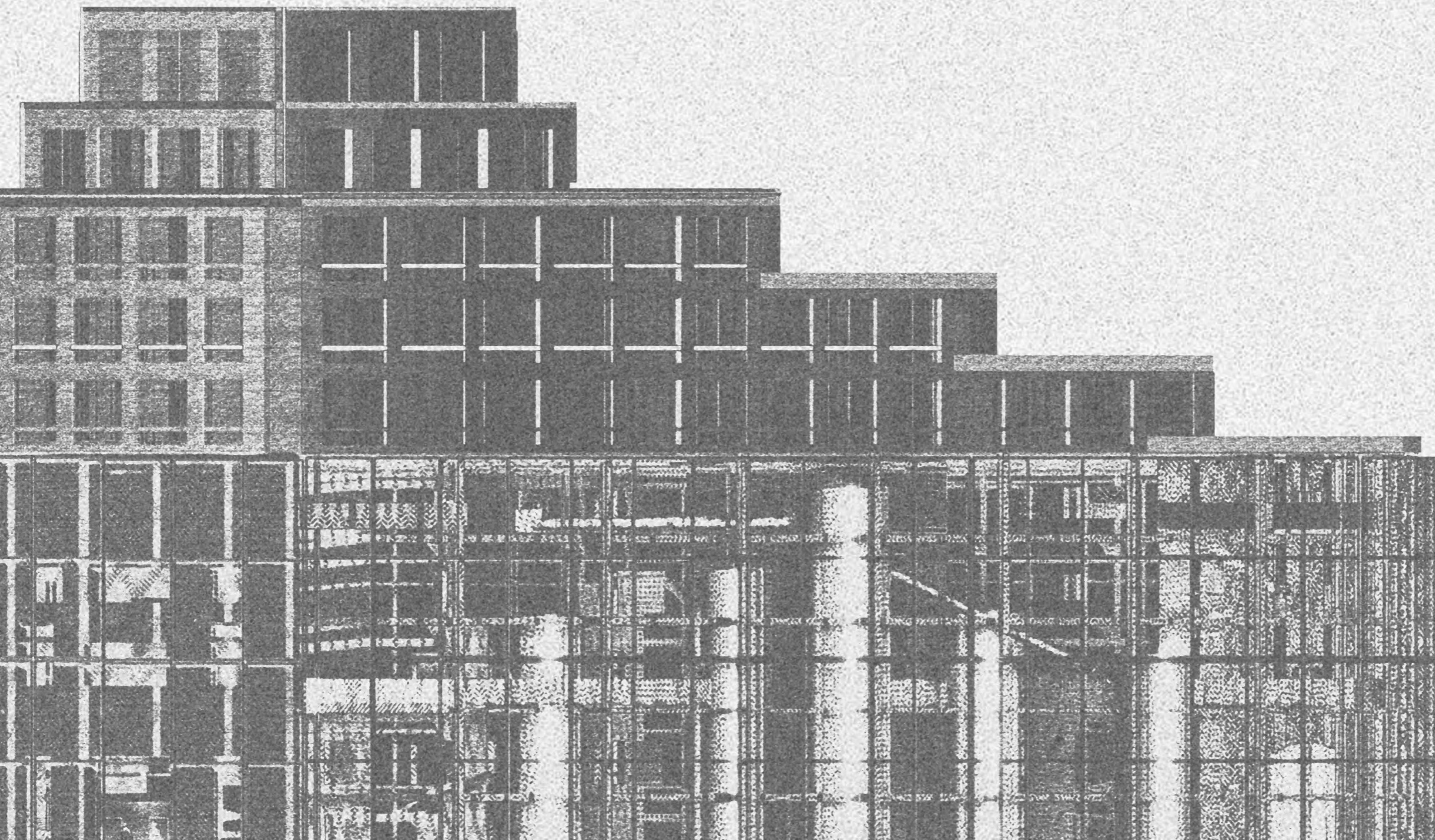


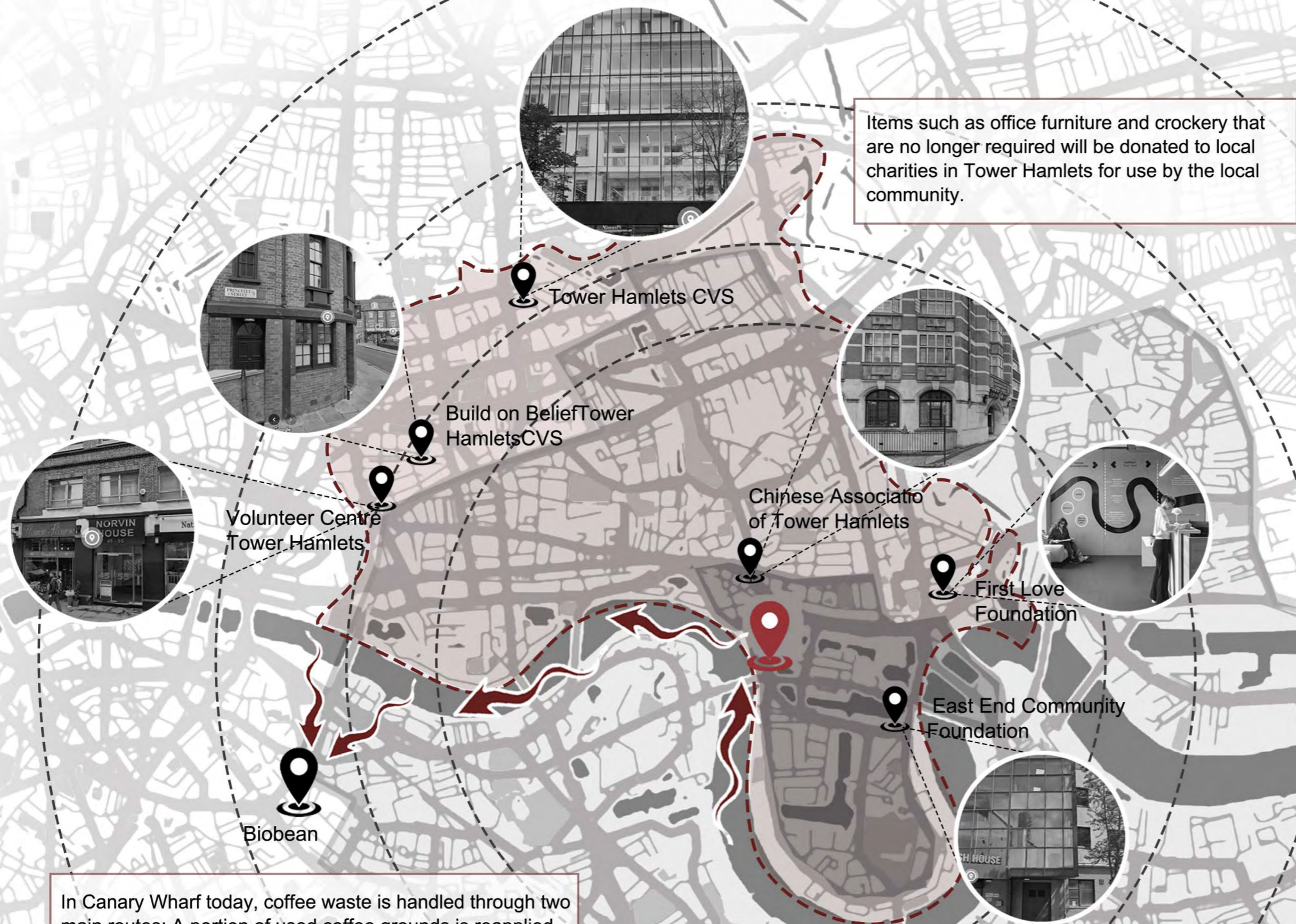
“Isle of Grounds”

*A Coffee Factory of Roasting, Recycling and
Regeneration in Canary Wharf.*



“Before I could transform the site, I had to learn how it speaks.”

Mapping



In Canary Wharf today, coffee waste is handled through two main routes: A portion of used coffee grounds is reapplied as natural fertilizer to enrich the soil in gardens and public green spaces. The remaining coffee waste is collected and transported to Bio-bean, a UK-based recycling company. There, the grounds are processed into coffee-based biomass logs, which are used as a sustainable heating fuel for households.

Site Analysis



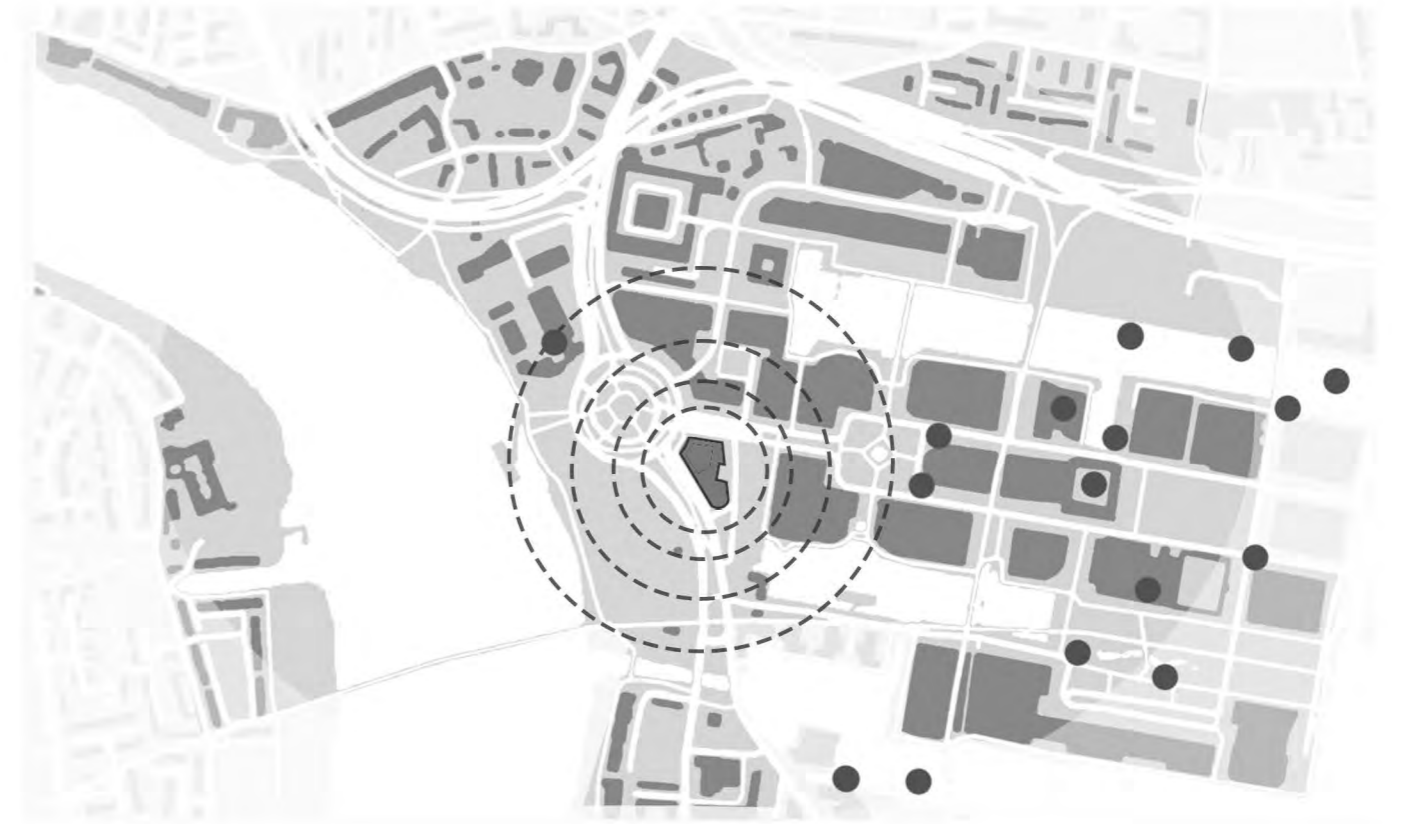
Close to the river with a great view



High density office building



Convenient location for transportation



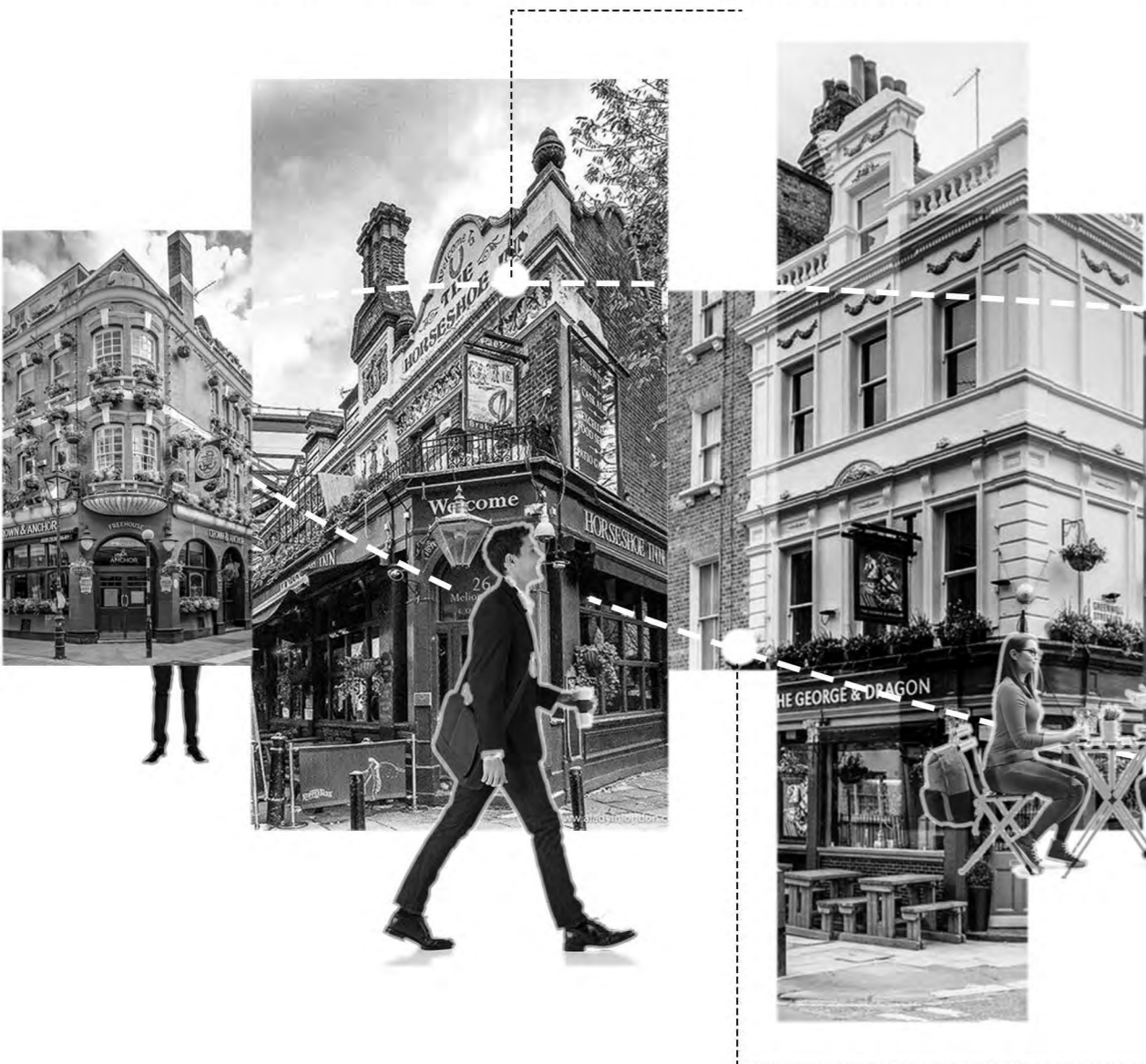
High density of coffee shops

Concept

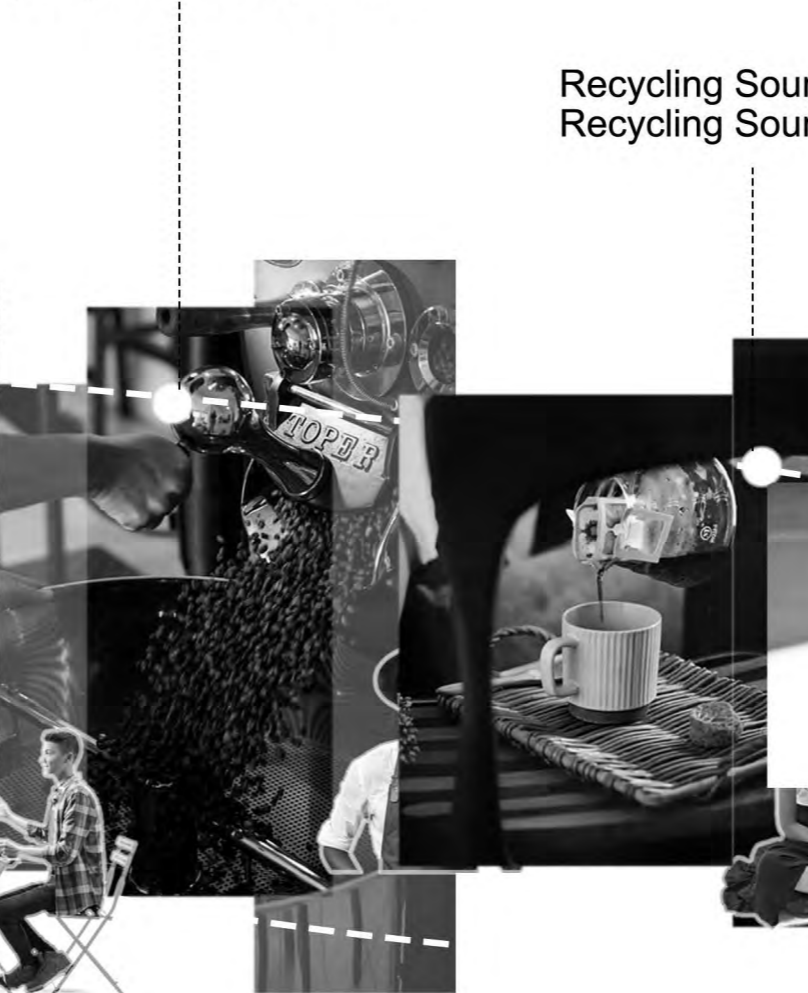
In cities like London, and especially in Canary Wharf, coffee is not just a beverage—it is a behavior: deeply embedded in daily routines, social rhythms, and workplace environments. With this consumption comes waste: vast quantities of coffee grounds are discarded daily, with little awareness of their material potential.

The proposed factory reclaims this overlooked byproduct, turning it into the basis of a circular economy. It not only processes raw coffee into consumable products but recycles waste into usable materials—from furniture to building components.

Coffee is more than a beverage in canary wharf



Recycling of coffee grounds



Recycling Source 1: Own coffee shop
Recycling Source 2: Canary Wharf Coffee Shop

Reproduced as furniture

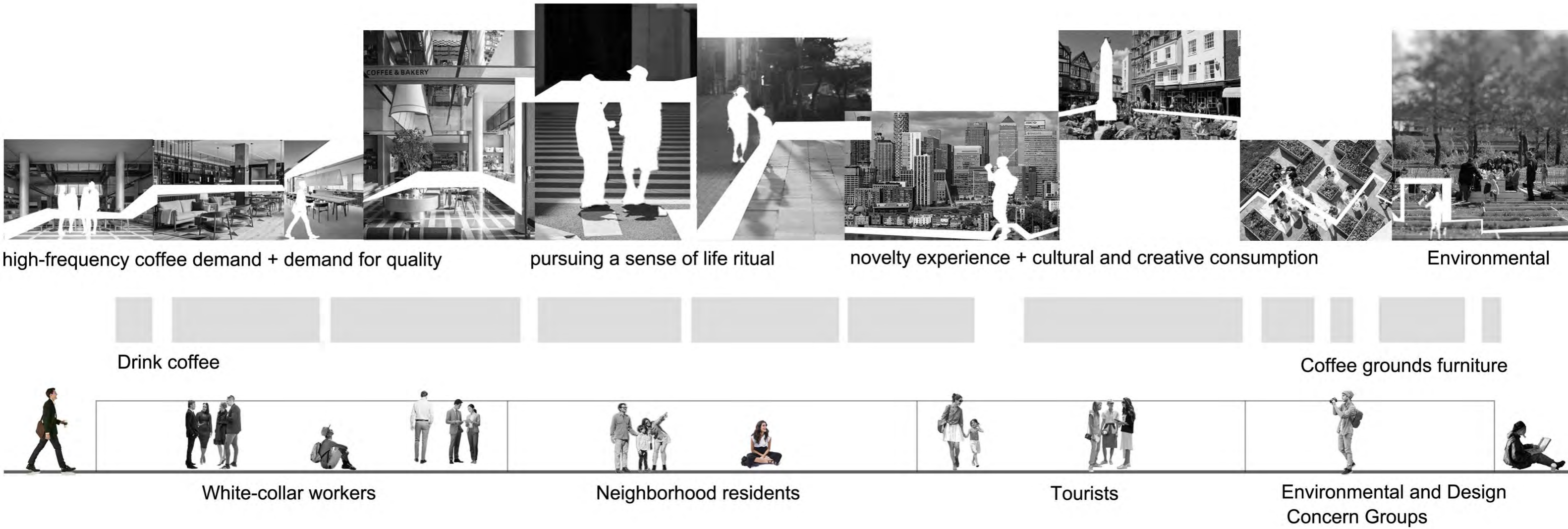


Repeatedly used by coffee shops through recycling

Urban Users

The factory is designed as a shared space where multiple user groups intersect through coffee—not only as a product, but as a process and material.

While urban professionals engage with the café as part of their daily routine, sustainability-minded users are drawn to the visibility of recycling systems and the potential of coffee grounds as a regenerative material.



“Every intervention begins with observation.”

Existing building



Finding about site

When I first studied the building, I noticed something interesting: ☒ There were small holes in the beams, which were once used for MEP pipes. ☒ They reminded me of the hidden logistics systems of the city—☒ things that are usually invisible but always moving..

This gave me the idea: ☒ Can I use these pipes and holes to show how energy, materials, and even information move through a building? ☒ It became a starting point.



Case Study

Starbucks Reserve Roastery, Shanghai

The Starbucks Roastery in Shanghai is a hybrid between a coffee factory and an immersive cultural experience. Visitors not only consume coffee, but observe its journey—from roasting to brewing to packaging.

Through this spatial choreography, I aim to blur the line between industry and intimacy, turning a daily commodity into a material narrative embedded in architecture.

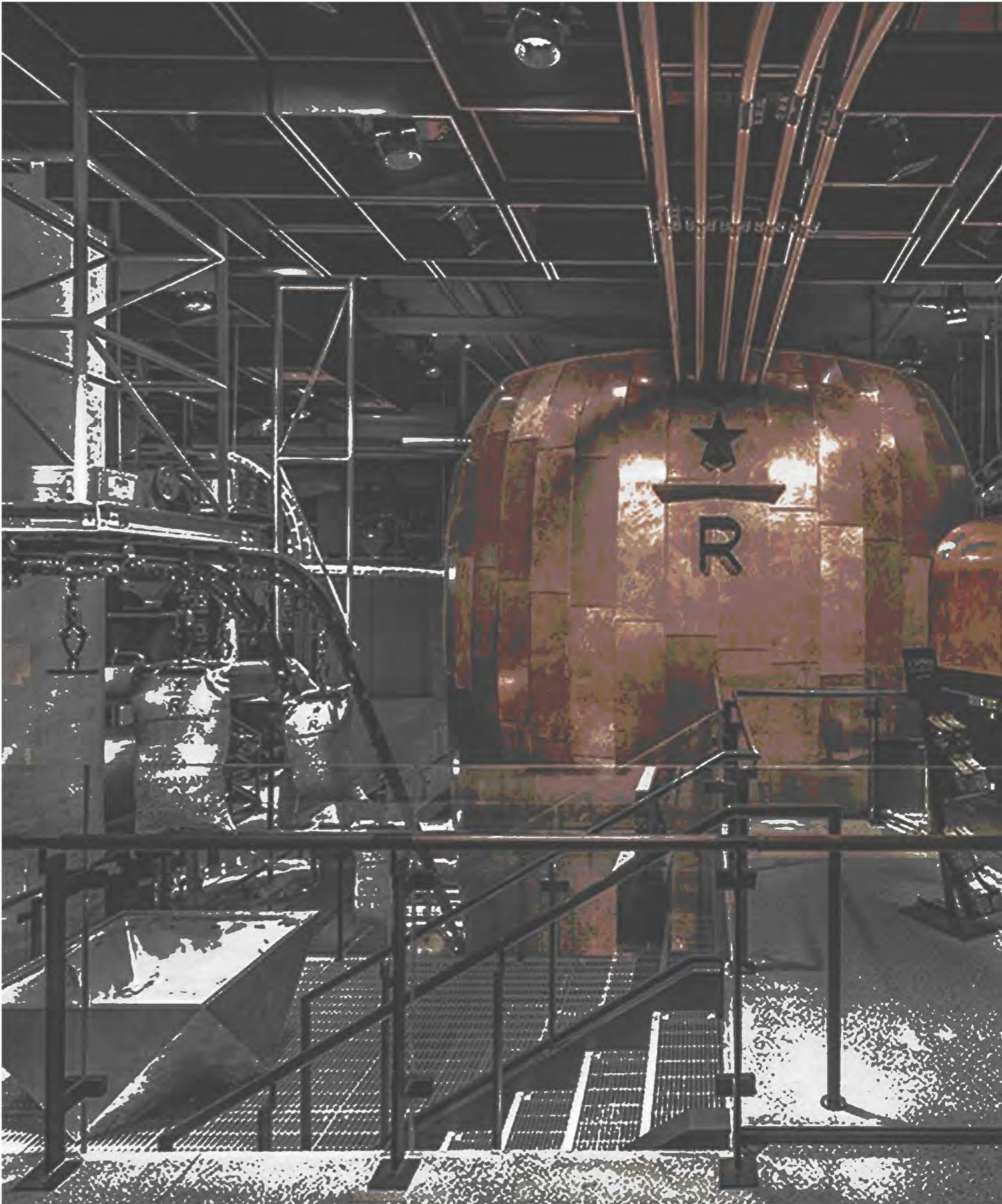


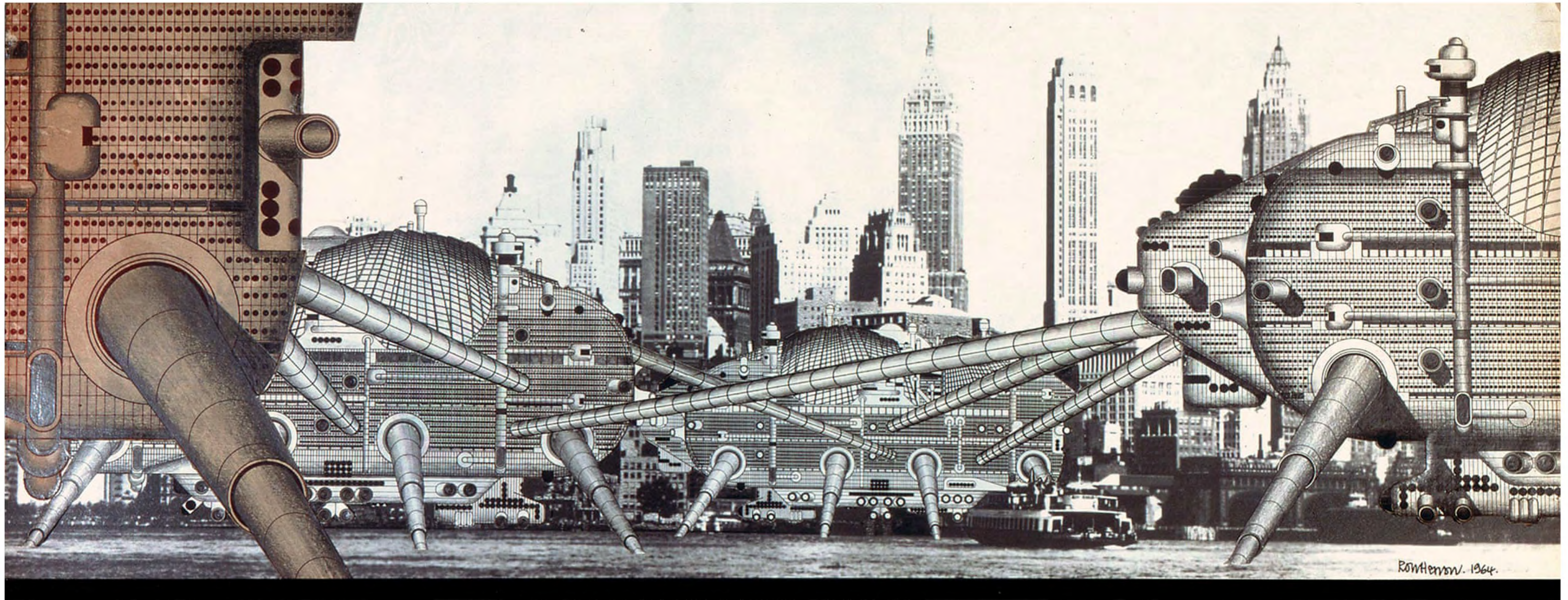
Image: Starbucks Reserve® Roastery Shanghai – Official Website

Case Study

'A Walking City' — Archigram

In my project, the idea of insertion is not only structural but also symbolic. Drawing inspiration from Archigram's Walking City, where mechanical limbs and plug-in systems transform static buildings into dynamic machines, I reinterpret this strategy through a network of visible pipes and functional openings.

By treating the pipe system as an inserted organ, the architecture becomes more than a container—it becomes a living infrastructure, capable of metabolizing, transforming, and narrating the journey of coffee through the city.



EACH WALKING UNIT HOUSES NOT ONLY A KEY ELEMENT OF THE CAPITAL , BUT ALSO A LARGE POPULATION OF WORLD TRAVELLER-WORKERS.

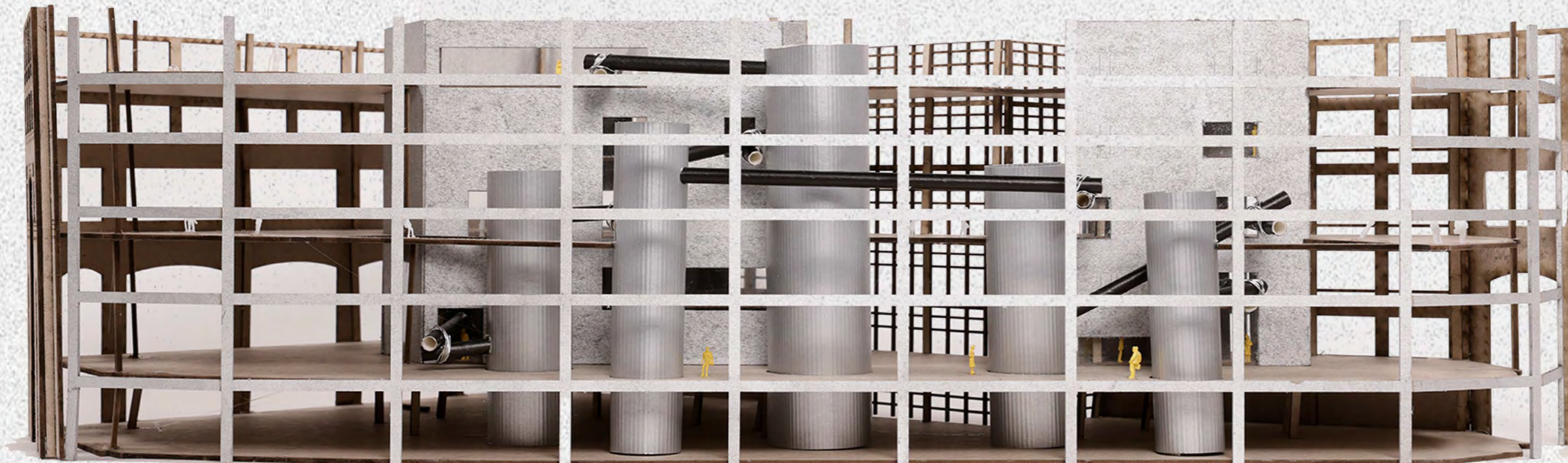
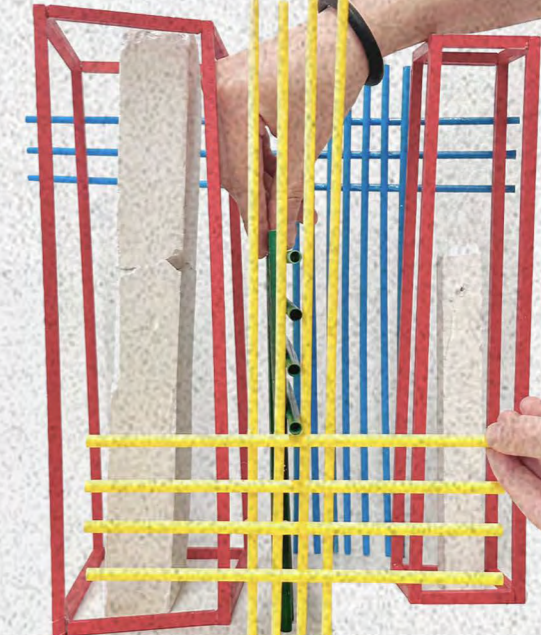
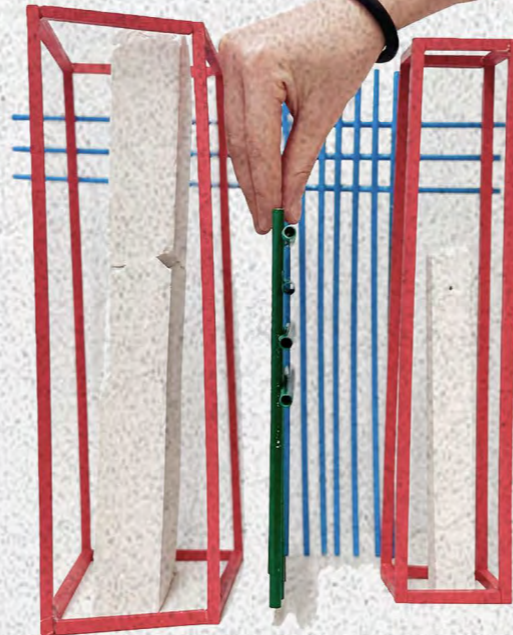
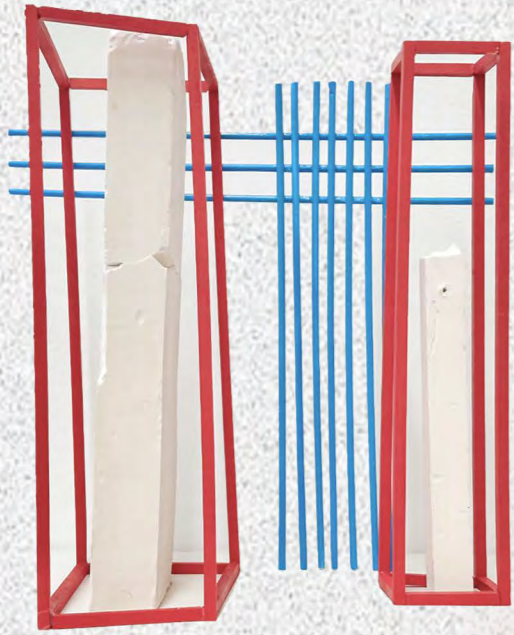
A WALKING CITY

Artefact and Models

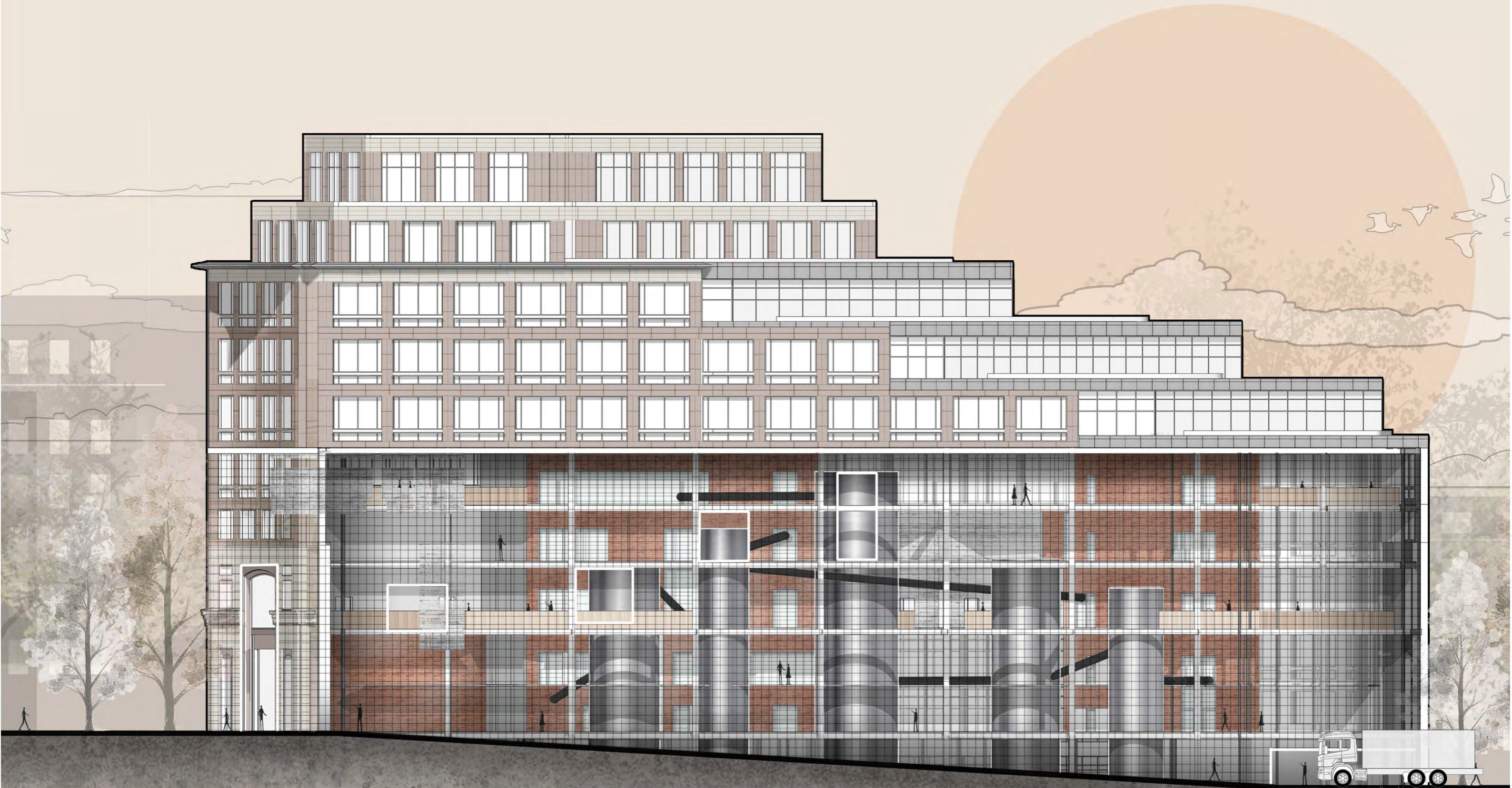
Since last semester, I've been using models to explore these ideas.

Last semester, I focused on showing the MEP systems inside the building core—like the hidden “veins” of the building.

This semester, I continued to test how pipes and staircases can become part of the visitor experience—how they can be like a living spine that people move through.



“To make it real, I began from here.”



Brand Introduction

Isle of Grounds

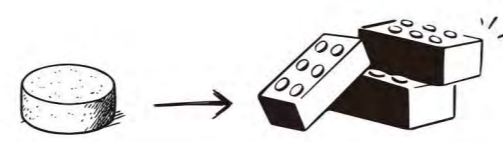
At *Isle of Grounds*, every cup is part of a cycle.

Menu

Grounds reused as



Espresso



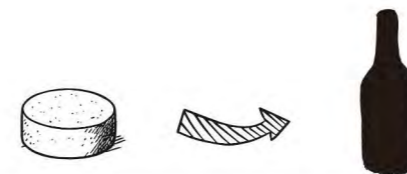
Latte



Drip Coffee



Gold Brew



Catalogue of Grounds

At "*Isle of Grounds*", every object begins with what's usually left behind. We collect spent coffee grounds from Canary Wharf's daily brew—compressing, reforming, and sealing them into tactile, functional pieces.

Each item in this collection carries the trace of a cup once poured and a place once busy. Designed not only to serve but to remind: material ends are not the end.

These are not just tables or stools. They are moments—grounded, reformed, and made durable.

1. 	2. 	3. 	4.
	6. 	7. 	
5. 		8. 	9.
10. 		11. 	12.

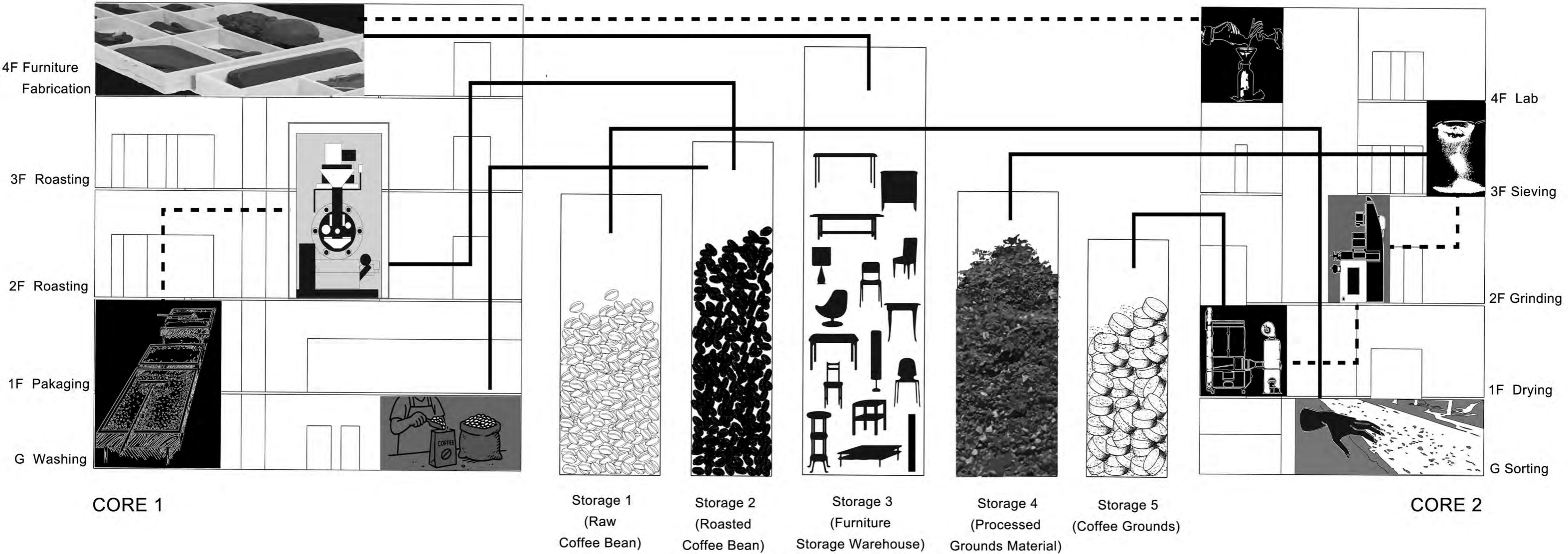
Name List

- | | | | |
|--------------------|-------------------|---------------------|----------------------|
| 1-Loop Table | 2-Crema Chair | 3-Volume 230 Table | 4-Binder Chair |
| 5-Aftercup Chair | 6-Grainline Table | 7-Still Roast Table | 8-Groundlight 01 |
| 9-Form Sheet Table | 10-Aftercup Chair | 11-Dock Slab Table | 12-Binder Mini Table |

Coffee Processing & Storage Flow

This diagram visualizes the full cycle of coffee—from raw bean to brewed waste—within the Isle of Grounds factory. It shows how the building is organized into vertical functions and horizontal material logic, linking architectural cores, equipment, storage, and the visible journey of transformation.

----- External Pipeline
 ——— Internal Pipeline

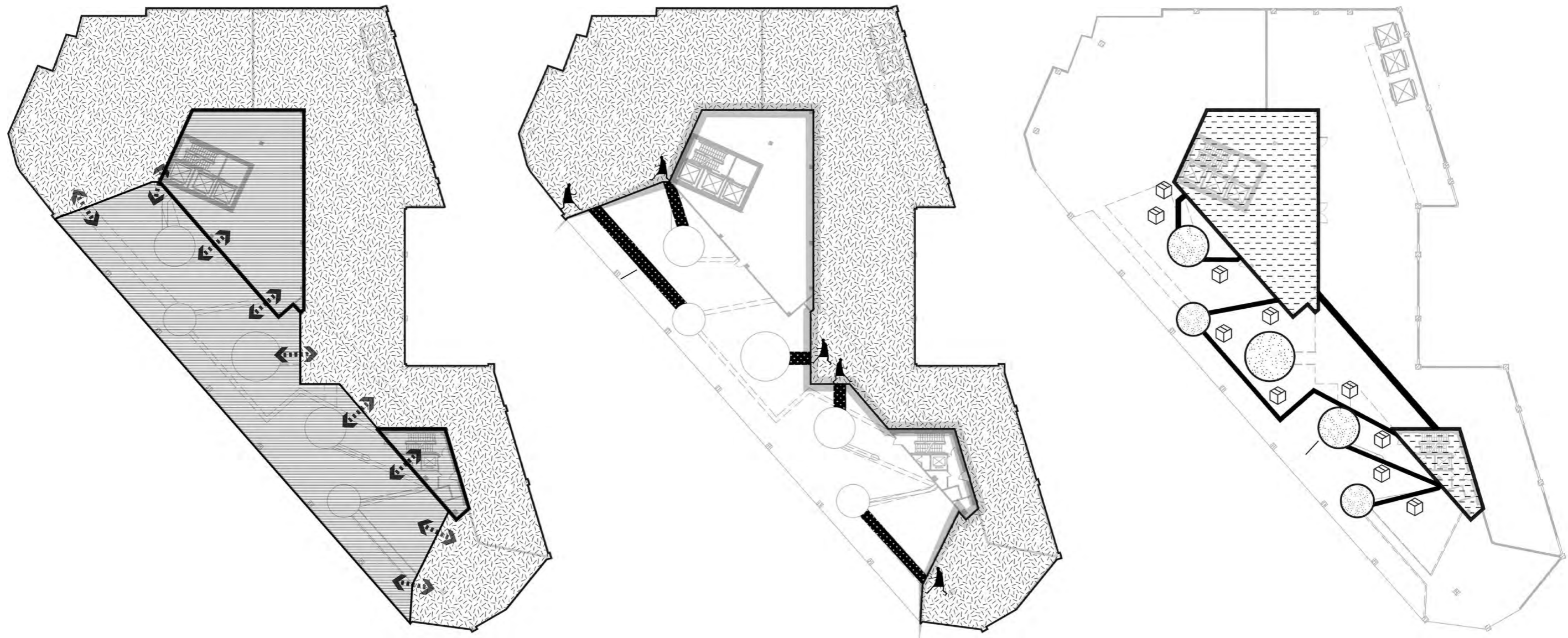




Design Development








This spatial split ensures a clear separation between industrial operations and the visitor's experiential path, while still keeping them visually and narratively connected.

A continuous viewing corridor is inserted alongside the factory zones, allowing visitors to walk through the building and witness different stages of coffee processing without disrupting the workflow.



-  Public Area (Café + Display)
-  Factory (Production Zone)

-  Public Area (Café + Display)
-  Viewing Corridor

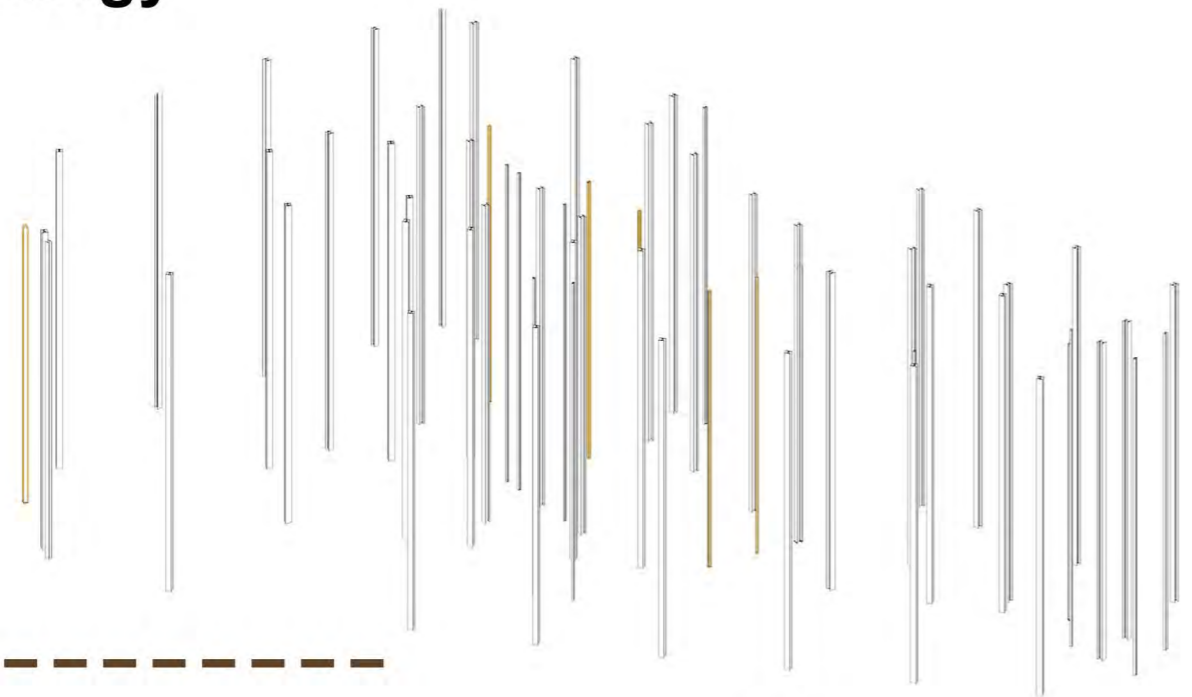
-  Delivery Pipeline
-  Factory (Storage Area)
-  Factory (Production Zone)

Structure Strategy

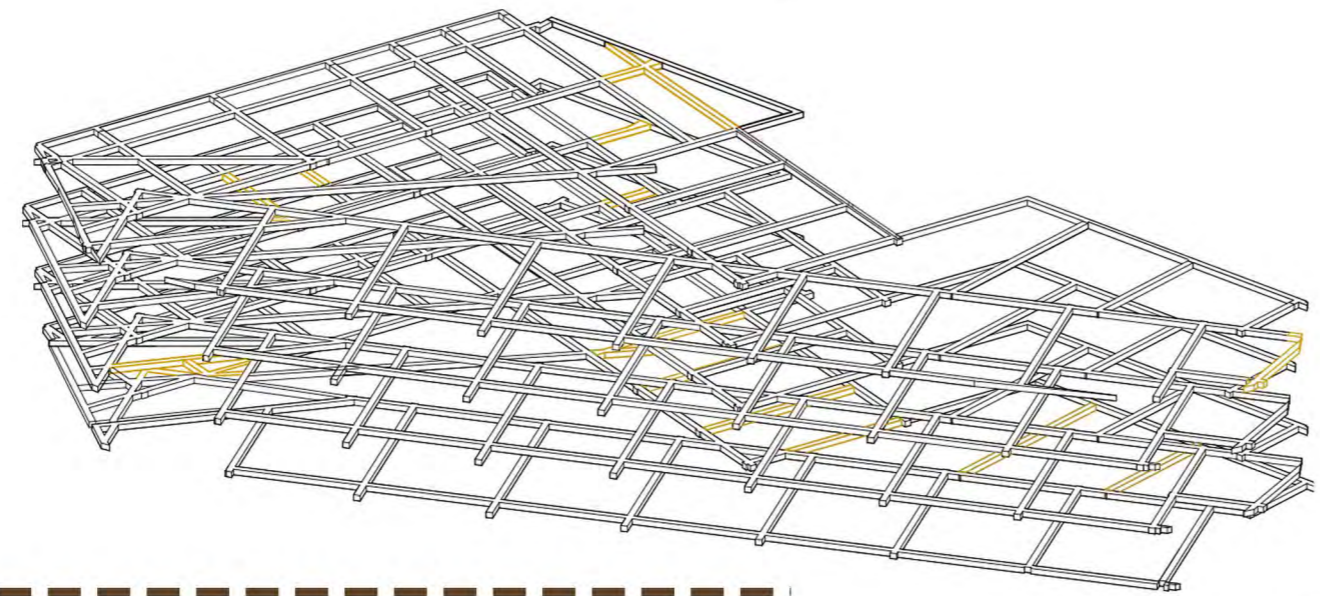
This diagram illustrates the structural approach taken in the transformation of the existing building. The original columns, beams are largely retained to preserve the architectural integrity and minimize structural waste.

Only a small number of structural elements—highlighted in yellow—have been selectively removed. These removals occur primarily where new staircases and vertical circulation cores are inserted, ensuring functional accessibility without compromising the overall frame.

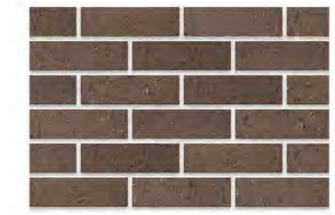
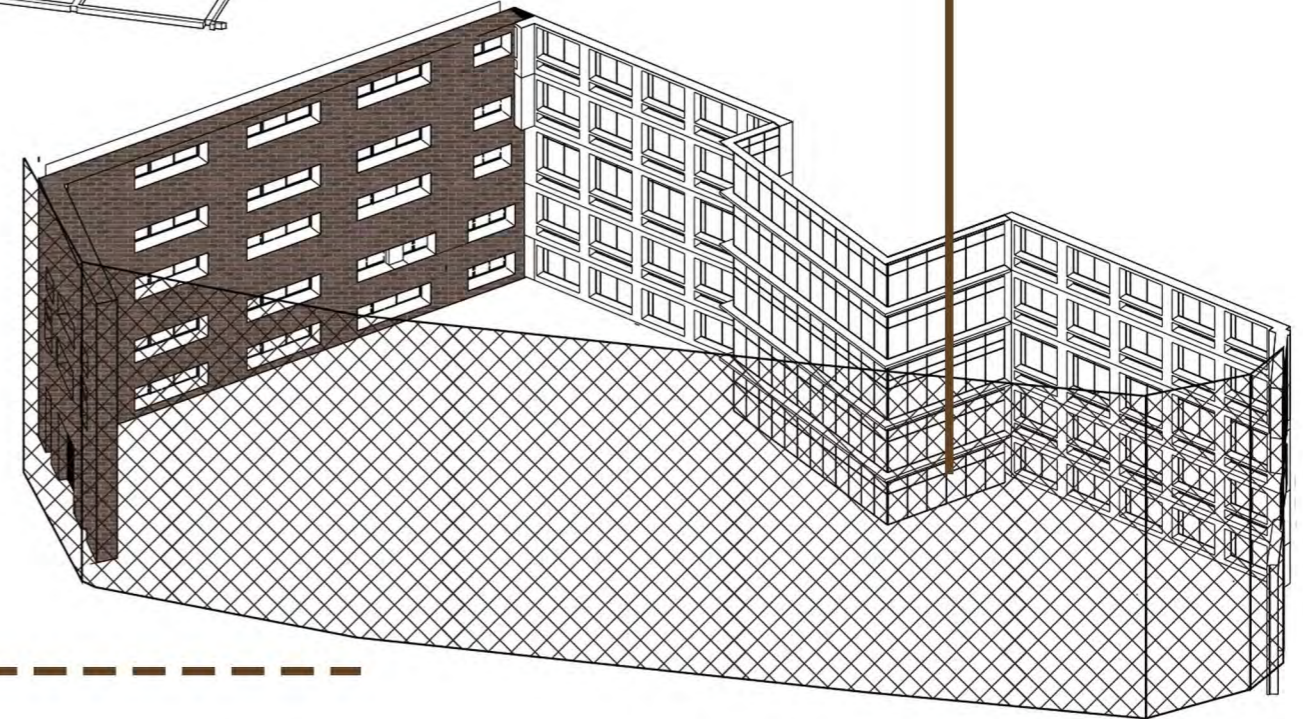
Columns



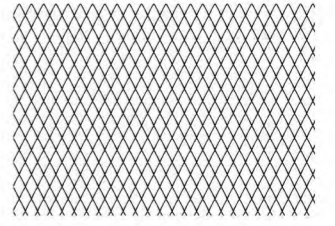
Beams



Facade



Coffee Grounds Brick



Steel Mesh

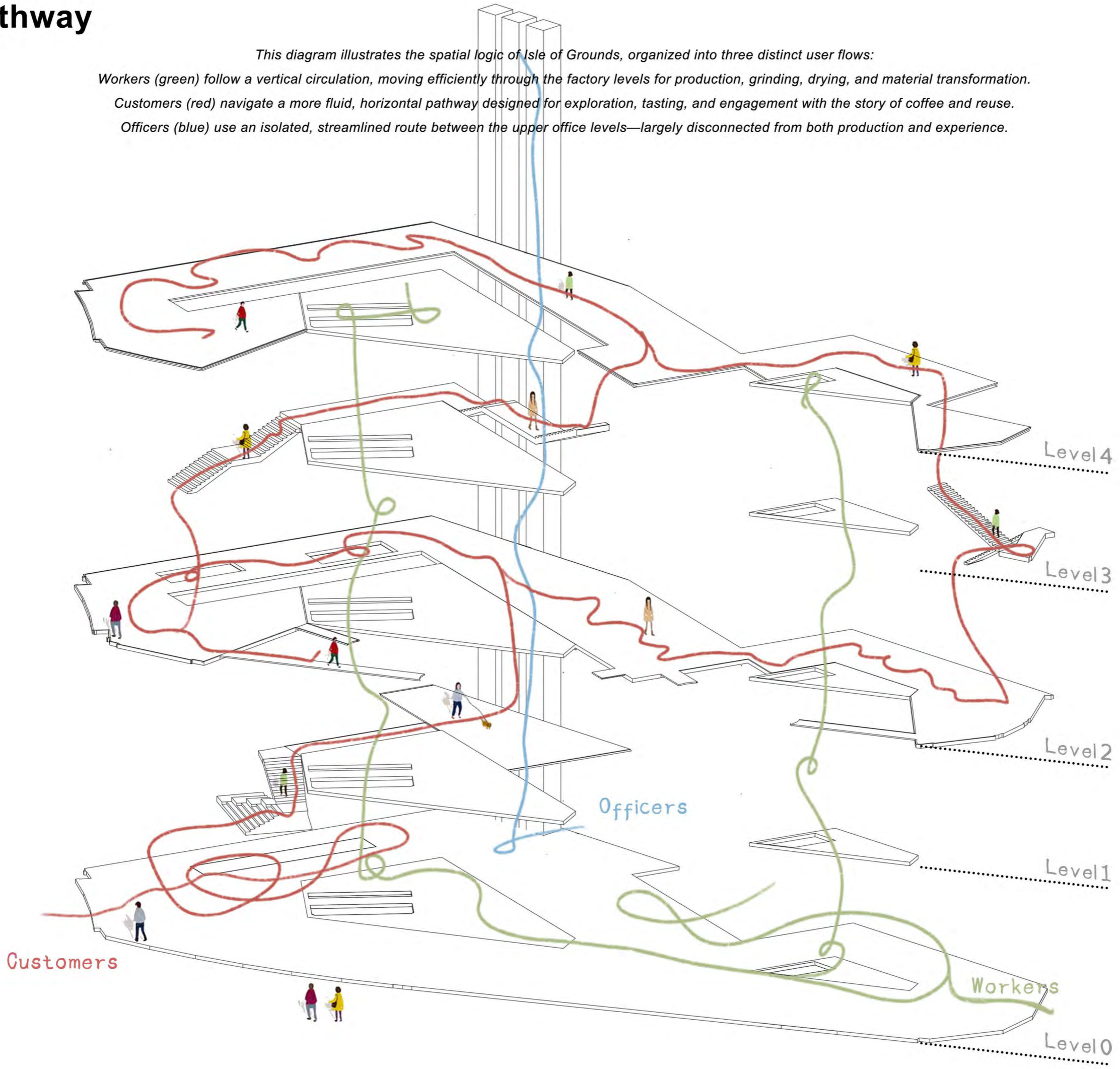
User's Pathway

This diagram illustrates the spatial logic of Isle of Grounds, organized into three distinct user flows:

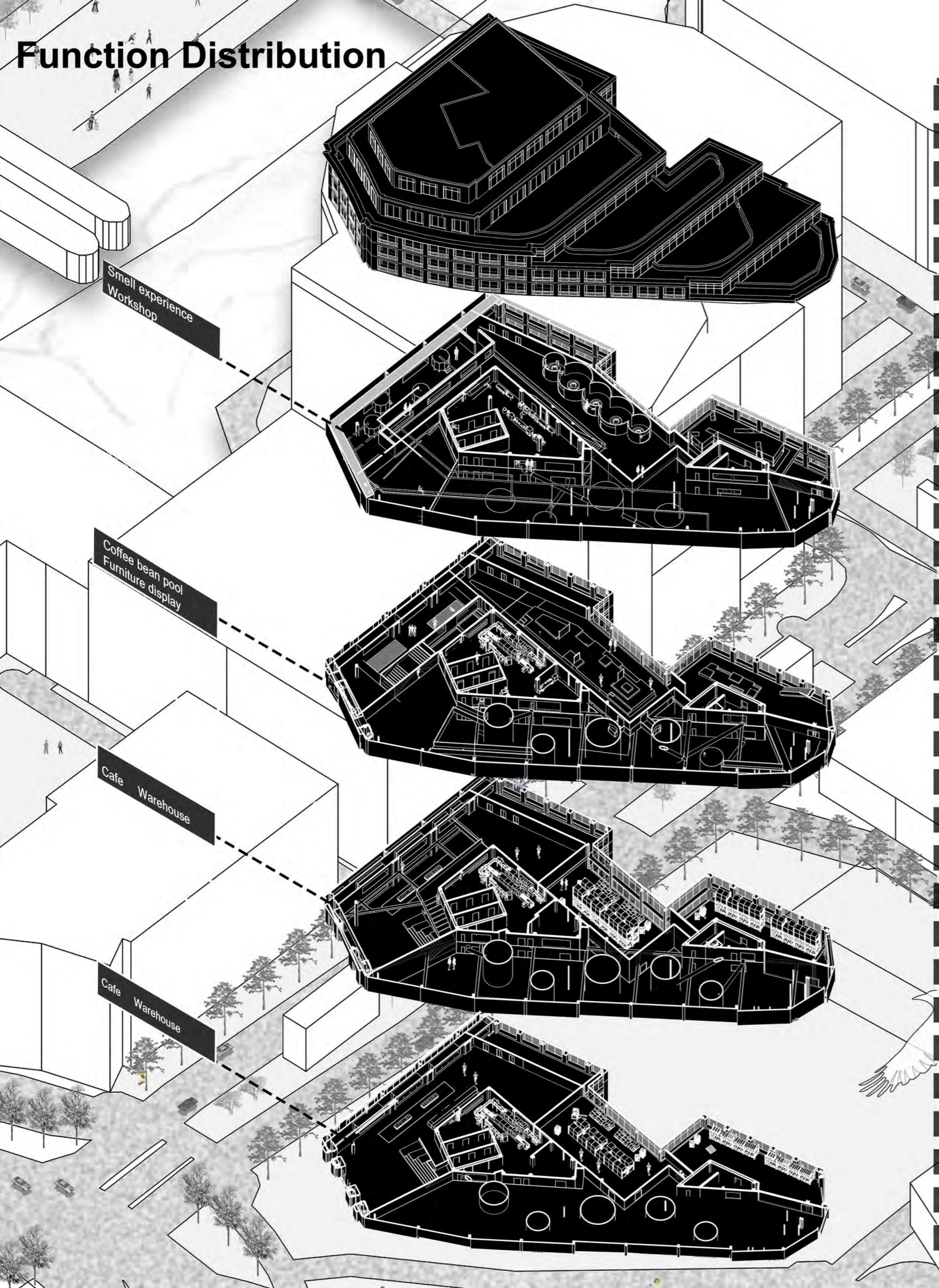
Workers (green) follow a vertical circulation, moving efficiently through the factory levels for production, grinding, drying, and material transformation.

Customers (red) navigate a more fluid, horizontal pathway designed for exploration, tasting, and engagement with the story of coffee and reuse.

Officers (blue) use an isolated, streamlined route between the upper office levels—largely disconnected from both production and experience.



Function Distribution

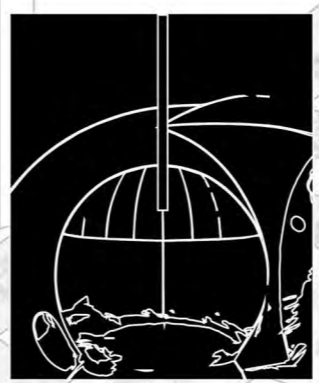


Smell experience
Workshop

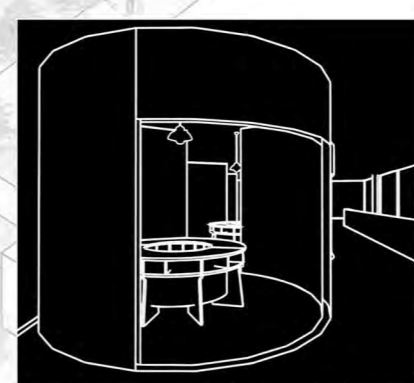
Coffee bean pool
Furniture display

Cafe
Warehouse

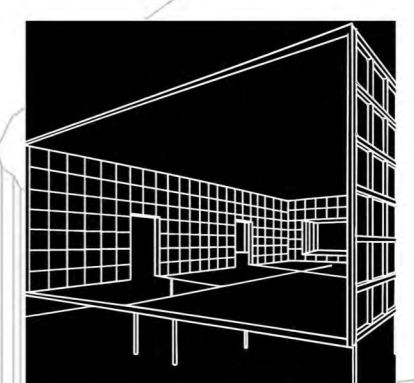
Cafe
Warehouse



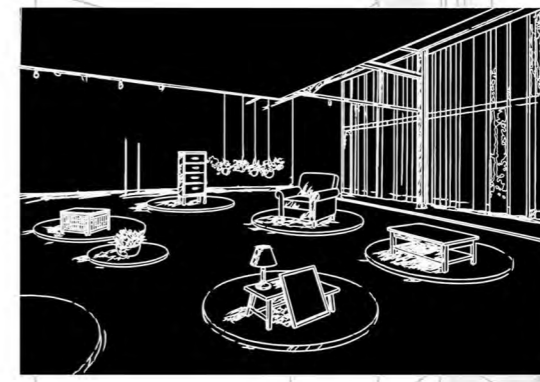
Smell experience
3F



workshop
3F



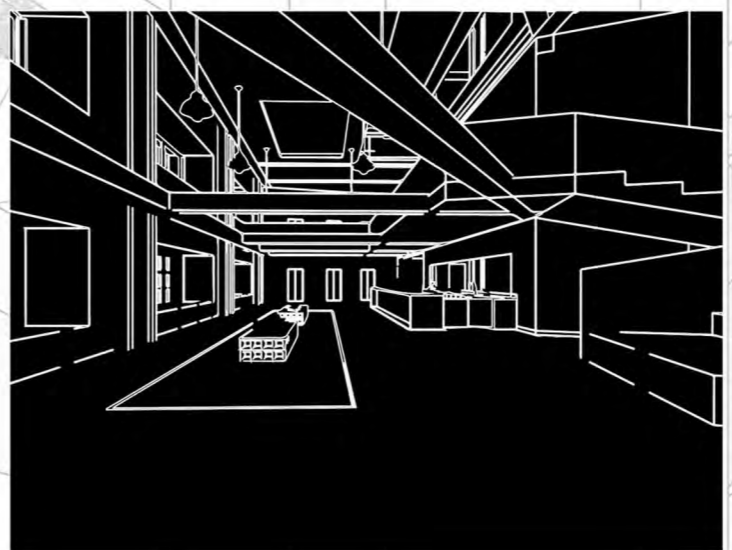
Production process display space
3F



Furniture display
2F



Coffee bean pool
2F



Cafe - G&1F

“Now, let’s enter the Isle of Grounds.”

Final Spatial Rendering

Cafe - G



Cafe - 1F





*Packaging area
(Factory)*

Coffee Bean Pool - 2F





Furniture Display - 2F

Smell Experience- 4F



Sightseeing corridor - 2F



*In a place where coffee is consumed without question, **Isle of Grounds** asks where that story truly ends.*

Through a visible system of flow, storage, and transformation, this project reclaims the forgotten residue of everyday rituals. Coffee grounds—once discarded without notice—are given new purpose as furniture, surfaces, and spatial materials.

This is not just about recycling, but about revealing.



***Thank you~
Anyi Xue***