PORTFOLIO

ANZHI LI

Selected works 2024-2025

Columbia University

PROLOGUE

Heightened susceptibility to binary oppositions characterizes our present state. Within architecture, this dichotomy embodies not just inconsistency but also signifies an acute awareness of boundaries, presenting a complex interplay of cohesive factors and holistic harmonization.

My exploration segments into four dimensions: temporal juxtaposition, spatial interweaving, the coexistence of materials and society, and the congruence between architecture and its site.

CONTENTS

The ministry for the future

Airship Hub Design

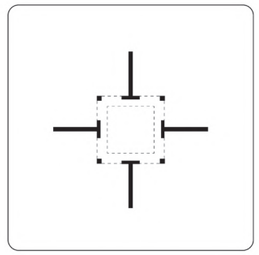
Summer Studio
Instructor: Dan Wood
Site: New york, USA

In a future where airships become a common mode of travel and work, this airship hub serves both the general public and United Nations members with distinct circulation routes. The building integrates a climate response department and a technology innovation department, addressing global environmental challenges. At its core lies a multi-layered rainforest that not only functions as a public park but also enables an internal carbon cycle.

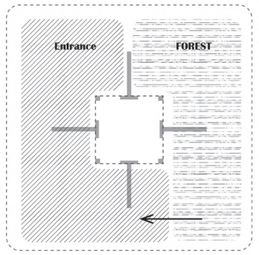
The design centers on an advanced landing mechanism, with landing capsules at the top that support docking, energy supply, and storage for airships. Airships connect via their nose cones to the building's central energy transfer station, enclosed by a U-shaped wall that defines the landing space. The umbrella-shaped energy station captures solar and thermal energy, converting it into electricity for the airship and building operations. The upper levels are reserved for UN access, featuring a private passage and elevator, while public areas are located below. The hub also houses UN offices, research labs, conference rooms, and exhibition spaces.

As a future-forward infrastructure, it supports innovations in carbon capture and environmental assessment, advancing the transition toward net-zero emissions and climate resilience. The design reflects a seamless integration of architecture, ecology, and technology.

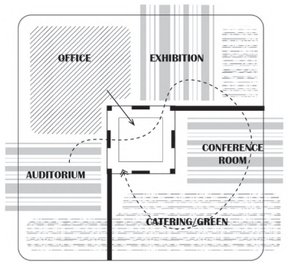
Plan Sequence



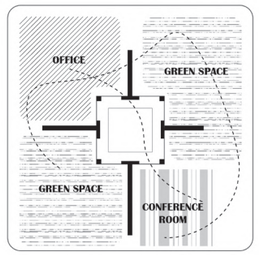
Structure



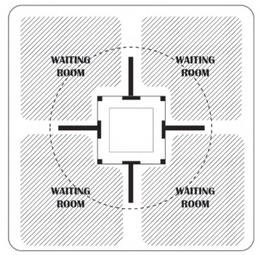
Entering



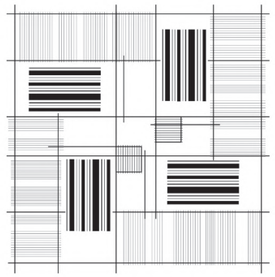
Experience



Open Median Space

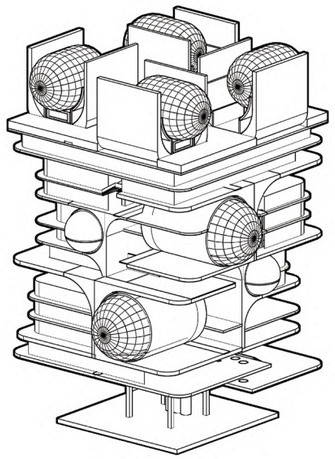


Check in/out



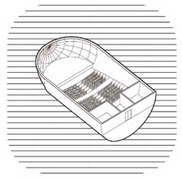
Airship Formation

FUNCTION FORMATION

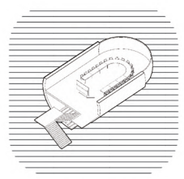


Capsule

Different functions in different scales



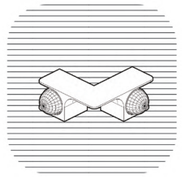
Capsule 1



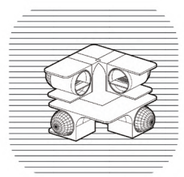
Capsule 2

Public Activities

Capsule in bigger scale



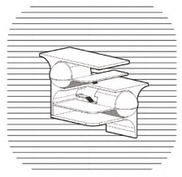
Single



Conbination

Conference

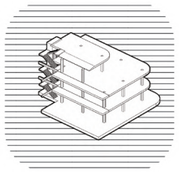
Capsule in smaller scale



Single

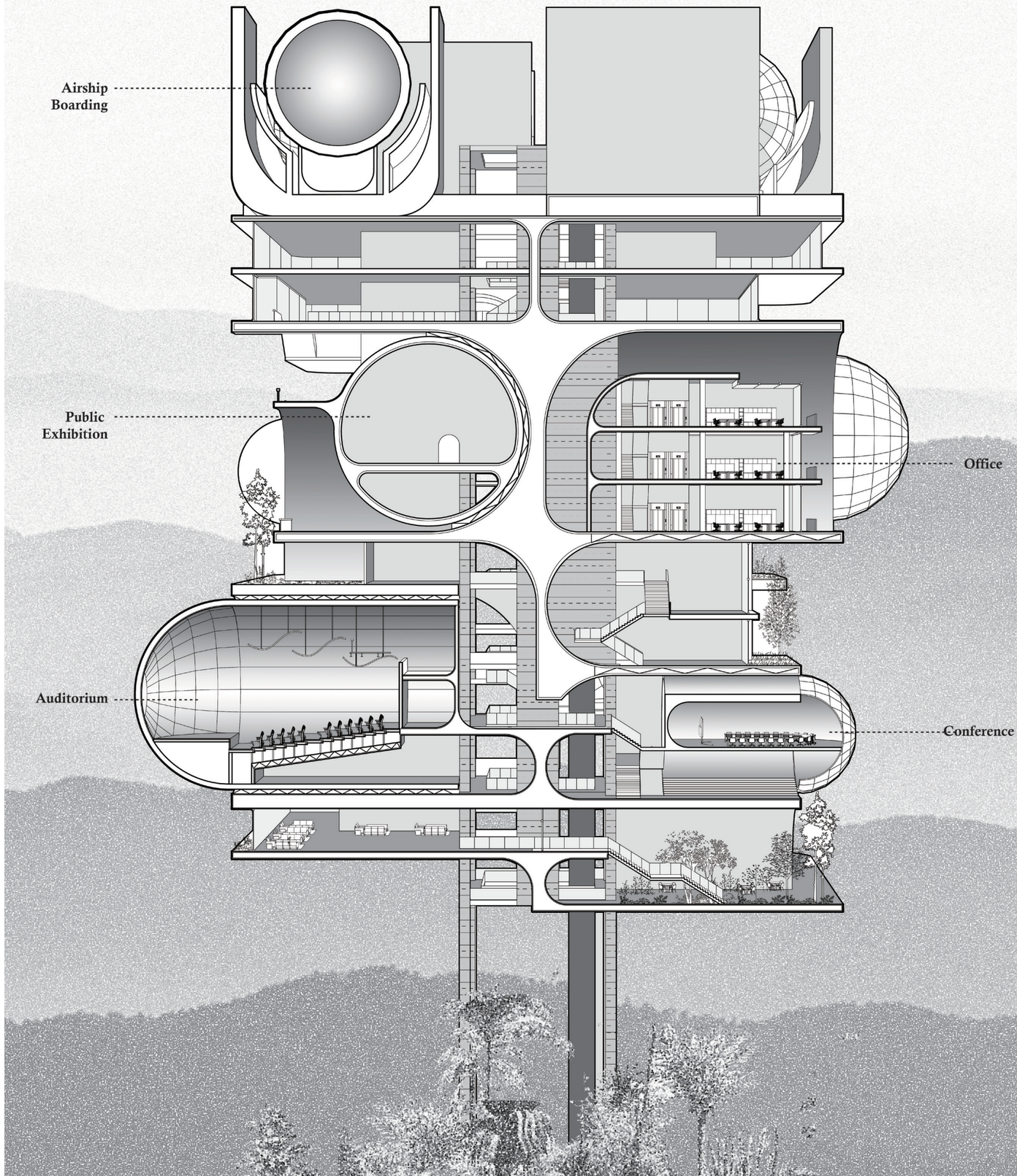
Conbination

Office



Airship Boarding

Airship Transportation



Recycled Materials

Corrugated fiberboard

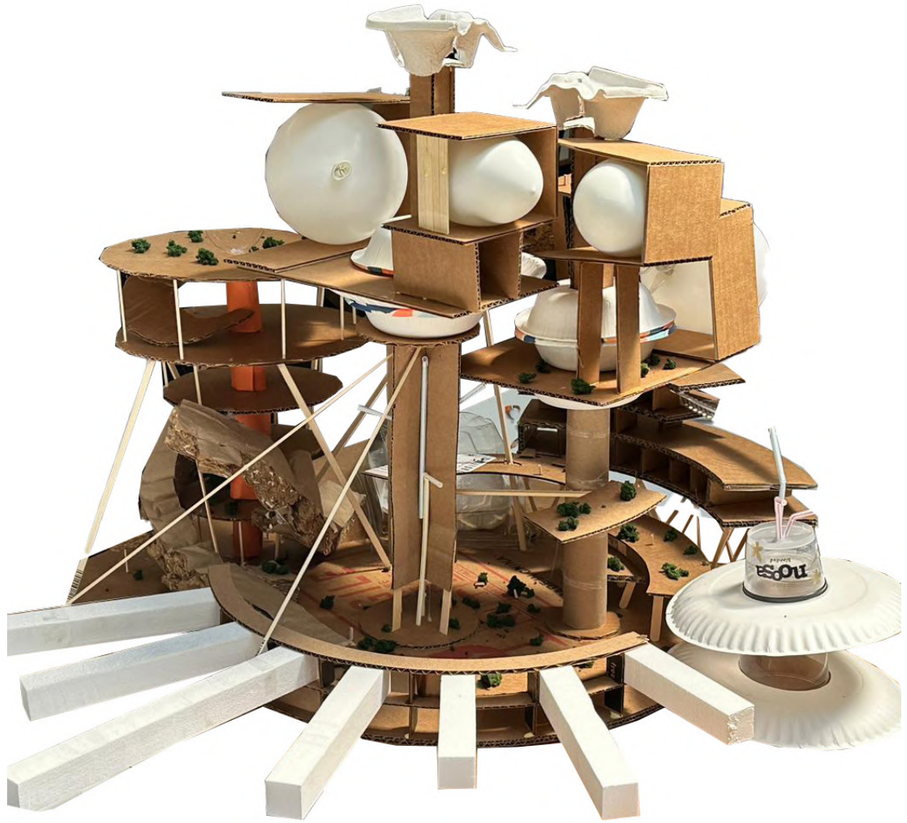
Corrugated fiberboard

Corrugated fiberboard

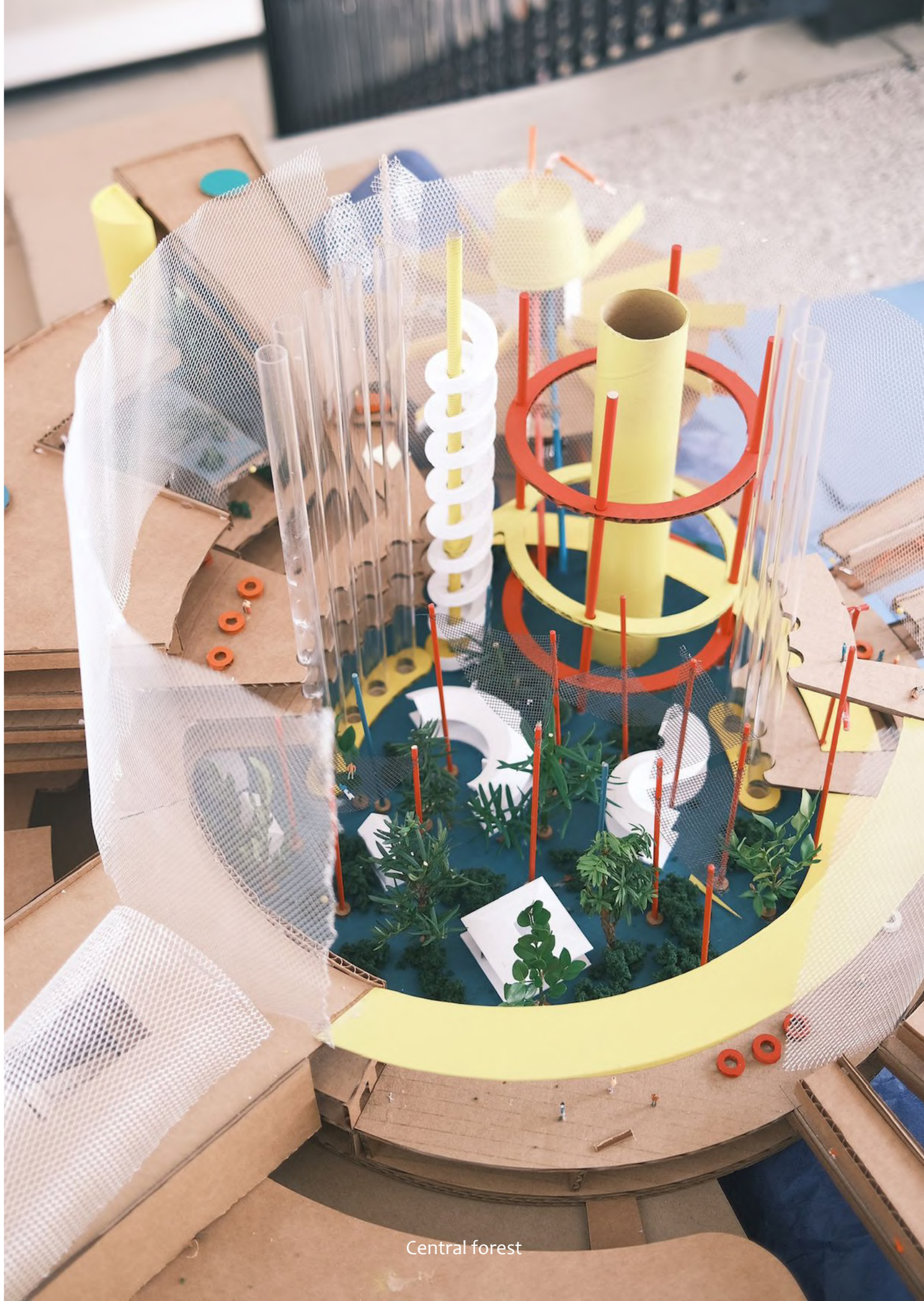
Corrugated fiberboard

Corrugated fiberboard

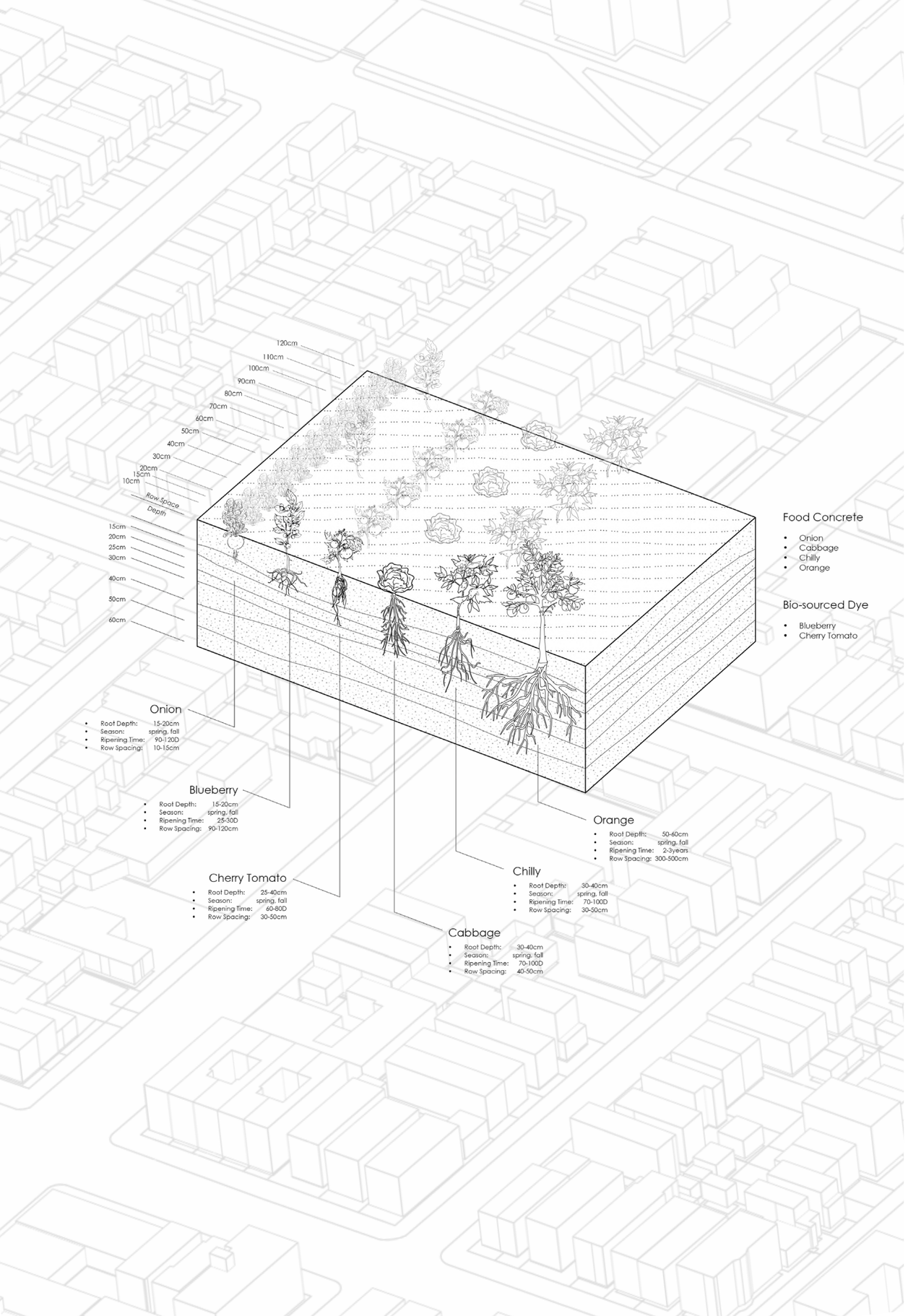
Corrugated fiberboard



Conceptual model made by recycled materials



Central forest



Harvest Beyond

Reverse Logistics in Food and Home Improvement Industry

Fall Studio

Group Work | Anzhi Li, Shuyi Kong

Instructor: Cyrus J Penarroyo

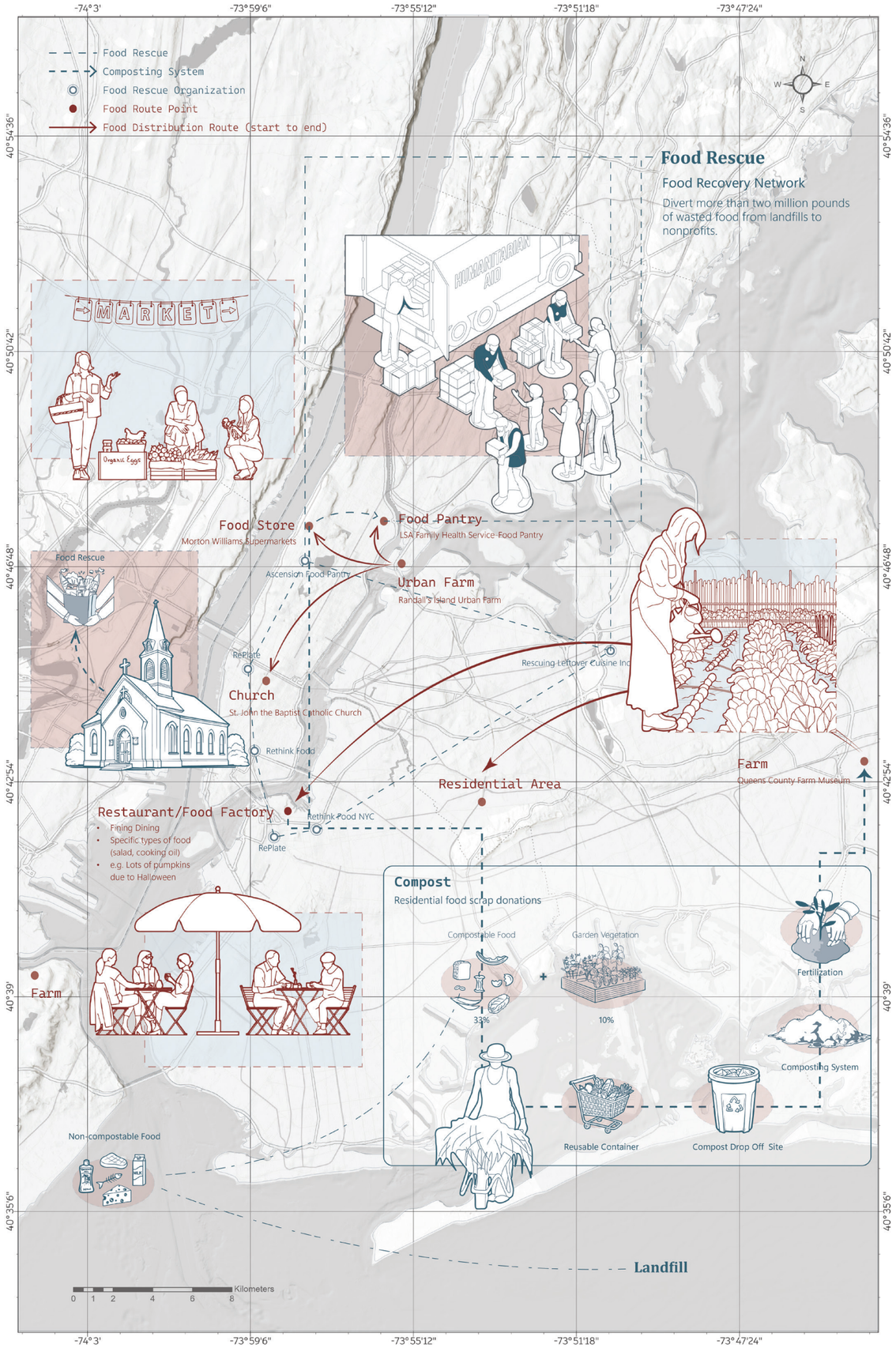
Site: New York, USA

This project will focus on the planetary implications and architectural possibilities of reverse logistics, or "the movement of goods from the consumer to their place of manufacture, sale, or disposal." Given the precision and smoothness associated with forward logistics, some people might be surprised to learn that reverse logistics is incredibly wasteful and inconsistent. For example, it takes double (or even triple) the amount of time to process a returned item than what it takes to initially ship it.

This project will consider the environmental harm of the returns industry, the influence of the internet consumer behavior, and the post office as a potential site for the re-valuing of material.

The project is organized around the food recycle system, which includes the urban farm, open kitchen, bio-lab and façade system. These space sequences manifest the food circulation in new possibilities, where the food from farm to table, and eventually to be the bio-sourced material to exist in new versions of life. Throughout this process, the microorganisms produced by discarded food, which were previously considered undesirable, are repurposed into new materials, adding a fresh impetus to food recycling efforts. In addition, a public exhibition in an open area provides the chance for public education.

Food Flow: Farm-Table-Landfill



Waste Management

Category of waste food

SHAPE

Ugly or Oddly Shaped fruits and veggies

DATE

Upcoming sell-by or expiration dates (food is often still safe to eat)

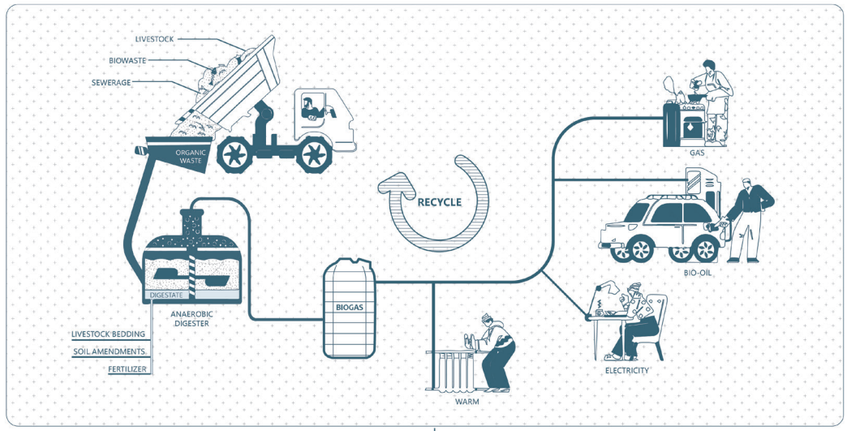
OVERPRODUCTION

Overproduction at farms (e.g. manufactured for a holiday that has now passed)

DAMAGED

Food getting damaged during transport

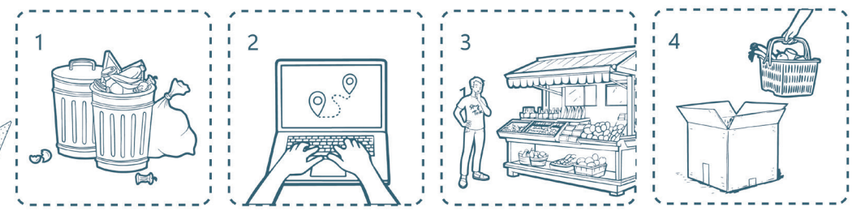
Organic Waste Recycle



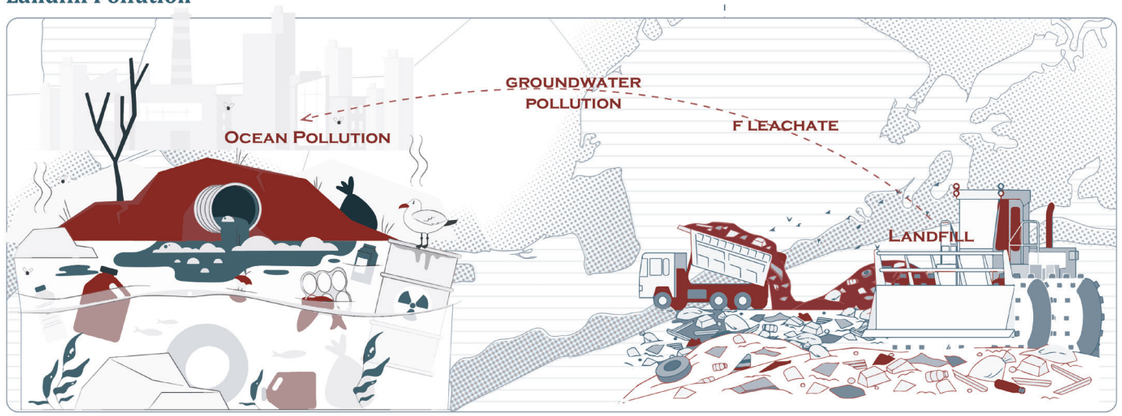
Food Rescue

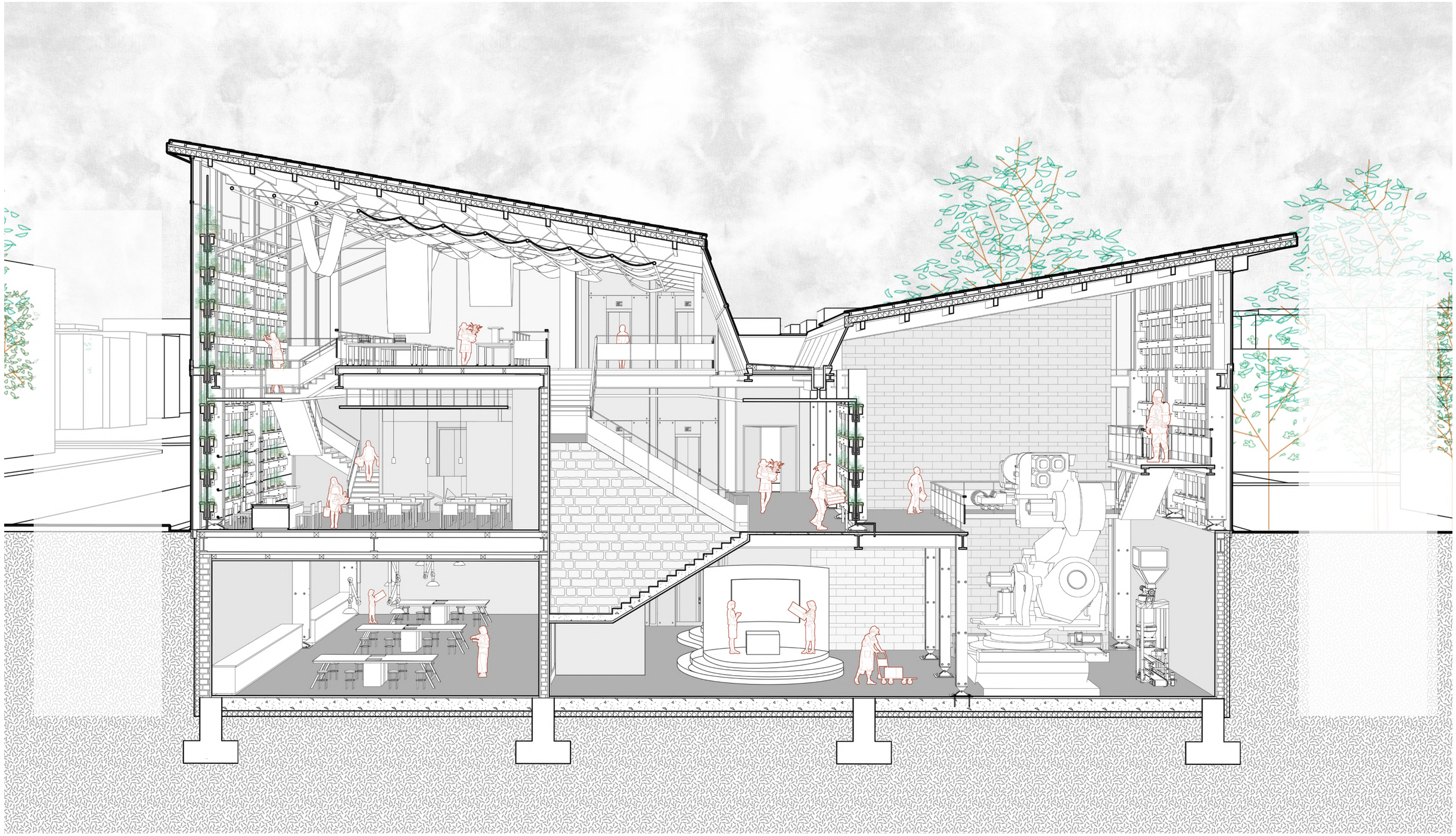
Food Recovery Network

Divert more than two million pounds of wasted food from landfills to

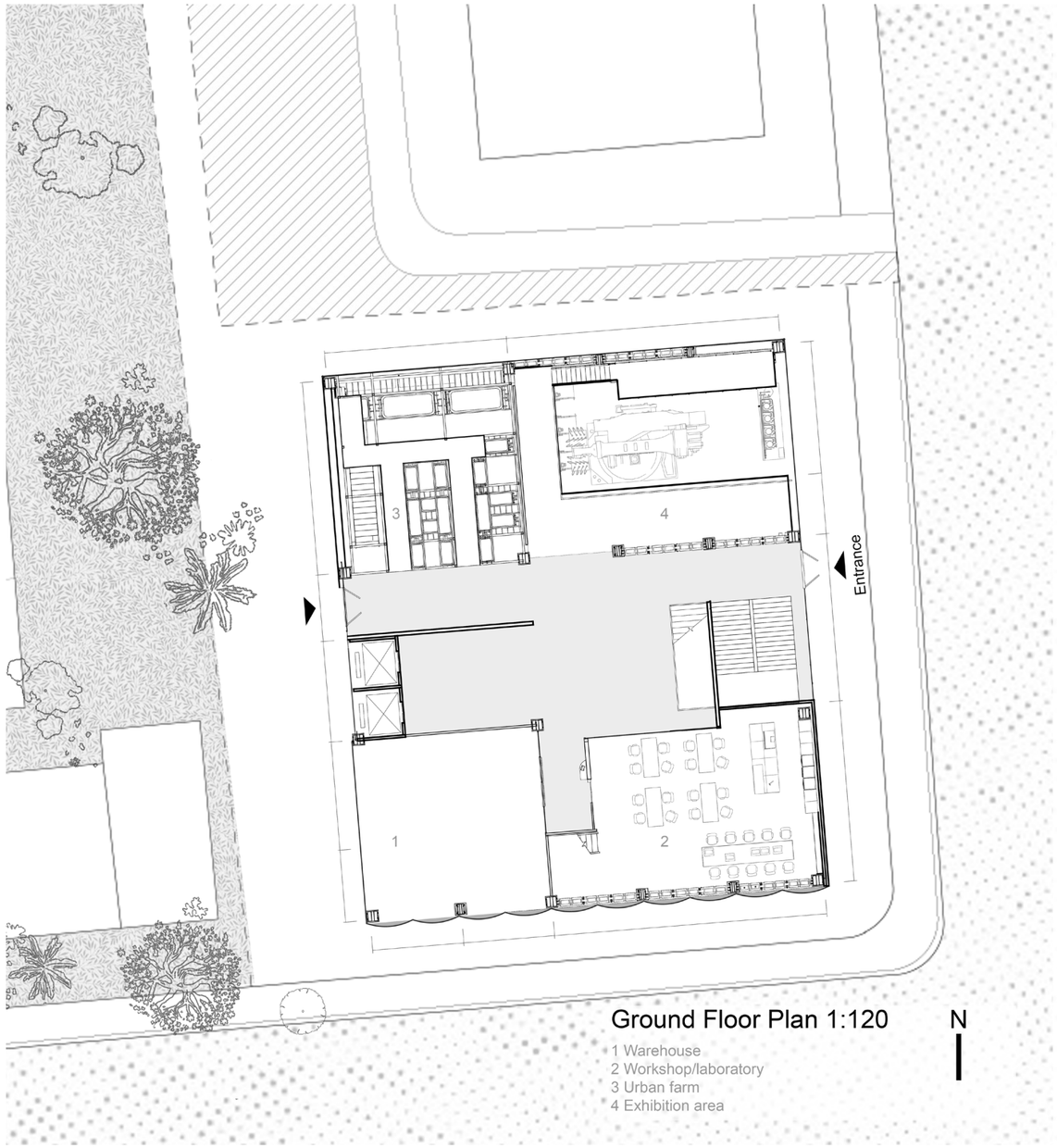


Landfill Pollution





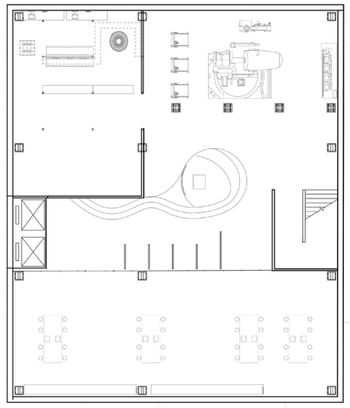
Section through the central circulation



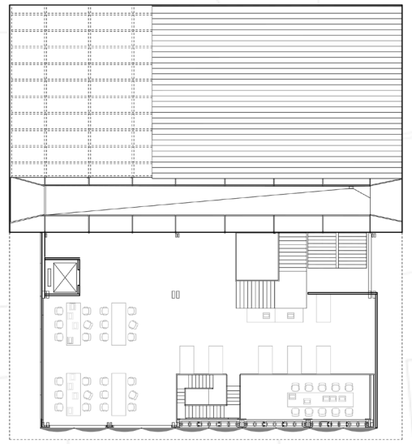
Ground Floor Plan 1:120

N

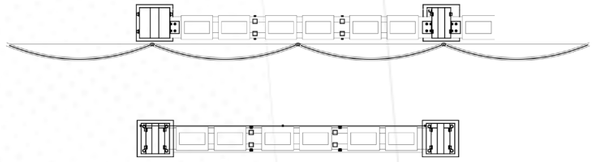
1 Warehouse
2 Workshop/laboratory
3 Urban farm
4 Exhibition area



Underground Floor Plan 1:180

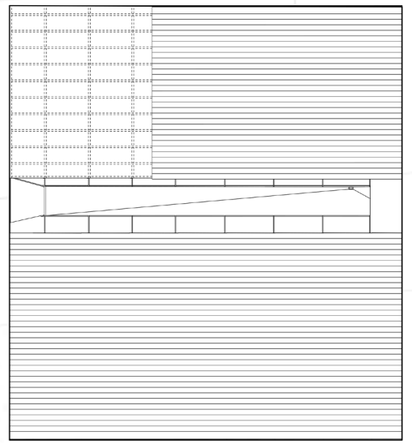


Second Floor Plan 1:180



Detail Facade

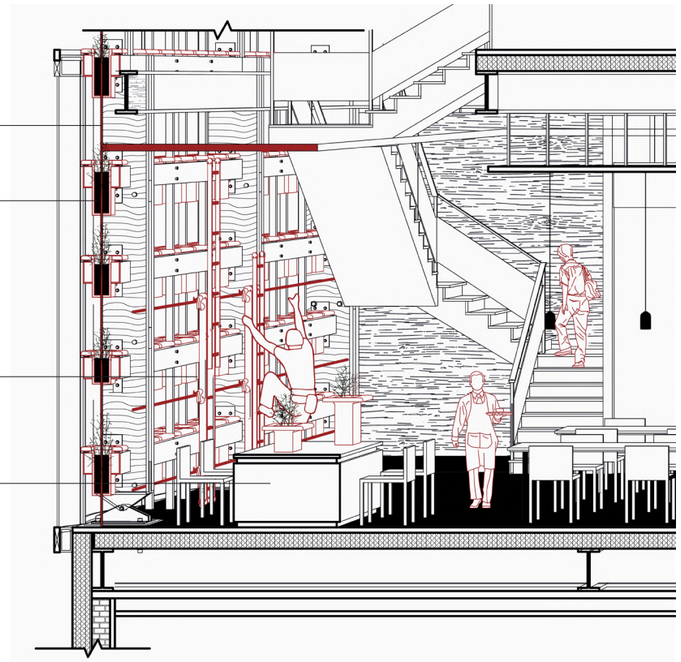
Both façade treatments are based on walls with water purifying plants, but they differ in the way they come into contact with the façade
1 presents a direct connection with the facade, flush with the facade wall
2 The wall structure has a wavy curve, which creates a certain dynamic visual effect with the façade.



Roof Plan 1:180

Details

Scene 1
Open Kitchen and Plantation System



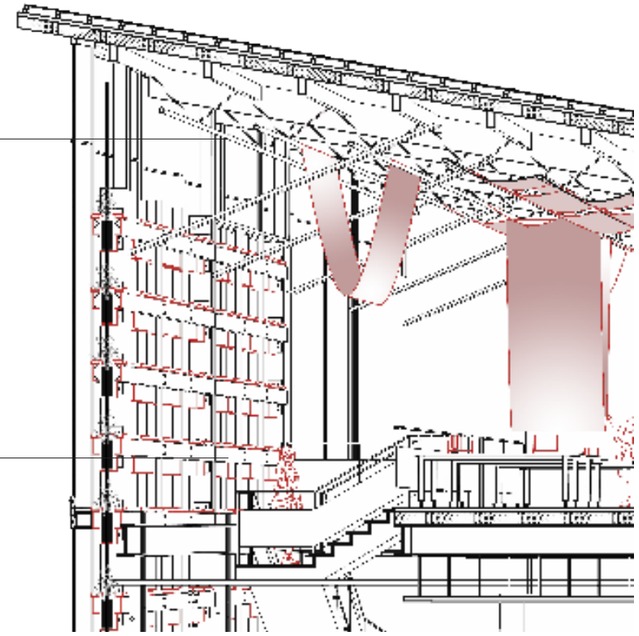
Plant irrigation pipeline

Soil
The soil depth varies according to the root system requirements of different plants.

Ladder

Plant Sorting Table

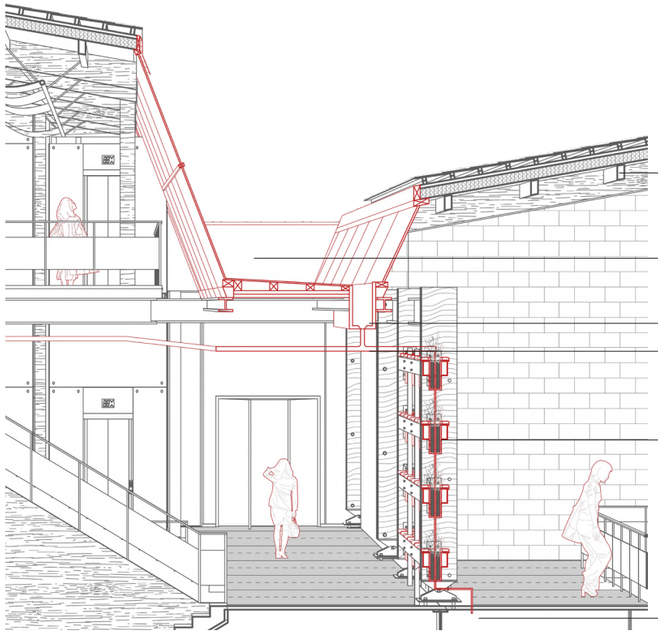
Scene 2
Dye house



Textile Drying Pipe Belt

Dye Preparation Table

Scene 1
Roof rain water collection system



Roof Rafter Frame
5cm*10cm

Sloped Rainwater Collection Roof

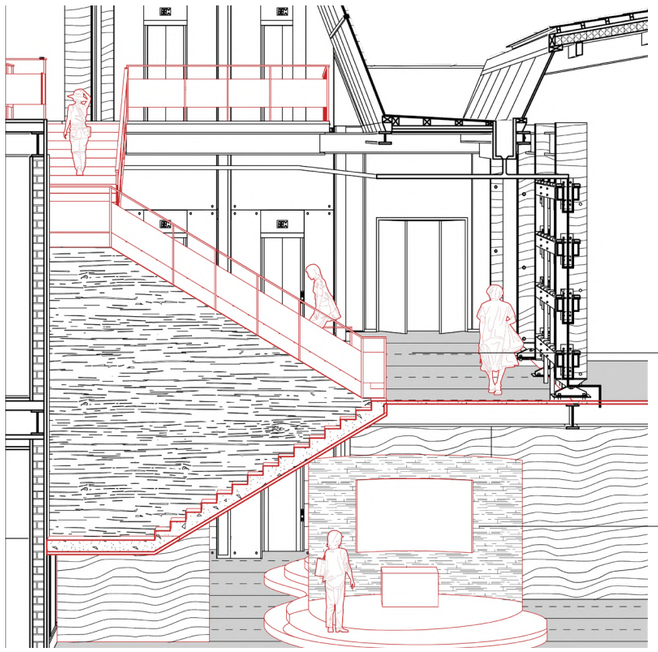
Water Valve

Plant irrigation pipeline

Water Purification

Water Pump
Pump the purified water to reservoir.

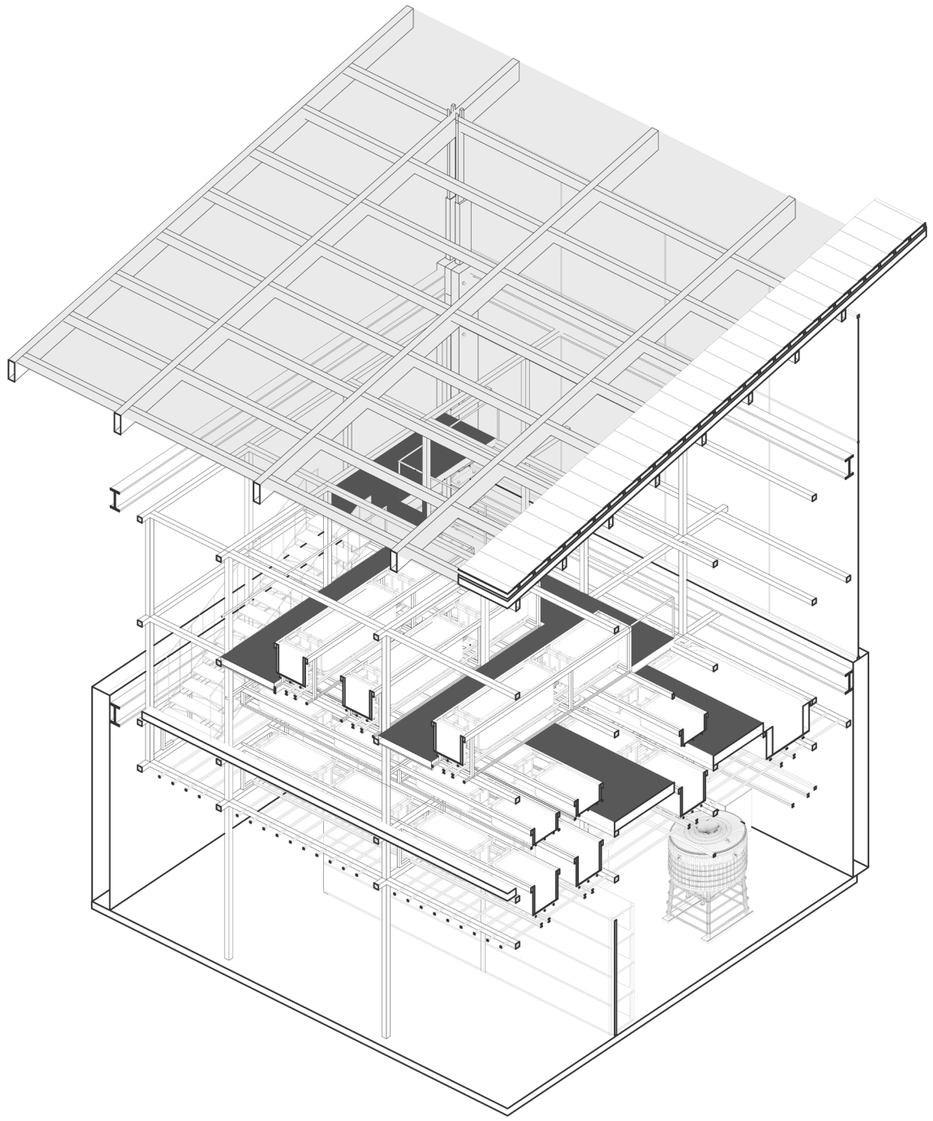
Scene 2
Public access



First Floor

Exhibition space

Section through the central circulation



Planning of the urban farm

The farm is designed to grow three main categories of crops based on the maturity cycle and sowing methods of different crops, covering diverse functional needs:

Category 1: *Supporting laboratory research*
types: cabbage, onion, orange.
Characteristics: Longer maturation period, mainly used for laboratory ‘food concrete’ research, exploring the feasibility of combining food waste with construction materials.

Category 2: *Supporting Education and Interactive Experiences*
types: strawberry, cucumber, cherry tomato.
Characteristics: Short ripening cycle (about two months), suitable for children and teenagers to provide planting experience education.

Category 3: *Supporting Restaurant Operations*
type: basil and a range of microgreens.
Characteristics: Can be grown in three dimensions through hydroponics or in conjunction with a brick wall. Provides a consistent yield throughout the year and a stable supply of raw materials for restaurant dishes.

Open Housing: Wild Edition

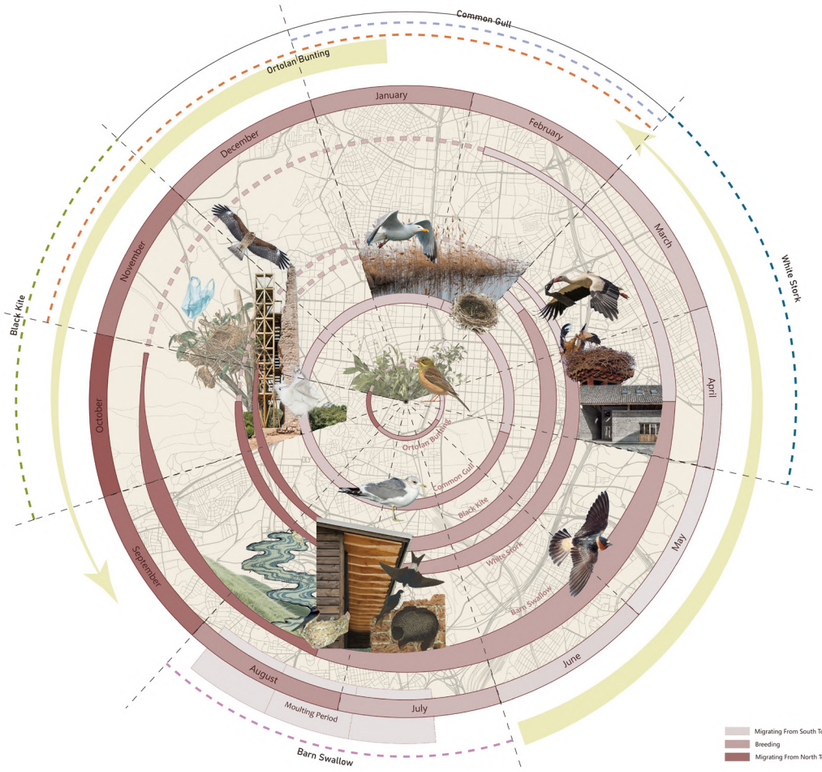
Social Housing Design

Spring Studio
Instructor: Juan Herreros, Oscar M Caballero
Site: Madrid, Spain

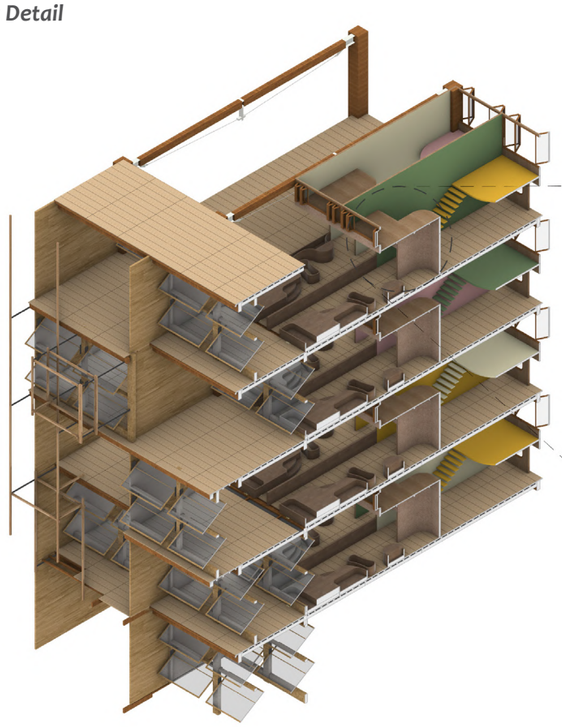
Set against the backdrop of a 1970s Brutalist-modernist building designed during Francisco Franco's dictatorship, this project critically reexamines the relationship between architecture, authoritarianism, and ecological degradation. The architect, a Yale-trained student of Paul Rudolph, created a structure marked by a rigid, repetitive façade—an embodiment of top-down control and spatial discipline. Simultaneously, Franco's regime implemented policies that devastated Spain's ecosystems, treating wetlands as "wasted land" to be drained for economic gain.

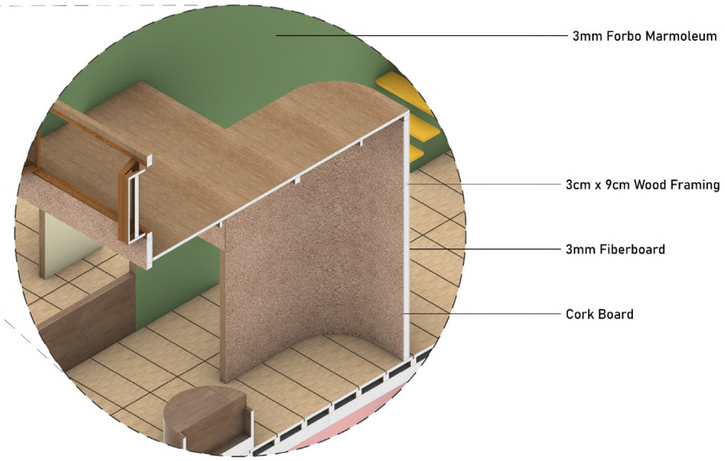
A notable example is a national park nearly sacrificed for agriculture and industrial expansion. Resistance came from scientists who reframed ecological protection as economic necessity, subtly subverting Franco's agenda. The regime's prioritization of urban development and privatization over natural resilience led to widespread environmental collapse, drought, and displacement.

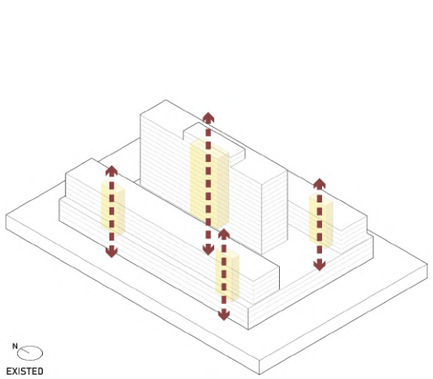
This history parallels Spain's current housing crisis—exemplified by districts like Salamanca, where property ownership enforces class divisions and ecological disconnection. **Our project rejects the legacy of homeownership as exclusion. Instead, we propose a new housing paradigm: one that sees the city as a living ecological system, where both humans and non-humans share space, migrate, and adapt.** Housing becomes a commons—not a commodity—built for resilience, diversity, and coexistence. Architecture must no longer reproduce segregation, but foster collective futures across species and social lines.


Common Gull
Ortolan Bunting
Black Kite
White Stork
January
February
March
April
May
June
July
August
September
October
November
December
Moulting Period
Barn Swallow
Ortolan Bullfinch
Common Gull
Black Kite
White Stork
Barn Swallow
Migrating From South To North
Breeding
Migrating From North To South
Width: Squares of recording

Unit Detail




3mm Forbo Marmoleum
3cm x 9cm Wood Framing
3mm Fiberboard
Cork Board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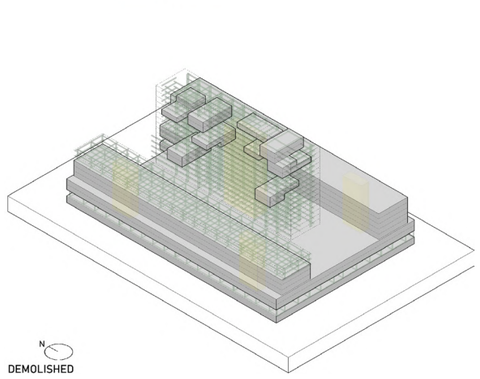
EXISTED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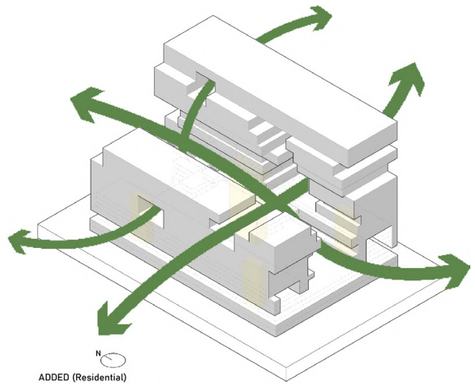
DEMOLISHED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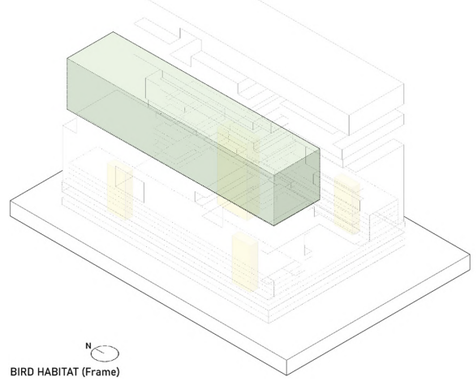
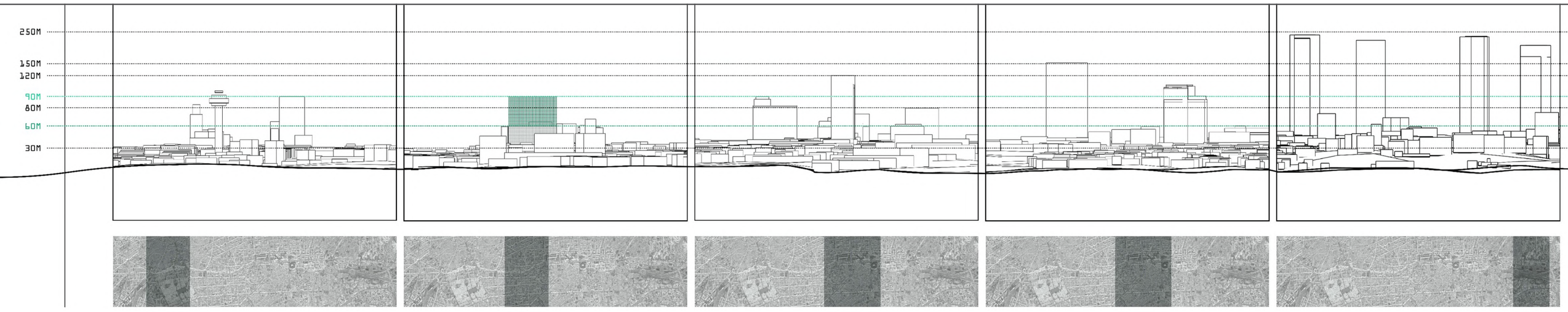
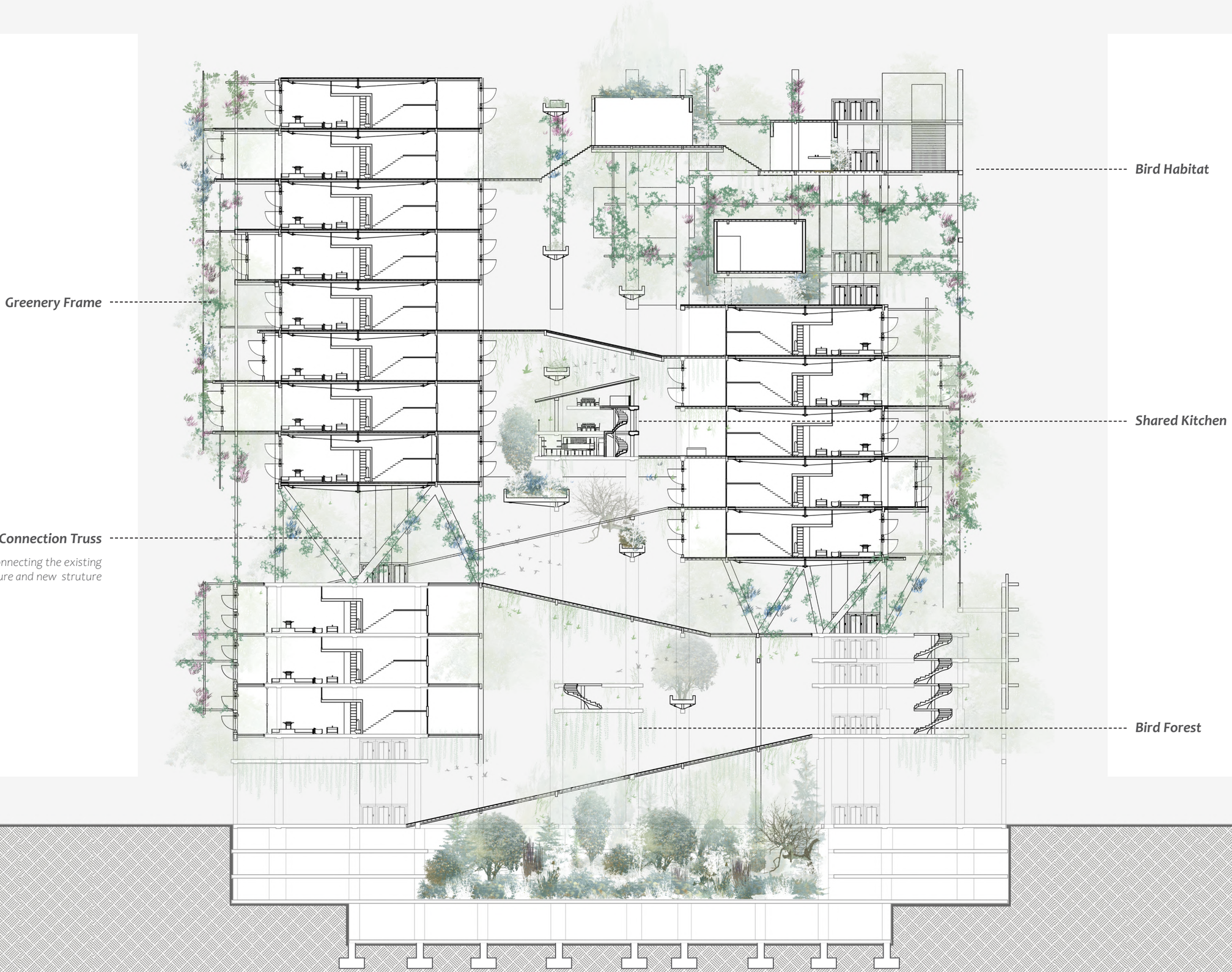
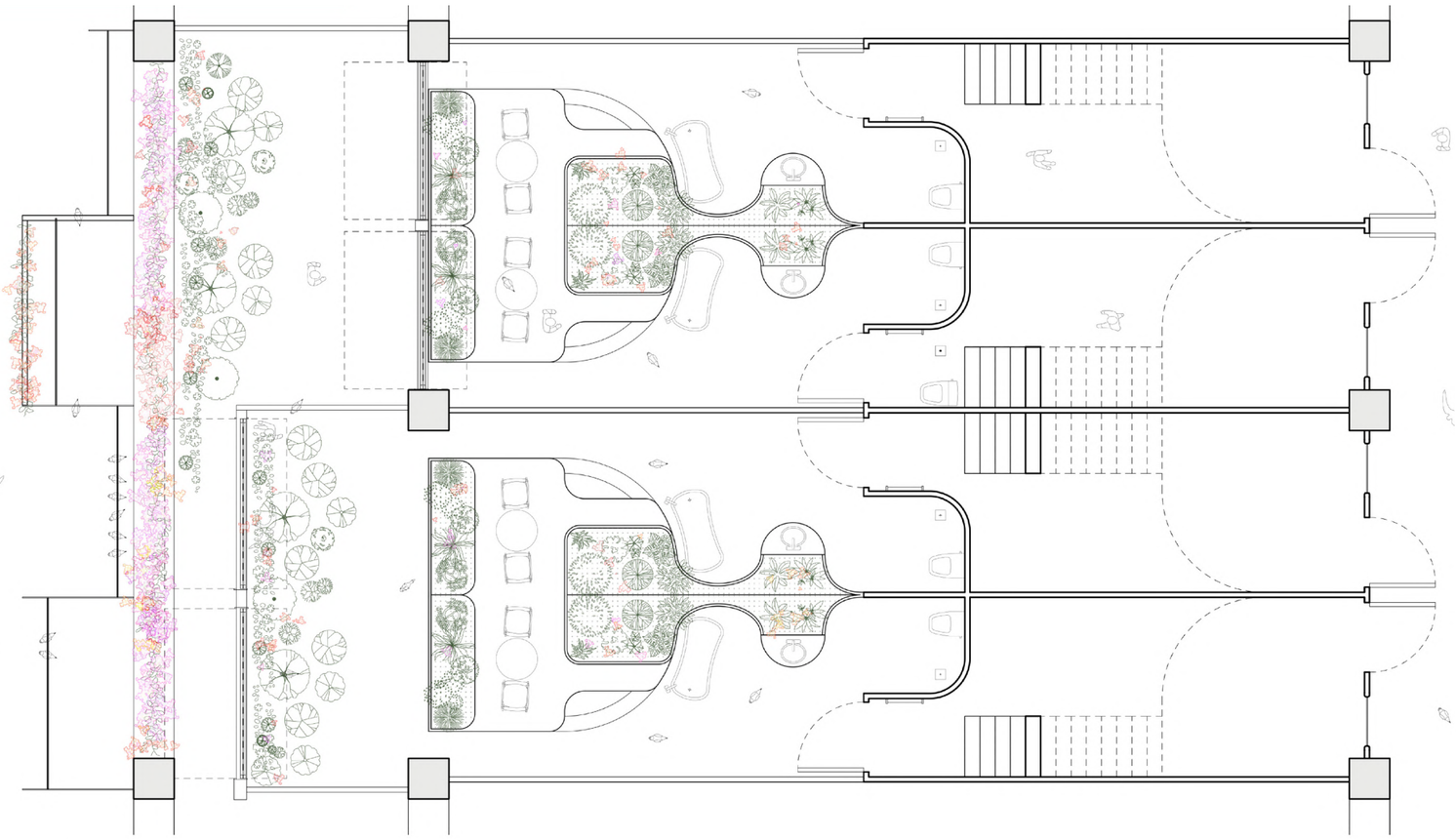
ADDED (Residential)


N
BIRD HABITAT (Frame)


250M
150M
120M
90M
60M
60M
30M

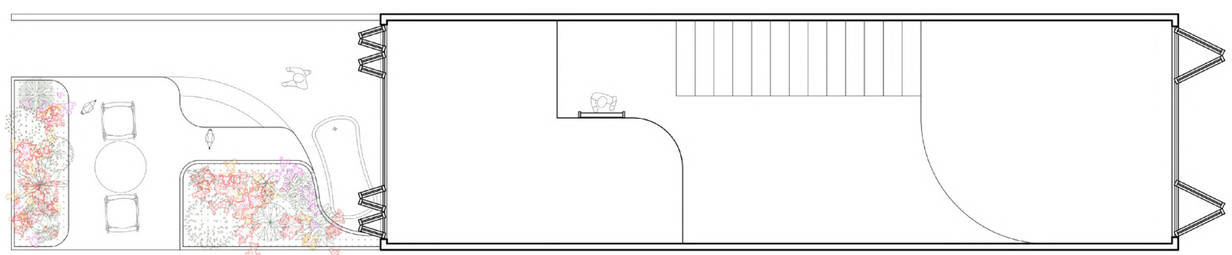

Greenery Frame
Bird Habitat
Shared Kitchen
Connection Truss
Connecting the existing structure and new struture
Bird Forest

Housing Unit



FIRST FLOOR PLAN

0 1m 5m



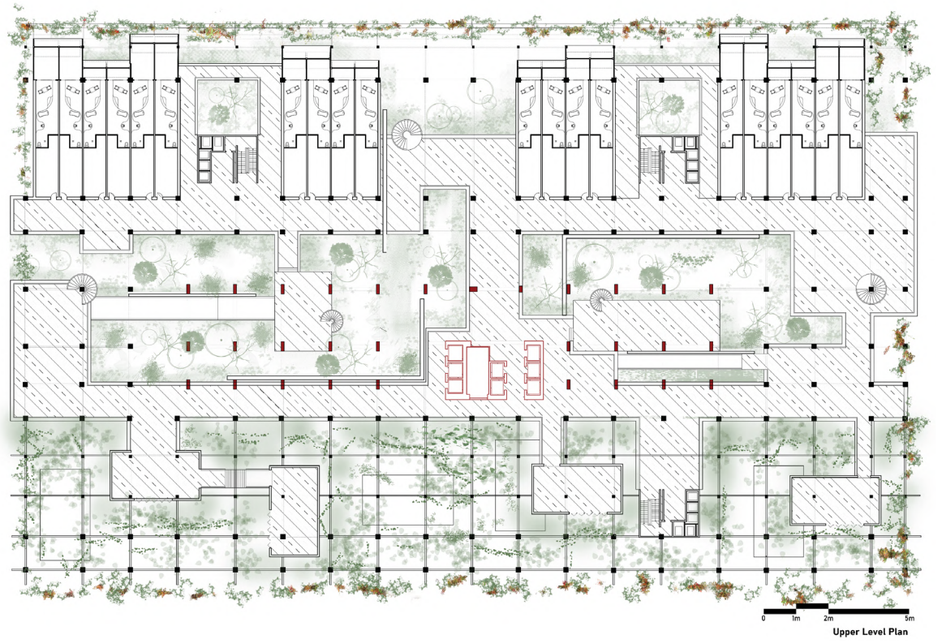
SECOND FLOOR PLAN

0 1m 5m

Mid floor plan

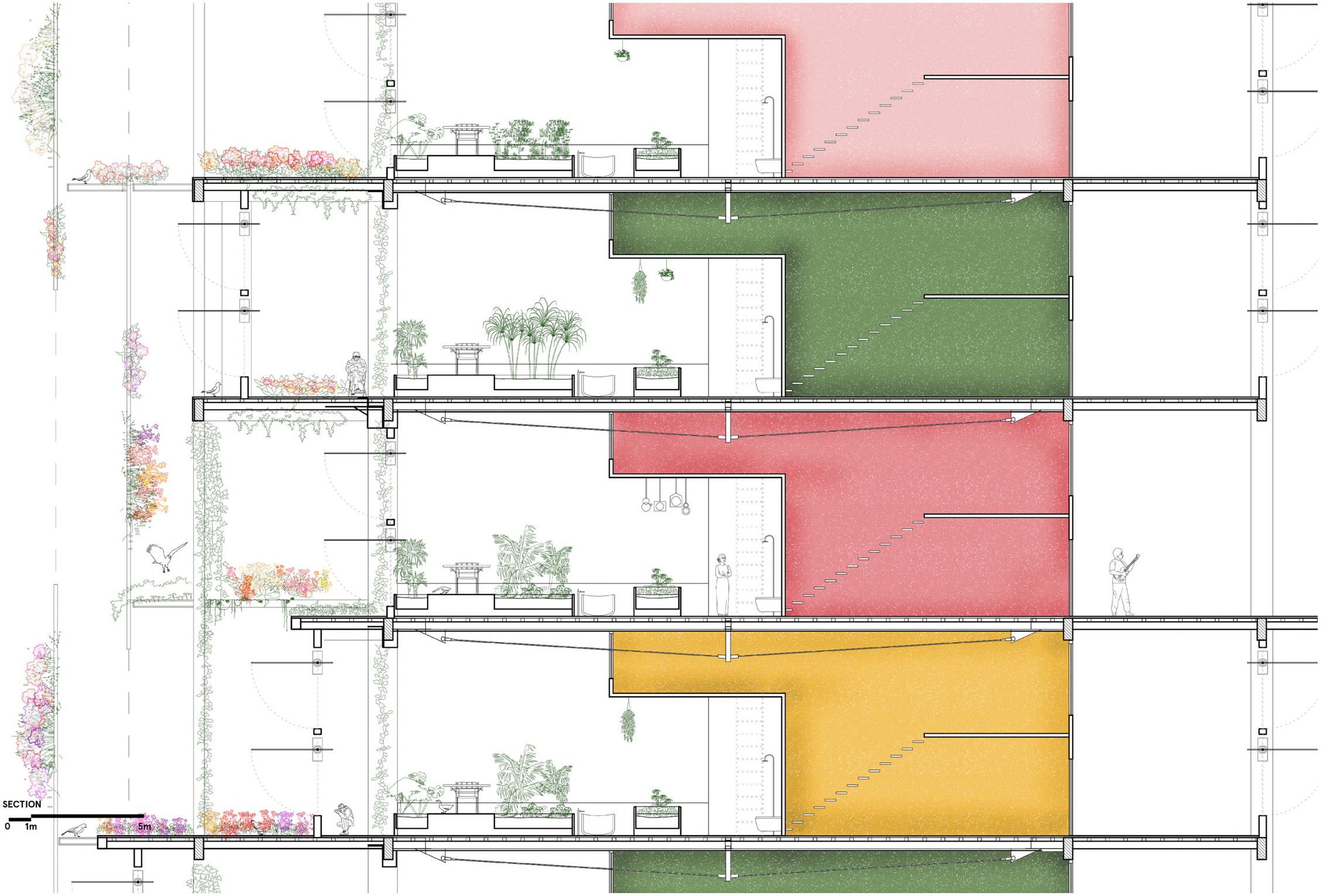
Lower Level Plan

Upper floor plan



Upper Level Plan

Housing Unit Section



Bird Forest - the space in between the two housing building

Preserve the existing beams and columns, and demolish the slab

Day-Public activities

Night-Club