

transit city

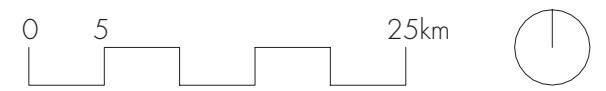


jaap le . 4230655
p5 . nov 2018

global housing
nelson mota
dick van gameren
rohan varma

•----- nala sopara

•----- mumbai







GO AHEAD.
AN.
AUSTRIE
ADAMAS GUNO

कृपया थोकेय नाम
मिलने के लिए है जल्दी।
गुरुवार
सिवाय रिक्ति।



problem statement | ***mumbai growth***



problem statement | ***mumbai growth***



an overcrowded city:

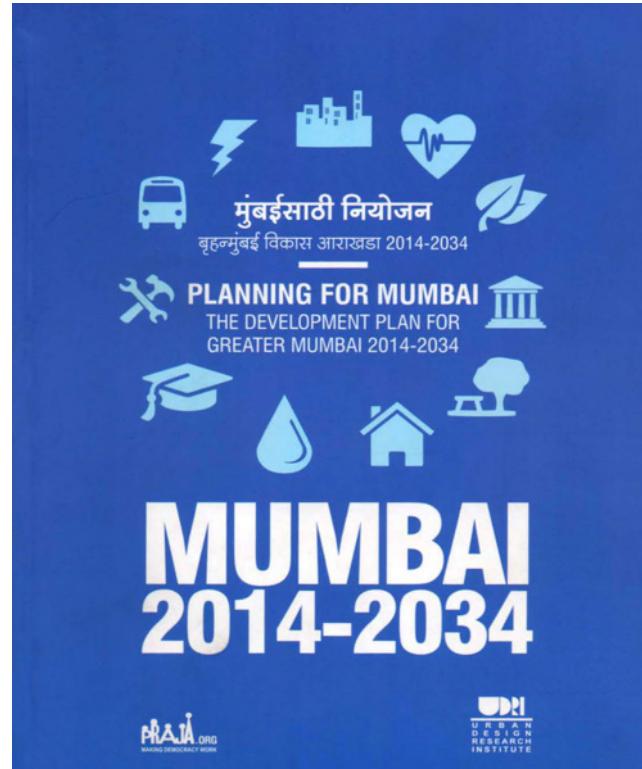
- + lots of work but no place to live
- + extreme densities
- + prices of land skyrocket
- + clogged transit corridors
- + satellite cities



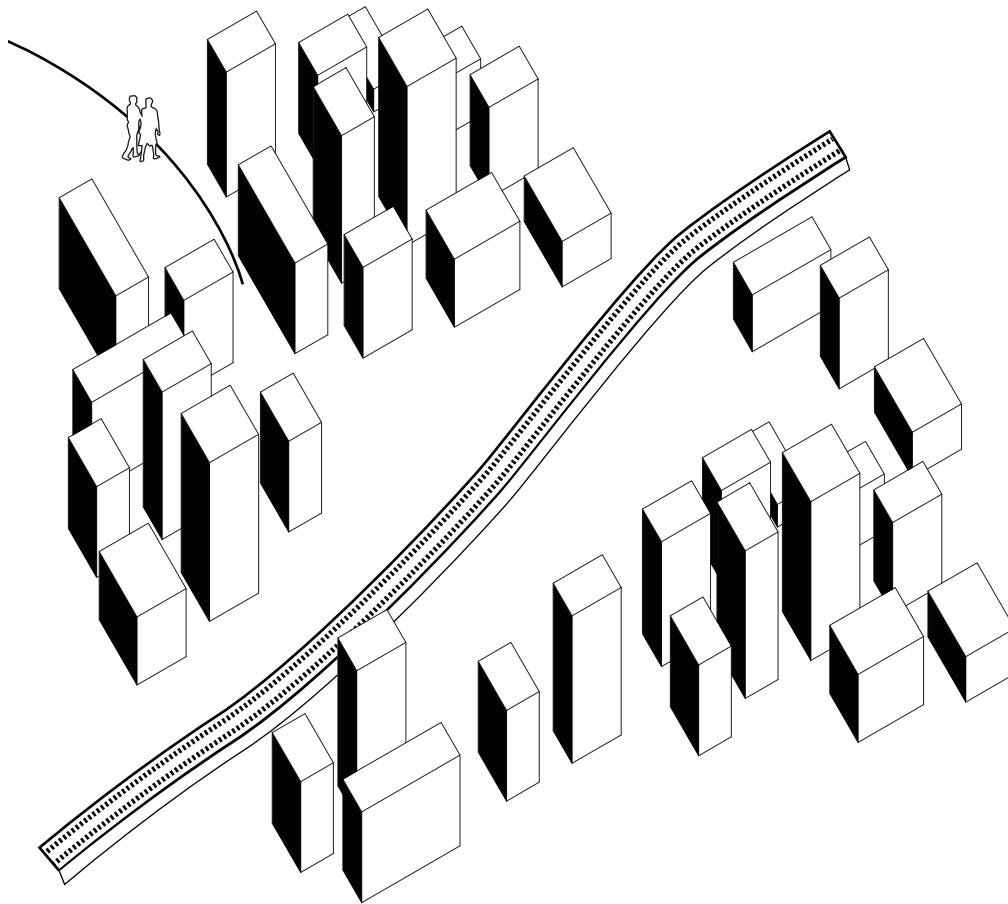
an overcrowded city:

- + lots of work but no place to live
- + extreme densities
- + prices of land skyrocket
- + clogged transit corridors
- + satellite cities

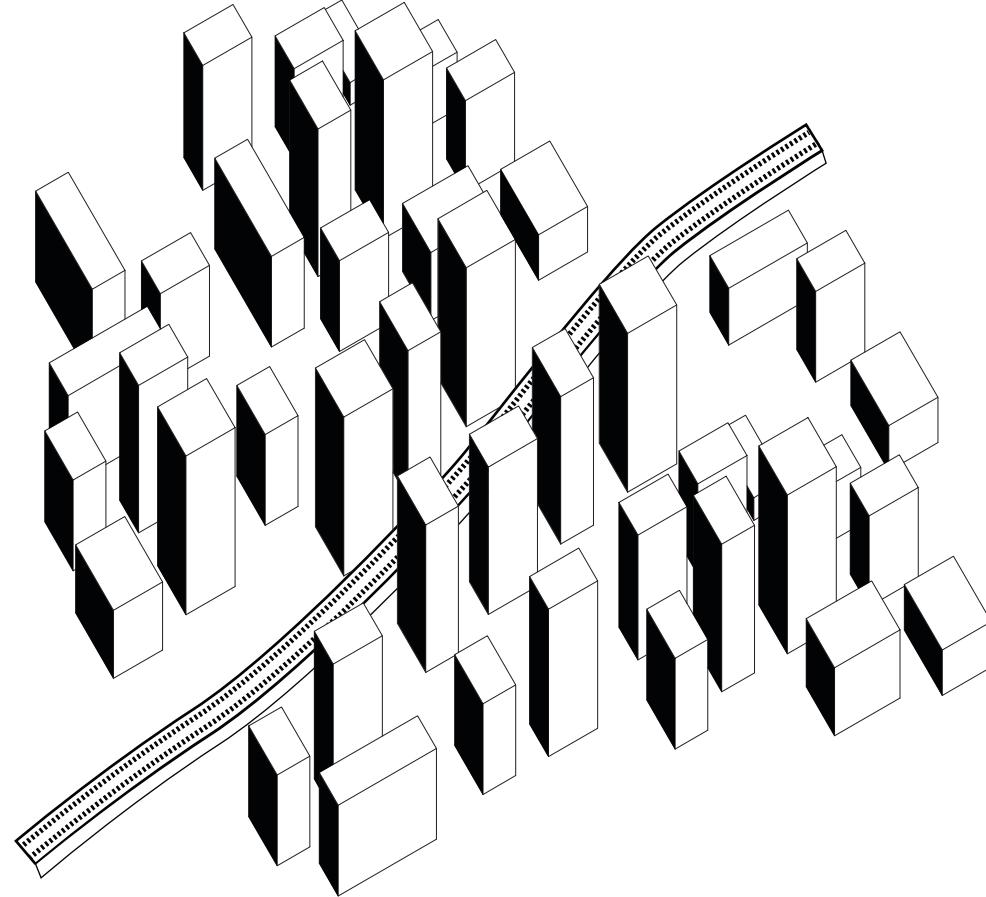
problem statement | *status quo: nala sopara*



problem statement | *MMR development plan 2014-2034*



problem statement | *development plan: new transit corridors*



density allowances will increase to up to FSI 4 for residential projects along transit corridors

problem statement | *development plan : densification*



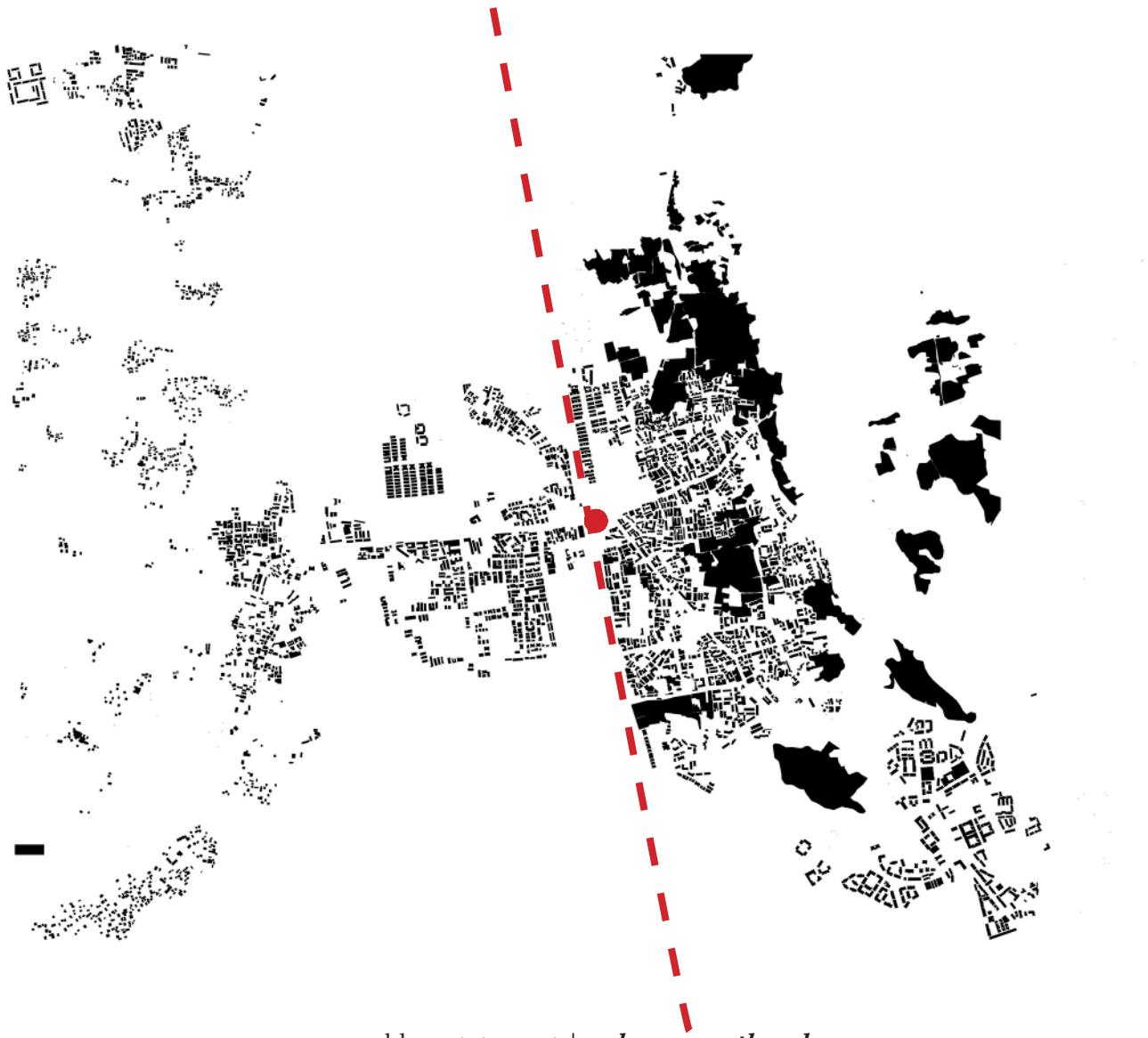
problem statement | *development plan: new trainline*



problem statement | *nala sopara*

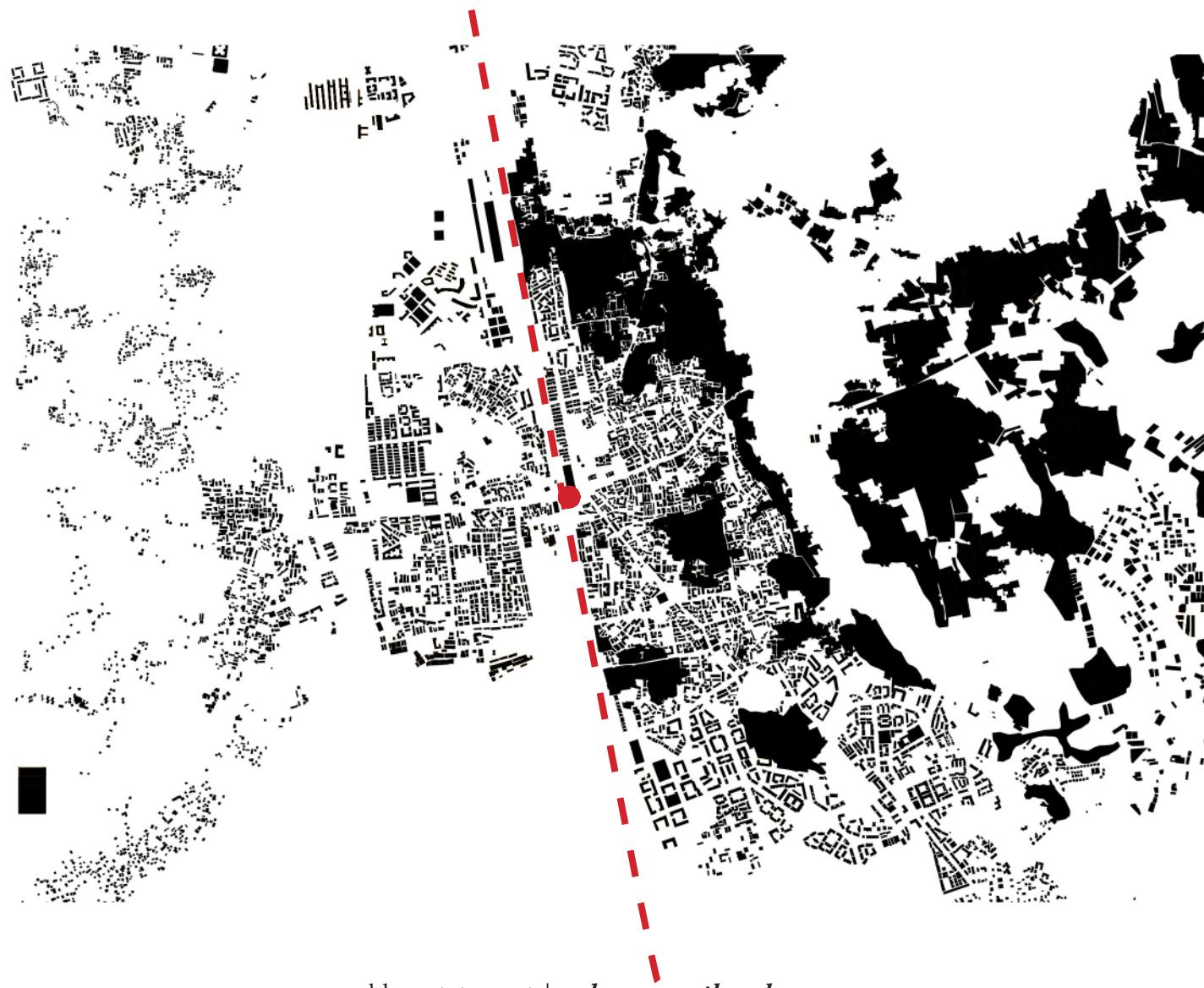


2002



problem statement | *urban growth nala sopara*

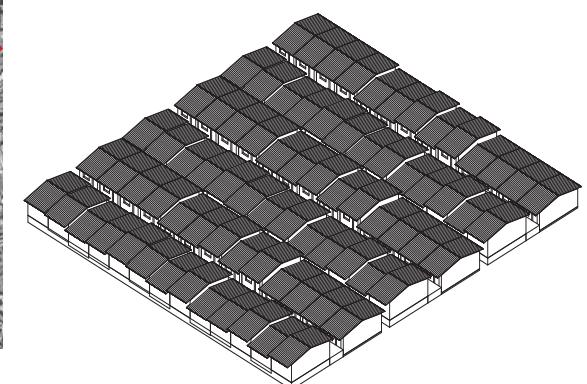
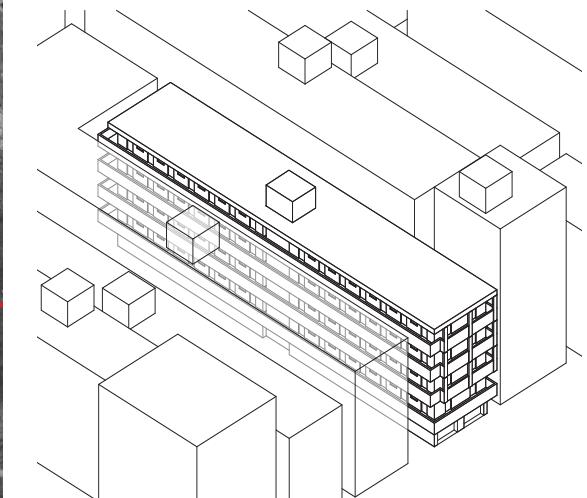
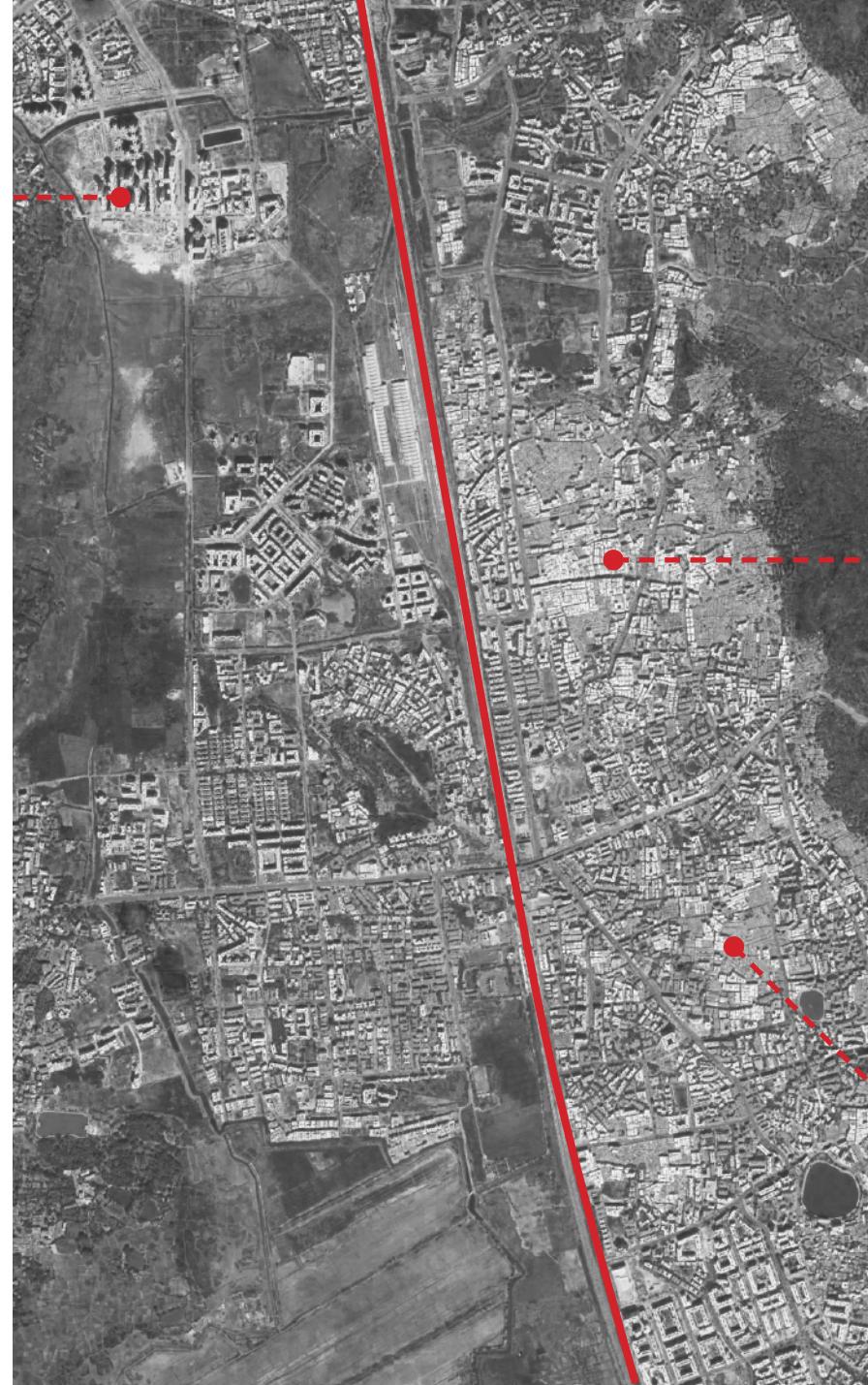
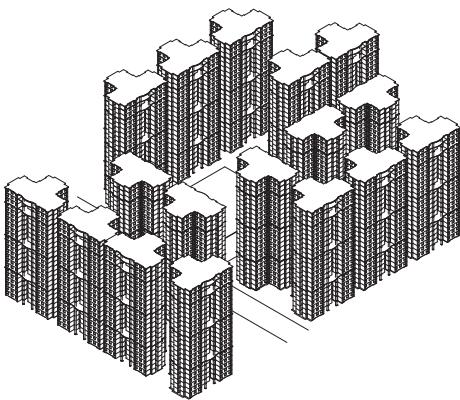
2017



problem statement | *urban growth nala sopara*



problem statement | *planned trainline*



problem statement | developments: open land vs redevelopment

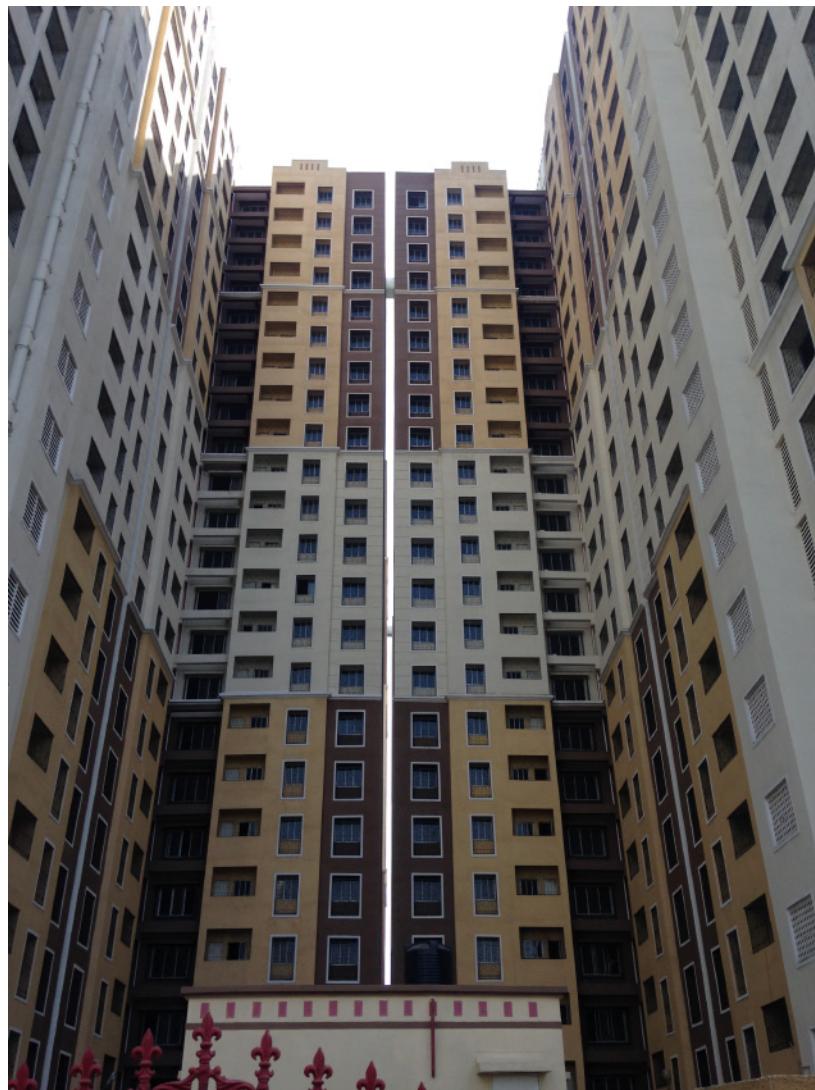


problem statement | new development: ***MHADA housing colony: virar
bolinj***

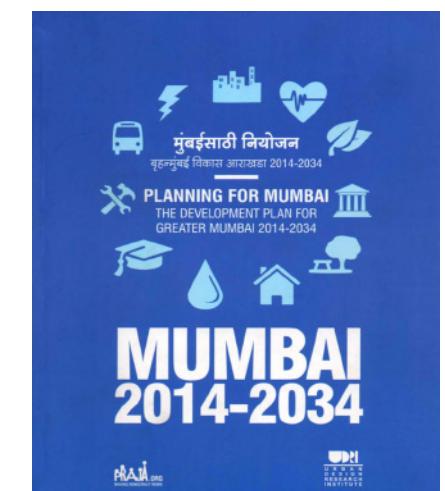


- + no relation to the ground
- + vertical gated communities
- + extreme density: FSI 4 and higher
- + no bigger amenities

problem statement | new development: ***MHADA housing colony***

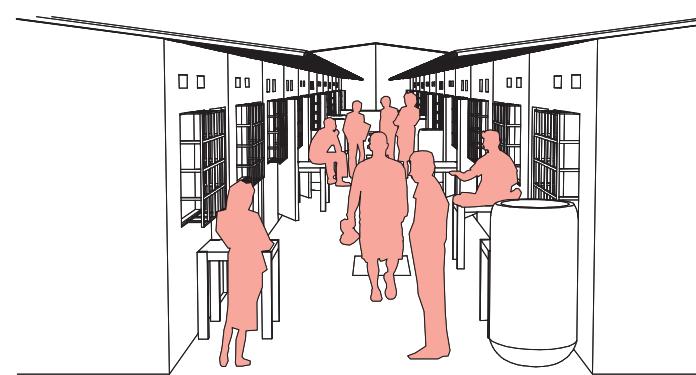
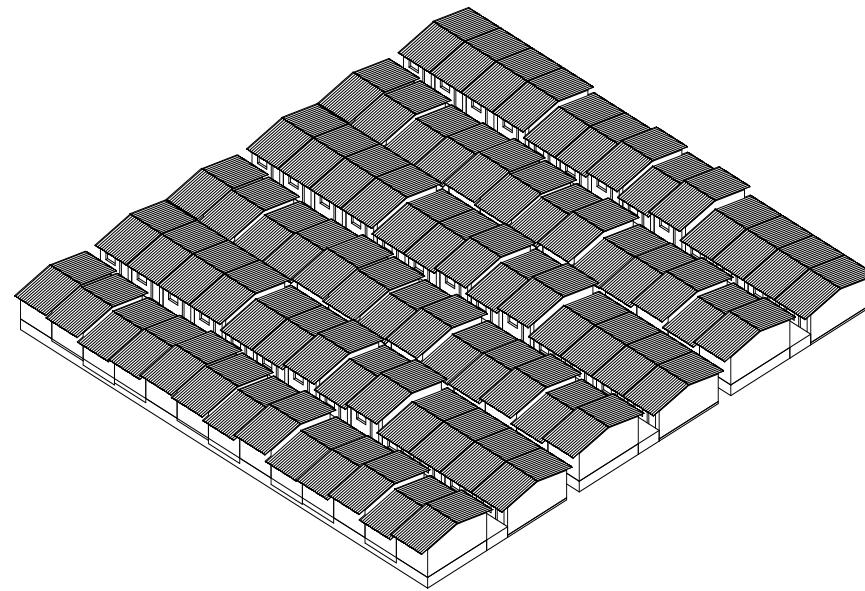


- + no relation to the ground
- + vertical gated communities
- + extreme density: FSI 4 and higher
- + no amenities or shops

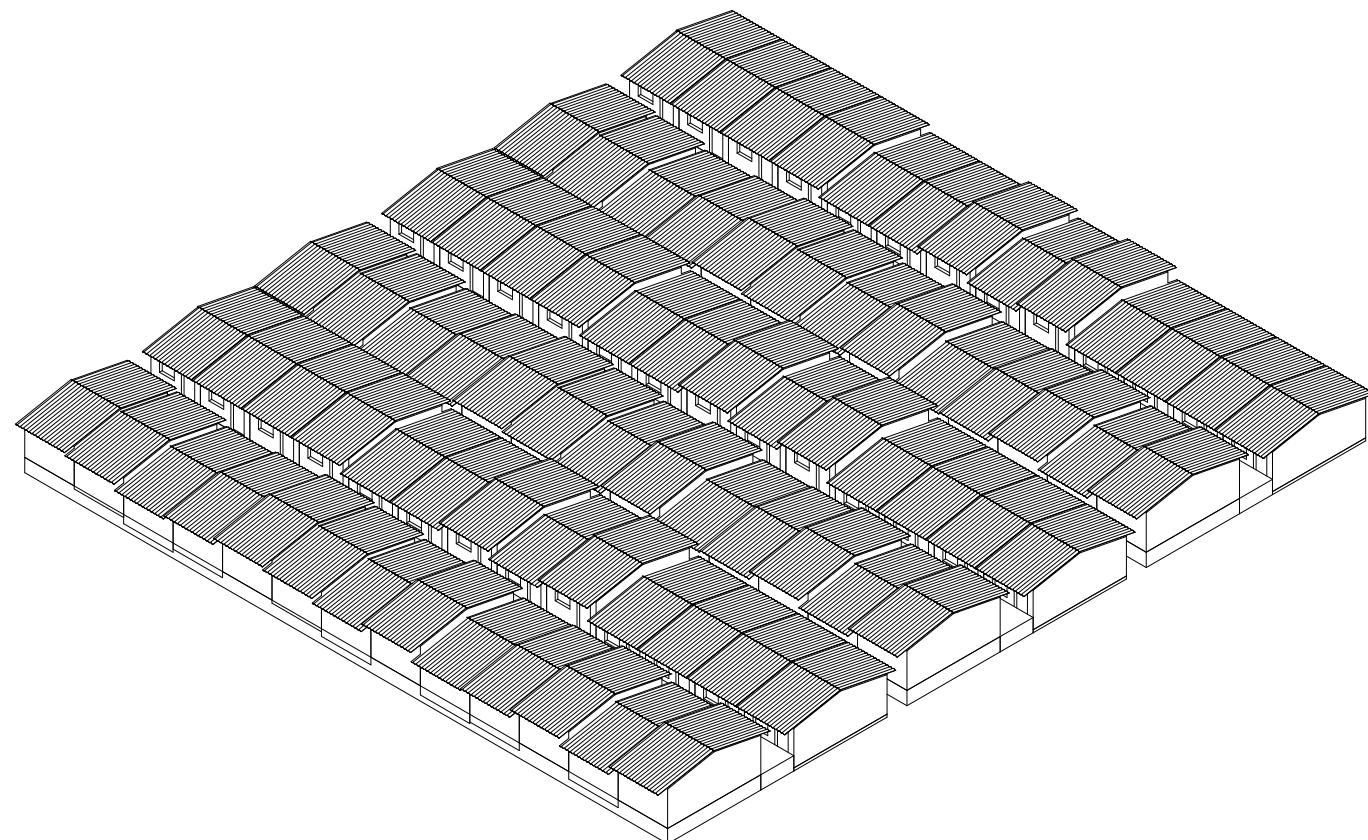


problem statement | new development: ***MHADA housing colony***

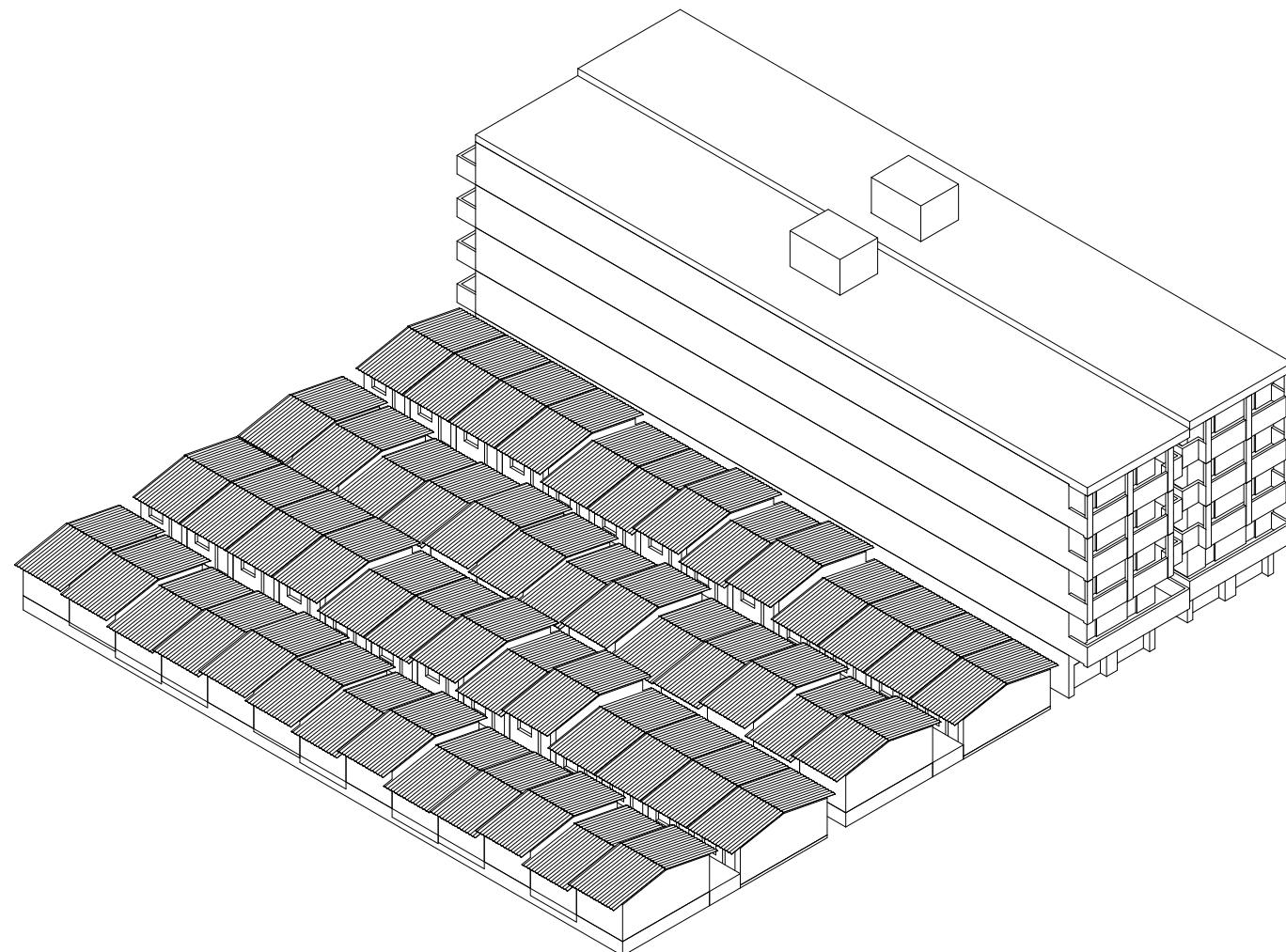




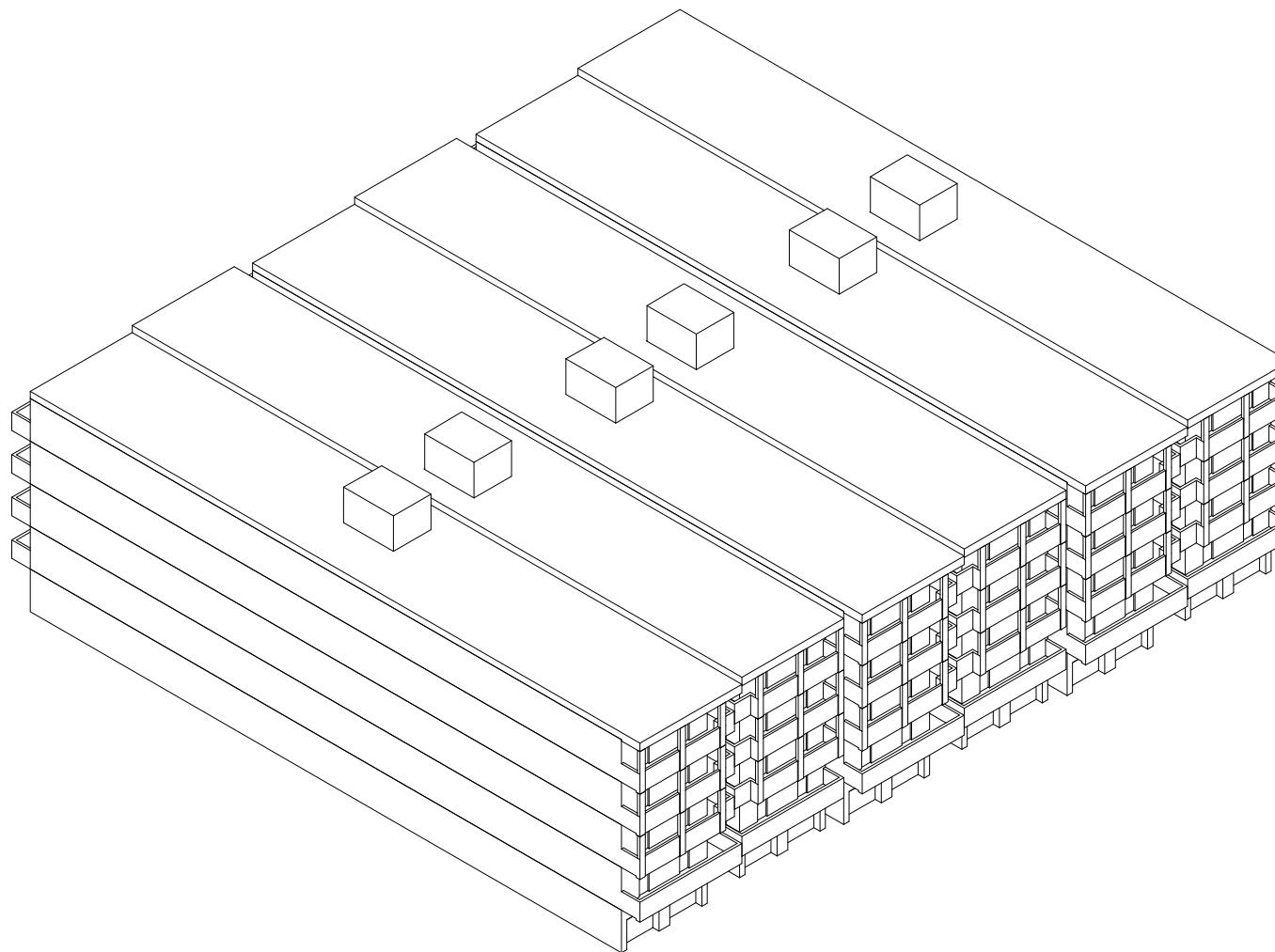
problem statement | *redevelopment densification: baithi chawl*



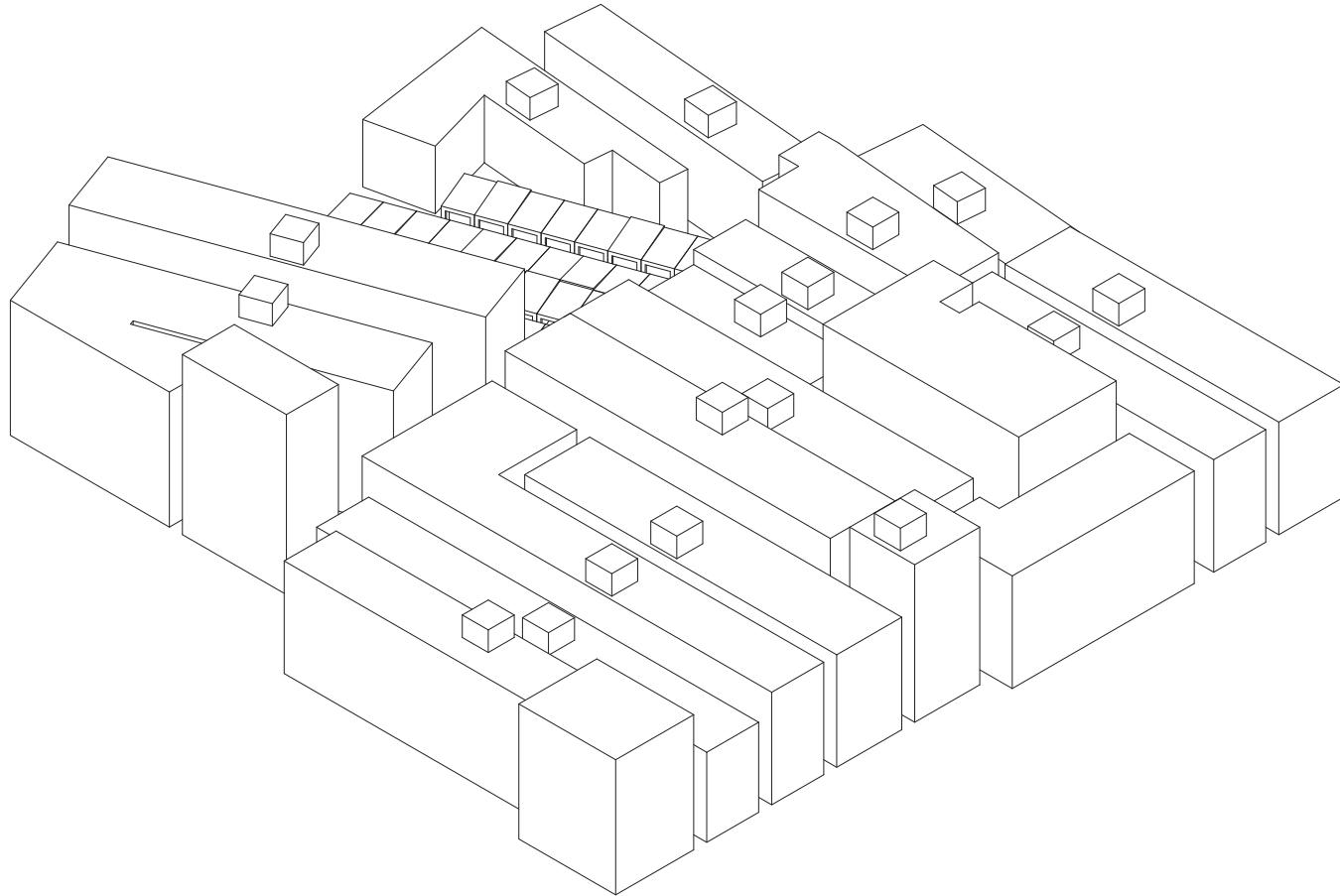
problem statement | *redevelopment densification: baithi chawl*



problem statement | *redevelopment densification: baithi chawal > chawal*



problem statement | *redevelopment densification: baithi chawel > chawel*



problem statement | *redevelopment densification: baithi chawl > chawl*

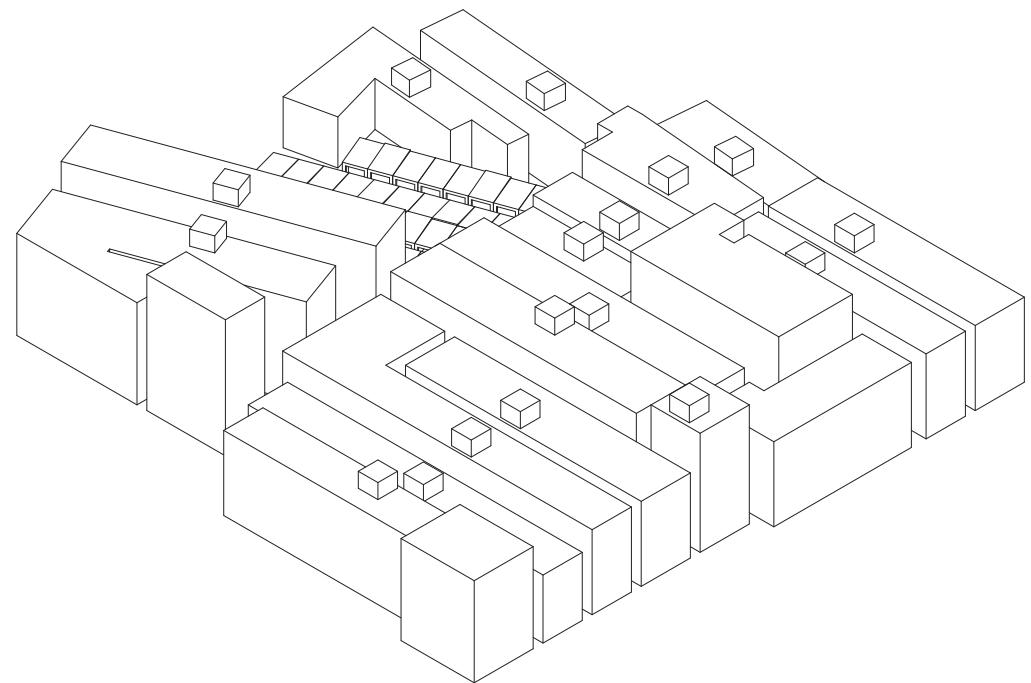


problem statement | *redevelopment densification: baithi chawl > chawl*

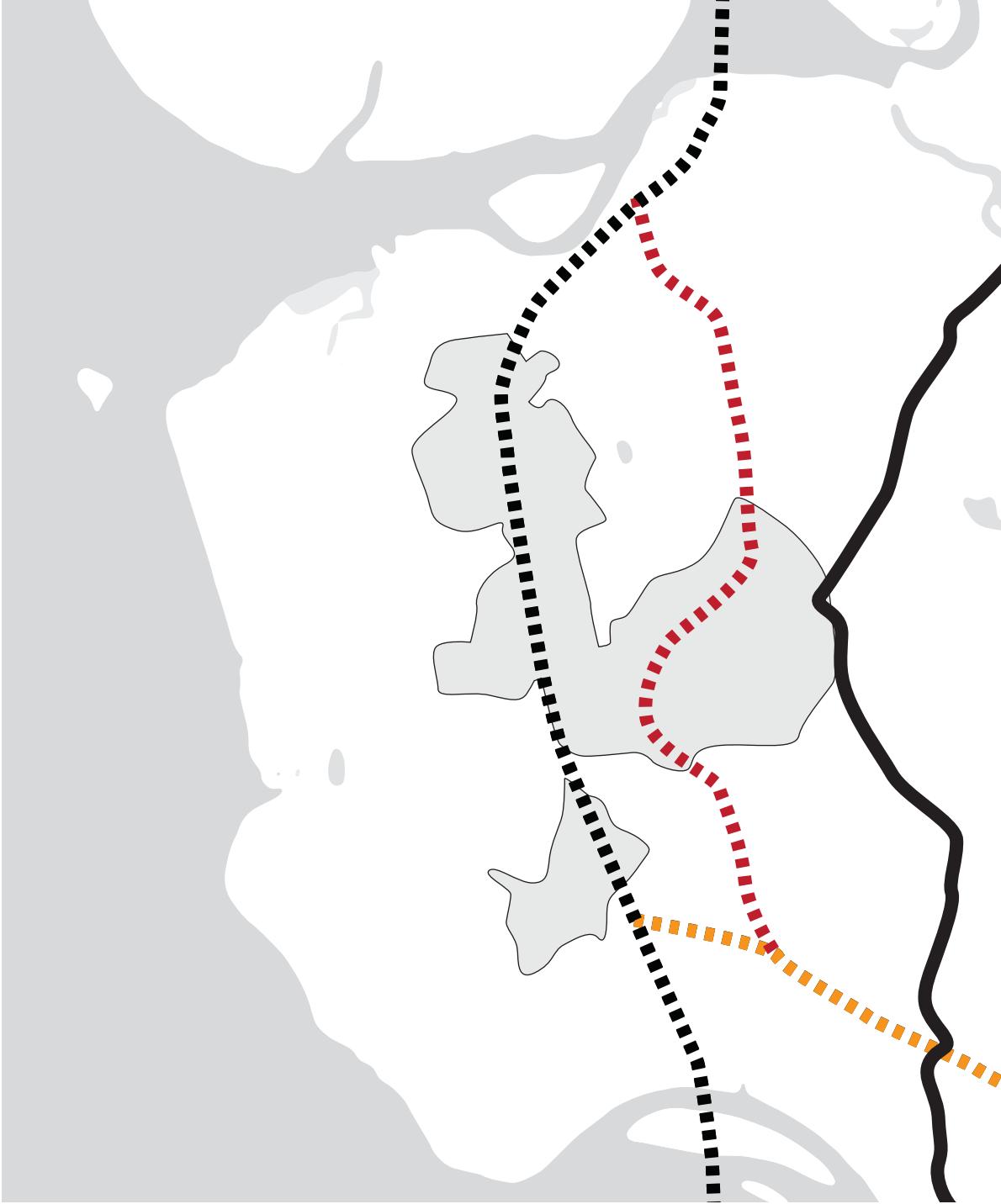


- + no open ground to relate to
- + poor conditions in terms of ventilation, daylight access and sanitation
- + monotypological unit sizes
- + vertical slumification

problem statement | *redevelopment densification: baithi chawl > chawl*

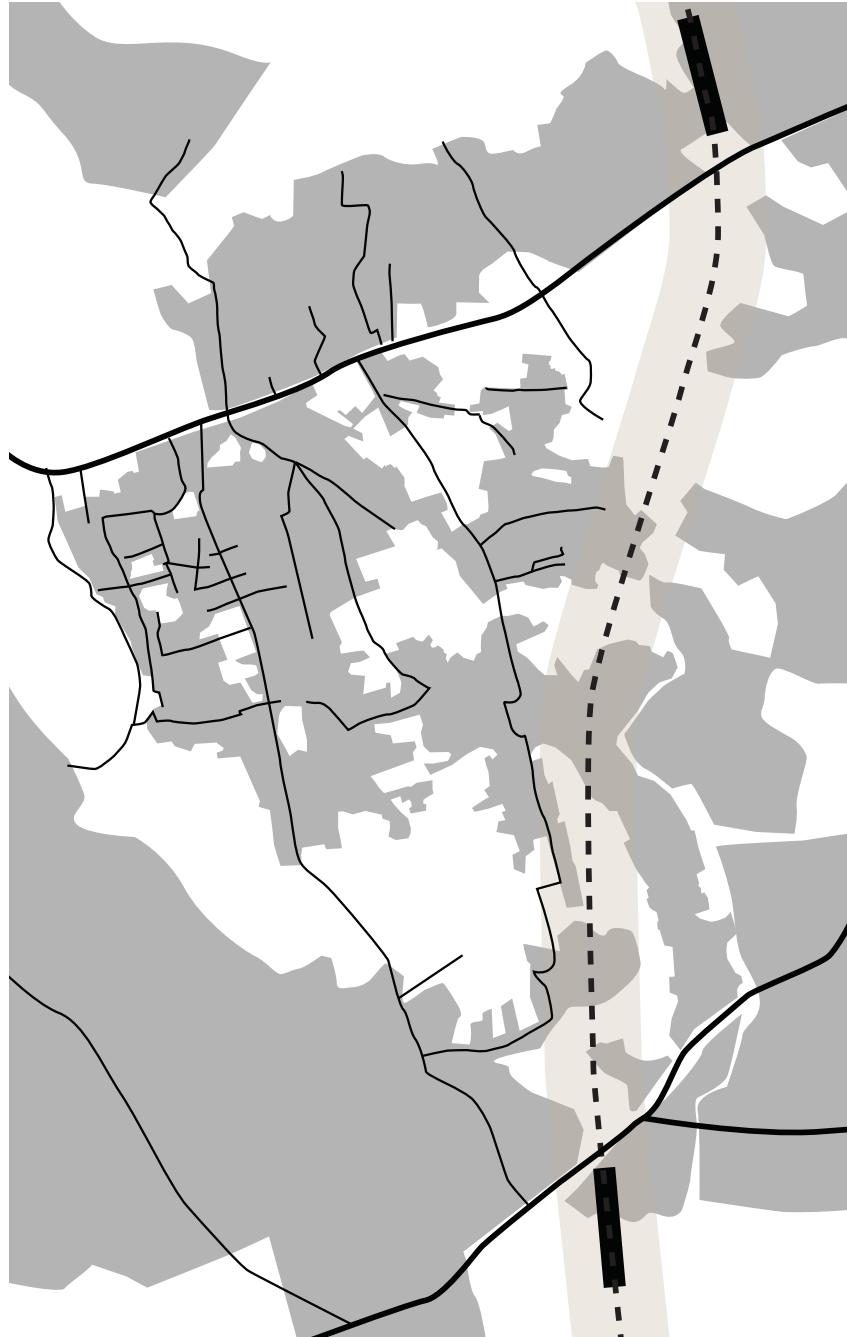


problem statement | *current market driven densification*

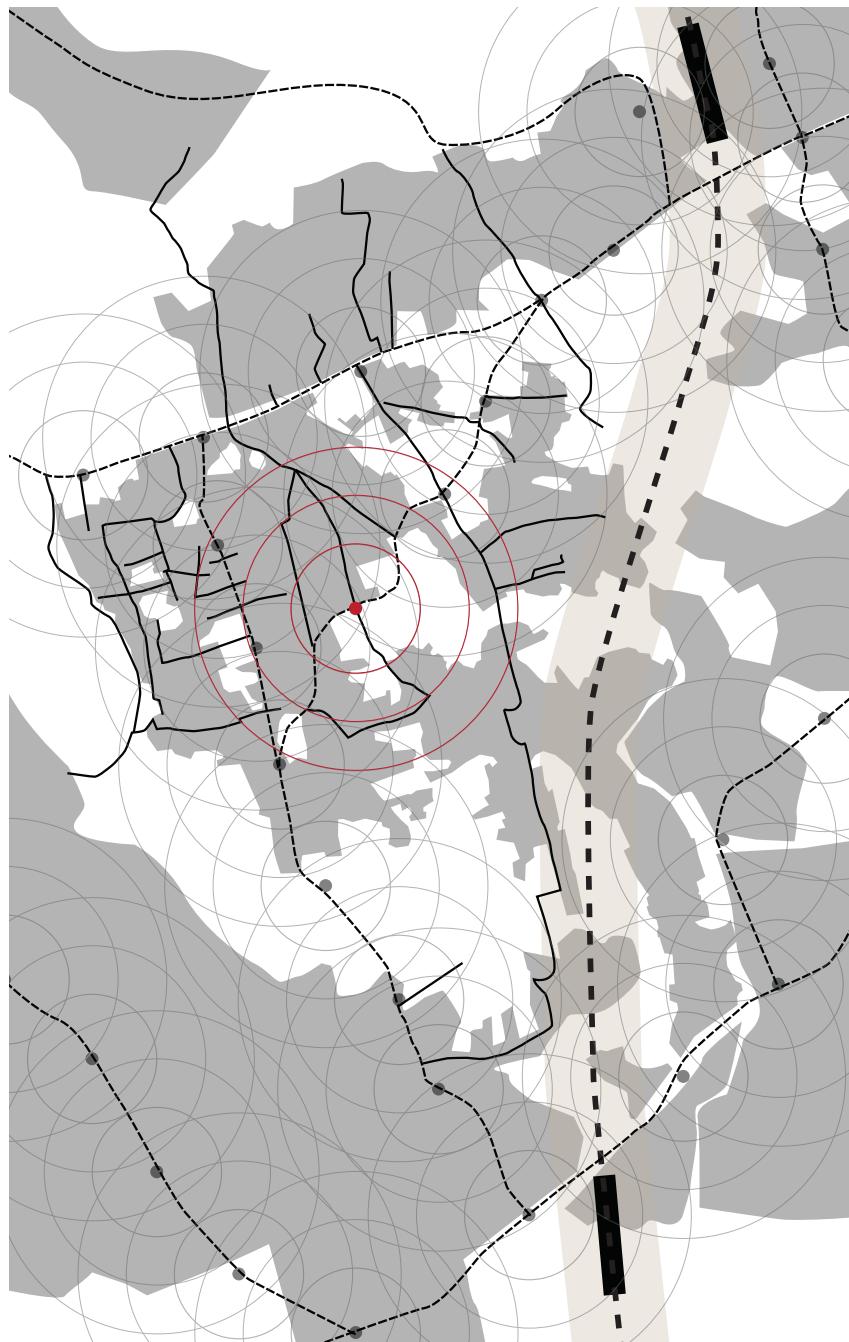


problem statement | *design direction: alternative infrastructural
densification*

regional strategy



regional strategy | *new train and buslines*



regional strategy | ***new train and buslines***

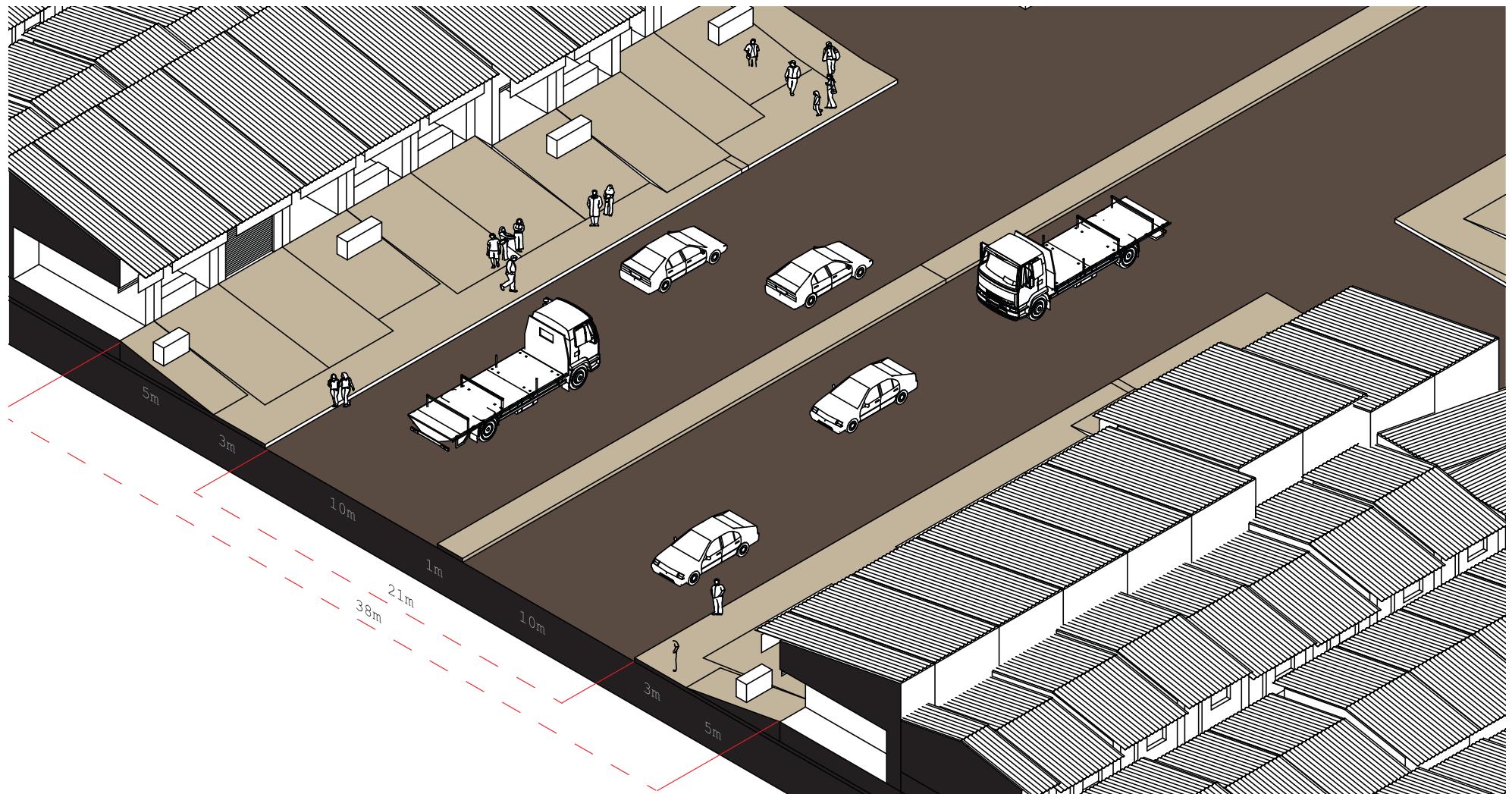
site analysis



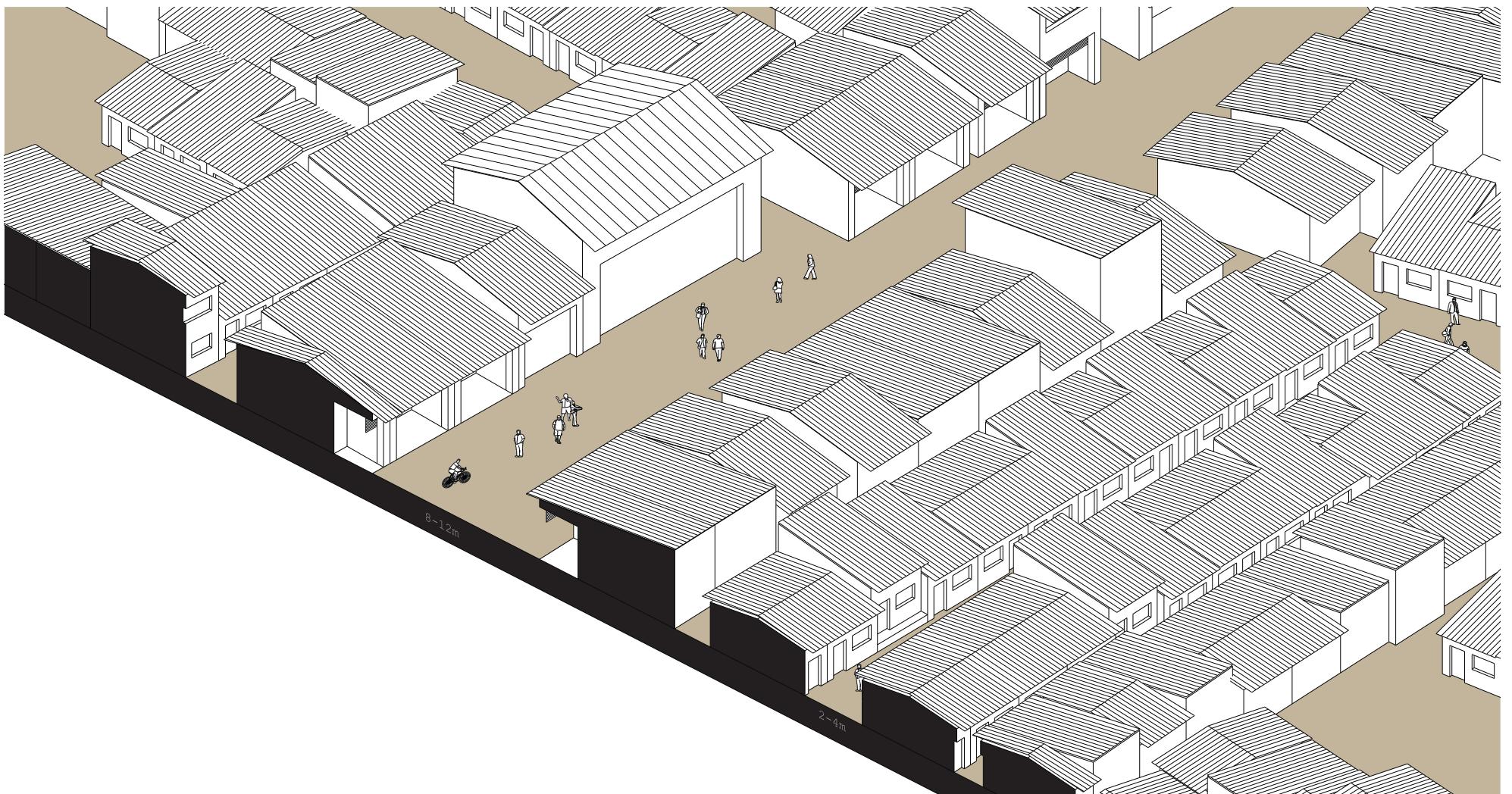
site analysis | *baithi chawls and hill*



site analysis | ***hierarchy of roads***



site analysis | **main road**



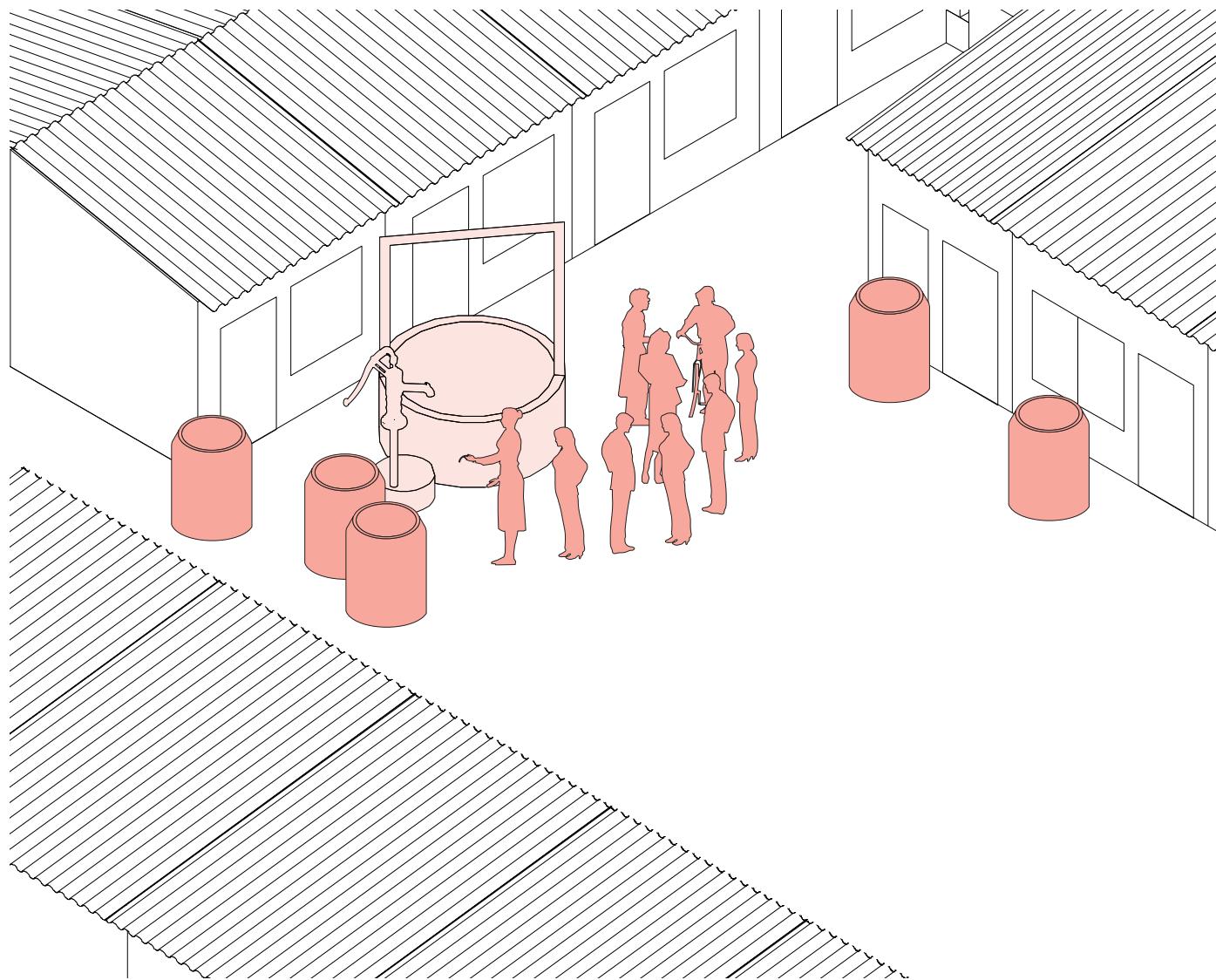
site analysis | ***secondary roads***



site analysis | *secondary roads: shops*

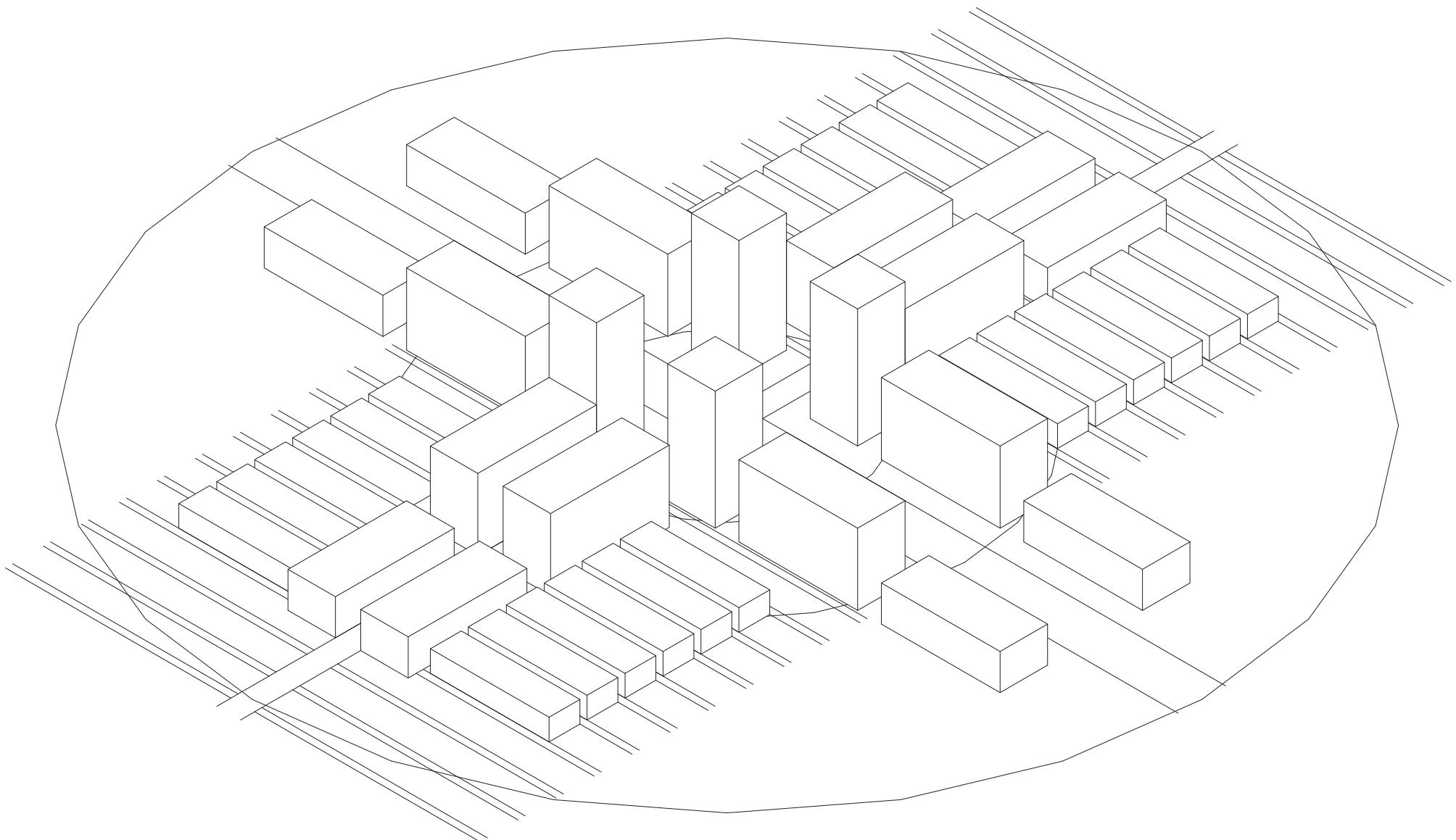


site analysis | *community lane*

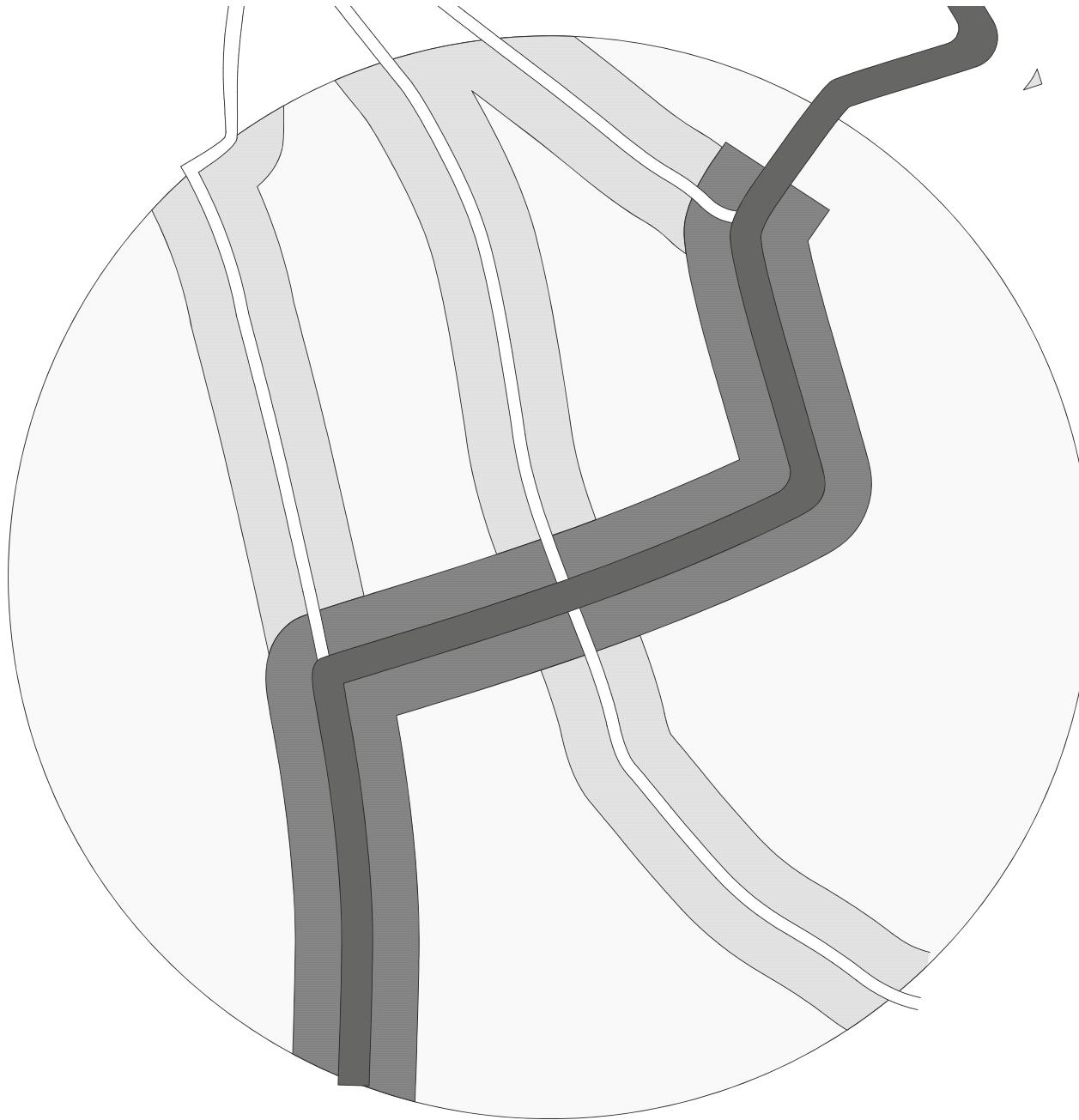


site analysis | *well as a social space*

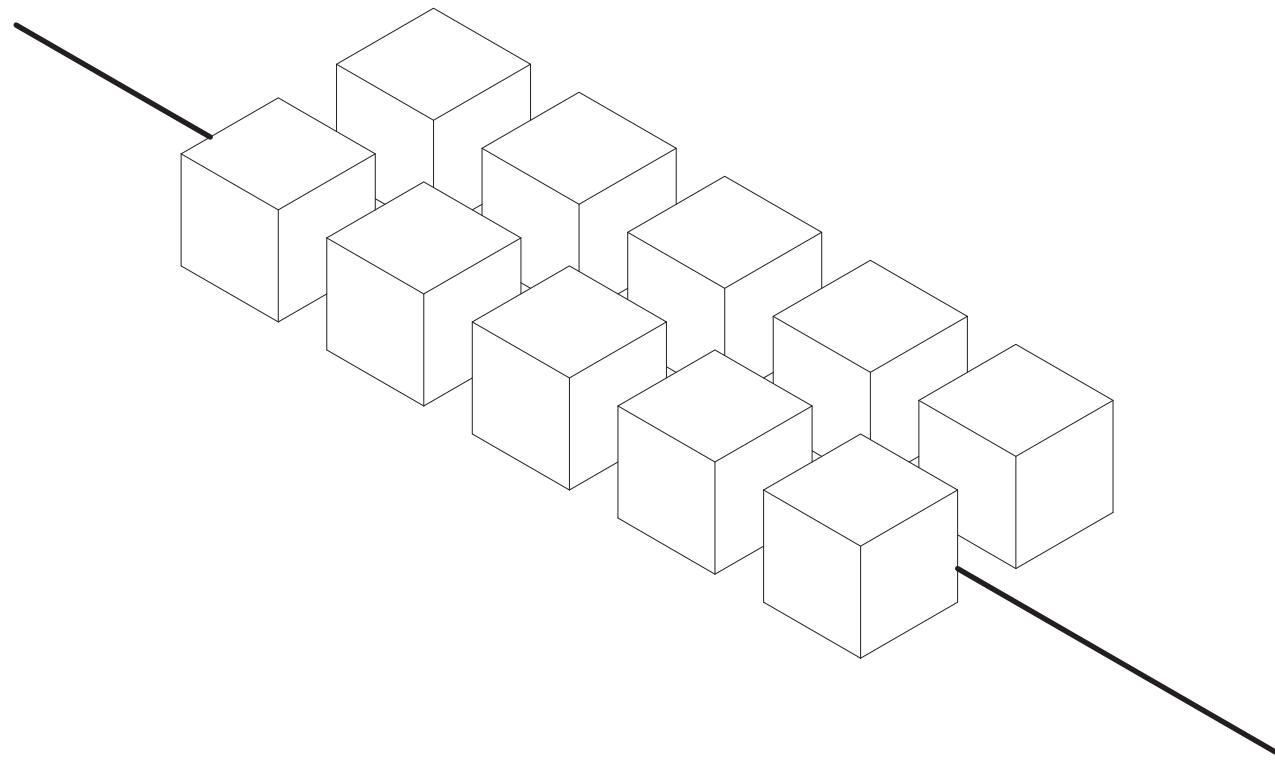
design strategy



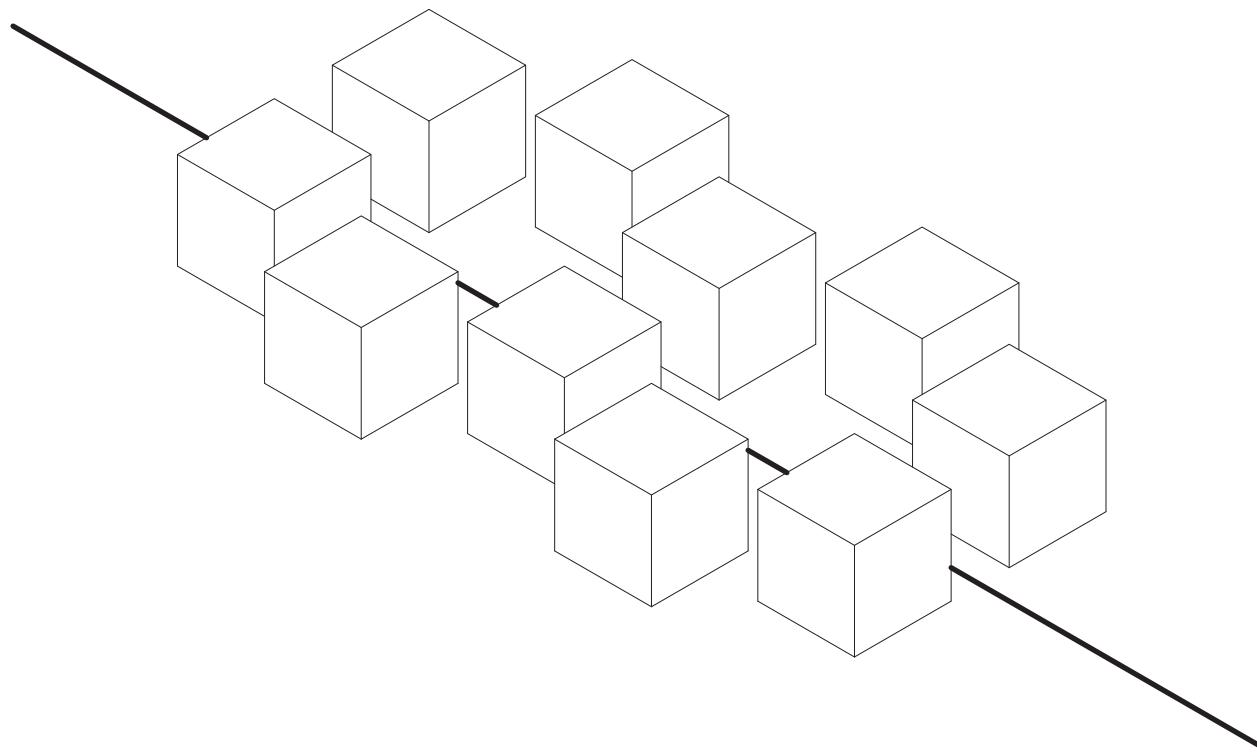
design strategy | *densification pyramid*



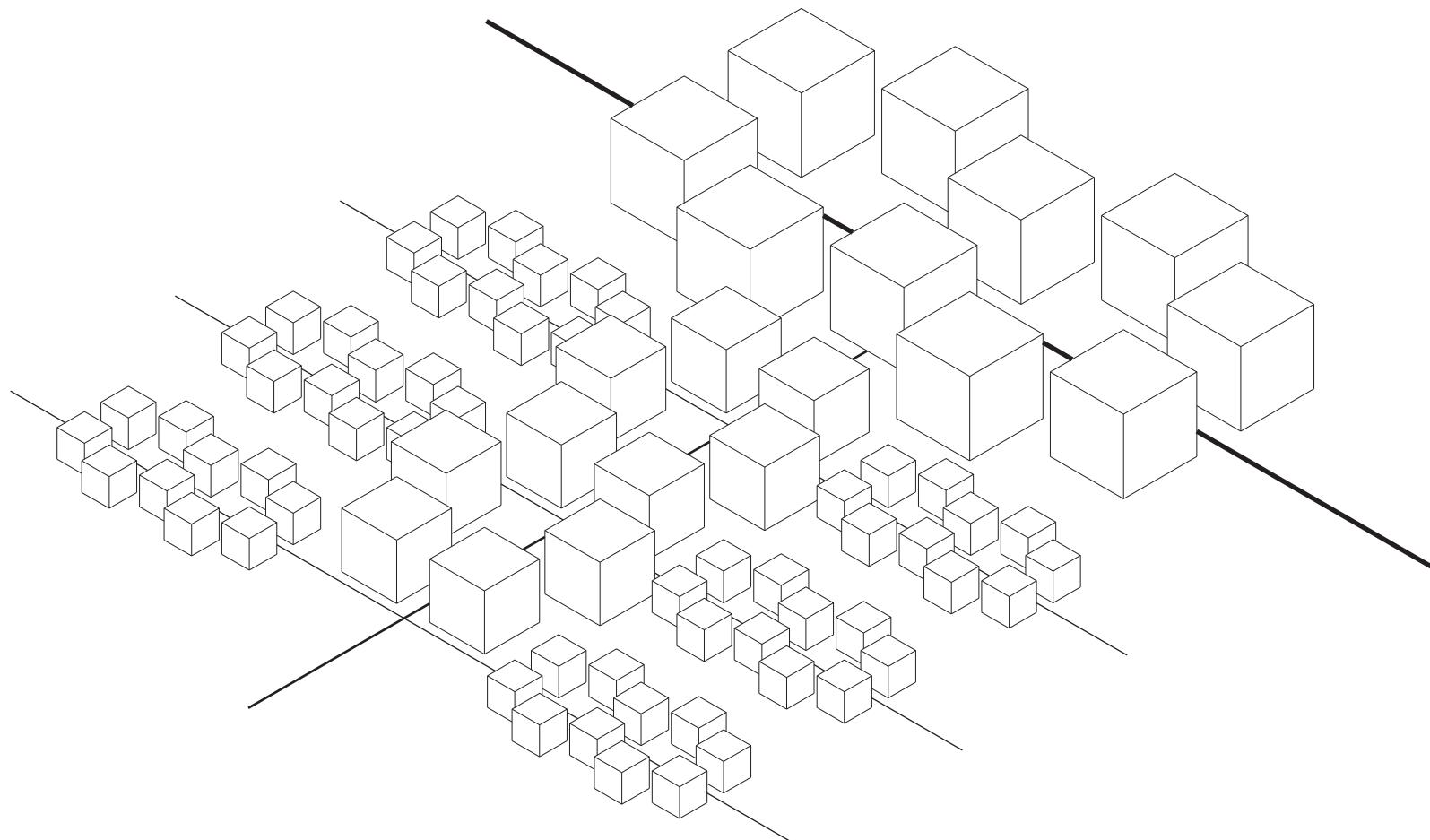
design | *density pyramid along existing roads*



design strategy | *linear densification*



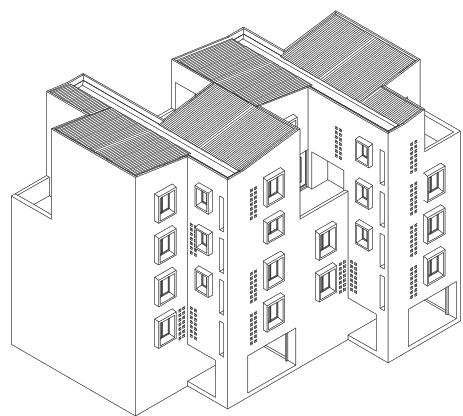
design strategy | *creating space*



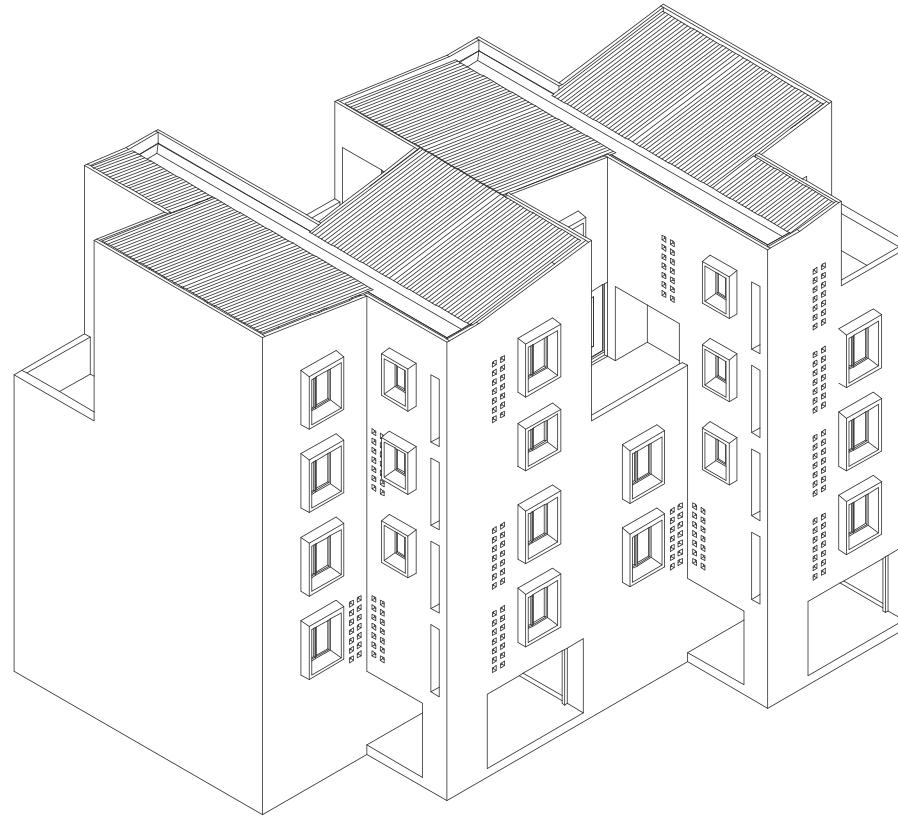
design strategy | *fractalsation*

design

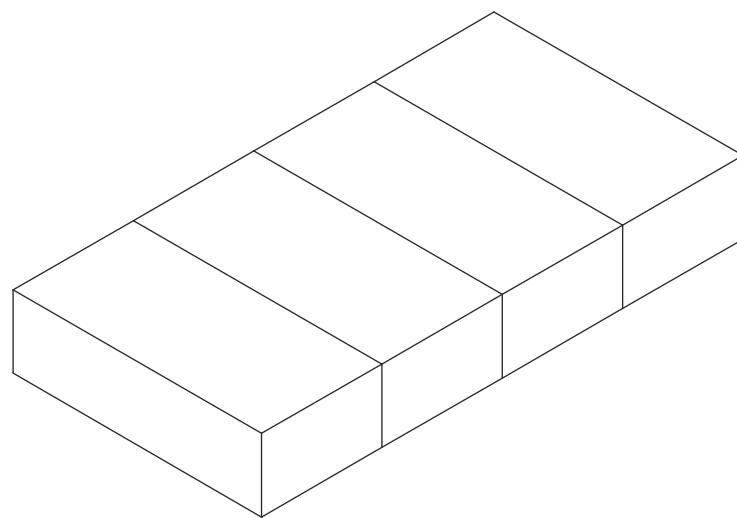




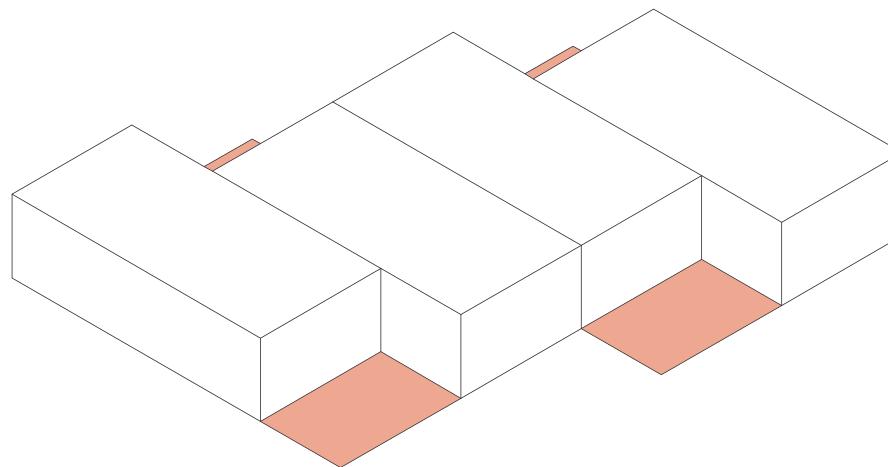
design | *two types: different density*



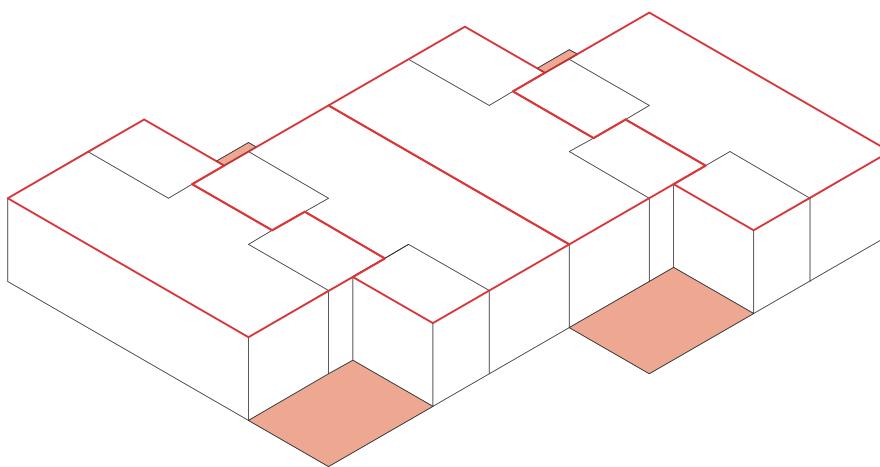
design | *midrise*



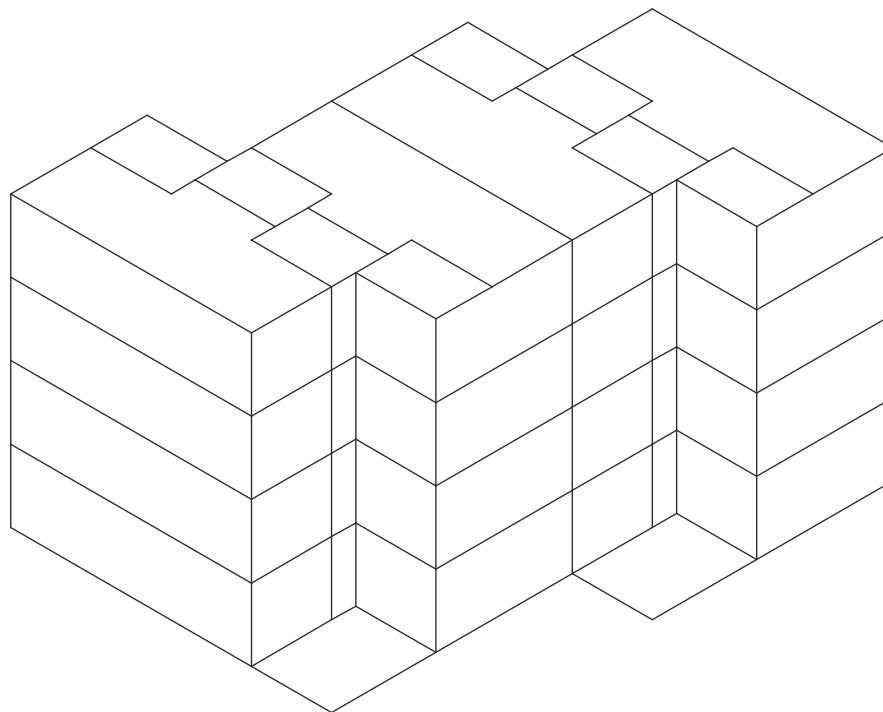
design | *design scheme*



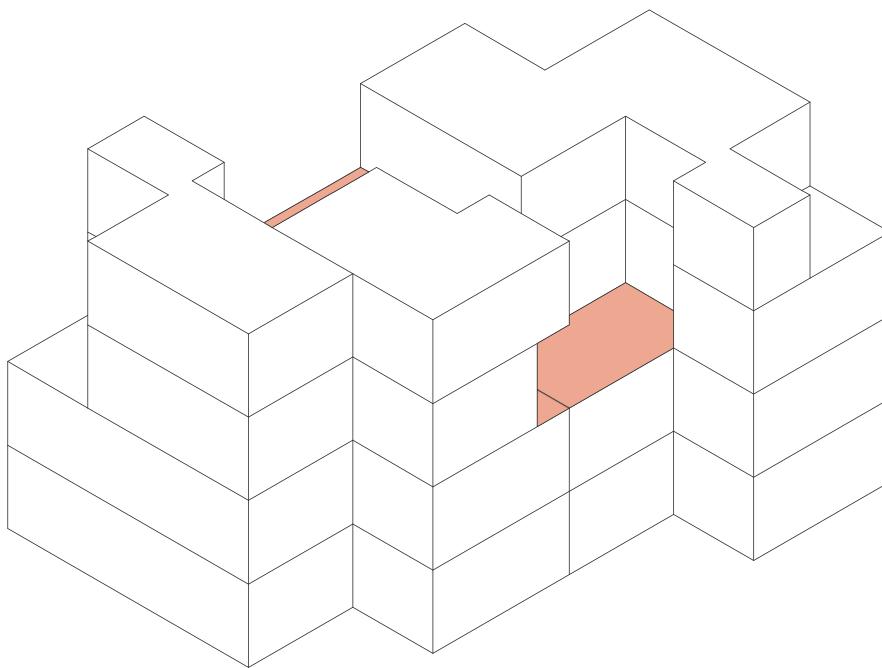
design | *create niches*



design | *expand interior space*

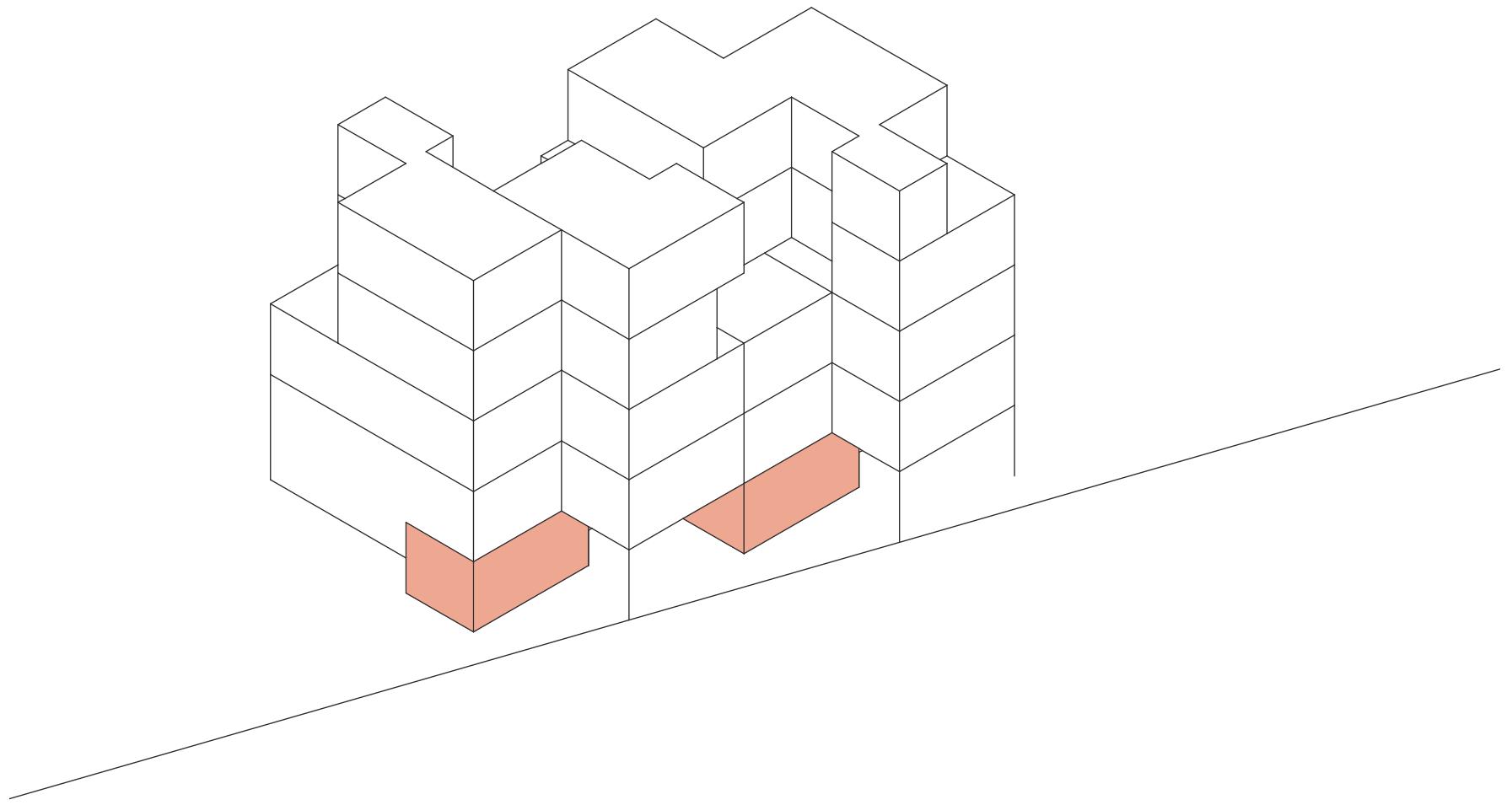


design | *stacking*



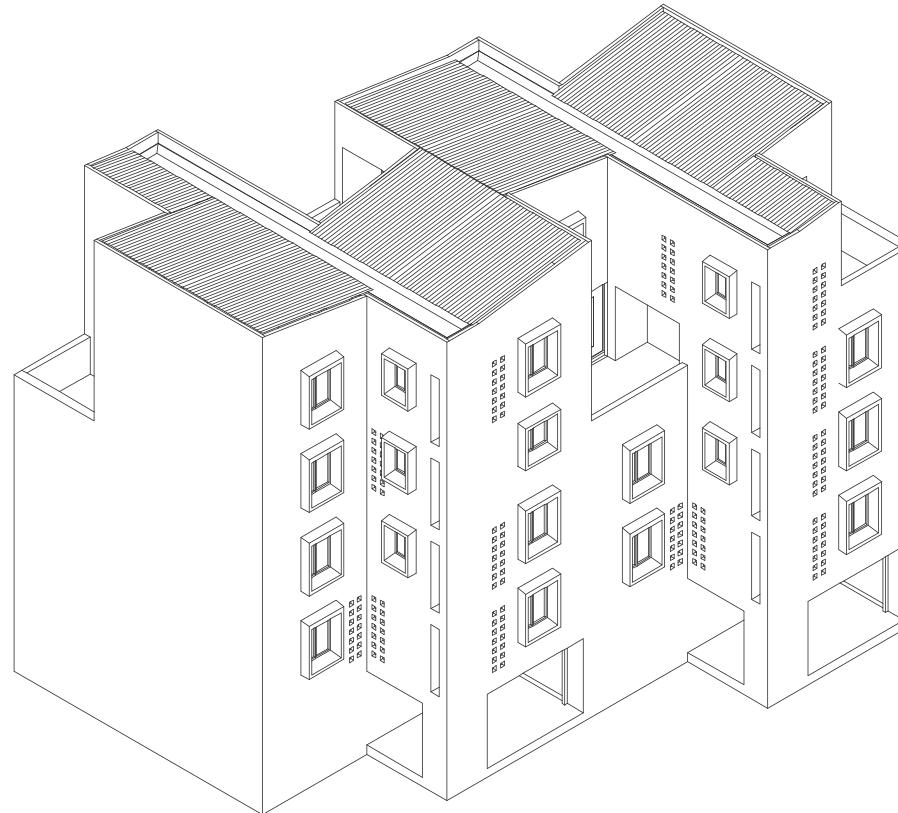
design | *create space*





design | *shops*





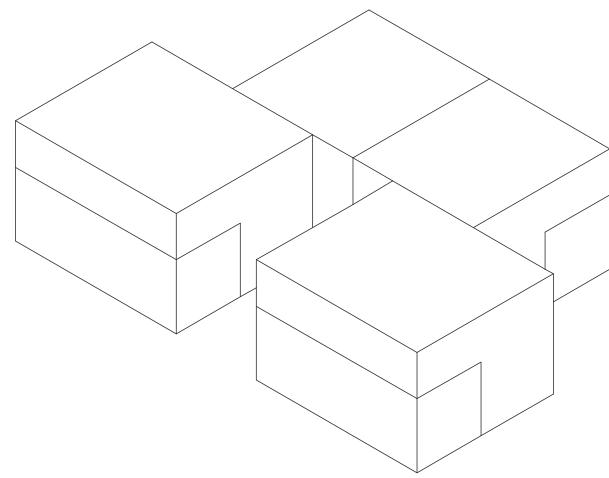
design | *midrise block*



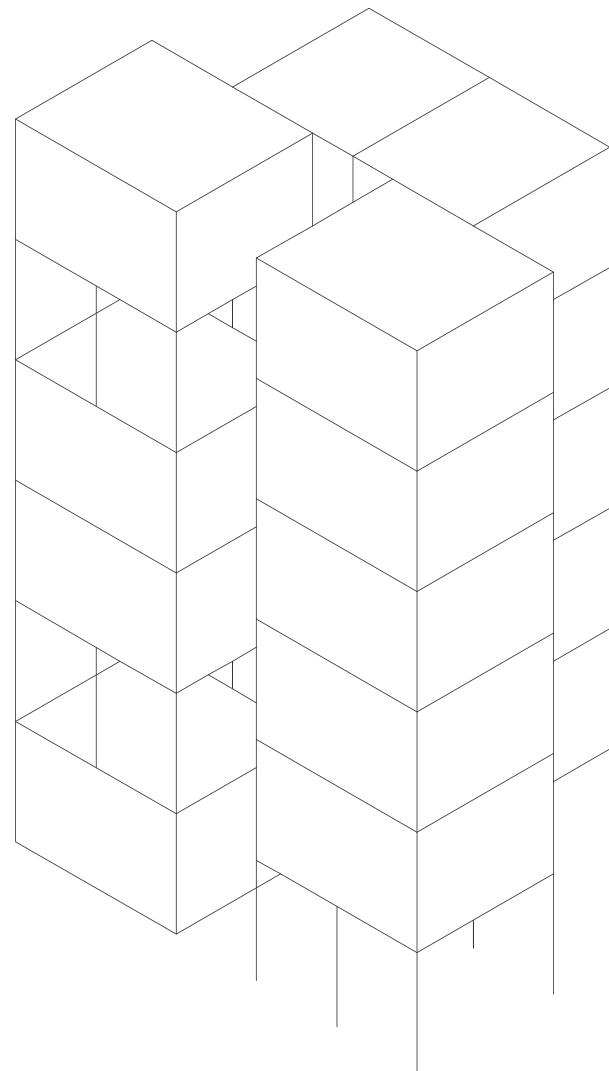


design | *tower*

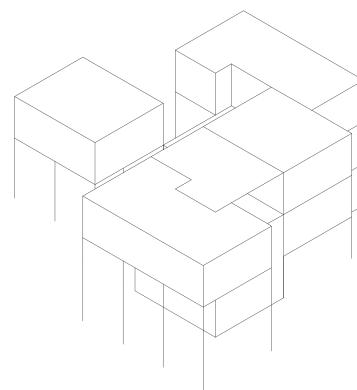
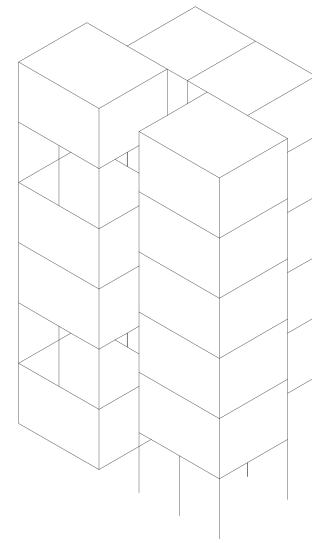




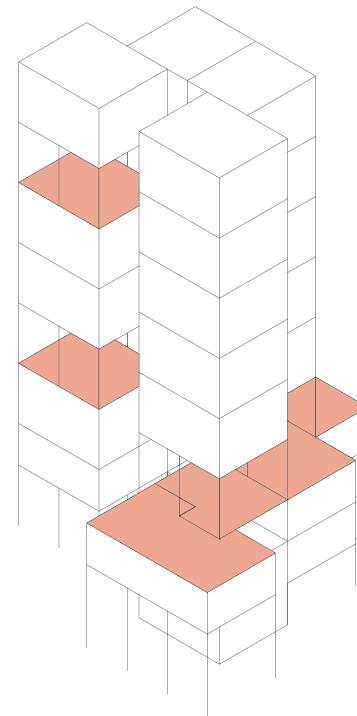
design | ***small units***



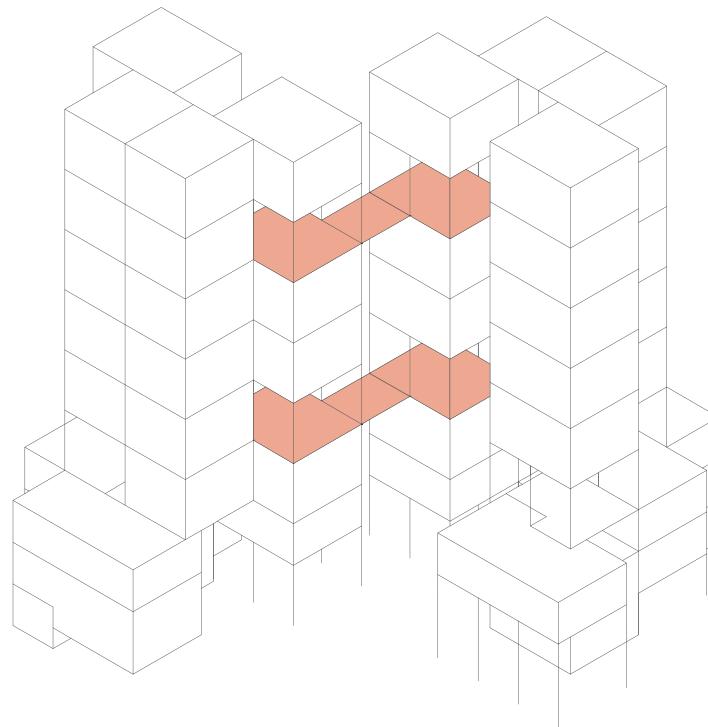
design | ***stacking***



design | *plinth*







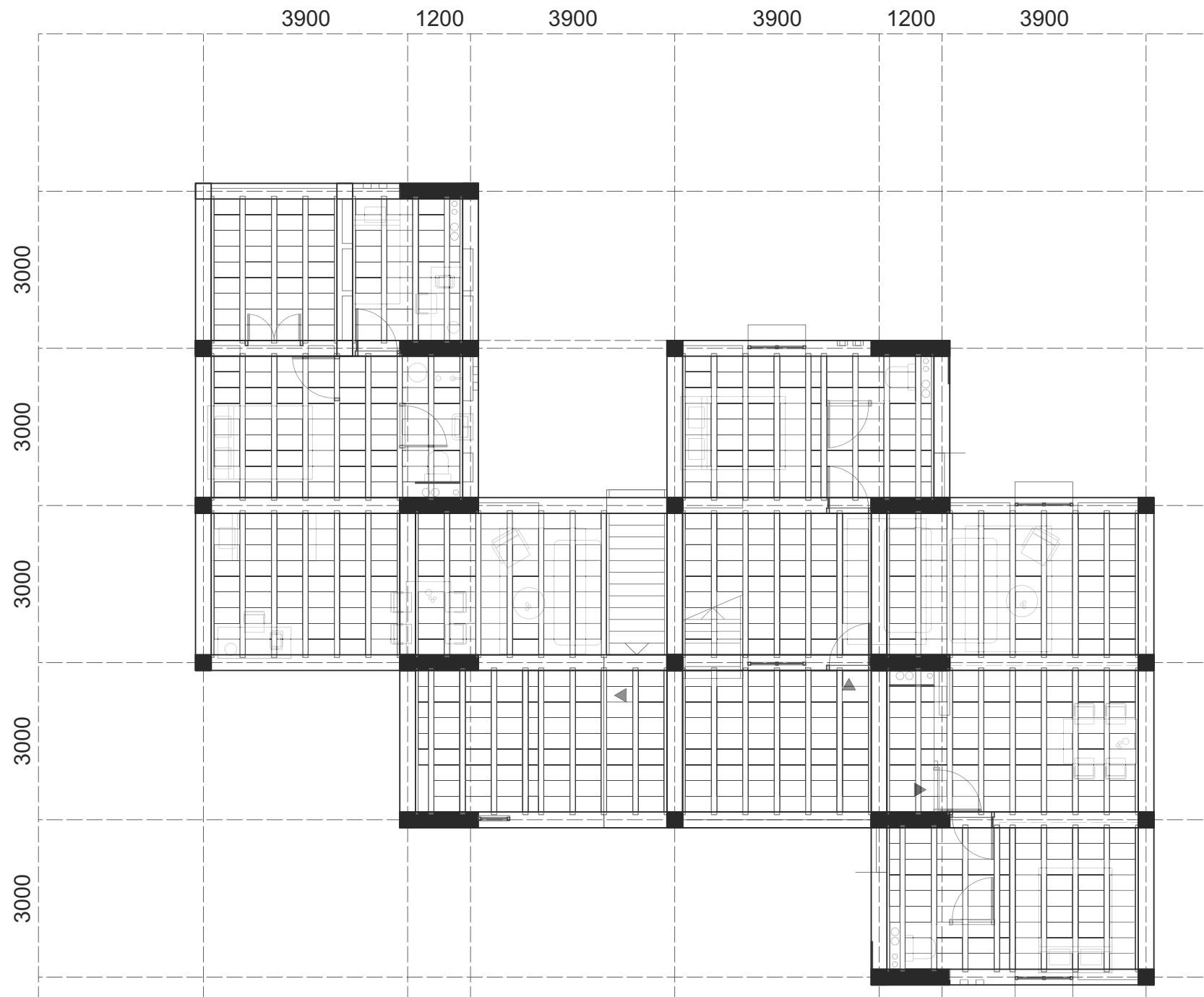
design | *clustering of social spaces*



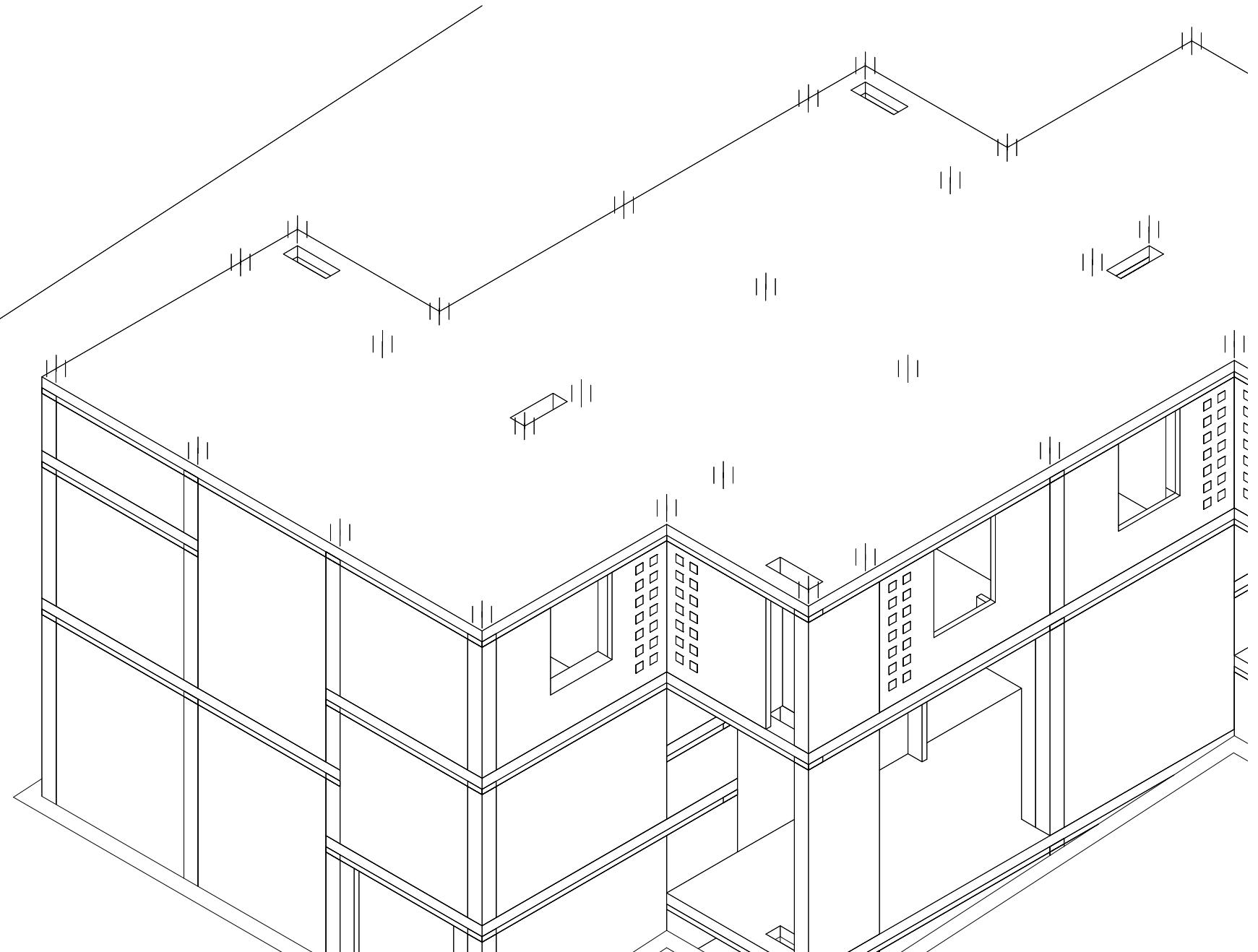
design | *towers*



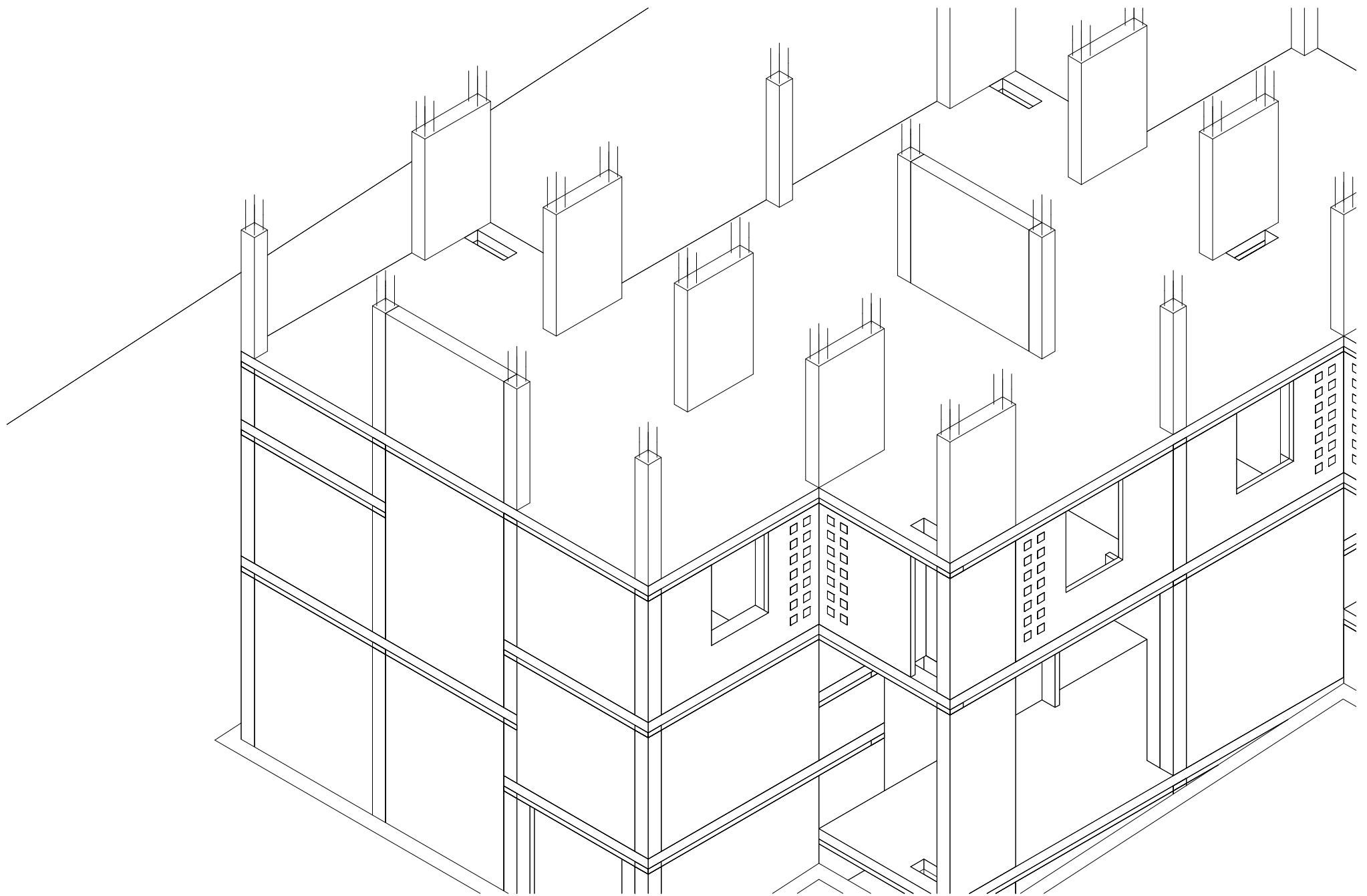
building technology



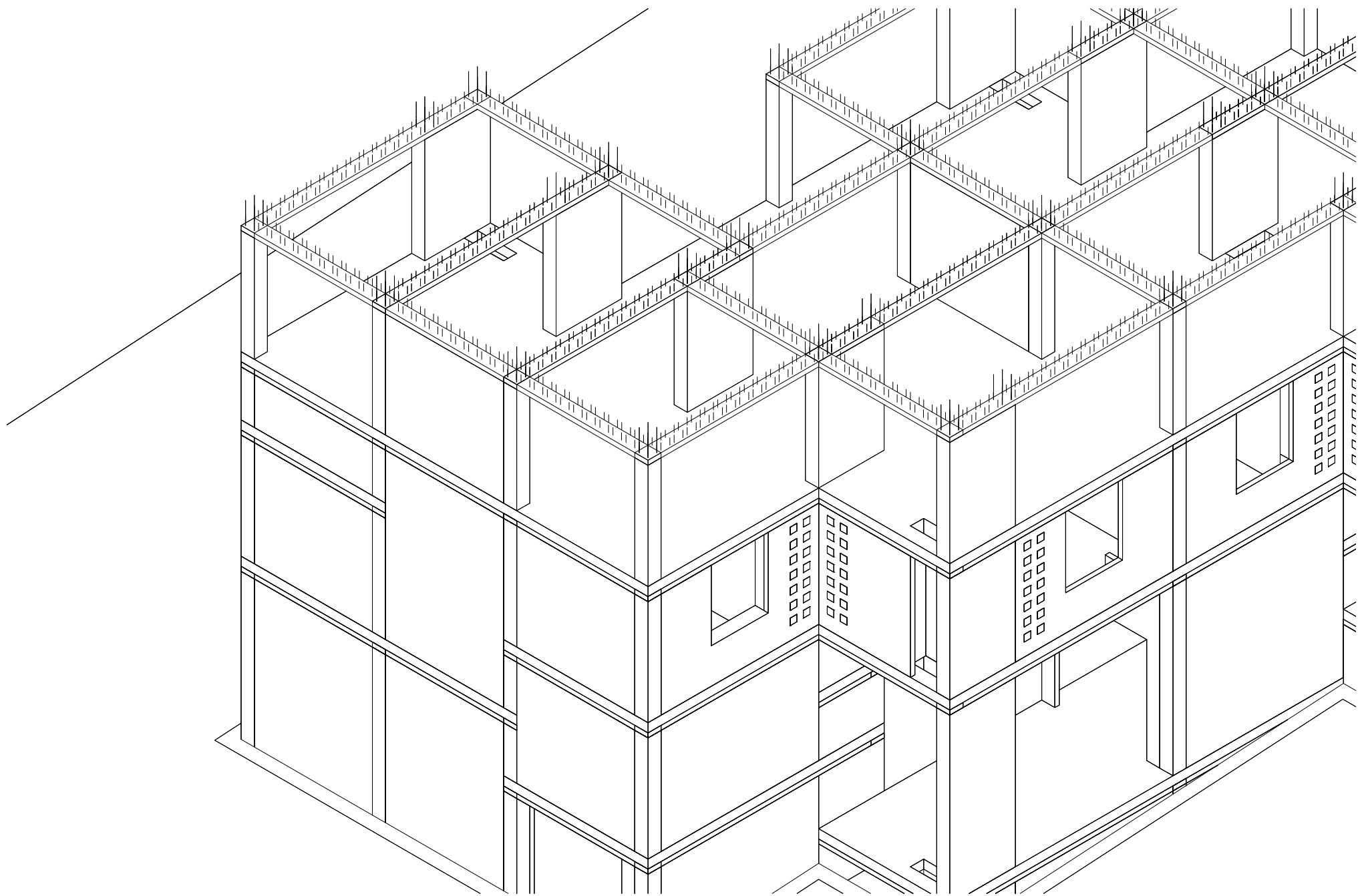
design | *structural grid*



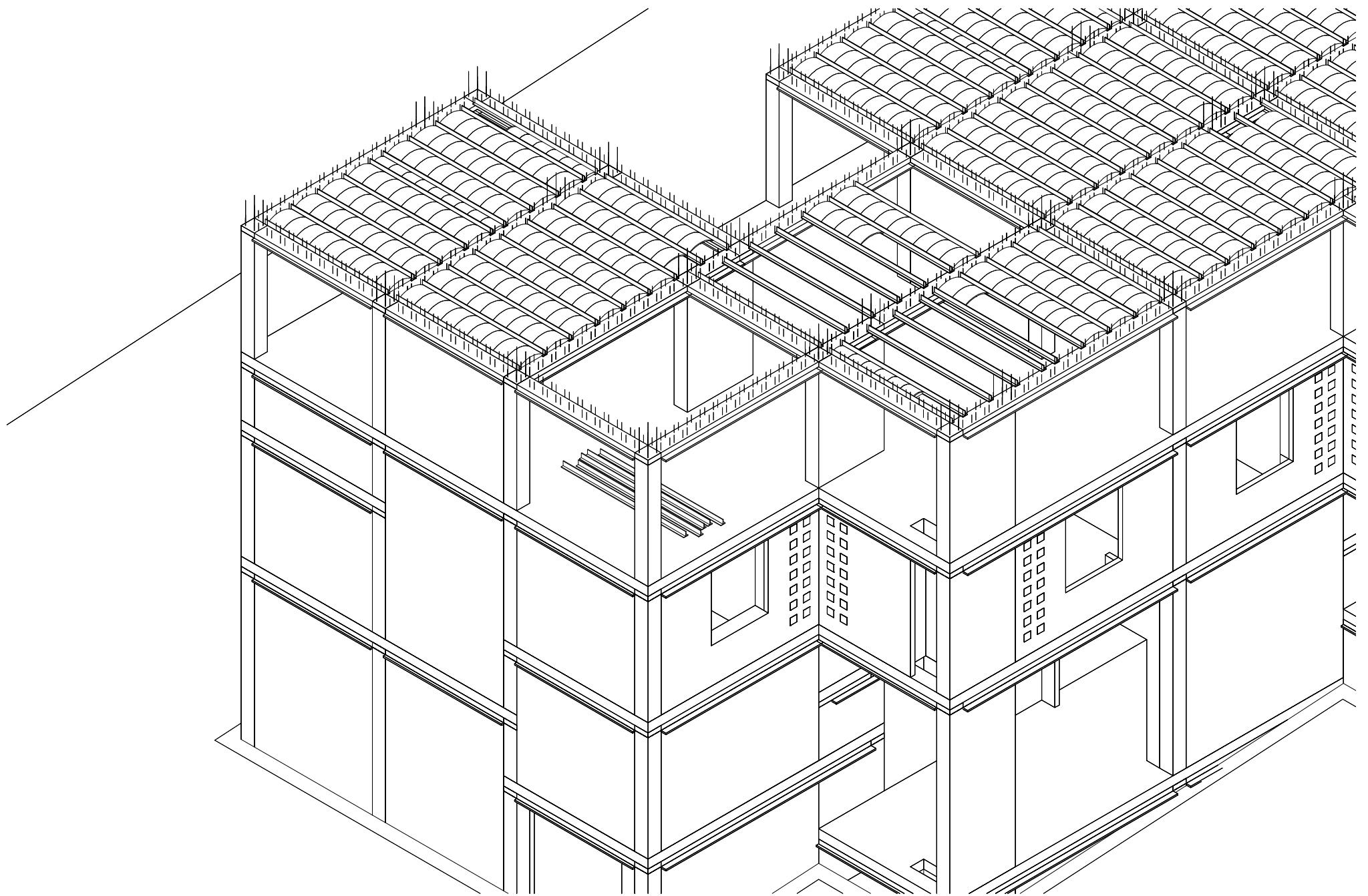
design | *building a floor*



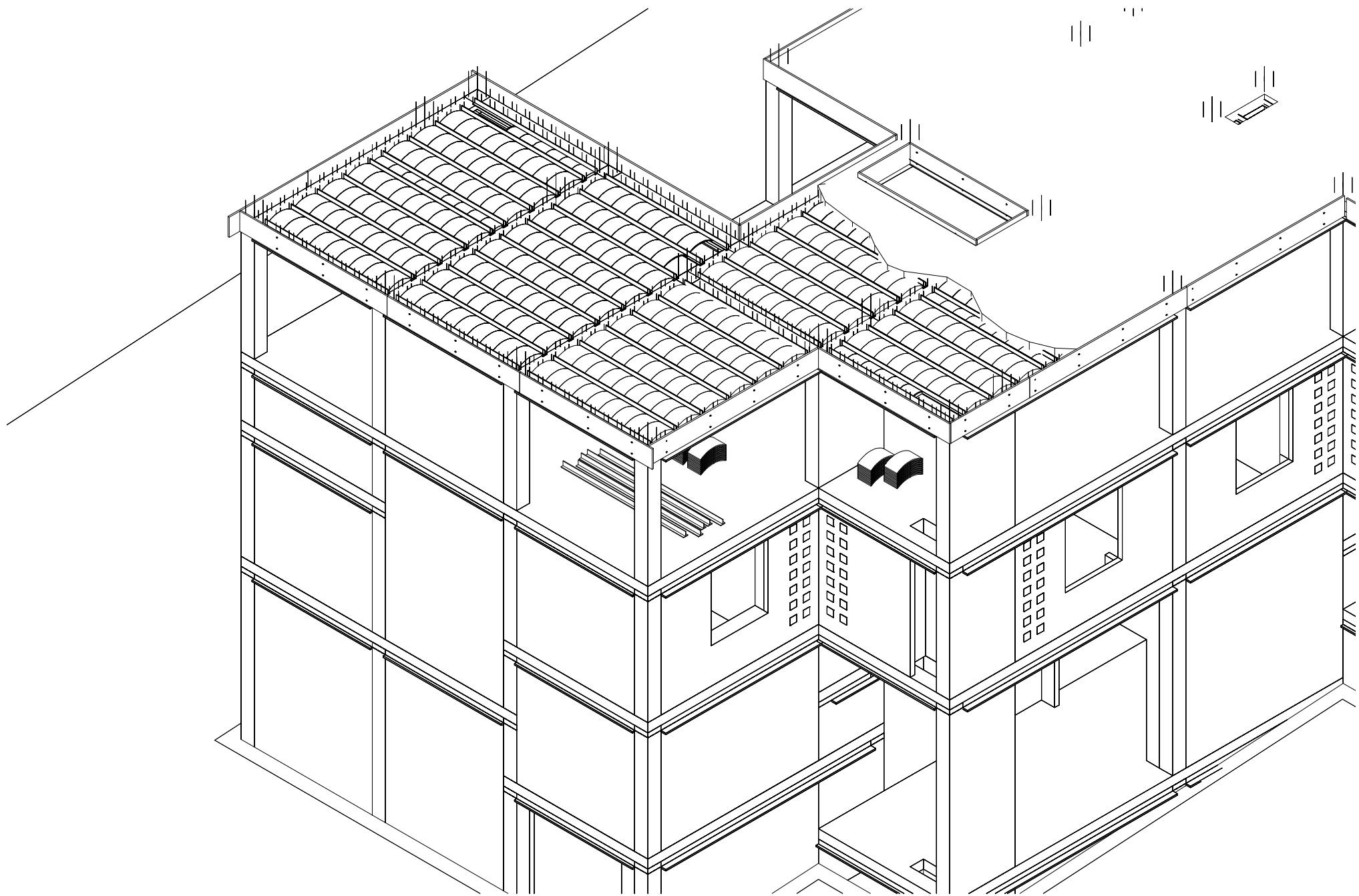
design | *construction: concrete columns*



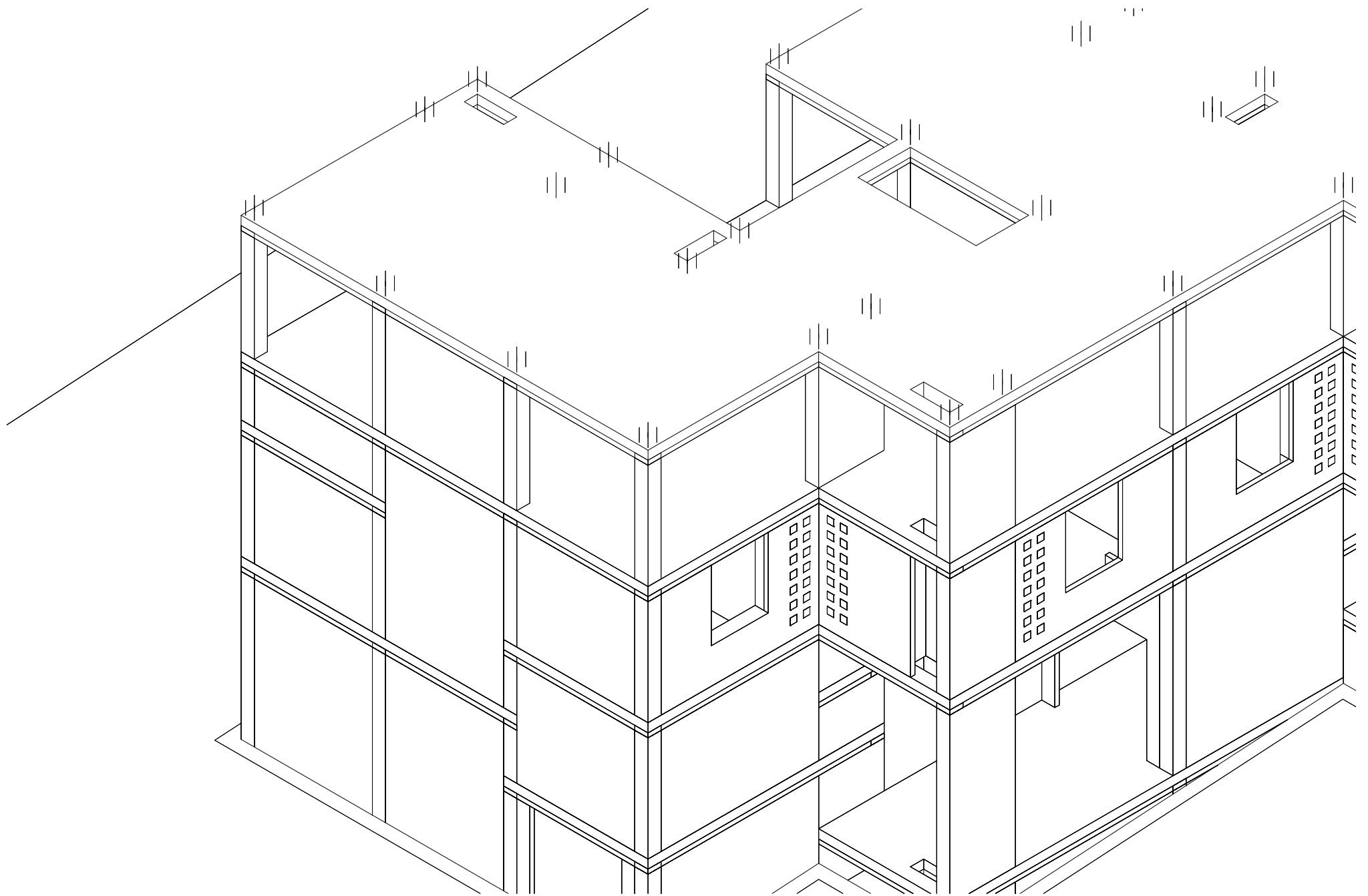
design | *construction: concrete beams*



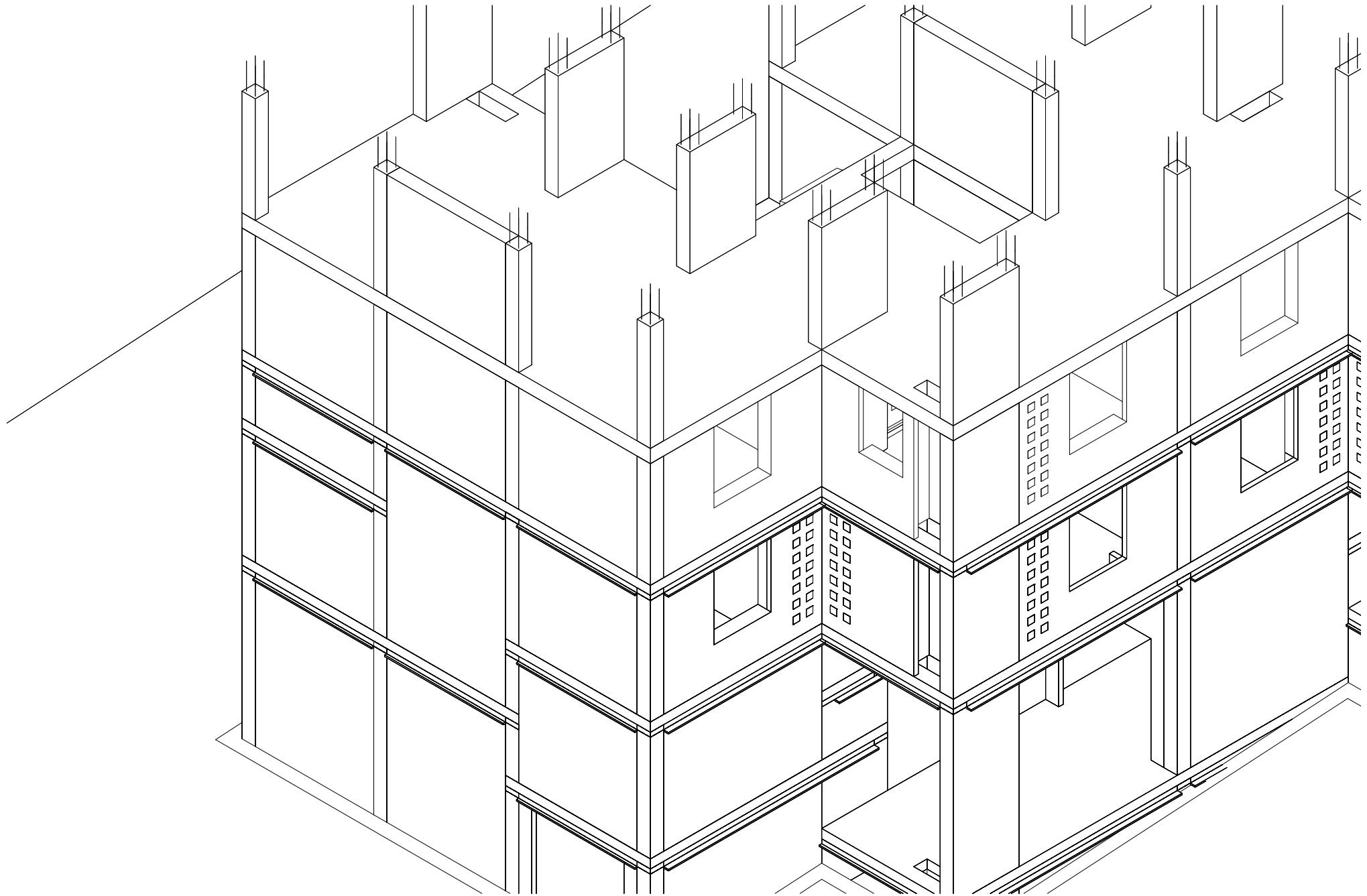
design | *construction: ceramic casing*



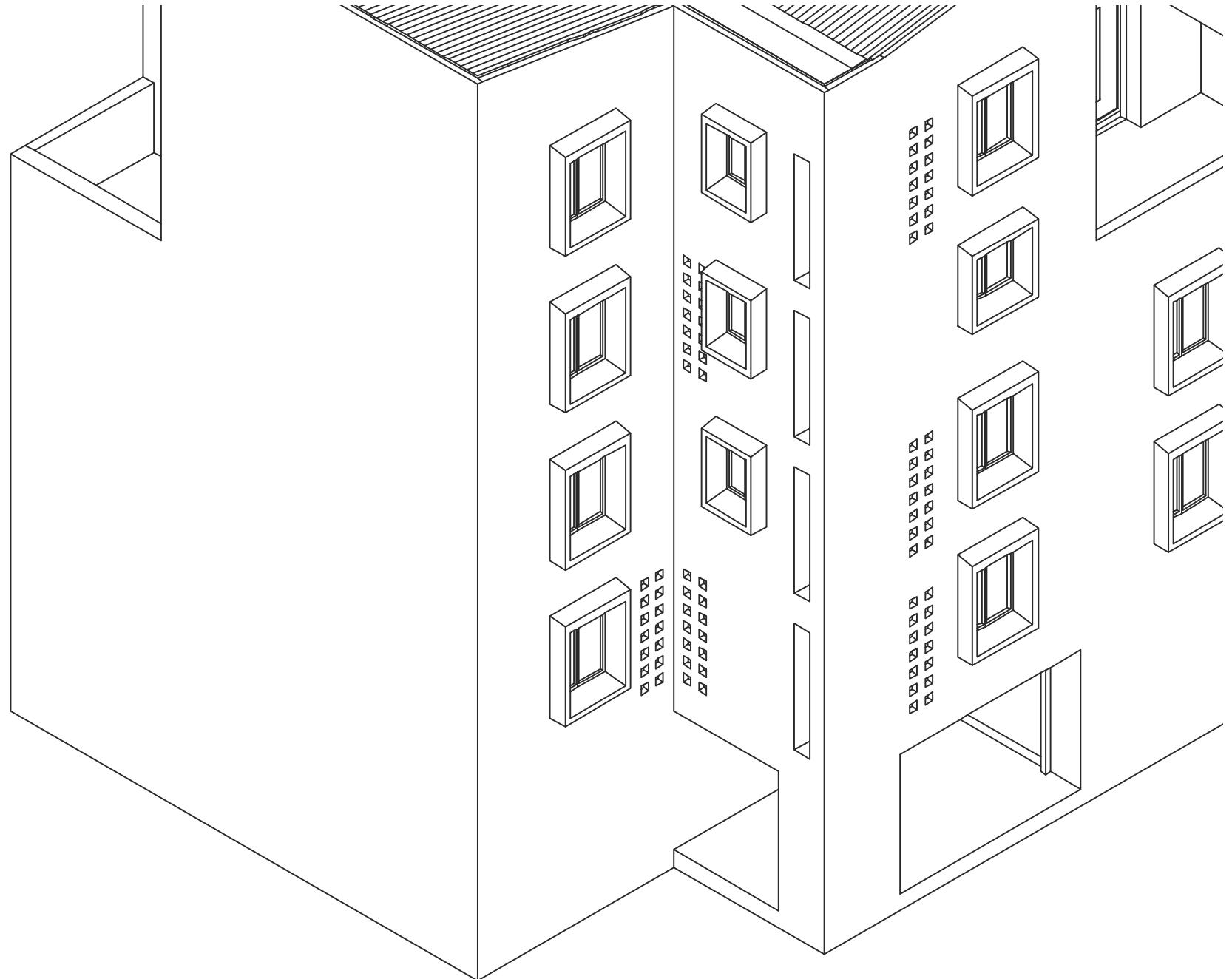
design | *construction: casting concrete*



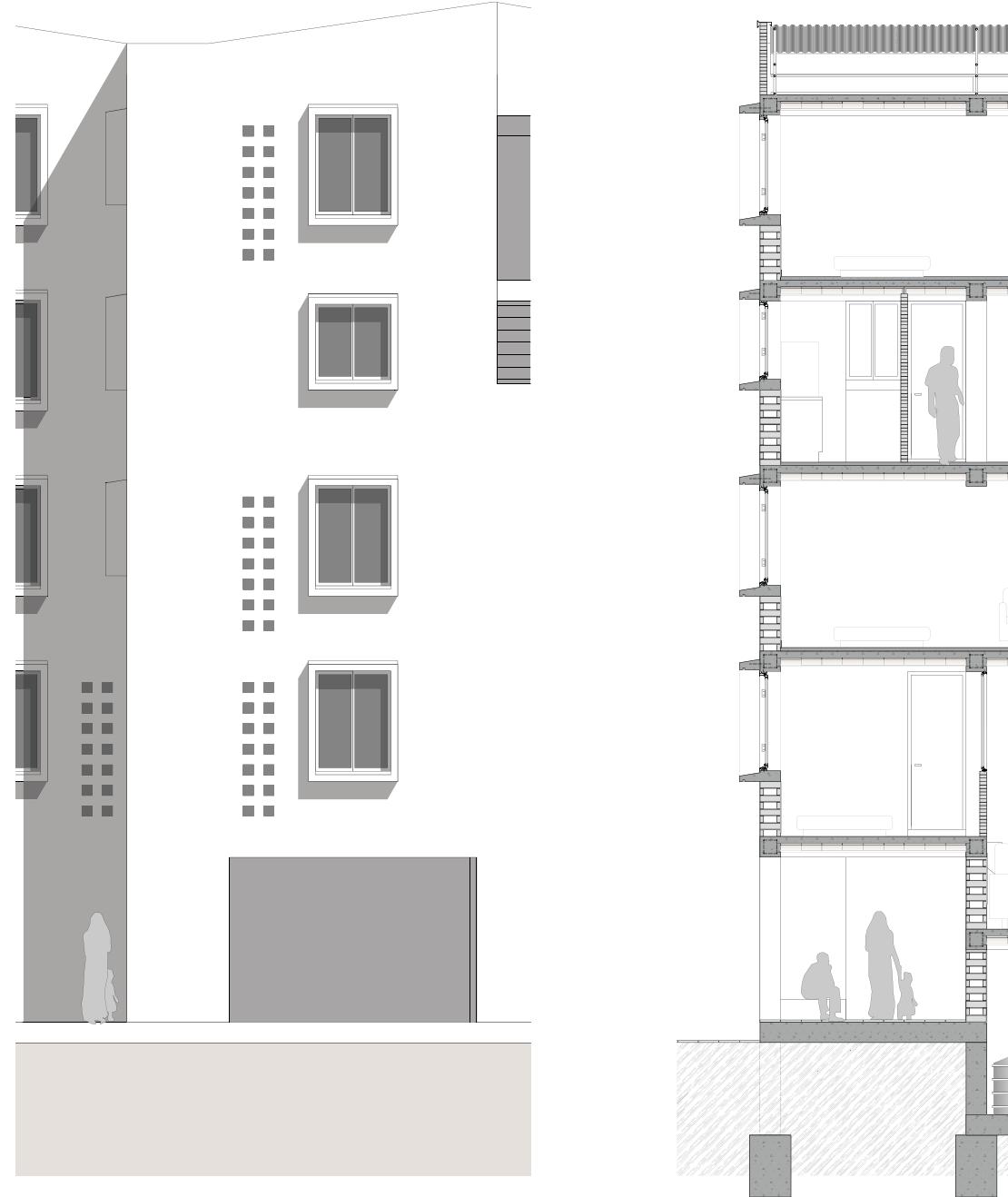
design | *construction: casting concrete*



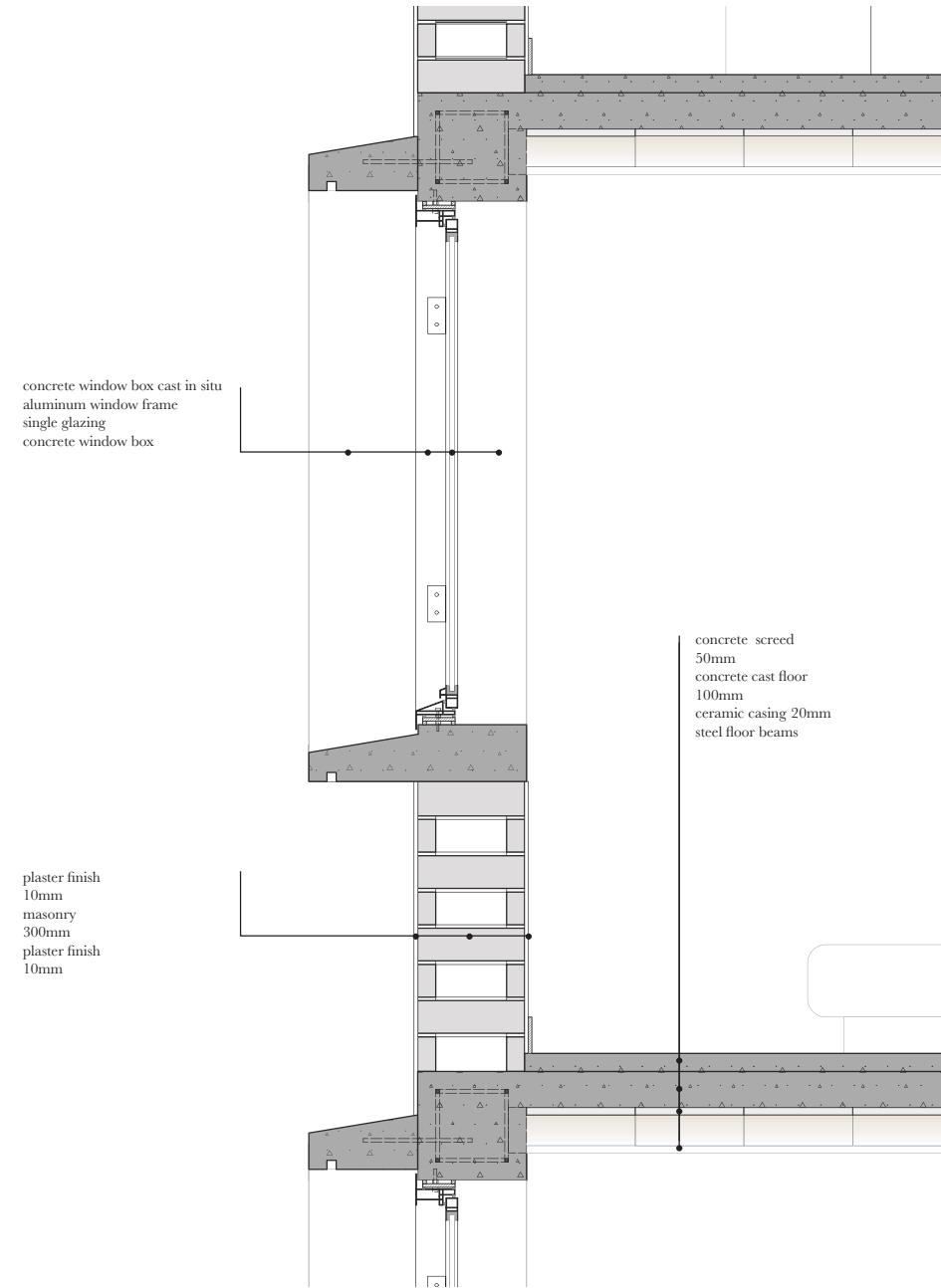
design | ***construction: brick infill***



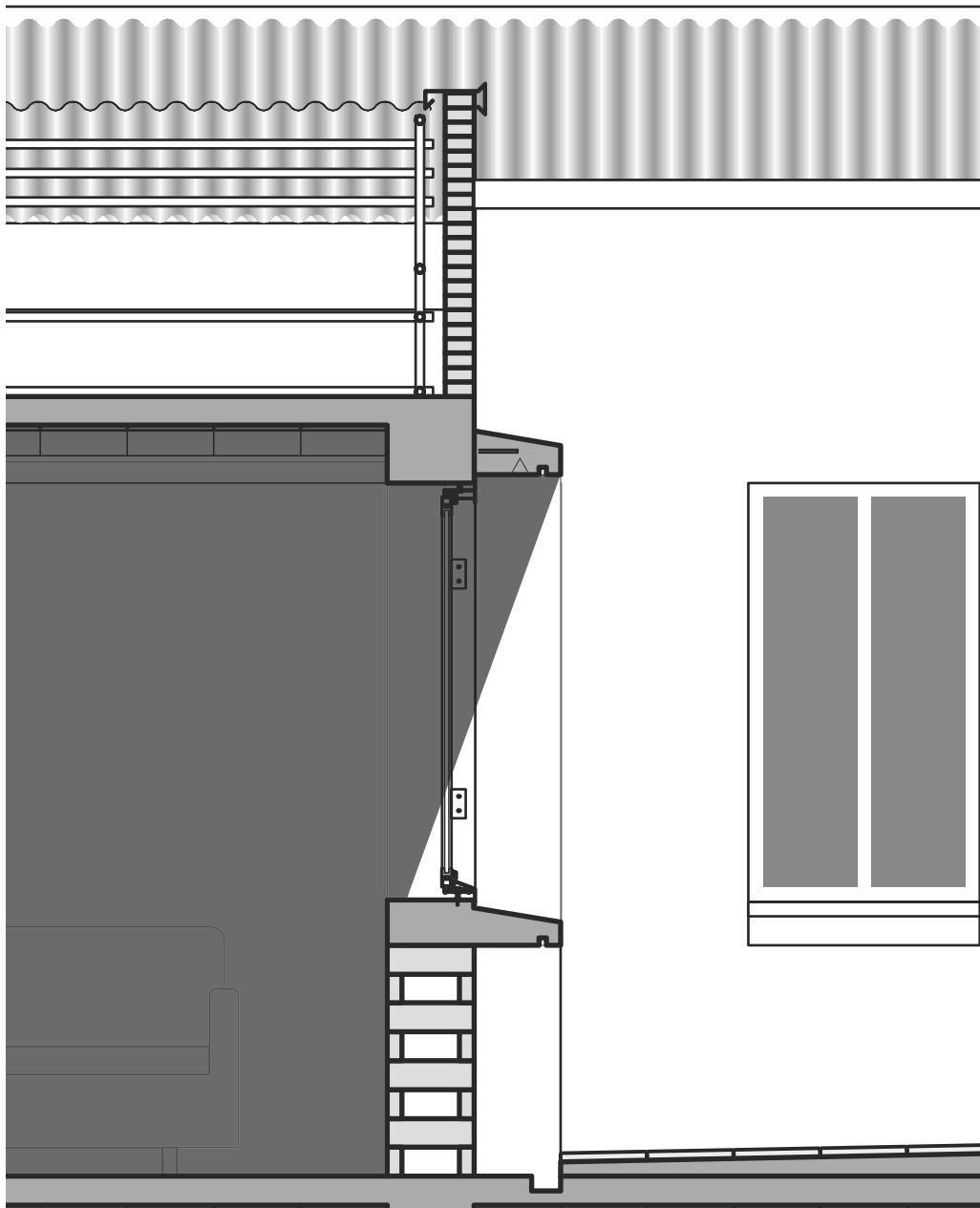
design | *construction: plaster finish*



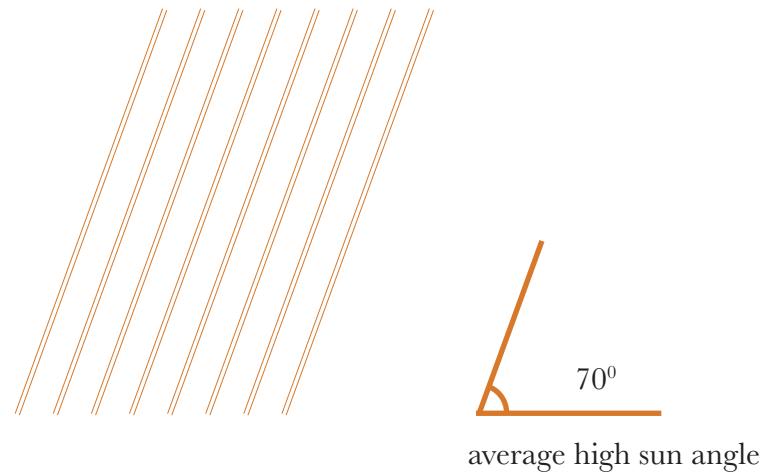
design | *facade fragment*

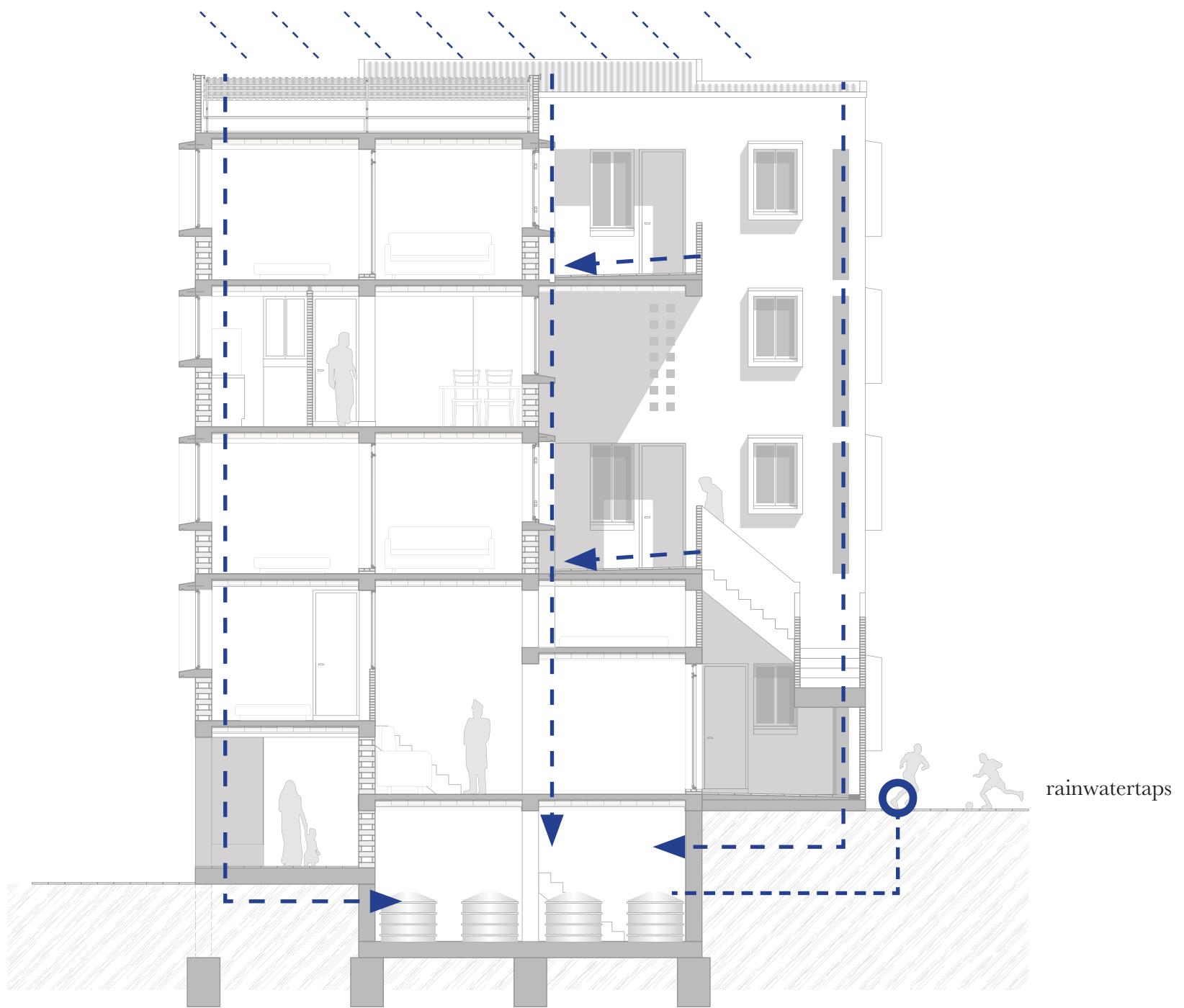


design | *midrise details: window, terrace door*



design | *shading*

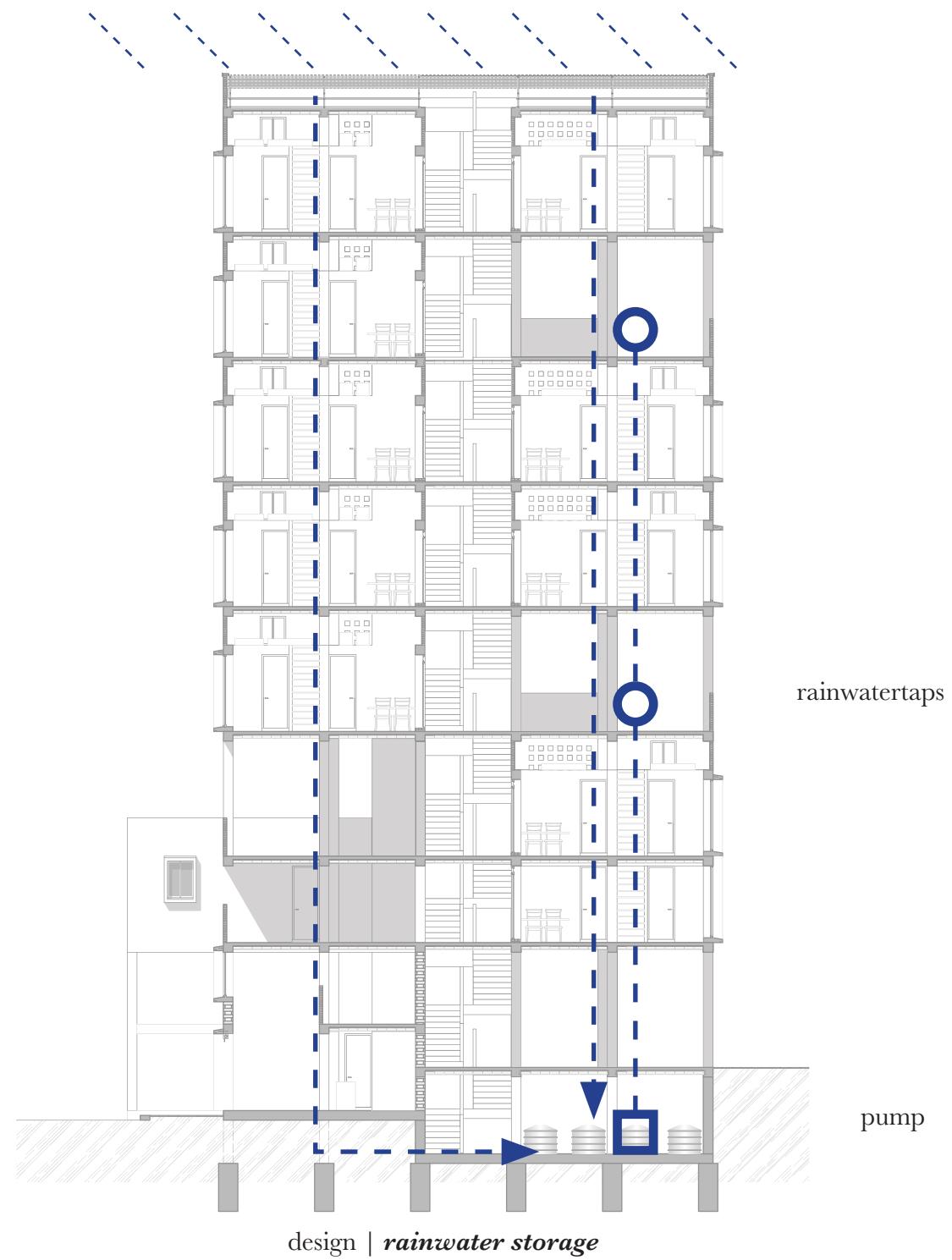




design | *rainwater storage*

rainwatertaps







clusters

Density

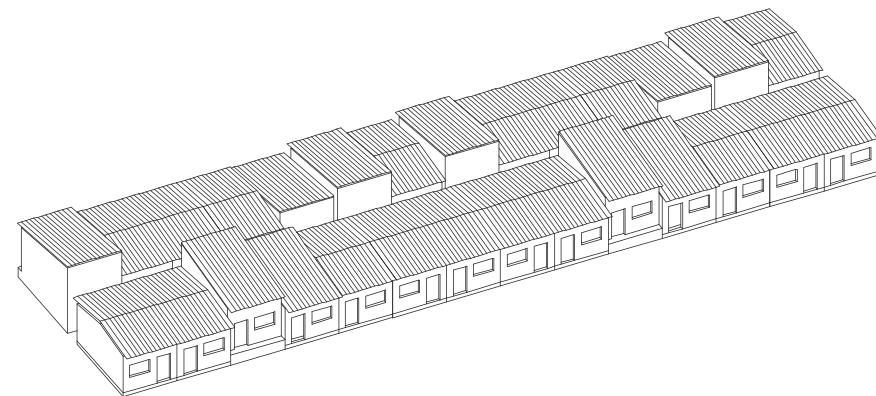
150 - 250 d/hct

0.5 - 0.7 FSI

EWS : 100%

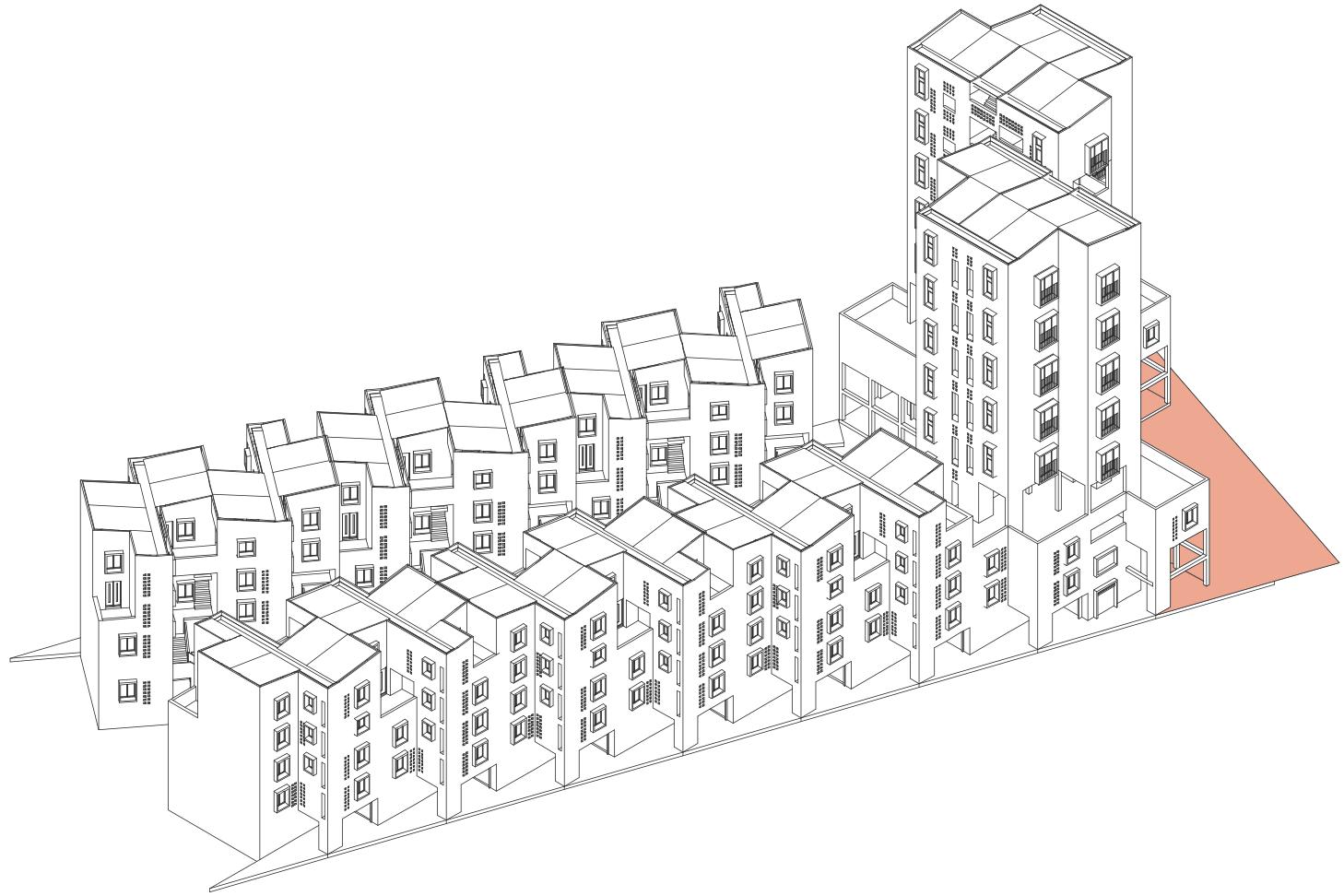
LIG : -

MIG: -





cluster | *connection*



design | *mirroring*

Density

370 d/hct

1,5 FSI

EWS : 54%

LIG : 36%

MIG: 10%



cluster | *steep hill*

Density

370 d/hct

1,5 FSI

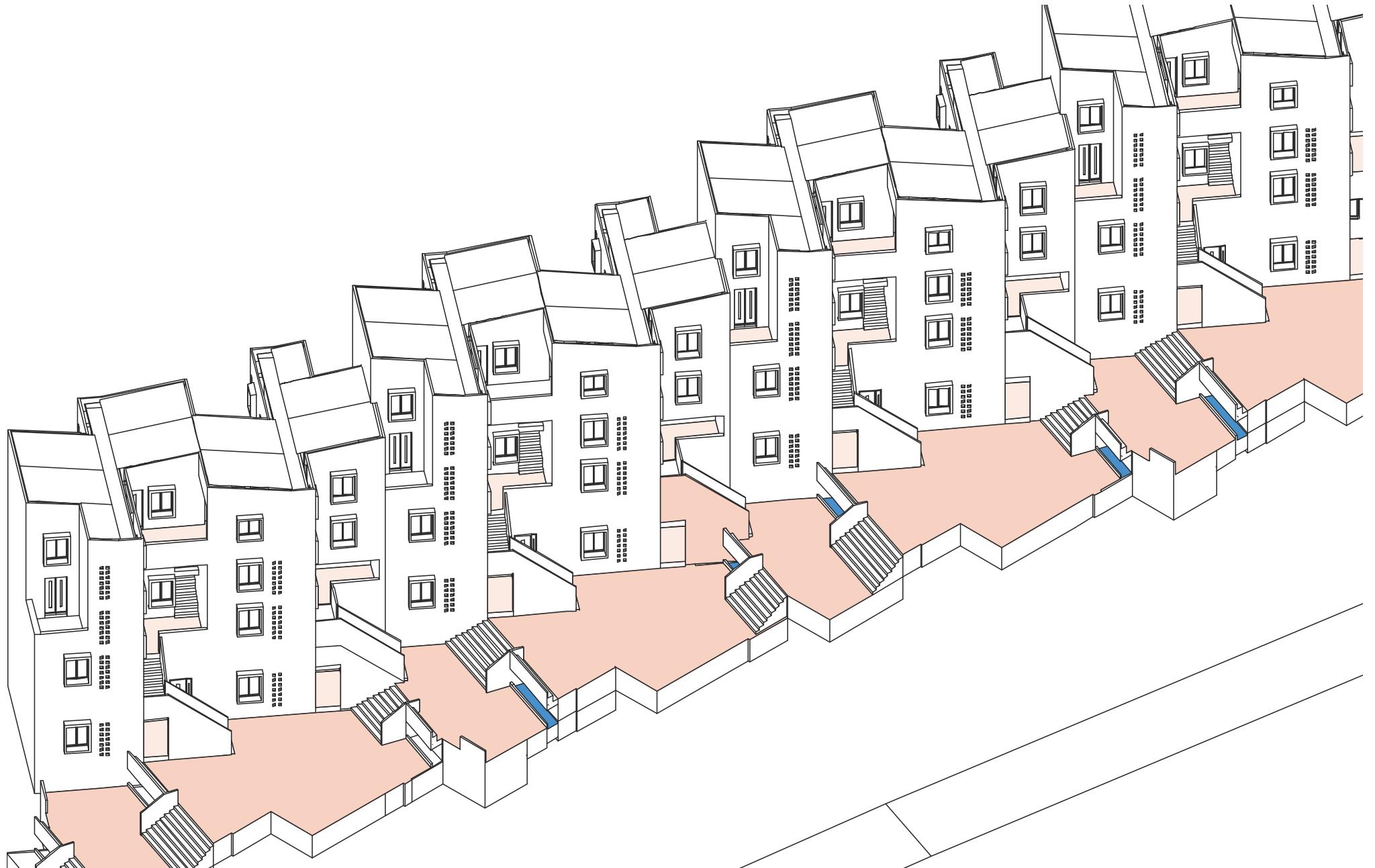
EWS : 54%

LIG : 36%

MIG: 10%



cluster | *stairs and watertaps*



cluster | *stairs and watertaps*

Density

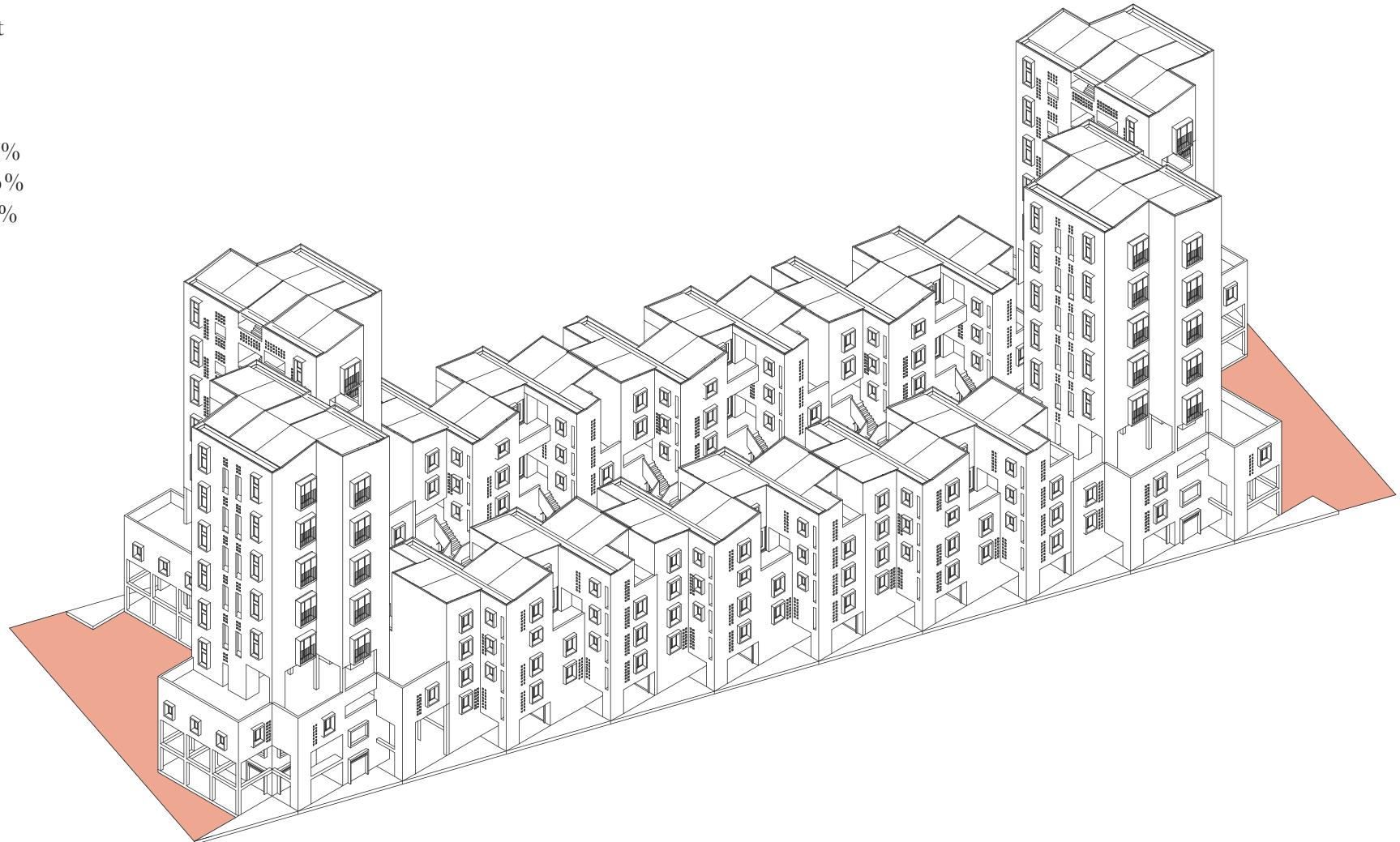
420 d/hct

1,7 FSI

EWS : 68%

LIG : 25%

MIG: 7%



cluster | ***higher density along main roads***

Density

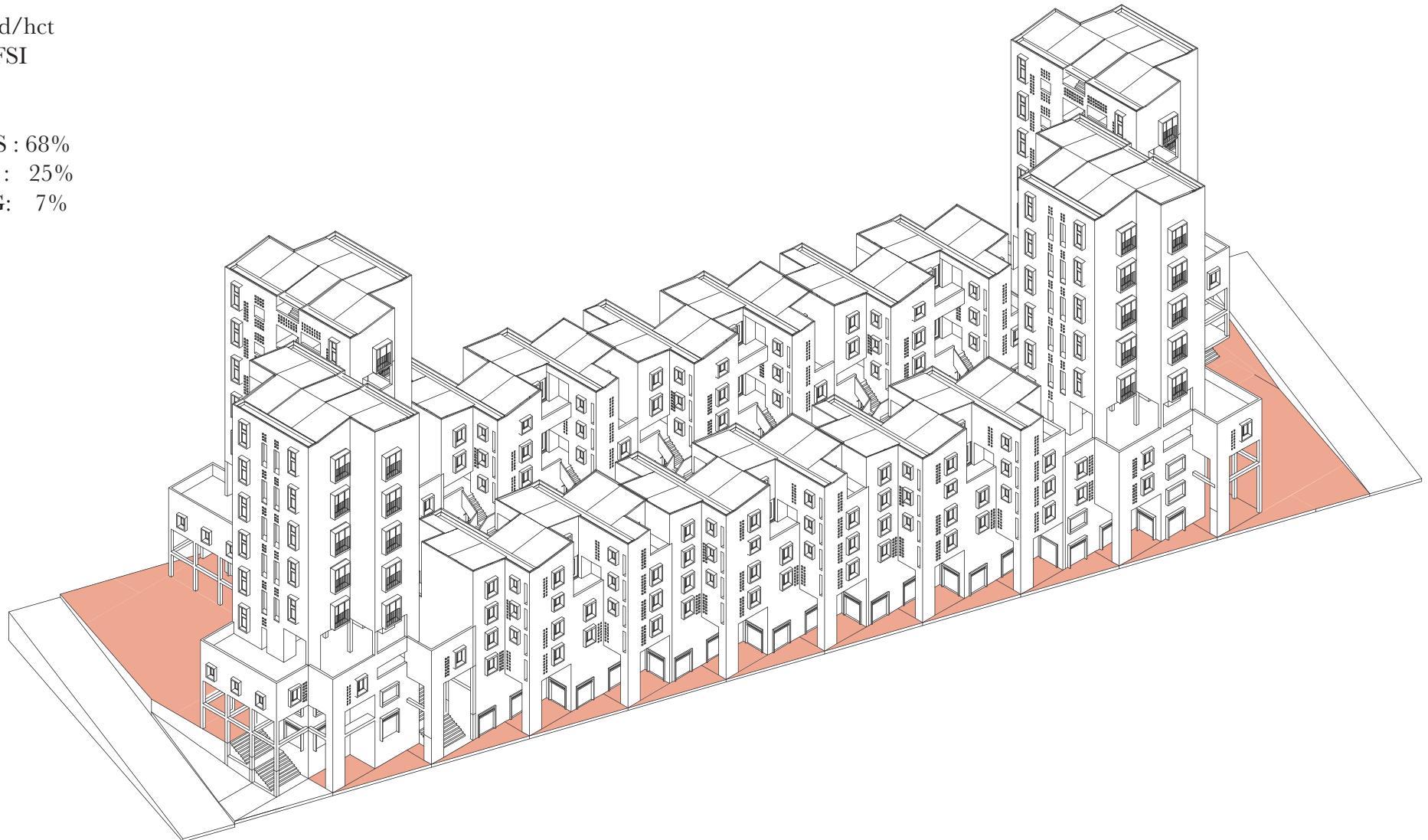
420 d/hct

1,7 FSI

EWS : 68%

LIG : 25%

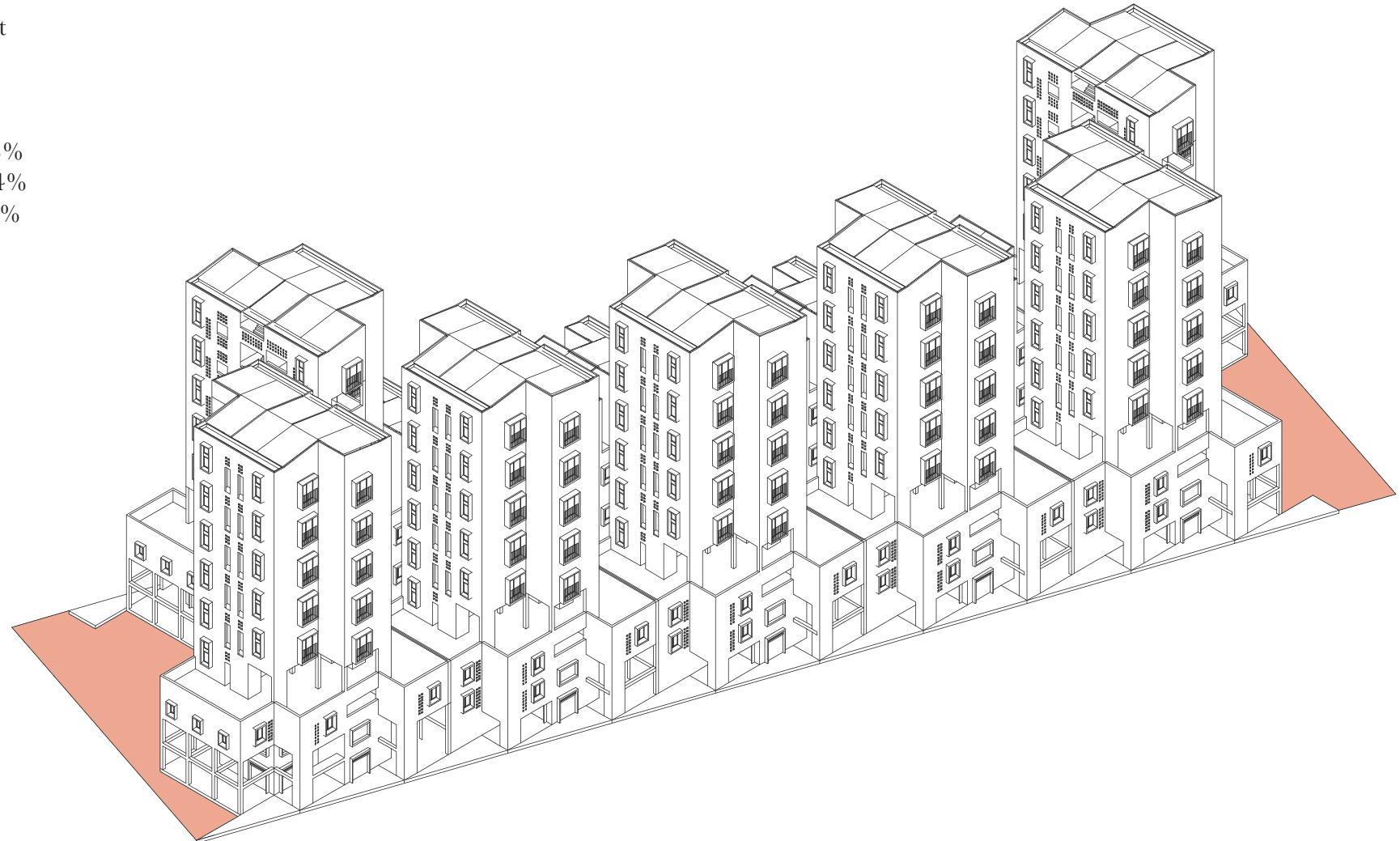
MIG: 7%



Density

500 d/hct
2 FSI

EWS : 83%
LIG : 14%
MIG: 3%



Density

500 d/hct
2 FSI

EWS : 83%
LIG : 14%
MIG: 3%



masterplan

















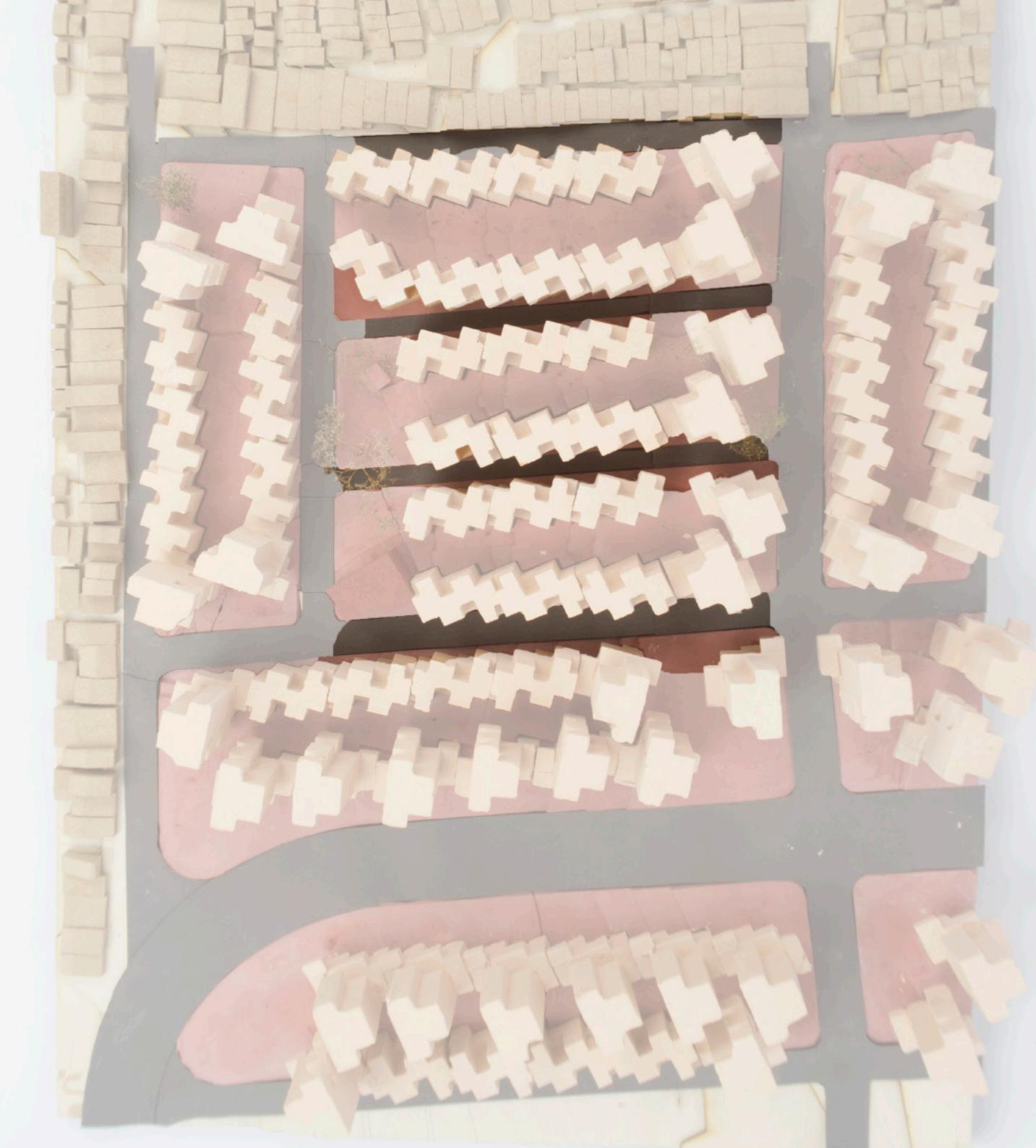






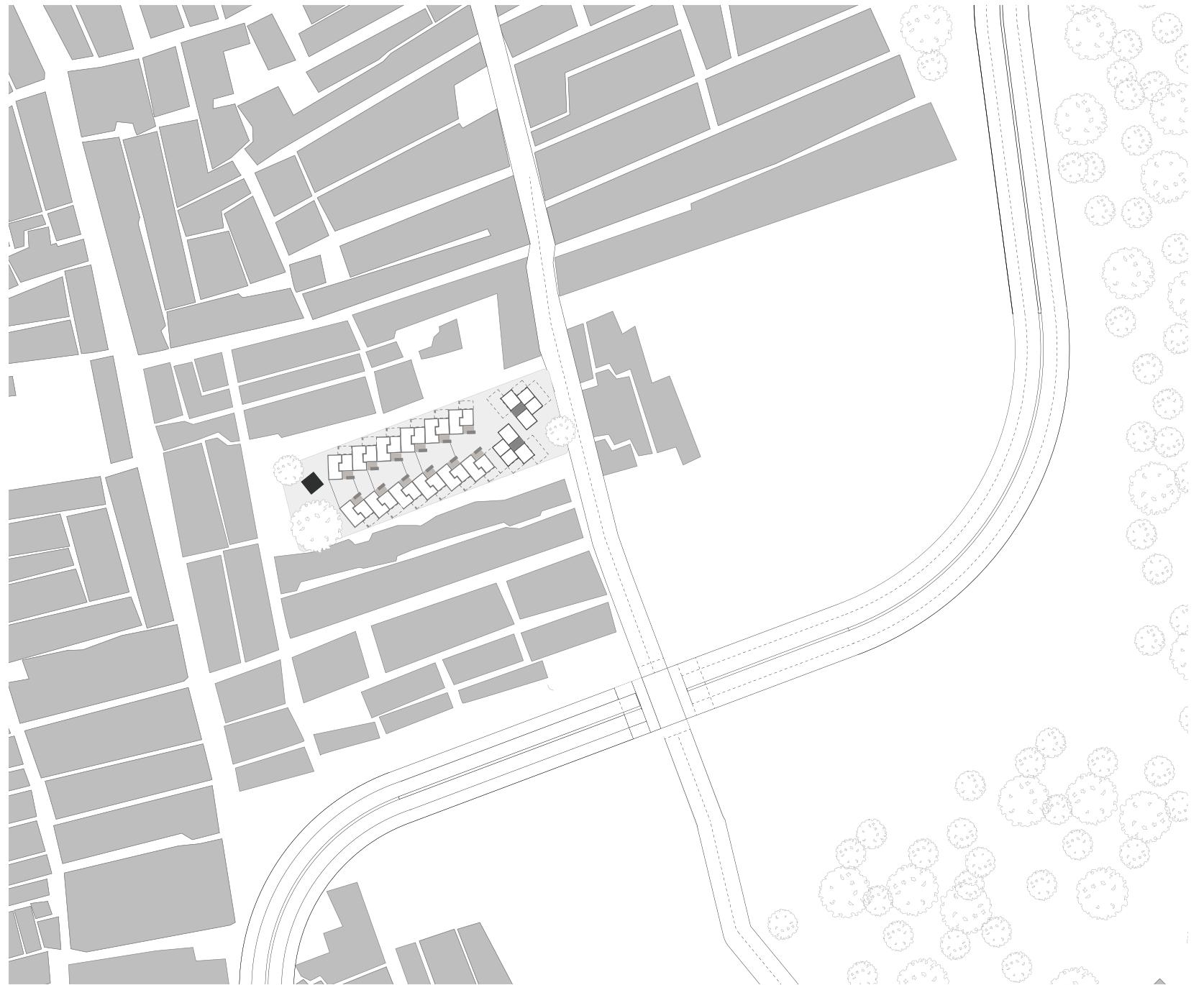


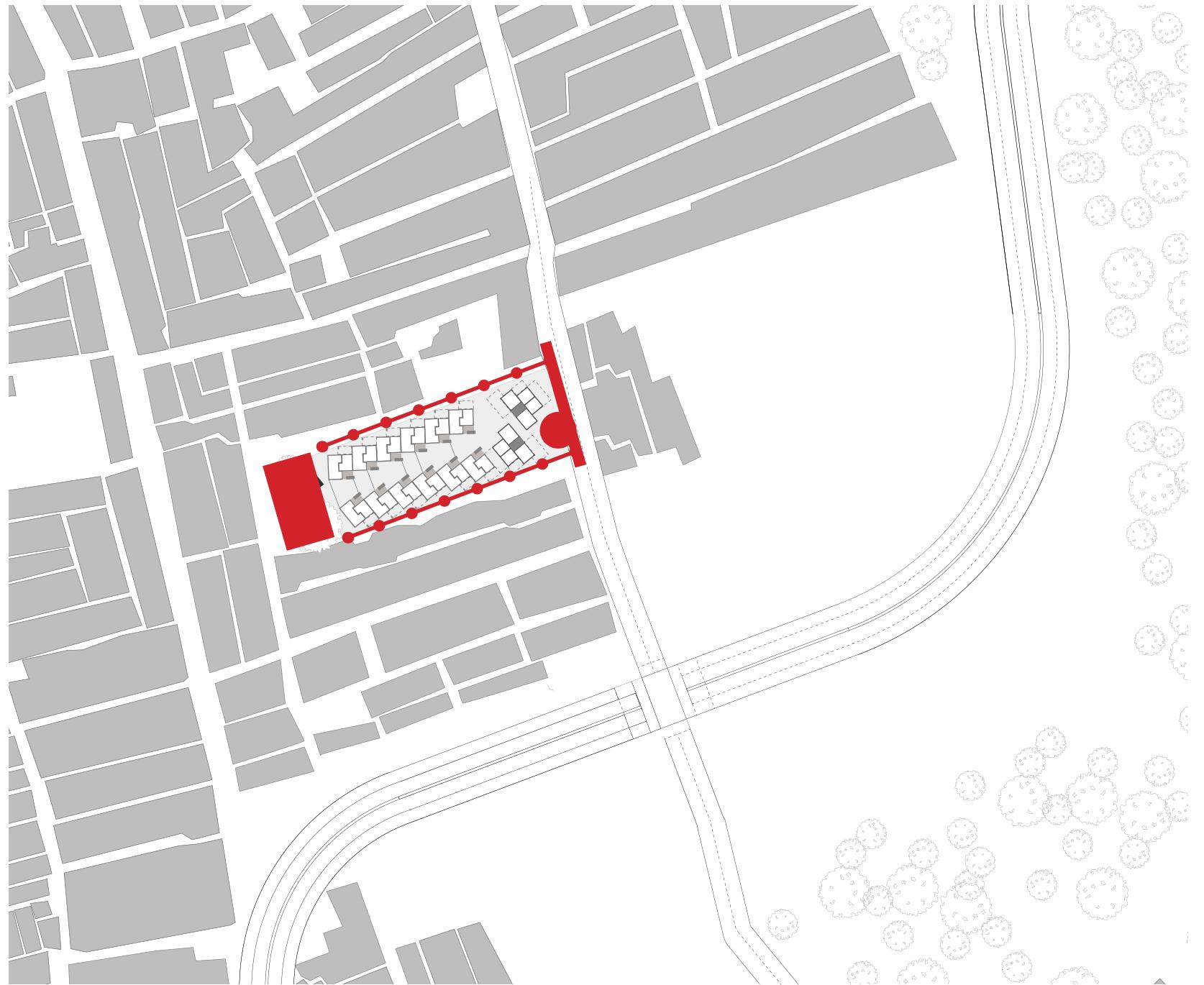












Density

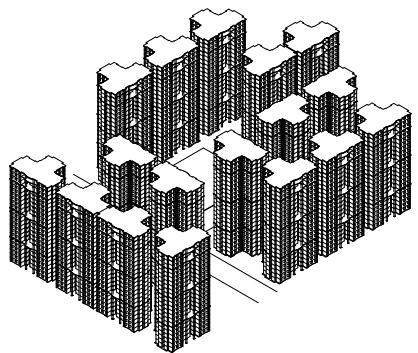
area: 50.000 m²
built: 12.000 m²
open space: 38.000 m²
rec. o.s.: 22.000 m²

units: 1814
people: 7256
schools: 2
centers: 12
shops: 204
busstop: 1

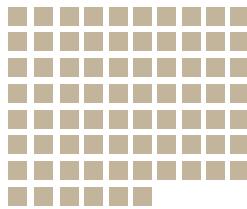
density 380 d/hct
FSI 1.6
open space/p: 5.2 m²
rec. o.s./p: 3.2 m²
p/school: 3628
p/center: 605

EWS : 67%
LIG : 26%
MIG: 7%

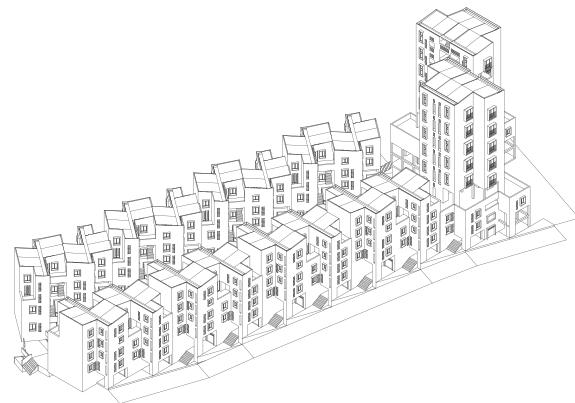




760 units / hct



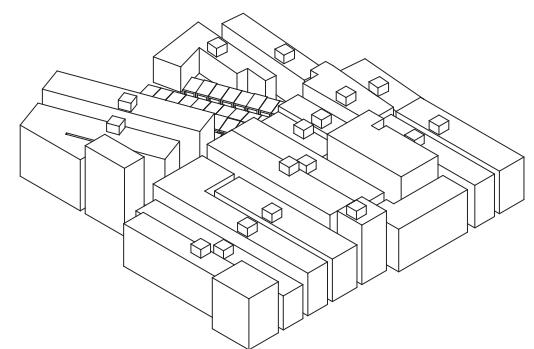
FSI: >4



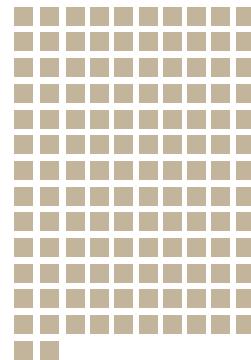
380 units / hct



FSI: 1.6

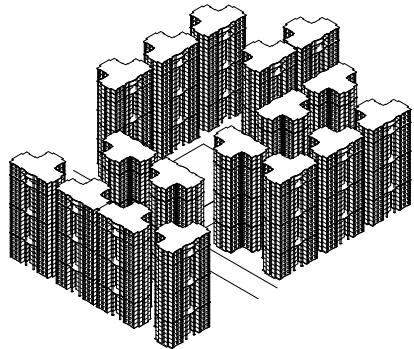


1360 units / hct

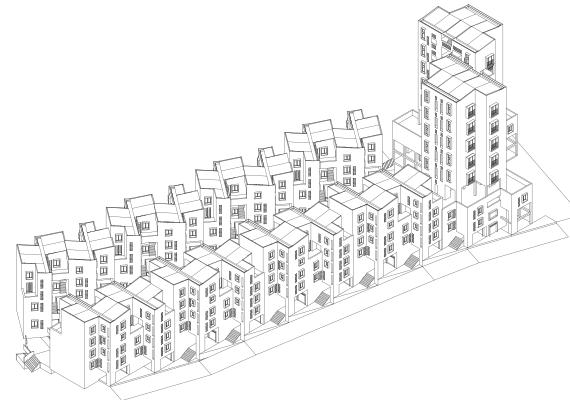


FSI: 3

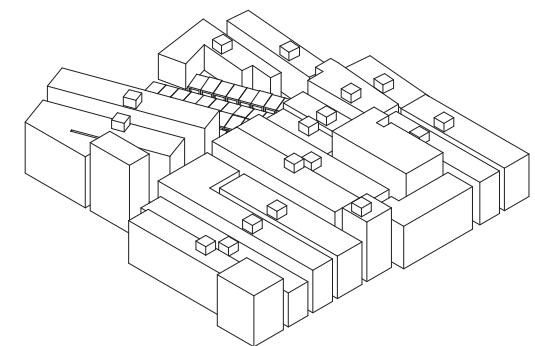
design | *comparison*



1.9 m² open space pp



5.2 m² open space pp



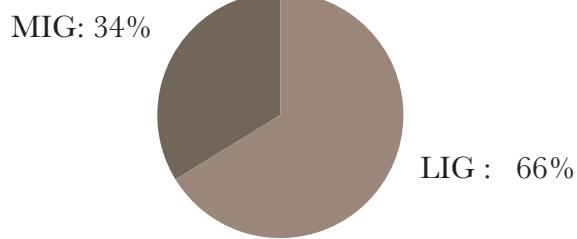
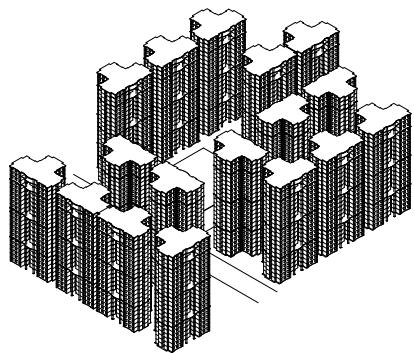
0.57 m² open space pp



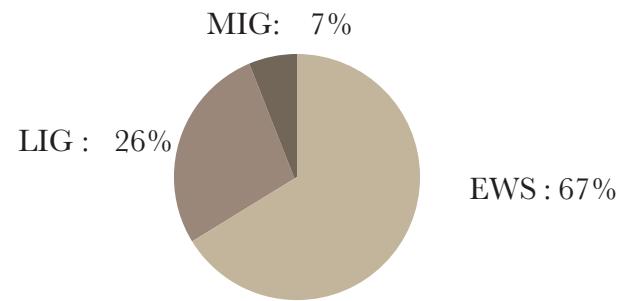
? m² recreational open
space pp

3.2 m² recreational open
space pp

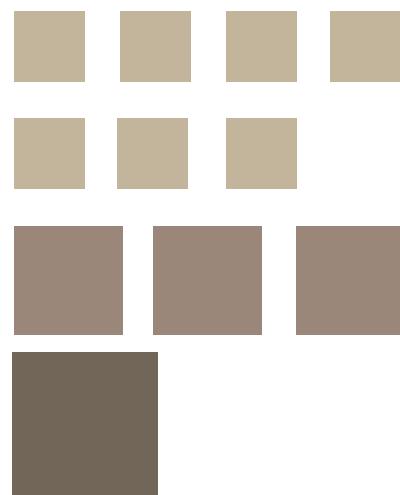
0 m² recreational open
space pp



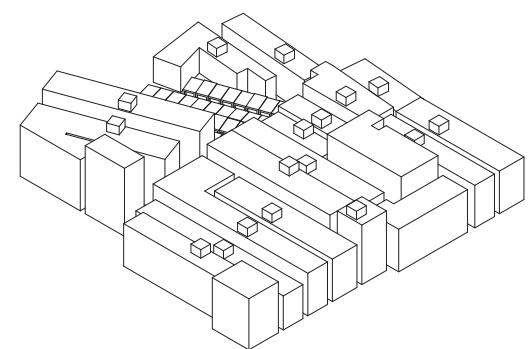
2 unit types



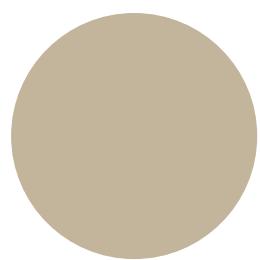
11 different unit types



design | *comparison*



EWS : 100%



2 unit types





















