



Yunru (Daisy) Chen

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EDUCATION

The Cooper Union for the Advancement of Science and Art | New York, NY
The Irwin S. Chanin School of Architecture, Class of 2023
GPA: 3.69

EXPERIENCE

NADAAA, Boston, MA, June 6 2022- August 28 2022

Design Intern for Project: University of Nebraska Lincoln Architecture Studio Addition.

- Schematic Design drawing set; budget progress (partial), early design development (partial).
- Digital 3D modeling on iterations based on changes of materials, lighting conditions, and budget.

Pei Cobb Freed & Partners, New York, NY, July 2021-September 2021, December 2021-January 2022

Design Intern for Project: NEOM Competition: The Line Project Across Saudi Arabia

- Schematic design round drawing set, editing of RFPs.
- Physical and digital 3D modeling and renderings.
- Biennale Exhibition: Preparation of digital fabrication model package for clients.

Cooper Union Summer Introduction to Architecture Program, New York, NY, June 2021- July 2021

Instructor

- Guidance on technical skills 3D modeling software: Rhino, Ai, Blender.
- Present lectures on architecture precedents and design concepts.
- Provide portfolio guidance.

Venice Biennale “Venice Masked”, New York, NY, April 2021

Assistant

- Website: <https://www.venicemasked.org/catalogue>
- 3D scanning and modeling

Cooper Union Saturday Program, New York, NY, October 2020- 2022

Instructor

- Introduce fundamentals of architecture to highschool students
- Instruct methods of physical modeling and representations

Cooper Union Teaching Assistant, New York, NY, 2020

Photography Teaching Assistant for Erieta Attali

- Assist public lectures with associated courses
- Course Preparation

EXHIBITION

The Benjamin Menschel Fellowship Exhibition, Self Organized, New York, NY, 2023

2022 Tallinn Architecture Biennale, Group Organized, Estonian Museum of Architecture, Tallinn, Estonia, 2022

Diriyah Biennale: The Line Exhibition, Client Organized, Foundation for Contemporary Art, Diriyah’s JAX district, 2022-2023

MoMA Exhibition: The Project of Independance: Architecture of Decolonization in South Asias, Client Organized, New York, NY, 2022

Architecture End of the Year, New York, Group Organized, NY, 2018-2023

Cooper Hewitt National Design Competition Finalist Exhibition, Group Organized, New York, NY, 2018

AWARDS & SCHOLARSHIP

The Irma Giustino Weiss Prize for Exceptional Creative Potential in Architecture or Art, New York, NY, 2023

Arthur Thomson AR’64 Thesis Fellowship, New York, NY, 2022-2023

The Cooper Union Grant Program, New York, 2022

The Benjamin Menschel Fellowship for Creative Inquiry, New York, NY, 2022-2023

IDCA Foundation Scholarship, New Yor, NY, 2018-2020

The Cooper Union Innovator Scholarship, New York, NY, 2018-2020

Michael F Roberti Scholarship, New York, NY, 2019

SKILLS

Digital

- Rhino, Auto Cad, Revit, Rendering Software (Blender, Enscape, Vray, 3D Studio Max) Photography, Adobe CS
- 3D Scanning & Printing (Form lab, Makerbot) Laser Cutter, CNC (RhinoCam), Water Jet, Machine Learning

Physical

- Drafting, Drawing, Painting, Modeling, Sculpture (Resin, Clay, Plaster, Wood, Metal, Foam)

LANGUAGES

Proficient in English and Chinese (Mandarin), Intermediate in Spanish.

Studio Projects, P1 - P24

Thesis: Disobedient Objects: A Catalogue of The Uncanny. 1

Urban Archive: New York City in Section in Relation to Communication and Data Transfer. 9

Experimentative Housing Project Part 1: High Density Low Rise 15

Experimentative Housing Project Part 2: High Density Mid Rise 19

Material Experimentations & Analysis, P25 - P44

Vinyl & Plastic: Blow-Up, An Inflatble, a Living Pod, an Adaptation. 25

Wood Venner: Architectonic: Materiality and Spacial Qualities. 29

Sheet Metal: Tangentail Bouncing Object. 33

Plaster: Solidified Movements. 37

Plaster as Surface: Form Finding and Structural Analysis. 39

Formal Analysis: Villa Muller, Adolf Loos. 41

Representation & Drawings, P45 - P56

Structural and Detail Drawings. 45

Descriptive Geometry and Drafting. 49

Freehand drawings. 51

Photography. 55

Thesis: Disobedient Objects

A Catalogue of The Uncanny

Instructors: Nora Akawi, Michael Young, Hayley Eber, Lydia Kallipoliti, Maren Speyer

This thesis is interested in exploring the possibilities of materials and how they can provide various aesthetics and functions through digital fabrication that reveals the strangeness of the materials themselves and the spaces they form. It questions the norms of common materials and how they behave in a domestic environment. Through a series of manipulations and modifications, the materials strive to do a little beyond what they ought to do, estranging the intimate encounters within the domestic space. The friction between tactile and tectonic, and the boundaries between public and private comprise the center of this discussion.



Plaster- Moon- Illumination



Wood-Panels-Illumination



Plaster- Water- Stair Division



Wood- Water- Floor



Plastic- Gradient- Division



Plywood- Drape- Division

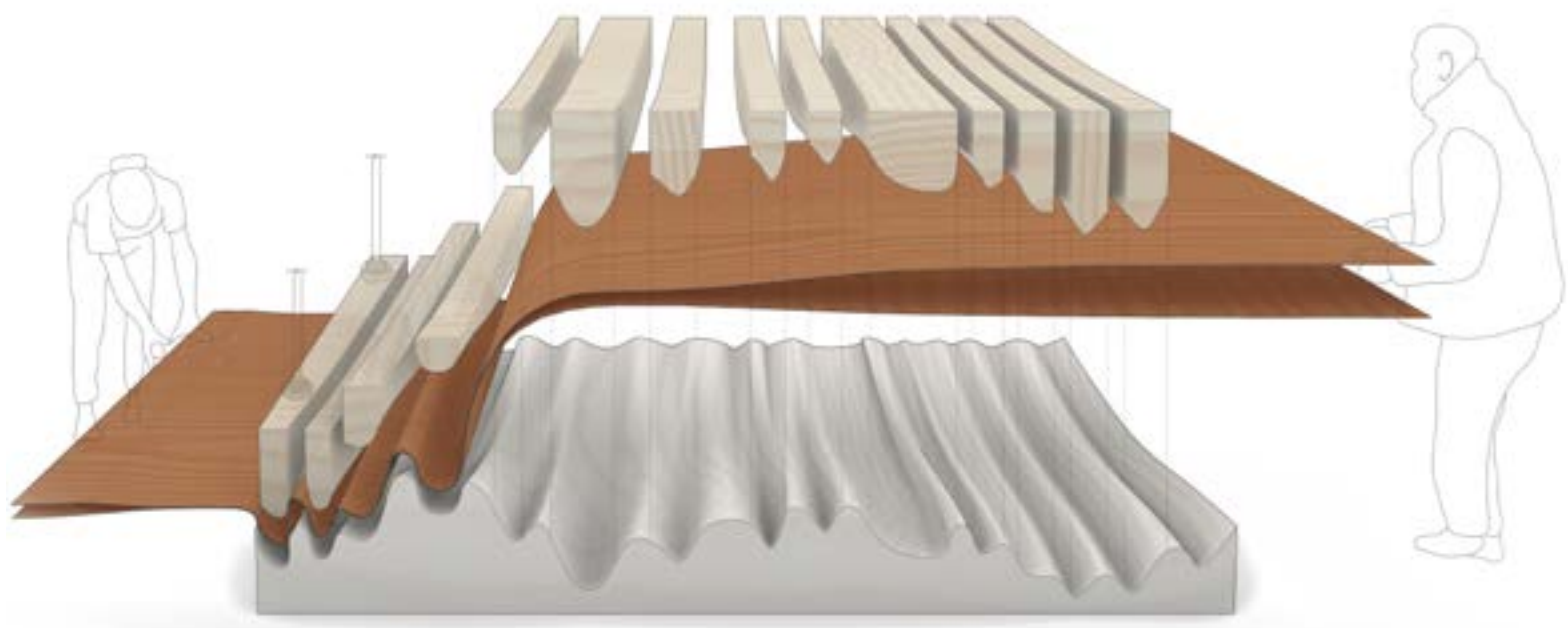


Triple Materials- Curtain- Stair Surroundings

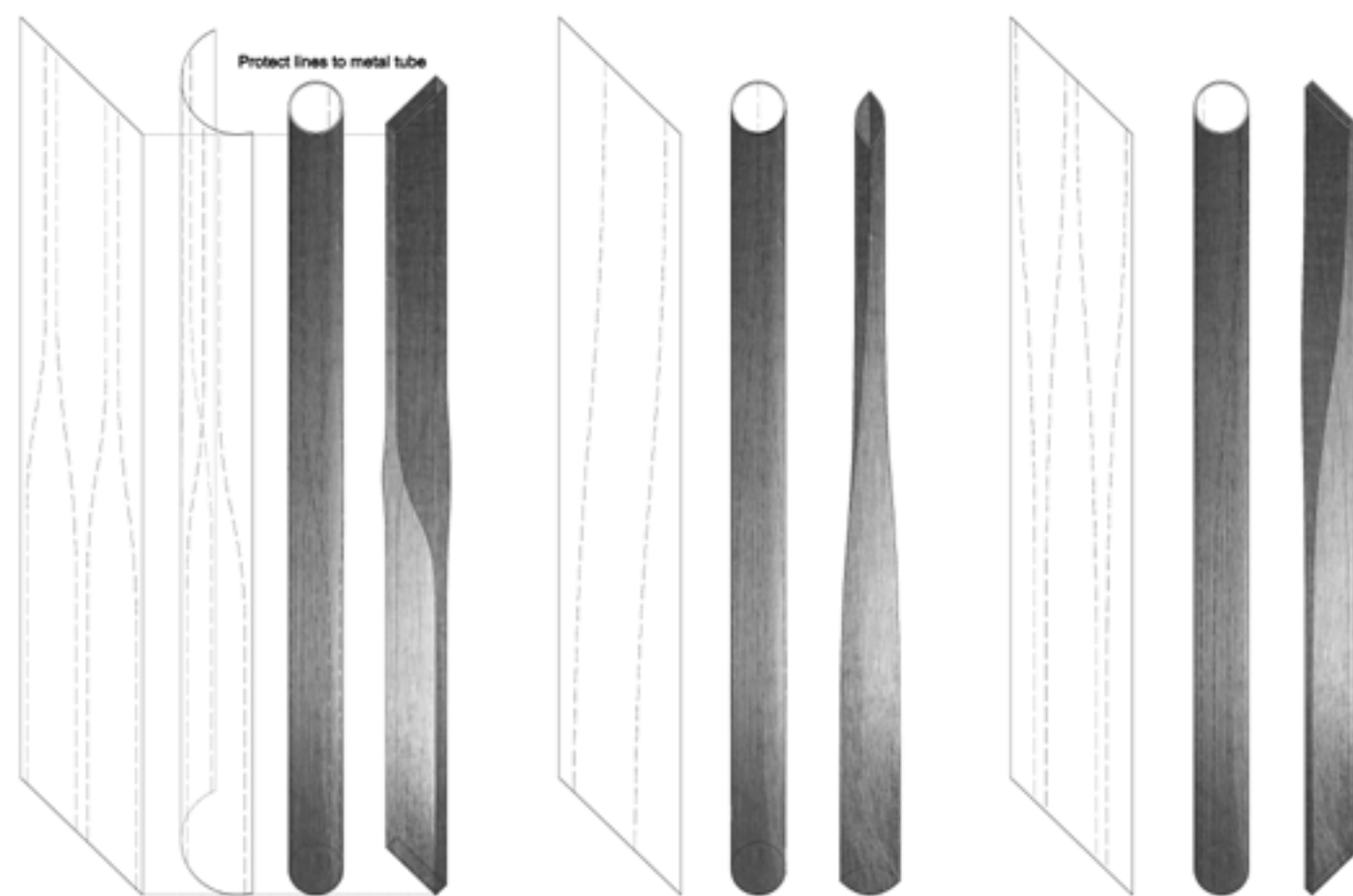


Metal- Aperture- Division

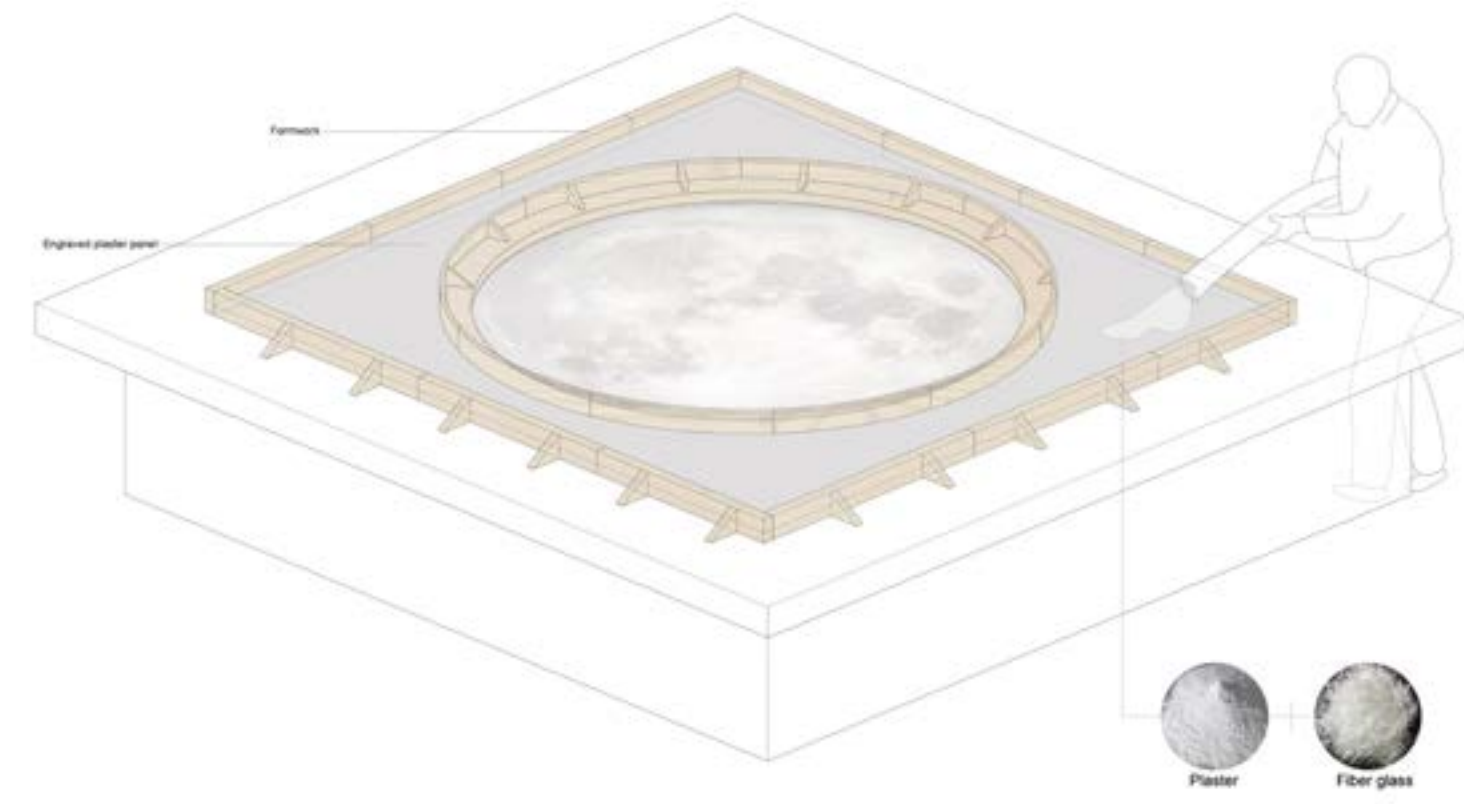




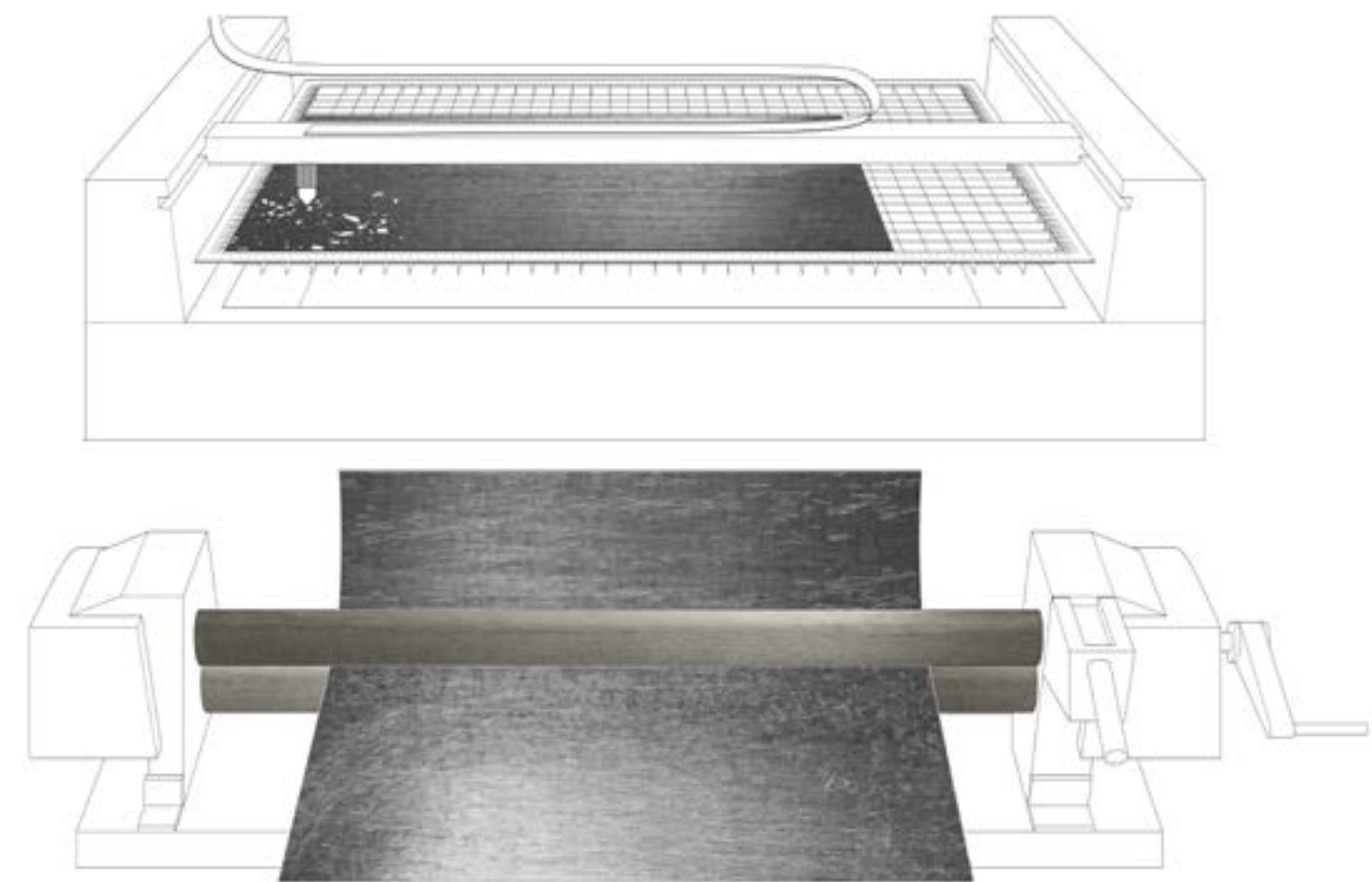
Mold pressing method illustration



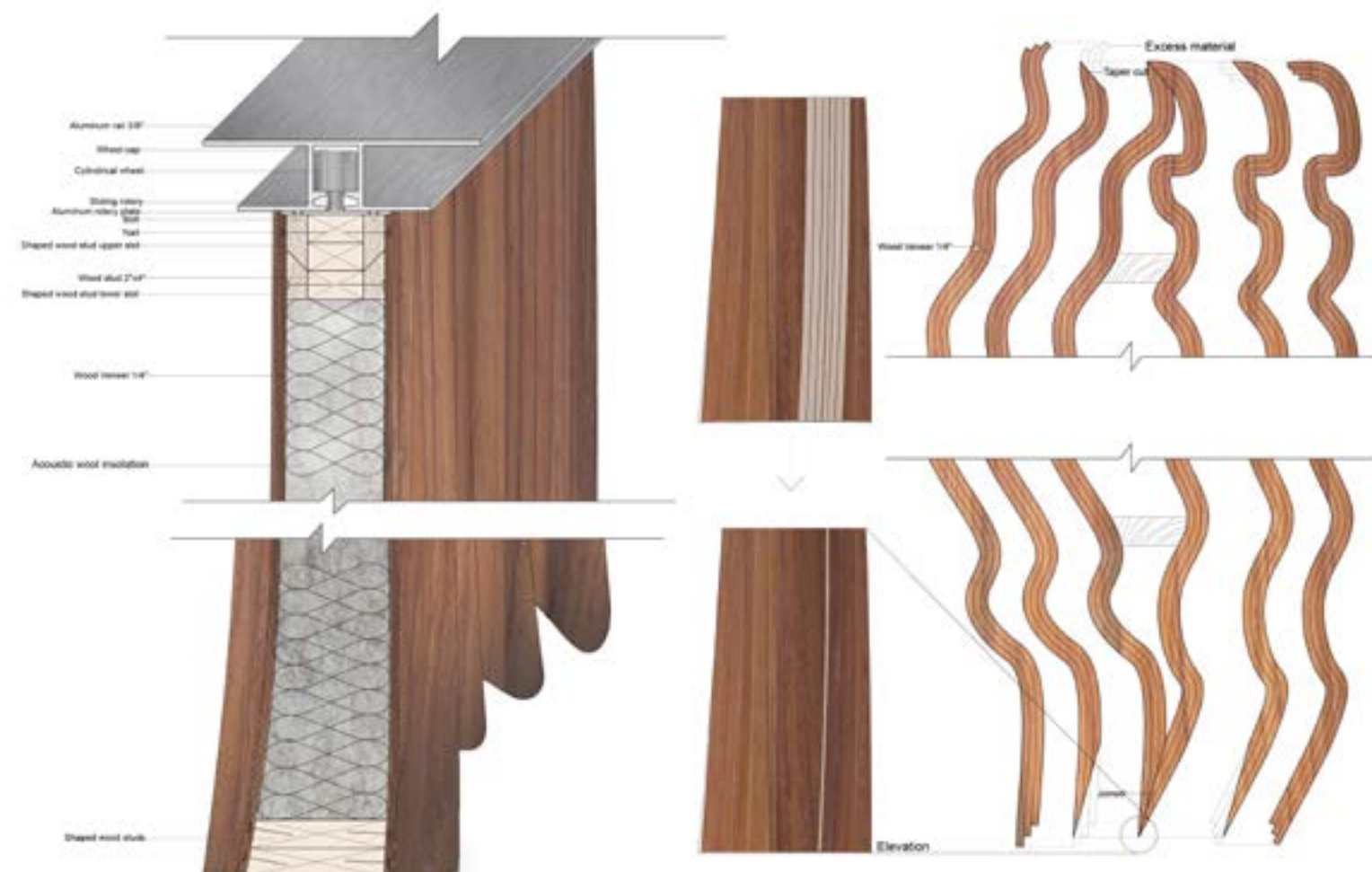
Metal tube transformation illustration



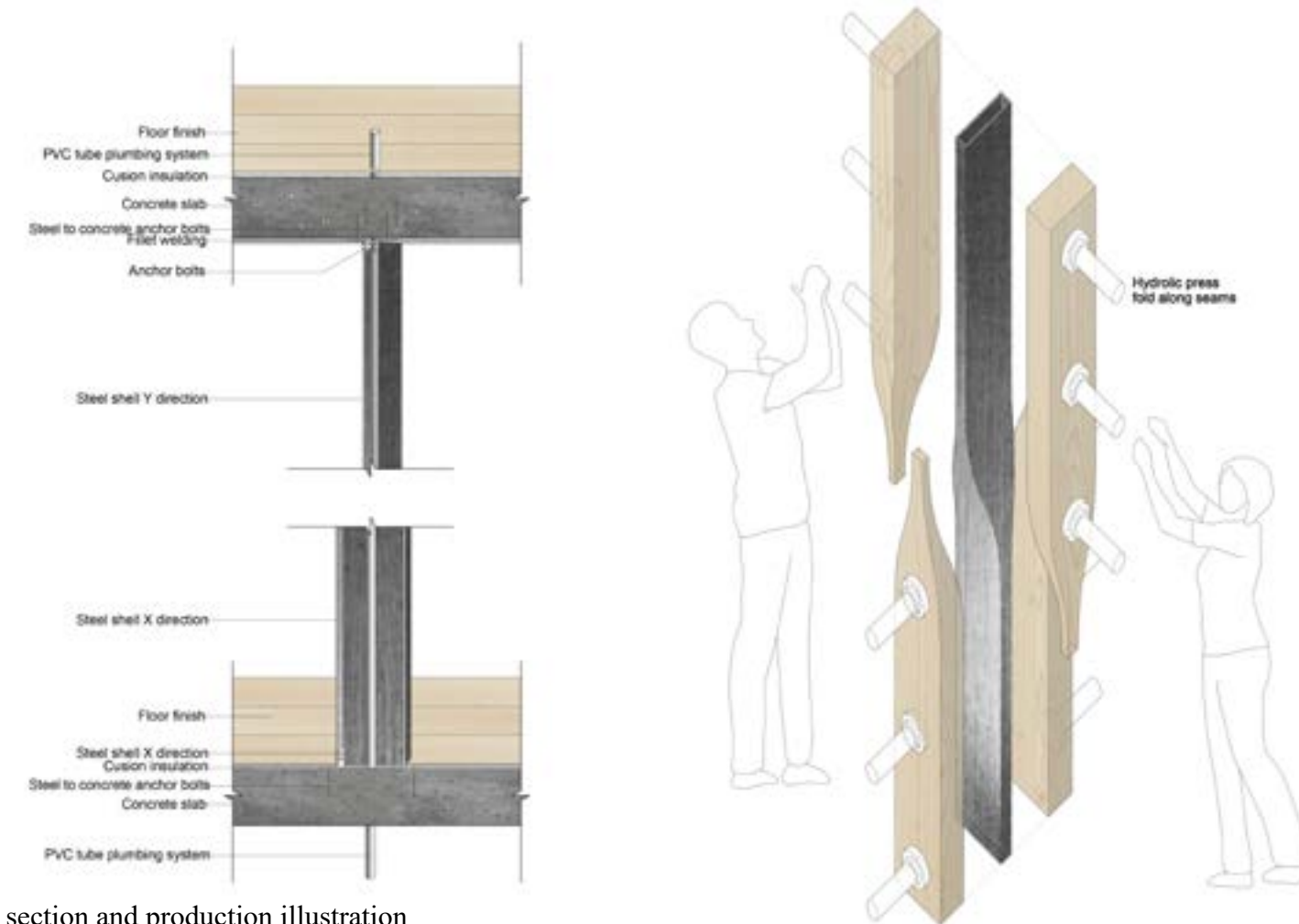
Moon ceiling production illustration



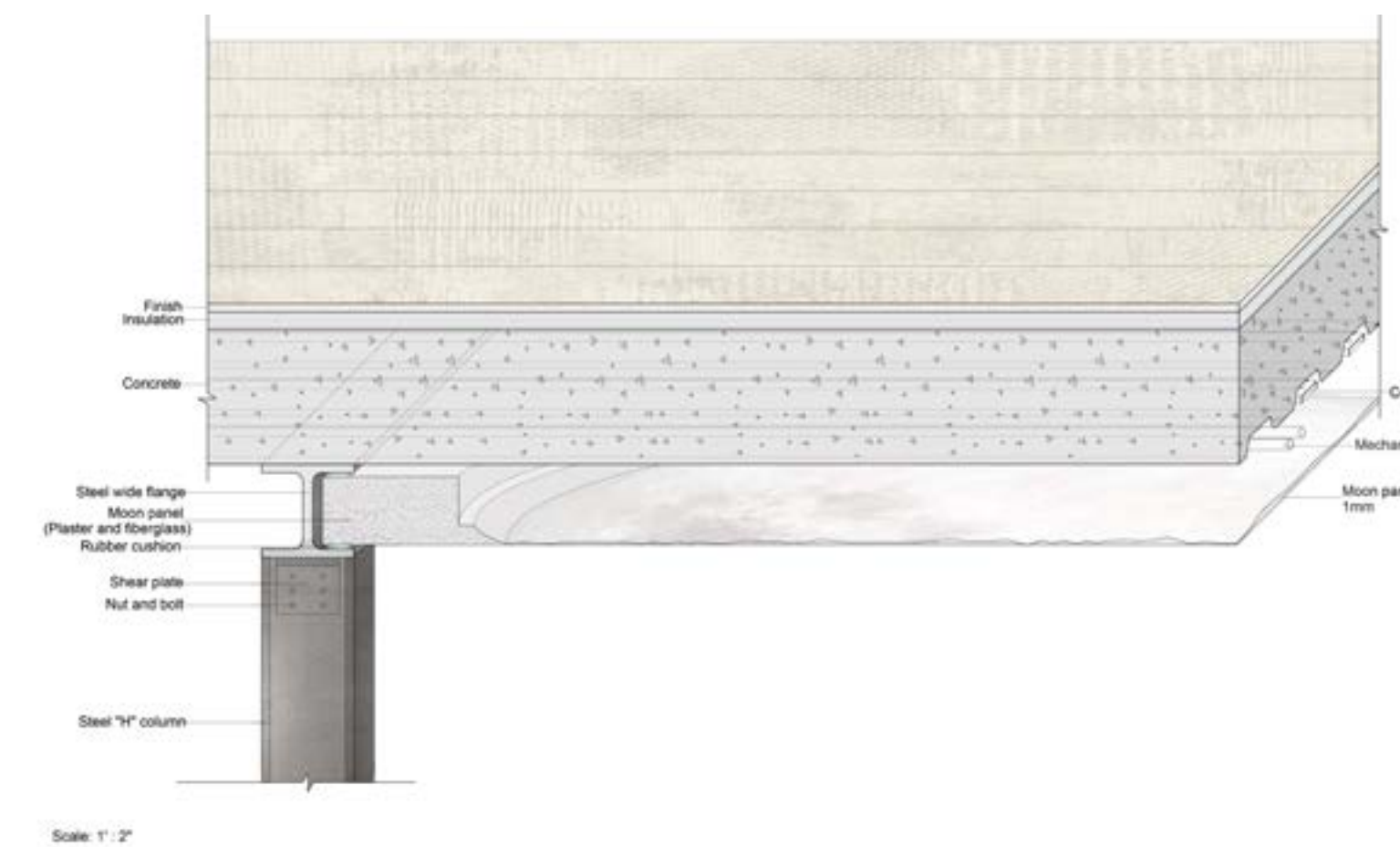
Metal aperture panels production illustration



Detail section



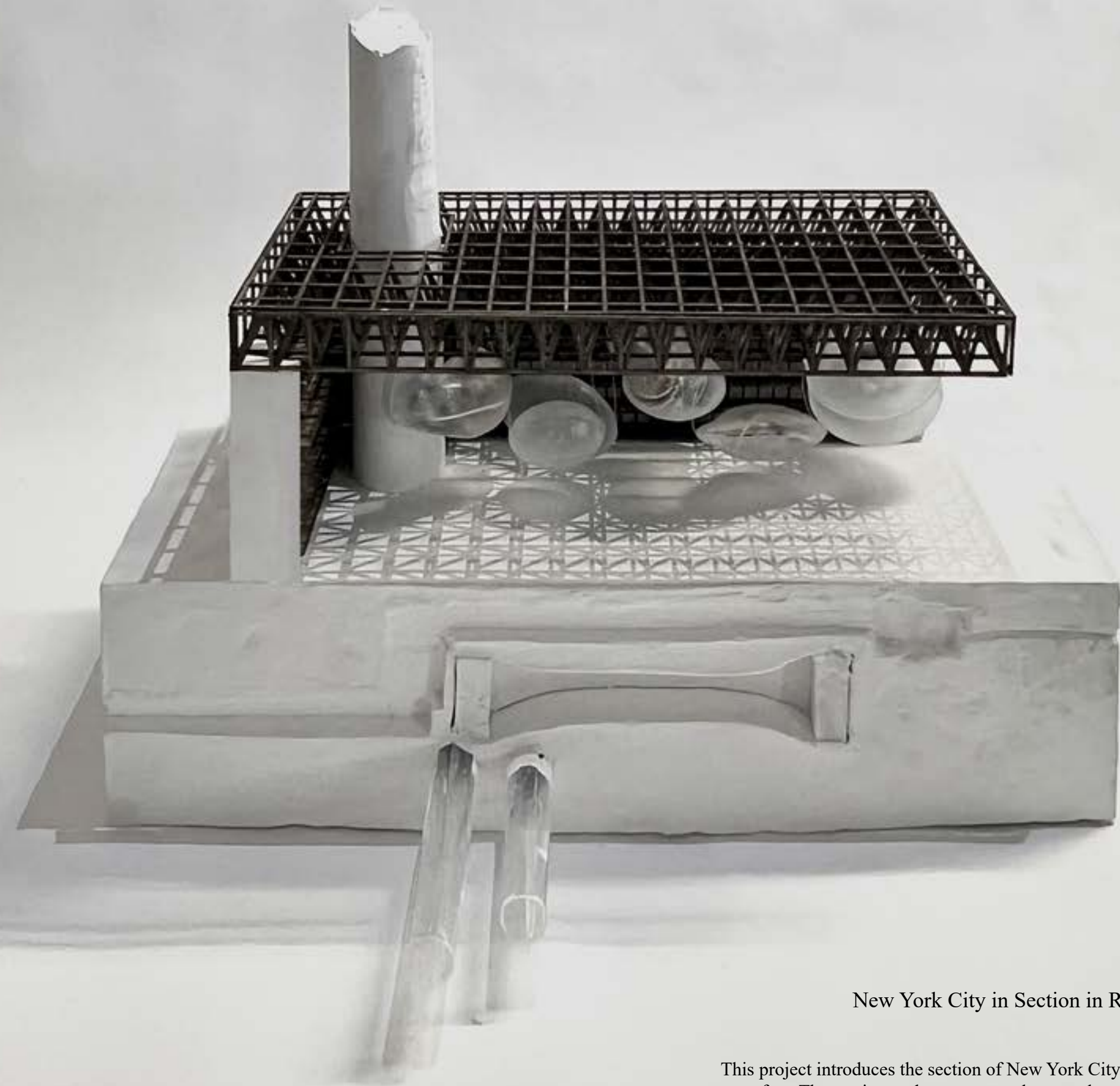
Detail section and production illustration



Detail section



Aperture sliding panels application

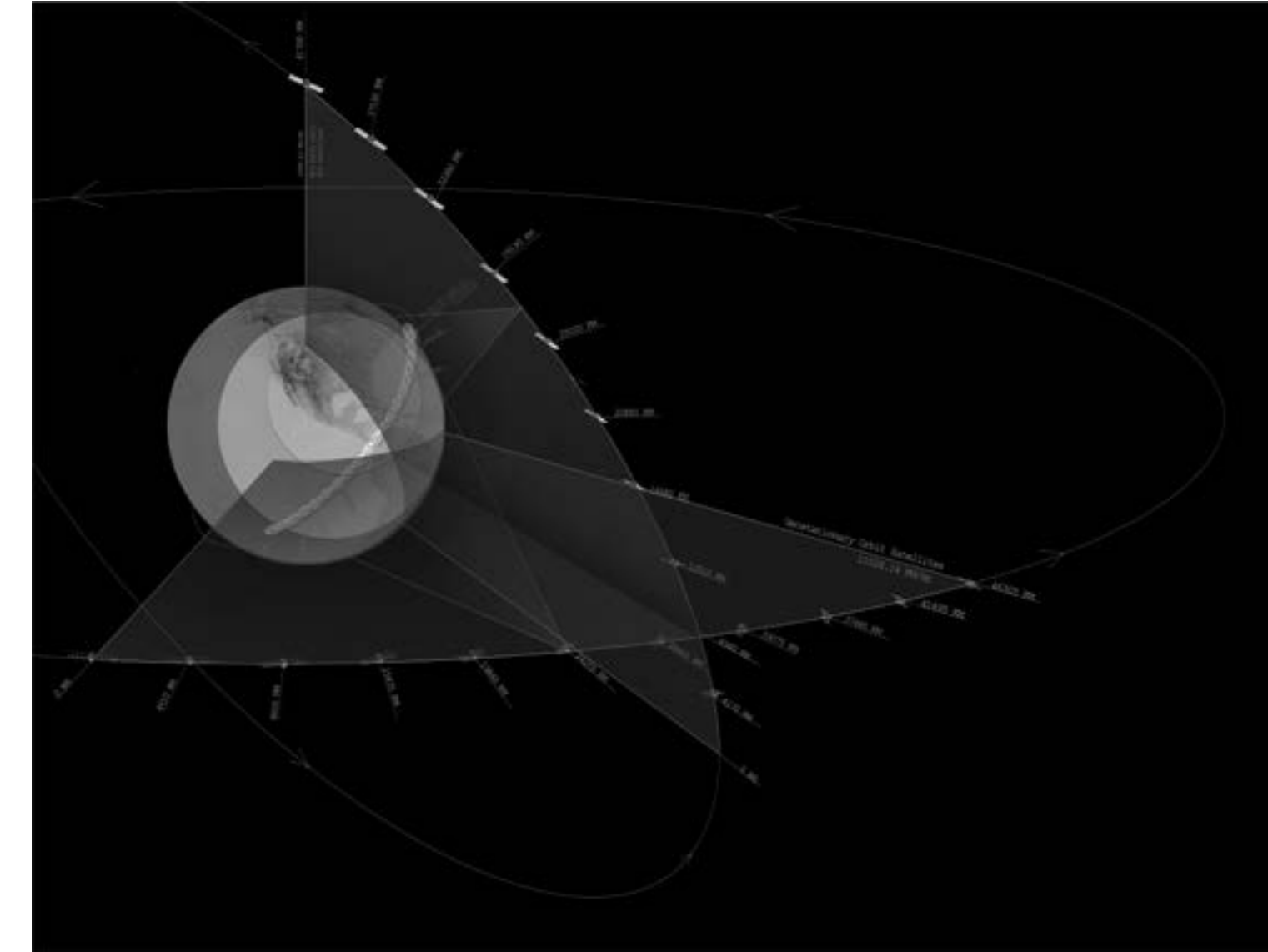


Urban Archive

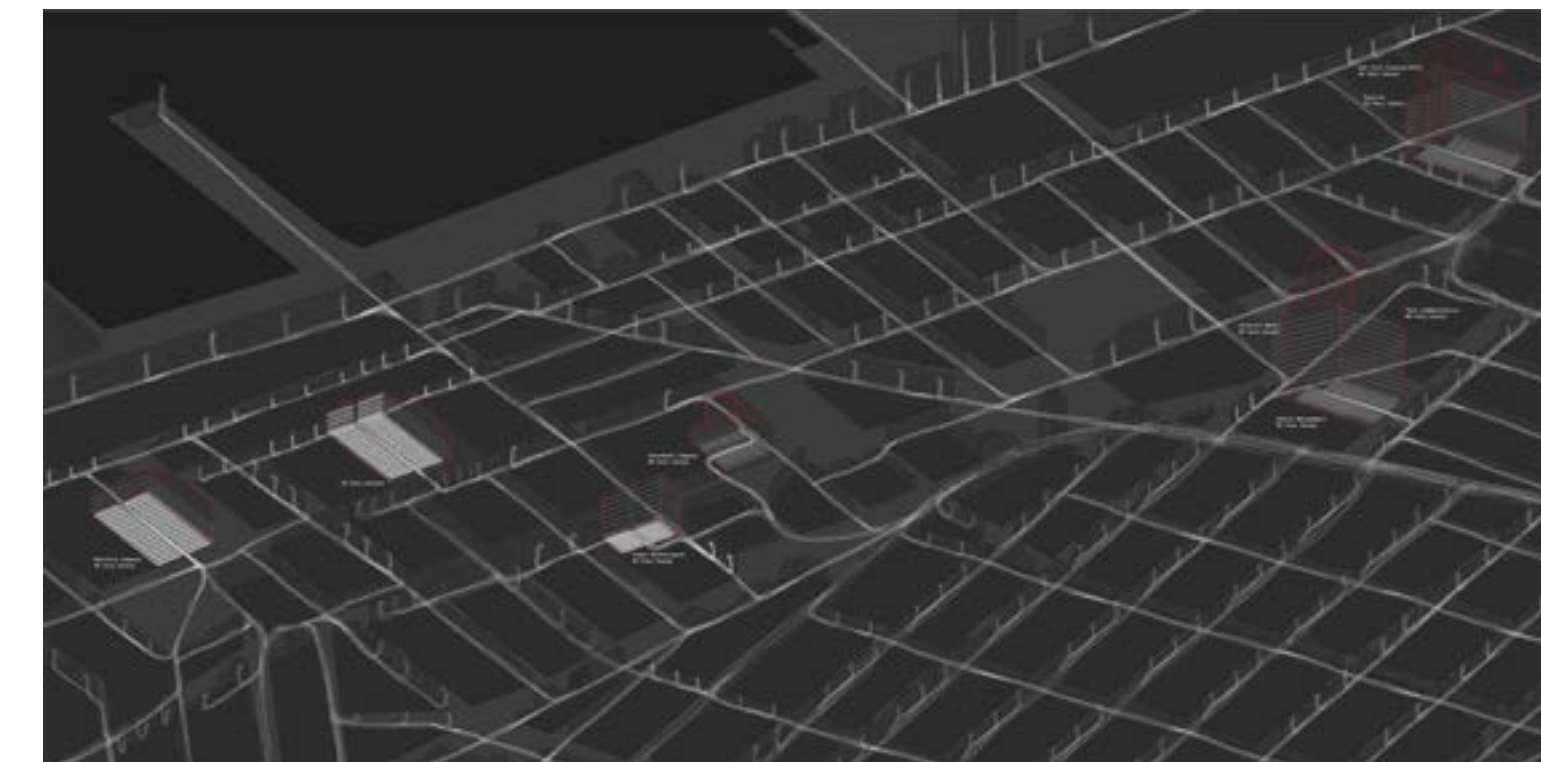
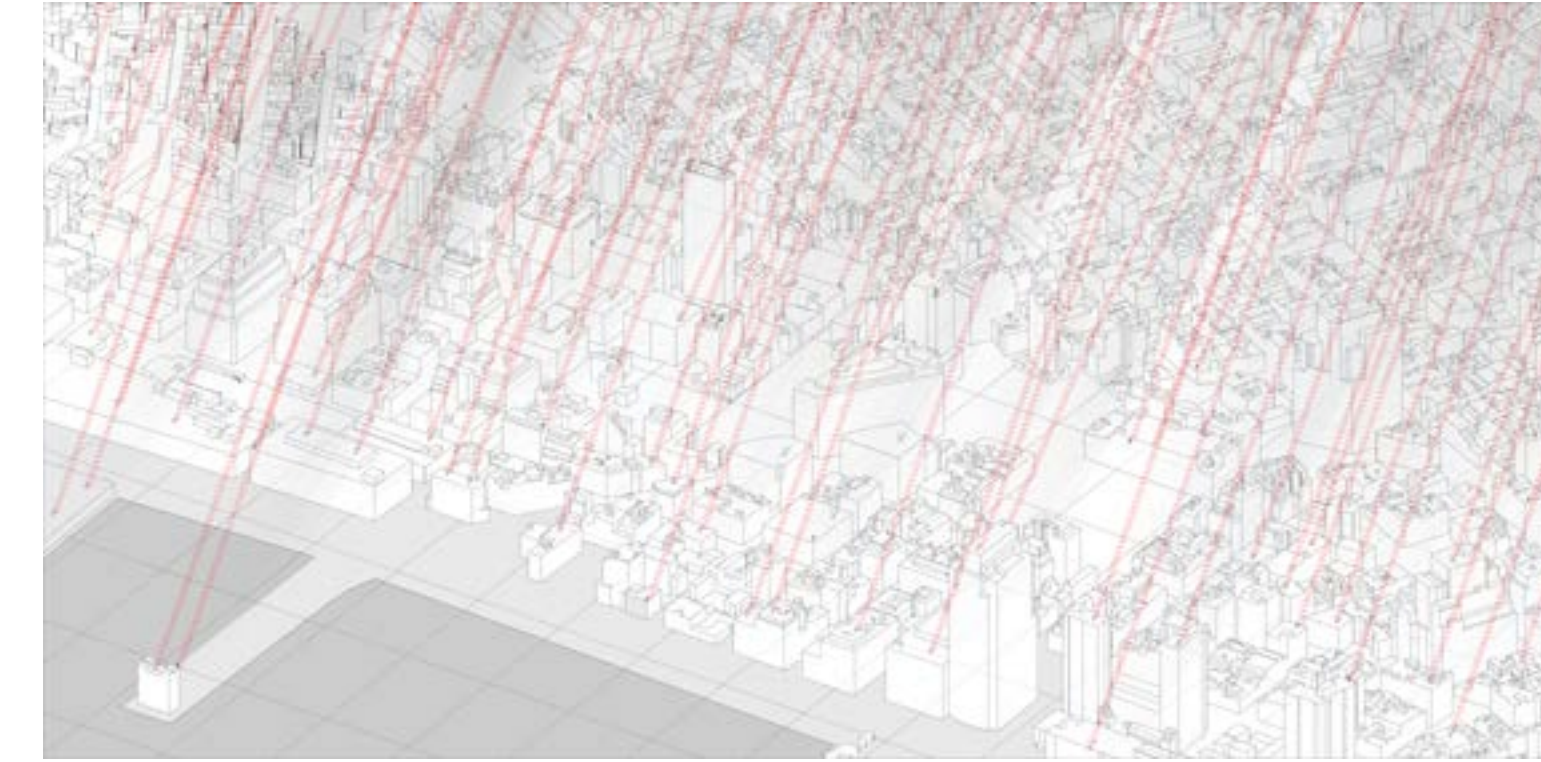
New York City in Section in Relation to Communication And Data Transfer

Instructor: Diana Agrest

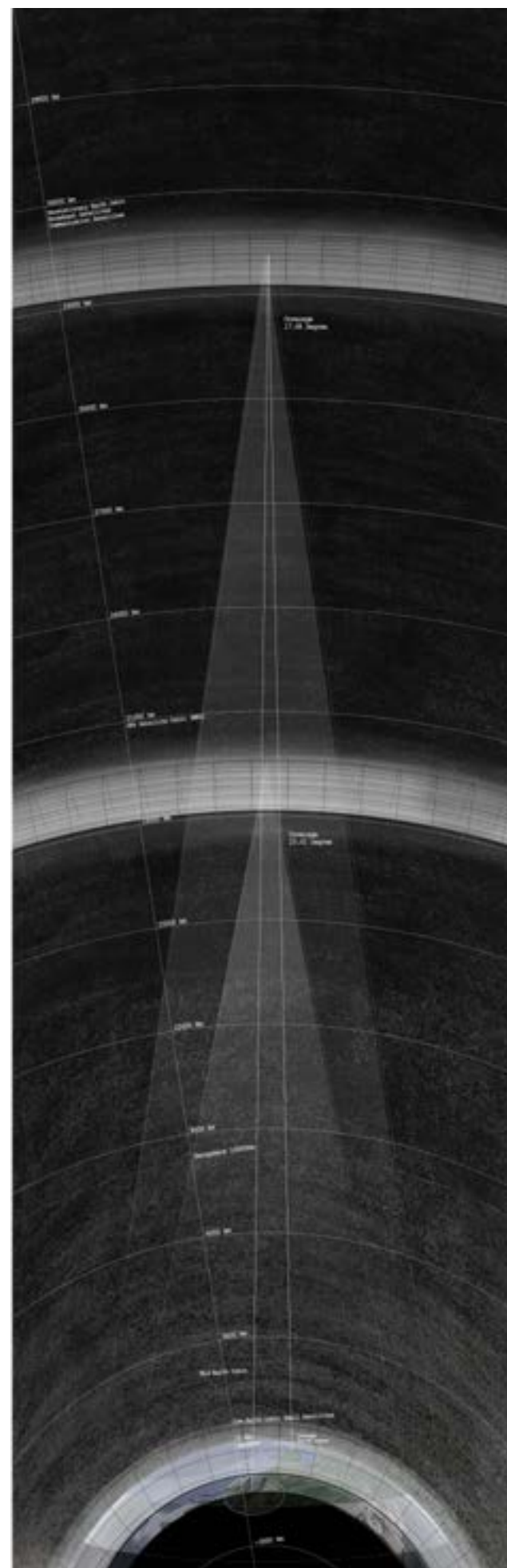
This project introduces the section of New York City in relation to the process of communication and data transfers. The section undergoes several stages throughout the development of the project: the impression of the city through film, the reading of the city, the transformation of the city, and the Archive.



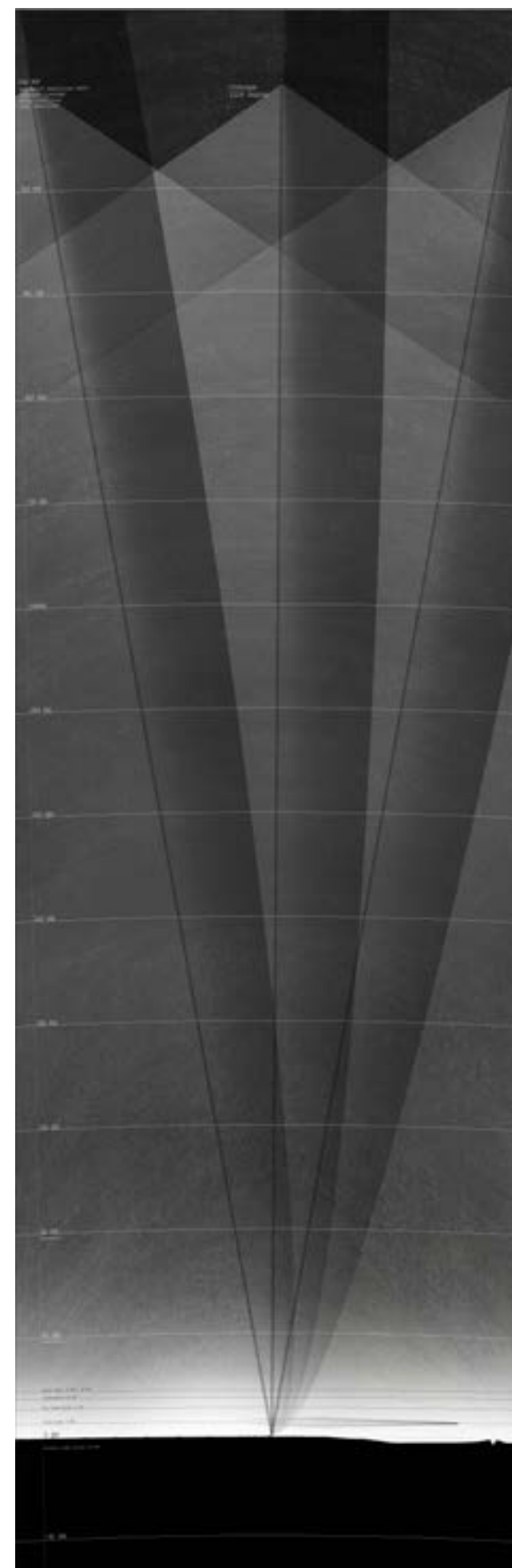
Satellites' movement in designated orbits around earth at increments of time.



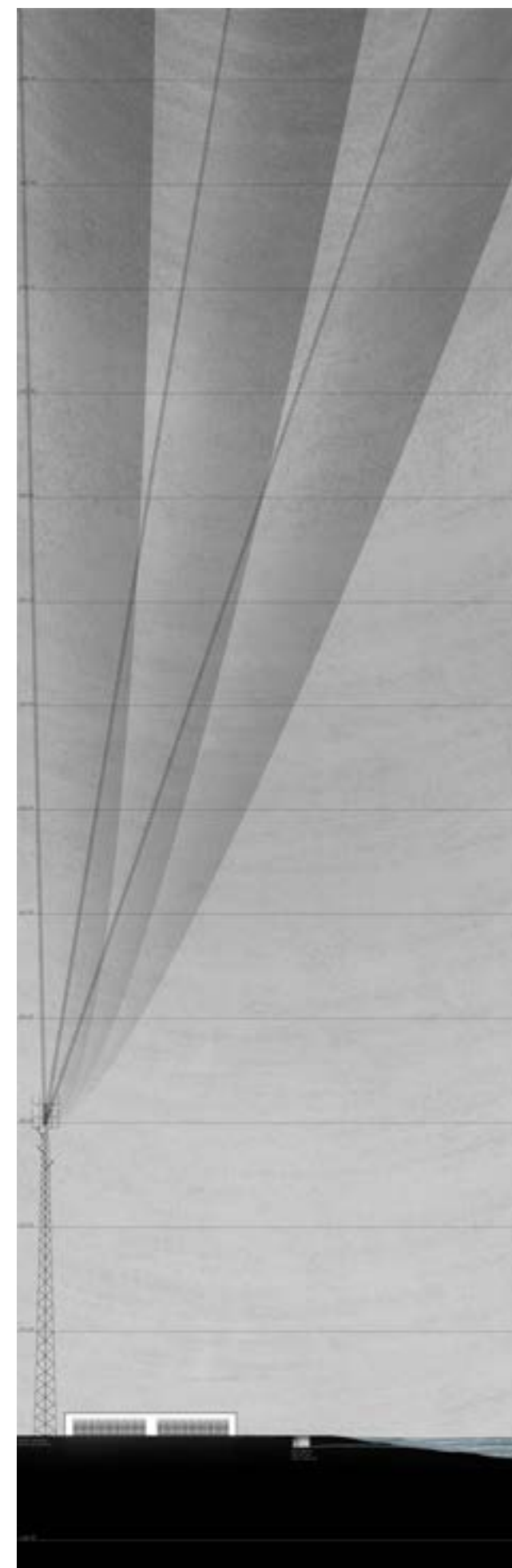
Dyptic showing above ground transmission through signals and underground transmission through cables.



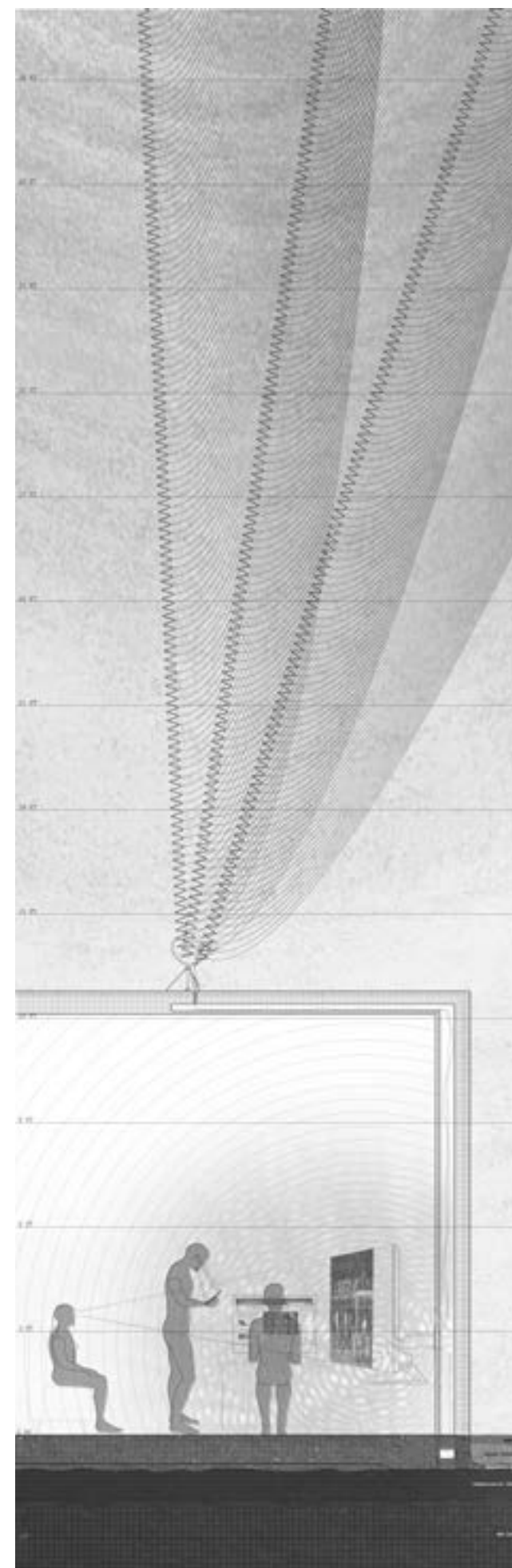
Section: Satellites' coverage on earth at varied earth orbits.



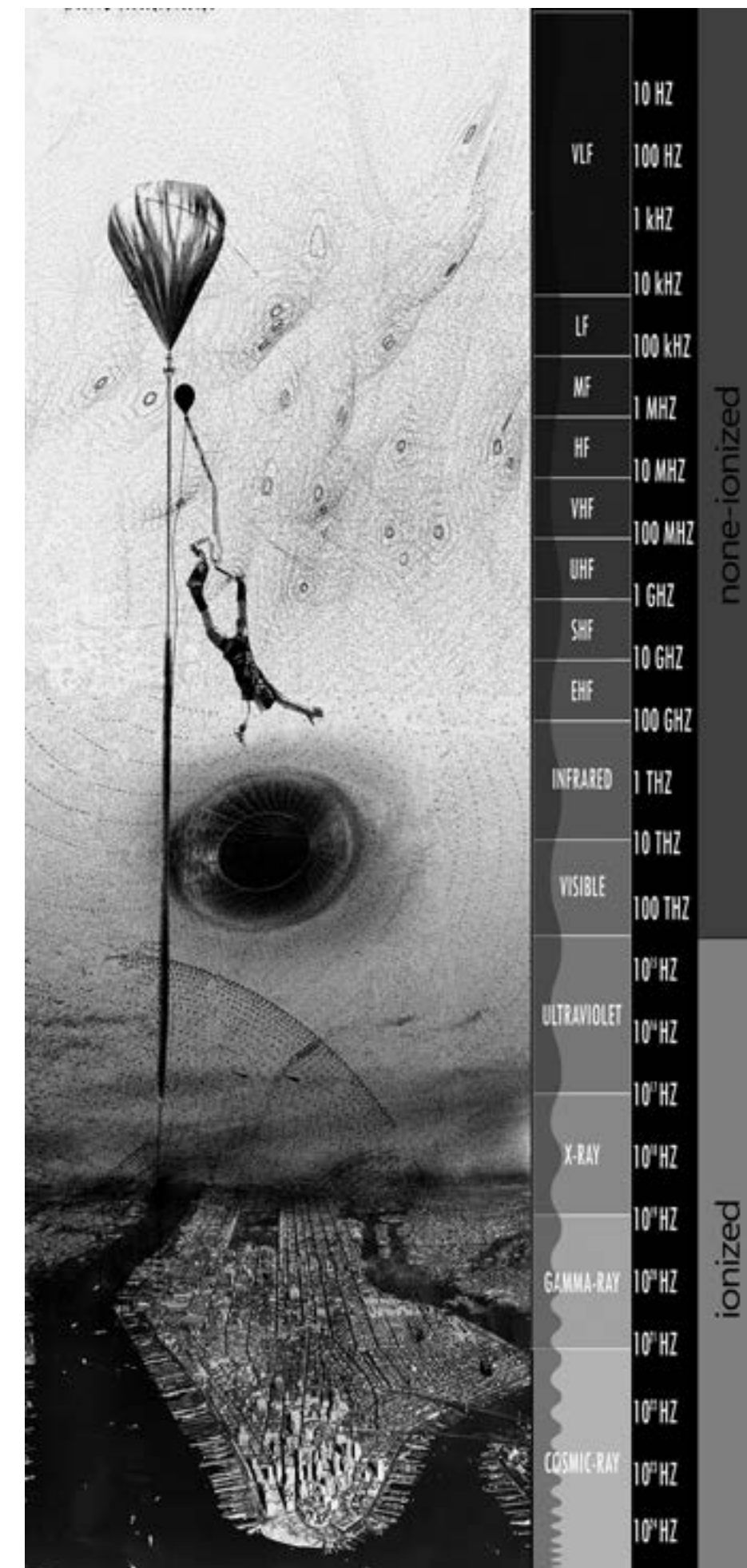
Section: Process of signals reaching earth surface.



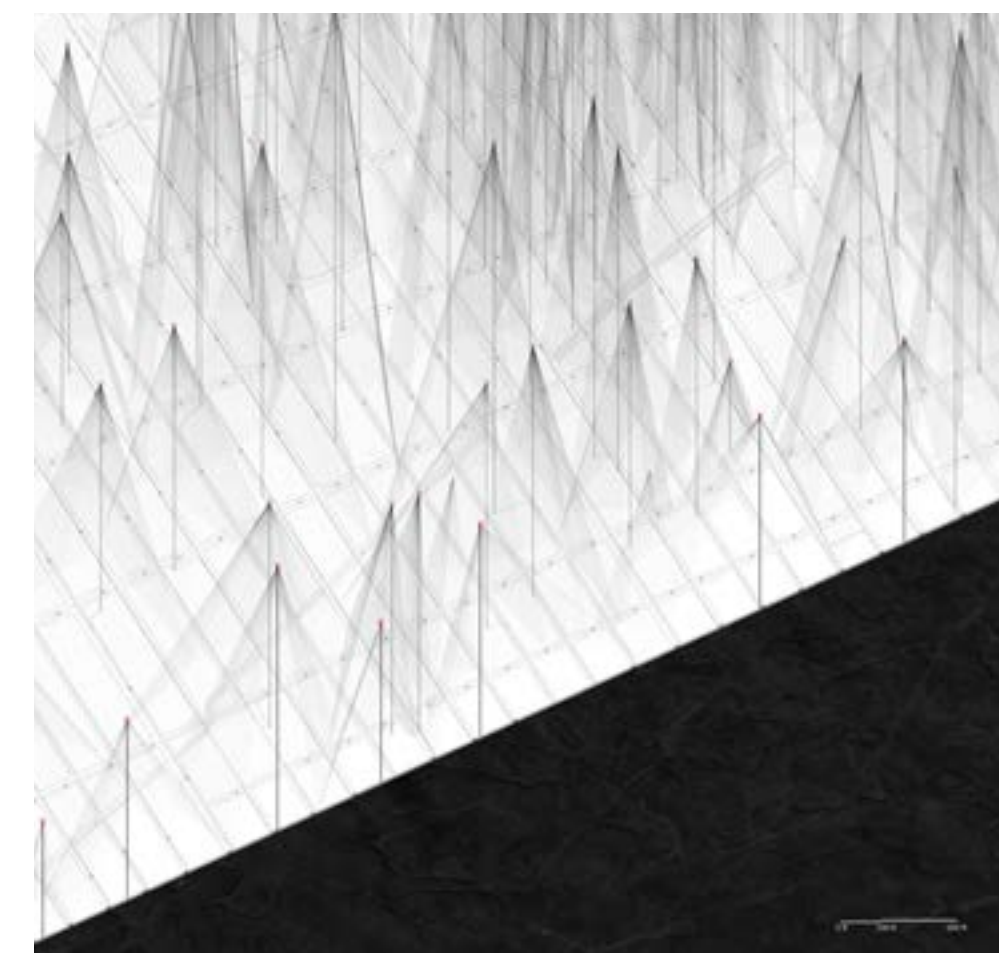
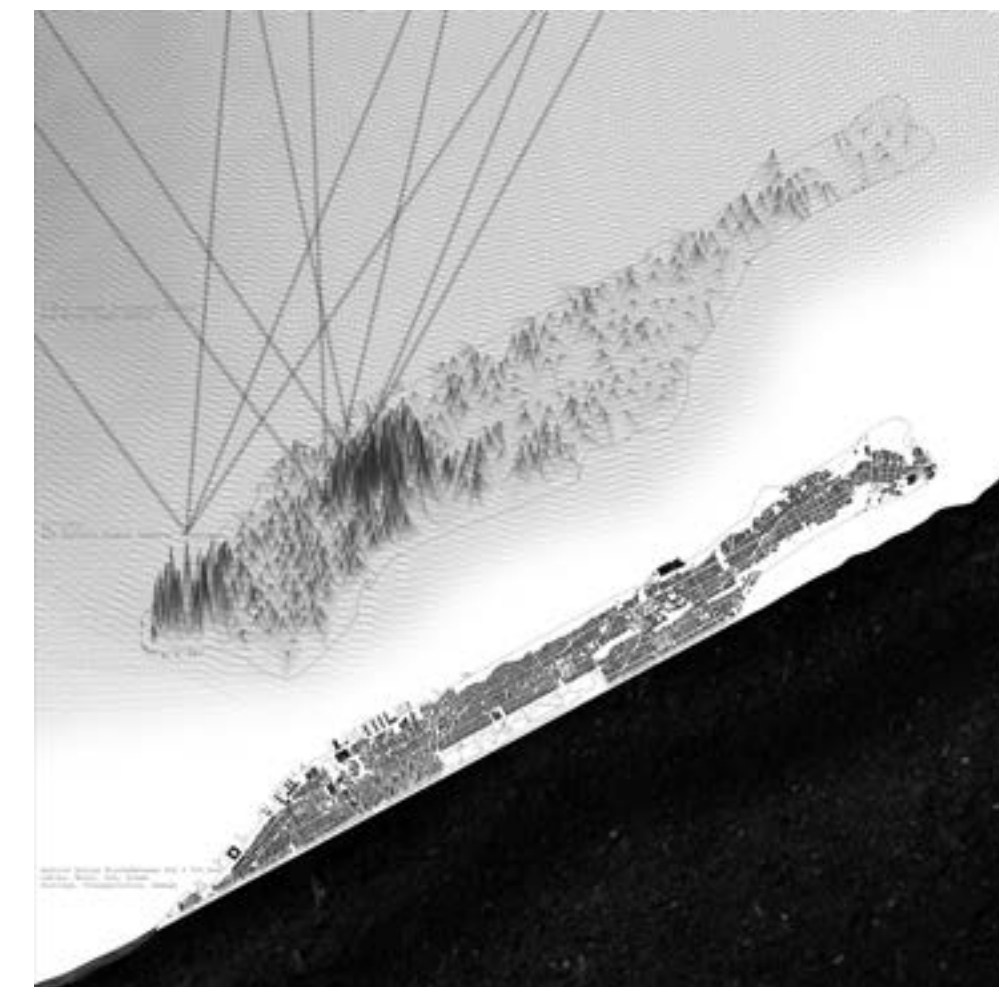
Section: Singals reach land station before distribution.



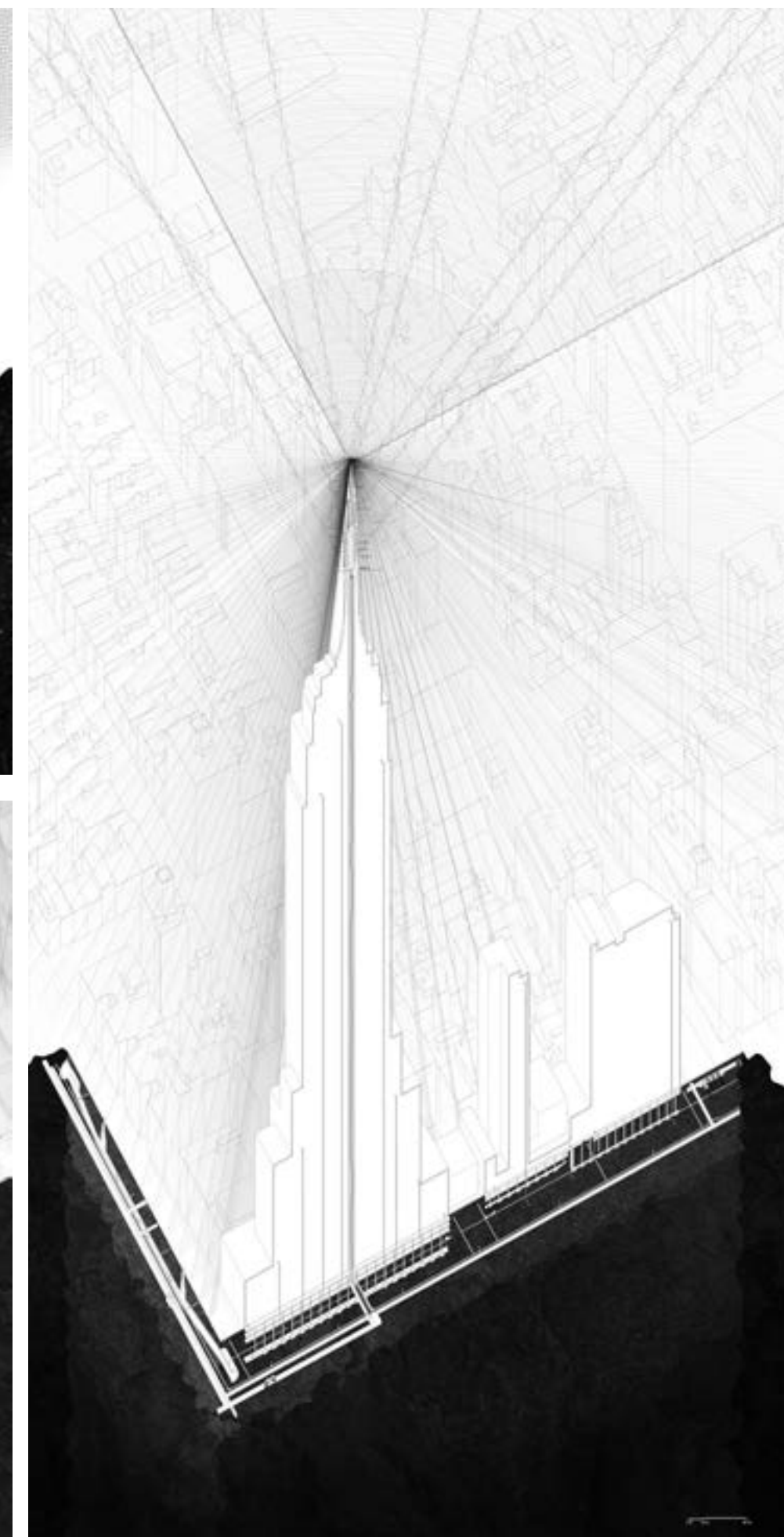
Section: Signal coverage in household.

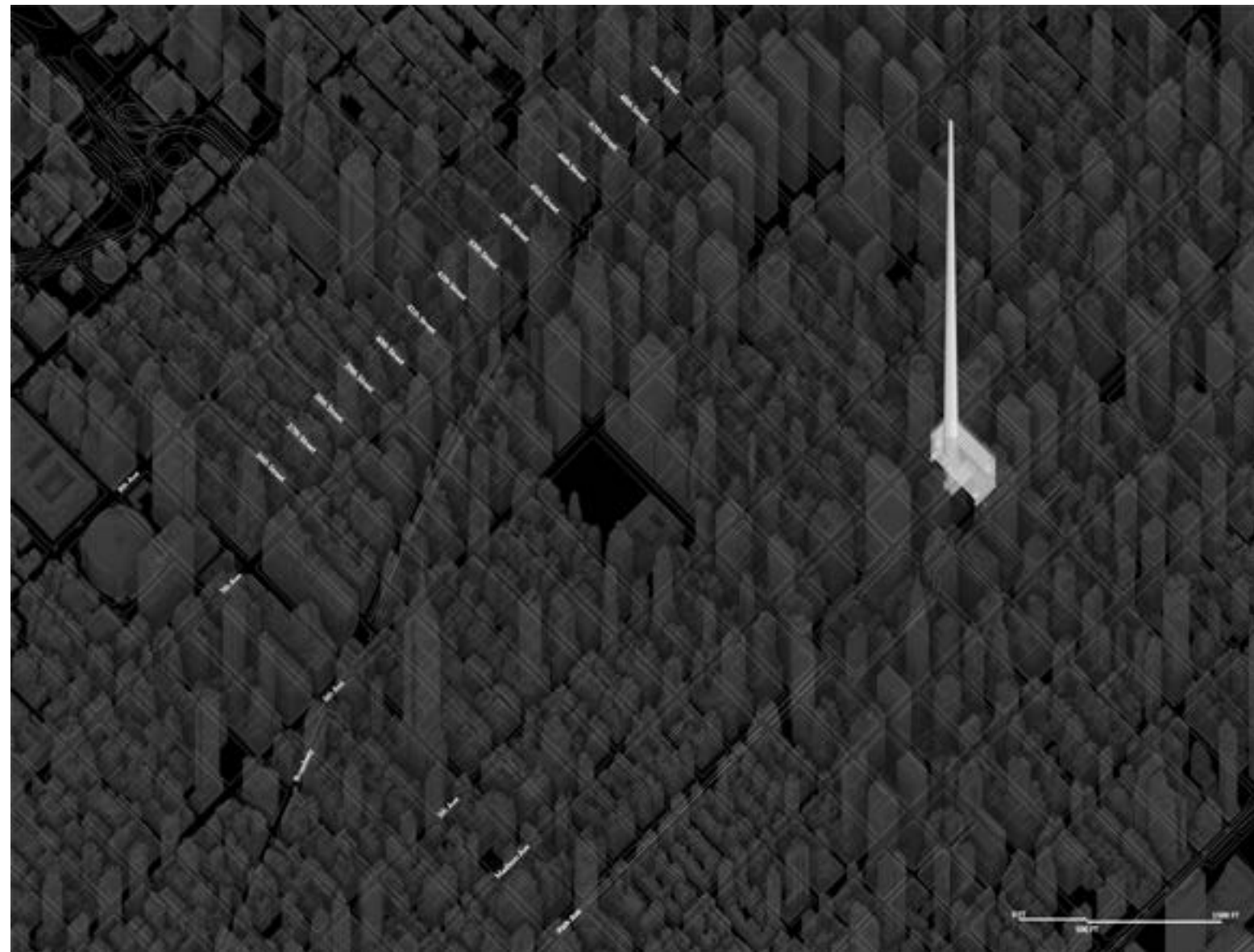


Conceptual Collage: Bungee jump into digital blackhole.

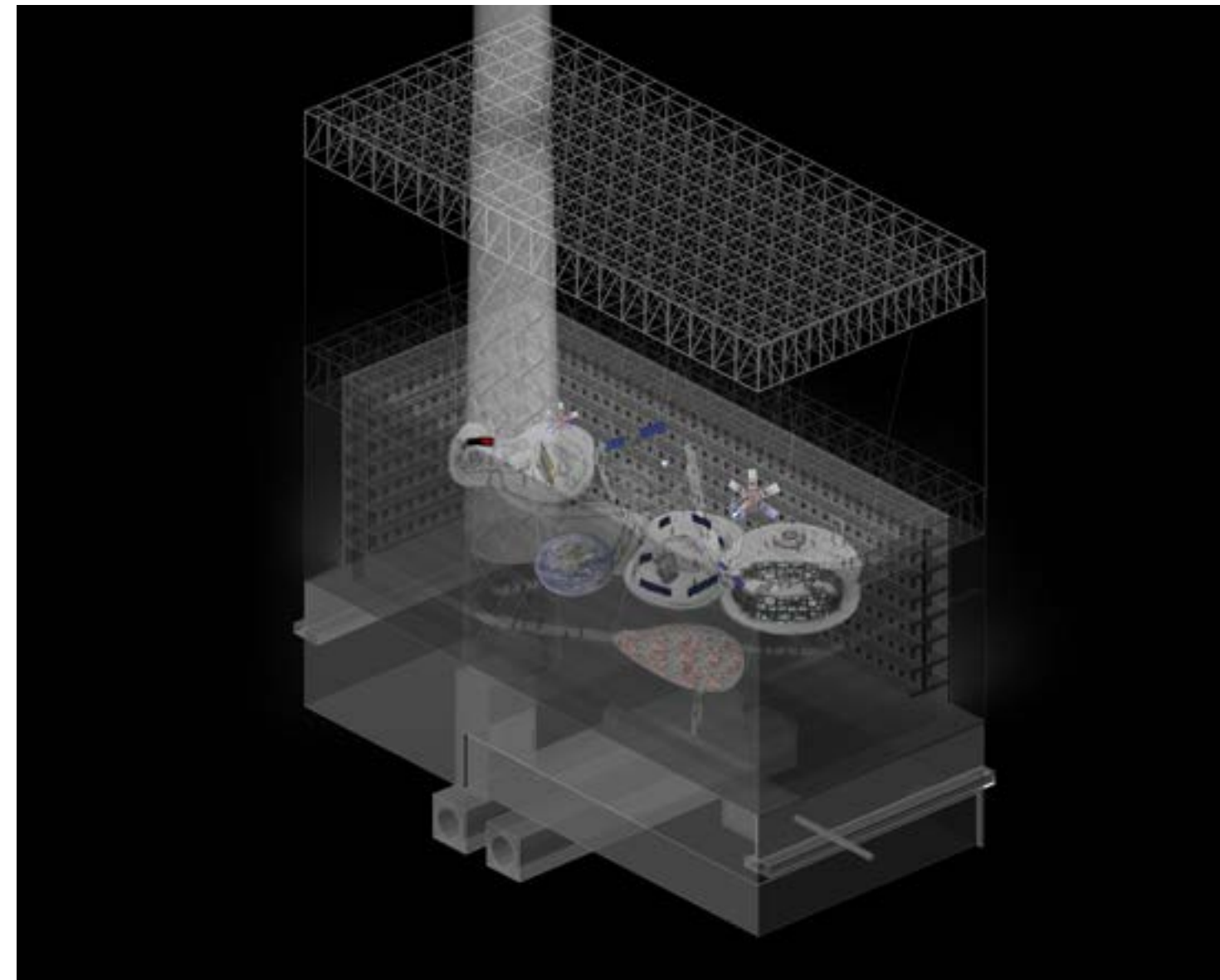


Axonometric Drawings: signals coverage and transmission in city at three scales.

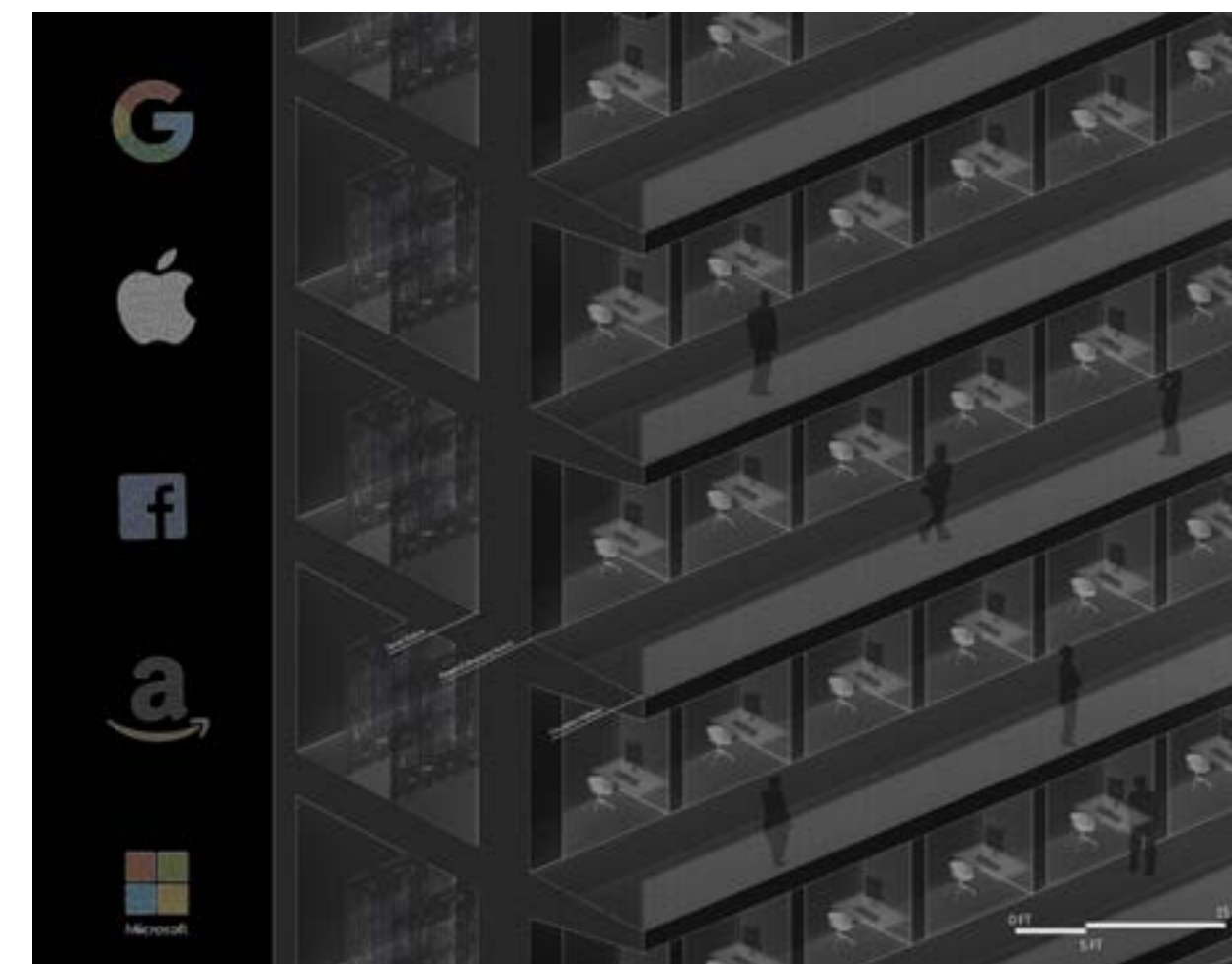




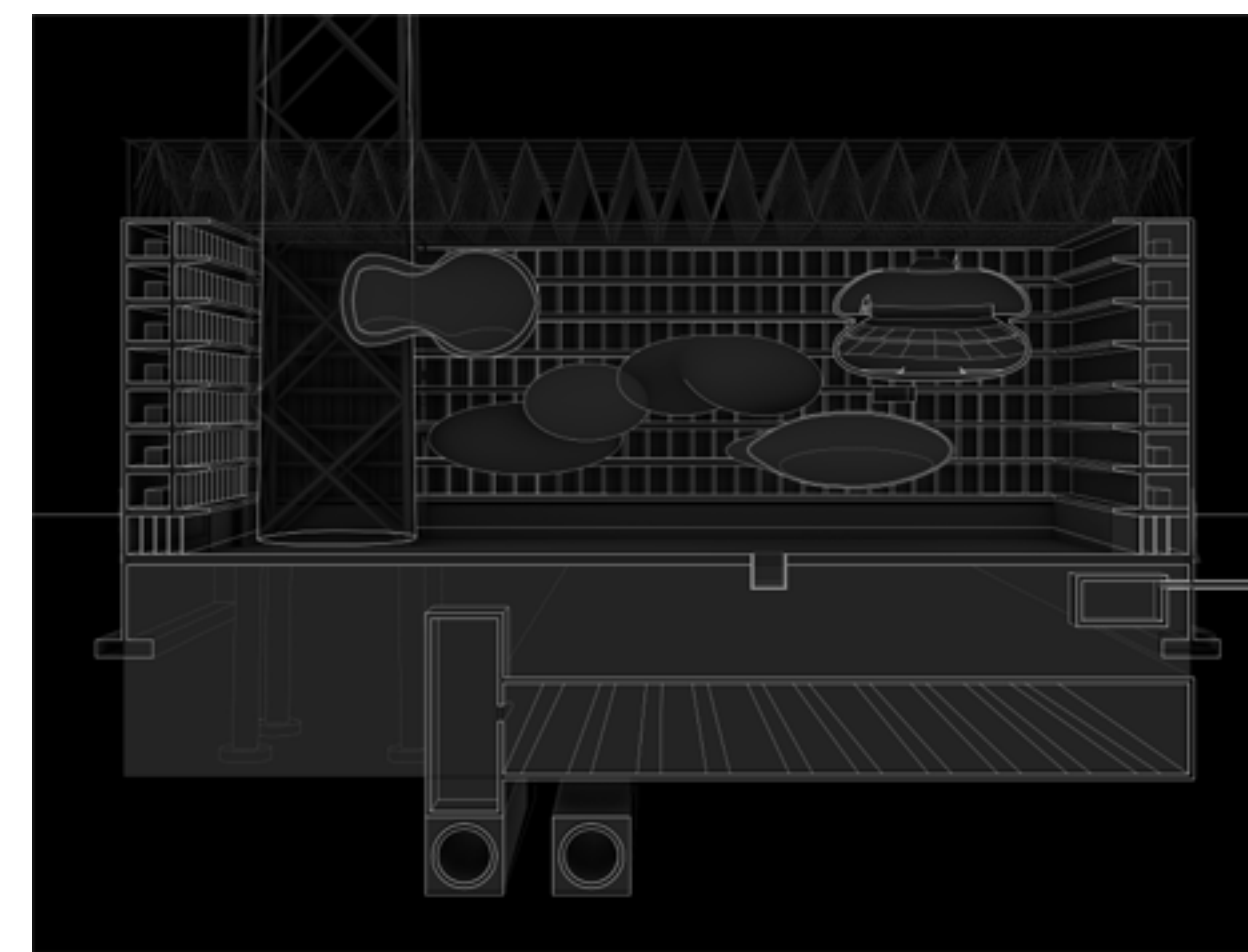
Site drawing of the Archive.



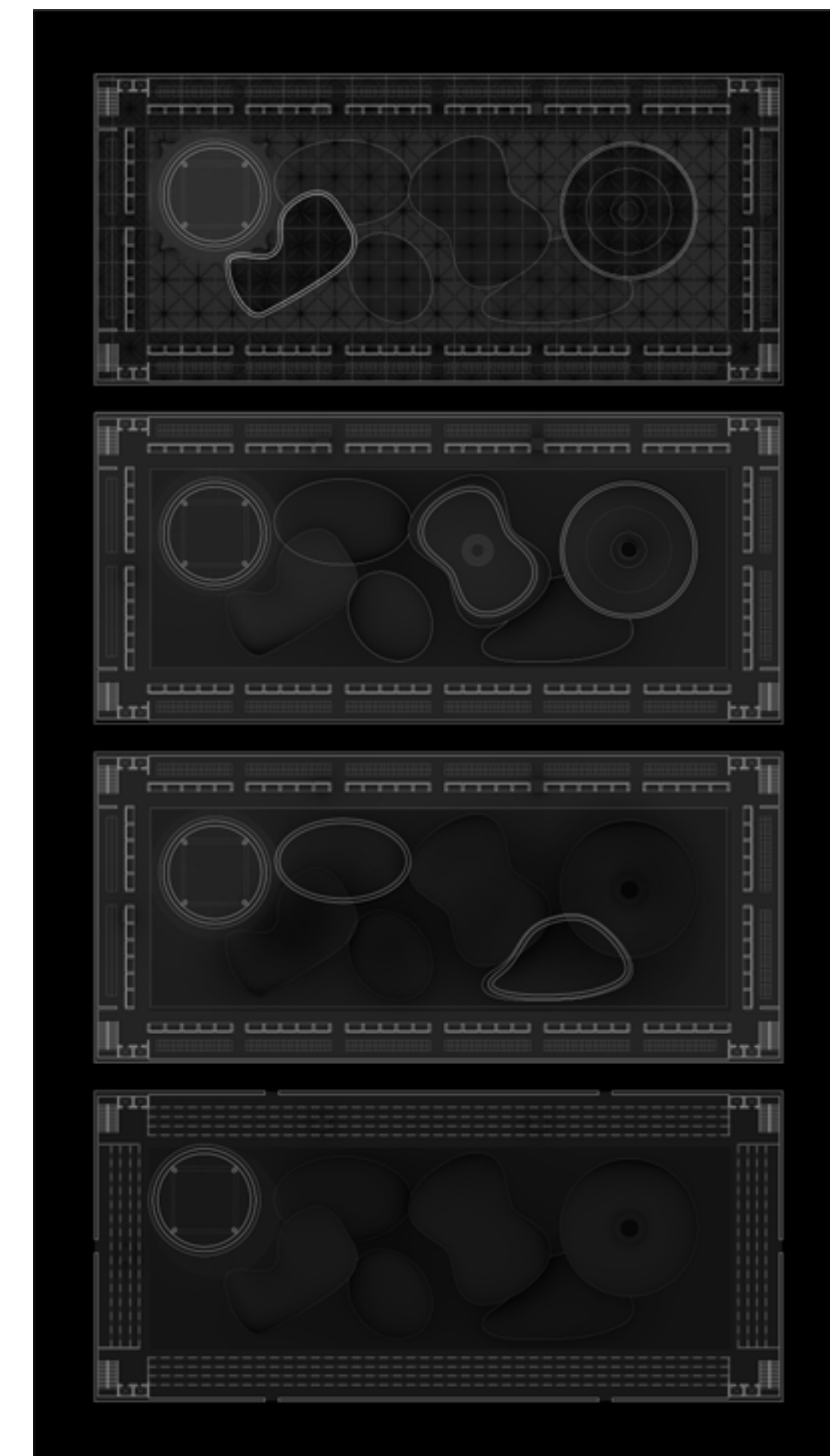
Axonometric drawing on the Archive and its interior.



Top: Zoomed-in axonometric drawing showing research hubs, data services, and corridor.



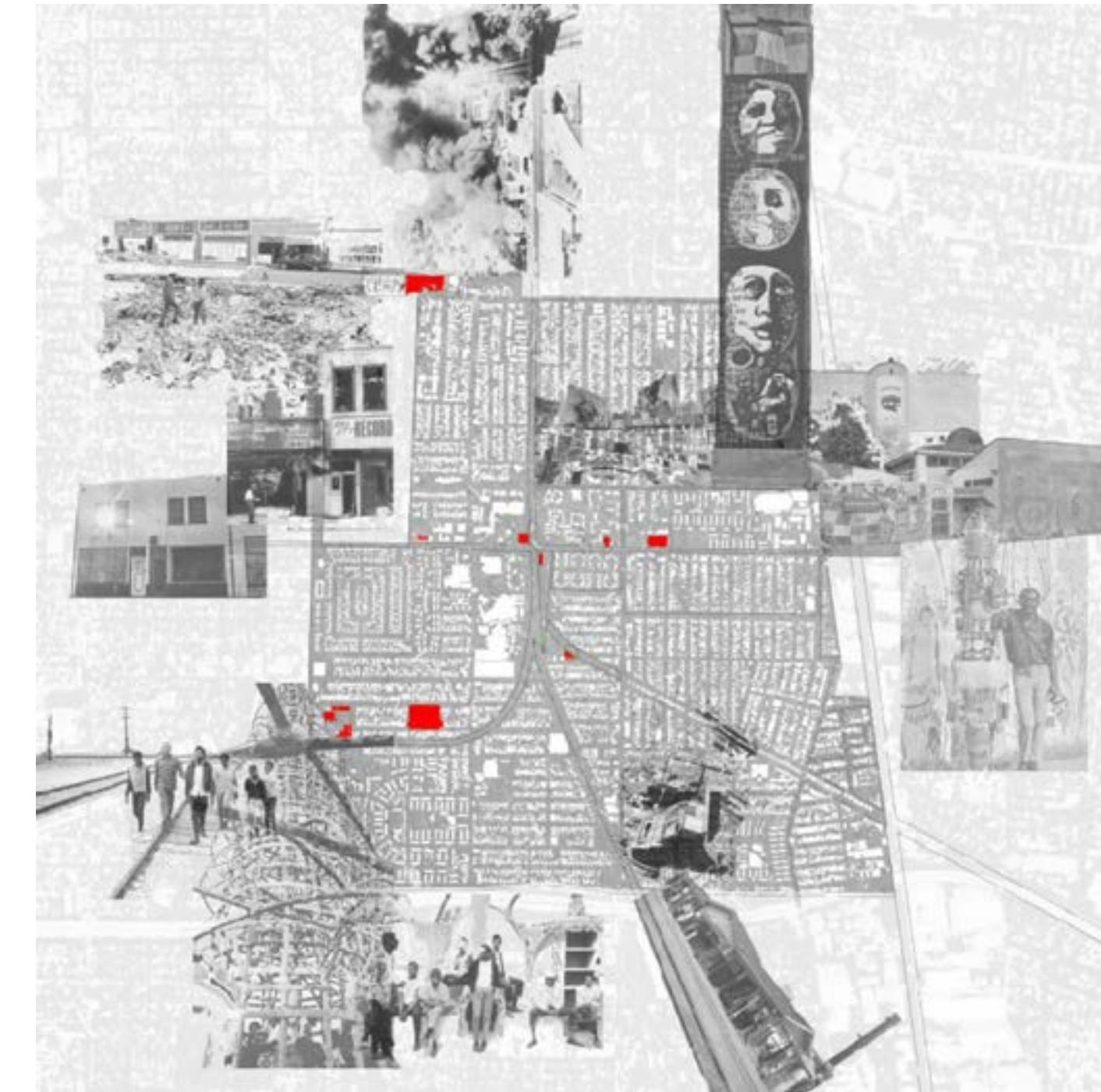
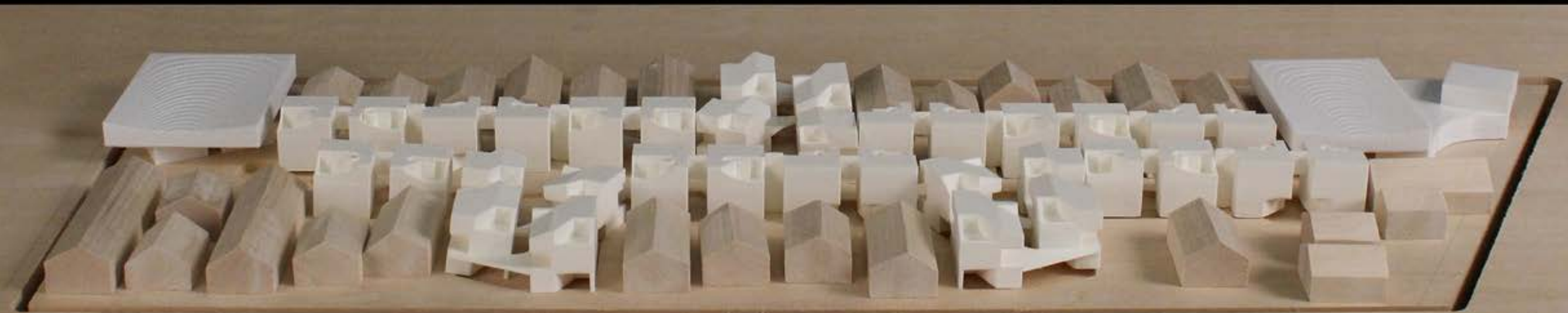
Bottom: Perspective section of the Archive, above and below ground.



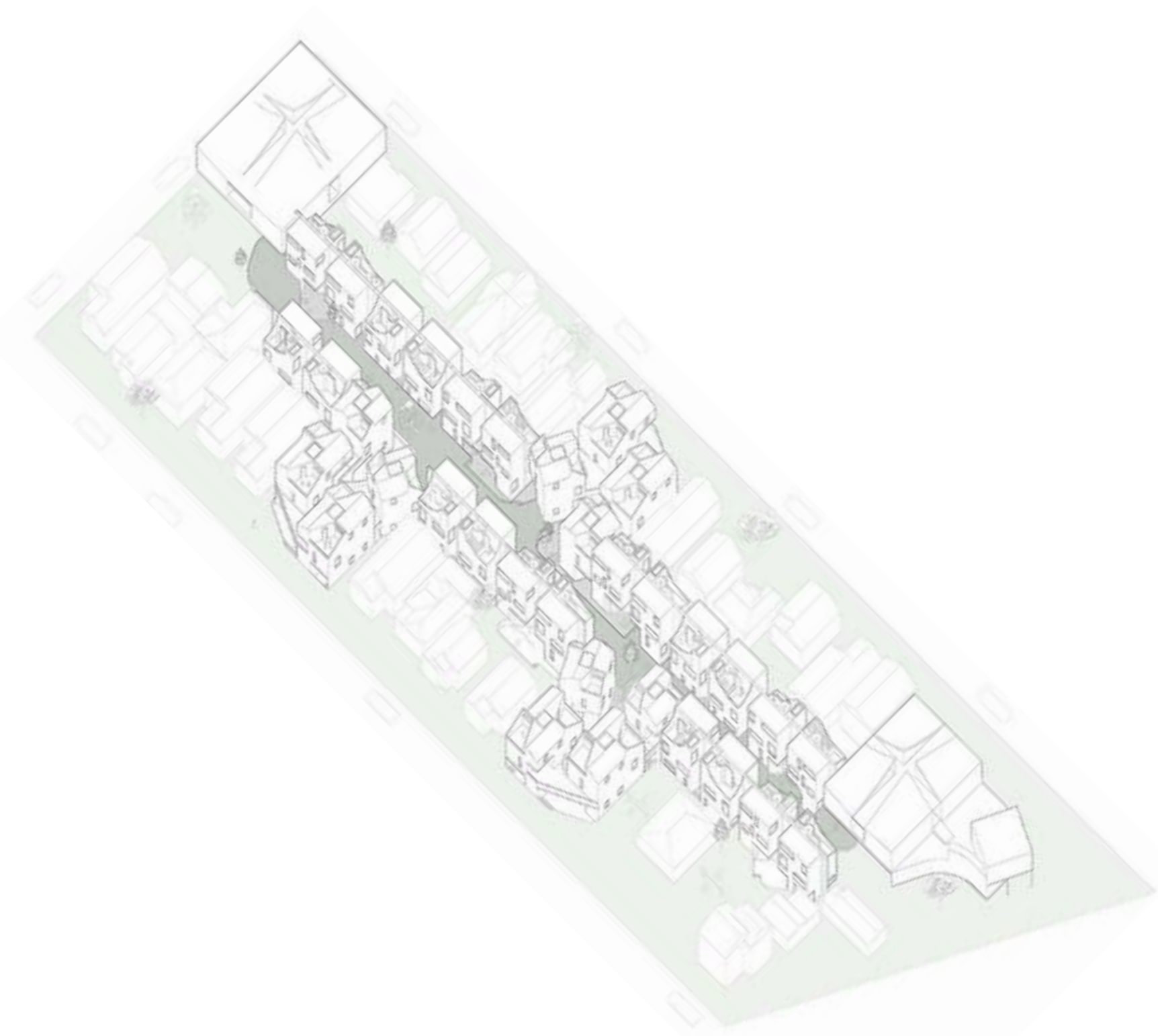
Plans of Archive.

Experimental Housing in Watts in Two Scales / Phase 1
High Density Low Rise Affordable Housing
Instructors: Nima Javidi, Daisy Ames, Mersiha Veledar, Mokena Makeka

Phase 1 of this experimental housing studio focuses on investigating high density, low rise affordable housing. The project aims to introduce new housing without demolishing the existing condition, inserting new housing into the surrounding neighborhood and introducing a central recreational street.



Site Collage: Composition of different activities, institutions, culture, and history in the Watts neighborhood.



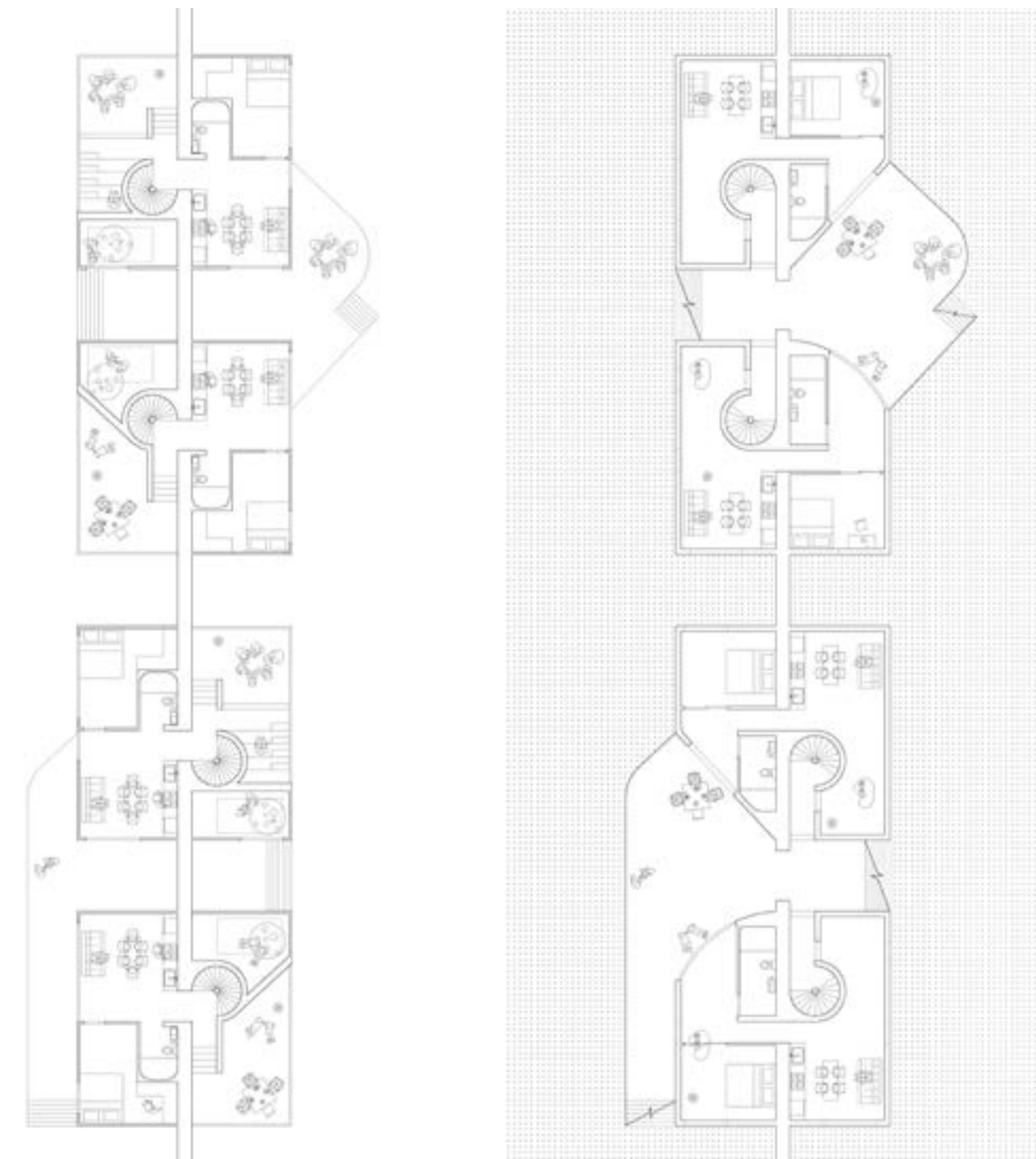
Axonometric: Housing project on site with different activities on suggested recreational pedestrian street.



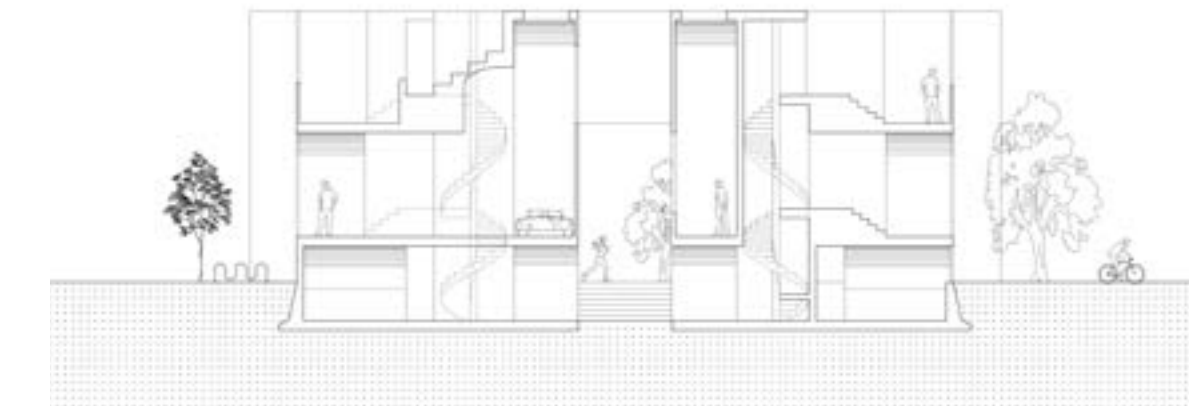
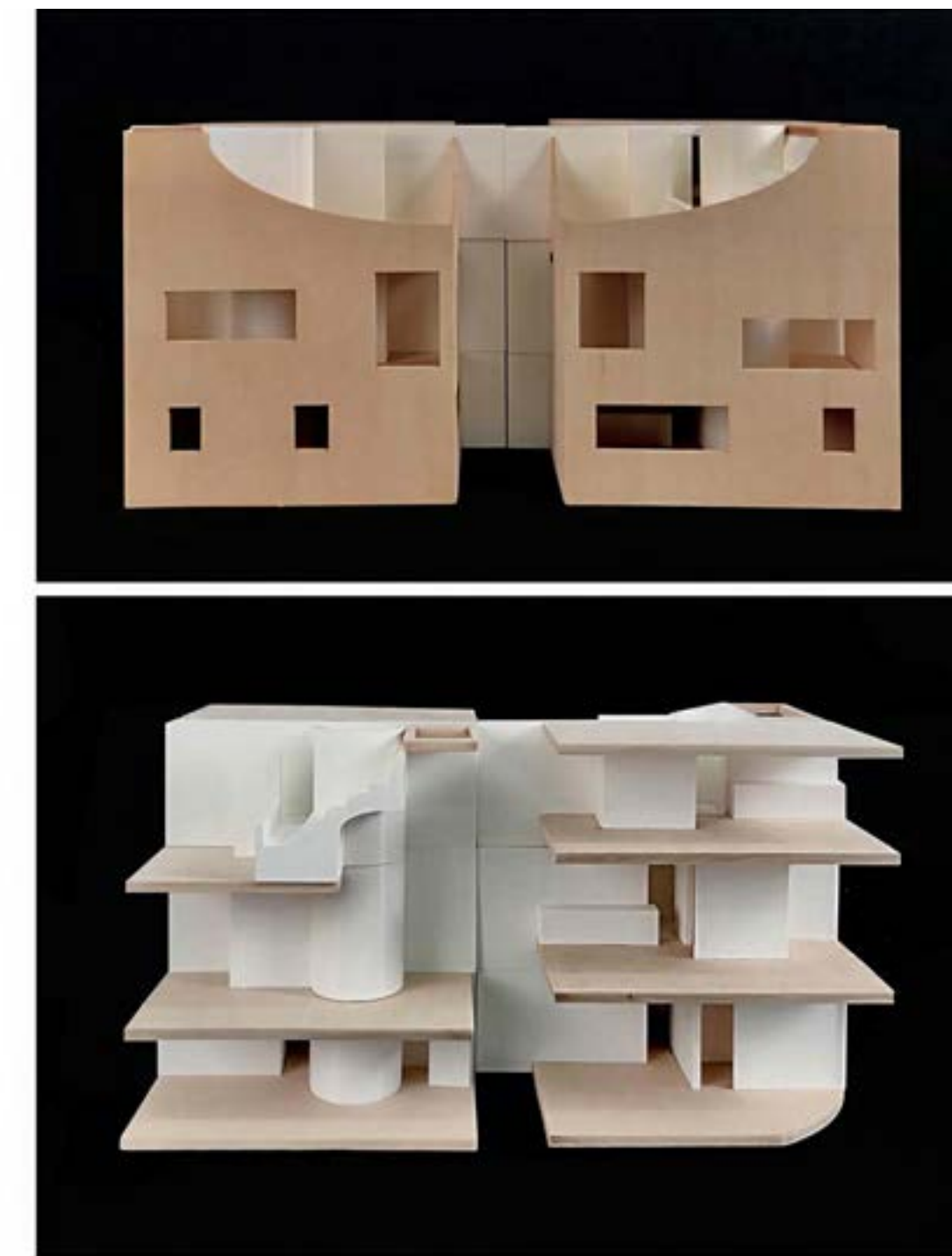
Model photograph on occupiable roof space and through threshold.



Photograph: Housing project on site (Duplex Housing)



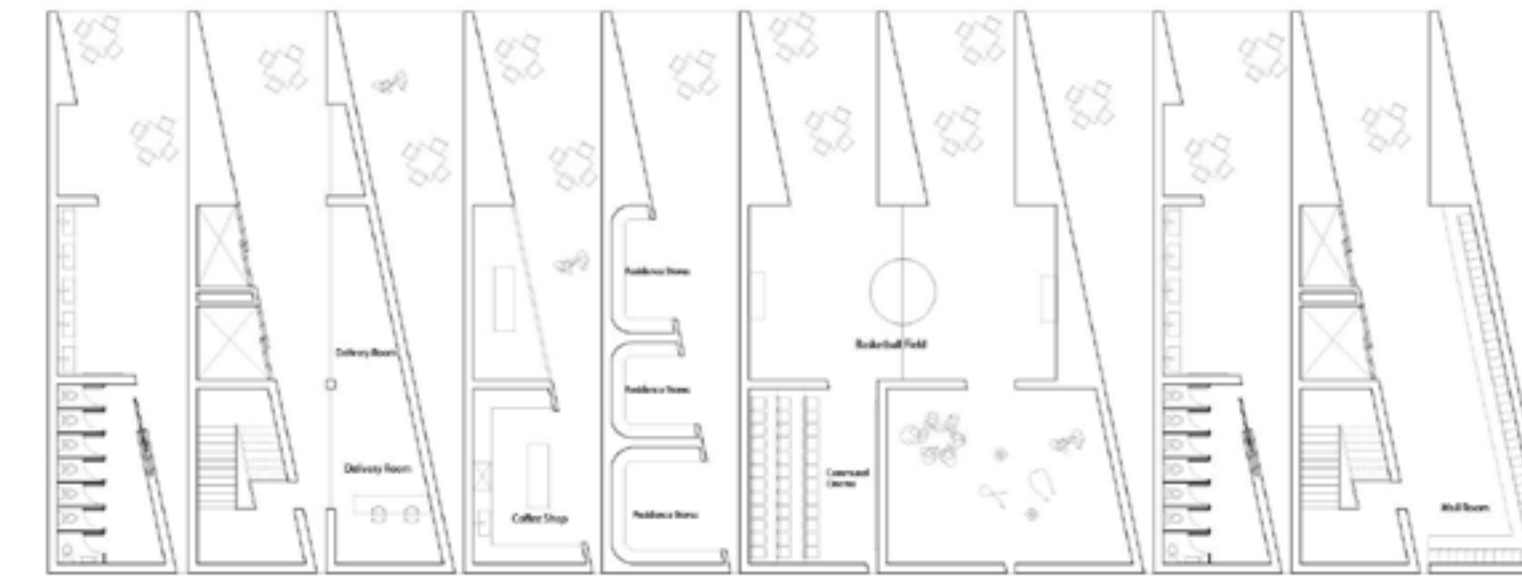
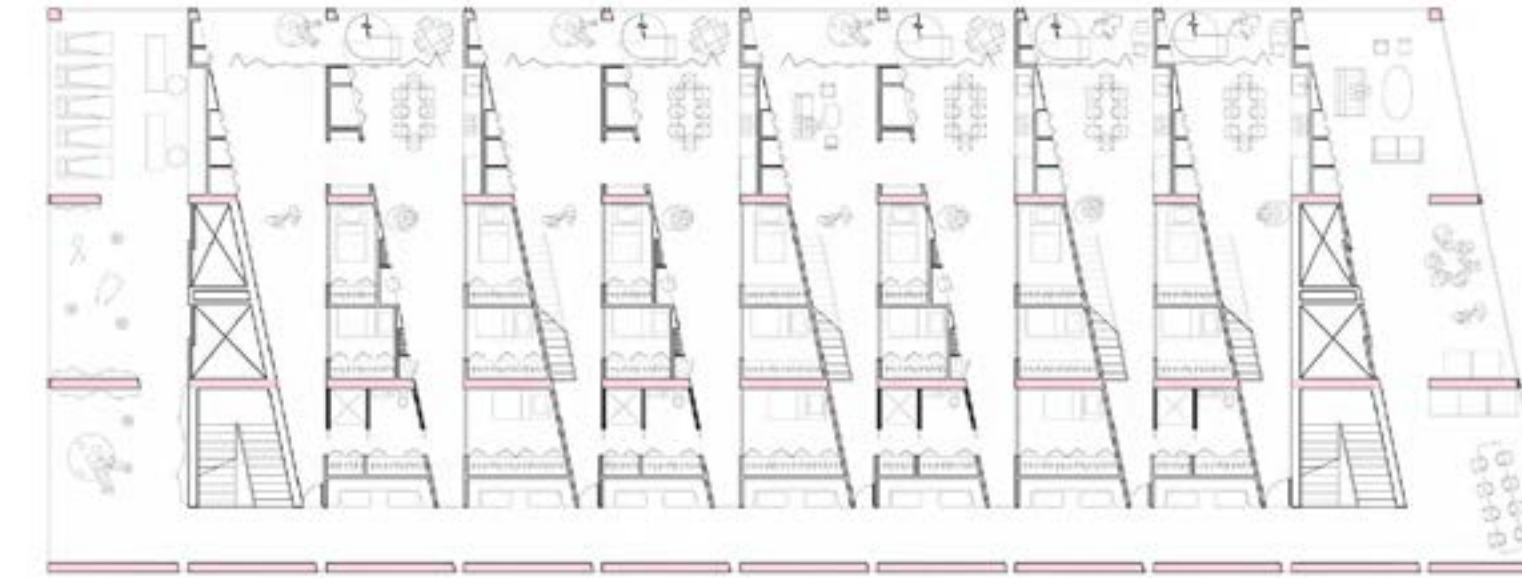
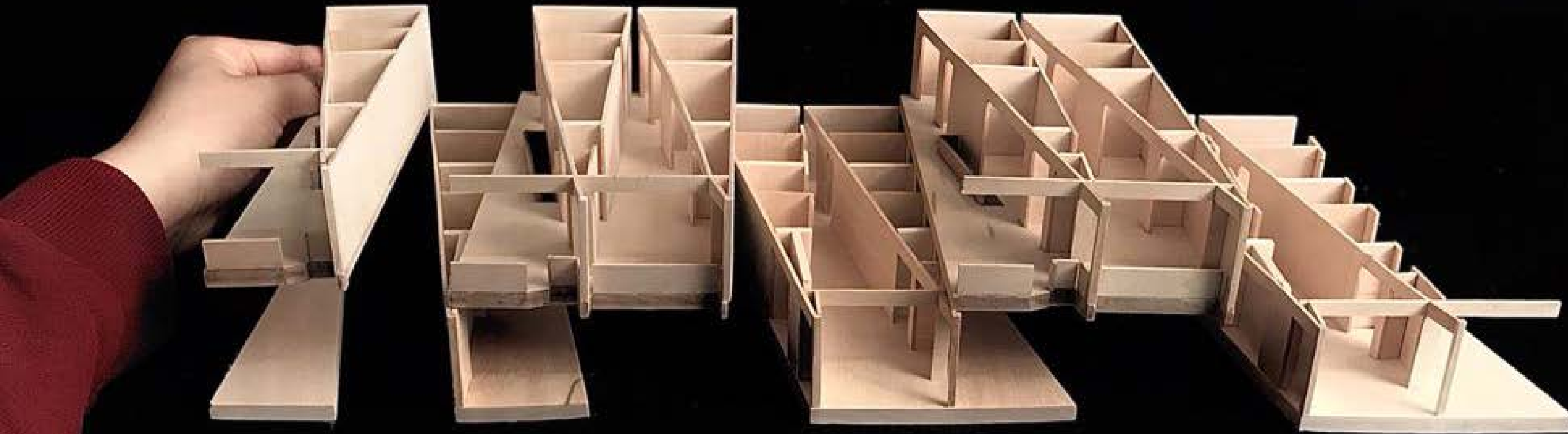
Plans / Sections



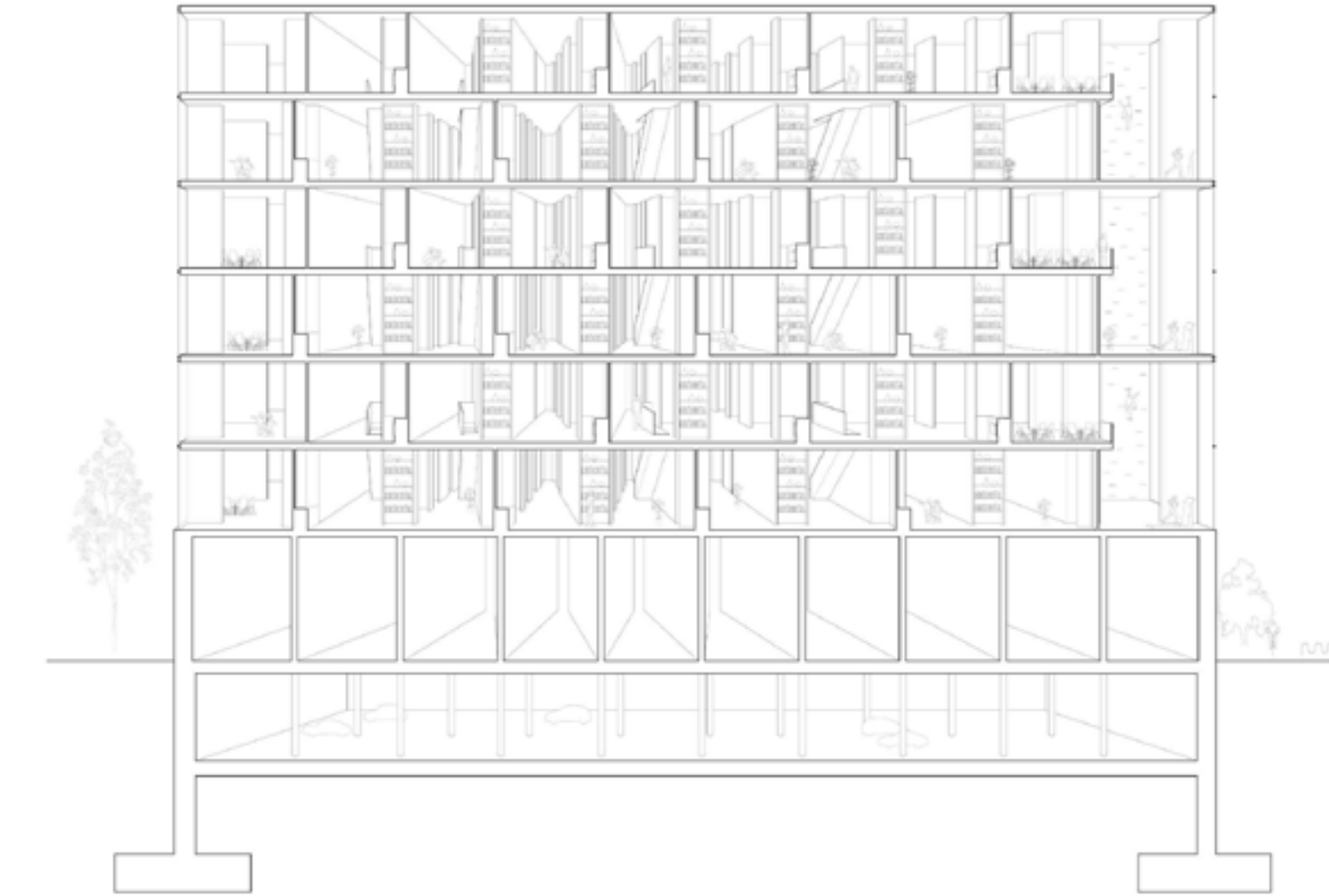
Model photographs in relation to section drawings.

Experimental Housing in Watts in Two Scales / Phase 2
High Density Mid Rise Affordable Housing
Instructors: Nima Javidi, Daisy Ames, Mersiha Veledar, Mokena Makeka

The second phase of this experimental housing project follows a structural parti for transforming load bearing walls to columns throughout the span of the building. The apartments units follow the preset rules of a structural system which allows the units to follow the rule of modularity through triangulation and stacking.



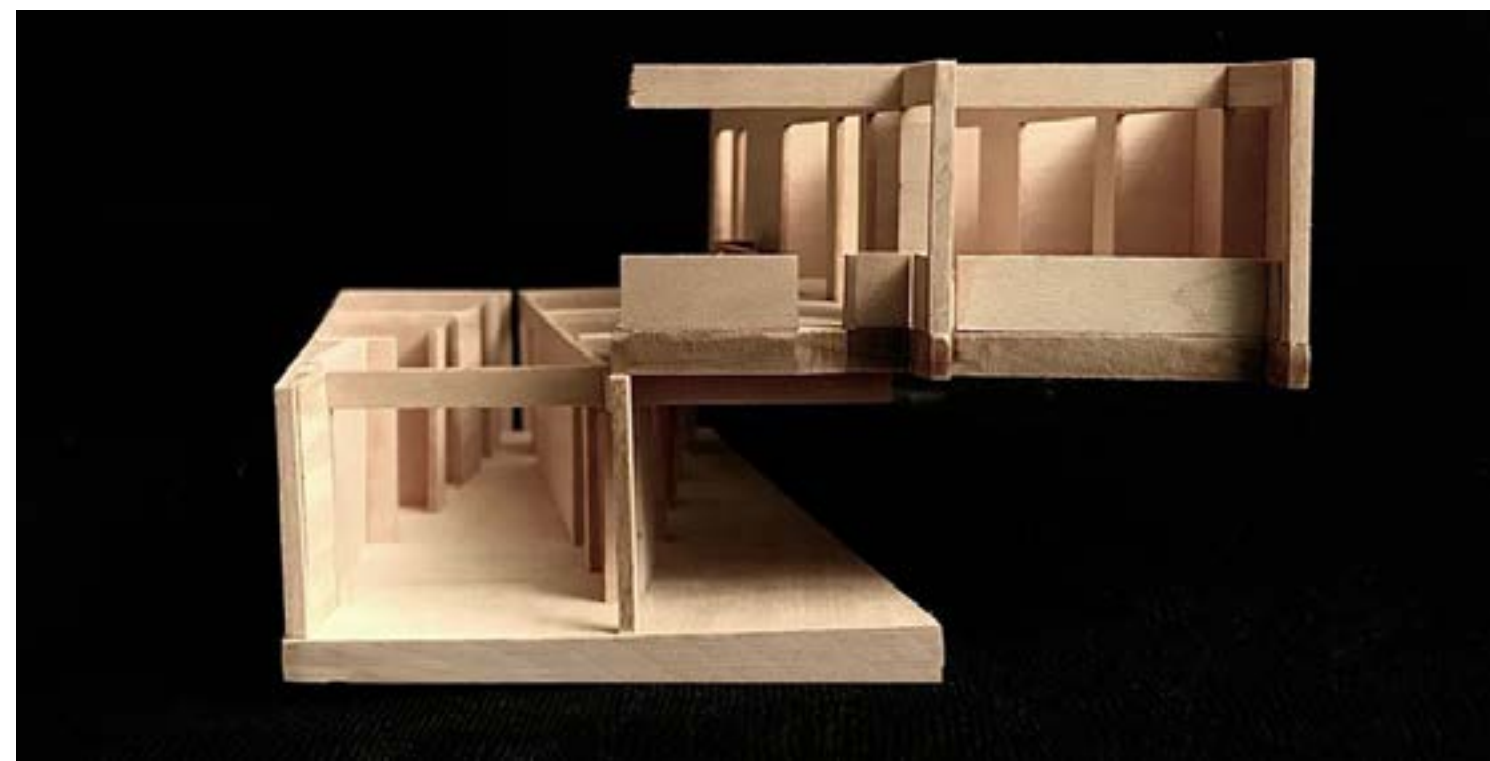
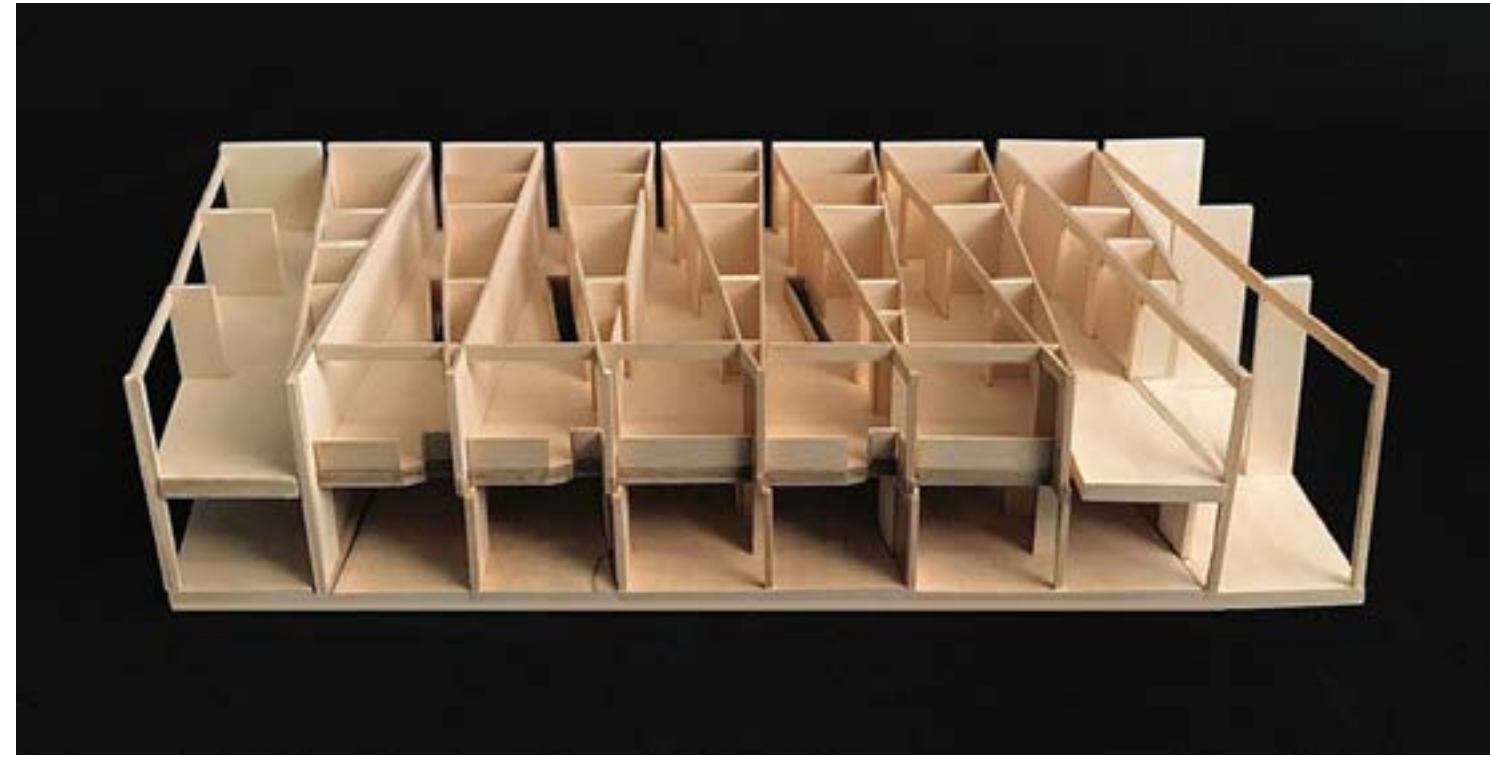
Top: Typical corridor level plan.
Bottom: Podium communal space plan.



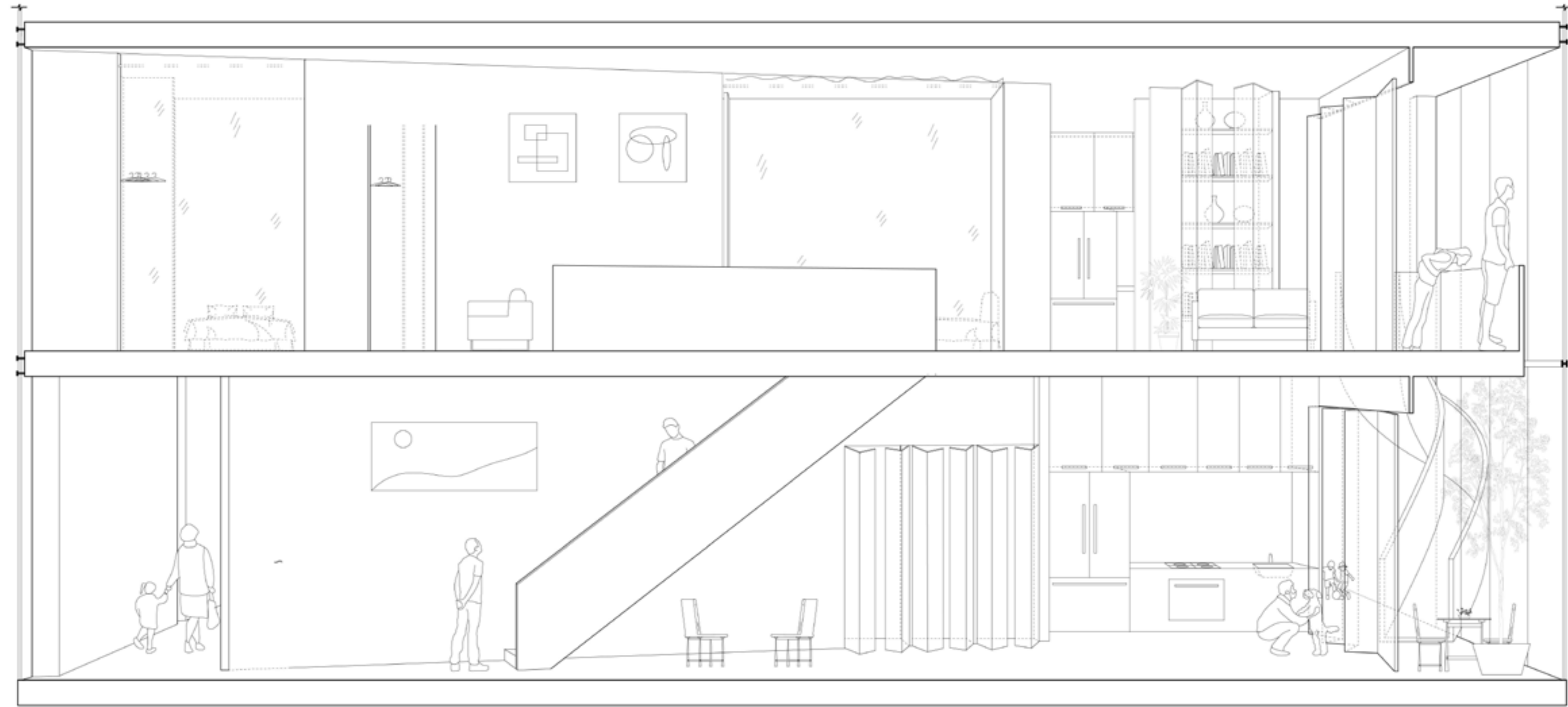
Section



Model Photograph



Model Photographs



Perspective section on typical unit.



Rendering image on corridor.



Rendering image facing bedrooms.



Rendering image through threshold.



Rendering image on dining space.



Blow-Up: An Inflatable, a Living Pod, an Adaptation
 Material Experimentation Exhibition on Inflatable and Plastic Membranes
 Collaboration with: Ameneh Arsanjani

This project begins as a singular unit but can be seen as a kit of parts to be distributed and made available at a full scale to address the issue of homelessness in NYC. It started with research of NYC available exhaust system. Then designed the living pods to be double skinned for the relief warm air to fill in as cushions for homeless people in winter. This way it reduces the risk of directly breathing toxic air from the building relief air.



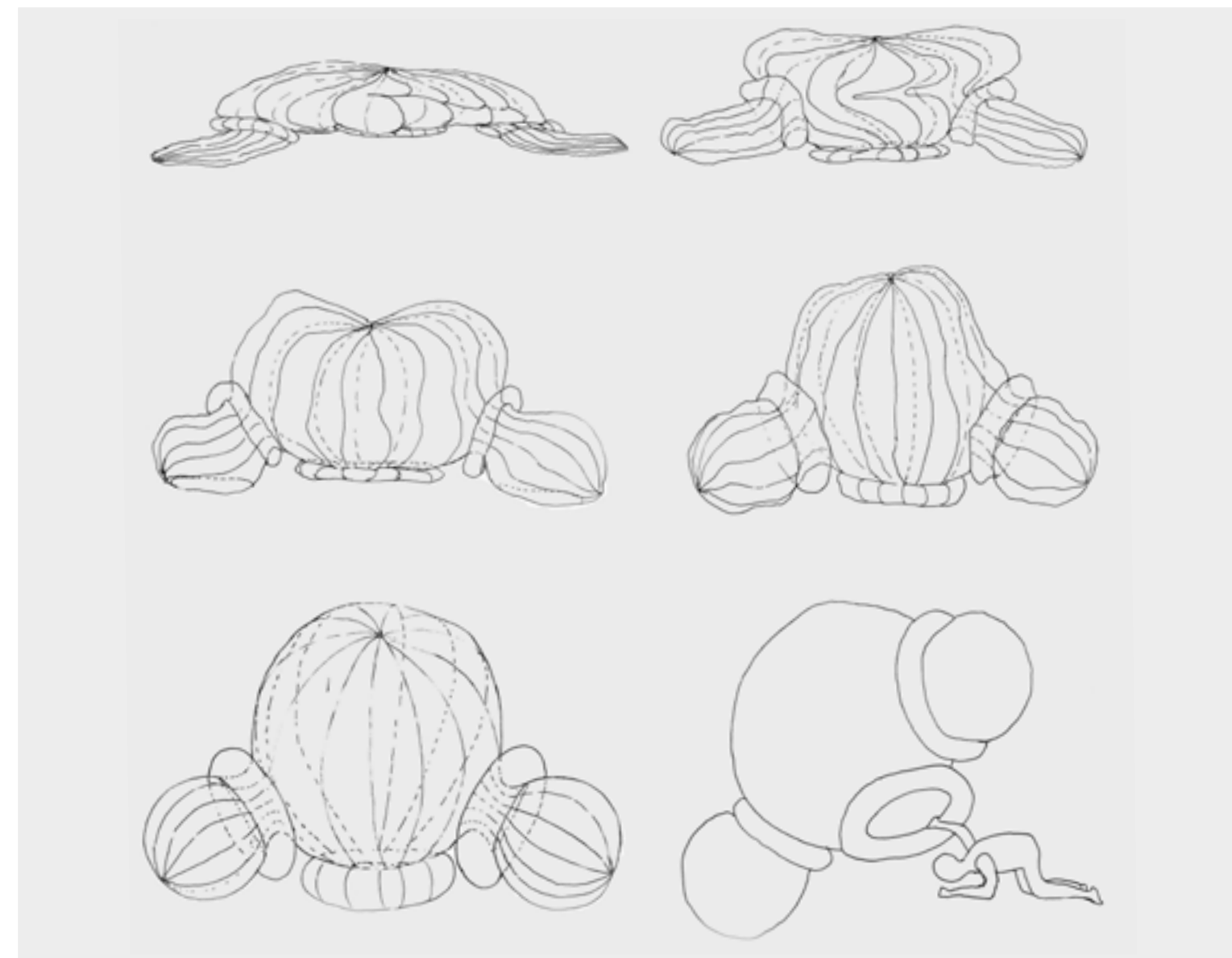
Project fabrication methods research studies.



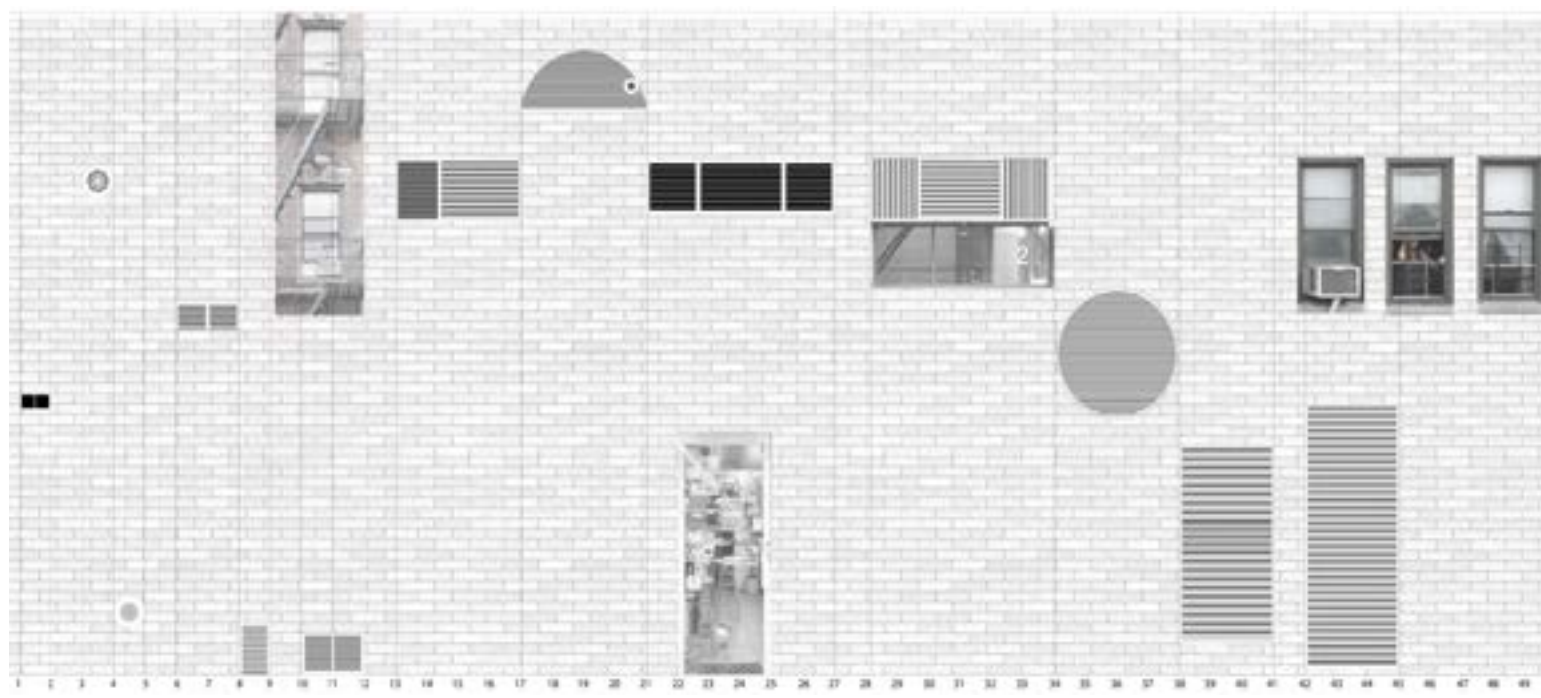
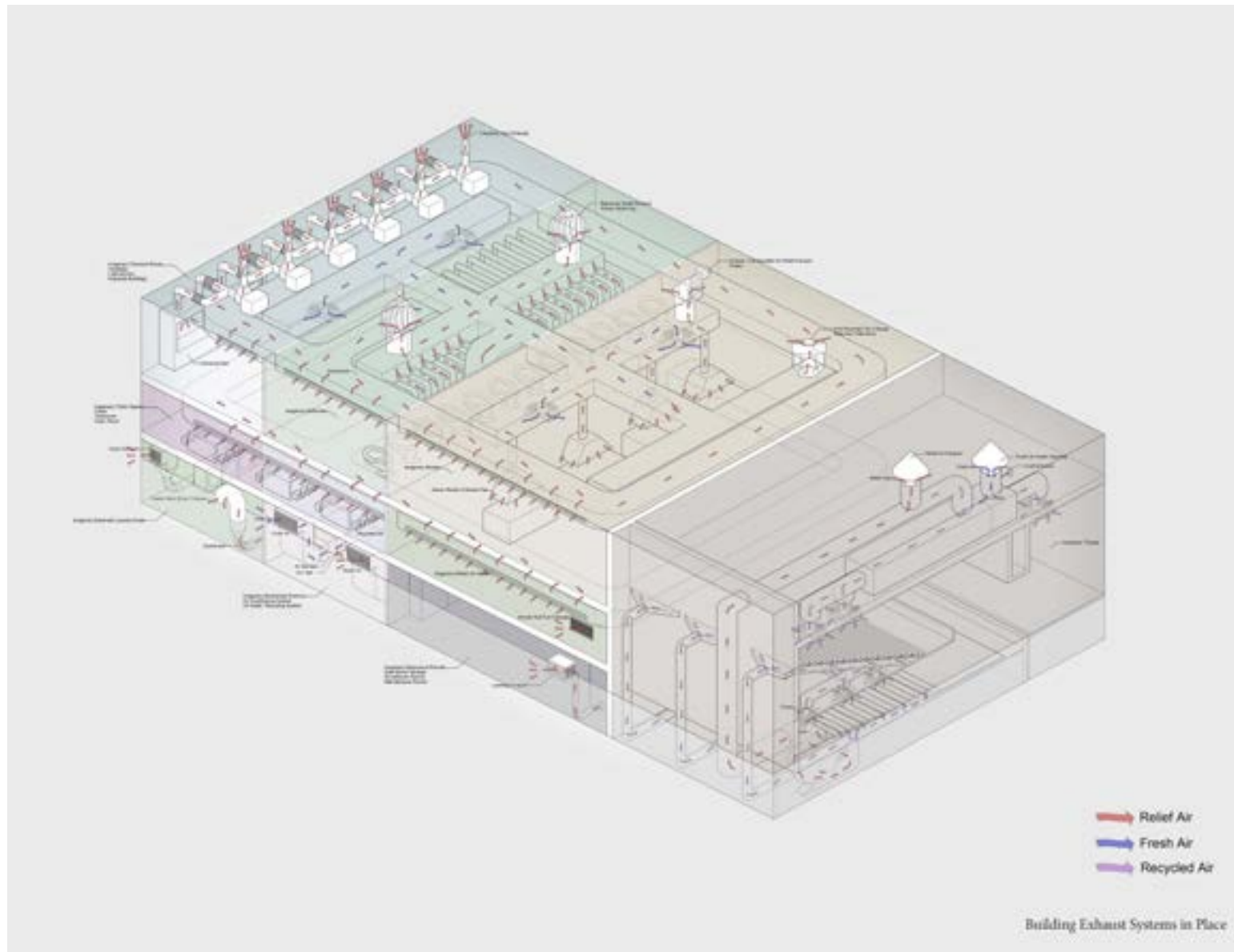
Research photographs.



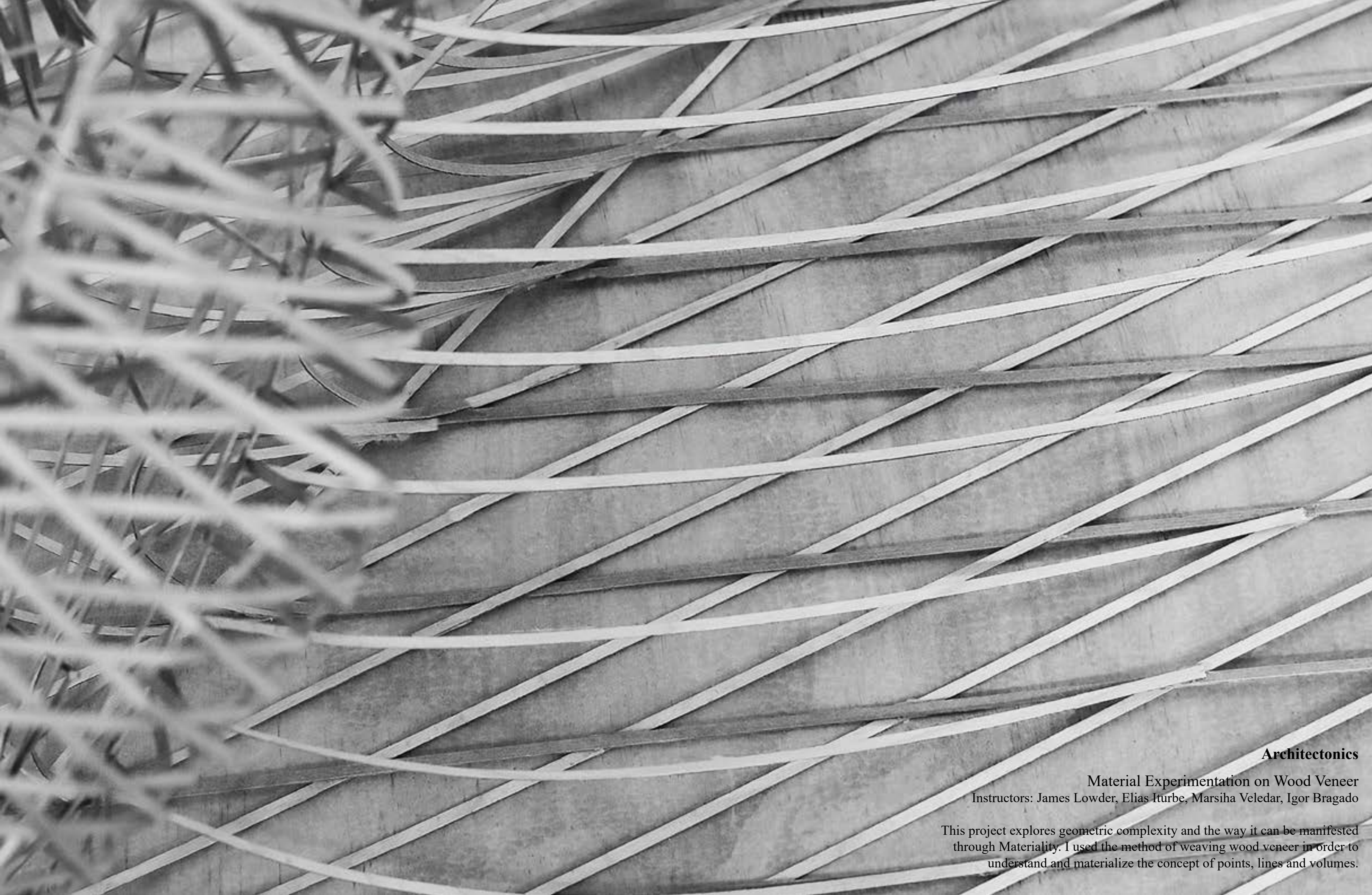
Project prototype photographs.



Comic drawing on project narrative.



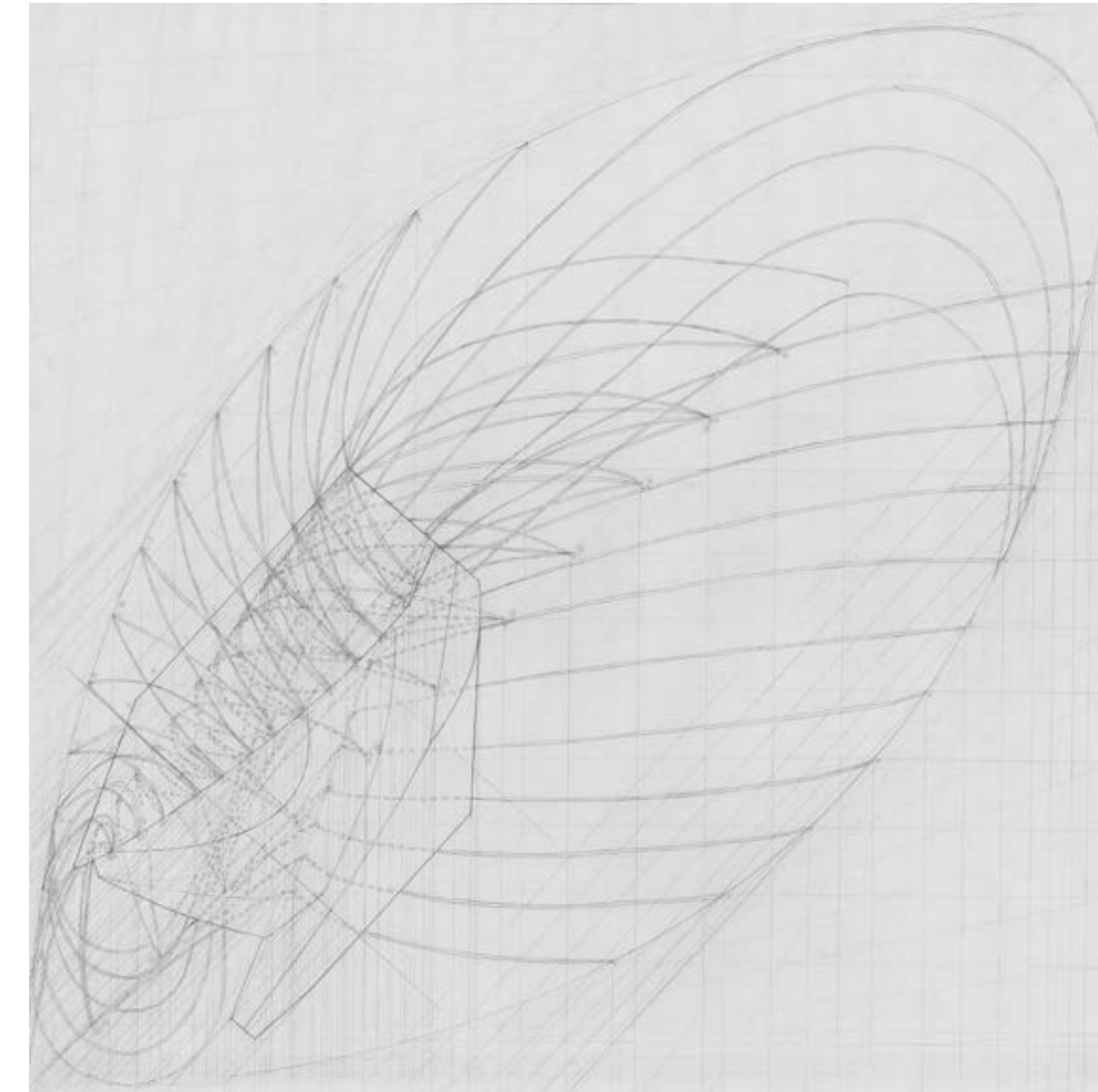
Research drawing: General building HVAC system types and heights.



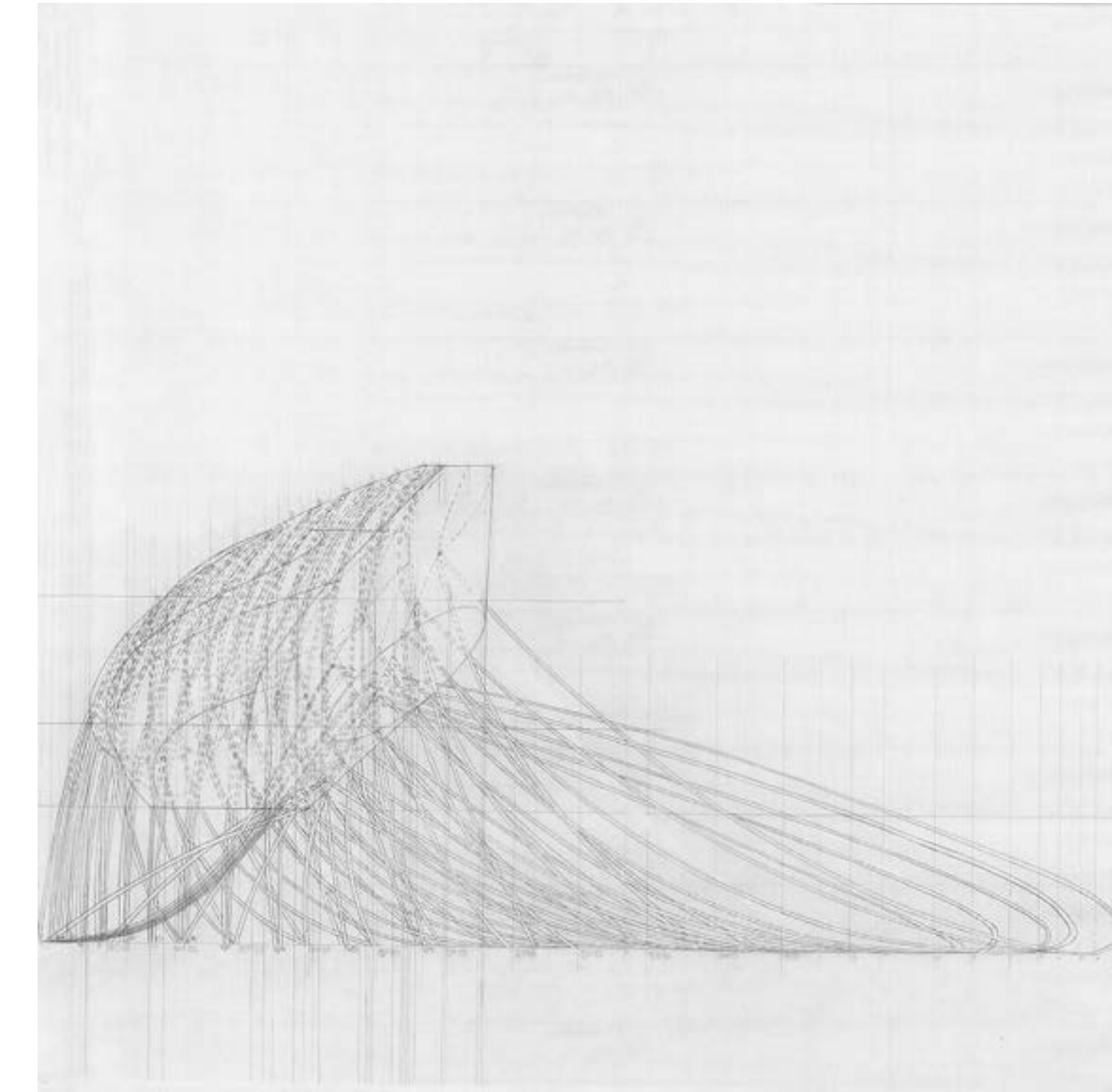
Architectonics

Material Experimentation on Wood Veneer
Instructors: James Lowder, Elias Iturbe, Marsiha Veledar, Igor Bragado

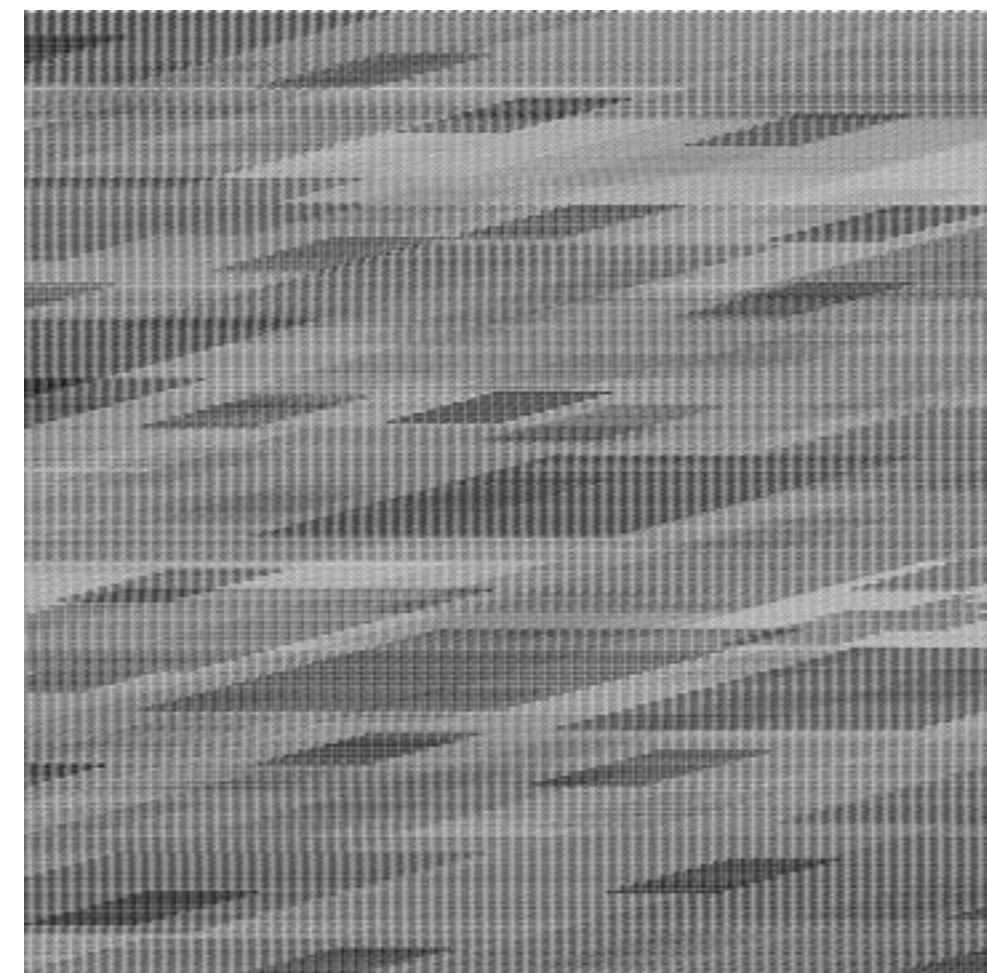
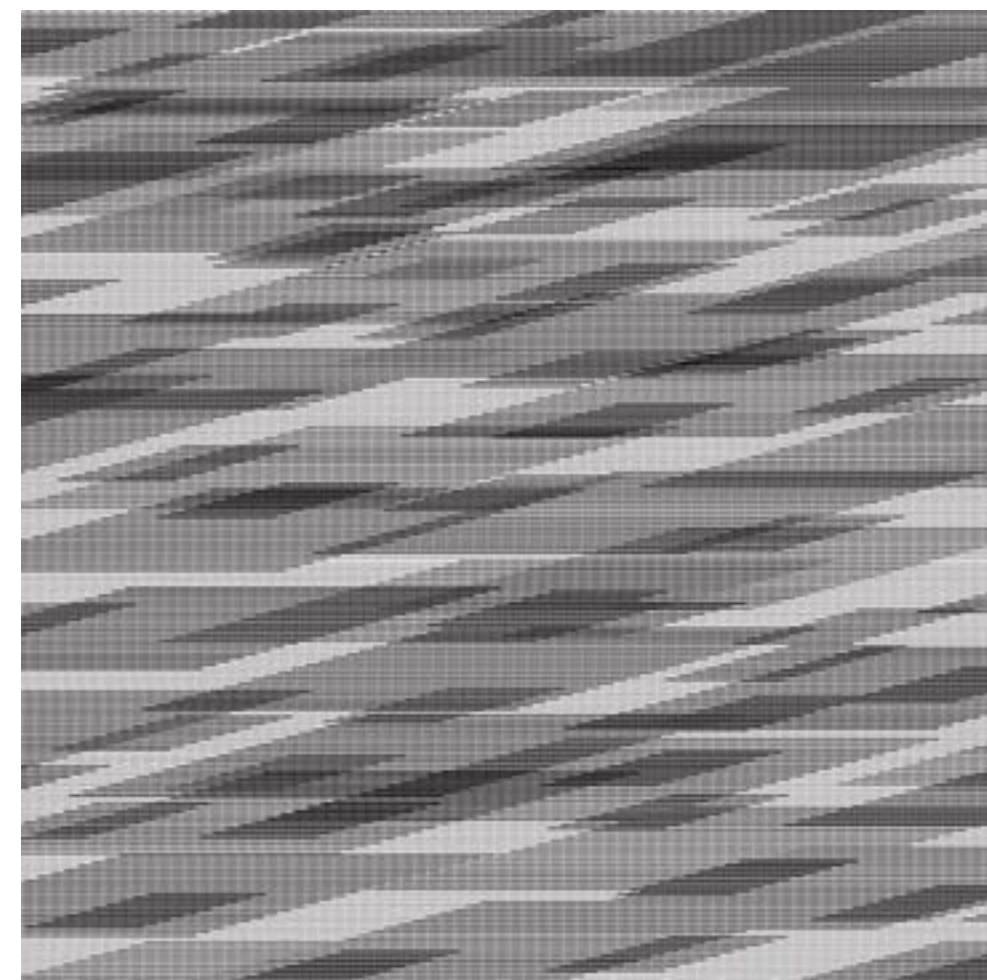
This project explores geometric complexity and the way it can be manifested through Materiality. I used the method of weaving wood veneer in order to understand and materialize the concept of points, lines and volumes.



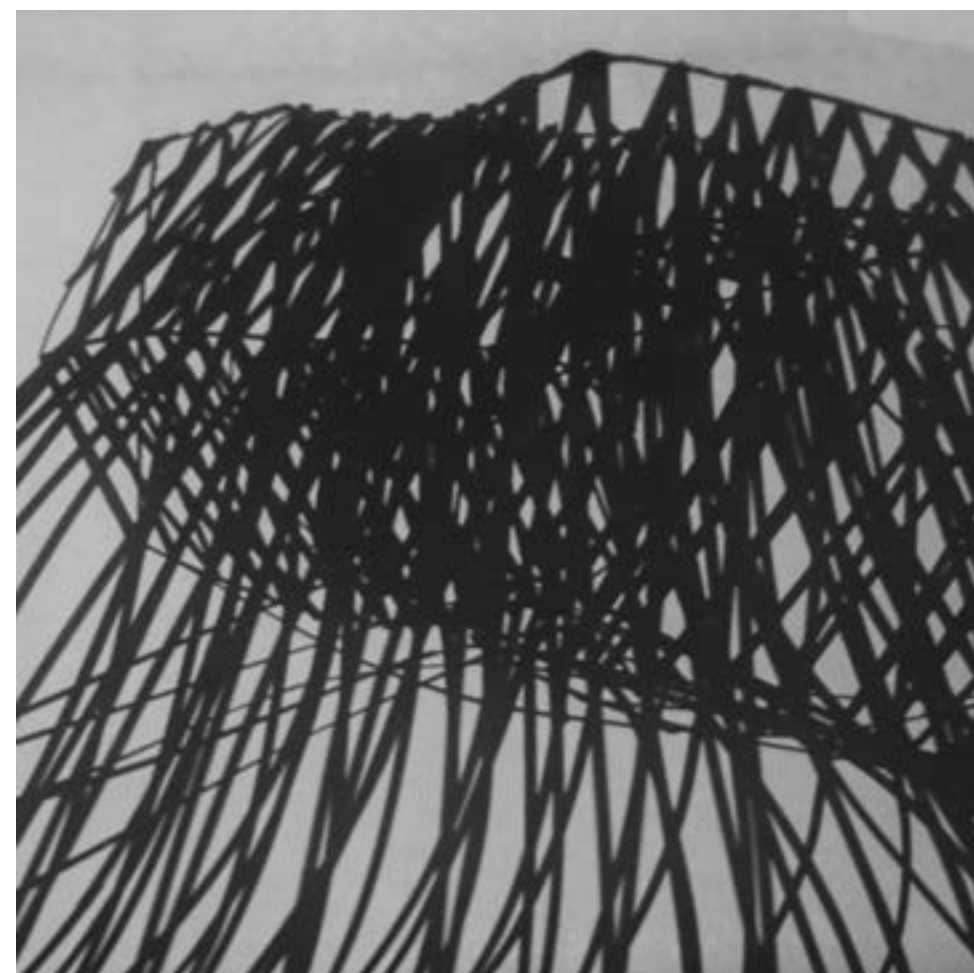
Top Elevation



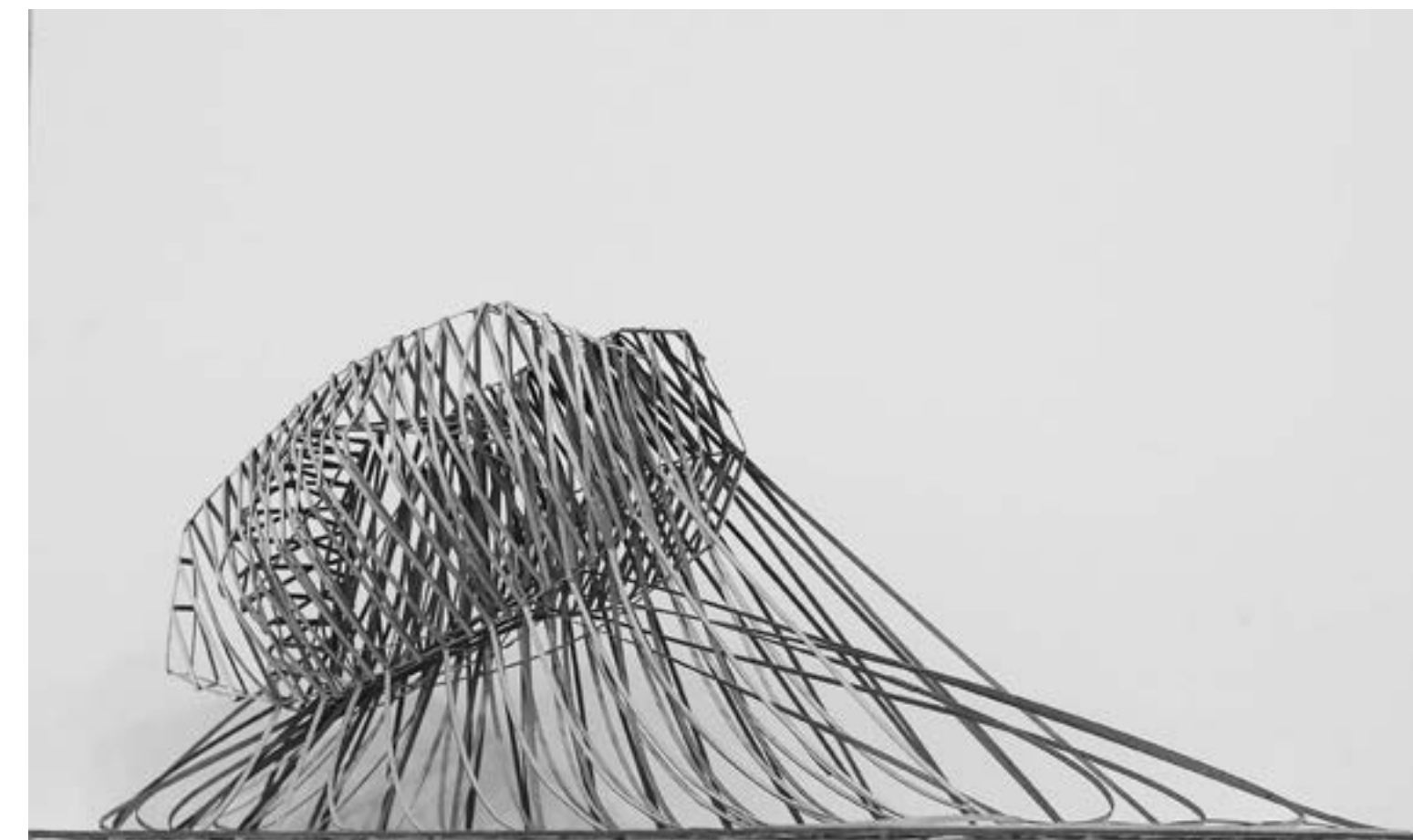
Front Elevation



Field line drawing showing the conceptual approach of the project.



Photographs of model under light, describe the project through conceptual imagery.

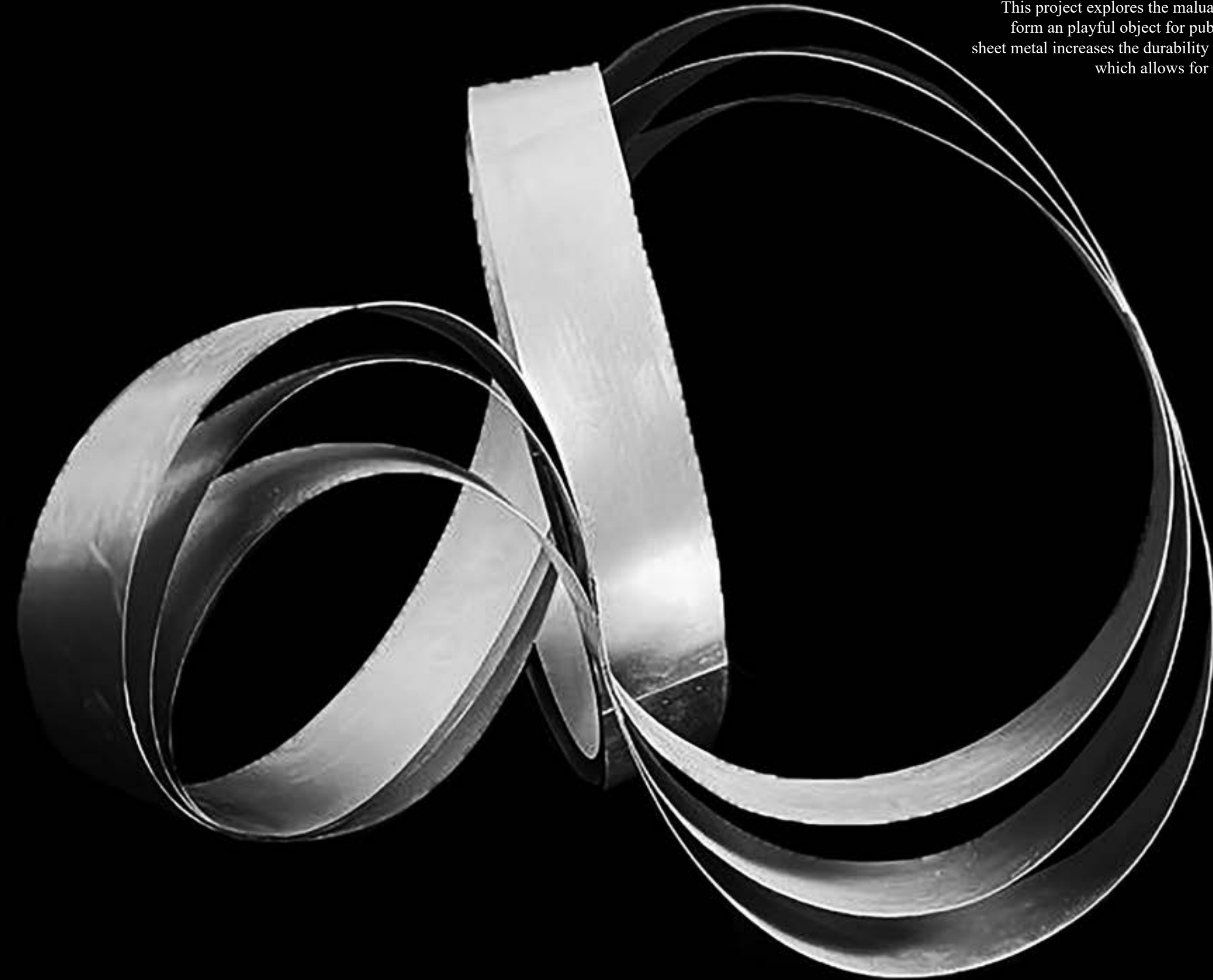


Photographs of physical model at two scales.

Tangential Bouncing Object
Material Experimentation on Sheet Metal

Instructor: Mersiha Veledar

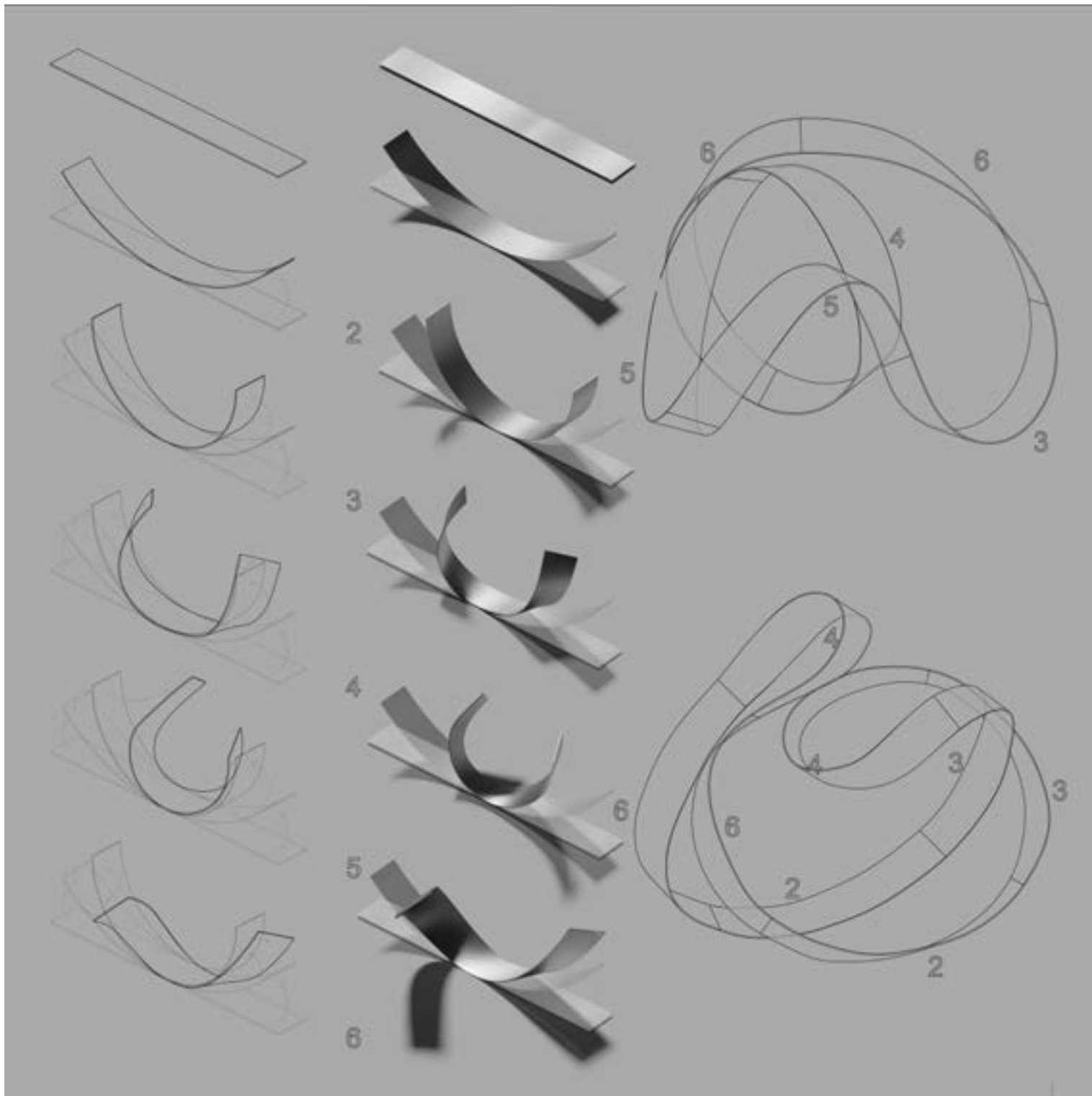
This project explores the malleability and tensile qualities of metal to form an playful object for public entertainment. The layering of the sheet metal increases the durability of the tensile strength at that segment which allows for a controlled movement of bounciness.



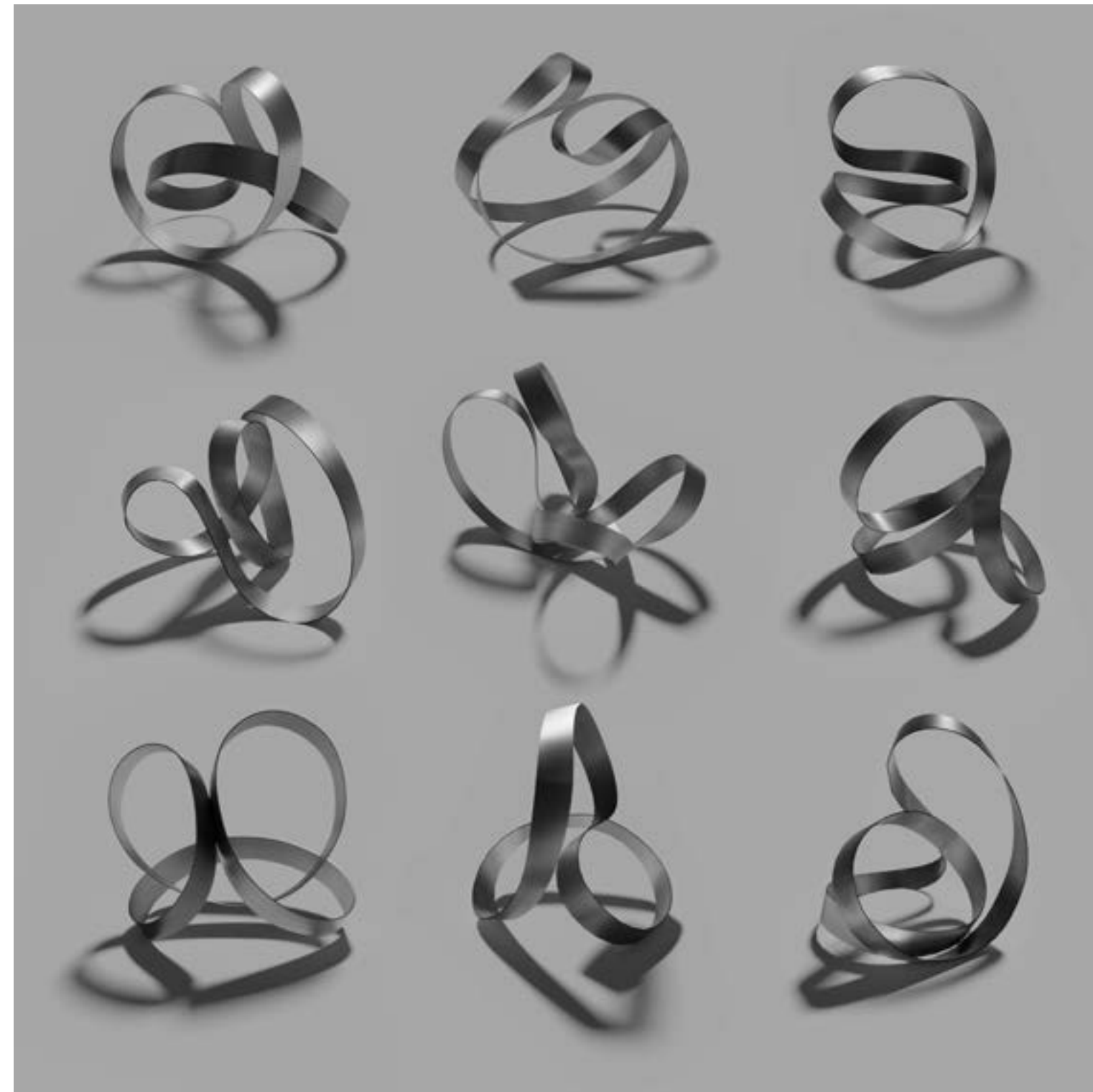
Model Photograph Zoomed In



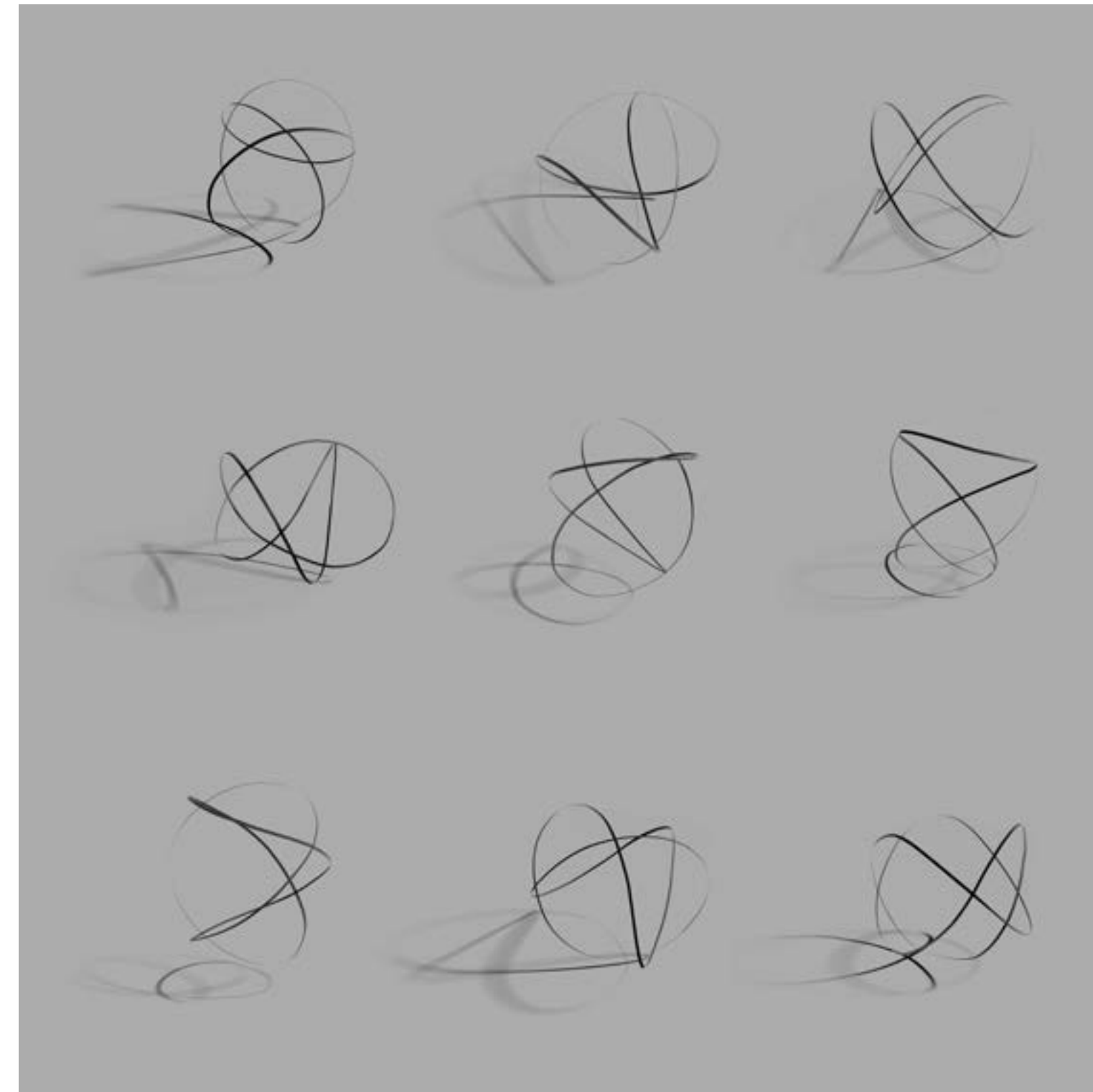
Model Photograph



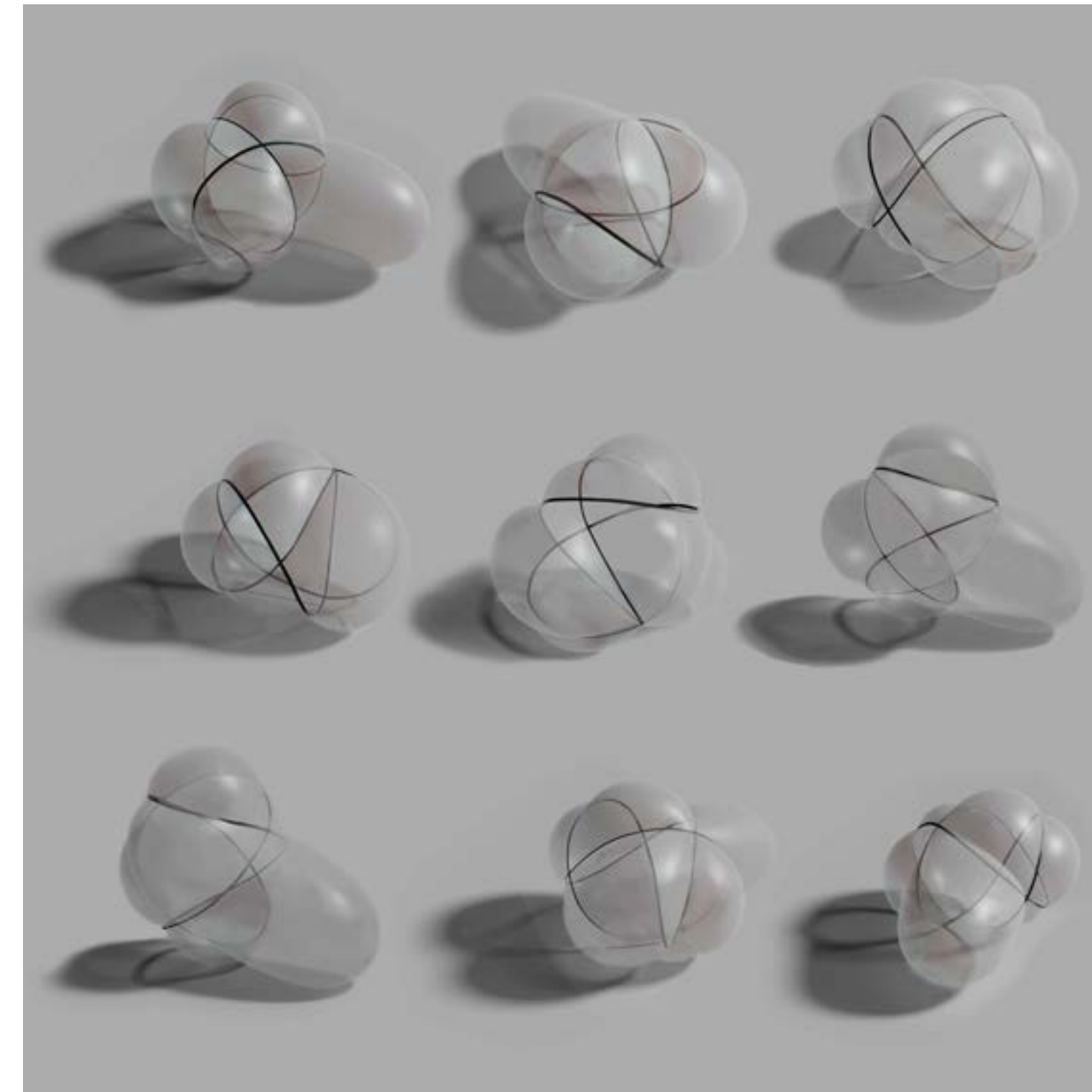
Sheet Metal Curvature Types



Rendering Image: Possible Combinations



Rendering Image: Possible Combinations Thin Metal

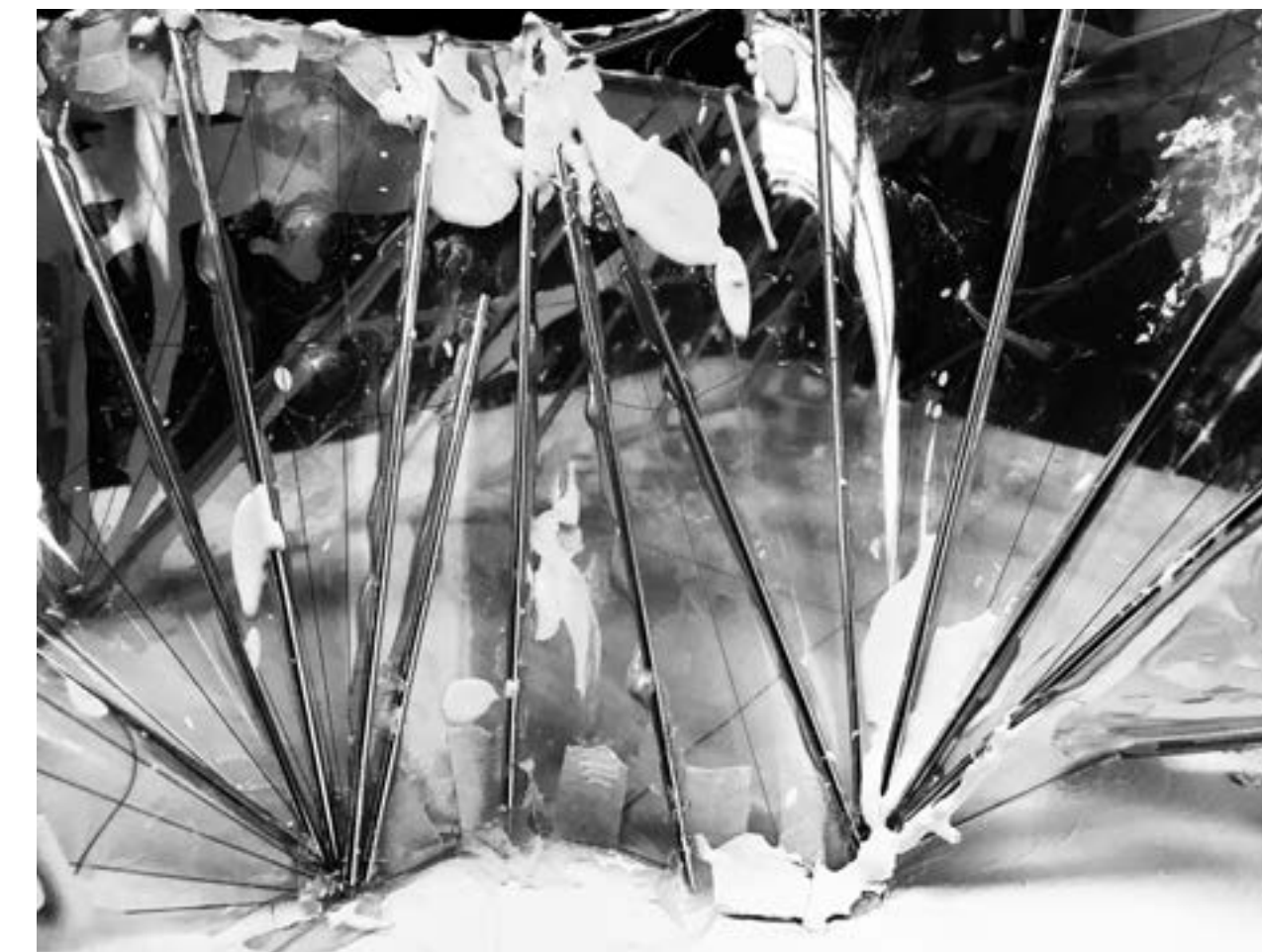


Rendering Image: Space Formation



Solidified Movement
Material Experimentation on Plaster
Instructors: Ted Baab, Elisa Iturbe, Ben Aranda, Tomar Zinger

This project aims to frame the dynamic movement and materiality of the plaster, which follows the surface geometry created through formwork of tangential conical figures.



Model Photographs

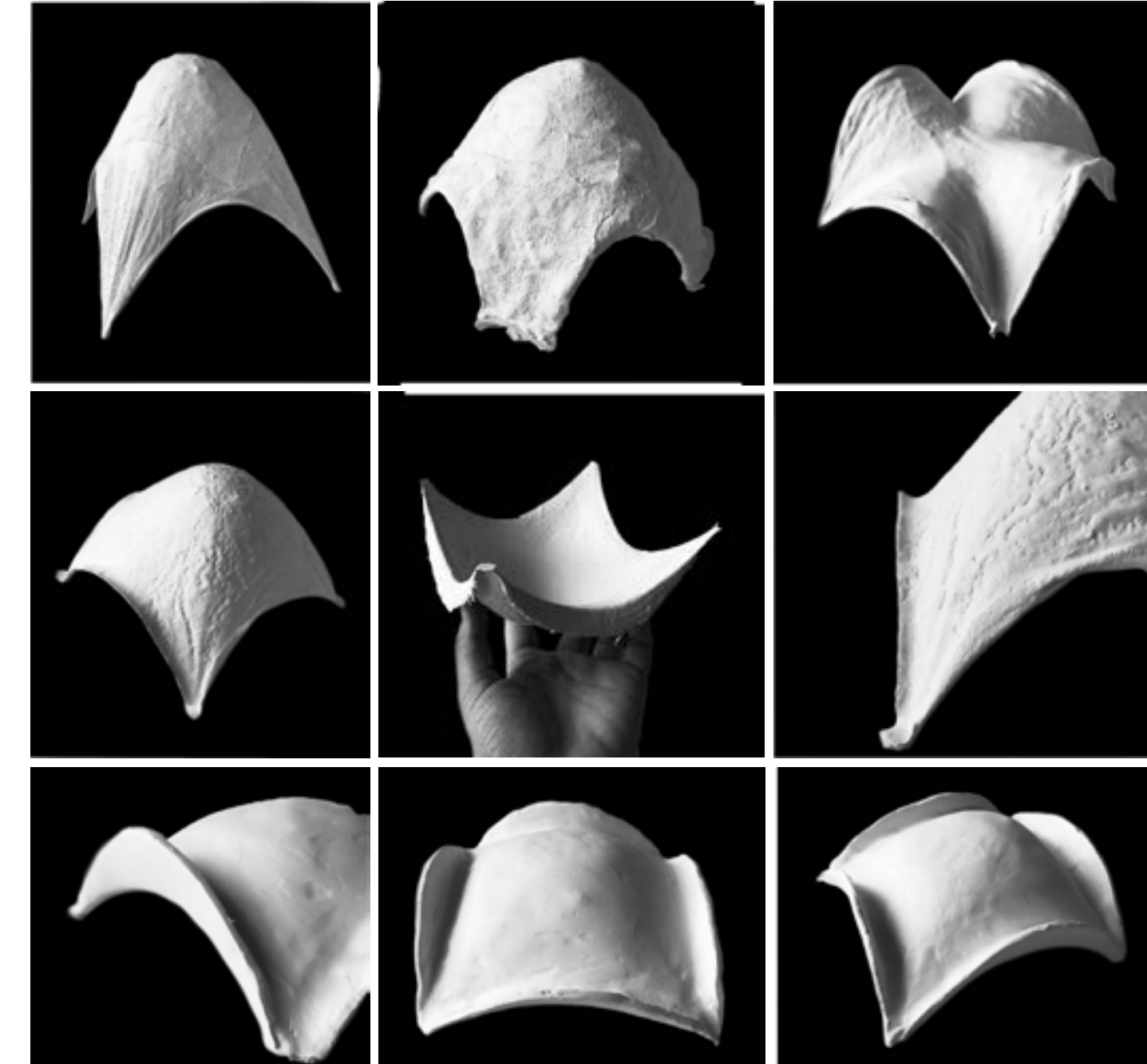


Model Photograph



Form Finding
 Material Experimentation on Plaster
 Instructors: Thorsten Helbig, Florian Meier

Analysis of a Heinz Isler Dome through form finding methods.



Model progress photographs.



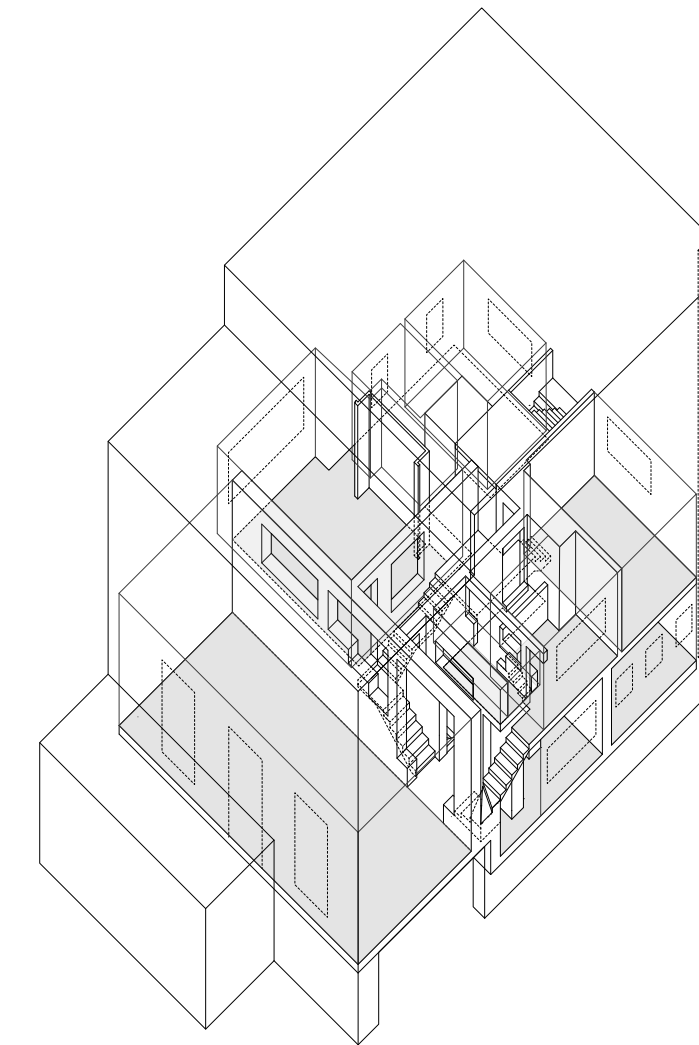
Model making process.



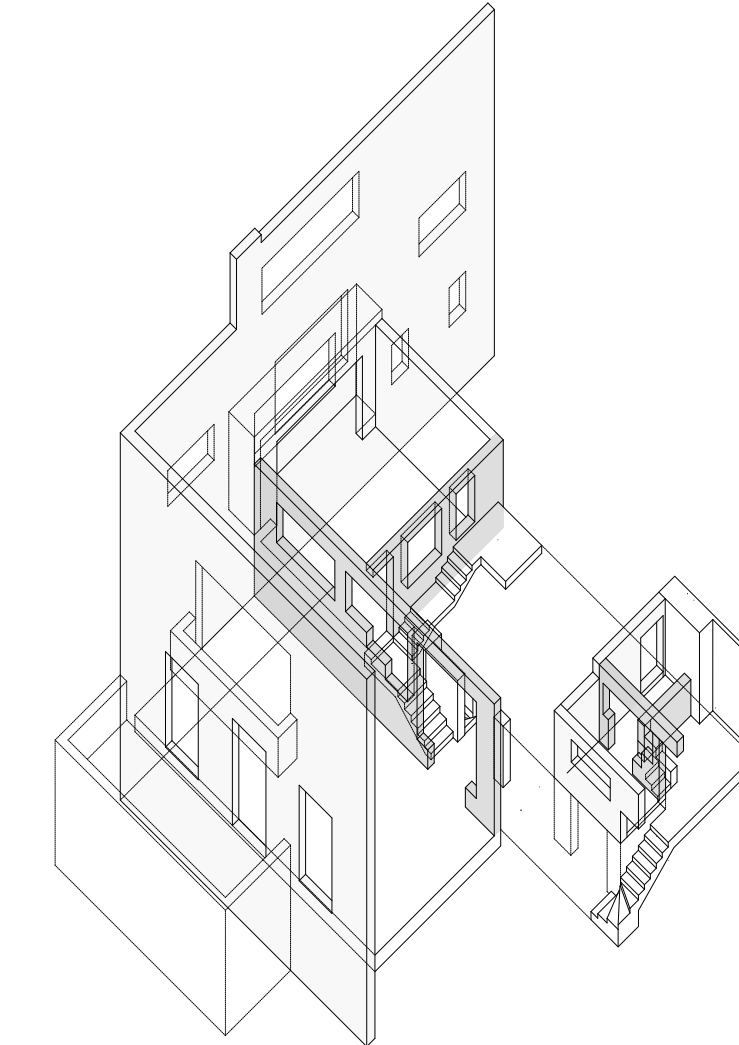
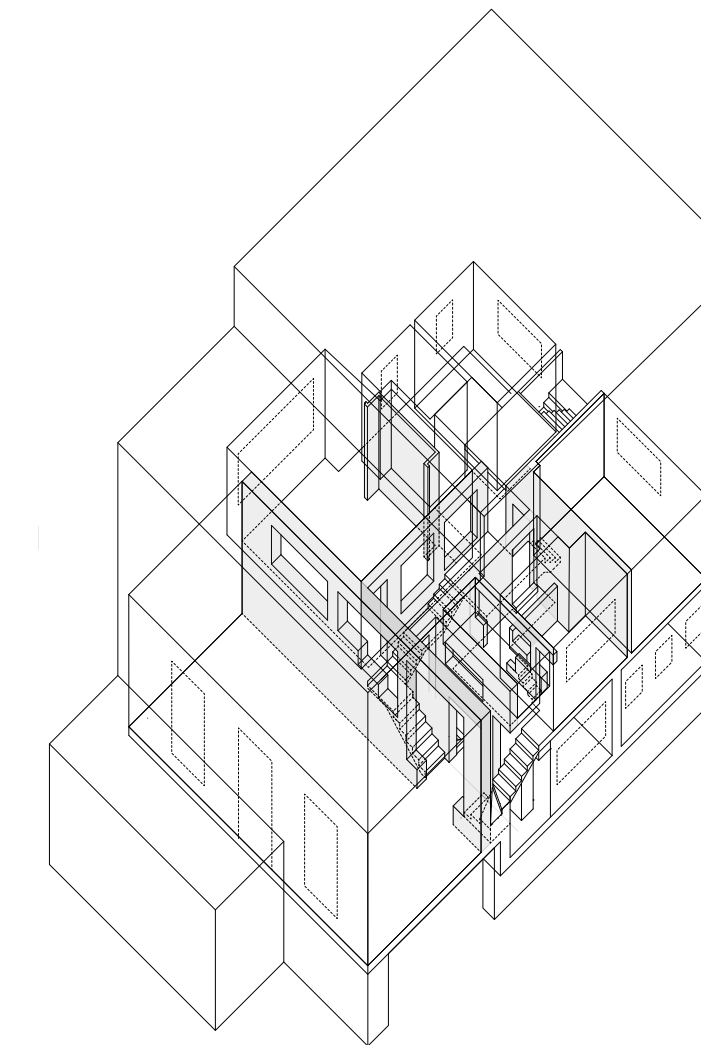
Formal Analysis: Villa Muller
 Architect: Adolf Loos

Instructors: Peter Eisenman, Elisa Itube, James Lowder, Guido Zuliani

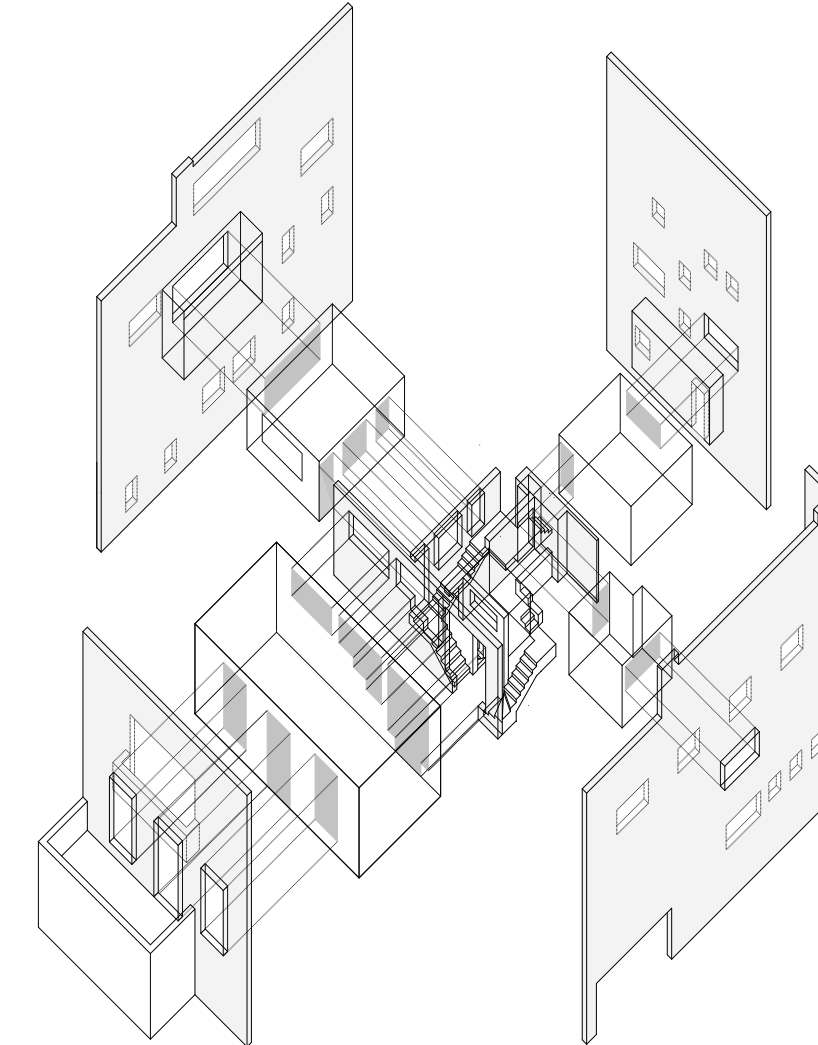
This Project analyzes Loos' idea of the "Raumplan", the relationship between space and promenade, and the framed views within the villa.

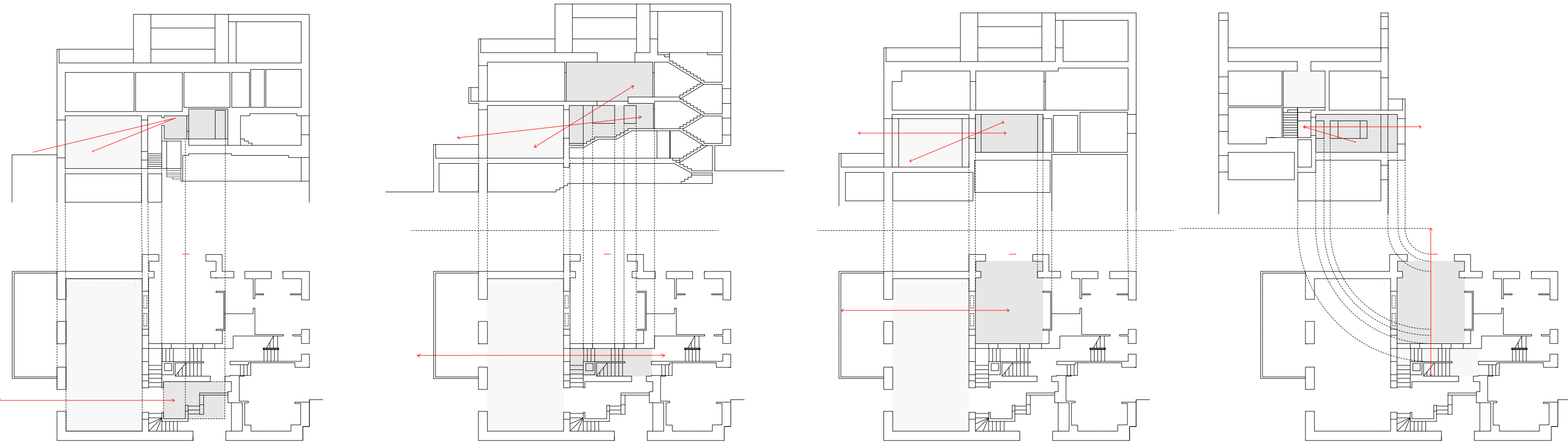


Analysis Drawing: Floors as "raumplan", walls as frame.

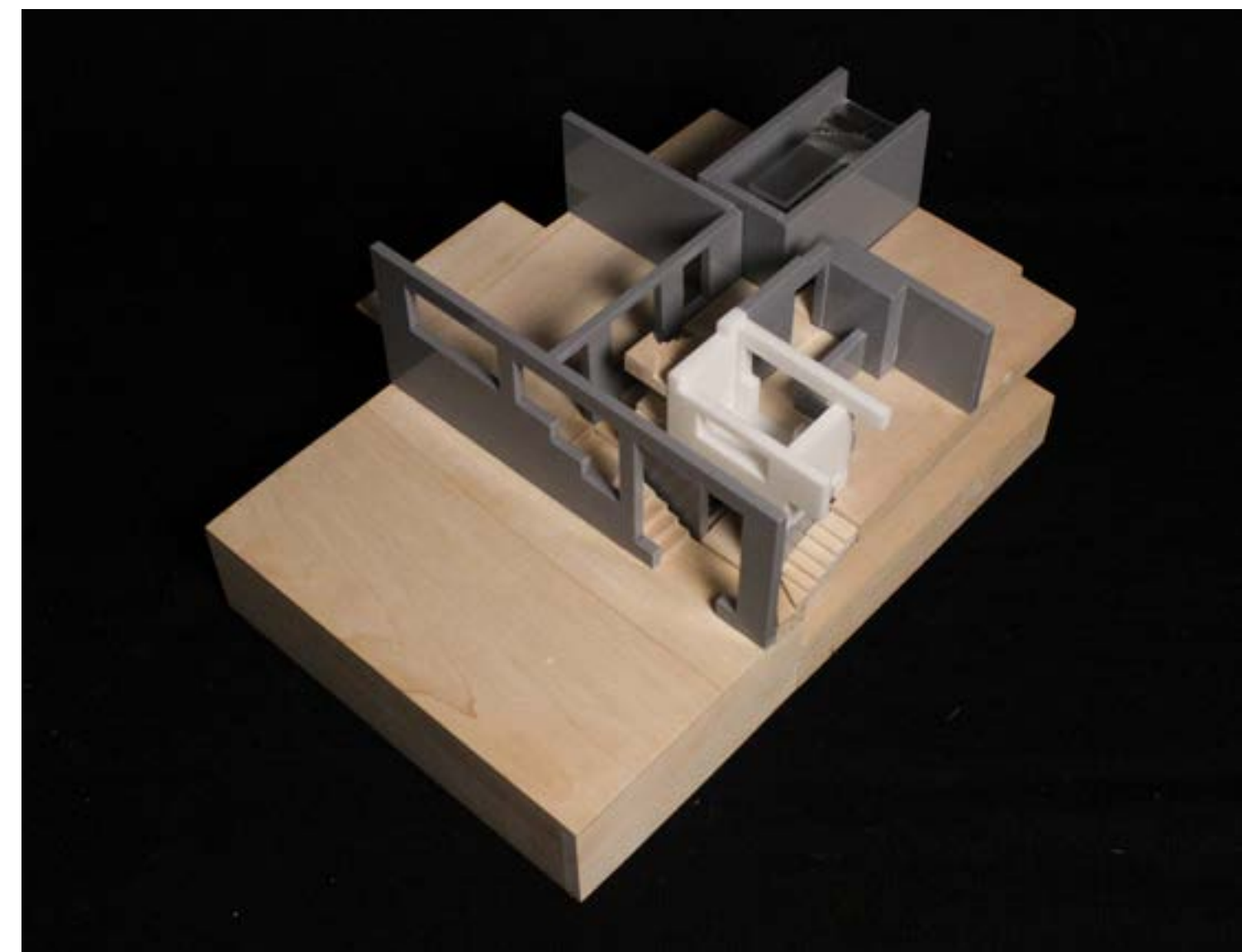


Analysis Drawing: Room within room, snail house, and rooms sandwich between walls





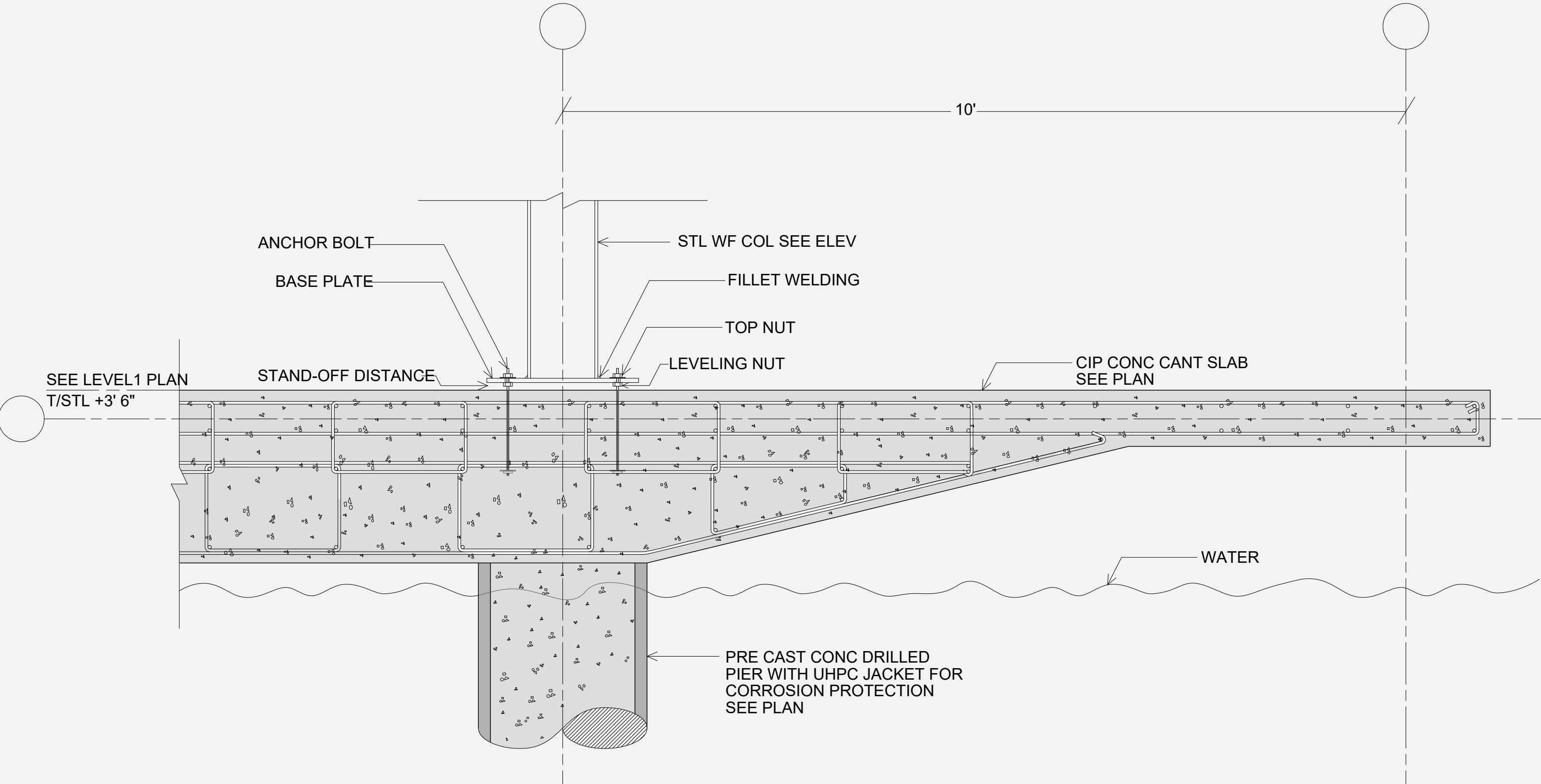
Analysis Drawing: Walls as framing device through spaces lays on axis.



Model Photograph

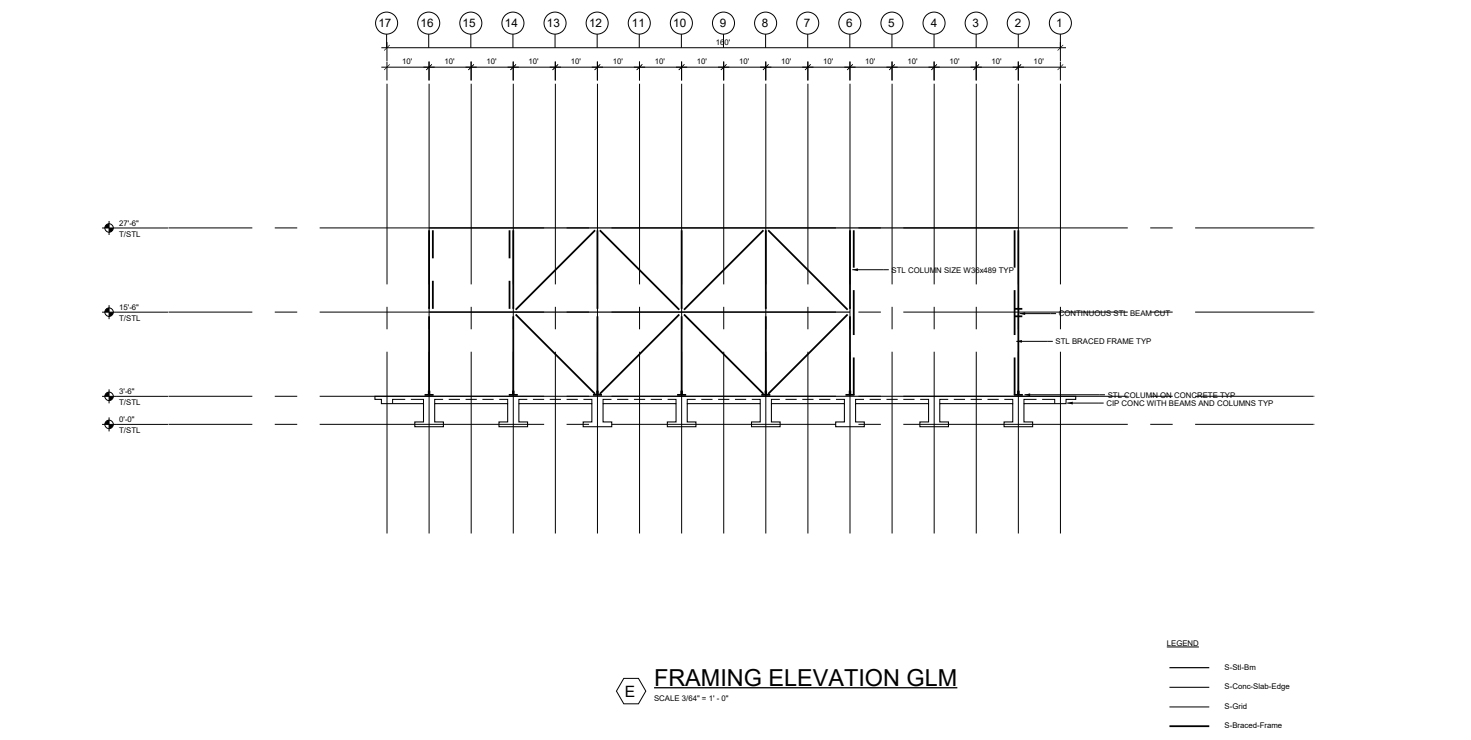


Model Photograph

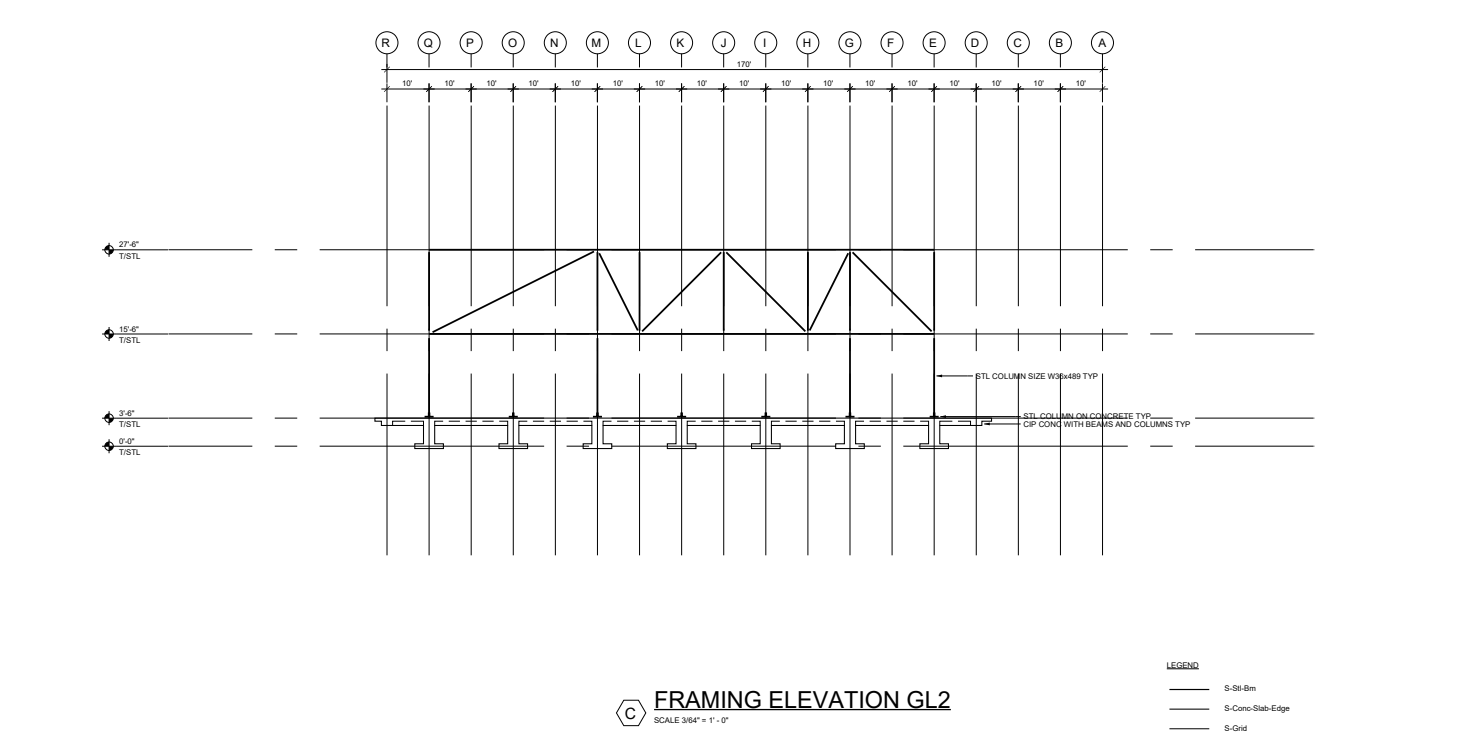


Structural Drawings
 Specifications on Building Structures
 Instructors: Gina Morrow, Xiaoxiao Wu

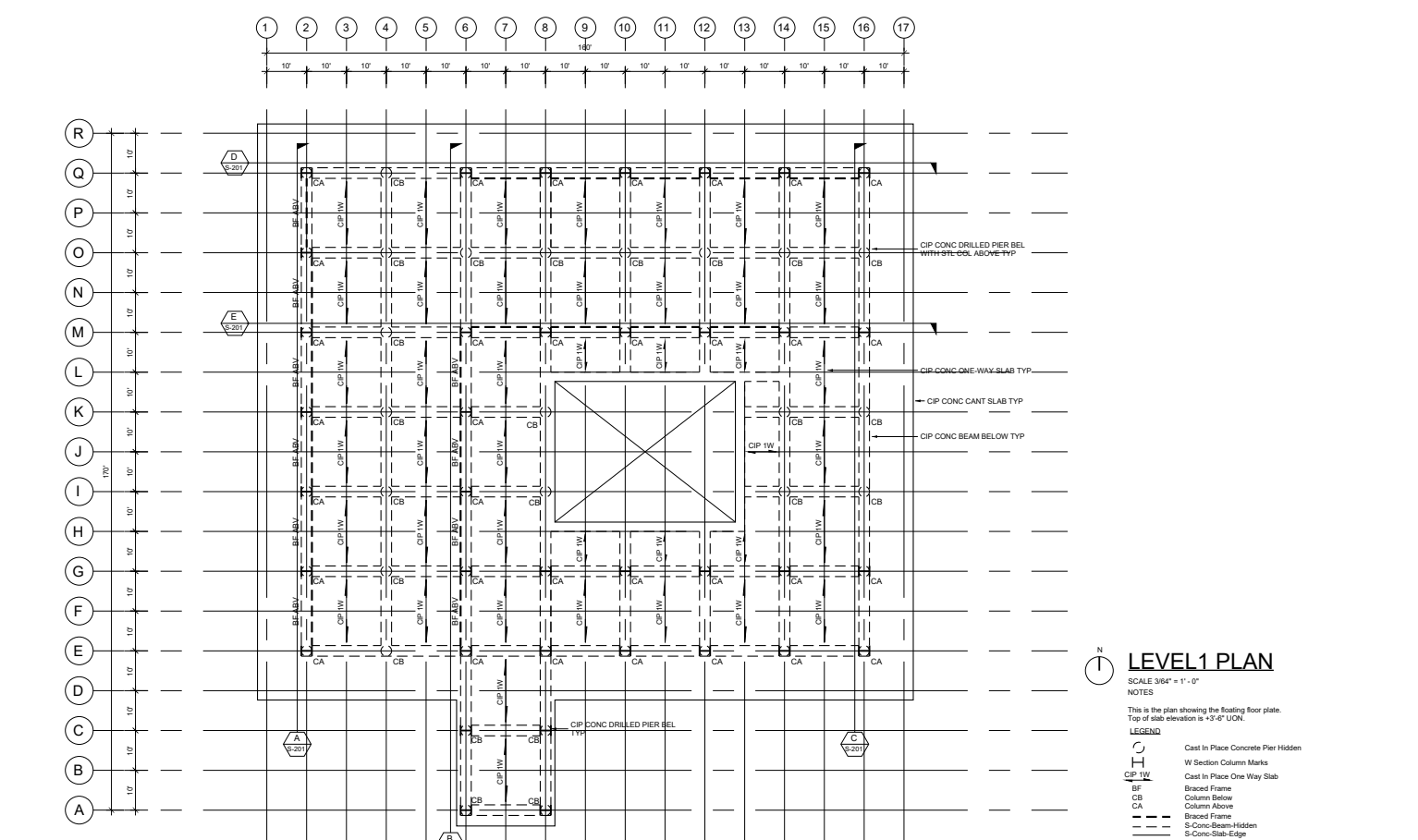
This drawing set focuses on a steel structure with cast-in-place concrete piers in water to create a visual effect of a floating building. The overall structure is composed of a column and beam system with lateral bracing, and truss system to treat the conditions of cantilevering and bridging. Structural and detail drawings are provided for construction and engineering purposes.



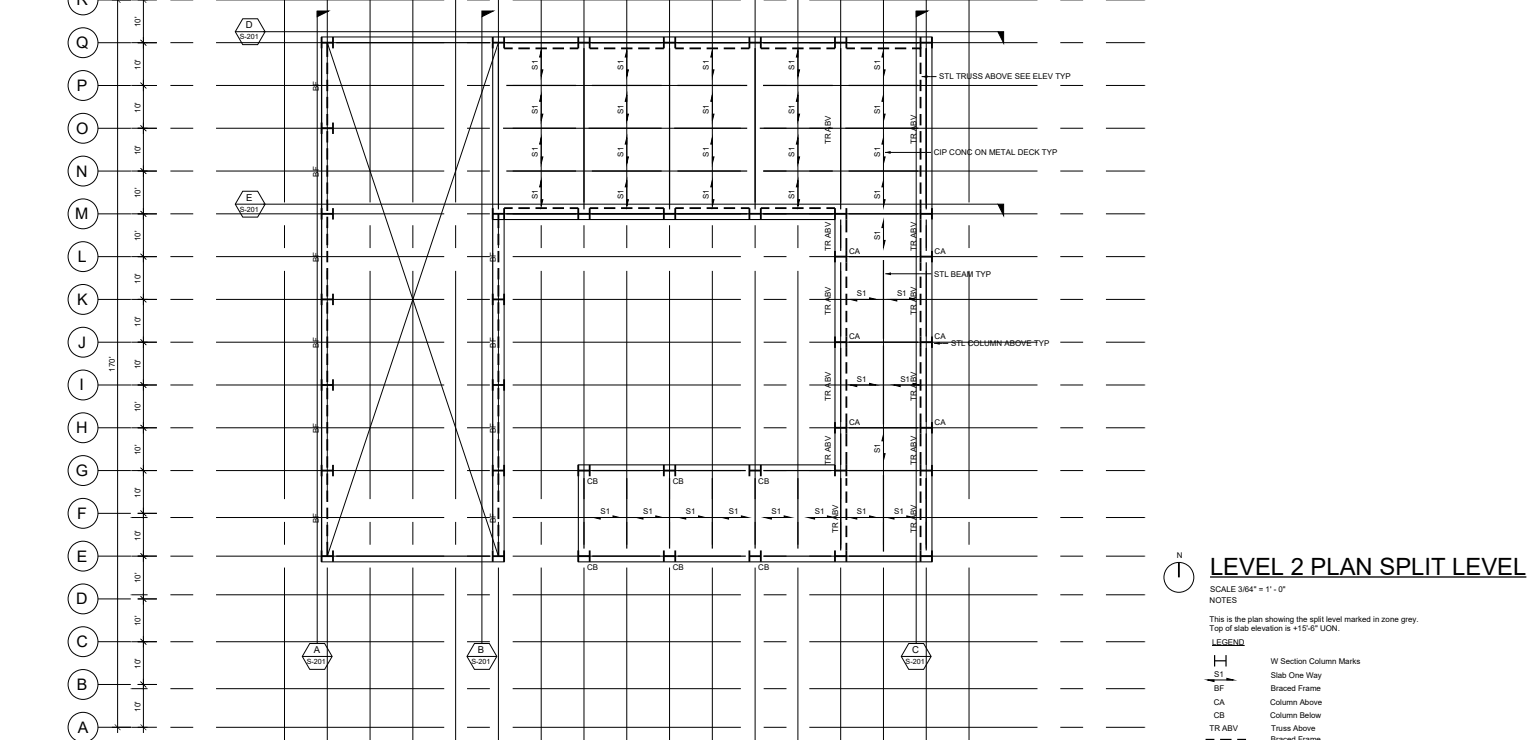
Assignment 2A
 Museum Elevation
 Scale: 3/8\"/>



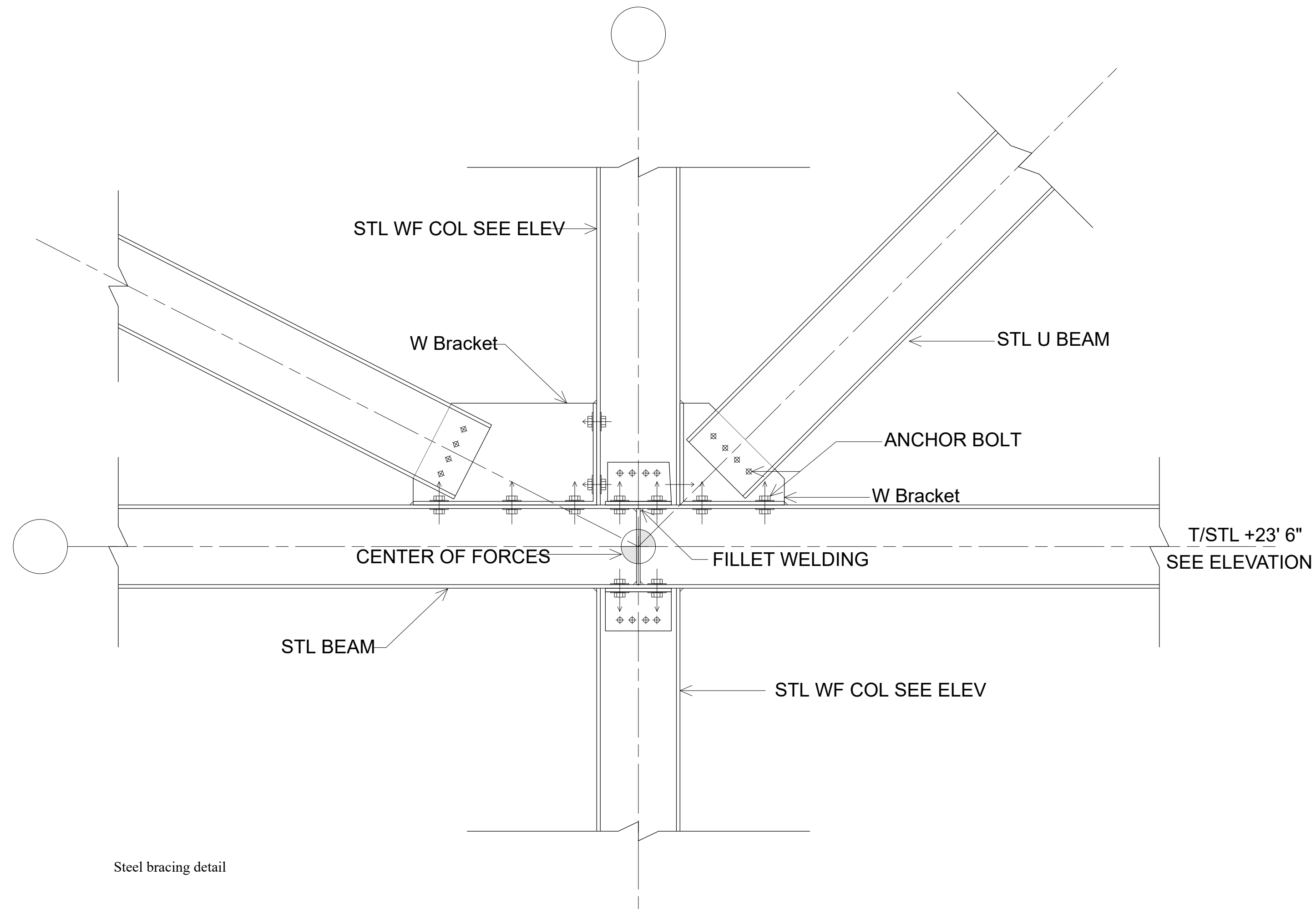
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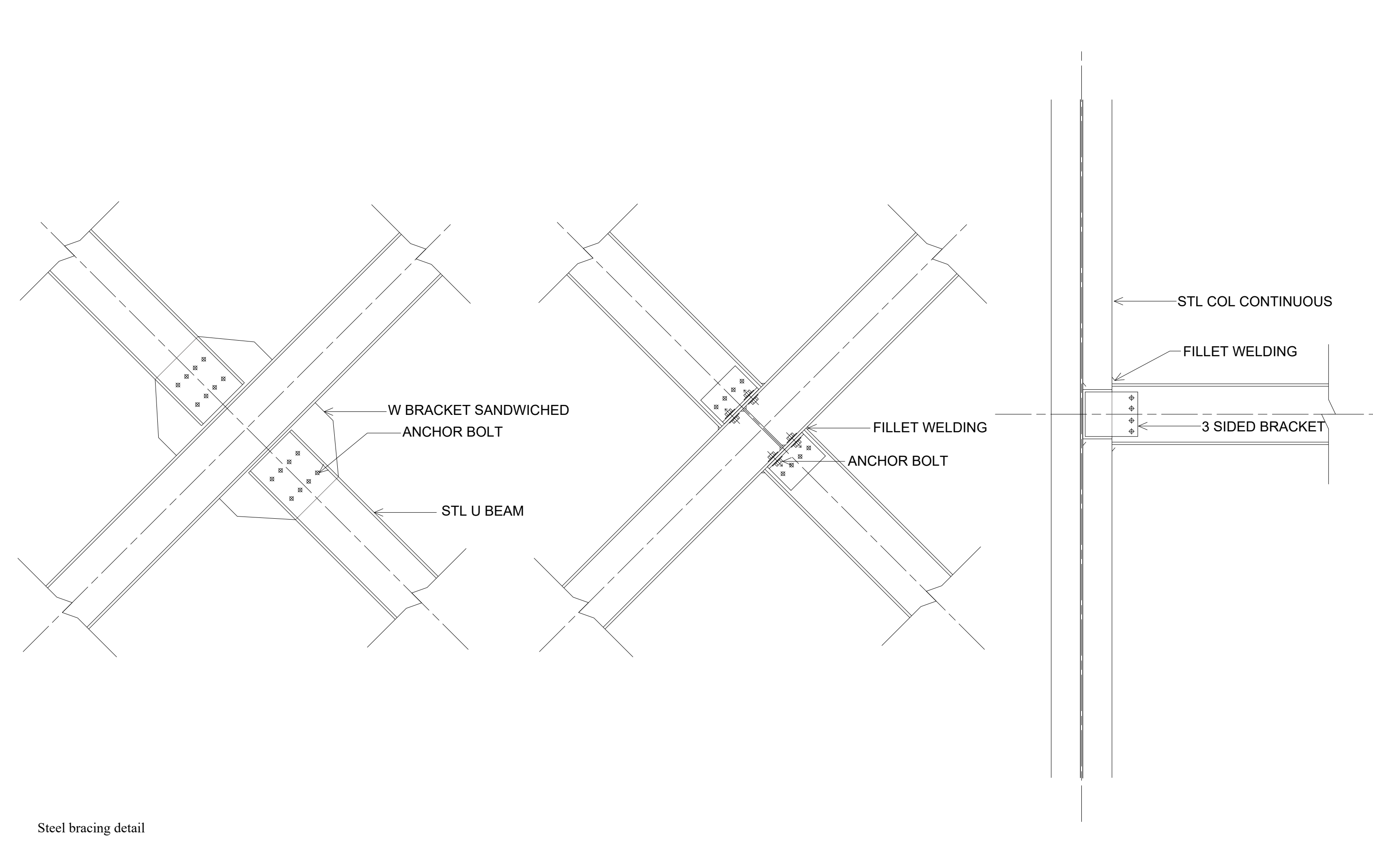
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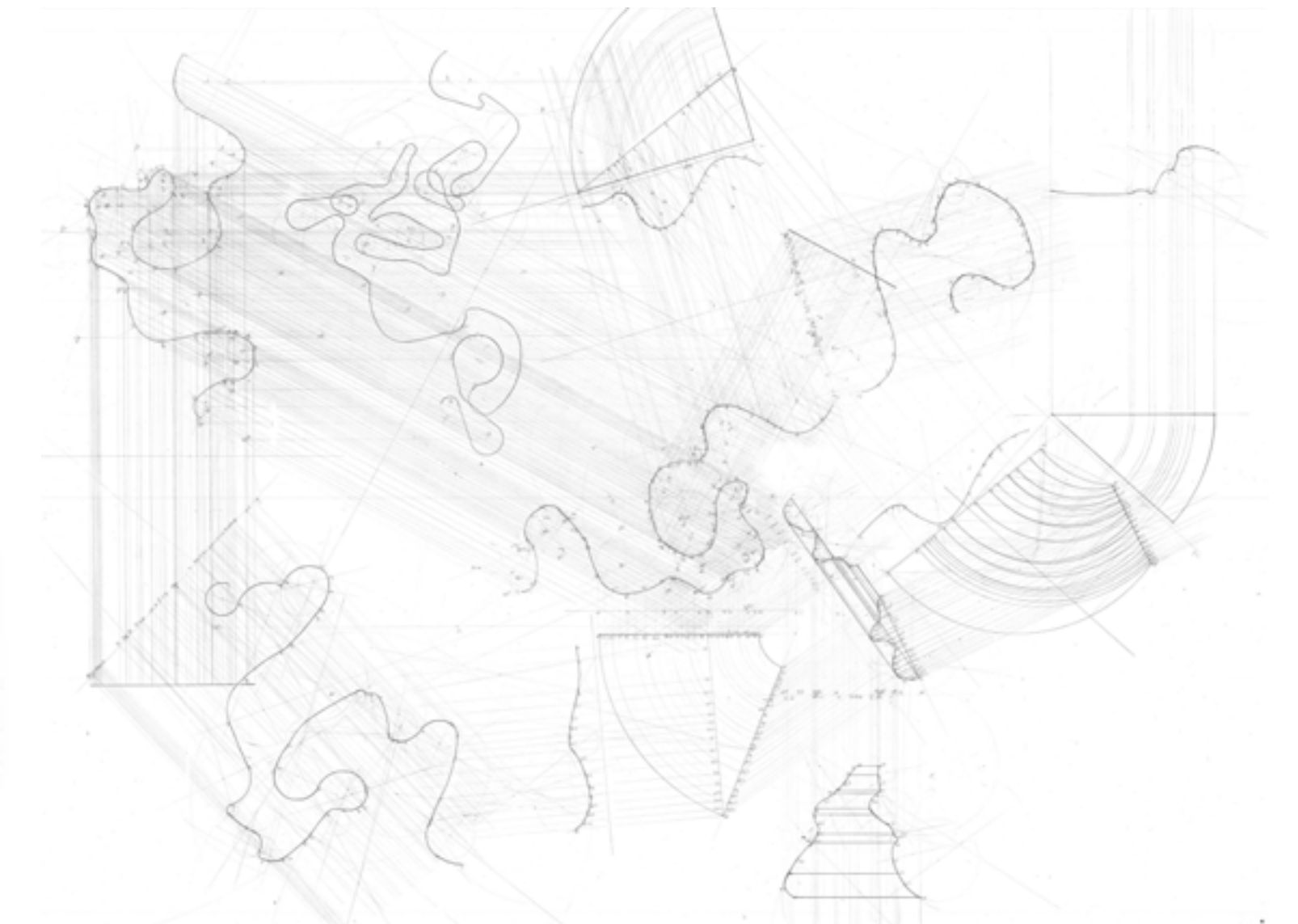
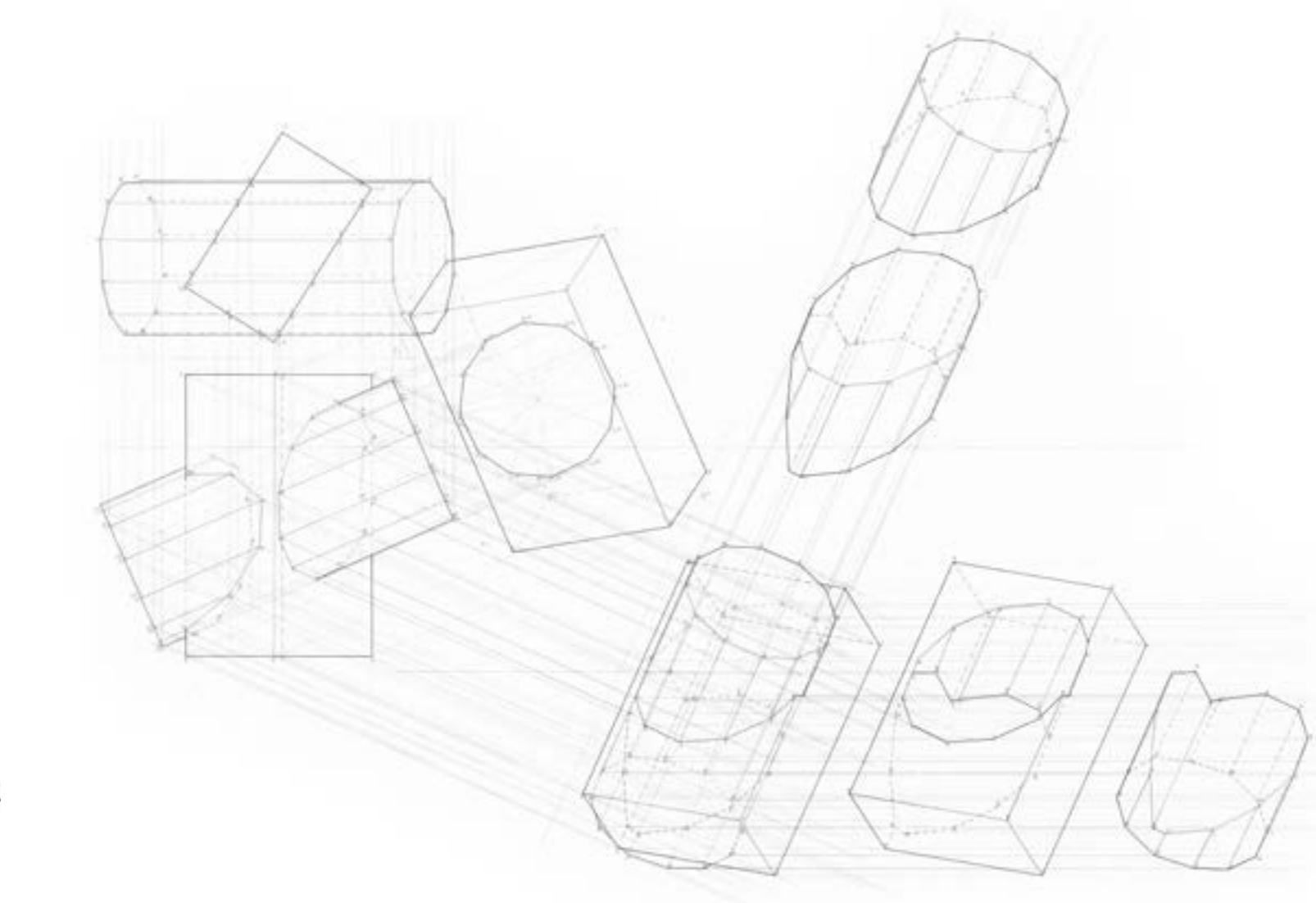
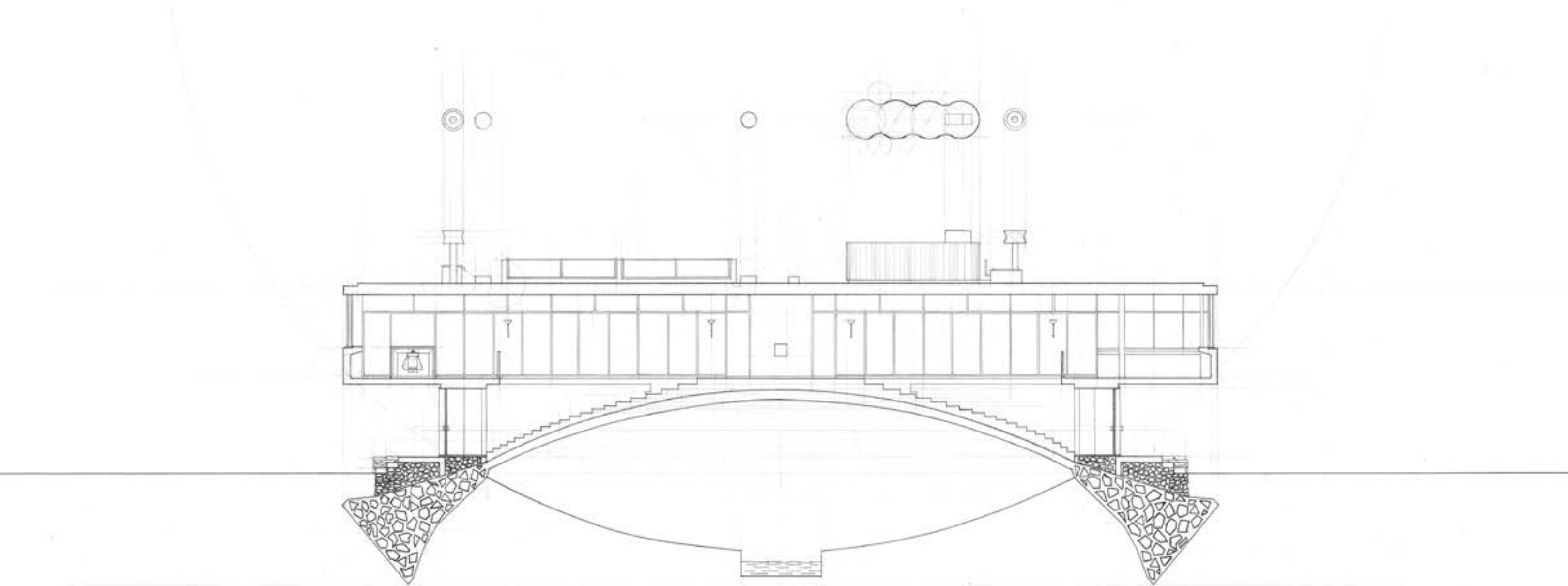
Assignment 2A
 Museum Plan Level 2
 Scale: 3/8\"/>



Steel bracing detail



Steel bracing detail



Representation: Drafting, Freehand Drawings, Photography
Instructors: James Lowder, Sue Gussow, Erieta Attali, Michael Jefferson

These drawings are practices in understanding the fundamentals of architectural representations: spatial orientations, compositions, tones, light, and the perception of space.



Figural Exercise 1



Figural Exercise 2



Figural Exercise 3



Figural Exercise 4



Cloud Exercise 1



Cloud Exercise 2



Photography Exercise 1 (NYC)



Photography Exercise 2 (NYC)



Photography Exercise 3 (NYC)



Photography Exercise 4 (NYC)

ADDENDUM

Collaborated Professional Works, A1- A12

MoMA Exhibition: The Project of Independence, Sada r Vallabhbhai Patel Municipal Stadium.	A1
Pei Cobb Freed & Partners: NEOM Competition, The Line Project in Saudi Arabia.	A3
NADAAA: University of Nebraska Lincoln Architecture Studio Addition.	A7



The Project of Independence: Architecture of Decolonization in South Asia
Sardar Vallabhbhai Patel Municipal Stadium, Ahmedabad, India, 1959-66
Commission: The Museum of Modern Art (MoMA), New York
Instructor: James Lowder

The project involved the design and construction of a model of the Sardar Vallabhbhai Patel Municipal Stadium in India for the exhibition at the Museum of Modern Art.



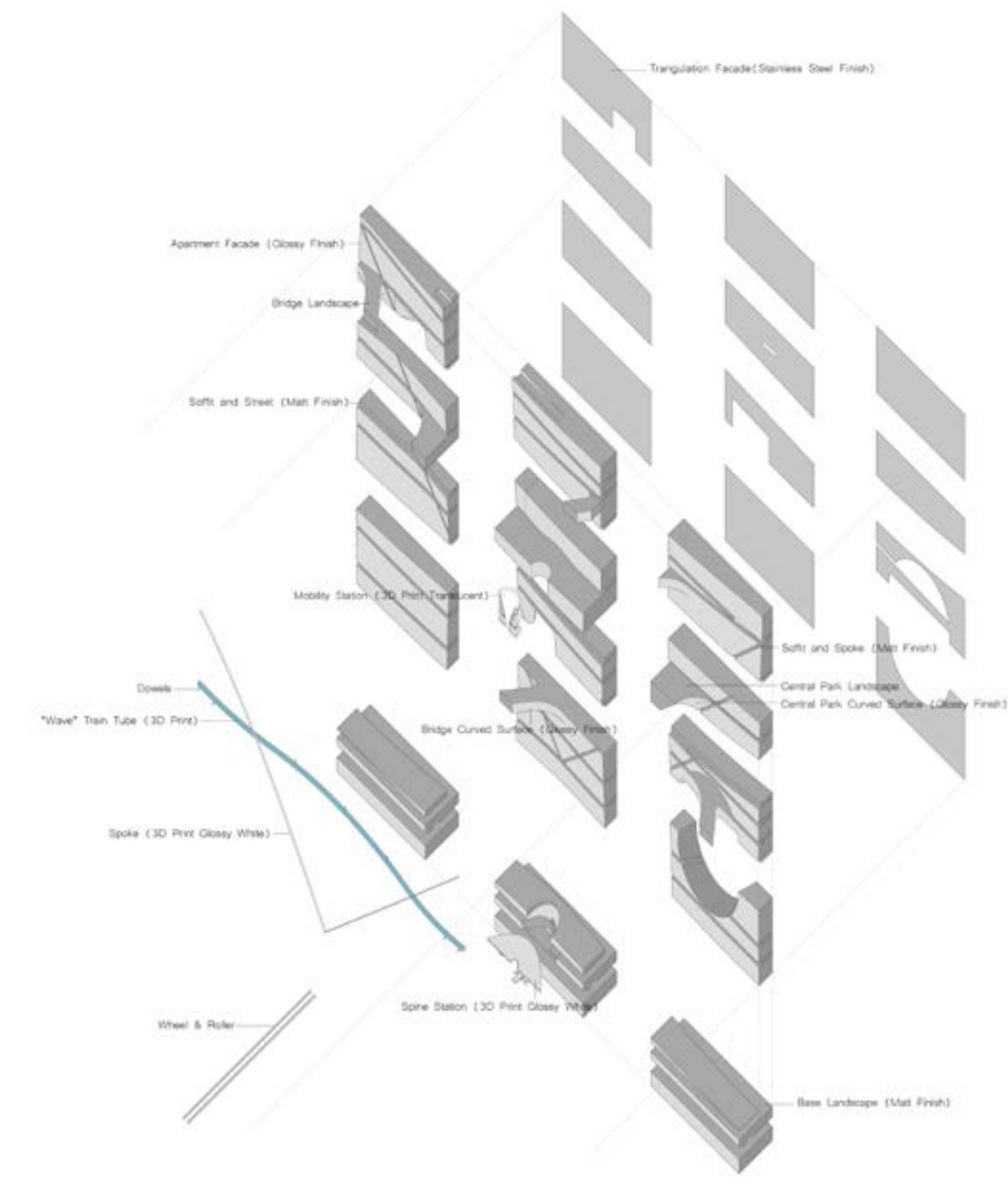


NEOM: The Line Design Competition
 Reimagining Urban Living in The Landscape of Saudi Arabia
 Internship with: Pei Cobb Freed & Partners

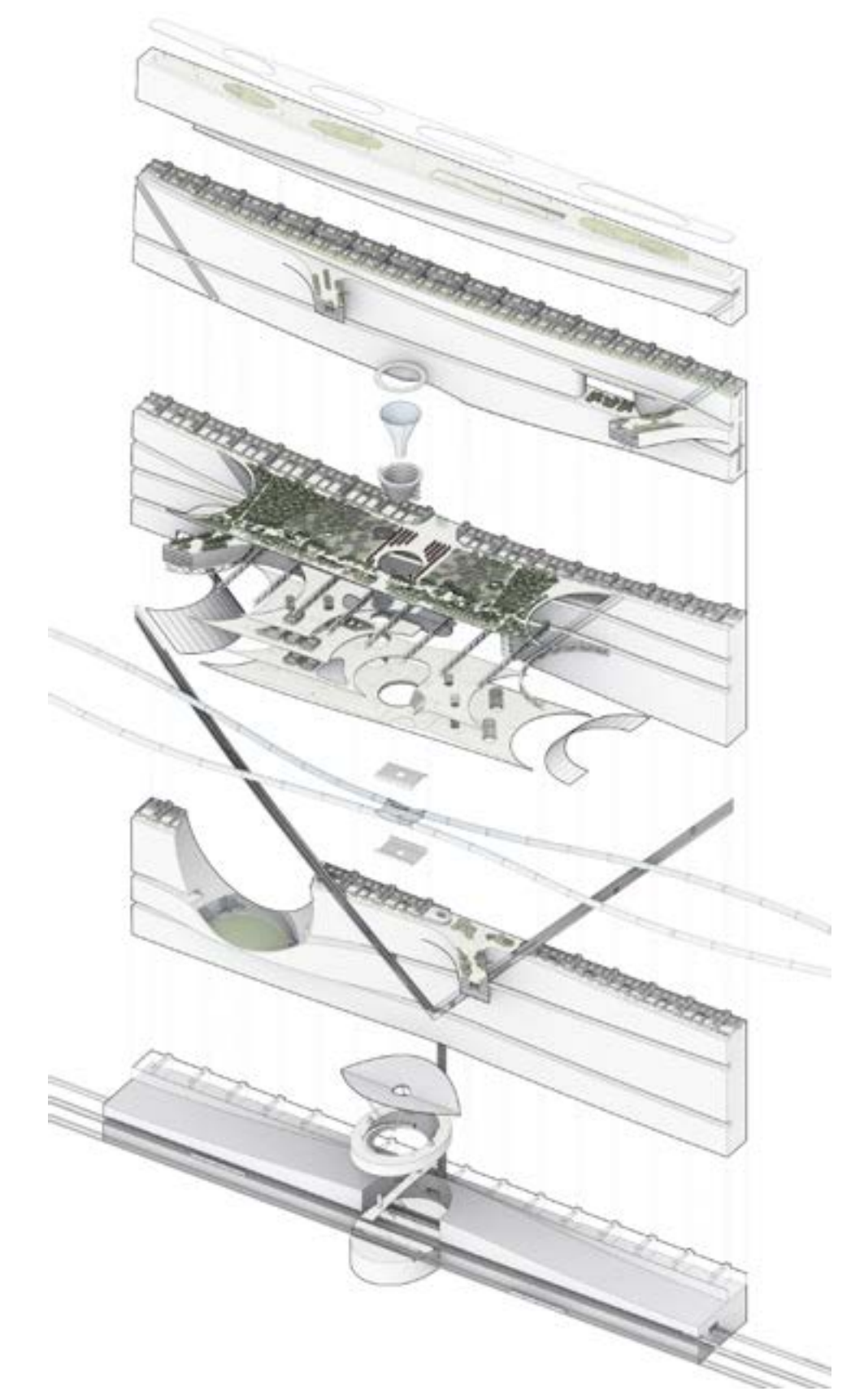
This Competition called for the design of a new urban living condition accommodating a population of 9 million using 100% renewable energy with 95% of the adjacent land preserved for nature. I was part of a team preparing a series of study models and drawings for developing the project concept. I also developed a detailed drawing package for a model shop to construct a large-scale model of the proposal for the Diriyah Biennale Exhibition.



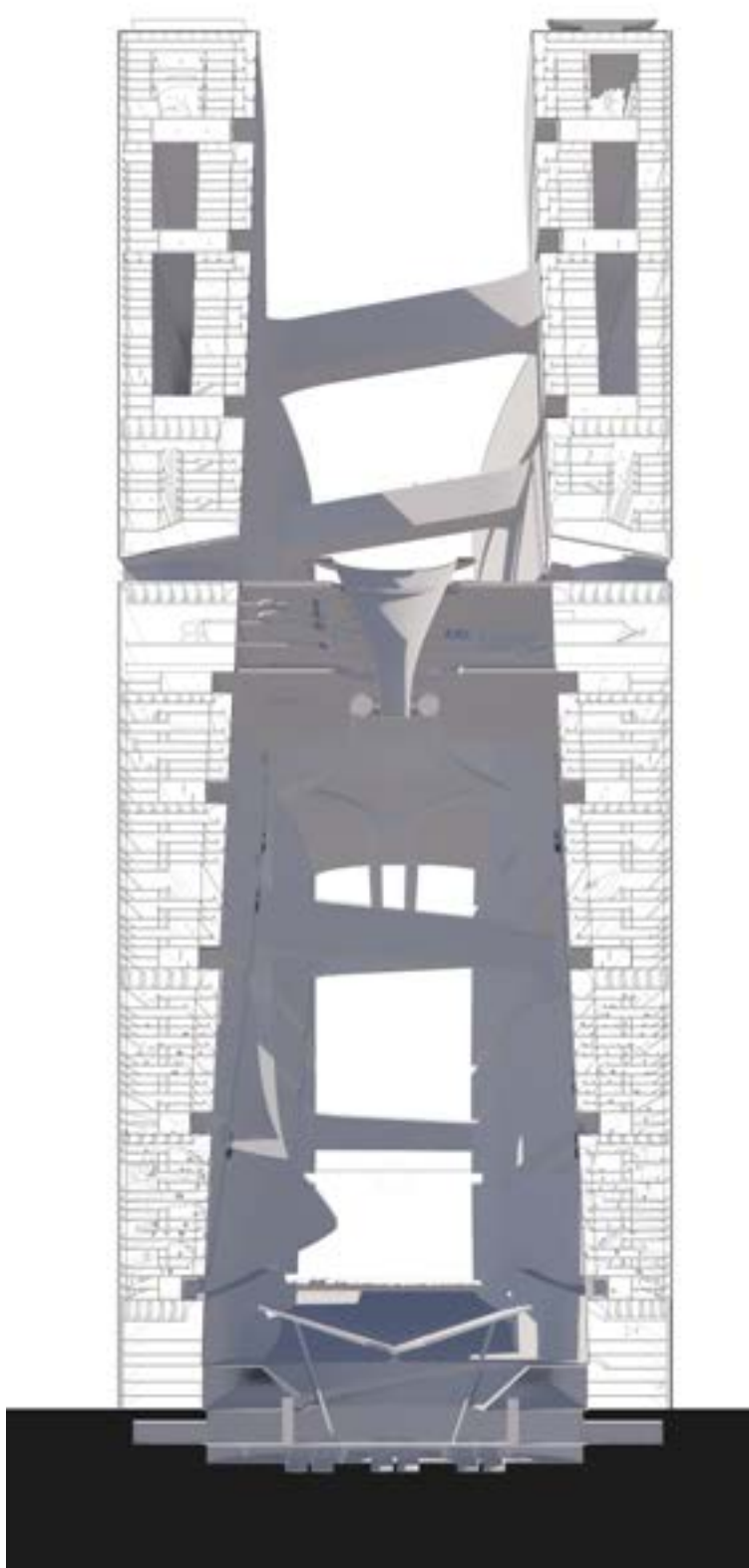
Plan Drawings



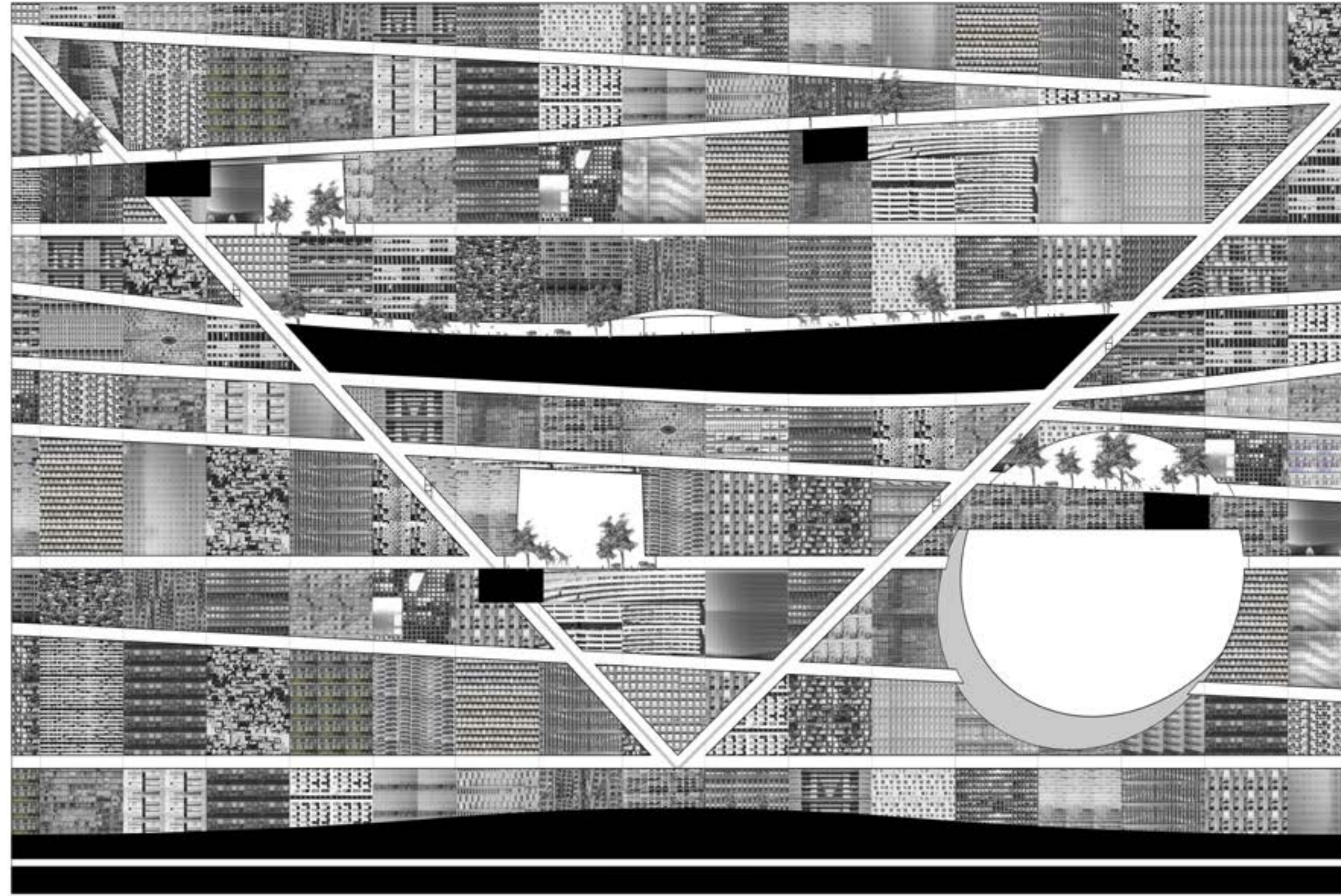
Specifications on construction of the exhibition model (Assembly)



Exploded axon with plans



Typical Section Drawing.



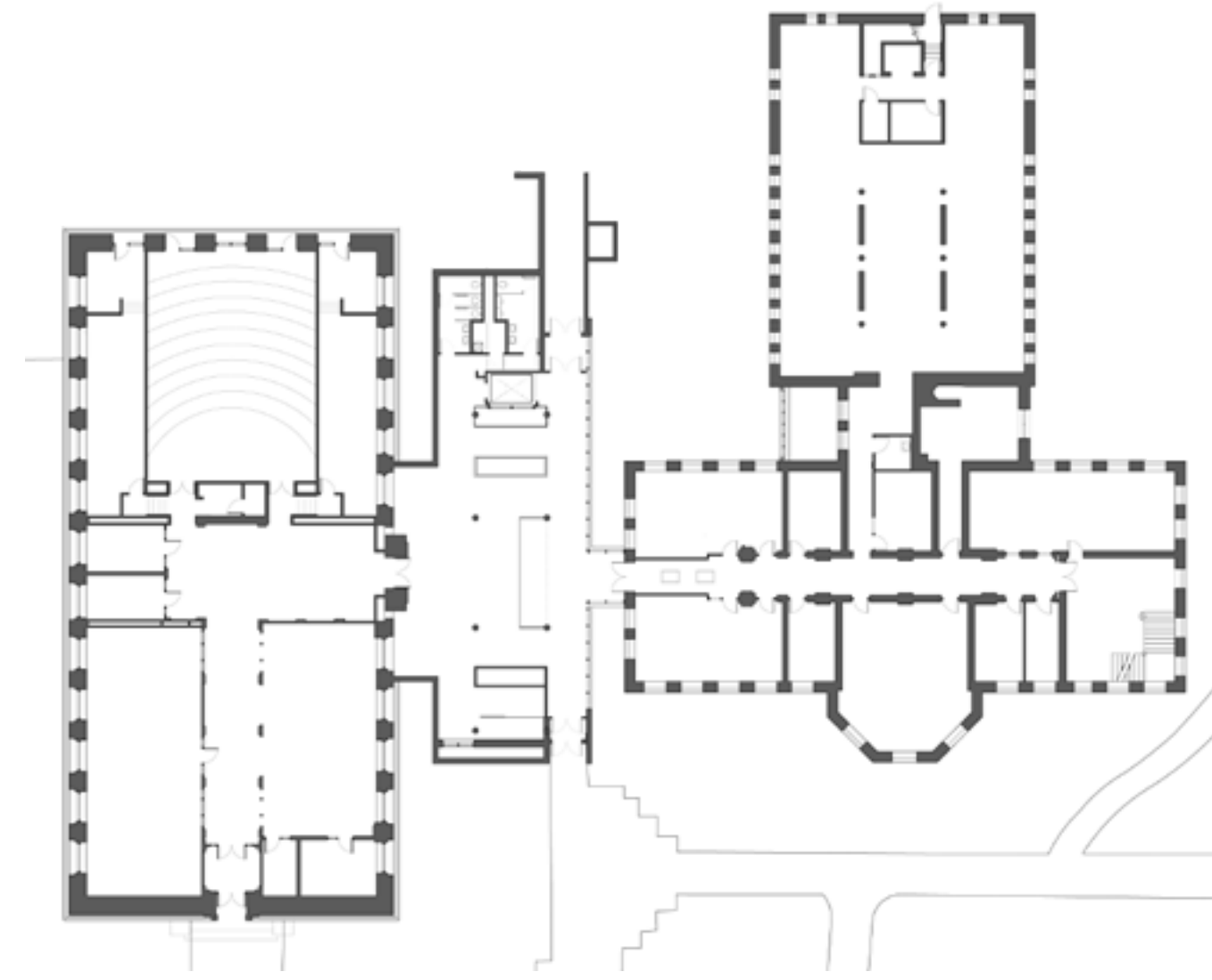
Conceptual Facade Elevation



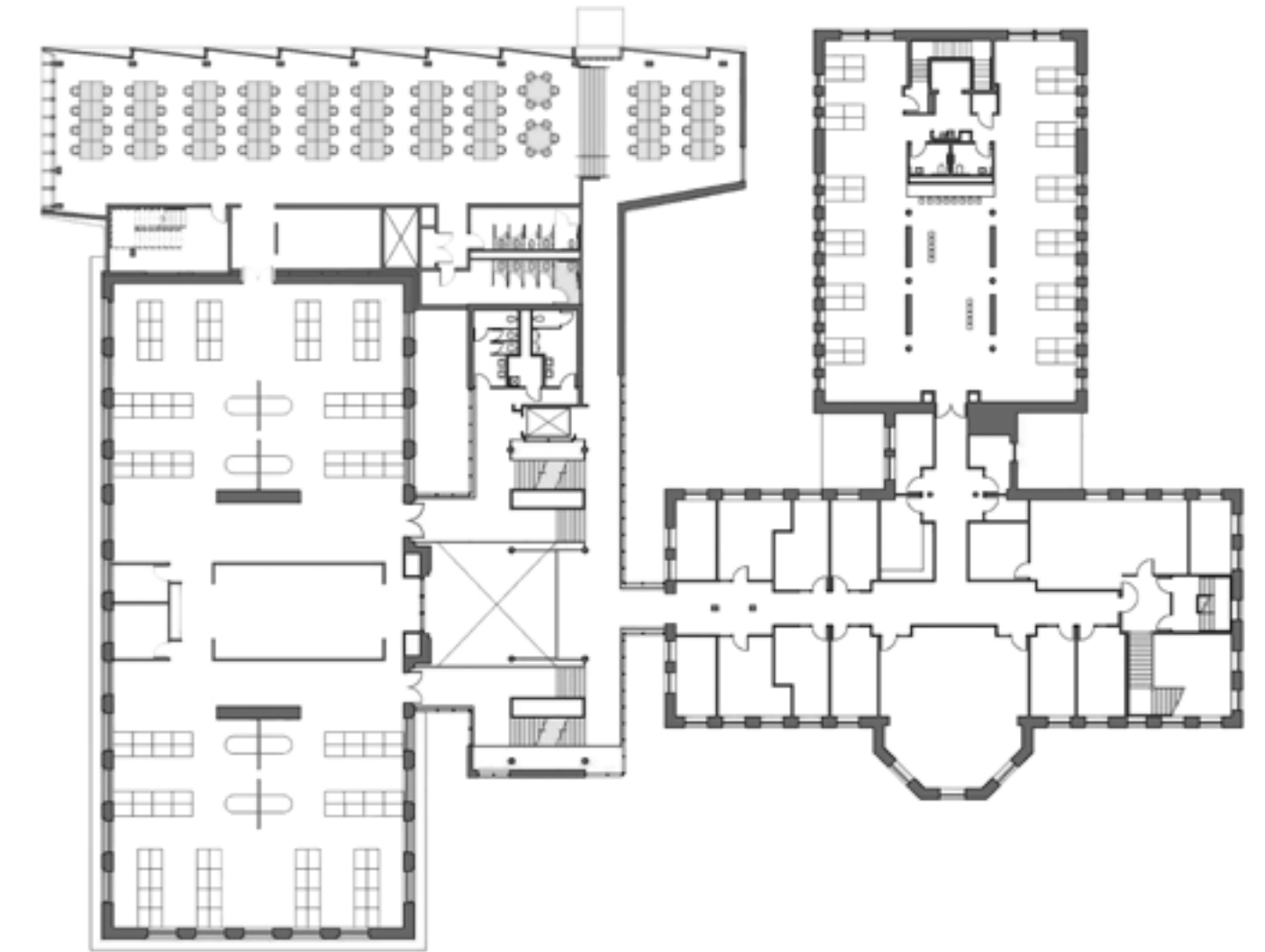
Models at varied scales photographs

NADAAA: University of Nebraska-Lincoln College of Architecture
Mass Timber Structure Campus Building Addition
Internship with: NADAAA

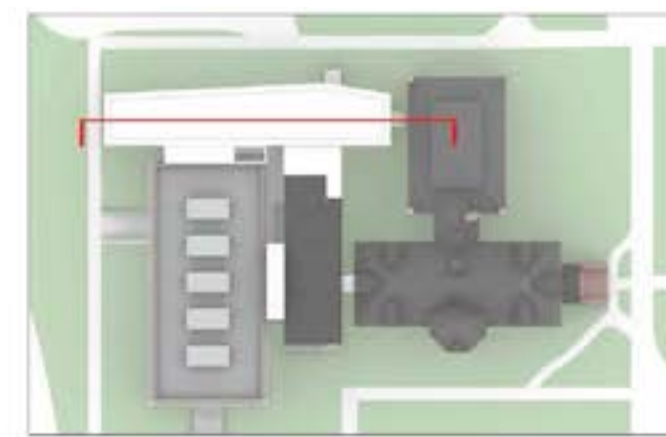
This was a fast-track mass timber project for the renovation and expansion of an architecture studio to accommodate the need for additional academic spaces: studios desks, pinup walls, a workshop, conference spaces, etc. The project connects three main programs at different levels. The use of a “hammerhead” typology offers an efficient circulation for the existing urban condition as well as the interior of the building. I prepared a series of façade studies to ensure the maximum amount of natural lighting in the studio spaces. As well as budget related adjustments.



Original Condition



Modified Condition



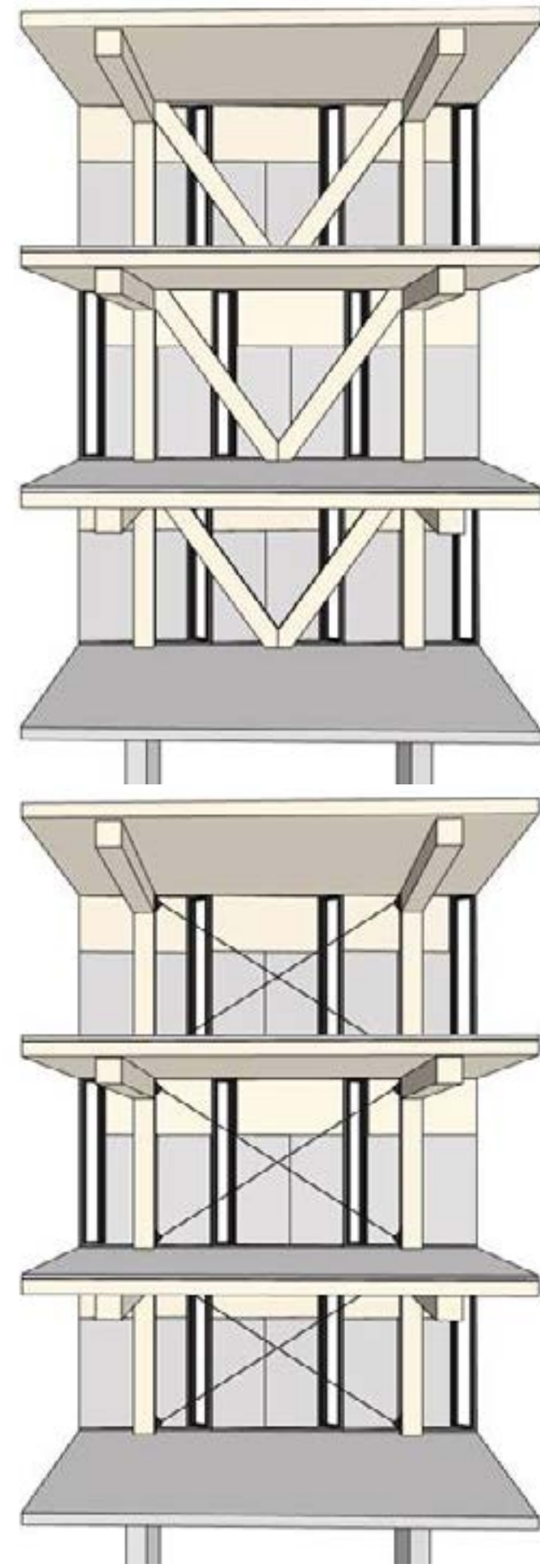
Facade Options

Facade Options

Selections From Schematic Design Review Stage Drawing Set



LEED analysis on glazing options



Timber Construction structure Lateral Bracing System Options



Interior Rendering With Natural Lighting