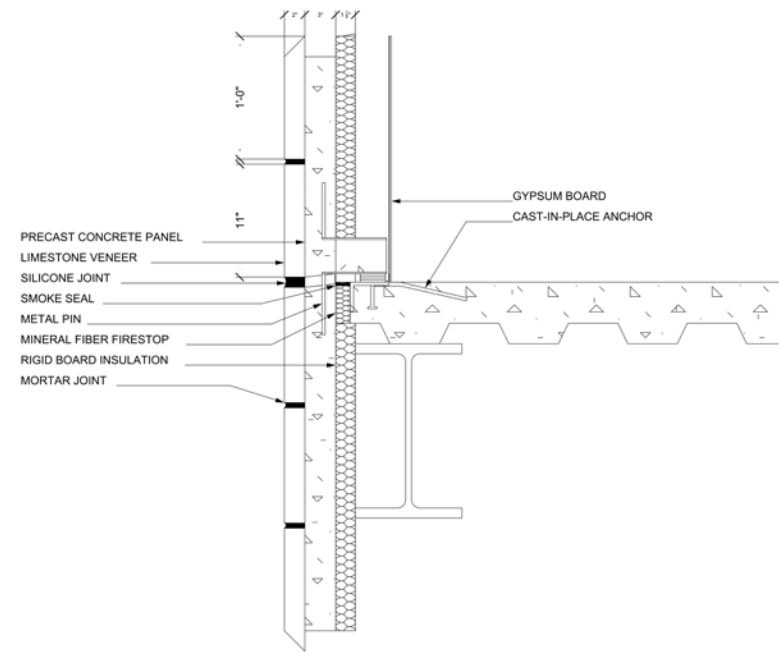
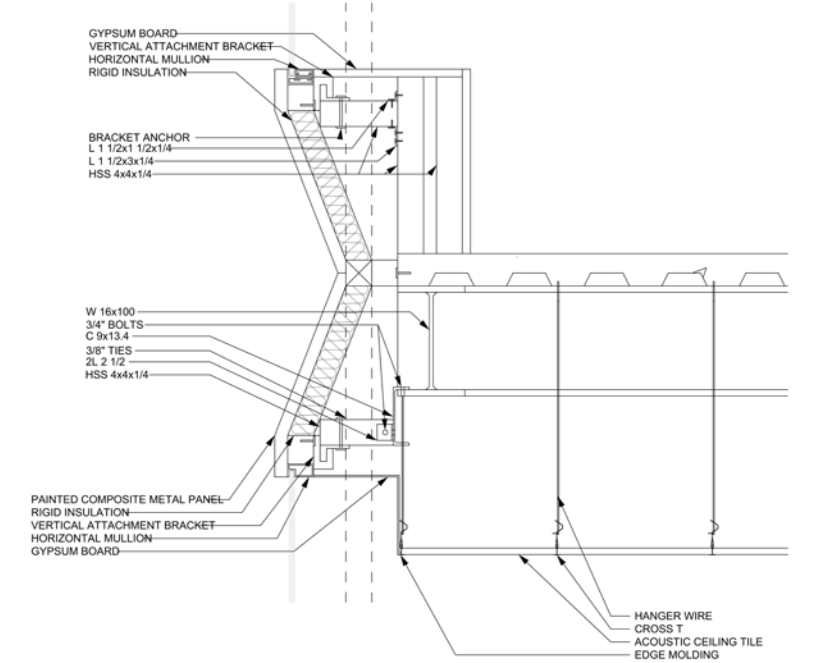
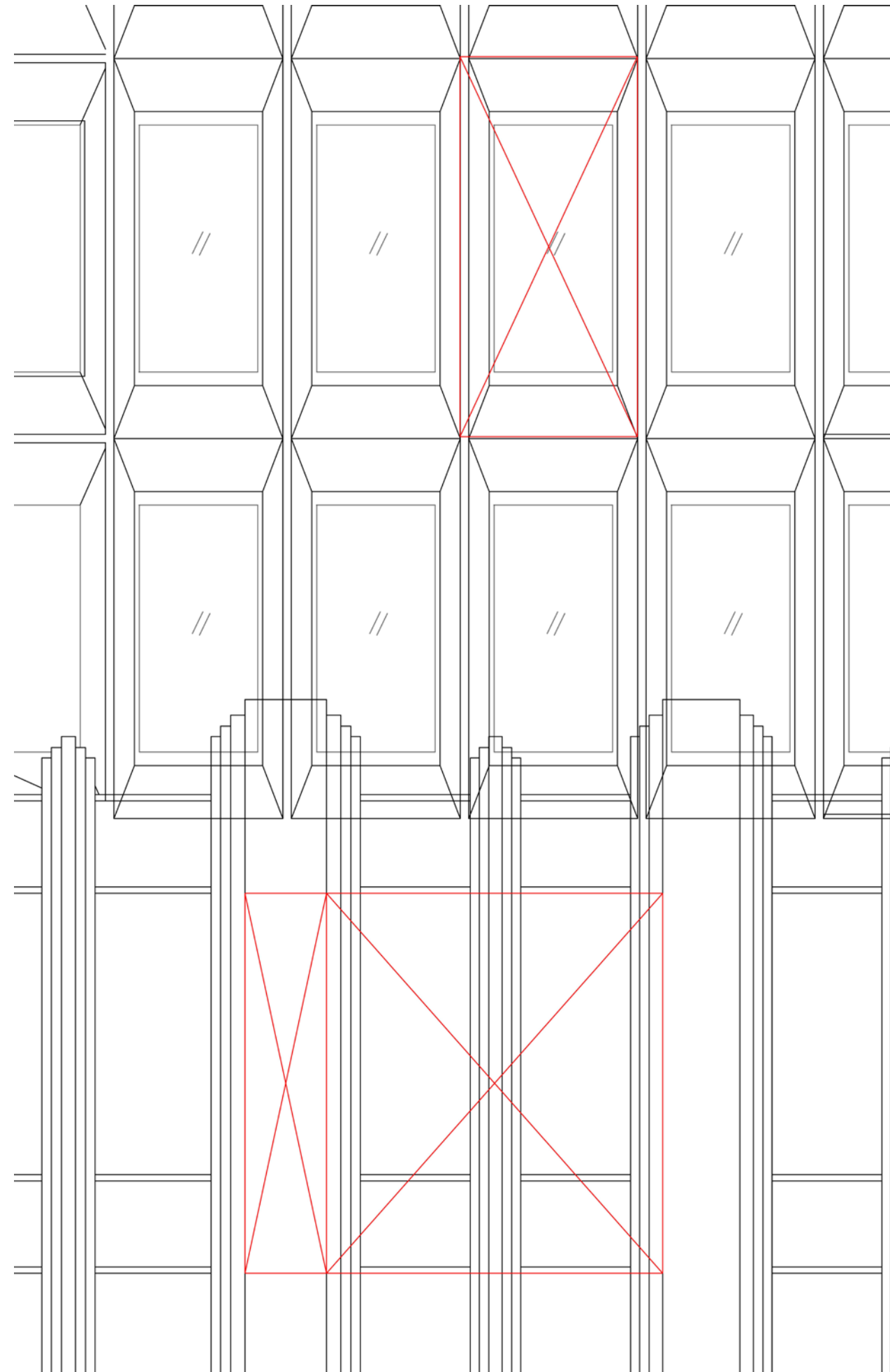
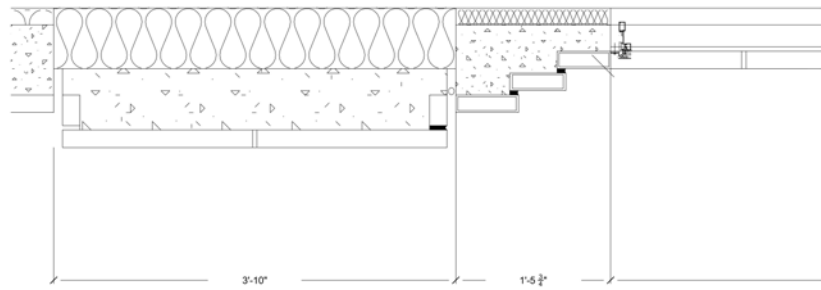


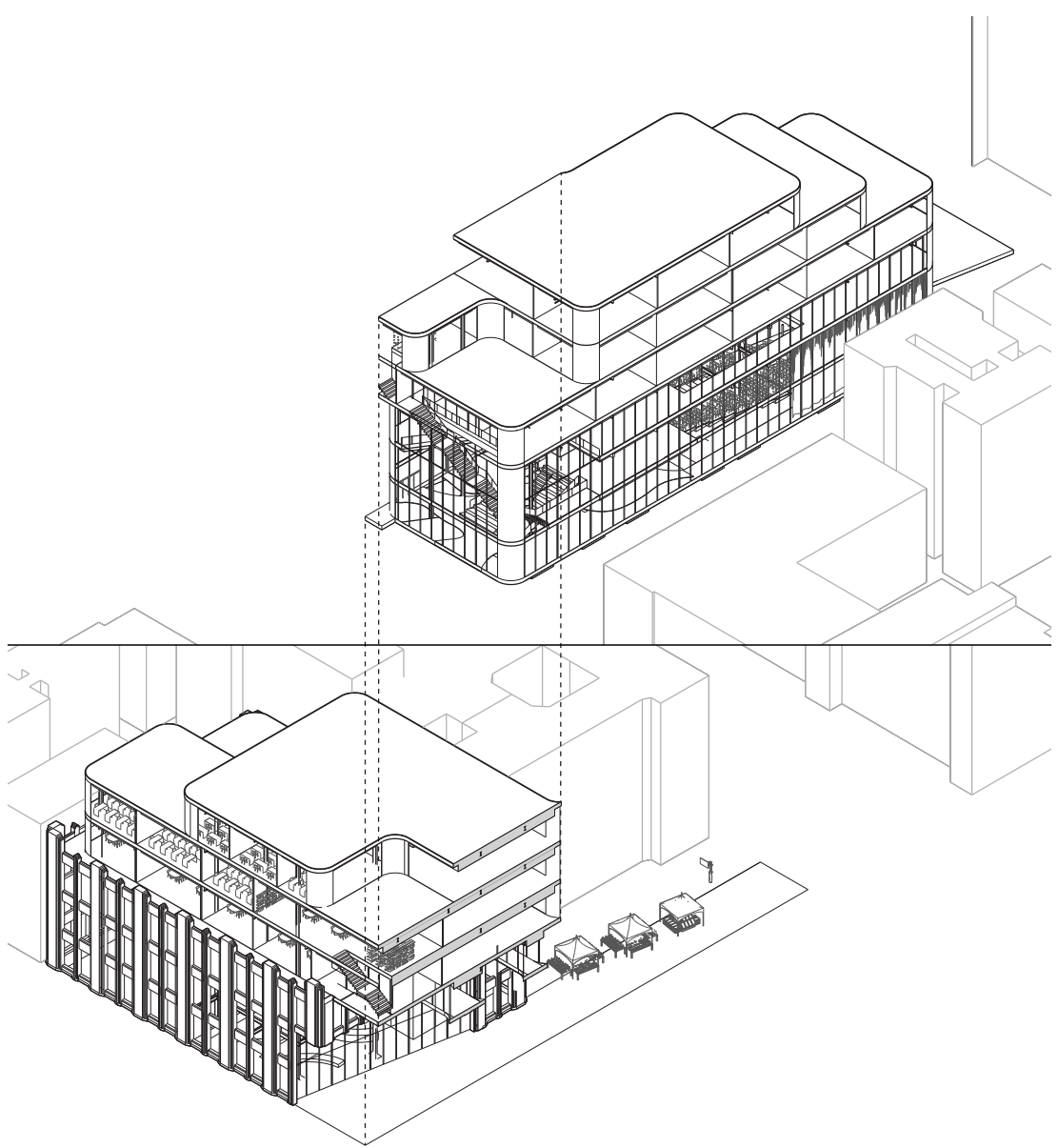
ARTICULATE

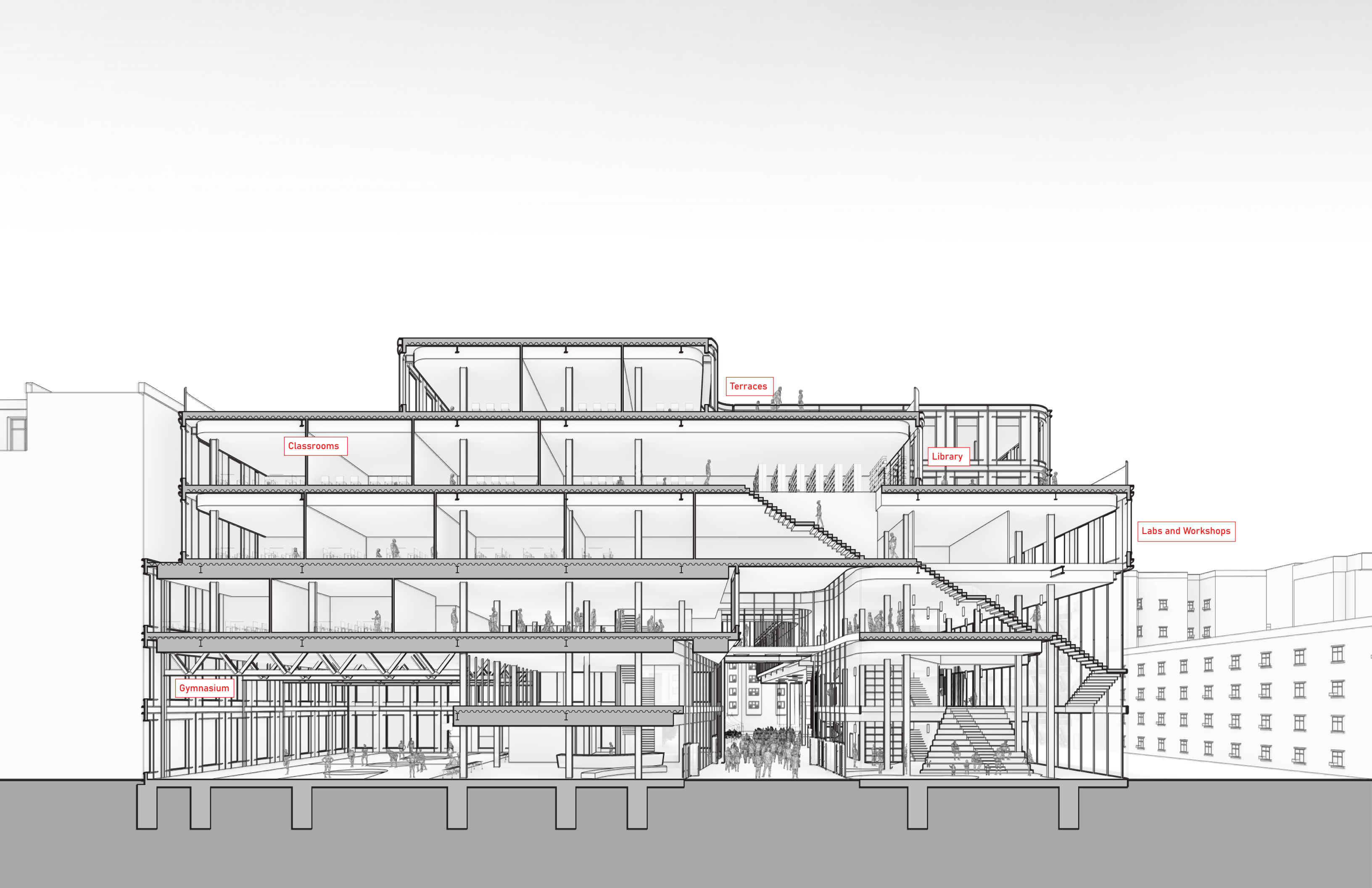


CUT THROUGH









Classrooms

Terraces

Library

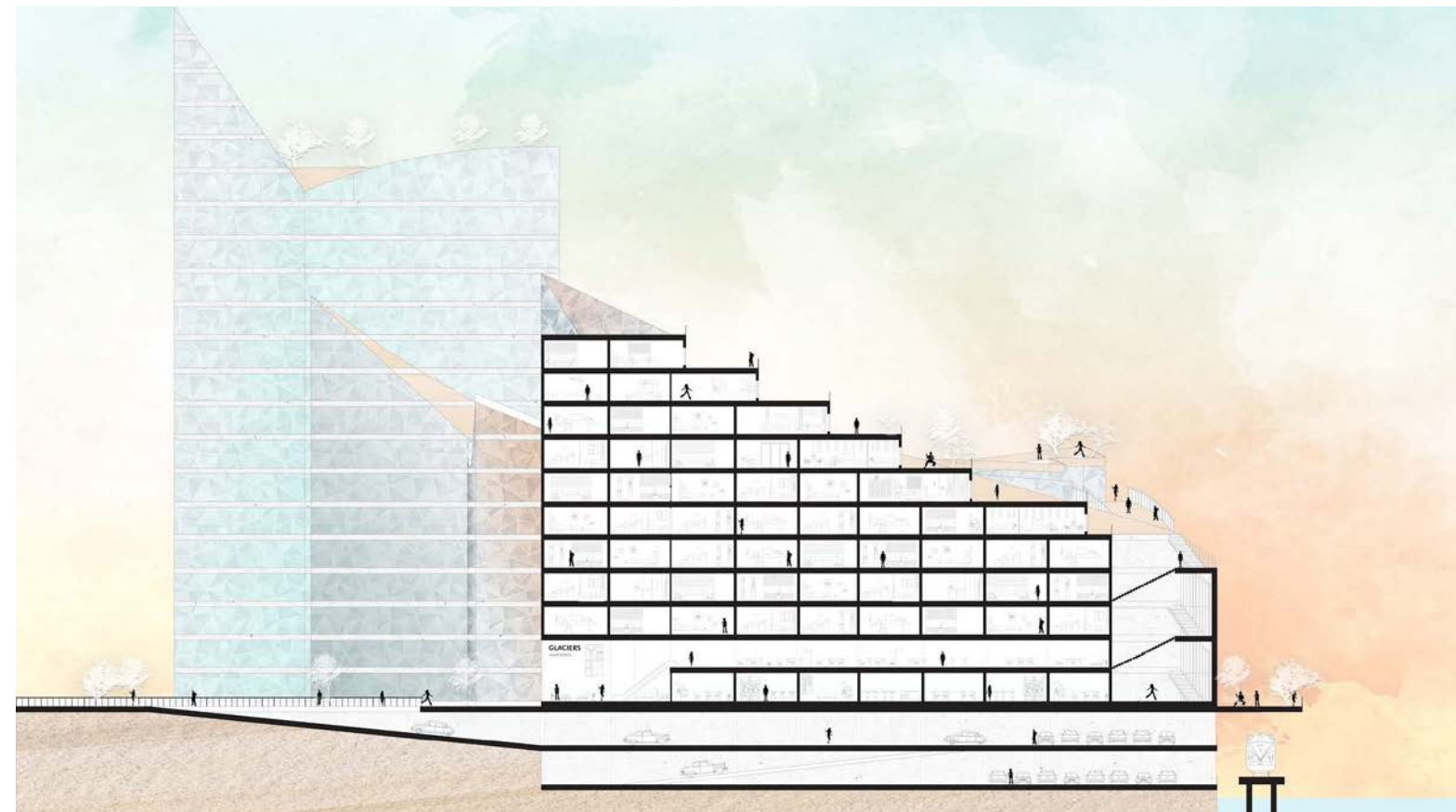
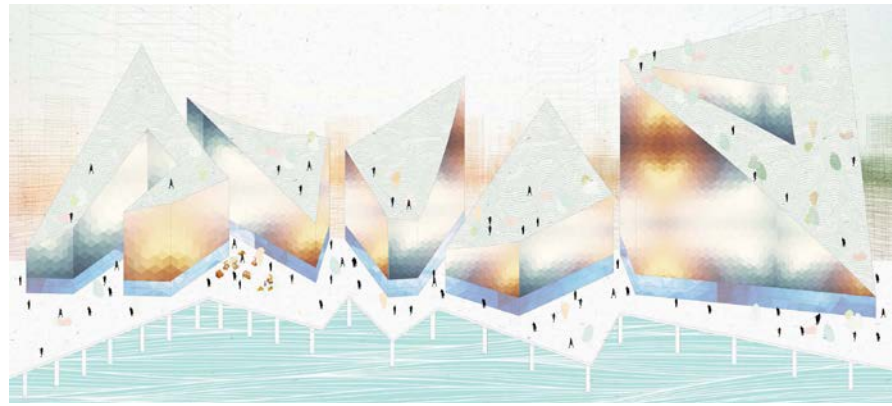
Labs and Workshops

Gymnasium



"GLACIERS" by Harlem River is a housing project comprised of five quadrilateral volumes. They are extruded up to form roof surfaces, that are hyperbolic paraboloids.

GLACIERS
Housing
Mott Haven, Bronx
September - December 2022
CORE Studio III
Critic: Galia Solomonoff
Studio Partner: Jamon Zixuan Mok



Madison Avenue Bridge

MANHATTAN

THE BRONX

Food Hall

Restaurant

Cafés

Pharmacy

Supermarket

Post Office

Craft Market

Makerspace

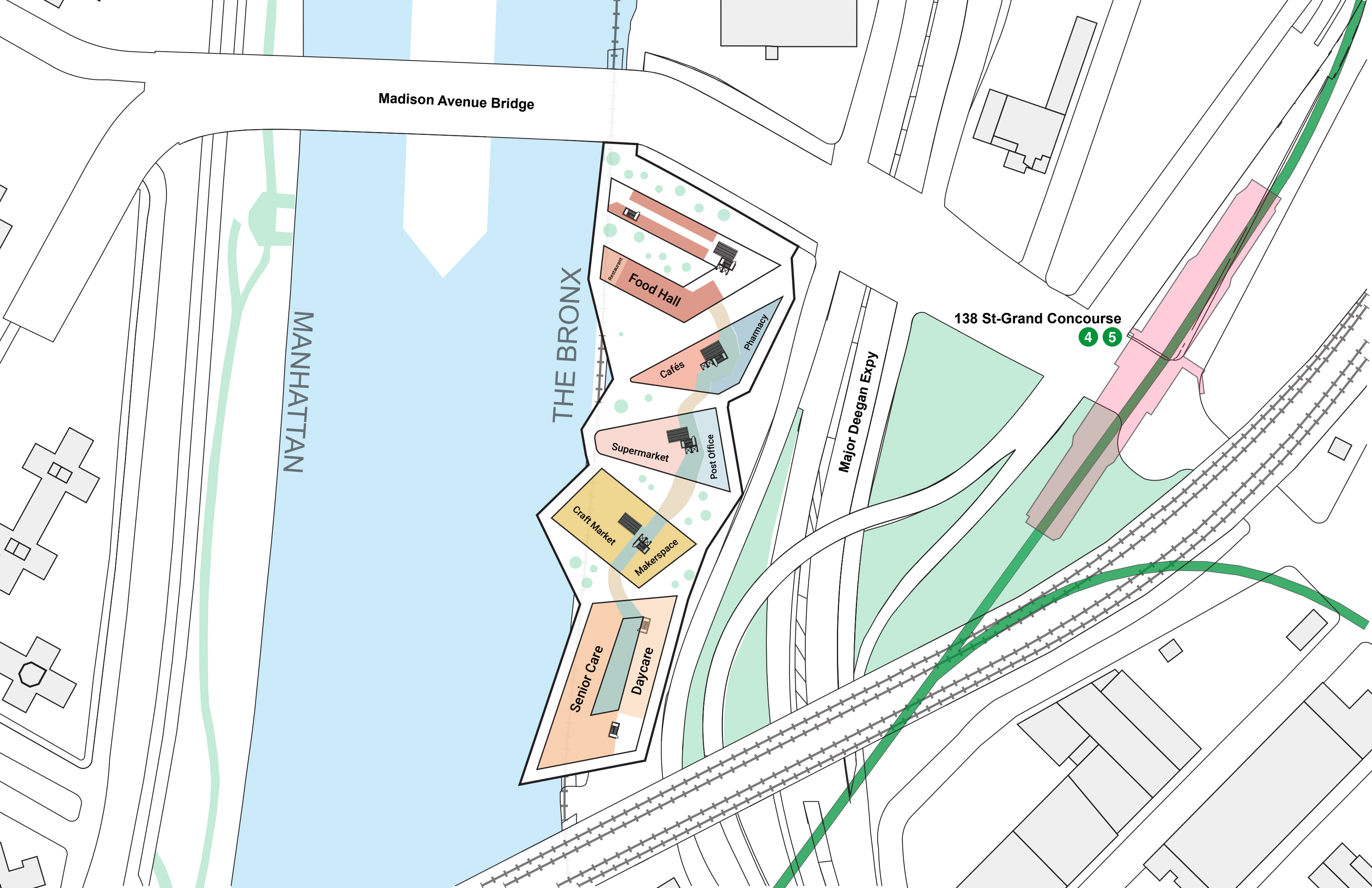
Senior Care

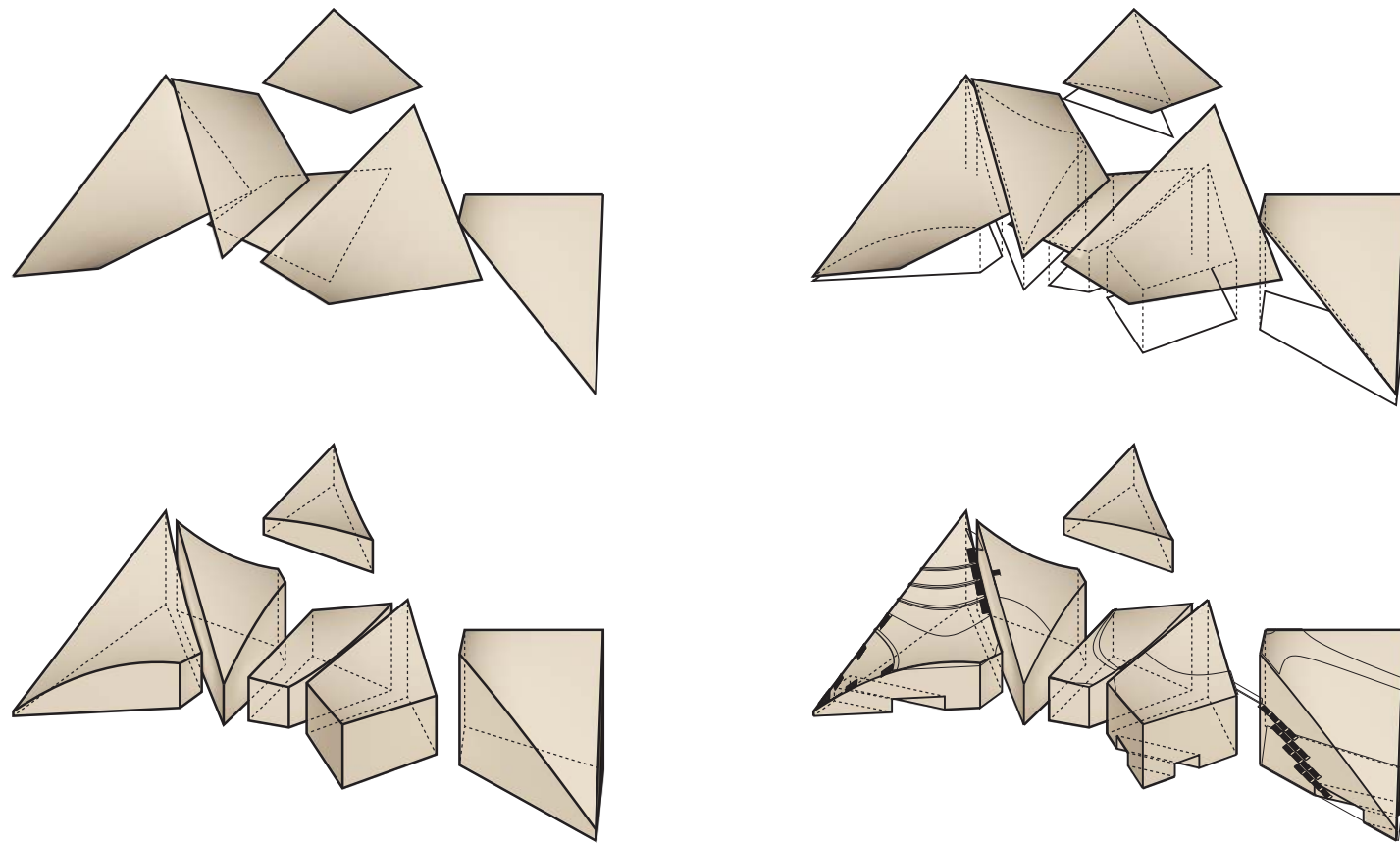
Daycare

Major Deegan Expy

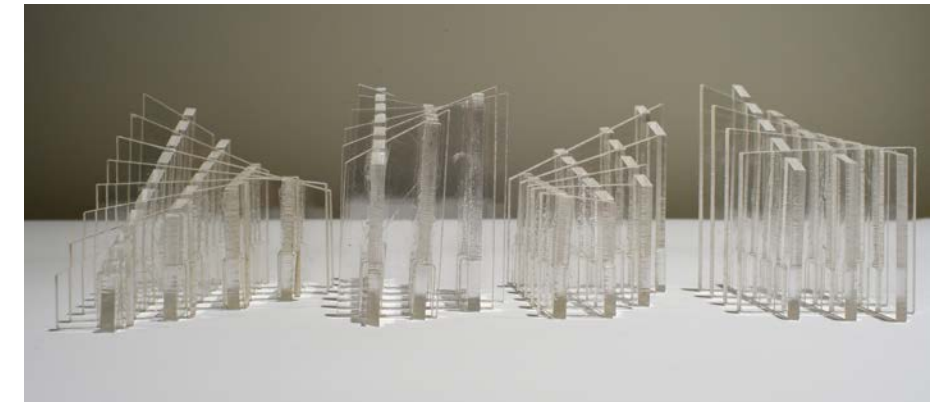
138 St-Grand Concourse

4 5

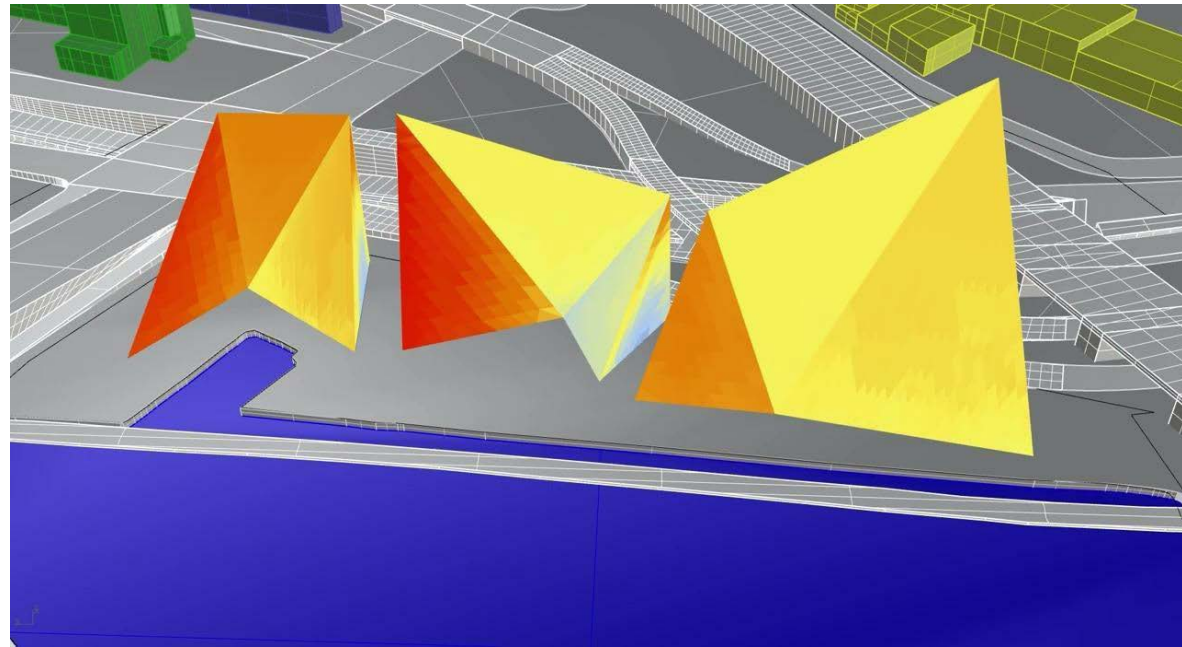




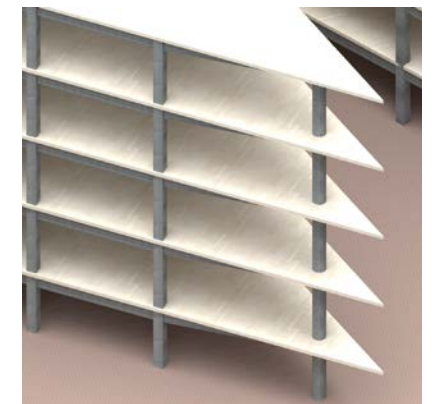
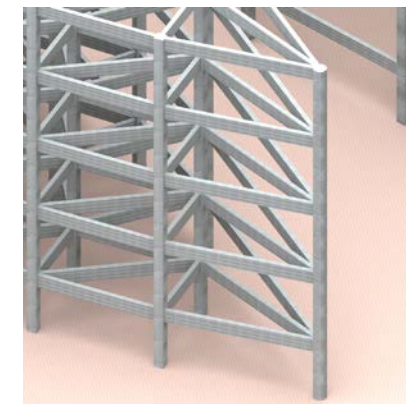
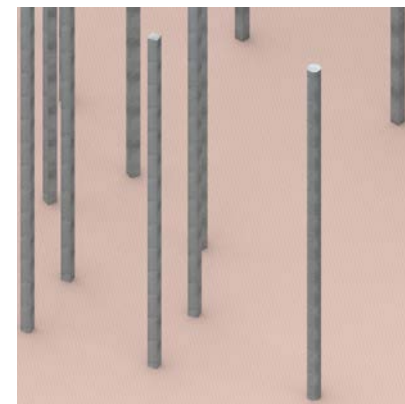
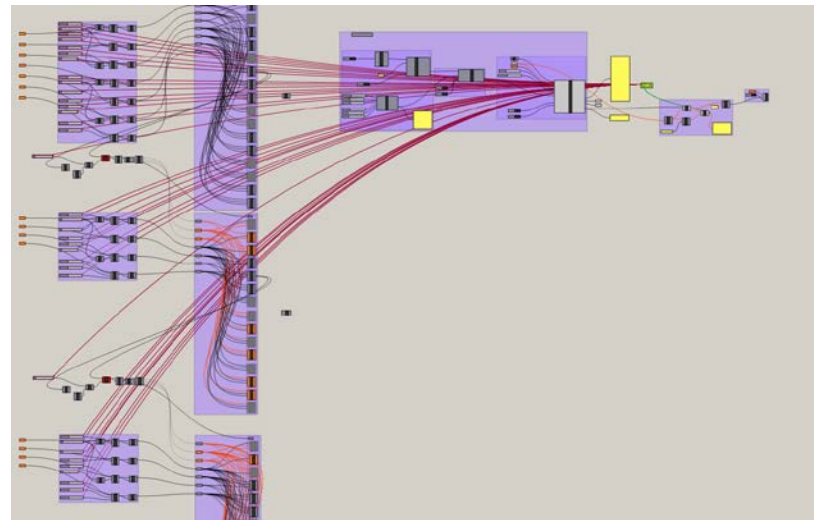
The geometry of "GLACIERS" is primarily comprised of a series of hyperbolic paraboloids. They are curved surfaces that can be constructed completely of straight lines. The highest vertices allow penthouses, townhouses, and gardens to line the peaks of these glaciers.



The effect is most noticeable when the massing is discretized.

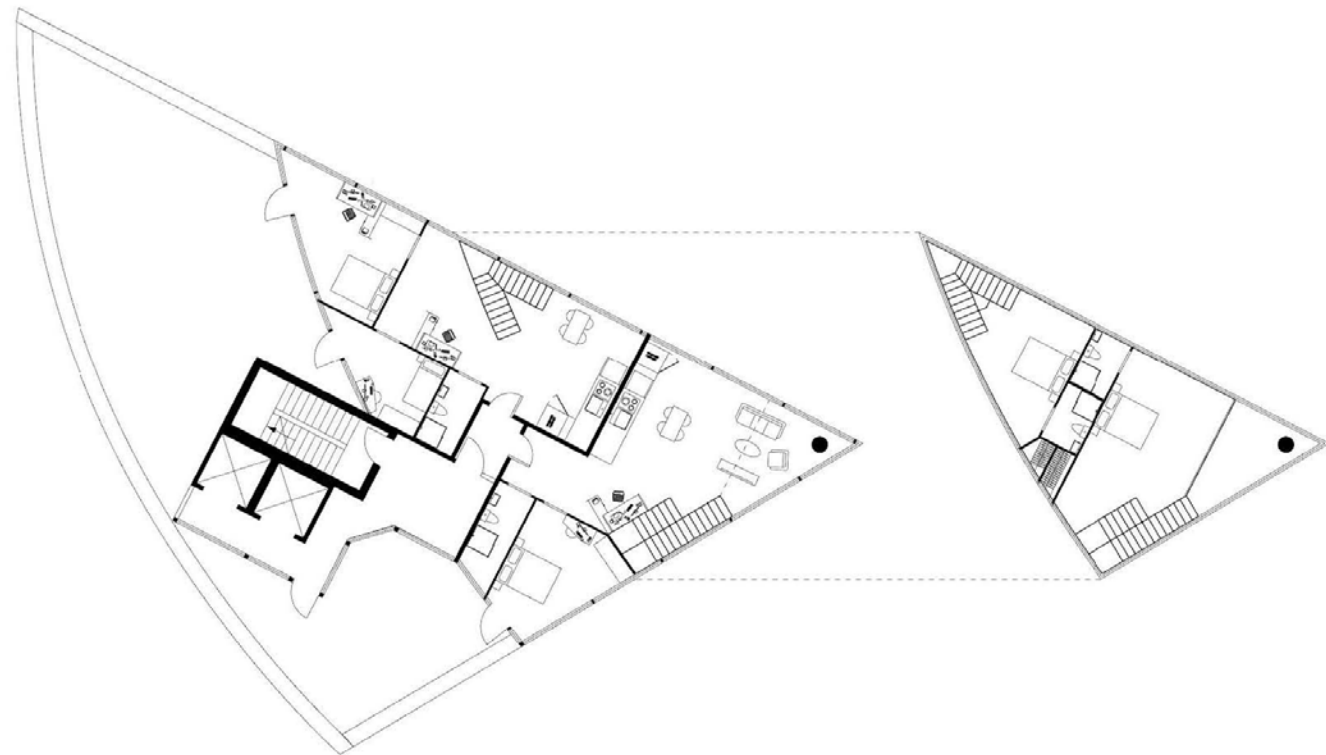
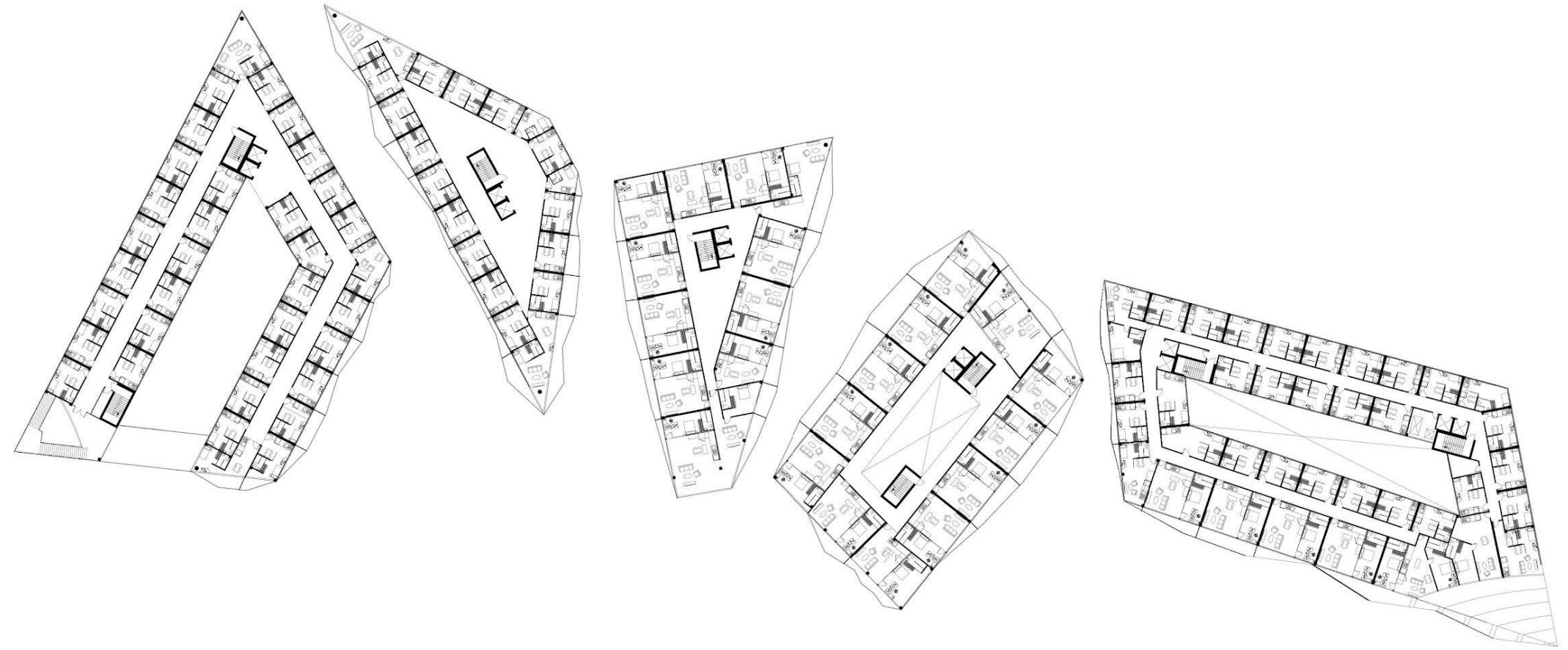


Grasshopper was used for Solar Radiation optimization, hyperbolic paraboloid generation, and efficient structural design.



CLT Floors sit atop reinforced concrete beams and columns.

Right: Floorplan. Typ.



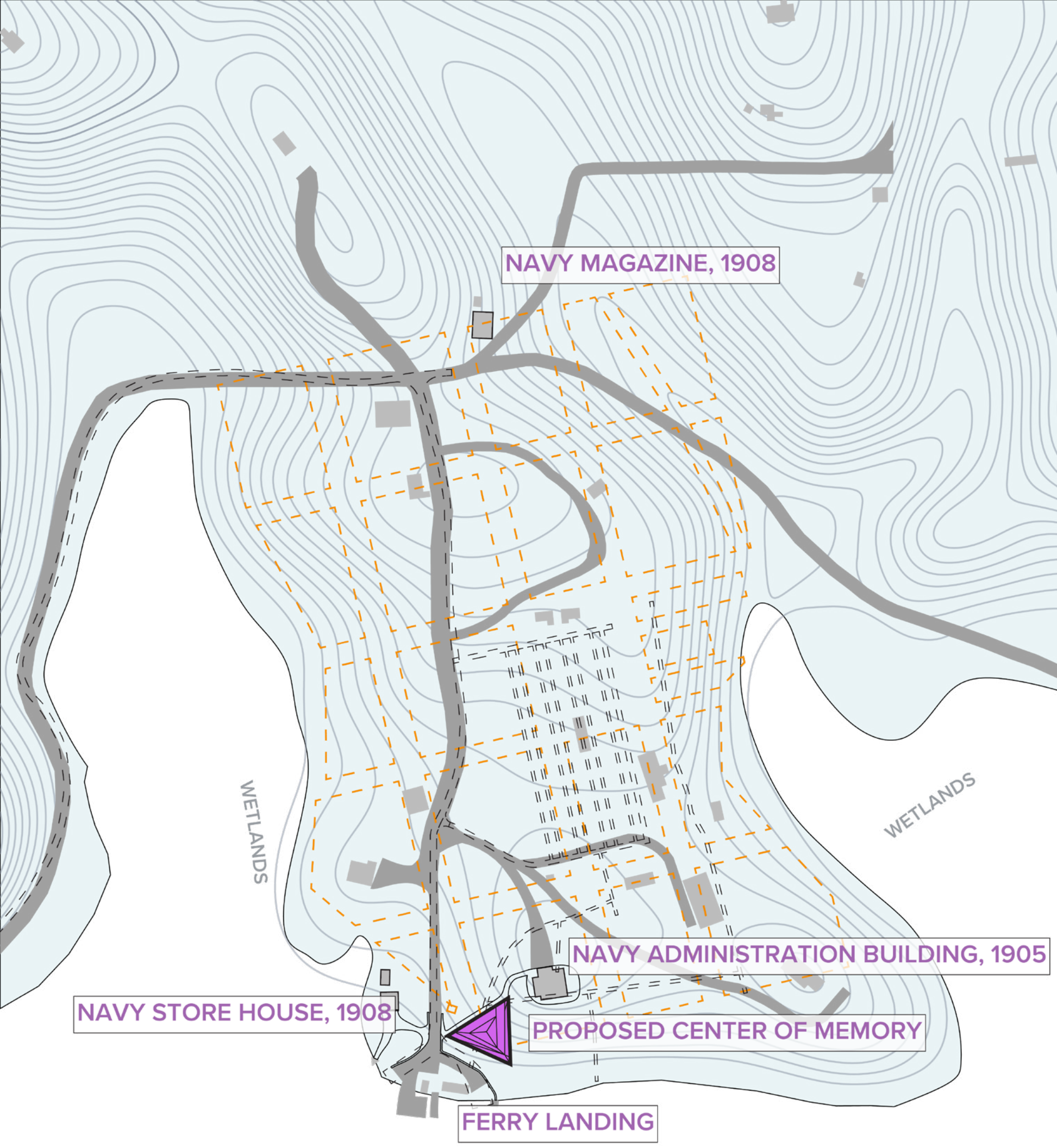
Left: At the uppermost floors, units are divided into duplexes with gardens.



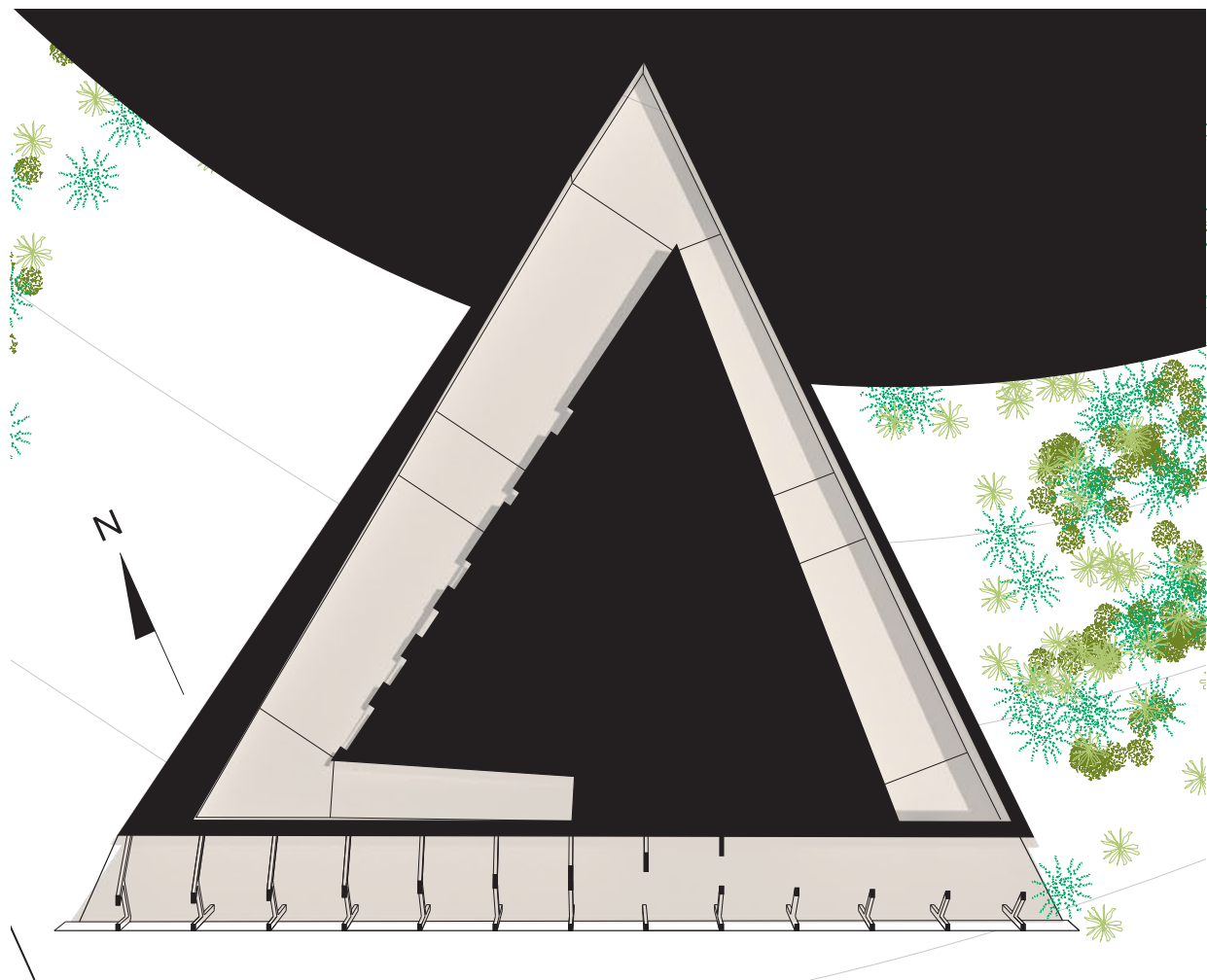


"TRAILS OF MEMORY"
Museum
Culebra, Puerto Rico
January - May 2023
ADVANCED STUDIO IV
Critic: Pedro Rivera, Ubaldo Escalante

This proposal addresses these two aspects, the contextualization of both artifacts and oral histories, through a construction: a new home for the artifacts, and an oral history center. As mentioned, San Ildefonso has two hidden histories: the unrealized colonial settlement plan, and the traces of the Navy camp. In this site plan, they are dotted in orange and gray respectively. The structure's triangle shape is derived from the need to maintain circulatory and visual corridors from the ferry landing and the two existing historic Navy buildings. Linearizing the timeline allows visitors to be "primed" for the stories to come. The structure is largely a subtraction from the land, and its outer walls are made of stabilized rammed earth. Reclaimed hardwood comprises the joist flooring and the purlins, and a lightweight sheet metal roof both reflect the common building practices of the island. The floor is stone up to the last, tight corridor, where the vertical gain is one story high.



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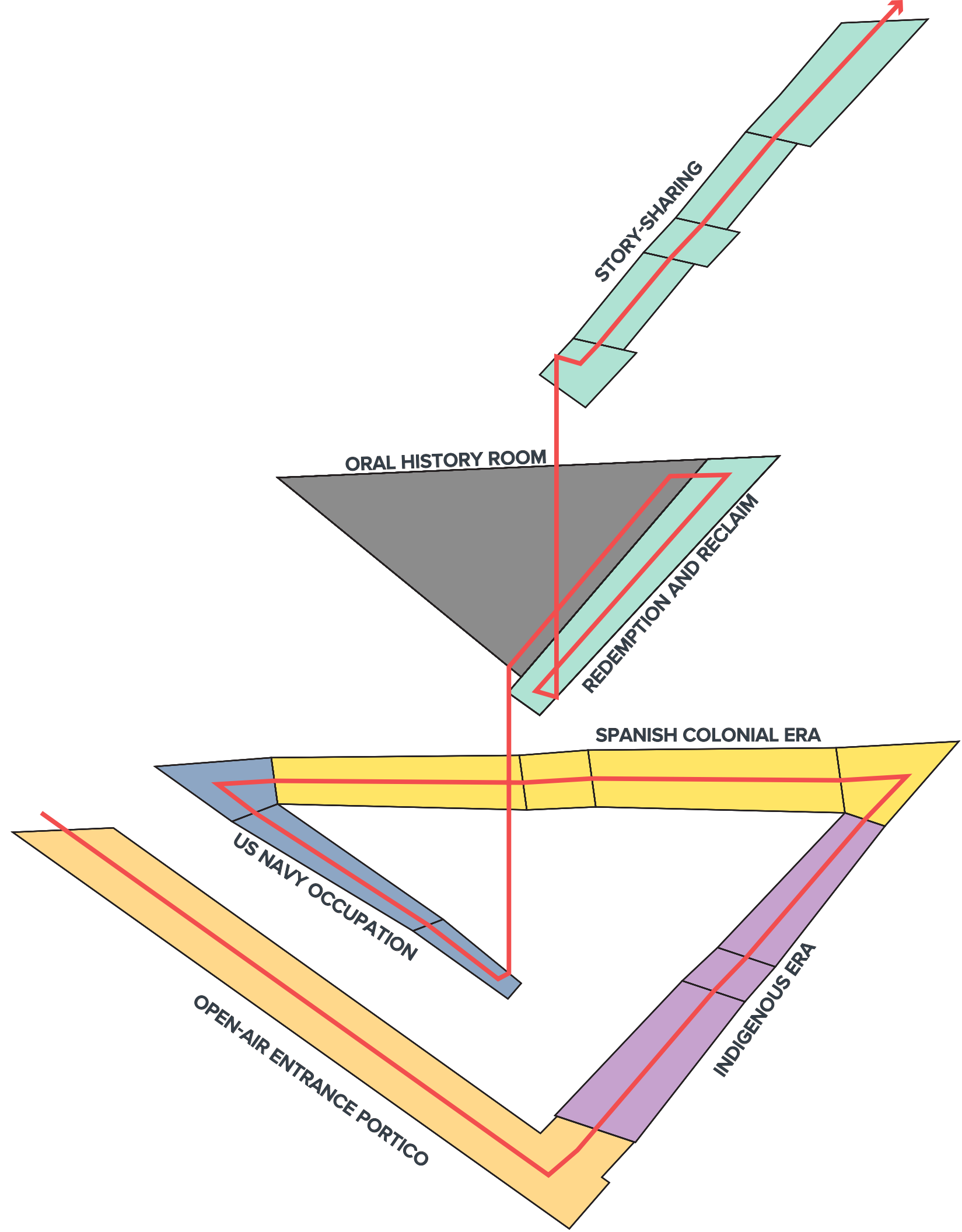


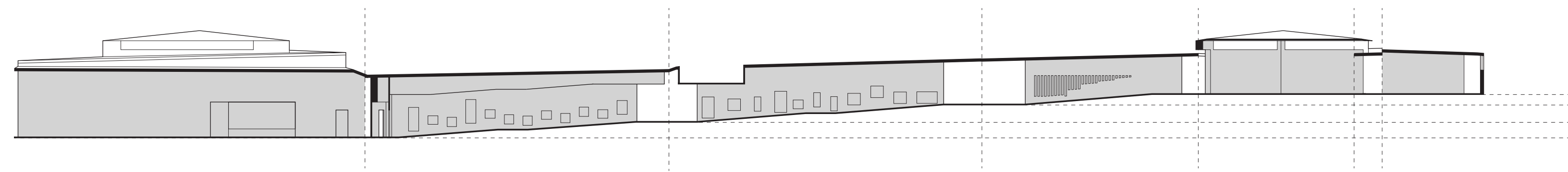
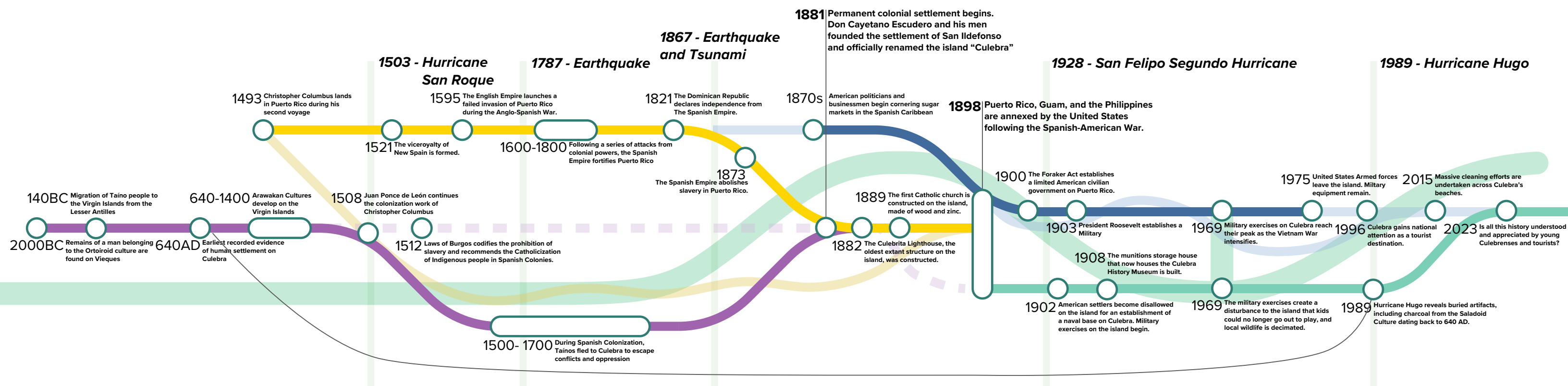
Plan at 10 feet

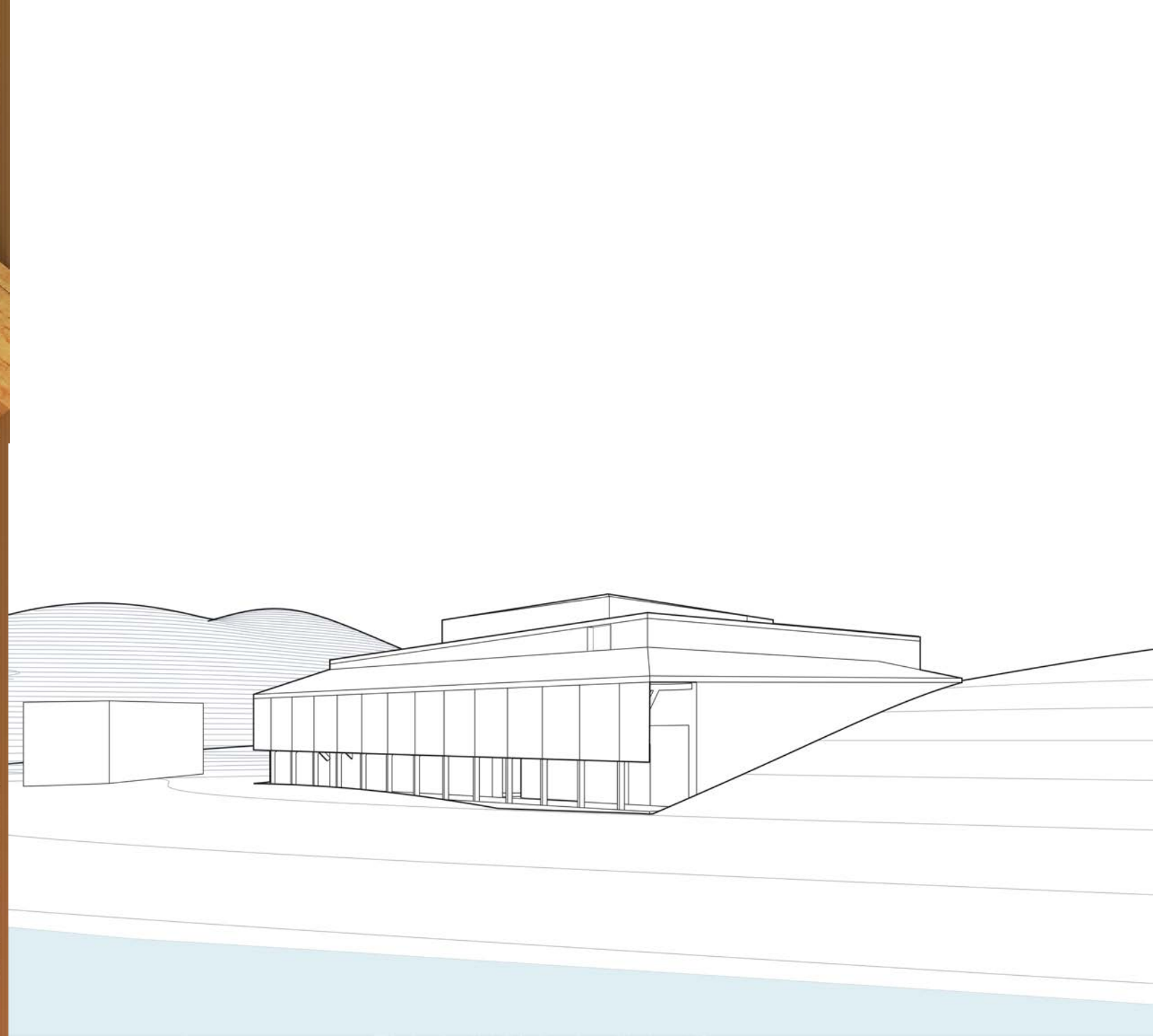
We envision the timeline introduced above as a singular path inside the museum. Linearizing the timeline allows visitors to be “primed” for the stories to come. The entire museum is arranged in a gentle ramp, which provides a subtle ascent.

First, artifacts pertaining to the pre-Columbian era, such as the pottery and campsite remnants, are on display. After turning the corner, documents and pieces related to trade and empire, and stories relating to Spanish colonization are on display and told. However, as the history progresses, with the American annexation of Culebra, the corridor upon the next turn becomes darker and narrower, evoking the direness of being under occupation.

Once visitors are primed for the climax of this history, the path culminates in a dark room, where oral histories and documentaries are screened. This large space can also invite meetings and commemorative events, as it was sized to hold twenty people holding hands in a circle. Upon exiting the oral history room, history continues. What now? The large forces of gentrification and tourism make a complex future for Culebra. This last stretch is for those to reflect and to engage with the history that has been written, with the books by the elders on display to keep the stories alive.

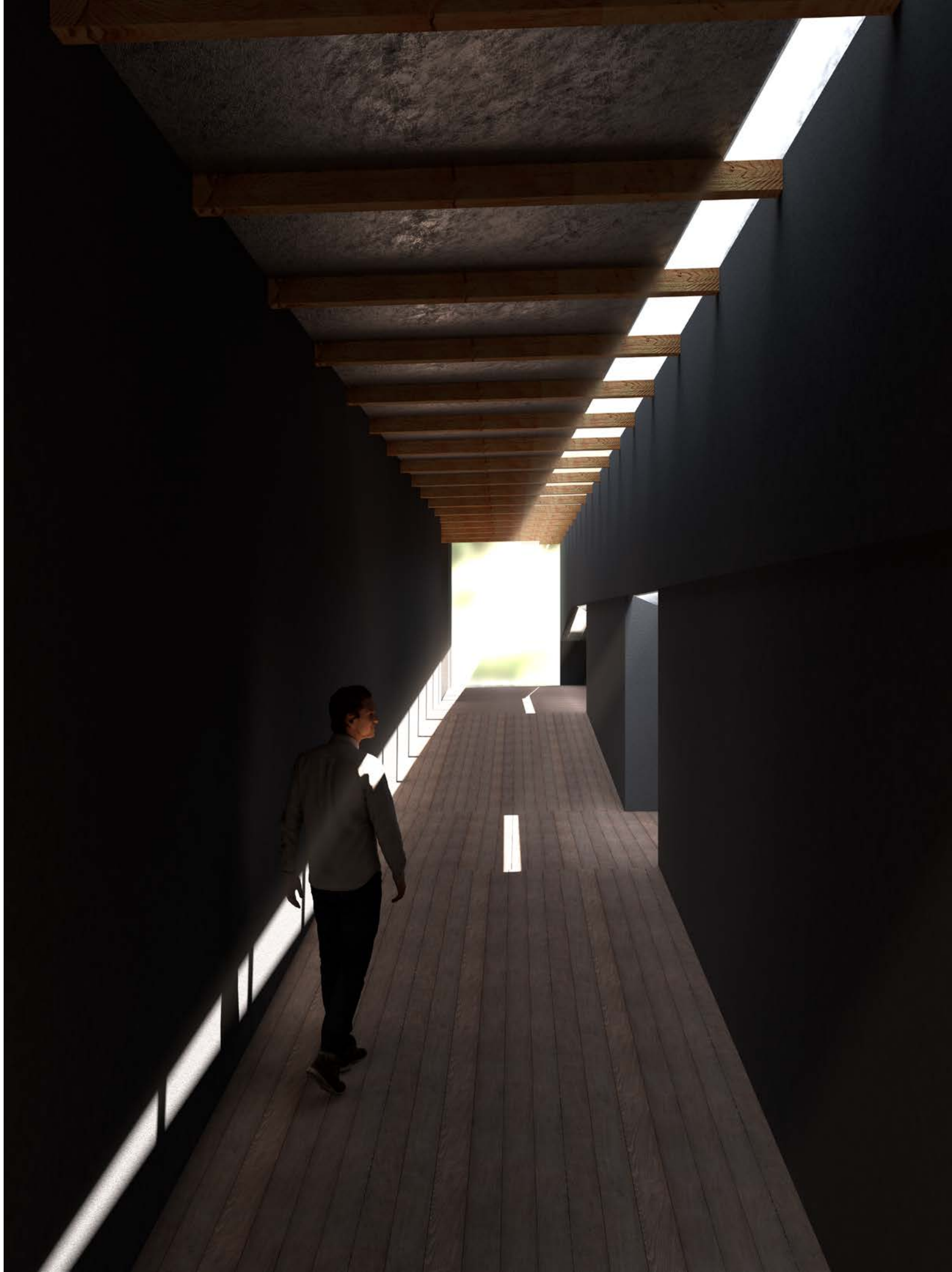






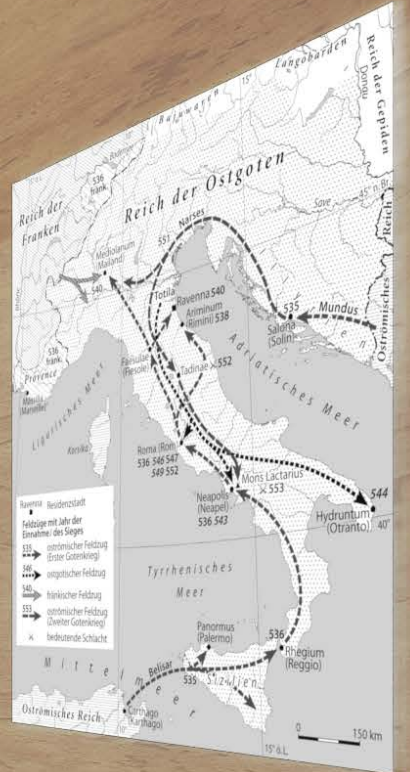


Culebra should have grown steadily during the sixty years that the Navy was here.





“IL MUSEO DELL’ACQUA”
Museum
Venice, Italy
September - December 2023
JOINT HISTORIC PRESERVATION/
ARCHITECTURE STUDIO
Critic: Jorge Otero-Pailos, Mark
Rakatansky



Rovigo

Feltre

Trevizo

The birth of the Venetian Empire begins in its lagoon, where the city’s earliest inhabitants were both trapped and thriving. It’s a miracle that Venice exists, from the resourcefulness required to build on marshland, to the historic contexts and “barbarian invasions” that have caused its inception.

El Dogado e Domini de Teraferma ca. 1500

N

At its height, Venice commanded an empire of the sea, the Stato da Mar. Its armies and mercenaries were supported only by the successive conquests on land, as the Venetian Republic took advantage of feuding neighbors to provide food and water to their everlasting trade and war machine, the Domini de Terraferma. Critical battles and turning points in its history have proven consequential and instrumental.

Dogado di Milàn

Milàn

Republega de Gènoa

Gènoa

Mar Lìguero

Arsiduco de Austria



Venetian expansion of Terraferma began with the War of Padua.
Hiring Condotieri, Doge Michele Steno sought to conquer fertile land.



Arsenale

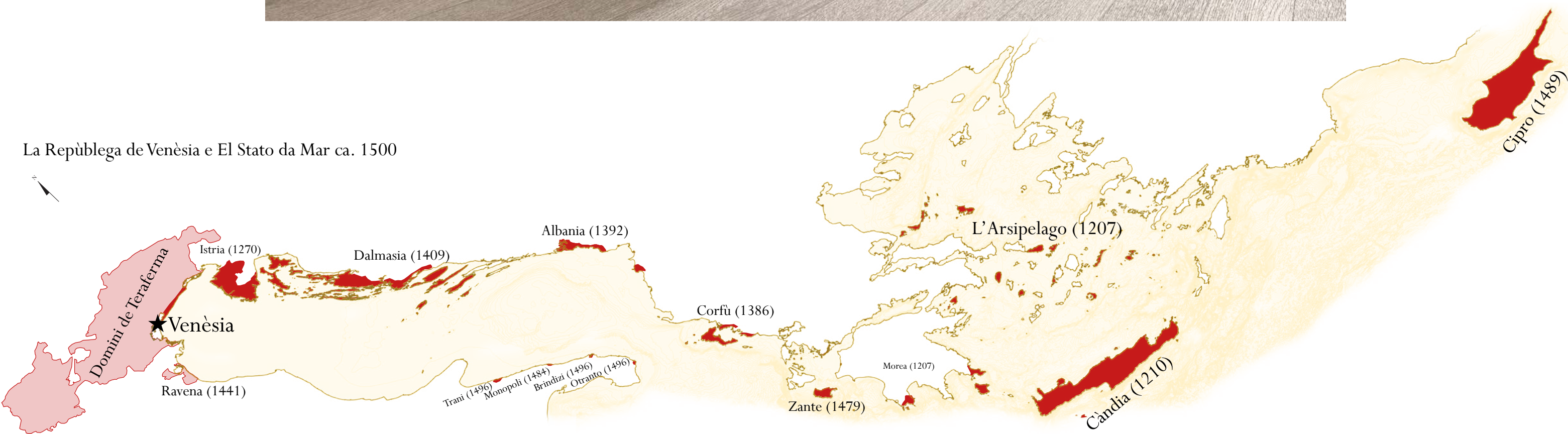
Piazza San Marco

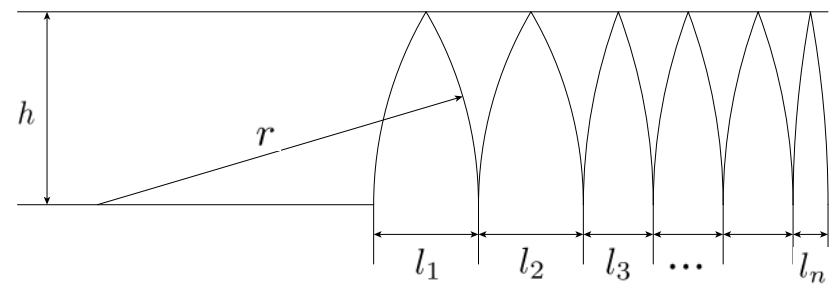
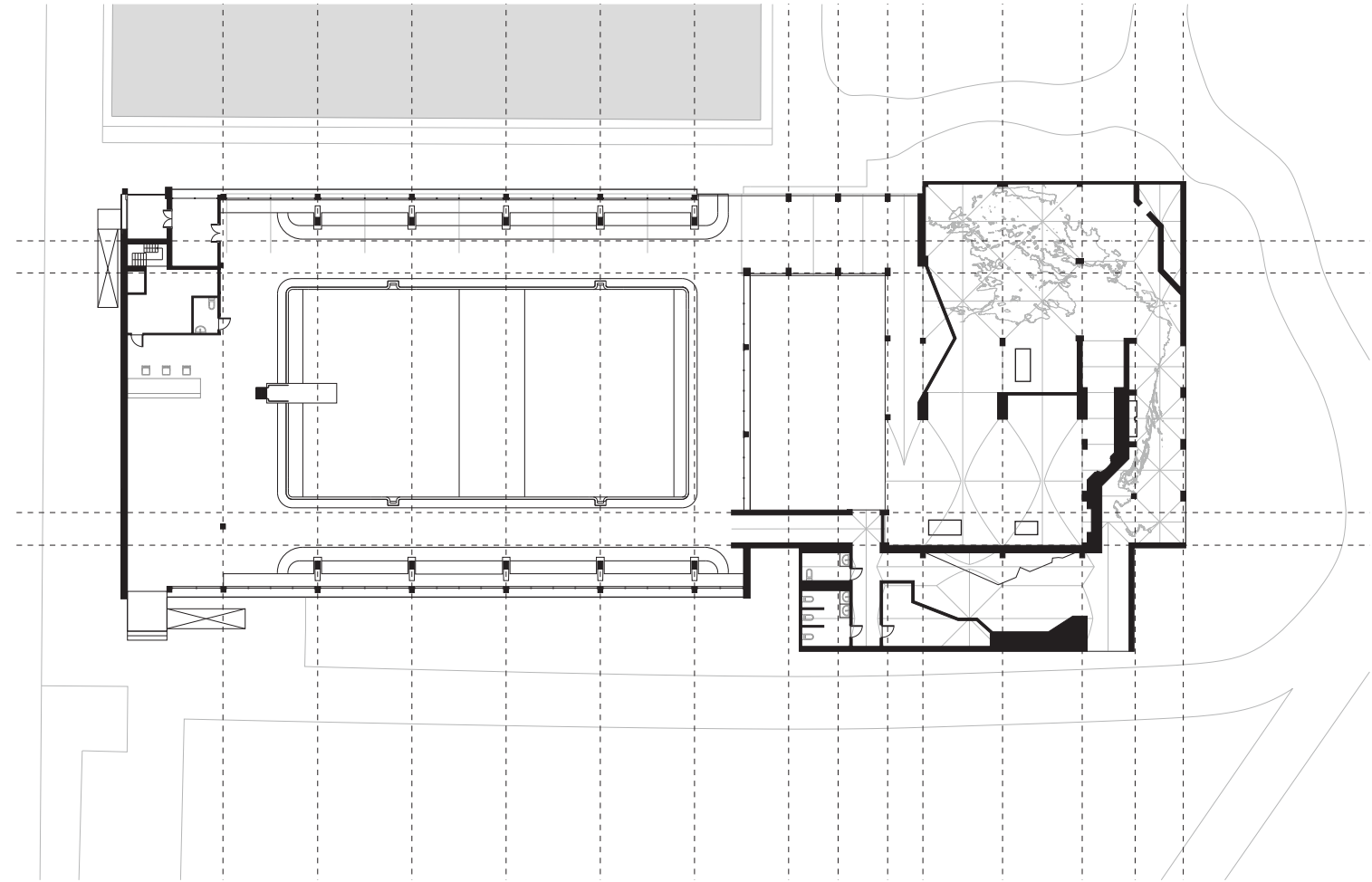
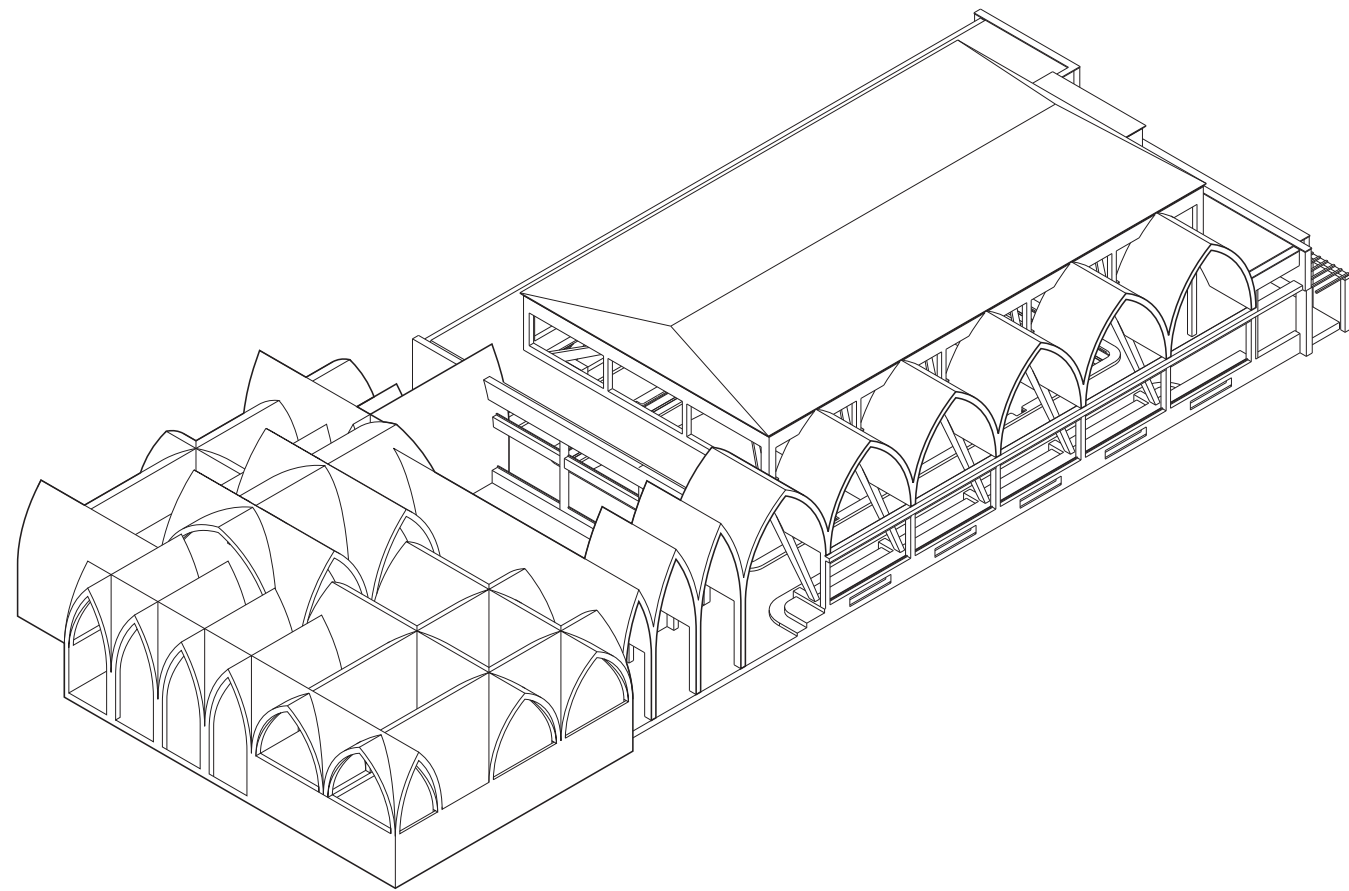
SITE

San Giorgio Maggiore



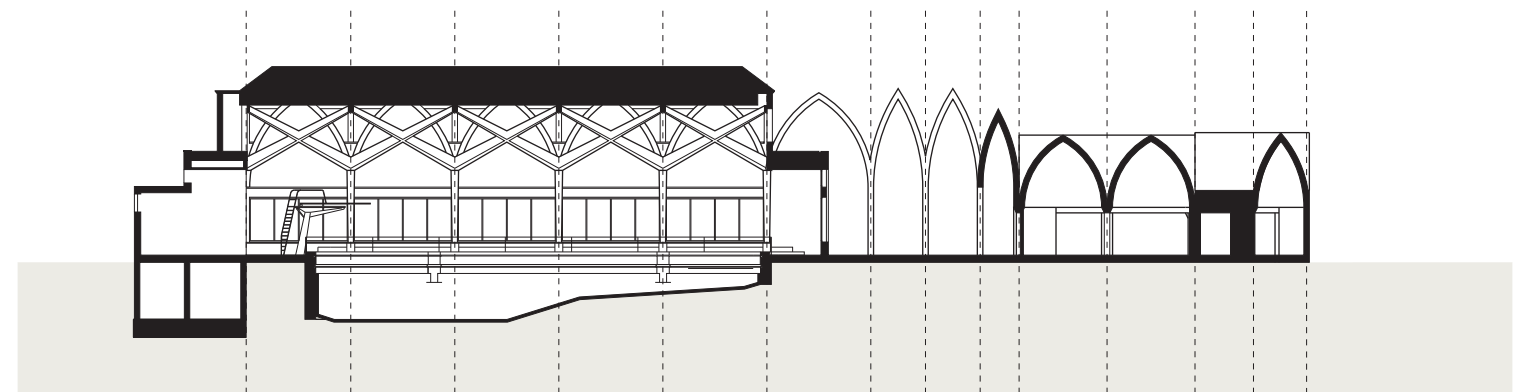
La Repùblega de Venèsia e El Stato da Mar ca. 1500





$$r_n = \frac{h^2}{l_n} + \frac{l_n}{4}$$

This addition to the original pool building consists of a series of pointed arch vaults, which direct museumgoers through the exhibition. Crossings are signified with groin vaults. Constraining height, radius was derived in terms of a variable span and a fixed height.

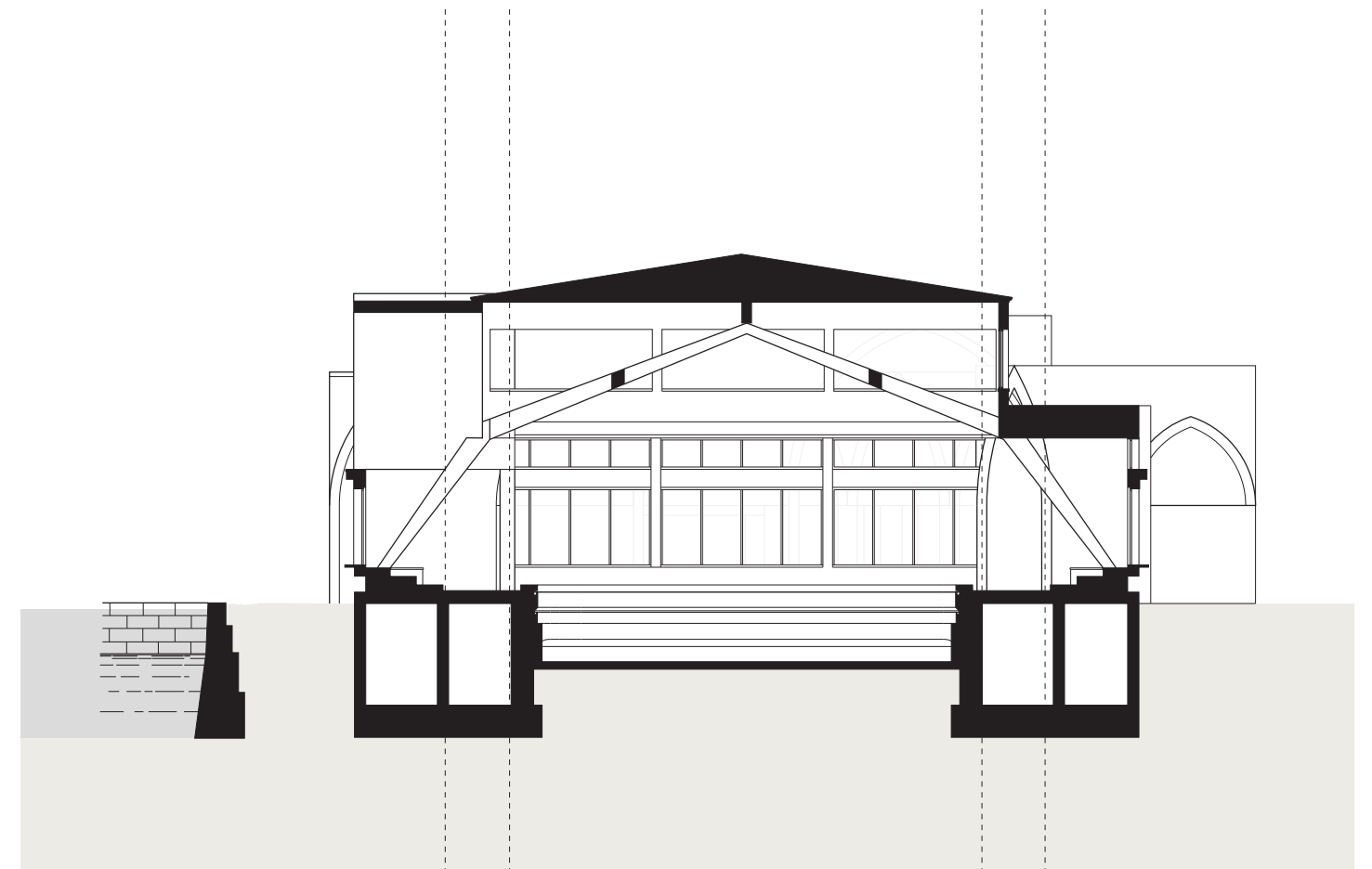




Pool Building: Current Condiitons



Pool Building: Proposed Conditions



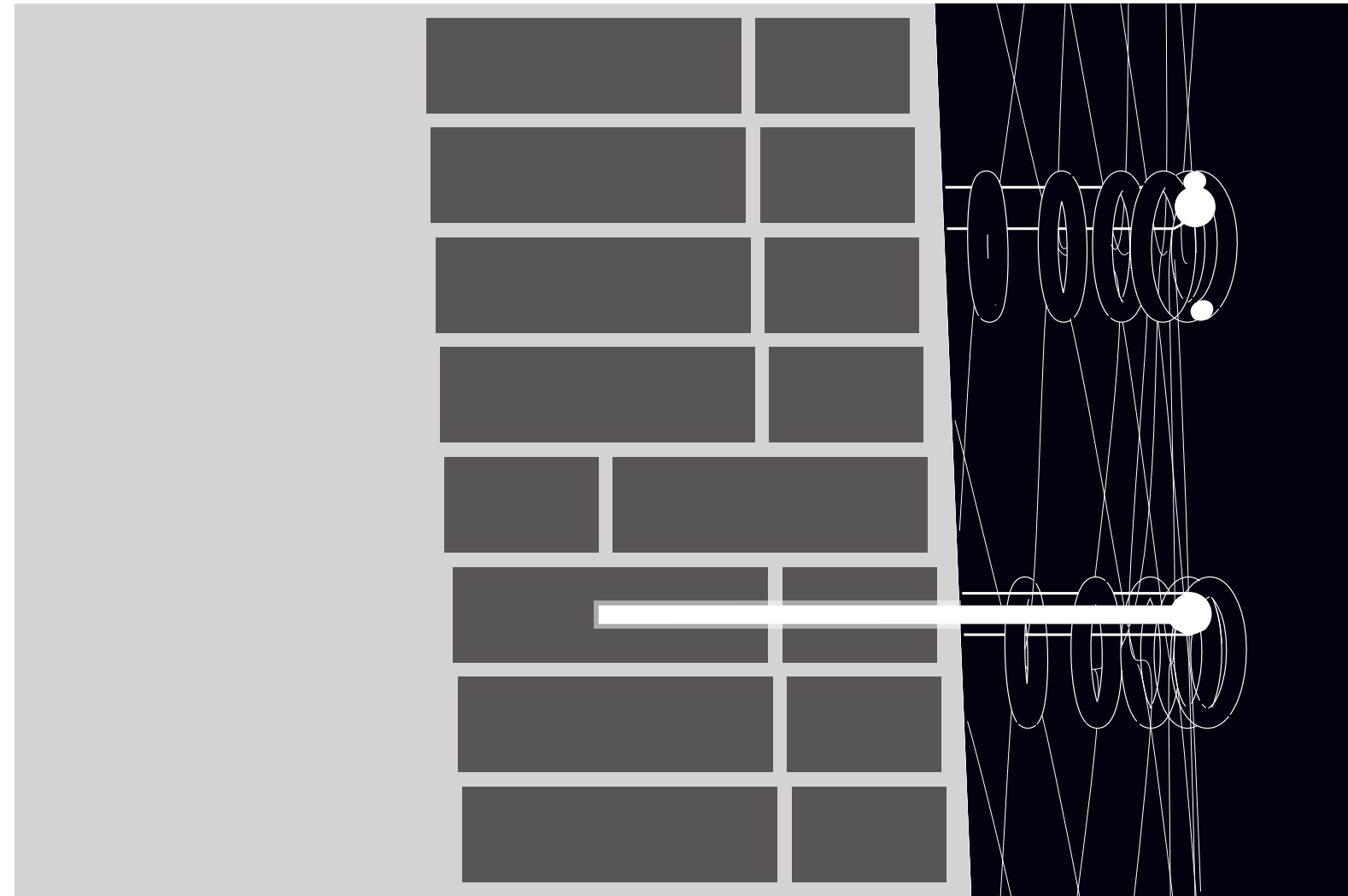
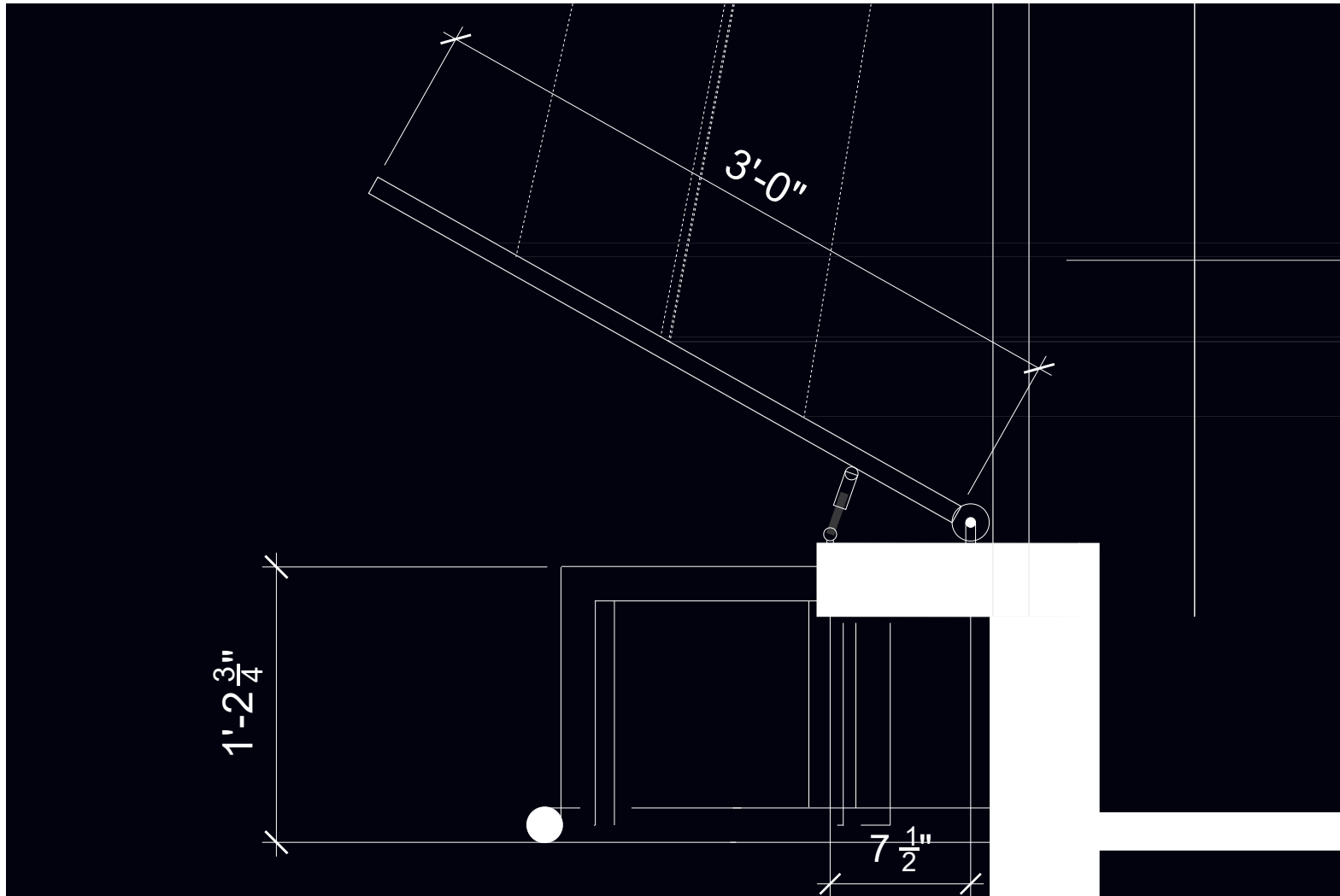
Corfù



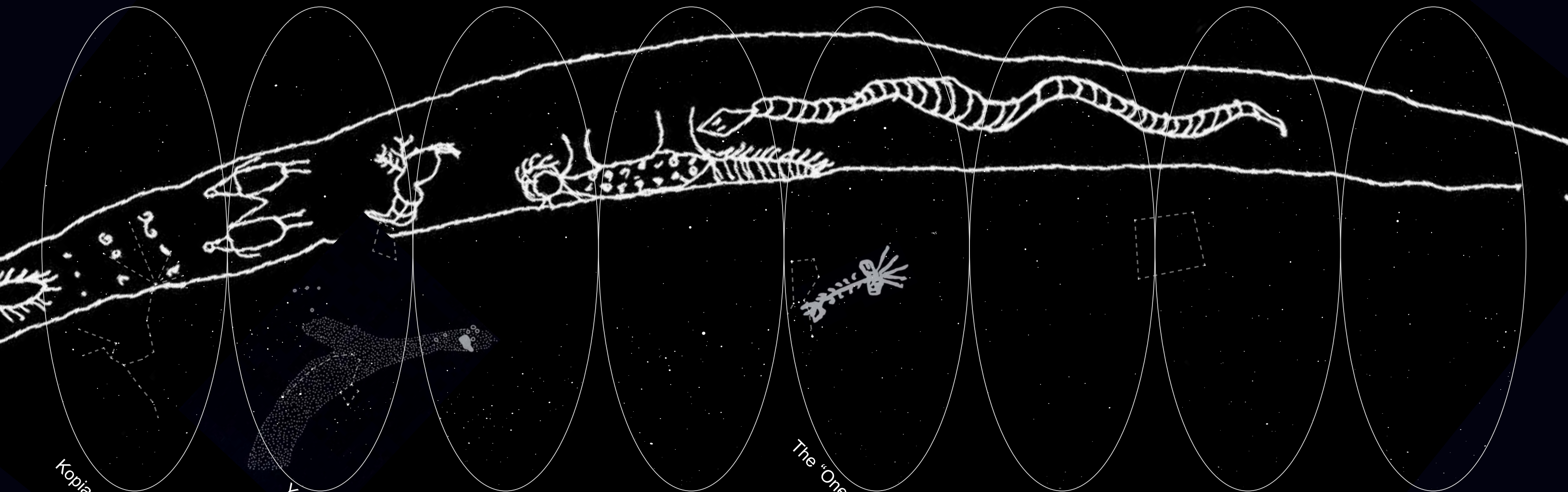


"THE MANTLE"
Salvador de Bahia, Brazil
January - April 2024
ADVANCED STUDIO VI
Critic: Mario Gooden

Navigation and migration occur under both visible and invisible circumstances. However, the value that has been ascribed to the visible is a product of modernizing forces, and the invisible has been subject to efforts to suppress it. The Farol da Barra, a lighthouse that sits atop the fort of Santo Antônio, in Salvador de Bahia, was used in the aid of navigation for the colonial power, the Portuguese Empire. As the city of Salvador de Bahia sits at the opening of the Bay of all Saints, the natural harbor made this city a center and a node for colonial trade and power. It sits at the tip of the peninsula at the southwestern end of the city, now a neighborhood known as Barra, but it made it a vulnerable target for competing colonial regimes who sought to wrest control over the Bay of All Saints and its extractive potential. The tip of the Barra is a rocky landmass with sandbanks, which caused many shipwrecks, thus providing the impetus for the construction of the lighthouse.



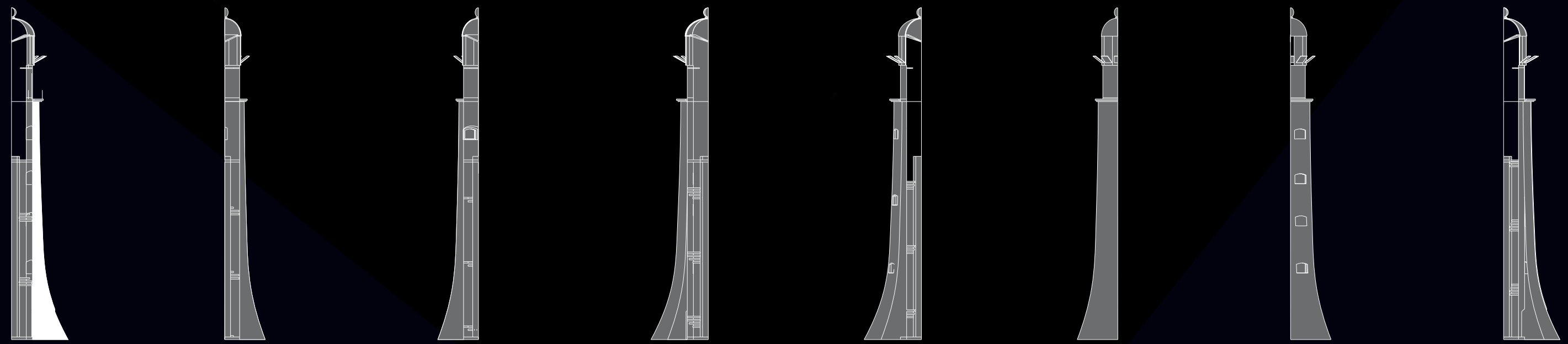
A series of refractors and reflectors are installed at the top that can relay information from the stars for a didactic and evocative effect. This intervention harnesses the technological understanding of optics and reverses it by changing the direction in which these light is manipulated. On the surface of the lighthouse and the fort, a mantle covers the entire structure. In low light, the fabric would reduce the profile of the fort and the lighthouse to a faint blur in the nighttime landscape. This intervention reverses the colonial power of the lighthouse by obscuring it.



Kopia Chawana

Yandoutin

The "One Legged Man"

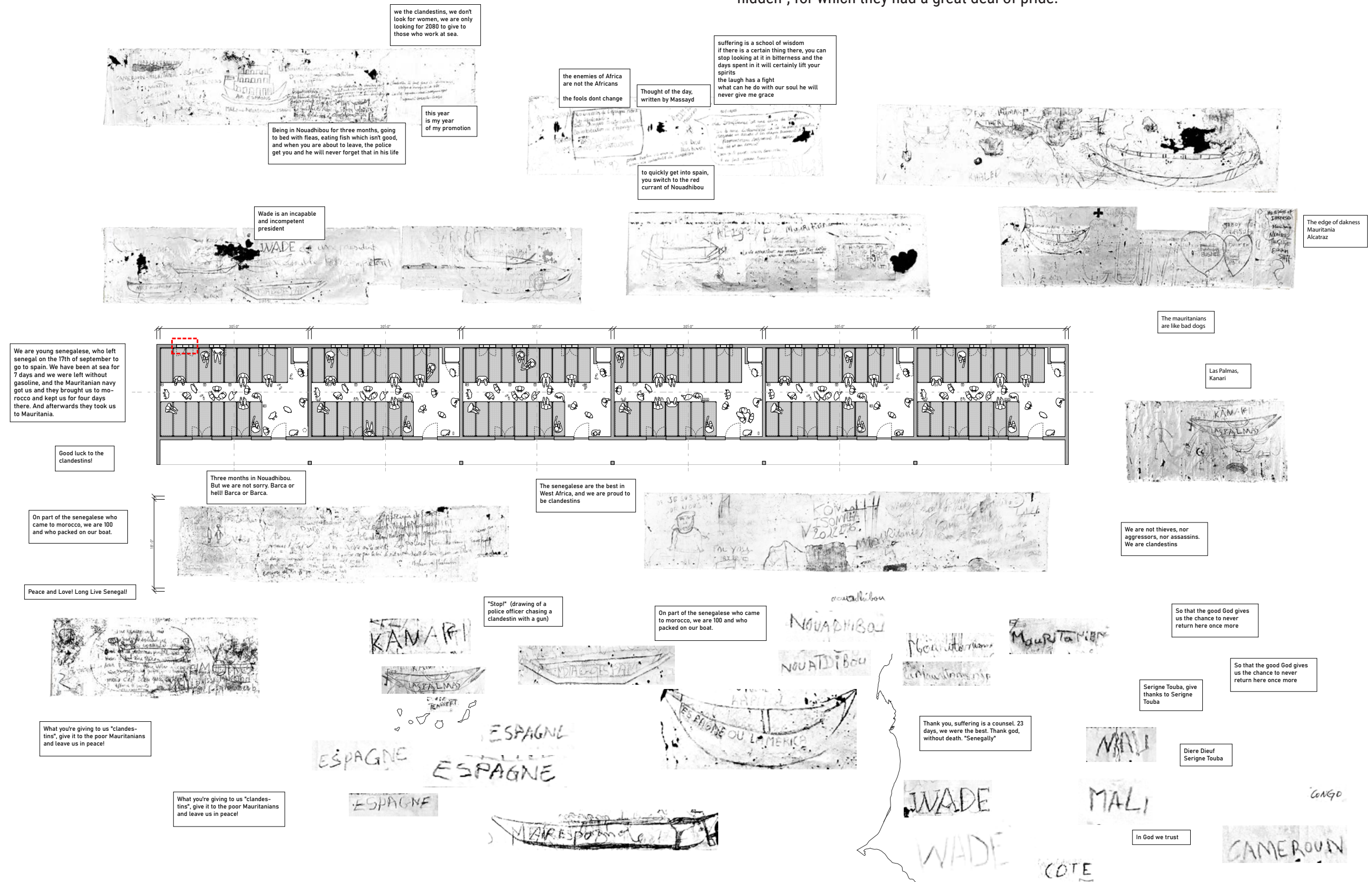


The indigenous Tupi, who inhabited present-day Bahia, have had a system of lore and stories that explained the night sky. Tupã, the Tupi word for God. Tupi Shamans were considered to be messengers of Tupã, and they were said to make frequent trips to the sky in their 'canoes', visiting constellations such as the kopia chawana. In Tupi culture, the

shaman carries a role of utmost importance. They are able to cure disease, communicate to the dead, and travel to the skies. Their tool/apparel was the mantle, that they used to assume their roles.

Navigation and migration occur under both visible and invisible circumstances. However, the value that has been ascribed to the visible is a product of modernizing forces, and the invisible has been subject to efforts to suppress it.

Take this unnamed migrant detention center in Nouadhibou, for example. Spanish artists Patricia Gómez and Maria Jesús González have meticulously documented and captured the walls of a migrant detention center in Mauritania. This center, which did not have an official name, was primarily active in the mid-to-late 2000s and was converted from an old elementary school. The migrants referred to themselves as "clandestins", the French word for "undocumented". But in a sense, they are also "hidden", for which they had a great deal of pride.



Drawing Co-created with Danyel Hueyopan



Alien Epistemology Drawing Workshop



