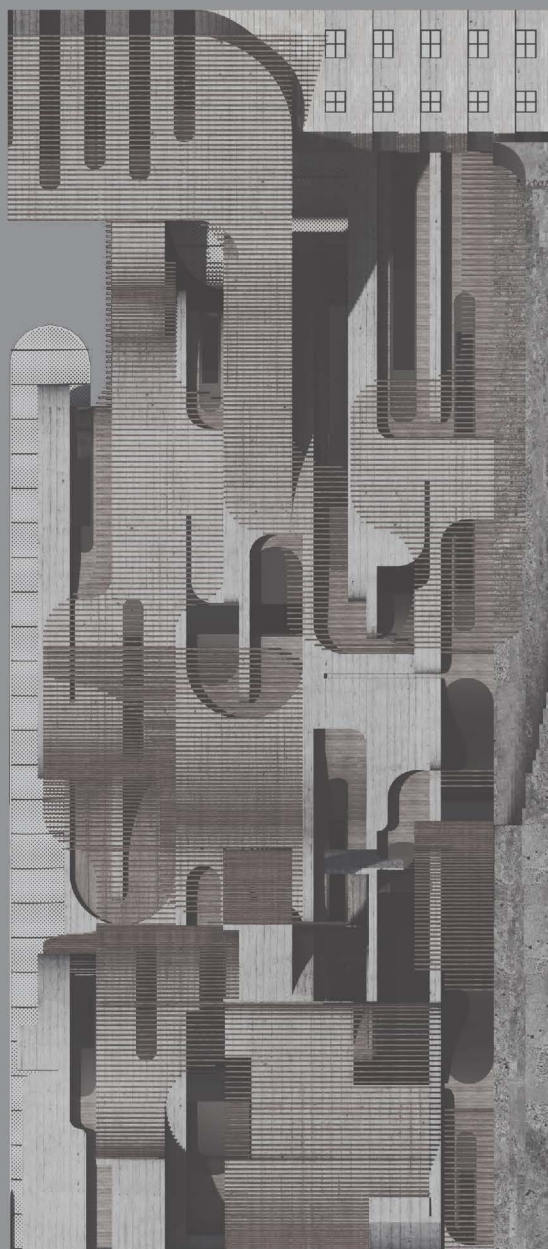


PORTFOLIO

MIRANDA K. SCHMIDT



SUSTAINABLE GREENPOINT PARK

Design 4 Studio: Integrated Building Systems

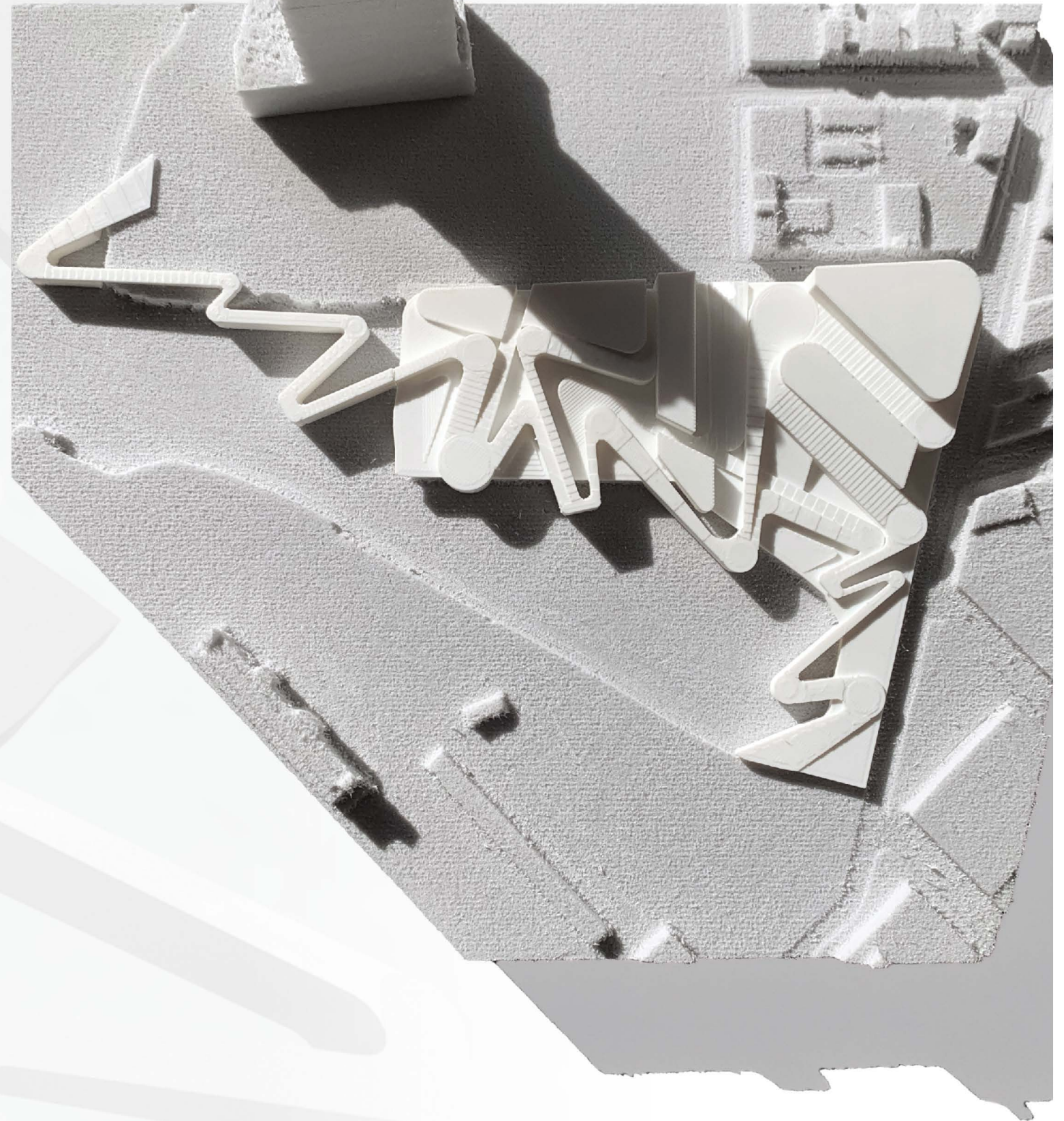
Spring Semester 2024 - Pratt Institute

Studio Prof: Erich Schoenenberger

The location is Bushwick Inlet, an unoccupied waterfront location at the convergence of Greenpoint and Williamsburg, both of which are experiencing rapid developments in luxury residential and office spaces. While these developments promote exclusivity, the goal for this site's compost facility, greenhouse, and market is quite the opposite in that it strives to bring about climate and food waste awareness in a public, accessible series of elevated pathways that are meant for the community to enjoy. Currently, this site lacks curiosity in how one meanders along the waterfront, which is due in part to New York's history of industrialization along the East River purely for economic prioritization over livability.

The pathway forms themselves are derived from the drawings of Enric Mirailles, and are to be fully accessible by the public. It is yet to be determined if the path will be supported by piles or some retaining wall structure--or a combination of both--but the concept is that as one traverses the path, they are given choices to take secondary pathways that would then lead them into an enclosed space. These spaces would either be a marketplace, dining facility, a sneak peak into the composting facility, or a recreational greenhouse. Providing the visitor with choices while inundating them with visuals of water management, greenery, and composting is a method for giving the community members both agency and a call-to-action to make sustainable choices in everyday life.

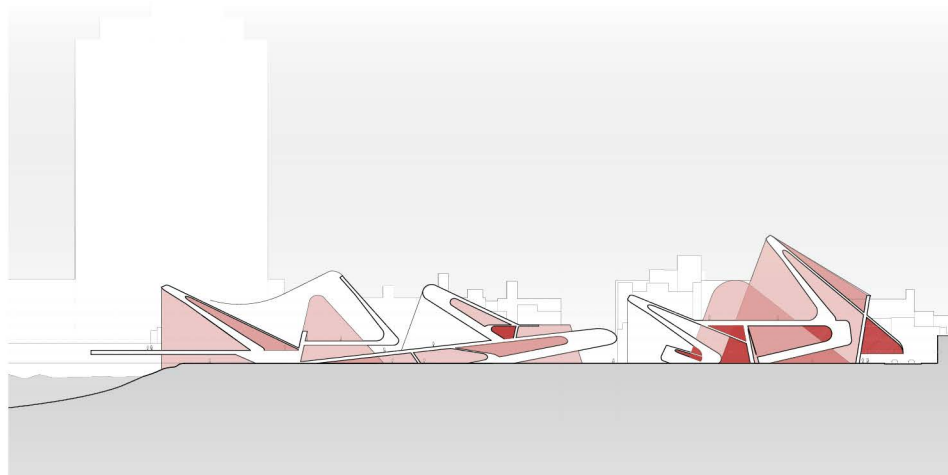
Having just been critiqued in a schematic design review for this semester's studio, this project is in its early concept phase and is still very much in the works.



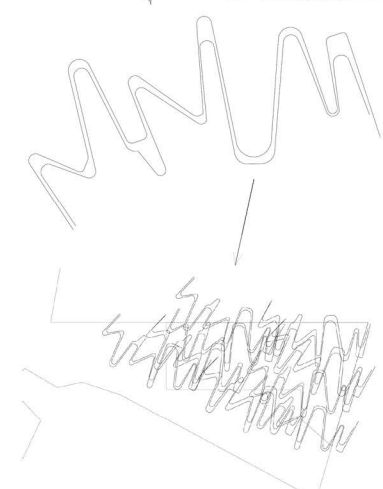
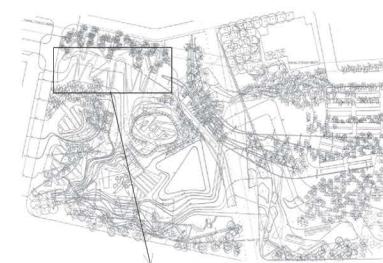


Site Context Map

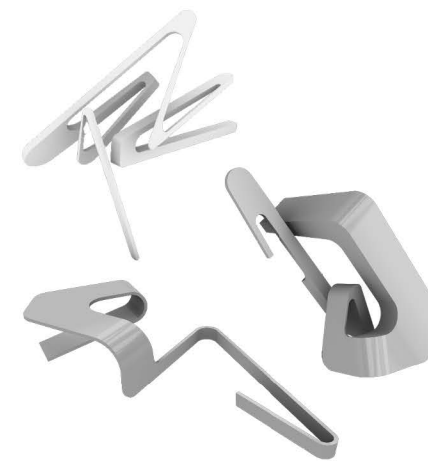
The existence of new office spaces, such as 25 Kent, will mean that there will be many lunch goers during the work week. A market could potentially play a role in providing eateries. Additionally, there is an awareness of flooding at varying levels, which makes one consider how a site can be prepared for future dynamic water conditions. We are proposing elevated pathways and possibly elevating the building mass to account for this. There could be more permanent program along the street edge for compost facilities and greenhouse, but along the water, there are opportunities to include flexible program that is seasonal and weather dependent.



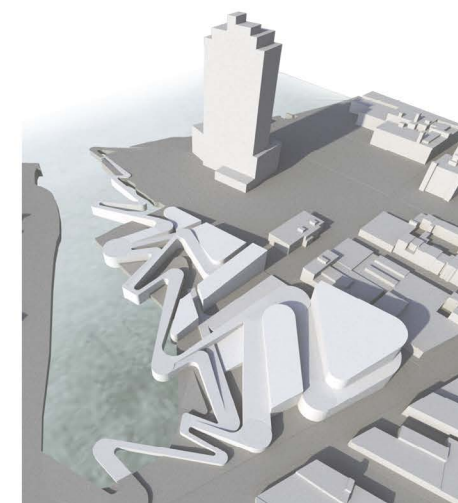
Sectional Exploration - Geometry Informs Circulation and Massing From Void Space



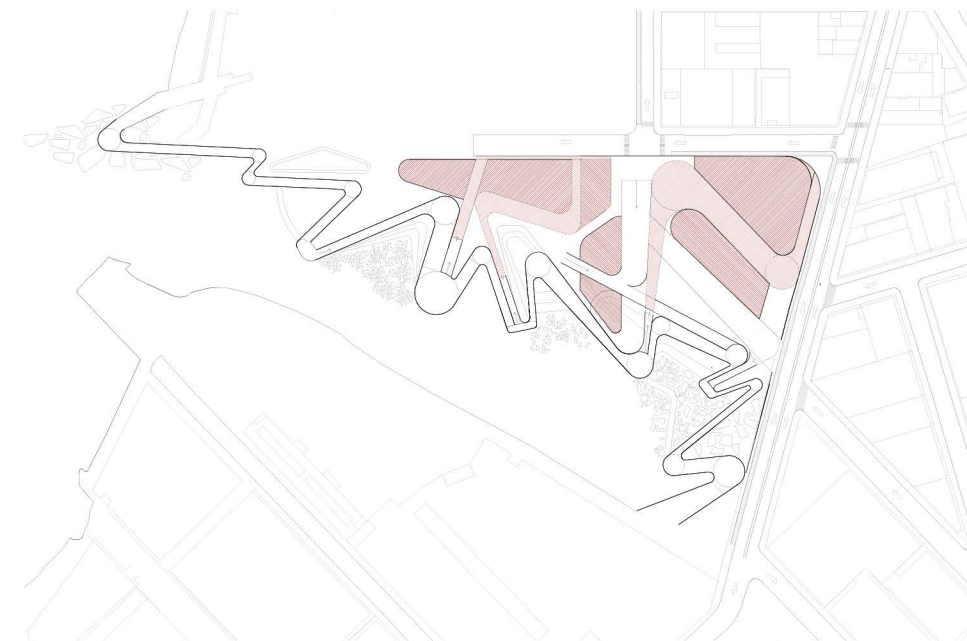
Process - Enric Mirailles Inspiration



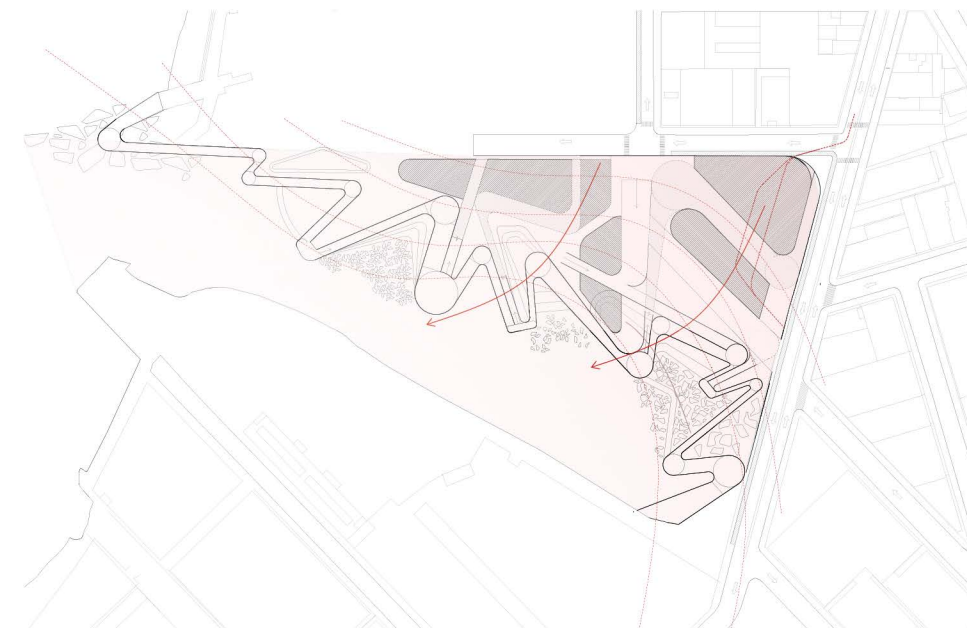
3D Studies From Mirailles Linework



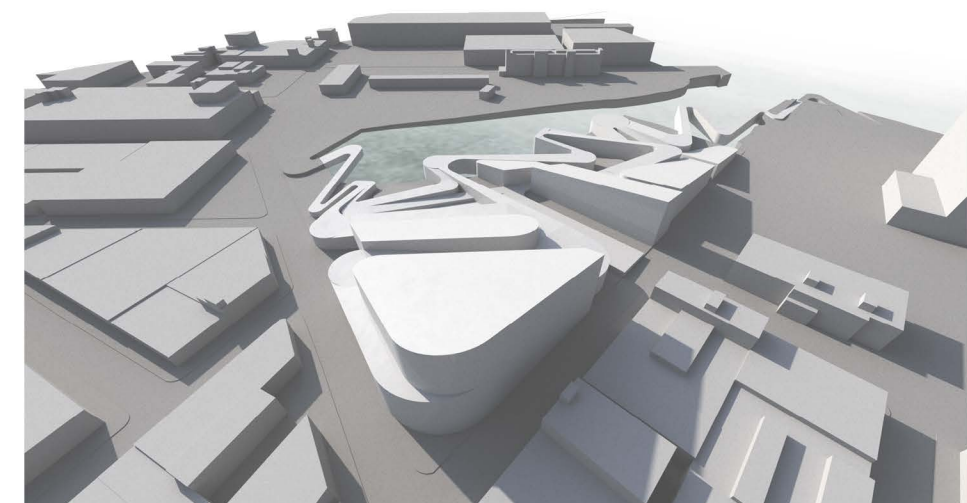
Clay Rendering - Pathways vs. Massing



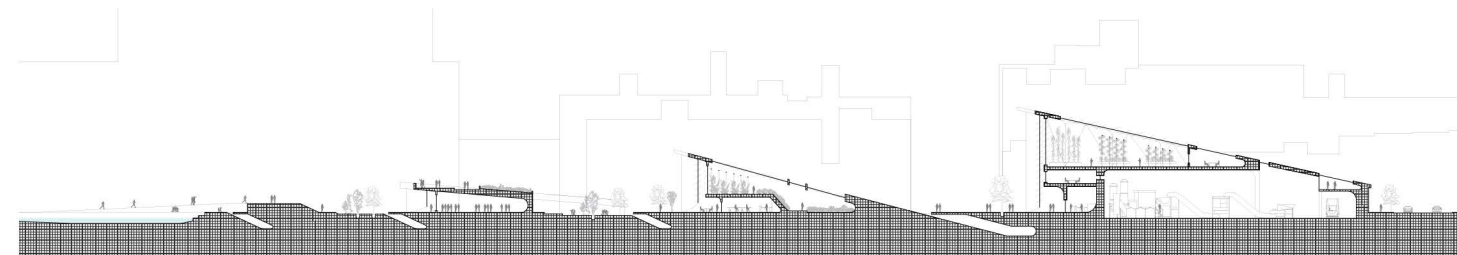
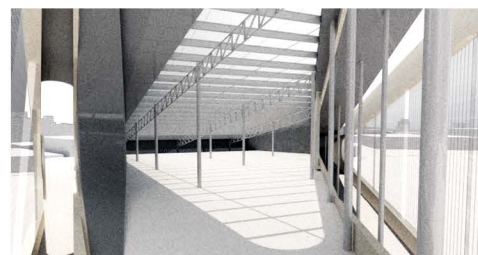
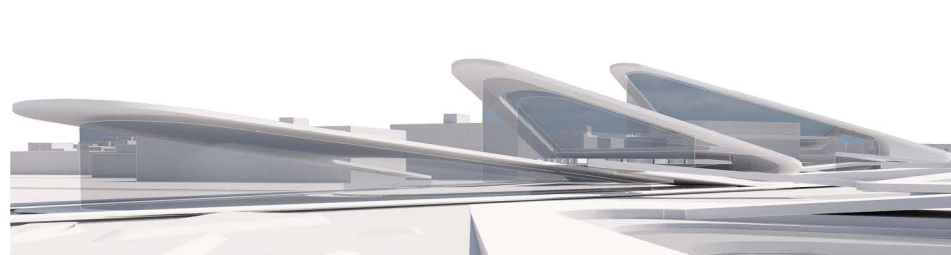
Plan - Proposed Pathways Create Voids Where Building Mass and Land Treatment Reside



Plan - Arrows Indicate Shift From Permanent Program To Temporary Seasonal Program



Clay Rendering - Massing for Compost Facility + Permanent Program



TERRACES IN TENSION

Design 3 Studio: Urban Qualities & Materials

Fall Semester 2023 - Pratt Institute

Studio Prof: Erich Schoenenberger

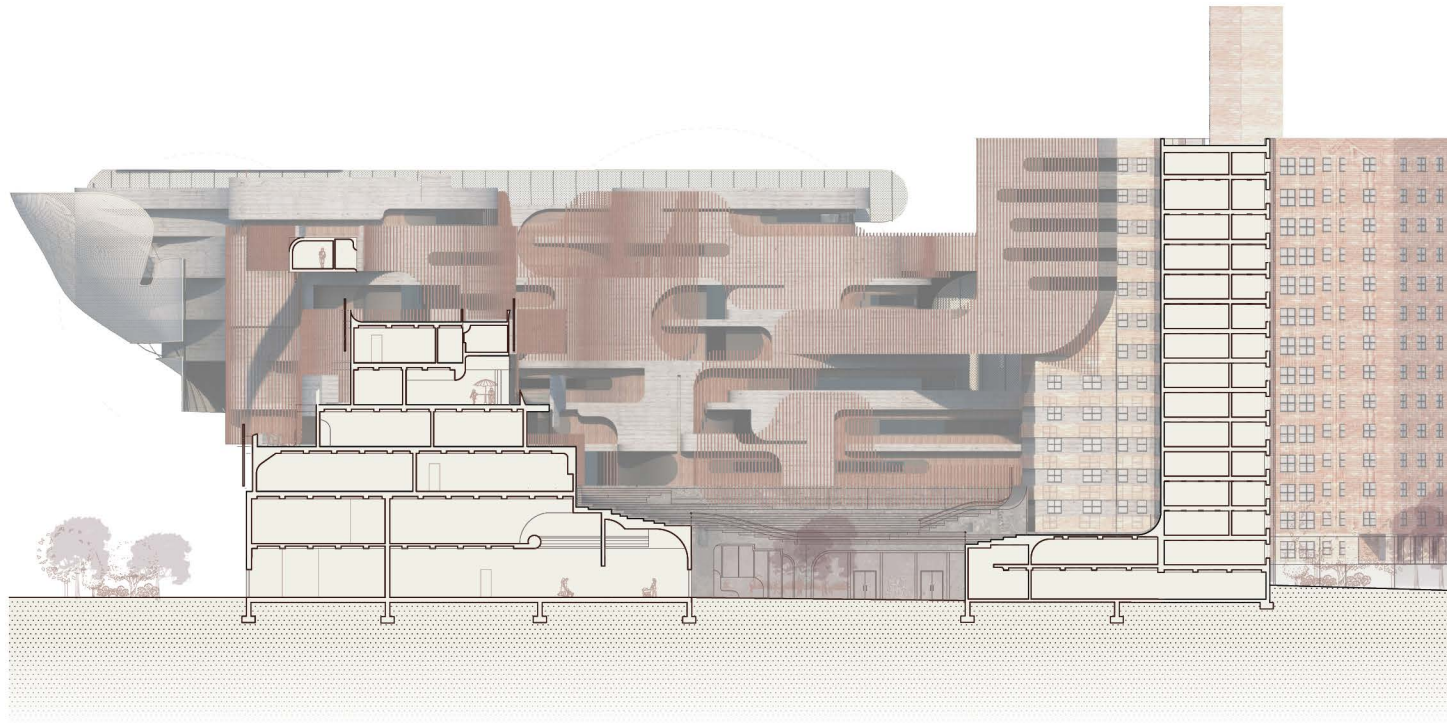
Materials & Assemblies Prof: Ben Martinson

Software: Rhino, VRay, AutoCAD, Grasshopper

The focus of this project was to propose a mixed use building on a NYCHA campus in Brooklyn that would integrate with the existing public housing towers on site and would have social and economic benefits for the community.

After conducting several site analyses, we came to the conclusion that there needed to be a better soundscape far removed from the noise of surrounding traffic and the BQE, which resides right up against the site's southwest corner. Our solution was to place the building at the exact opposite corner from the BQE and make the ground floor a community center, encouraging residents to take ownership of a livable, accessible space. Another conclusion was that there needed to be more intergenerational interaction to strengthen community bonds across age groups. The use of semi-public platforms connecting the campus towers would be activity spaces for young and old, where children can play and the elderly can observe the spectacle. The building itself adopts terraces, where residents can communicate and also enjoy privacy behind a terracotta baguette screen (or metal as a more light-weight substitute). Lastly, we proposed the use of bridges to connect the new building to the towers, which would house amenities such as a gym and laundry facilities.



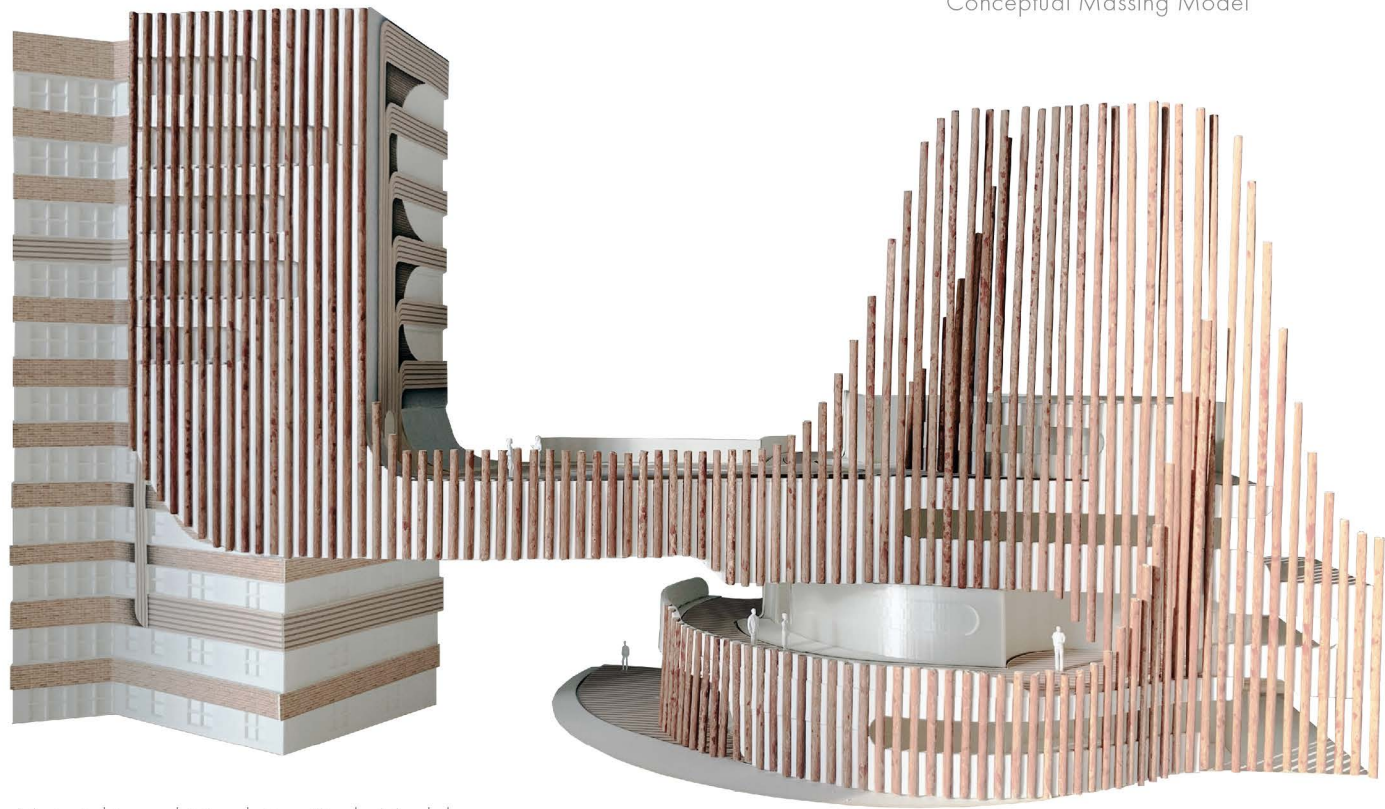


Section

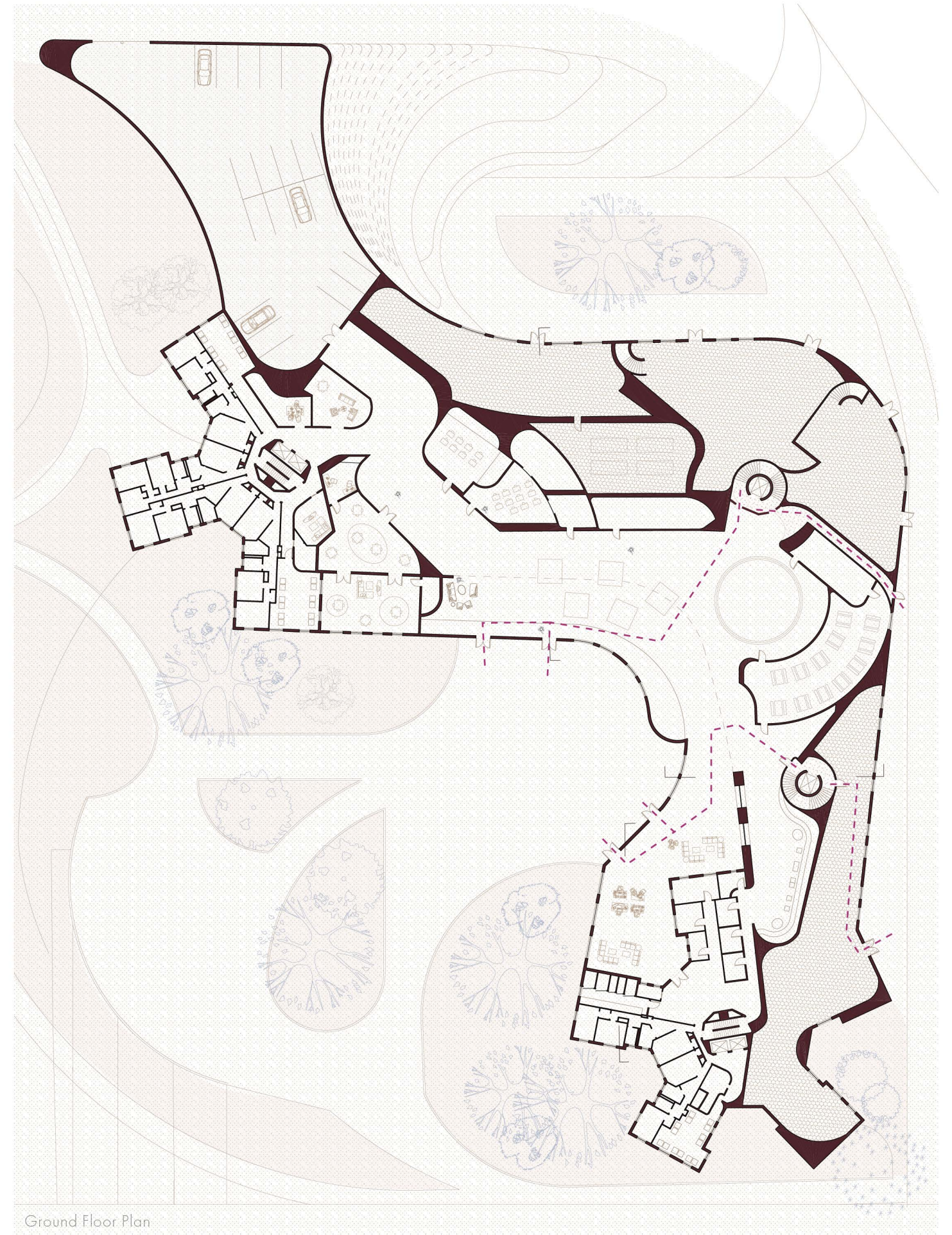
The ground floor plan provides an example of how the inward-facing and outward-facing areas of the building operate differently; the former in this case are multi-purpose activity spaces for existing and incoming Farragut residents exclusively and the latter are retail spaces where local vendors and artists can promote and sell their goods to generate community income. The proposed building integrates with the existing public housing towers and proposes beneficial amenities such as recreational spaces and laundry facilities. As residents ascend the building, they can cross the semi-public bridges to mingle and traverse between the two spaces.



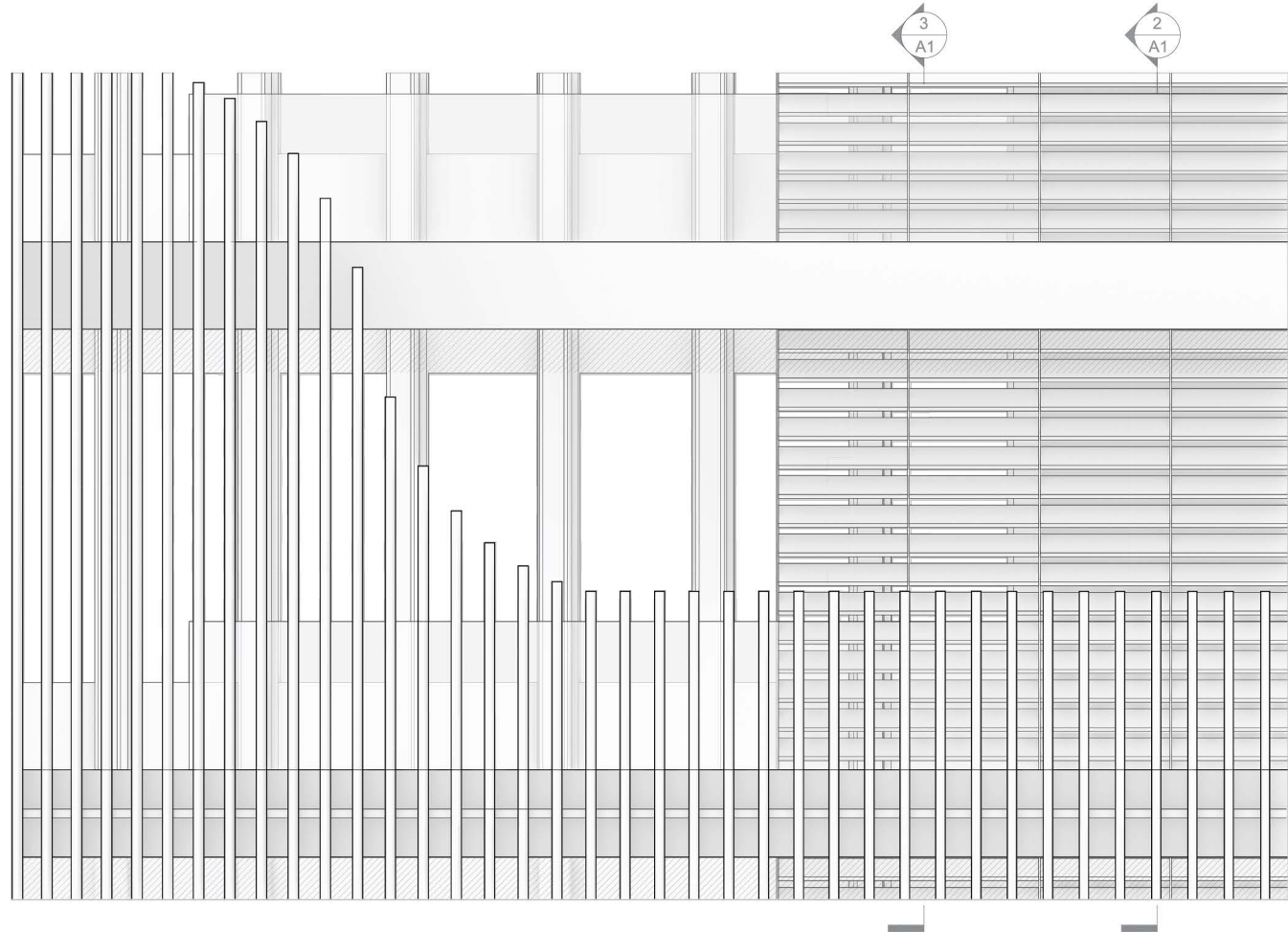
Conceptual Massing Model



Materiality and Circulation Study Model

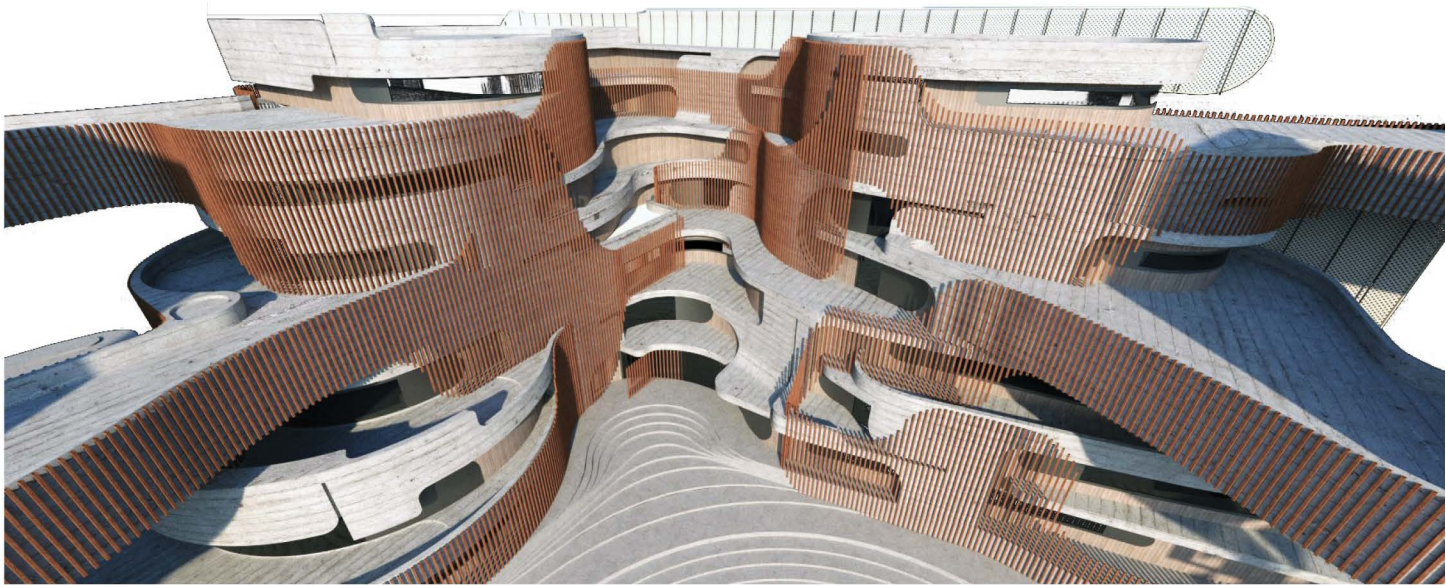


Ground Floor Plan

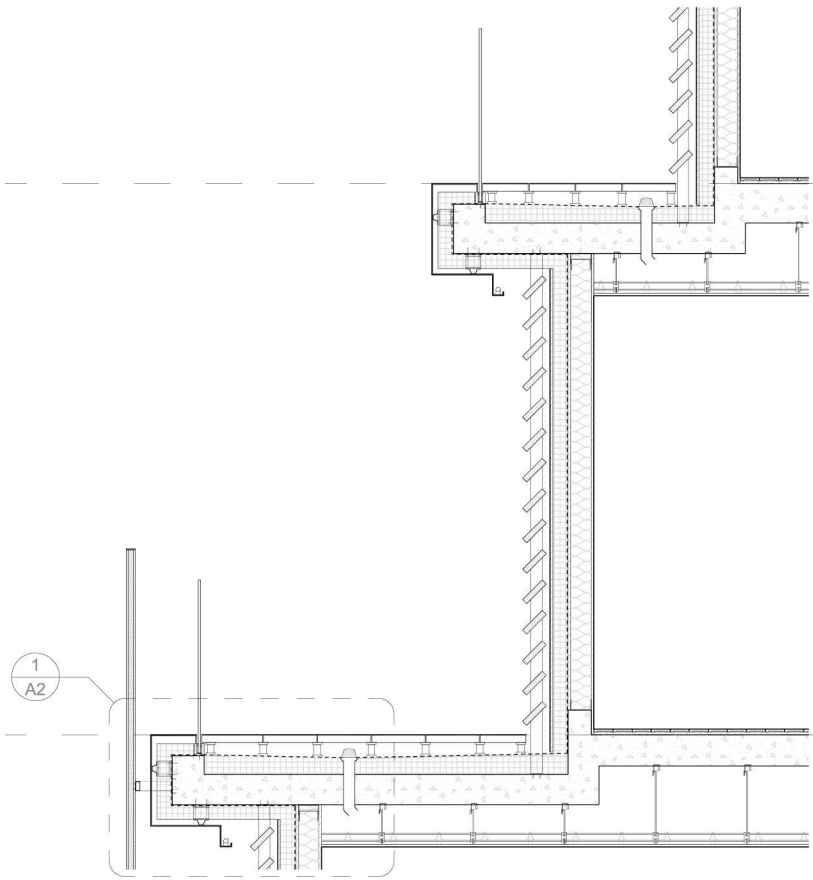


Elevation - Terrace Materials and Assemblies

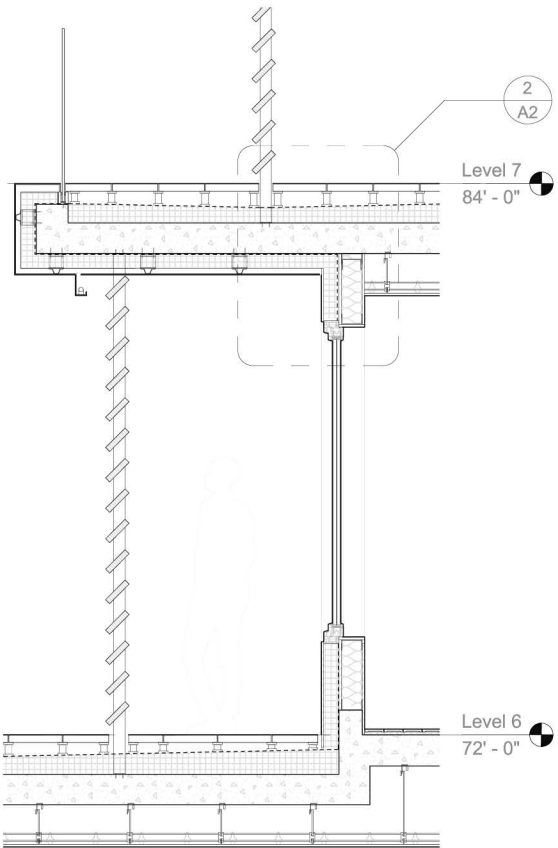
The building envelope functions based on inward-facing and outward-facing program. The former is expressed as terracing for residents to have access to outdoor space and community engagement, while the latter contains commercial activities and uses a perforated screen to grab the attention of surrounding community members who visit the space. The inward-facing portion features waves of terracotta baguettes that create a visual buffer for privacy in some areas, but also meet the height of the guardrail in others to clear the way for friends and neighbors to interact. Other materials proposed would be cedar wood panels that would screen the back entrance into the apartments, which would act as a passive cooling and shading device for hot city summers. Lastly, stone elevated on pedestals would be the main decking material for the balconies, juxtaposed with aluminum panels that would wrap around the concrete slab and parts of the exterior wall and act as a protective rainscreen from the elements.



Rendering Highlighting Inward-Facing Material Strategy



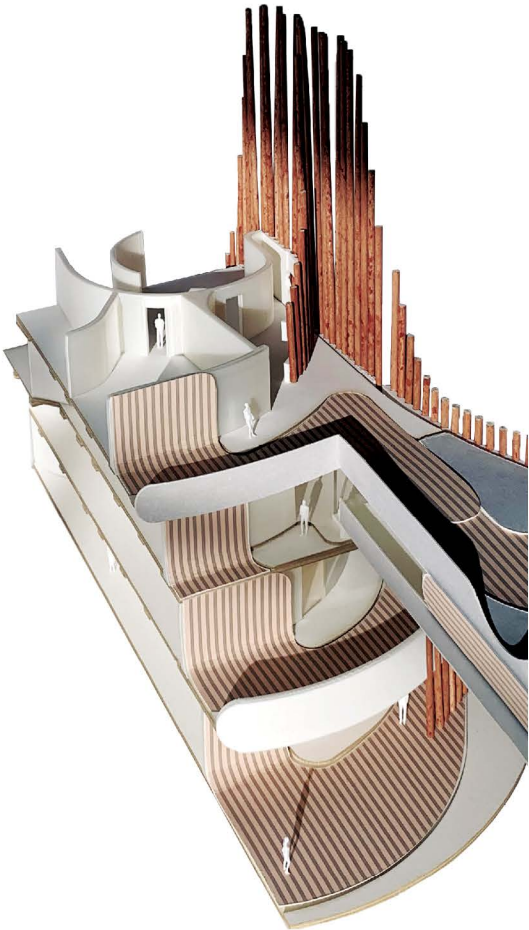
Section A1-2



Section A1-3



Rendering Highlighting Outward-Facing Perforated Screen Facade



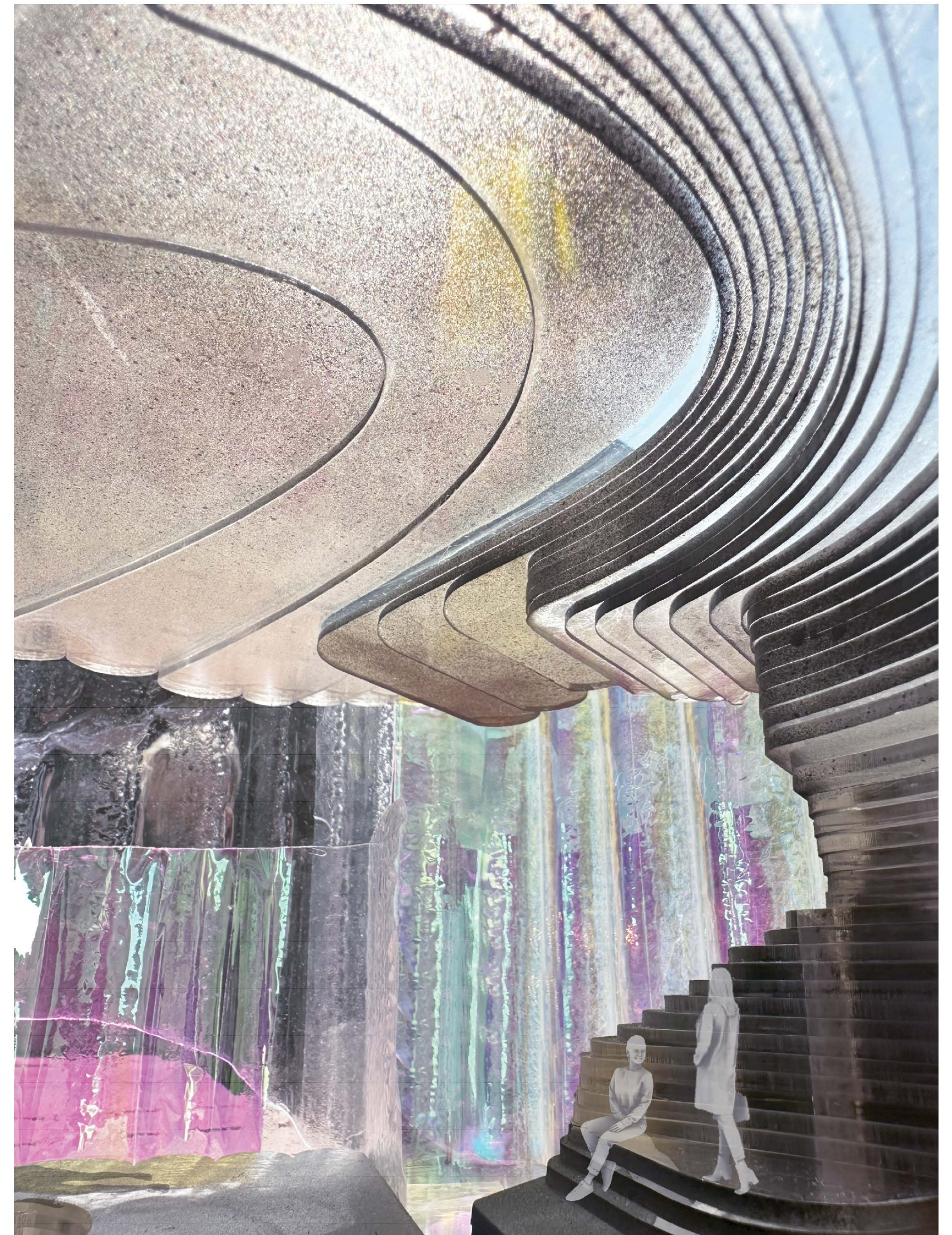
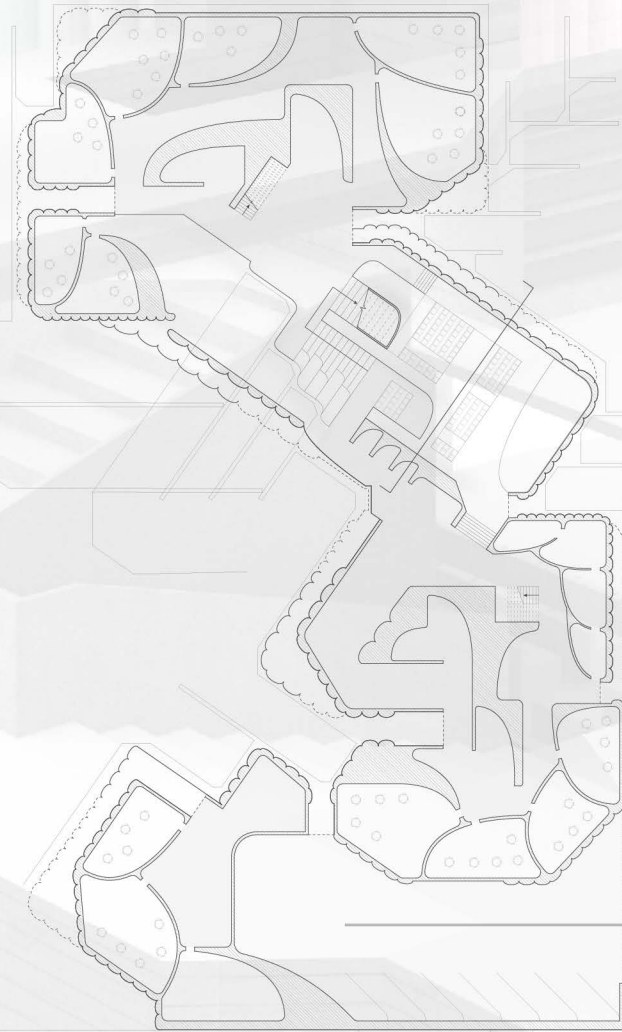
Materiality and Circulation Study Model

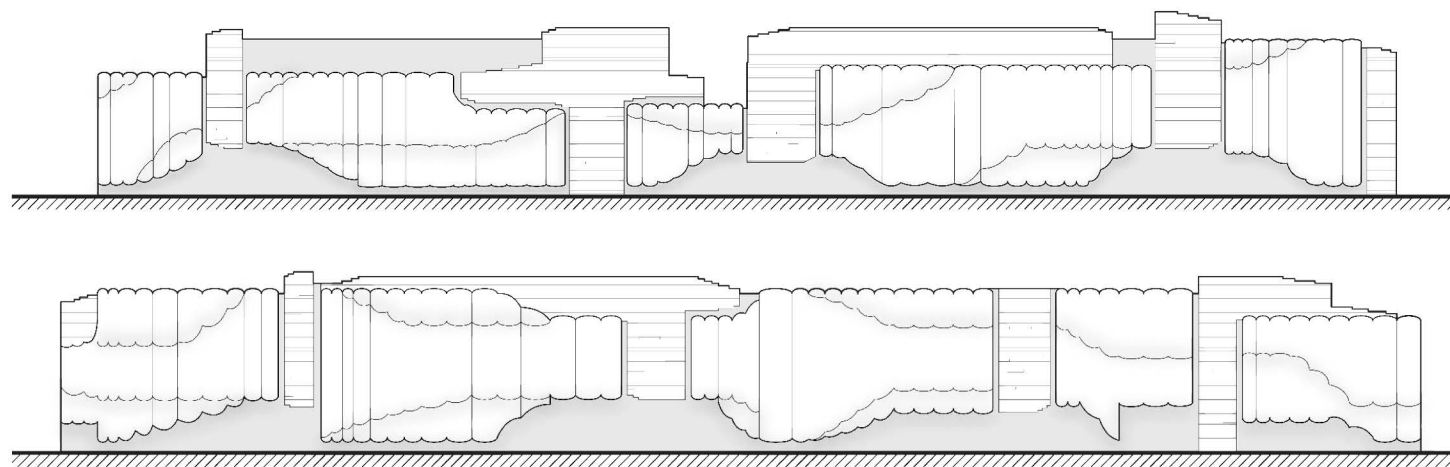
LEARNING ENVIRONMENTS

Design Studio 2: Interiorities & Contexts
Spring Semester 2023 - Pratt Institute
Professor: Hart Marlow

What can a learning environment look and feel like, and how can architects pave the way to change the conventions of spaces for intellectual stimulation and curiosity?

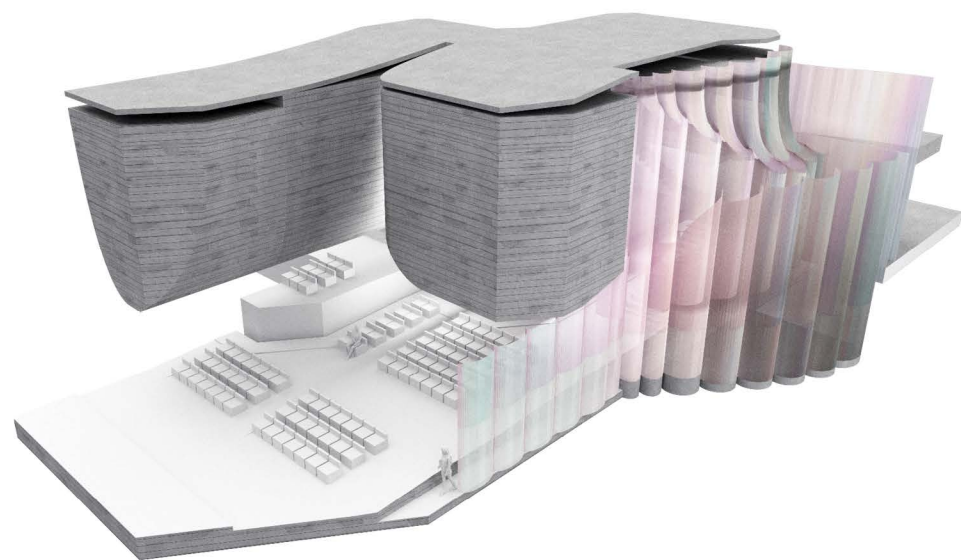
This semester allowed for an exploration of interstitial spaces, interiorities, hybridization of program, and experimentation with materials to push the boundaries that usually are in place for public school projects due to limited access to funding. The moments presented in this project can be compared to the limitless imagination of a child, where walls bend to form pillowy clouds and exude sensational colors and patterns. In these spaces, all rules are skewed and the mind is transported into an almost dream-like surrealist state: what is an auditorium, and how can its inherent spatial vastness occupy the same space as a library, which tends to house smaller nooks that are more calm and contemplative?



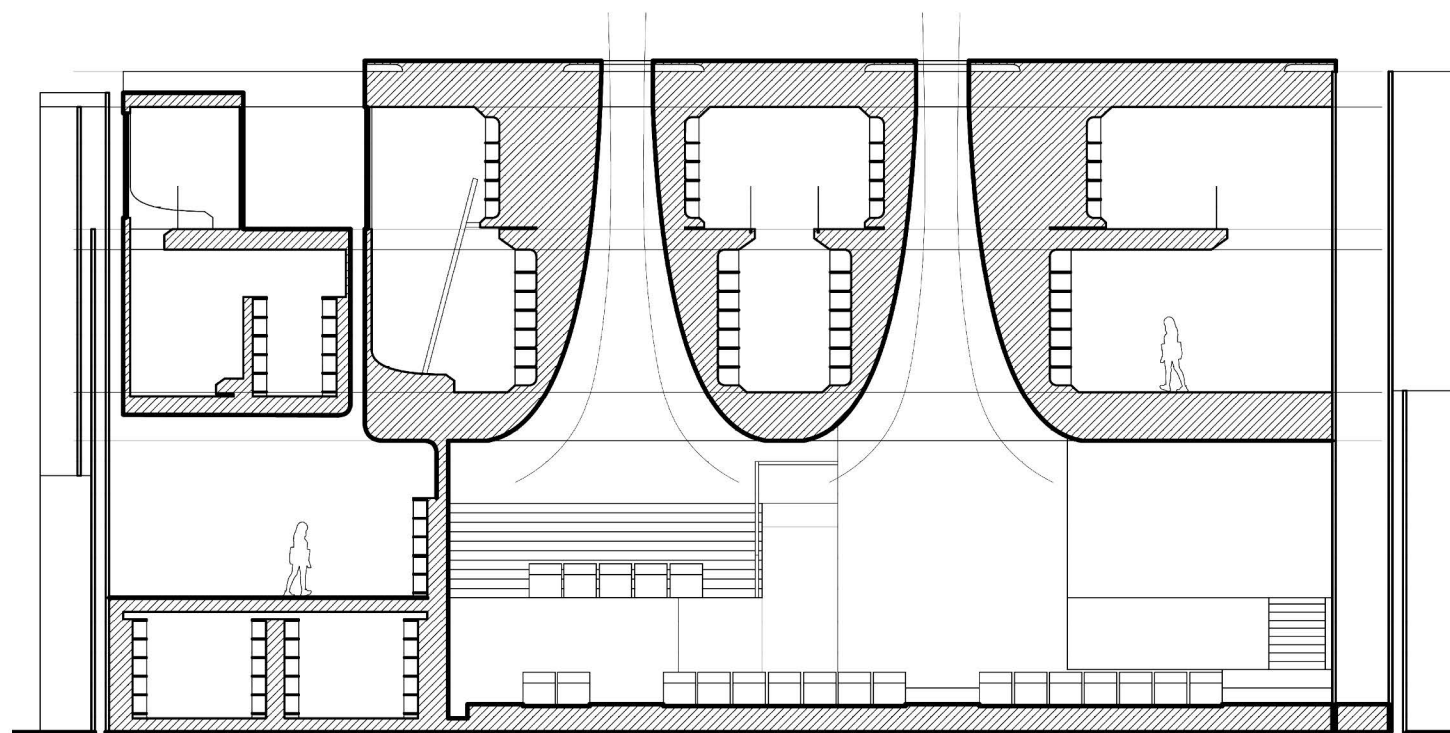


Elevations - North (top) and South (bottom)

Two seemingly solid masses float above a sloping auditorium gathering space, enclosed by an iridescent, colorful facade system of semi-transparent tubes. Upon ascending the space from the auditorium, students transition from a grandiose interior into a scaled-down, intimate collection of learning nooks, where they can choose to expand their minds alone or with their peers, or wander about the pods hoping to discover something new and inspiring. The layering of interiorities works to spark a child's creativity and curiosity.



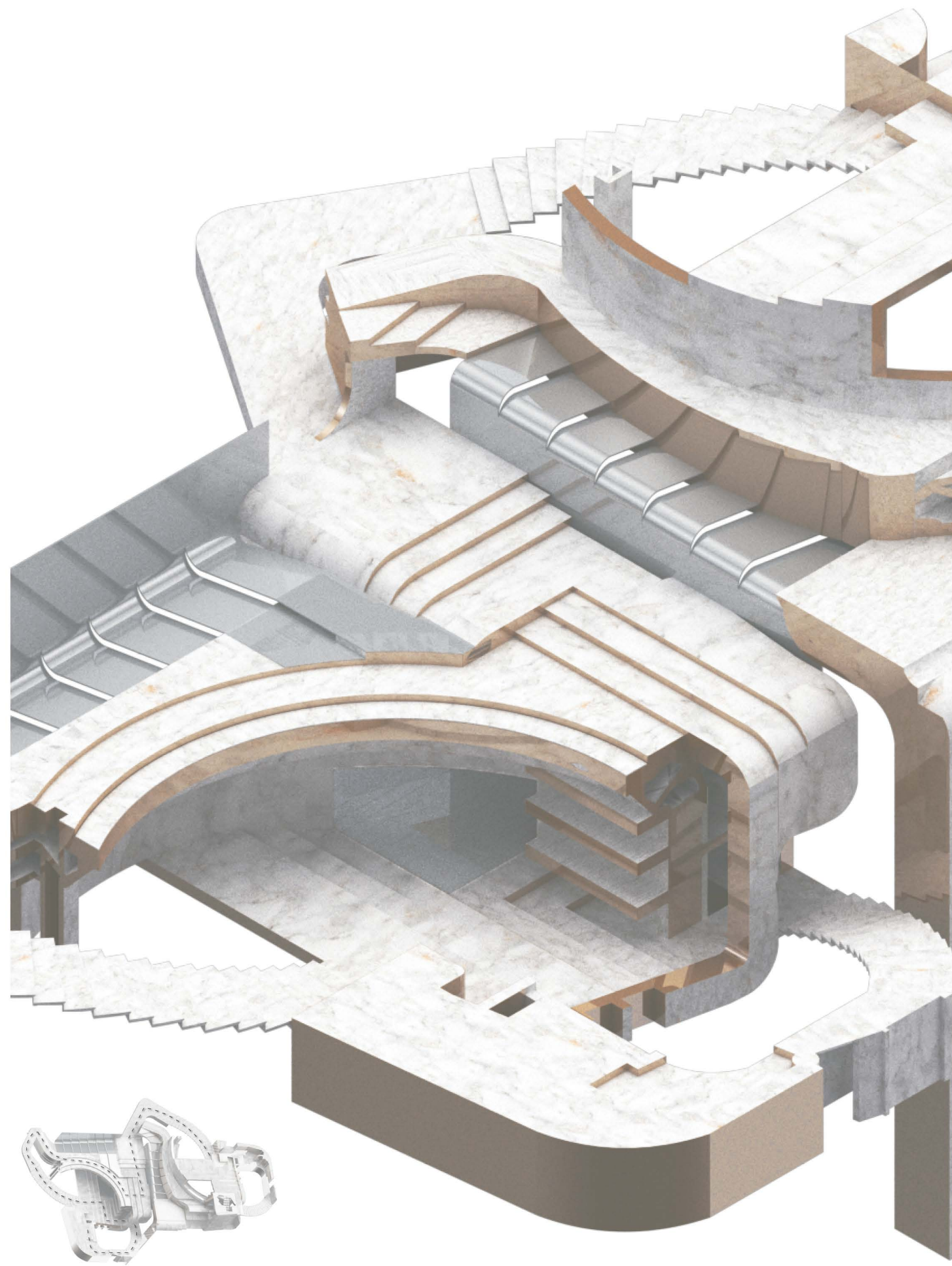
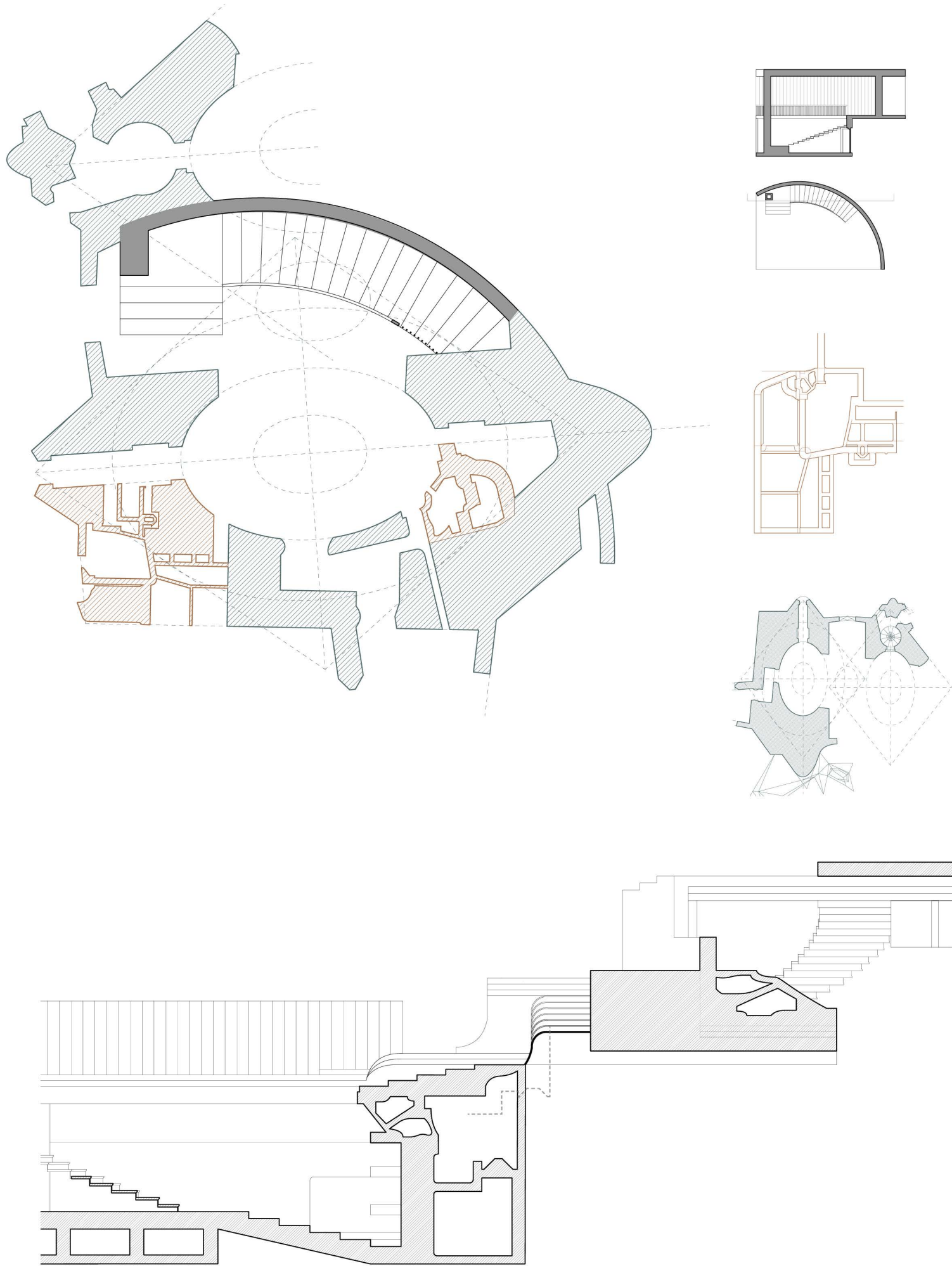
Rendering - Auditorium-Library Hybrid Interiority

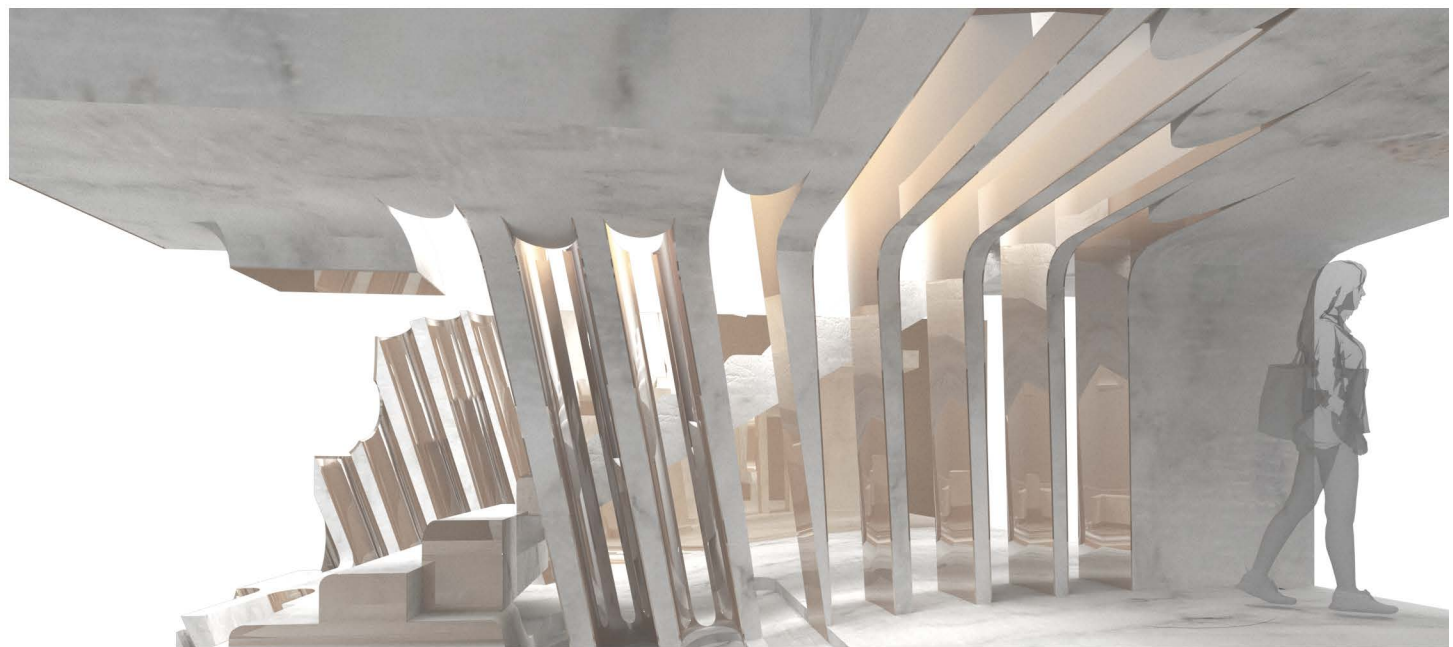
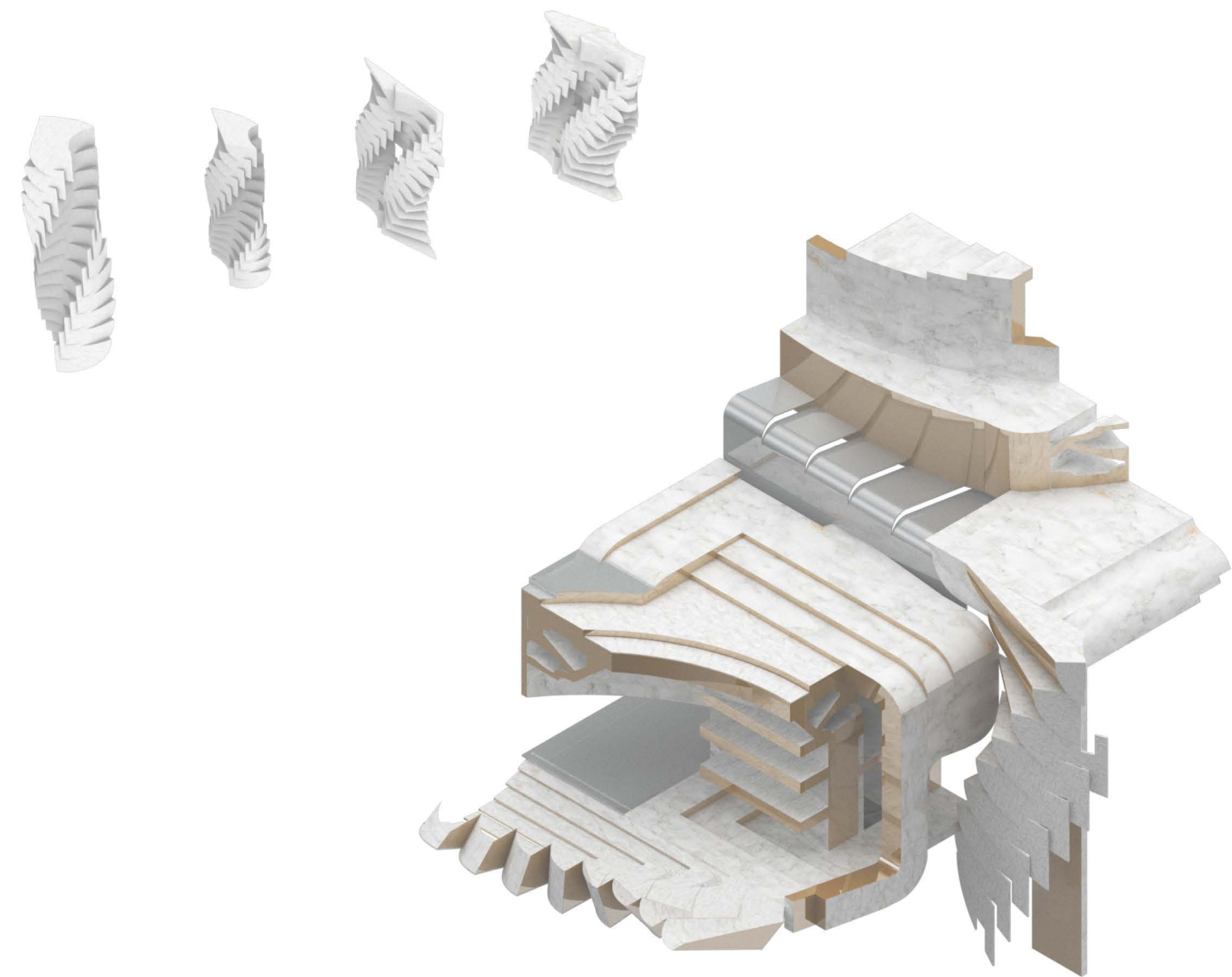


Section - Auditorium-Library Hybrid Interiority



Materiality Strategy Model





CASCADE

ARTIST HOUSE

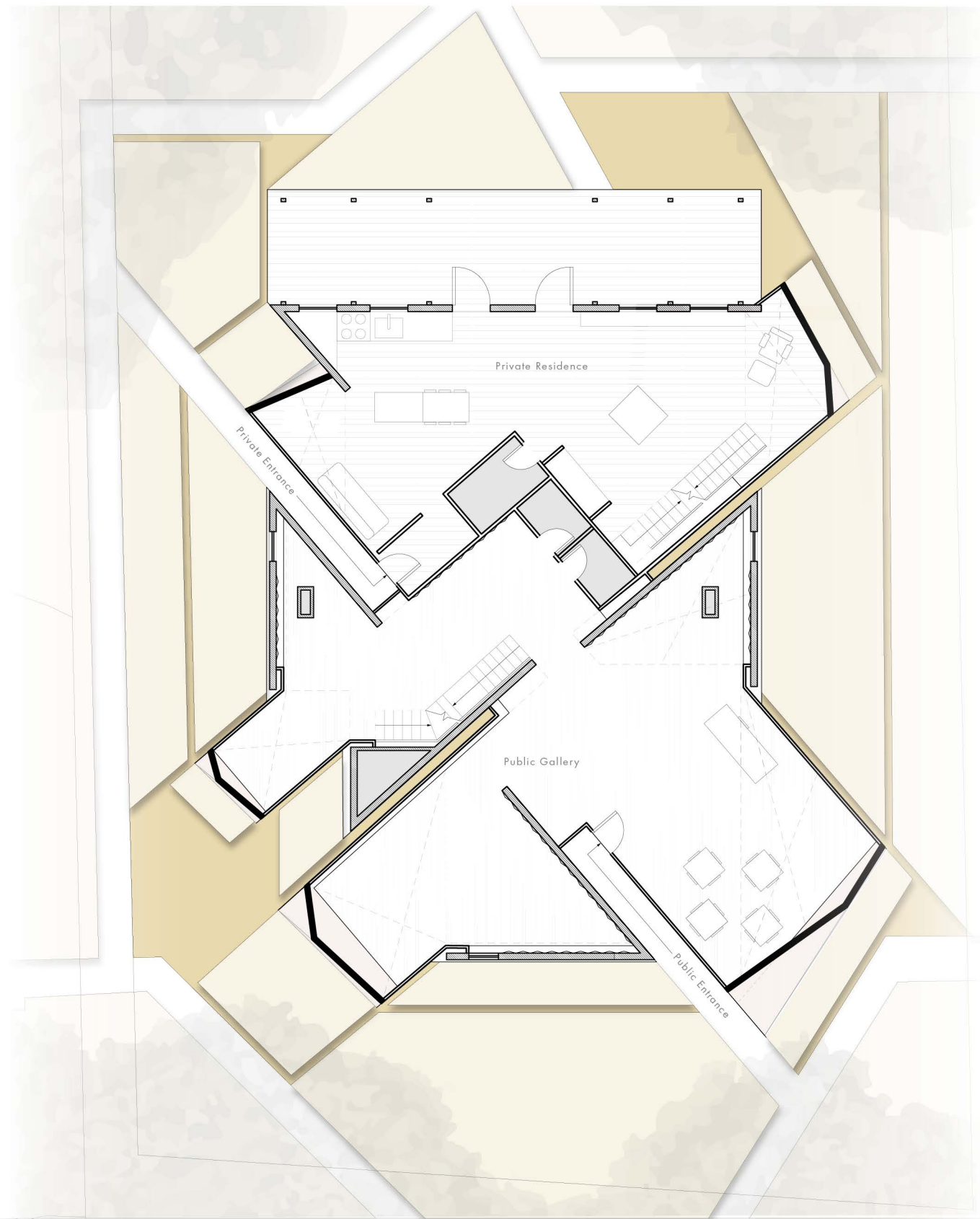
Design Studio 1: Media and Methods

Fall Semester 2022 - Pratt Institute

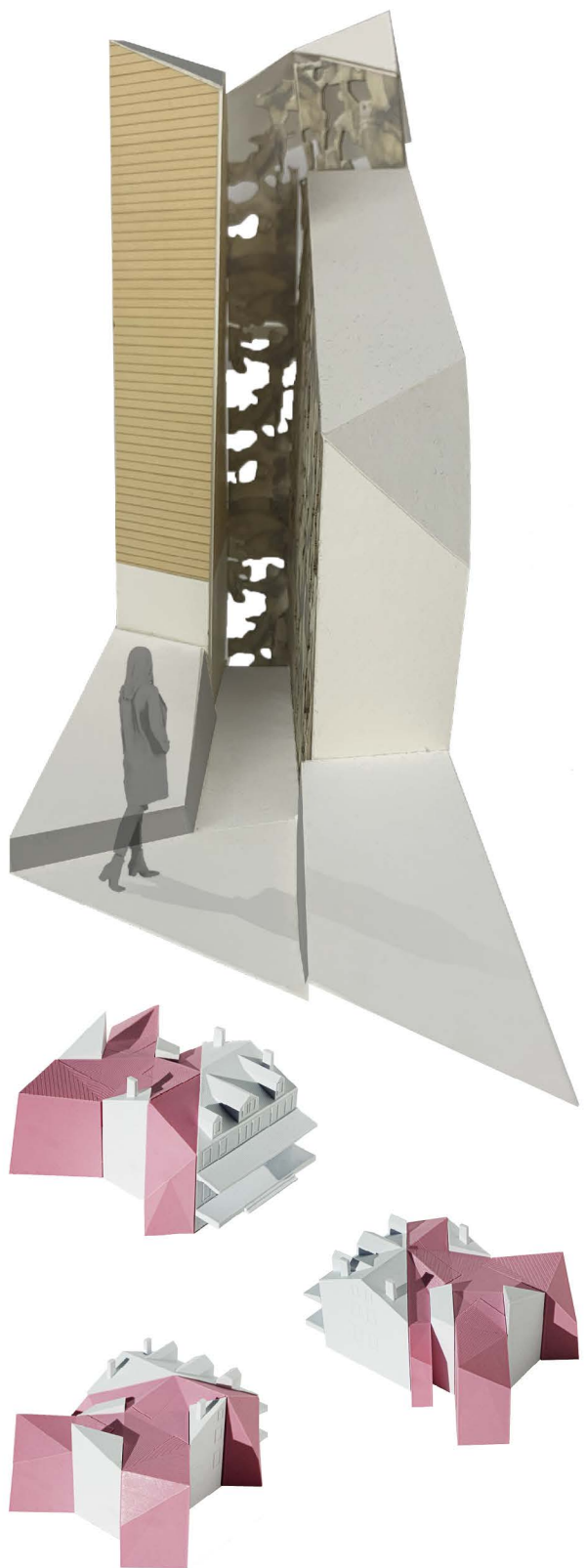
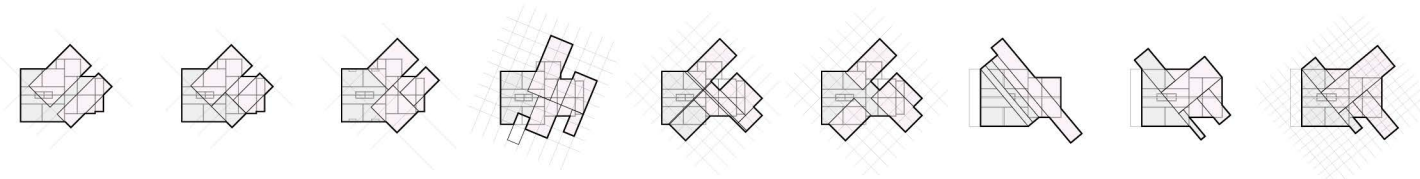
Studio Prof: Emilija Landsbergis

Governors Island, which is situated between Lower Manhattan and Brooklyn along the East River, is home to a series of historical landmarks that once housed US military officials. These houses make up the island's Nolan Park and have already undergone renovations/additions since their initial construction in the late 19th century. The proposed artist-in-residence is the next phase of House #7, which is an intervention and alteration to accommodate both a living/studio space and a public gallery space. The proposal's design language is generated through several masses that intersect and break up the existing facades. These masses connect and cascade over and weave through the prevailing wood siding and gabled roofs. Perforated walls support the proposed folding roof, which allows light infiltration to generate patterns on interior walls in different intensities throughout the day. Those who visit the gallery can enjoy the dance between sunlight and sculpture, while the residing artist can appreciate the proposed materiality and its respect for the historical structure.





First Floor Plan



Study Models - Entry Approach (top) & Massing (bottom)

The interior impact of inserting 45-degree masses into the existing mass was explored through a series of quick orthogonal plan studies. From this exercise came the realization that spaces between the masses created light reveals that, when scaled up to the architectural scale, make for a dramatic approach that opens up into the gallery space.

NORTH SHORE RENOVATION

Professional Project
January 2020 - March 2022
Martin Architects PC - Sagaponack, NY
Role: Project Manager & Architectural Designer
Software: Vectorworks, Sketchup

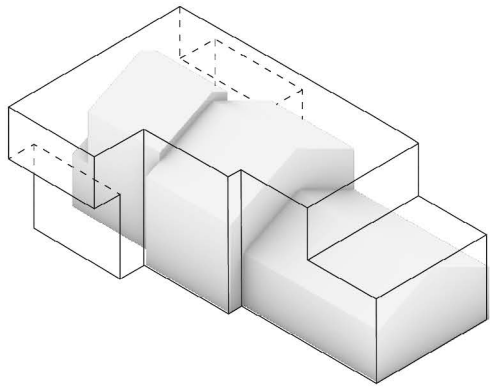
Head of the Harbor, a Long Island residential and 7 Emmet Way agricultural village bordered by Stony Brook and St. James, is a quiet, scenic neighborhood with winding roads leading to hidden architectural gems, both newly constructed and historically preserved. The site's 3.8-acre property is completely private and protected by wooded landscape-the perfect location for a young family looking to settle down comfortably.

The goal of this renovation-addition was to transform a worn-down house constructed in the 70s into a modern space that is environmentally-conscious in its design, construction, and efficiency.

The original foundation and approximately 50% of the framing were maintained, while the rest of the structure was brought up to code for safety. Additionally, geothermal was implemented to save energy and cost for our client over the years. Lastly, all wood cladding and decking was locally sourced to reduce energy waste from transportation.



The use of negative space helped streamline the row of masses that make up the house's original architectural form. As a result, the exterior was modernized without needing to completely tear down and rebuild the structure. The former front entrance into the house on the south was changed to the east elevation (shown below), allowing for more direct connection to the driveway. The sunny south portion of the site could then be opened up to create a private gardenscape for our client further down the line. Larger double-height windows were also implemented to allow for maximum natural light into the house, which is essential in such a heavily-wooded location.



Massing Diagram - Old vs. New



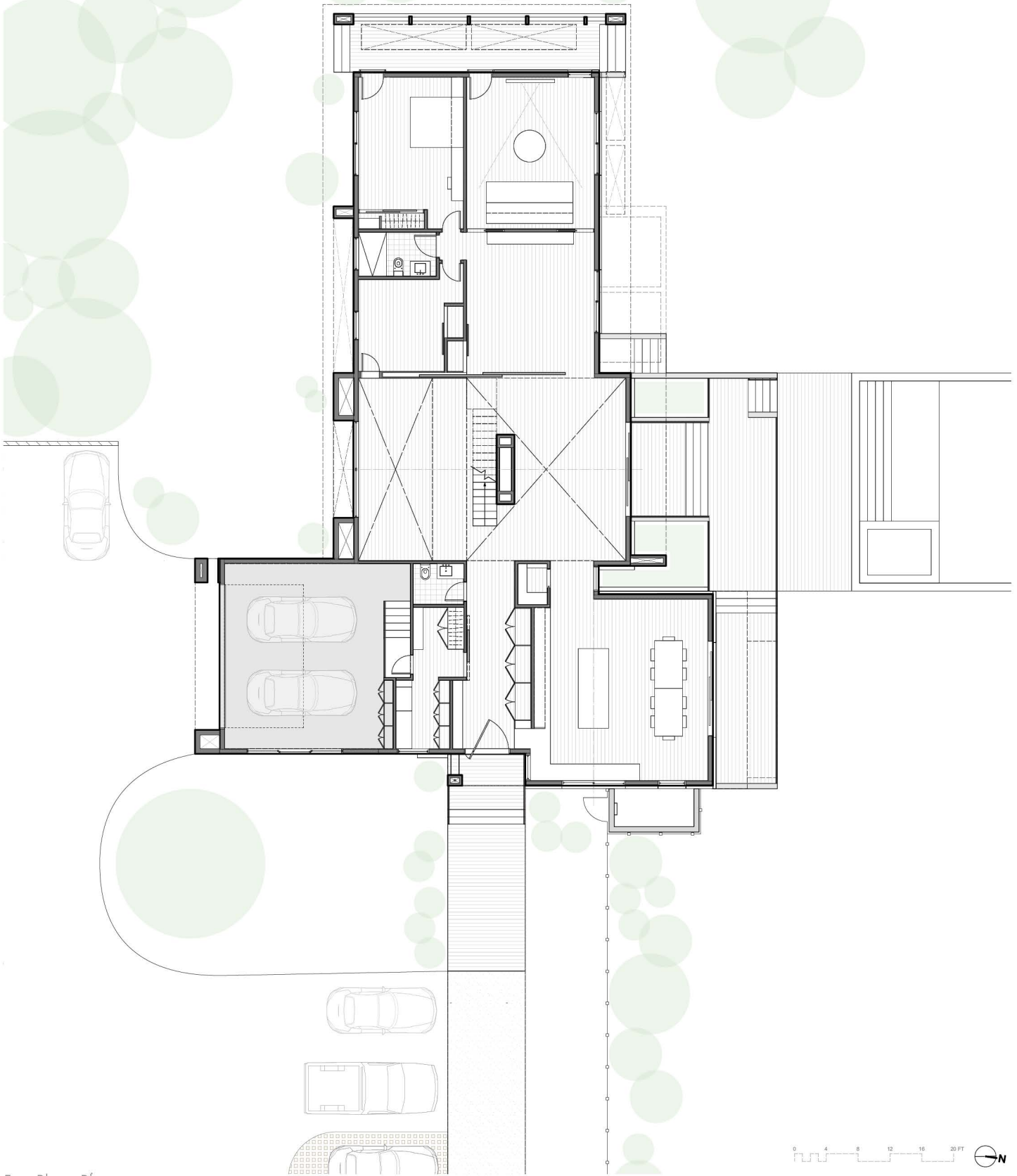
North Elevation



East Elevation



Current State of Construction



First Floor Plan

G W A T H M E Y

BATH + INTERIORS

Professional Project

September 2019 - August 2021

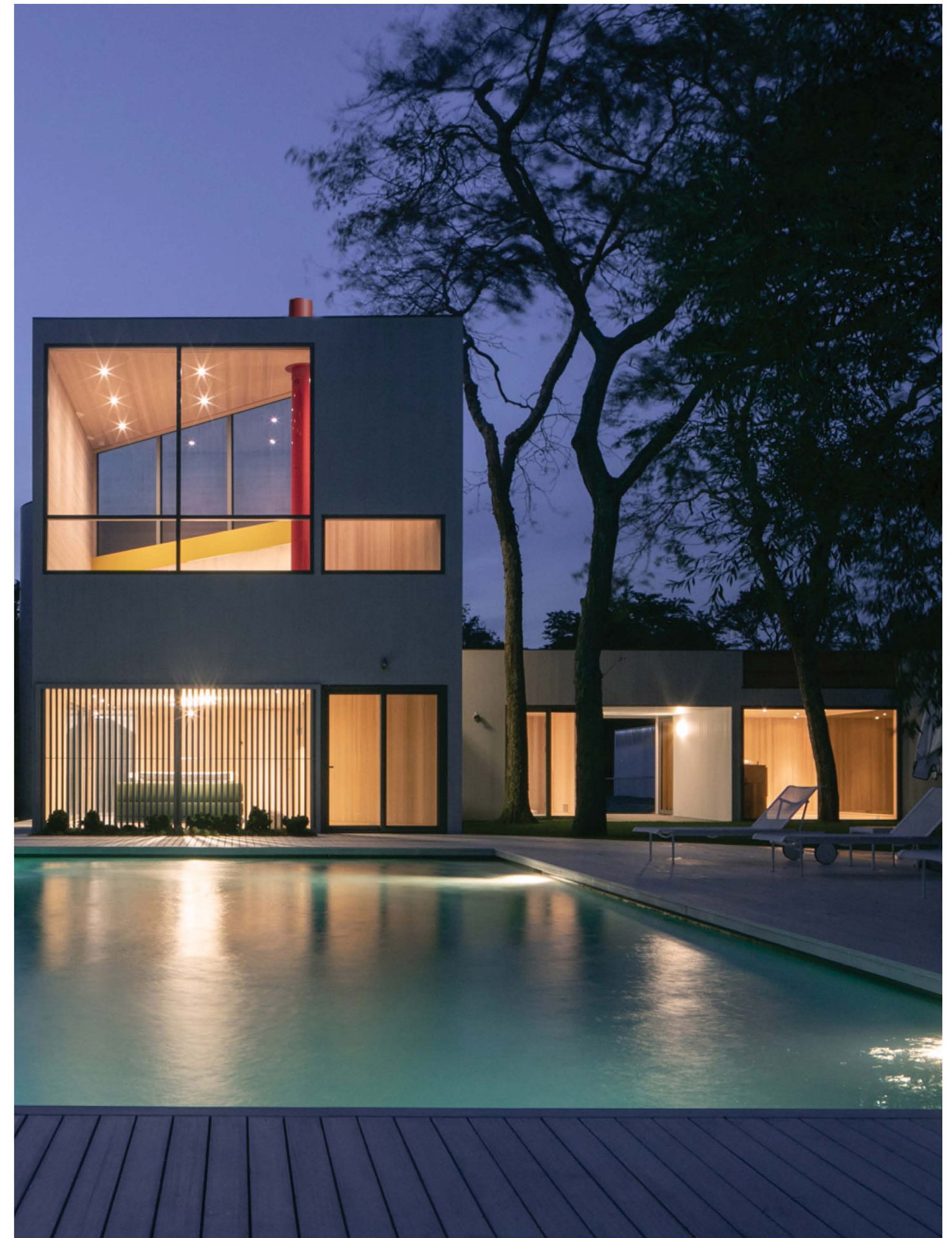
Martin Architects PC - Sagaponack, NY

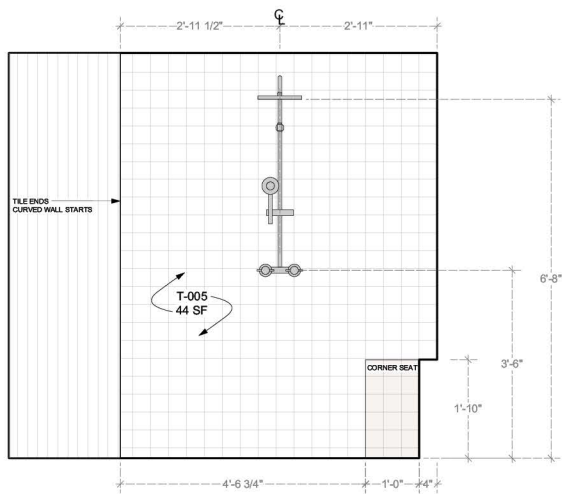
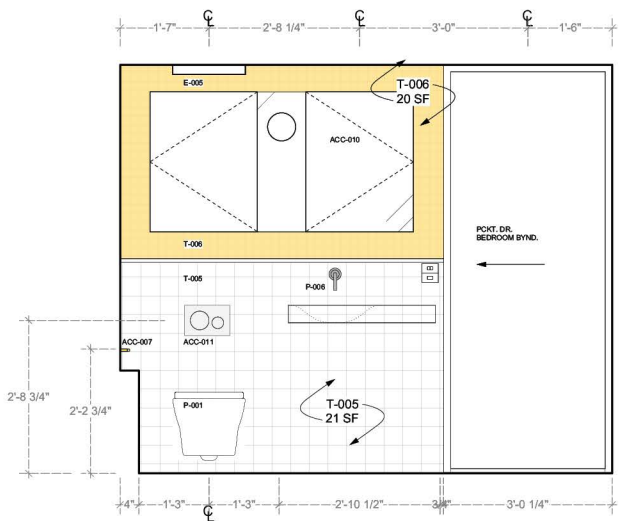
Role: Drafter & Interior Design Assistant

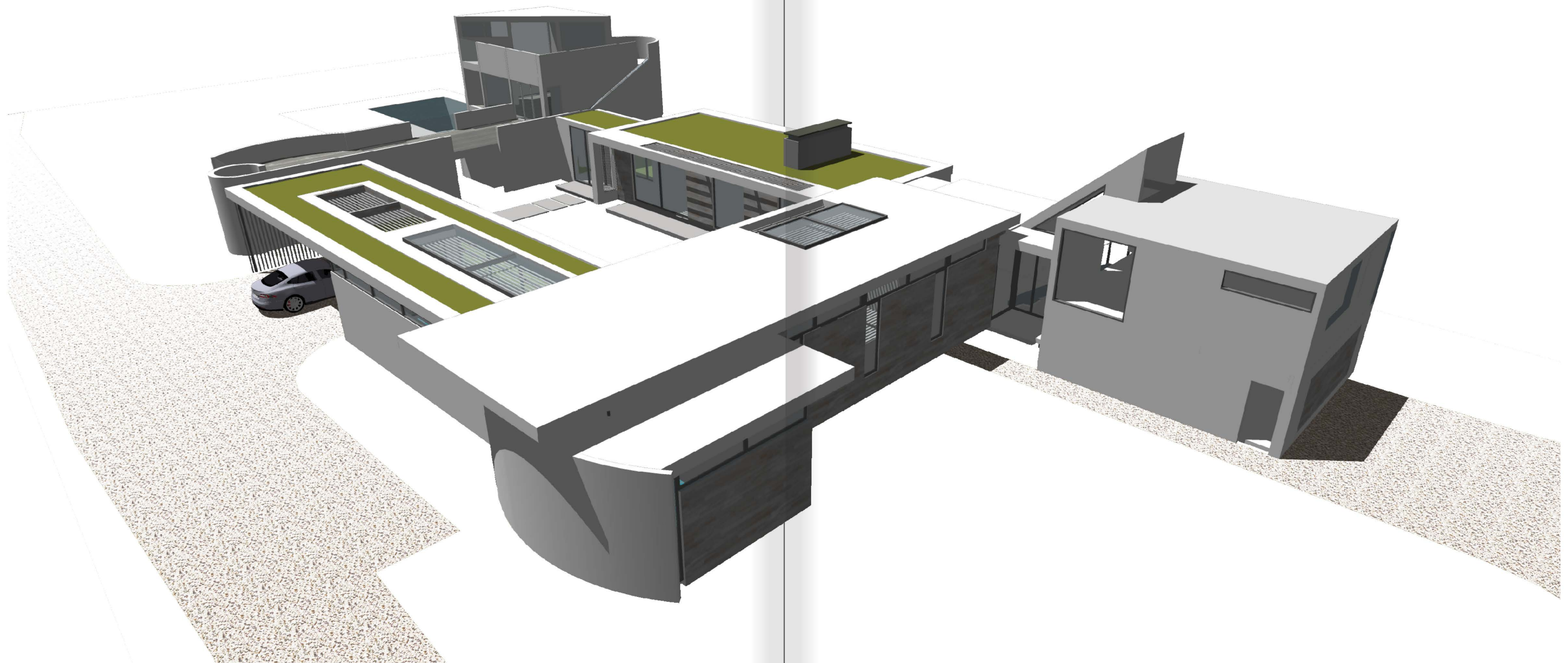
Amagansett, NY - Originally built in 1970, the Tolan House sits right next door to Charles Gwathmey's parent's house, which is known to be his most famous work. The original owner of the house was actor-producer Michael Tolan, but as ownership shifted over the years, the house underwent several renovations that were arguably conducted with little care to Gwathmey's original design.

In 2019, the house was at risk of demolition but was instead preserved through purchase by its current owners, who were our clients. They commissioned Martin Architects to restore the disintegrating mid century modern house because Nick Martin, the founder and owner of the firm, worked for many years with Gwathmey, who passed away in 2009.

I had the privilege to be a part of a team that focused on reimagining the interior spaces, specifically drafting the master bathroom that was originally a garage/ storage space. Modern white tiling, mahogany panels, primary colors, and stylistic plumbing fixtures: these were the features we focused on in the bathroom to connect to the aesthetic throughout the house, harkening back to Gwathmey's original design back in the 70s.







Phase II Schematic Model



Aerial View - Existing



Aerial View - With Phase II Addition

PHASE II SCOPE

Our team was also responsible for creating a design proposal for the expansion of the Tolan House to cater to the client's needs. Each rectangular form that would surround a courtyard space would include the following: a full kitchen and living space, a master bedroom, and a full-length indoor lap pool. Behind these forms would be a two-story guest house that mirrors the height present in the modern cube of the existing building. Plans for further design development for this proposal are currently in the works.



Phase II View Inside Courtyard

MONTAUK FIREPLACE

Professional Project

February 2021 - March 2022

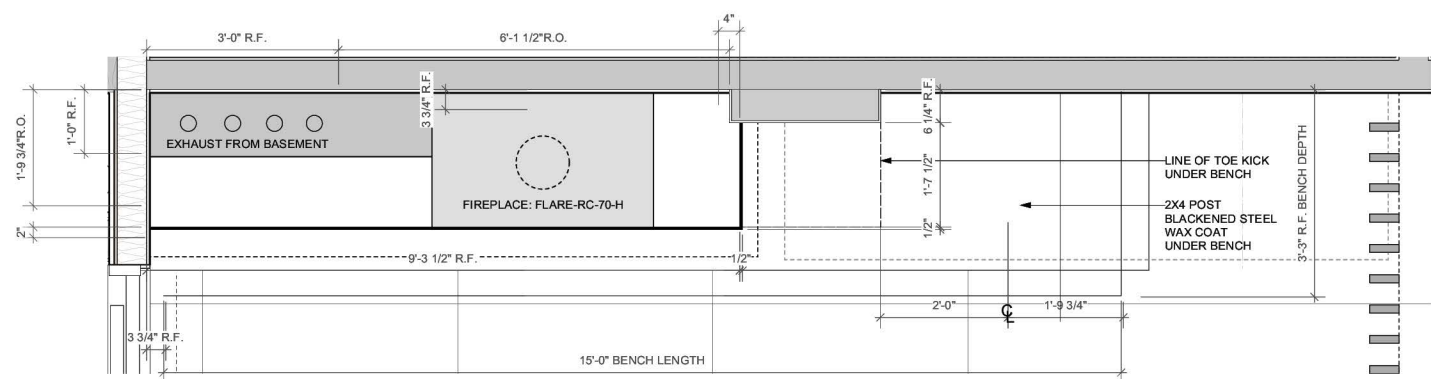
Martin Architects PC - Sagaponack, NY

Role: Architectural Designer

When talking to the client about their lifestyle and design aesthetic, it was evident that they preferred a clean, minimalist look, but were also not afraid to be bold. It seemed fitting, therefore, to provide them with a dynamic centerpiece for their double-height living space.

The fireplace is a modern spin on a traditional hearth, where a conventional gathering area around the fire is transformed into a monolithic plinth that seamlessly floats in mid air. In fact, the three-dimensionality of the planes that blend with the firebox gives the illusion that it is not a fireplace but actually a minimalist sculpture that suddenly emerges out of the walls. This blending of architectural wall and fireplace is also achieved with the use of Venetian plaster. The charcoal color is loosely applied and dances beautifully with the natural light coming through the windows. The work of Mark Rothko inspired the quality of the finish. The goal is for one to get lost in the textures of the plaster much like a museum visitor escapes into an artist's strong, impactful brushstrokes.





SKETCHES

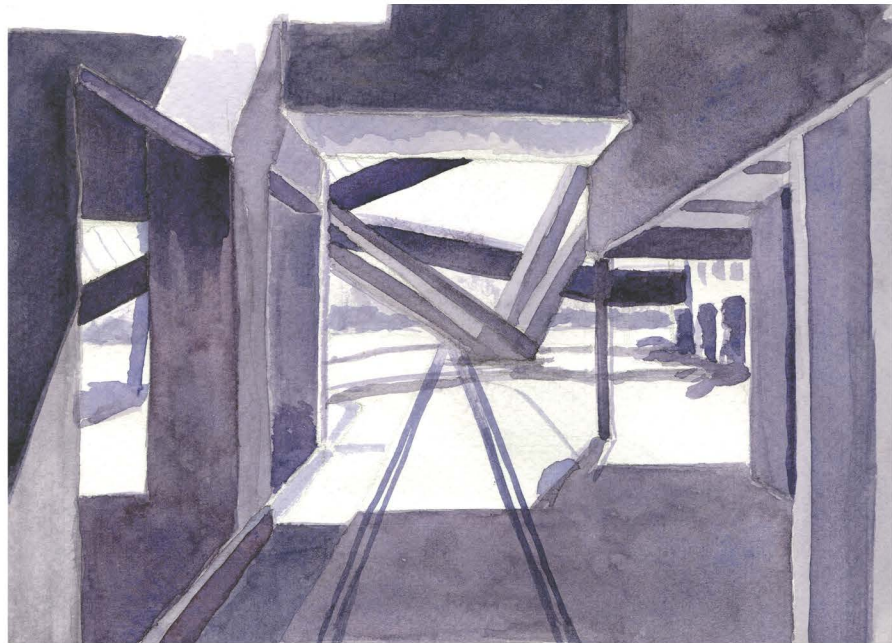
FROM OBSERVATION

Having had the privilege to study abroad in undergrad, I took advantage of the captivating, historic buildings around me through sketching. It felt important to me to capture not just the depth, proportion, and materiality of each scene, but also the mood that the architecture gave when situated in its specific context. Overall, accuracy of built form was just as important as emotive expression.

The use of watercolors and inks were my medium of choice for their viscosity on the page and for their accessibility when sketching in a bustling, crowded urban square. The most chaotic of locations was Montmartre. On Easter Sunday, I witnessed the sea of tourists zipping by, creating one continuous blurred form. Their fleeting nature juxtaposed with the rigid, monumental stance of Sacre-Coeur is represented by the drawing on the right. The insignificant cloud of visitors fade and drip away, while the architecture around them remains and outlives them. The following sketches similarly have a sense of playfulness while also exuding a melancholy innate to the human experience.



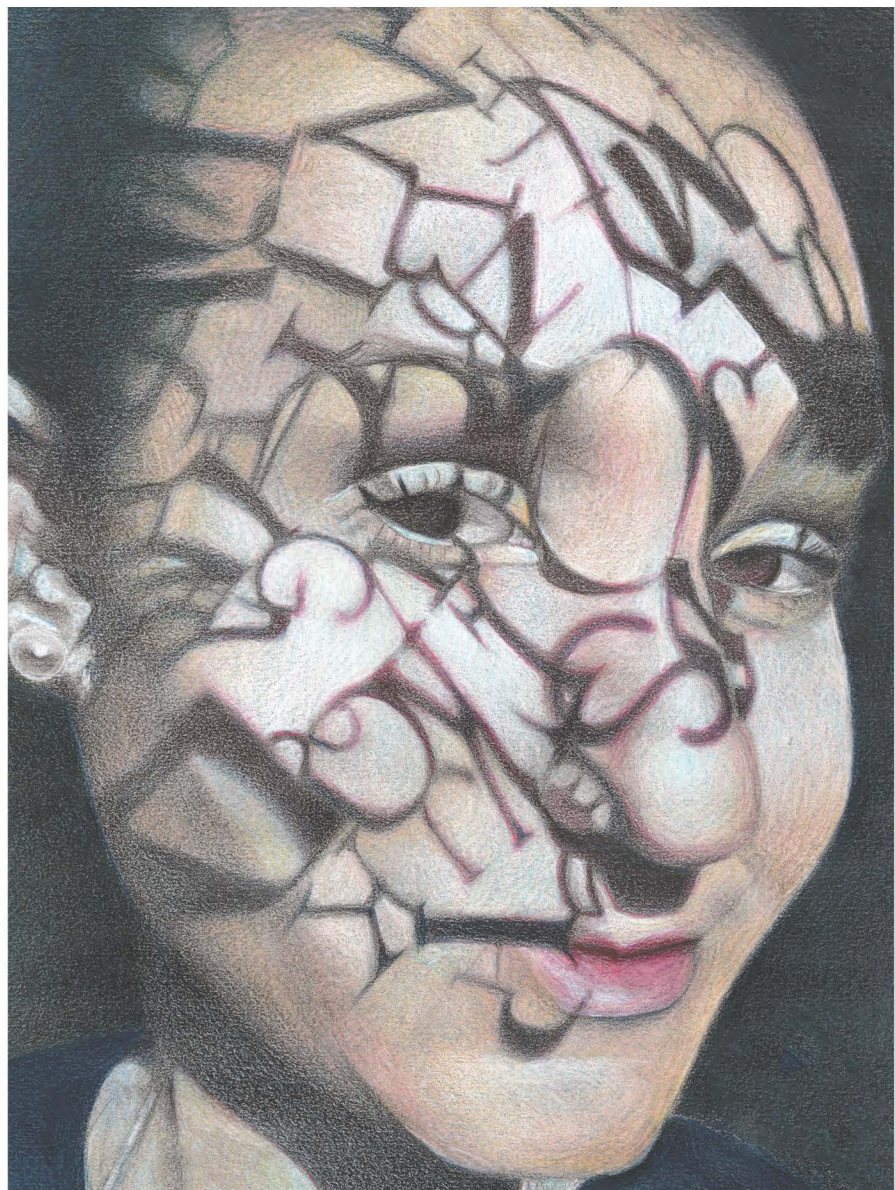
Sacre-Coeur - Paris, France



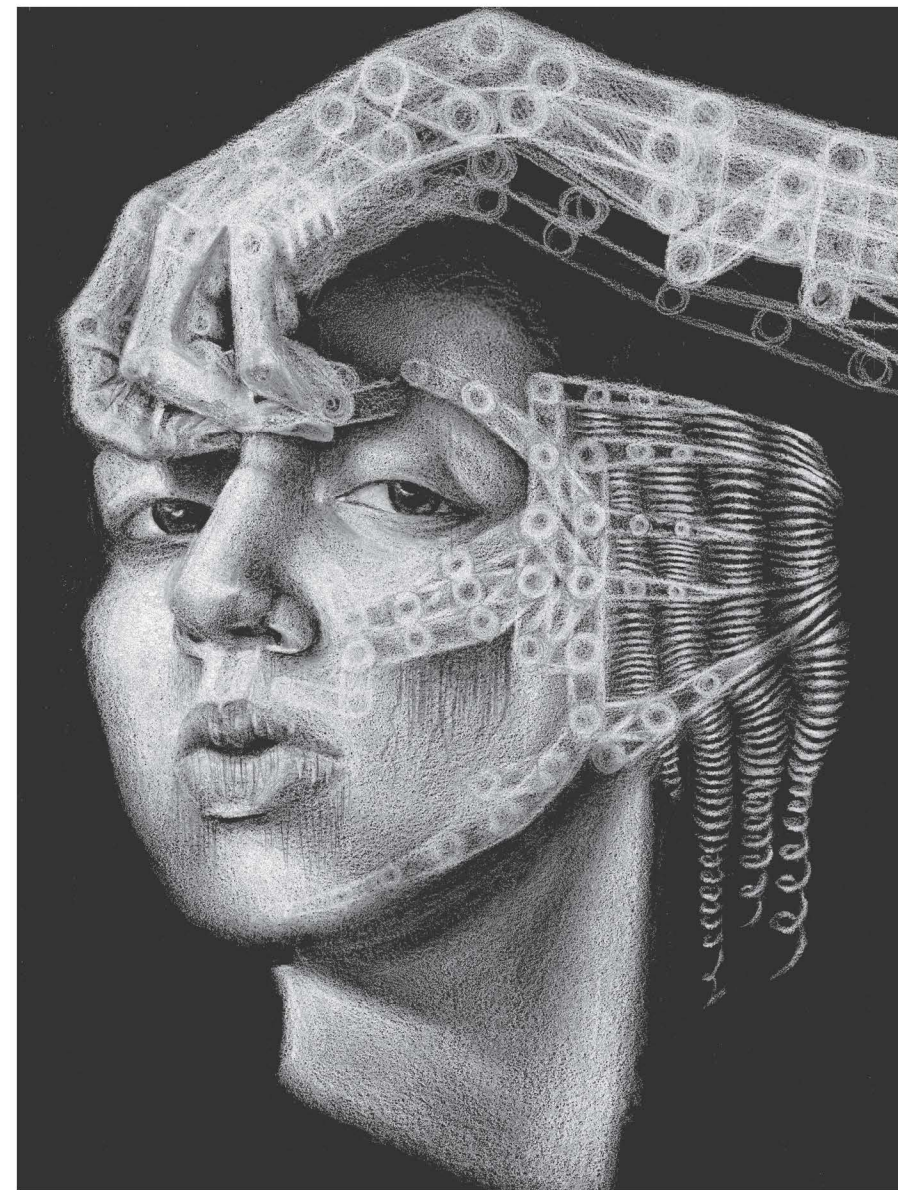
Underpass - Ruhr, Germany



Cathedral - Cologne, Germany



Portrait



Self-portrait