

Jacob Swanson

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2025

Education

Bachelor of Architecture

Minor in Environmental Studies and Sustainability
Albert Dorman Honors Scholar
New Jersey Institute of Technology, Newark, NJ

Work Experience

Research Assistant, NJIT

Edward Elgar Handbook on Sustainable Lifestyles (forthcoming)

- Reviewed and coded 900 abstracts based on common themes to aid in the formation of the first taxonomy of the field and the book's table of contents.
- Aided file management for 50+ chapter book with 90+ international contributors.

Grader, NJIT

STS363: Introduction to Sustainability Studies

- Drafted multiple choice questions for weekly quizzes and exams.
- Graded weekly quizzes and exams.

Extra Curriculars

Transect Student Publication, Newark, NJ

Editor-in-Chief (2023-Current)
-Managed outreach, work selection, production, and editing of Volume 5 and collaborated on the production of the broadsheet iteration.
-Increased engagement with student body by changing submission procedures and publication structure.
-Organized and hosted roundtable discussions with visiting professionals and academics.

ASHRAE-NJIT, Newark, NJ

-Attended 2023 and 2024 Winter Conferences with funding from ASHRAE-New Jersey.

AIAS-NJIT, Newark, NJ

- Freedom by Design Member (2021-Current)
- 3D Print Lab Volunteer Manager (2022-Current): Managed semesterly volunteer schedule and training; Aided technical managers in fixing printers and starting prints when necessary; Planned semesterly Volunteer Dinner with other AIAS Services.

Awards

Provost Summer Research Fellowship, NJIT
Challenges of Cohousing from the Architect's Perspective; Advisor: Dr. Maurie J. Cohen

- Examined the use of participatory design in cohousing as a social process and the evolution of those methods over time.
- Published abstract and presented results at the 2021 Undergraduate Summer Research Symposium.
- Invited to join the NJIT student chapter of the National Academy of Inventors.

Travisano Scholarship in Design, NJSOA

Awarded by the New Jersey School of Architecture recognizing "first year undergraduate students whose studio work demonstrates excellence in the art of architecture."

Work presented at Super Jury (2021, 2023) and invited to the Design Showcase (2022, 2023); invited guest critic on first/second year reviews (2022, 2023).

SPRING.23-

FALL.21-

SUMMER.21

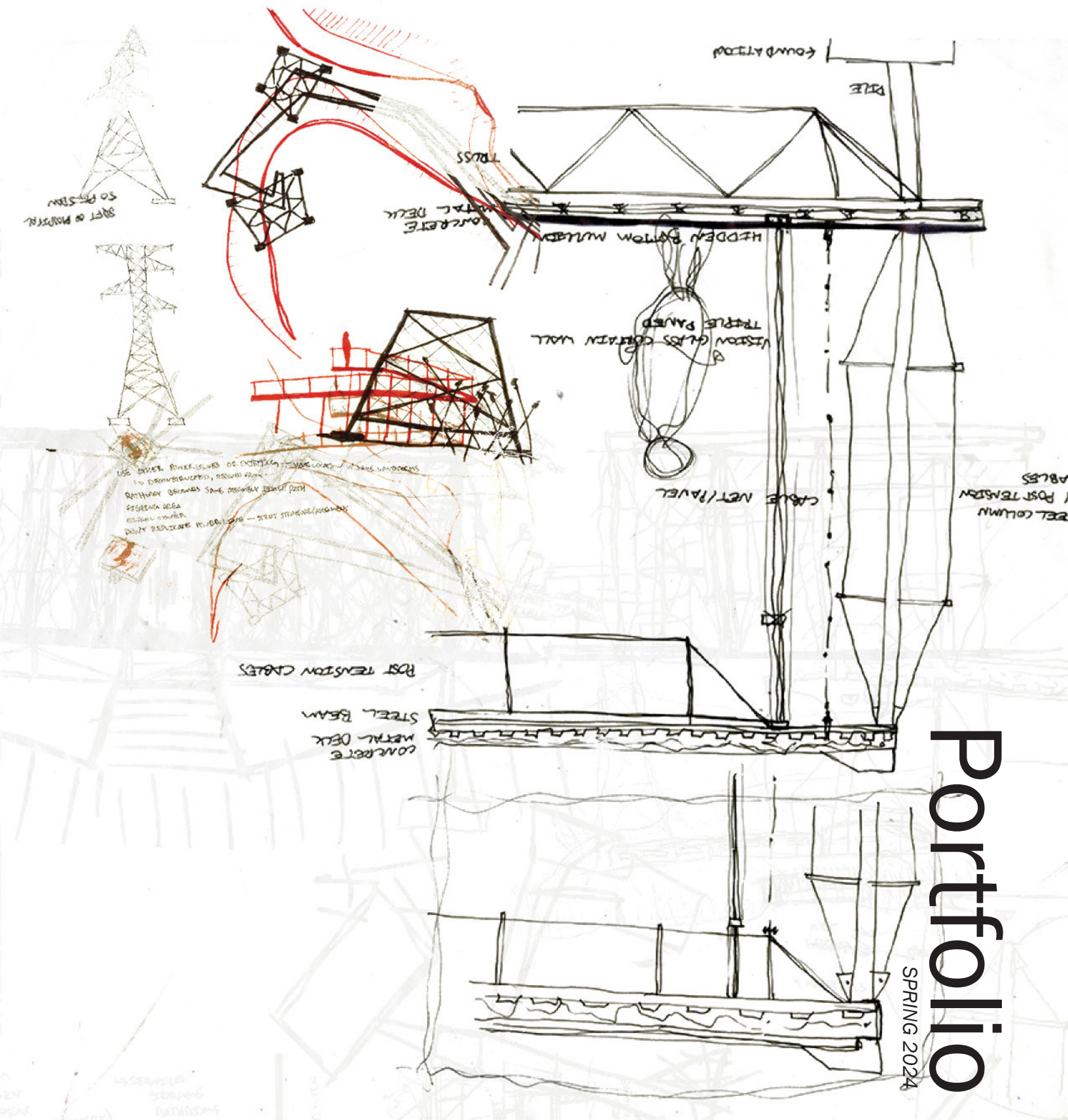
FALL.21

MAY.23-

FALL.22

FALL.20-

Jacob Swanson



Portfolio

SPRING 2024

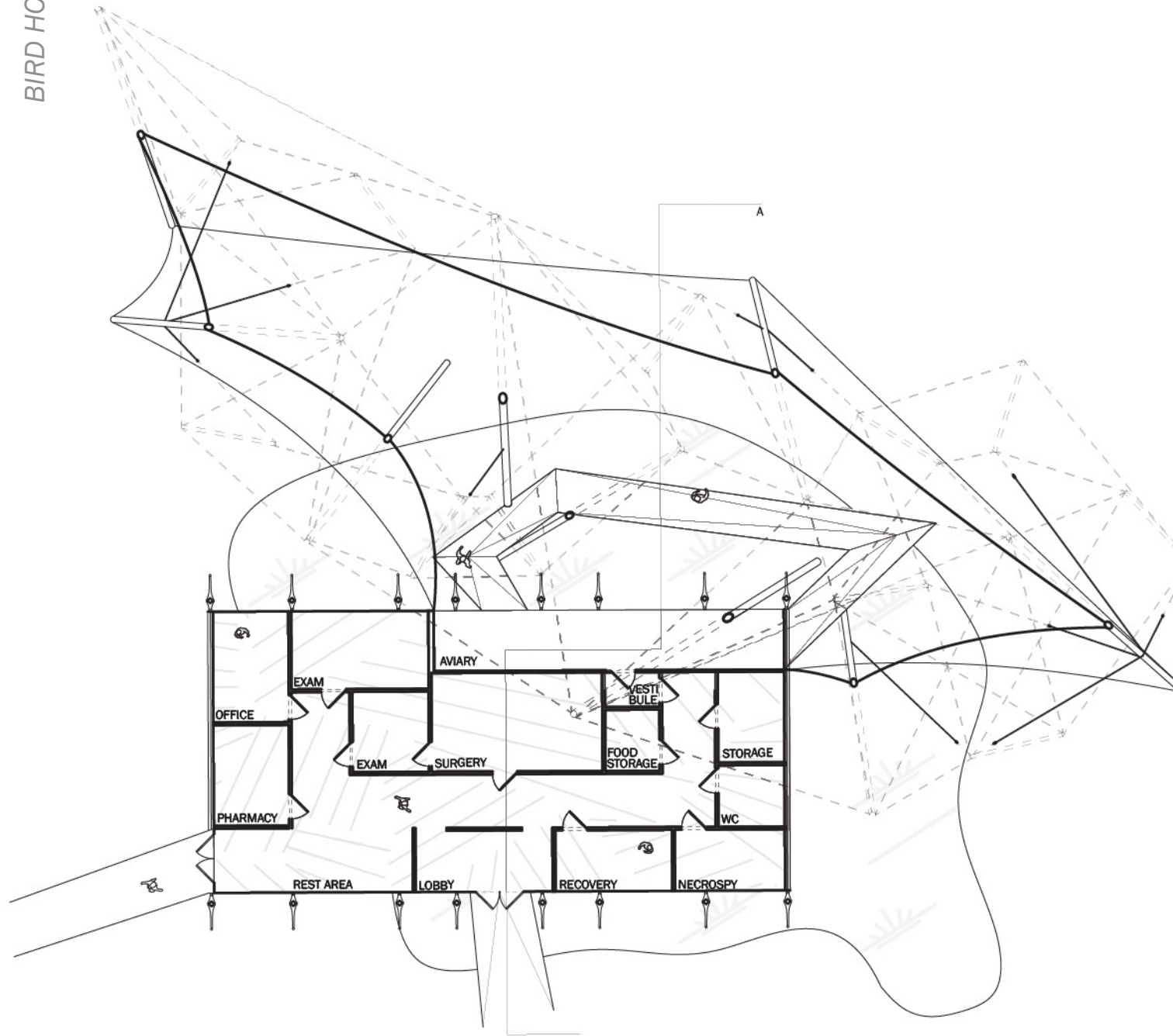


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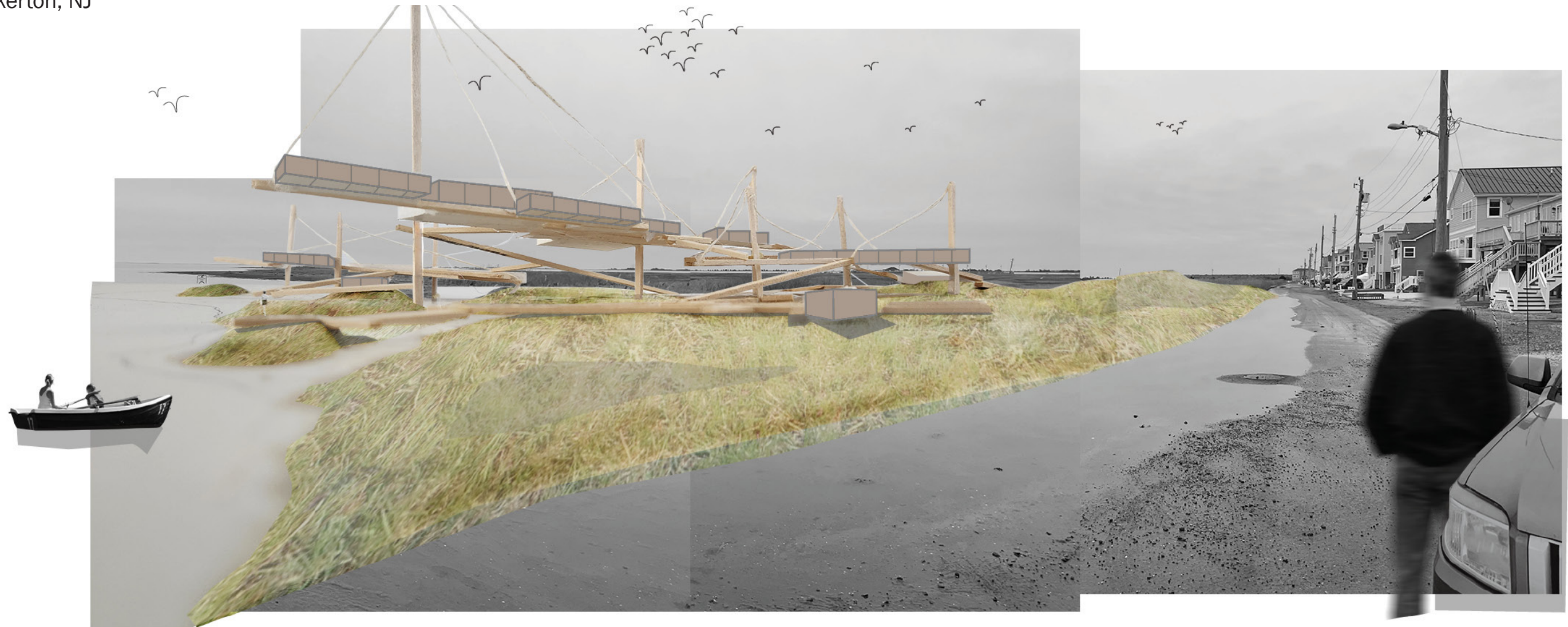
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Prof. Esther Zipori | Spring 2023

Tuckerton High School

High School

Spring 2024, with Jonah Junco

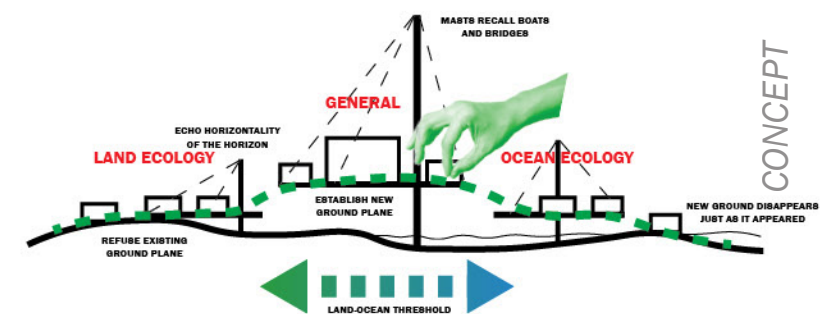
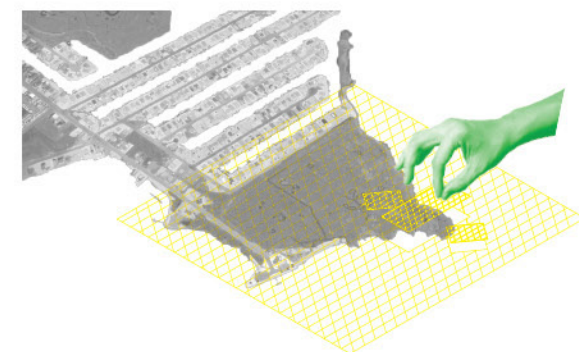
Tuckerton, NJ

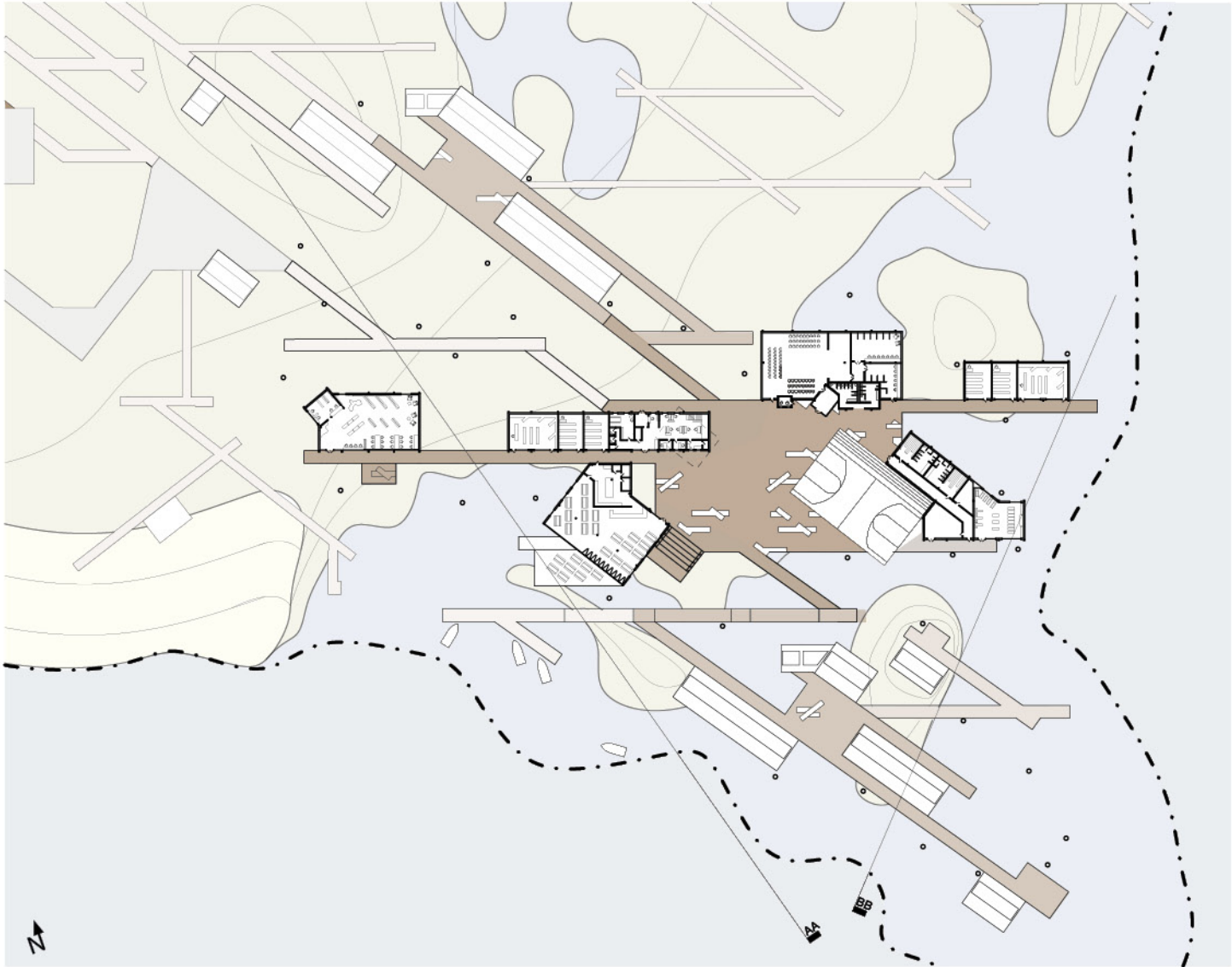
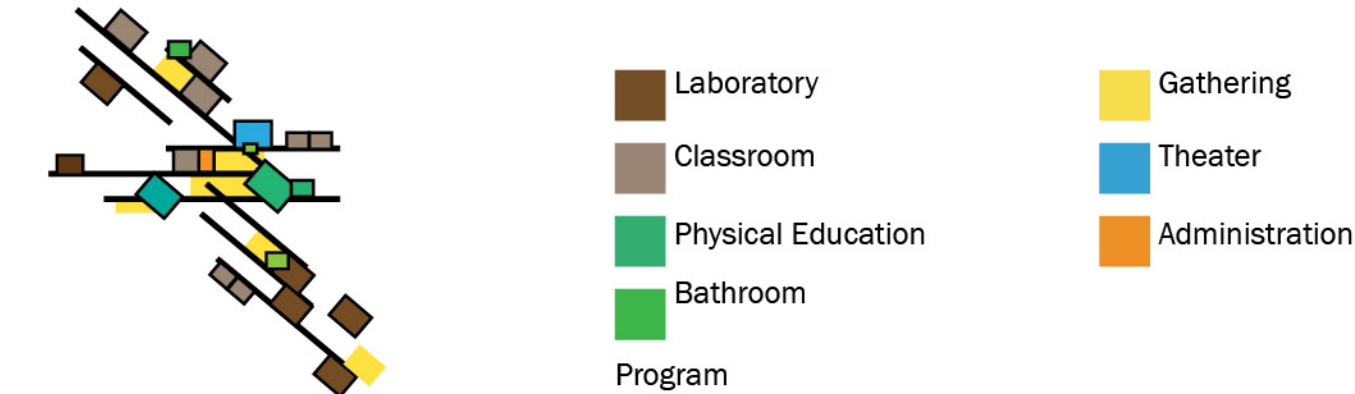
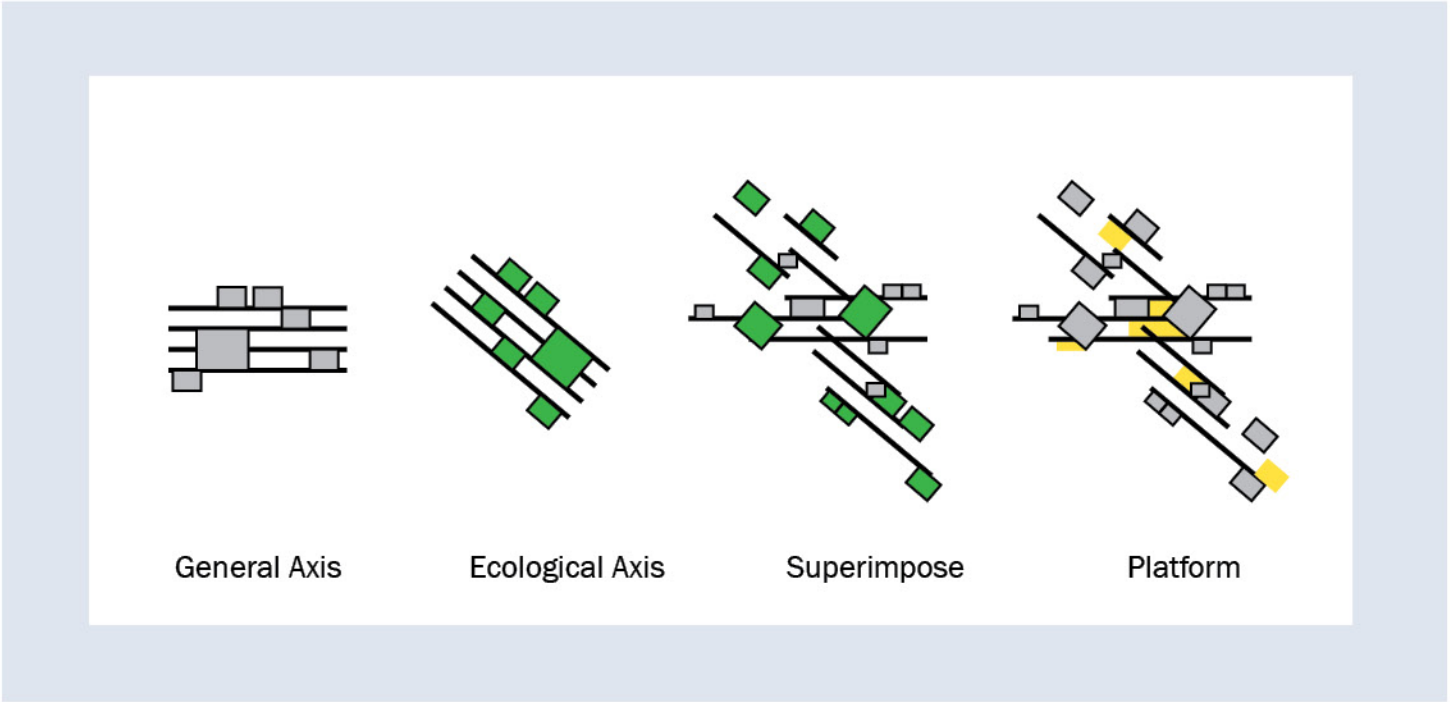


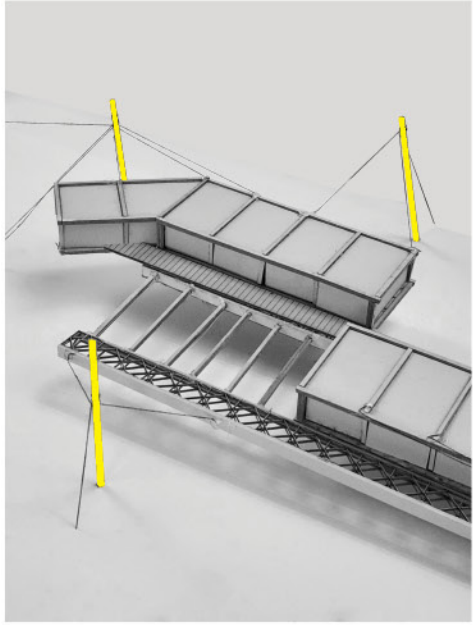
VIEW FROM LITTLE EGG BLVD

Located above a sometimes-flooded marsh, the Tuckerton High School for Environmental Studies floats above the ground on the threshold between land and water. Rejecting the idea that buildings must sit statically on the ground, it creates a new “ghost topography” on which its interior and exterior spaces sit, thus reinforcing and reproducing the horizontality of the view. Suspended on cables, the masts recall bridges and boat rigging.

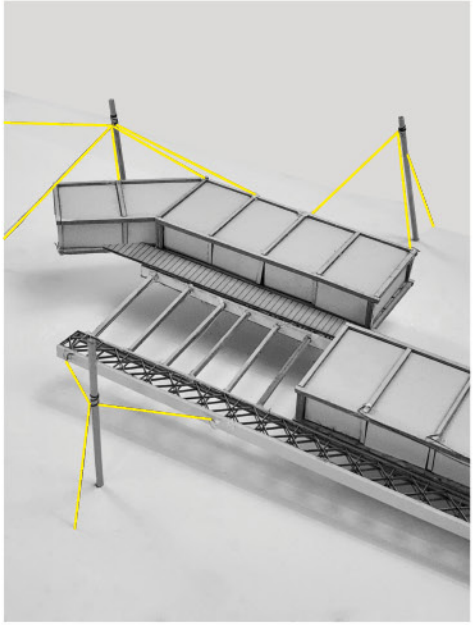
Spaces are arranged by program onto a general or ecological axis that become long platforms located on two levels to preserve views. The resulting intersection and play between volumes creates a dynamic plan that dematerializes at its edges into boardwalks.



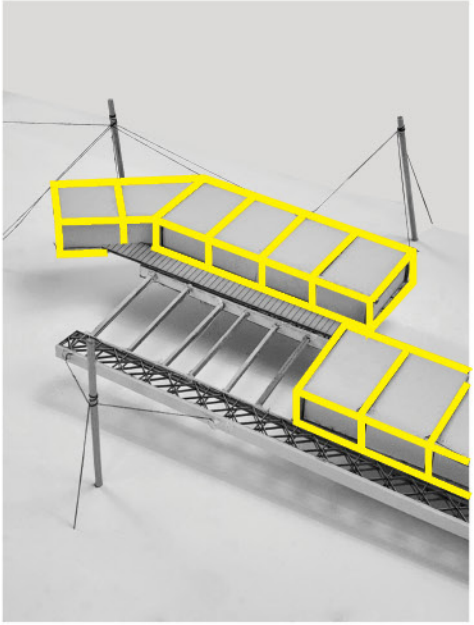




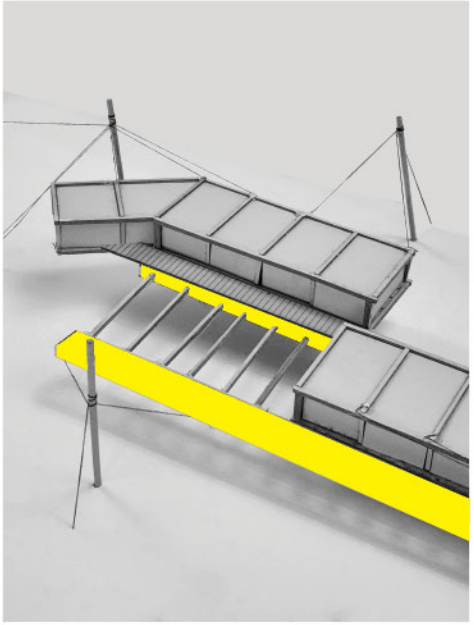
Masts



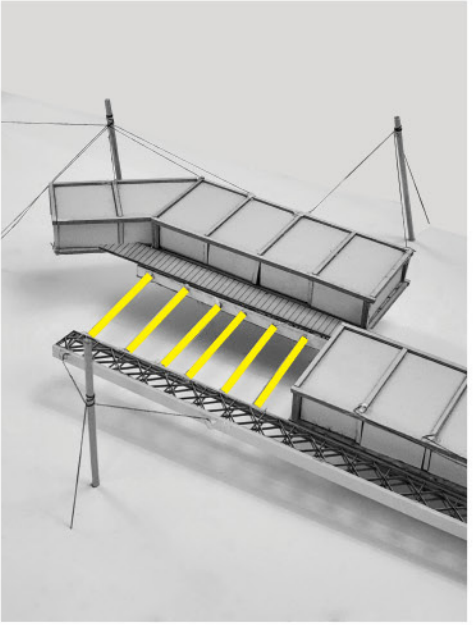
Cables



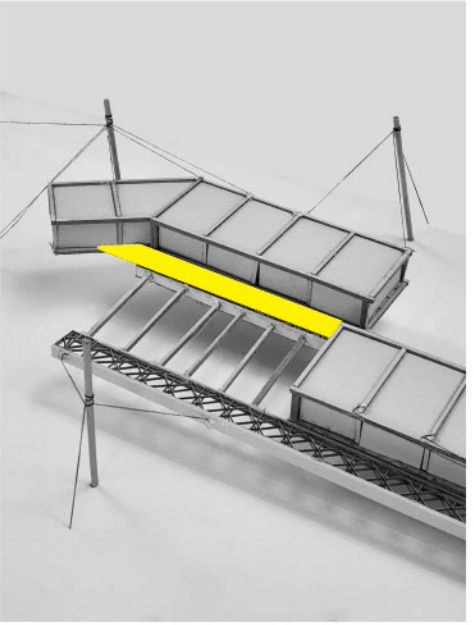
Vierendeel Trusses



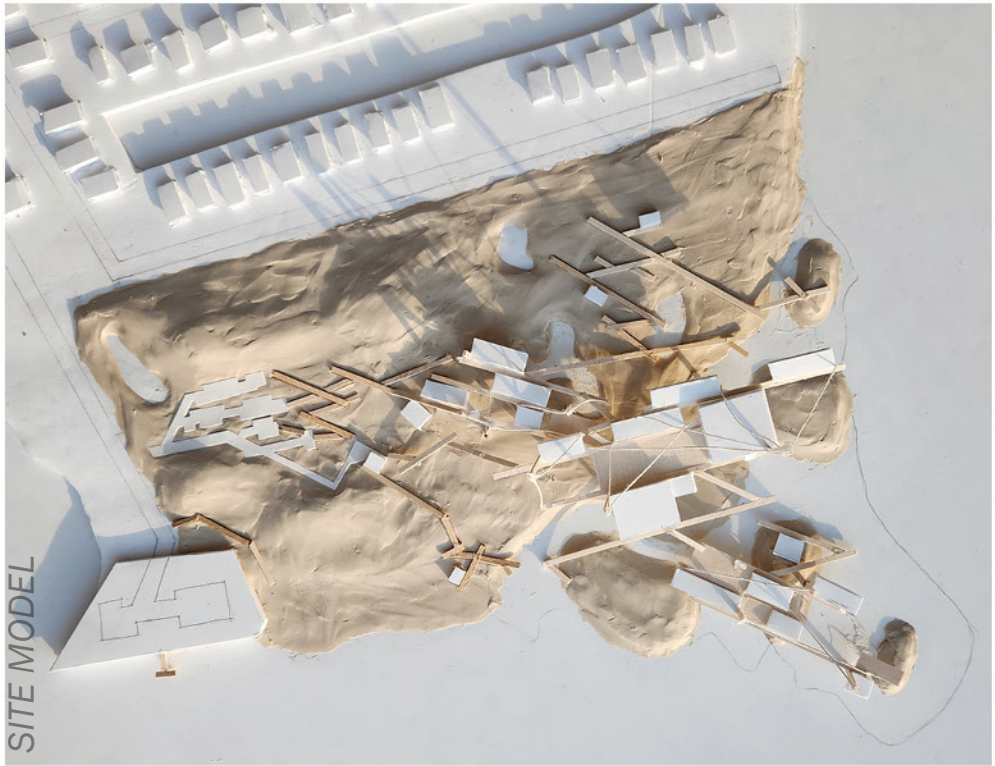
Box Trusses



I-Beams

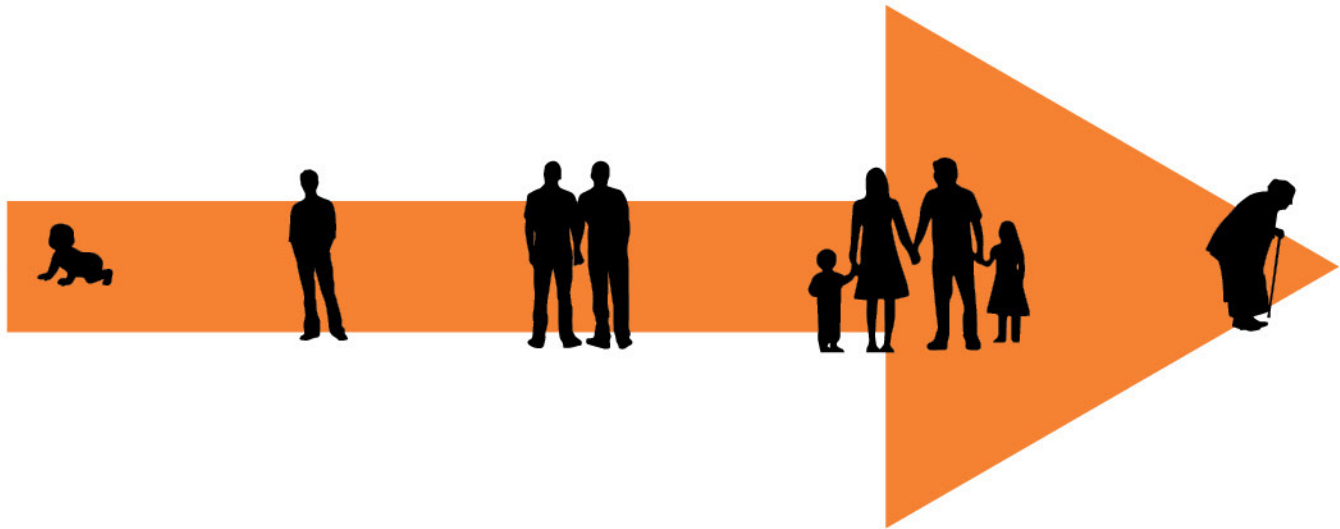


Ipe Wood Decking



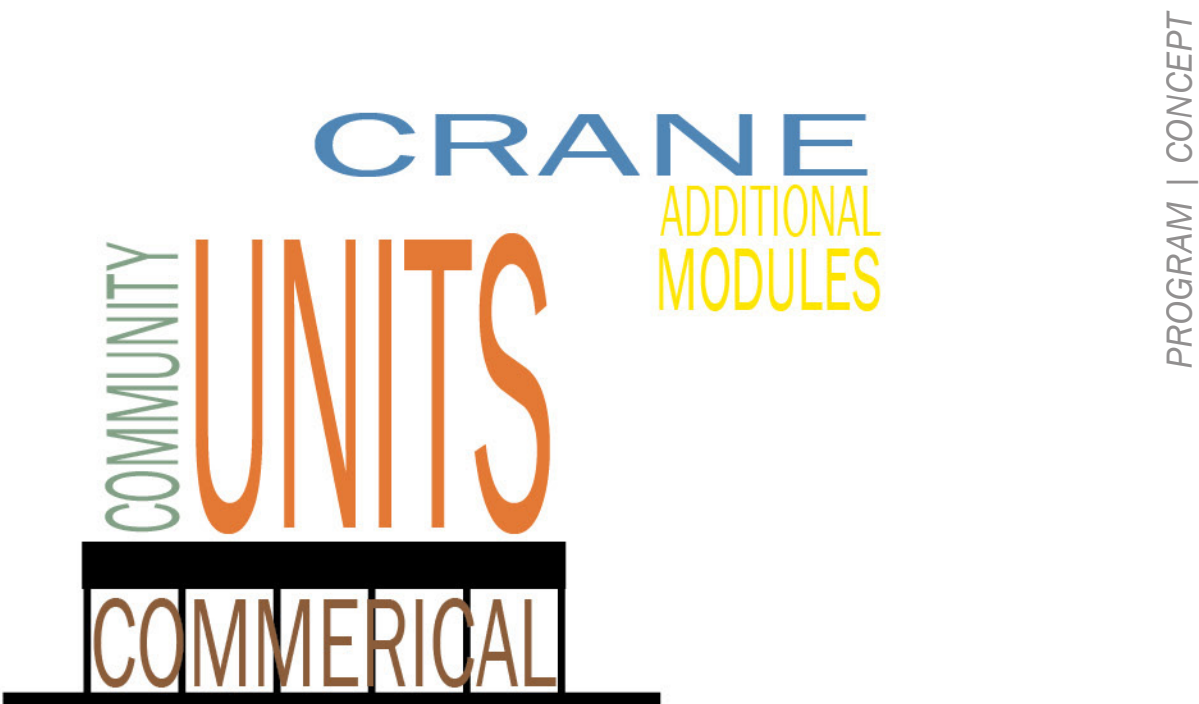
Living Platform

Multi-Family Housing
Fall 2023
Newark, NJ



Living Platform explores Cradle-to-Grave Living in Newark, NJ. Employing a series of interchangeable modules, units are able to grow and shrink as a person’s spatial requirements change over their lifecycle. Thus, residents never need to move.

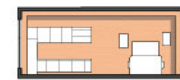
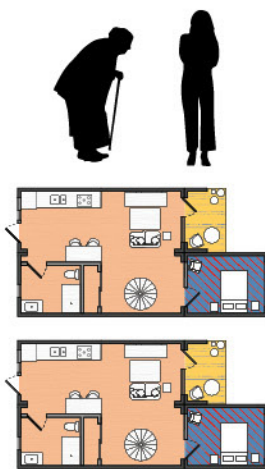
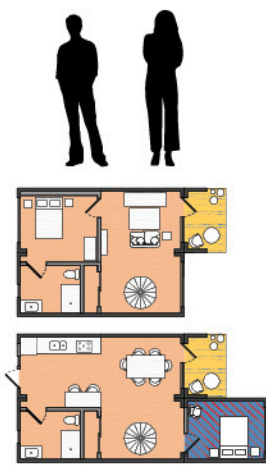
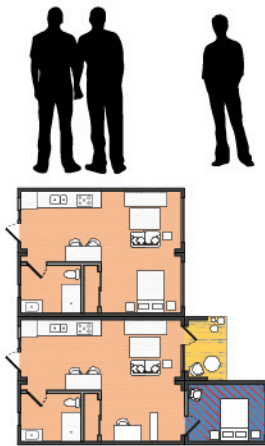
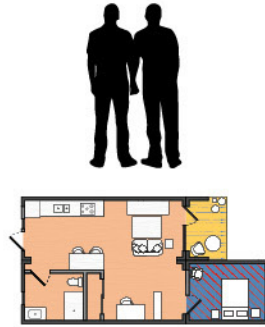
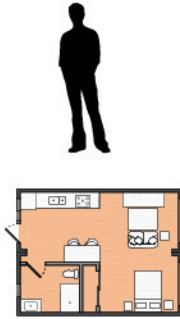
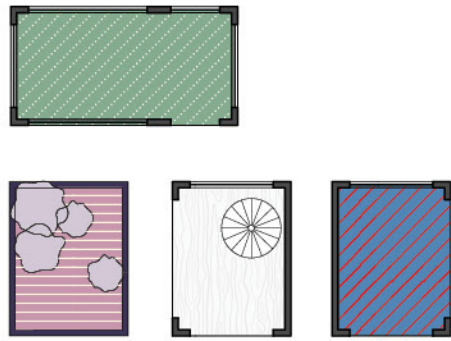
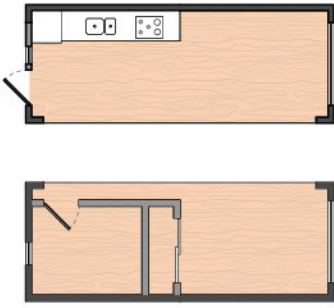
A large platform divides the building in two, providing flexibility to the ground floor. With utilities provided from above, commerical spaces are easily switched out, extended, or contracted based on the needs of the community above. Around the core, community modules provide common space and can be outfitted or switched out based on residents’ needs.

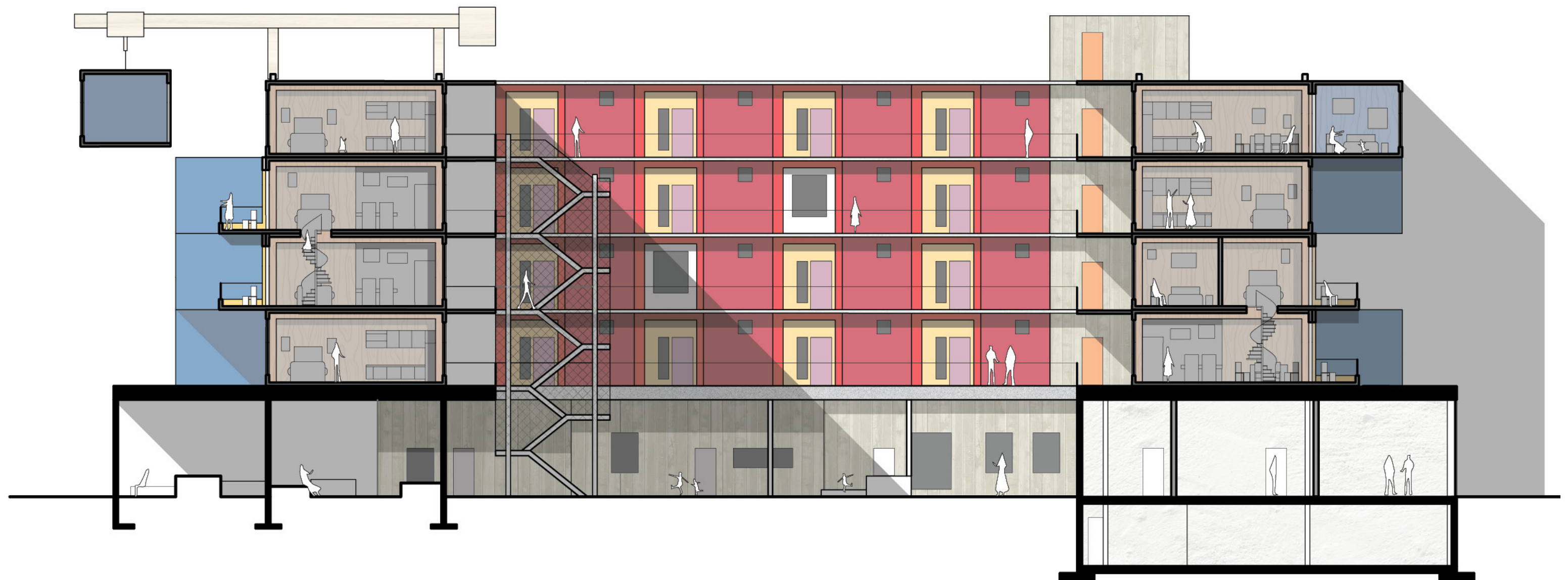


PROGRAM | CONCEPT



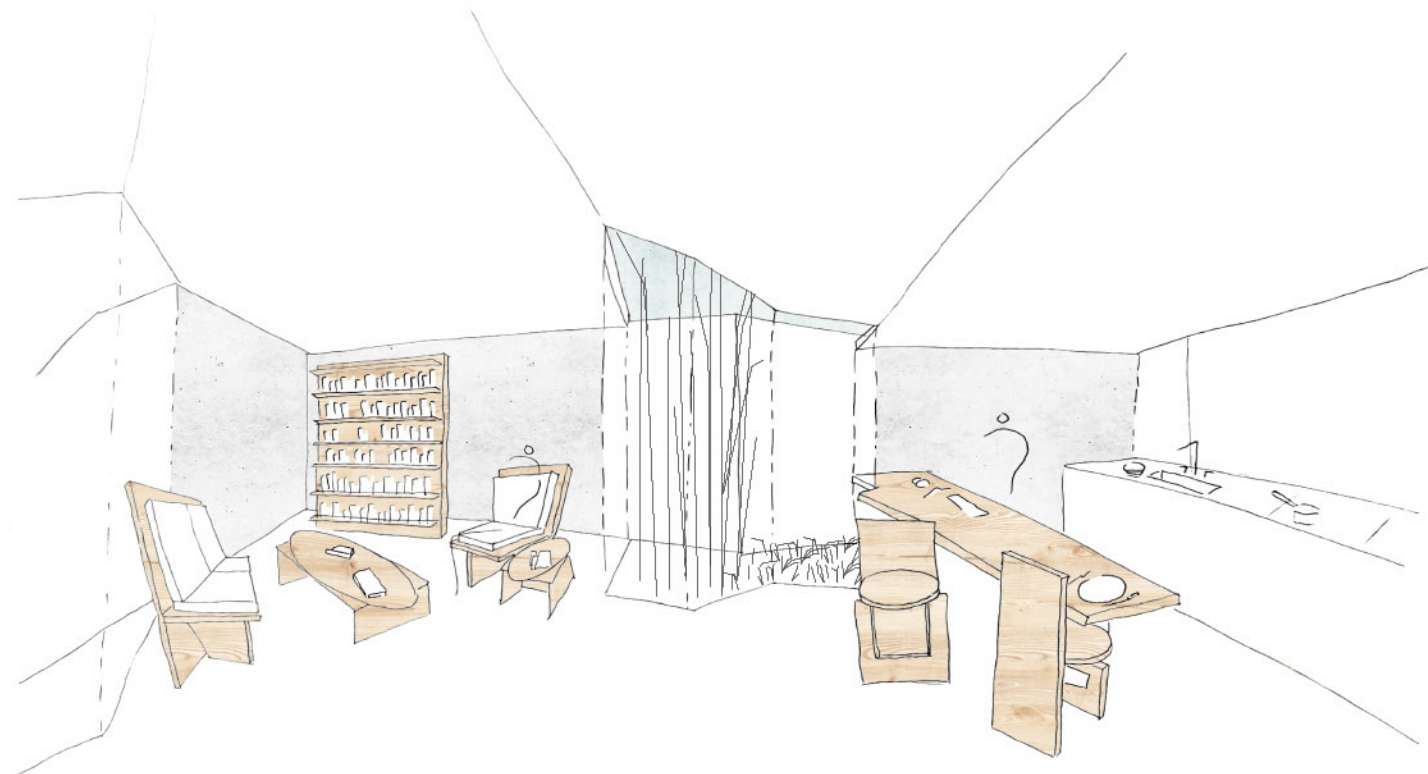
SECOND FLOOR





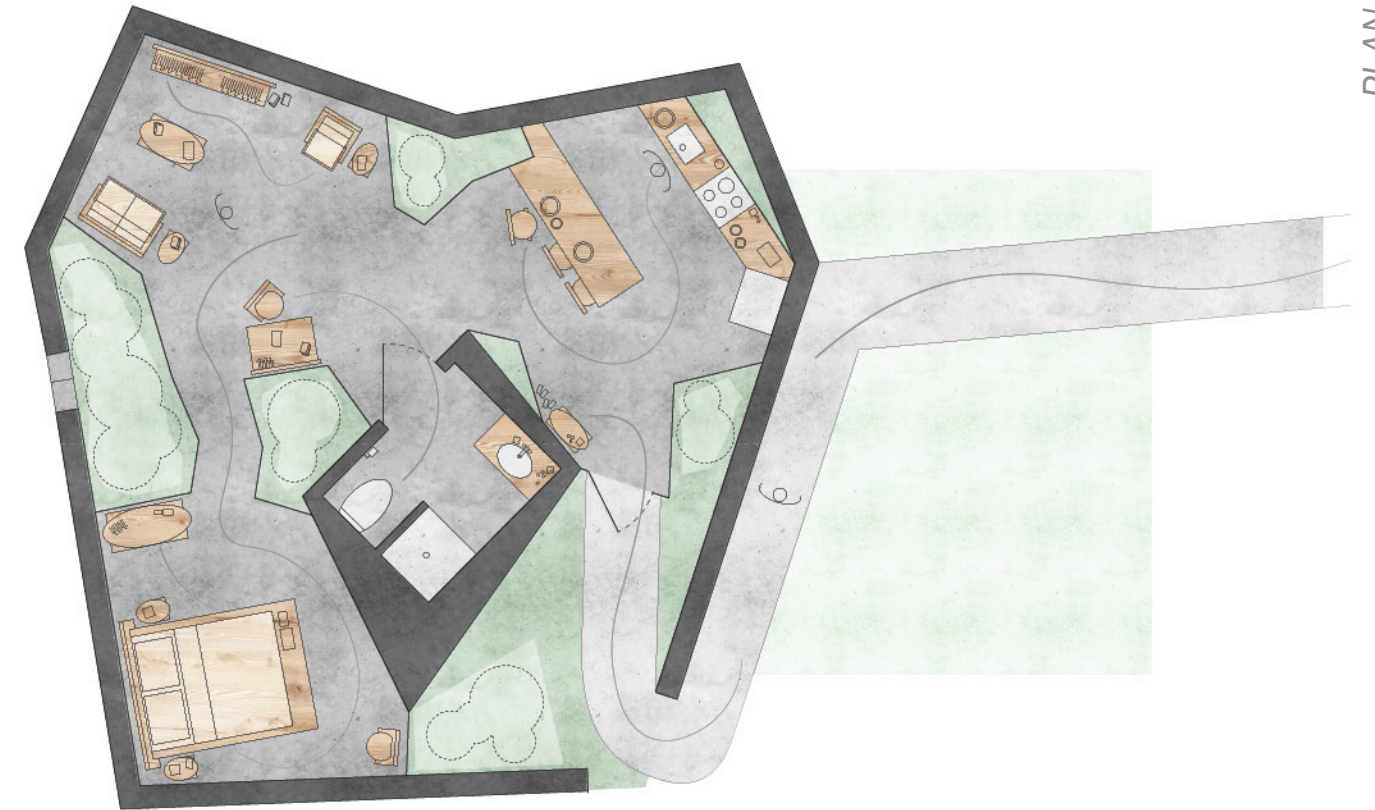
The Cave

Accessory Dwelling Unit
Montclair, NJ
Fall 2023



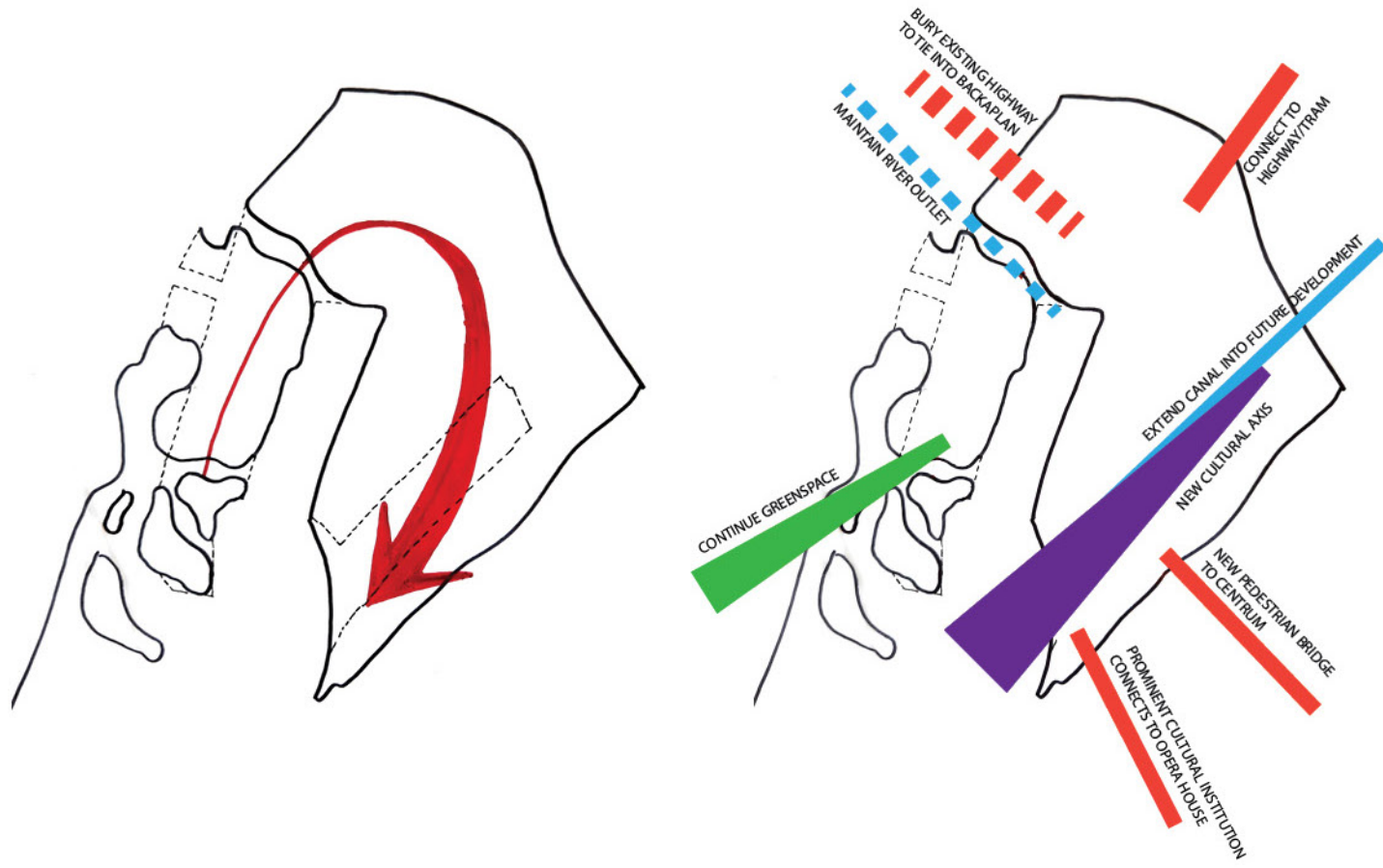
The Cave is inspired by contradictions and a celebration of interiority. Approached as a heavy, somber object in the landscape, the interior is sun-bathed, plant-filled, and human-scaled.

A full turn into the entry reorients the user to the space. Light wells define kitchen, living area, and bedroom such that the interior space becomes a separate entity contained between two concrete walls with a slightly rough texture that allows delicate light-play. Custom-designed wood furniture humanizes the space. The bathroom is central and open to the sky above, creating a James Turrell-like bathing experience. Between the bedroom and living area, a hint of the exterior is visible to the interior, giving a moment of respite from the intense interiority of the structure.



Frihamnen Masterplan

Masterplan
Göteborg, SWE
Summer 2023



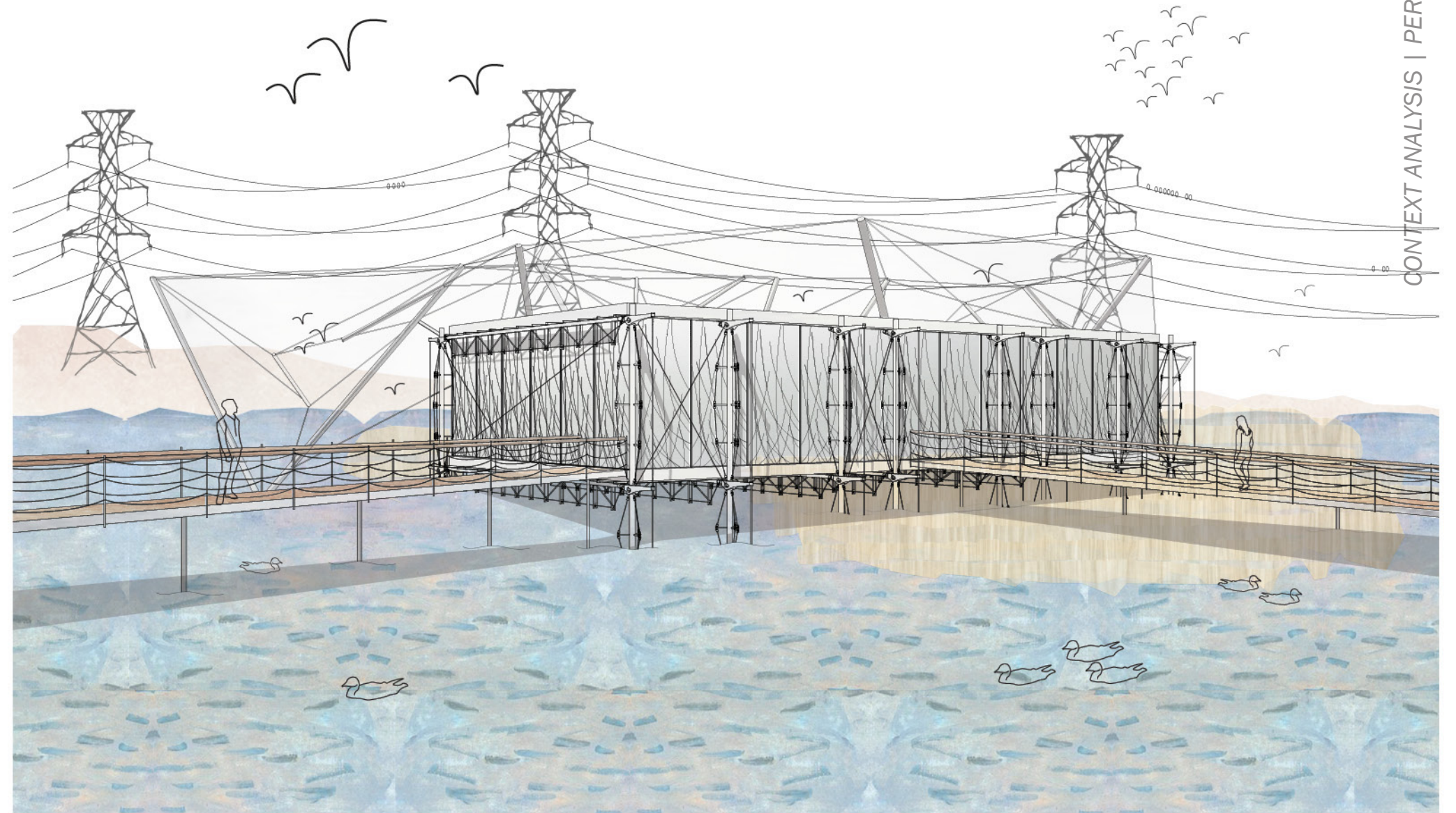
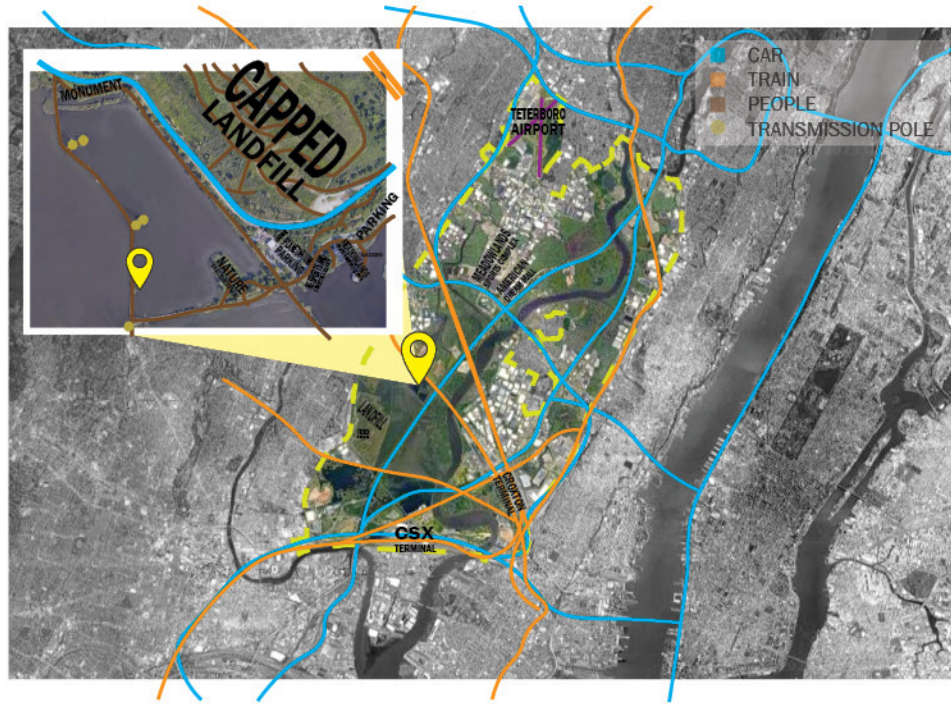
Connecting Göteborg, Sweden's dense 17th century Centrum with the less dense, more contemporary Backaplan on the northern banks of the Göta älv, This proposal redevelops the old port of Frihamnen using a series of increasingly intense urban experiences that welcome the river into everyday life.

Moving from leisure greenspace on the western tip to 20-story high rises on the eastern tip, the new neighborhood creates a contemporary counterweight to the old city. The tip is surmounted by a Museum of Industrial History, a nod to the site's past that creates a dialog with the opera house across the river. Filling in one of the old docks allows for more active engagement with the water's edge and central greenspace throughout the densest section. A variety of urban conditions are created throughout, from informal to formal, land-based to water-based, and public to private.



Under the Power Lines

Bird Hospital + Aviary
Meadowlands, NJ
Spring 2023



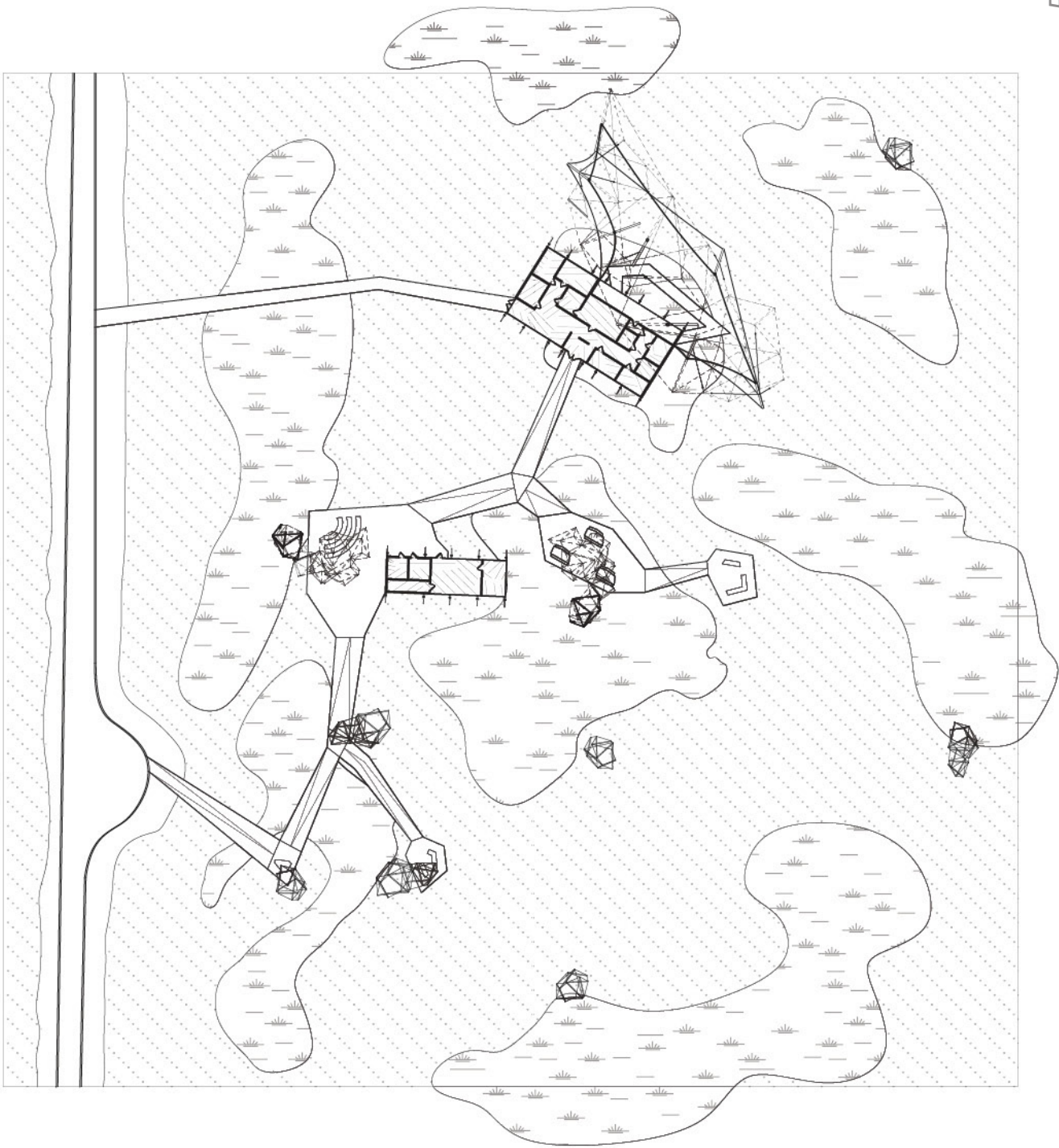
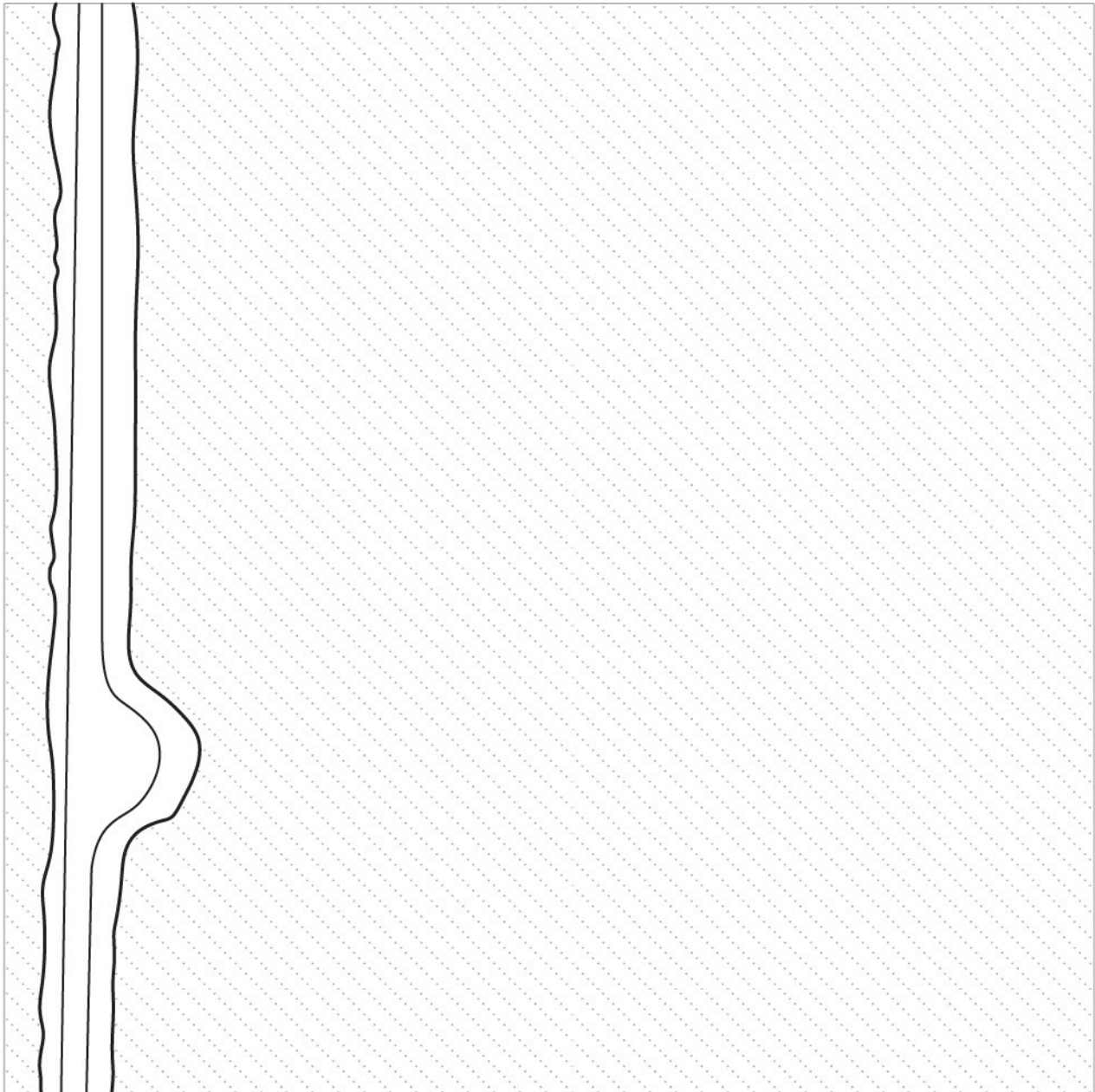
CONTEXT ANALYSIS | PERSPECTIVE

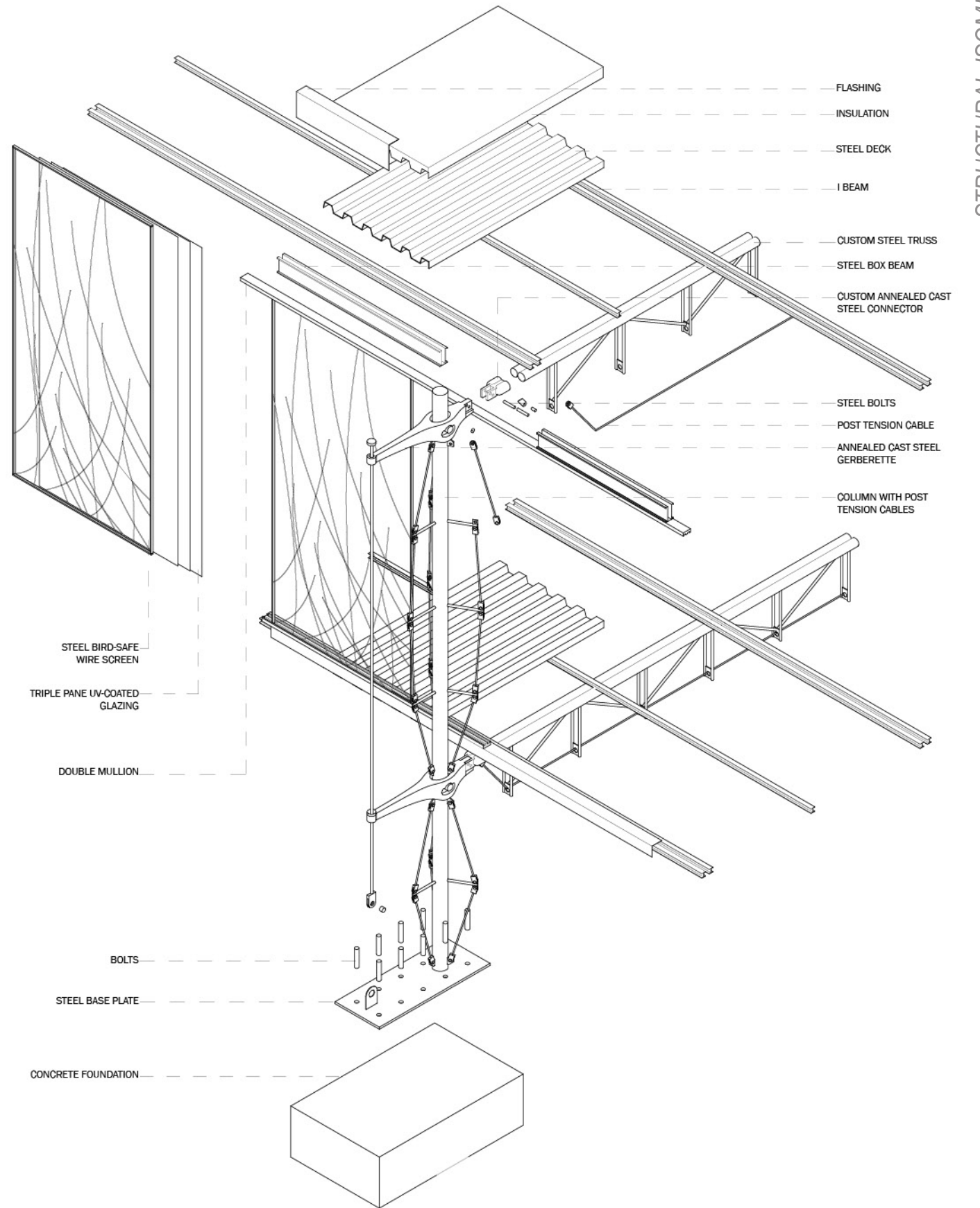
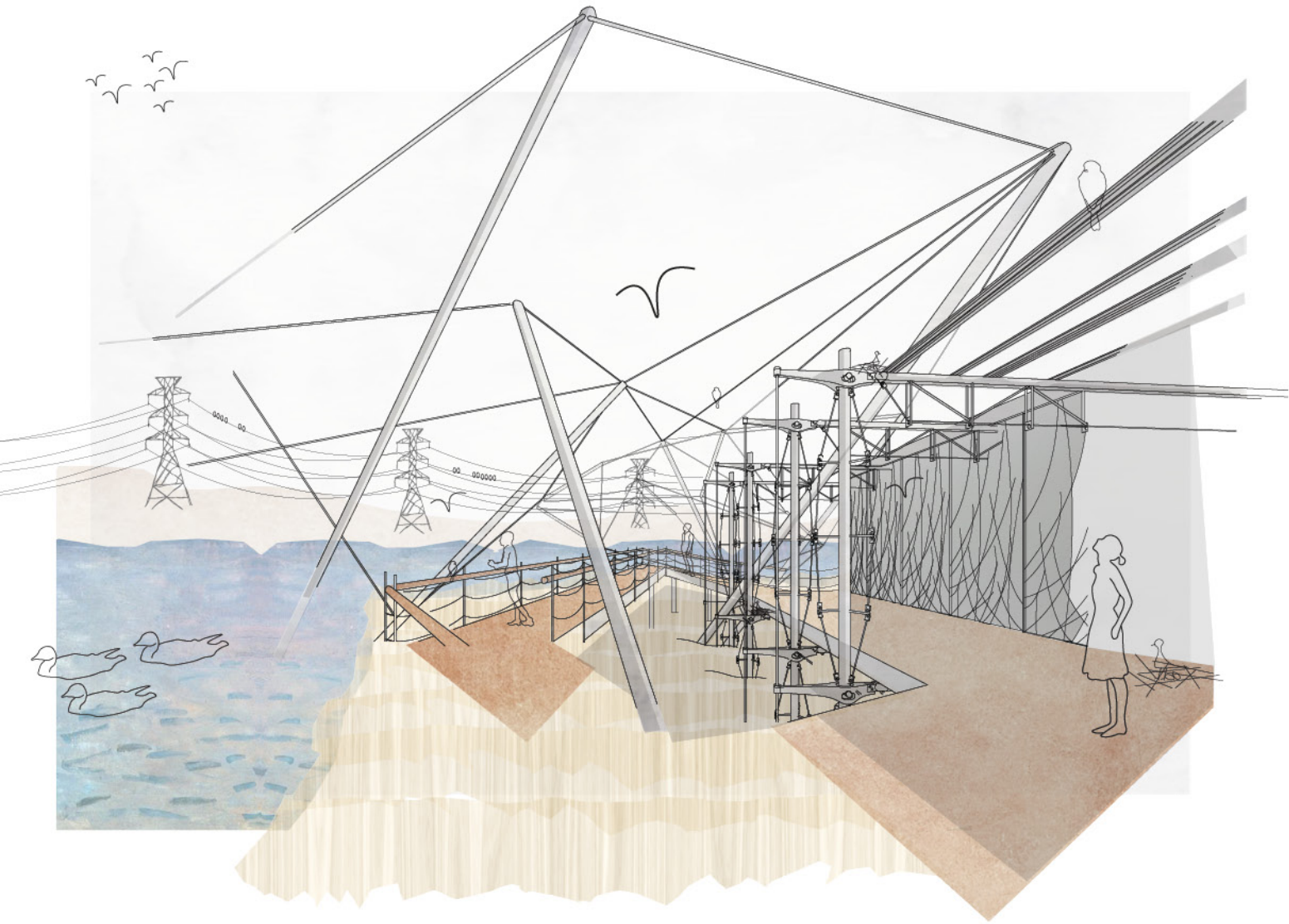
The New Jersey Meadowlands exist between the natural and the human-made, at once a nature preserve, hub for bird watchers, urbanized area, sport complex, shopping destination, light industrial center, and landfill that has been riven by infrastructure for cars, trains, planes, and electricity. Nature and humanity have long been considered antagonistic and the Meadowlands may seem like a particularly visible site in the fight between humankind's will to remake the landscape to their own liking and the vicissitudes of biogeophysical processes and non-human life.

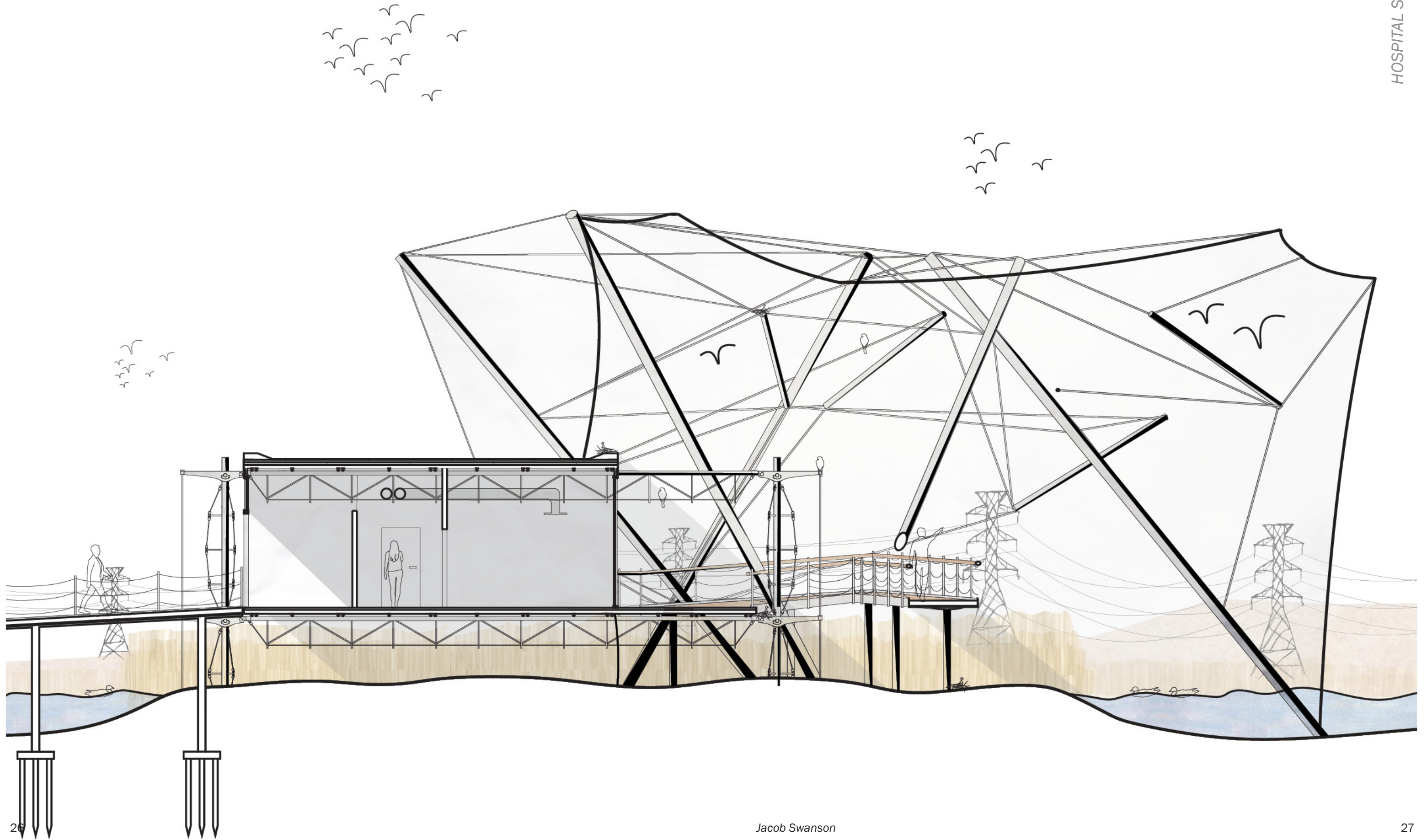
However, the reality of the Meadowlands is of wary coexistence between these forces, the product of an uneasy truce where neither has been successful in erasing

the other. Under the Power Lines aims to complicate perceptions of the relationship between the human and non-human, moving past easy oppositional framings towards a more contingent and dialectical one.

Appropriating the aesthetic language of the power lines, the veins that carry the lifeblood of contemporary life, with a tensegrity/gerberette structural system for a bird hospital, nesting structures, and boardwalk heightens the bizarre quality of the Meadowlands, undermines the perceived permanence of existing infrastructures, and asks whether structures for non-humans are infrastructural.







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Spring 2024

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