

Urban Voids and Human Needs

Bridging Gaps for Paramaribo's Unhoused



(Note. Illustration by Author, 2024)

INTRODUCTION

PARAMARIBO - SURINAME



Figure 1 : Photographs of Suriname.
Note. Source: *various sources*

GUYANA

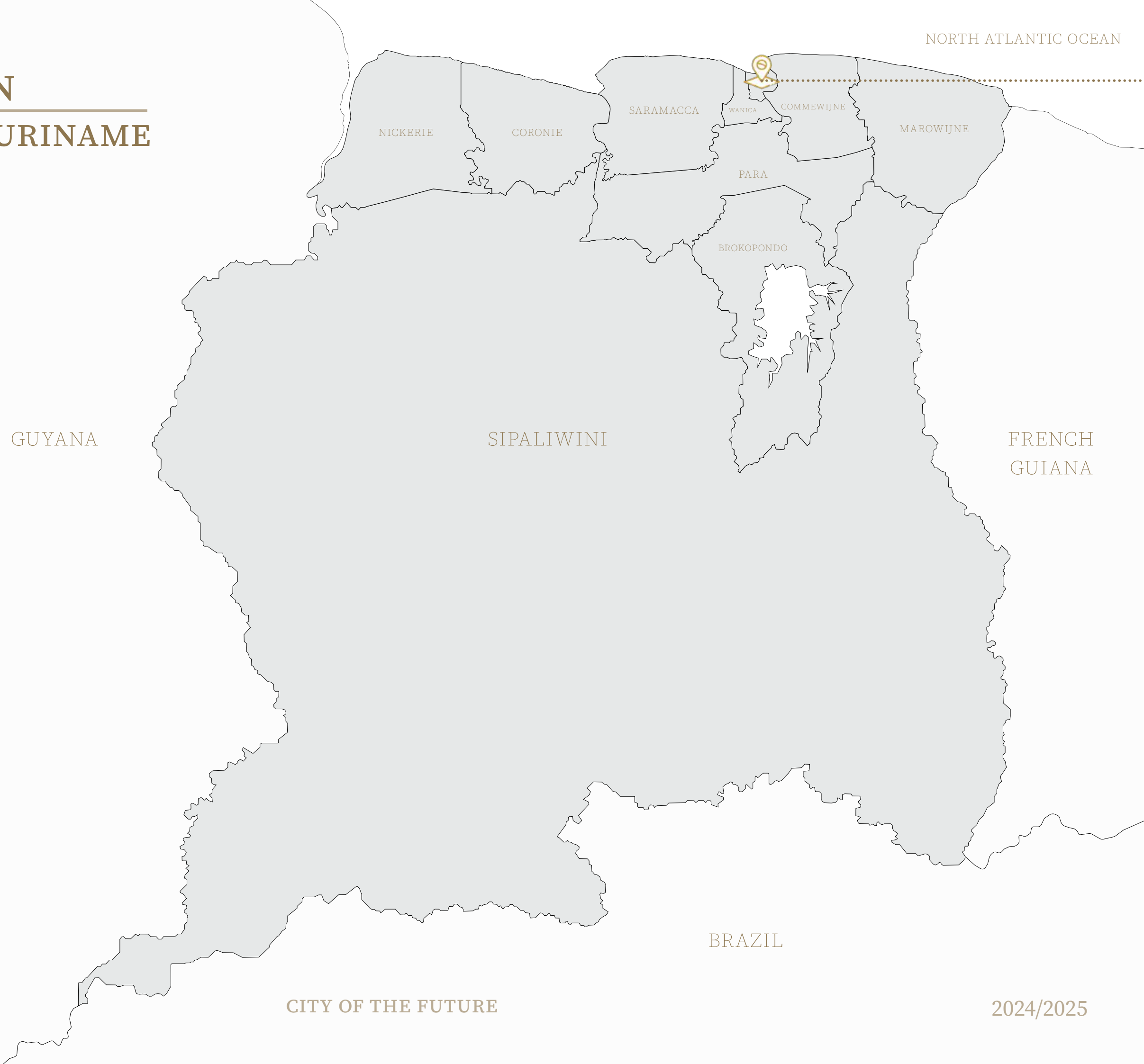
SIPALIWINI

FRENCH
GUIANA

BRAZIL

CITY OF THE FUTURE

2024/2025



PARAMARIBO

CULTURAL HUB

DIVERSE
ETHNICITIES

VIBRANT SOCIAL
CENTER

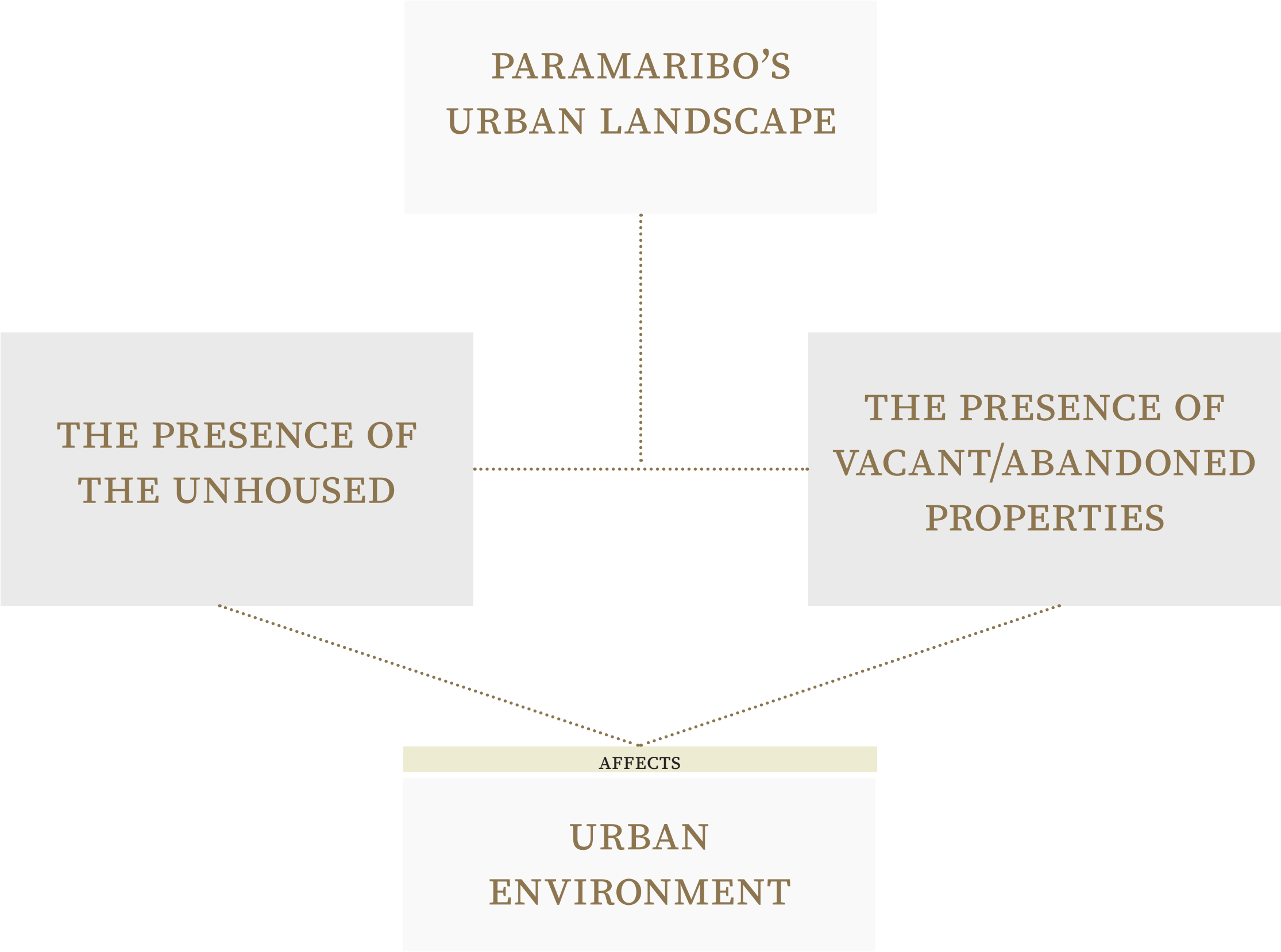
HISTORIC CENTER

Figure 2 : Capital city, Paramaribo.
Note. Source: *various sources*



FASCINATION & RELEVANCE

URBAN PHENOMENON



CONTEXT

The Unhoused Community

THE PRESENCE OF THE UNHOUSED

Figure 3 : Unhoused woman sleeping on the streets.
Note. Source: *Dagblad Suriname*



**Dagelijkse stijging aantal daklozen in binnenstad
Paramaribo**

Geplaatst op september 9, 2024

UNDERSTANDING THE TERMINOLOGY OF ‘UNHOUSED’

“Slayton (2021) notes this term has emerged as a preferred alternative to ‘homeless,’ reflecting efforts to reduce stigmatization.”

“THE INFLUENCE OF SURINAME’S ECONOMIC CONDITIONS AND POVERTY ON THE UNHOUSED COMMUNITY”

“

Despite entering a recovery period, many Surinamese still struggle with rising living costs and basic necessities. While inflation remains extremely high, average incomes have not kept pace. - Van Den Heuvel (2023)

”



Dus dat geld is zo op.




Ik heb geen elektriciteit,
ik heb geen water.




Het is nu erger geworden.



Ik kan nu maar één keer per dag eten.



Wij hebben gedwaald, met als gevolg het
inkrimpen van onze economie.



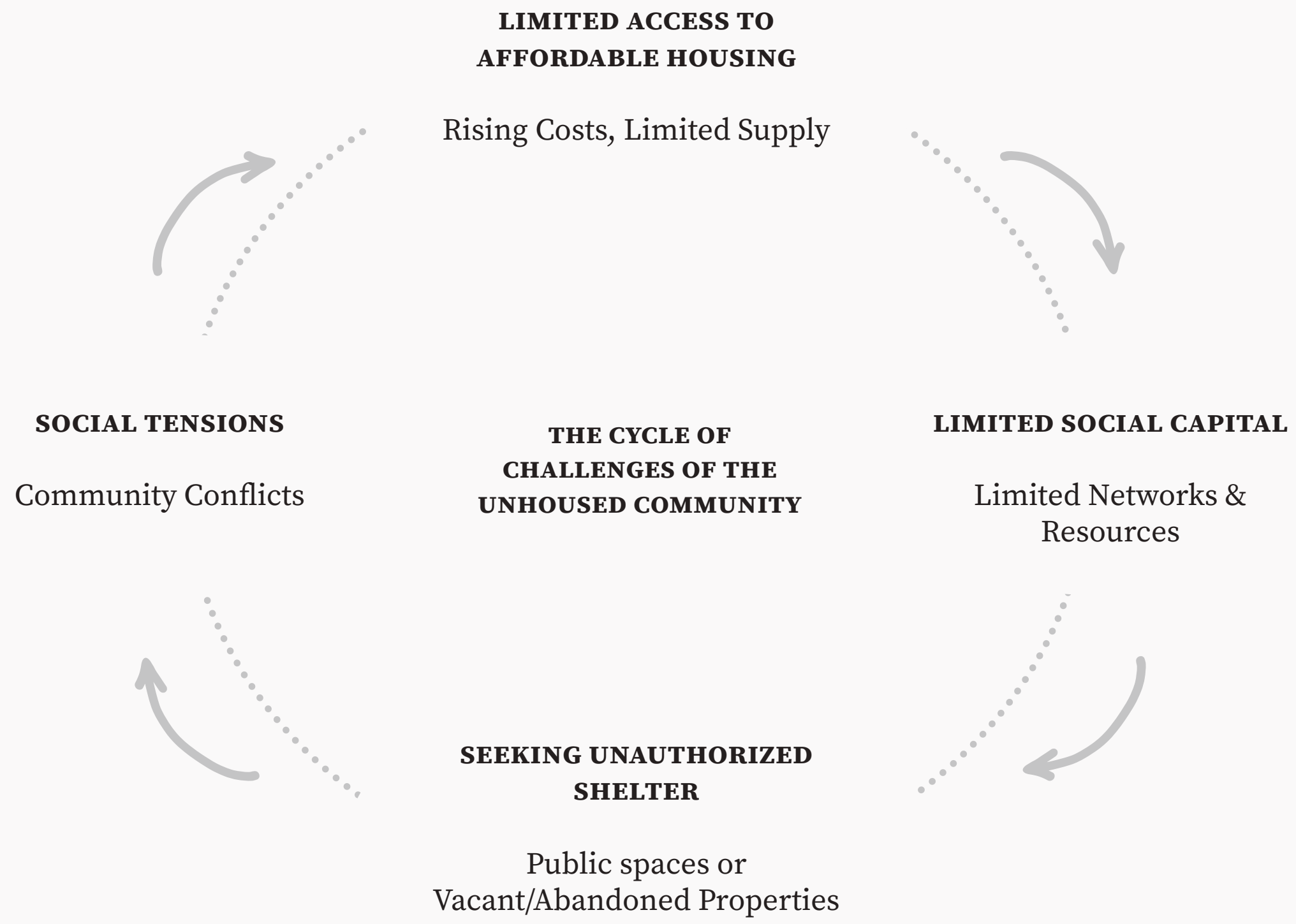
Alles is duur in de winkel.

THE HOUSING CHALLENGES OF THE UNHOUSED COMMUNITY




PROBLEM STATEMENT

URBAN PHENOMENON



URGENT CALL FOR HOUSING AND SUPPORT



“I miss the feeling of home and also miss normal, humane treatment. Many people living on the streets want to rebuild their lives, but we need support.”

Mr. Serezo
Unhoused individual in Suriname

“Not everyone on the street is an addict – Many of us are victims of economic hardship or disabilities. We need houses to leave the streets and rebuild our lives.”

Mr. Ronald Fernandes
Unhoused individual/
Spokesperson for the unhoused
community in Suriname



THE CONSTITUTION OF THE
REPUBLIC OF SURINAME (1987)
STATES:

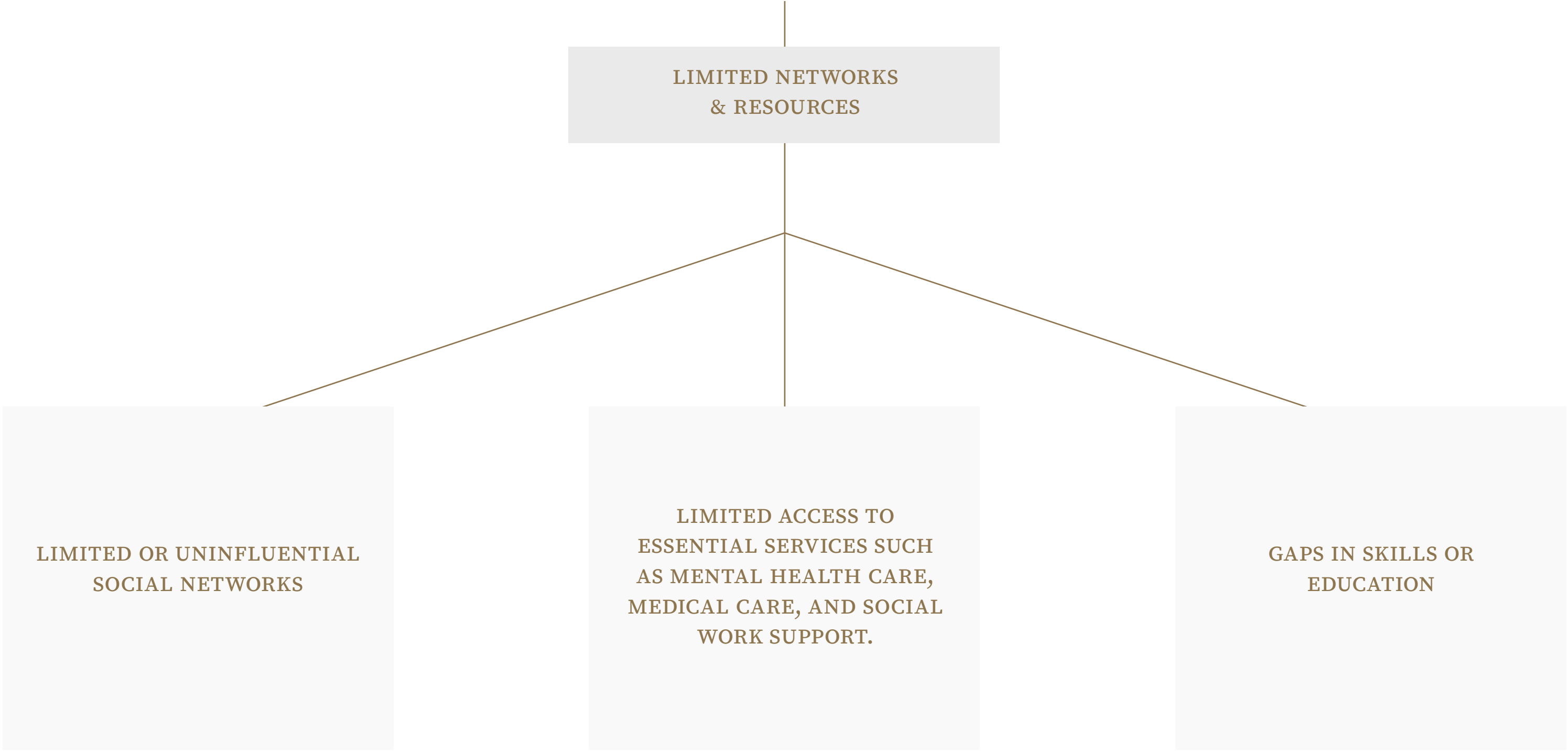
“A secured means of livelihood for the entire population”
(ARTICLE 4B)

“All who are within the territory of Suriname shall have an equal claim
to protection of person and property”
(ARTICLE 8[1])

“Everyone has a right to physical, mental and moral integrity”
(ARTICLE 9[1])

“Optimal satisfaction of basic needs for work, food, health care,
education, energy, clothing and communication”
(ARTICLE 24)

LIMITED SOCIAL CAPITAL



“WHAT IS THE SIGNIFICANCE OF SOCIAL CAPITAL?”

PARTICIPATION IN THE LOCAL COMMUNITY

SOCIAL BONDING

NETWORKS, RELATIONSHIPS,
NORMS, AND TRUST

COLLECTIVE INFORMATION
SHARING

NEIGHBOURHOOD STABILITY

SOCIAL CAPITAL

NETWORKS WITH TOTAL
CLOSURE

COMMUNITY DEVELOPMENT

COMMUNITY RESOURCES

“

Social capital forms the foundation upon which social stability and a community's self-help capacity are built—serving as a key factor in reversing neighbourhood decline - (Kleinmans, 2006, p. 70)

”

—“Social bonding is crucial, and these individuals have developed strong connections with each other, which can be leveraged effectively.”



Mrs. Madjerin Petrusie
Psychosocial worker/
Founder Samaria Tour

—“When someone new arrives, particularly a young person, others inform me so I can contact local authorities, because street life presents many dangers, and young people deserve better opportunities.”



Mr. Ronald Fernandes
Unhoused individual/
Spokesperson for Suriname's Unhoused
Community

CONTEXT

VACANT/ABANDONED PROPERTIES

THE PRESENCE OF VACANT/ABANDONED PROPERTIES



Dc Bhola erkent probleem bouwvallige gebouwen in binnenstad Paramaribo

Geplaatst op april 1, 2022

URBAN DECLINE

TANGIBLE 'URBAN VOIDS'

ENVIRONMENTAL RISKS
(ENVIRONMENTAL
DEGRADATION, POTENTIAL
FIRE HAZARDS, AND SITES
FOR CRIMINALITY)

THREATEN PUBLIC SAFETY

UNAUTHORIZED SHELTERS

“SELF-REINFORCING CYCLE OF URBAN DECLINE”

“

Once properties become vacant/abandoned, both property values and neighbourhood satisfaction decrease, often prompting other residents to relocate, which further destabilizes the community.

- Han (2013)

”

“WHERE CAN MEMBERS OF THE UNHOUSED
COMMUNITY FIND SUPPORTIVE HOUSING WITH
ESSENTIAL SERVICES WHEN NO ALTERNATIVES ARE
PROVIDED?”

REVITALIZATION
OF
VACANT/ABANDONED
PROPERTIES



CREATING A SOCIAL
RESILIENT RESIDENTIAL
SPACE WITH ESSENTIAL
SERVICES FOR THE UNHOUSED
COMMUNITY



“BRIDGING URBAN VOIDS AND HUMAN NEEDS”

RESEARCH QUESTIONS

MAIN QUESTION:

How are vacant/abandoned properties and the unhoused community connected in Paramaribo's neighbourhoods, and how can this connection build social capital?

PART I. THEORY

ECONOMIC DEVELOPMENT FINDINGS

Establishes the foundation through Urban Decline Theory
Examines economic context and influences

Sub Question 1:
How has Suriname’s economic journey (1975-2024) shaped its current economic and poverty conditions?

Sub Question 2:
How do Suriname’s economic and poverty conditions influence the relationship between the unhoused community and vacant/abandoned properties?

PART II. THEORY & RESEARCH

SPATIAL DEVELOPMENT FINDINGS

Applies Broken Windows Theory
Analyses the spatial situation in Paramaribo neighbourhoods
Focuses on vacant/abandoned properties

Sub Question 3:
How has Paramaribo’s urban development influenced the current patterns of neighbourhood conditions and property vacancy/abandonment?

Sub Question 4:
Which vacant/abandoned property in the study area shows potential for transformative solutions that support the unhoused community?

PART III. THEORY, RESEARCH & DESIGN

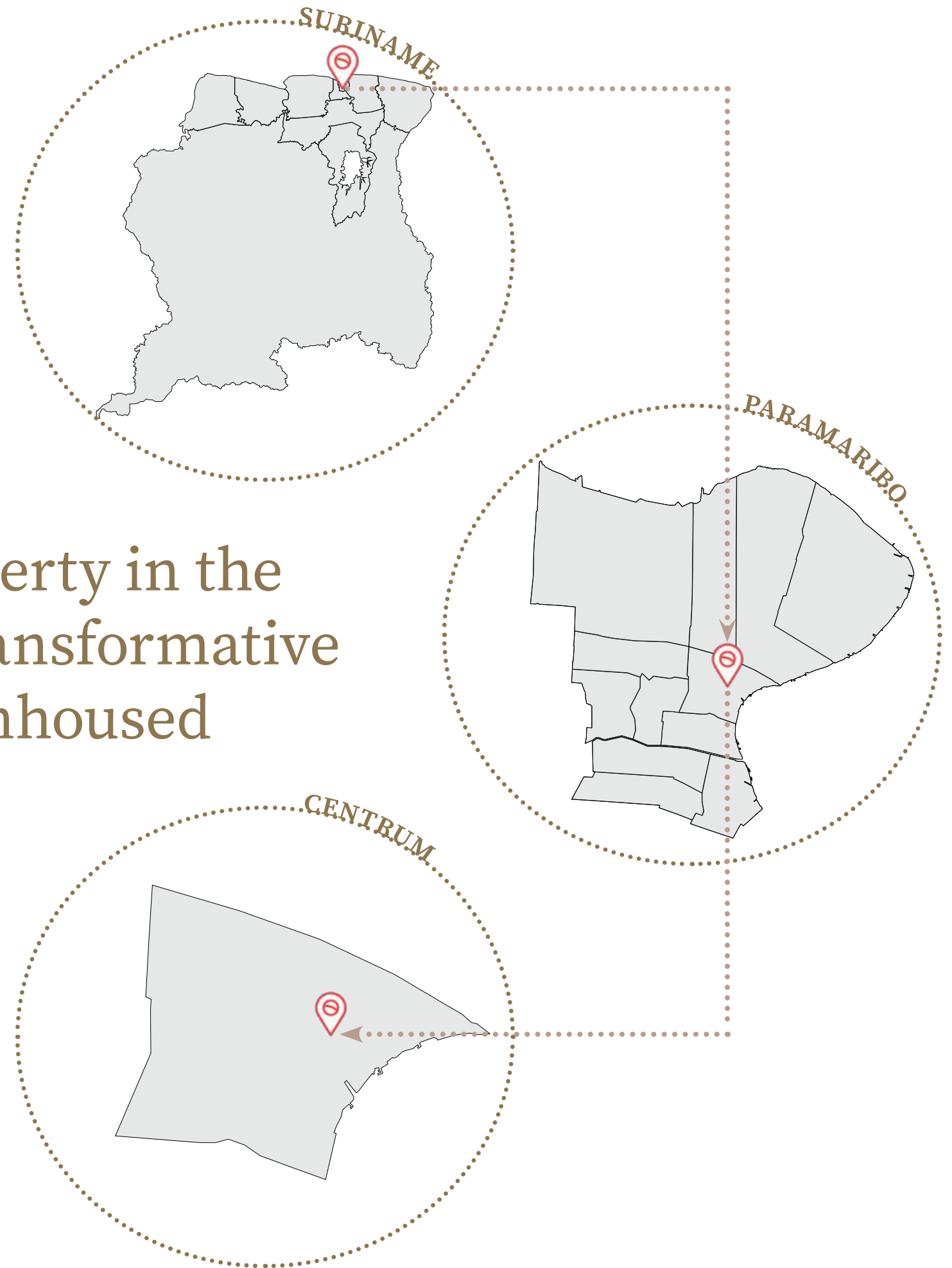
SOCIAL DEVELOPMENT FINDINGS

Utilizes Social Capital Theory
Develops concrete solutions for the unhoused community
Emphasizes social development through architectural intervention

Sub Question 5:
How can architectural interventions transform vacant/abandoned properties into social resilient, community-integrated residential spaces that build social capital for the unhoused community?

CONTEXT SITE ANALYSIS

Which vacant/abandoned property in the study area shows potential for transformative solutions that support the unhoused community?



LOCATION OVERVIEW

LOCATION
SCALE 1:5000

COMMERCIAL DISTRICT

RESIDENTIAL AREA

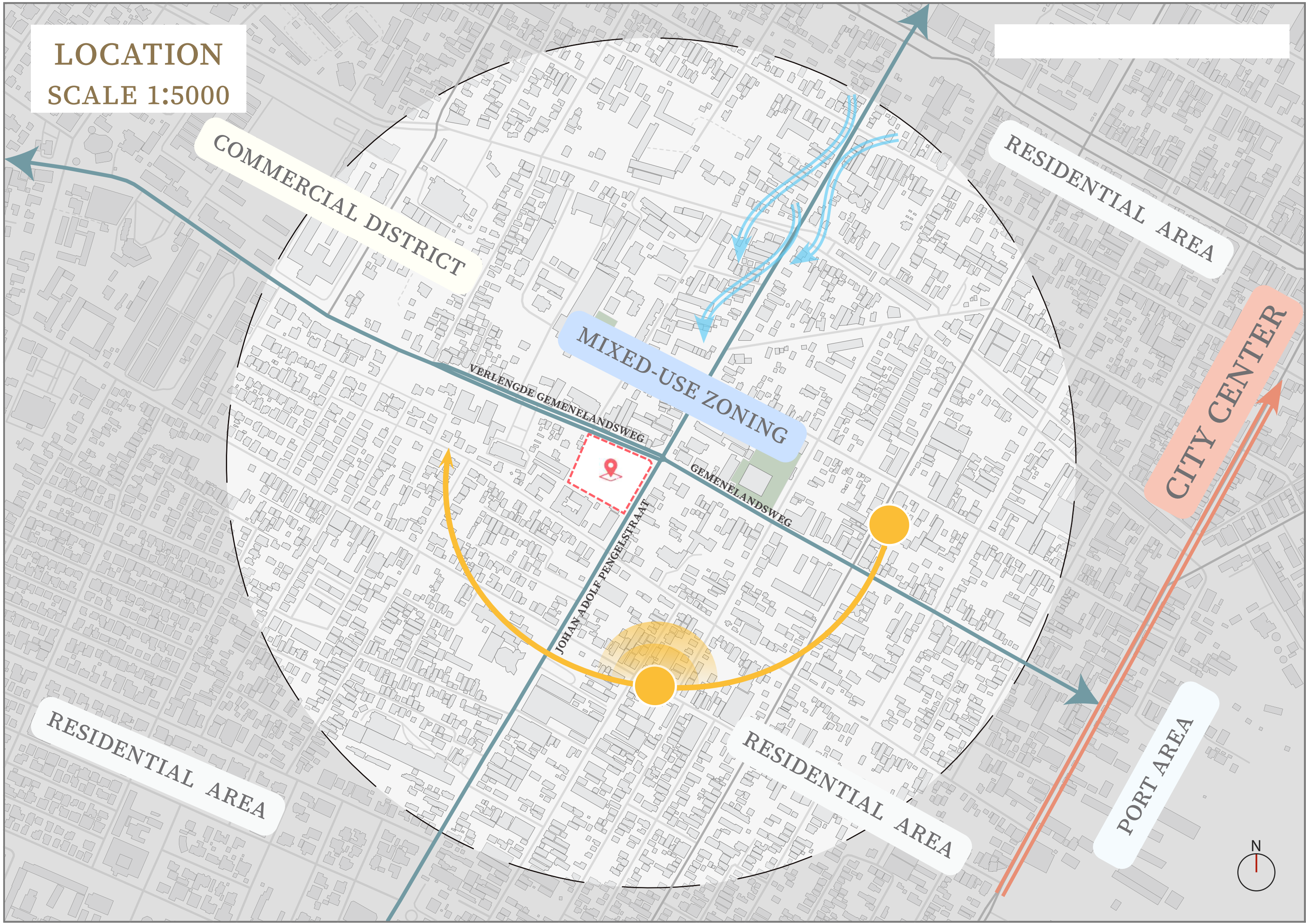
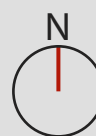
MIXED-USE ZONING

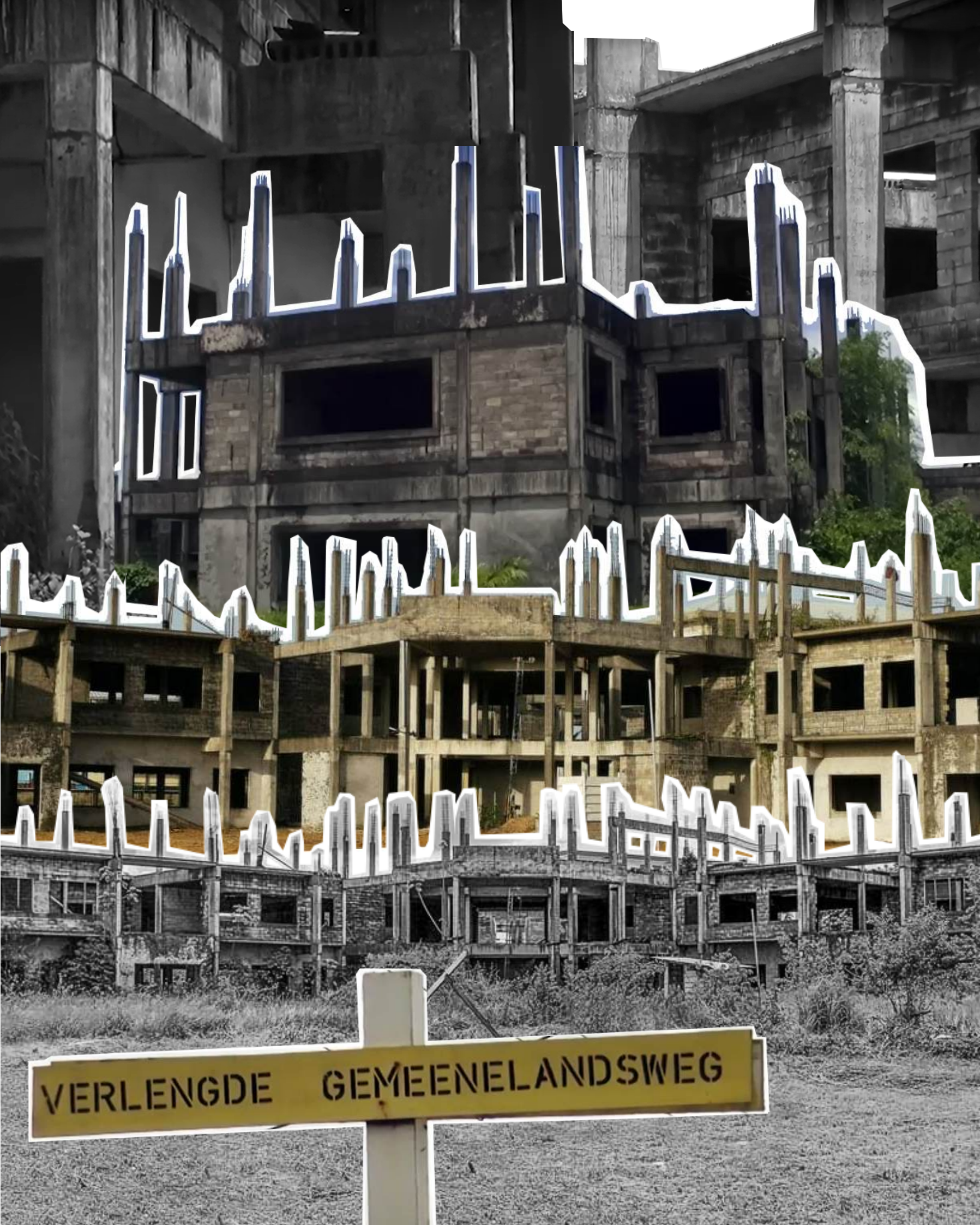
CITY CENTER

RESIDENTIAL AREA

RESIDENTIAL AREA

PORT AREA





CHOSEN SITE

The unfinished police headquarters in Centrum













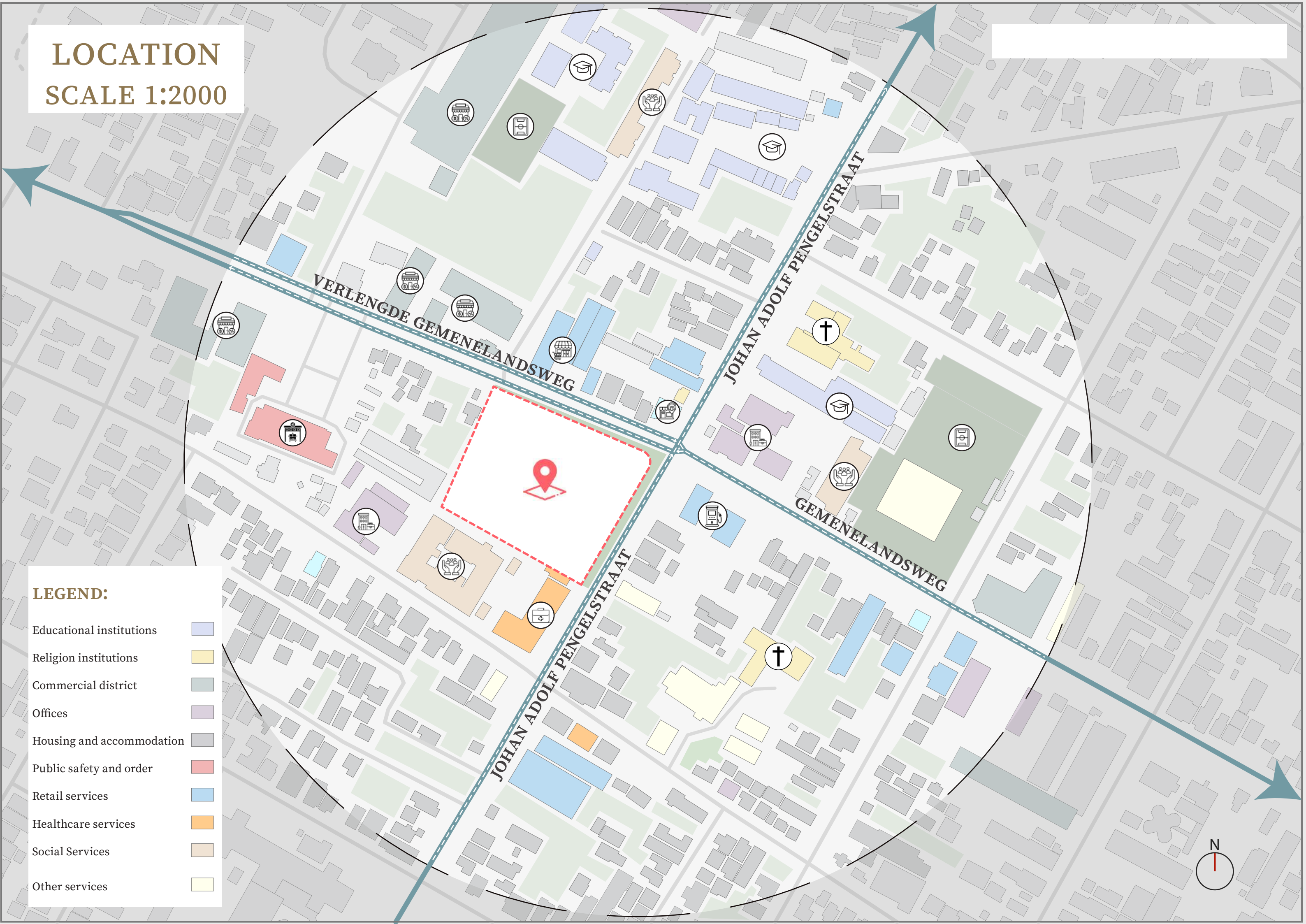
FUTURE VISION FOR AREA DEVELOPMENT

- The site, though planned for police facilities, holds greater potential as social resilient housing for the unhoused community, benefiting from its strategic mixed-use zoning location.
- Excellent public transportation access and proximity to employment opportunities for community reintegration and economic stability.
- The area surrounded by diverse facilities provides essential community support systems.

LOCATION
SCALE 1:2000

LEGEND:

Educational institutions	
Religion institutions	
Commercial district	
Offices	
Housing and accommodation	
Public safety and order	
Retail services	
Healthcare services	
Social Services	
Other services	







DESIGN QUESTION:

How can architectural interventions transform vacant/abandoned properties into social resilient, community-integrated residential spaces that build social capital for the unhoused community?

ARCHITECTURAL INTERVENTIONS



Social Housing

- Lack of housing creates instability; safe, affordable housing provides shelter and belonging
- Apartment blocks with integrated community spaces combine private areas with essential services
- Gallery-style access promotes natural neighbor interactions and social connections



Community Center

- Capacity-building strengthens individuals' and communities' ability to cultivate and mobilize social capital through training, workshops, and networking events
- Health and social providers should implement accessible programming like neighbor support groups, therapy sessions, and activity-based classes
- Programs such as yoga, art, and communal cooking facilitate belonging and community integration through meaningful engagement



Community Gardens & Outdoor Spaces

- Community gardens and outdoor spaces serve multiple needs for individuals transitioning from being unhoused
- Green spaces provide access to affordable, nutritious food while supporting community health
- Gardens create natural opportunities for building connections, developing community sense, and establishing ownership over shared space
- The process of nurturing plants parallels the growth of social bonds

DESIGN

PROGRAM OF REQUIREMENTS

1. Housing Facilities

- **Social housing units (Approx.50 residents):**
45-50 m² per unit
- **Basic Living Facilities:**
Bathroom
Kitchen
Living room
Sleeping Area
- **Basic amenities:**
Electricity
Water supply
Sanitation
Drainage System

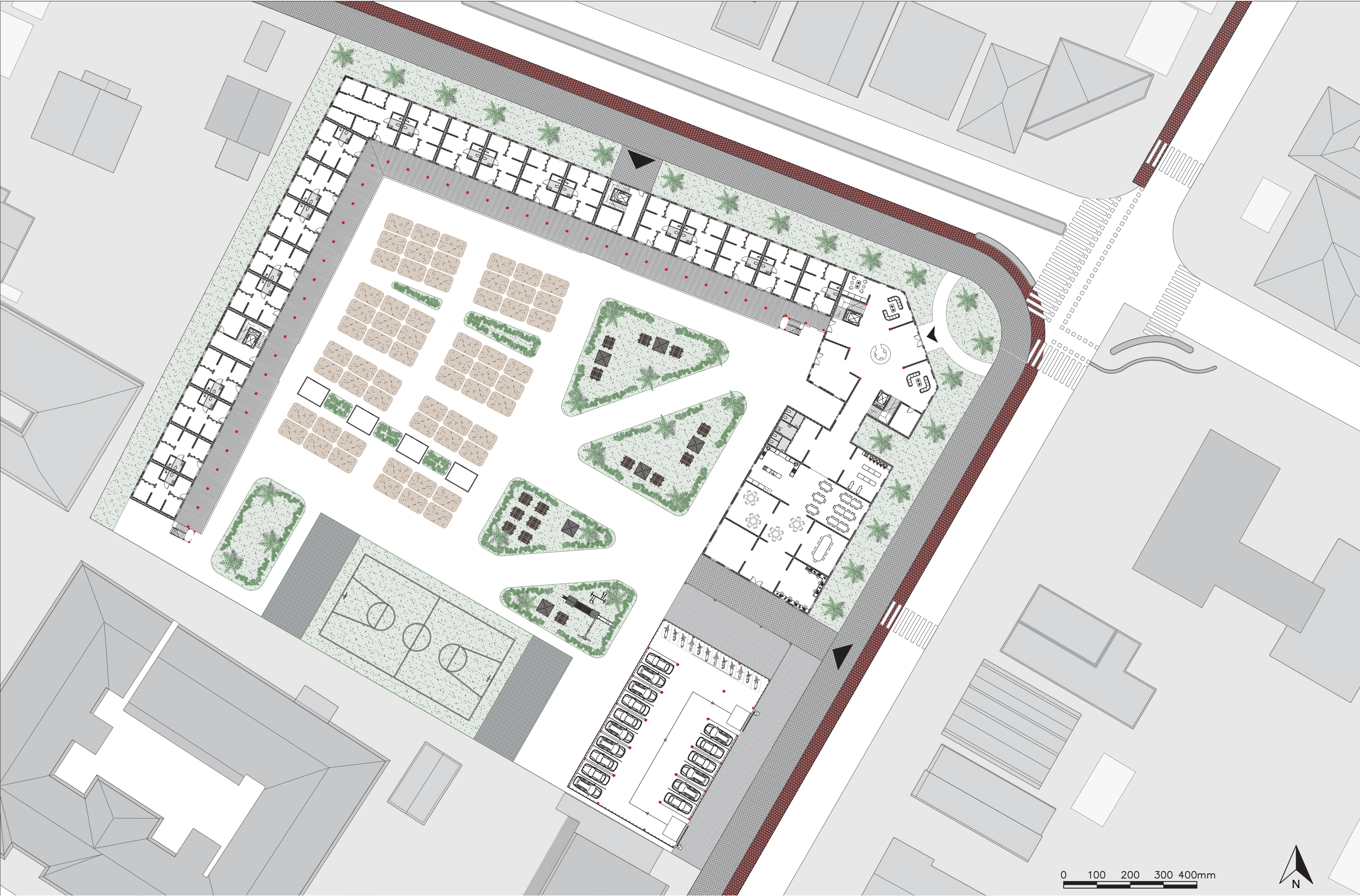
2. Community & Shared Facilities

- Community garden
- Communal kitchen
- Laundry Area
- Sport facilities

3. Social & Support Services

- Social Service Point
- Health & Counseling Service
- Emergency Assistance Point
- Housing Support Officer
- Job Training Center





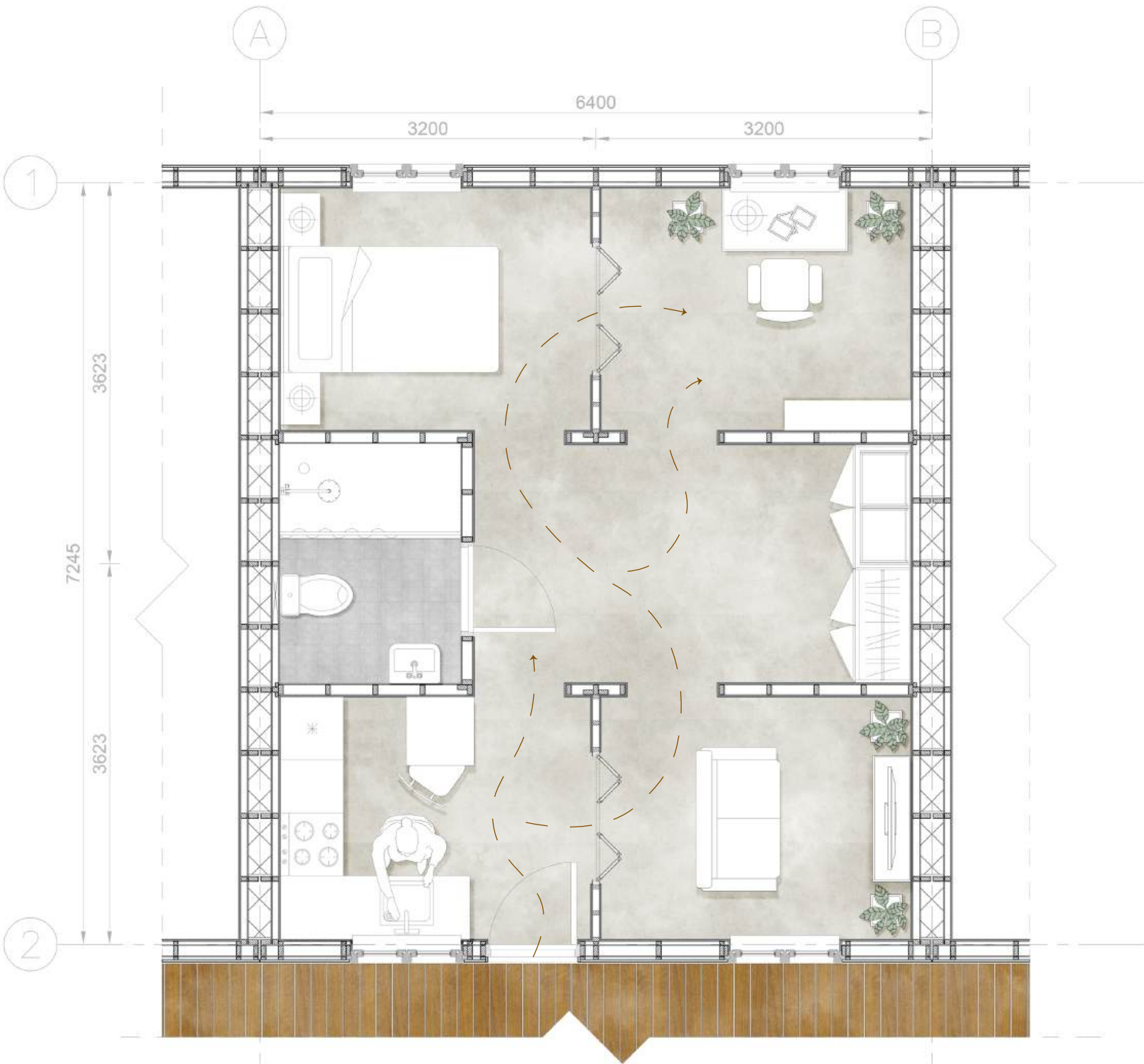
01. SOCIAL HOUSING

“WHAT ARE THE NEEDS OF THE UNHOUSED POPULATION?”

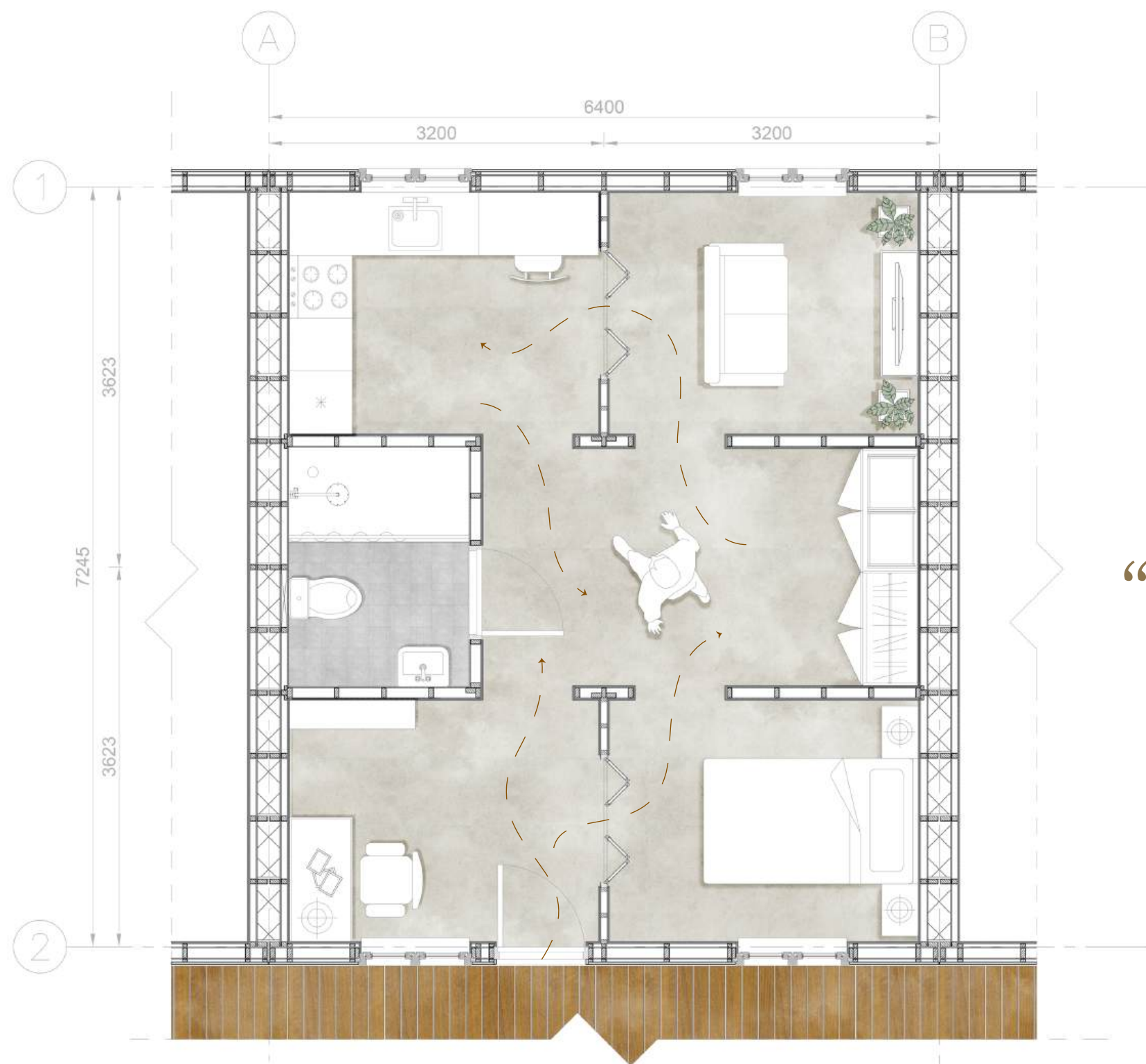
HOUSING UNIT PLAN

1. Housing Facilities

- **Social housing units (Approx.60 residents):**
45-50 m² per unit
- **Basic Living Facilities:**
Bathroom
Kitchen
Living room
Sleeping Area
- **Basic amenities:**
Electricity
Water supply
Sanitation
Drainage System

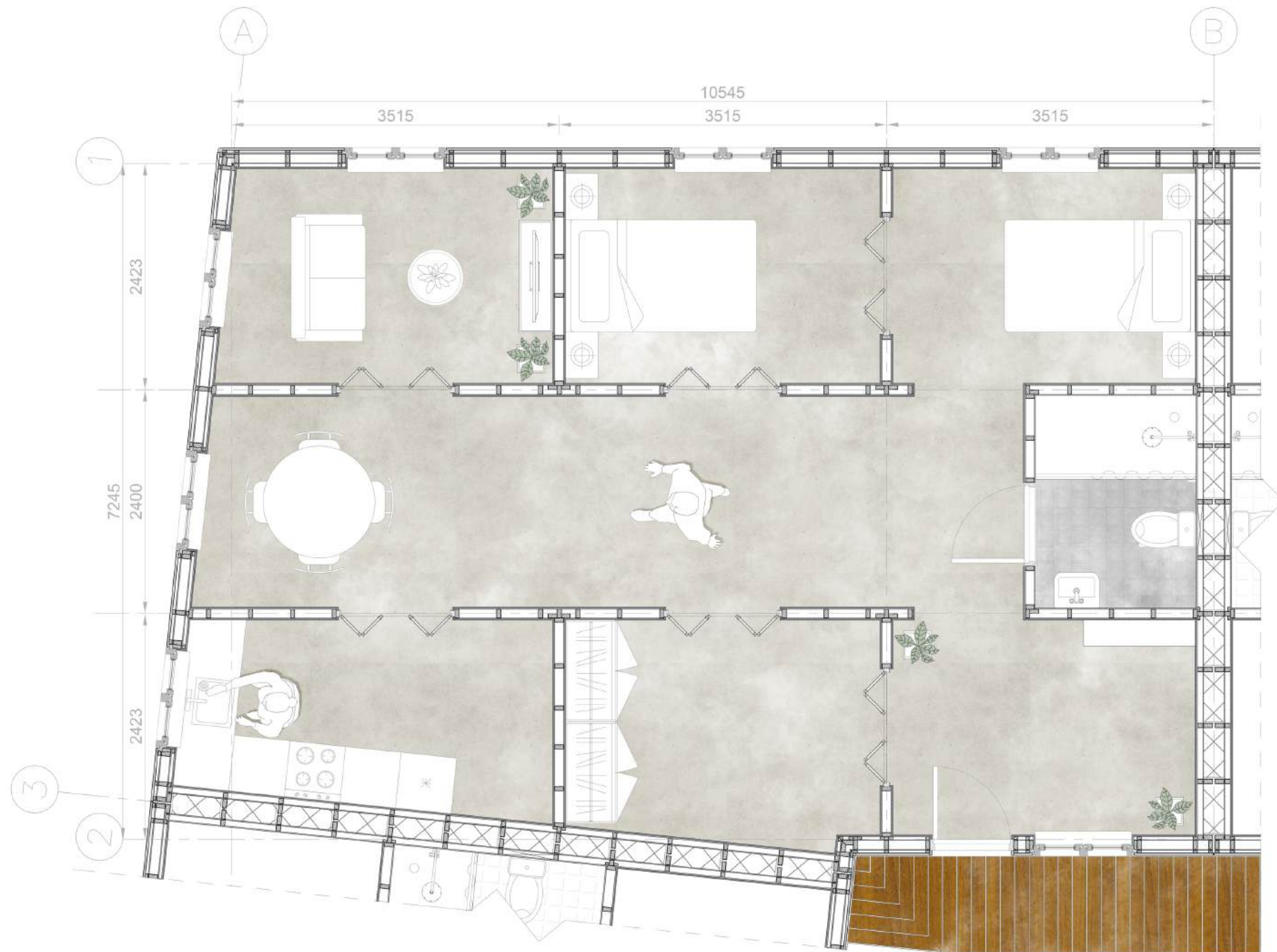


Type A.01

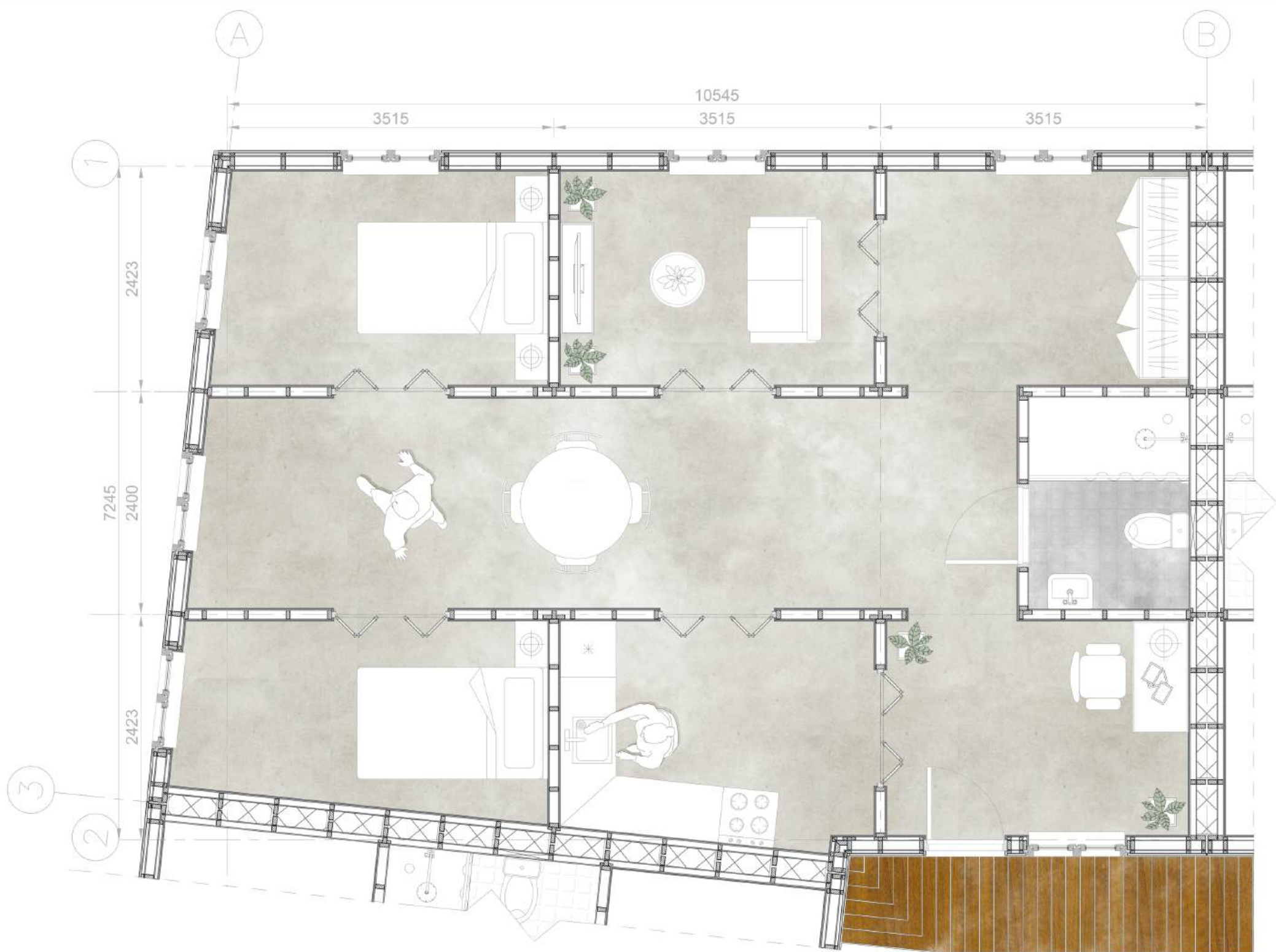


“FLEXIBILITY TO ADAPT TO
CHANGING NEEDS”

Type A.02



Type B.01



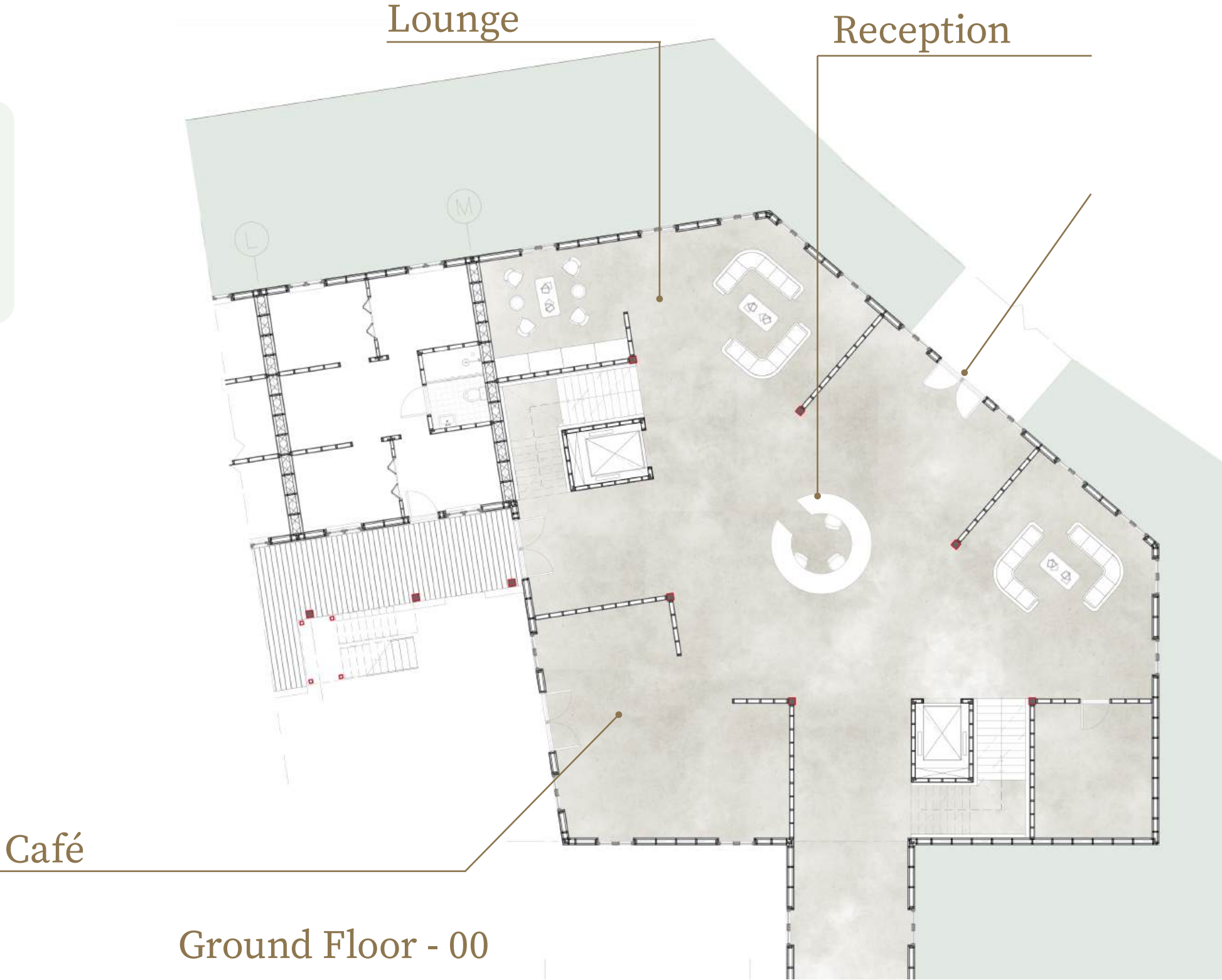
Type B.02

02. COMMUNITY CENTER

COMMUNITY CENTER PLAN

Community & Shared Facilities

- Communal kitchen + Dining Hall
- Laundry Area
- Activity Rooms
- Meeting Rooms
- Office Spaces



Toilet spaces

Shared Kitchen

Activity Rooms

Storage space

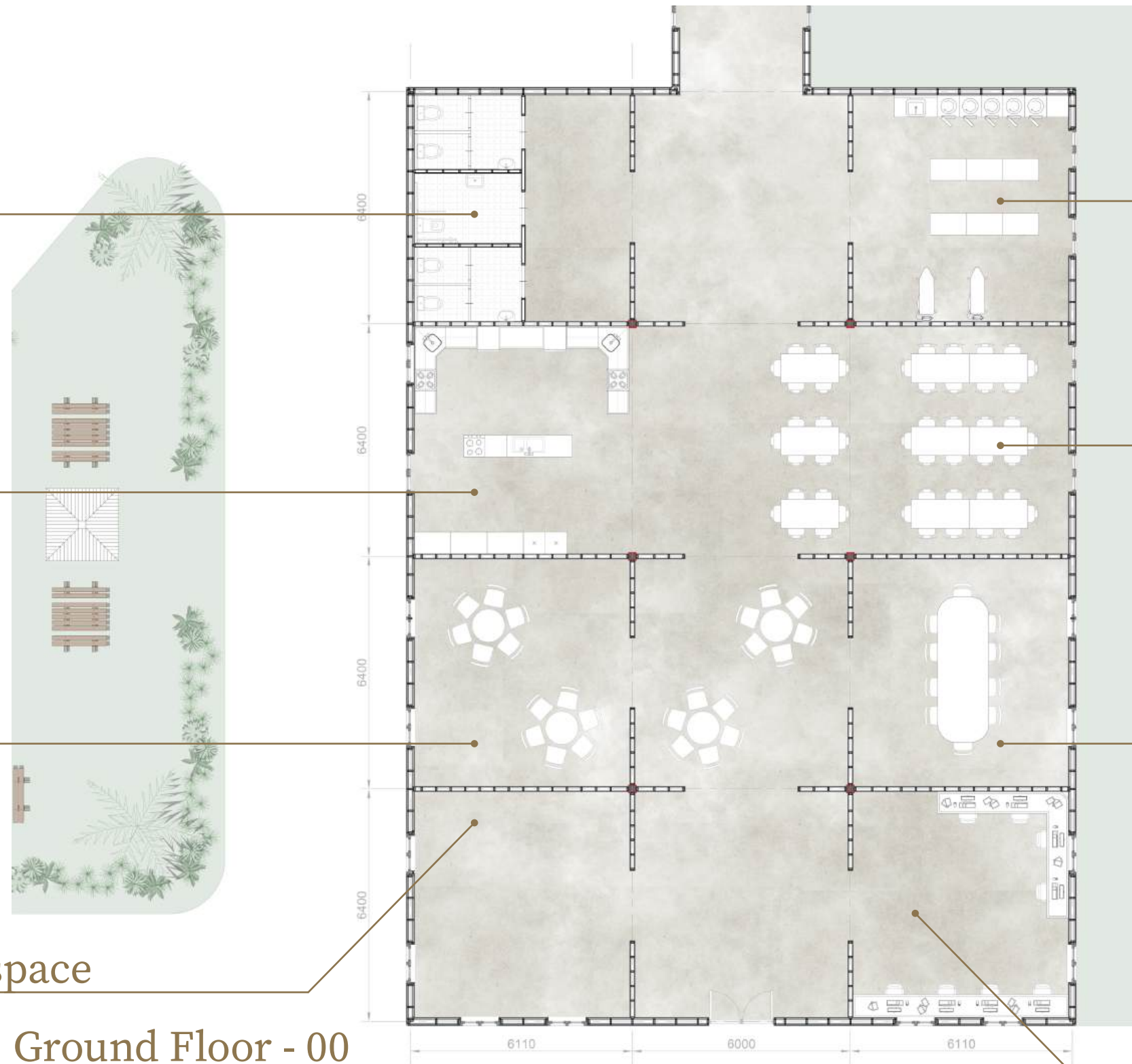
Ground Floor - 00

Shared Laundry Area

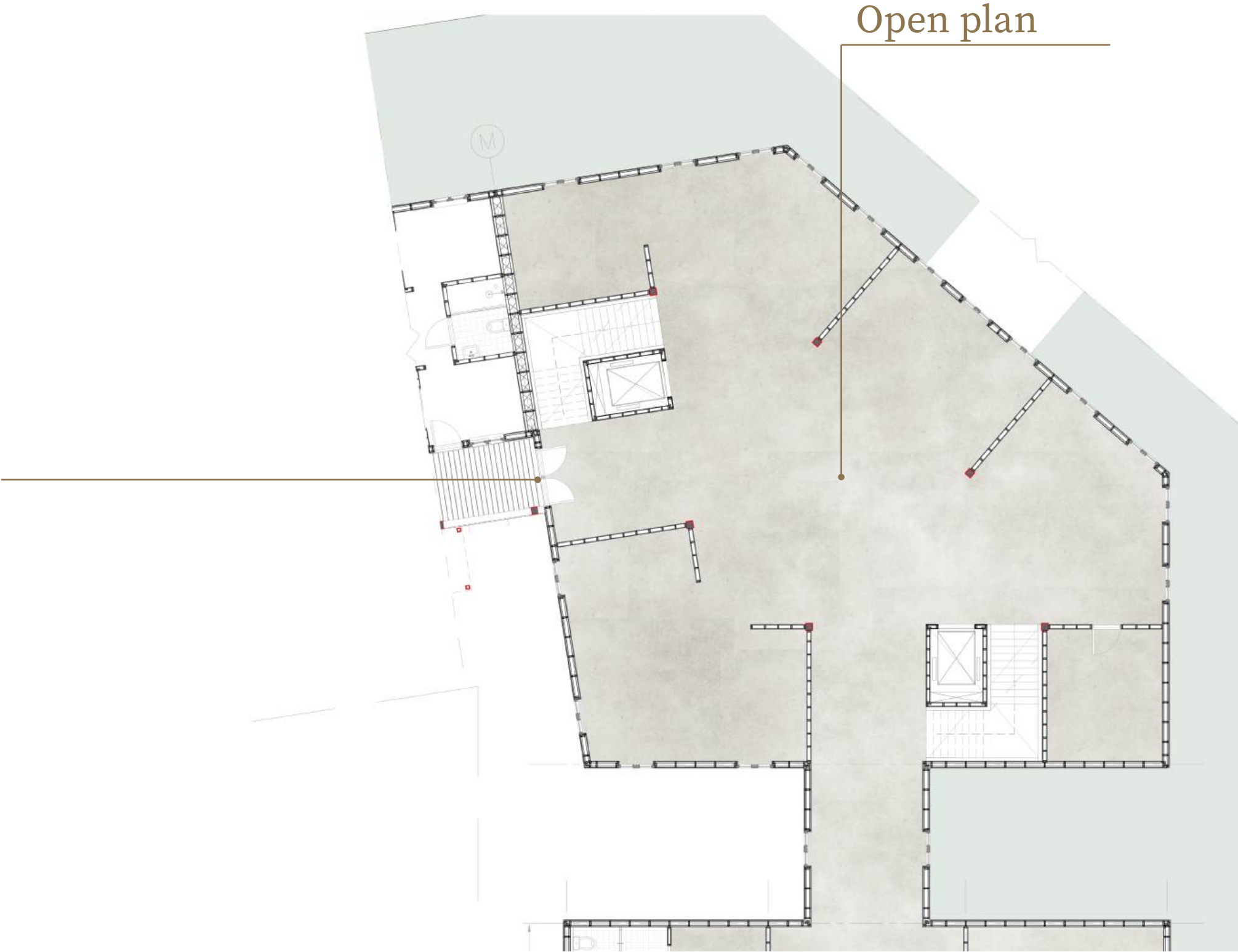
Dining Hall

Meeting Room

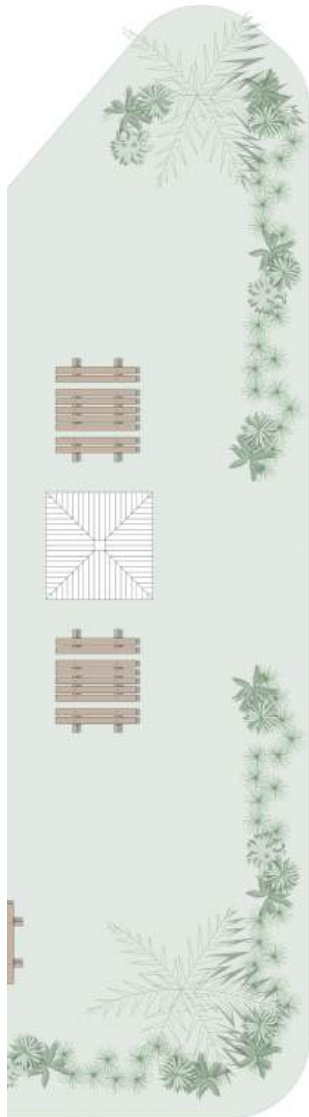
Office Spaces



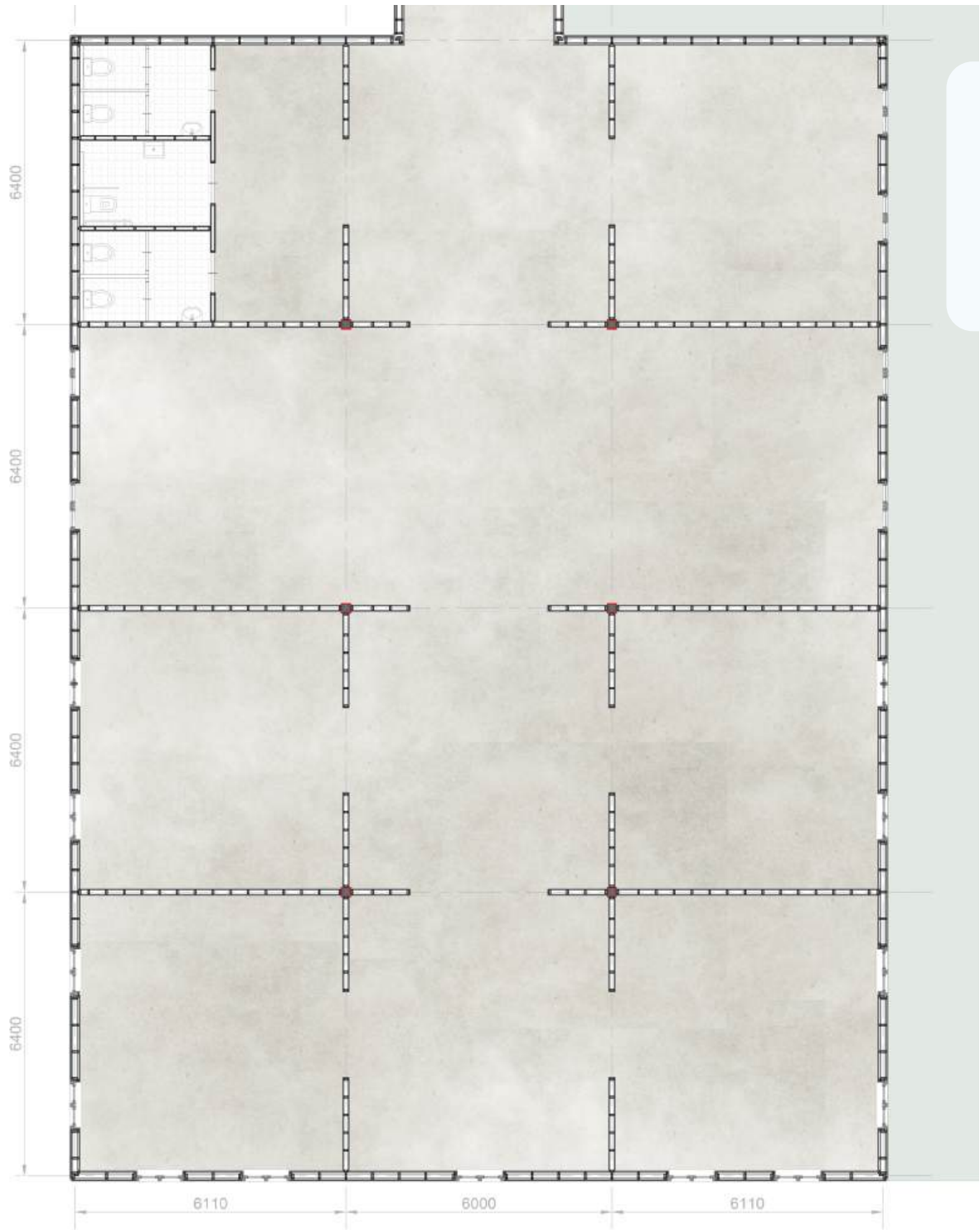
COMMUNITY CENTER PLAN



“FLEXIBILITY TO ADAPT ”



1E Floor - 01



Social & Support Services

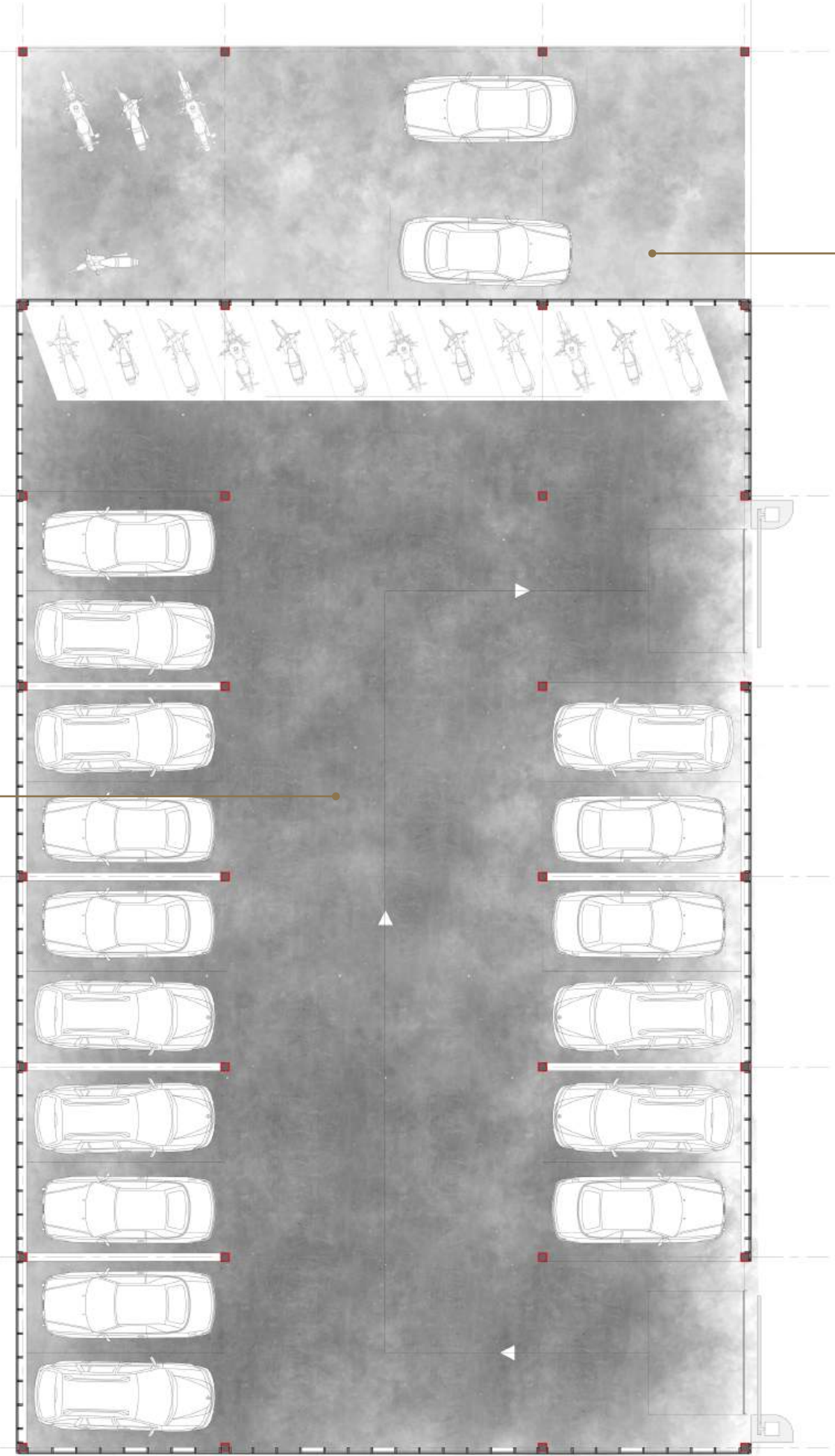
- Social Service Point
- Health & Counseling Service
- Emergency Assistance Point
- Housing Support Officer
- Job Training Center

03. COMMUNITY GARDENS & OUTDOOR SPACES

OUTDOOR SPACES

Parking garage for visitors and staff

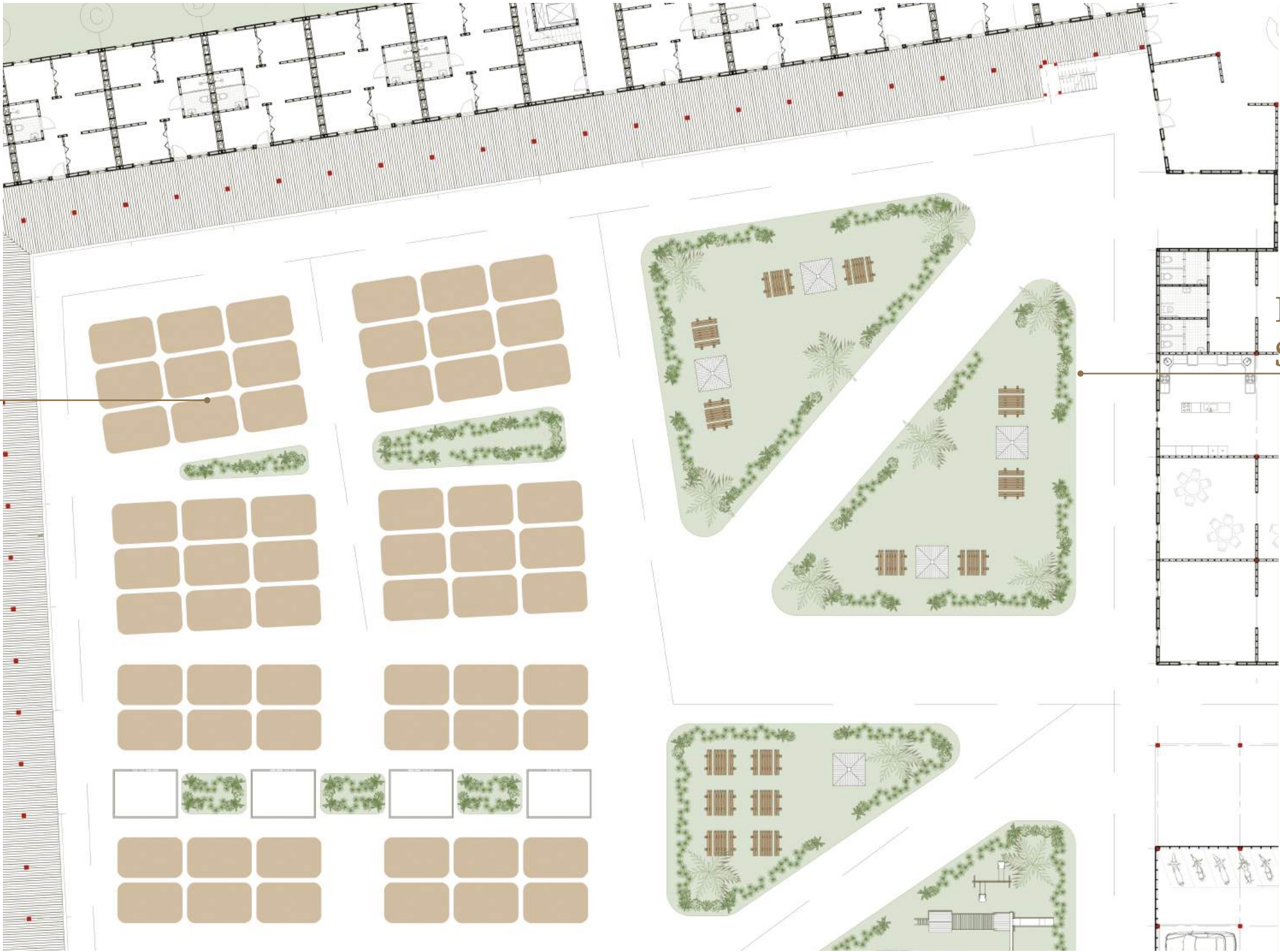
Space for vehicle washing and repair (cars and motorcycles)

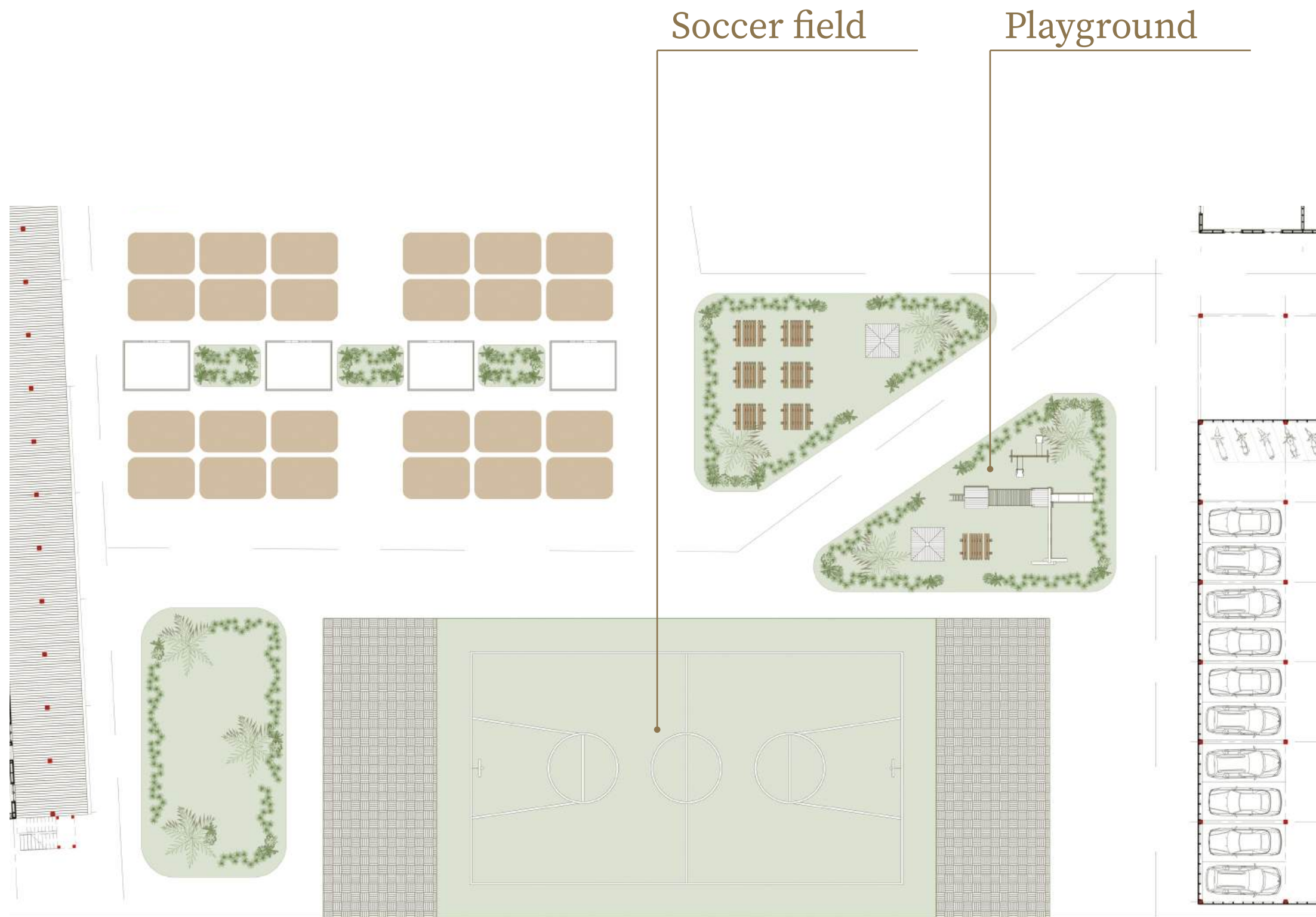


COMMUNITY GARDEN

Gardening

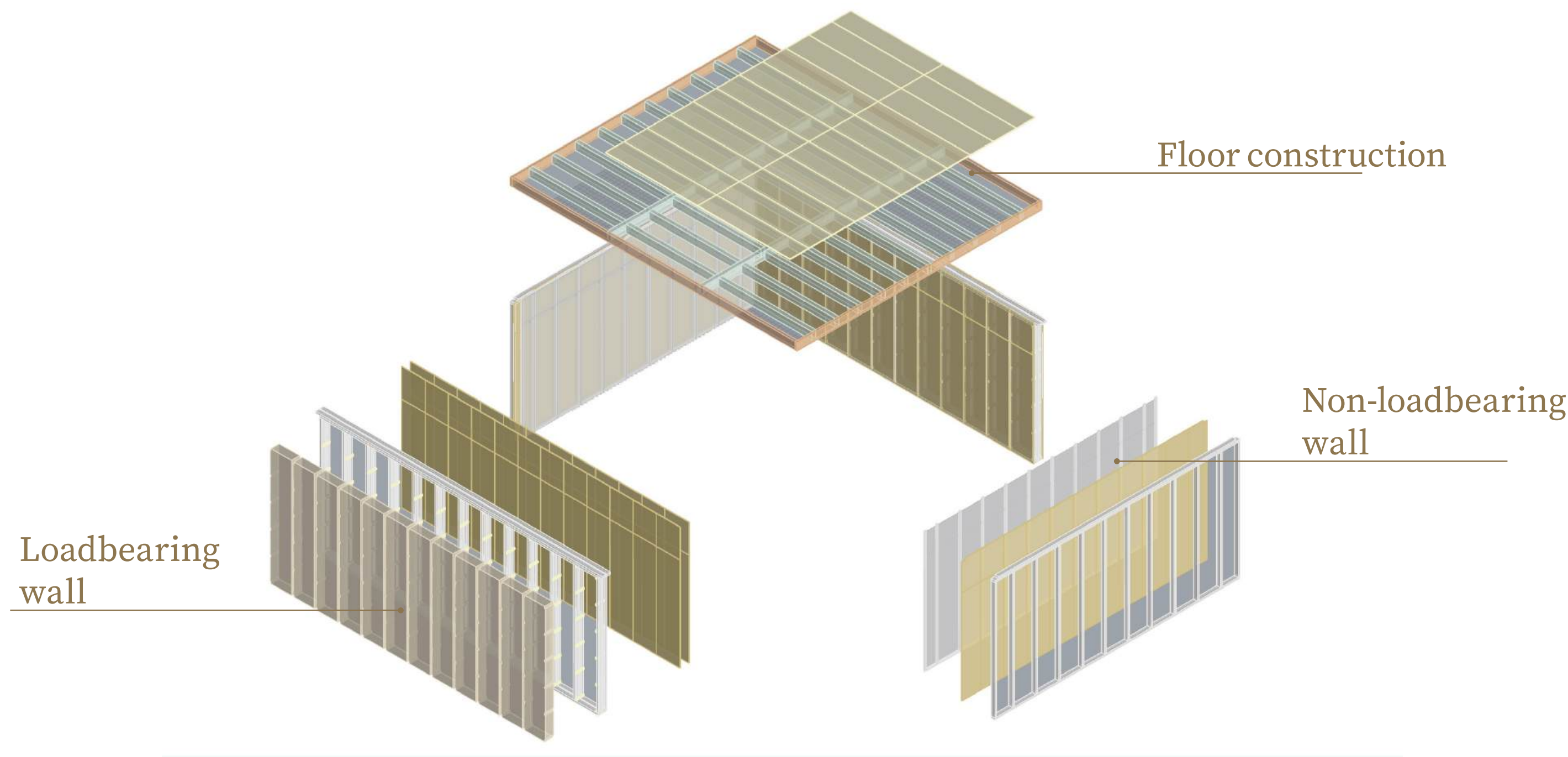
Public space
Seating places

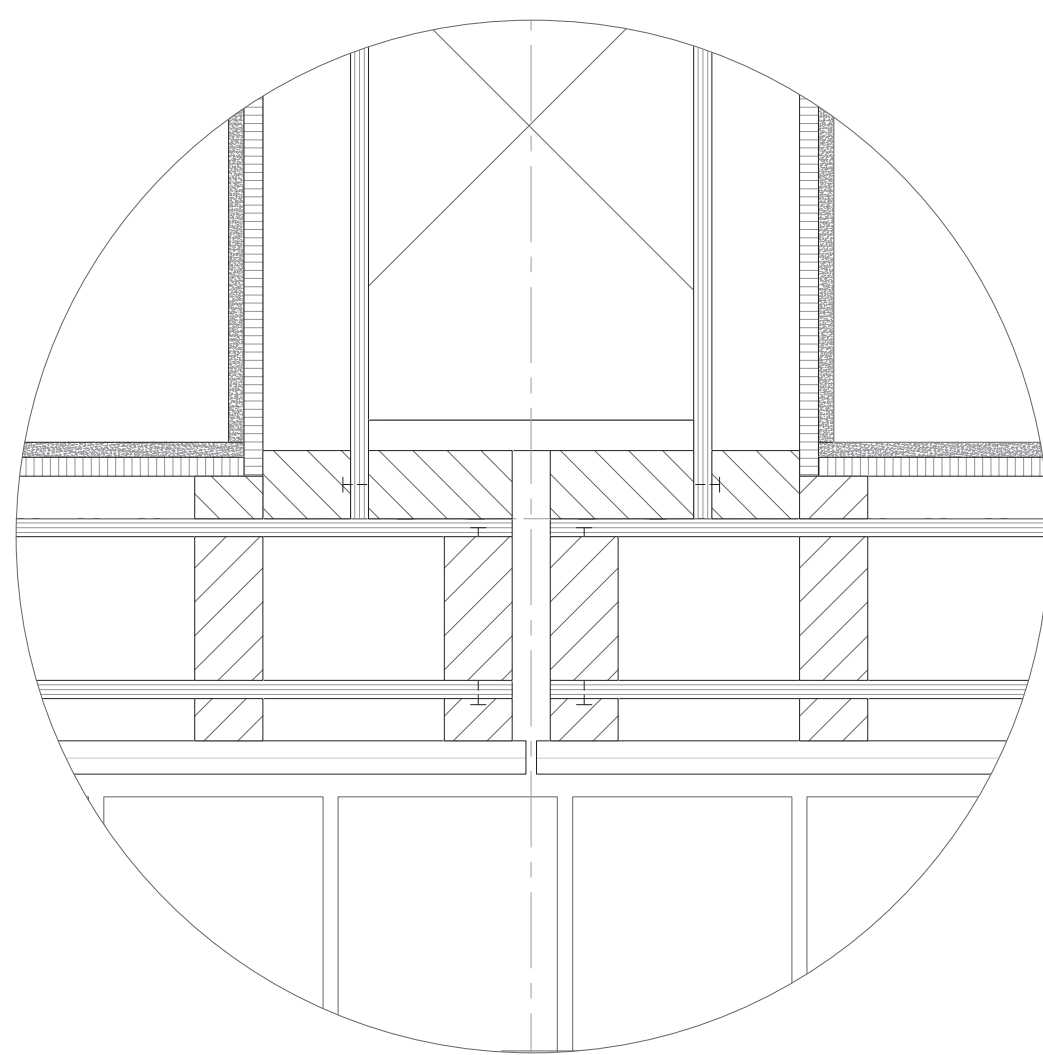
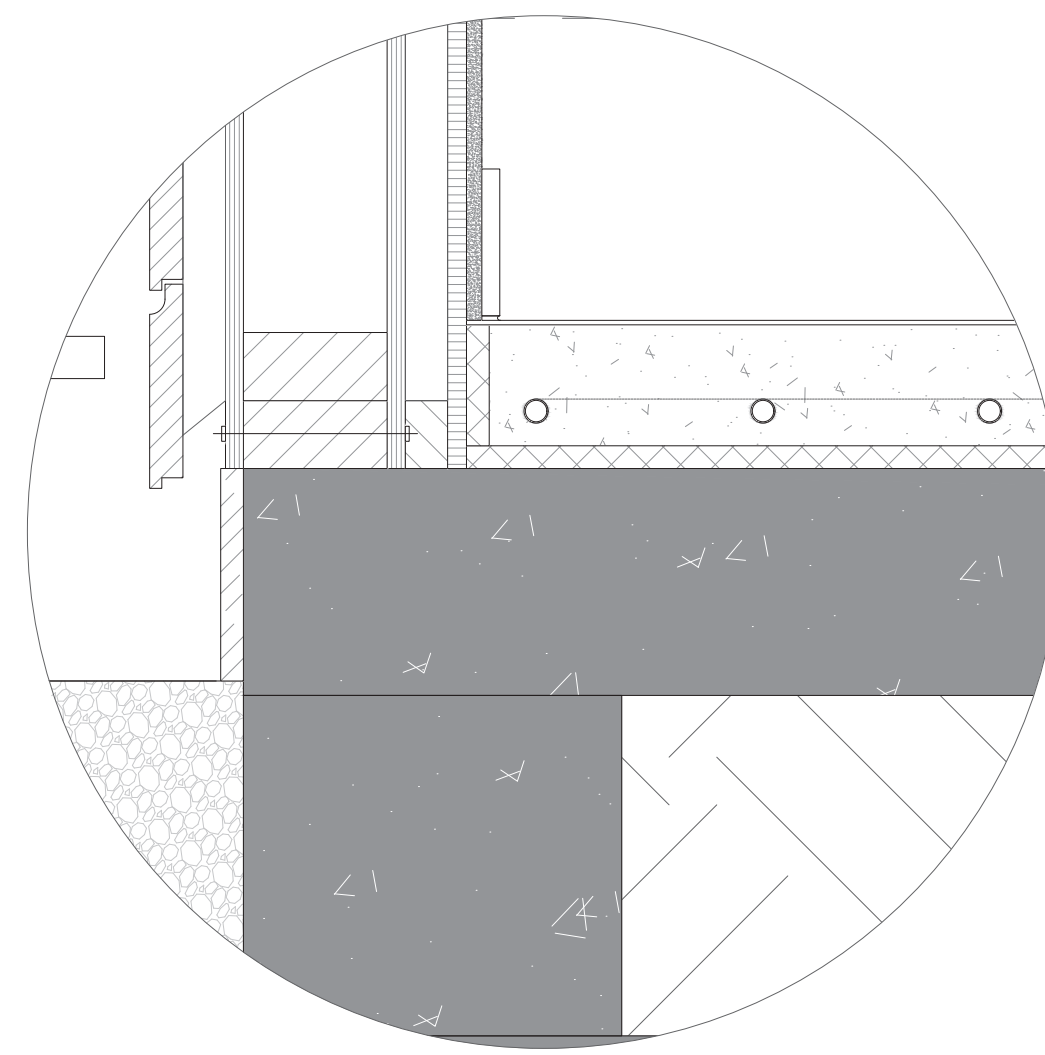
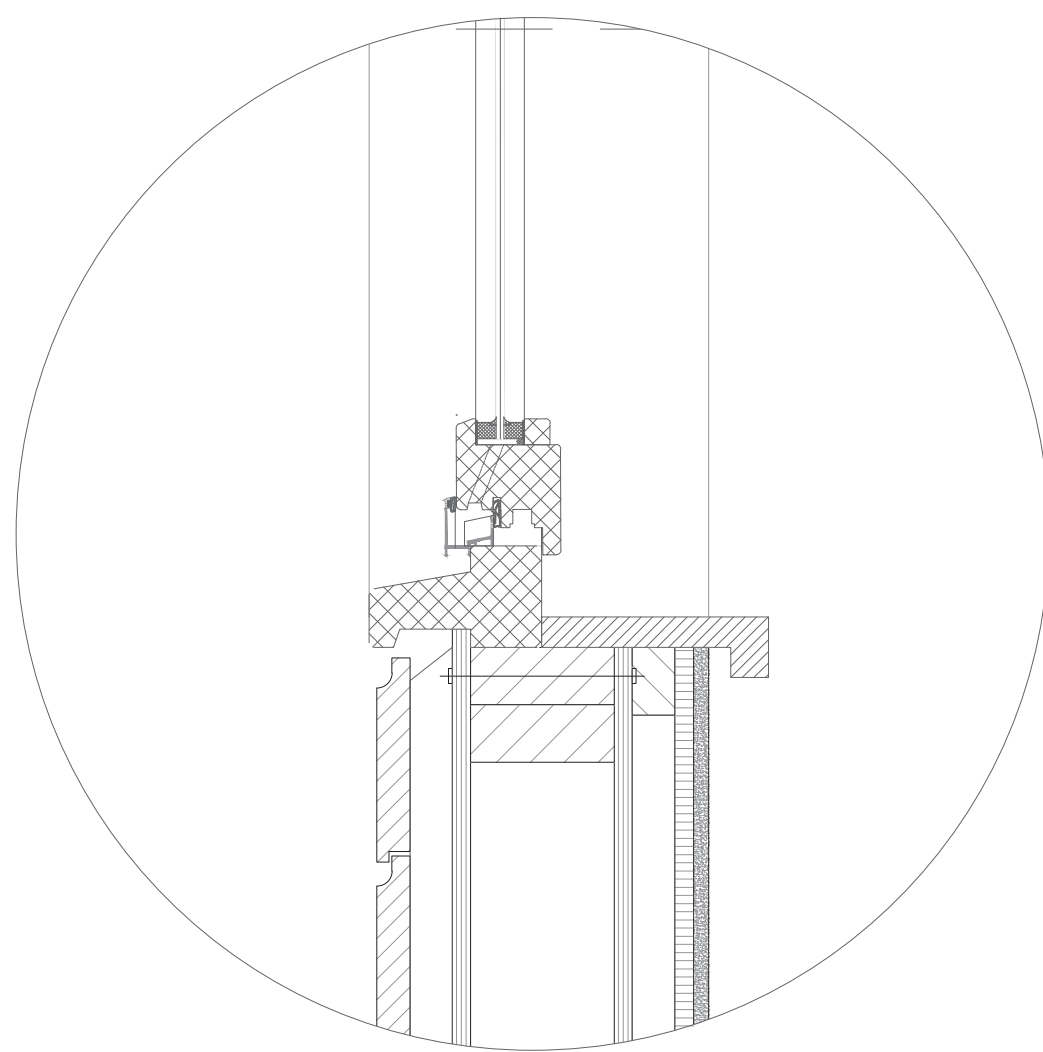
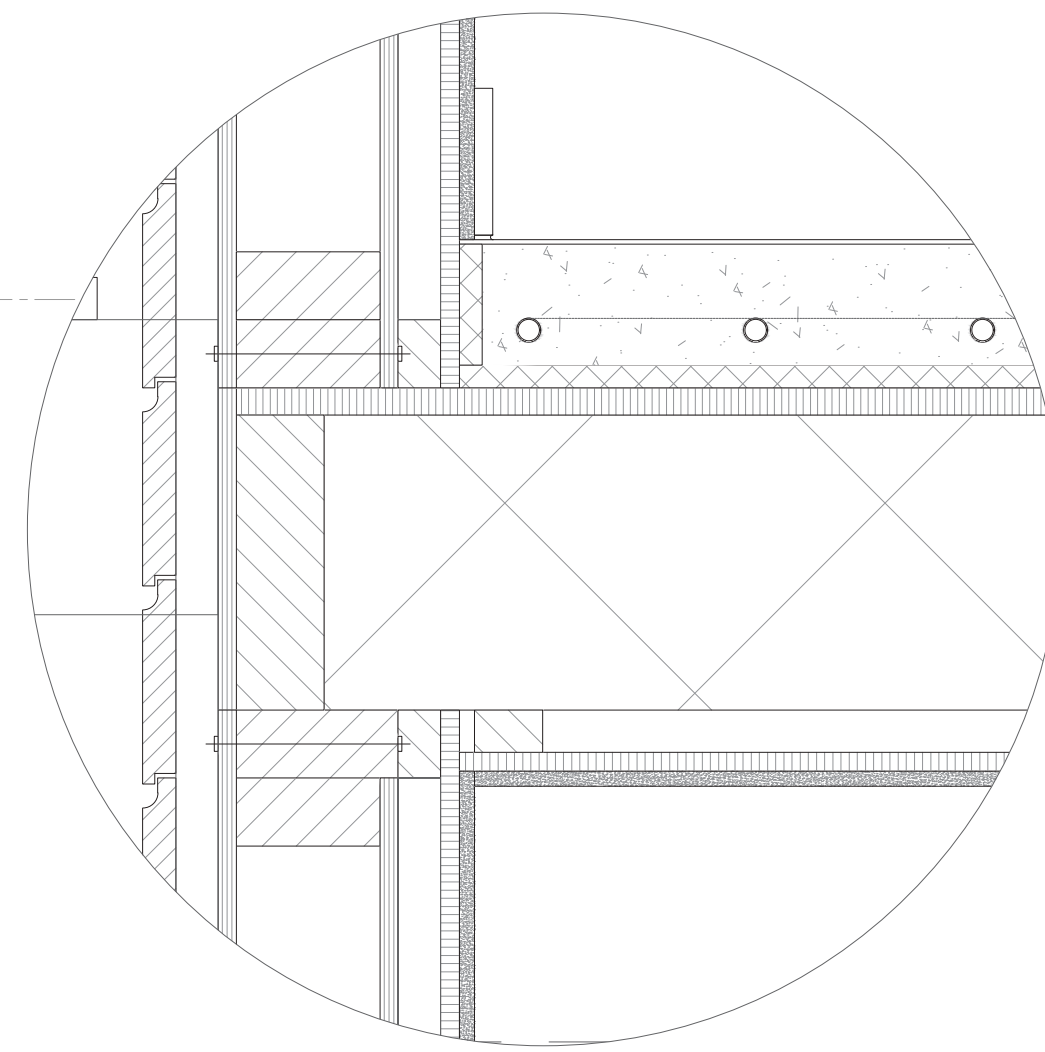
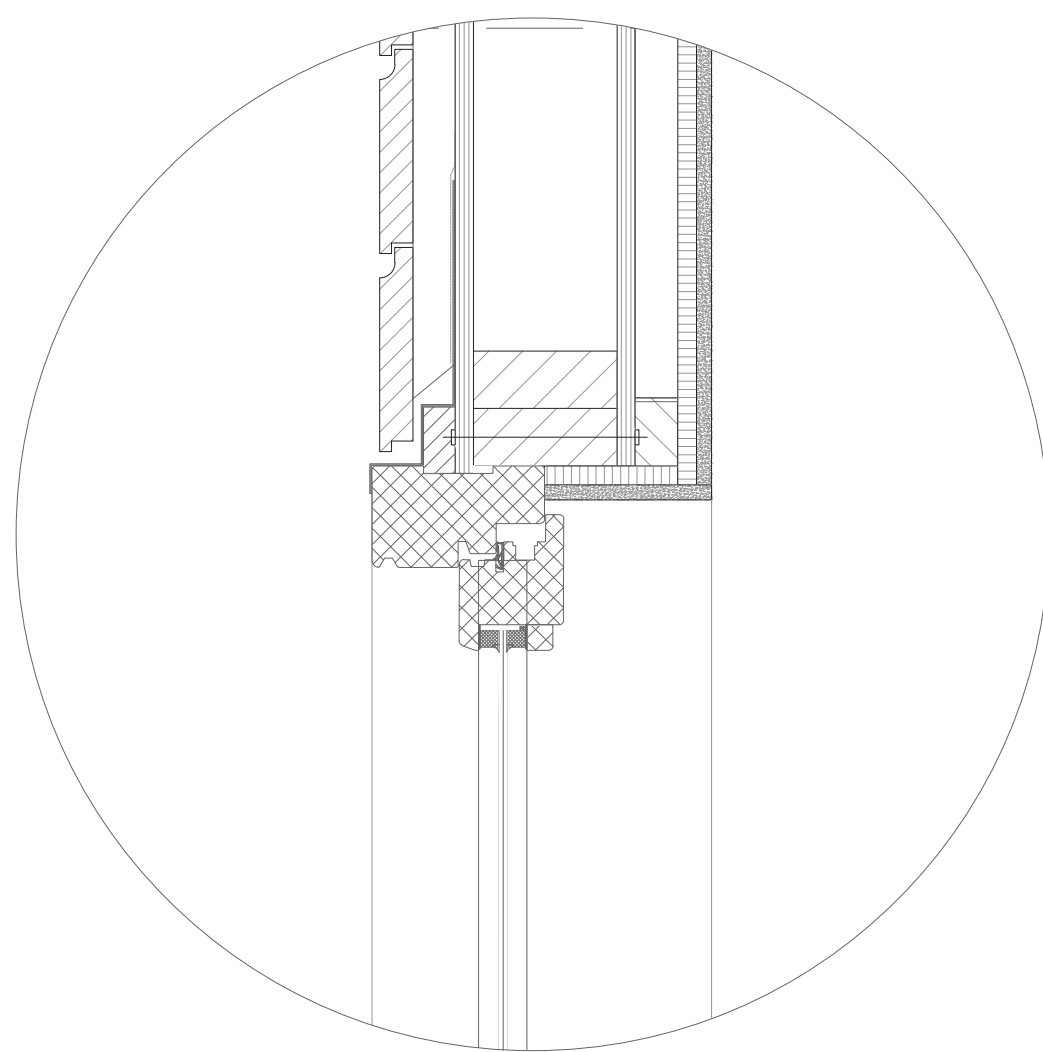
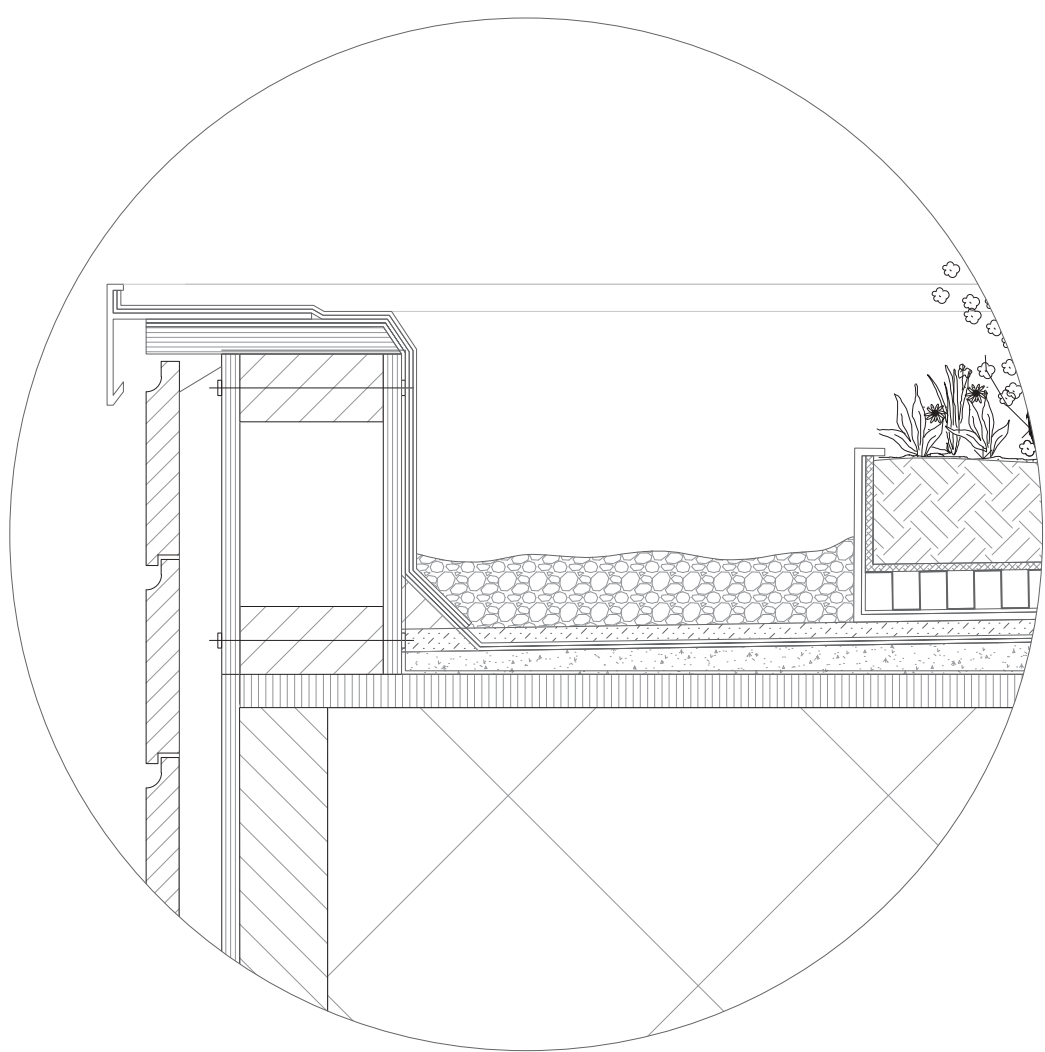
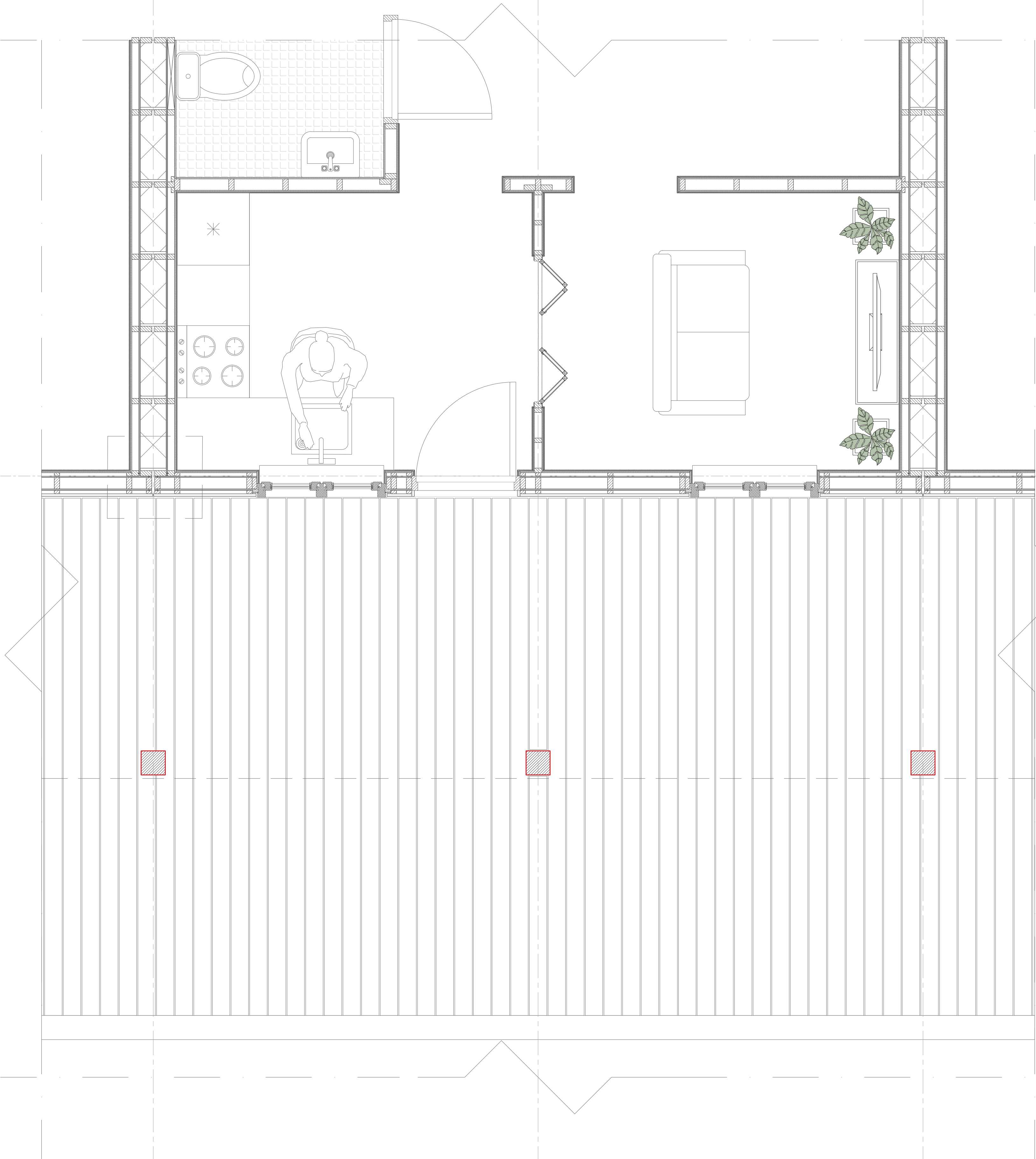
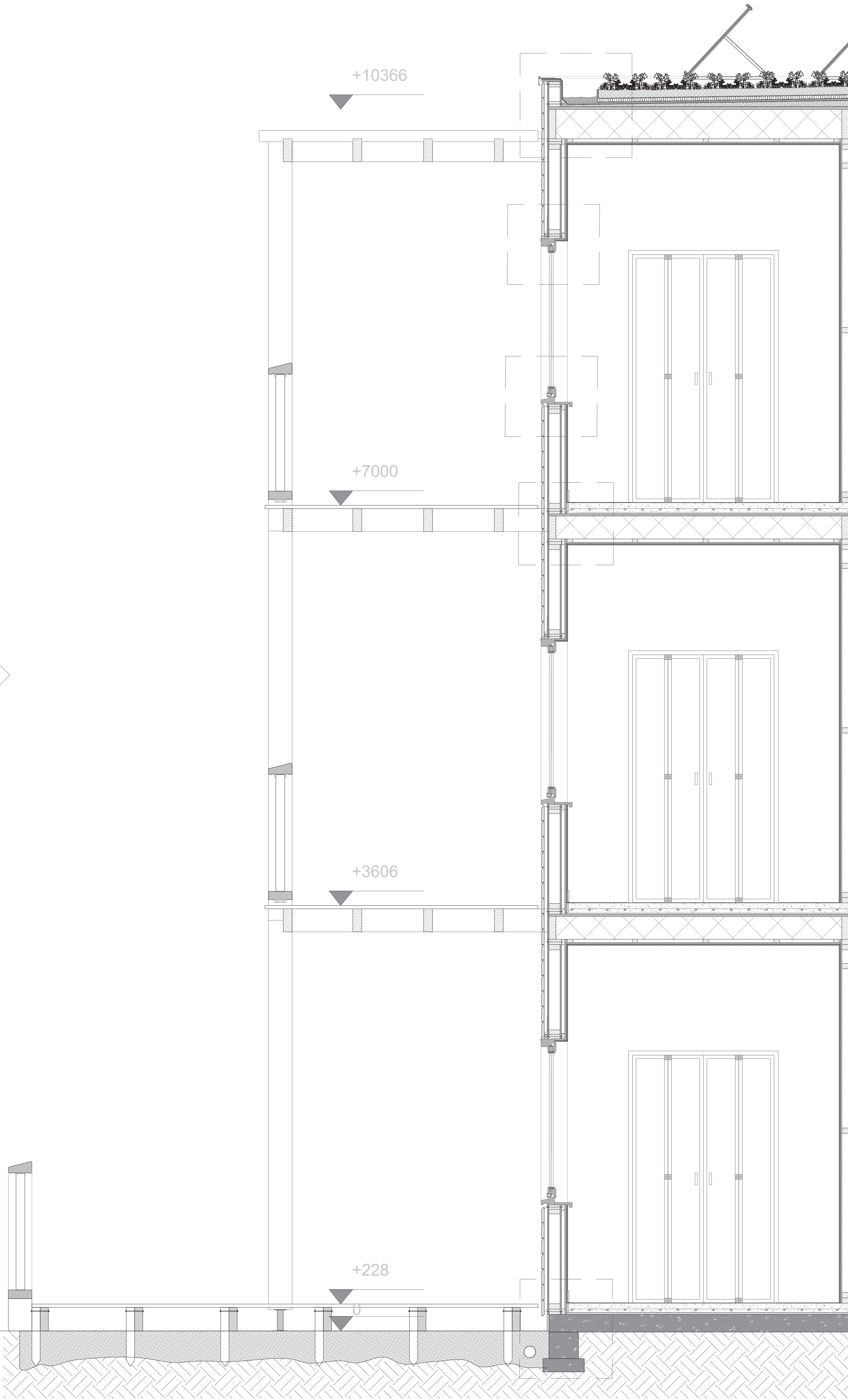




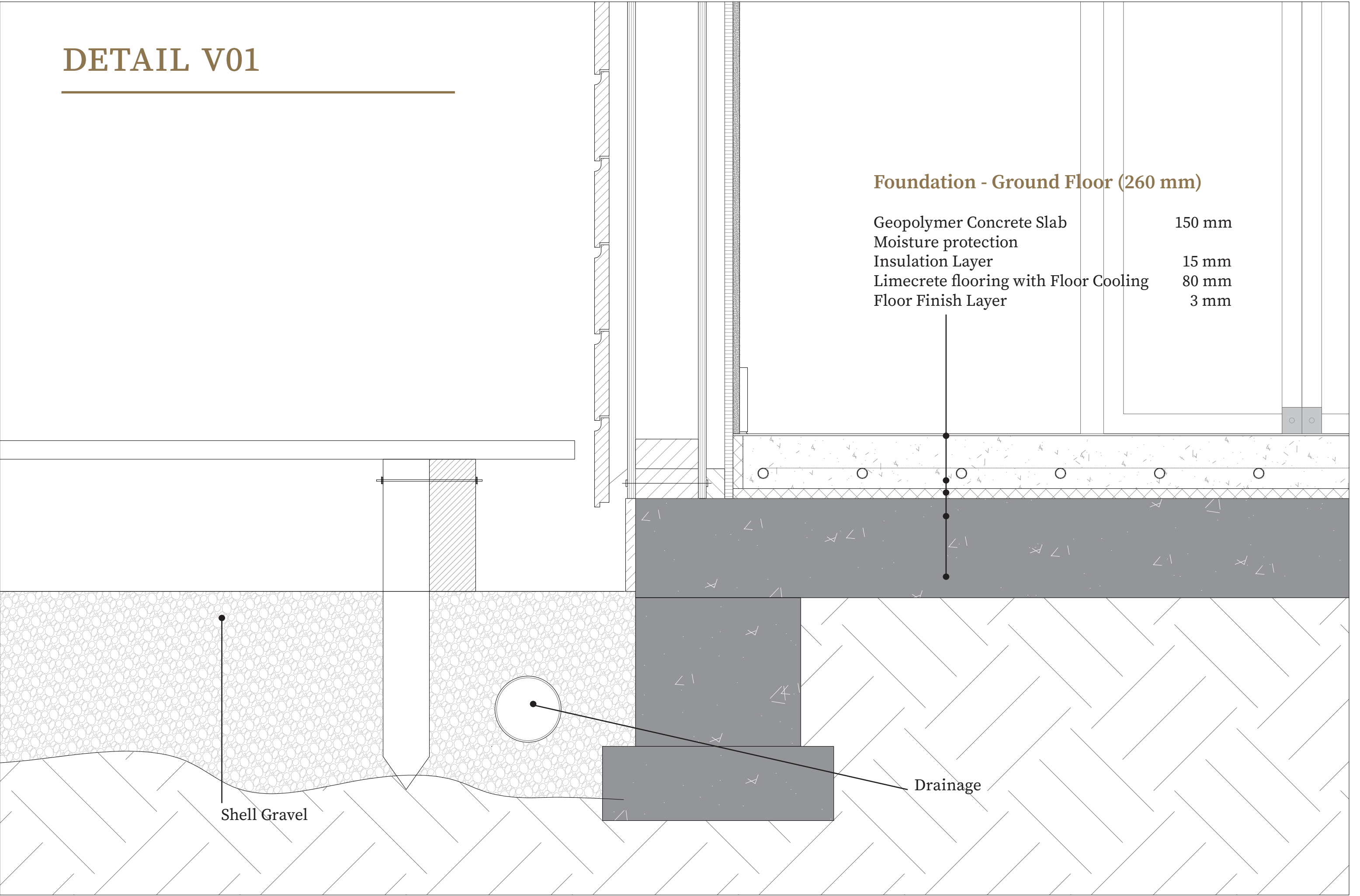
BUILDING TECHNOLOGY

HSB PLATFORM CONSTRUCTION
METHOD





DETAIL V01



RE-USING CONCRETE GRANULATE



Figure: Debris of concrete

Geopolymer Concrete: Advanced Sustainable Building Material

Geopolymer concrete is an innovative alternative to traditional Portland cement concrete that uses industrial waste materials like fly ash, slag, or rice husk ash as binding agents. This eco-friendly concrete is activated by alkaline solutions rather than water and cement.

Key Properties:

- High compressive strength and durability
- Excellent resistance to chemical attack and corrosion
- Superior fire resistance and thermal stability
- Low permeability and reduced shrinkage
- Fast setting and early strength development

Environmental Benefits:

- Significantly lower carbon footprint (up to 80% CO₂ reduction)
- Utilizes industrial waste materials
- Reduces landfill waste
- Lower energy consumption in production



MATERIAL

LOCAL MATERIAL



Figure 17: Basralocus Wood

Basralocus Wood: Premium Tropical Hardwood

Basralocus is a hard, beautiful, and virtually indestructible tropical deciduous wood species with exceptional sustainability qualities. This timber demonstrates remarkable resistance to pile worms, fungi, and insect attack, making it ideal for demanding applications.

Applications:

- Facade cladding and exterior finishing
- Parquet and strip flooring systems
- Indoor and outdoor planking
- Structural flooring and tie beam construction
- Architectural styles and building rules compliance
- Roof construction and structural elements

The wood’s durability and natural resistance properties make it suitable for both interior design and structural engineering applications where longevity and performance are essential.



Figure 18: Kopie Wood

Kopie Wood: Common Construction Timber

Kopie is a commonly used wood with fair strength but prone to cracking during drying. It shrinks minimally, works moderately well, and is rarely affected by termites. However, it’s susceptible to various rots. Easy to work with and holds nails well.

Applications:

- General and housing construction
- Interior and exterior fittings
- Flooring and tie beams
- Roof construction and framing
- Exterior planking and cladding

A practical choice for standard construction where moderate strength and good workability are needed.

DETAIL H01

Load-bearing Wall System (308 mm)

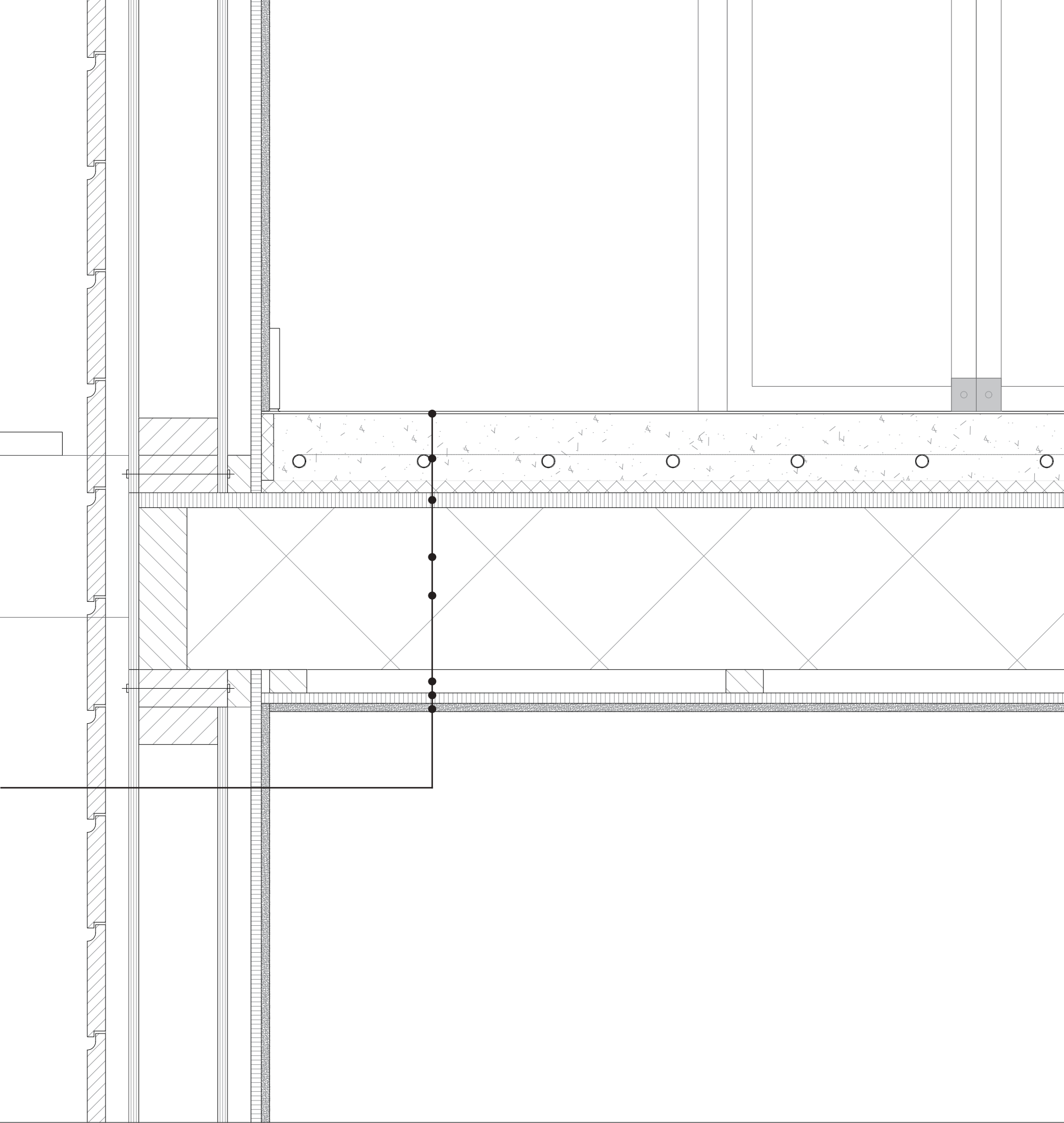
Clay Plaster	10	mm
Gypsum Board	9.50	mm
Plywood	12	mm
Wooden Construction (50x100mm) with Blown-in Straw Insulation (Prefab)	245	mm
Plywood	12	mm
Gypsum Board	9.50	mm
Clay Plaster	10	mm



DETAIL V02

Level Floor (361.50mm)

Gypsum Board	9.50 mm
Clay Plaster	10 mm
Wooden joists	40 mm
Blown-in Straw Insulation	100 mm
Wooden framing structure system (95x195mm)	
OSB	18 mm
Wood fiber Insulation Board	15 mm
Limecrete flooring with Floor Cooling	80 mm
Floor Finish Layer	3 mm



DETAIL V03

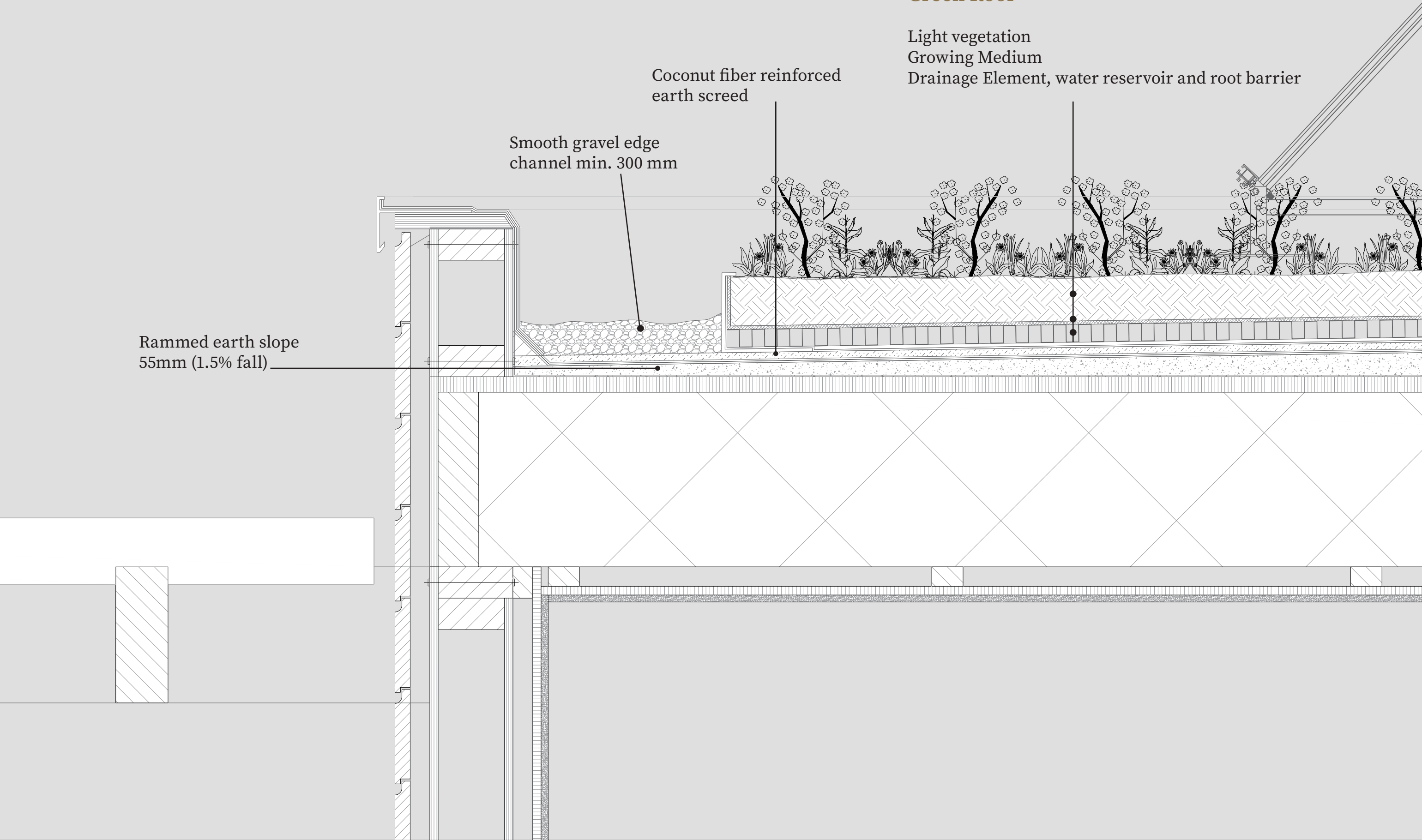
Green Roof

- Light vegetation
- Growing Medium
- Drainage Element, water reservoir and root barrier

Coconut fiber reinforced
earth screed

Smooth gravel edge
channel min. 300 mm

Rammed earth slope
55mm (1.5% fall)

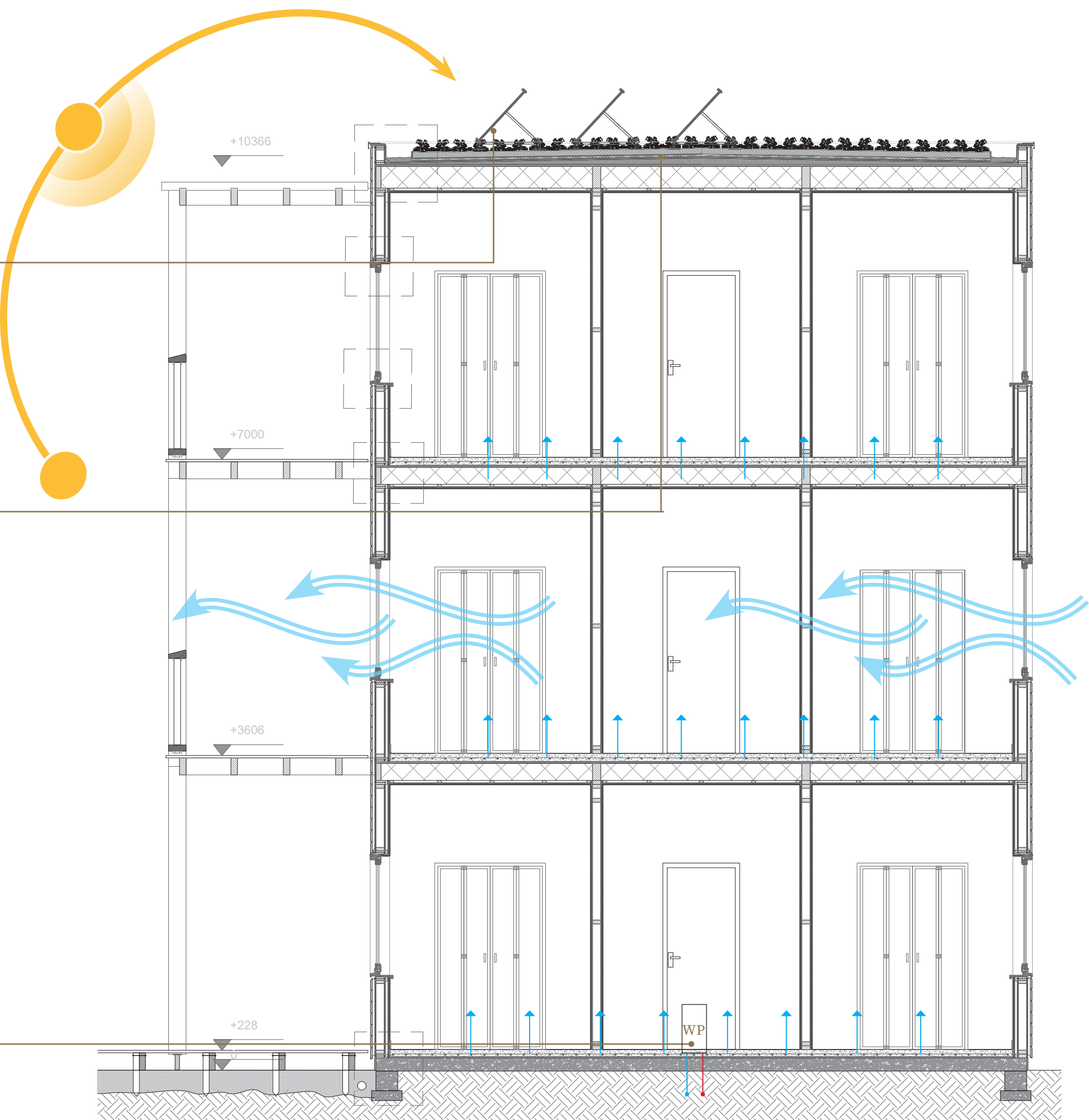


CLIMATE CONCEPT

Solar Panels for
back-up Energy

Green Roof
(Drainage of rainwater and
cooling effect for tropical
weather)

Heat Pump with
cooling system



“By bridging the gap between urban voids and housing needs, I hope to contribute to my birthland, Suriname, offering solutions that could revitalize our capital and improve the lives of its residents.”

THE END

THANK YOU!