LIVELIHOOD in *MOTION*

REDEVELOPMENT OF THE SWEEPERS COLONY IN SYLHET CITY

Graduation report: Presentation
Graduation Studio Dwelling: Global Housing 2024
Architecture of Transition in the Bangladesh Delta
AR3AD105

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DESIGN LOCATION

The Surma river flowing through Sylhet

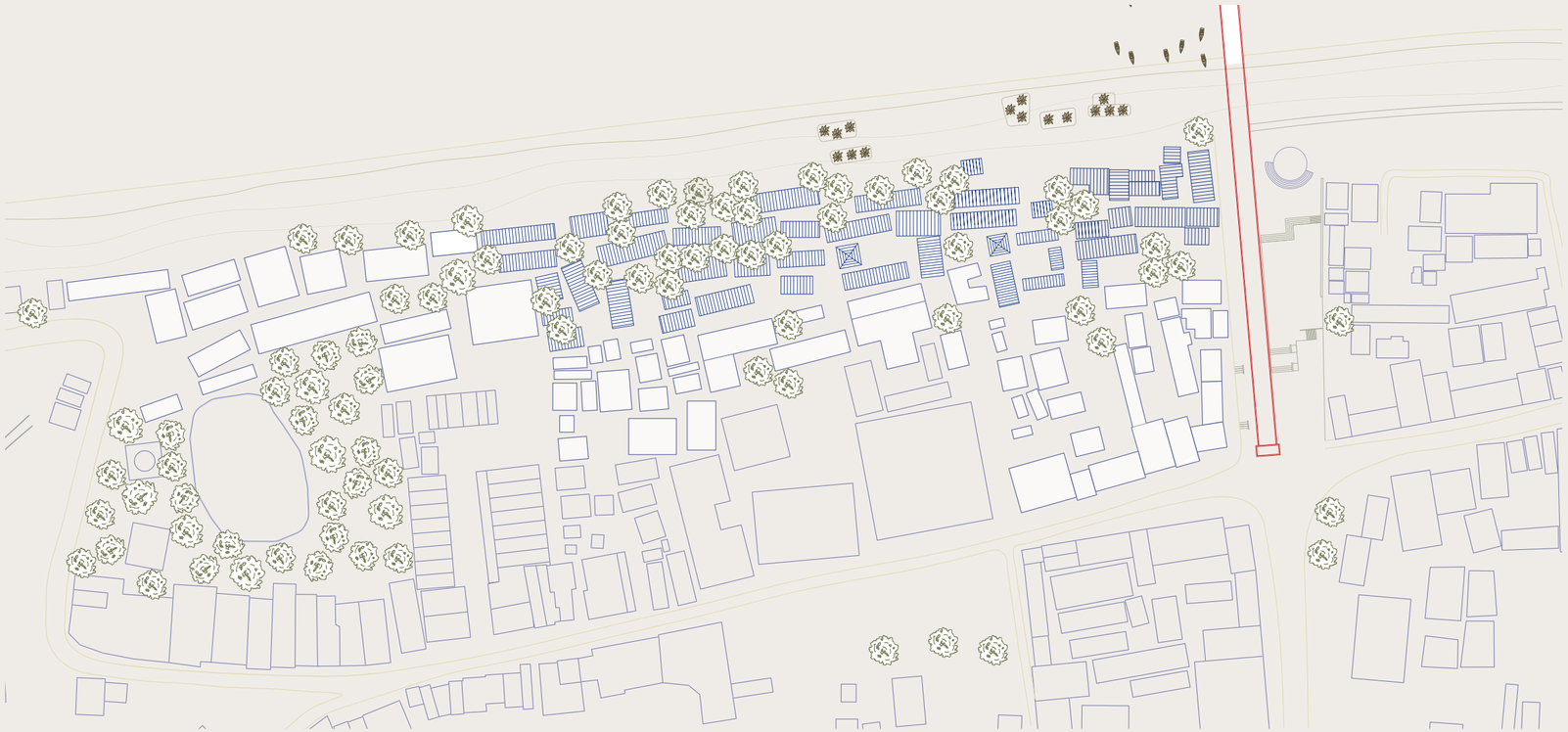
One of Sylhet’s landmarks: The Keane Bridge

Residents	**999.374**
Urban area	**58 km²**

CURRENT SETTLEMENT

+ Prominent location
+ Mix-use area
+ Community
+ Intimate spaces and scale

- 250 families
- Low-income settlement
- Accessibility and porosity
- Inadequate housing and public spaces



RESEARCH TOPICS

Livelihood

Generating income

Spatial equality

Generating income

Prevent the loss of current formal employment

Stimulate independent self-employment

Protect the work capital for low-income households

Attractive neighbourhoods attract costumers

Livelihood

Providing quality housing for various income groups

Income generating possibilities

Provide healthcare, education, and collective spaces (**Spatial equality**)

Formal housing regulations and policies (H.O.A.)

Spatial equality

Accessibility for all income groups

Stimulate income equality

Provide new market clusters

Decentralization of market and housing clusters

DESIGN VISION & GOALS

- Relocate 200 households
- Expand the area to meet density
- Include the Hindu community
- Keep the current values
- Attractive for a developer

Distressing commercial and housing areas Sylhet City

Connection with the rest of Sylhet City

Clear accessibility from
neighbourhood to dwelling

New large commercial area and workspaces

Porosity of the whole site and clusters

Meaningfull spaces residents and neighbourhood

Generating income oppertunities

Active riverfront with climate resilliency

Social- mix and cohesion

Living and working environment

Community feel at cluster level

Housing quality
and equality

Variations of typologies

level of scale

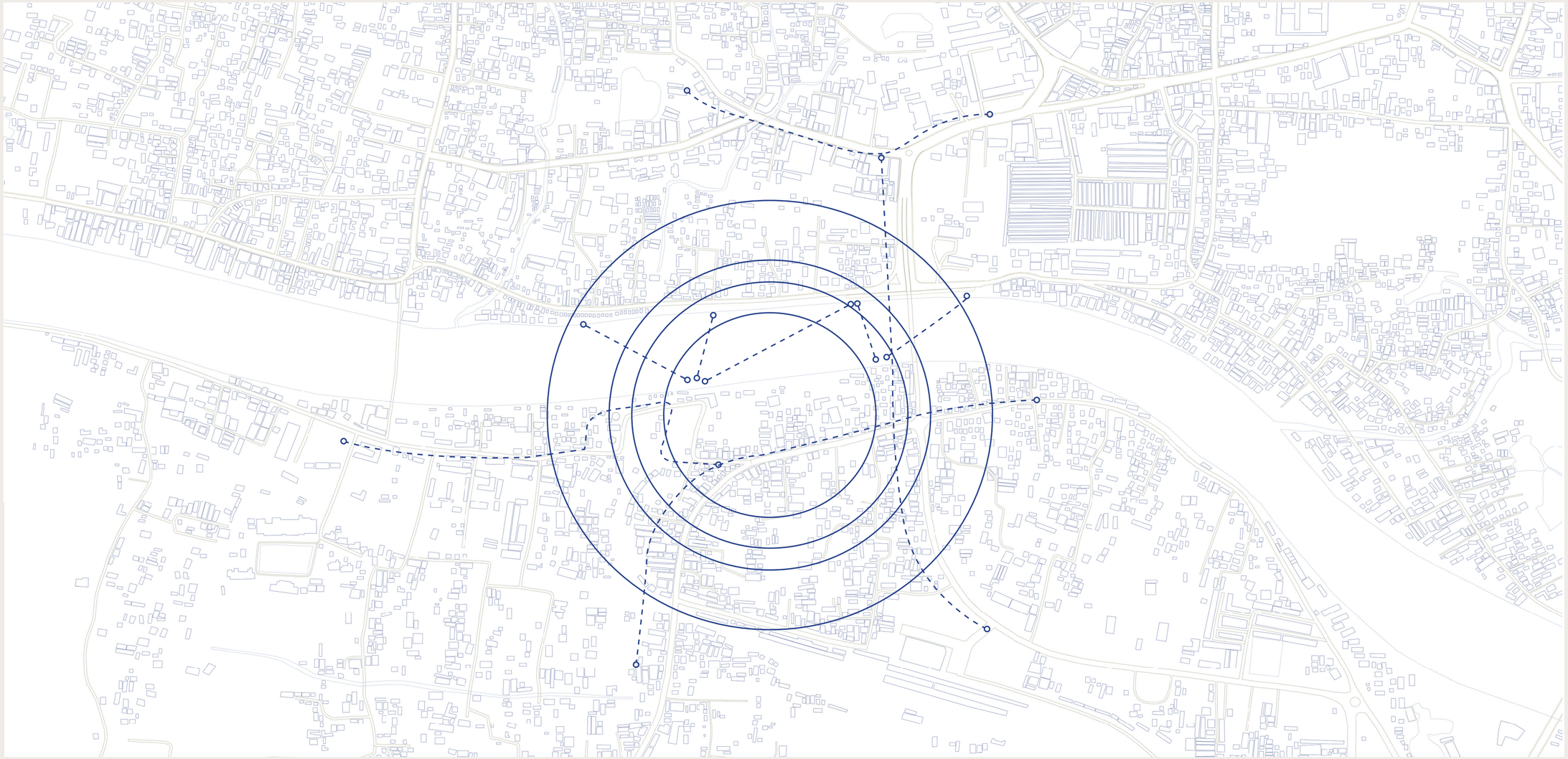
Neighbourhood strategy

Urban strategy

Cluster strategy

Dwelling strategy

NEIGHBOURHOOD STRATEGY

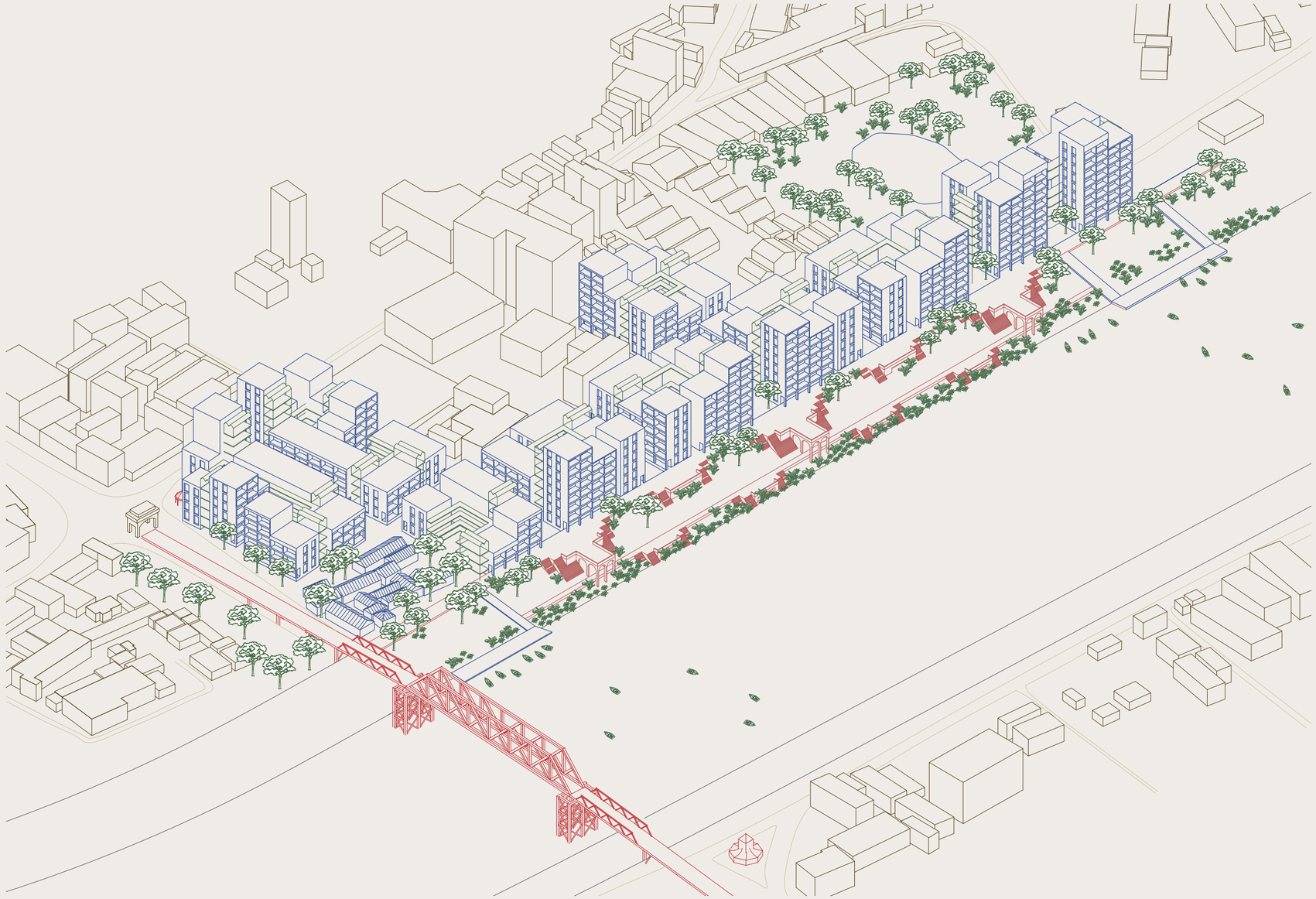


Distressing commercial and housing areas Sylhet City

Connection with the rest of Sylhet City

Clear accessibility from neighbourhood to dwelling

URBAN STRATEGY

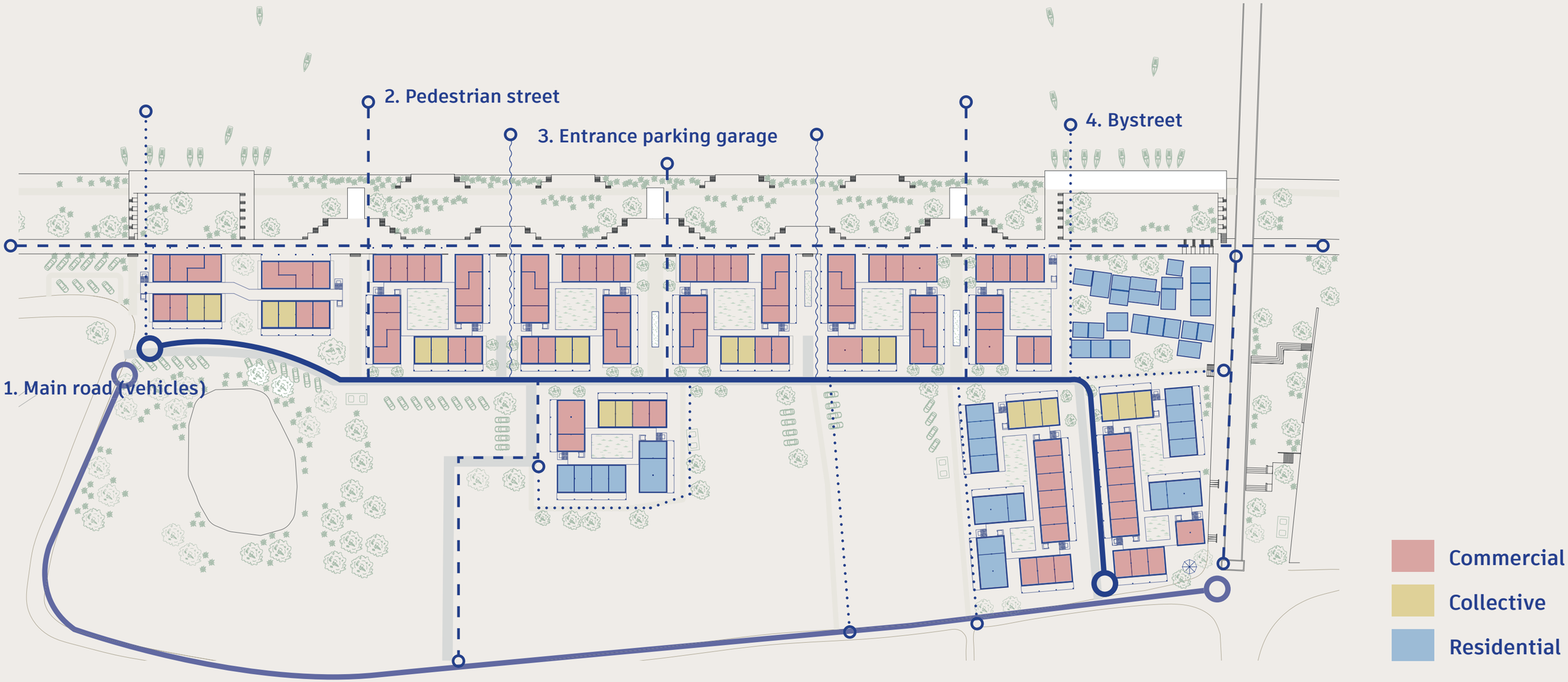


Area	**1,69 ha**
FSI	**2,67**
GSI	**0,45**
Dwelling types	**Low, middle, and high**
Unit/ha	**245**
Family members	**4-8**
Total residents	**1.915**
Residents/hectare	**1.104**
Typology area	**40-160 sqm**
Typology ratio	**37/34/29**

Meaningfull spaces residents and neighbourhood

Generating income oppertunities

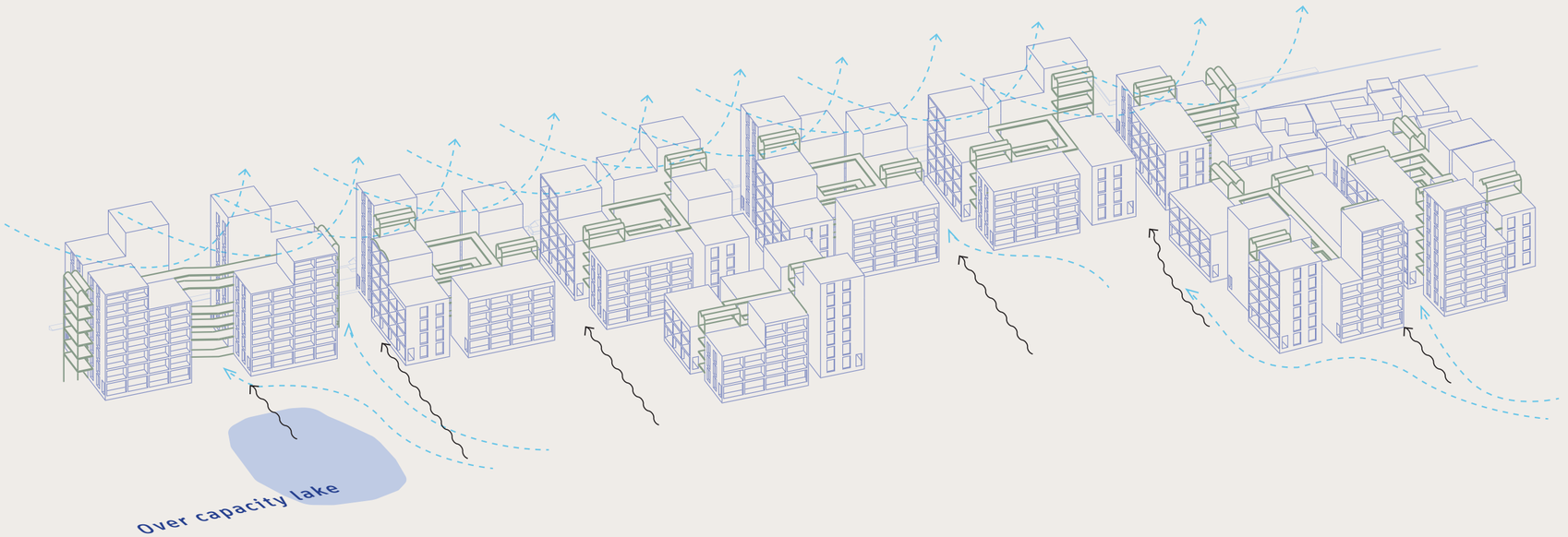
Active riverfront with climate resilliency



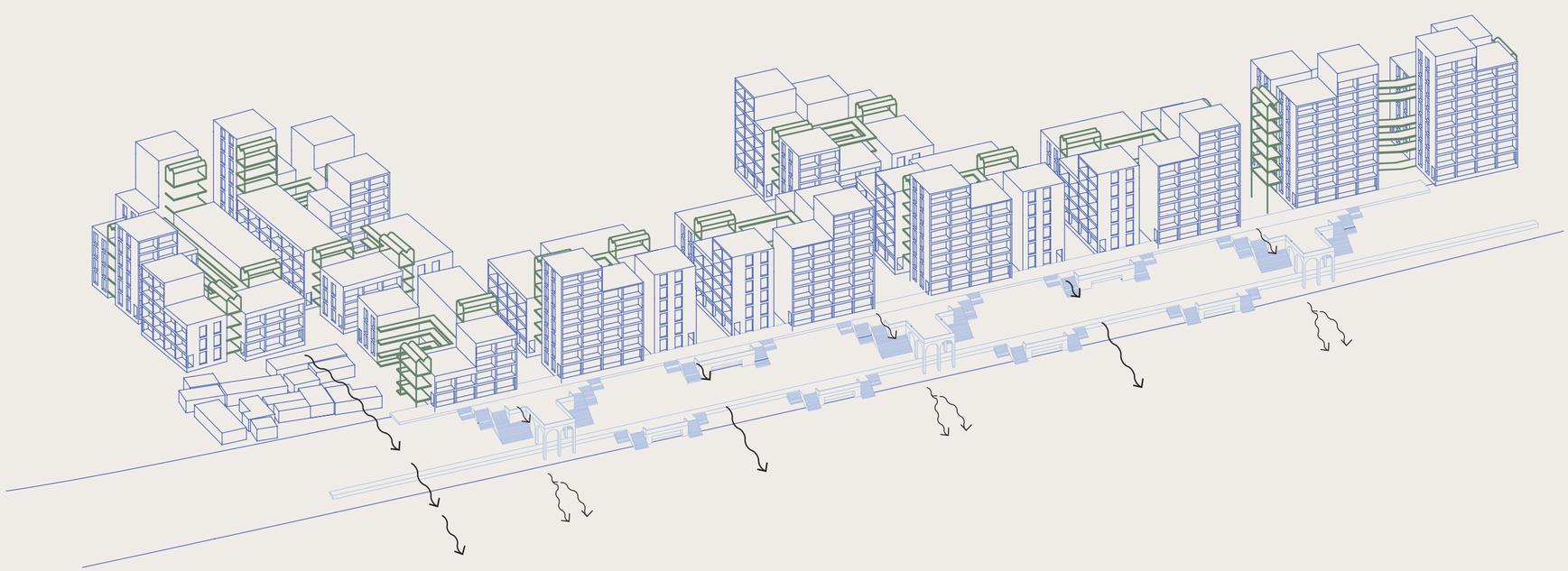
New large commercial area and workspaces

Porosity of the whole site and clusters

Riverside



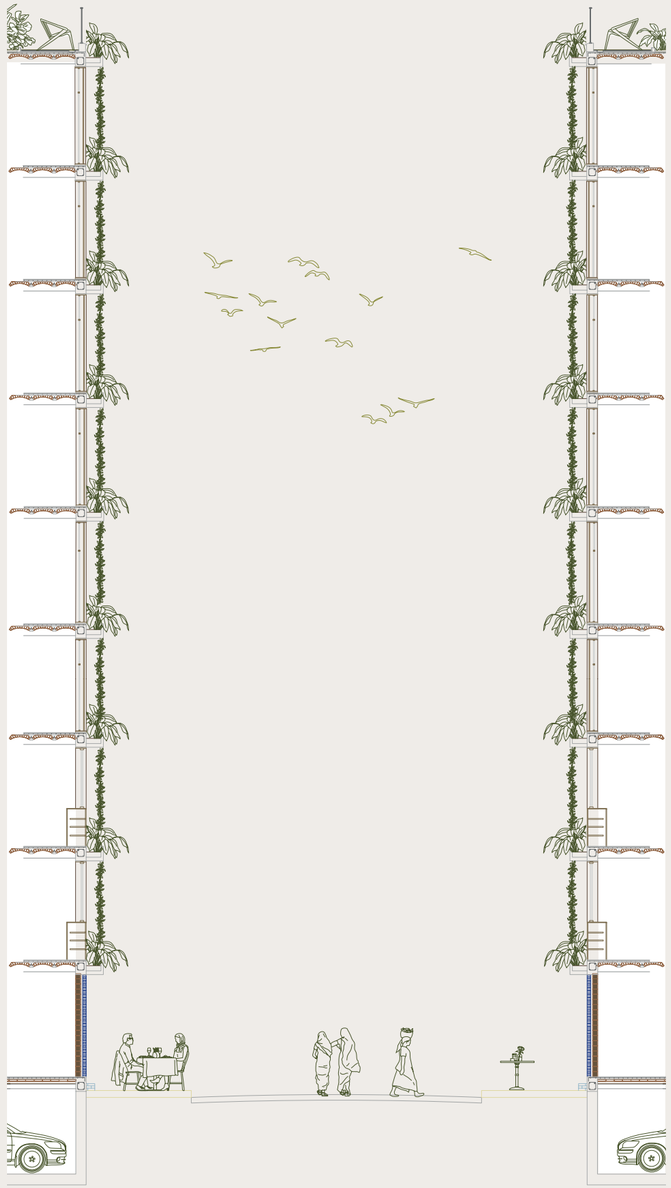
Cityside



Riverside

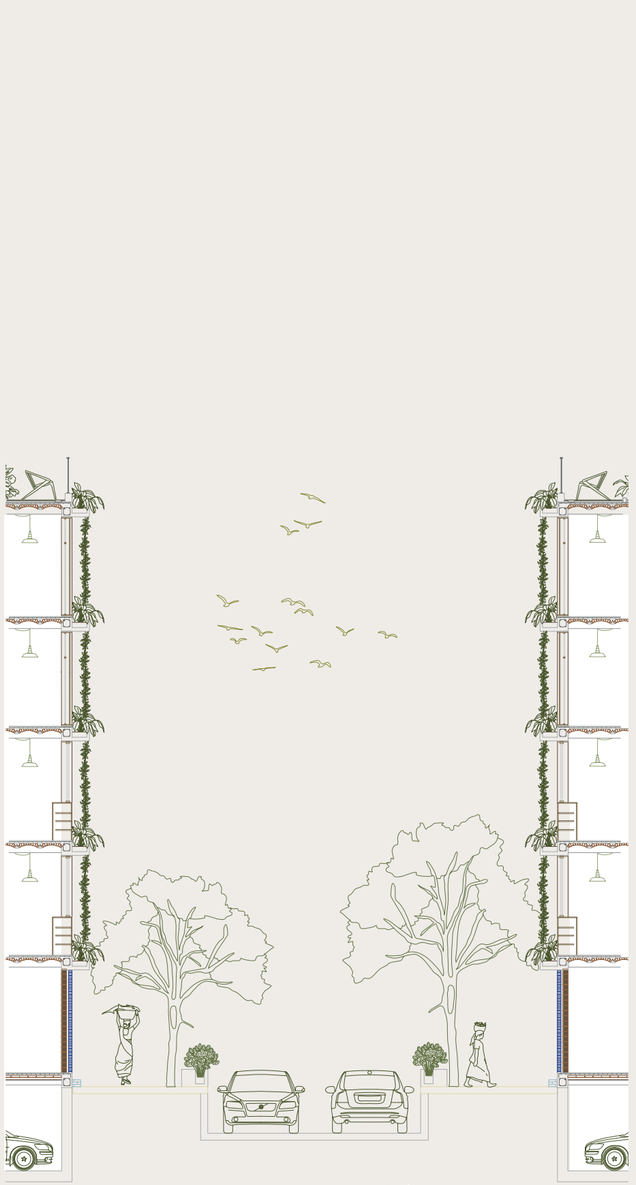
STREET TYPES

Main street

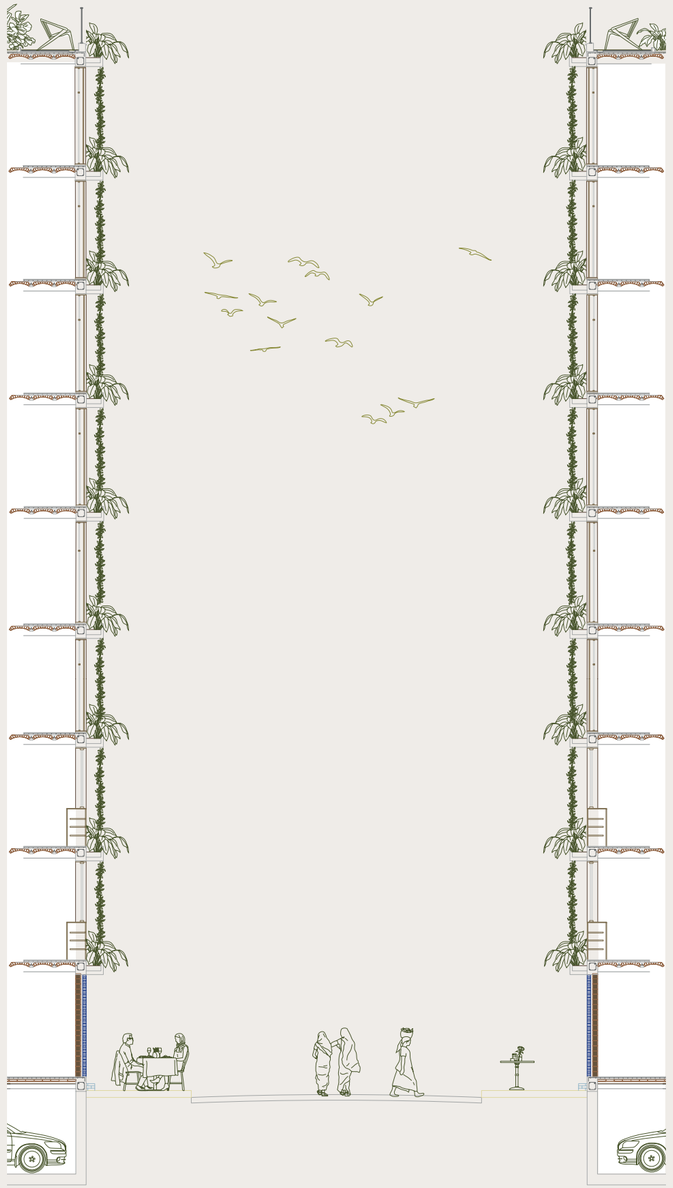


Main street

STREET TYPES

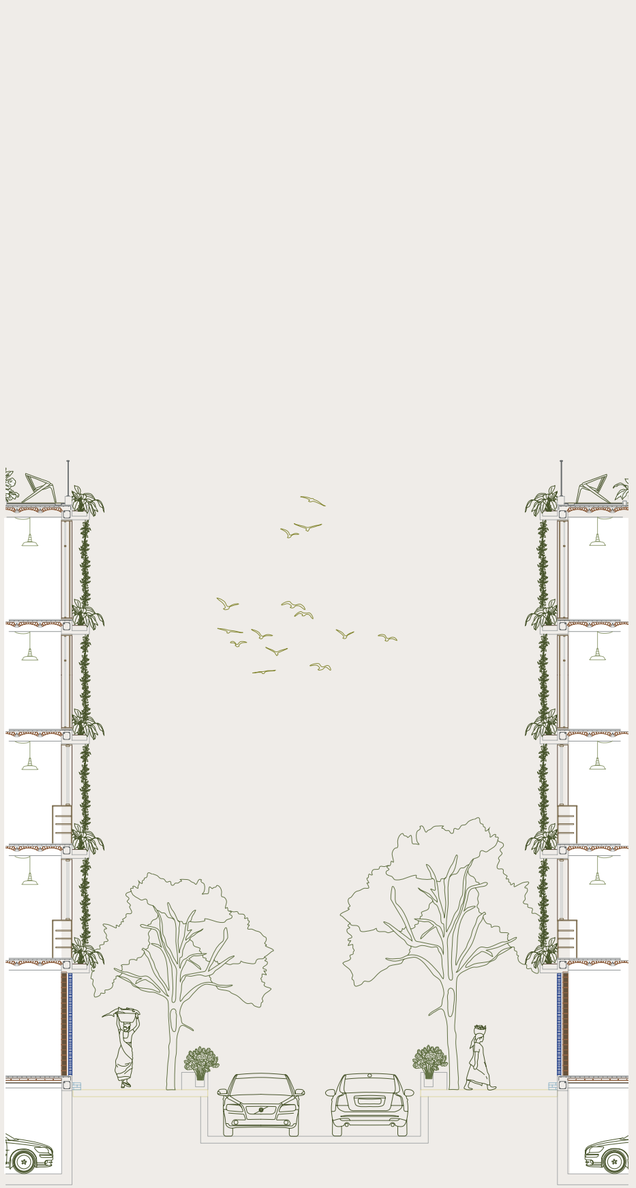


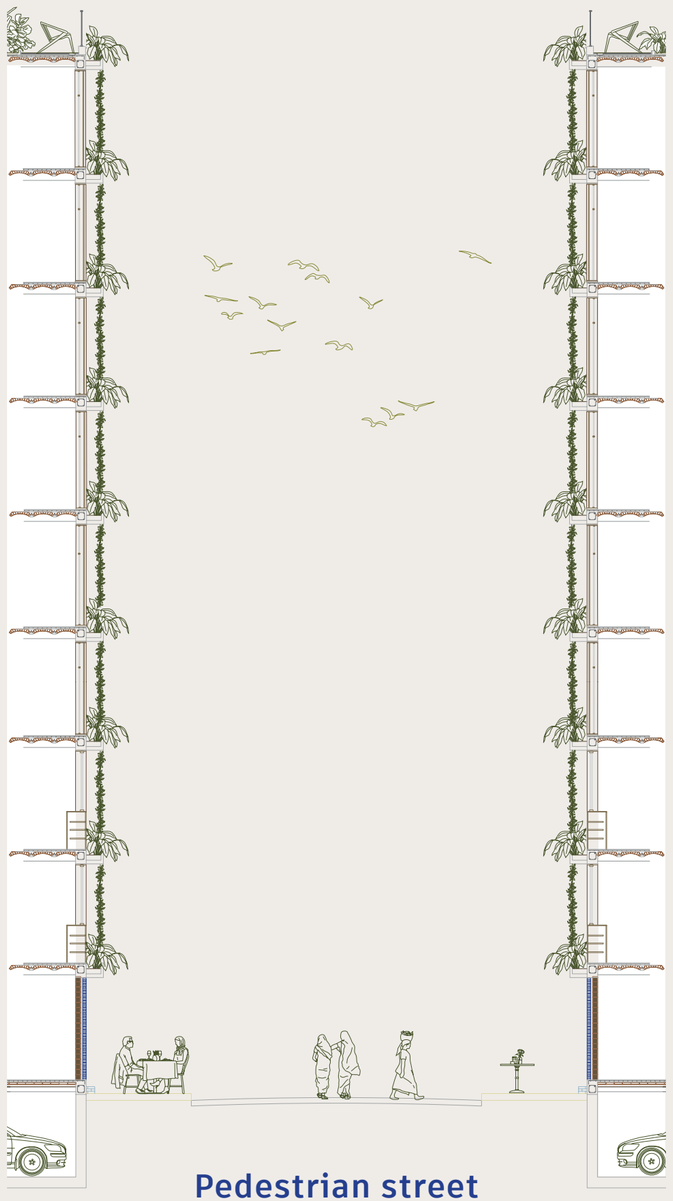
Entrance parking



Entrance parking

STREET TYPES



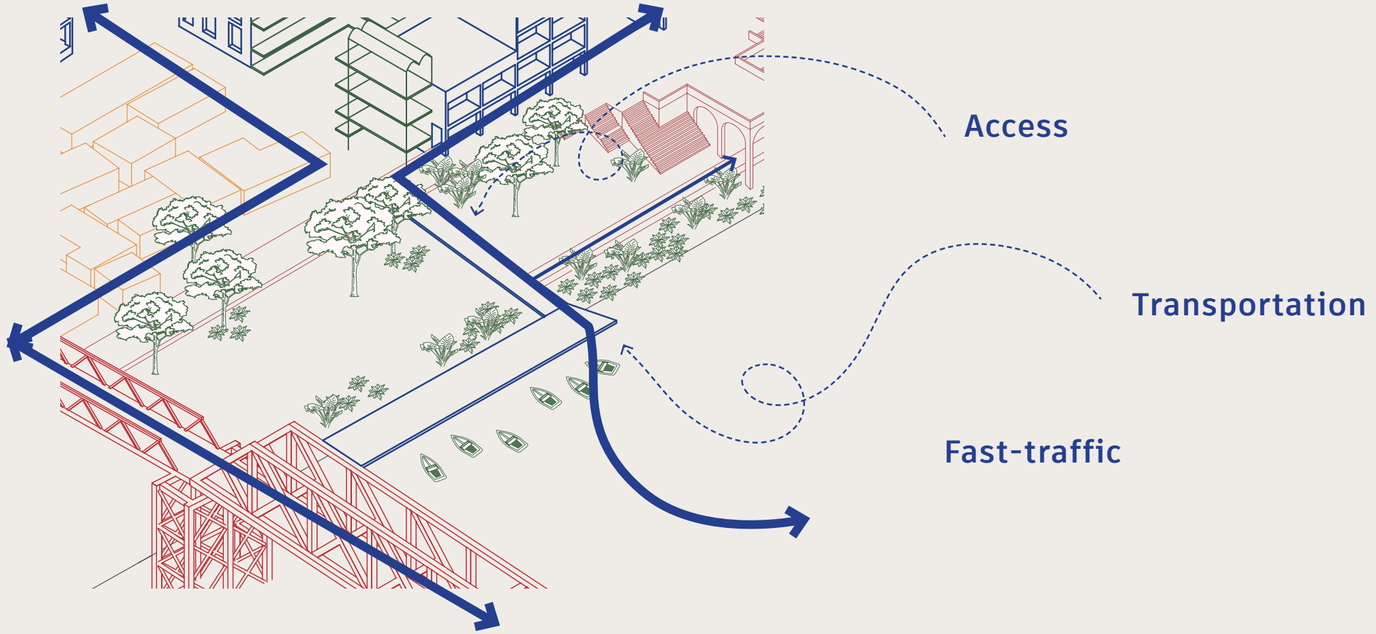


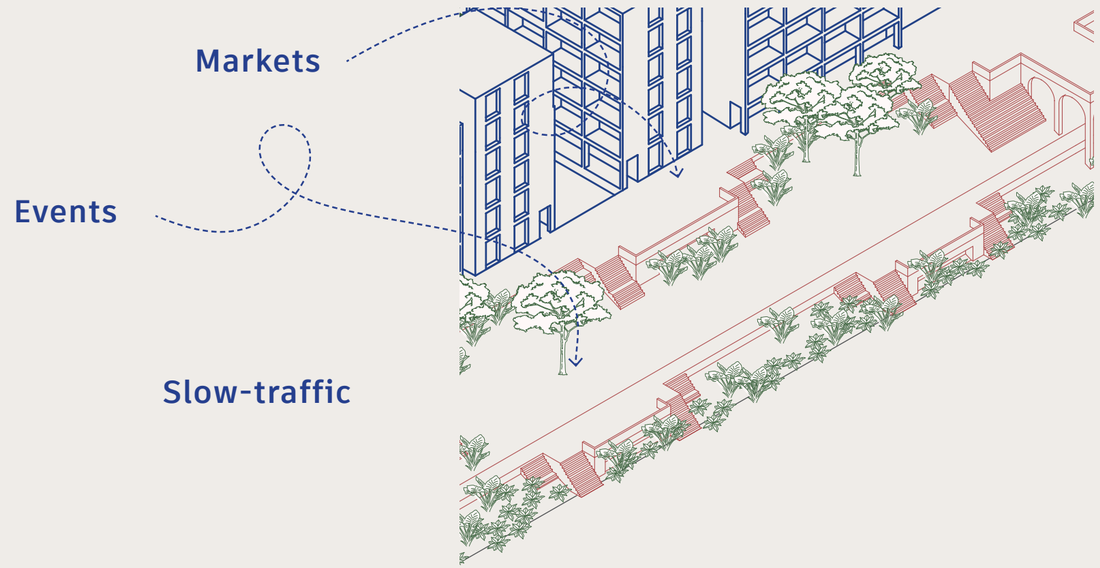
Pedestrian street

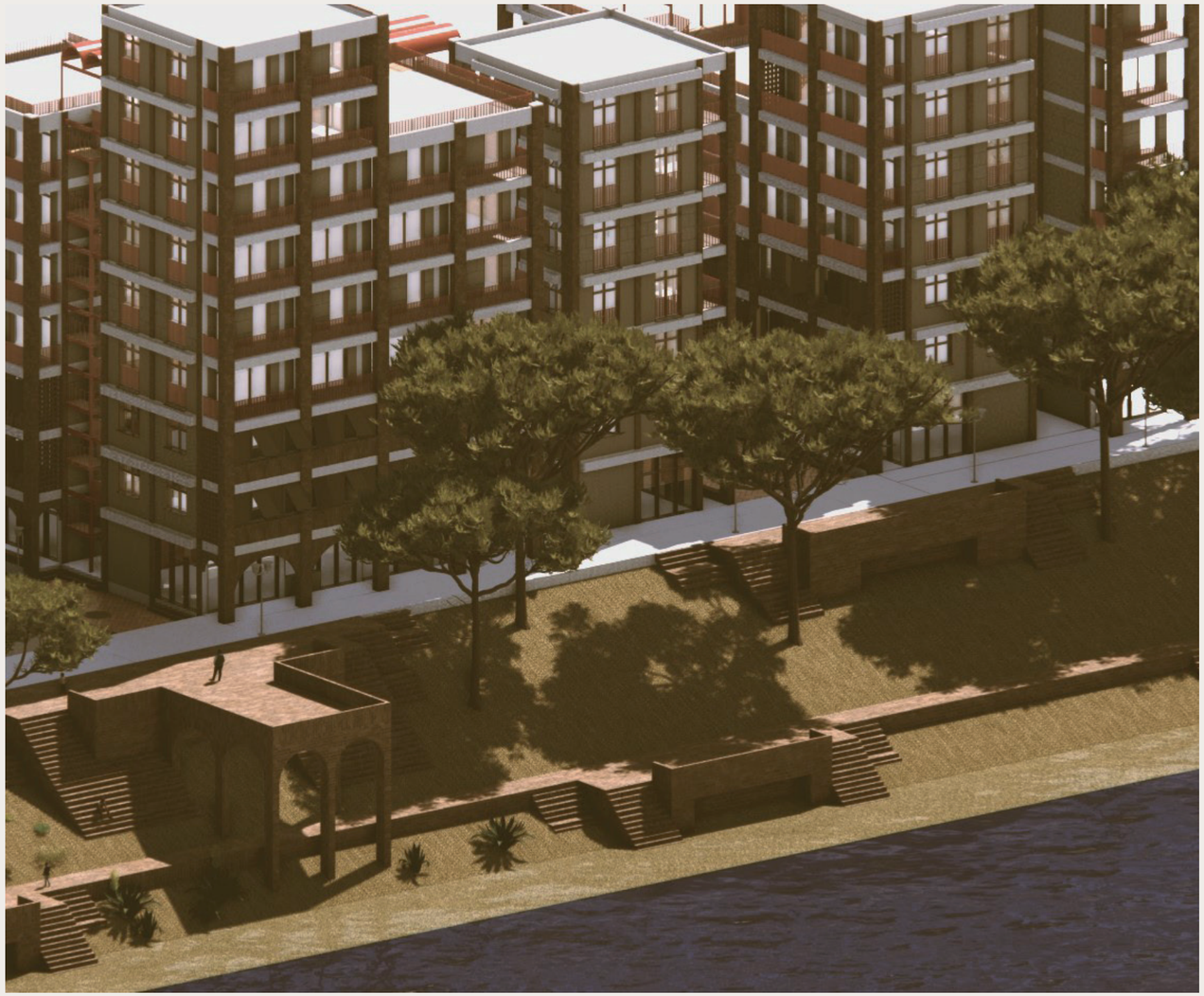
Pedestrian street

ACTIVATING THE RIVERBANK

Riverbank

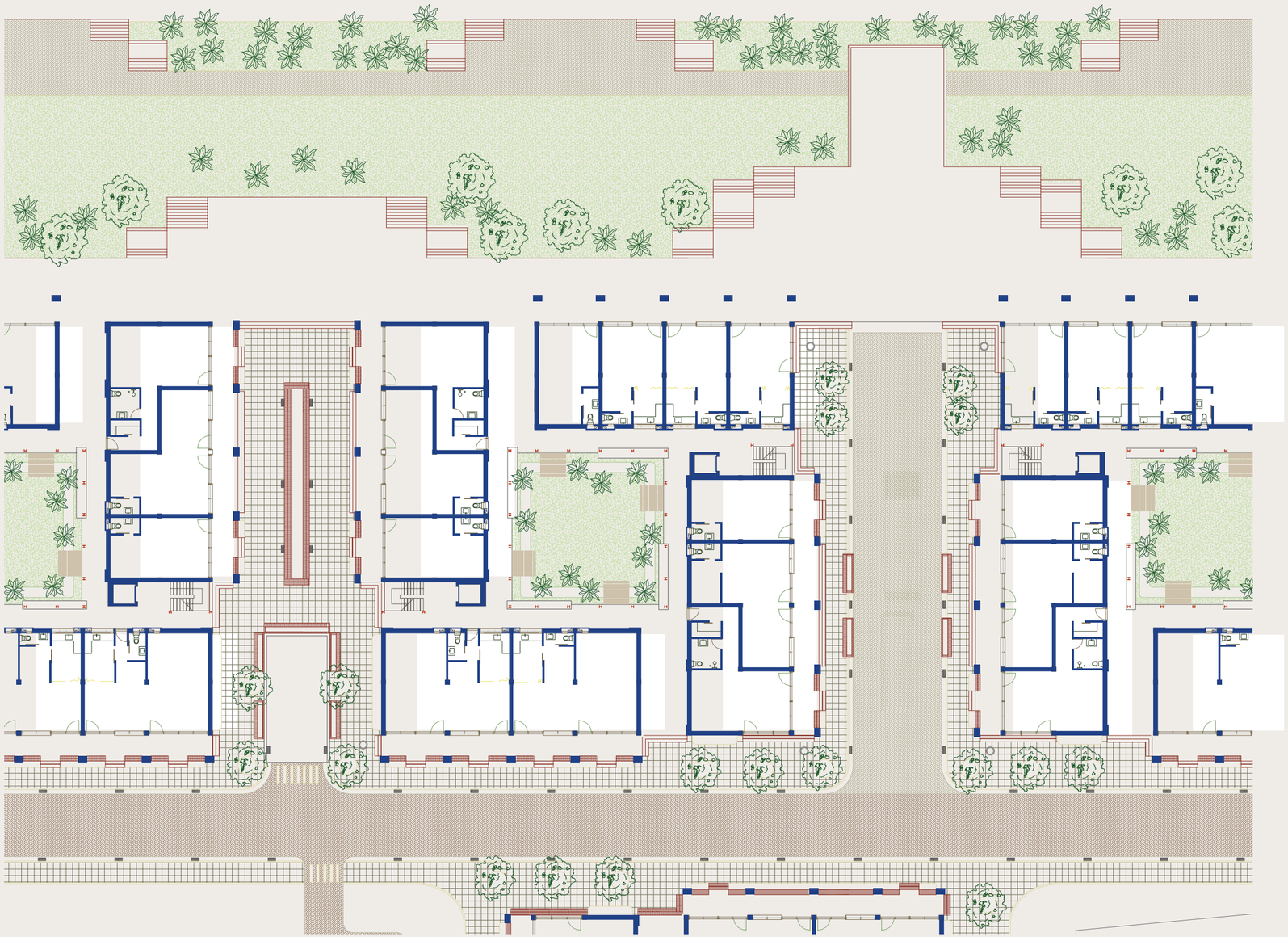


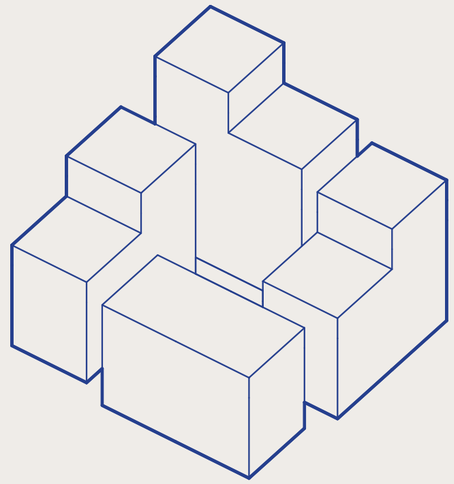




Riverbank

CLUSTER STRATEGY

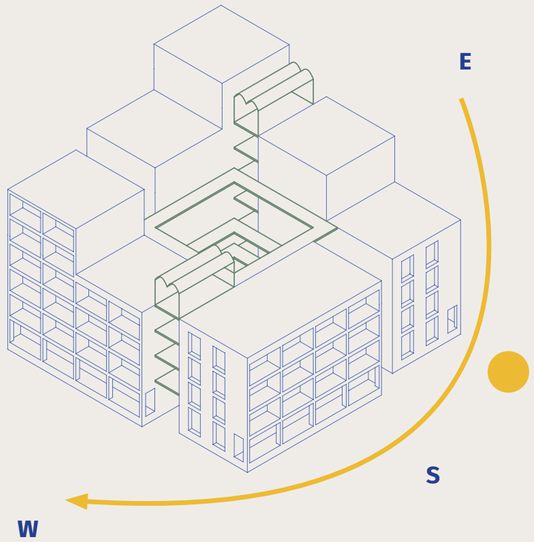




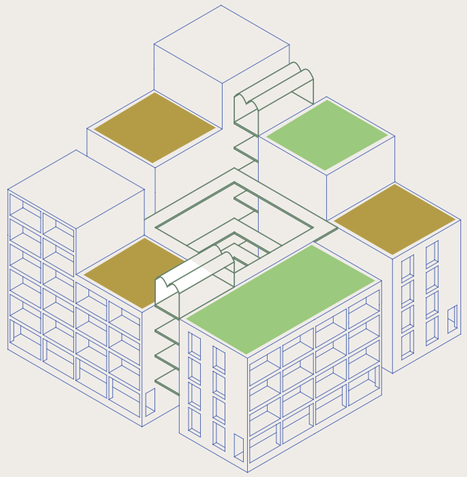
- Social- mix and cohesion
- Living and working environment
- Community feel at cluster level

HINDU COMMUNITY + CLUSTER

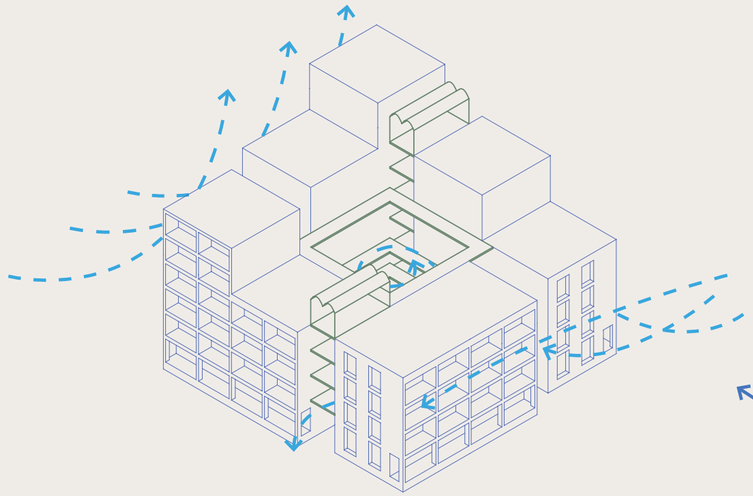
Sun



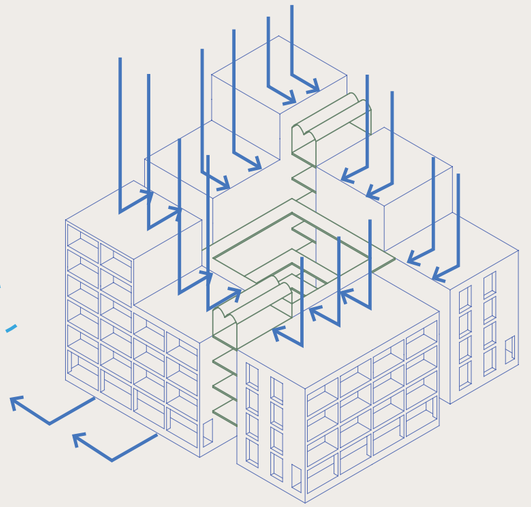
Landscape



Wind



Water



Rain

Street
=
channel

Deflection of wind

Rainwater storage tanks
+ filter system

Courtyard
wadi

Air recirculation

Rain

Rainwater storage tanks
+ filter system

City water network

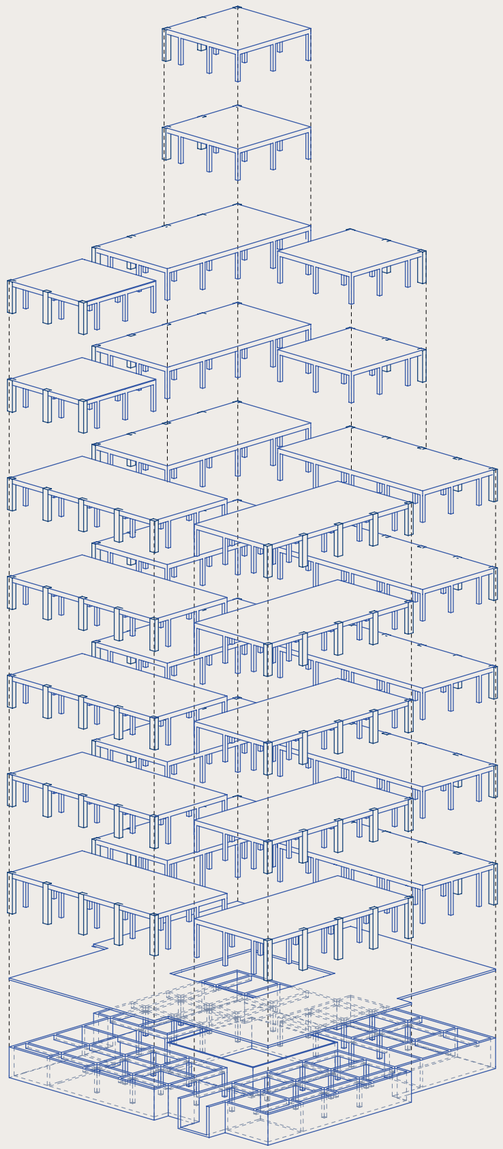
3 levels of water height

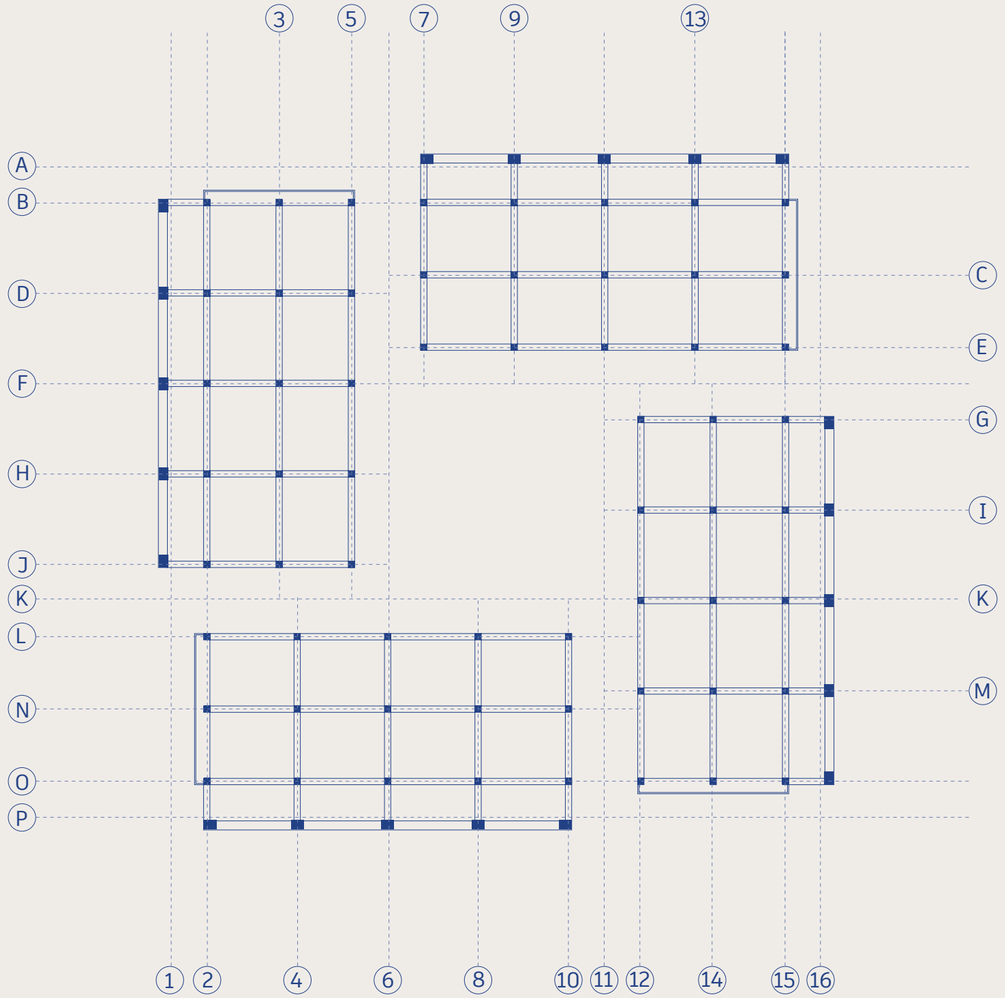
Central sewage system
over capacity --> runoff

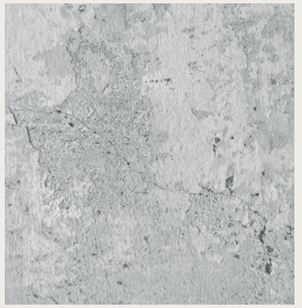
Bank filtrate

Groundwater

CONSTRUCTION







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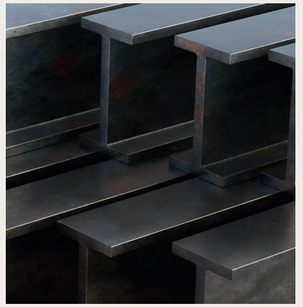
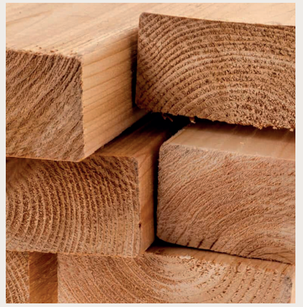


Steel



Timber

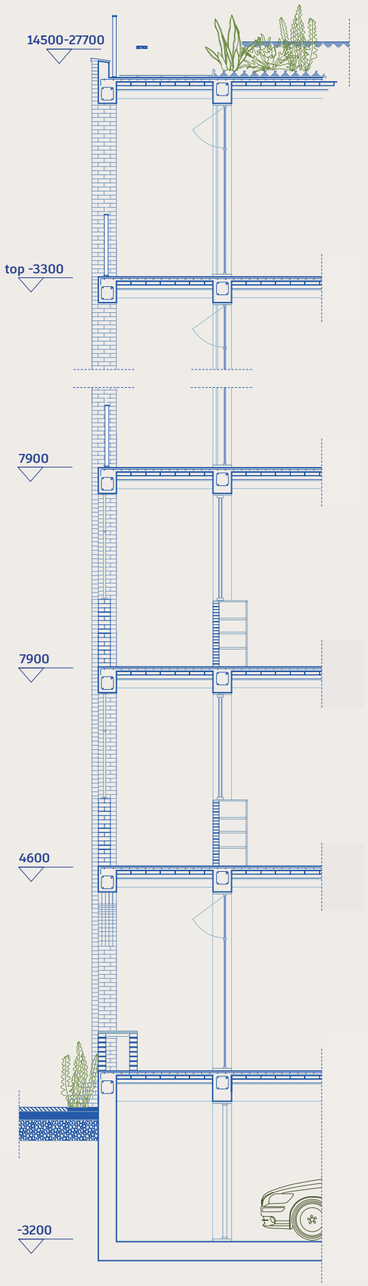
CONSTRUCTION

Hollow clay block

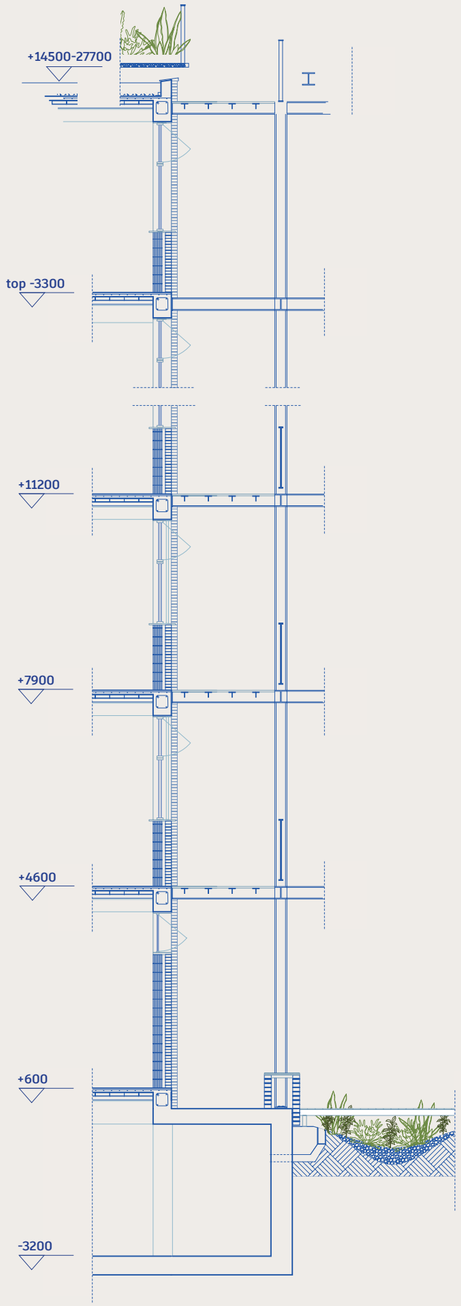
Fired brick

CSEB

CONSTRUCTION

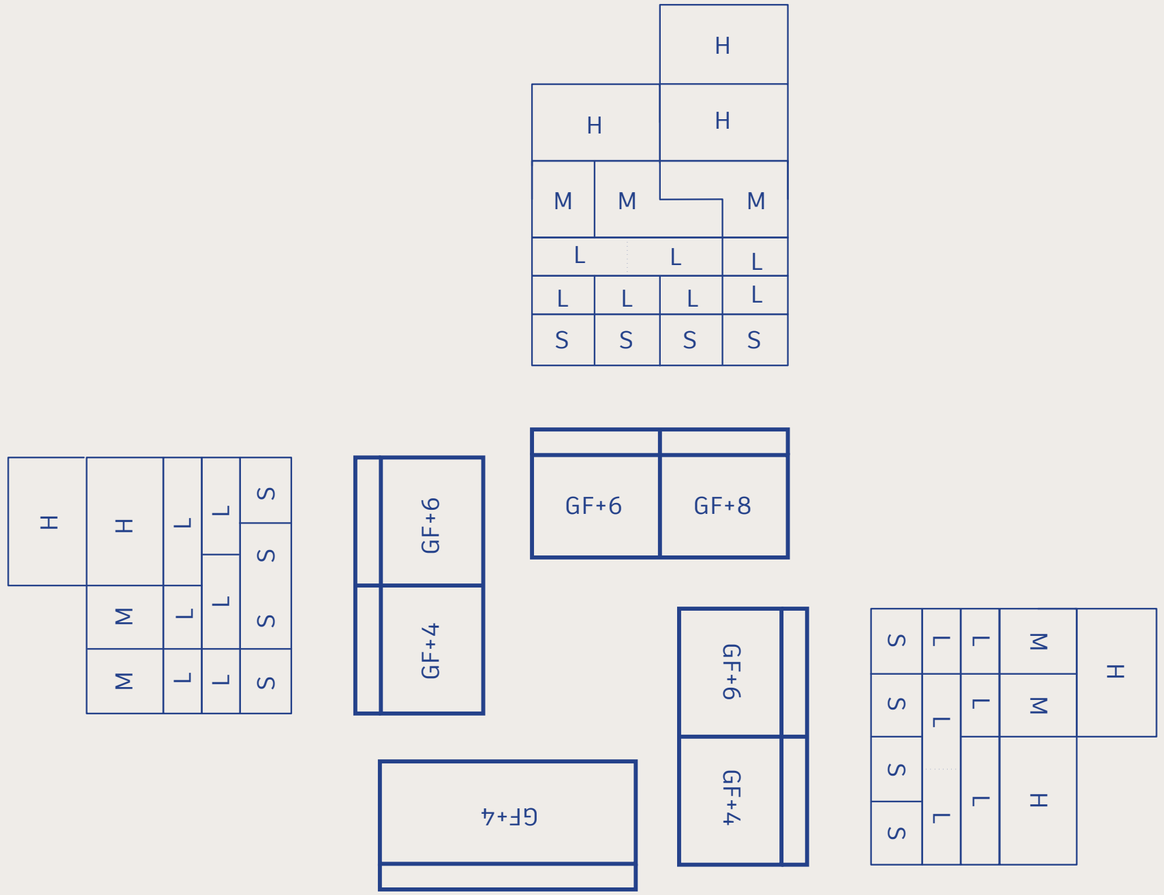


Fragment balconies



Fragment walkway

DWELLING STRATEGY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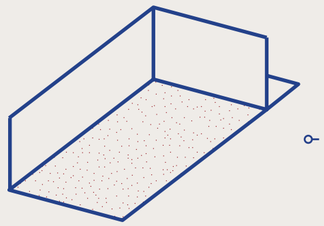
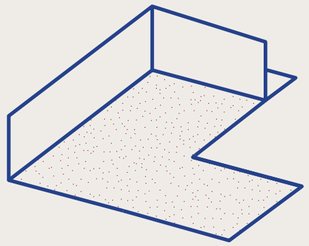
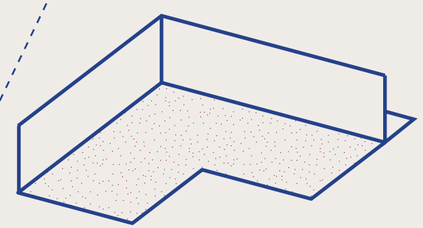
UNIT TYPES



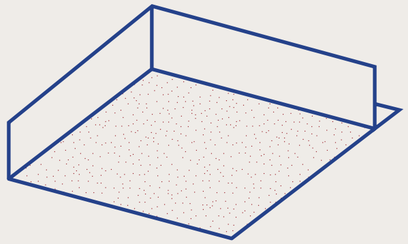
40 sqm interior
+
10 sqm exterior



60 sqm interior
+
10 sqm exterior

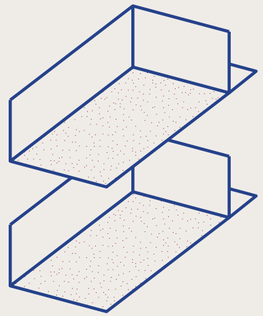


60 sqm interior
+
20 sqm exterior

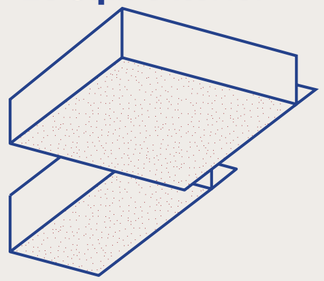


80 sqm interior
+
20 sqm exterior

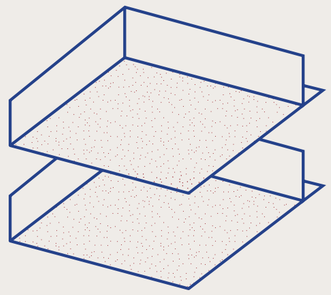
Low-income units



80 sqm interior
+
20 sqm exterior

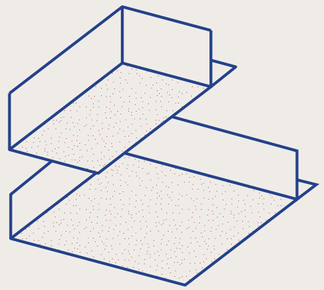


120 sqm interior
+
30 sqm exterior



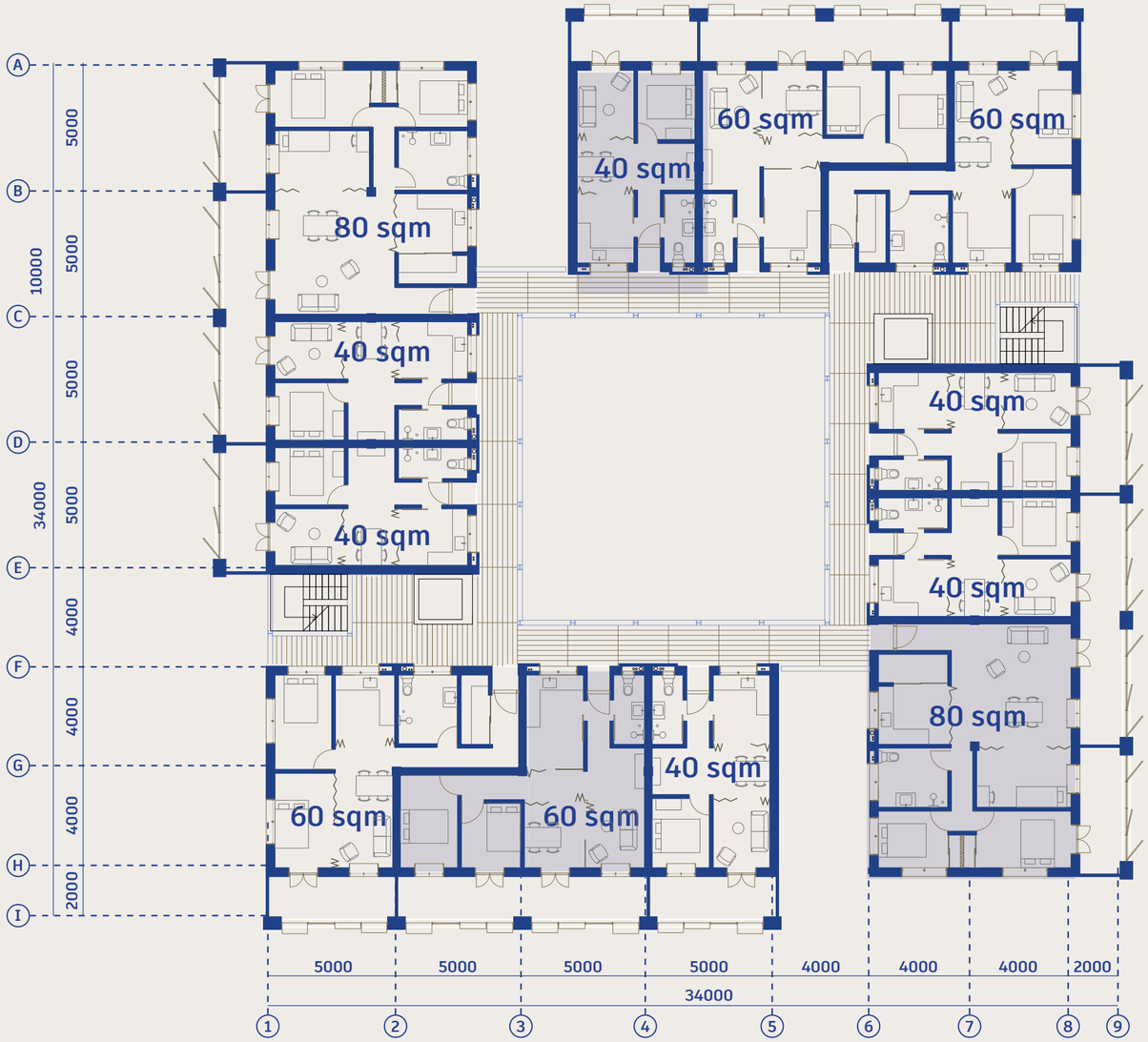
160 sqm interior
+
40 sqm exterior

Middle-income units



120 sqm interior
+
30 sqm exterior

High-income units



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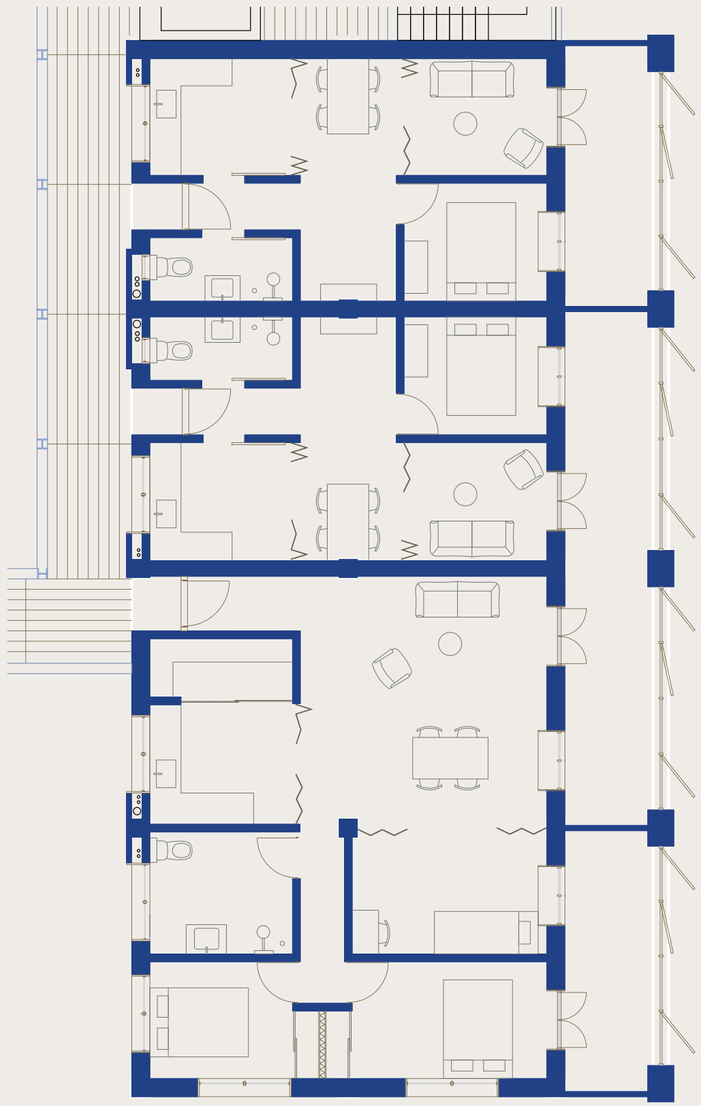
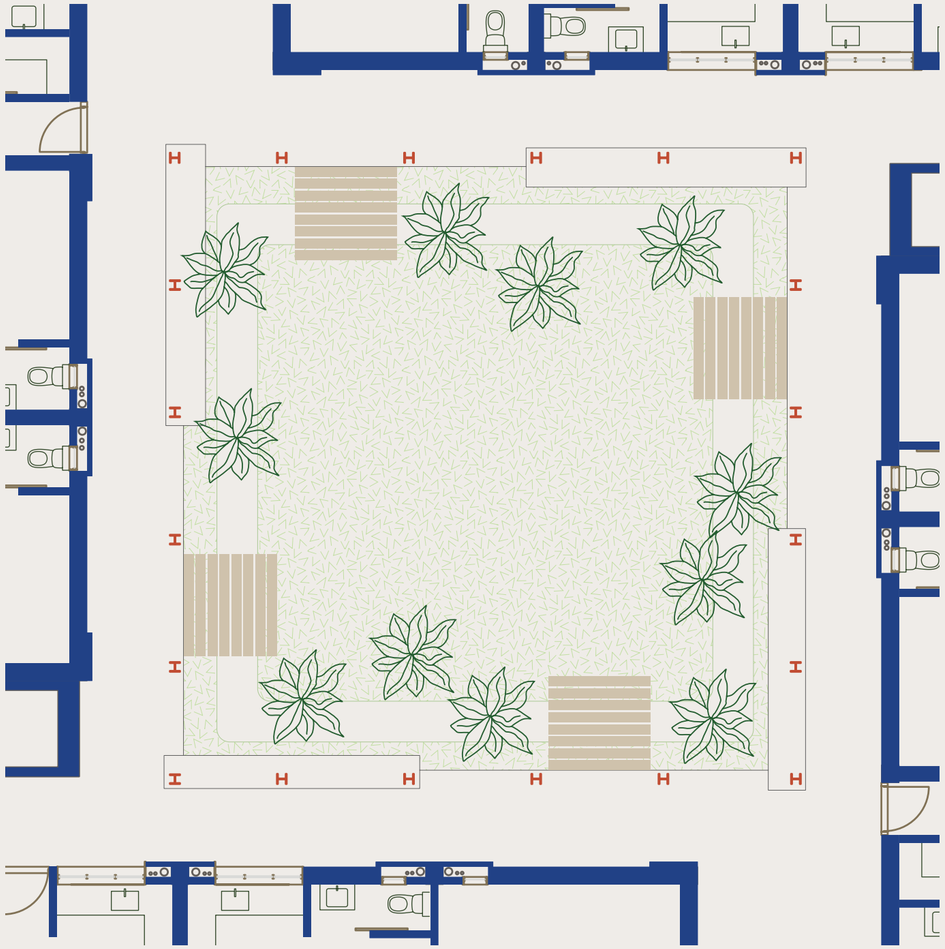
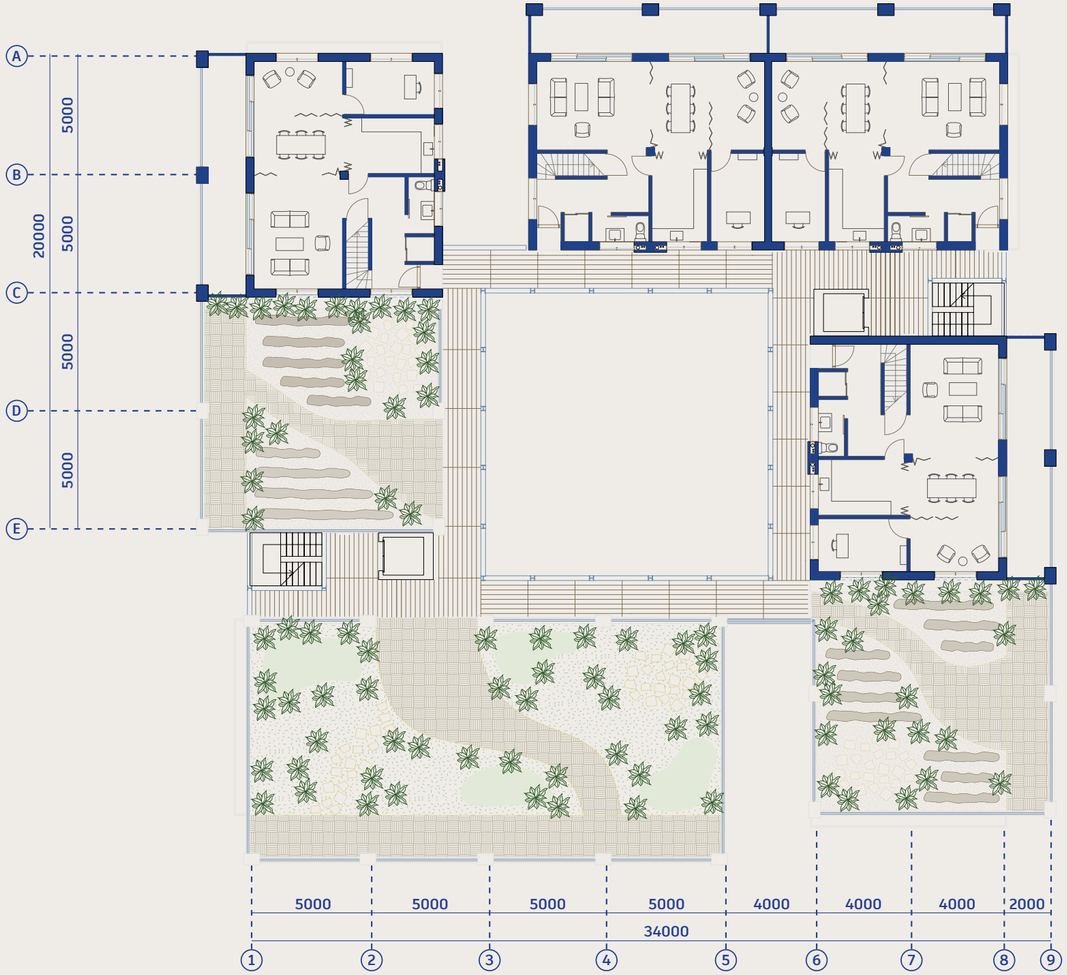


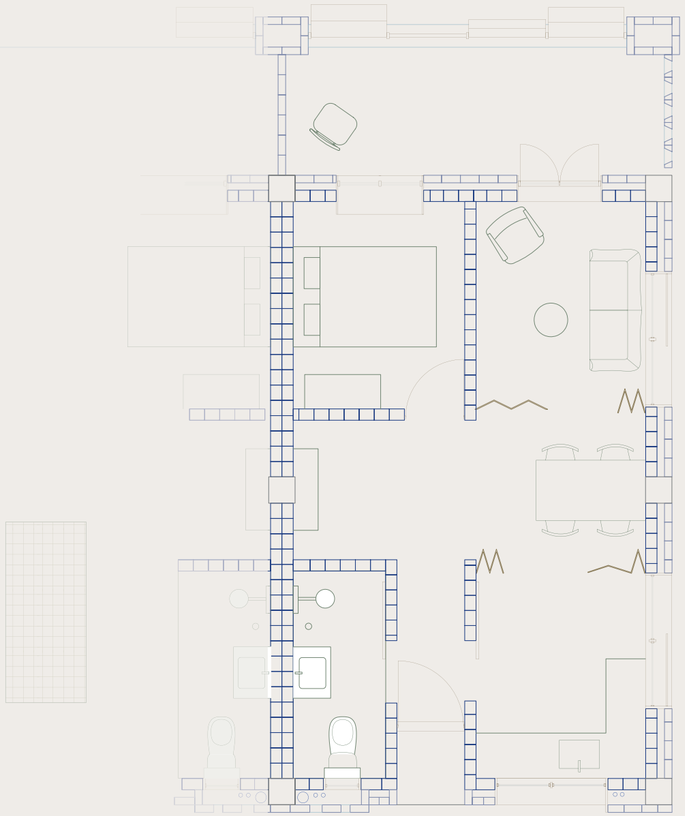
Low-income housing
Second floor - type 40sqm, 60sqm, and 80sqm

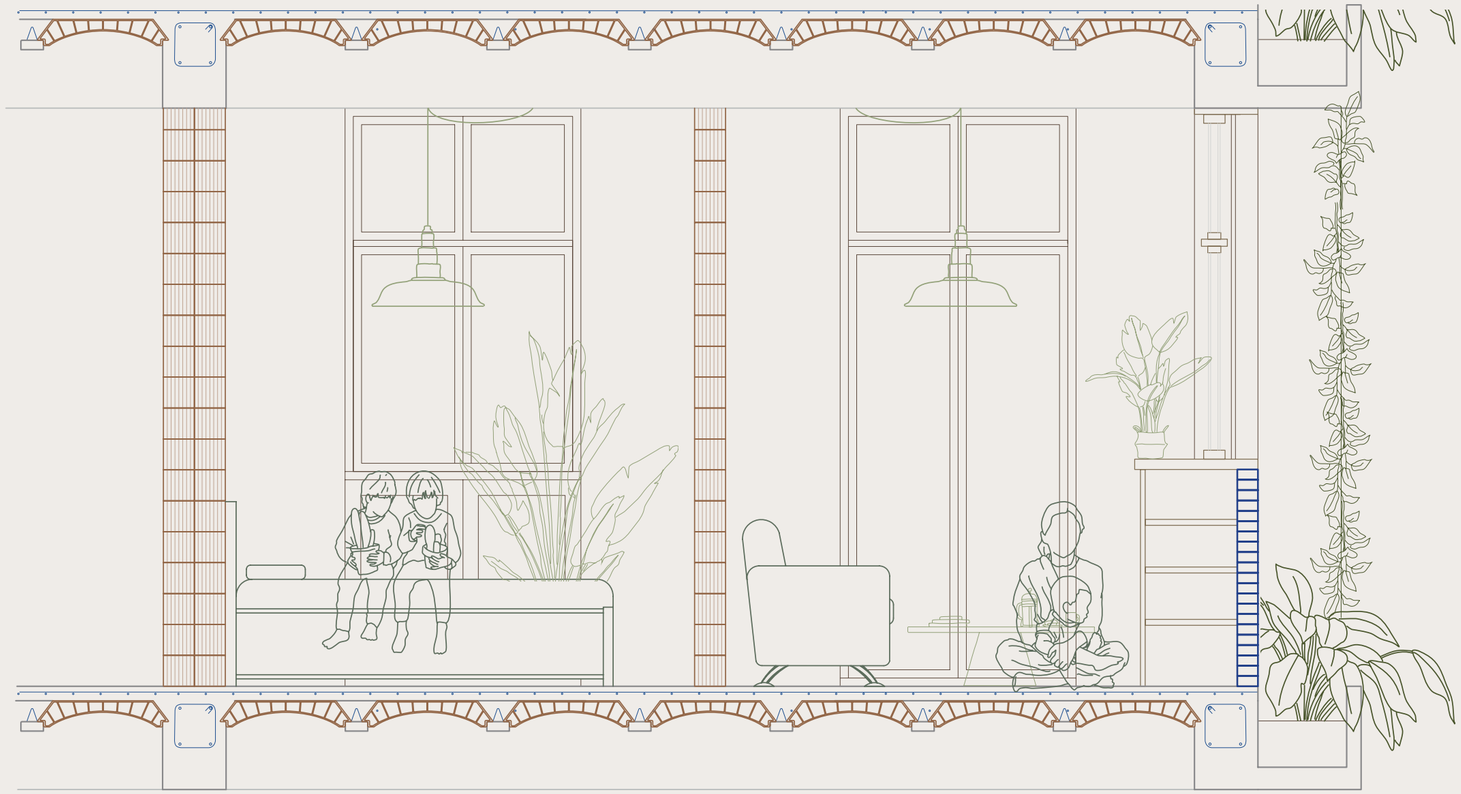


Courtyard
Ground floor - 144 sqm



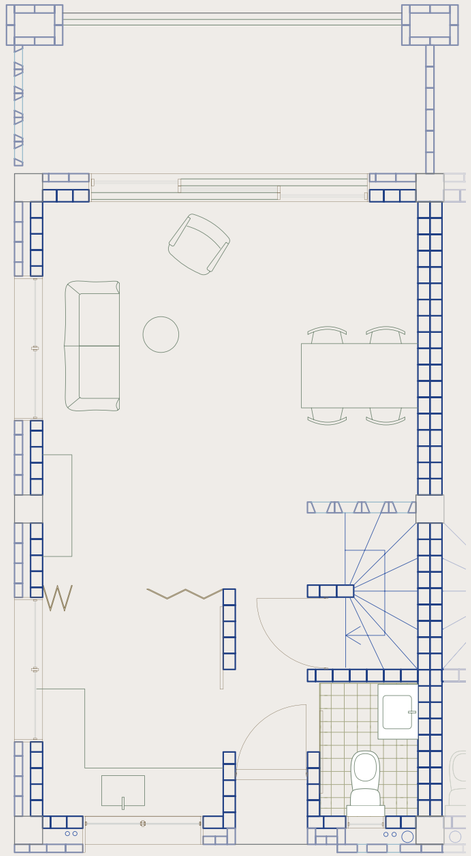
High-income housing & rooftops
Fifth floor - type 160 sqm (duplex)





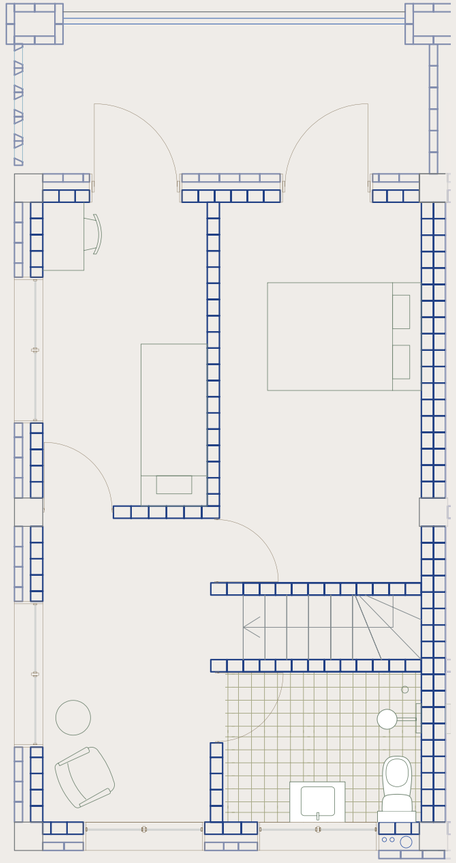
Low-income housing
40sqm

FLOORPLANS

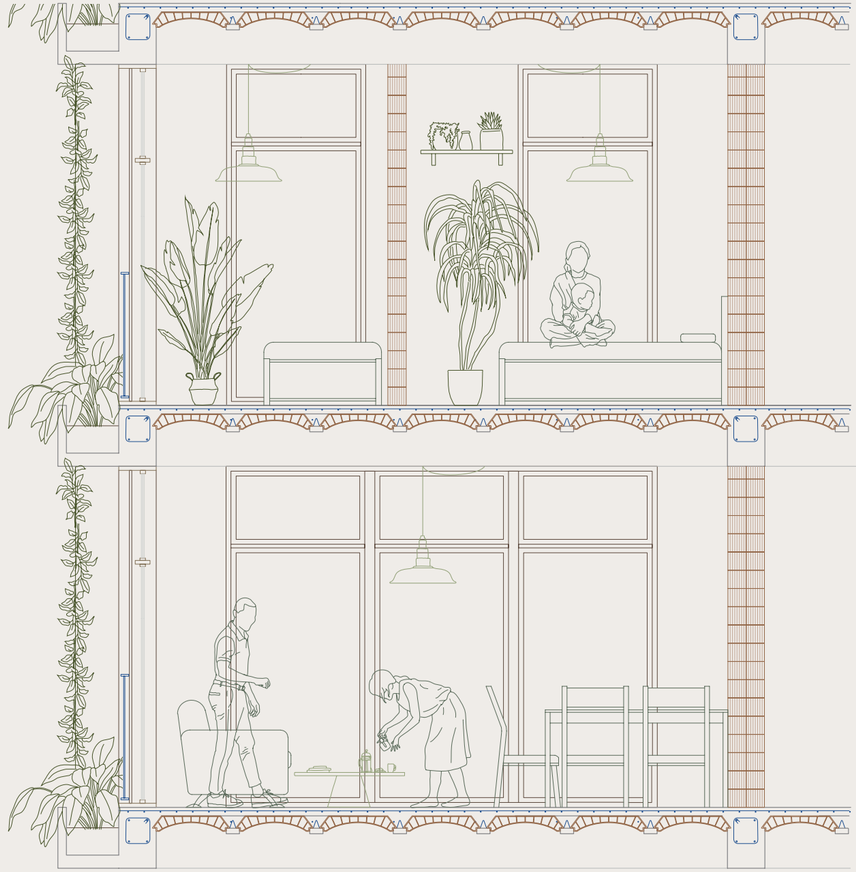


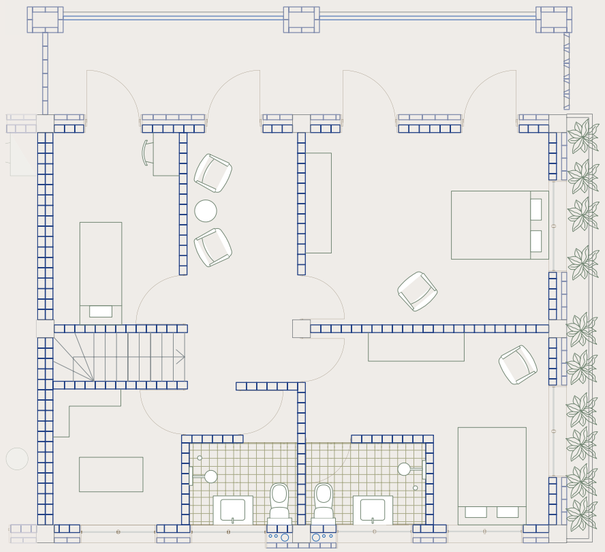
Level 1

Middle-income housing
80sqm

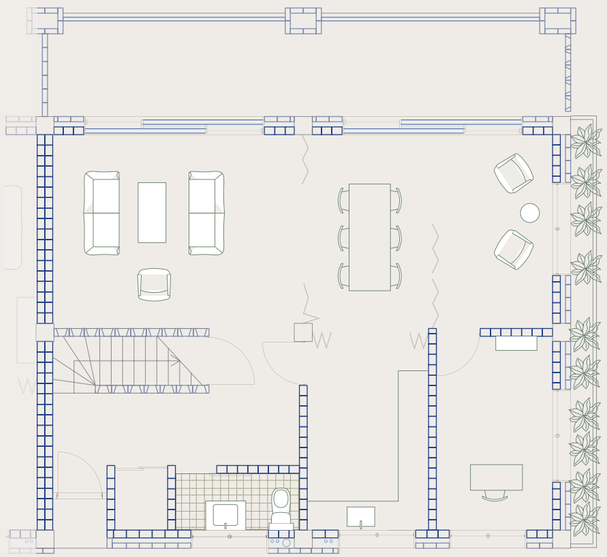


Level 2

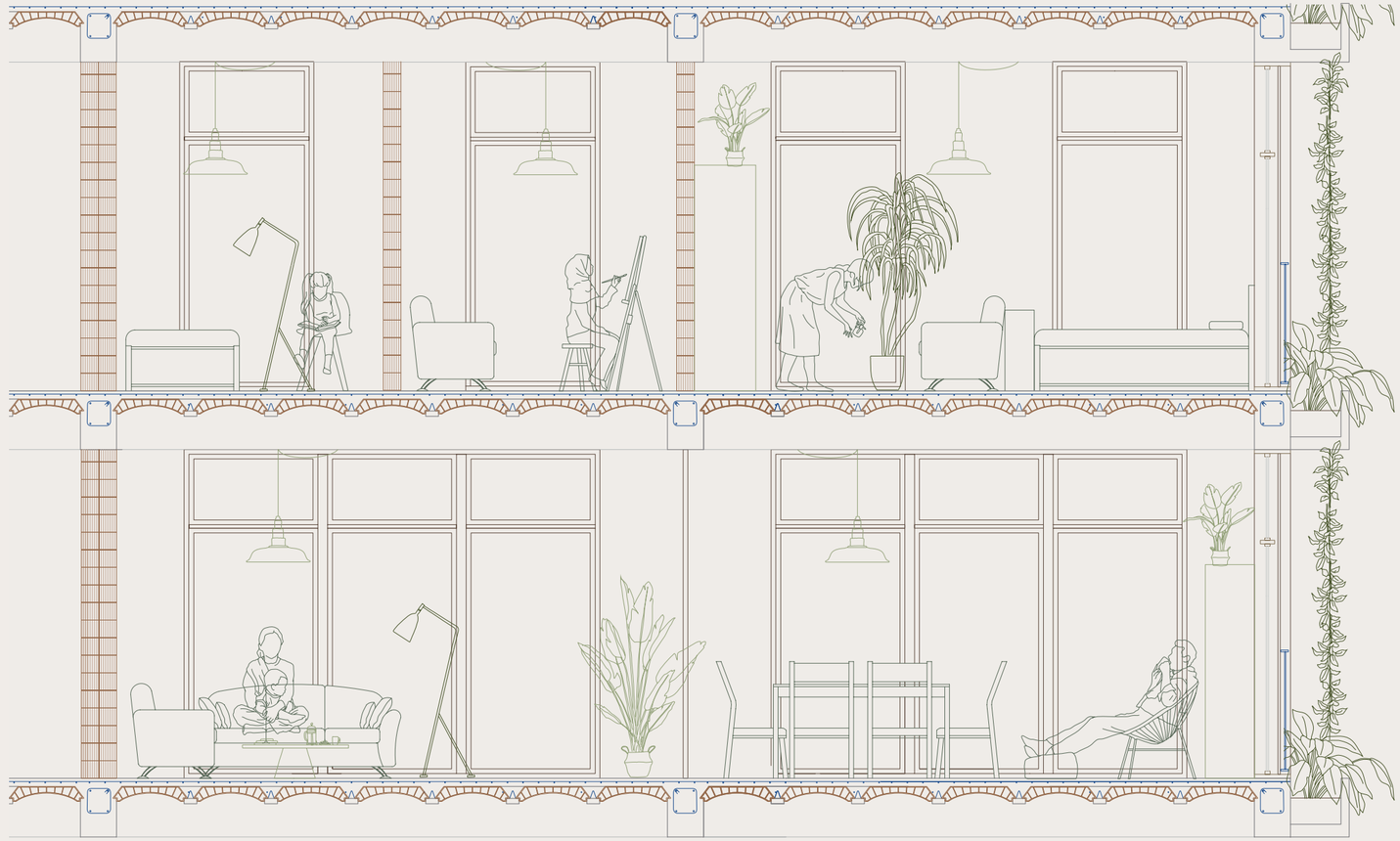




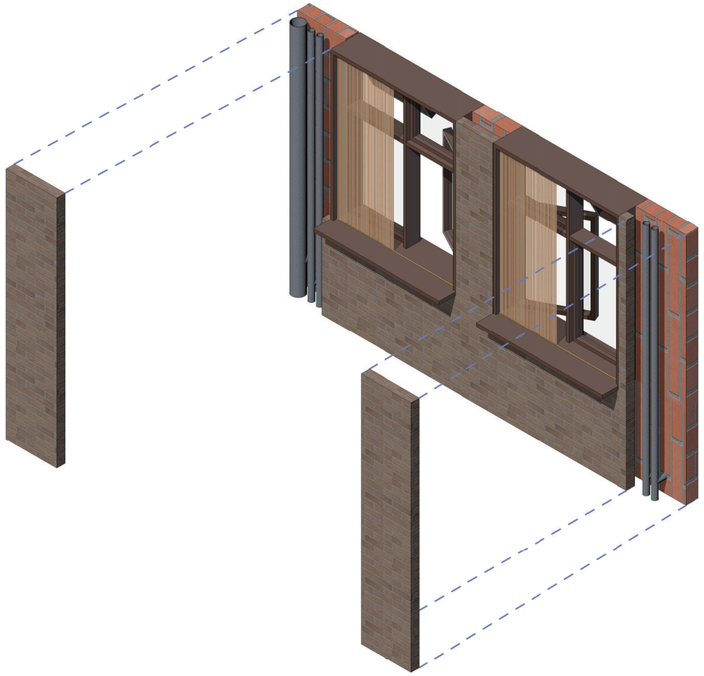
Level 2

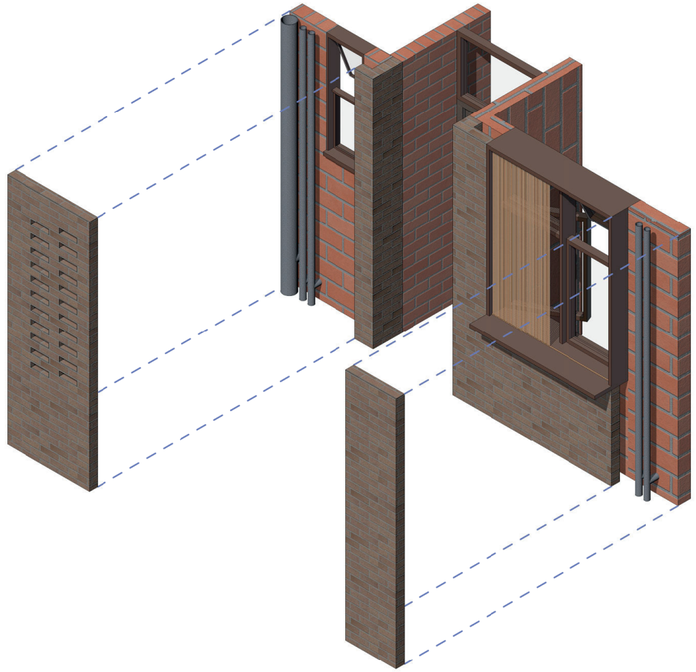


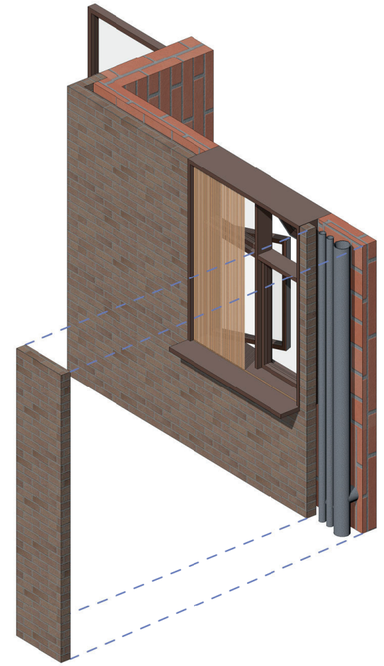
Level 1



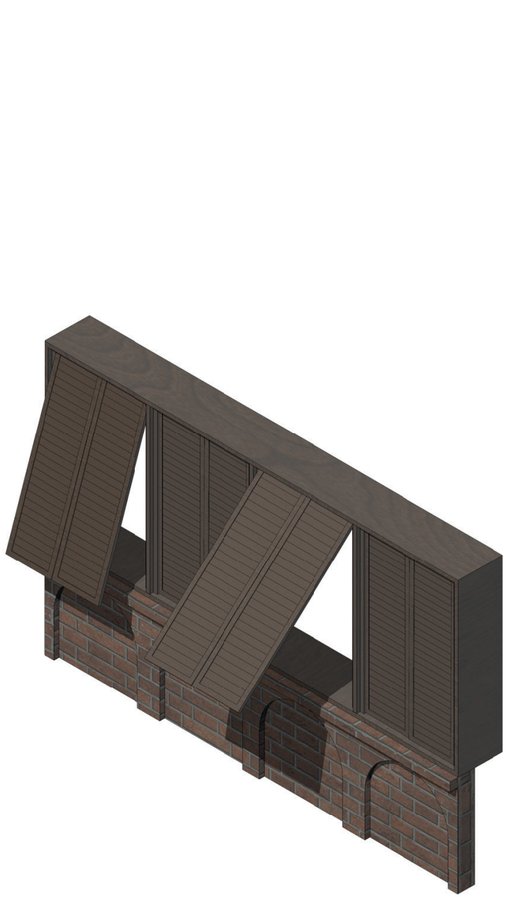
High-income housing
160sqm

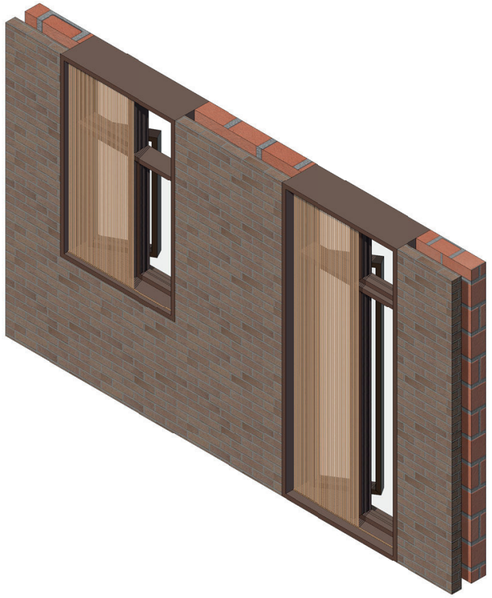


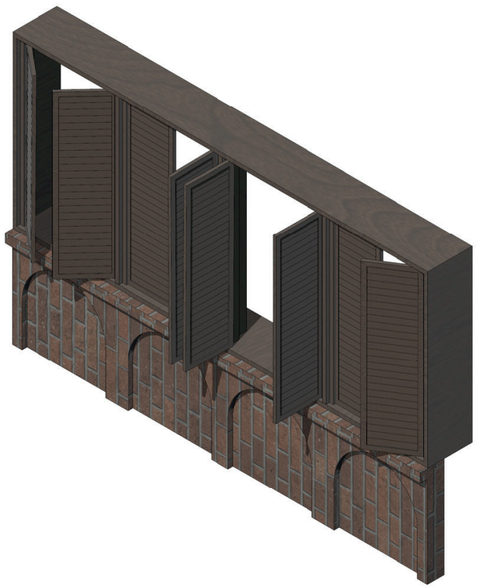




Facades - courtyard side
All floors







Facades - balcony side
First + second floor

Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

Arriving by boat - **Up the riverbank** - Through the pedestrian street - On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop - Arriving by boat - Up the riverbank - Through the pedestrian street -

Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - **Turning left by parking entrance** - To the supermarket - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - Turning left by parking entrance - **To the supermarket** - Through the courtyard - Up te walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up the walkway - Cooking at home - Working or relaxing on the balcony - Last hours of the day on the rooftop

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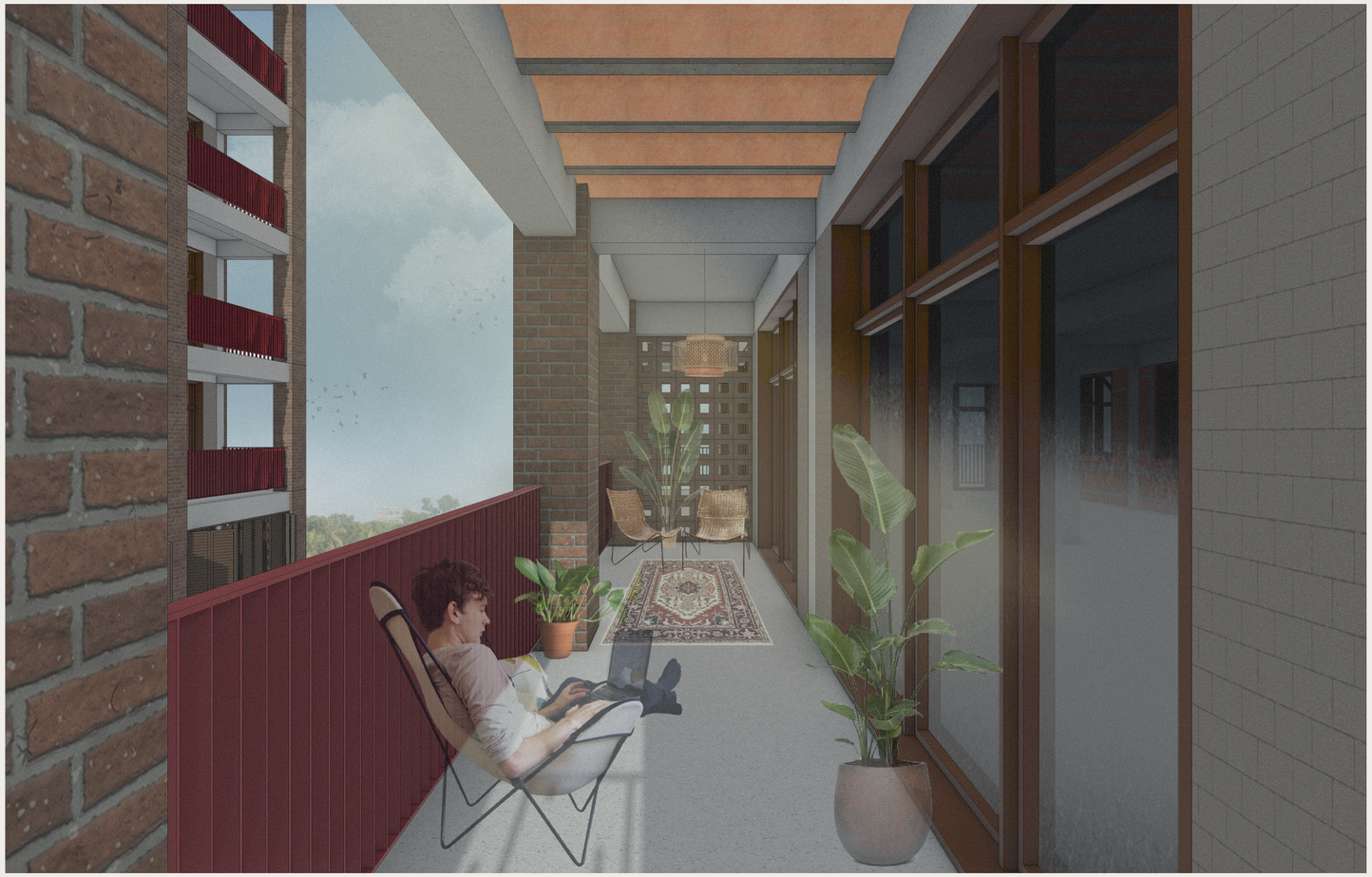
Arriving by boat - Up the riverbank - Through the pedestrian street - On the main road - Turning left by parking entrance - To the supermarket - Through the courtyard - Up te walkway - Cooking at hoh - Working or relaxing on the balcony - Last hours of the day on the rooftop

Working or relaxing on the balcony - Last hours of the day on the rooftop - Cooking at home - Up te walkway - To the supermarket - Through the courtyard - Turning left by parking entrance - On the main road - Through the pedestrian street - Up the riverbank - Arriving by boat



Working or relaxing on the balcony - Last hours of the day on the rooftop - Cooking at home - Up te walkway - To the supermarket - Through the courtyard - Turning left by parking entrance - On the main road - Through the pedestrian street - Up the riverbank - Arriving by boat -

Last hours of the day on the rooftop - Working or relaxing on the balcony - Working or relaxing at home - Cooking at home - Up te walkway - To the supermarket - Through the courtyard - Turning left by parking entrance - On the main road - Through the pedestrian street - Up the riverbank - Arriving by boat -

Thank You!