New Heritage Studio -
AR3AH105 Graduation Studio Adapting 20th Century Heritage

Clipping Kampung

Nurturing resilience in Hoptille through lessons from Kampung

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P5 - 23rd June 2021

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Ger Warries
Lidwine Spoormans

TU Delft Ymere

New Heritage Objectives

...Investigating the heritage values of these relatively new neighbourhoods (70s-80s) and finding design solution to tackle the current problems and future challenges...

H-Buurt, Amsterdam

Heesterveld

Bijlmerplein

Hoptille

The Needs of Housing in the Netherlands

https://www.dutchnews.nl/news/2020/10/shortage-of-social-housing-is-increasing-and-rents-are-rising-fast-woonbond/
https://www.iamexpat.nl/housing/real-estate-news/845000-homes-need-be-built-netherlands-over-next-10-years
https://nltimes.nl/2020/06/16/housing-shortage-845000-homes-must-built-2030

Location

A M S T E R D A M

2.5 km

5 km

7.5 km

I J m e e r

Z u i d - O o s t

Bijlmermeer

Amsterdam ArenA

Amsterdam Bijlmer ArenA

H-Buurt

Bijlmermeer

Bijlmerplein

Amsterdam ArenA

Amsterdam Bijlmer ArenA

ING

Nelson Mandela Park

Hoptille

Heesterveld

H-Buurt

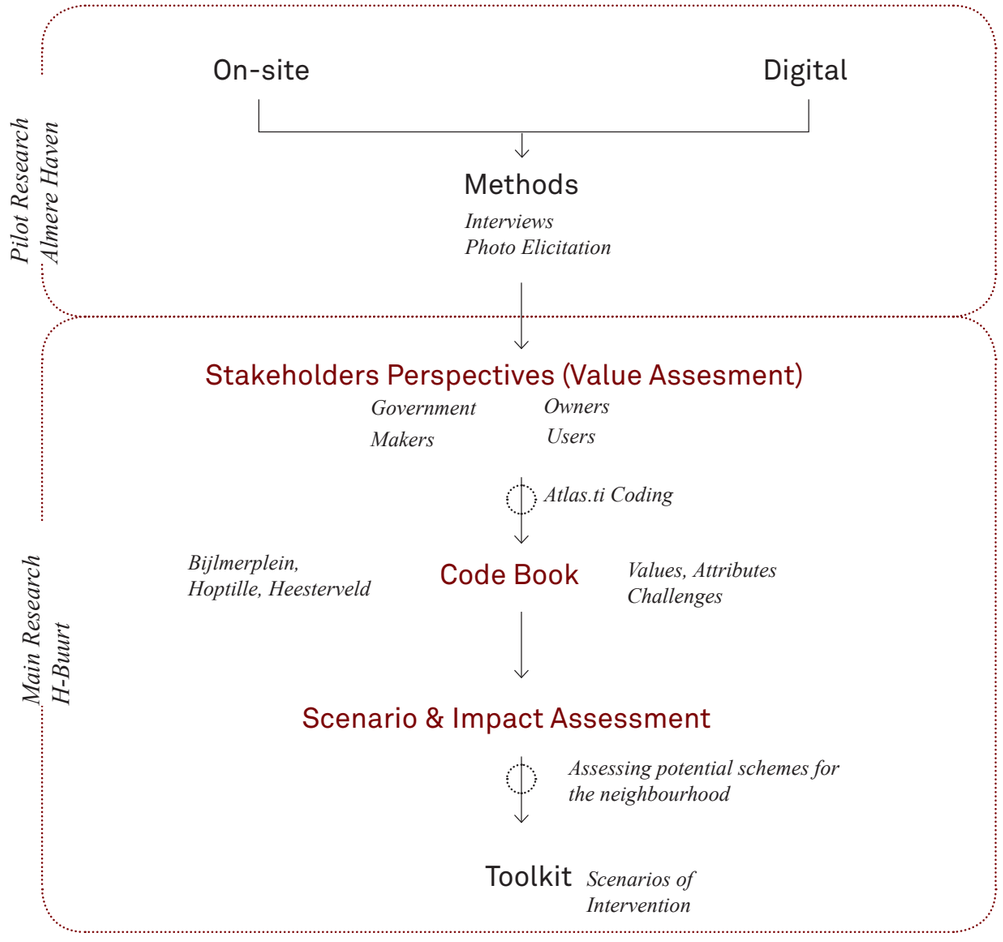
Shopping Center , and dwellings above the shops

Elongated building

Intimate space & colourful facade

The Research
Collective Research

...Investigating the heritage values of H-Buurt through appreciation from different stakeholders



Online & On-site Interviews

Literatures

Media Research

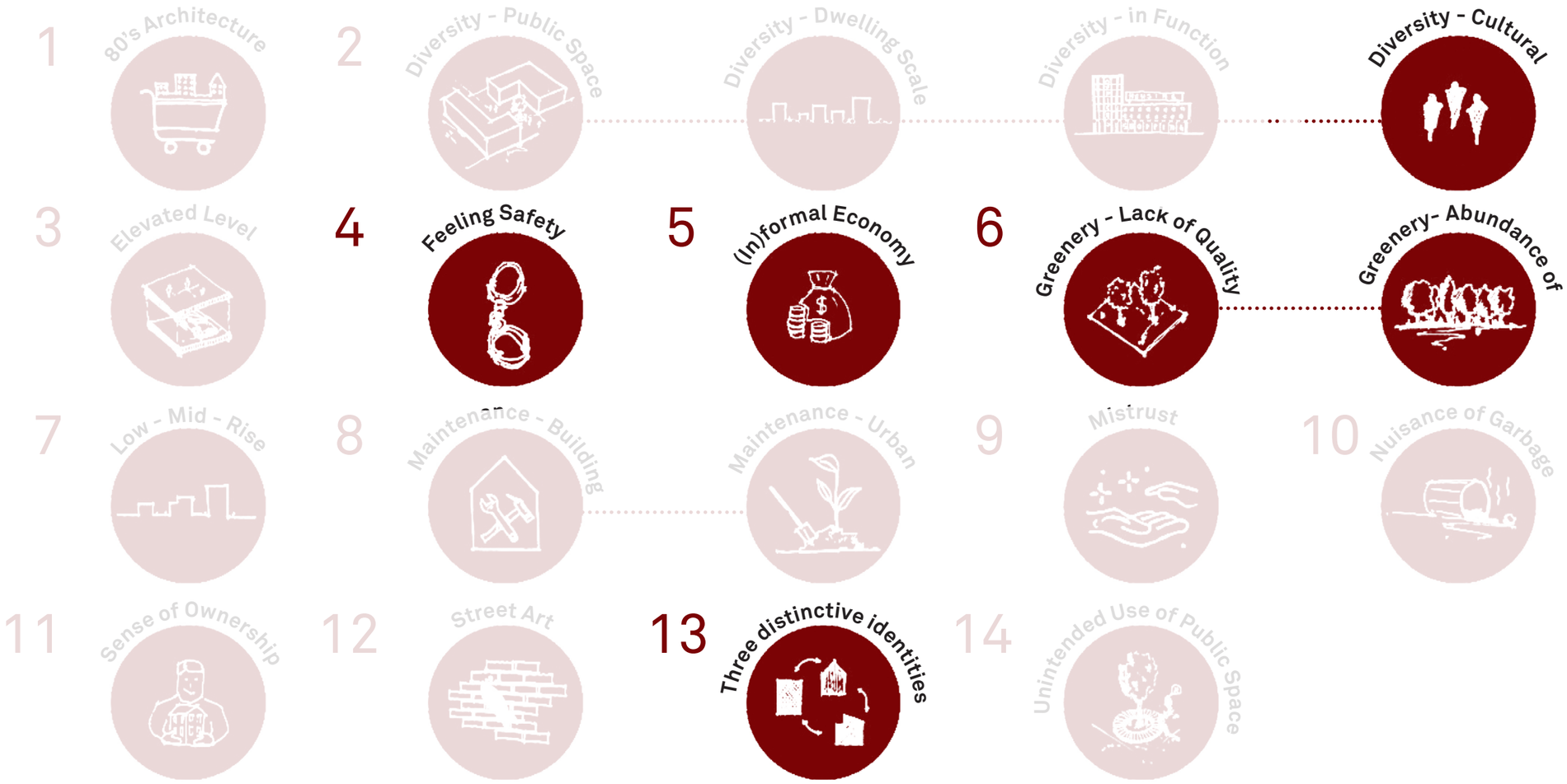
Narrative walks

Photo elicitation

P1

Focused Themes in Hoptille

Personal Research



PROBLEMS

PAST

Bijlmermeer

1.

The news coverage highlighted degradation, vandalism, lack of safety, crime,and the high rate of unemployment

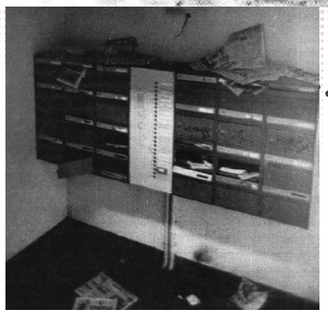
URRIJKE WONINGEN
VAN KEES RIJNBOUTT
HOPTILLE KREEG VANMIDDAG EERSTE BEWONERS
DINSDAG 3 NOVEMBER 1981
Verrassende woonwijk
n deel van Bijlmer
door FRANS HEDE

Hoptille

2.

Some headlines read: 'anti-Bijlmer Hoptille is a disaster', 'it is definitely not a nice place to live, 'Hoptille as meeting place for problems' and 'estate completely dilapidated in two years'. (Wassenberg, 2013)

3.



4.

Many tenants are problematic, resulting in a category of people who are not able to live independently by themselves. Many of them are on alcohol or drugs; rubbish, robberies and burglaries are regular, the long inside corridor, staircases, alcoves and dark corners are used for dumping rubbish, as public toilets, as meeting or sleeping places for junkies and tramps, or experienced as dangerous hiding places. (Wassenberg, 2013)

the fall

1. Bijlmer Aerial
(https://99percentinvisible.org/app/uploads/2018/02/biljmer-aerial.jpg)

Source Photos 2,3,4 : Wassenberg, Frank (1988), *Taken from HOPTILLE: EEN IDEALISTISCH WOONCONCEPT OP TILT*

PROBLEMS

PRESENTS

Attemps to improve socio-life

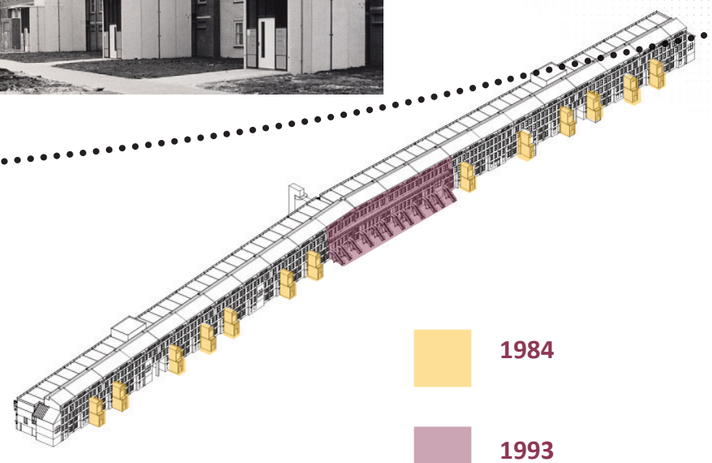
- **Housing Policy**
- **People empowerment**

1984

- **First Renovation**

Due to the socio-problem occured in Hoptille

Stadsarchief Amsterdam (n.d.)
Hoptille. Verbetering van 220 wooneenheden tot 227 woningen en wooneenheden. Ontworpen door L.R.R (http://archief.amsterdam/archief/5293. FO_B)



1984

1993

Feeling Safety

H-Buurt has its negative images due to **social problems and criminalities that occurred in the past.** They included nuisance, vandalism, problematic people, drug dealing, robberies, and many more.

Nowadays people feel safer living in the H-buurt. However, some people do not feel so, especially at night. The unintended use of public space due to lack of surveillance is also a part of the problem

(In)formal Economy

On the other hand, the negative informal economy such as **drug dealing** also happened in some urban structures.

H-Buurt belongs to a **relatively low-income neighbourhood** averaging 18,500 euro with 20.5% of the household in the Bijlmer Centrum DFH District having an income at or around the social minimum (allecijfers, n.d.). The CBS put the low-income threshold at €12,750 last year for a single person and €2,000 more for a family. (DutchNews,2019)

Greenery - Lack of Quality

H-buurt **has low quality of public space and greeneries** except for the square in Bijlmerplein. The connection on the ground floor between the private and public domain was also mentioned in the interviews. Also, the unintended public space lacks social control. The greenery also seems monotonous and not has quality.

Diversity - Cultural

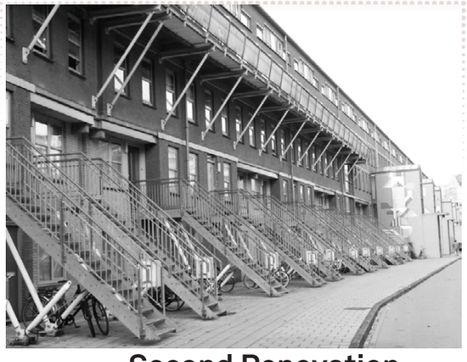
H-Buurt or Bijlmer is known for its **mixed ethnicity** background. Nowadays people from Suriname, Antilles, Turkey, Morocco, and others non-western live in great numbers in the neighbourhoods (allecijfers, n.d.). This mix of cultural diversity is something that people appreciated in this neighbourhood and is an aspect that **makes H-Buurt unique.** However, it becomes a challenge when different ethnic backgrounds live together as there is a risk for social segregation.

Risk to Social Segregation

Prone to the Gentrification

the rise

1993



- **Second Renovation**

Adding access in the middle part of the building

All these problems hinder the resilience in Hoptille

Resilience *is the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedback* *(Walker et al, 2004)*

CHALLENGES

FUTURE

The Needs of Housing in the Netherlands

Energy Requirement

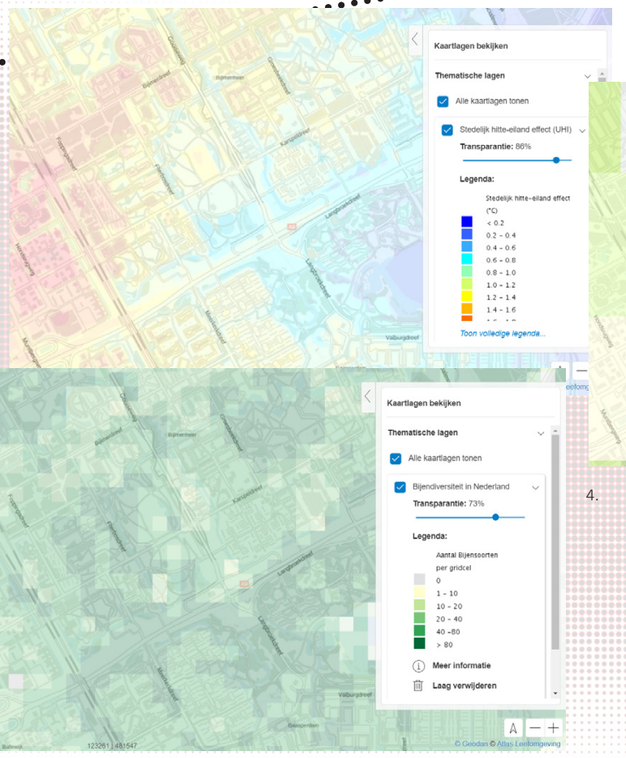
3.

1.

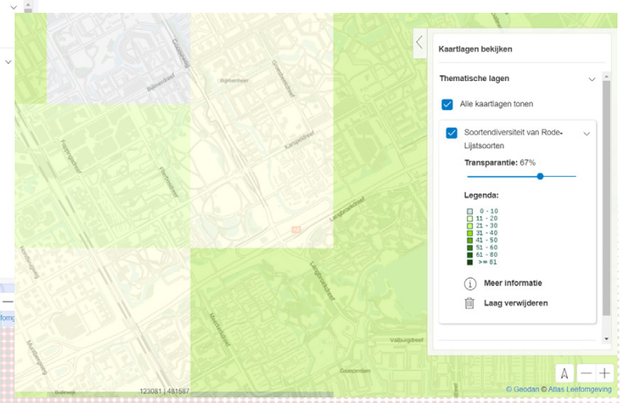
2.

Biodiversity

Urban Heat Island Effect



Biodiverse



4.

Bees Variety

1. https://www.dutchnews.nl/news/2020/10/shortage-of-social-housing-is-increasing-and-rents-are-rising-fast-woonbond/
2. https://www.iamexpat.nl/housing/real-estate-news/845000-homes-need-be-built-netherlands-over-next-10-years
3. https://nltimes.nl/2020/06/16/housing-shortage-845000-homes-must-built-2030
4. https://www.atlasleefomgeving.nl/kaarten

Why does Hoptille need to be resilient?

Past-Current Socio Problems

Dynamic of Demography

Economic Vulnerability

Ecological Vulnerability

Bounceback from its fall and tackle the present and future challenges..

What is the possible approach to improve resilience in Hoptille?

Resilience *is the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedback (Walker et al, 2004)*

Nurture??

RESILIENCE

Resilience is the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedback (Walker et al, 2004)

Adaptability

Adaptability is the capacity of **actors** *in a system... to influence resilience the capacity of humans to manage resilience.* *(Walker et al, 2004)*

ACTOR

Adaptability of the system is mainly a function of the **social component**— the individuals and groups acting to manage the system. *(Walker et al, 2004)*

Their **collective capacity to manage resilience**, intentionally, determines whether they can successfully avoid crossing into an undesirable system regime, or succeed in crossing back into a desirable one. *(Walker et al, 2004)*

Transformability

The capacity to create a fundamentally new **system** *when ecological, economic, or social (including political) conditions make the existing system untenable* *(Walker et al, 2004)*

SYSTEM

INDONESIA'S KAMPUNG

iNews id (2020) *Penampakan Banjir Jakarta dari Pantauan Udara* (https://www.youtube.com/watch?v=biplQLw0QKY&ab_channel=iNewsid)

Why Kampung?

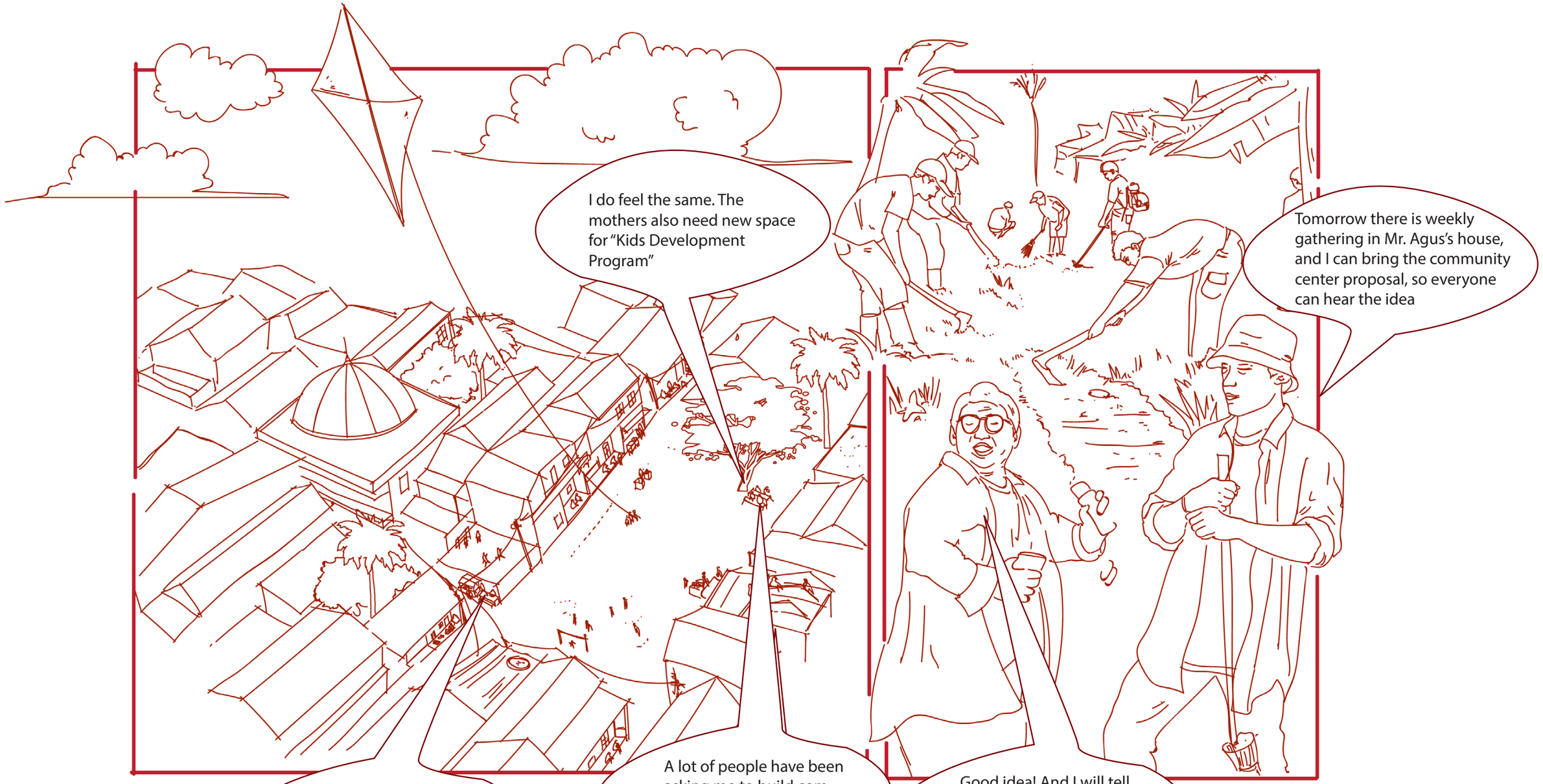
1. Collage Photos shows Kampung Activities

Despite from the risks in kampung, it has potential of resilience capacity because of the bond in the community

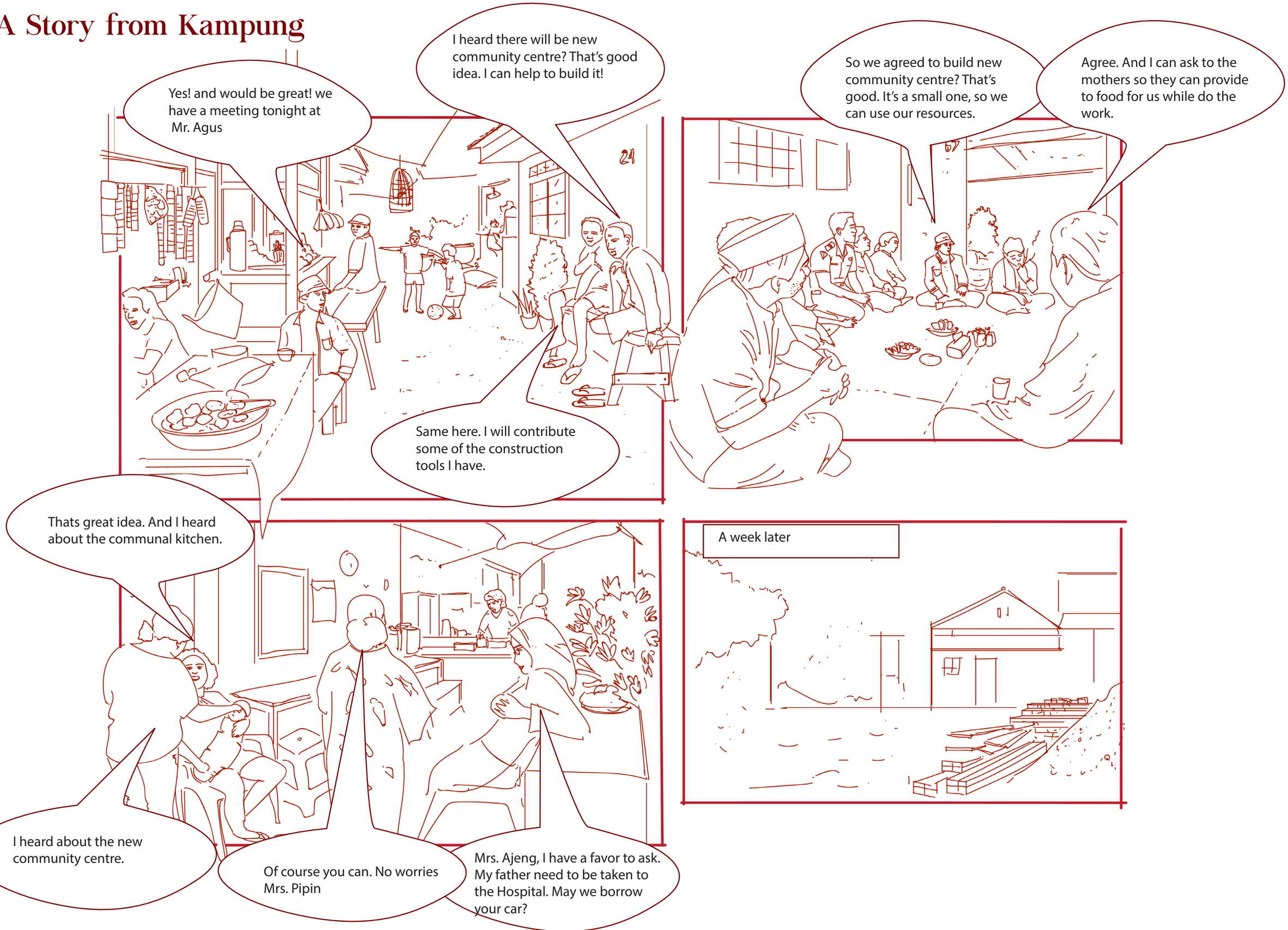
(Shirleyana 2018)

1. Source of Photos used in the collage :**Hutama, I.A.W. (2016)**, "Exploring the sense of place of an urban kampung. Through the daily activities, configuration of space and dweller's perception: case study of Kampung Code, Yogyakarta", ITC, University of Twente, Enschede, available at: www.itc.nl/library/papers_2016/msc/upm/hutama.pdf

A Story from Kampung



A Story from Kampung

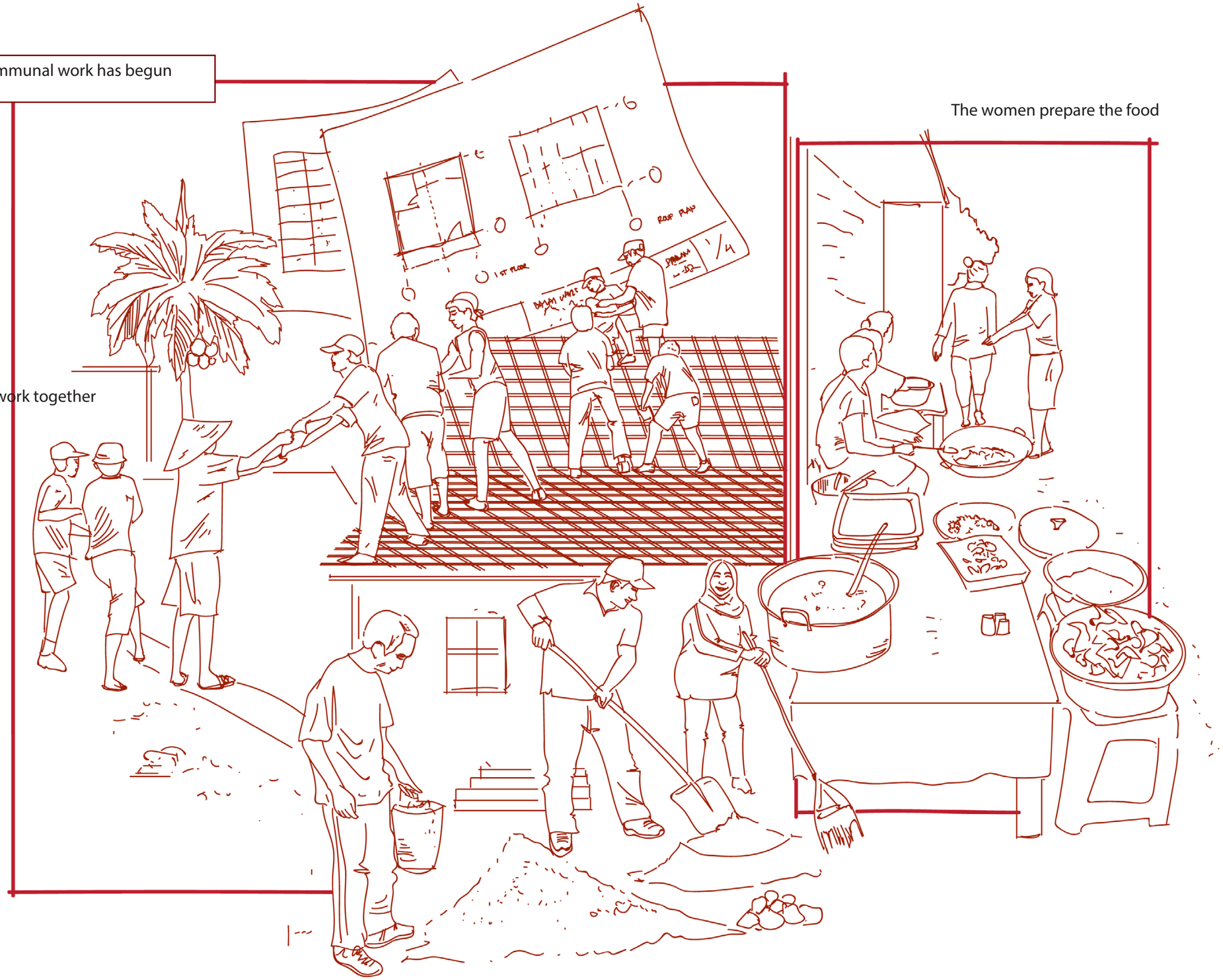


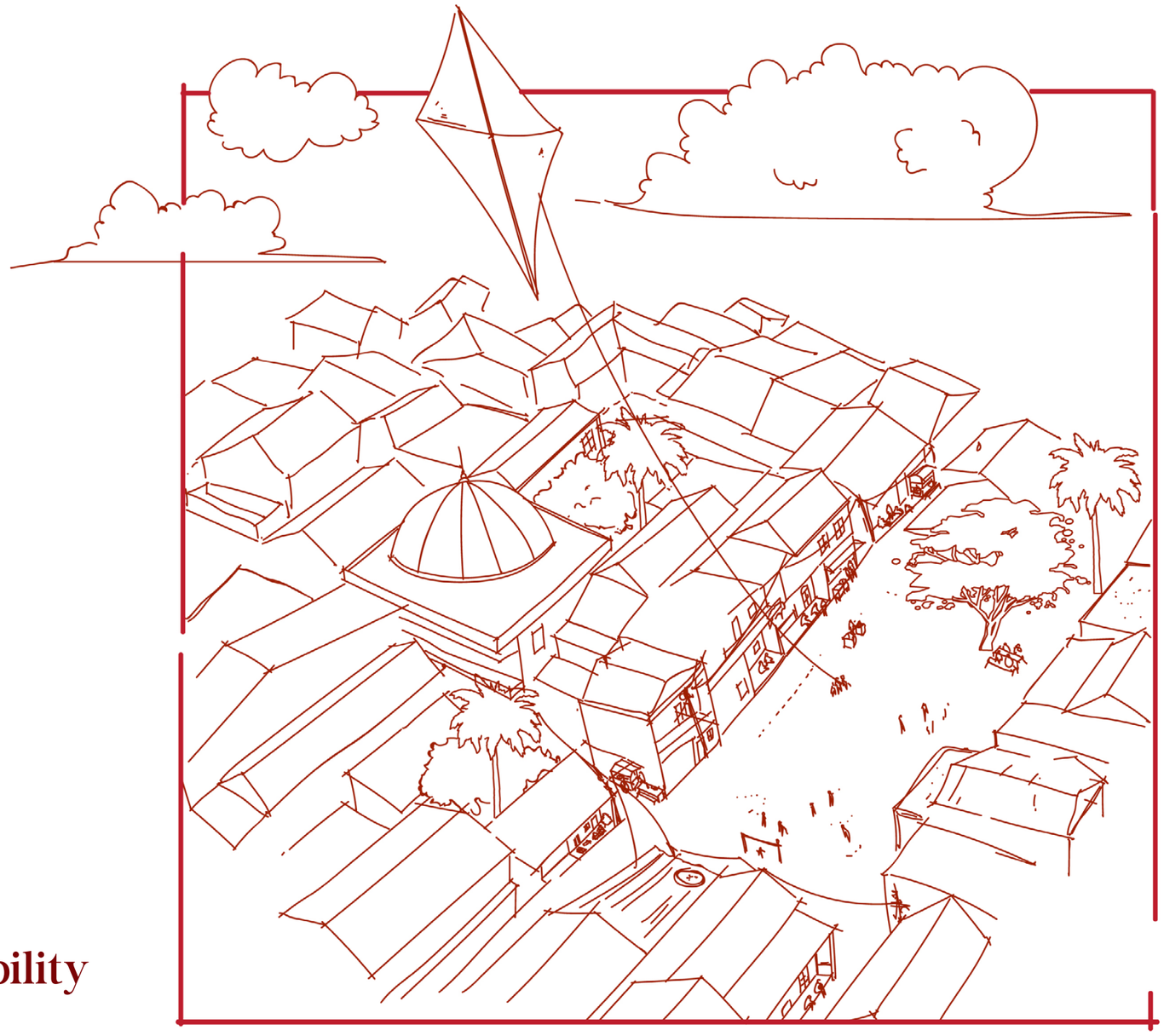
A Story from Kampung

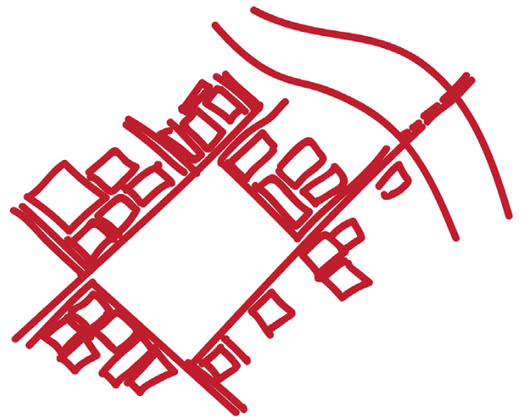
The communal work has begun

The men work together

The women prepare the food







Adaptability

ACTOR

SOCIAL CAPITAL

Quality

- Social Network
- Self Organization
- Collective Action (*Gotong Royong*)
- Reciprocity
- Trust/mutual dependence

Interaction

- Social Interaction
- Learning
- Collective Activities
- Face-to-face meetings

Transformability

SYSTEM

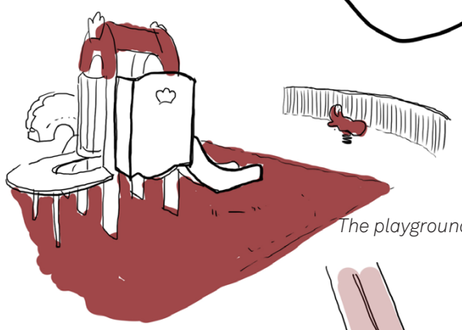
URBAN STRUCTURE

- Organic
- Gradually enrichment
- Adaptive

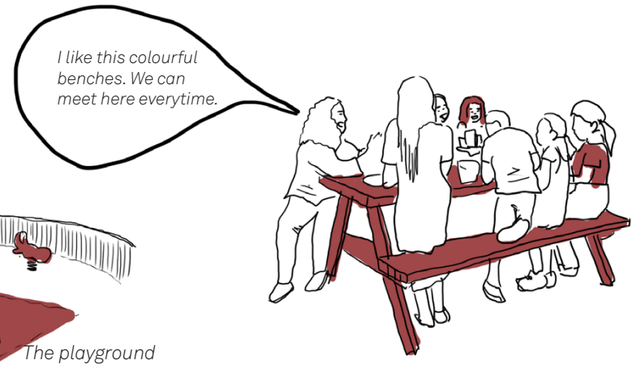
> Social capital and **interaction mutually shape, and are shaped by, urban form and spatial structures** – an active relationship between place and society .
> (Houghton, 2005).

Can social capital be Translated in the Dutch context?

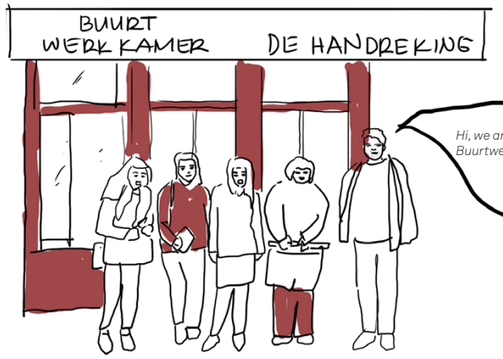
Social Value

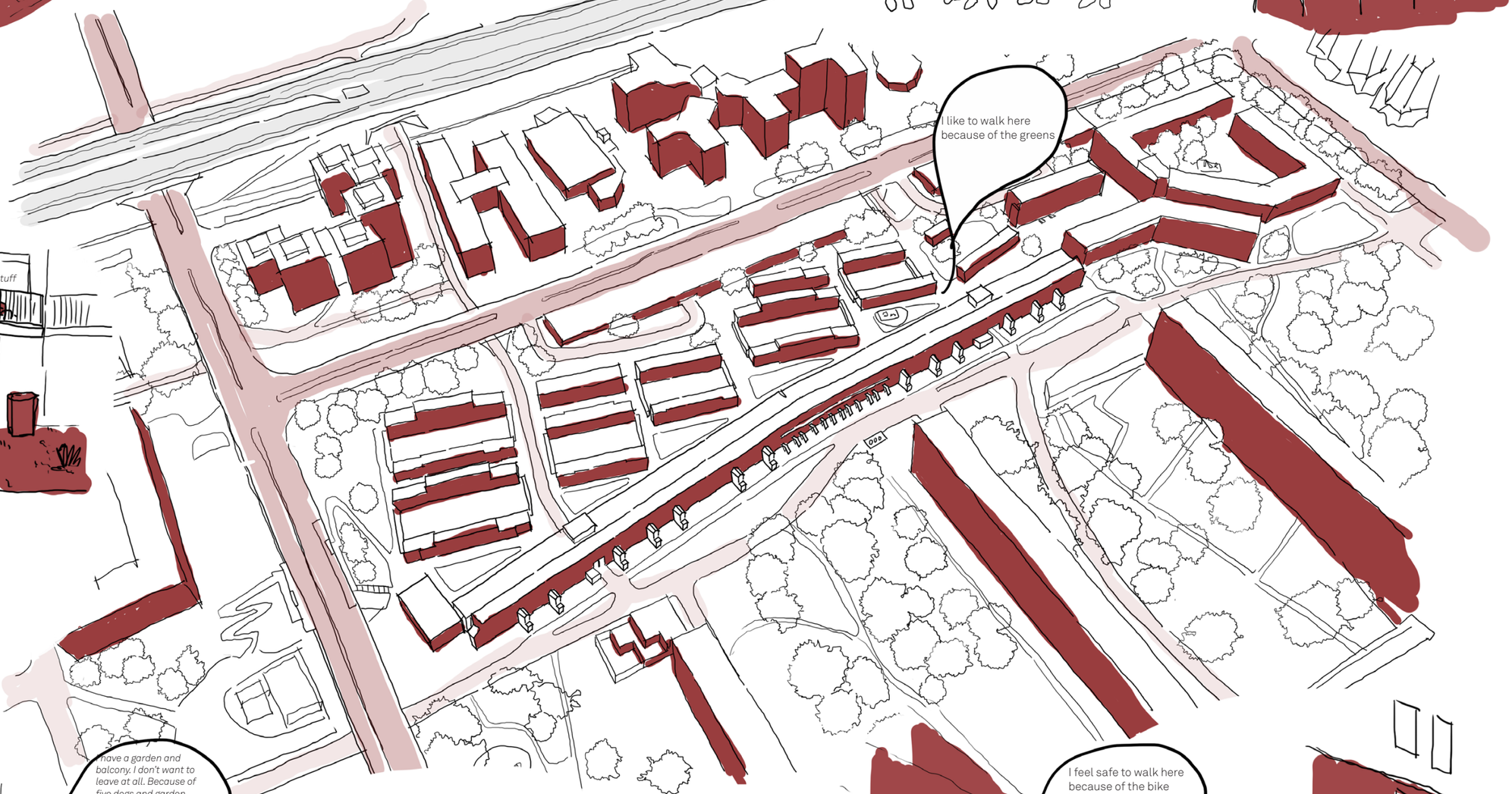


The playground



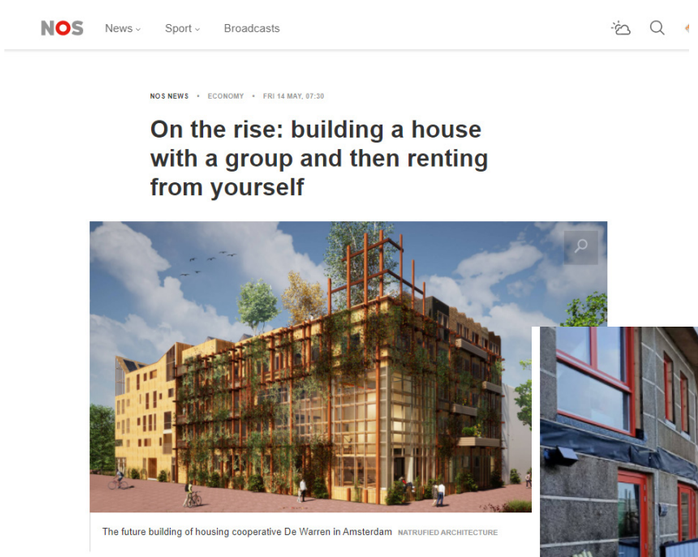
If people need help, they can come to this one spot which is very positive. People can find all types of helps..





The nuisance

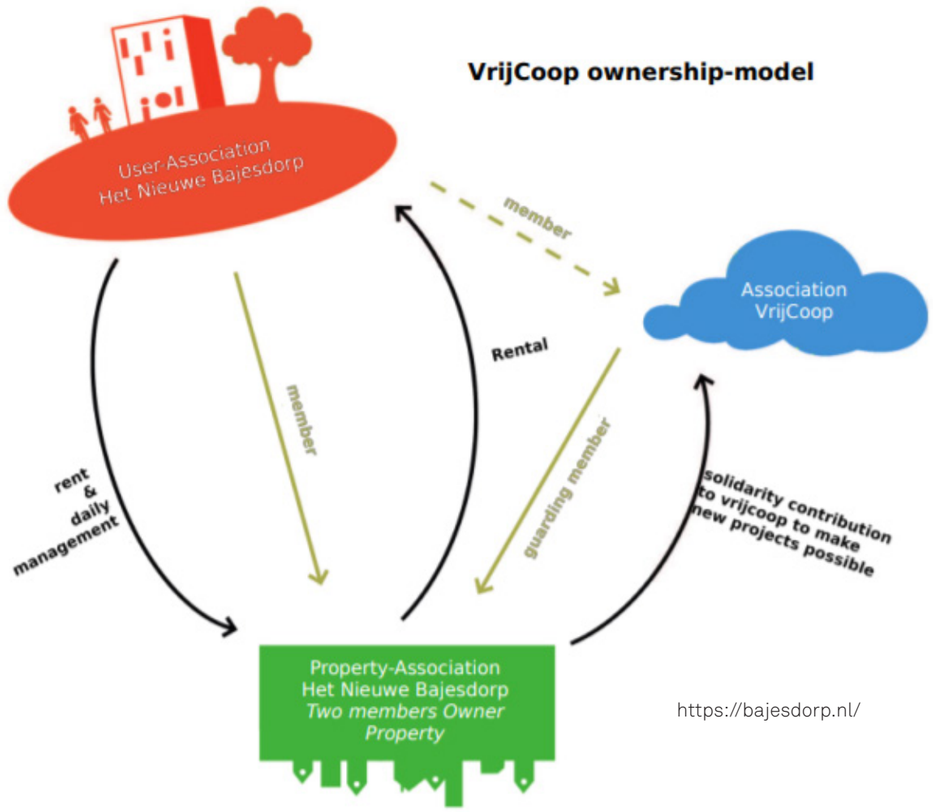
https://bajesdorp.nl/



https://nos.nl/artikel/2380662-in-opkomst-met-een-groep-een-huis-bouwen-en-dan-van-jezelf-gaan-huren

The project is set up according to the principles of VrijCoop: as collective property, as unsaleable real estate.

Housing Cooperative



https://bajesdorp.nl/

Self Manage Property

Informatie brochure (2020) *Investeren in Idealen De Vrijkoop van BajesDorp*
(https://bajesdorp.nl/wordpress/wp-content/uploads/2020/10/brochure_vrijkoop_bajesdorp.pdf)

Why giving the autonomy to the resident is matter?

Giving higher autonomy to local community, could potentially empower them & increasing opportunities that would lead to to freedom.

→ *Good development*

Having greater freedom to do the things one has reason to value is (r) significant in itself for the person's overall freedom, and (2) important in fostering the person's opportunity to have valuable outcomes. Both are relevant to the evaluation of freedom of the members of the society and thus crucial to the assessment of the society's development.

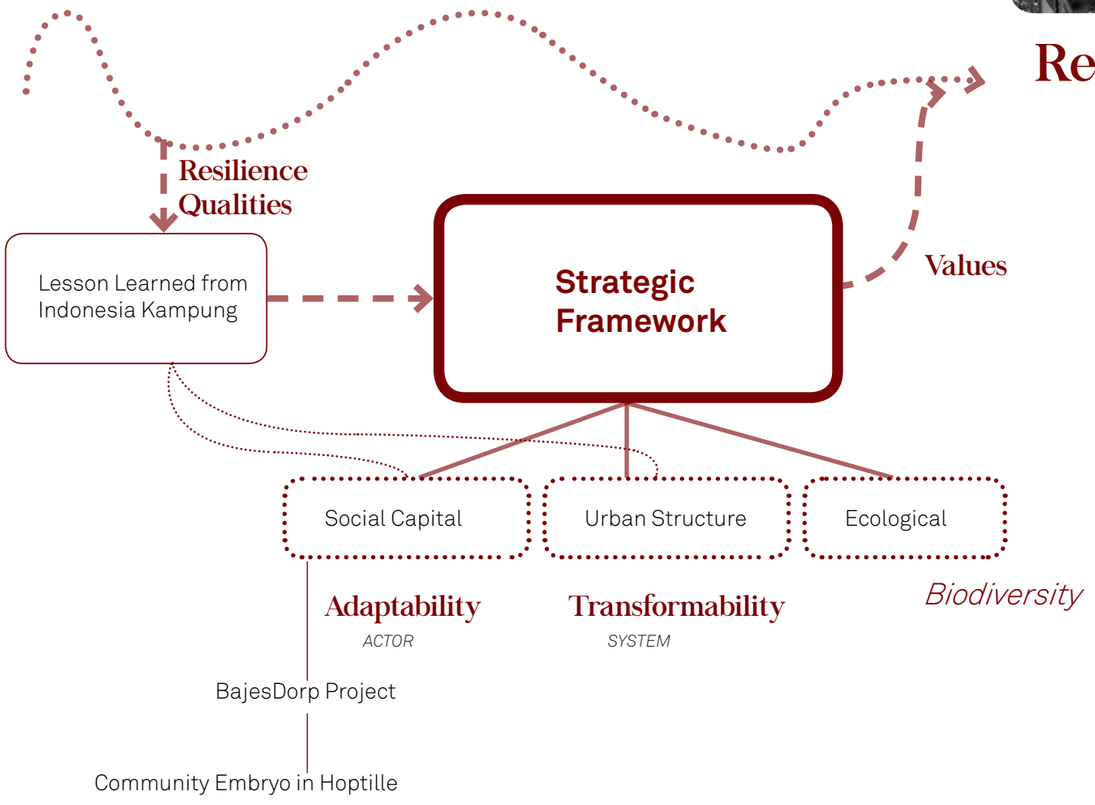
interpretation from the Development of Freedom by Amartya Sen

Approach

Bijlmer Museum (2014) *OUDE-H-BUURT-MET-HOPTILLE (https://bijlmermuseum.com/de-bijlmer-in-tijd/oude-h-buurt-met-hoptille/)*

Resilient Hoptille

Findings _ Problems _ Challenges



Social Capital - Actors - Adaptability

Big Renovation

Ymere

Proposal

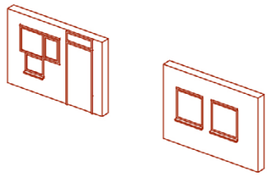
Hoptille Residents Association

Rent

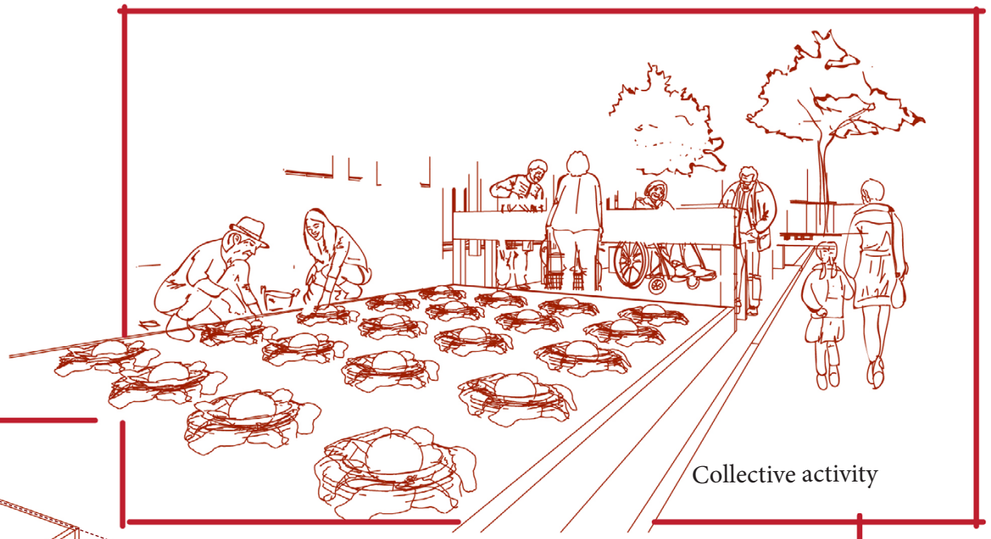
Member

Residents

Responsibility for the residents to maintain the environment



Modular building

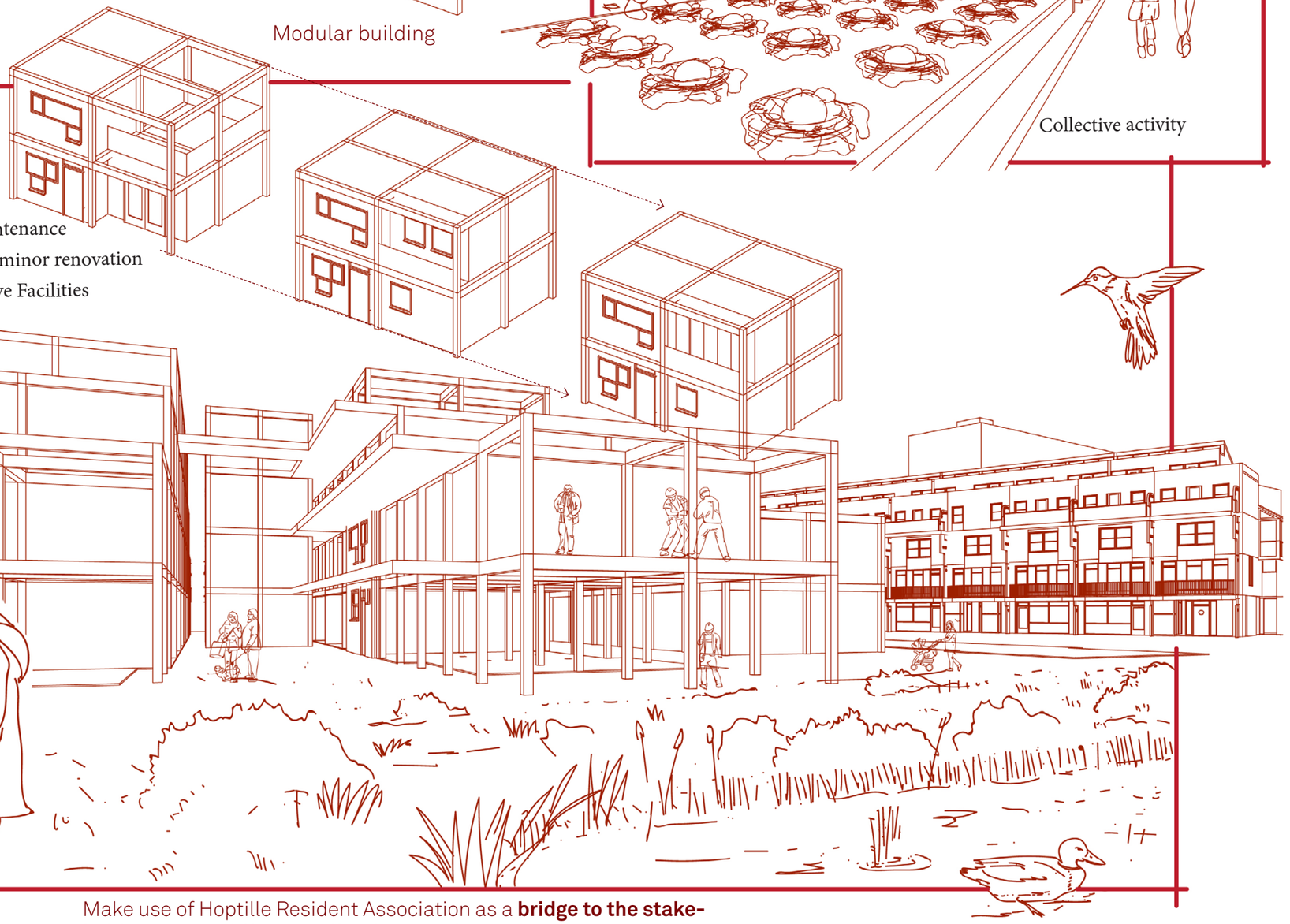


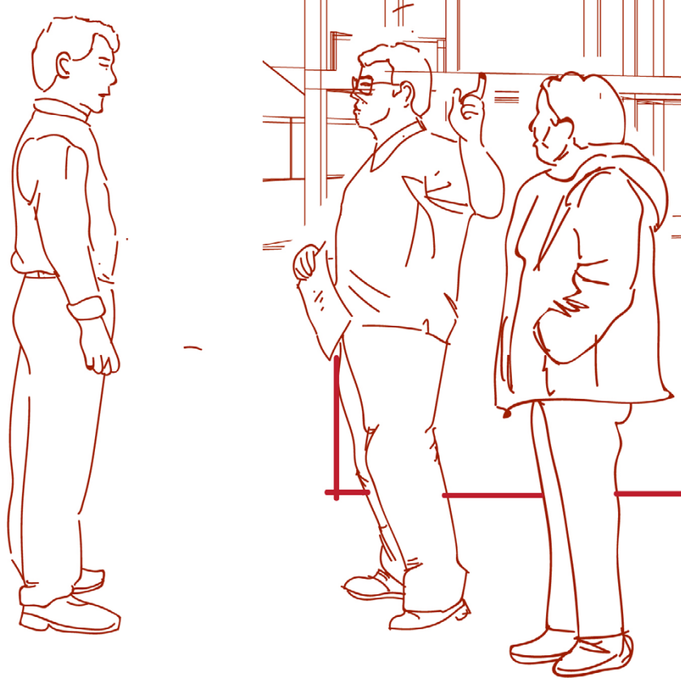
Collective activity

Daily/Minor Maintenance

Additional Space/minor renovation

Events & Collective Facilities





Make use of Hoptille Resident Association as a **bridge to the stake-holder**, initiate different **collective meeting and action** more **responsibility to the environment.**

Strengthening the **role of resident in decision making and planning of Hoptille**. It also create the sense of belonging

Social bonds by knowing the neighbours and **enhance the face to face meeting**

1 Social Capital

Social Network

Self Organization

Collective Action

Reciprocity

Trust

Make use of Hoptille Resident Association as a **bridge to the stakeholder**, initiate different **collective meeting and action** more **responsibility to the environment.**

Strengthening the **role of resident in decision making and planning of Hoptille**. It also create the sense of belonging

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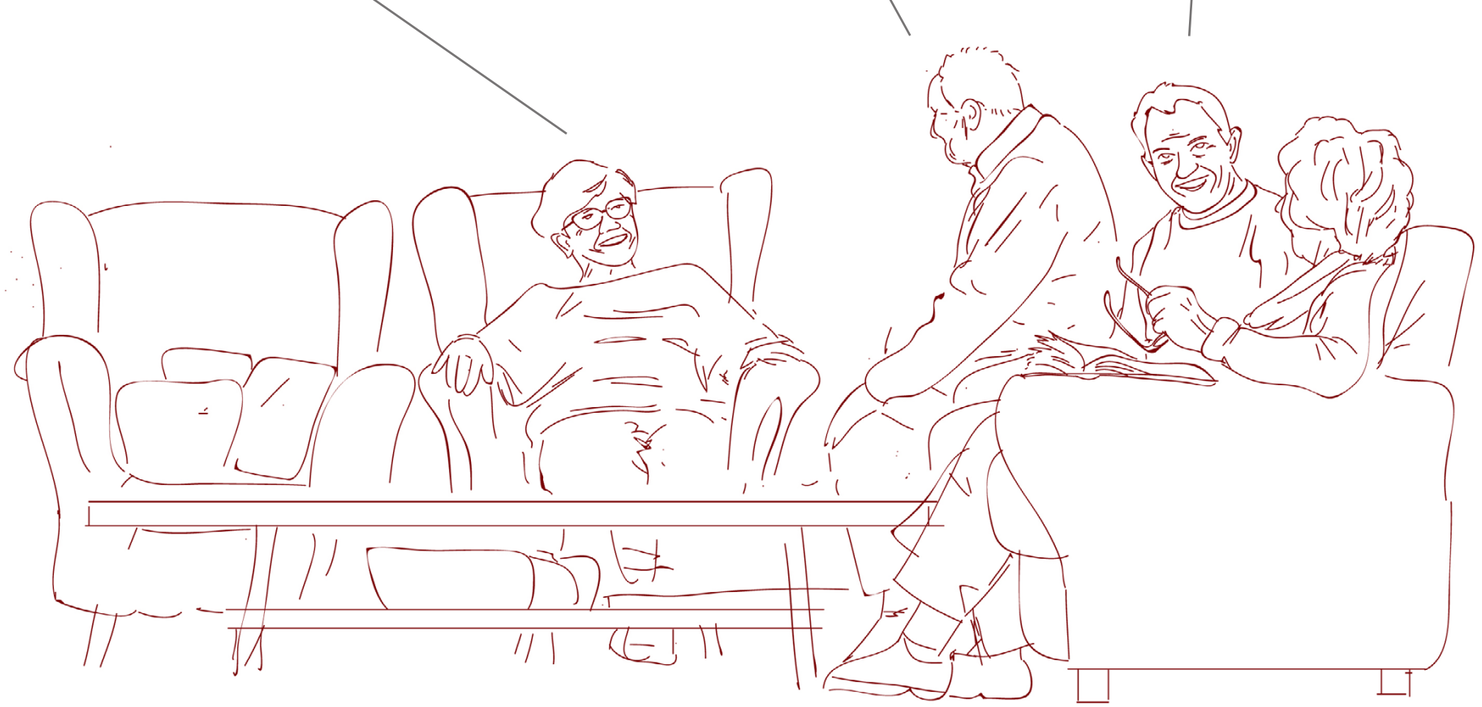
Collective Programs

Build their own Buildings



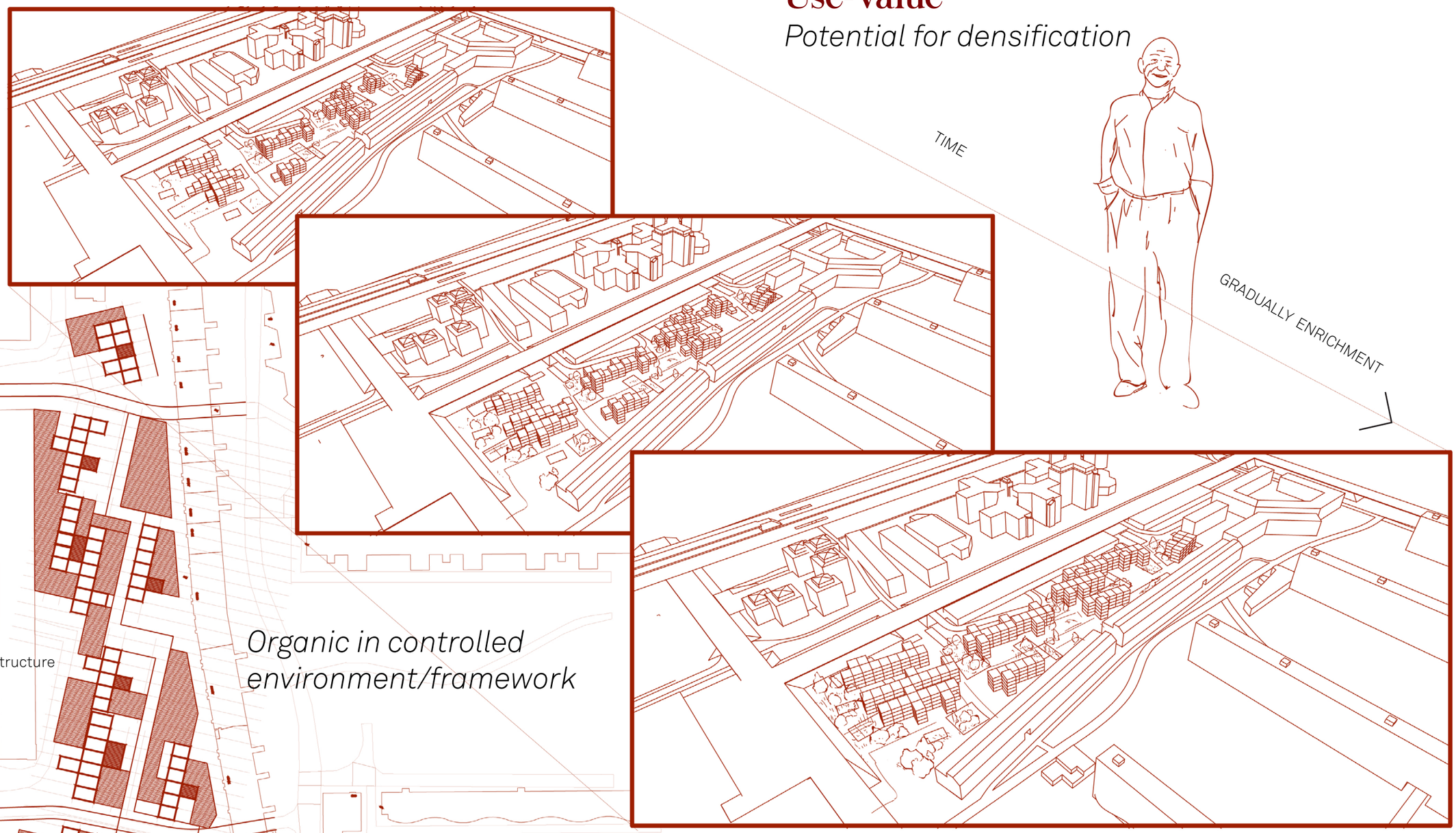
The Urban Structure - System - Transformability

Use-Value

Potential for densification

TIME

GRADUALLY ENRICHMENT



Set up the
framework and infrastructure

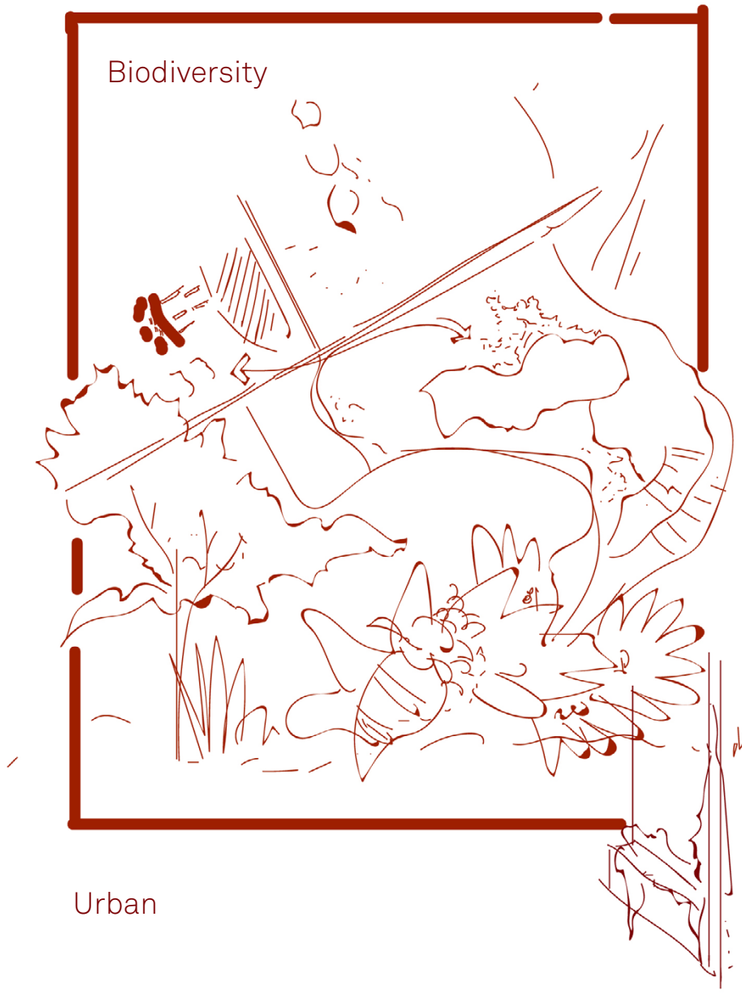
Organic in controlled environment/framework

Allows changing & upgrading (flexible)

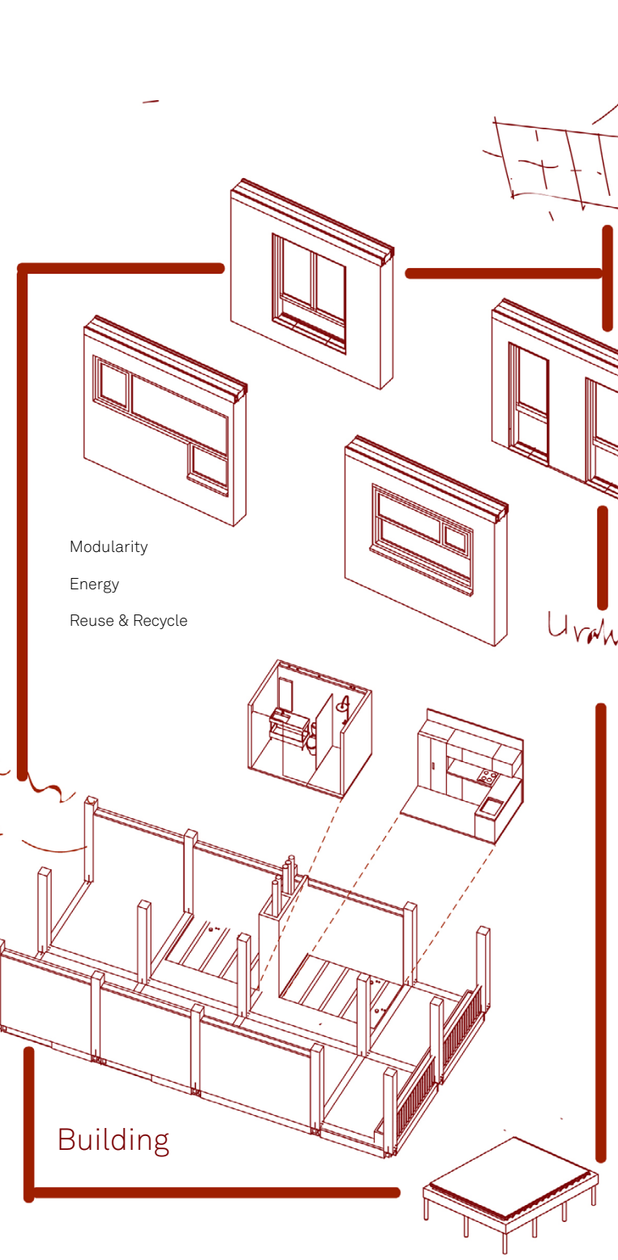
Integrated infrastructure

Component Modular (easy disassembly & reusable)

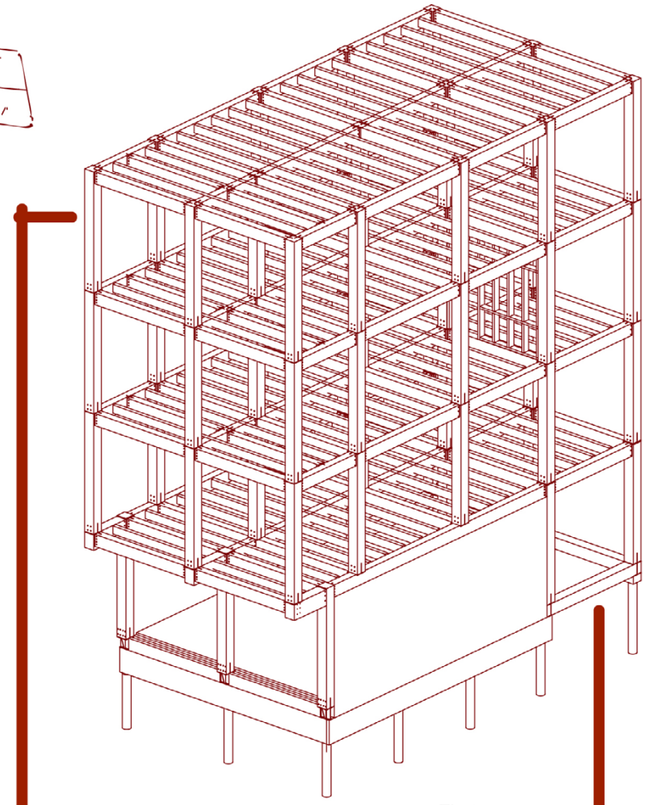
3. Ecological
Environmental Position



Urban



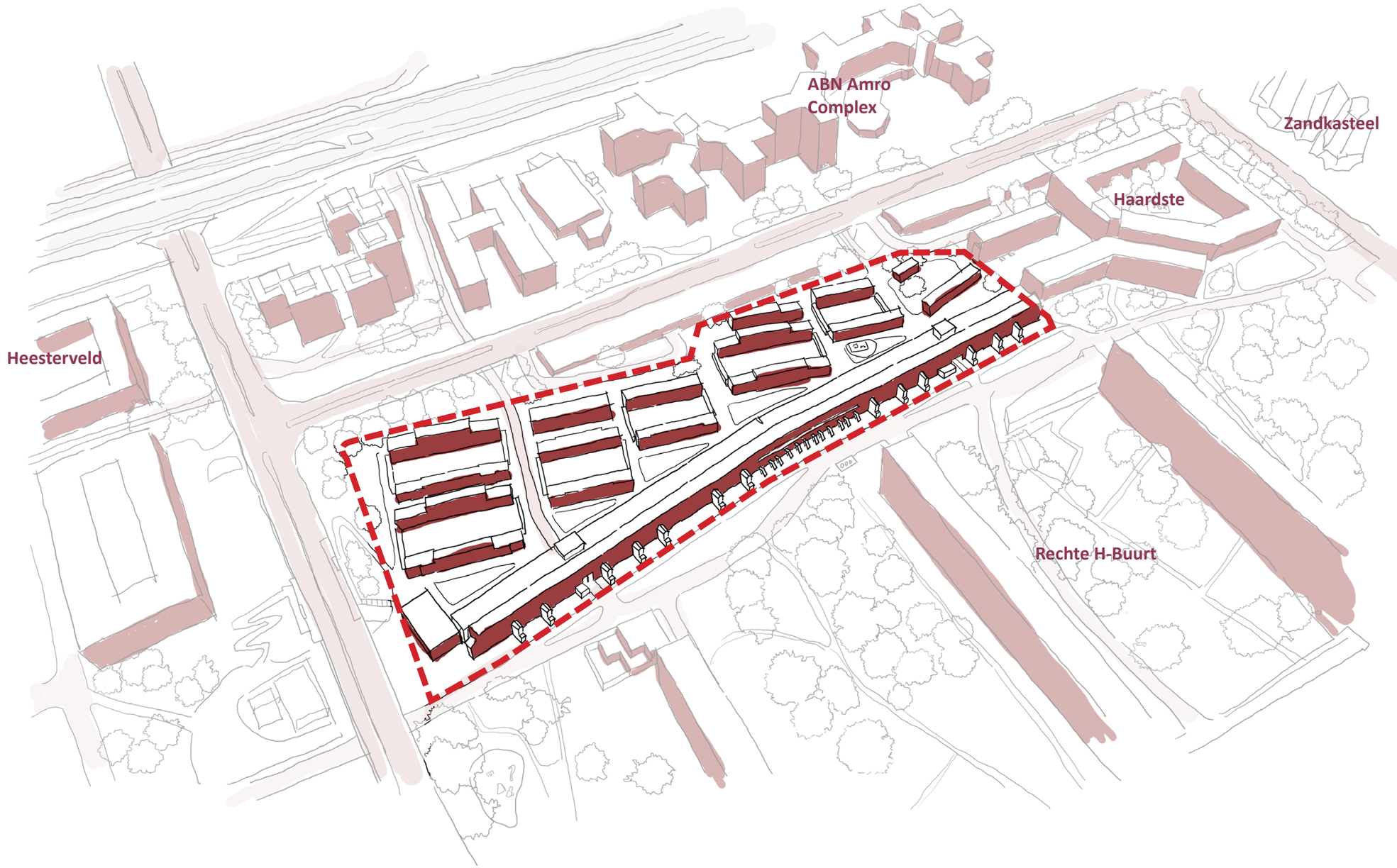
Building



Material

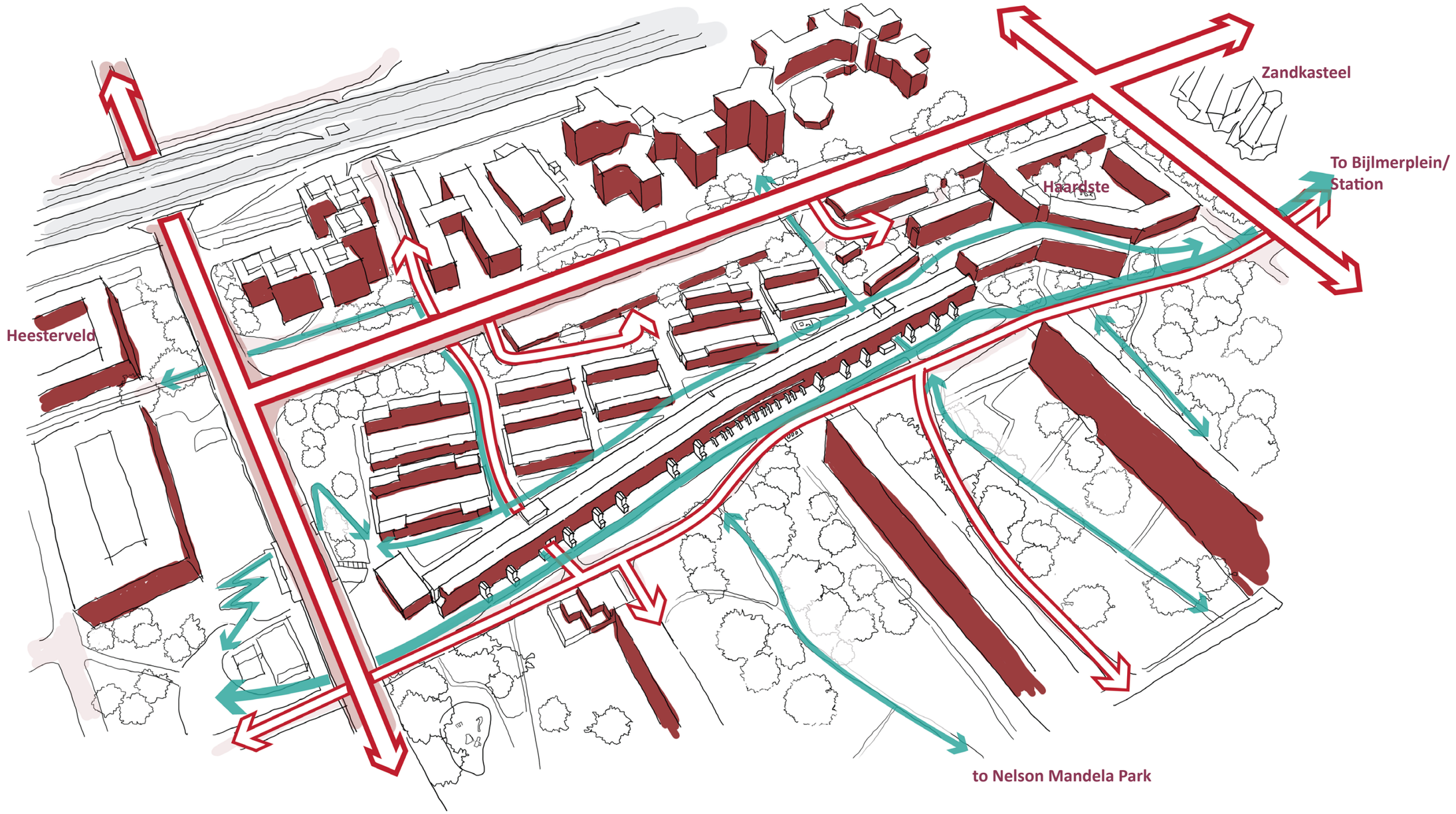
The Intervention

Bijlmer Museum (2014) *OUDE-H-BUURT-MET-HOPTILLE (https://bijlmermuseum.com/de-bijlmer-in-tijd/oude-h-buurt-met-hoptille/)*


ABN Amro
Complex
Zandkasteel
Haardste
Heesterveld
Rechte H-Buurt

Hoptille Analysis

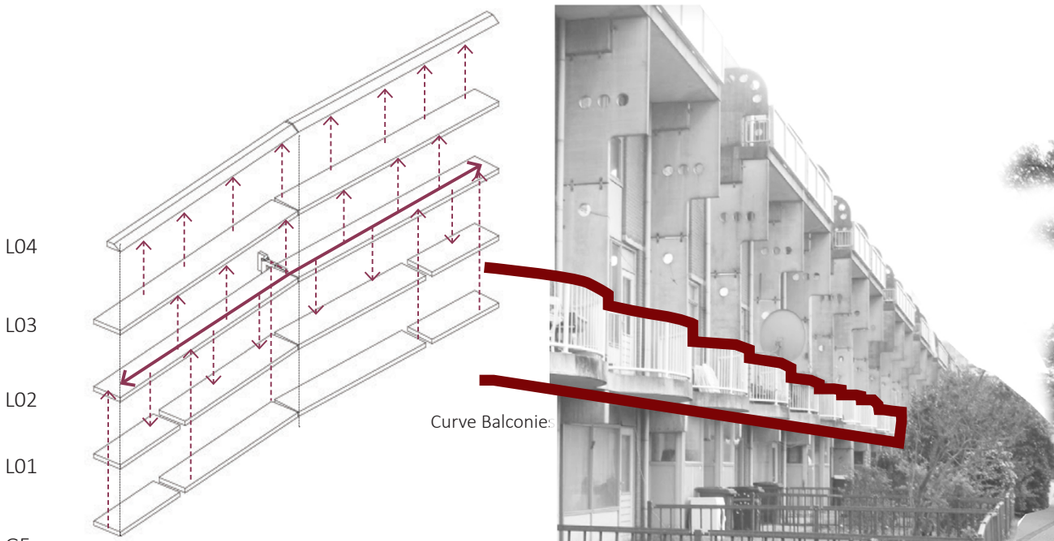
Accessibilty



Hoptille Analysis

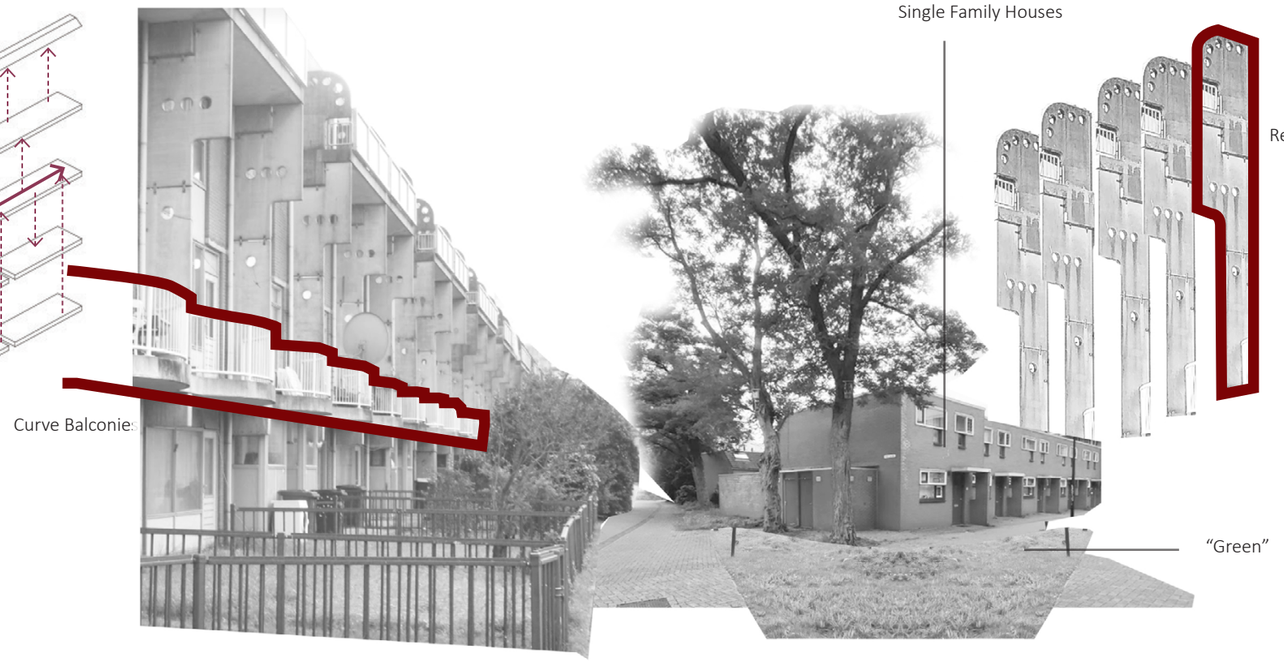
Function and Building Heights

Heritage Hoptille?



1980

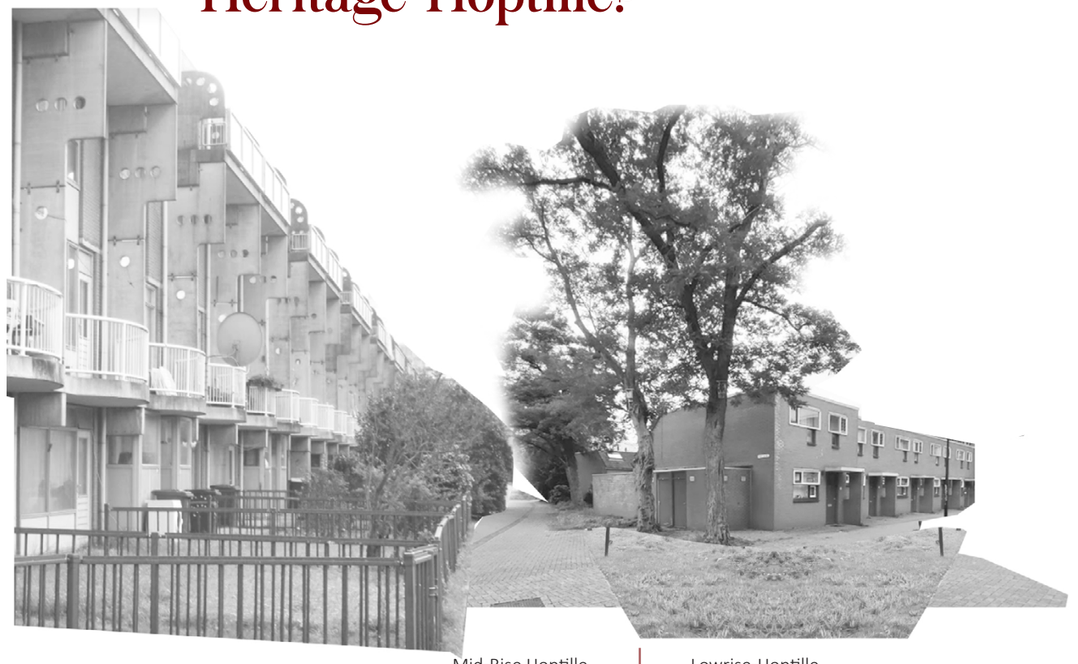
Architectural Value



Aesthetical Value

Social Value

Heritage Hoptille?



Mid-Rise Hoptille

Lowrise-Hoptille

Robin Hood Garden[1]

street in the sky

vertical prefab concrete

Inner Corridor

Facade Elements

80s facade elements

Architectural Value

A breakthrough of Youth Housing with HAT Units

Mixed of Housings (Youth, Elderly, Families, ex-convict)

Cultural Diversity

Innovative approach in the 70s

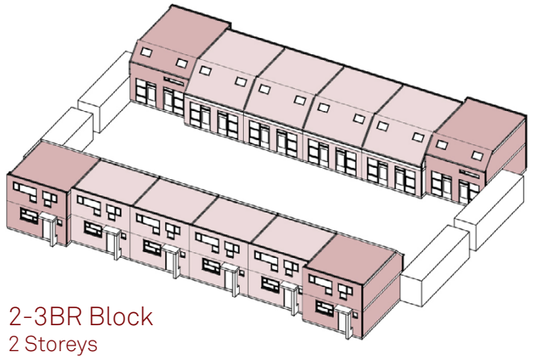
Social Value

Participatory process

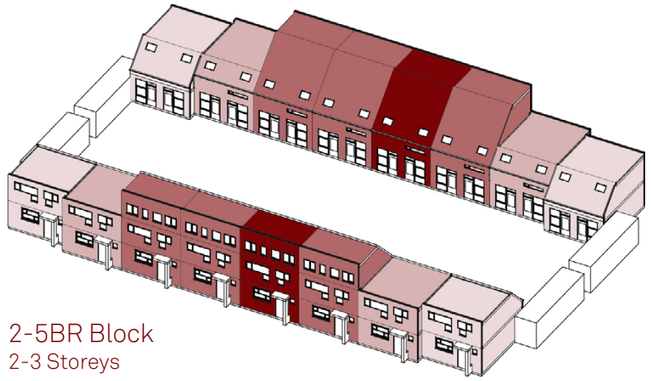
Source photo : 1. Cadman, Steve (2008) https://www.flickr.com/photos/stevecadman/2361178047

Building Analysis

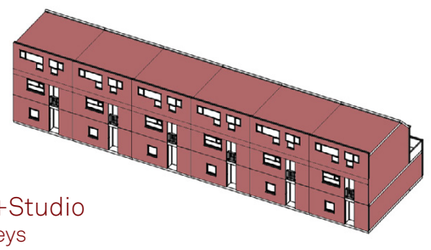
Existing Building Block



2-3BR Block
2 Storeys

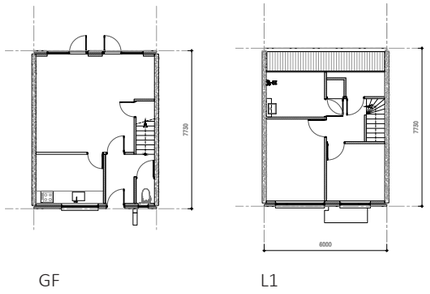


2-5BR Block
2-3 Storeys

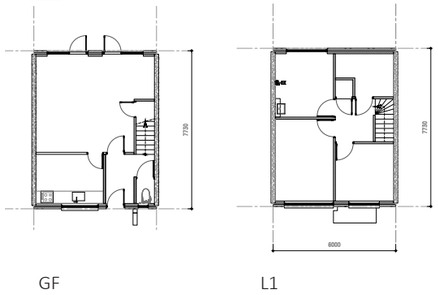


3 BR+Studio
3 Storeys

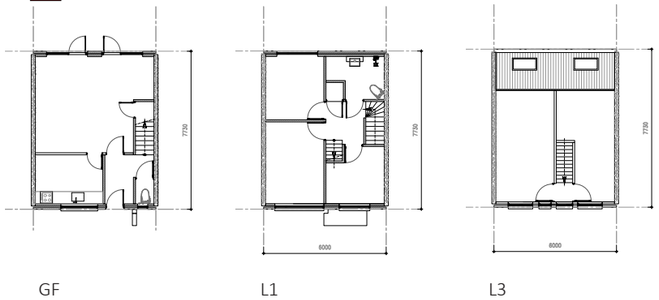
2BR (90 sqm)



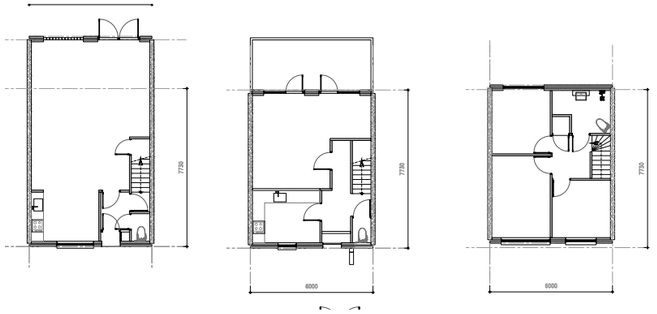
3BR (90 sqm)



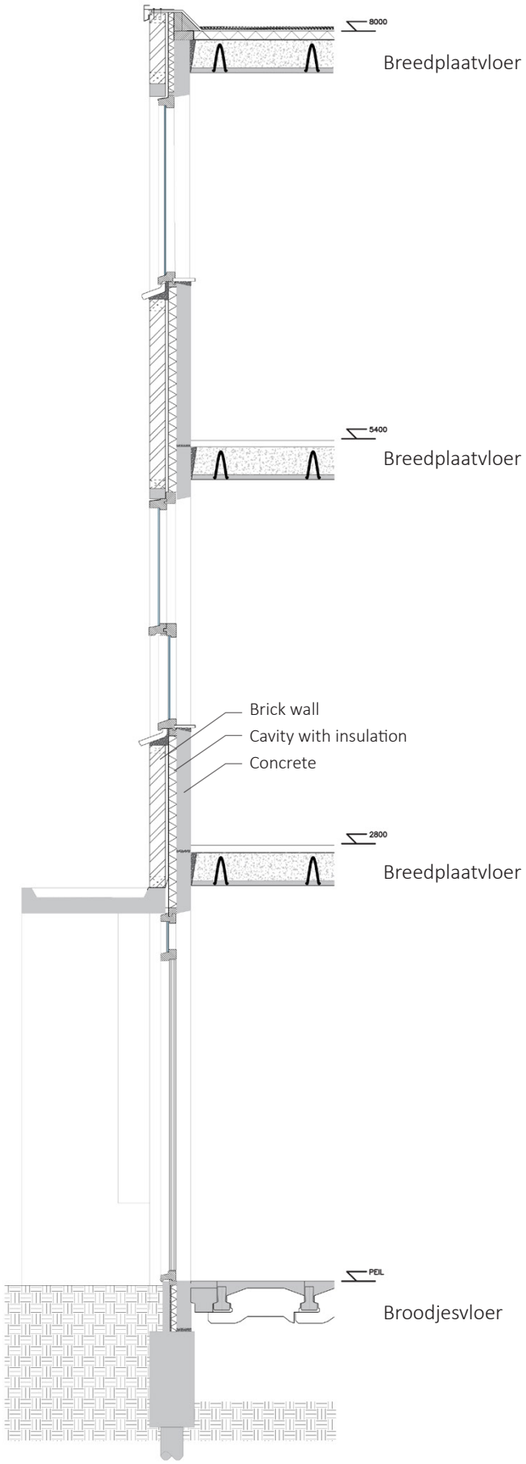
4BR (135 sqm)
5BR (135 sqm)

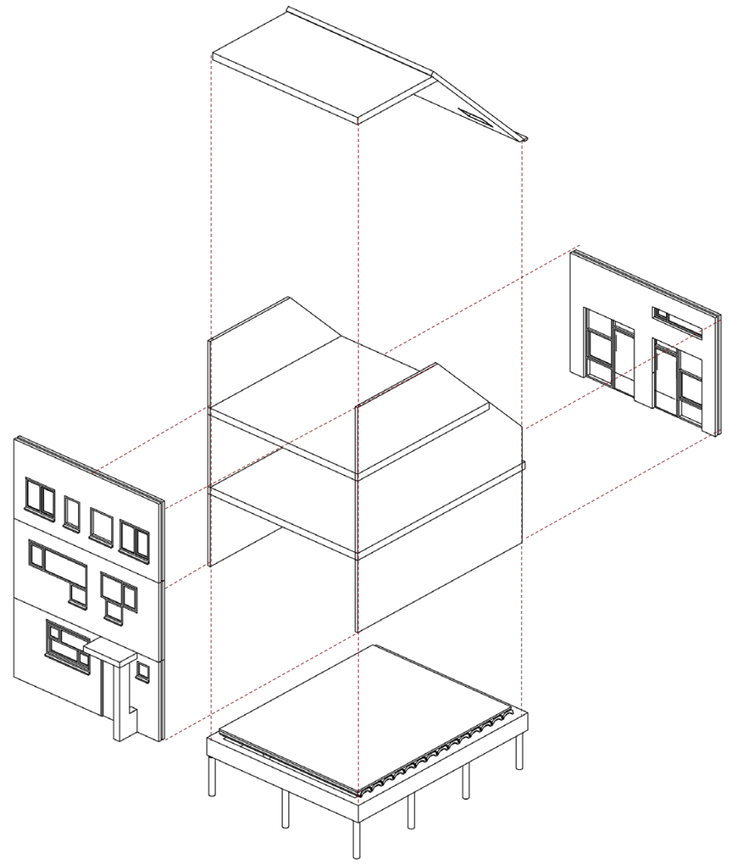


3BR+Studio (149 sqm)



Building Analysis

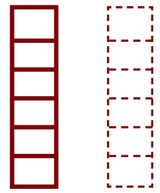




Low-Rise Building Intervention
Transformability

Stadsarchief Amsterdam (1981) *Luchtfoto Bijlmer Centrum*
(http://archief.amsterdam/archief/10009.B)

1. Building Block Strategy

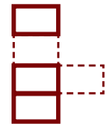


Reuse Partially

2. Building Height

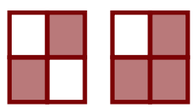
Mid-Rise (4-5 storeys)

3. Building Strategy



Modular

4. Function Freedom



Combination (Variants & Options)

5. Facade Freedom

Combination (Variants & Options)

6. Building Material

Wood

Current

Values

Attributes

Ecological

- Car-Free Environment
- Lack Of Quality green
- Lack of Maintenance
- Lack of Energy freedom

Social

- Community Activities
- Intimate & Quiet Environment
- Social Housing
- Multicultural
- One of the first public participation housing program
- Presence of Communal Garden
- Unsafety Feeling

Economic

- Social Housing
- Low Income - sense of ownership
- Low Density
- Lack of adequate units
- High utility cost

Aesthetical

- Building Scale-Human Scale
- Repetitive architecture

Historical

- One of the first public participation housing program
- Anti-Bijlmer

Use Value

- Dwellings
- Closeness to facilities
- Separation Function (monofunction)
- Lack of building quality
- Lack of space plan quality
- non-universal design

Challenges *Qualities/Potentials*

Strategy/Intervention

Adaptability

Social Capital

1. Social Bonds

Social bonds. by knowing the neighbours and **enhance the face to face meeting**

Initiate different **collective meeting and action**

2. Autonomy - Degree of Freedom

Strengthening the **role of resident in decision making and planning of Hoptille**. It also create the sense of belonging

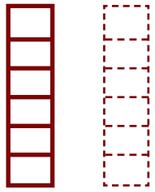
Make use of Hoptille Resident Association as a **bridge to the stakeholder**, more **responsibility to the environment.**

Strategy/Intervention

Transformability

Urban-Building Structure

1. Building Block Strategy



Reuse Partially

Reuse partially existing urban structure, foundation, and structure.

Growth and Change

Allow growth and changing overtime

2. Building Height

Mid-Rise (4-5 storeys)

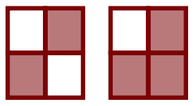
Response to the context of mid-rise neighbourhood and anti-Bijlmer

3. Building Strategy

Modular

Modular structure aims balance the standardization, customization, and transformation.

4. Function Freedom



Combination (Variants & Options)

Aiming the freedom for residents to build and custom their house.

5. Facade Freedom

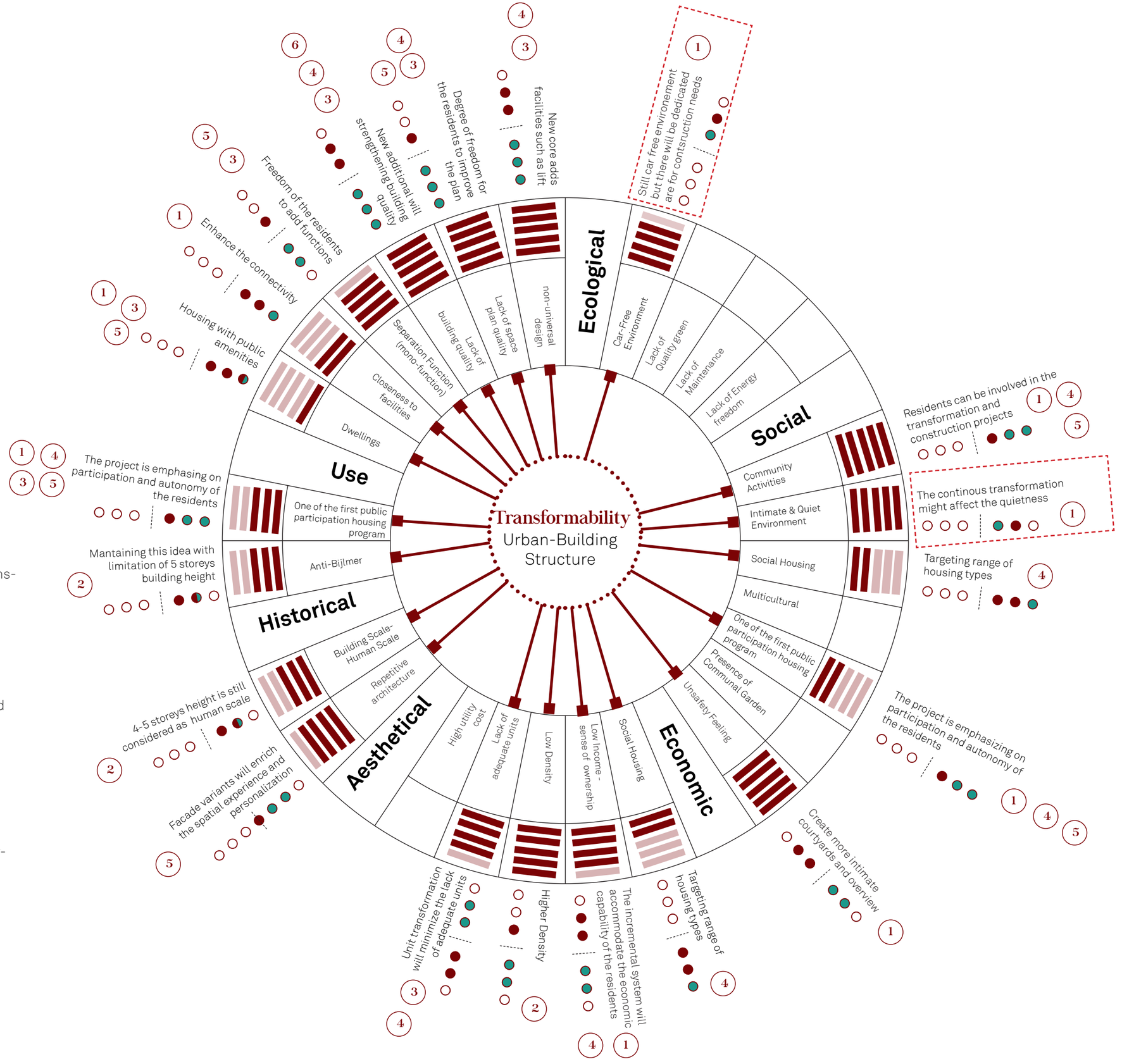
Combination (Variants & Options)

Create balance between function-performance, freedom-harmonization

6. Building Material

Wood

Aiming the sustainability material, light weight, and easy to (dis)mantle.



Strategy/Intervention

Ecological

Urban-Building Structure

1. Enhance Biodiversity

To maximize the vegetation structure space. (S,M,L)

Water landscape

2. Sustainable Building Material & Energy

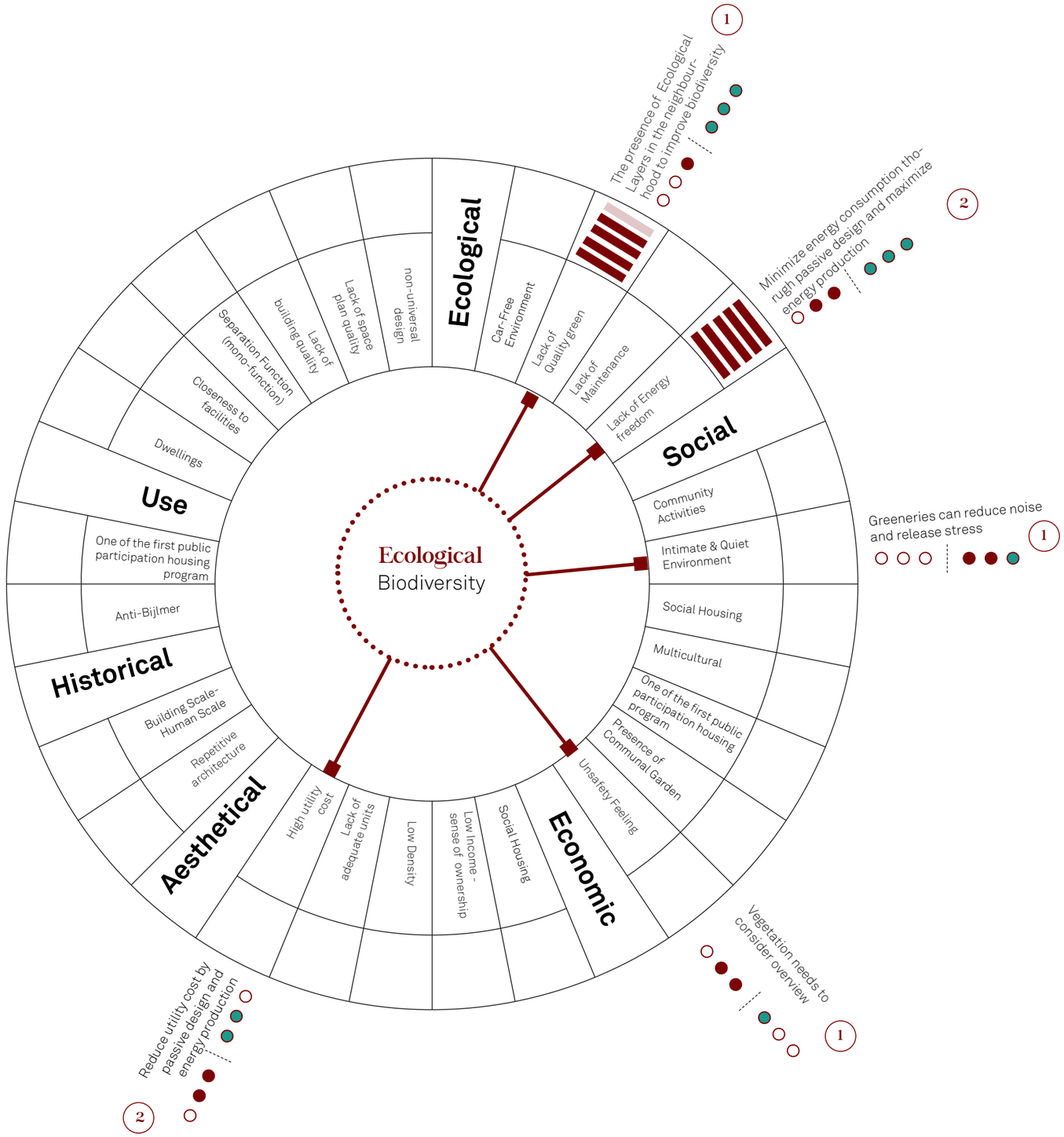
Wood as Building Material

Meet the energy requirement (passive & active)

3. Reuse - Recycle

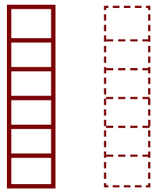
Reuse partially existing structure, and building component

Recycle existing building material



Building Intervention

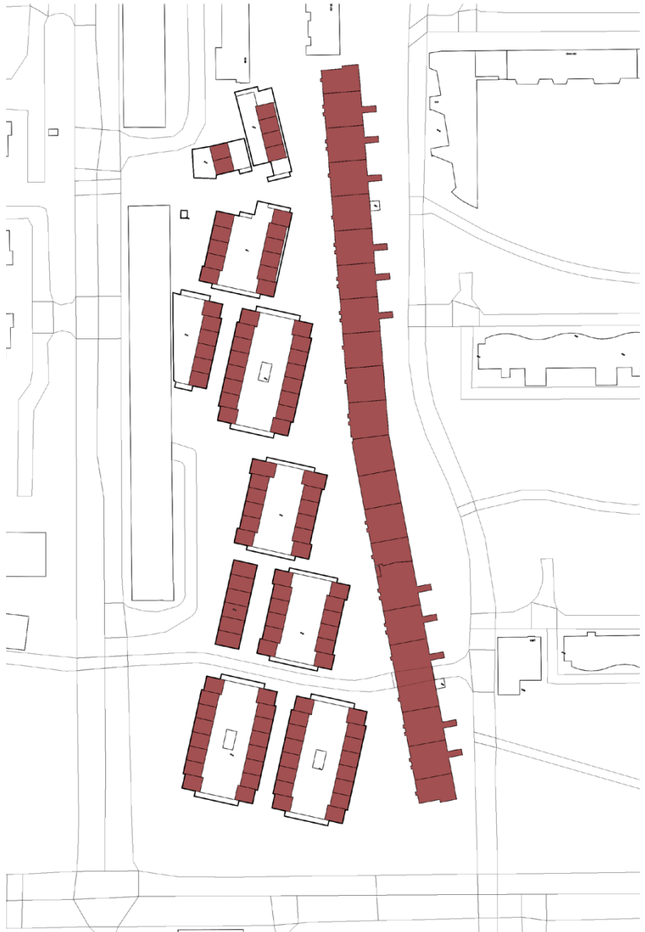
1. Building Block Strategy



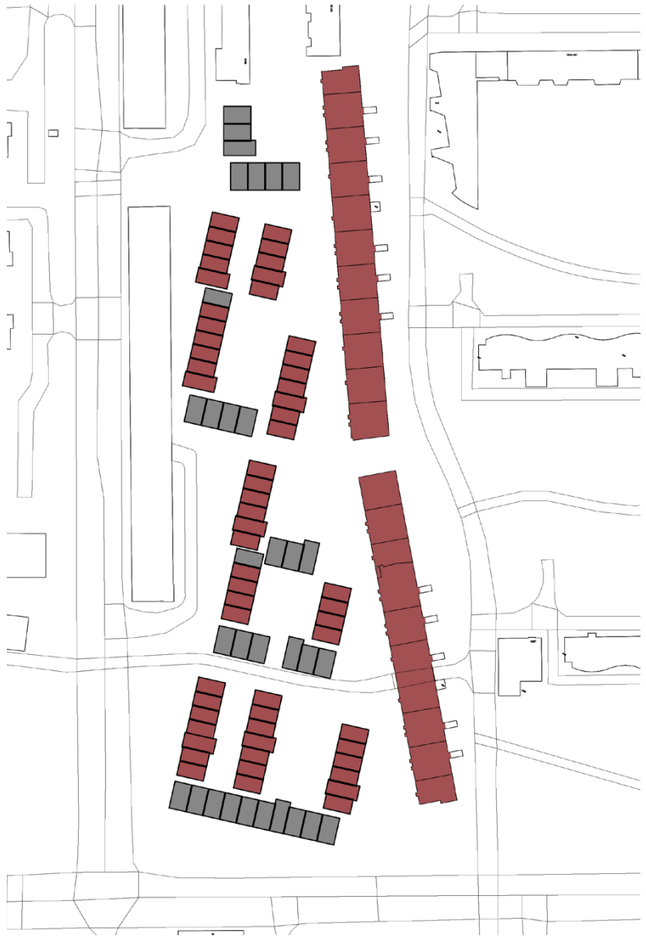
Reuse Partially

Mid-Rise (4-5 storeys)

Stadsarchief Amsterdam (1981) *Luchtfoto Bijlmer Centrum*
(http://archief.amsterdam/archief/10009.B)



Existing Urban Block



Proposal Urban Block

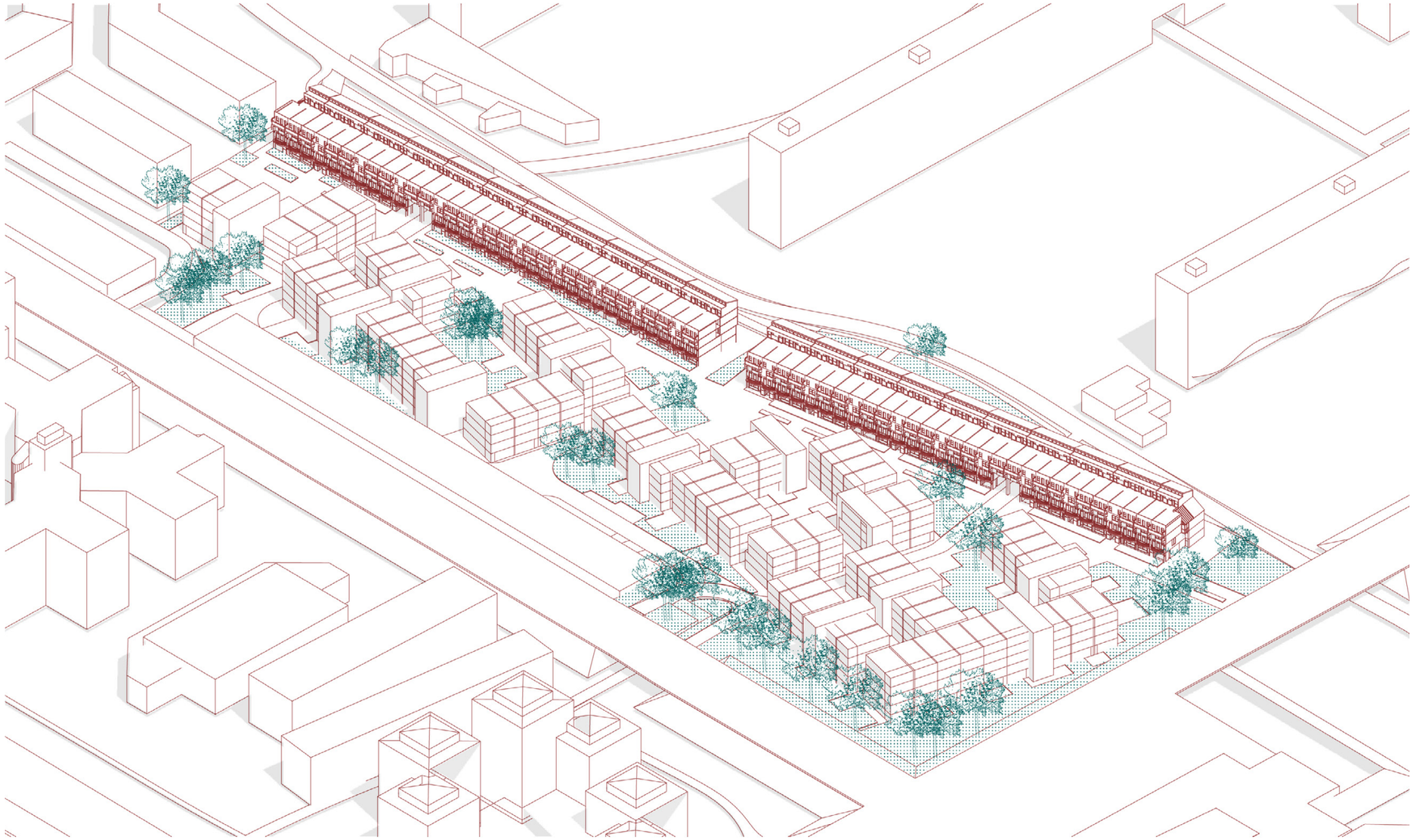
Building Intervention

2. Building Height

Mid-Rise (4-5 storeys)

Hoptille Context
(Low & Mid-rise)

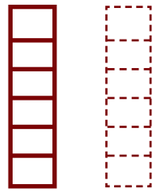
Potential of
Densification



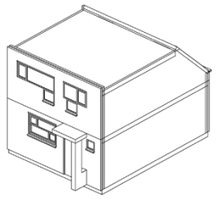
Stadsarchief Amsterdam (n.d.) *Hoptille. Ontworpen door VDL (Verster Dijkstra Loerakker)*
(http://archief.amsterdam/archief/5293.FO_B)

Building Intervention

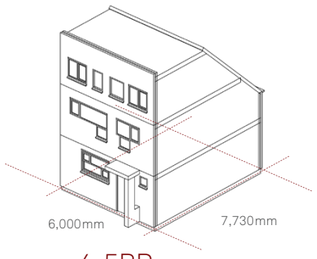
1. Building Block Strategy



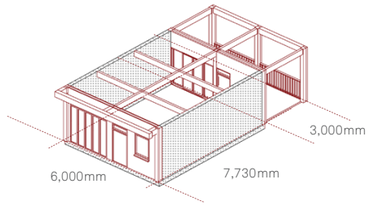
Reuse Partially



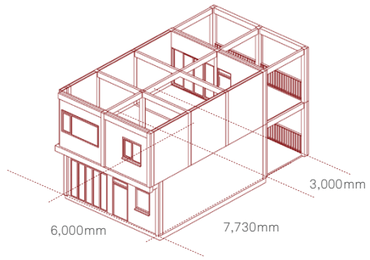
2-3BR

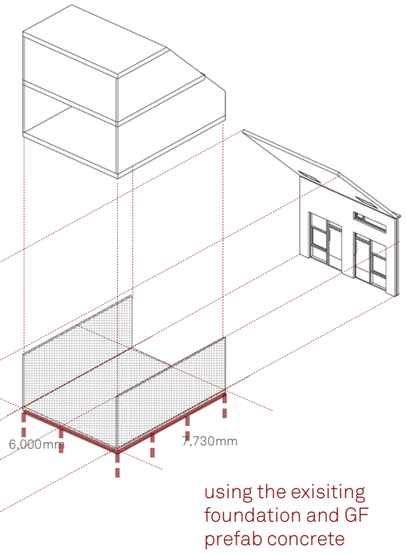


4-5BR



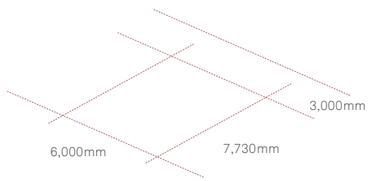
Glulam timber
as new structure

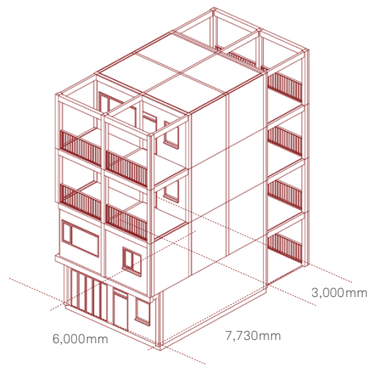




Dismantle the doors
& windows

using the exisiting
foundation and GF
prefab concrete



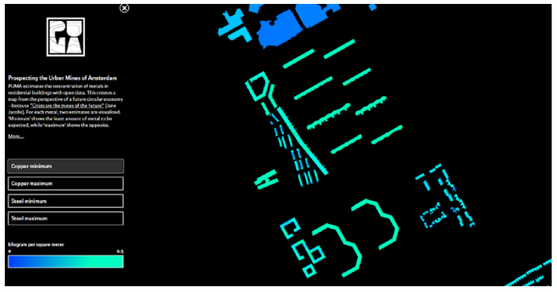


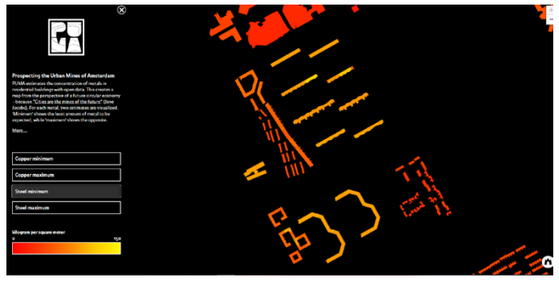
Exisitng brick Bricks will be use
as .. external wall? partition
wall? paving? park furniture

Crushed concrete - downcycling
to city and some can be used as
park furniture

Source : Yong Gwan Kim (n.d.) Hanil Visitor Center

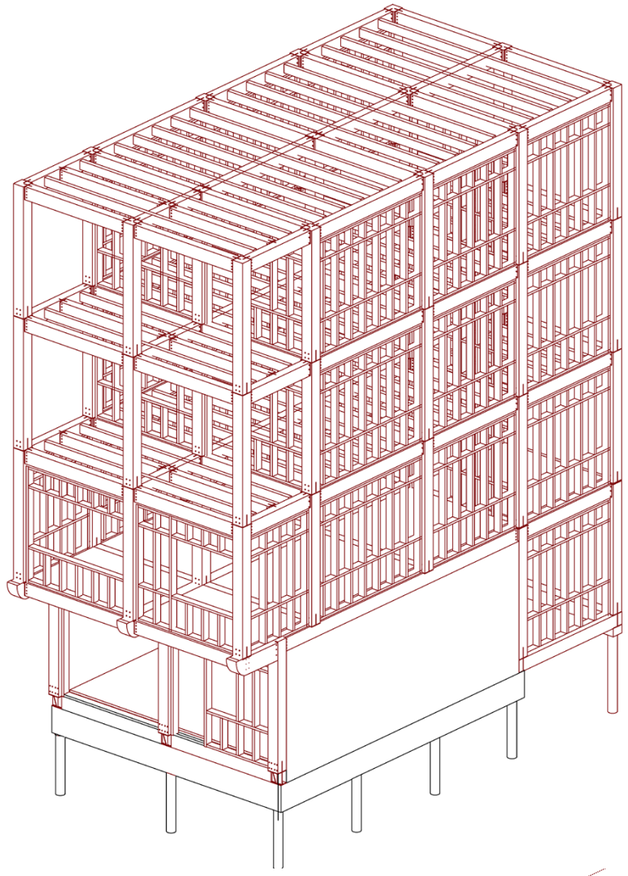
Potentially
Urban Mines

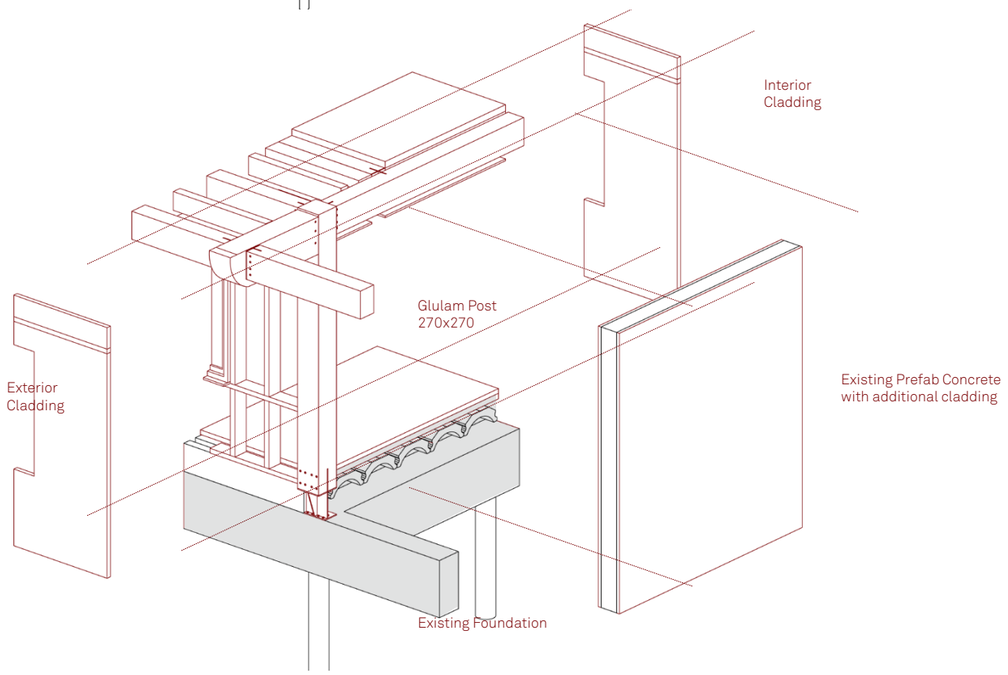


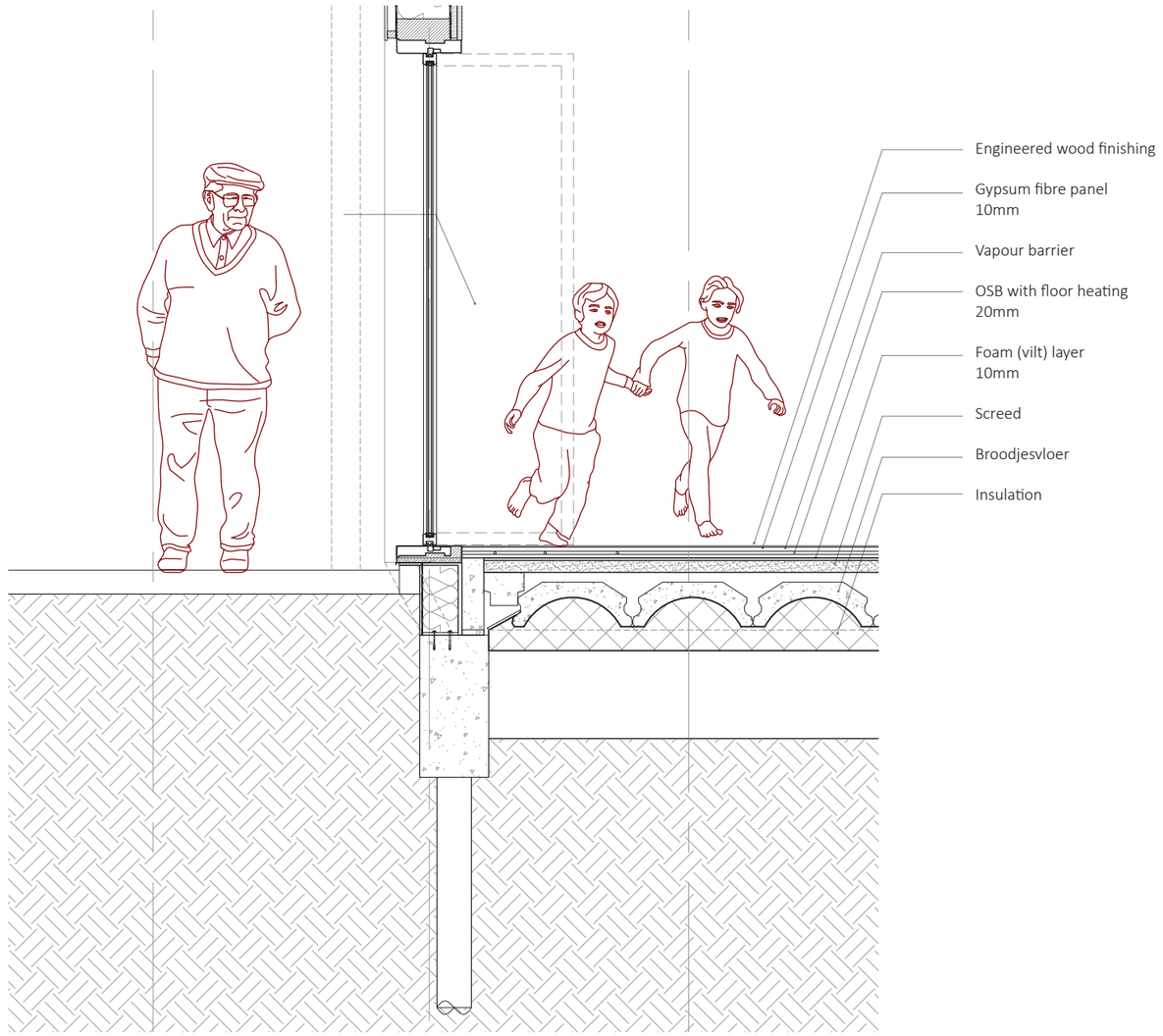


Prospecting the Urban Mines of Amsterdam, https://code.waag.org/puma/#52.3096,4.9541,16

Structural Concept

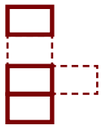






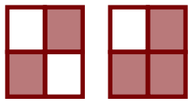
Freedom Concepts

3. Building Strategy



Modular

4. Function Freedom

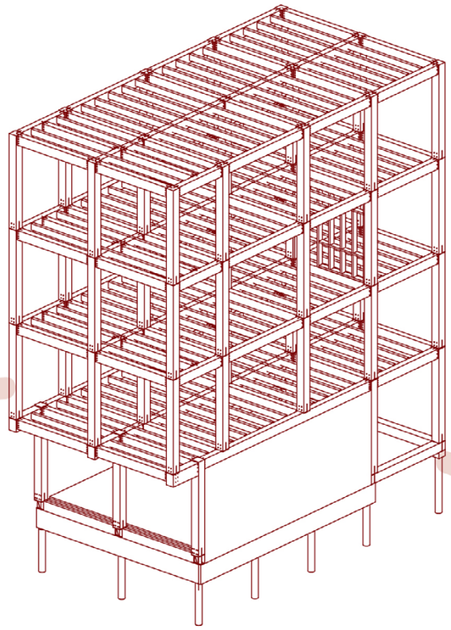


Combination (Variants & Options)

5. Facade Freedom

“Supports are part of the public domain and are permanent, while the infill belongs to the individual and is changeable. Public participation and freedom of choice of the user is the key objective.”

— N. John Habraken (1961)

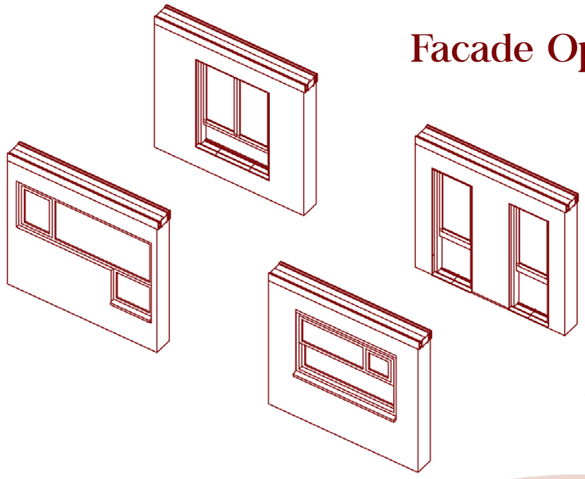


Structure

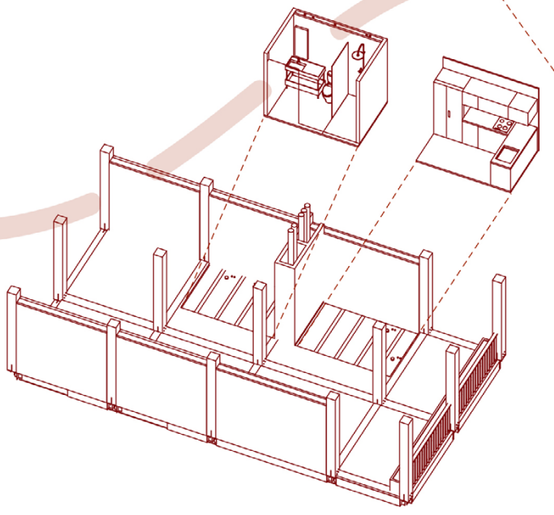
Fix/Given

Site

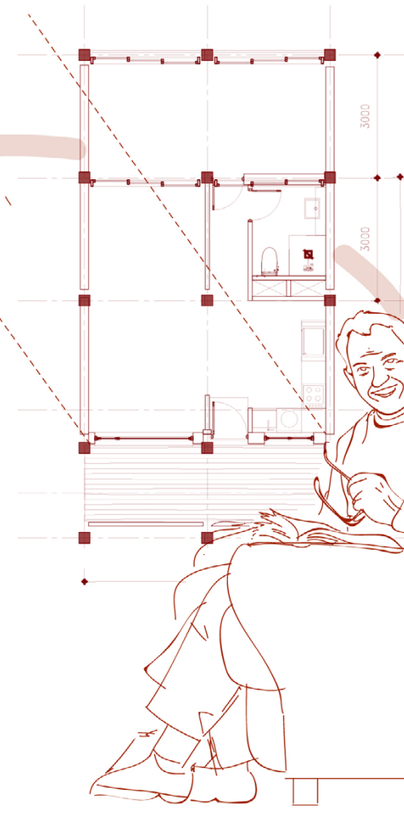
Permanent



Facade Options



Toilet & Kitchen

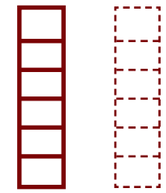


Layout Plan

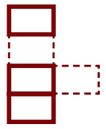
Stuff - People

Dynamic

Building Intervention



Reuse Partially



Modular

Wood

~+144 houses

Potential of Densification

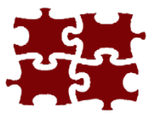
Locally Industrial Forest

Save embodied carbon compare to additional densification concrete and brick material ~1872 ton*

Carbon Emission Saving

Facade & Building Component can be used for other tenants

Circular Economy



Degree of Flexibility

Modular and prefabricated means less waste material

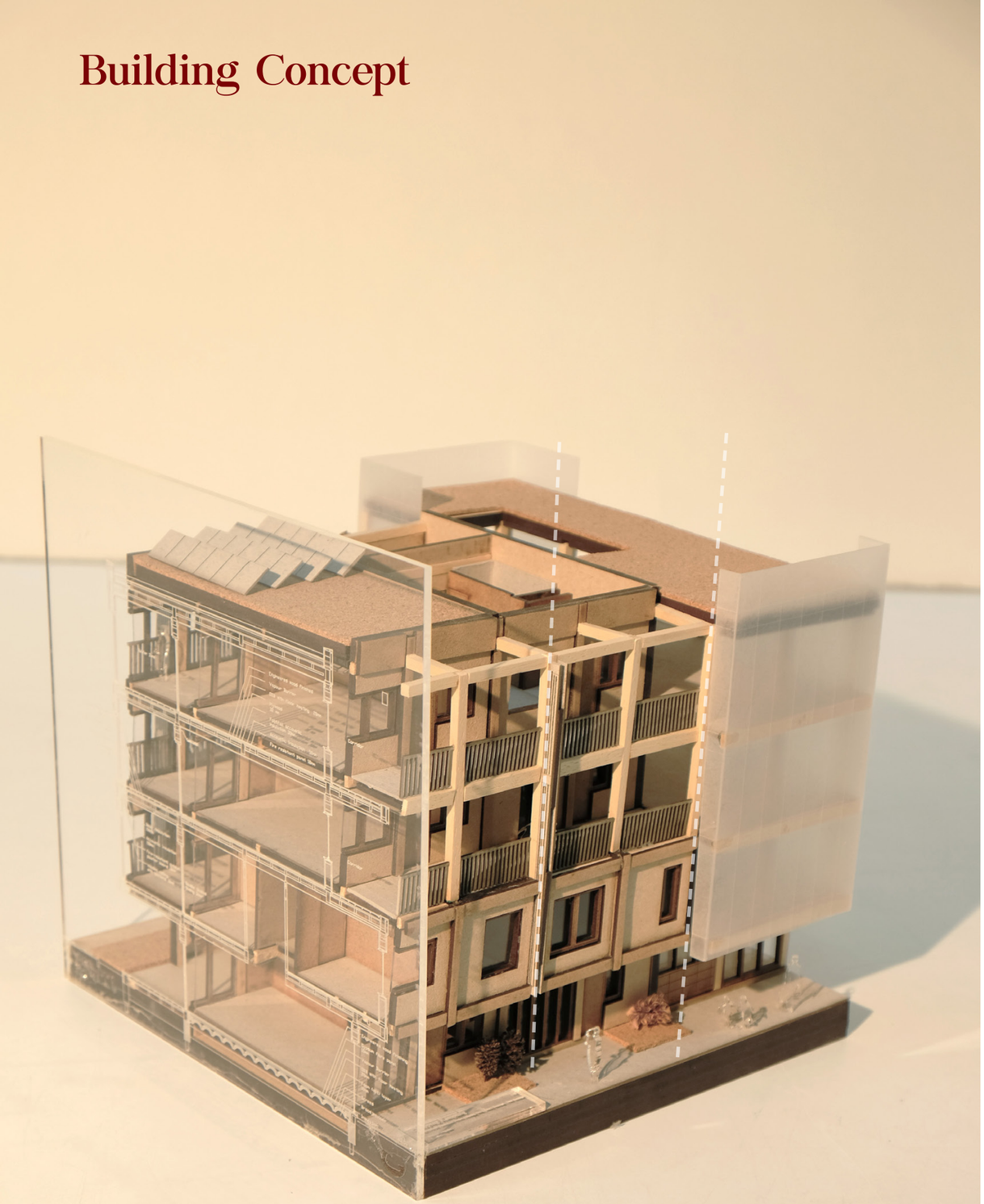
Light Weight

Easy Assemble

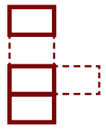
New Load fit to the existing foundation

* calculation based on data from Hegger et al.,2005

Building Concept

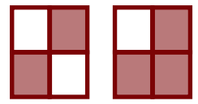


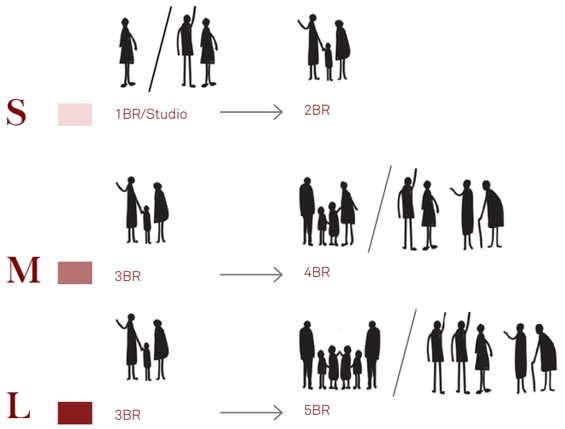
3. Building Strategy

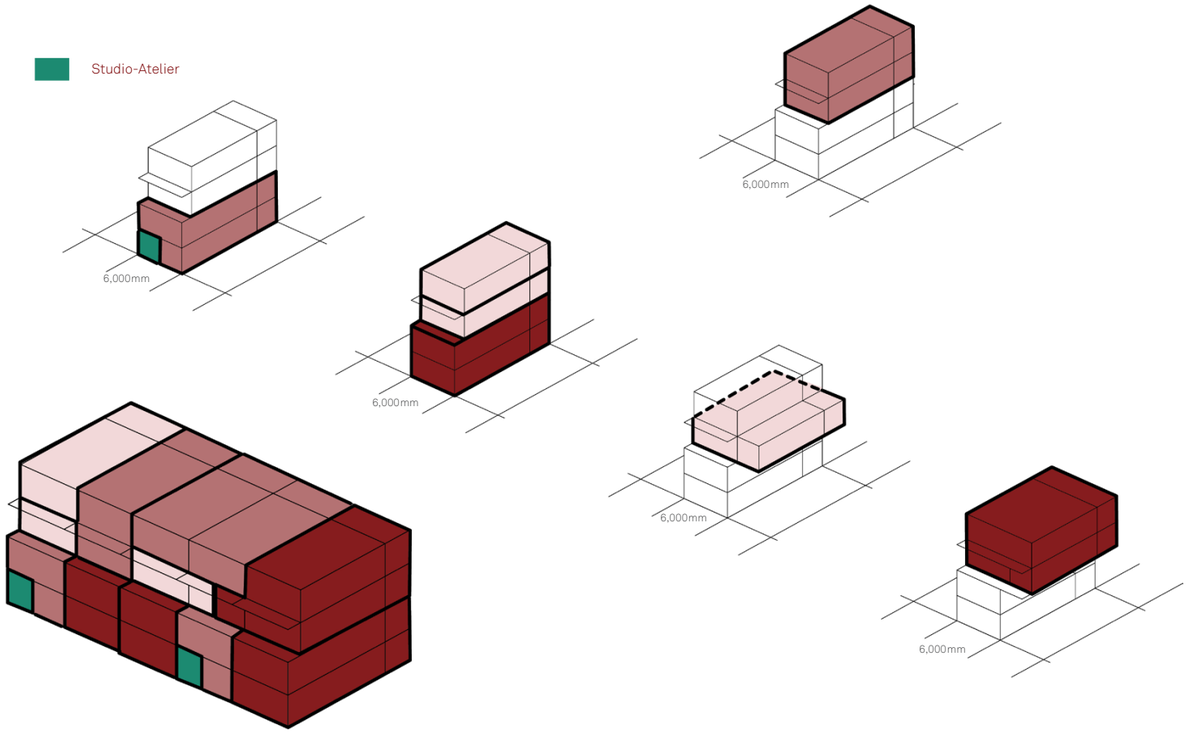


Modular

4. Function Freedom







Type Loft - 01

L

Level GF& L01

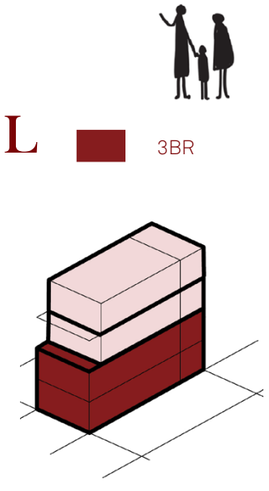
Area 140 sqm

Typical 3BR

Potential 5BR
Private Garden

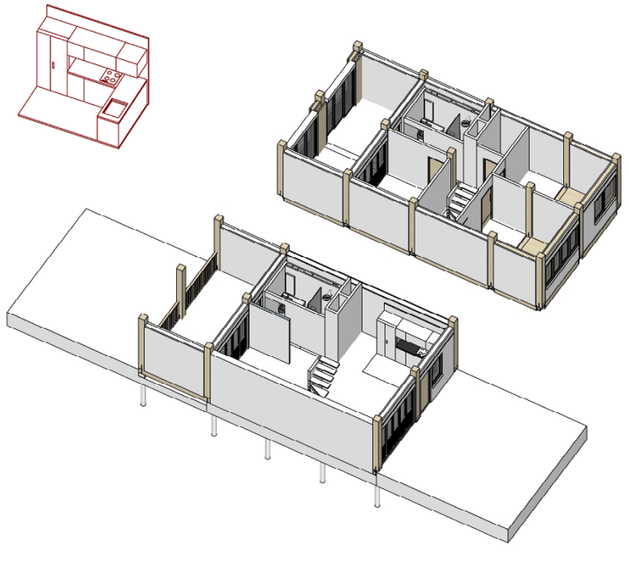
Toilet
Degree of Recomendation

Kitchen
Degree of Recomendation



Toilet
Degree of Recomendation

Kitchen
Degree of Rec



Type S-02

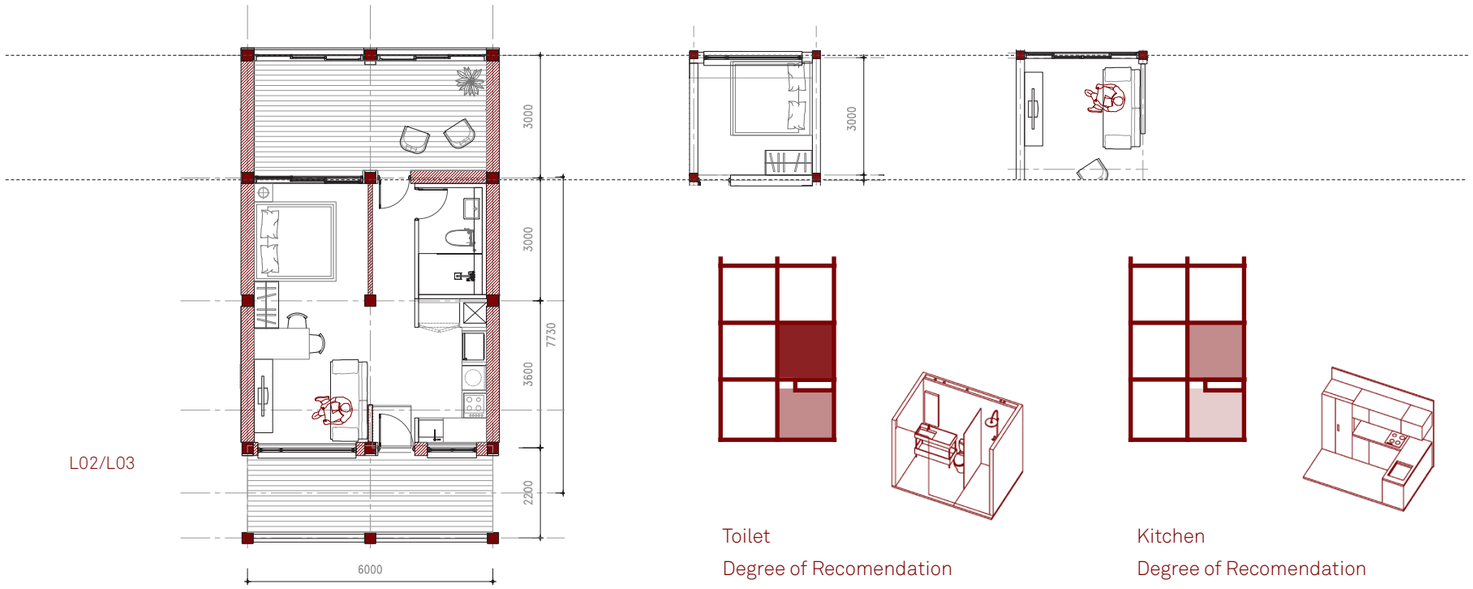
S

Level L02/L03

Area 60 sqm

Typical 1BR/Studio

Potential 2BR



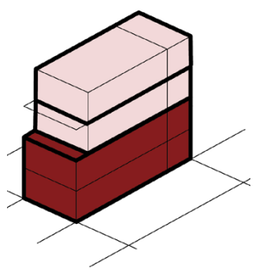
Toilet

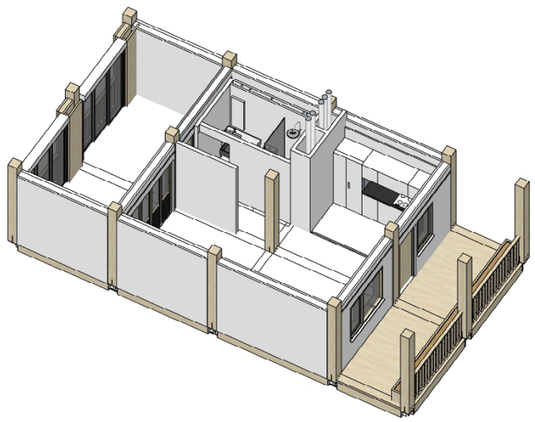
Degree of Recomendation

Kitchen

Degree of Recomendation

S 1BR/Studio → 2BR





Type M-02-Loft

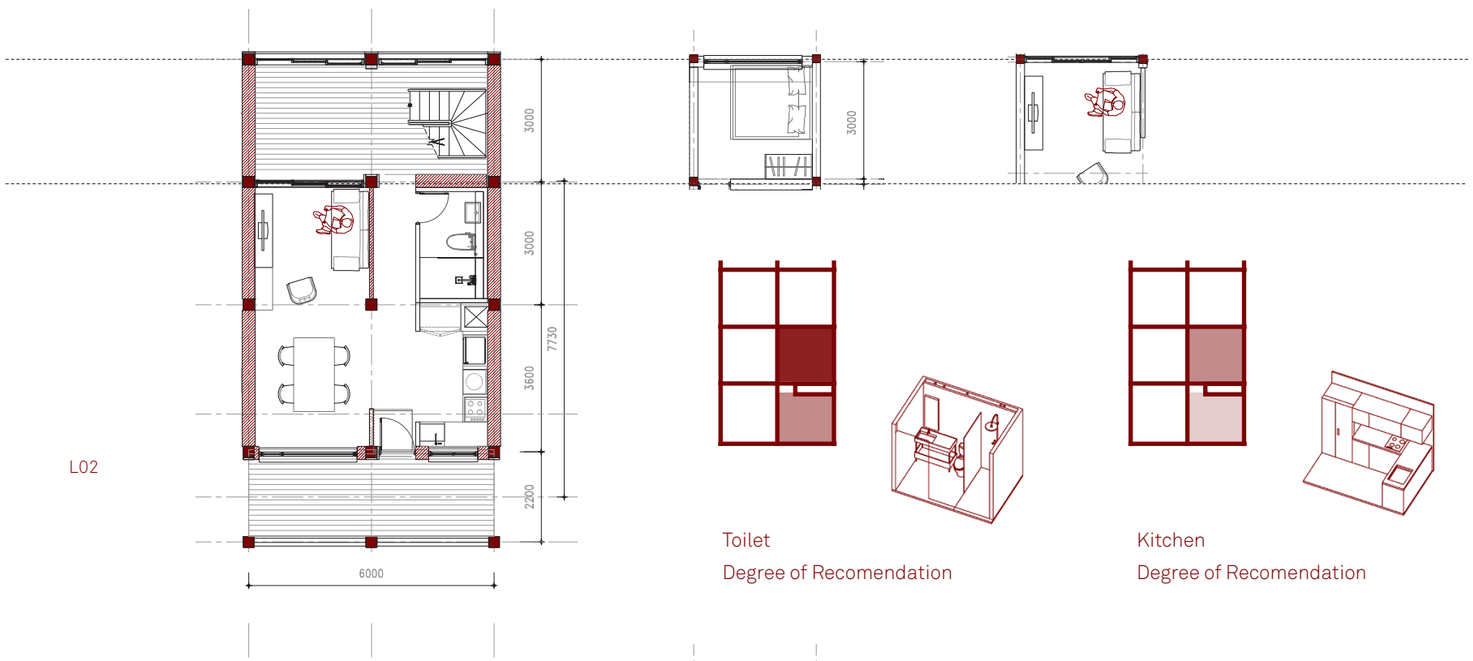
M

Level L02 & L03

Area 120 sqm

Typical 3BR

Potential 4BR



L02

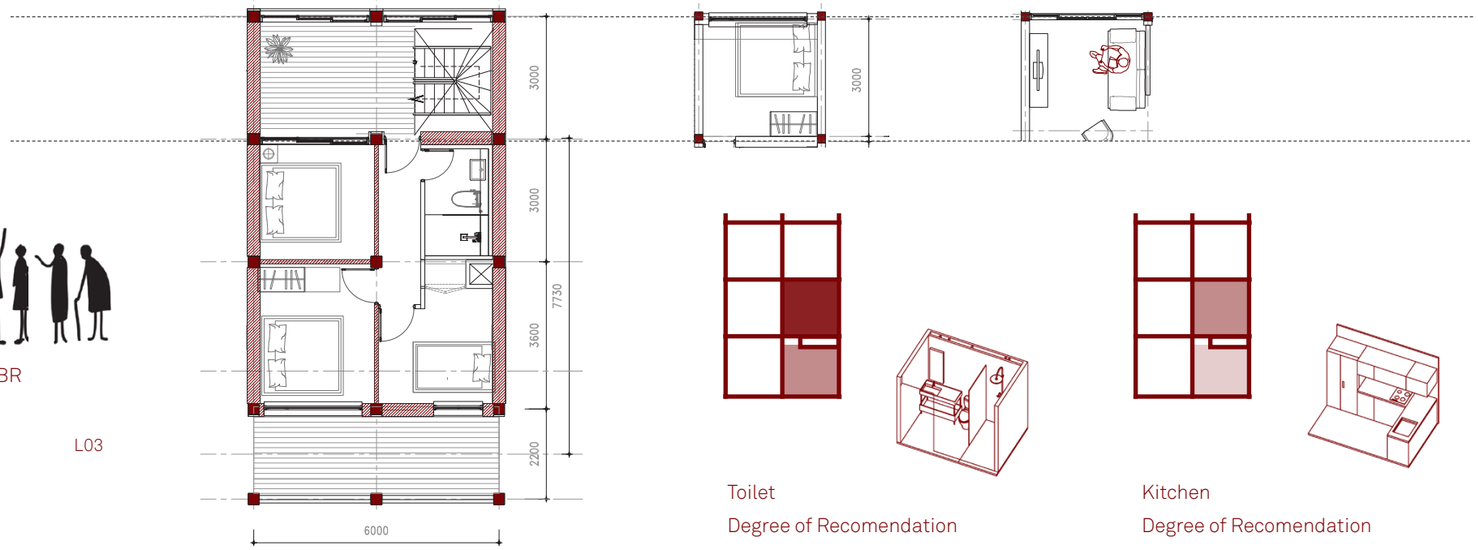
Toilet

Degree of Recomendation

Kitchen

Degree of Recomendation

M 3BR → 4BR



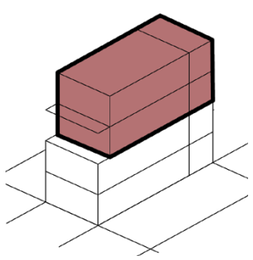
L03

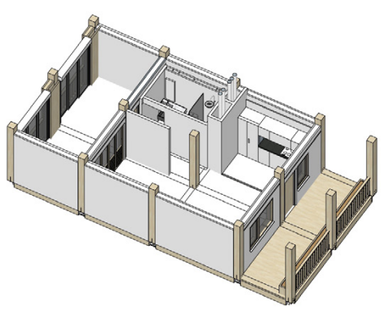
Toilet

Degree of Recomendation

Kitchen

Degree of Recomendation





Type M-02-H

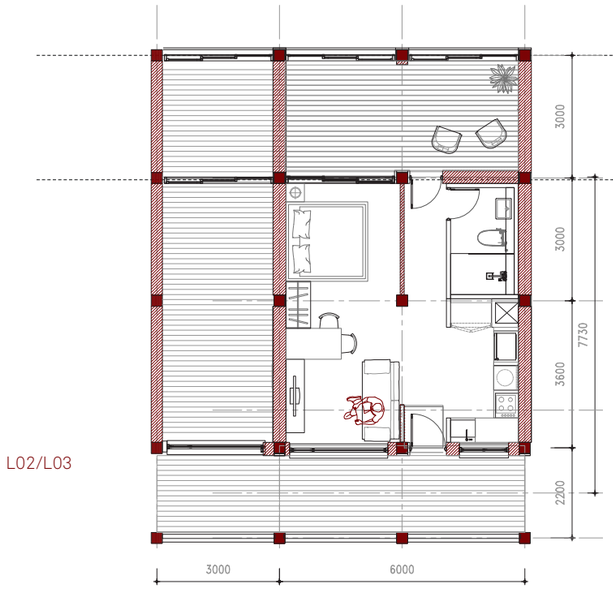
M

Level L02 & L03

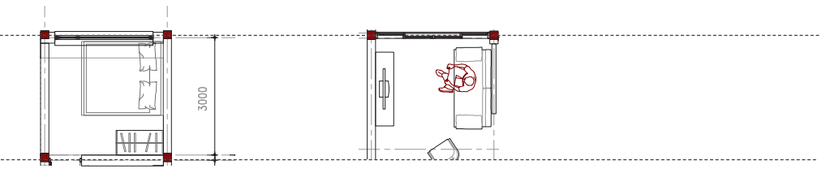
Area 88 sqm

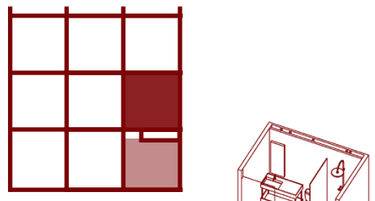
Typical 1BR

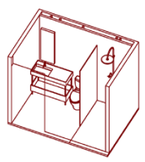
Potential 3BR



L02/L03

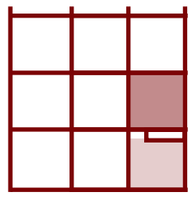


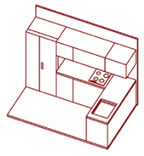




Toilet

Degree of Recomendation

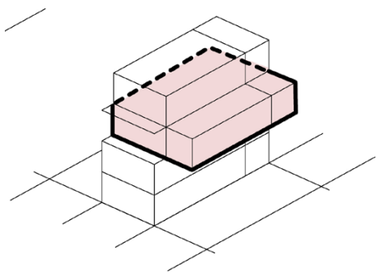




Kitchen

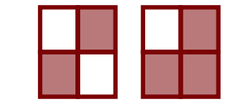
Degree of Recomendation

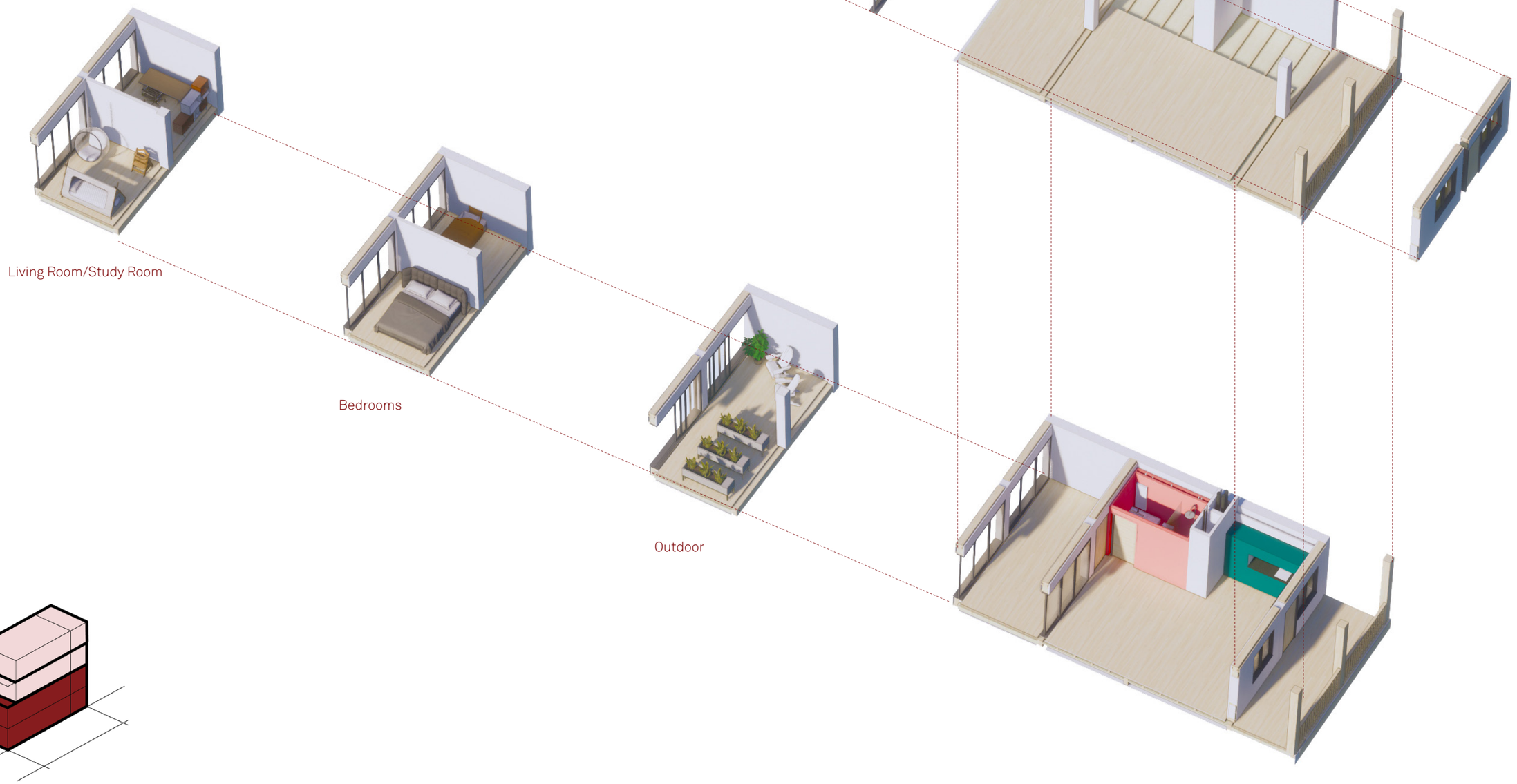
M 1BR/Studio → 3BR

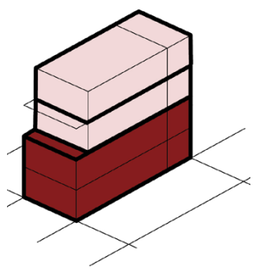


Building Concept

4. Function Freedom

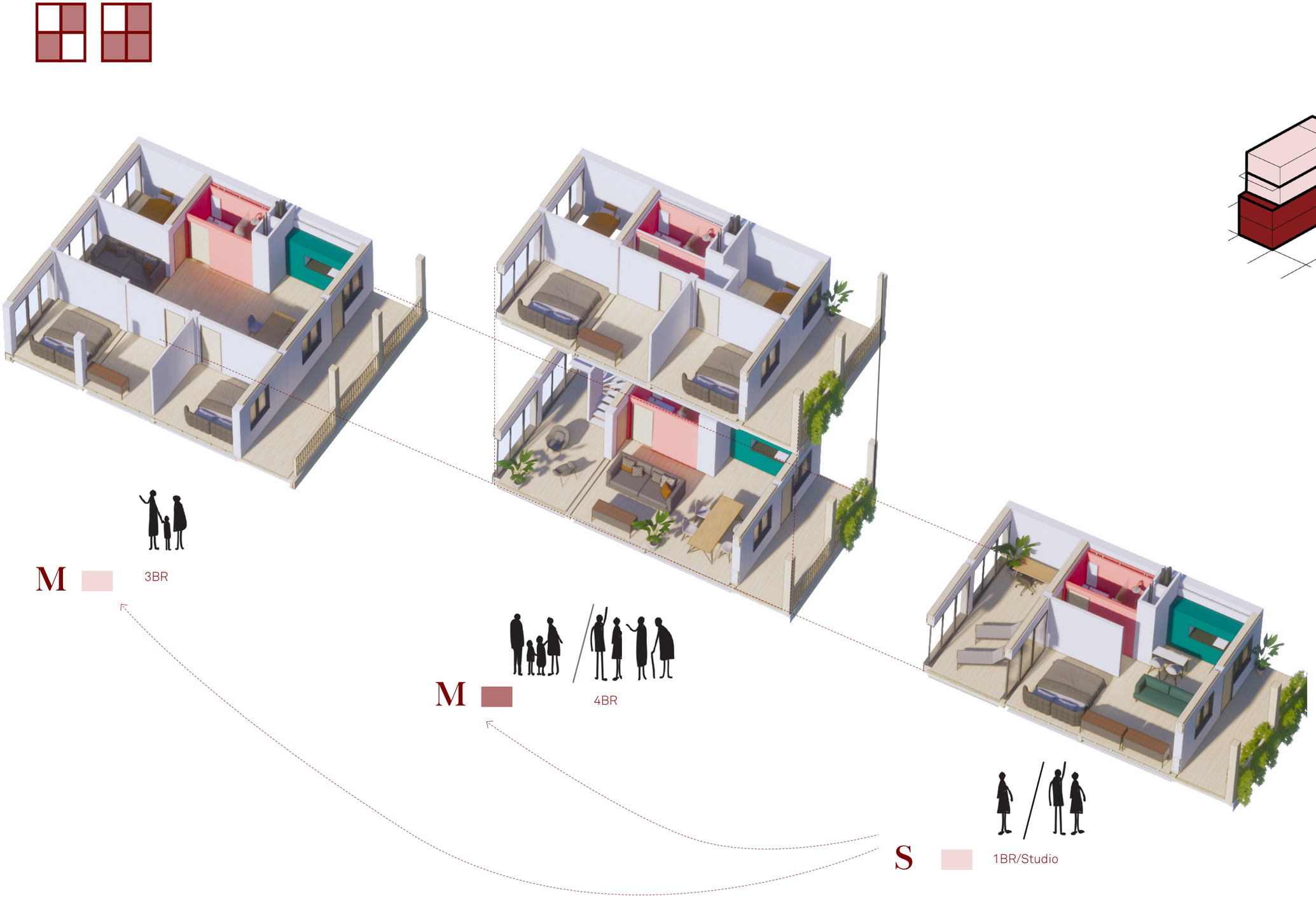




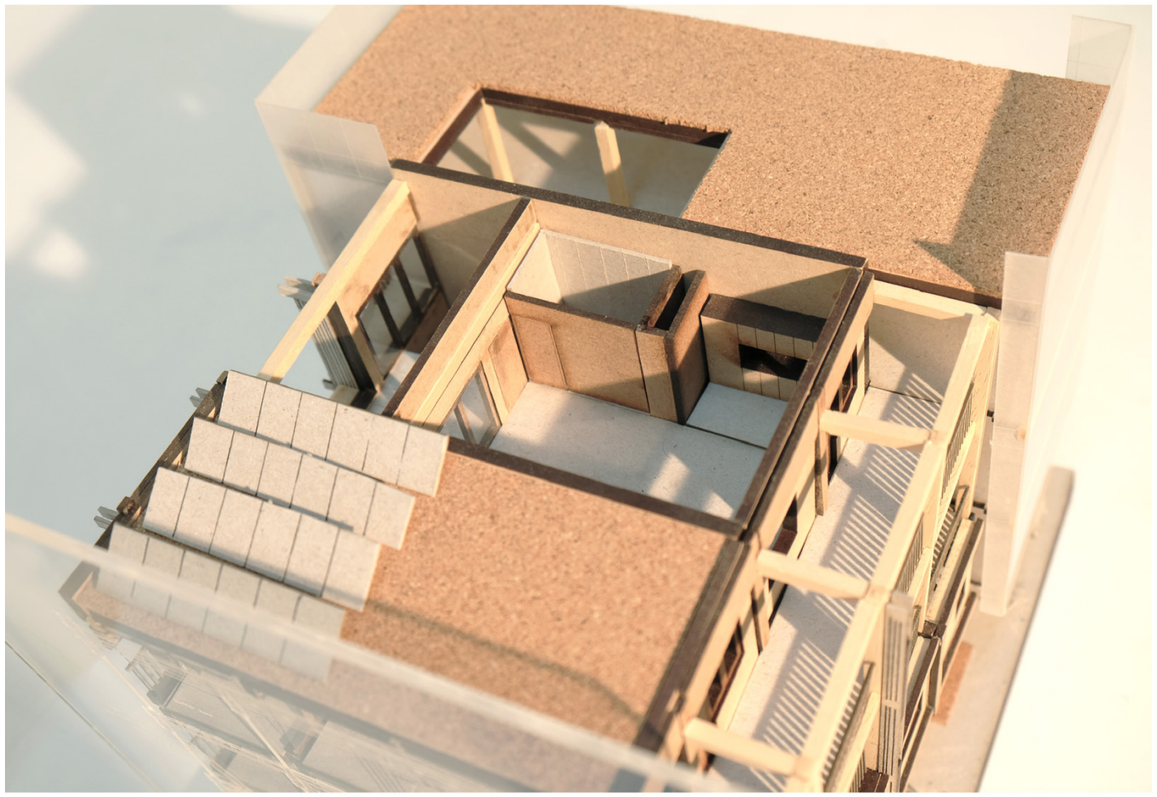


Building Concept

4. Function Freedom

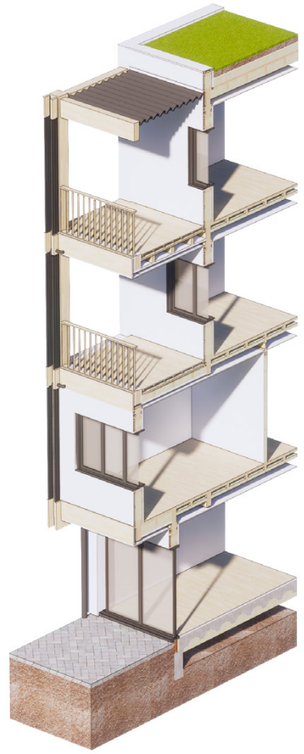


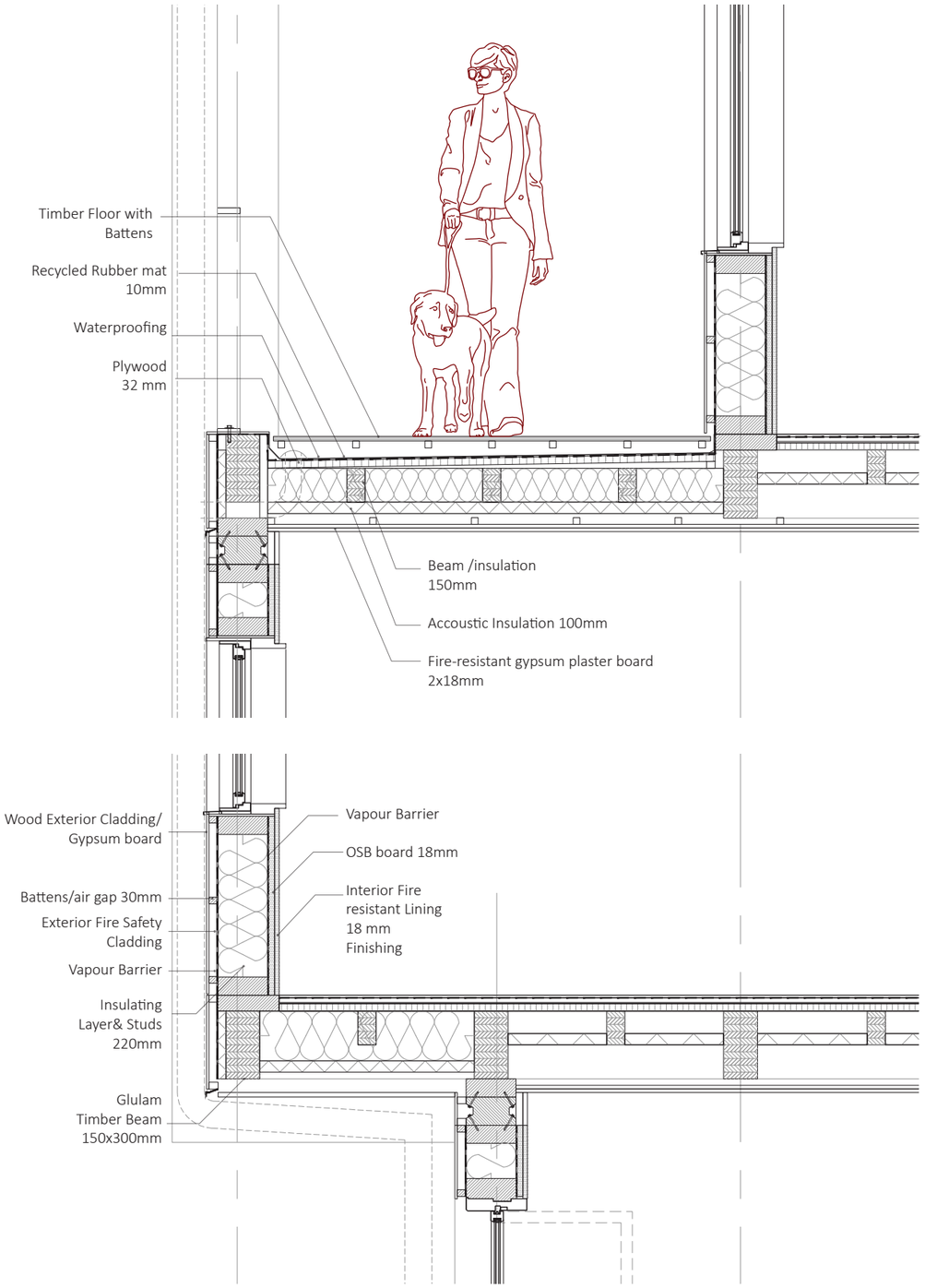
Building Concept



Building Concept

5. Facade Freedom



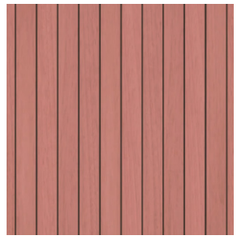


Building Concept

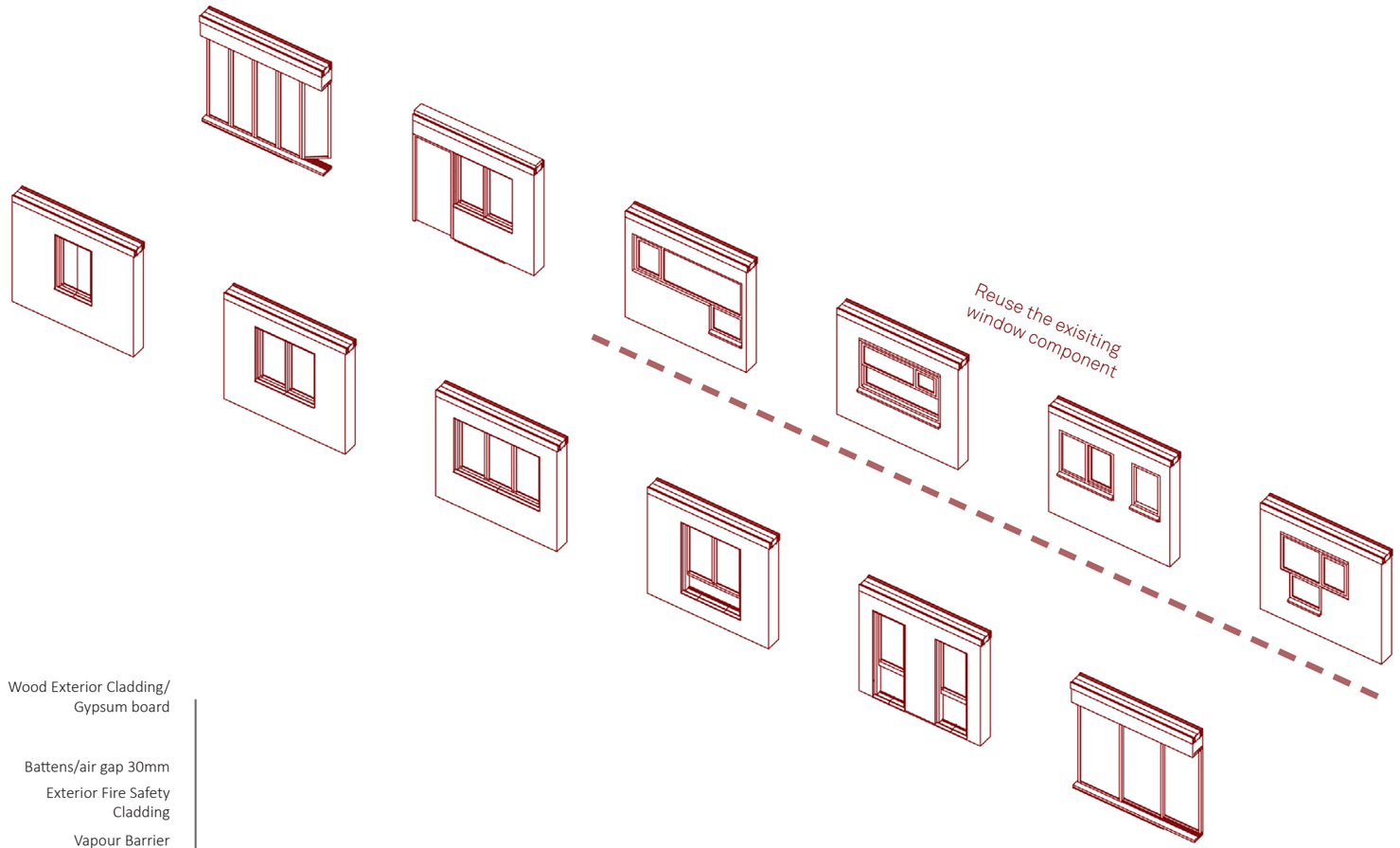
5. Facade Freedom

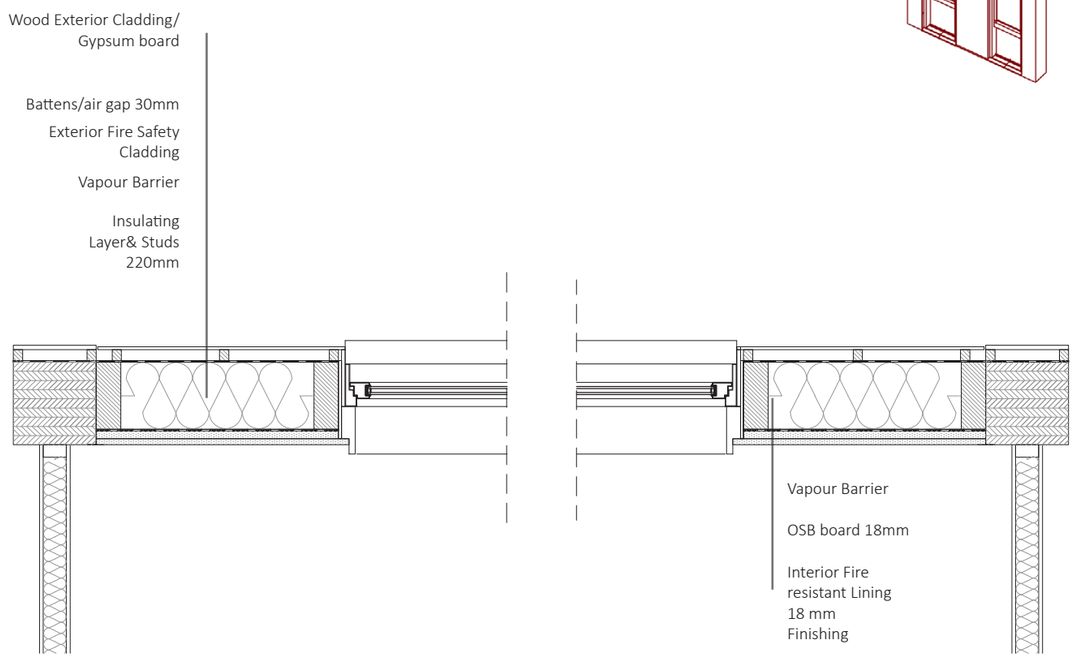
Texture & Colour

Natural Colour
Wood Cladding

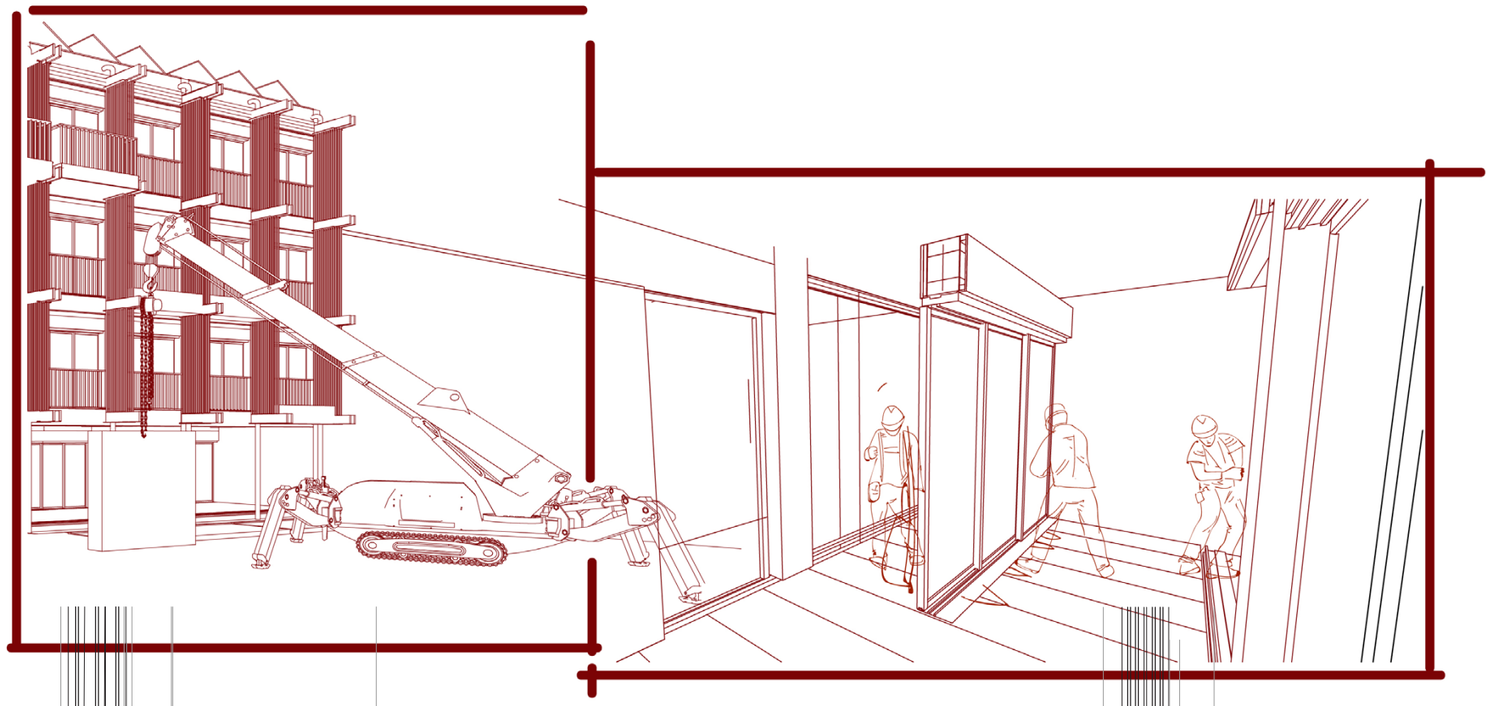


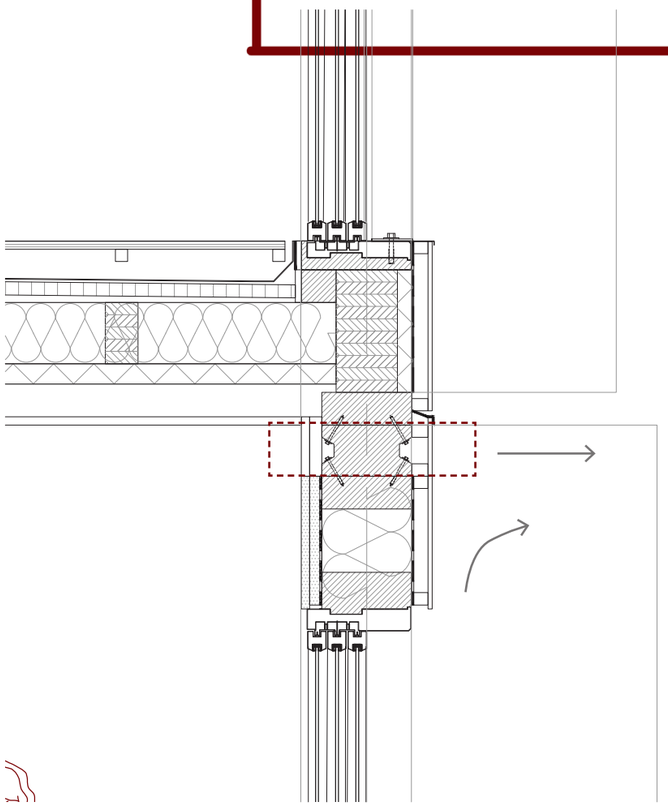
Red Coloured
Wood Cladding

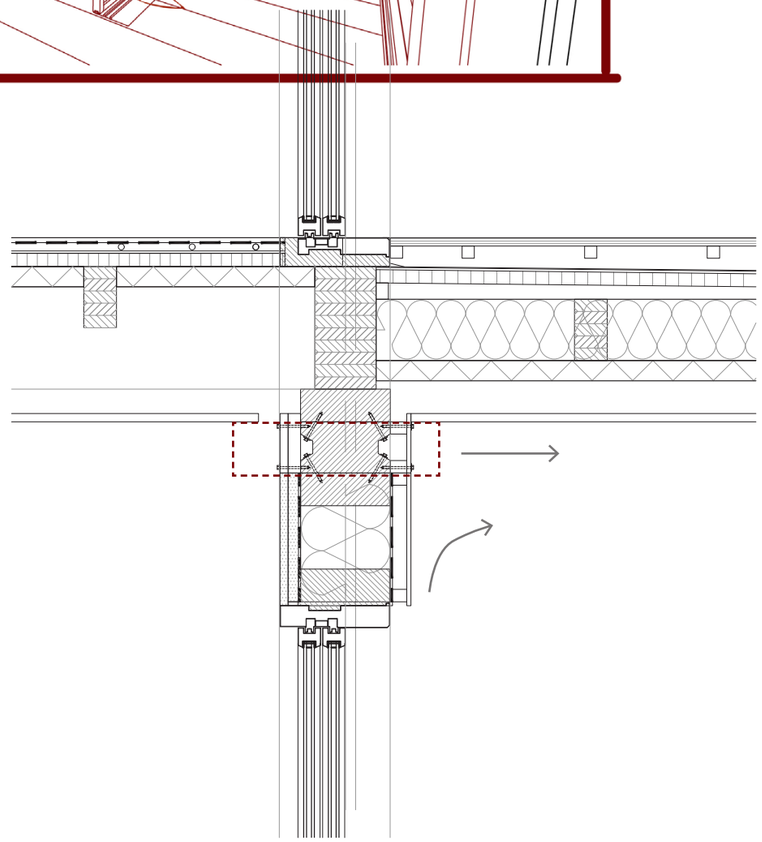


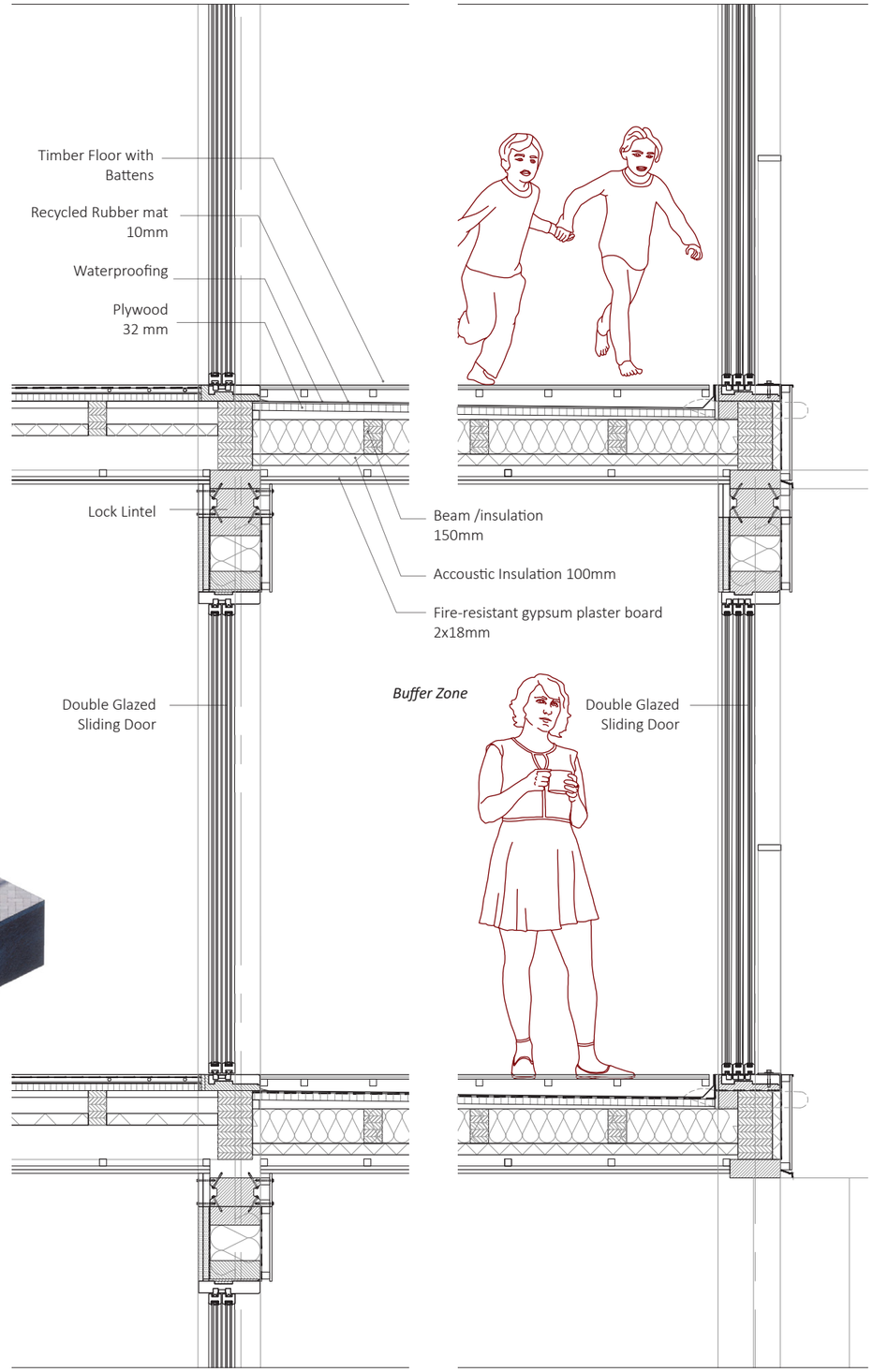


How to (De)Mounted

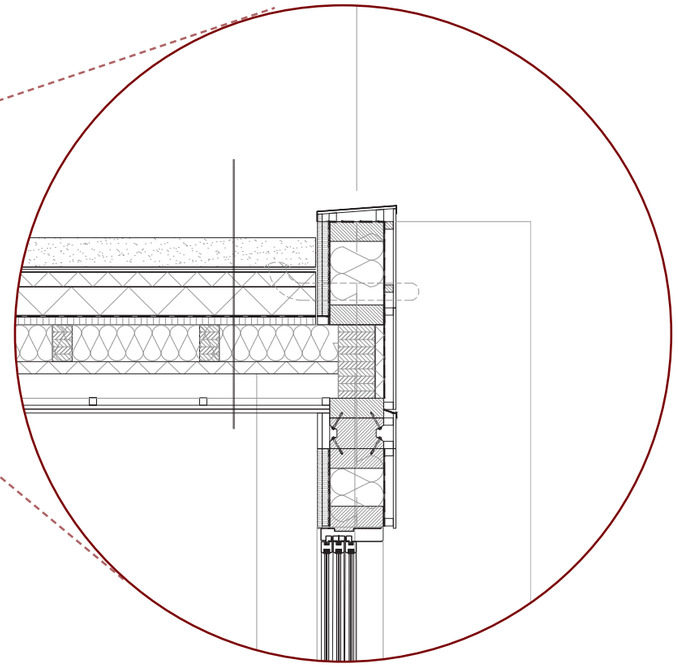







Timber Floor with Battens
Recycled Rubber mat 10mm
Waterproofing
Plywood 32 mm
Lock Lintel
Beam /insulation 150mm
Accoustic Insulation 100mm
Fire-resistant gypsum plaster board 2x18mm
Double Glazed Sliding Door
Buffer Zone
Double Glazed Sliding Door

Facade Options



Extensively planted green roof
120mm

Fleece protective layer
10mm

Two-ply rof membrane
10mm

Gradien insulation
60mm

Thermal Insulation
140mm

Vapour barrier

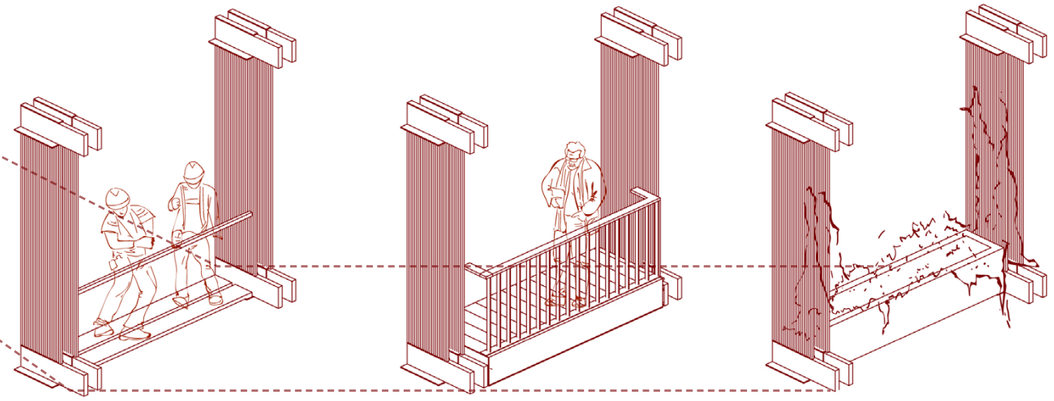
Construction phase sealing
3.5mm

Plywood
32mm

Beam /insulation
150mm

Accoustic Insulation 100mm

Fire-resistant gypsum plaster board
2x18mm



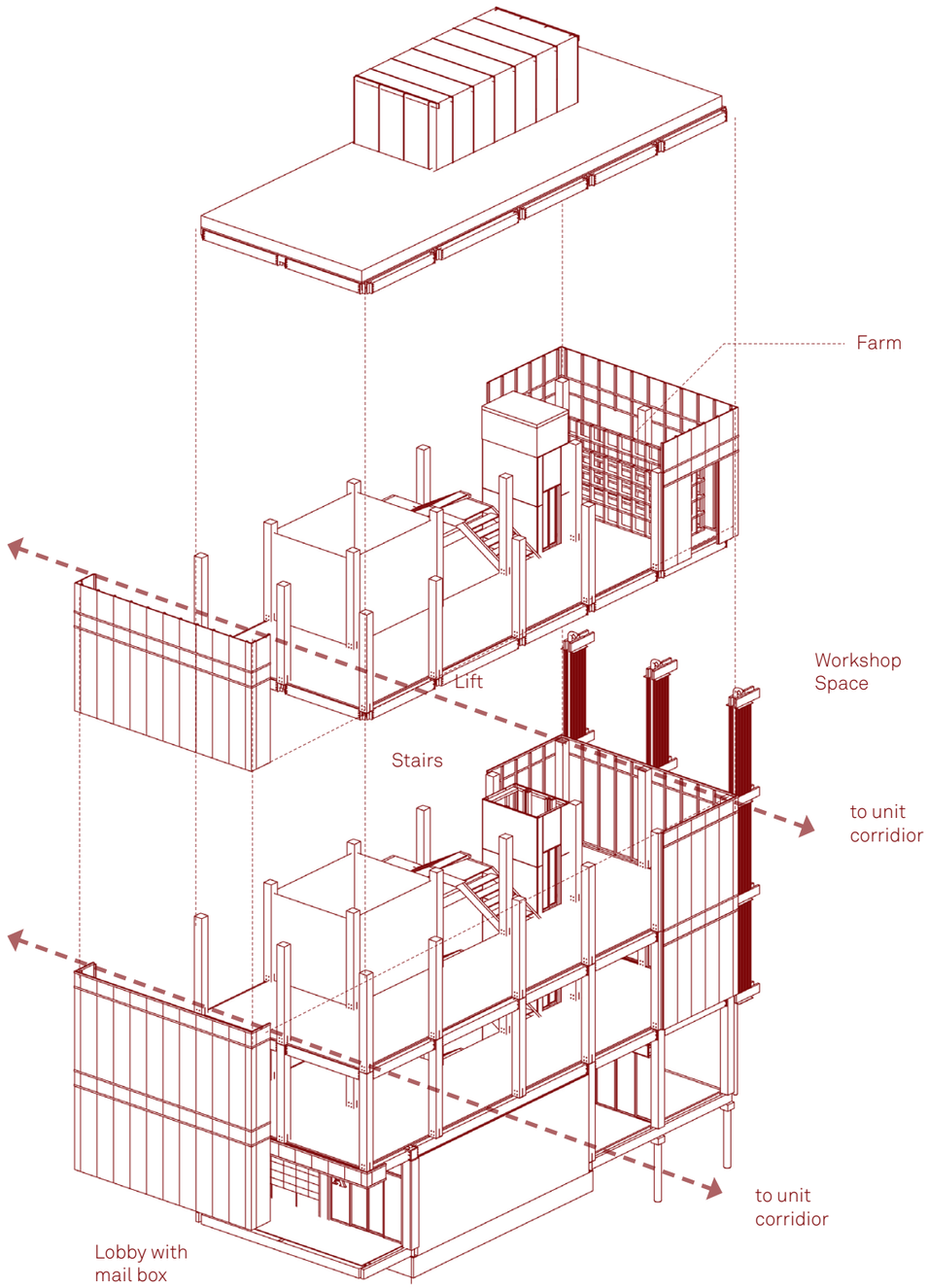
Temporary Scafolding

Balcony

Planters

Facade Concept

Core


Farm
Workshop
Space
Lift
Stairs
to unit
corridior
to unit
corridior
Lobby with
mail box

Master Plan

1 Hoptille Mid-rise

2 New middle access

3 Main Public Building

4 Low Rise-Intervention

5 Bridge from Bus stop

B Bus Stop

P Hoptille Parking Building

Master Plan

Master Plan

Parking for Disable and Drop-off (car & Truck)

Dedicated Space for Mini Crane

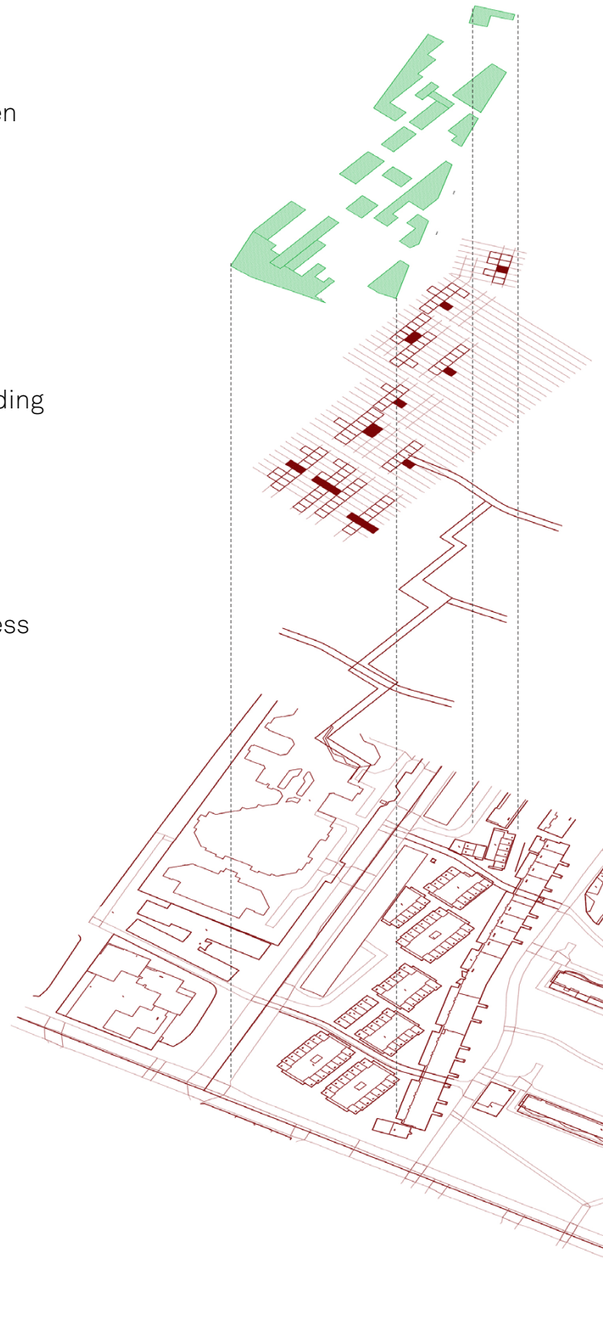
Master Plan Layers

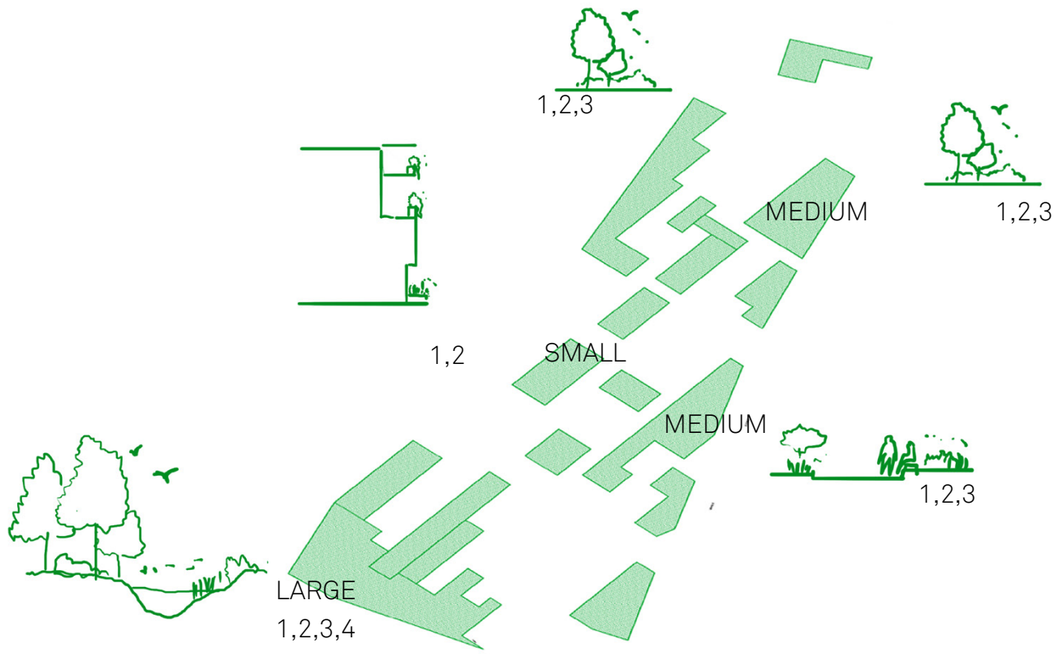
Green

Building

Access

Site





To maximise the vegetation structure, space. A maximised vegetation structure would consist

1) undergrowth of **herbaceous plants,**

2) a low shrub **layer**,

3) a layer of **small trees and tall shrubs**,

4) a **canopy layer**.

In addition, climbers could be added

Site Plan

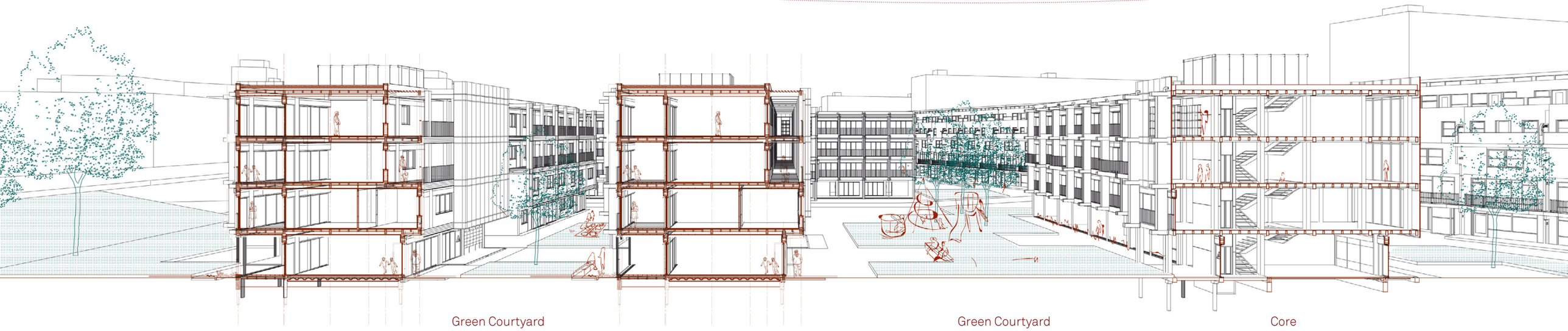
L02

View from the Viaduct (south)

View towards the Public Building

Public Building

Section



Green Courtyard

Green Courtyard

Core

Interior View

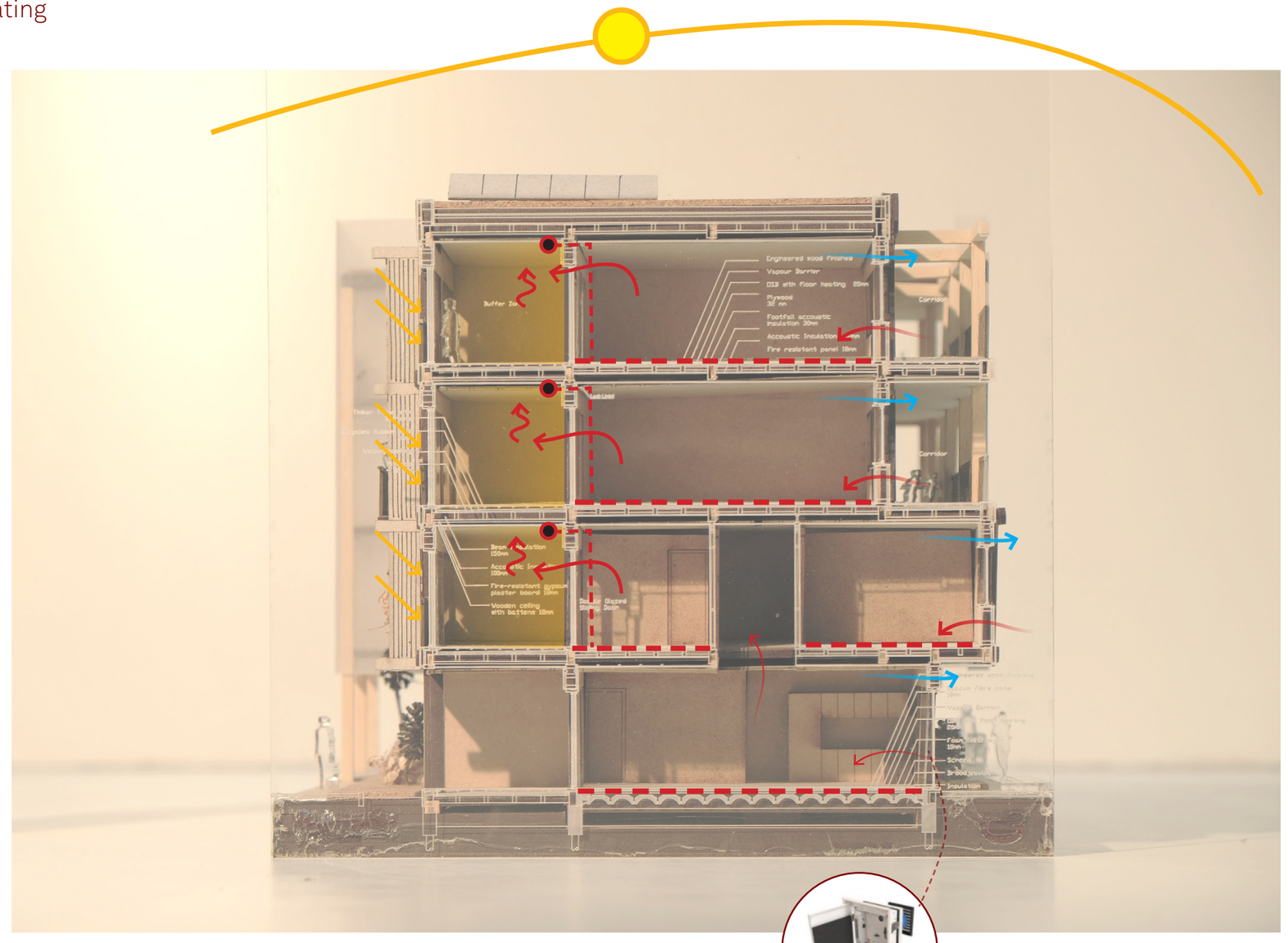
View towards the Innercourt

Climate Concept

Winter

Existing heating system in the block is using Gas.
It is not connected to city heating

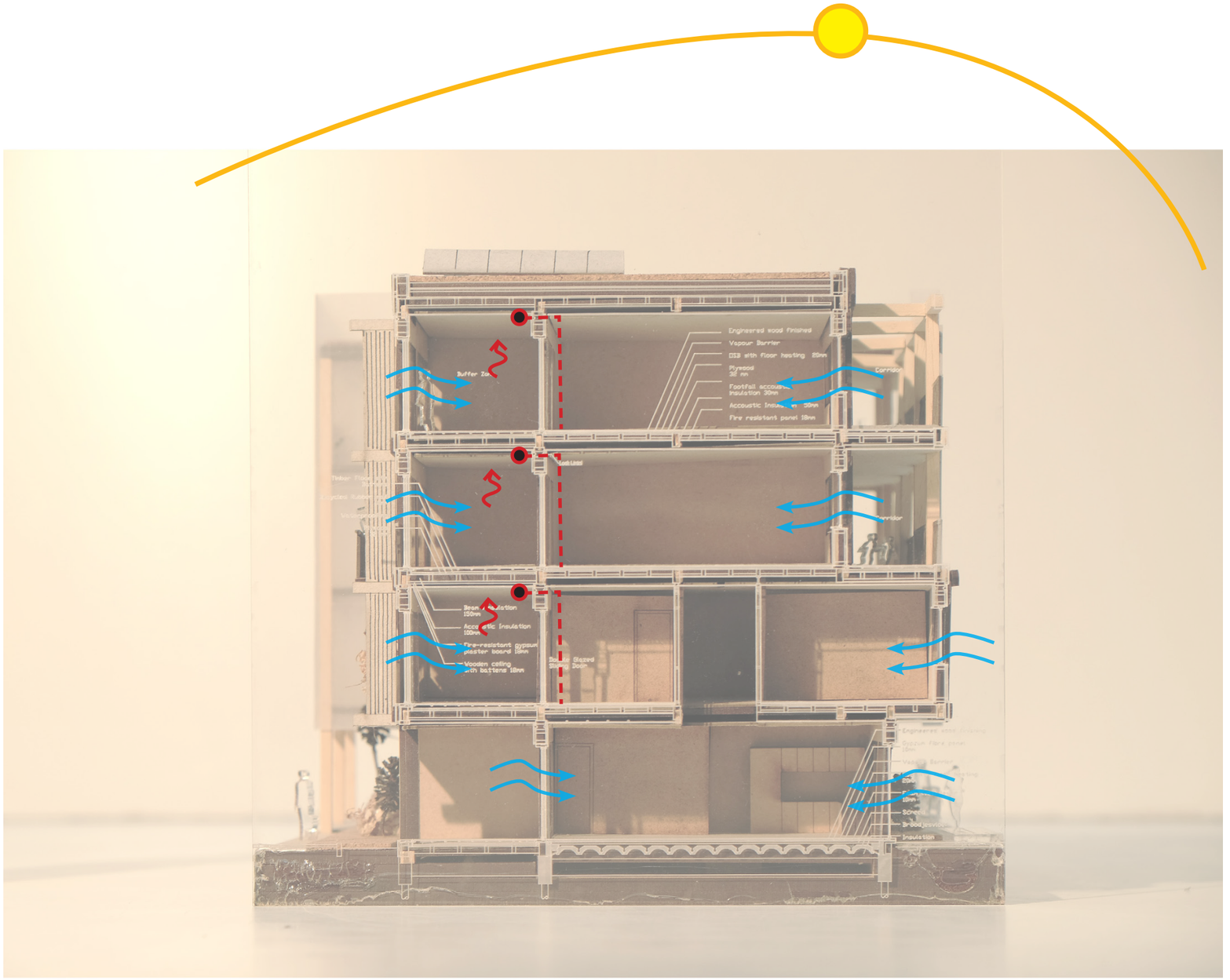
Ventilation Concept



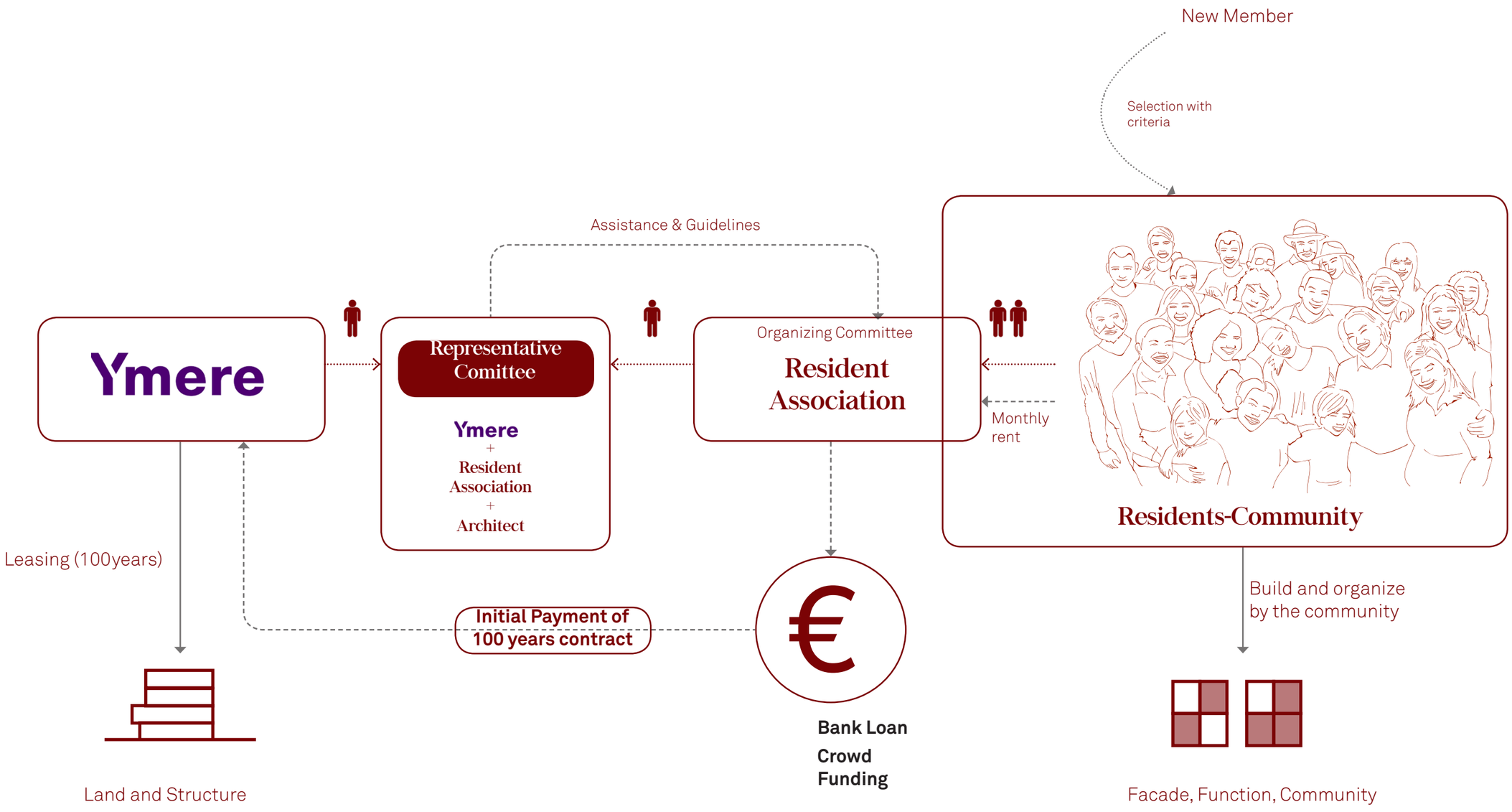
Fresh air and exhaust
Decentralized

Climate Concept

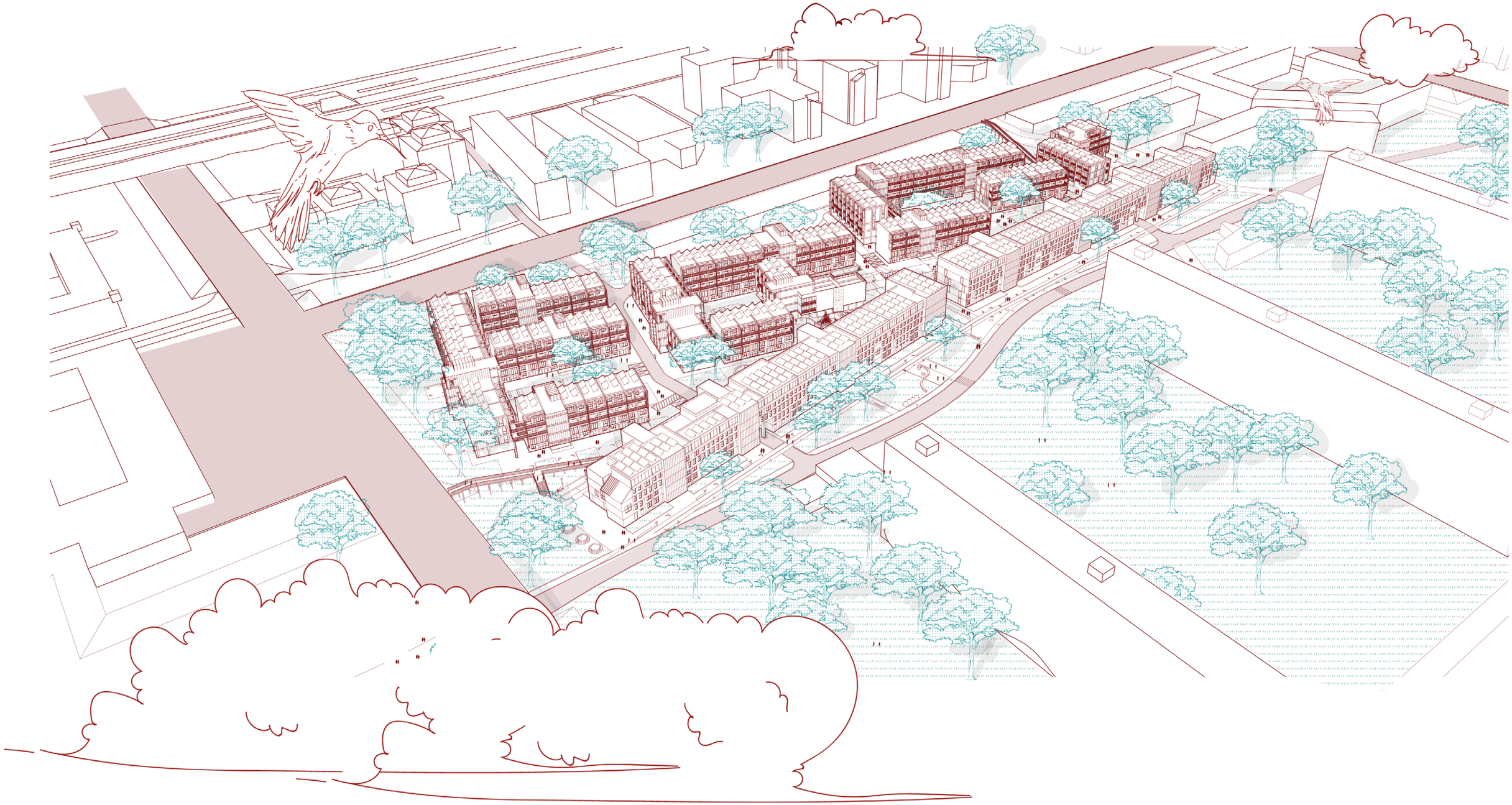
Summer

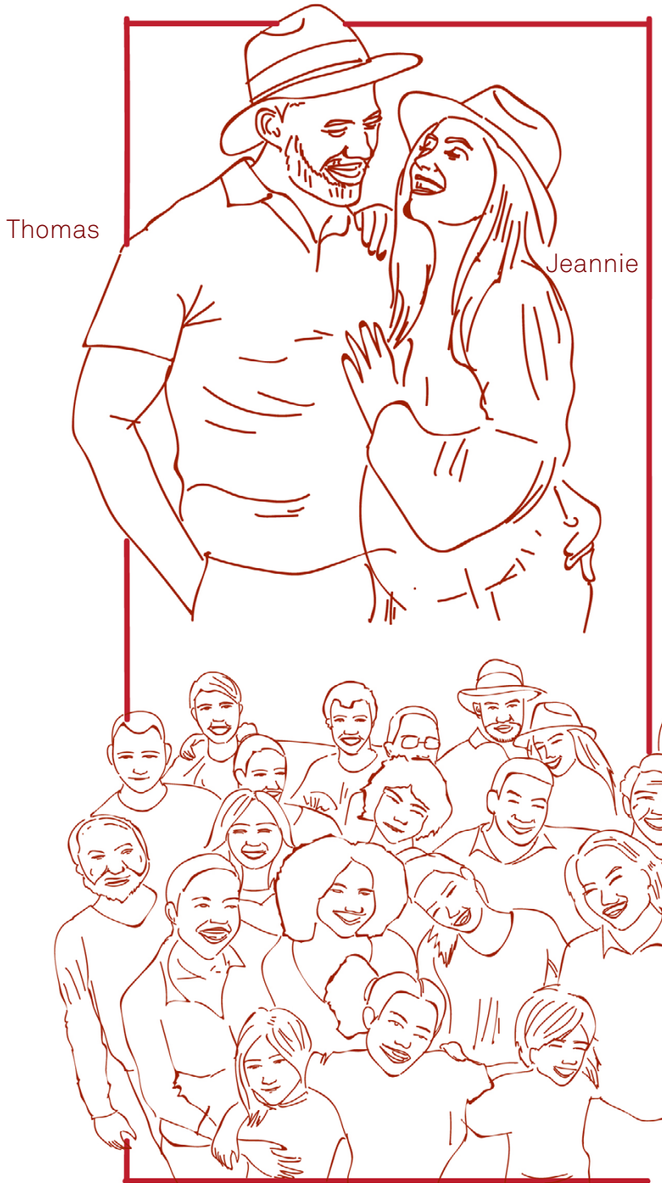


Organization

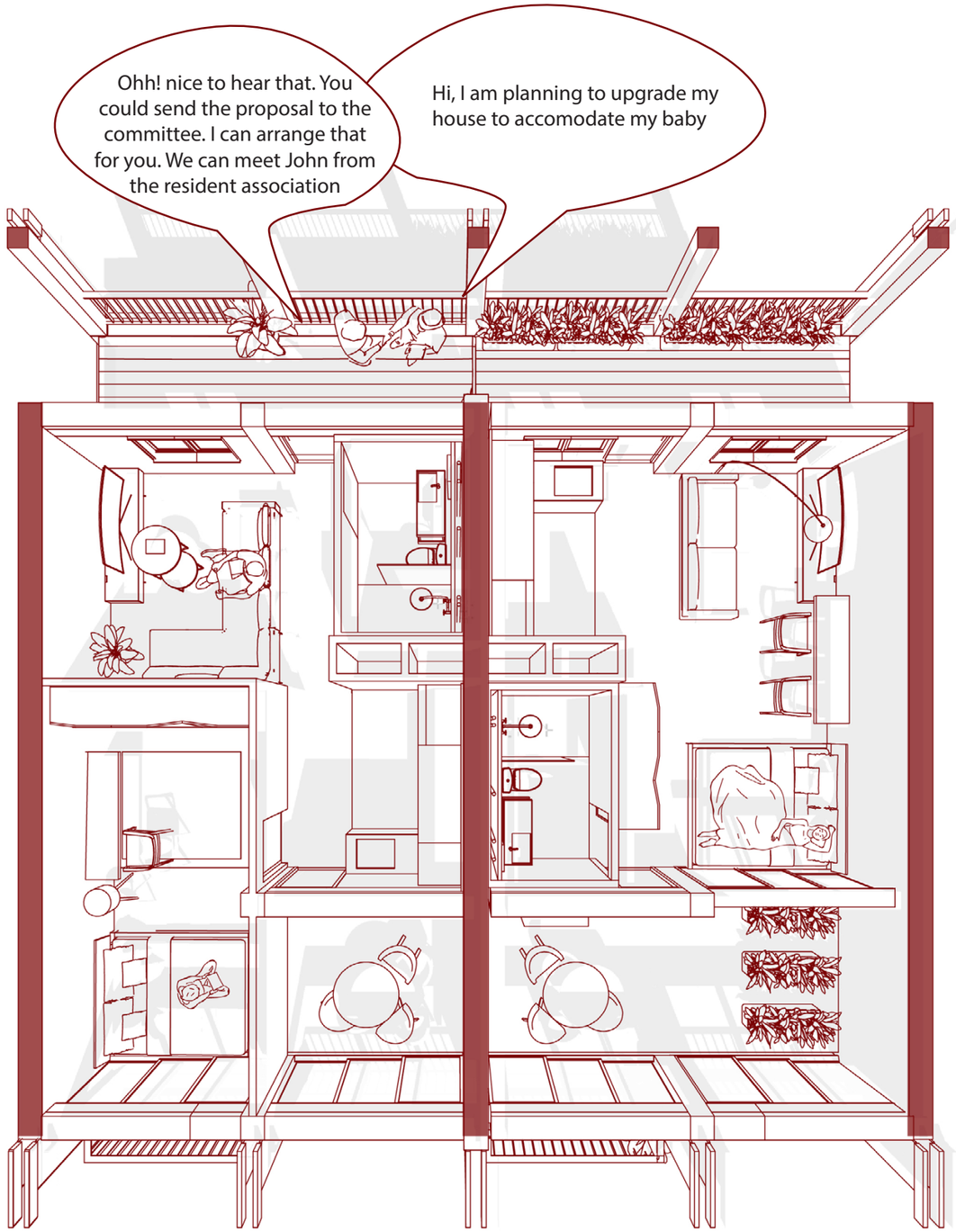


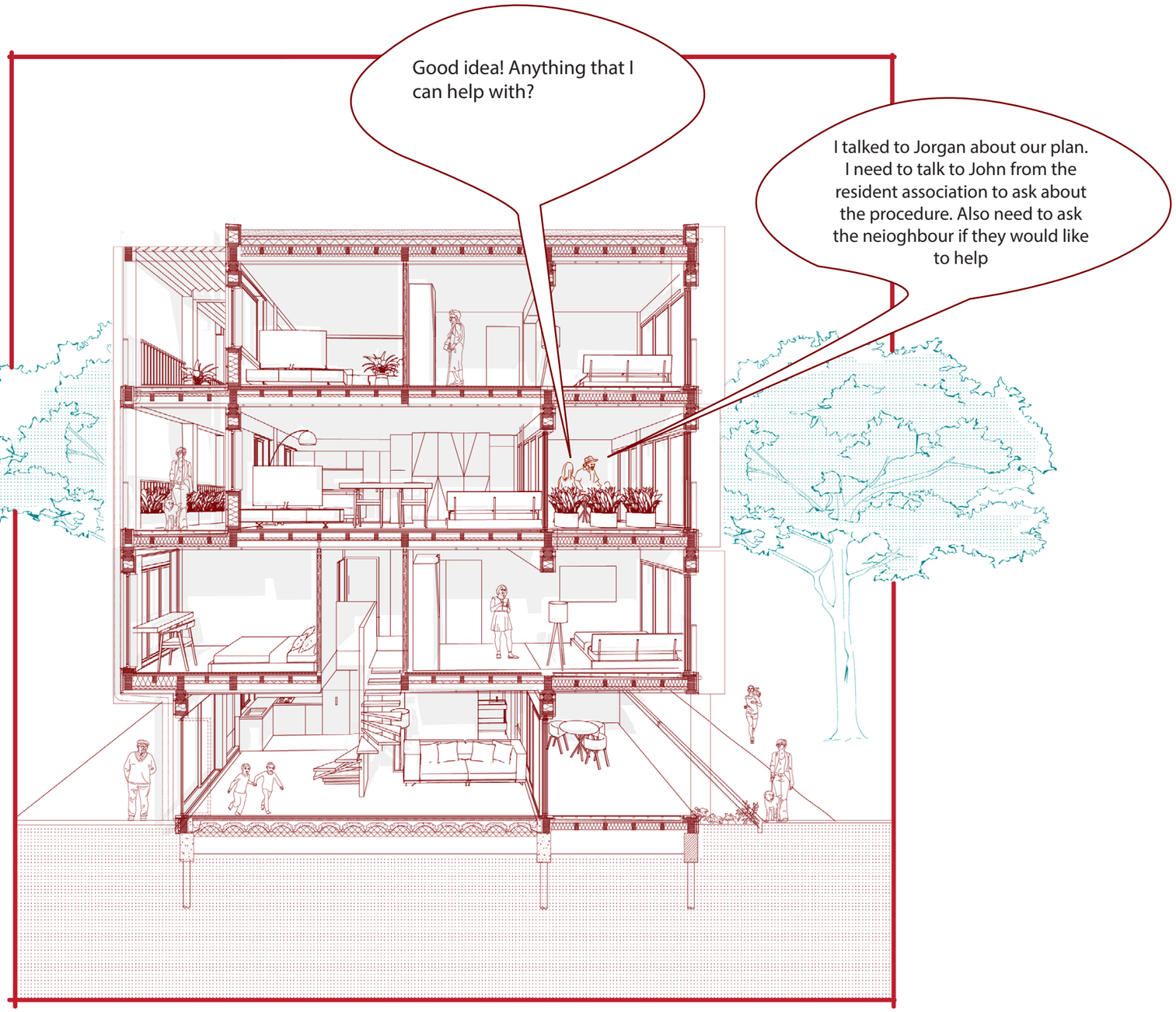
A Story from Hoptille

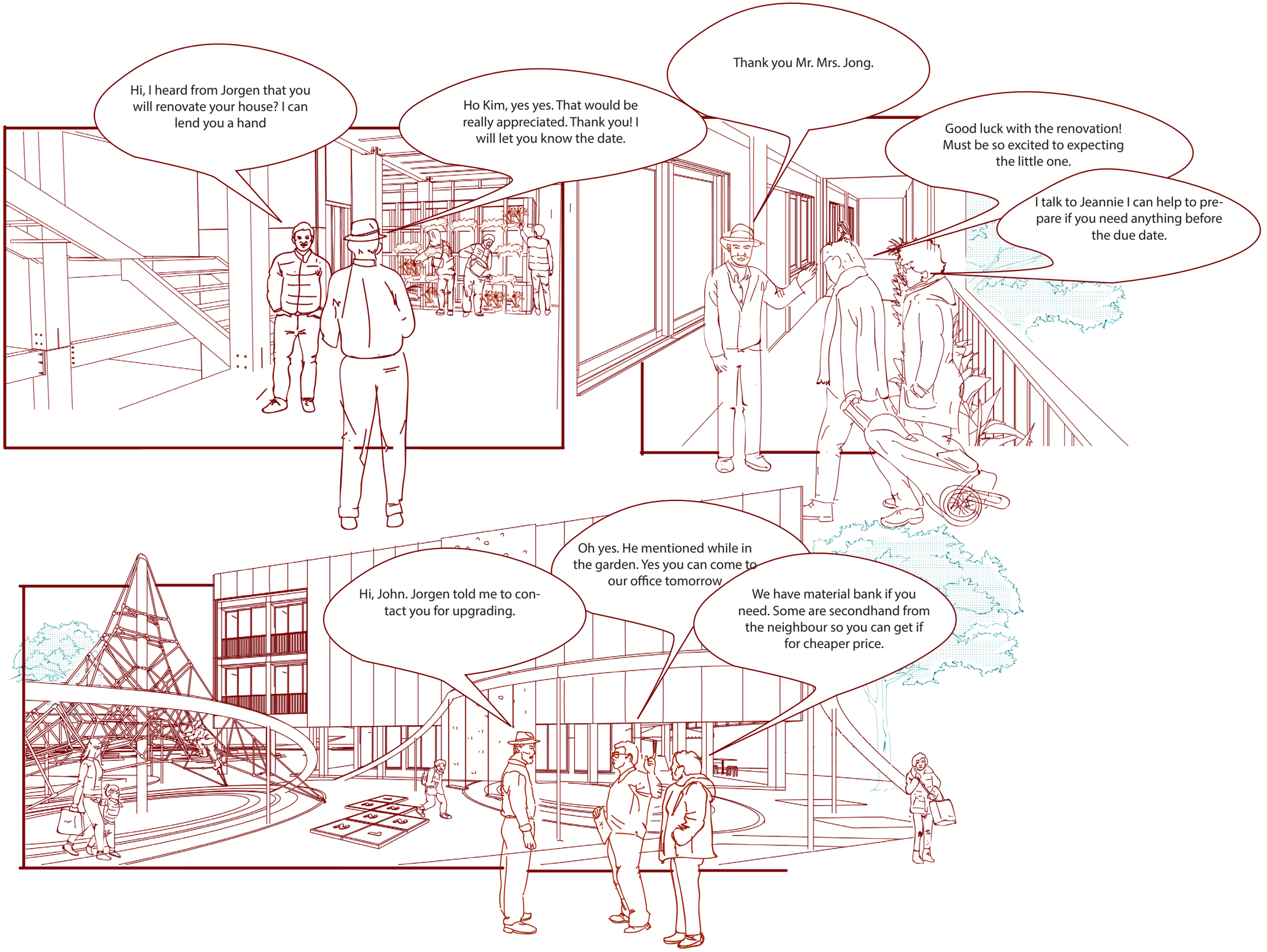




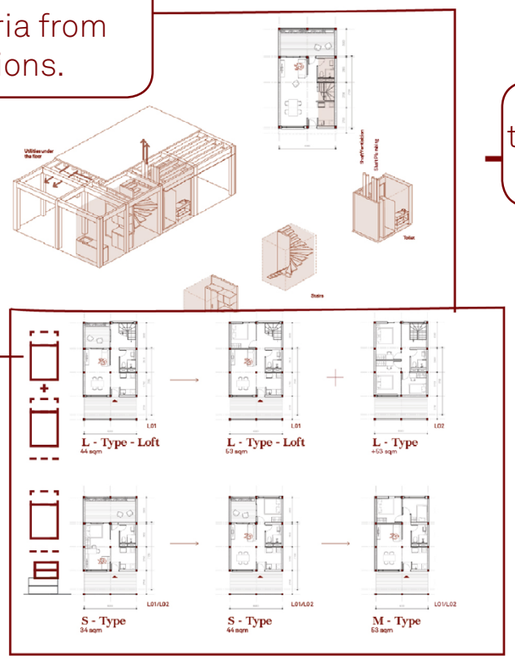
Hoptille Community



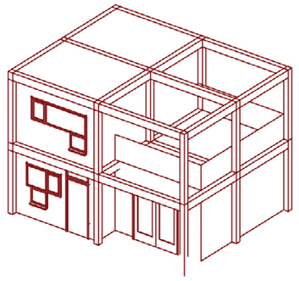

Good idea! Anything that I can help with?
I talked to Jorgan about our plan. I need to talk to John from the resident association to ask about the procedure. Also need to ask the neioghbour if they would like to help


Hi, I heard from Jorgen that you will renovate your house? I can lend you a hand
Ho Kim, yes yes. That would be really appreciated. Thank you! I will let you know the date.
Thank you Mr. Mrs. Jong.
Good luck with the renovation! Must be so excited to expecting the little one.
I talk to Jeannie I can help to prepare if you need anything before the due date.
Hi, John. Jorgen told me to contact you for upgrading.
Oh yes. He mentioned while in the garden. Yes you can come to our office tomorrow
We have material bank if you need. Some are secondhand from the neighbour so you can get if for cheaper price.

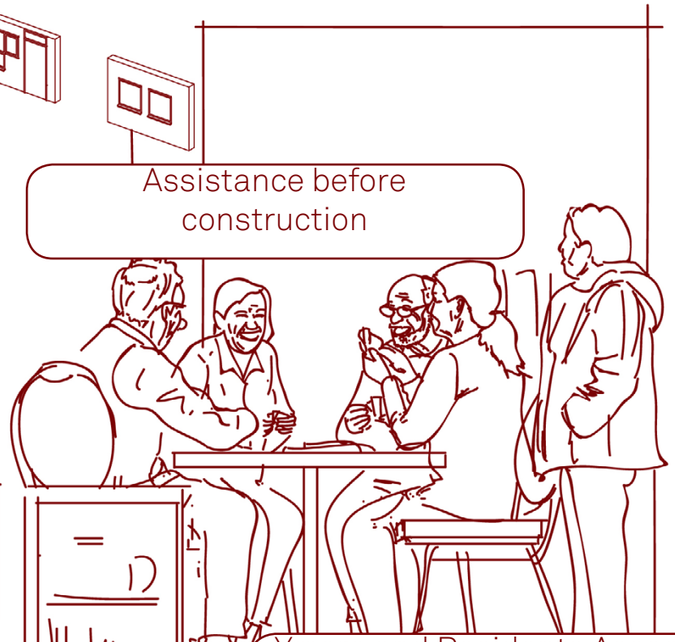
The architect set the standard that meet the criteria from Ymere & regulations.



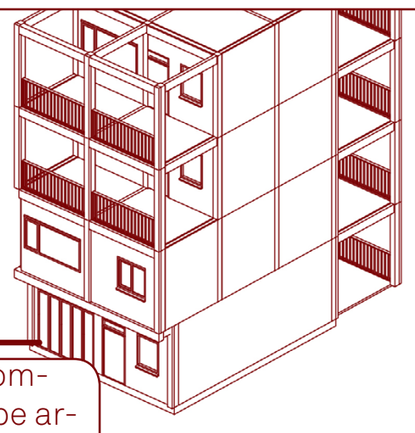
Residents choose the housing plot & type. It comes with different possibilities of arrangement and facade.



Assistance before construction

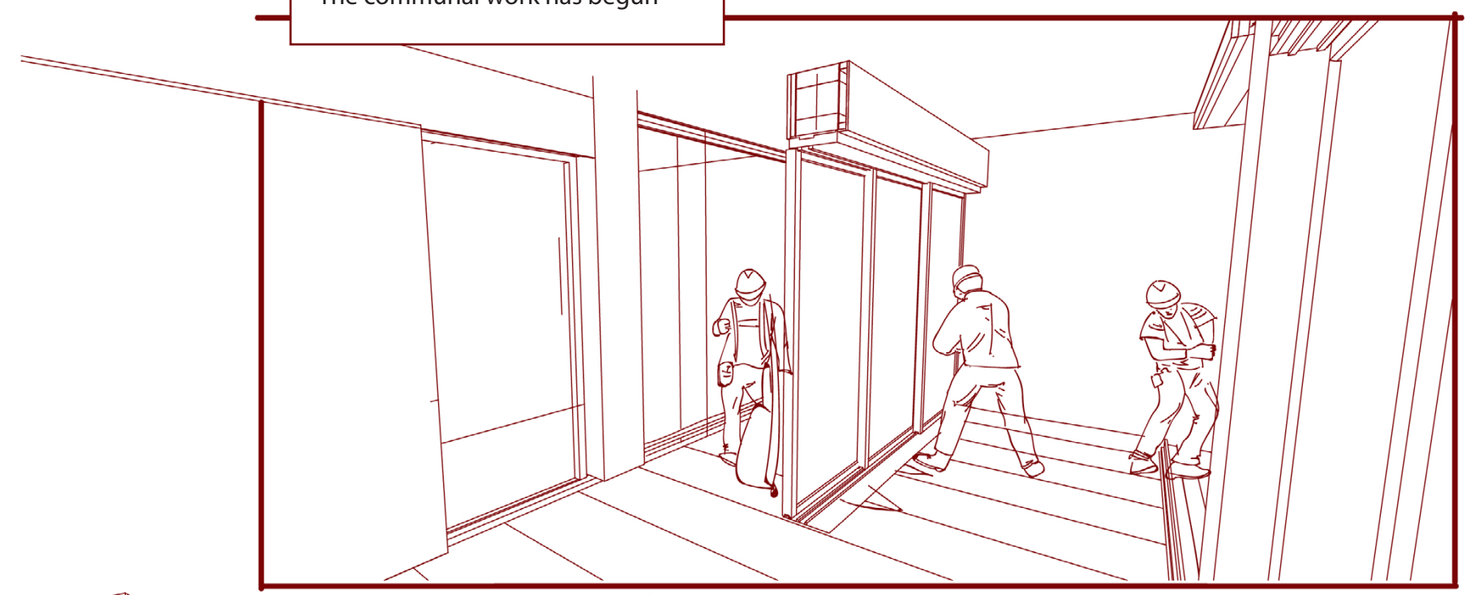


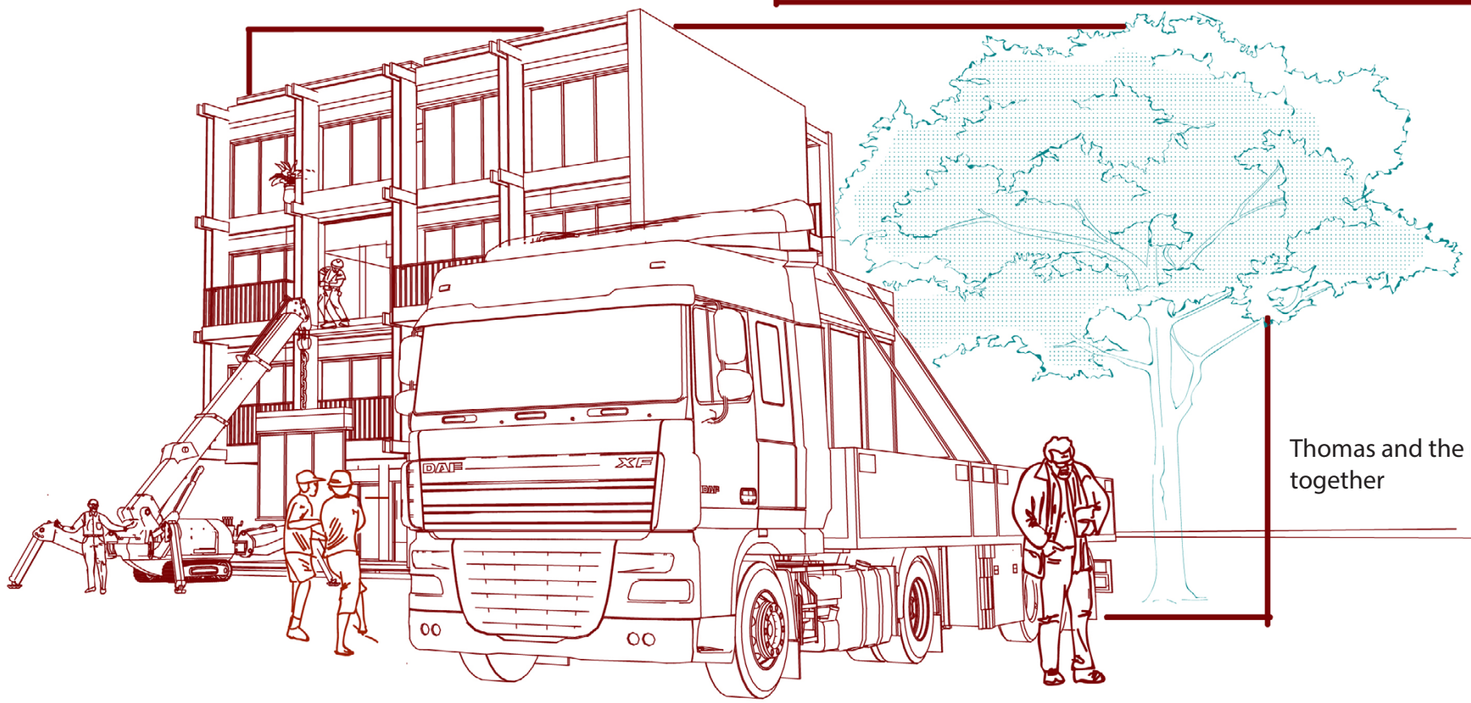
Ymere and Residents Association regulates the time of construction in the time windows. *says max twice a year the residents can upgrade their house / communal facilities in 3 weeks



The development of housing and communal can be built by builder or can be arranged by the Resident association for participation

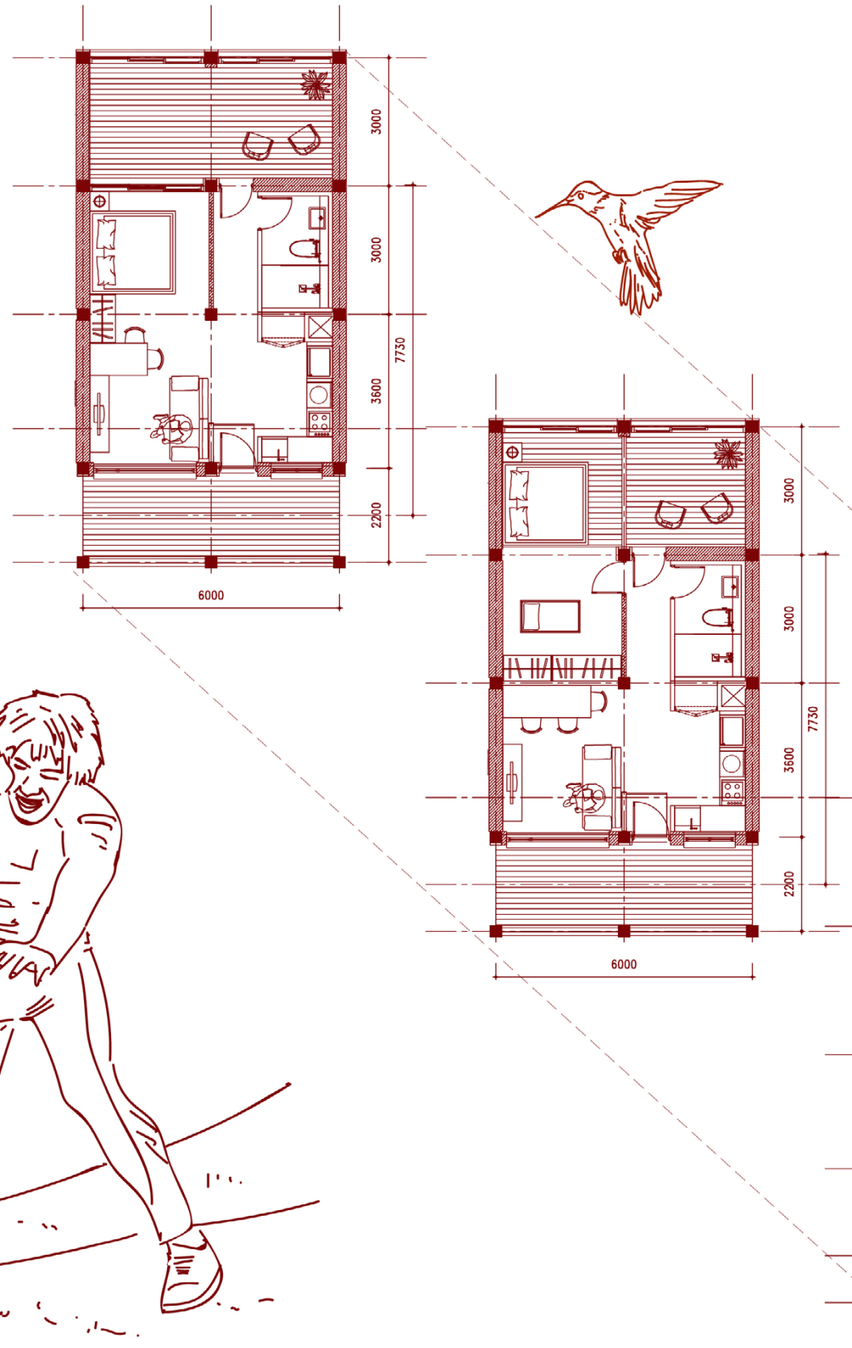
The communal work has begun

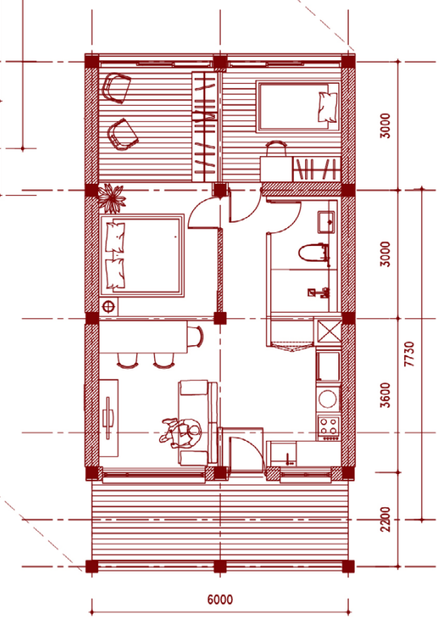




Thomas and the neighbours are working together

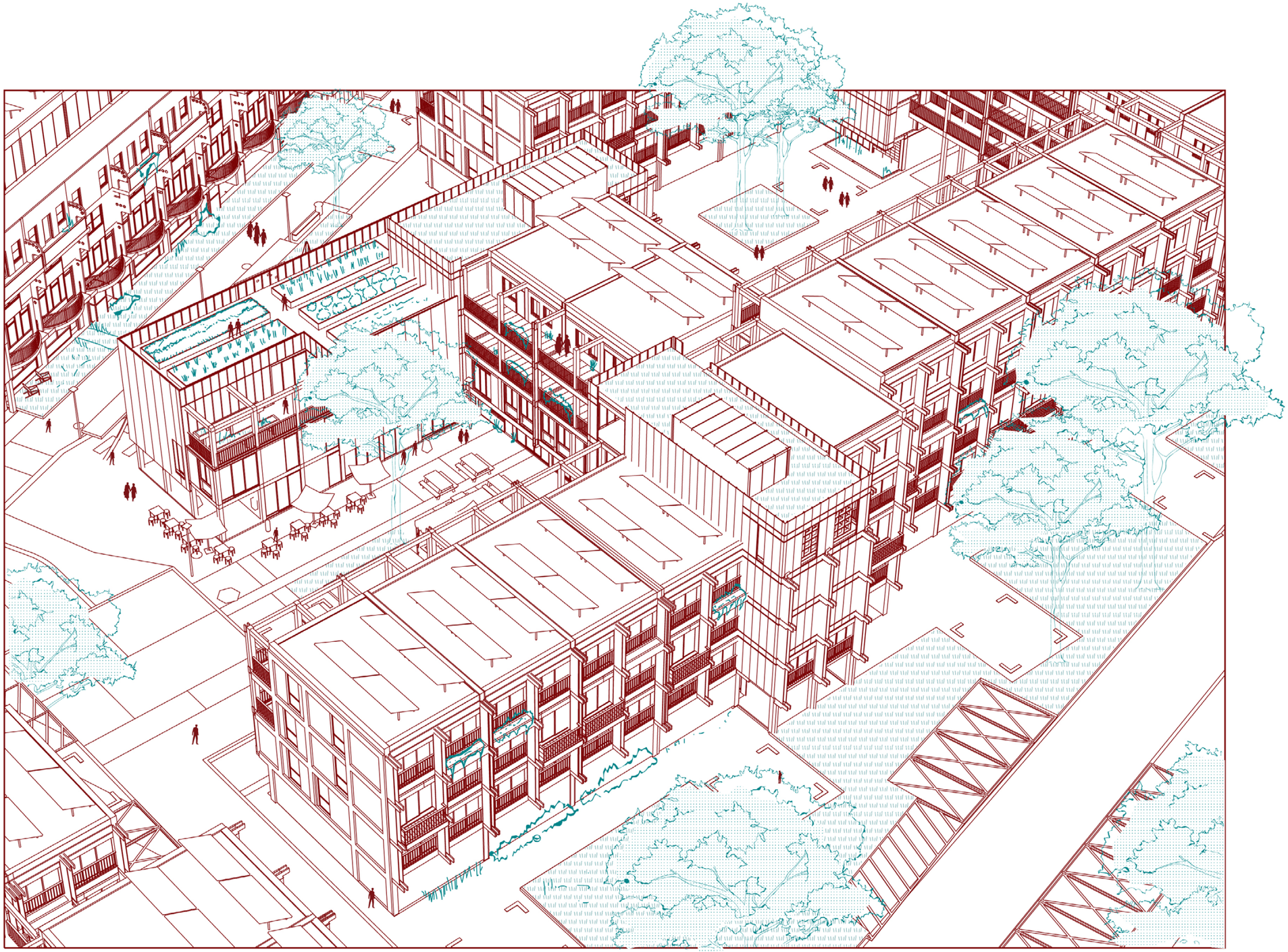
It take 1 day to assembly the facade

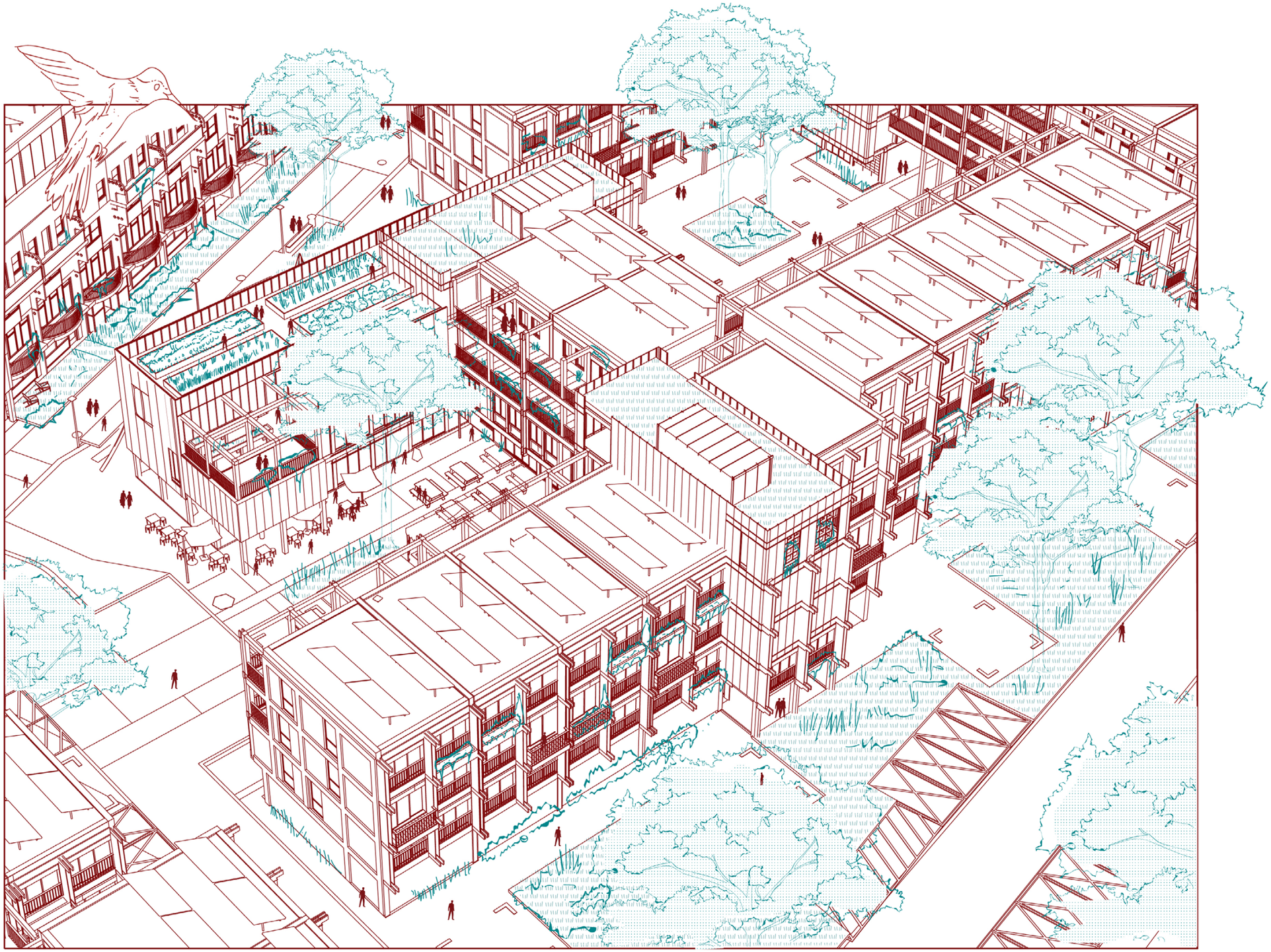




The house that grows overtime

Time is a space dimension





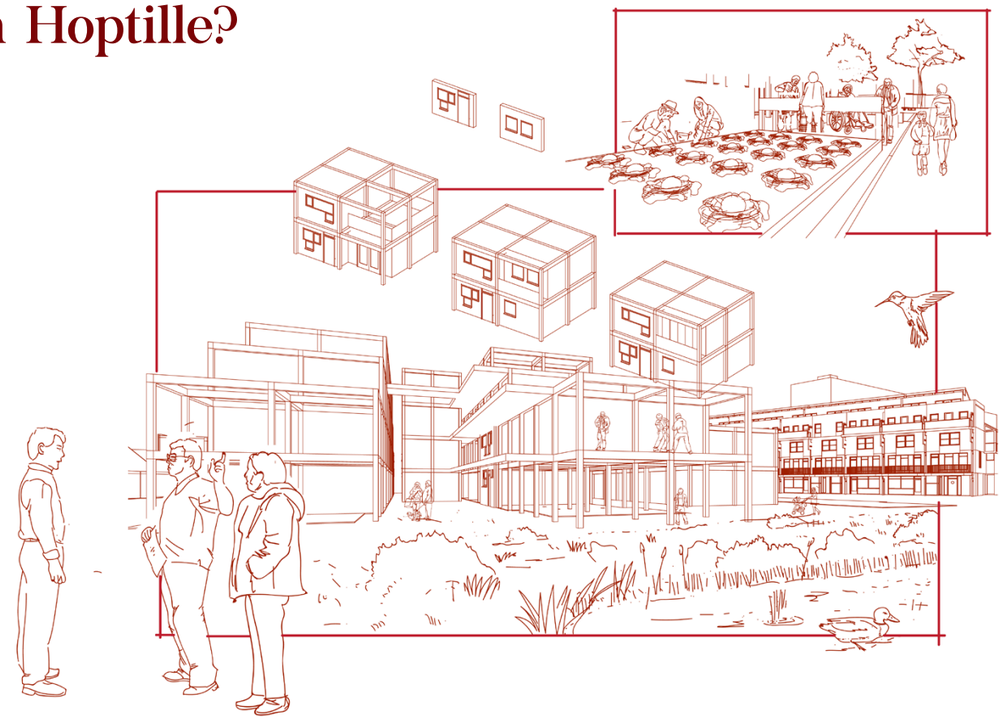
Conclusion

Does this approach improving resilience in Hoptille?

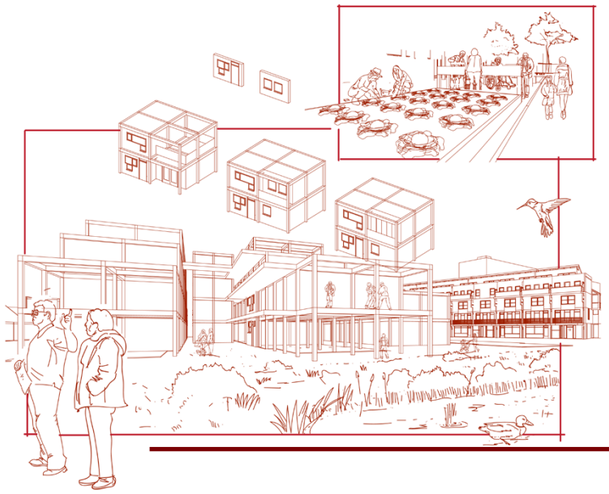
Social Capital | Urban Structure | Ecological

Adaptability *ACTOR* | **Transformability** *SYSTEM* | *Biodiversity*

+ **Redefining its Values & Significance**
+ **Echoing its social value and innovative identity**
+ Nurturing its **community** to tackle its socio problem
+ Reduce the burden in renting and energy consumption
+ Longer Tenant to **reduce social segregation**



The Relevance



Hoptille

+ **Lower** rent
+ **Co-owner**
+ **Future proof** as longer leasing
+ Involved in **planning and decision making**
+ Fill the **communication** gap to YMere
+ **Strong Community**
+ **Collective projects**

Residents-Community

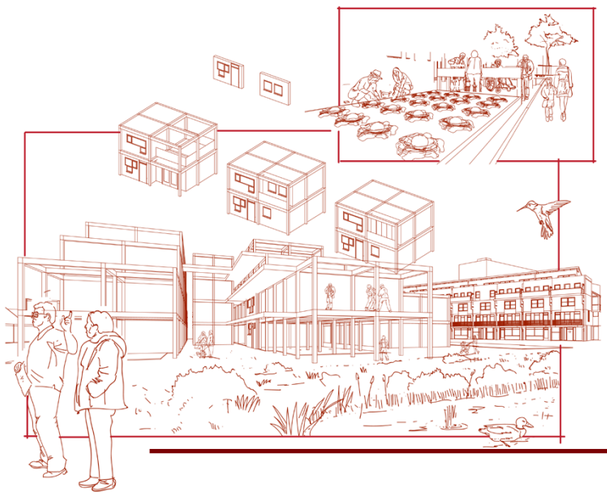
+ **Densification**
+ **Lower Initial Cost**
+ **Longer Tenant** - Future Proof
+ Strengthening the Community and **nurturing social value**
+ **Less burden** for control/manage the property
+ **Re-finding the Value and Brand**

- Need to Match with profitable housing target

Ymere

Owner

The Relevance

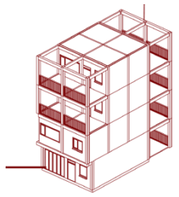


+ Providing **Framework & Options**
+ **Long-term** control/involvement
+ **Co-Creation**

Hoptille

+ **Open Building** Enrichment
+ **Cross-culture** approach
+ **Baukultur**
+ **New approach** on potential heritage
+ **Redefine** the beauty of social interaction

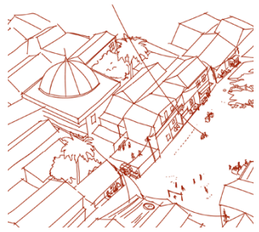
Architect



+ New system of **Co-ownership as part of housing ecosystem - new policy**
+ New classification between **owned-rented** house
+ New classification between **corporate & individual** entities
+ **Densification**
+ **Incremental housing** in rented sector
+ **Intergenerational** Housing

Architecture

Dutch Housing



+ Learn about Co-ownership model
+ **Building code** for the growth of Kampung so it meets building regulation and safety
+ Reuse sustainable building material
+ Bank need to **recognize** group people for loan
+ Rethinking of **rent culture as part of housing system and the regulation** (currently more owned-house) - housing as investment
+ **Amplify the spirit of Gotong Royong &**
Koperasi (Cooperative)

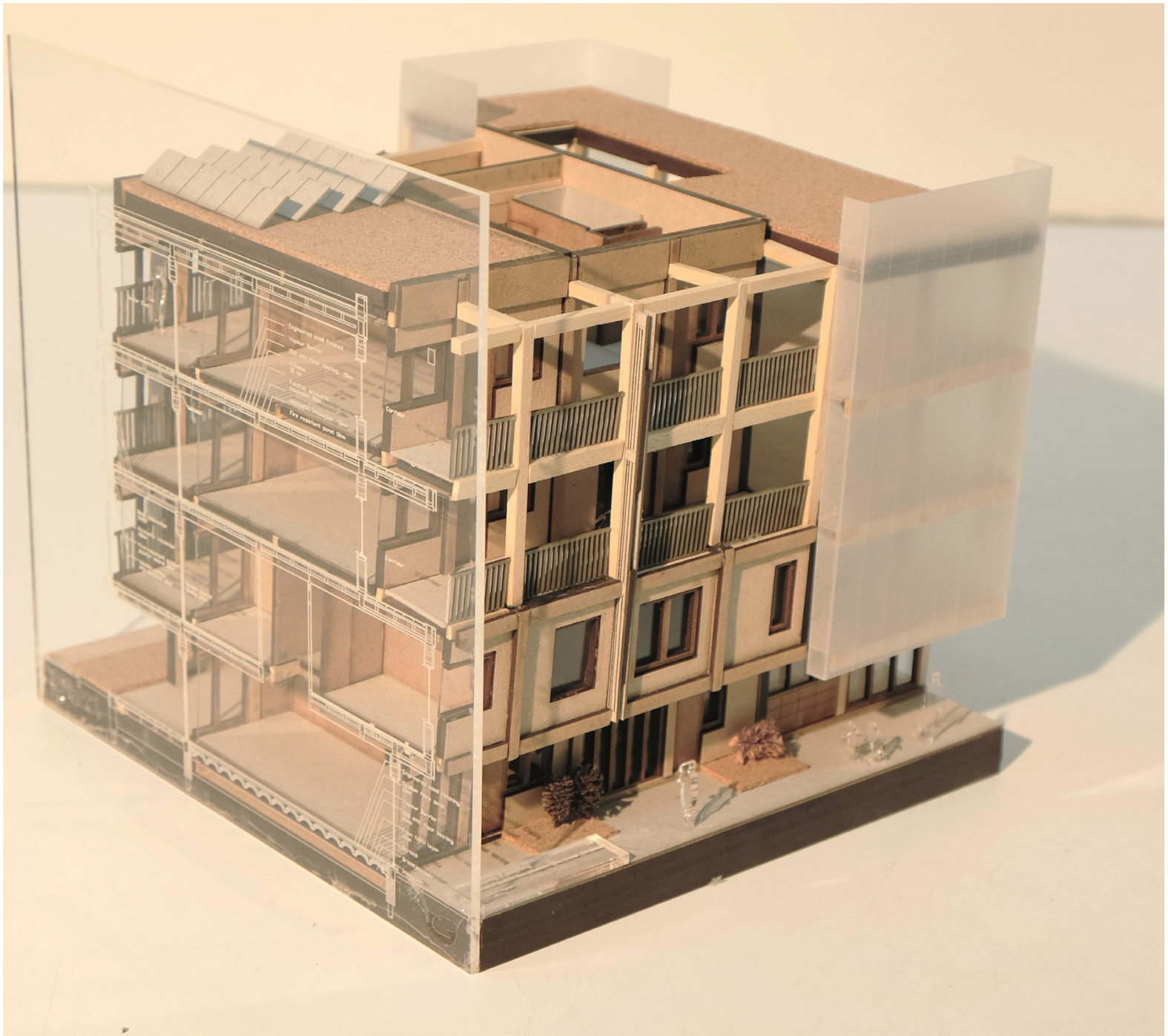
to Indonesia Kampung

can it be apllied in other Places?

Yes

+ Architectural wise - Modulor and open building
+ Economical wise - low rent / low cost
+ Functional wise - incremental
+ Social wise - Strengtening the community
+ Organizational wise - adpatation

Reflection



No Appreciation from the people
= No Heritage?

Role of the Architect and
its challenges

Time is a space dimension

THANK YOU