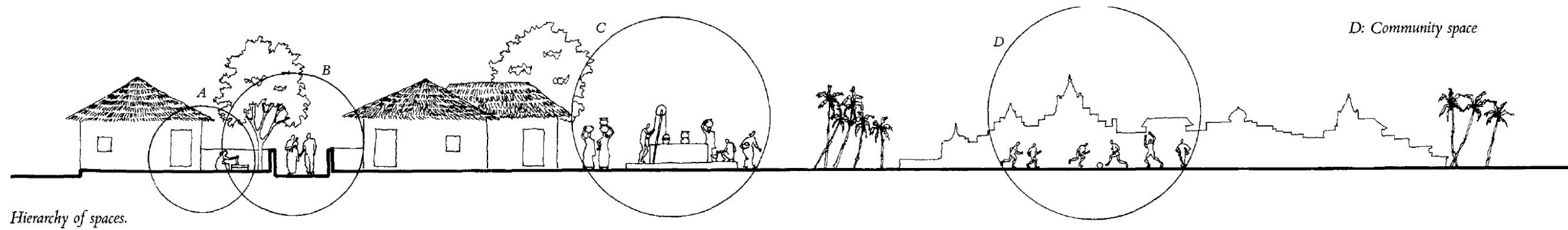


LIFE BETWEEN BUILDINGS

RECONSIDERING ECONOMIC
AND SOCIAL VALUES OF THE URBAN POOR

PAVLO GOROKHOVSKYI | 4740823



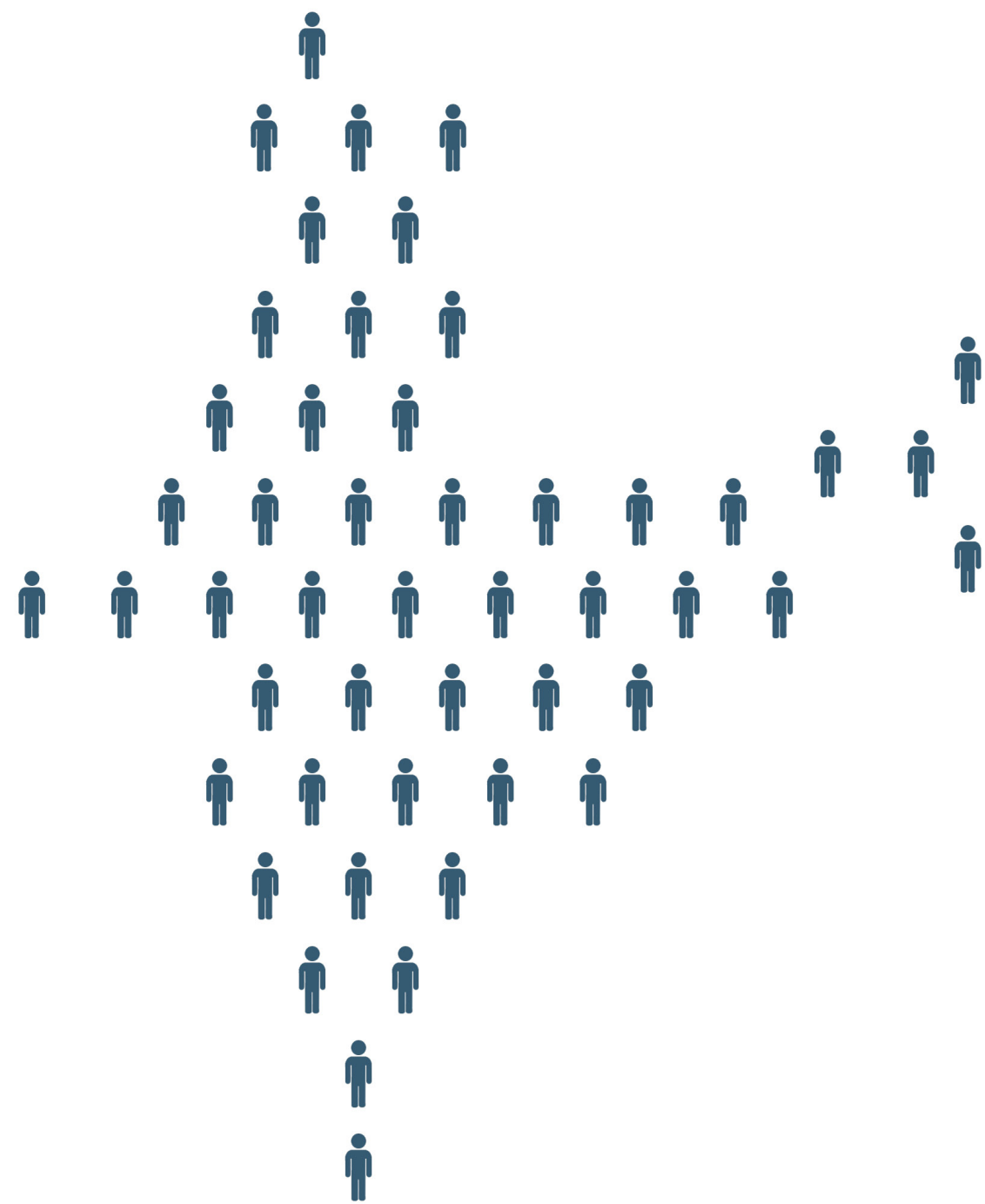
«SUCCESSFUL HOUSING IS A SEAMLESS CONTINUUM OF SPACES THAT GOES ALL THE WAY FROM THE MOST PRIVATE, TO SEMI-PRIVATE, TO THE PUBLIC. THIS IS WHY IT GENERATES COMMUNITY.»

CHARLES CORREA

INTRODUCTION

URBAN POPULATION
INDIA

221 979 000
1990



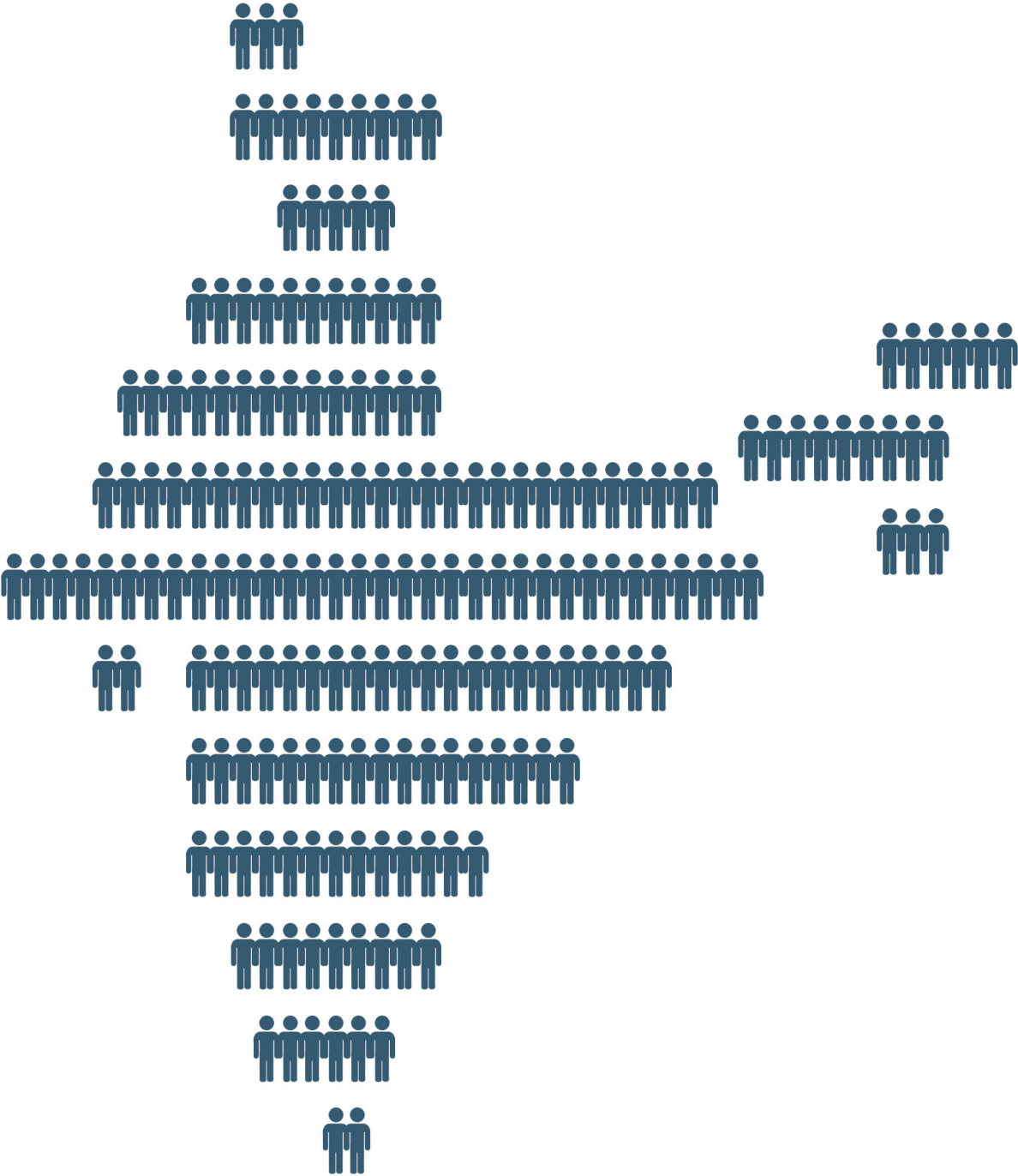
URBAN POPULATION
INDIA

410 204 000
2014

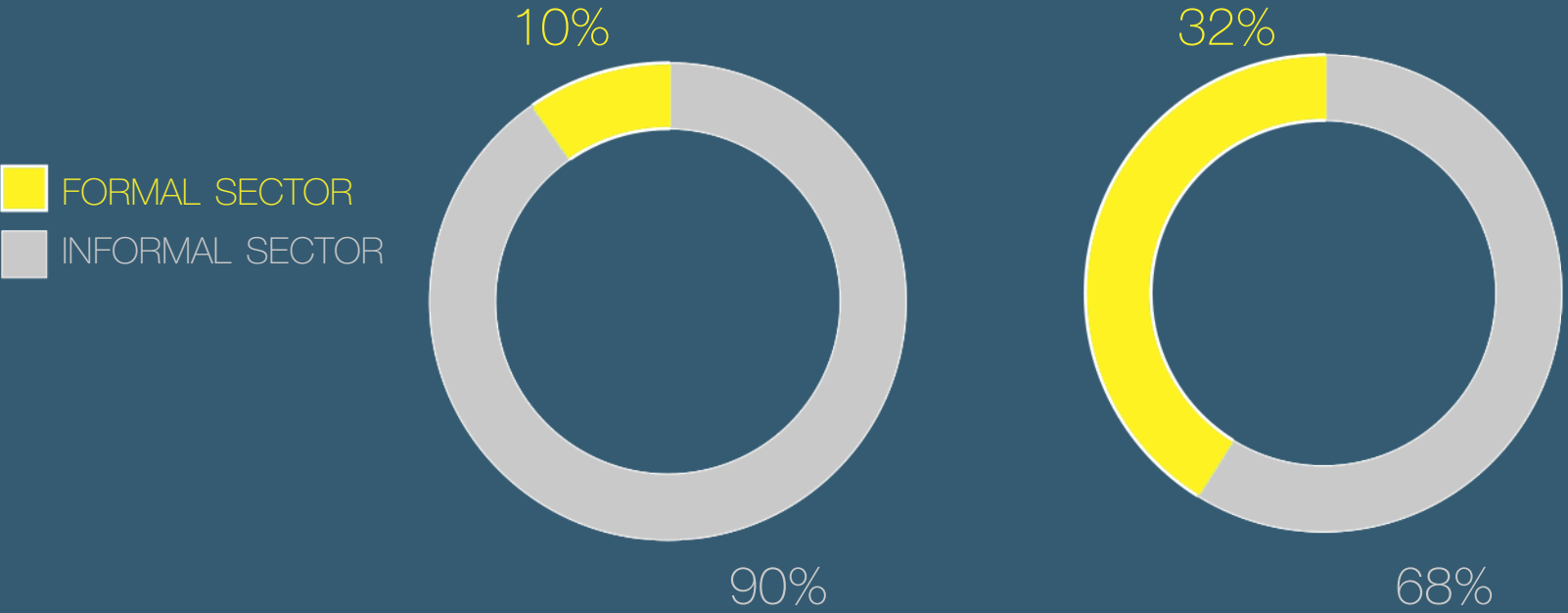


URBAN POPULATION
INDIA

814 399 000
2050



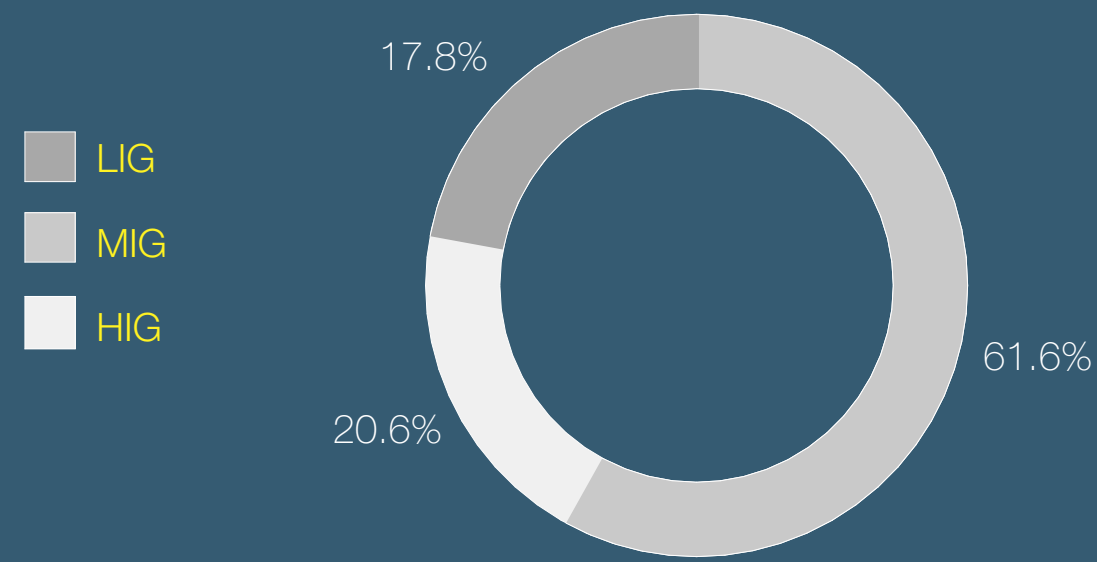
PERCENTAGE OF WORKERS IN FORMAL AND INFORMAL SECTORS IN INDIA AND MUMBAI



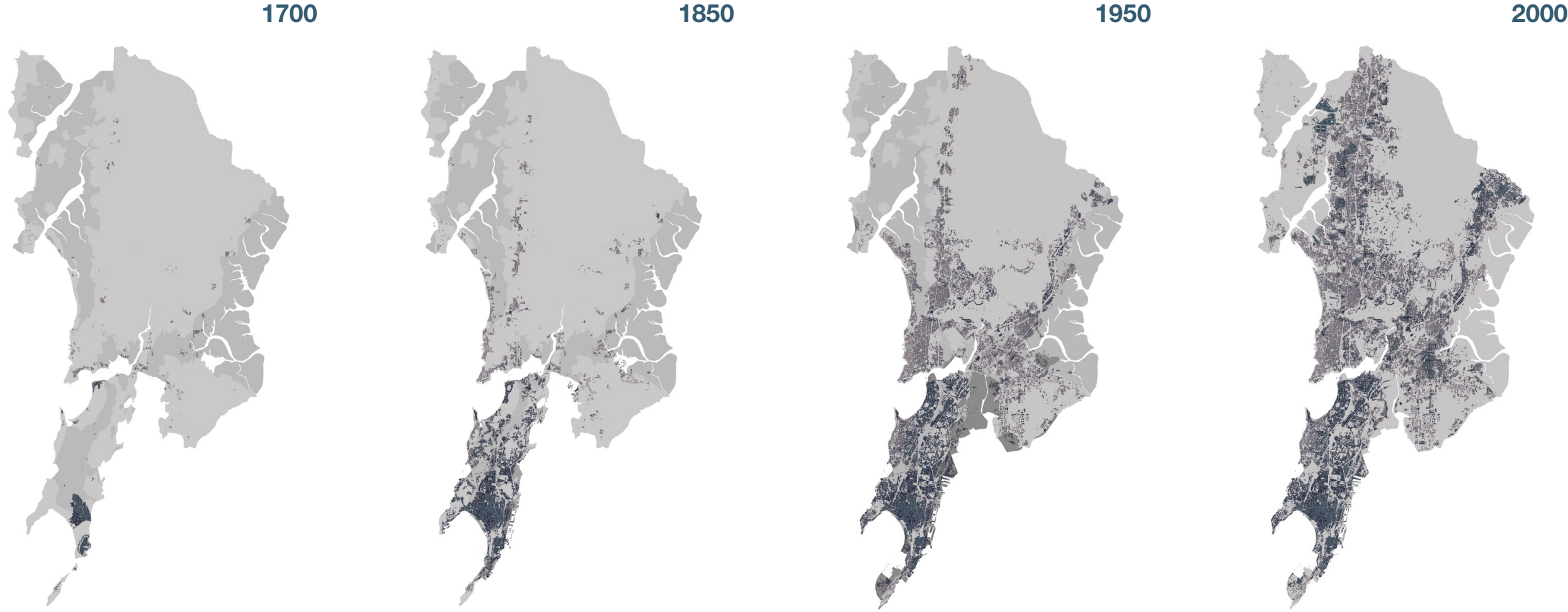
DISTRIBUTION OF WORKFORCE IN INDIA FROM 2007 - 2017



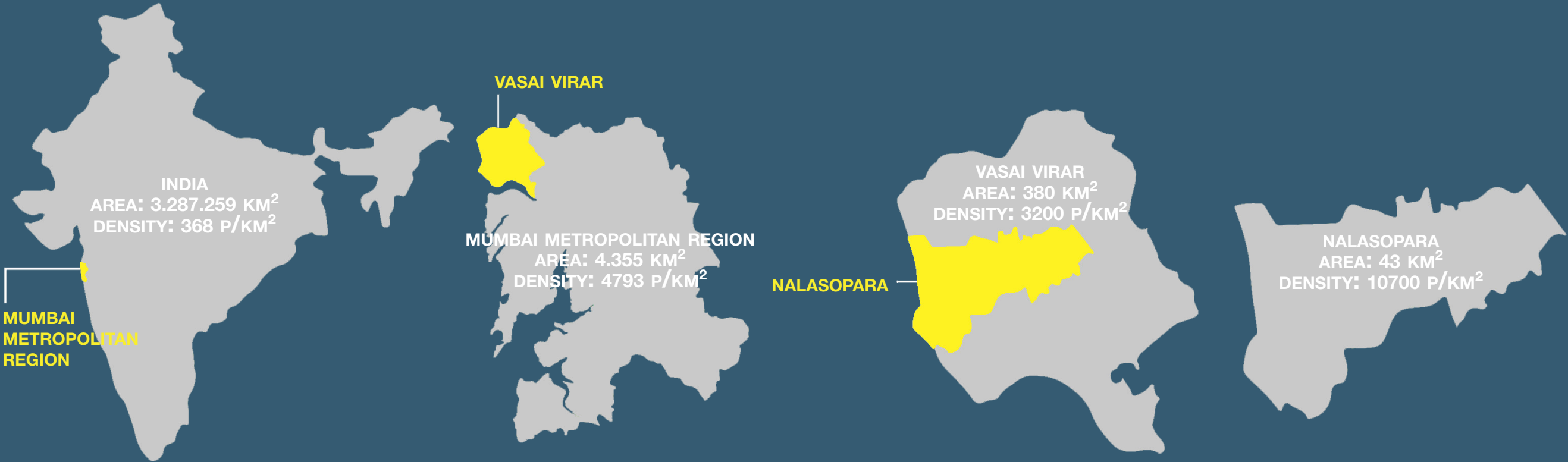
INCOME GROUP DISTRIBUTION IN INDIA



URBAN GROWTH
MUMBAI



COMPARISON OF POPULATION DENSITY OF INDIA, MUMBAI METROPOLITAN REGION, VISAI-VIRAR AND NALASOPARA







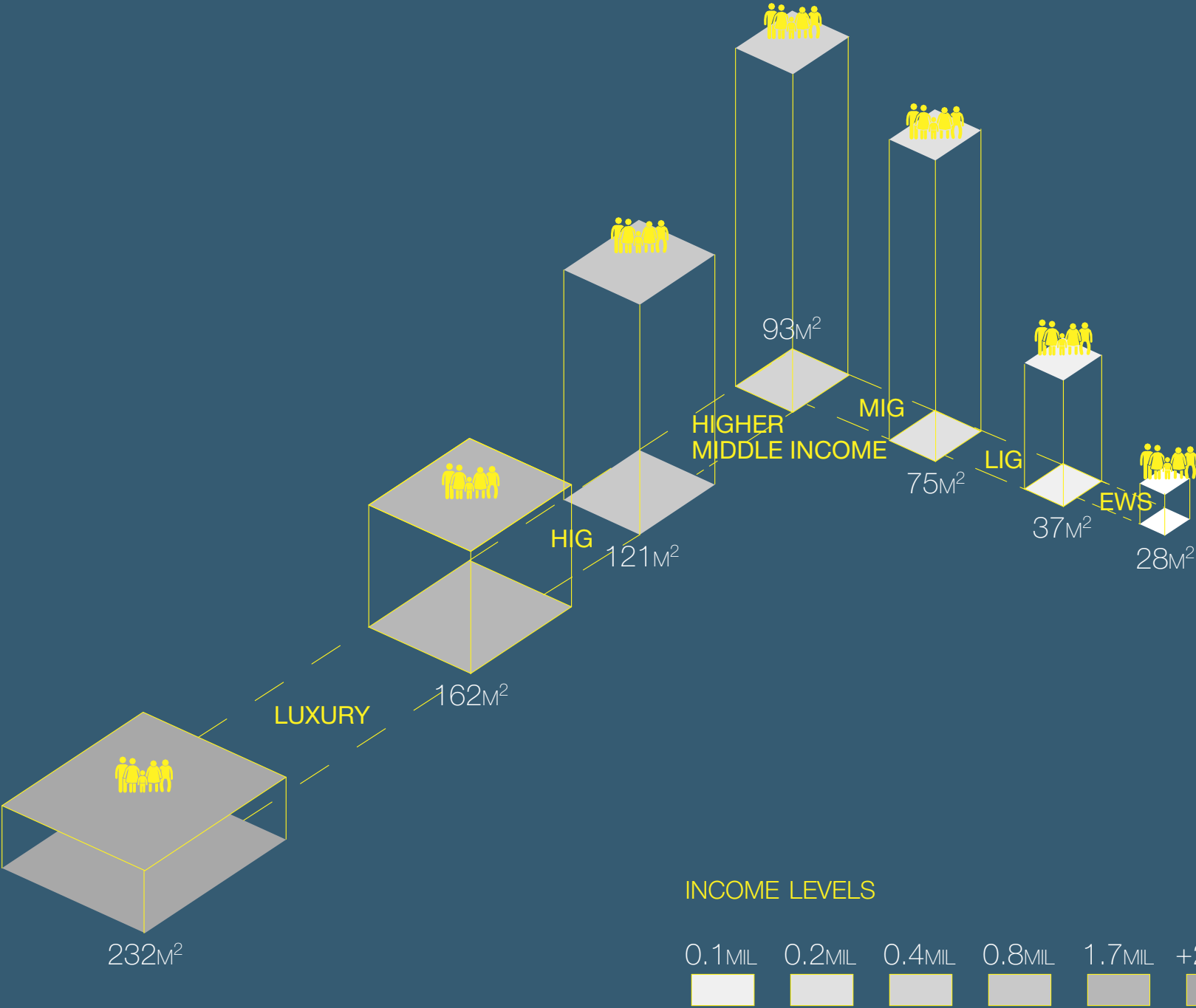
NALASOPARA GROWTH

MHADA DEVELOPMENT

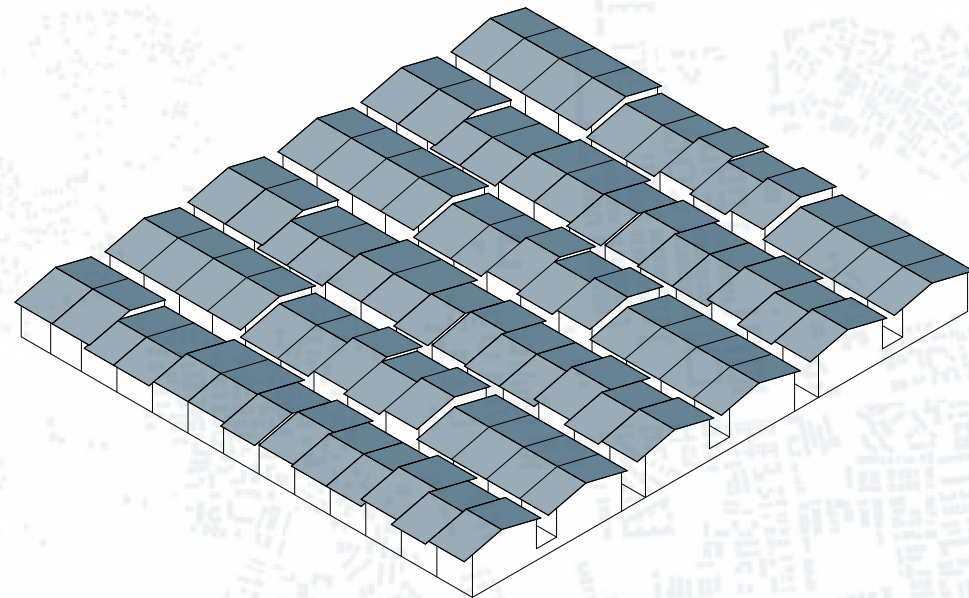




HOUSING AFFORDABILITY AND INCOME GROUP CLASSIFICATION

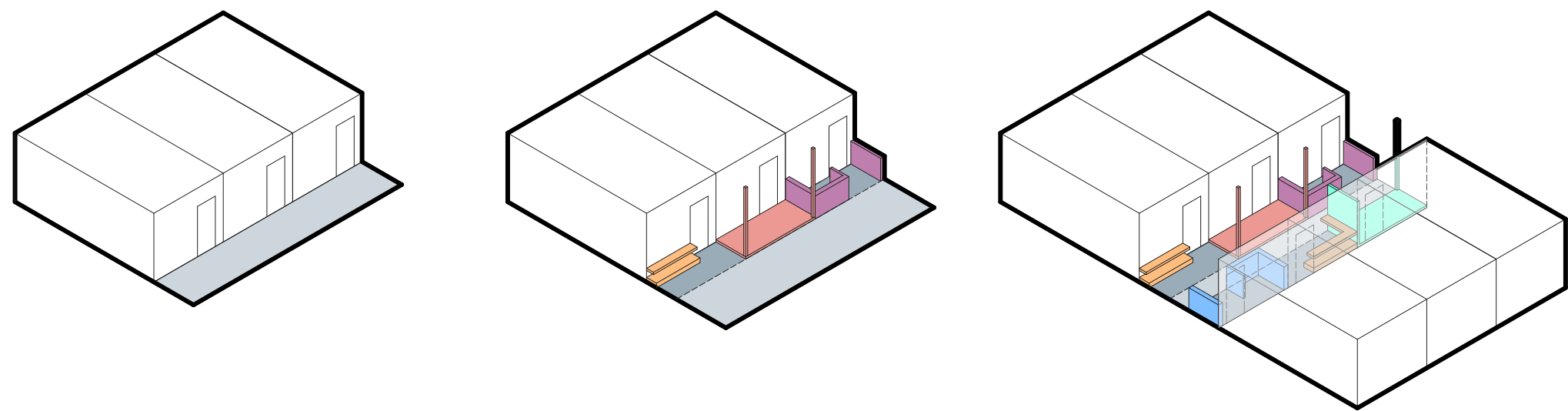


BAITHI CHAWLS

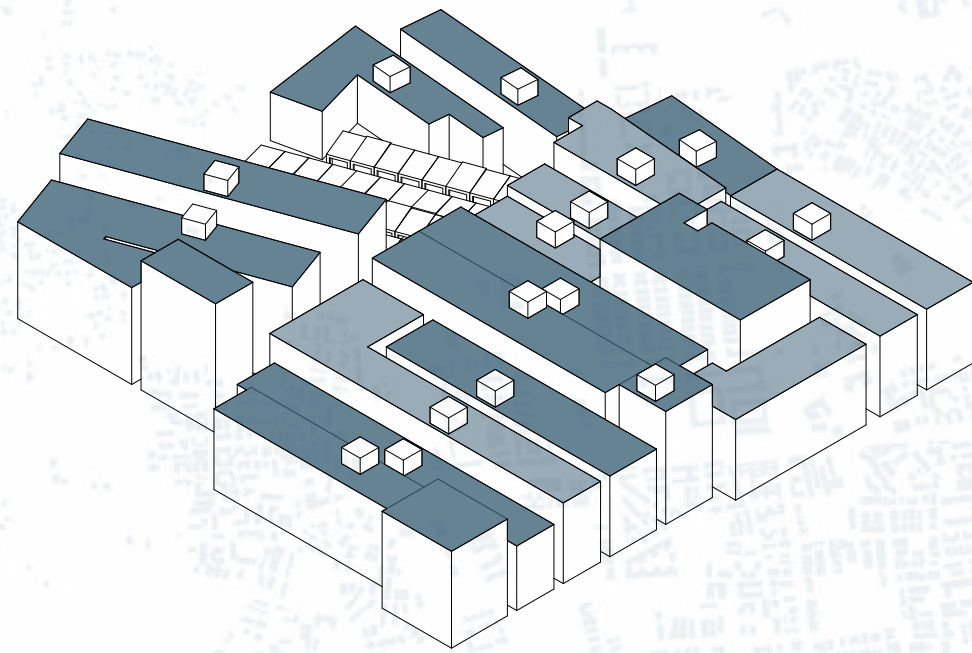




POSSIBILITY OF HOUSE EXTENSION

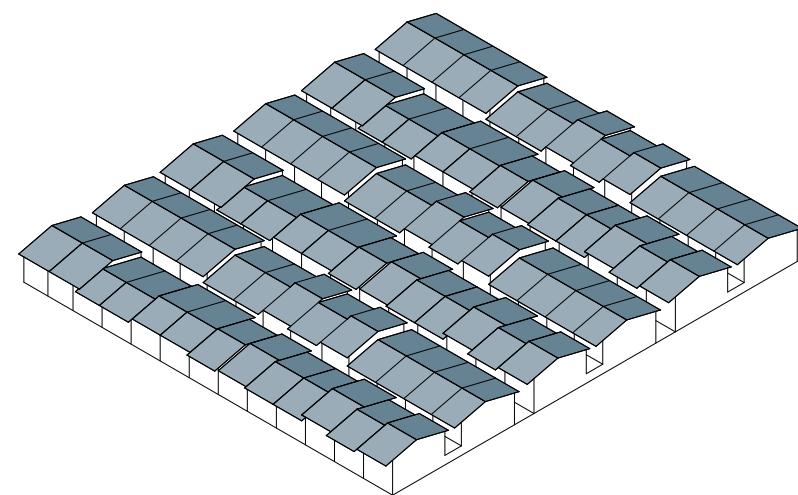


HAND-SHAKE CHAWLS

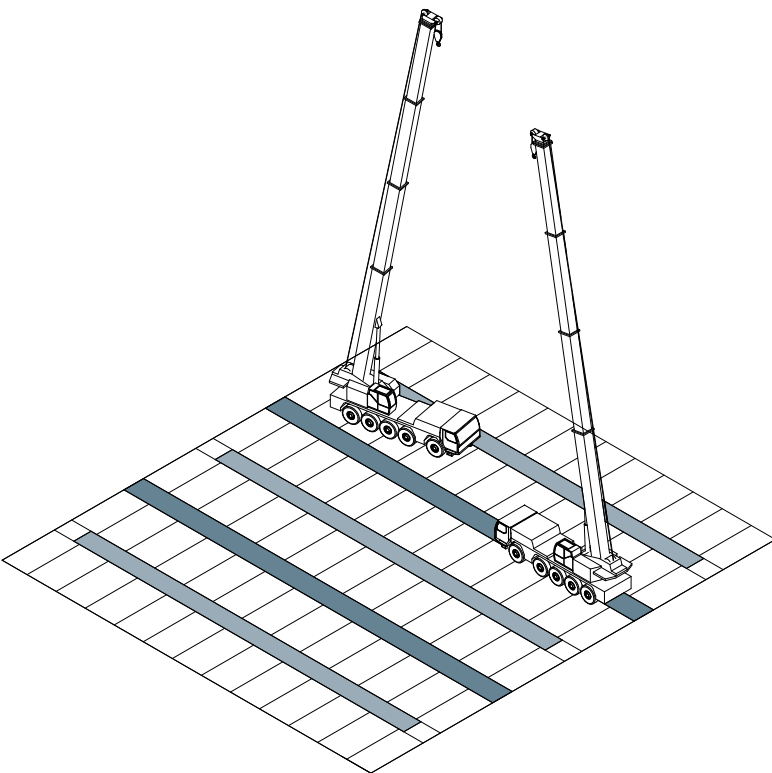




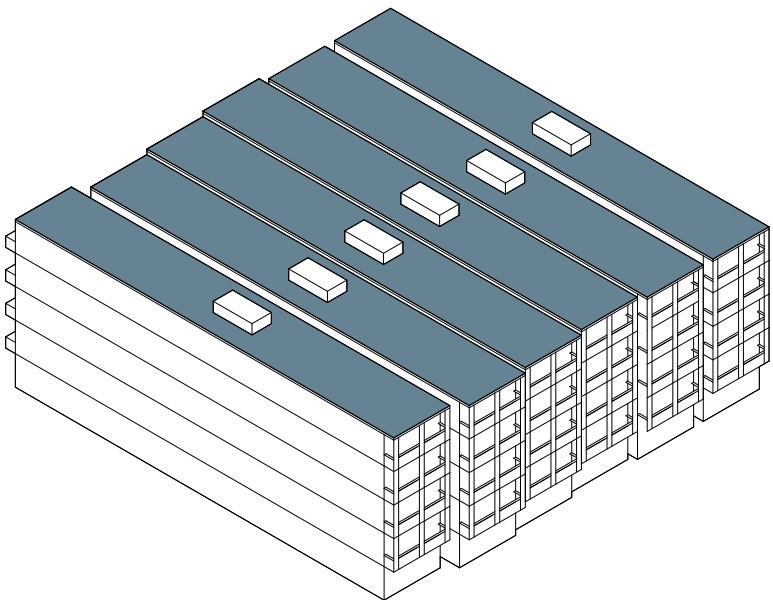
TRANSFORMATION
FROM BAITHI TO HAND-SHAKE



BAITHI CHAWLS
FSI = 0.7



SAME FOOTPRINT



HAND-SHAKE CHAWLS
FSI = 4.0

THE REDEVELOPMENT OF NALASOPARA EAST HAPPENED WITHOUT TAKING INTO ACCOUNT
PATTERNS OF SOCIAL ACTIVITIES AND INCOME GENERATION.

IT LACKS BOTH OUTDOOR SPACES AND PLACES FOR GATHERING THAT COULD REINFORCE
THE **SENSE OF COMMUNITY** AND DIFFERENT FORMS OF SMALL-SCALE, HOME
WORKSPACES, WHICH PLAY AN IMPORTANT ROLE IN THE **INFORMAL ECONOMY.**

«EVEN DREARY AND CHAOTIC SLUMS, OR GROUND FLOOR TENEMENTS ARE
CREATING COMMUNITY. HOWEVER, TALL BUILDINGS, THAT HAVE NO RELATIONS
TO THE GROUND – GENERATE ANONYMITY»

CHARLES CORREA

TRANSFORMATION FROM BATHI TO HAND-SHAKE

2002



2006



2011



2013



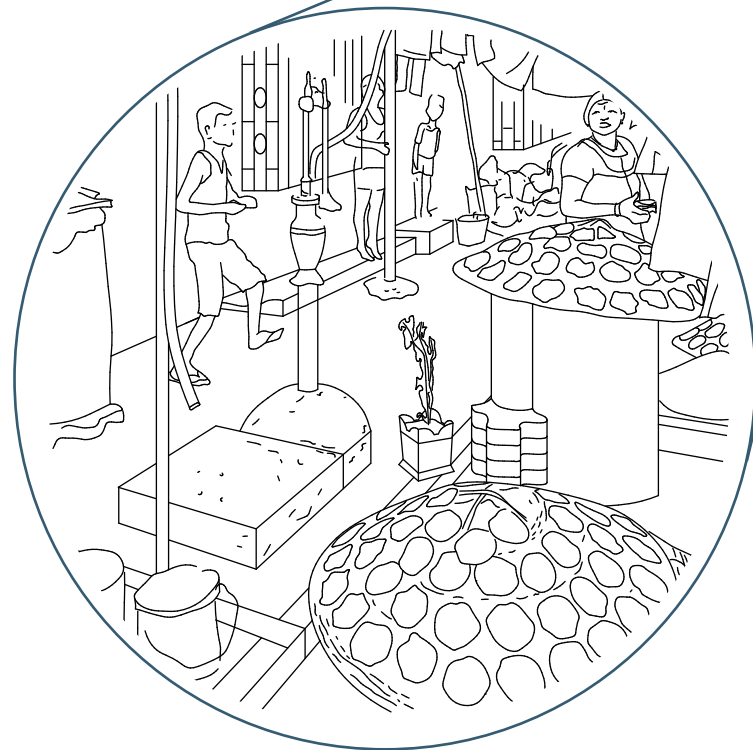
2018



TWO REALITIES OF NALASOPARA EAST



BAITHI CHAWLS



INCOME GENERATION

BAITHI CHAWLS



INCOME GENERATION



SOCIAL INTERACTION

BAITHI CHAWLS



INCOME GENERATION

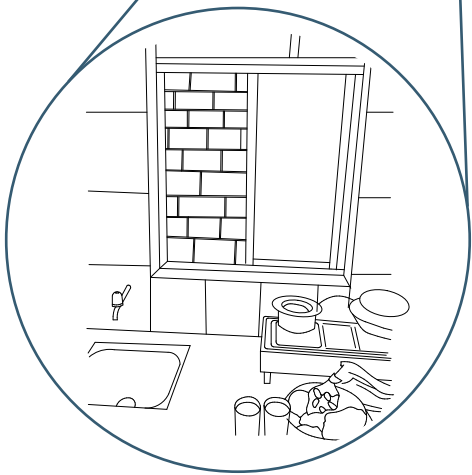


SOCIAL INTERACTION



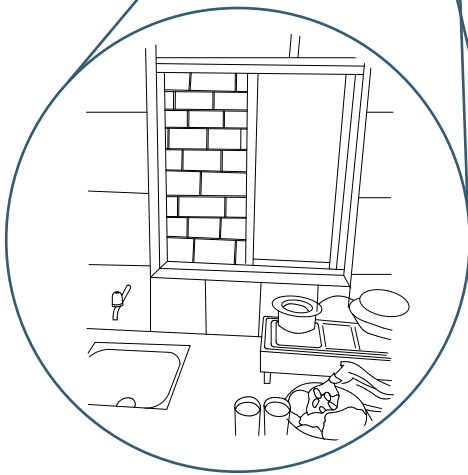
**MULTI-FUNCTIONAL
EXTENSION**

HAND-SHAKE CHAWLS

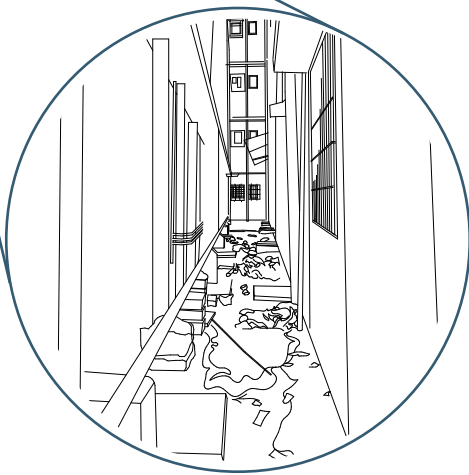


**LACK OF
VENTILATION**

HAND-SHAKE CHAWLS

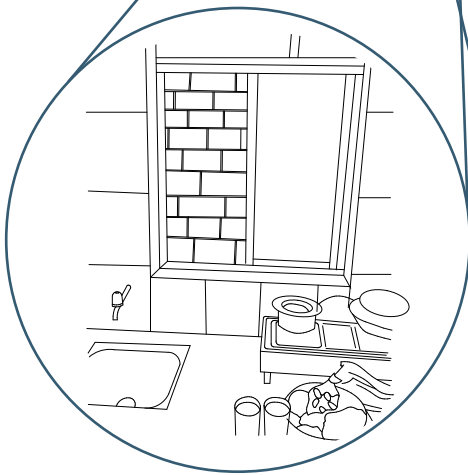


LACK OF VENTILATION

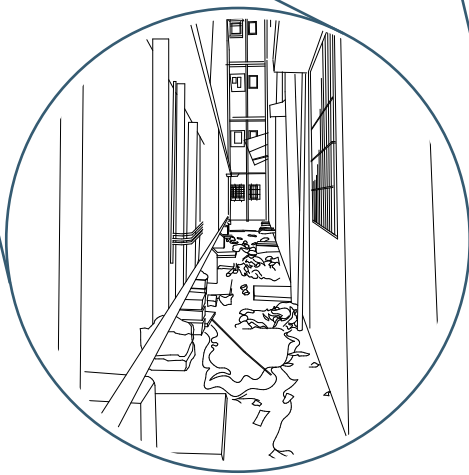


POOR HYGIENIC CONDITIONS

HAND-SHAKE CHAWLS



LACK OF VENTILATION

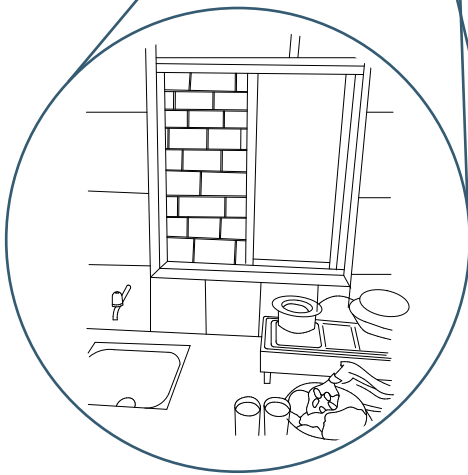


POOR HYGIENIC CONDITIONS

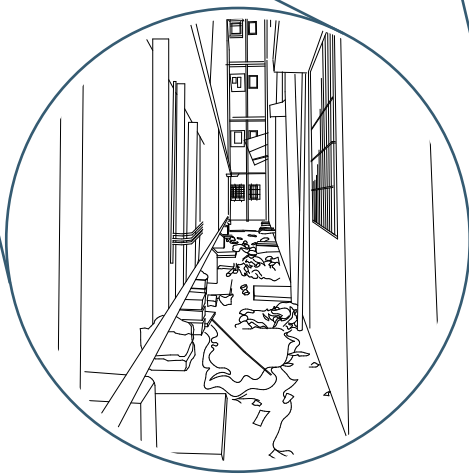


OUTDOOR NEGLIGENCE

HAND-SHAKE CHAWLS



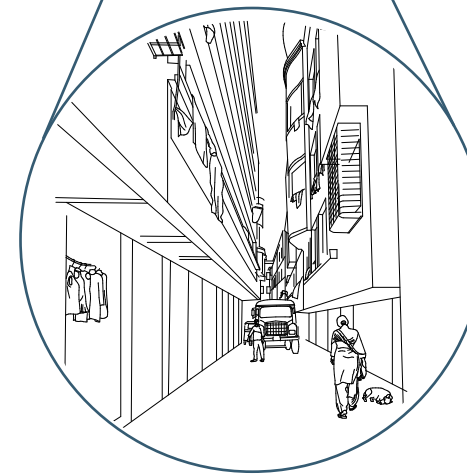
LACK OF VENTILATION



POOR HYGIENIC CONDITIONS

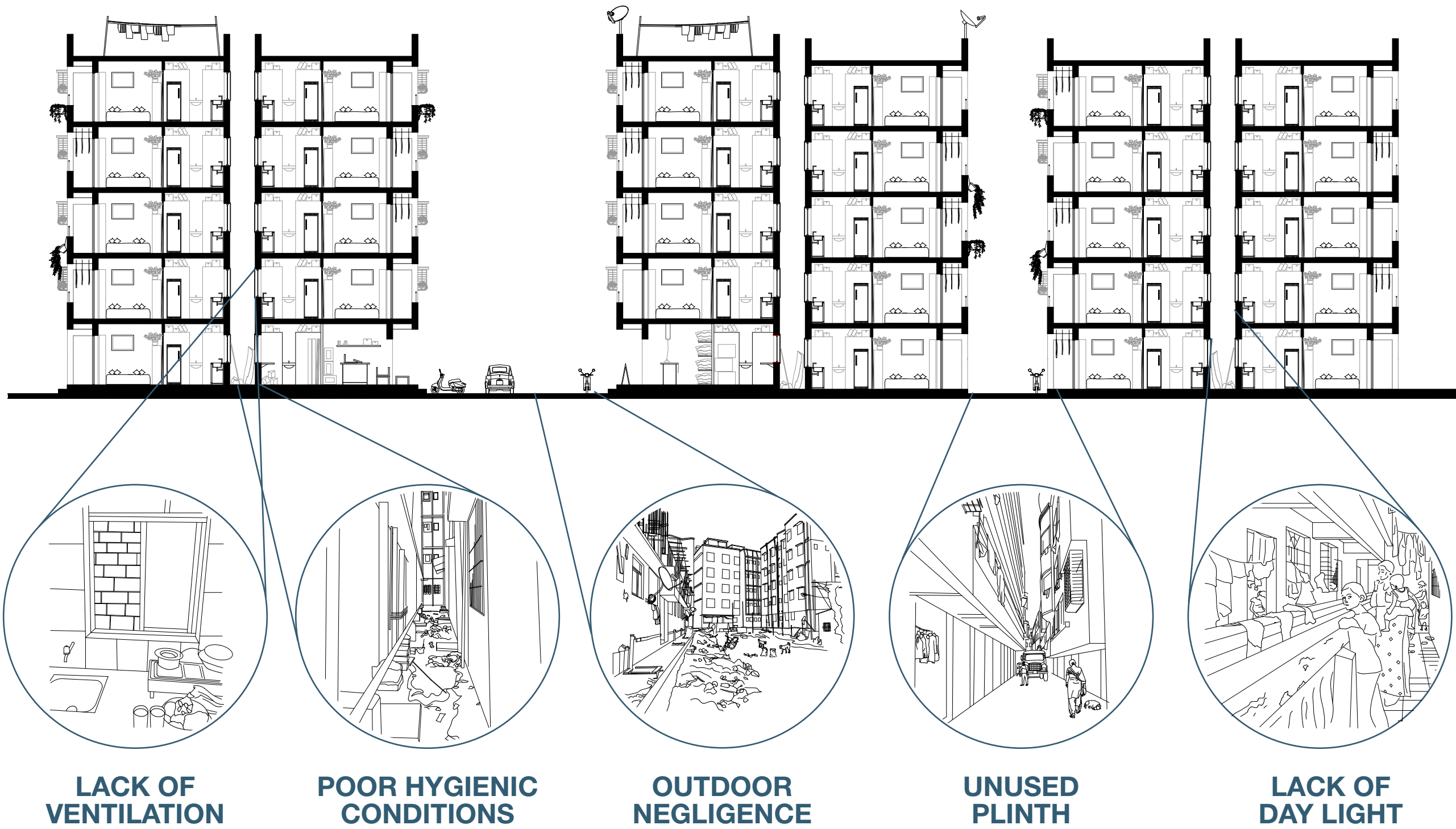


OUTDOOR NEGLIGENCE



UNUSED PLINTH

HAND-SHAKE CHAWLS





UNITED NATIONS

GOAL 8 DECENT WORK AND
ECONOMIC GROWTH

GOAL 11 MAKE CITIES INCLUSIVE,
SAFE, RESILIENT AND SUSTAINABLE

TRANSFORMING OUR WORLD:



**THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT**

CREATION OF INCLUSIVE LIVELIHOODS
IN THE CITY



MUMBAI 2014-2034

PROBLEM STATEMENT

NALASOPARA EAST GREW AS A SATELLITE DORMITORY TOWN OF MUMBAI WITH A **CHAOTIC MASS OF MONOTONOUS BUILDINGS** WITH **POOR INFRASTRUCTURE** AND **IMPOSSIBILITY OF COMMUNITY AND INFORMAL ECONOMY**.

THE LACK OF INCOME GENERATION SPACES, MEETING PLACES, EDUCATIONAL FACILITIES AND CULTURAL AMENITIES TRANSFORM THE CITY INTO MONO-FUNCTIONAL ZONE, WHICH **FAILS TO MEET THE NECESSITIES OF THE NEWCOMERS**.

« WHEN THE TOWN WAS EXPANDING, ITS PUBLIC SPACES WERE SHRINKING. »

PK DAS

RESEARCH AIM

INVESTIGATION OF **THE NEEDS AND AMBITIONS OF PEOPLE**
IN THE NEIGHBOURHOOD, ANALYZING THE EXISTING OUTDOOR
SPACE OF DIFFERENT SCALES, ITS **POSSIBILITIES, FORMATION**
TOOLS AND RELATION TO THE DWELLING.

RESEARCH QUESTION

TO WHAT EXTENT **THE SENSE OF COMMUNITY** OF THE BAITHI CHAWLS CAN BE PRESERVED (ENHANCED) IN **AN AFFORDABLE DWELLING TYPOLOGY**, OFFERING **A COMPETITIVE ALTERNATIVE** TO THE CURRENT DEVELOPMENT?

RESEARCH SUB-QUESTIONS

WHAT ARE THE ELEMENTS THAT DETERMINE COMMUNITY?

HOW CAN SOCIAL AND INCOME GENERATING ACTIVITY BE STIMULATED WITHIN THE FRAME OF A NEW DEVELOPMENT?

WHAT ARE THE MAIN POSSIBLE SOURCES OF INCOME GENERATED IN THE NEIGHBORHOOD?

TO WHAT EXTEND LOW-RISE, HIGH-DENSE APPROACH COMBINED IN BAITHI CHAWL CAN BE TRANSFORMED IN A NEW, COMPETITIVE (REGARDING FSI) SCHEME, WHILE PRESERVING THE SENSE OF COMMUNITY?

WHAT ARE THE ELEMENTS, WHICH IDENTIFY AND INFLUENCE SPACES FOR SOCIAL INTERACTIONS AND INCOME GENERATION?

ASSIGNMENT

ON THE URBAN LEVEL - TO **LEVEL OUT THE DENSITY** OF THE BAITHI CHAWLS AND THE HANDSHAKE CHAWLS, CREATE A SEAMLESS NET OF OPEN SPACES

ON THE LEVEL OF NEIGHBORHOOD - TO ACHIEVE **DIVERSITY**, REGARDING VARIOUS TYPOLOGIES RESPONDING TO DIFFERENT INCOME GROUPS, PROVIDE HEALTHY LIVING CONDITIONS

ON THE LEVEL OF CLUSTER - CREATE **SOCIAL AND INCOME GENERATION SPACES**, ENHANCE THE QUALITY OF LIFE

ON THE LEVEL OF DWELLING - DIVERSITY REGARDING LEVELS OF **PRIVACY**. POSSIBILITY FOR **EXTENSION**

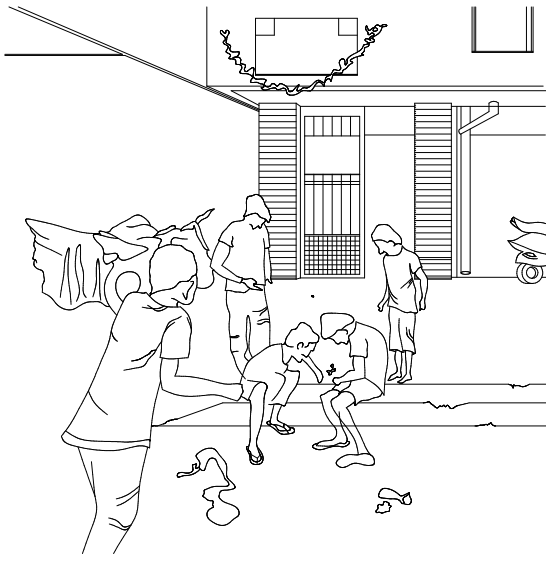
MY GOAL IS TO FIND OUT A SOLUTION, THAT CAN BE BOTH ATTRACTIVE FOR THE DEVELOPER, REGARDING COMPETITIVE FSI, CREATING COMMERCIAL SPACES AND ACTIVATE THE STREETS FOR THE DWELLERS, CONSIDERING ECONOMIC AND SOCIAL PATTERNS AND VALUES OF THE URBAN POOR.

SOCIAL SPACES



GOSSIP CORNER

«WE PREFER TO SIT HERE AND GOSSIP»



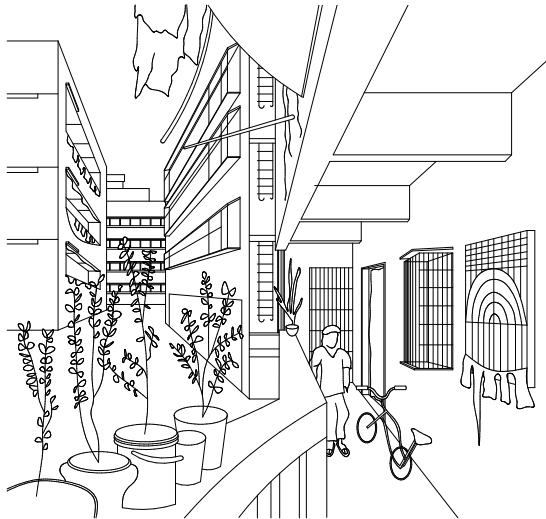
EXPLOSIVE STOOP

«DIWALI IS COMING UP
WE WILL HAVE CRACKERS!»



ALLEY OF INTIMACY

«WOMEN LIKE TO STAY IN
THEIR COMFORT ZONE AND
MEN STAY IN THE STREETS.»



SOCIAL CORRIDOR

«MY HUSBAND AND I MOVED
HERE FROM BOMBAY
BECAUSE IT'S CHEAPER
WE PAY RS 2000 A MONTH»



GULLY CRICKET

«WE ALWAYS COME TO PLAY
HERE BECAUSE IT'S FOR FREE
WE LEARNT TO PLAY AT THE
CRICKET SCHOOL BUT THAT
IS ONLY FOR MEMBERS.»



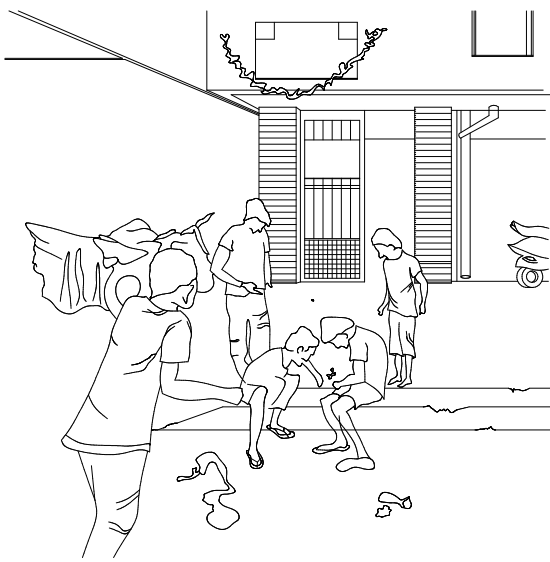
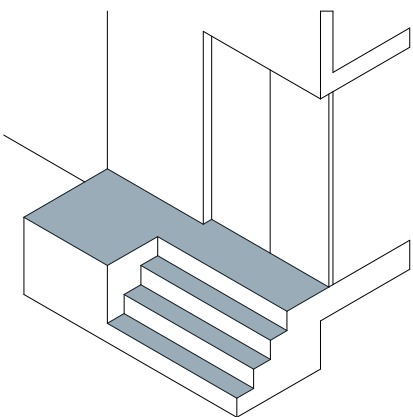
MULTIPURPOSE ALTAR

«DURING GANESH CHATURTHI
WE PREPARE THE STAGE FOR
THE IDOL
WE DECORATE IT WITH
FLOWERS AND OFFER
SWEETS TO THE LORD
A LOT OF OUR FRIENDS
AND RELATIVES COME TO
CELEBRATE WITH US»

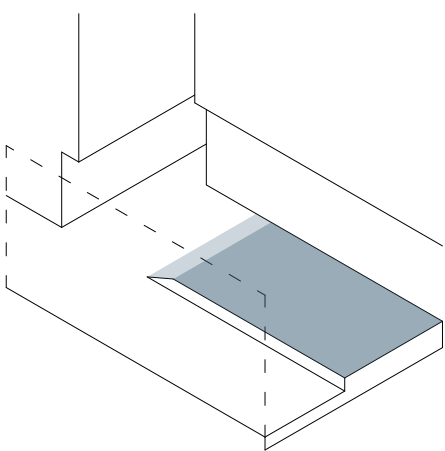
SOCIAL SPACES



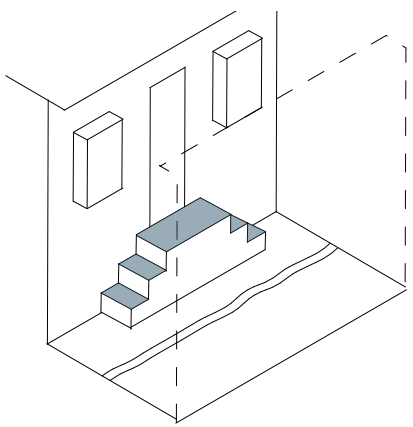
GOSSIP CORNER



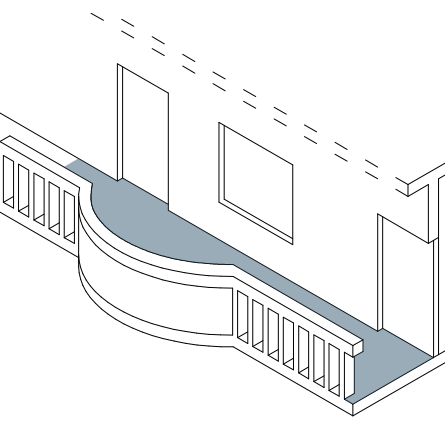
EXPLOSIVE STOOP



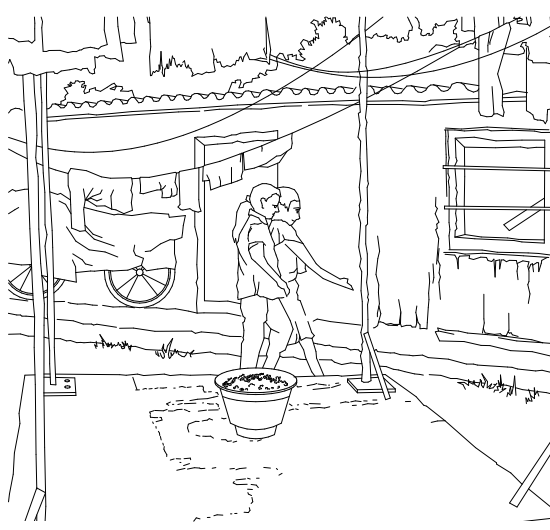
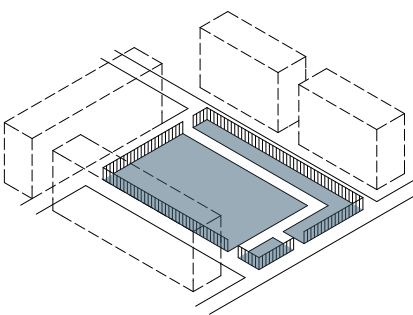
ALLEY OF INTIMACY



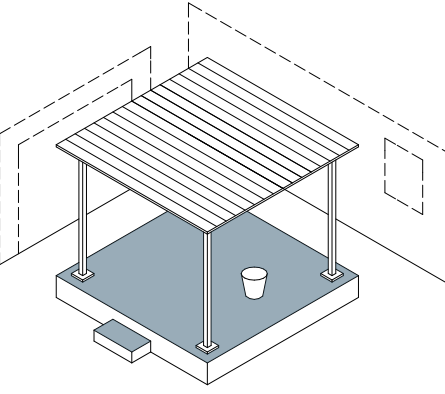
SOCIAL CORRIDOR



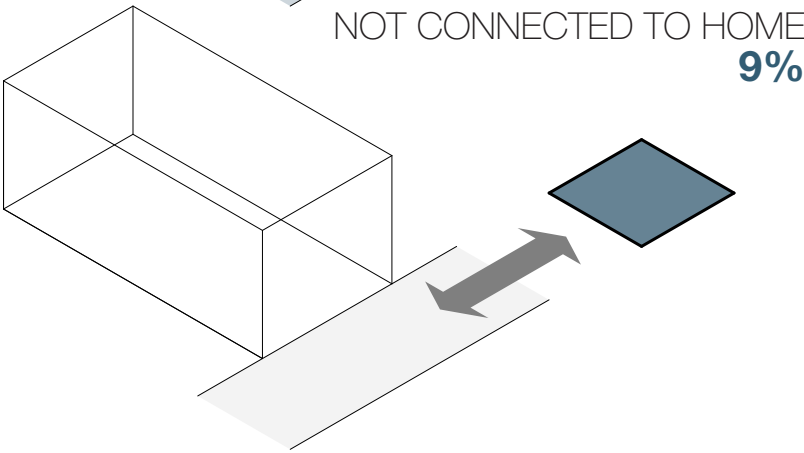
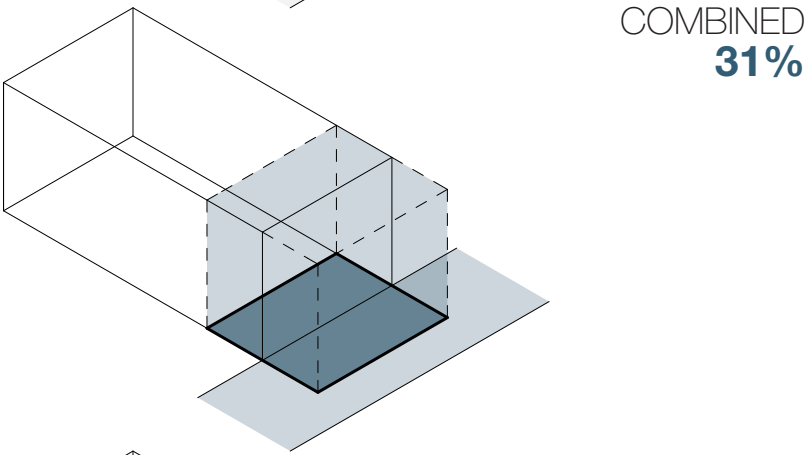
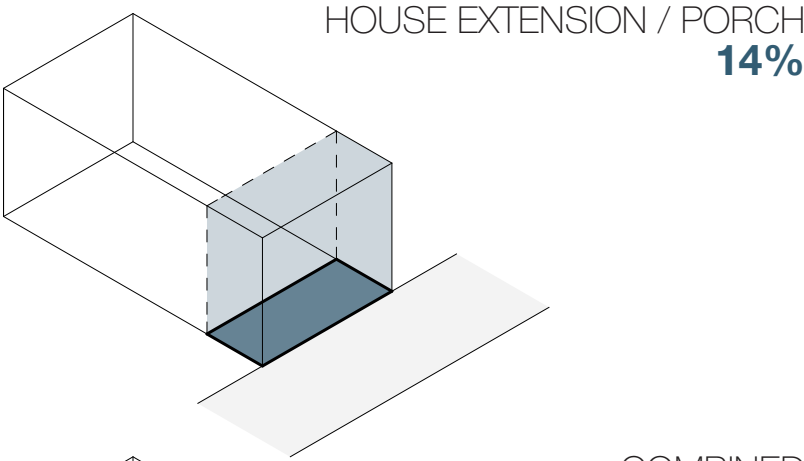
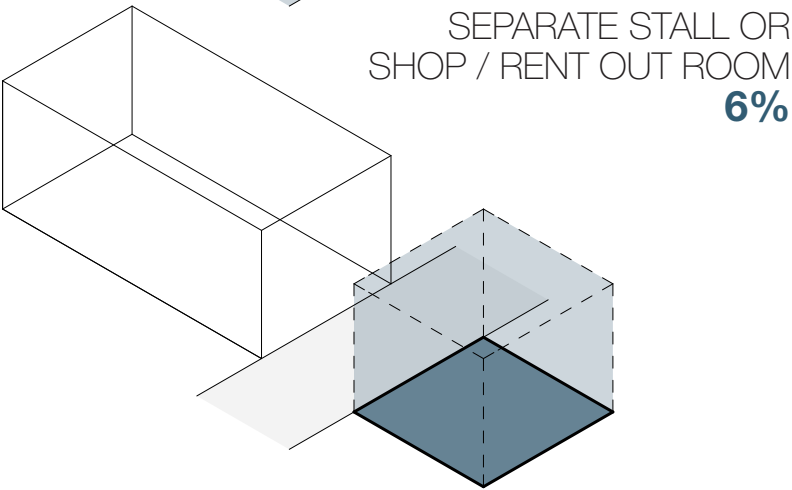
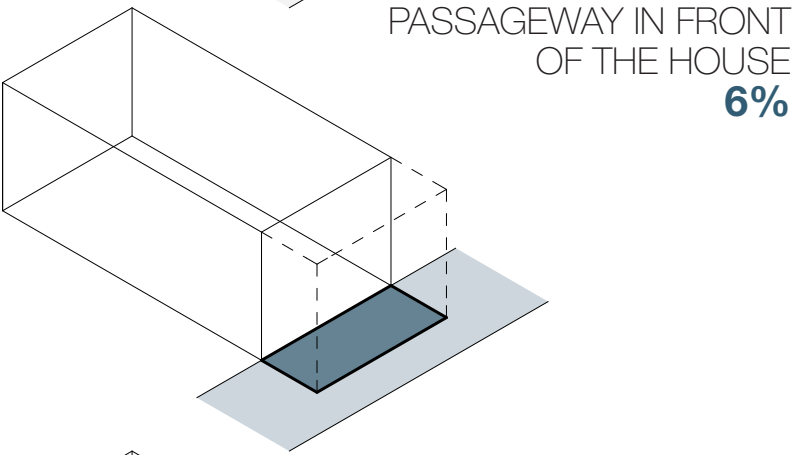
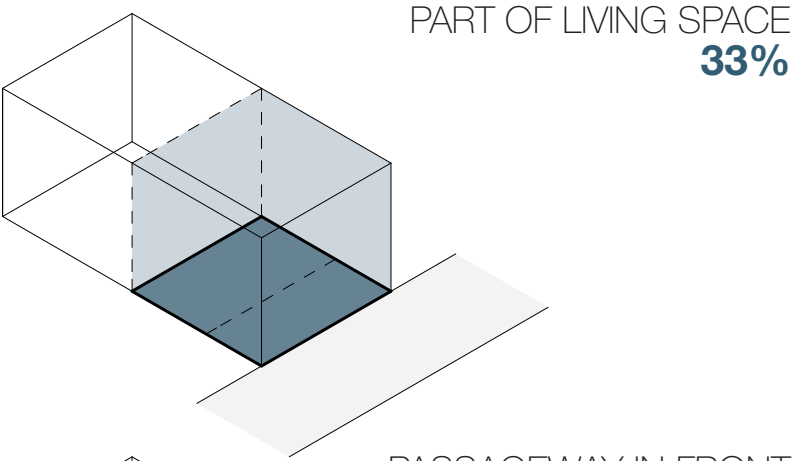
GULLY CRICKET



MULTIPURPOSE ALTAR

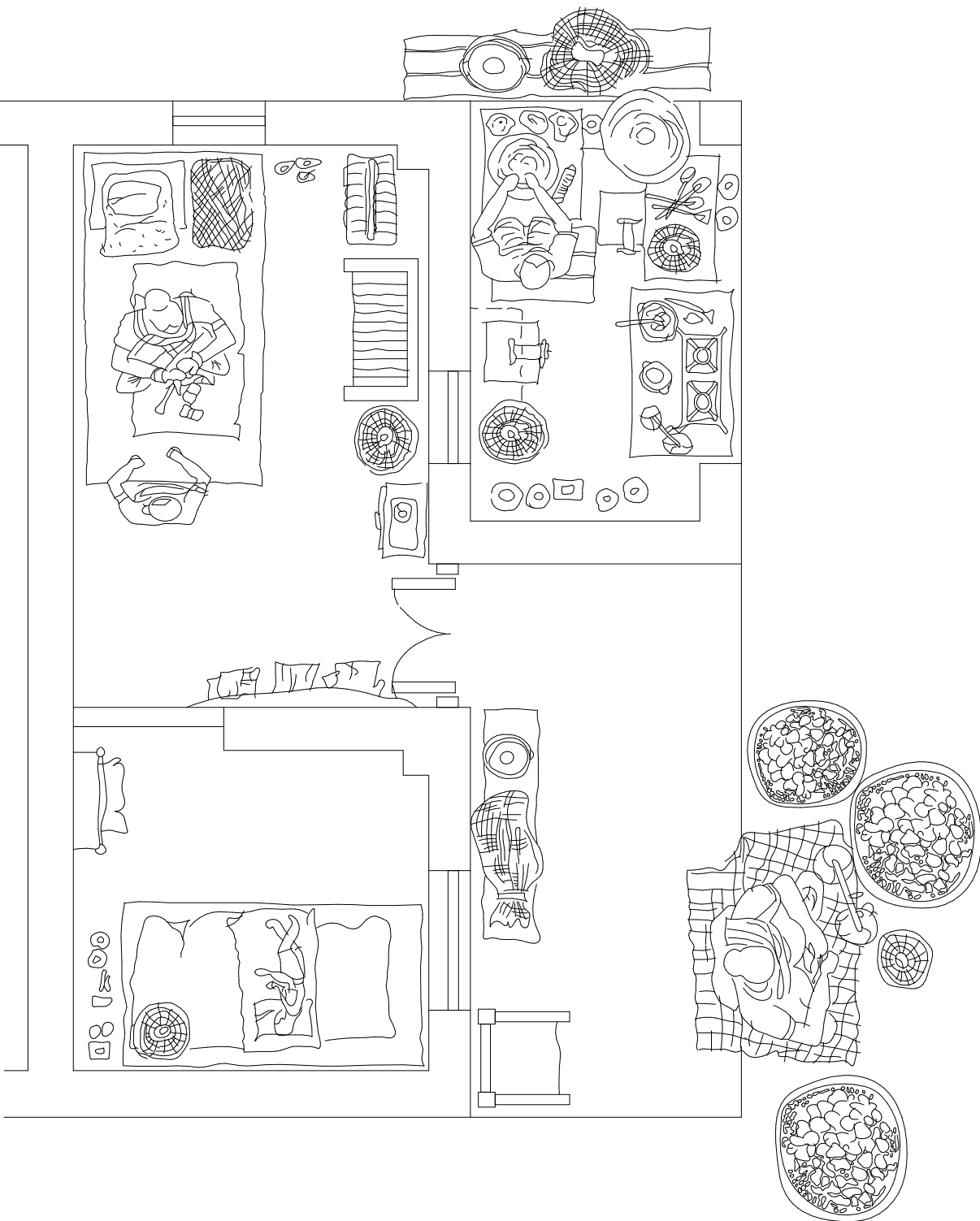
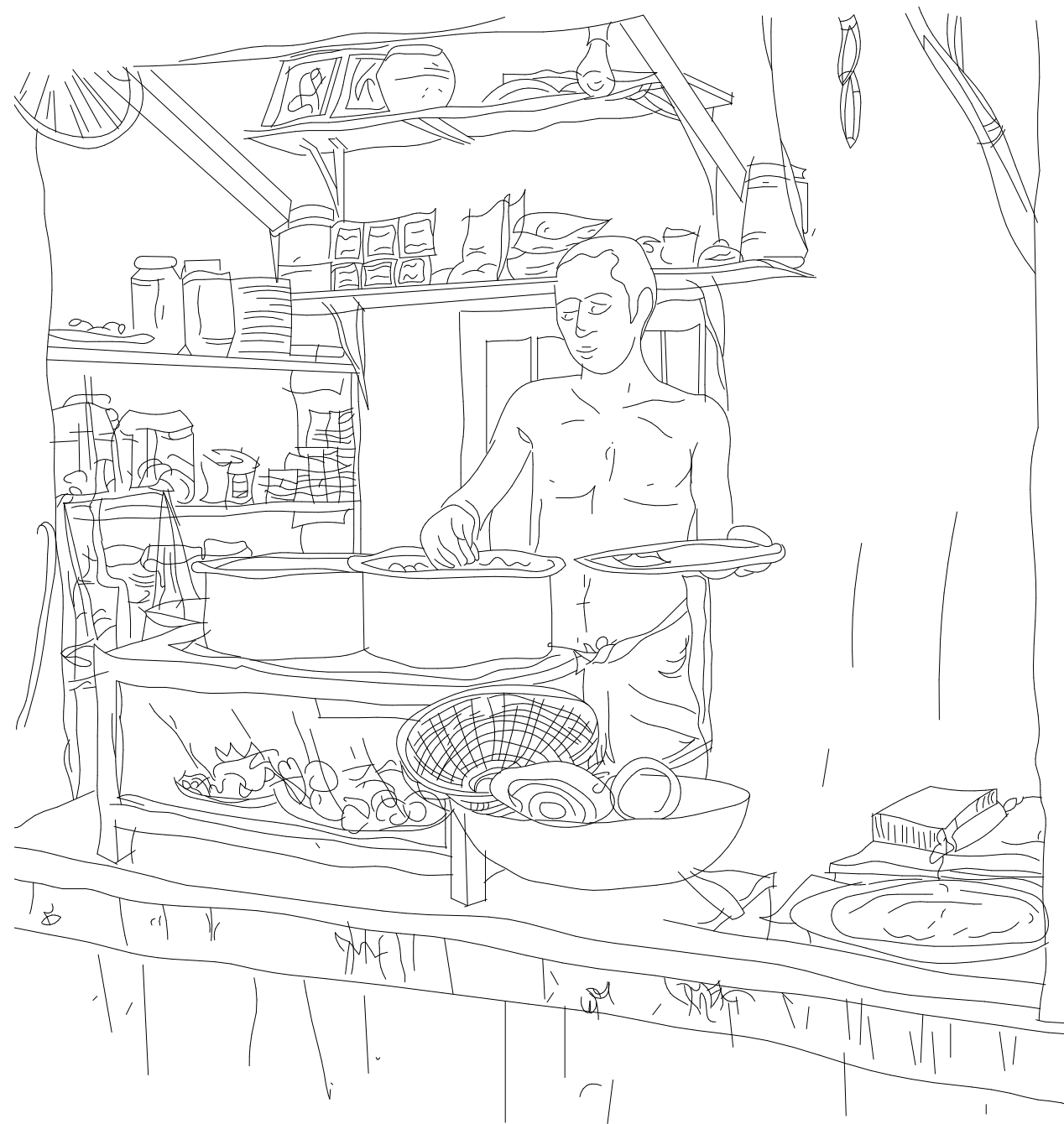


INCOME GENERATION SPACES



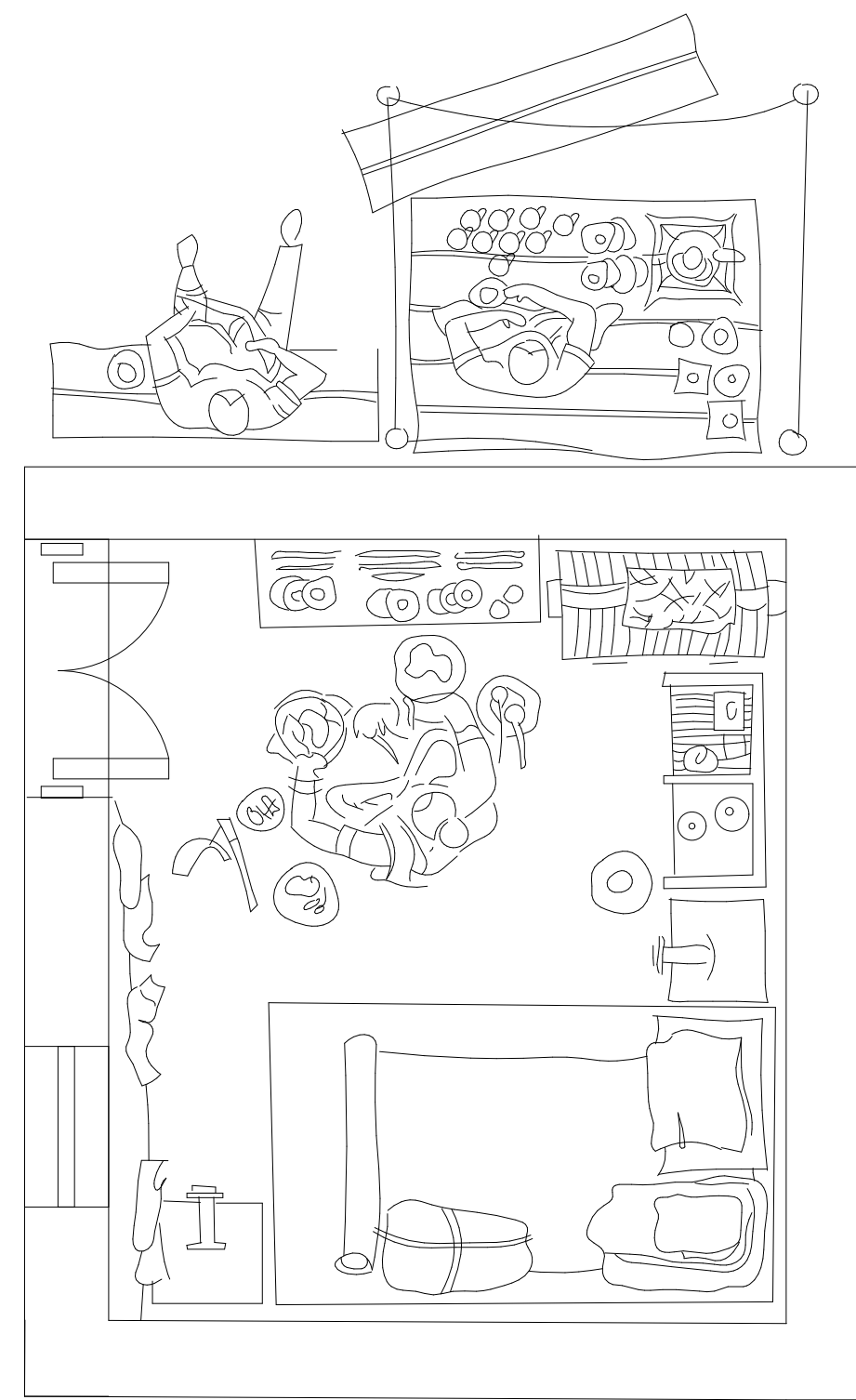
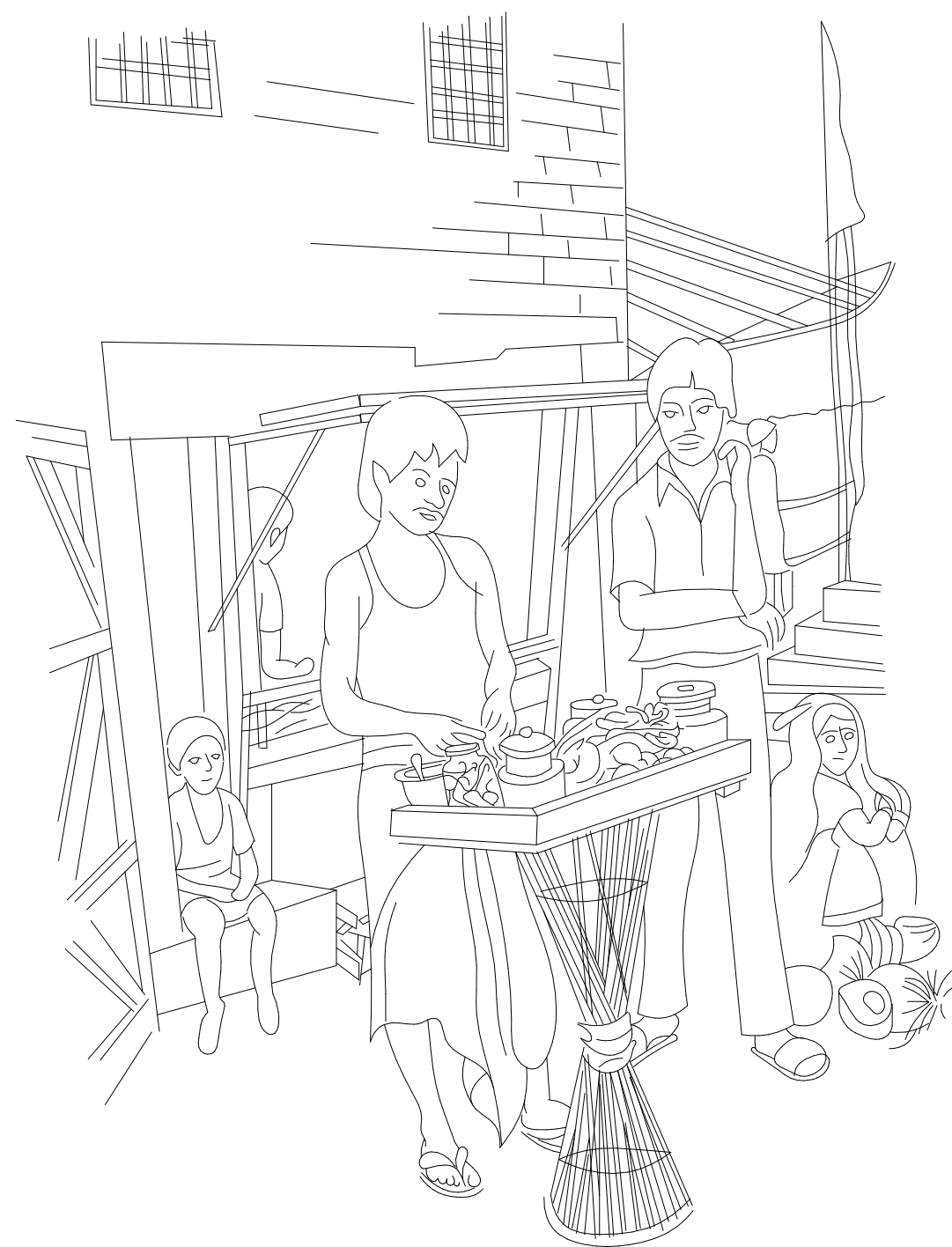
INCOME GENERATION SPACES

BHUPOTI SARKAR'S SNACK SHOP IN THE FRONT PORCH OF THE HOUSE

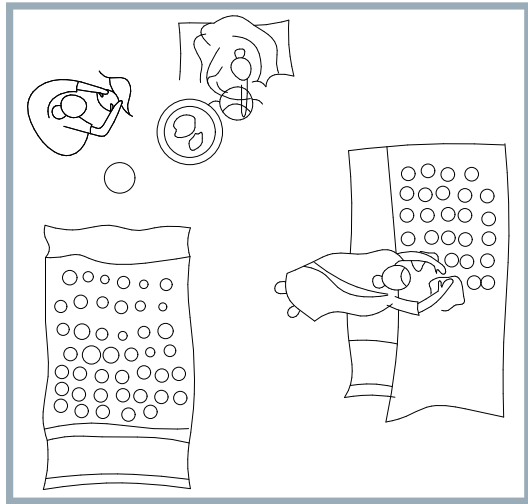


INCOME GENERATION SPACES

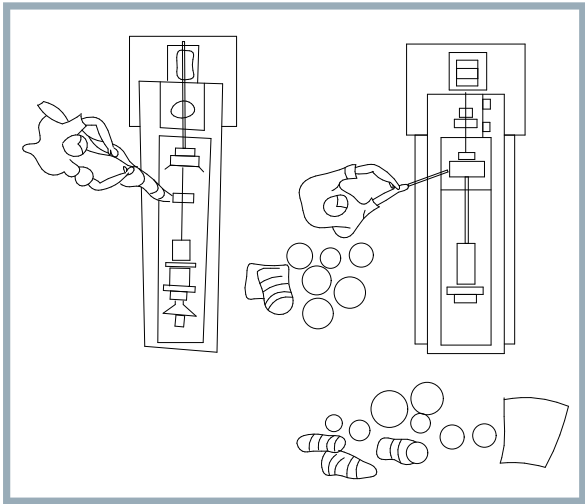
SALAUDDIN'S PICKLE STAND AT THE DAILY MARKET NEXT TO HIS HOUSE



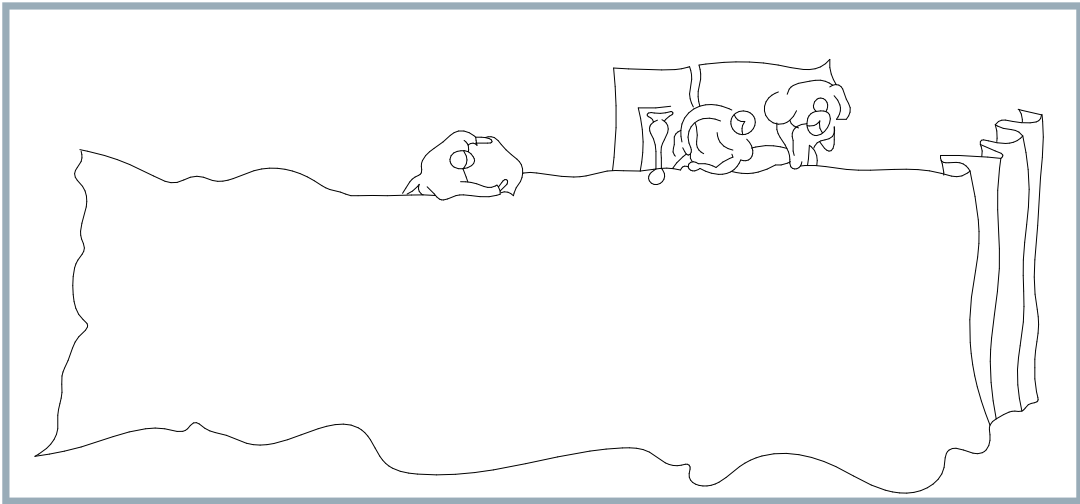
INCOME GENERATION SPACES



BREAD - 6m²



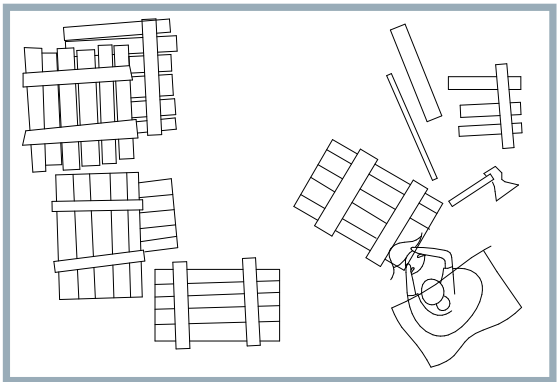
UTENSILS - 18m²



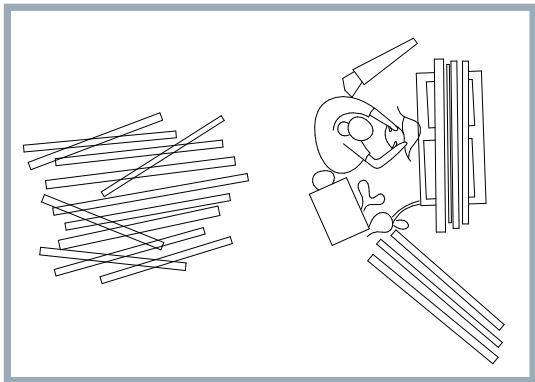
AWNINGS - 32m²



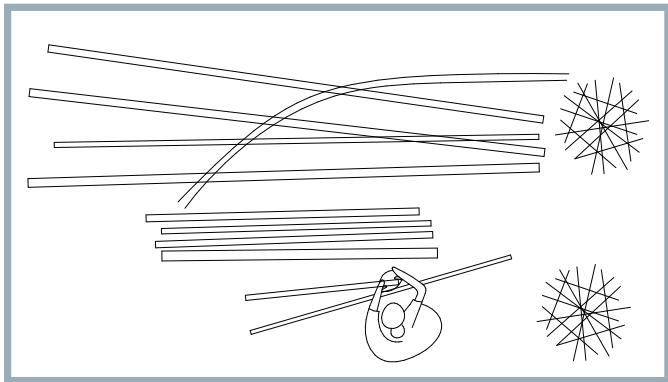
CIGARETTES - 6m²



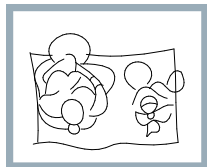
WOODEN CRATES - 36m²



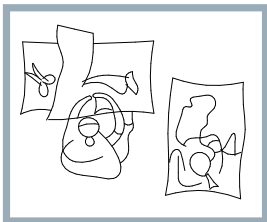
CARPENTRY - 4m²



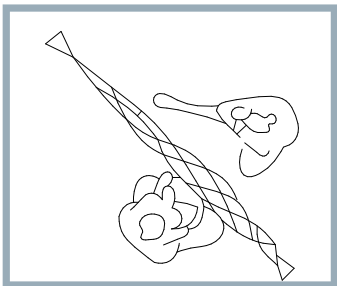
BASKETS - 16m²



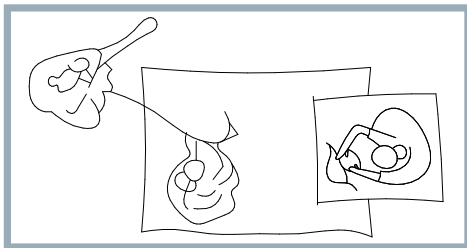
BRACELETS - 6m²



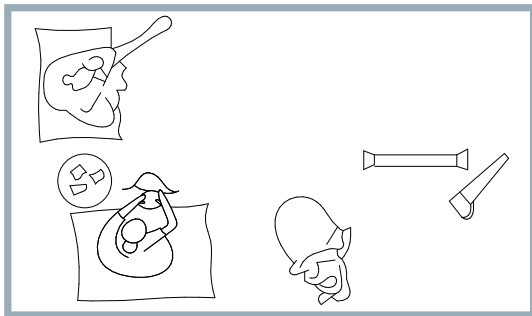
CLOTHES - 4m²



ANIMAL HARNESS - 4m²



STRING - 4m²



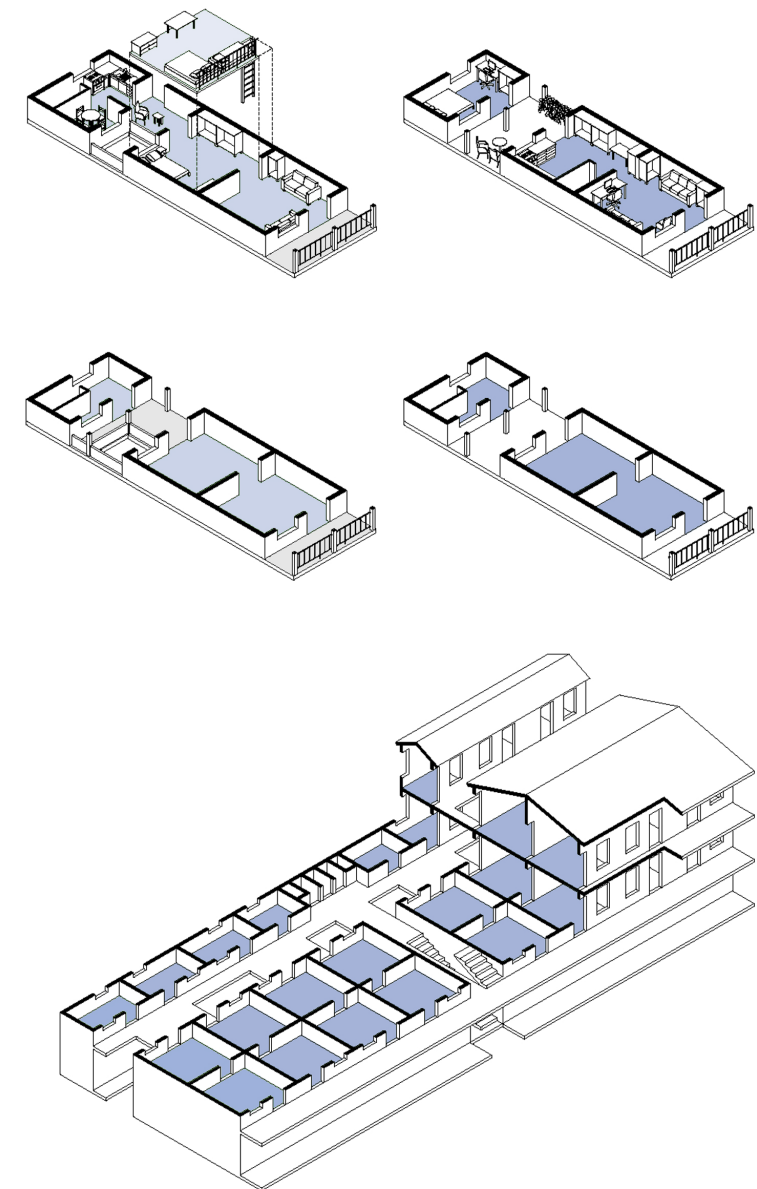
WOODEN COMBS - 4m²

CASE STUDIES



ATMARAM CHAWL - 1866

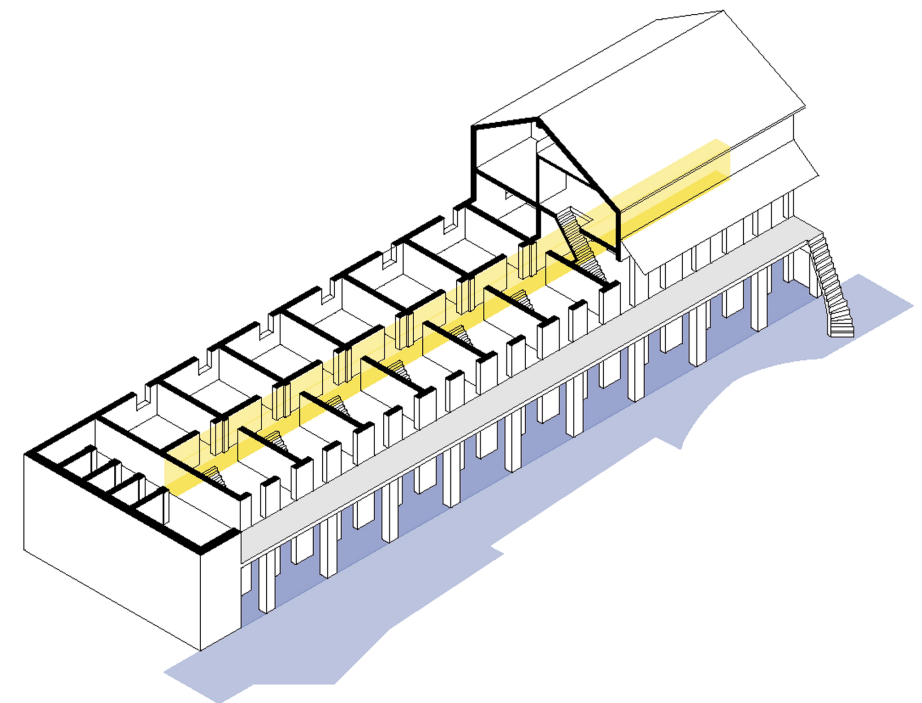
COMMUNITY SPACE / INCOME ORIENTED MODIFICATION





MOTA MANDIR CHAWL - 1865

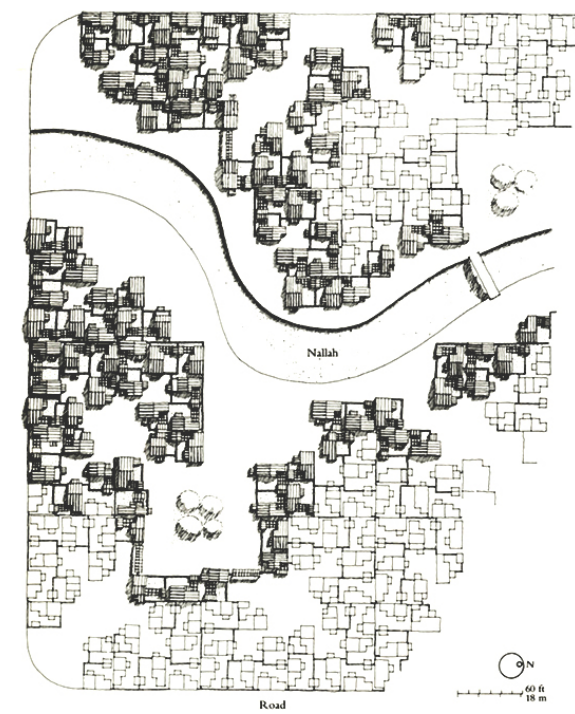
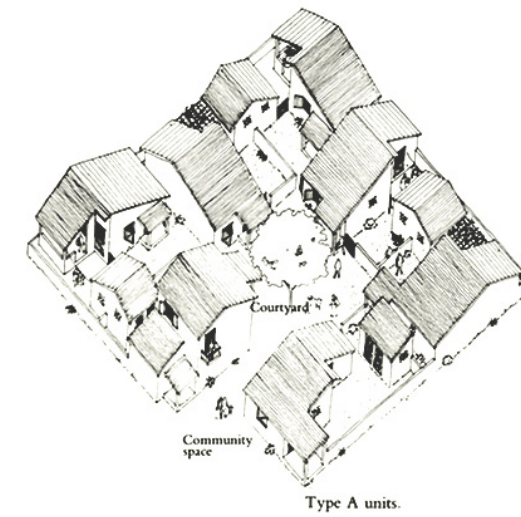
THE FLOW OF THE SPACE





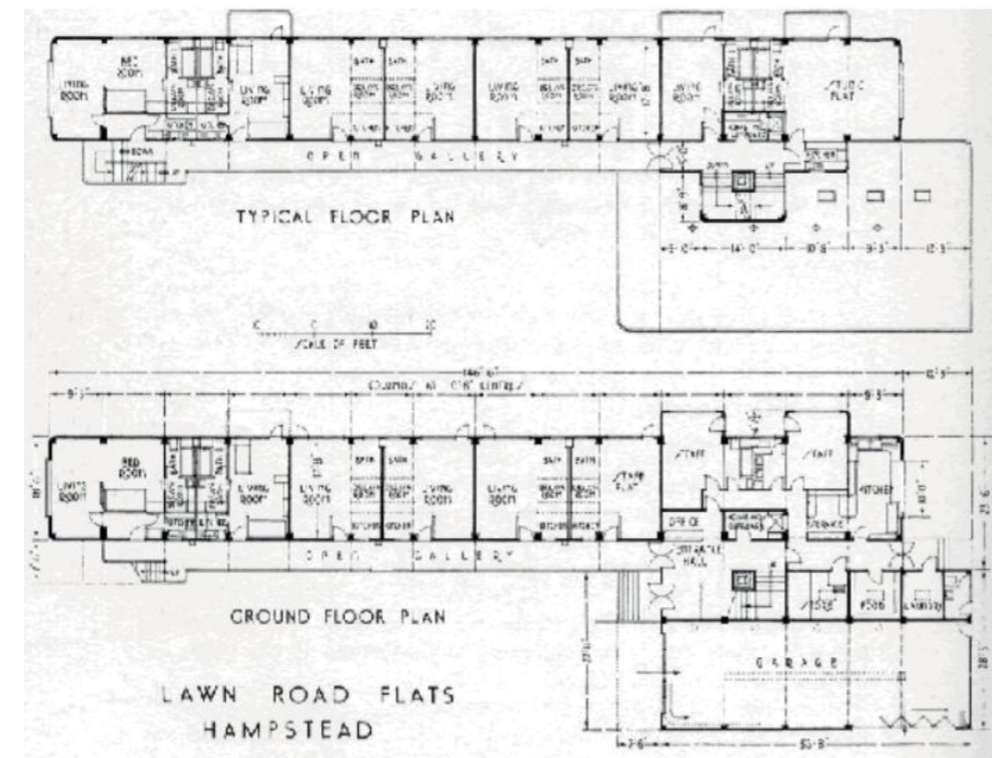
BELAPUR - 1986
CHARLES CORREA

**CLUSTERING / INCREMENTALITY /
HIERARCHY OF SPACE**



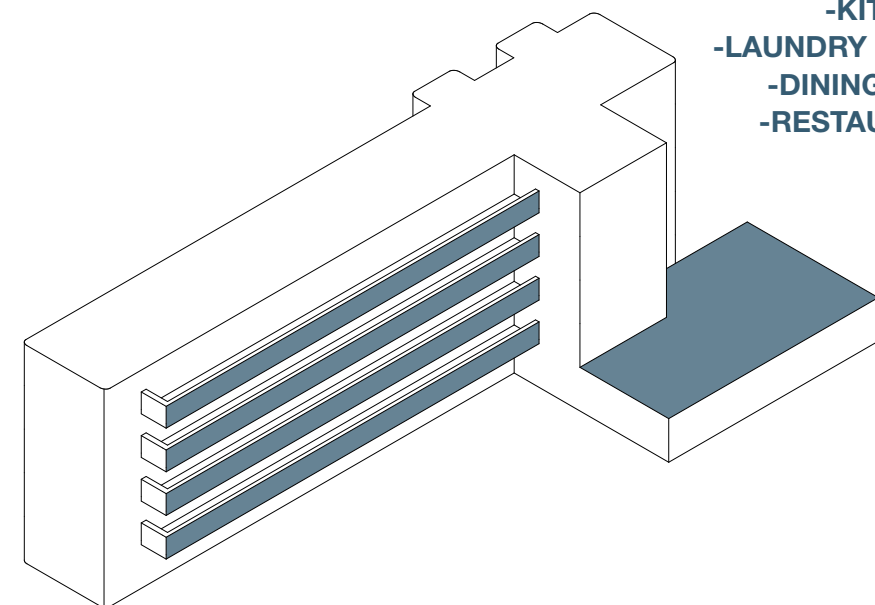


THE ISOKON BUILDING (HAMPSTEAD, UK) - 1934
WELLS COATES



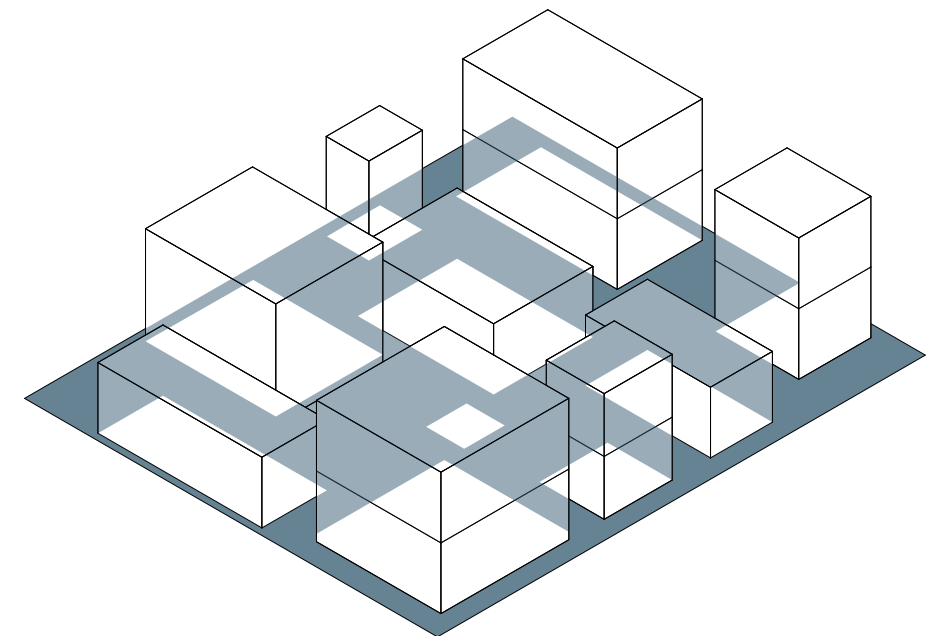
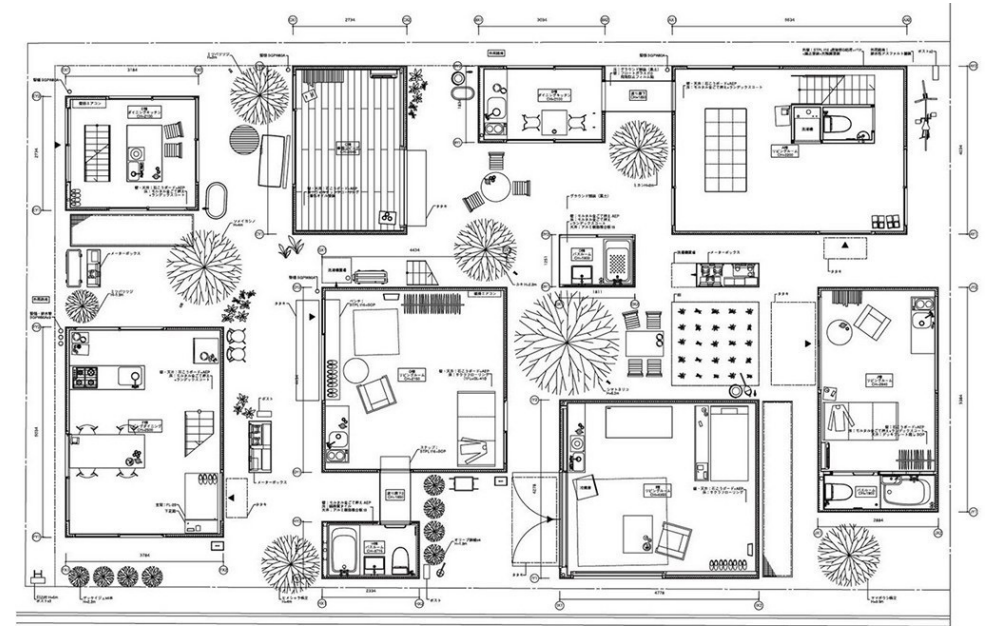
COMMUNAL AREA

- KITCHEN
- LAUNDRY ROOM
- DINING HALL
- RESTAURANT





MORIYAMA HOUSE (TOKYO, JAPAN) - 2005
RYUE NISHIZAWA



URBAN STRATEGY

URBAN STRATEGY

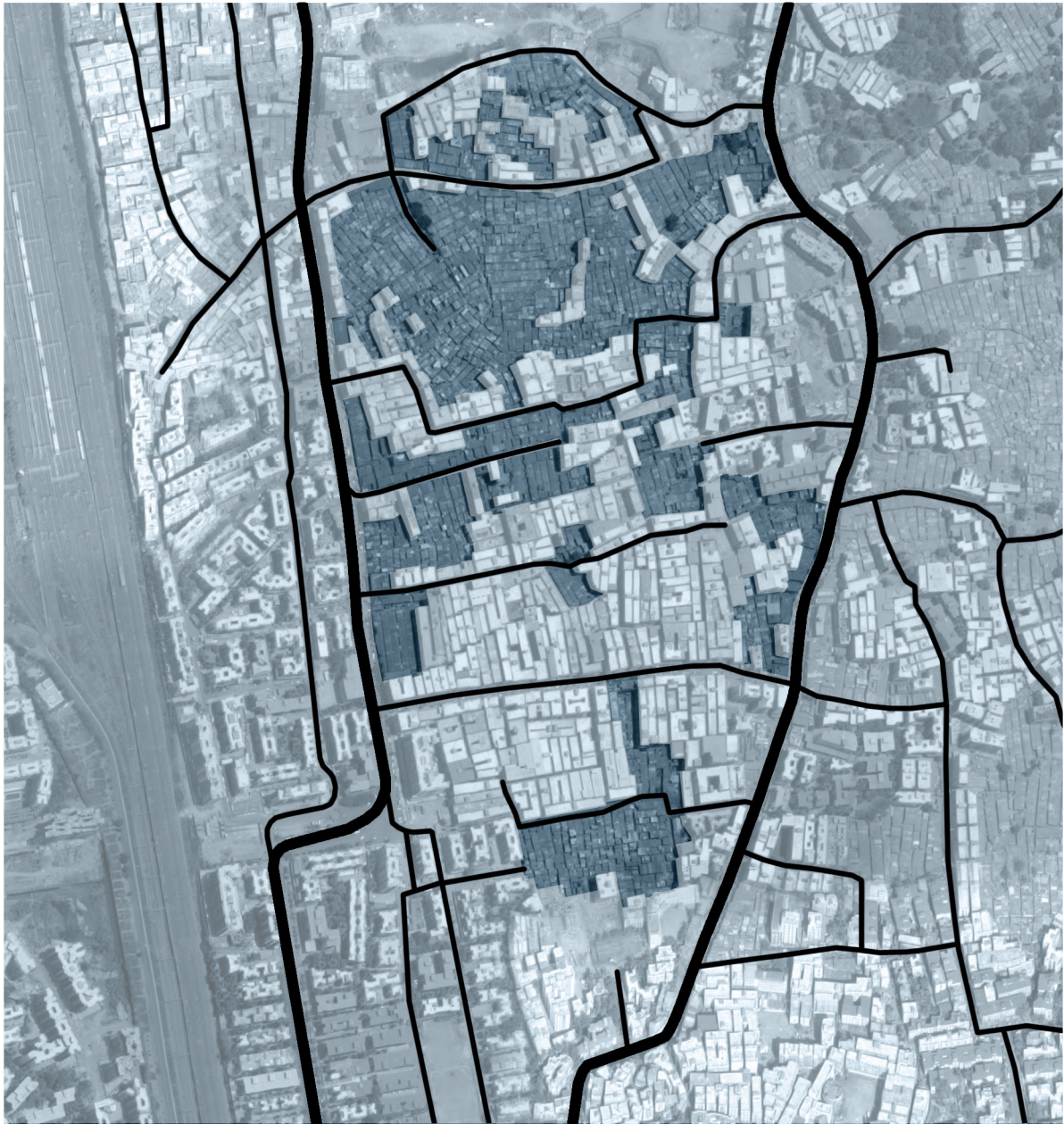
BAITHI CHAWLS



MAIN ROADS



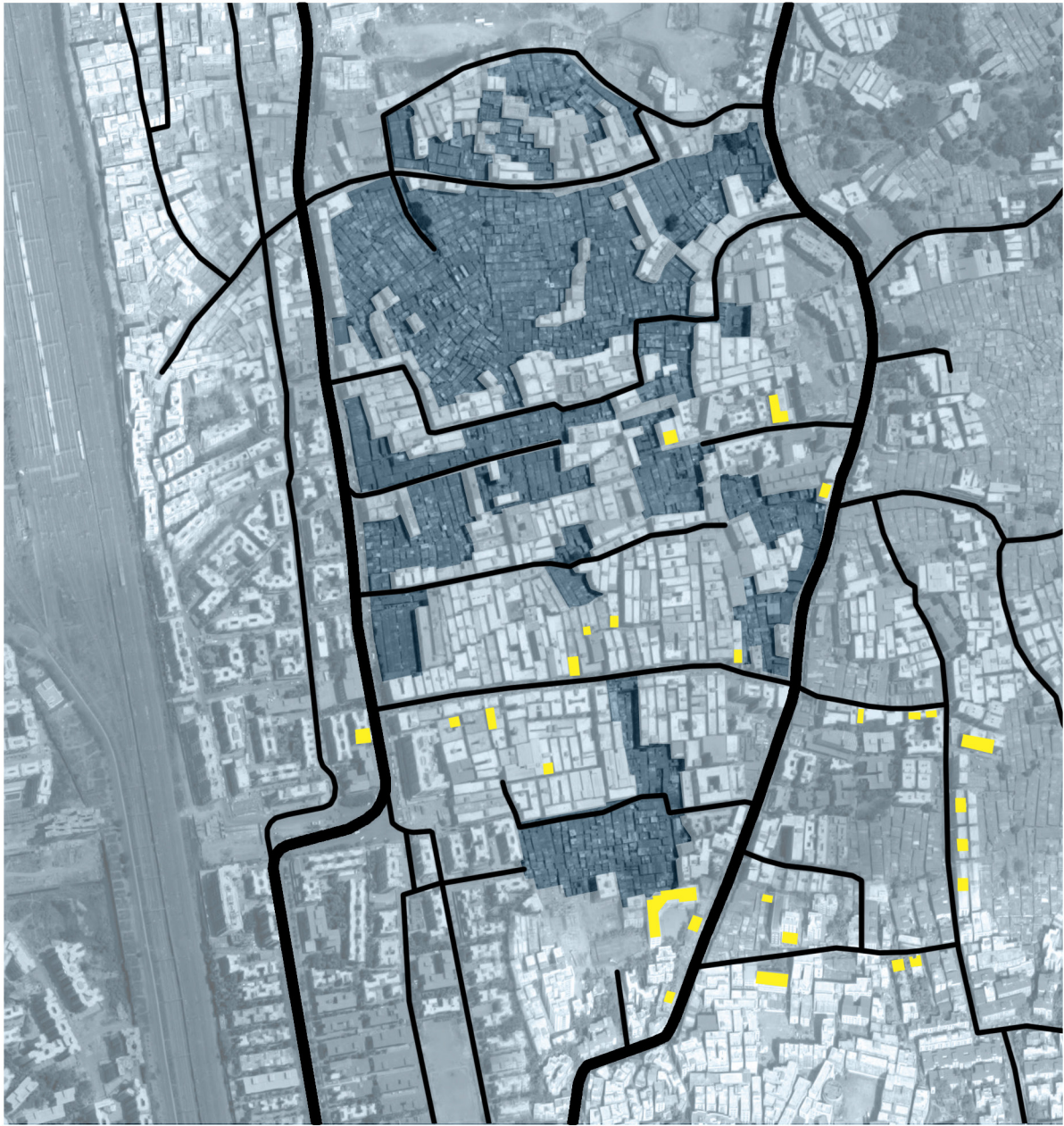
SECONDARY ROADS



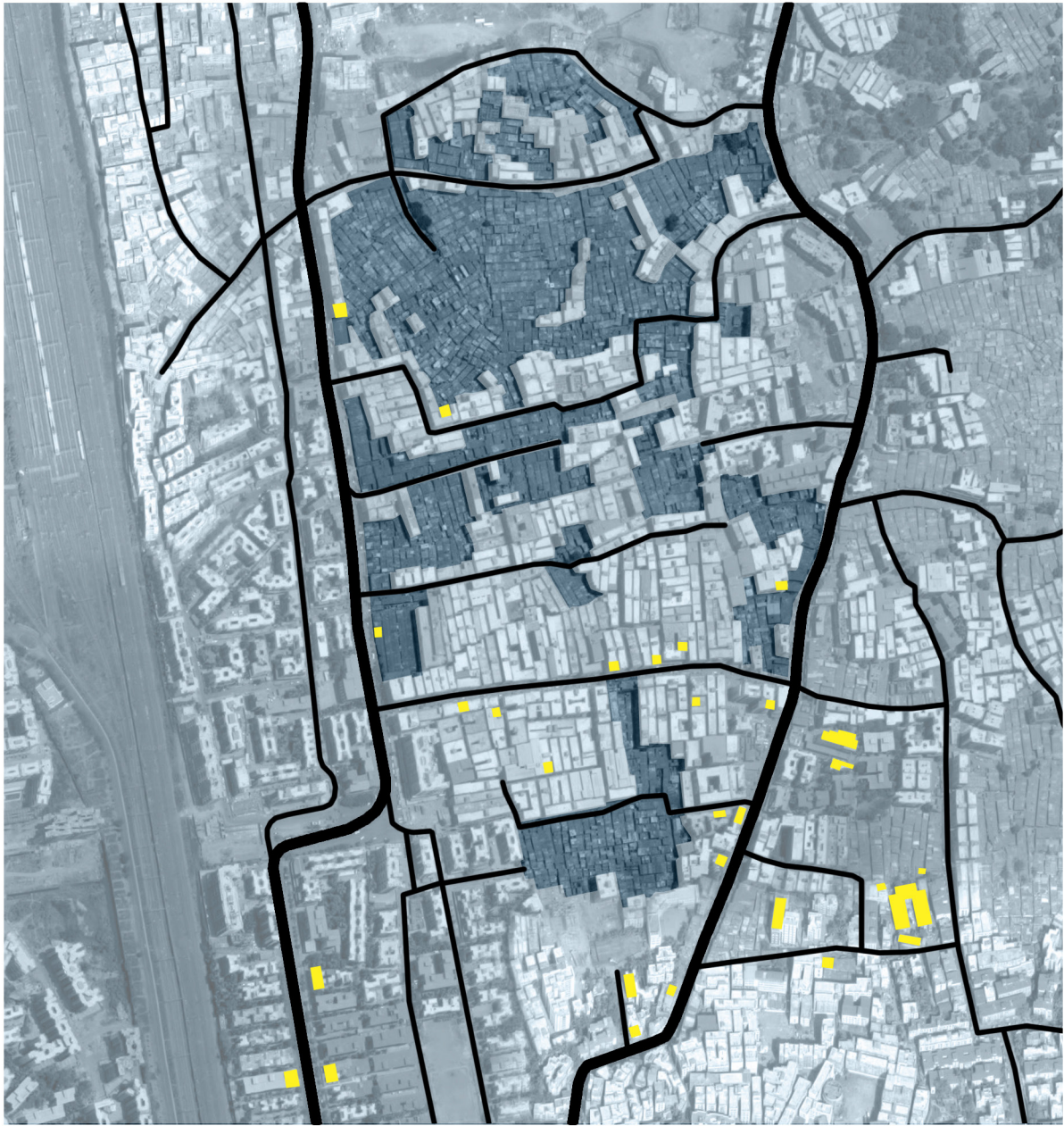
**COMMERCIAL
FACILITIES**



**EDUCATIONAL
FACILITIES**



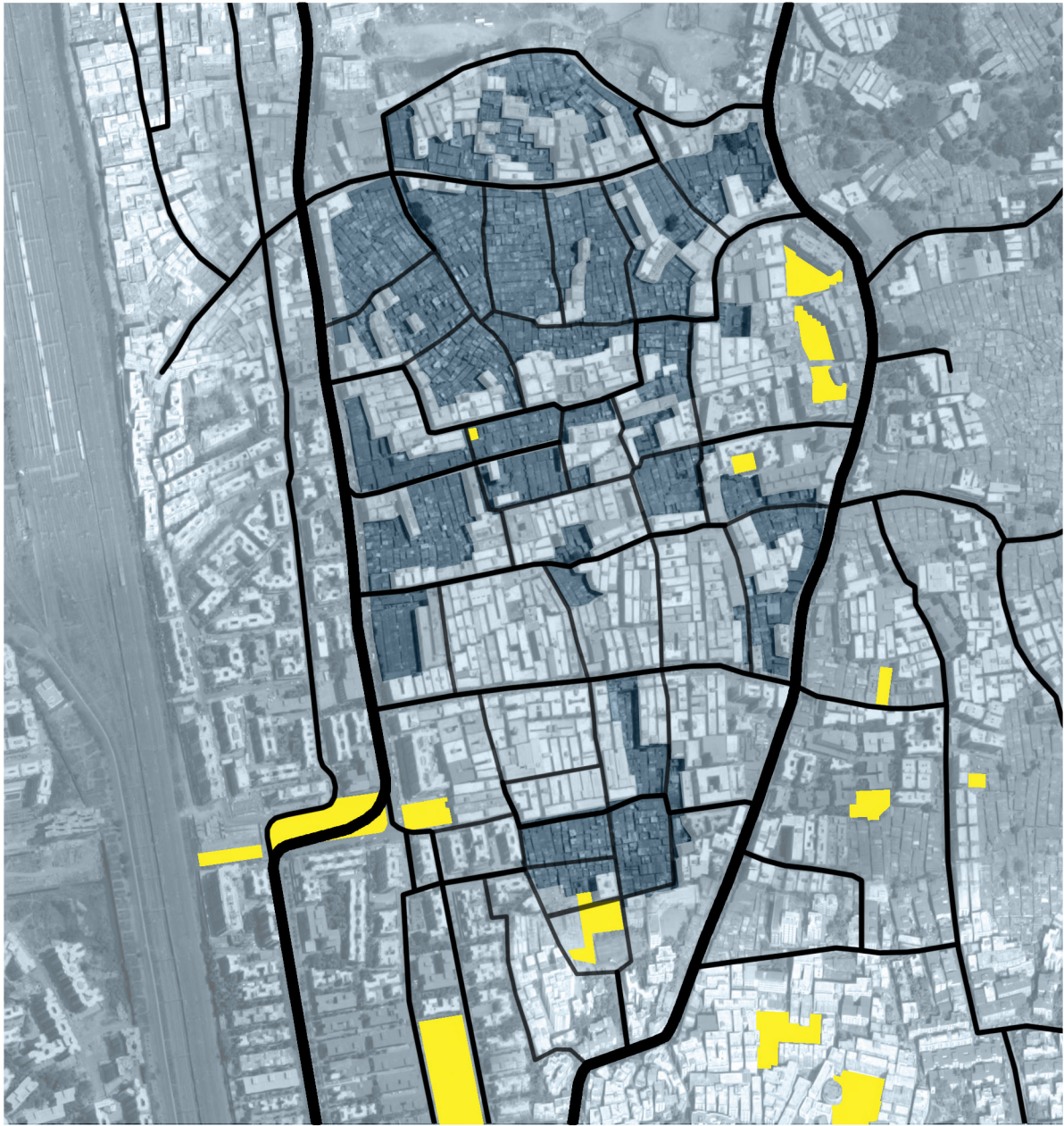
**MEDICAL
FACILITIES**



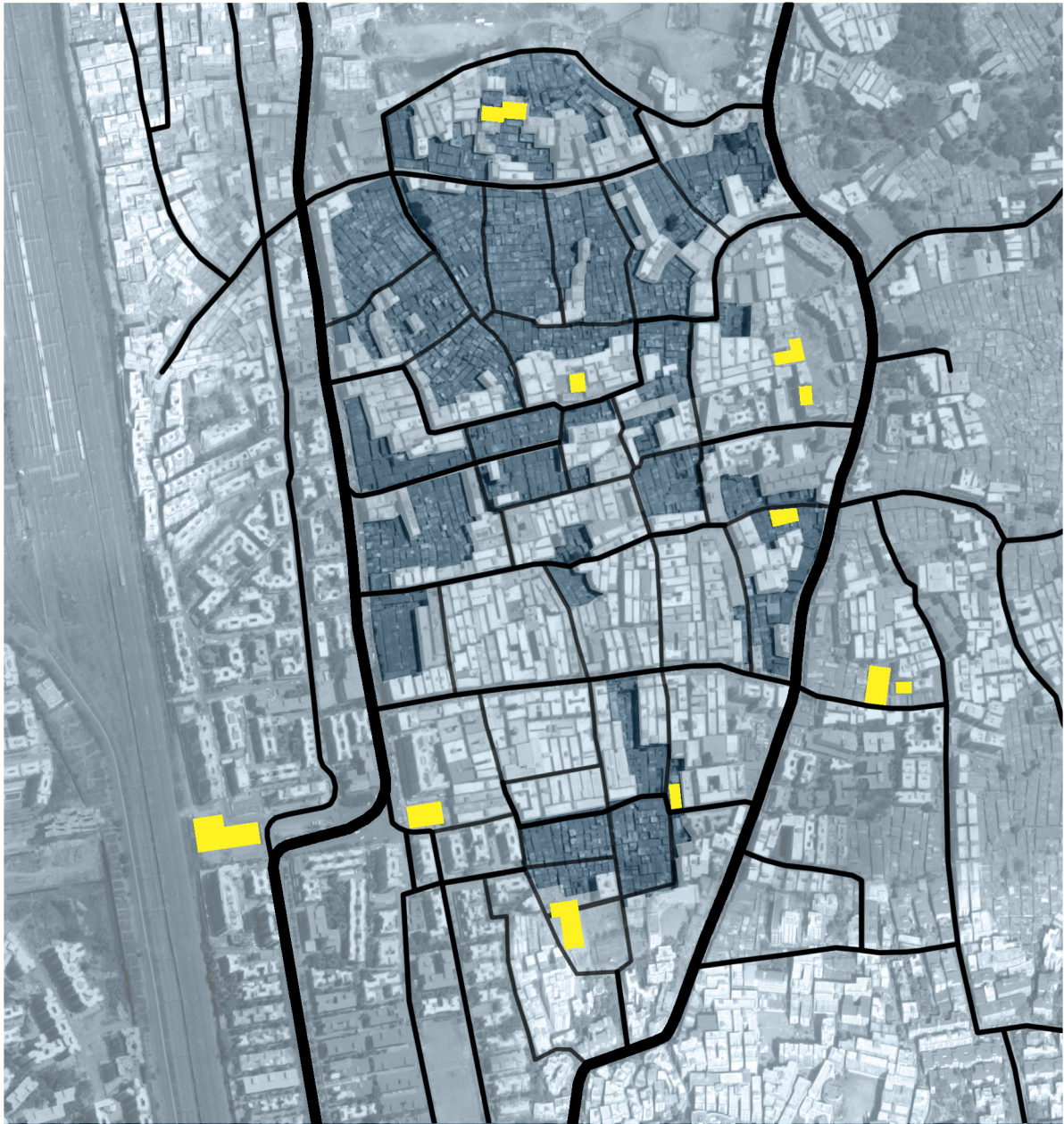
**ROAD NETWORK
IMPROVEMENT**



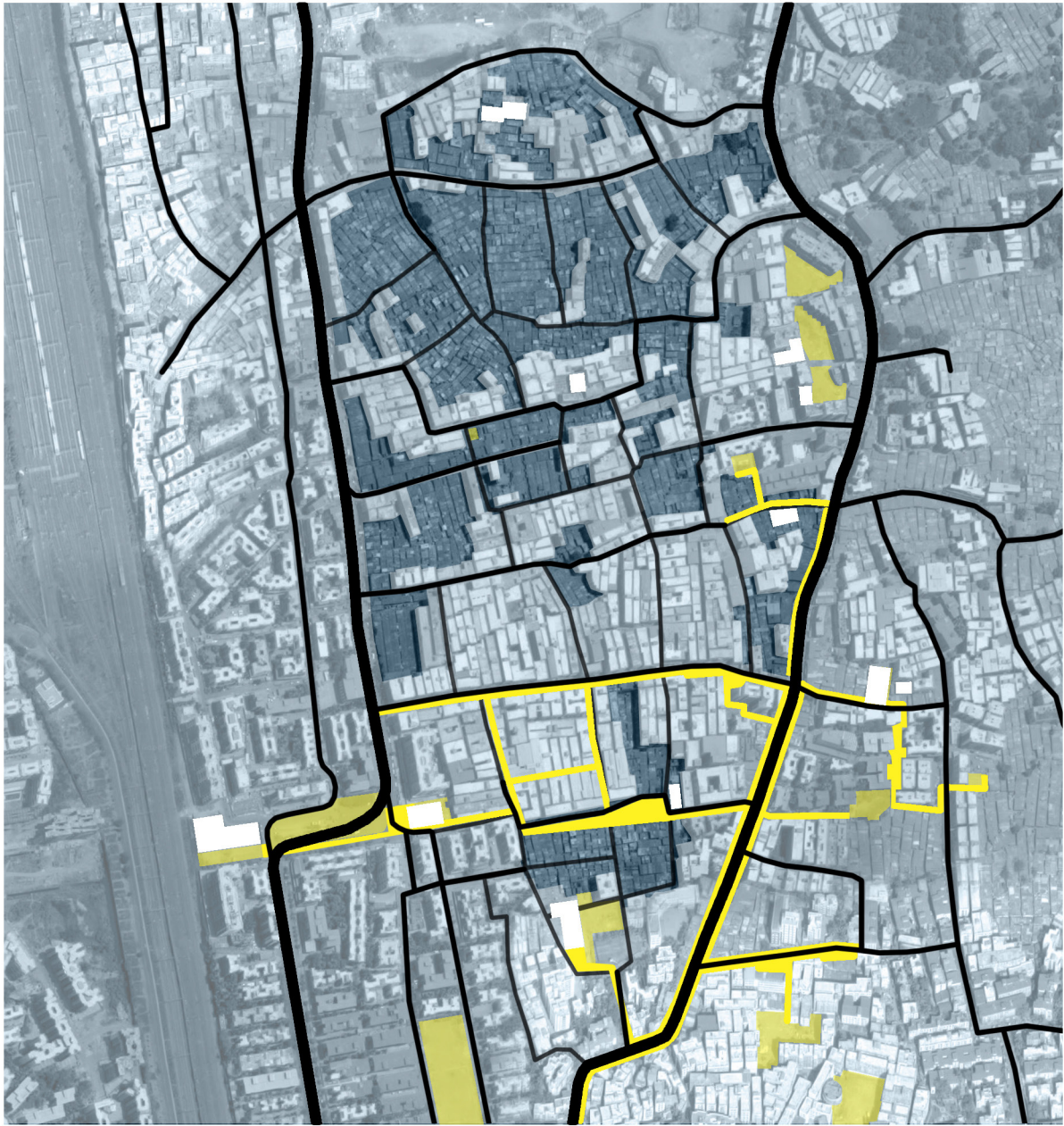
**OPEN SPACE
PRESERVATION**



**GREY FIELDS AS
STARTING POINTS**



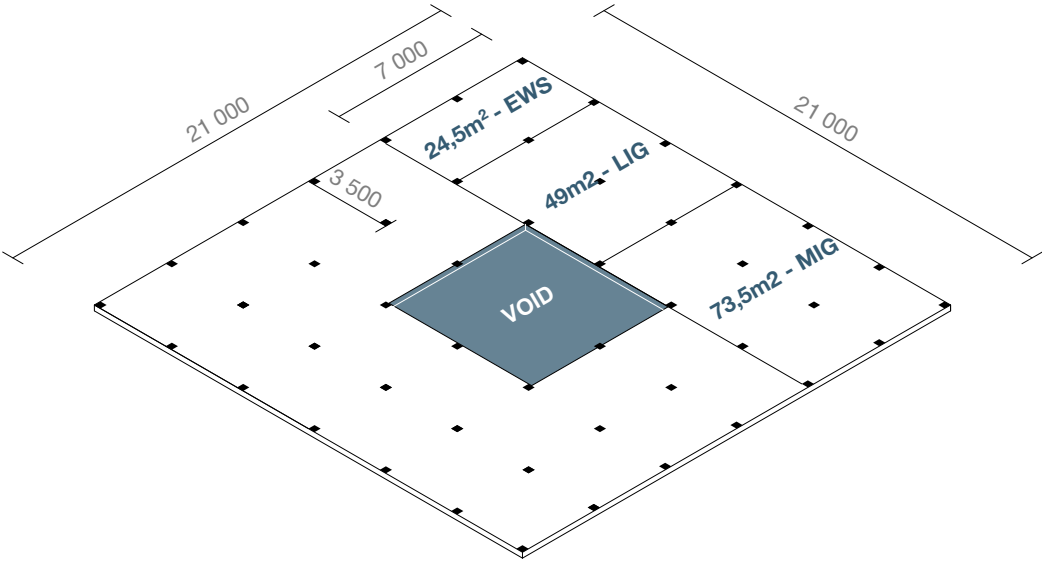
**SEAMLESS NET OF
OPEN SPACES**



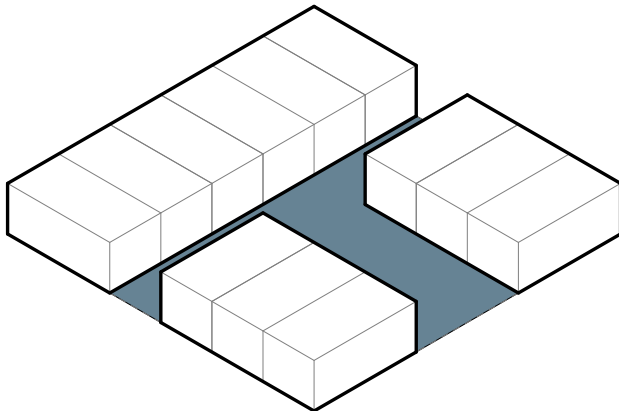
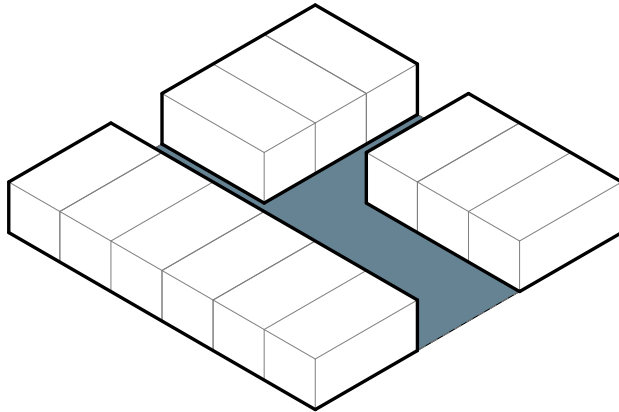
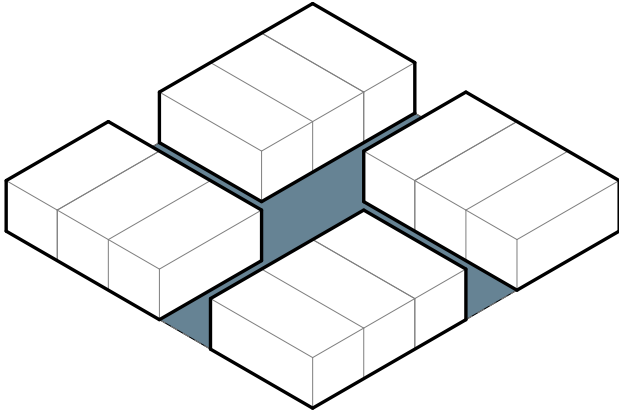
ARCHITECTURAL RESPONSE

CLUSTER

STRUCTURE

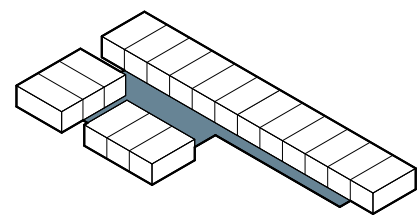


VARIETY

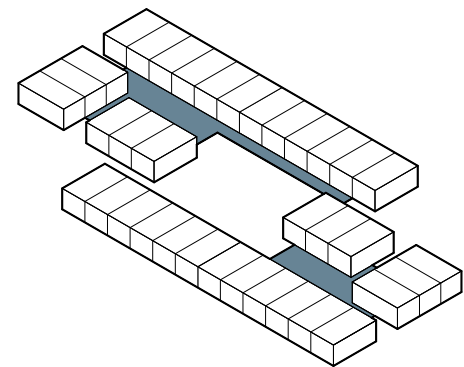


CONCEPT

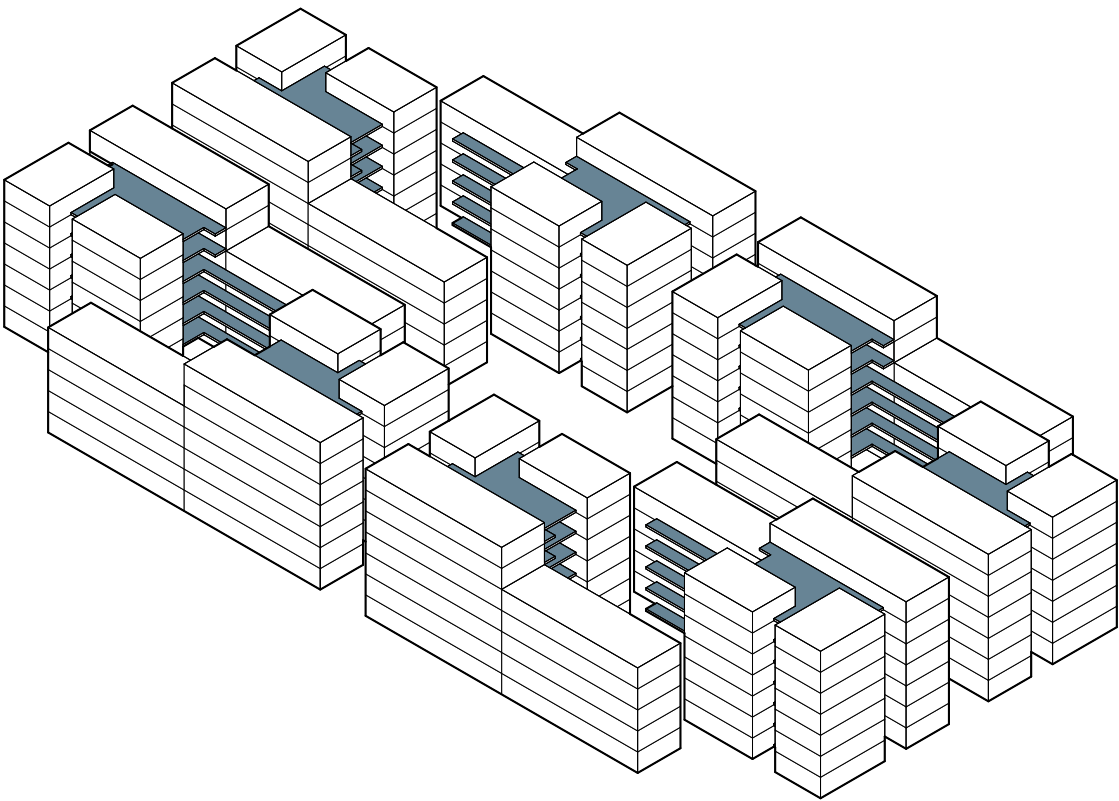
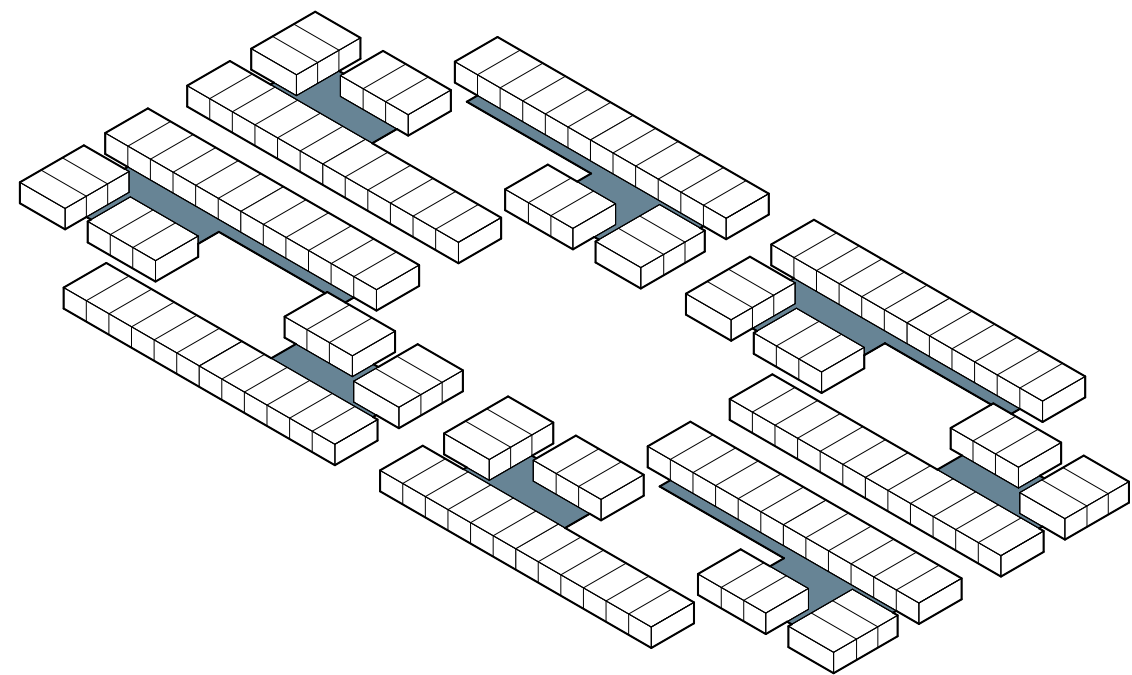
CLUSTER



COURTYARD

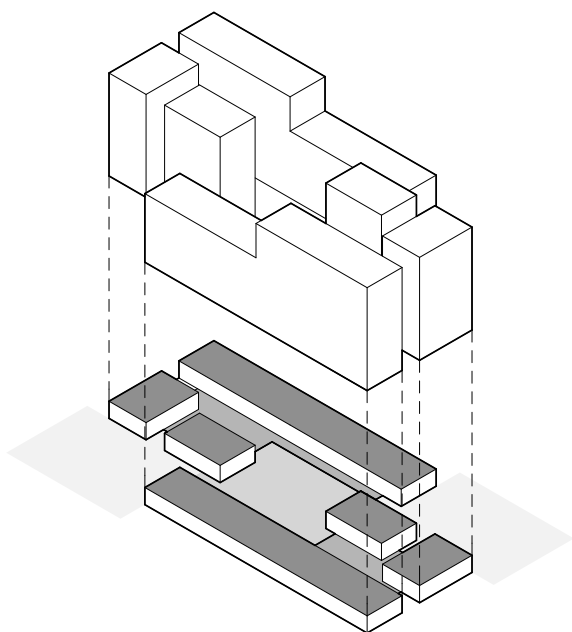


NEIGHBORHOOD



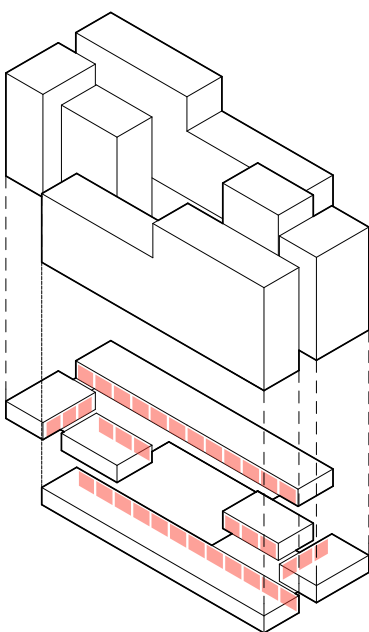
CONCEPT

DIFFERENT LEVELS OF
PRIVACY



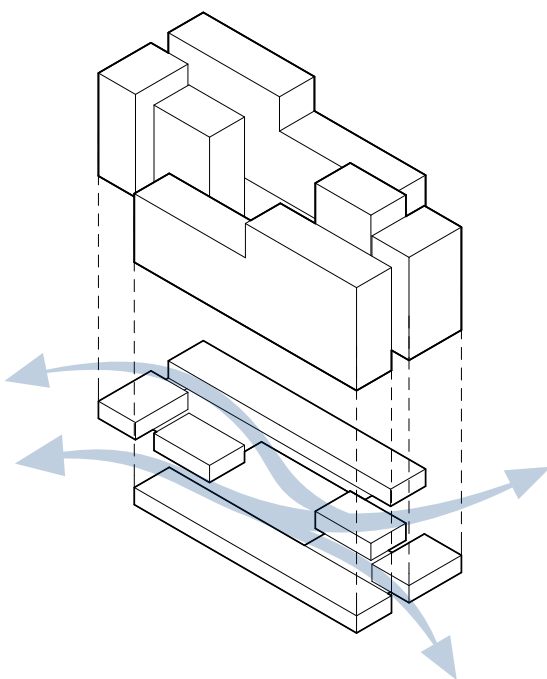
- DWELLING UNIT
- COMMON AREA/GALLERY
- COURTYARD
- PUBLIC SQUARE

COMMUNITY AND
SELF SEQUE



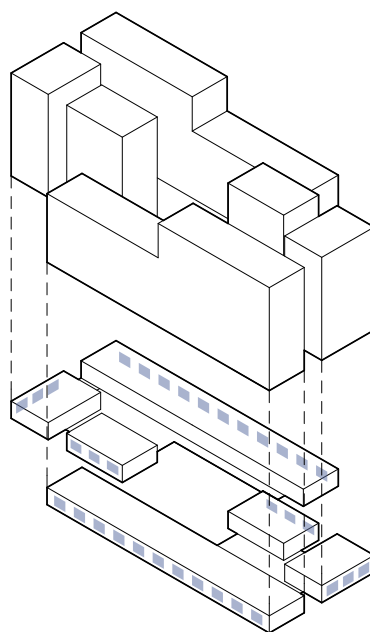
KITCHEN WINDOWS ARE
ORIENTED TOWARDS
COMMUNAL AREA

NATURAL VENTILATION



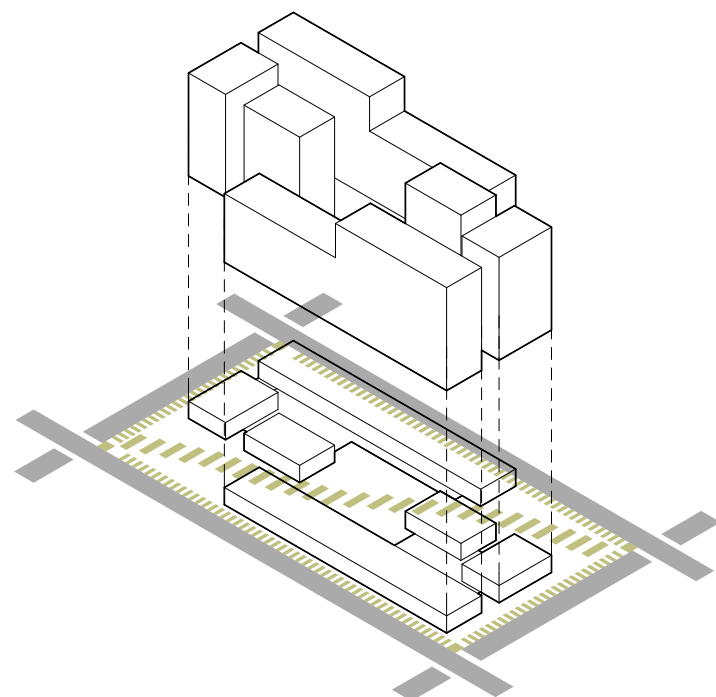
HOUSING BLOCKS ARE
ORIENTED ALONG THE WEST-
EAST WIND SIDE

QUIET SIDE OF THE
CLUSTER



BEDROOMS AND TOILETS
ARE ORIENTED TOWARDS THE
SPINE OF THE CLUSTER

SAFE COURTYARDS



COURTYARDS ARE ONLY FOR
PEDESTRIANS, ALL VEHICLE
ARE OUTSIDE

NEIGHBORHOOD STRATEGY

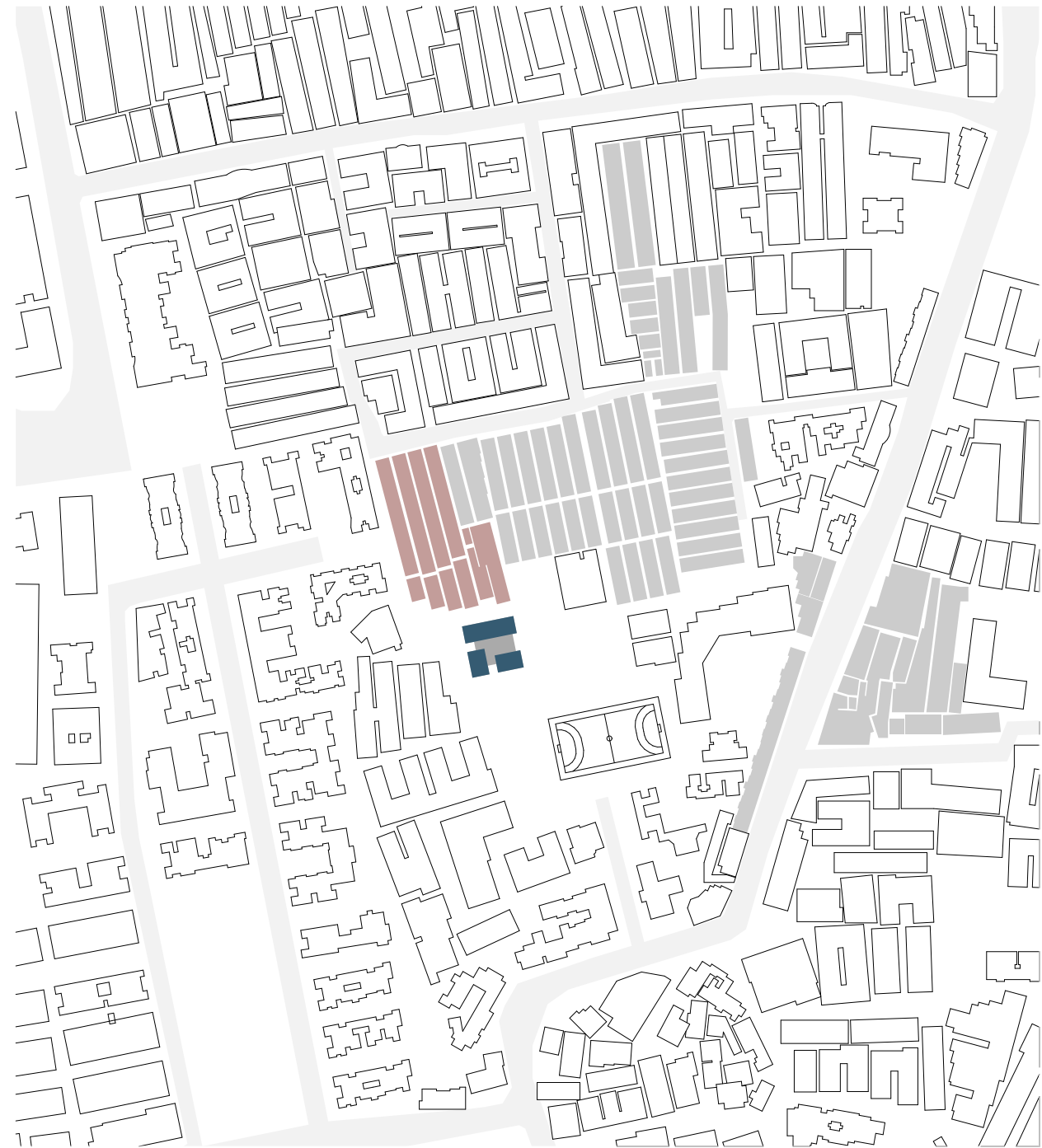
NEIGHBORHOOD STRATEGY

PHASE 0
STARTING POINT



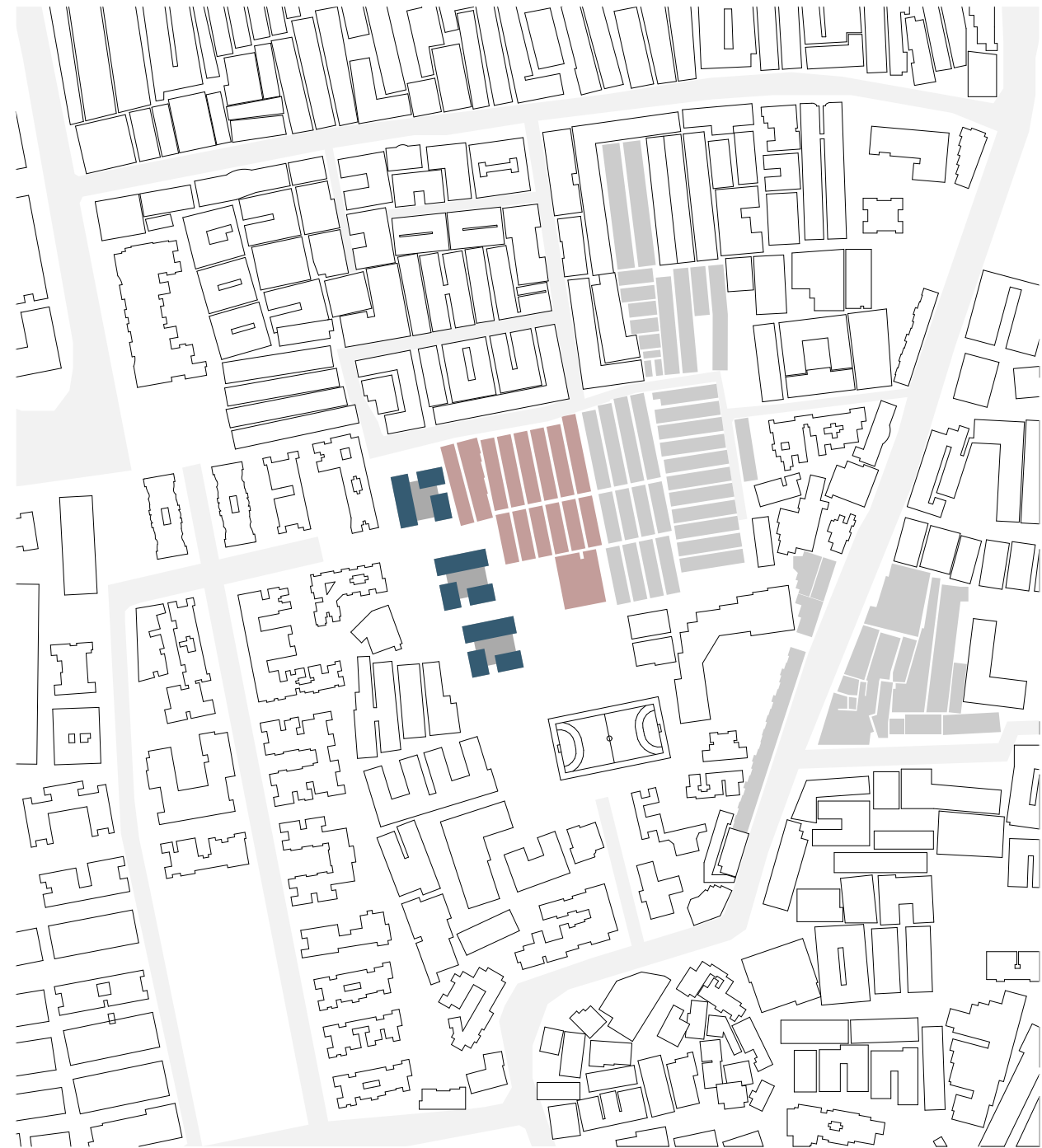
NEIGHBORHOOD STRATEGY

PHASE 1
60 NEW UNITS
60 TO CLEAR
0 VACANT UNITS



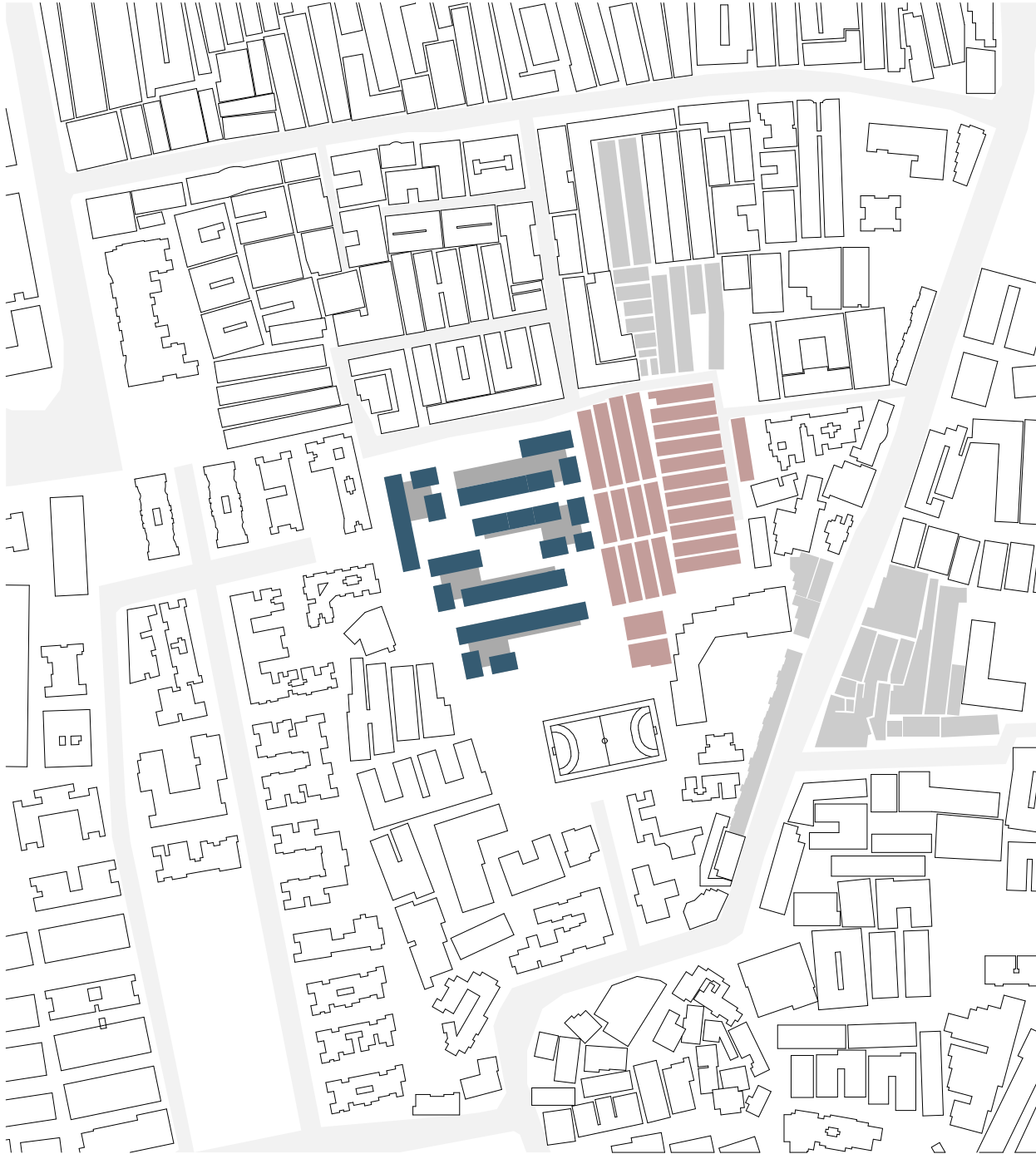
NEIGHBORHOOD STRATEGY

PHASE 2
120 NEW UNITS
120 TO CLEAR
0 VACANT UNITS



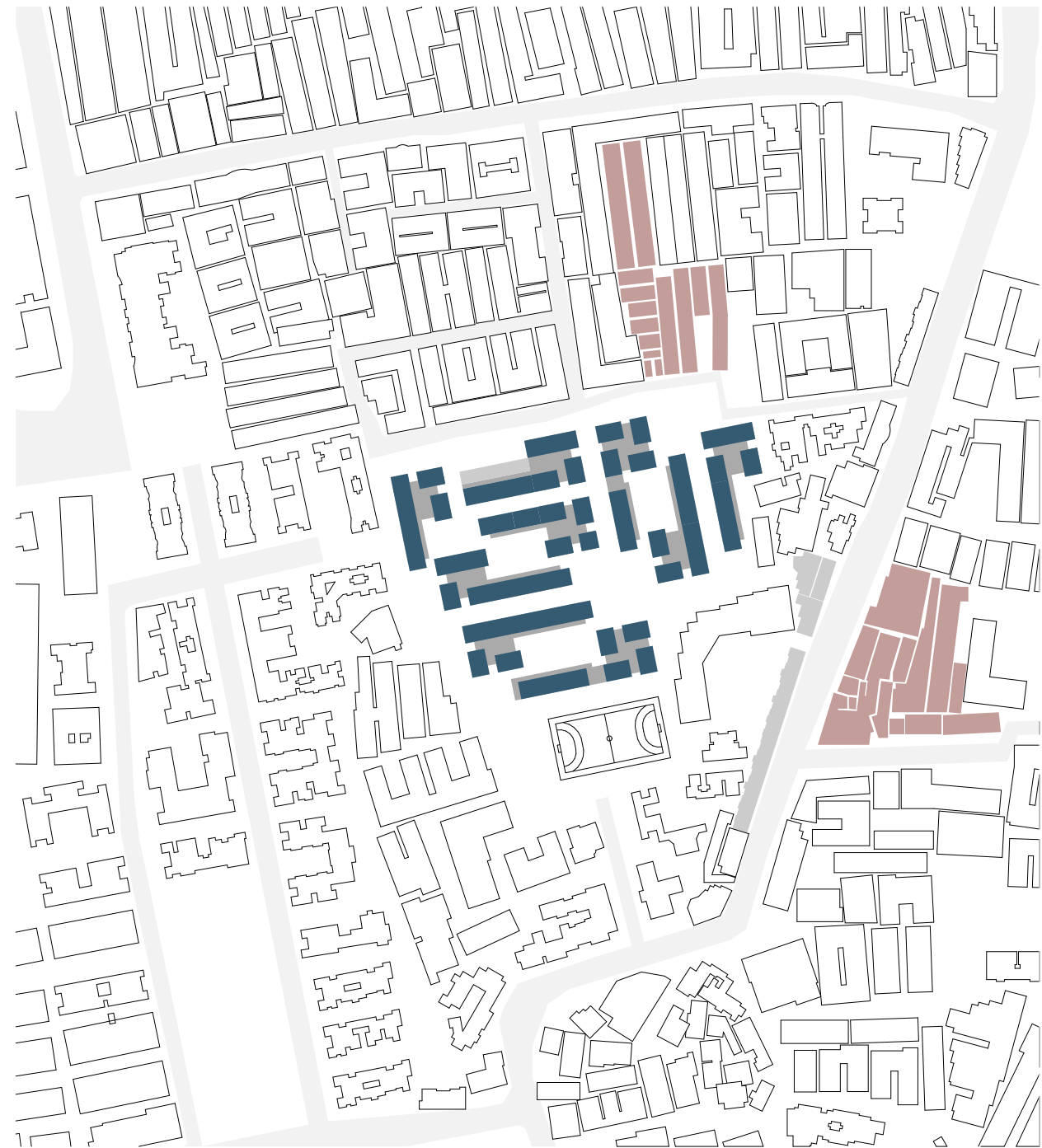
NEIGHBORHOOD STRATEGY

PHASE 3
310 NEW UNITS
165 TO CLEAR
145 VACANT UNITS



NEIGHBORHOOD STRATEGY

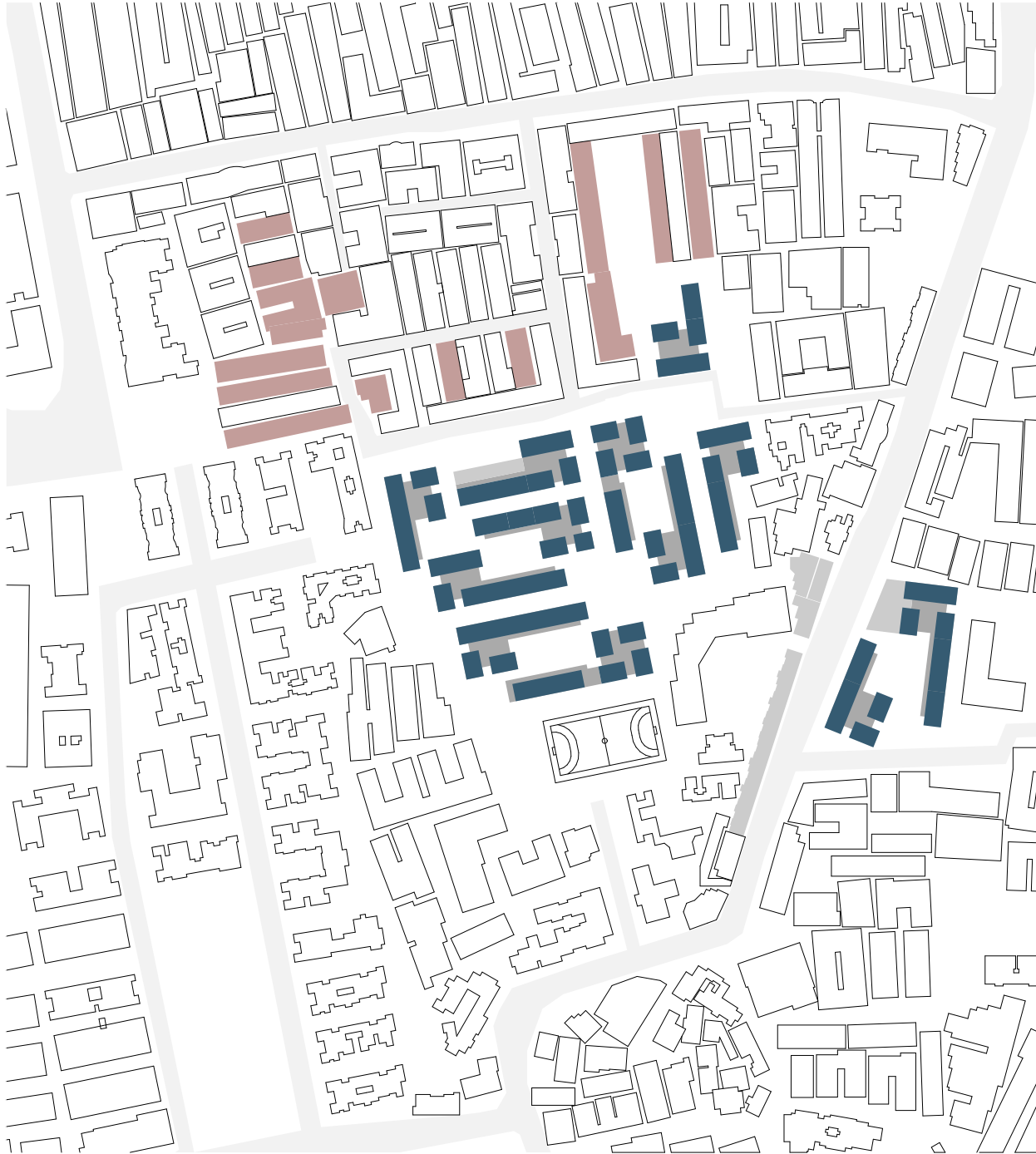
PHASE 4
393 NEW UNITS
151 TO CLEAR
387 VACANT UNITS



NEIGHBORHOOD STRATEGY

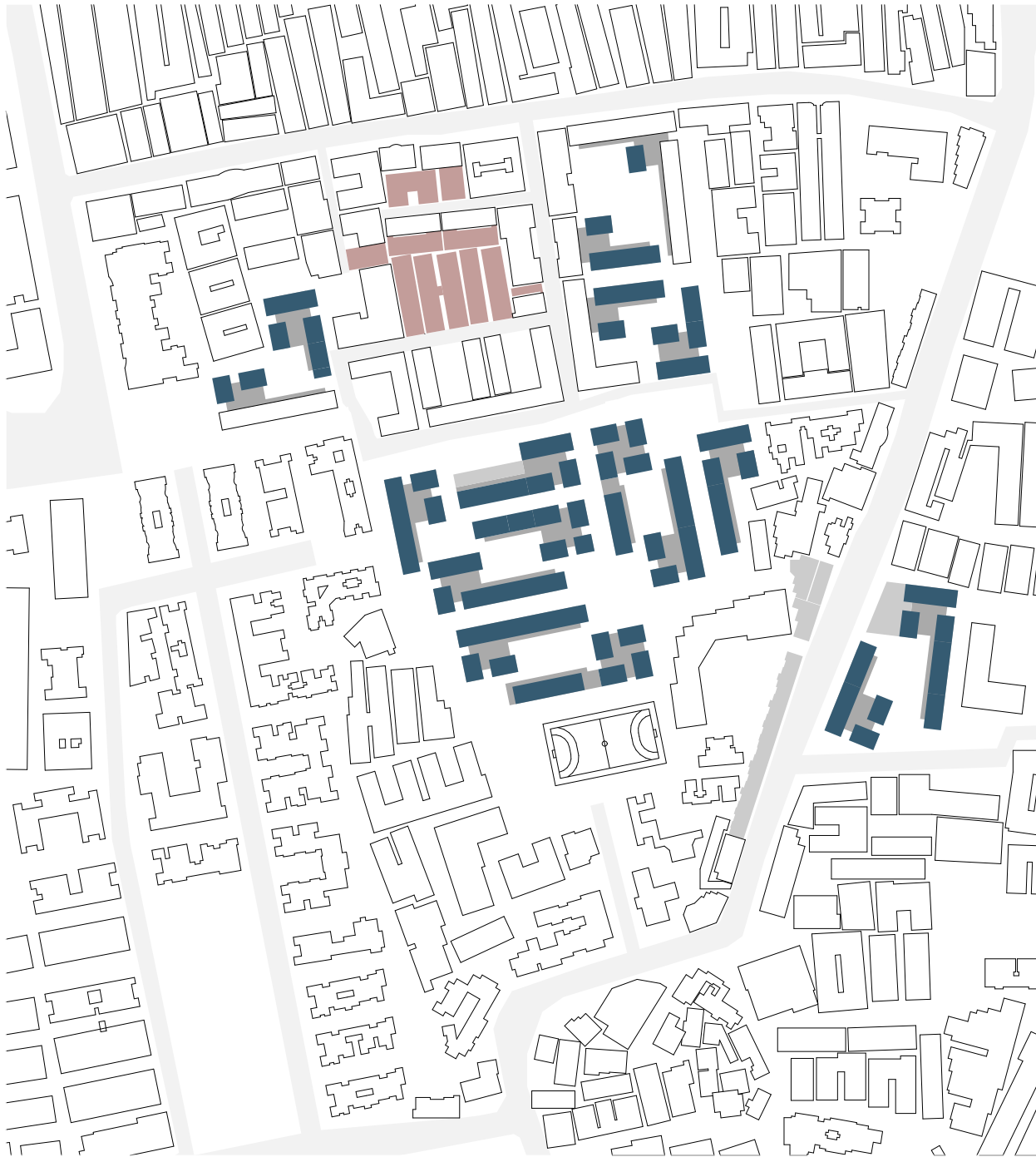
PHASE 5
242 NEW UNITS
629 VACANT UNITS

460 TO CLEAR
169 VACANT UNITS



NEIGHBORHOOD STRATEGY

PHASE 6
220 NEW UNITS
280 TO CLEAR
109 VACANT UNITS



NEIGHBORHOOD STRATEGY

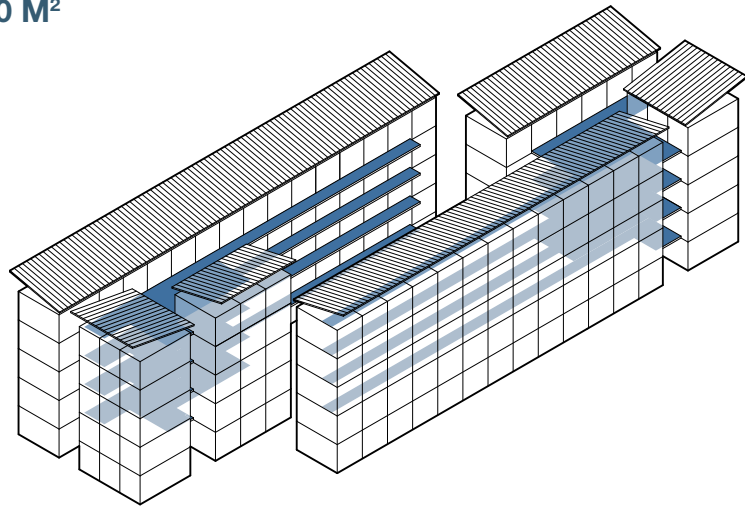
PHASE 7
36 NEW UNITS
0 TO CLEAR
145 VACANT UNITS



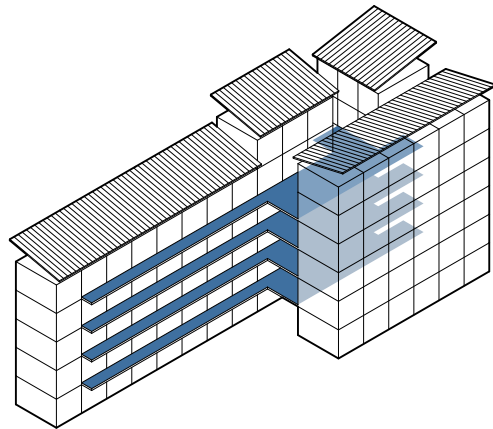
MODIFICATIONS / EXCEPTIONS



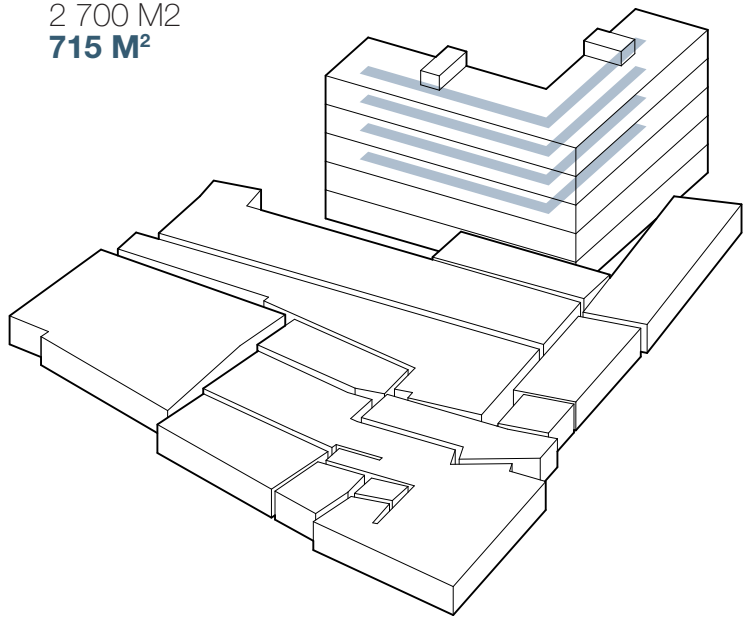
5 170 M2
1 320 M²



2 770 M2
690 M²



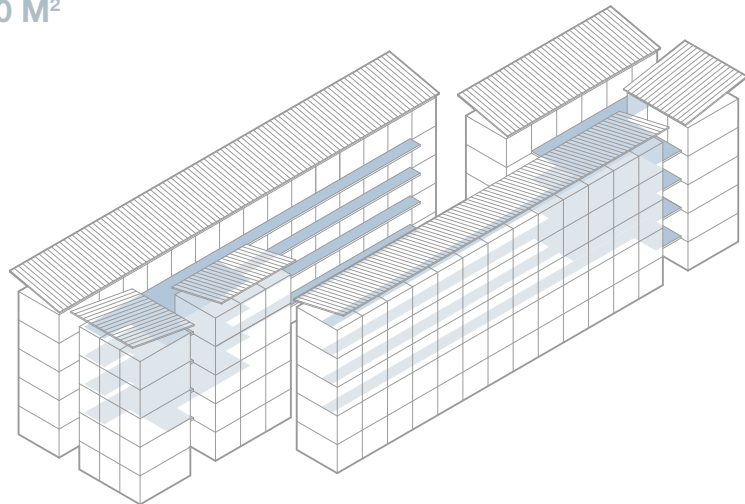
2 700 M2
715 M²



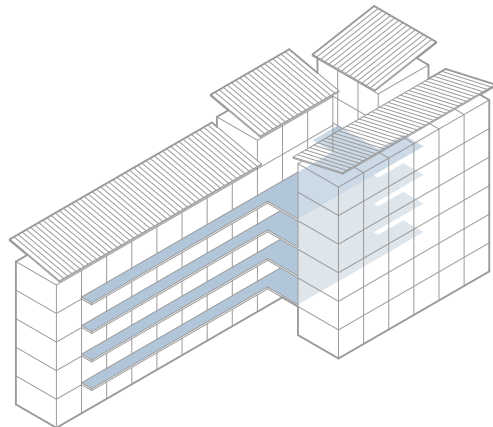
MODIFICATIONS / EXCEPTIONS



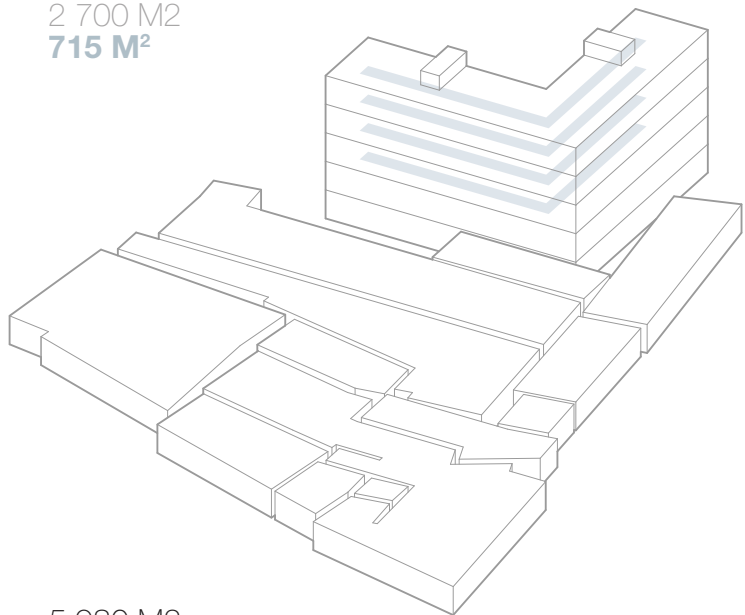
5 170 M2
1 320 M²



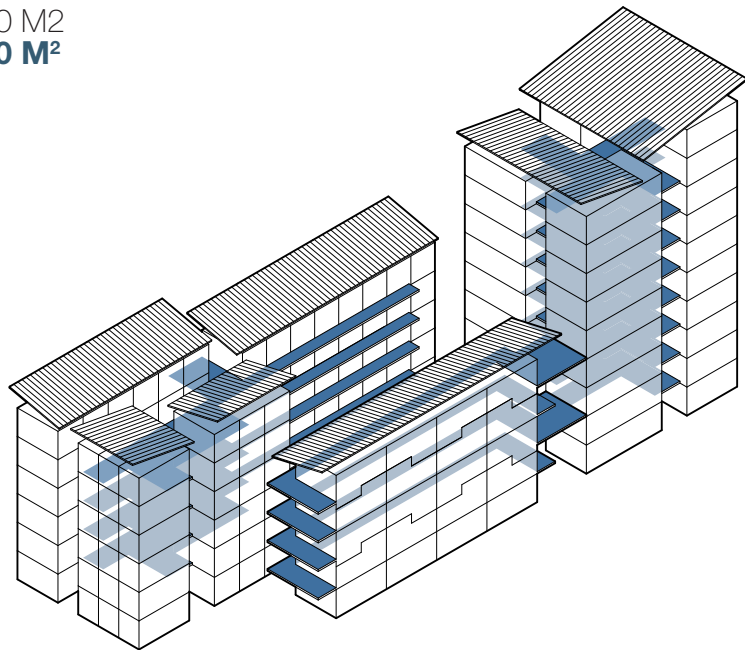
2 770 M2
690 M²



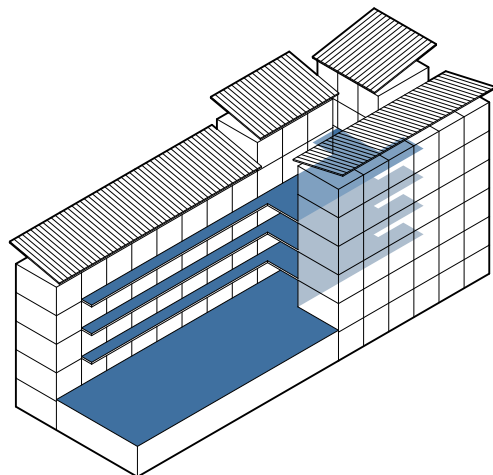
2 700 M2
715 M²



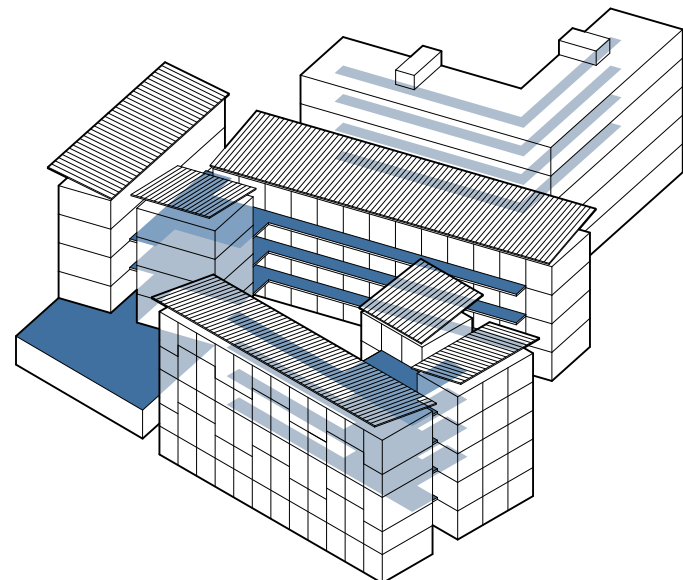
7 790 M2
2 670 M²



3 220 M2
1 080 M²



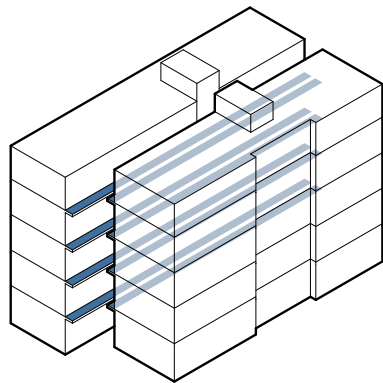
5 980 M2
1 800 M²



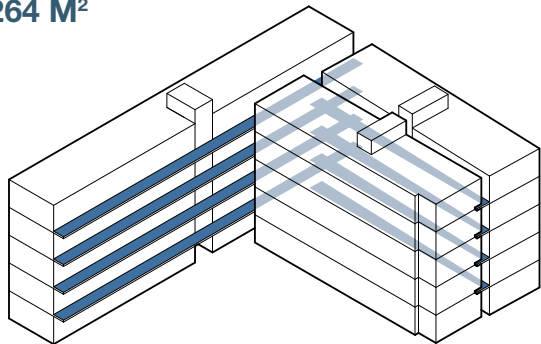
MODIFICATIONS / EXCEPTIONS



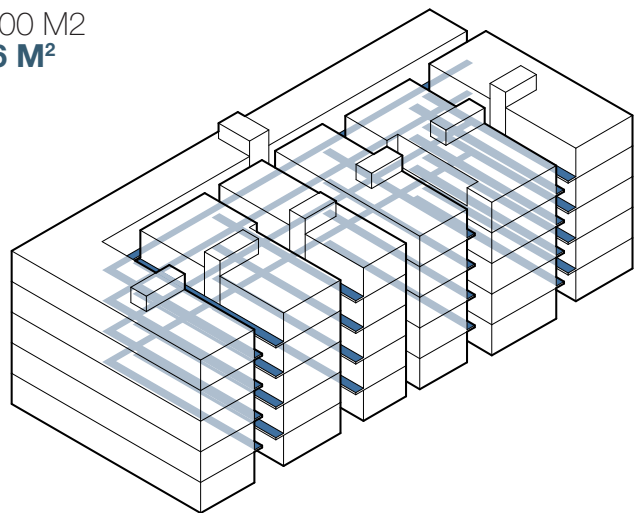
1 960 M2
208 M²



3 870 M2
264 M²



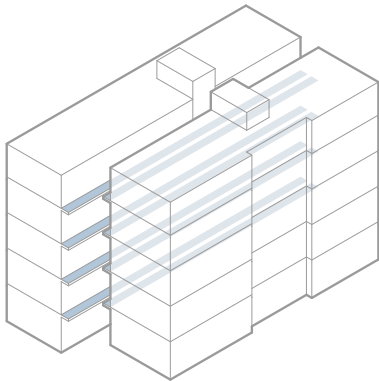
6 500 M2
756 M²



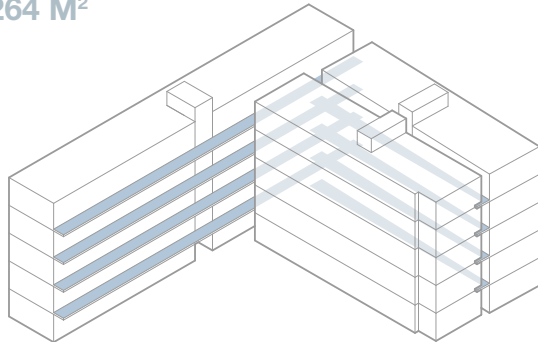
MODIFICATIONS / EXCEPTIONS



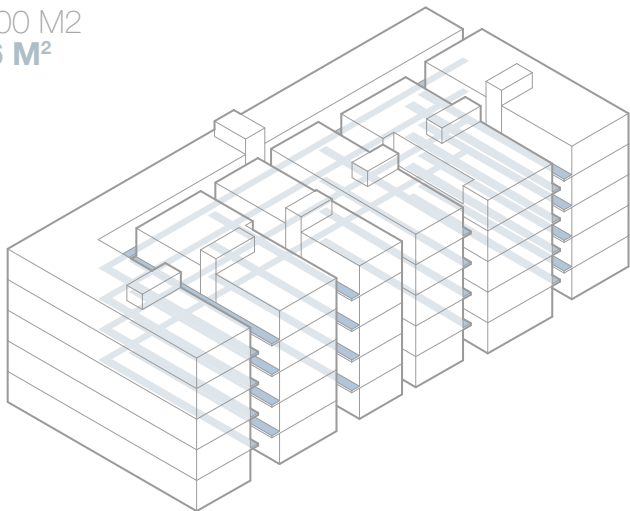
1 960 M2
208 M²



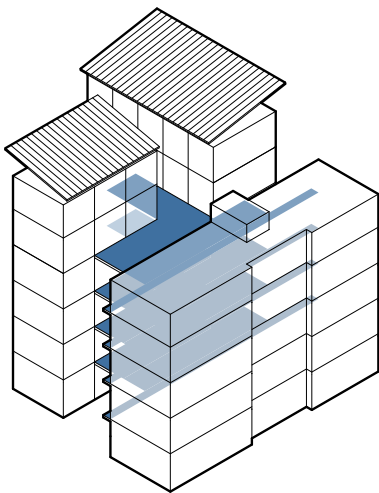
3 870 M2
264 M²



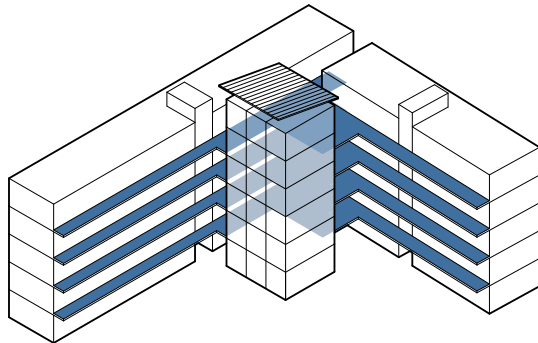
6 500 M2
756 M²



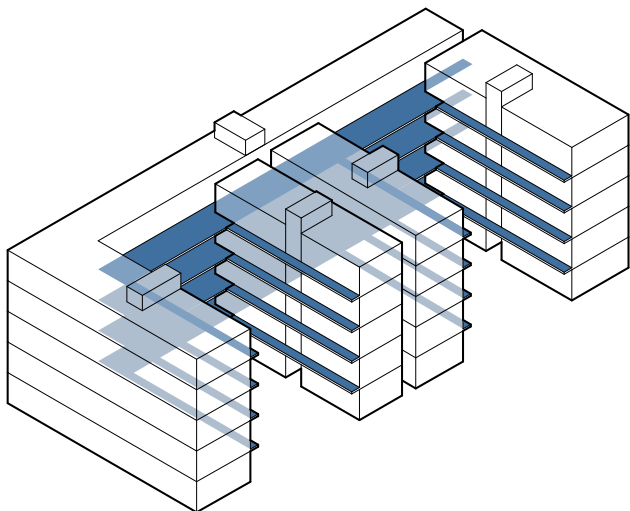
2 310 M2
560 M²



3 380 M2
960 M²



5 100 M2
960 M²





NEIGHBORHOOD MASTERPLAN

0 5 10 20 50

PUBLIC SQUARE

MORNING (GRAZING)



AFTERNOON (MARKET)



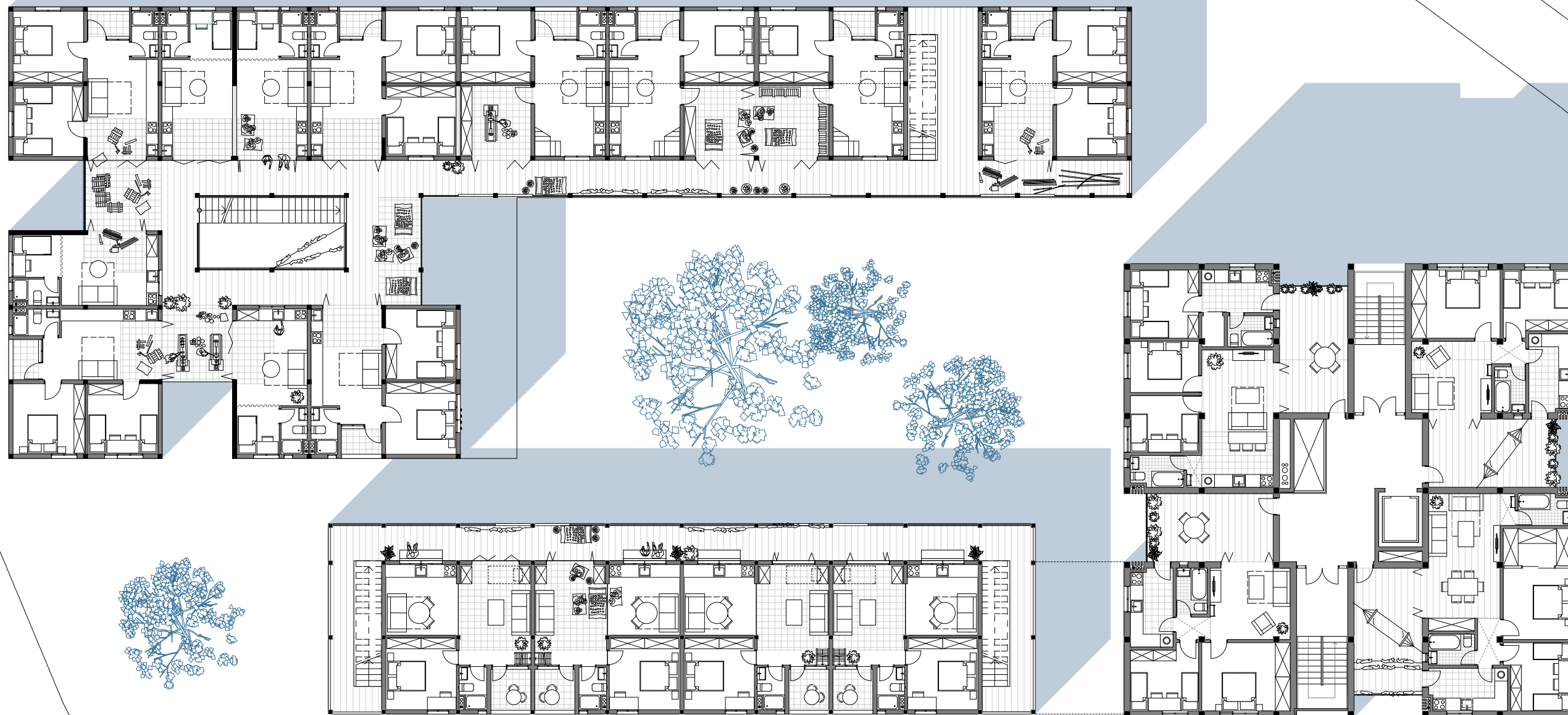
EVENING (STREET FOOD)



CLUSTER



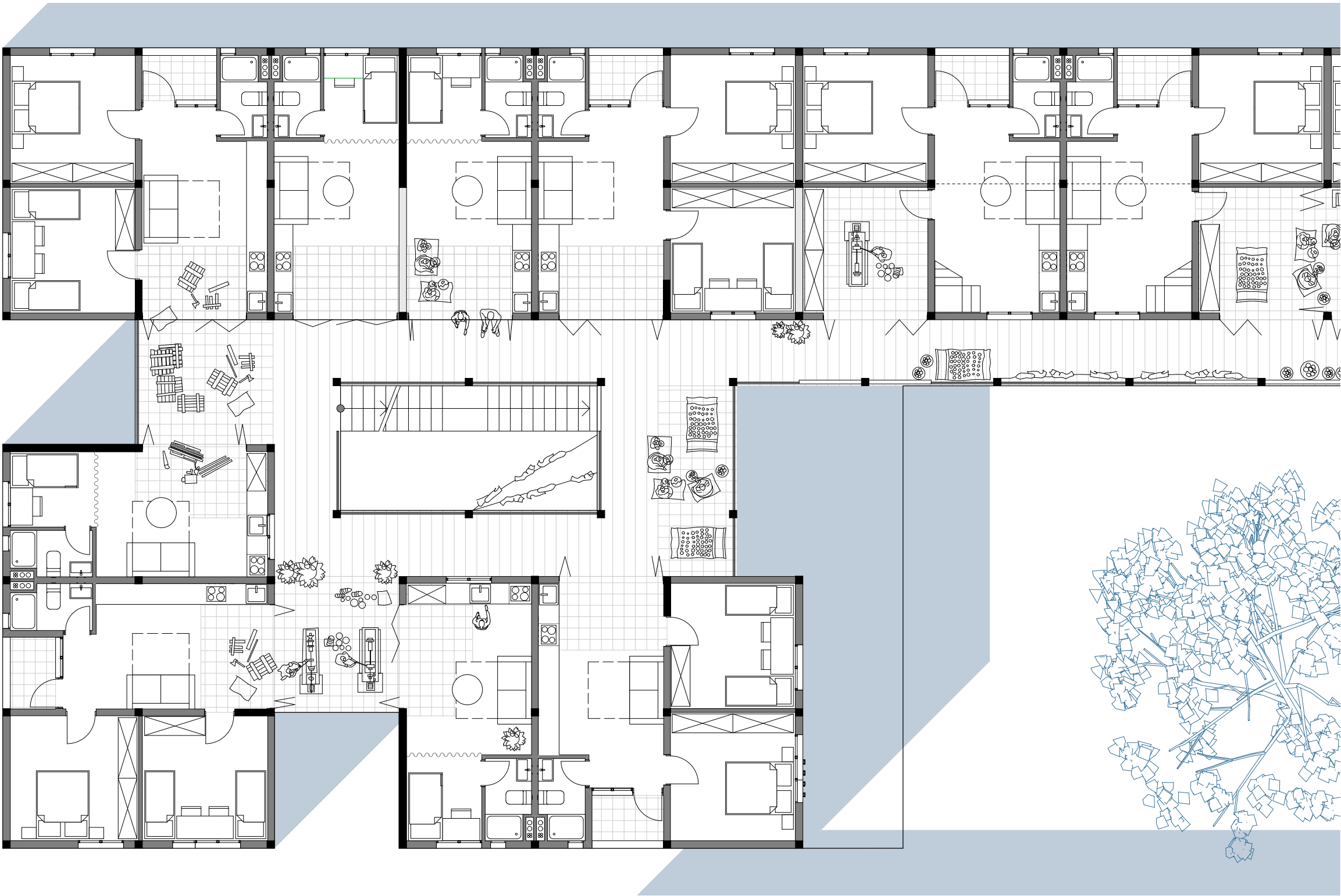
GROUND FLOOR PLAN



TYPICAL FLOOR PLAN

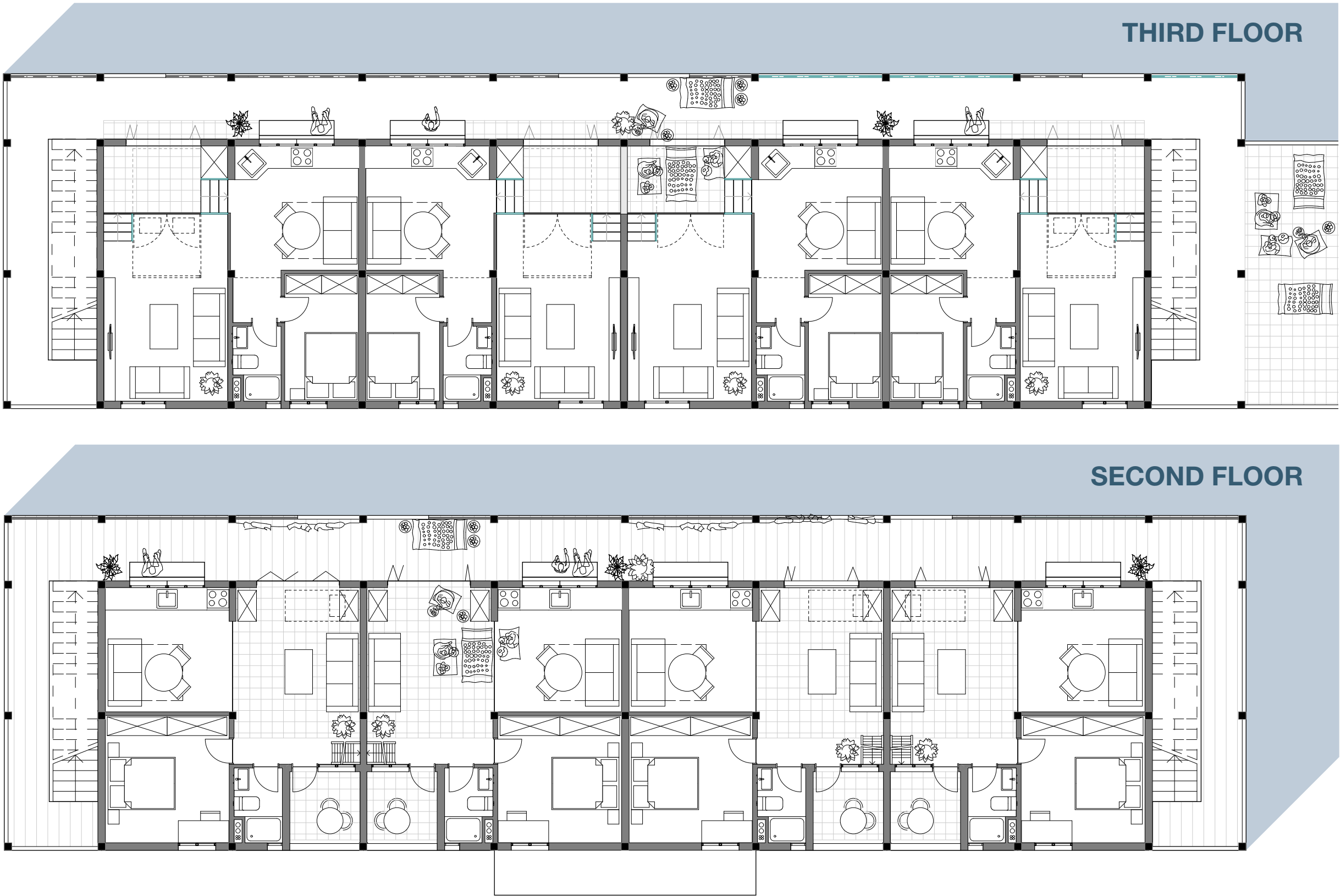
'CLUSTER' FLOOR PLAN

EWS / LIG
24 - 45 m²



'SPLIT LEVEL' FLOOR PLAN

LIG / MIG
45 - 60 m²



'TOWER' FLOOR PLAN

MIG / higher MIG
72 - 95 m²

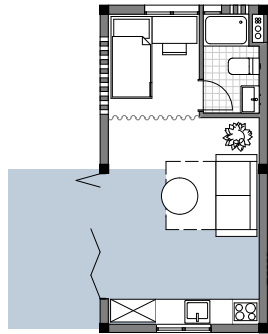


DWELLING

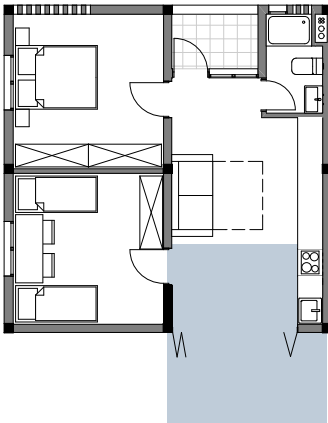
UNIT TYPES



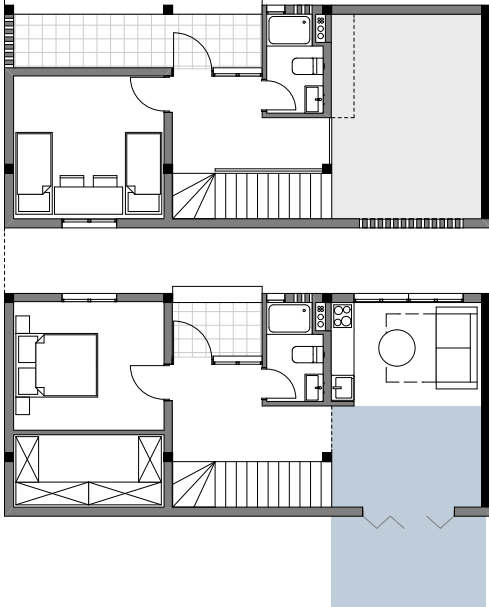
Type A - 24m2
31m² - incl.front door space



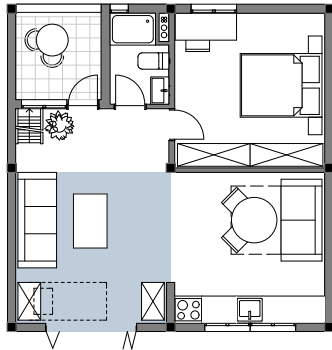
Type B - 45m2
52m² - incl.front door space



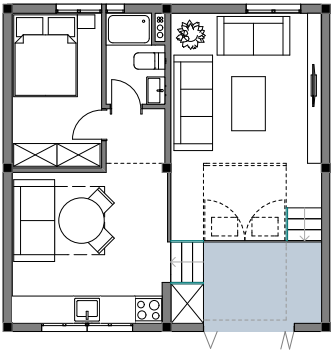
Type C - 76m2
82m² - incl.front door space



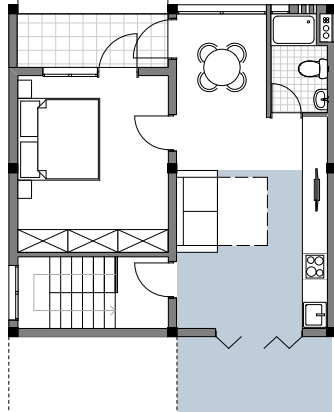
Type G - 44m2
54m² - incl.front door space



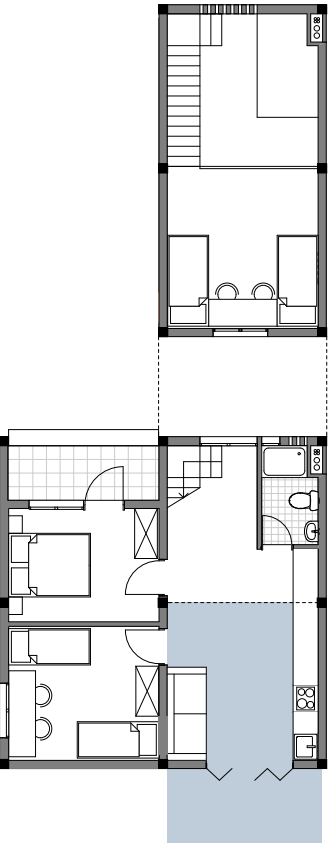
Type H - 48m2
54m² - incl.front door space



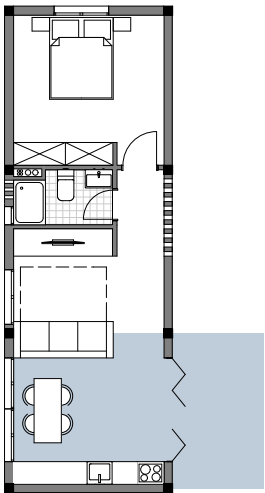
Type D - 72m2
78m² - incl.front door space



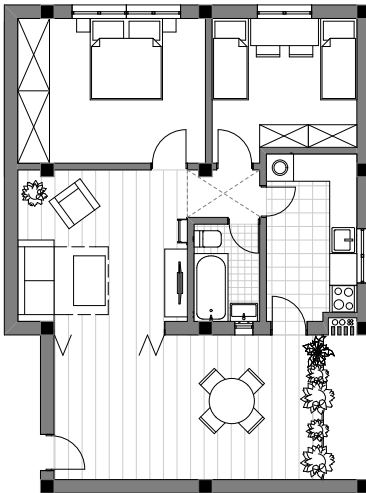
Type E - 60m2
66m² - incl.front door space



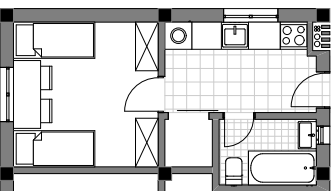
Type F - 34m2
40m² - incl.front door space



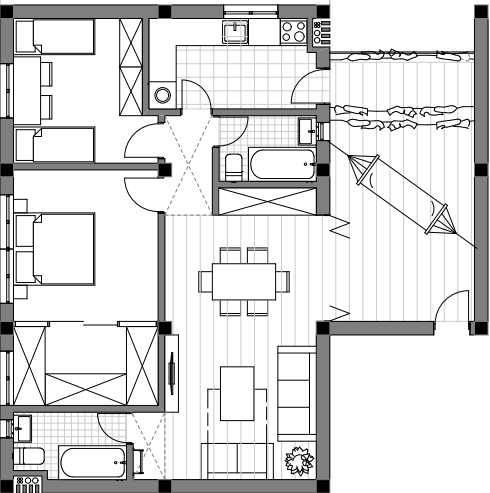
Type I - 69m2



21m2
Rent out option

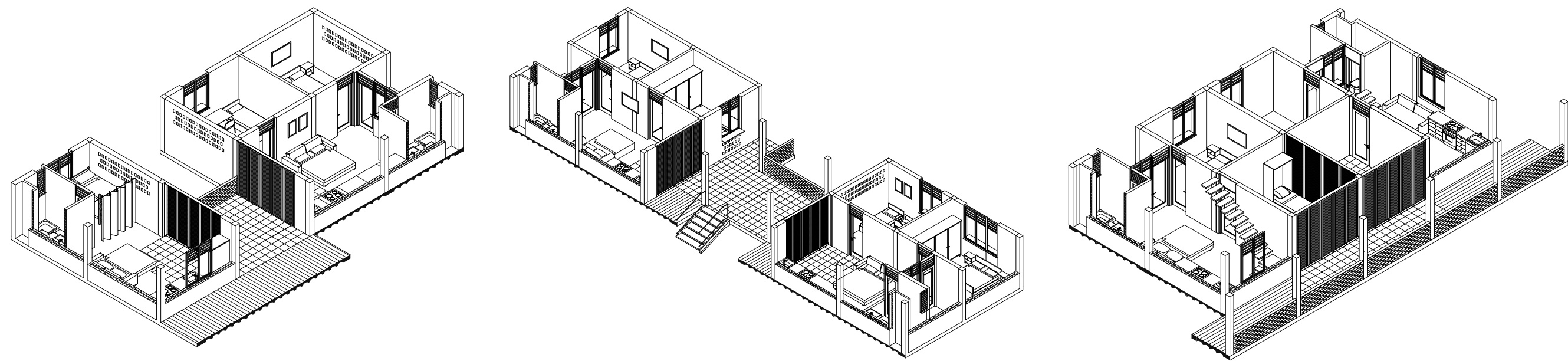


Type J - 88m2



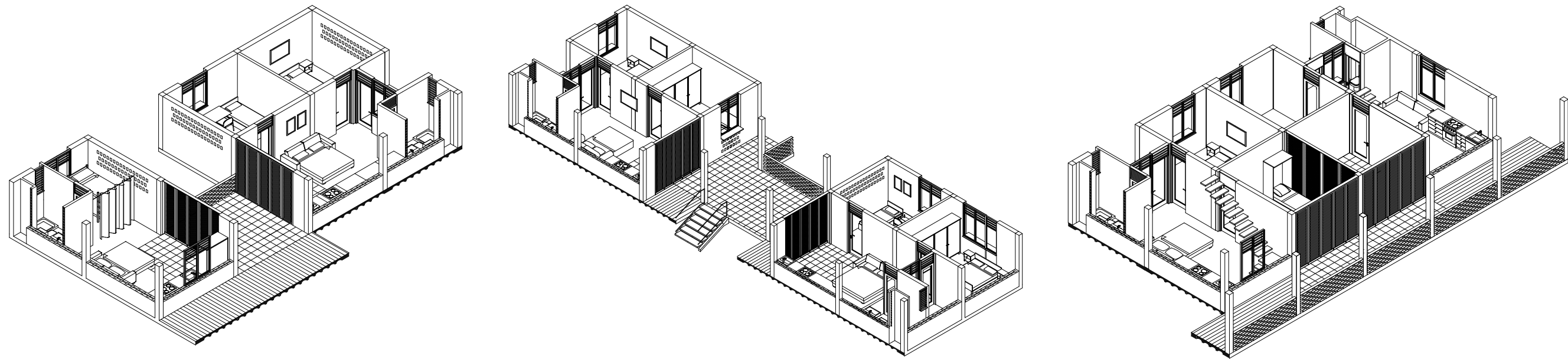
SPACE TRANSFORMATION

NIGHT TIME

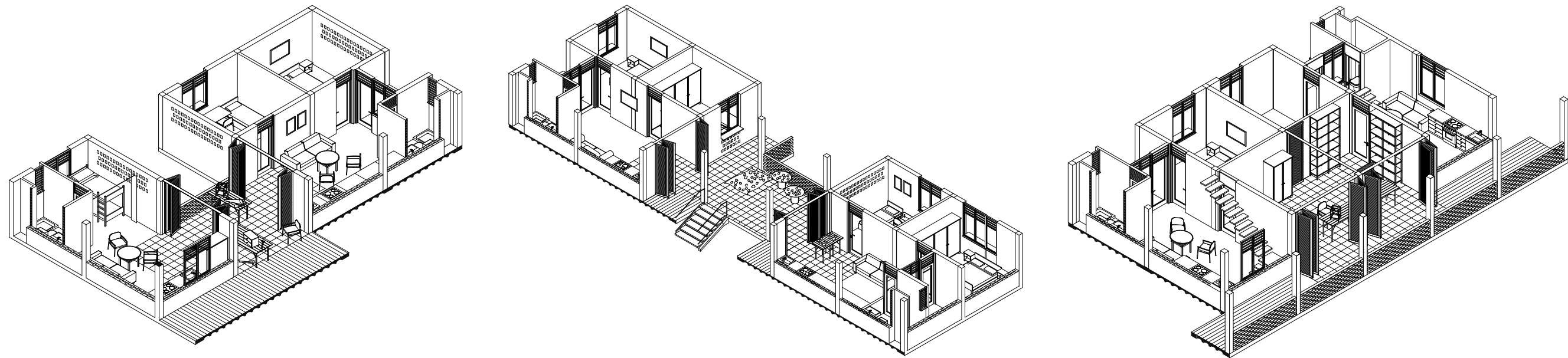


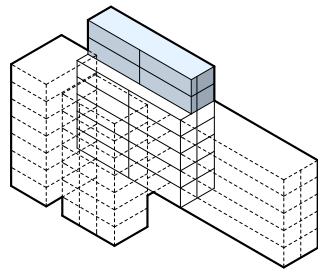
SPACE TRANSFORMATION

NIGHT TIME

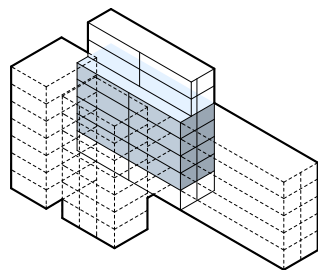


DAY TIME

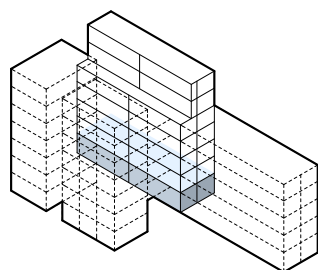




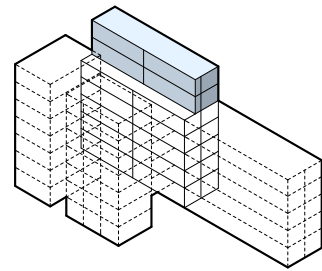
UPPER FLOORS



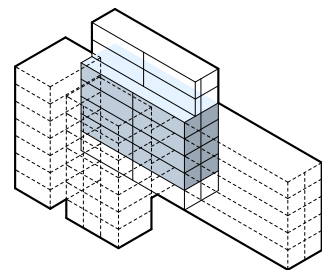
TYPICAL FLOORS



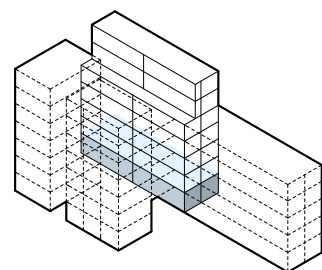
GROUND FLOORS



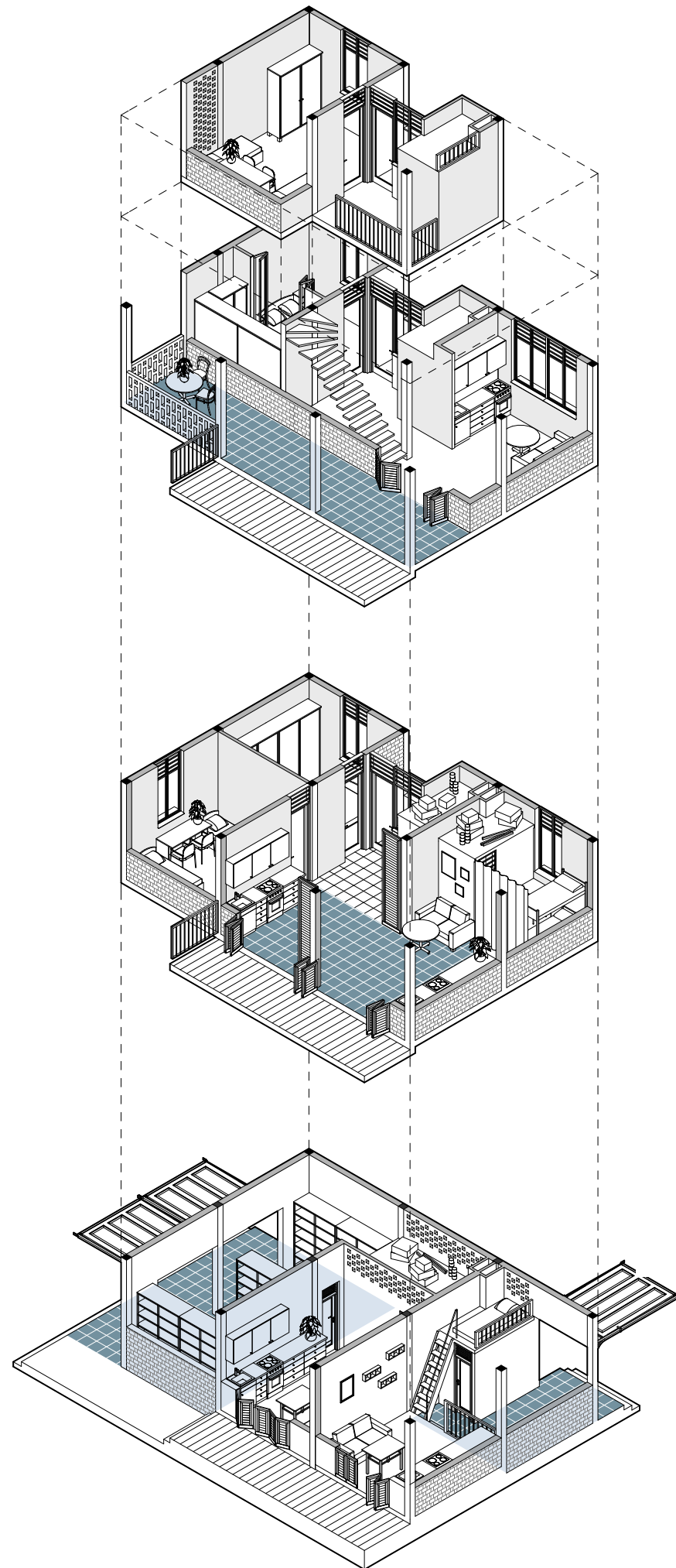
UPPER FLOORS

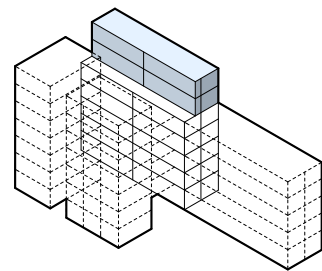


TYPICAL FLOORS

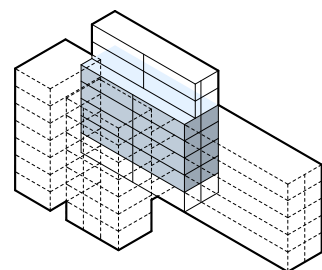


GROUND FLOORS

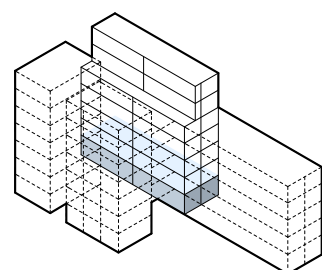




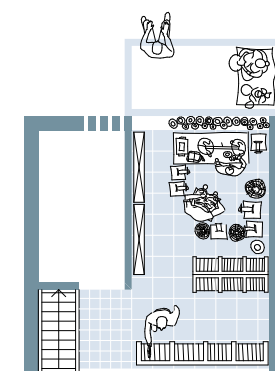
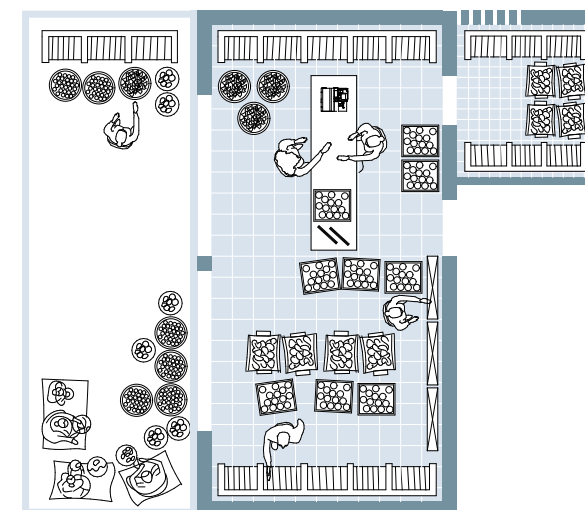
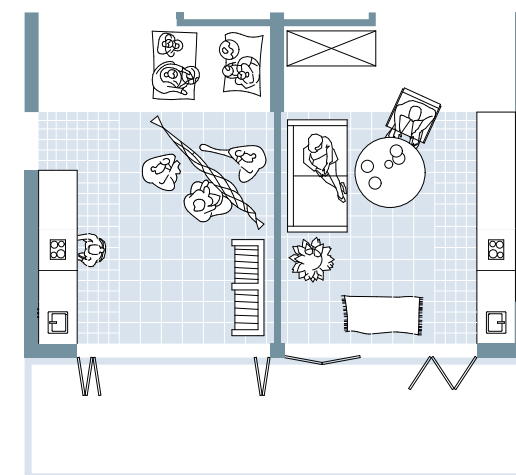
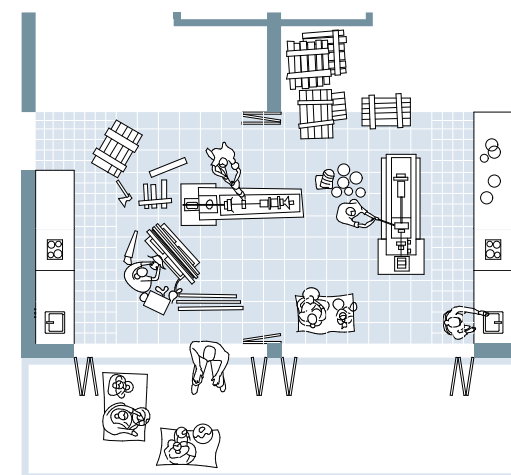
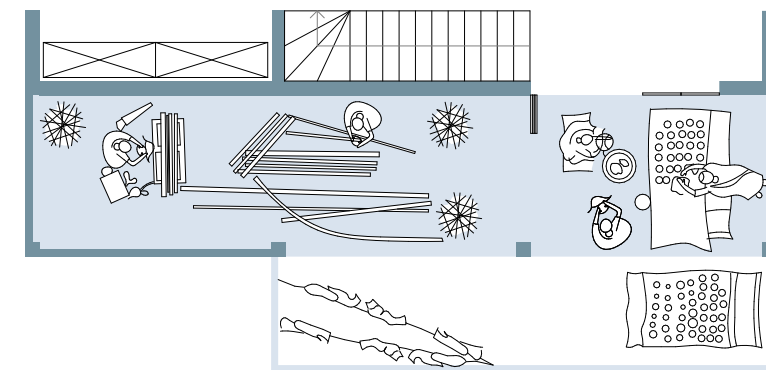
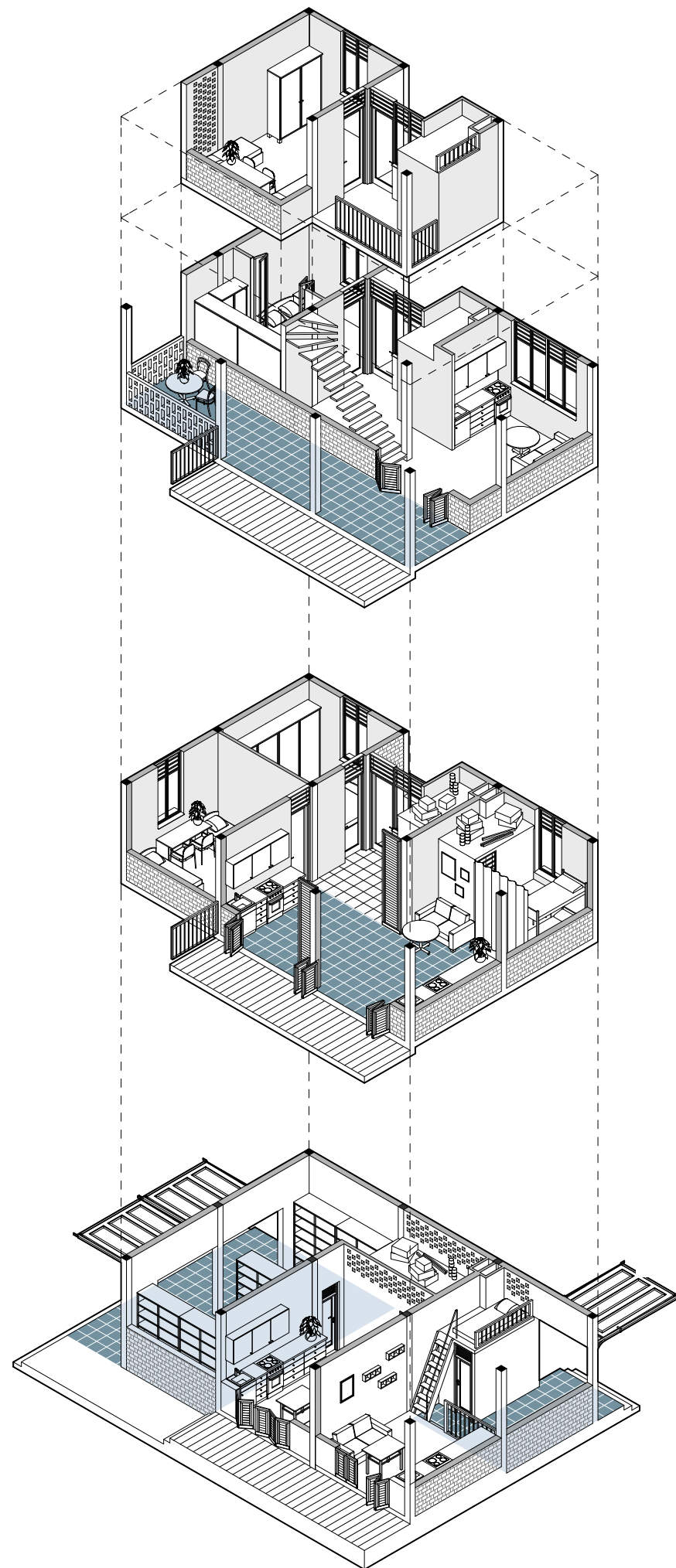
UPPER FLOORS



TYPICAL FLOORS

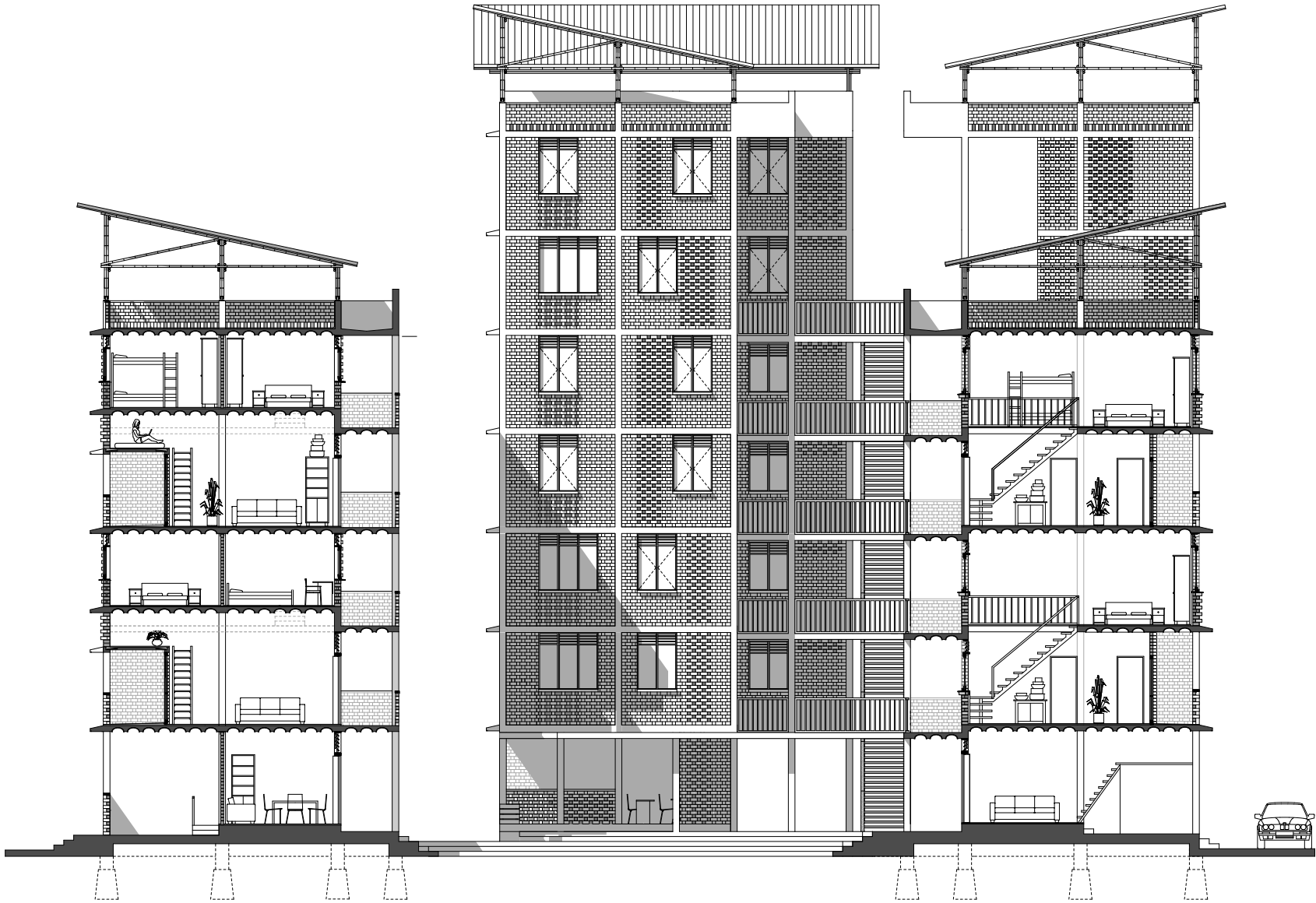


GROUND FLOORS



MATERIALITY

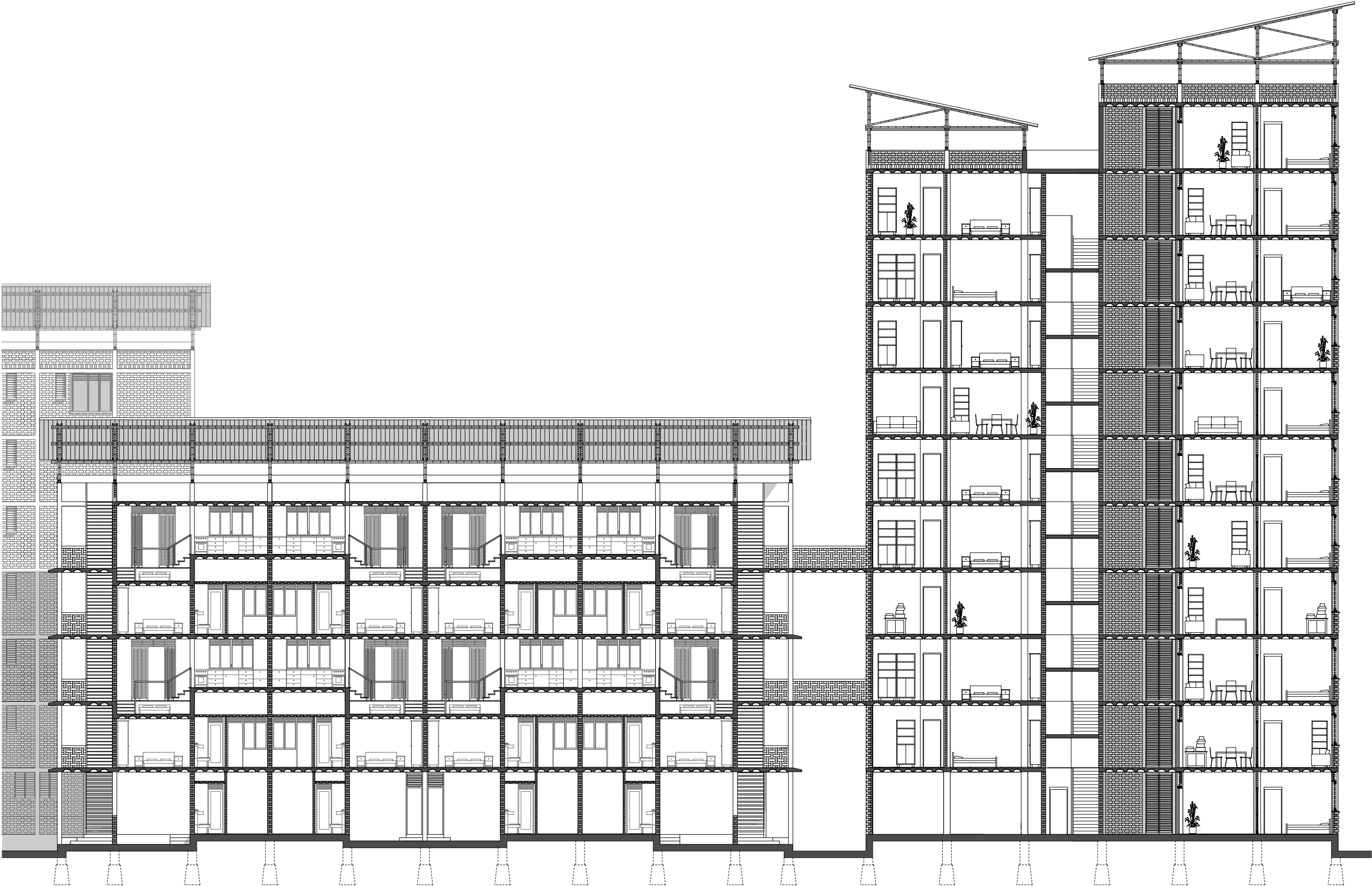
EASTERN ELEVATION / CROSS SECTION



SOUTH ELEVATION

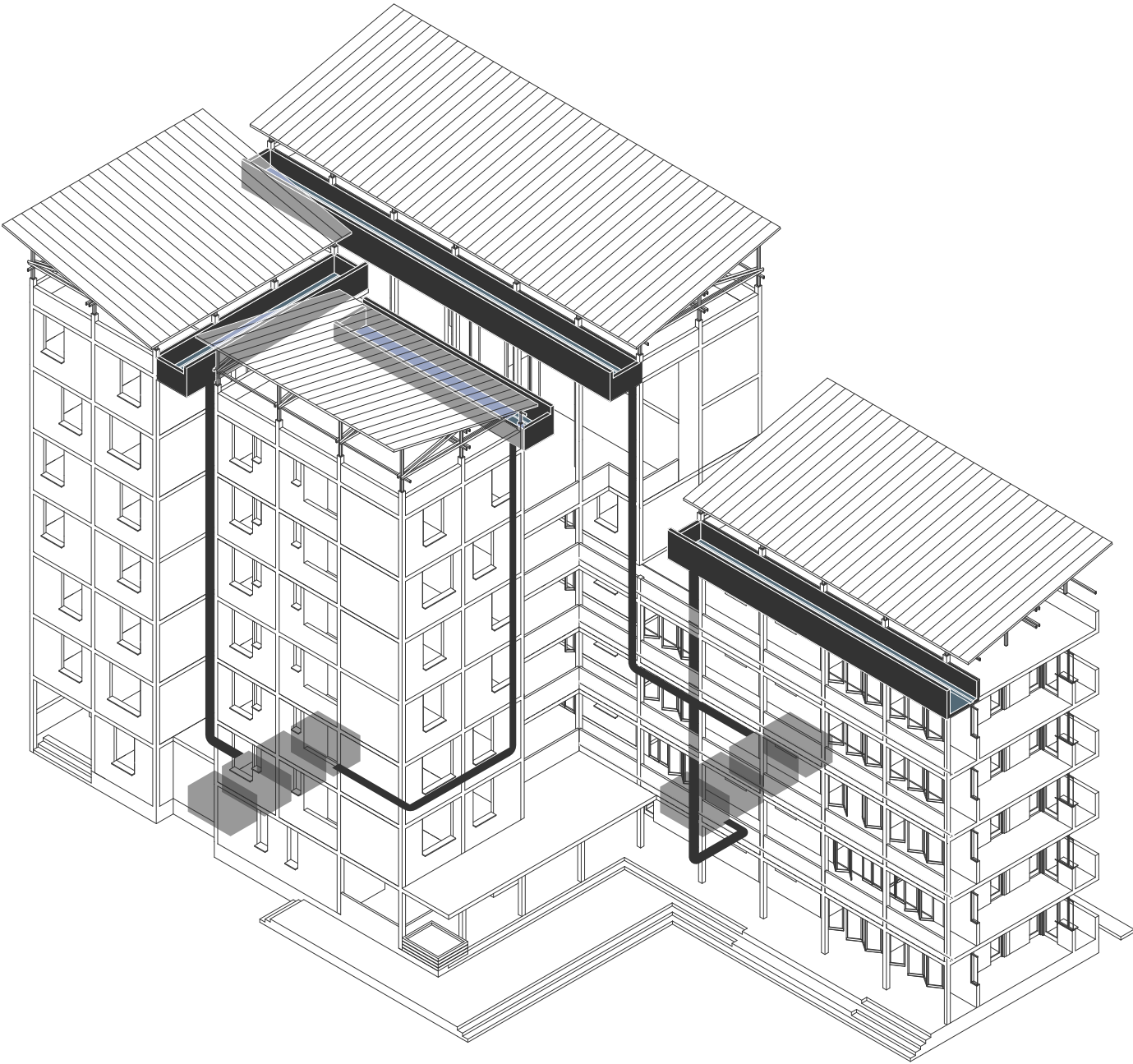
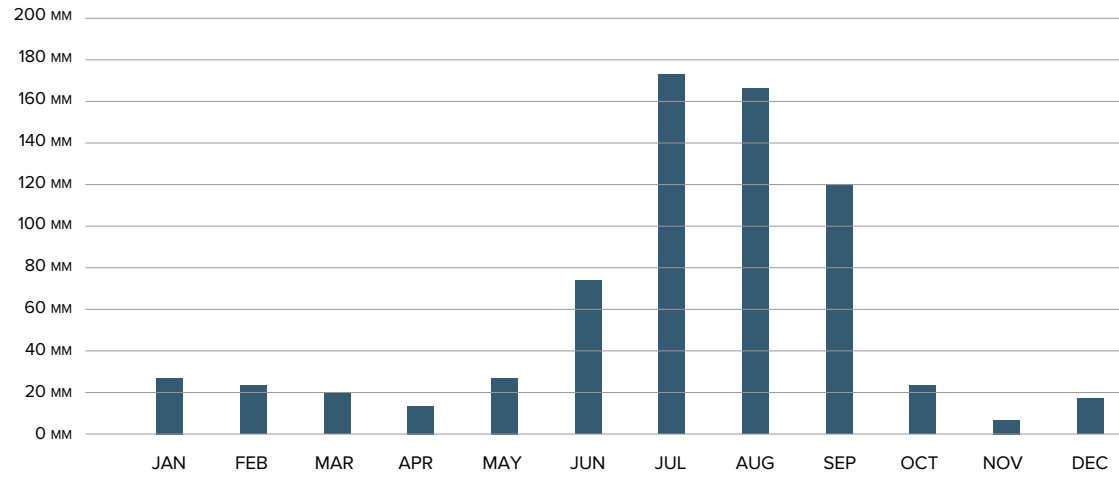


SOUTH LONGITUDINAL SECTION

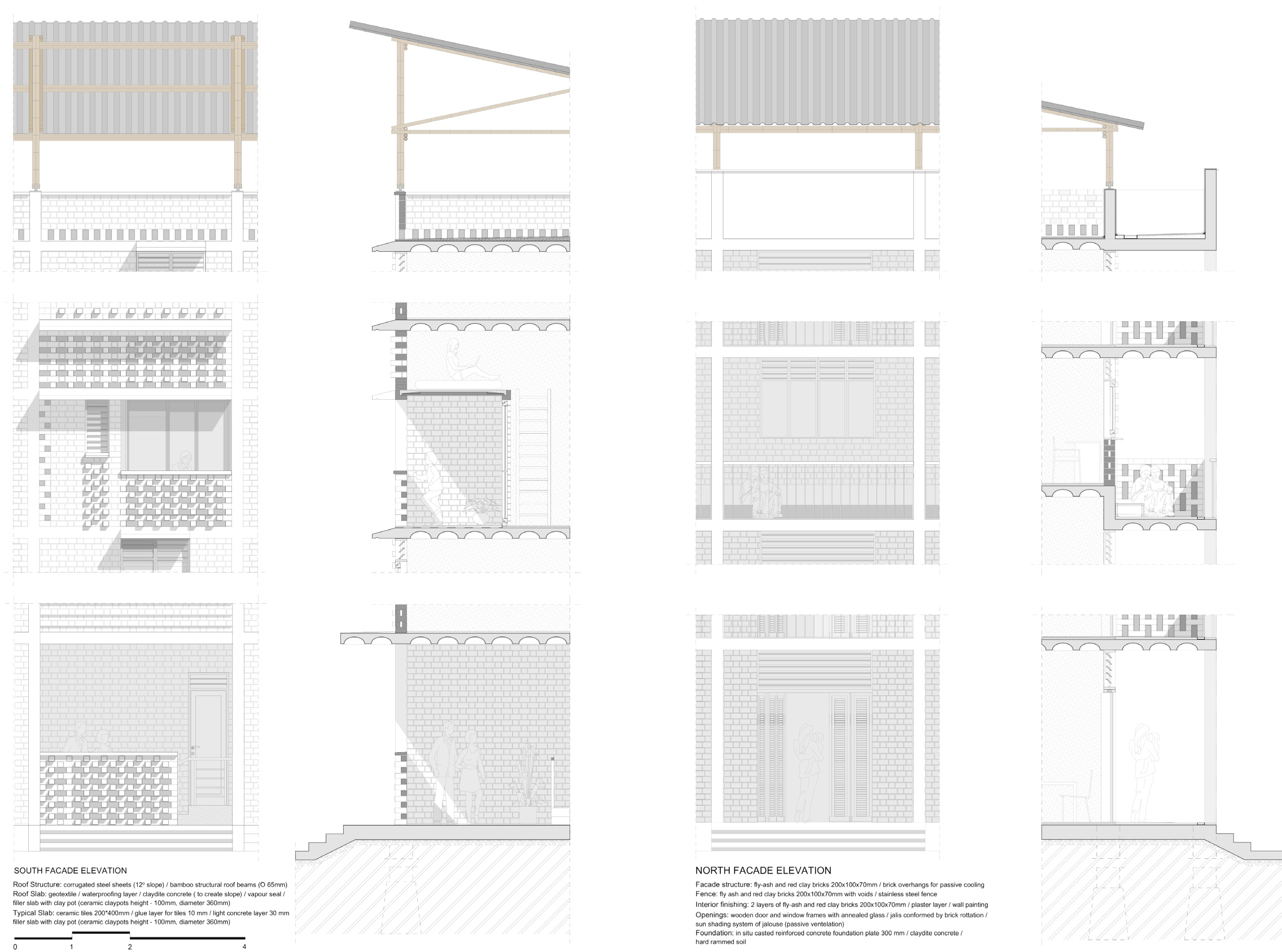


RAINWATER COLLECTION

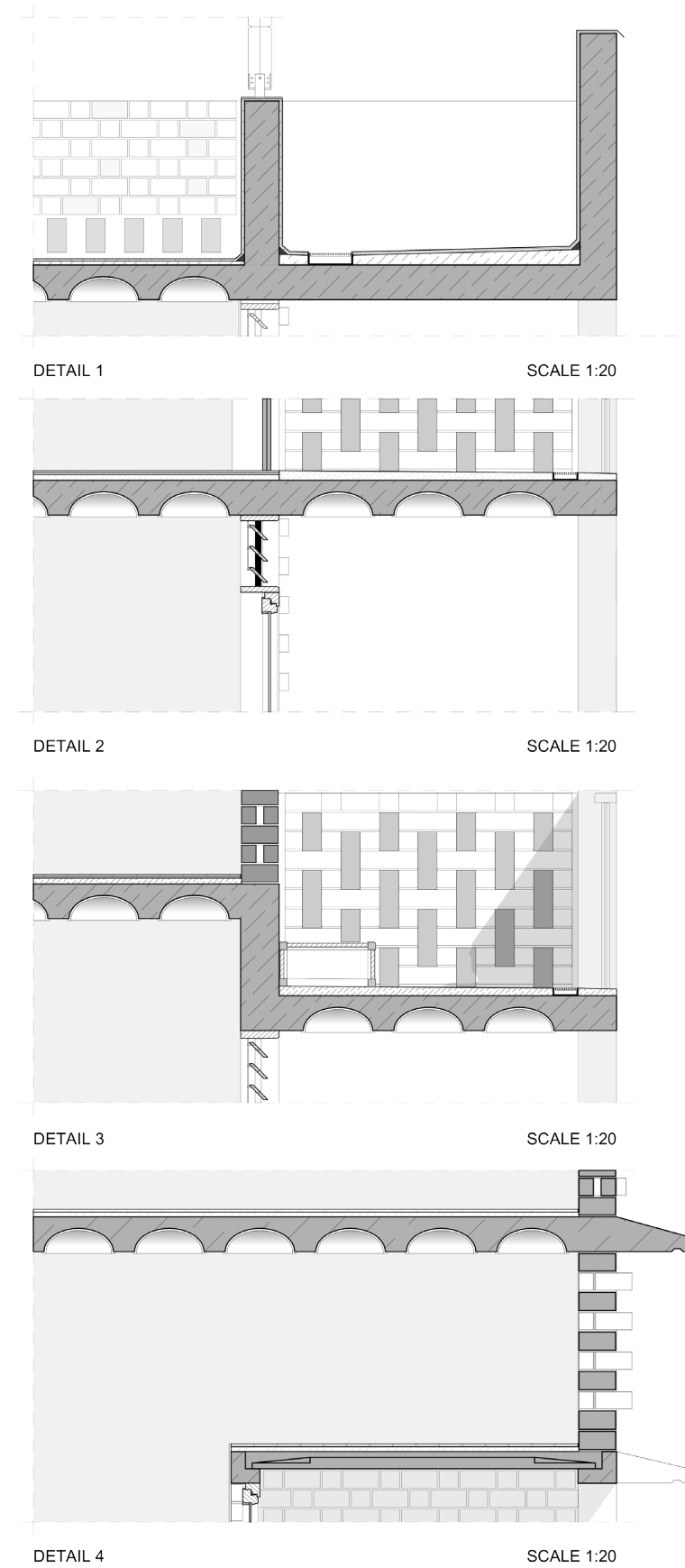
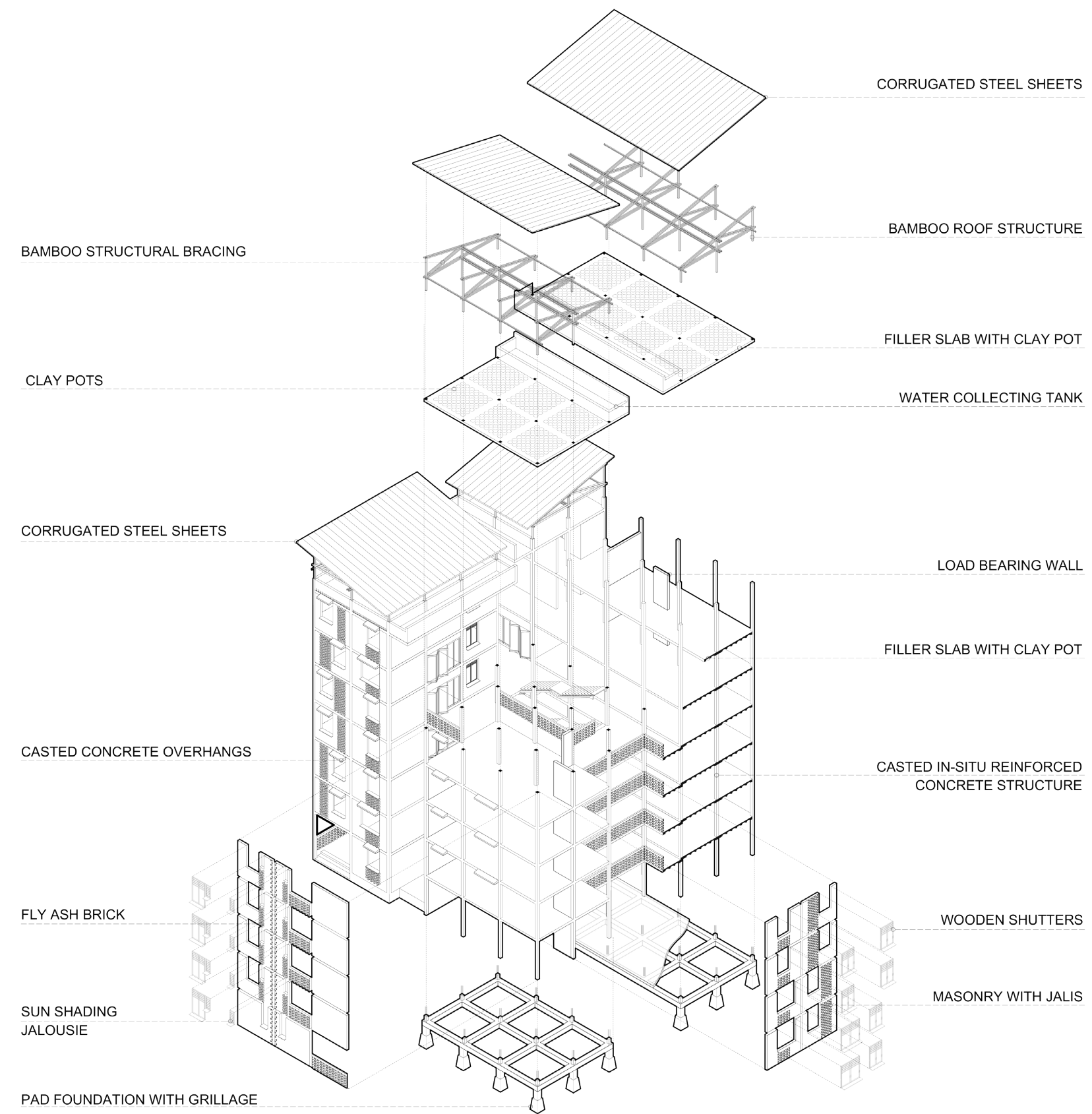
AVERAGE PERCIPITATION PER MONTH (2016)

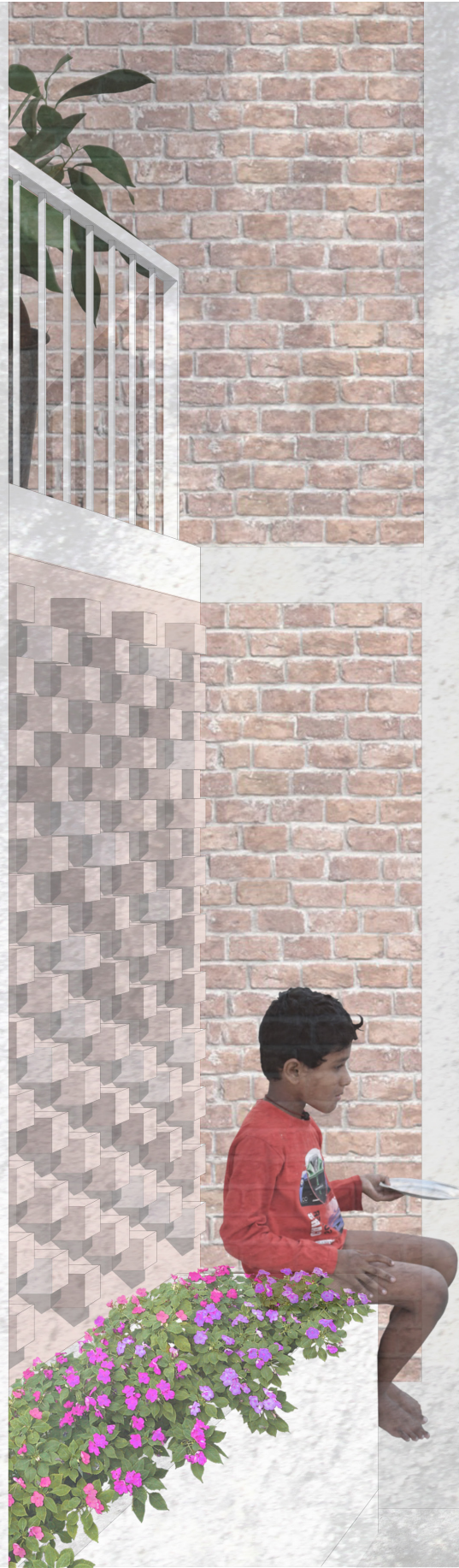


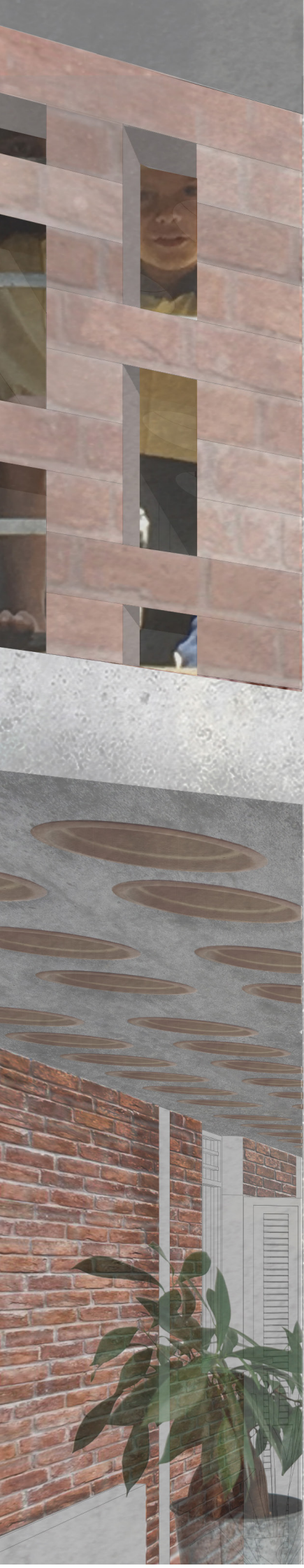
STRUCTURAL SECTIONS OF THE BUILDONG SOUTH / NORTH FACADES ELEVATIONS



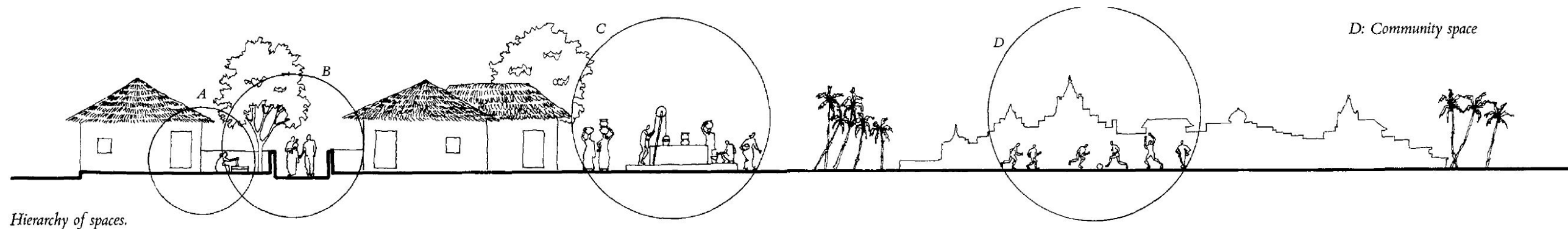
STRUCTURAL AXONOMETRY





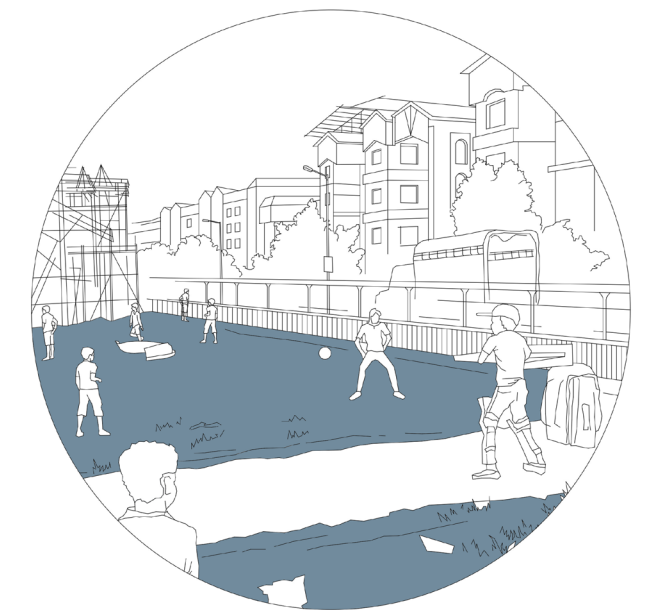
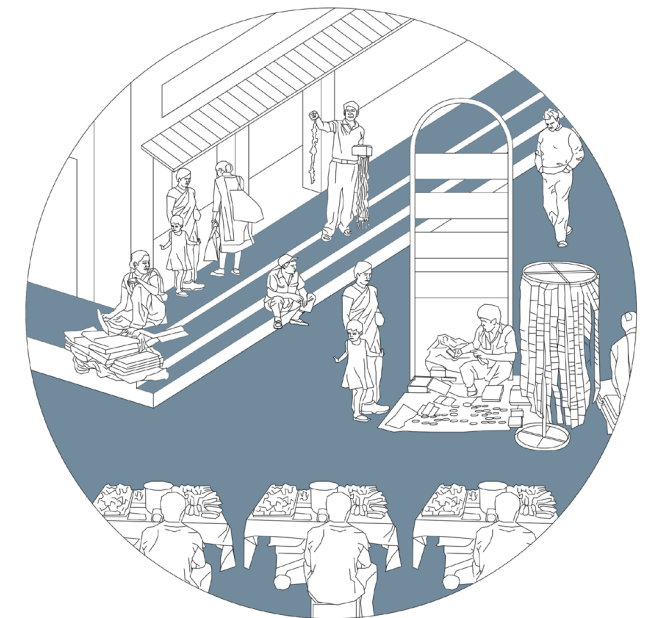
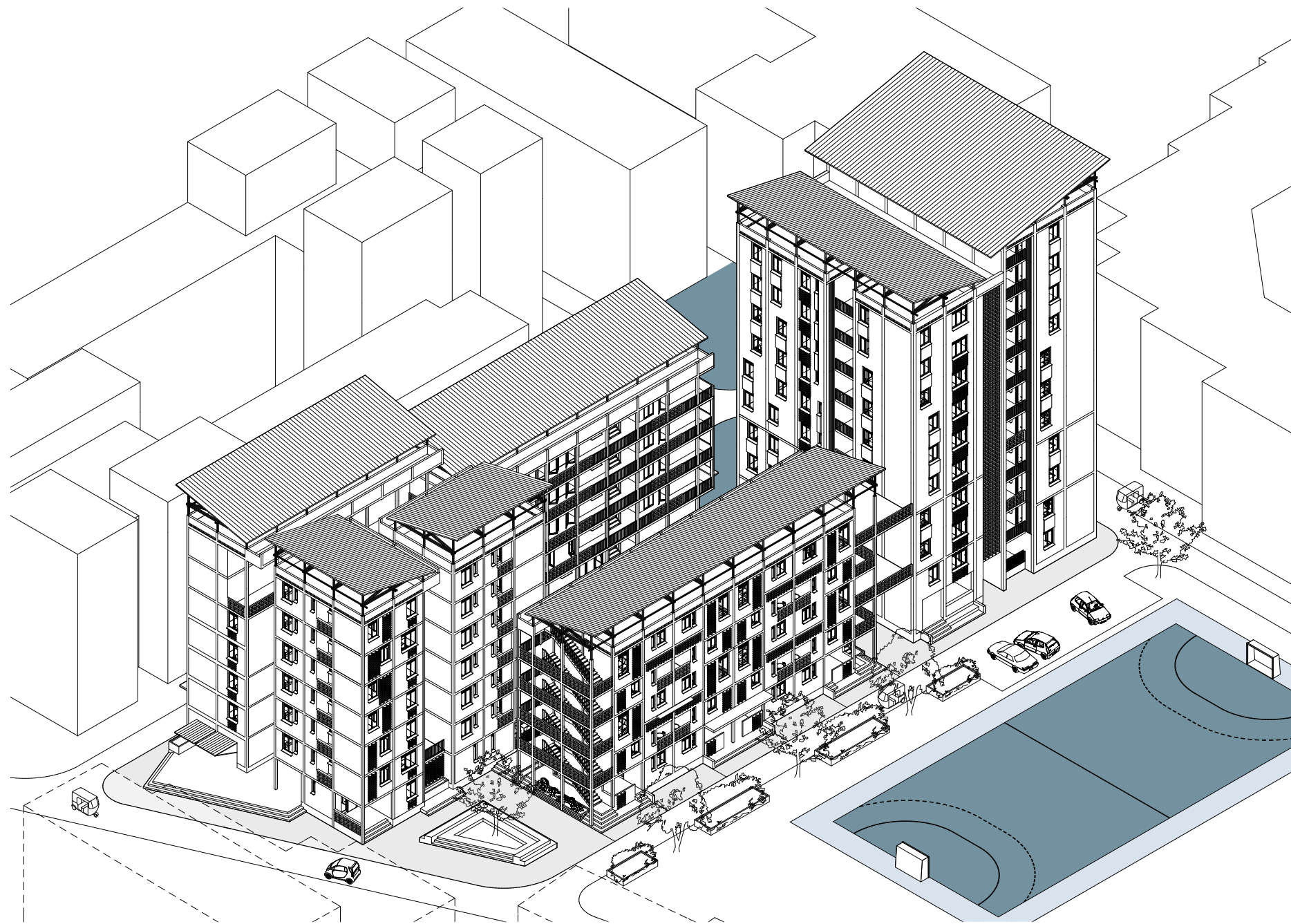
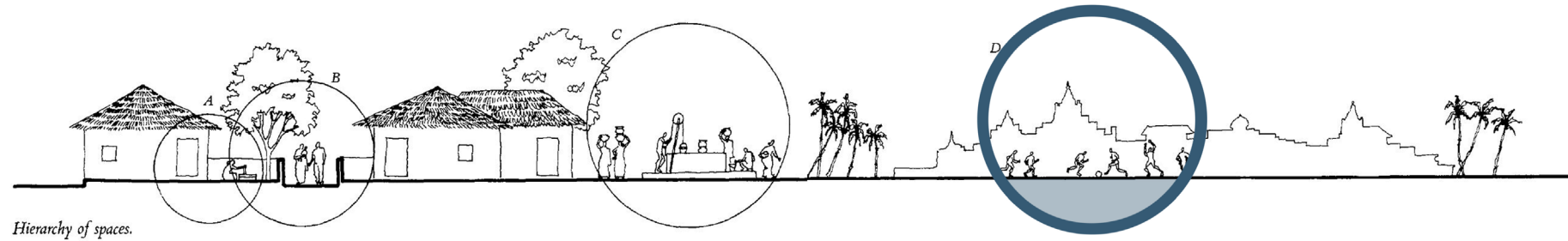






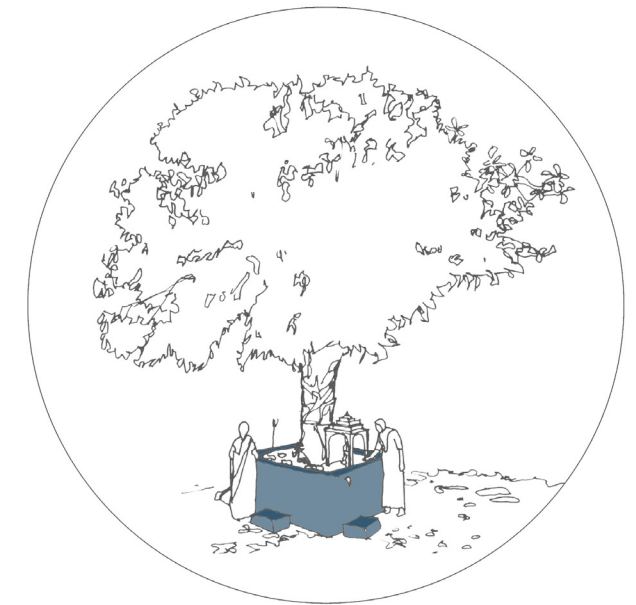
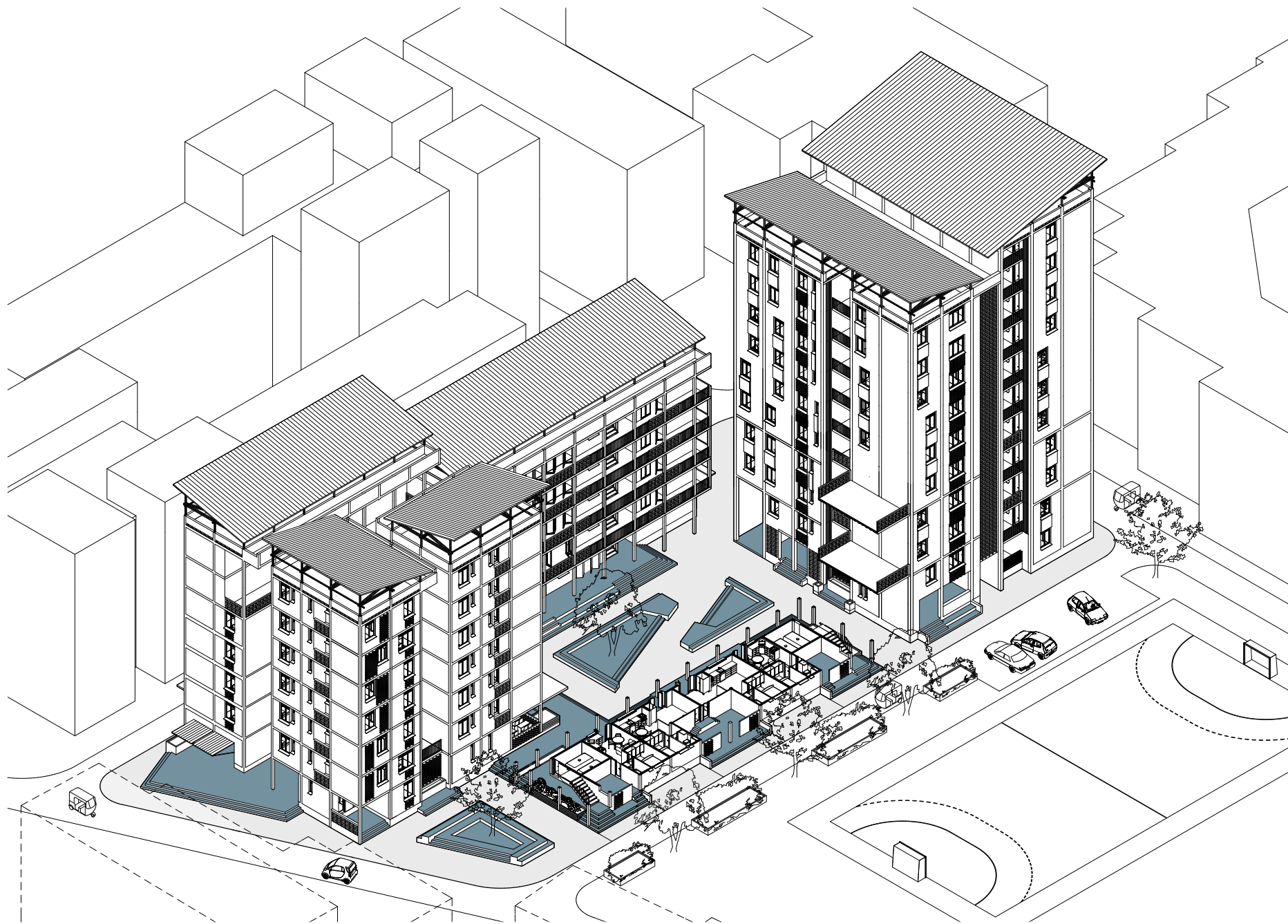
«SUCCESSFUL HOUSING IS A SEAMLESS CONTINUUM OF SPACES THAT GOES ALL THE WAY FROM THE MOST PRIVATE, TO SEMI-PRIVATE, TO THE PUBLIC. THIS IS WHY IT GENERATES COMMUNITY.»

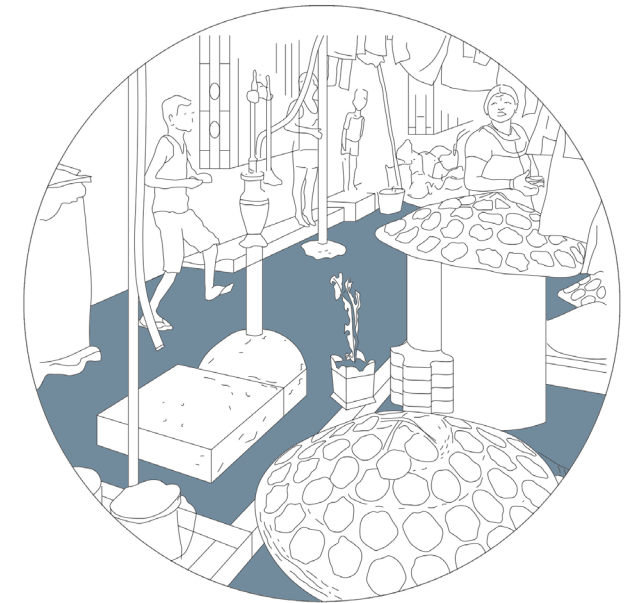
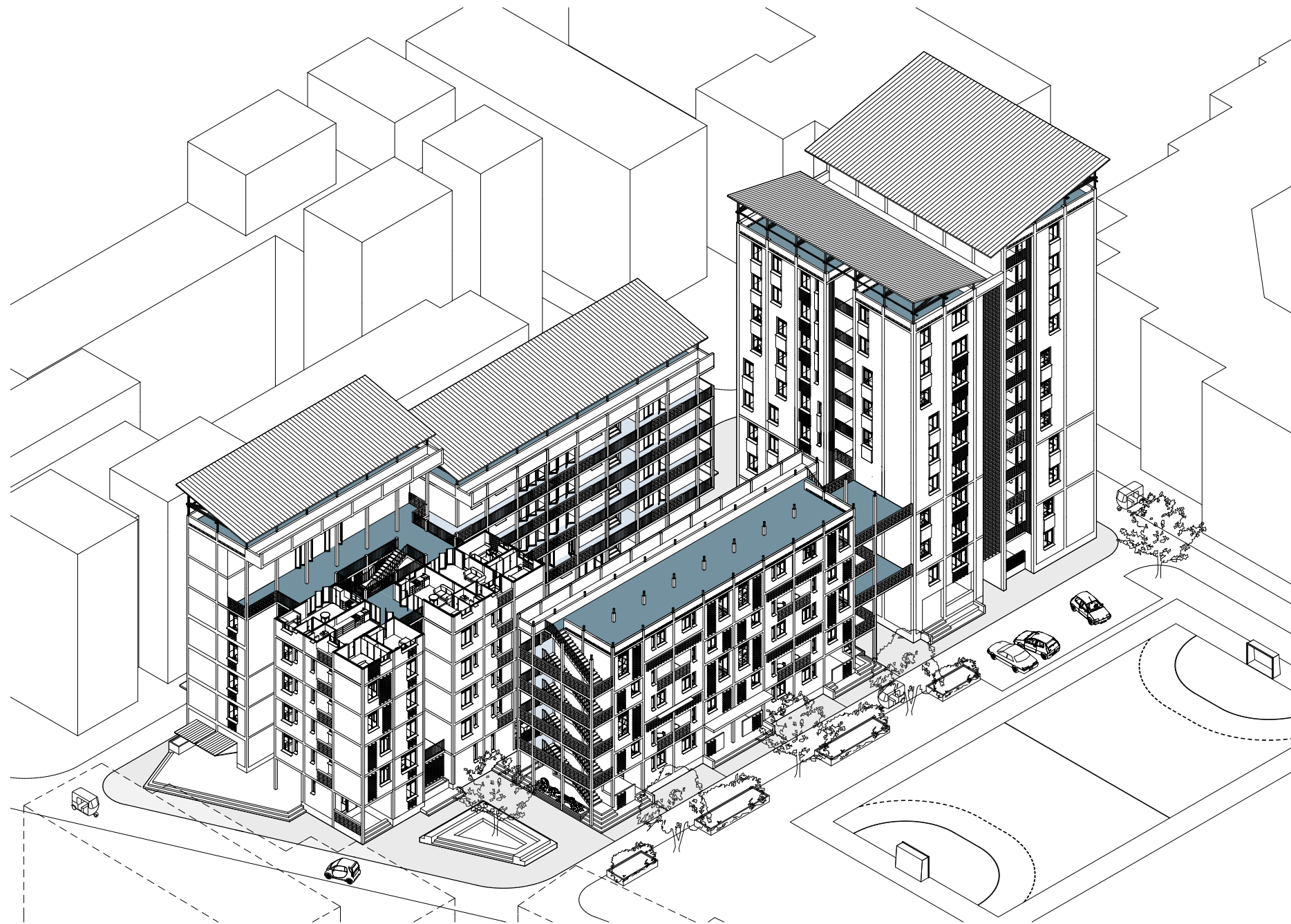
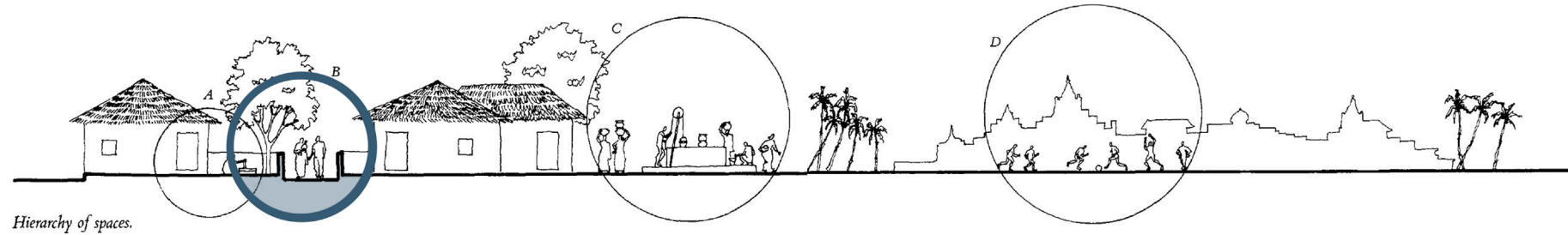
CHARLES CORREA

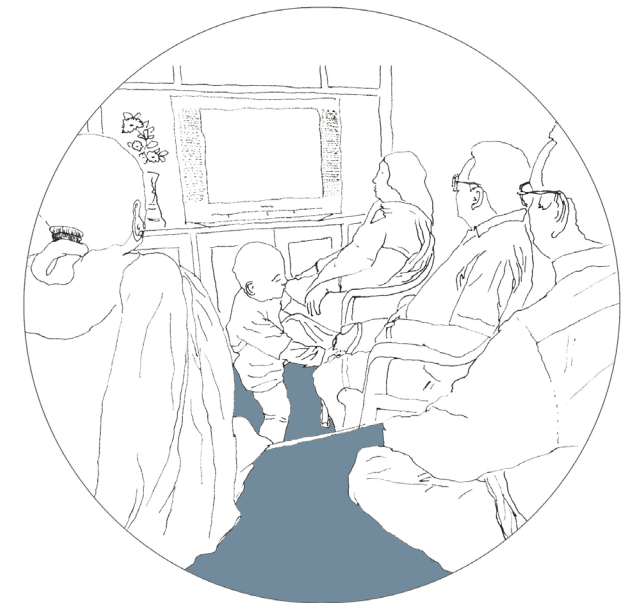
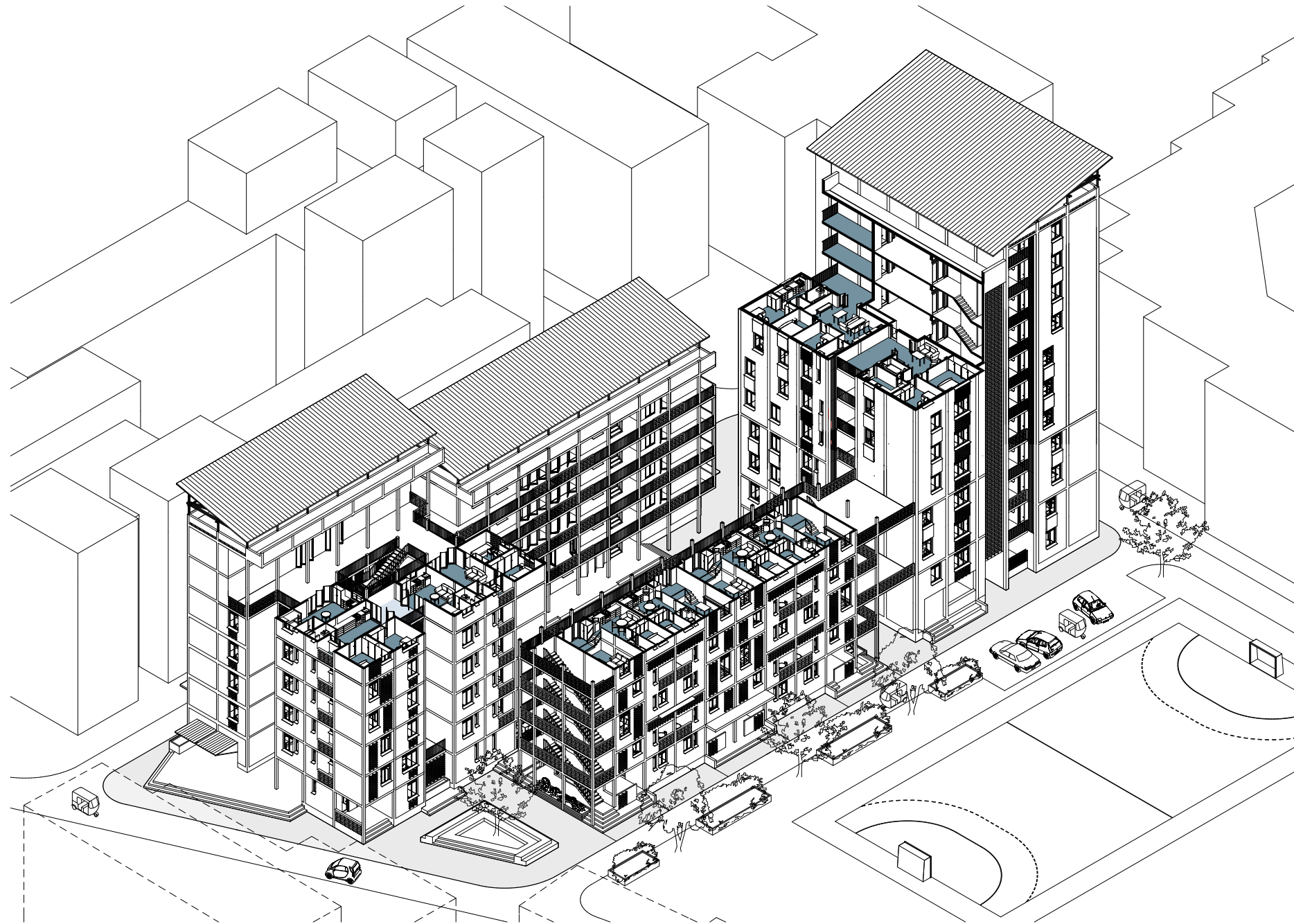
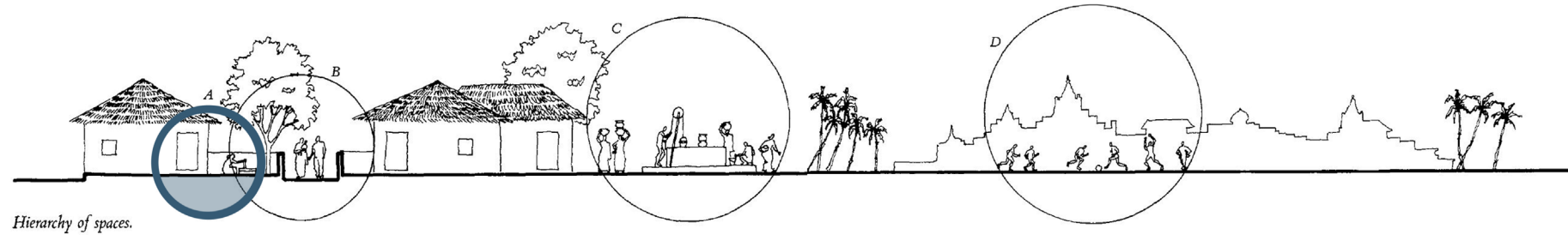




Hierarchy of spaces.







THANK YOU