

# Undergraduate Design Portfolio

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**01**

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Location: Palm Point Park, Gainesville, Florida  
Architectural Design 5: Fall 2019  
Instructor: Professor John Maze

**02**

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Location: Atsena Otie Key, Cedar Keys, Florida  
Architectural Design 5: Fall 2019  
Instructor: Professor John Maze

**03**

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Location: Studio Made, Gainesville, Florida  
Architectural Design 4: Spring 2019  
Instructor: Professor Mark McGlothlin

**04**

Pages 07 - 08

Location: Studio Made, Gainesville, Florida  
Architectural Design 3: Fall 2018  
Instructor: Professor Martin Gundersen

**05**

Pages 09 - 10

Location: Studio Made, Gainesville, Florida  
Architectural Design: Summer 2019  
Instructor: Not Applicable

**06**

Pages 11 - 12

Location: 212 SE 1st St., Gainesville, Florida  
Architectural Design 6: Spring 2020  
Instructor: Michael Kuenstle

# 01

## Florida Landscape



Model Photo

This project was assigned by our professor to explore the Florida landscape and learn how to create a space that involves the surrounding and manipulation of the landscape. The location is in Palm Point Park in Gainesville. The assignment of the project is to create a bath house that would house both an individual hot and cold bath, along with a group bath. We were also assigned one partner to create the architecture together. Our inspiration for the project was to create a Japanese style bathhouse that introduced rituals and objectives that would create an overall experience.



Exterior Perspective

The materials we chose to utilize would be rammed earth and concrete to combat the hot summer months of Gainesville, Florida. The project also manipulates the water and sunlight to create a harmonious experience to the user. Initially, we proposed a plan to create an invigorating and celebrated space that continues beyond the confines of solid land and spans across the water.

The entrance of the architecture is playful and creates an ecosystem with the water. Upon manipulation of the water, the inhabitant would walk above the water and be able to touch the rammed earth upon entering the bath house. Upon entering the space, the ritual of the space would create a genkan style step in which the inhabitant would take off their shoes and put on sandals instead to create an experience in which the inhabitant is taking a moment of pause before entering the main space.



Interior Perspective

The initial design was created by finding the winter solstice line and creating an axis that revolved around the line. The design led to a creation of a rammed earth wall that separates the private and group settings.



Site Diagram

The reasoning for the architecture to be built across the water and land is to create a seamless connection and the view of the landscape in its entirety.

The inspiration came across a fisherman and the limit of his ability to move beyond the defined ground before him. The understanding between the ground and water is what defines what could be accessible. By understanding the limitations, the architecture can play with the defined line between ground and water. Creating a space that can engage on the weather patterns of the area allows for manipulation of this idea.



Ground Floor Plan in Context

The function of the design is to create a bath house that contains an individual hot and cold bath, along with a group bath. The hot and cold individual bath was located to the west of the rammed earth wall along with the changing rooms to allow for privacy.

On the right side of the wall contains the group bath and light reflection space. The hot water from the group bath and individual bath had to be heated up through means in which the inhabitants would burn wood in a furnace. The furnace heats the water and disperses onto the bath locations which the process would be done initially before entering the baths. By the time the hot water is heating the bath, the inhabitant would change their clothes and explore the reflection space that is tucked between the wall and furnace. The dark space allows very small slivers of light to penetrate the room and create moments of reflection across the ground and roof.



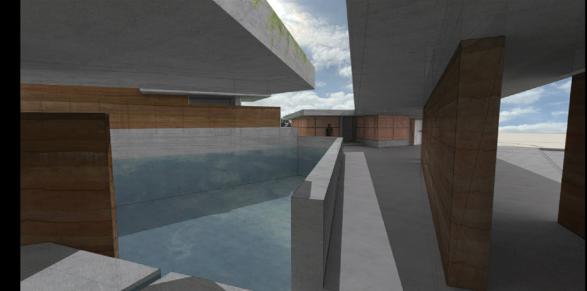
02

## Florida Ruins

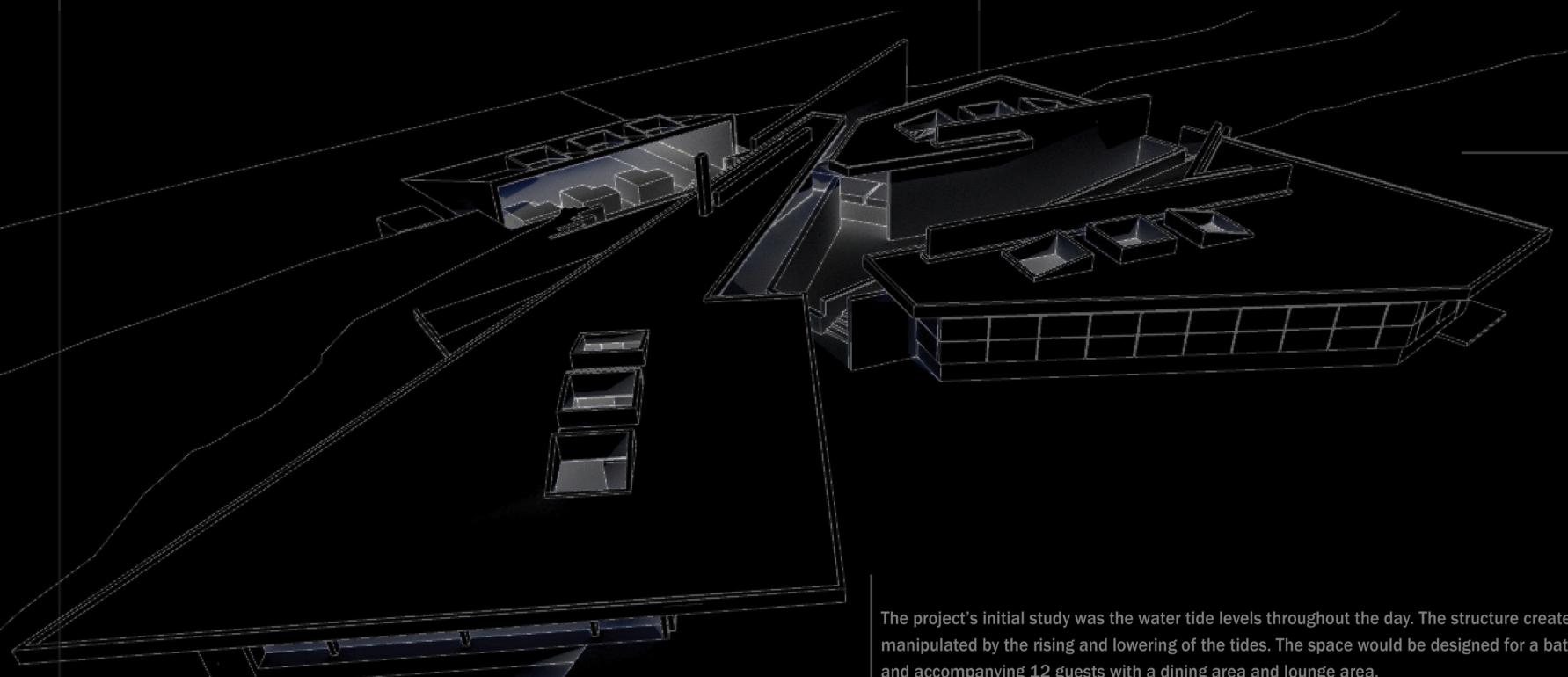
The site is located in Atsena Otie Key, a small island off of Cedar Key in which the island used to house a city before being devastated by a hurricane in 1896. The community eventually moved out in the 1950's before being bought by the Suwannee River Water Management District and converted into a wildlife sanctuary.



Interior Perspective



Interior Perspective

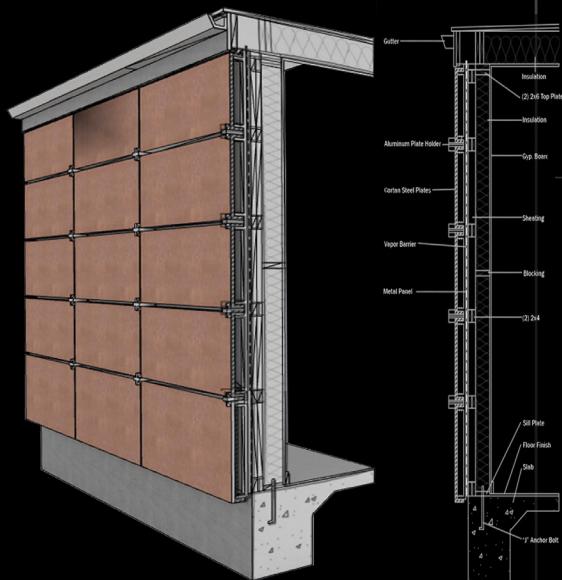


Model Render

The project's initial study was the water tide levels throughout the day. The structure created can be manipulated by the rising and lowering of the tides. The space would be designed for a bath house and accompanying 12 guests with a dining area and lounge area.

03

South-West Section

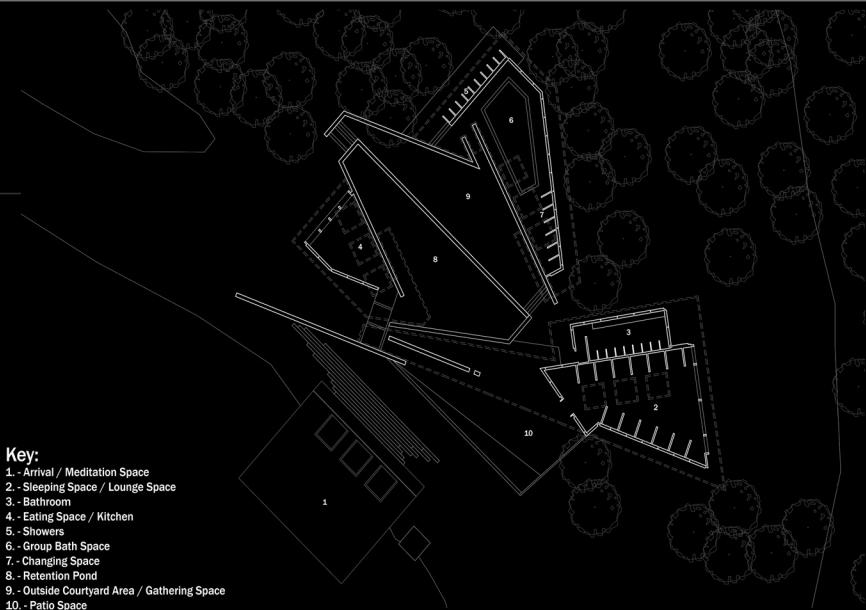


Wall Segment

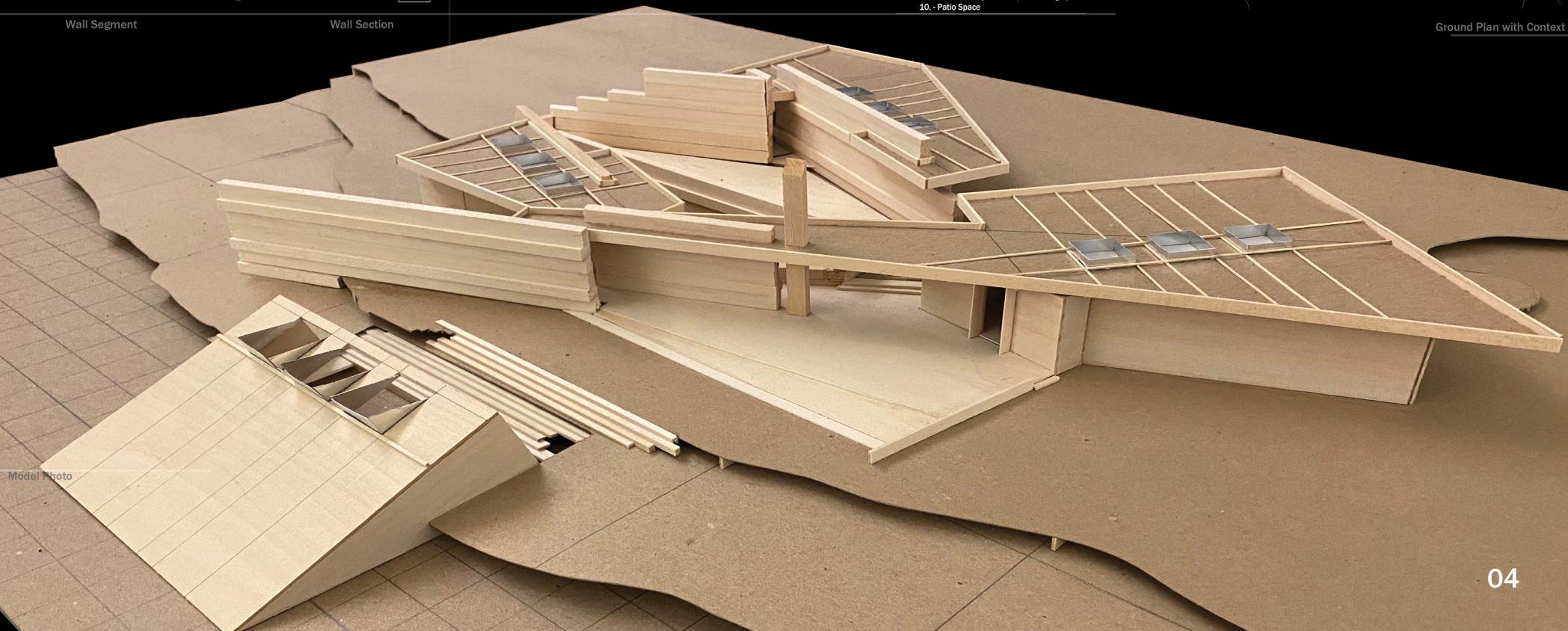
The guest would first arrive by kayak and dock the kayak in the meditation space that would be protruding out of the water. The guest would then be welcomed by the lounge area in which the beds and bathrooms are located.

The main focus of the architecture is to provide a place to eat, bathe, and sleep while allowing for exploration of the island. The architecture's main goal is to not take away from the island but create a livable space in which a guest can come back to after exploration.

- Key:**
- 1 - Arrival / Meditation Space
  - 2 - Sleeping Space / Lounge Space
  - 3 - Bathroom
  - 4 - Eating Space / Kitchen
  - 5 - Showers
  - 6 - Group Bath Space
  - 7 - Changing Space
  - 8 - Retention Pond
  - 9 - Outside Courtyard Area / Gathering Space
  - 10 - Patio Space

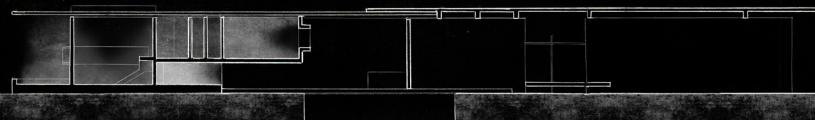


Ground Plan with Context

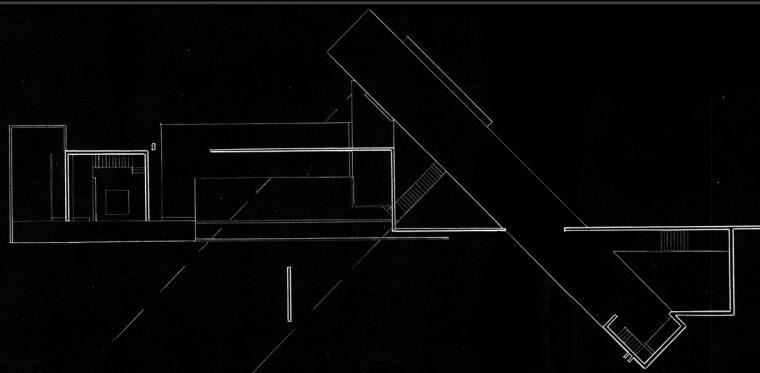


Model Photo

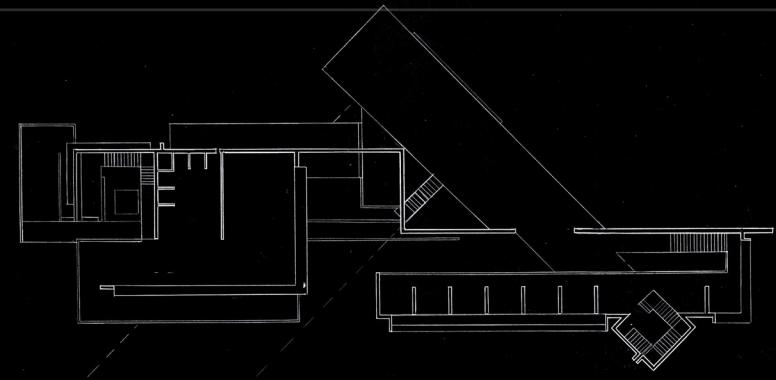
# Horizontal Datum



North Section

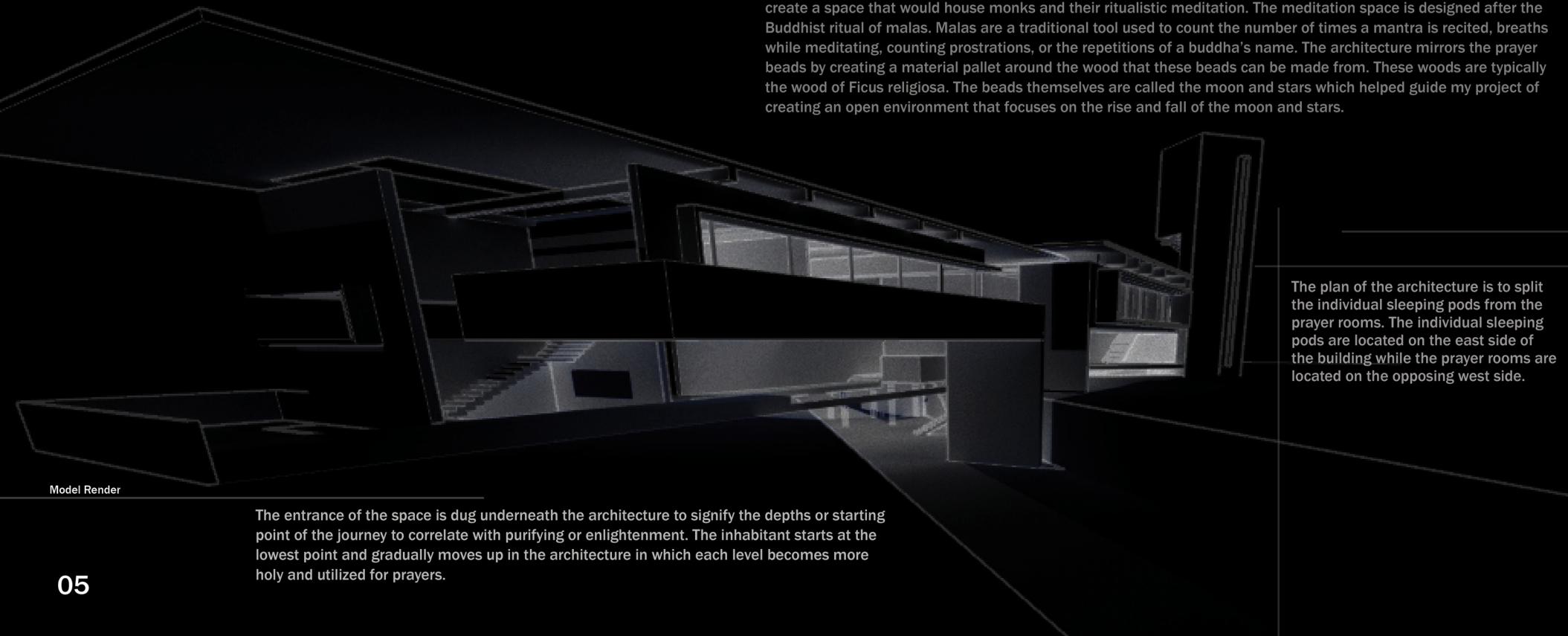


Ground Floor Plan



Second Floor Plan

The project's main function is to explore open space in which we focus on how the site can engage the architecture. The project is required to contain a bell tower, water well, and individual sleeping pods. I initially proposed an idea to create a space that would house monks and their ritualistic meditation. The meditation space is designed after the Buddhist ritual of malas. Malas are a traditional tool used to count the number of times a mantra is recited, breaths while meditating, counting prostrations, or the repetitions of a buddha's name. The architecture mirrors the prayer beads by creating a material pallet around the wood that these beads can be made from. These woods are typically the wood of Ficus religiosa. The beads themselves are called the moon and stars which helped guide my project of creating an open environment that focuses on the rise and fall of the moon and stars.



Model Render

The entrance of the space is dug underneath the architecture to signify the depths or starting point of the journey to correlate with purifying or enlightenment. The inhabitant starts at the lowest point and gradually moves up in the architecture in which each level becomes more holy and utilized for prayers.

The plan of the architecture is to split the individual sleeping pods from the prayer rooms. The individual sleeping pods are located on the east side of the building while the prayer rooms are located on the opposing west side.



East Section



Interior Perspective

The space is created to be open and allow for the inhabitant to view all parts of the space to create an open plan.



Interior Perspective

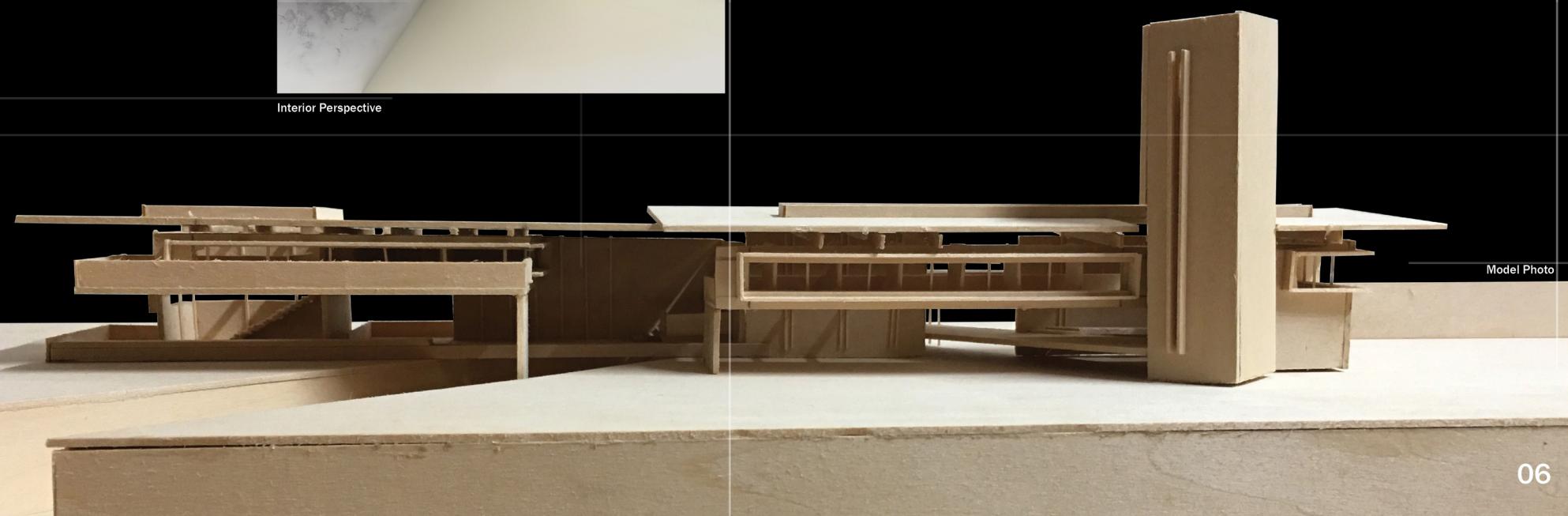
The inspiration comes across the Buddhist temples in which prayers would be both stagnant and volatile meaning the space would need to atone for the constant movement of people and spaces that could hold a single person for hours during prayers. The space also focused on small close corridors to allow for sound to travel and echo the chants of the prayers.



Interior Perspective

Since the bell tower is utilized to track time, the bell tower would be positioned on the east side with the individual pod spaces. The bell tower is angled to face the moon's direction and position which signifies the importance of the moon's path relative to the site.

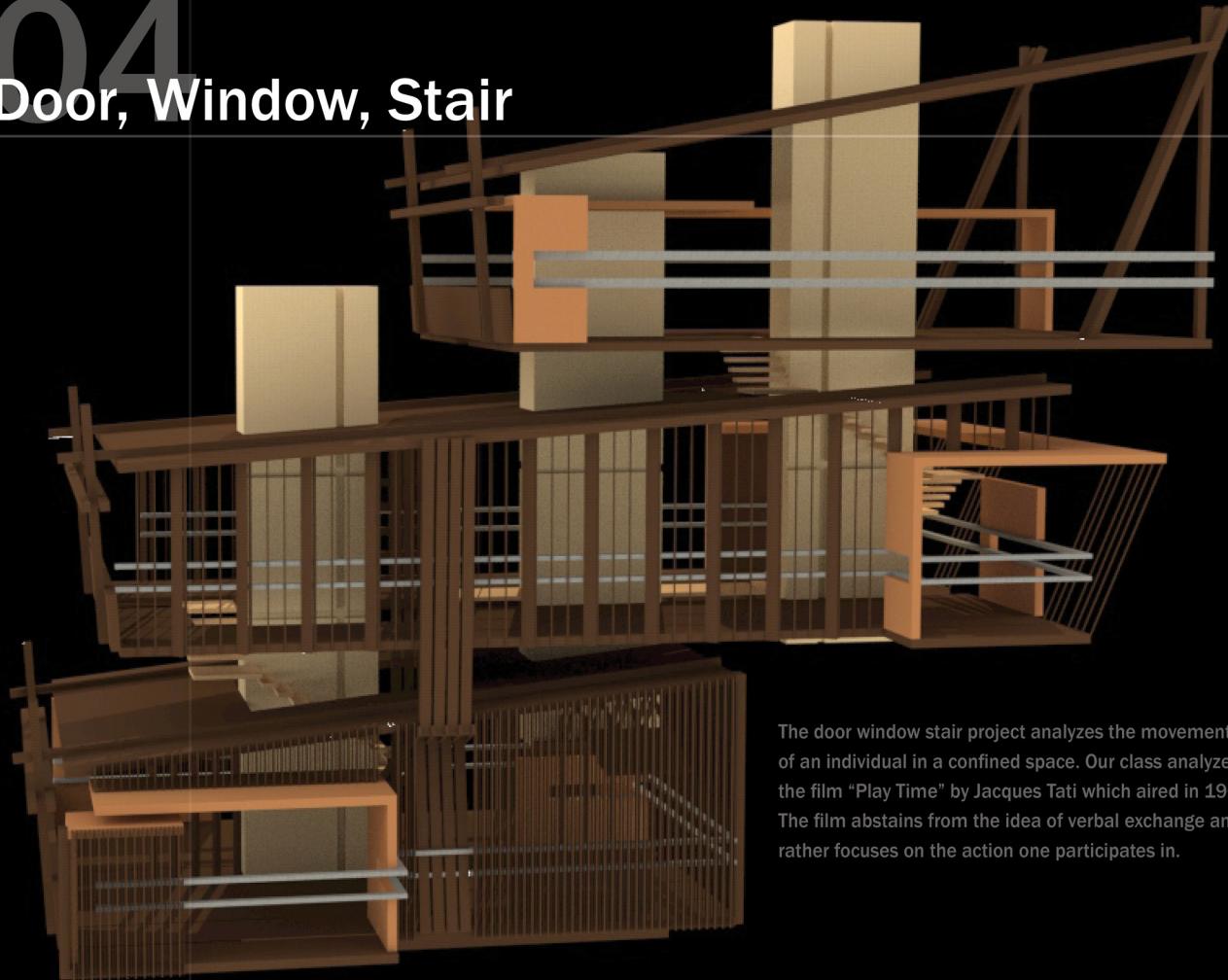
By splitting the two spaces, the inhabitant would have to walk from the east side to west side by walking outside on an overhead bridge that connects the two spaces from the back of the architecture to create a journey so that the space signifies more of an importance to the space rather than another space that was put in for convenience sake.



Model Photo

# 04

## Door, Window, Stair



Model Render

The door window stair project analyzes the movement of an individual in a confined space. Our class analyzed the film "Play Time" by Jacques Tati which aired in 1967. The film abstains from the idea of verbal exchange and rather focuses on the action one participates in.

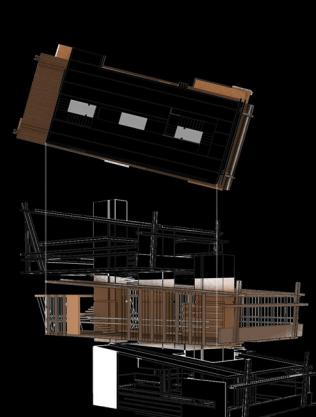
By understanding the movement and circulation within a built environment, we understand how movement is key to architecture. We were assigned a project that would understand movement in a space through an enormous object as a wall.



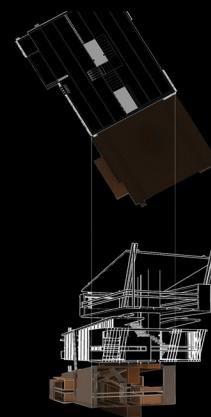
# 07



Third Floor Plan Diagram

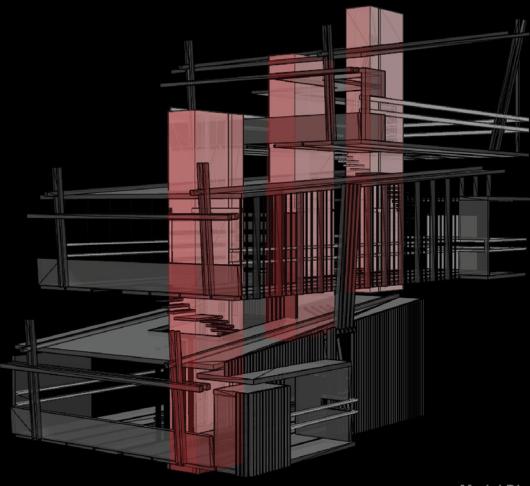


Second Floor Plan Diagram



First Floor Plan Diagram

Exploded Axonometric

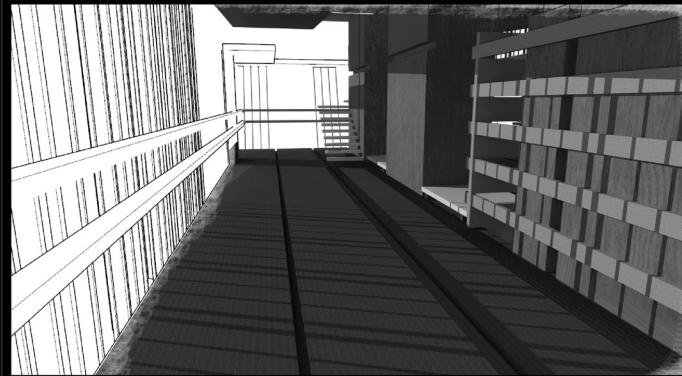


Model Diagram



Interior Perspective

By focusing on a wall that incorporates most of the project, it can be shown how a wall could connect spaces through various thresholds. The wall in this project was disassembled and split into three, same size components that would be aligned in a row and increased intermittently. By doing so creates an abstract wall that is not physically bounded together by materials but instead correlates an idea of space occupying in between the segments as a barrier.



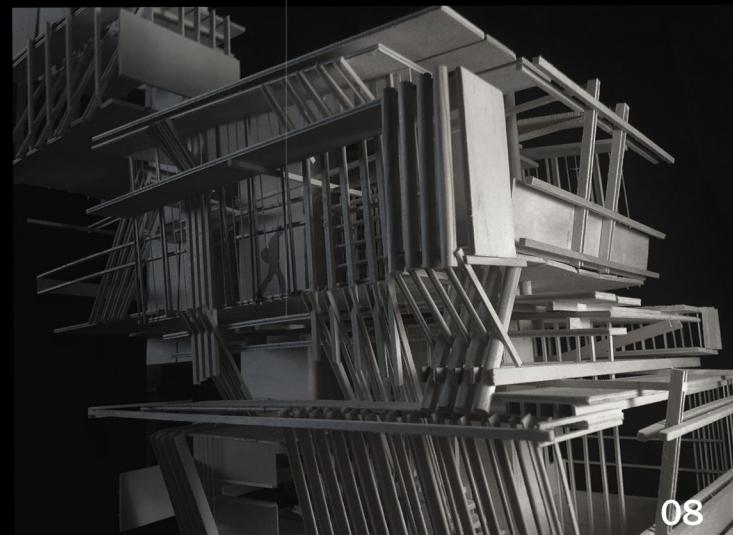
Interior Perspective

By presenting this idea, the space that is between the segments of wall would be uninhabitable and inaccessible from one side of the space to the other. By displaying the idea of nothingness in the space that is unable to be accessed, it creates a wall that is not physically there.



Interior Perspective

The space that surrounds the wall is utilized in a way that shows various levels only accessible through vertical movement. The stairs that are within this project circulates the fragmented walls to show the vertical movement as an idea of scaling the wall to the next enclosed space.



Model Photo

# 05

## Creative Outlet

The Creative Outlet project was a project that I self-assigned over summer. I wanted to challenge myself to create a model that would create spatial differences.

Upon entering the space, the angled slope overheads bring a narrower attention to the center of the space in which recreation outside could be utilized. By sloping the overheads, the space would also be compressed and expanded upon that shares the same overhead to the second-floor plane. This would also in turn create a scale difference in the space and size of the overhead.

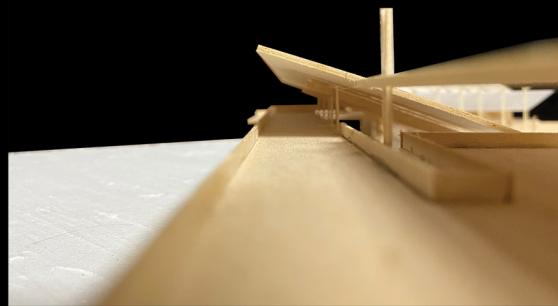
Model Photo



The function of the design is to create a train station that would occupy the people boarding the train and create a space for gathering.

The smaller isolated space is for the people who are arriving and leaving by train while the main space is to create a movement that rotates around the station. By adding a second level, the space frames many different views of the landscape while also focusing internally on the train station.

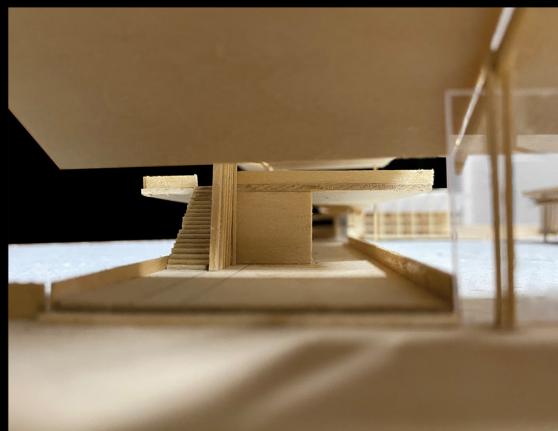
The initial design was created by changing the depths of the spaces and ground to create a harmonious relationship between the movement of the space. The overhead condition also utilizes pattern techniques that echoes across the architecture.



Model Photo

The close-up pictures explore the scale by utilizing stairs and railings. It also further explores how the sloping overhead is creating a second overhead to the second-floor plane. The slits in the roofs allows for exposed structure and natural lighting.

The inspiration came across the desire for a large-scale project that would require complex design while also minimizing the physical appearance. The difference in design between the main structure and train station is to show the physical difference in the two projects and therefore bring attention to the different building phases.



Model Photo

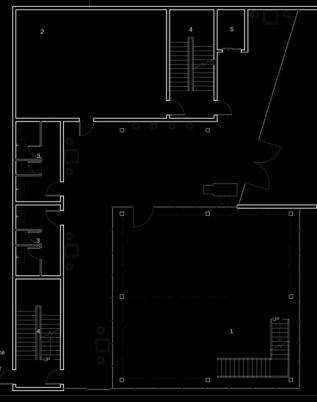


Model Photo

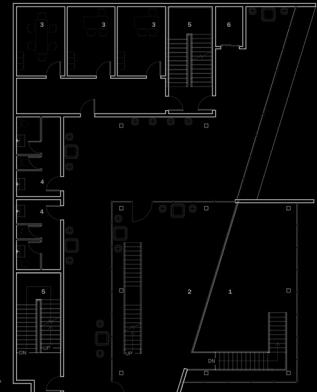


Model Photo

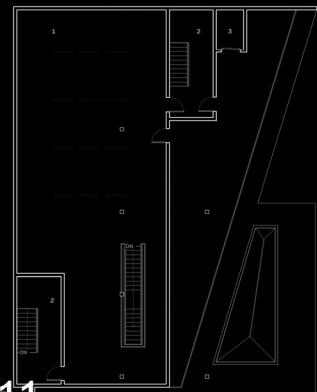
# 06 Downtown



Ground Floor Plan with Context



Second Floor Plan



Third Floor Plan

This project required the utilization and execution of Revit. The assigned project explores the idea of confined space. The parameters of the building allowed for no larger than 60' x 80'. The project would also be situated in front of the Gainesville hippodrome. The project also required to contain two fire exit stairs, a mezzanine and an elevator.



Model Render



Interior Perspective

The project contains two gallery spaces. One gallery space would utilize natural lighting while the other would utilize artificial lighting. The natural lighting would be positioned toward the gallery on the ground floor to also create a transparent gallery to the pedestrians that occupy the public sidewalks. The ground floor gallery would be subject dependent on the lighting of the sky to create a more variable outcome on the reflection of the paintings and sculptures in the gallery.



Interior Perspective



West Section

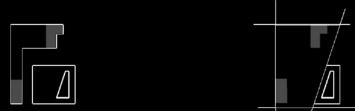


South Section



East Section

The third-floor gallery consists of artificial lighting to create a more non variable lighting experience which further improves the lighting quality and exposure of the paintings and sculptures. The experience of the gallery also becomes more linear in approach to the lighting and execution of the walkway. The other interior spaces include a leasable space on the ground floor to encourage more foot traffic inside. Along with the leasable space, the project also required office spaces and bathrooms. The placement of the offices on the second-floor help reduce distractions and noise from the ground floor. The placement of the mezzanine also encourages movement from one gallery into the other.



Fire Stair and Elevator Placement Diagram

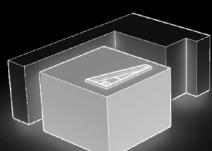


Interior Perspective



Interior Perspective

The mezzanine helps direct the form of the architecture by slicing into the gallery while also holding the function of the space to create a common gathering area while leading to the third-floor gallery. The offices would be located behind the mezzanine along with the bathrooms. The third-floor gallery does not contain any windows due to the disruption of lighting from outside. The artificial lighting would take importance of the space while also preventing distractions from the artwork.



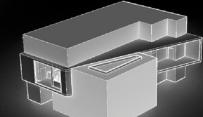
Ground Floor Gallery Diagram



Mezzanine Diagram



Third Floor Gallery Diagram



Third Floor Gallery Diagram