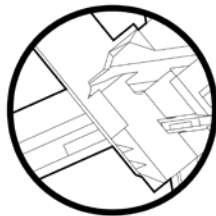


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GSAPP | SU24 - SP25

S T A T E M E N T

I like **architecture** because it demands excellence across many disciplines to achieve greatness. It fuels my curiosity, allowing me to explore diverse fields and connect elements that captivate me.

I love **architecture** because it engages me on an intimate scale, revealing its character through intricate details, while on a grand scale, it sublimates me with unarticulated emotions and a sense of awe.

I have always been drawn to the smaller, more nuanced details—not solely in terms of structure or formal but in how they resonate emotionally and operate in practice. To me, architecture, at its core, is an unfolding experience shaped by its details to **animate, resonate, and articulate**.

This portfolio showcases a broad spectrum of my architectural interests at **GSAPP**, including social interaction, spatial experiences, philosophy , and technology.

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# CASA PRISMA

A PLAYFUL GERIATRIC RENOVATION ON SHAKYGROUND

**Location:** San Rafael, Mexico City

**Instructor:** Gabriela Carrillo

Thomas de MonchauxRita

**Partner:** Zhuofan Song

**Key Words:** Reflection, Care, Re-Densification

Mexico is undergoing a significant **demographic shift**, with the median age rising from 27.9 in 2015 to a projected 42 by 2050. During this period, the population **aged 65** and older is expected to triple, reaching 20.2%. This transformation places increasing pressure on limited social resources, **making aging a challenge** to both livelihood and dignity in the face of persistent age discrimination.

**Color**, particularly in a vibrant urban context like Mexico City, is vital in **shaping emotional and spatial experience**, especially for elderly residents who spend extended time indoors. Color is dynamic, shifting with light, context, and memory.

This project seeks to **densify an existing 50-unit geriatric center into a joyful 100-unit geriatric social housing** by introducing playful architectural elements inspired by the church's peculiar presence to improve accessibility and engagement. More than just architectural gestures, these elements are designed to spark joy, curiosity, and movement. They create moments of surprise and delight, encouraging the elderly to **interact, explore, and feel young again**.



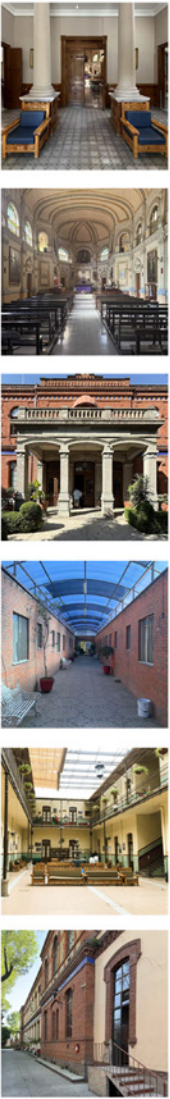
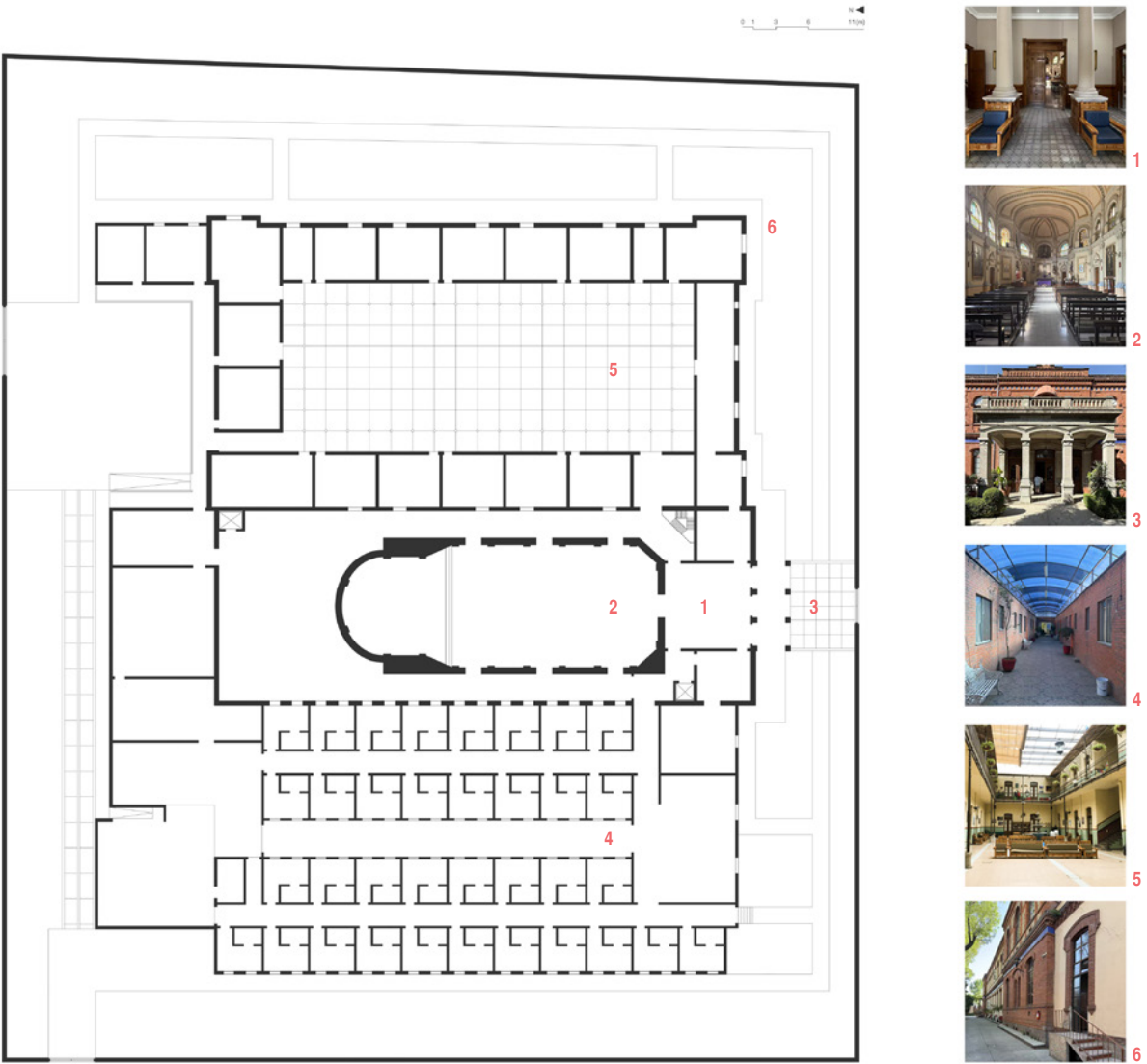
Lobby Render, Reflective Ramp



Site Mapping, San Rafael, Mexico City



Color, Light, Material Study



A reflective study was conducted on-site to observe how color and light interact with the built environment. For instance, red walls cast pink hues onto adjacent white façades, while worm’s-eye views of balconies revealed layered color grids shaped by depth, material, and shadow. These chromatic relationships were mapped to reveal each structure’s distinct architectural character and material choices. These insights inform the design concept of Day House, Night House, and Reflection, which transforms a 19th-century geriatric center into a 100-unit social housing complex. Programs are organized by day and night use and distributed across varied heights to encourage exploration and accessibility. Playful architectural interventions, such as ramps, light tunnels, sawtooth roofs, and water features, are sensory catalysts, inviting movement and sparking curiosity. Together, these elements reframe aging as an active, communal, and joyful experience.

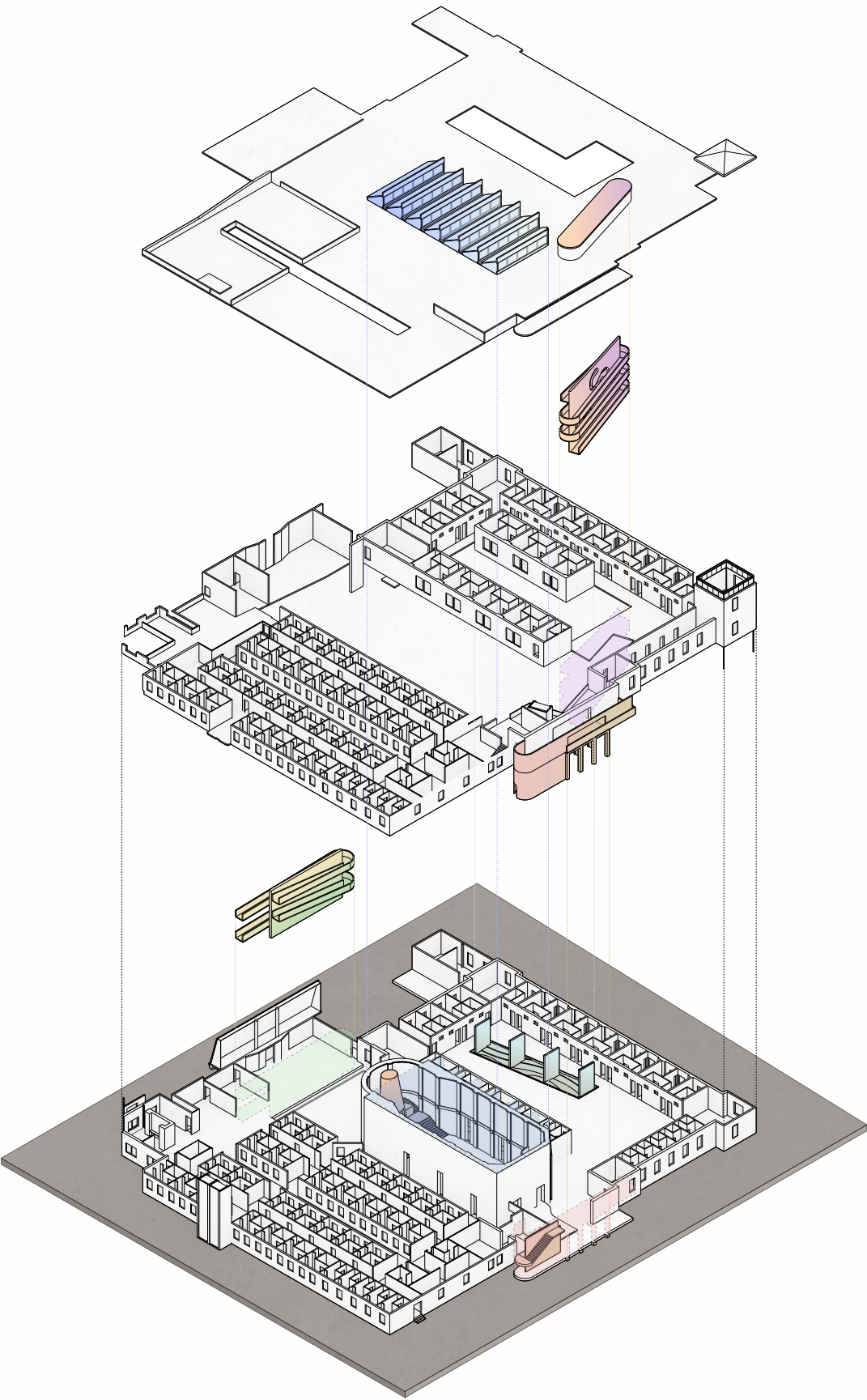
Geriatric Center: Hogar para Ancianos Matías Romero I.A.P., Plan & Site Visit Photo



LEFT: Corridor, Site | RIGHT: Corridor, Guahuanato

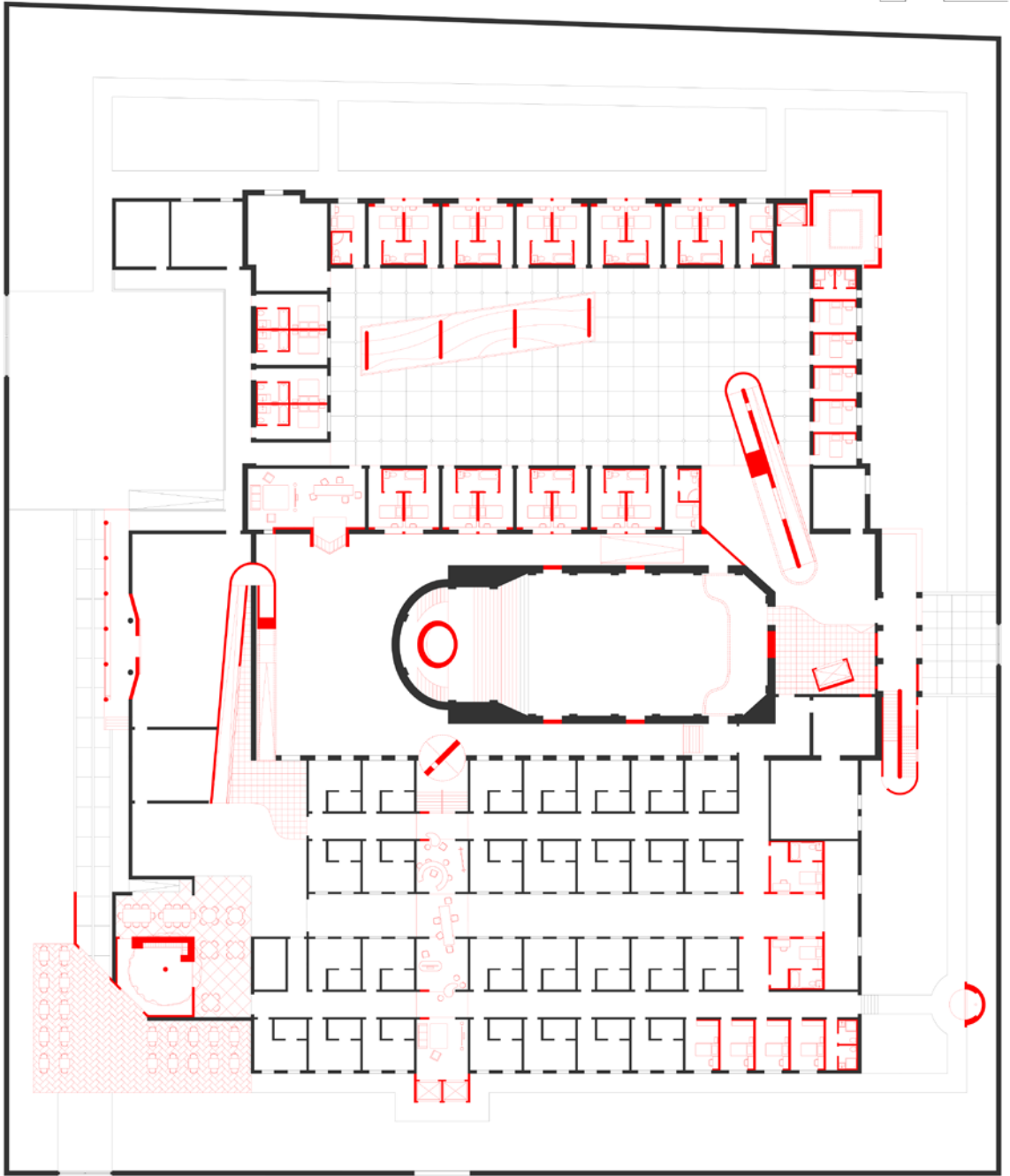


LEFT: Cafeteria, Site | RIGHT: Cocinas Cencalli, Mexico City

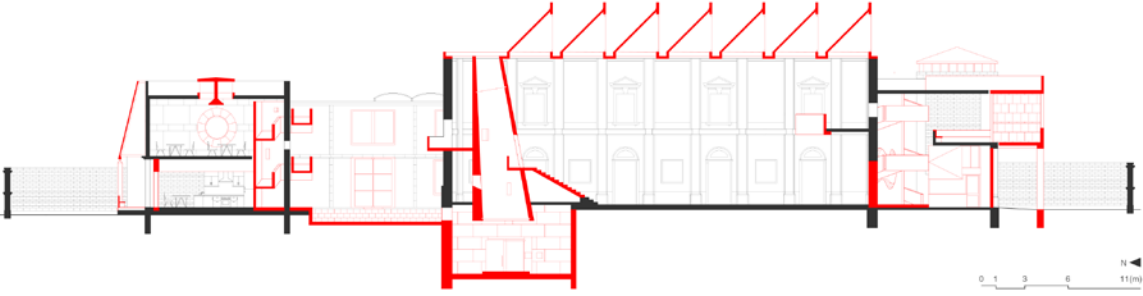


Exploded Renovation Axon

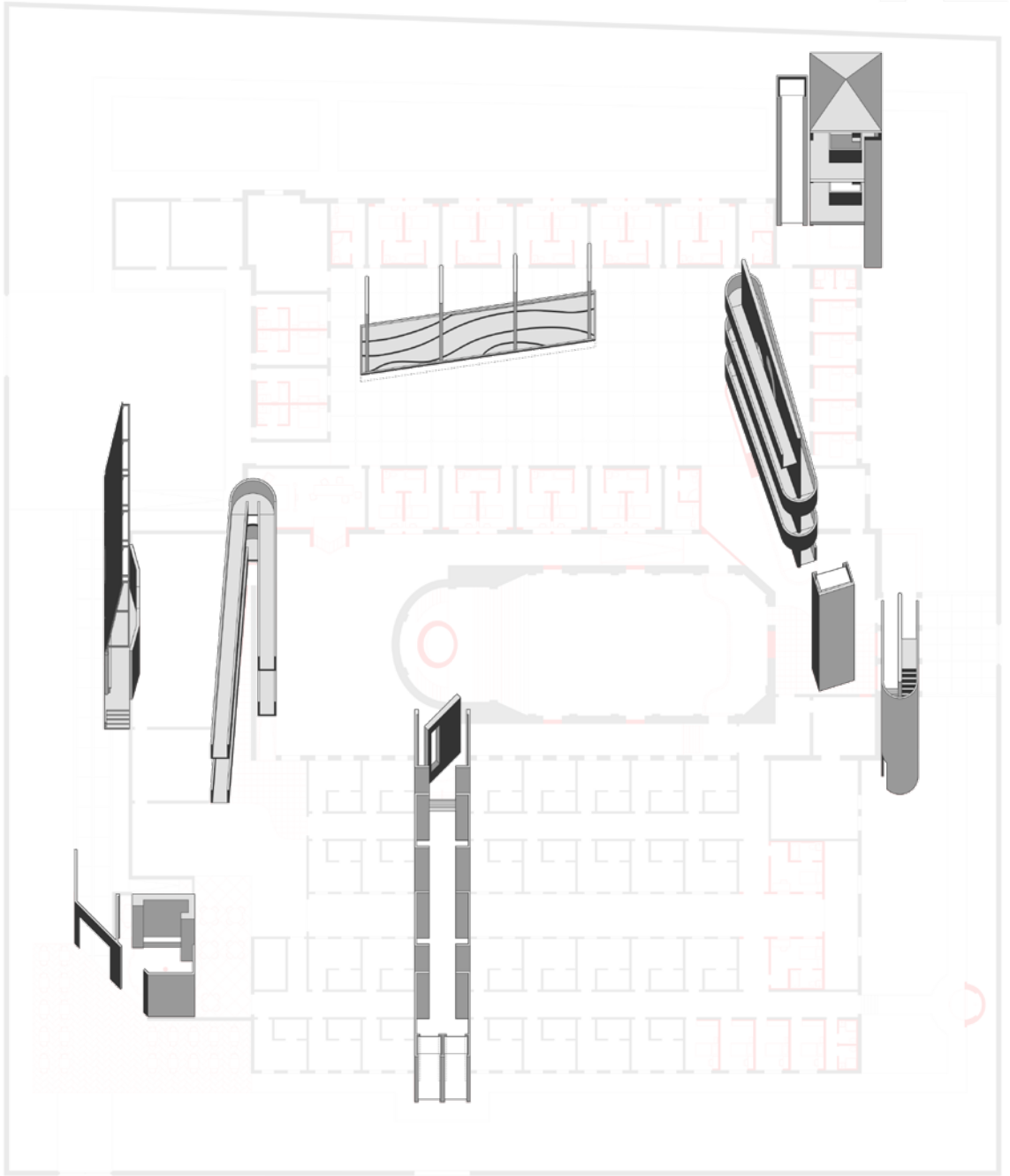
Plan, Renovation In Red



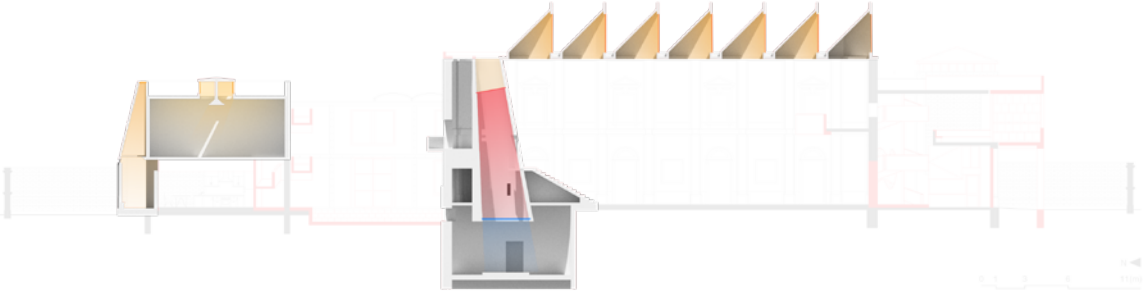
Section



Playful Artifact



Light & Color







Lobby Render, Reflective Ramp





Courtyard Render, Indoor Water Feature



# REACH WITH TREMOR

A SYMPATHY-DRIVEN WEARABLE EXPERIENCE

**Instructor:** James F. Nanasca  
**Team:** Yinhui Dong, Jieyu Yang, Zhuofan Song  
**Key Words:** Automation, Sensation

ReachWithTremor is a **provocative, sympathy-driven design** that enables users to physically engage with the **experience of intention tremor**, a neurological condition characterized by increasing hand tremors as the hand approaches a target. Commonly associated with cerebellar damage resulting from stroke, multiple sclerosis, or traumatic injury, intention tremor renders even the most routine actions.

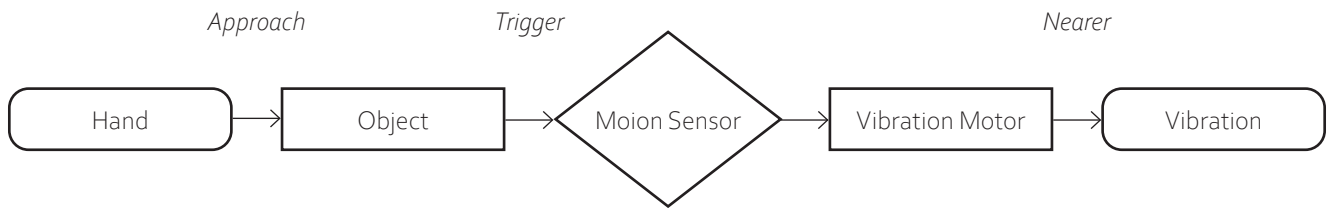
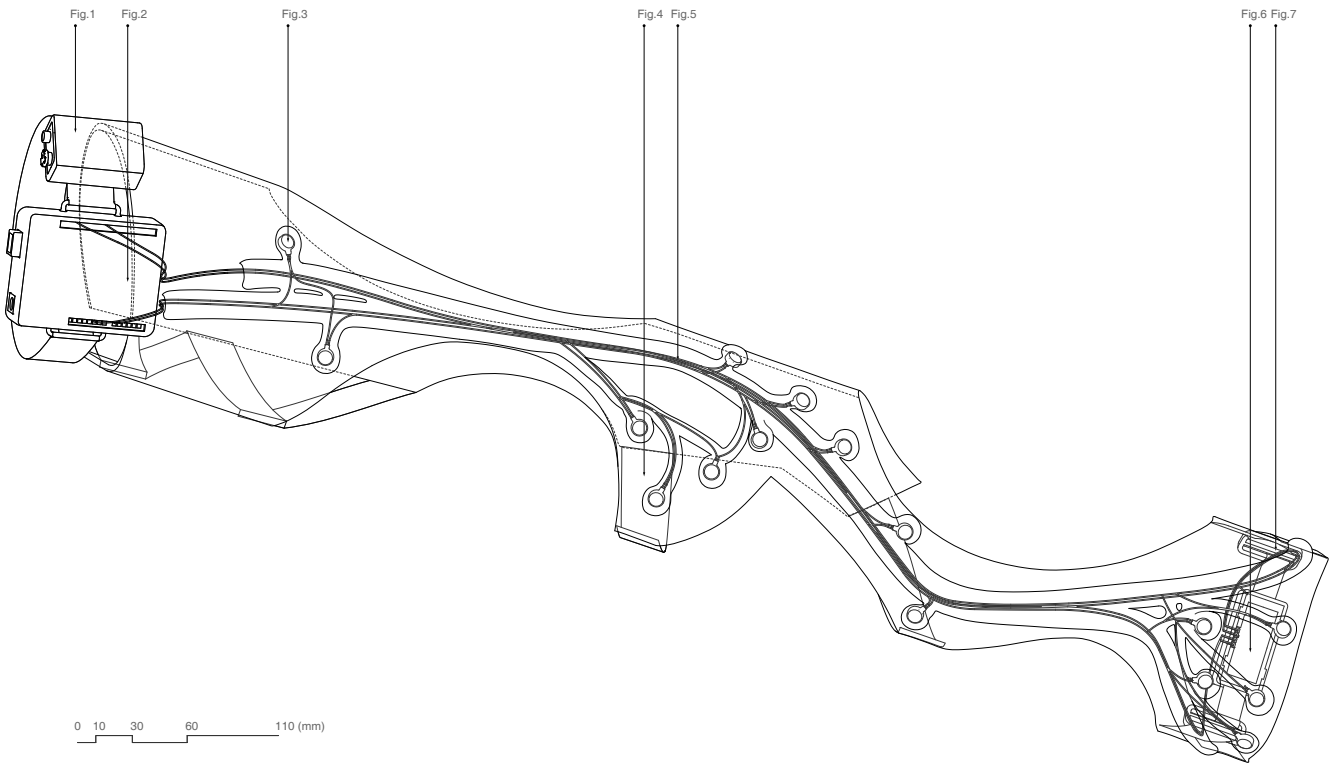
This project does not seek to offer a clinical explanation or therapeutic solution. Instead, it presents **a wearable automaton that fosters empathy through embodied sensation**. By simulating the disruptive nature of tremors, the device encourages users to understand the physical and emotional burden better. It **visualizes the invisible struggles** of those with neurological disorders, inviting a more profound and embodied understanding.



Tremor Simulation Photo

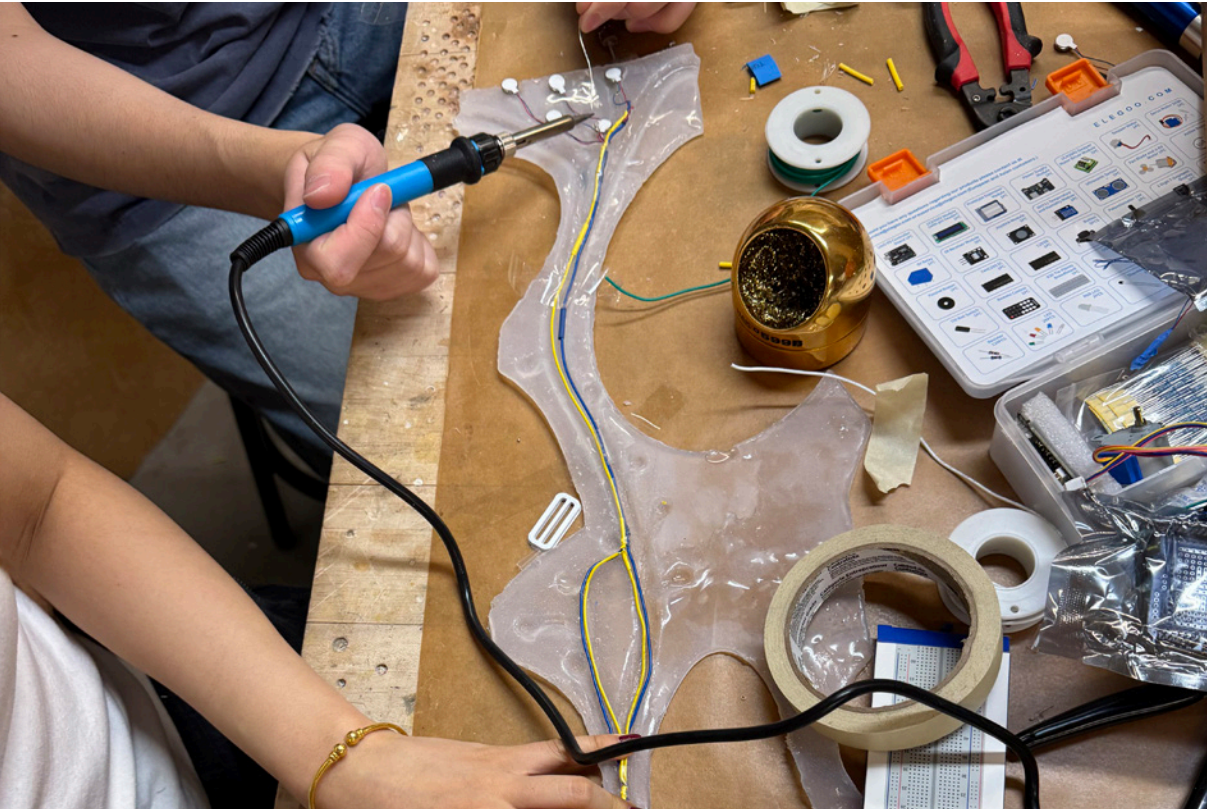


Patent Drawing



The design process began with experiments using an Arduino, motion sensors, and vibration motors. The system mimics the uncontrollable shaking associated with intention tremor by triggering vibrations as a hand nears an object. Early iterations focused on sensor placement and timing, eventually positioning the sensor in the palm to enhance realism.

The system operates via proximity sensors embedded in the palm that detect the distance to nearby objects. As the hand approaches a target, vibration motors are activated, simulating the onset of tremor. These components are powered by a microcontroller and battery in the wearable shell. The fabrication entailed extensive digital modeling, mold creation, silicone casting, and electronic integration—the final wearable features are adjustable elastic straps for comfort and fit while maintaining flexibility at key joints.



Soldering



Final Design Test





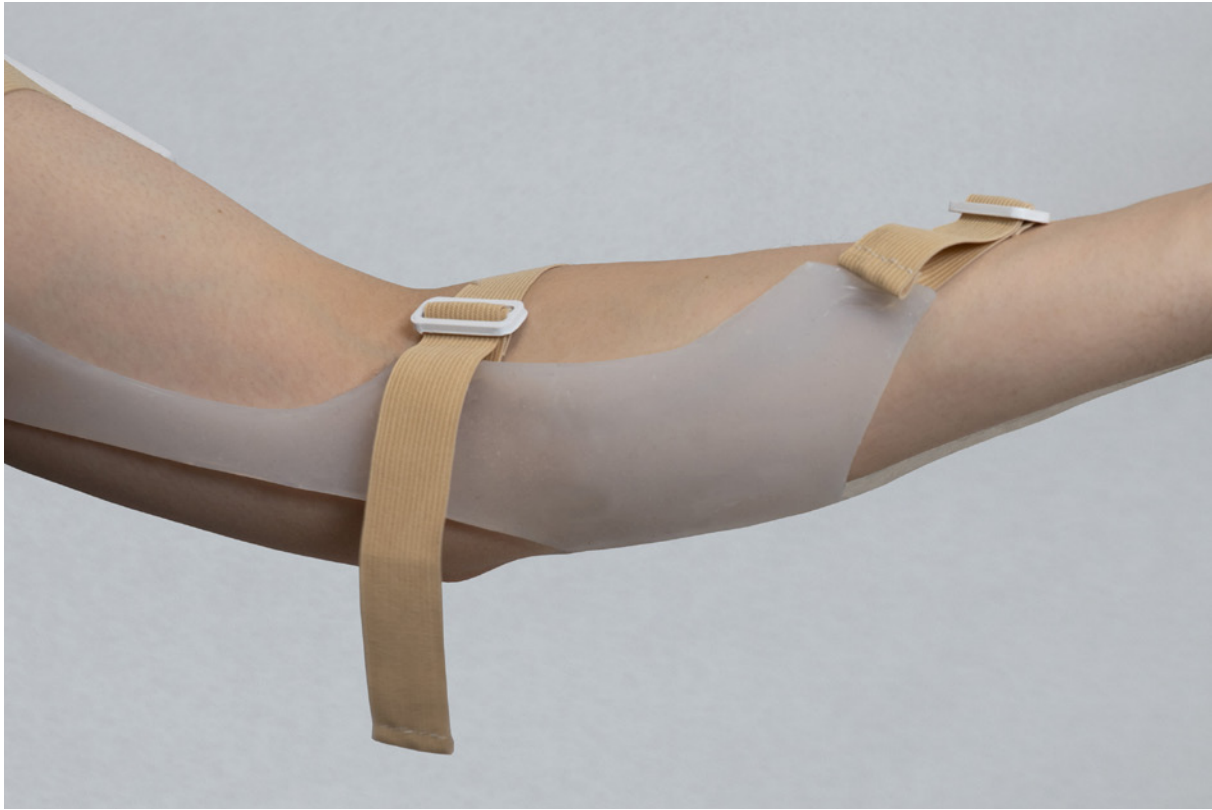
Final Design, Front



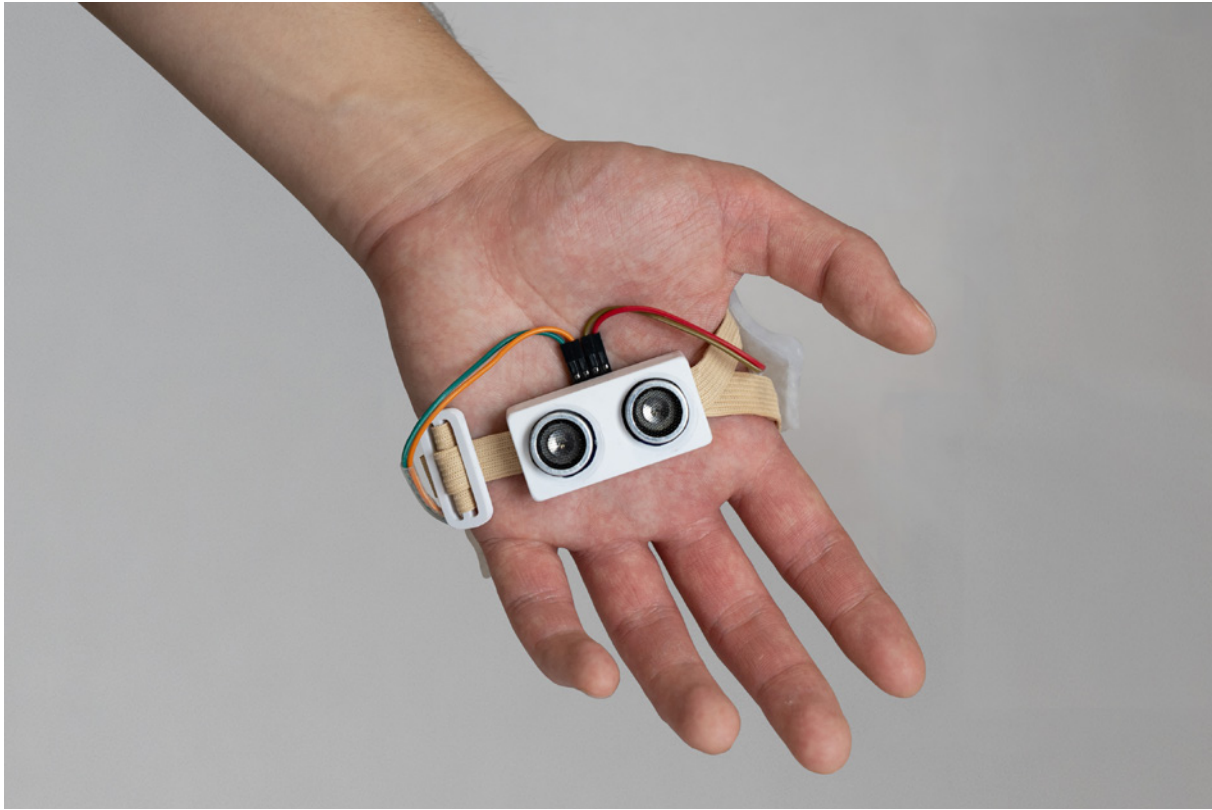
Hnad Detail



Joint Detail



Palm Detail





# LITTLE WETLAND

RETHINKING WETLAND IN NEW YORK CITY

**Location:** Manhattan, New York  
**Instructor:** Michael Wang  
**Partner:** Sitan Zhu  
**Key Words:** Wetland Restoration, Public Intervention

**Wetlands are crucial natural filters**, yet economic development has caused a **60% loss in New York**. Now overwhelmed by human-made contamination, many wetlands risk turning into toxic “Pandora’s Boxes.” Traditional restoration methods often worsen the issue by disturbing polluted soil. Wetlands urgently need an **upgrade**.

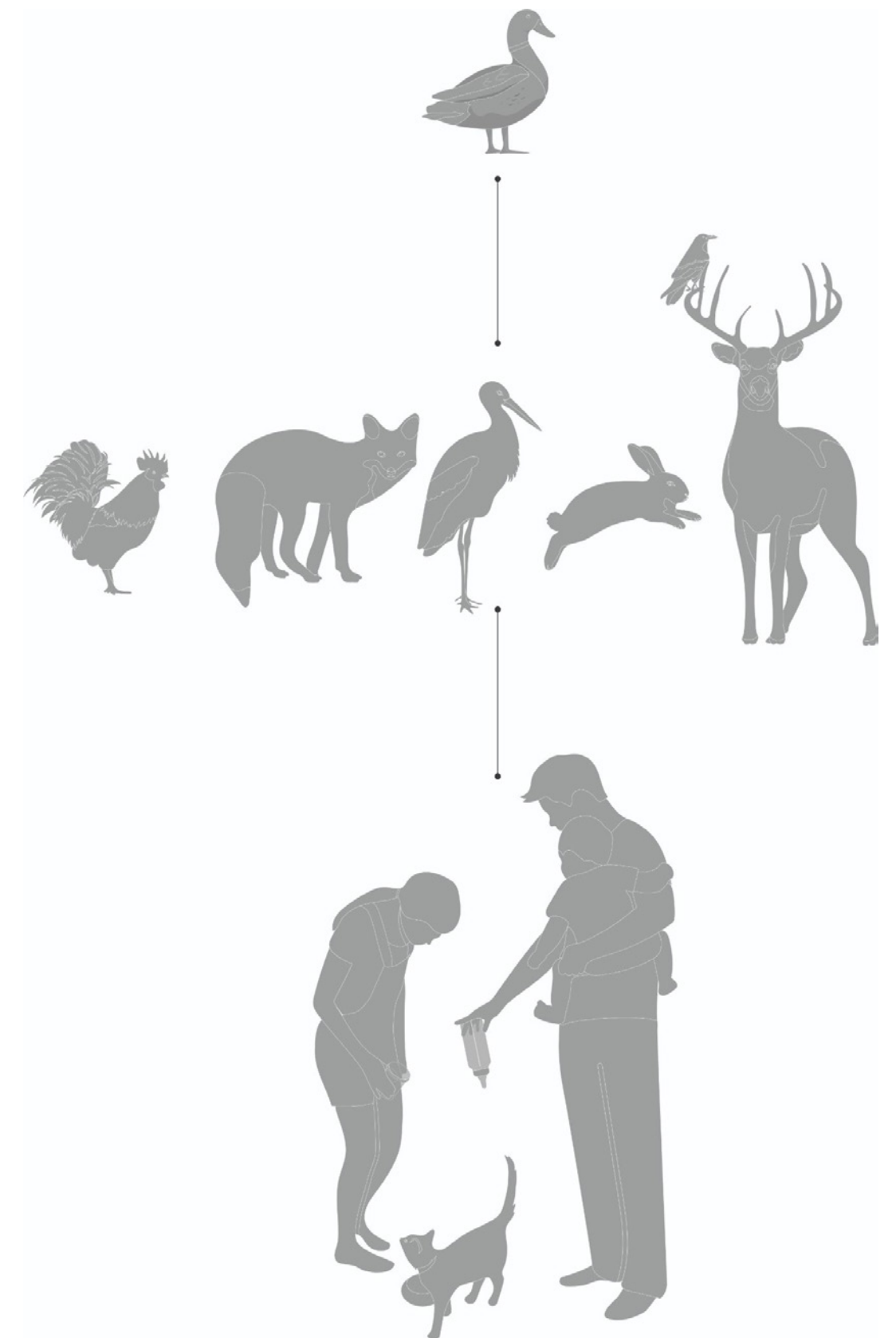
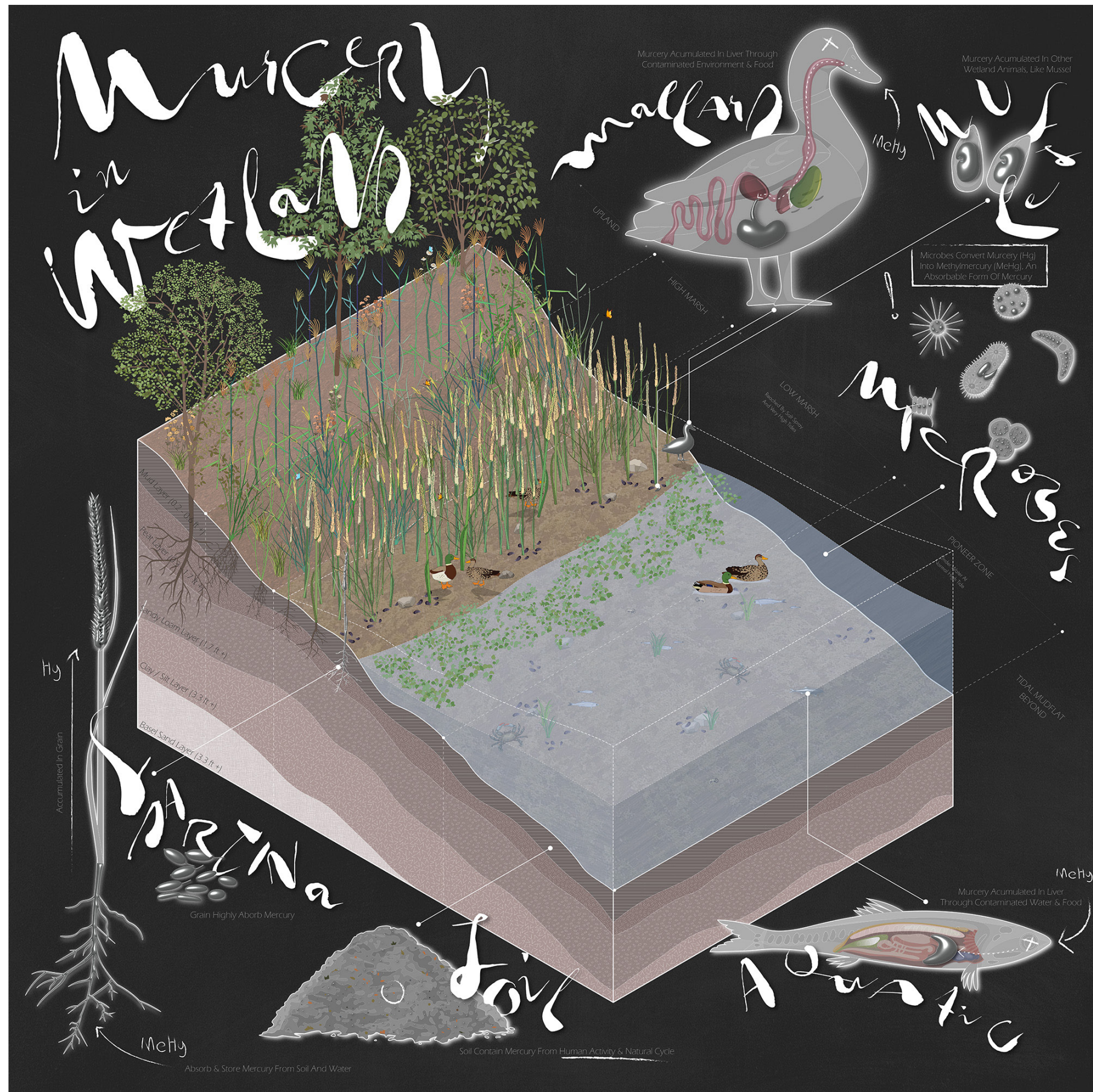
Our project tackles two key challenges: **unawareness and self-sustainability**. To address unawareness, we propose integrating wetlands into urban areas as accessible educational spaces. This increased visibility fosters **public understanding** and appreciation of their essential ecological roles. For self-sustainability, we introduce a hybrid system that merges natural processes with **enzymatic technology** to manage contamination. These wetlands become semi-autonomous detoxification systems.

Our chosen site, **Little Island** on the Hudson River, exemplifies underutilized potential. Though designed as a green retreat, it harms local habitats. We aim to reprogram it as a living wetland that **educates, restores, and supports** human visitors and the surrounding ecosystem.

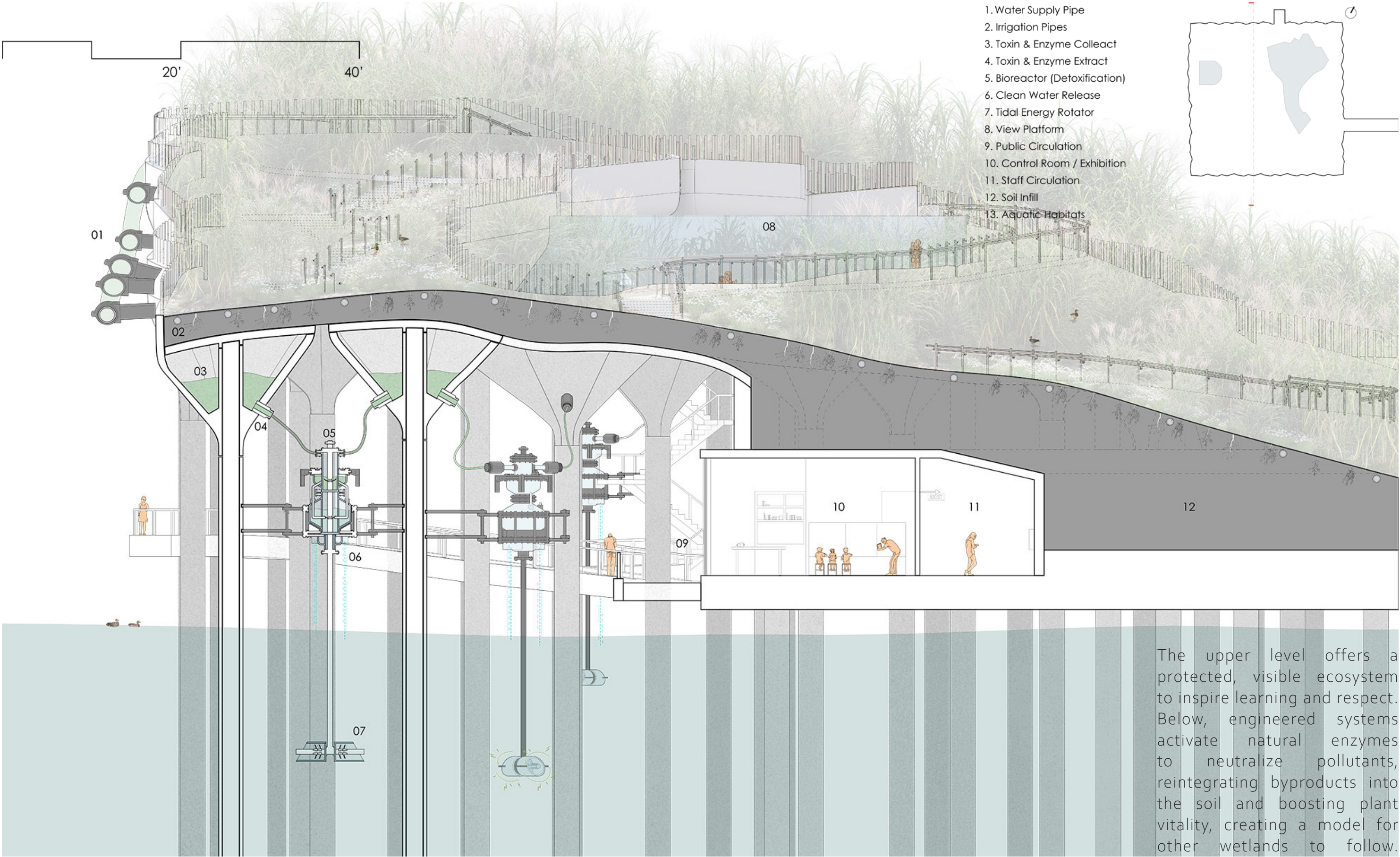


Little Wetland Render

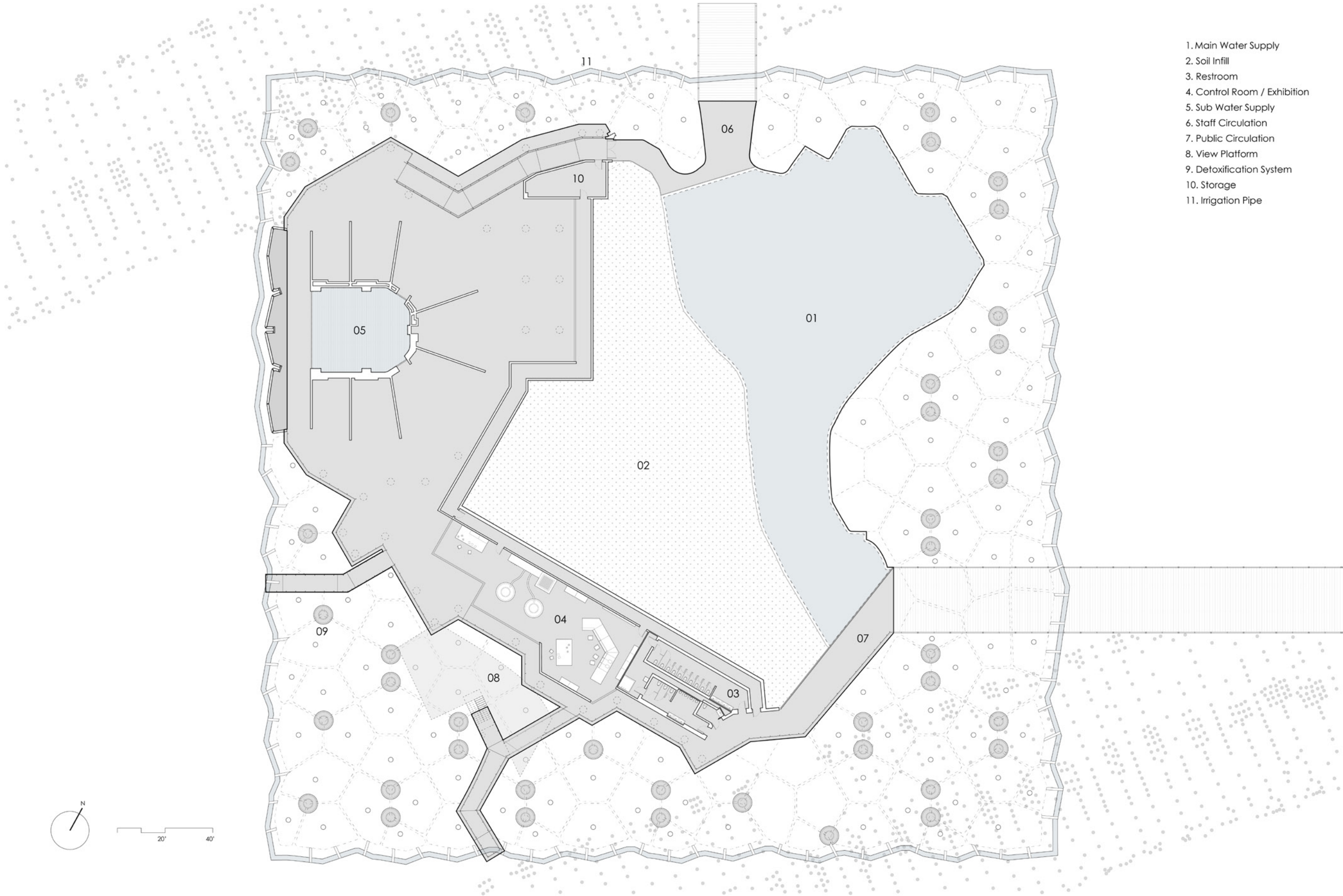








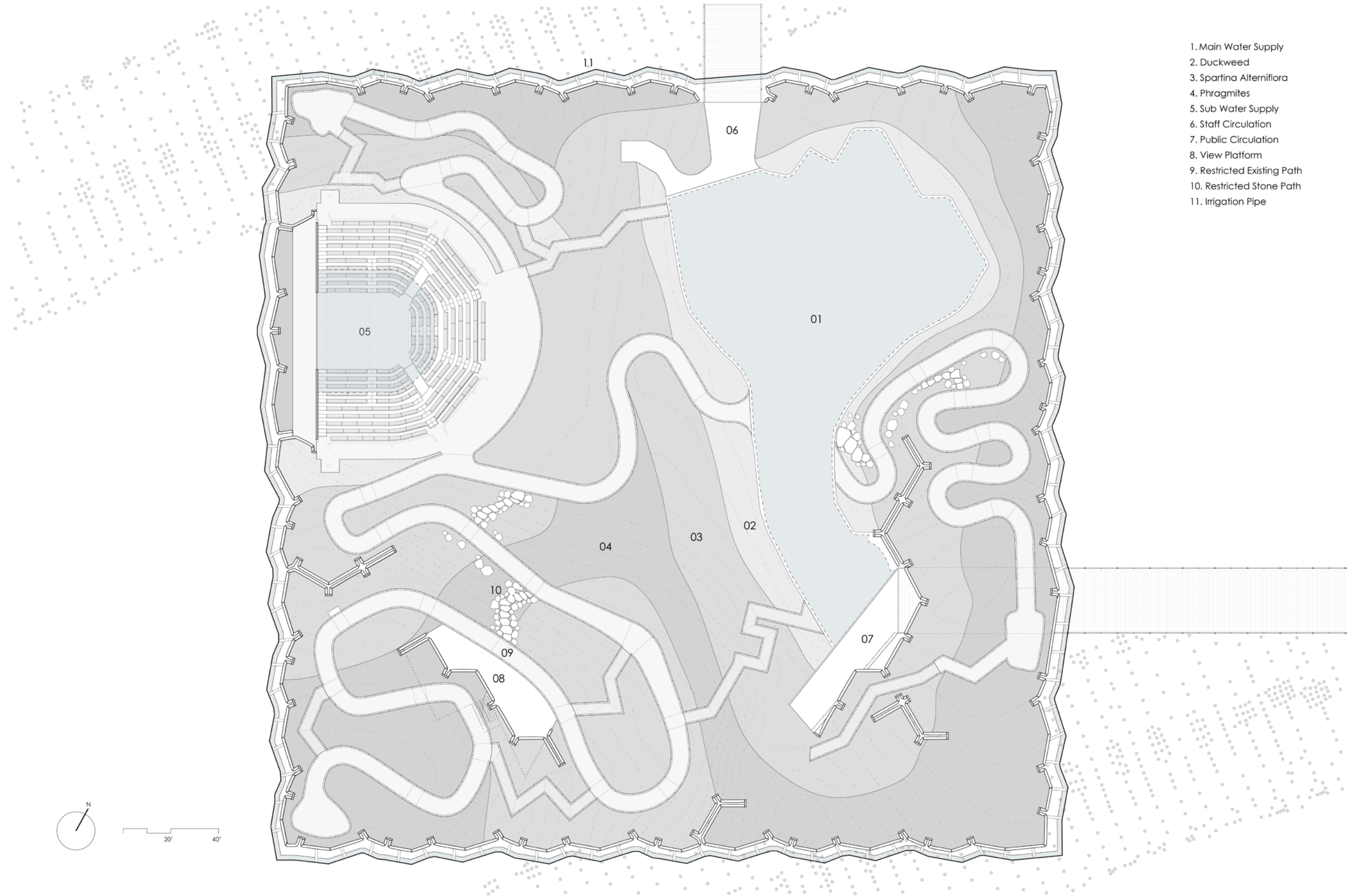




- 1. Main Water Supply
- 2. Soil Infill
- 3. Restroom
- 4. Control Room / Exhibition
- 5. Sub Water Supply
- 6. Staff Circulation
- 7. Public Circulation
- 8. View Platform
- 9. Detoxification System
- 10. Storage
- 11. Irrigation Pipe

Under Level Plan







Physical Model Detail



Top Level Render



Street View Render



# HOUSE OF CHANCE

ARCHITECTURE APROPOS ART & PHILOSOPHY

**Instructor:** Steven Holl, Dimitra Tsachrelia

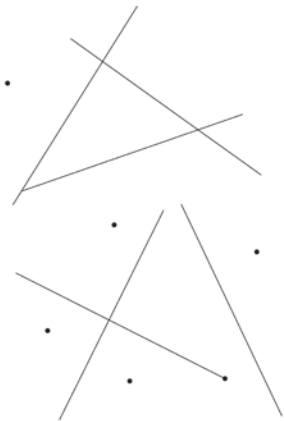
**Key Words:** Spatial Interpenetration, Chance, Silence

This project investigates **chance as a method for defining space**, drawing inspiration from the groundbreaking works of **John Cage**, a pioneer of non-standard and experimental modern music. Cage's avant-garde philosophy emphasized individuality and was profoundly shaped by the concept of chance, a form of randomness. Cage's iconic composition, 4'33", exemplifies his exploration of silence—not as the absence of sound but as the ambient, unintentional noises surrounding us. For Cage, **silence was a space where sounds interpenetrate** freely, akin to the **transparency and interplay of architectural reflections**. This principle of spatial interpenetration and method of chance influenced his later works, such as the Variations series, which used random points and lines to create unfocused, dynamic soundscapes. **This project builds on Cage's ideas and extends his musical philosophy into architectural design** through the conceptual "House of Chance." Inspired by Cage's Variations, the design employs random points and lines to establish spatial boundaries and axes. These elements were extruded, folded, and trimmed to create interpenetrating blocks, which naturally formed rooms, stairs, and windows. The process embraced randomness and inconsistency created from chance, mirroring Cage's musical approach. Composing these inconsistent blocks forms the **moments of solid and transparent interpenetration**.





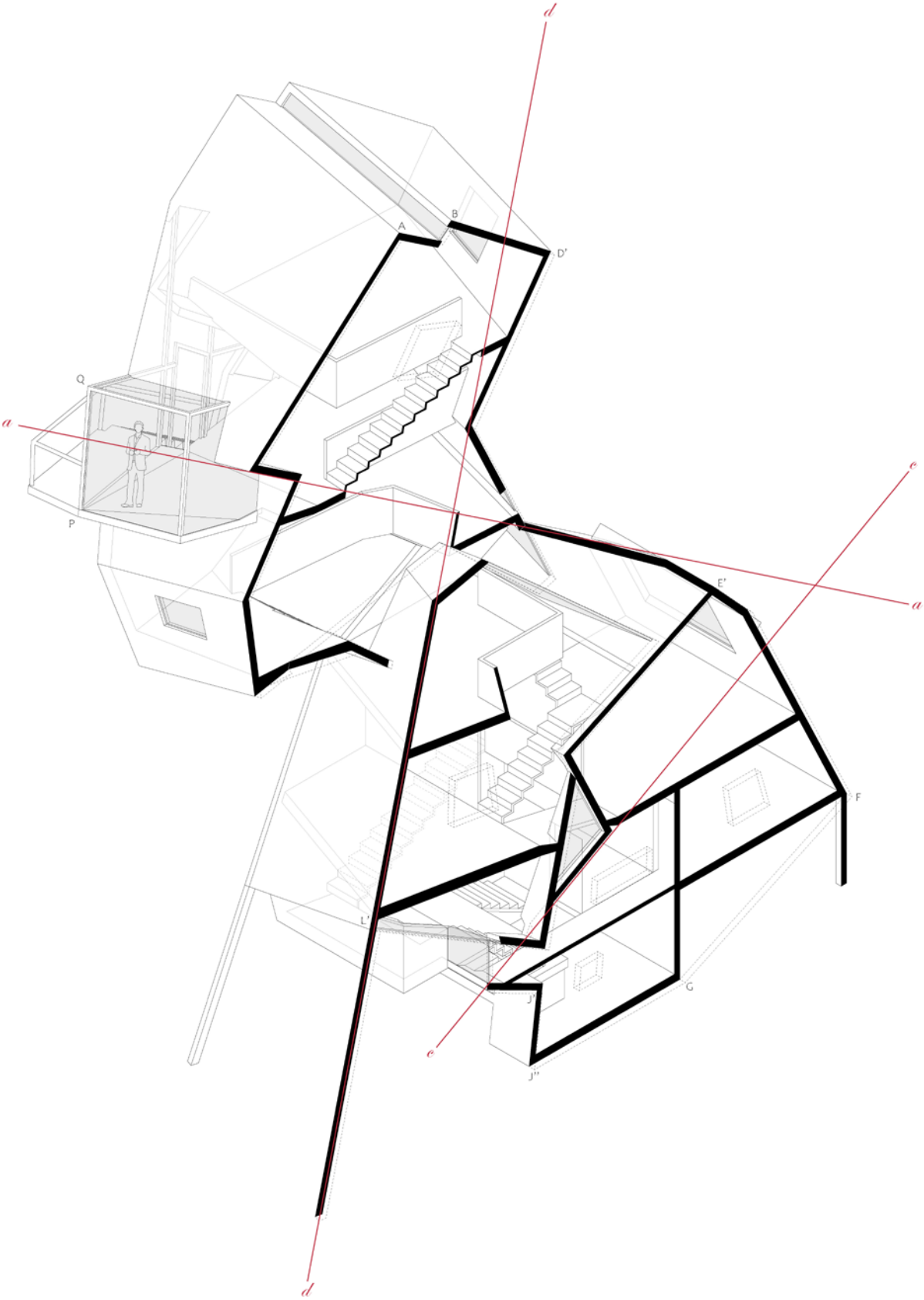
Compose



Variations II, John Cage, 1966

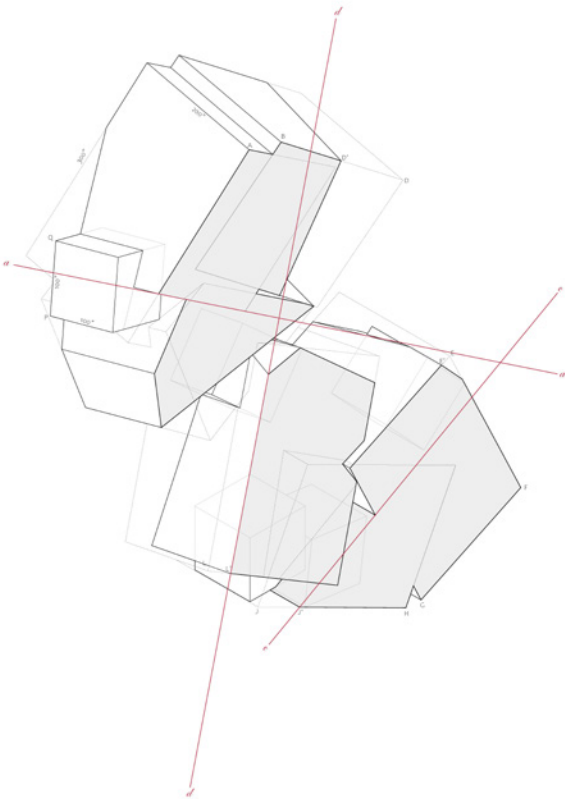
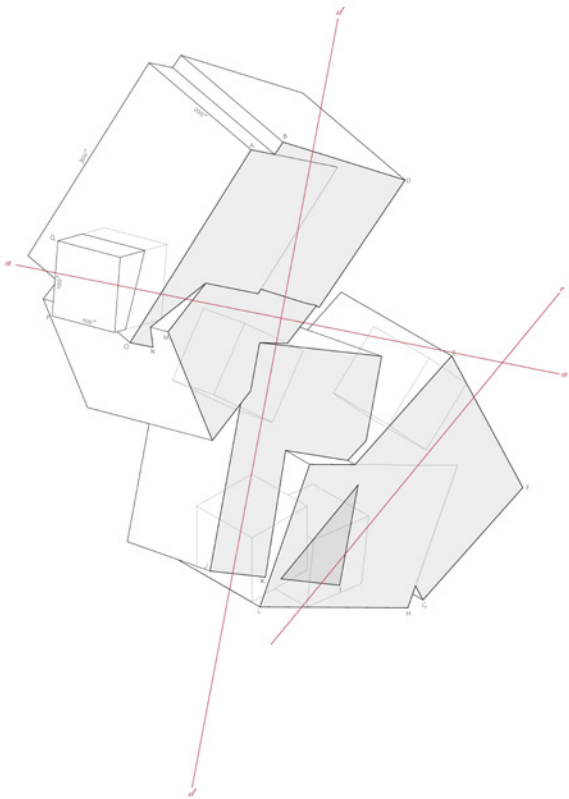


Boundary



Solid & Transparency

Extrusion & Fold



Trim



Physical Model, 16" x 9" x 21" , 1:40



Physical Model Elevation



Physical Model Detail 1

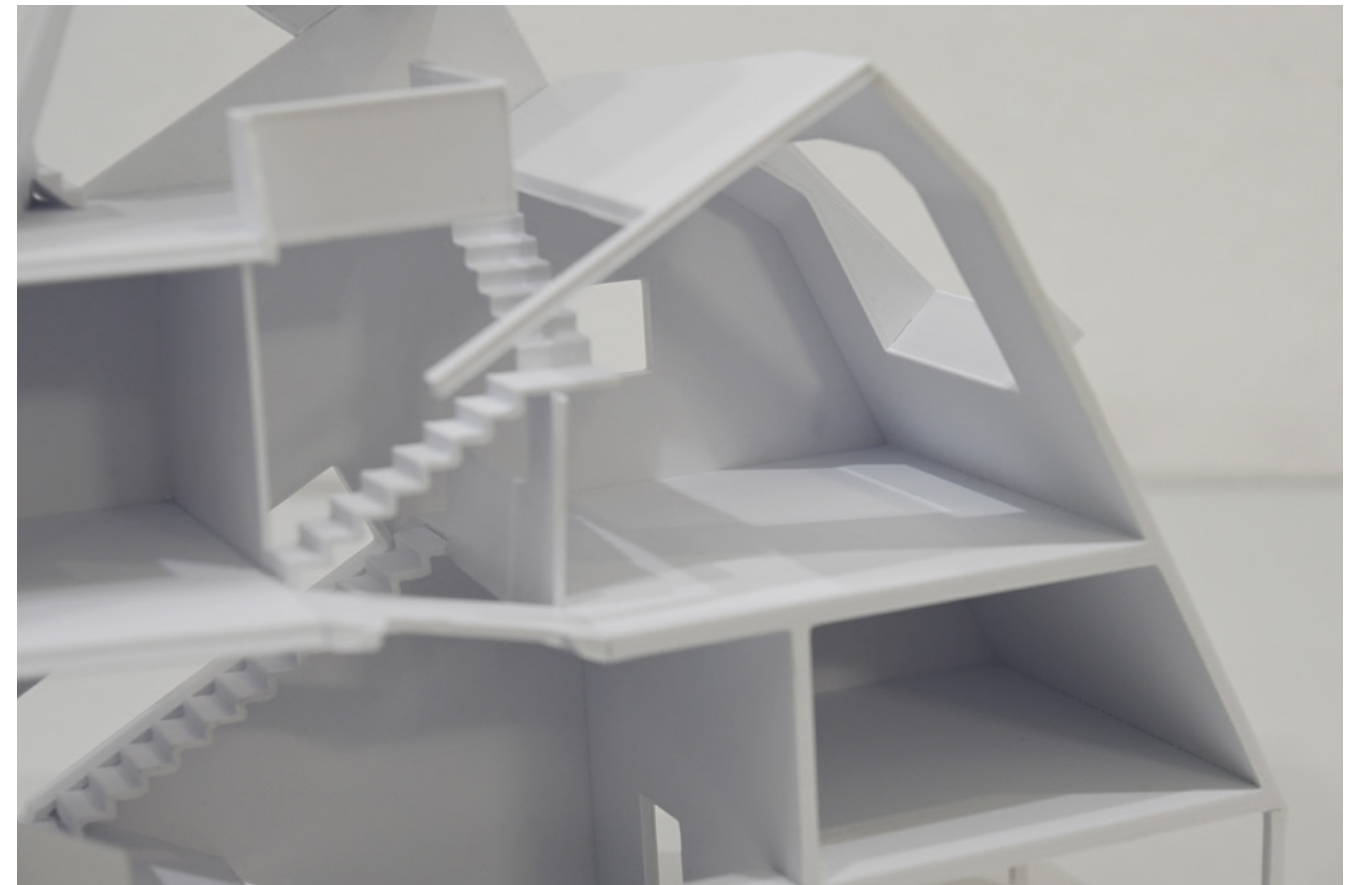


"There is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot."

— John Cage

"In the nature of the use of chance operations is the belief that all answers answer all questions."

— John Cage



Physical Model Detail 2



# THE TRICKLE

TRANSMUTING THE WOUND: CULTURAL INFRASTRUCTURE FOR  
DIVINITY, NATURE, & COLLECTIVE EXPERIENCE IN NYC  
(PART I)

**Location:** The Ramble, Central Park, New York

**Instructor:** Larissa Belcic & Michelle Farang Shofet

**Partner:** HaoYu Wu

**Key Words:** Spatial Sacredness, Installation

In the 19th, New York City's rapid growth led to a densely populated urban setting as immigrants and workers were drawn to new industrial opportunities. To create a recreational haven amidst this bustling city, **Central Park** was conceived in 1855, eventually becoming a cherished urban sanctuary.

At its core, **The Ramble** offers a **hidden oasis**, transporting visitors to a natural landscape within the city's heart. This 36-acre woodland, with its rugged rock outcrops, hills, and winding streams, embodies the spirit of 'Forever Wild.' Though entirely artificial, its dense forest serves as a lush veil, concealing the surrounding urban sprawl and offering an immersive experience that allows visitors to **escape the city and connect with nature**.

Inspired by The Ramble's unique spatial qualities, **"The Trickle"** explores the **interplay of elements like rocks, trees, and the passage of time**. By transforming and reimagining these features, "The Trickle" invites visitors to **experience the serenity of nature** in a new way, fostering a sense of **slowness and tranquility**. It creates a peaceful retreat from the city's hectic pace, where visitors can immerse themselves in the quiet sanctuary of nature.









The Trickle

Material: Green Chiffon, Stone, LED Neon Strip Light, Fishing Wire, Steel Hook, Musk Fragrance



Grab one stone - Follow the stream of light - Feel free to rearrange the stones - Place your chosen stone on the end



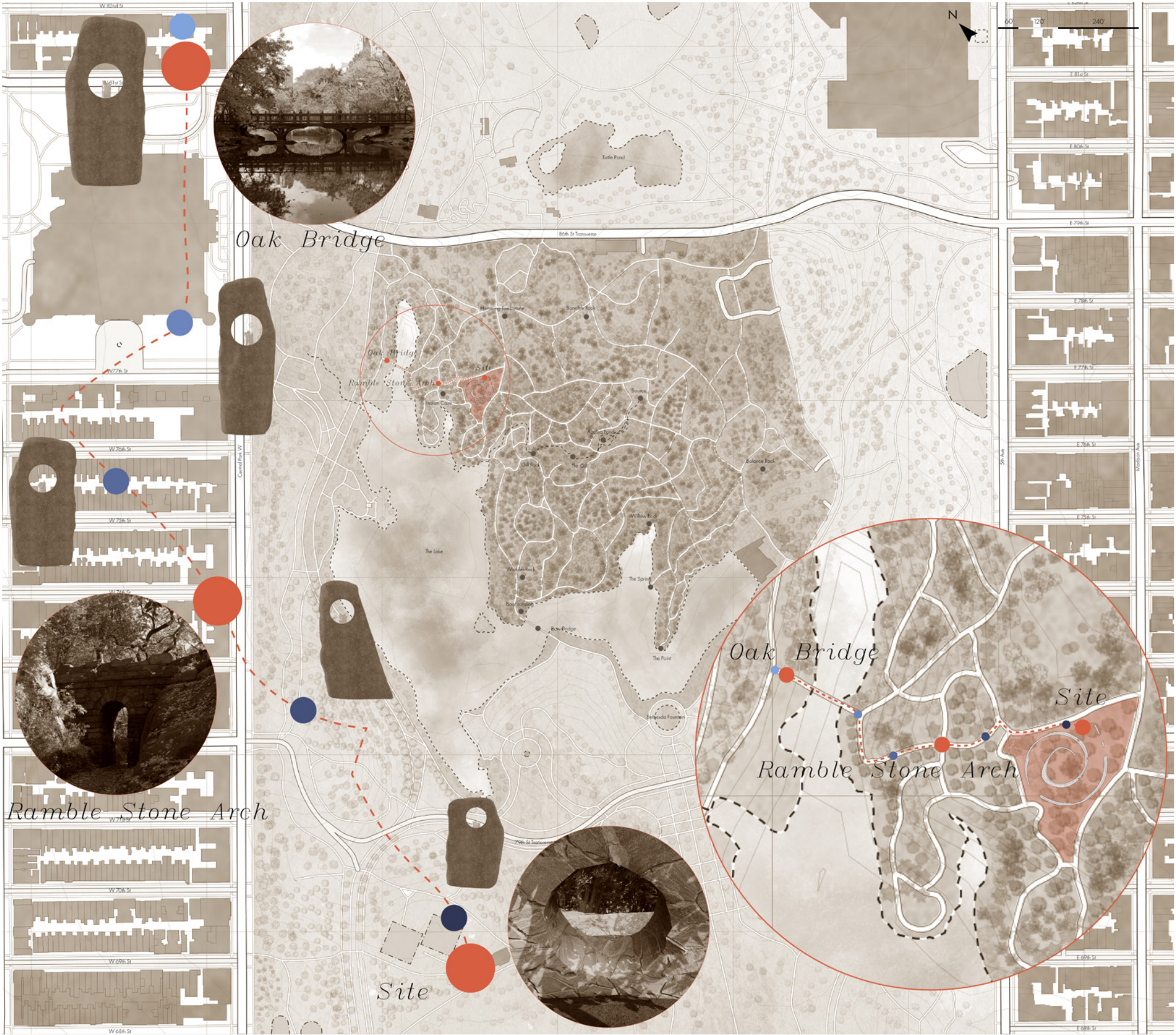
**NOCTURNAL EMBRACE**  
TRANSMUTING THE WOUND: CULTURAL INFRASTRUCTURE FOR  
DIVINITY, NATURE, & COLLECTIVE EXPERIENCE IN NYC  
(PART II)

**Location:** The Ramble, Central Park, New York  
**Instructor:** Larissa Belcic & Michelle Farang Shofet  
**Key Words:** Emotional Inhabitance, Darkness

Building on the research from Part I, Part II delves into the **contrasting qualities of The Ramble by day and night**. During the day, The Ramble welcomes visitors with its intricate paths and lush greenery, offering **a serene and peaceful escape from the city's bustle**. However, at night, it transforms dramatically into a place of **fear and uncertainty**, where darkness shrouds the landscape, amplifying the unknown and evoking a sense of anxiety.

Despite these fears, they are often irrational, driven more by imagination than reality. **Night in nature is not as difficult as we might think**. To address this discomfort, I propose a night ritual in a pavilion called the Nocturnal Embrace.

Located on an elevated Manhattan schist near The Ramble's entrance, this pavilion is accessible via a path marked by five stone markers, symbolizing the phases of **sunrise to sunset**. The pavilion's design encourages a **gradual transition from light to darkness**, guiding visitors to embrace the night as a **space for contemplation and reflection**. During the day, the pavilion serves as a shelter and resting space. At night, it becomes an enclosed space of the unknown, embracing you with the freedom and protection to grow and reflect.



Master Plan



Axon

Plan



Day Time Render



Night Time Render





Section



Everett