

A NEW OLD COMMUNITY

Development of 'local community' centers with culinary-related functions to address current needs of Belgrade's population

Methods of Analysis & Imagination
Raluca Bratfalean-Igna



A NEW OLD COMMUNITY

I. SOCIO-CULTURAL & SPATIAL CONTEXT

Culinary Heritage & the Heritage of Community Architecture

II. INTERVENTION A: NEW BELGRADE

Revitalisation of 'Local Community' Center in Block 70

III. INTERVENTION B: OLD BELGRADE

New Community Center on Bulevar Kralja Aleksandra



A NEW OLD COMMUNITY

I. SOCIO-CULTURAL & SPATIAL CONTEXT

Culinary Heritage & the Heritage of Community Architecture

II. INTERVENTION A: NEW BELGRADE

Revitalisation of 'Local Community' Center in Block 70

III. INTERVENTION B: OLD BELGRADE

New Community Center on Bulevar Kralja Aleksandra



Initial Research: Belgrade's Green Markets



Main source of architectural inspiration during visit of Belgrade

Large open spaces / intricacy, appropriation, and comfort

Vibrant and interactive places - expression of culture

Familiar with their significant value in Eastern European/Balkan context

Emphasize importance of culinary heritage in Serbia

Initial Research: Palilula Market Hall



Precedent building study

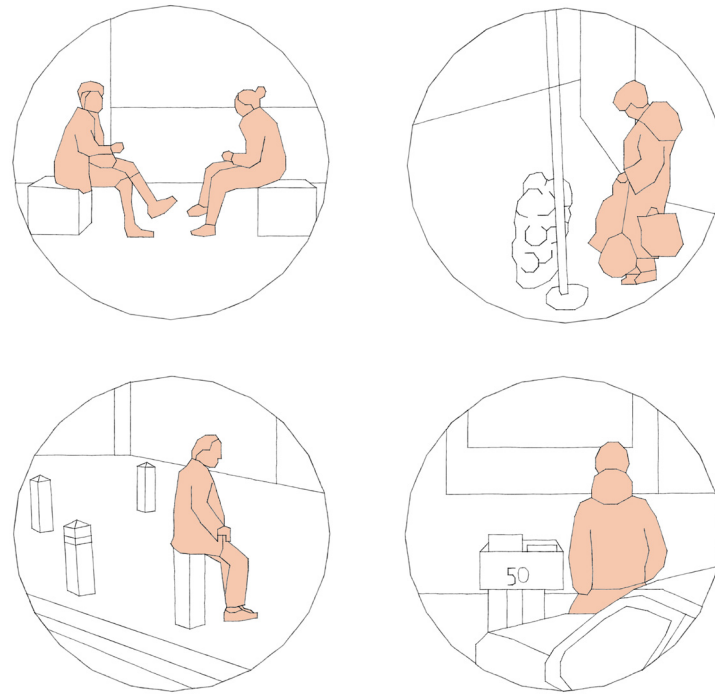
Contemporary green market hall

Result of architectural competition - exciting form and structure

Different interior experience compared to other green markets

No consideration of Belgrade's cultural context?

Initial Research: “The Street as a Public Home”



Q1 group research: Socio-cultural characteristics in Belgrade's streetscape

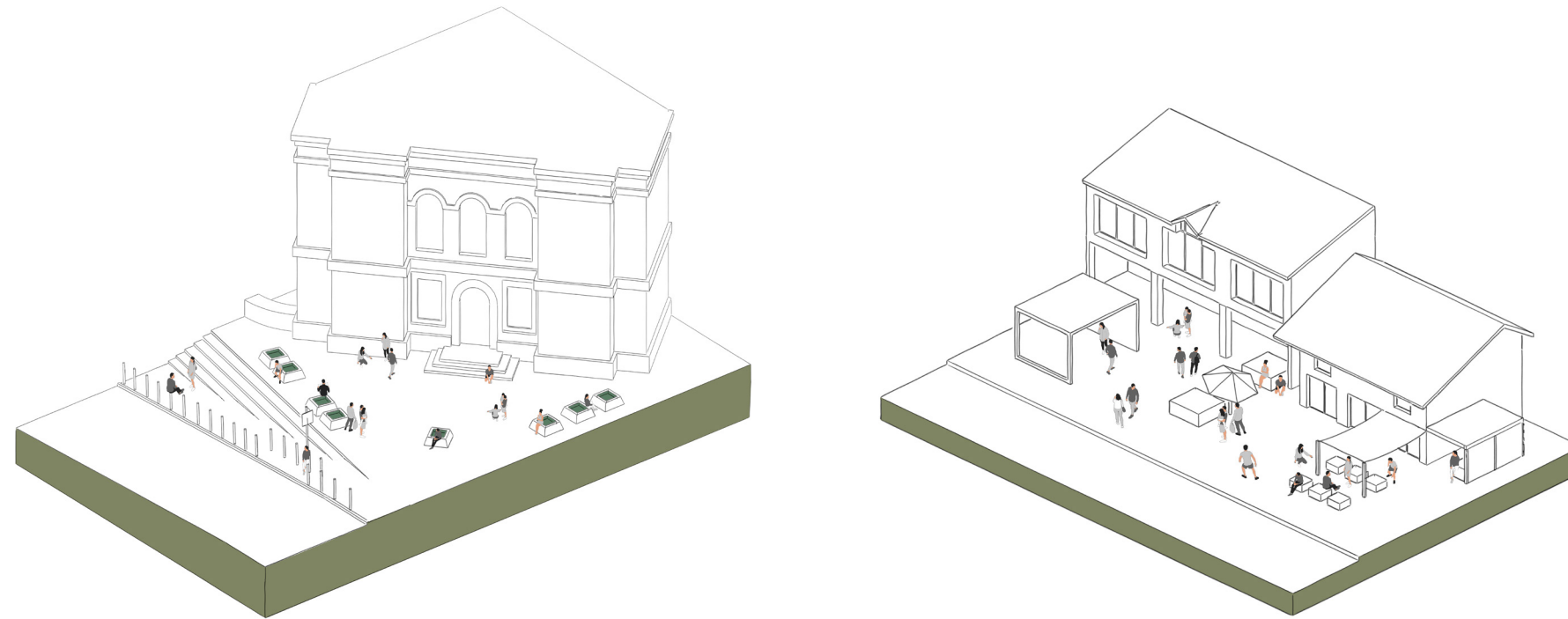
Strong connection between people and surrounding architecture

Comfort and freedom to perceive public spaces as one's home

Large extent of appropriation/adaptation of urban furniture

New architectural developments should encourage these socio-cultural processes

Initial Research: “The Street as a Public Home”



Guidelines for culture-inclusive design (in the context of Belgrade)

Generosity: architecture as a platform for social interaction

Expansiveness: spatial broadness as opposed to strict borders between spaces

Transition: gradient area between public/private that allows appropriation

Flexibility: spaces that encourage a variety of functions, actions, and micro-flux

Socio-Cultural Context: *Existing Practices*



“Balkan countries have a strong culinary heritage maintaining the consumption of traditional food in close connection with the cultural habits of their population.”

(G. Giroud, et. al., *A cross-cultural segmentation of western Balkan consumers*, *Society of Chemical Industry*, vol. 93, 2013, p. 3464)



“All urban centres still smell of grilled peppers and green markets exhibit large packages of vegetables for the preparation of the zimnica.”

(Bernardoni P, Est`eve M, Paus M nd Reymann R, *Case Studies on Quality Products Linked to Geographical Origin in the Balkans*. *FAO, AGRIDEA*, Rome, 2008. p. 1)

Socio-Cultural Context: *Identified Problem*



“These habits are likely to decline in the medium and long term with the modernisation of agriculture.”

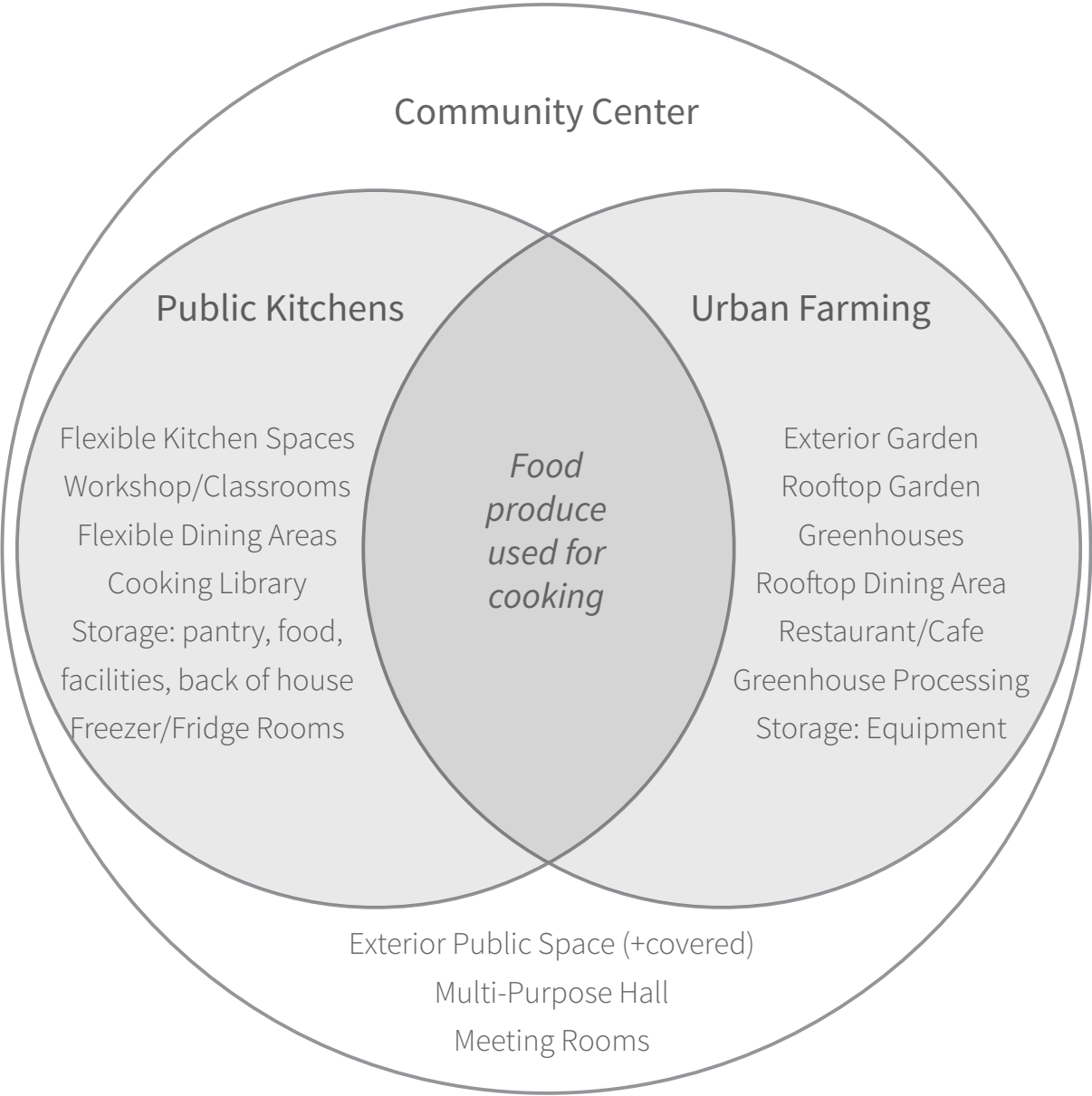
(A cross-cultural segmentation of western Balkan consumers, G. Giroud, et. al, Society of Chemical Industry, vol. 93, 2013. p. 3465)



“The movement away from traditional croplands has disconnected city-dwellers from native agriculture.”

(K. Mehta, Leveraging Globalization to Revive Traditional Foods, Journal of Sustainable Development, vol. 9, no. 6, 2016, p. 213)

Socio-Cultural Context: *Resulting Building Program*



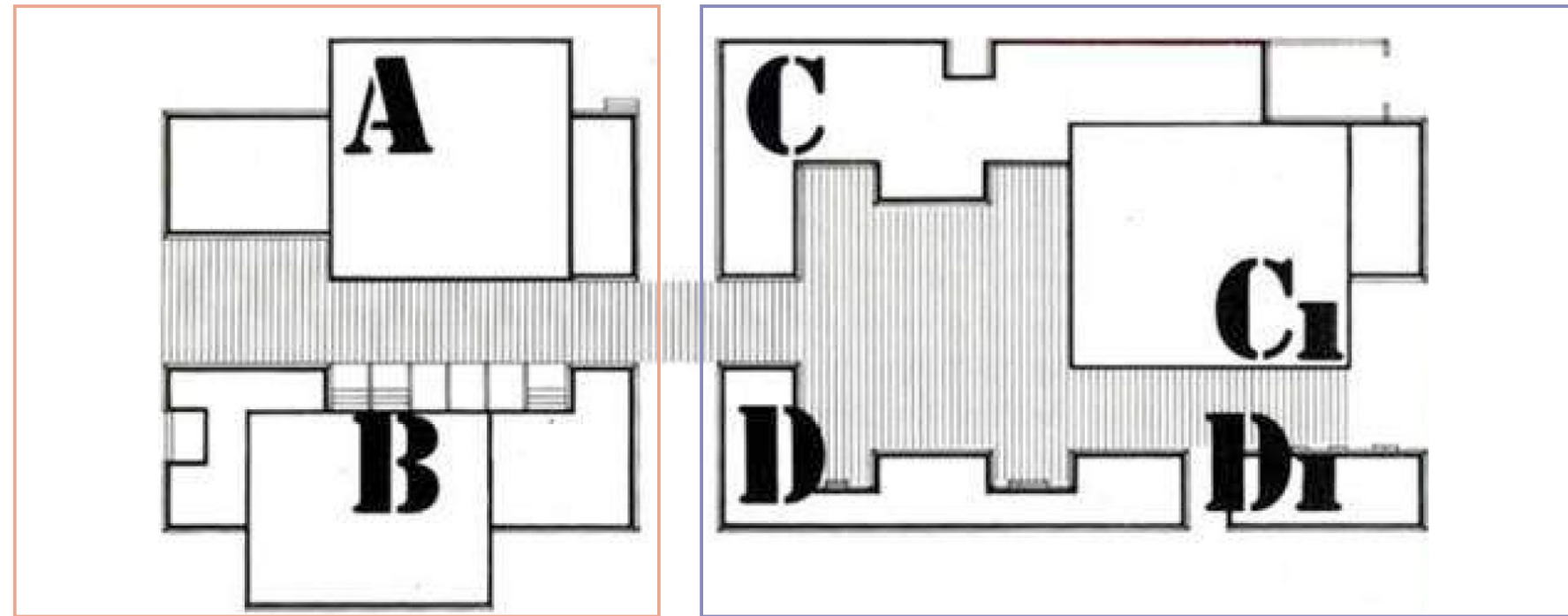
Spatial Context: *'Local Community' Existing Typology & Heritage*



Modernist approach of socialist government
Functionalist strategy - clearly defined program
Standardised design replicated in multiple sites across New Belgrade
Fast & economical construction with pre-fabricated concrete and steel
Construction stages - building blocks to be built separately in case of lack of funding
Managed by members of local community in coordination with government officials

(Marija B. Martinović, Yugoslav Self-management & Architecture of Local Community Centers in Belgrade 1950-1978, University of Belgrade, 2020, p. 159)

Spatial Context: *'Local Community' Typical Plan*



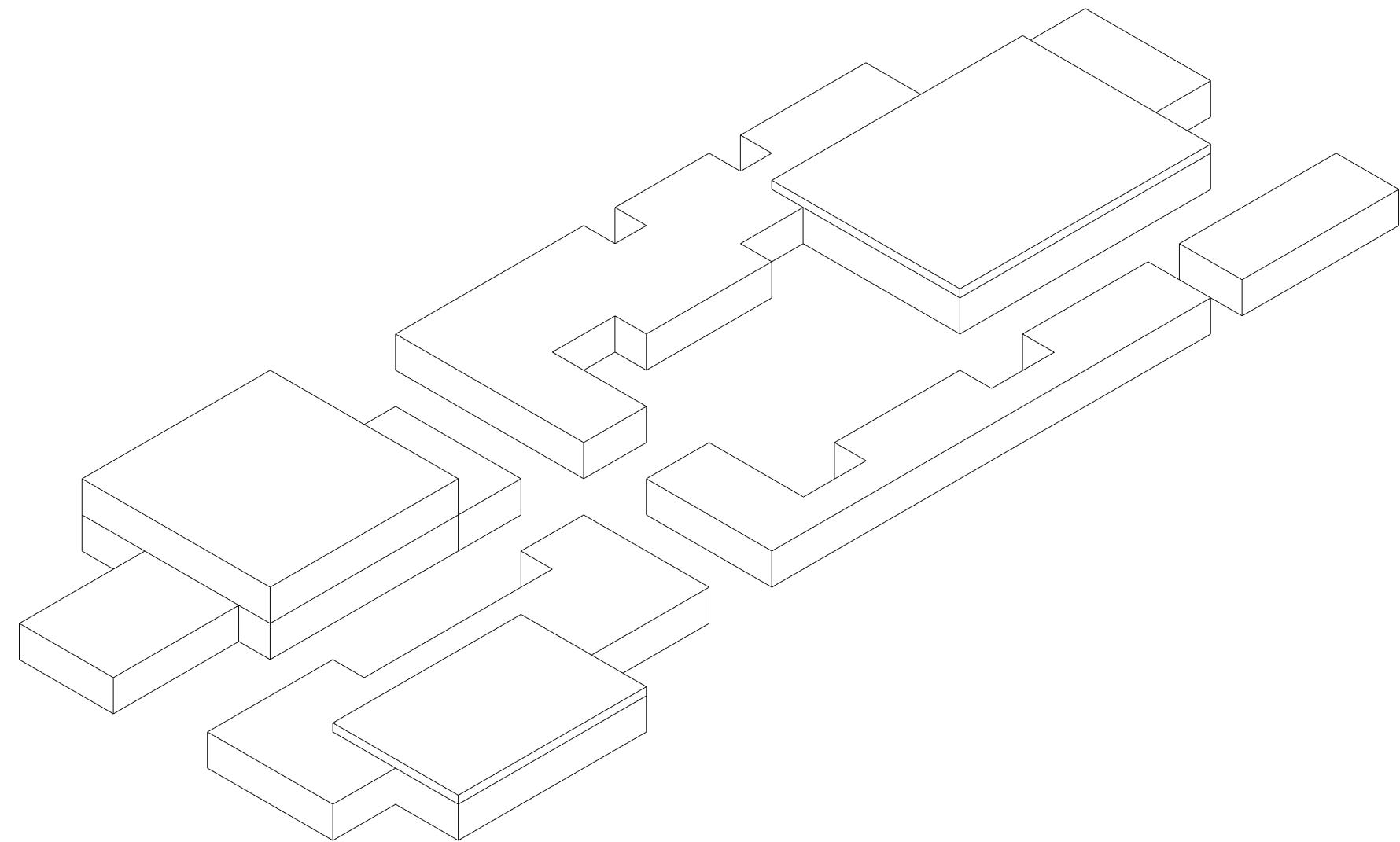
A - Administrative & Building Services,
Bank, Post Office (600 sqm)

B - Gathering Hall: socio-political activity
of community members, library, youth
club (500 sqm)

C - Supermarket & Catering incl.
restaurants, kitchens, grocery markets,
storage (1350 sqm)

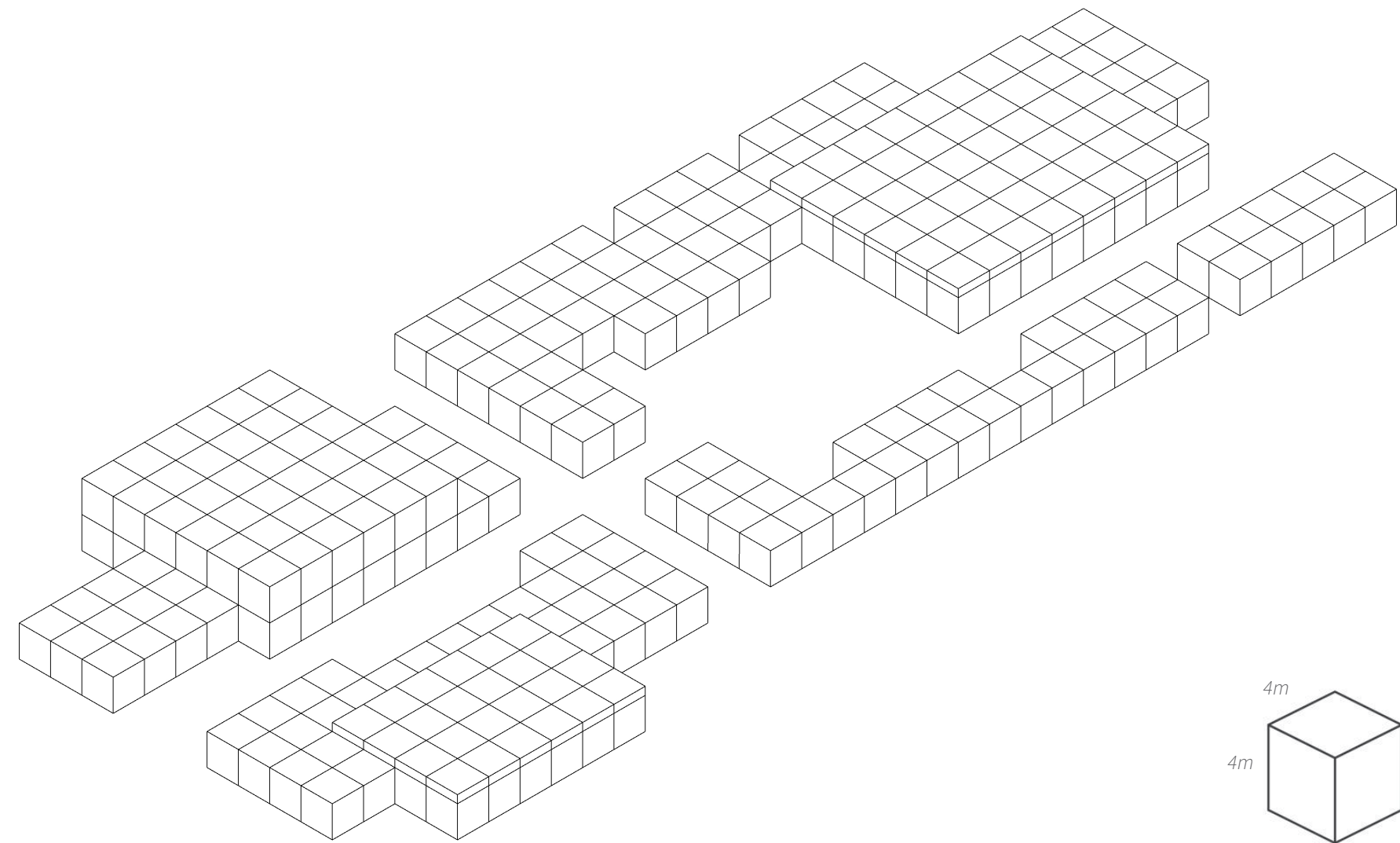
D - Shops & Services incl. crafts,
bookstore, hairdressers, etc. (600 sqm)

Spatial Context: ‘Local Community’ Configuration



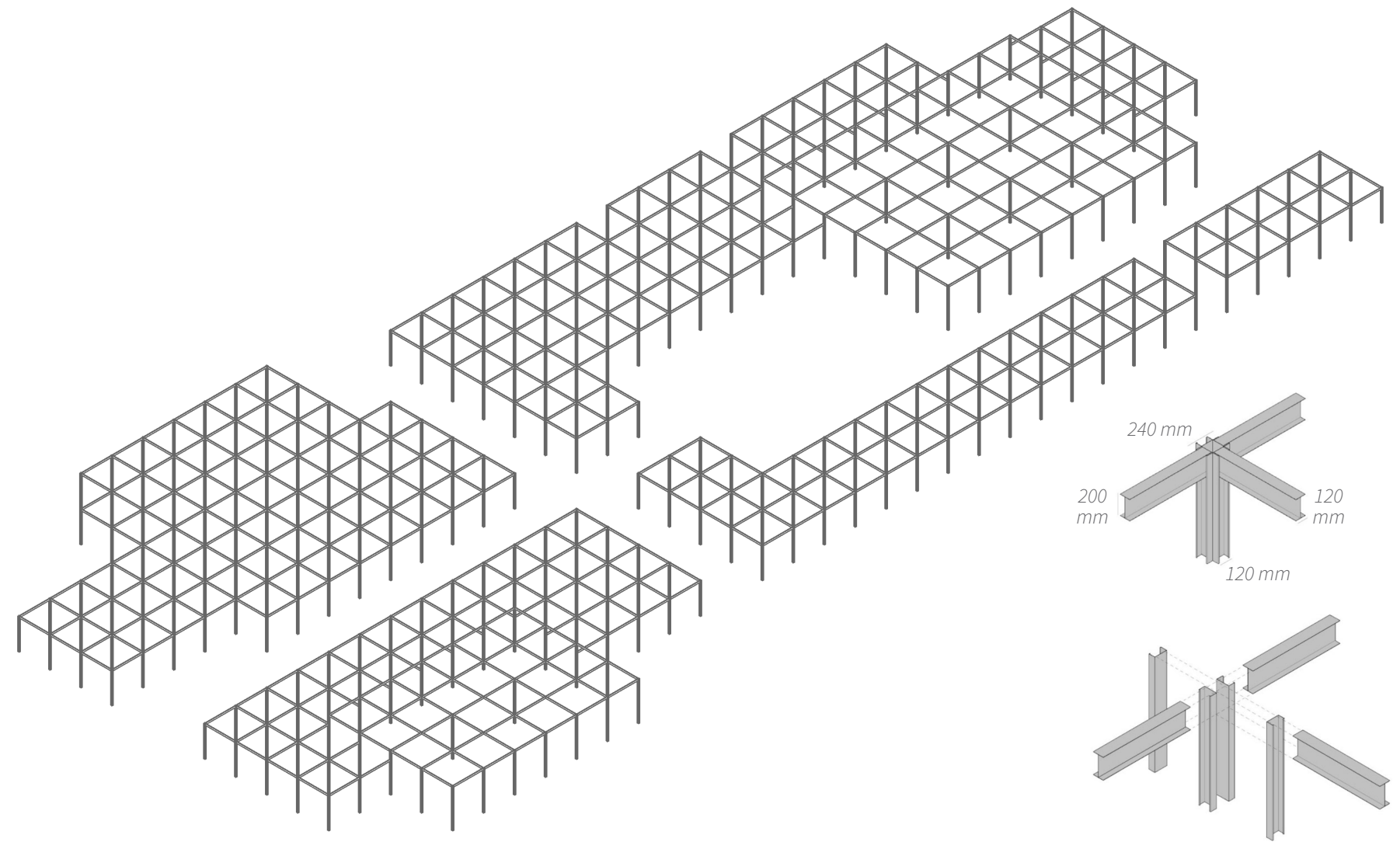
Distribution of Blocks in ‘Local Community’ Centers

Spatial Context: ‘Local Community’ Configuration



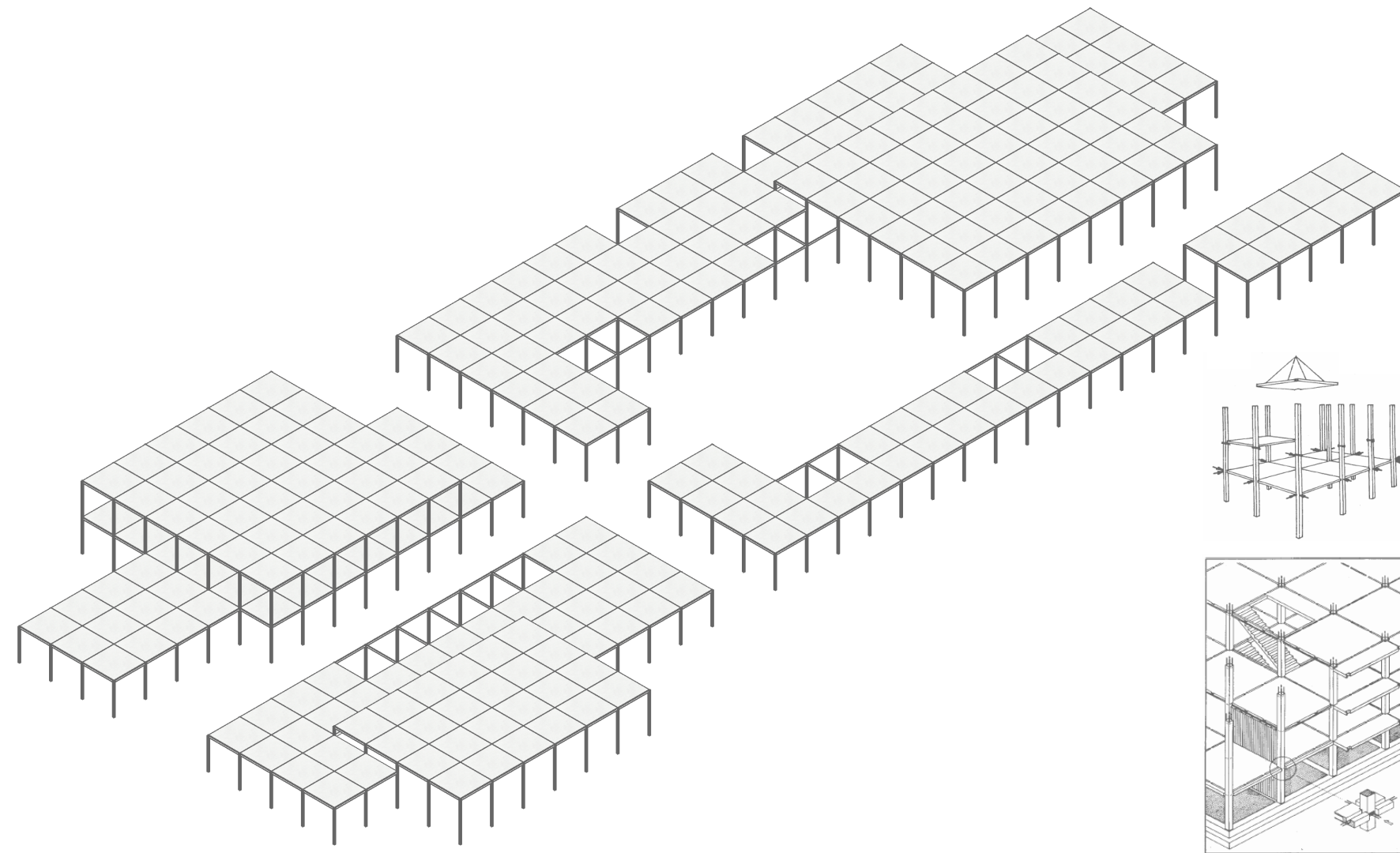
4m x 4m Modules Across Entire Structure

Spatial Context: ‘Local Community’ Structure



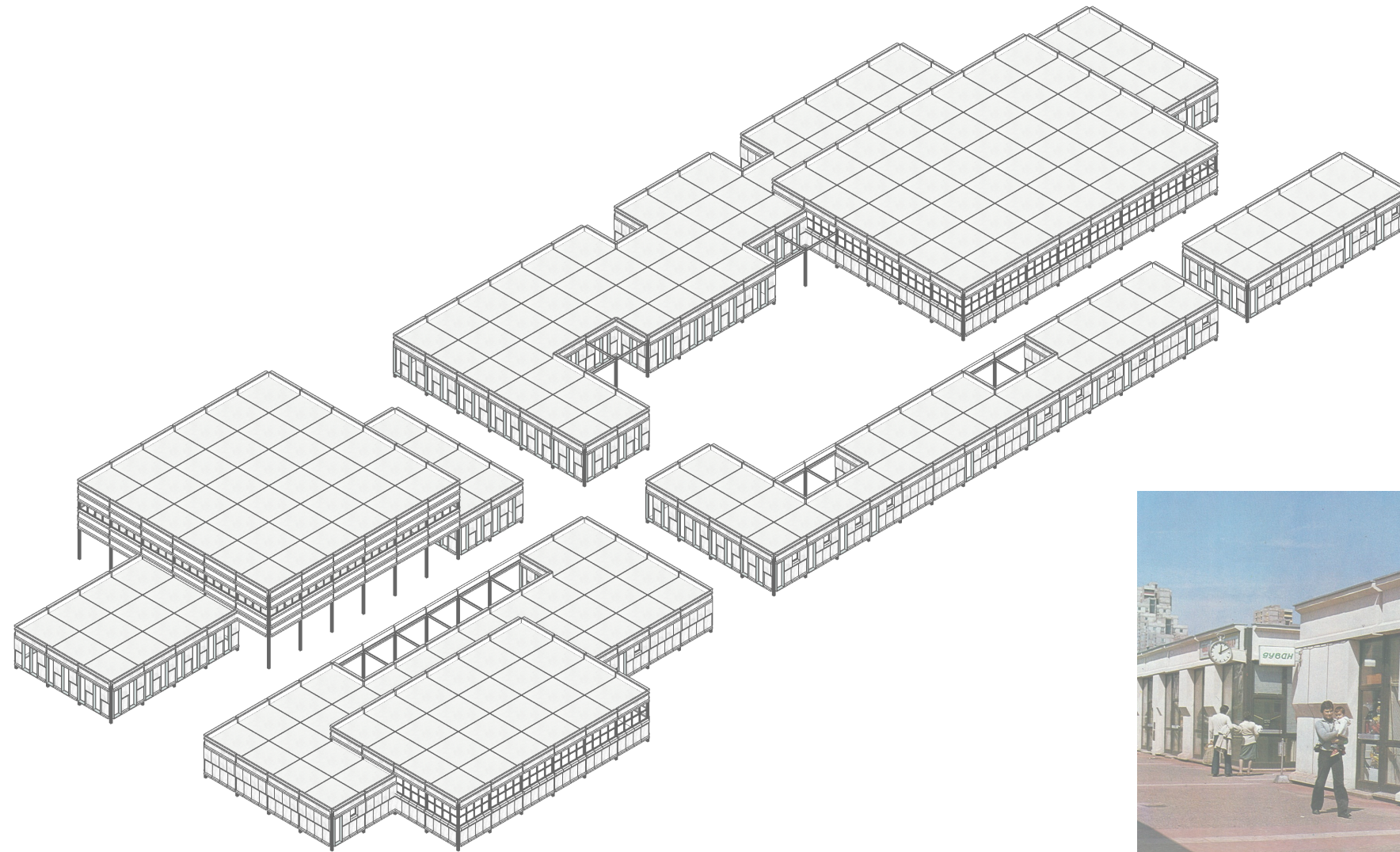
Modular Steel Frame

Spatial Context: *'Local Community' Structure*



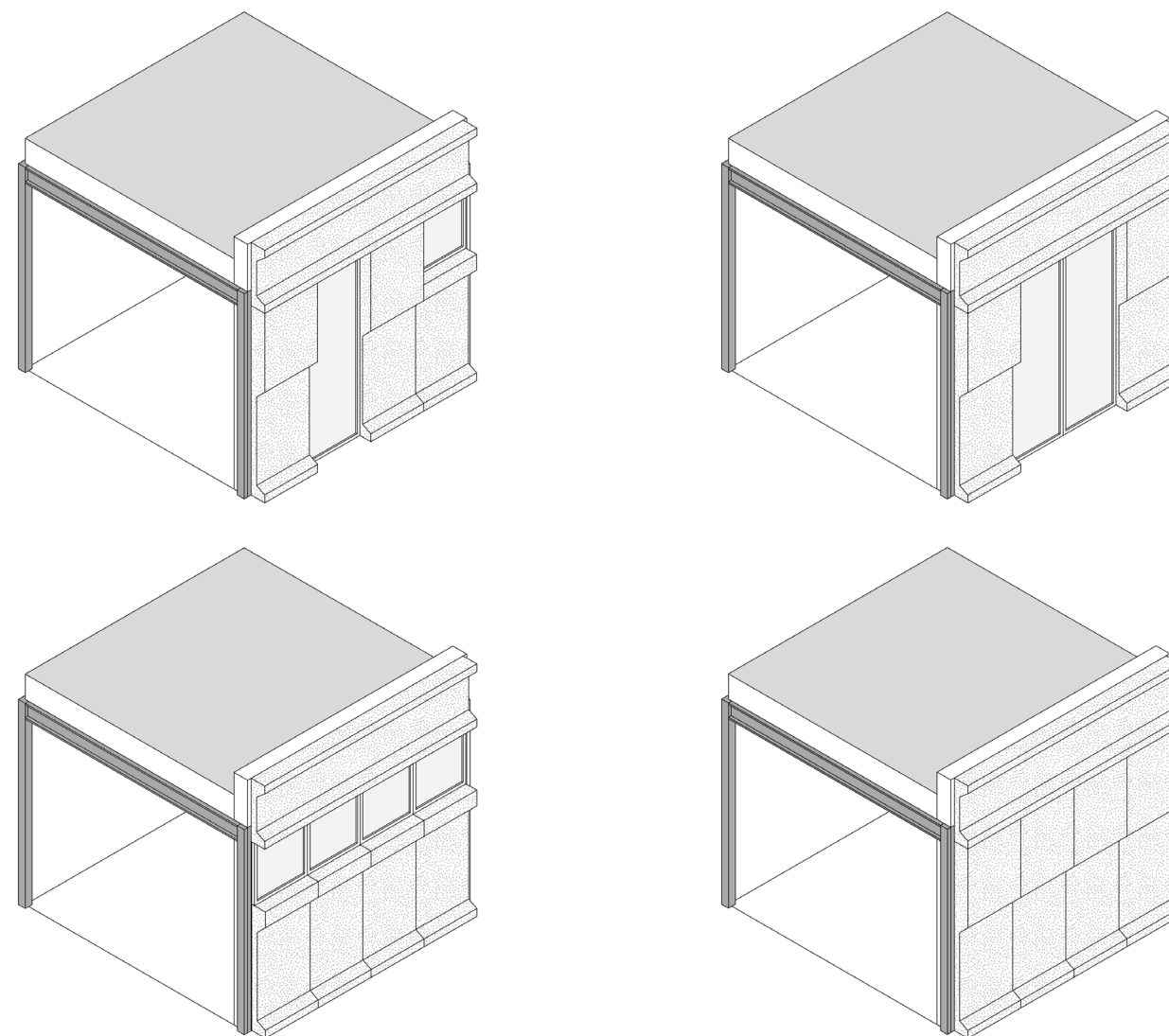
Modular Prefabricated Concrete Floors

Spatial Context: *'Local Community' Structure*



Modular Prefabricated Concrete Facade

Spatial Context: *'Local Community' Modularity*



4m x 4m Module Variations

Spatial Context: *‘Local Community’ Need for Revitalization*



Current state of degradation

Collapse of political system that organized the local communities

Lack of funding from government

Lack of information for the general public on the activities conducted in centers

Lack of participation by the members of the community in current activities

(Dobrica Veselinović, “Local community - place or community?”, Danas, 2017, www.danas.rs/dijalog/licni-stavovi/mesna-zajednica-mesto-ili-zajednica/#comment-form-div)

Spatial Context: *Site Selection*

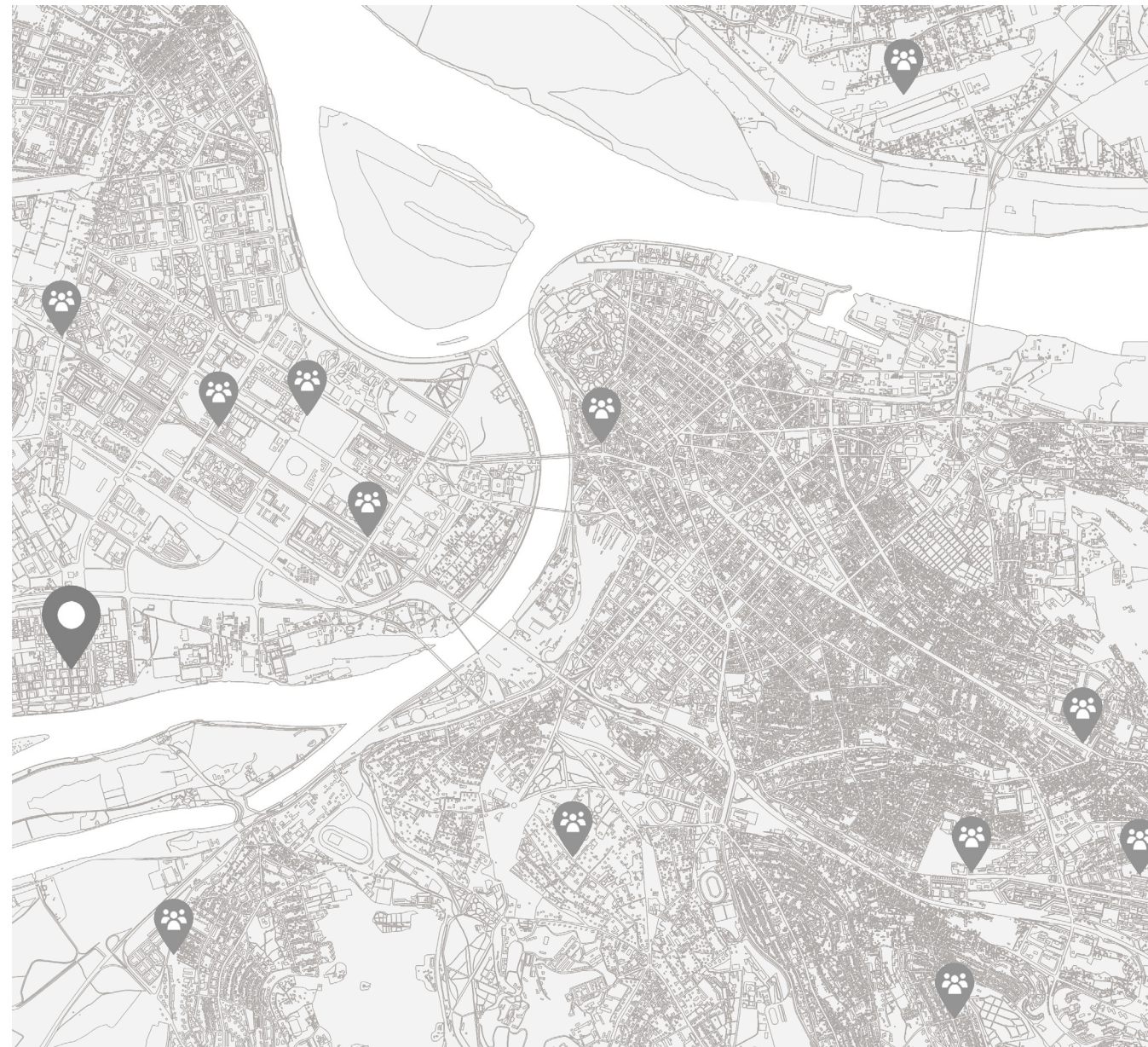


Existing network of
'local communities'
built during the
1960's & 1970's

Intention of adding
a more culinary-
focused program
into Belgrade's
community centers

Similar community-
led management in
collaboration with
Serbian Agricultural
Cooperatives

Spatial Context: *Site A - Block 70, New Belgrade*



Existing center in
state of disrepair

New function
would revitalize the
structure

Re-introduction of
cultural value to
neighborhood

Prolong lifespan of
building's durable
materials

Create an example/
procedure for the
revitalization of
the other 'local
community' centers
built during the
socialist era

A NEW OLD COMMUNITY

I. SOCIO-CULTURAL & SPATIAL CONTEXT

Culinary Heritage & the Heritage of Community Architecture

II. INTERVENTION A: NEW BELGRADE

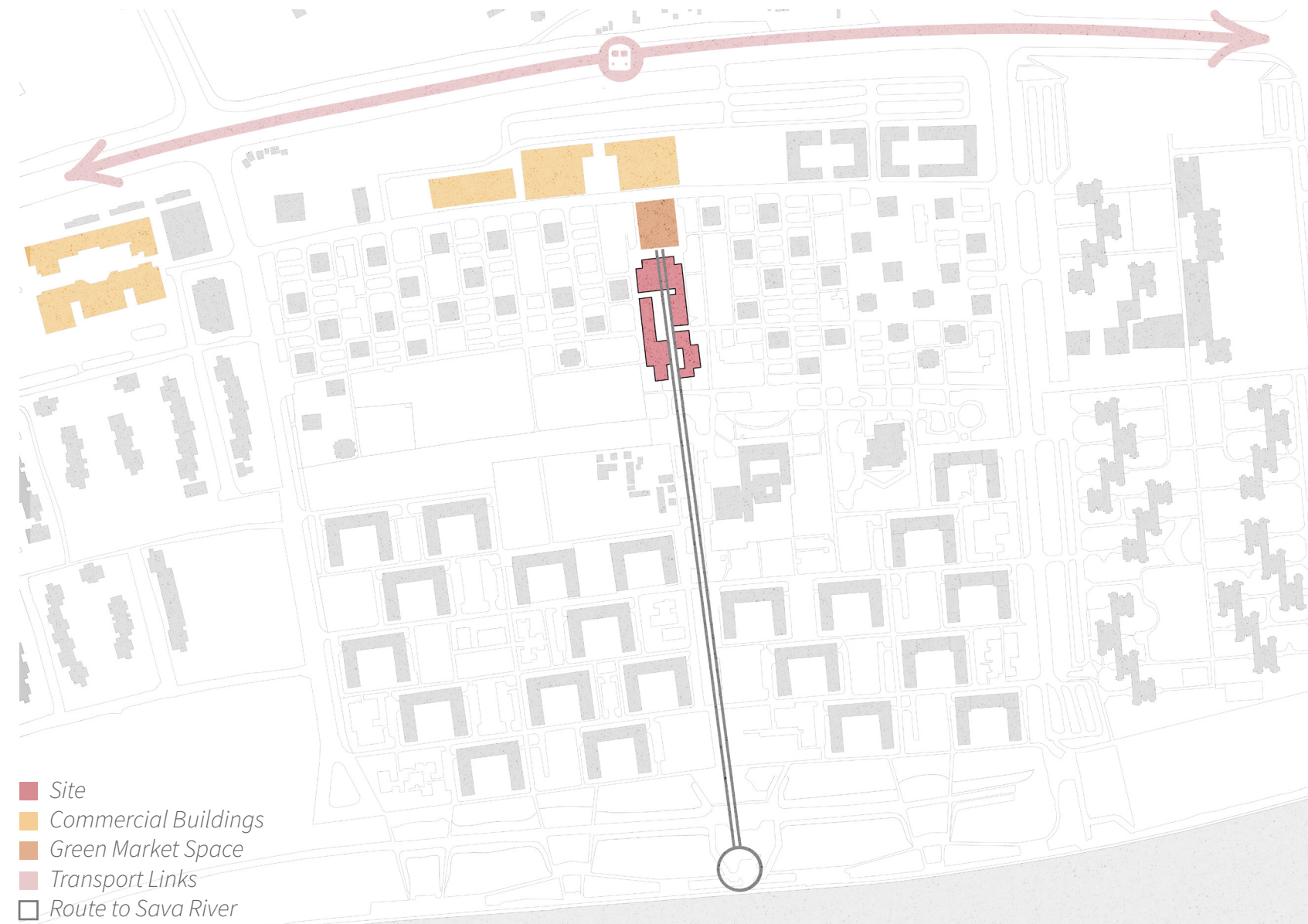
Revitalisation of 'Local Community' Center in Block 70

III. INTERVENTION B: OLD BELGRADE

New Community Center on Bulevar Kralja Aleksandra



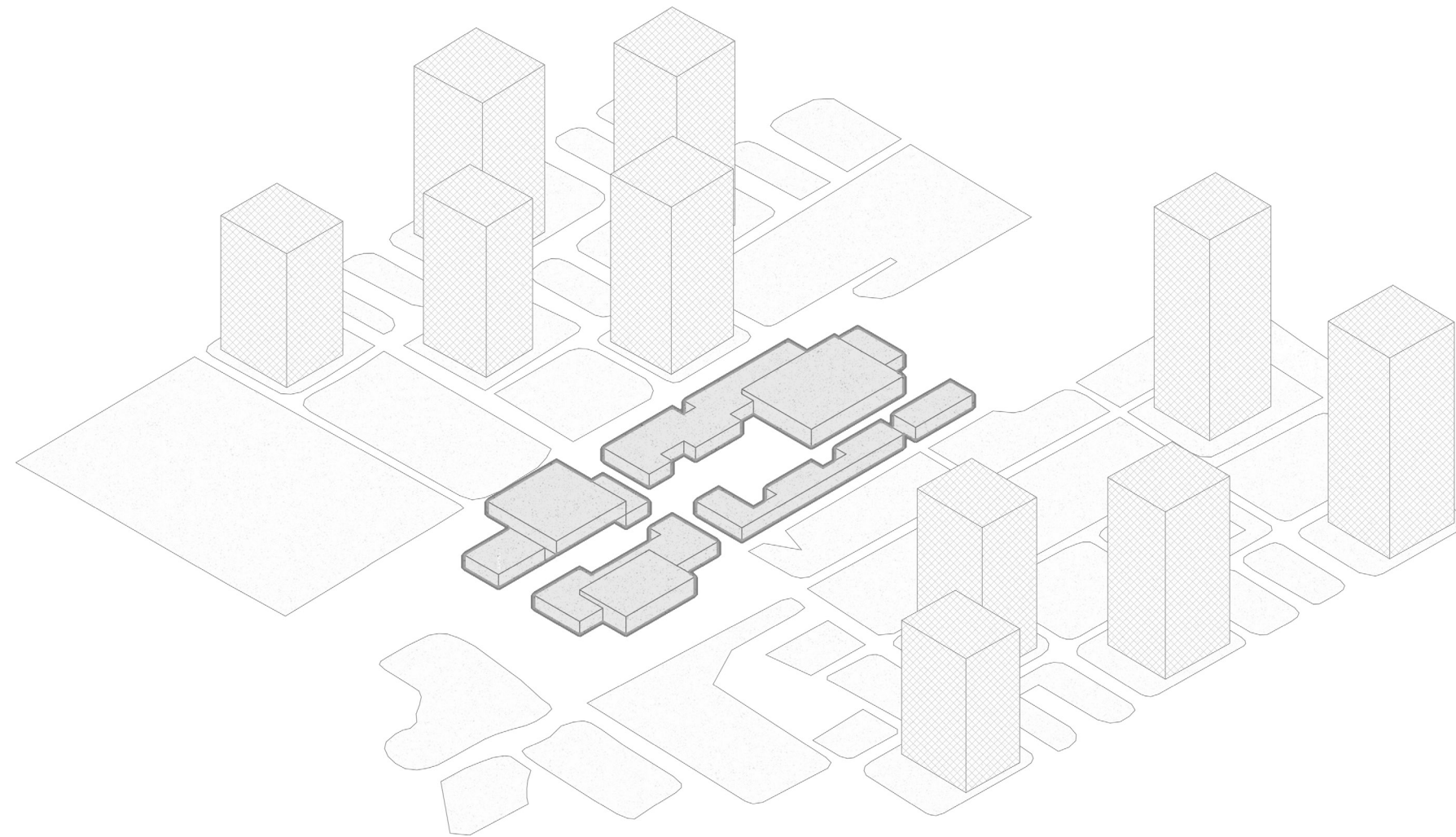
Urban Scale Analysis



Green Market Space Adjacent to Community Center

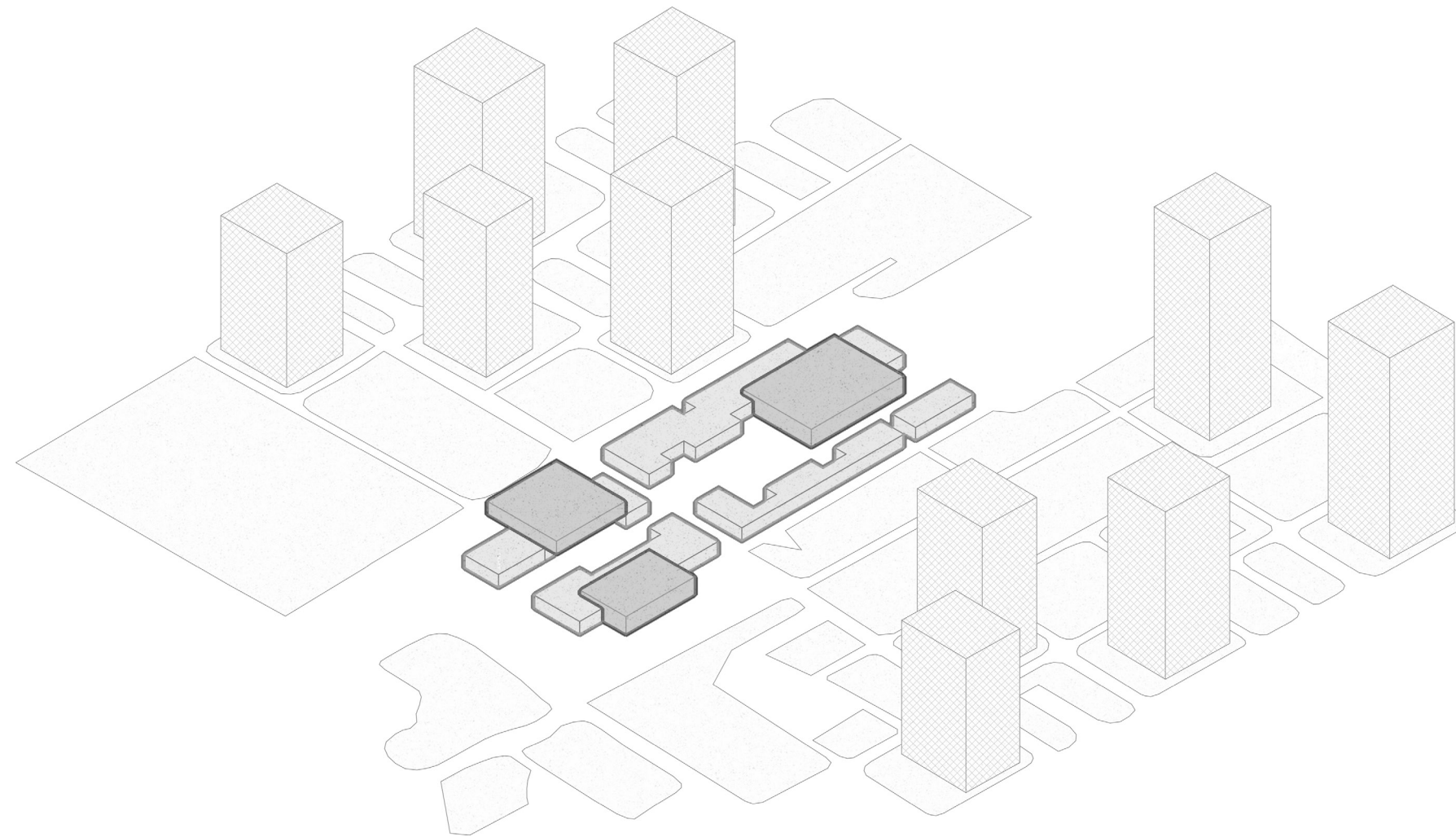


Form Rationalization: *Existing Structures*



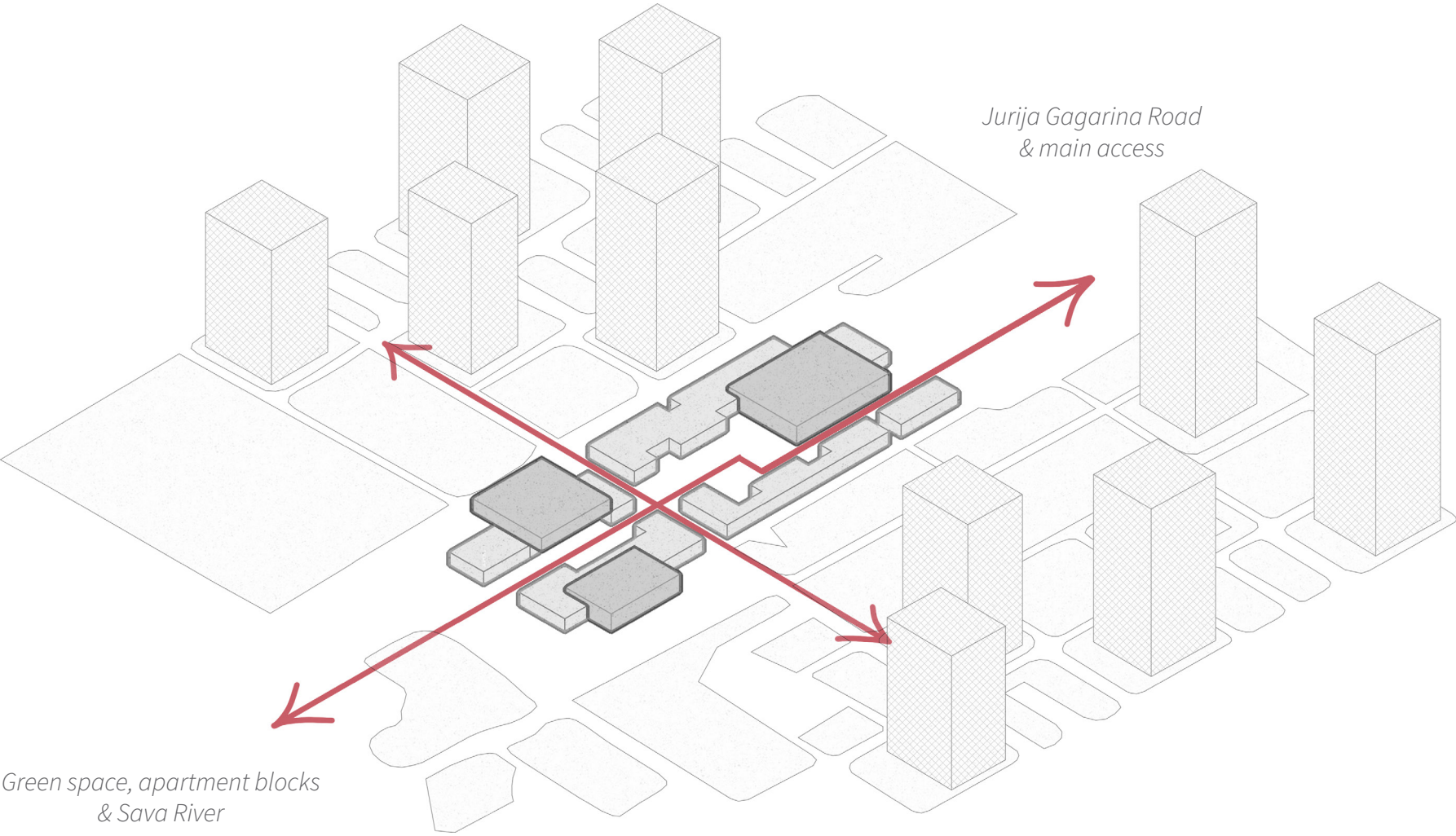
Four Blocks & Two Courtyards

Form Rationalization: *Existing Structures*



Three Protruding Volumes

Form Rationalization: *Existing Routes*

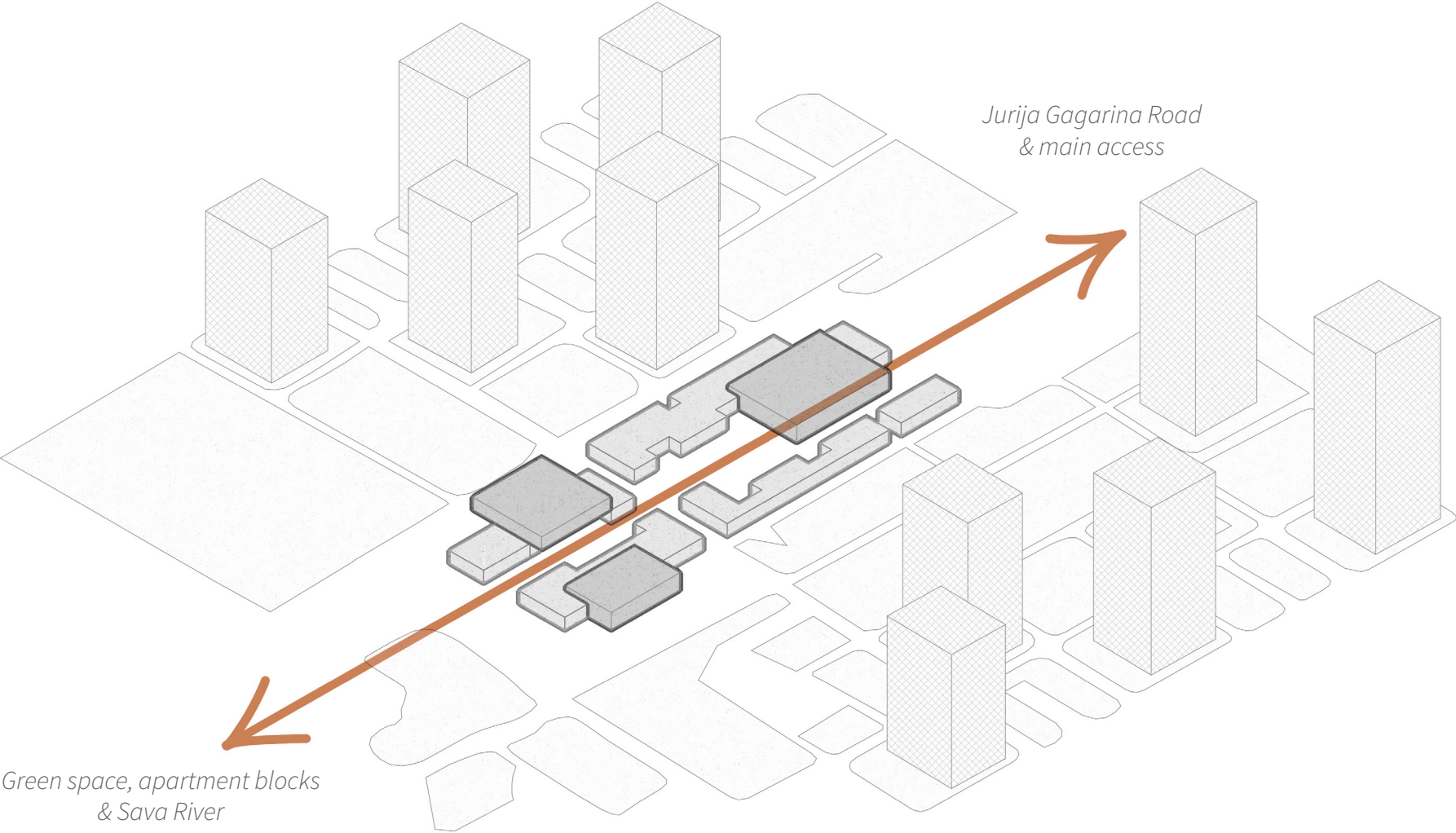


*Jurija Gagarina Road
& main access*

*Green space, apartment blocks
& Sava River*

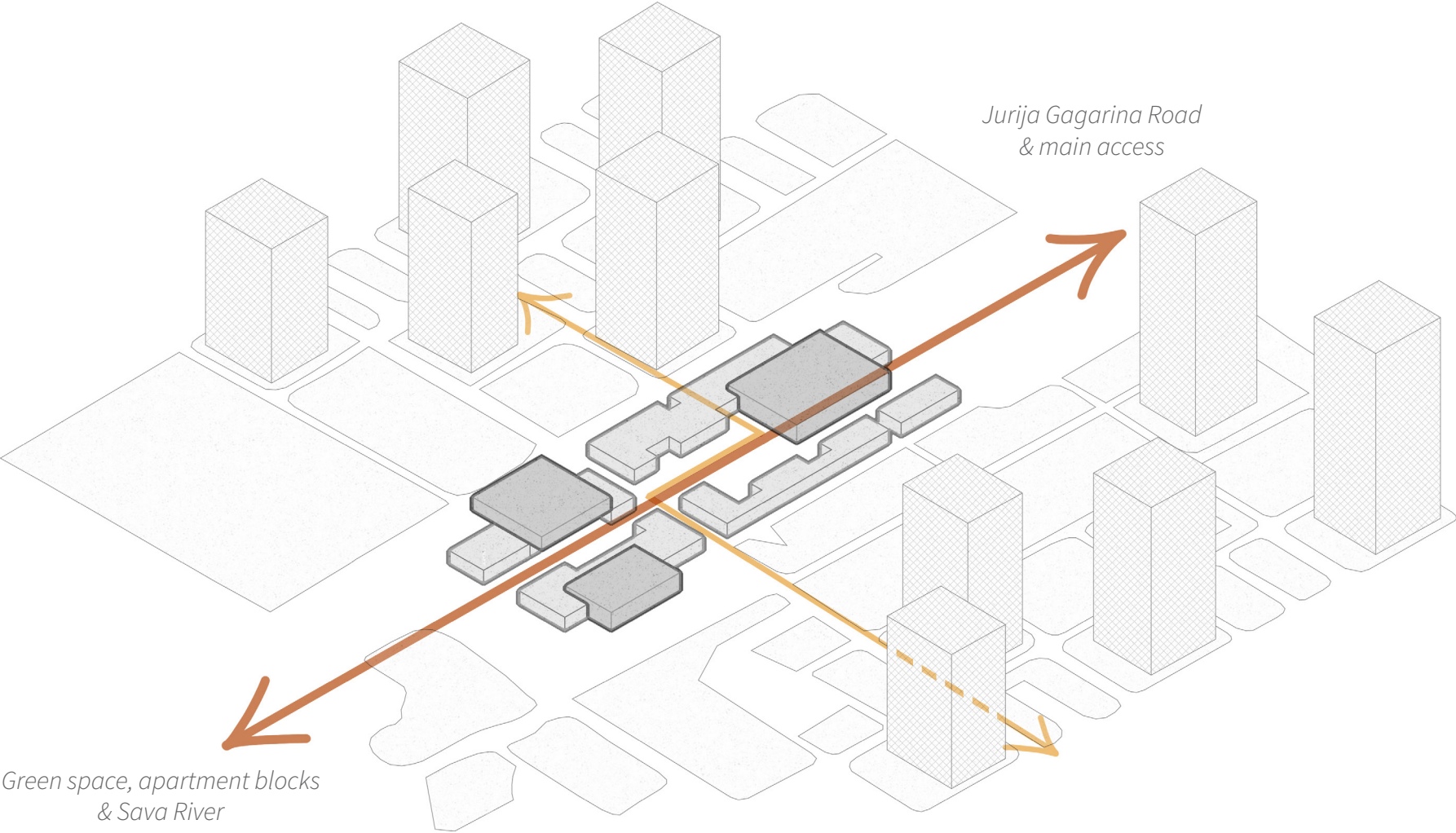
Cross-Shaped Connections

Form Rationalization: *New Routes*



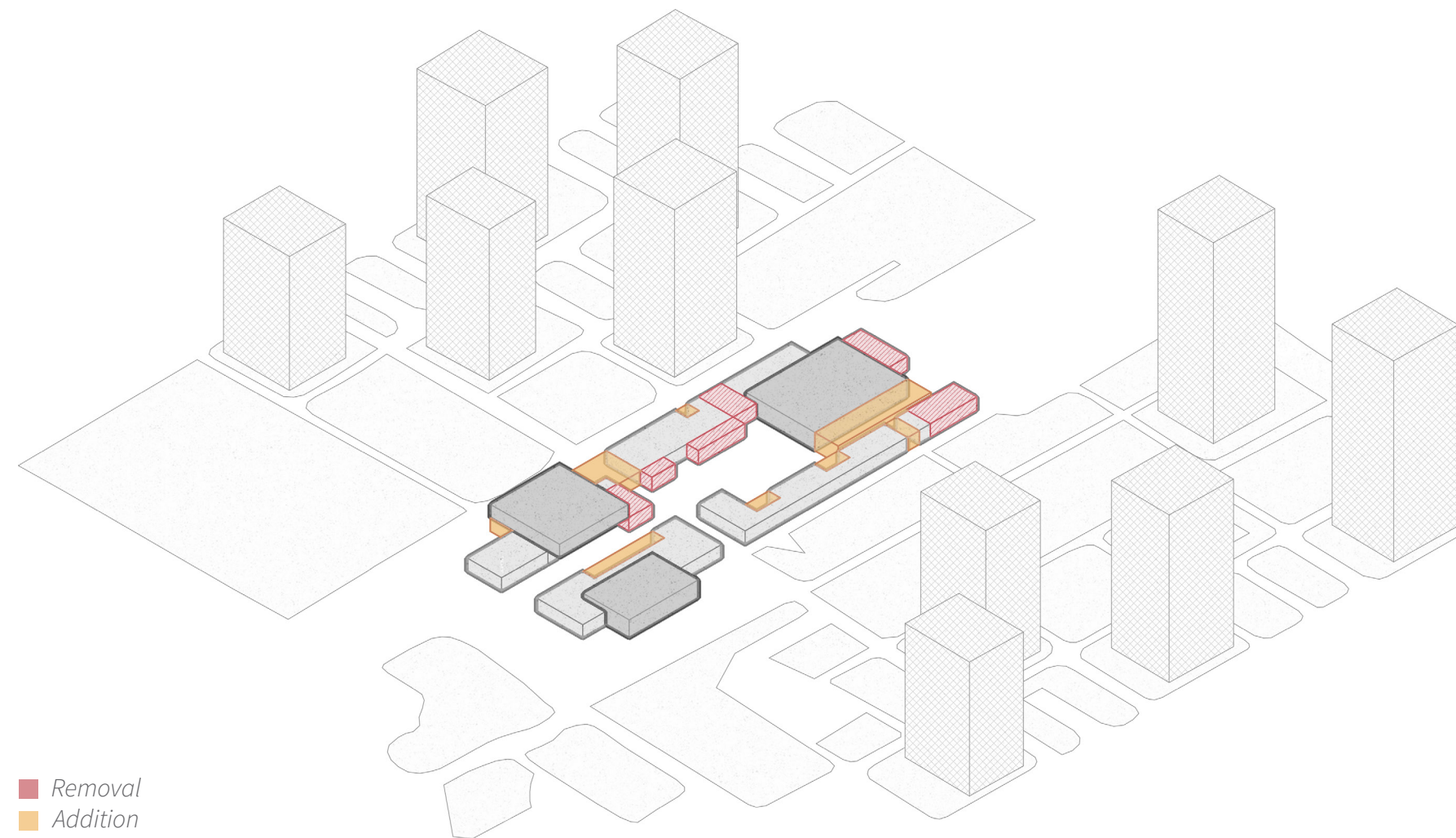
Straight Link Between Main Entrance & River

Form Rationalization: *New Routes*



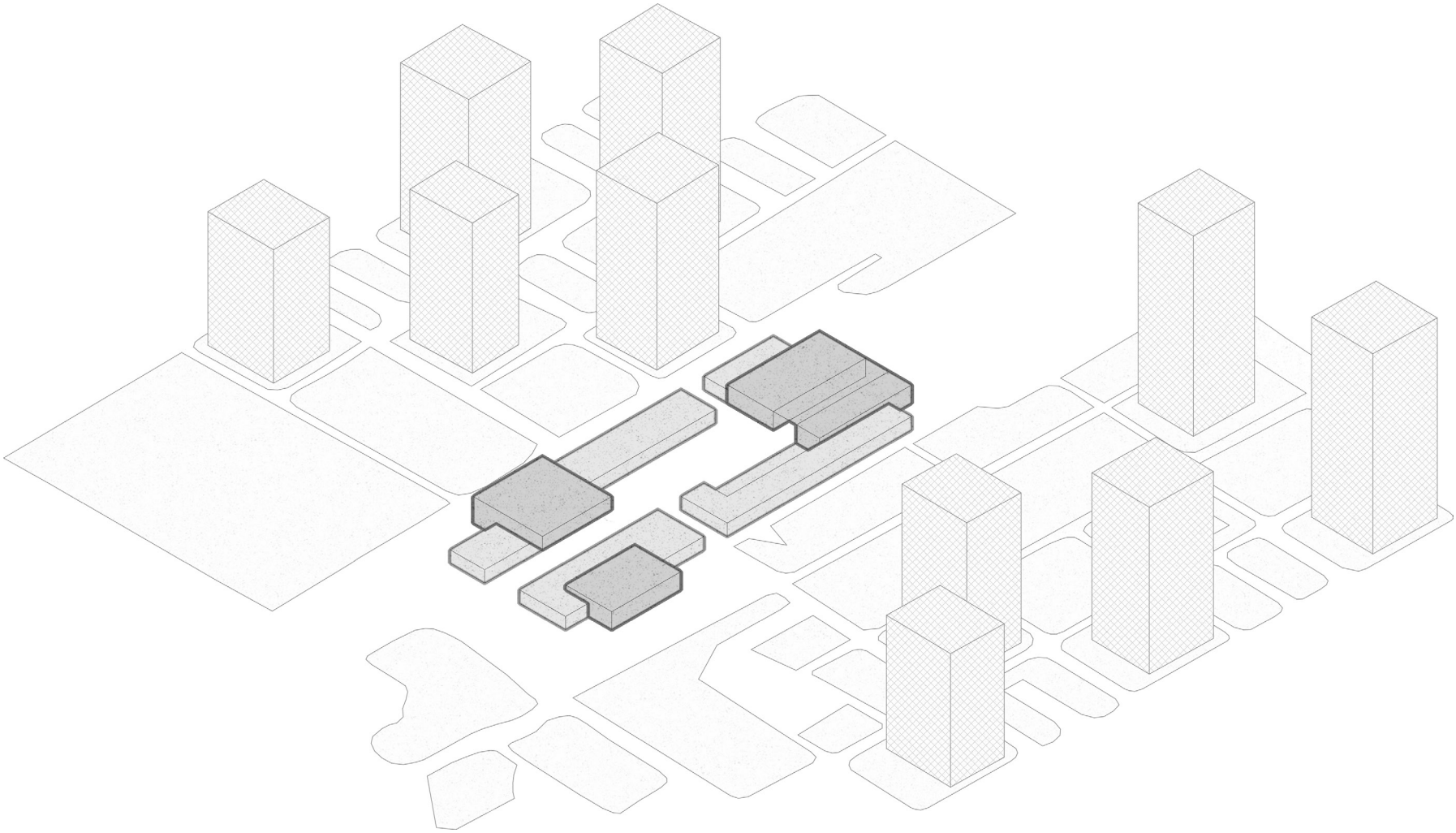
Better Integration Amongst Surrounding Blocks

Form Rationalization: *Volume Refinement*



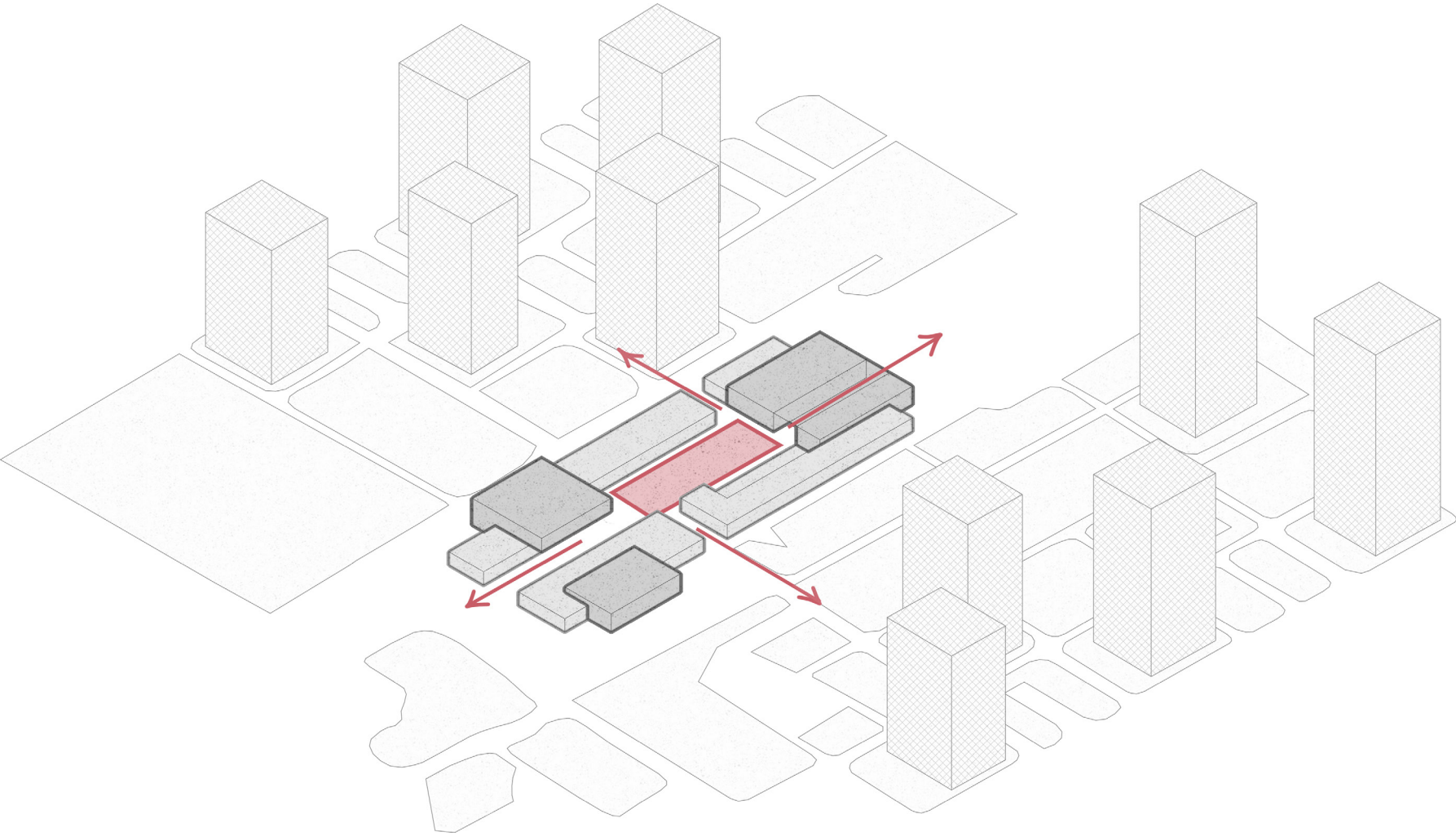
Removals & Additions of 4x4 Modules

Form Rationalization: *New Structures*



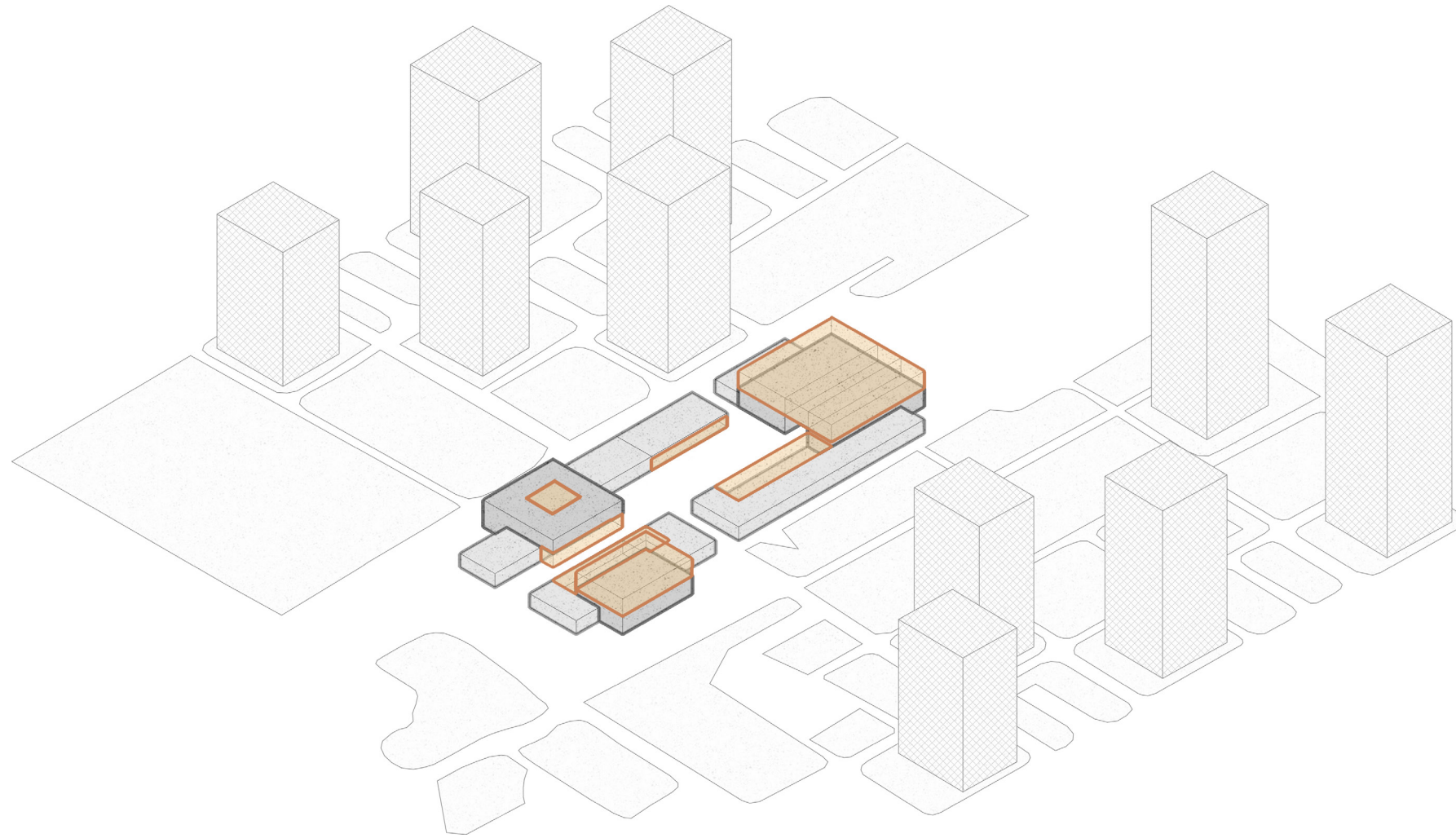
Three Building Blocks with Respective Protruding Volumes

Form Rationalization: *New Structures*



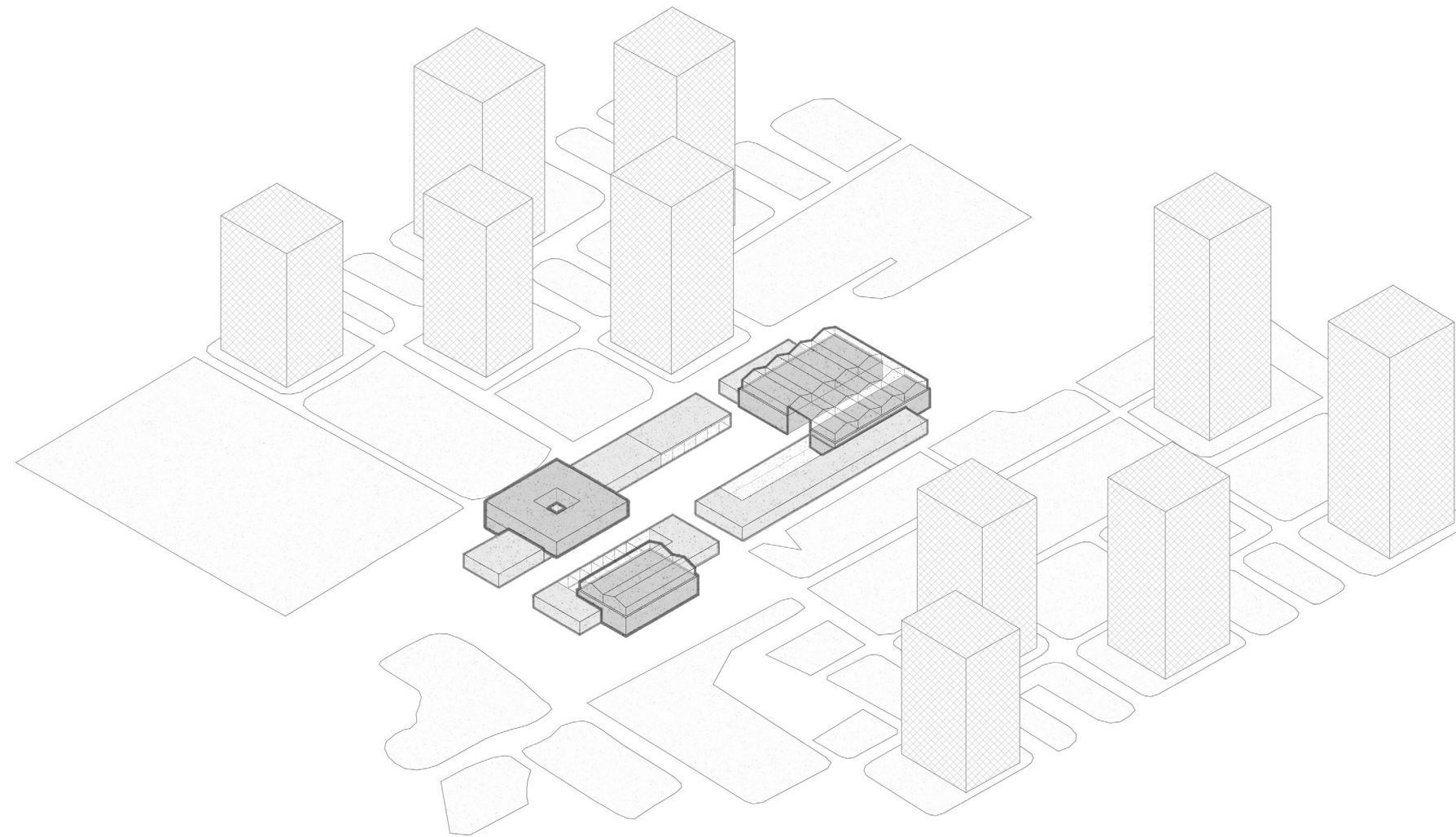
Clearly-Defined Courtyard Connecting All Entrances

Form Rationalization: *Functional Alterations*



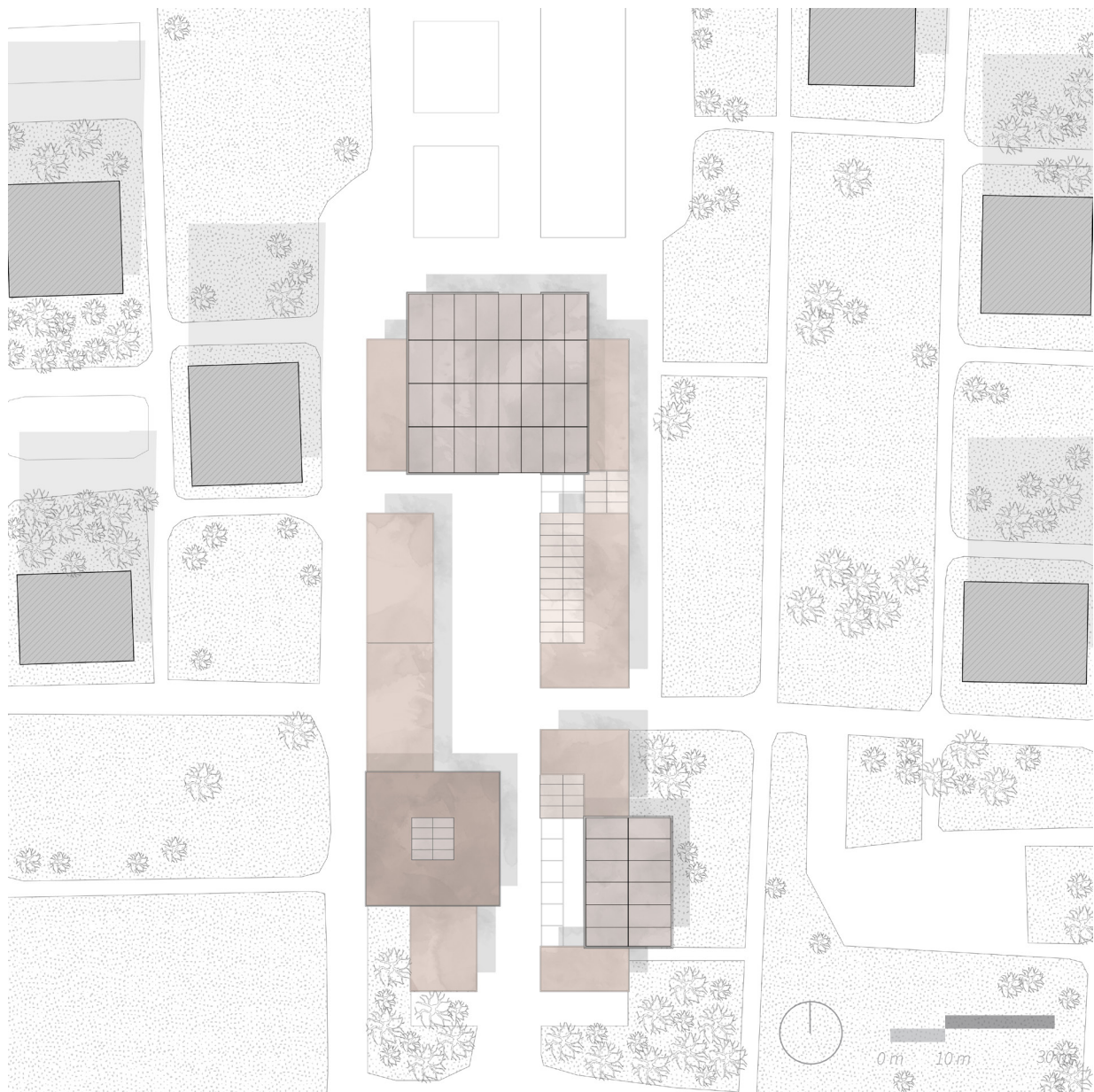
New Spaces & First Floors on Taller Volumes

Form Rationalization: *Resulting Configuration*

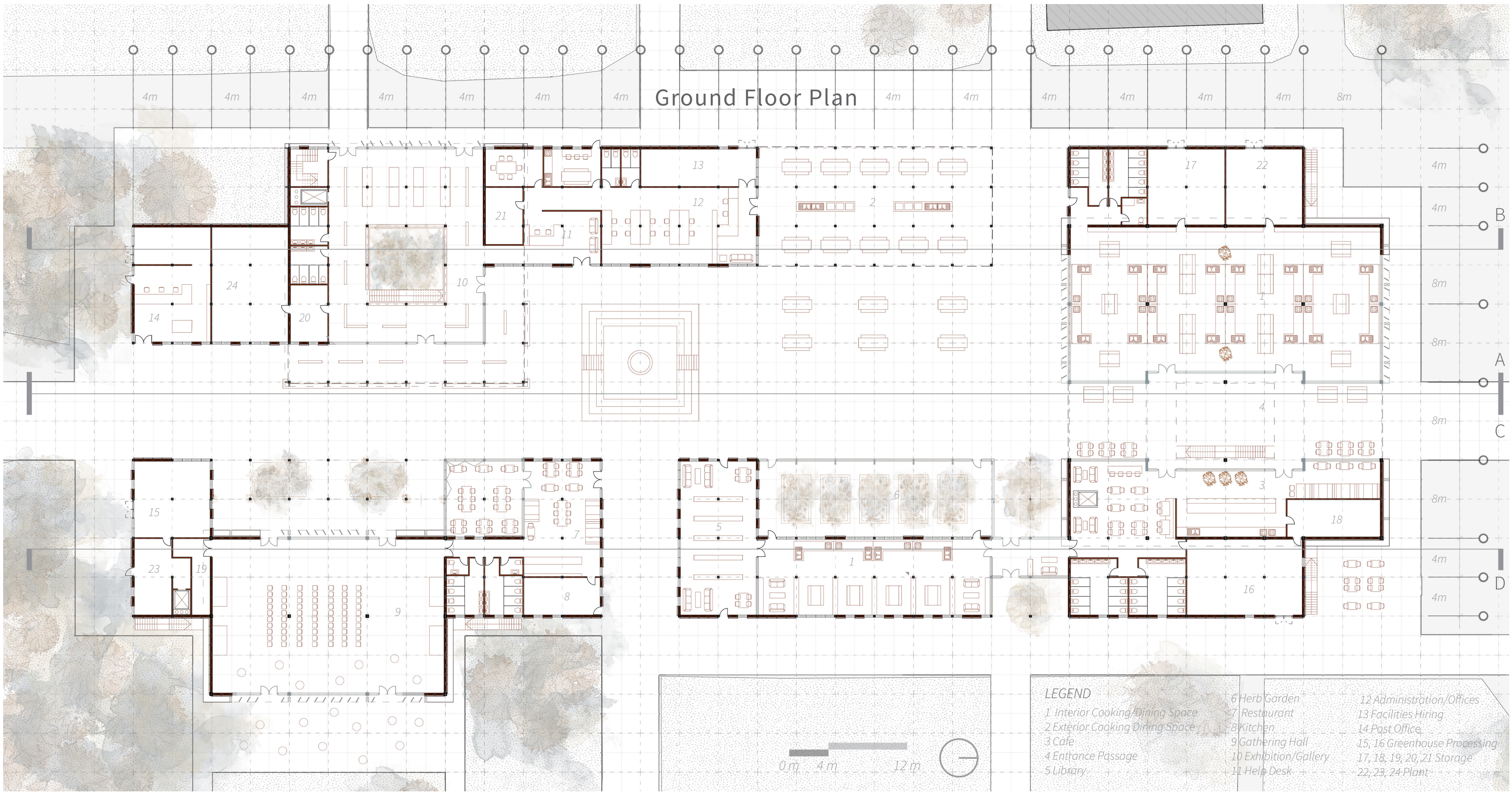


Revitalised Existing Community Center with Culinary-Focused Functions

Site Plan



Ground Floor Plan



LEGEND

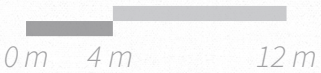
- | | | |
|---------------------------------|-----------------------|------------------------------|
| 1 Interior Cooking/Dining Space | 6 Herb Garden | 12 Administration/Offices |
| 2 Exterior Cooking/Dining Space | 7 Restaurant | 13 Facilities Hiring |
| 3 Cafe | 8 Kitchen | 14 Post Office |
| 4 Entrance Passage | 9 Gathering Hall | 15, 16 Greenhouse Processing |
| 5 Library | 10 Exhibition/Gallery | 17, 18, 19, 20, 21 Storage |
| | 11 Help Desk | 22, 23, 24 Plant |

0 m 4 m 12 m

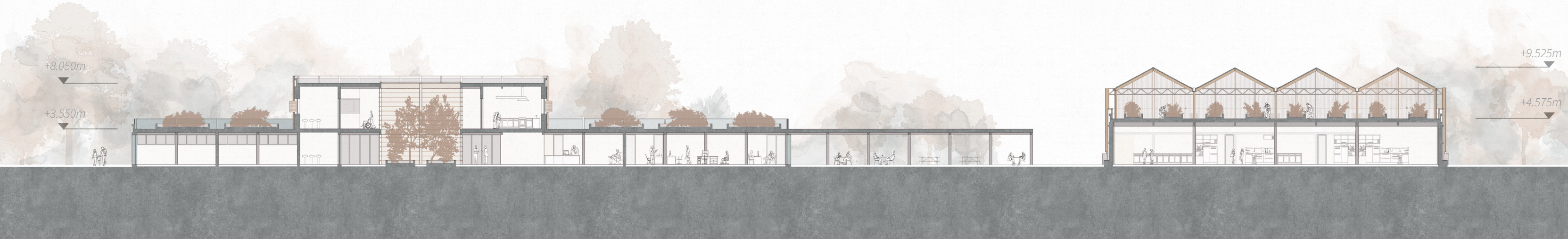


[illegible]

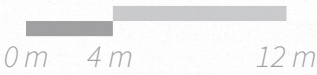
Section A (Interior Elevation)



Section B



Section C (Interior Elevation)



Section D



1:20 Facade Segment

Polycarbonate Greenhouse Envelope

Timber Greenhouse Frame

Steel Truss

Primary Timber Beam

Timber Structure for Screen

Raised Floor for Services

Existing Concrete Slab

Timber Screen

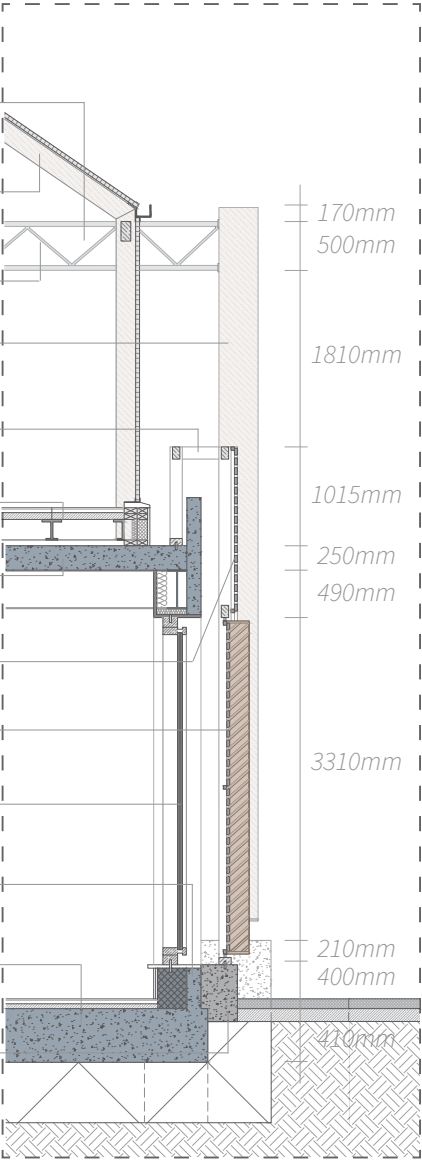
Timber Louvers

Window (Curtain Wall)

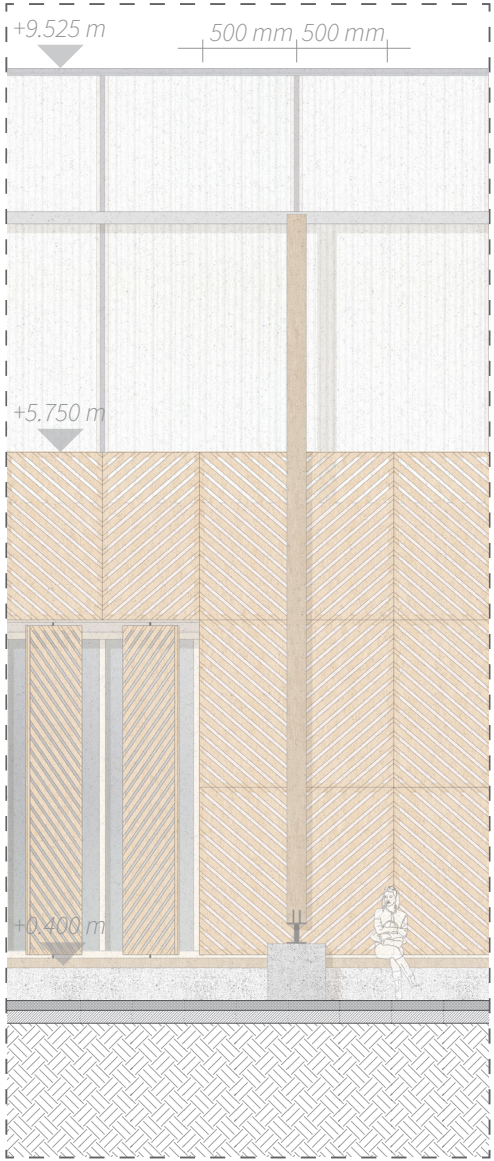
Existing Concrete Cladding

Existing Concrete Foundation

Foundation for New Structure and Screen

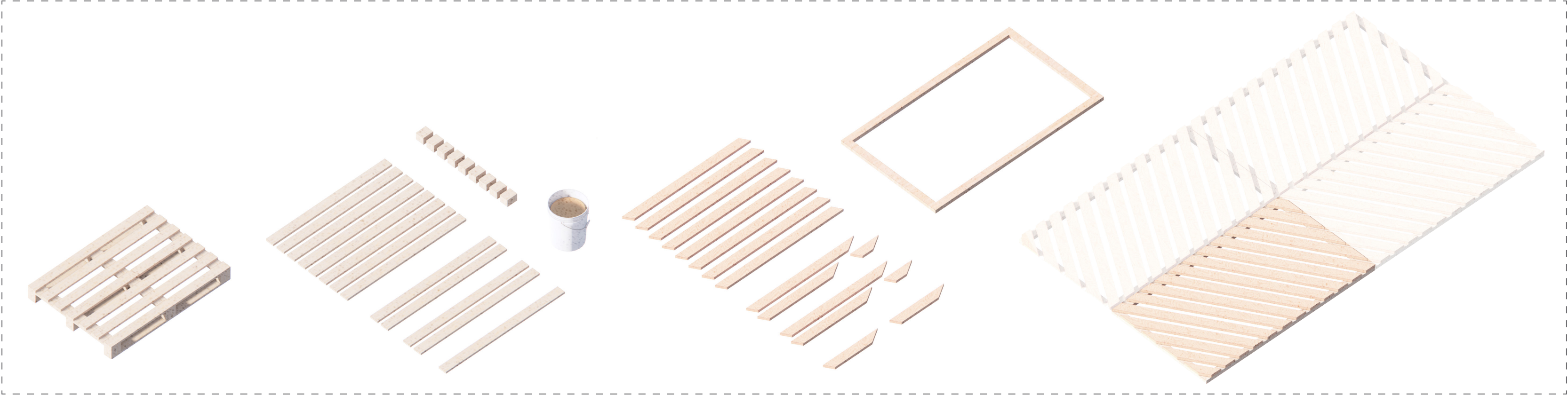


Section



Elevation

Material Circularity: One Pallet - One Panel



Used Timber Pallet:
1200 x 800 mm

13 Timber Planks: 80 x 1200 mm
(9 Timber Blocks)
Timber Lacquer/Varnish

8 Timber Planks: 80 x 1175 mm
2 Timber Planks: 80 x 1000 mm
2 Timber Planks: 80 x 730 mm
2 Timber Planks: 80 x 200 mm
2 Timber Planks: 80 x 465 mm
Timber Frame (New)

Modular Timber Panels:
1700 x 1000 mm

Softer & More Open Modernist Character for the Neighborhood



Ground Floor Plan

Gathering Hall

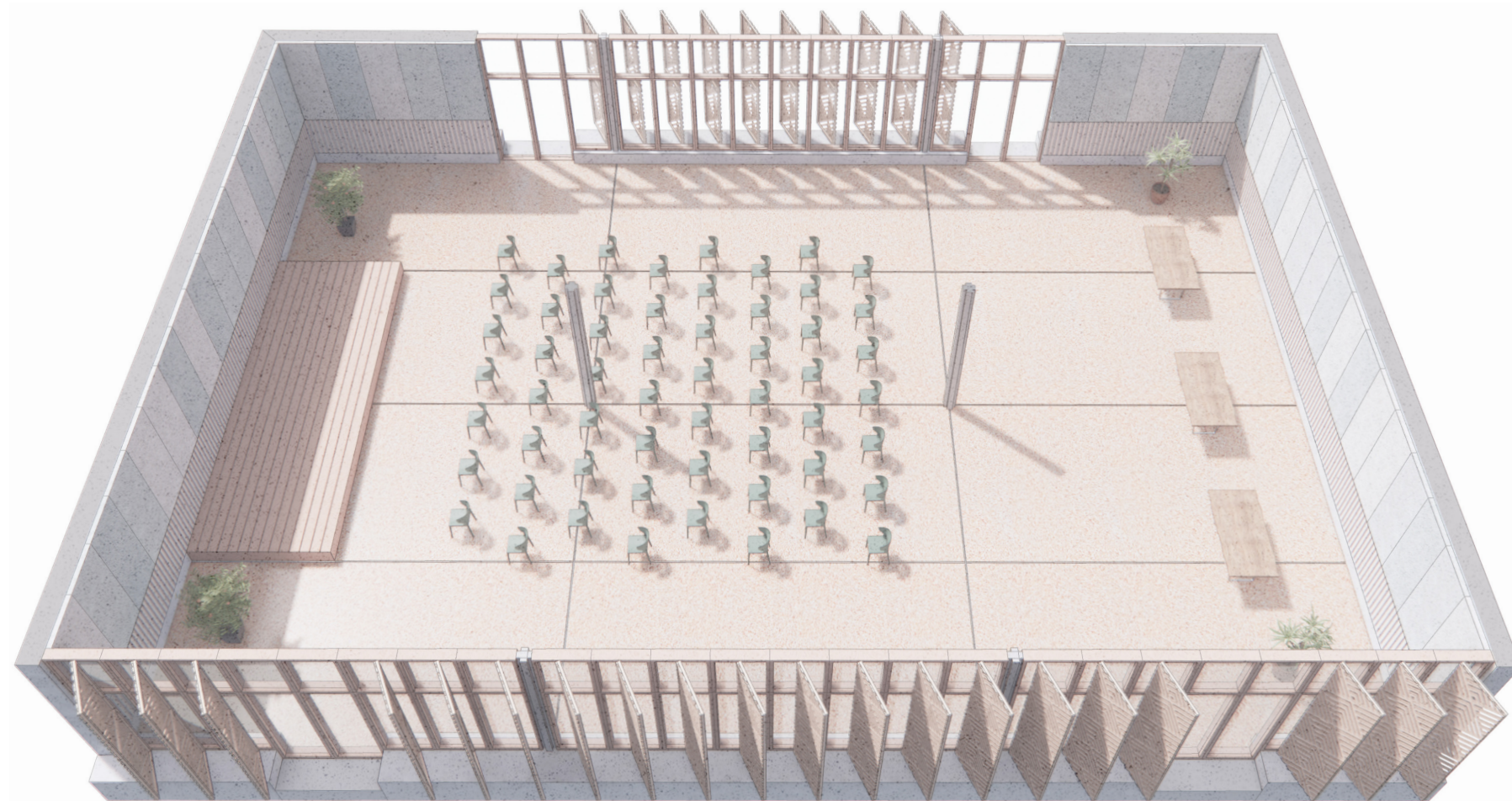
LEGEND

1 Interior Cooking/Dining Space	6 Herb Garden	12 Administration/Offices
2 Exterior Cooking/Dining Space	7 Restaurant	13 Facilities Hiring
3 Cafe	8 Kitchen	14 Post Office
4 Entrance Passage	9 Gathering Hall	15, 16 Greenhouse Processing
5 Library	10 Exhibition/Gallery	17, 18, 19, 20, 21 Storage
	11 Help Desk	22, 23, 24 Plant

Meeting of Agricultural Cooperatives in Gathering Hall



Interior Experience: Light & Sound



The louvered screens outside windows can be adjusted to let in more or less light depending on interior activity

The screen perforations create playful lighting effects when cast onto the floor surface

Acoustic panels are placed on walls and ceiling to counteract echoes in the large spaces

Sound is reflected in the hard surfaces of the floor and surrounding glazing

Interior Experience: Materials & Textures



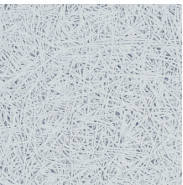
Acoustic Timber Panels

Placed in between metal beams as to not
reduce height of spaces



Acoustic Wood Wool Panels

Shades of blue complement timber tints
Reflect proportions of modernist forms



Light-Colored Timber Planks

Light-painted planks from disassembled
timber pallets



Existing Concrete Wall

Exposed concrete to connect to the
previous interior of the building

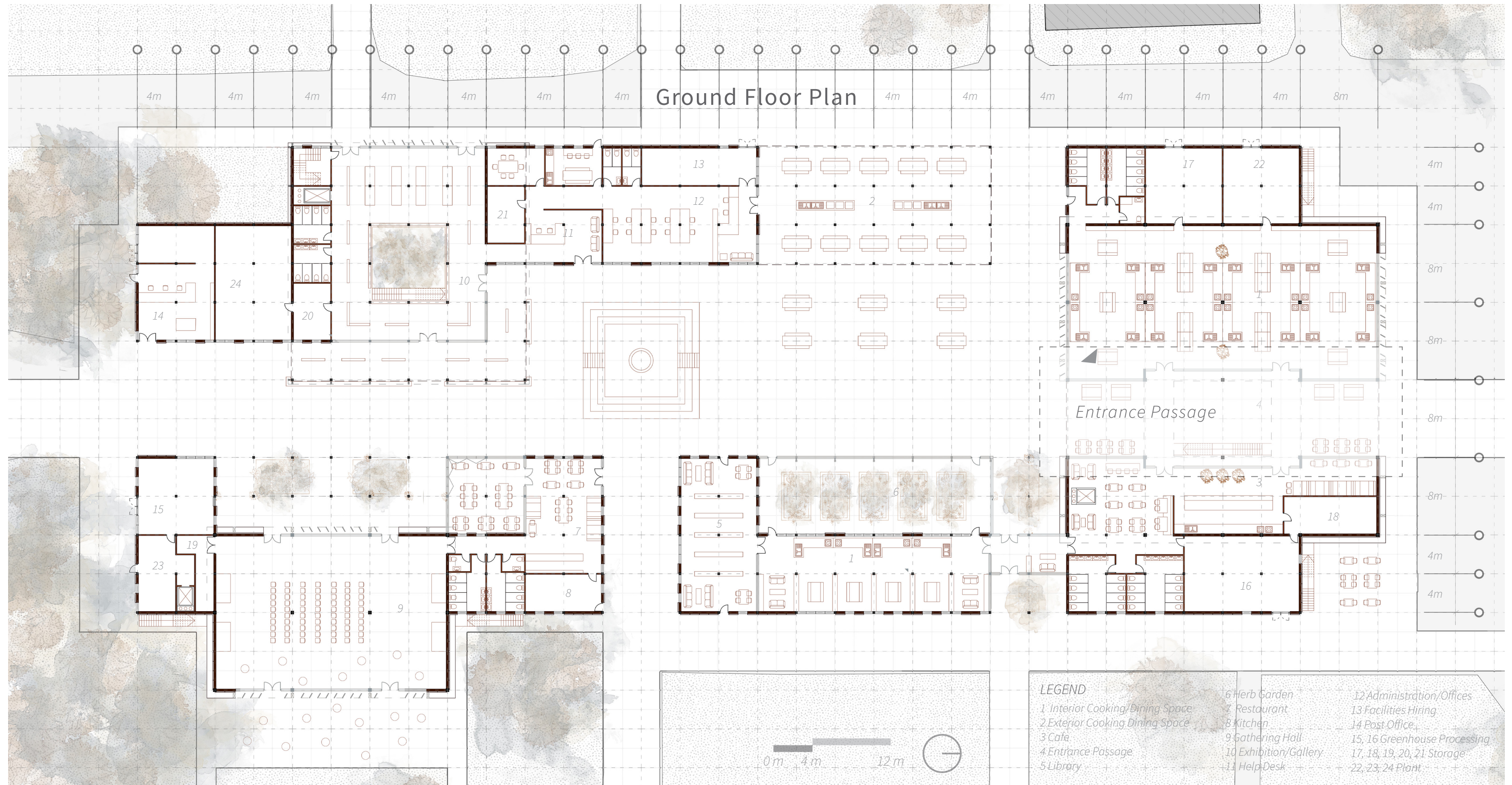


Foresso Floor Tiles

Wood-based terrazzo tiles (from offcuts of
timber screens and pallets)



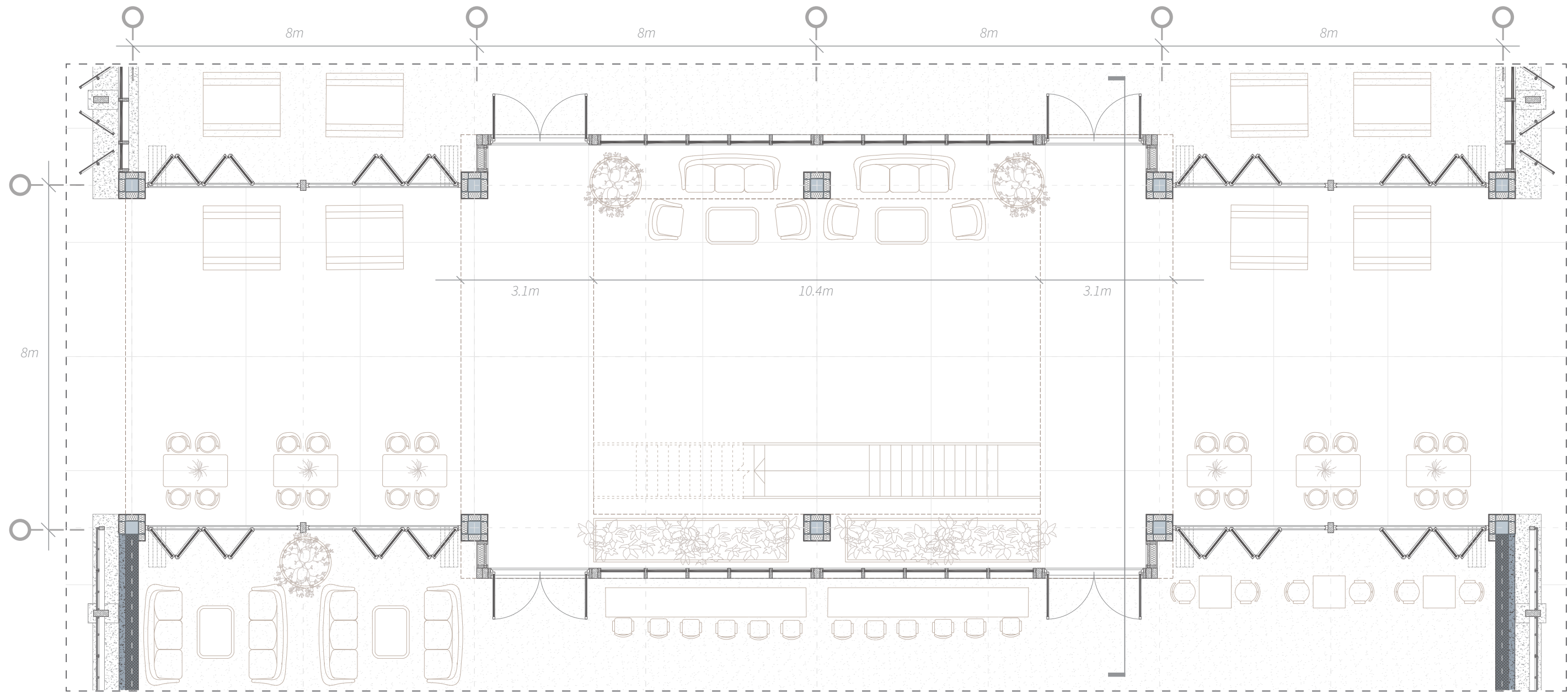
Ground Floor Plan



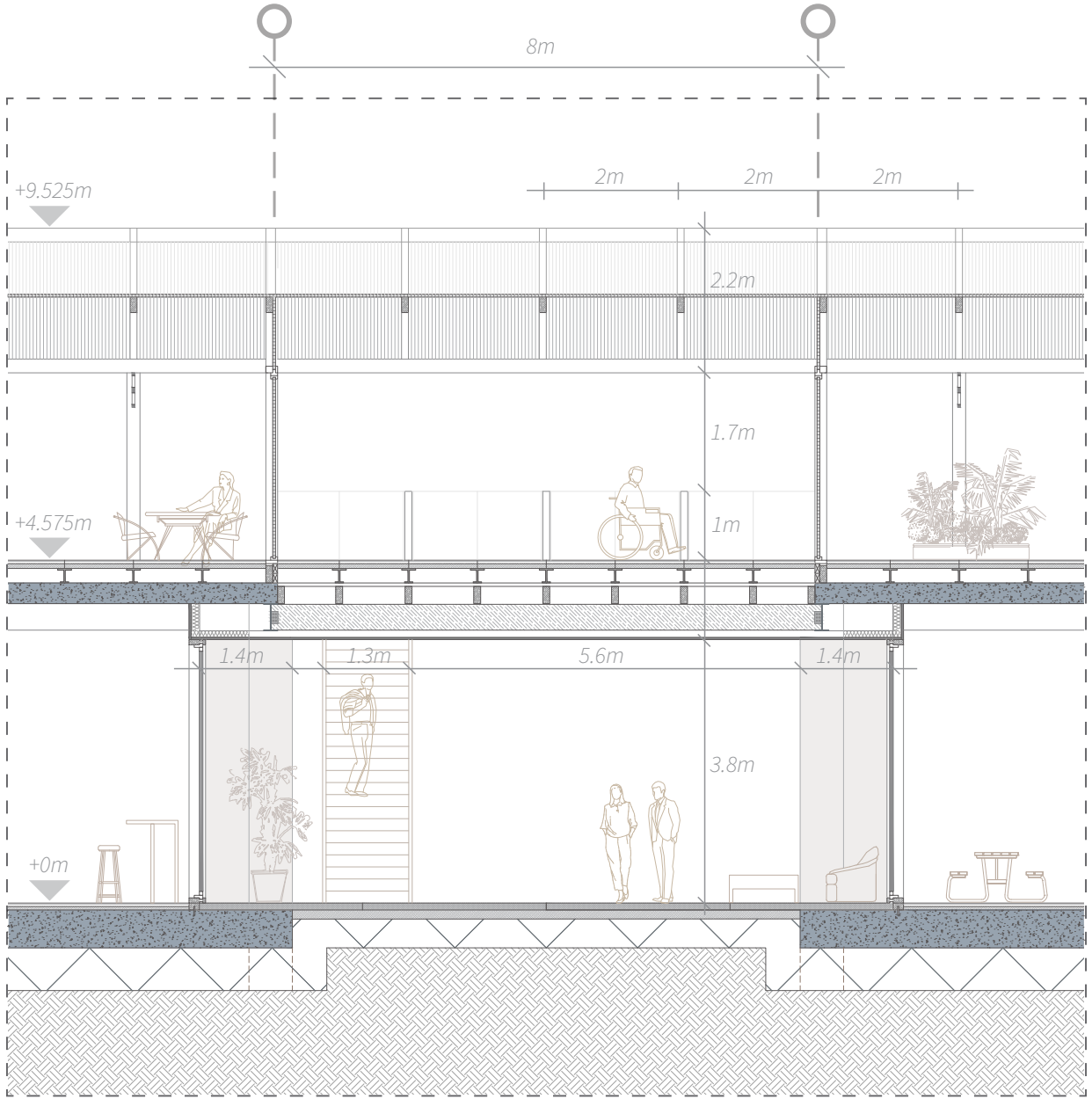
Visual Connections Across Passage



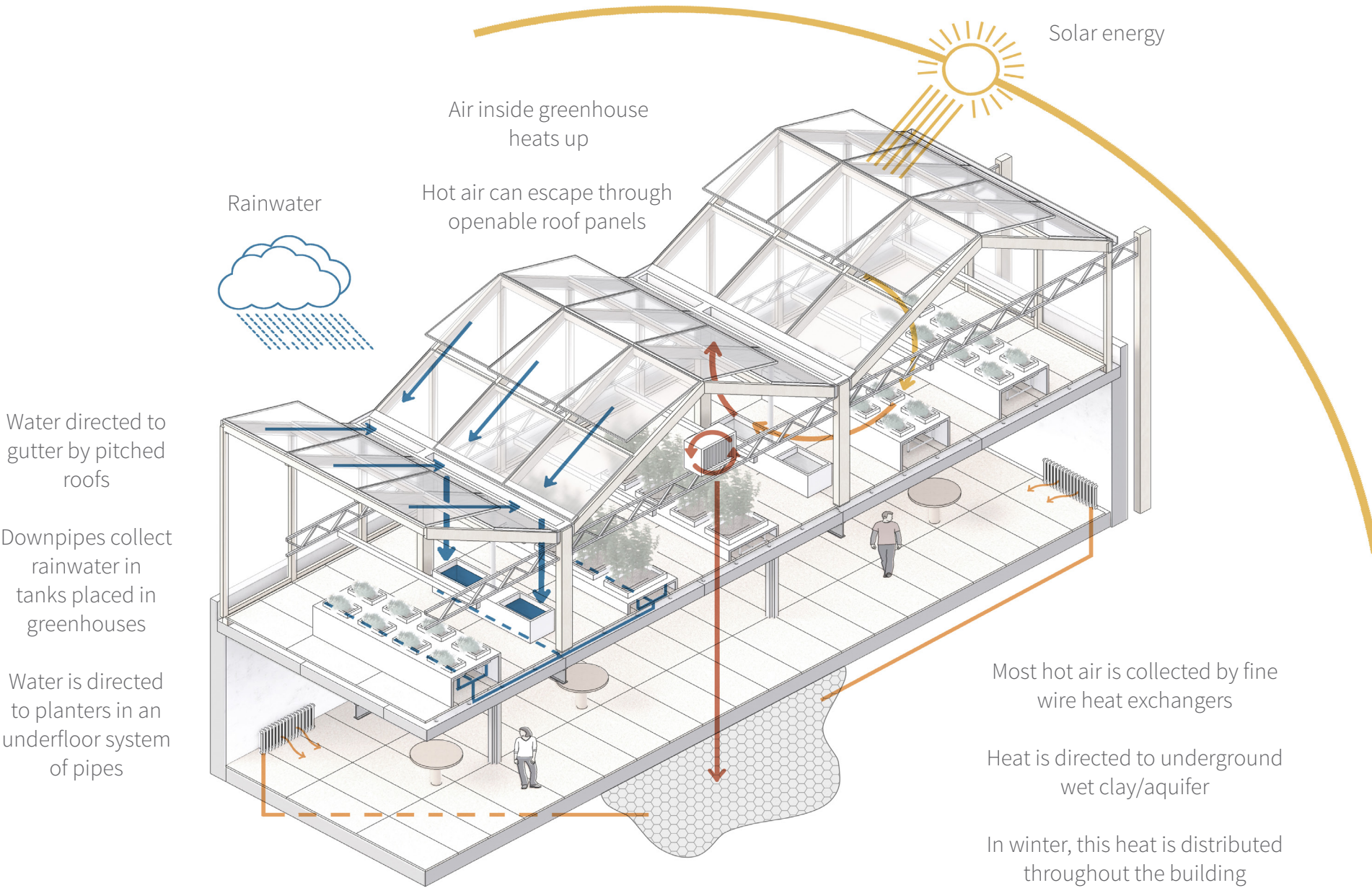
Entrance Passage 1:50 Plan Study



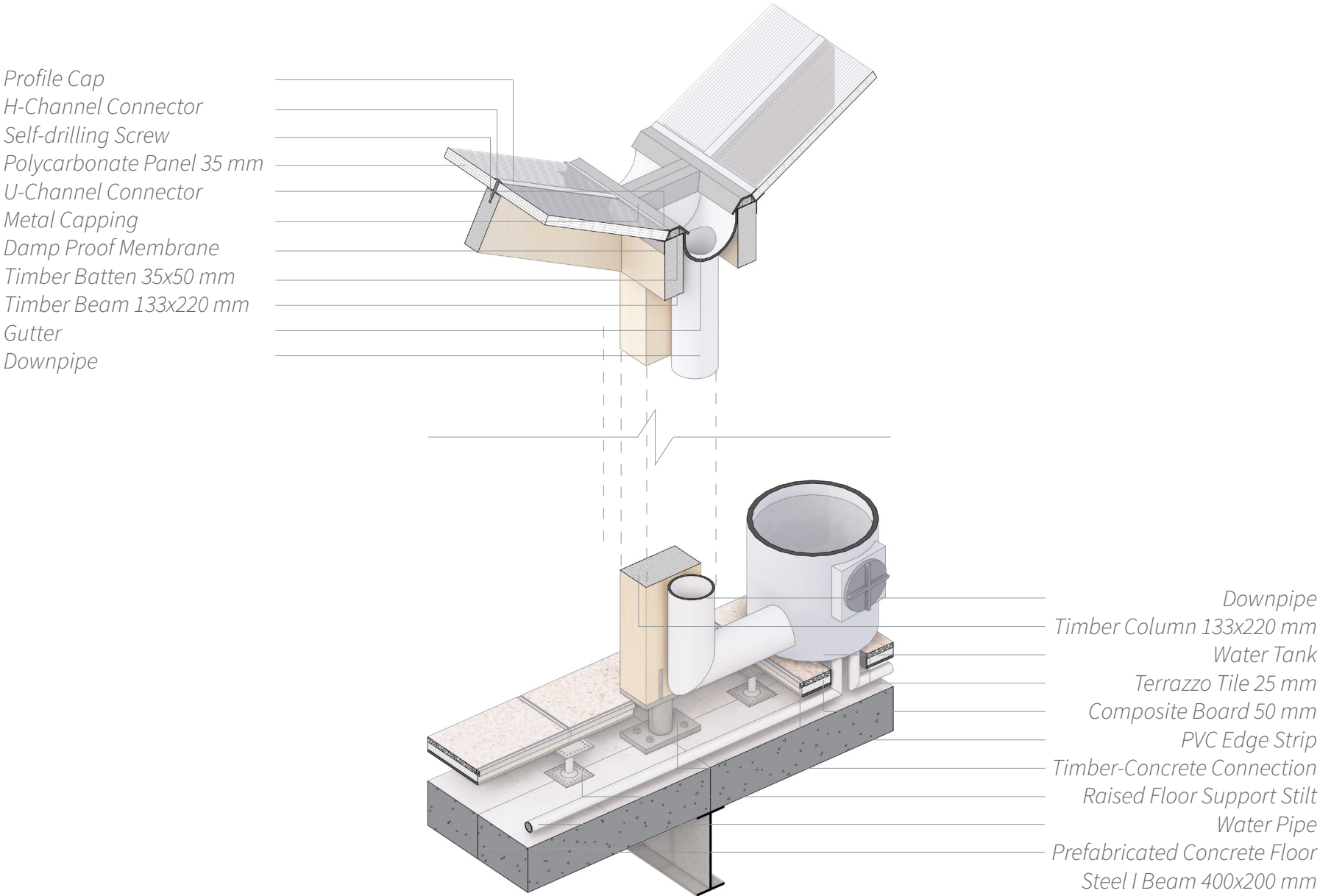
Entrance Passage 1:50 Section Study



Climate Circularity: Water & Heat Cycles



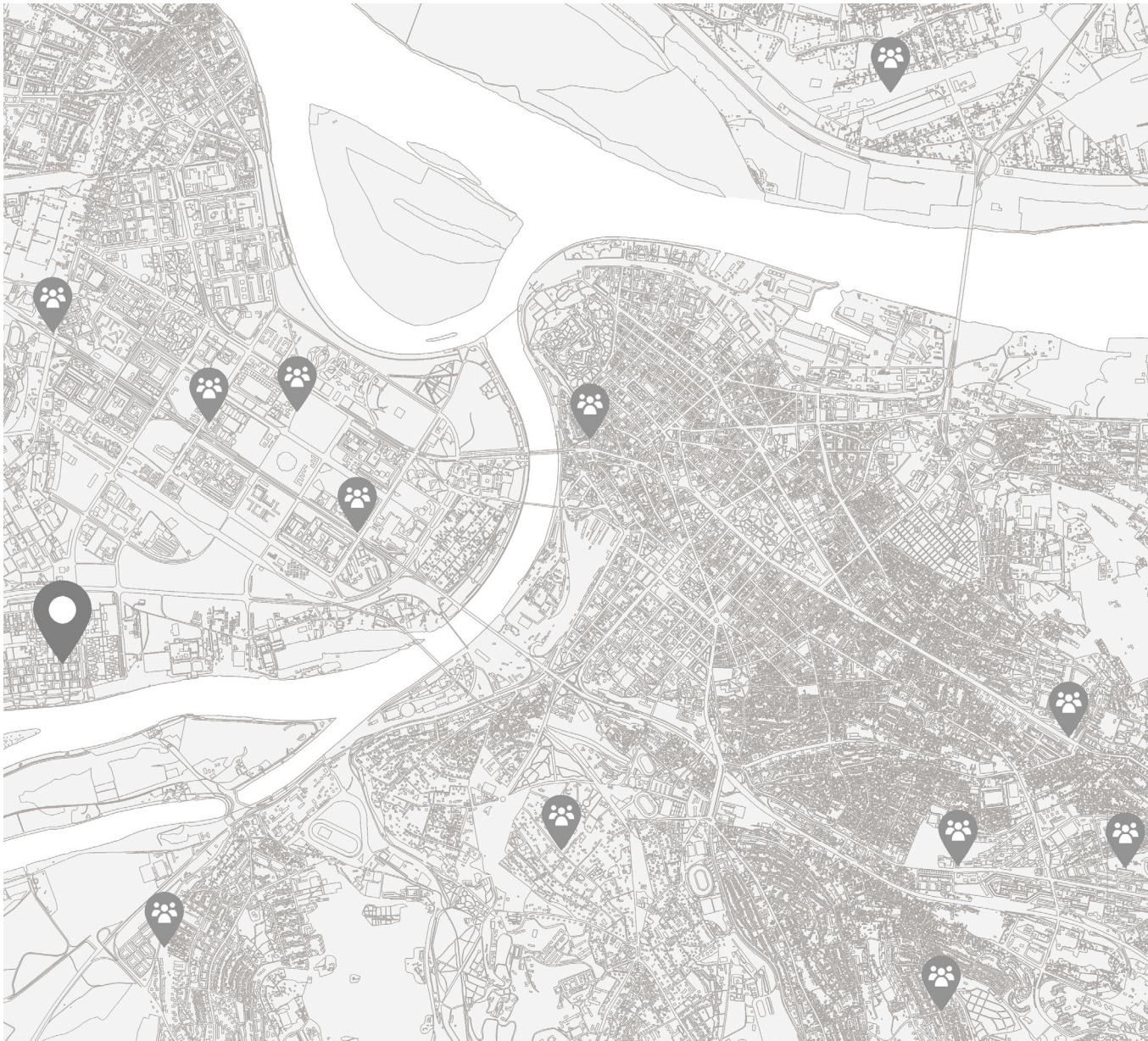
1:10 Drainage & Water Collection Detail



New Functions, New Connections, New Community



Site A - Block 70, New Belgrade



Modernist heritage
revitalised and
augmented

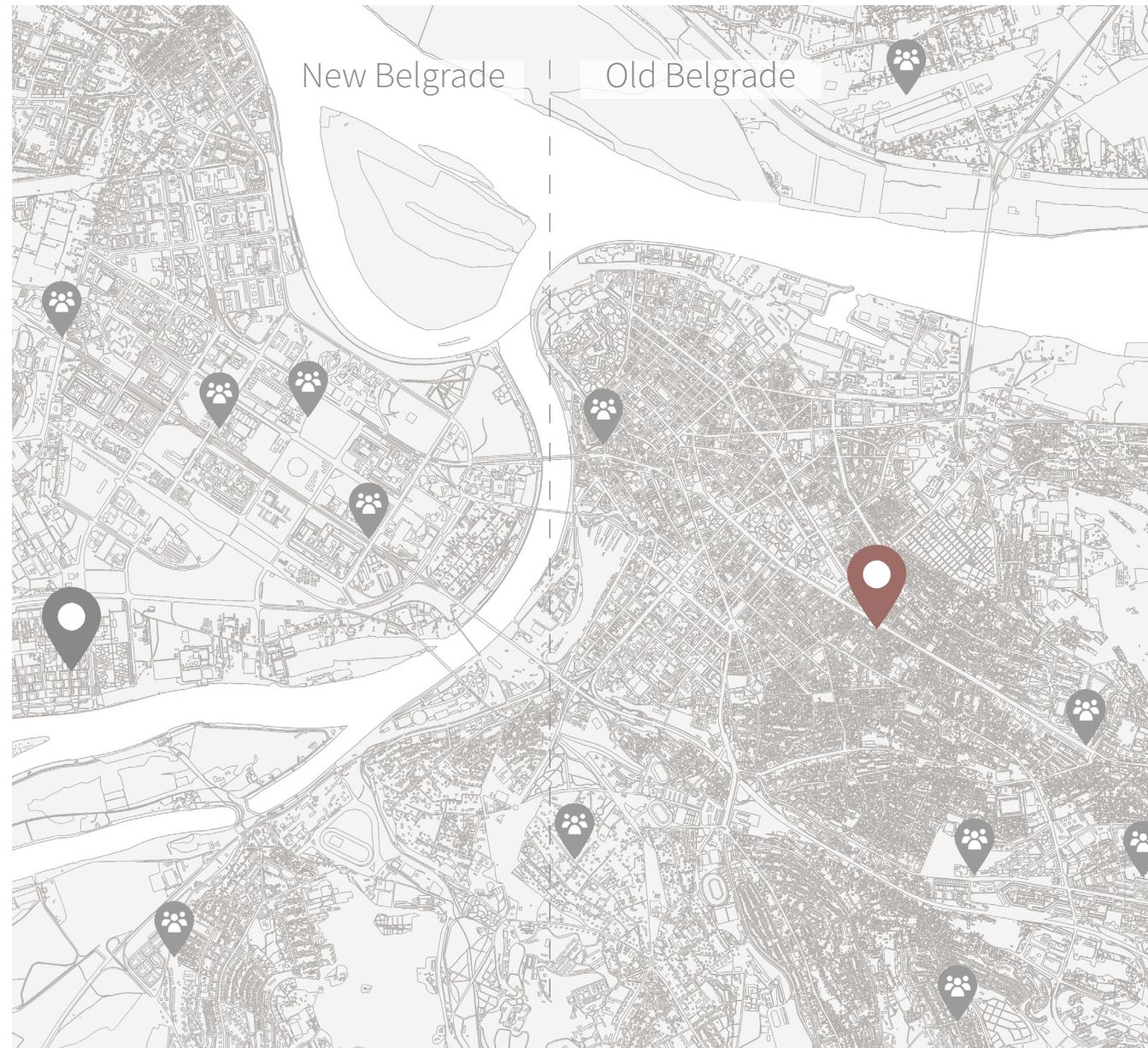
Culinary heritage
brought increased
cultural value to
Block 70

Improved
integration into site

Circular cycles
included in
materiality & climate
control

The process can
be continued/
replicated on the
rest of Belgrade’s
local communities

Site B - Bulevar Kralja Aleksandra, Old Belgrade



Very few existing community centers in neighborhoods of Old Belgrade

Reduced living and exterior space compared to New Belgrade

Greater need for communal facilities due to high building and population density

Using typological transference onto new site as an example for the construction of new community centers

A NEW OLD COMMUNITY

I. SOCIO-CULTURAL & SPATIAL CONTEXT

Culinary Heritage & the Heritage of Community Architecture

II. INTERVENTION A: NEW BELGRADE

Revitalisation of 'Local Community' Center in Block 70

III. INTERVENTION B: OLD BELGRADE

New Community Center on Bulevar Kralja Aleksandra



Short History of 'the Depo'



1892 - Tram Depo

1996 - Flea Market

2014 - Burned down in fire

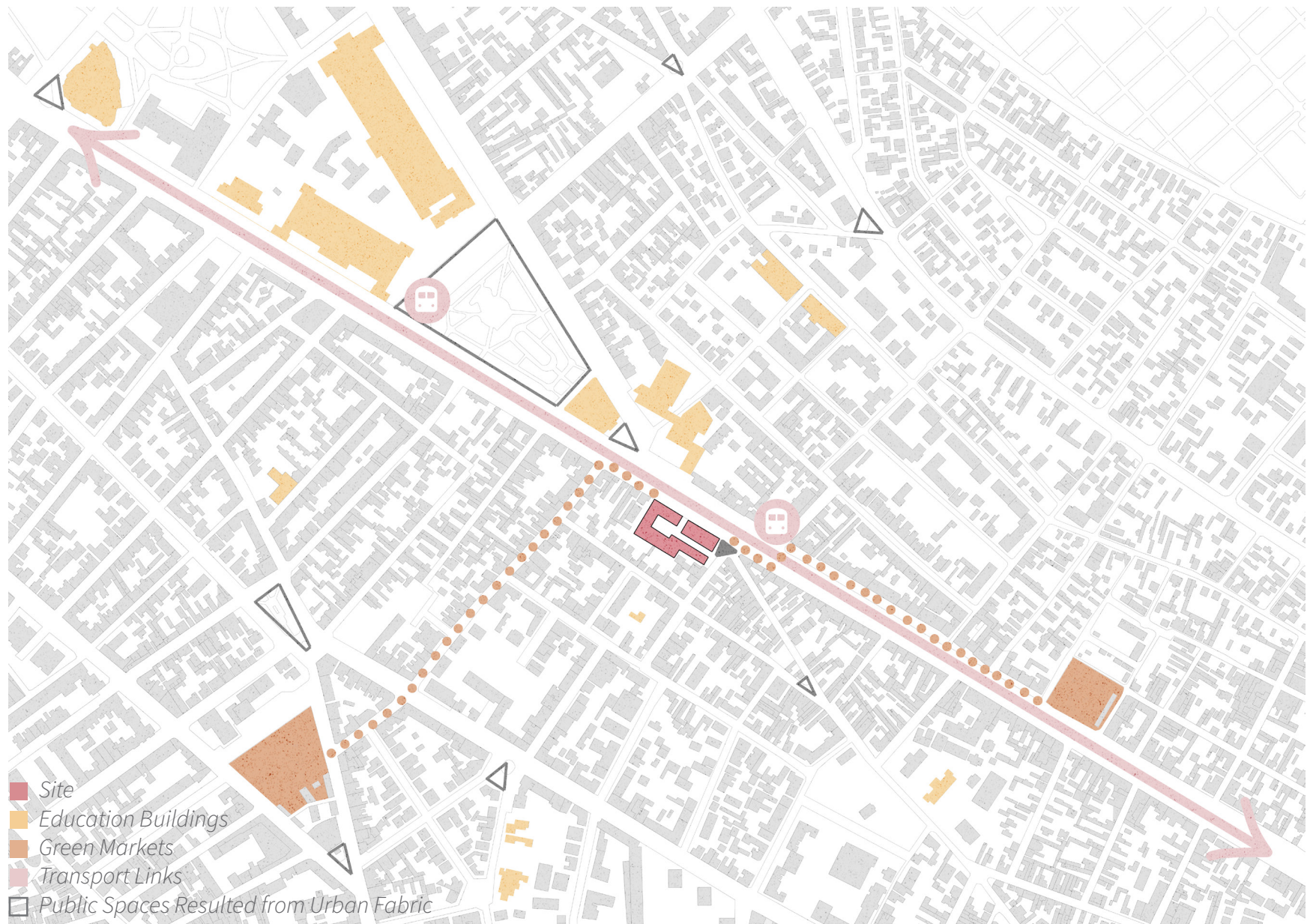
2021 - Sold to foreign development firm

Structure has preliminary protection as cultural monument

Municipality considered preserving/renovating structure into a cultural building

Significantly restrictive site to challenge the process of typological transference

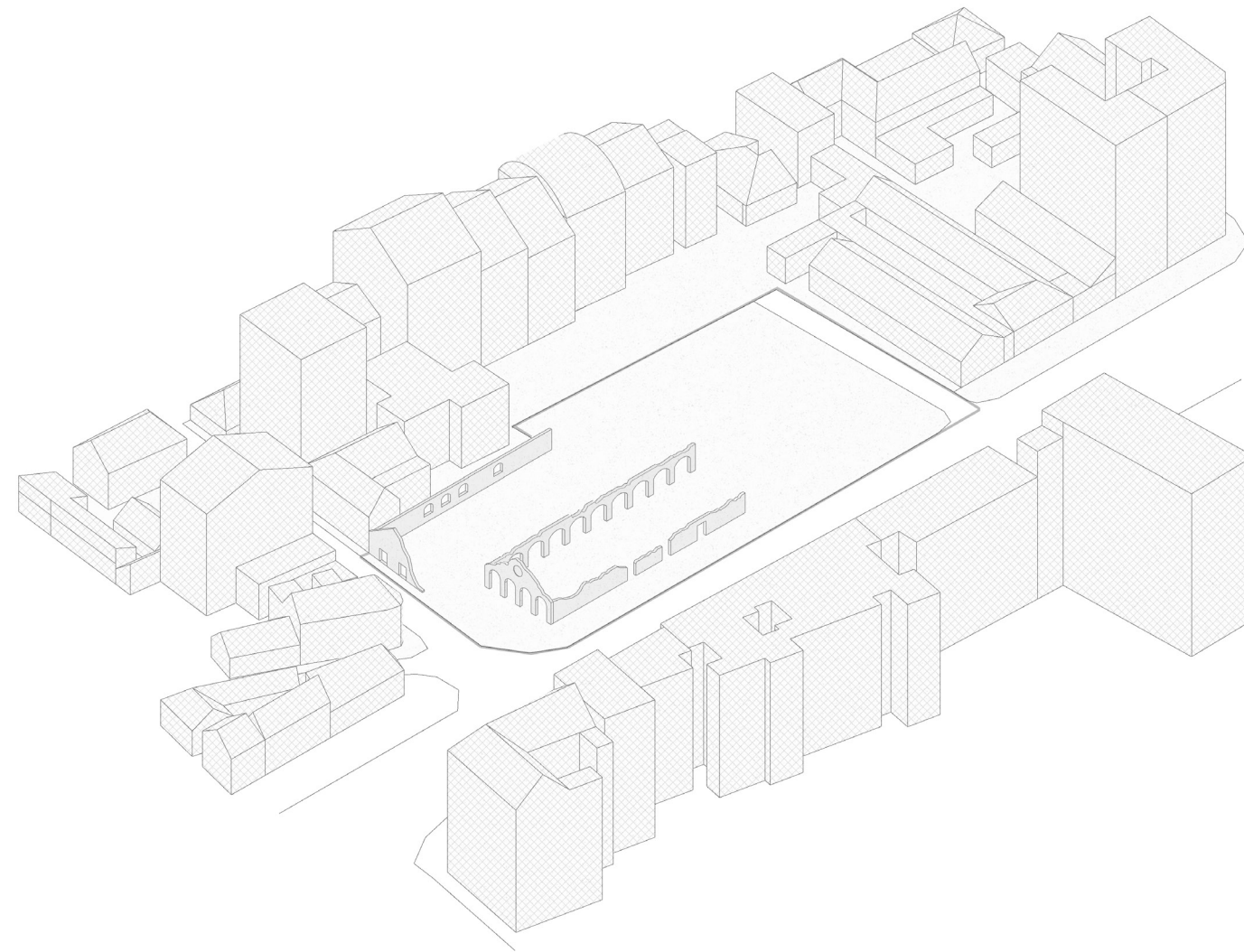
Urban Scale Analysis



Family Cooking Ajvar in Courtyard

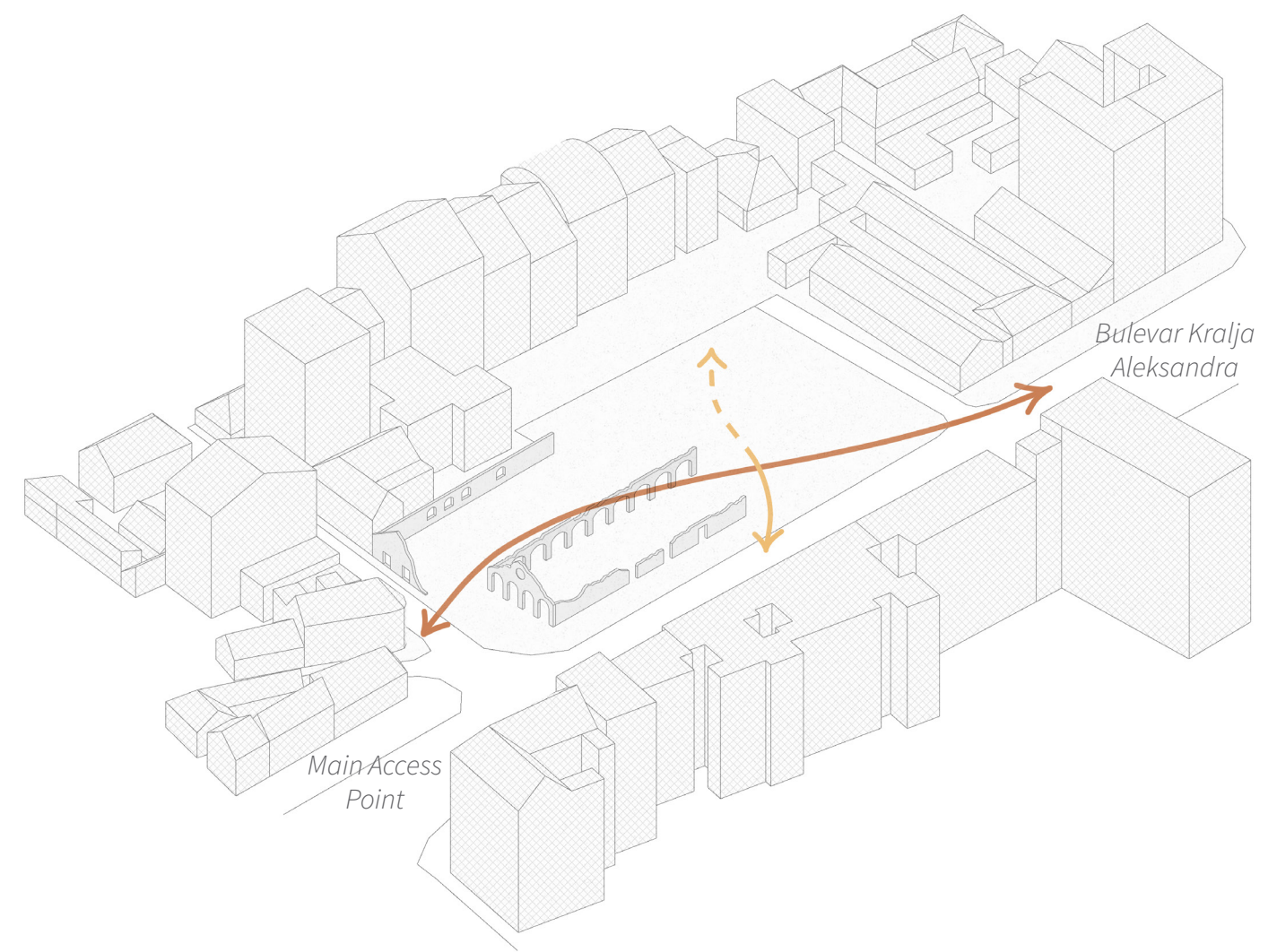


Form Development: *Existing Structures*



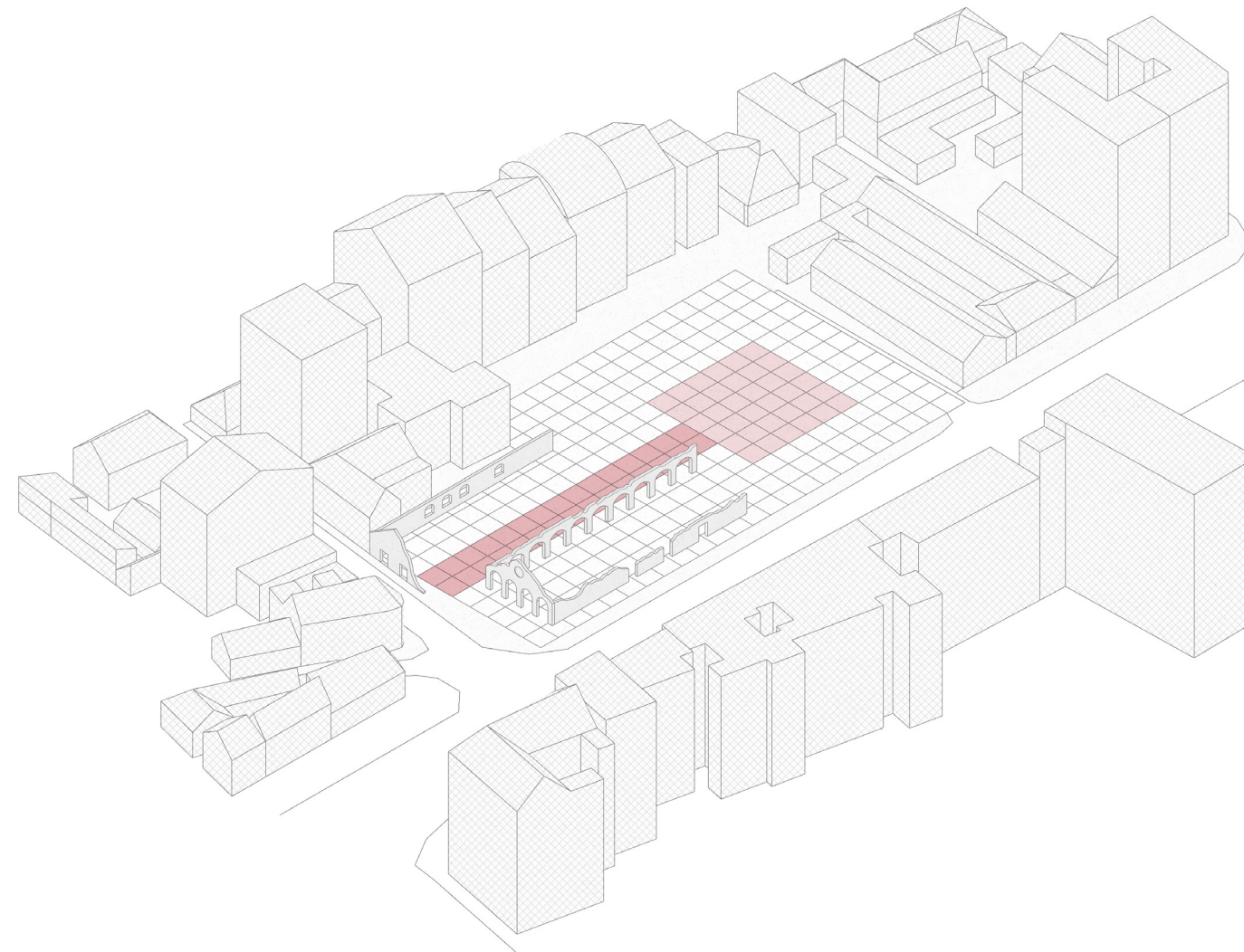
Ruins of Walls and Arches

Form Development: *Typological Transference*



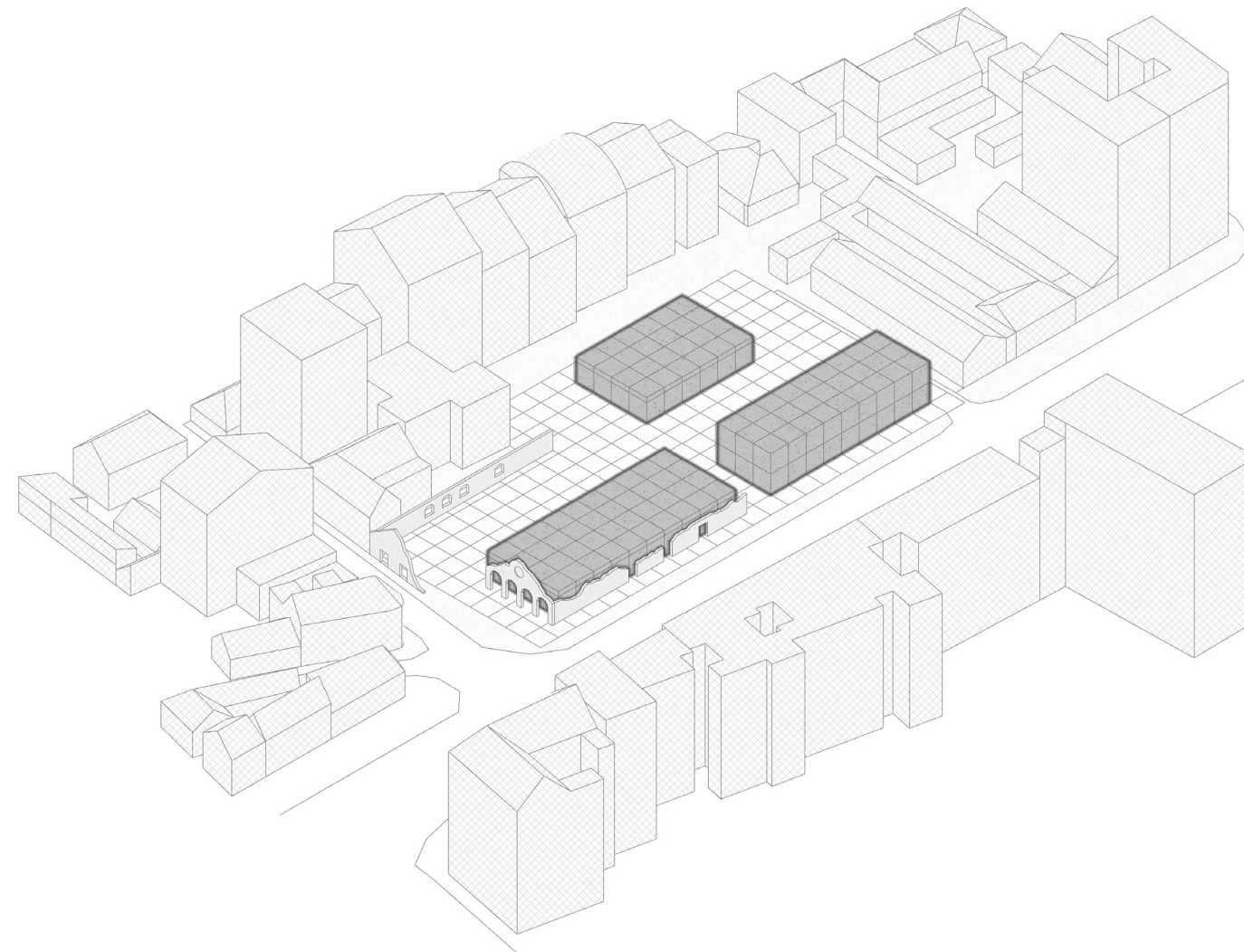
Definition of Circulation Routes

Form Development: *Typological Transference*



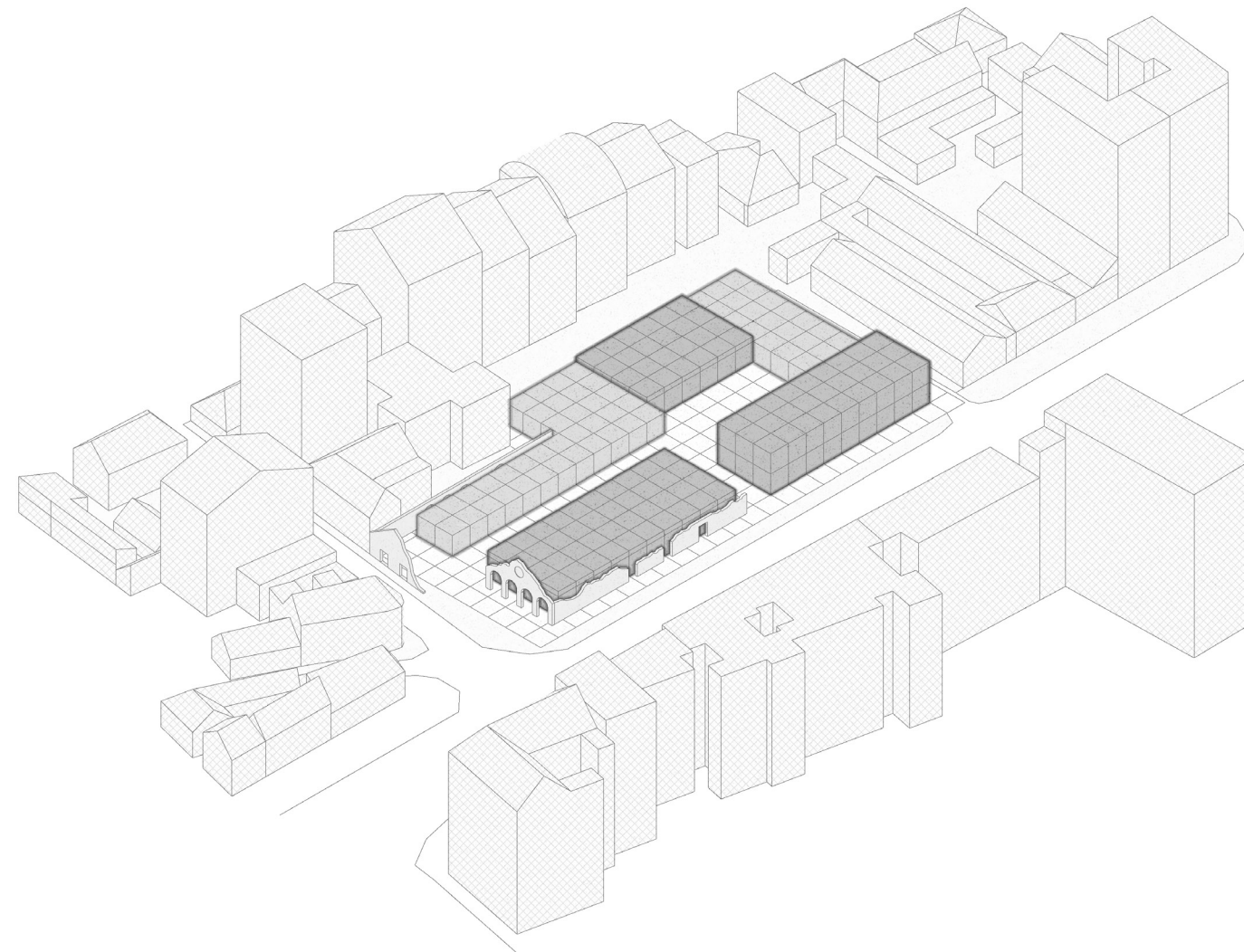
Introduction of 4m x 4m Grid and Axes

Form Development: *Typological Transference*



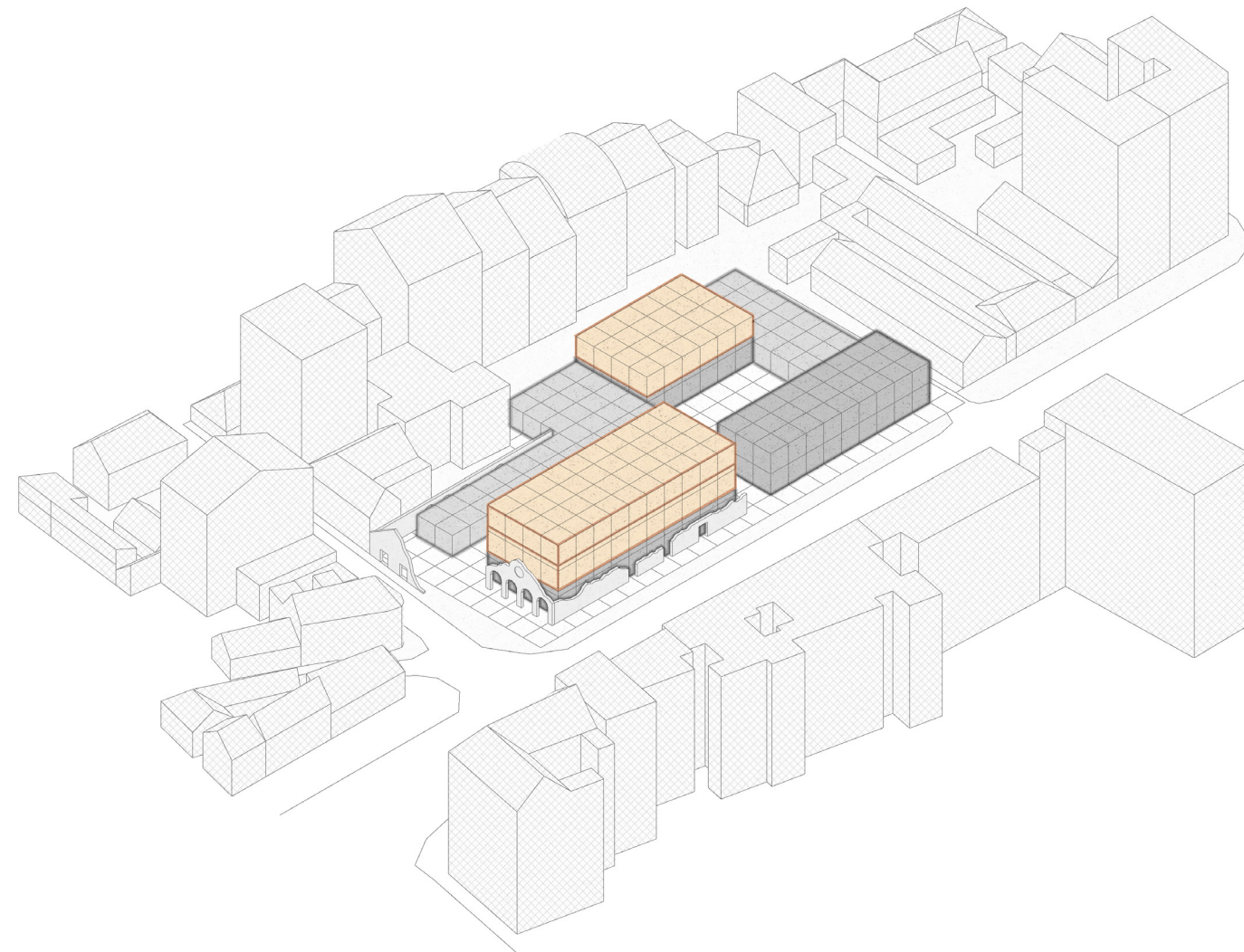
Definition of Three Protruding Blocks

Form Development: *Typological Transference*



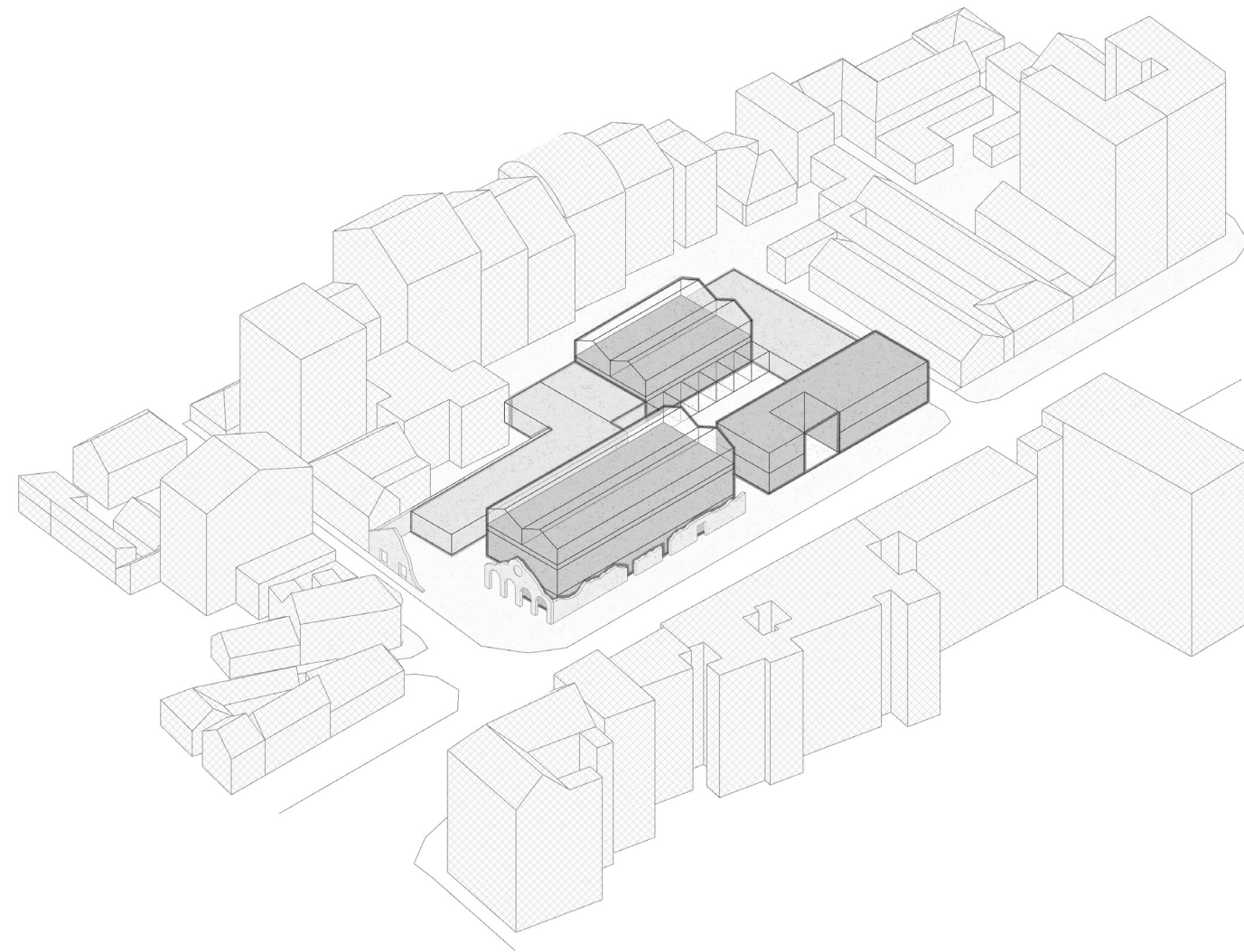
Addition of Secondary Volumes

Form Development: *Typological Transference*



Addition of Functions According to Program

Form Development: *Typological Transference*



Resulted Forms Reflecting the “Essence” of Previous Intervention

Site Plan



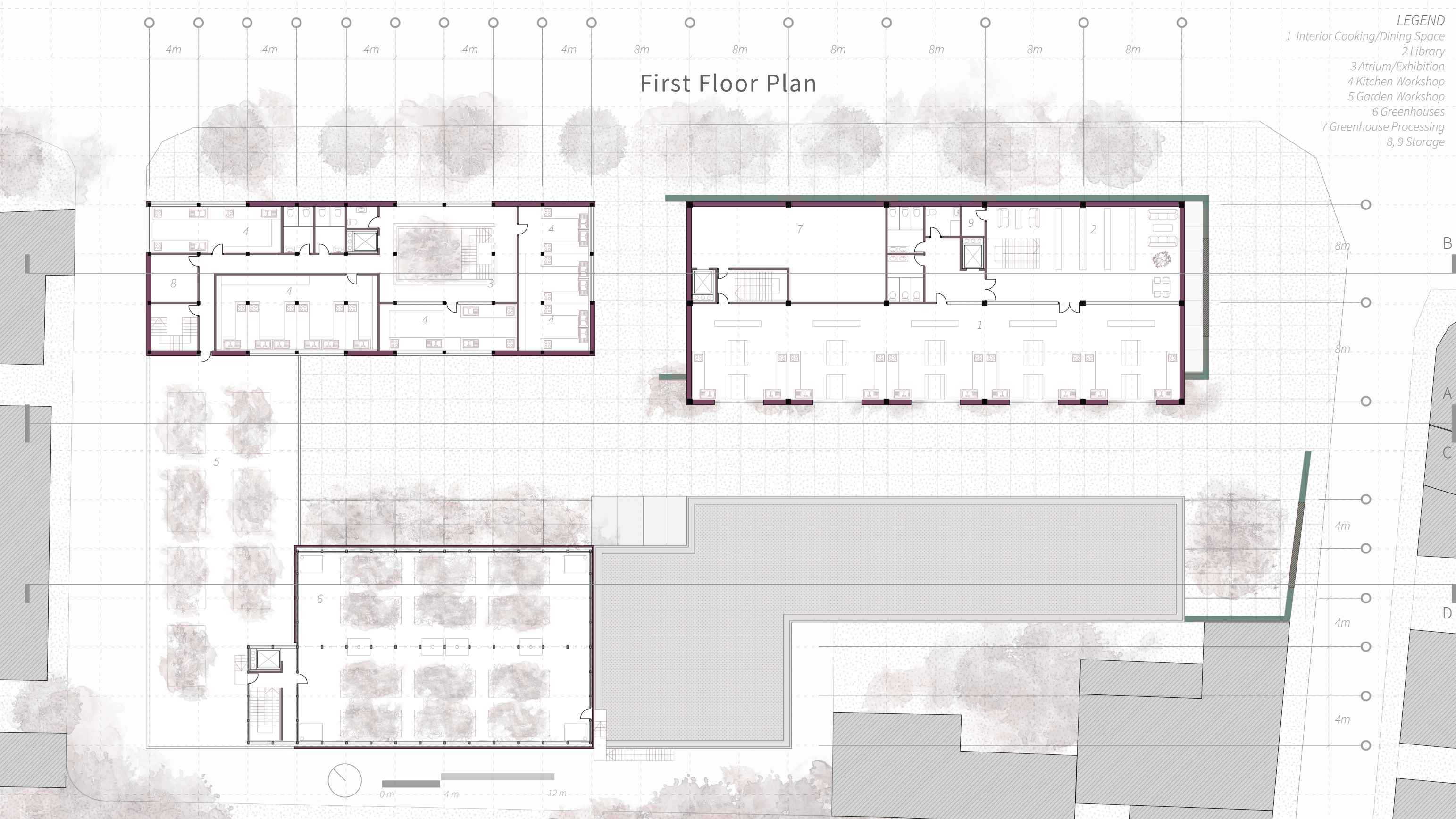
Ground Floor Plan

- LEGEND
- 1 Interior Cooking/Dining Space
 - 2 Exterior Cooking Dining Space
 - 3 Cafe
 - 4 Restaurant
 - 5 Kitchen
 - 6 Gathering Hall
 - 7 Administration/Offices
 - 8 Meeting Room
 - 9 Facilities Hiring
 - 10 Exhibition/Gallery
 - 11 Greenhouse Processing
 - 12, 14, 15 Storage
 - 16, 17, 18, 19 Plant

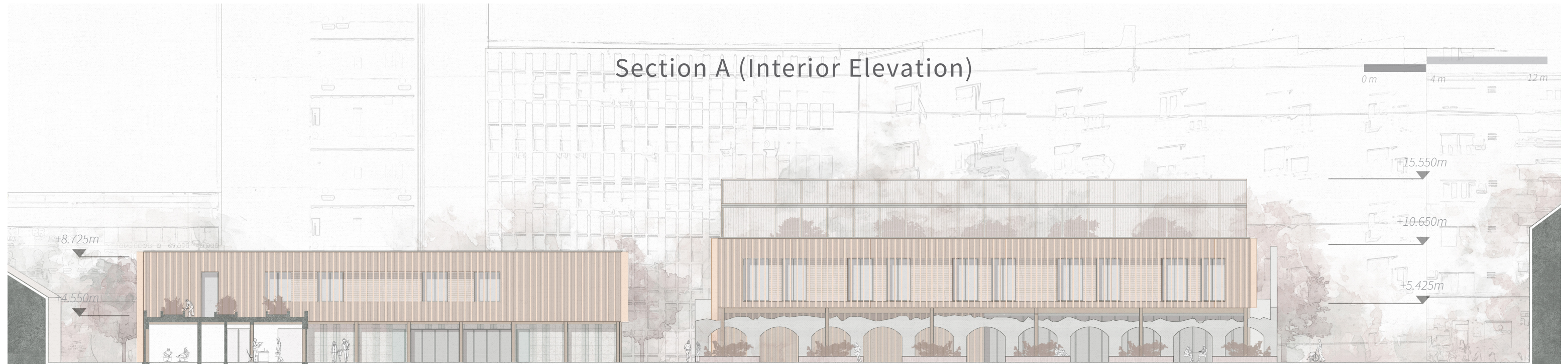


First Floor Plan

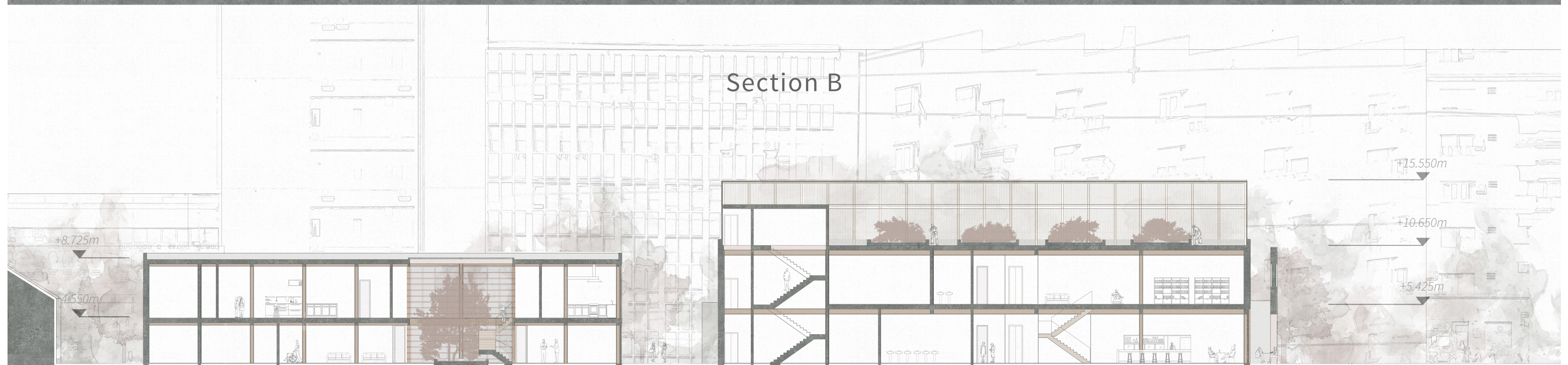
- LEGEND
- 1 Interior Cooking/Dining Space
 - 2 Library
 - 3 Atrium/Exhibition
 - 4 Kitchen Workshop
 - 5 Garden Workshop
 - 6 Greenhouses
 - 7 Greenhouse Processing
 - 8, 9 Storage



Section A (Interior Elevation)

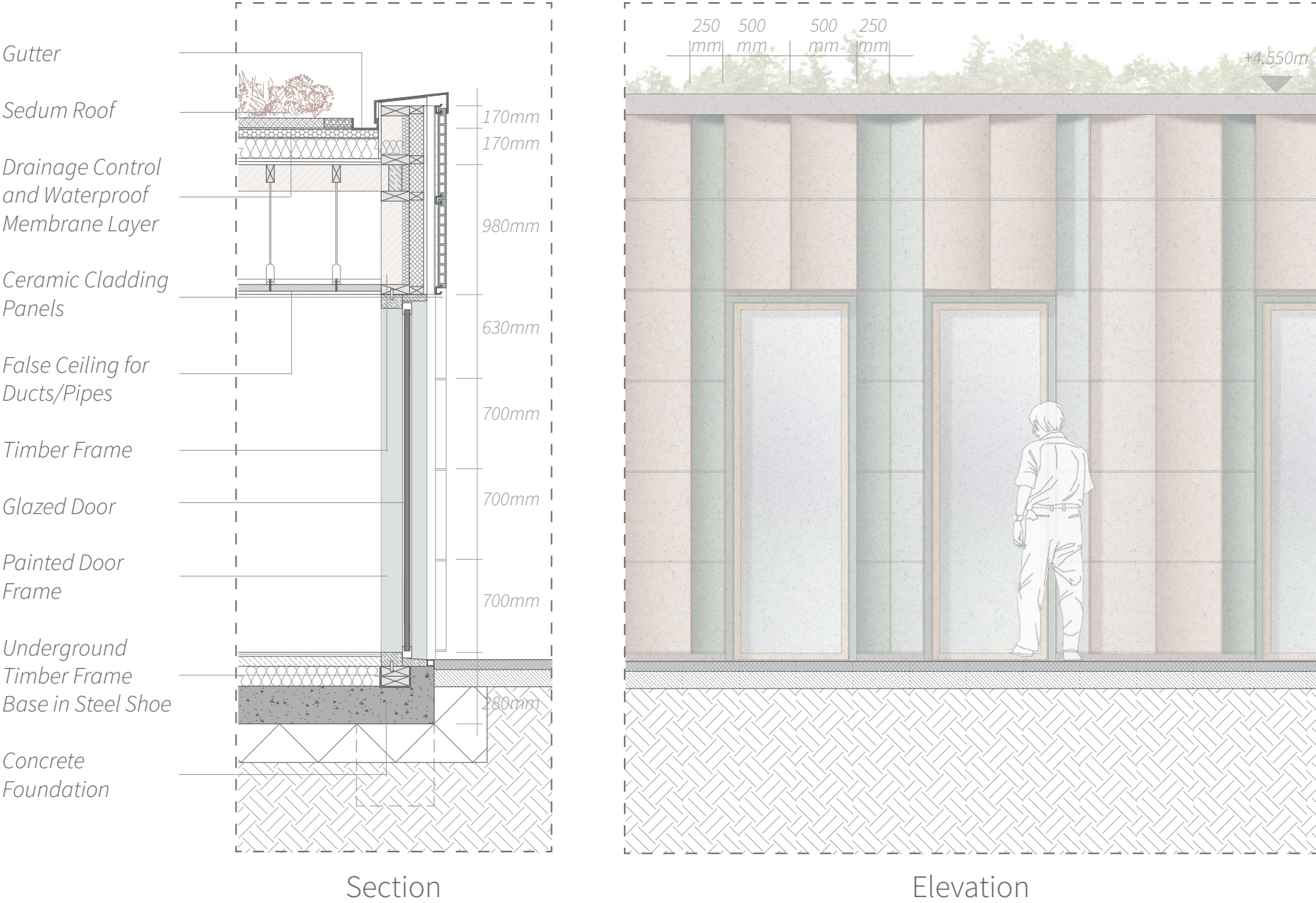


Section B

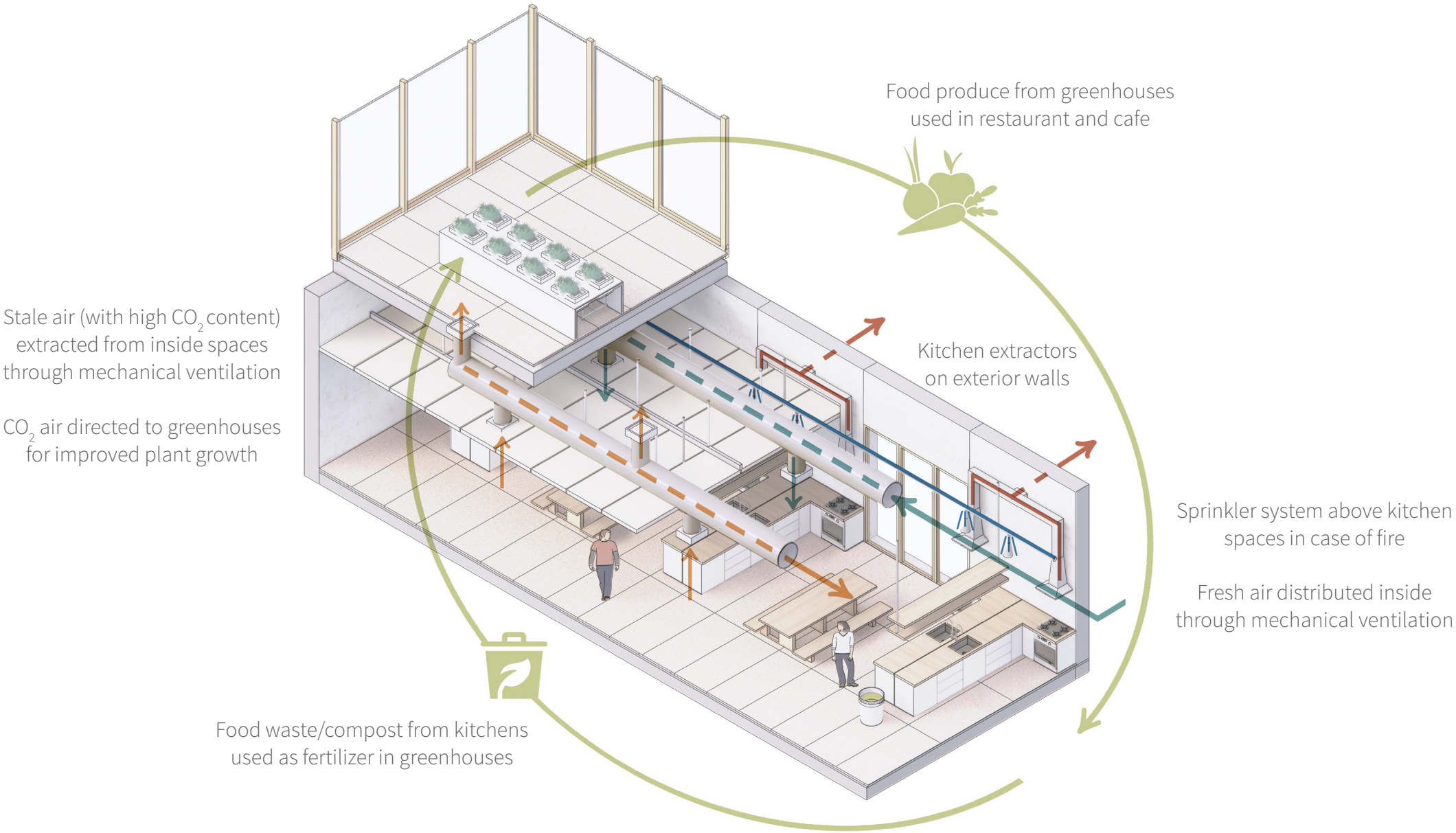




1:20 Facade Segment

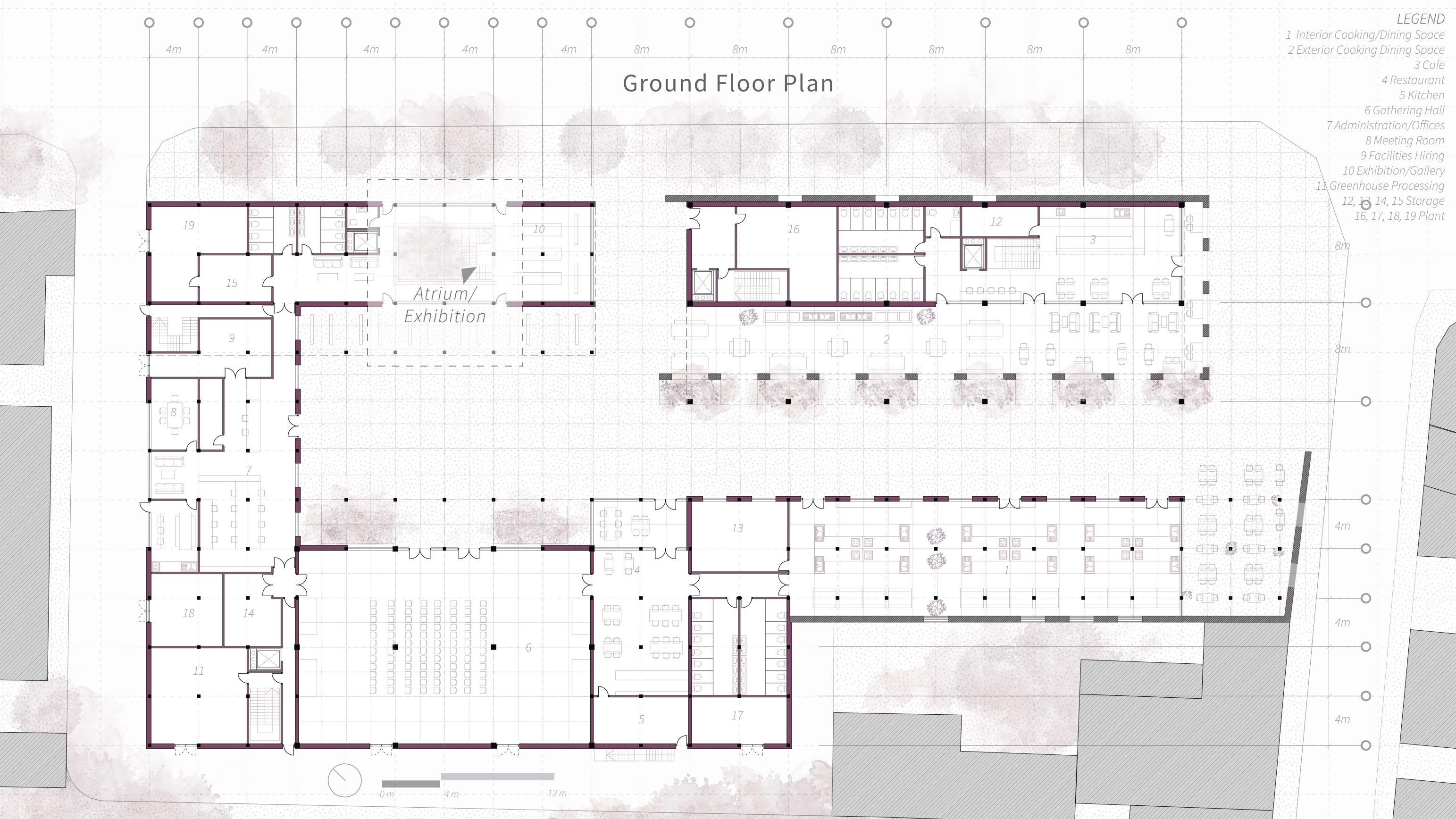


Climate Circularity: Air & Food Cycles



Ground Floor Plan

- LEGEND
- 1 Interior Cooking/Dining Space
 - 2 Exterior Cooking Dining Space
 - 3 Cafe
 - 4 Restaurant
 - 5 Kitchen
 - 6 Gathering Hall
 - 7 Administration/Offices
 - 8 Meeting Room
 - 9 Facilities Hiring
 - 10 Exhibition/Gallery
 - 11 Greenhouse Processing
 - 12, 13, 14, 15 Storage
 - 16, 17, 18, 19 Plant




‘Ostava’ Exhibition in Circulation Atrium




Atrium: ‘Ostava Kaleidoscope’ Exhibition


Ajvar
(pepper paste)

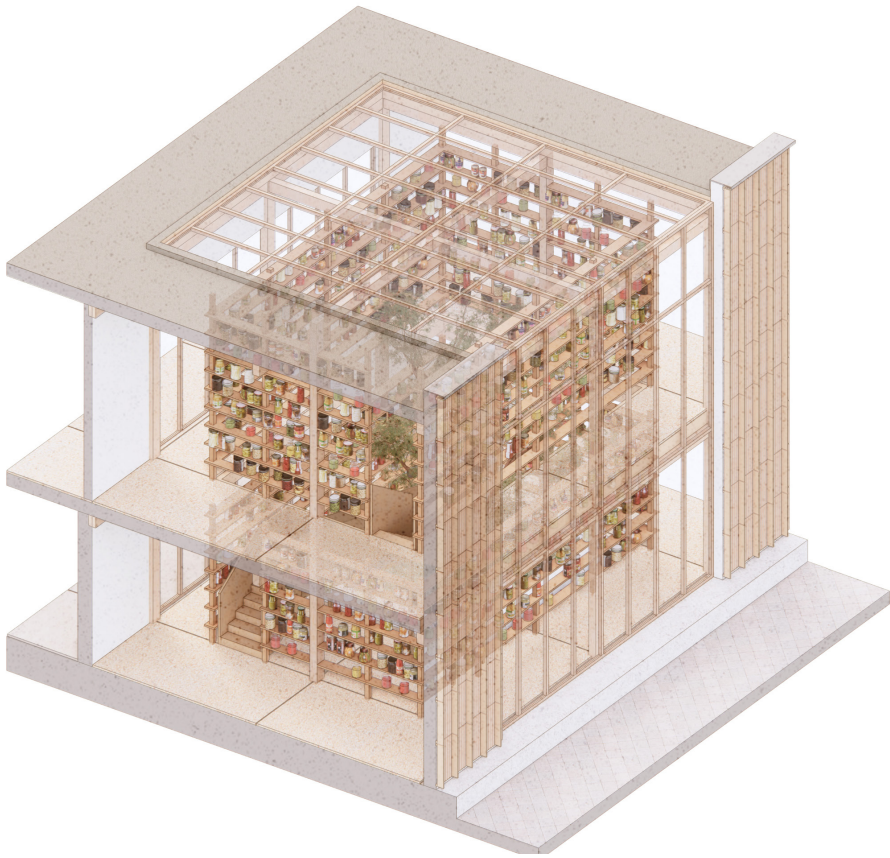


Pomidor
(tomato juice)



Slatko
(fruit & berry jam)







Kompot
(fruits & syrup)

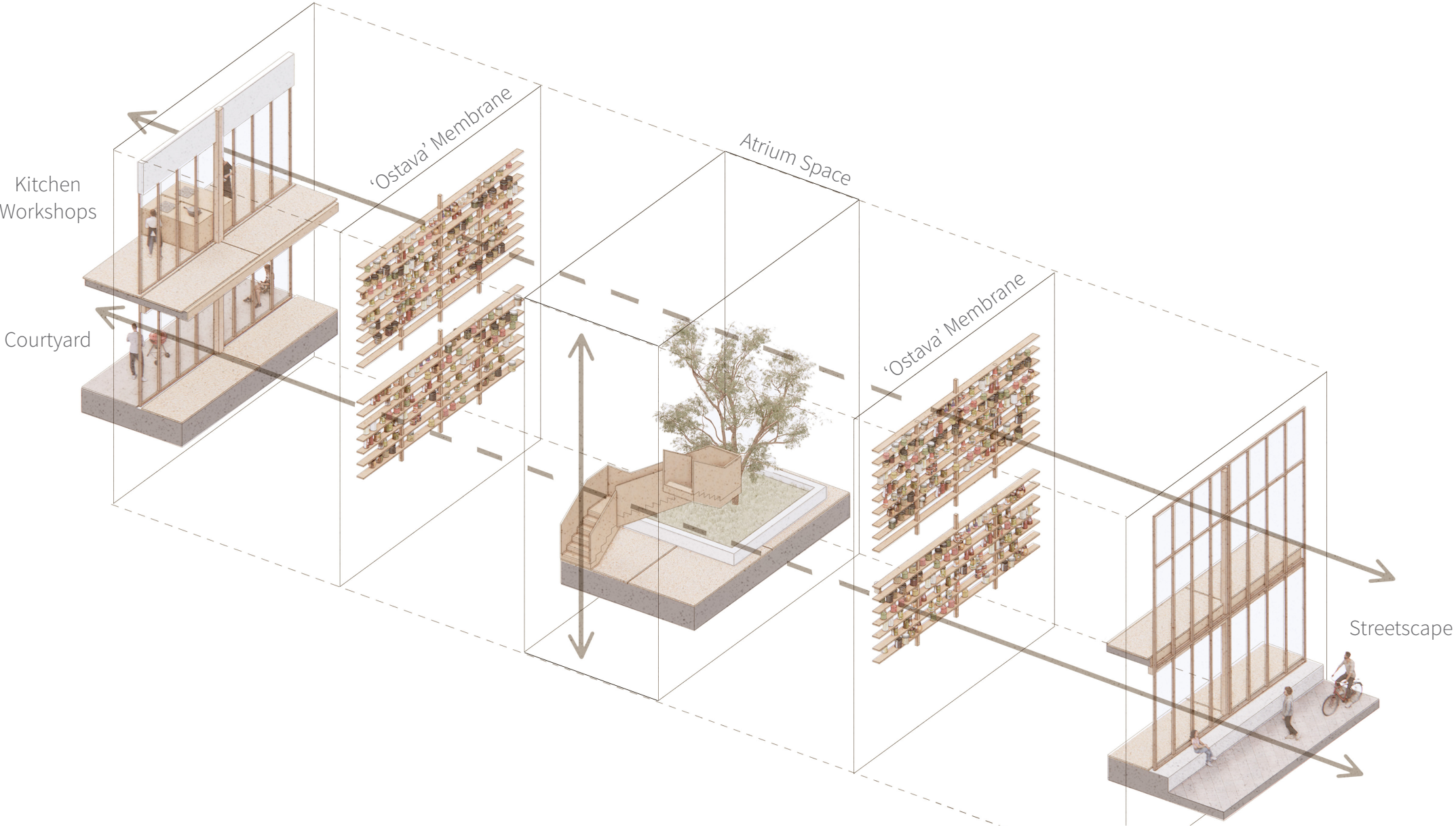


Paprike
(grilled peppers)



Kisela Zimnica
(pickled vegetables)

Layers & Connections through Atrium



Ground Floor Plan

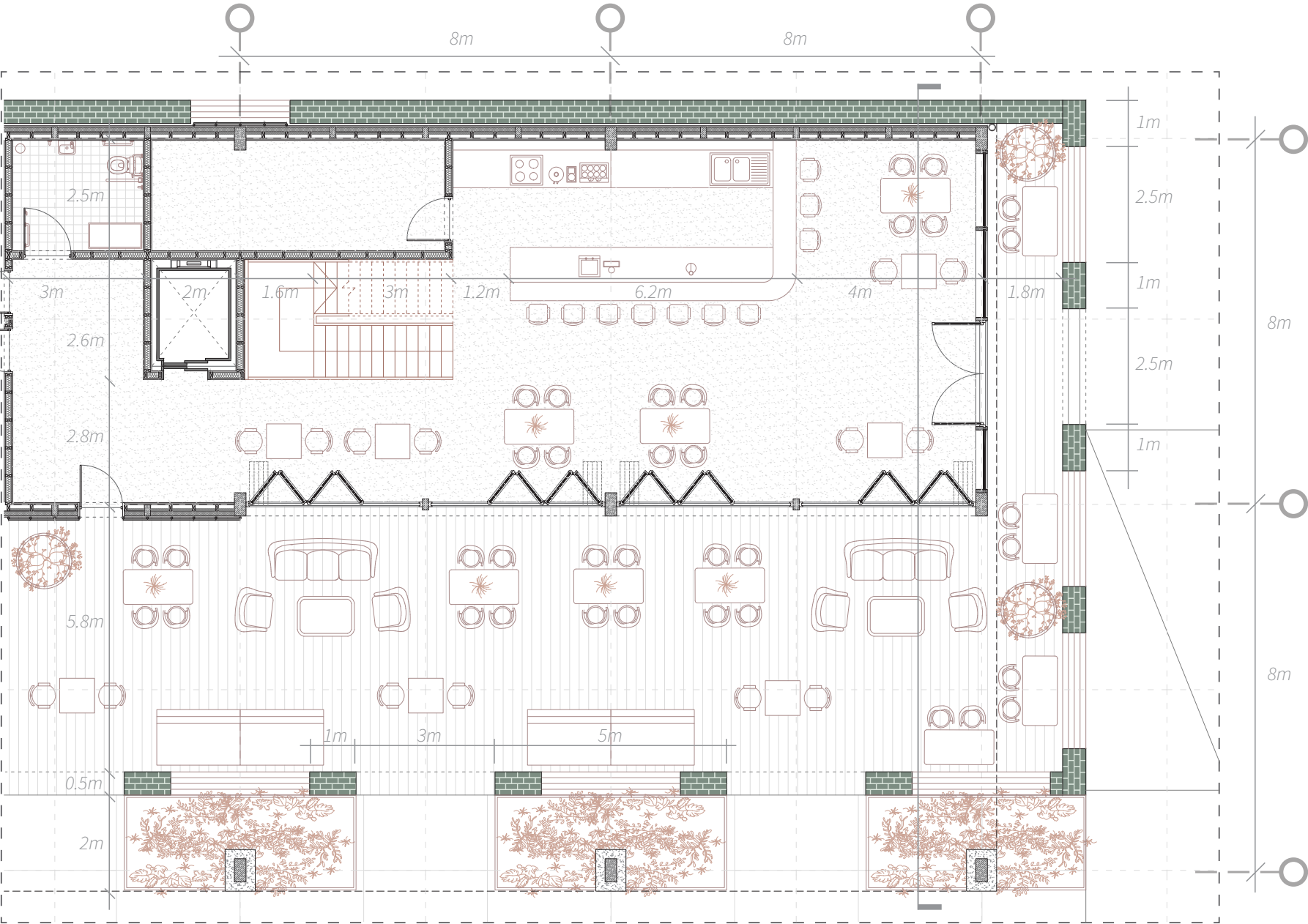
- LEGEND
- 1 Interior Cooking/Dining Space
 - 2 Exterior Cooking Dining Space
 - 3 Cafe
 - 4 Restaurant
 - 5 Kitchen
 - 6 Gathering Hall
 - 7 Administration/Offices
 - 8 Meeting Room
 - 9 Facilities Hiring
 - 10 Exhibition/Gallery
 - 11 Greenhouse Processing
 - 12, 13, 14, 15 Storage
 - 16, 17, 18, 19 Plant



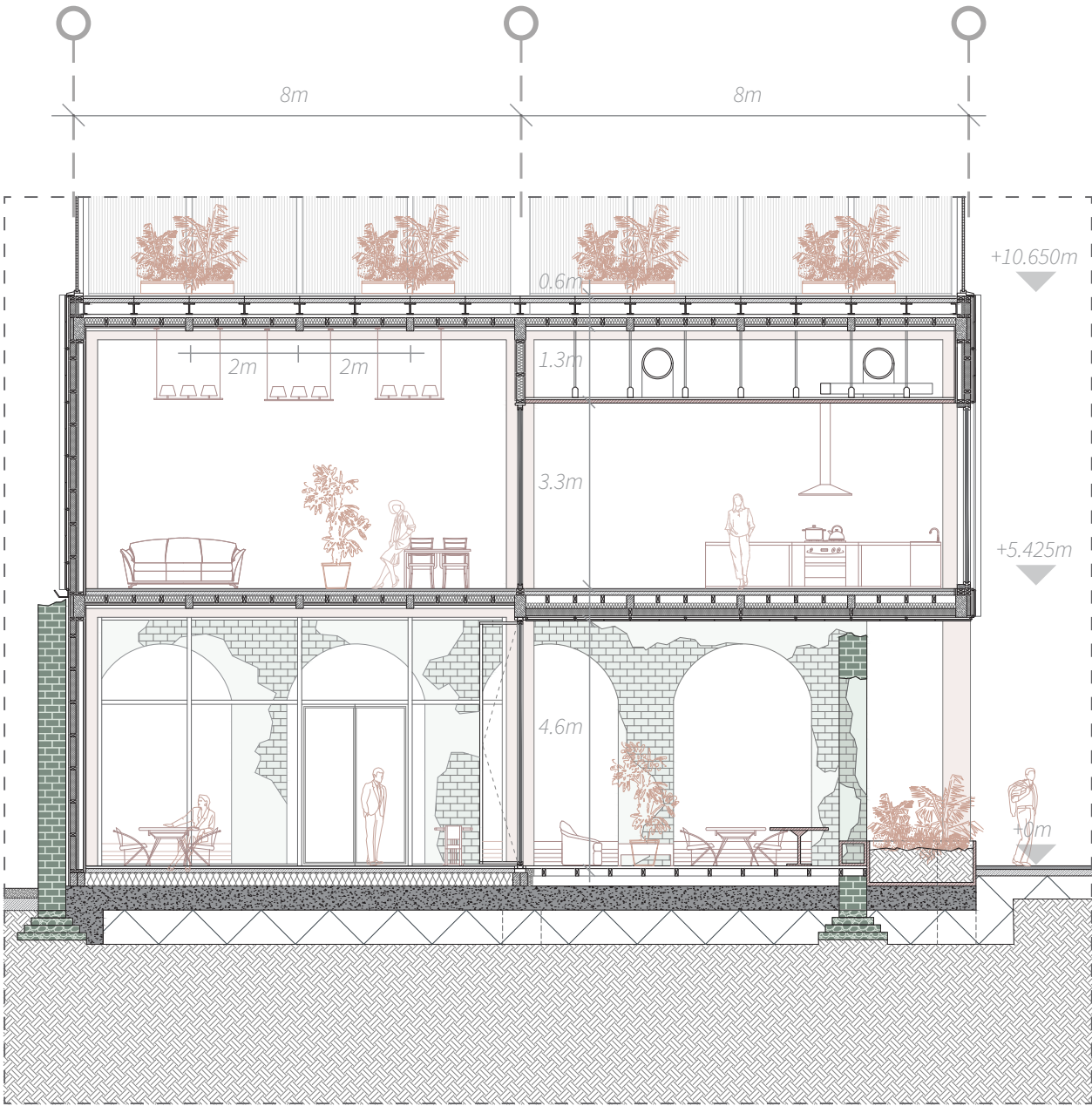
Contrasting Old & New in Interior Spaces



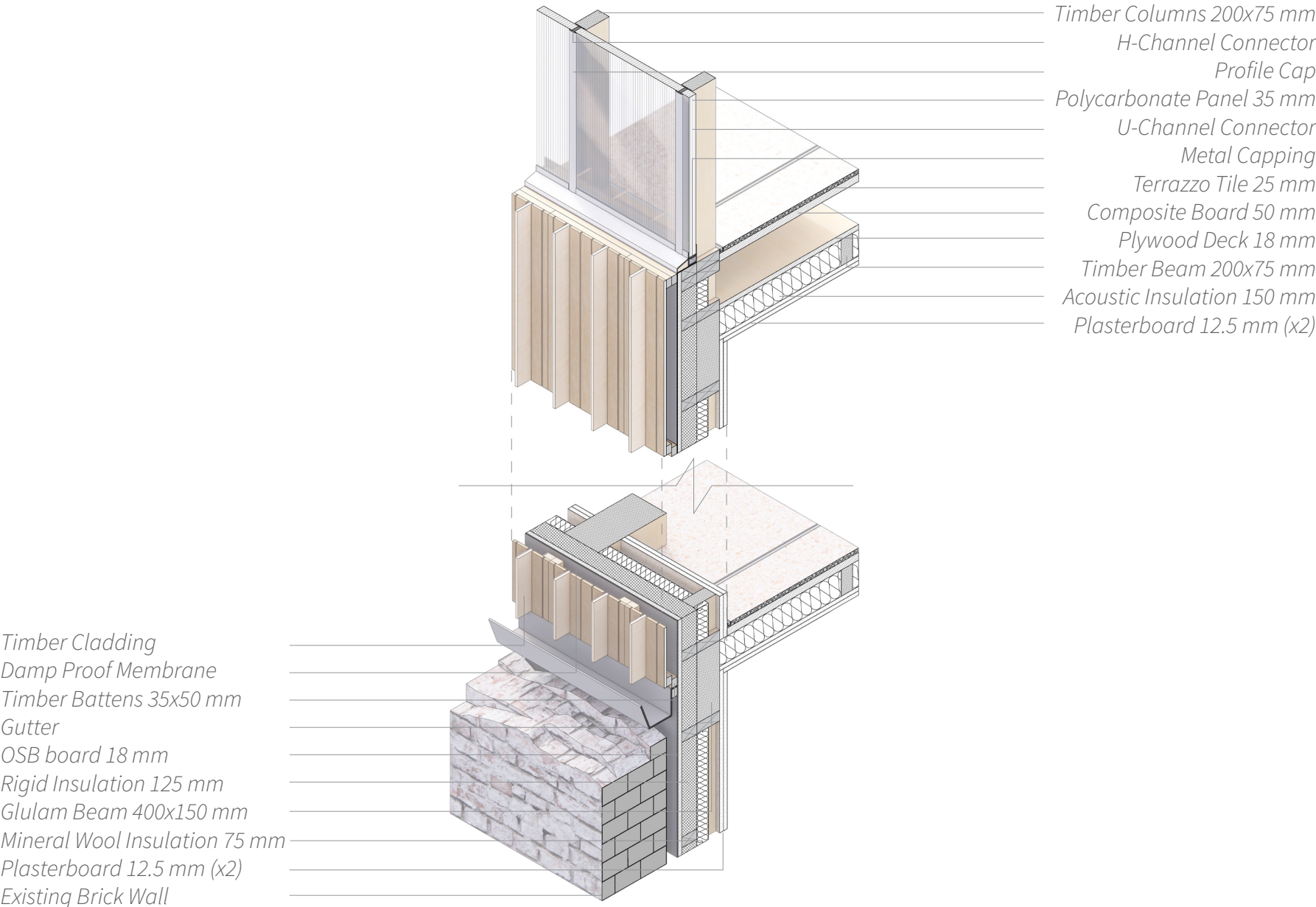
Passage (Entrance) - 1:50 Plan Study



Passage (Entrance) - 1:50 Section Study



Climate Control - 1:10 Drainage/Facade Insulation Detail



Contrasting Old & New in Exterior Spaces



A *NEW* OLD COMMUNITY

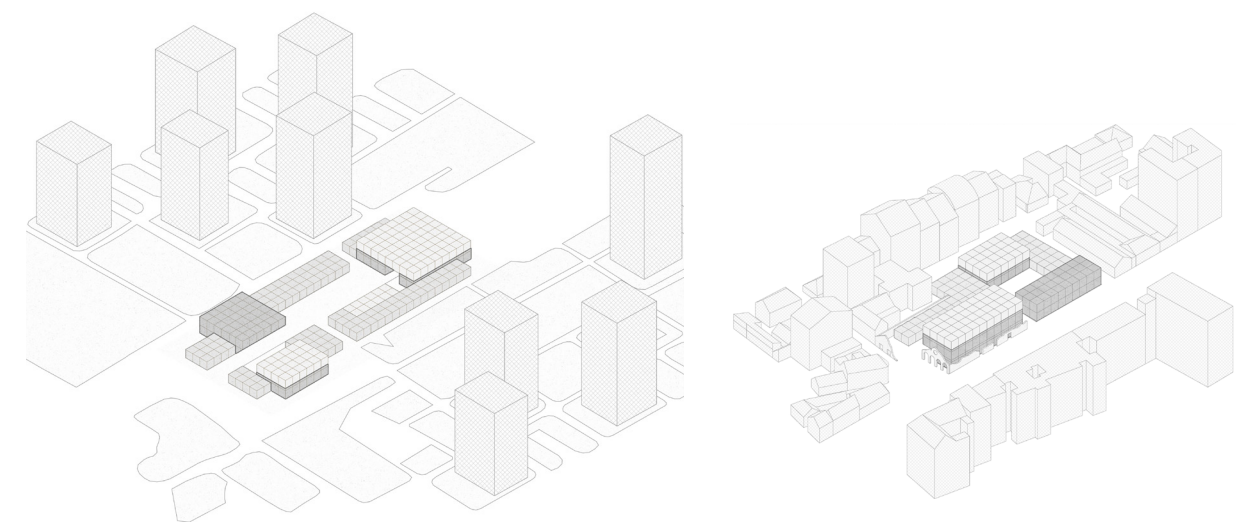
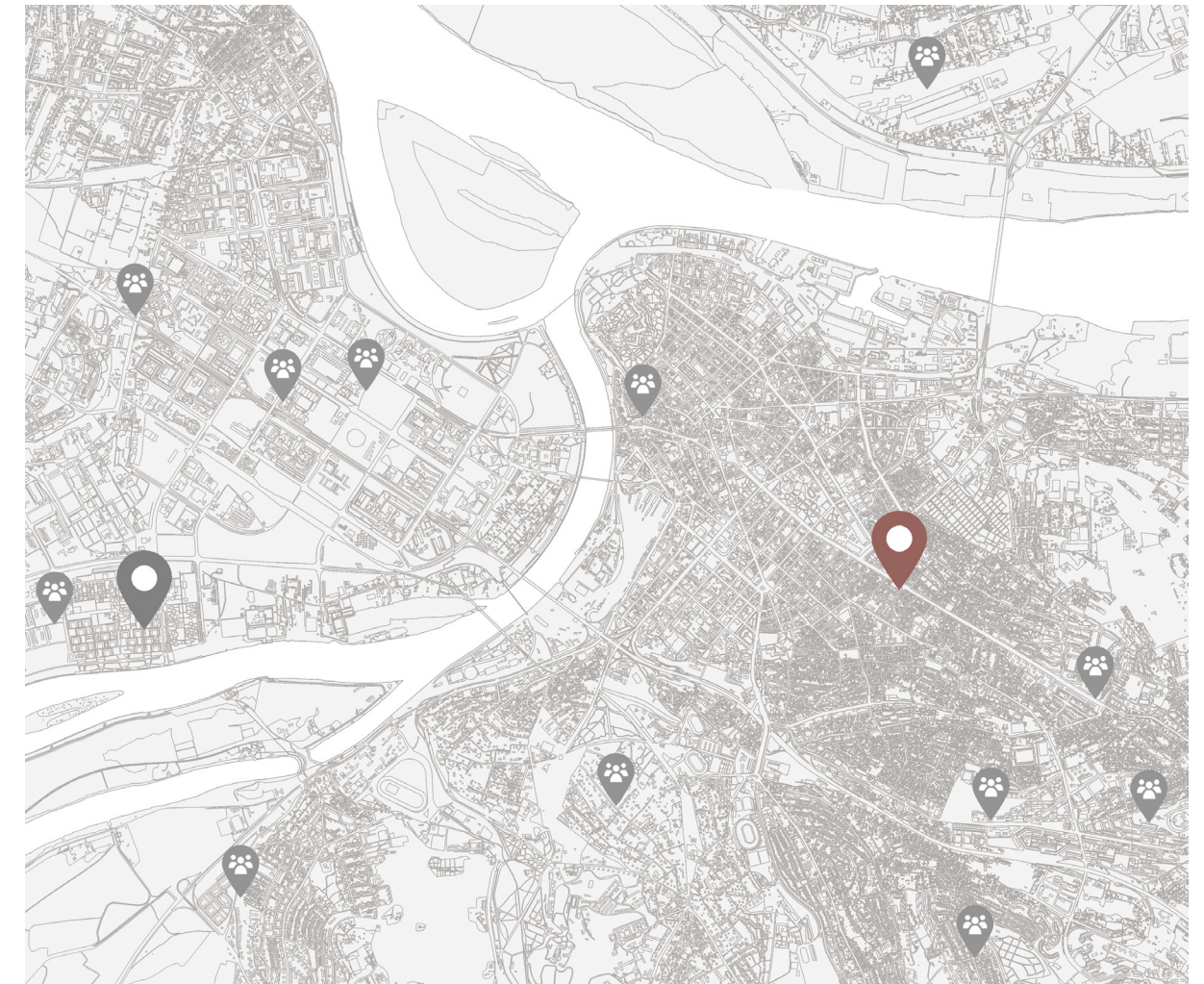
REFLECTION

Two-Step Typological Transference:

Step 1. Revitalisation of an existing structure: preserve modernist heritage, include new cultural elements, circular flows, and site integration

Step 2. Design of a new structure: relate to existing architectural heritage, base on concepts developed in Step 1, bring community space to the neighborhood

Two sites - back and forth development of ideas



Step 1

Step 2

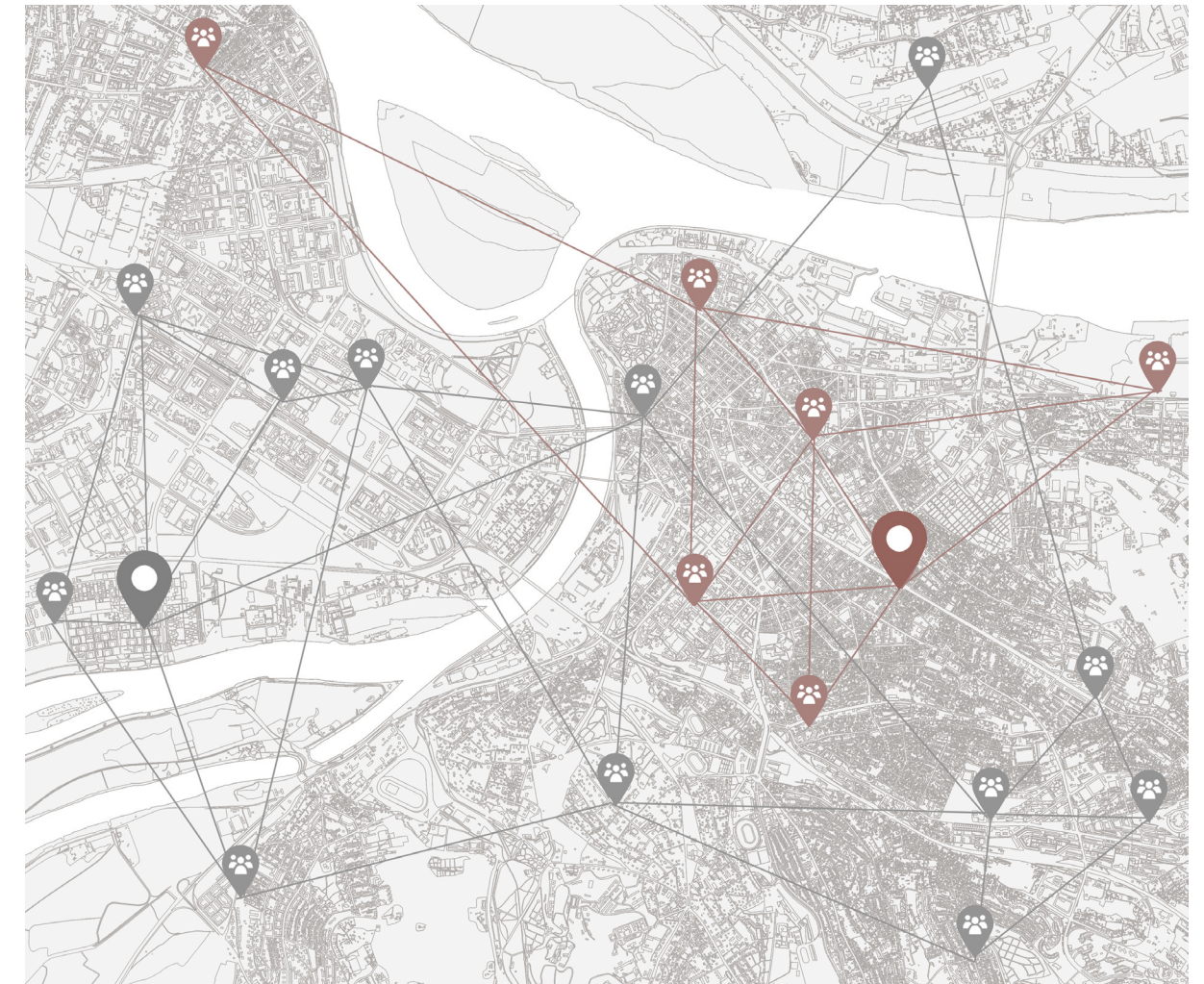
A NEW OLD COMMUNITY

REFLECTION

New Meanings for the City of Belgrade:

Wider contribution: network of connected community centers in all areas of the city
- significant reach/impact in restoring culinary practices, bridging communities, and creating a new architectural image for Belgrade's neighborhoods

Character of buildings: complementary balance between modernist proportions/features, contemporary additions, and more cultural/appropriation opportunities - reminiscing of the past, alluding to the future, holistically sustainable



PERSONAL ARCHITECTURAL POSITION

CULTURAL RESPONSE FOR SUSTAINABLE URBAN DEVELOPMENT

Current discourse: Sustainable development is environmental, economical, social
New approaches consider culture an equally important component
i.e. Palilula market hall and socialist 'local community' centers

Project response: Tri-fold response to local culture in the context of Belgrade
Promotion of dissipating anthropological (culinary) heritage
Enabling existing practices of appropriation of public spaces
Revitalising/preserving modernist & pre-war architecture

Disciplinary method: Balanced contrasts amongst 'opposite' architectural elements

