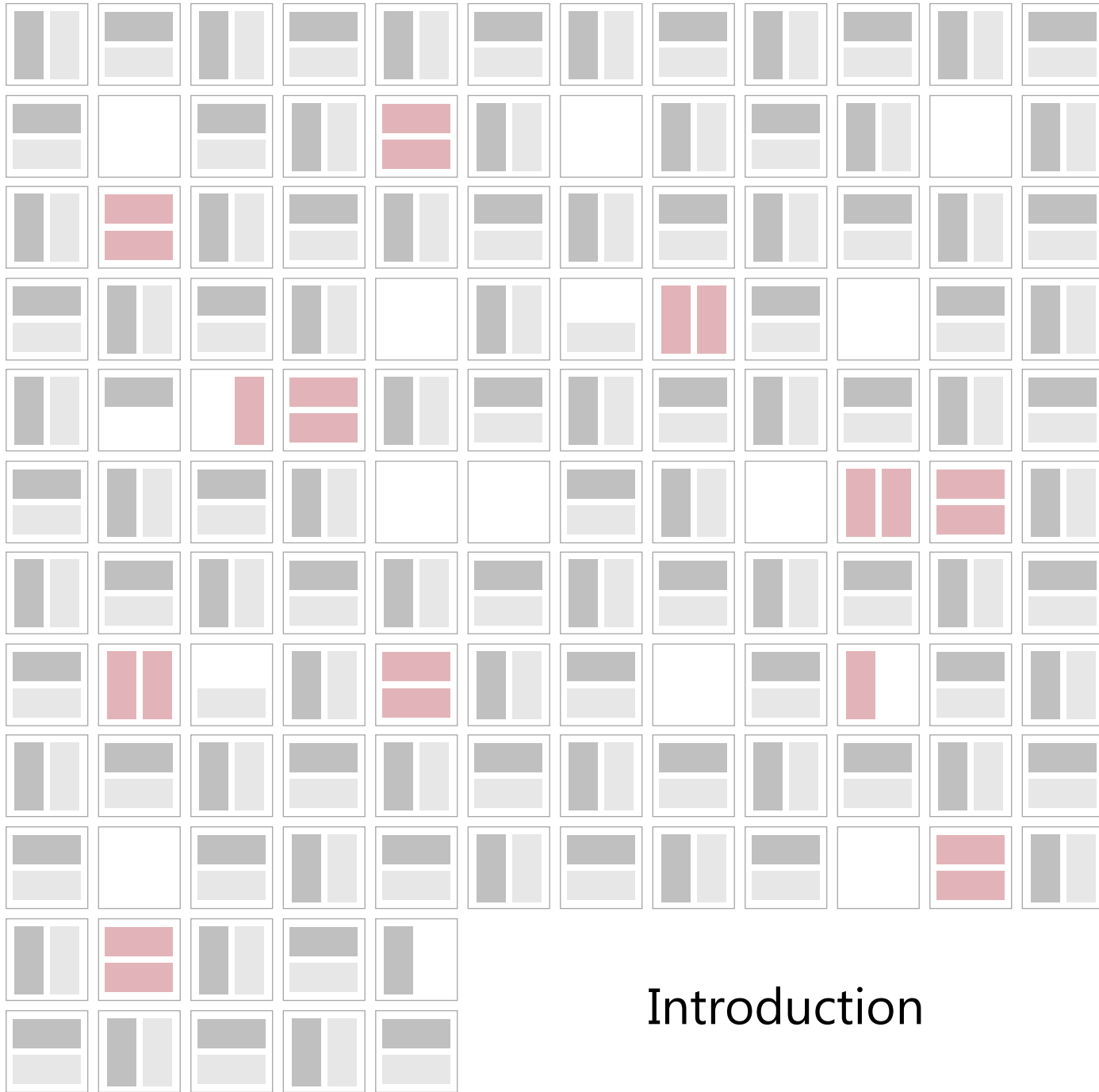


In between handshakes

A critical demolition as a redevelopment strategy

P5 Presentation _ Thomas Fell Rubio _ Global Housing Studio

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Introduction

Location

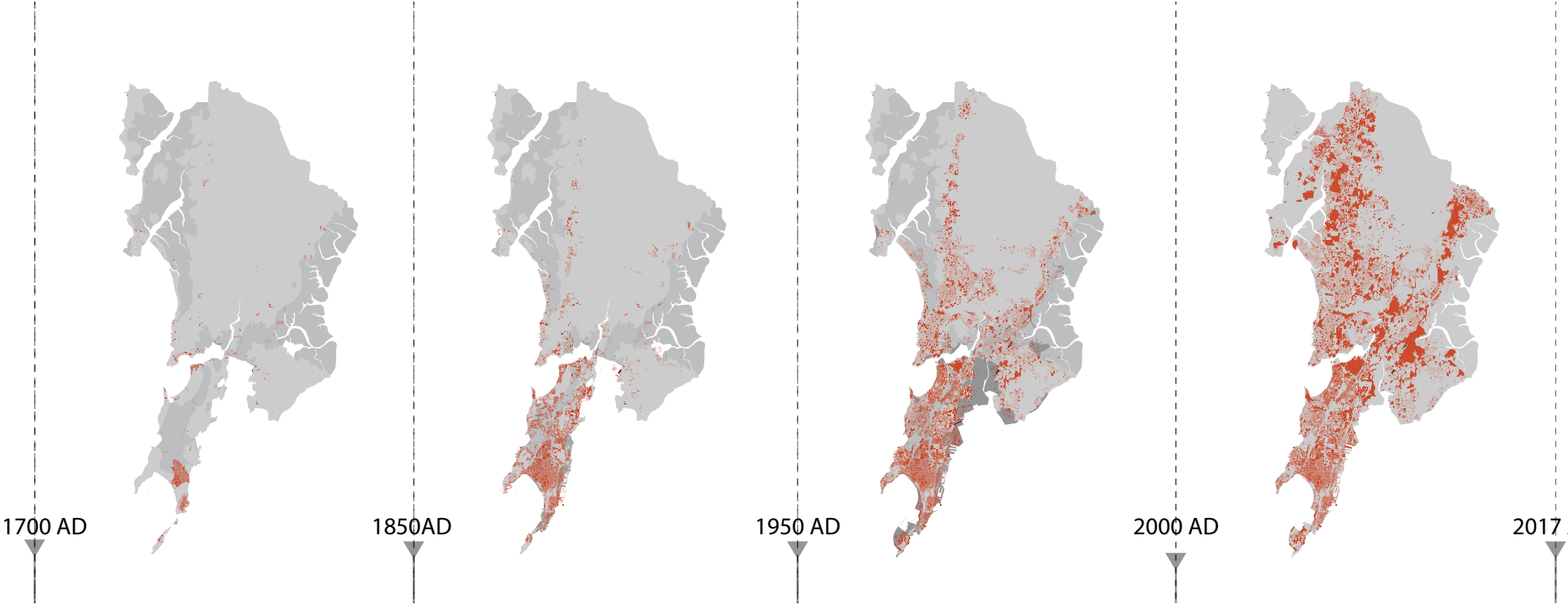


India



Vasai-Virar

Mumbai Urban Growth



Nala Sopara



Nala Sopara Urban Growth

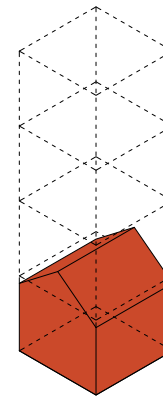
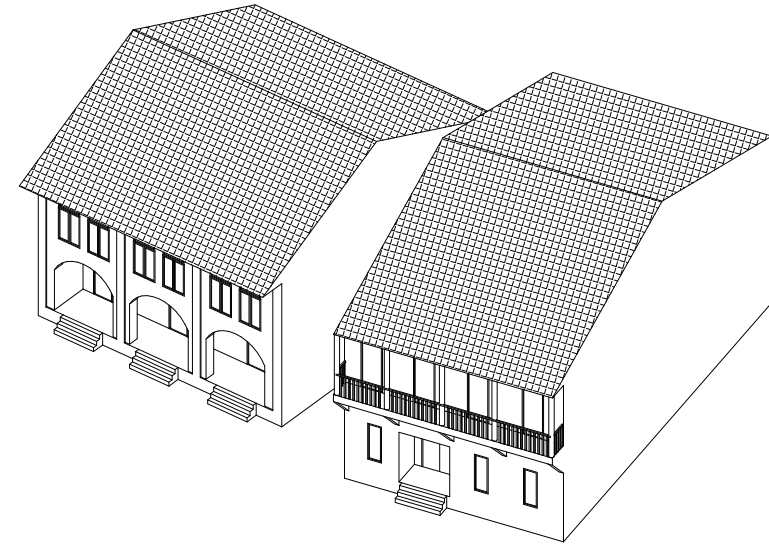




Housing Types

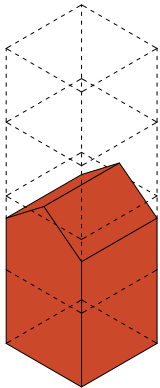
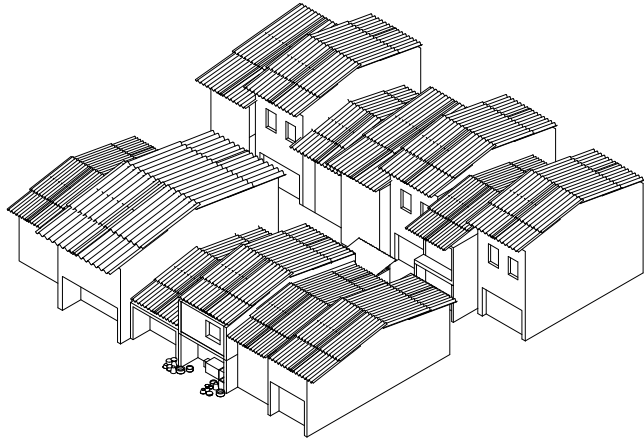


Old Village House

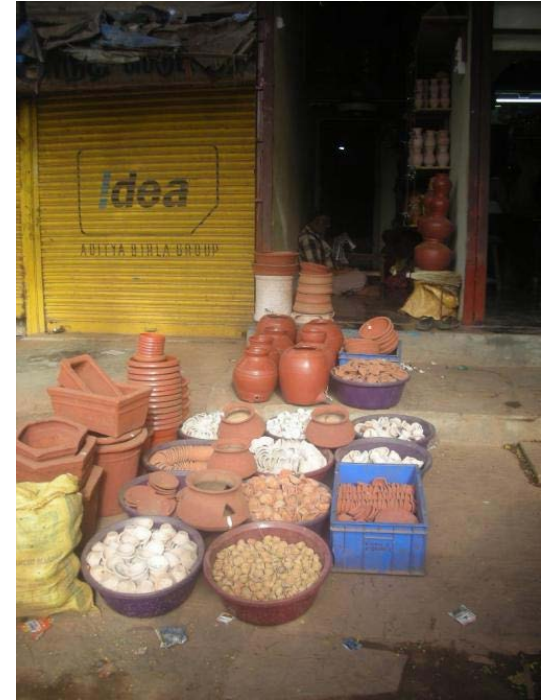


FSI: 0,9

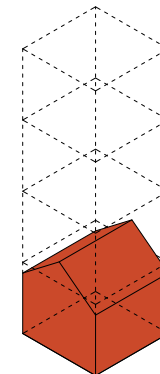
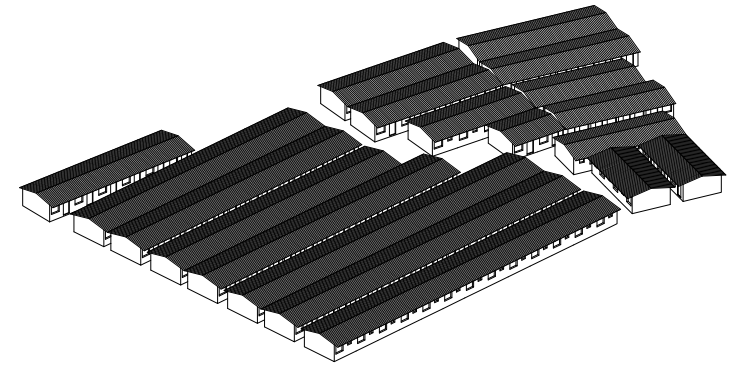
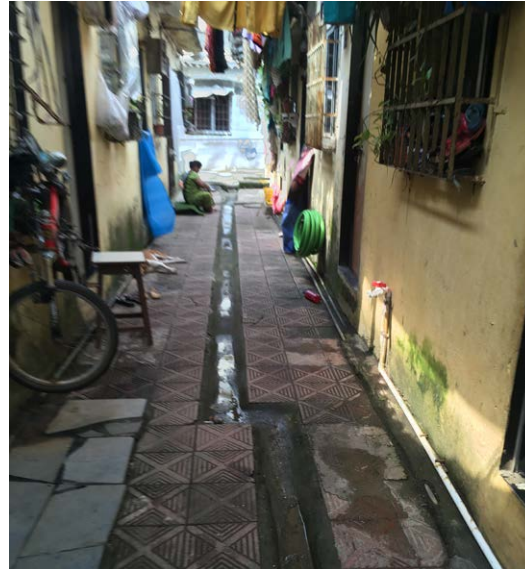
Slum Settlement



FSI : 1.7

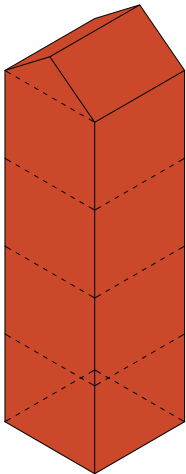
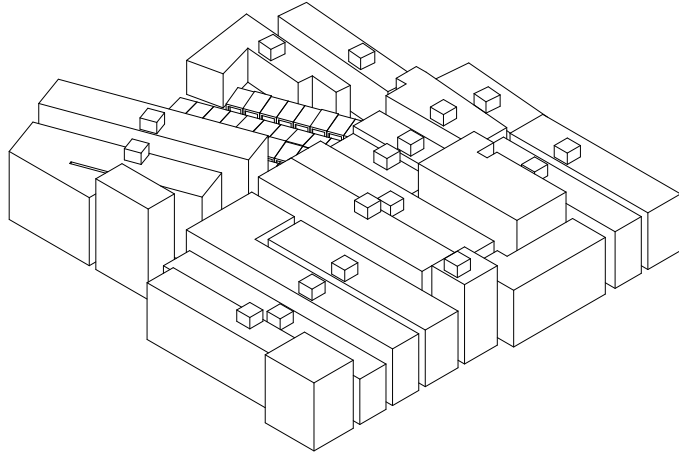


Baithi Chawl



FSI: 0,85

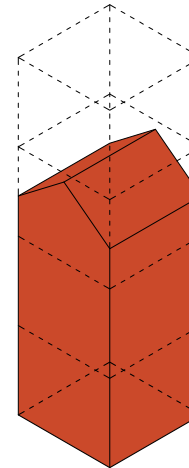
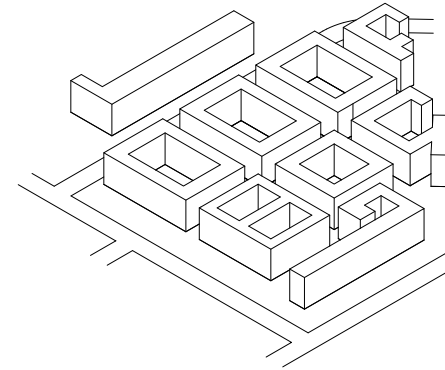
Chawl



FSI: 4.0

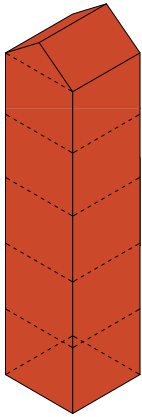
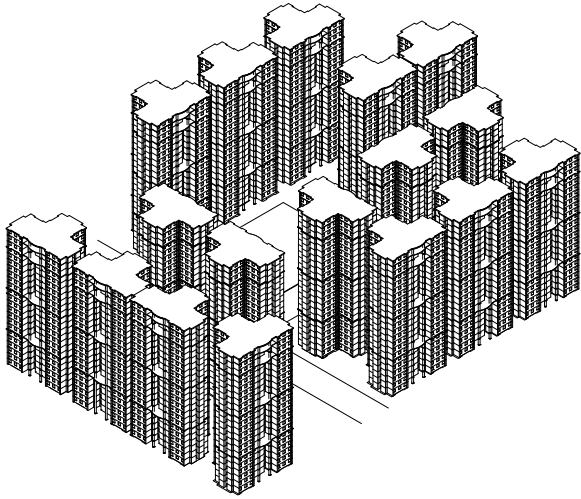


Real State Apartments



FSI : 2.5

MHADA High Rise

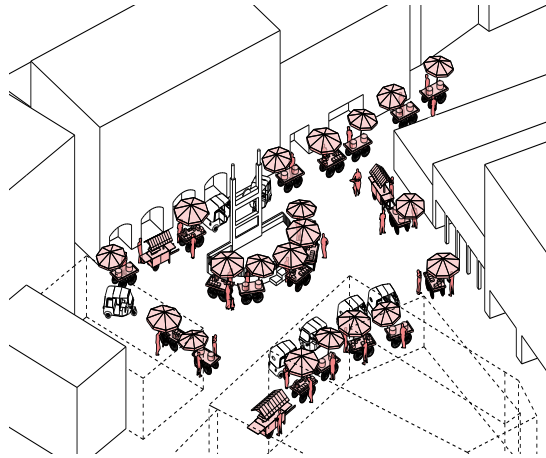


FSI : 5.6

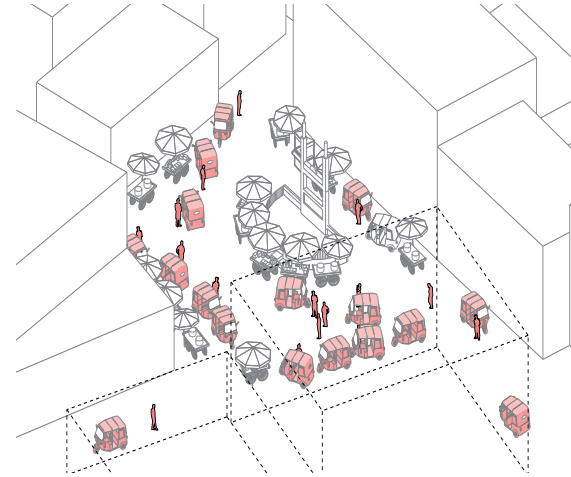


Patterns of Living

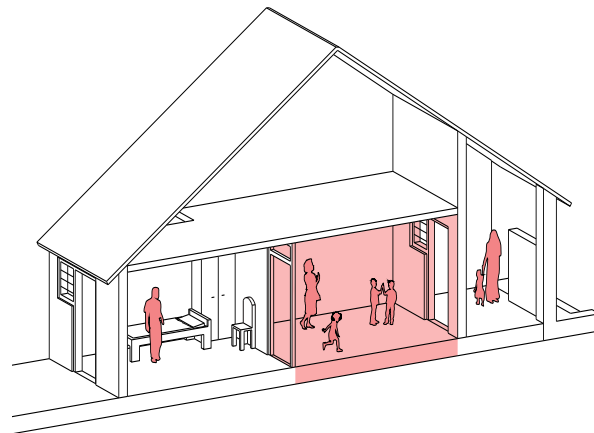
Old Village _ Income Generation



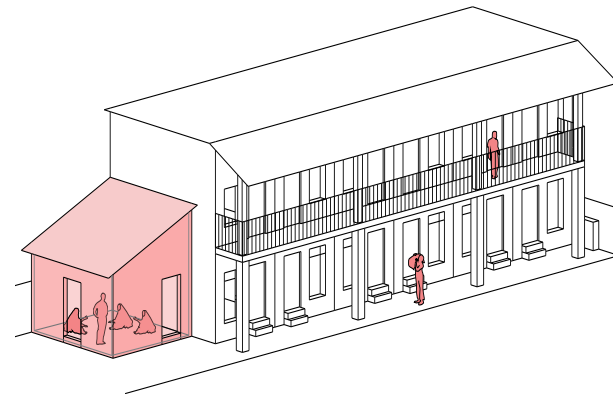
The Market Vendor



The Rickshaw

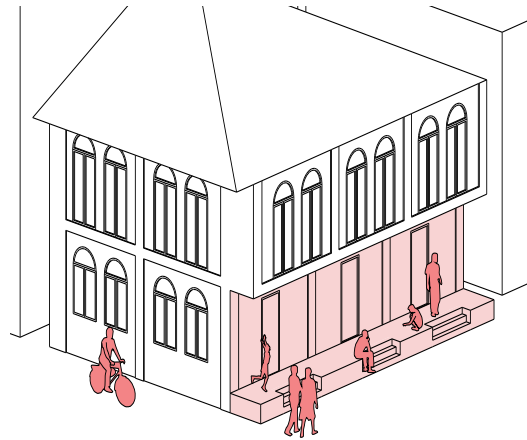


Subletting

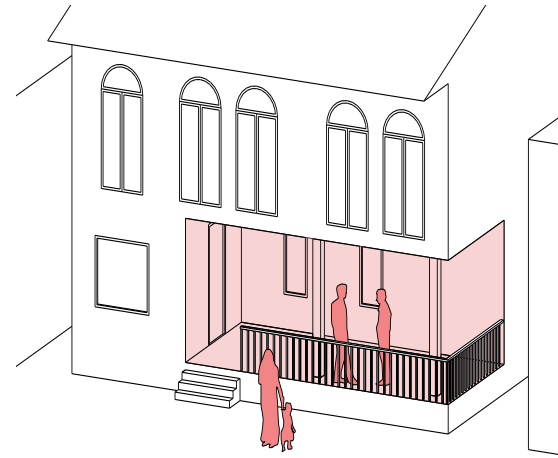


Micro Enterprise

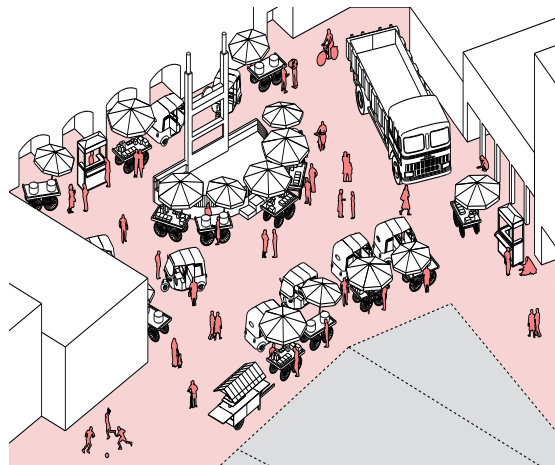
Old Village _ Social Spaces



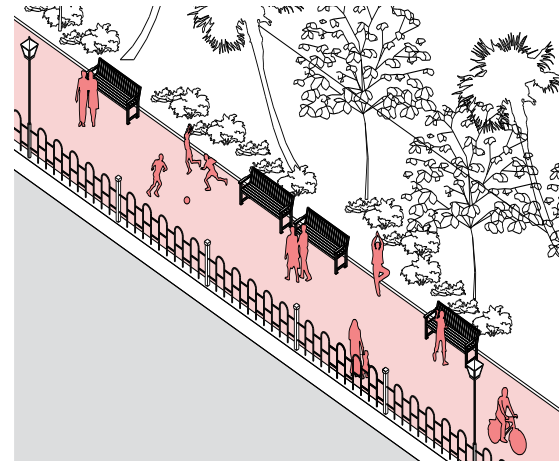
The Ota



The Loggia

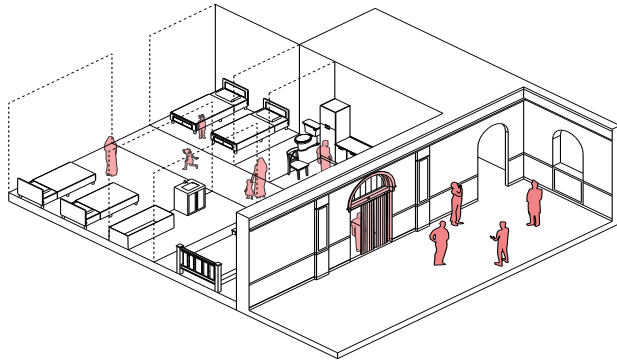


The Market Area

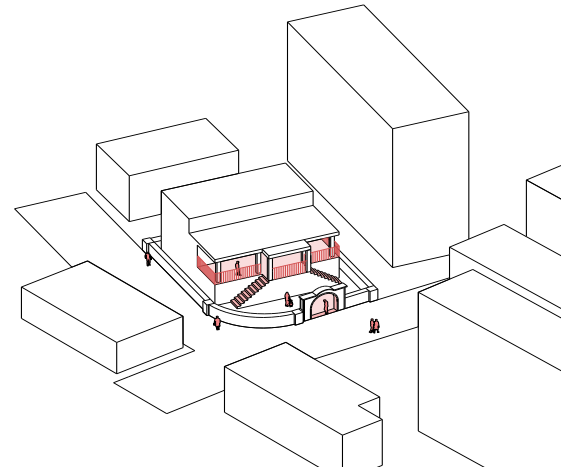


The Lakeside

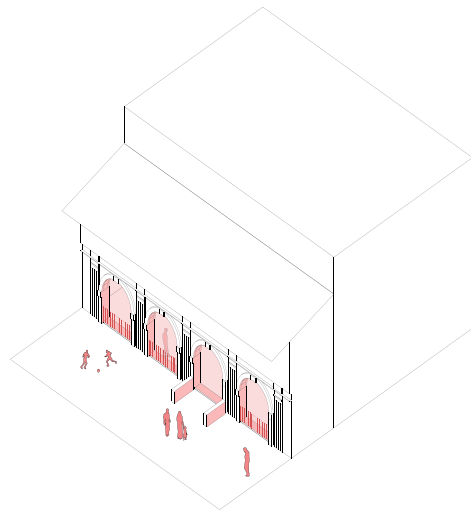
Old Village _ Borders



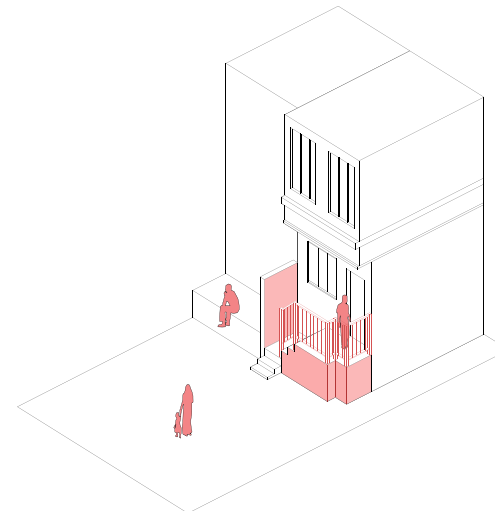
The Curtain



Religious Hindu Spaces

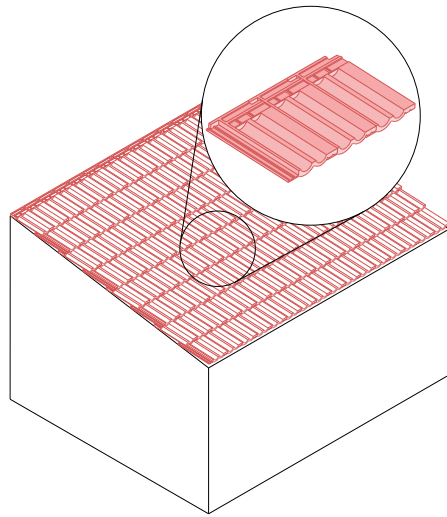


The Loggia

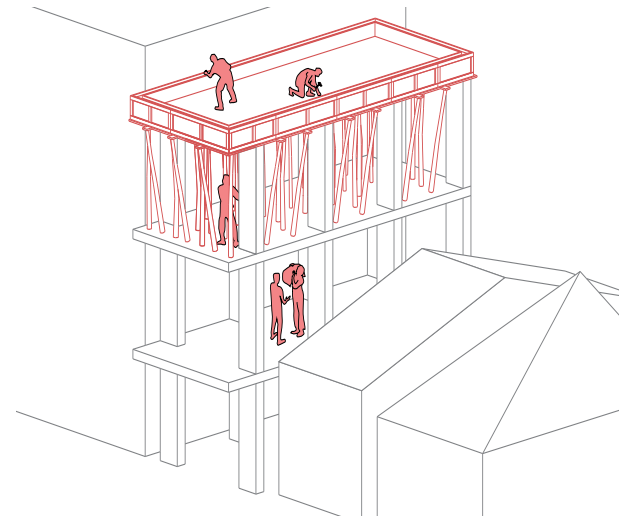


The Heightened entrance

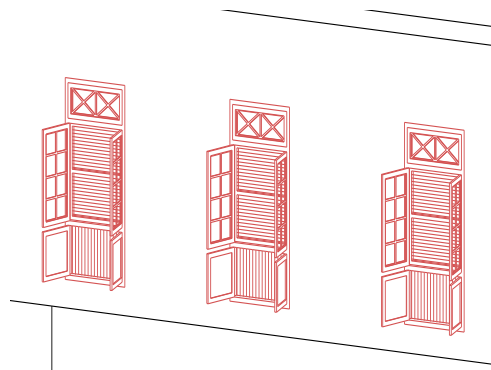
Old Village _ Building Technique



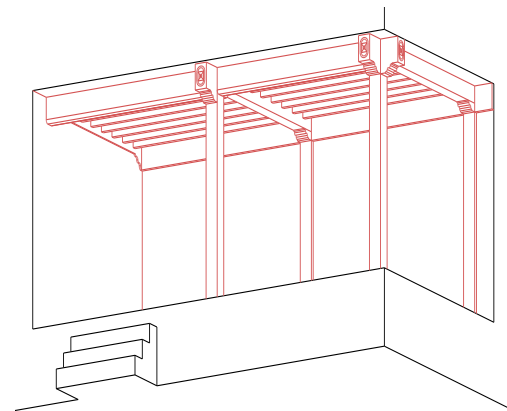
Clay Rooftile



Timber Formwork

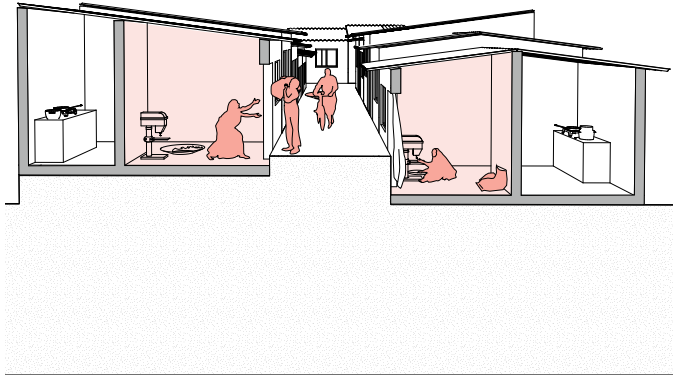


Three - part window

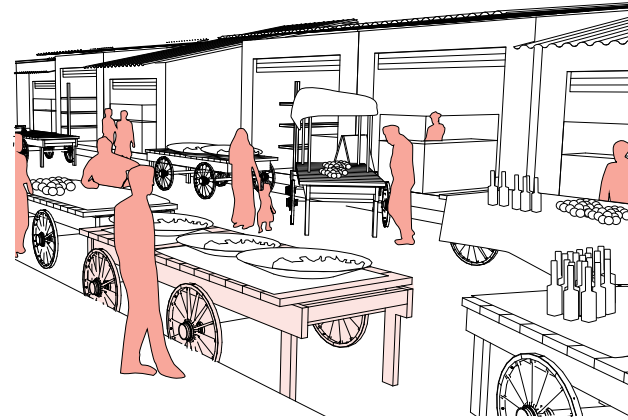


Timber Loggia Construction

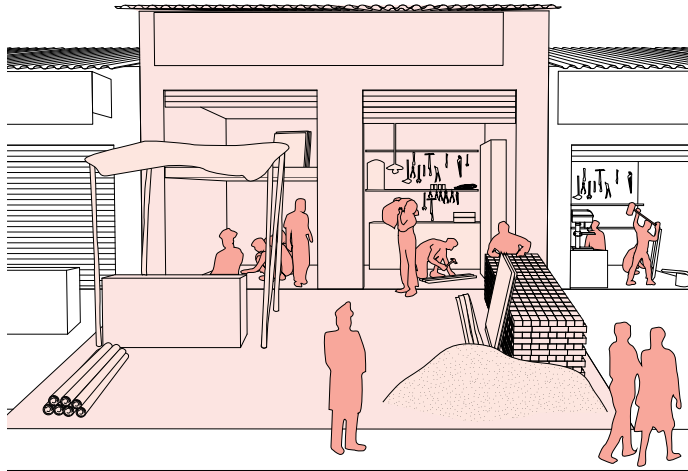
Baithi chawl _ Income Generation



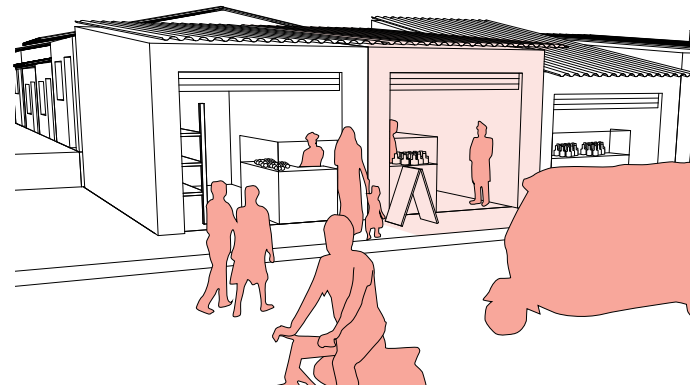
Domestic Workshops



Street Vendor

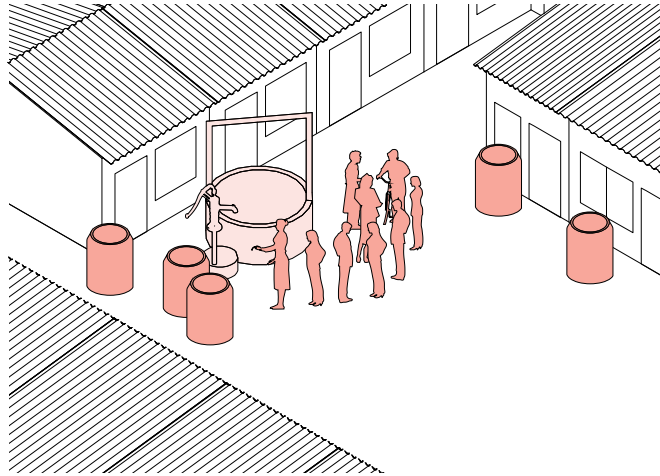


Industrial Ghals



Local Shops

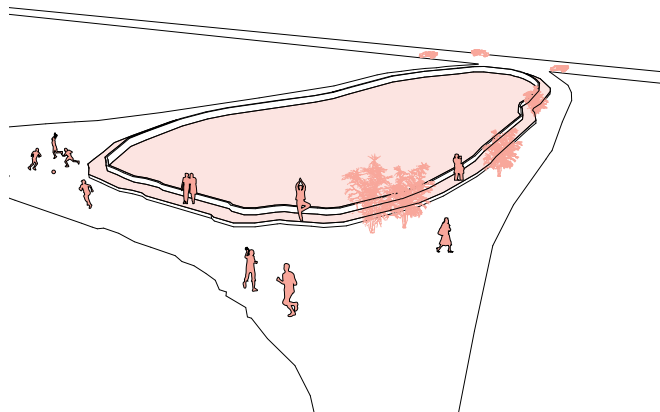
Baithi chawl _ Social spaces



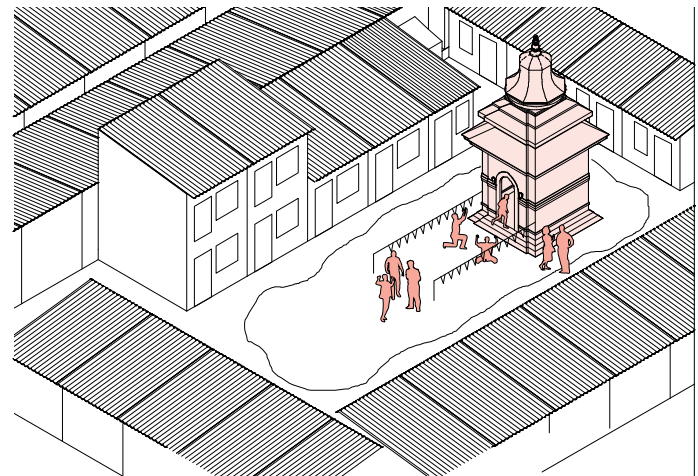
Wells



Communal alleys

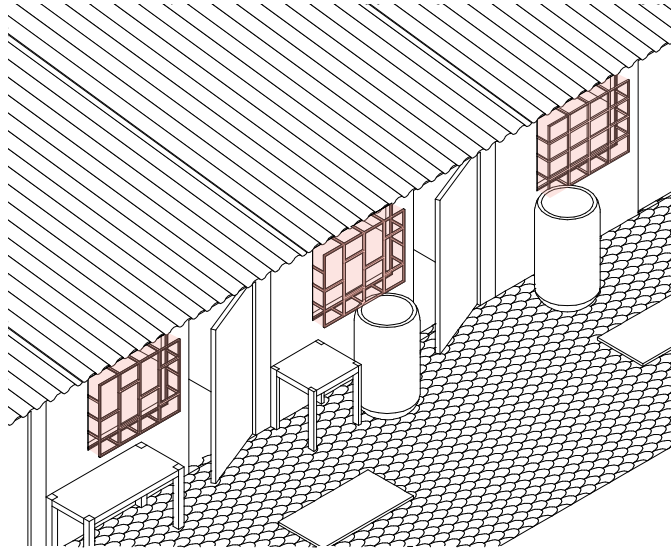


Lakes

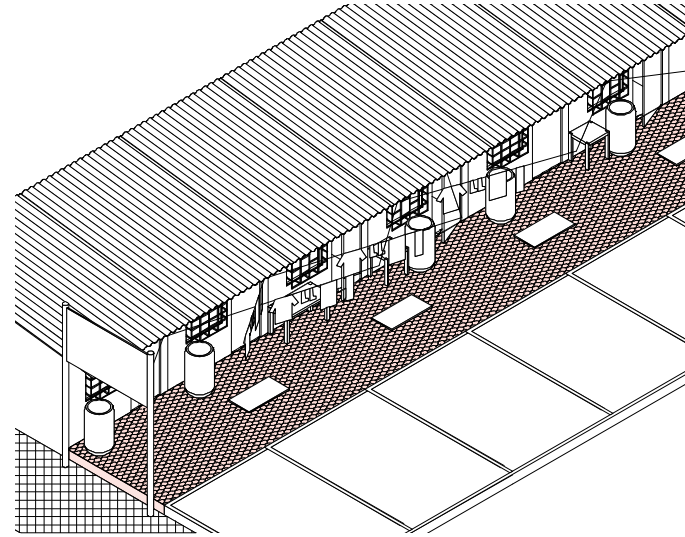


Temples

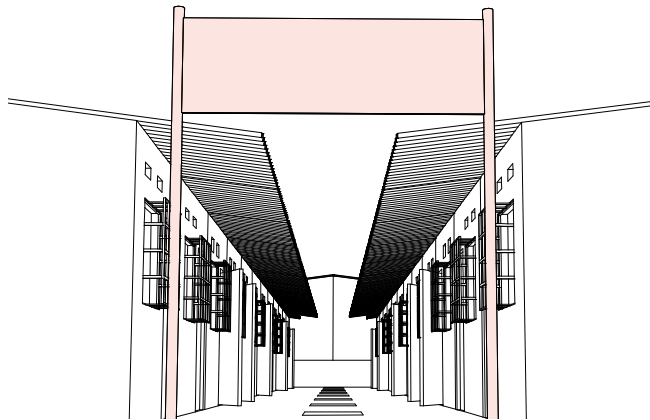
Baithi chawl _ Borders



Windows cages



Communal Pavements

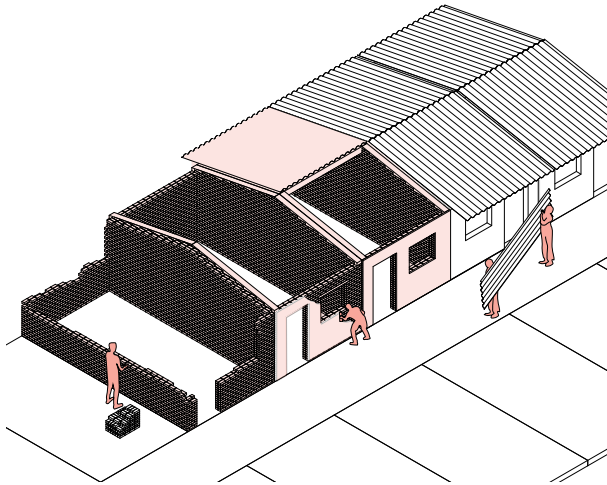


Society Gates

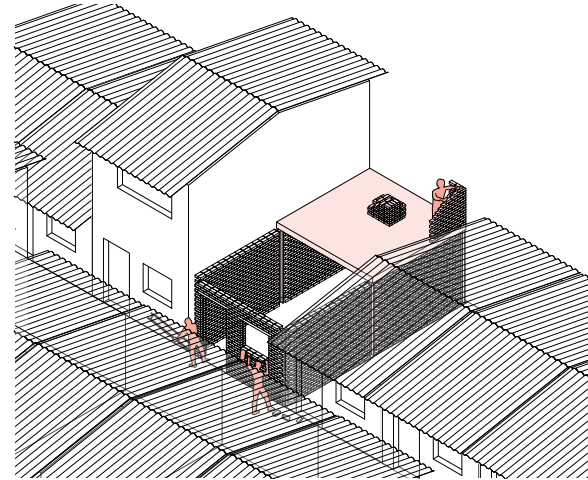


Roof Canopies

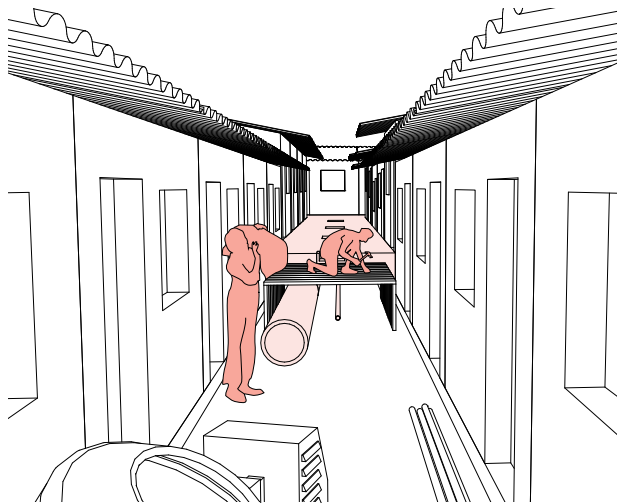
Baithi chawl _ Building Technique



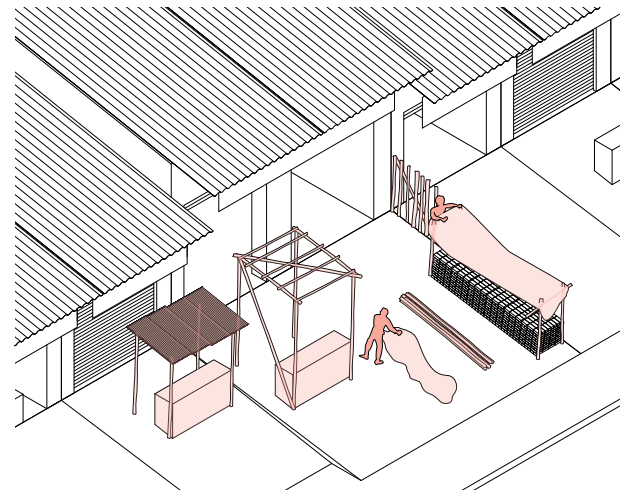
Baithi chawl construction process



Vertical Units extension



Elevated Flood preventive paths

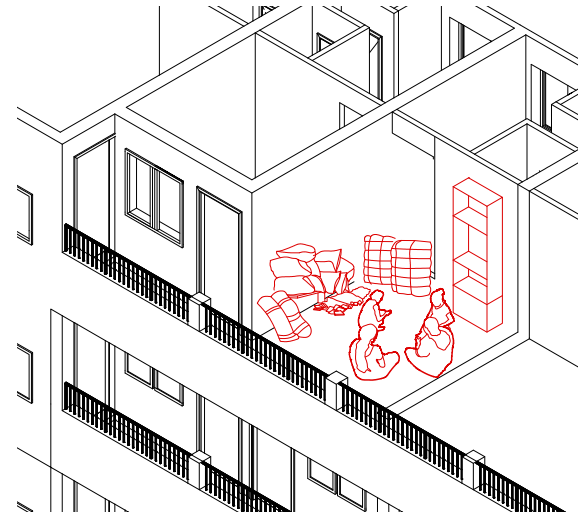


Exterior buildouts

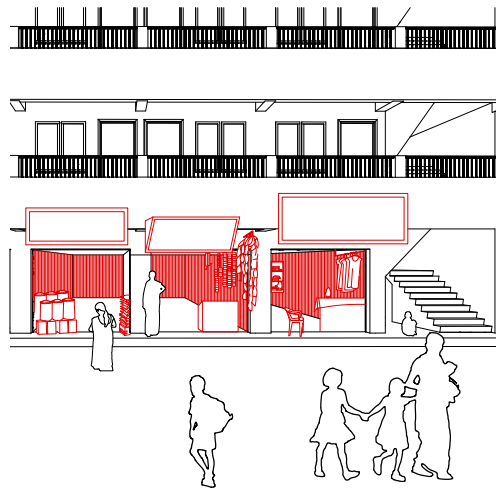
Chawl _ Income Generation



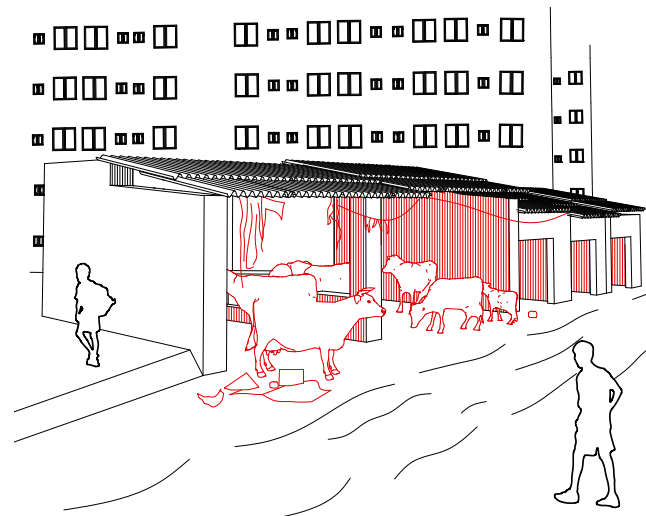
Street Vendor



Home based business

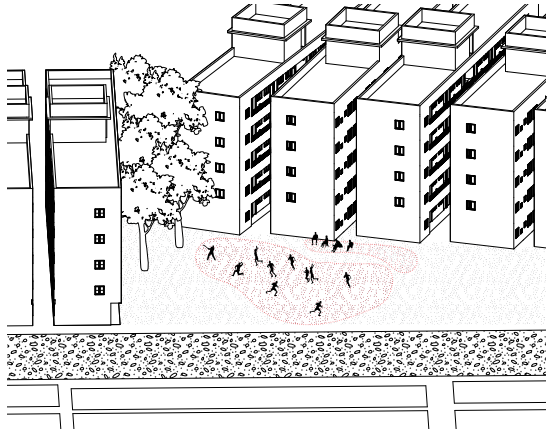


Commercial plinth



Cow shed

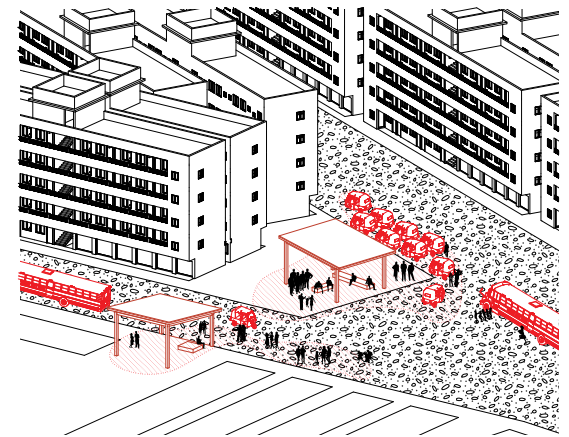
Chawl _ Social spaces



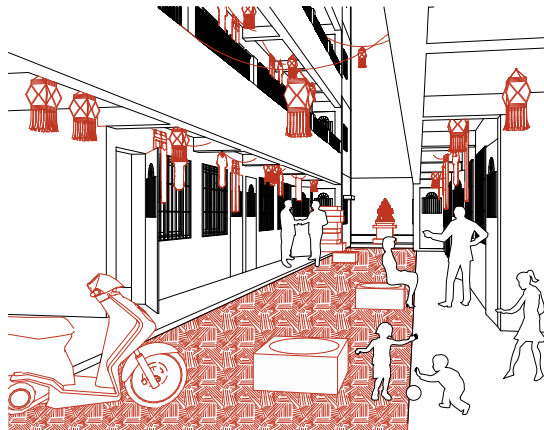
Galli Cricket



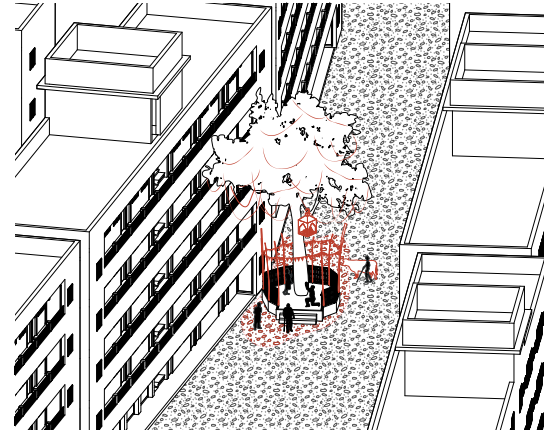
Circulation Gallery



Public transportation Hub

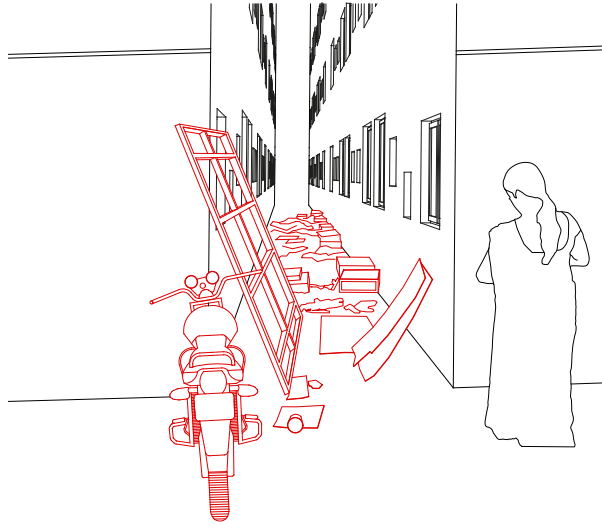


Front Alley

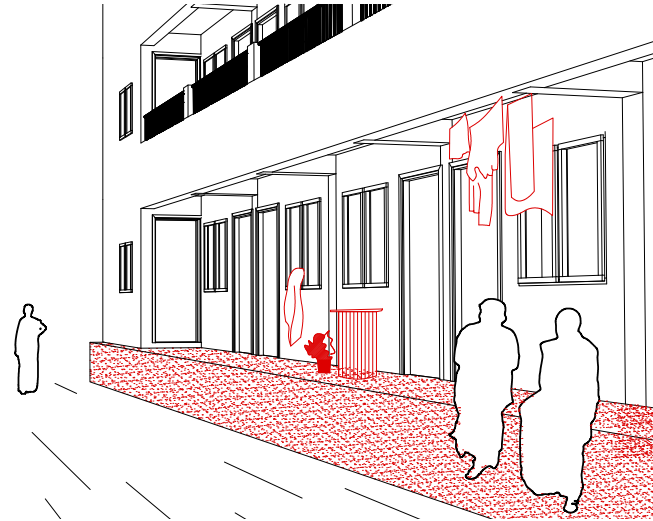


Holy Tree

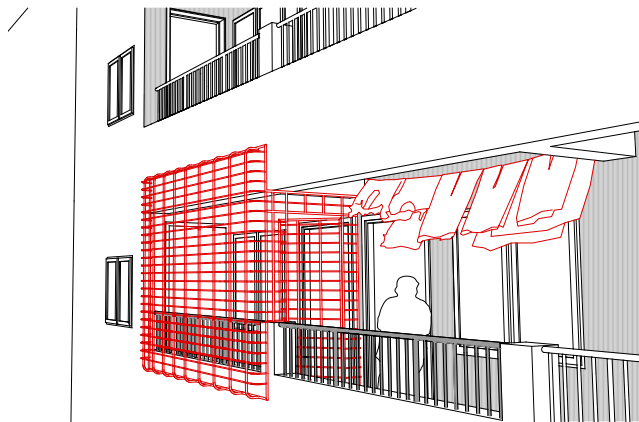
Chawl _ Borders



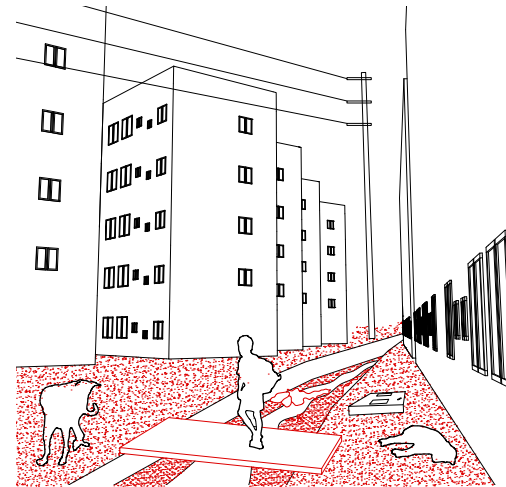
Back Alley



Raised Groundfloor

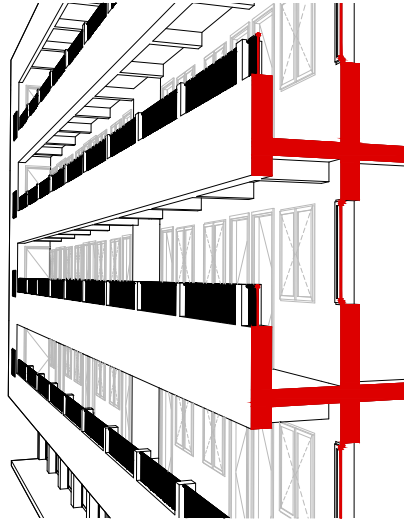


Appropriated Gallery

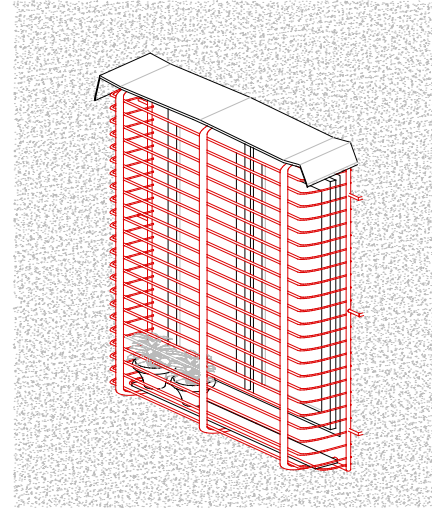


Sewage Canal

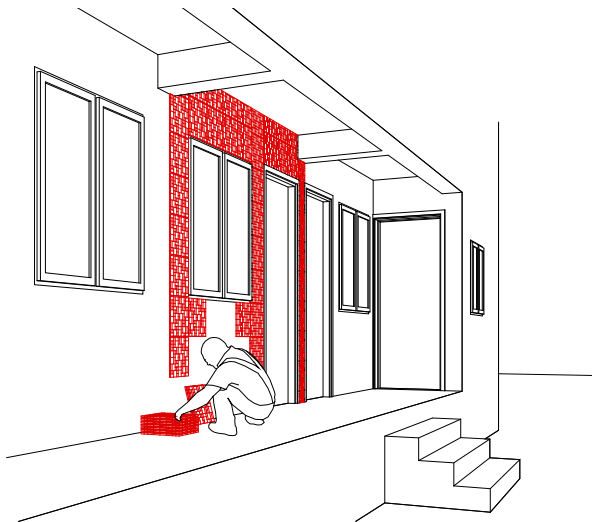
Chawl _ Building Technique



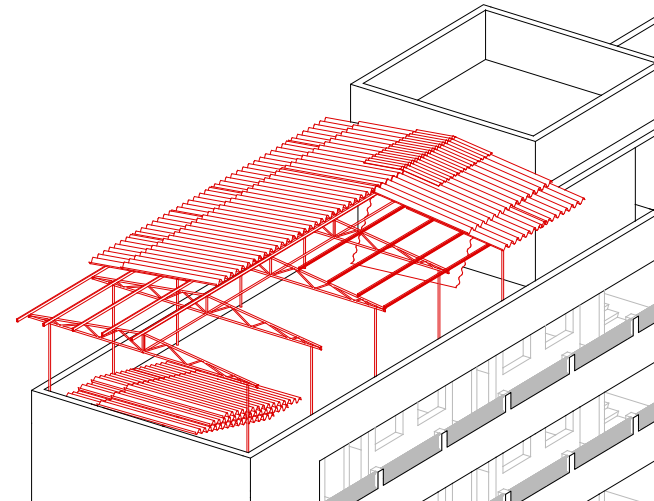
Concrete Cantilever Gallery



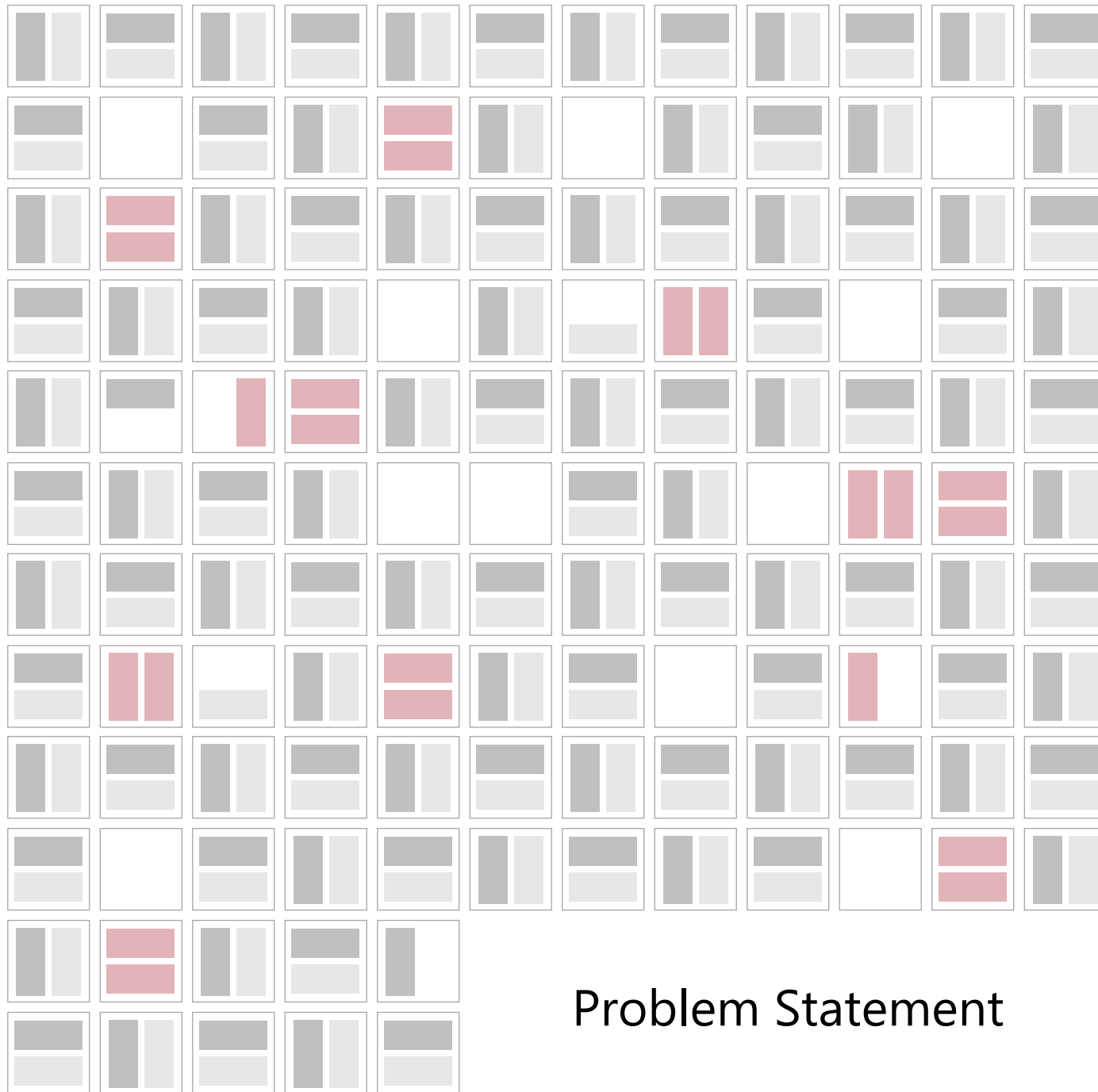
Window Cage



Customized Facade

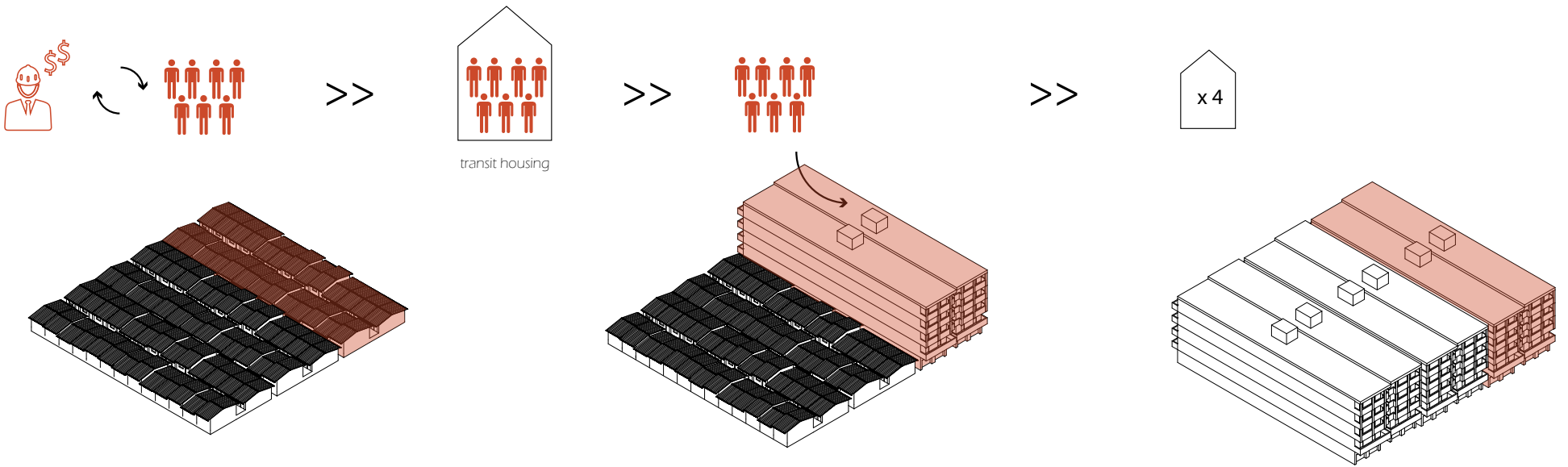


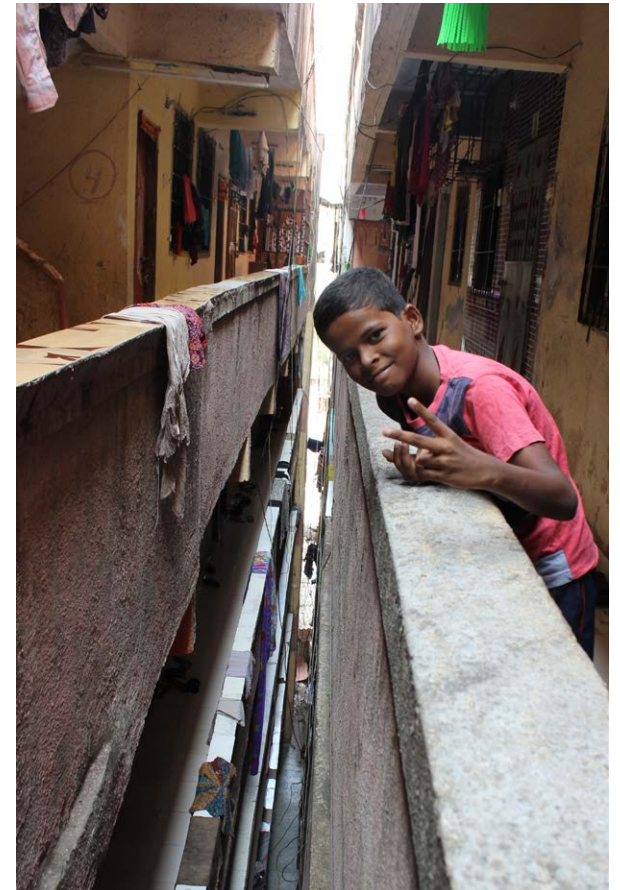
Roof Extension



Problem Statement

SRS _ Redevelopment Scheme



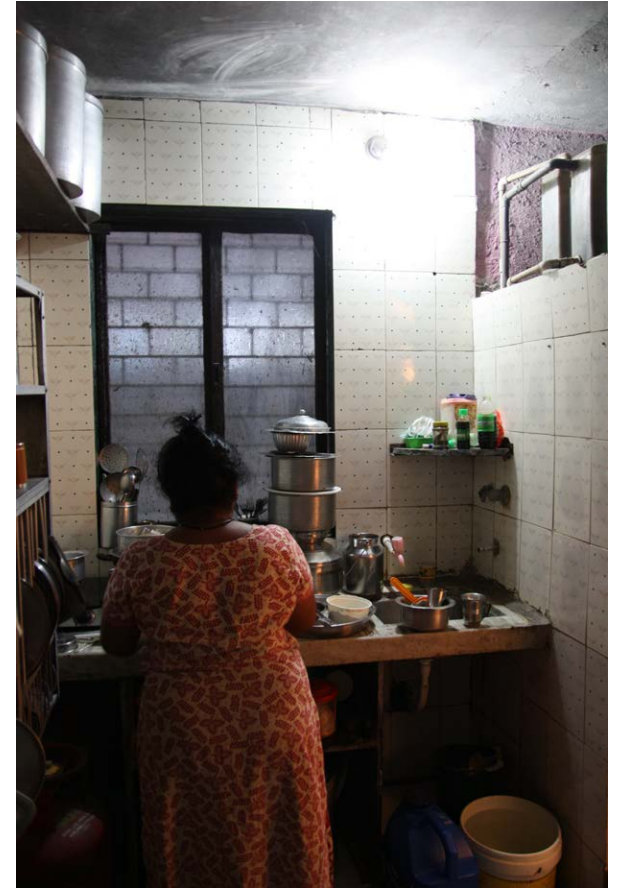




Lack of daylight



Unsafe structure

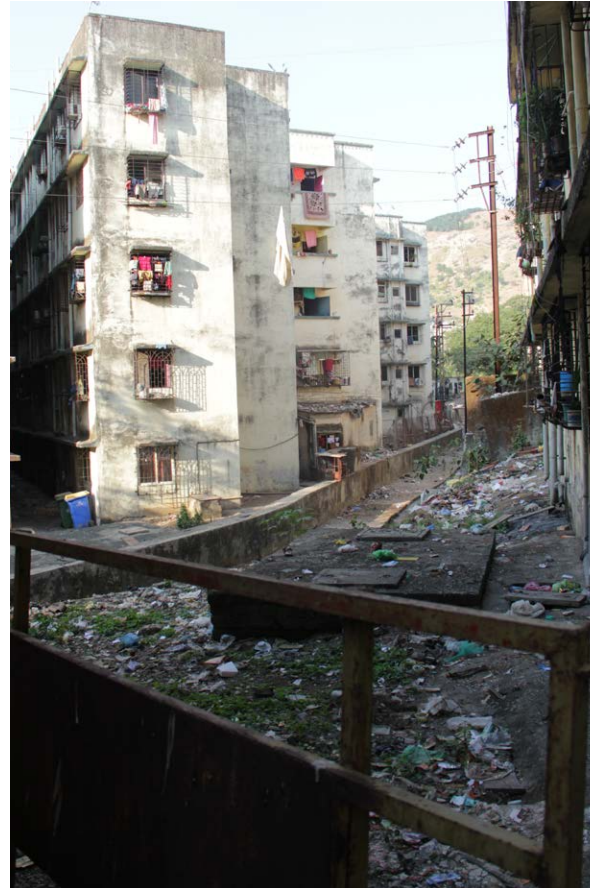


Lack of ventilation

The "Handshakes" apartments



Back alleys






Limits



Unused plinth

Oswal Nagari



-  Oswal Nagari
-  Handshakes Apartments Clusters
-  Baithi chawls





Handshakes Apartments

Baithi chawls

context

Oswal Nagari



3315



/ Ha.

1062



13260



/ Ha.

4250



FSI: 3.55



0.3



0.7 m² / person

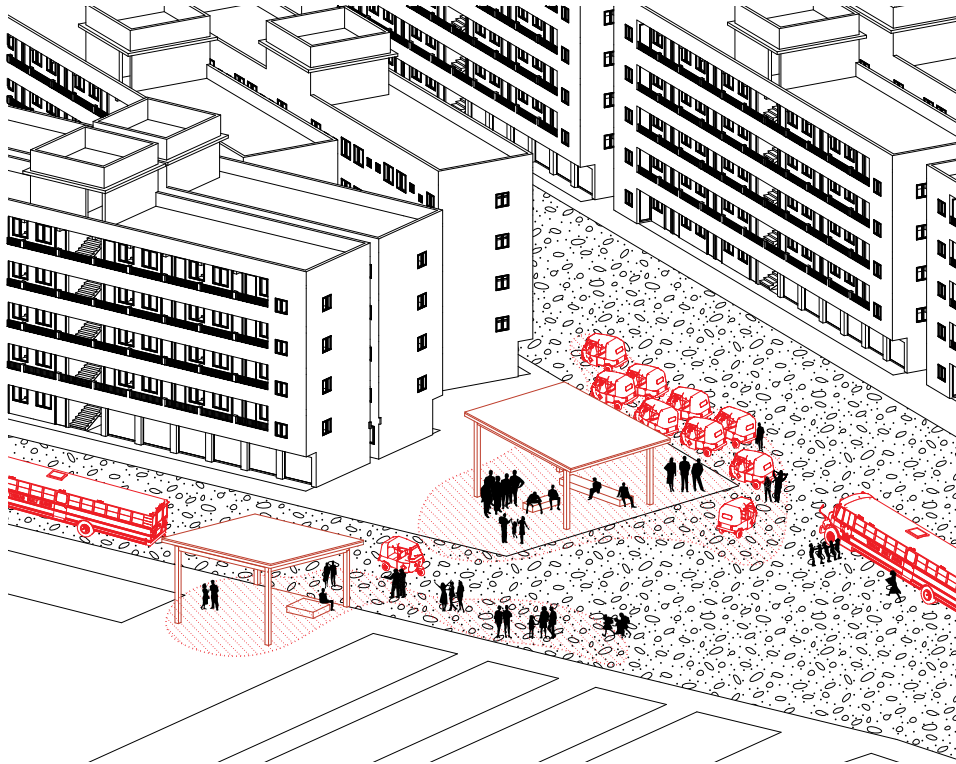


1.1 m² / person

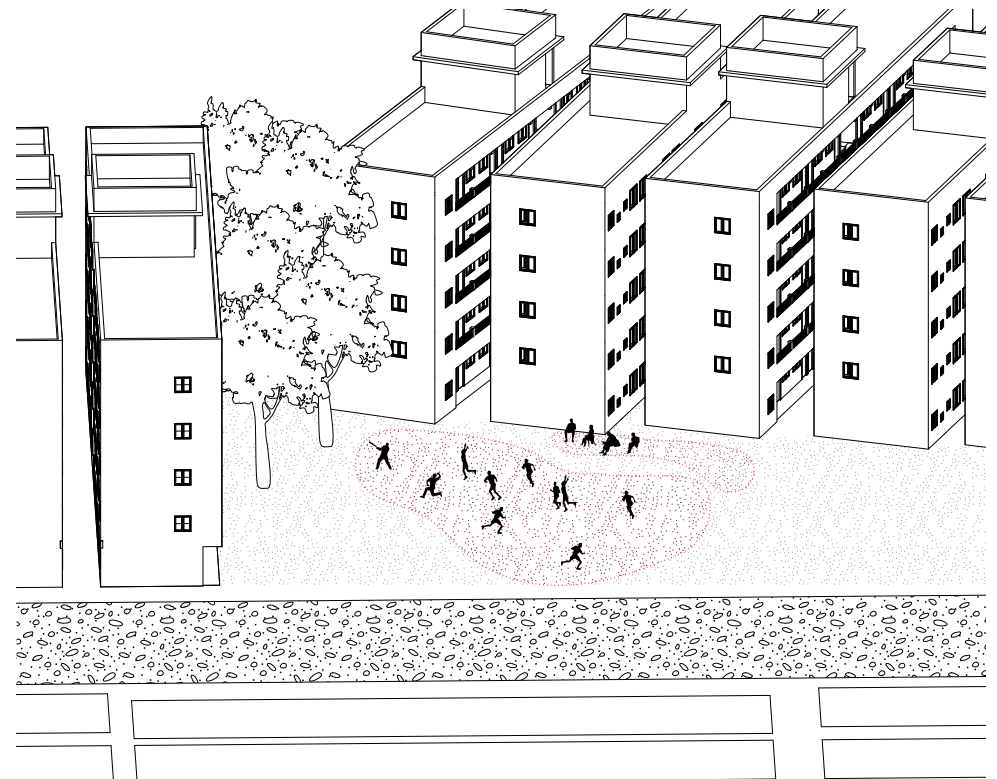


9 m² / person

Open Spaces



Bus Stop



Random Open Space

The role of the plinth

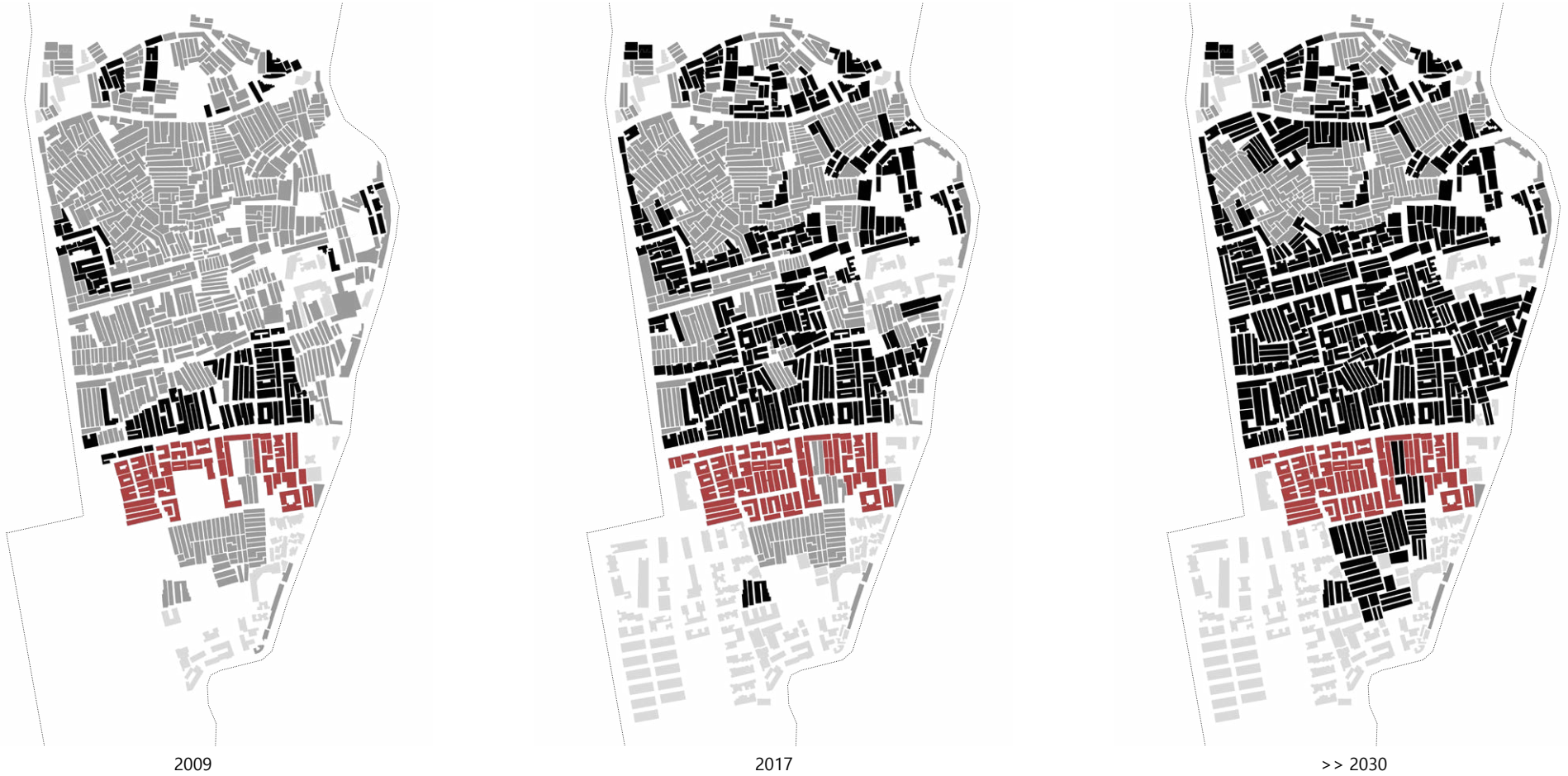





Commercial use



In "handshakes" apartments

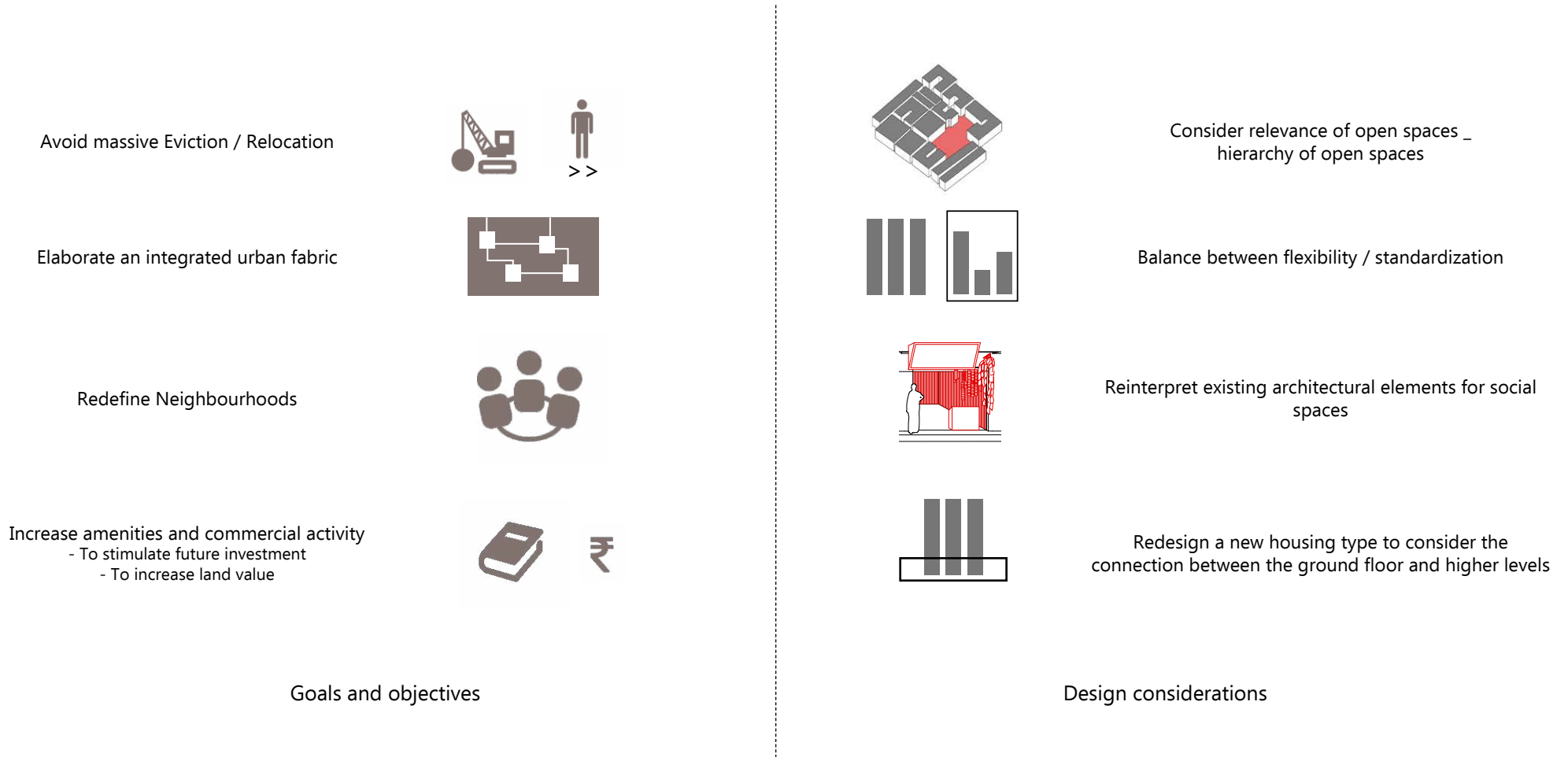
Urban Growth _ What is the next step?

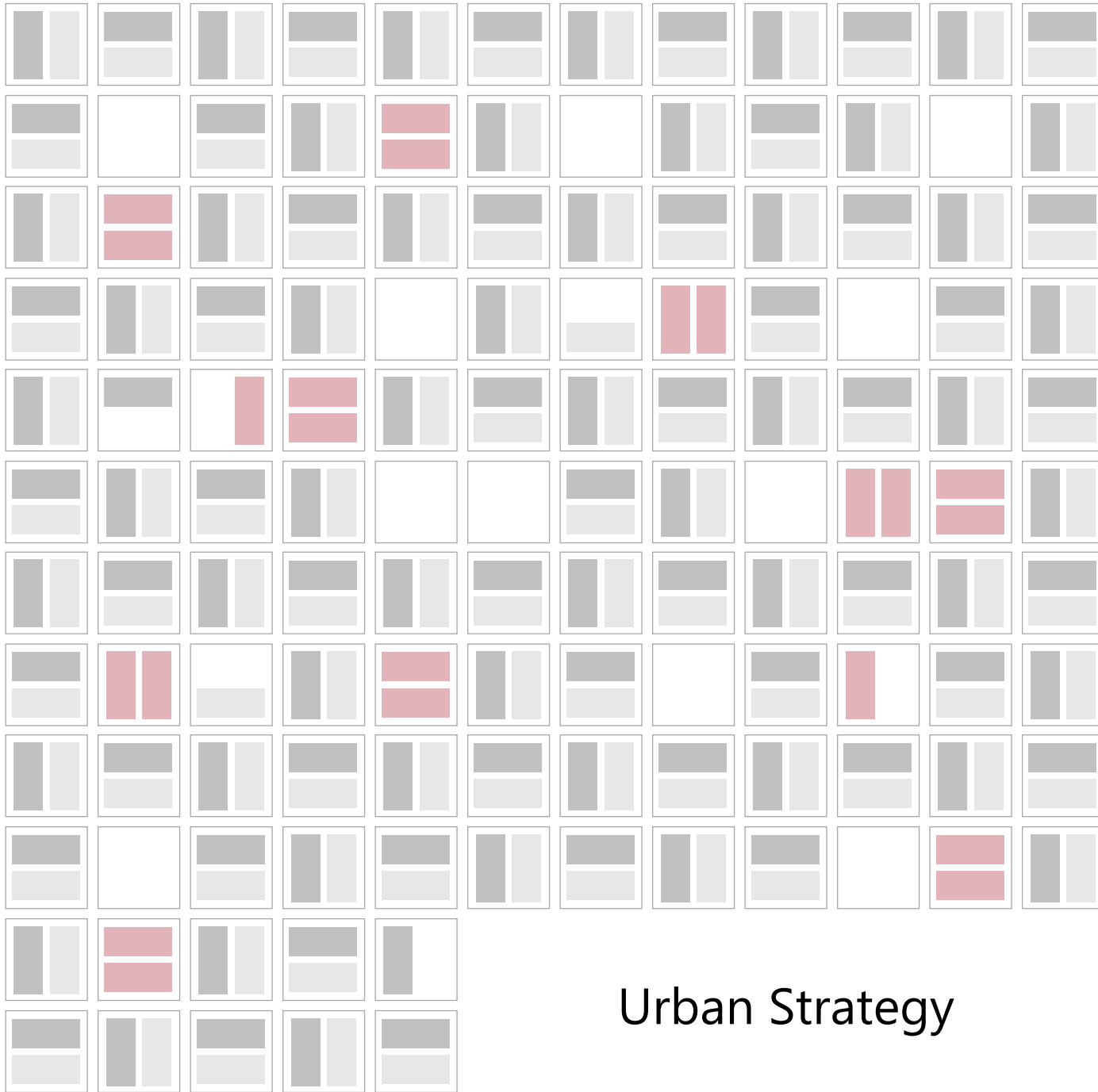


-  Handshakes Apartments
-  Baithi chawls
-  context

Research Question and Goals

Taking into account that the Handshakes have remained without any improvement for years, to which extent would it be possible to accommodate the families into an affordable solution with an improvement in sanitary and social conditions?





Urban Strategy

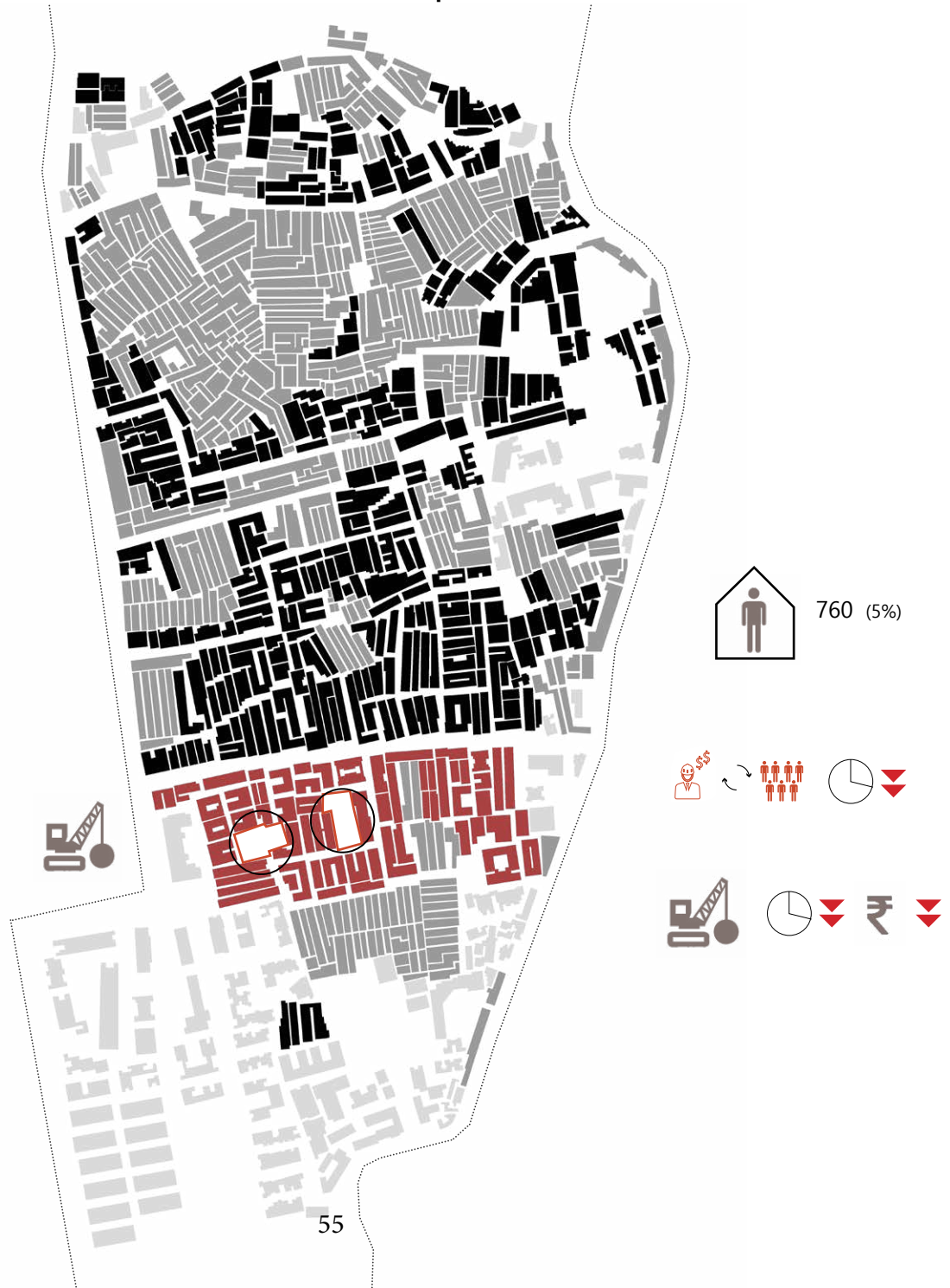
Tabula Rasa v/s Acupuncture



Tabula Rasa v/s Acupuncture

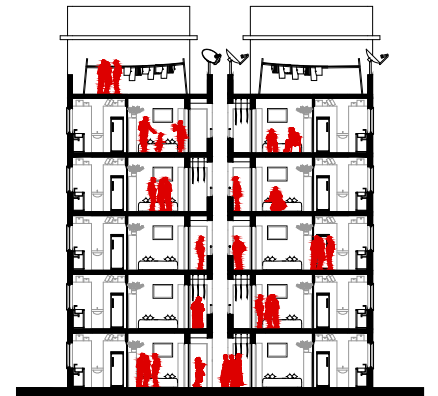


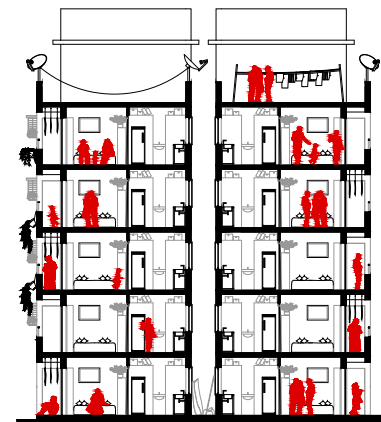
Tabula Rasa v/s Acupuncture

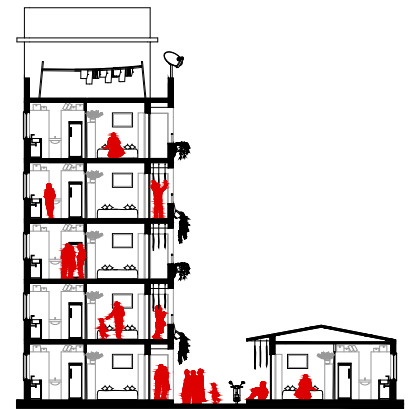
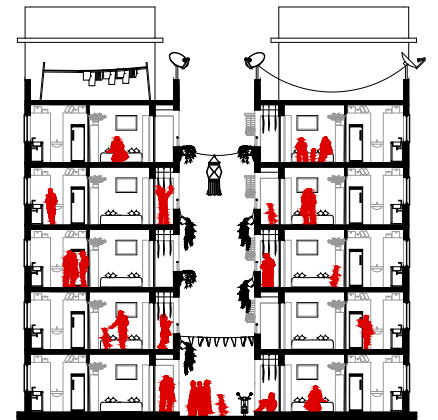


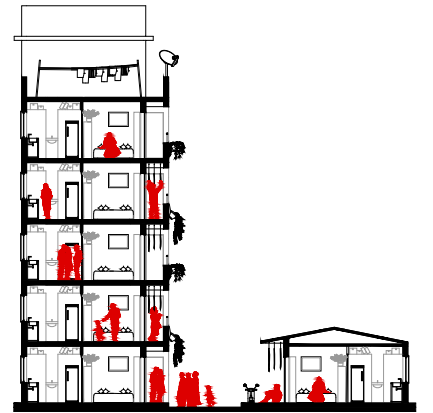
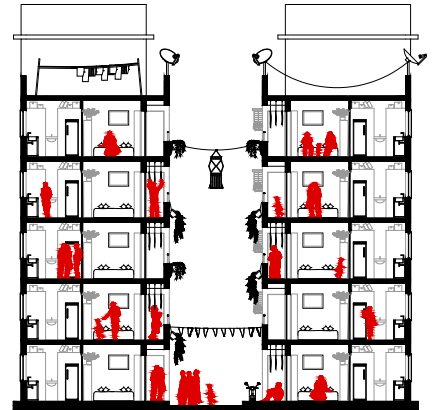
Demolition Criteria _ Street profiles

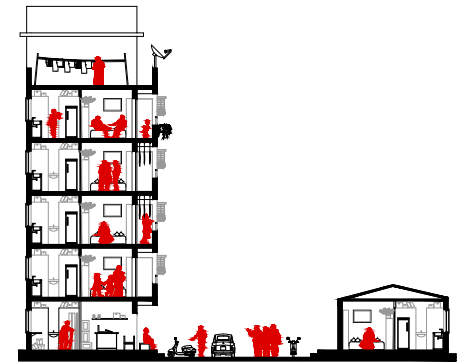
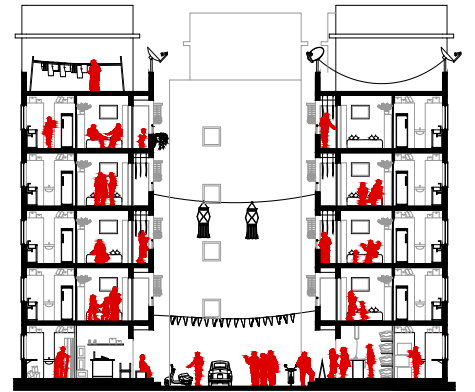












Demolition Criteria _ Existing Infrastructure



Demolition Criteria



Connect streets



Open facades



Activate death ends





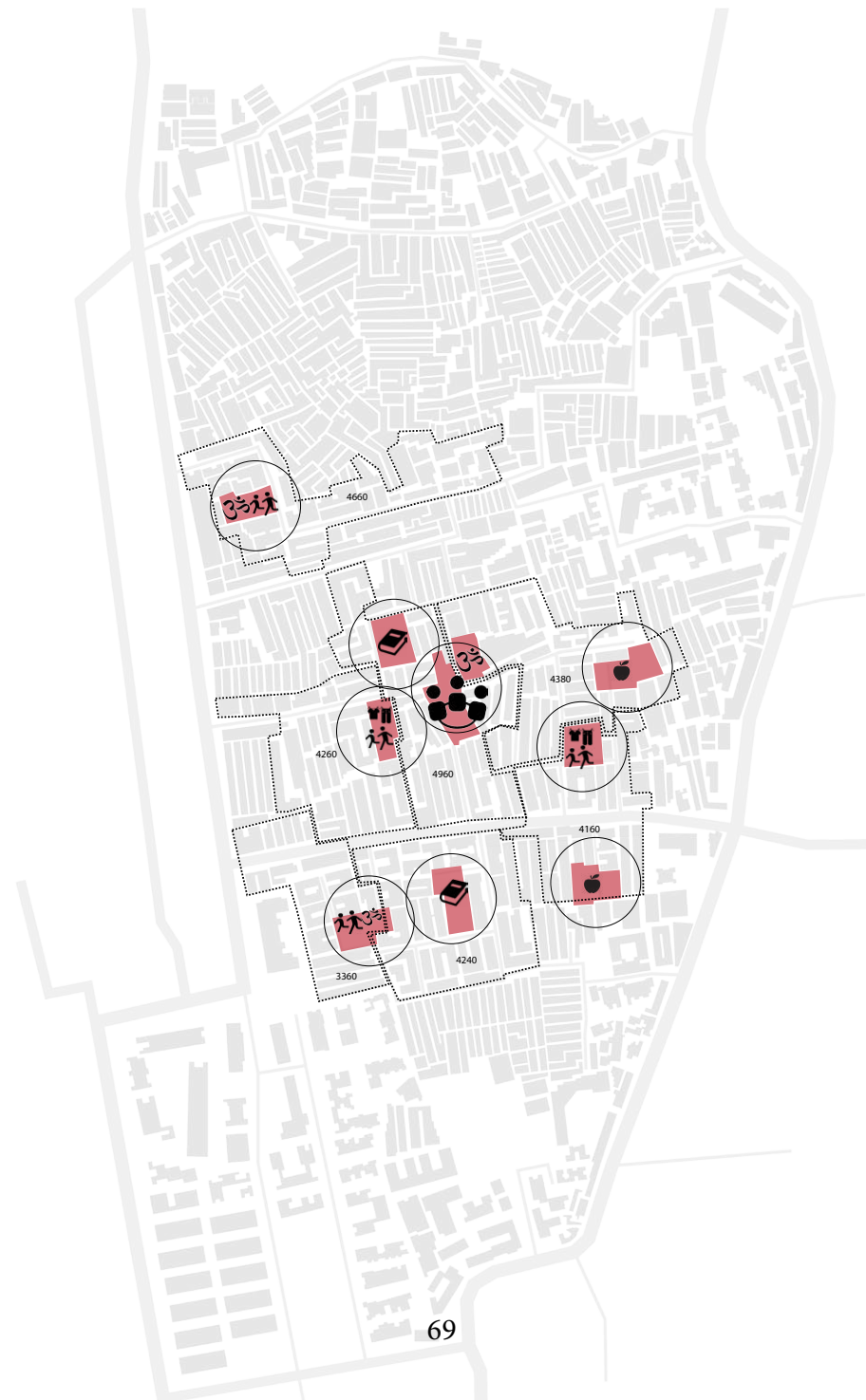


Masterplan

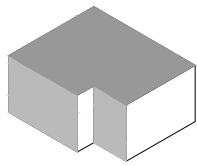




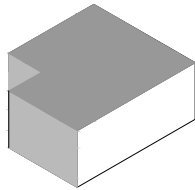
To Consolidate Neighbourhoods



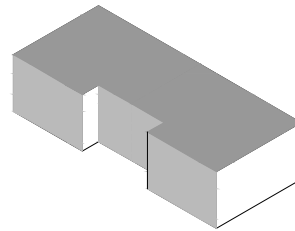
Building type



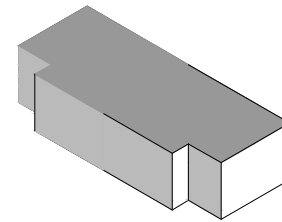
28m²



40m²



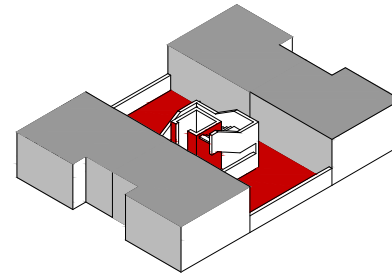
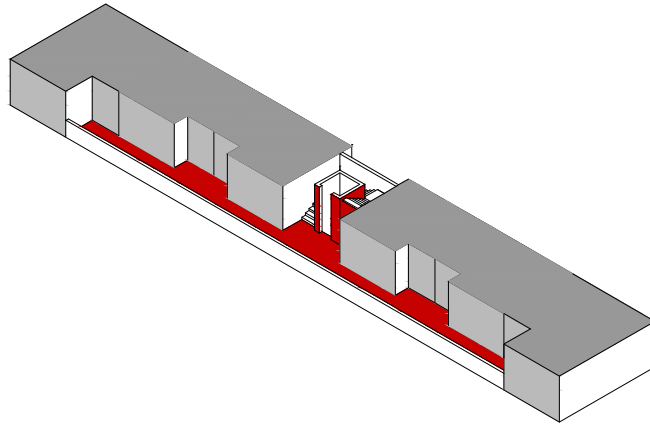
56m²



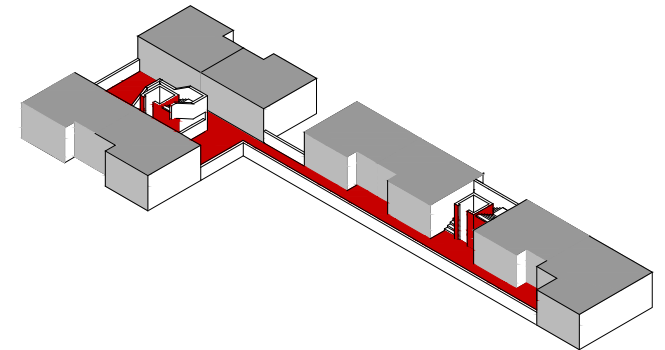
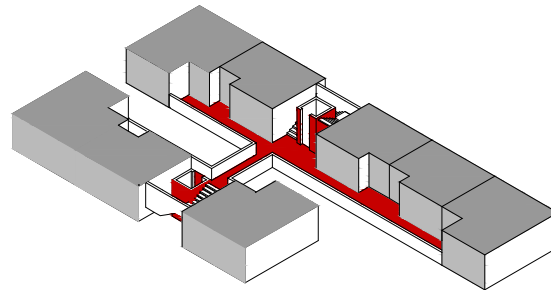
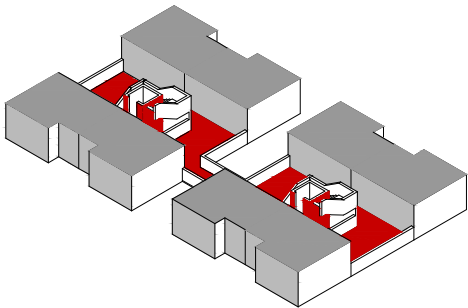
56m²

Unit as a module

Building type

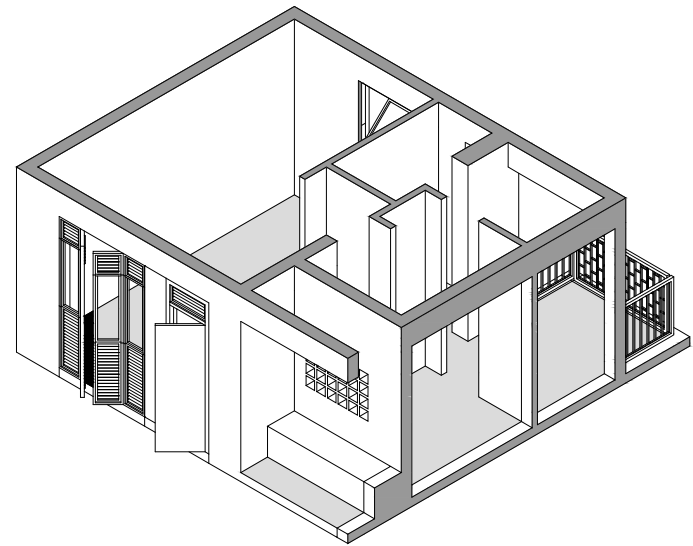
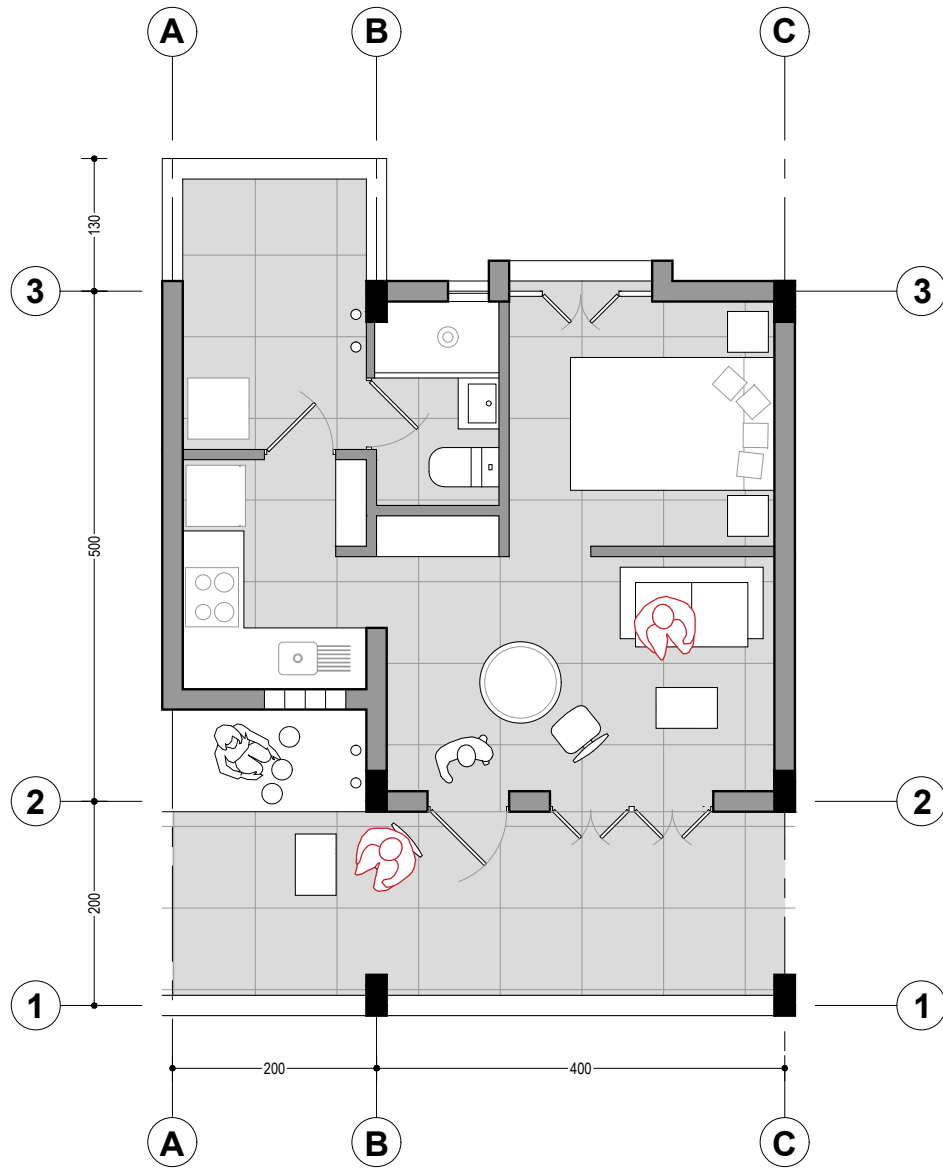


Line and Tower

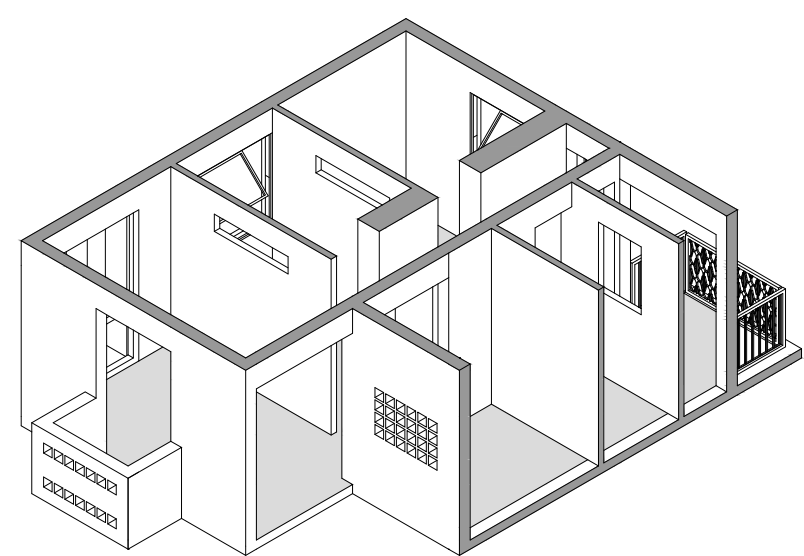
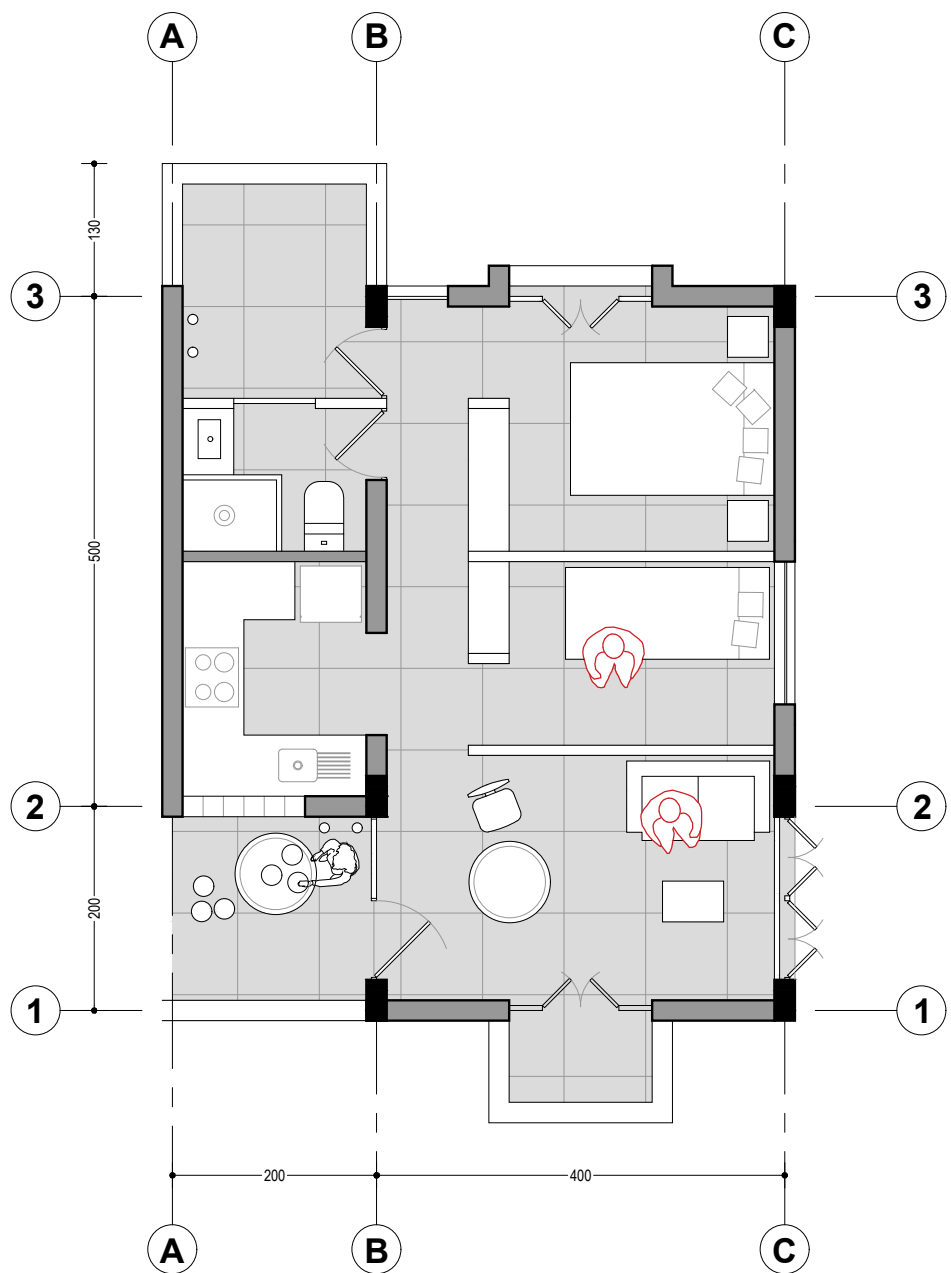


Cluster

Unit Layout

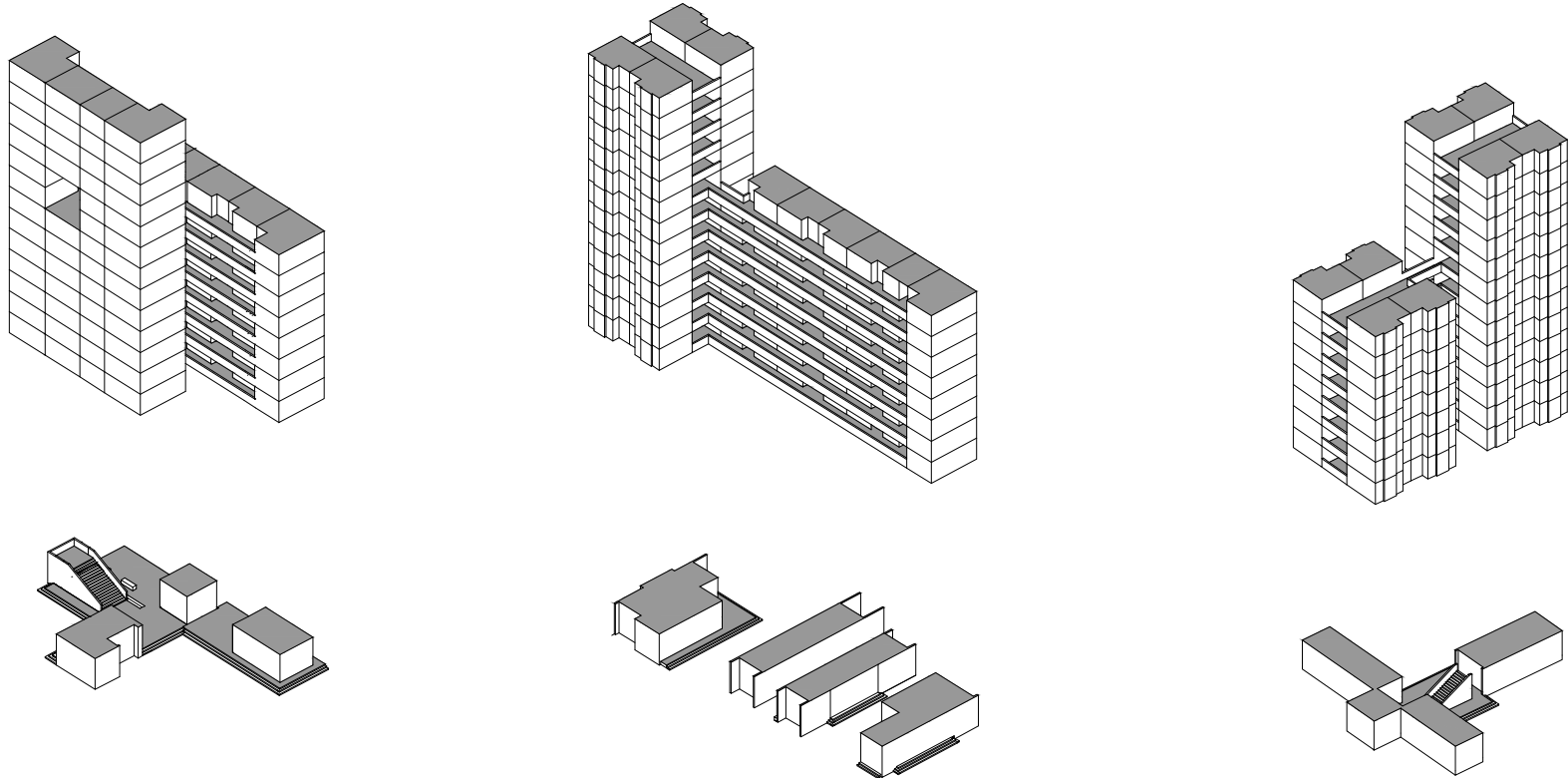


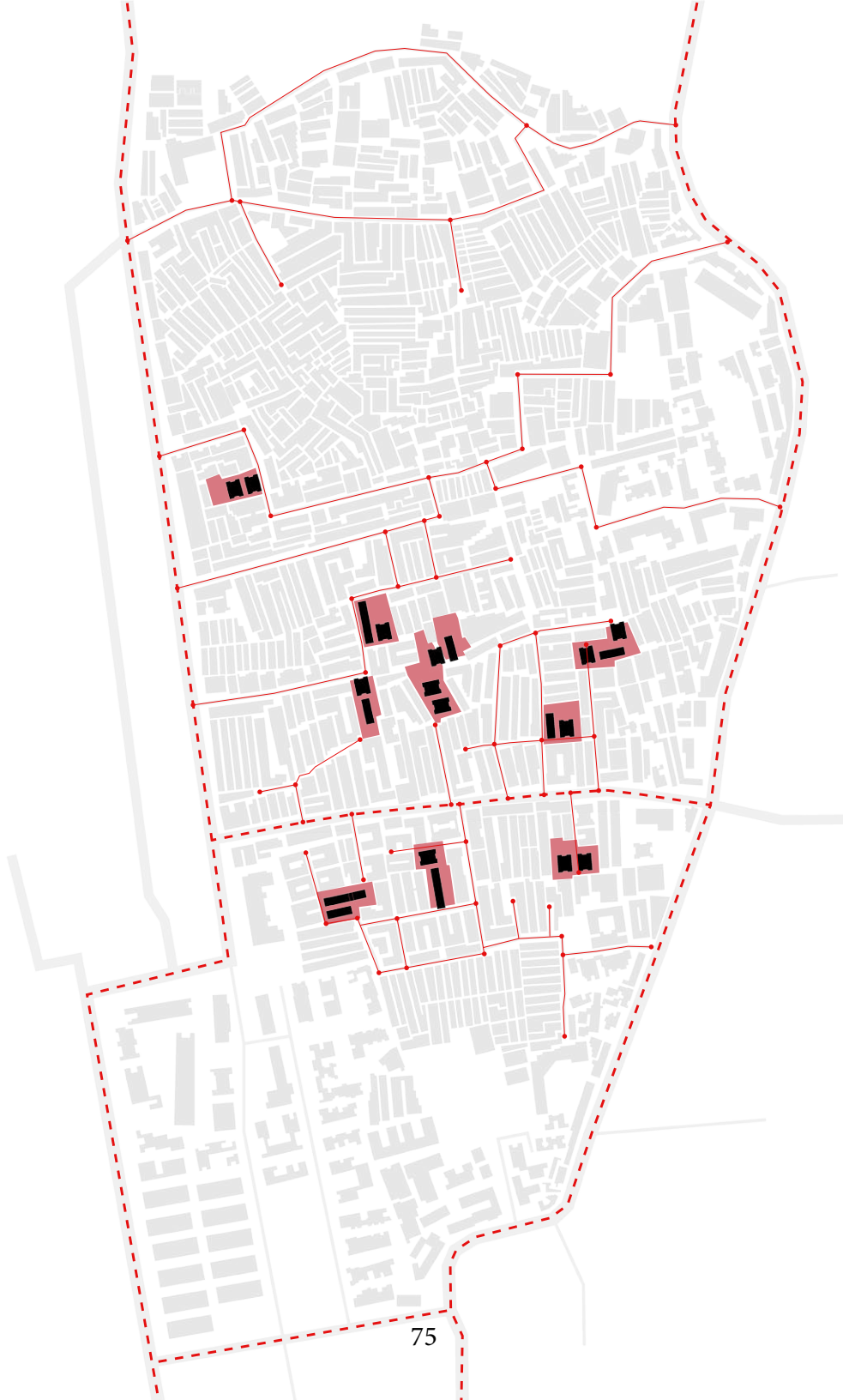
EWS 28 m² >> 31 m²



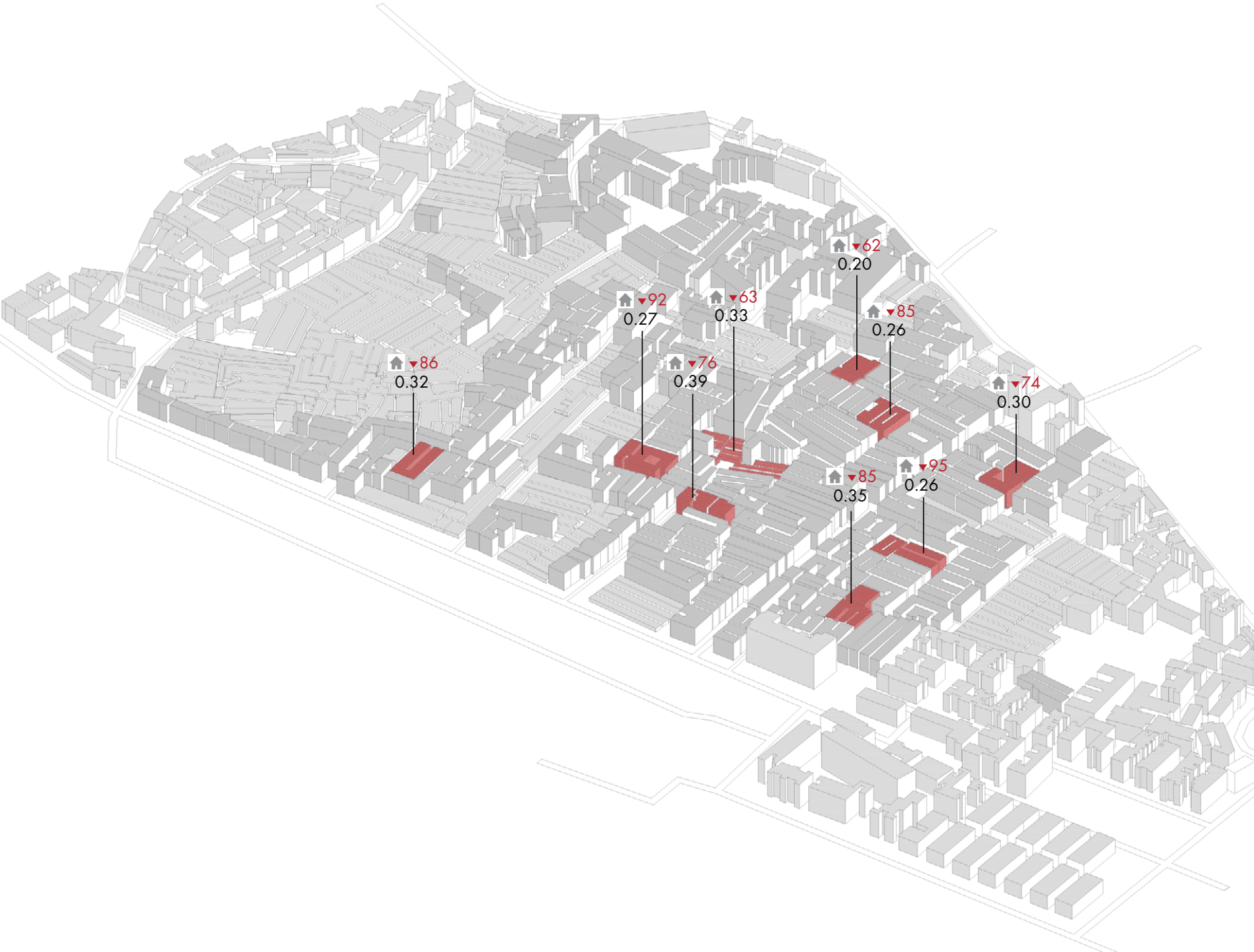
EWS 38 m² >> 45 m²

Flexible plinth + standrad Tower

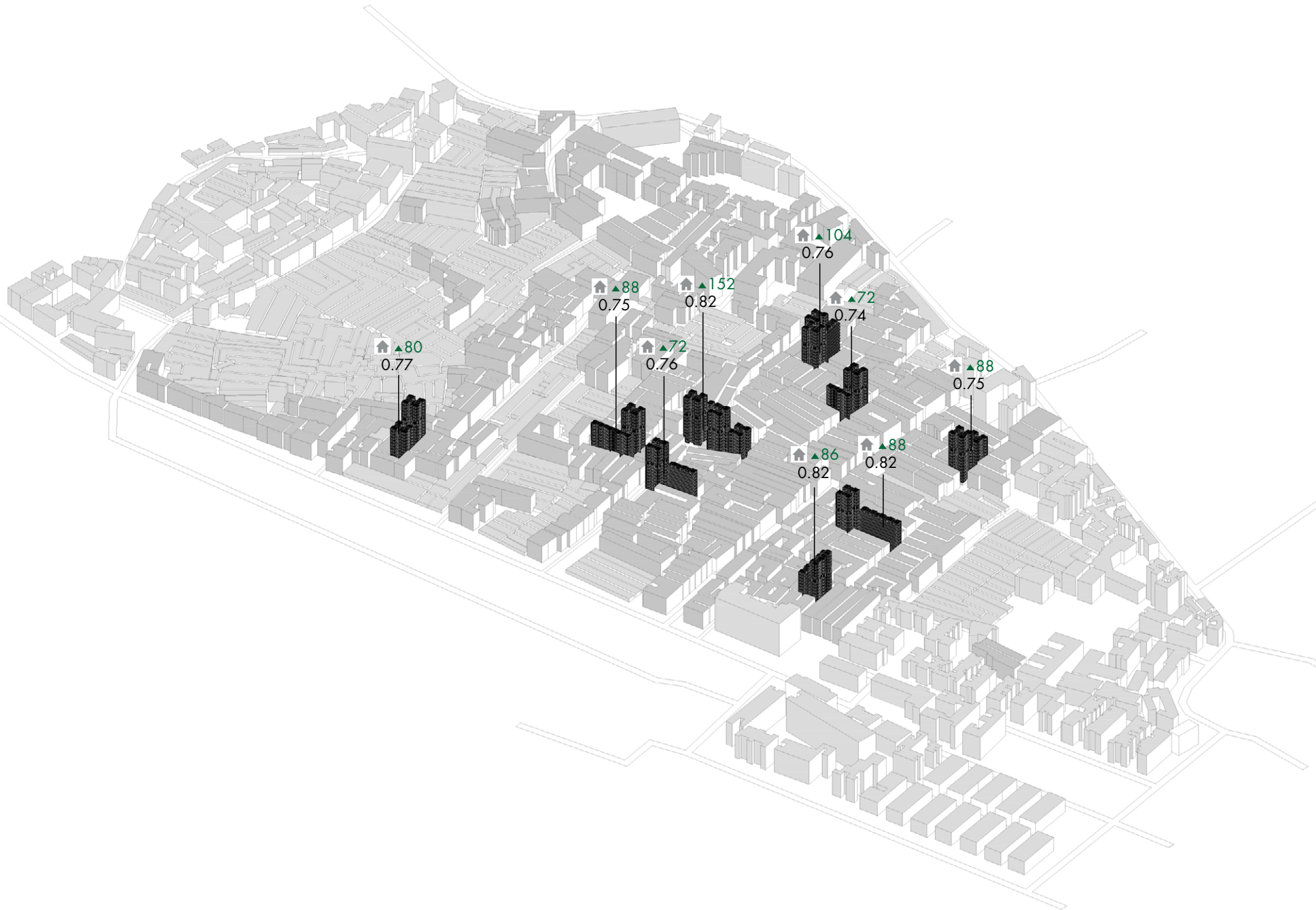


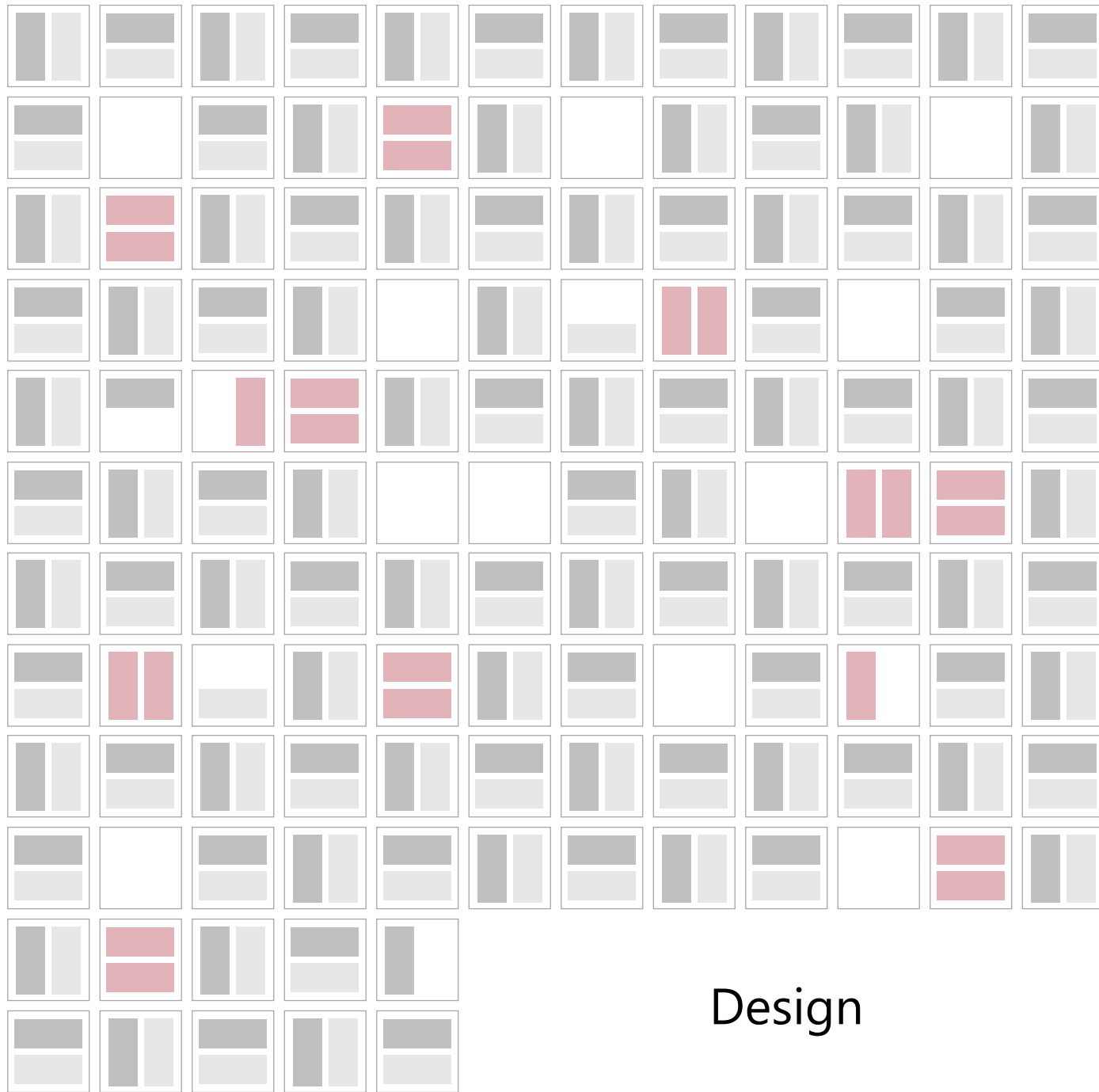


Existing situation



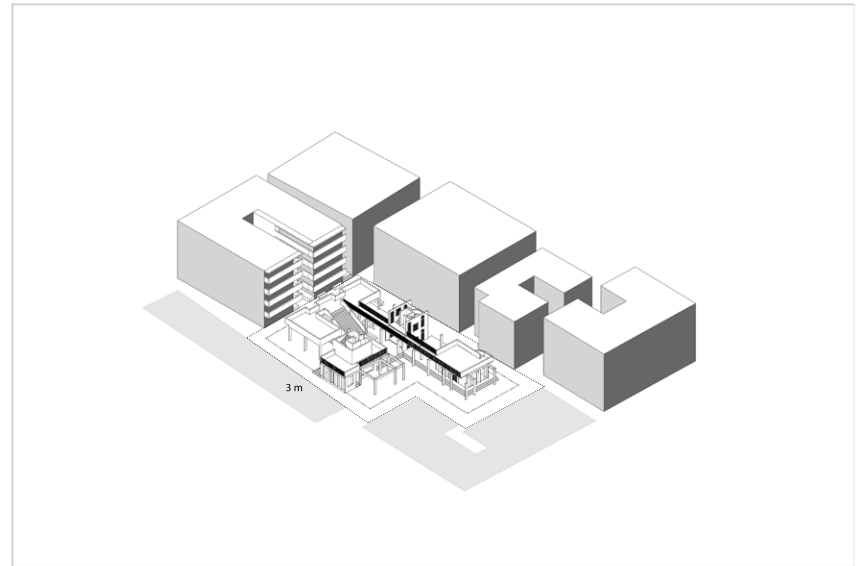
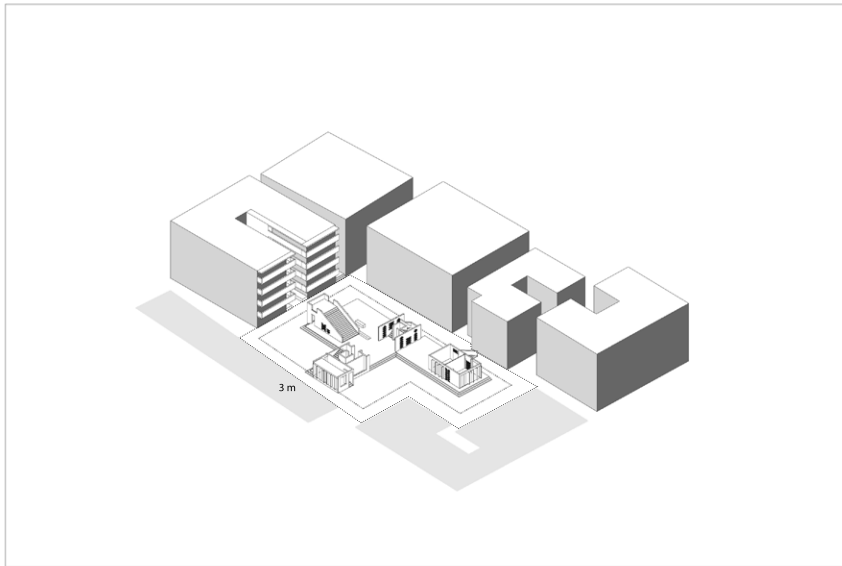
Acupunctural Strategy



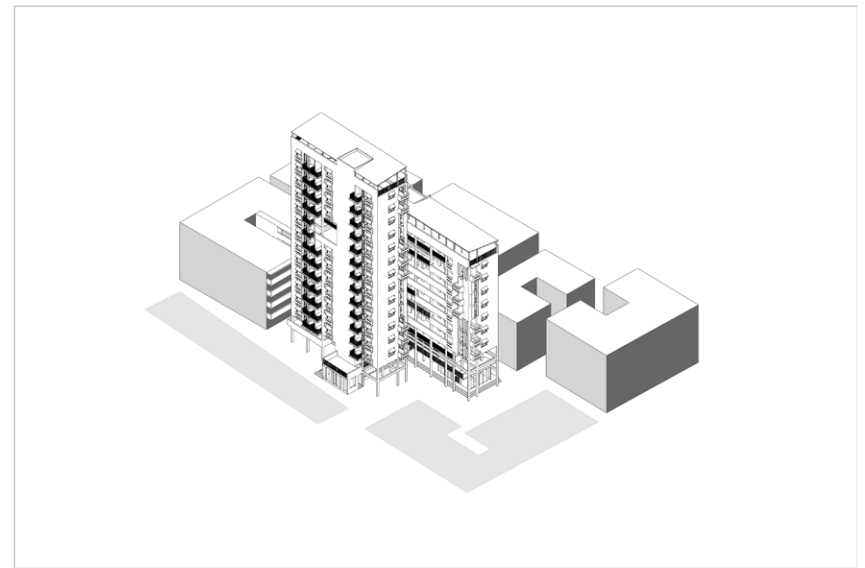
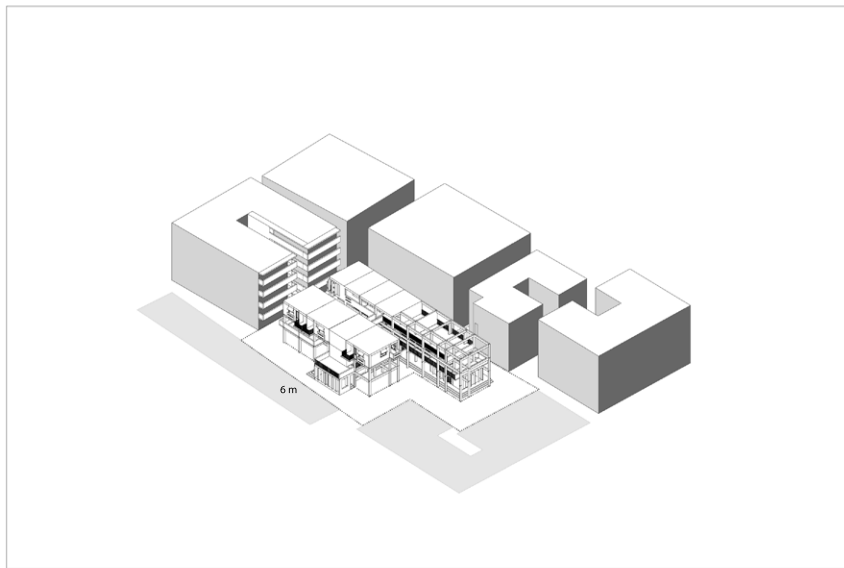


Design

Design Strategy



Design Strategy



References



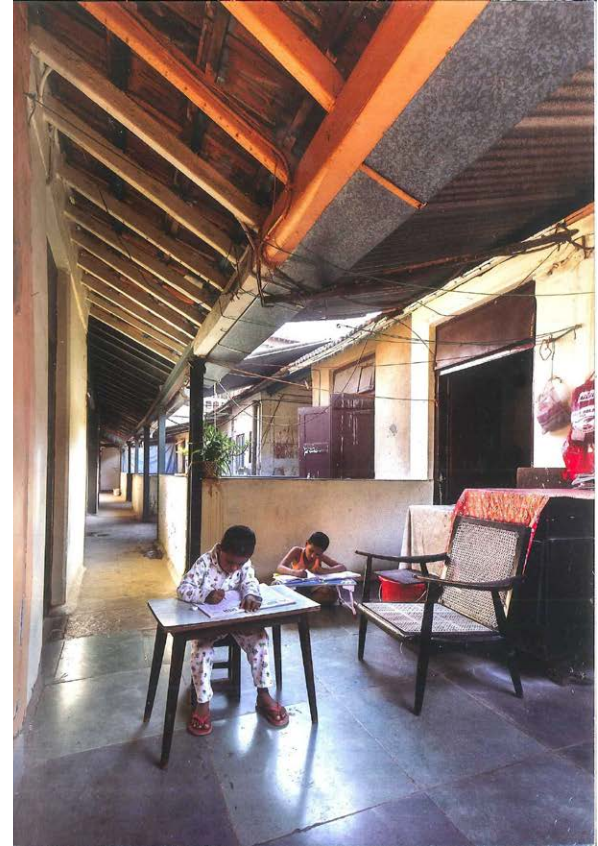
C.Correa / Art's Center Jaipur / Courtyards and open spaces sequence



BDD Chawls / Encroachment



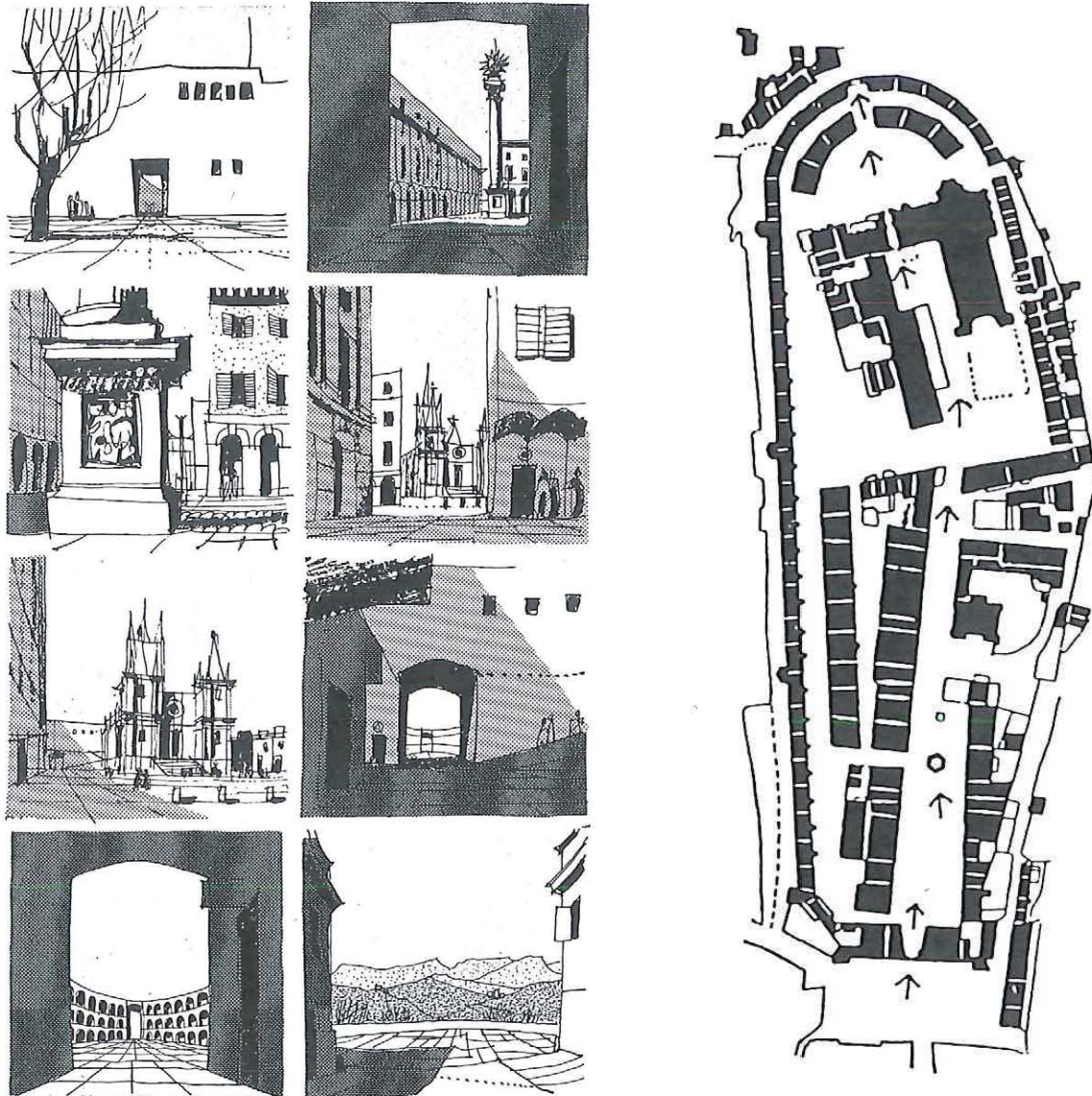
Bhatia Chawls / face corridors



Atmaram Chawl / Inner social spaces



M.Tabassum / Architect's residence / Open Interior spaces.

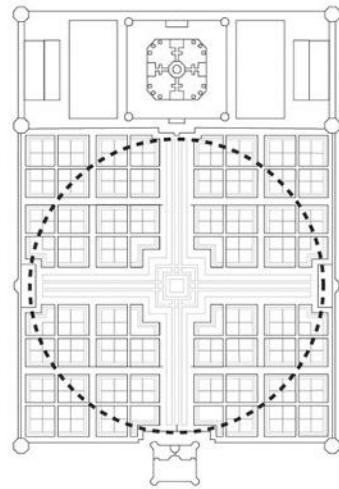


The serial Vision

“The typical town is not a pattern of streets but a sequence of spaces created by buildings.”



100 mts.



Sussman, A., & Hollander, J. B. (2014). Cognitive architecture : designing for how we respond to the built environment.

The social field

“Only when the distance has been reduced to about 100 meters (110 yards) can we see movement and body language in broad outline.”

Gehl, J. (2010). Cities for People. Washington, DC: Island Press. p.34



Uses being adapted in the existing conditions



Apropration of non used spaces



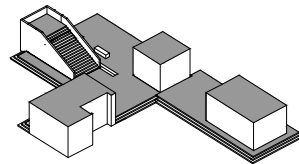
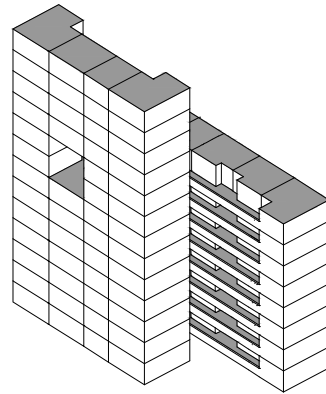
Paintings in Public Space & maintenance _ A concern to keep these spaces clean through an specific use
"Rethink the city" online course





Vendors & space appropriation _ Images from "Rethink the city" online course

Plinth 1



The plinth



Spaces for the community



collective spaces for the building



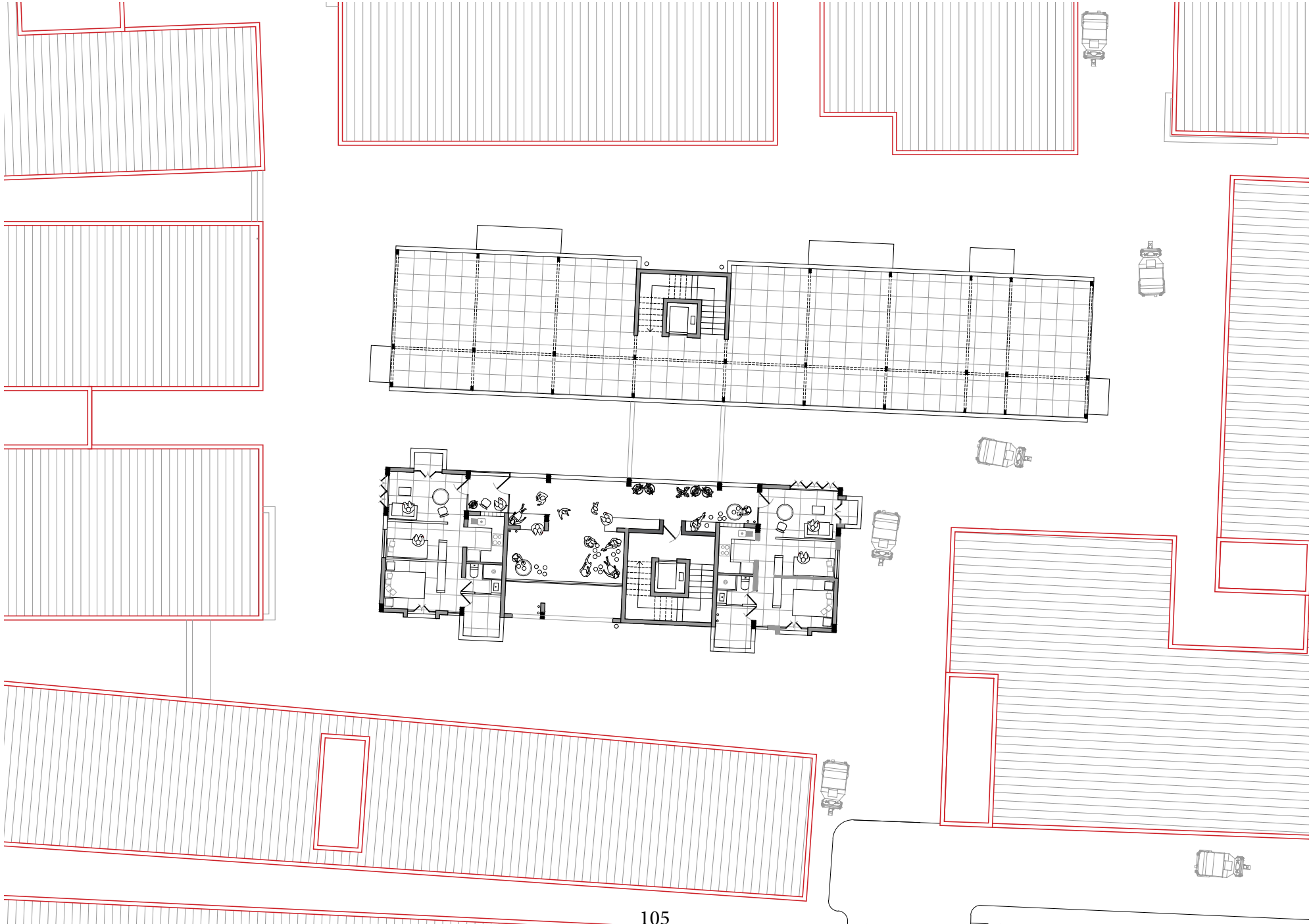
Floor type



Collective spaces

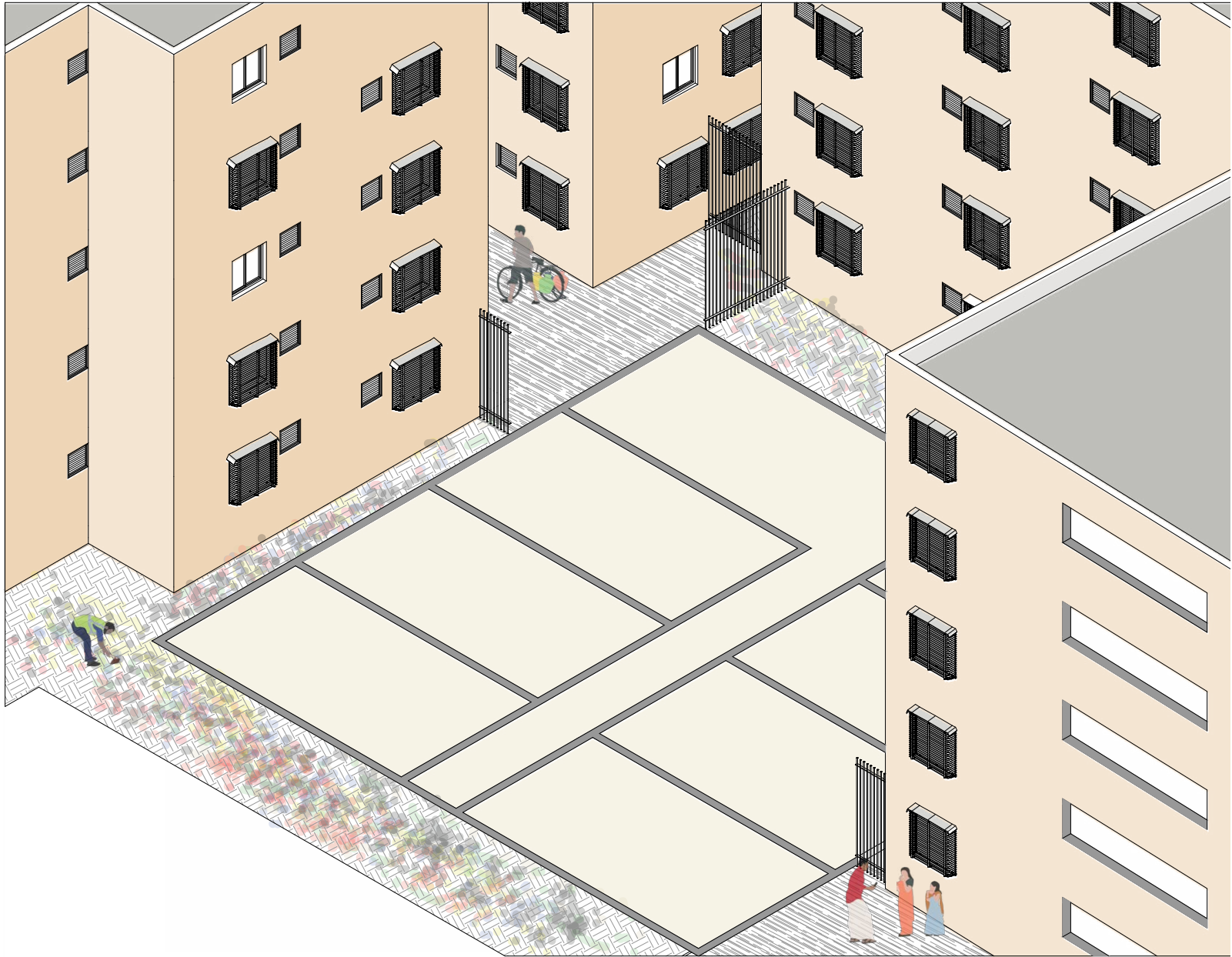


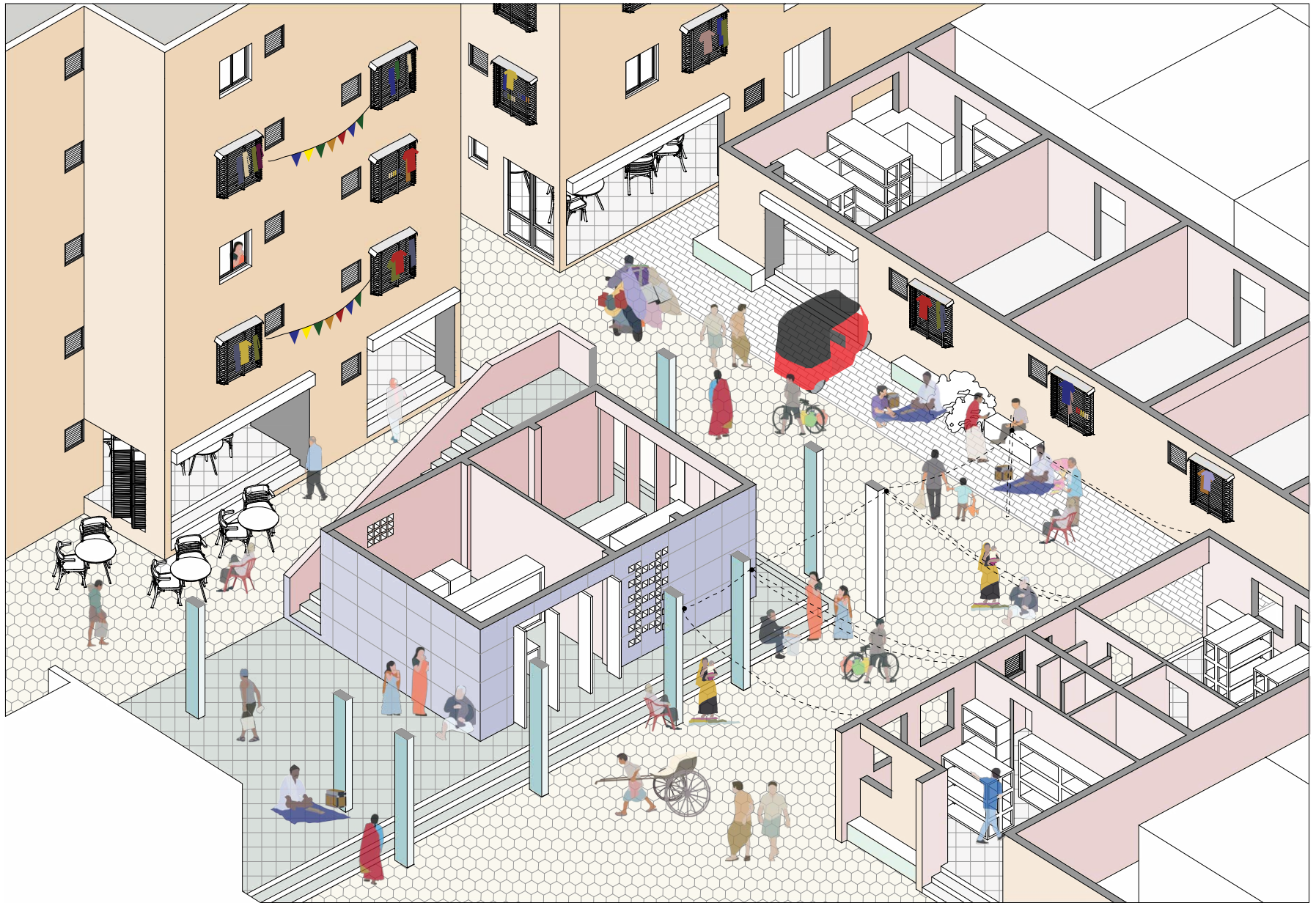
Collective spaces

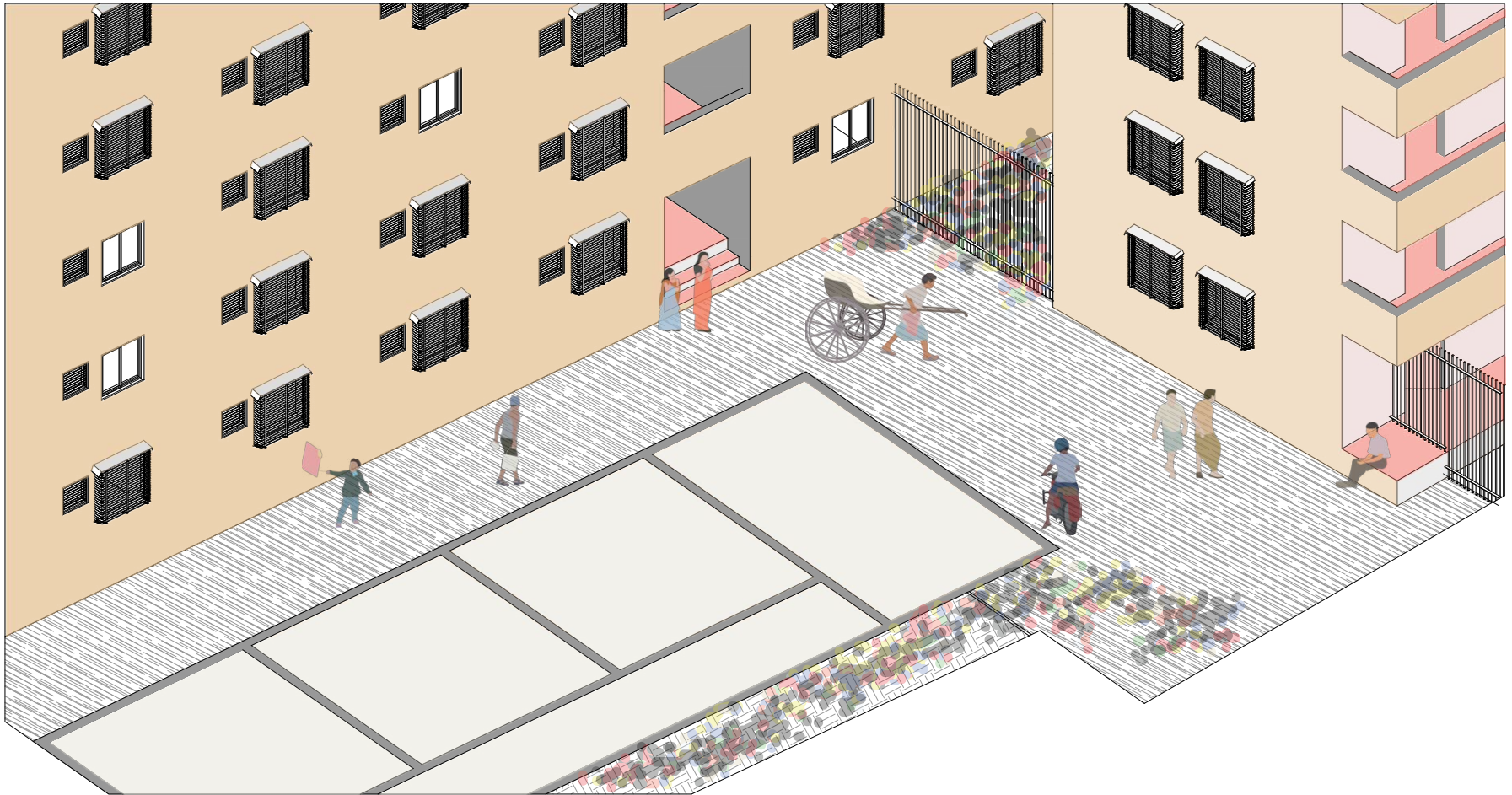


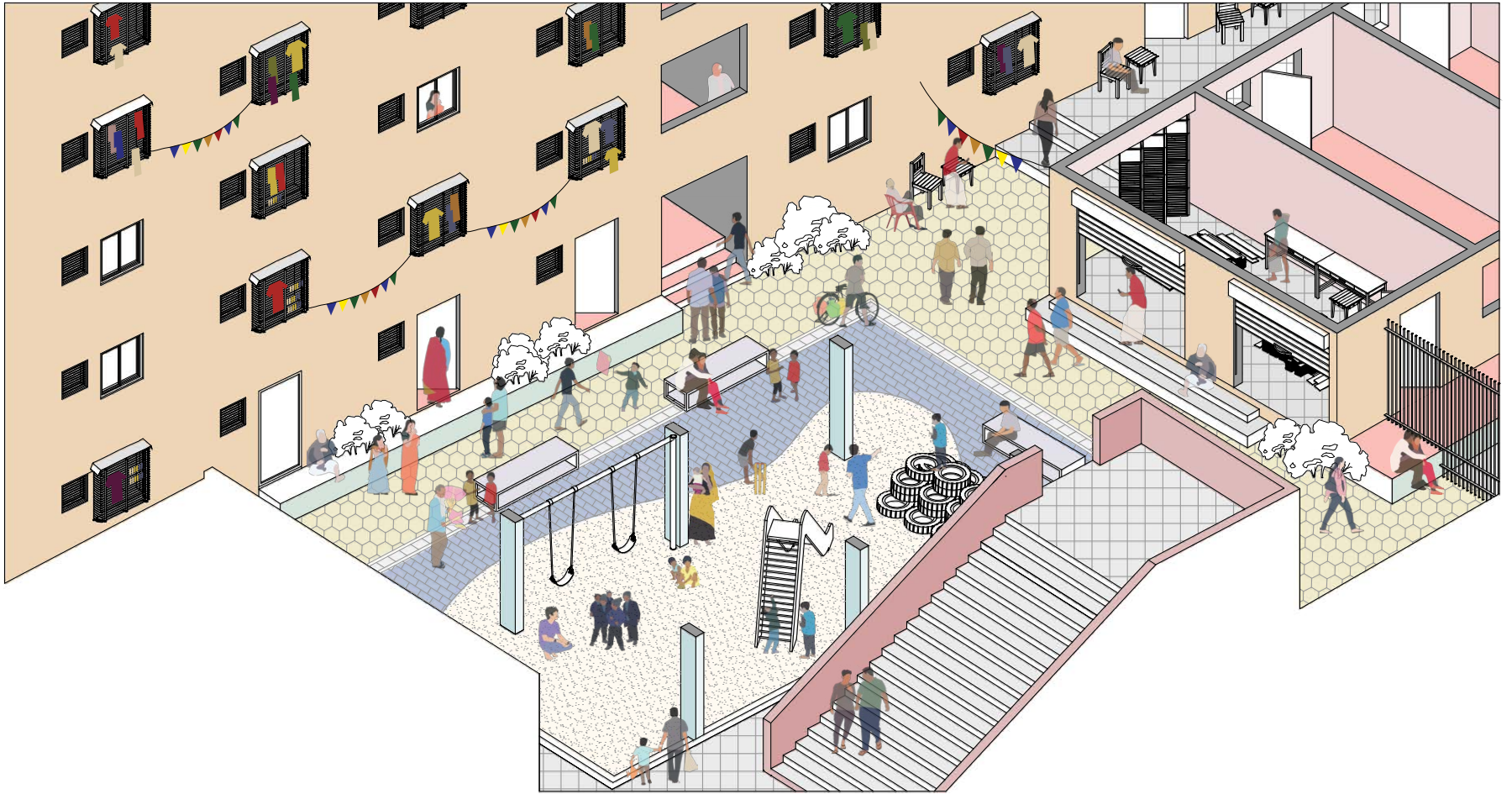
Section



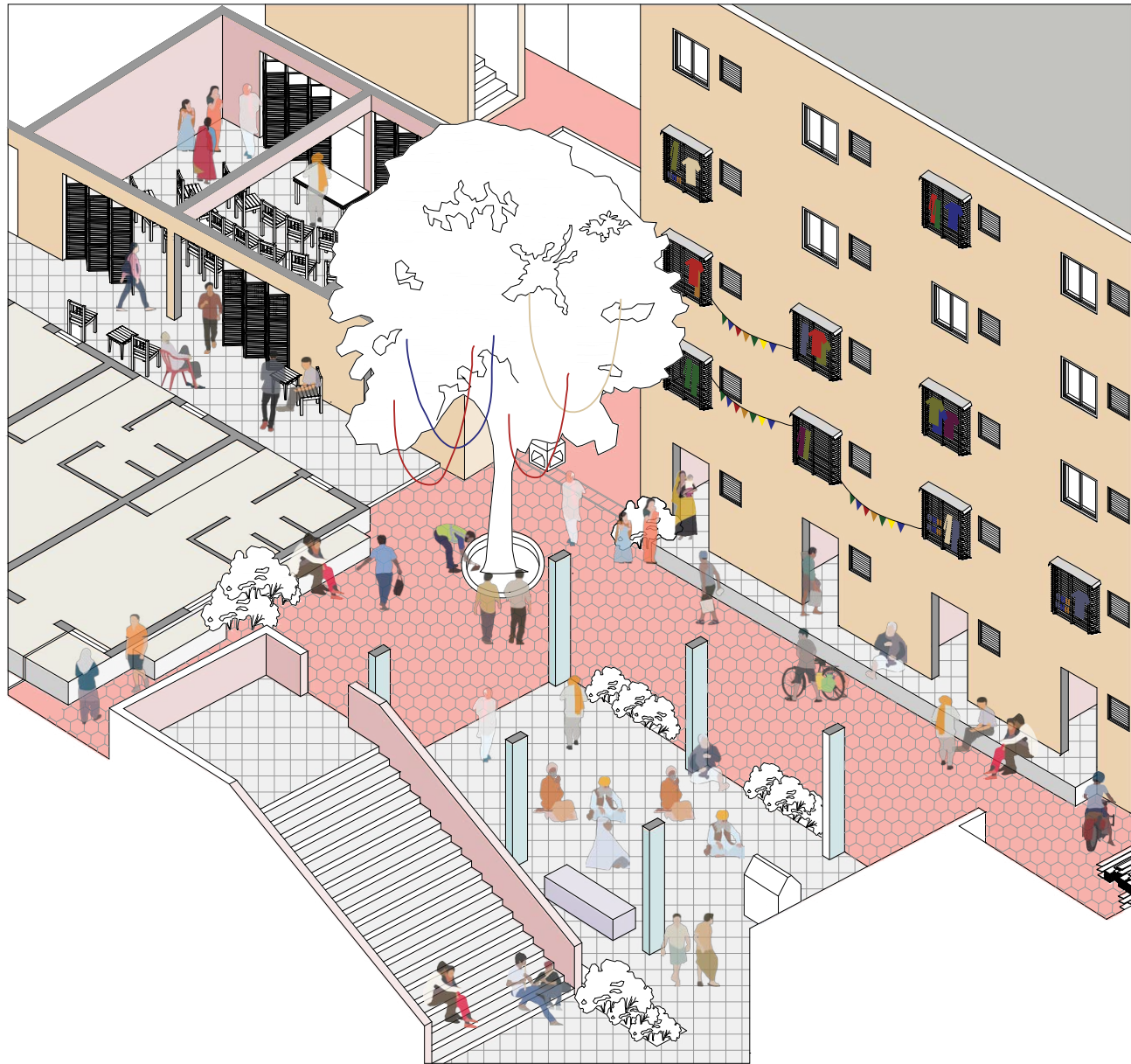




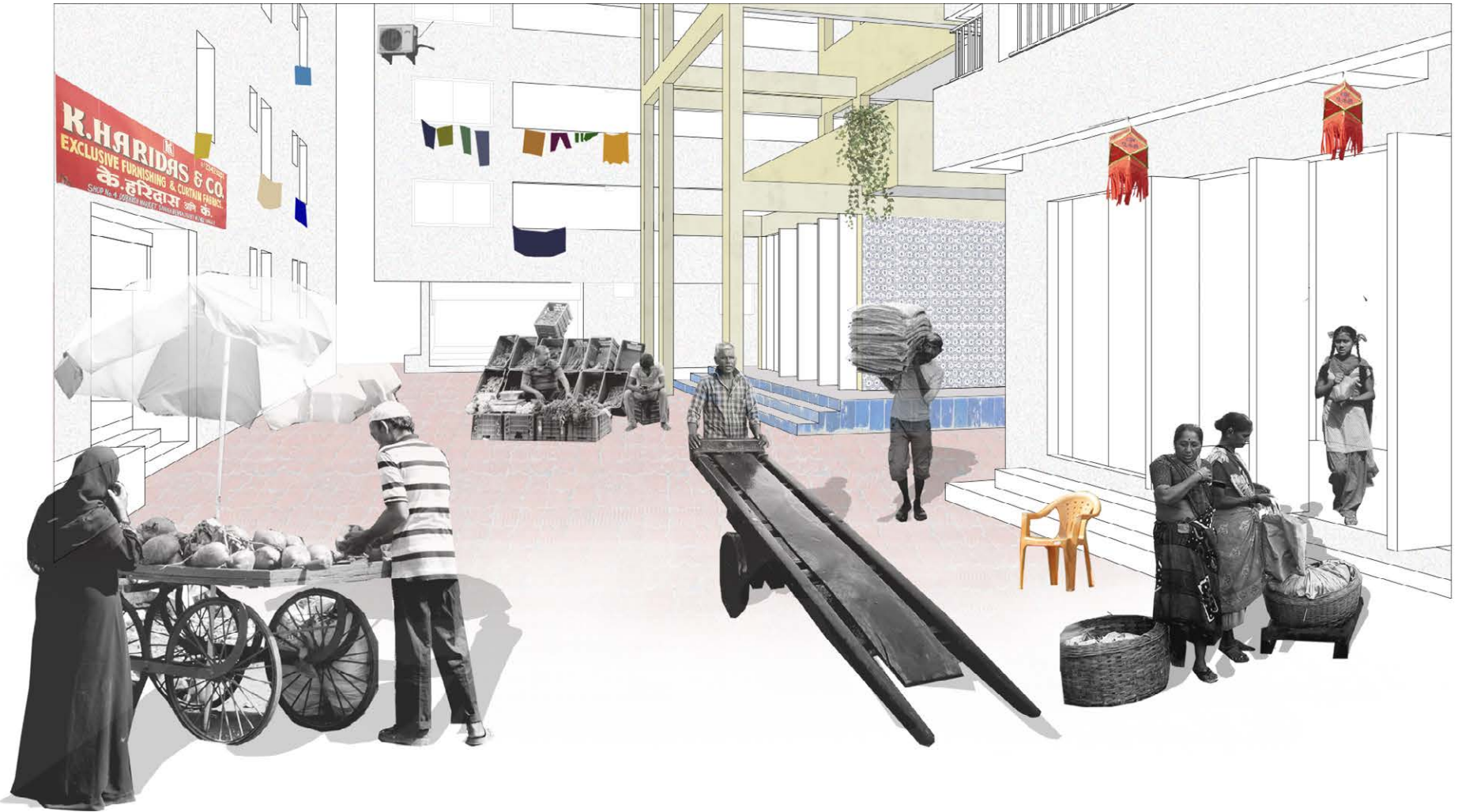
















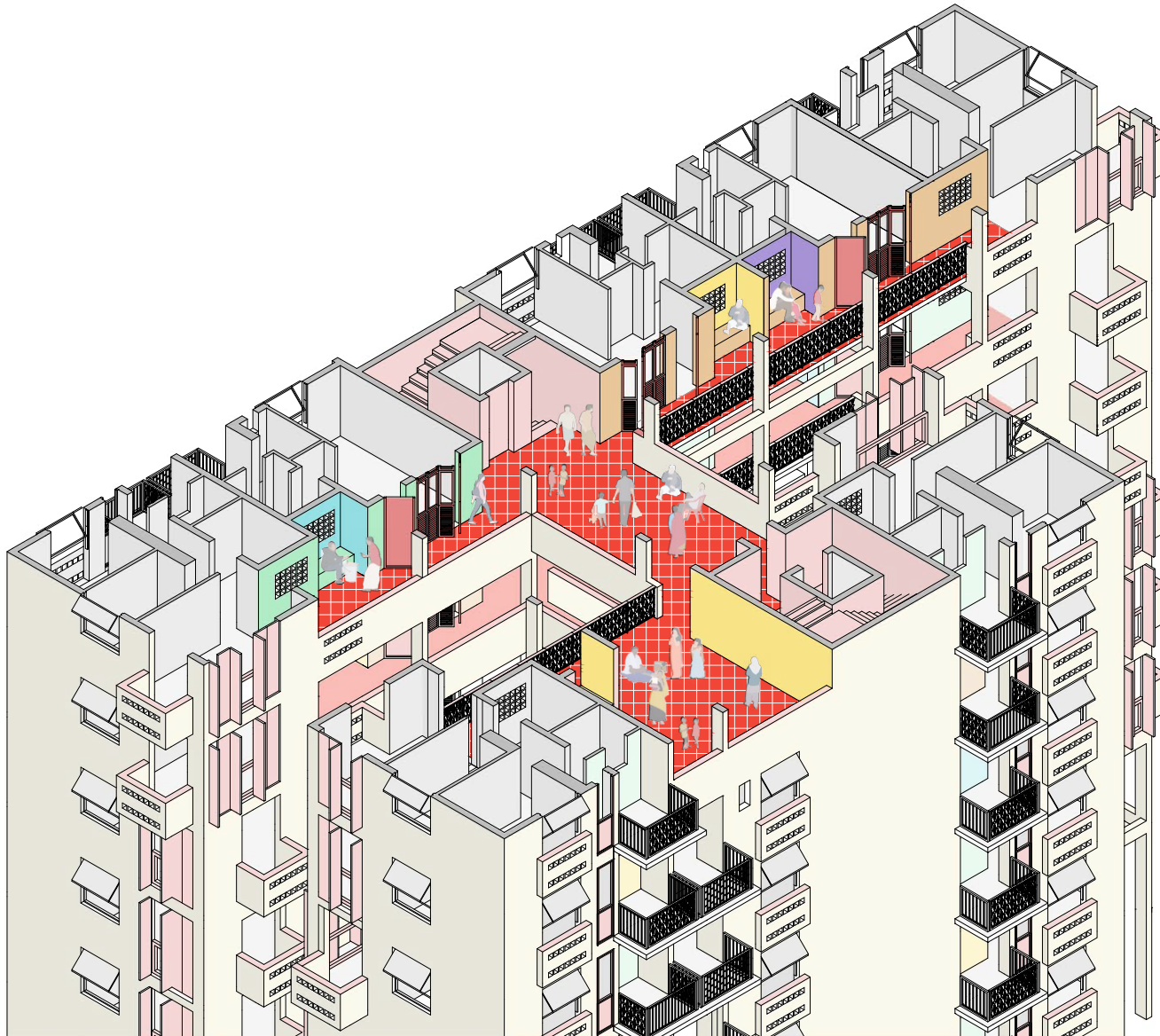








Corridor connection





Urban Situation



0.31 (building)



0.3 (full area)



0.7 m²/person
124



2% active shops



FSI: 3.55

Plinth Flexibility



0.82 (building)



0.32 (full area)



0.75 m² / person
125

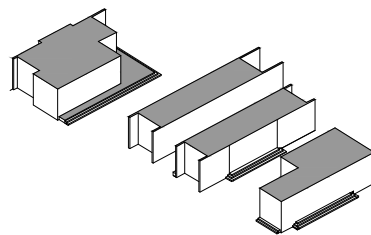
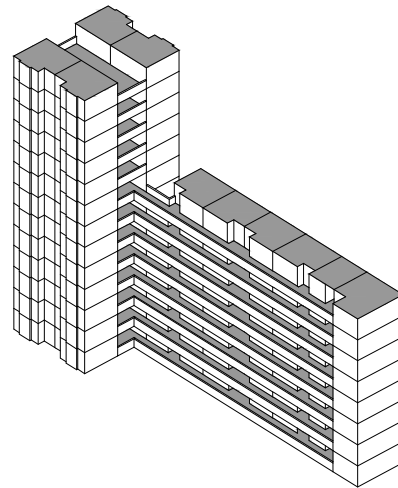


8% active shops

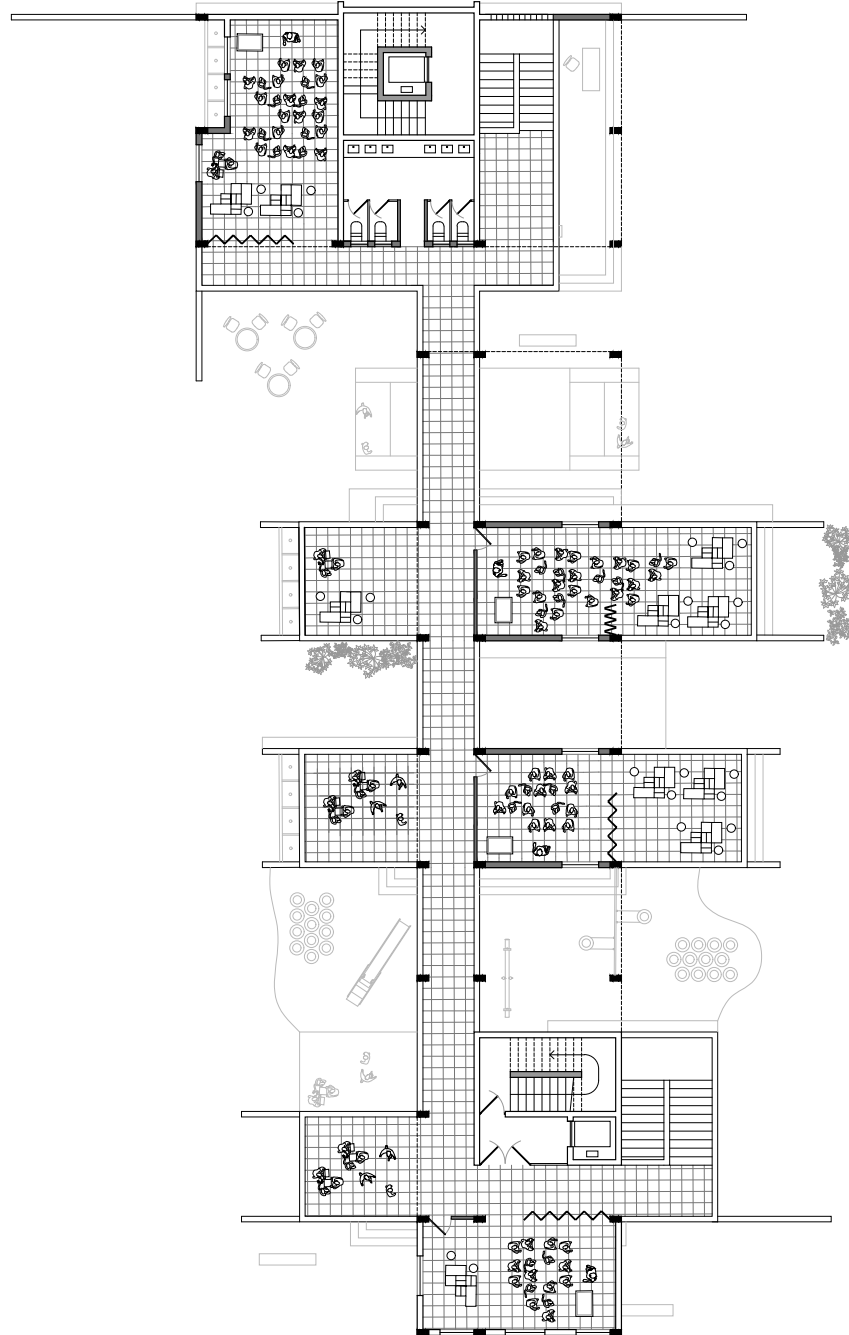


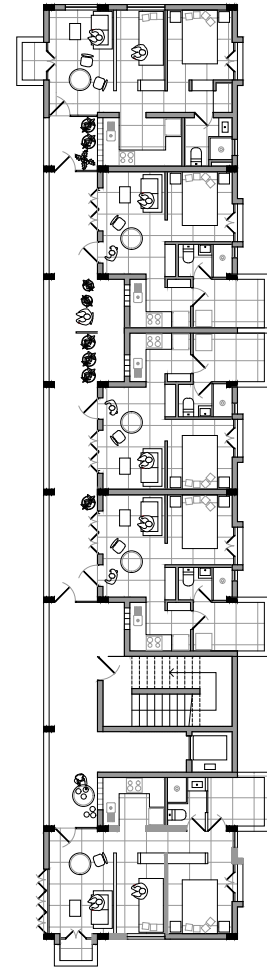
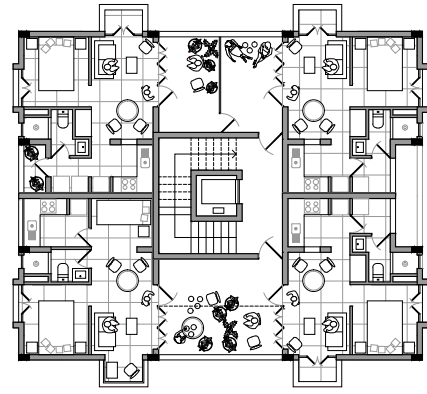
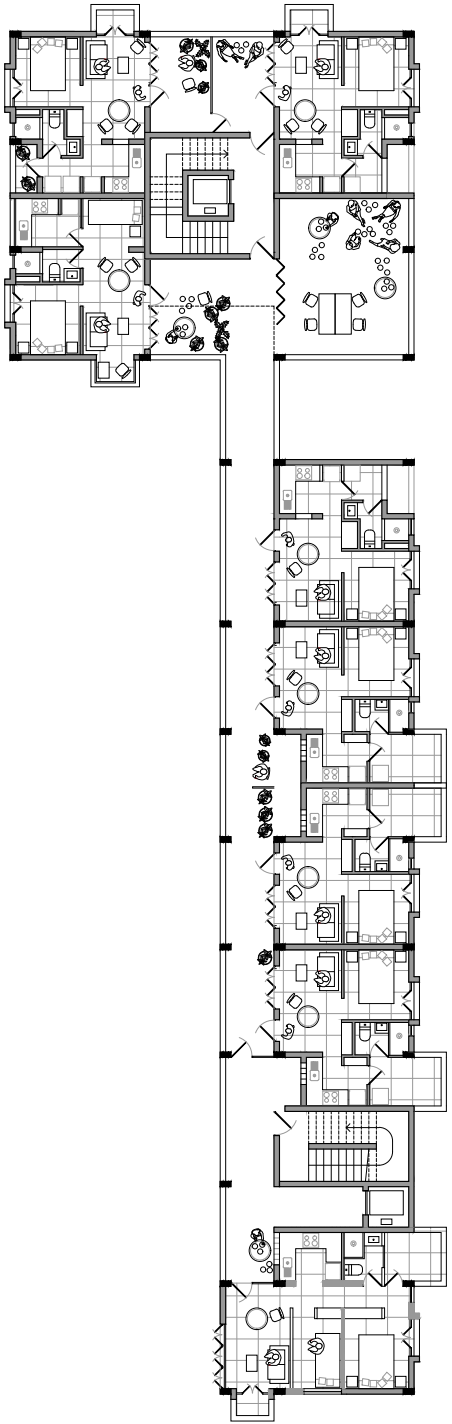
FSI: 3.5

Plinth 2 _ Elementary school

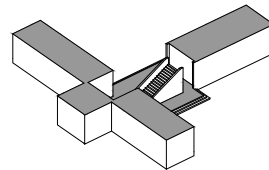
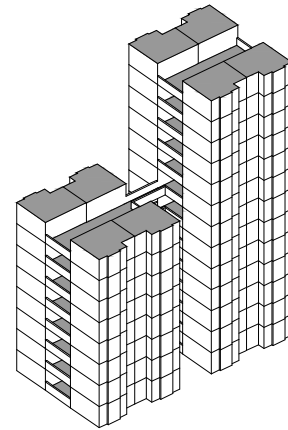


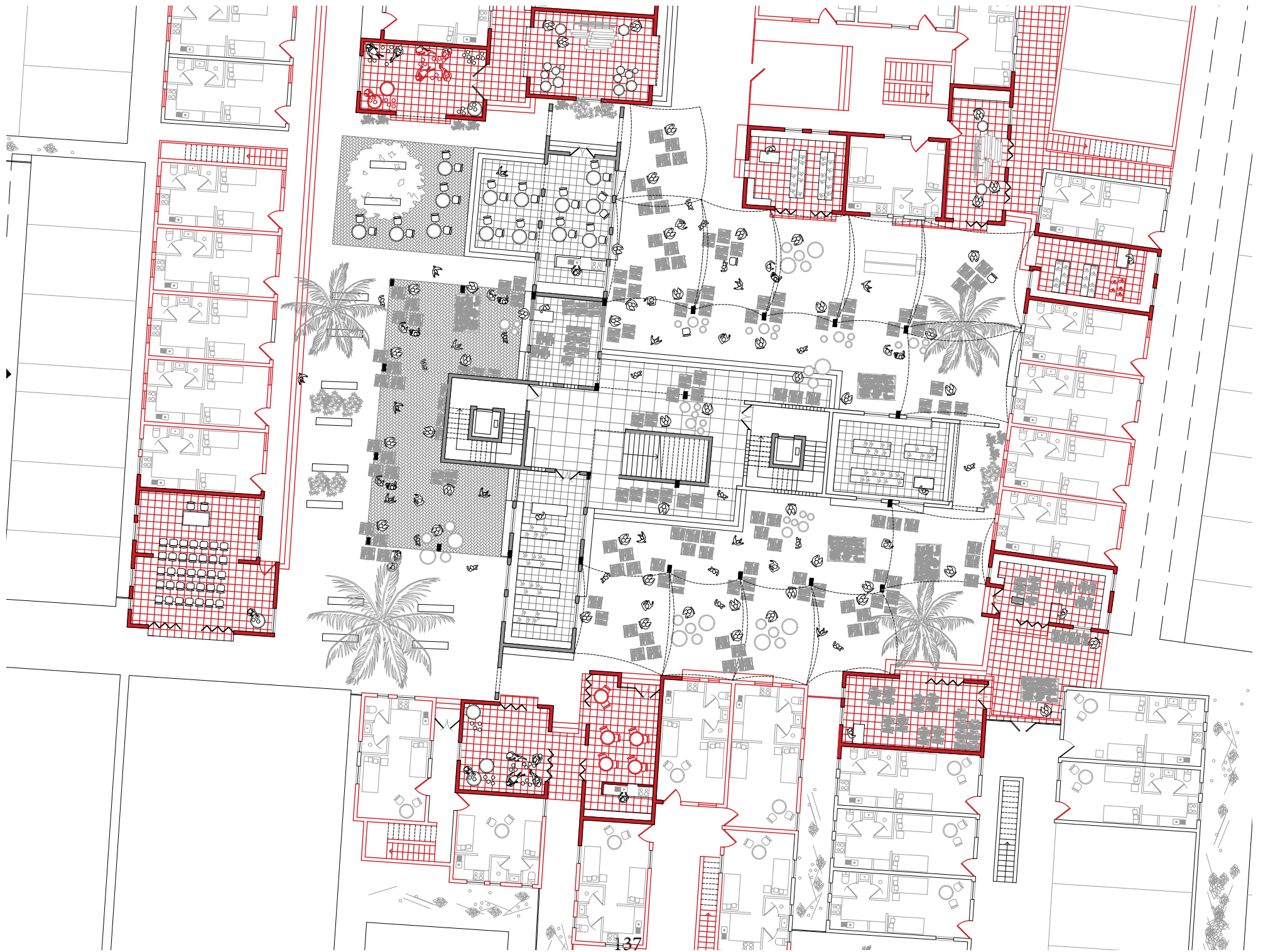


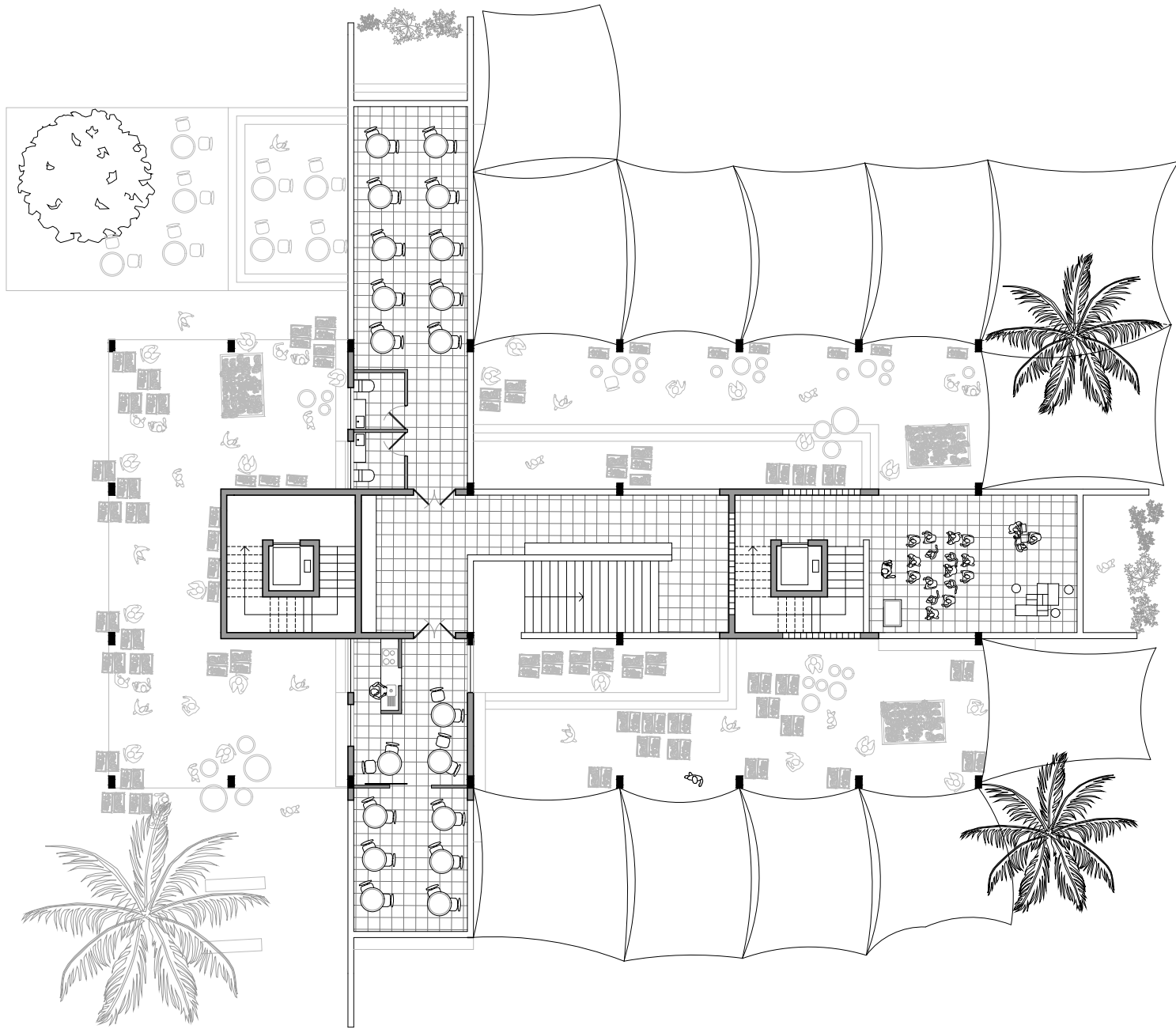


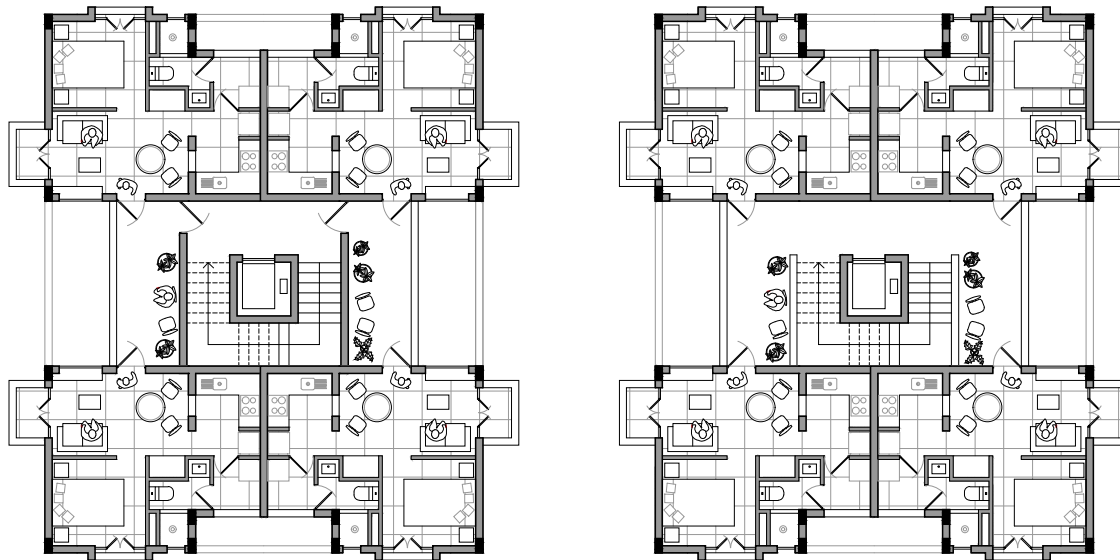
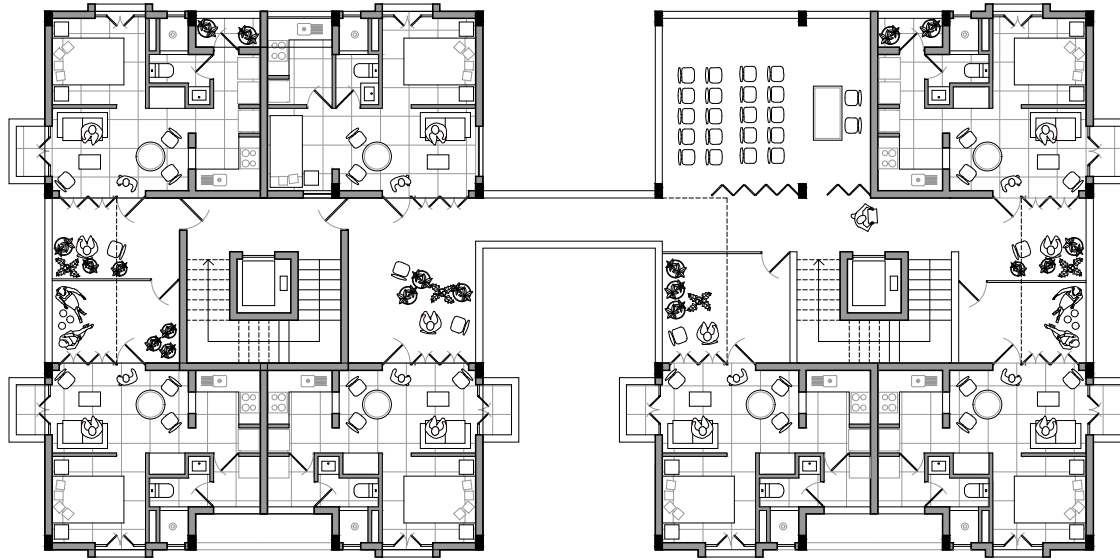


Plinth 3 _ Market



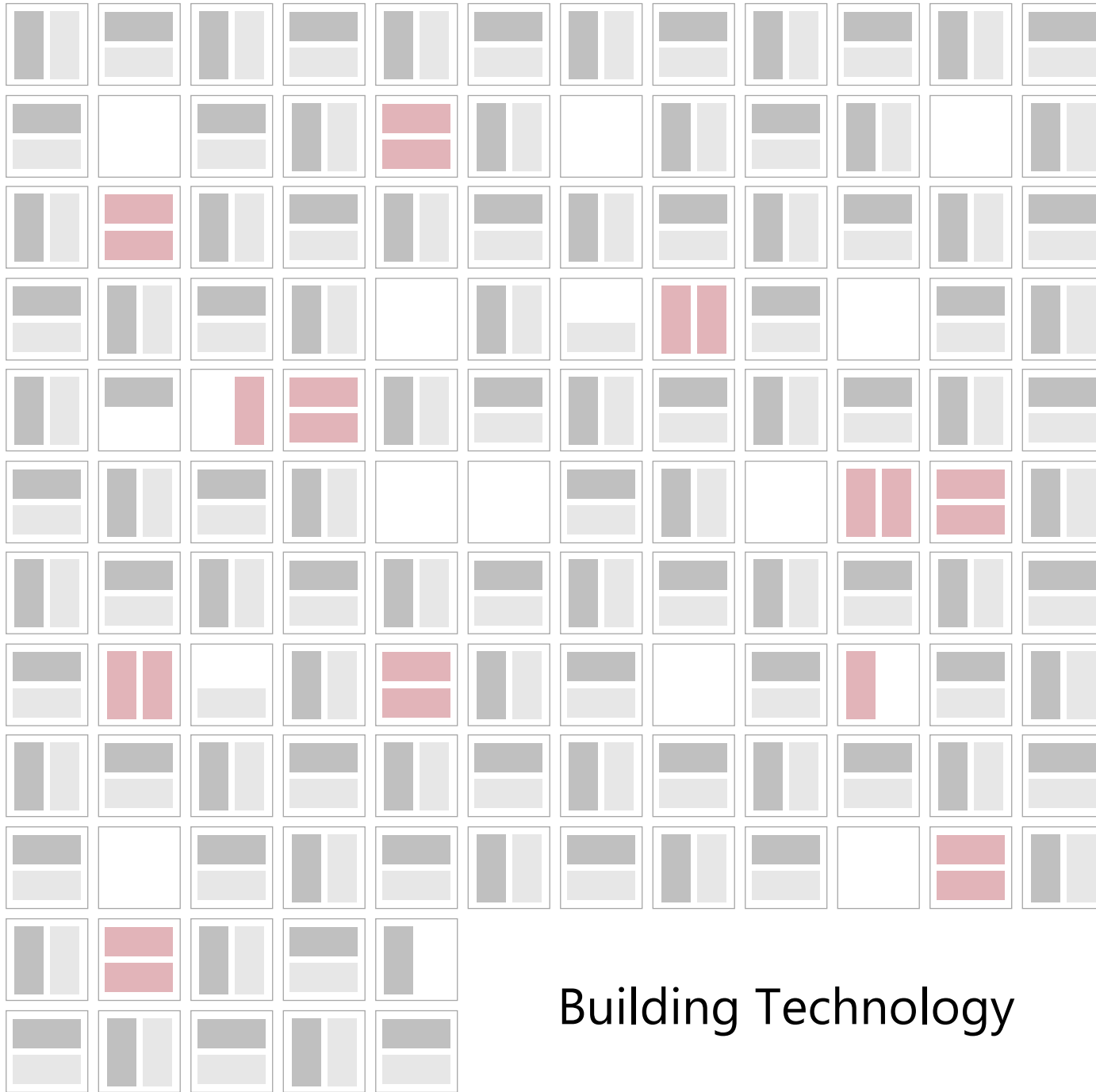






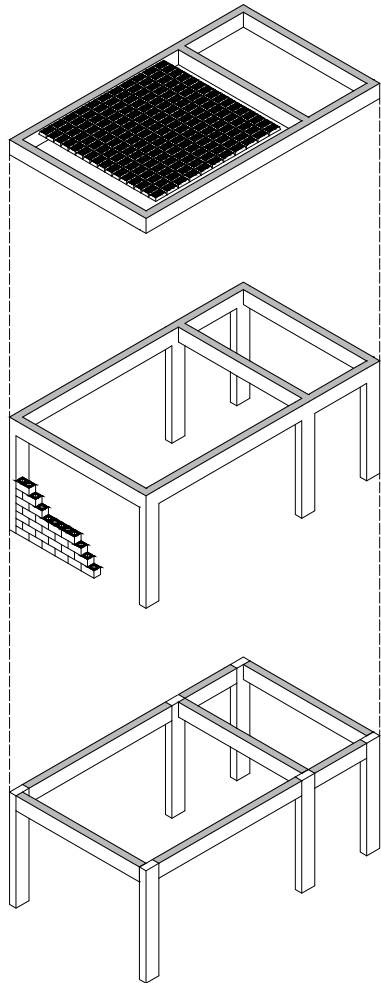
Plinth Flexibility





Building Technology

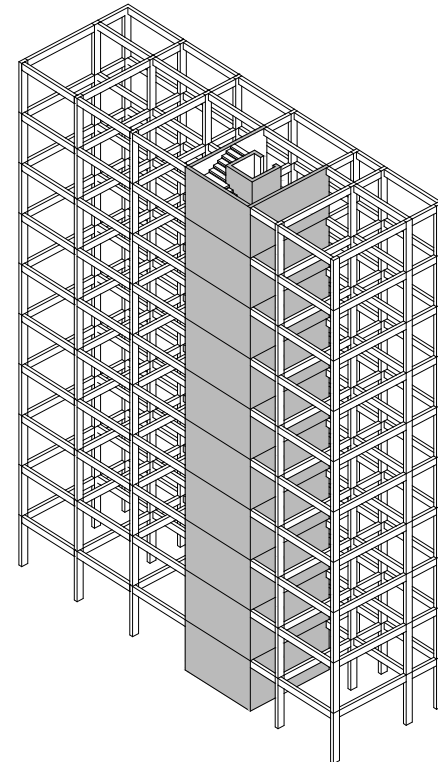
Building Elements



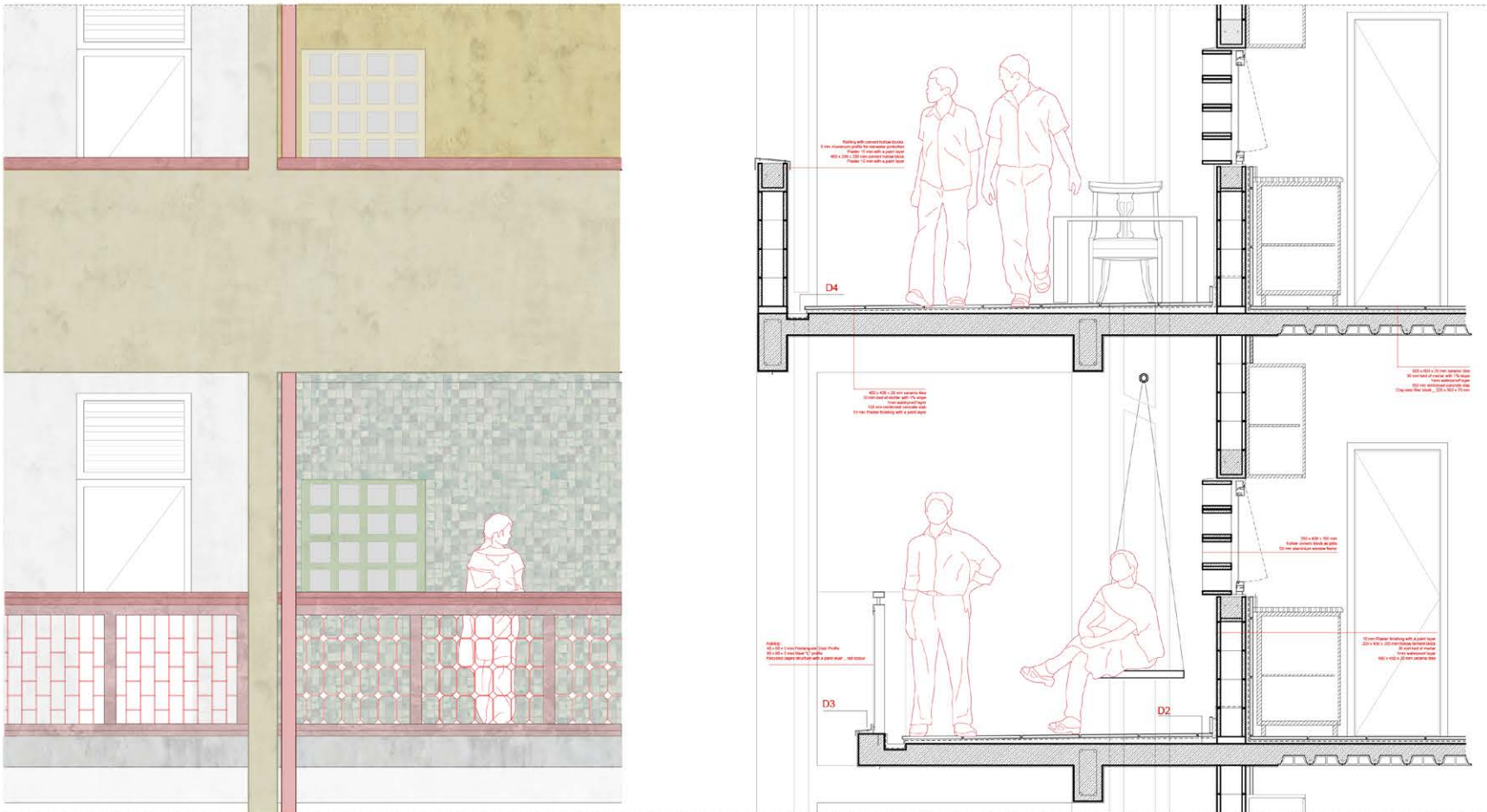
Filler Slab with clay blocks

Hollow Cement Blocks

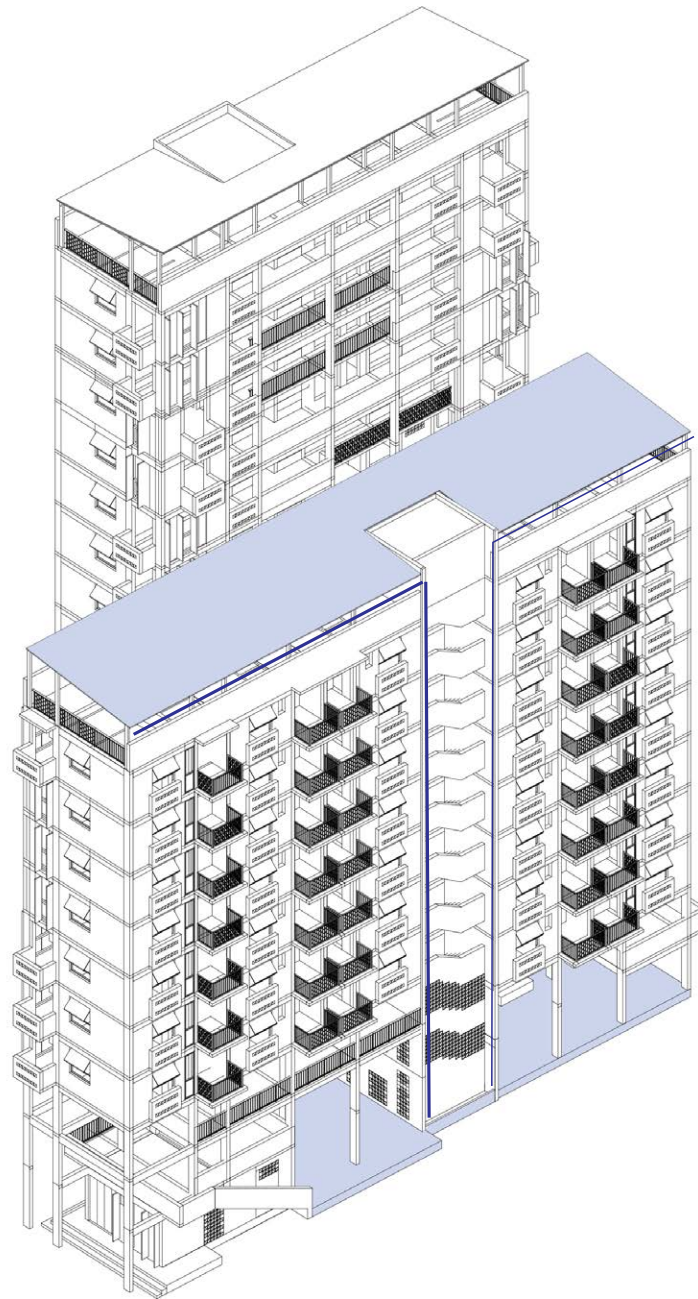
In situ Concrete _



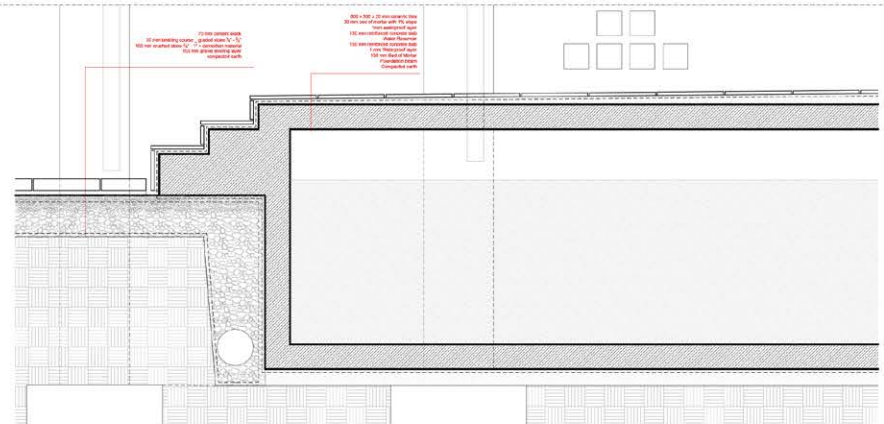
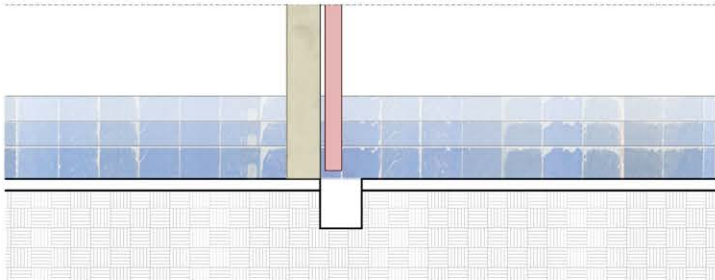
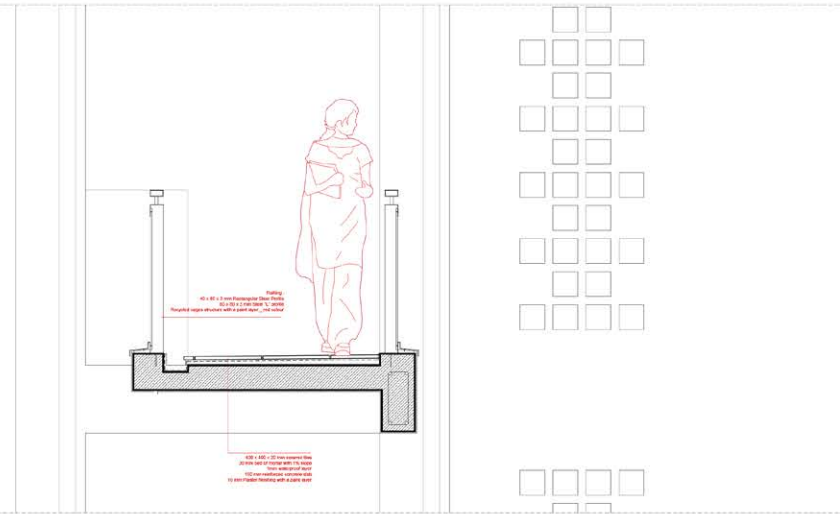
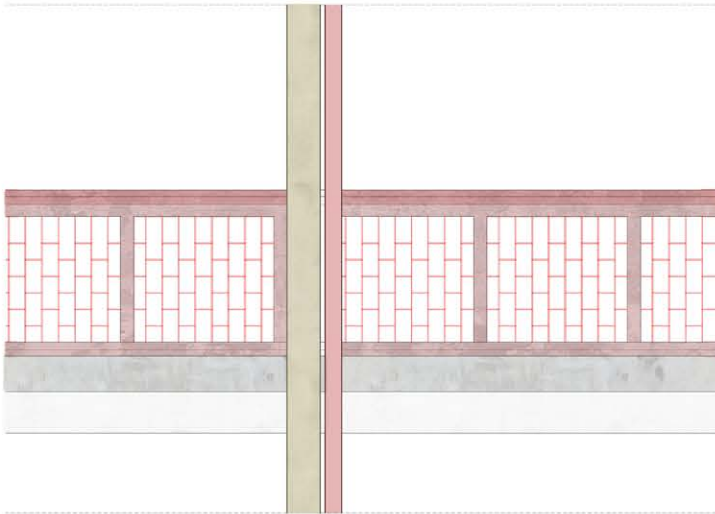
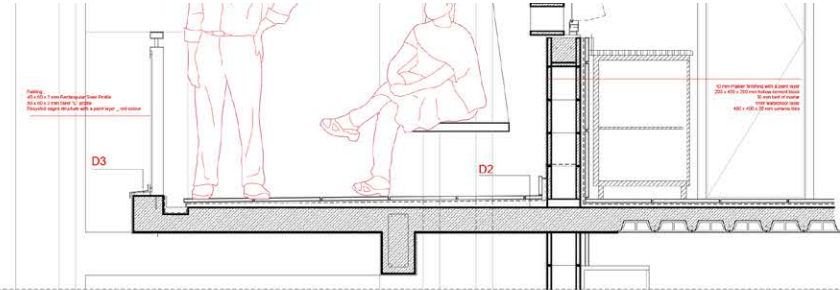
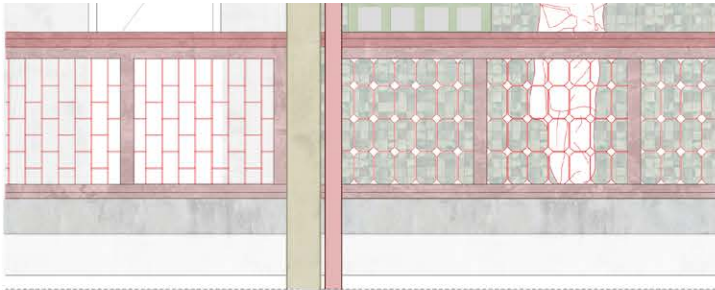
Building Elements _ The corridor



Building Elements _ Rainwater manage



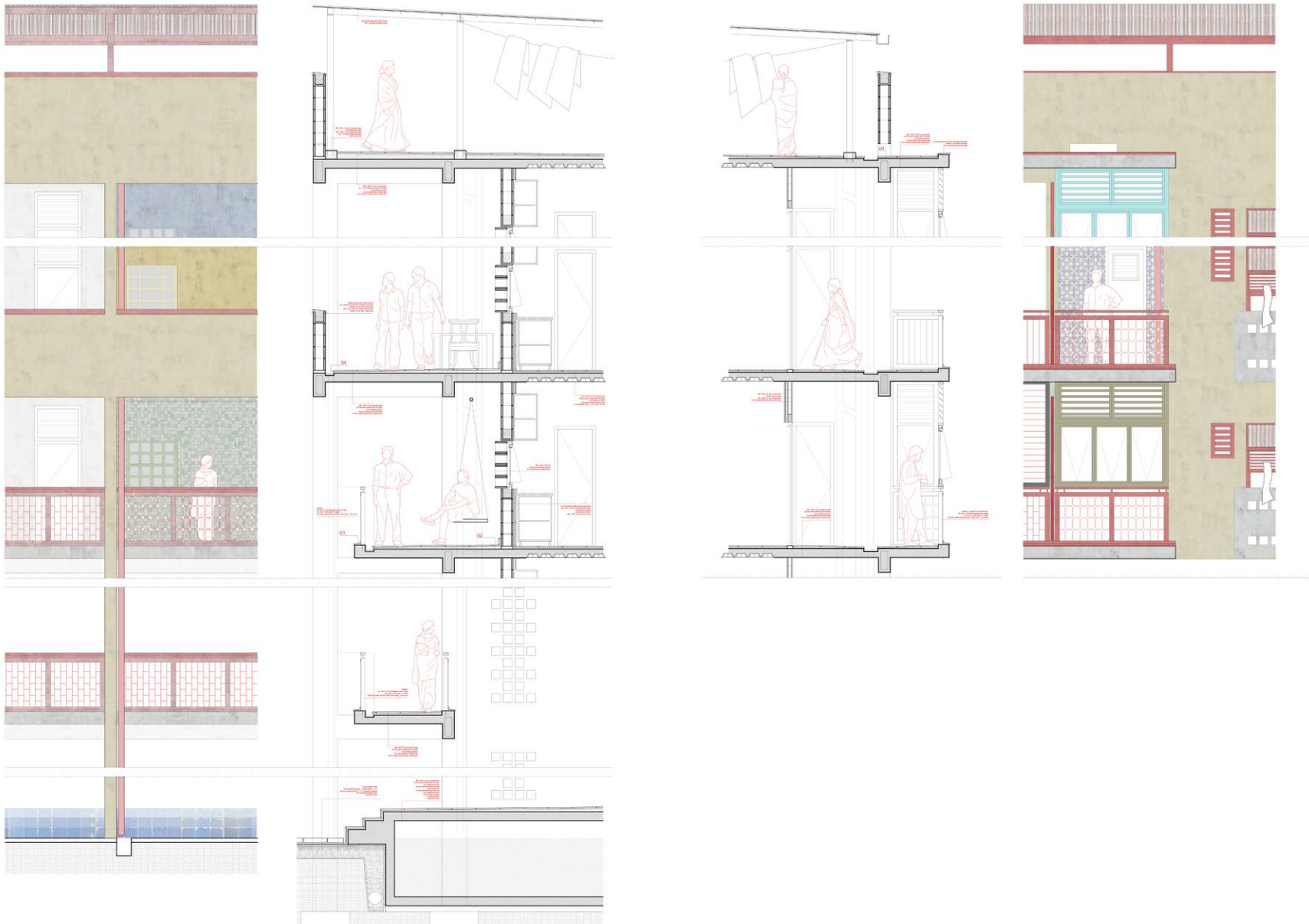
Building Elements _ Rainwater manage



Building Elements _ Balcony



Ventilation and facades



Feasibility scheme



MHADA.
(Mumbai Housing and Development Board)



Private Builder



Transfer FSI



Extra units in the market*



Pay Demolition cost

EWS

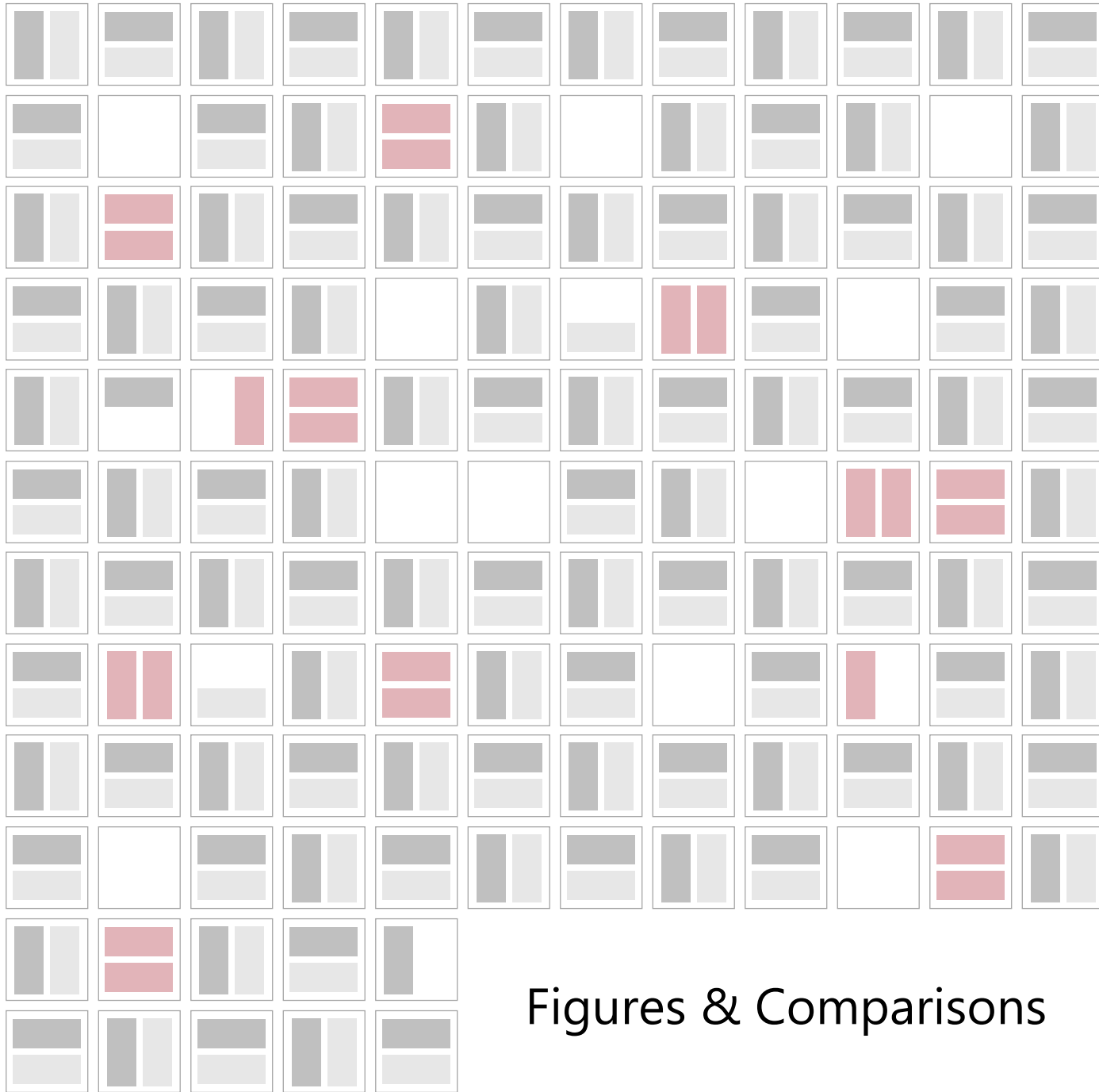
Pay for affordable units*



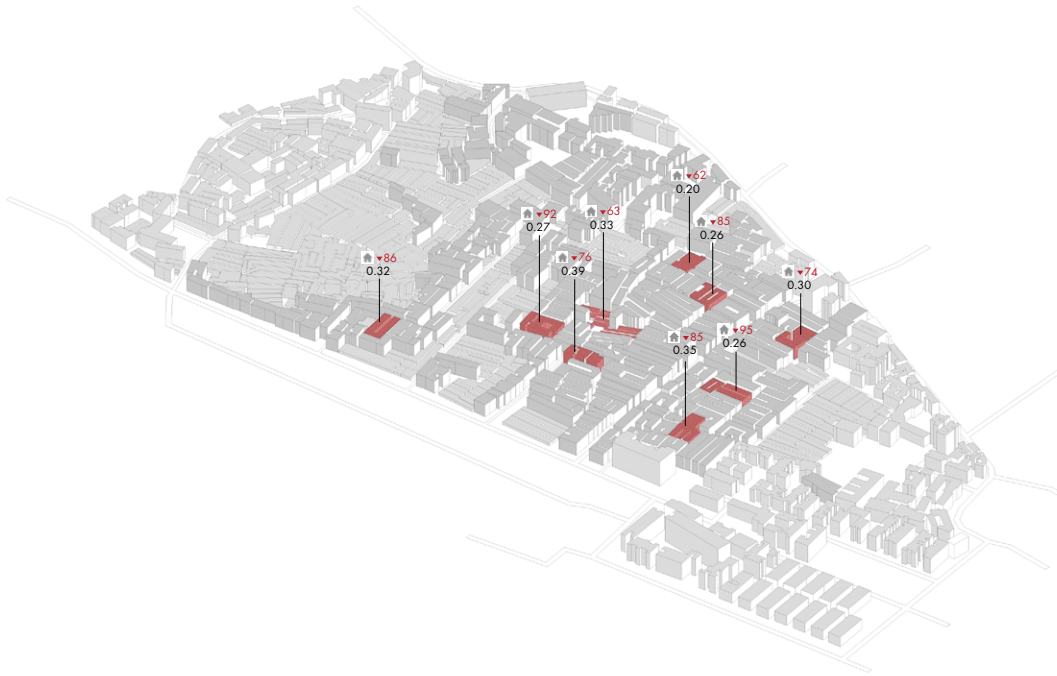
Pay annuity to developer (15-20 years)*



Pay annuity to developer (15-20 years)
+ 40 - 50% Building cost*



Figures & Comparisons



724



0.3



FSI: 3.3



2%



5% active shops



830



0.77



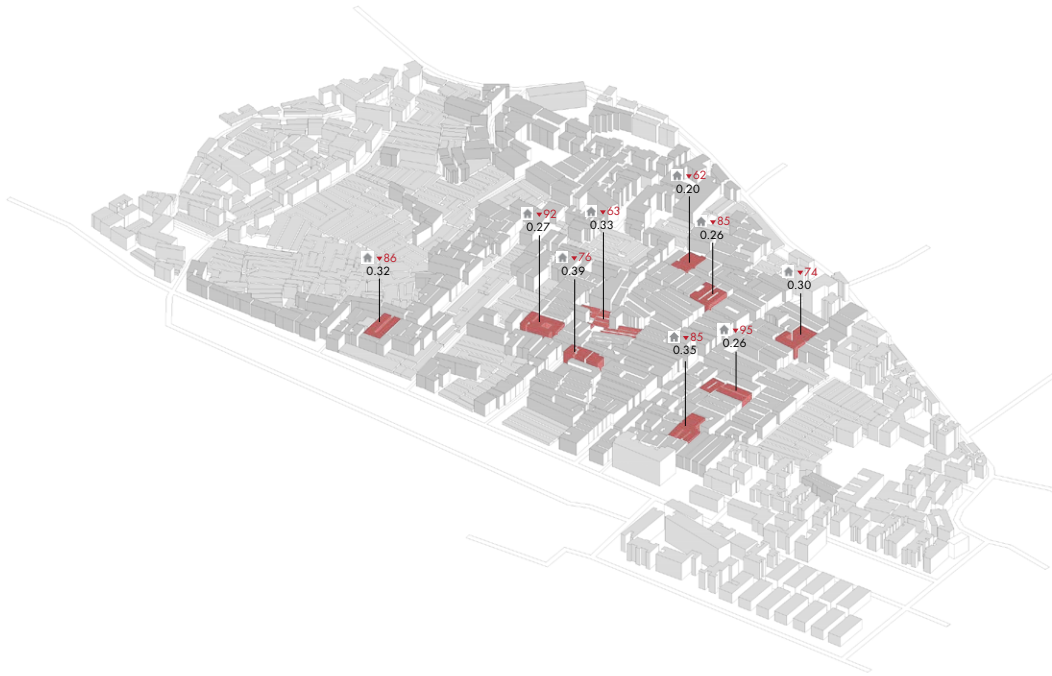
FSI: 3.2



10%



10% active shops



Avoid massive Eviction / Relocation



Elaborate an integrated urban fabric



Redefine Neighbourhoods



Increase amenities and commercial activity
 - To stimulate future investment
 - To increase land value

