



## A FRUITFUL BORDER

P5 June 28th 2017 | Anne van der Meulen 4076567

Tutors: Nelson Mota, Dick van Gameren, Anteneh Tola and Steven Steenbruggen



# Content

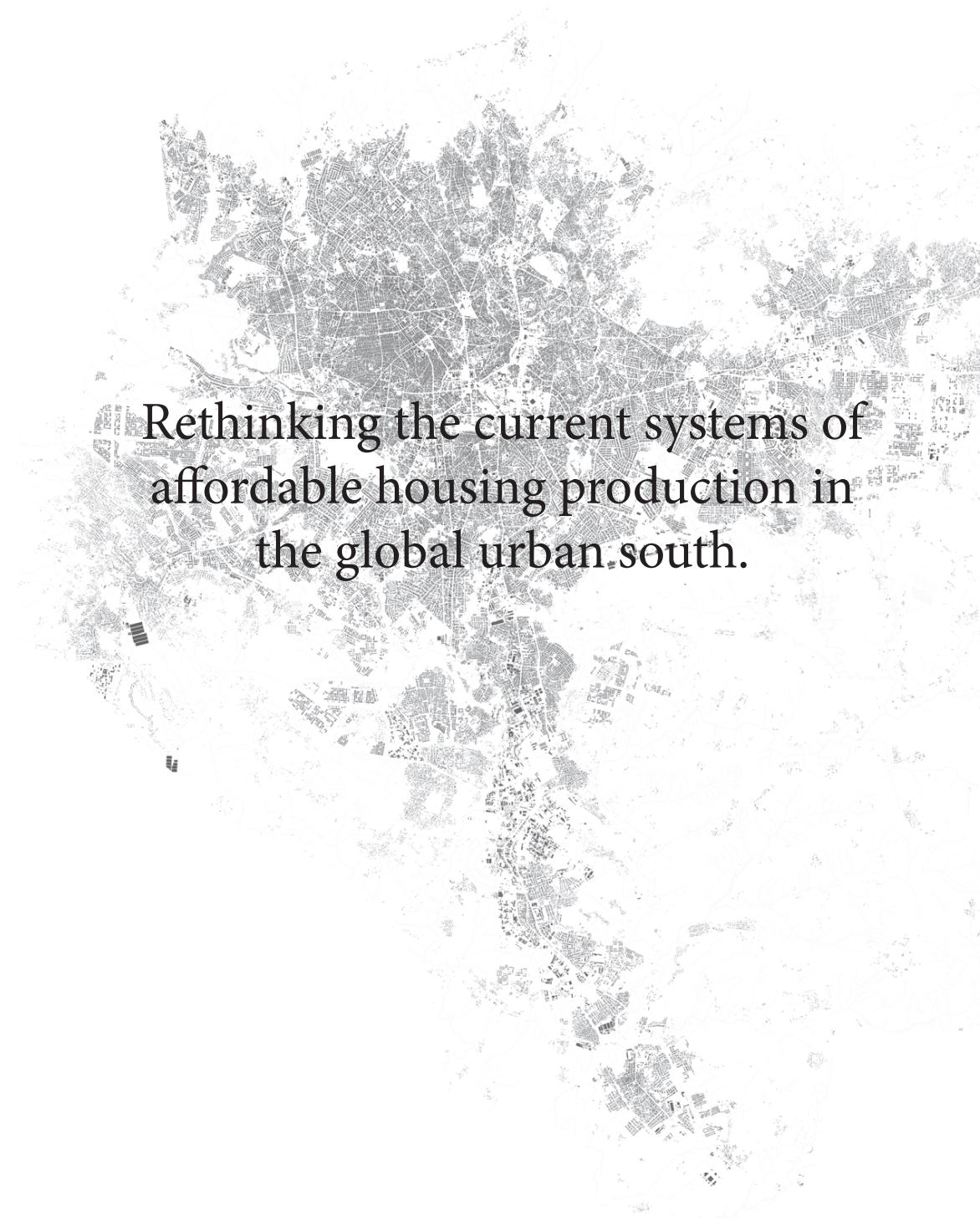
Problem statement

Research question

Location

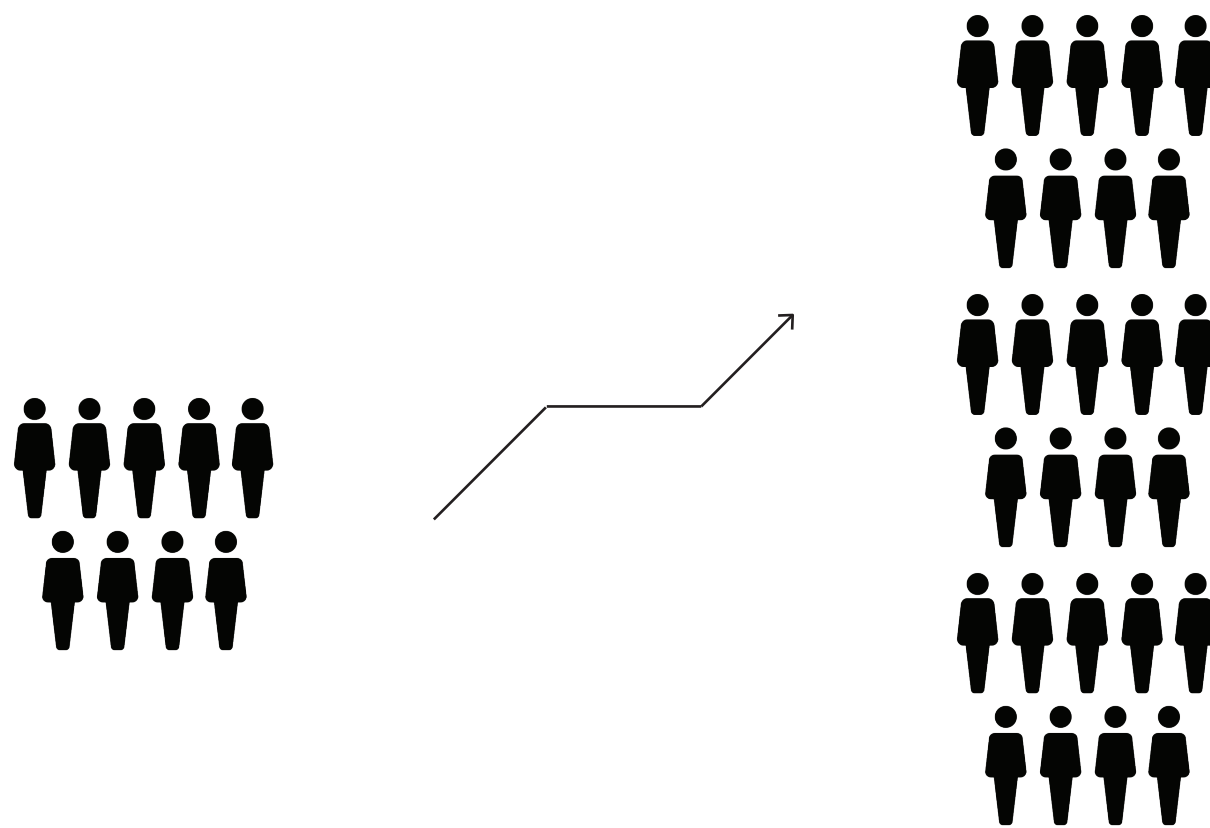
Strategy

Design

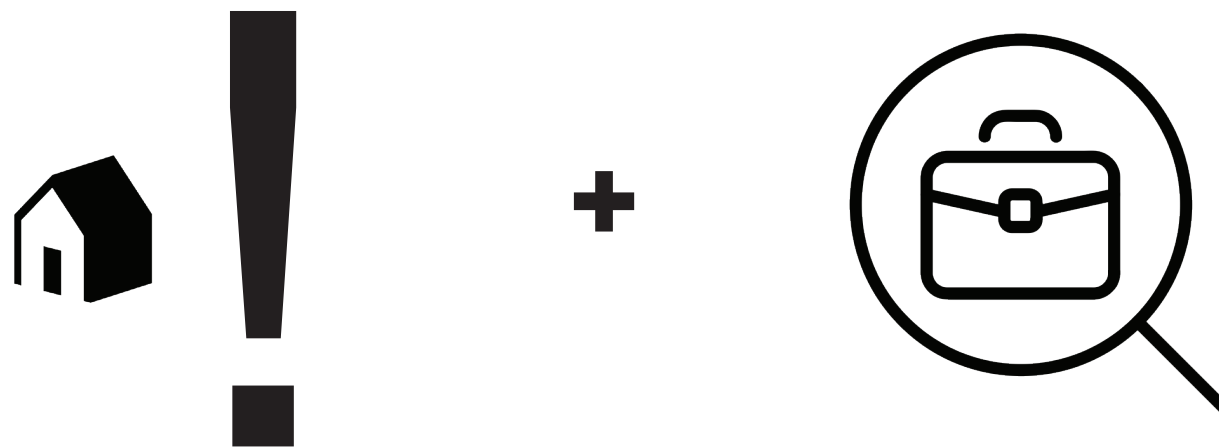


Rethinking the current systems of  
affordable housing production in  
the global urban south.





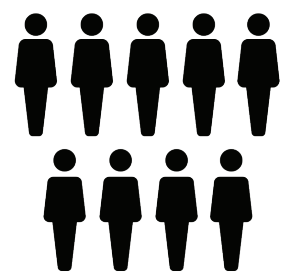
Population growth global urban south



Housing shortage and growing demand for employment

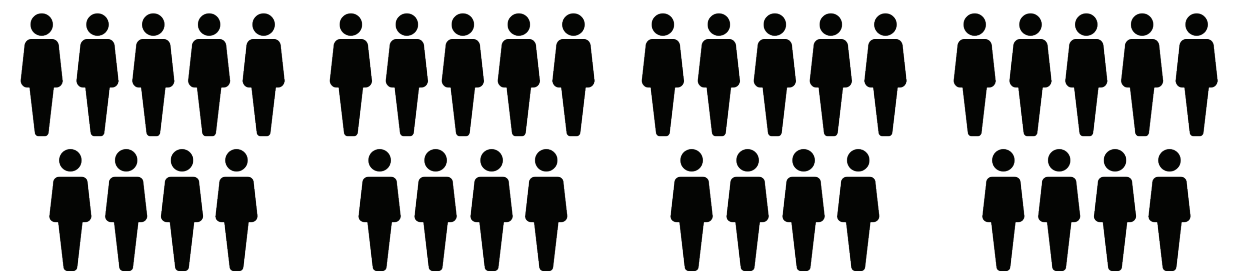


2014



18 million

2050



70 million

## Growing urban population Ethiopia



The half Italian lady





Addis Ababa | Rapid growth

[http://i.huffpost.com/gadgets/slideshows/345705/slide\\_345705\\_3620893\\_free.jpg](http://i.huffpost.com/gadgets/slideshows/345705/slide_345705_3620893_free.jpg)





Slum city settlements





Demolition by the government

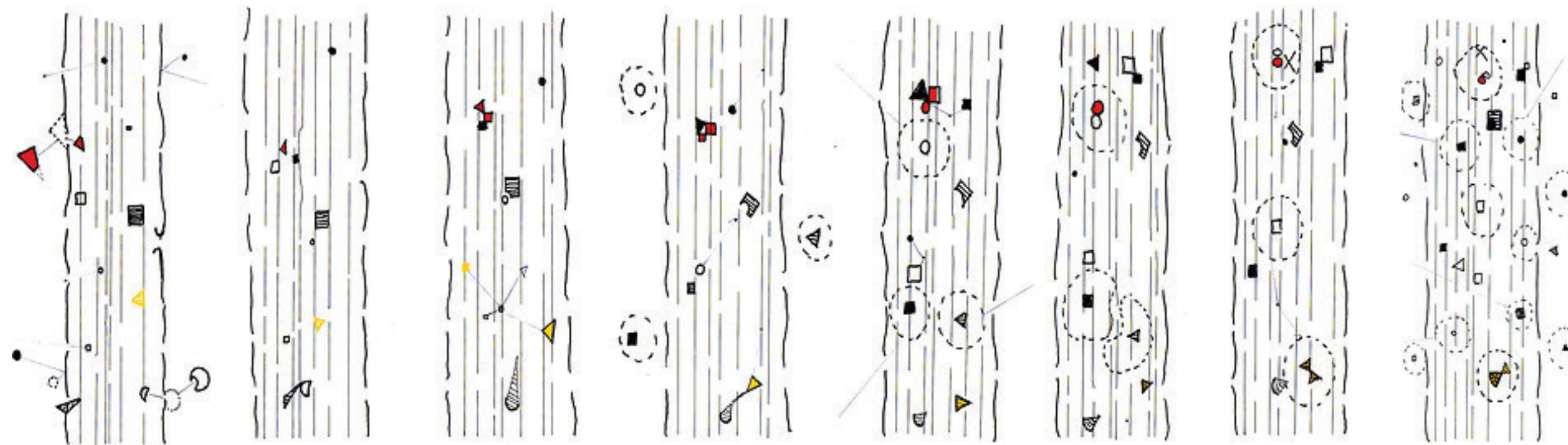




What about the public space?

Current strategy government | Condominium blocks

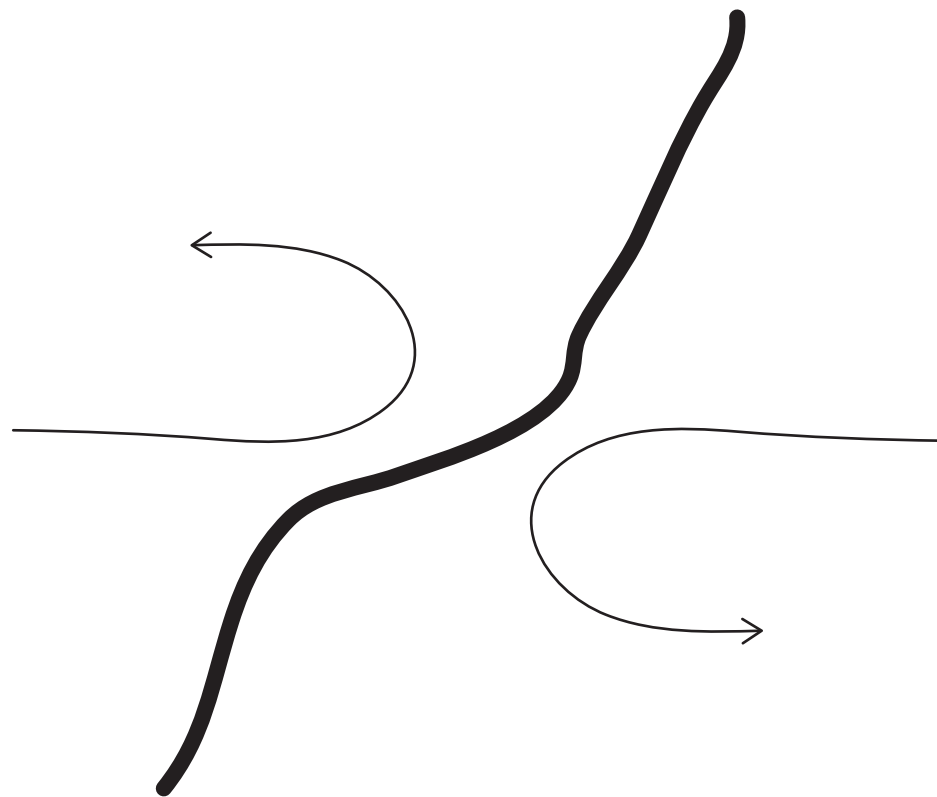




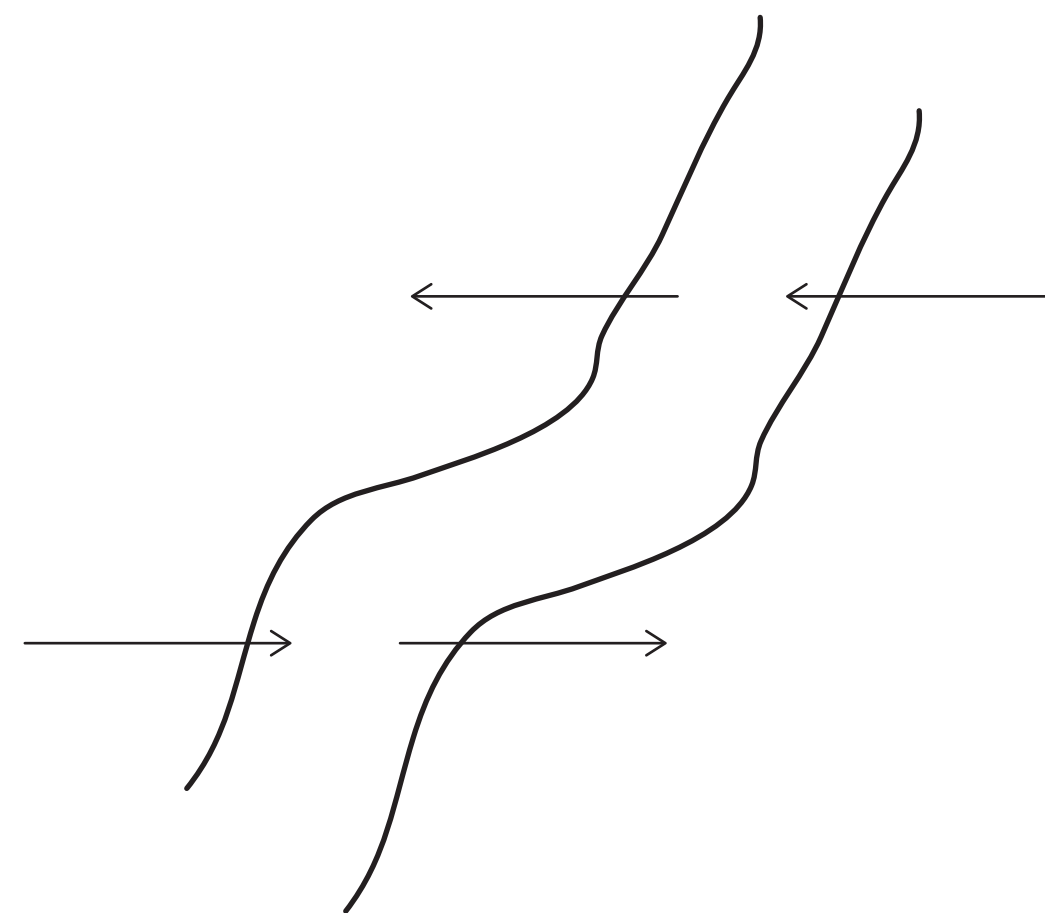
A border like a cell membrane

## Theories of Richard Sennett - The open city

<https://thesleepofrigour.files.wordpress.com/2014/06/vu-hoai-nam.jpg>



STOP



Open for human exchange

Boundaries vs borders



Economical exchange



Social exchange

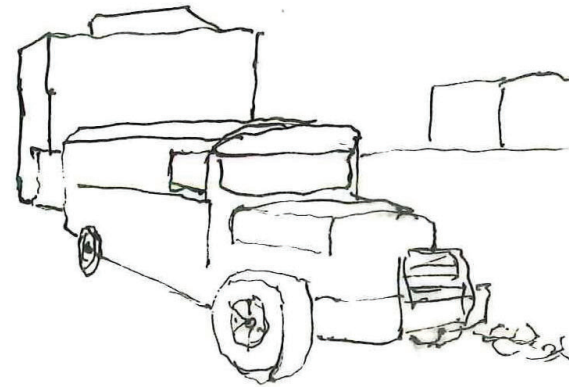
Open for human exchange



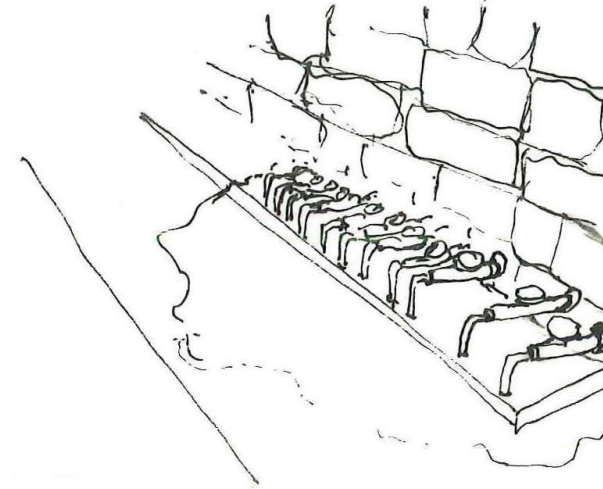
Water vendor



Entering traffic



Water connections



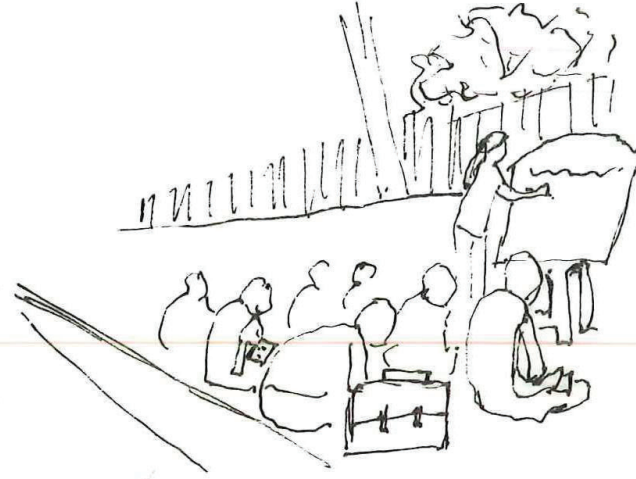
Washing



Waste collection



Open air school



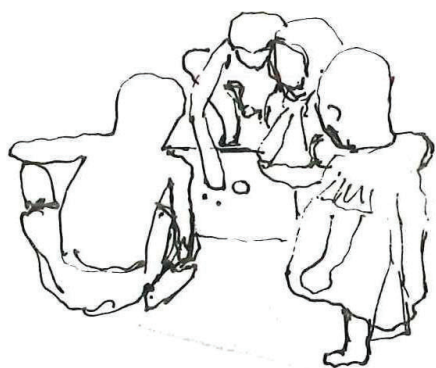
Informal meeting



Street vendor



Playing children



Household activities



Open air market



Food preparation





How can an affordable housing scheme in Addis Ababa be an open border  
that generates economic and social exchange?

And how can this scheme respond to the topography and the future plans  
of the government?

Sefer = Neighbourhood

Research question







Location | Dejach Wube sefer





Park







Sint George cathedral Addis Ababa

[https://honeysun.files.wordpress.com/2009/02/2009-01-02\\_14-27-07-dmc-fx9.jpg](https://honeysun.files.wordpress.com/2009/02/2009-01-02_14-27-07-dmc-fx9.jpg)





The sefer





**Highly developed | Ras palace**





The Addis Ababa restaurant | Old Ras Palace of Dejach Wube





Street left side





Demolition

Demolition and starting developments





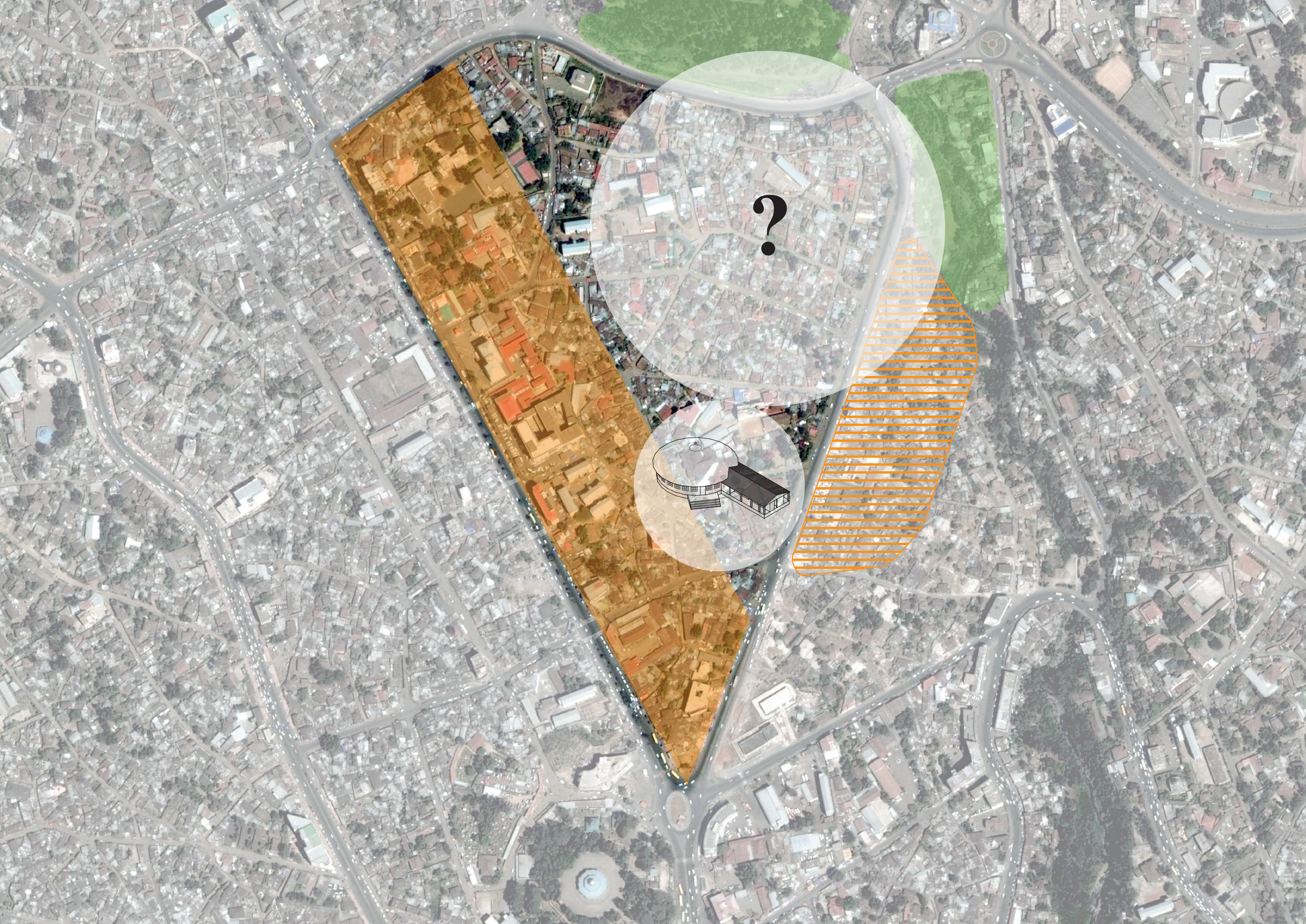
Street right side





Street right side



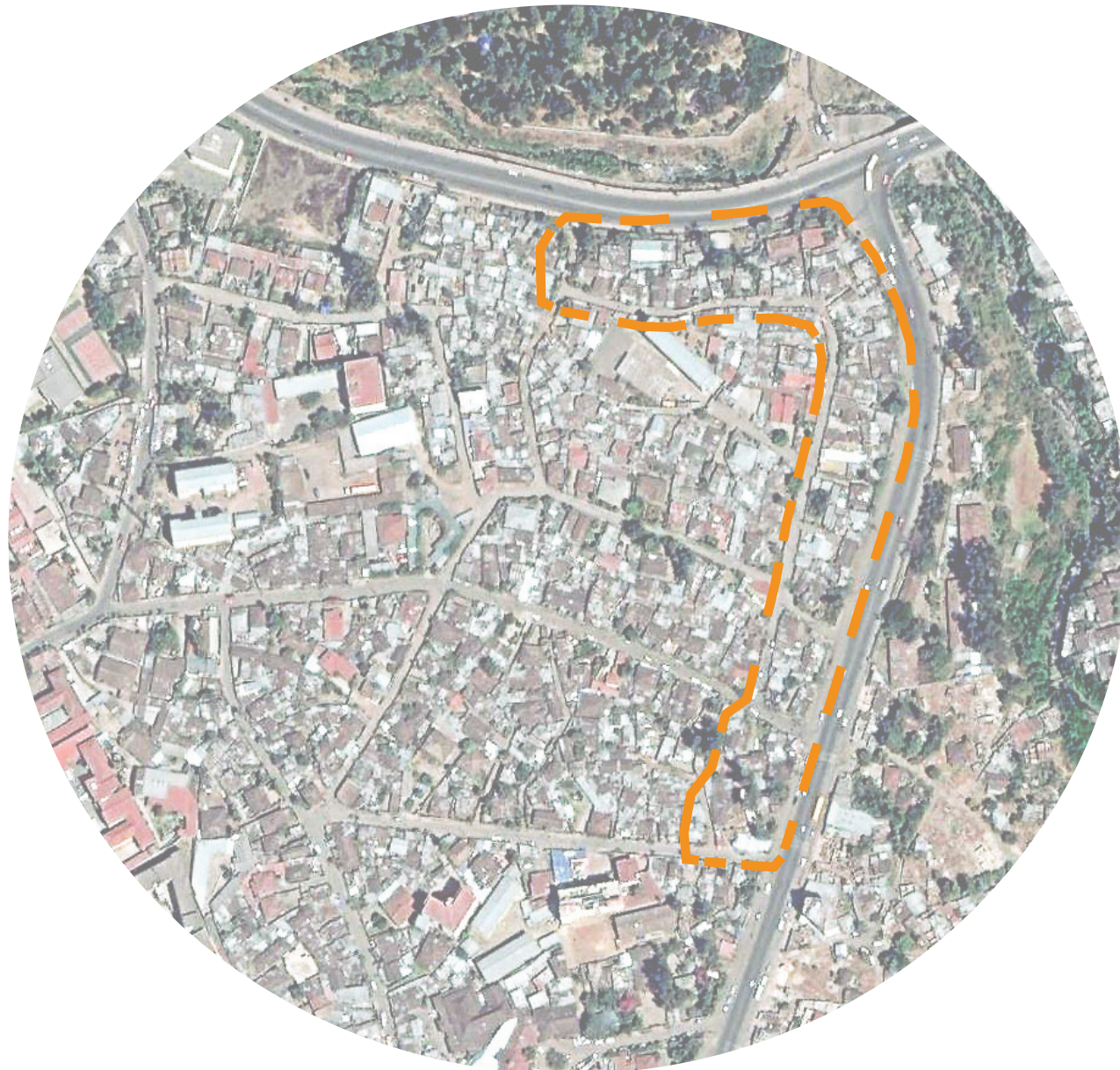






Atmosphere in the sefer





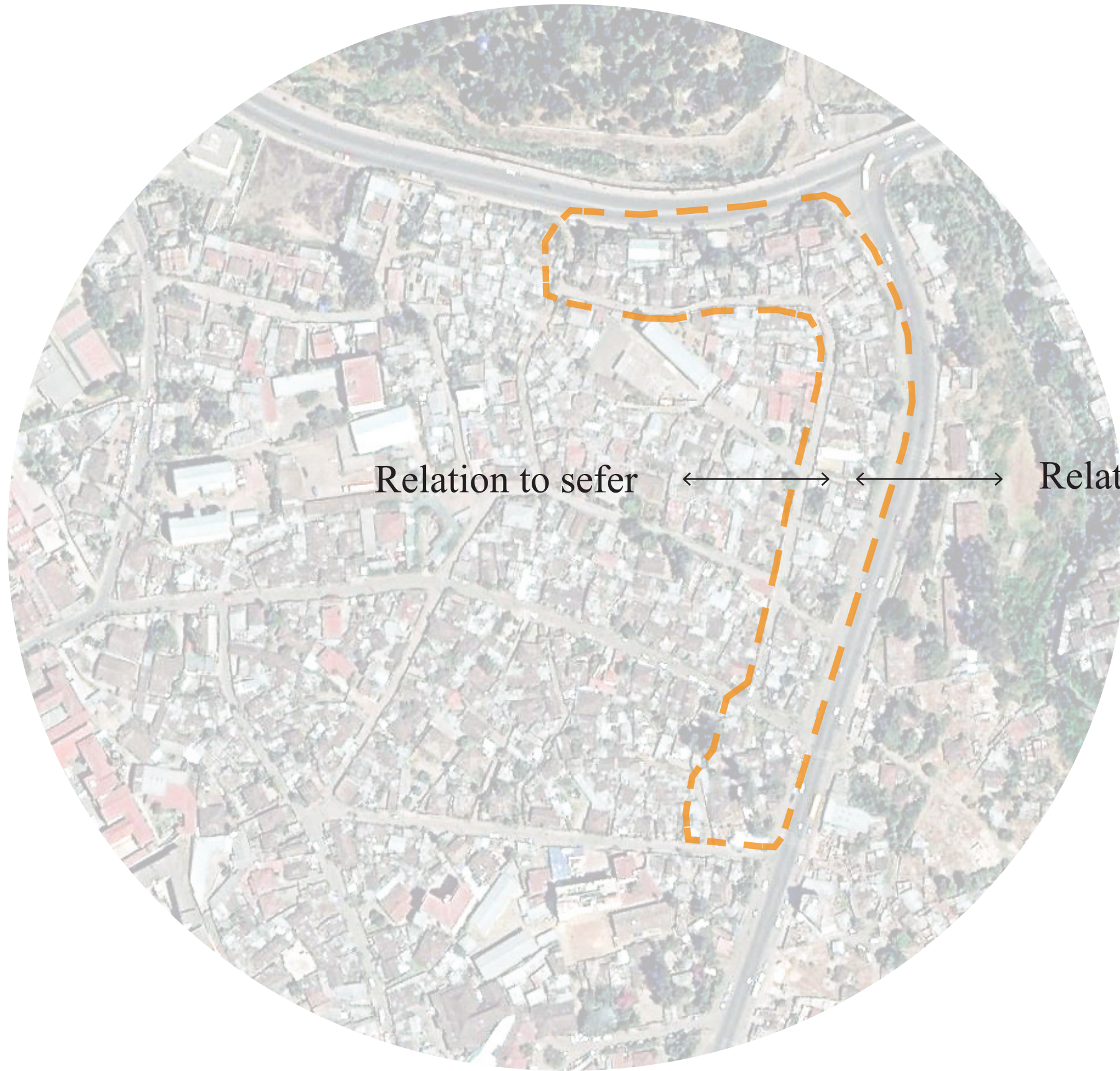
Demolition



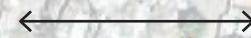
Poor dwelling quality

Site | Low quality dwellings





Relation to sefer

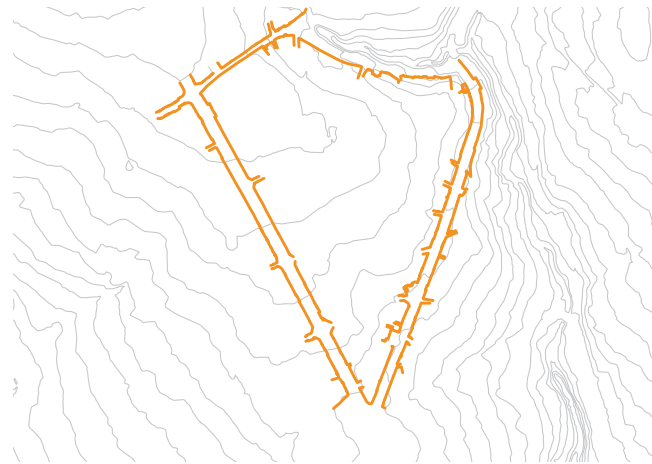


Relation to the main street

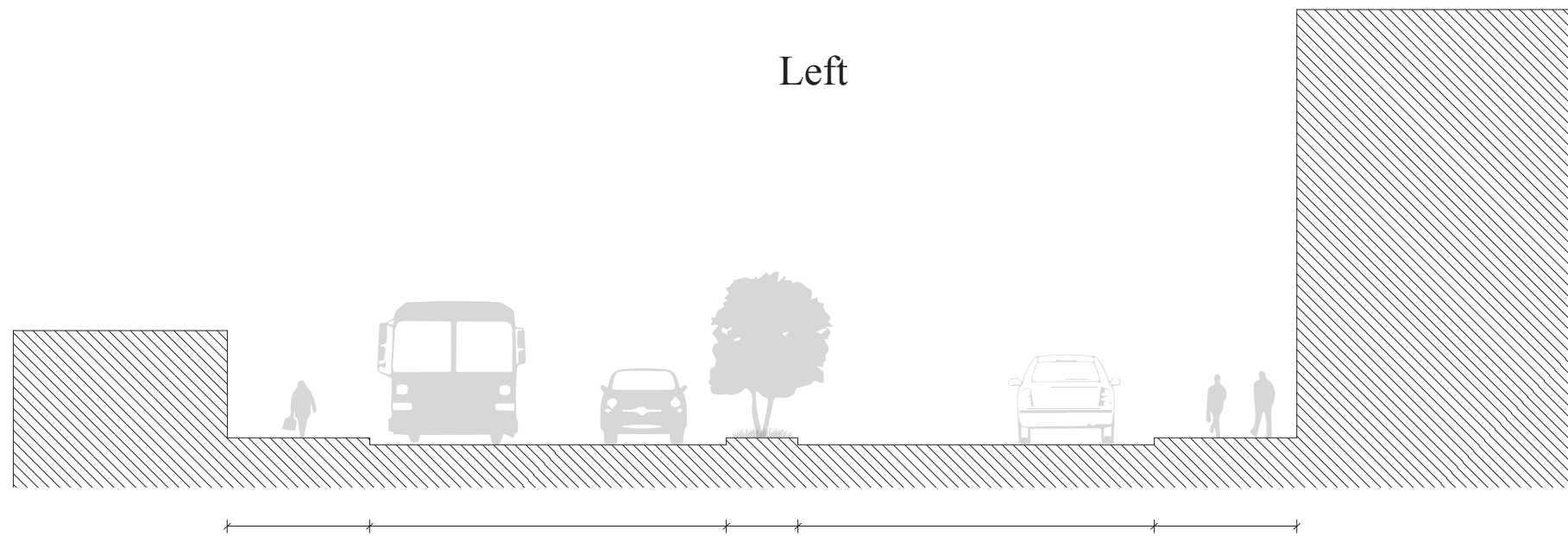
The border of the sefer



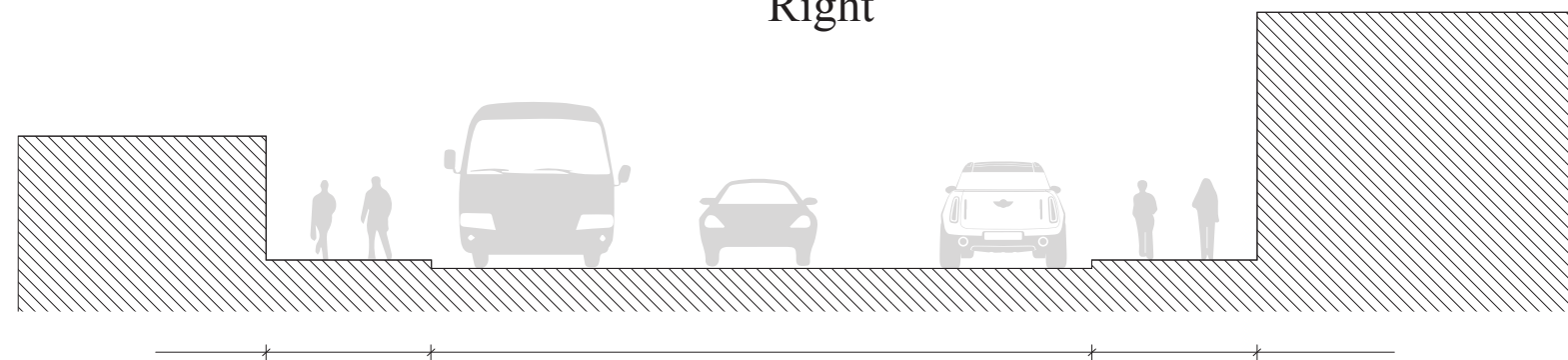
Main streets



Left



Right



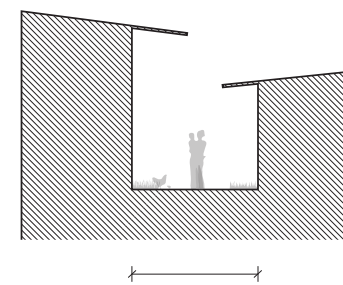
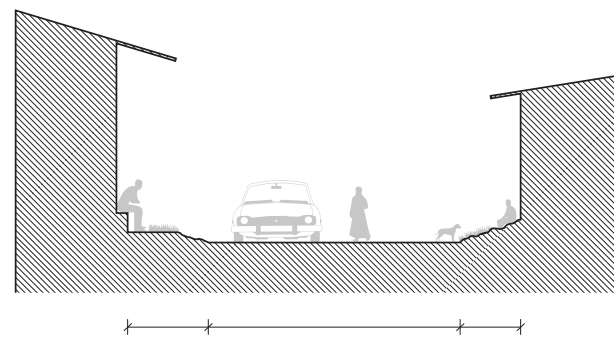
Different street sections



Secondary streets



Inner streets



Small scale



Main streets



Secondary streets



Inner streets



Compound



Sequence of publicness



## Main streets



- Shops
- Taxi's
- Shadow places
- Workshops
- Street vendors

## Secondary streets



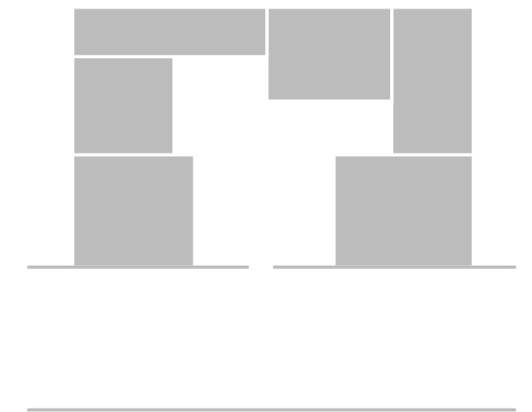
- Shops
- Iddir
- Playing
- Workshops
- Household activities
- Drying herbs
- Picking up children
- Window shop
- Making Chicka
- Vegetable garden

## Inner streets



- Small shops
- Playing
- Workshops
- Household activities
- Drying herbs
- Vegetable garden
- Water source
- Outdoor living space

## Compound



- Playing
- Household activities
- Drying herbs
- Vegetable garden
- Outdoor living space
- Cooking
- Washing
- Drinking coffee
- Weddings/funerals

Different streets host different activities





Main streets



Secondary streets

Different streets host for different activities





Inner streets



Compound

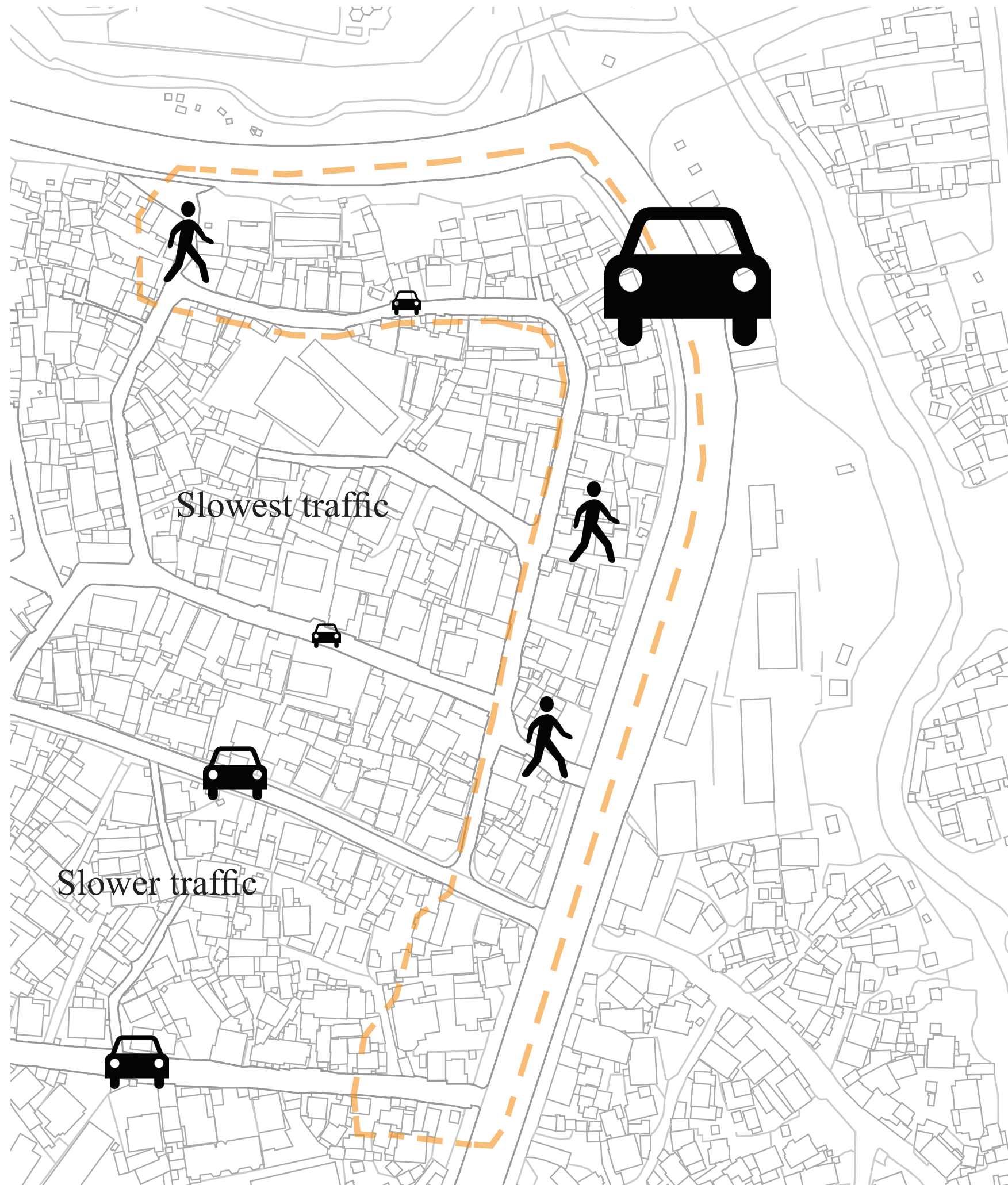
Different streets host for different activities



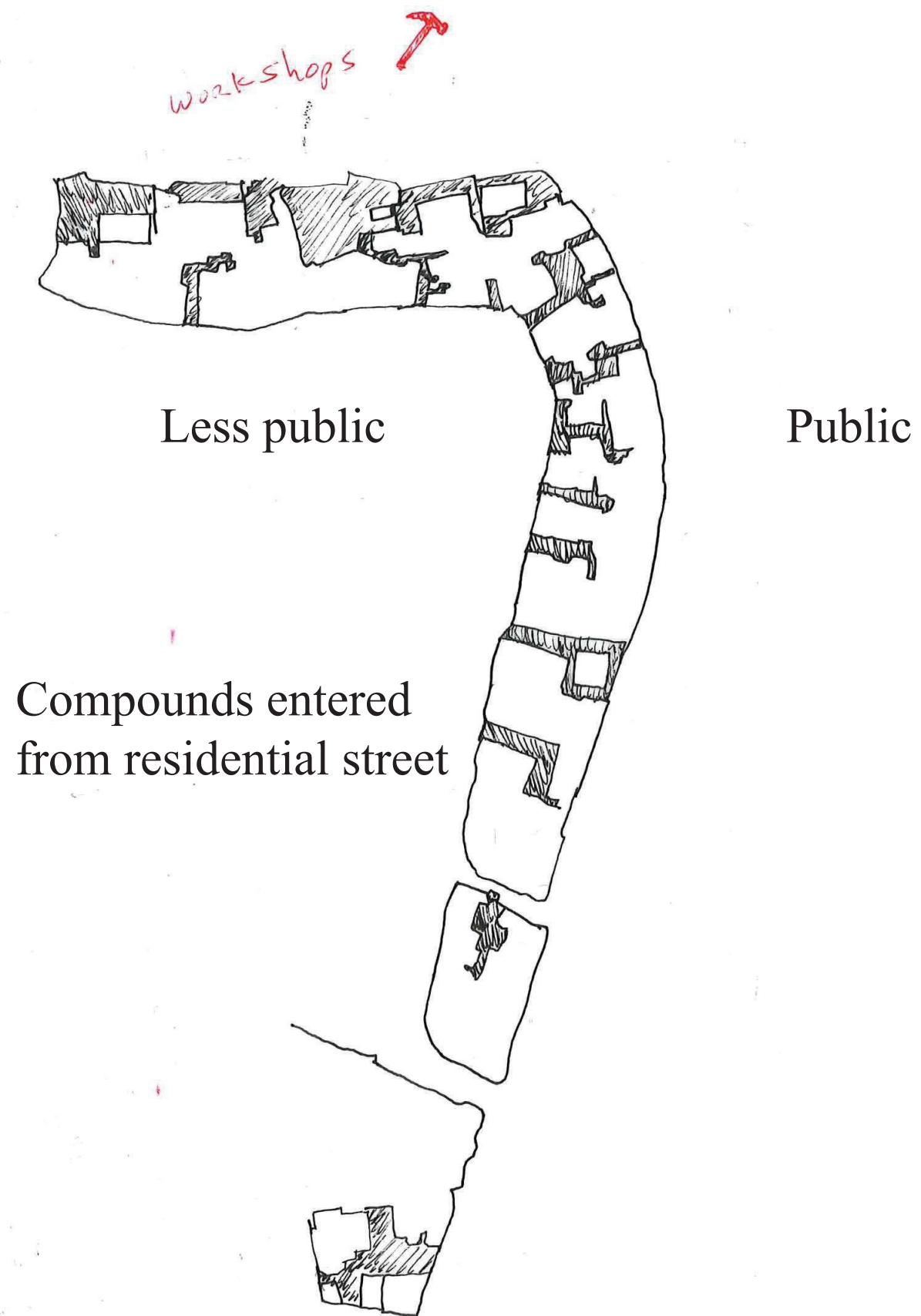


Workshops, in different types of streets









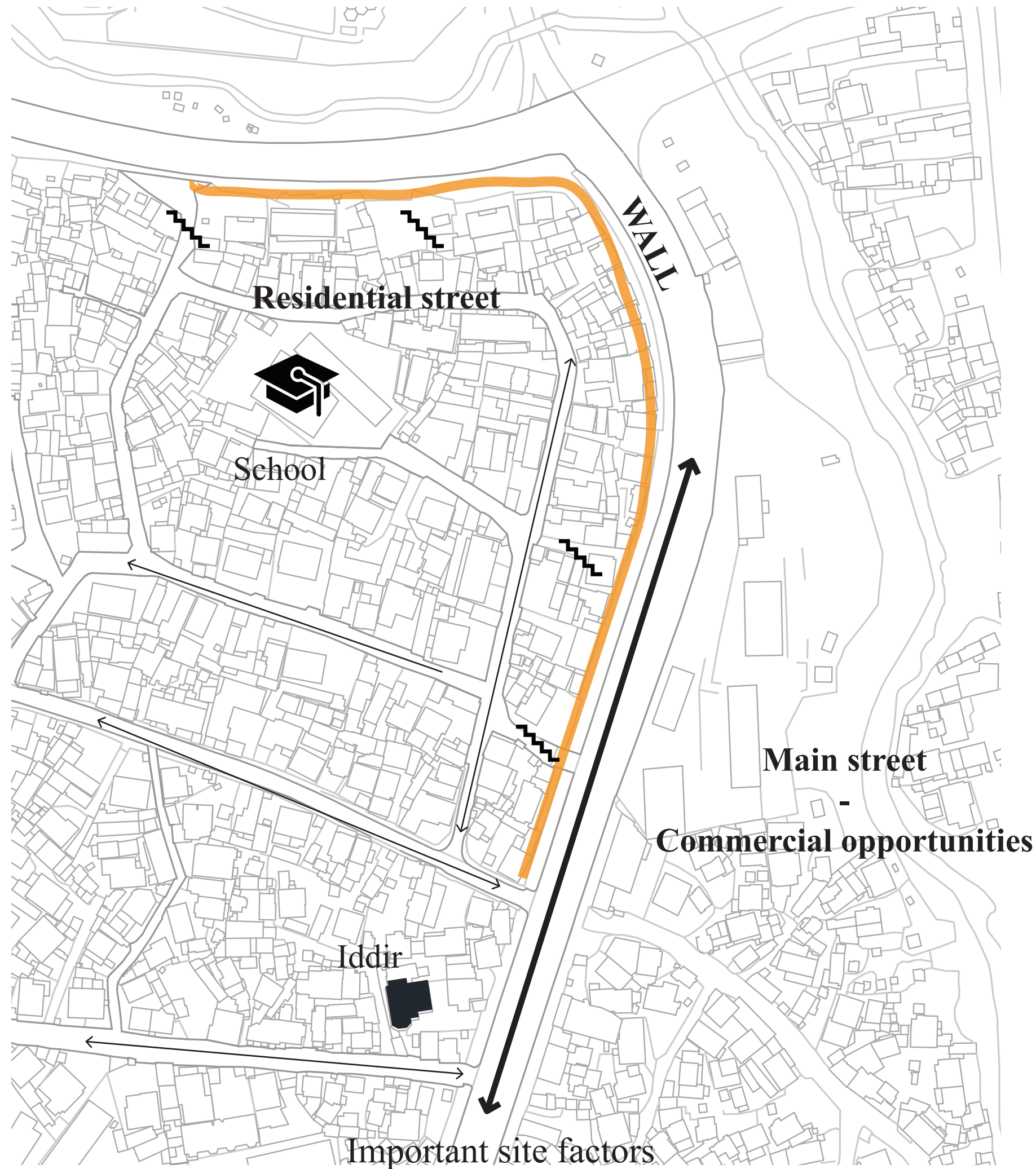
Situation now



Into sefer

Shops

Into sefer







The wall | Deal with the topography





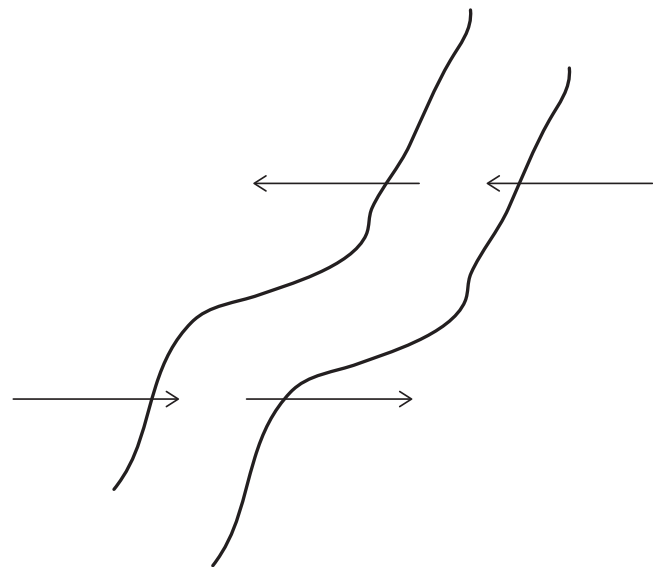






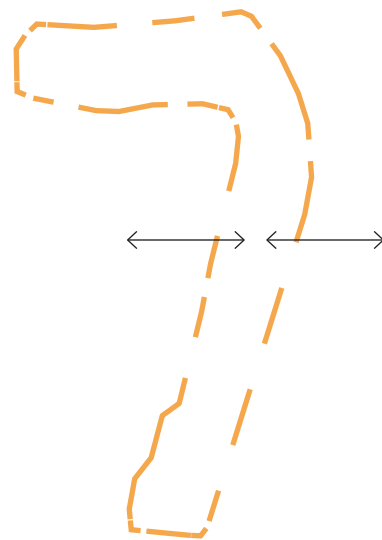
## Open border

- Economic exchange
- Social exchange



## Future developments

- The developing city
- The changing street



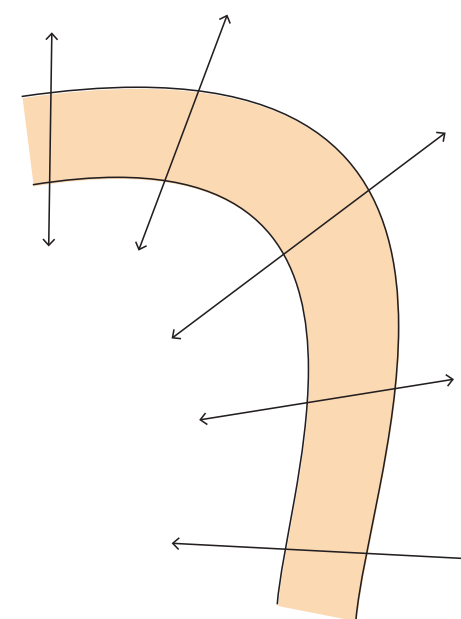
## The topography

- The wall
- Topography



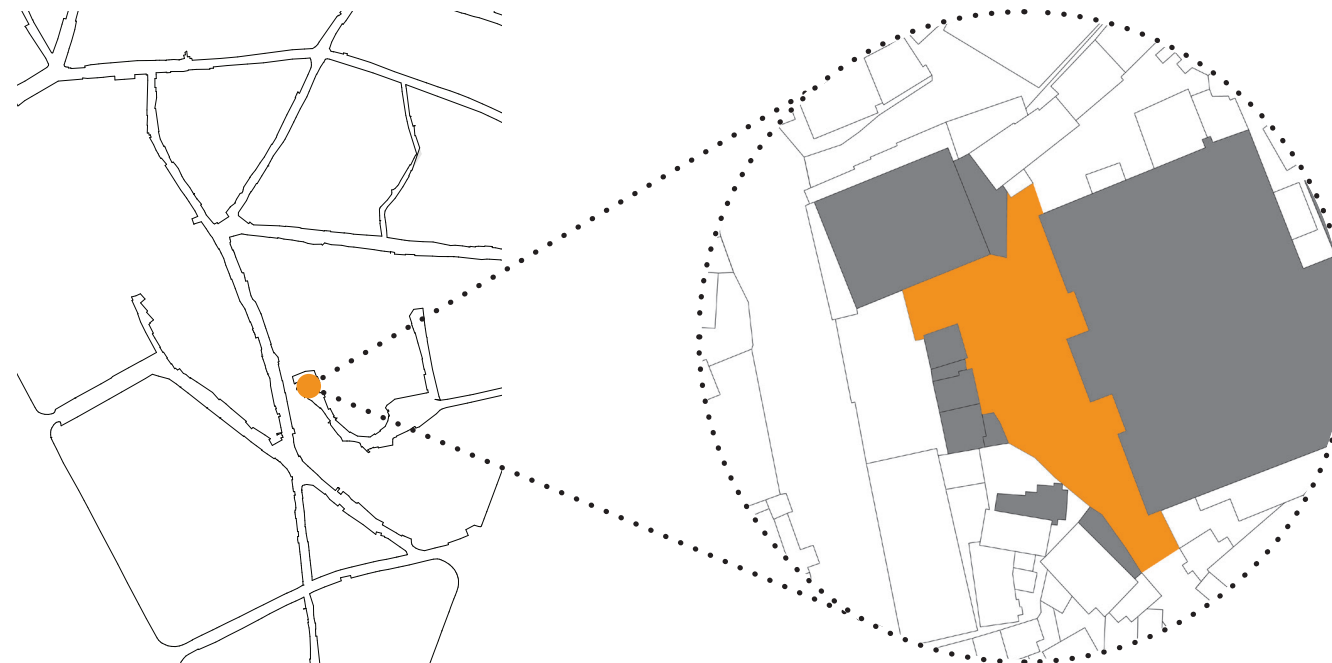
## Focus of the design





The membrane





Ex chef Addis Ababa restaurant

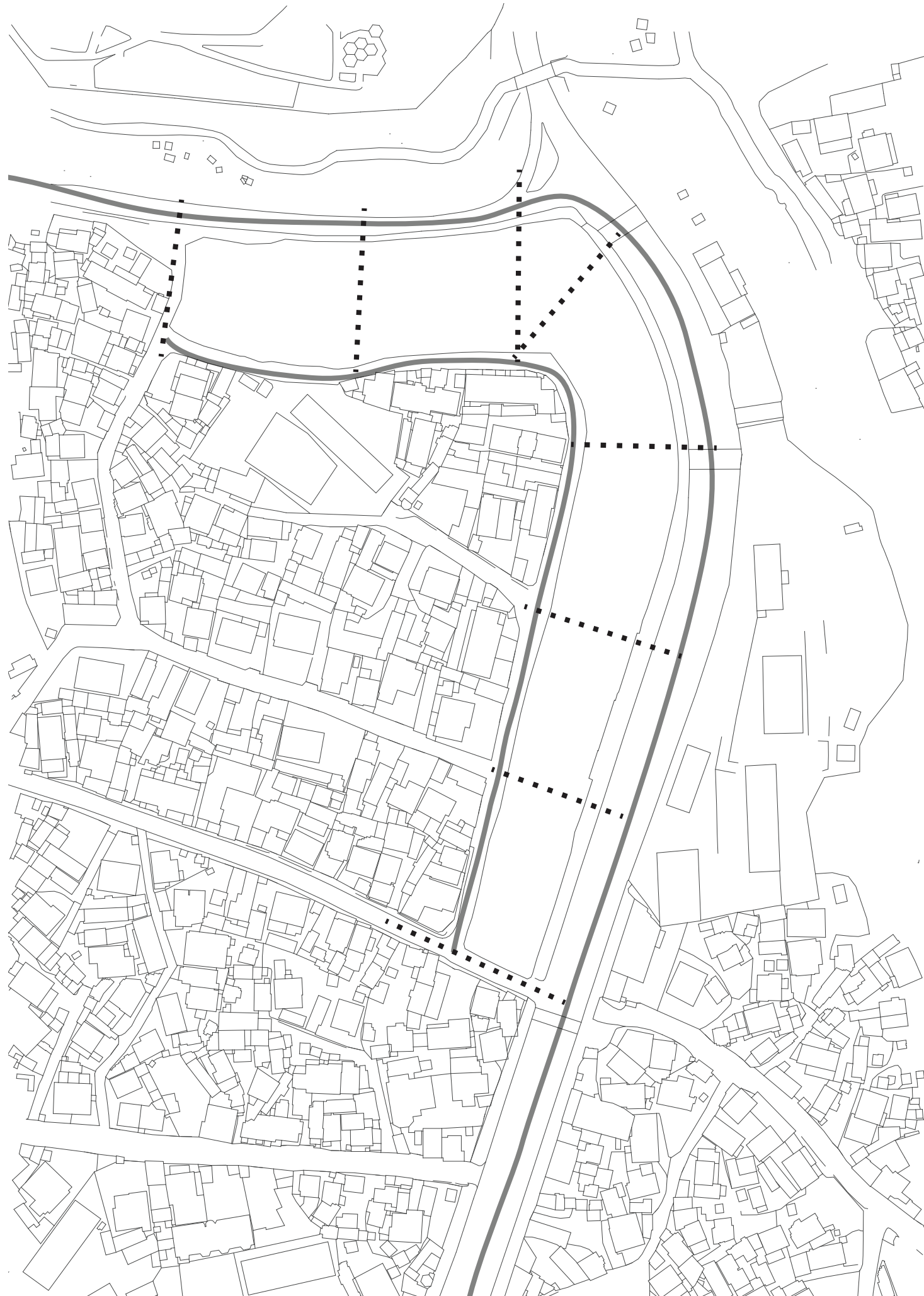


## The design

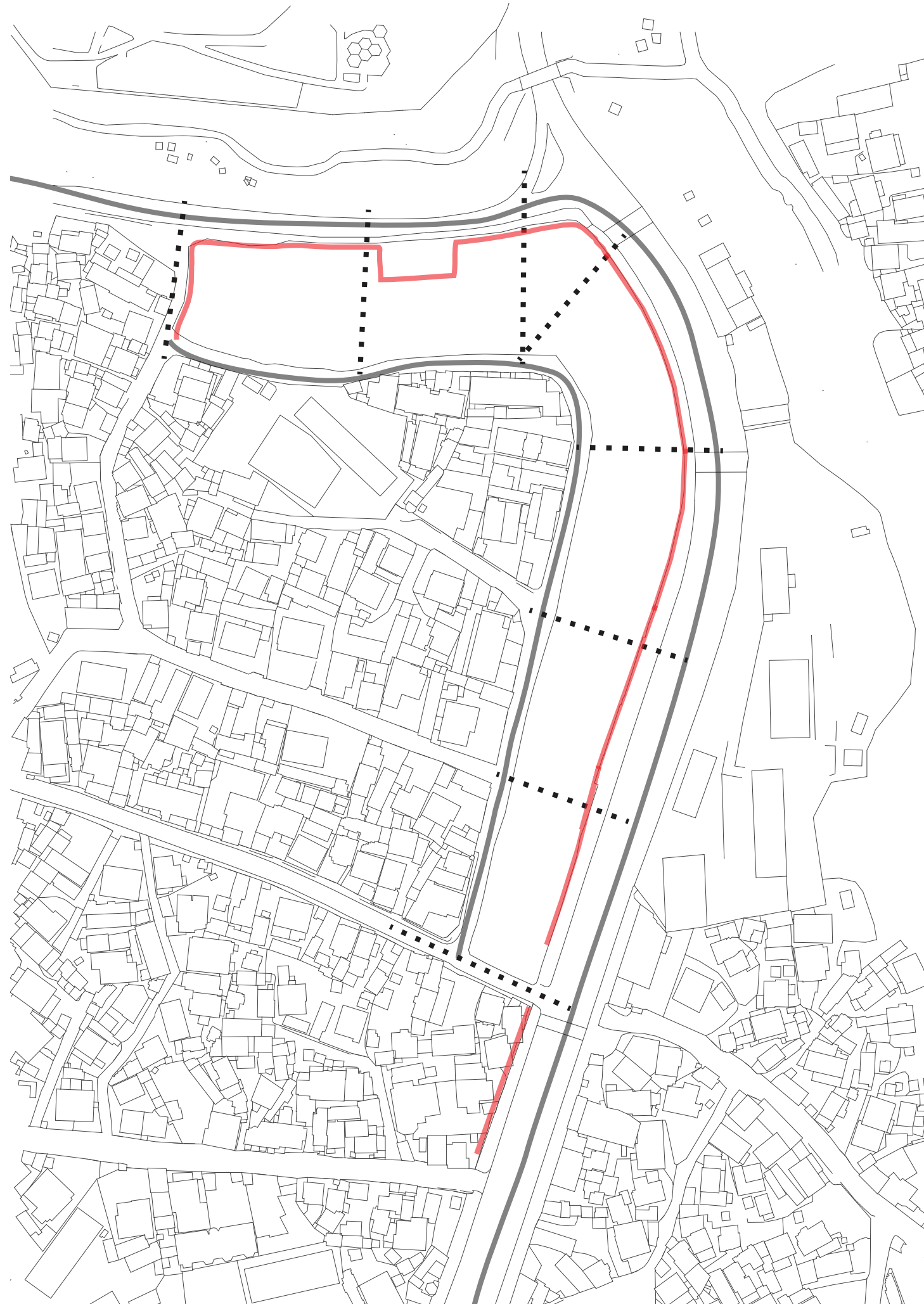




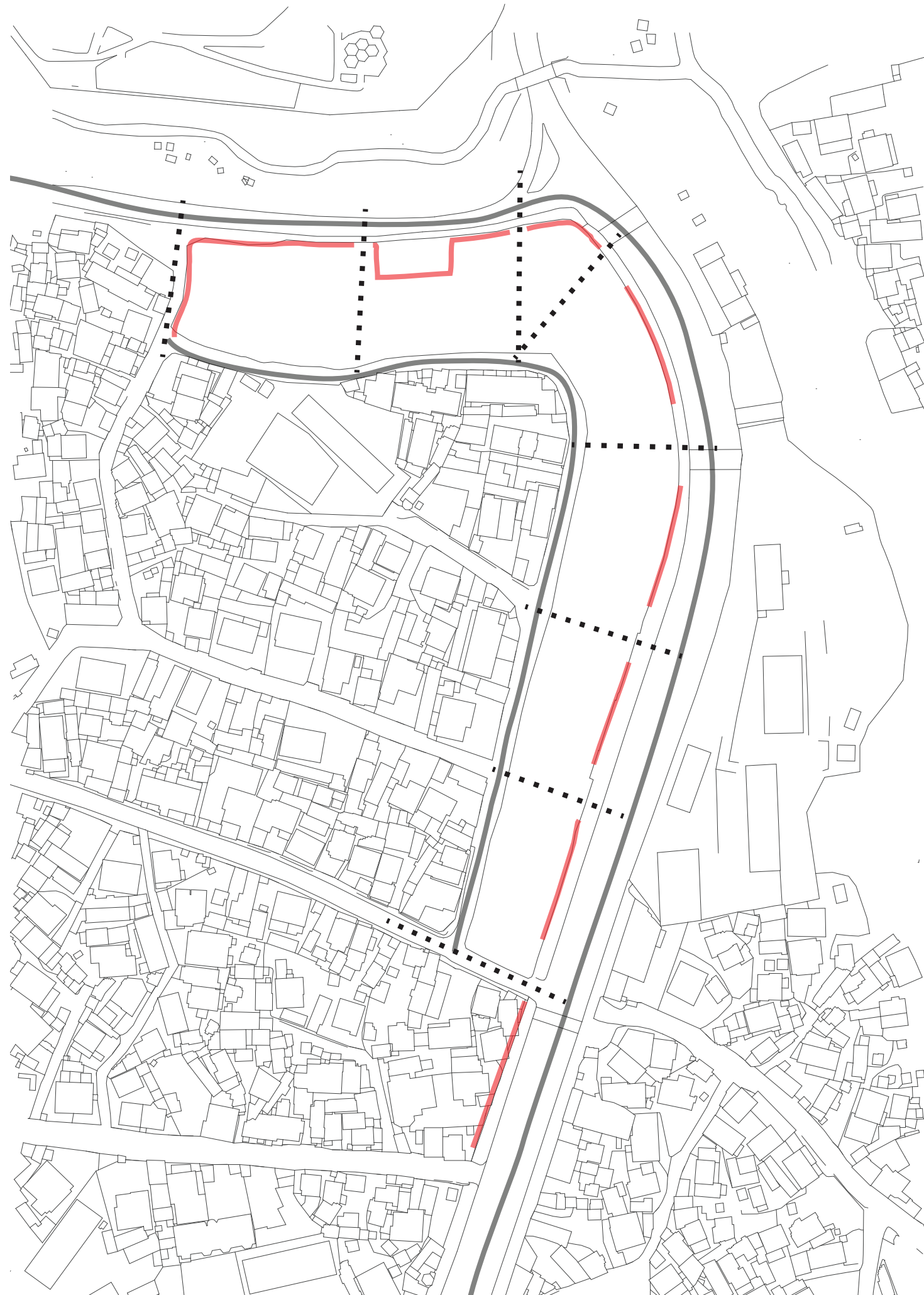




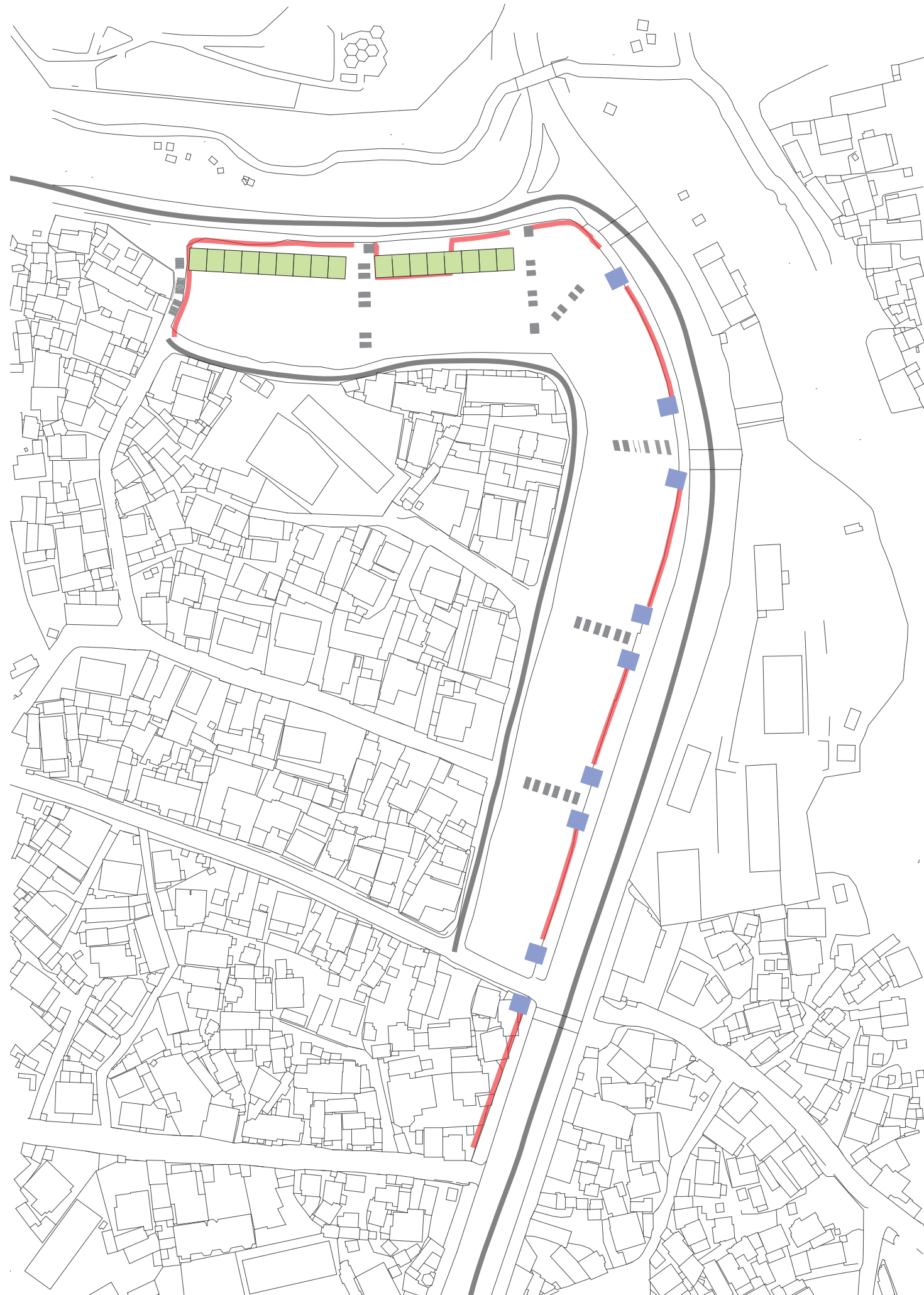




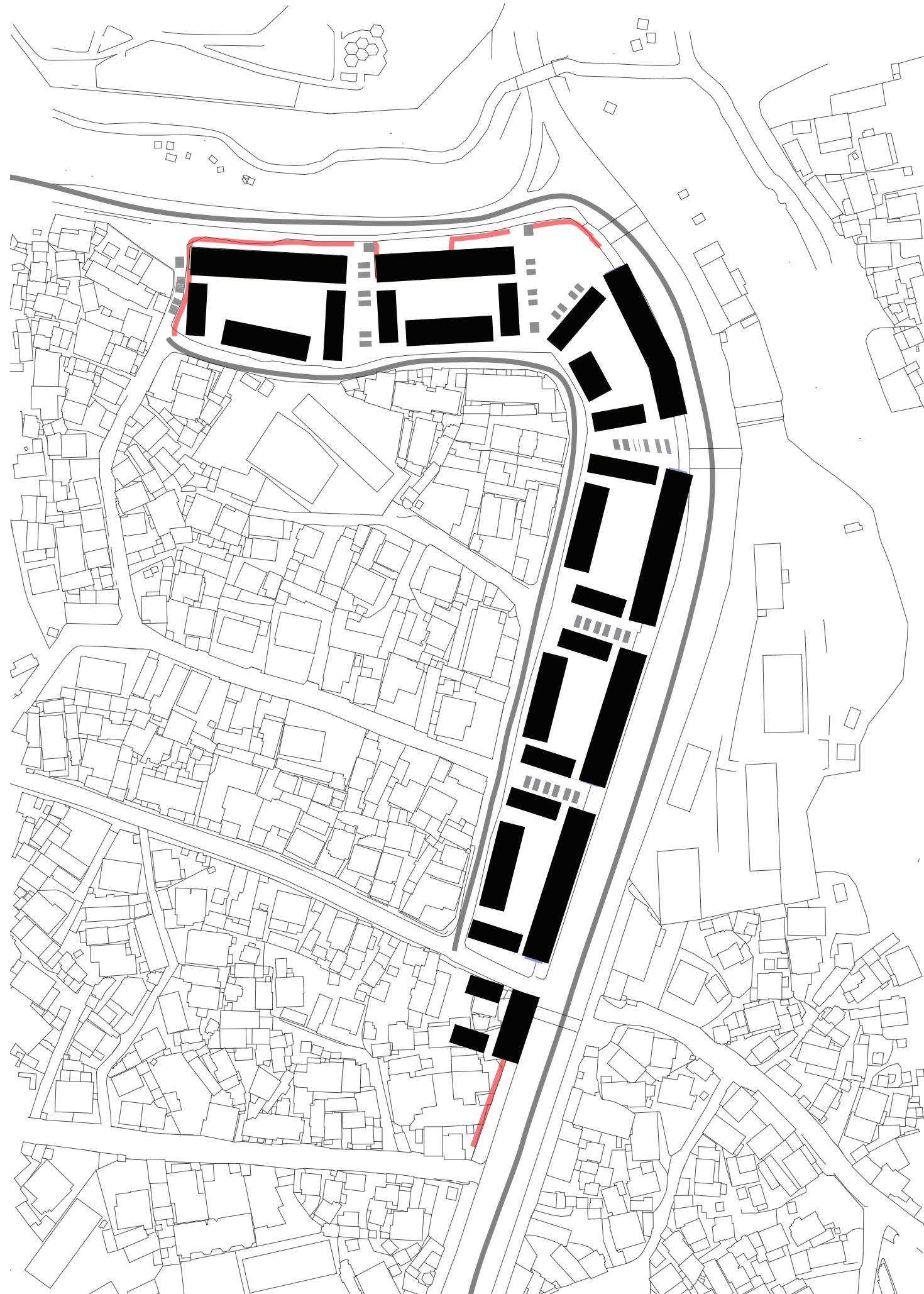








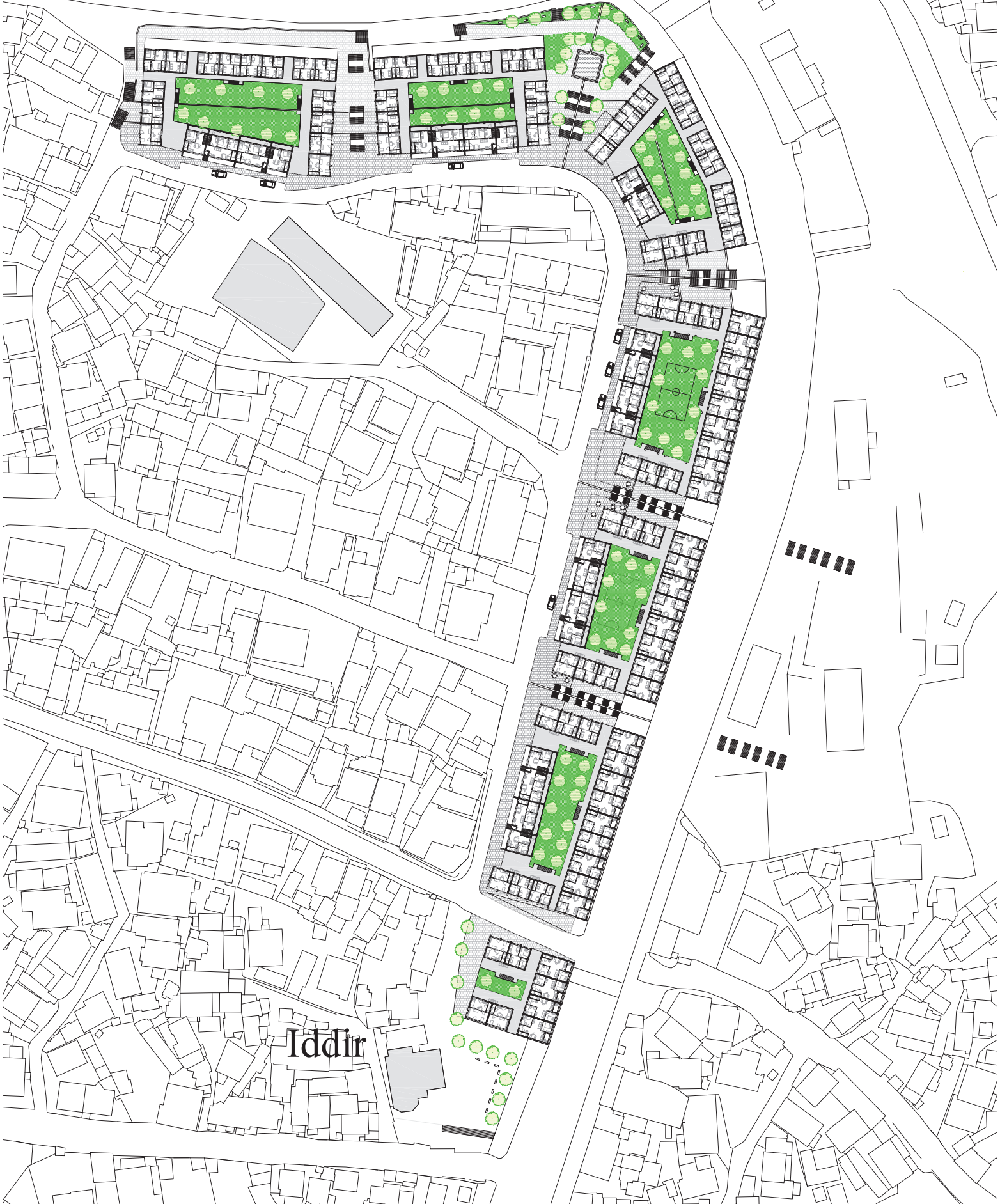






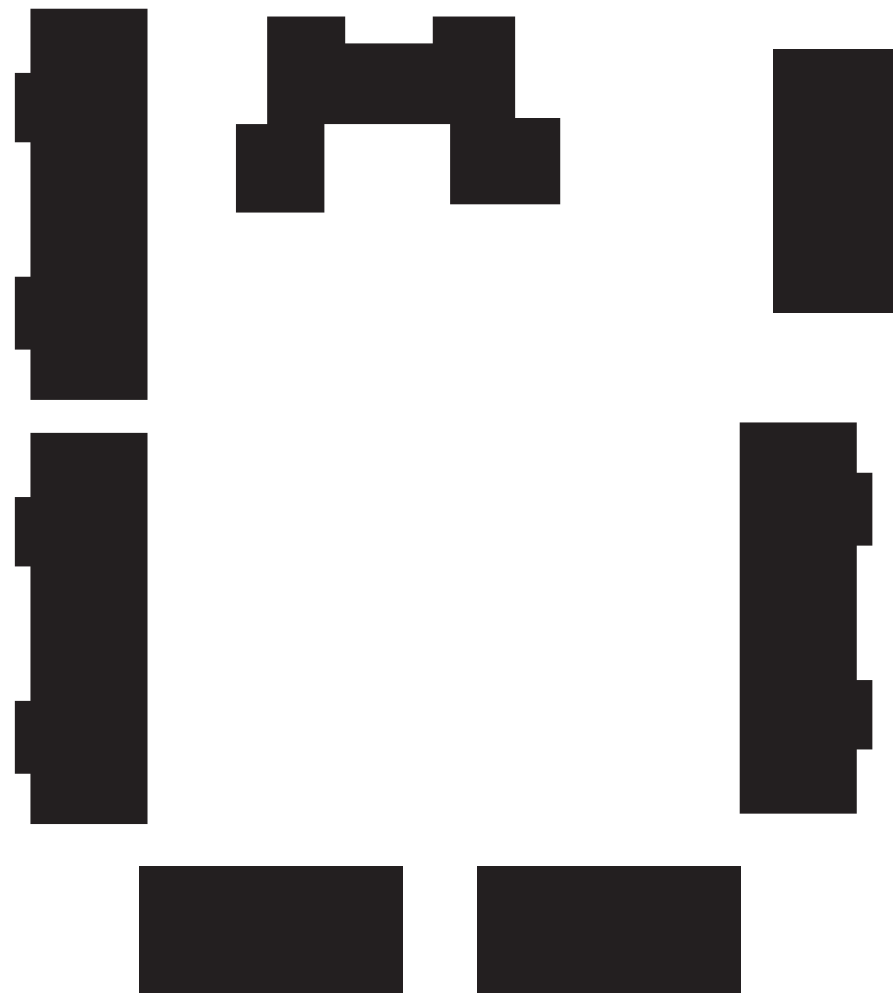
Masterplan

Public play landmark



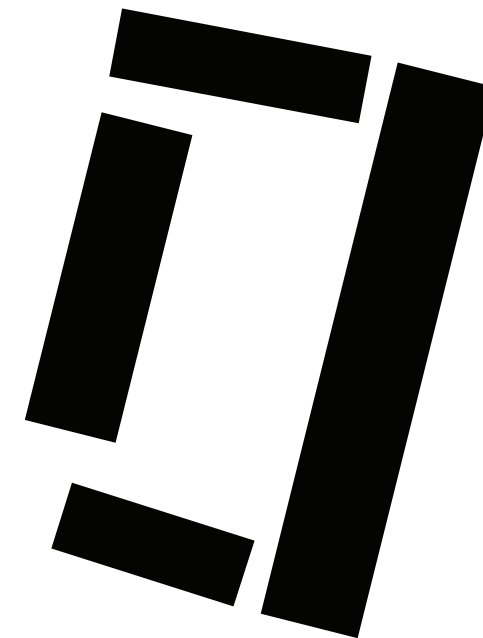
Tddir





Condominiums

>



Design

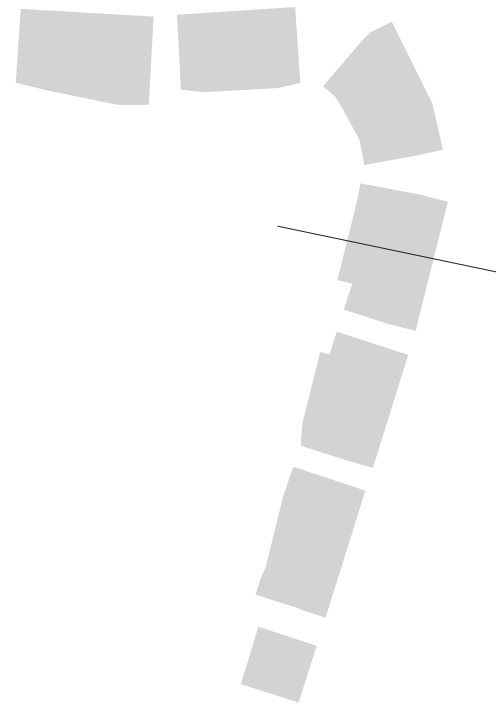
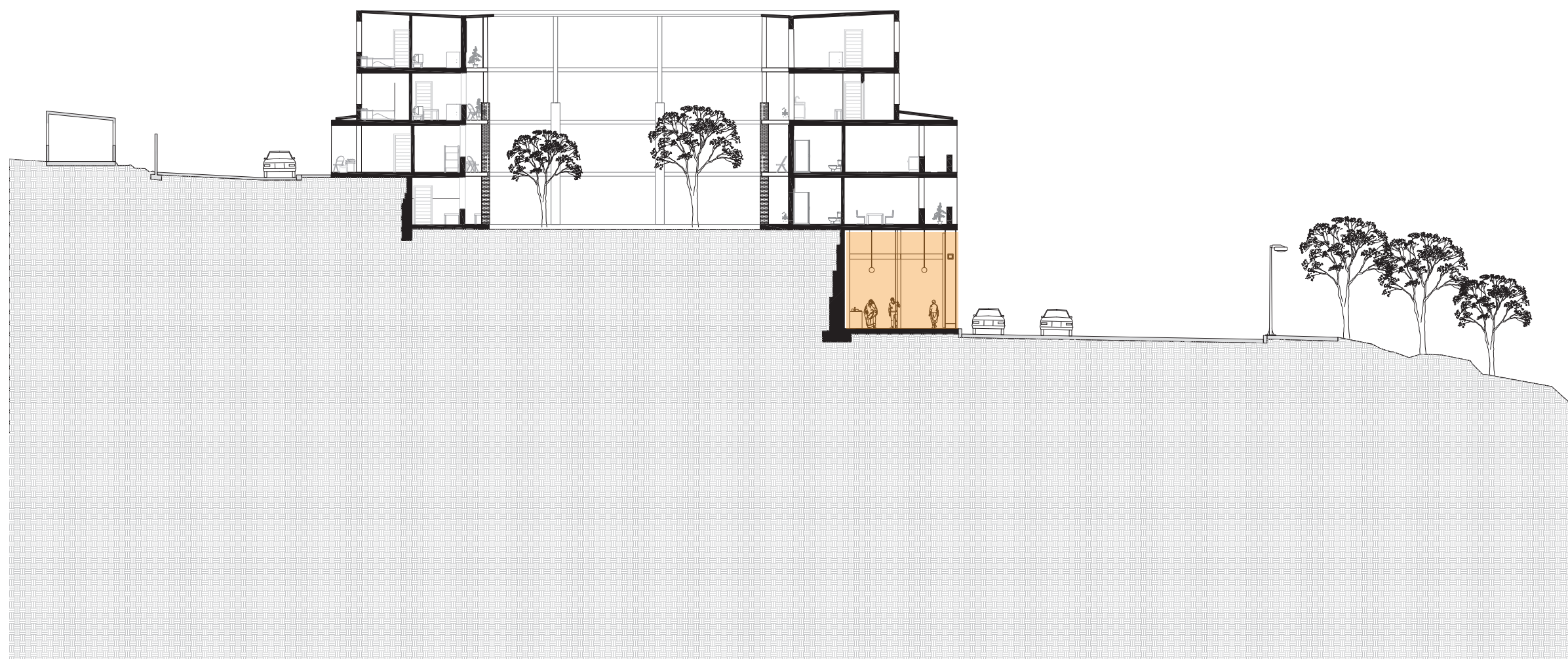
Comparison condominiums





Section | Arcade



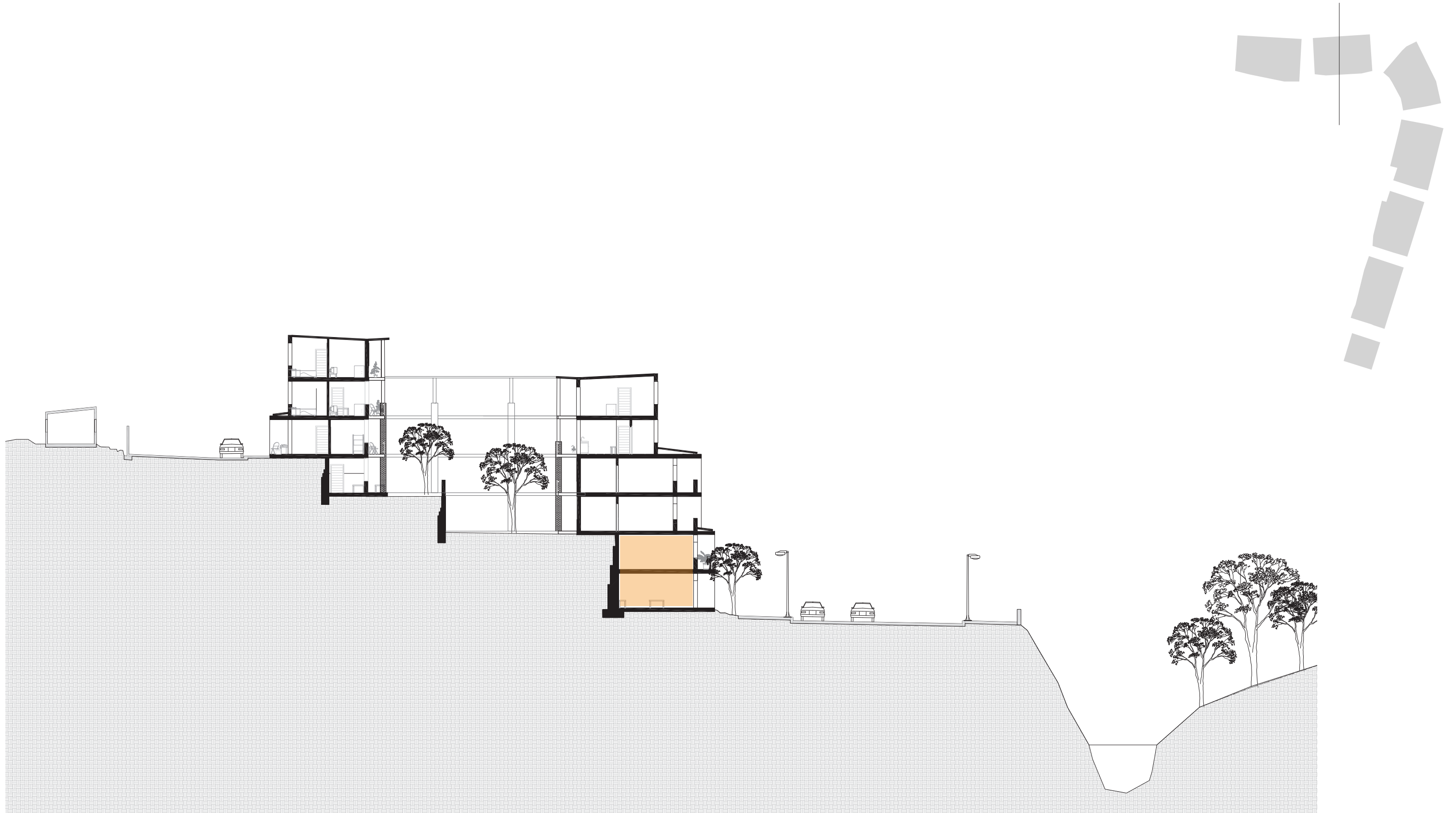






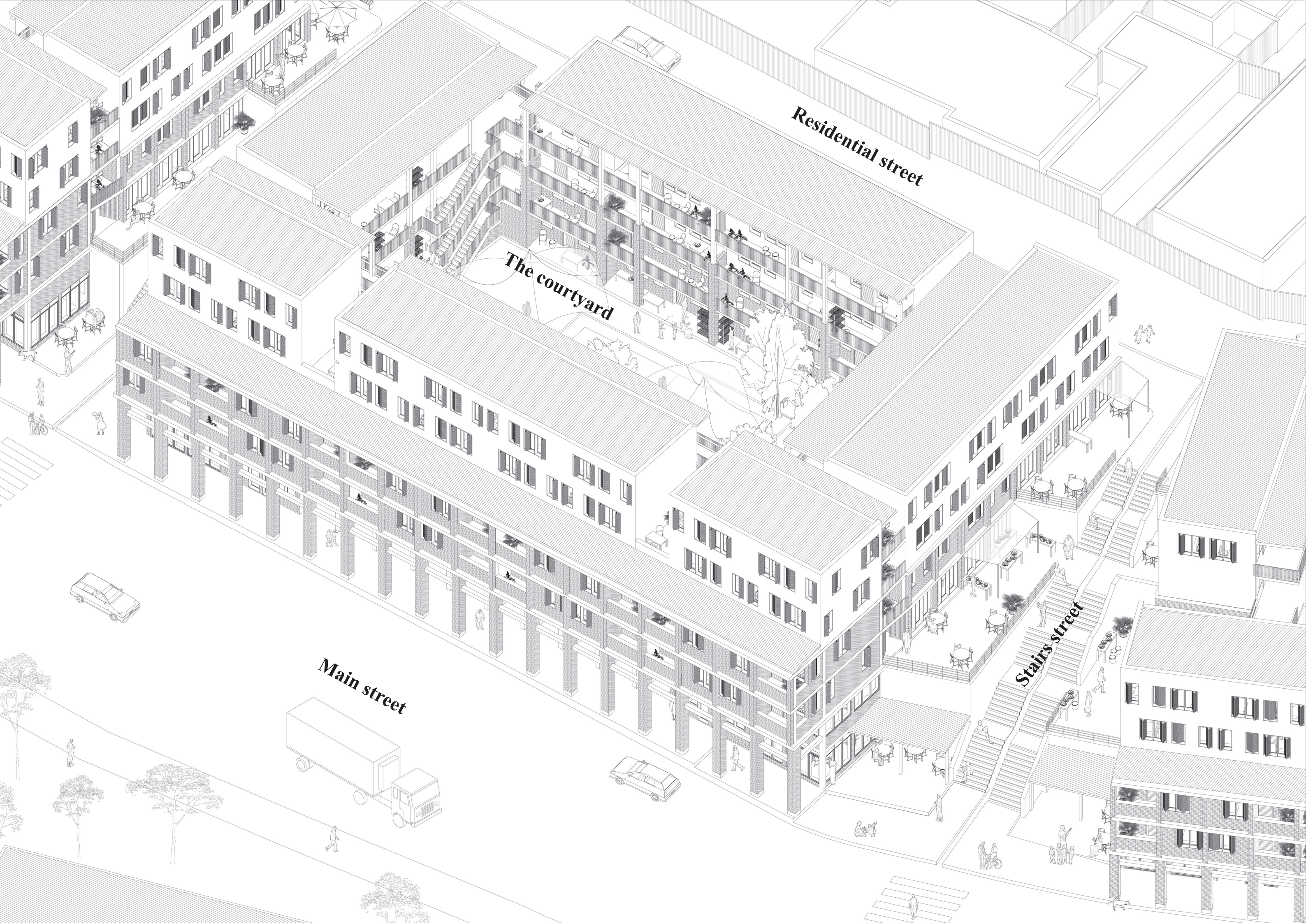
Section | Green spot





Section | Workshops





*Residential street*

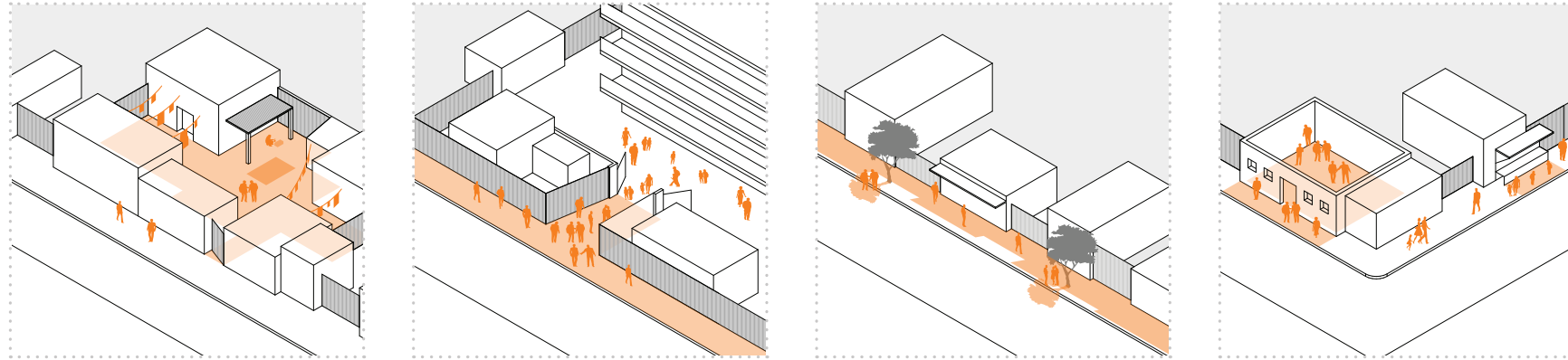
*The courtyard*

*Main street*

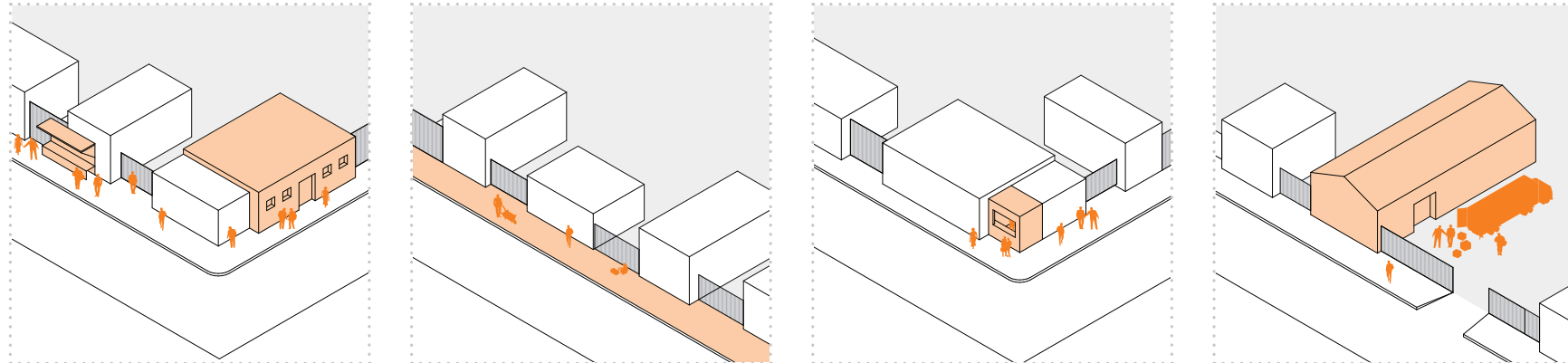
*Stairs street*



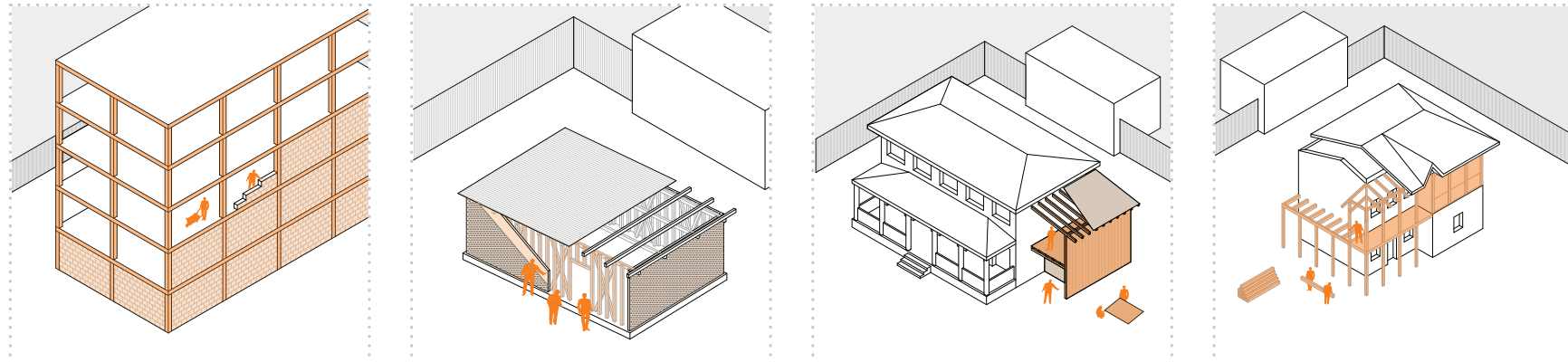
Social spaces



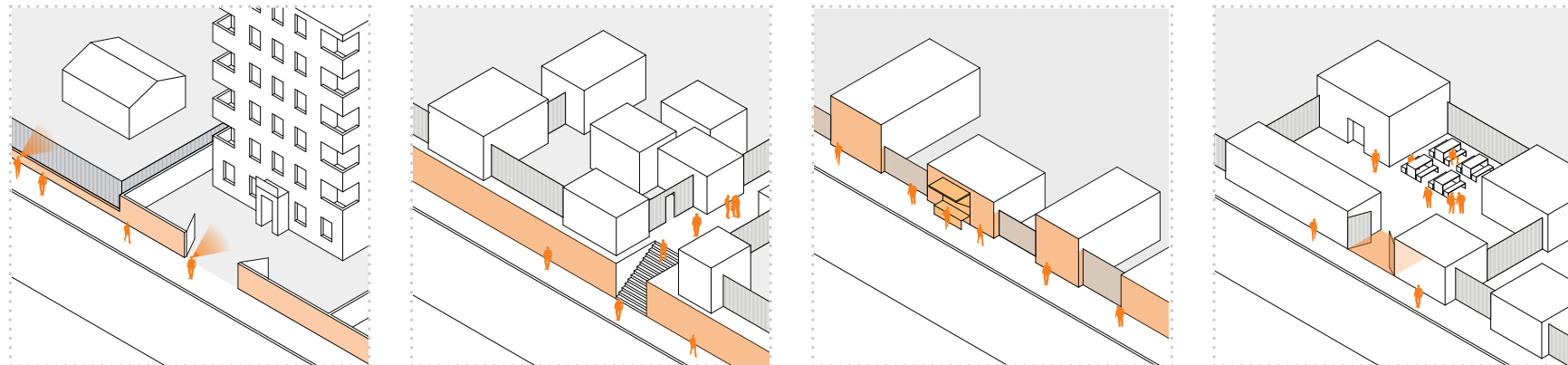
Income generation



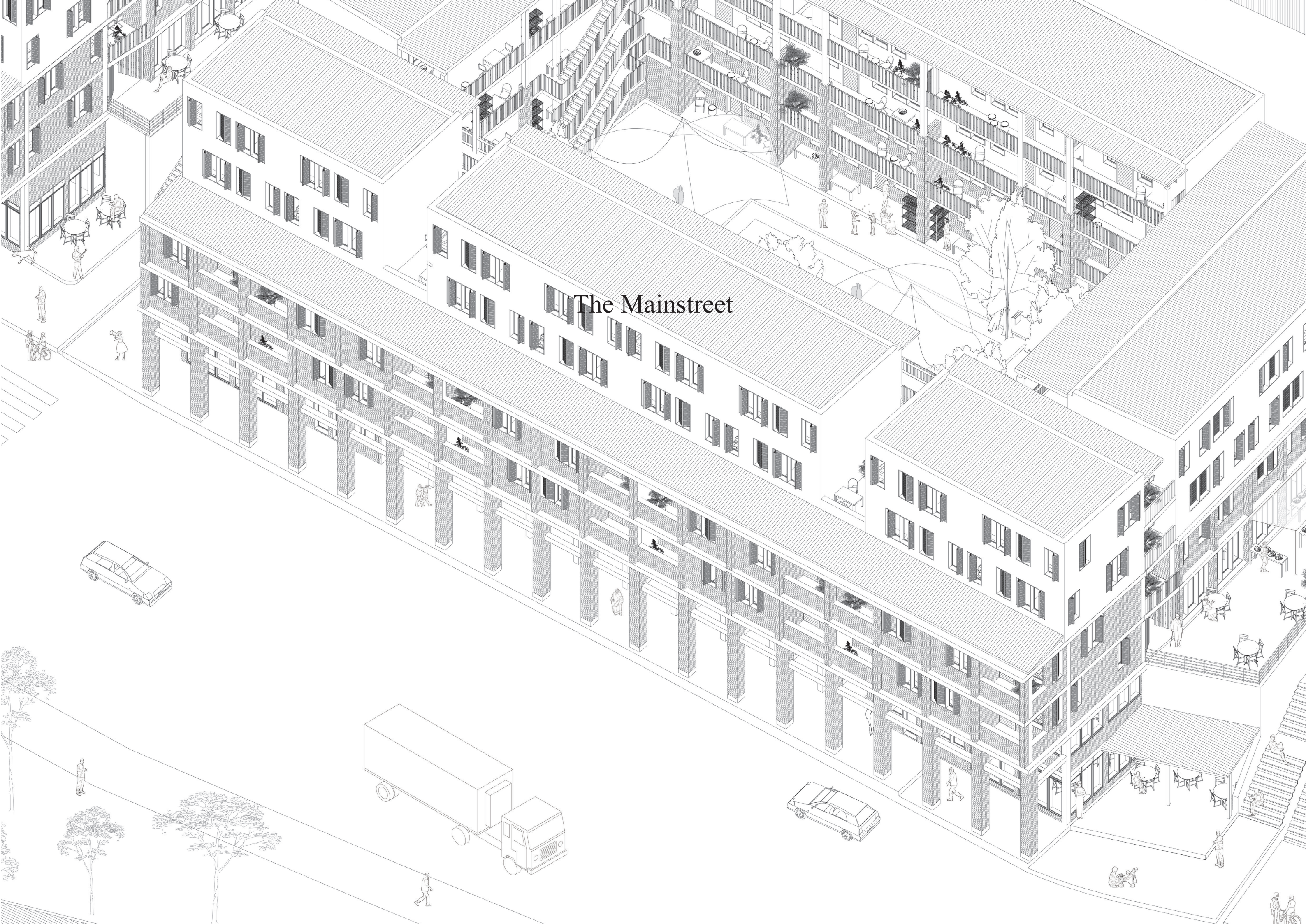
Building techniques



Borders

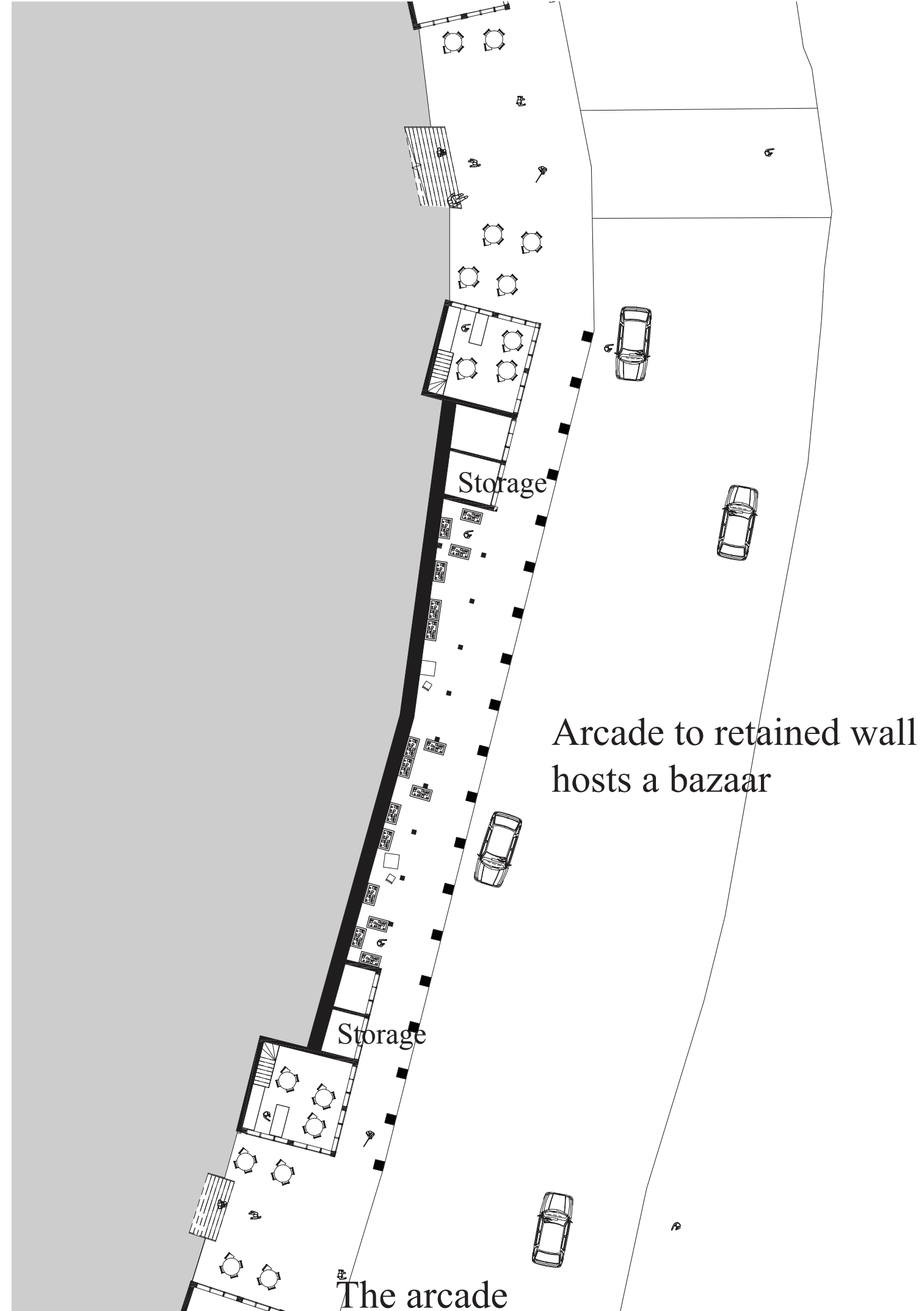




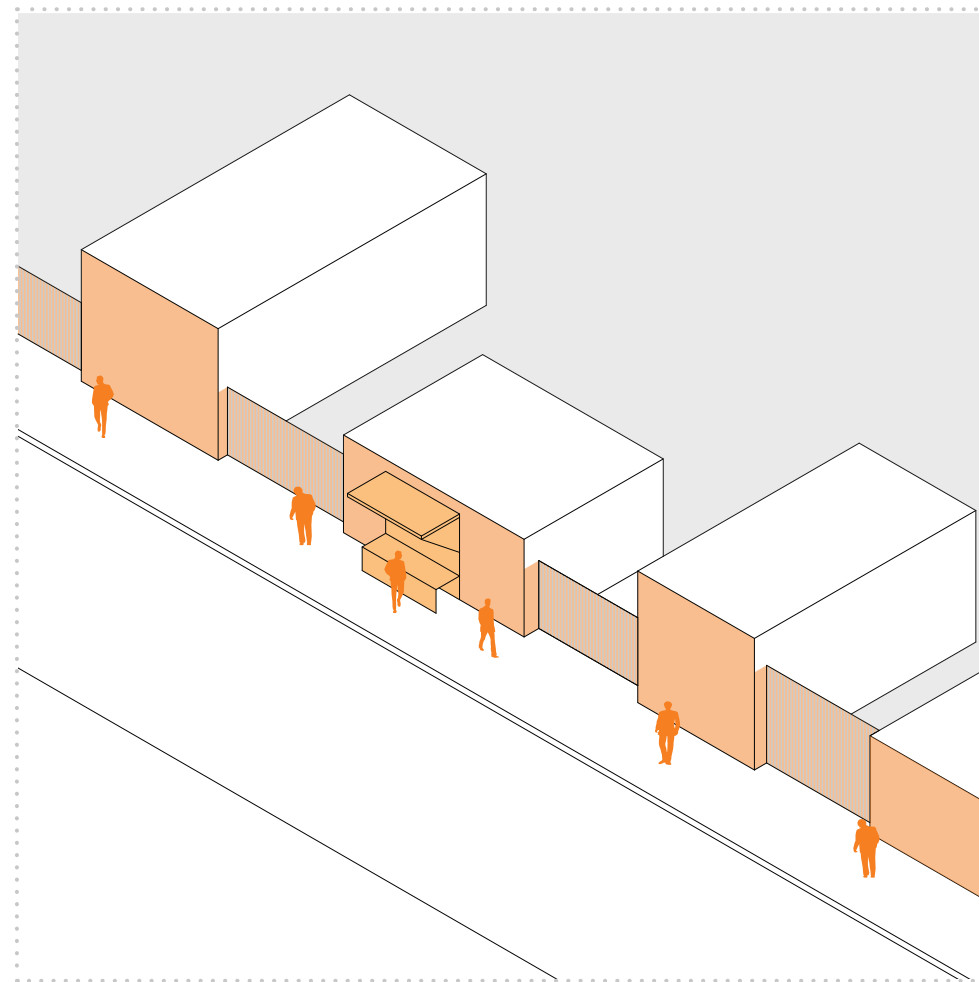


The Mainstreet





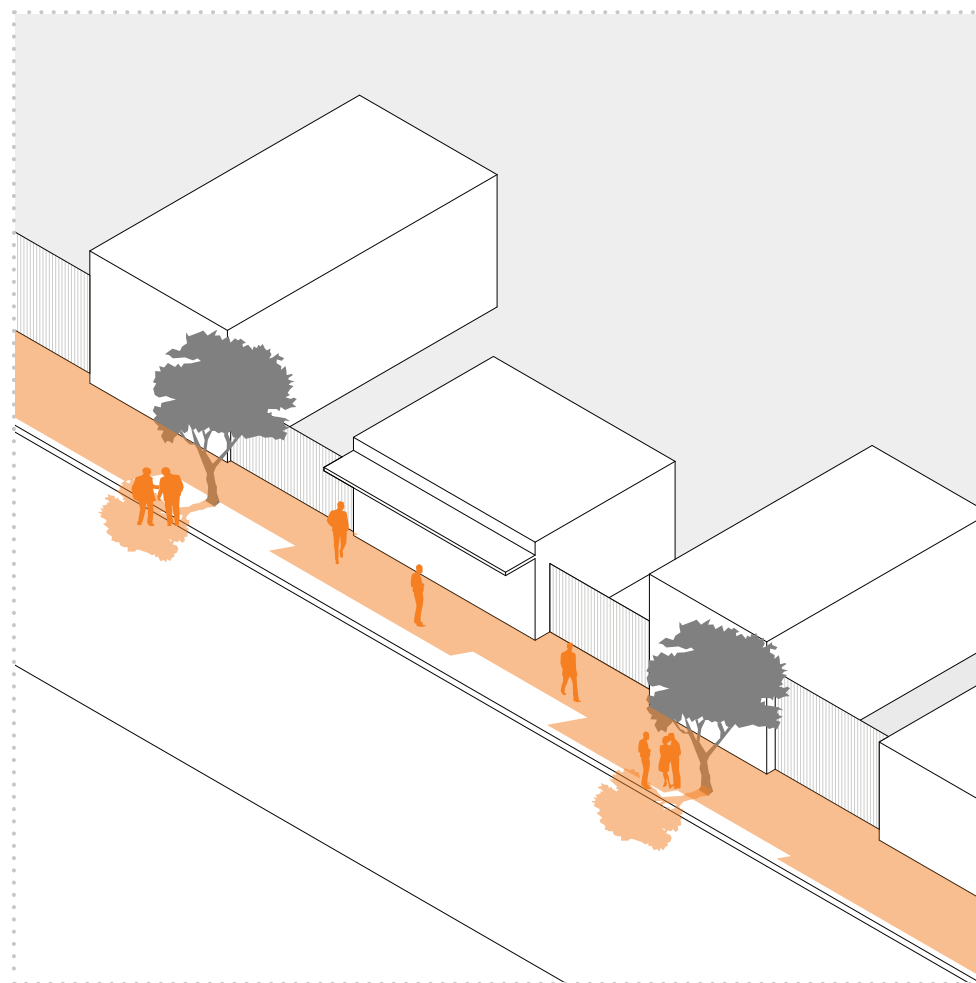




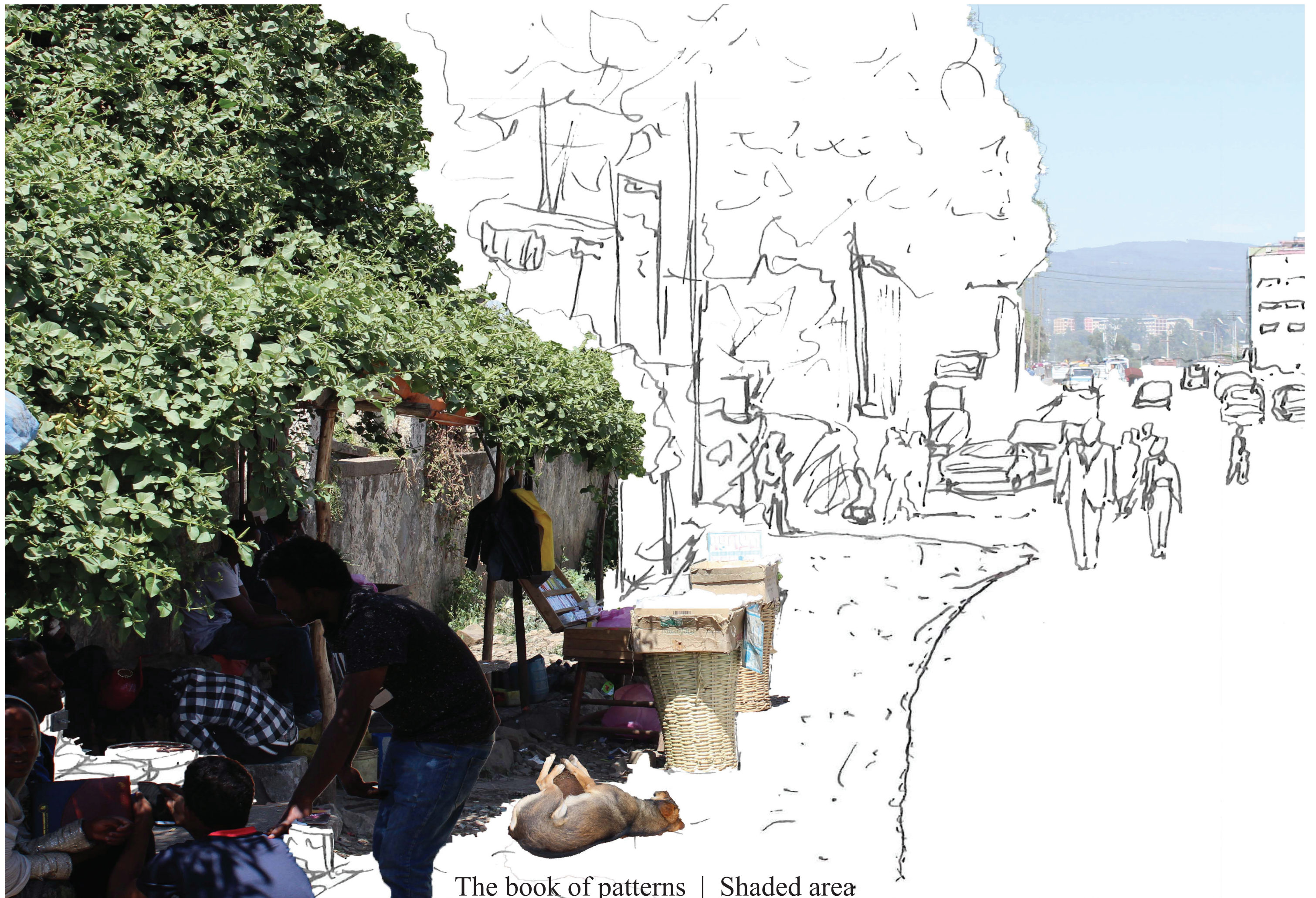












The book of patterns | Shaded area





References of the city | National theatre Addis Ababa

[https://c1.staticflickr.com/4/3754/11785495716\\_933c75b5b6\\_b.jpg](https://c1.staticflickr.com/4/3754/11785495716_933c75b5b6_b.jpg)









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☎ 0111 26 36 66 0930 / 07 76 81

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TOMOCA

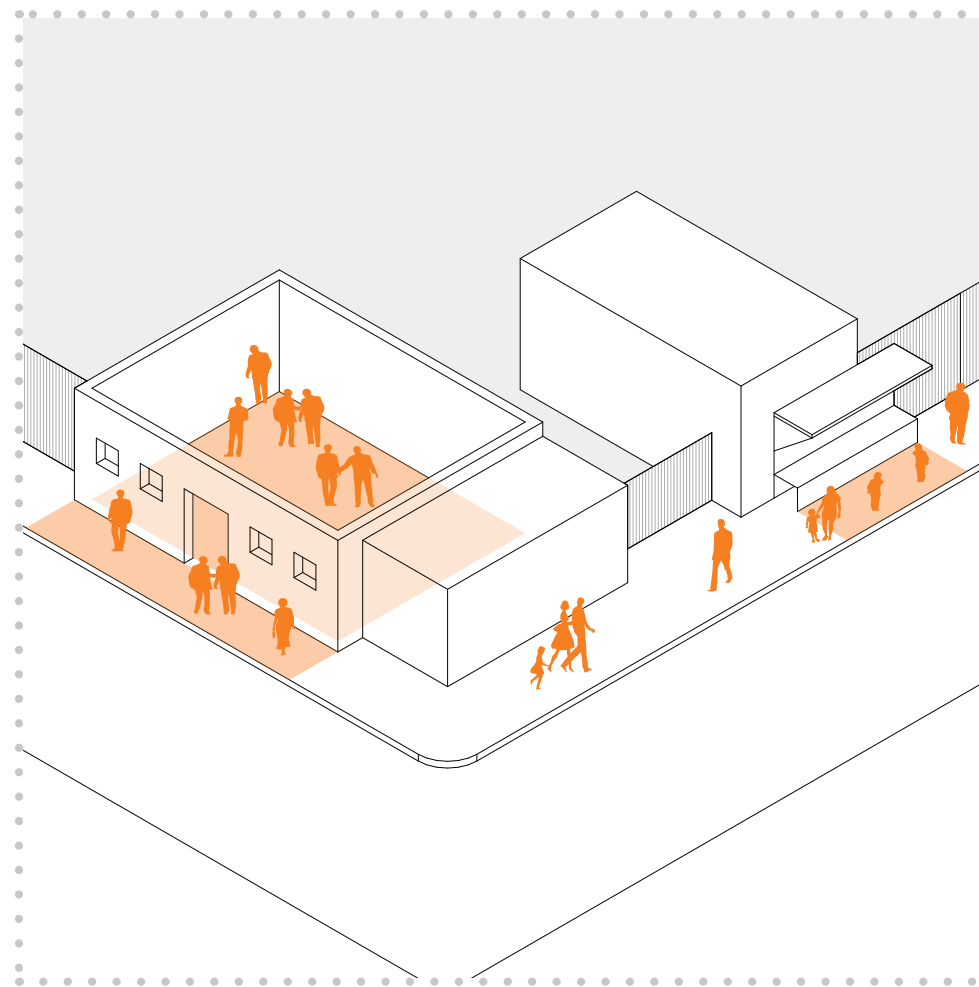
WEINSMBERG  
THE TEANS  
20 TEANS 12  
WARINE CORPS



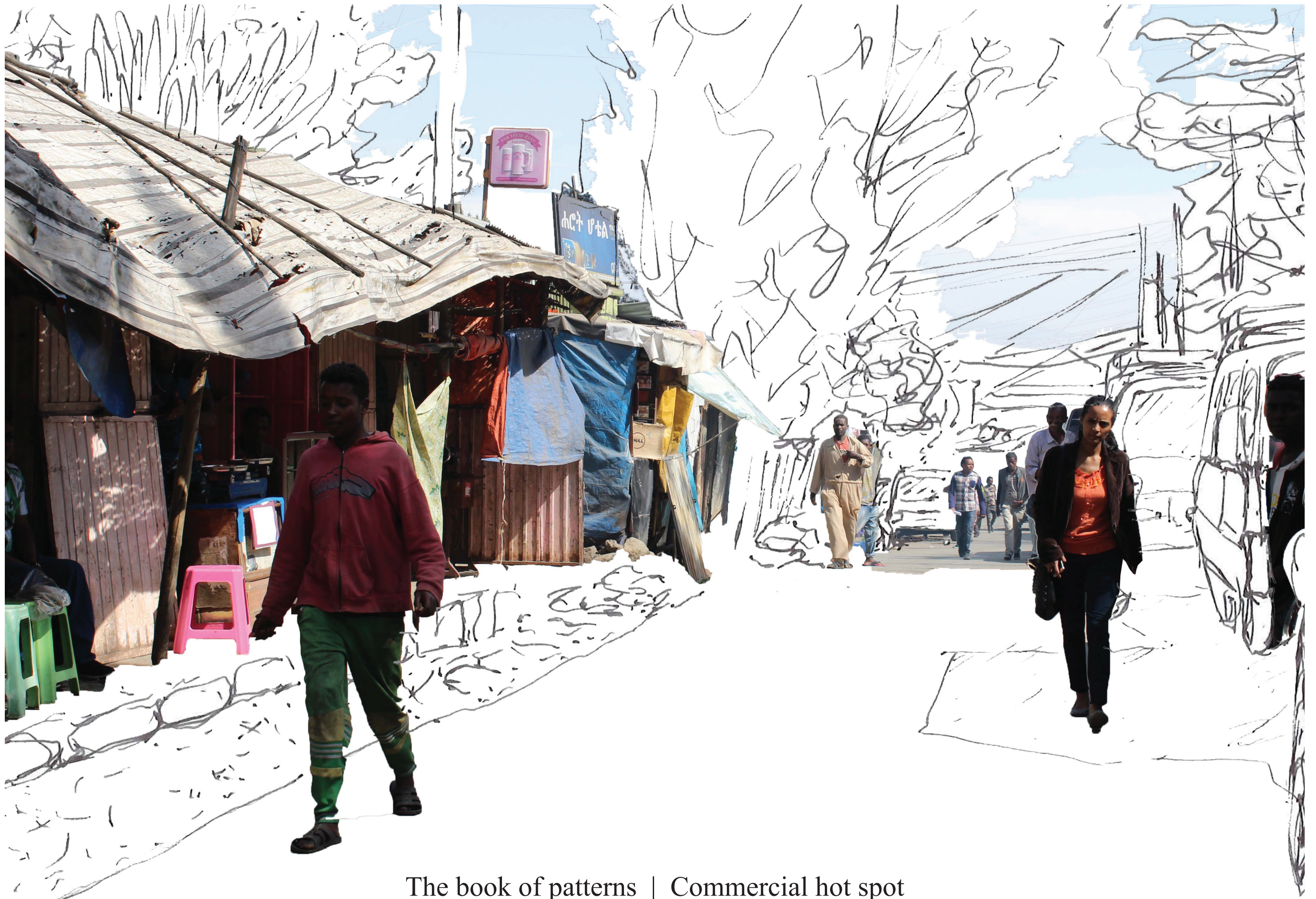


The stairs









The book of patterns | Commercial hot spot

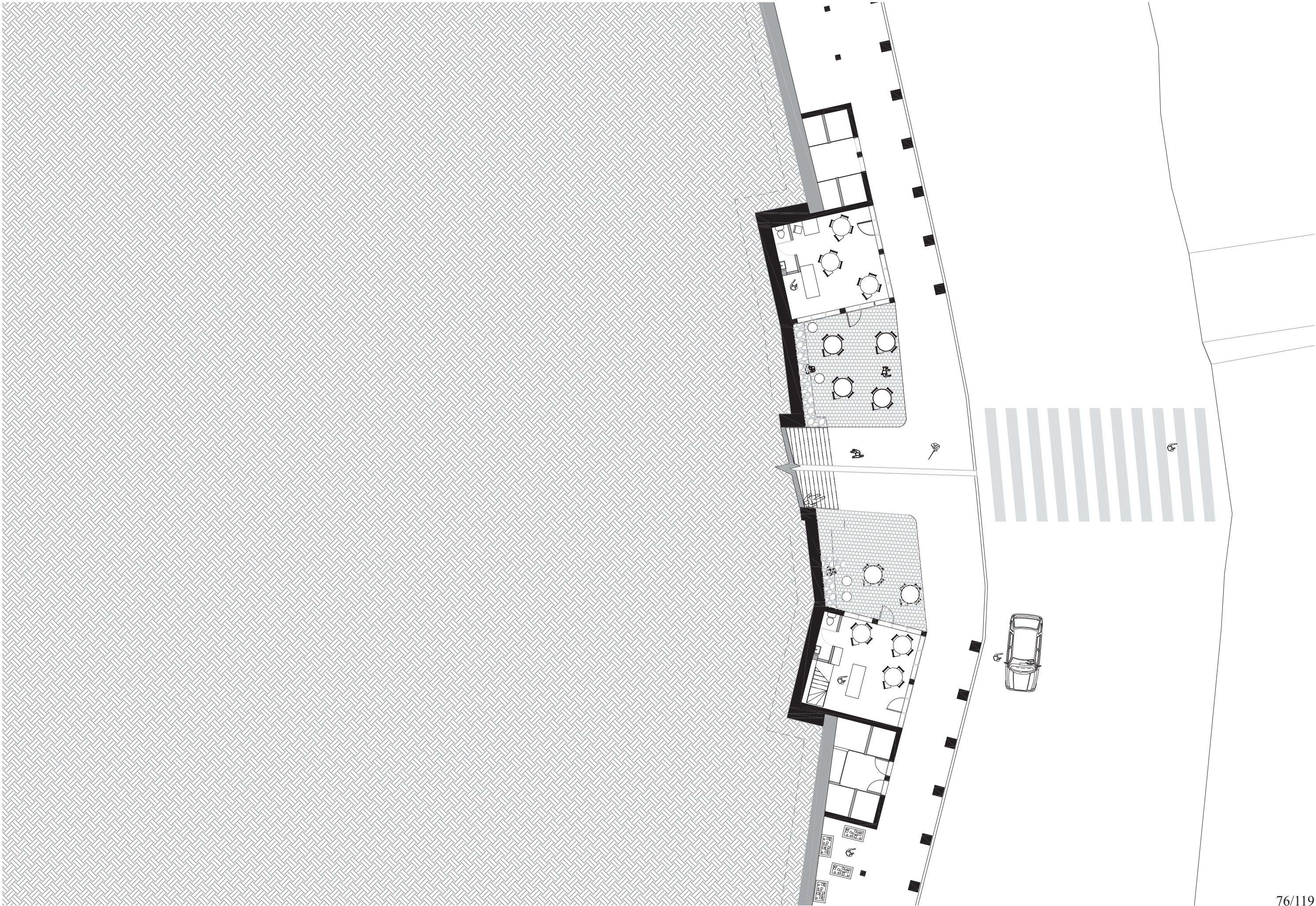




70 Dereja, a social and political place

[https://www.google.nl/search?q=70+dereja+addis+ababa&rlz=1C1CHFX\\_nLN562NL562&source=lnms&tbm=isch&sa=X&ved=0ahUKEwi09LTNjoHUAhXBKsAKHZpFBDYQ\\_AUICygC&biw=1536&bih=711#imgsrc=T6HmFcpcr0fNrM:](https://www.google.nl/search?q=70+dereja+addis+ababa&rlz=1C1CHFX_nLN562NL562&source=lnms&tbm=isch&sa=X&ved=0ahUKEwi09LTNjoHUAhXBKsAKHZpFBDYQ_AUICygC&biw=1536&bih=711#imgsrc=T6HmFcpcr0fNrM:)





















18 m<sup>2</sup> studio + 18 m<sup>2</sup> shop



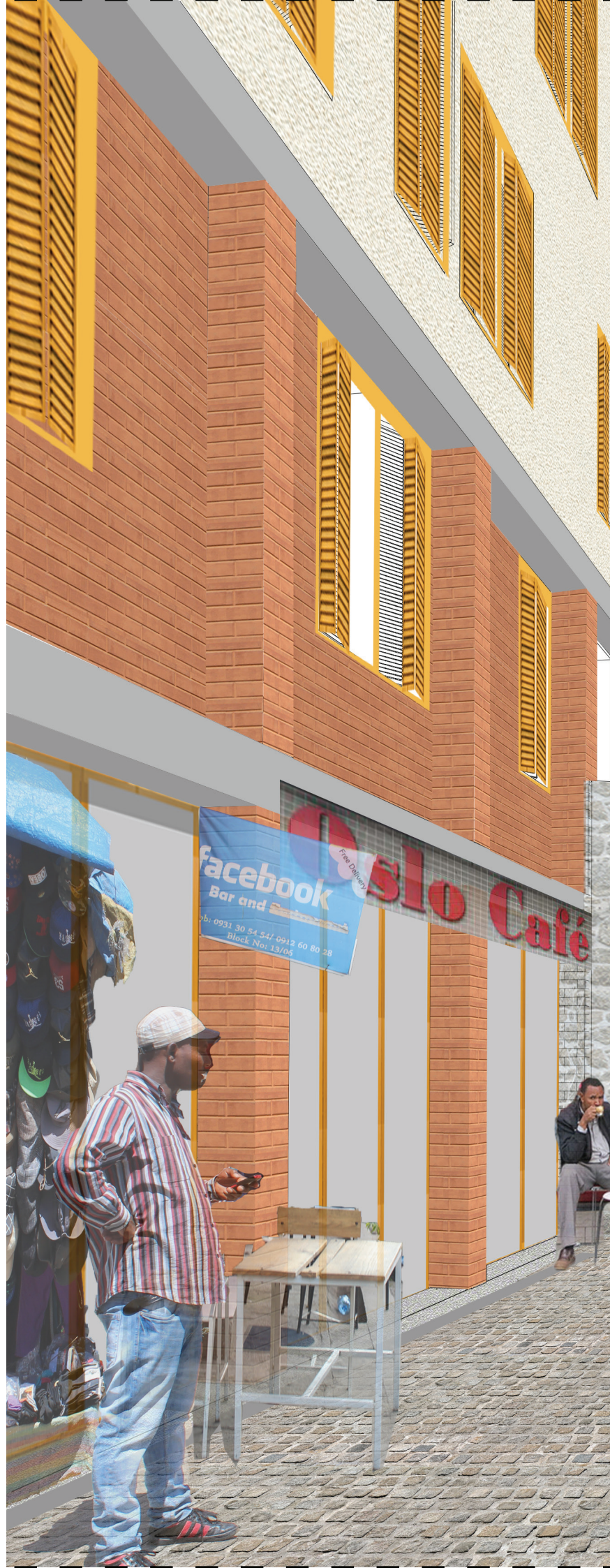


The Facebook neighborhood | The scale of the shops

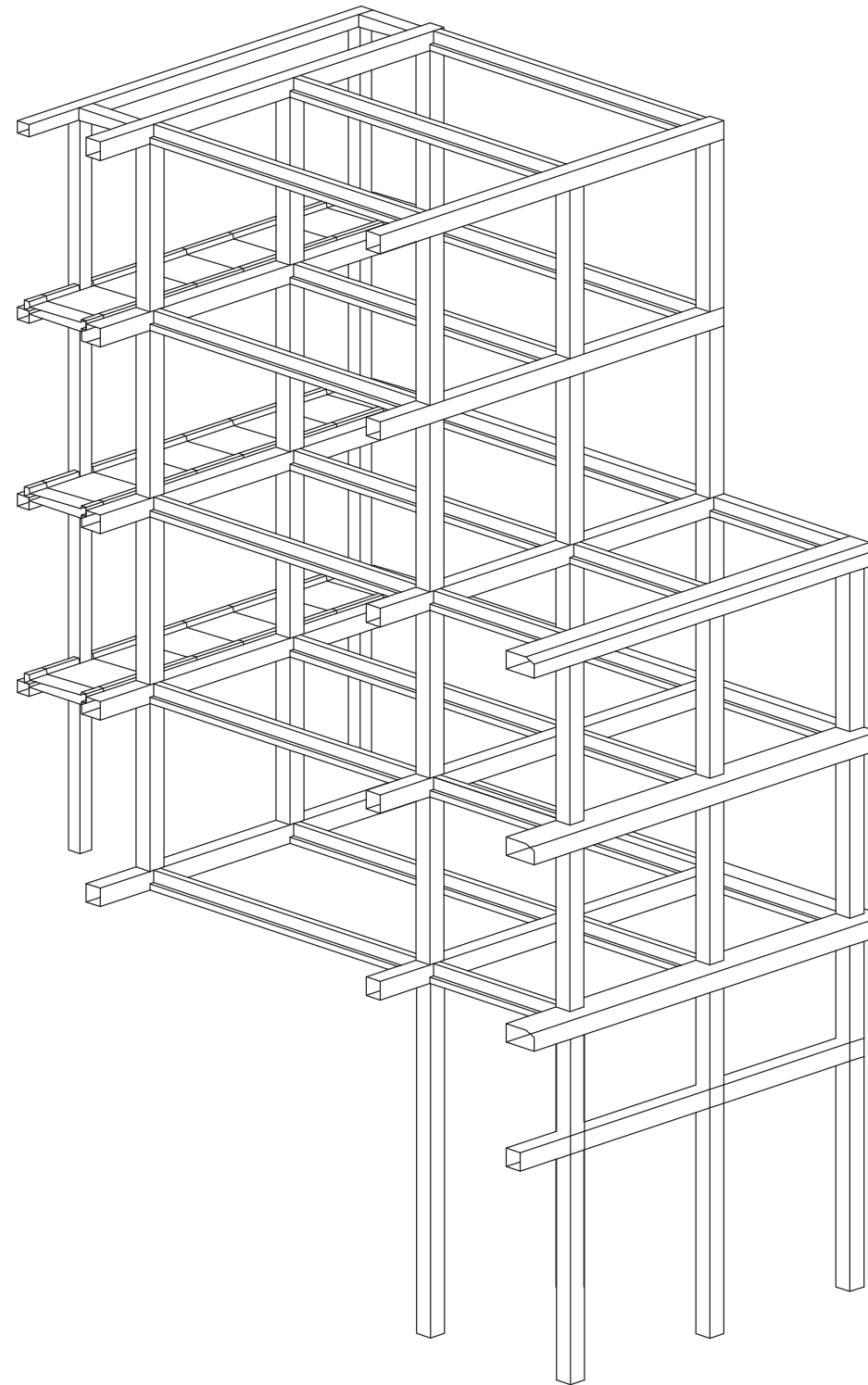




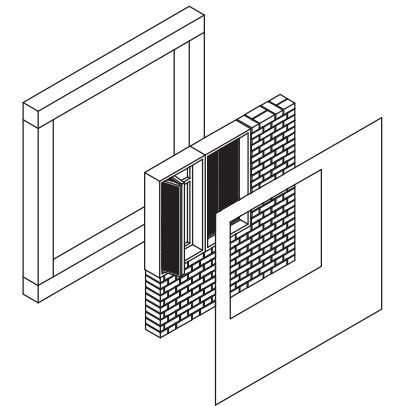




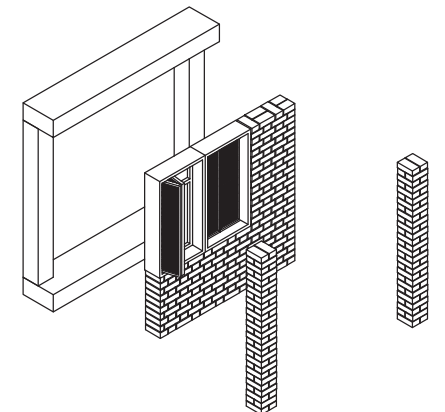
## Concrete columns, beams and ring beams



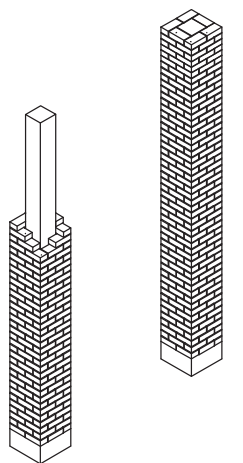
CEB infill + plaster



CEB infill + CEB facade elements



CEB clad concrete columns  
ARCADE



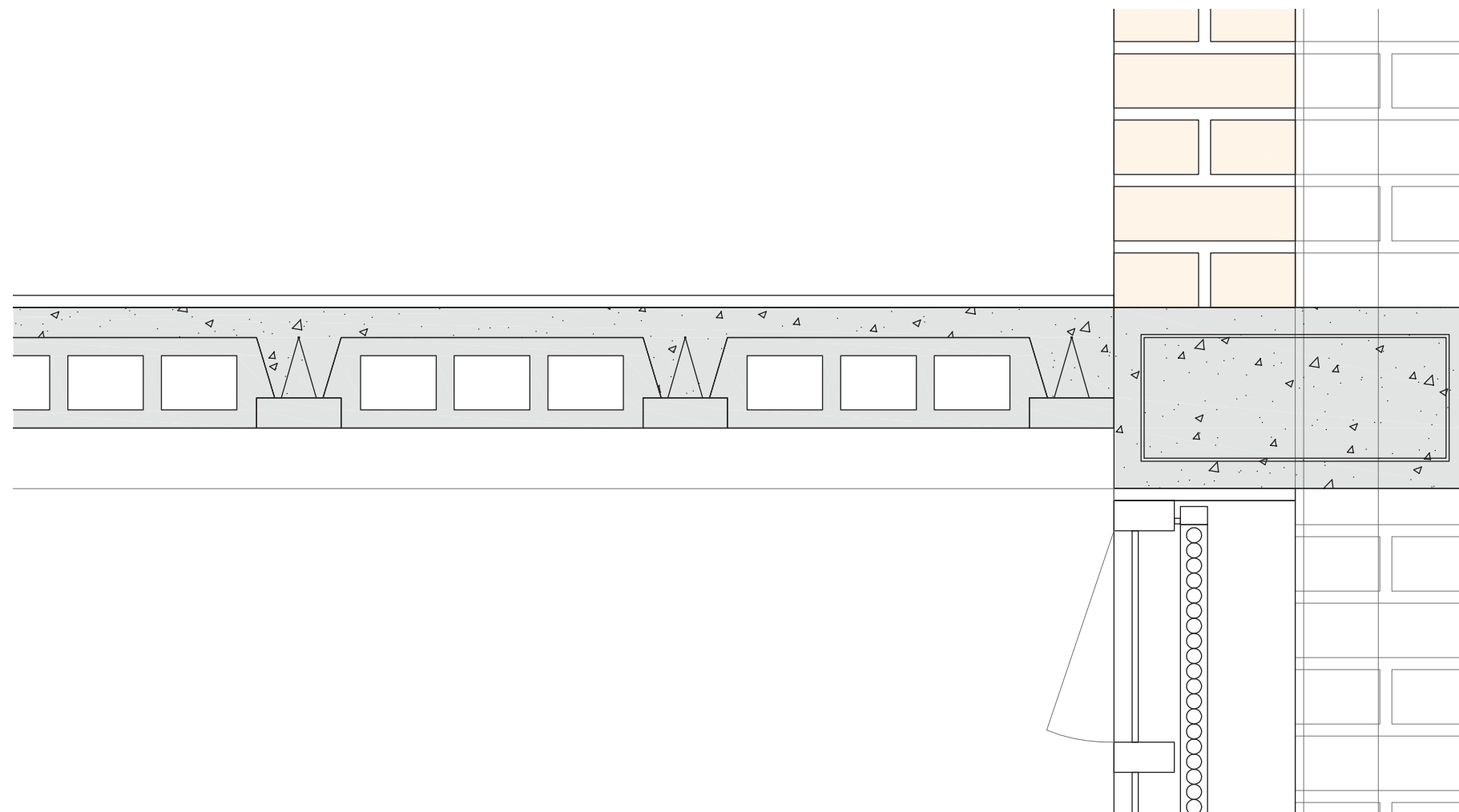




## Making CEB's

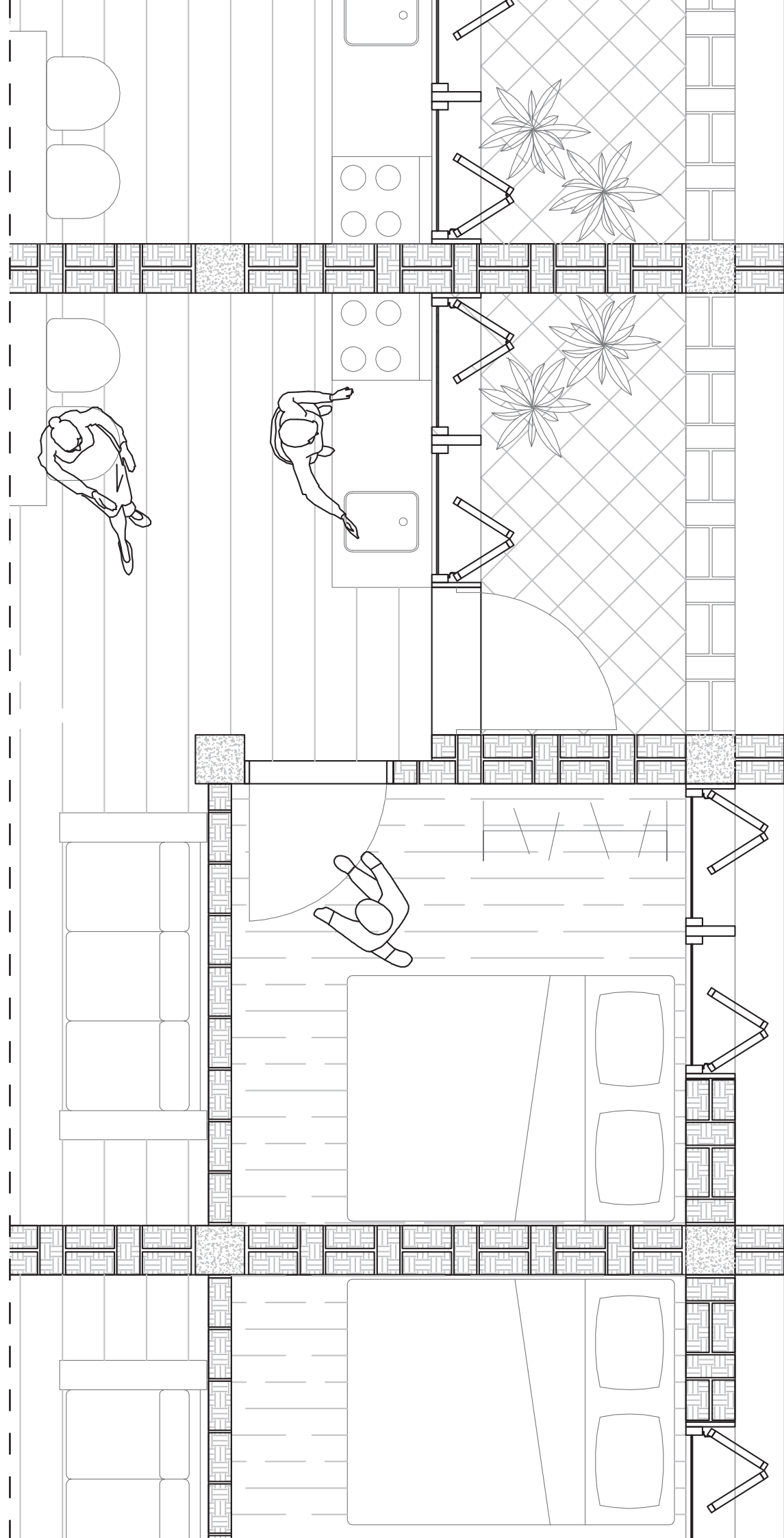
<http://images.adsttc.com/media/images/54a3/6cc3/e58e/ce6c/5a00/0049/newsletter/096A0517.jpg?1419996346>



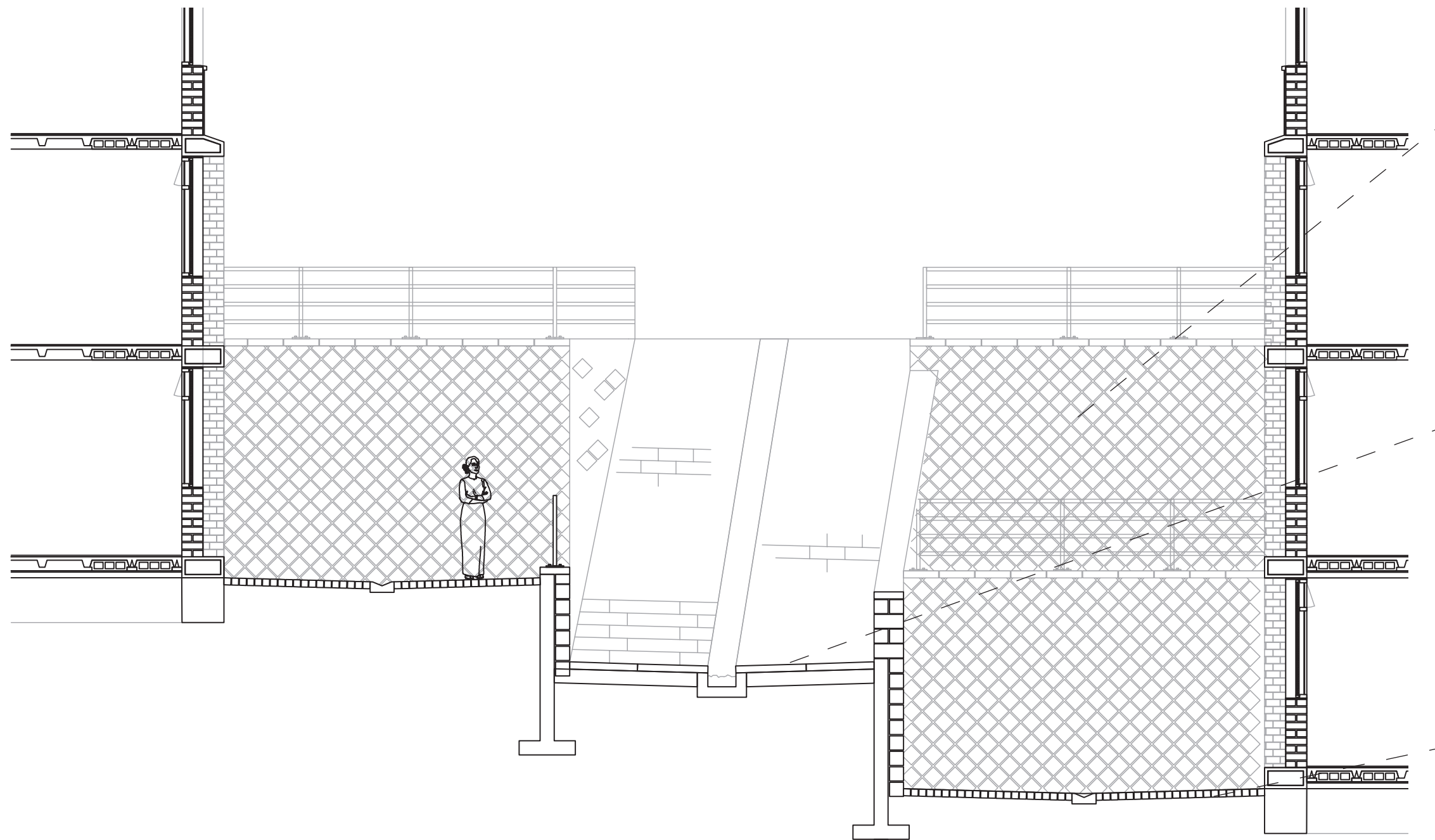


Hollow concrete floor blocks









Section stairs and terraces

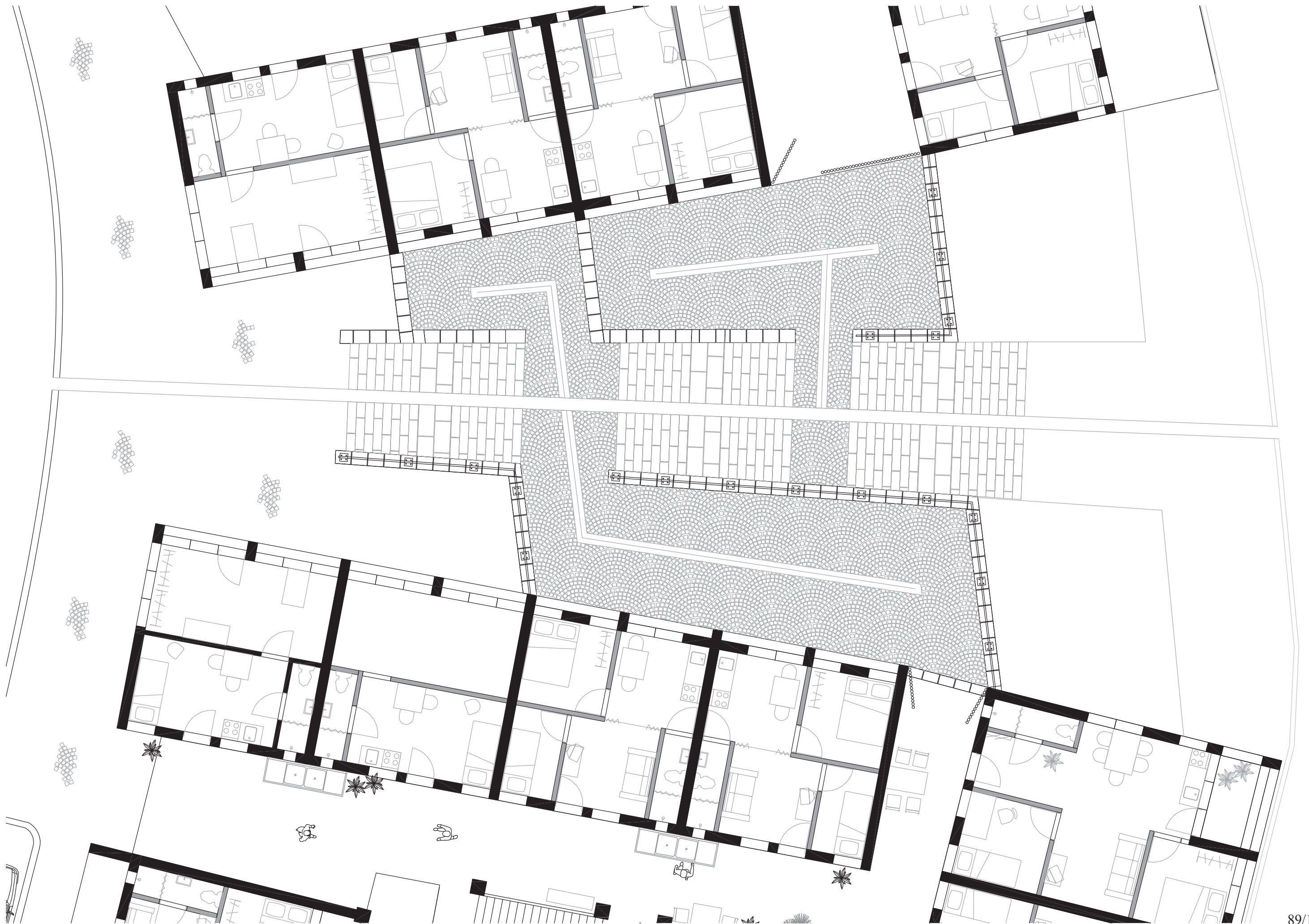




Small water canal in Freiburg | Simple element and very interesting for kids

<https://thetravelingtimes.files.wordpress.com/2012/10/freiburg-boy-with-boat.jpg>



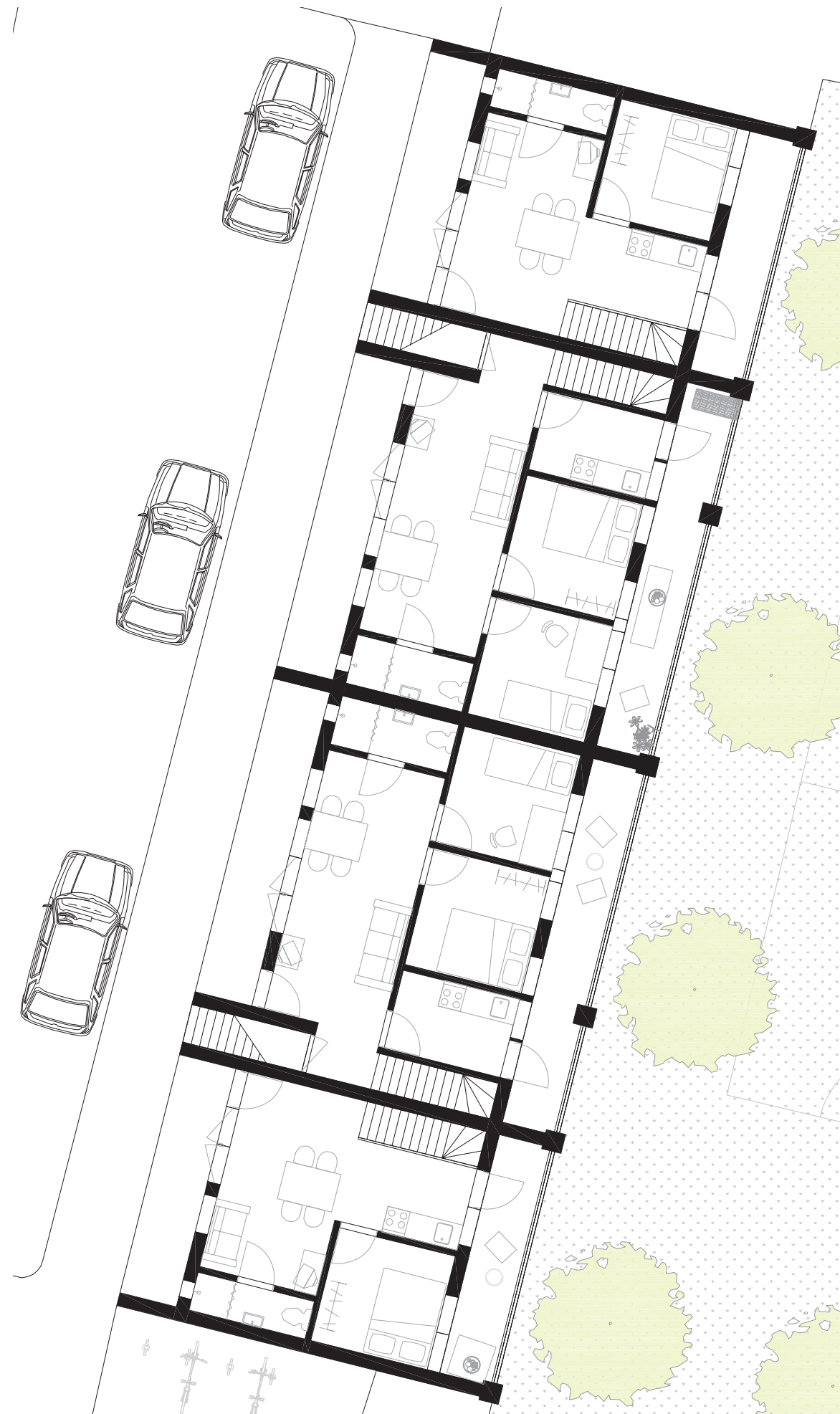






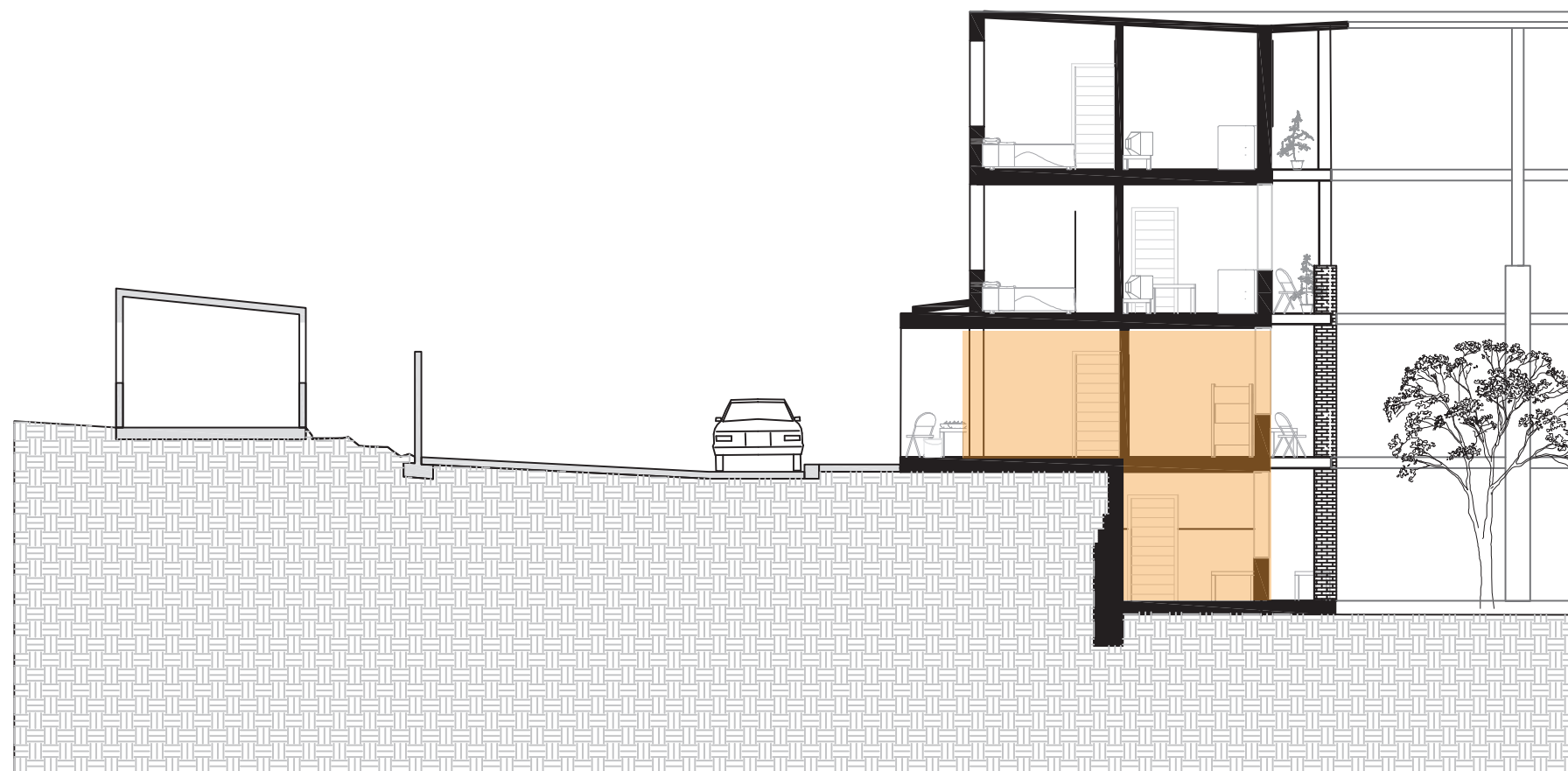
The residential street





Family housing | Portiek





Maisonnette dwelling ground floor

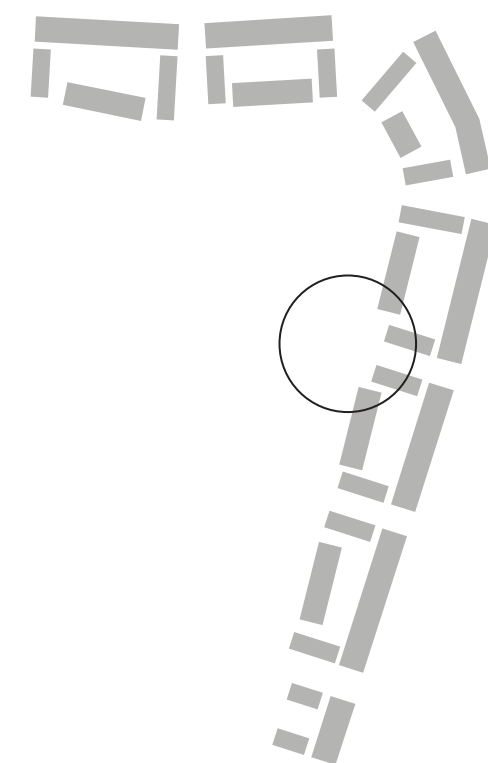




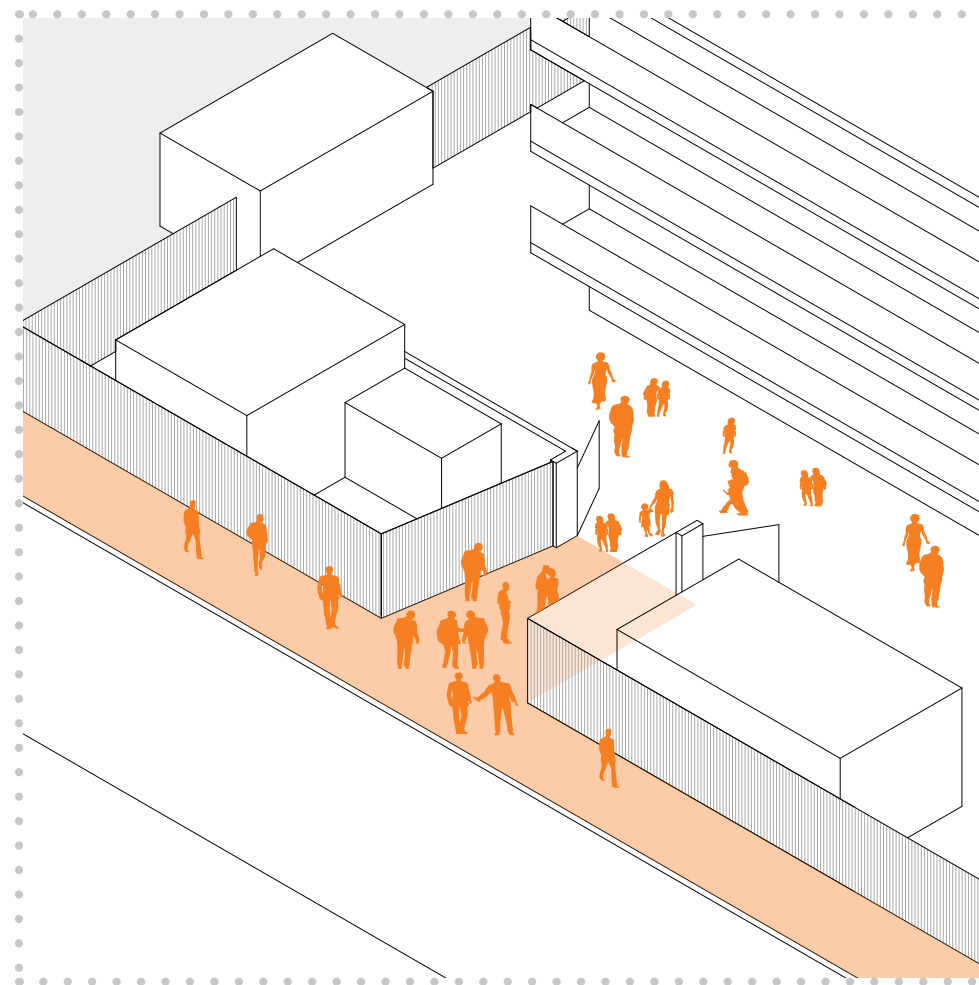








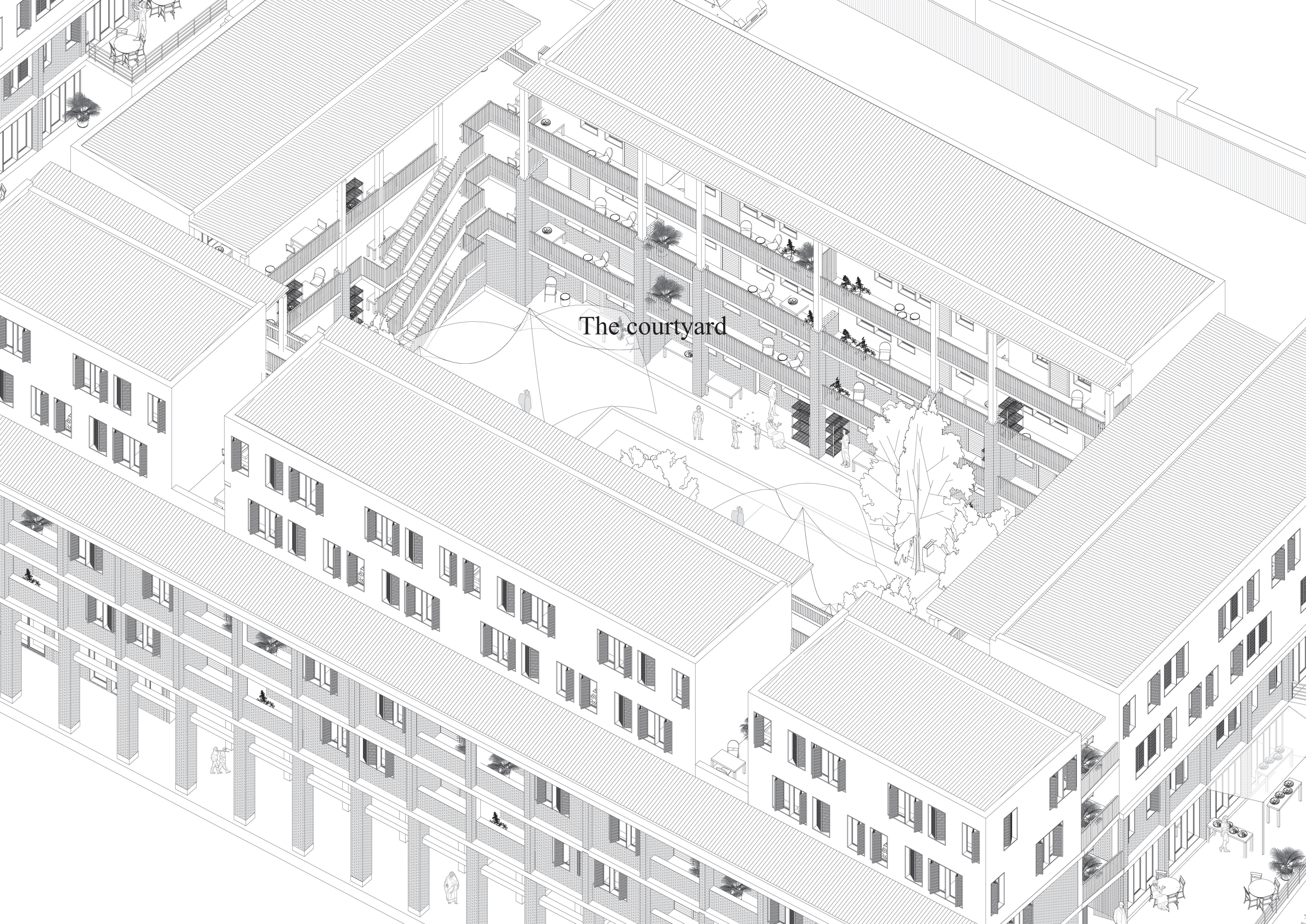






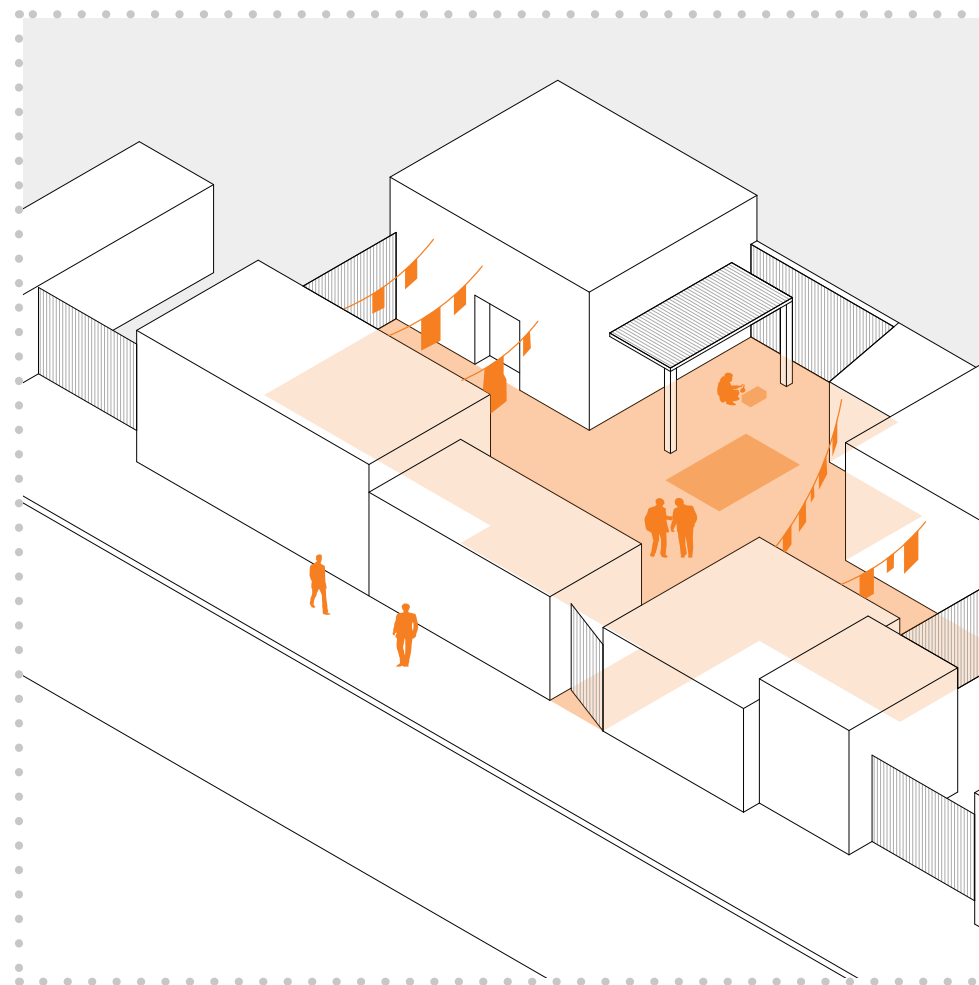






The courtyard



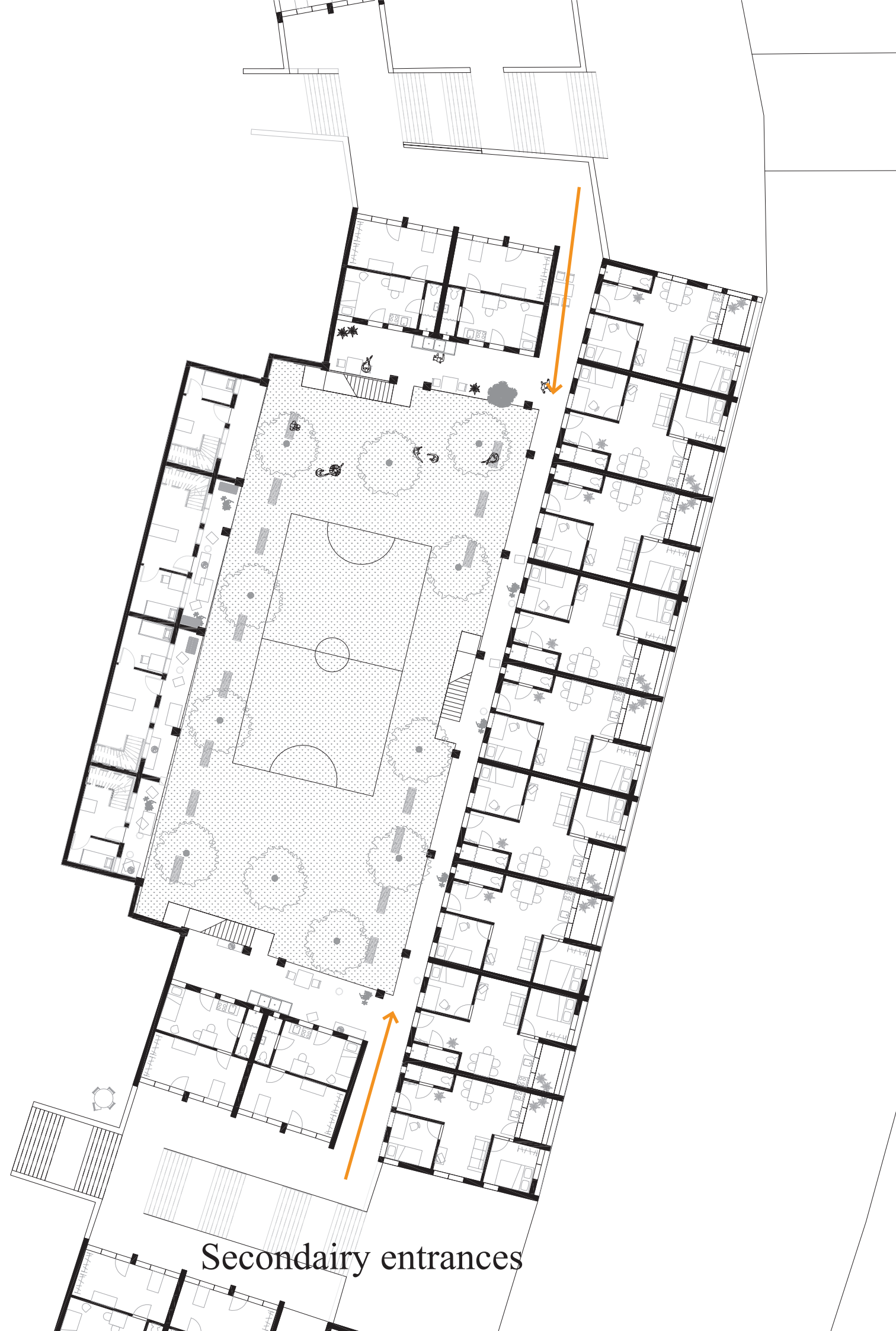






Book of patterns | Compound courtyard





Secondary entrances





Main entrances





Shop

Cafe

Small studio

Small studio

Shared gallery

Big unit

Private balconies

Small gallery

Maisonette family block

Shared courtyard

















Shared in between spaces



The climate





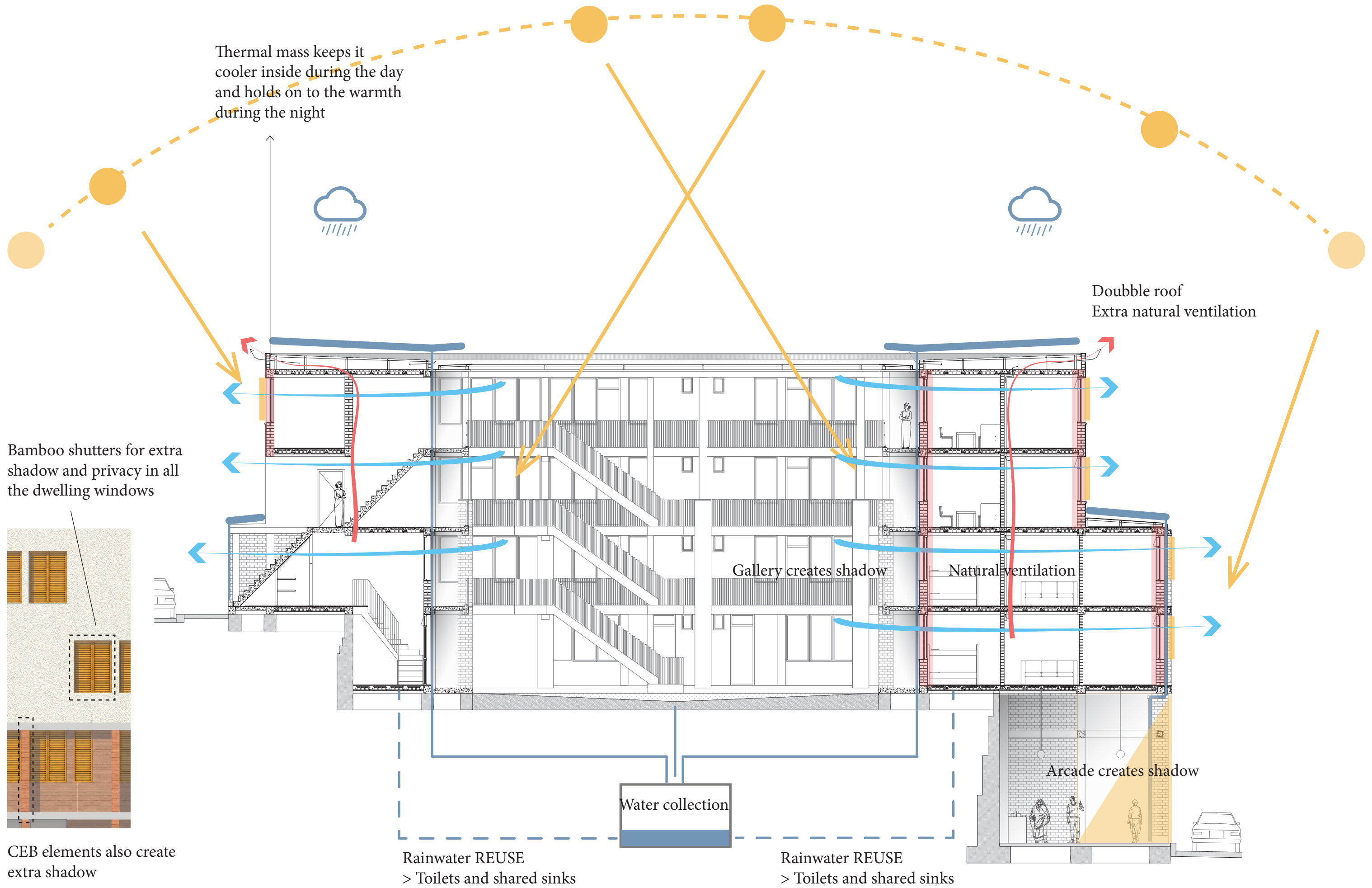
The green play corner



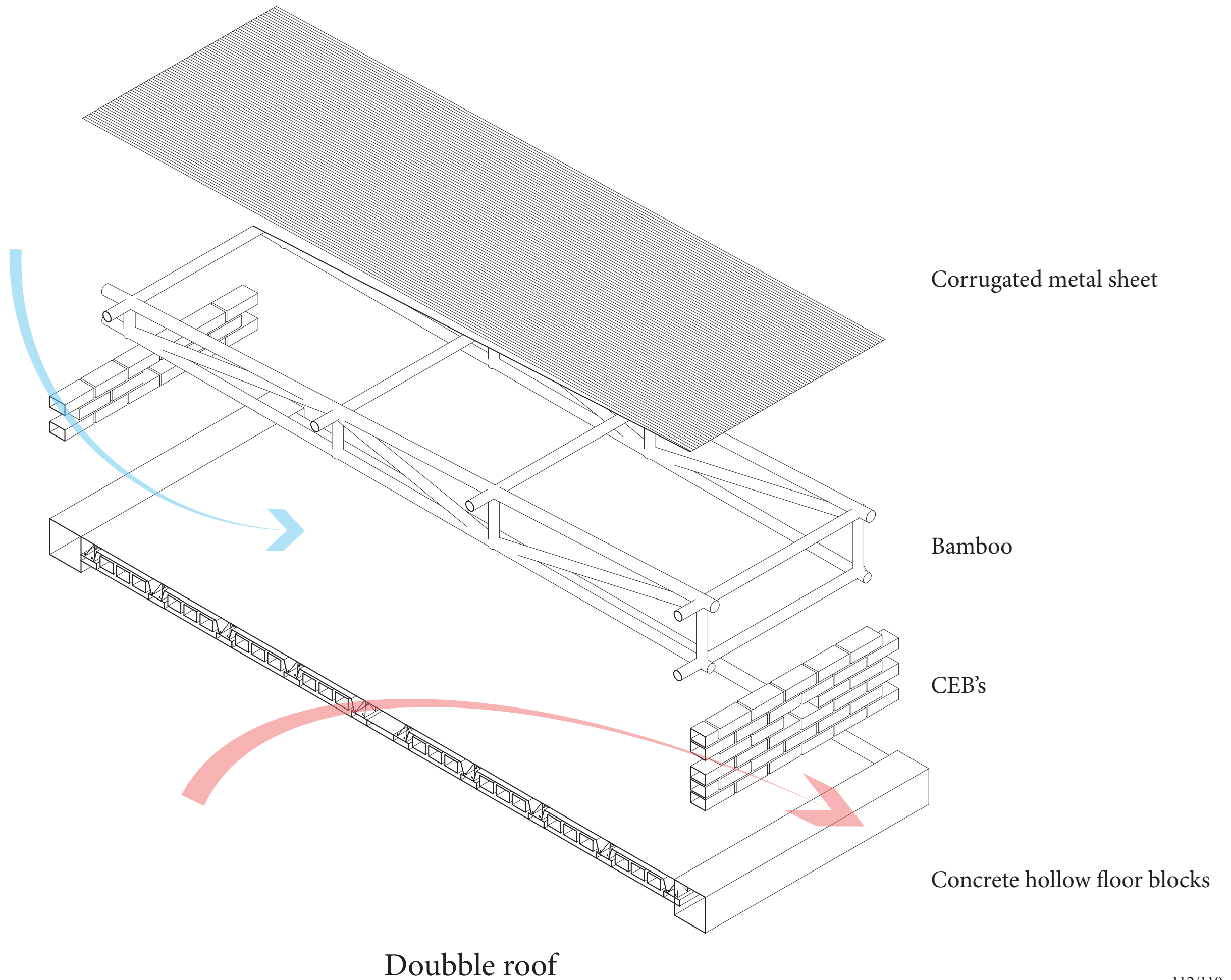


Rainwater solution corner









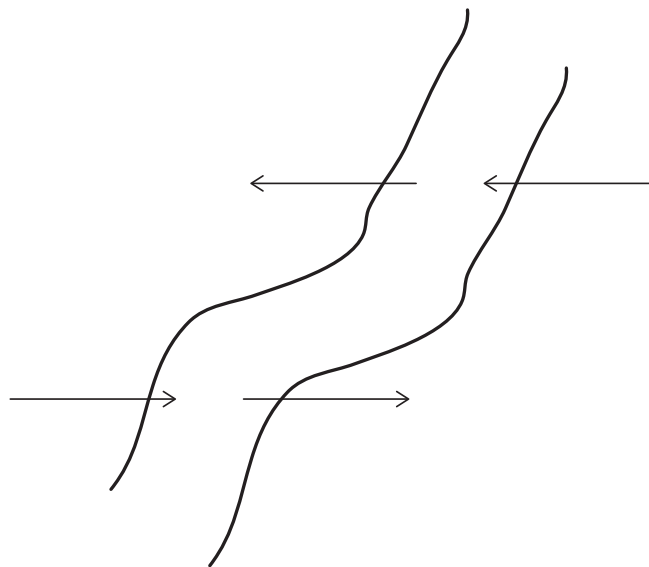


## Conclusion



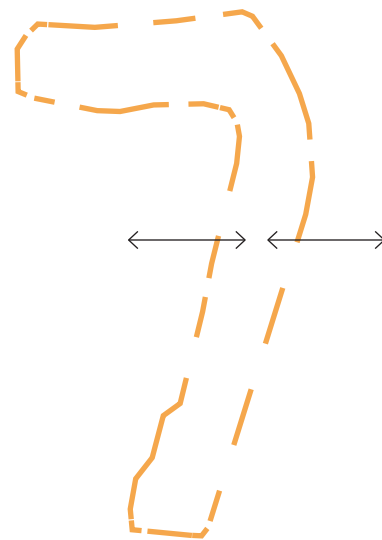
## Open border

- Economic exchange
- Social exchange



## Future developments

- The developing city
- The changing street



## The topography

- The wall
- Topography



## Focus of the design





The open border | Social and economic exchange





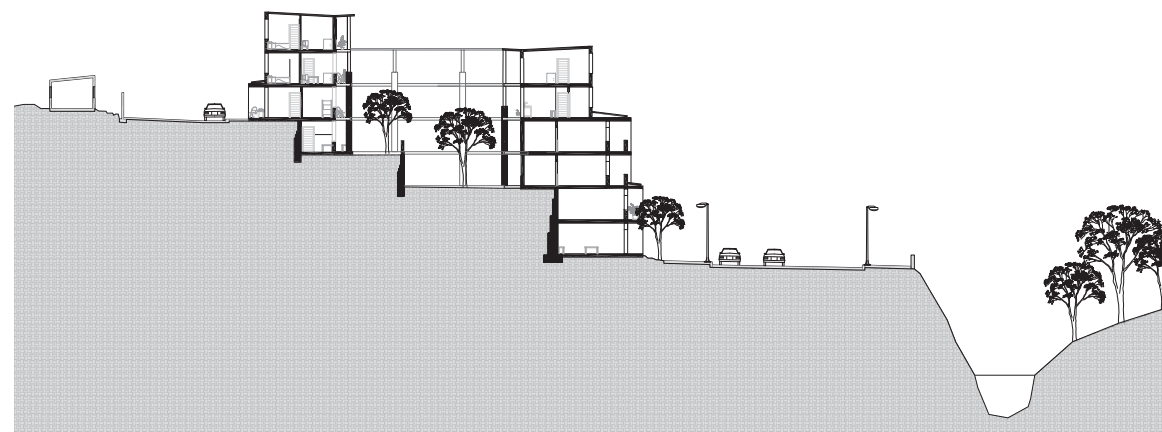
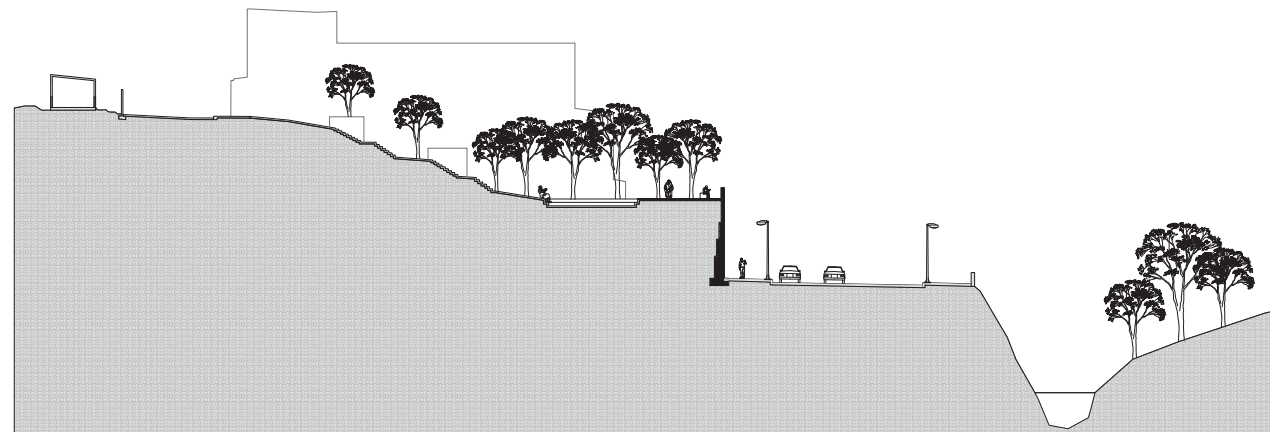
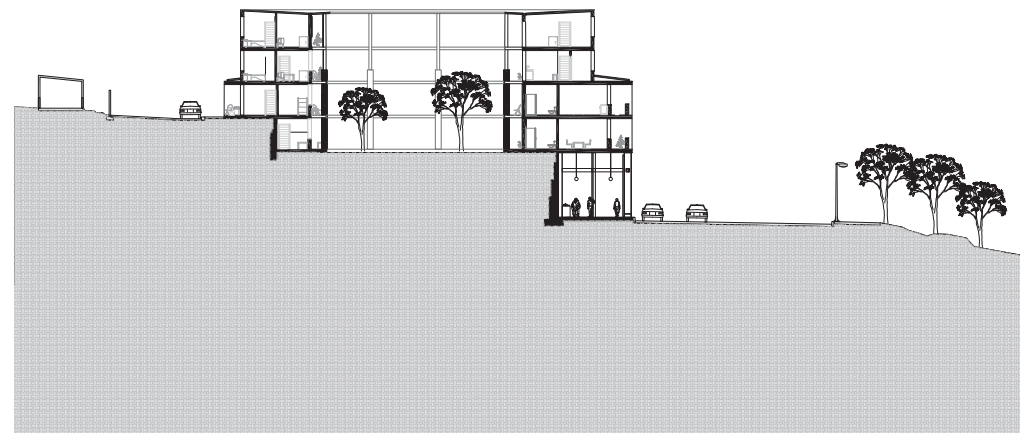
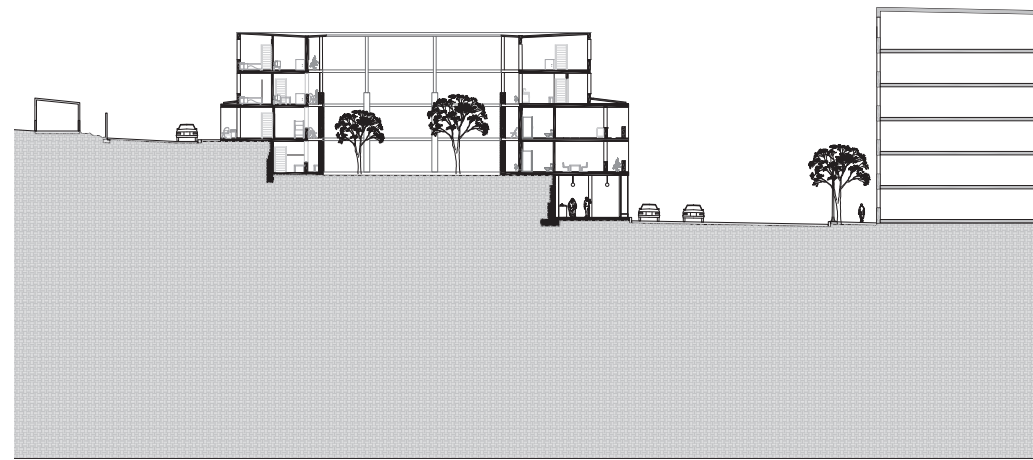
Relation to future developments and the city | A place for the city





Relation to a residential atmosphere





The topography | The block adapts



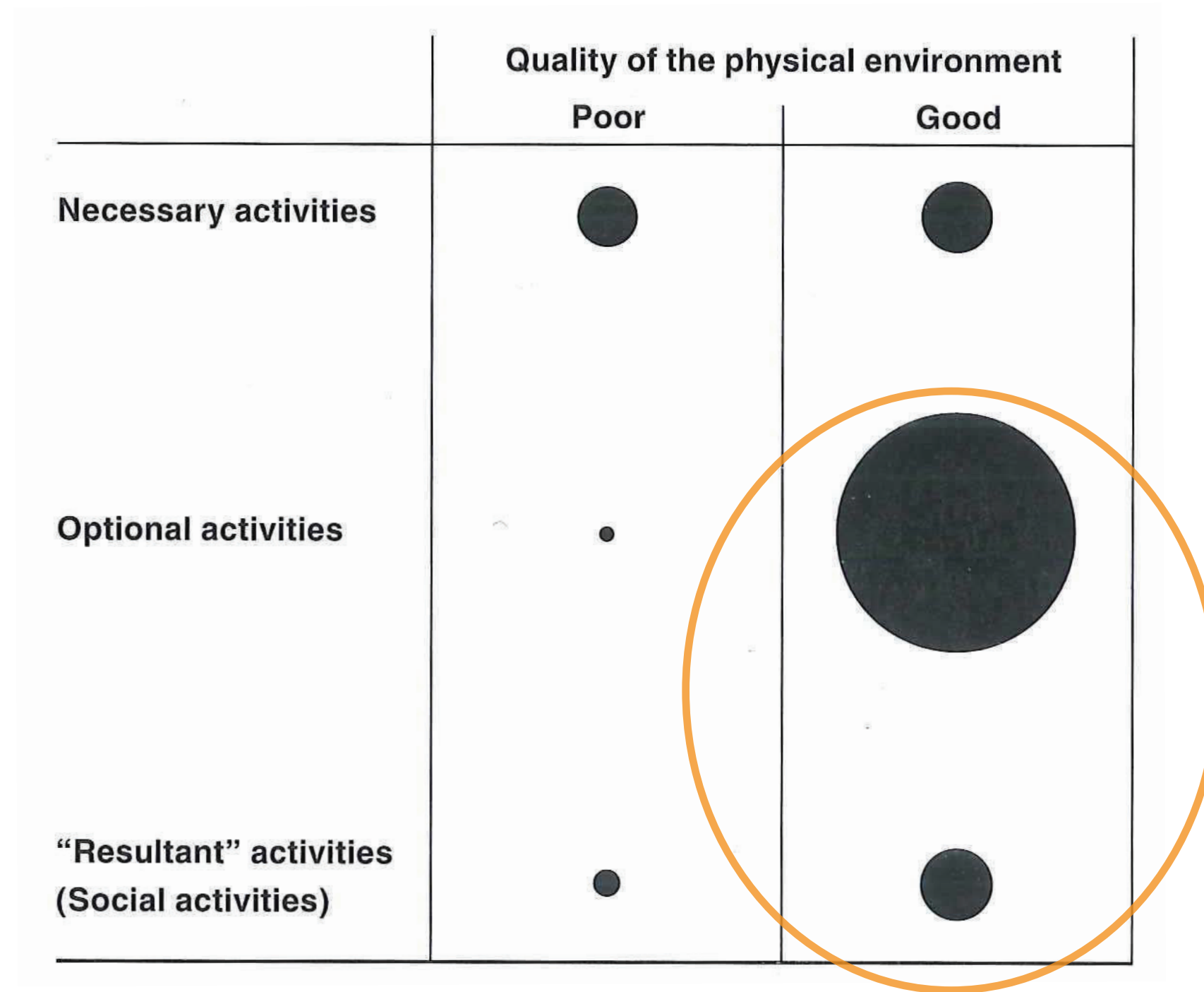


End



Extra slides

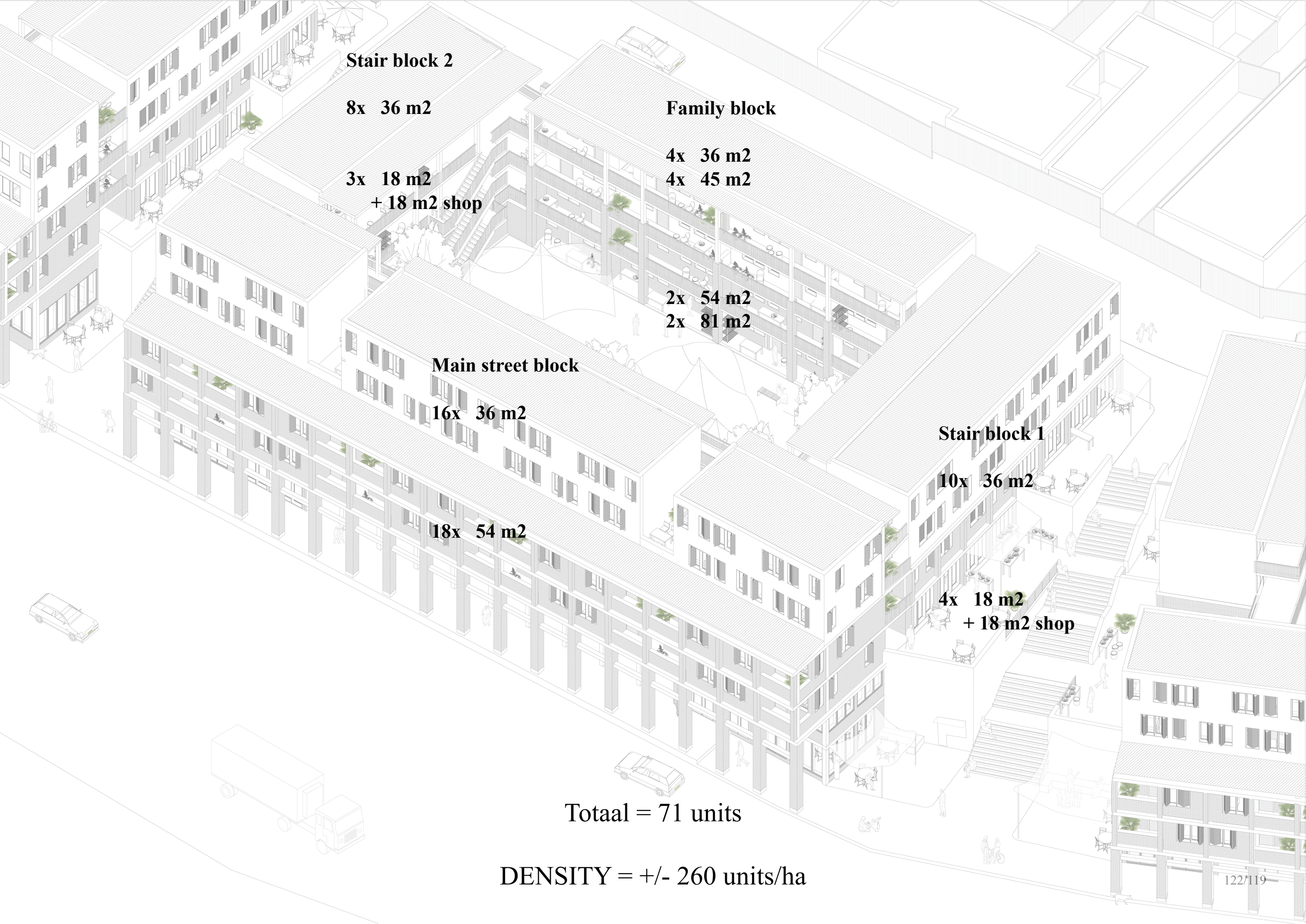




## Theories of Jan Gehl

The more activities in one border the more successful





**Stair block 2**

**8x 36 m2**

**3x 18 m2  
+ 18 m2 shop**

**Family block**

**4x 36 m2**

**4x 45 m2**

**2x 54 m2**

**2x 81 m2**

**Main street block**

**16x 36 m2**

**18x 54 m2**

**Stair block 1**

**10x 36 m2**

**4x 18 m2  
+ 18 m2 shop**

**Totaal = 71 units**

**DENSITY = +/- 260 units/ha**



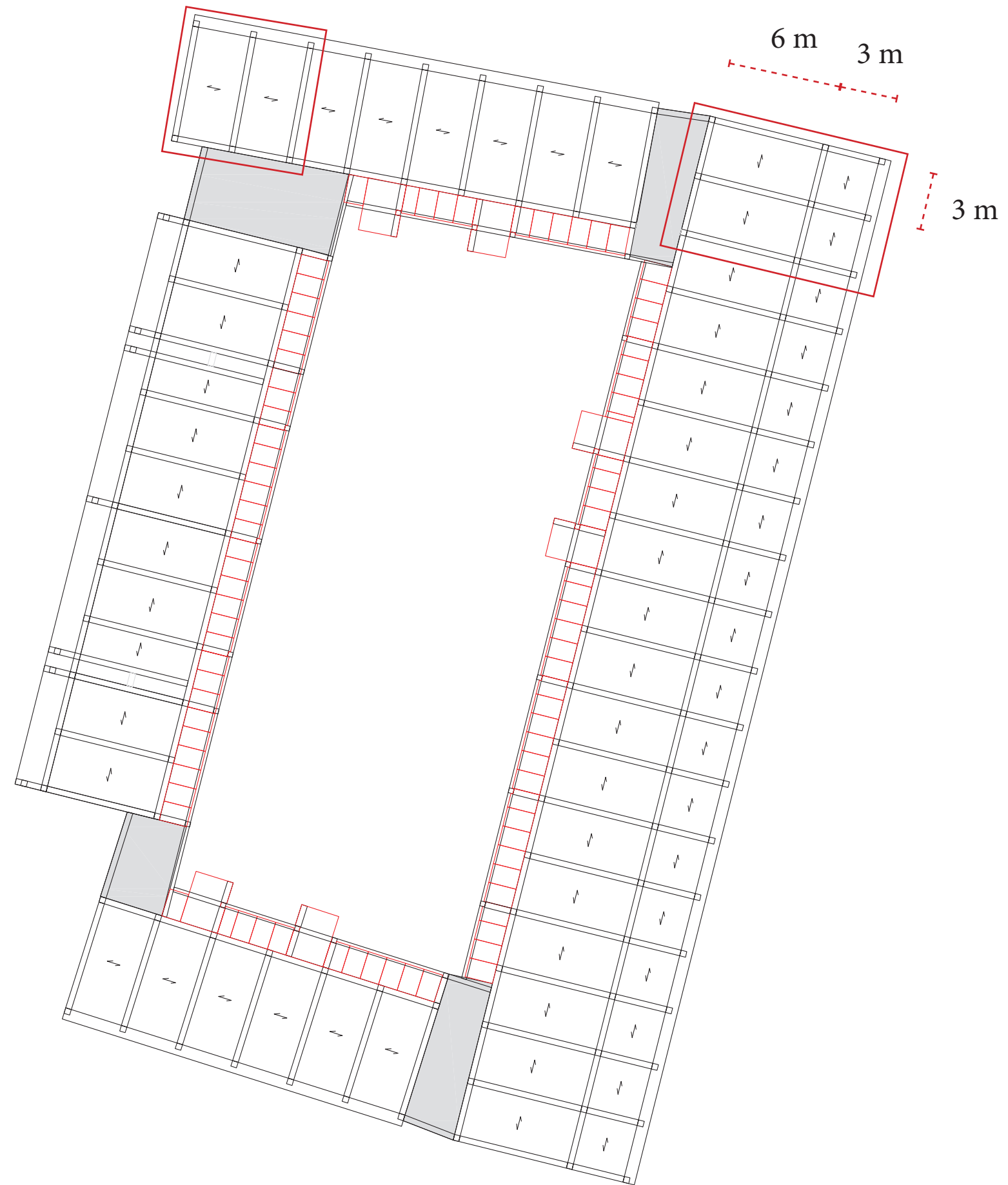


<http://c8.alamy.com/comp/C3RXT6/the-piazza-addis-ababa-ethiopia-C3RXT6.jpg>



<http://mw2.google.com/mw-panoramio/photos/medium/45409554.jpg>





Construction plan













Blocks and beams





Wall re-used stones



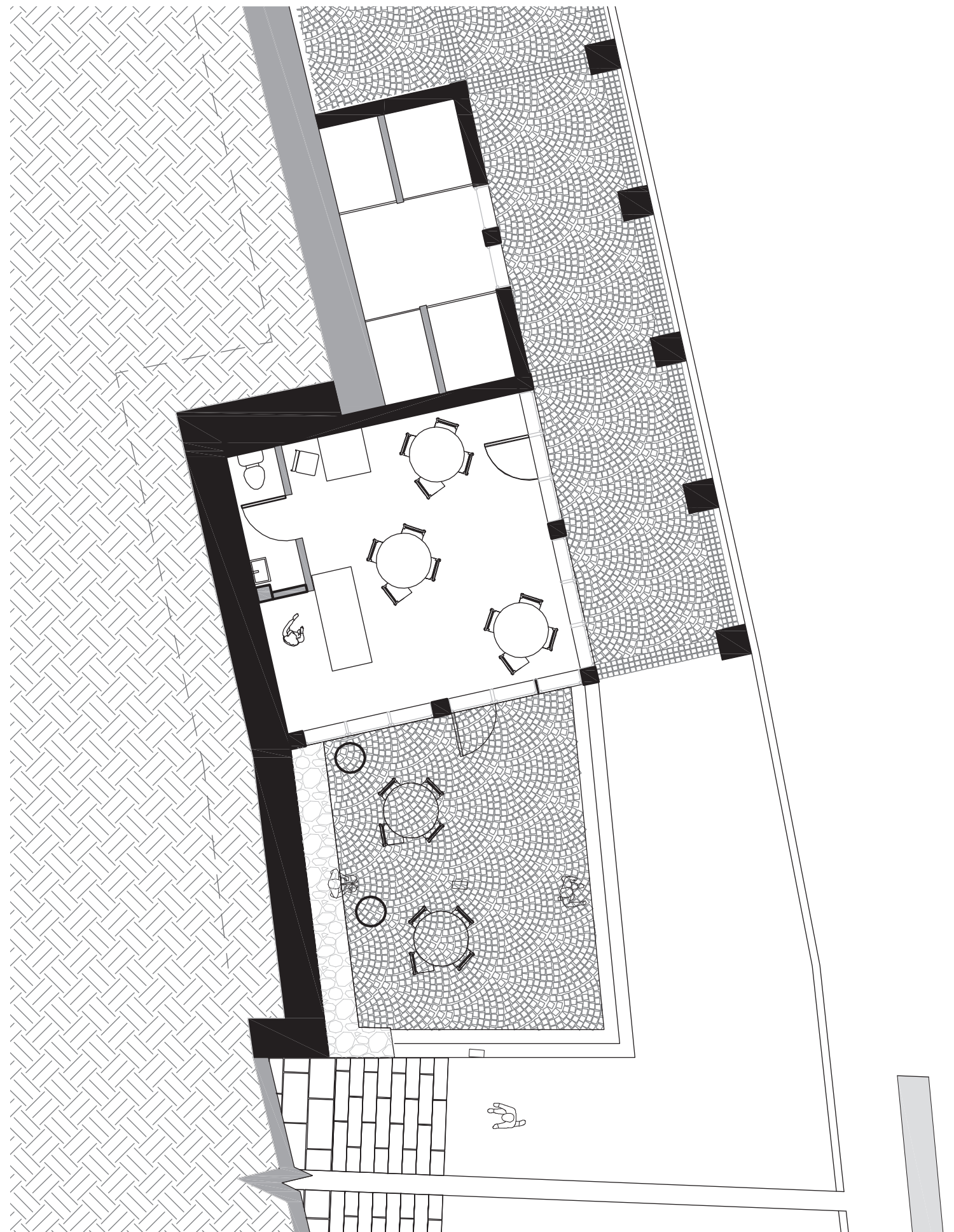
Cobblestones pavement



Stair tiles

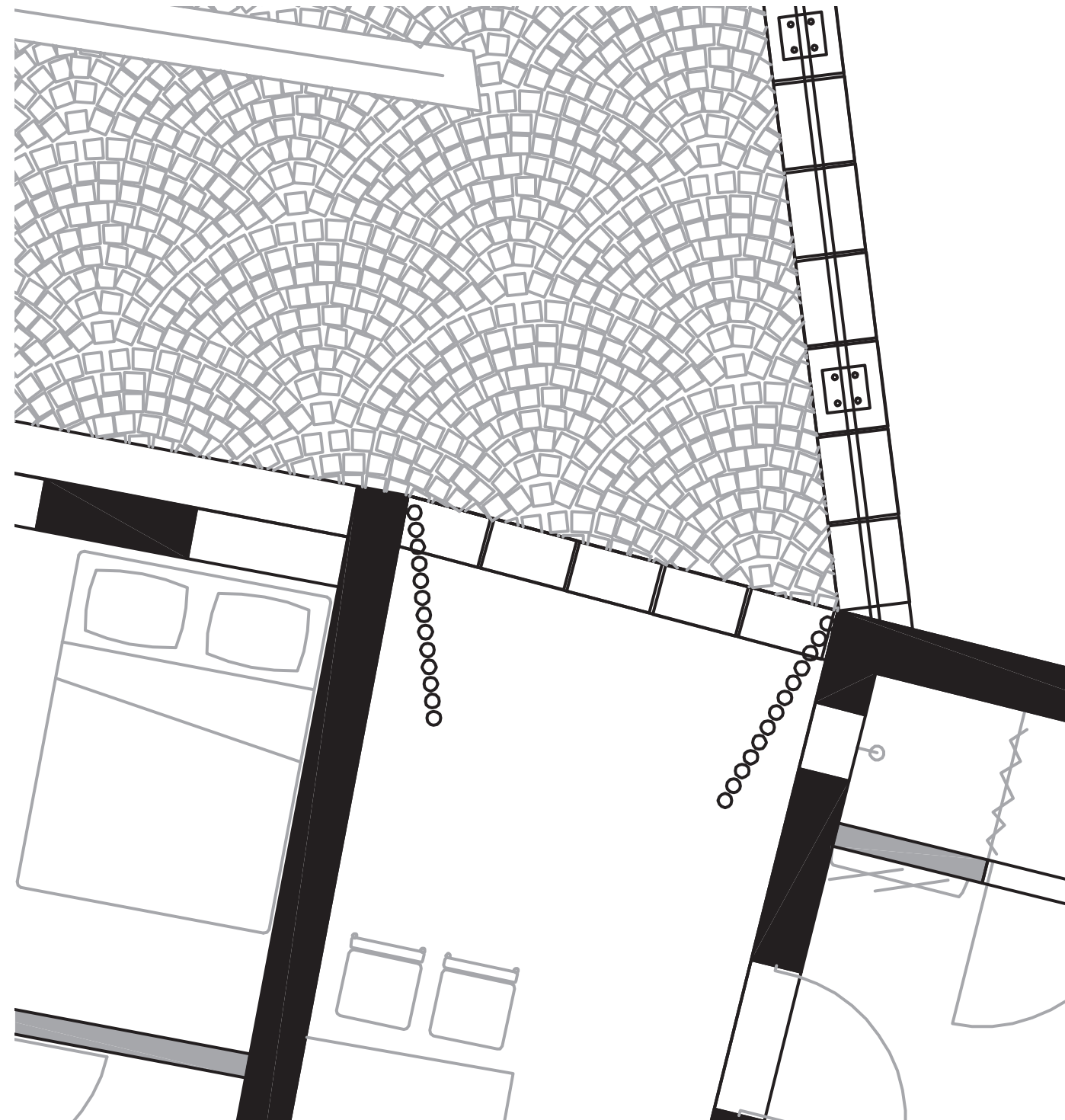
Materialisation stairs





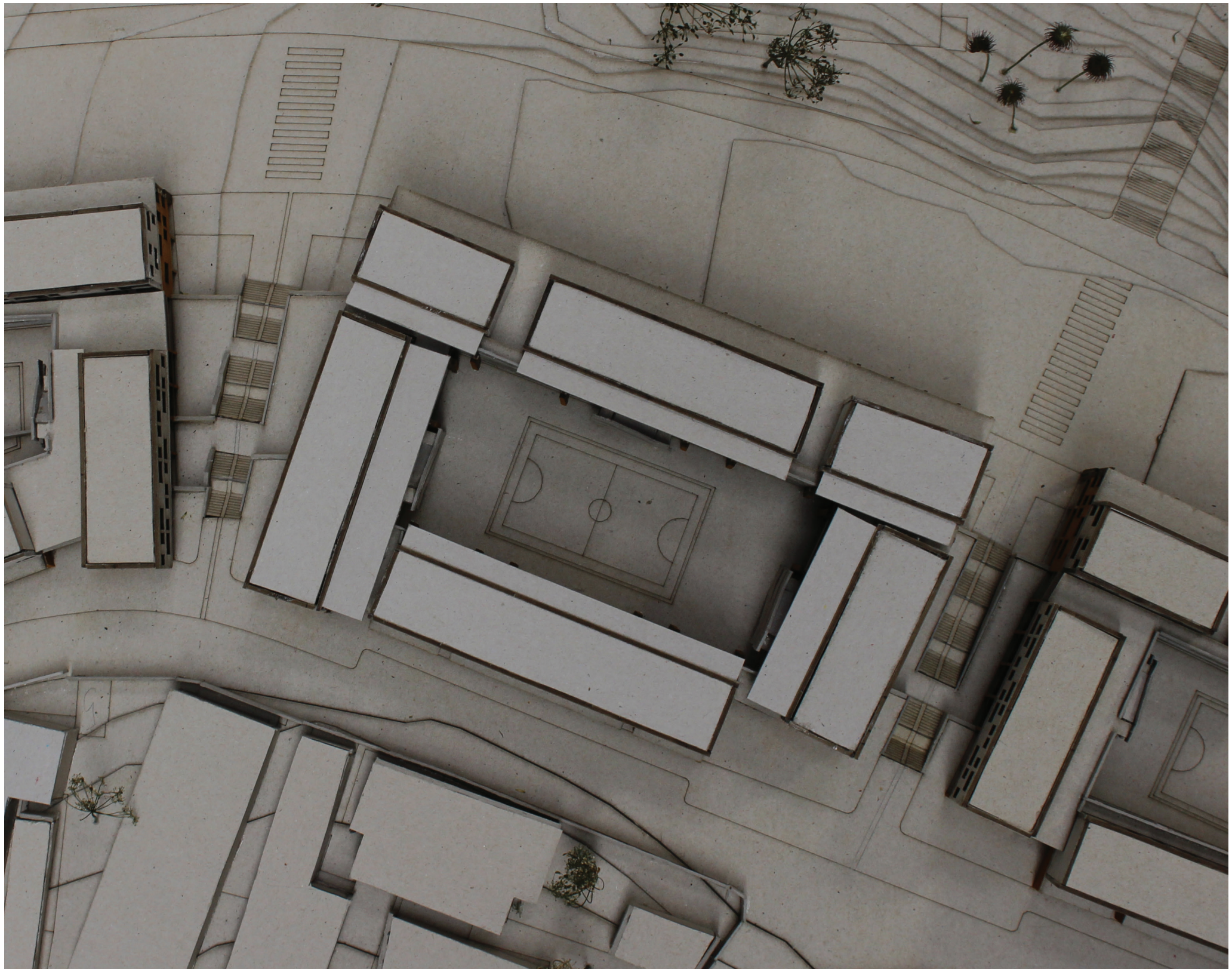
Pavement arcade





Bamboo gate secondary entrance | Border and baundary





Gutter courtyard





Metal railings for open view from stairs