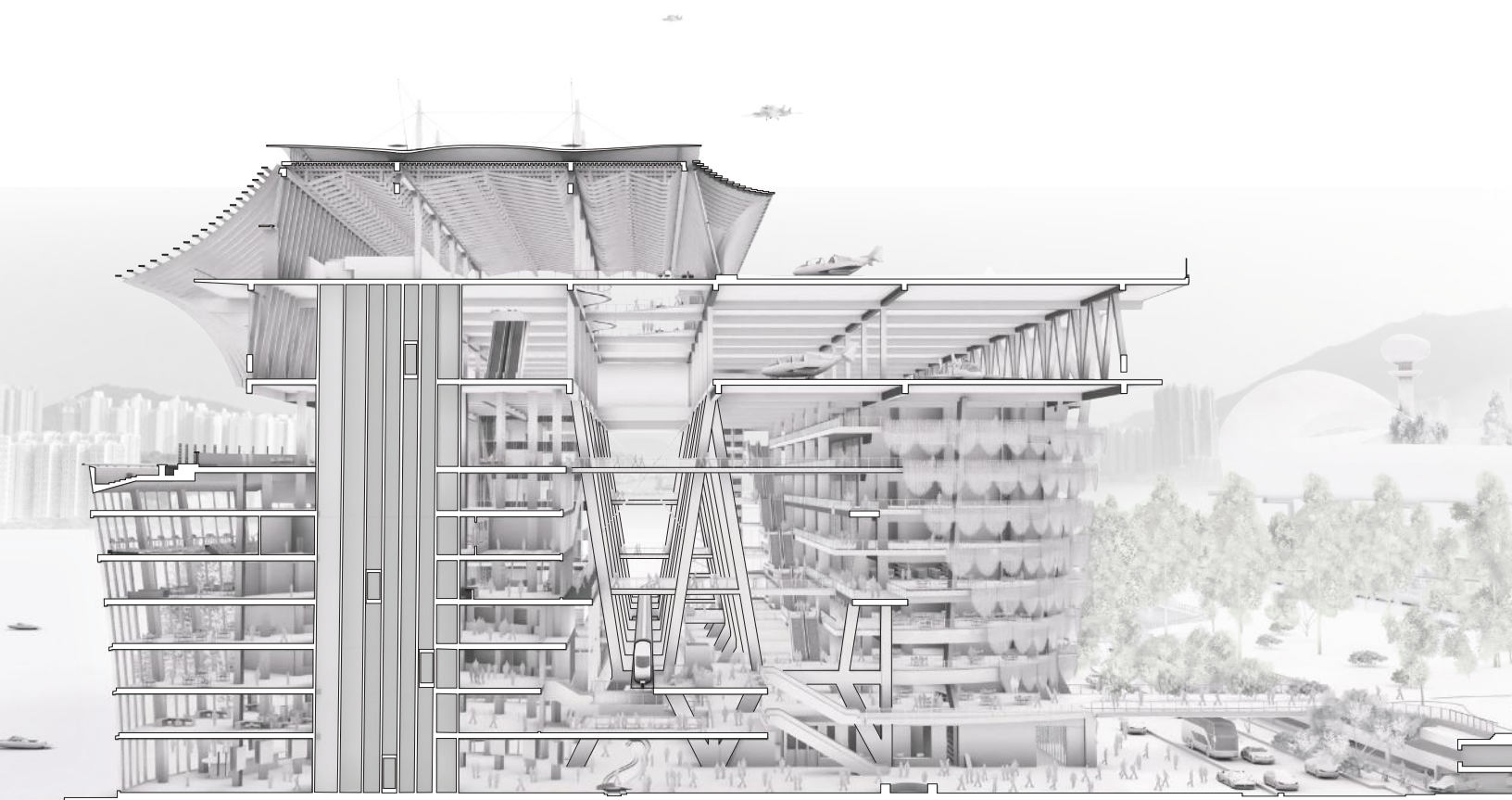
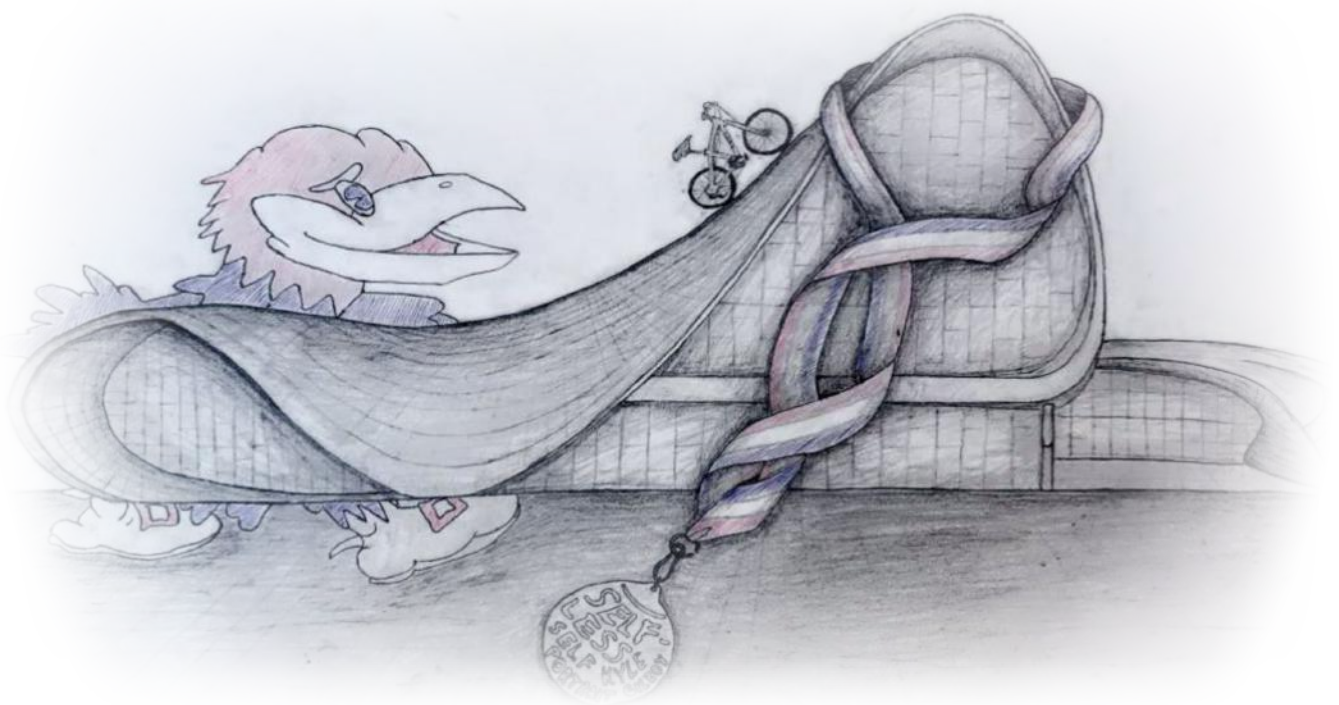


Destinations for People.

A Collection of Architectural Ideas.

By Kyle Gilboy.





A Self-Less Self-Portrait. Created October 2017.

KYLE GILBOY

My strongest interests lie at the intersection of architecture, urban design and behavioral psychology. How can the characteristics of our built environment increase our levels of overall productivity, improve our general well-being, and strengthen our relationships with other people?

Updated: January 10, 2024

kylegilboy@ku.edu

1.847.848.8789

issuu.com/kylegilboy

Lawrence, KS 66044



EDUCATION

UNIVERSITY OF KANSAS

Professional Master of Architecture Degree | Class of 2024
Professional Bachelor of Arts in Architectural Studies Degree
Certificates in Urban Design and Design-Build
Current GPA: 3.81
Lawrence, KS | Fall 2019- Spring 2024
Contact: **Dr. Jae Chang**, Associate Dean | jdchang@ku.edu

DANISH INSTITUTE FOR STUDY ABROAD

Studied Urban Design and Urban Livability
Copenhagen, DK | Summer 2022
Contact: **Regitze Hess**, Professor | Regitze.Hess@dis.dk

LAKE ZURICH HIGH SCHOOL

High School Diploma
Lake Zurich, IL | Class of 2018
Contact: **John Keyzer**, Engineering | john.keyzer@lzs95.org

ATTRIBUTES

SOFTWARE PROFICIENCY

AutoCAD | Bluebeam | Illustrator | InDesign | Lumion
Microsoft Office | Revit | Rhinoceros | Sefaira | SketchUp

SOFTWARE FAMILIARITY

3DS Max | After Effects | ArcGIS | Enscape | Inventor | Photoshop

PERSONAL QUALITIES

Comfortable with leading a group.
Can understand software quickly.
Adaptable to new environments and roles.
Easy to collaborate with.
Enthusiastic, energetic, hard-working.
Passionate about lifelong learning and personal growth.

ACCOMPLISHMENTS

KU ARCHITECTURE STUDENT PORTFOLIO AWARDS

3rd Year Award Recipient | Spring 2022
4th Year Award Recipient | Spring 2023
Portfolio Award Reviewer | Fall 2023

KU DISTINCTION SCHOLARSHIP

Recipient from 2018-2022.
Awarded in recognition of exceptional academic status.

CHICAGO COMMUNITY BOND FUND

Led a fundraising initiative, raising \$4,410 for peaceful protesters arrested during the Black Lives Matter marches.

LAKE ZURICH CROSS COUNTRY

All-Conference Award Recipient | Fall 2017
Most Improved Runner Recipient | Fall 2015

EXPERIENCE

STUDIO 804

Site Manager & Site Work Lead | Full-Time
Lawrence, KS | Fall 2023-Spring 2024
Contact: **Dan Rockhill**, Distinguished Professor | dan@rockhillandassociates.com

HKS, INC.

Architectural Intern | Full-Time
Chicago, IL | Summer 2023
Contact: **Janhvi Jakkal**, AIA, ACHA, LEED AP, Office Leader | jjakkal@hksinc.com

JESSE OSOSKI ART

Construction Intern | Full-Time
San Mateo, CA | Summer 2022
Contact: **Jesse Ososki**, Founder | 1.310.699.8684

BSA LIFESTRUCTURES

Architecture Intern | Full-Time
Overland Park, KS | Summer 2021
Contact: **Niyanta Gopal**, AIA, Mentor | 1.913.522.9353

K&M PRINTING

Bindery Supervisor | Seasonal
Schaumburg, IL | Spring 2019- Winter 2021
Contact: **Keith Stobart**, Manager | 847.774.0667

INVOLVEMENT

UNIVERSITY OF KANSAS // BJARKE INGELS GROUP

Student Liaison | KU // BIG Student Survey Distribution & Collection
Lawrence, KS | Spring 2023
Contact: **Mahbub Rashid**, School Dean | mrashid@ku.edu

NATIONAL ARCHITECTURAL ACCREDITING BOARD

Student Representative | University of Kentucky Visiting Team | Spring 2022
Student Representative | Penn State University Visiting Team | Spring 2023
Contact: **Dr. Danielle Willkens**, PSU Team Chair | danielle.willkens@design.gatech.edu

AMERICAN INSTITUTE OF ARCHITECTURE STUDENTS

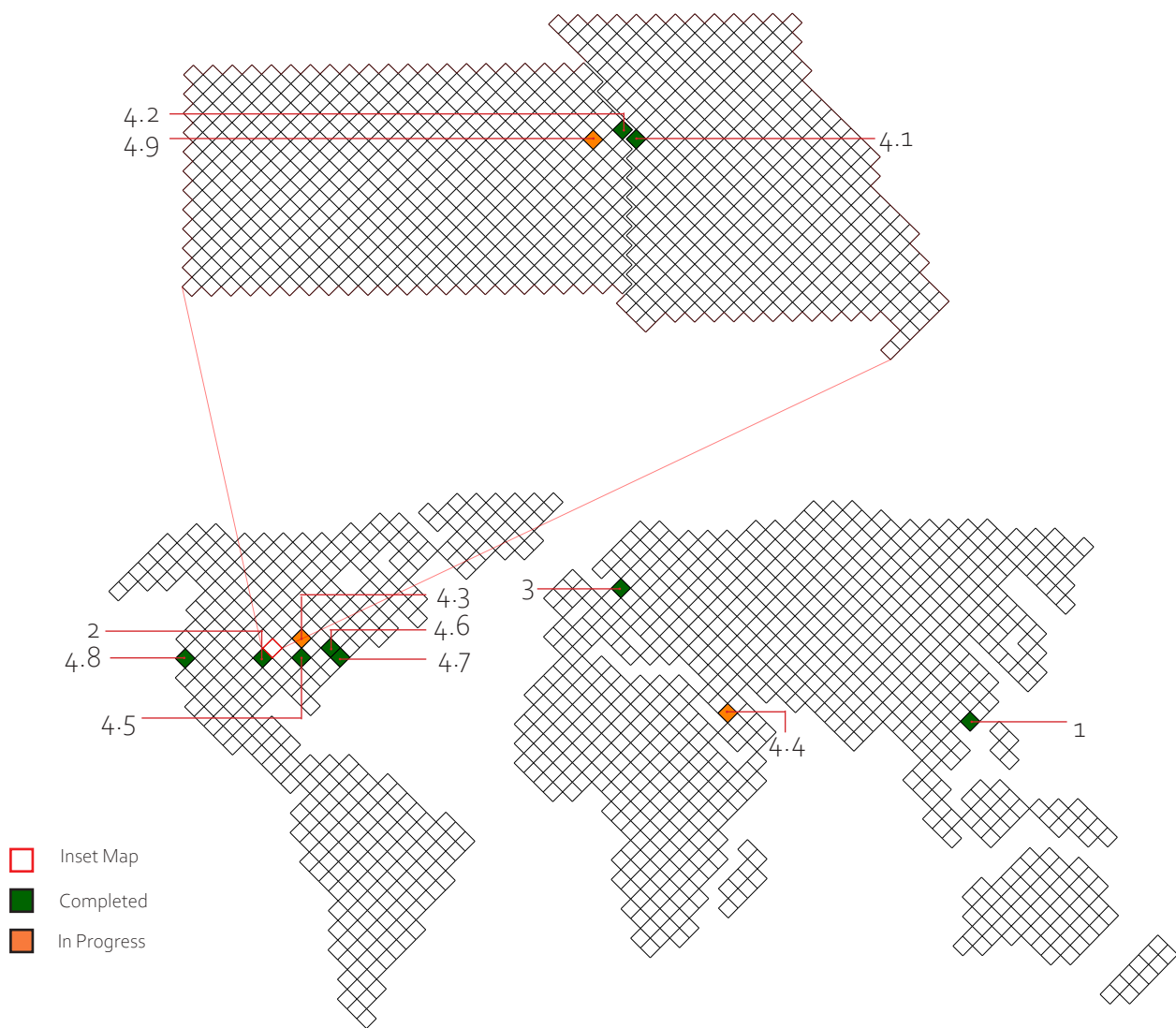
Committee Member | National Student Health & Well-Being Task Force
Lawrence, KS | Fall 2022-Summer 2023
Contact: **Ethan Sandburg**, AIAS Midwest Quad Director | ethansandburg@ku.edu

UNIVERSITY OF KANSAS

Studio Mentor | 2nd-Year Architecture Studios
Student Ambassador | School of Architecture & Design
Lawrence, KS | Fall 2021-Spring 2023
Contact: **Richard Findley**, Professor | rjfindley@gmail.com

RESURRECTION CATHOLIC SCHOOL

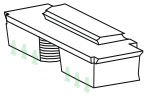
Volunteer Teacher | Taught Art, Science and Mathematics through Architecture
Kansas City, KS | Spring 2022, Spring 2023
Contact: **Mary Cate Skevington**, STEM Teacher | mskevington@rcskck.org



"The building is a special place because of its architecture; but it's people who make it special by participating in it."

-Charlie Chaplin

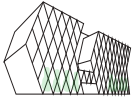
SELECTIONS



01 KAI TAK SKYPORT

p. 7

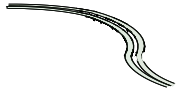
An Urban Symbol for the Future of Transit
Hong Kong, China | Spring 2023 | ARCH609 | [Dr. Kapila Silva](#)



02 NOMADHOUSE

p. 27

A Temporary-Living and Community Hub
Oklahoma City, USA | Fall 2022 | ARCH608 | [Eddy Tavio](#)



03 BISPEENGBUEN BRIDGEPARK

p. 39

An Elevated Park that Reconnects a City
Copenhagen, DK | Summer 2022 | UBDS740 | [Michela Nota](#)



04 EXPERIENCES

p. 43

A Collection of Professional Work and Involvement Efforts
Summer 2021-Present



05 ARTWORK

p. 49

A Showcase of Sketches, Paintings, and Models
Spring 2017-Present

HONG KONG SAR, CHINA

22.3964° N, 114.1095° E

POPULATION: 7,333,200



"Once you have tasted flight, you will forever walk the earth with your eyes turned skyward;
For there you have been, and there you will always long to return."

-Leonardo da Vinci



CLASS: ARCH609 | Dr. Kapila Silva

LOCATION: Hong Kong, China

SIZE: 1.63 Million SF

BUILDING TYPE: Transportation Hub

PROJECT TYPE: Partner (with Graylon Sestak)

Located in the heart of Hong Kong, Kai Tak Skyport paves the way for a **brand-new building typology while adding regional air mobility to the city via eVTOLs** (electric vertical takeoff or landing vehicles).

Designed with state-of-the-art technology and futuristic aesthetics, the skyport features four FATOs (takeoff & landing pads) and advanced automated systems to ensure safe and efficient operations. It provides a seamless connection between different districts of Hong Kong and nearby regions, significantly reducing the travel time and easing congestion on traditional roadways.

The skyport is a **multi-use building, acting as a regional maintenance hub for eVTOLs**. The building also features **retail, office, and hotel** program within the confines of the skyport. Its innovative design incorporates sustainable practices, such as renewable energy sources and noise reduction measures, minimizing its environmental impact and **bringing the building up to LEED Gold standards**.

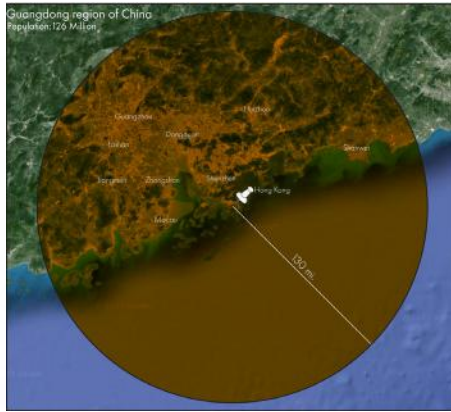
As Hong Kong embraces the future of transportation, the skyport serves as a shining example of the city's commitment to **advancing technology and enhancing urban mobility**.

JUSTIFICATION OF SITE

METROPOLITAN DENSITY

The Guangdong region of China is home to 126 million people; nearly all of its citizens are within the range of an eVTOL flight.

Hong Kong serves as a geographical and cultural hub for this region, making it perfect for a vertiport. Upon further research, we noticed a large area of undeveloped land within the city.



REVIVING AN ICON

This district-sized peninsula was once Kai Tak Airport, formerly the international airport for Hong Kong.

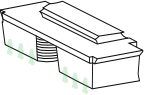
The airport was in service until 1998 until it was closed due to noise pollution, air pollution, and an "overall sense of impending catastrophe" due to its dramatic plane landings.



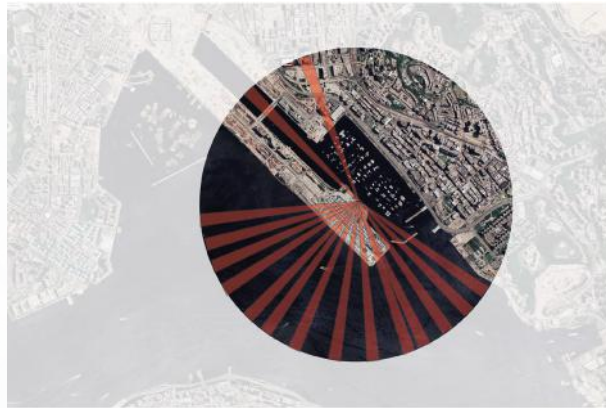
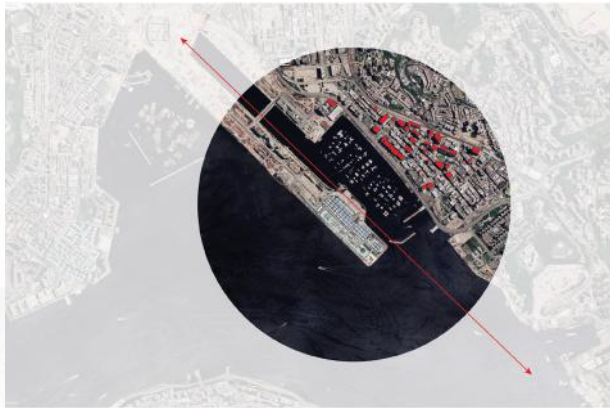
COMPLETING A PLAN

Kai Tak peninsula is currently in redevelopment. Large projects such as a sports stadium and cruise terminal are now built along the harbor. The vertiport claims an open space at the south end of the district, fitting in nicely with the existing master plan while allowing open harbor paths for takeoff and landing.





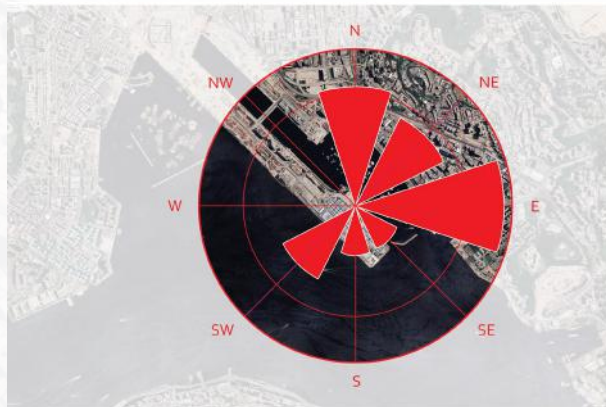
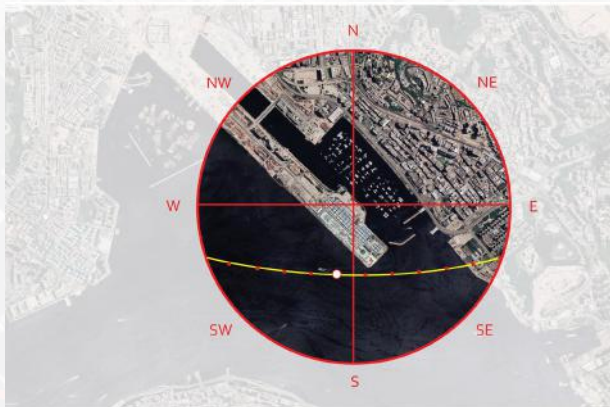
SITE STUDY



FLIGHT PATHS

Adhering to FAA guidelines, the design ensures that no buildings obstruct the vertiport's potential flight paths.

The design opted for a flight path running over the harbor, parallel to the peninsula



SUN & WIND

A sun study helps us locate our buildings openings to capture sunlight, while our wind study influenced the position of the flight deck so planes takeoff against the wind.



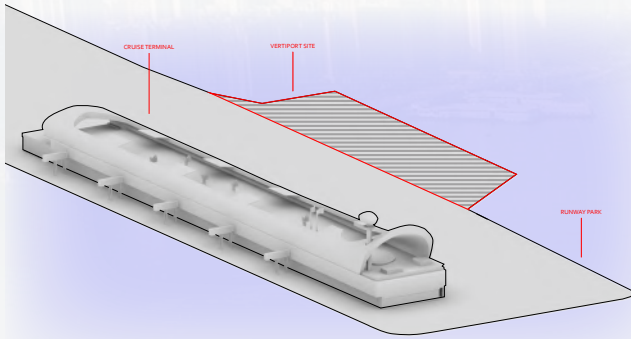
TRANSIT SYSTEM

Hong Kong's robust transit plan does not currently have a rail line to service this peninsula.

The proposed closed-loop monorail links the vertiport and nearby cruise terminal back into the fabric of Hong Kong.

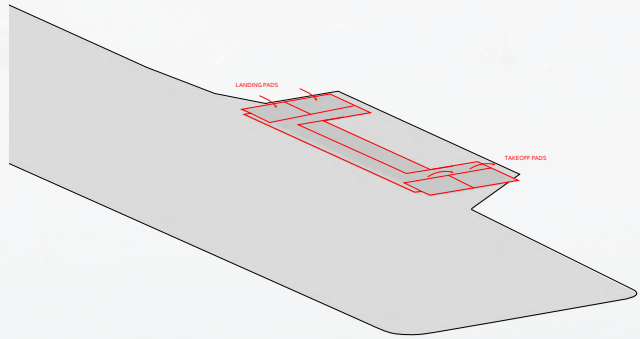
DEVELOPMENT OF FORM

The building massing develops from the site's context, using large moves to ensure the success of the building from an operational standpoint. On another level of detail, the building uses the ideals and elements of **Feng Shui** to create expansive, inviting spaces that guide the visitor experience. Finally, the vertiport incorporates details of Southeast Asian architecture to create an iconic building that can rightfully call Hong Kong its home.



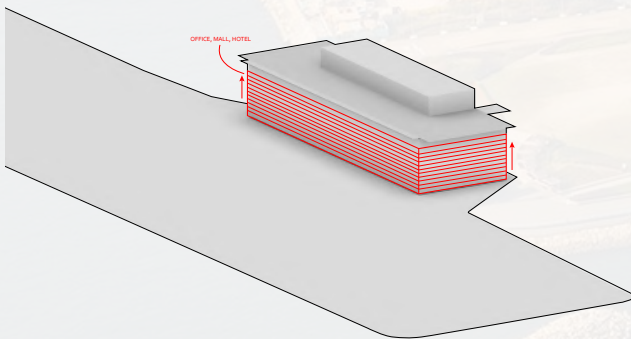
1. Selecting a Site

An area at the end of the peninsula sits adjacent to the existing cruise terminal. This bump-out in the peninsula allows unobstructed flight paths along the harbor and has no plans for development in the current Kai Tak master plan. These attributes makes it the best place to establish a large-scale transit destination.



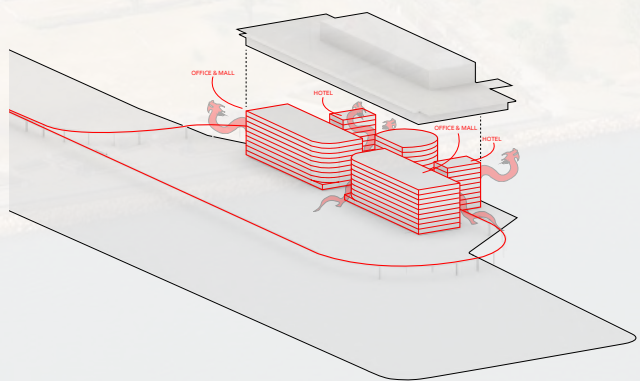
2. Designing the Flight Deck

Since vertiports are most compact if eVTOLs take off from the roof, the building is designed with a top-down approach. The shape of the site and the open flight paths along the harbor suggest a linear arrangement. The landing and takeoff pads are placed at the northwest and southeast respectively, allowing the aircraft to generate lift against the wind. All dimensions adhere to FAA standards.



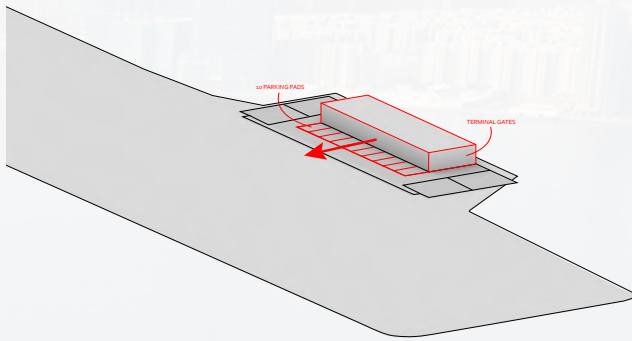
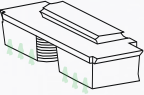
5. Applying a Mixed-Use Program

Hong Kong has some of the most valuable real estate in the world. In response, the building expands its program upward to make the most of its site. This new volume becomes an office-building, multi-story mall, and luxury hotel. A final street-side floor takes care of the operational logistics of the building.



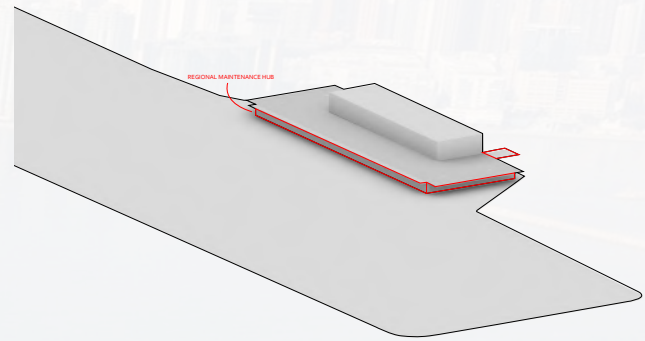
6. Respecting Feng Shui | Dragon Gates

A series of open voids, or "dragon-gates" adheres to the core ideas of **Feng Shui** while dividing the building both visually and programmatically. This provides light, fresh air, and intuitive way-finding, while carving a path for a new monorail line to cut through the building.



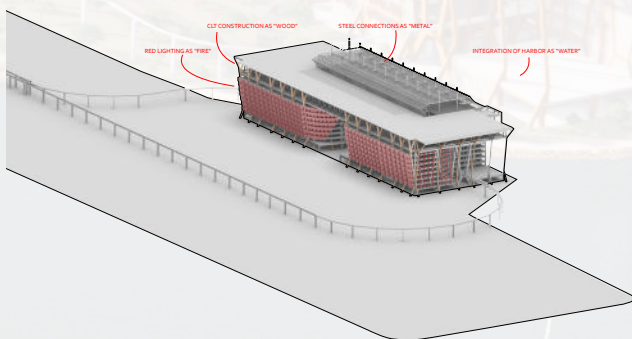
3. Creating the Concourse

The space leftover provides space for 10 parking pads, each serving a terminal gate. The concourse is pushed to the east, giving the terminal gates expansive views of the harbor.



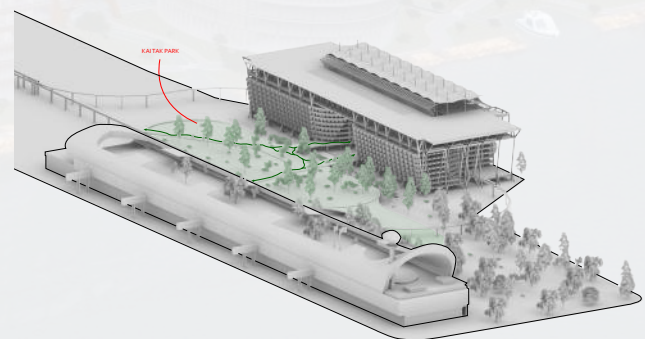
4. Establishing a Maintenance Hub

Since Hong Kong serves as geographic and financial focal point for the region, the skyport will serve as a maintenance hub, supporting a potential network of smaller vertiports across the region. In effect, a floor dedicated to maintenance shops and hangars was necessary. The layout of the maintenance floor parallels the flight deck for maximum efficiency, using an “assembly-line” approach.



7. Respecting Feng Shui | The Five Elements

The building uses materials, resources, and lighting to represent the five elements of **Feng Shui**. CLT construction with steel connections represent wood and metal, while red lighting and harbor integration represent fire and water. The final element is earth, which will be represented in the park.



8. Respecting Feng Shui | Opening the Park

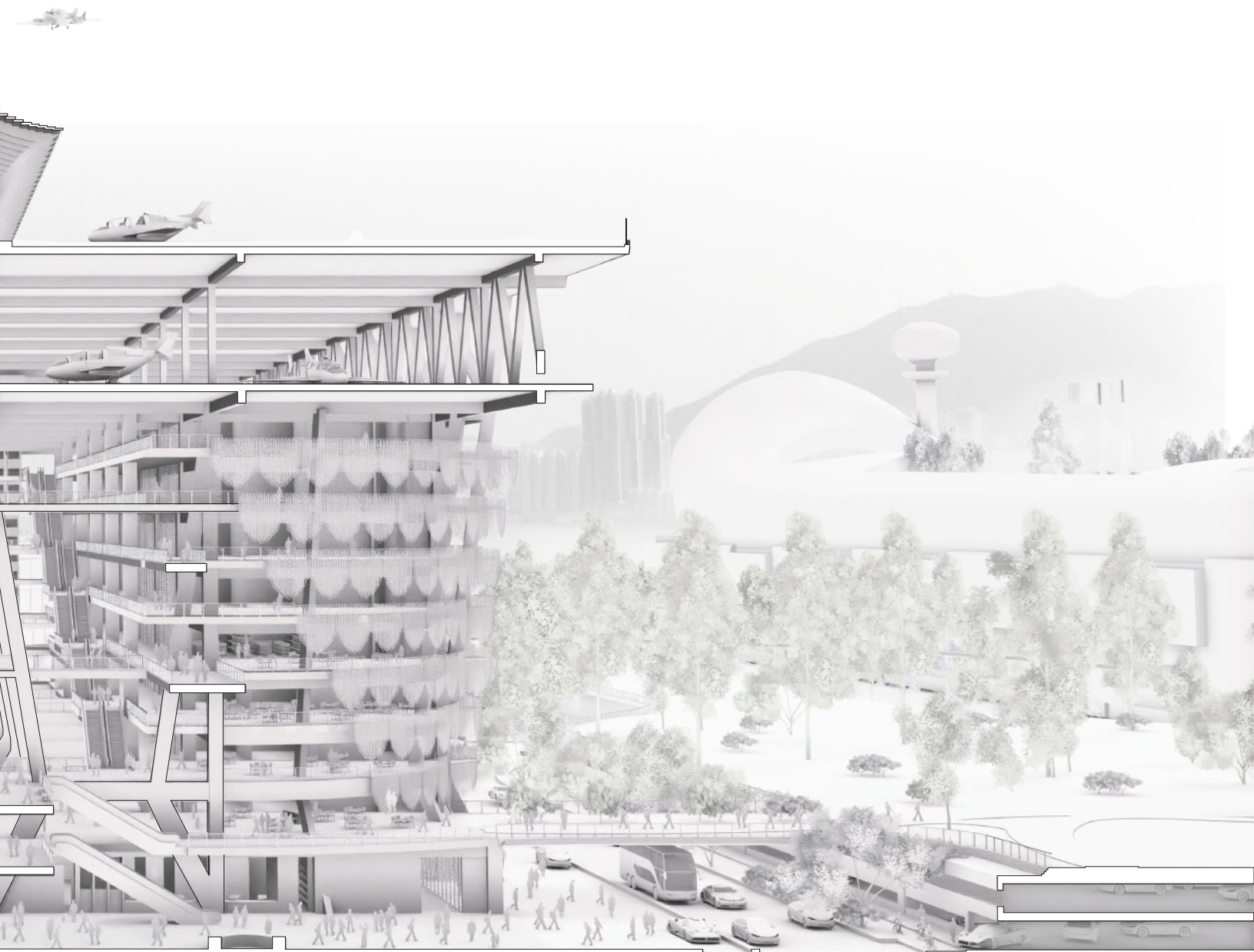
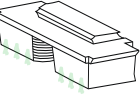
With earth as the final element, it represents itself with the creation of a half-million square-foot open park. This links the two transit hubs with a grand public space as a gift back to the city. The pathways connect the two destinations to the masterplan's existing pedestrian bridge. This forms the Chinese symbol for Kai, meaning “to open”.

AN ICONIC URBAN HUB

The building links air flight with water transit, a monorail system, ride-share and bus lanes, and finally, an elevated park and pedestrian walkway. Thread this into office space, hotel program, and a multistory mall, and the final product is an urban landmark that quickly becomes a global icon.

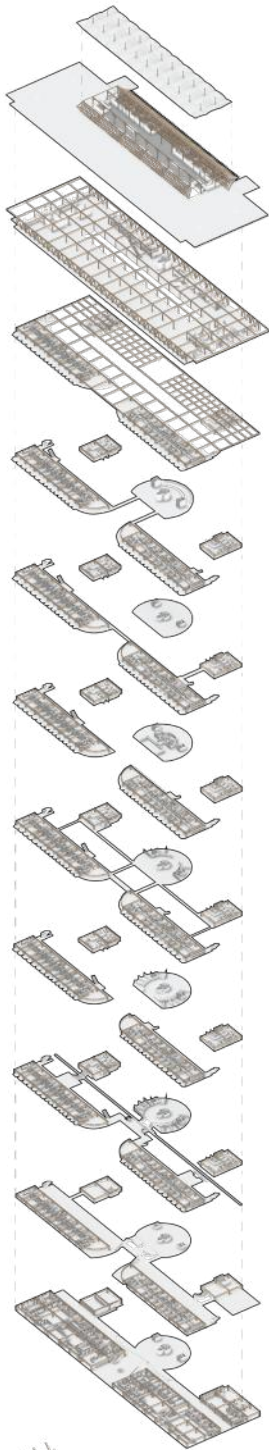
Pictured: Section Cut Looking Southeast





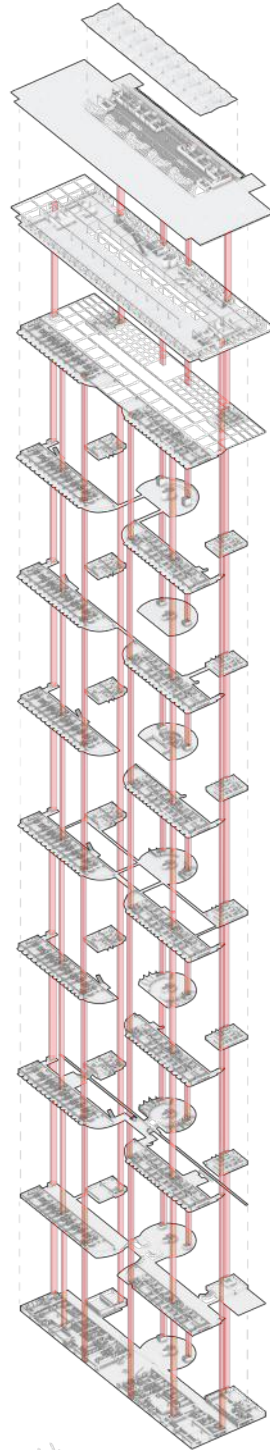
STRUCTURAL SYSTEM

Diagonal CLT bracing in open spaces, post-lintel system in closed spaces.



EGRESS SYSTEM

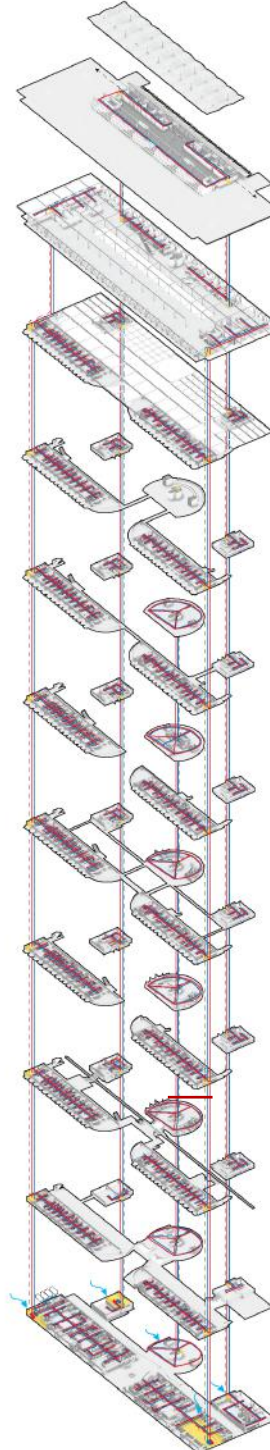
Every space in the building is within 250' of an enclosed stairwell.



Fire-Rated Egress Stair

HVAC SYSTEM

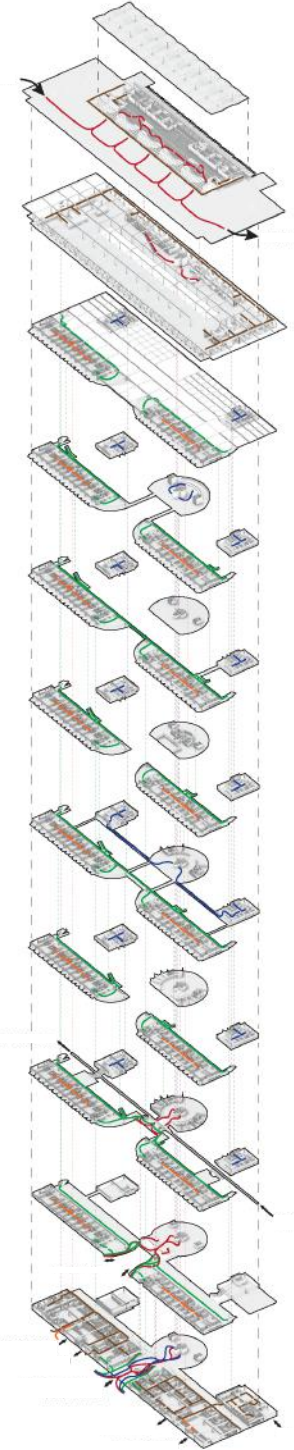
A VAV system meets cooling demands, optimizing efficiency.



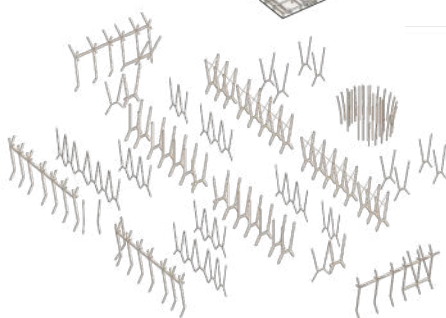
Mechanical Room
Fresh Air Intake
HVAC Supply
HVAC Return

USER CIRCULATION

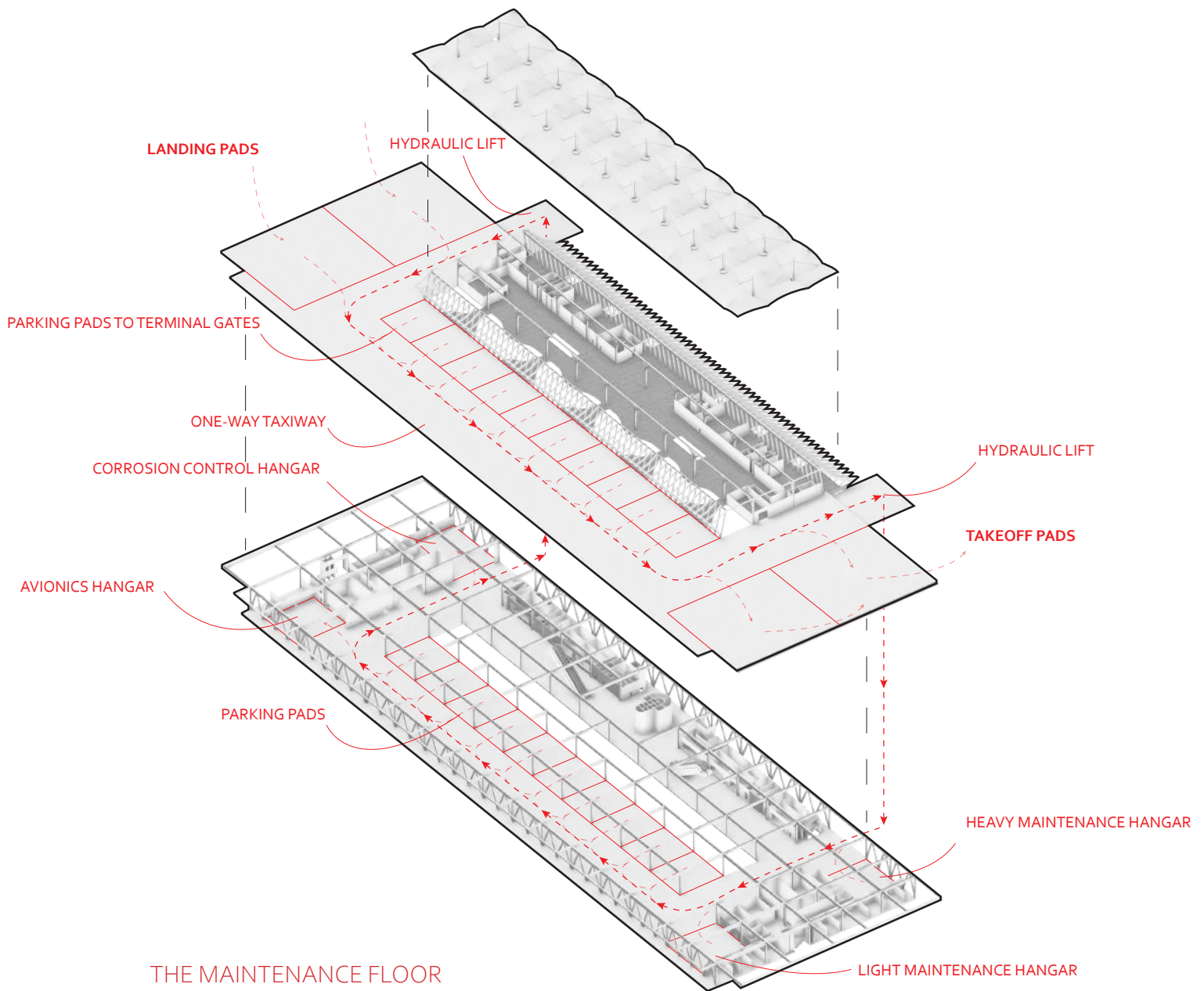
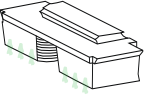
Employees, fliers, and visitors all experience the building differently.



Entry/Exit
Passenger Experience
Vertiport Staff Experience
Hotel Guest Experience
Mall Shopper Experience
Office Worker Experience



Environmental and life safety systems consulted with Dr. Jae Chang.



THE MAINTENANCE FLOOR

A maintenance floor sits below the flight deck and mirrors the program, creating maximum efficiency. The eVTOLs always move in one direction, creating an "assembly-line approach" that allows aircraft to move through its maintenance seamlessly.

The floor features four main hangars, specializing in corrosion control, avionics, heavy maintenance, and light maintenance respectively.



THE STREETSIDE FLOOR | SCALE: 1/32"=1'

- | | | | |
|-----------------------|-------------------------|-------------------------|------------------------|
| 1. Mechanical Room | 17. Network Operations | 33. TSA IT Desk | 49. Sales Office |
| 2. Shell Space | 18. Telecommunications | 34. TSA Training Room | 50. Break Room |
| 3. Reception Room | 19. Breaker Panels | 35. Open Offices | 51. Reception Desk |
| 4. IT Maintenance | 20. Backup Generator | 36. Storage room | 52. Waiting Area |
| 5. Equipment | 21. Fire Suppression | 37. Report Room | 53. Reservation Office |
| 6. Tool Room | 22. Mechanical Room | 38. Retail Inventory | 54. Call Center |
| 7. Security Rooms | 23. Cooling Room | 39. Receiving Room | 55. Retail Prep |
| 8. Emergency Response | 24. Main Generator | 40. Trash Room | 56. Open Offices |
| 9. Server IT Desk | 25. Receiving Room | 41. Ride-share Drop-Off | 57. Accounting Office |
| 10. Break Room | 26. Inventory Office | 42. Agency HR Office | 58. Marketing Room |
| 11. Supply Room | 27. Reception Office | 43. Compliance Room | 59. Travel Booking |
| 12. Reporting Room | 28. Closed Offices | 44. Training Room | 60. Hotel Booking |
| 13. Server Room | 29. TSA Conference Room | 45. Agency Management | 61. Ride-share Offices |
| 14. Conference Room | 30. TSA Break Room | 46. Closed Offices | 62. Mail Room |
| 15. Closed Offices | 31. Access Control | 47. Business Center | 63. Security Room |
| 16. Open Offices | 32. Command Center | 48. Conference Room | 64. Car Rental Desk |



65. Front Desk
 66. Ride-Share Area
 67. Agency Lobby
 68. Exhibition Space
 69. Main Elevator Core
 70. Main Help Desk
 71. Security Staff
 72. Pet Relief Area
 73. Luggage Screening
 74. Baggage Service
 75. Check-In Storage
 76. Check-In Management
 77. Purchasing Office
 78. Banking Office
 79. ATM Machines
 80. Open Offices

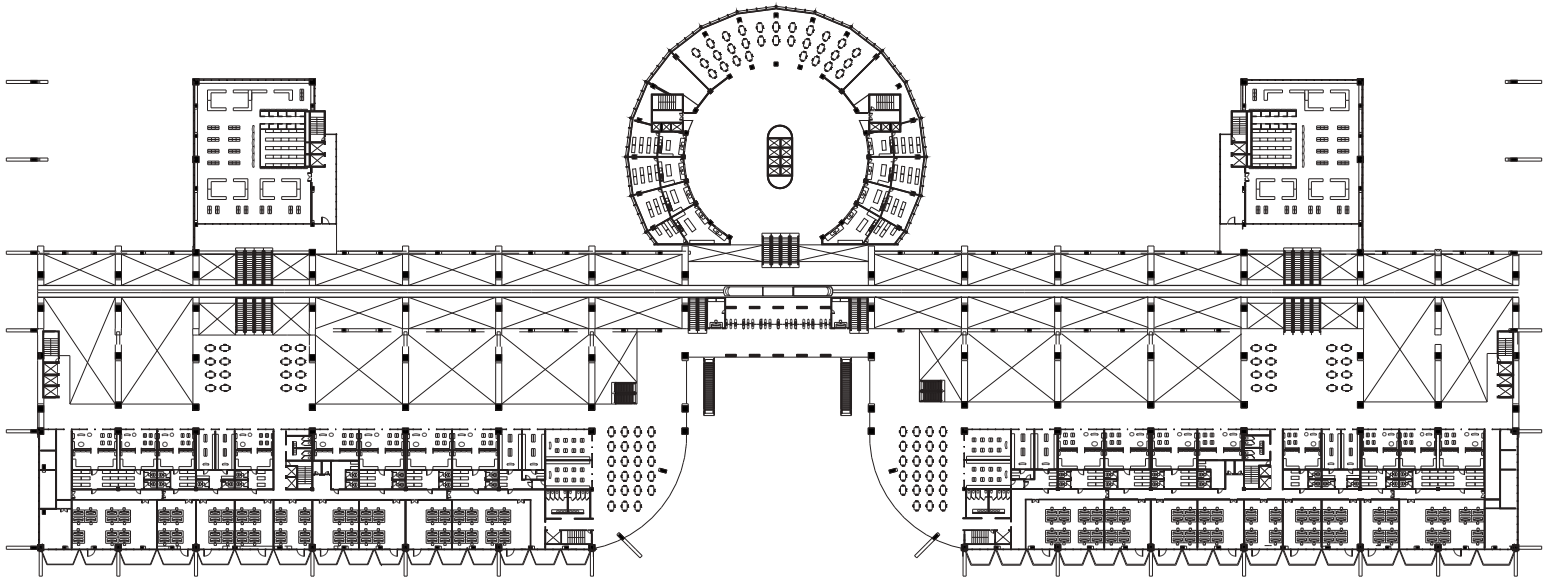
81. Conference Room
 82. Training Room
 83. Mechanical Room
 84. Shell Space
 85. Check-In Desks
 86. Ground Transport
 87. Medical Office
 88. Human Resources
 89. Reception Office
 90. Customer Service
 91. Lot Office
 92. Ticketing Office
 93. IT Support Office
 94. Accounting Office
 95. Legal Office
 96. Emergency Station

97. Break Room
 98. Limo Dispatch
 99. Taxi Dispatch
 100. Shuttle Dispatch
 101. Shuttle Bus Stop
 102. Retail Prep
 103. Electrical Fuel Station
 104. Equipment Storage
 105. Utility Office
 106. Utility Storage
 107. Water Treatment Room
 108. Boiler Room
 109. Fire Pump Room
 110. Pump Room
 111. Chiller Room
 112. Electrical Room

113. Mechanical Room
 114. Rental Car Return
 115. Packing Room
 116. Receiving Area
 117. Security Area
 118. Staging Room
 119. Shipping Room
 120. Loading Bay
 121. Warehouse Storage
 122. Trash Compactor
 123. Supply Room
 124. Break Room
 125. Open Offices
 126. Closed Offices
 127. Warehouse Front Desk
 128. Conference Room

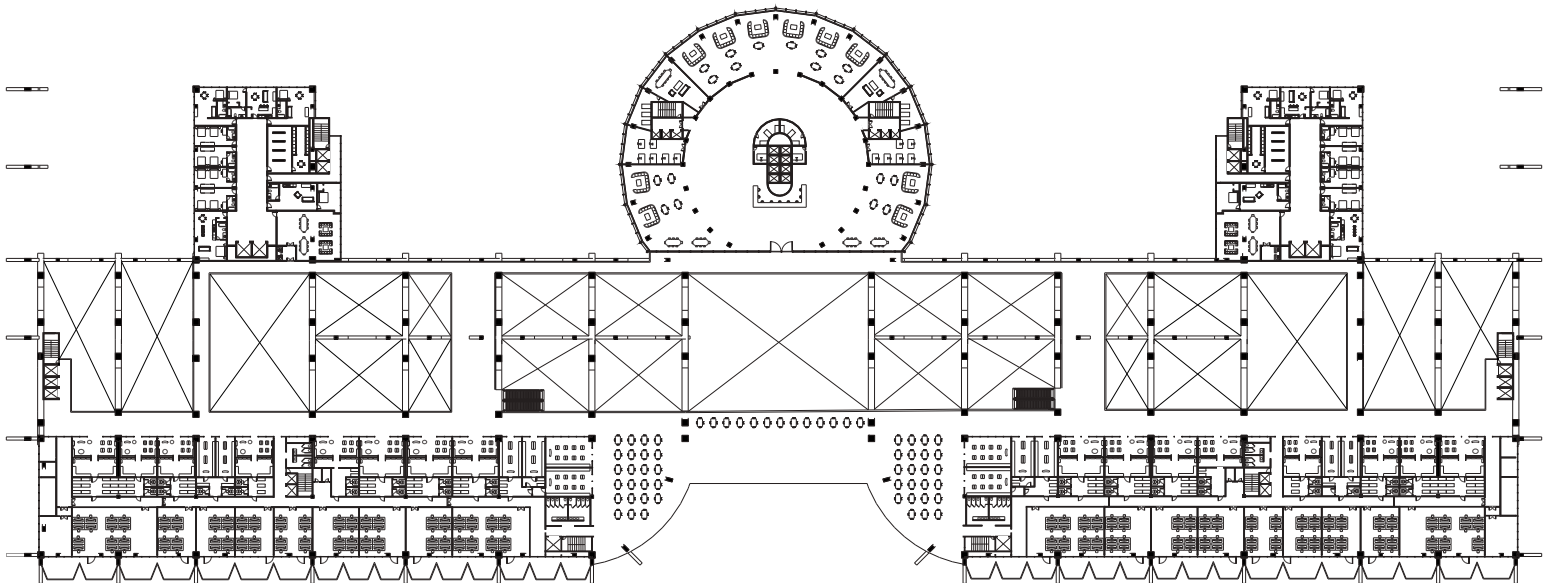


FLOOR PLANS | SCALE: 1/64"= 1'



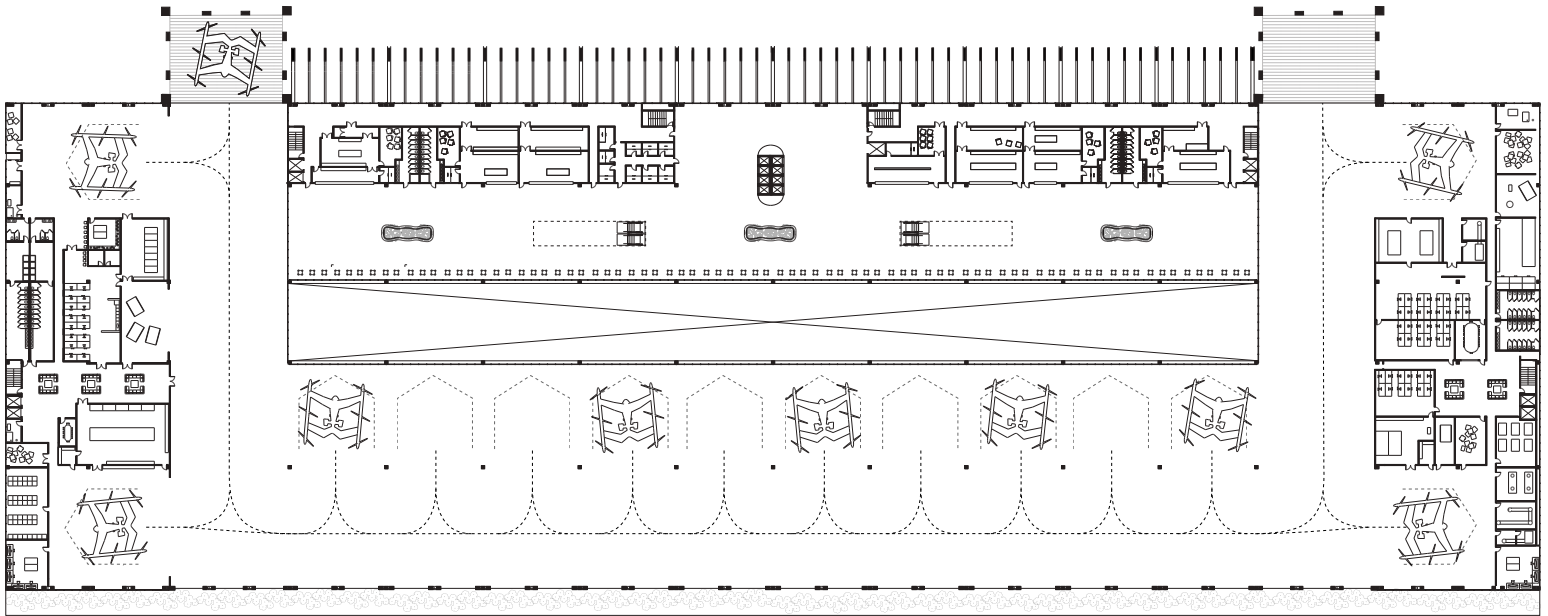
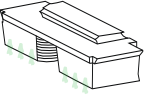
FLOOR 3 | MONORAIL FLOOR

The third floor supports the monorail system and features office and mall space, as well as a food court. The center of this floor is the “heart” of the building in terms of foot traffic.



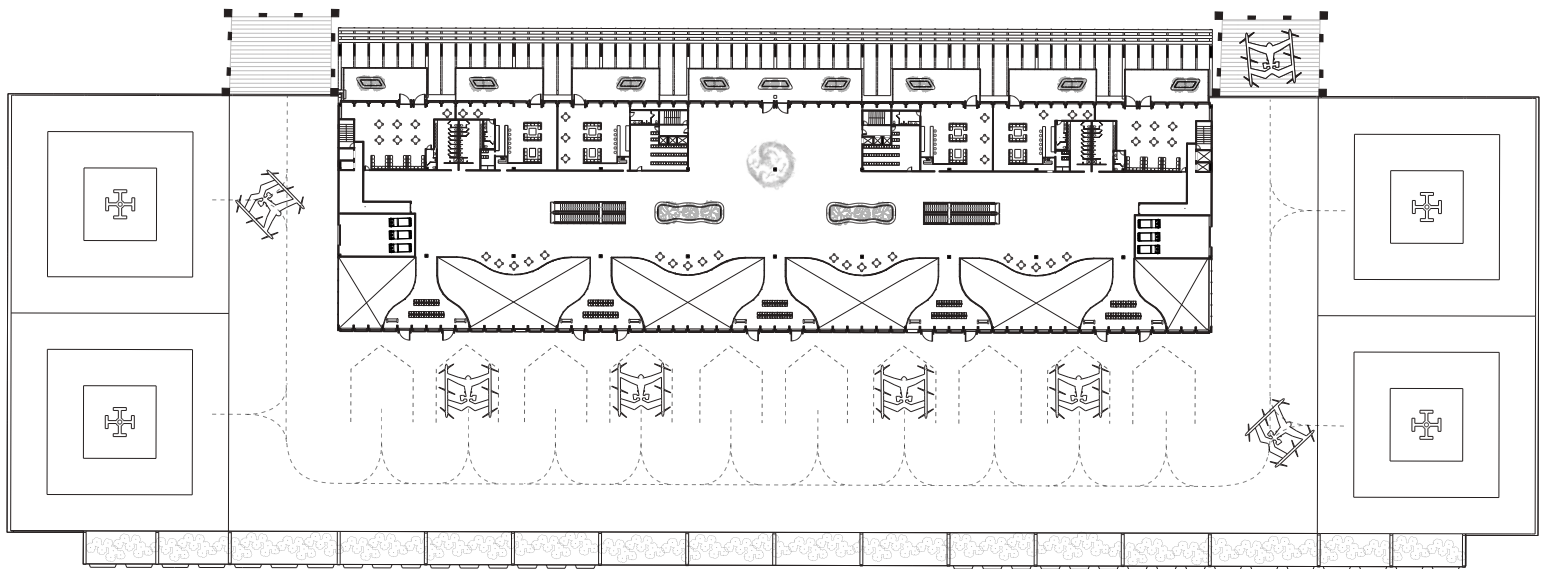
FLOORS 4-9 | OFFICE, MALL, AND HOTEL FLOORS

Floor 4 through 9 features office, hotel, and mall space, creating a vibrant atmosphere that is occupied 24 hours a day. A canyon of space runs horizontally across these floors which creates a monumental open-air space that continues all the way to the ground level.



FLOOR 10 | MAINTENANCE FLOOR

This floor features four maintenance hangars, 10 parking pads, and an open-air taxiway. The north portion of the building is enclosed and designed for passengers. It looks down over the atrium and across to eVTOLs in service, framing the maintenance process as a spectacle in of itself.



FLOOR 11 | TERMINAL & FLIGHT DECK

The terminals are located along five dustpan-shaped platforms that overlook the 11-story atrium. Each platform services two gates. The eVTOLs pick up passengers at these gates and drive to the take-off pads where they finally take flight.



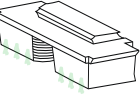
Aerial View | Looking West



Aerial View | eVTOL Landing



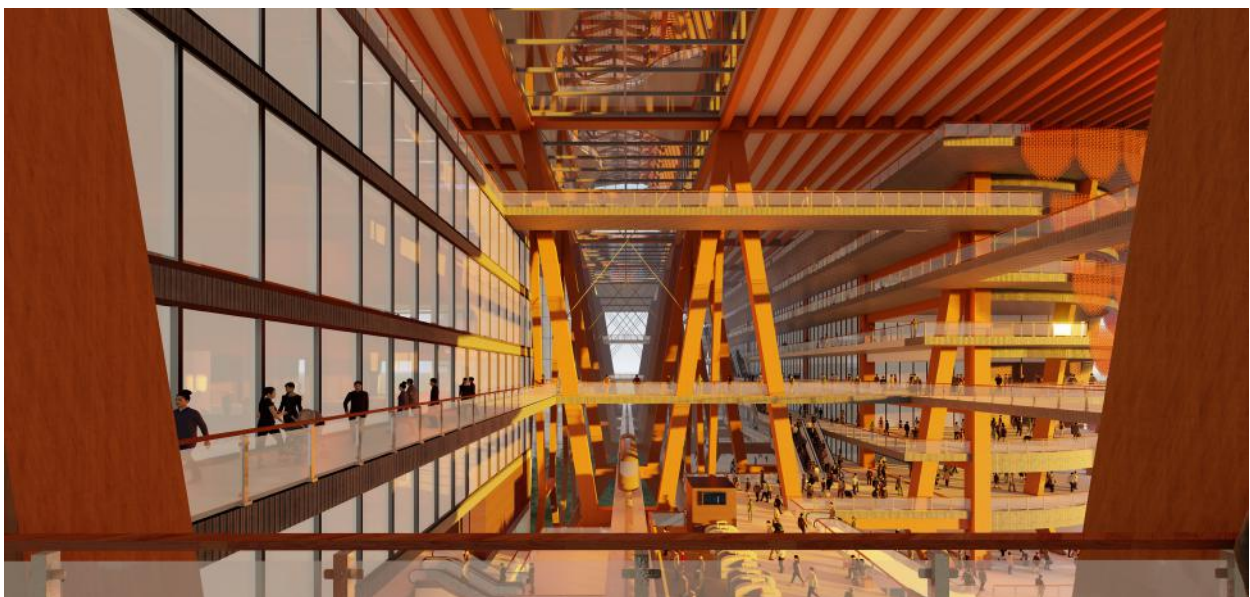
Flight Deck



Atrium from Above



Terminals and Gates



Atrium Above the Monorail

AN EYE FOR SUSTAINABILITY

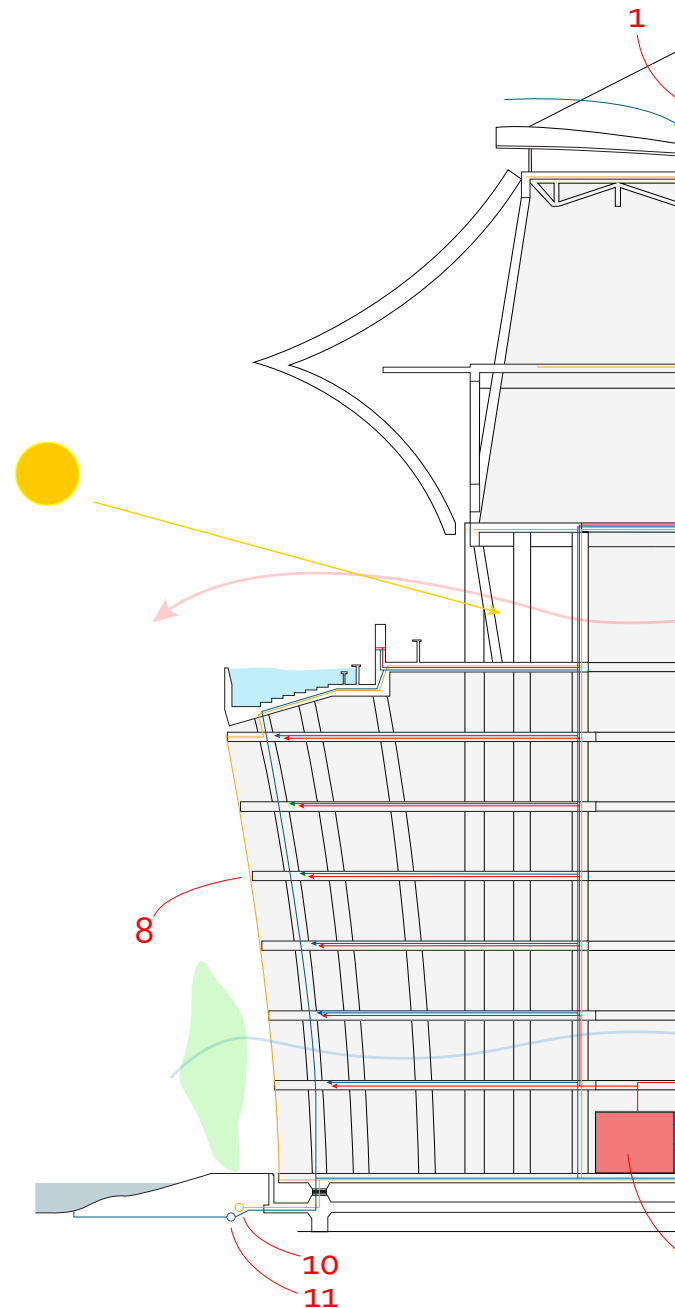
The broader approach to the vertiport promotes an "open-air" concept while the details of the building take every measure to preserve and collect clean water, generate electricity, and harness natural sunlight.

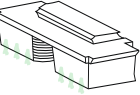
When a performance study was simulated in Sefaira, the building is expected to consume less than 10,000 BTU per square foot each year, well exceeding the standards set for the 2030 challenge.



KEY

1. A tensile roof collects rainwater and sends it into the building.
2. The captured rainwater is channeled through hollowed CLT-columns.
3. Runoff from the flight deck is filtered through a soil bed before it is collected.
4. The building takes advantage of the stack effect, allowing warm air to exit.
5. The building form allows sunlight to reach the busy monorail station.
6. Electrical current runs beneath the maintenance floor to charge the EVTOLs.
7. Aluminum mesh has built-in LEDs, allowing the building's facade to be even more expressive.
8. FAA-Approved Photo-voltaic Panels harness the sun's energy without disrupting the aircraft's communication signals.
9. An electric track powers the monorail, allowing the system to generate zero emissions.
10. Electricity is generated from an off-site solar array.
11. Water is collected from the harbor and filtered within the building before reaching the water reservoir.
12. Main East Boiler
13. Main East Water Reservoir
14. Main West Boiler
15. Main West Water Reservoir

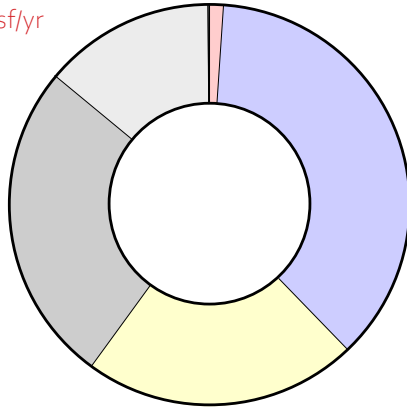




STANDARD CONSTRUCTION

Energy Use: 28 kBTU/sf/yr

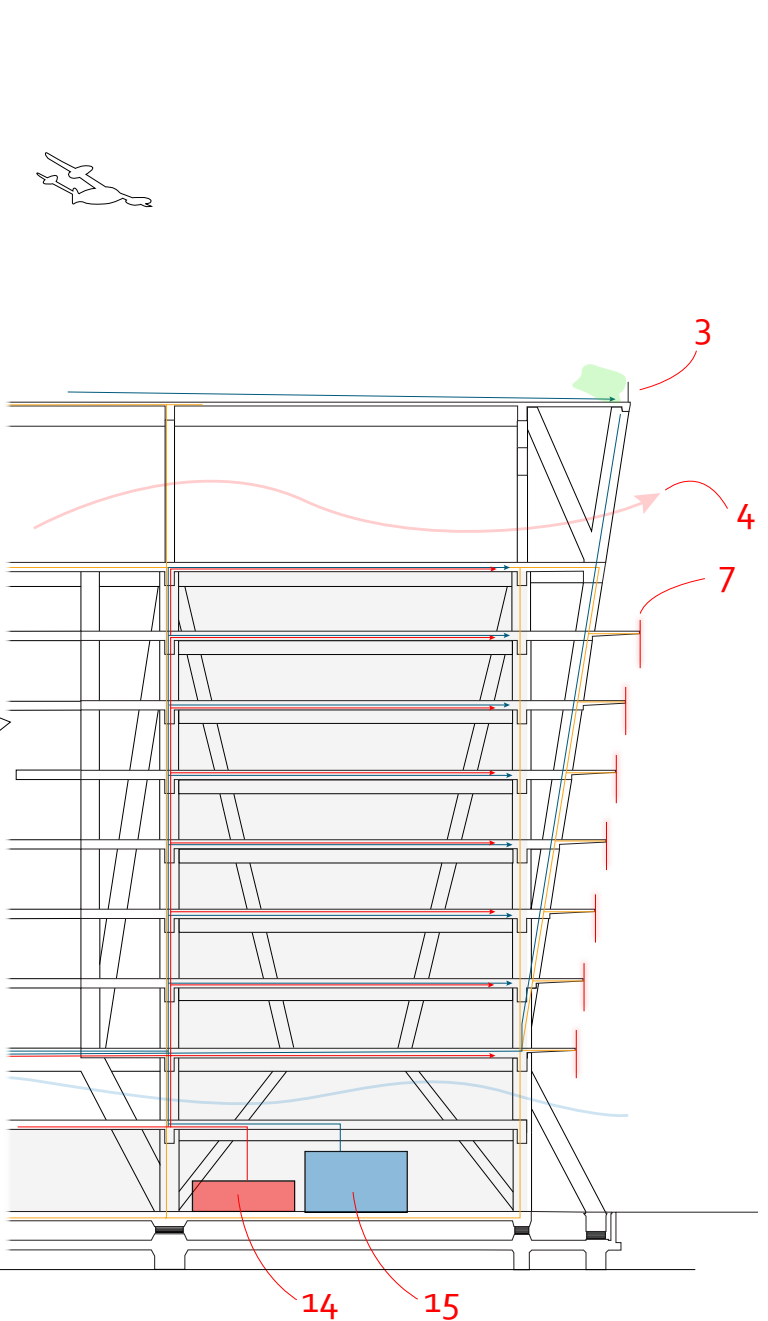
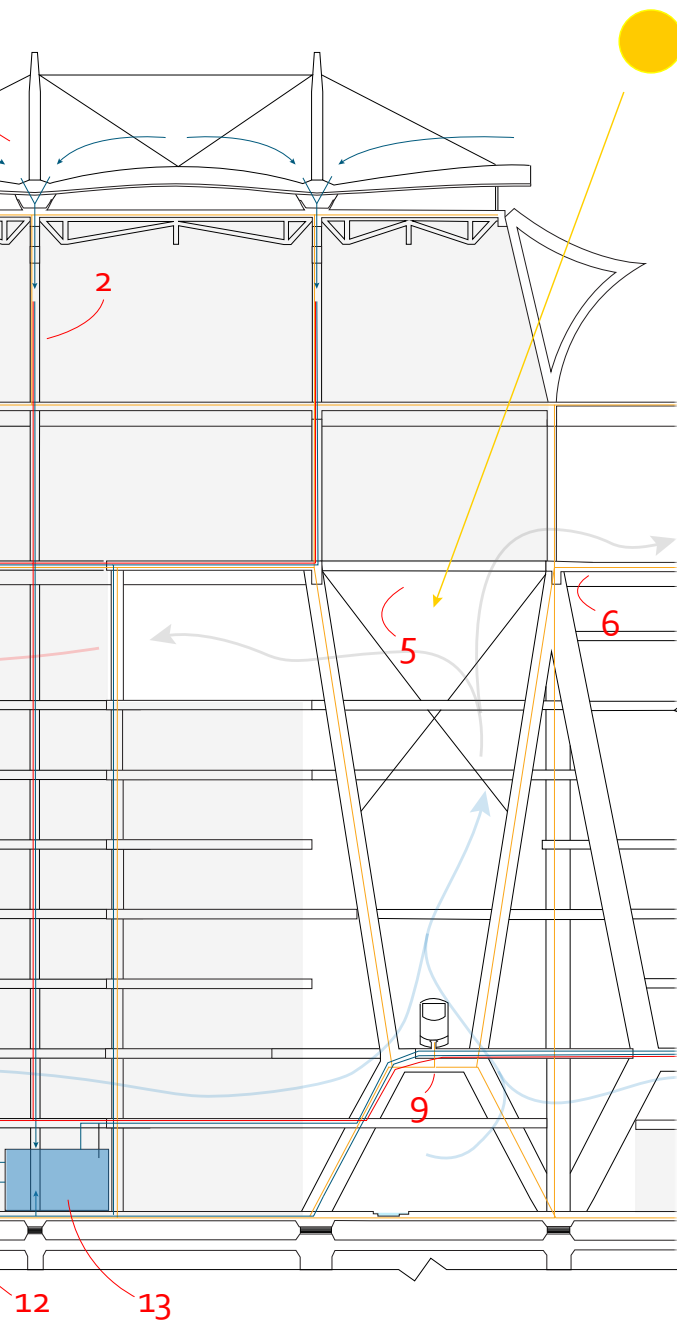
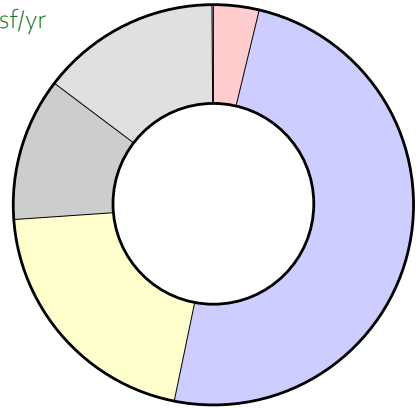
Cooling: 36.8%
Equipment: 26%
Fans: 14%
Heating: 1%
Pumps: 0.2%



OPTIMAL CONSTRUCTION

Energy Use: 10 kBTU/sf/yr

Cooling: 49.4%
Lighting: 20.7%
Fans: 15%
Heating: 3.2%
Pumps: 0.1%

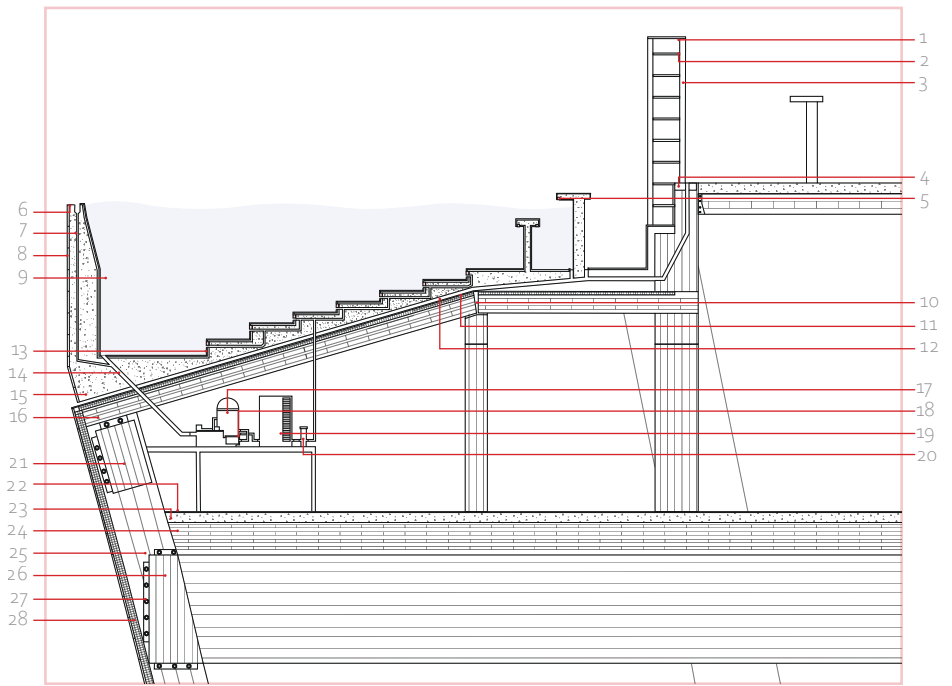


REFINING THE DETAILS

Since many attributes of this building have never before been created, the construction details of the vertiport are completely unique to this project.

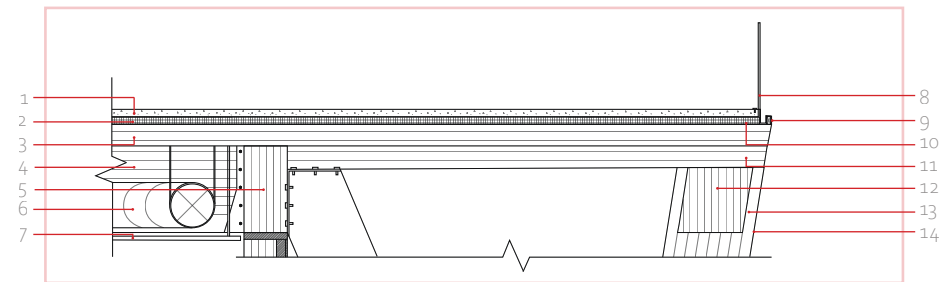
DETAIL A | 1/10" = 1'

- | | |
|---------------------------|-----------------------------|
| 1. Metal Angle Bracket | 15. Concrete Pool Form |
| 2. Wooden Shelving | 16. 7-Ply CLY Decking |
| 3. Metal Shelf Frame | 17. Cartridge Filter |
| 4. Aluminum Sill Plate | 18. Variable Speed Pump |
| 5. Recessed LED Lighting | 19. Heating System |
| 6. Drip Flashing | 20. Chlorine Dispenser |
| 7. Pool Overflow Drain | 21. 3' Glulam Beam |
| 8. Metal Cladding | 22. Epoxy Coating |
| 9. Chlorine Water | 23. Concrete Deck |
| 10. Steel Angle Connector | 24. 11-Ply CLT Decking |
| 11. Waterproof Membrane | 25. 30" Glulam Girder |
| 12. Water Intrusion Drain | 26. 5' Glulam Girder |
| 13. Ceramic Tiles | 27. Steel Bracket Connector |
| 14. Pool Drain | 28. 4" Rigid Insulation |



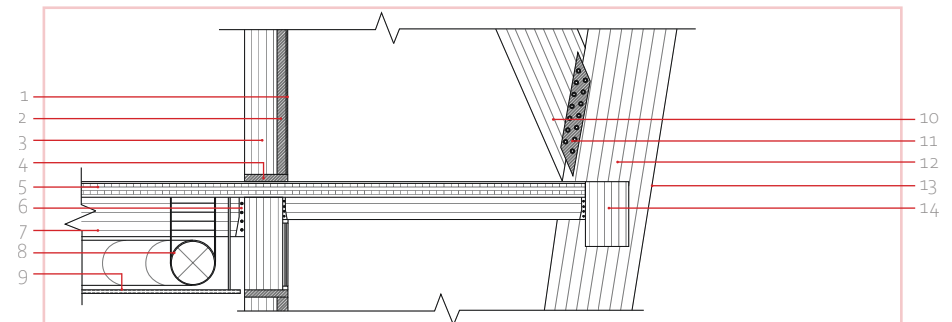
DETAIL B | 1/10" = 1'

- | | |
|--------------------------|-----------------------|
| 1. 4" Concrete Base | 8. Metal Railing |
| 2. 4" Rigid Insulation | 9. Gutter Flashing |
| 3. 3-Ply CLT Decking | 10. Vapor Barrier |
| 4. Glulam Joist | 11. Glulam Beam |
| 5. Glulam Girder | 12. 3' Glulam Girder |
| 6. 24" Diameter Air Duct | 13. Glulam Column |
| 7. Acoustic Felt | 14. Aluminum Cladding |



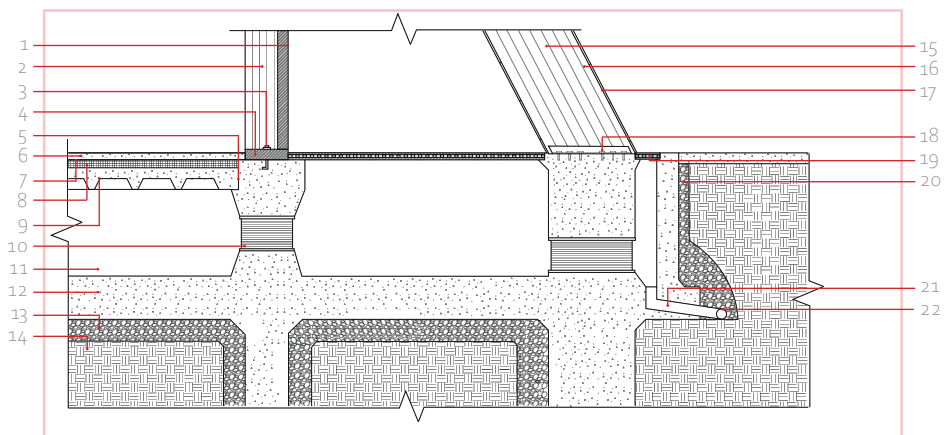
DETAIL C | 1/10" = 1'

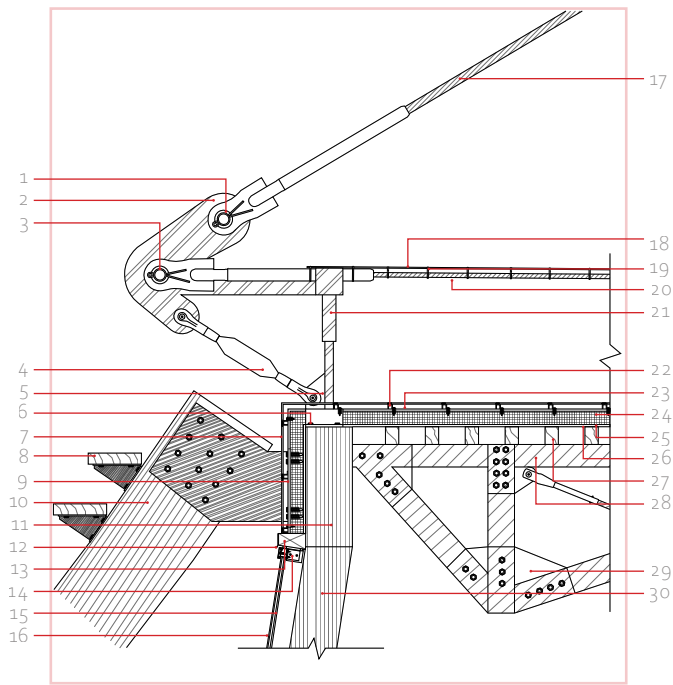
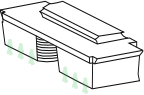
- | | |
|--------------------------|-----------------------------|
| 1. Glass Pane | 8. 24" Diameter Air Duct |
| 2. Mullion Frame | 9. Acoustic Felt |
| 3. Glulam Column | 10. 4' Glulam Bracing |
| 4. Transom Frame | 11. Steel Bracket Connector |
| 5. 7-Ply CLT | 12. 4' Glulam Column |
| 6. 20" Hanger Connection | 13. Aluminum Cladding |
| 7. 2' Glulam Beam | 14. 3' Glulam Beam |



DETAIL D | 1/10" = 1'

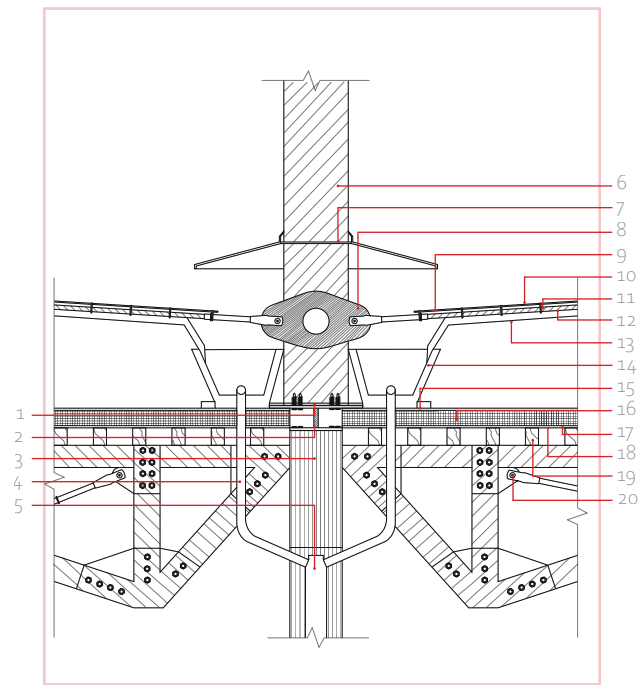
- | | |
|---------------------------|-----------------------------|
| 1. Glass Pane | 12. Isolated Foundation |
| 2. Glulam Column | 13. Compacted Gravel Fill |
| 3. Anchor Bolt (5' O.C.) | 14. Compacted Earth Fill |
| 4. Metal Sill Plate | 15. Glulam Column |
| 5. Control Joint | 16. Water-Resistant Barrier |
| 6. Concrete Slab | 17. Aluminum Cladding |
| 7. Vapor Barrier | 18. Steel Angle Connector |
| 8. Rigid Insulation | 19. Breakaway Metal Grate |
| 9. 2-Way Waffle Slab | 20. Compacted Gravel Fill |
| 10. Seismic Base Isolator | 21. Water Drain |
| 11. Crawl Space | 22. Perforated Drain Pipe |





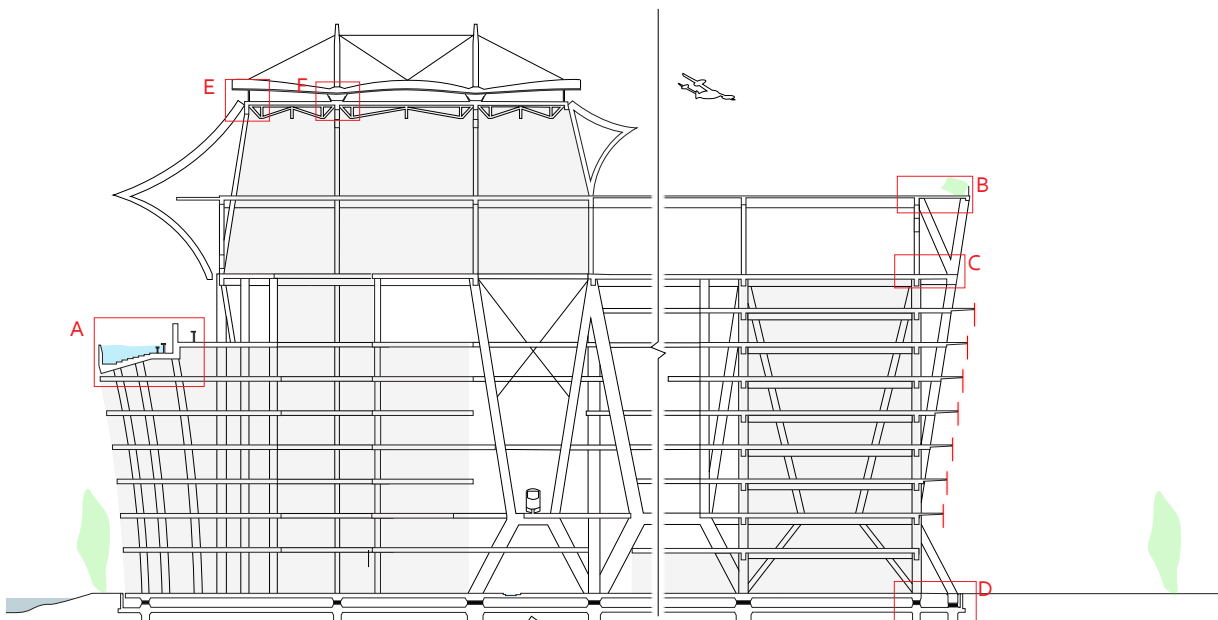
DETAIL E | 1/4" = 1'

- | | |
|------------------------------------|--------------------------------|
| 1. Large Clevis Rod End w/ Pin | 16. Double Pane Glass Window |
| 2. Welded Steel Fin | 17. 3" Diameter Steel Cable |
| 3. Small Clevis Rod End w/ Pin | 18. PTFE Fabric |
| 4. 5" Diameter Compression Rod | 19. PTFE to Cable Wrap |
| 5. Welded Steel Fin | 20. 3" Diameter Steel Cable |
| 6. Steel Anchor Plate | 21. Steel Truss |
| 7. Tongue & Groove Rainscreen | 22. Rainscreen Fastener |
| 8. Dimensional Lumber Louvers | 23. 1" Dens-glass Sheathing |
| 9. Welded Anchor Plate | 24. 6" Rigid Insulation |
| 10. Aluminum Column w/ Wood Finish | 25. Vapor Barrier |
| 11. 30" Glulam Girder | 26. 1" Gypsum Board |
| 12. Drip Flashing | 27. Dimensional Lumber Purlins |
| 13. Wooden Backing | 28. CLT Truss |
| 14. Backer Rod & Sealant | 29. Welded Steel Plate |
| 15. Angled Mullion | 30. Glulam Column |



DETAIL F | 1/4" = 1'

- | | |
|---------------------------------|---------------------------------|
| 1. Welded 2-Way Knife Plate | 11. PTFE Cable Wrap |
| 2. Anchor Plate | 12. 3" Diameter Steel Cable |
| 3. 30" Glulam Girder | 13. Drip Flashing |
| 4. 2" Diameter Downspout | 14. Rain Gutter |
| 5. 4" Diameter Downspout | 15. PVC Membrane & 1" Sheathing |
| 6. 3' Diameter Steel Column | 16. 6" Rigid Insulation |
| 7. 3' Rain Disk | 17. Vapor Barrier |
| 8. Steel Cable-Column Connector | 18. Gypsum Board |
| 9. Clevis Rod End w/ Pin | 19. Dimensional Lumber Purlins |
| 10. PTFE Fabric | 20. Clevis Rod End w/ Pin |



OKLAHOMA CITY, OK, USA

35.4676° N, 97.5164° W

METRO POPULATION: 1,441,695



"Though we travel the world over to find the beautiful, we must carry it with us, or we find it not."

-Ralph Waldo Emerson



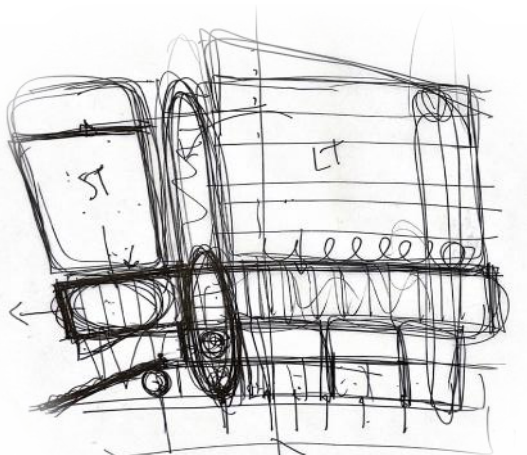
CLASS: ARCH608 | Eddy Tavio

LOCATION: Oklahoma City, OK, USA

SIZE: 310,000 GSF

BUILDING TYPE: Mixed-Use Residential

PROJECT TYPE: Studio City Plan | Individual Building



Oklahoma City is experiencing a total makeover of its inner city, recognizing that successful urban growth demands careful planning. We asked ourselves: "What would it look like if 10,000 people relocated to the heart of OKC?"

The ultimate plan revolves around the vision of reuniting the city's business district with its adjacent riverfront. This involved extending the axis of an urban park and encircling it with housing, public amenities, and a lively nightlife. Subsequently, the studio segmented into districts and intricately outlined a framework to support this vision.

East of the park lies a 72-acre area, once home to grain silos, now transforming into a new neighborhood—a microcosm of the broader urban plan. The district aims to cater to diverse lifestyles and demographics, serving as the shortest route from the city core to the river. A new soccer stadium anchors the district, infusing vibrancy and character into the area.

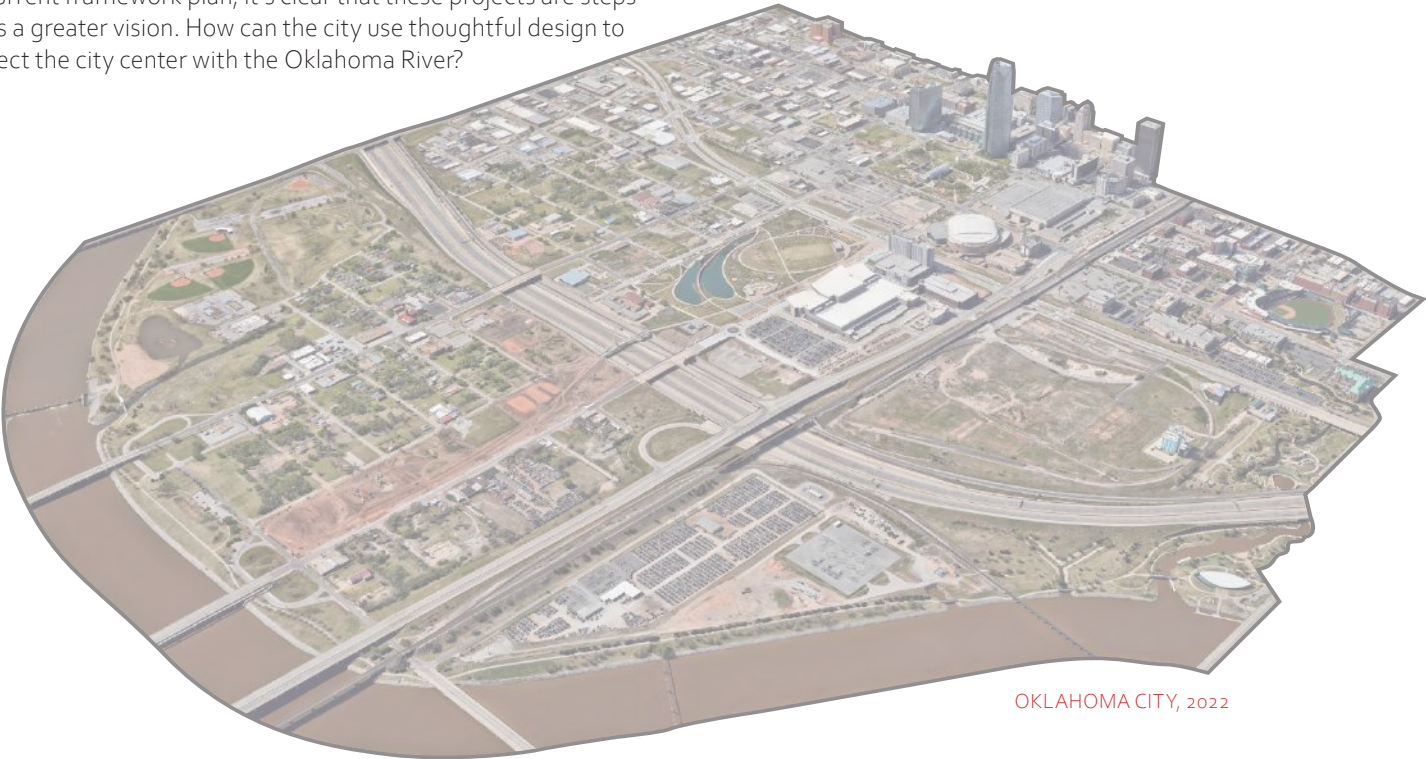
Adjacent to the soccer stadium, the Non-permanent Occupation Metropolitan Apartment Dwelling N.O.M.A.D. House complements as a community anchor, pushing the limits of temporary living.

It poses the question: "Can a housing complex create an ideal environment for residents, regardless of their length of stay?" The answer lies in a fusion of six floors of community amenities and six floors of housing, fostering community integration and evolution.

The final product is a 310,000 square-foot hub and city icon with a "laced" facade that compliments its truss structure while mimicking a soccer net.

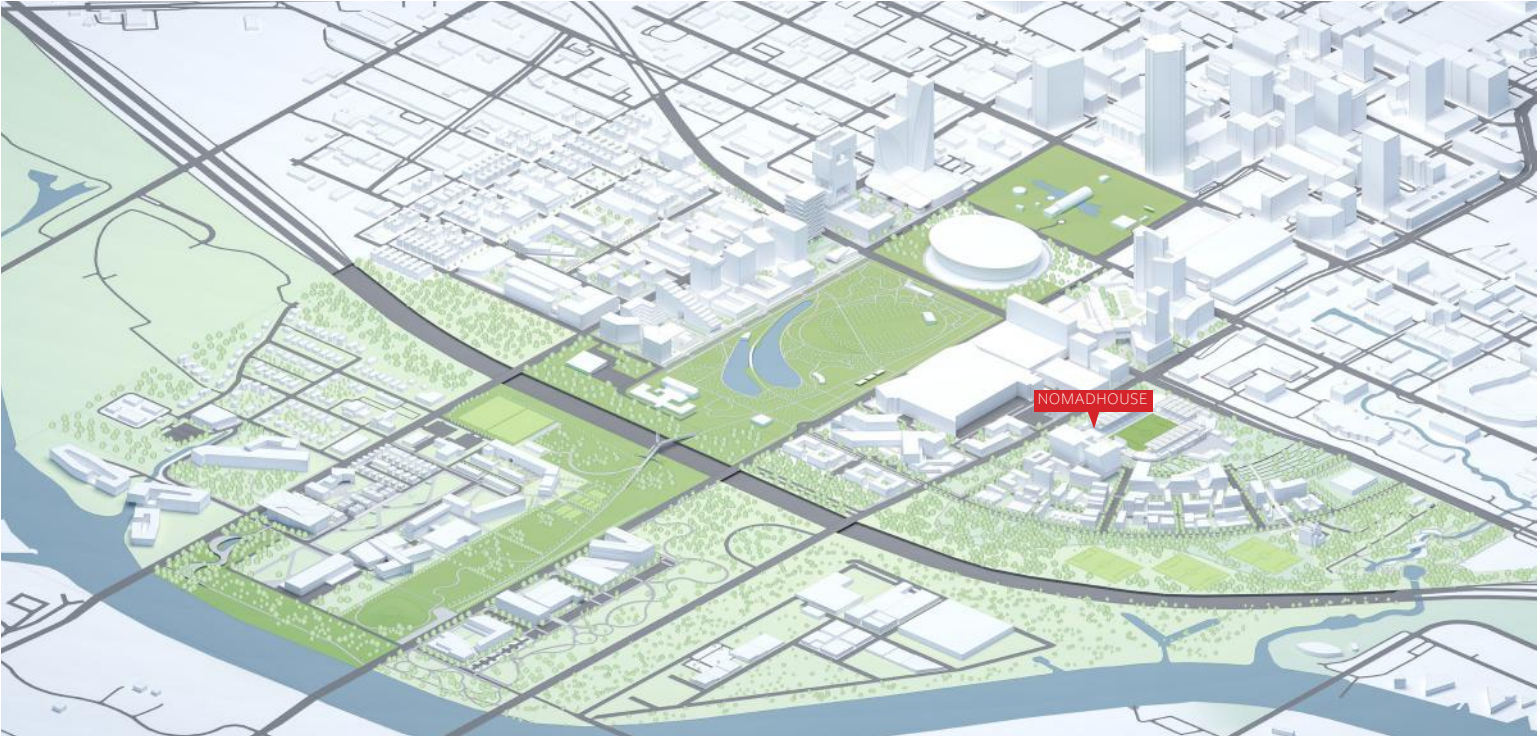
CREATING A FRAMEWORK: "CORE TO SHORE"

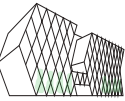
Downtown Oklahoma City is beginning to thrive, introducing brand-new places like Scissortail Park and the OKC Convention Center. In the city's current framework plan, it's clear that these projects are steps towards a greater vision. How can the city use thoughtful design to reconnect the city center with the Oklahoma River?



THE PROPOSED DESIGN

The city core connects to the river by extending the park across its north-south axis. The park is flanked by mixed-use residential projects on either side, paying attention to a spectrum of densities and building scales. This allows for a wide spectrum of lifestyles to co-exist in one community.





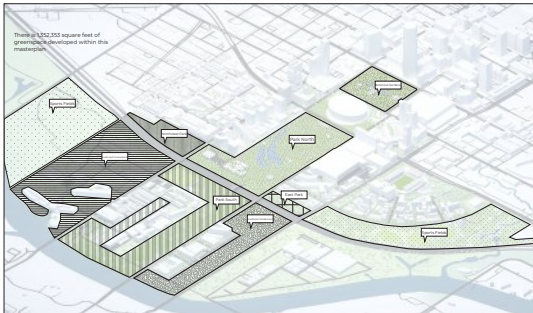
Throughout the design process, our studio considered a wide array of aspects; each plays a role in creating a successful city.



District Overlay by **Nadia Al-Ani**

A NEIGHBORHOOD SCALE

The city plan orders itself into seven distinct districts, each with their own strengths, values, and potential lifestyles. An ambitious master plan begins to break its scale into manageable subsets.



Green Space Overlay by **Graylon Sestak**

RESPECTING OPEN SPACE

While the 824-acre plan has the density to accommodate more than 10,000 new residents, it leaves plenty of room for wild grass, manicured parks, and public plazas. This serves to encourage exercise, interaction, excellent air quality, and natural water drainage.



Transit Overlay by **Sam Cohen | Kyle Gilboy | Brooks Quinby**

FORMING A TRANSIT NETWORK

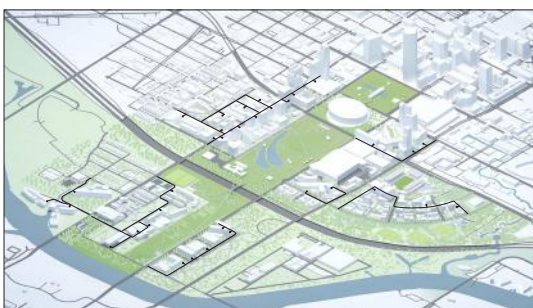
While each district is unique, they are all connected via bus, streetcar, and bicycle infrastructure. This gives residents plenty of transportation options beyond the conventional car, and facilitates a more equitable framework for all.



Mixed-Use Overlay by **Jimena Dorador | Britney Martinez**

ENHANCING THE COMMUNITY

To better serve incoming residents, the city framework places an emphasis on communal spaces for recreation and education. The plan allows all residents to live within walking distance of these amenities.



Service Spine Overlay by **Julia Larkin | Molly Mistler**

BEHIND THE SCENES

The design resolves any logistical issues by creating services access to all new buildings, and required parking is allocated into multi-story garages instead of sprawling surface lots.

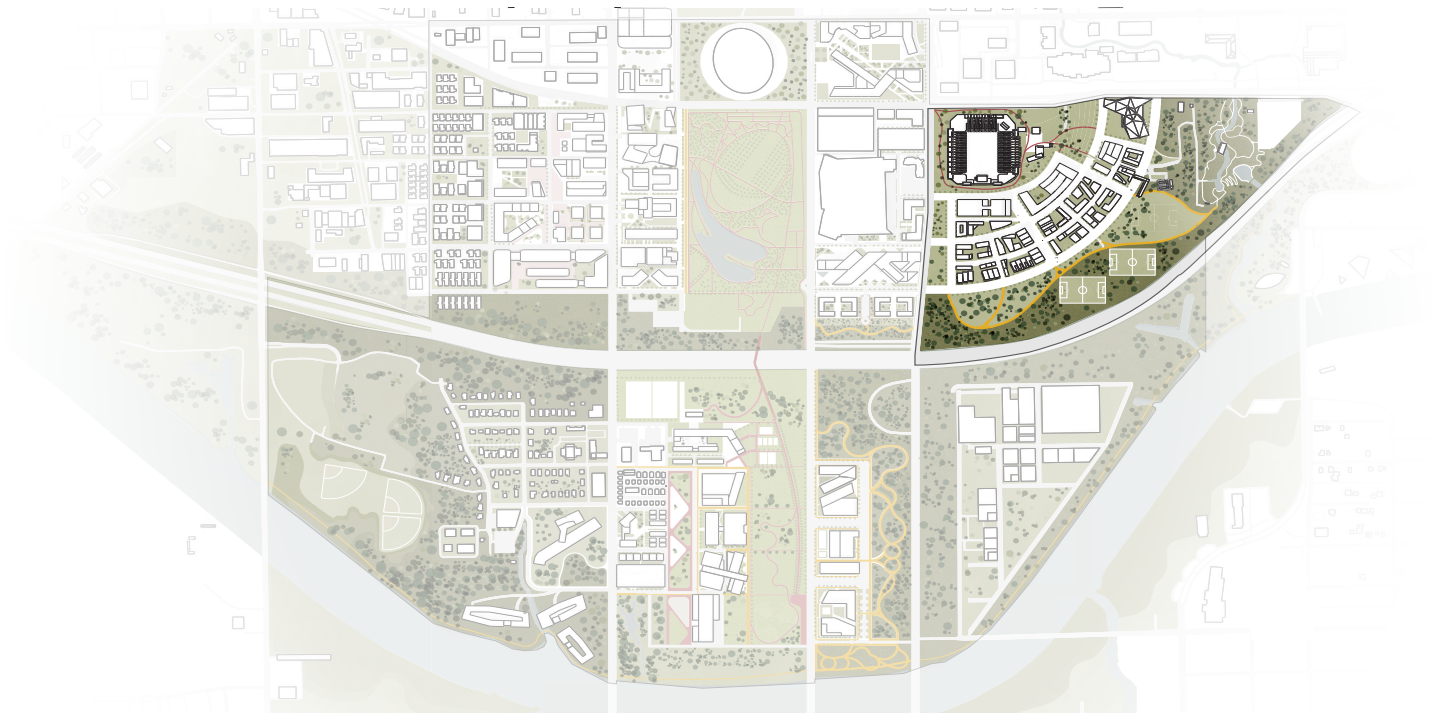
THE NORTHEAST "SILO" DISTRICT: A NEIGHBORHOOD OF VARIETY

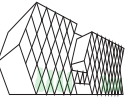
The Northeast District, shaped by Interstate 40, Shields Boulevard, and Oklahoma City Boulevard, forms a quarter-circle with a semi-radial layout. Centered around a soccer stadium, two main commercial strips extend outward, fostering varied densities for diverse lifestyles. The community is bordered by a natural buffer, reducing freeway noise, aiding water drainage, and enclosing a 22-acre public park.



ADHERING TO A GREATER CONTEXT

The neighborhood fits into the greater city framework by creating a microcosm of the larger vision. It does so by promoting a spectrum of densities while creating pathways from the urban center to the river. The soccer stadium completes a rectangular circuit of entertainment venues, neighboring the convention center, the new basketball stadium, and Bricktown, to the west, northwest, and north respectively.



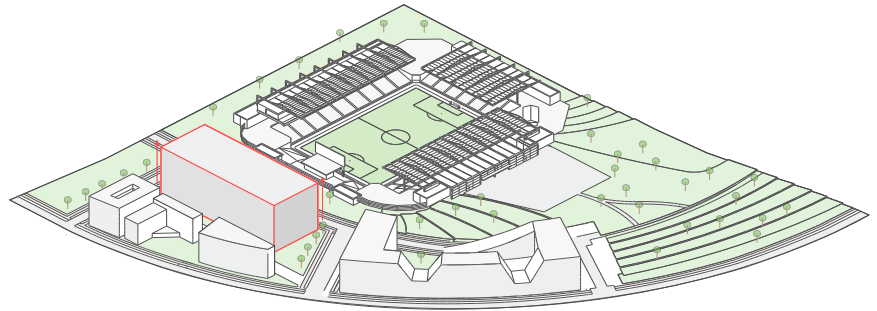


How can a temporary housing complex create a sense of permanent community?

An open design uses public spaces to welcome the outside world in, encouraging chance encounters and unique interactions.

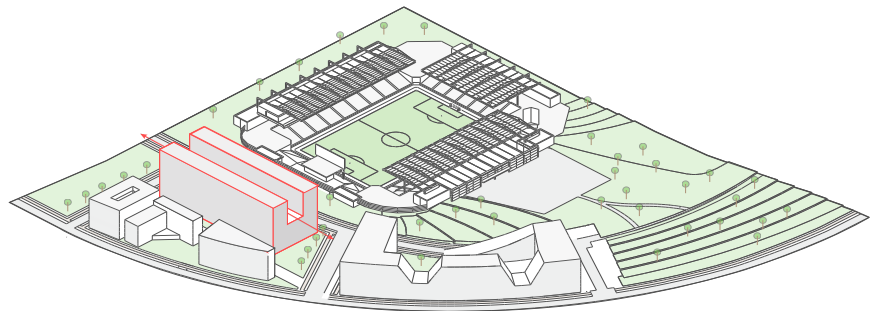
I. FORMING AN ANCHOR

The building places 132 temporary living units atop six floors of public space; this introduces the 'nomads' to the Northeast District, and the OKC community. The building uses double-height spaces and open floor layouts, using visual permeability to facilitate social connection.



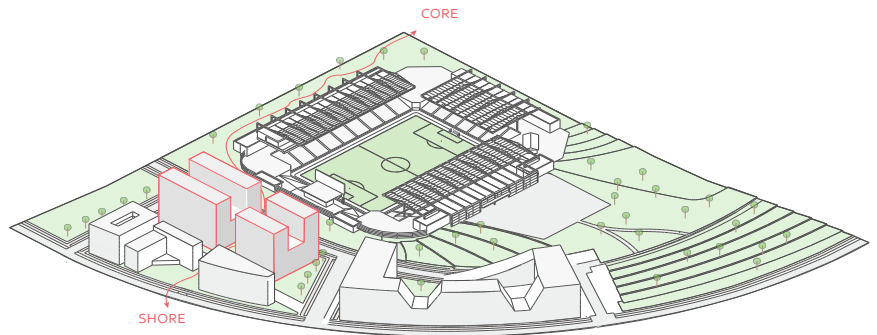
II. CARVING A MAKESHIFT STREET

A six-story, 30ft-wide void creates a 'vertical street' for the units, serving as a light-well and an open hallway. This further creates visual permeability and allows all units to receive daylight from both the north and south.



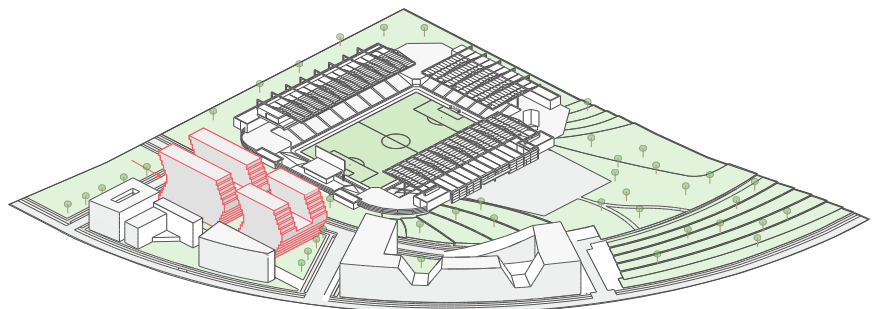
III. BLAZING A TRAIL

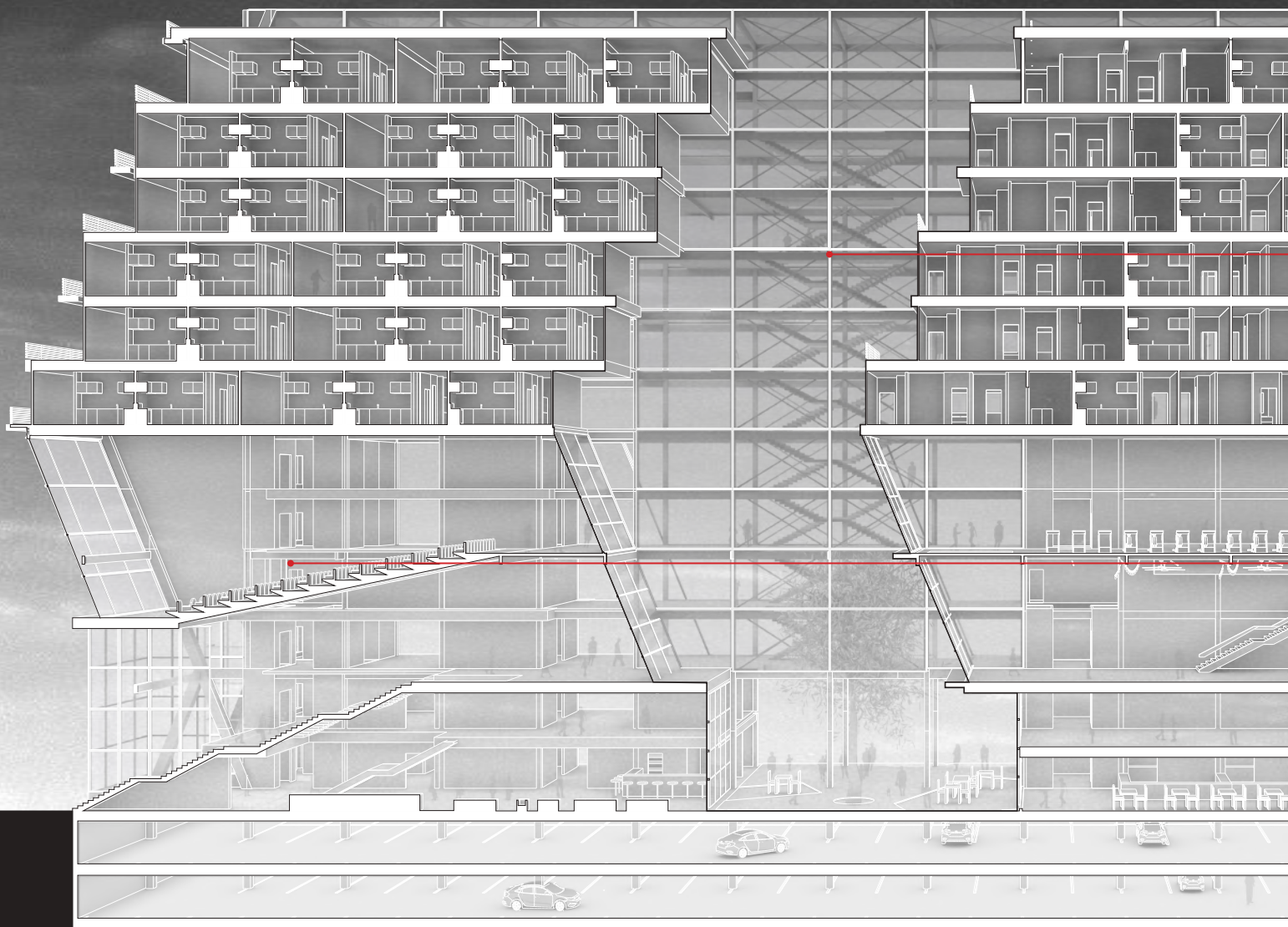
A 60ft- wide passage cuts through the building from north to south, connecting the stadium to the rest of the neighborhood. The building becomes a noise barrier without being a physical barrier, and reiterates the Core-to-Shore narrative at the individual building scale.



IV. EMBRACING THE SUNRISE

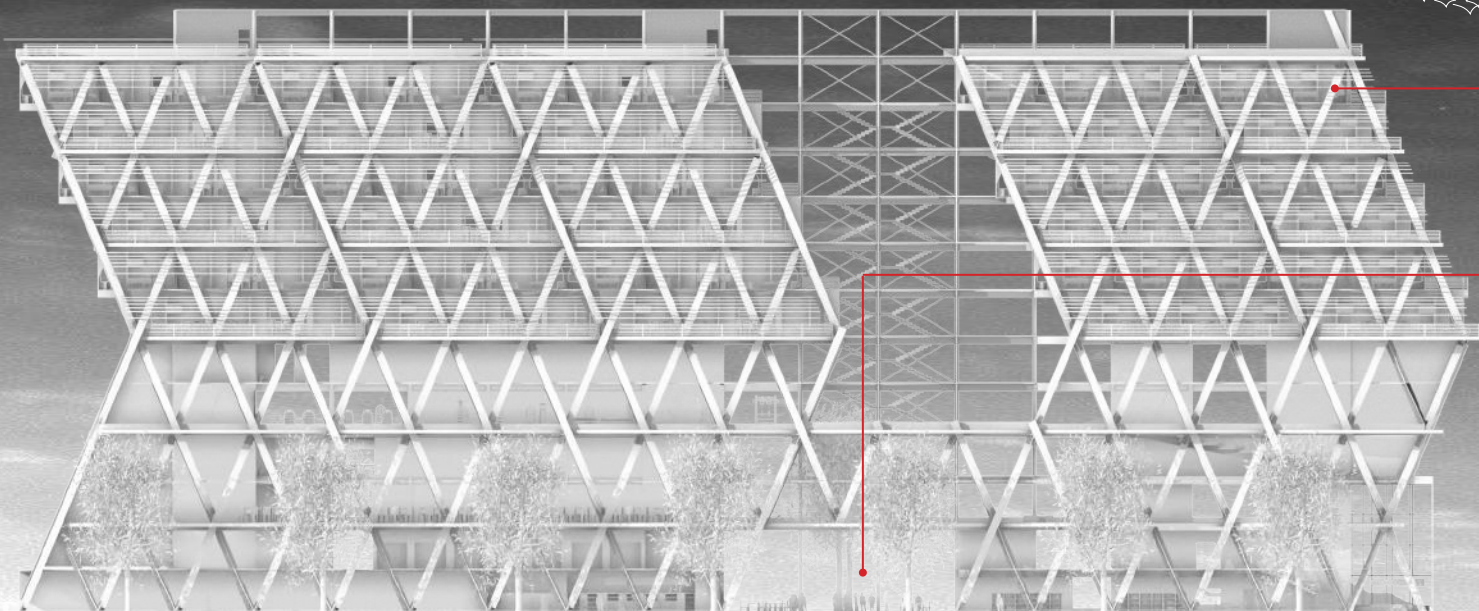
A CLT truss frame allows the building to have deep floor plates, and shifts five feet per floor to compliment the truss structure. This staggering also creates semi-private eastern balconies for both the building's west and east wings.

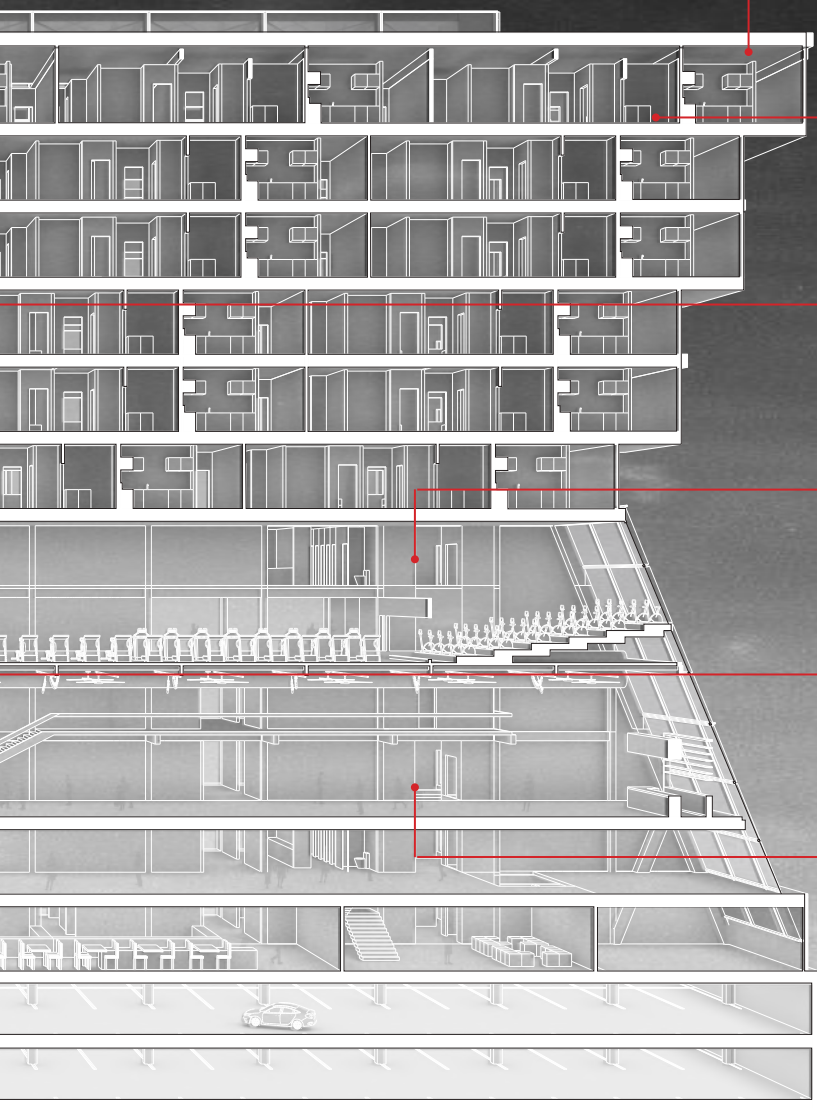




NORTH SECTION

SOUTH ELEVATION





NOMAD UNITS

The standard 760 square-foot unit is completely furnished and features in-unit laundry, a kitchen, and a full bathroom.

FAMILY UNITS

The 2-bed, 2-bath units feature 1600 s.f. of living space; it boasts laundry, kitchen, ample storage and a dining table for eight.

12-STORY ATRIUM

The atrium spans the entire building and brings light all the way from the skylights to the ground floor.

DOUBLE-HEIGHT GYM

The gym boasts a cardio room, weight room, and locker rooms. The high ceilings provide proper lighting and air circulation.

192-SEAT AUDITORIUM

The auditorium and film room each have 192 seats and can be used for talks, ceremonies, watch parties, and more.

EVENT SPACE

The double-height event space features an open bar and nearly 6,000 square feet of open floor. Its flexibility allows it to provide for nearly any celebratory gathering or event.

EAST ELEVATION



WATER COLLECTION

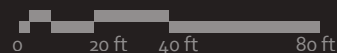
An inward slope allows the roof to collect 915,000 gallons of water annually, providing each unit up to 18 gallons per day.

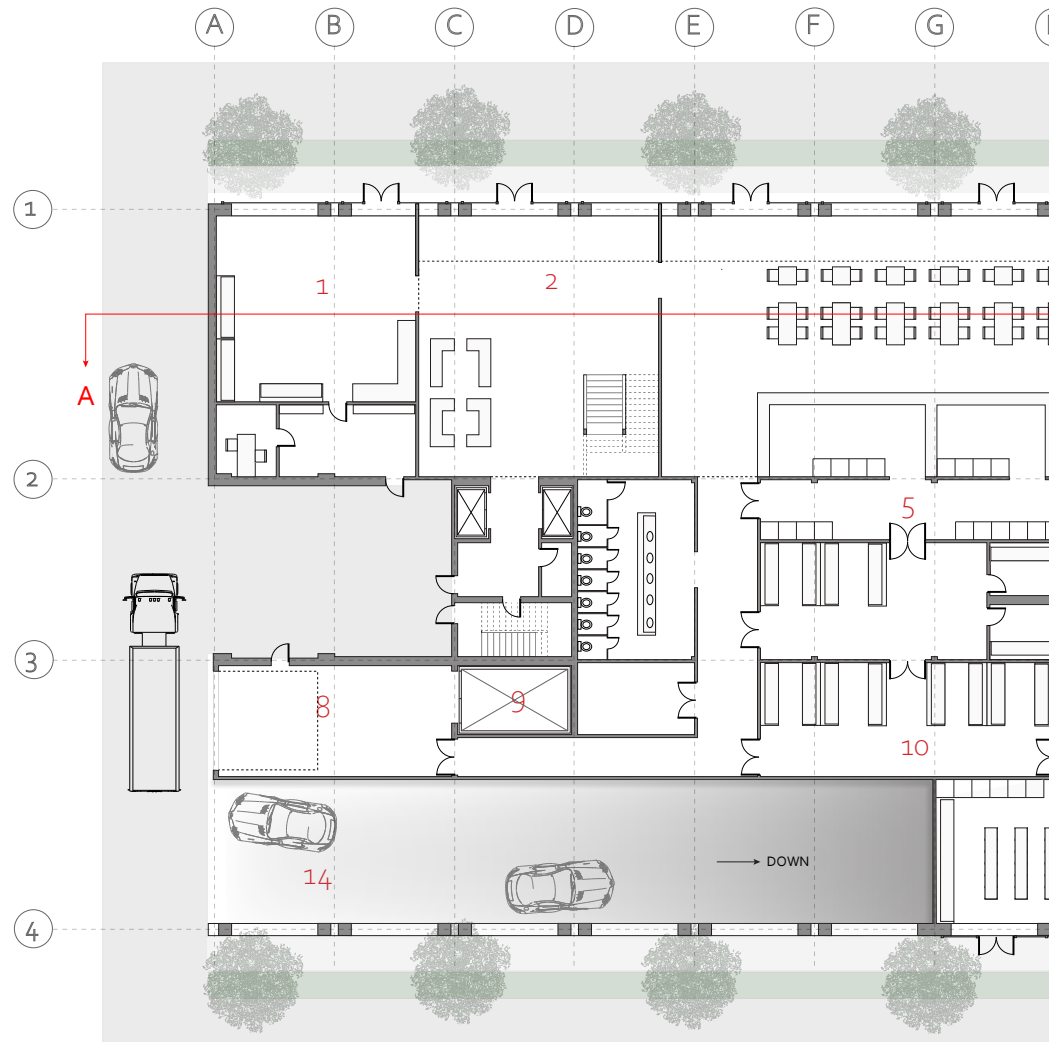
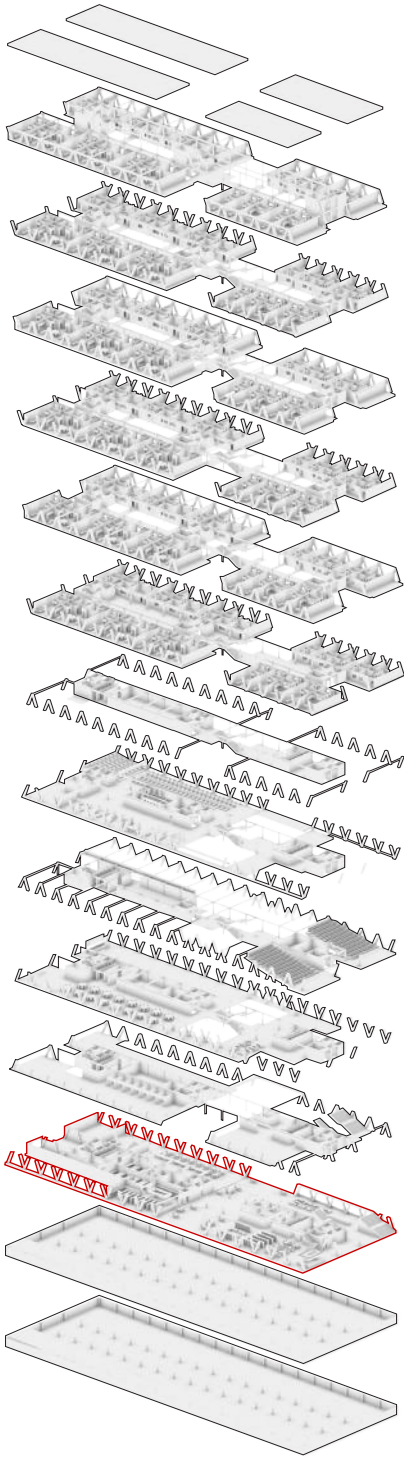
WEAVED FACADE

The metal facade compliments the internal truss structure while symbolizing the weave of a soccer net.

OPEN PASSAGE

The public passageway carves through the building, creating an open plaza that connects the city core to the river's shore. The opening is 60 feet wide, creating space for open seating, food vendors, and patches of greenery.

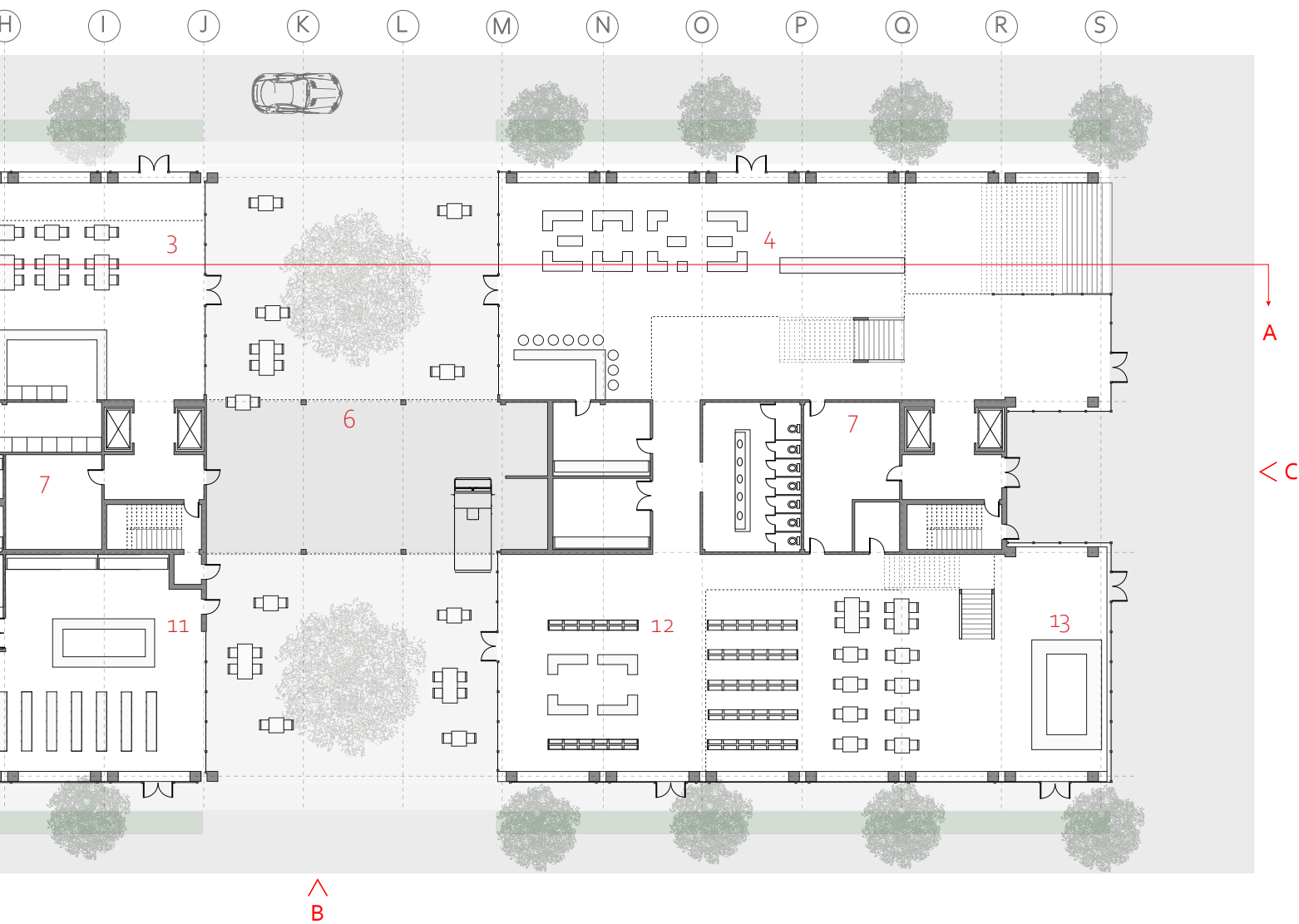


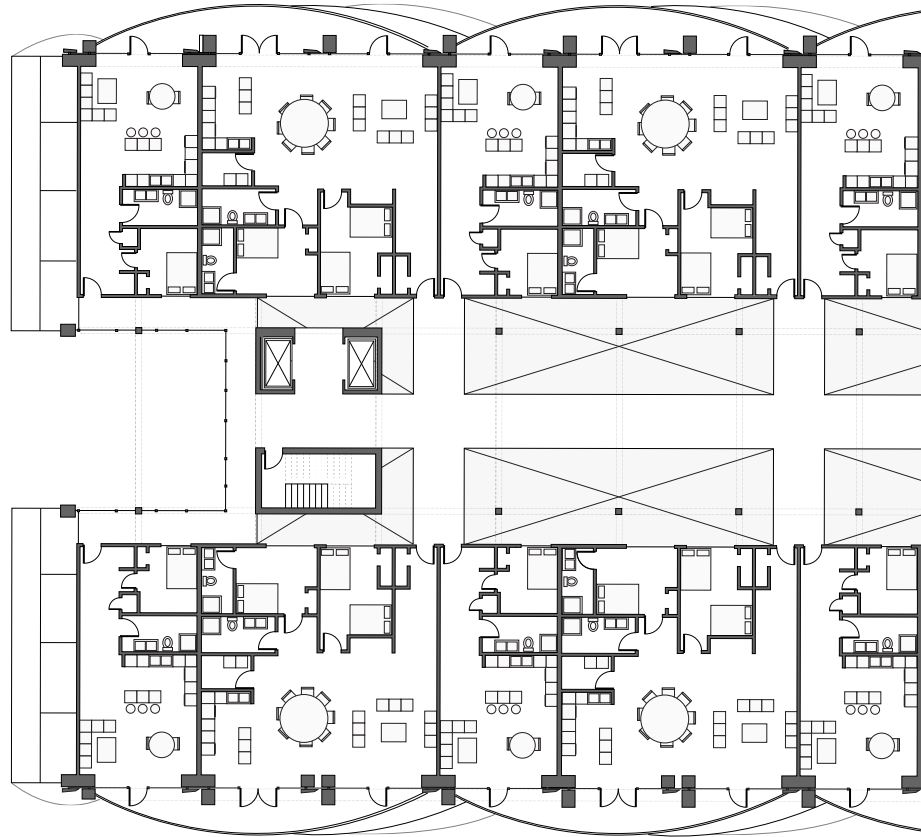
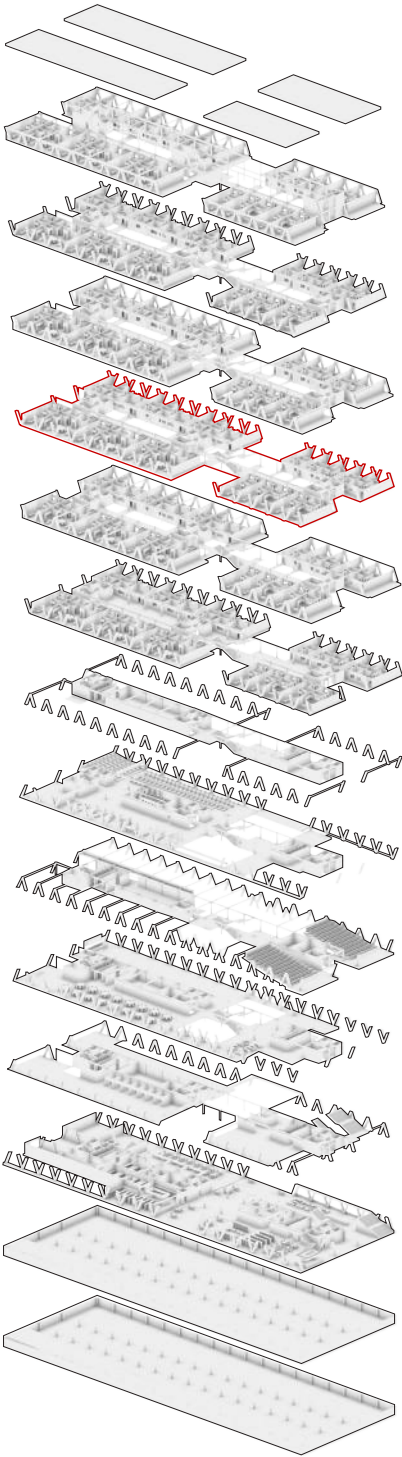


GROUND-LEVEL PLAN ▲

The ground level is arranged into three rows that align with the structural grid. The middle row is reserved for staff, allowing them to serve spaces to the north and south. The outer rows line the exterior which allows for street access, daylight, and views for the public.

- | | |
|--------------------|---------------------|
| 1. Leasable Retail | 8. Loading Dock |
| 2. Family Lobby | 9. Freight Elevator |
| 3. Food Court | 10. Market Storage |
| 4. NOMAD Lobby | 11. Market |
| 5. Kitchen | 12. Bookstore |
| 6. Passageway | 13. Coffee Shop |
| 7. Mechanical | 14. Parking Entry |

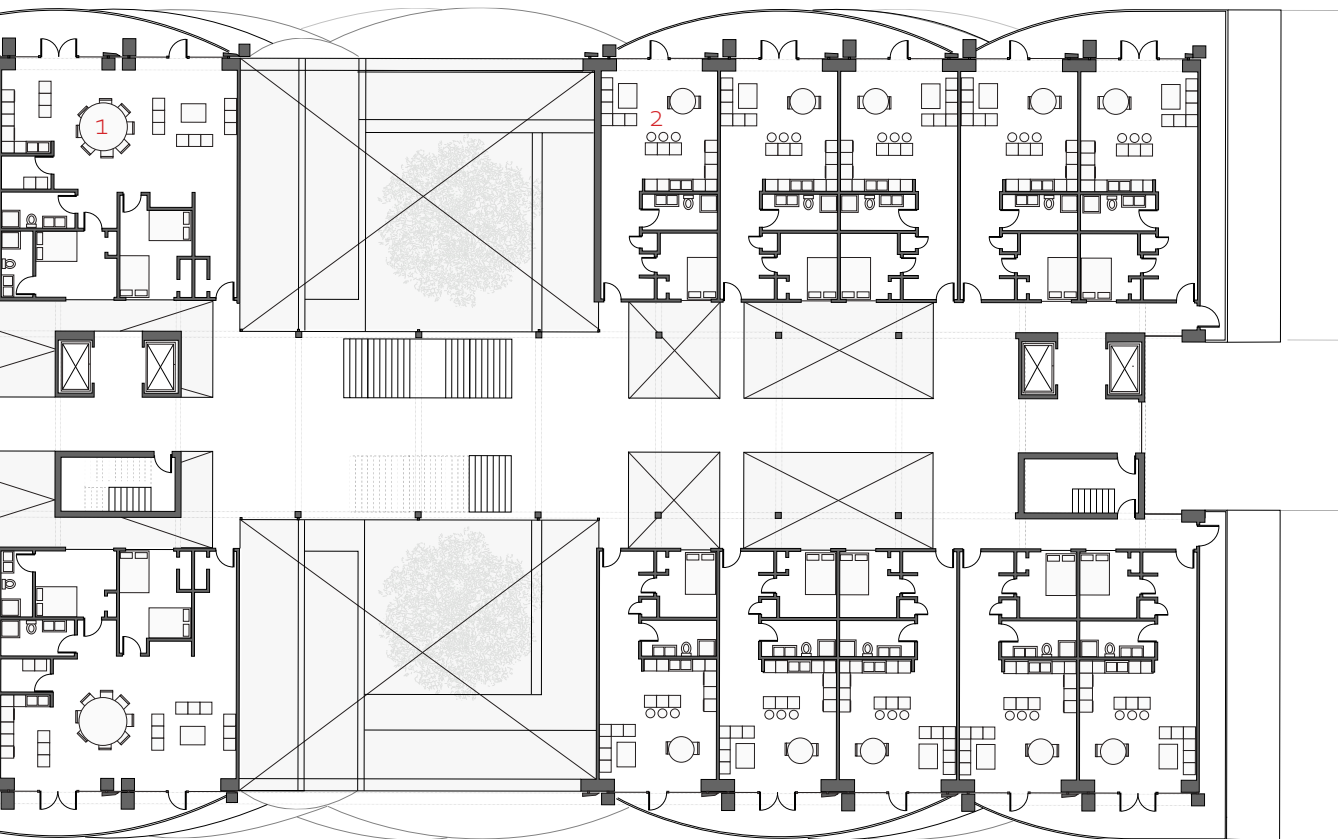
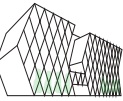




RESIDENTIAL PLAN ▲

Each residential floor is built of a set of standard modules, allowing for streamlined construction. The plan creates variety by allowing residents to choose which views they have, how large their suite is, and whether or not to have a balcony.

1. Family Unit
2. NOMAD Unit



COPENHAGEN, DK

55.6761° N, 12.5683° W

POPULATION: 1,476,988



"Invisible threads are the strongest ties."
-Friedrich Nietzsche



CLASS: UBDS740 | Michela Nota

LOCATION: Copenhagen, DK

SIZE: 1,100,000 GSF

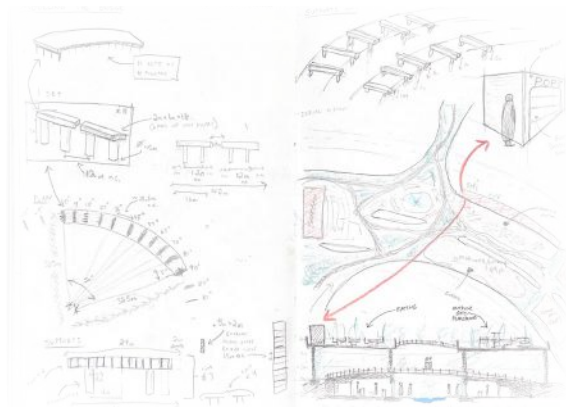
BUILDING TYPE: Infrastructure

PROJECT TYPE: Individual

Copenhagen boasts top-tier public transit and bicycle infrastructure, priding itself on minimizing reliance on automobiles. The city continually distances from private vehicles through measures like removing on-street parking and limiting access to inner-city streets. However, a kilometer-long elevated roadway at the city's edge remains a challenge, disrupting parkways and acting as a physical barrier to neighboring Fredriksberg.

An urban impact study under the bridge revealed a gender disparity, with men more likely to linger, implying a safety concern for women. This led to us wondering: **How can urban design enhance safety for women and children?**

The solution re-imagines the bridge as an urban oasis, redirecting cars below, reducing lanes and speeds. Elevated spaces ensure safety, fostering natural surveillance from adjacent buildings. Ultimately, the transformed bridge connects parkways, enhancing the city's nature network.



INTRODUCING BISPEENGBUEN: "THE ANTI-BRIDGE"

The concept of "bridge" typically signifies unity, peace, and harmony when connecting distinct entities. However, Bispeengbuen, while a literal bridge, serves solely to connect two motorways, elevating itself to disconnect from the public realm. Ironically, this bridge becomes a barrier on various scales.

STREET SCALE: VERTICAL BARRIER

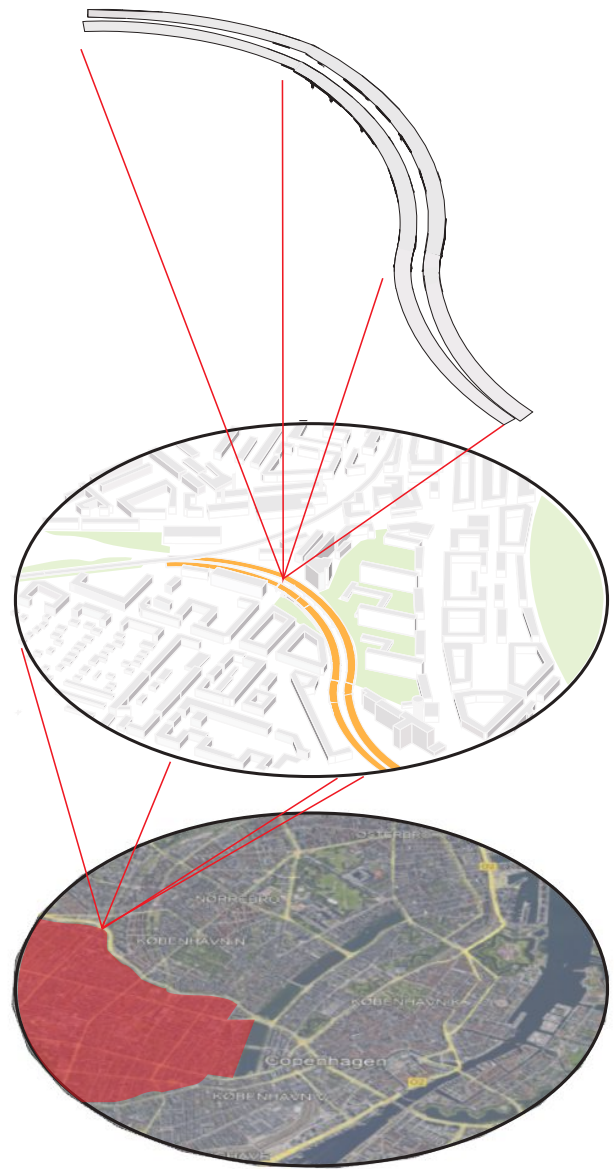
Private cars are elevated and separated from cyclists, buses, and pedestrians, suggesting priority to automobiles and creating a space both inhospitable and inaccessible to people.

LOCAL SCALE: NATURE BARRIER

The bridge is responsible for the termination of a 9-kilometer nature path to the west, cutting it off just a few blocks away from Superkilen, a 3-kilometer park to the east. (Map: 1-km diameter)

CITY-SCALE: POLITICAL BARRIER

The bridge is a concrete manifestation of the political barrier between Fredriksberg (red), and Copenhagen. This further divides the two communities on either side. (Map: 5km diameter)



ENHANCING COMMUNITY

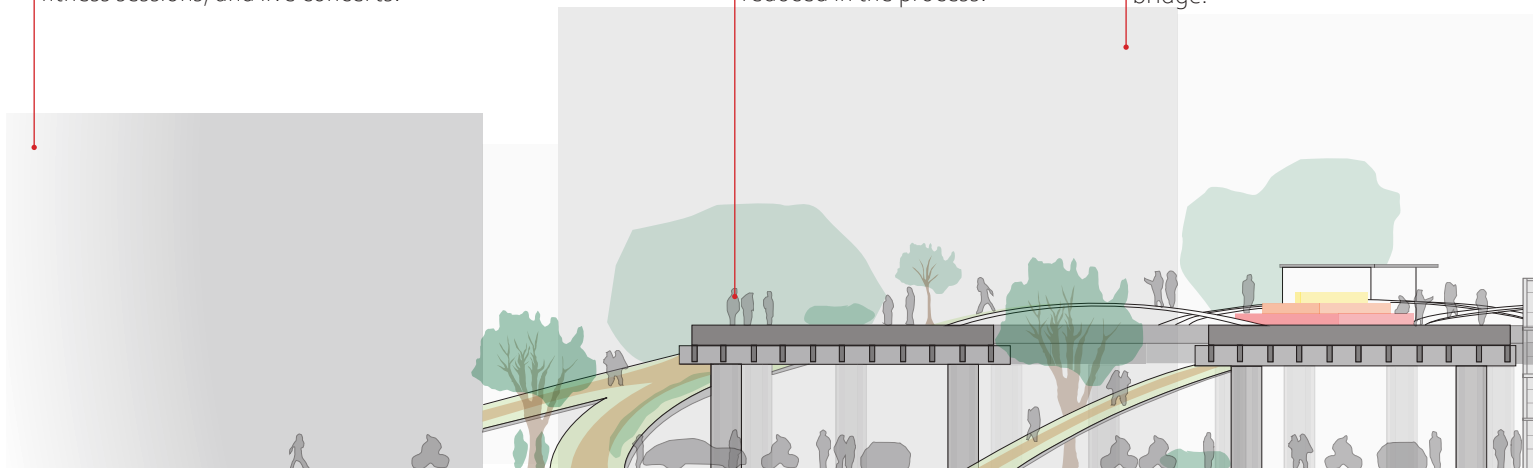
There are multiple grocery stores, fitness centers, and music stores within 500 meters of the bridge. This creates possibilities to bring communities together through farmers' markets, fitness sessions, and live concerts.

PRIORITIZING PEOPLE

Traffic is redirected below the bridge, integrating automobiles back into the public realm and reclaiming the bridge for people. Speed limits and lane widths are reduced in the process.

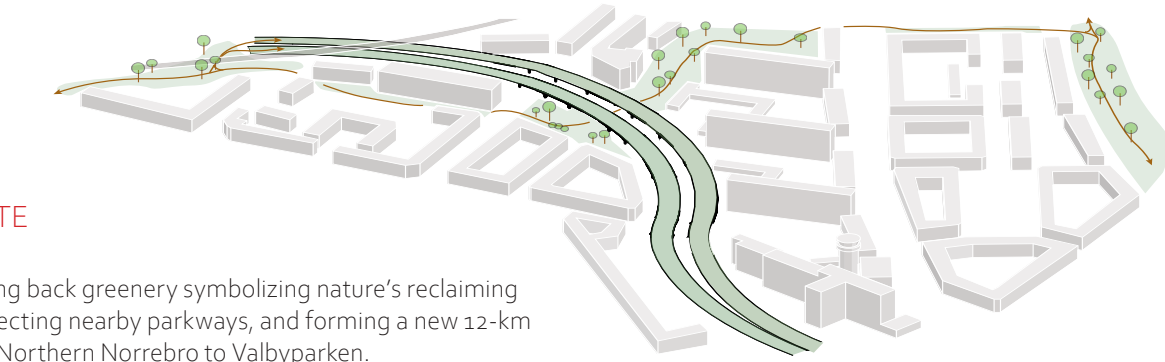
EYES ON THE STREET

Relocating pedestrians above the bridge allows for natural surveillance from the adjacent apartments. This increases safety for everyone using the bridge.



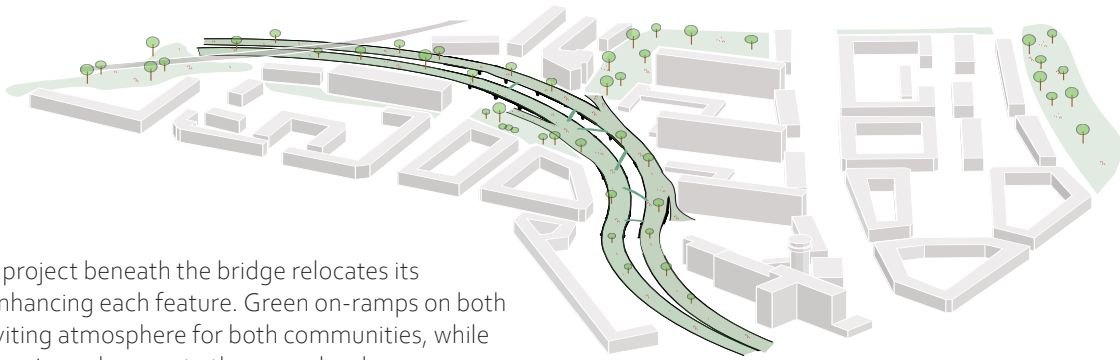
I. PRIORITIZE

The bridge is shut down to all motor vehicles. All traffic is redirected around and under the bridge. This re-introduces the roadway back into the street-scape, placing more 'eyes on the street' and enhancing the sense of safety for pedestrians.



II. INTEGRATE

The bridge bring back greenery symbolizing nature's reclaiming of space, connecting nearby parkways, and forming a new 12-km network from Northern Norrebro to Valbyparken.



III. INVITE

An existing impact project beneath the bridge relocates its amenities above, enhancing each feature. Green on-ramps on both sides provide an inviting atmosphere for both communities, while an elevator ensures universal access to the upper level.

ACCESSIBILITY FOR ALL

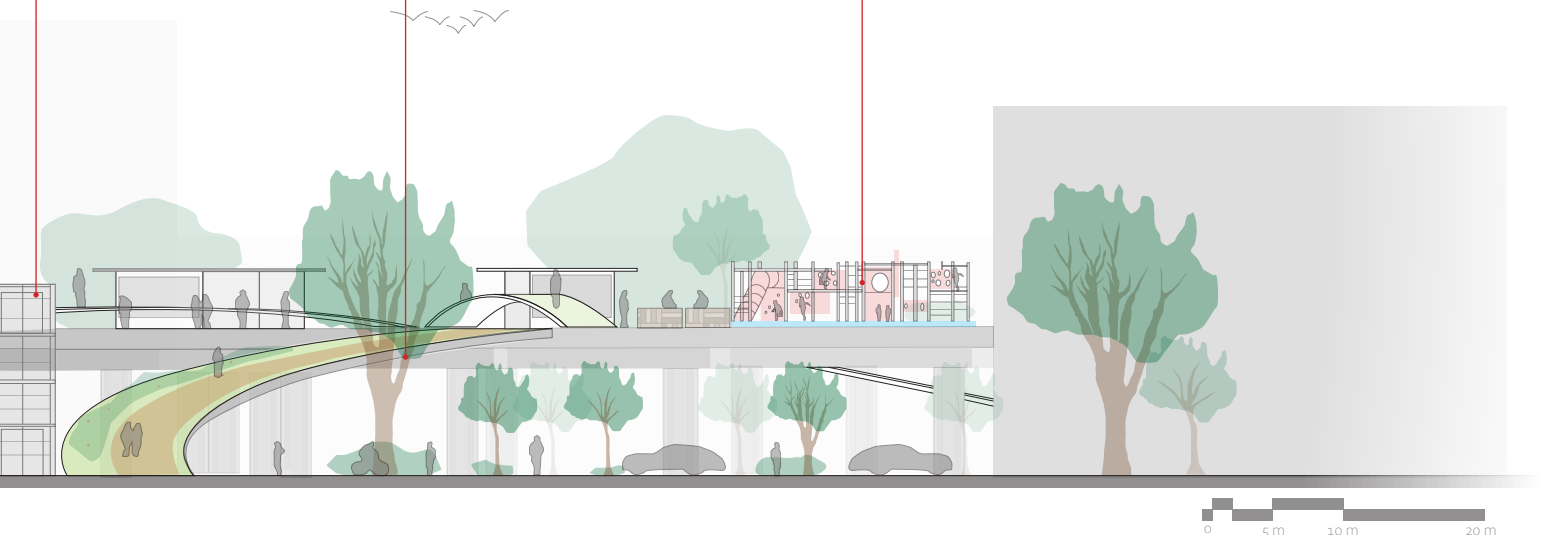
A glass elevator connects the park to Nordre Fasanvej, a busy street at the ground level. This addition provides everyone the chance to experience the park.

ENTRY VIA "ON-RAMPS"

A set of inclined green pathways let citizens easily access the top of the bridge, integrating it into the surrounding park network, drawing allusions to freeway on-ramps.

HOLISTIC PROGRAMMING

Activity spots like playgrounds, sports courts, and dining venues create a place that attracts people of all backgrounds and brings them together into one spot.



4.1 | KANSAS CITY, MO

4.4 | JEDDAH, SAUDI ARABIA

4.7 | BALTIMORE, MD

4.2 | KANSAS CITY, KS

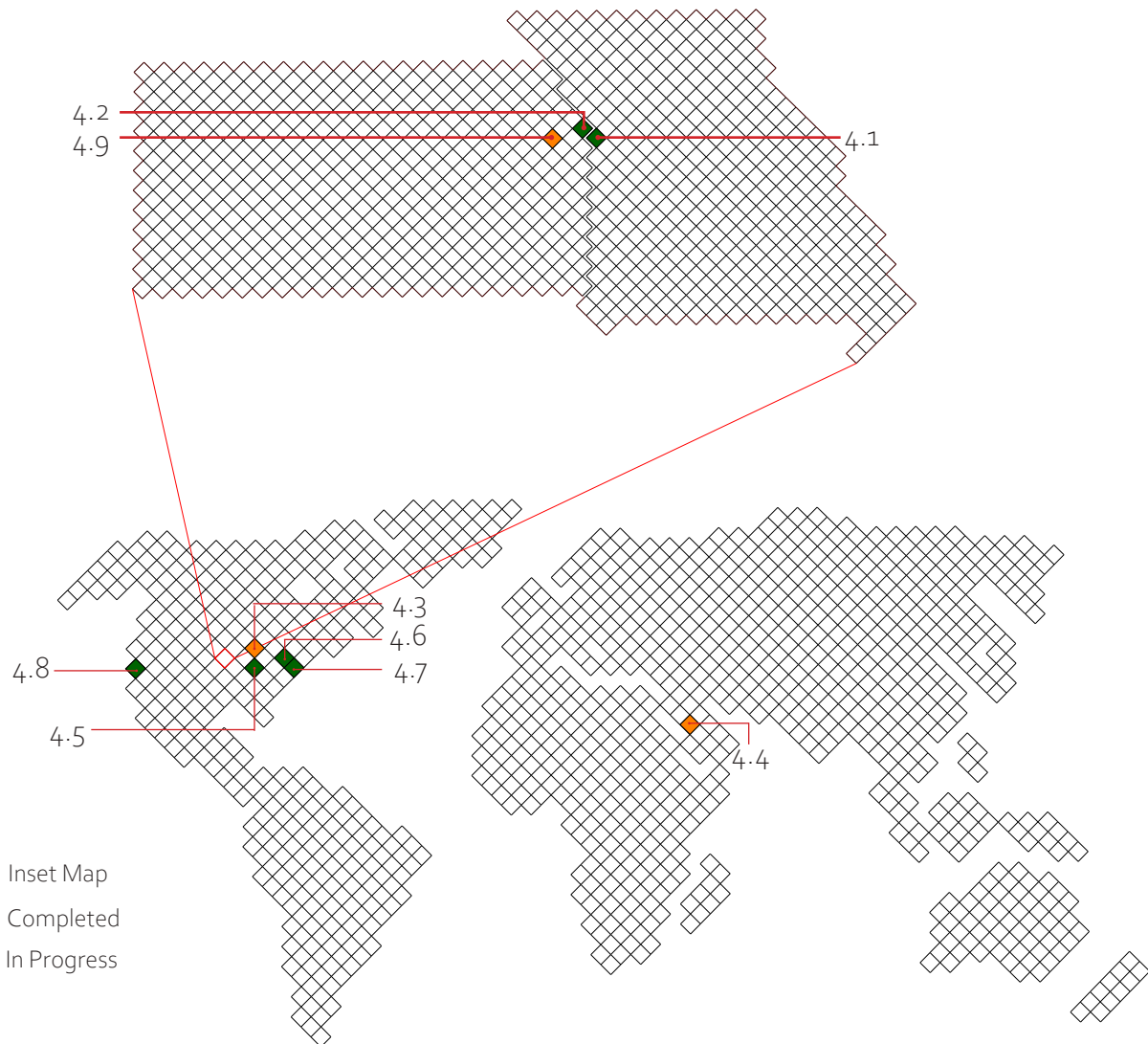
4.5 | LEXINGTON, KY

4.8 | BELMONT, CA

4.3 | CHICAGO, IL

4.6 | UNIVERSITY PARK, PA

4.9 | LAWRENCE, KS



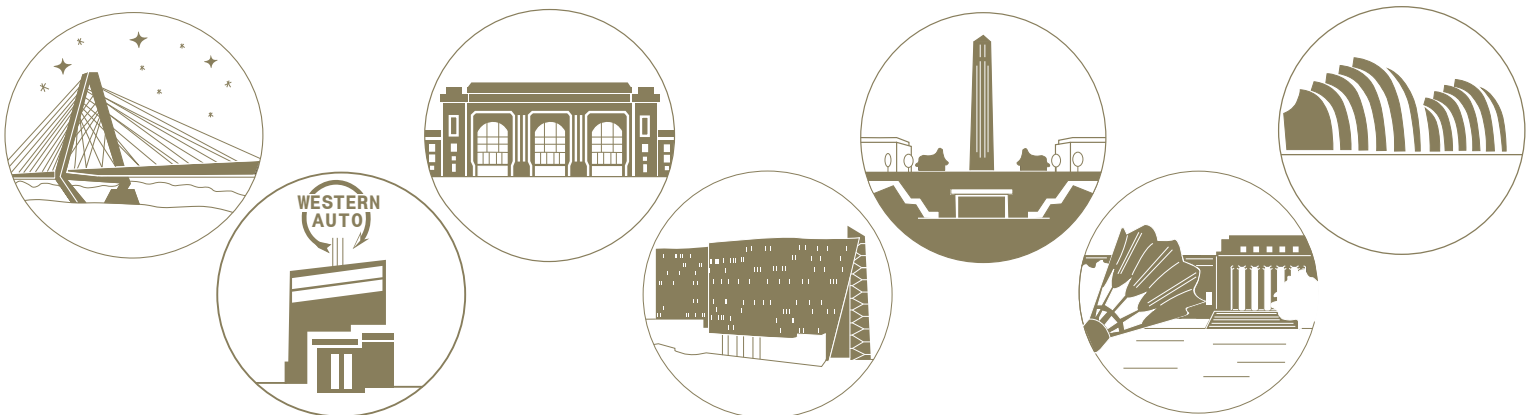
"Action is the foundational key to all success."
-Pablo Picasso



4.1 | BRASS INSETS | KANSAS CITY, MO

During my first internship in the summer of 2022, the team at BSA LifeStructures gave me complete freedom in designing a series of floor insets. The purpose was to serve as a way-finding tool to navigate the new cafeteria at Children's Mercy Hospital. The artwork was designed as abstractions of local landmarks, alluding to the way real landmarks help us navigate the city.

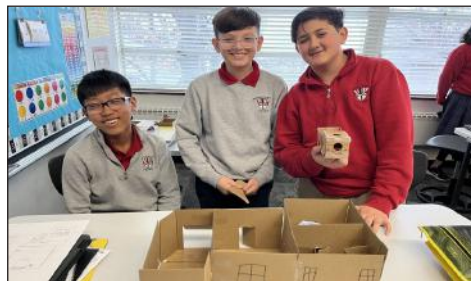
The project was completed in January 2022.



4.21 | RESURRECTION CATHOLIC | KANSAS CITY, KS

In the spring of 2022, I volunteered to teach two architecture lessons to 2nd graders at Resurrection Catholic School in Kansas City, Kansas. The experience proved to be incredibly rewarding and I kept in touch with the teachers I was able to work with.

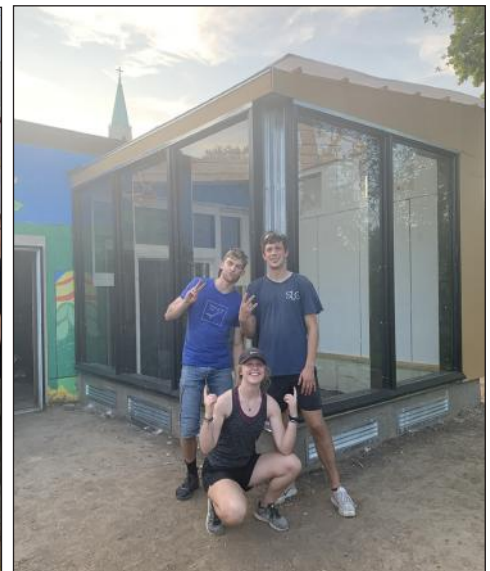
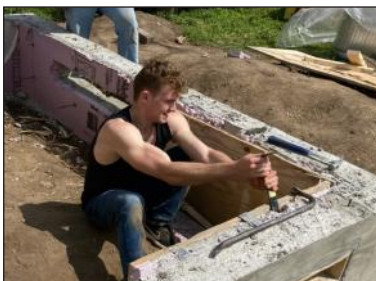
A year later, I was asked to come back to the school and teach a total of 20 architecture lessons over the course of six weeks. The classes were taught to 2nd, 3rd, 4th, and 7th graders, and each group had a small studio project tailored to their skill level.



4.22 | URBAN STATION | KANSAS CITY, KS

Concurrently with my first lessons teaching, our studio was designing and building a greenhouse across the street from the elementary school. The greenhouse was an extension of a local community center and was intended to teach neighborhood children how to grow their own plants.

Work done under Studio 509, Led by **Dr. Nils Gore**

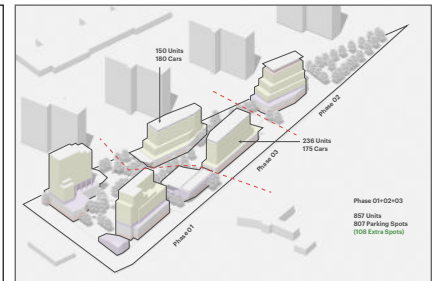
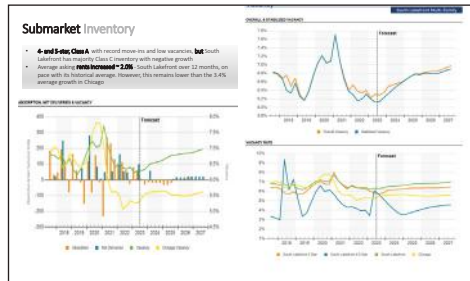
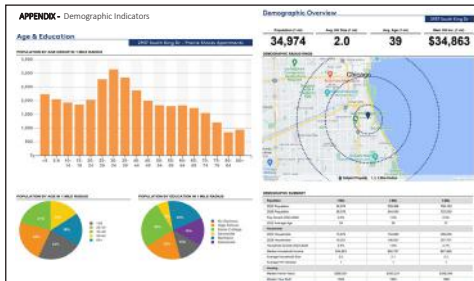
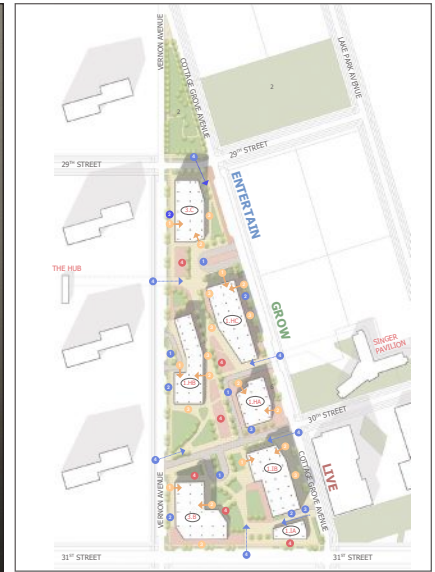




4.3 | PRAIRIE SHORES DEVELOPMENT | CHICAGO, IL

During my time with HKS Chicago in the summer of 2023, my co-interns and I teamed up with interns from Farpoint Development. Our project combined urban planning, urban design, and finance to imagine a new neighborhood that is not only creative and forward thinking, but practical and economically viable. The project featured an in-depth urban-analysis, a design proposal, and a market analysis.

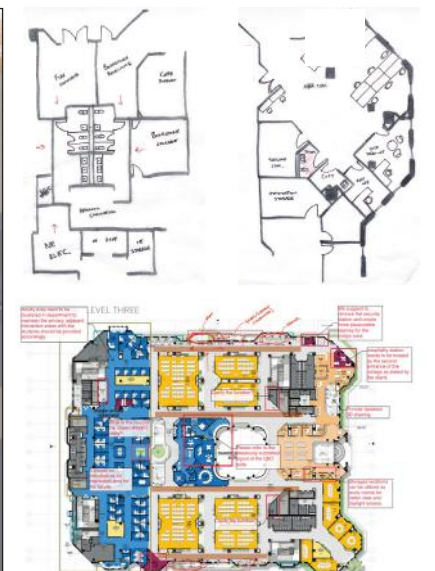
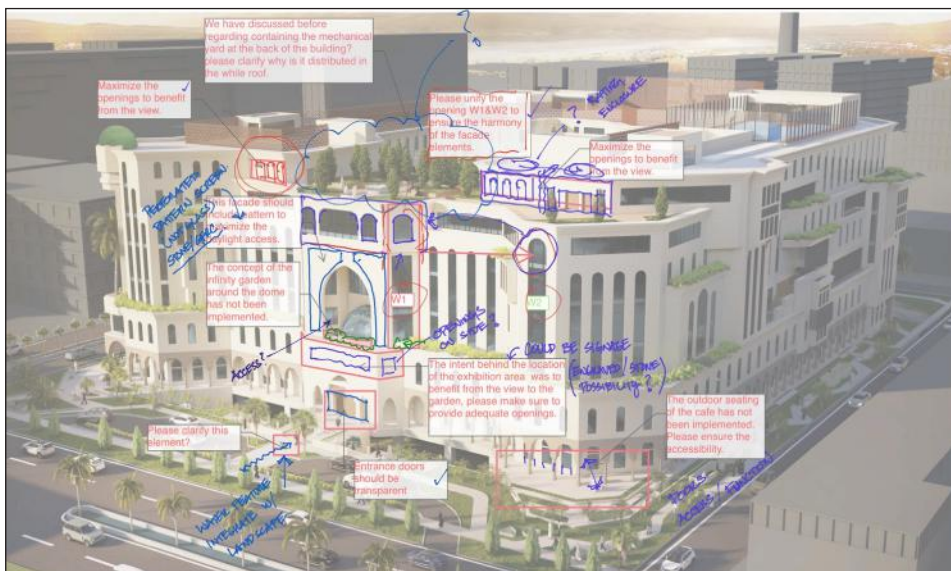
Design Proposal Led by **Kartik Sharma, Kyle Gilboy, Hollis Kerr** | Urban Policy Research Led by **Marlene Guzman** | Submarket Analysis Led by **Dhruv Basu**



4.4 | INTERNATIONAL MEDICAL COLLEGE | JEDDAH, SAUDI ARABIA

While I worked on our intern proposal with HKS, I was also aiding the development of IMC Medical College in Jeddah, Saudi Arabia, in its schematic design phase. My two areas of focus were space planning and facade articulation.

Rendering by **Parsa Aghaei** | Space Planning Led by **Jorge Barrero**



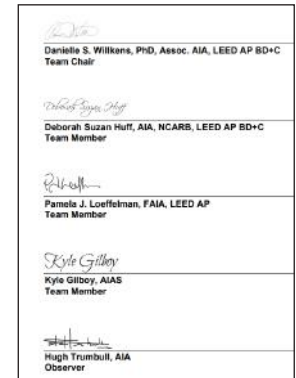
4.5 | NAAB ACCREDITATION UNIVERSITY OF KENTUCKY | LEXINGTON, KY

In the spring of 2022, I participated as the student representative for the NAAB accreditation of the M. Arch program at University of Kentucky.



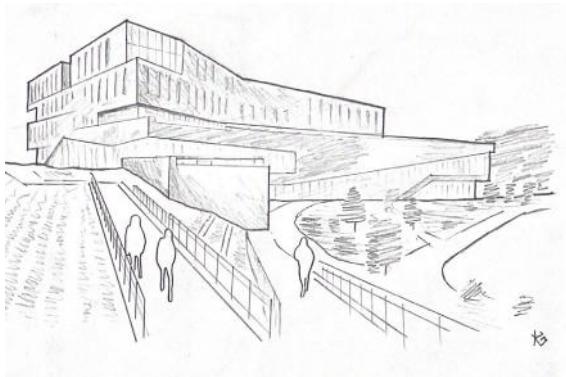
4.6 | NAAB ACCREDITATION PENN STATE UNIVERSITY | UNIVERSITY PARK, PA

In the spring of 2023, I was invited to come back and participate as the student representative for the NAAB accreditation of the B. Arch program at Penn State University.

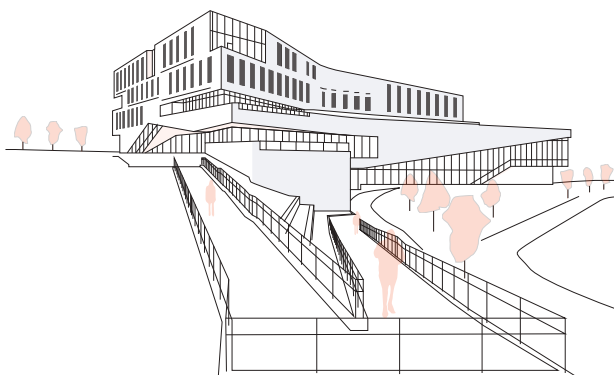
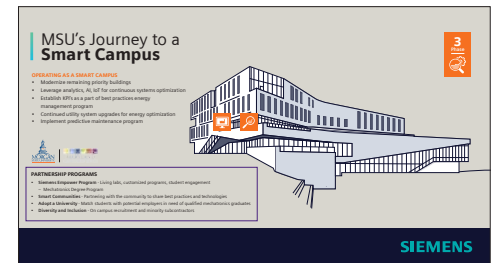


4.7 | FREELANCE ILLUSTRATION FOR CAIRO DESIGN | BALTIMORE, MD

During the fall of 2021, I worked on a project with Cairo Design for Morgan State University in Baltimore. The illustration represents Tyler Hall, a new building on the MSU campus.



Initial Sketch



Submitted Illustration



4.8 | JESSE OSOSKI ART | BELMONT, CA

At the end of summer 2022, I lived with the Ososki family and worked for Jesse to help me further understand the construction side of architecture. I spent time doing landscaping work, installing drywall, extending water lines, breaking up concrete, and more. The home is located in Belmont, California and was completed in 2023.



Organizing Equipment in the Garage

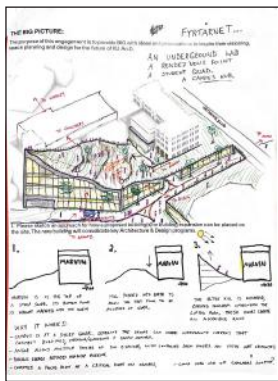
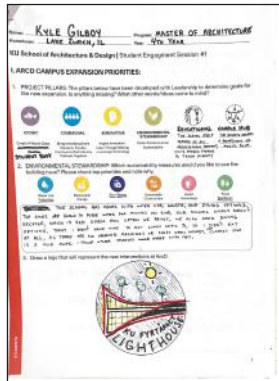


Digging & Extending Plumbing Lines



Installing Drywall Throughout the Home

4.91 | ENGAGEMENT WITH BJARKE INGELS GROUP | LAWRENCE, KS



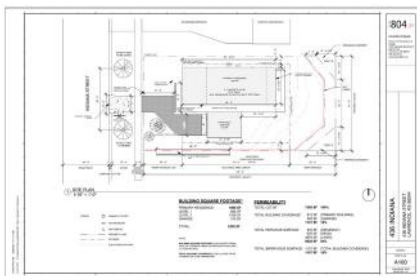
In the spring of 2023, Bjarke Ingels Group was beginning their initial ideas for our new design school at University of Kansas. The faculty nominated me as a student representative to engage in an ongoing dialogue with architects at BIG.

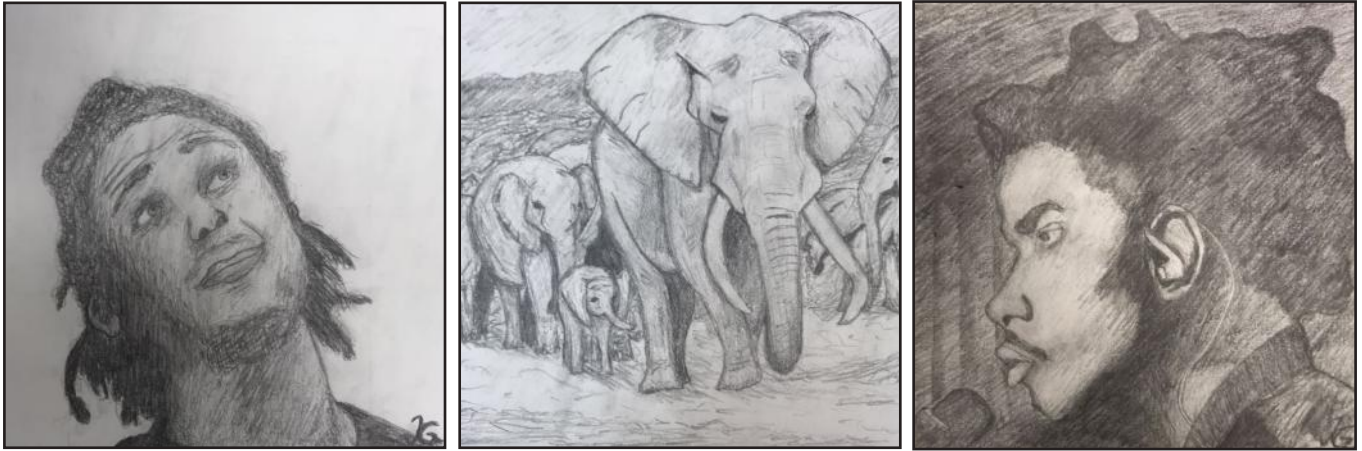
As a student liaison, I was asked to distribute and collect student surveys so the designers could better understand the needs of the students. Exercising my management skills, I returned over 100 student surveys in a matter of 5 days.

4.92 | SITE MANAGEMENT FOR STUDIO 804 | LAWRENCE, KS

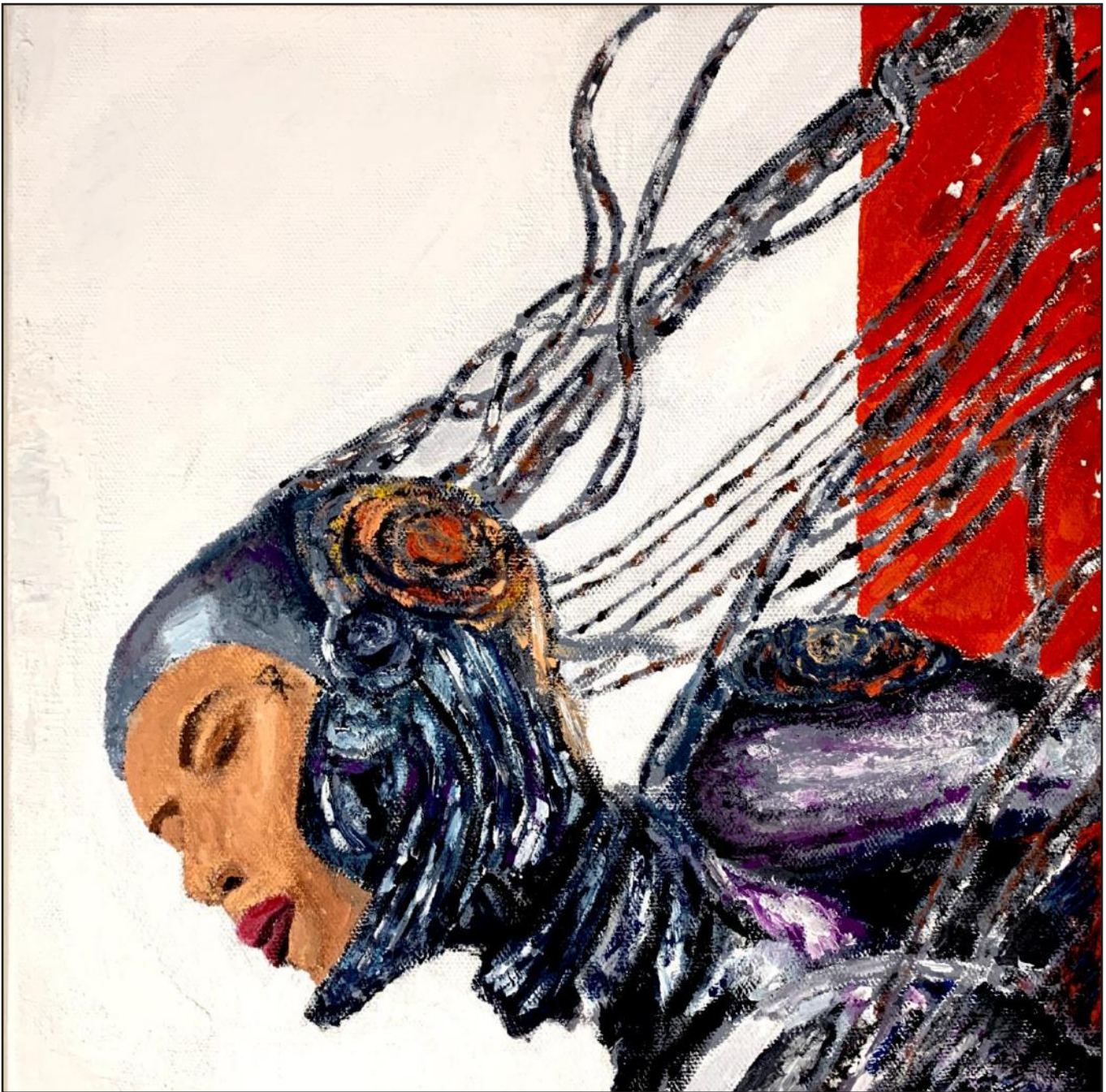
Currently in my graduate year, I serve as the site manager and site work lead for Studio 804's 2024 project, 436 Indiana.

More about this experience can be found in my graduate portfolio once the house is finished in May of 2024.





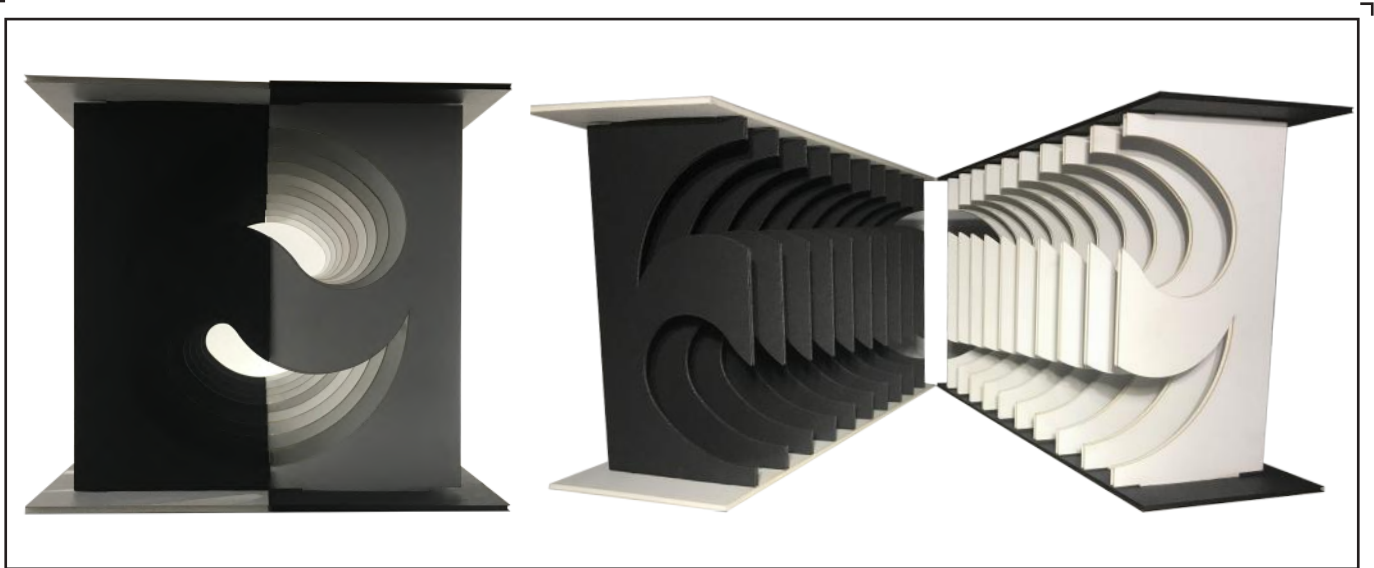
Left to Right: [Kweku Collins](#) Portrait, Memory of Elephants, [Smino](#) Portrait | Pencil Sketches



Modus Vivendi by [o7o Shake](#) | Oil Paint on Canvas



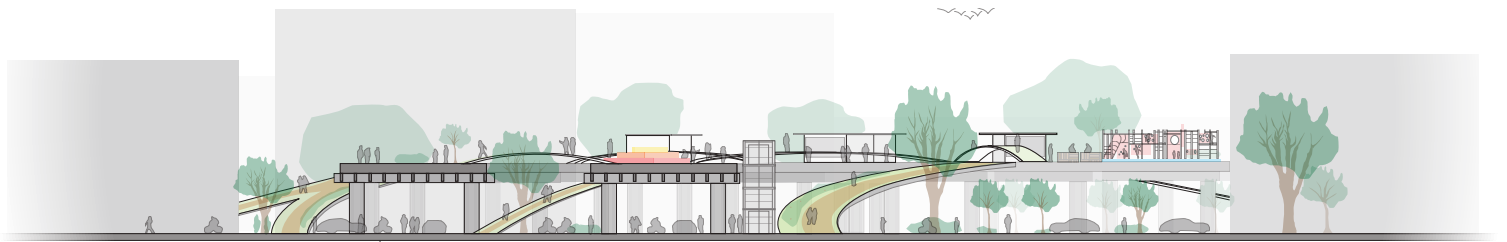
The presented artwork is a collection of sketches, paintings and models I've completed from high school up until my first year of college.



Disparity Light Box | Foam Core + Wood



Modularity Wall System | Paper + Wood



KYLE GILBOY

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