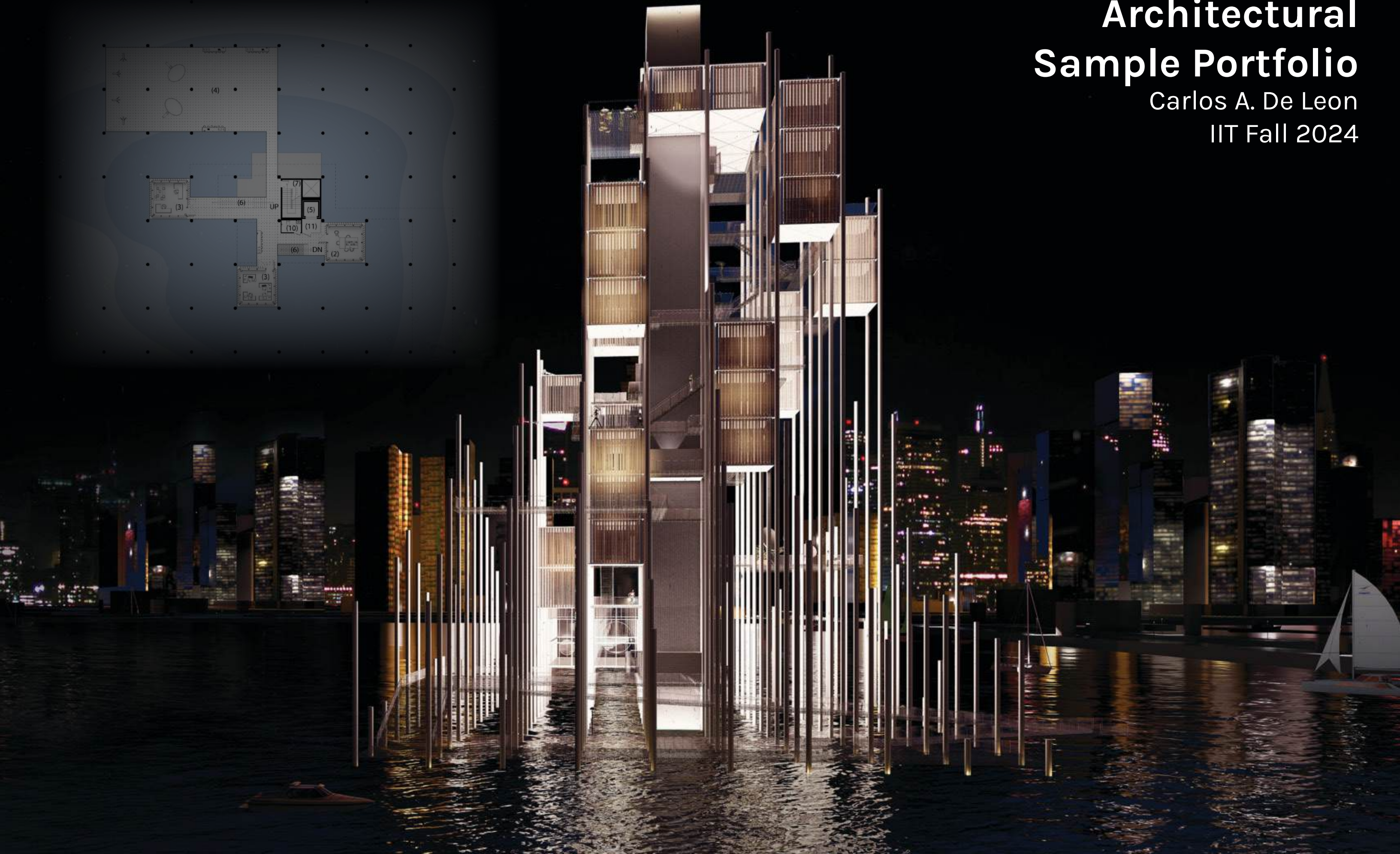


Architectural Sample Portfolio

Carlos A. De Leon
IIT Fall 2024



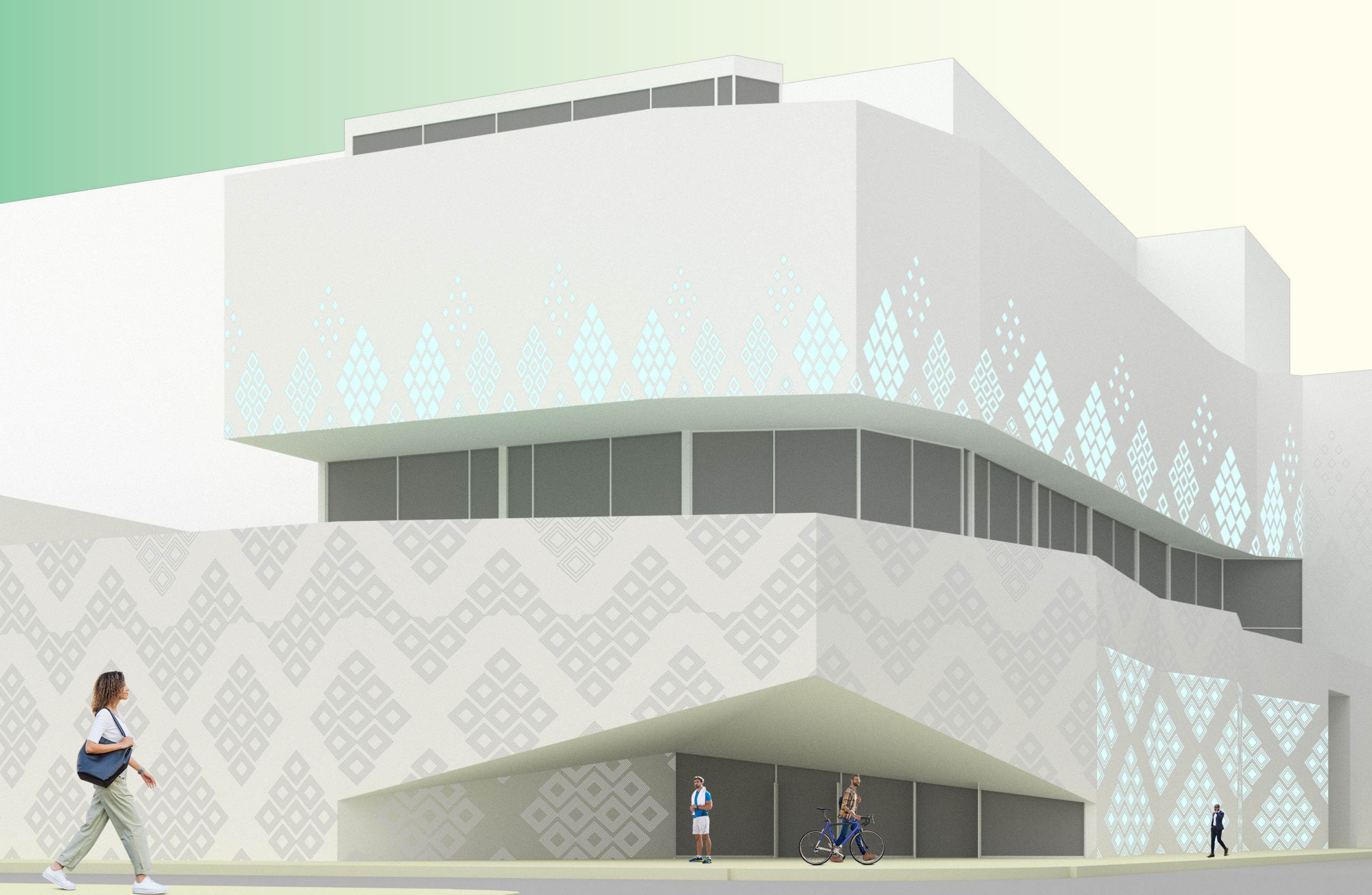


Table of Contents

Water Garden 3

The Emergence of Peace 5

Aquatic Science Forum 9

Brazilian Mosaic 12

Contact Information

Full Name: Carlos A. De Leon

University: Illinois Institute of Technology

Degree: Bachelor of Architecture

Phone #: 224-226-5752

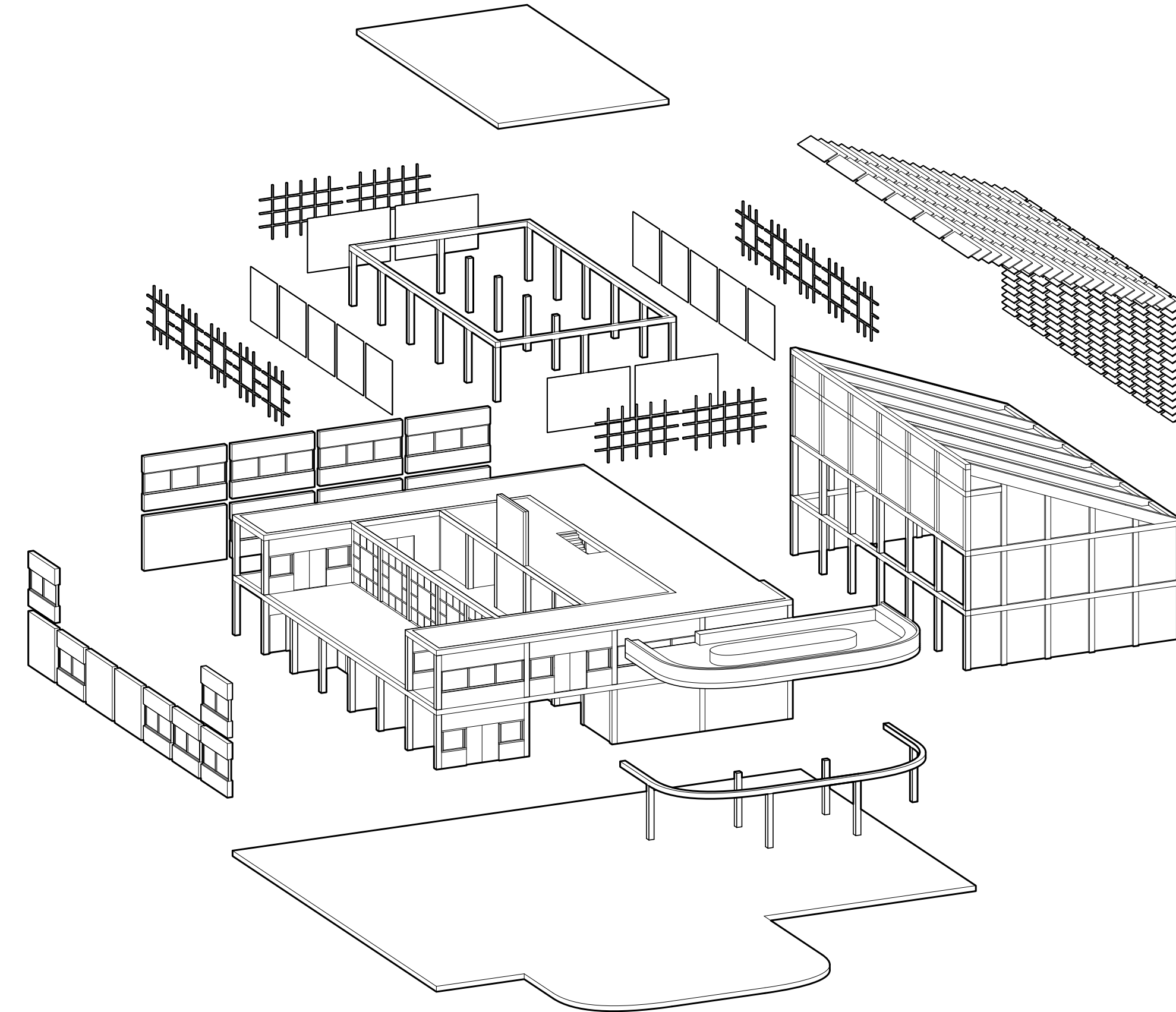
Email: carlos.deleon31@yahoo.com

Website: <https://www.arch-design-portfolio.com/>



Water Garden - ARCH 305 - Studio V: Hybrid - Fall 2022

Made to accommodate a variety of activities year-round, the Water Garden is a fieldhouse designed around a natatorium with sloped roof panels. The roof panels block sun during the summer and allow sun during winter, making swimming an enjoyable experience no matter the weather. A large multipurpose event space is situated on the center of the building and provides a clear view of the neighborhood. The Water Garden sits in 4801 S Marshfield Ave.

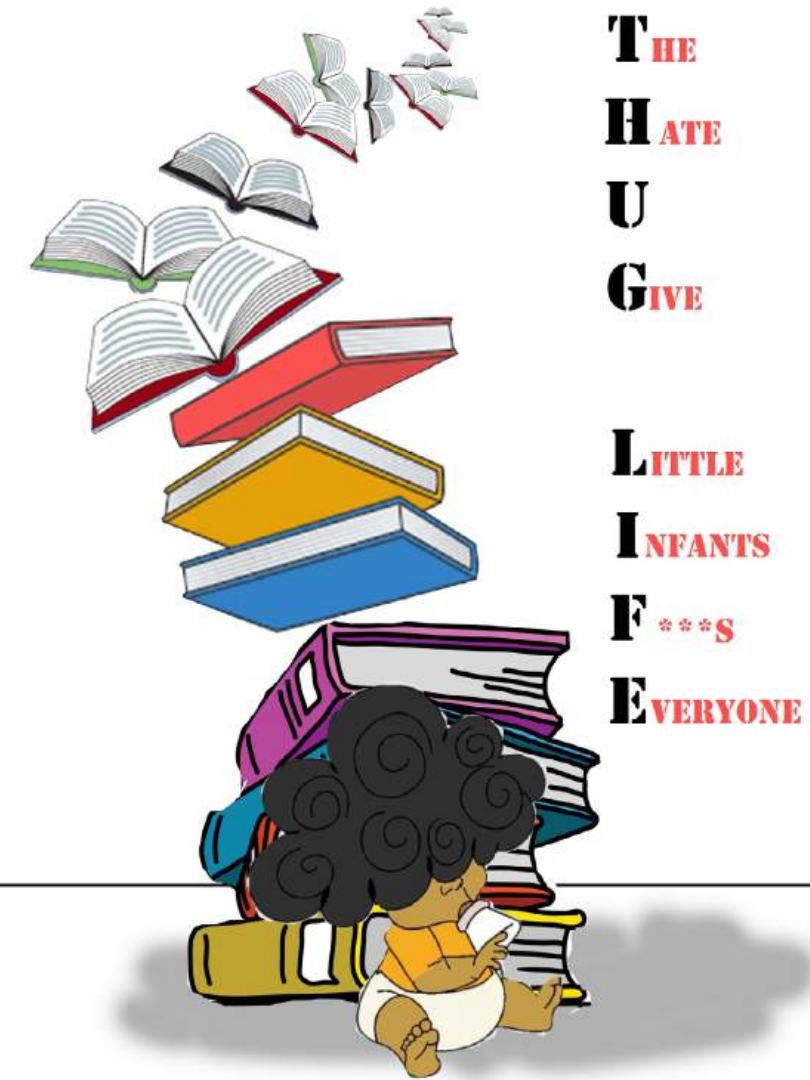




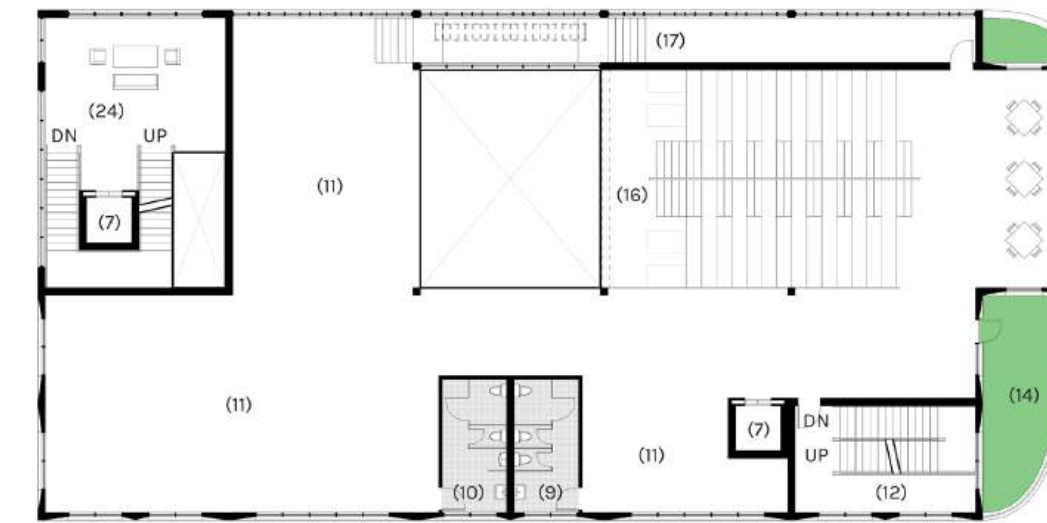
The Emergence of Peace - ARCH 418 - Studio VIII: Synthesis - Spring 2024

The Emergence of Peace is an initiative to foster an interactive experience for the community of Bronzeville, providing opportunity for recovery, transformation, and humanization of black and brown people. To do this, several play areas were placed to turn this peace museum into a playground as well as a host of library books to educate and minimize effects of discrimination in educational, social, and other domains. As a result, this peace museum emerges as a beacon facing E 47th St, adjacent to S King Dr.

EMERGENCE OF PEACE MUSEUM

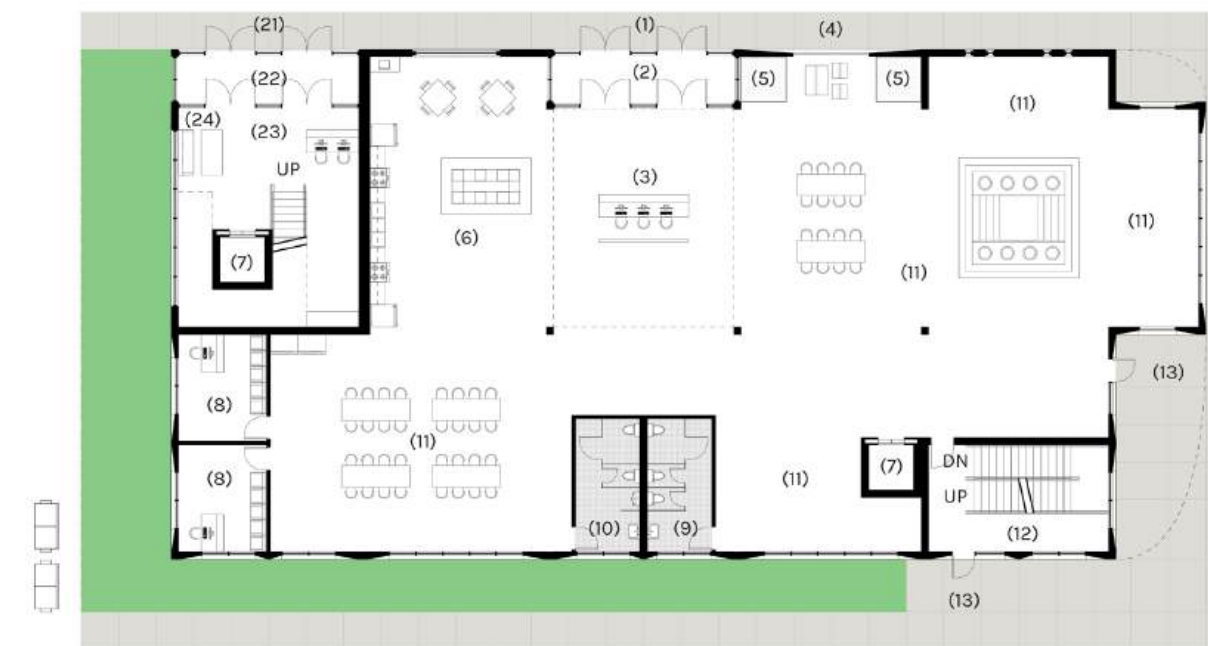


^ Concept diagram by Tukesha Hill



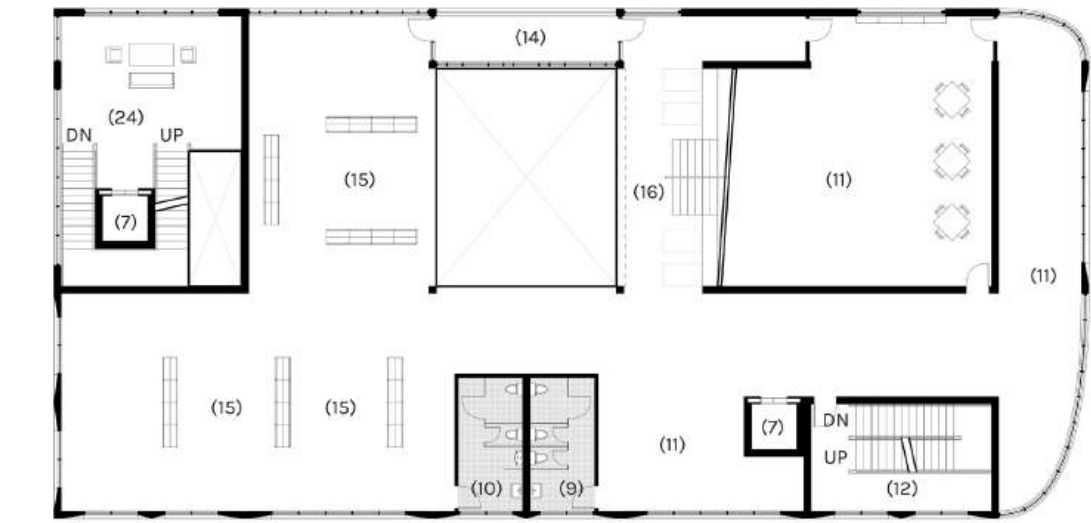
3rd Floor Plan

Scale: 3/32" = 1' - 0"



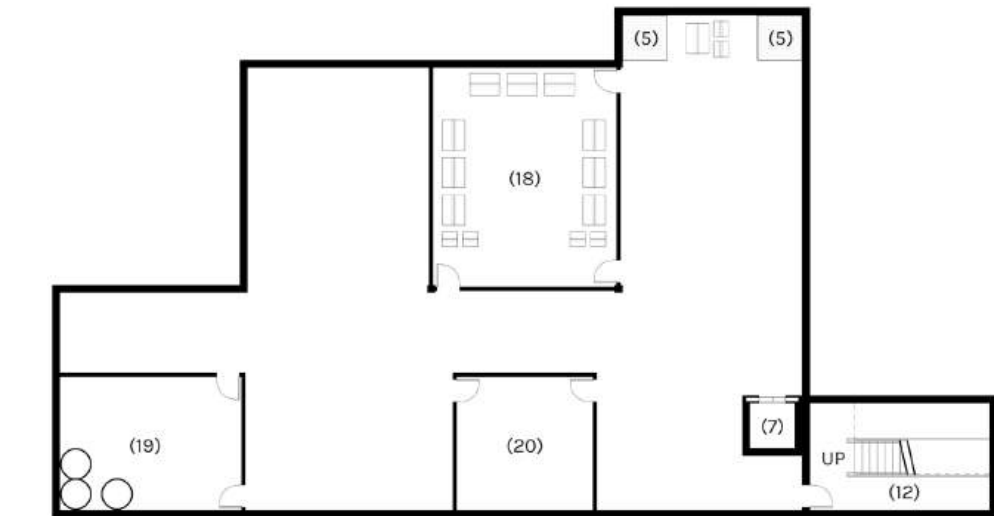
Ground Floor Plan

Scale: 3/32" = 1' - 0"



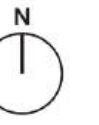
2nd Floor Plan

Scale: 3/32" = 1' - 0"



Lower Level Floor Plan

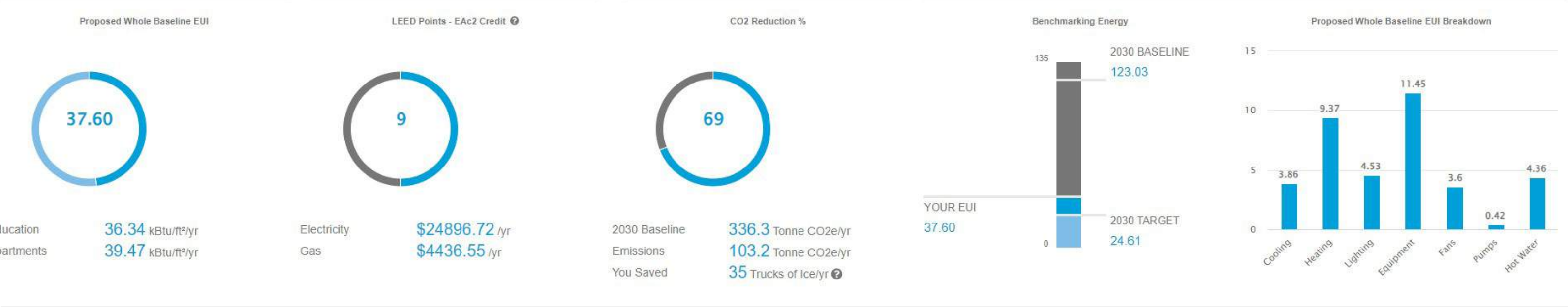
Scale: 3/32" = 1' - 0"



FLOOR PLAN KEY

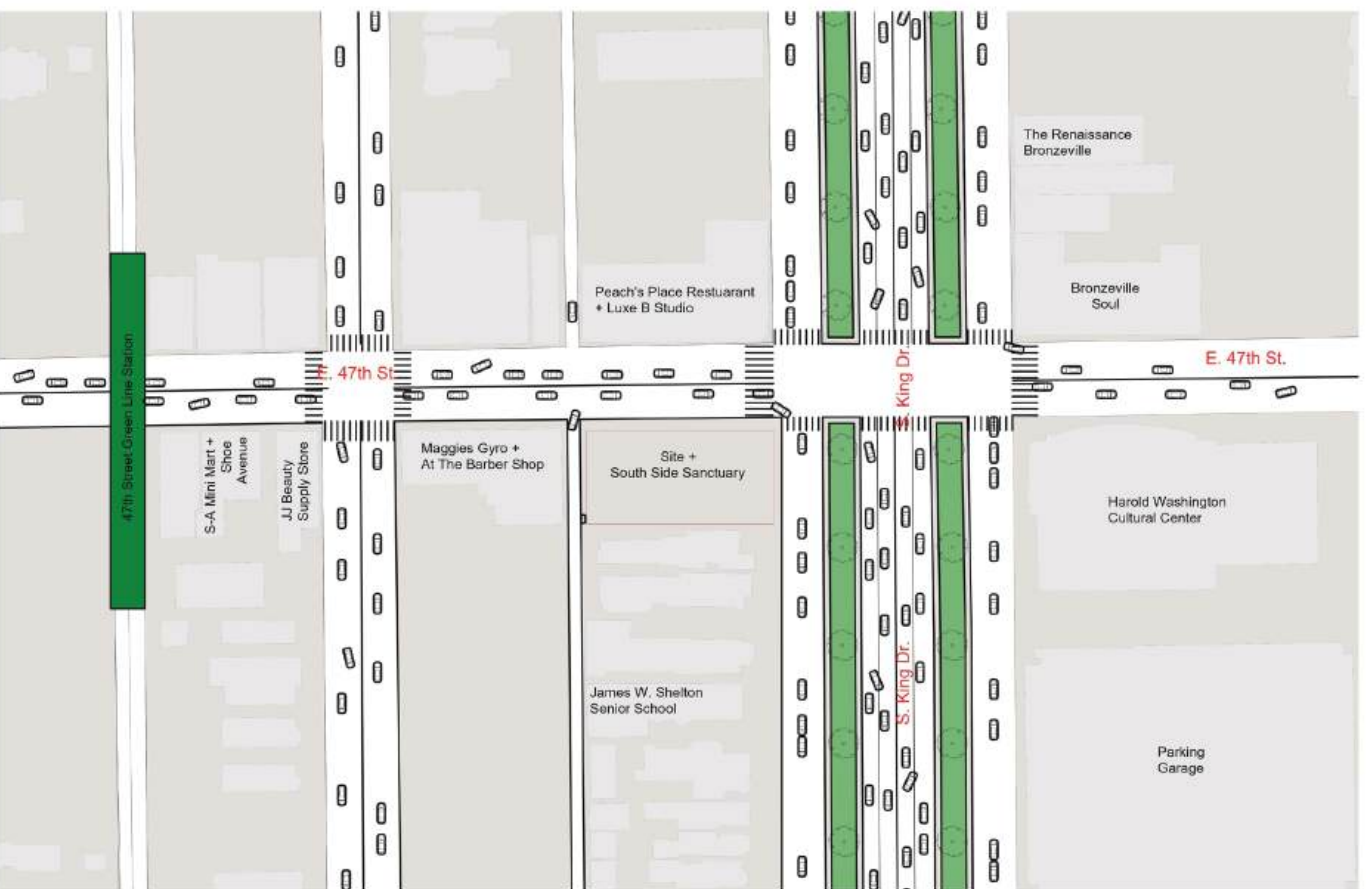
- (1) Entrance
- (2) Vestibule
- (3) Reception
- (4) Food Pantry Door
- (5) Food Pantry Elevator
- (6) Cafeteria
- (7) Elevator
- (8) Admin. Office
- (9) Women's Restroom
- (10) Men's Restroom
- (11) Multipurpose Space
- (12) Fire Exit Stair
- (13) Exit
- (14) Balcony
- (15) Library Space
- (16) Auditorium
- (17) Monkey Bar Space
- (18) Food Storage
- (19) Mechanical Space
- (20) Plumbing Room
- (21) Residential Entrance
- (22) Residential Vestibule
- (23) Residential Lobby
- (24) Lounge
- (25) Community Lounge
- (26) Laundry
- (27) Studio Apartment
- (28) 1BD Apartment
- (29) 2BD Apartment
- (30) 3BD Apartment

Baseline Energy

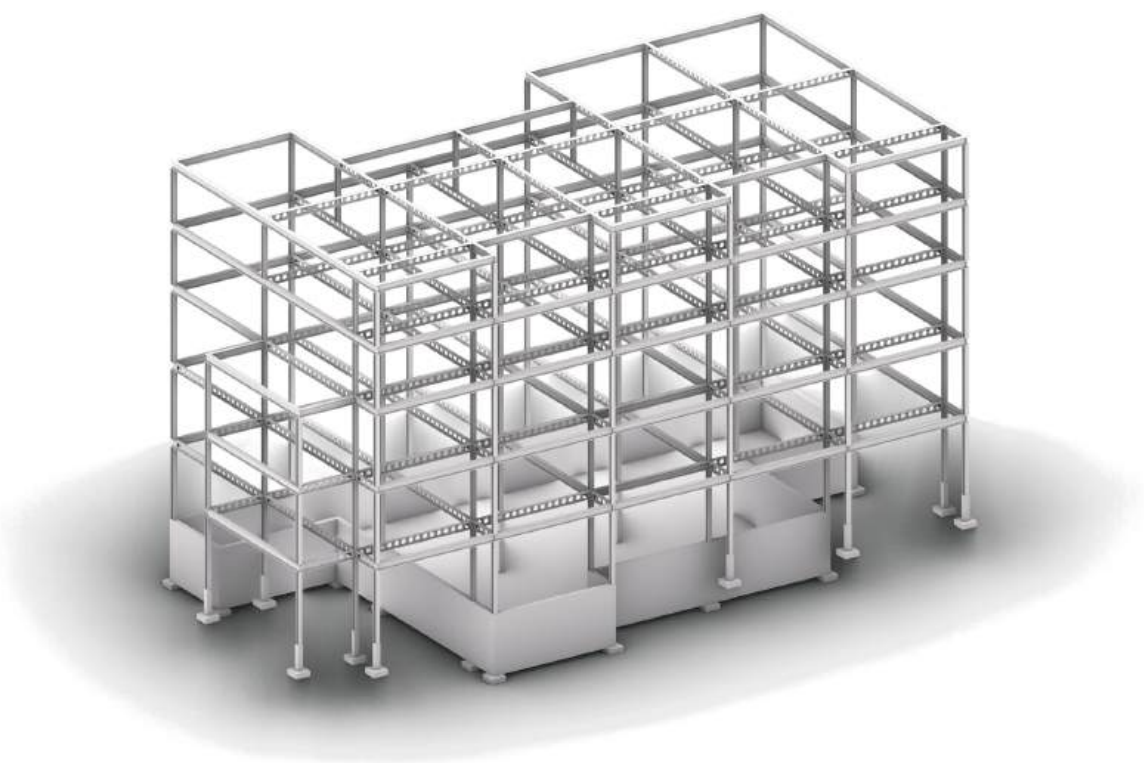


Cooling Your cooling load is not dominating your energy use. This is because your HDD are higher than your CDD days.	Heating Your heating load is not dominating your energy use. This makes sense - although your HDD days are higher than your CDD, the Equipment load is dominating the calculation. Look under the Usage and Schedules tab in the Engineering Inputs.	Lighting Your lighting load contributes to 12.05% of the total EUI. You can reduce your lighting load by reducing your lighting power density and having daylight and occupancy sensors in the Engineering Inputs.	Equipment Your equipment load is dominating your energy use. You can reduce your equipment load by reducing your appliance power density.	Hot Water Your hot water load contributes to 11.6% of the total EUI. You can reduce your hot water load by reducing your domestic hot water demand and using a more efficient hot water generation system in the Engineering Inputs.	Fans Your fan load contributes to 9.58% of the total EUI. You can reduce your fan energy by switching your fan flow control accordingly in the Engineering Inputs. Total Outdoor Air for the project is 8192.25 CFM.	Pumps Your pump load contributes to 1.12% of the total EUI. You can reduce your pump energy by adjusting pump control for cooling/heating in the Engineering Inputs.
--	--	--	---	--	--	--

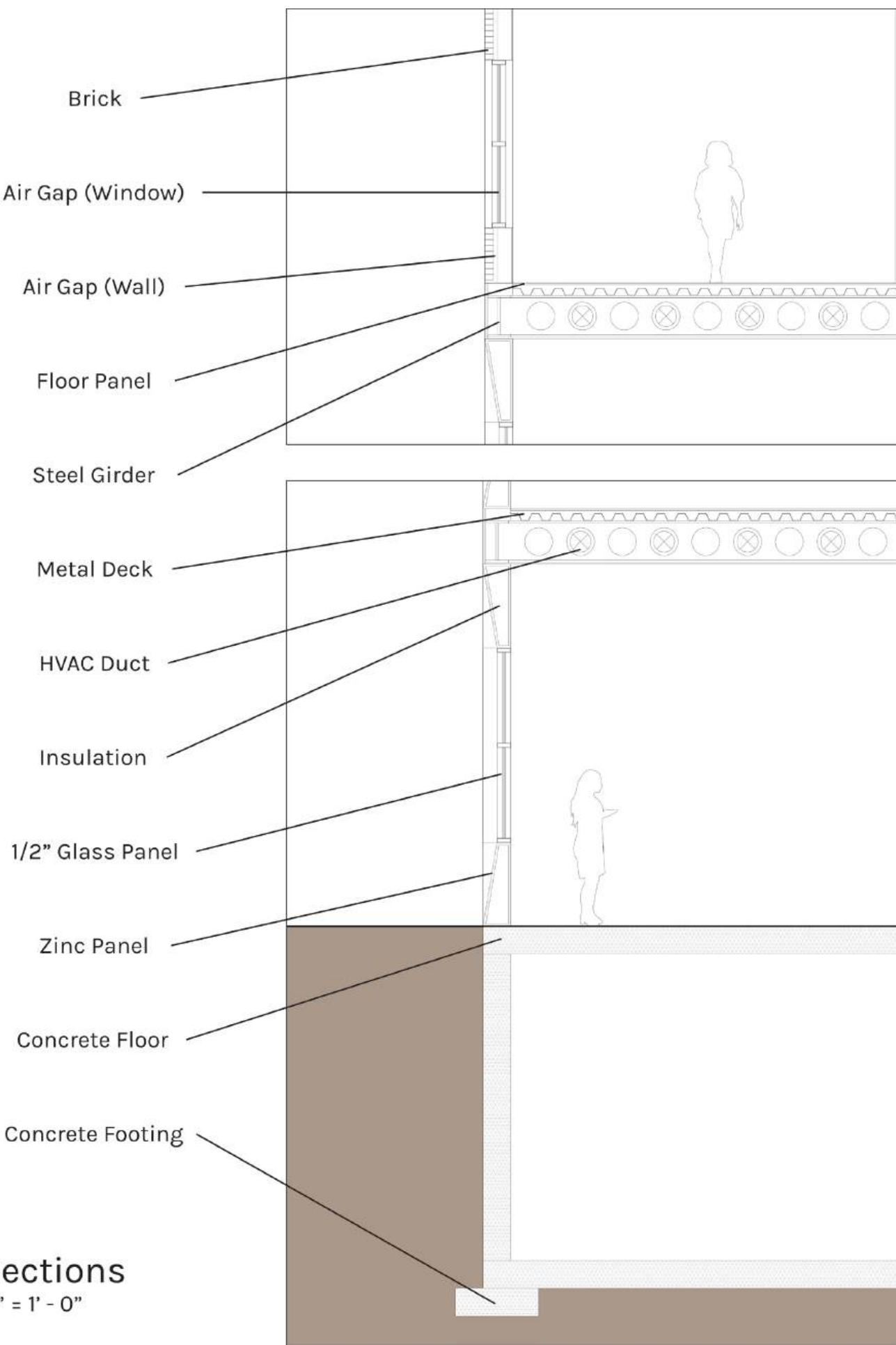
The playful and colorful facade is a break of pace from the mundane, brutalist appearance that many buildings in Bronzeville possess. Peace Museum gives black people and other residents in the community hope and a sense of belonging. It also features green balconies. All materials and shipping are made domestically in the US. Steel is chosen as it is nearly 100% recyclable and can be easily fabricated. Zinc is also recyclable, yet lightweight for ease of transportation and highly malleable to form into different shapes. Bricks are obtained from leftover piles in Chicago instead of factories, reducing pollution from factories and transportation. Glass is a go-to material for recyclability and visibility.



Context Plan
Scale: 1/64" = 1' - 0"



Structural/Mechanical Axon



Wall Sections
Scale: 1/2" = 1' - 0"



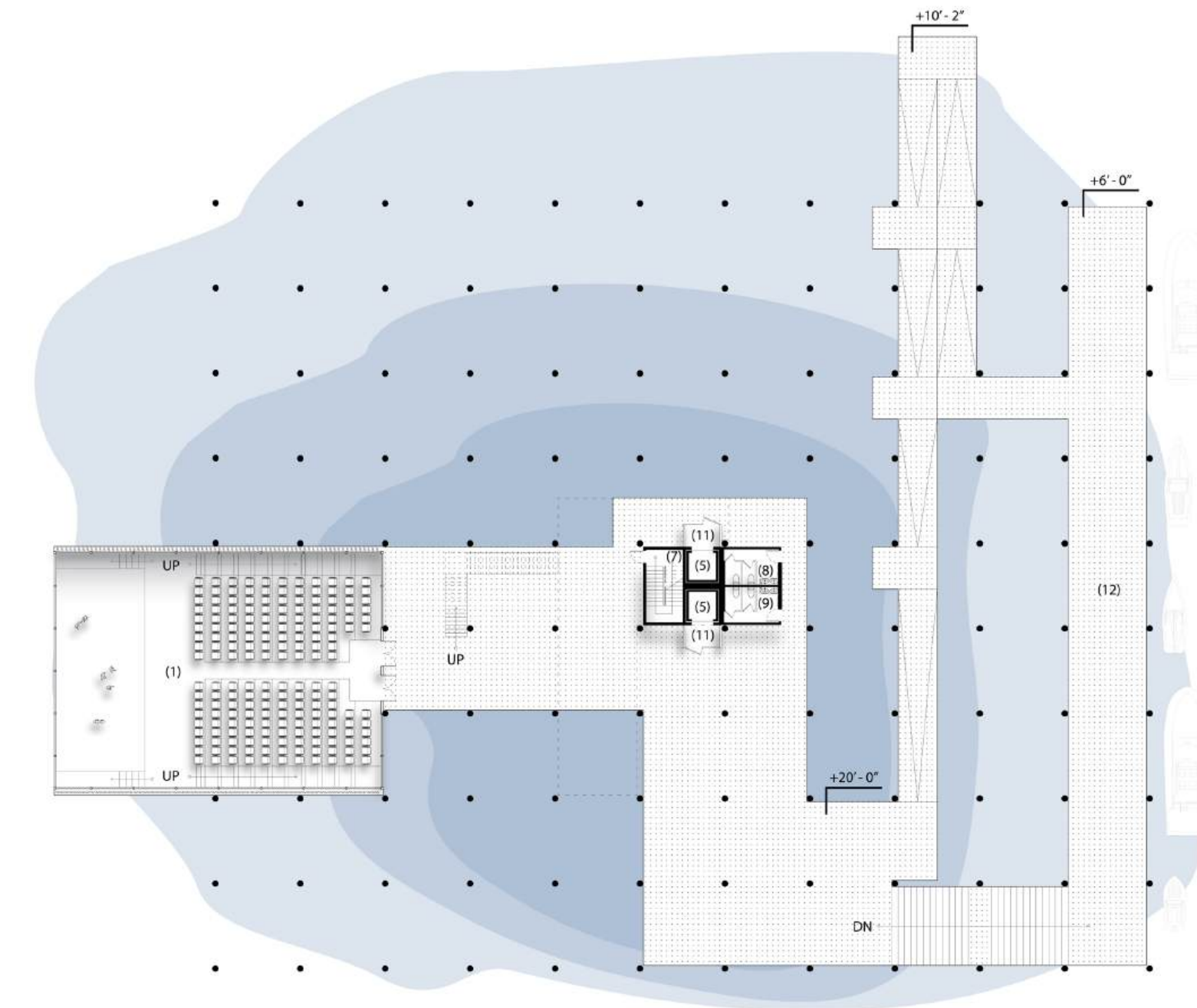
Model by Katarzyna Wodzis and Bowen Song

Aquatic Science Forum - ARCH 497 - Topics in Architecture - Summer 2024

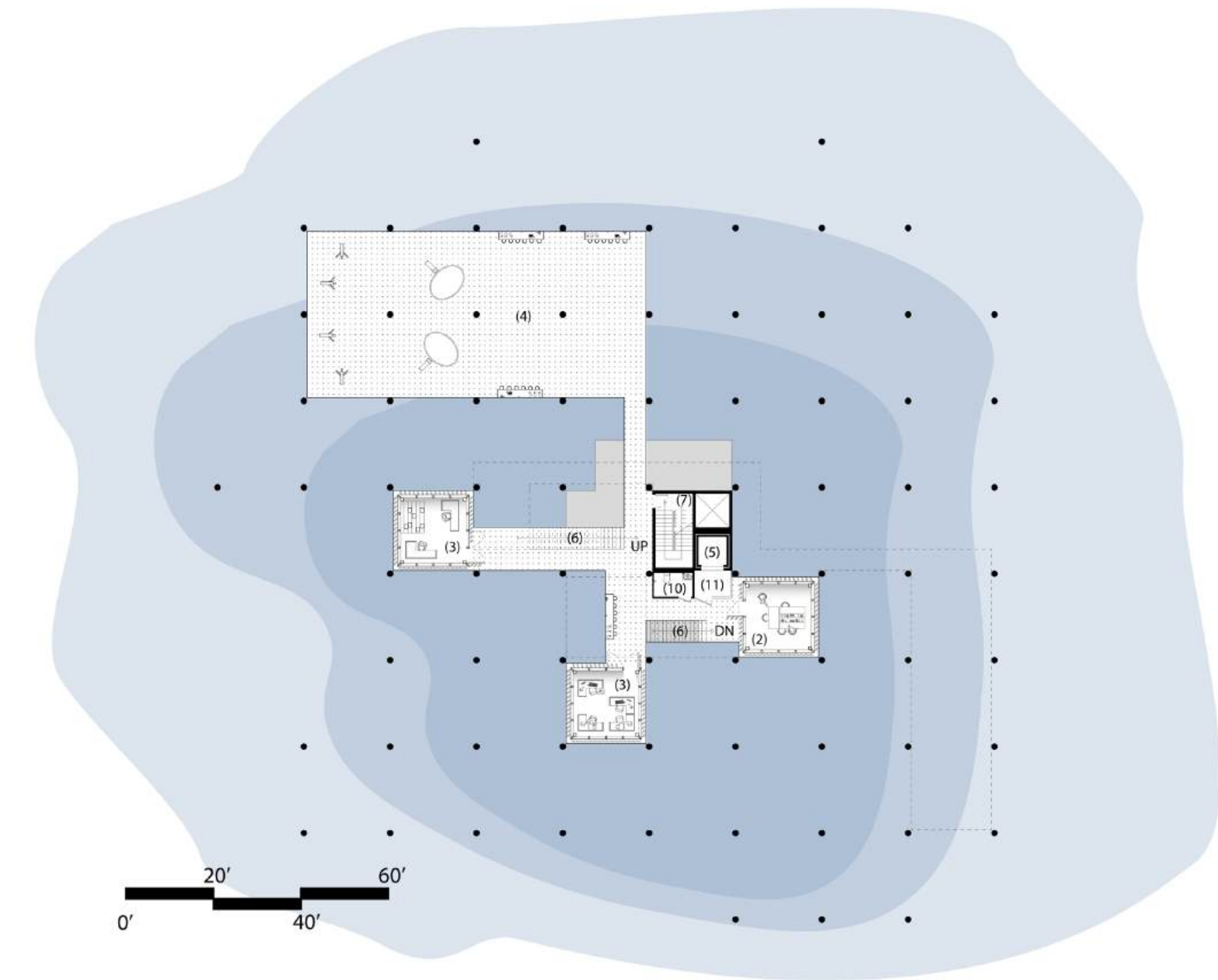
The Aquatic Science Forum acts as a filter by shaping interactions between public and private spaces, allowing movement while framing views and transitions through its modular design. Standing above Lake Michigan, it responds to the surrounding landscape by embracing openness and enclosure, fostering dynamic interplay between built environment and natural elements.

20ft Floor Plan

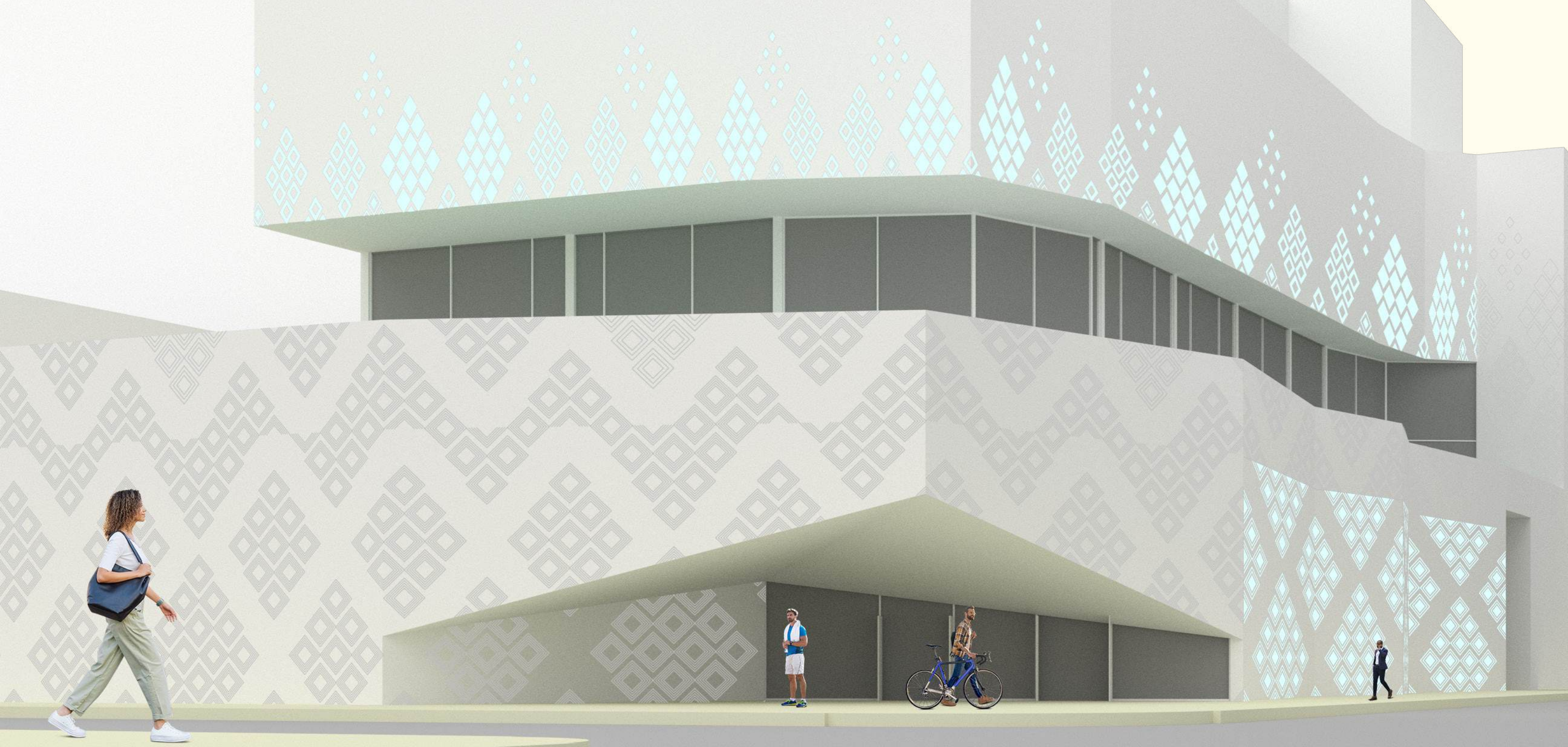
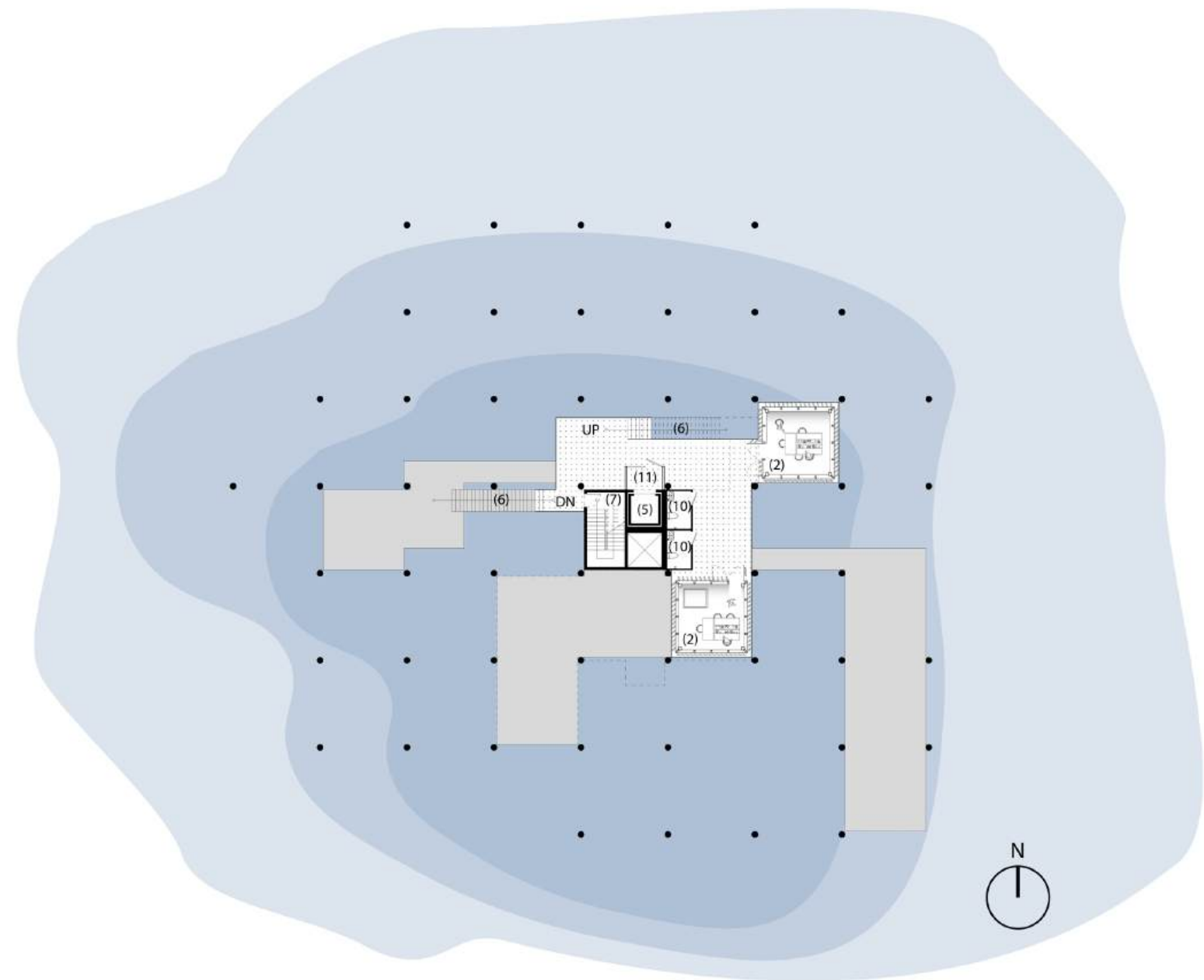
- 1) Presentation Hall
- 2) Maker Space
- 3) Office
- 4) Telescope Research
- 5) Elevator
- 6) Stairs
- 7) Fire Exit Stairs
- 8) Men's Bathroom
- 9) Women's Restroom
- 10) Unisex Bathroom
- 11) Vestibule
- 12) Dock
- 13) Cafe
- 14) Outdoor Cafe Seating



60ft Floor Plan

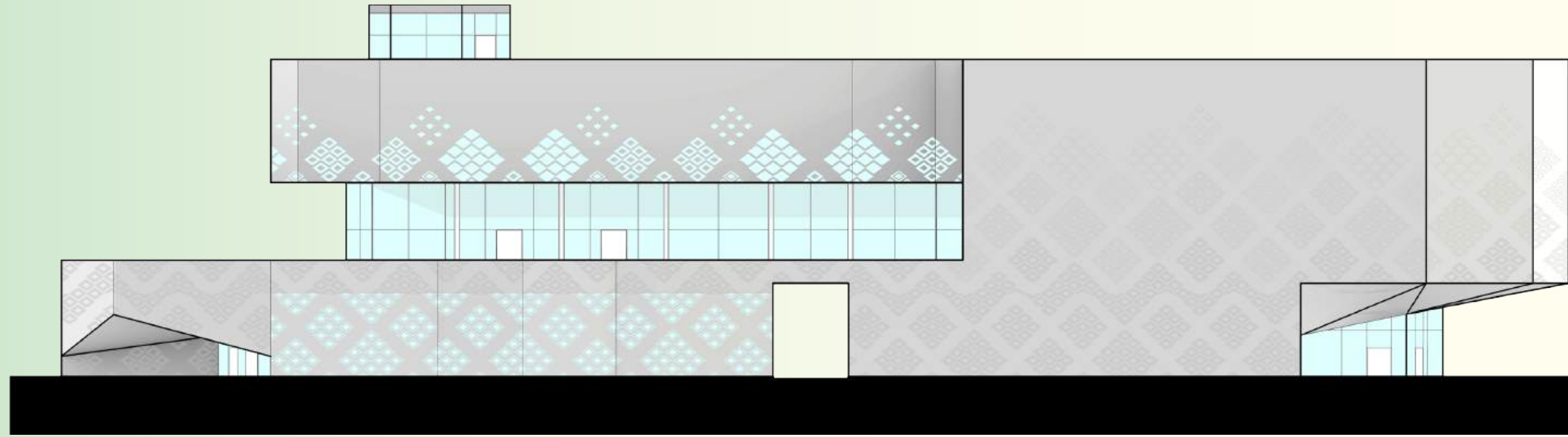
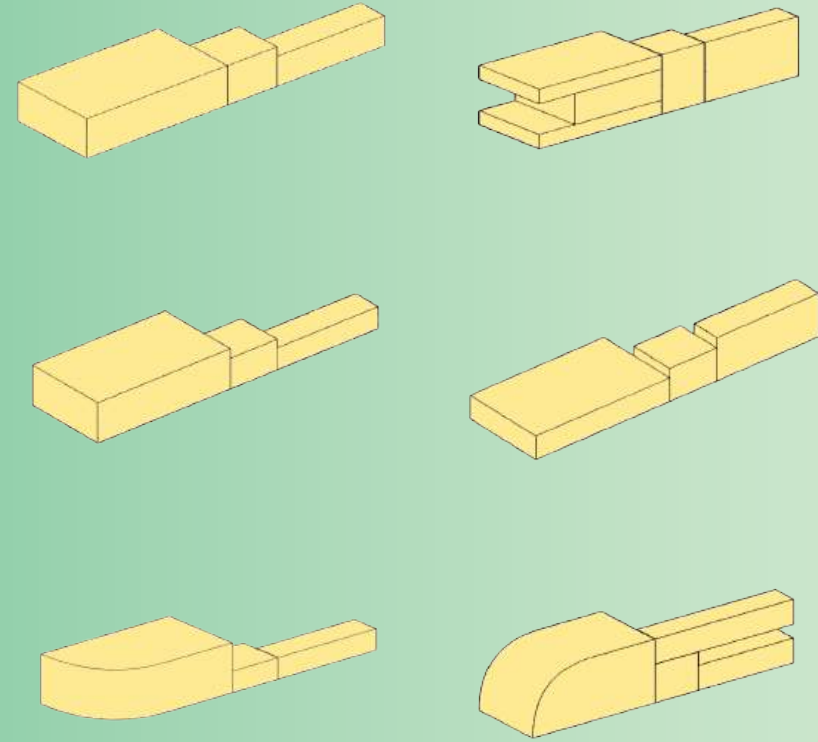


90ft Floor Plan

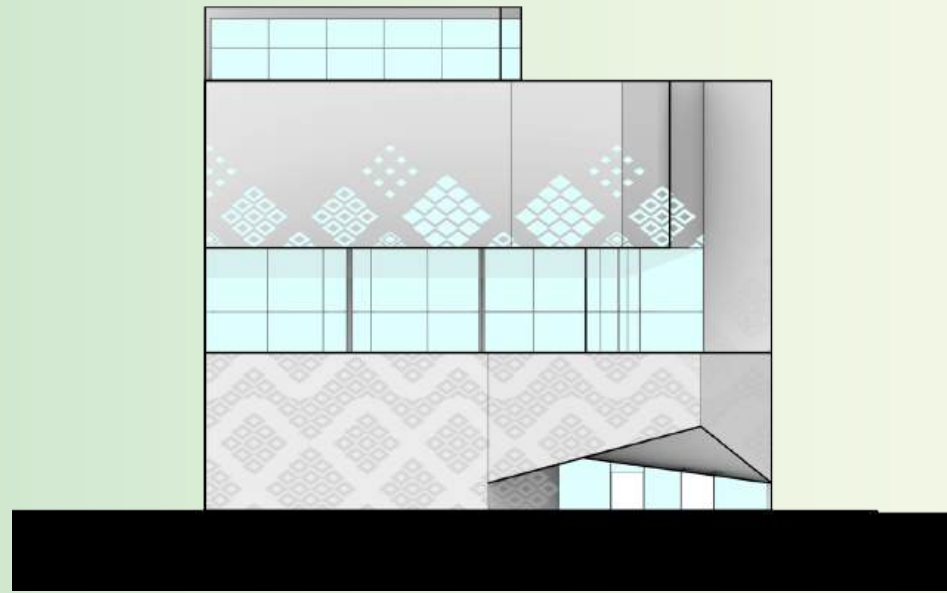
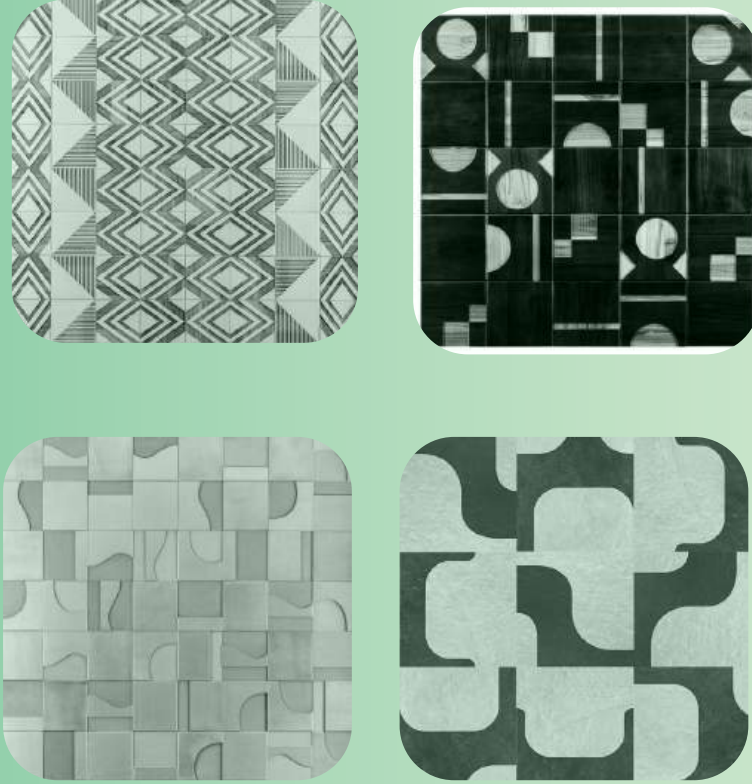


Brazilian Mosaic - ARCH 419 - Studio IX: Advanced Studio - Fall 2024

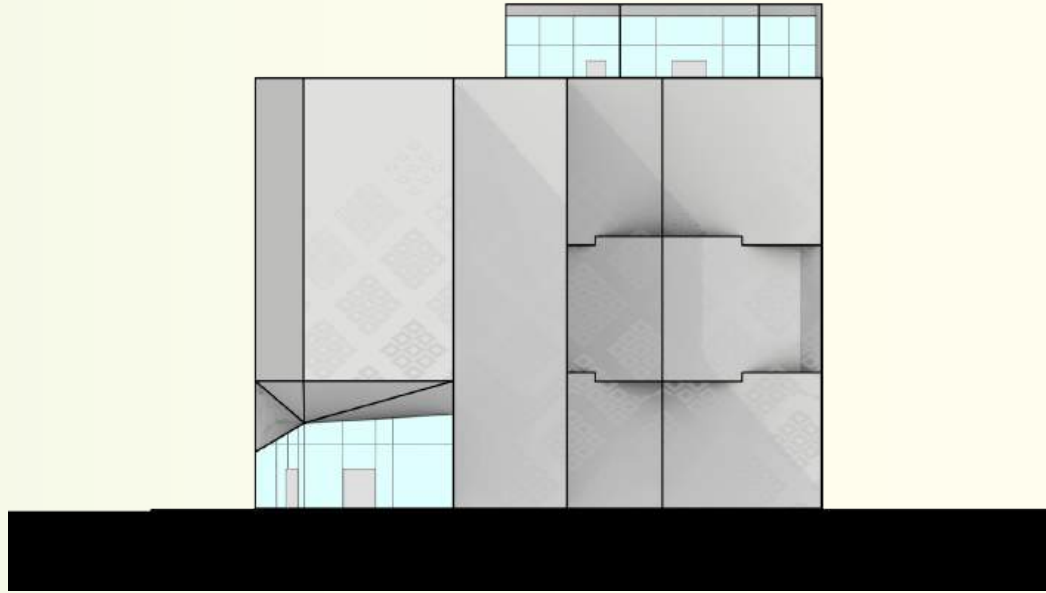
In order to unite and empower the people in Chicago, the Brazilian Mosaic weaves its vibrant tapestry over its facade as well as incorporating aspects of Brazilian culture, reflecting Brazil's rich history and multicultural heritage. This mosaic houses three exhibits along with a temporary exhibit based on the contemporary culture tailored towards current trends and events. Brazilian Mosaic stands at E Harrison St, next to S Wabash Ave.



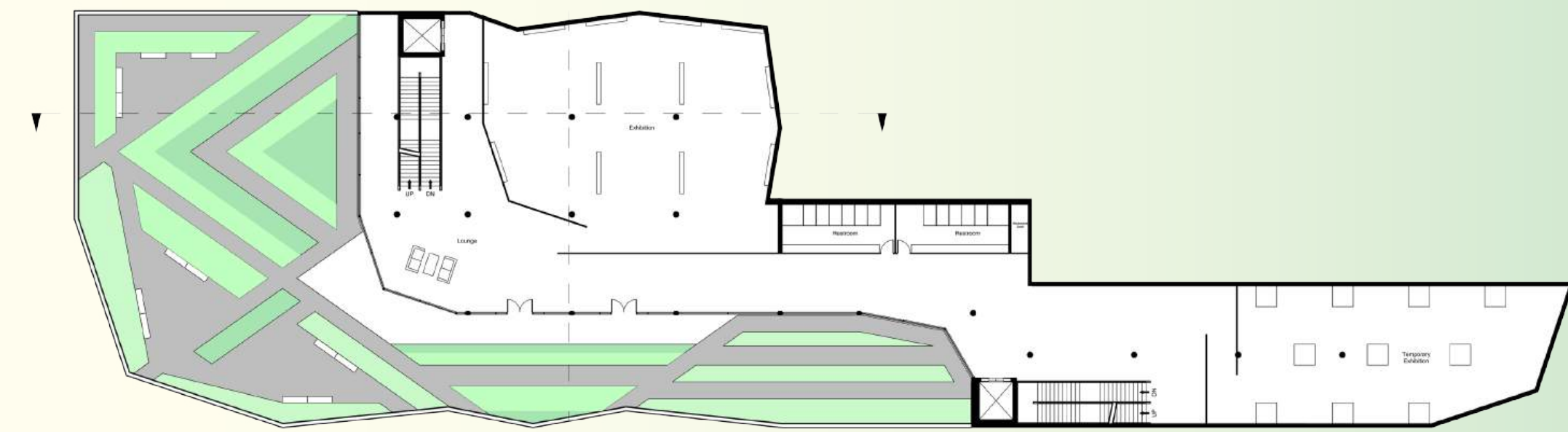
North Elevation
Scale: 1/16" = 1' - 0"



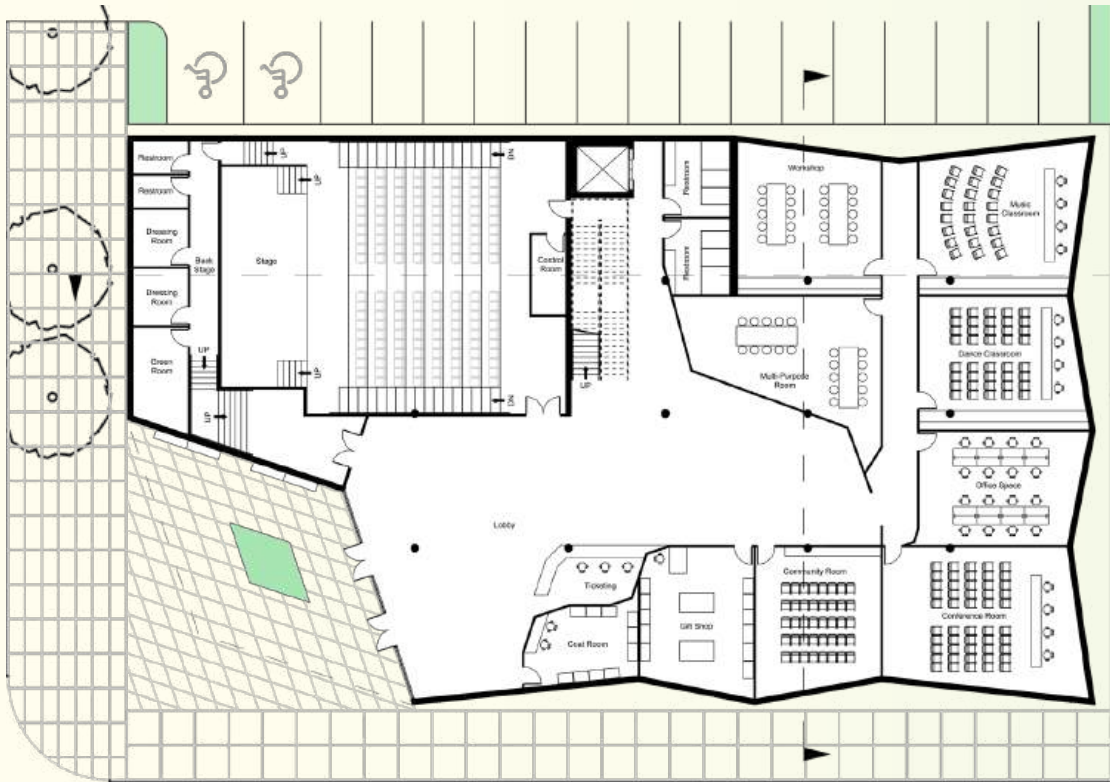
East Elevation
Scale: 1/16" = 1' - 0"



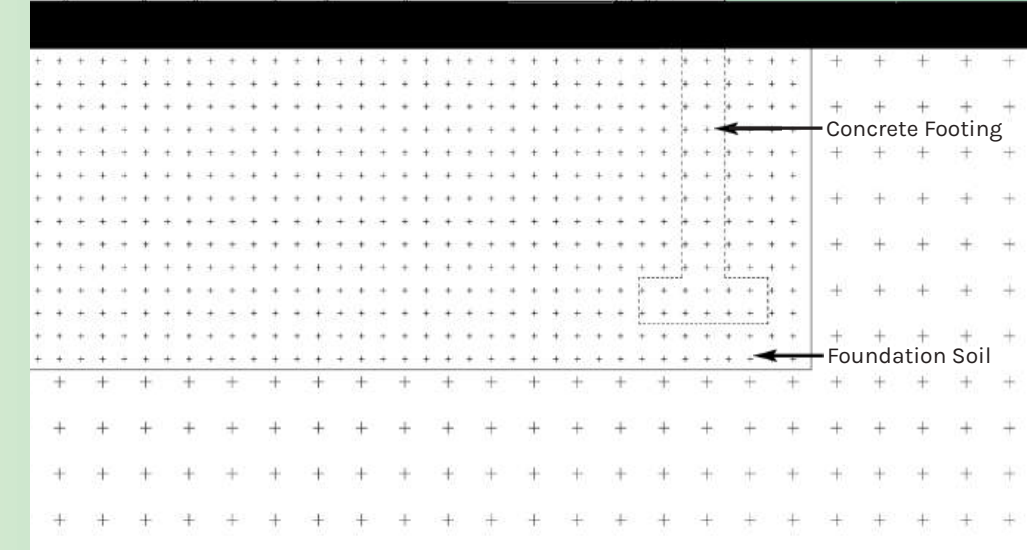
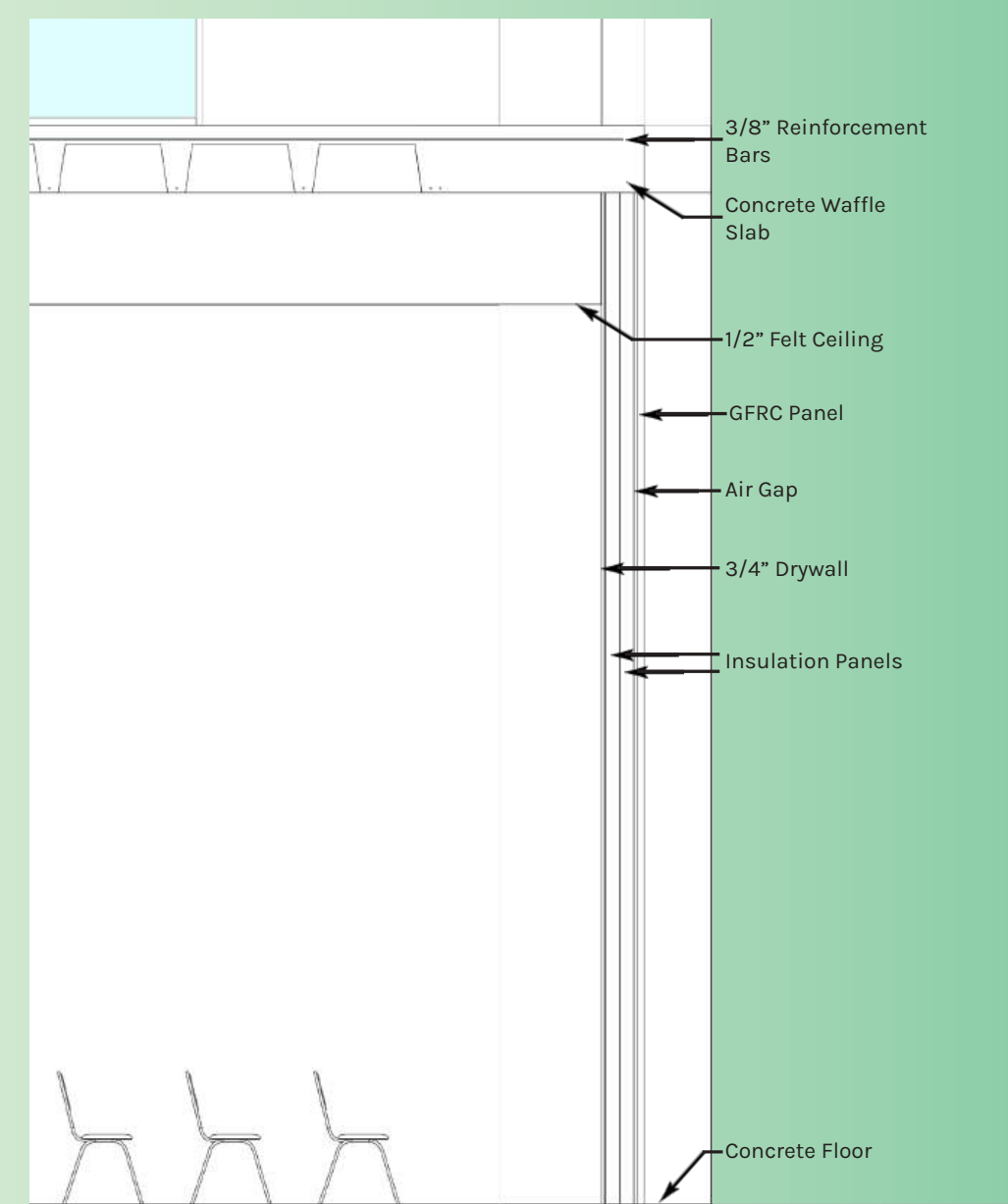
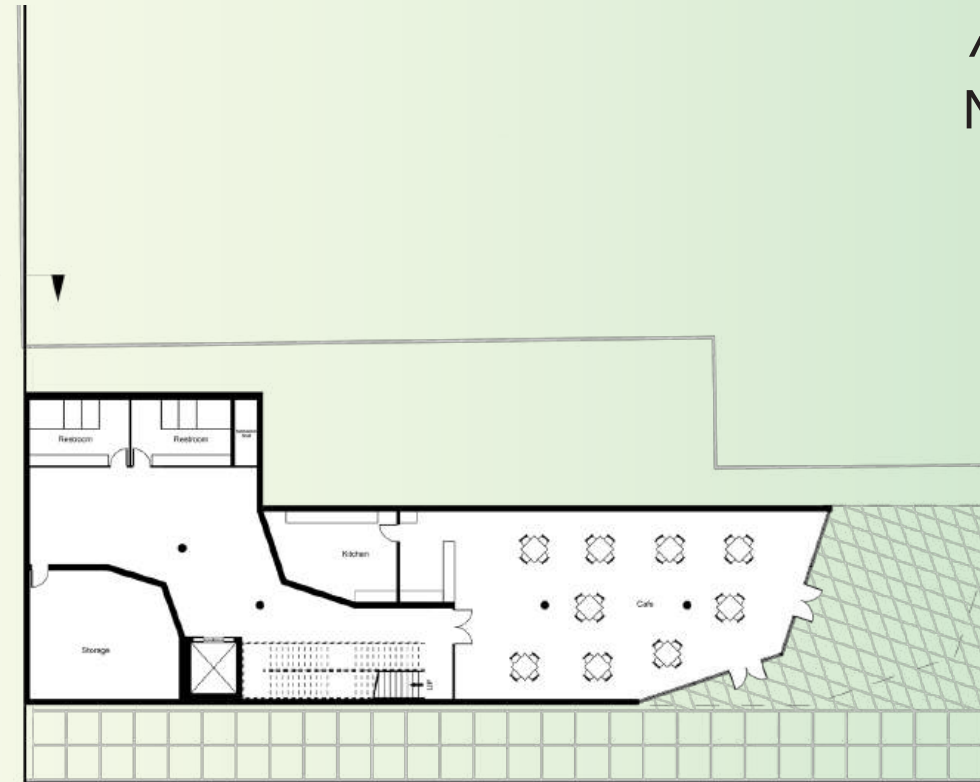
West Elevation
Scale: 1/16" = 1' - 0"



Second Floor Plan
Scale: 1/16" = 1' - 0"



Ground Floor Plan
Scale: 1/16" = 1' - 0"



Wall Section
Scale: 1/2" = 1' - 0"