





2050:

**replacment
parts**

Hana Marisa Mohar

CP

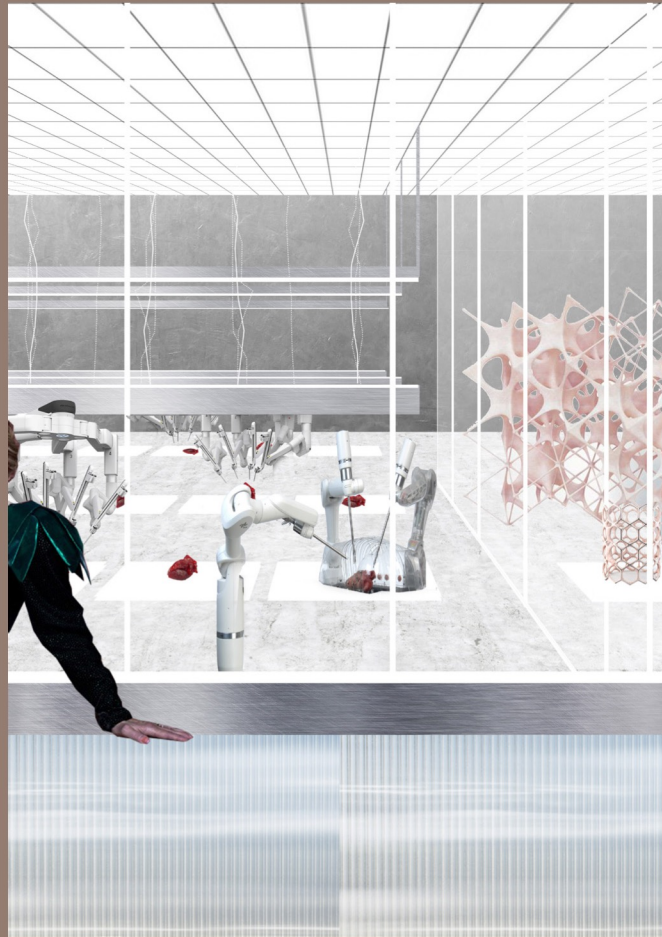
2050











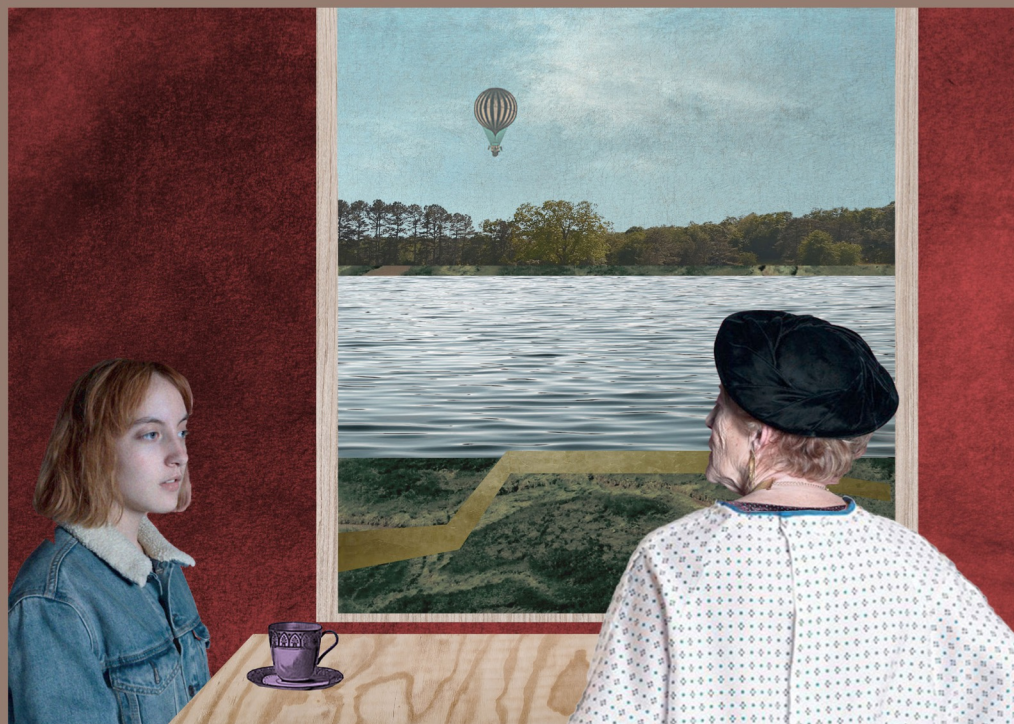














How can future
airport-city amenities perform as an
interface between global demands and
local urbanity?

Chapter 1:

AIRPORT CITY

What is the future
of airports?





A new urban form
which exists to
serve the needs of
companies whose
business model
depends on access
to transportation.

The Airport City (1978)



Spruce Creek, Florida (1978)

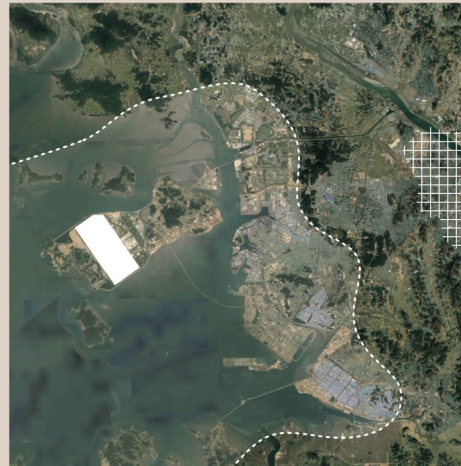
The Airport City (1978)



The Aerotropolis (2000)



Spruce Creek, Florida (1978)



Incheon airport, Seoul (2001-)

The Airport City (1978)



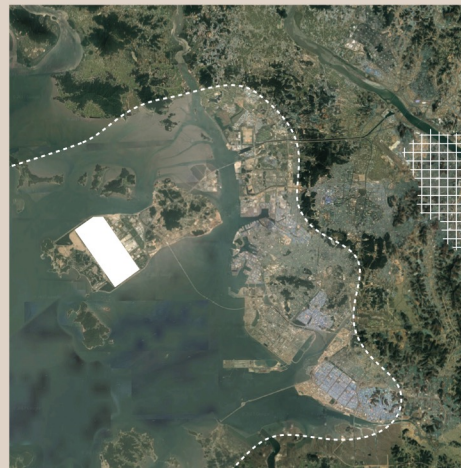
The Aerotropolis (2000)



The Airport Corridor (2003)



Spruce Creek, Florida (1978)



Incheon airport, Seoul (2001-)

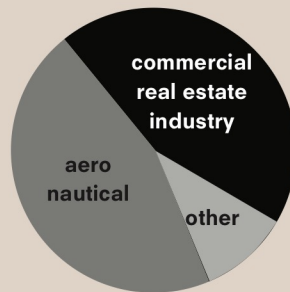


Schiphol, Amsterdam (2008-)





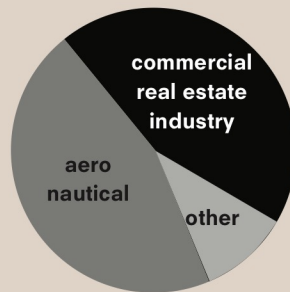
AIRPORTS AND CAPITAL



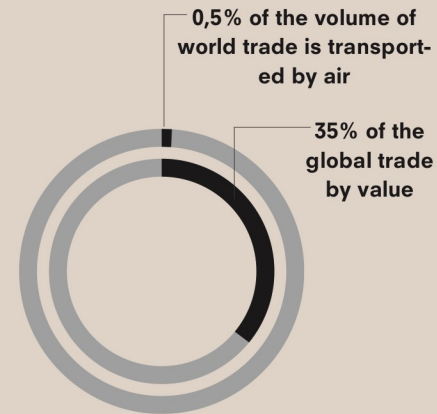
40–60%
non-aeronautical
revenue



AIRPORTS AND CAPITAL



40–60%
non-aeronautical
revenue



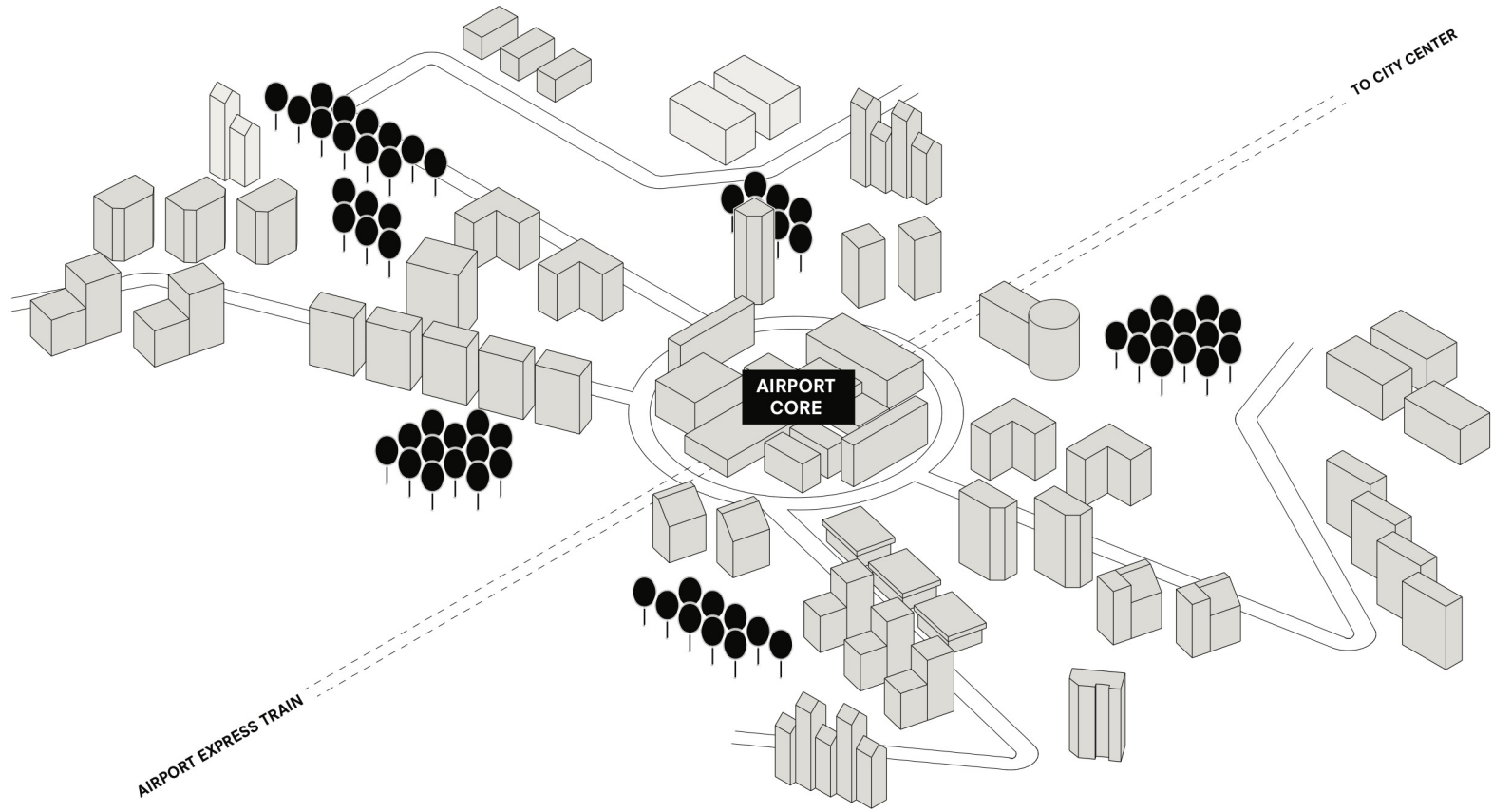
volume vs. value



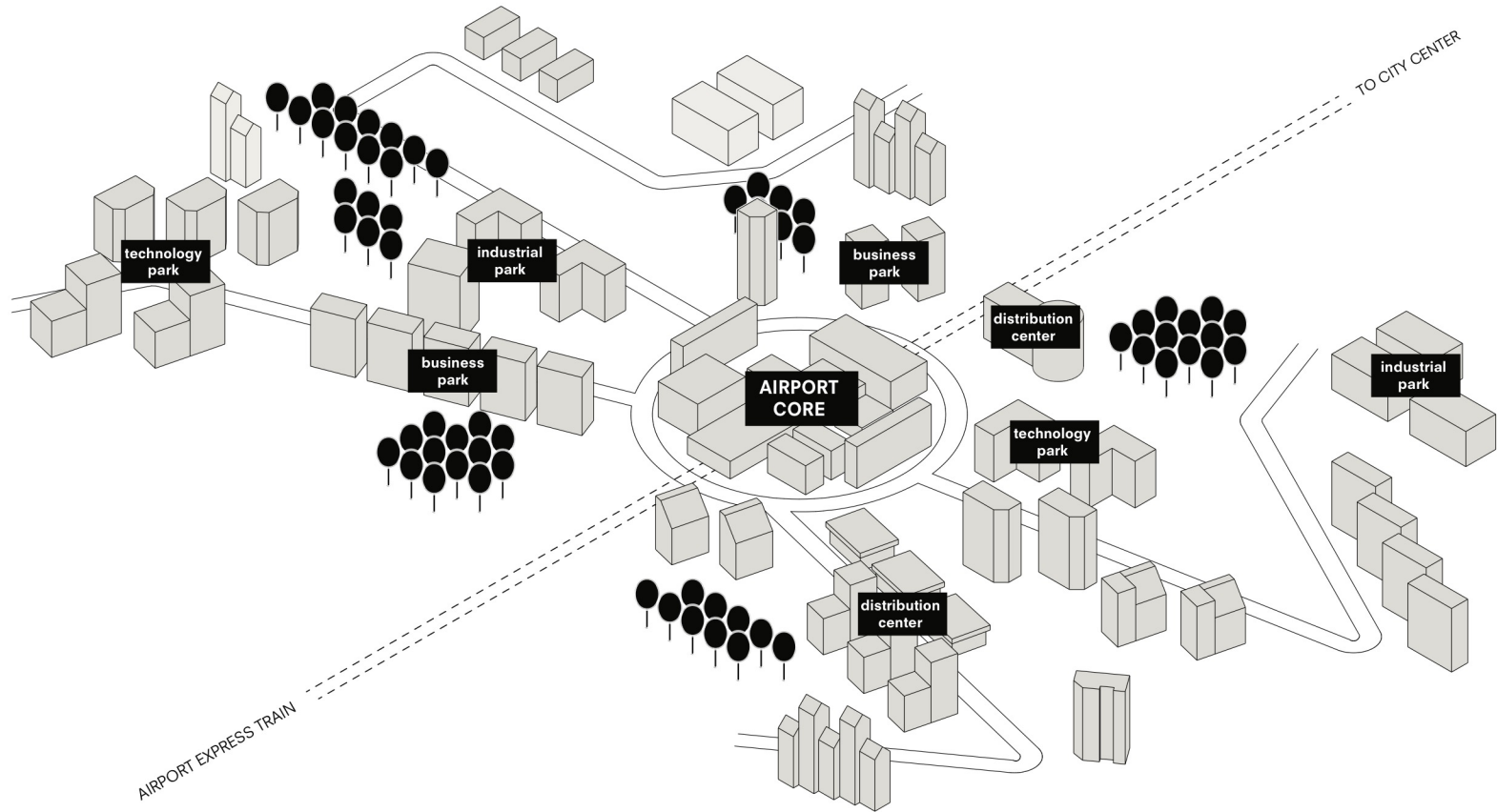


**what is this city
made of?**

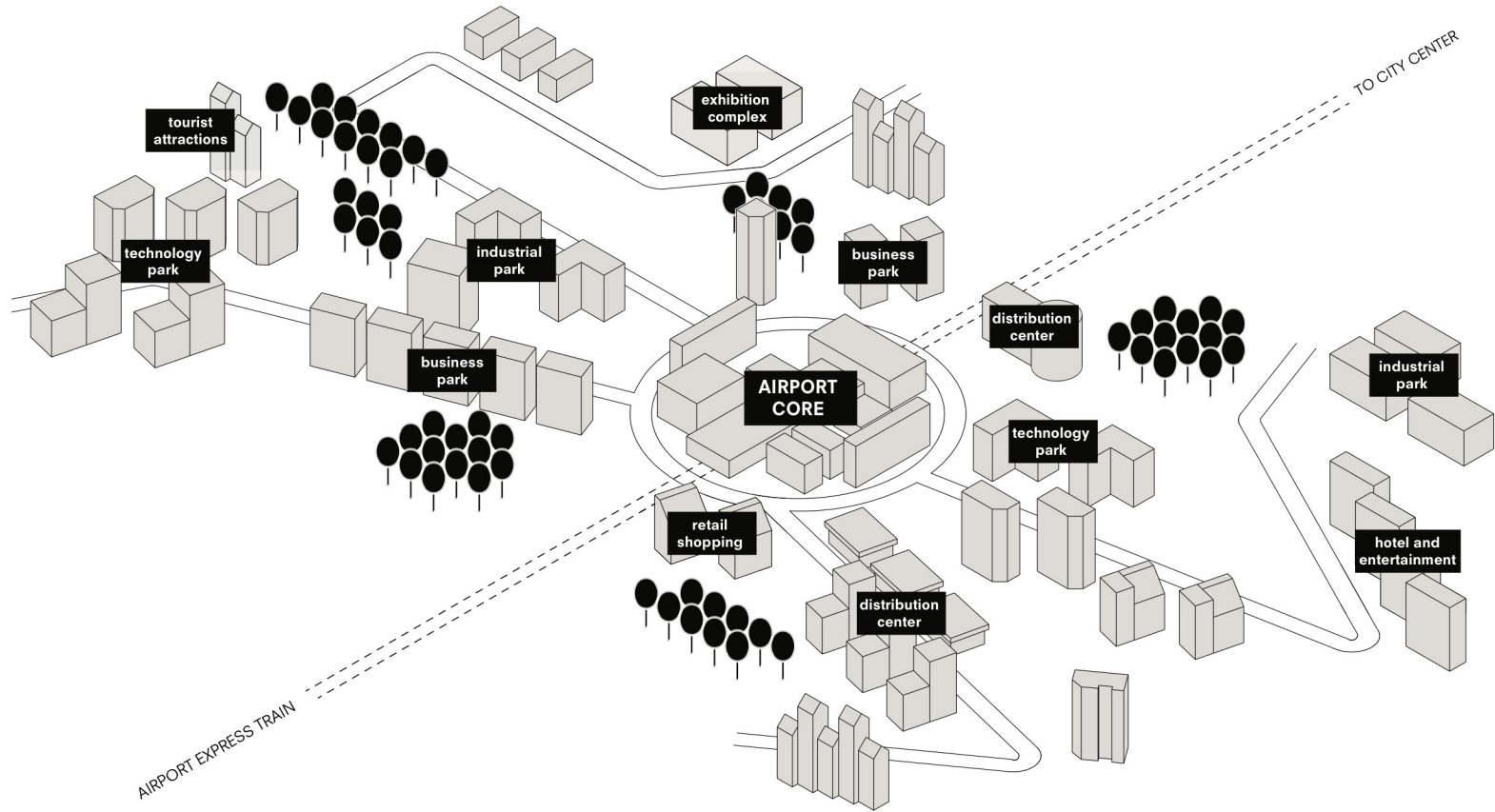
airport city



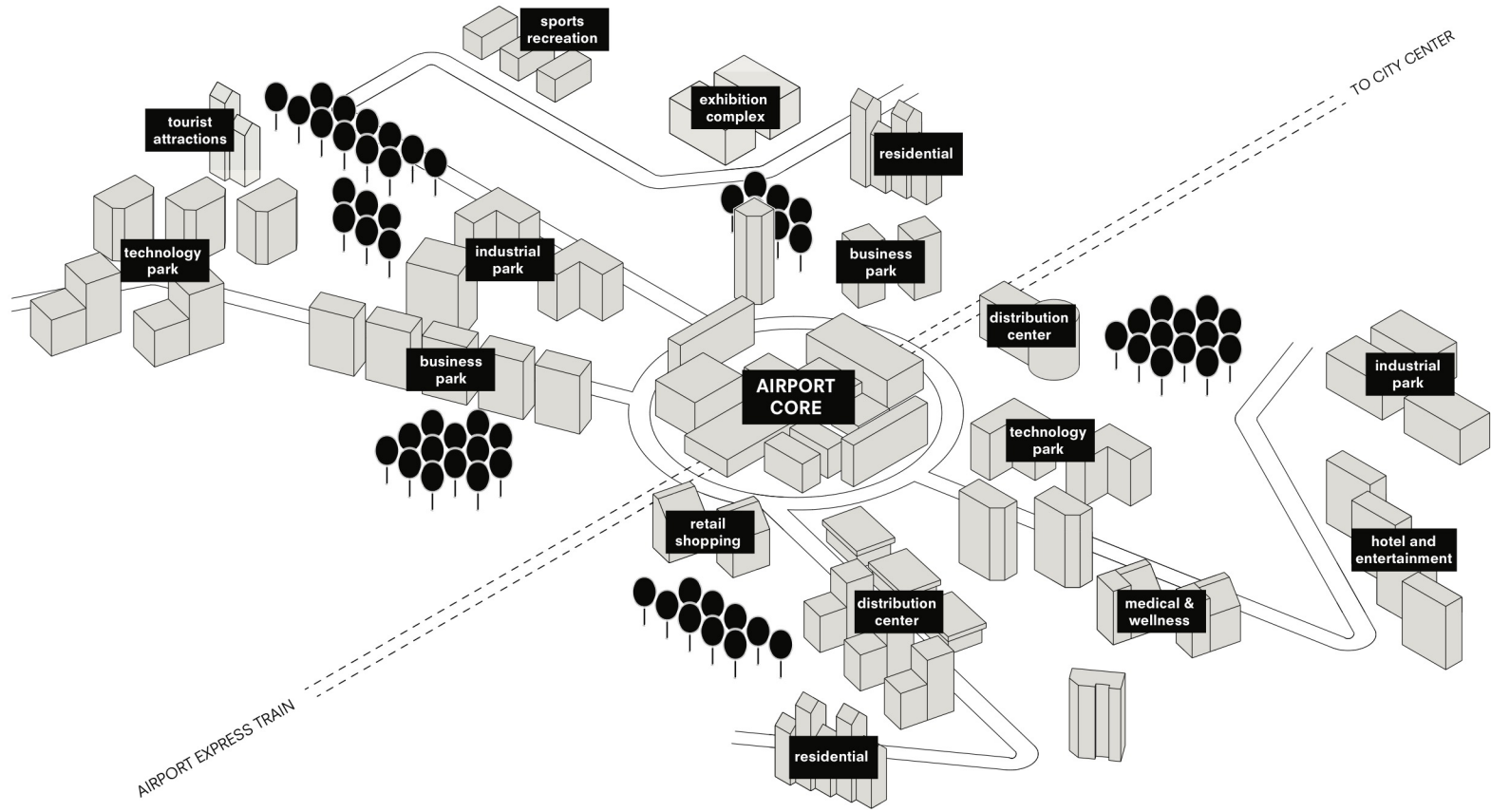
airport city



airport city



airport city













education

tourism

culture

sport

commercial

living!?!

health

civic

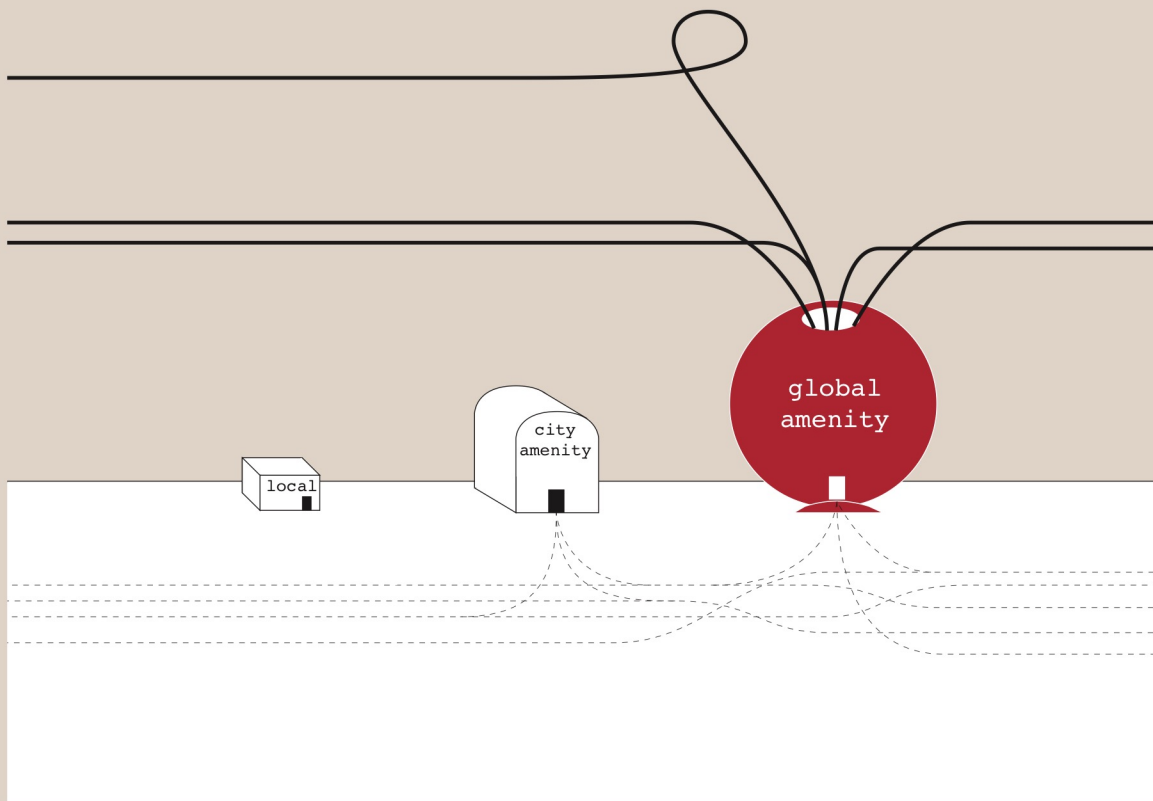




rise of global amenities?

24/7 global services





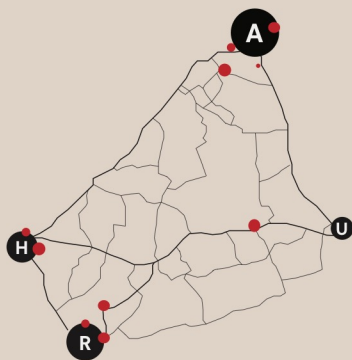


Amsterdam



Amsterdam

=

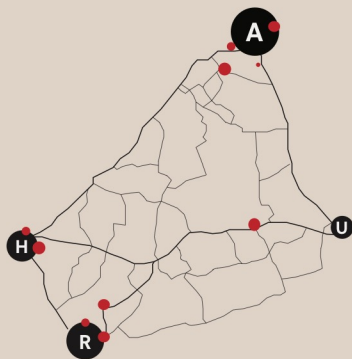


Randstad region



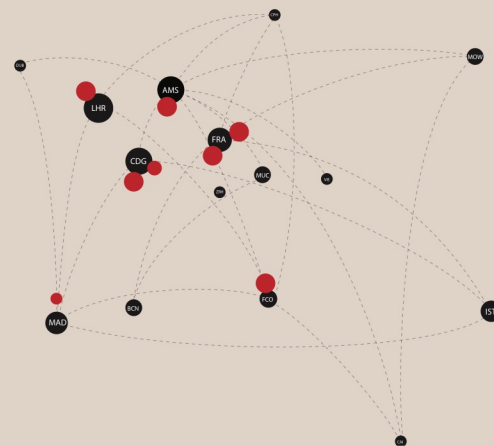
Amsterdam

=



Randstad region

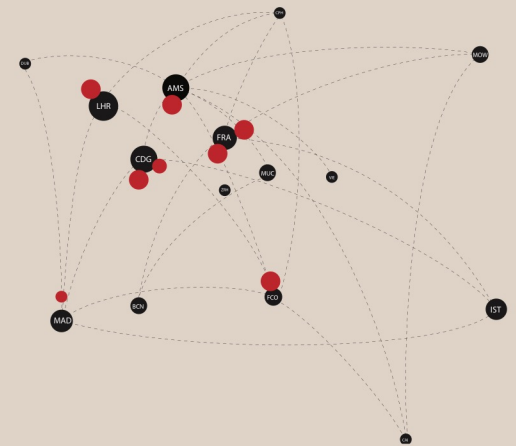
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Europe

biggest
high-cost
state of art

=



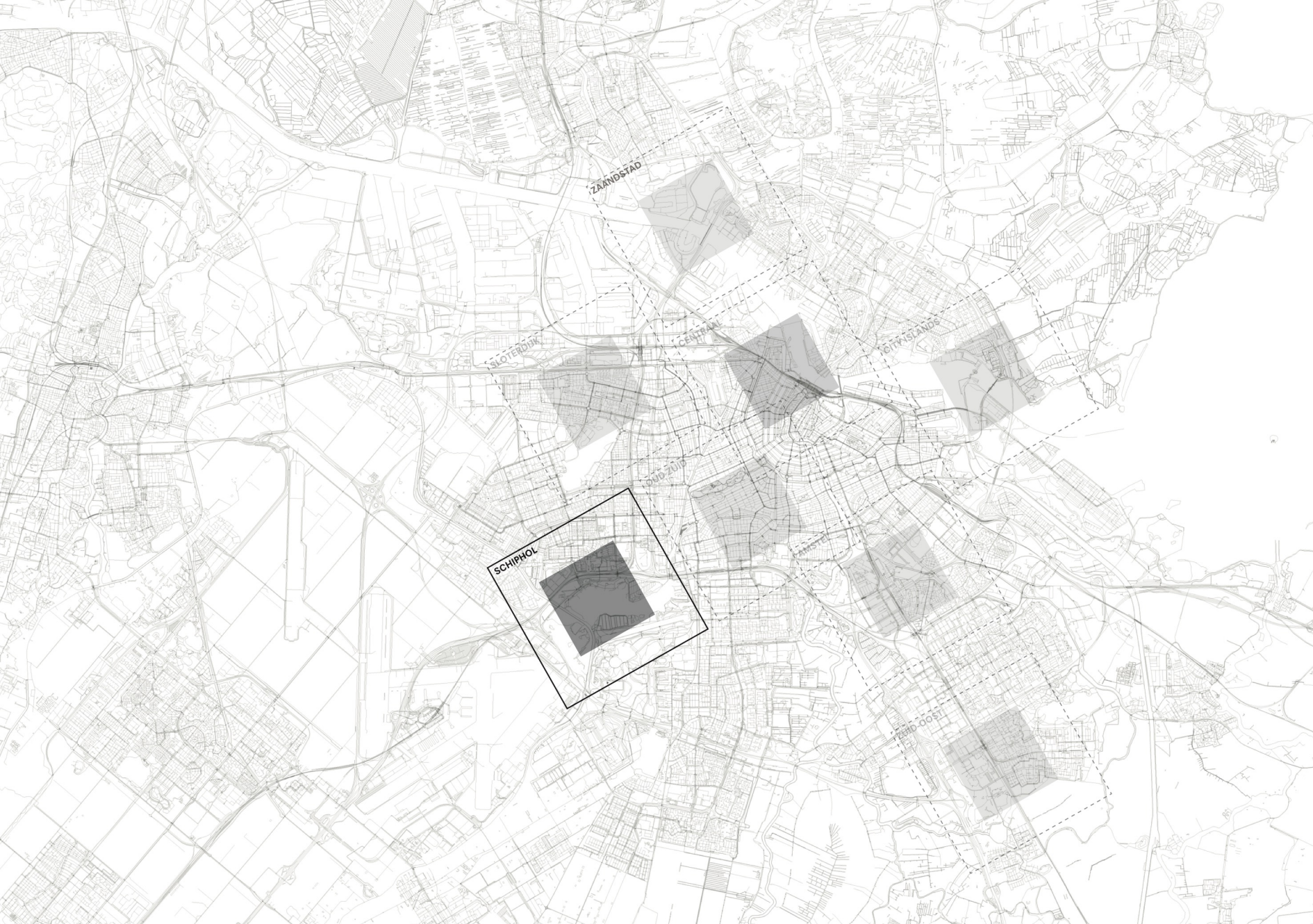


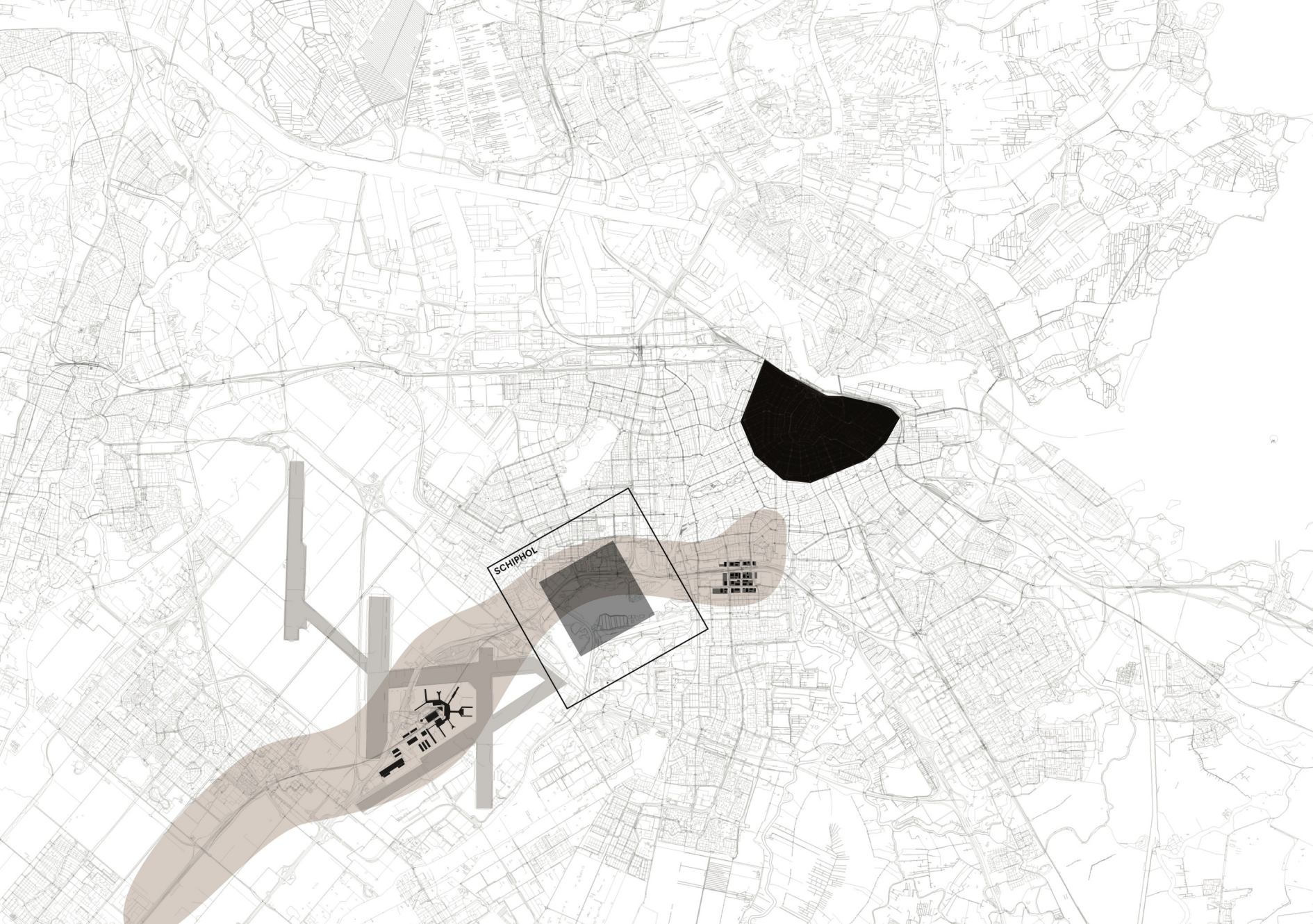








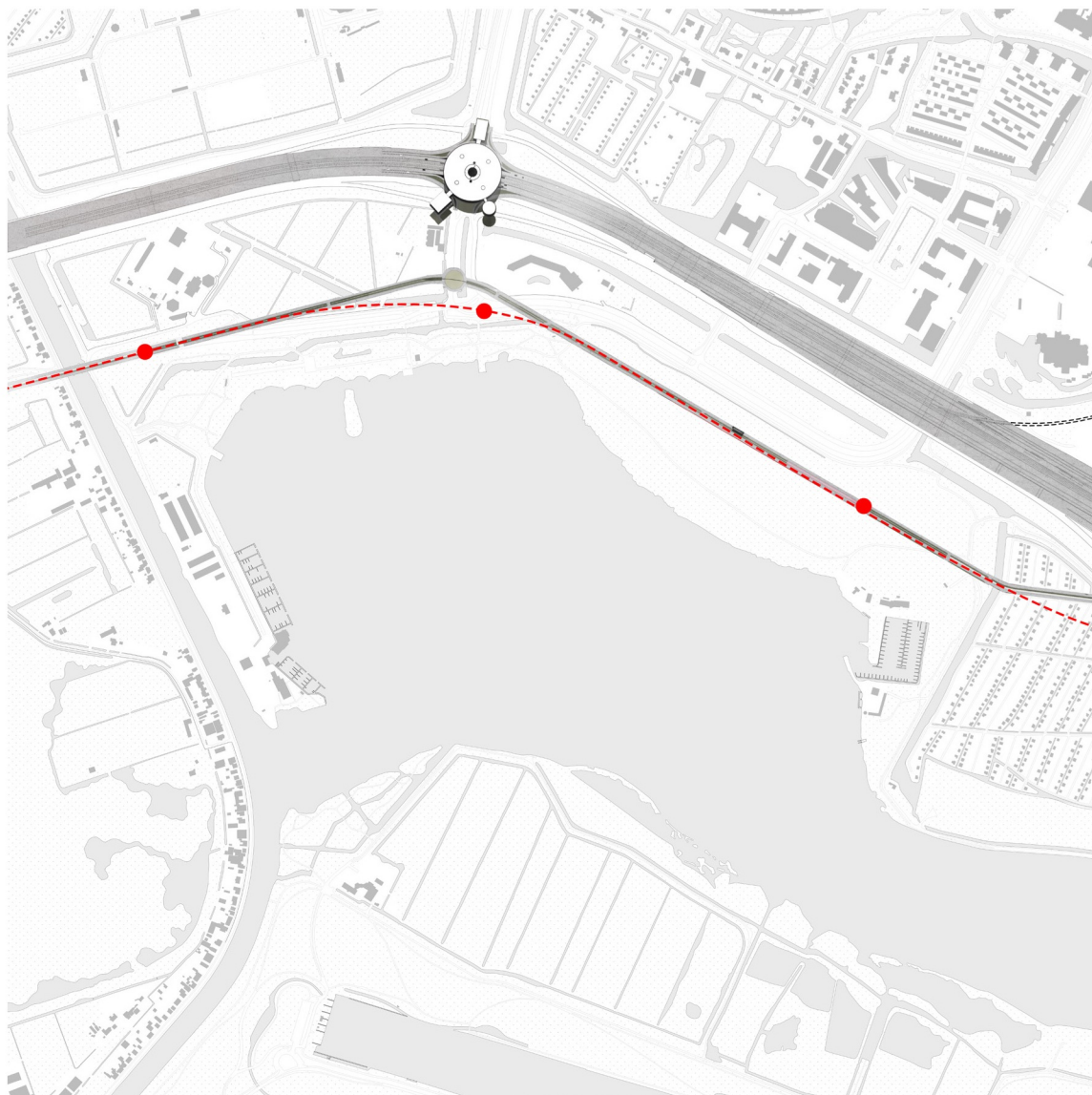


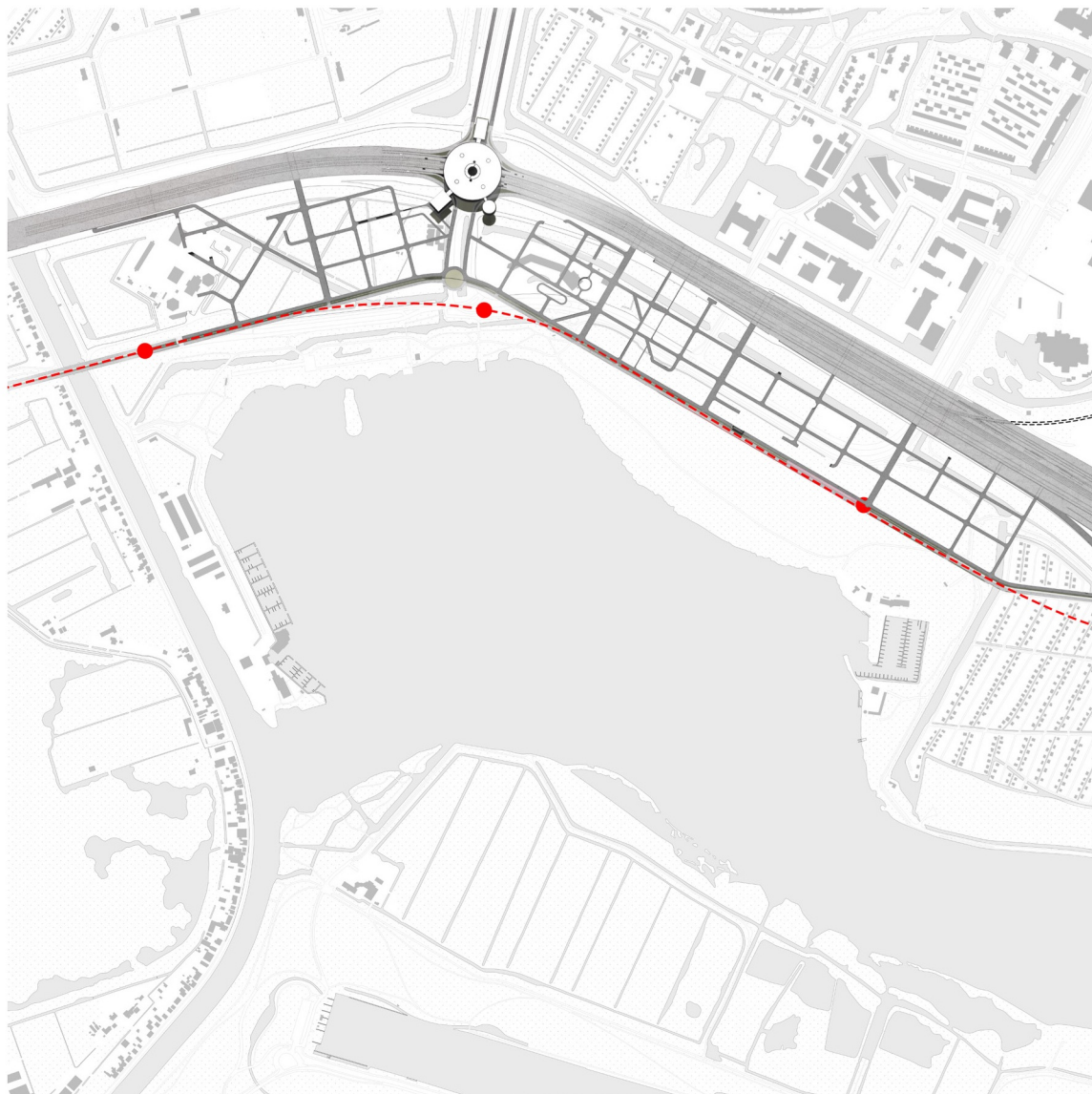




Schiphol Corridor 2050



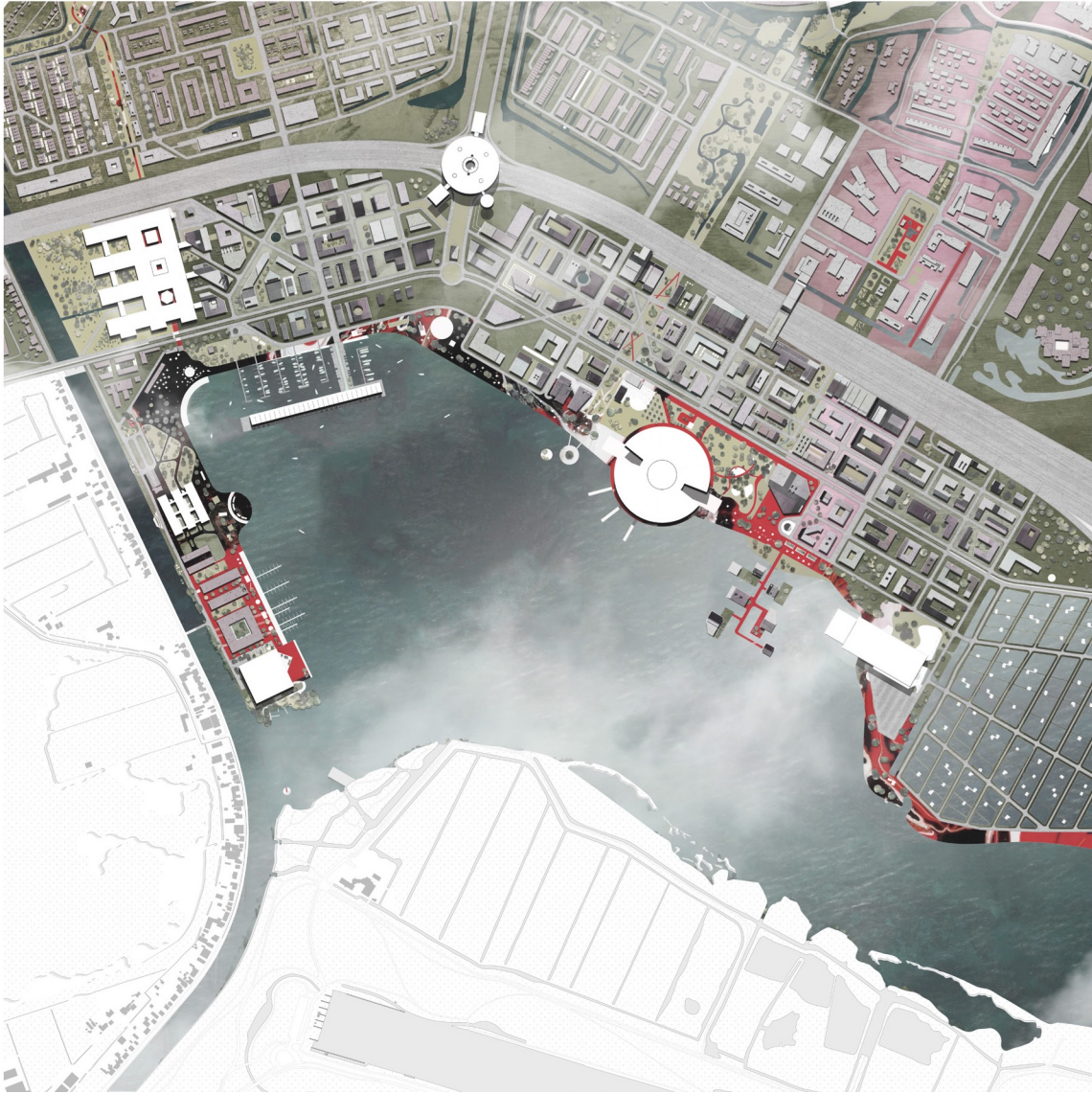


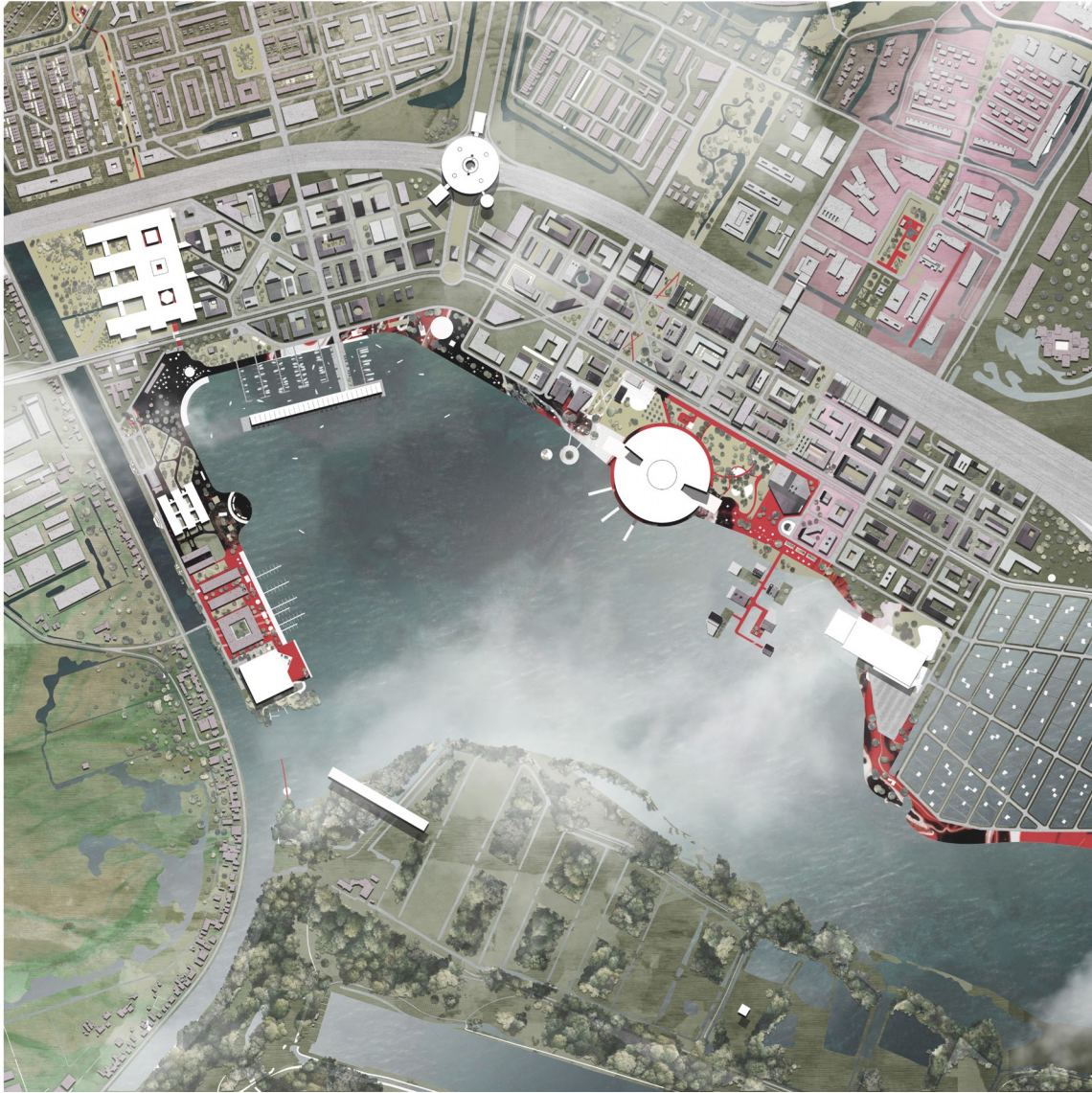










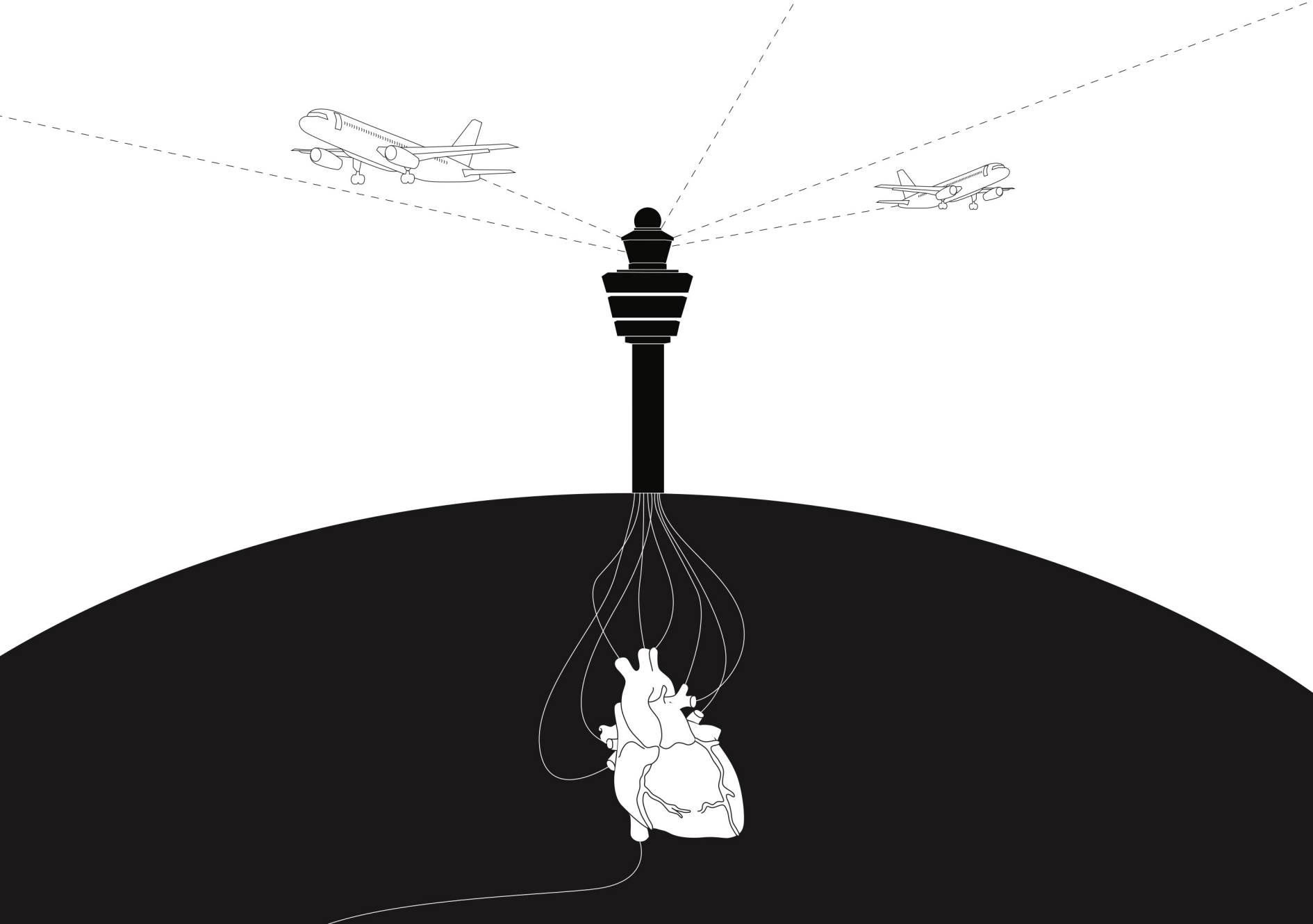


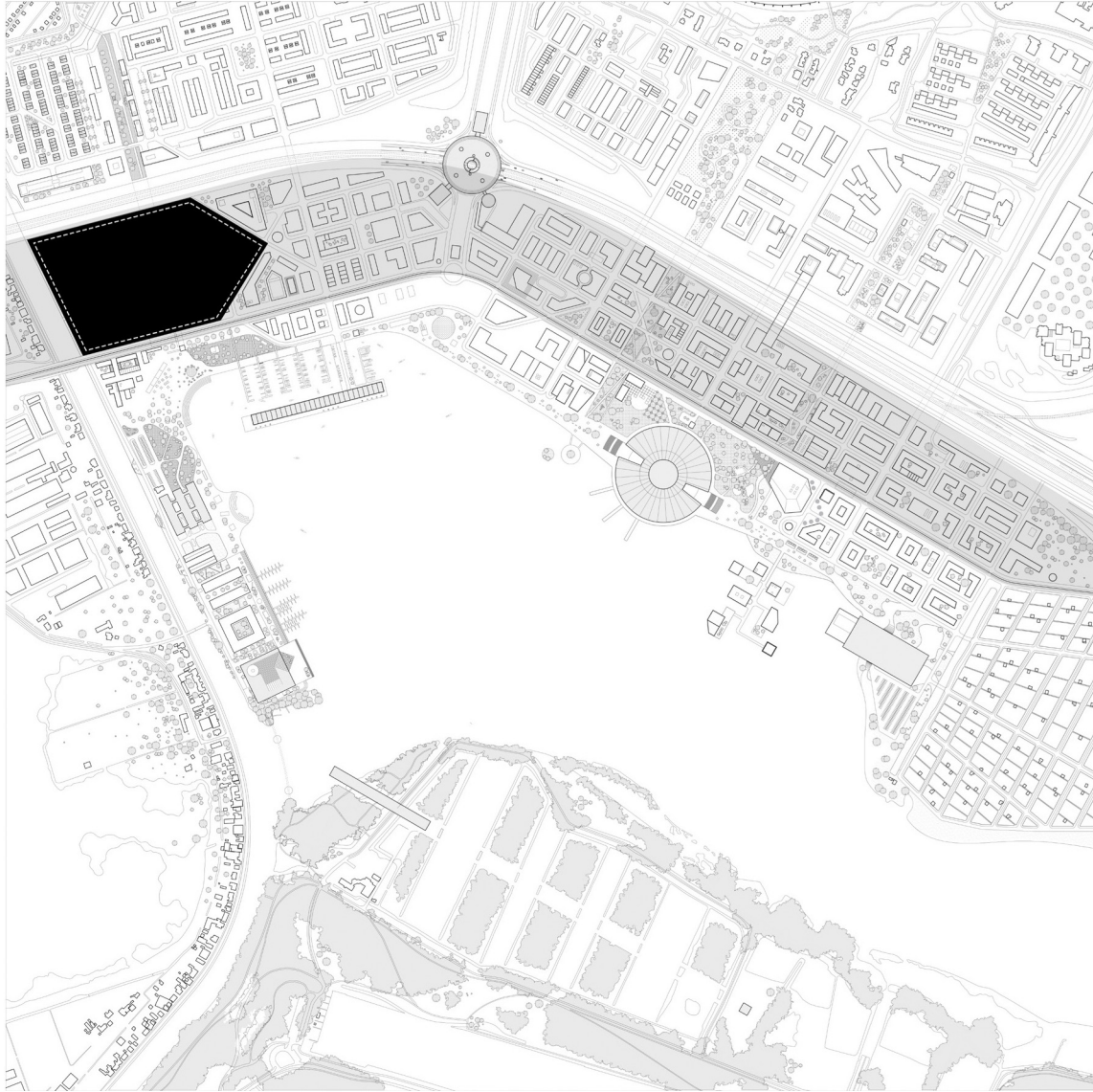




Airports will become
like train stations





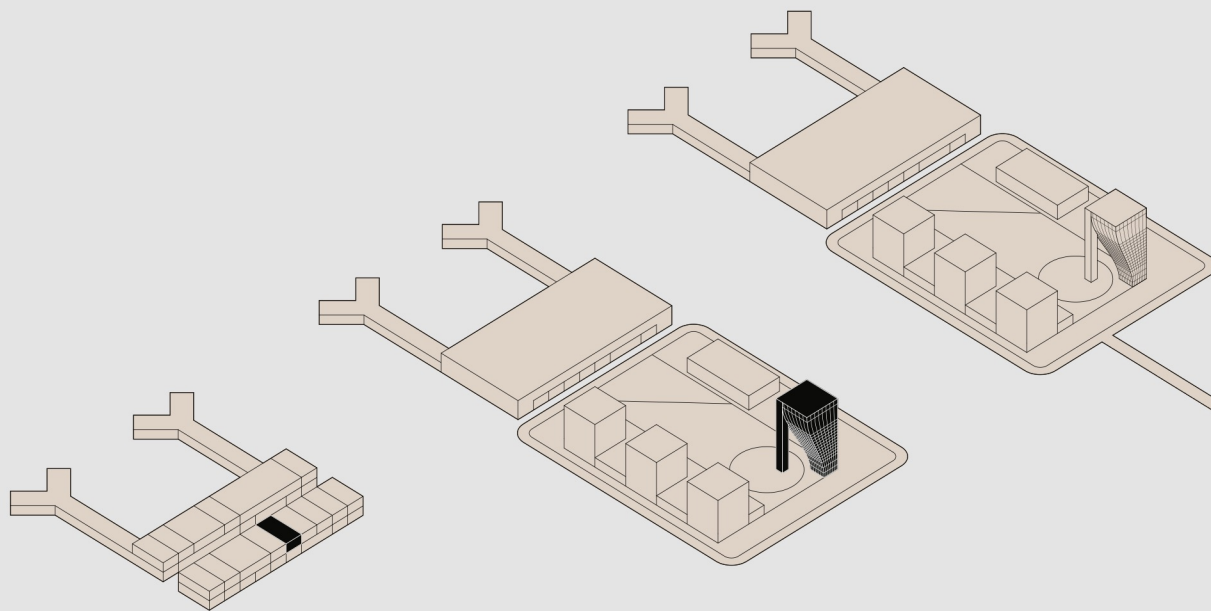


Chapter 2:

CAMPUS

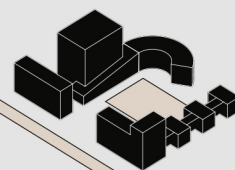
How urban is campus?



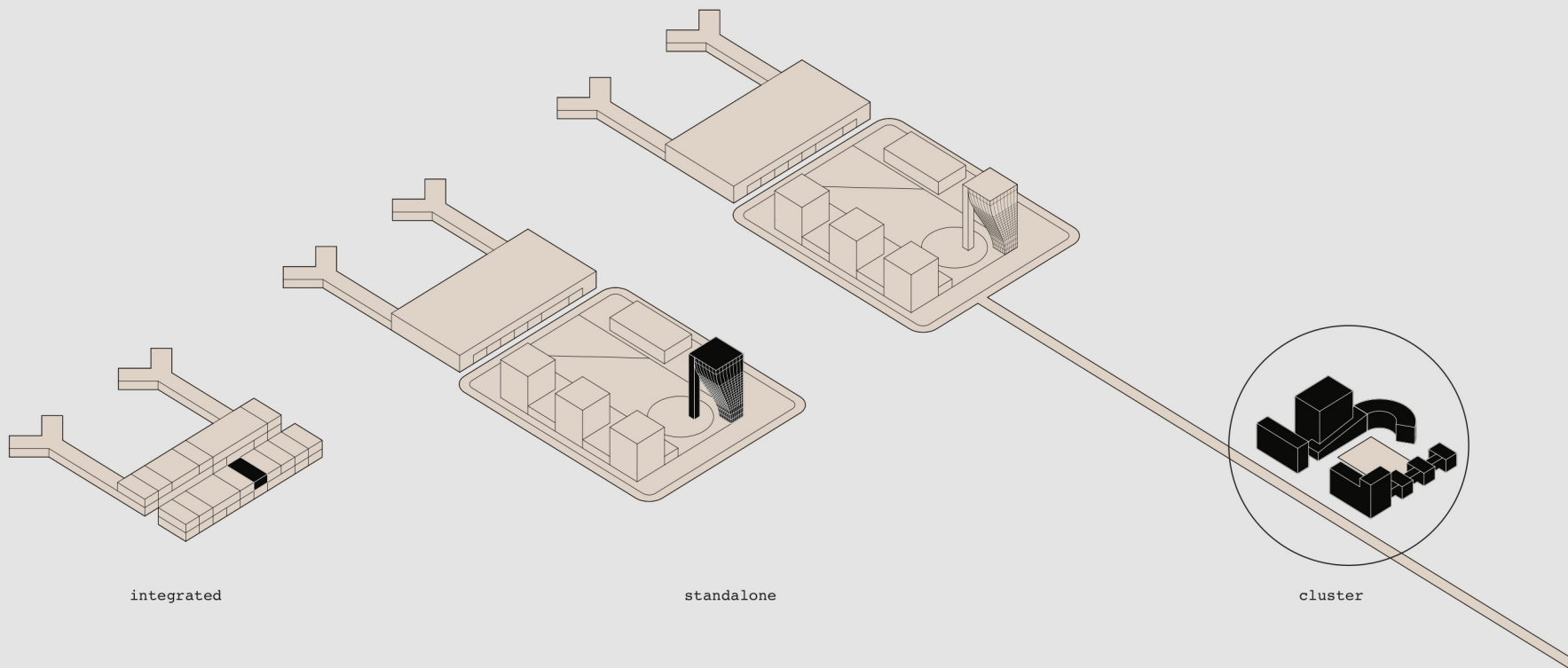


integrated

standalone



cluster



airport city campus

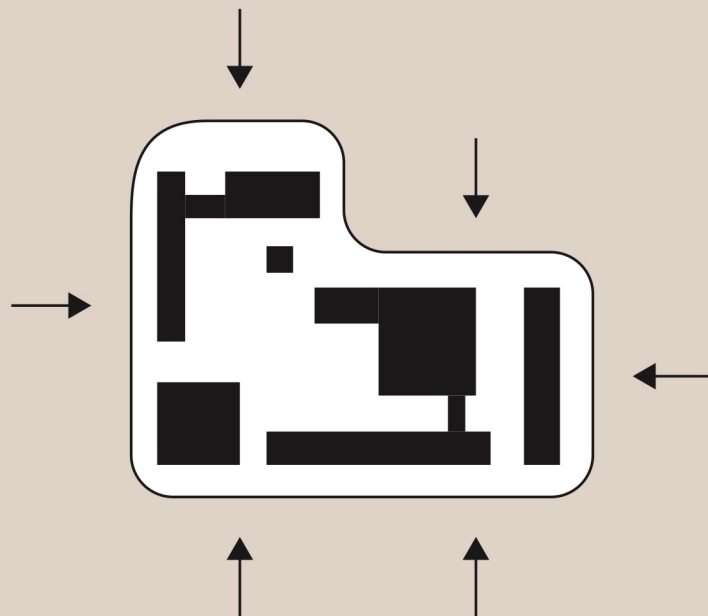








program driven
monofunctional



airport **CITY?**



hermetic





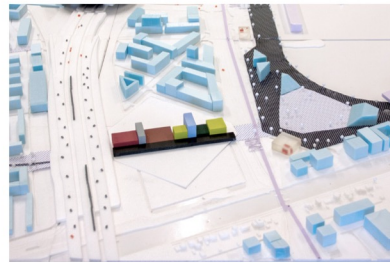
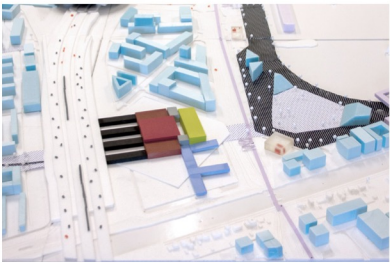
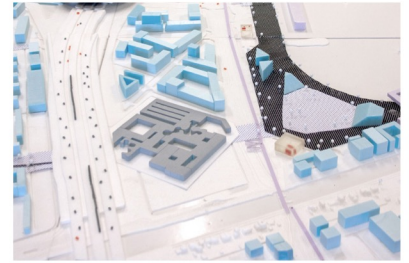
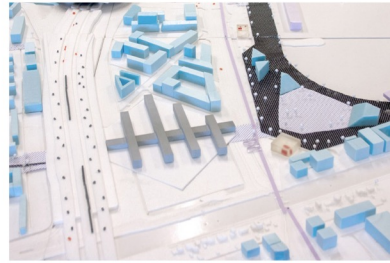
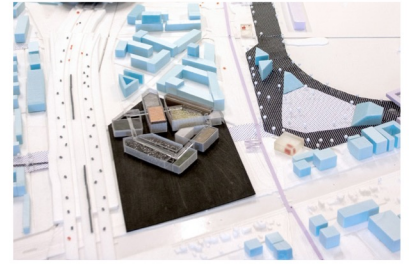
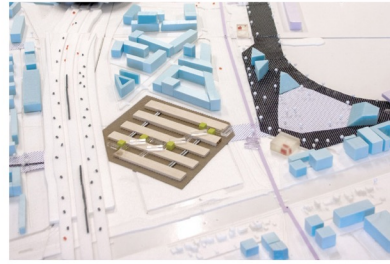
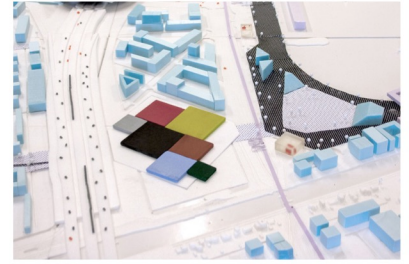
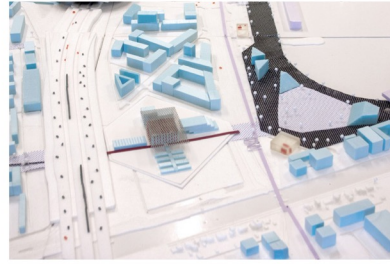
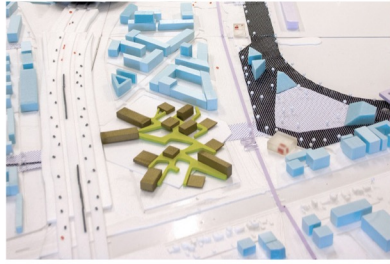
for profit

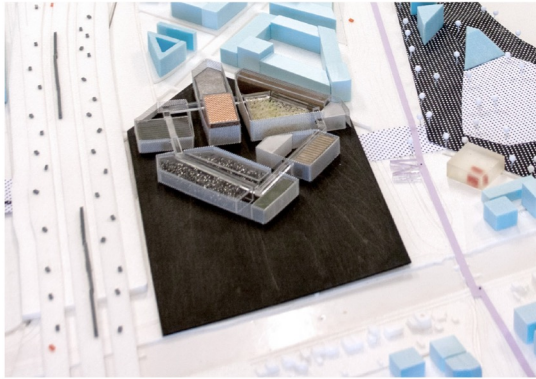
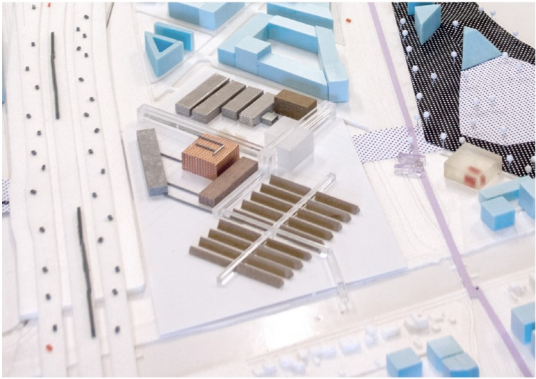


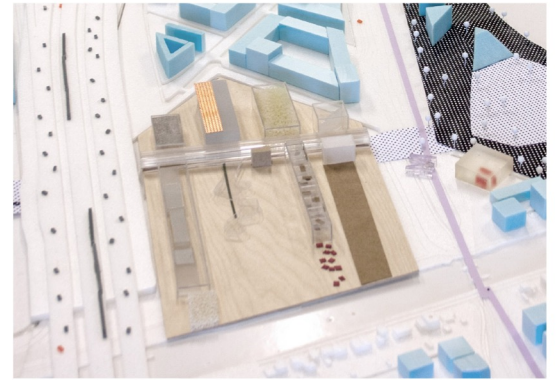
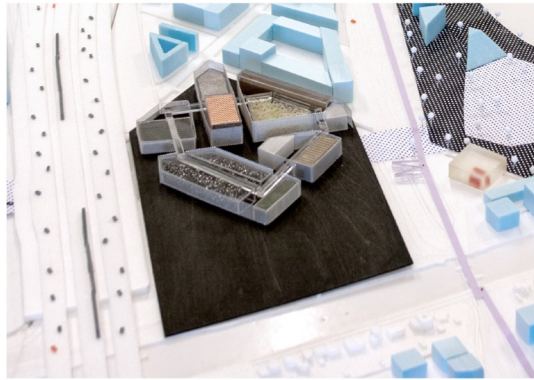
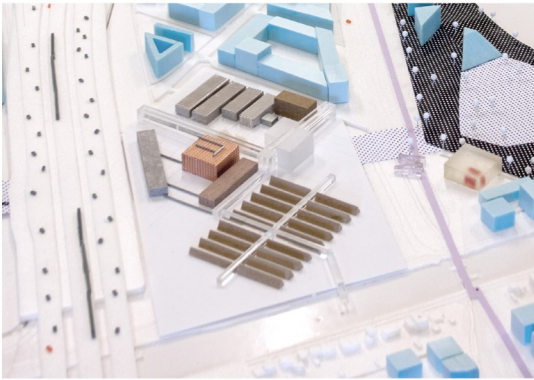
FAKE URBANITY!

sincere and contextual!?

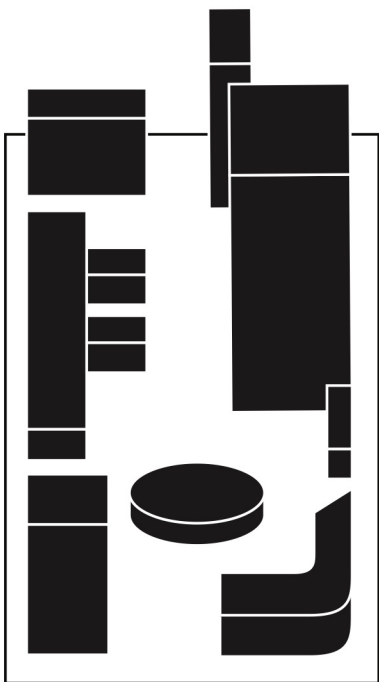


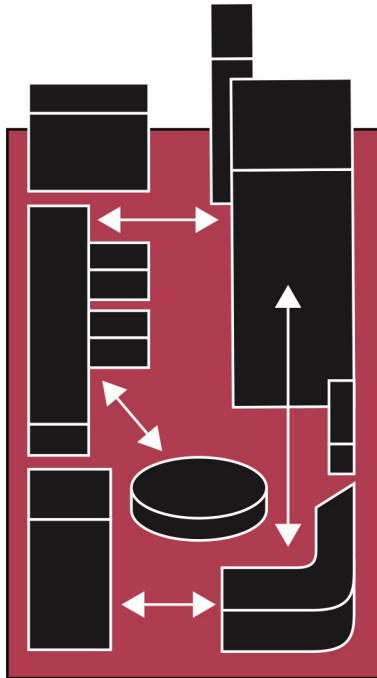




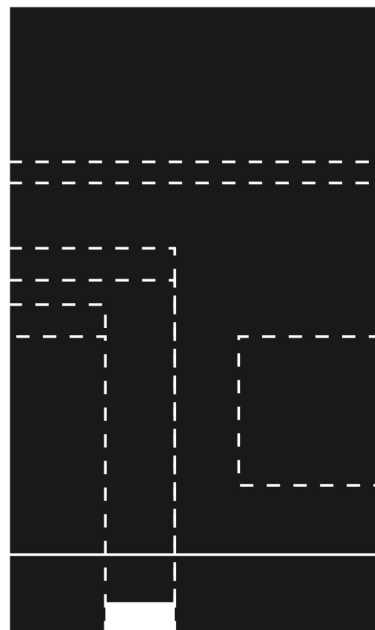
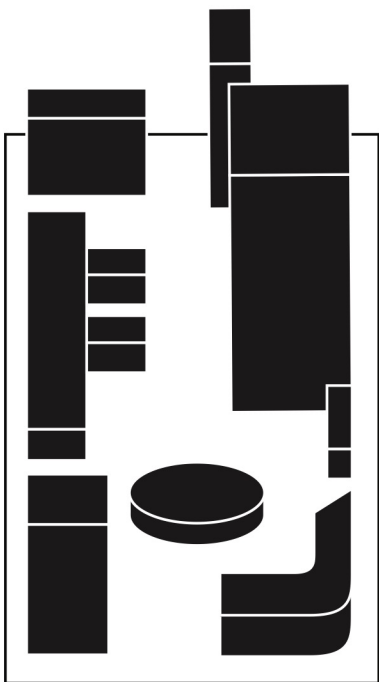


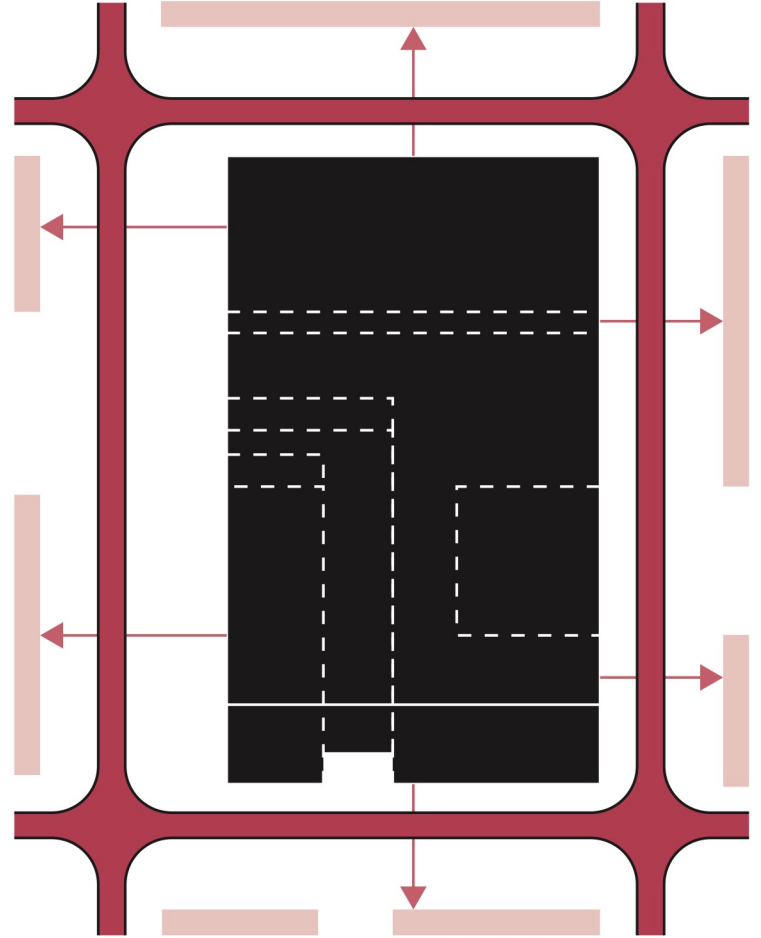
too fargmented!



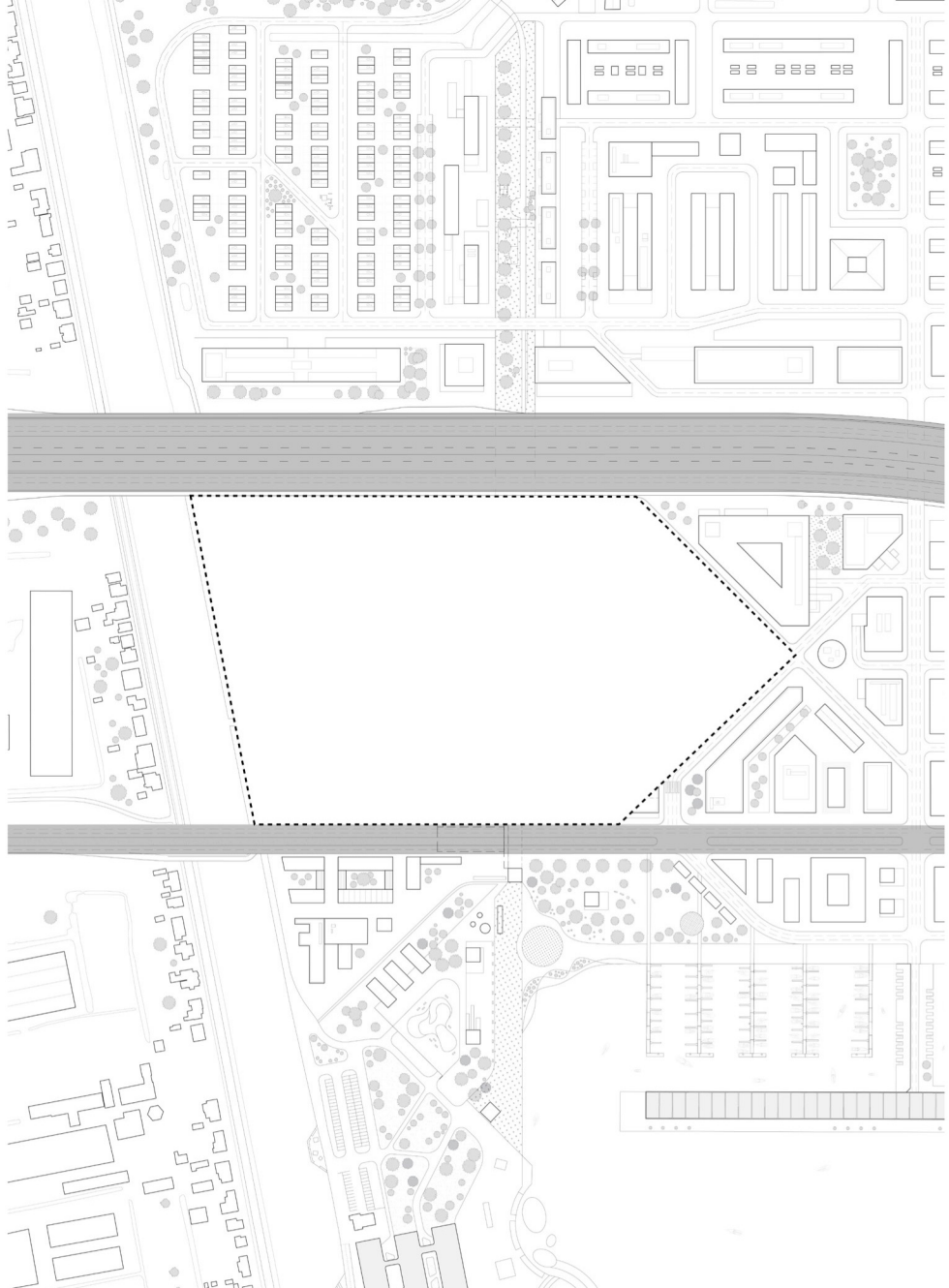


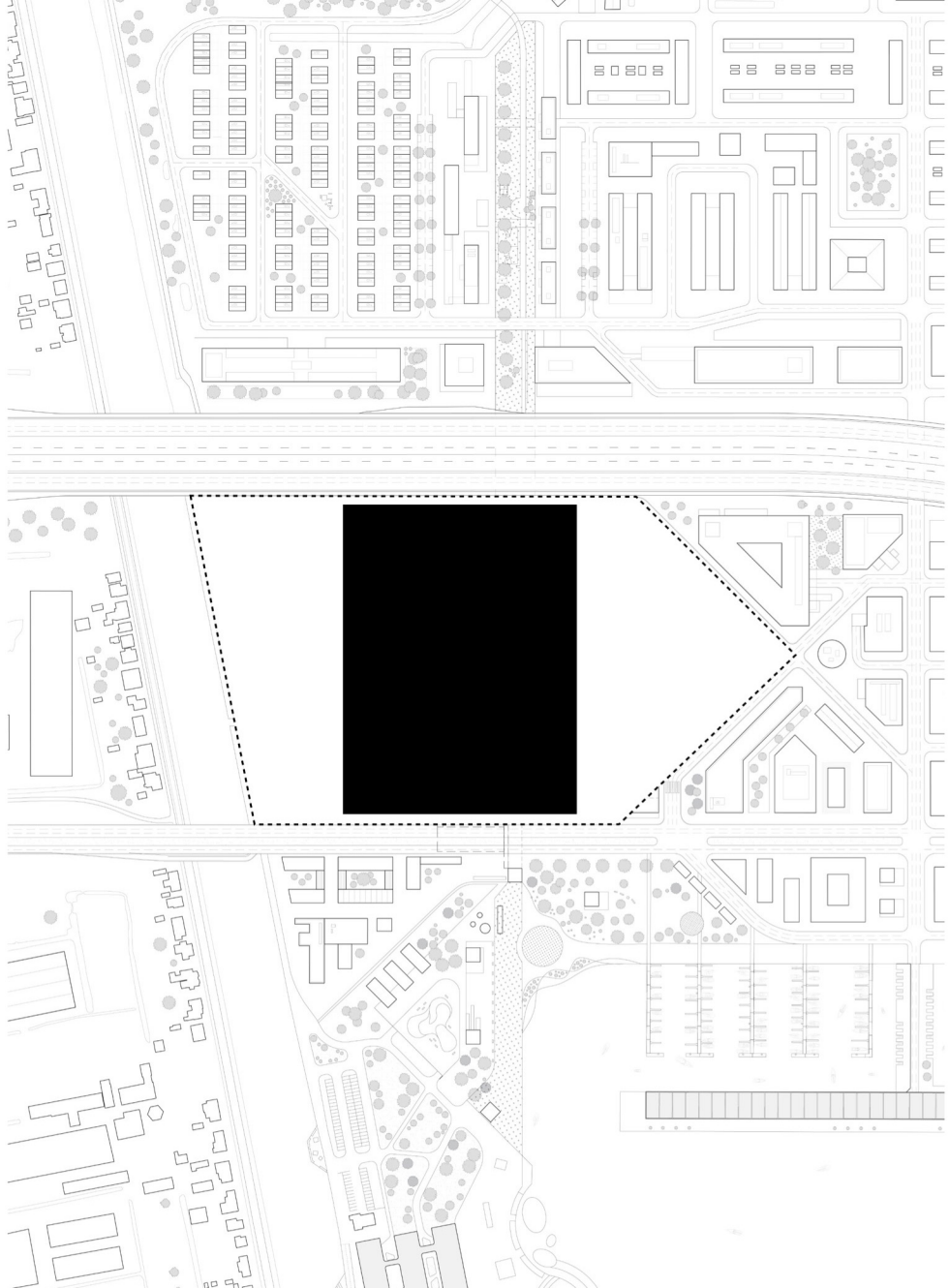
self referential

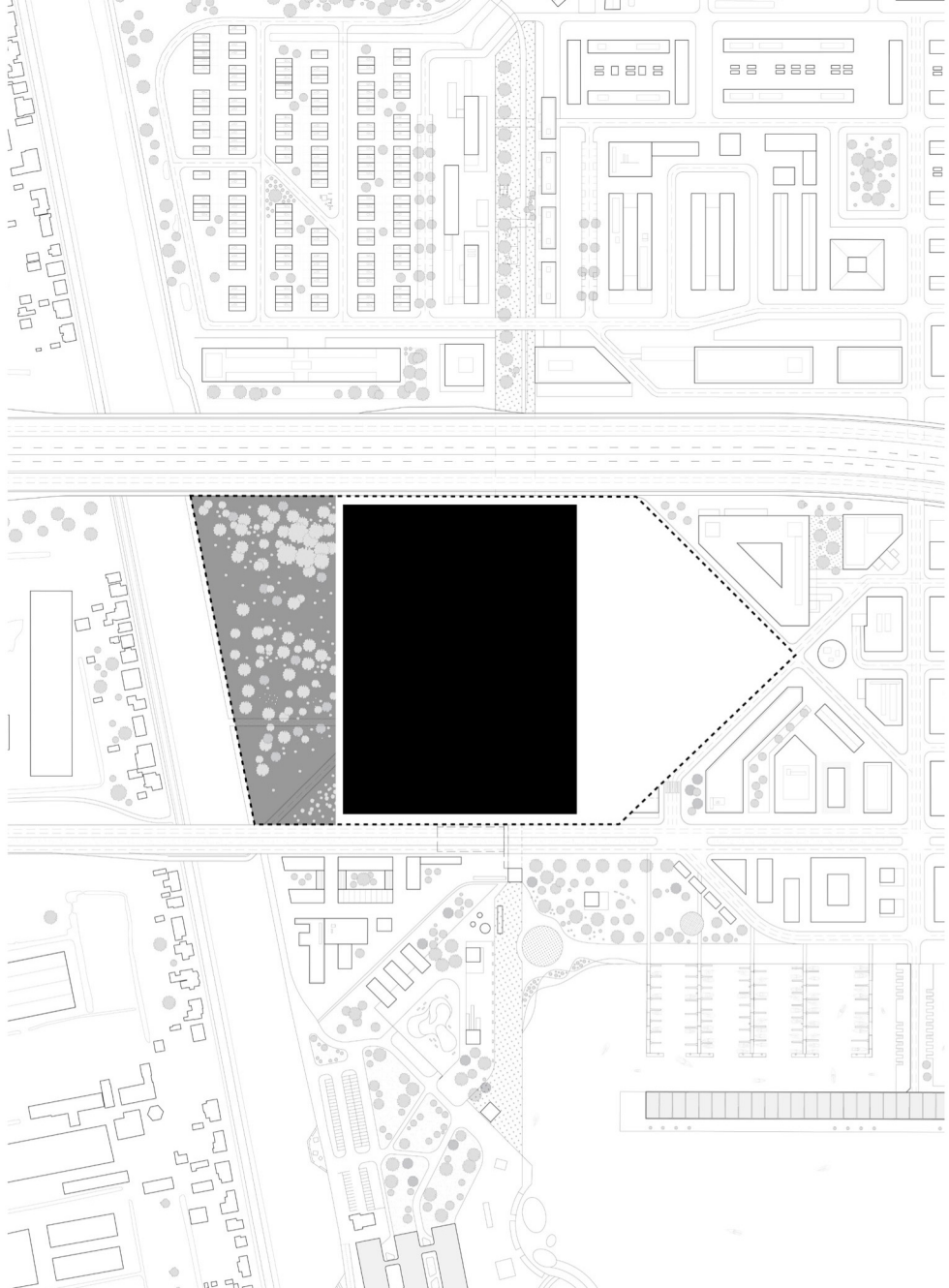


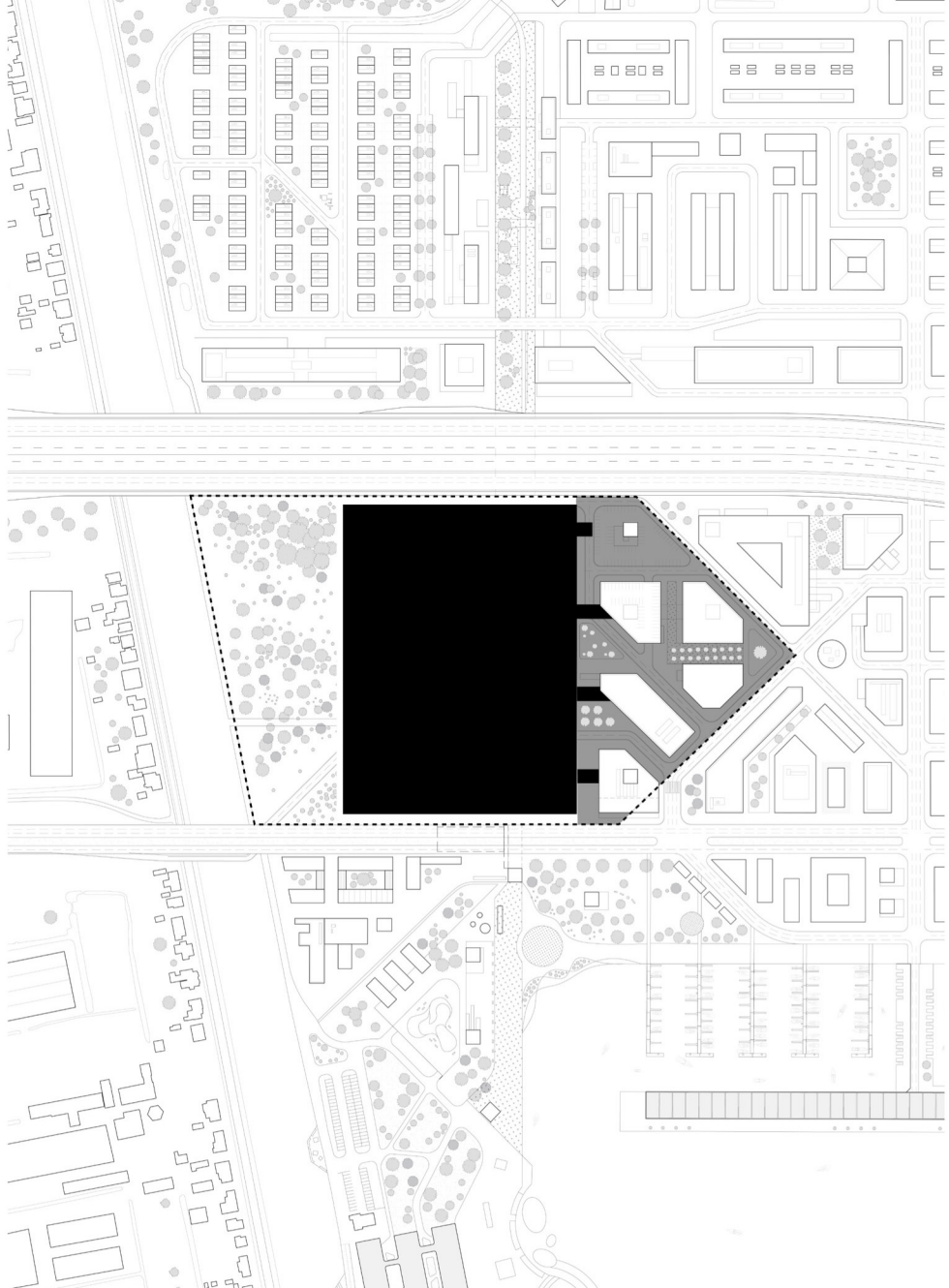


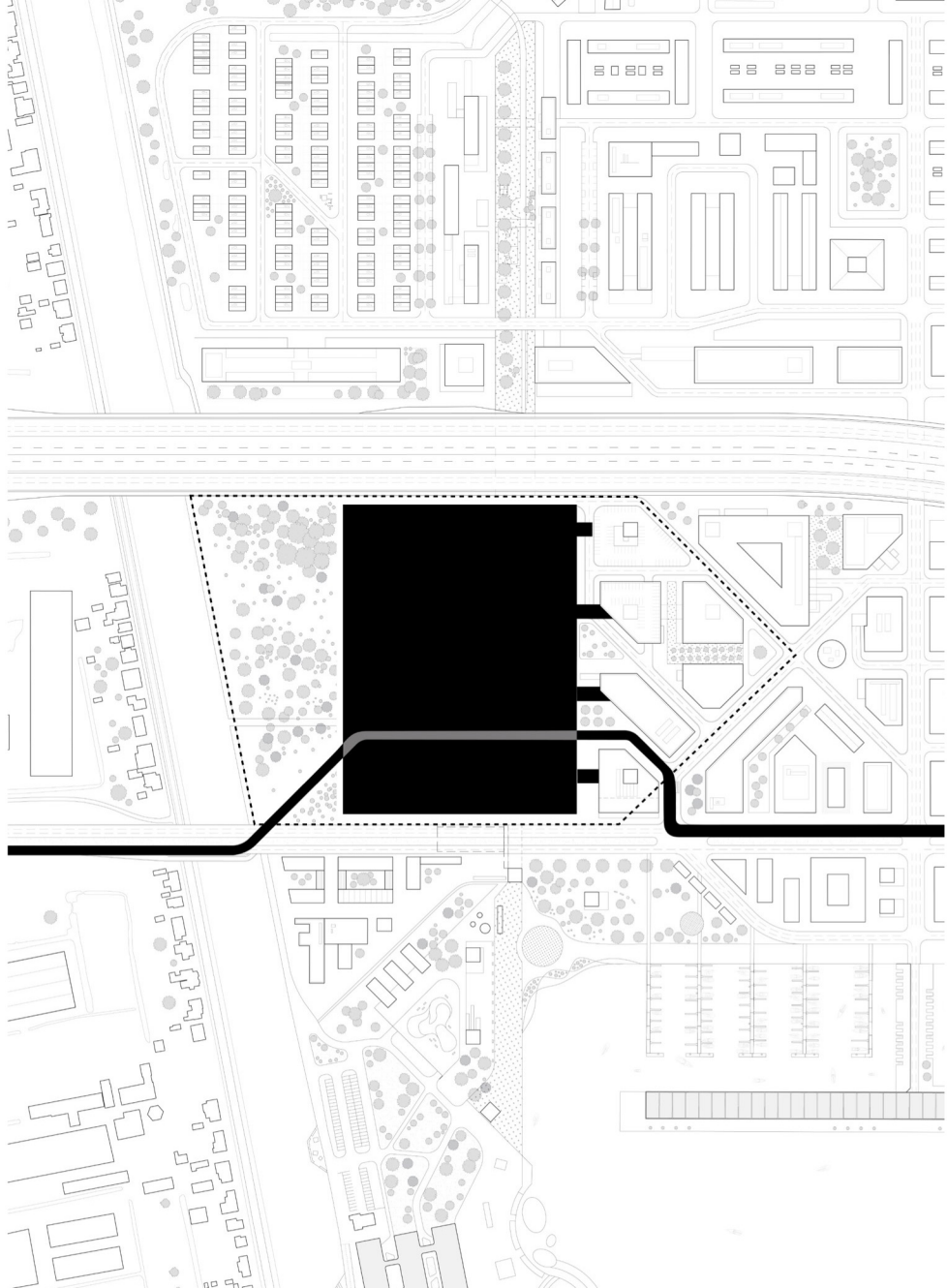


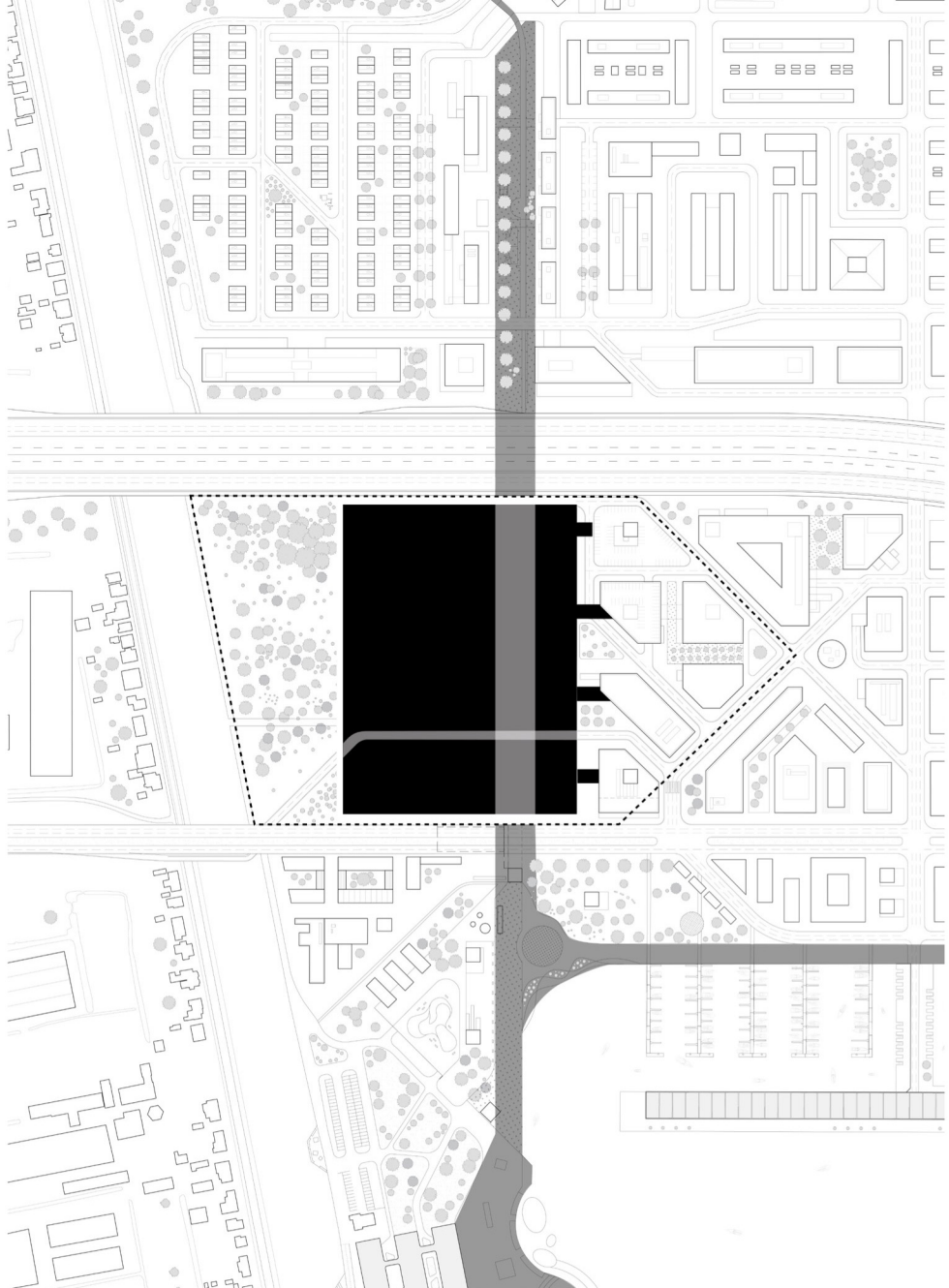






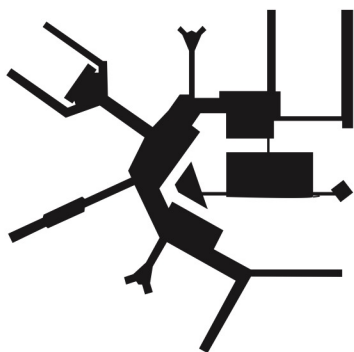






The campus as a megabuilding

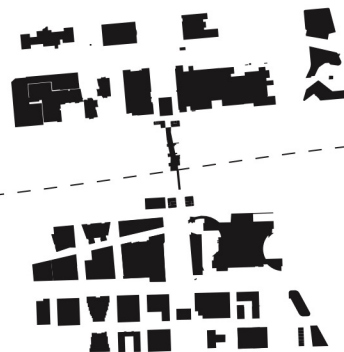




Schiphol



Organ Factory
campus



Zuidas

Chapter 3:

MEGA STRUCTURE

What is the future of
hospitals?



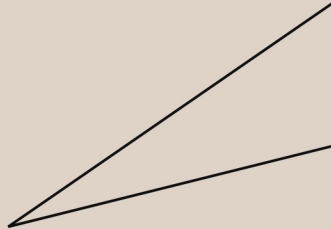
extreme
specialisation



general hospital



general hospital



hub
hospital

specialized
hospital





general hospital



hub
hospital



specialized
hospital

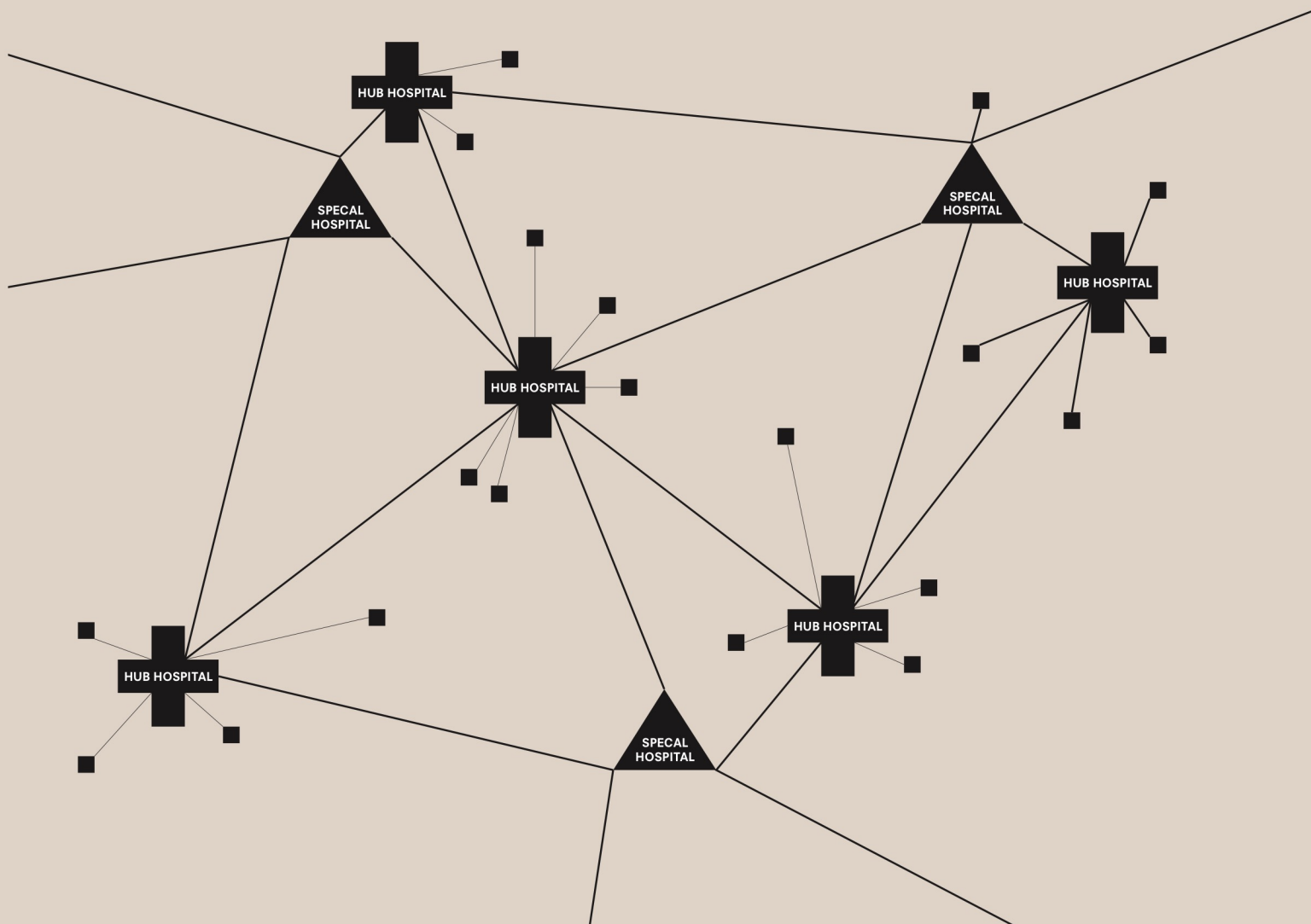


community
health center



rehabilitation
centers



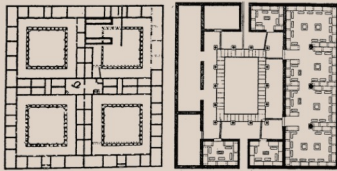


efficient,
process based
architecture

katagogion

"a hotel for visitors"

katagogion in Epidauros

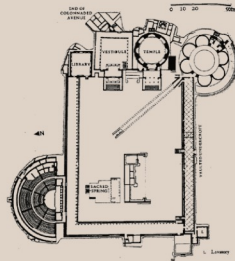


ANCIENT GREECE

asclepeion

healing temple, sacred to the god Asclepius, the Greek god of medicine

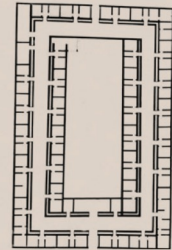
The Asclepieion at Pergamon



valetudinarium

military barracks hospital

The Asclepieion at Pergamon

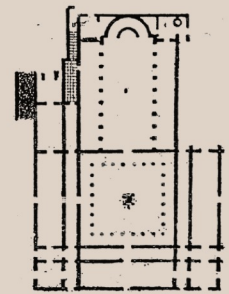


ANCIENT ROME

xenodocheion

a hostel or hospital, usually specifically for foreigners or pilgrims

The Xenodocheion of Pammachius, 520 ad



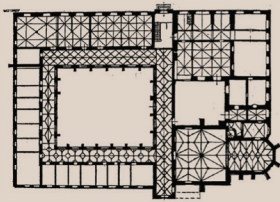
BYZANTUM



cloister infirmary

modern hospital

church and hospital in Cues, Germany, 1447

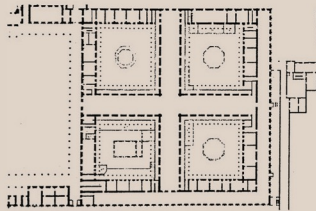


MIDDLE AGES

city hospital

air and sunlight guide the plan disposition

Ospedale Maggiore in Milan, 1456

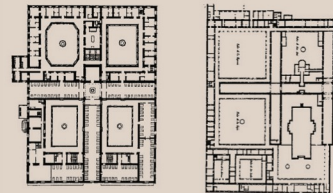


the cross

big hospitals with smaller wings

Hospital de los Reyes in Santiago di Compostela, 1501

Hospital de la Sangre in Seville, 1546

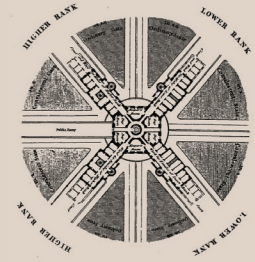


15TH CENTURY

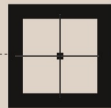
panopticum

new interpretation of patient-oriented architecture

Ospedale Maggiore in Milan, 1456



18TH CENTURY

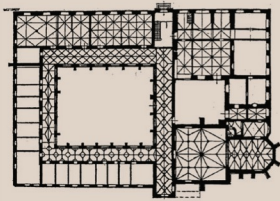


first hospitals
in trading cities

cloister infirmary

modern hospital

church and hospital in Cues, Germany, 1447

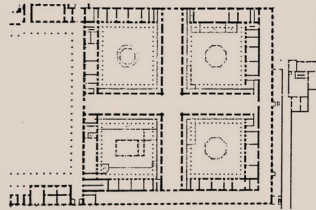


MIDDLE AGES

city hospital

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Ospedale Maggiore in Milan, 1456

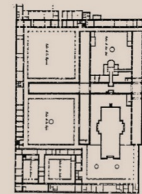


the cross

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Hospital de los Reyes in Santiago di Compostela, 1501

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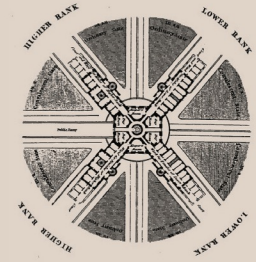


15TH CENTURY

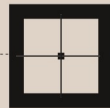
panopticum

new interpretation of patient-oriented architecture

Ospedale Maggiore in Milan, 1456



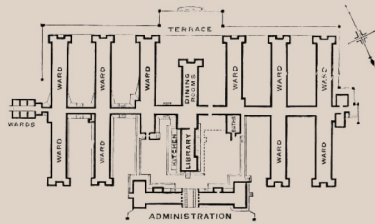
18TH CENTURY



comb and rack

modern hospital

Royal Herbert hospital, 1447



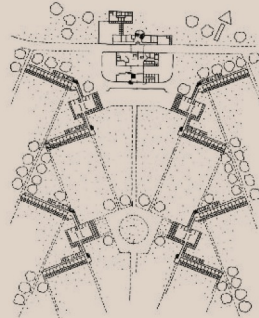
19TH CENTURY



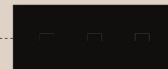
pavillion

air and sunlight guide the plan disposition

Sanatorium Zonnestral, 1928



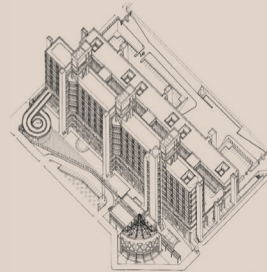
1920S



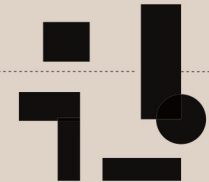
megastructure

big hospitals with smaller wings

Woodhul hospital NYC, 1968



1970s



campus

new interpretation of patient-oriented architecture

Erasmus medical center, 1970



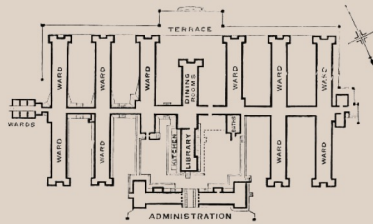
2018

technology driven
architecture

comb and rack

modern hospital

Royal Herbert hospital, 1447



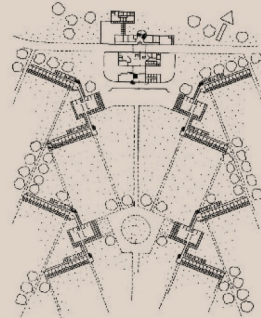
19TH CENTURY



pavillion

air and sunlight guide the plan disposition

Sanatorium Zonnestral, 1928

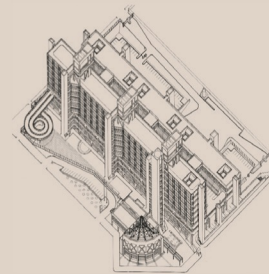


1920S

megastructure

big hospitals with smaller wings

Woodhul hospital NYC, 1968



1970s



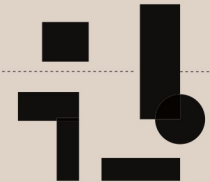
campus

hospitals grow building by building

Erasmus medical center, 1970



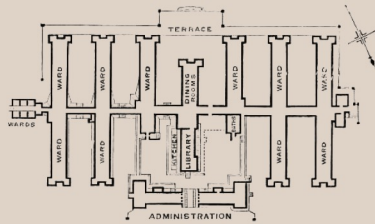
2018



comb and rack

modern hospital

Royal Herbert hospital, 1447



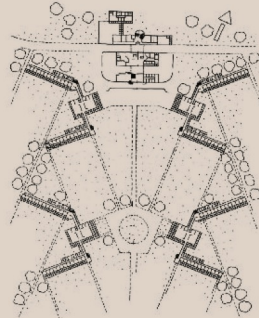
19TH CENTURY



pavillion

air and sunlight guide the plan disposition

Sanatorium Zonnestral, 1928

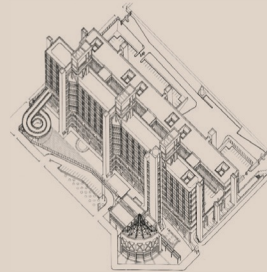


1920S

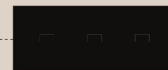
megastructure

big hospitals with smaller wings

Woodhul hospital NYC, 1968



1970s



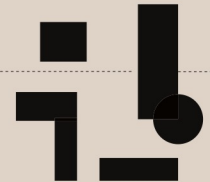
campus

hospitals grow building by building

Erasmus medical center, 1970



2018

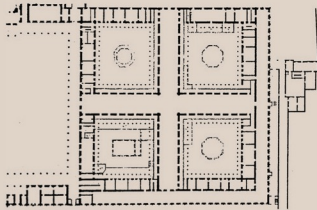


fusion with other
education, business

city hospital

air and sunlight guide the plan disposition

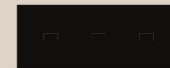
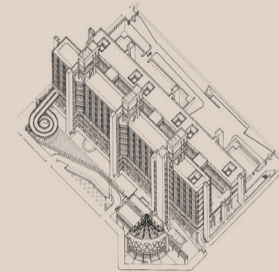
Ospedale Maggiore in Milan, 1456

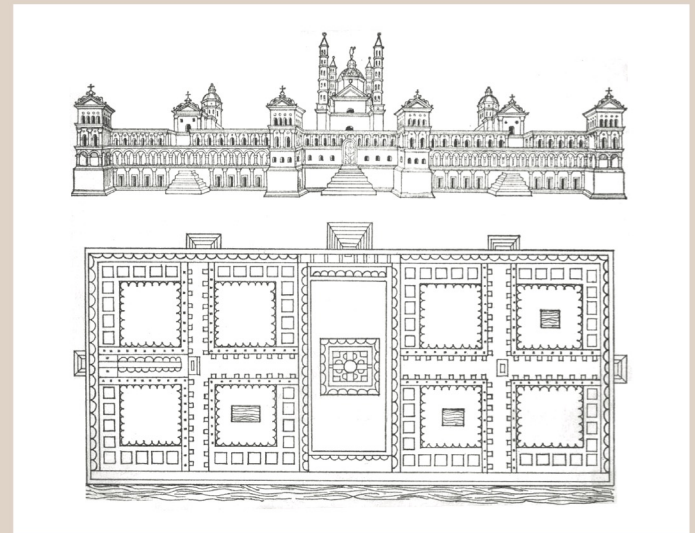
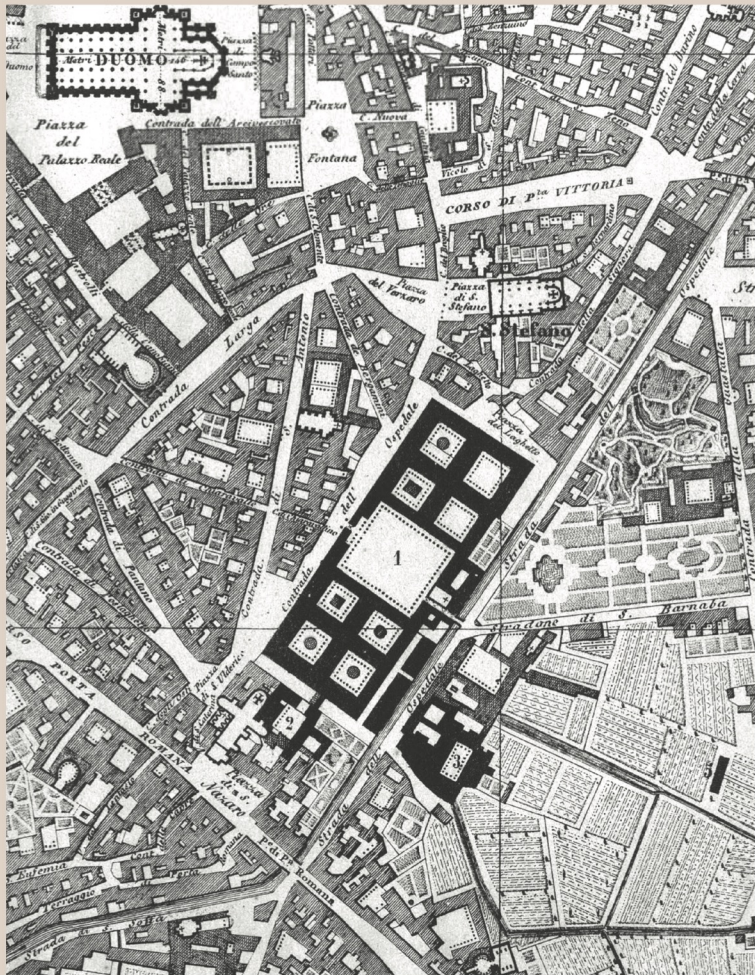


megastructure

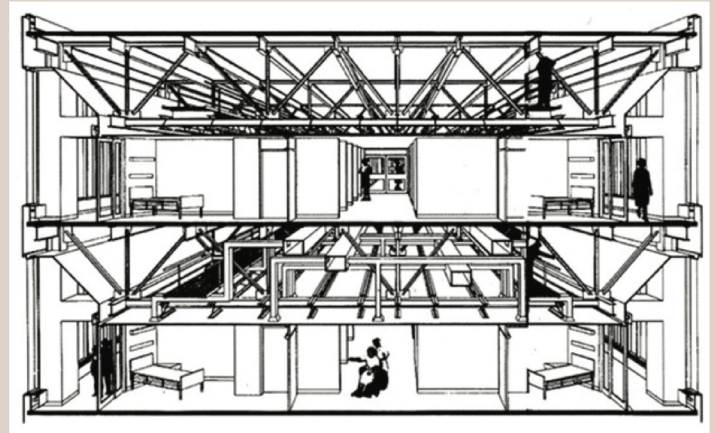
big hospitals with smaller wings

Woodhul hospital NYC, 1968

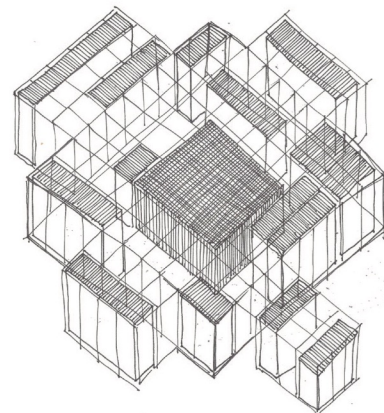
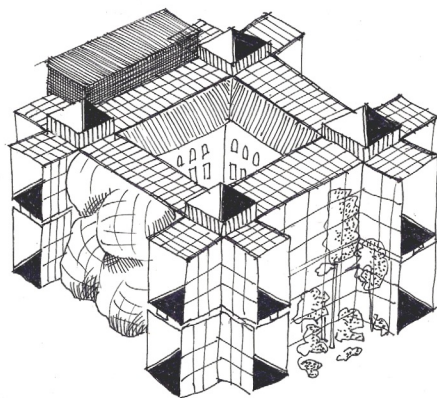
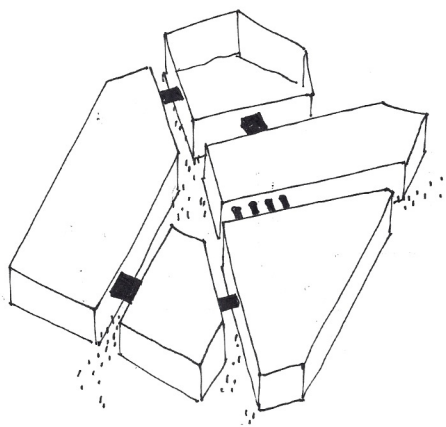


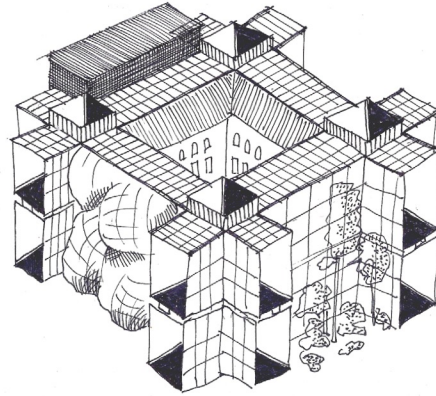


Ospedale Maggiore, Milan, 1456

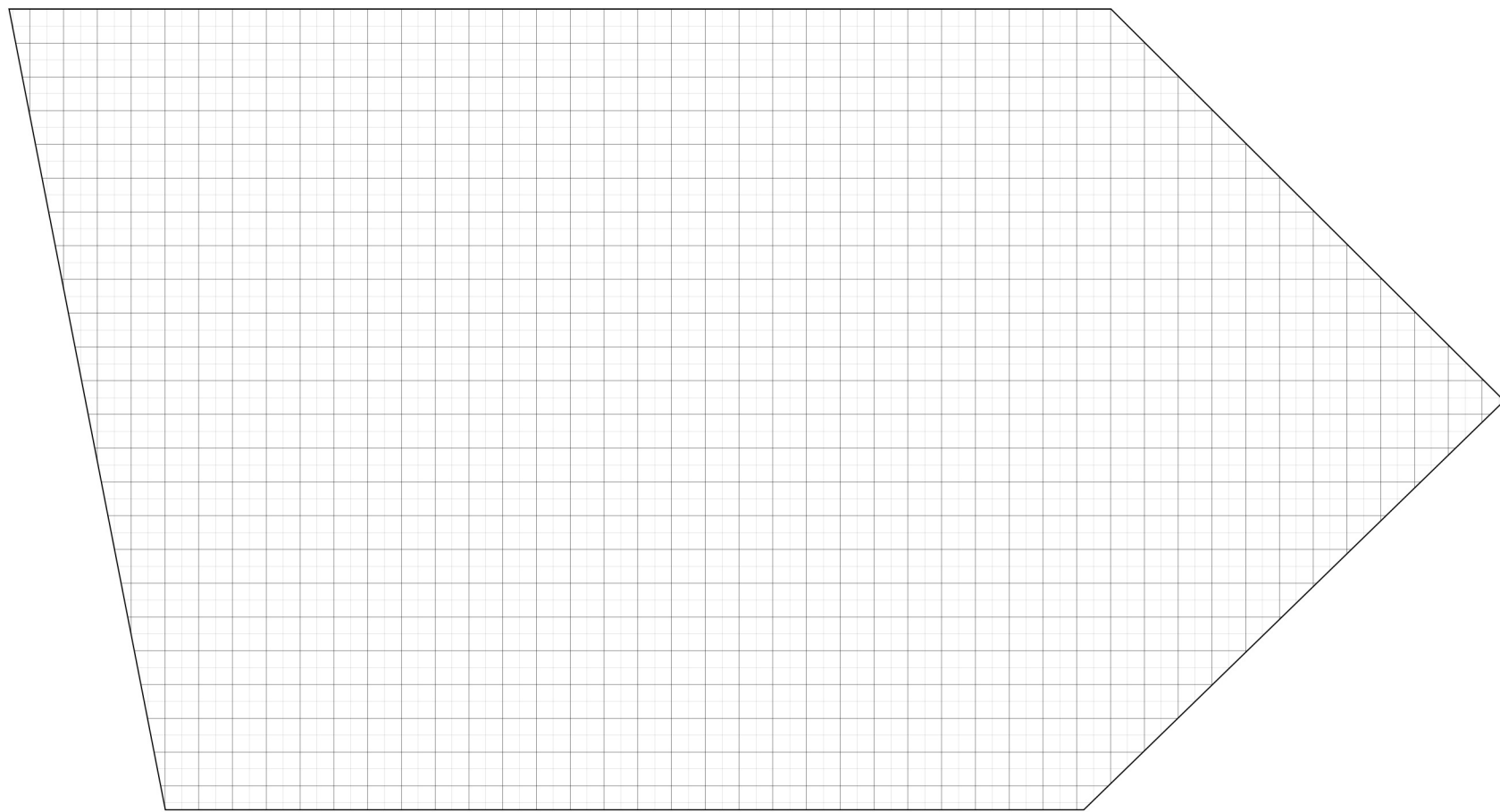


Woodhull hospital, NYC, 1982

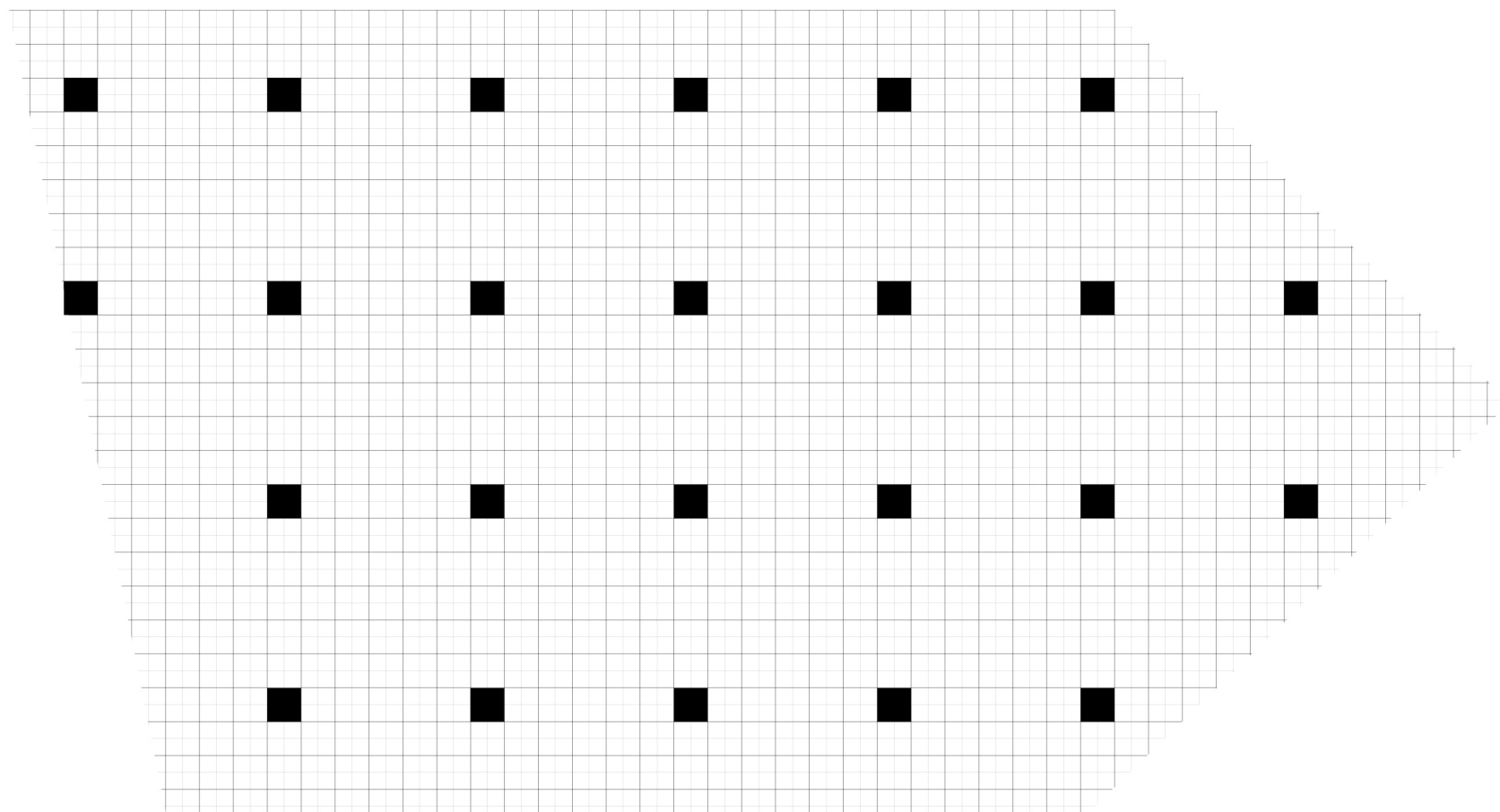




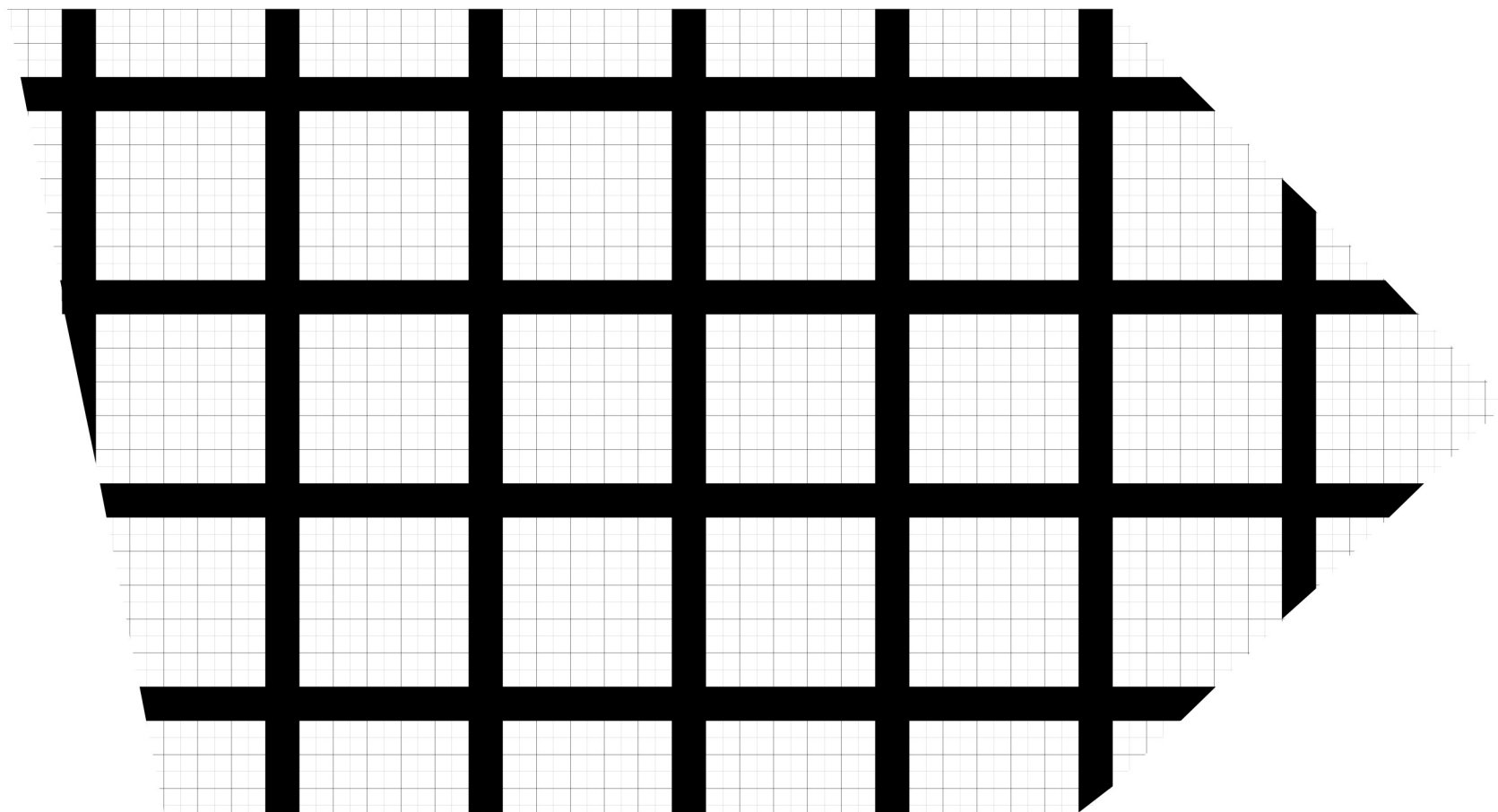
grid



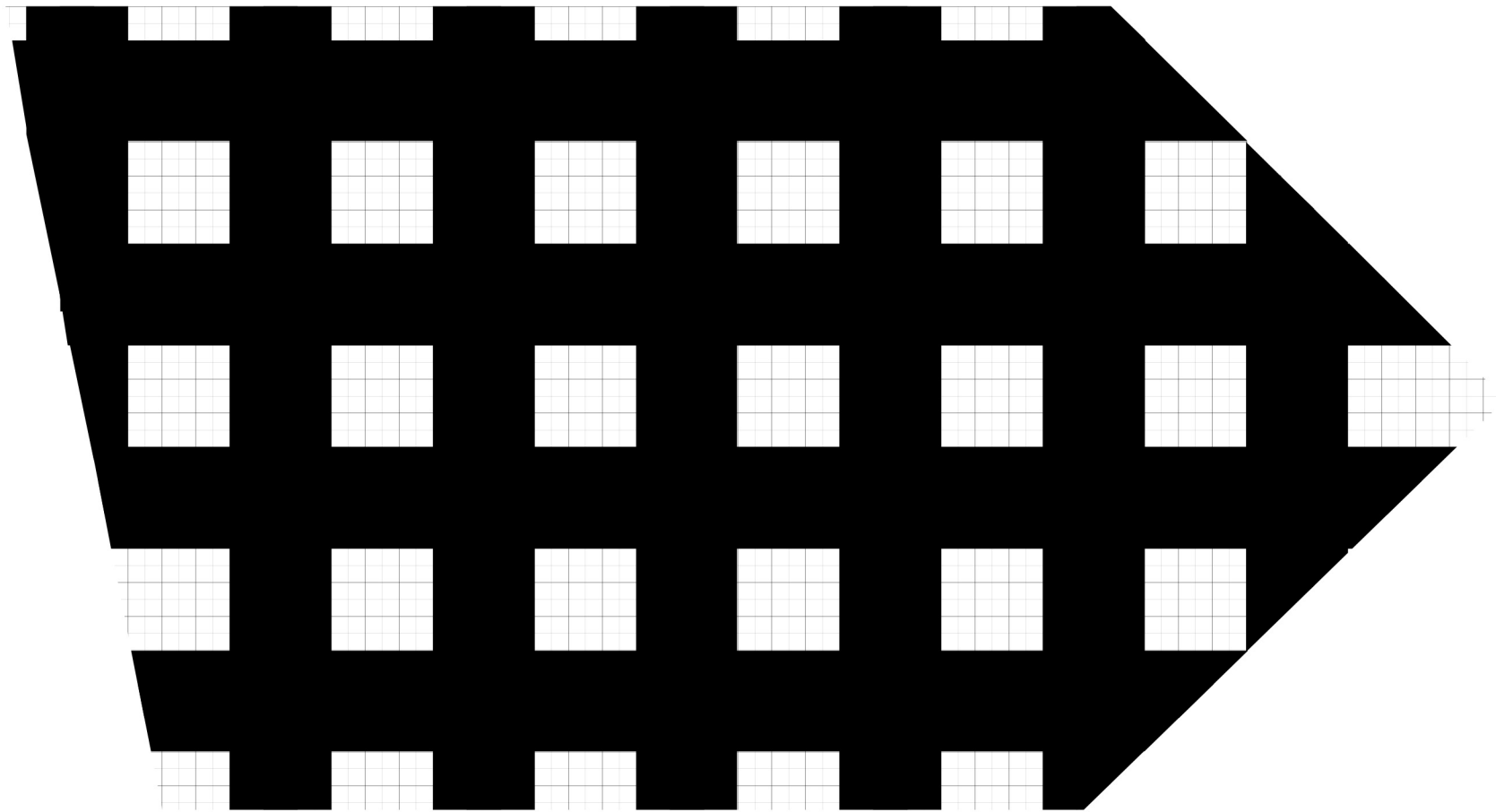
plot



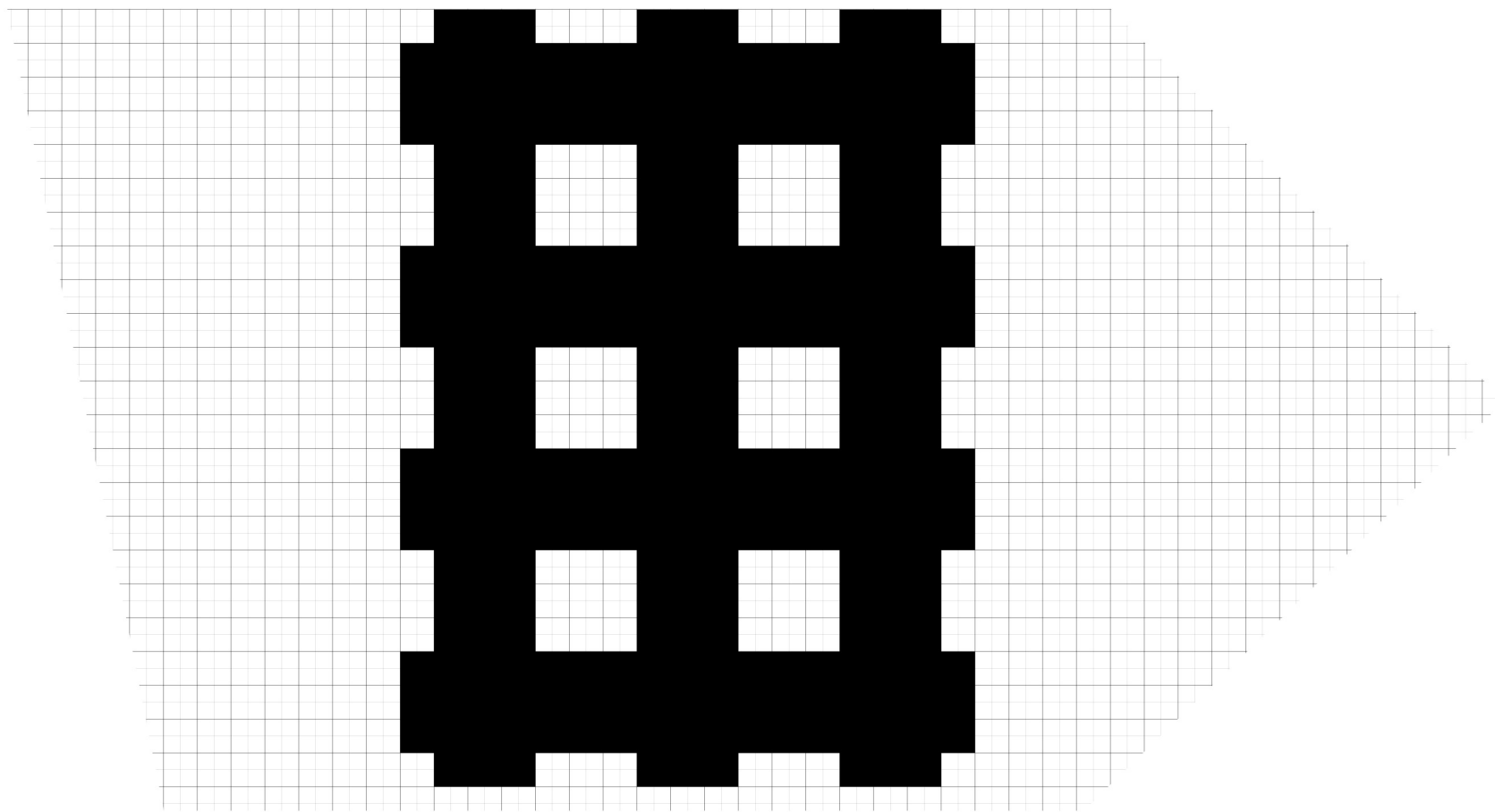
cores



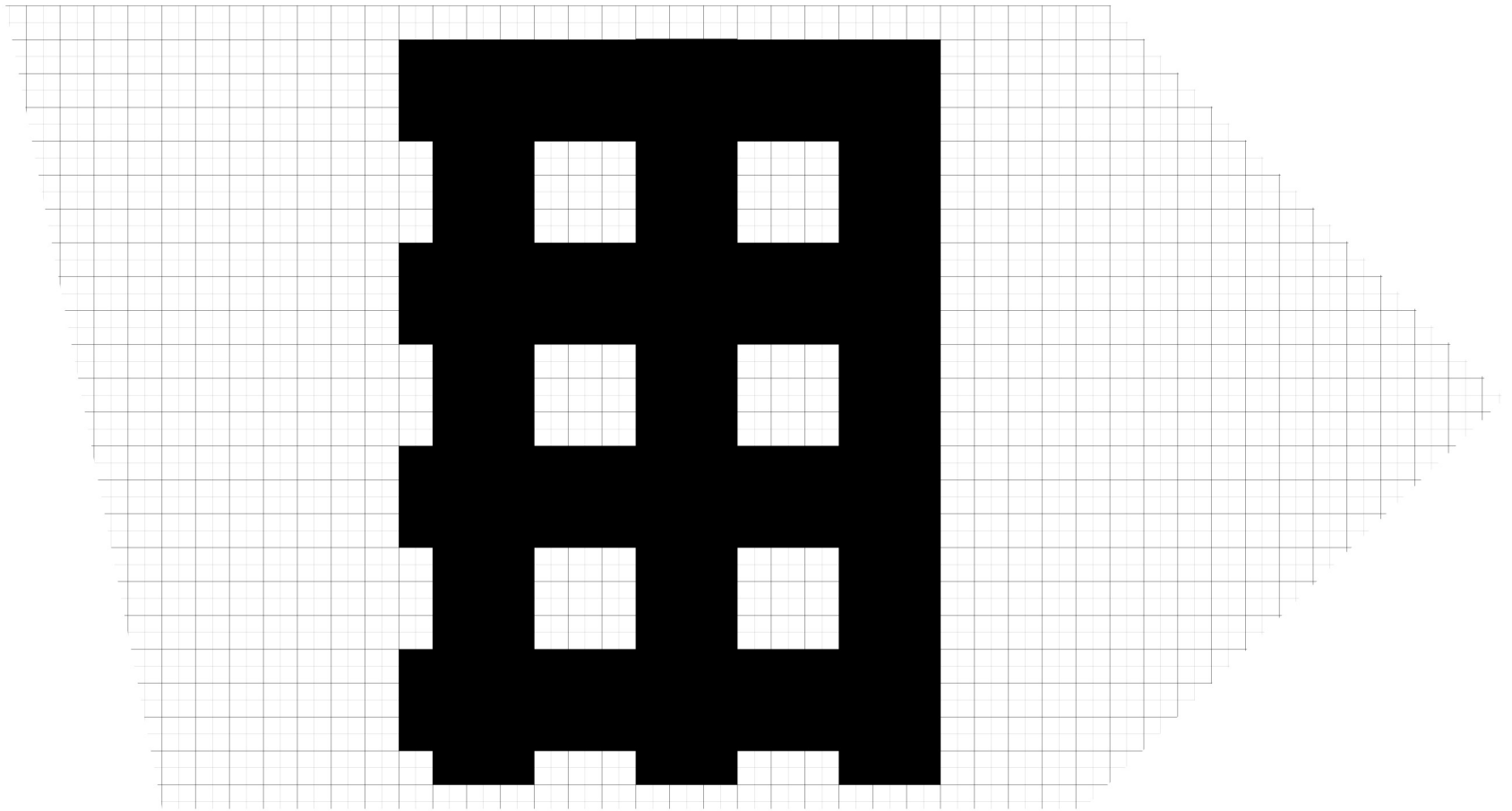
connections



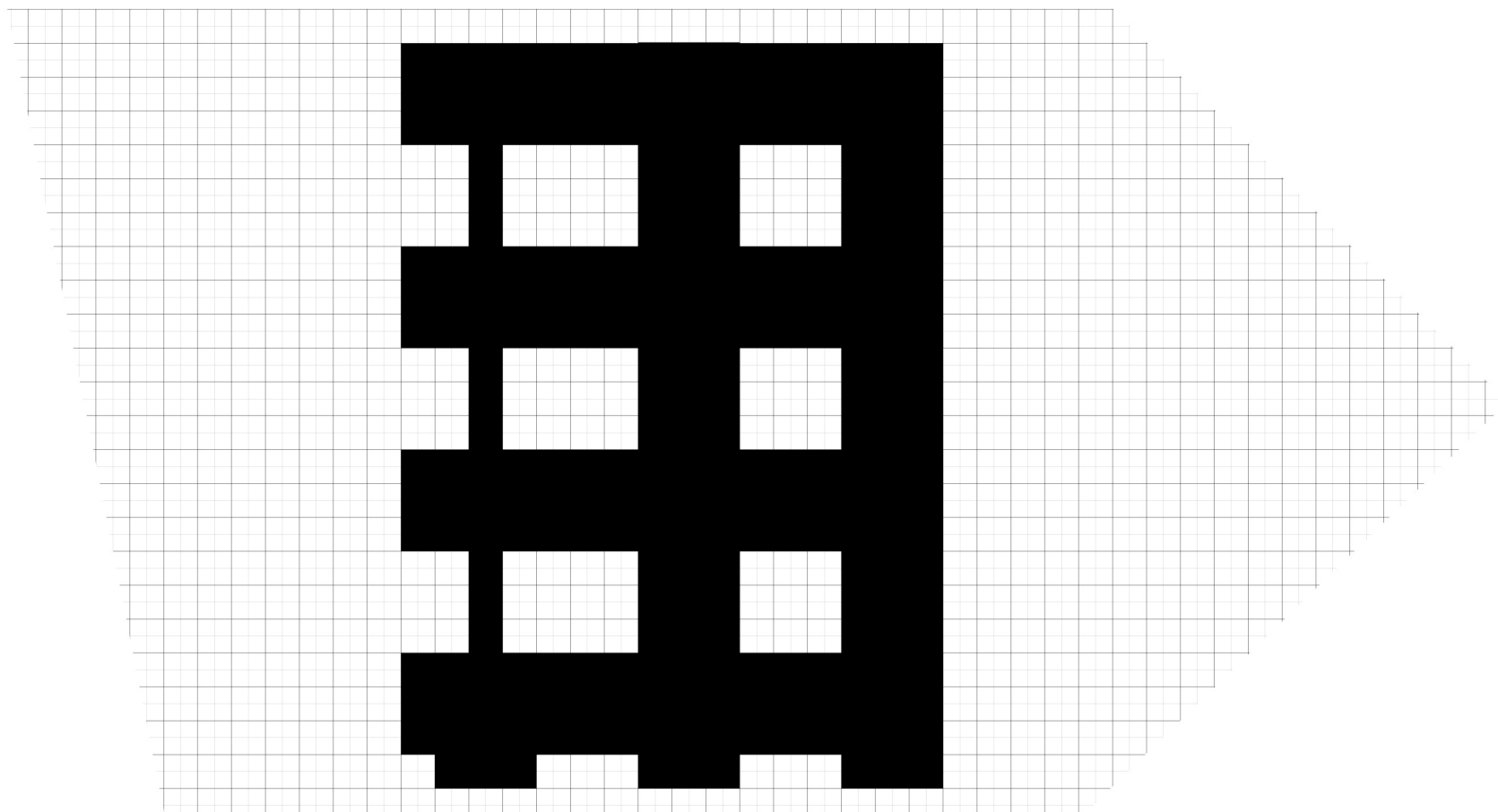
program



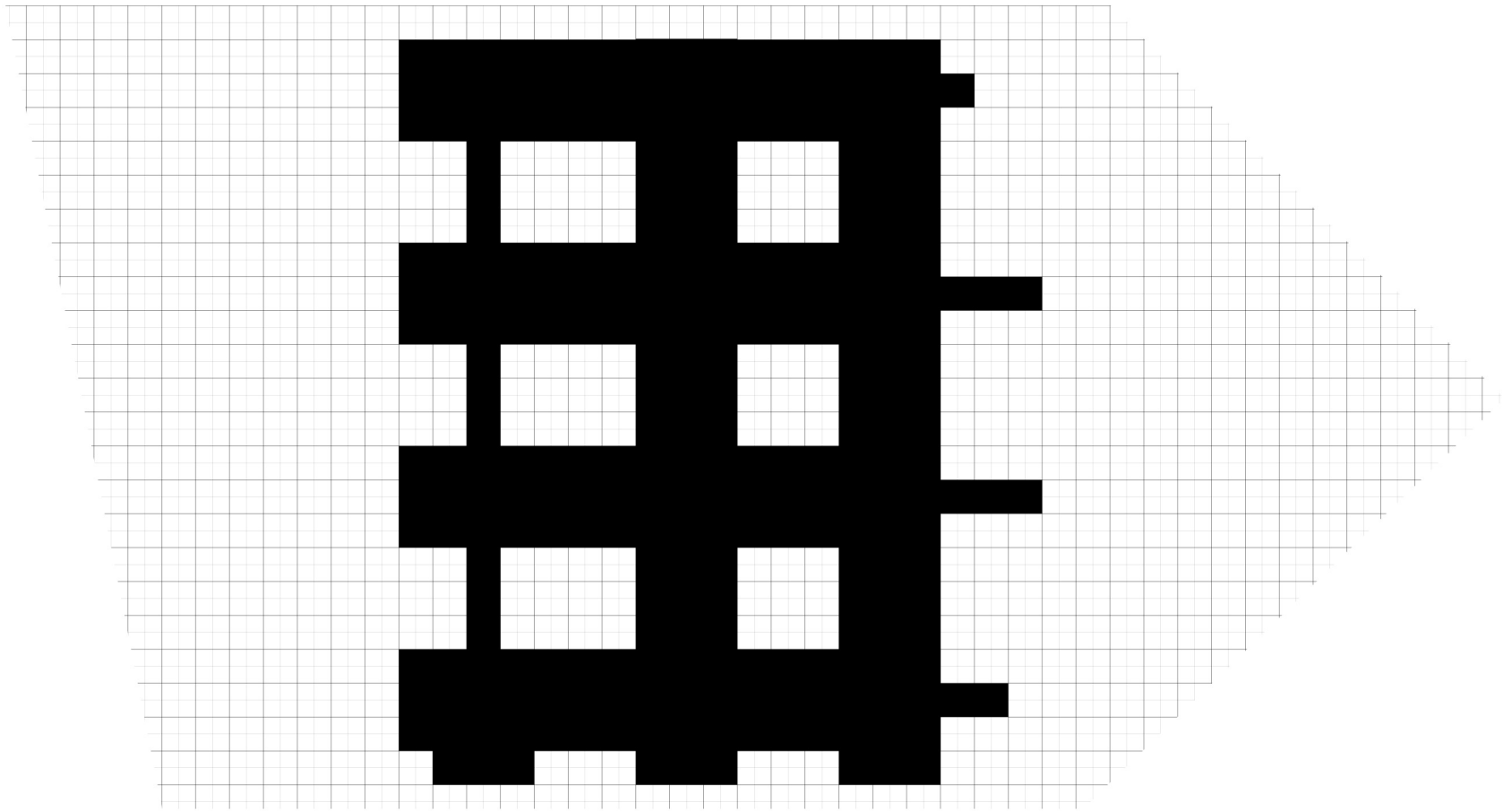
optimum area



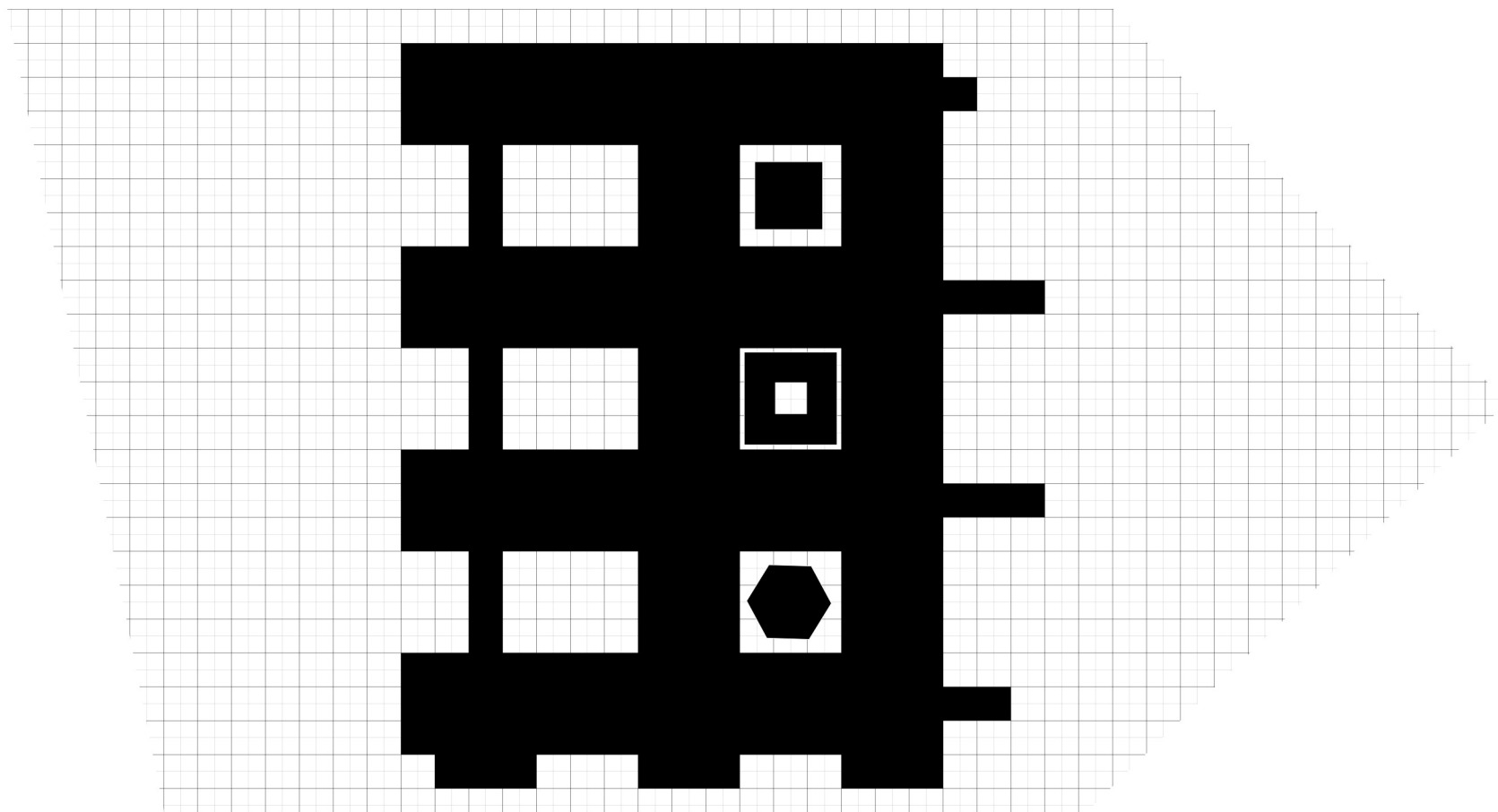
closing towards highway



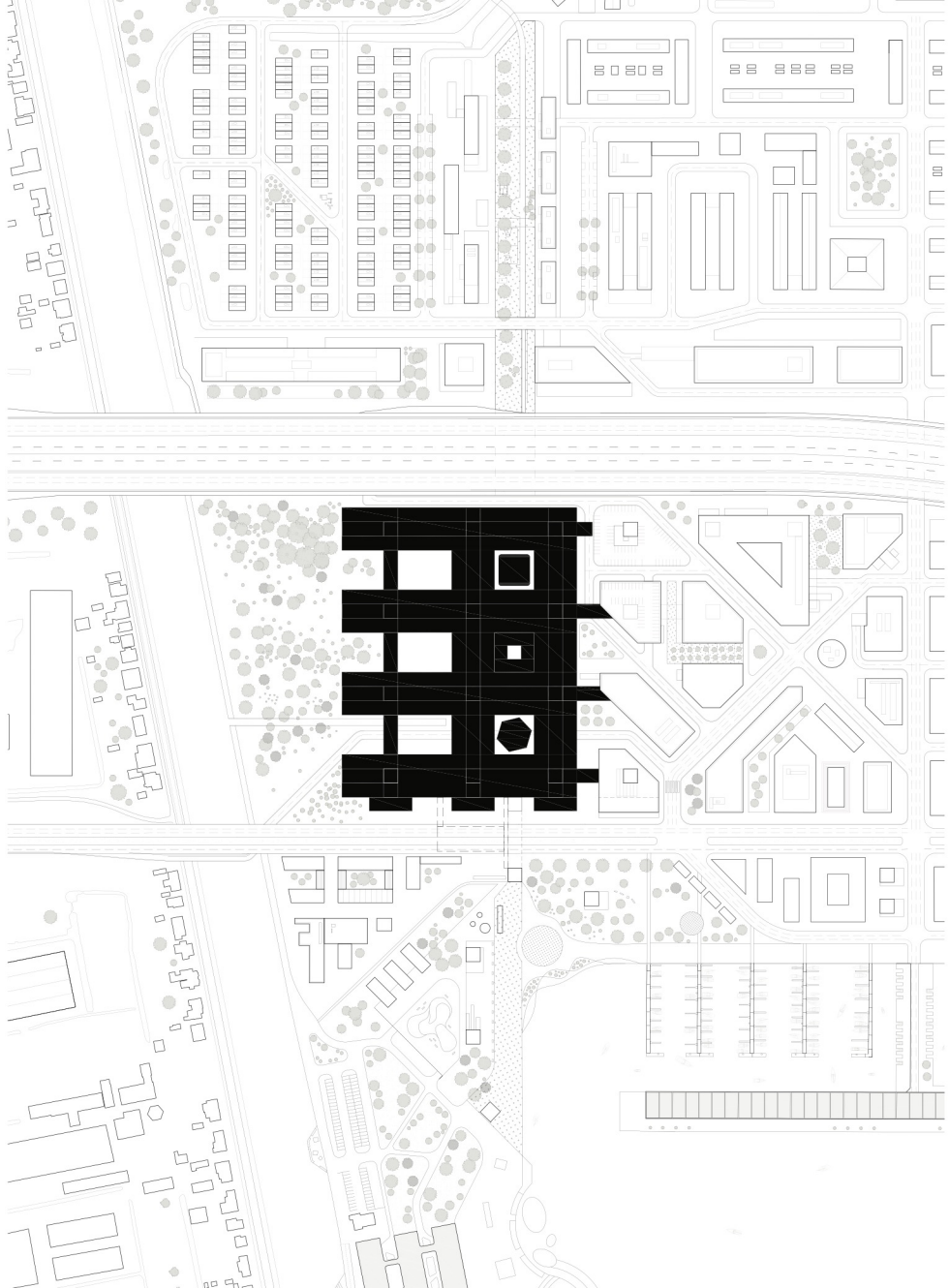
opening to the canal

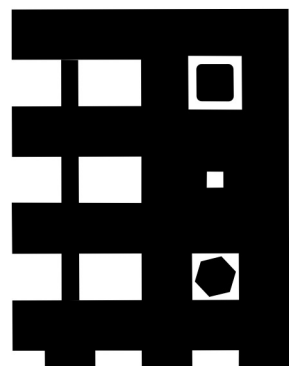


connecting to the city



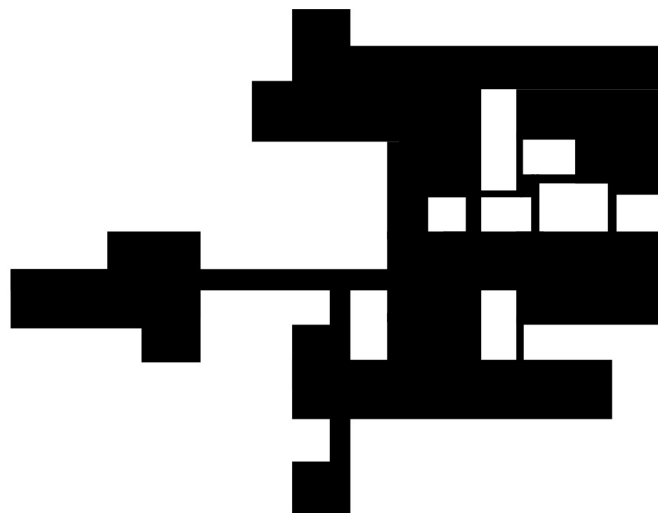
nested special program





Schiphol
organ factory
2050

80.000 m2



New Venice
hospital
1965

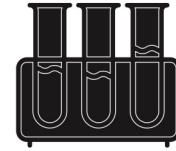
40.000 m2



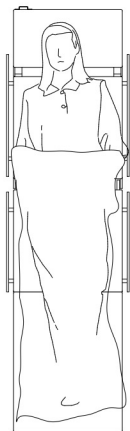
biomanufacturing
and distribution
of organs



transplantation
surgery



research and
conference



patients



medical
staff



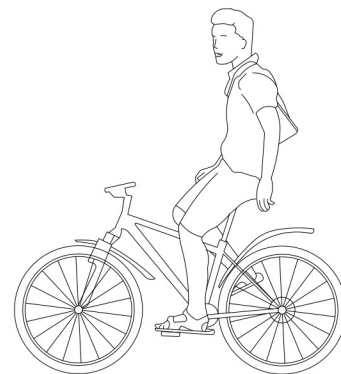
organs



family



visitors



locals

organ production and
dispatch logistics



public passage and
conference



organ production and
dispatch logistics



surgery and
diagnostics



public passage and
conference



organ production and
dispatch logistics



amenities



surgery and
diagnostics



public passage and
conference



organ production and
dispatch logistics



examination
wards



amenities



surgery and
diagnostics



public passage and
conference



organ production and
dispatch logistics



private
rooms



examination
wards



amenities



surgery and
diagnostics

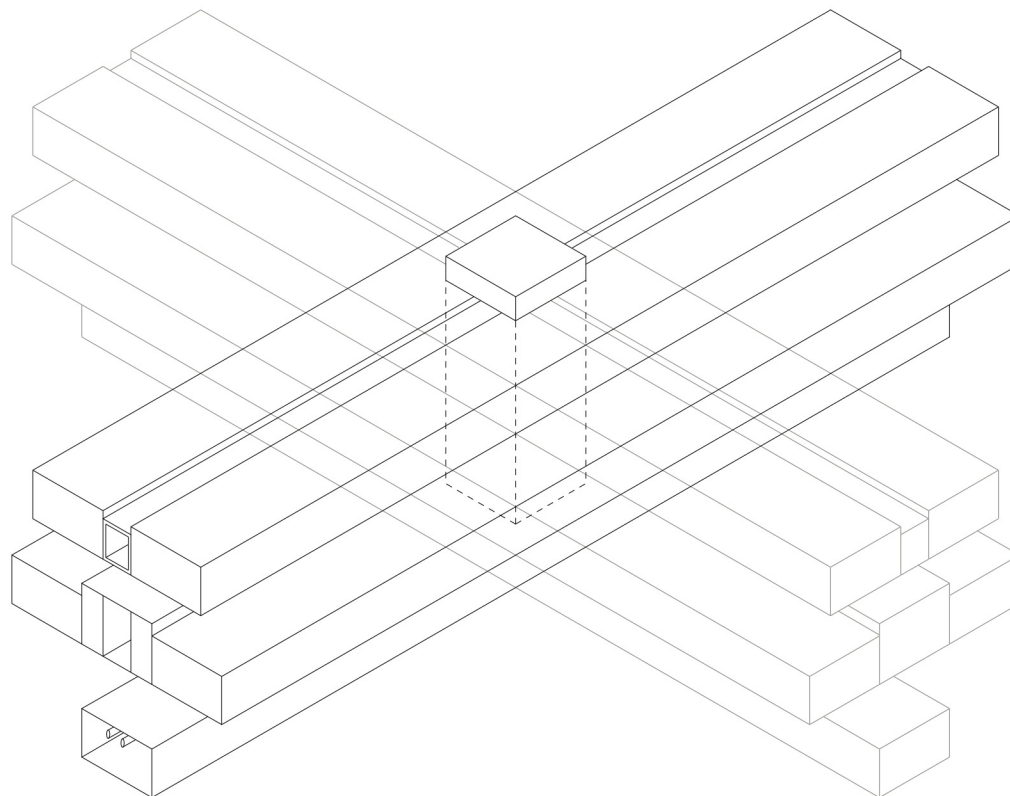


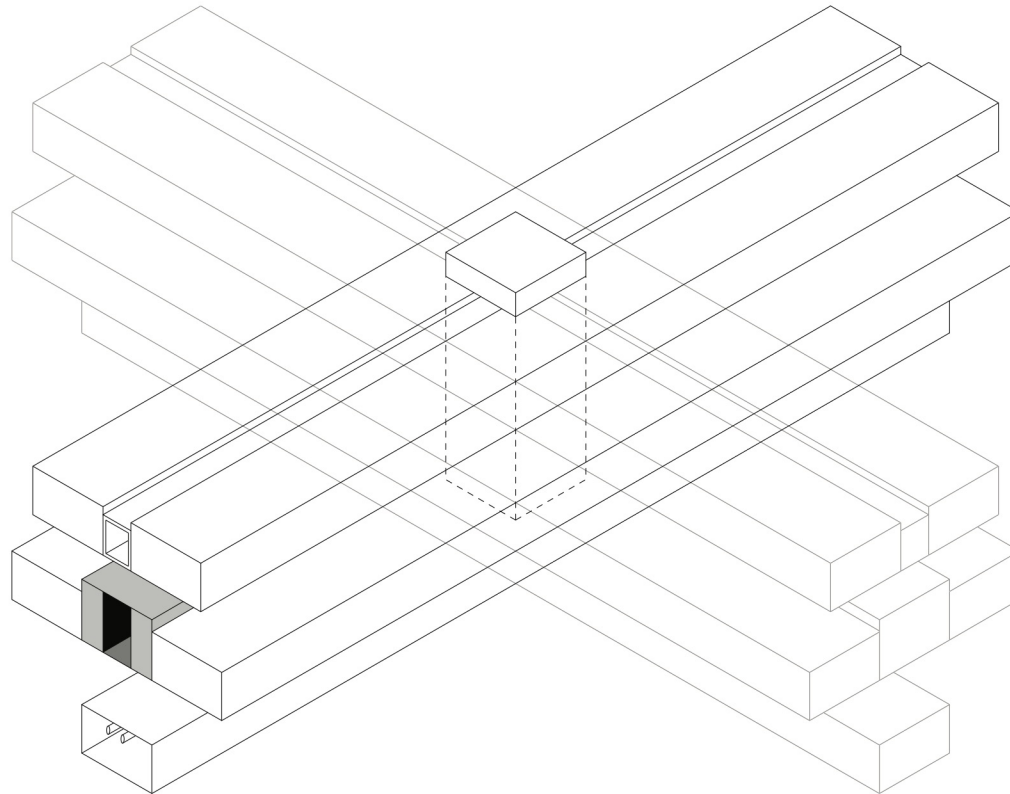
public passage and
conference



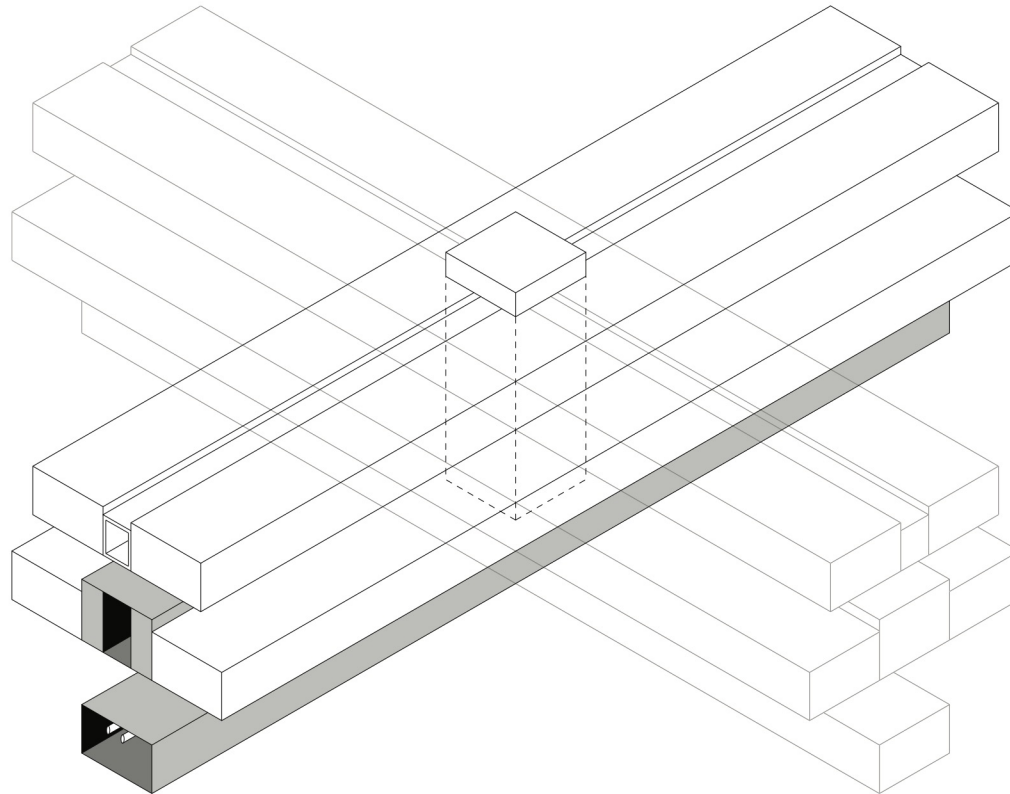
organ production and
dispatch logistics



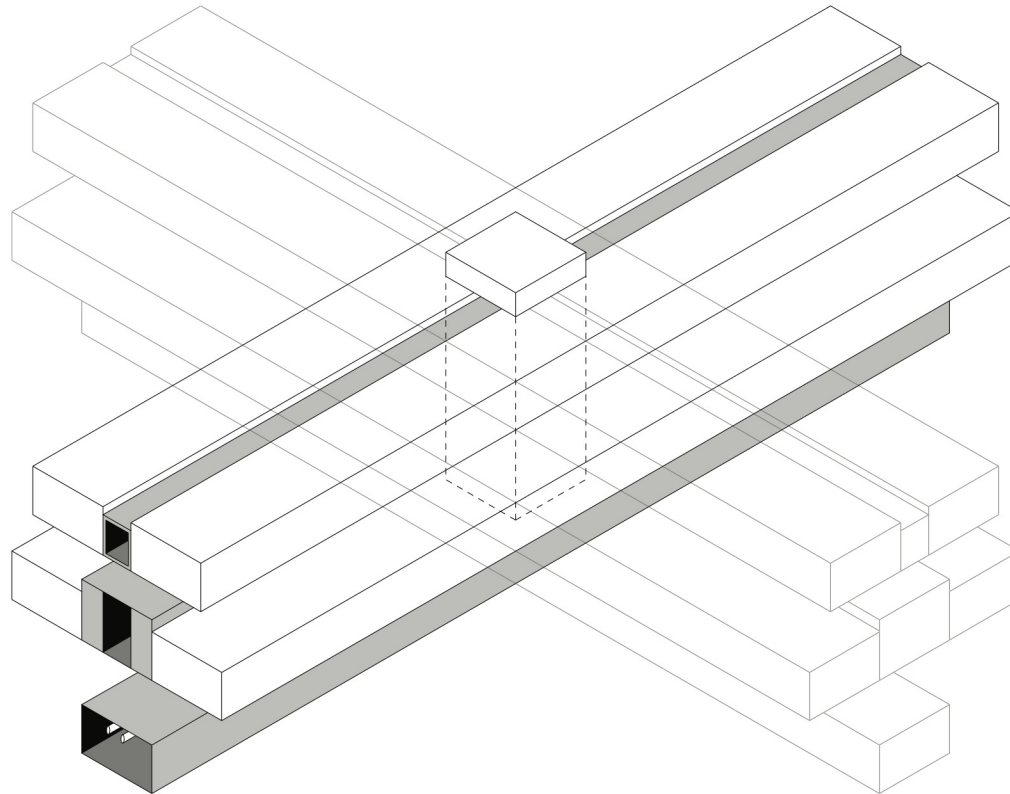




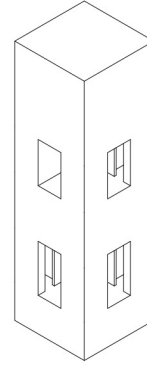
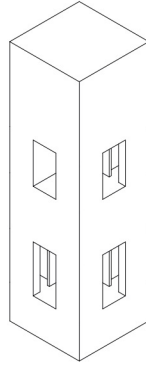
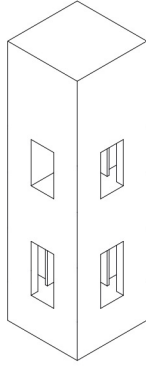
hospital hallway

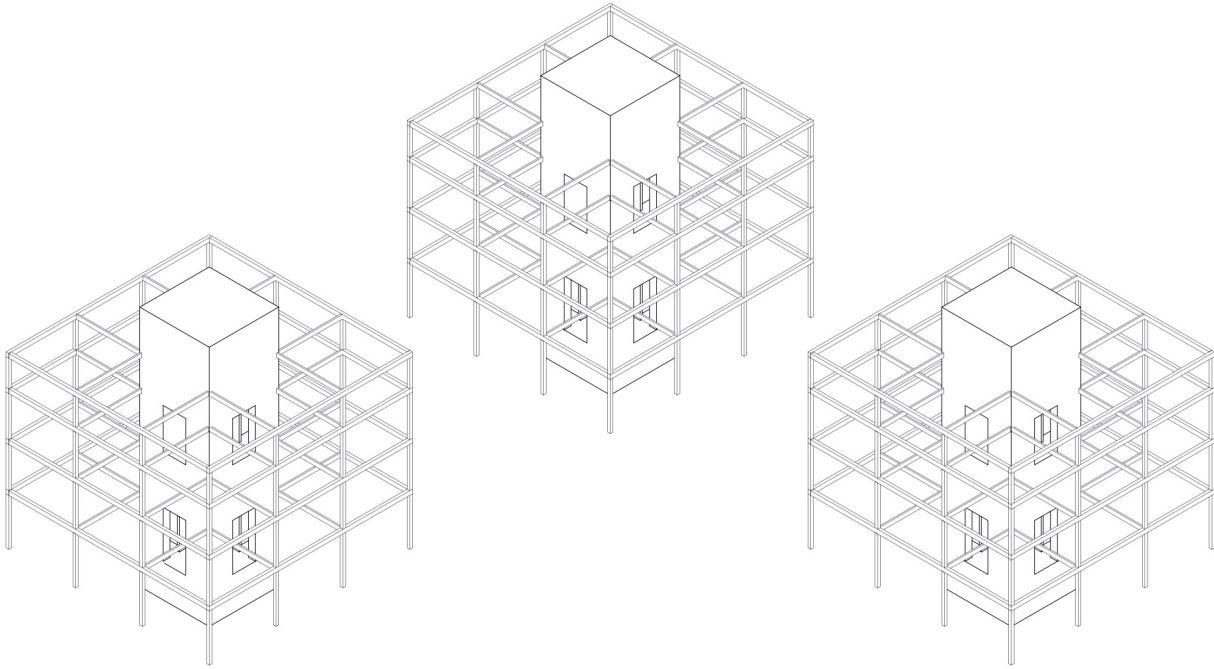


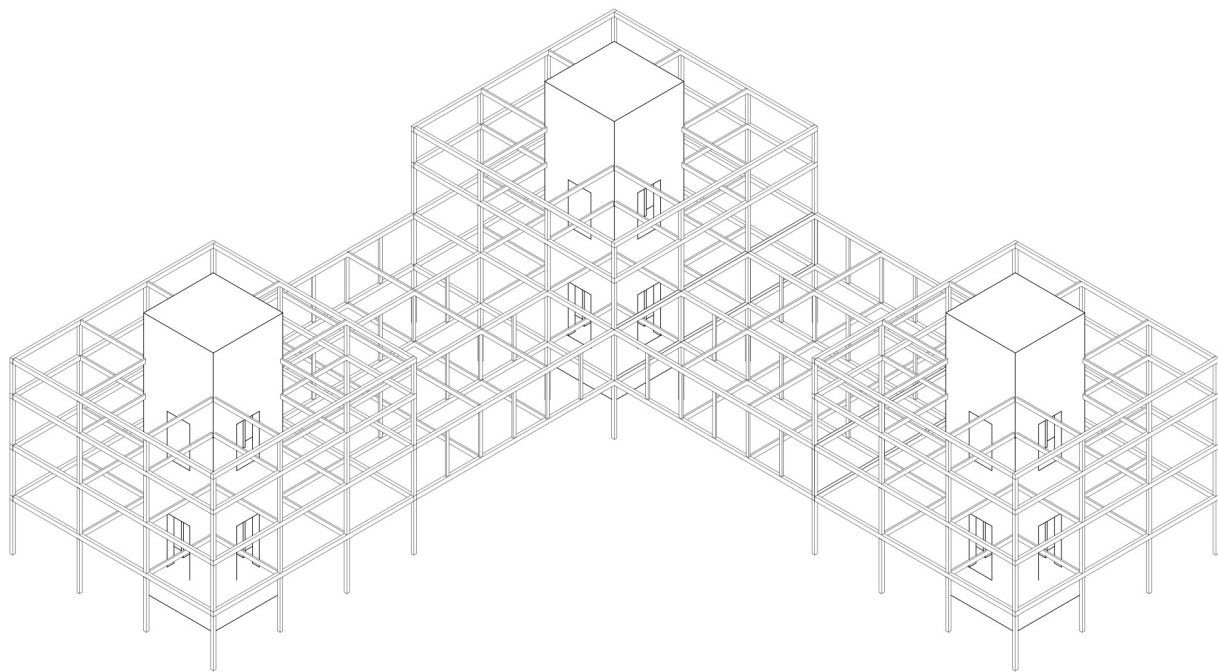
production chain

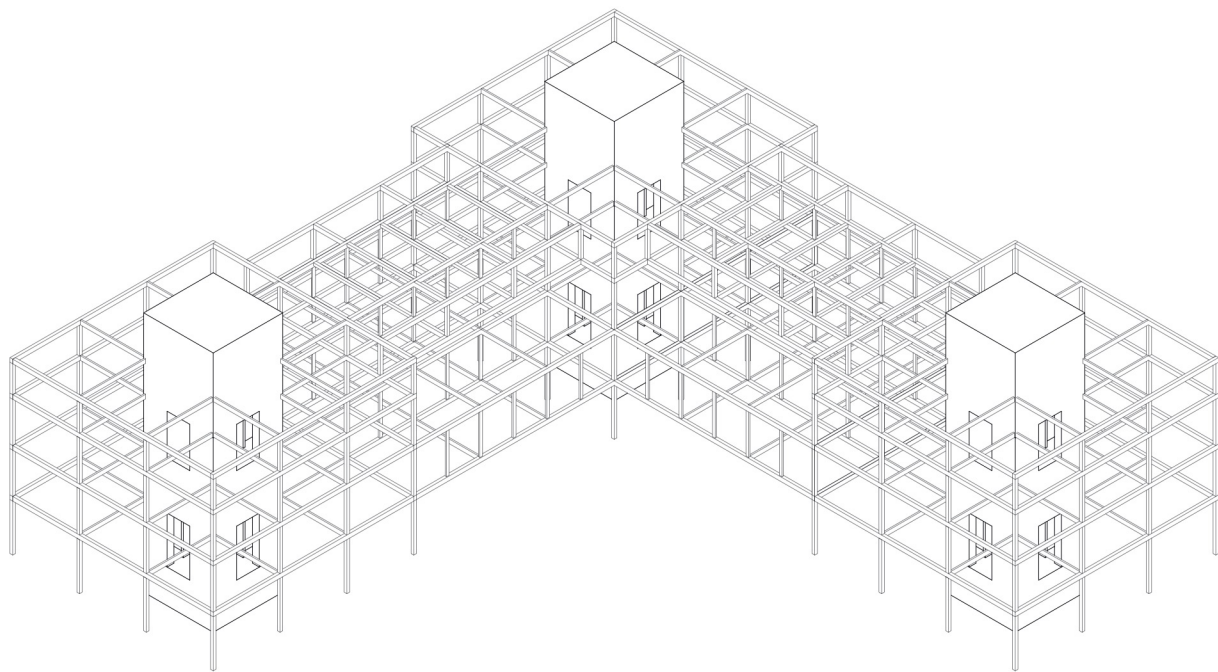


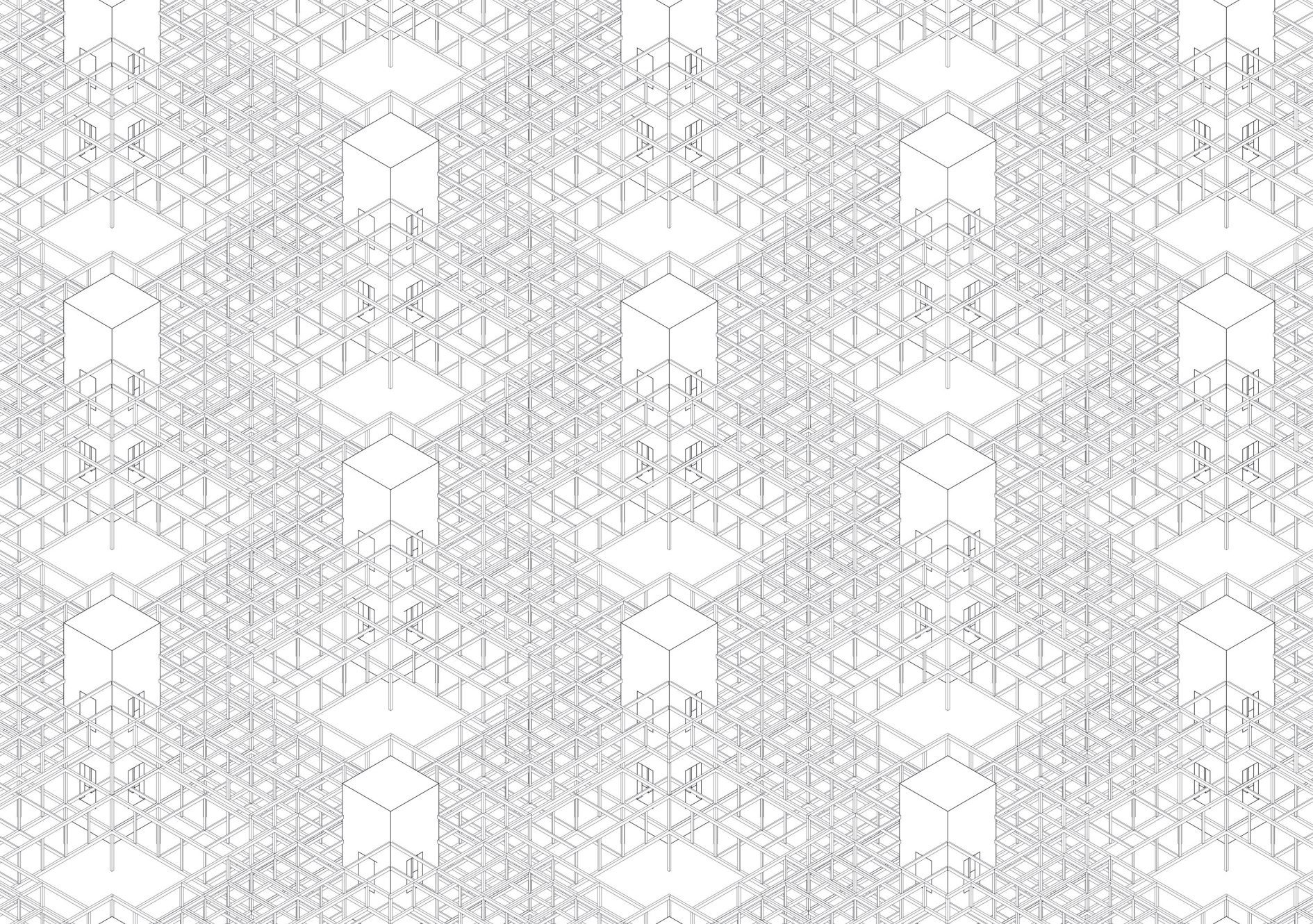
people mover





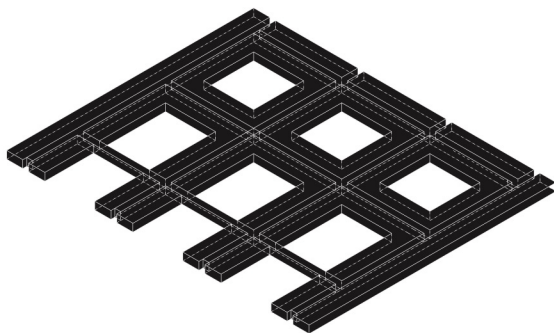




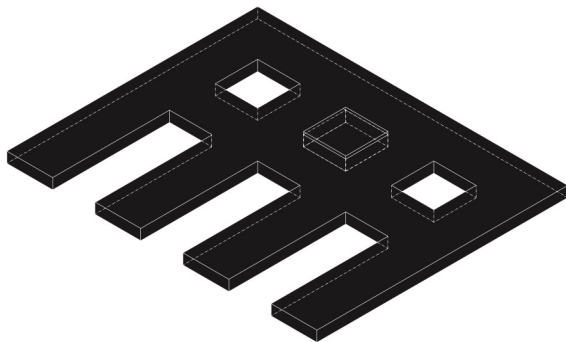


two worlds

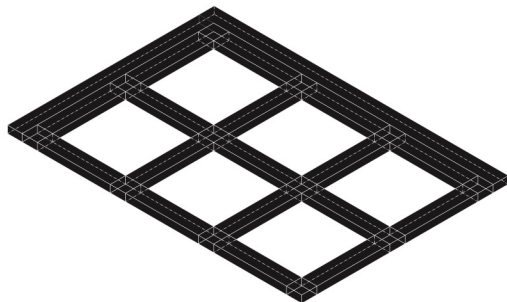
wards



hospital



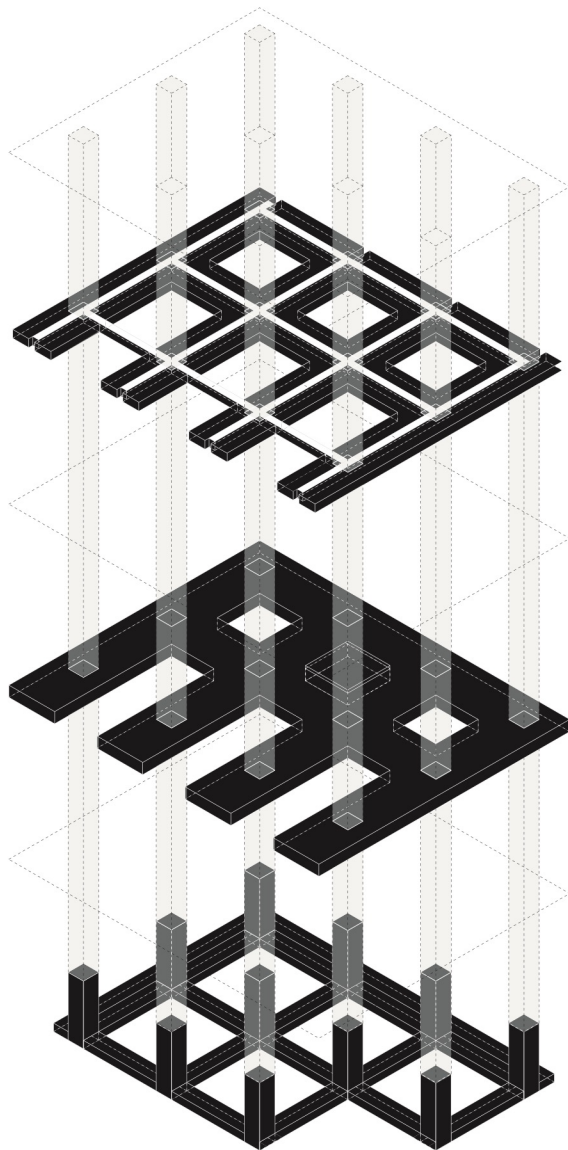
production



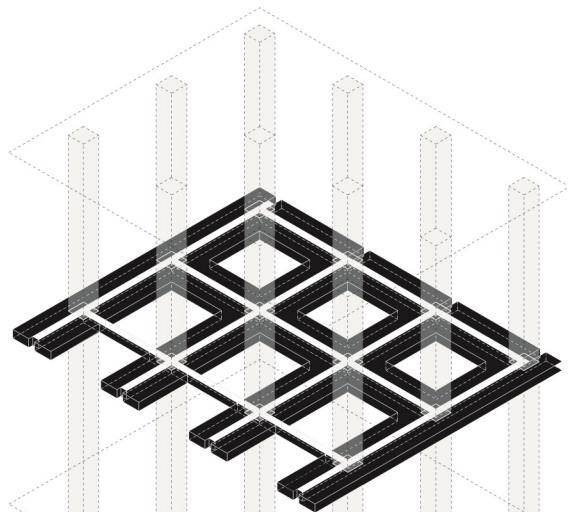
wards

hospital

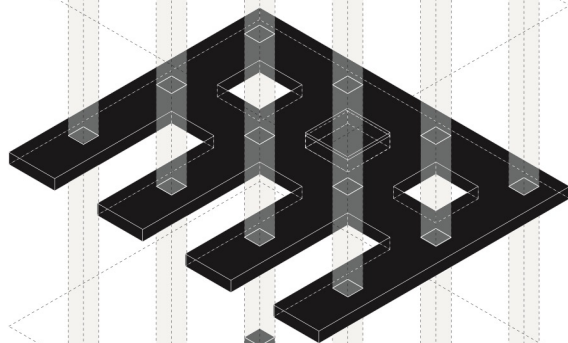
production



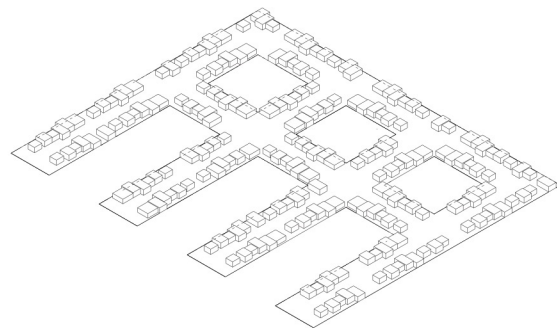
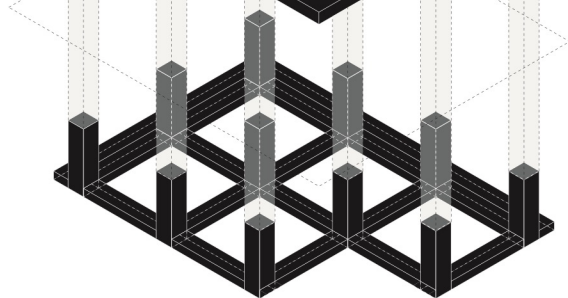
wards



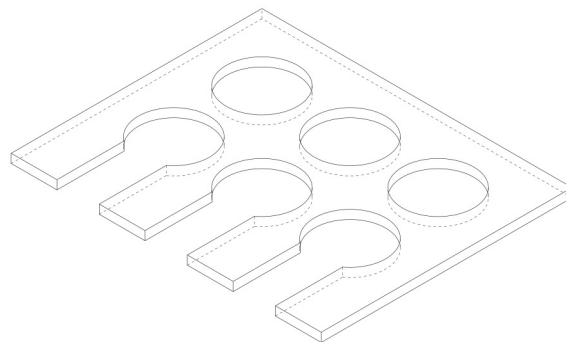
hospital



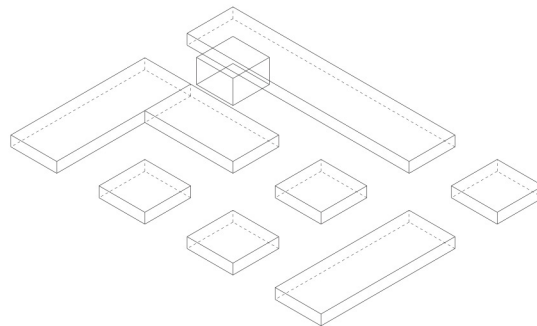
production



homes



resort

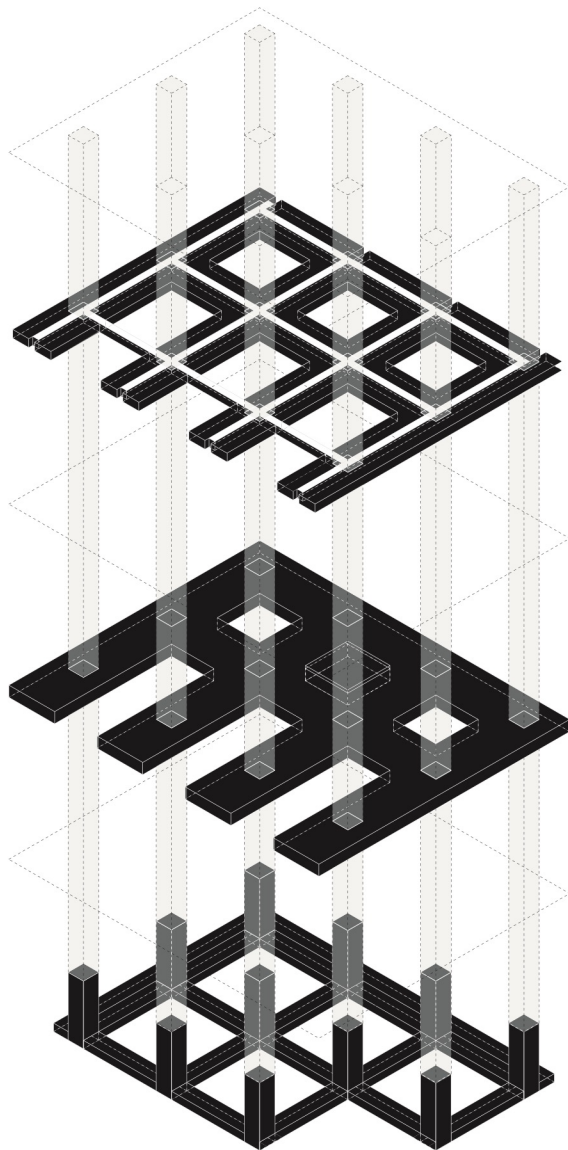


public
buildings

wards

hospital

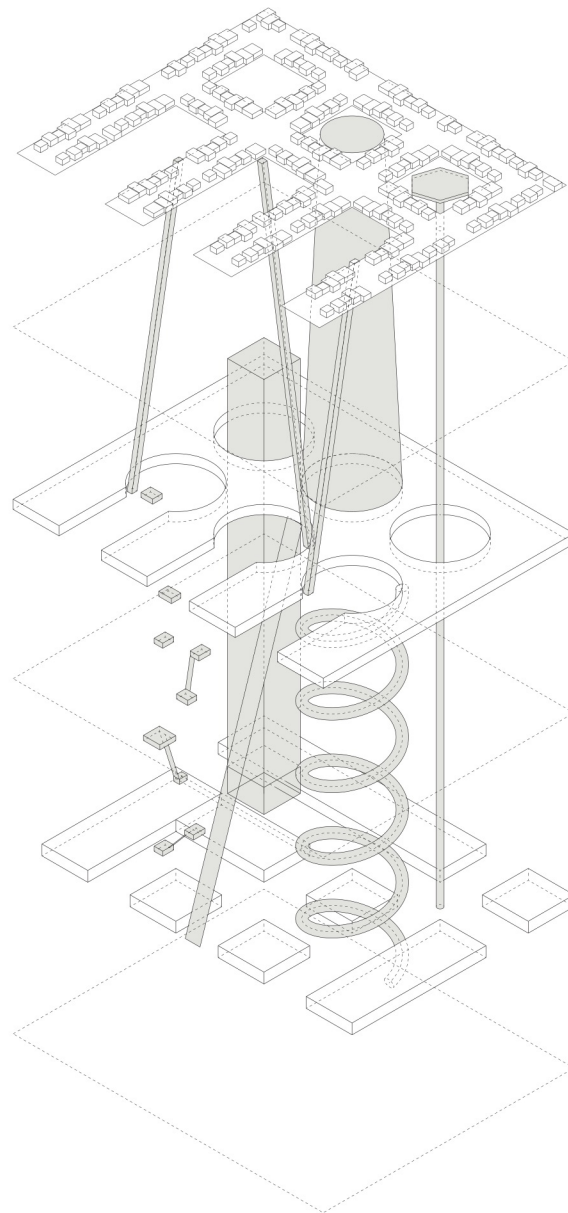
production

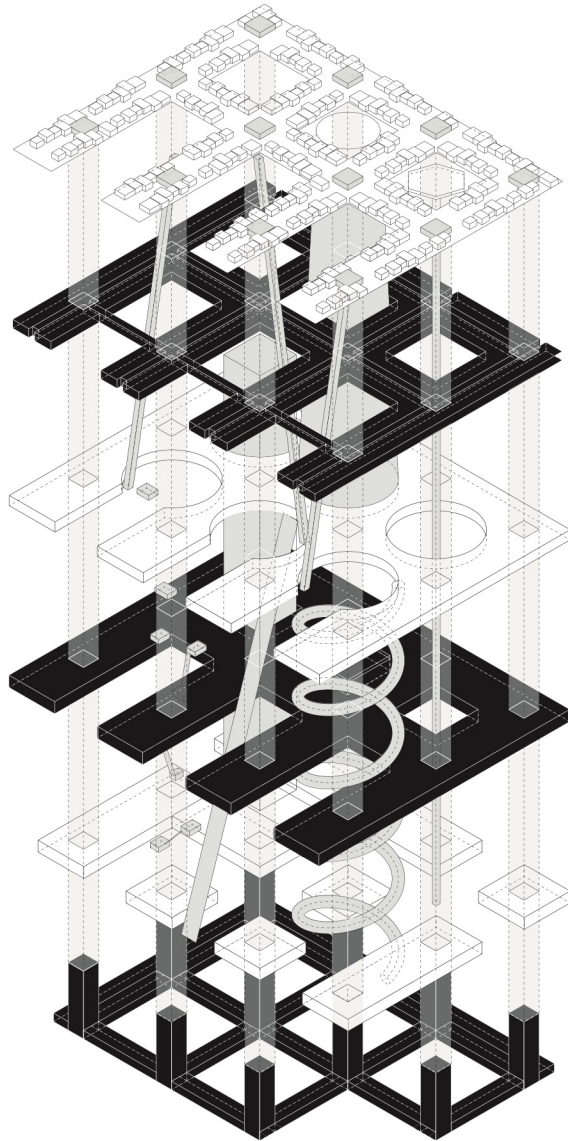


homes

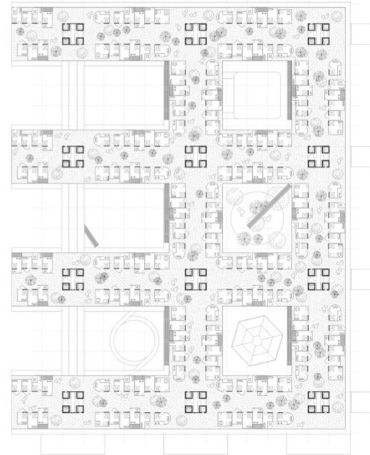
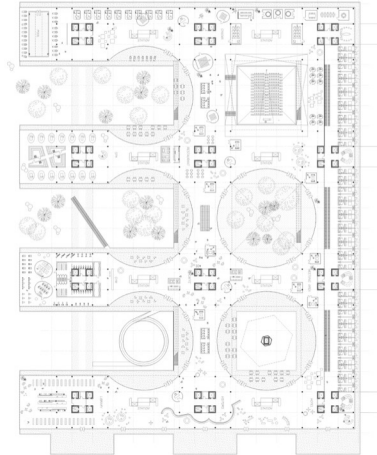
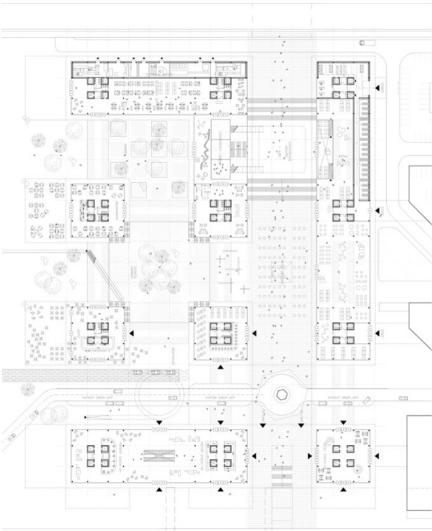
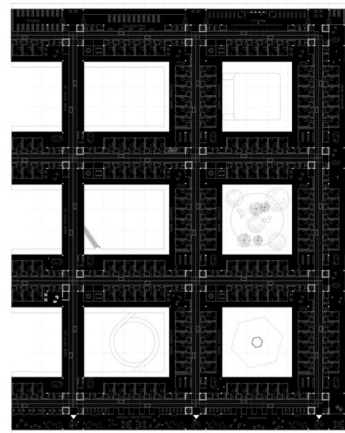
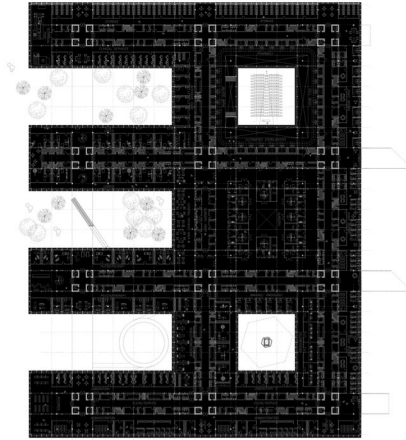
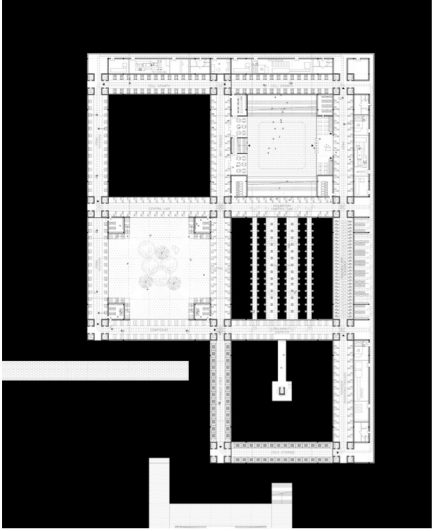
resort

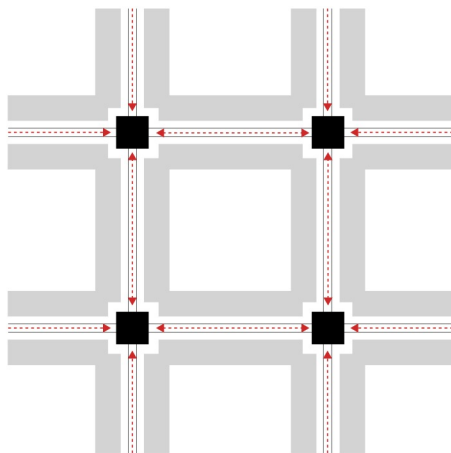
public
buildings

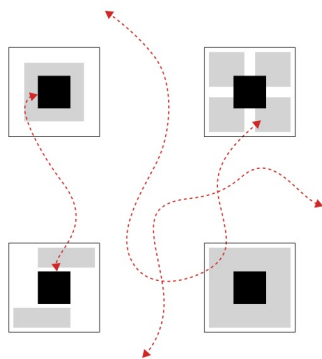
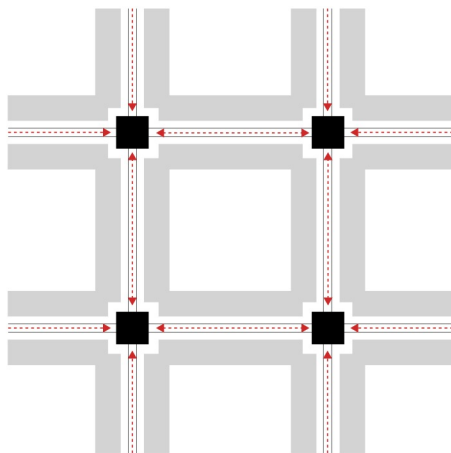


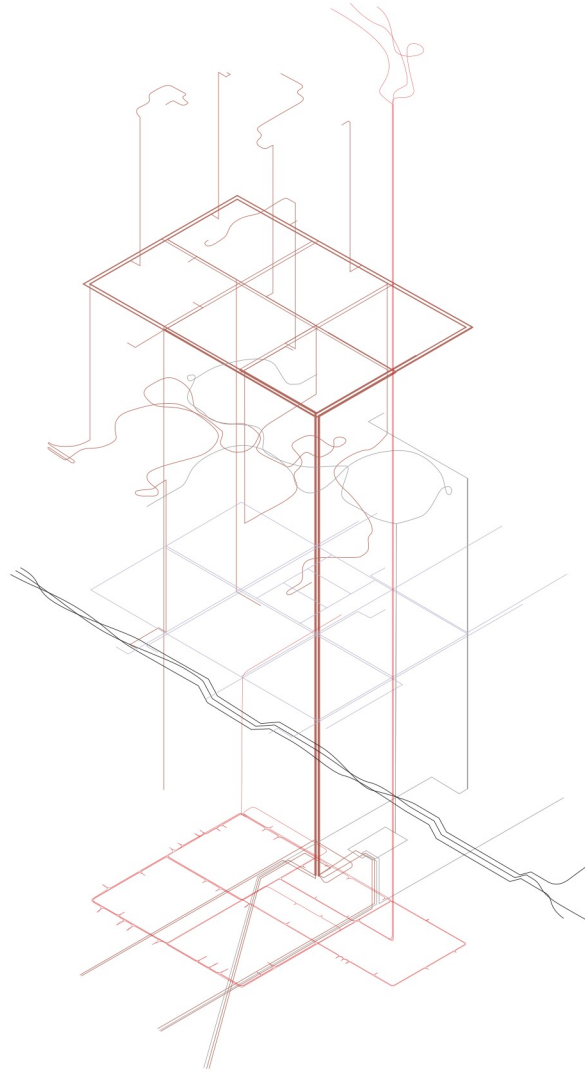


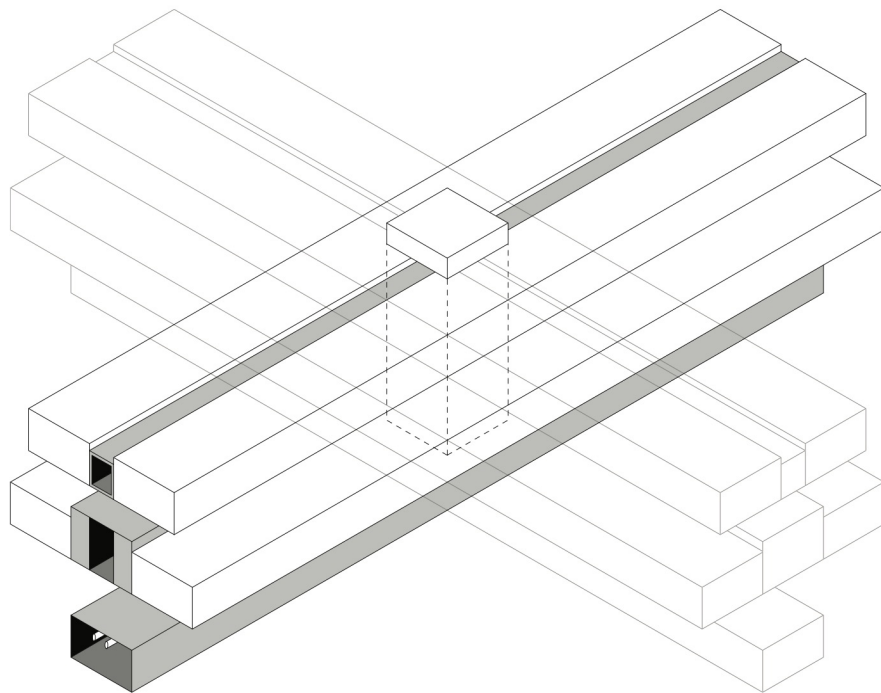
machine

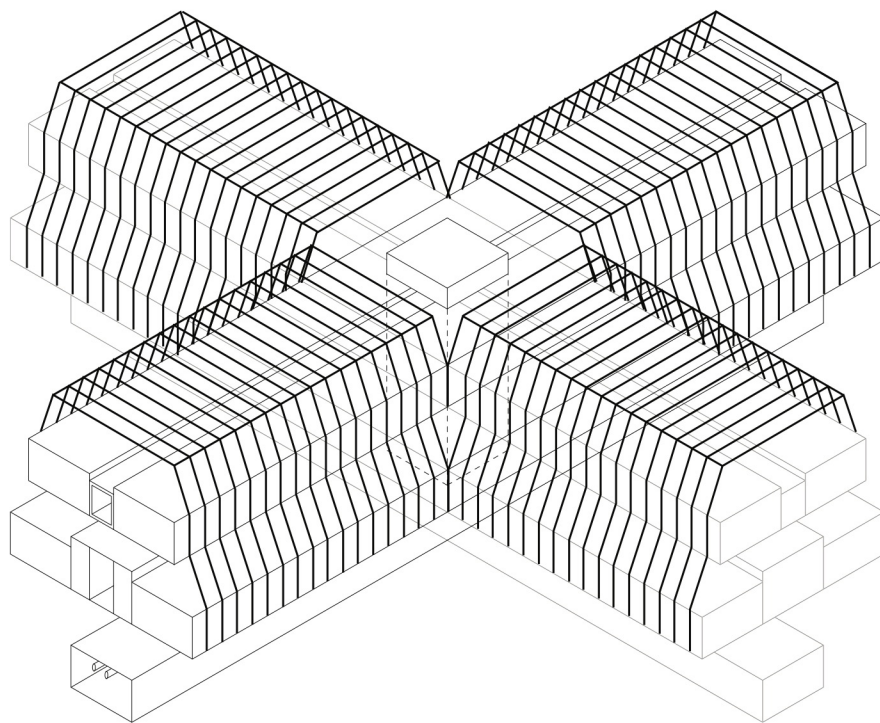




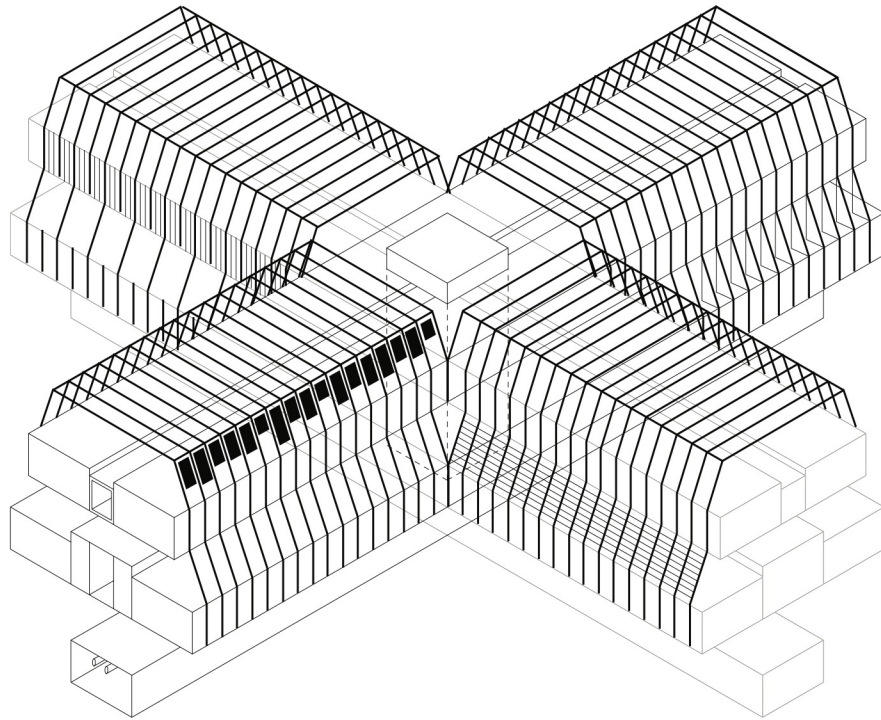








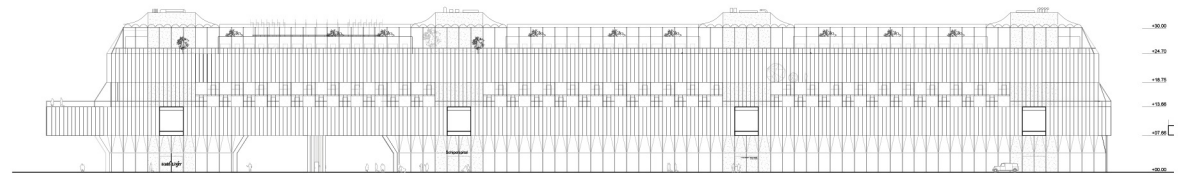
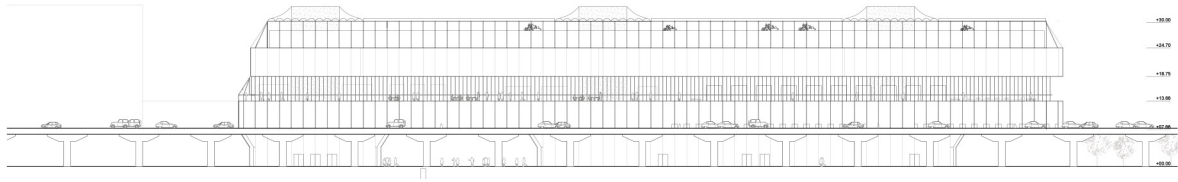
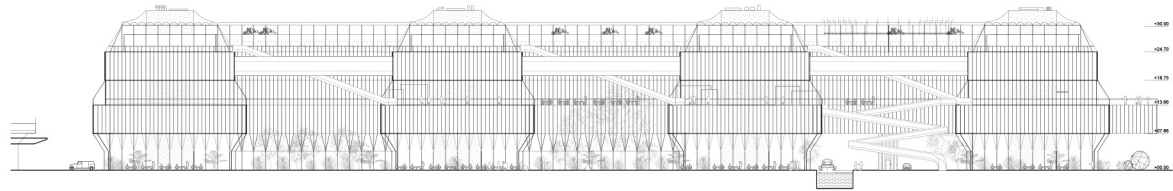
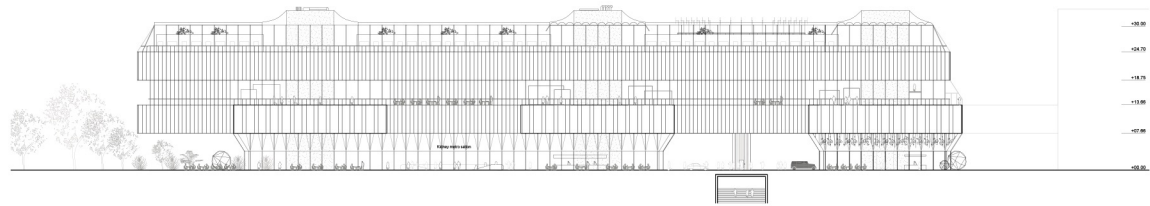
facade

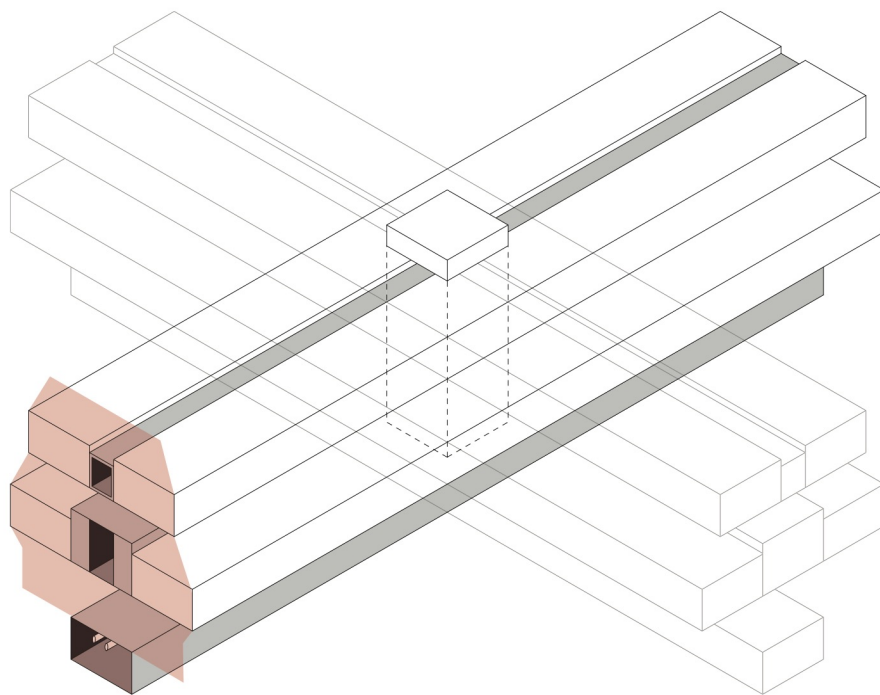


facade

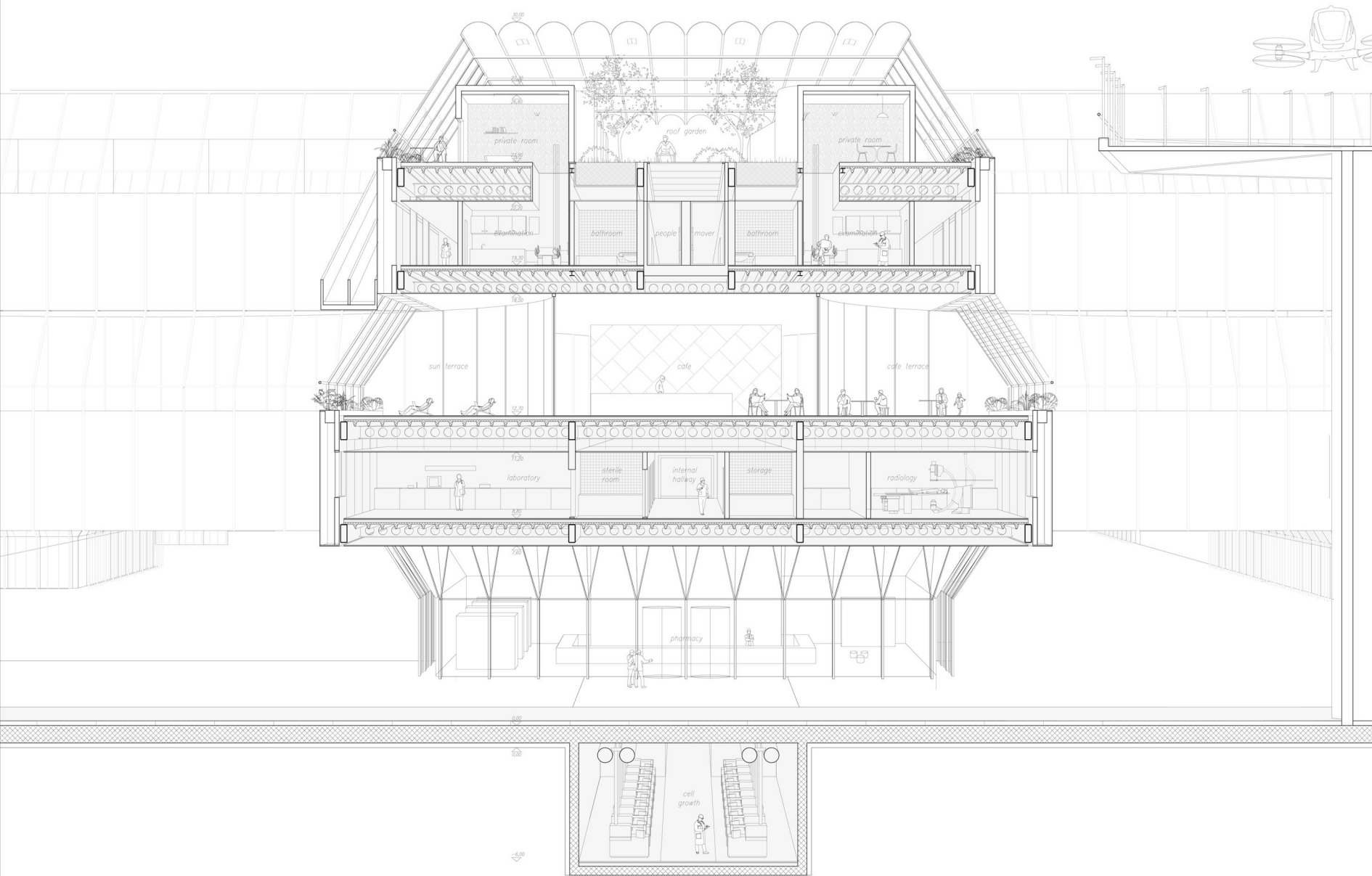


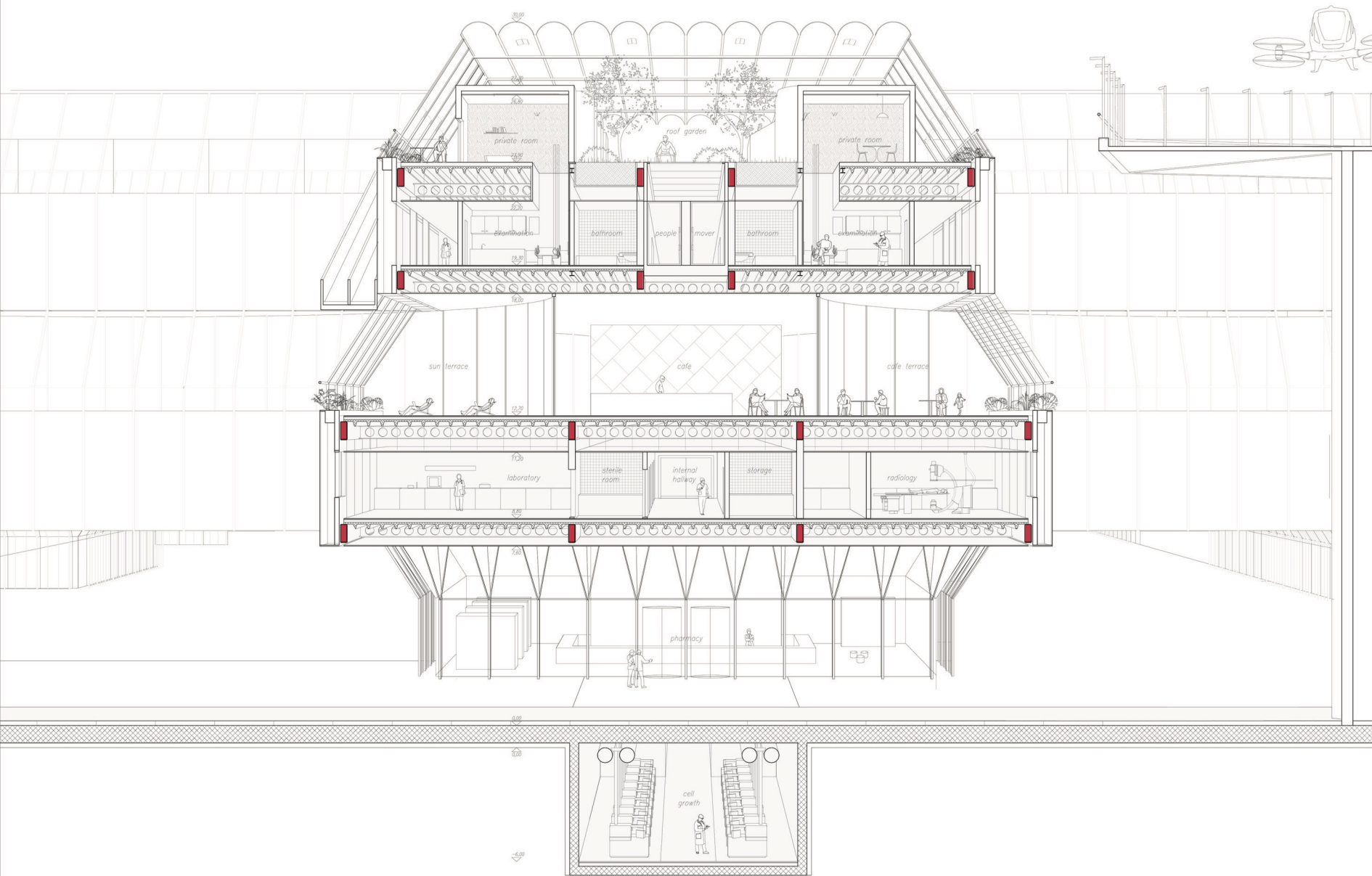


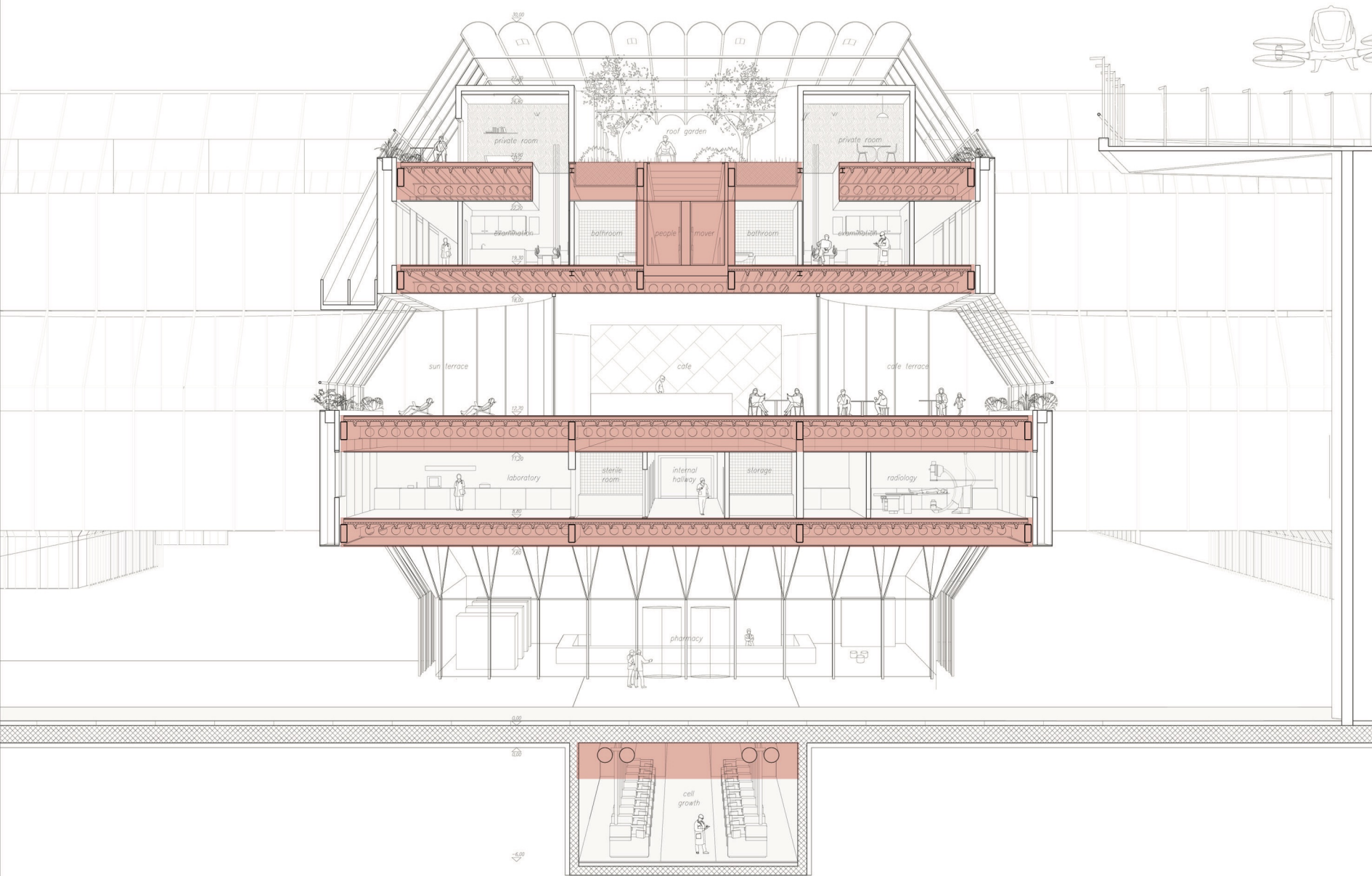


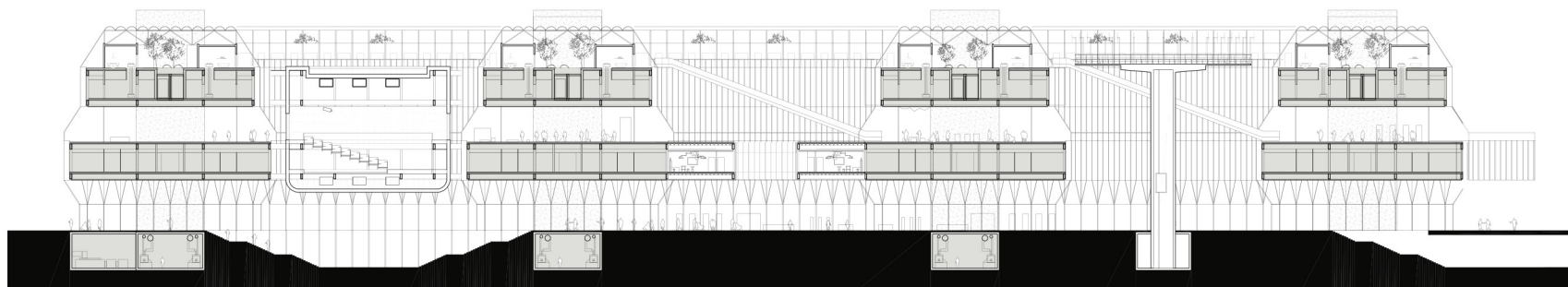


section



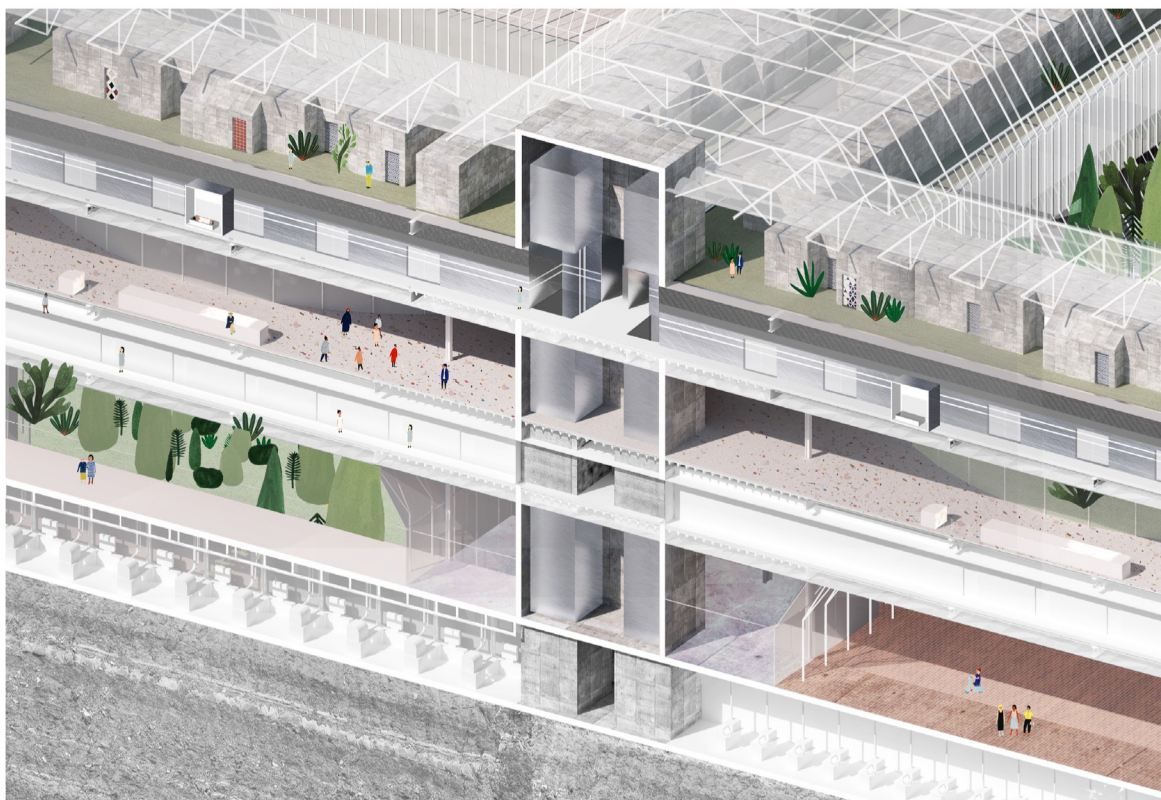






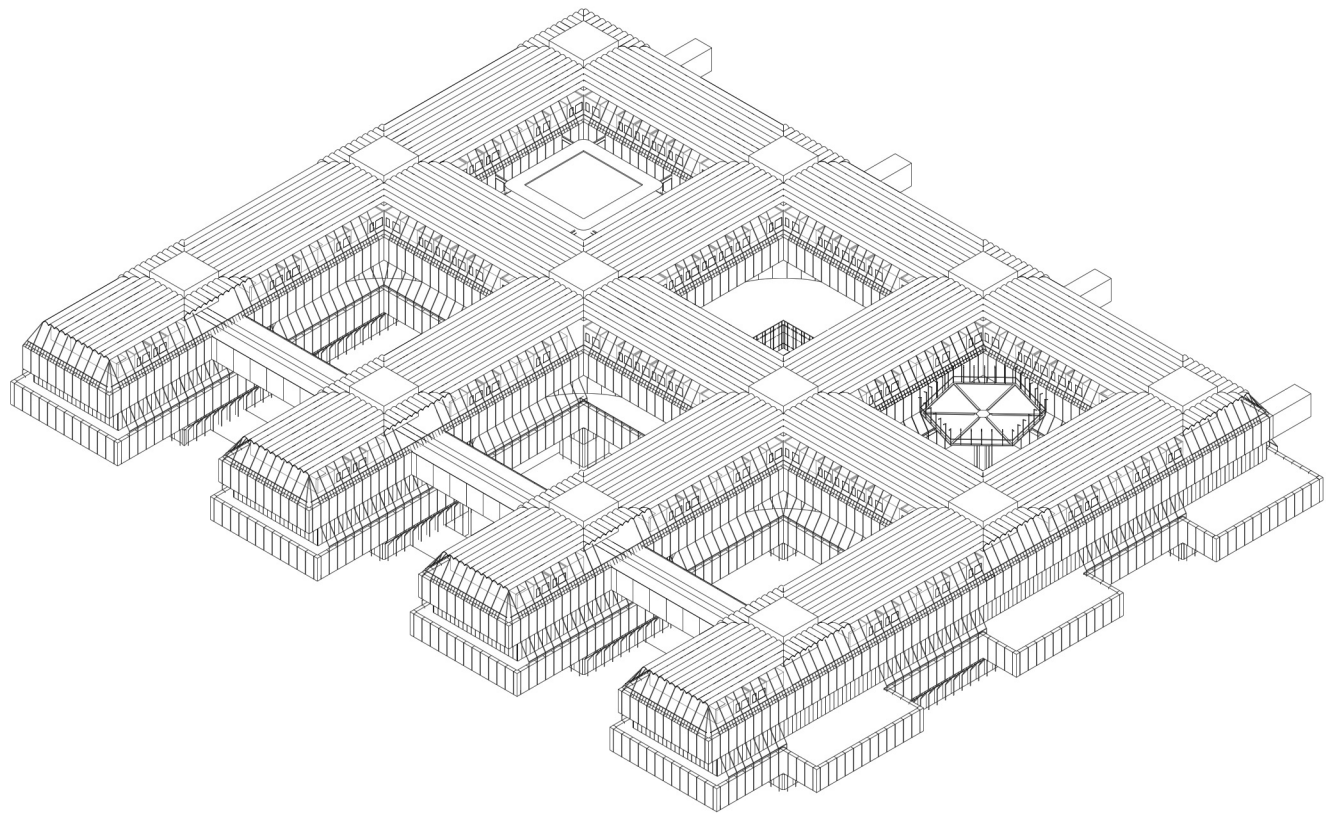






Fewer but more
complex hospitals





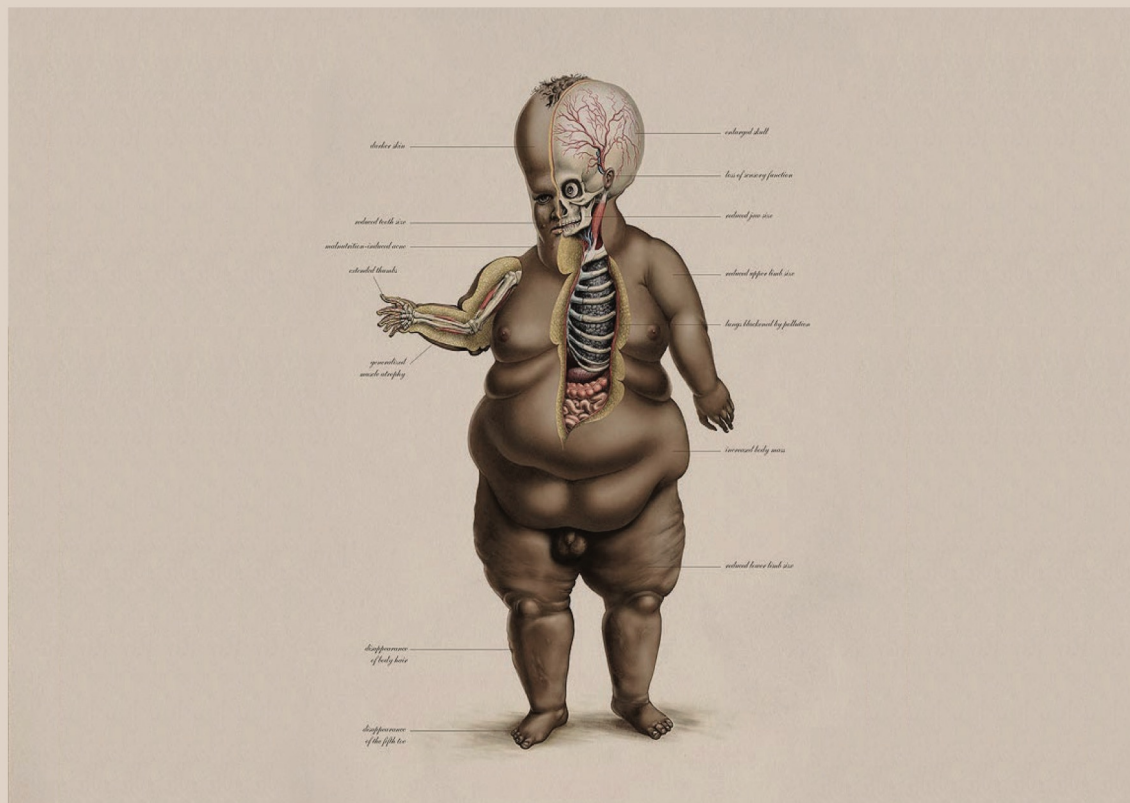
Chapter 4:

ORGAN

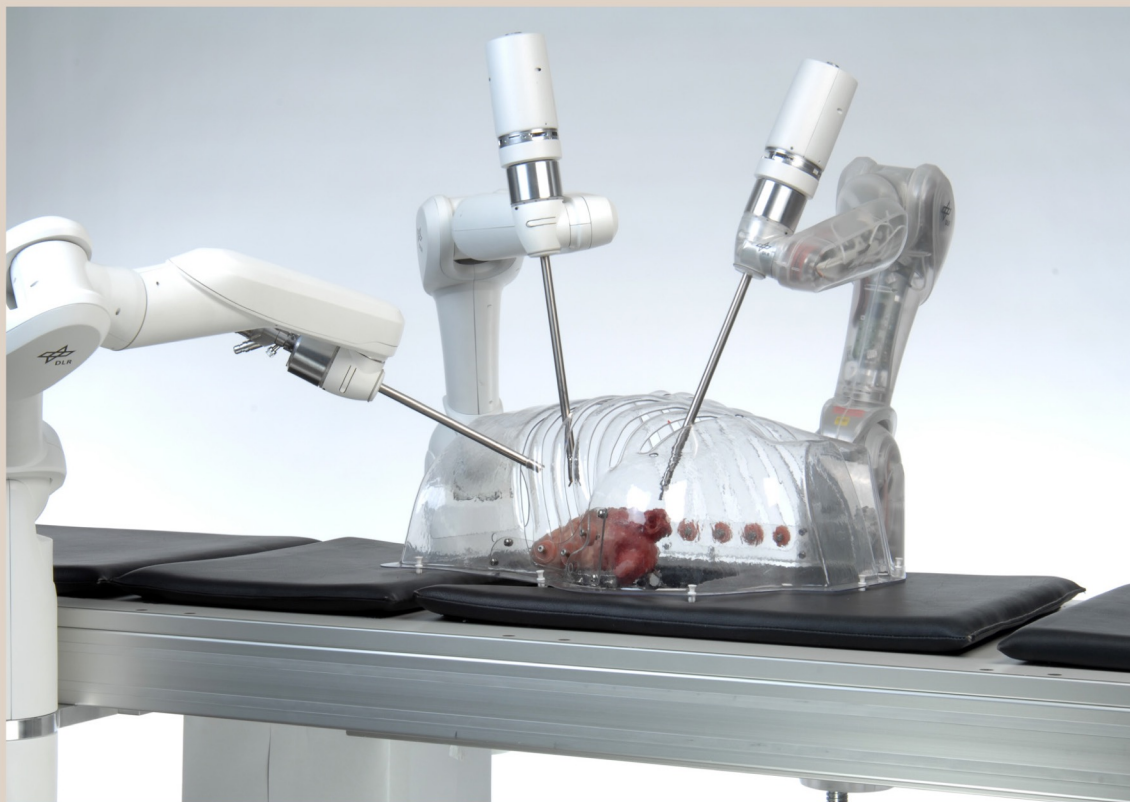
FACTORY



Future of the
human body?



ideology
of constant
technological
innovation





**bioproduction process = approx. 7
weeks**

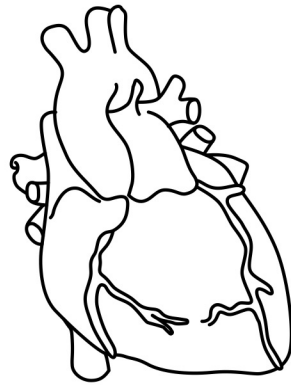
1. cell extraction

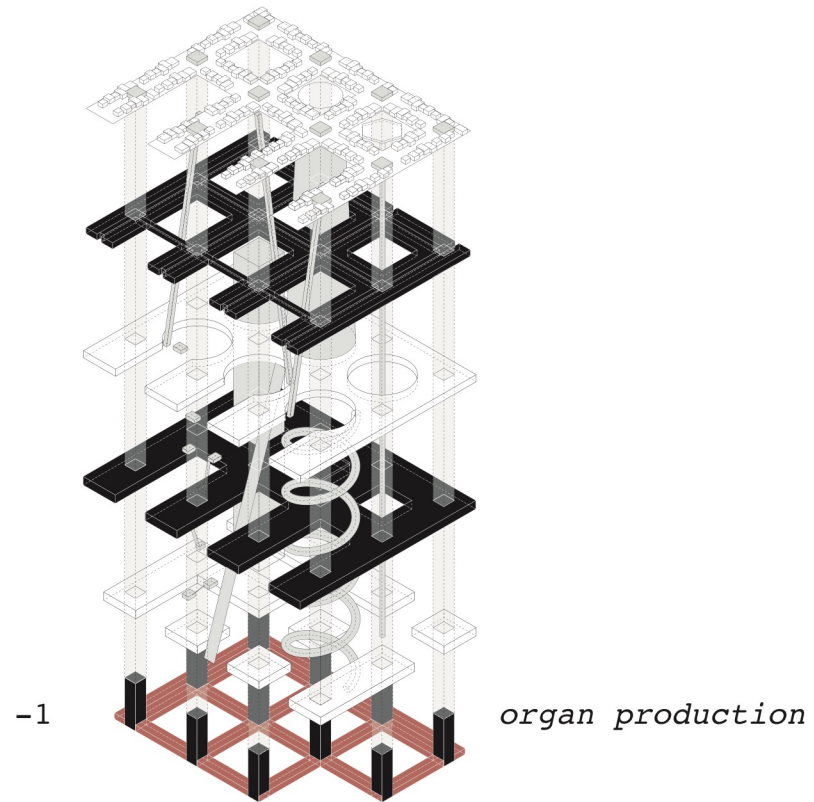
2. cell growth (3 weeks)

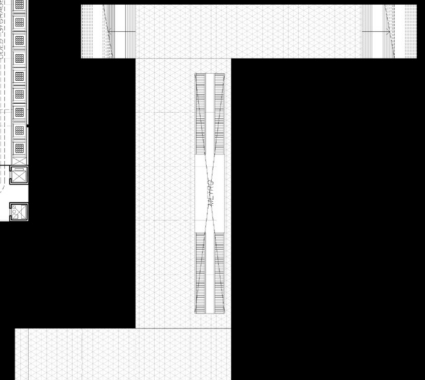
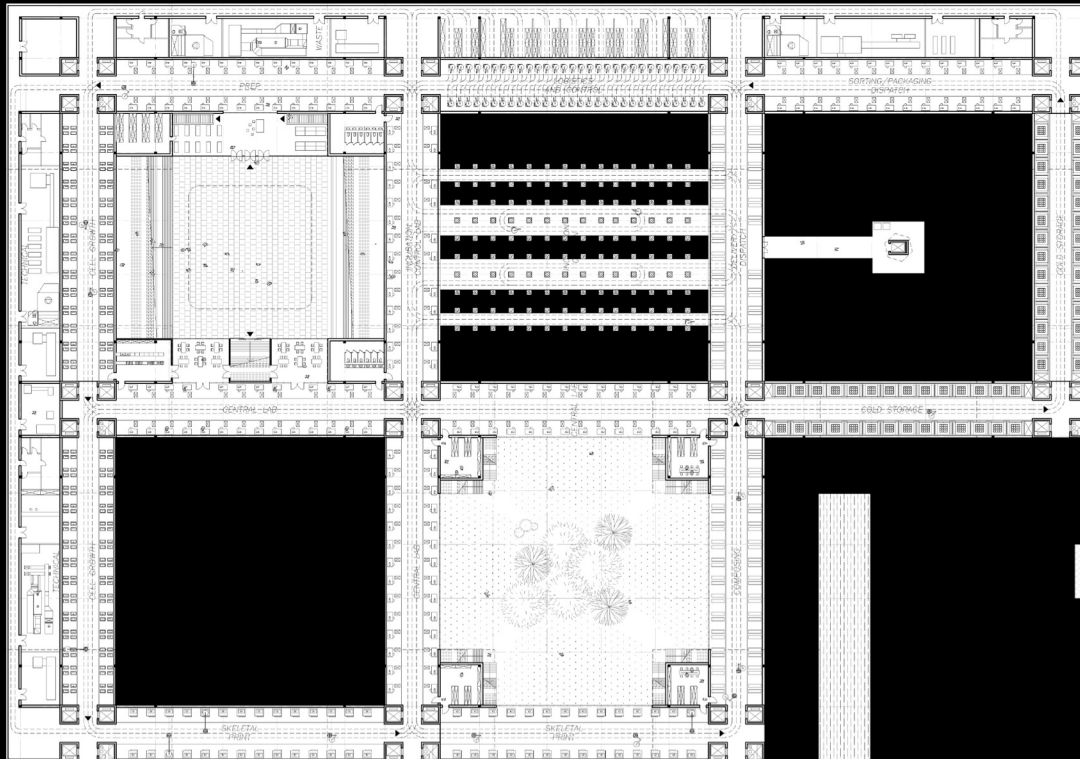
3. skeleton printing (1 week)

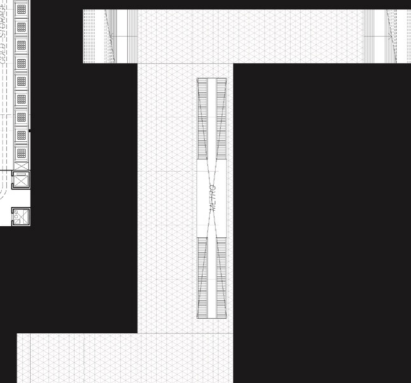
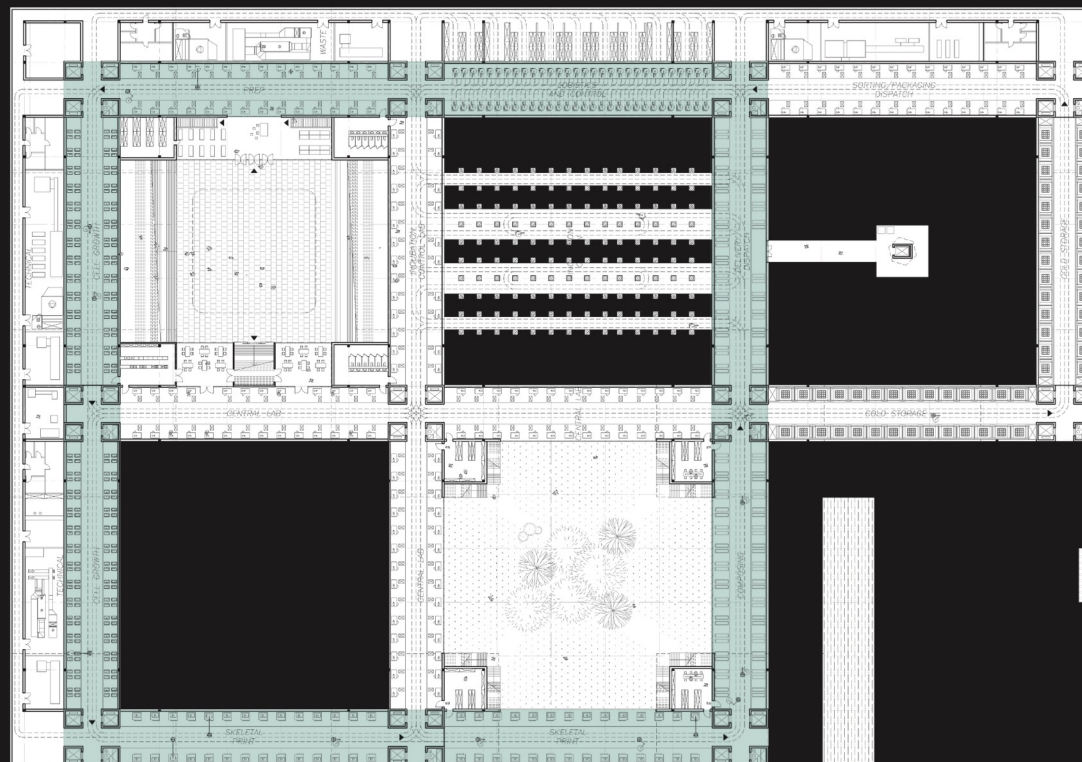
4. tissue layering (1 weeks)

6. incubation (2 weeks)

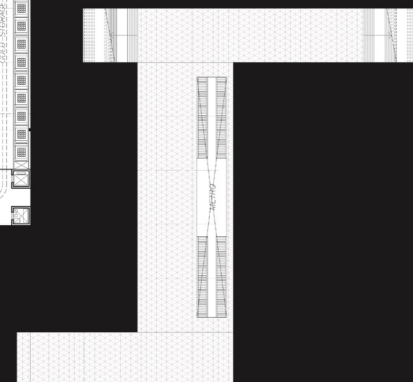
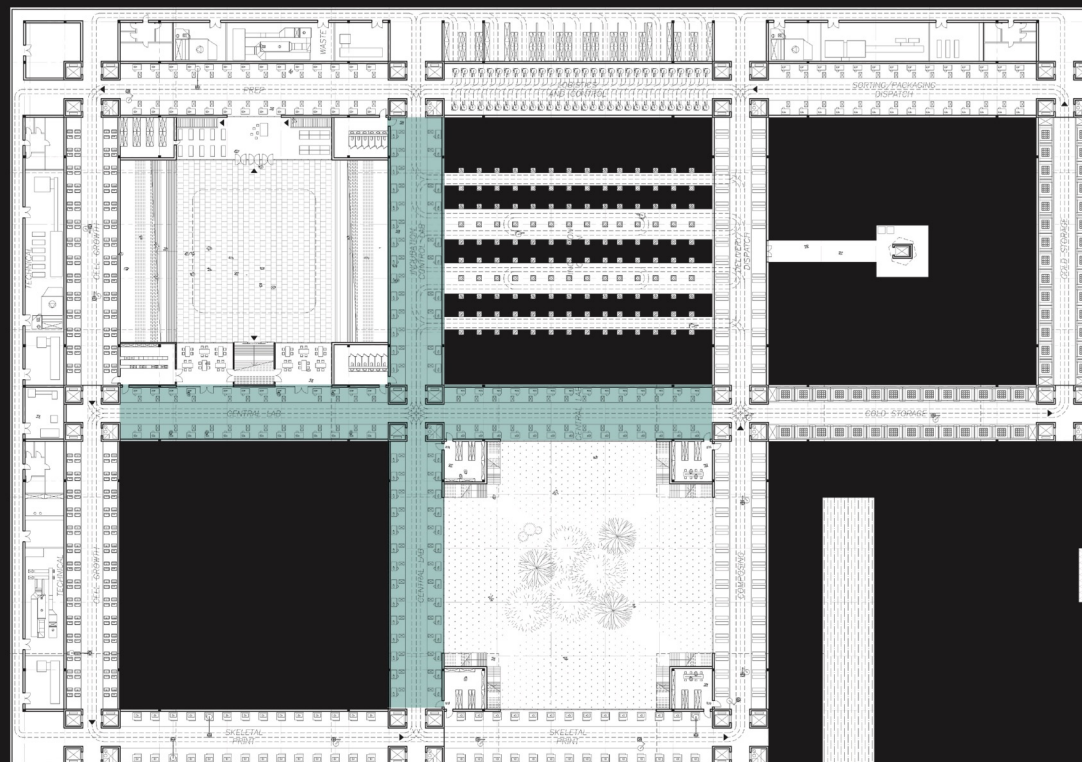






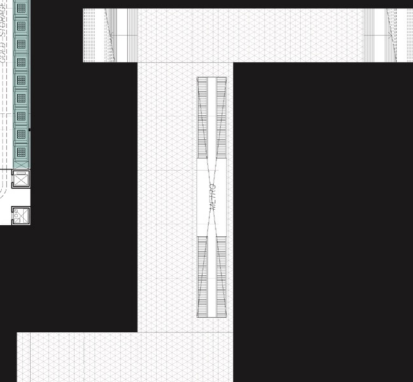
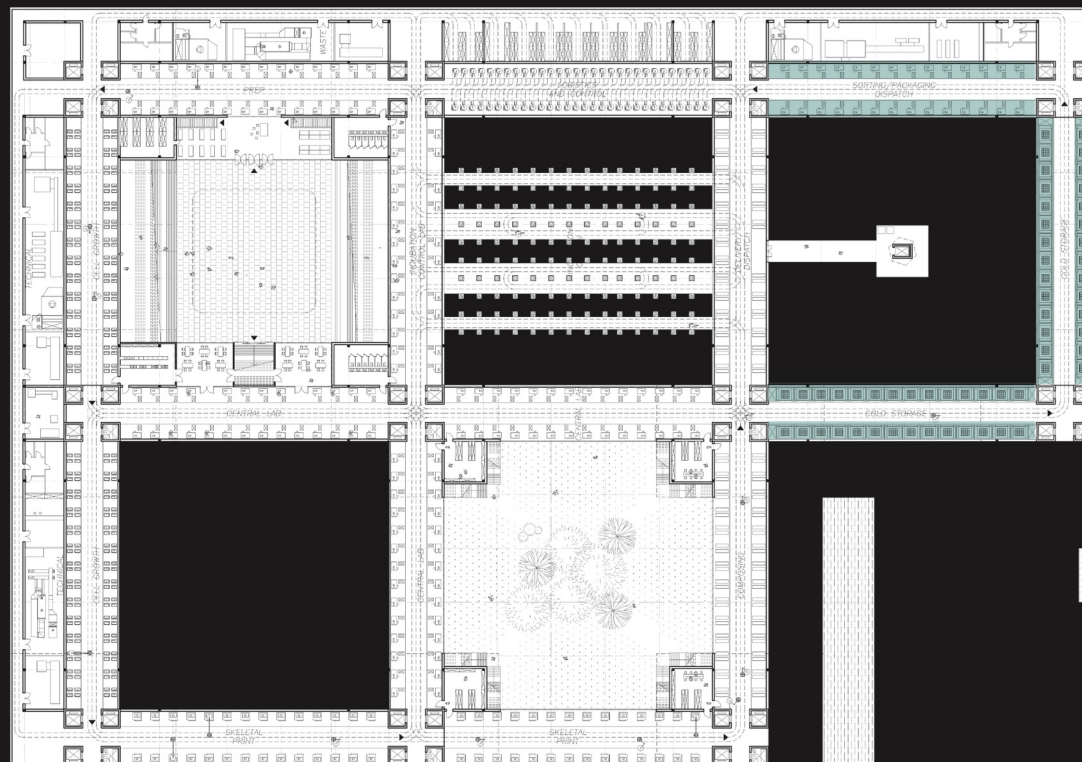






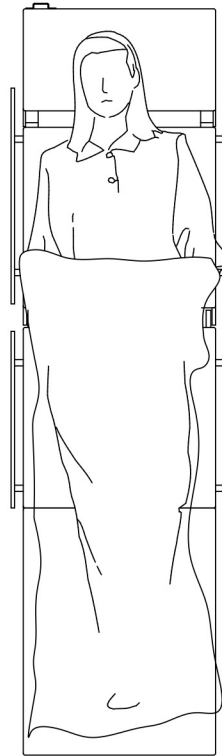
10

30



10

30



patient stay = approx. 4 weeks

1. admission

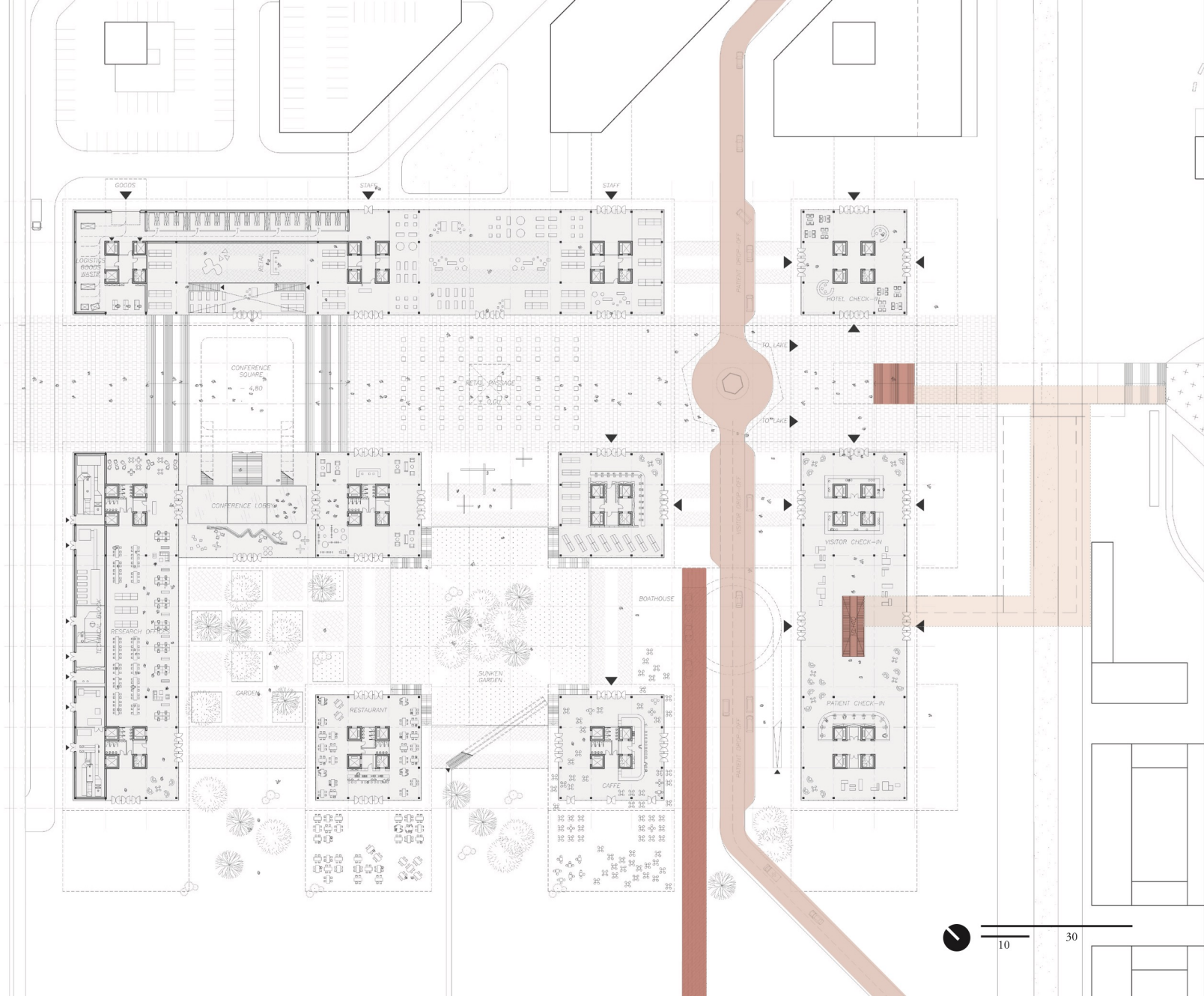
2. diagnostics and prep (1 week)

3. surgery(1 day)

4. post-op care (2 weeks)

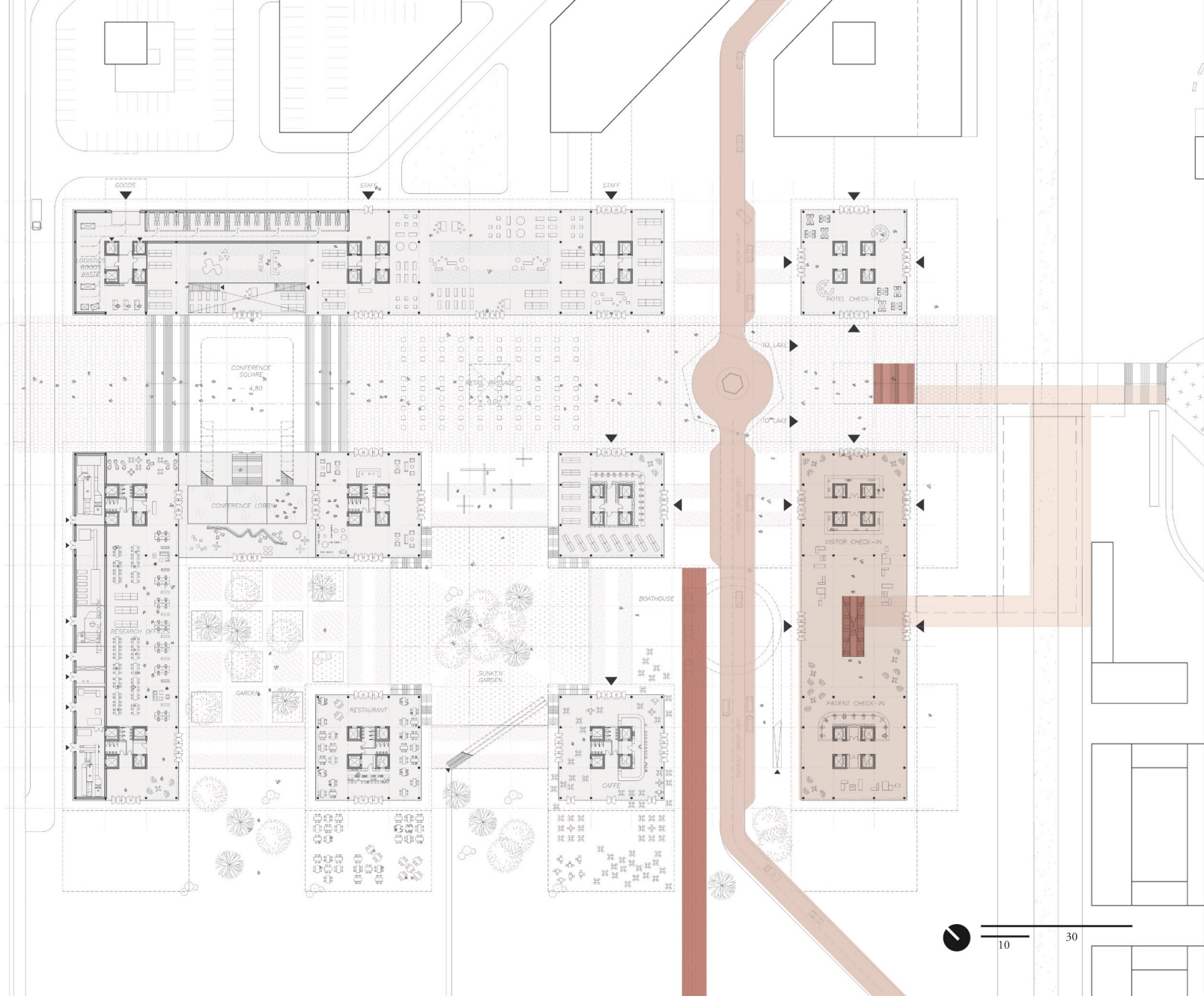
6. recovery (1-2 weeks)





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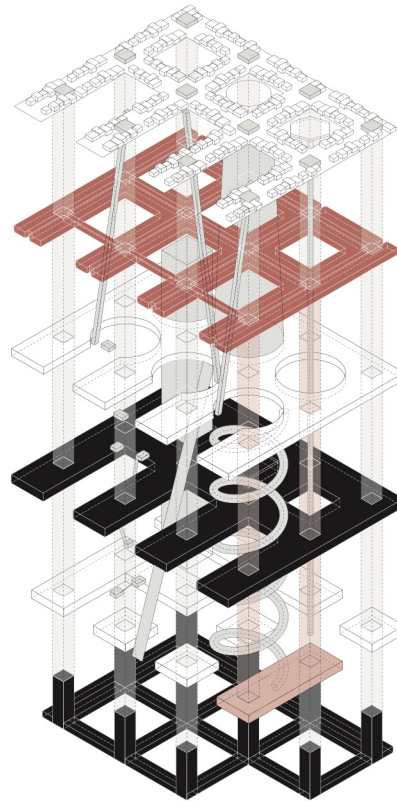


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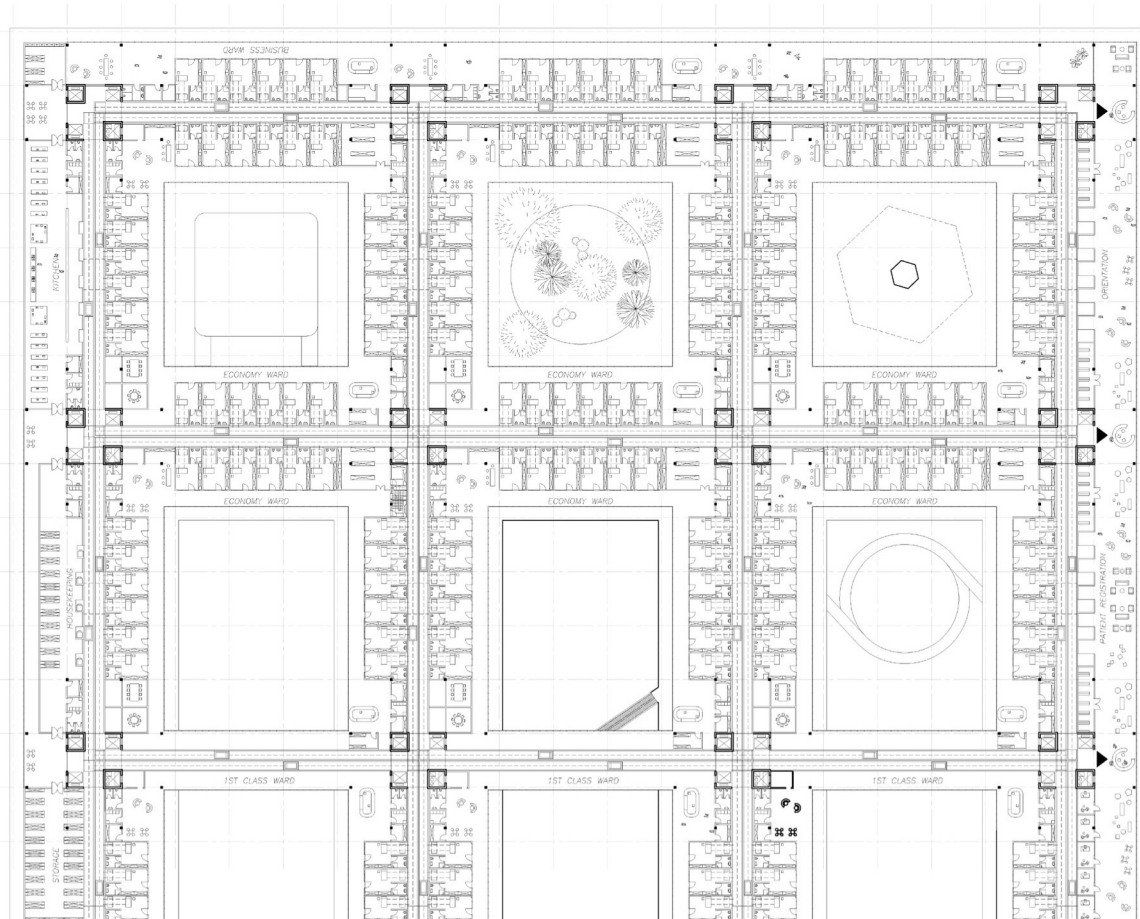
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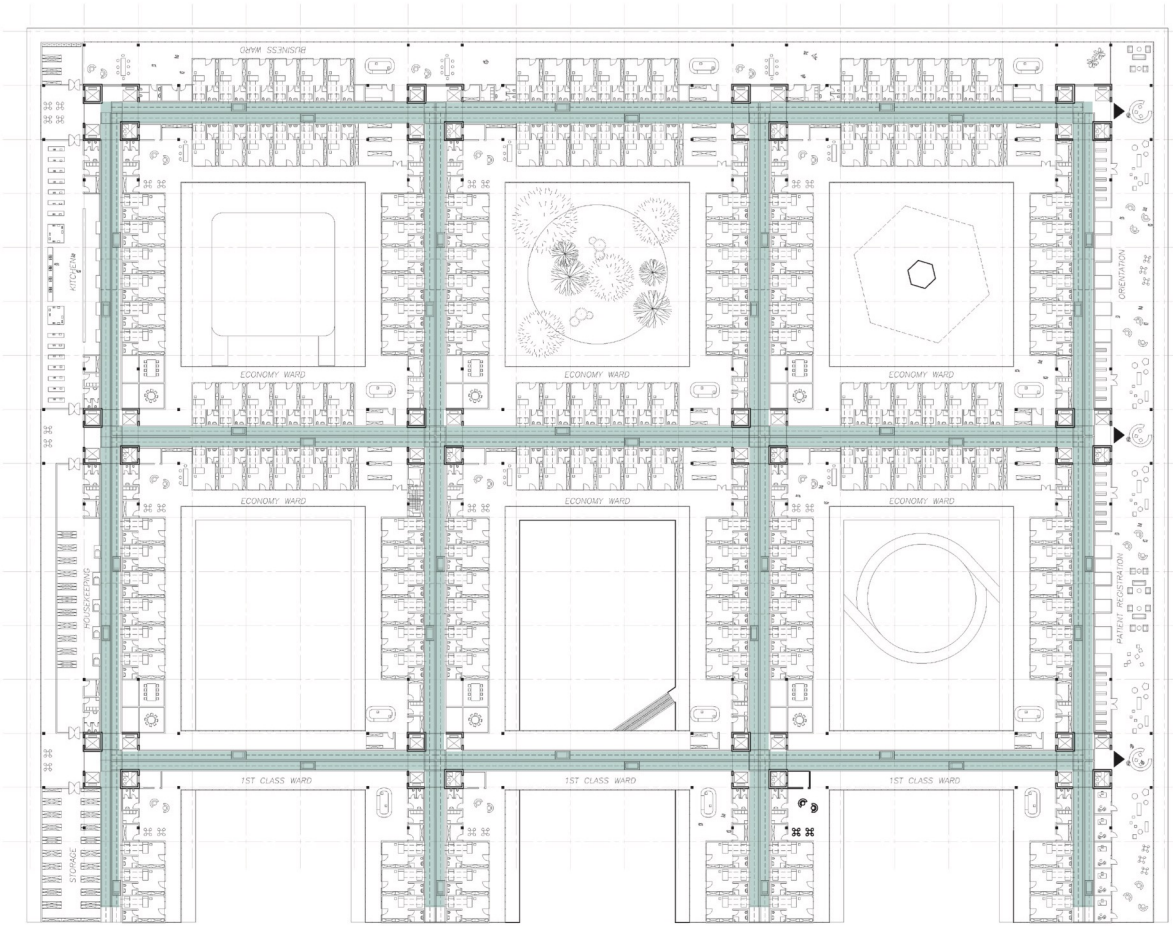


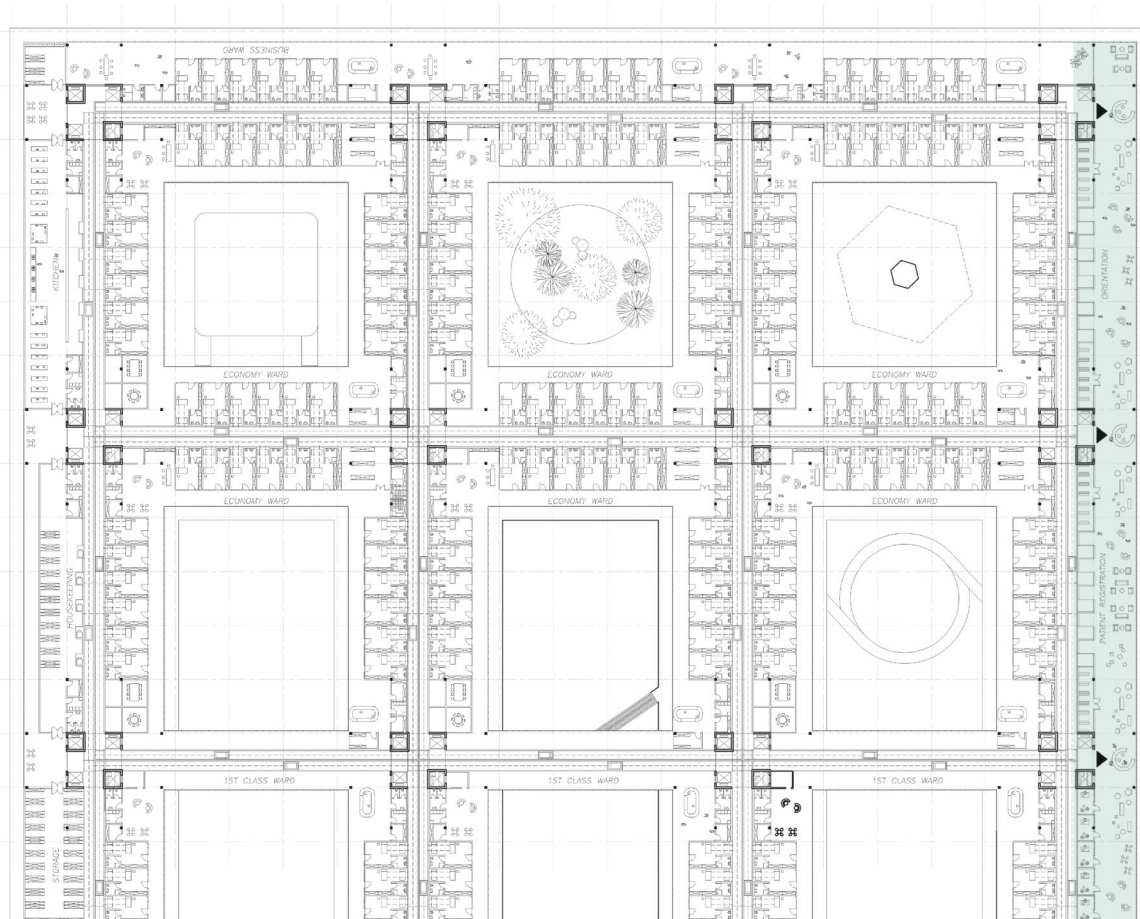
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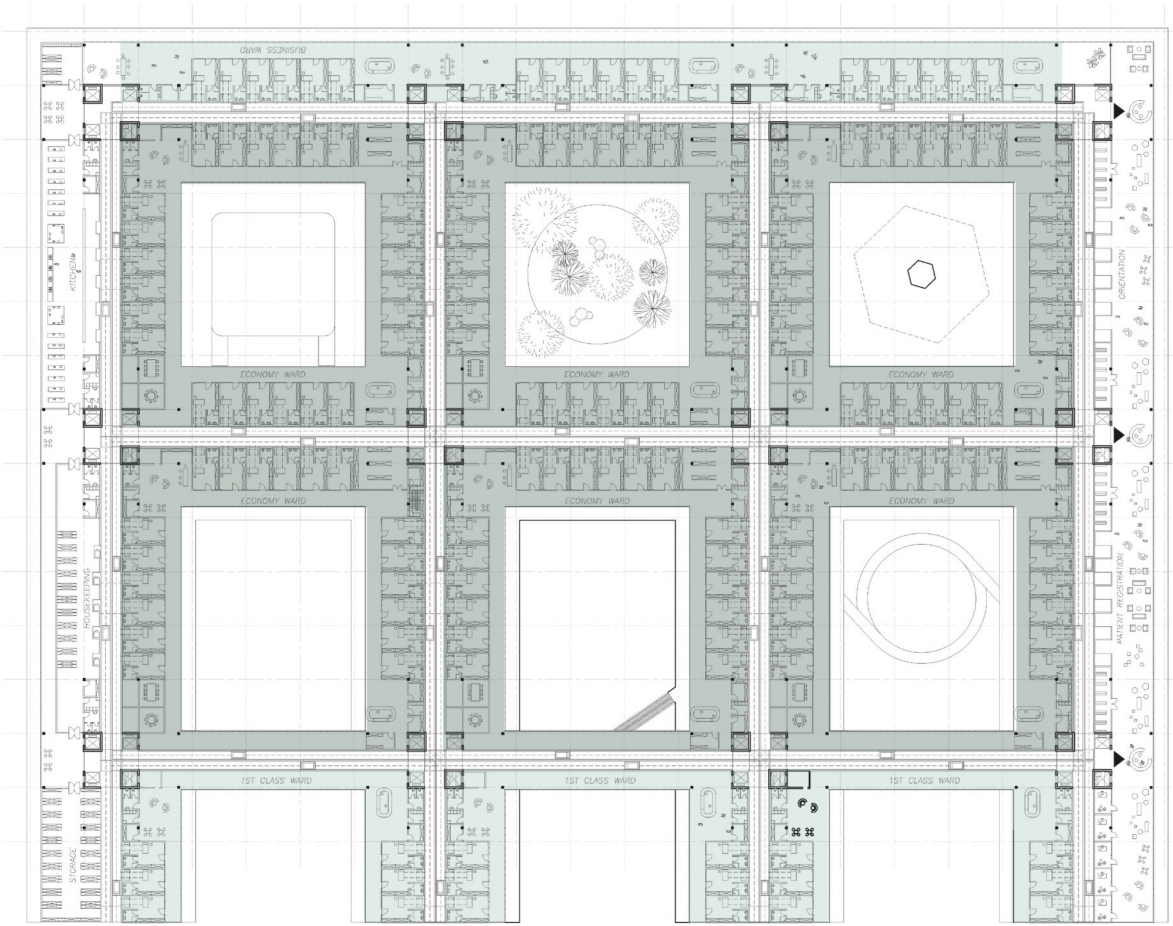
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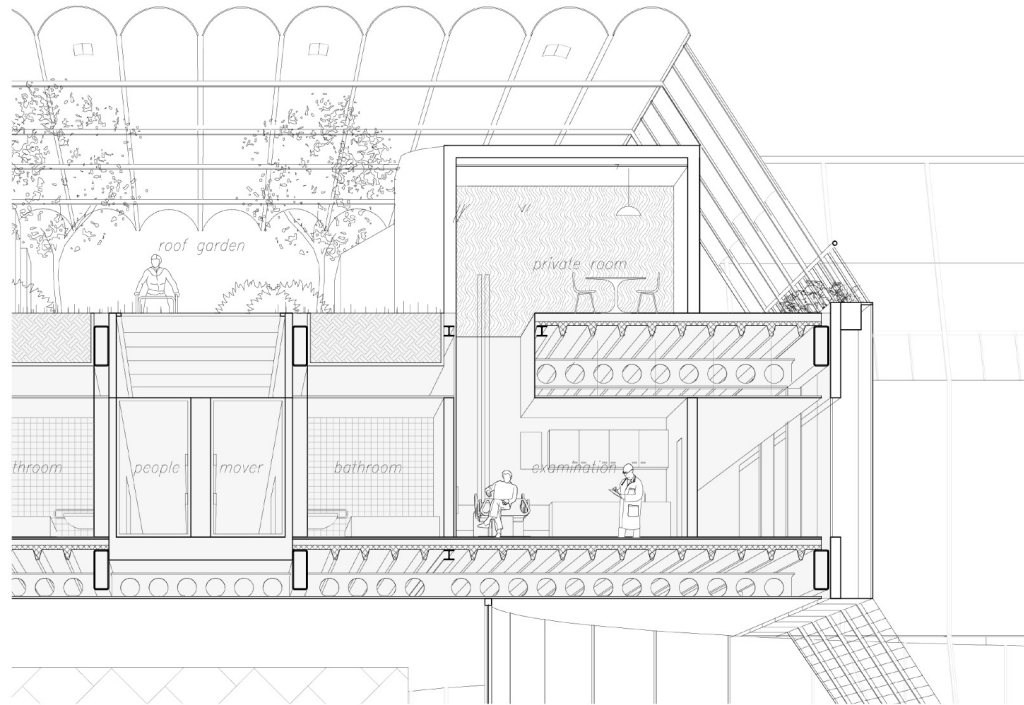


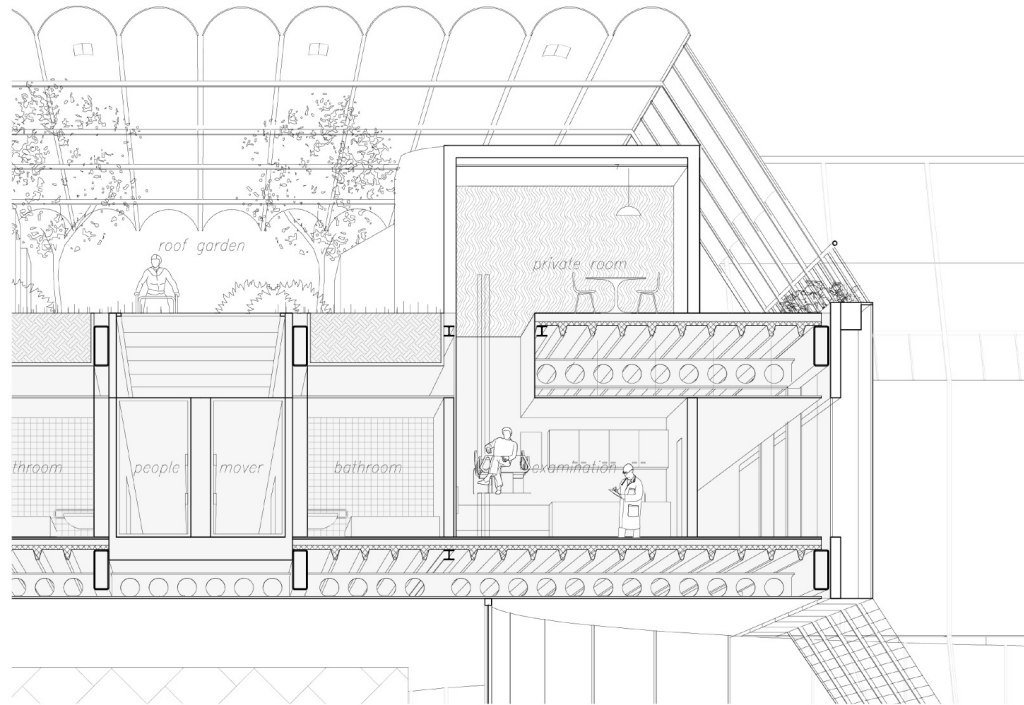


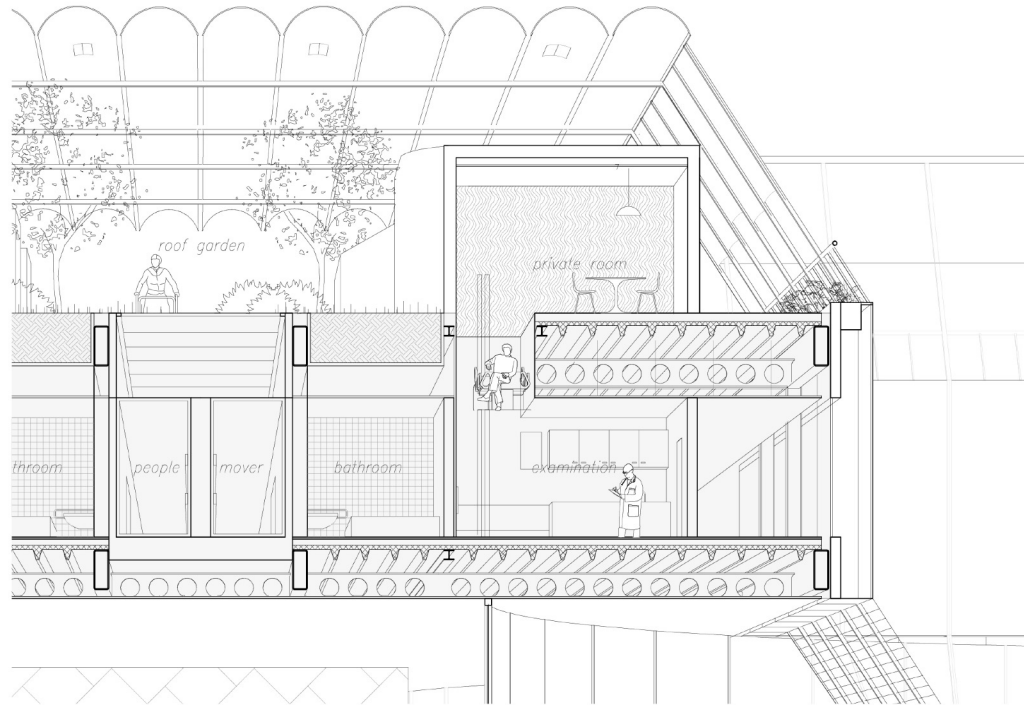


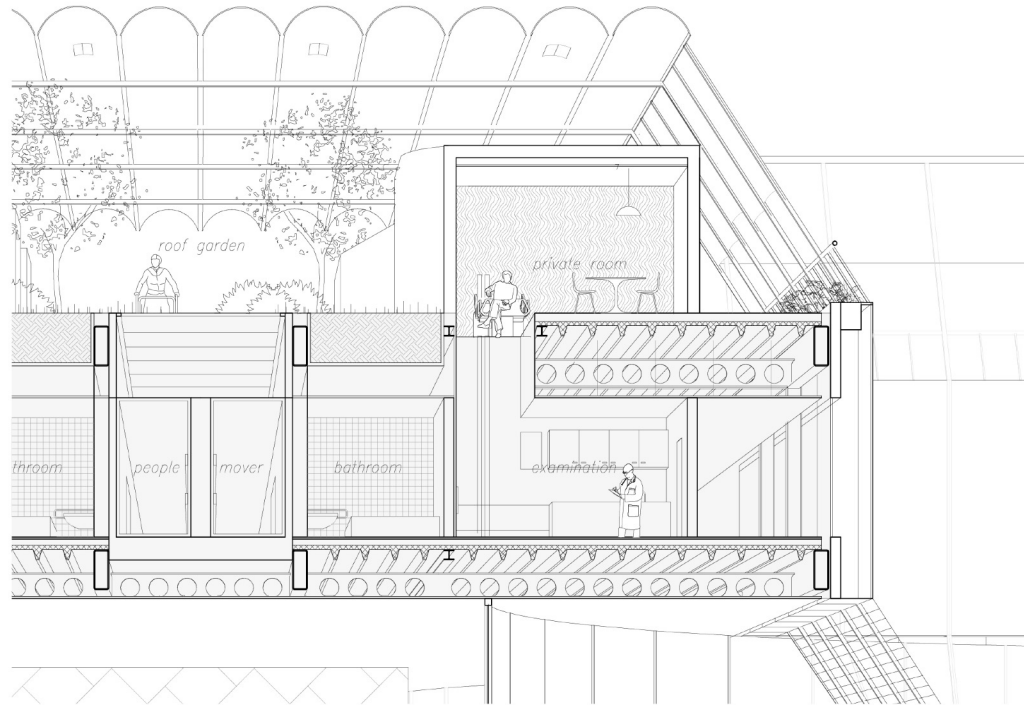


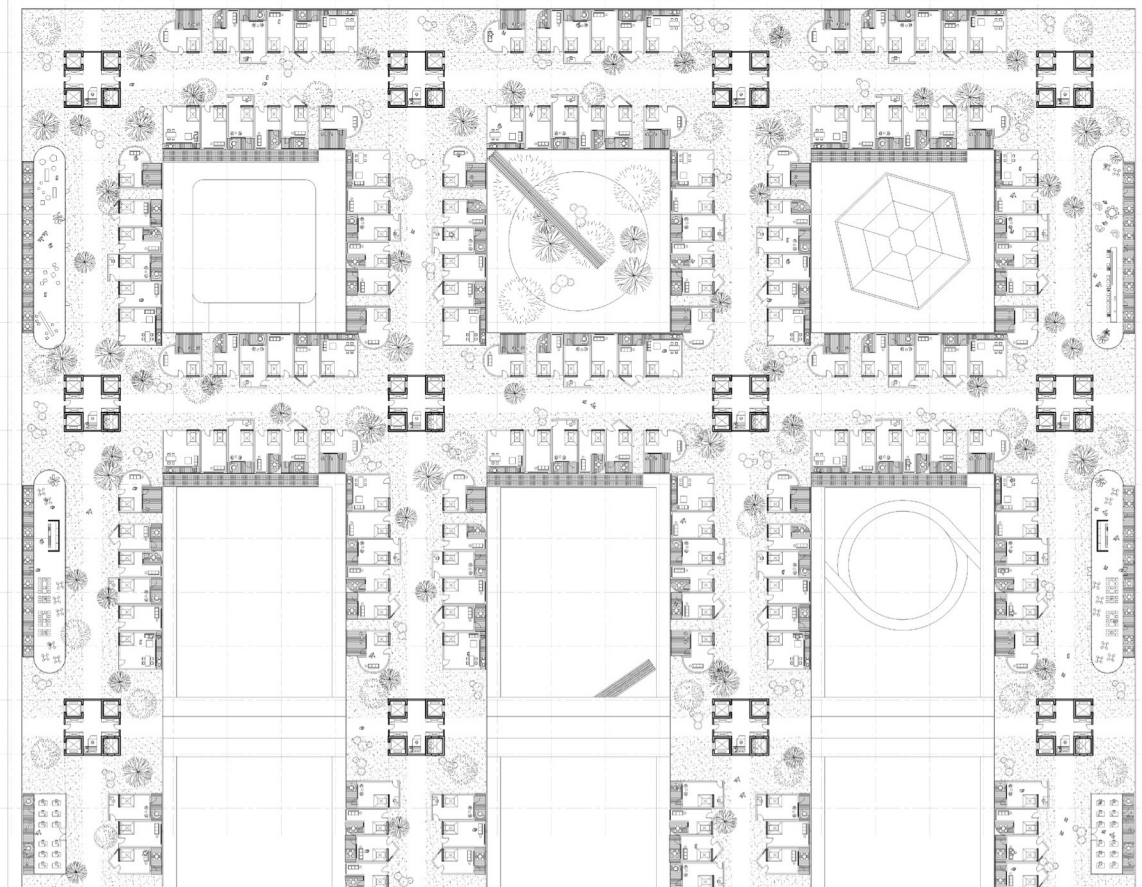


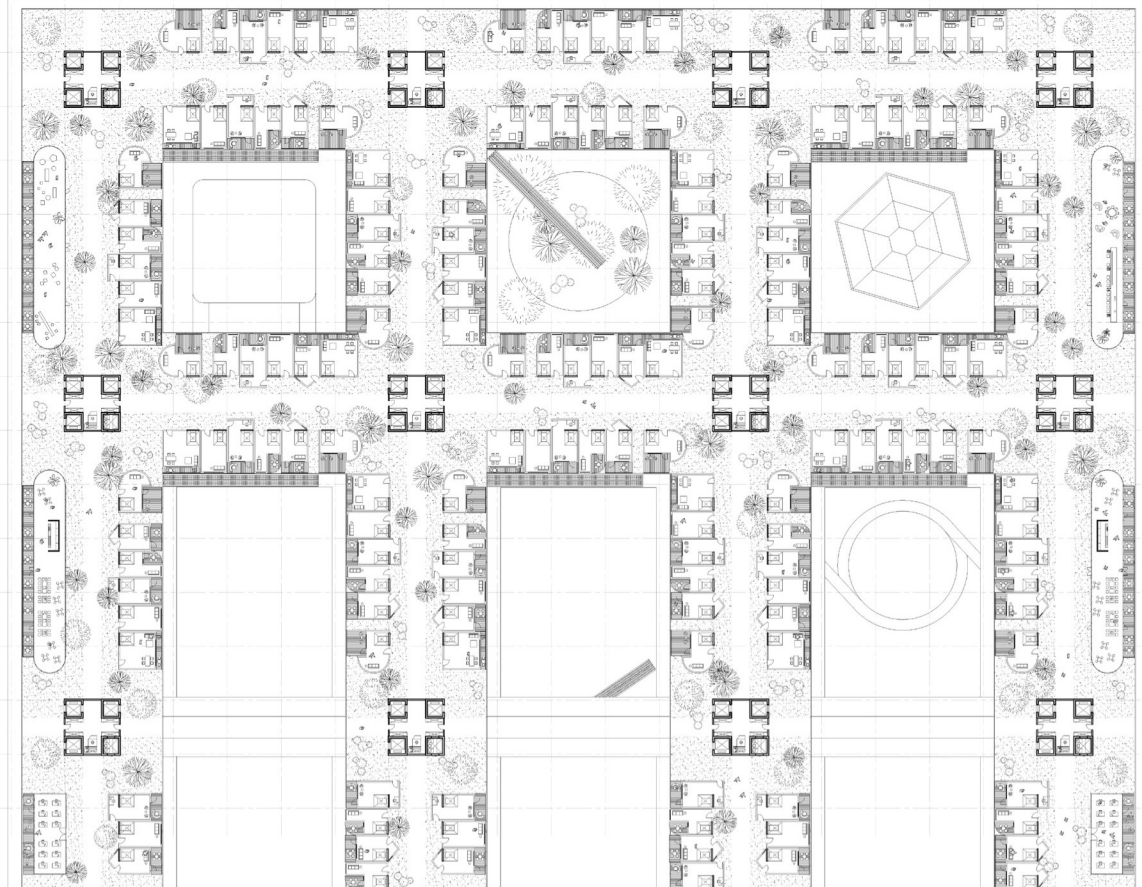






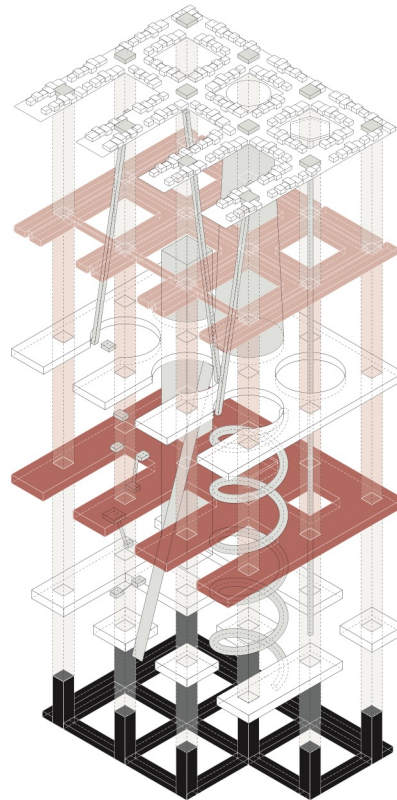




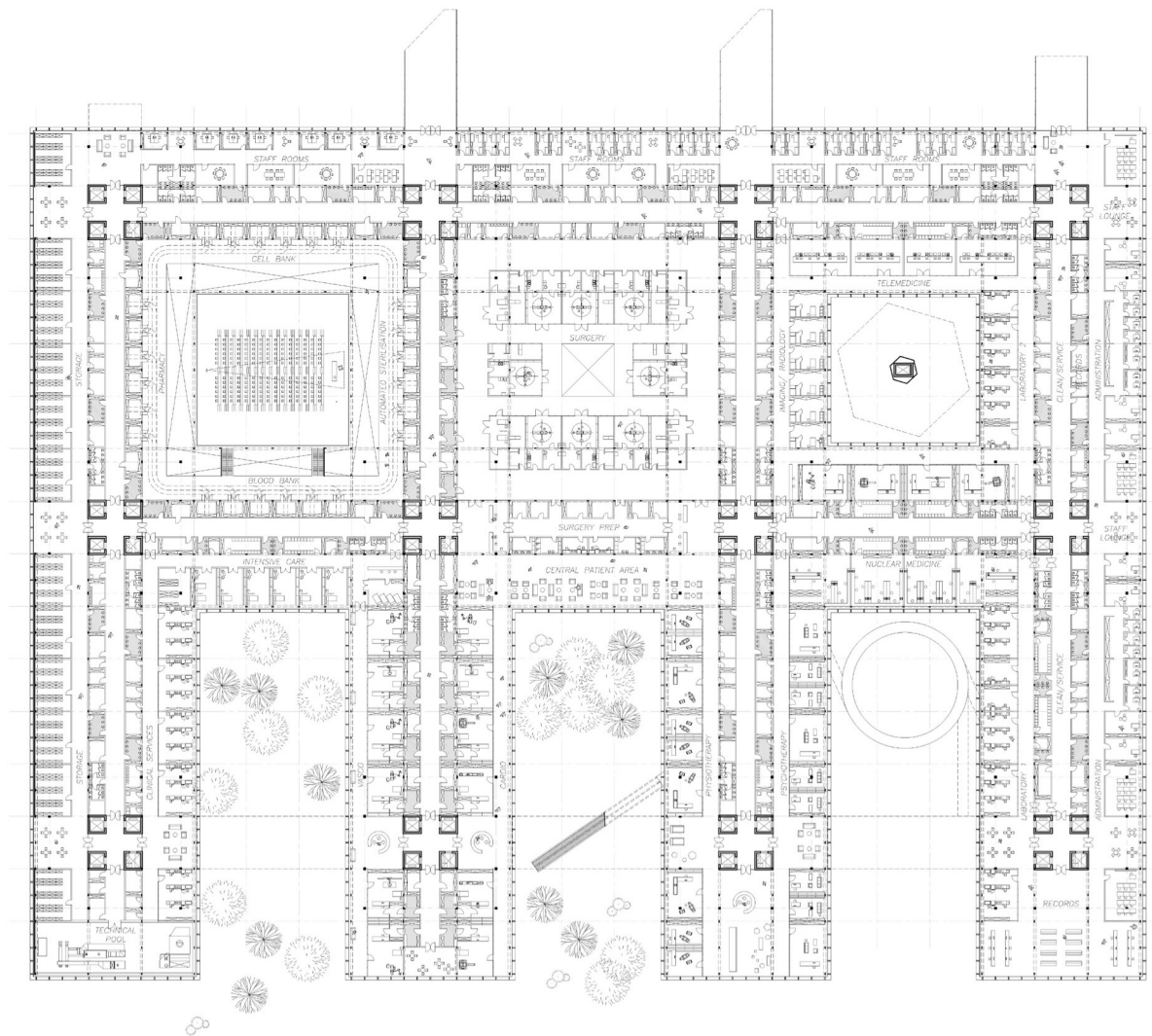




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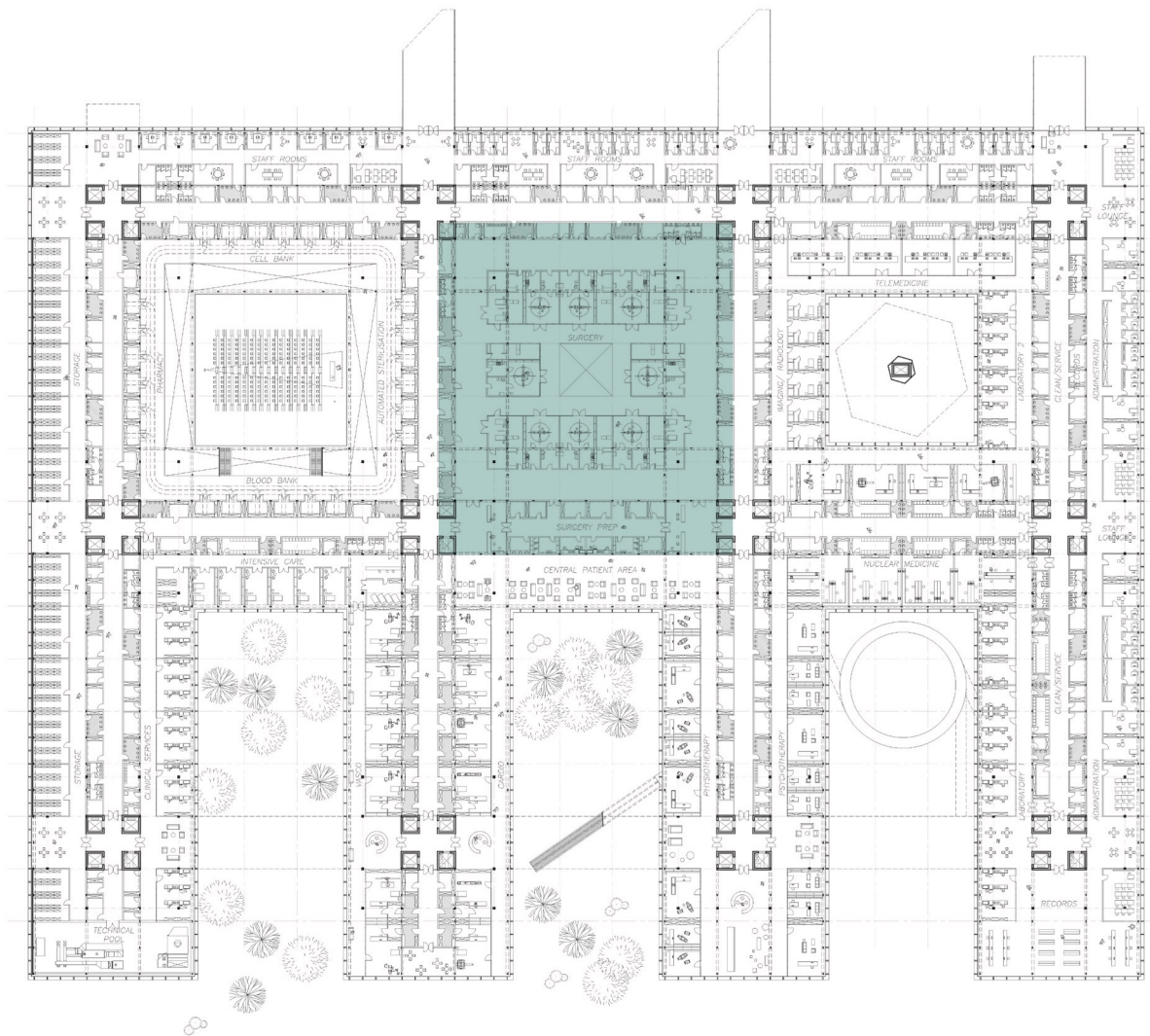
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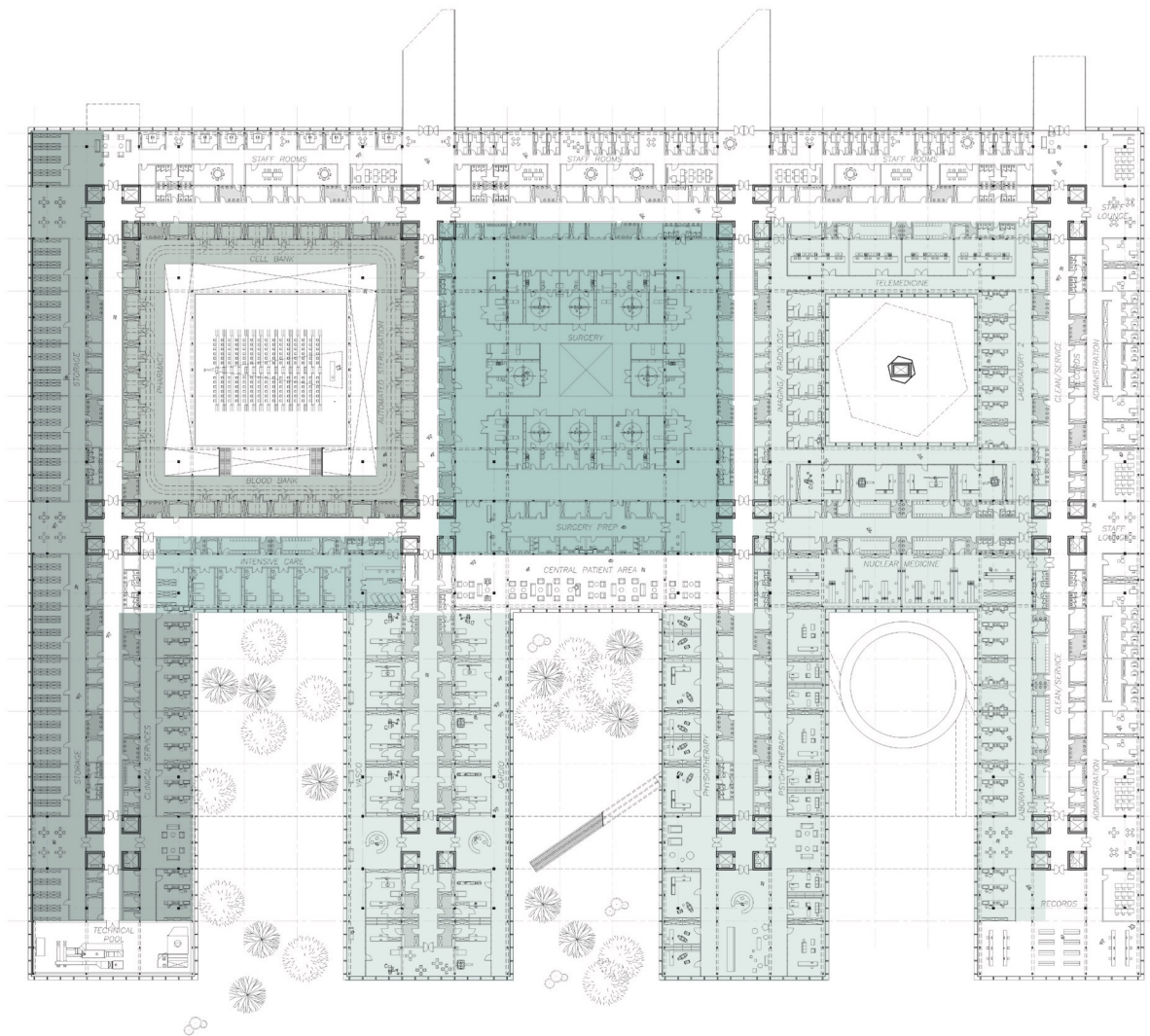


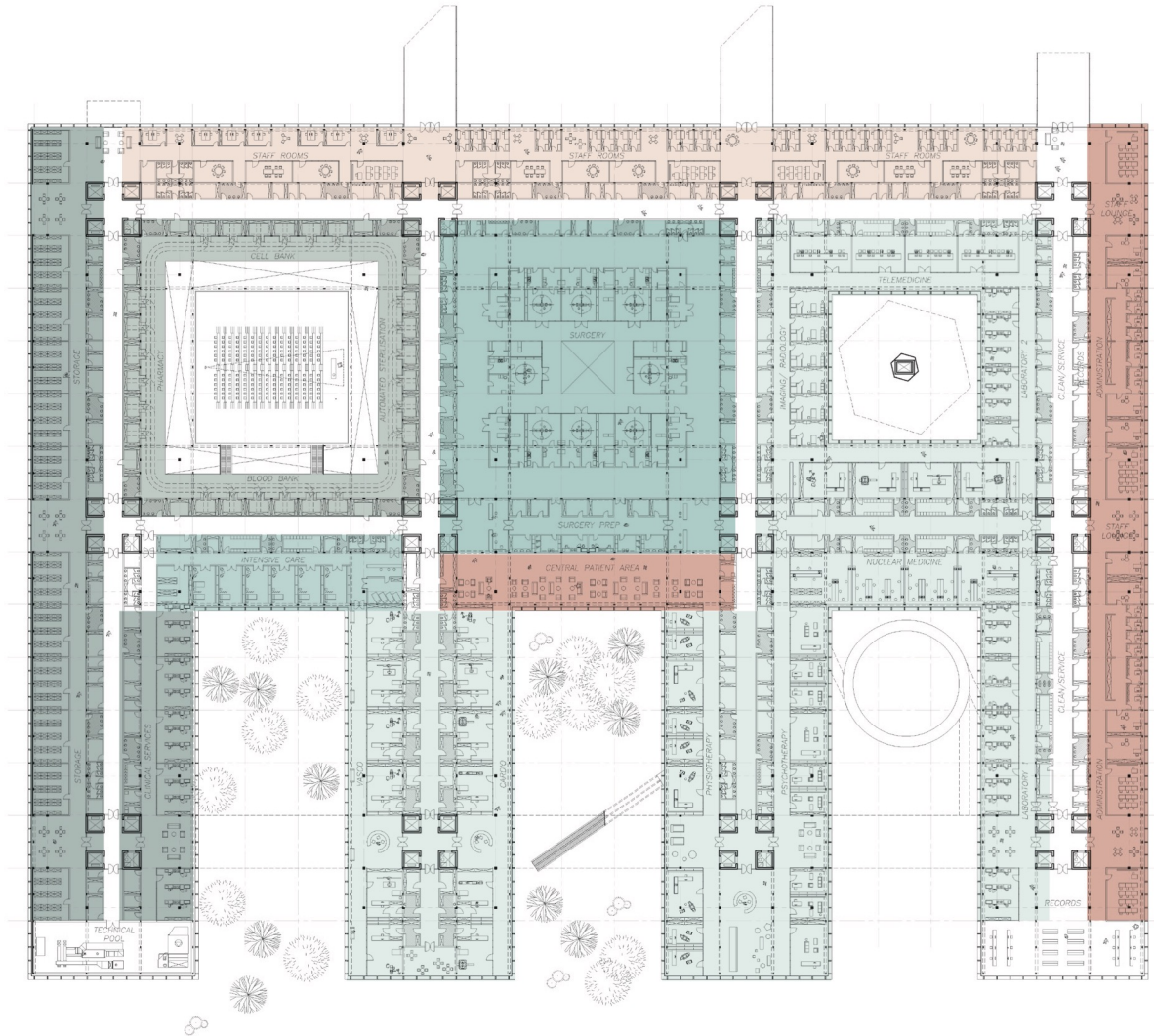




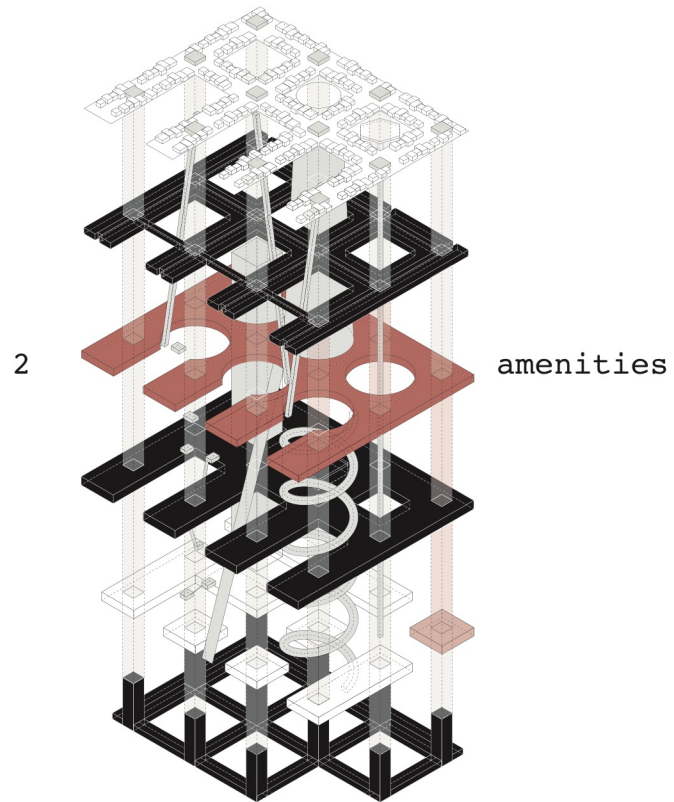


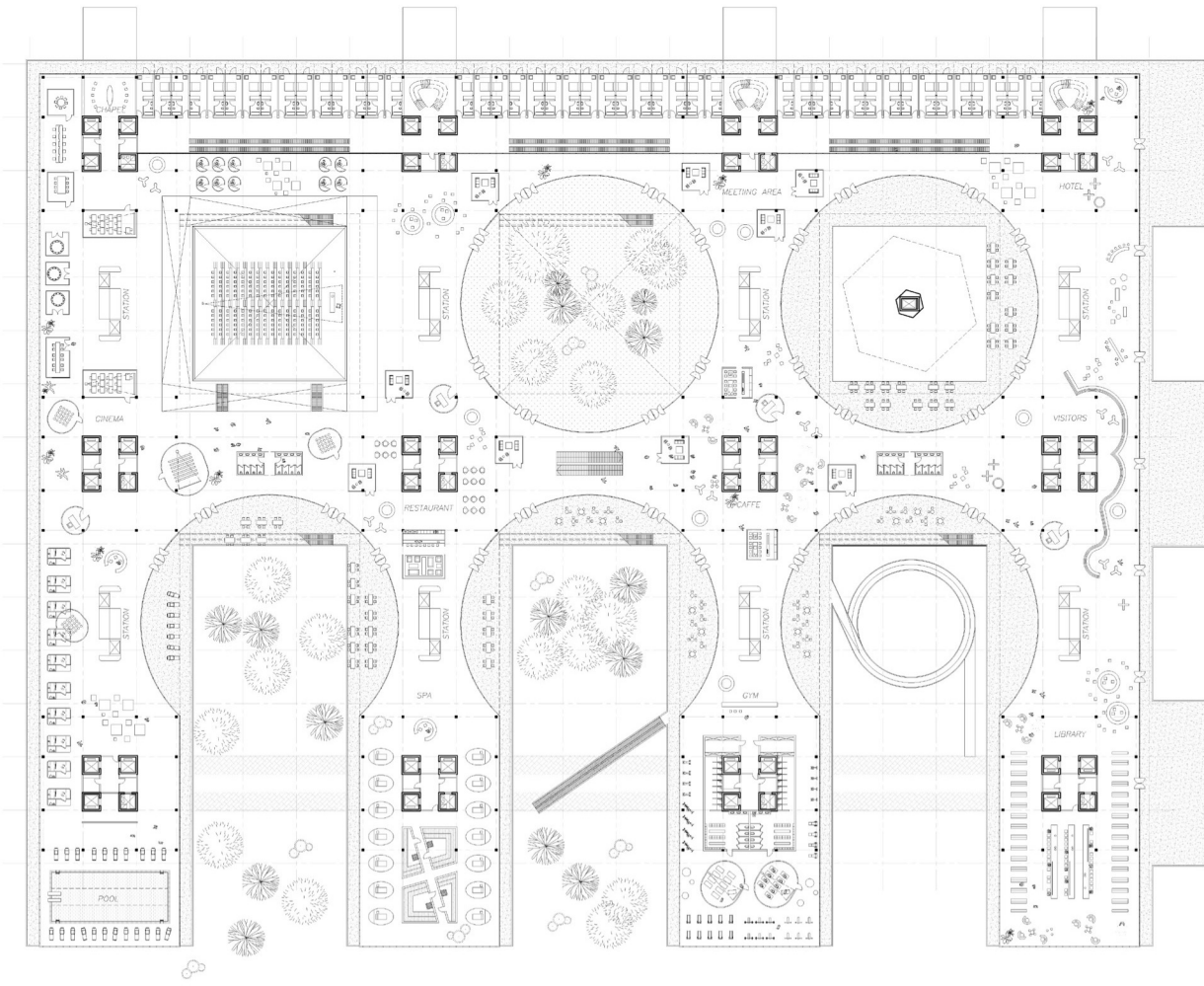




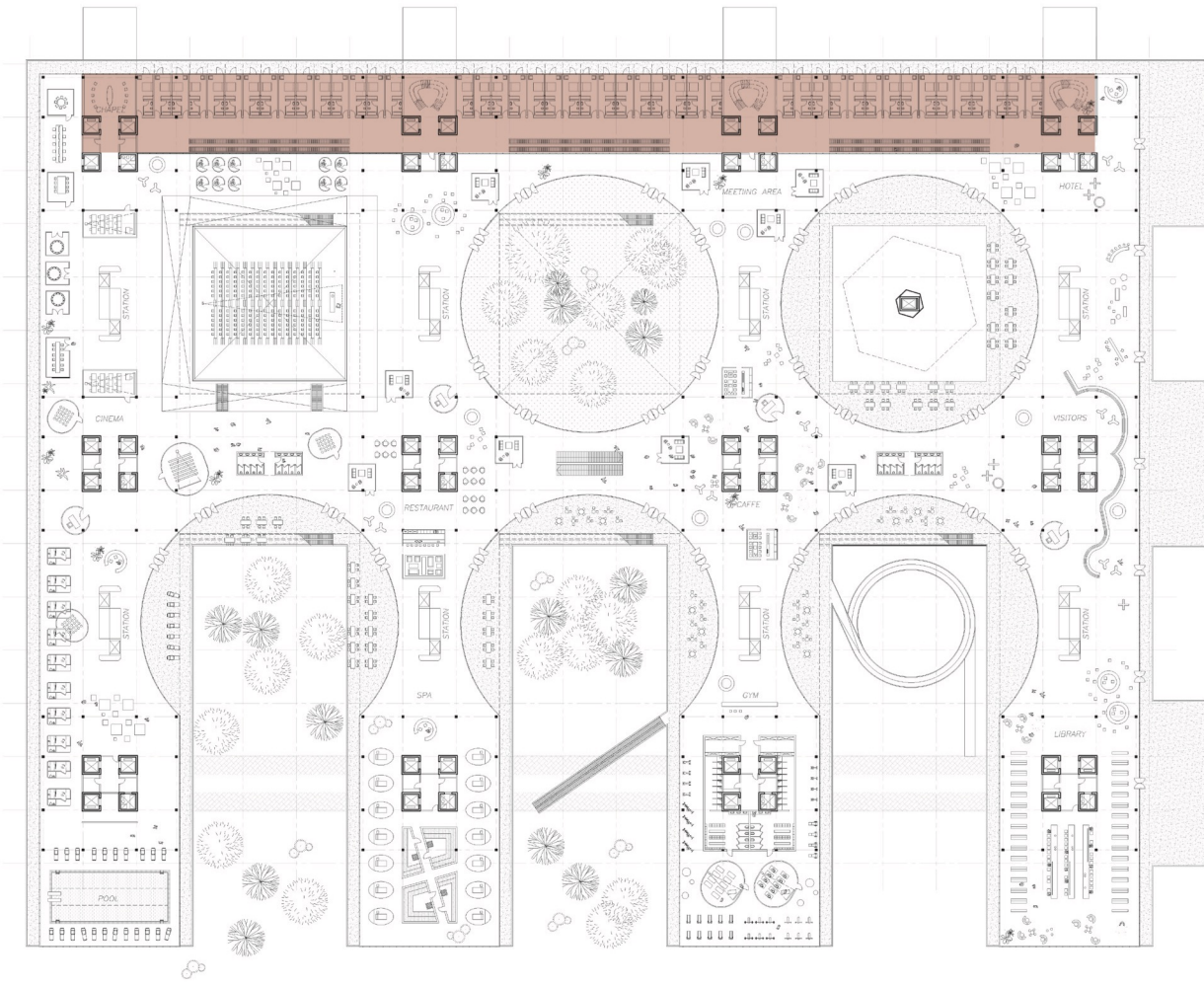


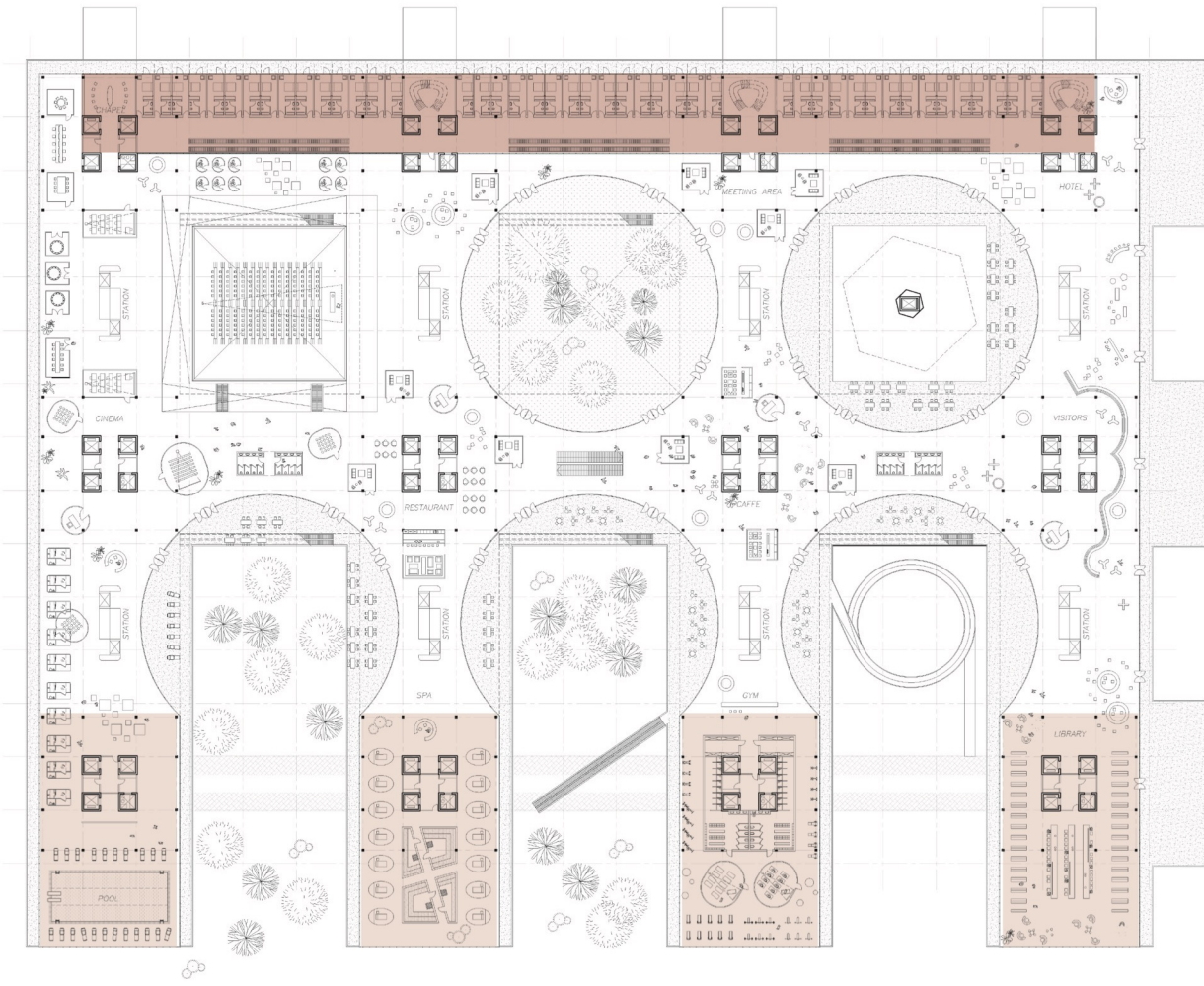




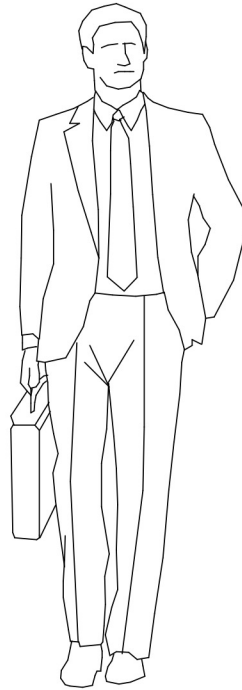


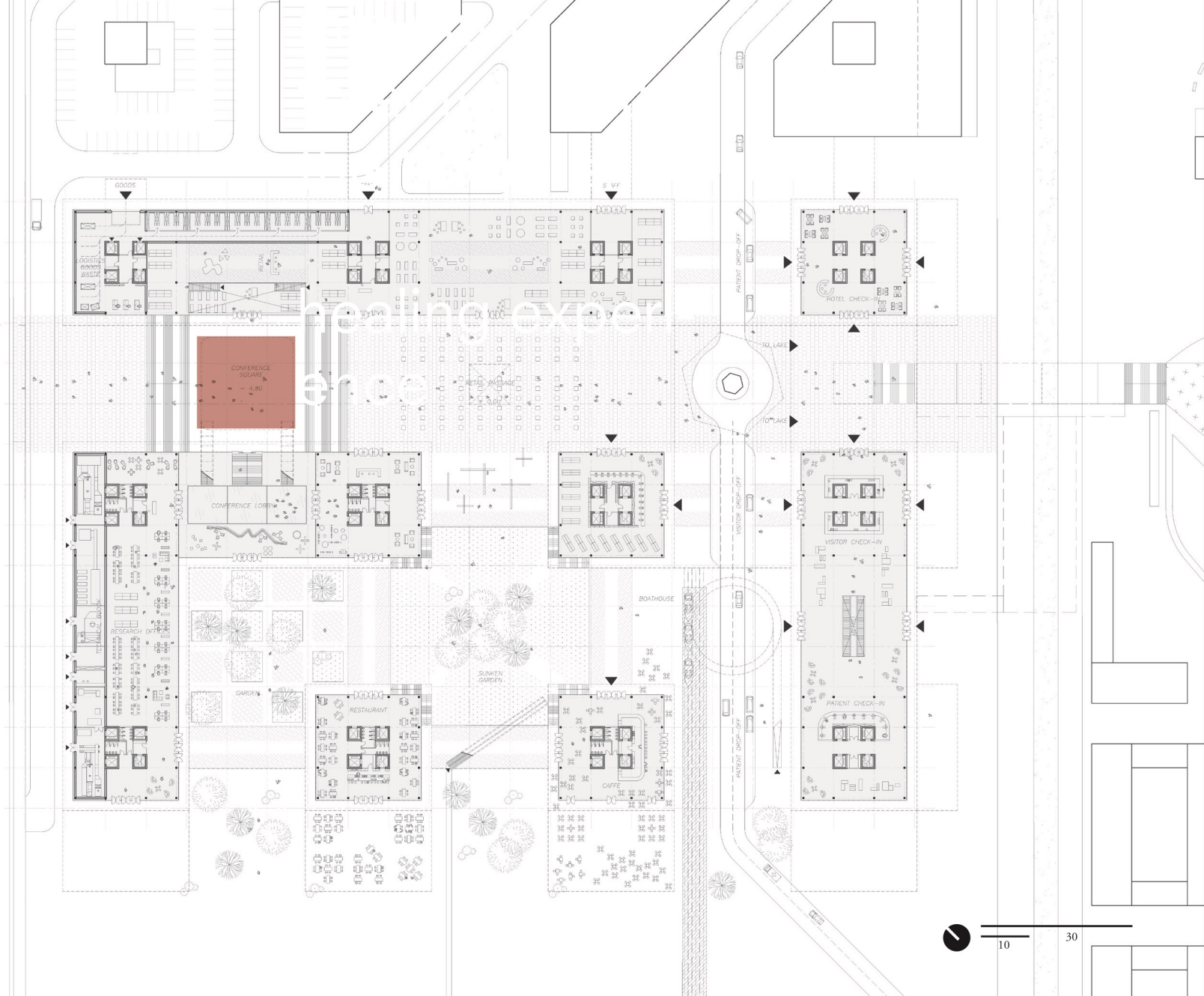






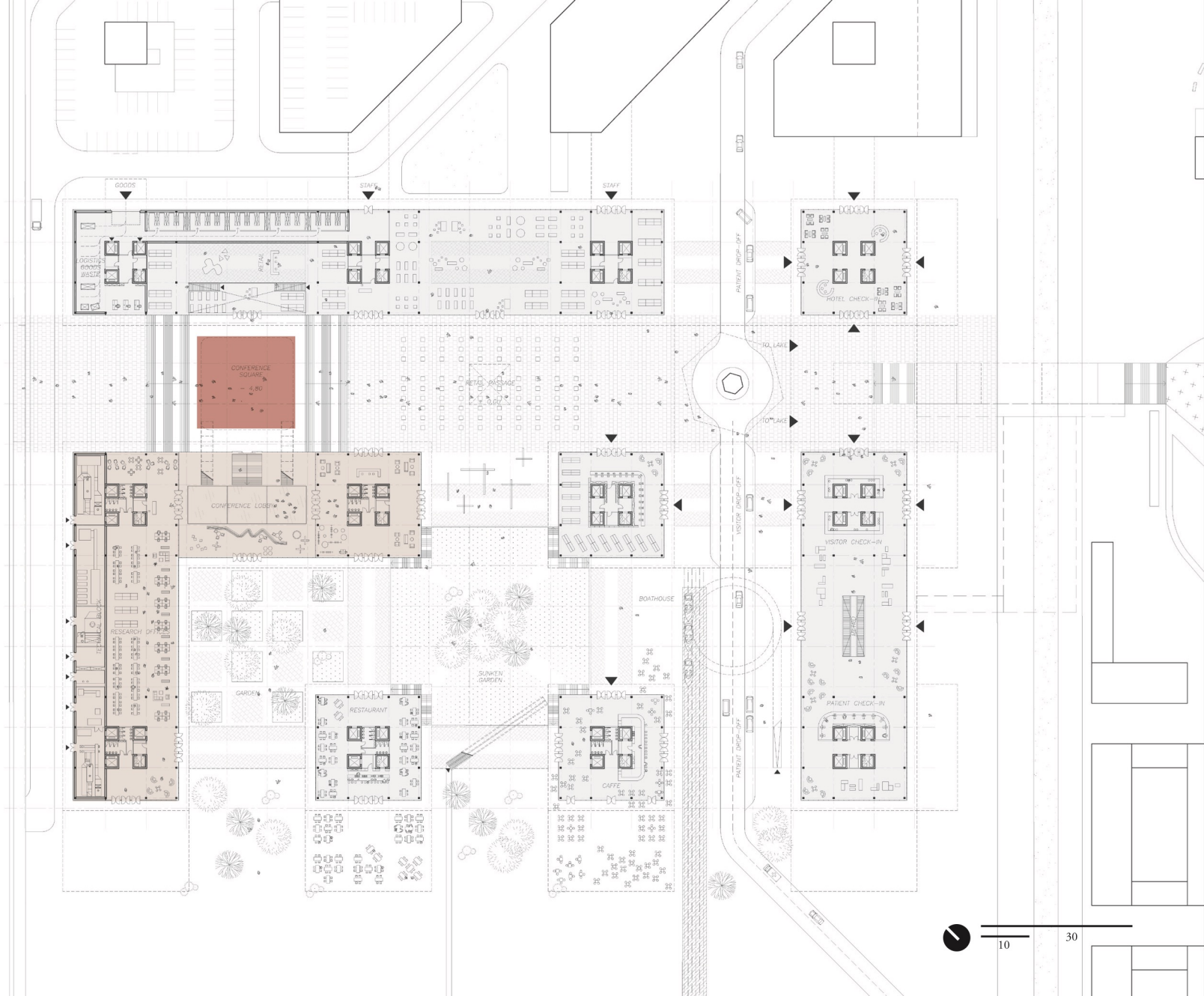






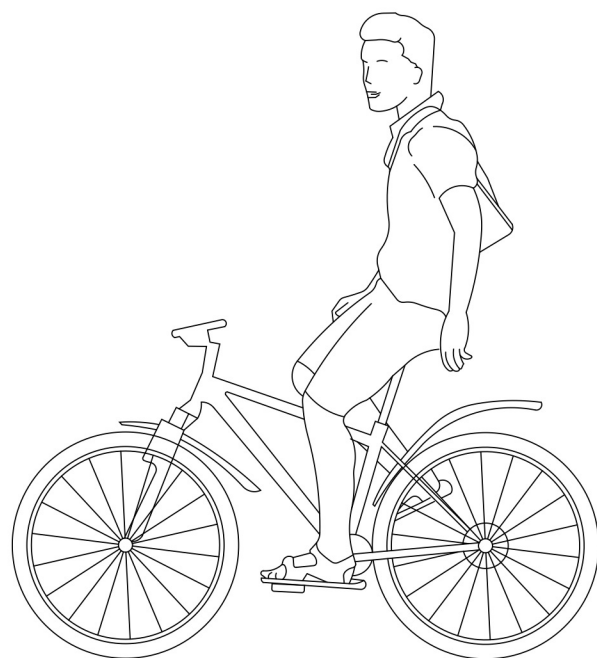
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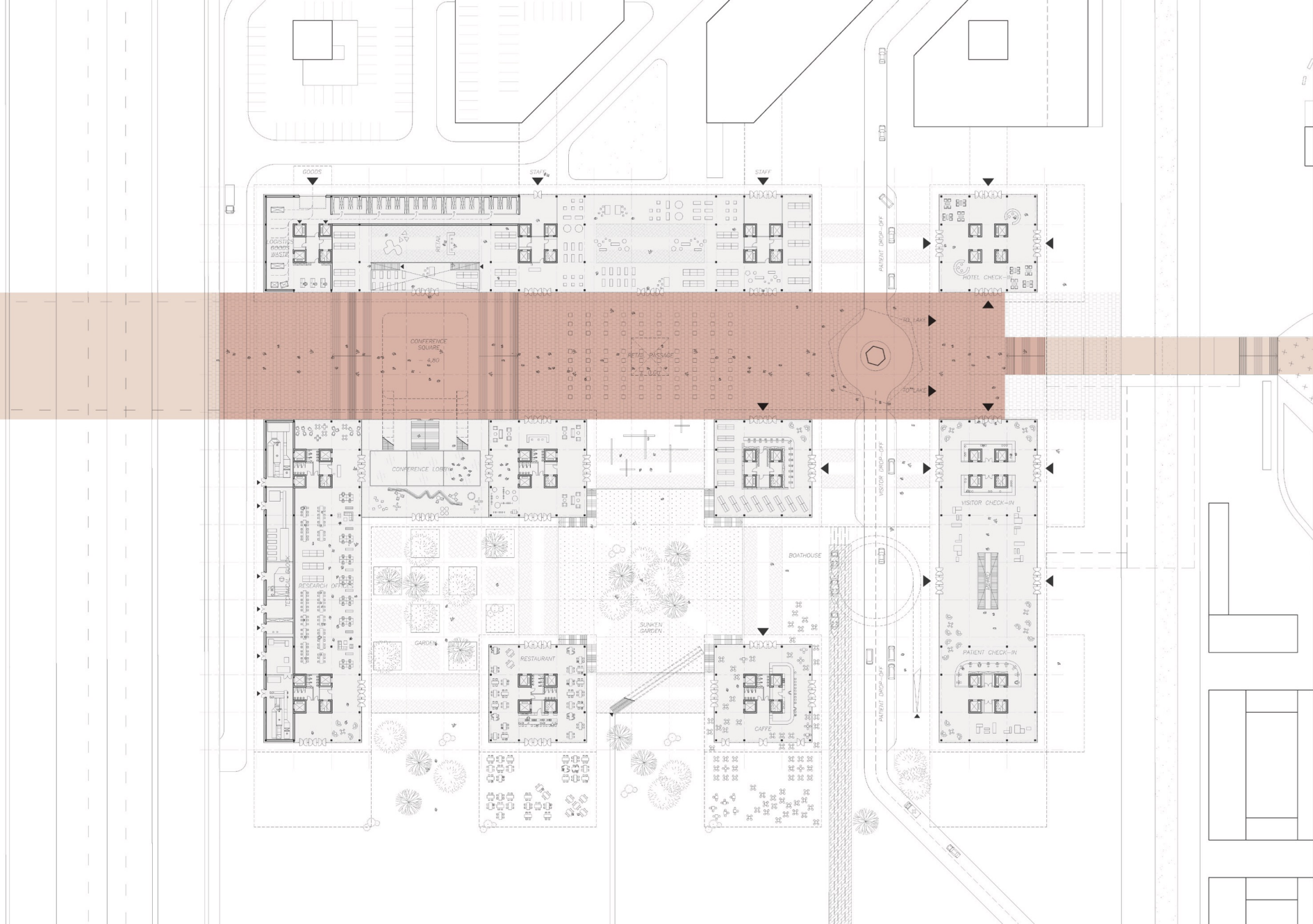


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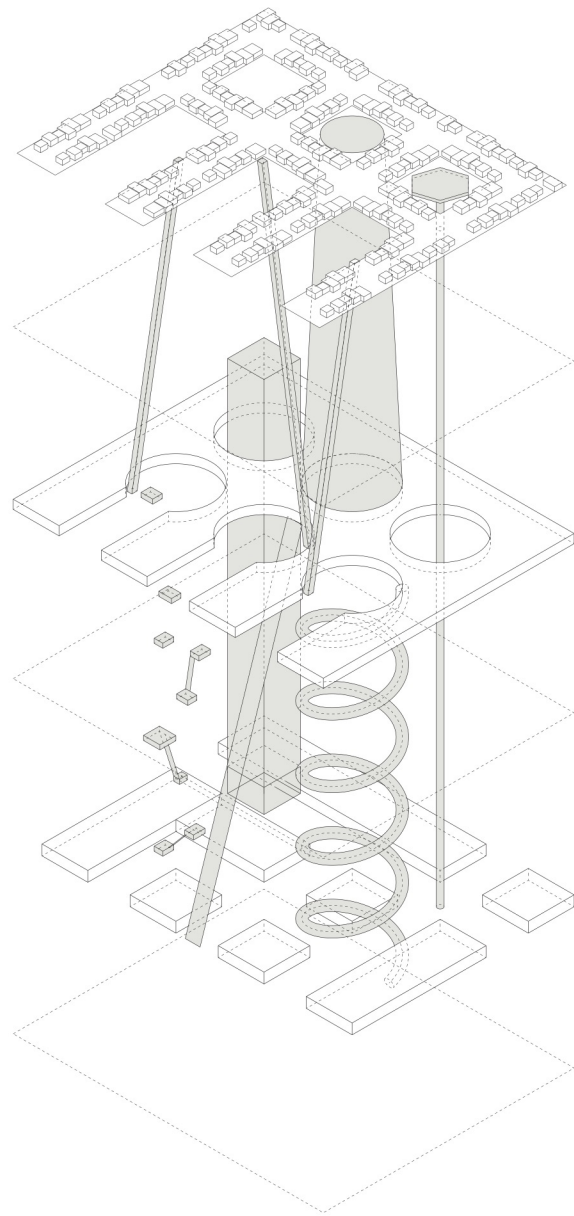
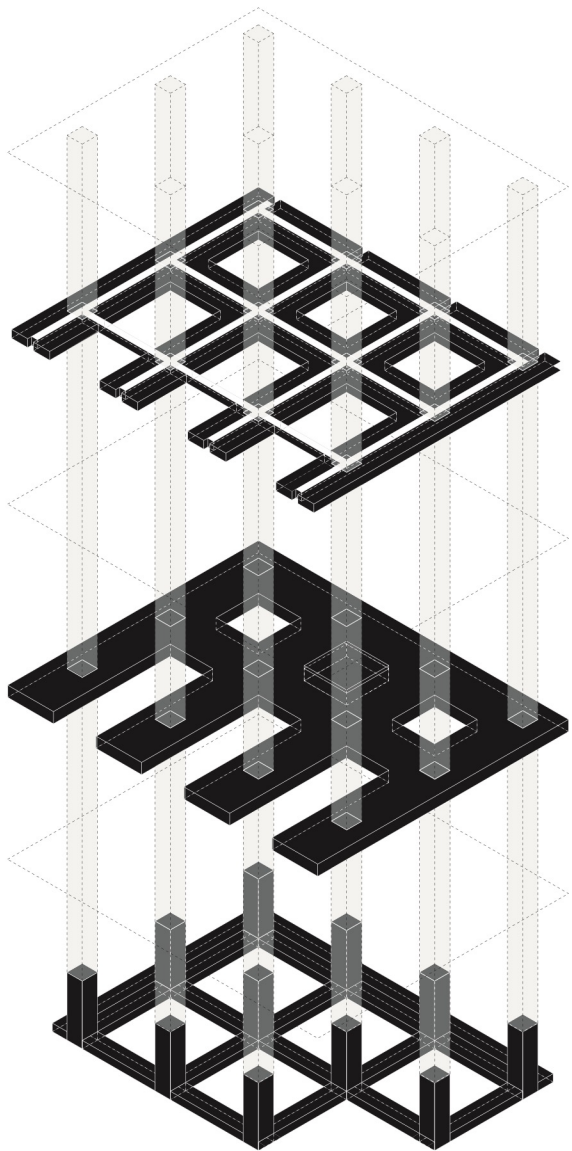
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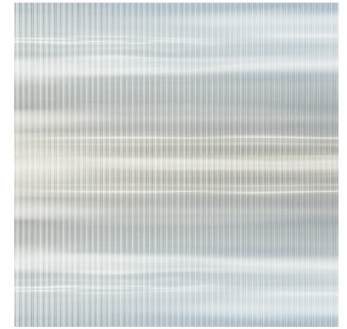
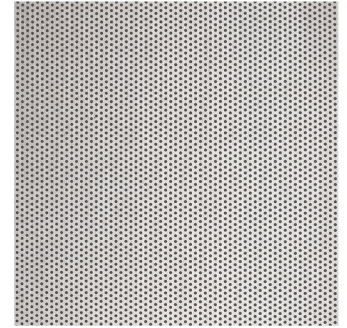


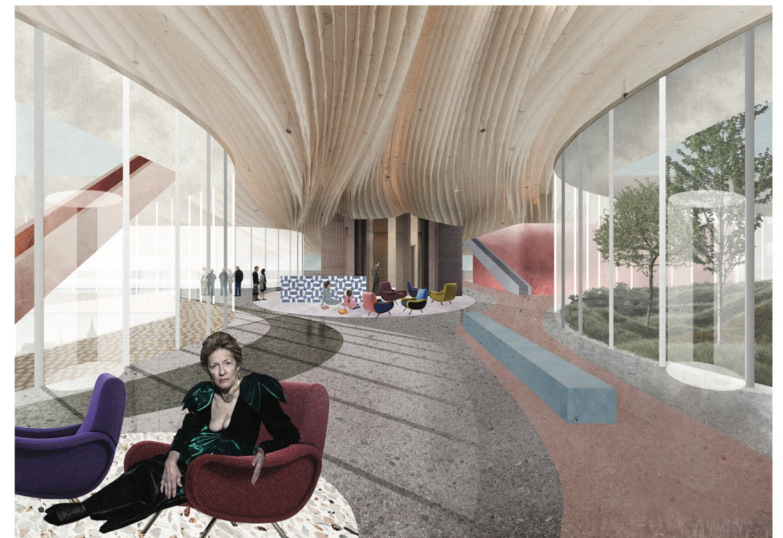


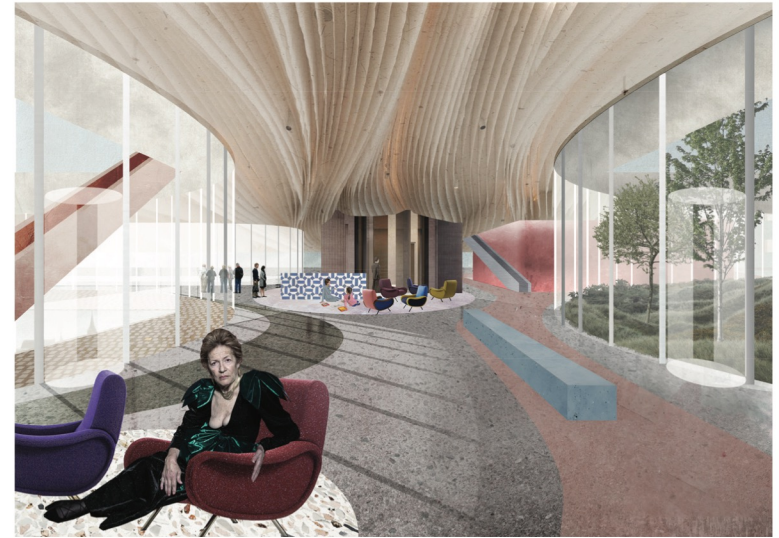
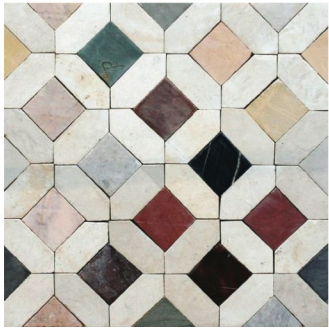




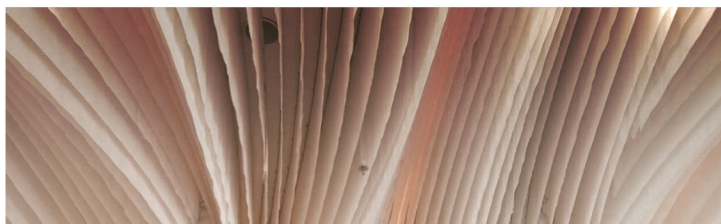


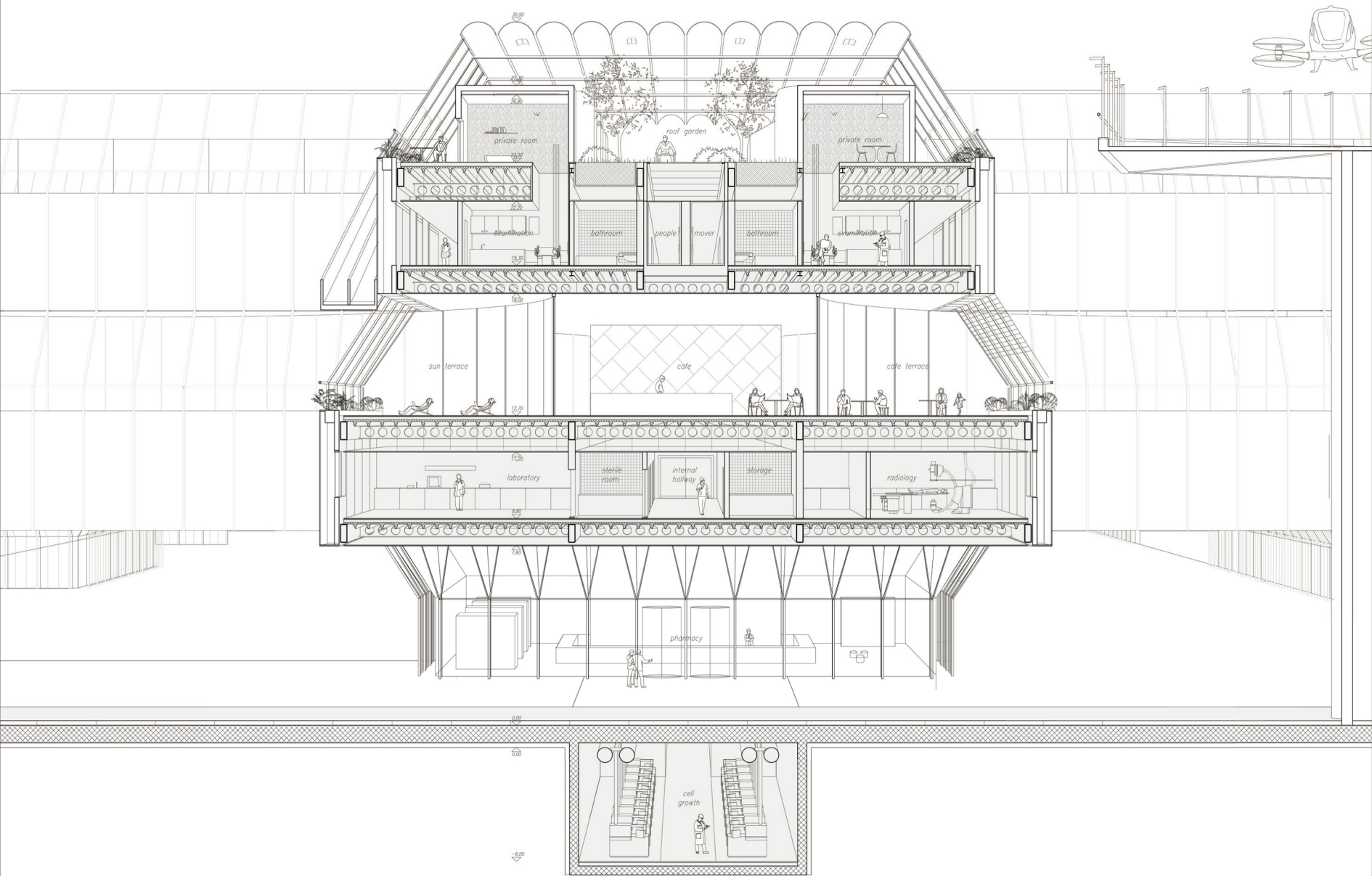


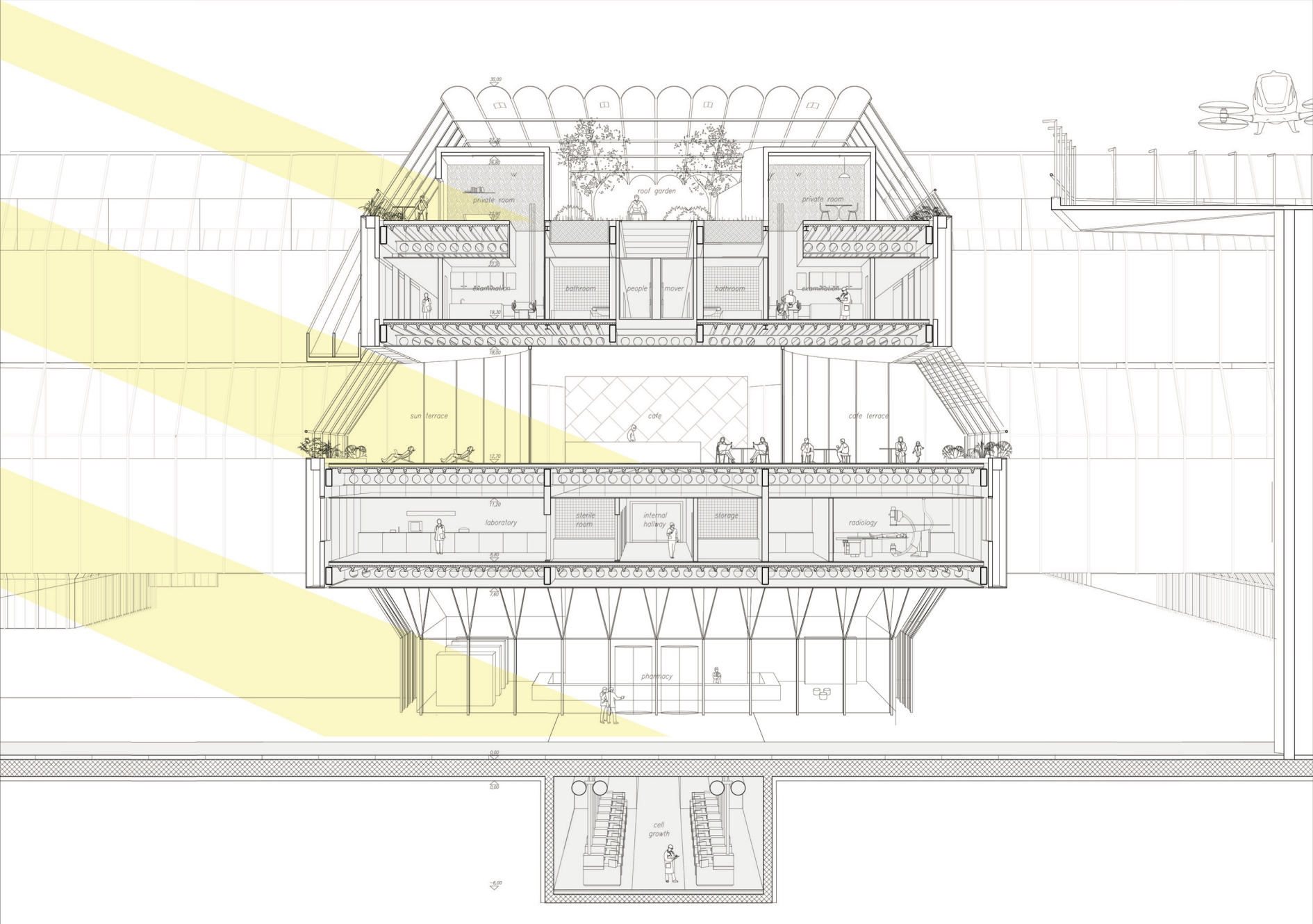


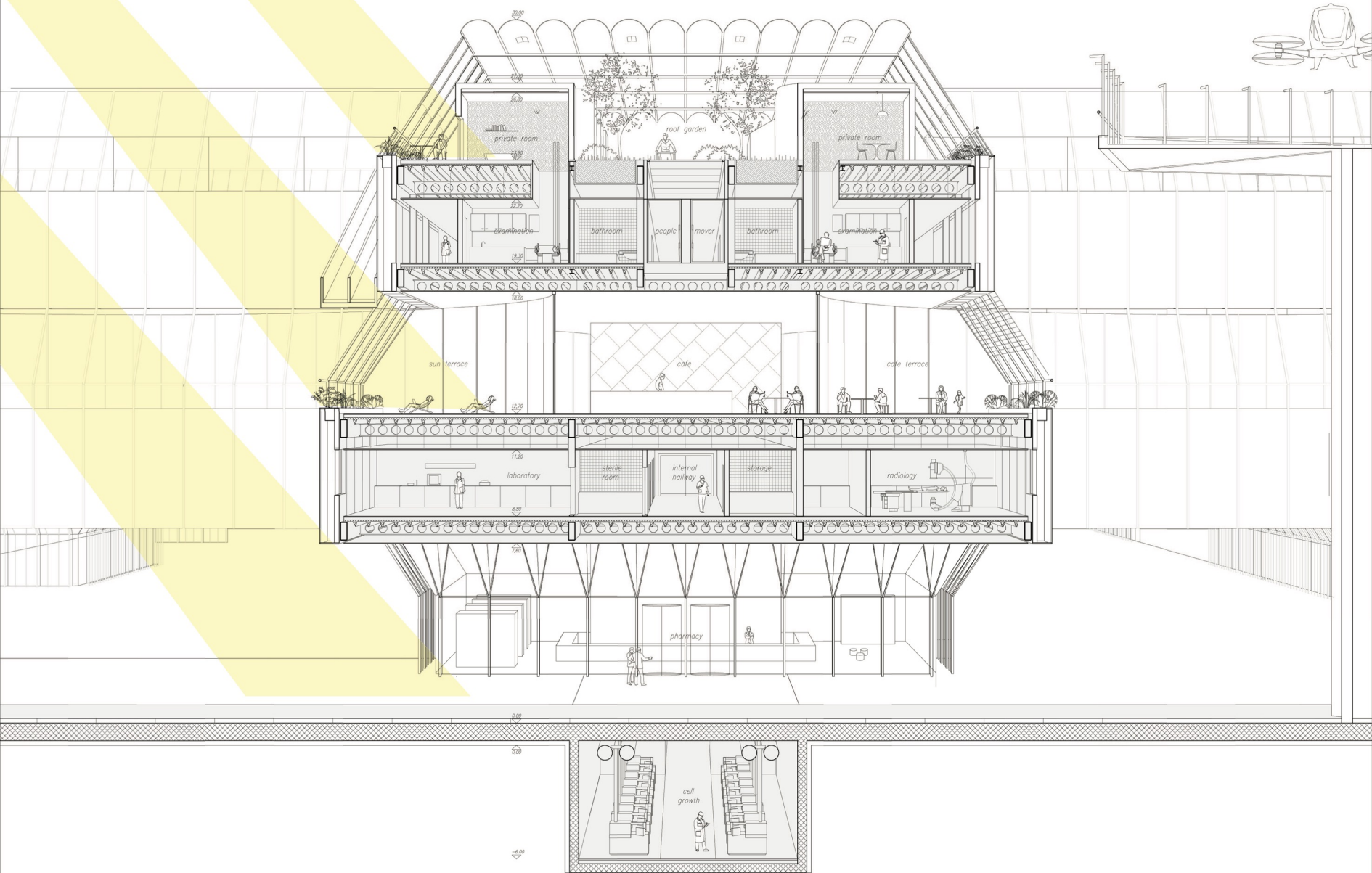


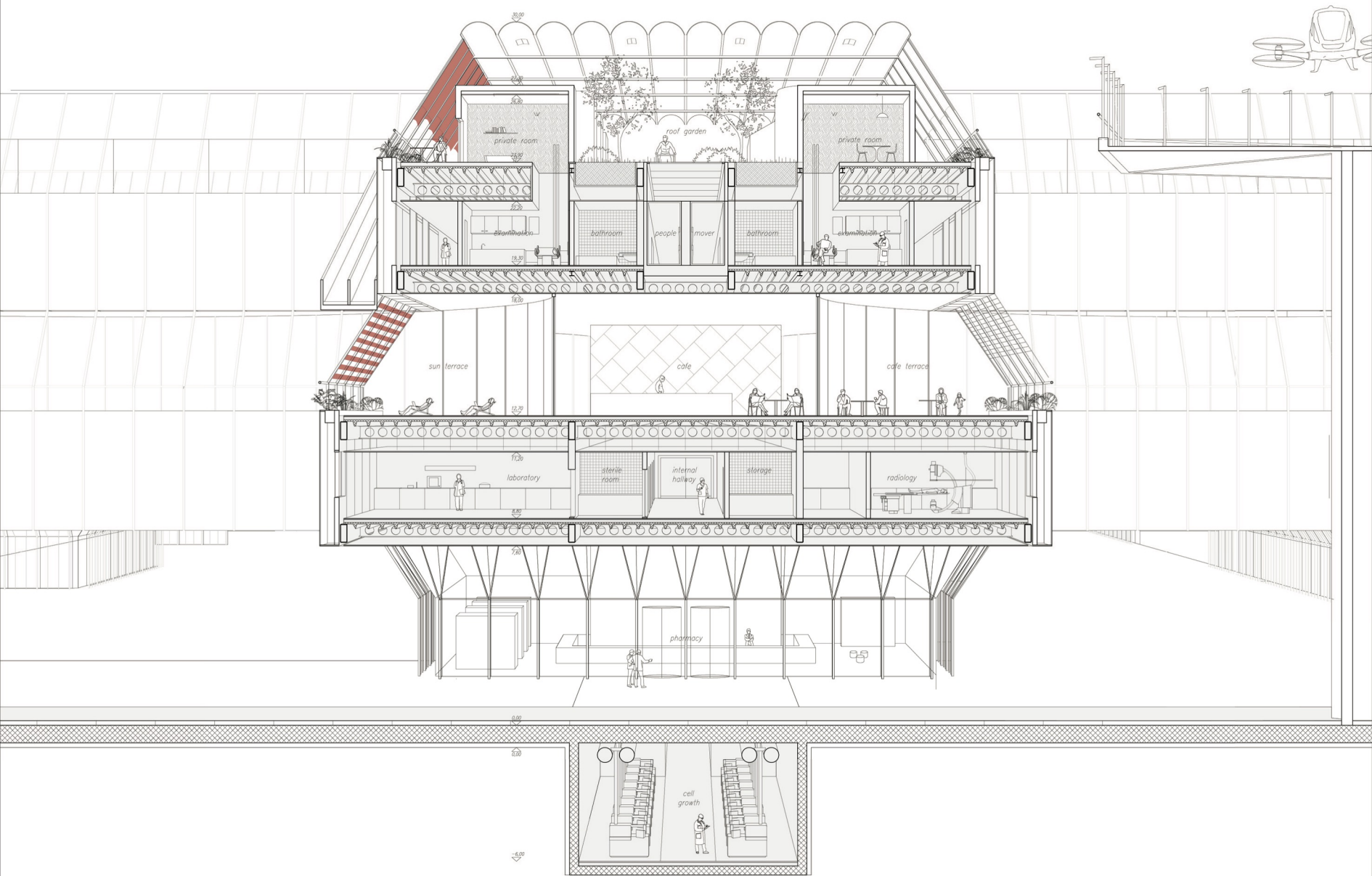


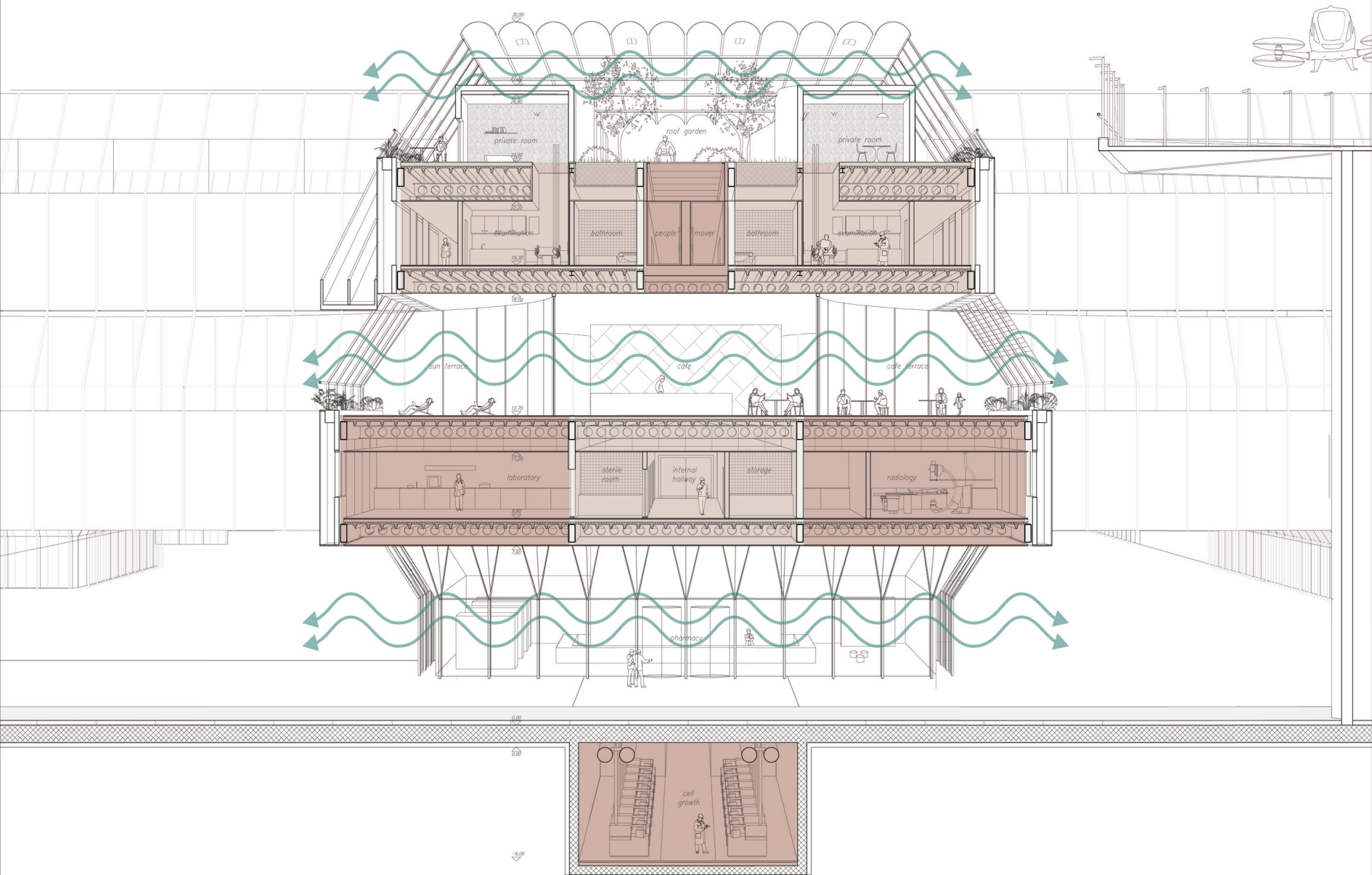


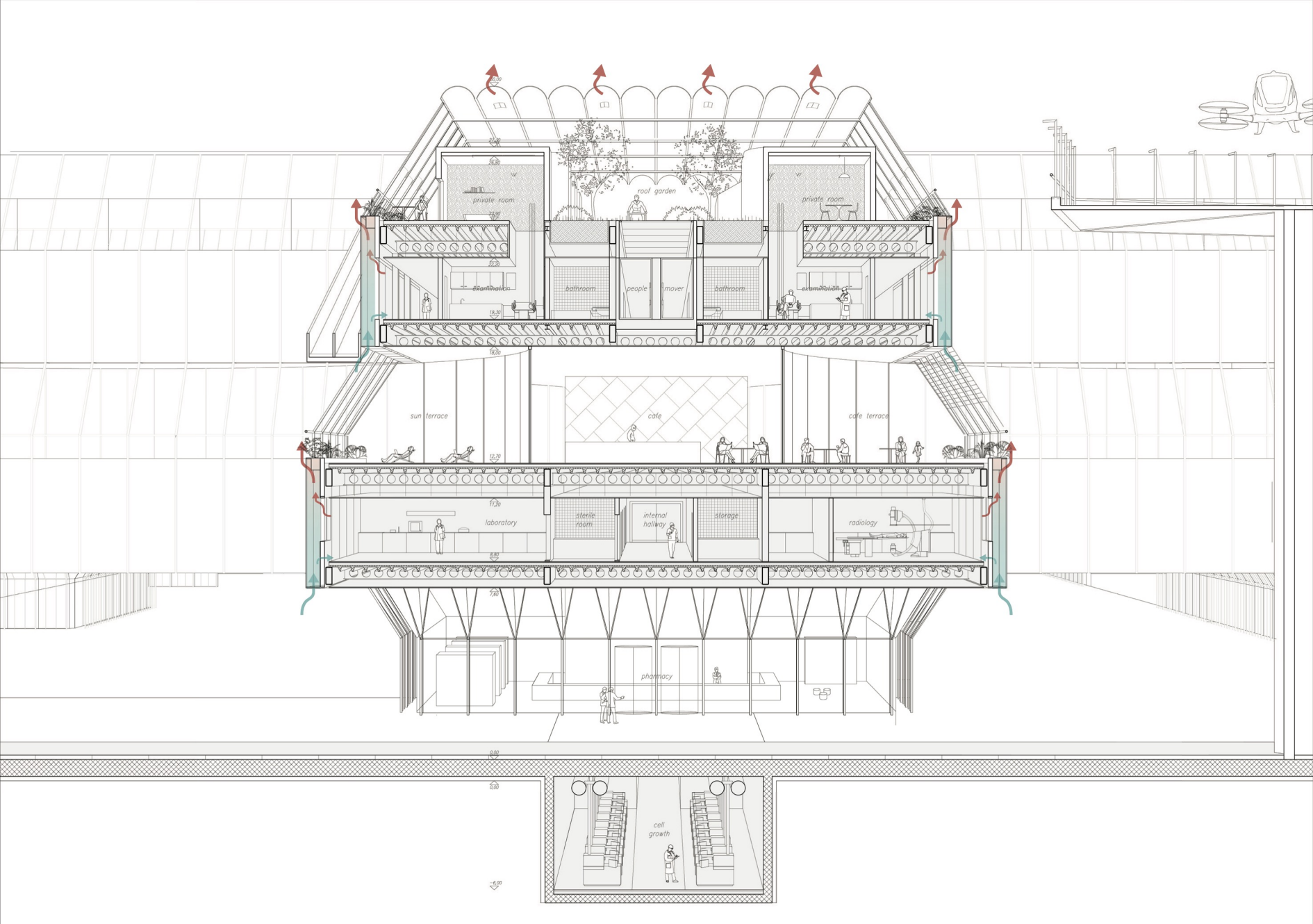


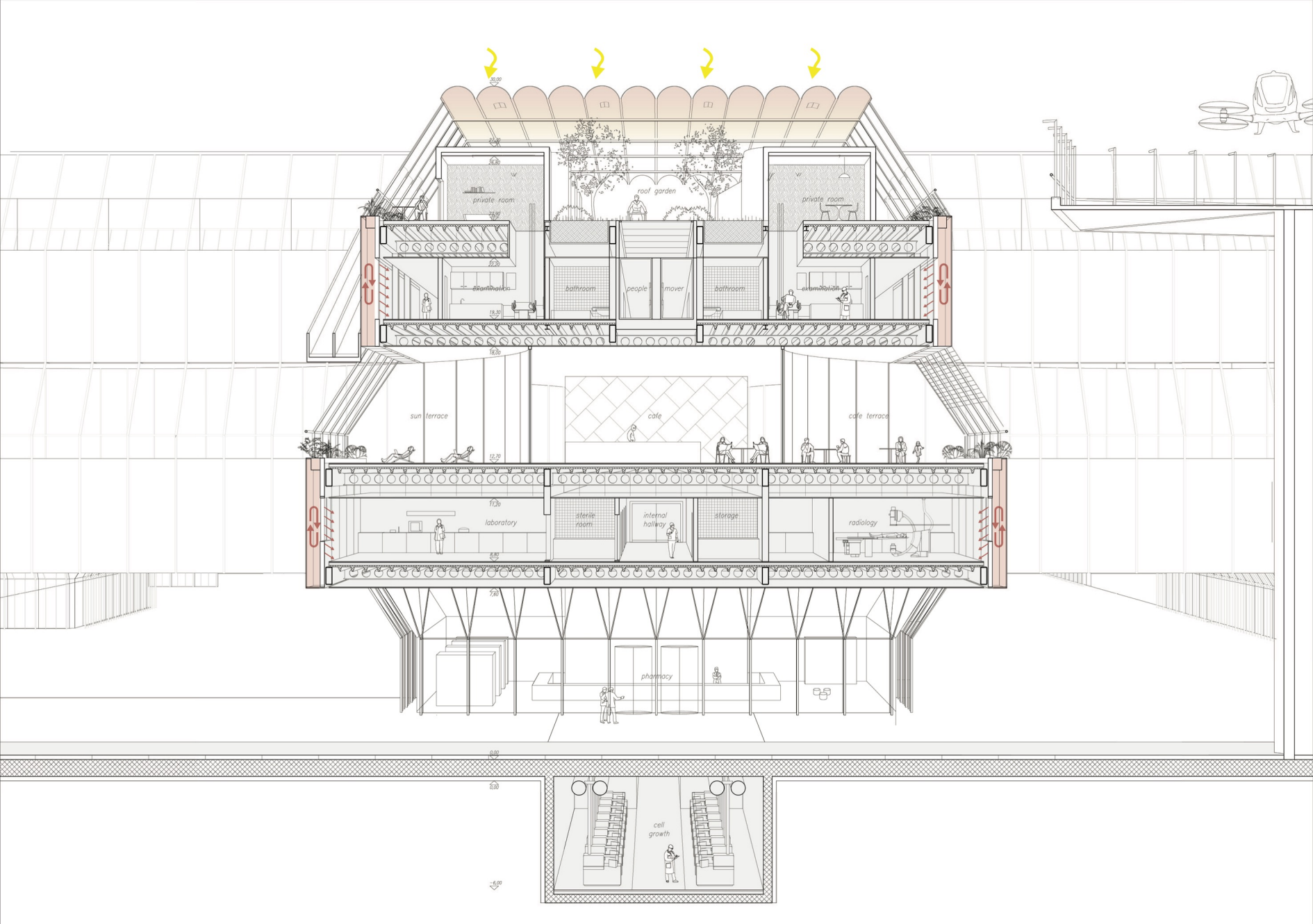


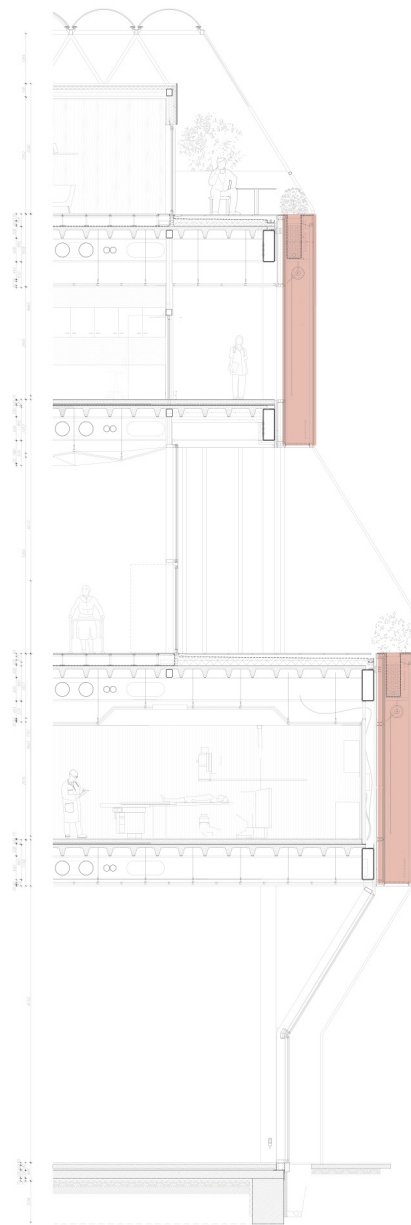


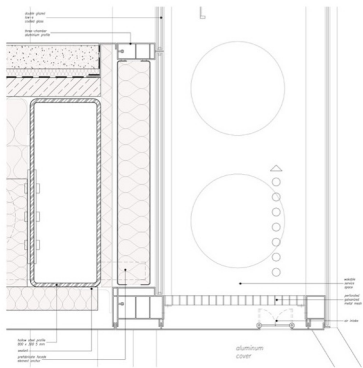


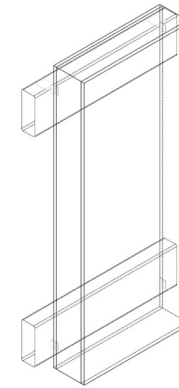
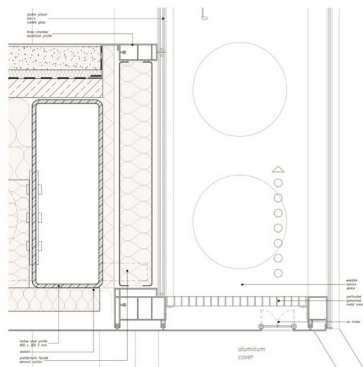
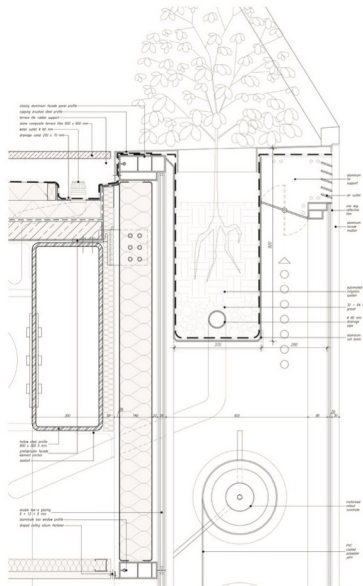
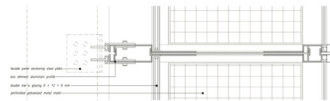




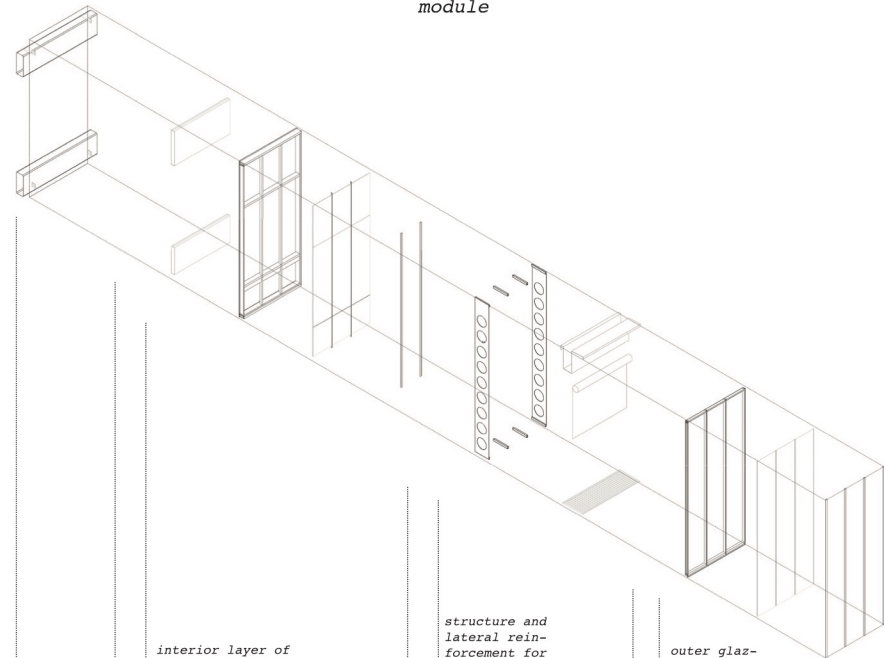








*box-window facade
module*

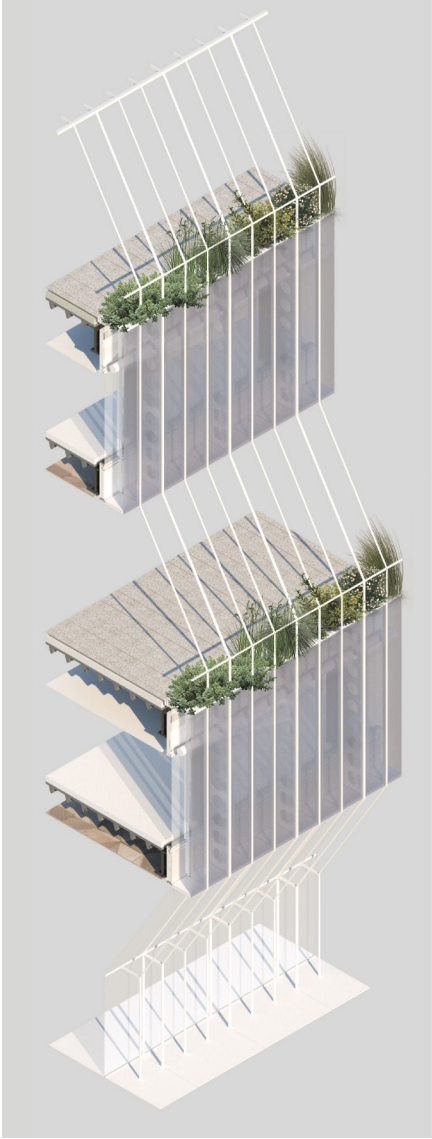


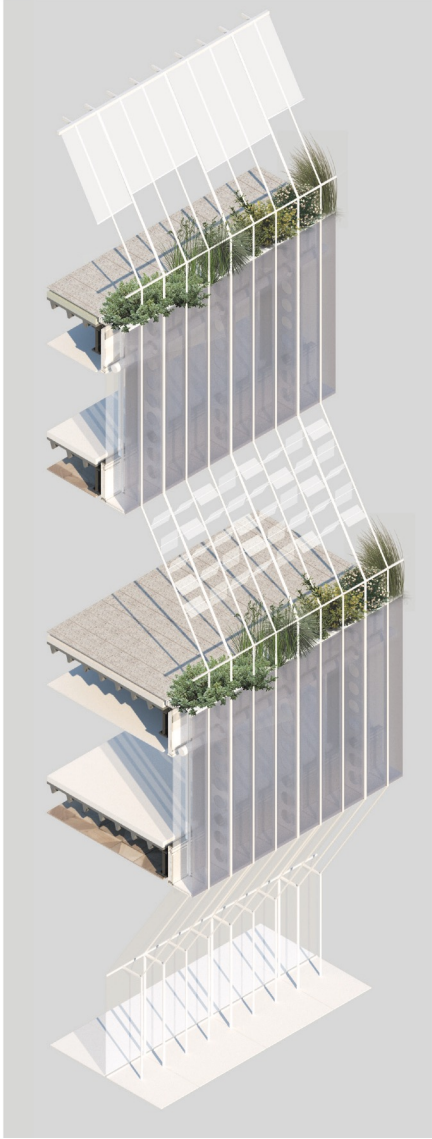
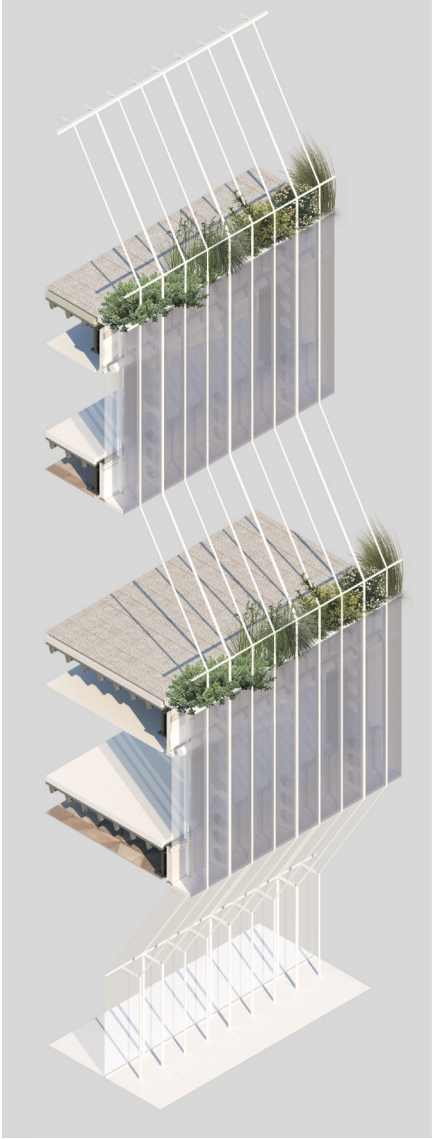
fastening

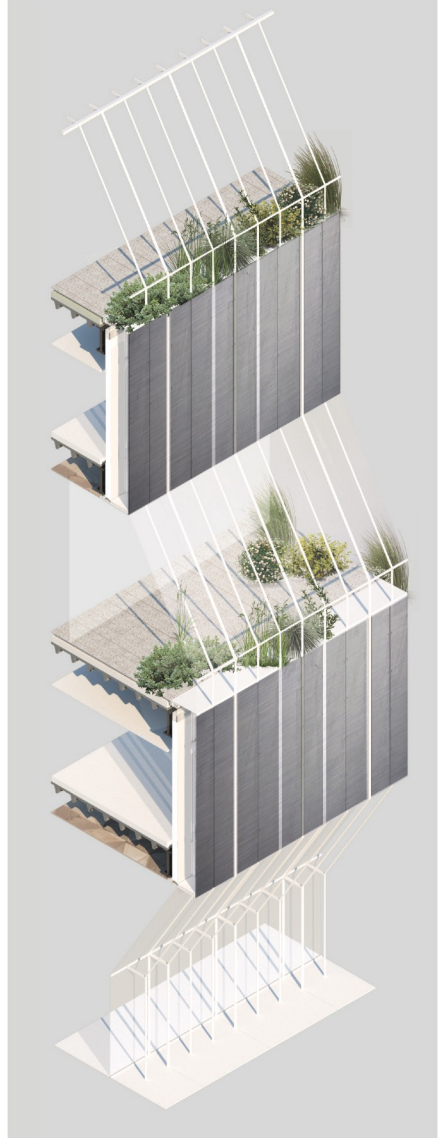
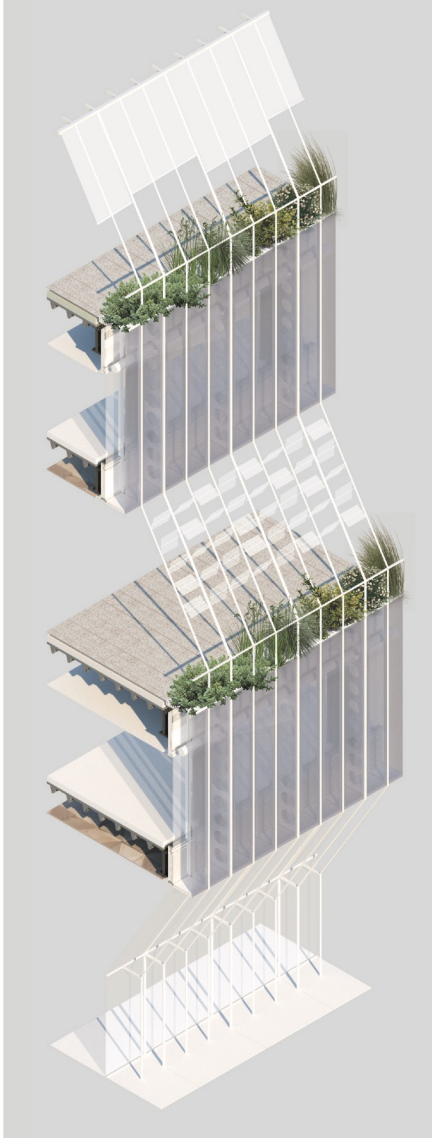
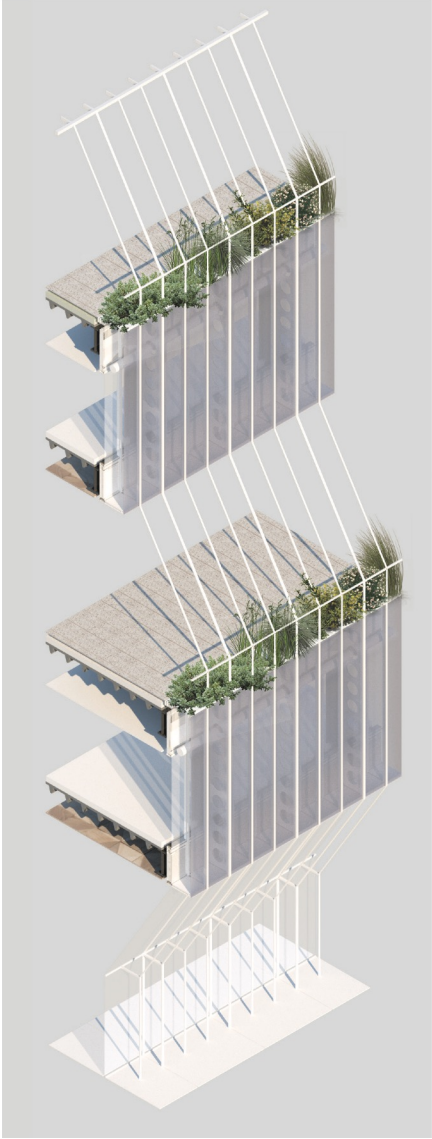
interior layer of
aluminum profiles
with
double glazing and
insulation infill

structure and
lateral rein-
forcement for
the outer layer
with sun shad-
ing and soil
basin

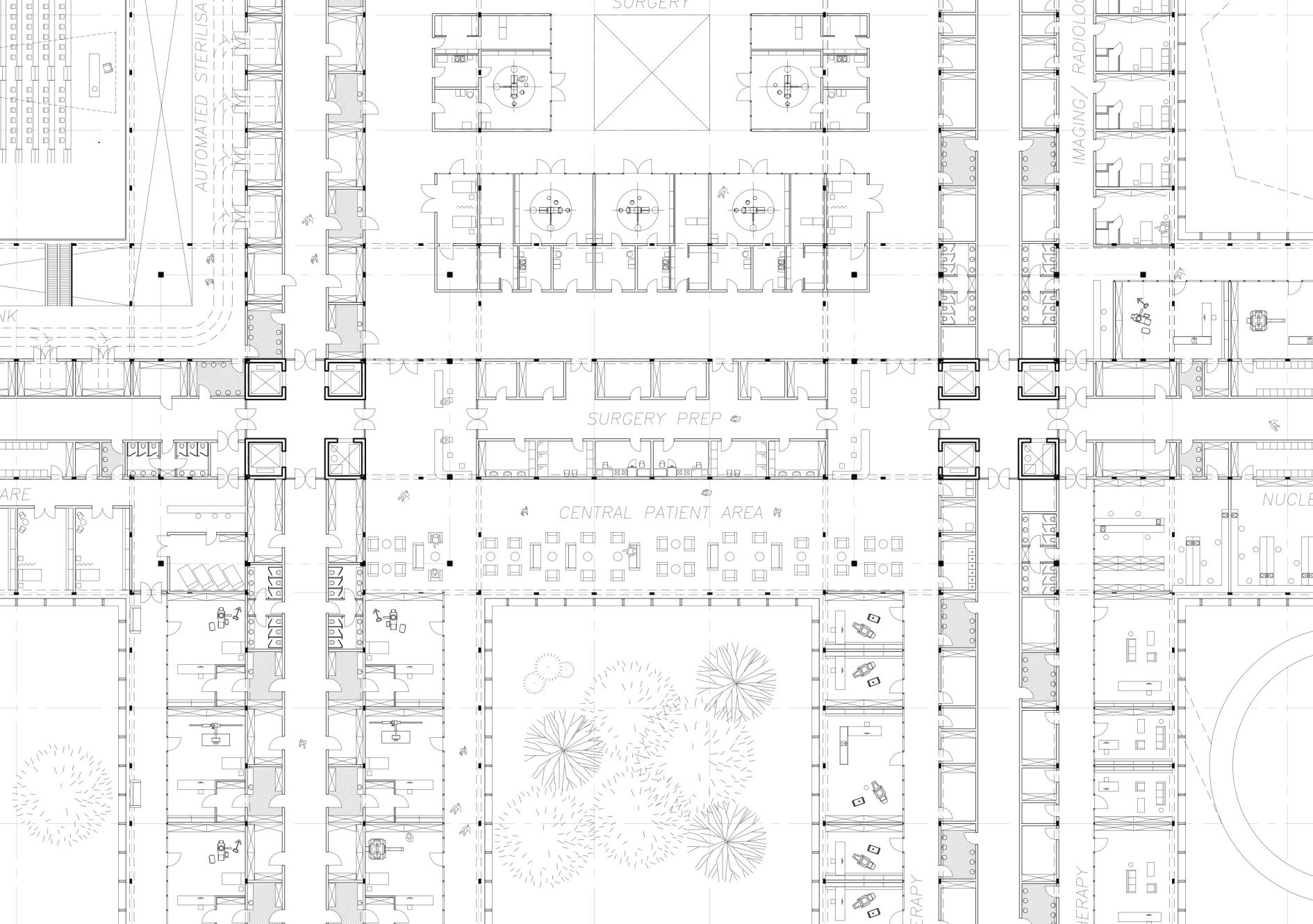
outer glaz-
ing with a
reflective
film, without
transom







modularity &
adaptability



AUTOMATED STERILISATION

SURGERY

IMAGING / RADIOLOGY

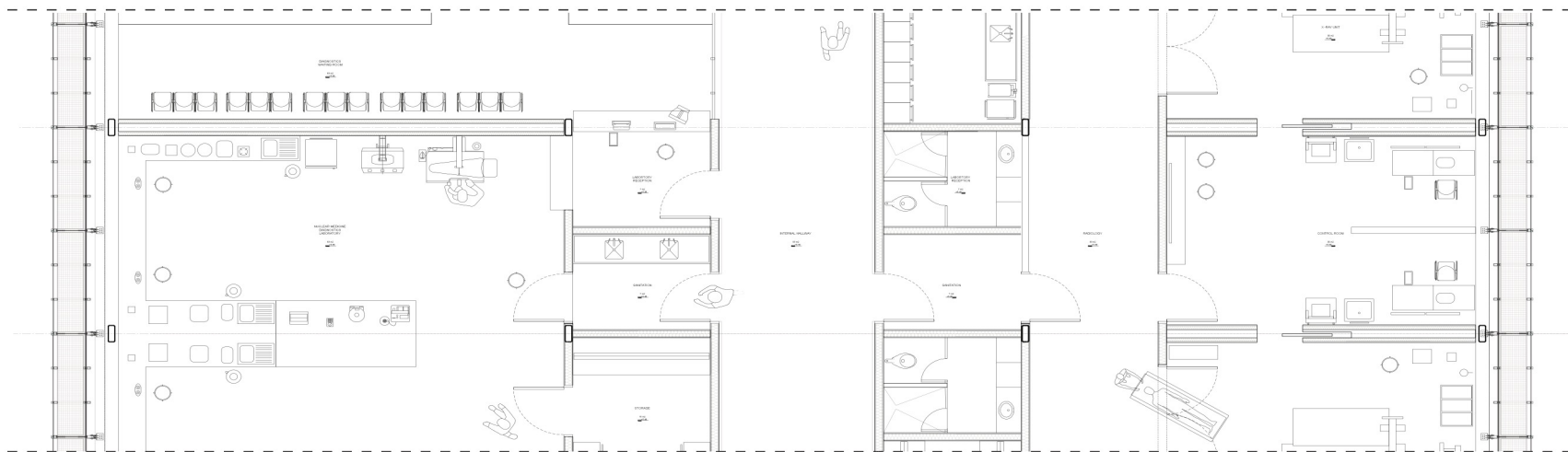
SURGERY PREP

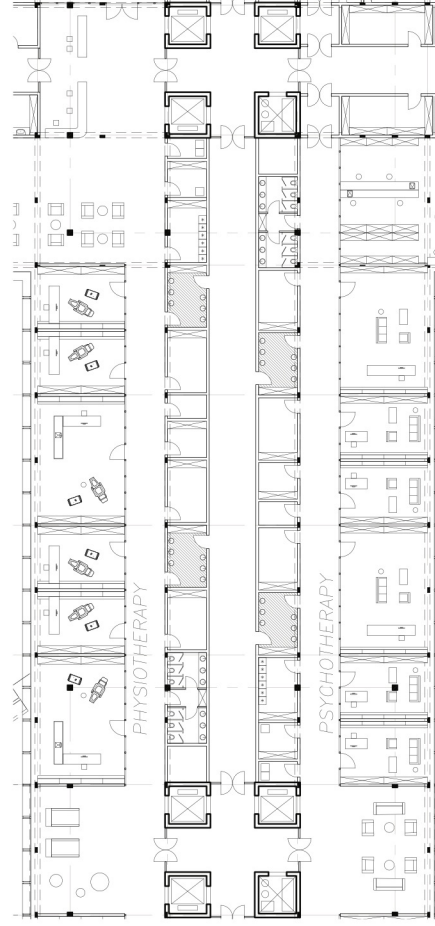
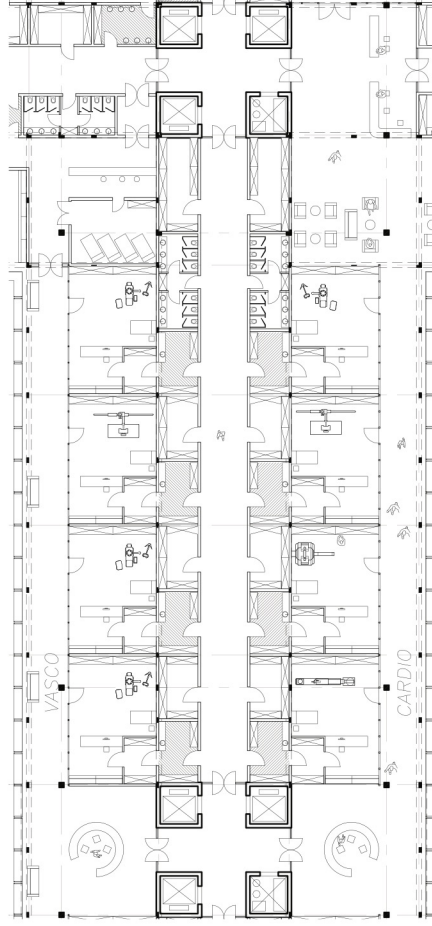
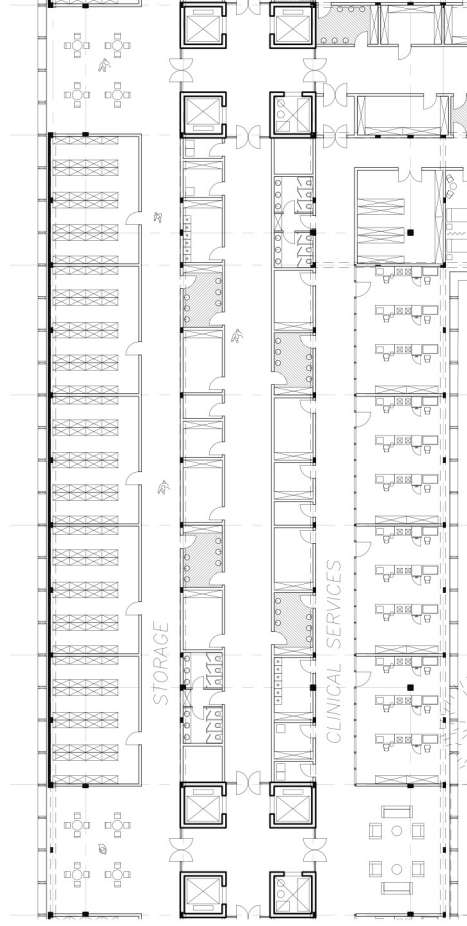
CENTRAL PATIENT AREA

NUCLE

THERAPY

THERAPY





Sistem of
standardized and
arbitrary spaces



