2026

SELECTED **WORKS**

ARCHITECTURE PORTFOLIO



Ryan **Sitterly**

about me

Hi, I'm Ryan Sitterly, an architecture student at RPI based in Troy, NY. I have a background in art and graphic design so when I started my architecture journey I began with hand drawing and building physical models. This gradually moved into digital and 3D modeling, and now I'm expanding into parametric and research-based design through CASE.

I enjoy all forms of design, from physical model making to computational tools, and I like approaching problems from multiple angles. I'm naturally curious and always studying new buildings and methods, always trying to learn and grow as a designer.

Contact me

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Education

Rensselaer Polytechnic Institute (RPI) — Bachelor of Architecture
Expected Graduation: 2028

CASE New York — Center for Architecture Science and Ecology (RPI-affiliated)
Interdisciplinary research center integrating architecture, engineering, and building science with a focus on sustainability, material experimentation, and computational design
Spring 2025

Hudson Valley Community College (HVCC) — Associate in Applied Science, Architectural Science
2022-2024

Honors & Awards

RPI School of Architecture Honors Review Recipient
Fall 2024 · Fall 2025
Selected for top studio projects of the semester; work archived and exhibited by the School of Architecture

Research Experience

CASE Research Studio — Building Science & Environmental Systems | New York, NY
· Collaborated with interdisciplinary teams of architects, engineers, and researchers
· Explored sustainable and performance-driven design strategies through analysis and testing
· Built parametric workflows in Rhino/Grasshopper to study daylight, energy use, and material efficiency
· Produced diagrams, models, and research-informed design proposals

Work Experience

Rivers Casino — Bar Porter (Bar Back) | Schenectady, NY
Nov 2023 – Jan 2026
· Worked in a high-volume bar environment supporting bartenders and service staff
· Handled restocking, setup, and day-to-day organization of bar operations
· Worked efficiently under pressure and as part of a team

Grasdorf Enterprises — Landscaping Crew Member
2021 – 2023
· Performed hands-on outdoor work including planting, grading, and site preparation
· Assisted with small-scale construction and material installation
· Gained practical experience working directly with tools, materials, and site conditions

Skills

Design + Methods
Sustainable design · Environmental analysis · Parametric modeling · Computational workflows · Research visualization · AI visualization · Prototyping

Software
Rhino · Grasshopper · Revit · Adobe Creative Suite (Illustrator, InDesign, Photoshop) · Rendering tools (V-Ray, Twinmotion) ·

Fabrication
3D Printing · Laser Cutting · CNC · Model making · Material testing

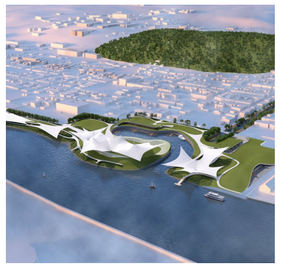
contents

01

Archipelago

p.04

This projects radiaclled transforms a no mans land into a dynamic landscape equiped with marina, mobility hub, recycling cemter and ampitheatre

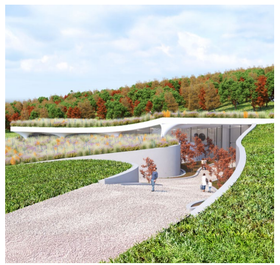


02

The Maggazino

p.24

This projects is an art gallery built into the landscape to not distrupt the existing circulation around the site.



03

Framework

p.36

This project explores the relationship of structure and space using mass timber. The program inclused 50 units of housing with floor level retail.



04

Hotel Lotus

p.50

This is a hotel located in China. This project dove into working complex organic shapes into a buildable and occupiable experience. W



05

The Art of Guitar

p.60

The project program was exibition space with a theatre. The form was developed through the exploration of abstacting the shape of a guitar.



01

Archipelago

Troy, NY | Fall 2025

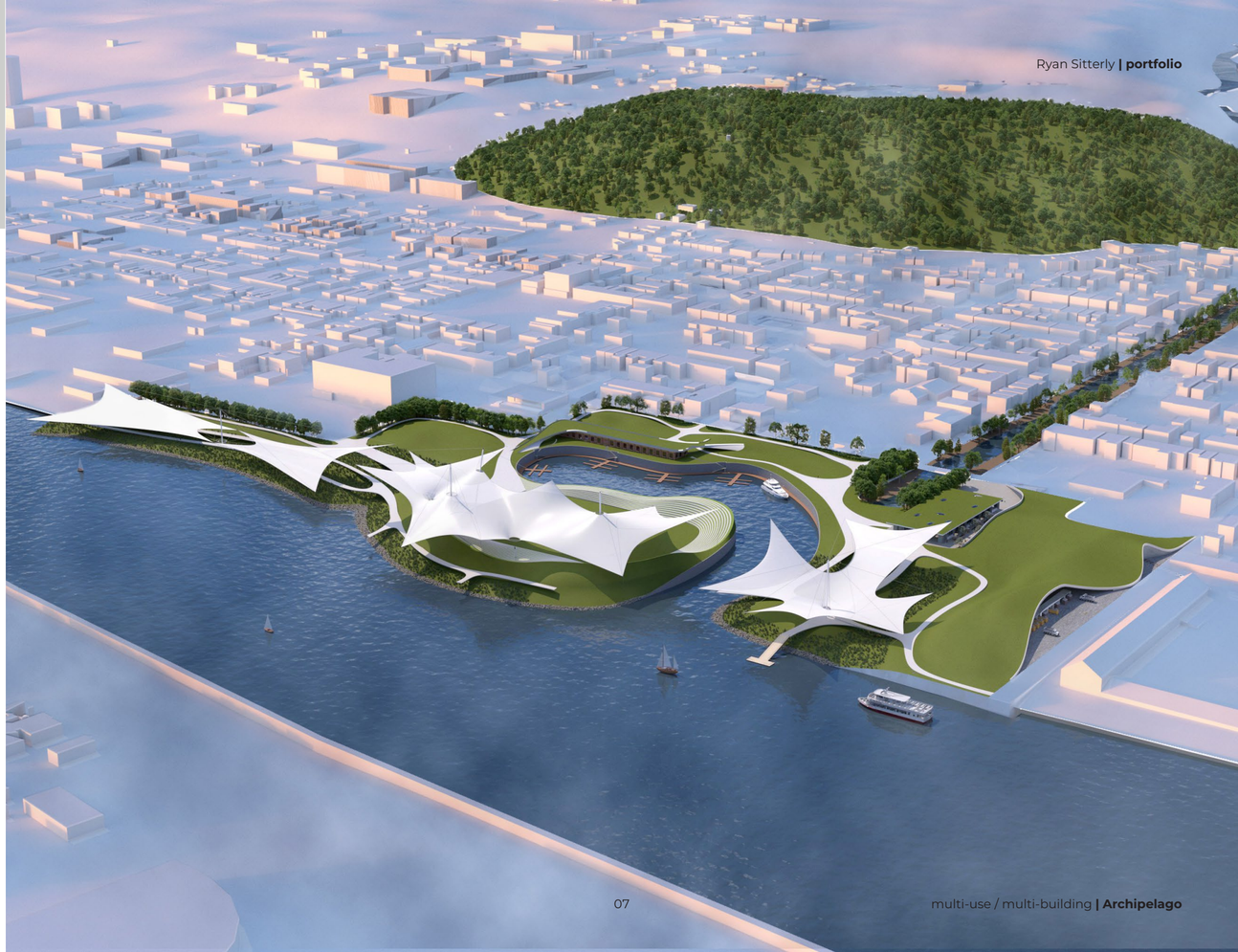
project type
multi-use / multi-building

software used
rhino
grasshopper
illustrator
photoshop
v-Ray
indesign

Buildings - like the ground they are grafted onto and materials that pass through them - are malleable formations of matter that are concentrated and reconfigured, over and over, from one place to another, through processes that are often invisible to us. As such, this studio's inquiry will challenge the traditional view of buildings as permanent structures, singular objects, with fixed use types. It will take up the notion of architecture as a "moving project", conceptually and literally. This effort will combine speculative thinking with pragmatic, material-based work, orienting its study towards a creative exploration of the multivalent ways that architecture changes over time.

The studio's design project is a new urban center in Troy, N.Y. that includes a public waste recovery/reuse center and intermodal transit hub. It is a multi-use, multi-building complex that will be located at the intersection of the Hudson River and the Poestenkill Creek. This area is a gritty, leftover post-industrial landscape where urban systems (ecology + mobility) converge and the entanglement of planetary-scale realms (biosphere + technosphere) appear in curious, almost invisible ways. Much of this place could be characterized as full of a certain kind of emptiness, one in which architecture is conspicuously absent. It's most visible physical feature is a massive salt pile used to de-ice roads in the Capitol Region. The city recently announced that this pile will be removed by 2029, with these three main concepts in mind, **CIRCULARITY, ADAPTABLITY**, and **EPHEMERALITY** the question is :

What should come next...and what might come after that?



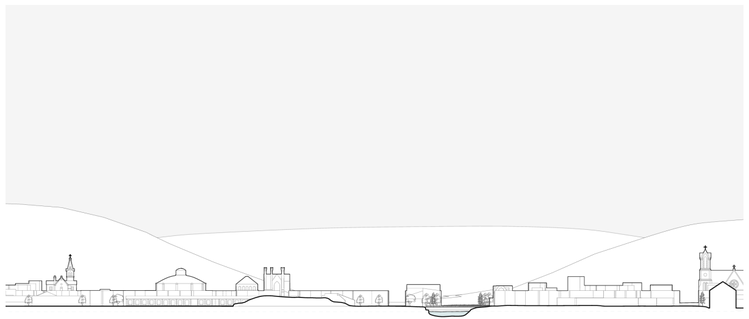
current site





The site as it currently is acts as a disconection between the urban fabric and the waterfront as well as an eye sore.

site elevation



site context



Current perspective view of site

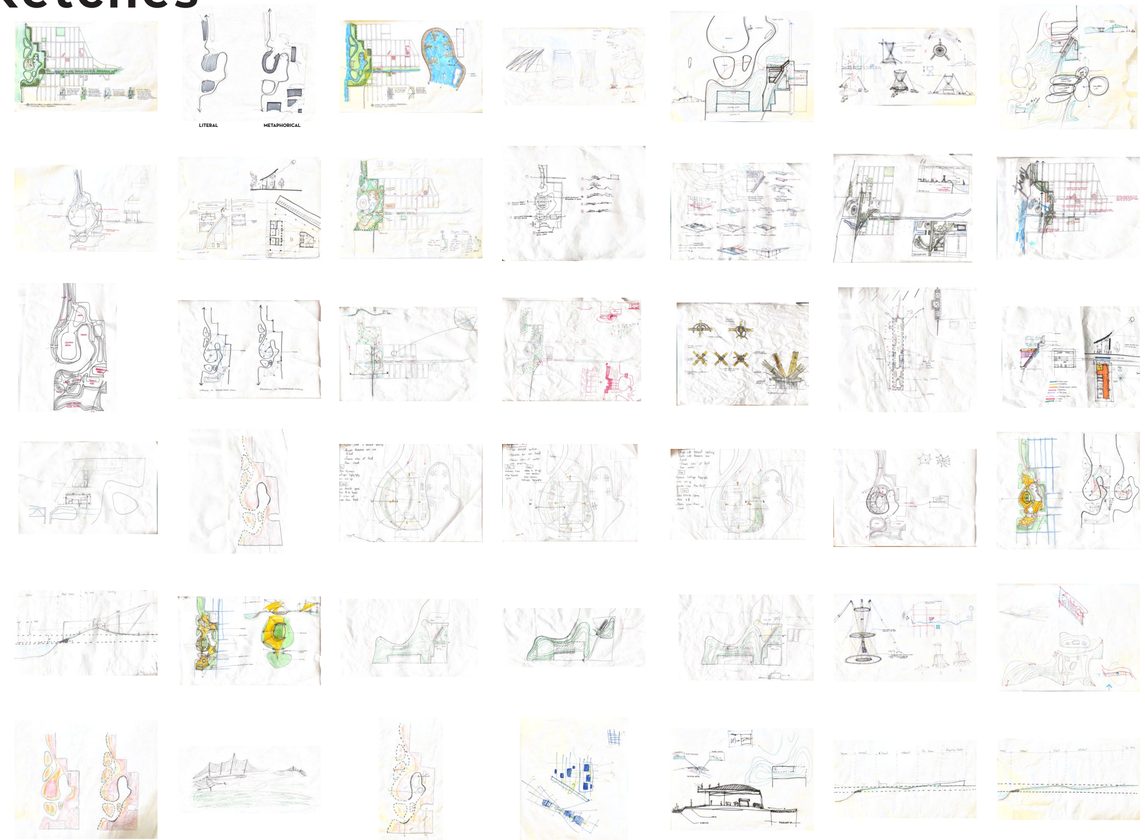


Diagram showing where the old water line used to be

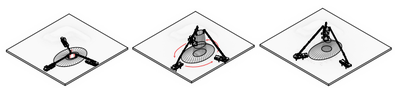


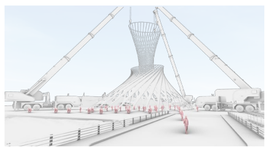
In the late 1800 chunks of Mt.Ida were added to the site to move watefront

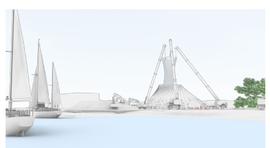
sketches

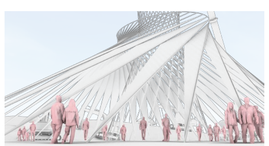


salt installation



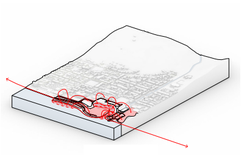






At the start of the semester, we were tasked with designing a temporary installation adjacent to the existing salt pile, remaining in use until its removal in 2029. We proposed a liftable structure using the site's existing cranes, functioning as a tarp when lowered and as a monument and multi-use space when raised. Named the "Salt Beacon," the structure could support lighting visible from miles away, establishing a new landmark for Troy and later evolving into a site-wide tensile system.

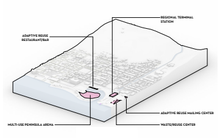
process diagrams



Reverse Land Reclamation:
Land is removed to draw the waterfront inland, and creating a water-responsive landscape.The soil is reused on site.



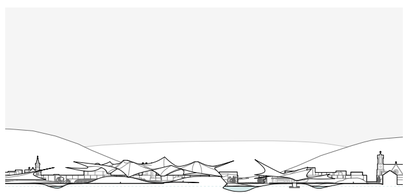
Interconnected Paths:
A continuous path network is created across the site



Building Typologies:
Structures are integrated seamlessly within the landcape

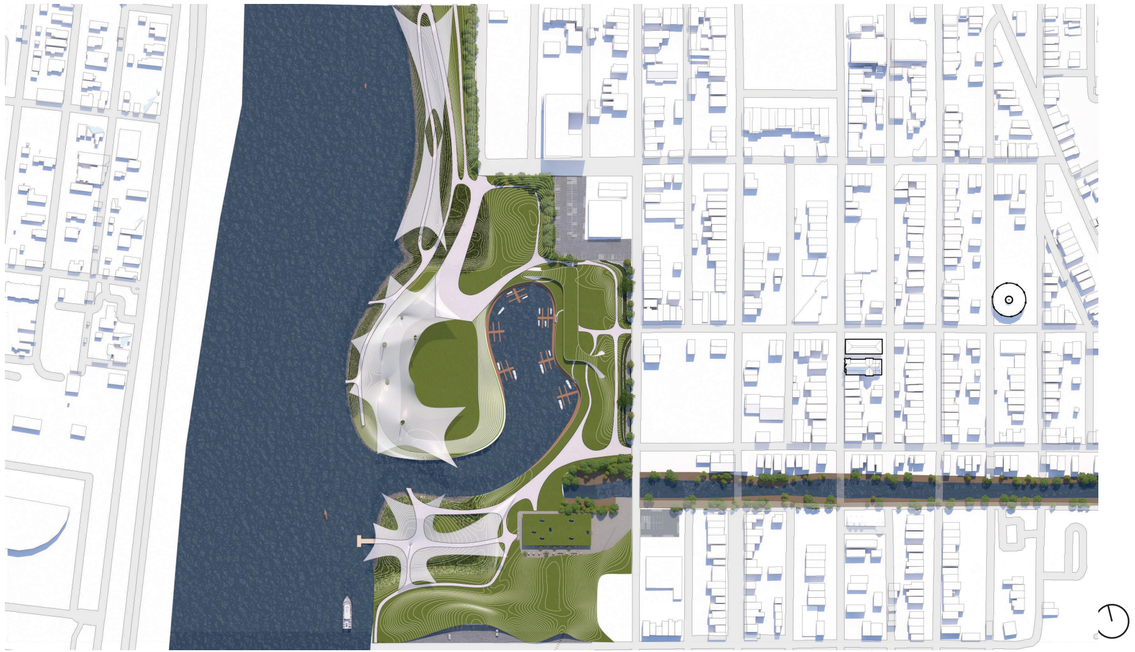


Tensile System:
A tensile system is added to the waterfront framing views and defining space.



Proposed Site Elevation:
The proposed site elevation presents a more dynamic waterfront without obstructing existing sightlines.

site plan





Daily Average (+0)

Daily average (normal) river height. No changes to site edges



+8' Water Level

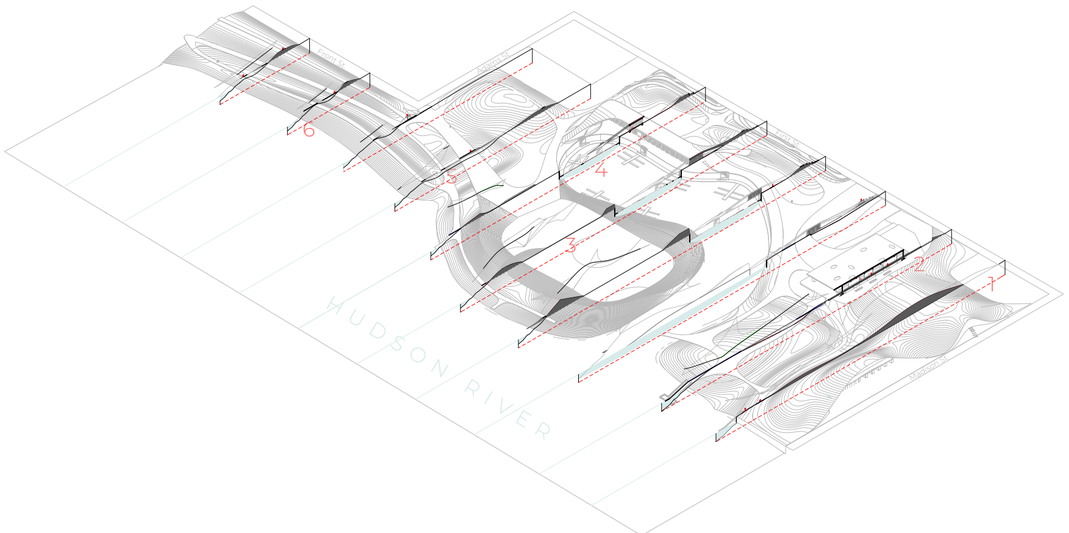
When site floods the waters edge moves in and islands start to form near the waterfront



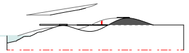
+20' Water Level

With a 20-foot rise in water level, the islands contract further as the water's edge advances inland. Buildings, the amphitheater, and primary roads remain unaffected.

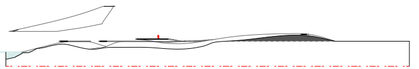
site section catalog



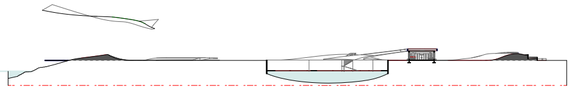
6 Front St. River Walk



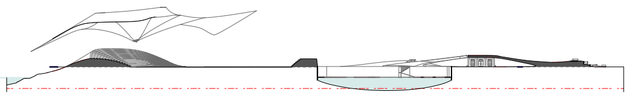
5 Riverwalk / Wetlands



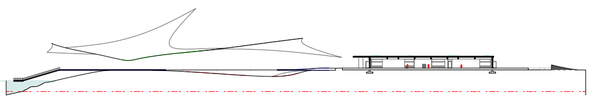
4 Ampitheatre / Marina / Restaurant



3 Full Ampitheatre / Marina / Restaurant Roof



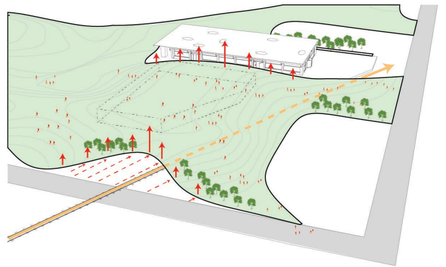
2 Ferry Launch / Wetlands / Train Station



1 First St. / Madison St.

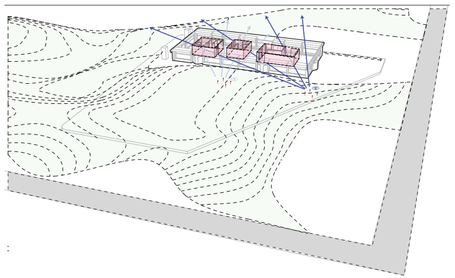






Building Typology I: Rail Station and Mobility Hub

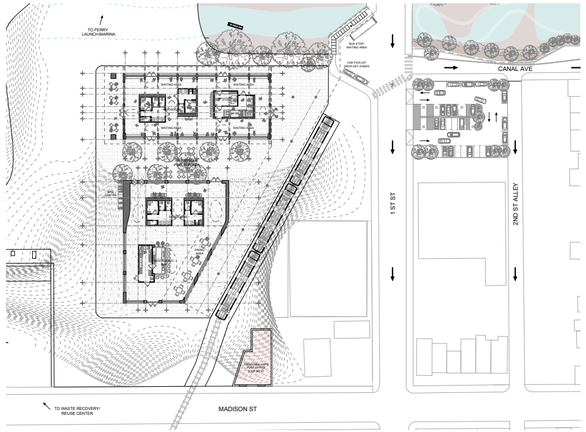
The topography is lifted to alllow the trian to enter underneath. This serves two main purposes. One, as visitors arrive to the site by train, the full landscape is intentionally concealed until visitors deboard, creating anticipation and curiosity.Two, lifting the land over the tracks and station creates additional park space while providing elevated views of the landscape

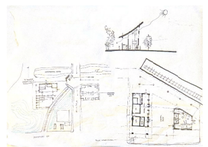


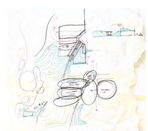
Building Concept

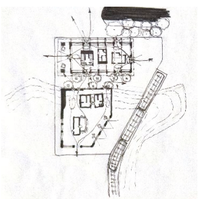
Instead of thinking of the train station waiting room of a building we thought of it as an **archipelago.** Postioning the interior walls in a way where they do not tough allows penetrating views through the building. As visitors move off the train towards the landscaope they can see slivers of the park in the distance

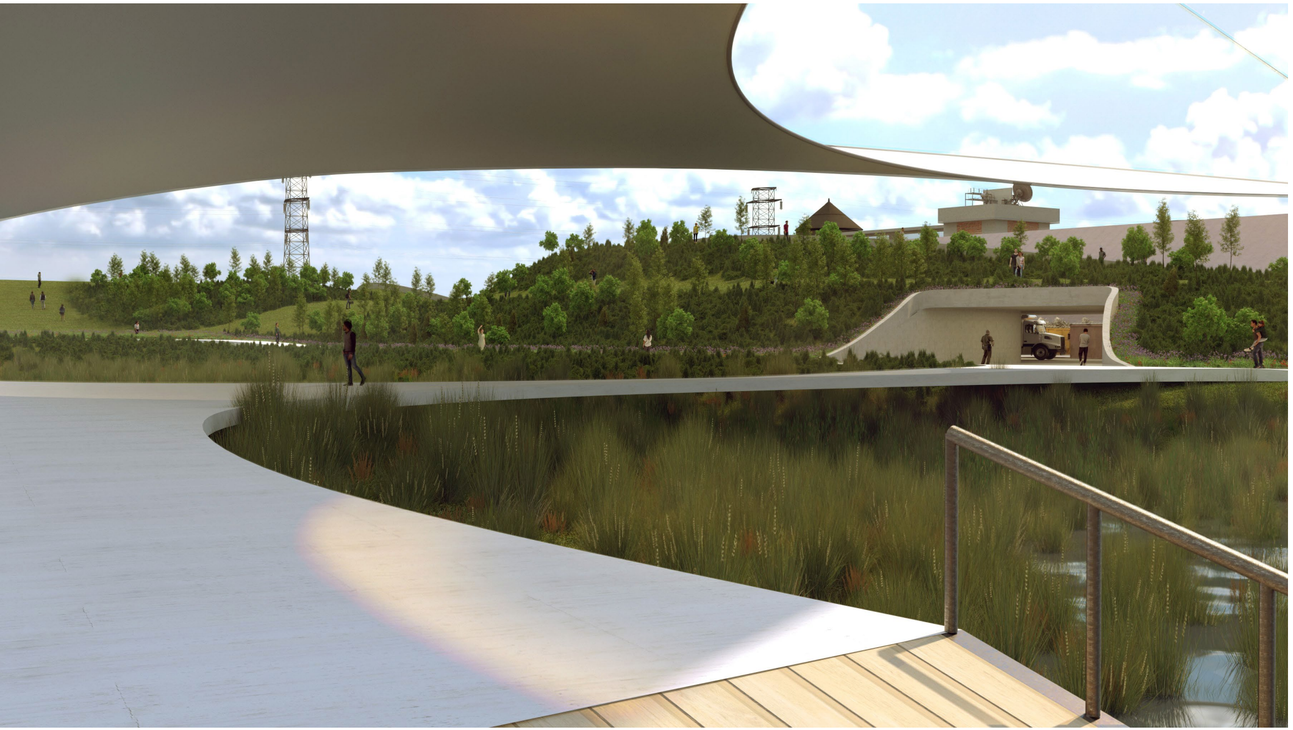
plan

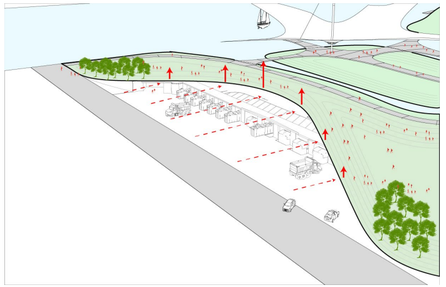








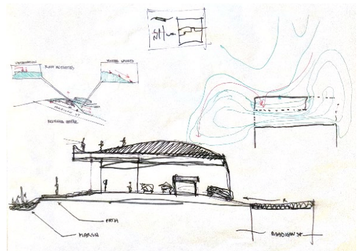


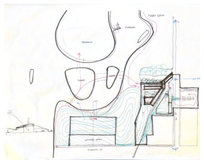


Building Typology II: Recycling Center

The topography is lifted to alllow the trian to enter underneath. This serves two main purposes. One, as visitors arrive to the site by train, the full landscape is intentionally concealed until visitors deboard, creating anticipation and curiosity.Two, lifting the land over the tracks and station creates additional park space while providing elevated views of the landscape



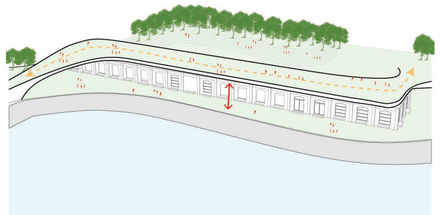




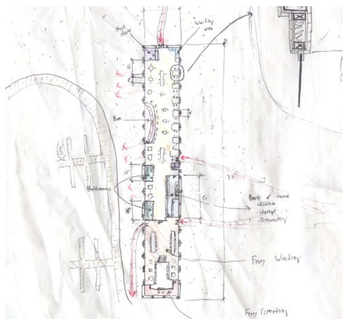


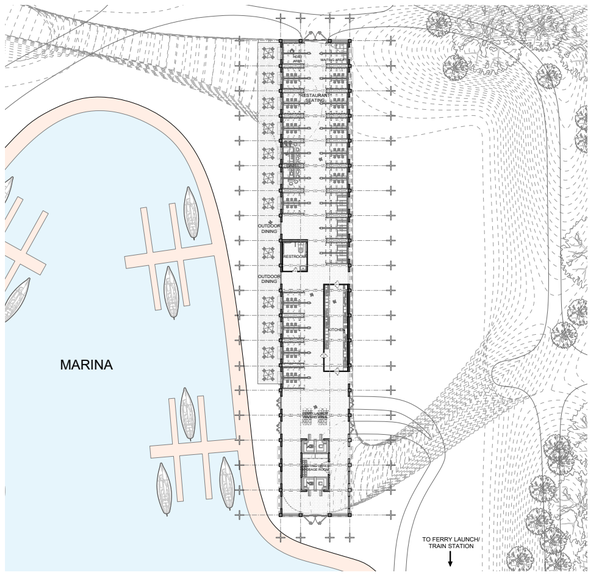


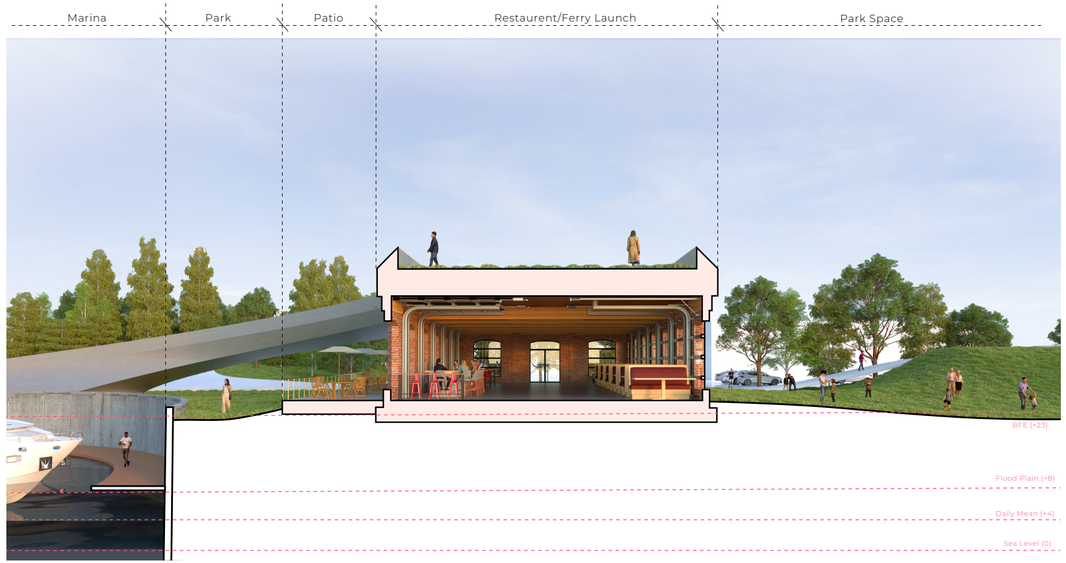
plan



Building Typology II: Adaptive Reuse Restaurant / Bar
We revitalized the existing train depot at the center of the site by reopening its boarded windows as sliding glass garage doors. The pitched roof was removed and replaced with glulam beams to support a new green roof. Positioned between the park to the east and the marina to the west, the building now acts as a spatial buffer, reinforcing the **archipelago** concept.





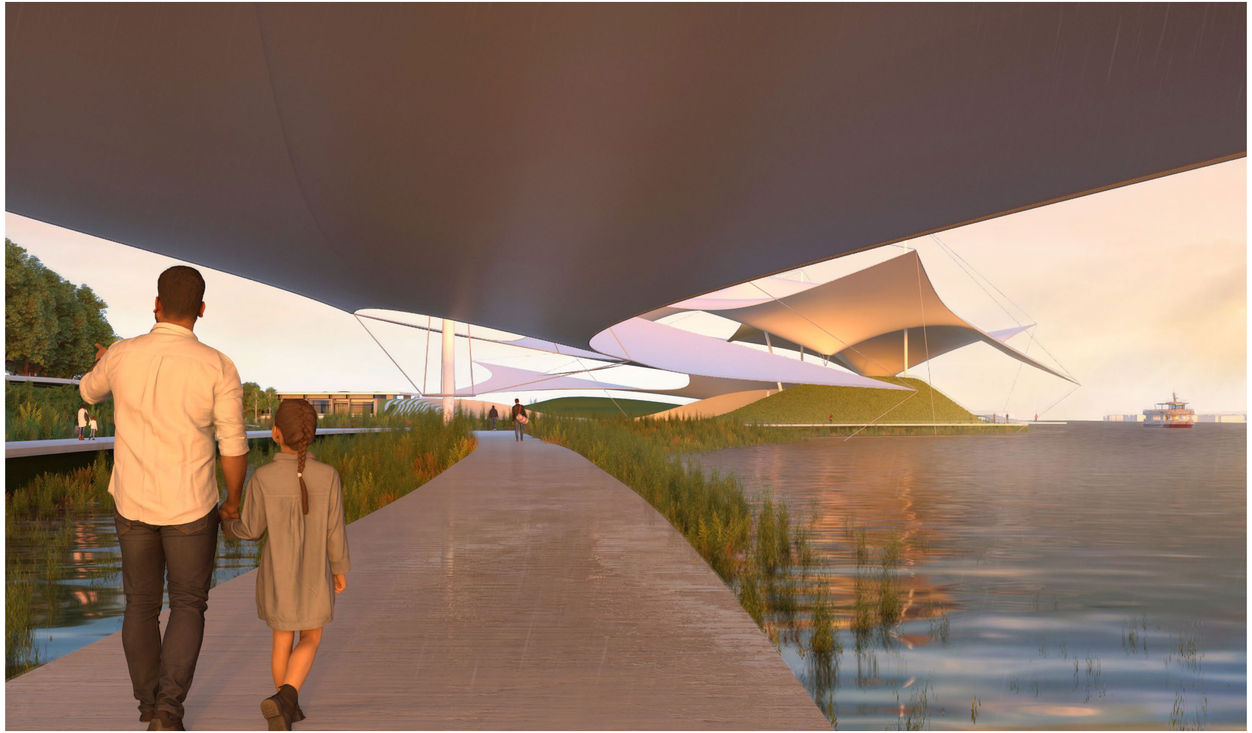


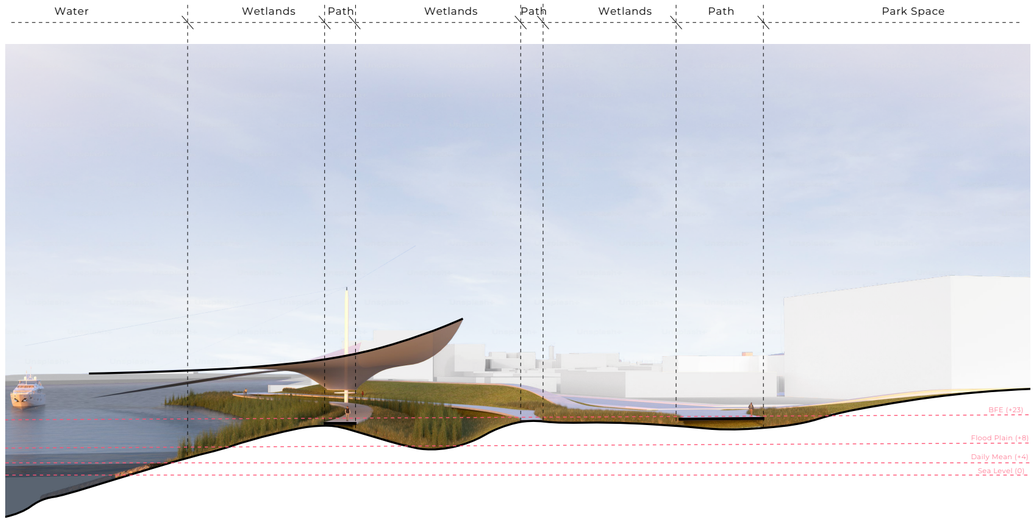


This section highlights the key spatial relationship between the park space to the right and the marina to the left, with the restaurant positioned between them as a mediating buffer. During warmer months, the restaurant's glass doors can fully open, allowing visual and physical continuity between the two zones while still maintaining their distinct identities. This condition reinforces an **archipelago** logic of spatial organization, where distinct spaces remain independent yet connected through deliberate transitions.







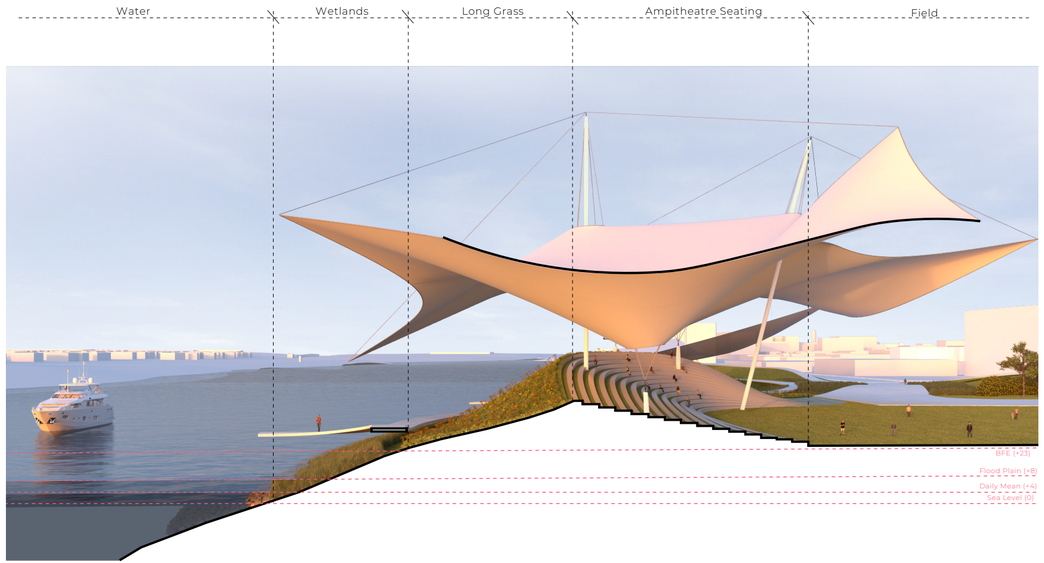




The wetland portion of the project along the river's edge is intentionally designed to flood. As water levels rise, the landscape transforms into a series of islands along the waterfront. This dynamic condition enhances the visitor experience, improves site drainage, and supports the creation of a new ecological habitat. The formation of these islands directly embodies the **archipelago** concept across the site.

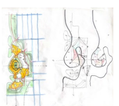








The amphitheater is positioned on a peninsula extending into the water. The field is sized to accommodate a wide range of sporting events, while the seating is designed to appear as if it is lifted from the ground. This seating also serves as a buffer between the wetlands and the field, reinforcing the **archipelago** logic. Tensile cables double as integrated lighting, allowing the space to host large-scale concerts and establishing the amphitheater as both a landmark for Troy and a destination for the greater upstate New York region.





02

The Magazzino

Cold Springs, NY | Fall 2024

project type
art gallery

software used
rhino
illustrator
photoshop
v-Ray
indesign

Adress site, topography, vegetation

My whole design process revolved around integrated my structure within the surrounding landscape. I embedded my buildng directly between the exit of the Magazzino and the donkey pen, which is a main attraction of the site. By making the roof walkable, it allows my buildng to restore the aestietic quality of the landscape and also keeping the site circulation the same as it was before. I used the already existing vegetation as a way to connect my building to the surroundings and also as a way to direct circulation.

How people experience the art

The underground position of the gallery relects the use of raw and natural materials often found in Arte Povera works. By designing a clearstory spanning the lenght of the gallery, plenty of natural light is allowed in but not directly on the artwork. The clearstory also allows the viewers to see the vegetation, further emphasizing the idea of art and nature. I kept both ends of my building as glazing, added 4 foot walls in my gallery space and left the top half of the community room as glazing so at any angle in the building you can see all the way throught to the grass on either side, connecting you with nature at all times. to futher emphasize the natural feel I made my interior columns organically curved to make you feel like like building is growing from the ground.

Ideas about program

I tried to keep the program space of the building felxible. I wanted to keep the gallery space open and dynamic to allow for many differnet peices of art. I added my community space strategically facing to the woods so thar anybody not wanting to experience the art has a place to relax and feel connected with nature while stille being inside. The walkable roof was aso a main idea of the program since it keeps the landscape functional for any activities that might be done outiside. By keeping the indoor gallery space open and roof occupiable it creates a multi functional building catering to art enthusieats or nature lovers.

How it fits into larger context and how it changes it

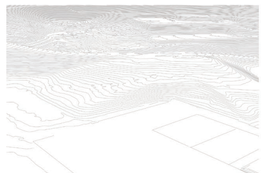
The design compliments the existing gallery spaces by maintaining the large open spaces to view the art, but offering a more artistic and natural approach to the structure itself.It does not compete or overhsadow the existing buildings bur rather it enhances the overall complex by maintaining its natural beauty while also adding new programmable space. It changes the site from being about art, to being about the connection of art and nature, specifically Arte Povre and nature.

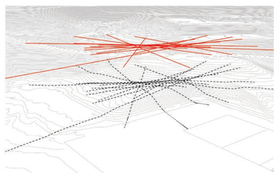


project location



Located in Cold Spring, NY, a historic, picturesque village in the Hudson Valley, known as a popular day/weekend getaway from NYC for its scenic beauty, unique shops, restaurants, and outdoor activities.The town is made of mostly of dense forrest and steep hills.

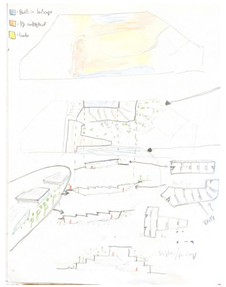


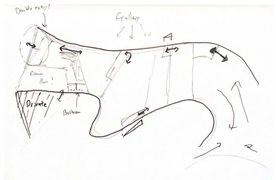


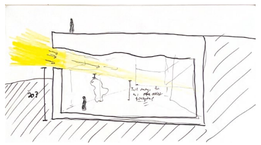
These diagrams show early expllration into tracing walking paths throughout the site simulating circulation possiblitites. This logic carries over into the final design.,

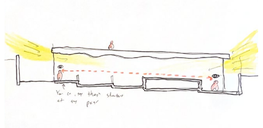
sketches





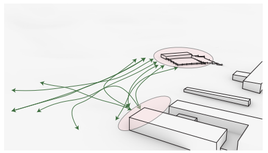




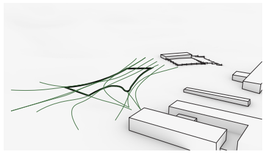


These sketches show early exportation of program layout in relationshio to the site, exploration of circulation and layout in plan, and early itterations on how light enters the gallery space.

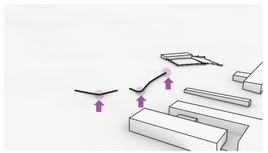
concept



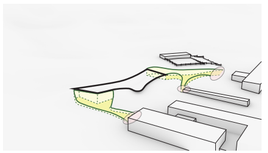
Circulation Paths:
The design started by drawing paths between the exit of the magazzino and the donkey pen since thats where people will circulate after leaving the magazzino



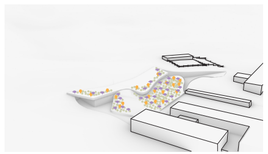
Shape Outline:
Based on the paths drawn a shape started to emerge folllowing the ;ath network and contours of the land



Extrude:
The three attractor points of the geomtry on the downslope are pulled up allowing sunlight to come into the building and leveling the roof plane

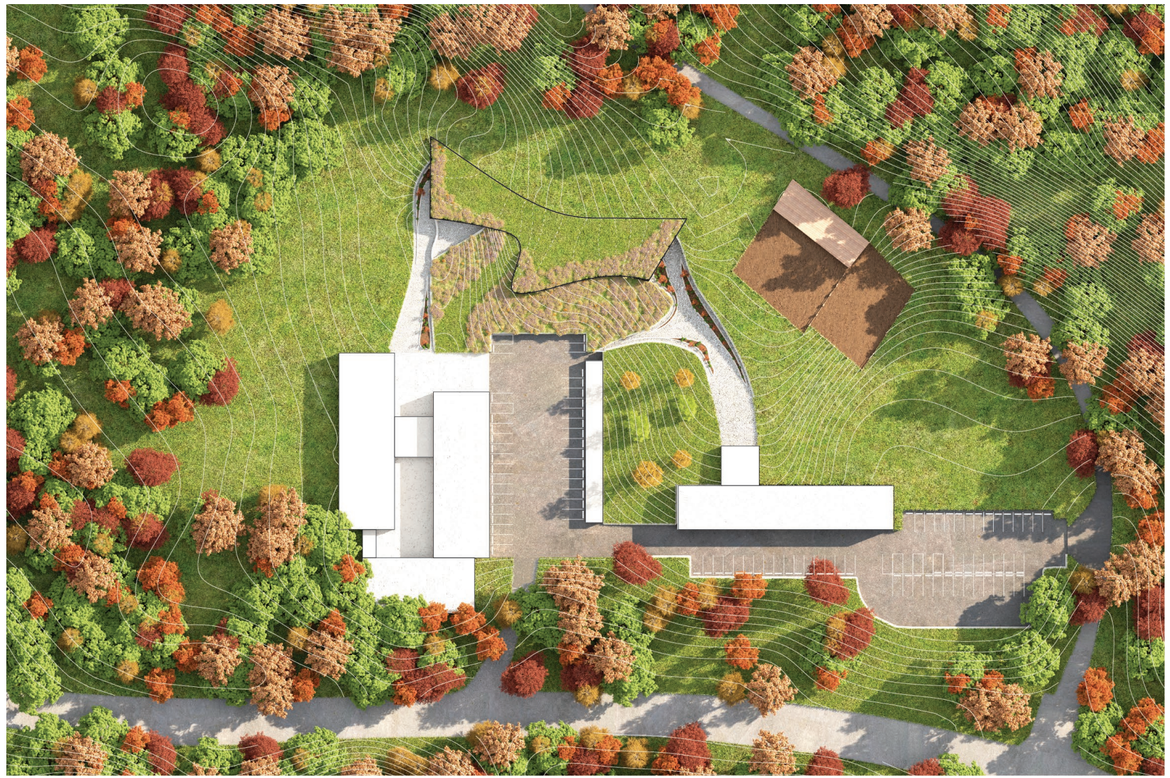


ADA Paths:
1/12 ADA paths are then carved into the landscape from the two entries of the building to the three main acess points of the site

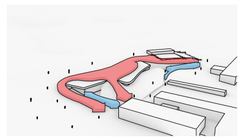


Vegetation:
With the form set, local vegetation is reintroduced as a spatial and safety device, guiding movement and preventing access to hazardous roof edges.

site plan



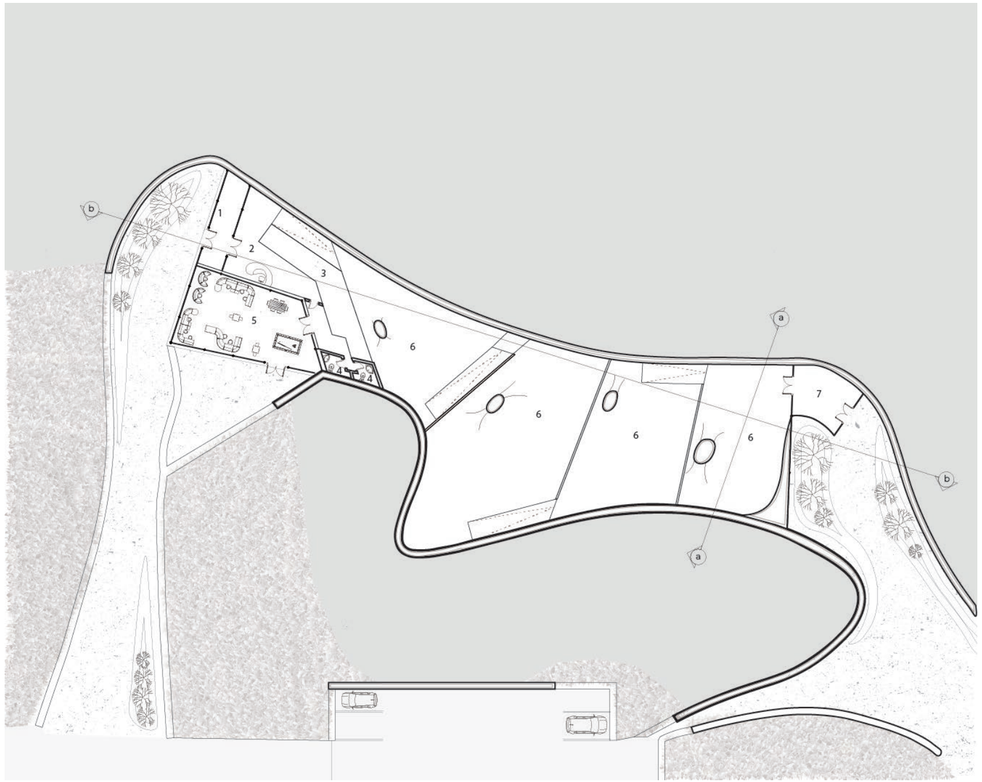


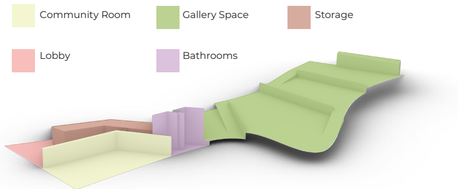


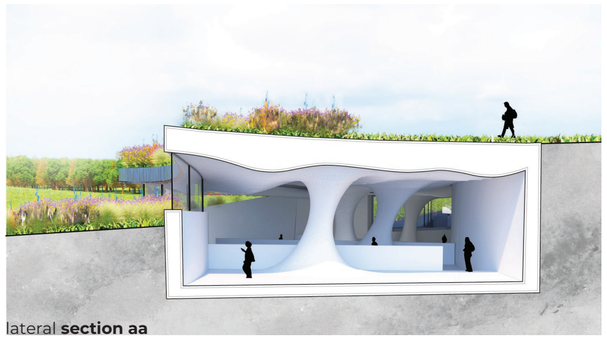
The whole design of this building revolved around stealth and adapting to the current circluation of the site. By summerging the building the into the ground the musuem guests are alowed to walk freely around the site same as before.

The building being underground also creates another advantage. Museums require less, if not any, direct sunlight, so by having the only light source in the gallery space located at the ceiling the artwork inside is not effected by the sun

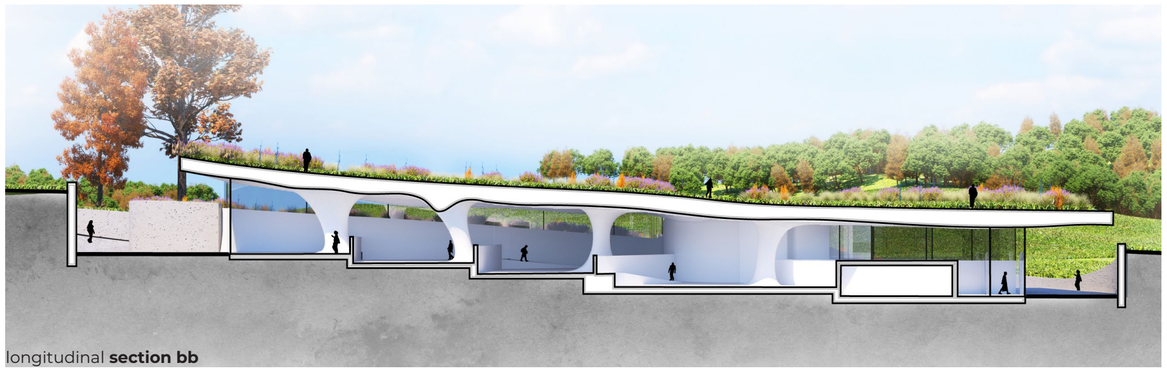
plans





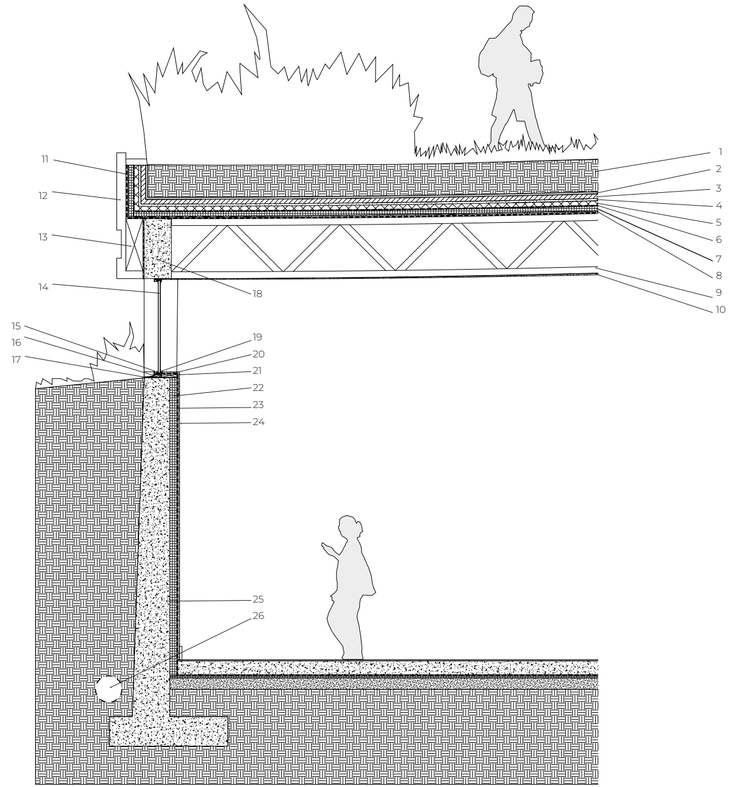


lateral **section aa**



longitudinal **section bb**

1 soil
2 filter layer
3 drainage layer
4 waterproof layer
5 thermal insulation layer
6 vapor screen
7 2" rigid insulation
8 1/2" plywood
9 2' truss
10 1/2" gypsom
11 waterproof layer
12 metal cladding
13 substructure
14 insulated glass
15 trim
16 flashing
17 capilary break
18 reinforced concrete beam
19 shim
20 bevelled plate
21 backdam
22 2" rigid insulation
23 waterproof layer
24 3/4" gypsom finish
25 12" reinforced concrete
26 4" drainage layer









03

Framework

Troy, NY | Fall 2024

project type
mixed use / residential

software used
rhino
grasshopper
illustrator
photoshop
v-Ray
indesign

This project is a celebration of form, structure, and inclusivity. Designed entirely from mass timber, it explores the expressive possibilities of ruled surfaces—a geometrical strategy where straight lines generate curved, flowing forms. These surfaces guide both the visual and structural logic of the building, creating a rhythm of sweeping timber beams that are not only load-bearing but also shape the spatial experience within. Structure is not hidden here—it is celebrated,revealed, and integrated directly into the interior design.

The building's language blurs the boundary between architecture and furniture. Columns become bookshelves, beams become benches, and the curves of the roof inspire the shapes of the walls and rooms inside. Everything flows. This is a space where structure becomes function,and function becomes art.

But it is more than a sculptural form—it is a social statement. This building is meant for everyone. From the working individual to the upper-class professional, the design offers a wide range of room sizes and layouts to accommodate different needs, lifestyles, and incomes. The design refuses the idea that good architecture is a luxury. Instead, it proposes a new standard—one where beauty, warmth, and material honesty are accessible to all.

Mass timber was chosen not just for its environmental benefits, but for its warmth and tactile nature. It brings a sense of calm and connection, making the space feel grounded and human. The ruled surfaces, meanwhile, lend the project a dynamic spirit—organic but precise, expressive but efficient.

This building stands as a model for a new kind of architecture: inclusive, expressive, and deeply rooted in the unity of structure and experience. It invites everyone to live not just in shelter, but in design

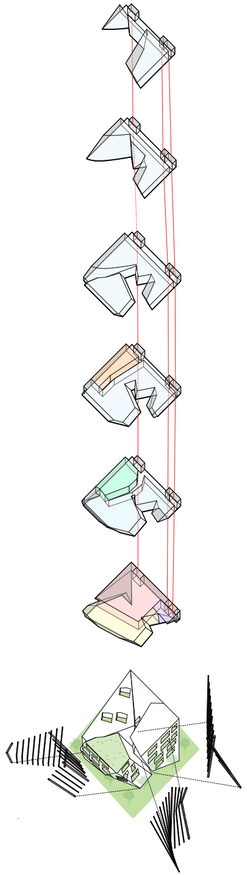


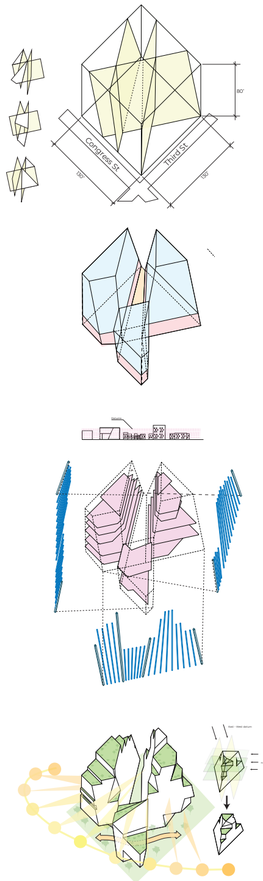
project location



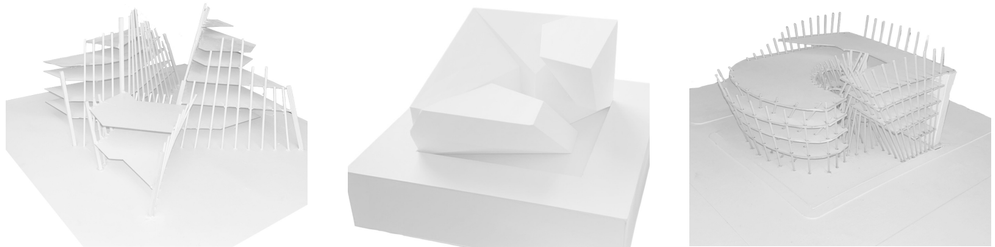
This site is currently a Dunkin Donuts located in the middle of Troy's downtown surrounded by brownstones and victorian buildings

Massing studies

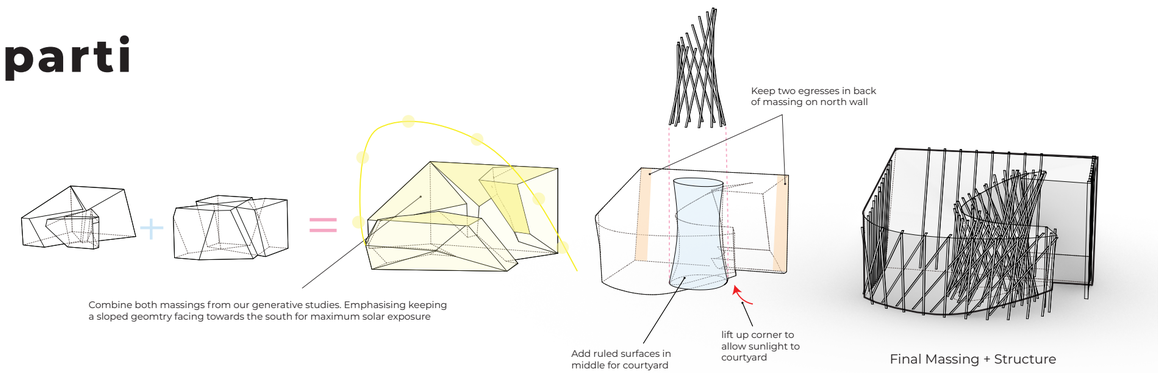




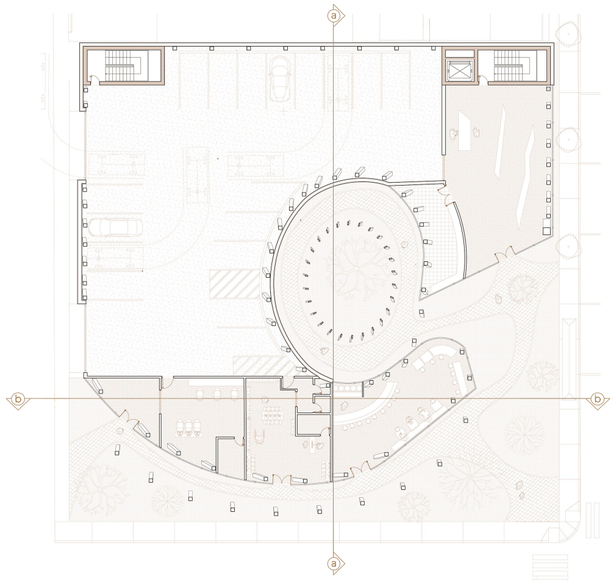
models



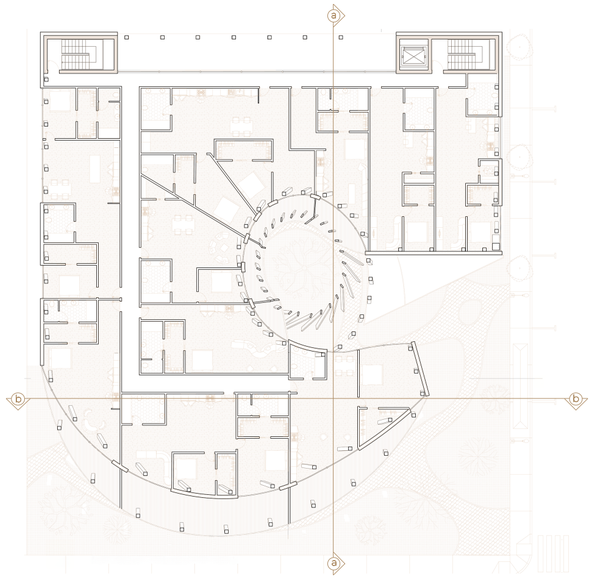
parti



plans

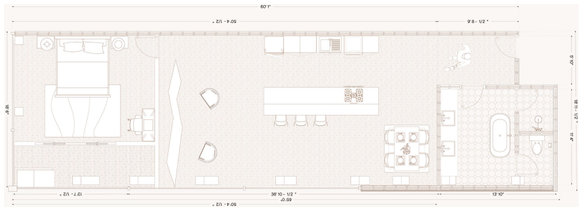


ground **floor**



first **floor**





detail **plan**

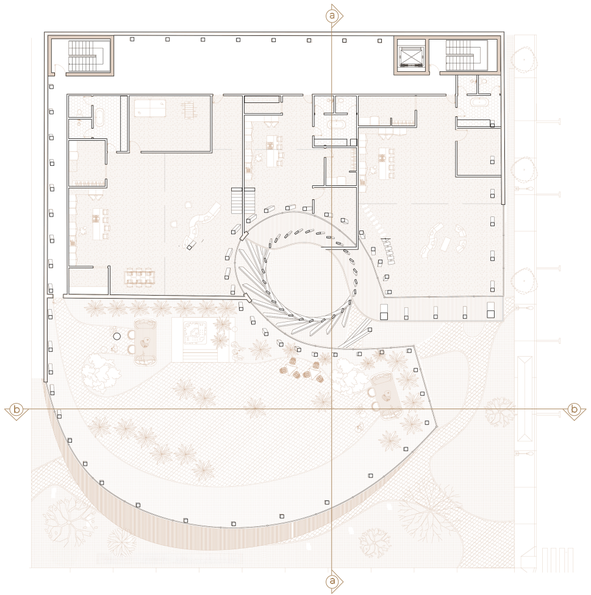
The central peice of the design was the ruled surface, terraced couryard situated in the middle of the project. The spiral colums act as a visual centerpeice as well as the exterior structiure. Each balconoy slighly overhangs the one below it, acting as a shading device, reducing solar exposure during summer months.

The layouts of the apartments revolve around getting as much sunlight into bedrooms and living areas as possible. The costruction is all timber and instead of hiding the structure it is purposely shown so that the structure dictates the space.

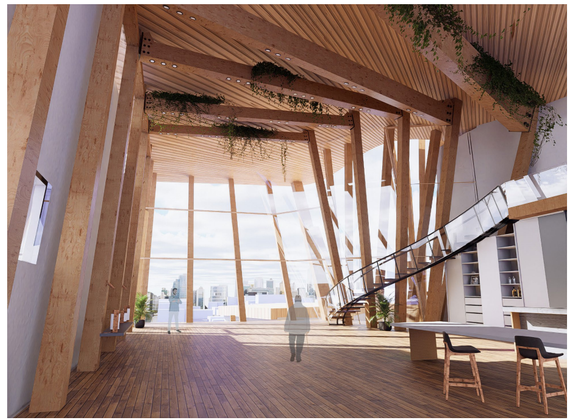
plans



fourth **floor**



fifth **floor**



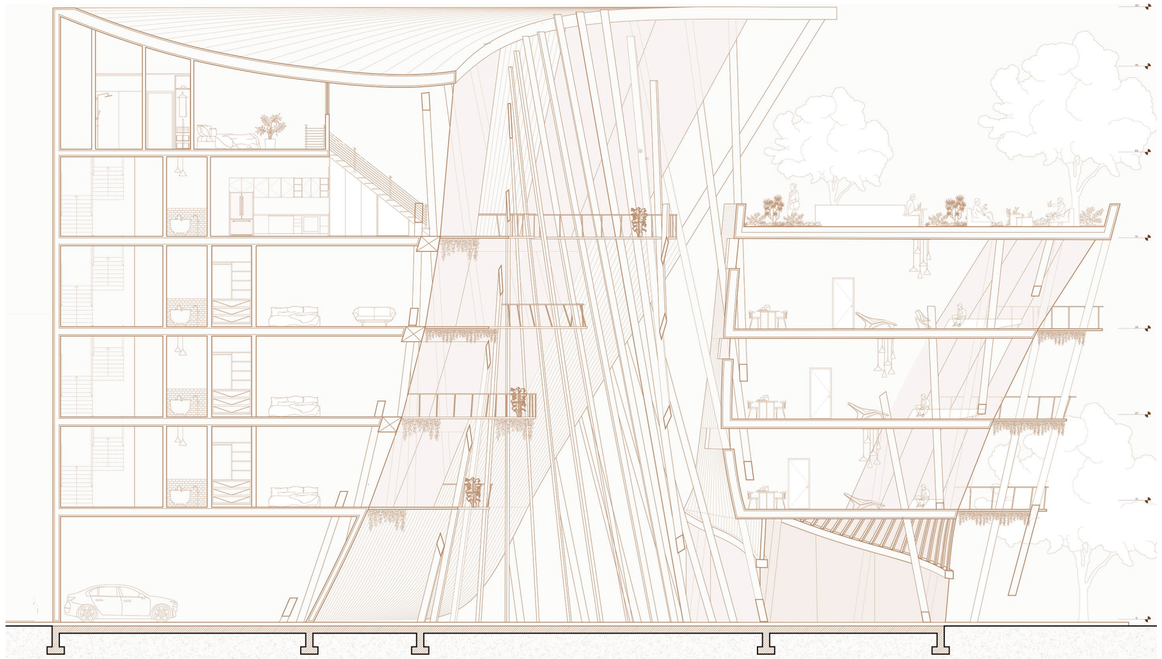


detail **plan**

The structure became the main driver in defining space and interior layouts of units. The massive clt colums became anchors for countertops, tables and storage. My leaving these colums exposed it creates a more emmersive, intersting, and dynamic living condition.

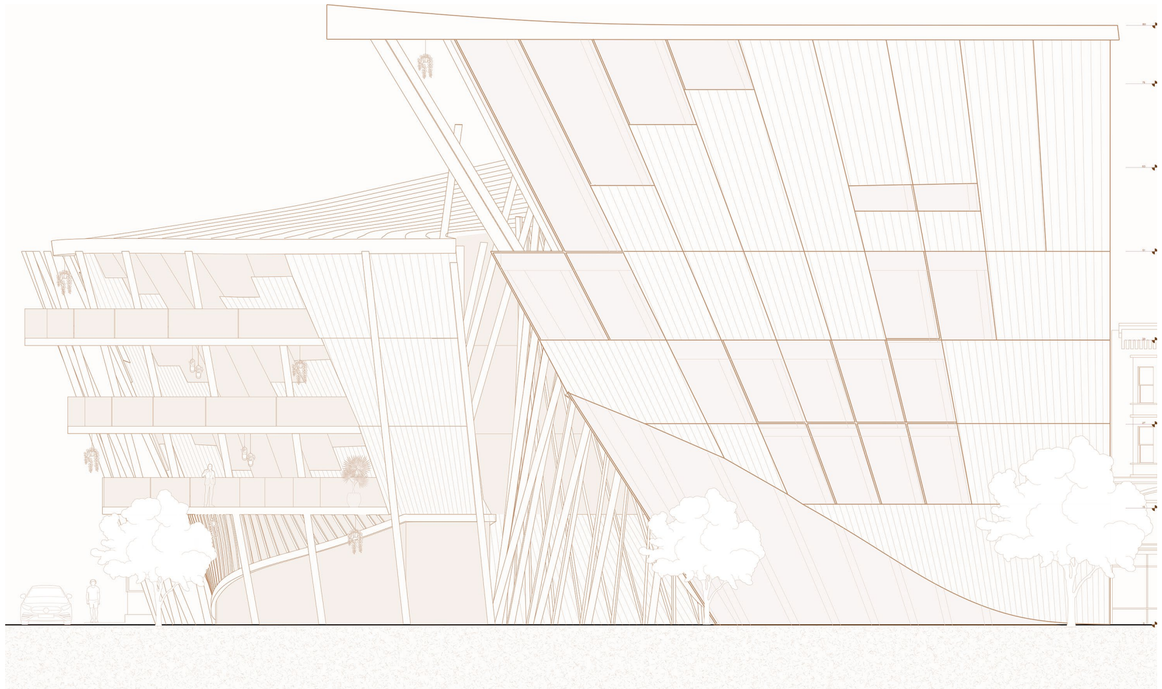
The detail plan is showing the layouts of one of the top floor lofts. The bottom floor which is shown has a massive living area with floor to ceiling glazing, full kitchen, office and bathroom. This hihglights the range of units this building satisfies, from cozy studios to sprawling spacious lofts.

sections

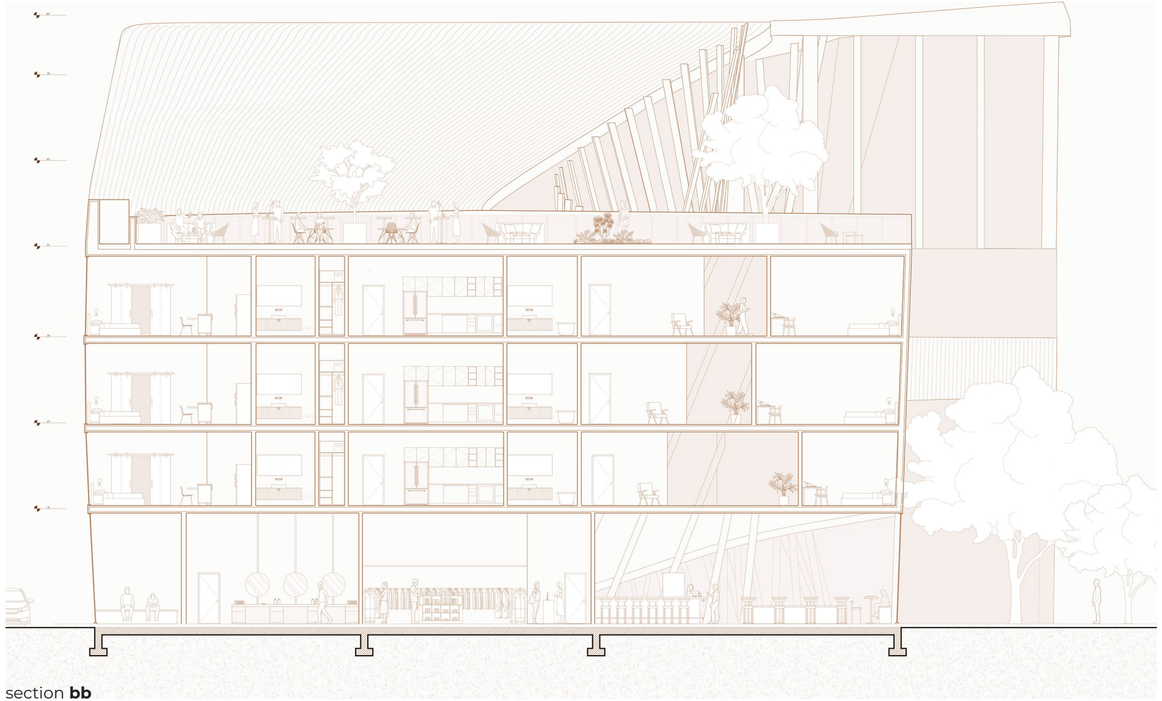


section **aa**

elevations

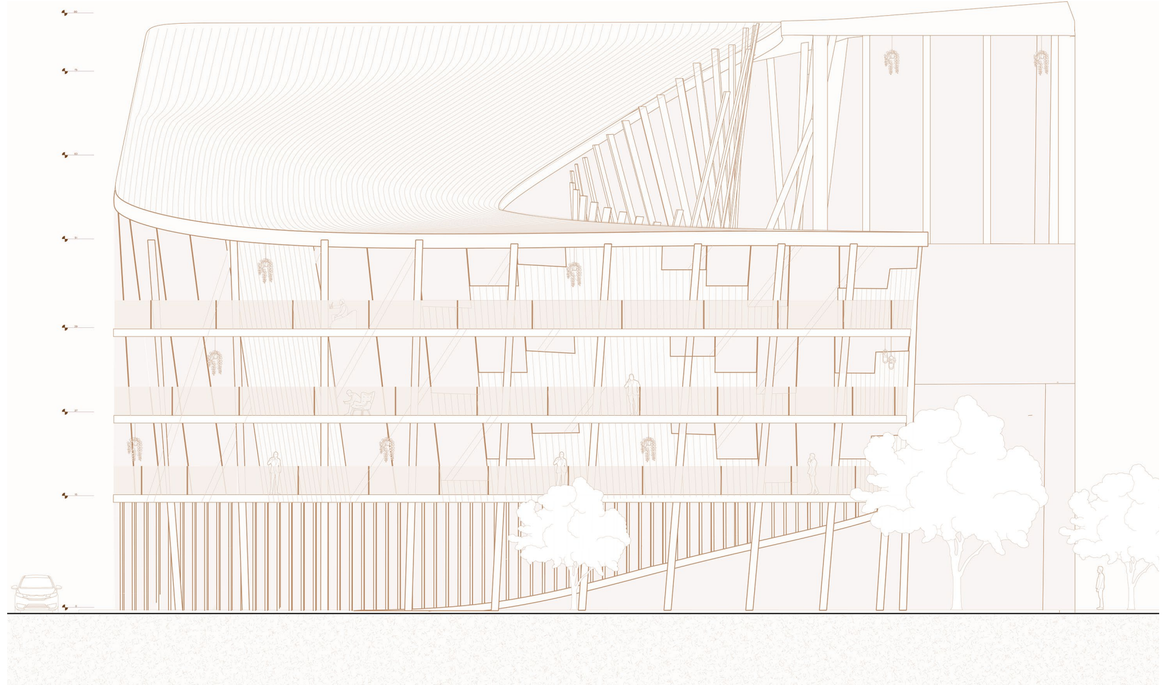


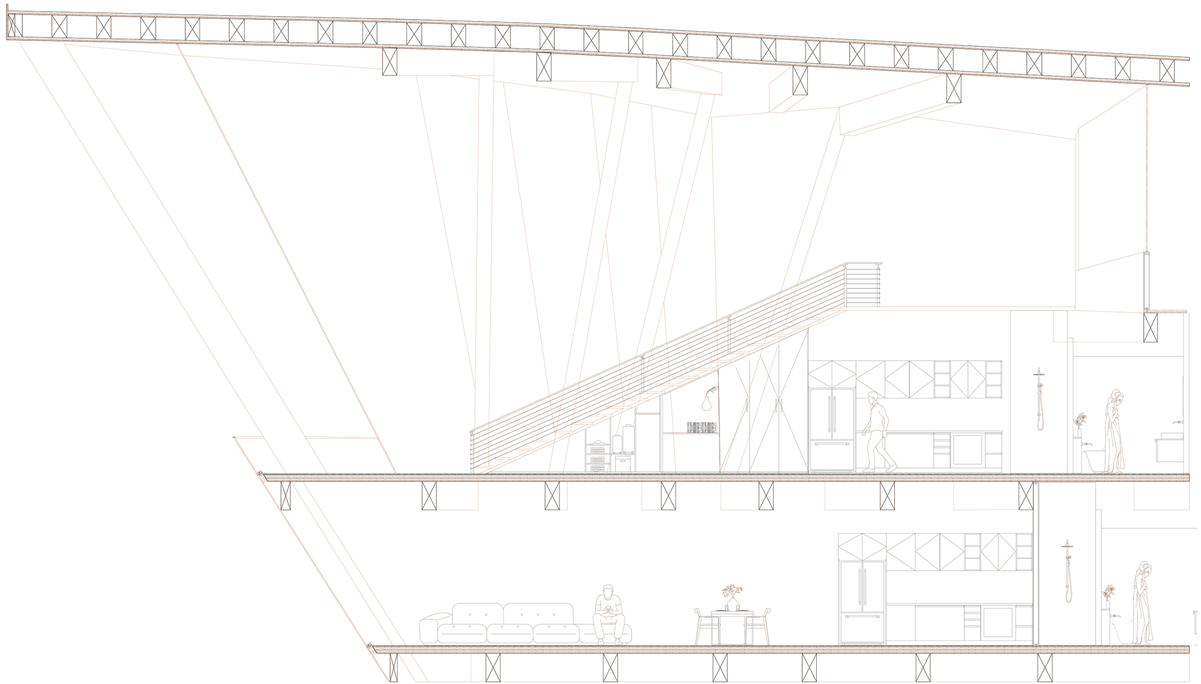
sections



section **bb**

elevations







04

Hotel Lotus

Hong Kong, China | Spring 2024

project type
hotel

software used
rhino
grasshopper
illustrator
photoshop
indesign
revit

The building is inspired by the lotus flower, using its layered petals and vertical growth as a framework for both form and organization. A solid base anchors the structure to the site, containing the most public and grounded programs. As the building rises, stacked floor plates curve and extend outward like petals, gradually opening the architecture to light, air, and views. Circulation is organized around a central core, allowing program to radiate outward while maintaining clarity and order. This progression from heavier, enclosed spaces at the base to lighter, more open spaces above reflects the lotus's natural emergence, translating its organic logic into an architectural system.



project location



Located in the very large city of hong Kong, this site is an abandoed lot over looking the bay. Situated right next to a highway this site gets lots of traffic that surrounds it. The bay is a large shipping hub so it is constently busy during day times.

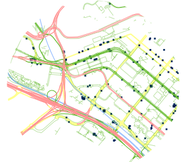
site analysis



zoning



green space



roads

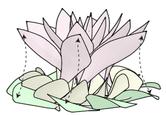
concept



Array:
Taking three distict petal shapes at different hieights and arrayed them in a circle



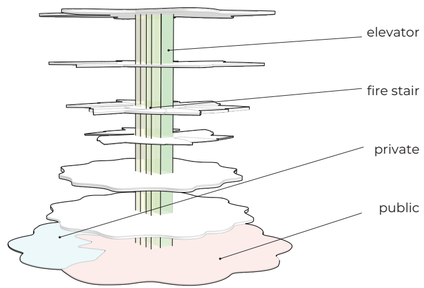
Twist:
Twist each petal 45 º to add space between each petal



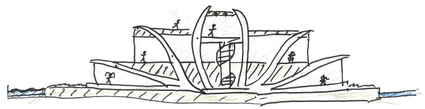
Bridge:
A connection between certain petals is established to hide the columns and create harmony between the three seperate petals.

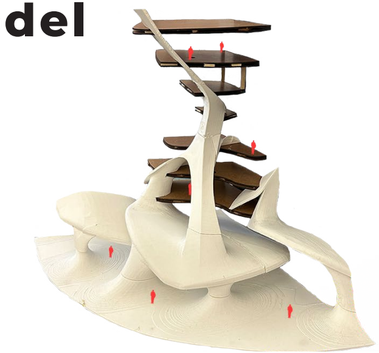


Final Form:
The final form resembles the lotus flower while also allowing for a fliud and fuctional form.

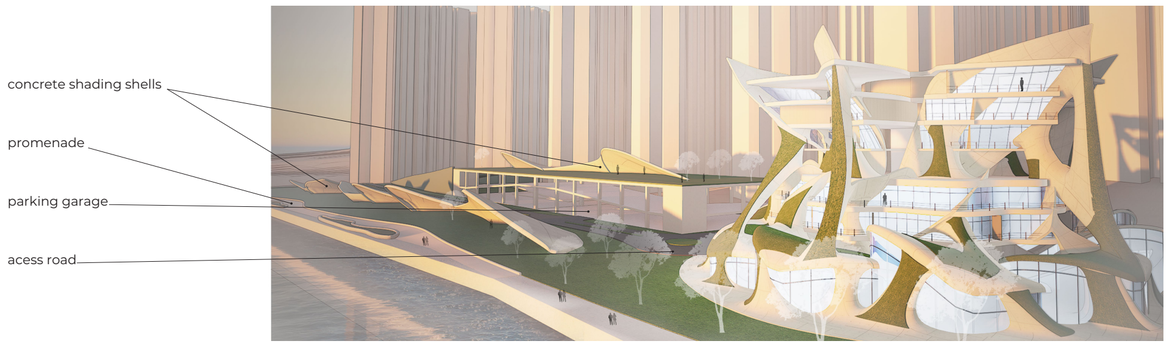


model

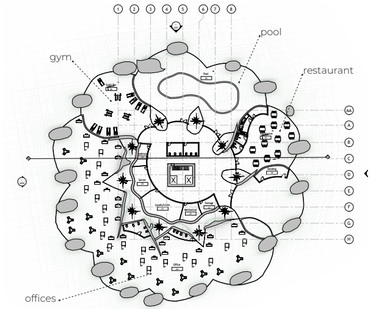




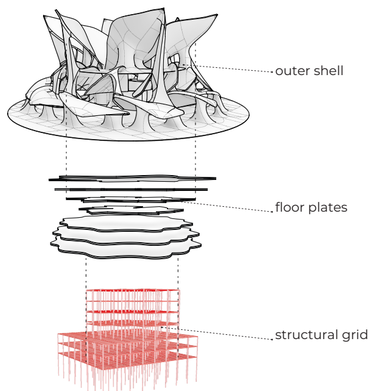


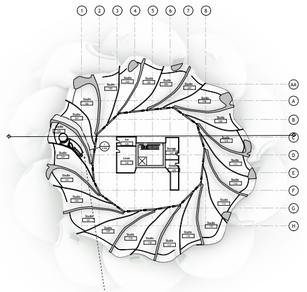


plans

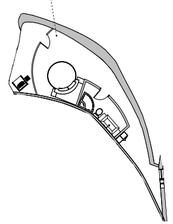


ground **floor**

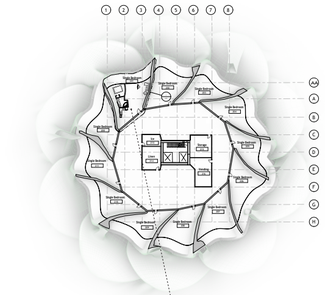




second **floor**



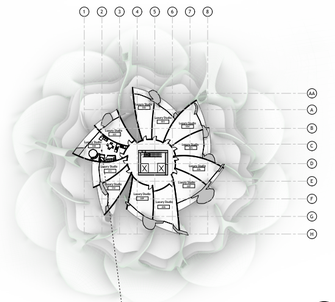
Studios:
The second floor is comprised of 24 studio units equiped with a bathroom, storage, queen bed and balcony



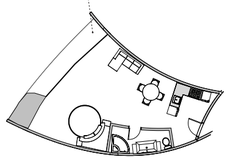
third **floor**



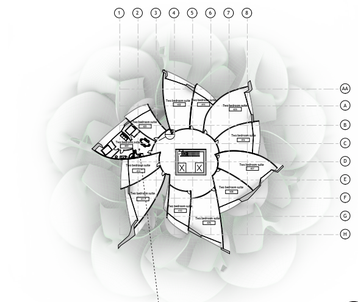
One Bedroom:
Third floor is comprised of 12 one bedroom units equiped with closet, bathroom, kitchen, living room and balcony



fourth **floor**



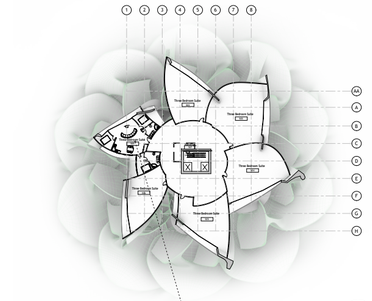
Luxury Studio:
The forth floor in comprised of 12 luxury studios equiped with a queen bed, bathroom, living room, kitchen and balcony



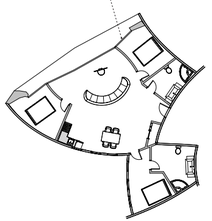
fifth **floor**



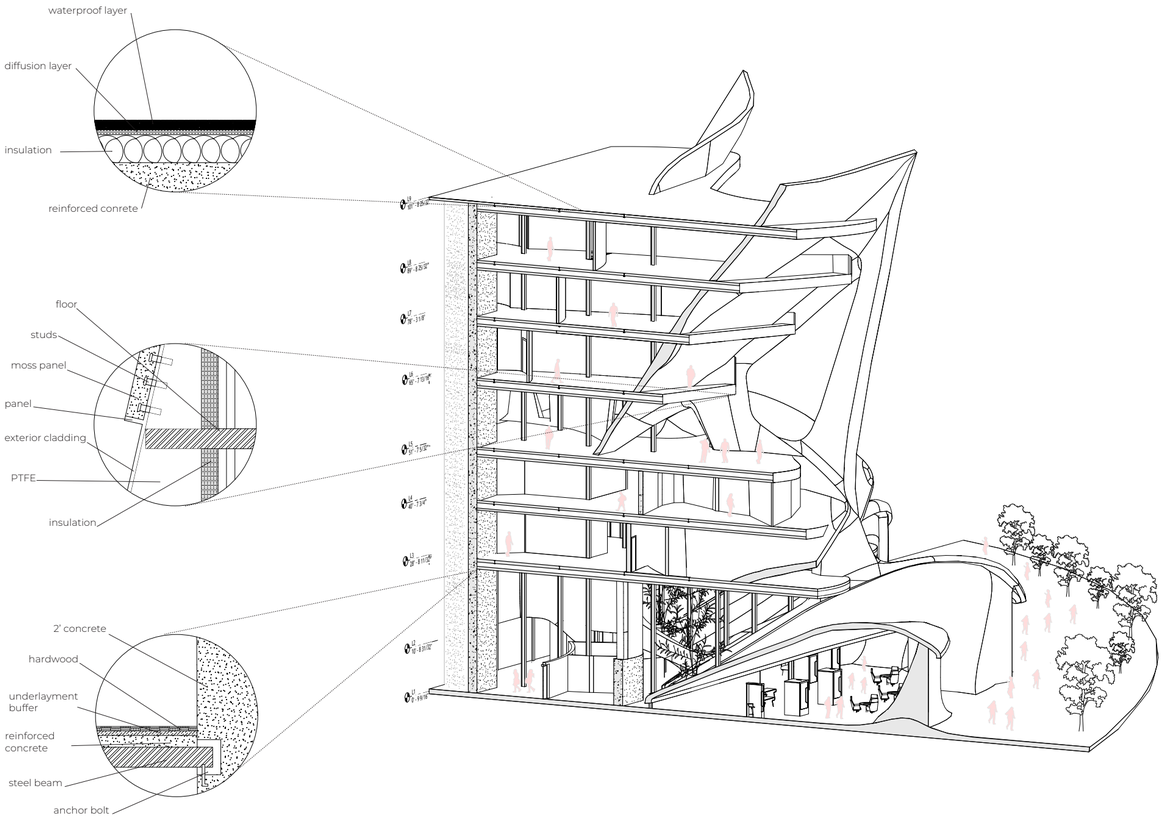
Two bedroom:
The fifth floor is comrpised of 12 two bedroom suites equiped with livng room, bathroom, kitchen, dinng room anfd balcony



sixth **floor**

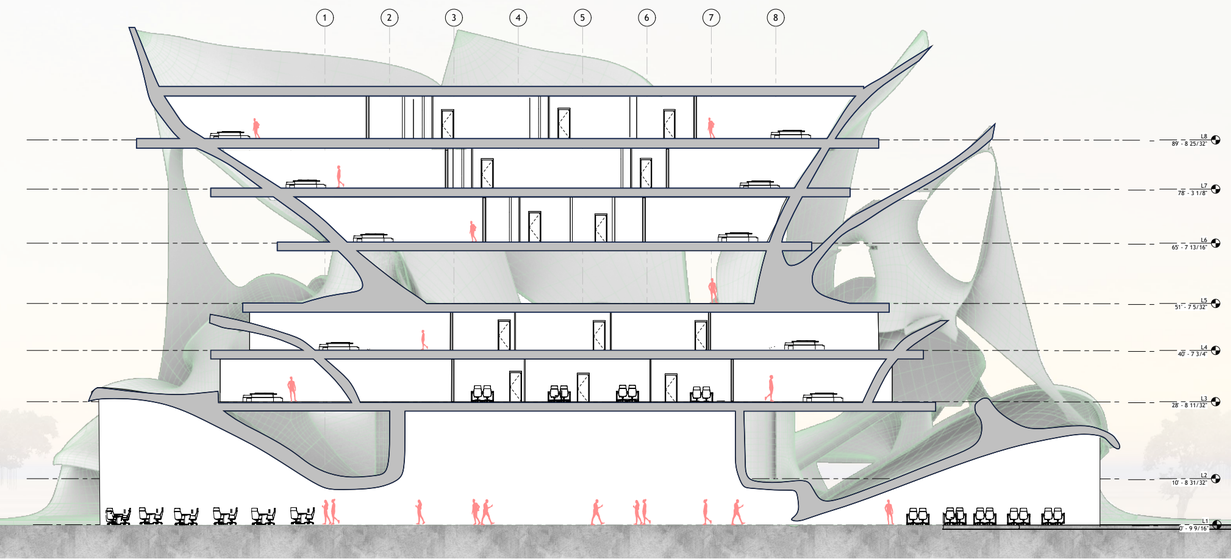


Three bedroom suite:
The sixth floor is comrpised of 6 three bedroom suites equiped with two bathrooms, living room, kitchen and balcony

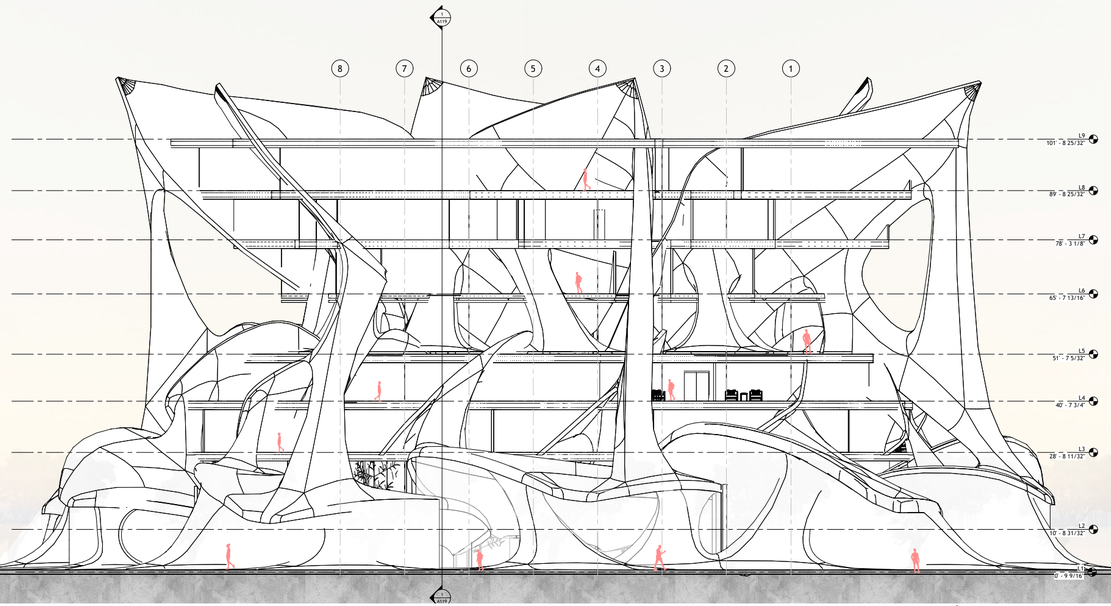

waterproof layer
diffusion layer
insulation
reinforced conrete
floor
studs
moss panel
panel
exterior cladding
PTFE
insulation
2" concrete
hardwood
underlayment
buffer
reinforced
concrete
steel beam
anchor bolt



section



elevation



05

The Art of Guitar

Lynwood, CA | 2023

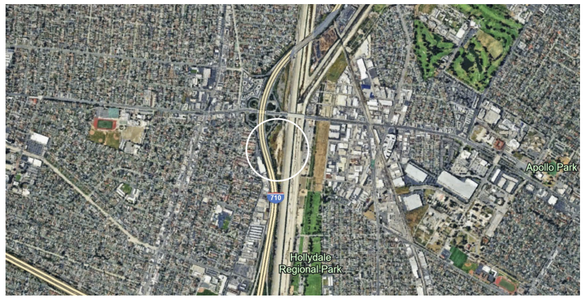
project type
multi - use / museum

software used
rhino
illustrator
photoshop
indesign
cadmapper
twinmotion

The building's structure is curved in direct reference to the guitar's body, establishing a continuous architectural form shaped by flow. Museum galleries are arranged in an ascending sequence, echoing the logic of a fretboard, where spaces progress rhythmically and build as visitors move through the building. The theater is positioned at the headstock, acting as a focal point for performance and public gathering, while lesson rooms are shaped after guitar pickups. Compact, modular spaces embedded within the larger form and tuned for learning and instruction. Together, these elements translate the physical and functional components of the guitar into an integrated architectural system.



project location



Located in Lynwood, California, this underdeveloped site sits between a major highway and the river within a dense urban context. The surrounding Gateway City is a diverse, multicultural community currently navigating growth, safety, and redevelopment.

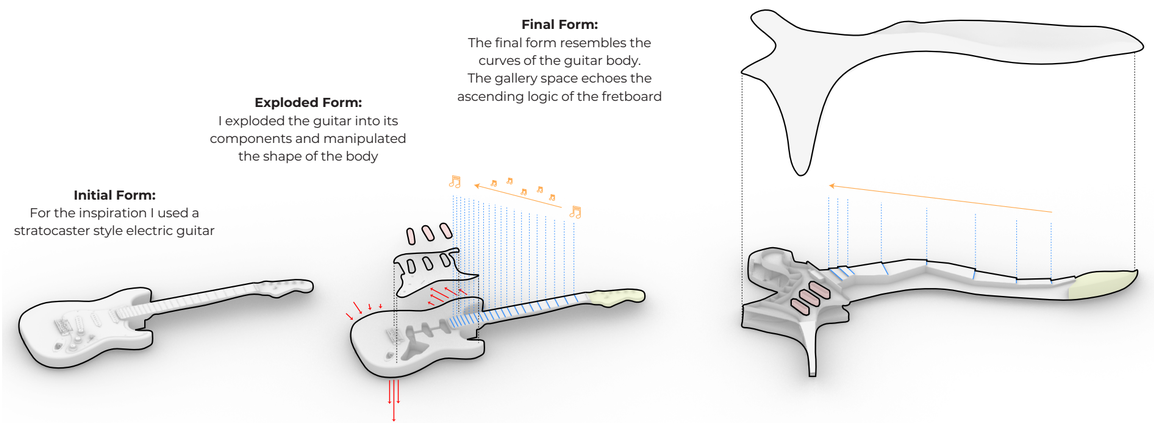
site analysis



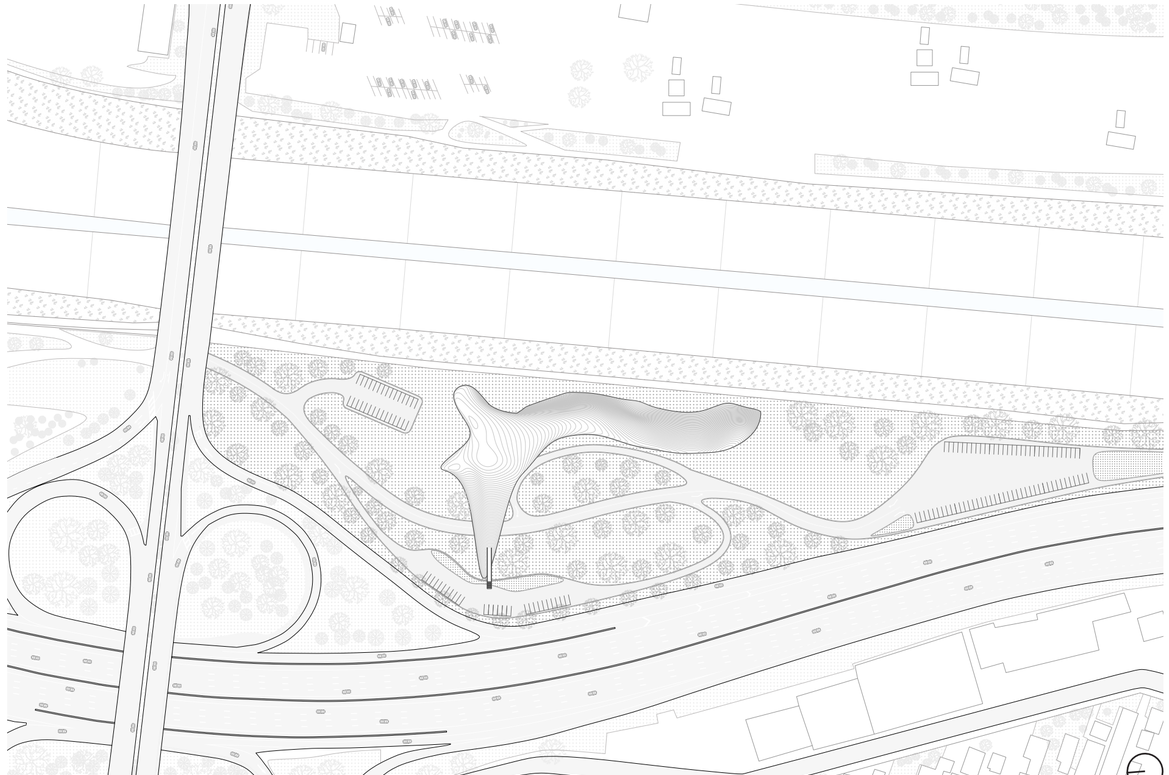
Final Form:
The final form resembles the curves of the guitar body. The gallery space echoes the ascending logic of the fretboard

Exploded Form:
I exploded the guitar into its components and manipulated the shape of the body

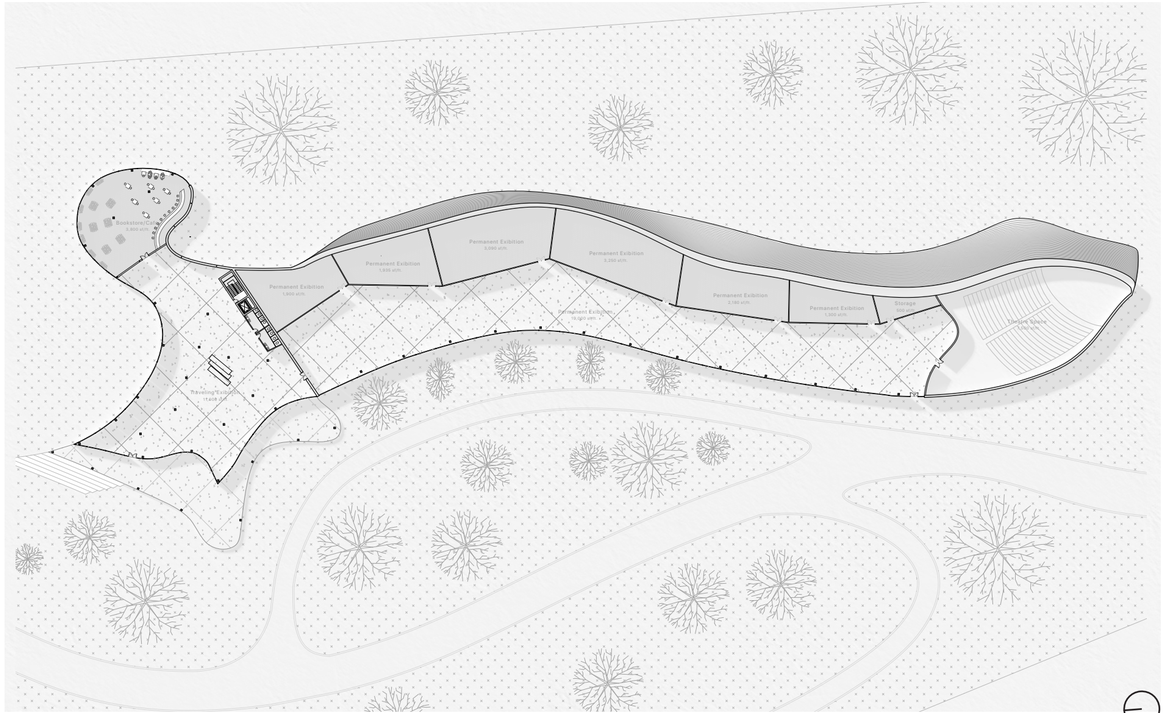
Initial Form:
For the inspiration I used a stratocaster style electric guitar



site plan

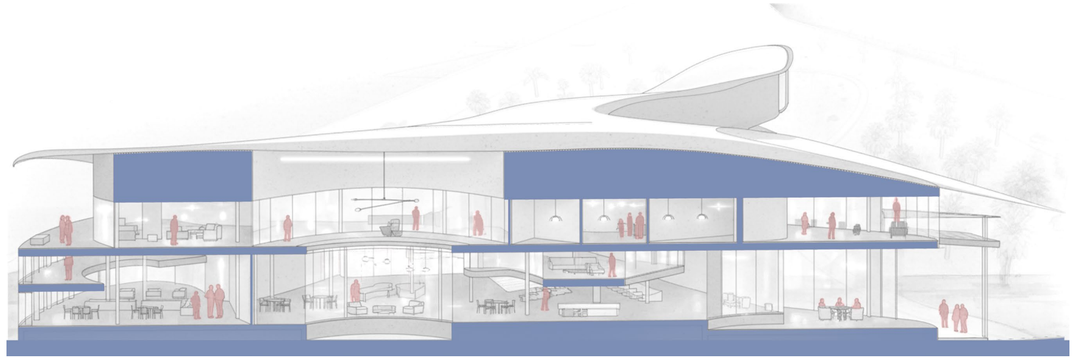


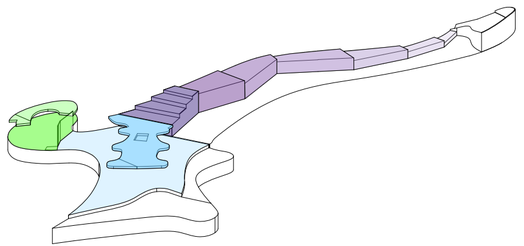
plan



ground **floor**

section





Exibition Space

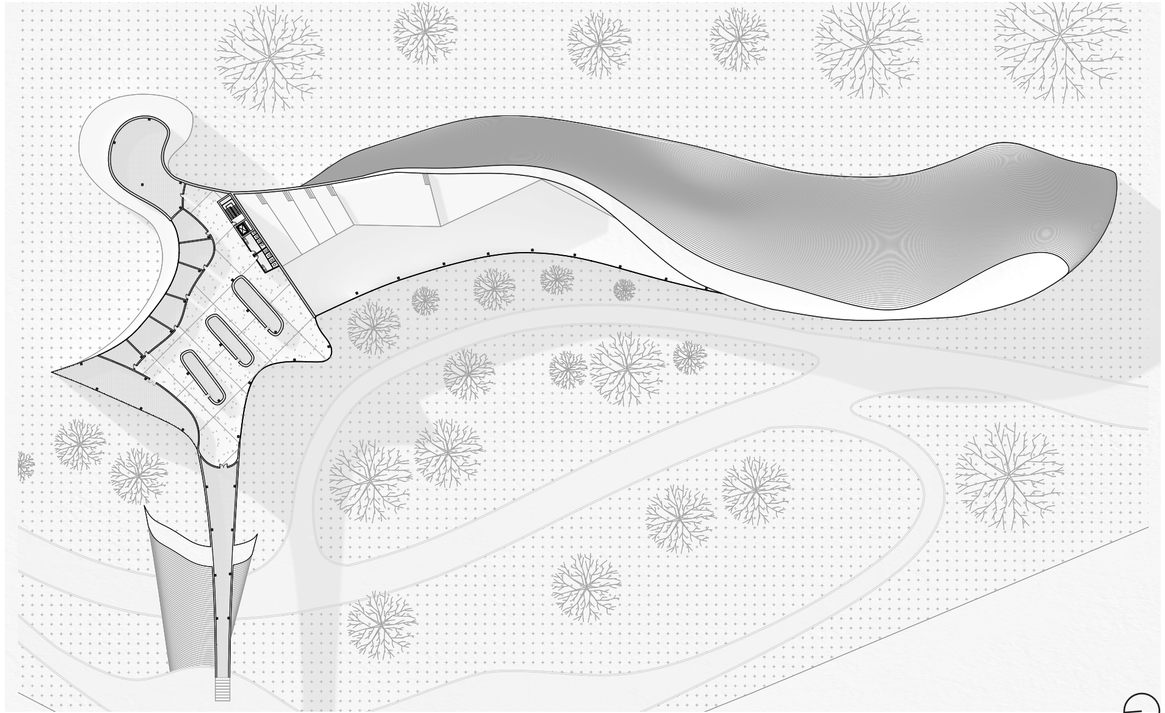
Traveling Exibition

Cafe

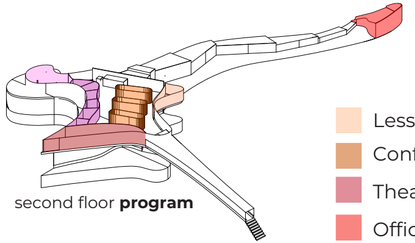
Gift Shop

ground floor **program**

plan

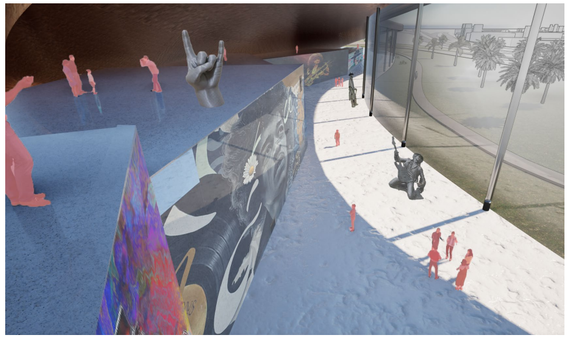


second **floor**

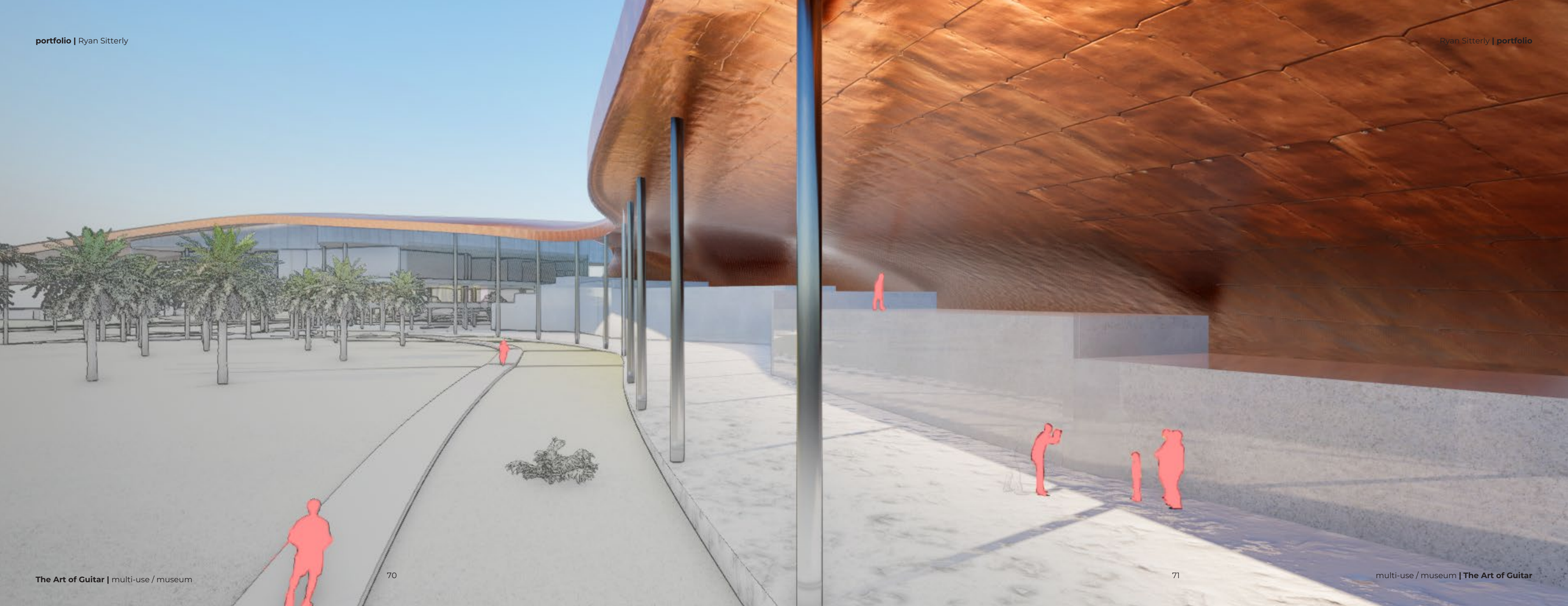


second floor **program**

- Lesson Rooms
- Conference Room
- Theatre
- Offices
- Recording Studios
- Staff Lounge







Thank You

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2023 **| 2026**
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