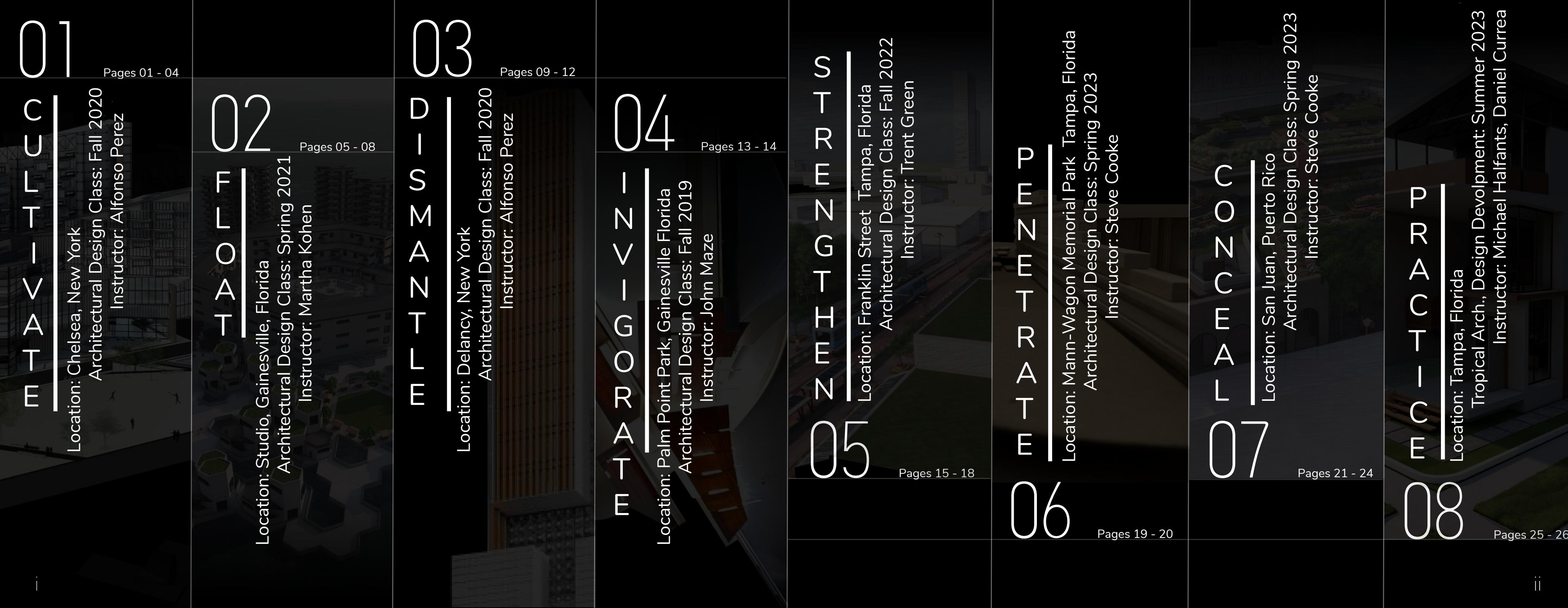


# Architectural Design Portfolio

Brian Espinosa  
Tampa, Florida





01 Π Τ Δ < — Τ Σ Σ

Location: Chelsea, New York  
Architectural Design Class: Fall 2020  
Instructor: Alfonso Perez  
Pages 01 - 04

02 Τ Δ Ο Τ Τ

Location: Studio, Gainesville, Florida  
Architectural Design Class: Spring 2021  
Instructor: Martha Kohen  
Pages 05 - 08

03 Π Γ — Ζ Δ Σ Ο — Δ

Location: Delancy, New York  
Architectural Design Class: Fall 2020  
Instructor: Alfonso Perez  
Pages 09 - 12

04 Π Η Δ Ρ Ο Γ — < Ζ —

Location: Palm Point Park, Gainesville Florida  
Architectural Design Class: Fall 2019  
Instructor: John Maze  
Pages 13 - 14

05 Ο Ζ Π Ι — Γ Ζ Π Ζ — Σ

Location: Franklin Street Tampa, Florida  
Architectural Design Class: Fall 2022  
Instructor: Trent Green  
Pages 15 - 18

06 Π — Δ Ρ — Ζ Ζ Ζ Ζ

Location: Mann-Wagon Memorial Park Tampa, Florida  
Architectural Design Class: Spring 2023  
Instructor: Steve Cooke  
Pages 19 - 20

07 Π — Δ Π Ζ Ζ Ζ Ζ

Location: San Juan, Puerto Rico  
Architectural Design Class: Spring 2023  
Instructor: Steve Cooke  
Pages 21 - 24

08 Π Κ — Η Ζ Δ Ζ Ζ

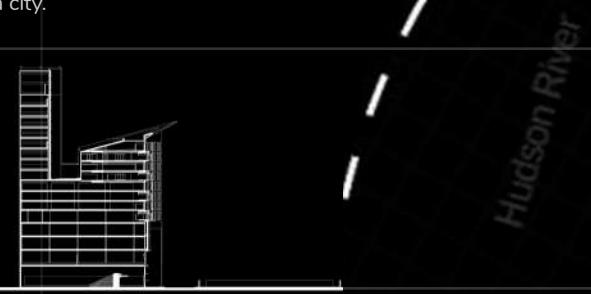
Location: Tampa, Florida  
Tropical Arch., Design Development: Summer 2023  
Instructor: Michael Halfants, Daniel Currea  
Pages 25 - 26

# 01 Cultivate

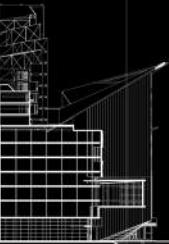
Techniques:  
AutoCAD  
Lumion  
Photoshop  
RayTrace  
Rhino

Traditional farming will no longer satisfy the growing population of New York and will need to be supplemented and replaced. Vertical farming would be introduced into the site to **enrich** the population with fresh produce.

The experimental and artistic nature of Chelsea, New York provides an ideal location for a new agricultural program that introduces new technology into a dense fabric, thus re-defining agriculture in a city.



Exhibition Section



Library Section

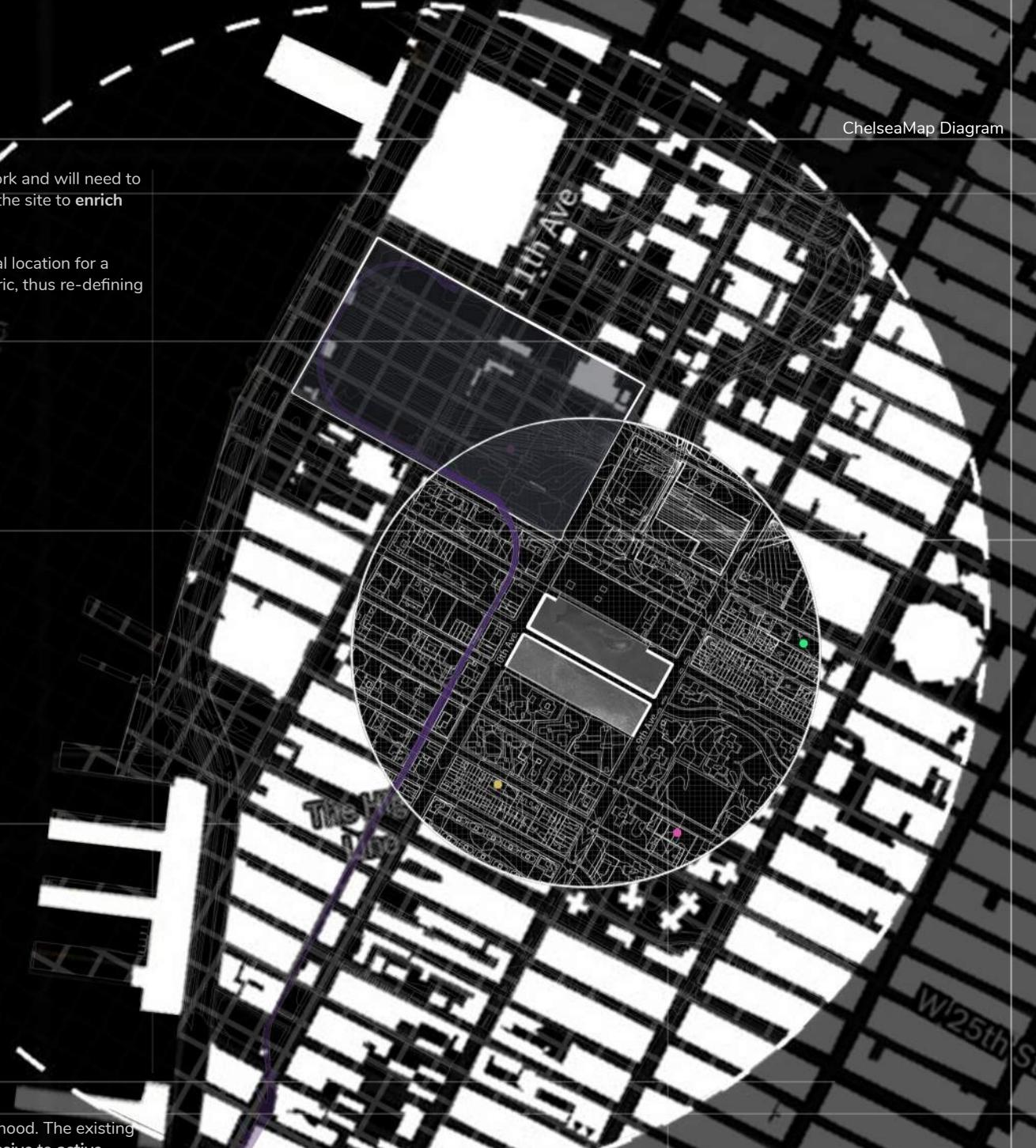


Vertical Farm Section

Chelsea park is considered one of the busiest public spaces in the neighborhood. The existing park was designed for the community with many visitors that vary from **passive** to **active** recreation.

01

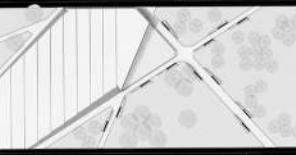
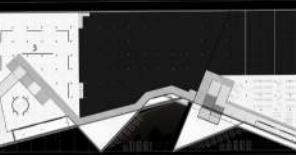
02



ChelseaMap Diagram



Environmental Effects of Traditional Agriculture



Key:  
1. Environmental Science Library  
2. Indoor Gymnasium  
3. Institute Exhibit

First Floor Plan with Context



Exterior Render

Agriculture is the most fundamental invention in human history. However, 70% of freshwater contamination is a direct result of traditional agriculture.

Nearly 3/4 of usable fresh water goes to agriculture. Despite the high-water use, traditional crop yield is under .75 pounds per square foot.

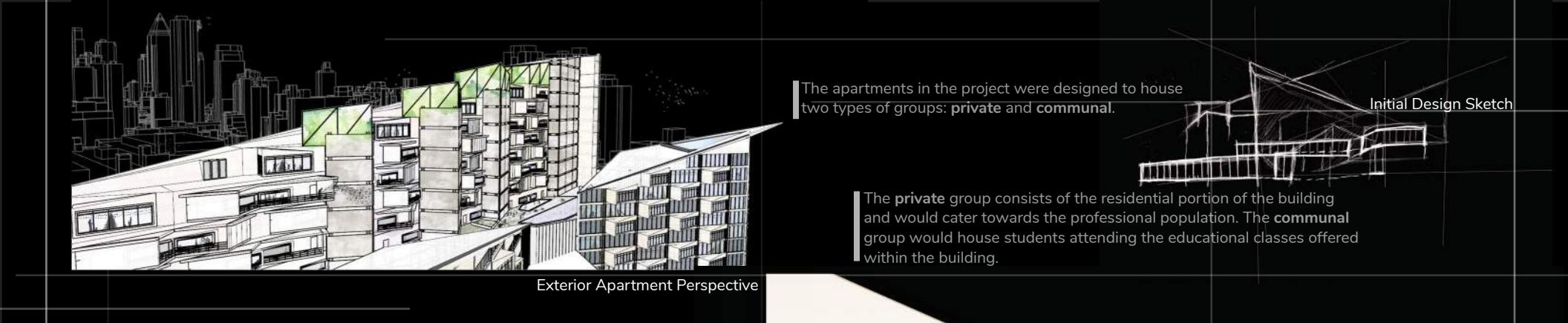


Interior Library Perspective

As dense living becomes an undeniable reality, field farming will become less and less relevant as cities expand into rural areas. Traditional farming will no longer be able to satisfy the growing populations.

The Cultivate Project introduces **controlled environment farming** to the Chelsea neighborhood. The high-density nature of this type of agriculture uses 95% less water than field agriculture and allows for the water to be recycled.

The form is inspired by an **abstracted form** of the standard New York City block. The architecture of the modularity of brownstones was pulled and pushed by creating edges into the jagged structures on the 28th street Façade. In a city where relaxed public outdoor space is highly coveted, this form allows for smaller pockets of relaxed space in a public setting.

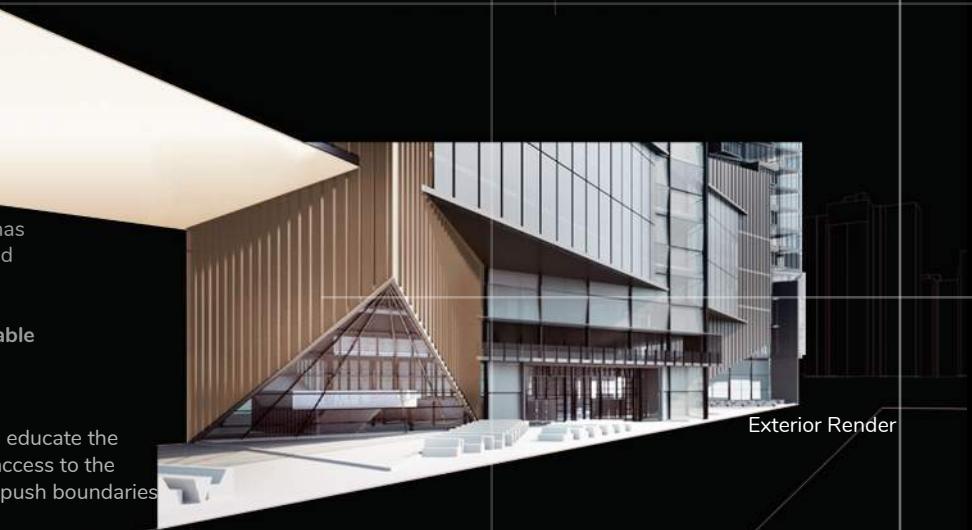


The apartments in the project were designed to house two types of groups: **private** and **communal**.



The **private** group consists of the residential portion of the building and would cater towards the professional population. The **communal** group would house students attending the educational classes offered within the building.

Exterior Apartment Perspective



Exterior Render

The vertical farms offer a unique design that can grow plants in **high densities** with relatively low floor space use - an ideal program for food production in a city like New York City. Since vertical farming is sustained solely on artificial lighting, it is an **ideal program** for these problematic spaces.

Controlled environment farming is a newer method in the agricultural industry, and the **potential** has yet to be fully realized. Especially in the city of New York where the blocks are notoriously large and therefore contain substantial core spaces.

For a farming facility of this size, the addition of a body of students and researchers will be **invaluable** in the pursuit of further advancing the awareness and production of types of farming that are still being explored.

The library will specialize in environmental sciences to benefit the institute and educate the community on how to live **sustainably**. The students at the institute will have access to the farming facility to study, test, research, and develop technical **innovations** and push boundaries of biotech in controlled environments.



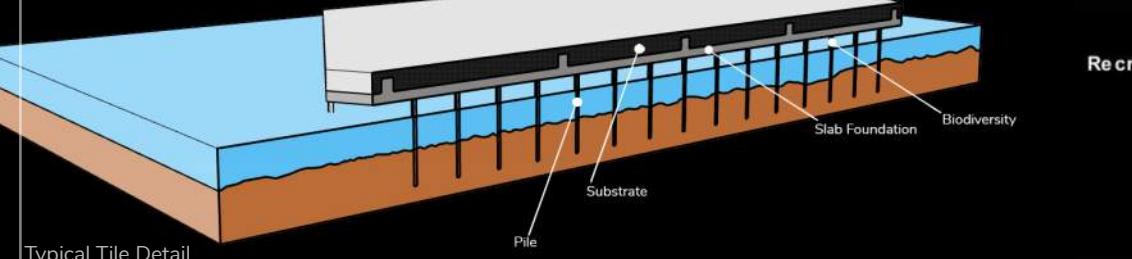
Section Elevation



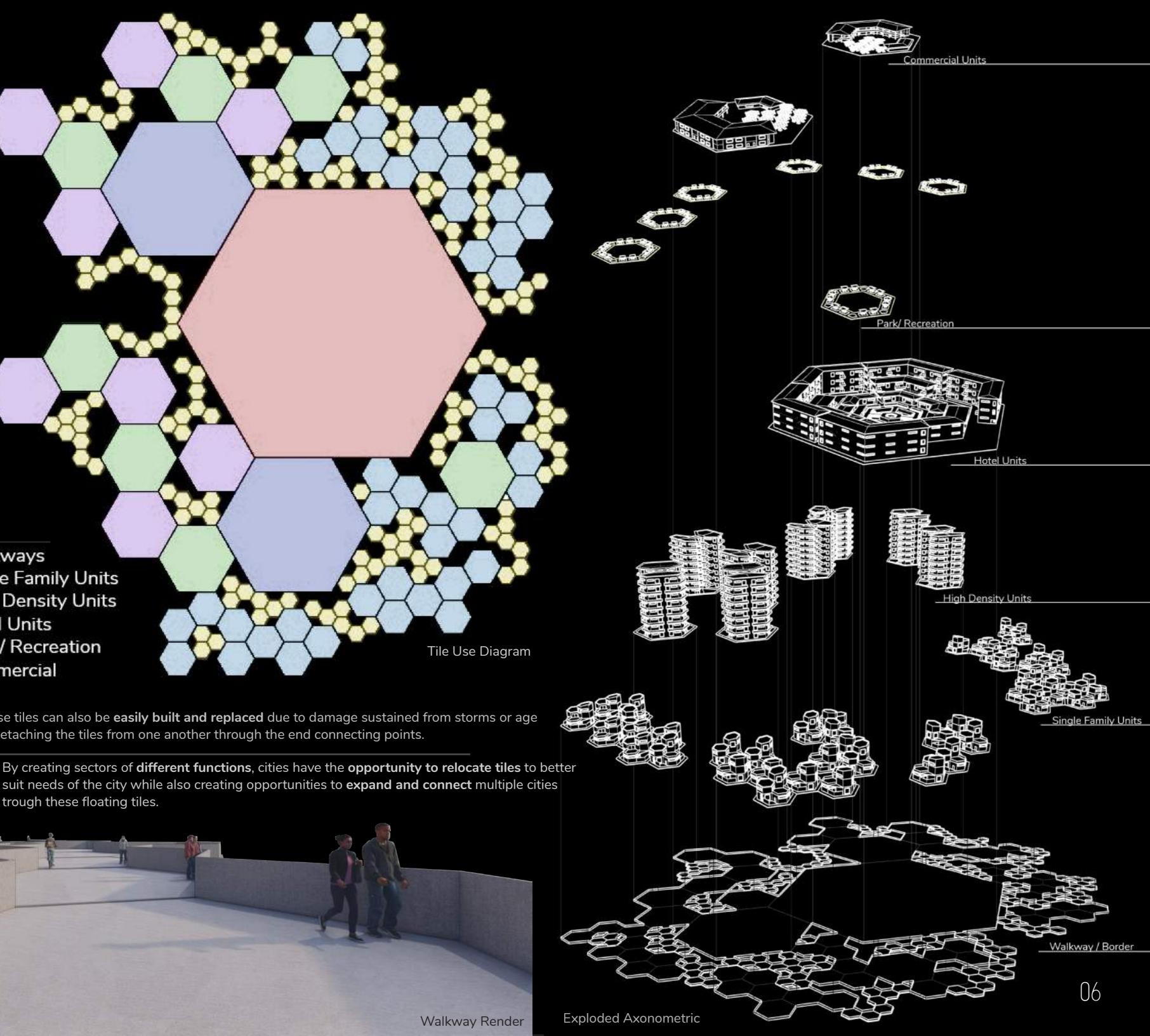
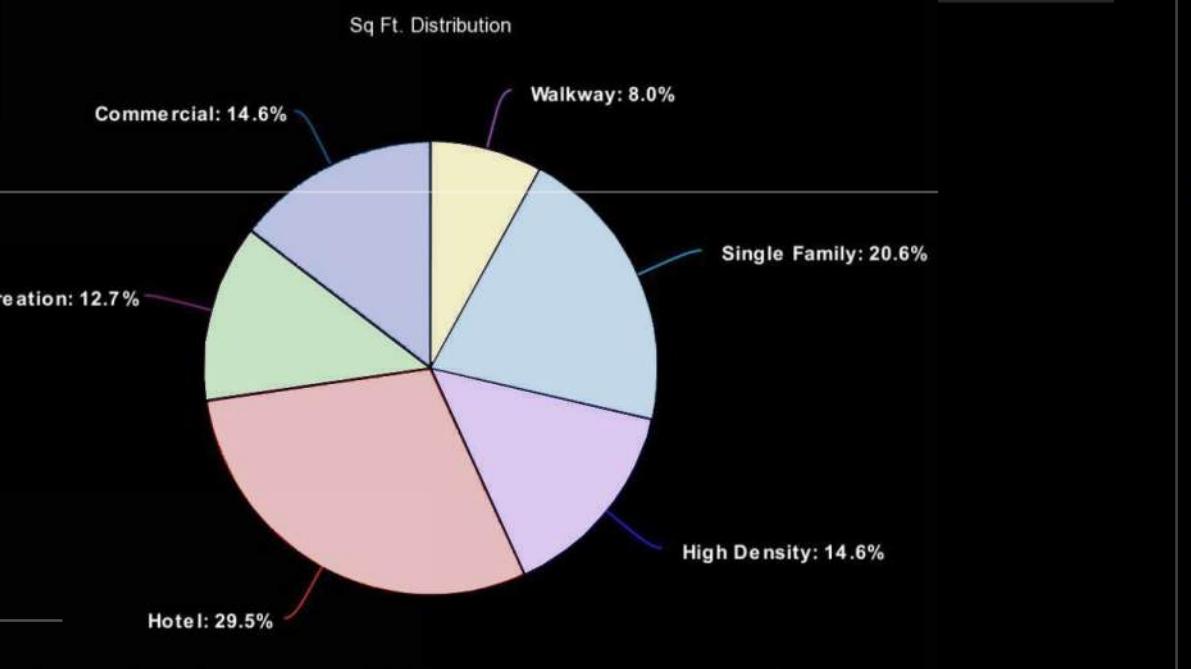
Exterior Render

# 02 Float

Techniques:  
AutoCAD  
Lumion  
Photoshop  
Rhino



Project Float focuses on **rising water levels** in existing cities. Areas like Miami and St. Augustine will experience heavier floods from tropical storms and hurricanes which could decimate neighborhoods and force people to evacuate.





Residential Tower Exterior Render

Examples of these tiles include mass living such as residential towers that could occupy more dwellers while also **connecting** them to tiles that include open green space and commercial use. Connecting tiles can improve social aspects of cities by adding multiple functions of activity to **promote healthier living** by walkable locations.

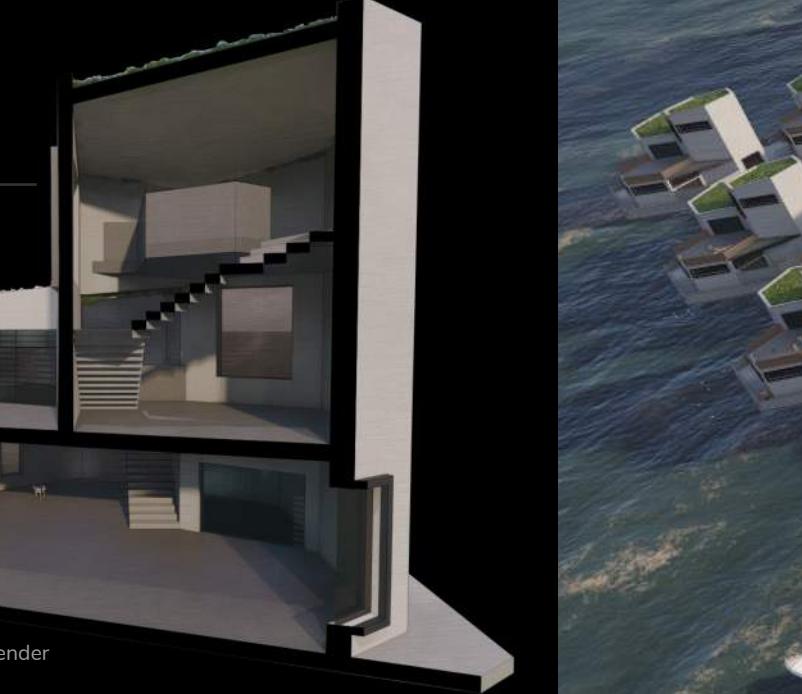
The **buoyant tile foundations and flexible structures** can help dissipate the energy of storms and tropical surges, reducing potential damage and increasing overall resilience to extreme weather events. These cities can incorporate **sustainable technologies** and practices, such as renewable energy sources (solar, wind, tidal), advanced waste management systems, and efficient transportation options.



07



Commercial Exterior Render



Single Residential Model Render

The floating residential tiles can offer additional living space without encroaching upon sensitive terrestrial ecosystems or exacerbating urban sprawl. By maintaining a central hotel core, this unique tourist destination can attract visitors interested in experiencing innovative urban environments. This could create new economic opportunities.

Project Float can promote marine biodiversity and ecosystem health. The integration of artificial reefs, underwater gardens, and sustainable aquaculture practices can help restore and protect marine life.



Exterior Render

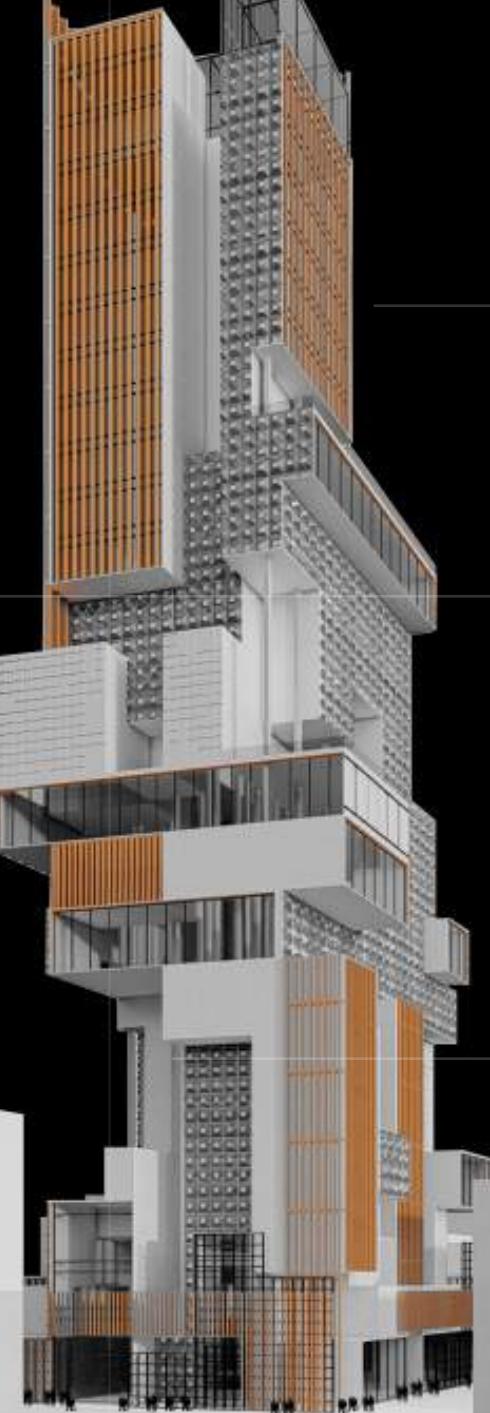
The Float Project sparks a vision of a **sustainable, adaptive, and interconnected** future. By introducing advanced technologies and innovative urban planning, these aquatic metropolises have the potential to address some of the most pressing issues people face in the current environment.

08

# 03

## Dismantle

Techniques:  
AutoCAD  
Lumion  
Photoshop  
Rhino  
Sketchup



Exterior Render



Interior Perspective

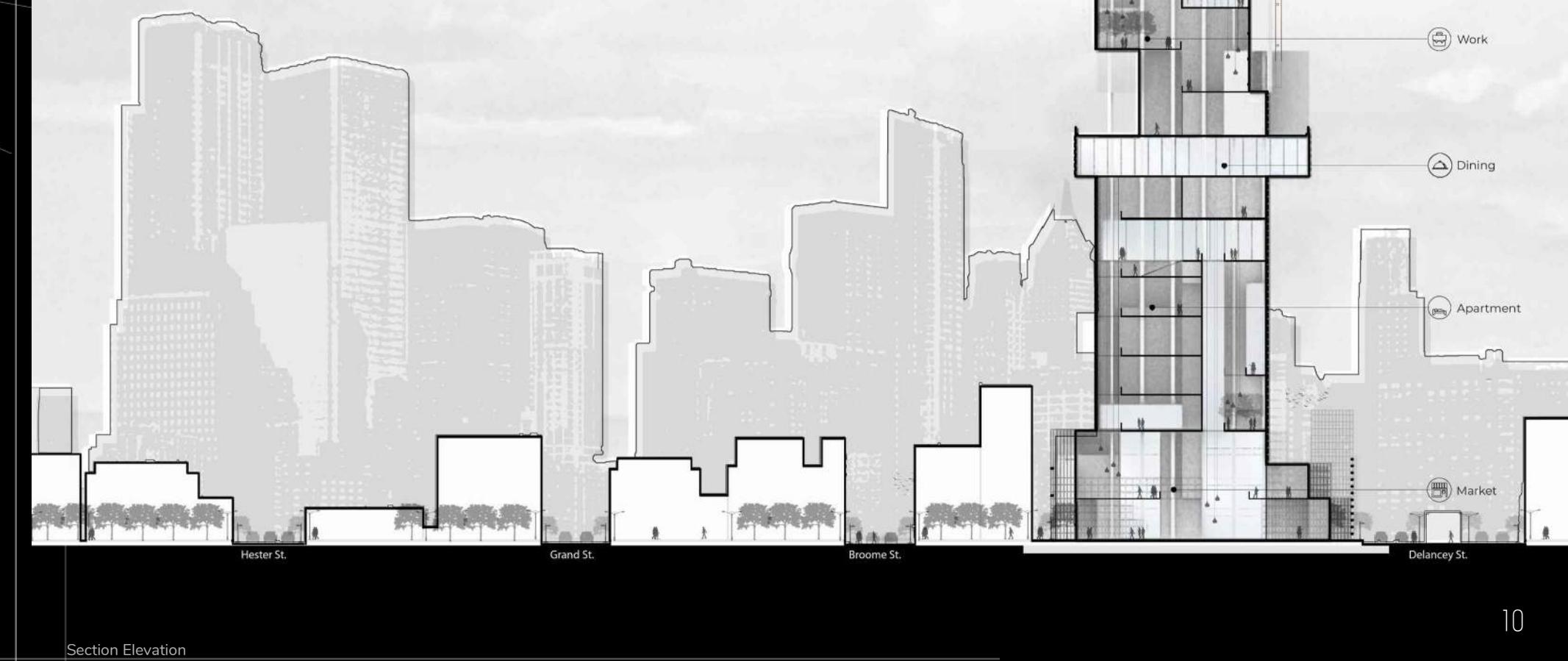
Project Dismantle houses a variety of amenities such as shops, lounges, bars, and restaurants. The objective of Project Dismantle is to create a space that **unifies** what is considered many different cultures and **blend** into one identity.

Project Dismantle offers the ability to house apartment units that **encourages** the local community to engage with the visiting community. Project Dismantle is taking what is many individuals with **different objectives** and creates one **unified system** that makes up New York.

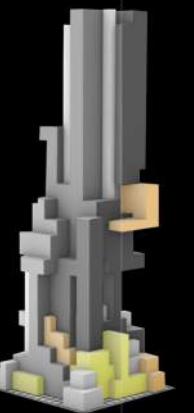


Street Perspective

Project Dismantle emphasises the singular **modular units** that combine the main space of the tower. The spaces are uniquely defined by the **shifts** of the modular components that **expand** or **contract** into the new engaging space.



Section Elevation



Initial Mass Model

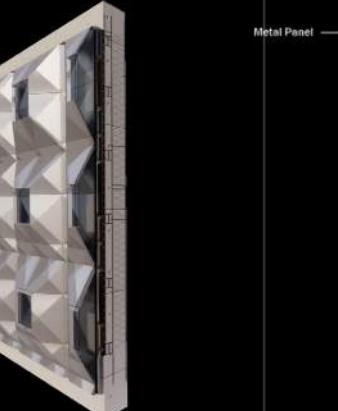
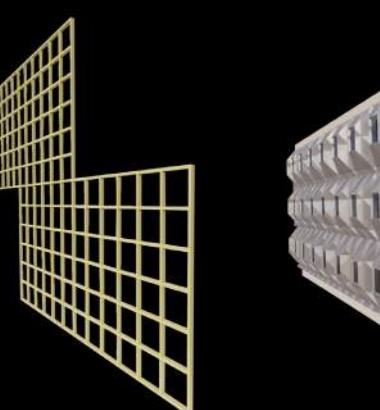
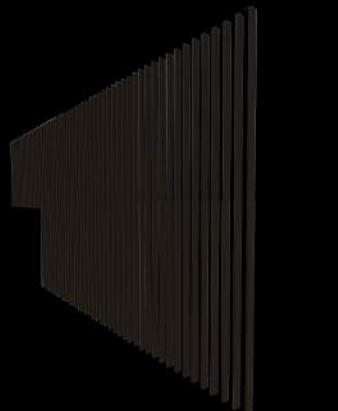


Main Interior Perspective

Diagram Section

Due to the **pushing** and **pulling** of masses on the physical form, there is no concise straight line that holds the form of the city on the first floor. New York is known for holding the edge of the city blocks.

To maintain the city block edge, the tower contains an external **gate** that **holds** the cities edge while also creating special **pockets of space** that allow for people to gather before entering the project.



Façade Section Perspective

Façade and Wall Section



Exterior Render

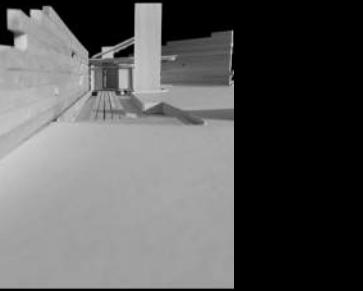
# 04 Invigorate

Techniques:  
 Hand Drawing  
 Layering  
 Physical Model Building  
 Photography  
 Photoshop



Lighting Study Photo

The Florida landscape is unique with its flooded, flat landscape. The design intent of the Florida Landscape project is to create a structure that could **manipulate** and **accentuate** the perks of the flooded landscape. The project houses a bath house that would accommodate individual and group baths. The main inspiration of the project was a traditional Japanese bath house. The research on Japanese bath houses introduced rituals and chores that the individuals would perform prior to bathing.



Entrance Model Photo

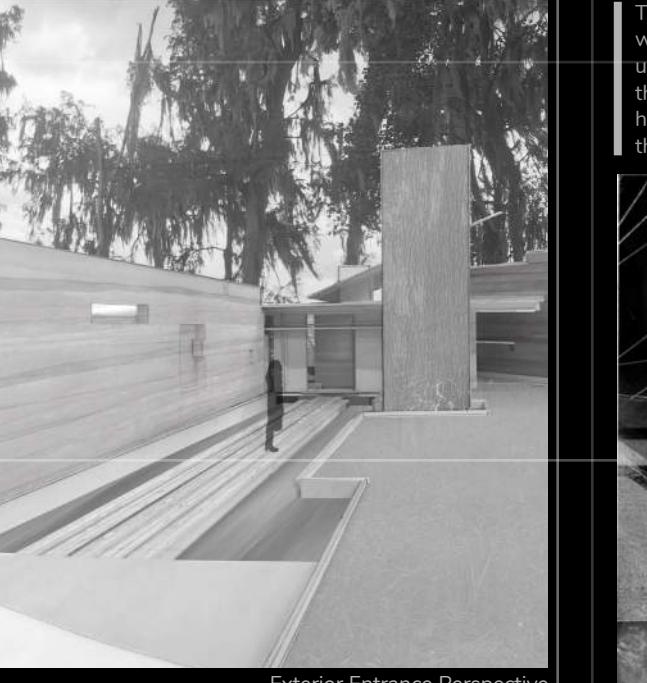
The material palette would contain rammed earth and concrete to assist with the hot climate of Florida. The project **manipulates** the water and sunlight to create a **harmonious** experience to the individual. The plan was to create an **invigorating** and **celebrated** space that continues beyond the confines of solid land and spans across the water.

The inhabitant would walk above the water and be able to touch the rammed earth upon entering the bath house. Entering the space, a genkan step invites the individual to remove their outside footwear which creates a moment of **pause** before entering the main space.



Diagrammatic Map Plans

The form of the bath house was created by finding the winter solstice line and creating an **axis** the project would revolve around.



Exterior Entrance Perspective



Main Space Interior Perspective

The rammed earth wall was designed to be placed across the water to create a **seamless** connection between defined and undefined ground. The inspiration came across a fisherman and the limit of his ability to move beyond the defined ground before him. By understanding the limitations, the architecture can stitch the fine line between ground and water.



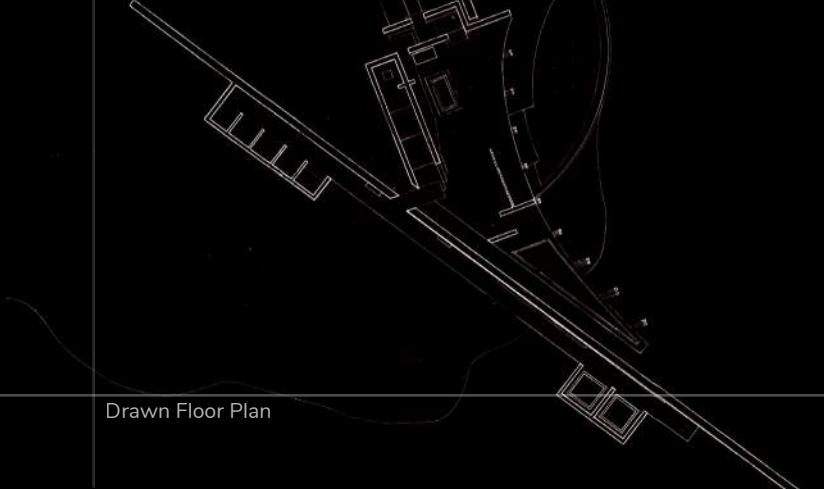
Site Diagram



Interior Model Photo

The **reflection** space that is tucked between the wall and furnace creates a dark space that emits small **slivers of light** to penetrate the space and create moments of **reflection** across the ground.

The rammed earth wall **splits** the main space into two spaces: **private** and **public**. On the public side, the space contains the group bath and light **reflection** space. The water is heated by a wood burn furnace. The water is then dispersed onto the bath locations initially upon entering the baths.



Drawn Floor Plan



Model Photo

# 05 Strengthen

Techniques:  
Photoshop  
Rhino  
AutoCAD  
Lumion



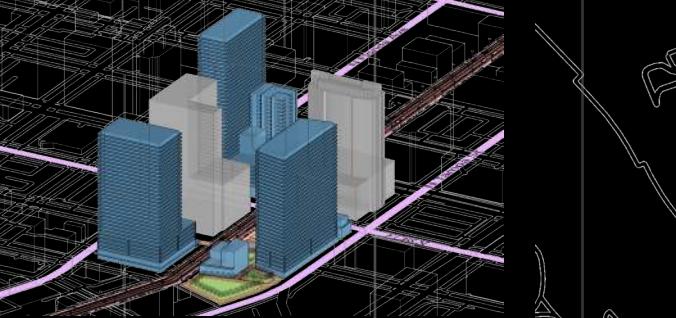
Section Perspective

Project Strengthen focuses on **reinforcing** the historic Franklin Street located in Tampa, Florida. By re-introducing and expanding the Tampa street car to enhance the pedestrian experience. This street car proposal can entice city goers to walk and use public transportation.

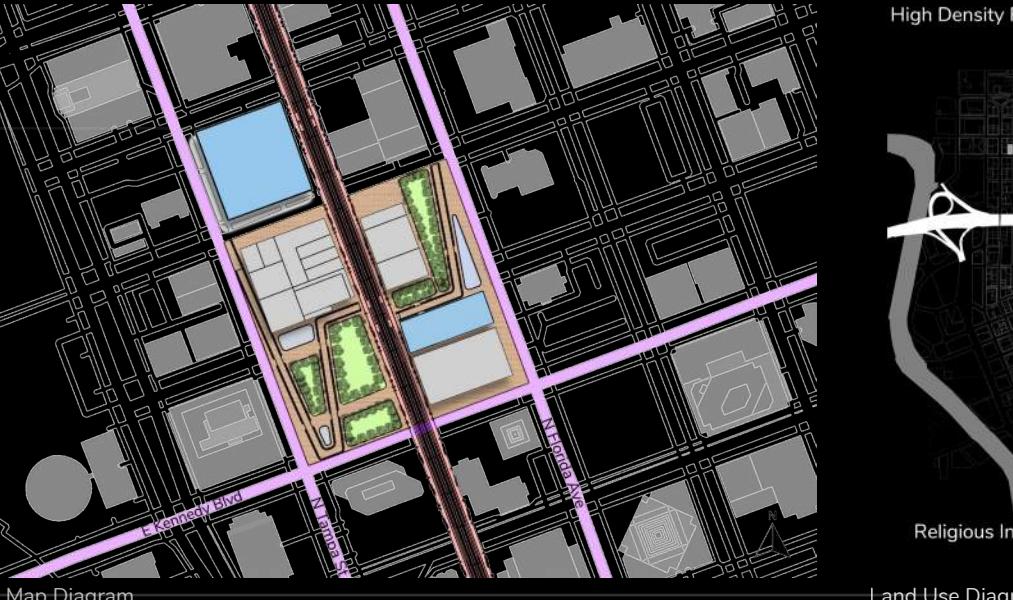


Exterior Render

Public transportation in America has a negative connotation due to the use of personal vehicles on the road. By focusing on development that relies on the public transit system, more inhabitants would rely on the street car and create a more inviting environment.



15



Street Car Stop Map Diagram



Currently Non-Occupied Area



Low Density Residential Area



Middle Density Residential Area



High Density Residential Area



Commercial Area



Educational Institutions Area



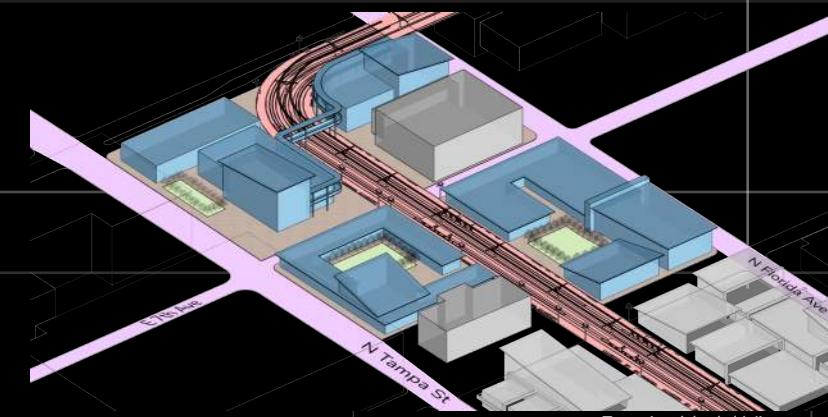
Religious Institutions Area



Government Institutes, Public Utilities, and Amenities Area



Parks and Recreations



Exterior Model View

Adding residential, commercial and public parks can **amplify** the desolate street of Franklin Street and create a more lively and inclusive environment for people to walk down the street to experience various activities.



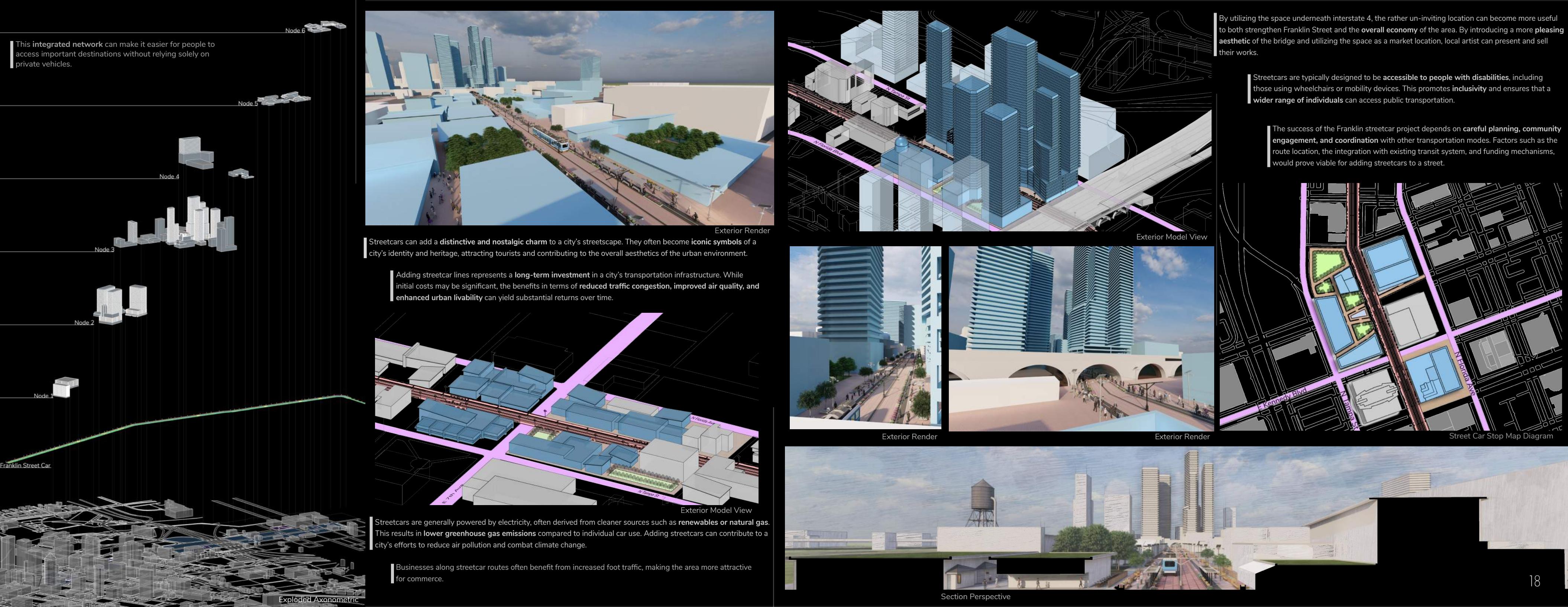
Street Car Stop Map Diagram

Franklin Street can also spread past the street and bring in and disperse the foot traffic onto other successful locations south as river walk, water street, and Armature Works. This can also help Franklin Street succeed from the **connectivity of the different locations**.



Exterior Render

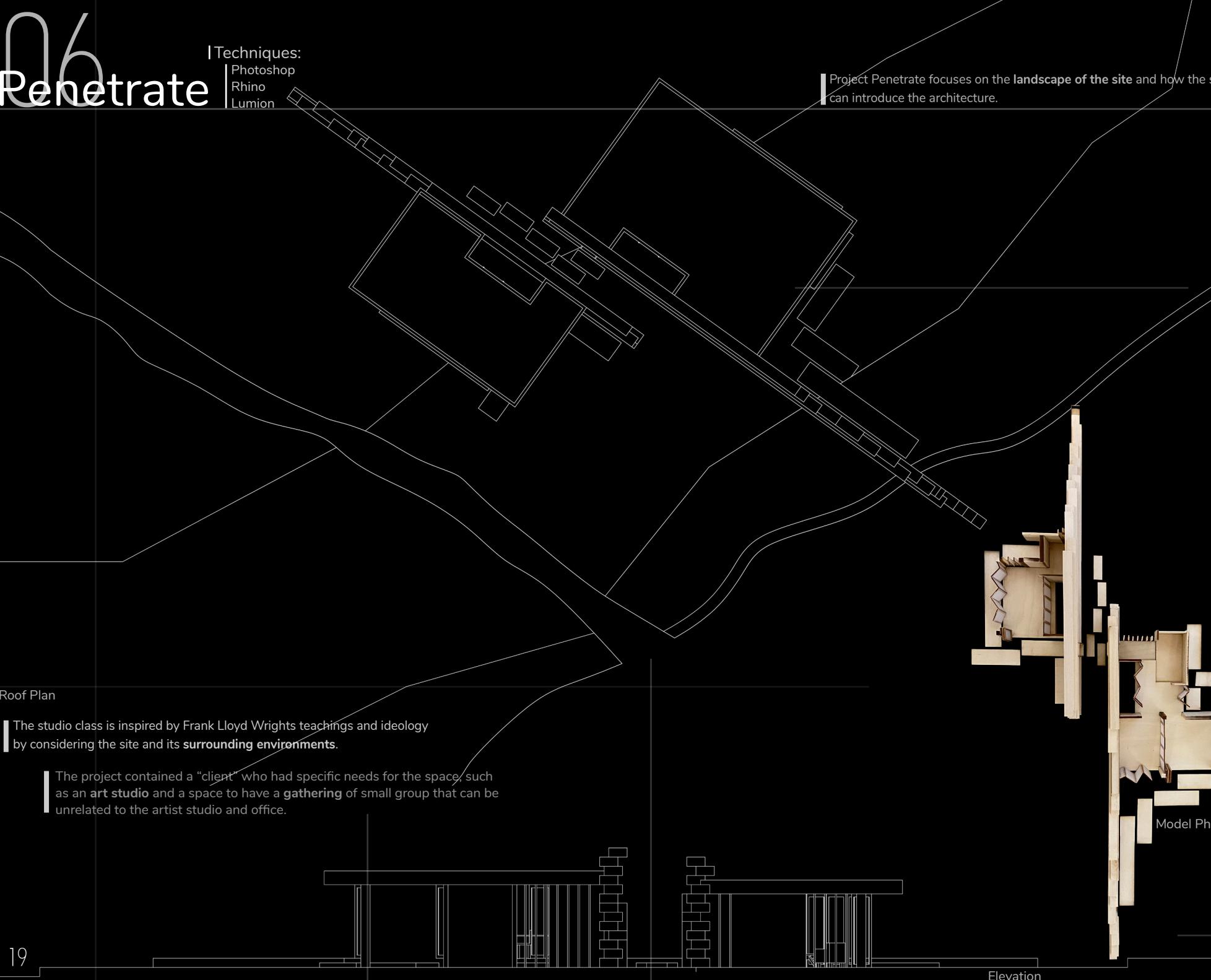
16



## 06

## Renetrate

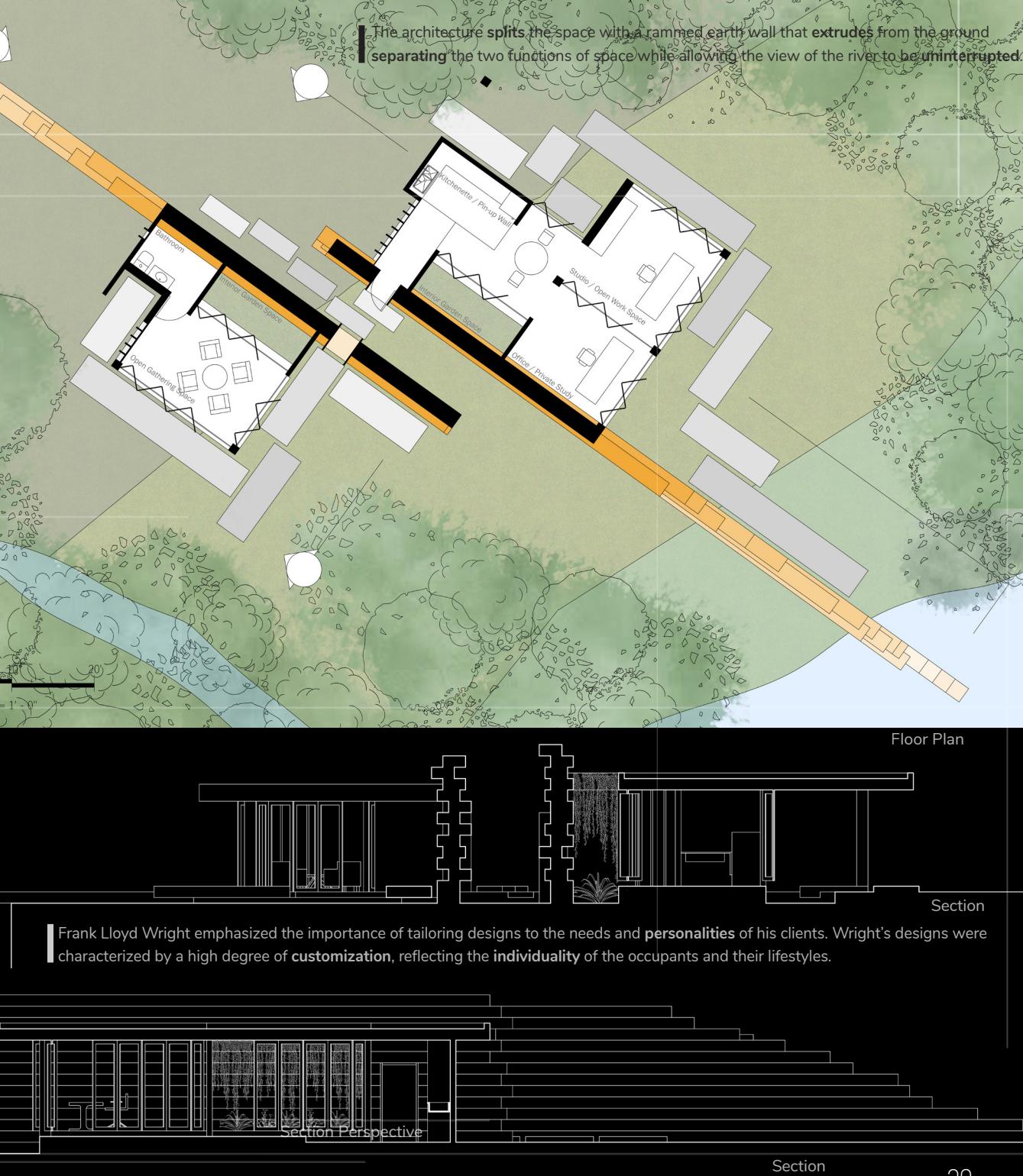
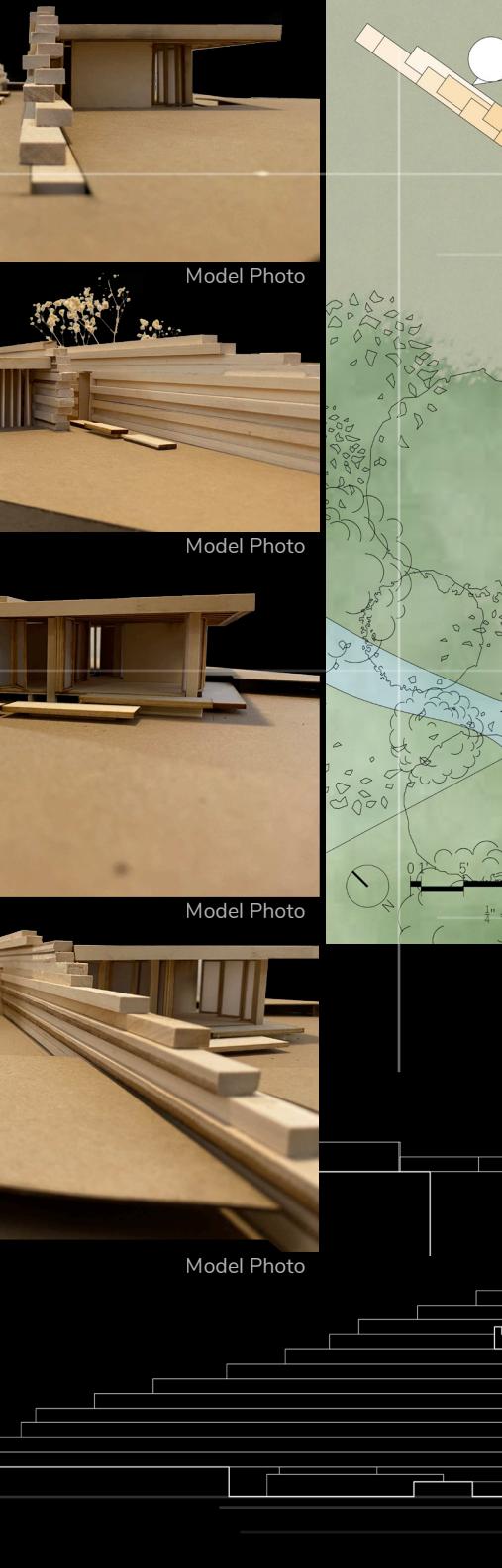
I Techniques:  
Photoshop  
Rhino  
Lumion



The studio class is inspired by Frank Lloyd Wright's teachings and ideology by considering the site and its **surrounding environments**.

The project contained a "client" who had specific needs for the space, such as an **art studio** and a space to have a **gathering** of small group that can be unrelated to the artist studio and office.

Project Penetrate focuses on the **landscape of the site** and how the site can introduce the architecture.



# 07 Conceal

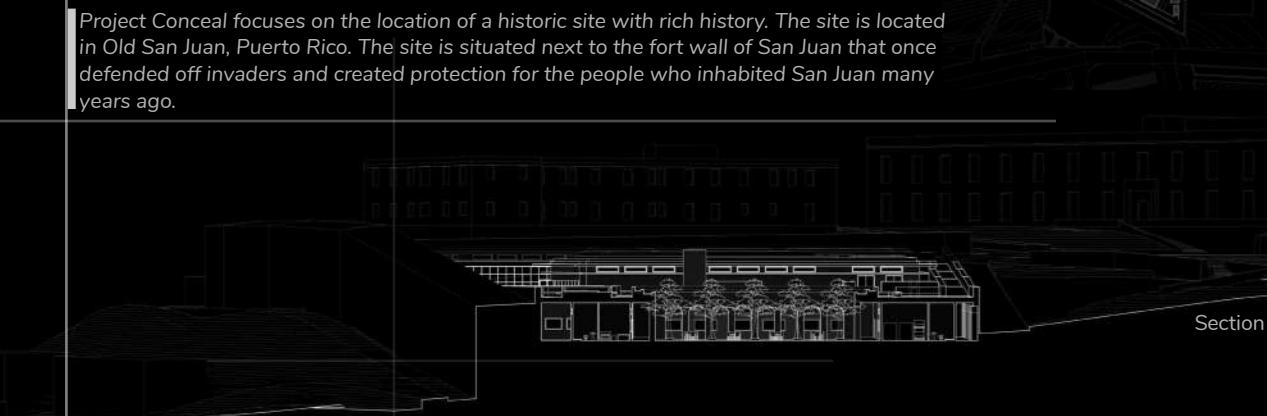
## Techniques:

- AutoCAD
- Hand Drawing
- Photography
- Physical Model Building
- Lumion
- Rhino

Project Conceal focuses on the location of a historic site with rich history. The site is located in Old San Juan, Puerto Rico. The site is situated next to the fort wall of San Juan that once defended off invaders and created protection for the people who inhabited San Juan many years ago.

The site contains **exquisite views** to the edge of the fort and the ocean beyond. The architecture was imperative not to interrupt the view that many tourists and locals travel to for entertainment.

By building underground, valuable surface land can be **preserved** for parks, gardens, recreational areas, and natural habitats. This approach helps **maintain green spaces** and contributes to the overall **quality of the urban environment**.



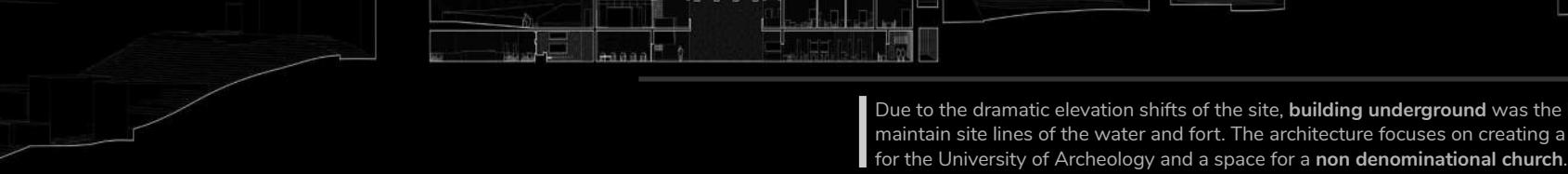
Section



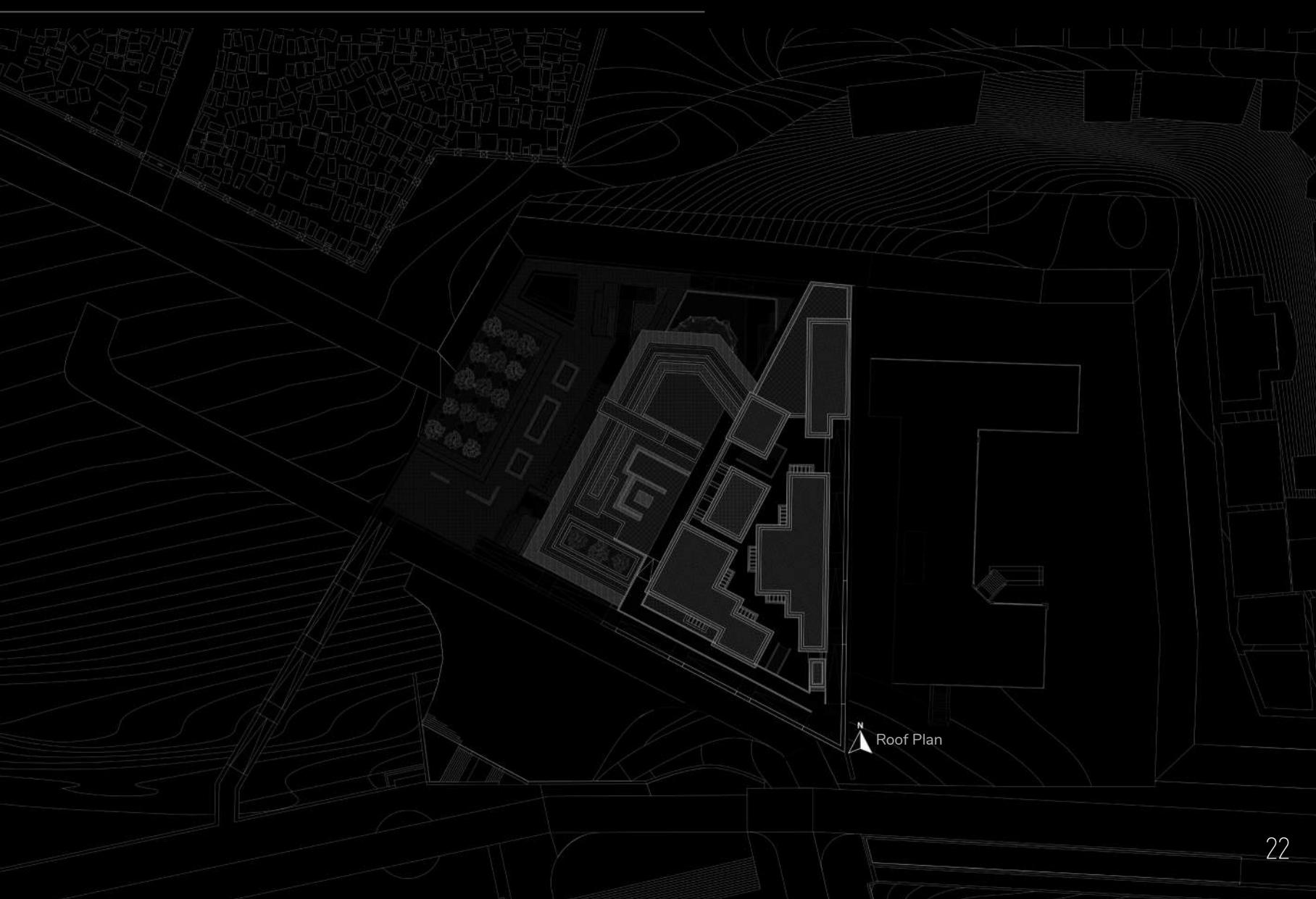
Interior Render



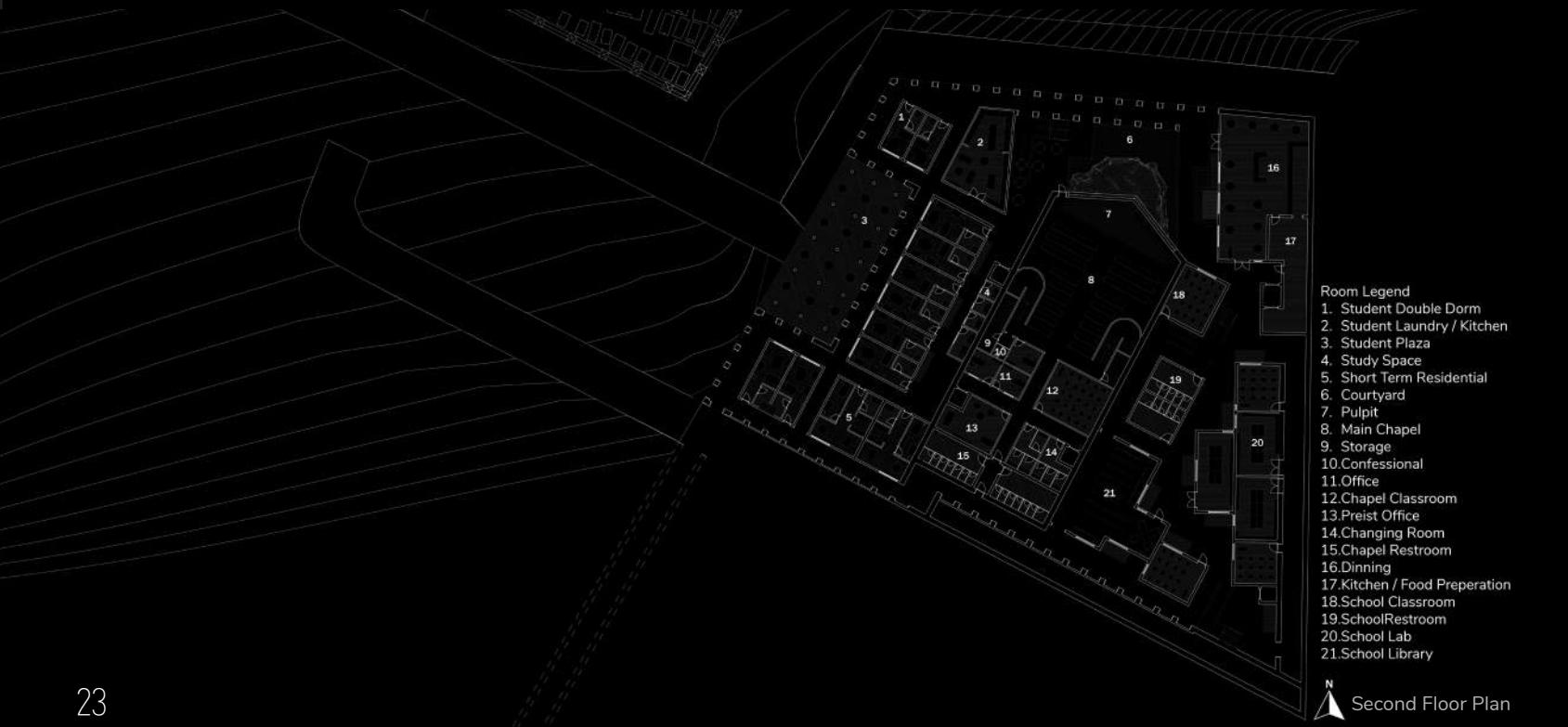
Exterior Render



Section



Due to the dramatic elevation shifts of the site, **building underground** was the best situation to maintain site lines of the water and fort. The architecture focuses on creating a **learning space** for the University of Archeology and a space for a **non denominational church**.



# 08 Practice

## Tropical Architecture Summer 2023

Techniques:  
Revit  
Rhino  
Lumion



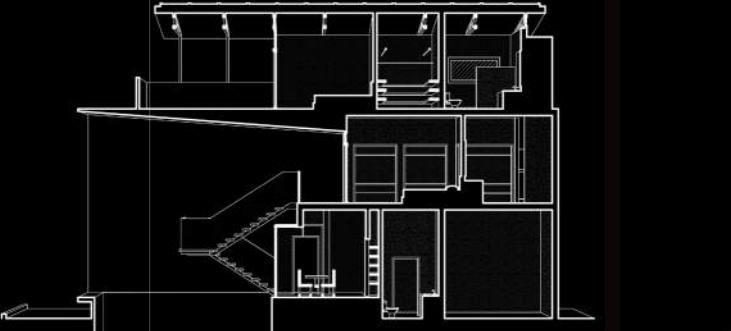
Exterior Render



LUMION  
Interior Render



LUMION  
Interior Render



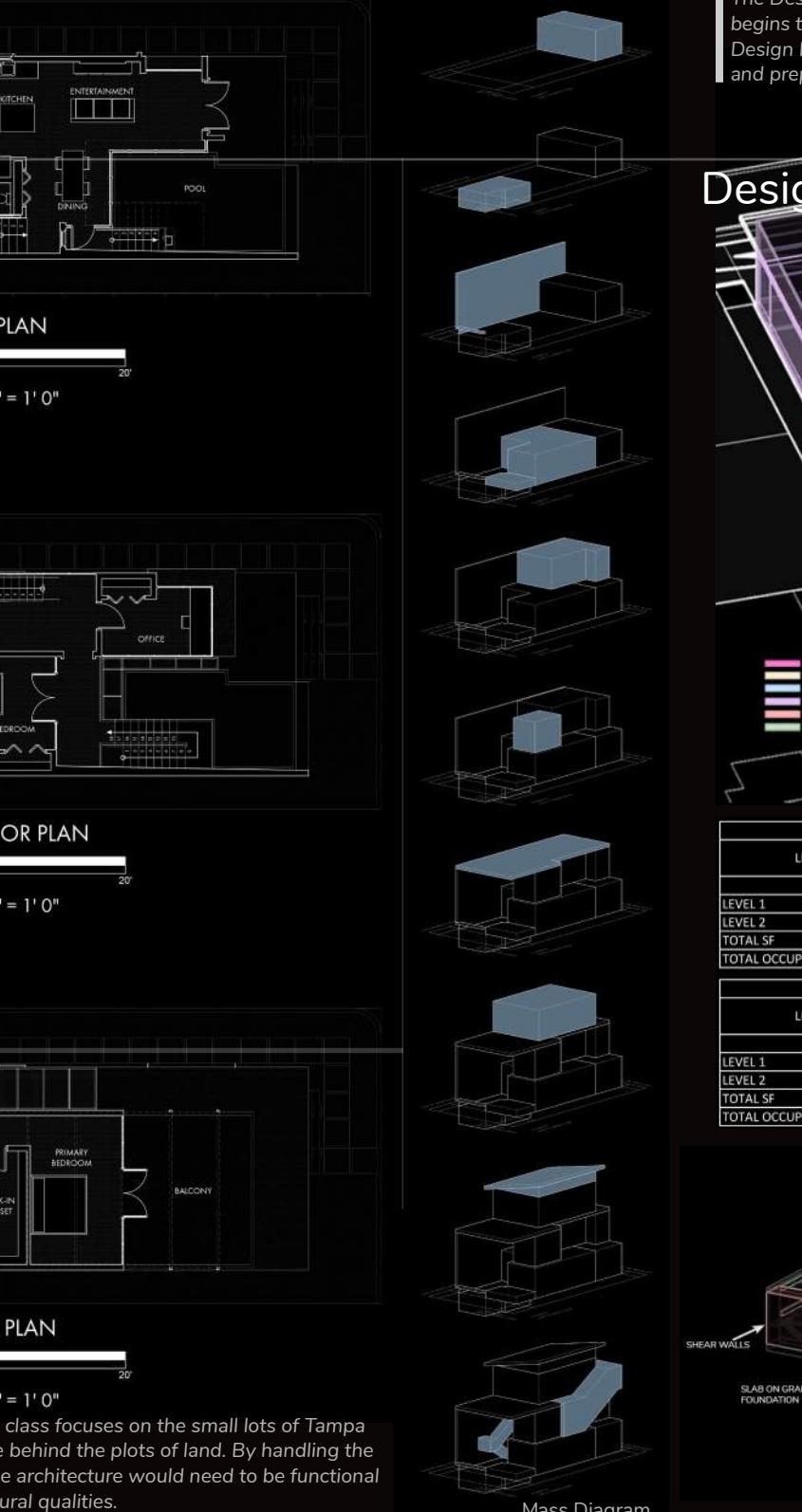
LONGITUDINAL SECTION

SCALE BAR:  $\frac{1}{8} = 1' 0''$

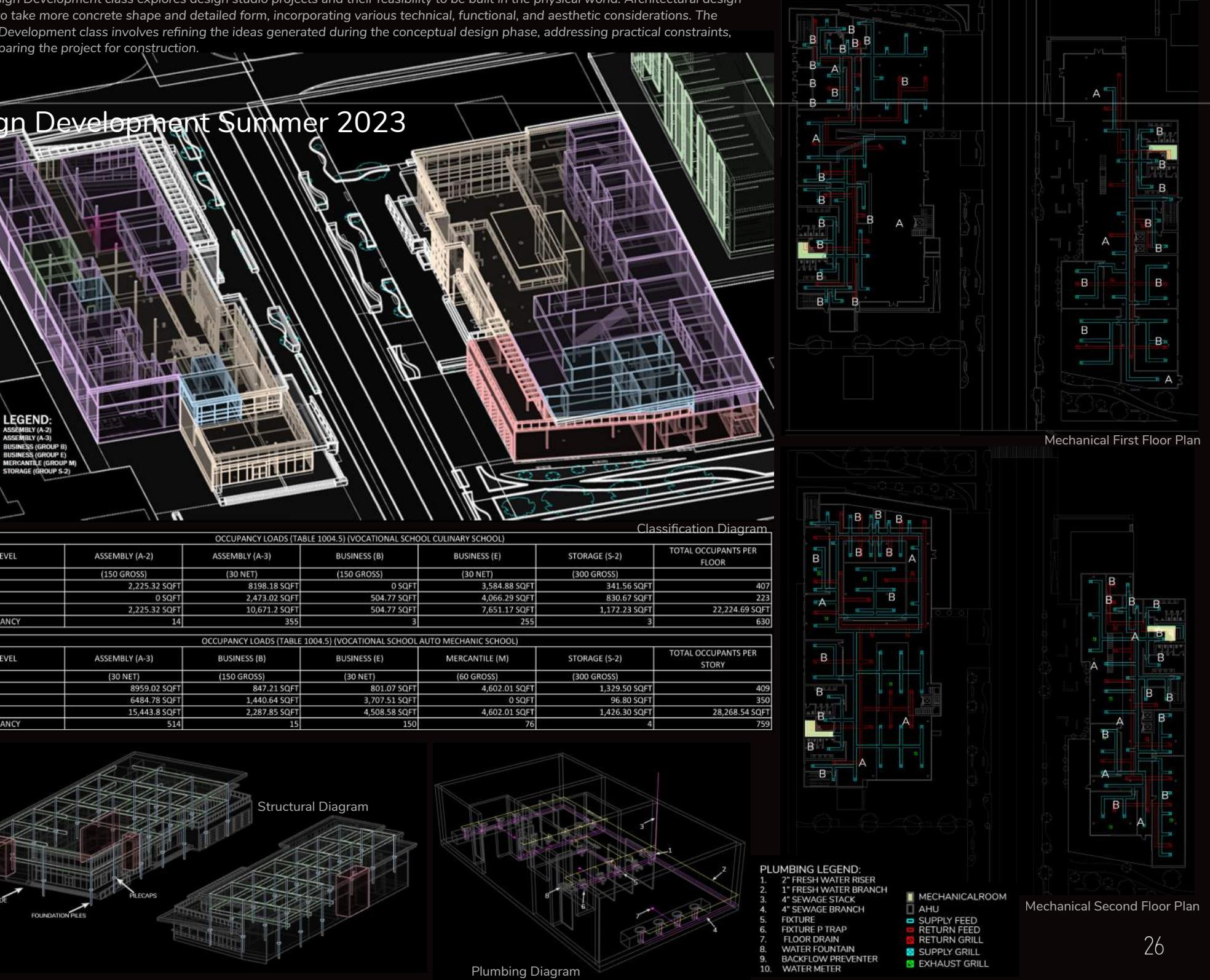


CROSS SECTION

SCALE BAR:  $\frac{1}{8} = 1' 0''$



The Tropical Architecture class focuses on the small lots of Tampa and the historic relevance behind the plots of land. By handling the challenges of slim lots, the architecture would need to be functional by also creating architectural qualities.



# 2021 – Current Professional Works

## Zyscovich Wellen Park High School Sarasota, Florida



The single-building Wellen Park facility will feature signature spaces including a welcome center designed to encourage parent participation; a common areas functioning as a cafeteria, the school's largest classroom and a community event space; an innovation zone housing engineering, entrepreneurship and tourism labs; the second-floor student union with a library, counseling and career services overlooking the commons area; an 850-seat performing arts center; and a championship gymnasium with training and athletic centers.

The high school is one of three new schools planned for more than 4,200 students in the rapidly growing Wellen Park, ranked the second-fastest growing community in the country for 2022. Also coming is a for-profit K-6 charter school — for more than 600 students, expected to open this fall — and Sarasota County Schools' planned K-8 school next to the new high school.

Wellen Park is planned for 22,500 homes and 50,000 residents — more than five times its current population of about 9,500 residents.



Future high school students in Wellen Park will study science in an outdoor living lab, collaborate on project-based assignments in a large common areas, enjoy a collegiate-inspired student union and get a jump start on skills needed by local companies.

With nature as its guide, the 2,100-person capacity student building represents the future of Sarasota high schools. The \$175 million high school — the first built by Sarasota County Schools in 30 years — is located on River Road and the future Manasota Beach Road extension. Expected to open in August 2025, the 325,000-square-foot school is a radical departure from traditional sprawling campuses. The compact three-story design improves security and student circulation, Jane Dreger, director of construction services, told the school board.



Exterior Render

First Floor Plan



Project Create is a self-assigned project. The goal of the project was to create spatial differences.

Exterior Render

Parking will be conveniently located underground and out of site, while designated on-street ride-sharing drop-off and pick-up areas will be provided.



Exterior Render



Exterior Render

## Gresham Smith Nashville Yards Parcel 9 Nashville, Tennessee

When real estate investors Southwest Value Partners purchased a 16-acre site in a prime location on the western edge of downtown Nashville, Gresham Smith was brought on to help reimagine its potential. The result is a high-quality, urban community that celebrates Nashville's roots while introducing an eclectic mix of spaces that continues to advance the world-class city.

Nashville Yards site was once a railyard: the place that people and goods entered Nashville. With the new development, Nashville Yards once again becomes the gateway to the city through the creative combination of additions to the city's skyline and a layered walkable environment.



Exterior Render

Integrated design features such as pedestrian plazas and common branding elements that influence the way people will engage with streets, sidewalks and lighting will create a holistic feeling within Nashville Yards.



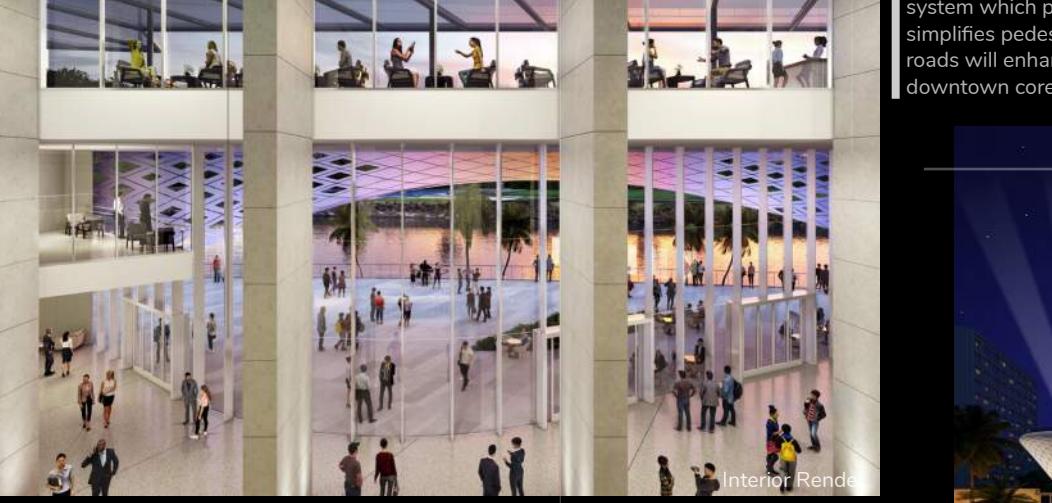
Exterior Render

Overall, the project is estimated to generate over \$36 billion in economic impact to the region.



Gresham Smith and DLR group joined to create the Straz Center expansion project by adding new functions and activities.

The expansion of the complex resolves several key challenges restricting Straz's ability to remain a state-of-the-art performance facility.



Straz will also be adding a series of interventions such as an expanded lobby, updated food and beverage services, a new event center, an arrival plaza, and outdoor event terraces.

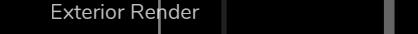


# Gresham Smith

## Straz Performing Arts Center

Tampa, Florida

The David A. Straz Center for the Performing Arts commands a prominent 10-acre site along the Hillsborough River, and is the sixth largest performing arts center in the U.S. Built in 1987 on an abandoned gravel lot, it is now home to Opera Tampa, the Patel Conservatory, and six theaters/rehearsal halls.



The Straz expansion will contain a redesigned vehicular road system which provides much-needed space for parking and simplifies pedestrian and vehicular circulation. These upgraded roads will enhance the connection of the Straz to the river and downtown core.



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