

YANG LU'S PORTFOLIO

COLUMBIA UNIVERSITY, GSAPP

Project 1: Broadway Block Activation

Follies

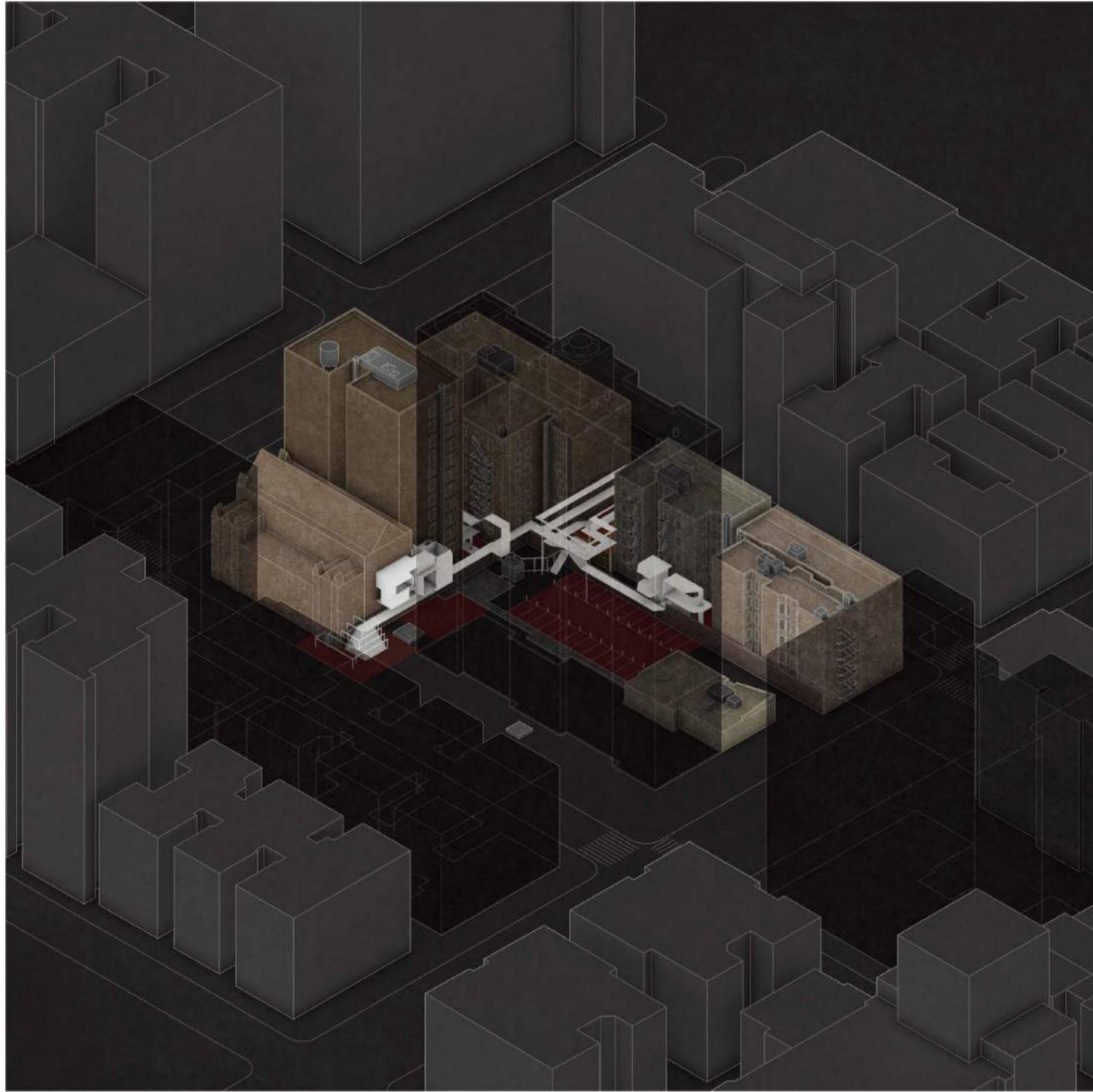
Core I, Fall 2019

Individual Work

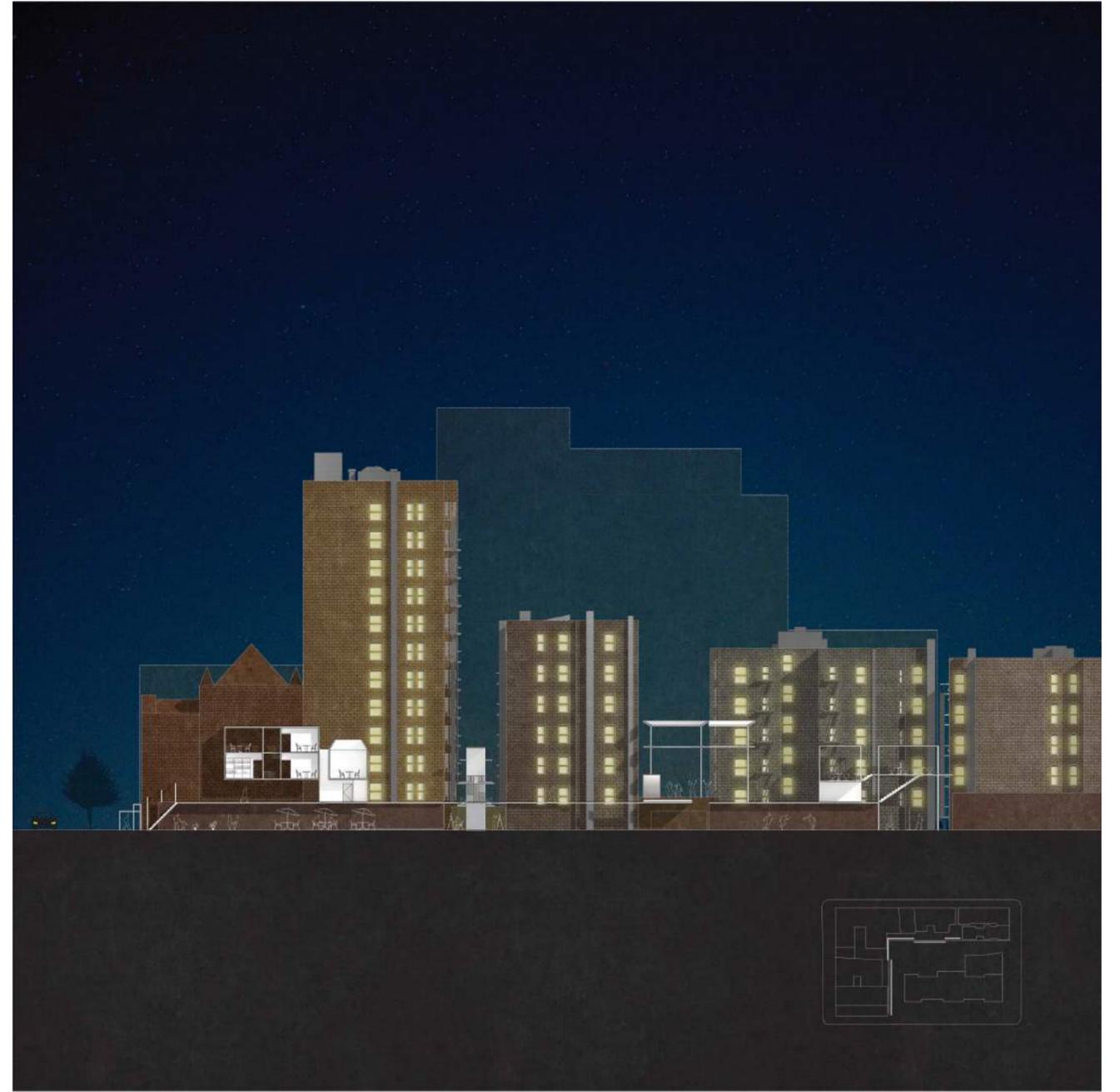
Instructor: Jose Araguez

The project includes five follies with different functions, which activates different ground and rooftop areas of a block in Broadway. The project explores about how different forms and functions work in an existing site.



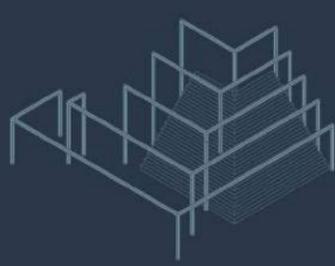


Axon

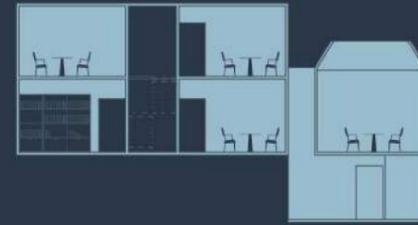
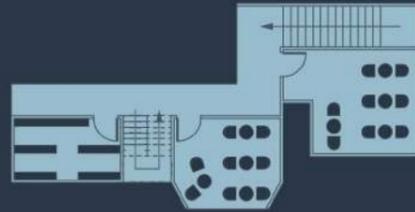
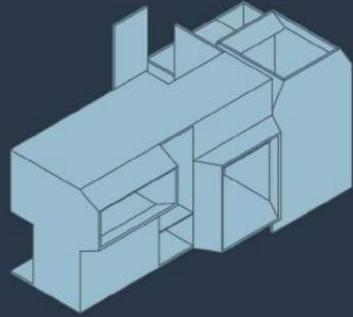


Section

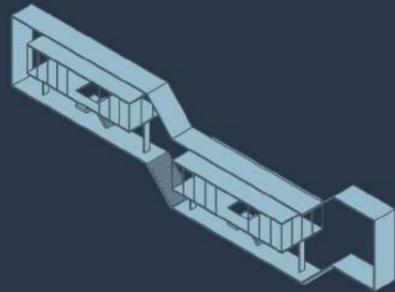
Folly #1
Entrance



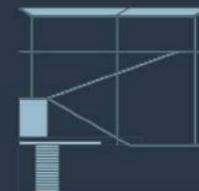
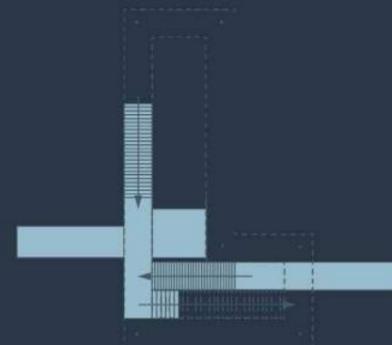
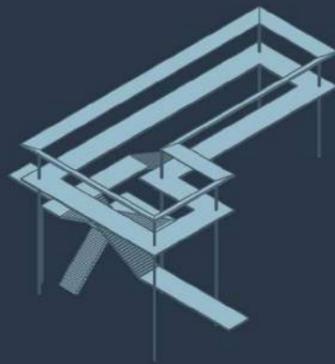
Folly #2
Reading Space



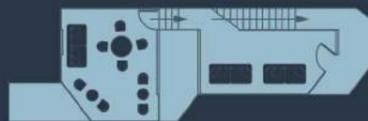
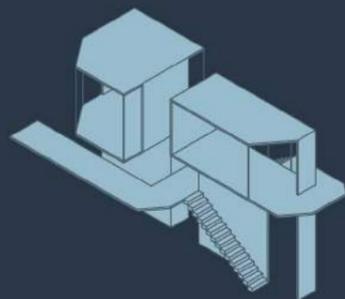
Folly #3
Creative Space

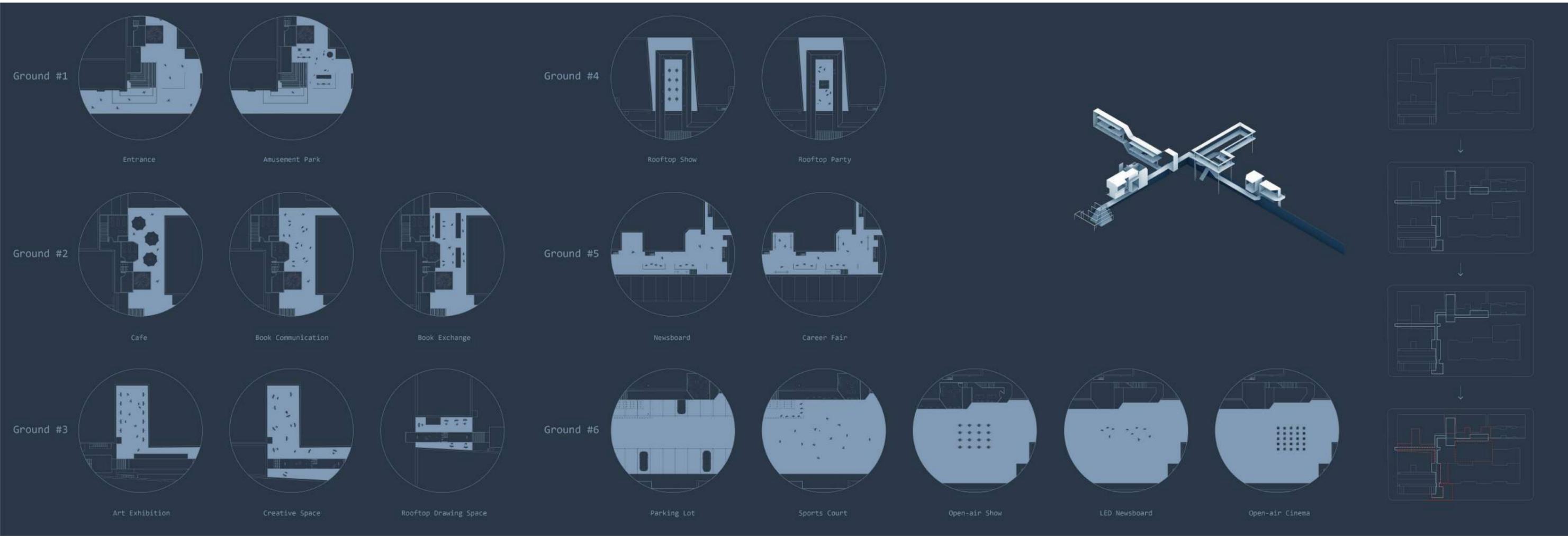


Folly #4
Community Center

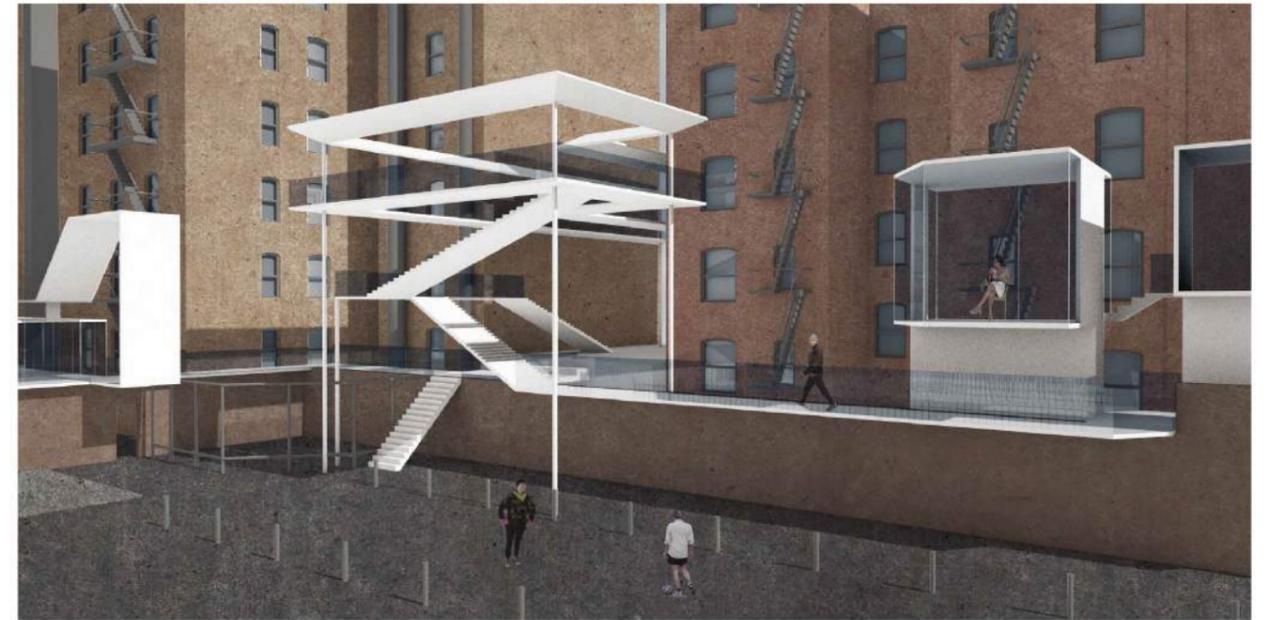


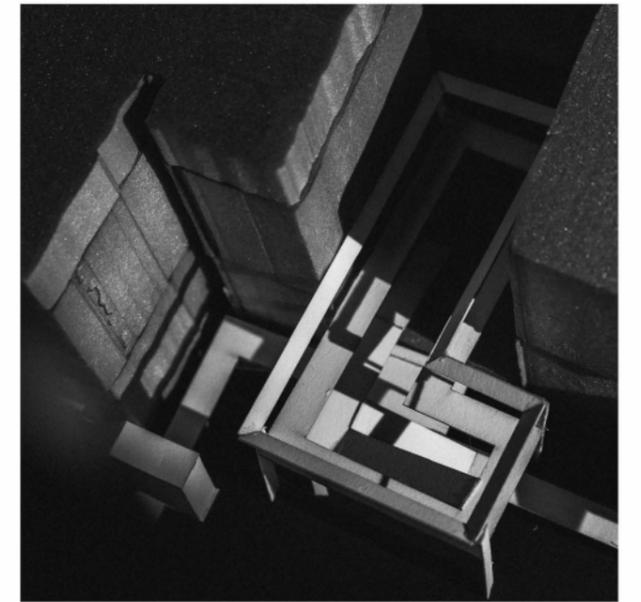
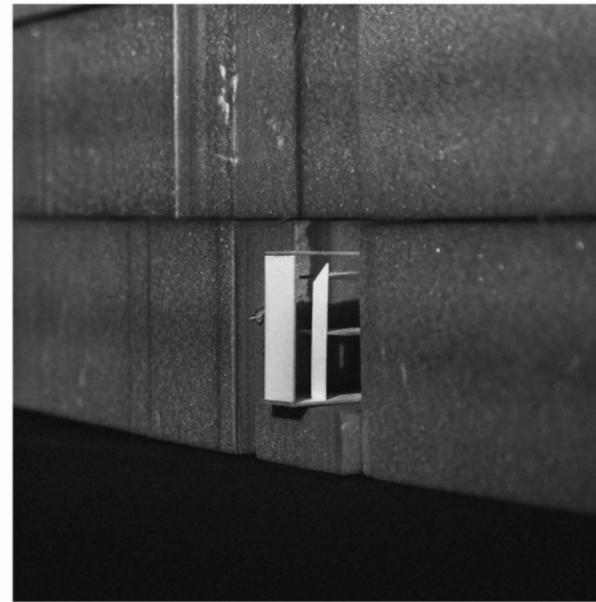
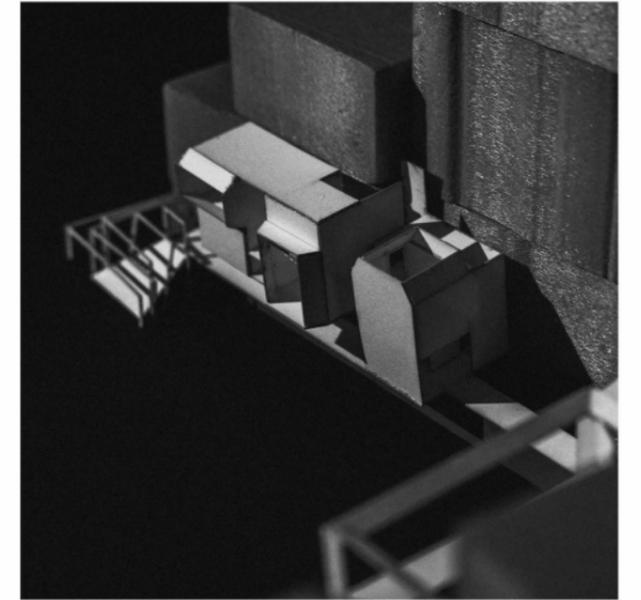
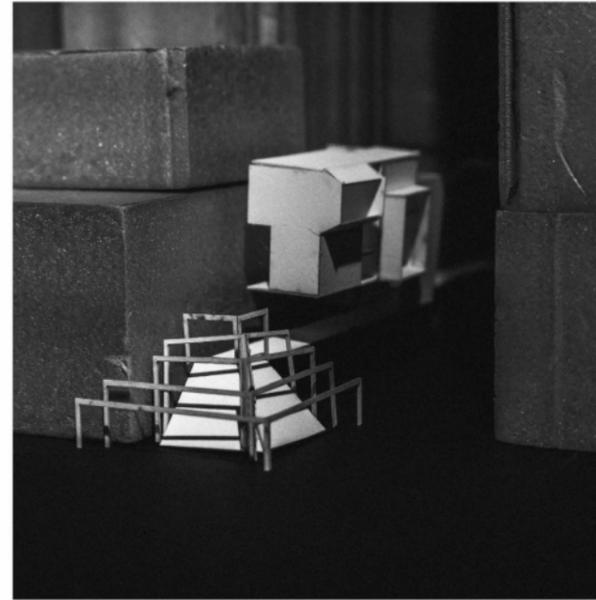
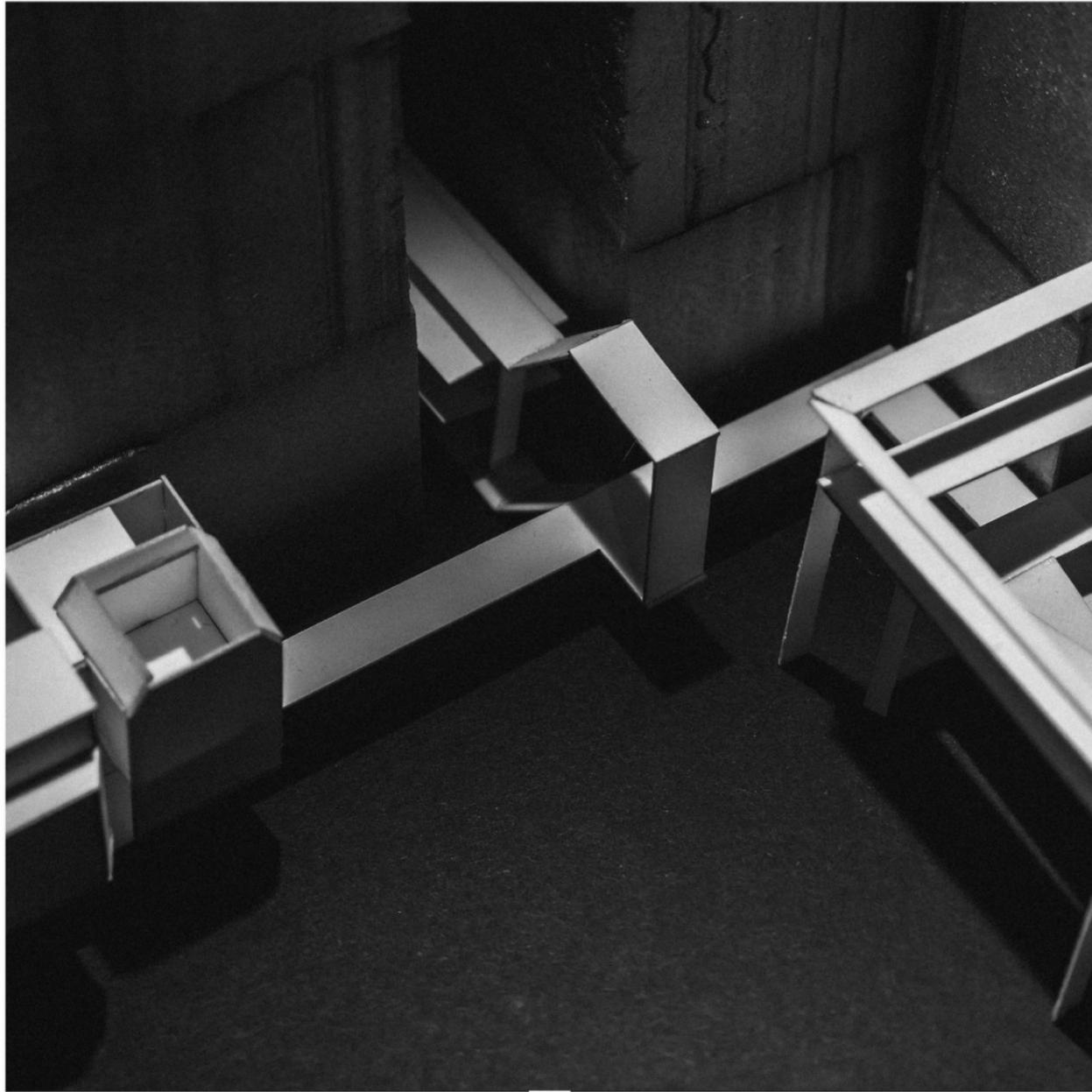
Folly #5
Information Center





Grounds Activated by Follies

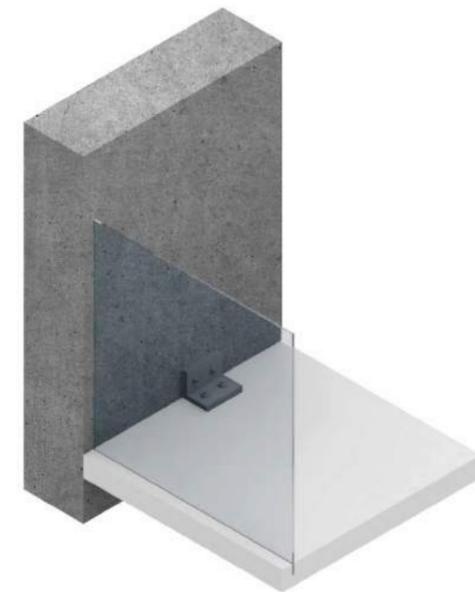
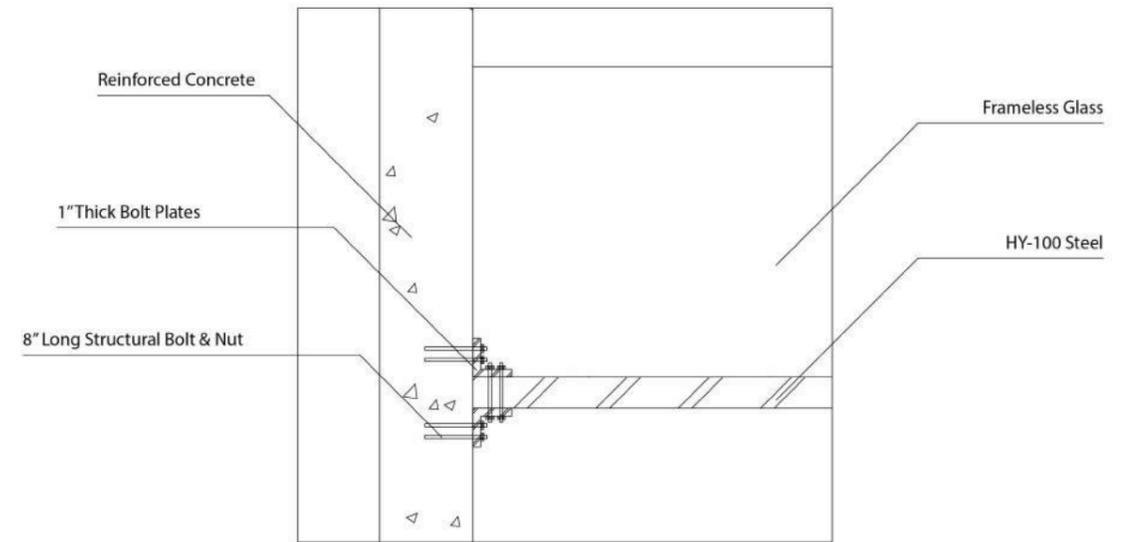




Physical Model



1:1 Construction



1:1 Construction Detail

Project 2: Dilation-Contraction

A Continuous and Open School

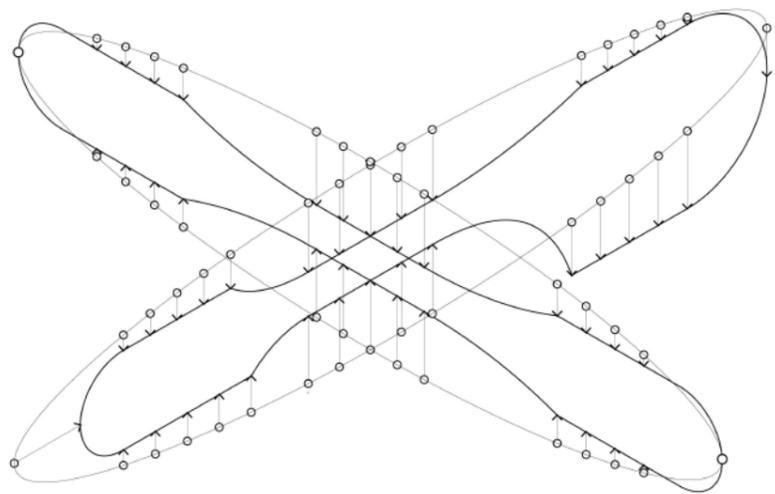
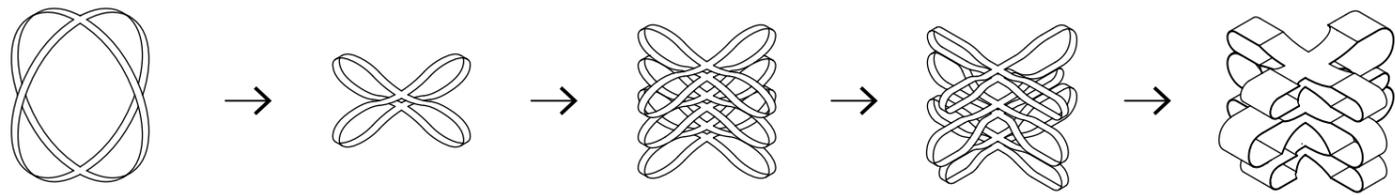
Core II, Spring 2020

Individual Work

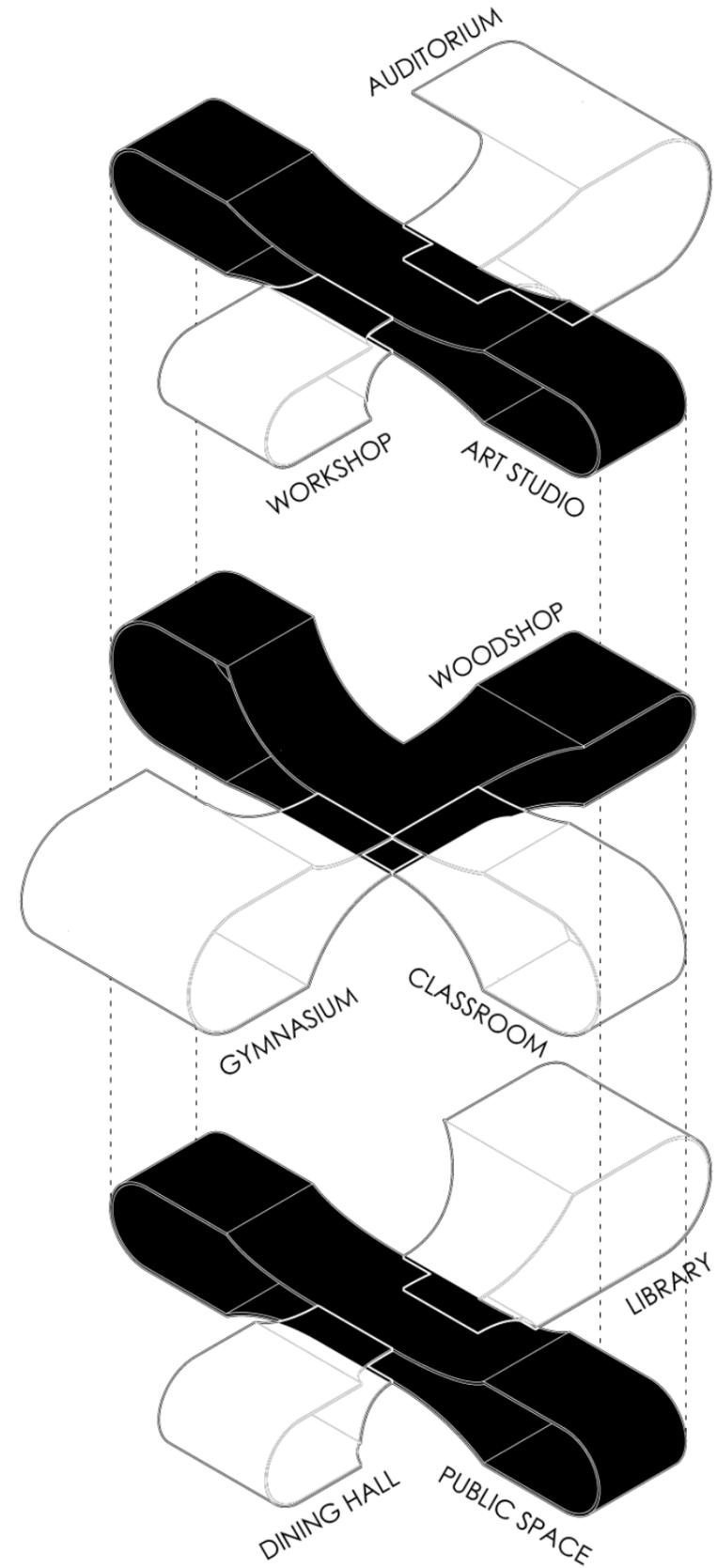
Instructor: Karla Rothstein

The project begins with the concept of dilation and contraction. Continuous loops are modified to create spaces of differing qualities and behaviors. A continuous and open structure is inserted at the center and connects to the existing building creating an open space experience for the whole project. The open negative space created between the loops provides large areas for children's outdoor activities. The facade of the project enlivens the local streetscape, inviting the public to engage with the life of the school.

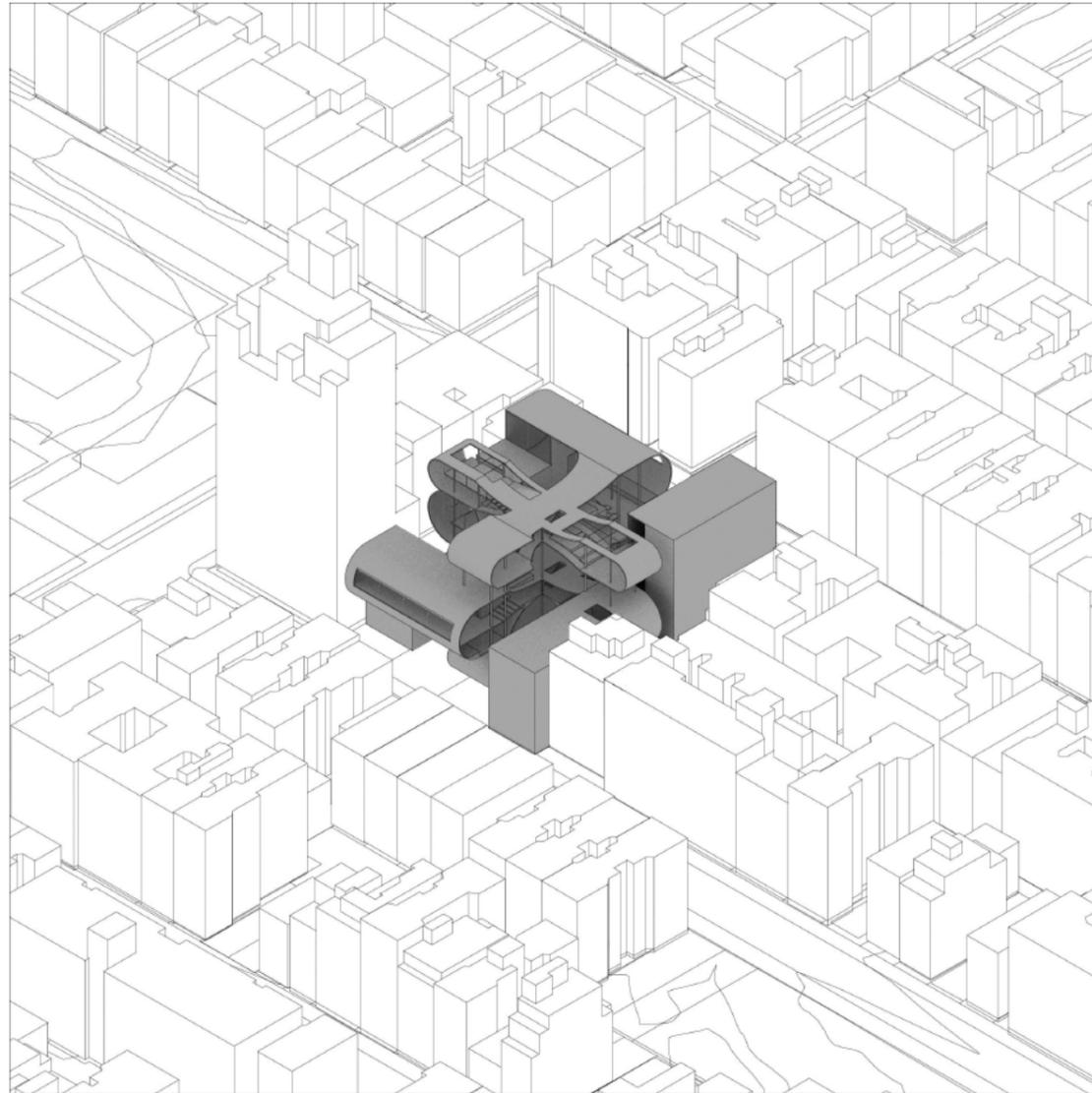
Concept Development



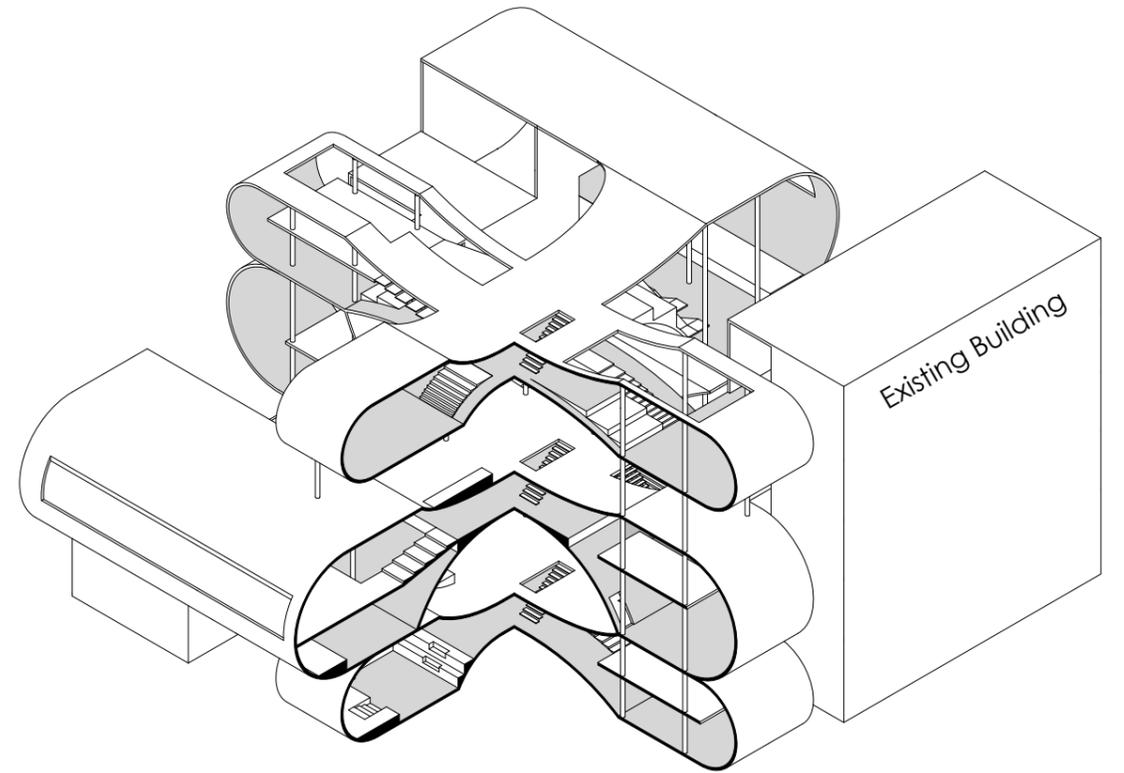
Concept of Dilation-Contraction



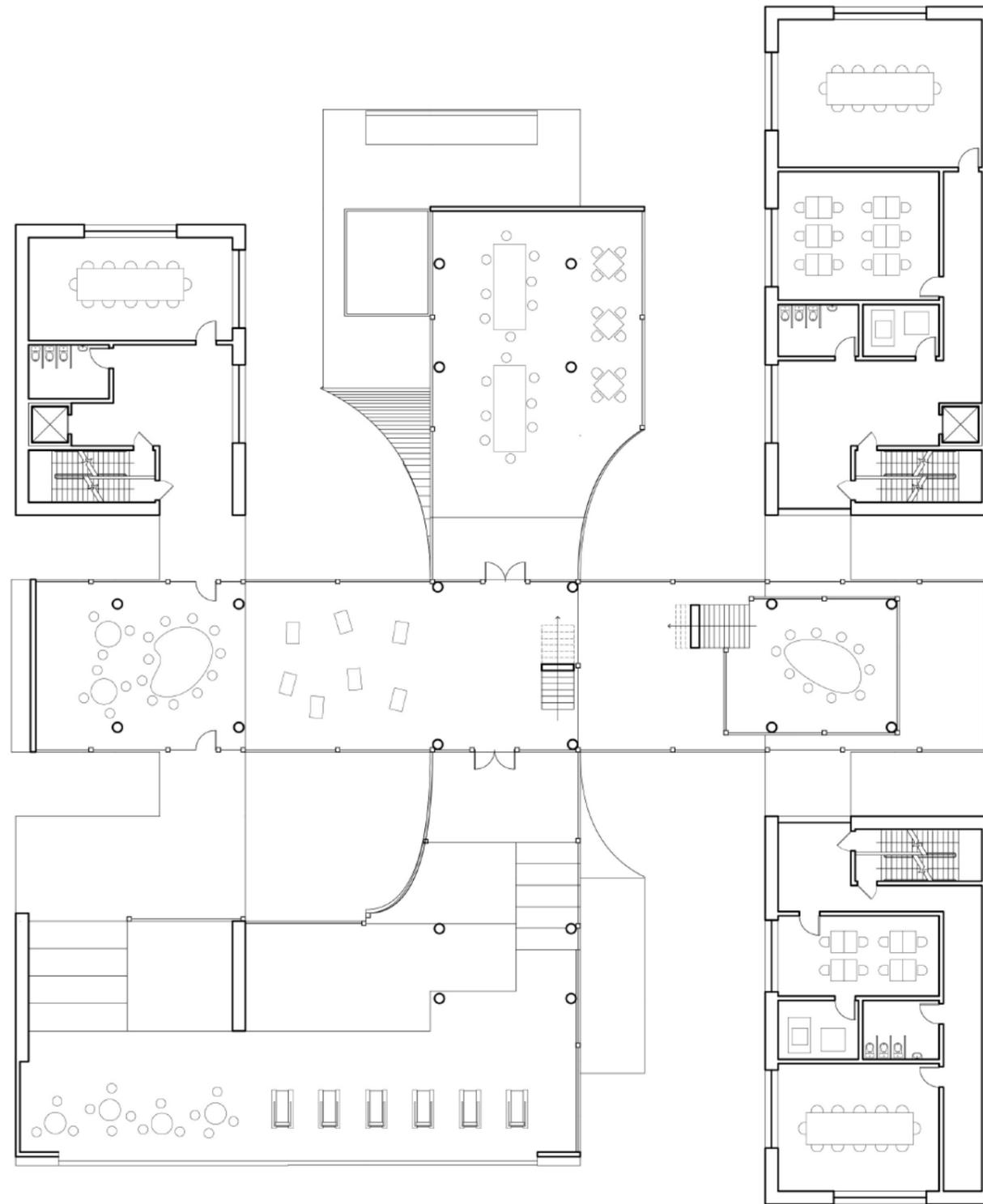
Program



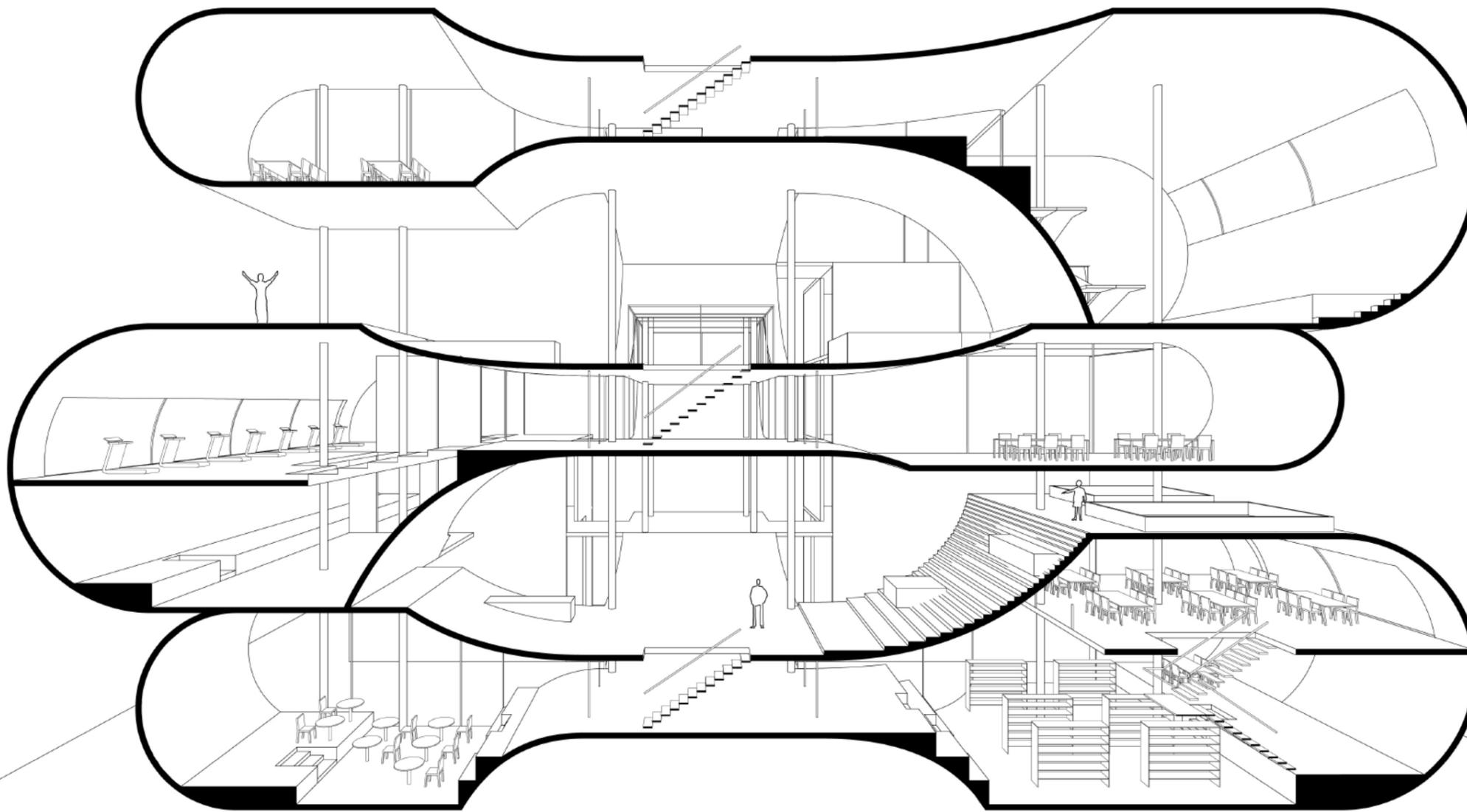
Axon



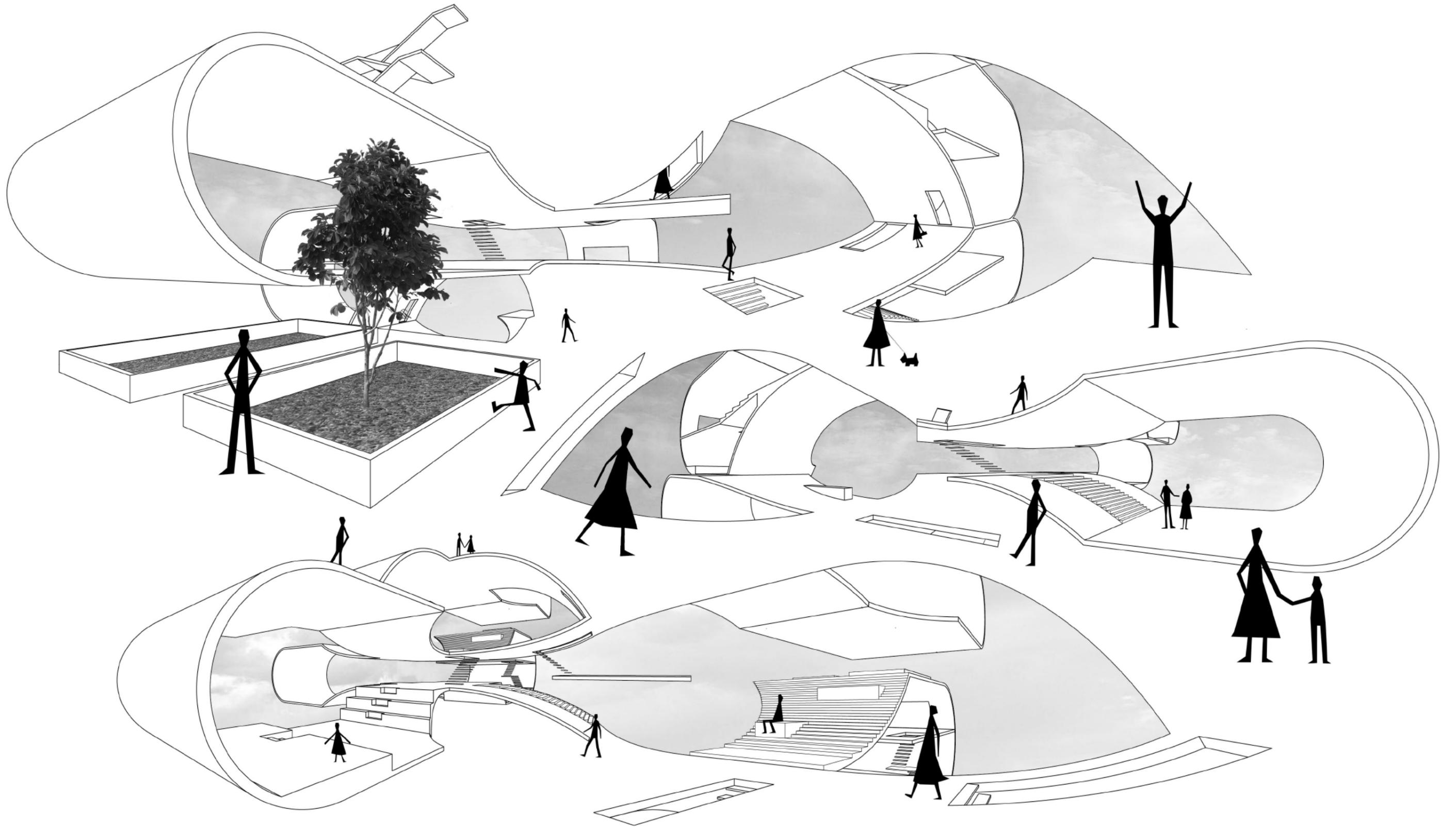
Axon Cutaway

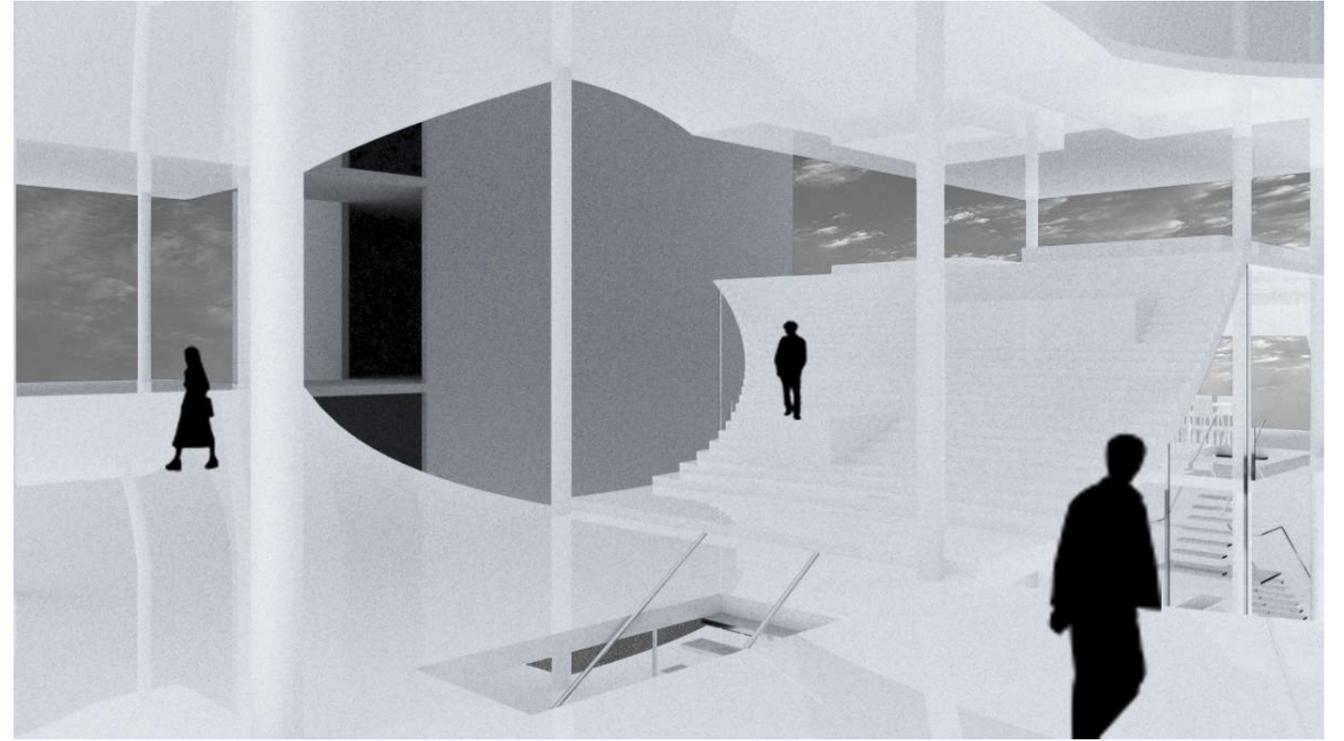
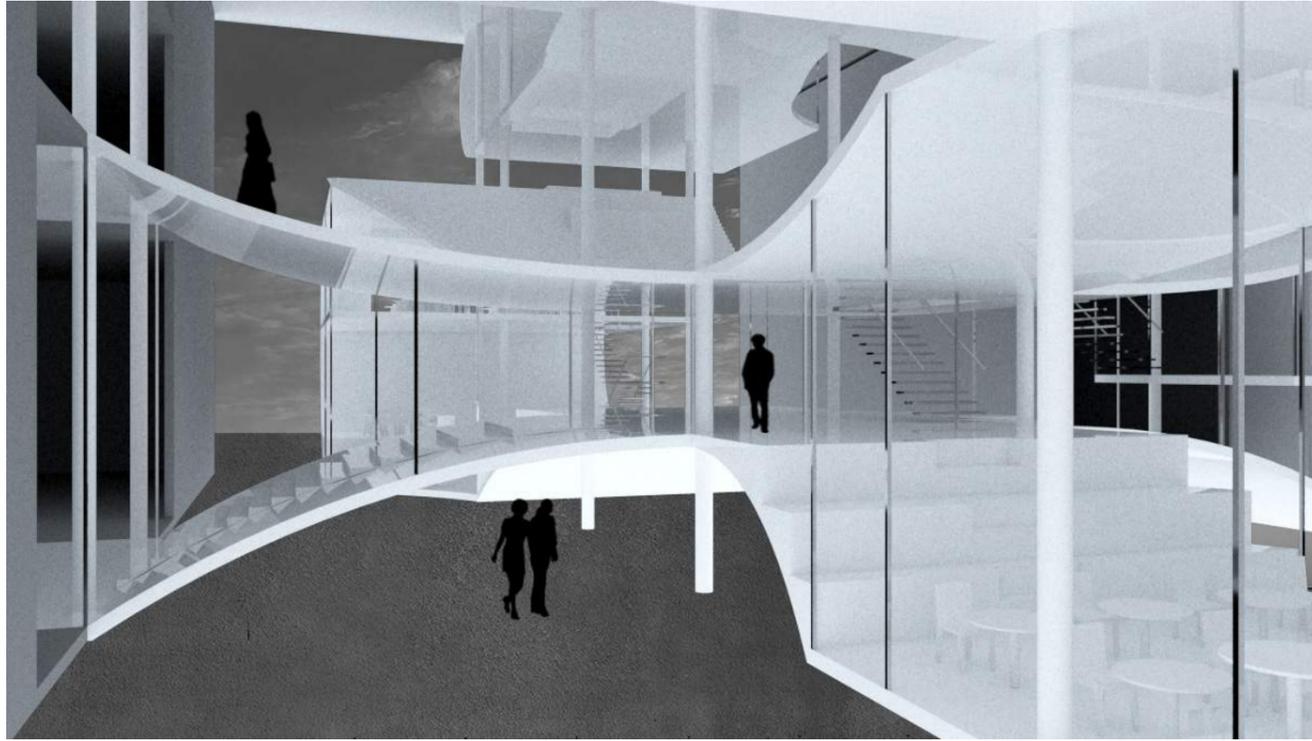


Plan



Section Perspective







**Project 3:
Separation and Reunion**
Bronx Housing Complex

打造文明纽约
构建和谐社会

Core III, Fall 2020

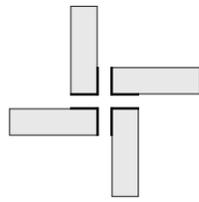
Collaborator: Alexis Zheng
Instructor: Annie Barrett

The project focuses on resident's interaction. The whole frame is developed systematically and includes three spaces: units, internal courtyards and external courtyards. The choice of circulation maximizes resident's interaction: they are always separating in one courtyard and reuniting in another courtyard.

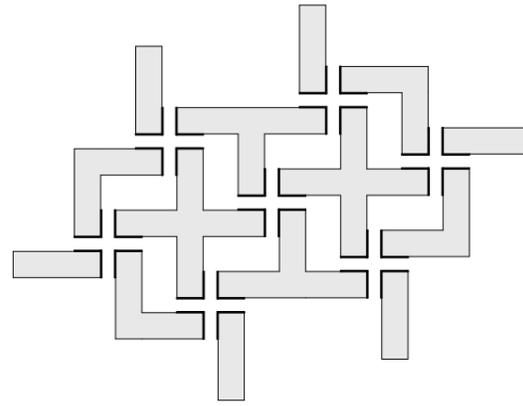
Concept Development



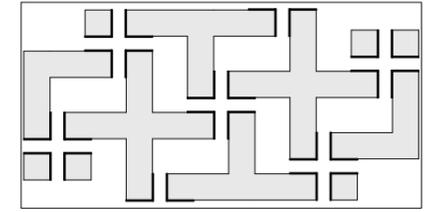
SPLIT UNITS BY CROSS



EXTEND UNITS



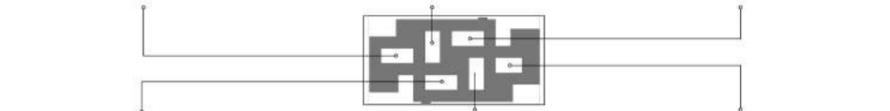
CONNECT THE BASIC MODEL TO CREATE A FRAME



DEVELOP FRAME WITH SITE BOUNDARY



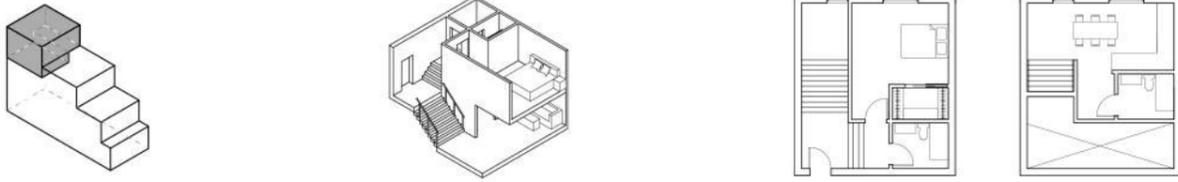
Axon



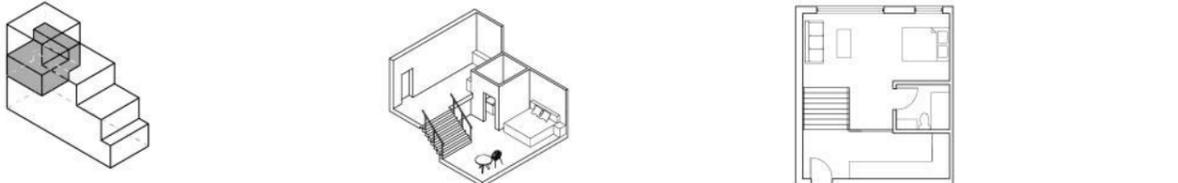
Courtyards

Unit Types

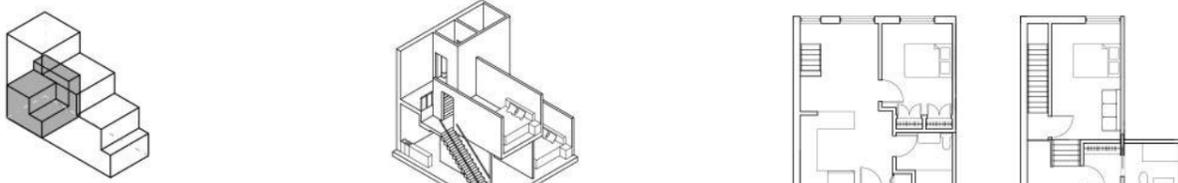
Unit A
815 SF



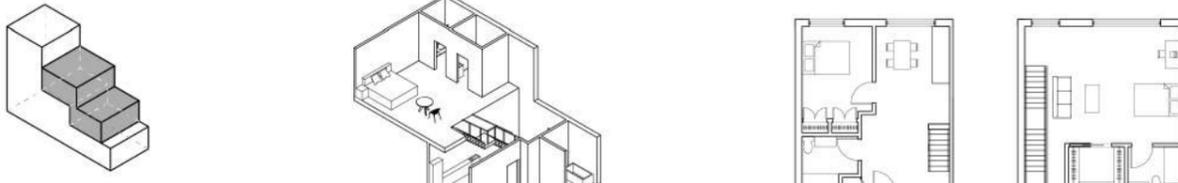
Unit B
500 SF



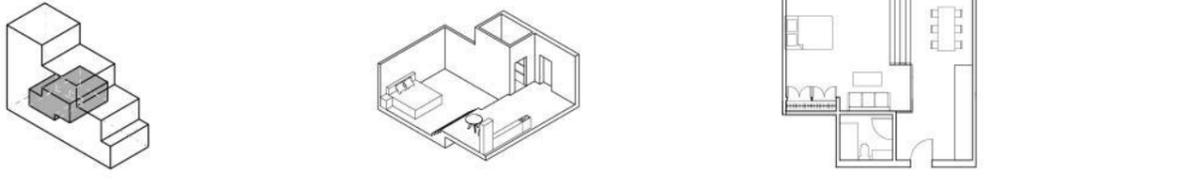
Unit C
880 SF



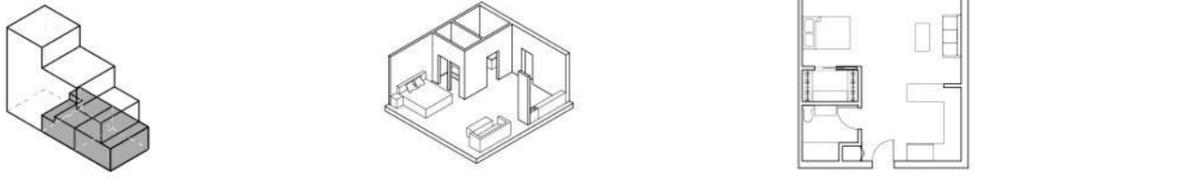
Unit D
1000 SF



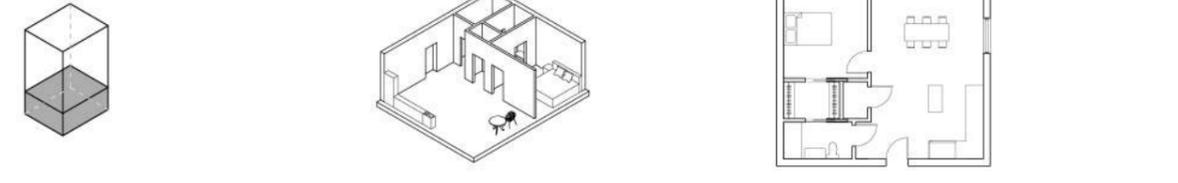
Unit E
570 SF



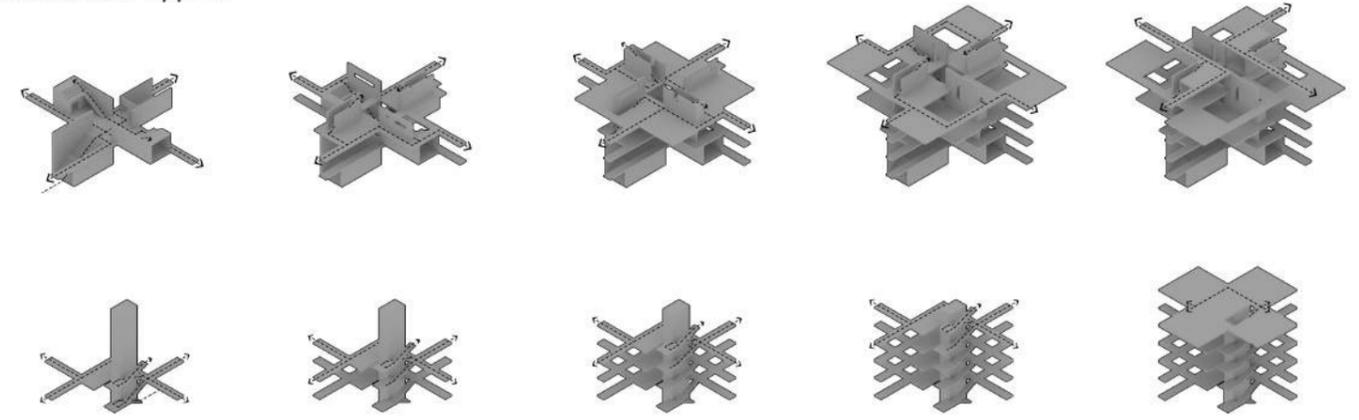
Unit F
530 SF

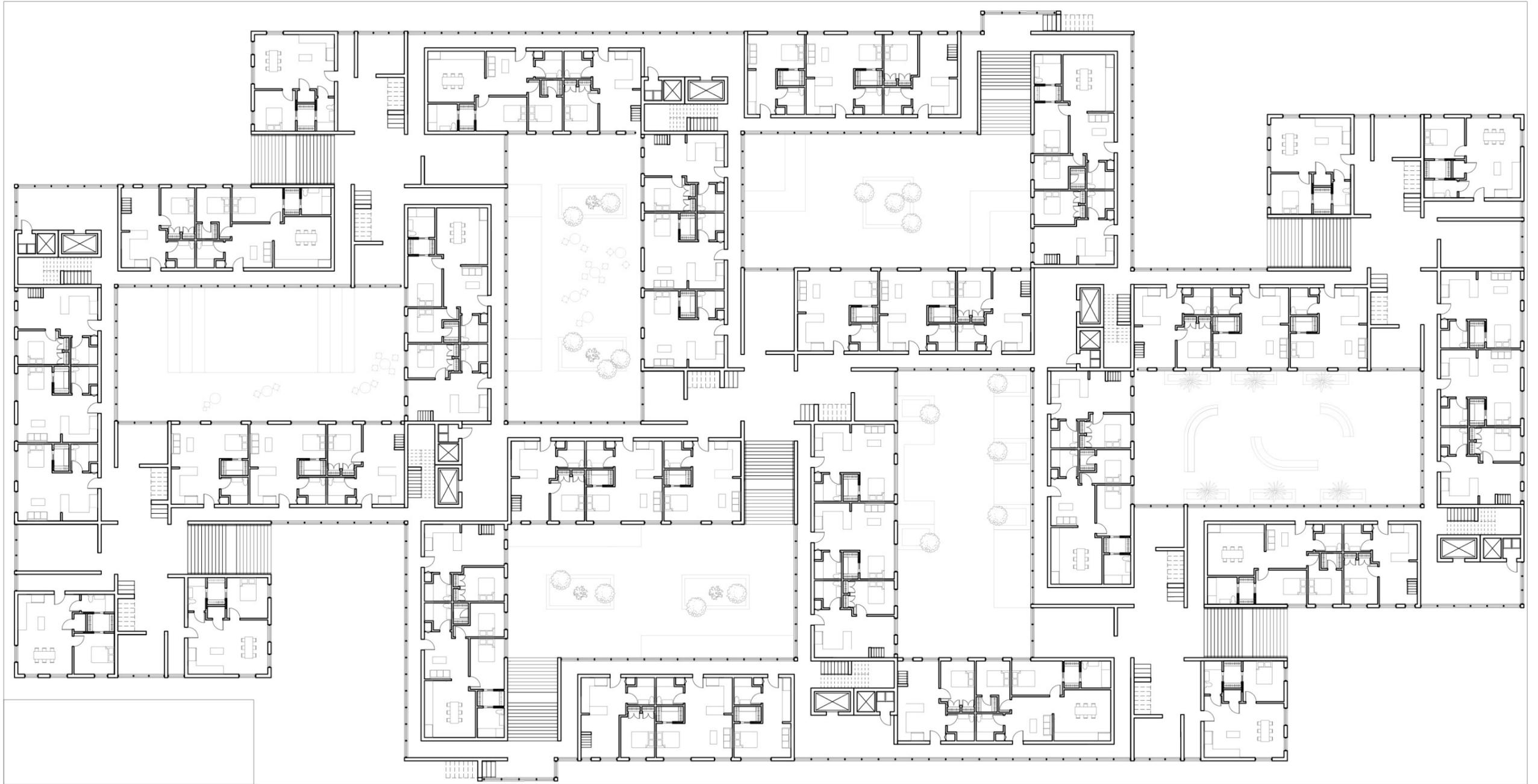


Unit G
670 SF



Circulation Types





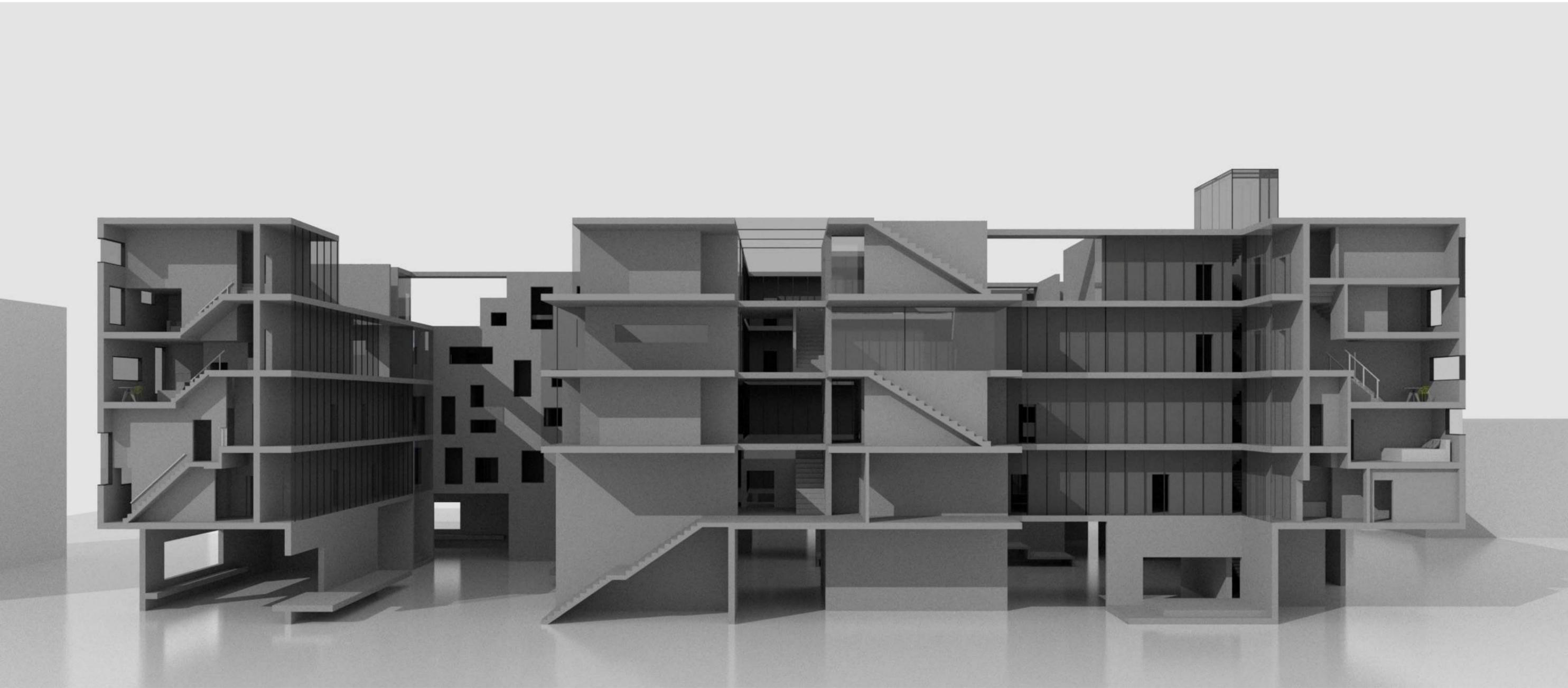
First Floor Plan



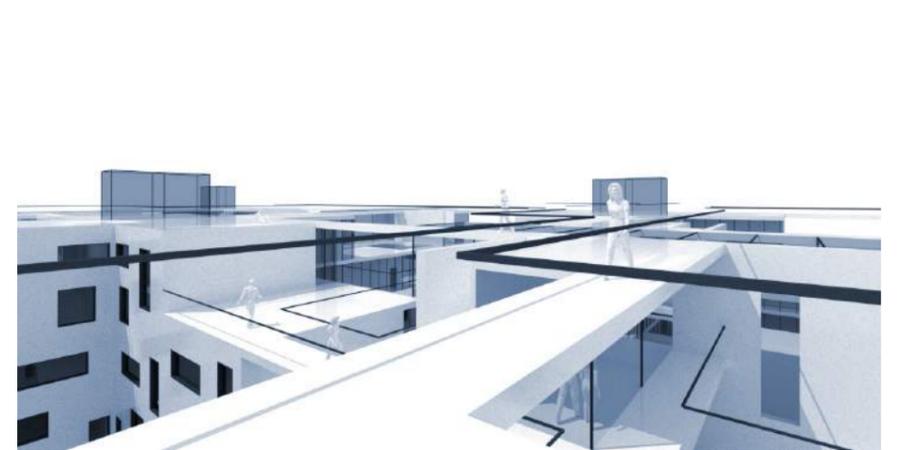
Third Floor Plan



Section Perspective



Section Perspective



Project 4: Long Box and Artificial Landscape

Vaccination Center and Film Center

Advanced IV, Spring 2021

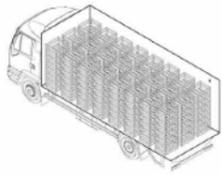
Individual Work

Instructor: Phu Hoang



The project explores the relationship of film and architecture. By analyzing the Syndromes and A Century by Apichatpong, the concept of moving shots and perspective is used for the project. The general layout of the project is created based on the research of changing of scenes during the movement, and exterior space has different features in perspective with the interior space in the project. The space provides possibility for motion not only for people but also for vehicle. For the near future, inspired by the food distribution system in wellness research and truck as a system in thermal infrastructure research, the trailers used in film industry are used as mobile vaccination center.

Food Cold Chain

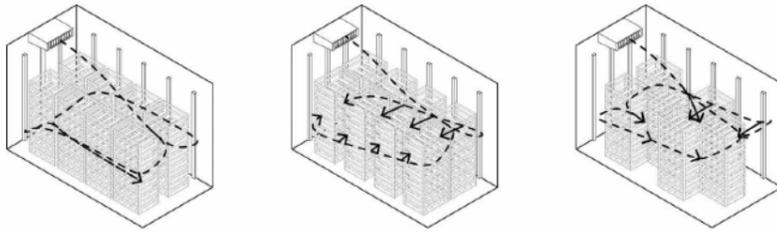


Field, 25°C
○

Temperature

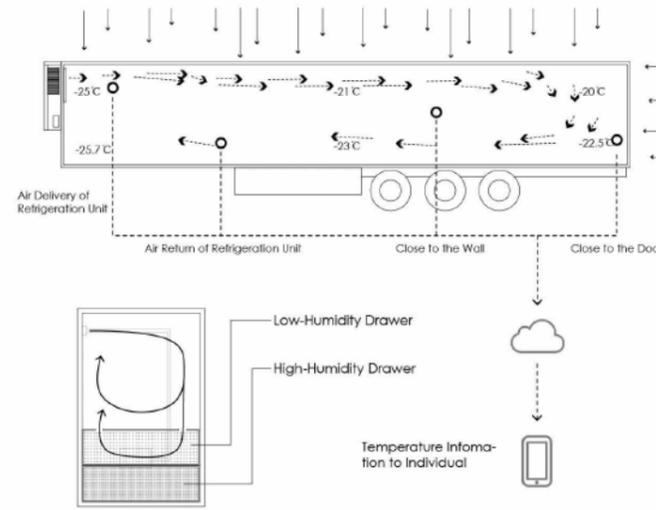
Shipment

Air Circulation in Truck



Transportation, 0°C
○

Storage Space



Refrigerator, 5°C
○

Distribution Space



Food Pantry:
Community Action Food Pantry

Food Pantry, 4°C
○

Distribution Site, 2°C
● →

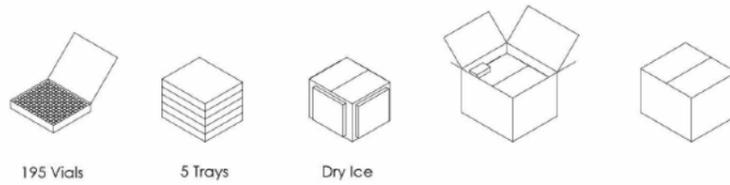
Manufacturer, -20/-70°C
●

Transportation, -20/-70°C
●

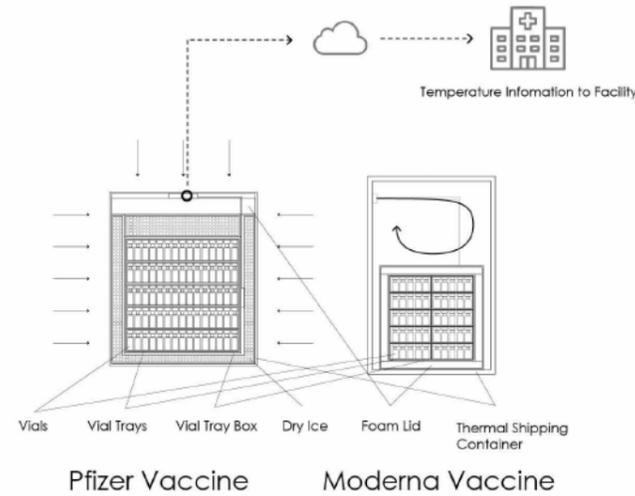
Thermal Shipper, -20/-70°C
●



Moderna Vaccine



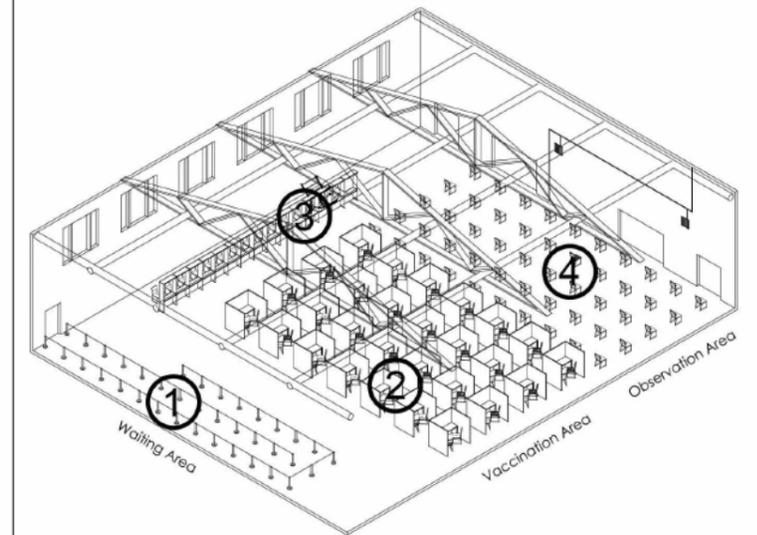
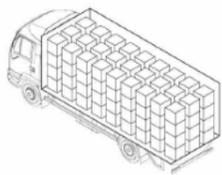
Pfizer Vaccine



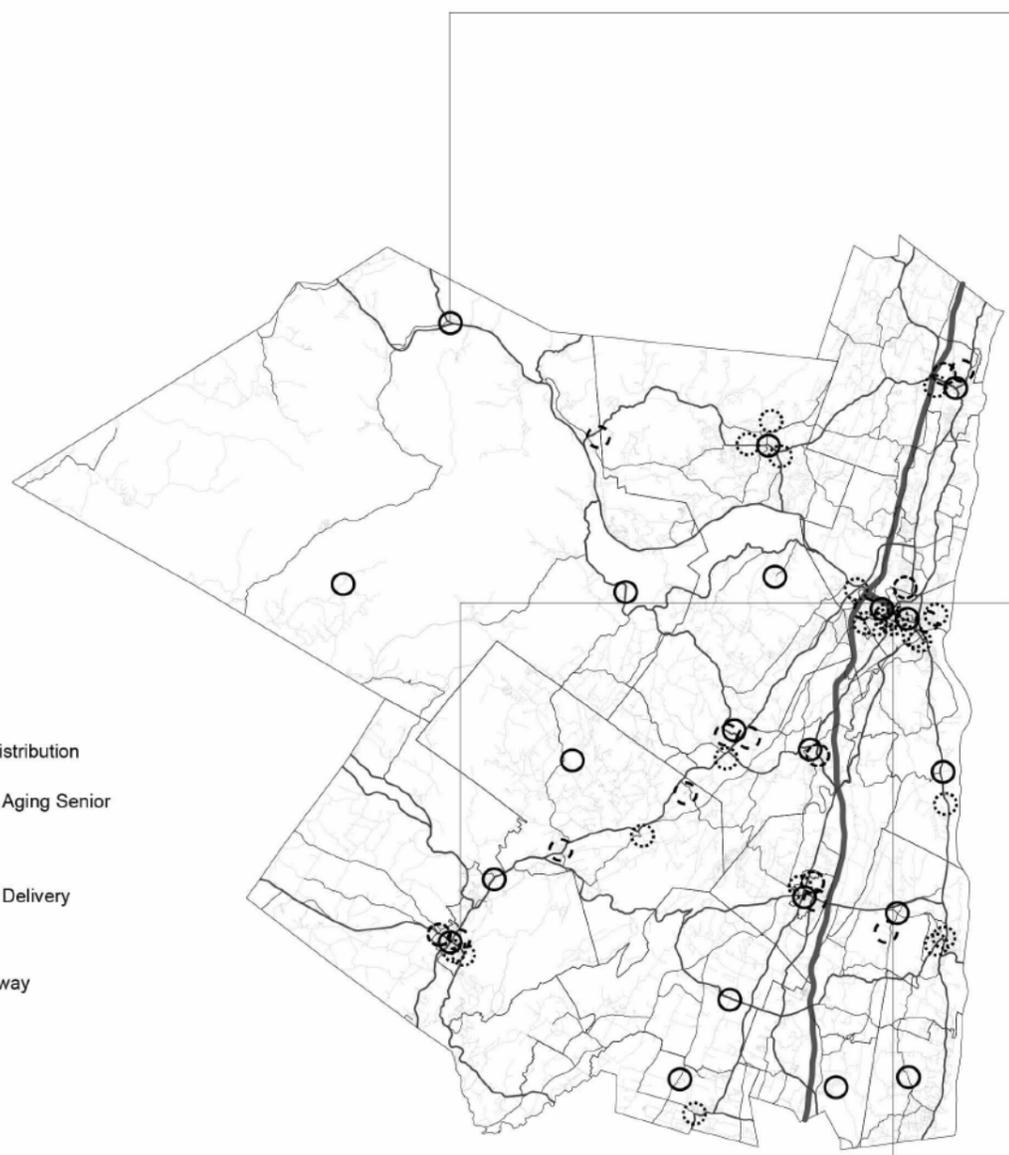
Pfizer Vaccine

Moderna Vaccine

Vaccine Cold Chain

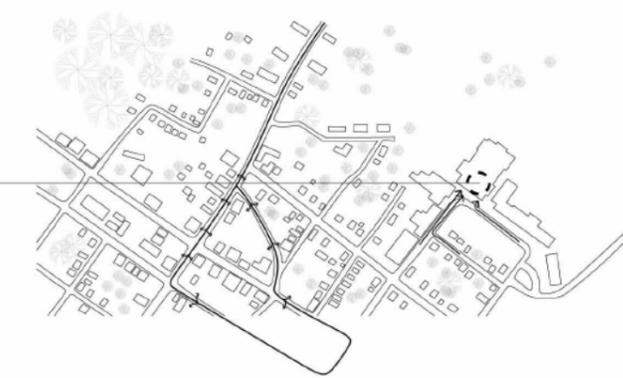
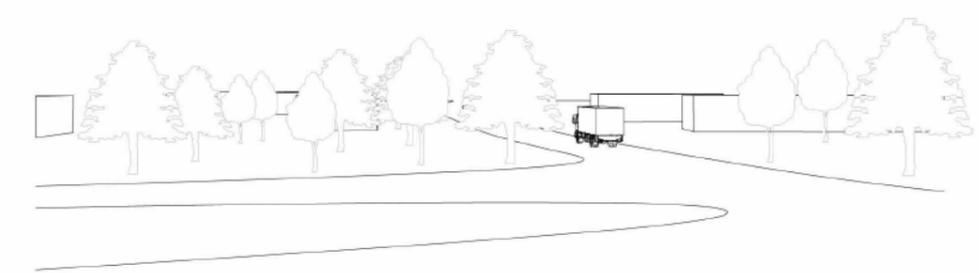


Vaccine Distribution Site:
Kate Walton Field House at Kingston High School



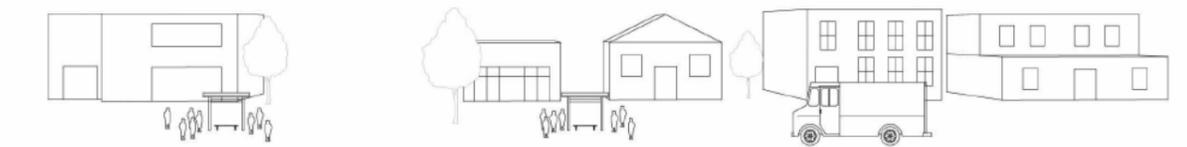
Meal Distribution, Shandaken

Population: 2964
 Time: T, Th, Sat
 Who: Ulster County Residents



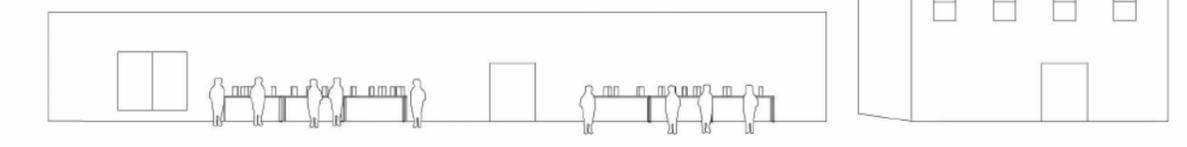
Ellenville School District

Children Population: 1119
 Time: M, W
 Who: Ellenville Students
 Notes: Delivery along bus routes, or pick up at school

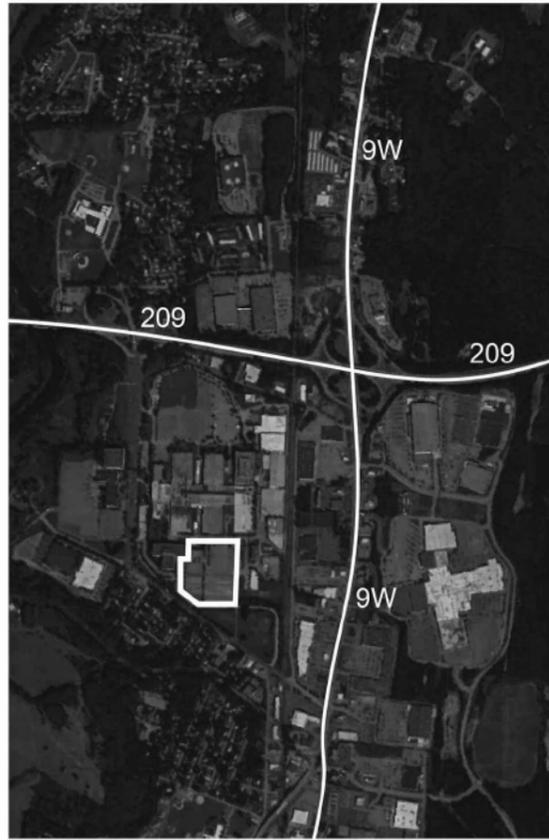


People's Place Food Pantry

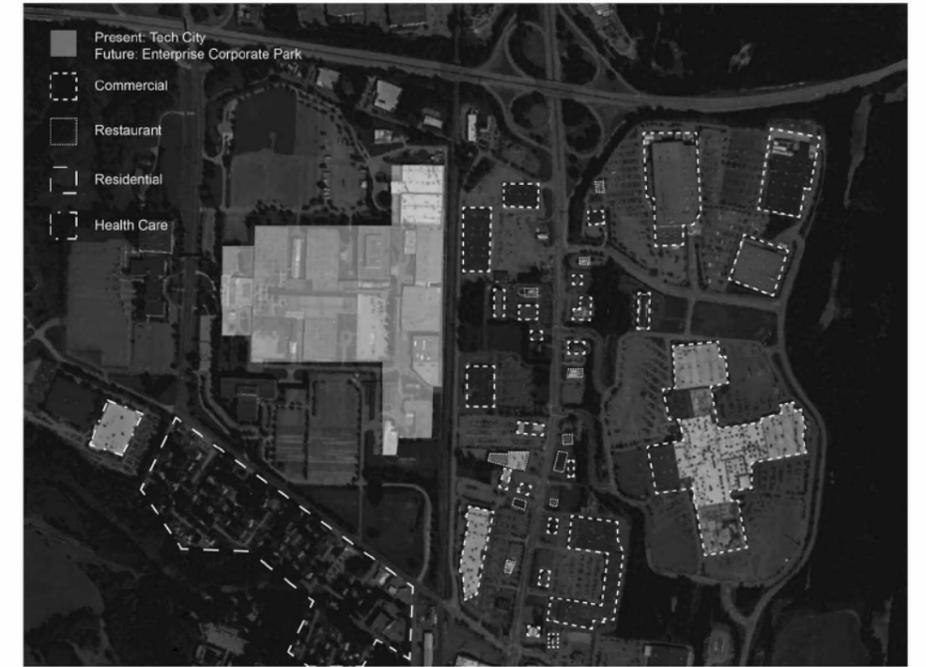
Population: 23506
 Time: M-F 10-1, W 5:30-7:30
 Who: Ulster County Residents
 Notes: Pick up



Site Analysis



Vehicle Circulation



Program

Site Area: 592200 sq.ft
Location: Kingston
Artery: Route 9W, 209

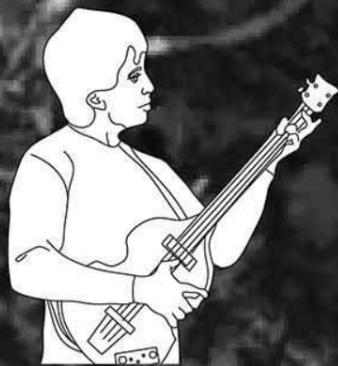


Concentration



Public Transportation

Ulster Performing Arts Center



I'm looking for a large stage where I can perform for residents in Ulster County when I'm free. However, the Ulster Performing Arts Center is too formal and restricted in availability for both of me and residents.



Why is there only one cinema in Kingston? I want to watch films with people sitting around me and have discussion about the film after it finishes. How can I find this kind of space?

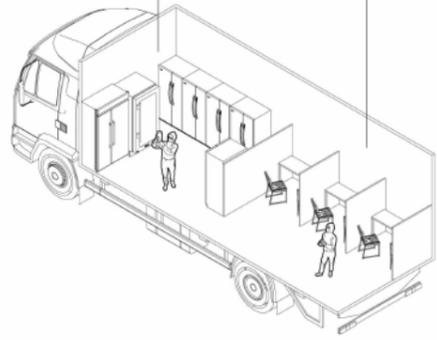


NCG Cinema

Trailer Comparison

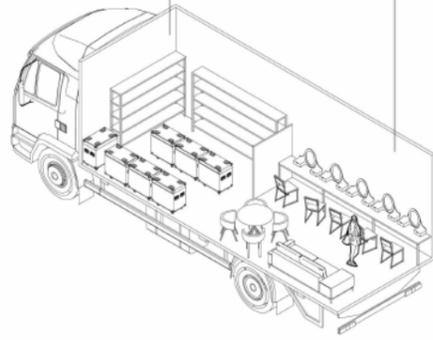
Vaccine Storage

Vaccination Space



Equipment Storage

Actor Resting Space

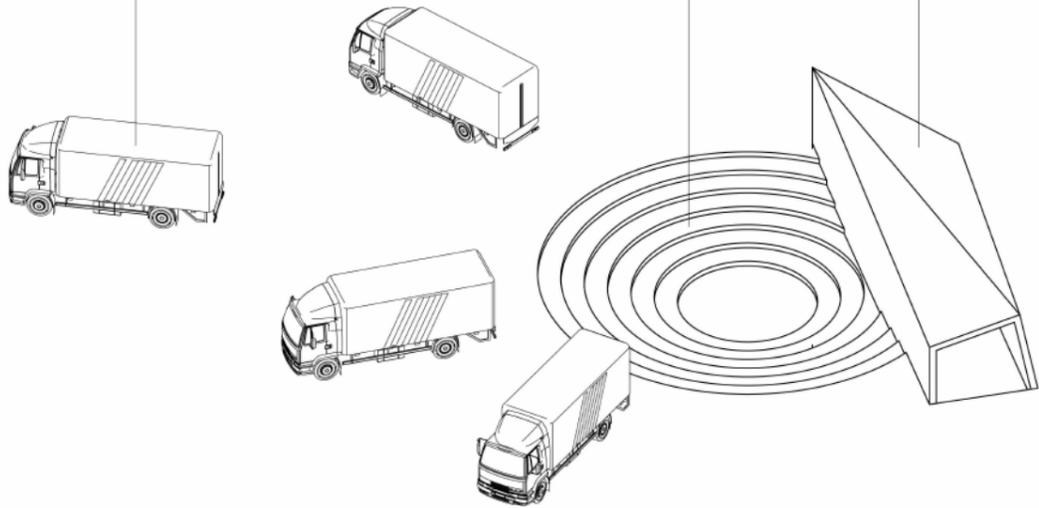


Program

Inoculation & Storage

Waiting & Recovery

Consultation

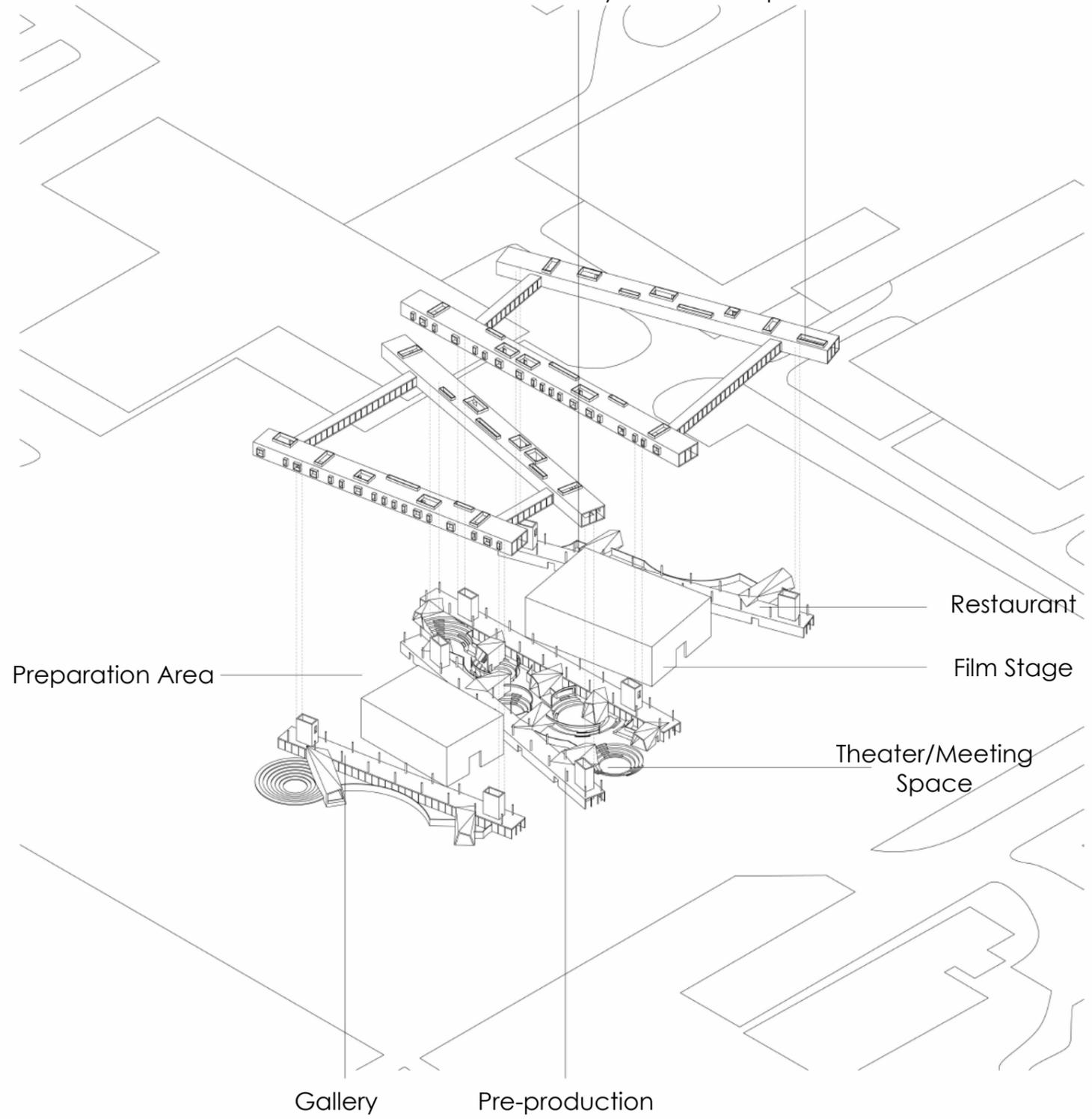


Vaccination Center

Program

Library

Post-production



Gallery

Pre-production

Restaurant

Film Stage

Theater/Meeting Space

Film Center



Part 1



Part 2

Concept

1. Shot: outdoor/indoor, still/pan & zoom

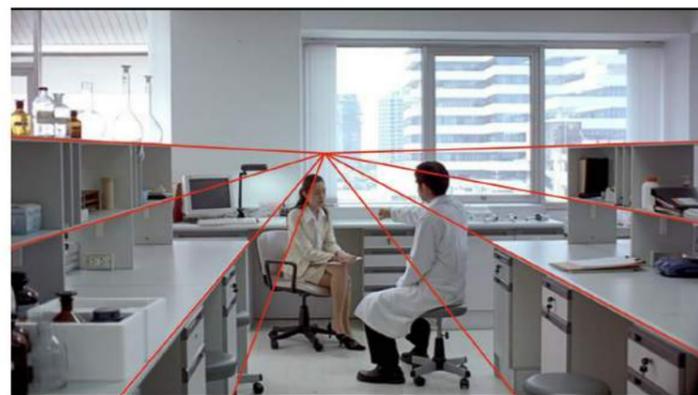


Zoom Shot

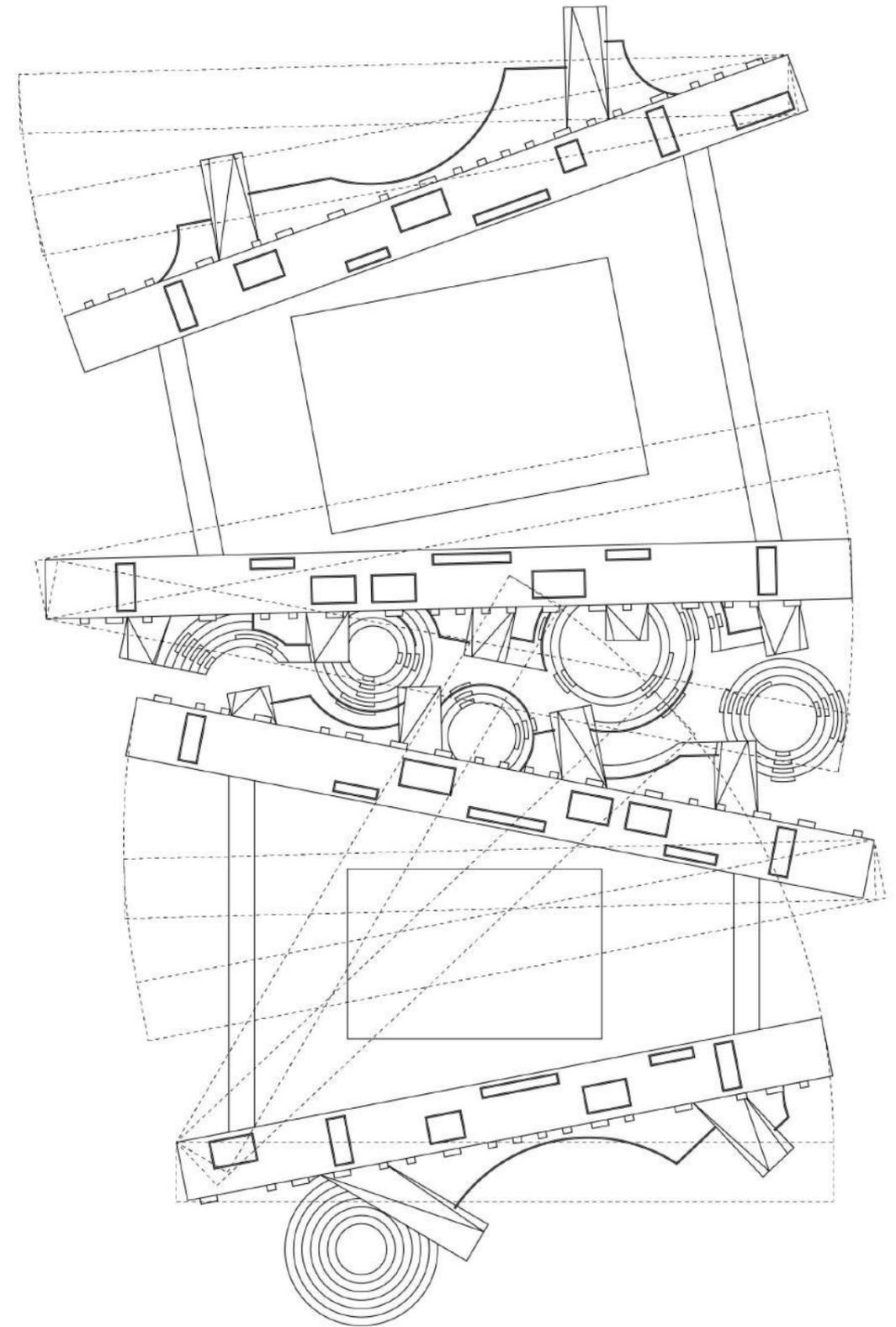
2. Perspective: rural/urban, outdoor/indoor, scattered perspective/focus perspective



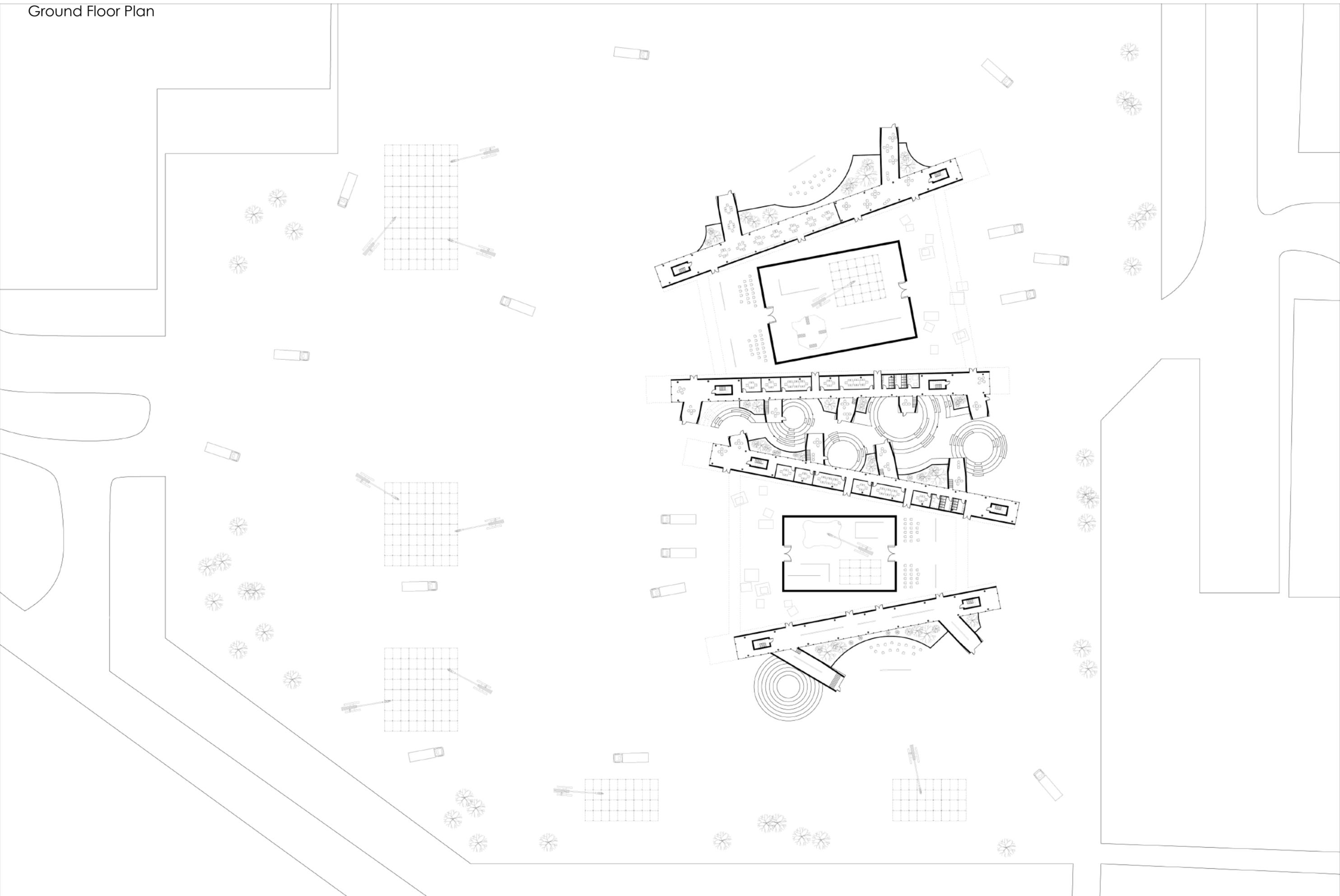
Rural Part



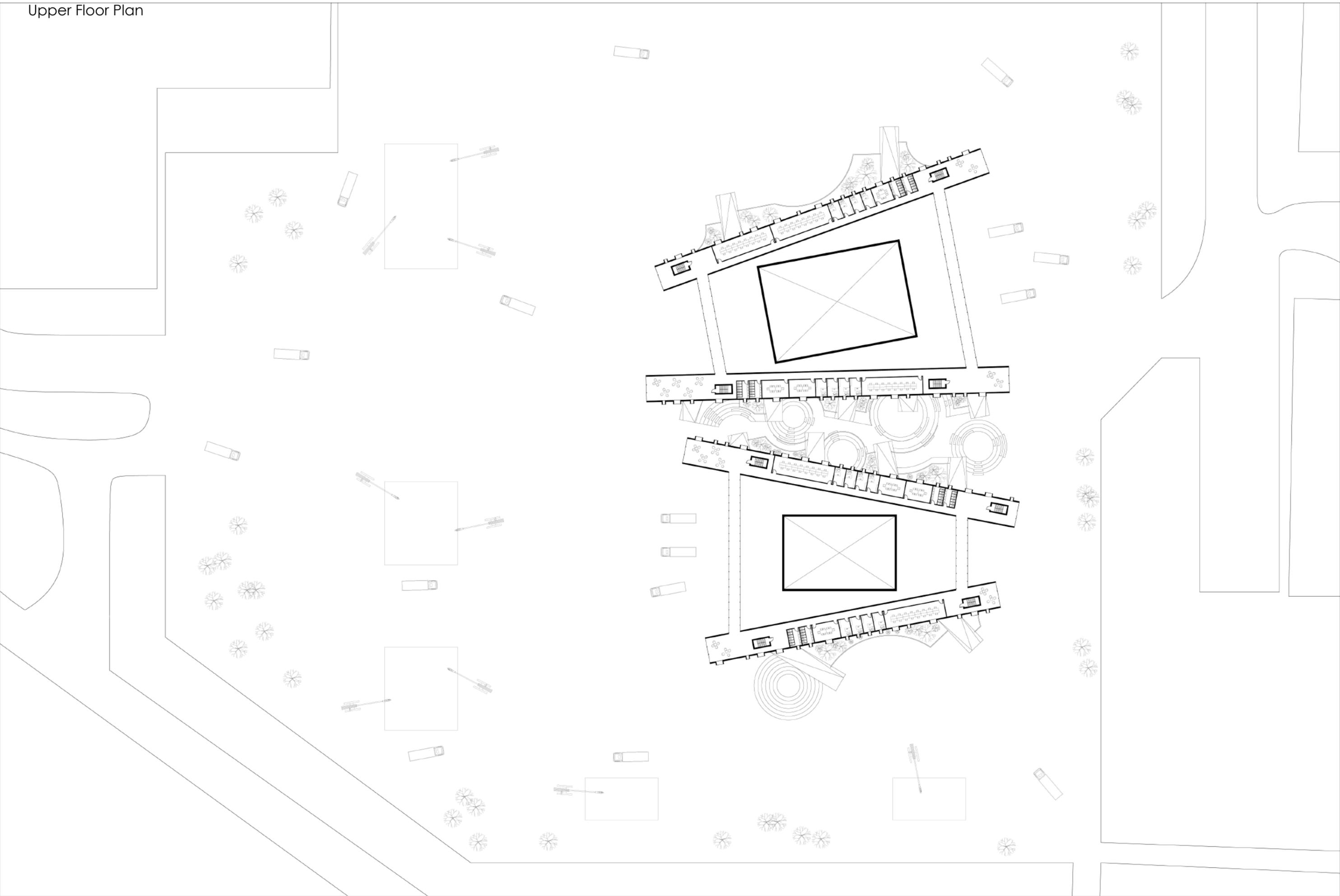
Urban Part



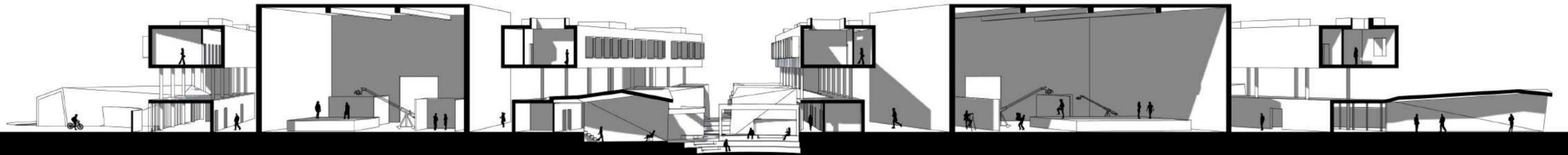
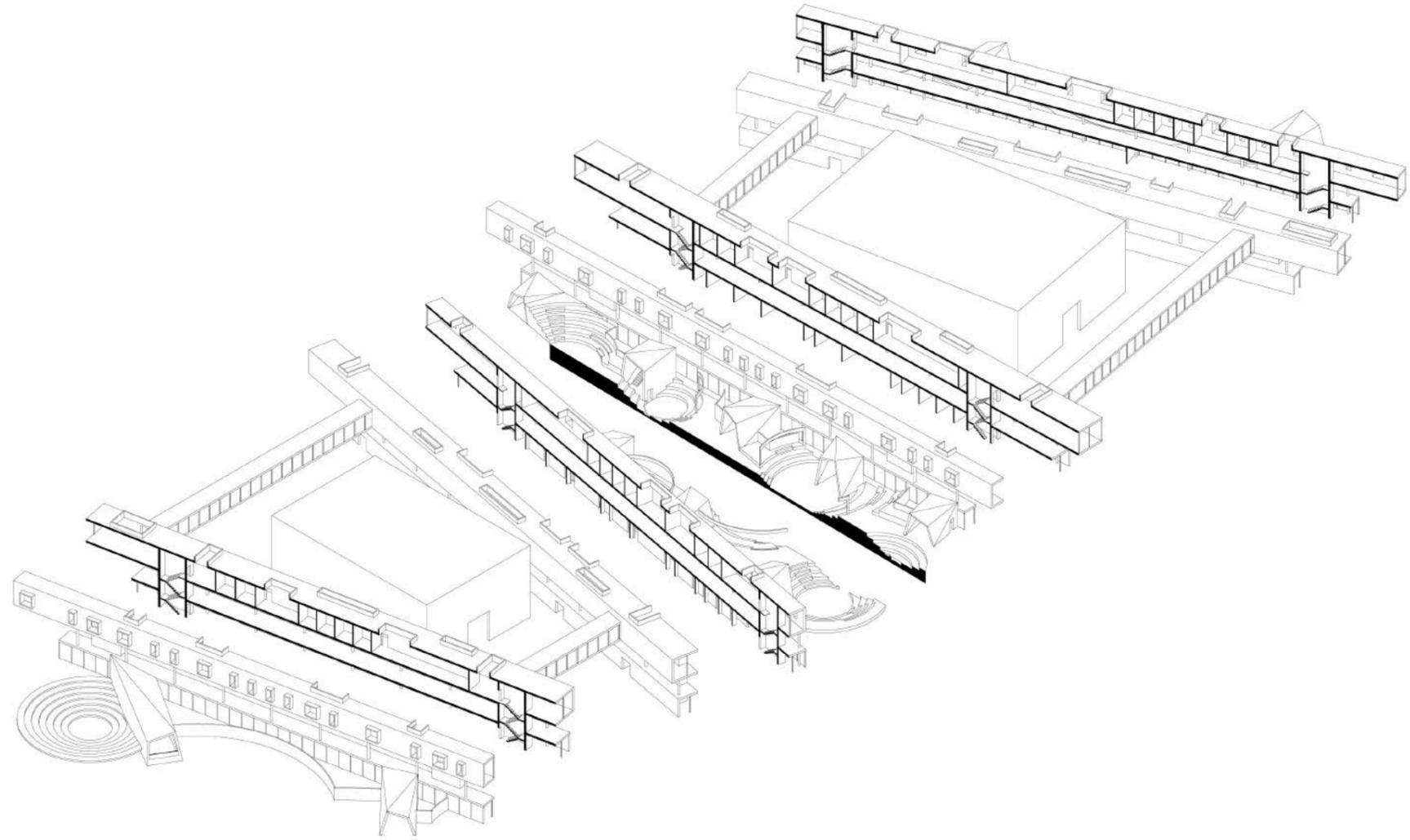
Ground Floor Plan



Upper Floor Plan



Section







Vaccination Center and Vaccination Bus



Film Center

Project 5: Luffa House

Lever House Intervention

Advanced V, Fall 2021

Collaborators: Bingyu Xia, Xumin Chen

Instructor: Andres Jaque

The project is an intervention of Lever House, and tries to resist the cleanliness concept of the company and the plastication of its detergent products. Existing materials of the building's interior are used to create a space at the facade of the building for luffa to grow. Luffa gradually intrudes the interior and influences people's lives in the building.



California, USA
Nathan and Sherri Pauls
Luffa Gardens
Local Events 2021/2022

by Jessica Potter December 26, 2019



Aloha In the Park: October 9th, 2021
Address: Dry Creek Park
855 N. Clovis Ave.
Clovis, CA 93611
Hours: 10 a.m. - 4 p.m. (Saturday)

Italy
Leone Contini
Foreign Farmers (2018)



Juice of Luffa can treat cough
and nourish skin according to
Medical book in Qing dynasty.



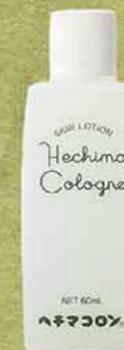
China
Poem written by
You Lu about
Luffa, Song Dy-
nasty
(960-1276)

“丝瓜涤砚磨洗，
余渍皆尽而不损砚”

Luffa is native to
South and Southeast
Asia.



Vietnam
Luffa is cooked in many ways.



Japan
Hechima, illustration from the
Japanese agricultural encyclo-
pedia Seikei Zusetsu (1804)

Paraguay
Elsa Zaldivar uses luffa to
deal with housing short-
age and poverty. She
created a building mate-
rial with luffa waste.

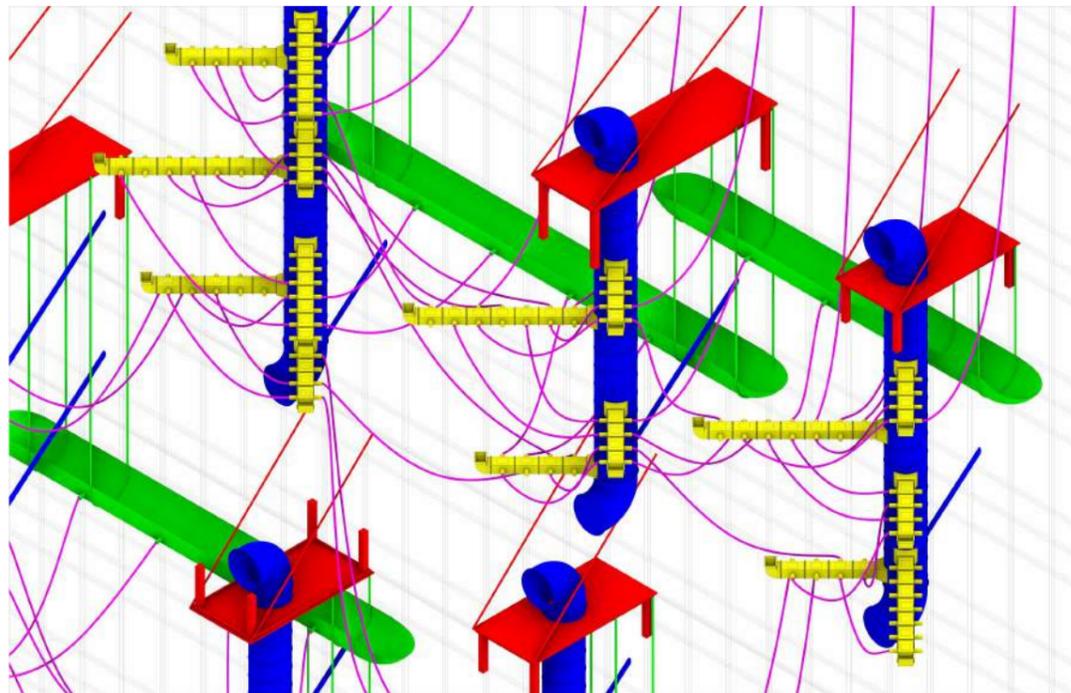


Ghana
TV Channel interviewed people who
used luffa.

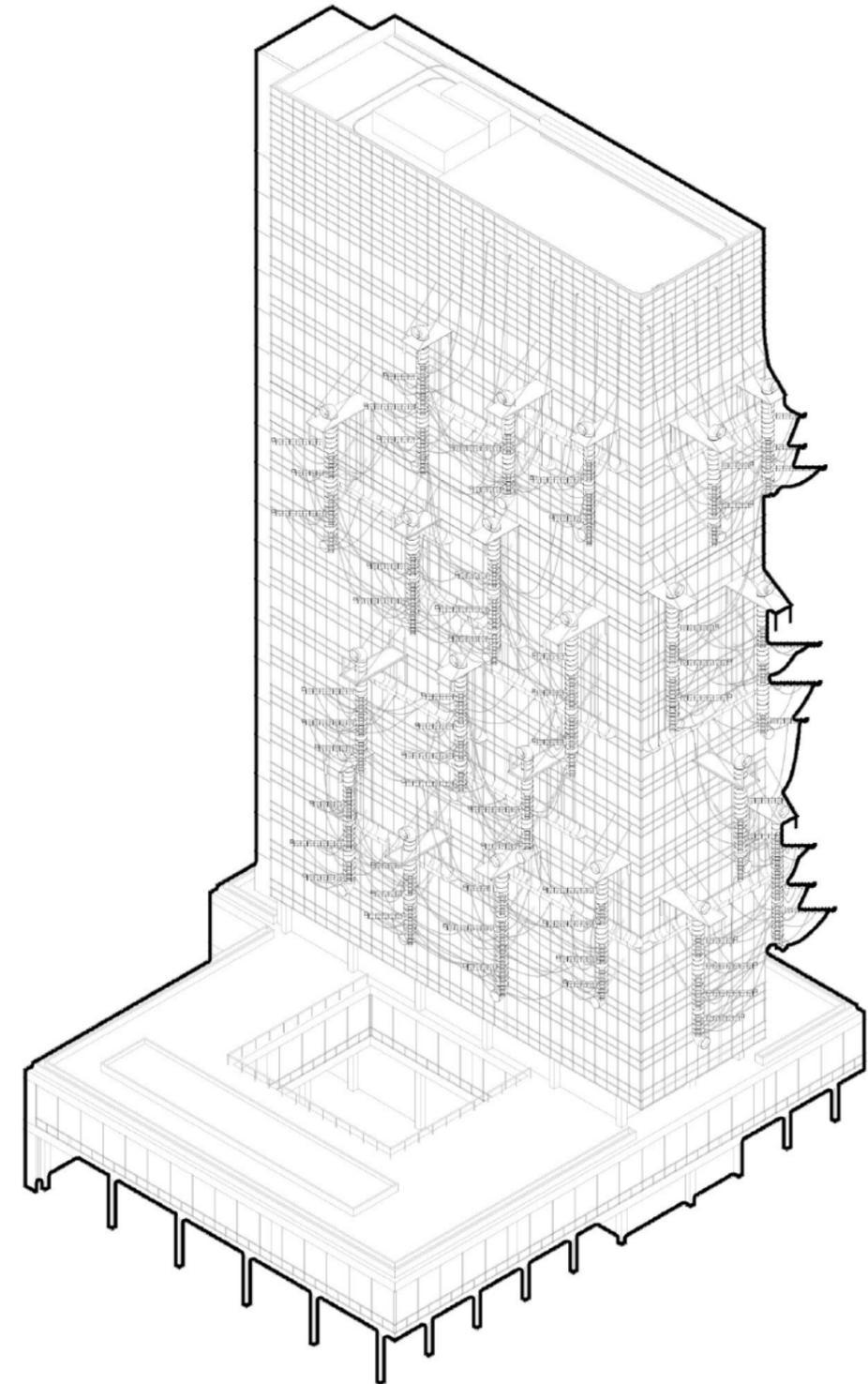




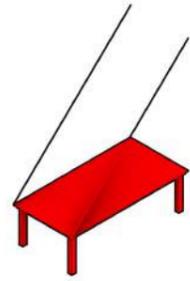
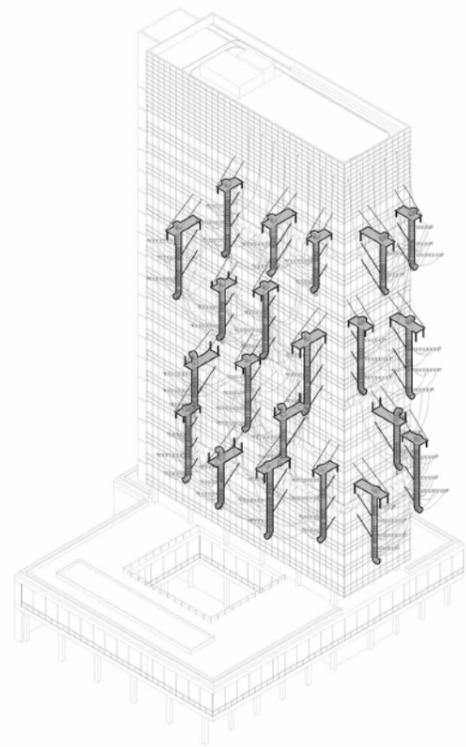
Existing Materials of the Building's Interior



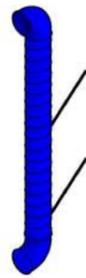
Intervention



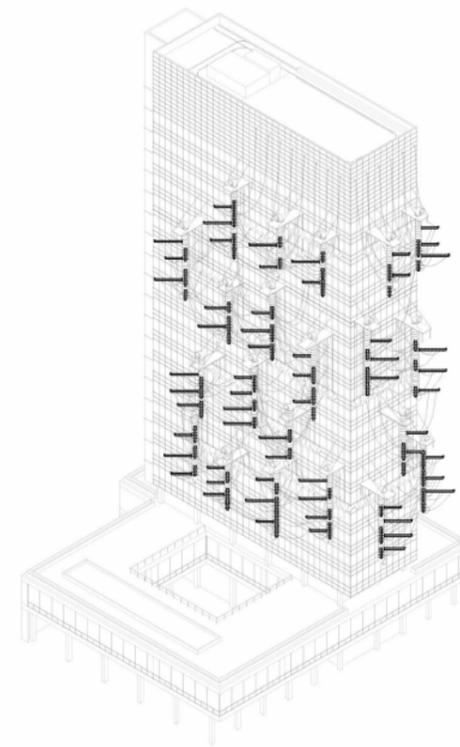
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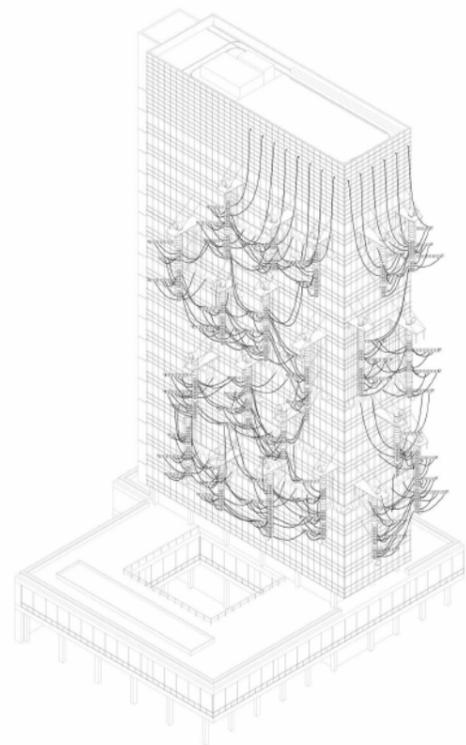
Desk: Hanging System



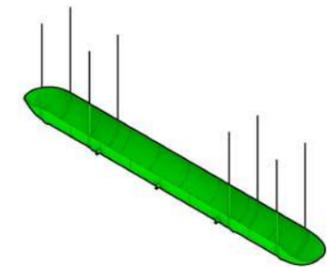
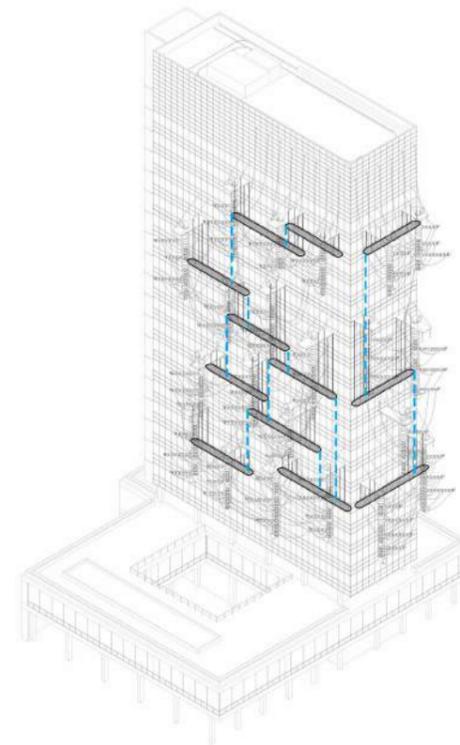
HVAC Duct 1: Soil Compost



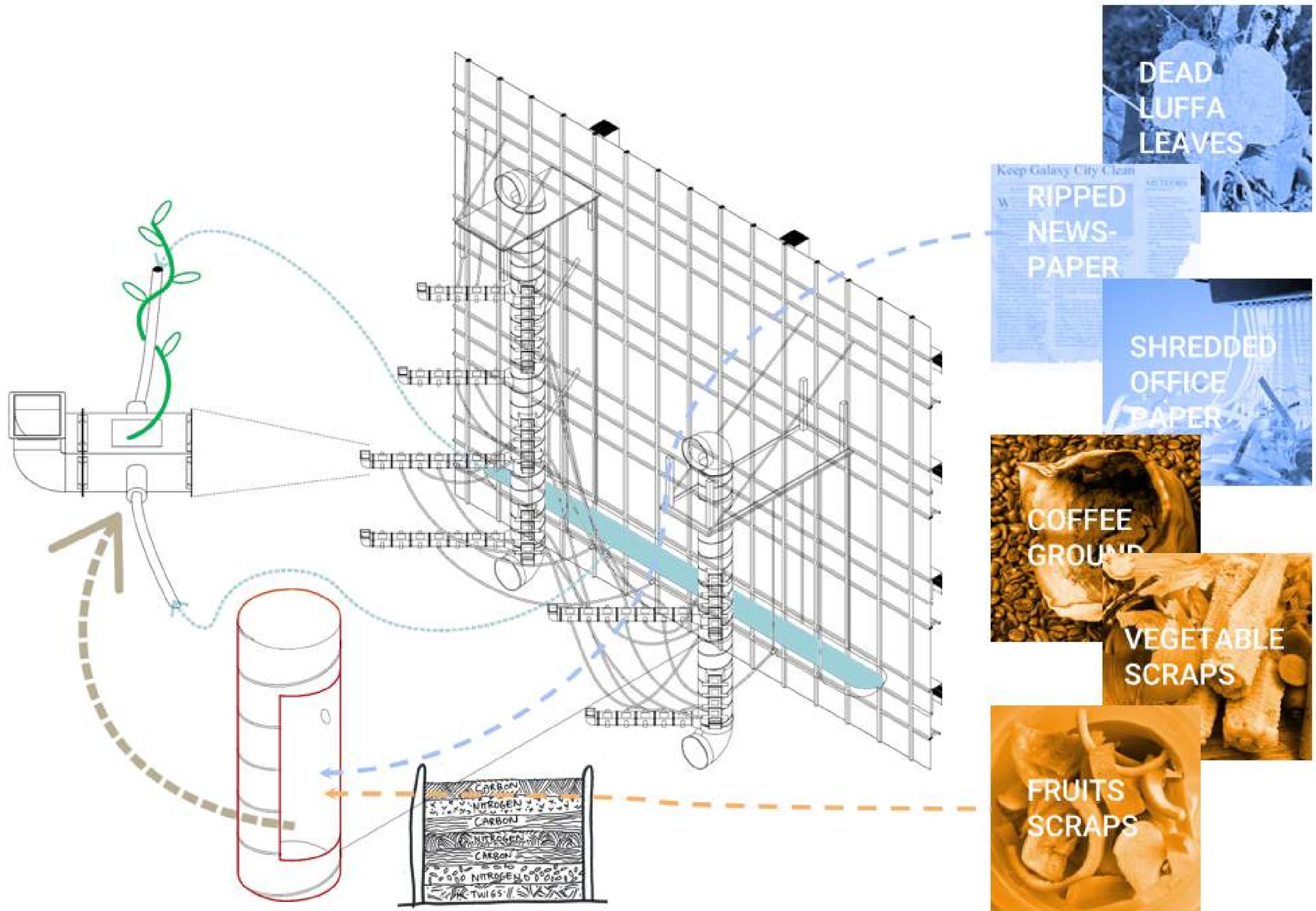
HVAC Duct 2: Plant Container



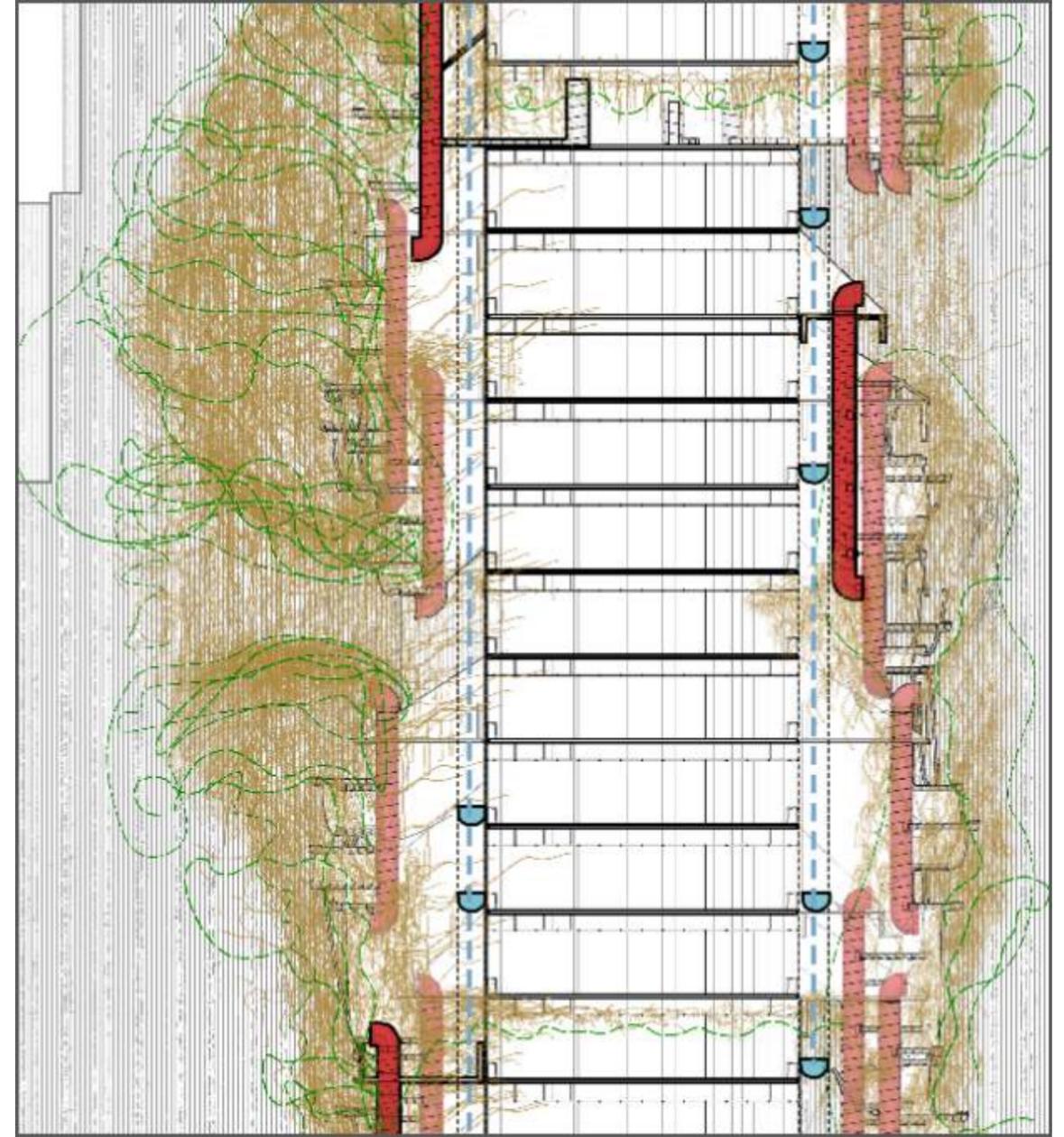
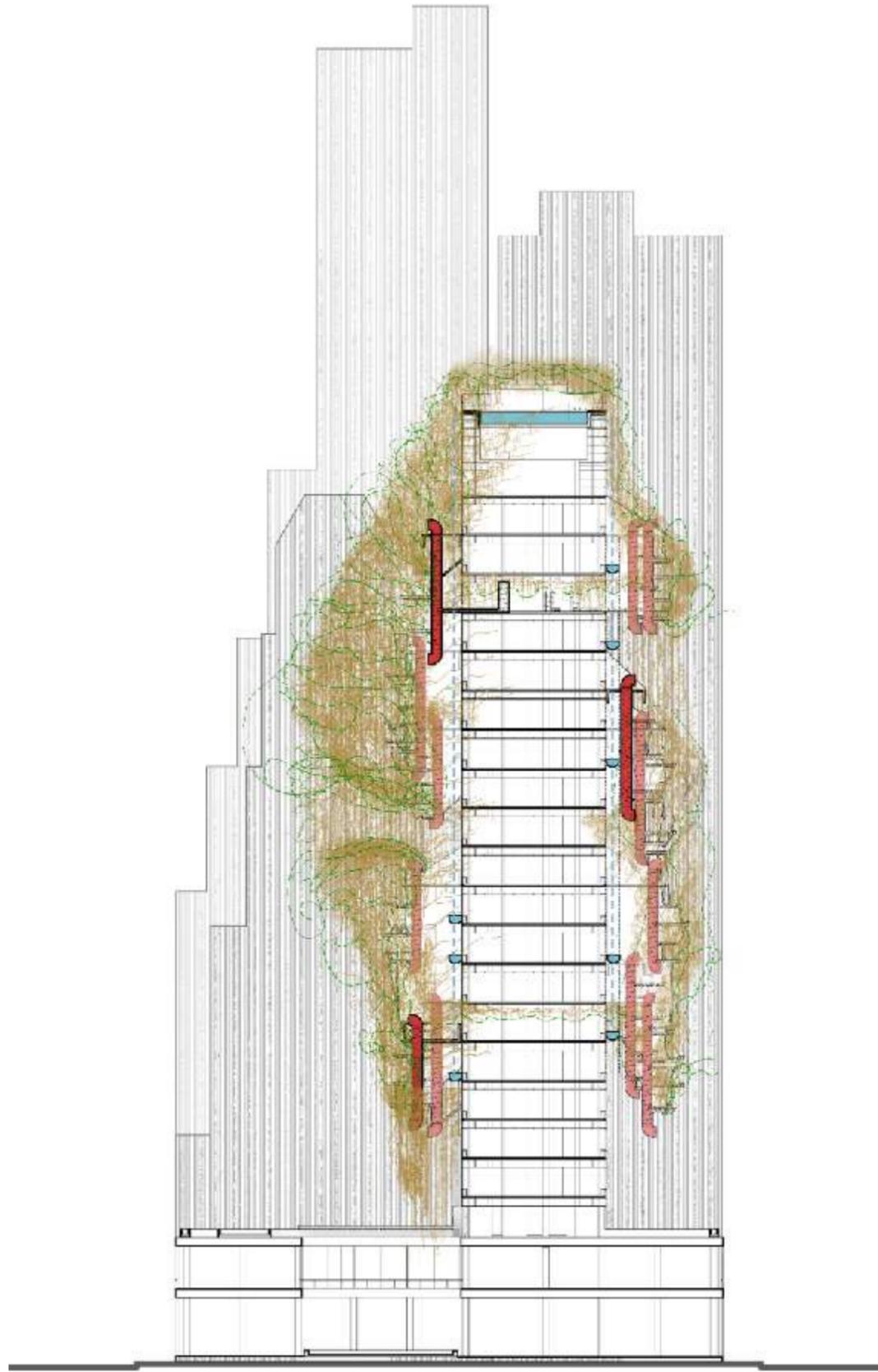
Rope: Irrigation



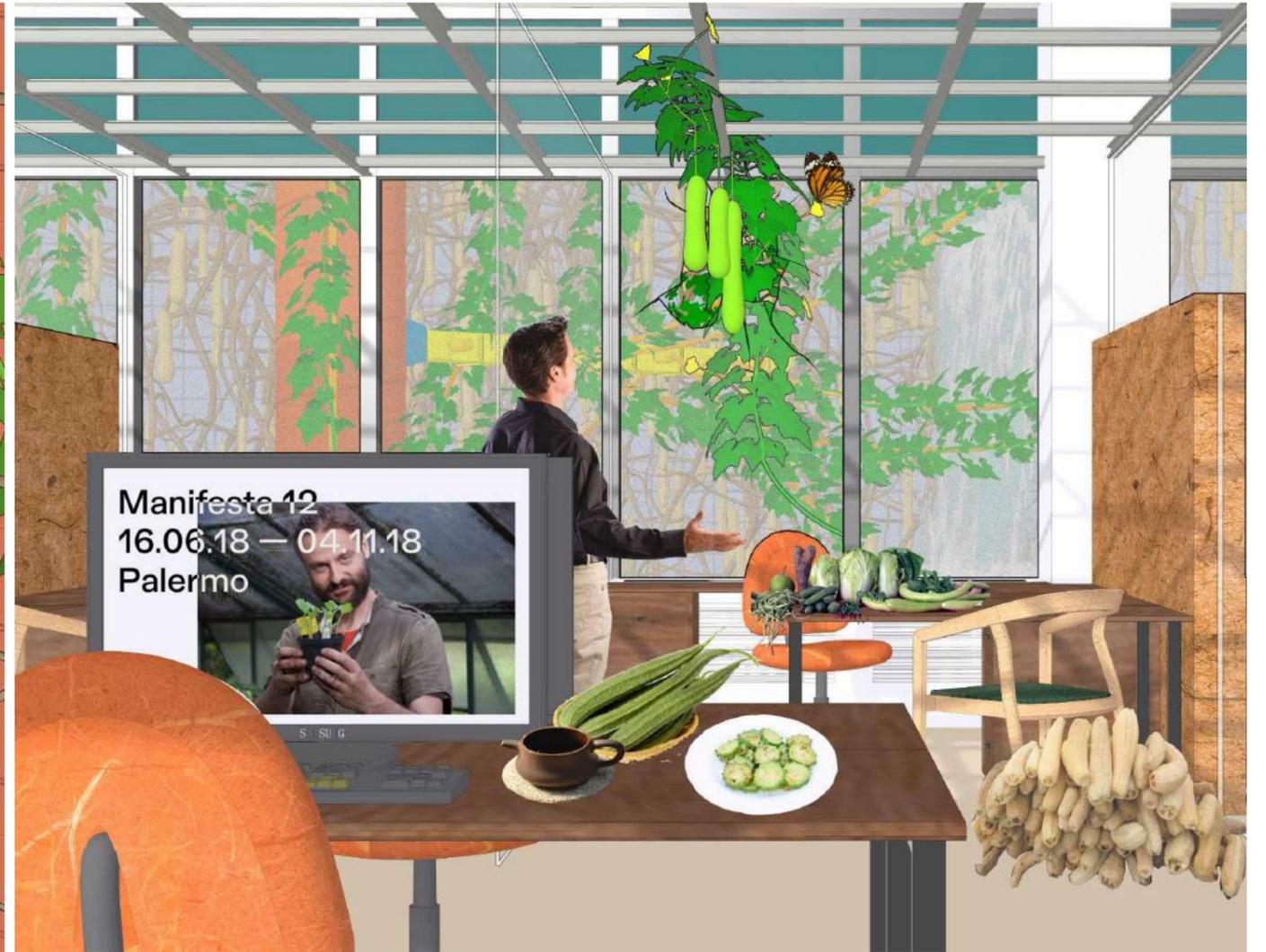
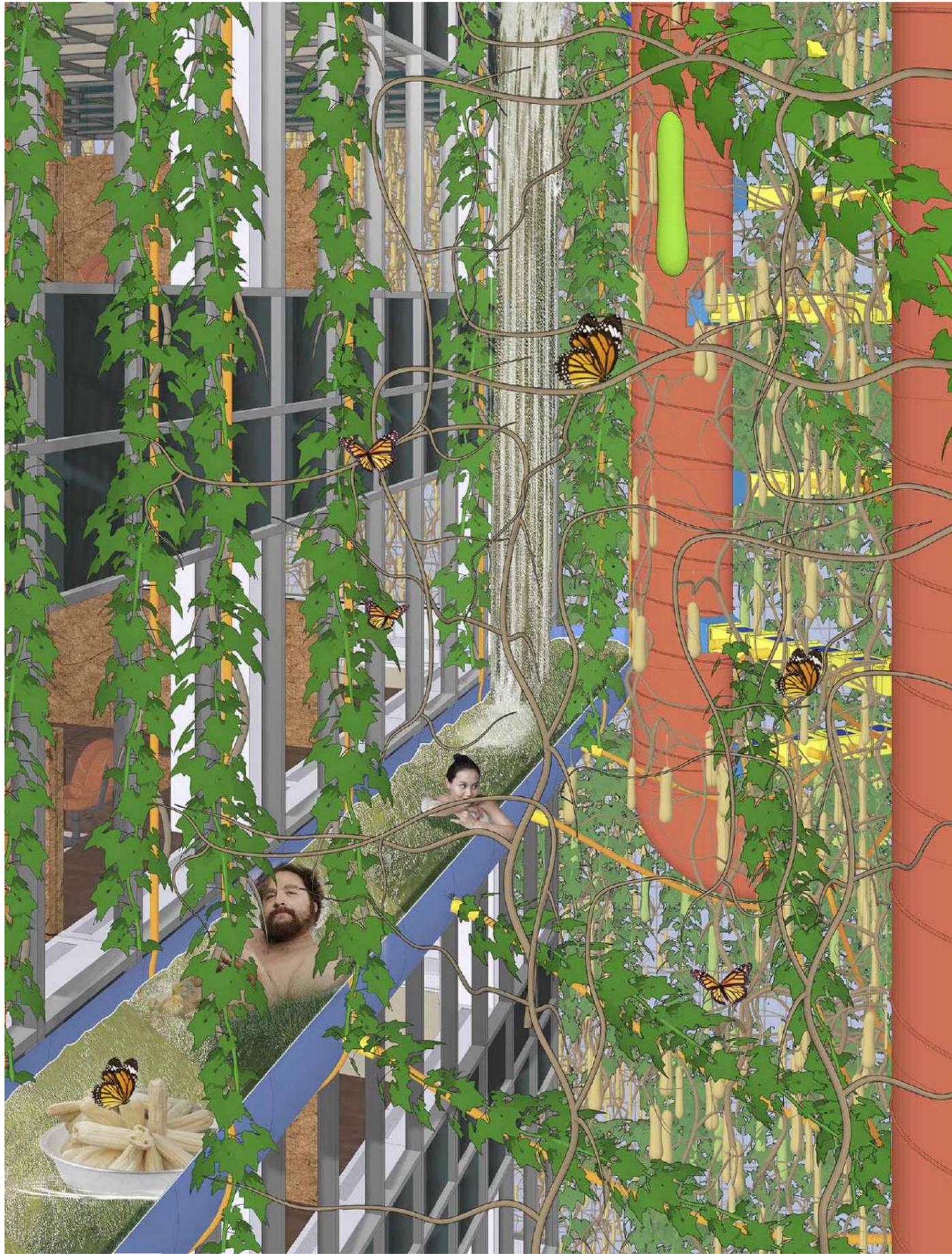
HVAC Duct 3:
Water Repeater Station



Section







Project 6: Long Day's Journey into Night

Subway Entrance Transitional Space

Advanced VI, Spring 2022

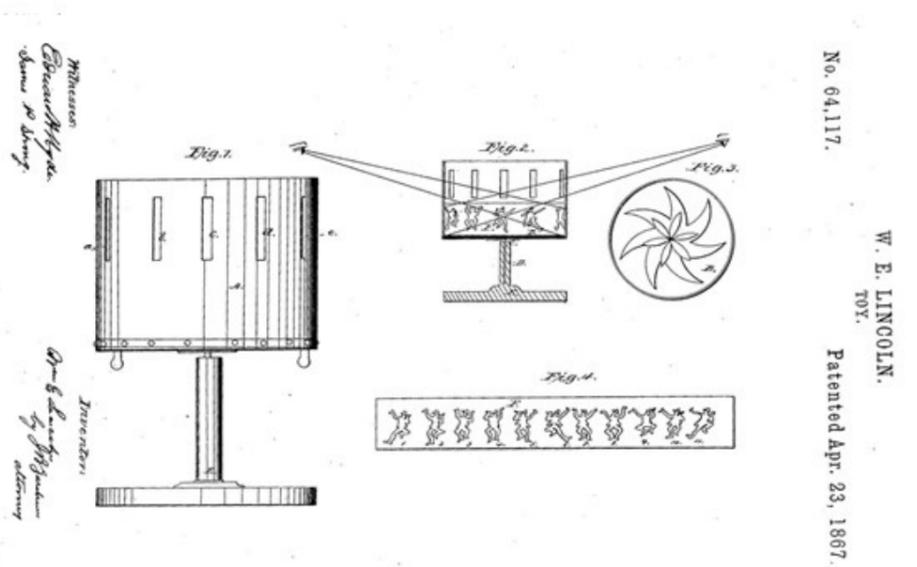
Individual Work

Instructor: Stephen Cassell, Annie Barrett

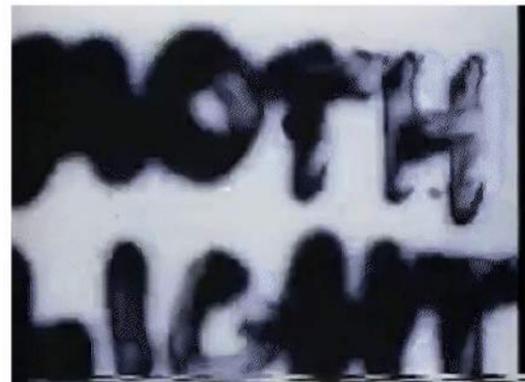
The project located at the subway entrance of Borough Hall Station tries to relieve the psychological stress when people move suddenly from above the ground to underground. The project is inspired by Stan Brakhage's film "Mothlight" and an early pre-film animation device called zoetrope. The project intends to provide a specific spatial and visual experience and an opportunity to make a dream.



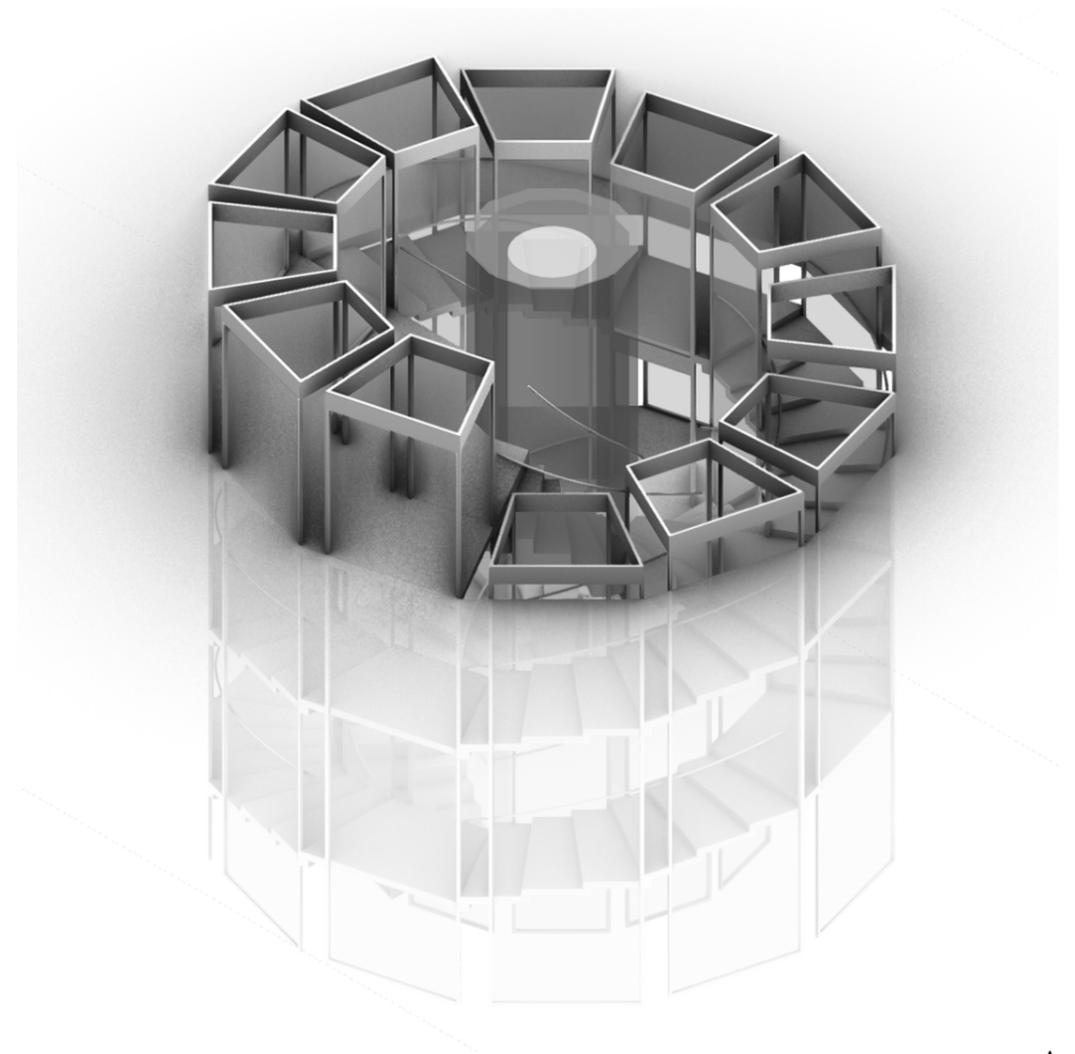
Site Plan



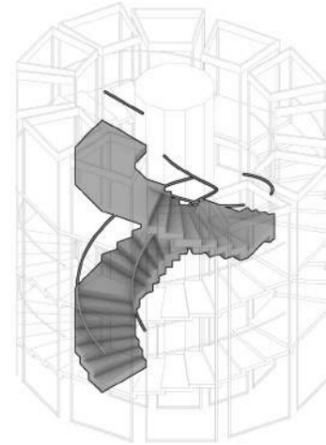
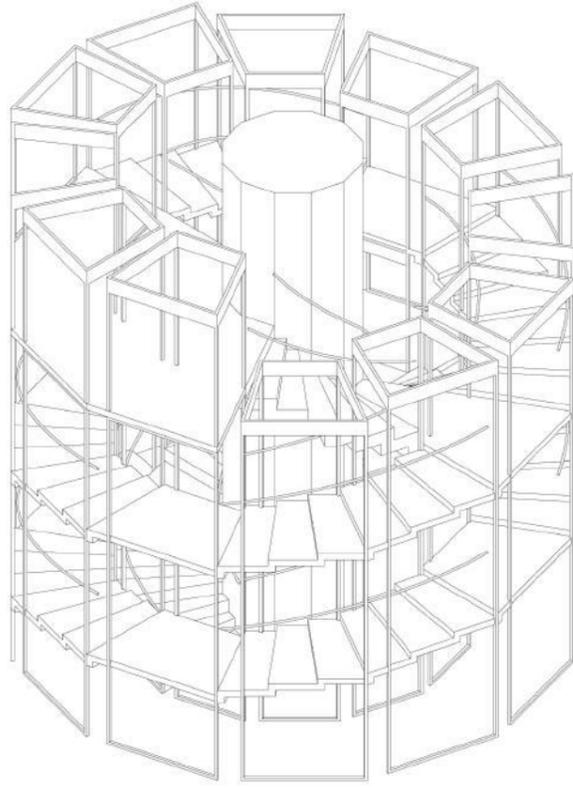
Zoetrope



Mothlight - Stan Brakhage



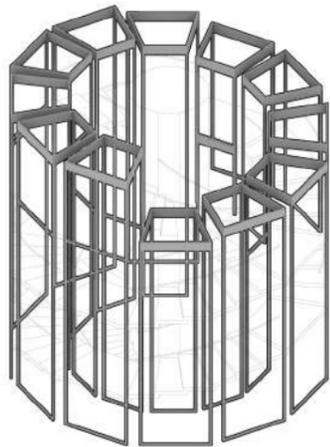
Axon



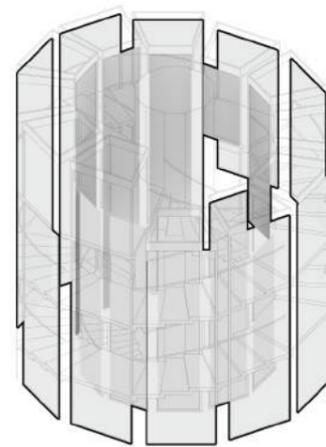
Inner Staircase



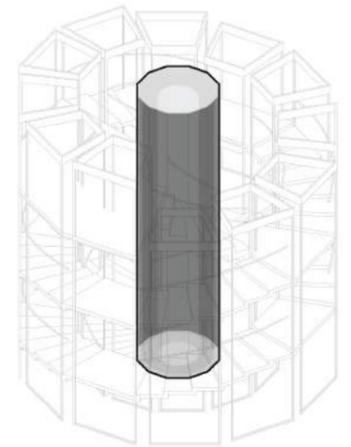
Outer Staircase



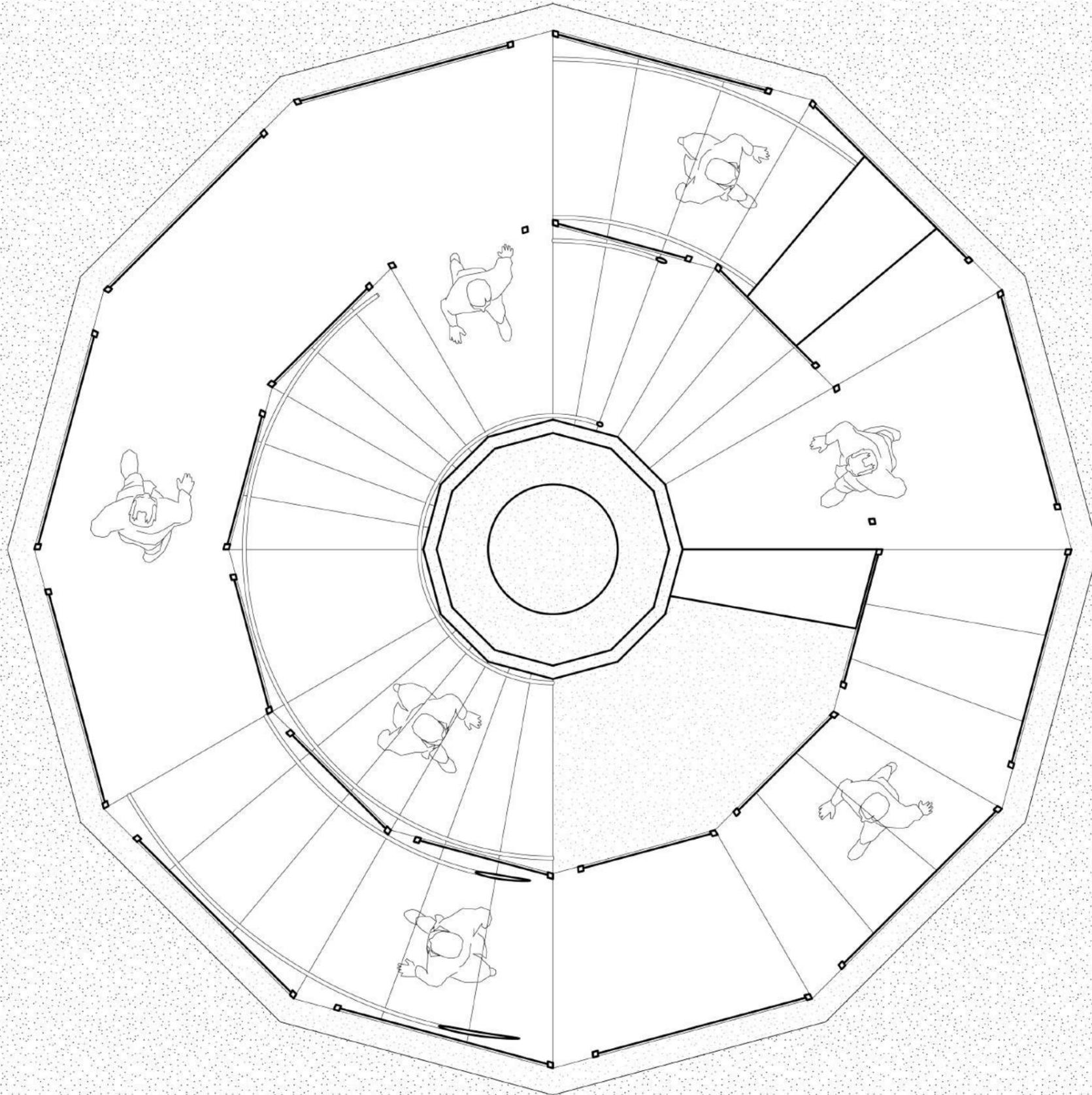
Stainless Steel
Frames



Glass Panels

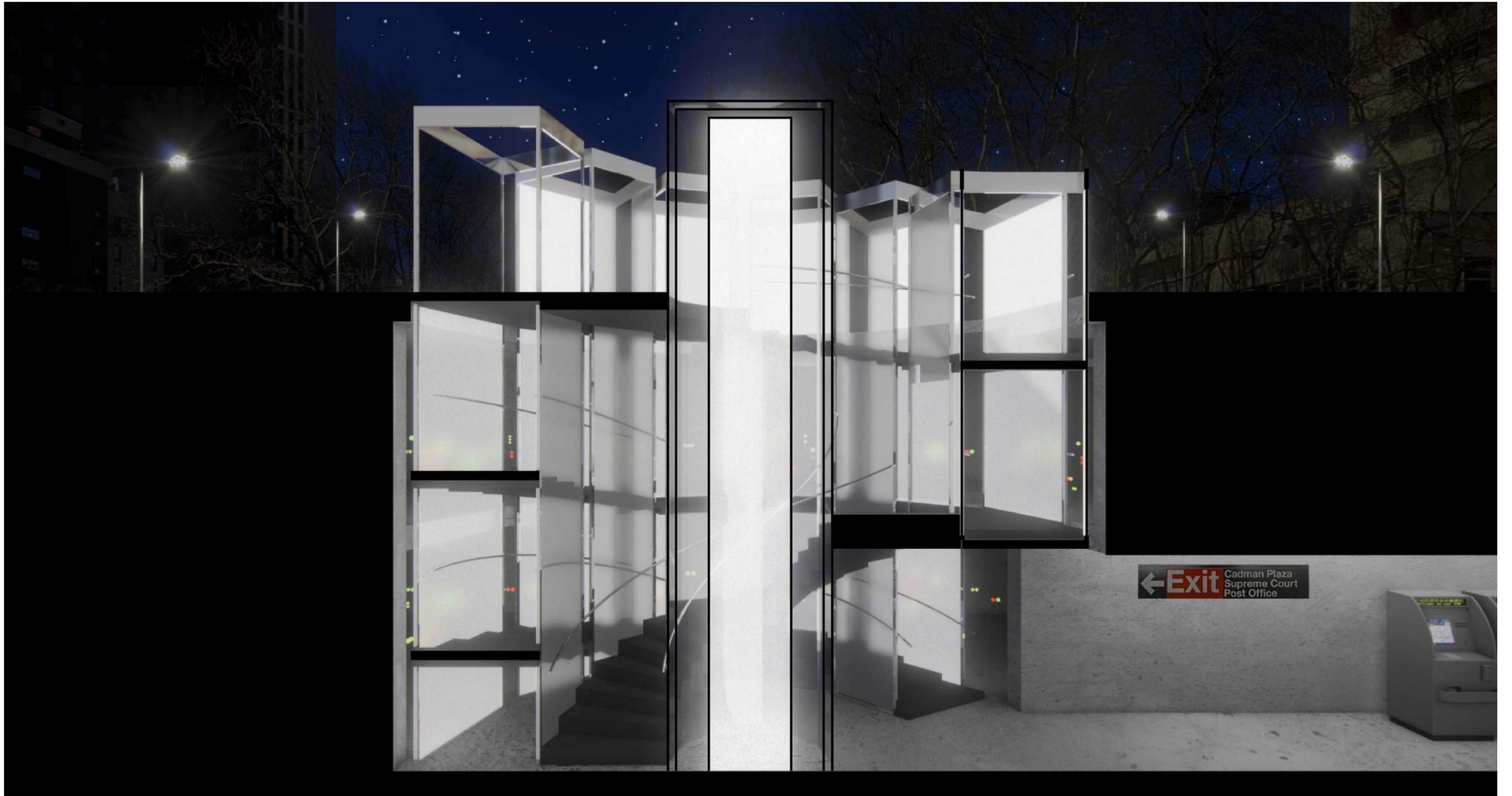


Glass Cylinder





Section



Section



