



INTER-SPECIES SHELTER

RABAN OHLHOFF

MAIN INTENTIONS

HOMELESSNESS

CONTEXTUAL INTEGRATION

CONCEPT

SITE

UNIT DESIGN

TEMPORALITY

ASSEMBLAGES

FOLLOW-UP

REFERENCES

tackling the problem of
HOMELESSNESS

759 Homeless People in Brussels

1/3 Of Brussels population lives below the
poverty line

Poverty and real estate prices increase
every year



Offer affordable transitional housing

Propose use of undeveloped fallow land

Supply restart possibility

integration into the
CONTEXT

Astonishing pre-existing biodiversity

Existence of rare organisms and
ecosystems

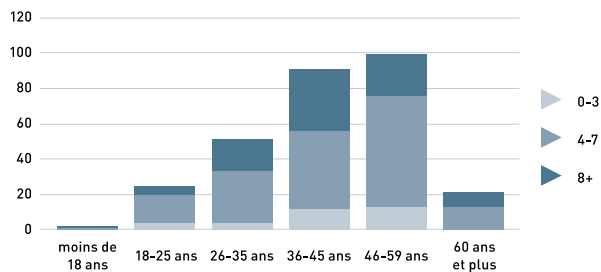
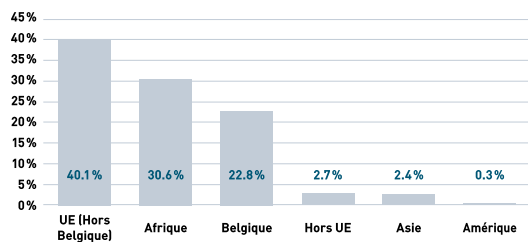
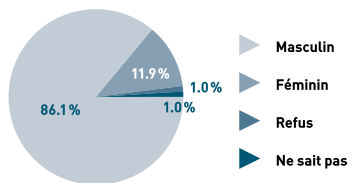
Landscape as a co-product of nature and
people



Careful analysis of existing species and
their interactions

Attempt to integrate architecture into
existing structures

DATA HOMELESSNESS



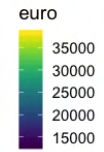
Situations de vie	2008		2010		2014		2016		2018		Evolution 2008-2018
	#	%	#	%	#	%	#	%	#	%	
Espaces publics	269	15,6	329	16,9	412	15,8	707	20,9	759	18,2	+182,1%

Zones	2008		2010		2014		2016		2018	
	#	%	#	%	#	%	#	%	#	%
3 gares principales	143	54,6	181	55	132	32	123	17,4	119	15,7
Pentagone	78	29,8	99	30,1	171	41,5	274	38,7	227	29,9
Hors Pentagone	41	15,6	49	14,9	109	26,4	310	43,8	413	54,4
Total	262	100	329	100	412	100	707	100	759	100

LE DÉLAI D'ATTENTE POUR UN LOGEMENT SOCIAL
(44000 MÉNAGES CONCERNÉS)
EST DE +DE 10 ANS



MEDIAN INCOME
HOMELESSNESS

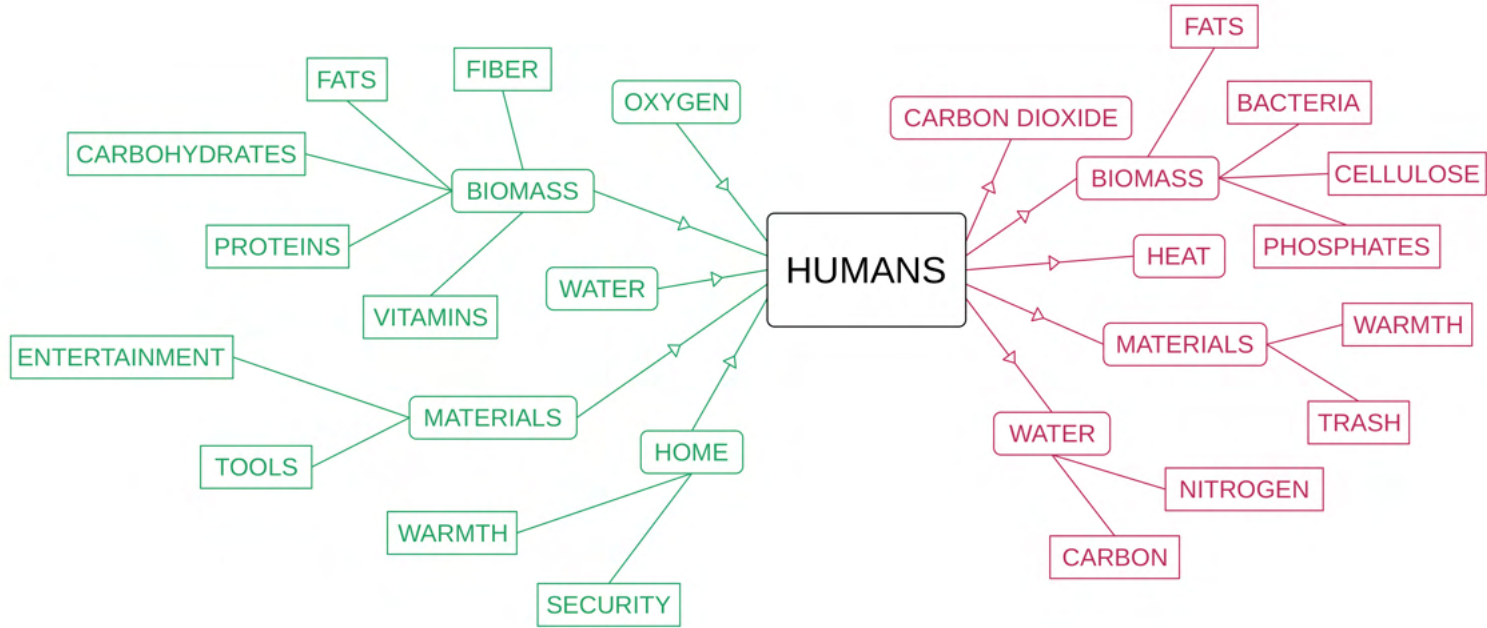


EXAMPLE
HOMELESSNESS

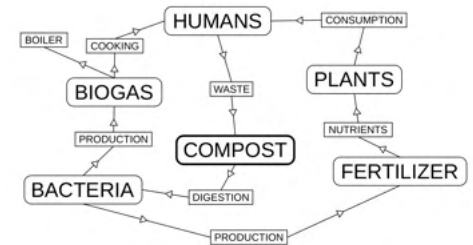
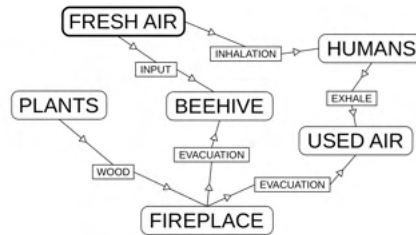
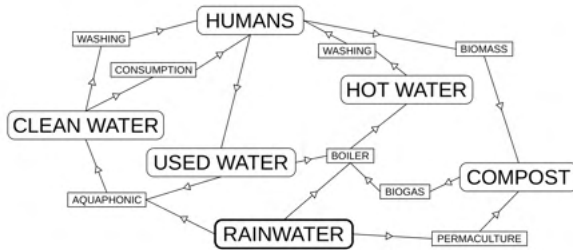
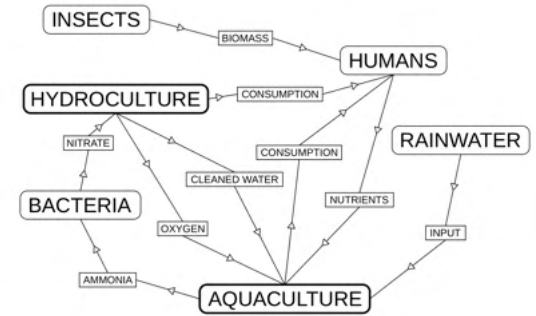
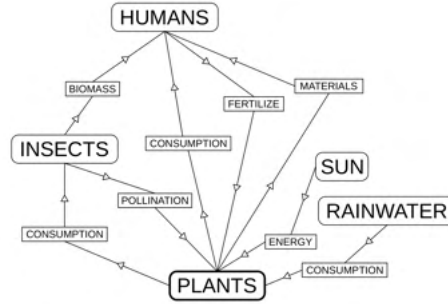
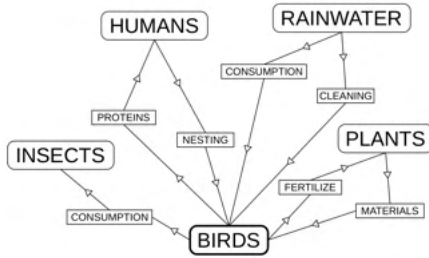
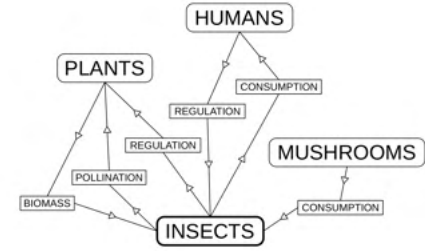
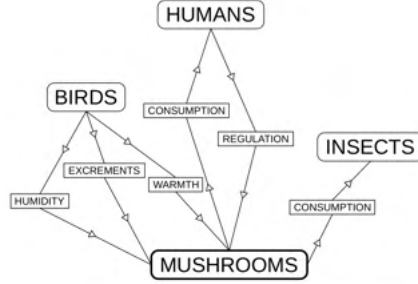
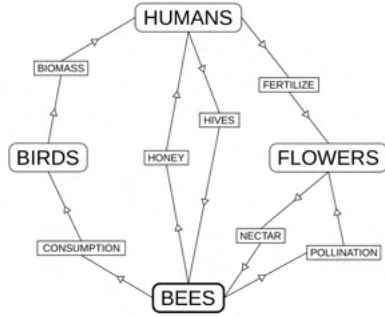



400
TOITS | DAKEN

INPUT/OUTPUT
CONTEXTUAL
INTEGRATION



**SYSTEMS
CONTEXTUAL
INTEGRATION**



UTILITIES
CONTEXTUAL
INTEGRATION

A BIOGAS DIGESTER

B AQUAPONICS

C BEEHIVES

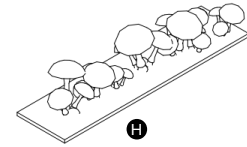
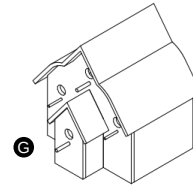
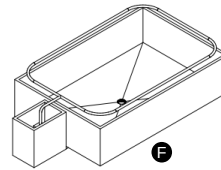
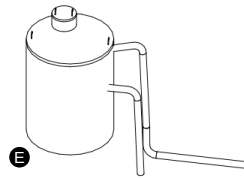
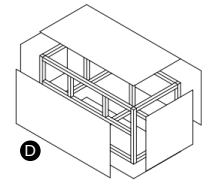
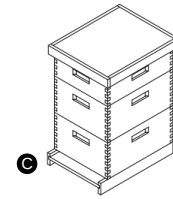
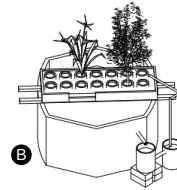
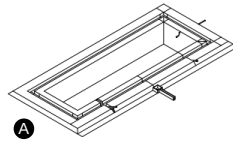
D CRICKET FARM

E RAINWATER CISTERN

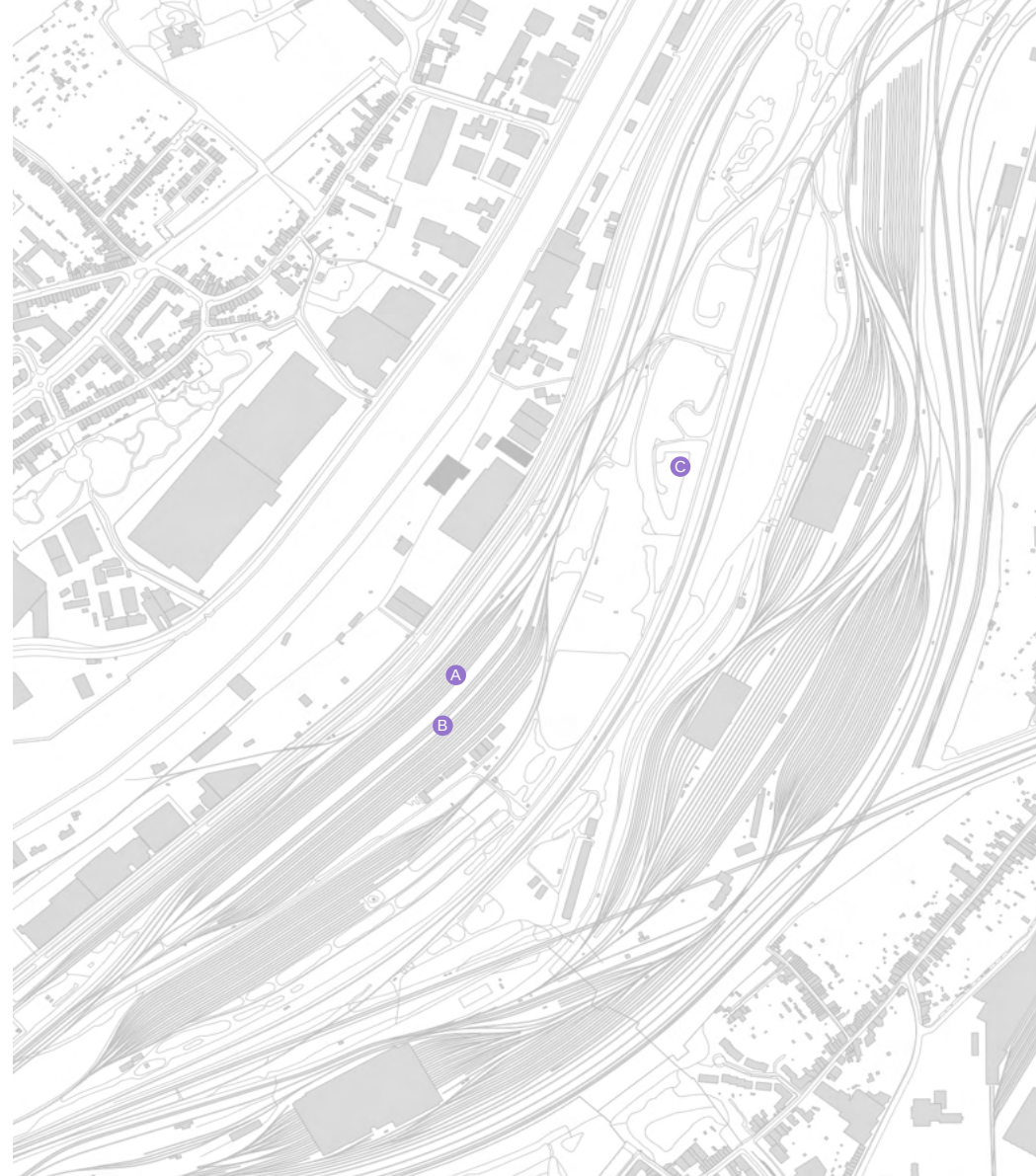
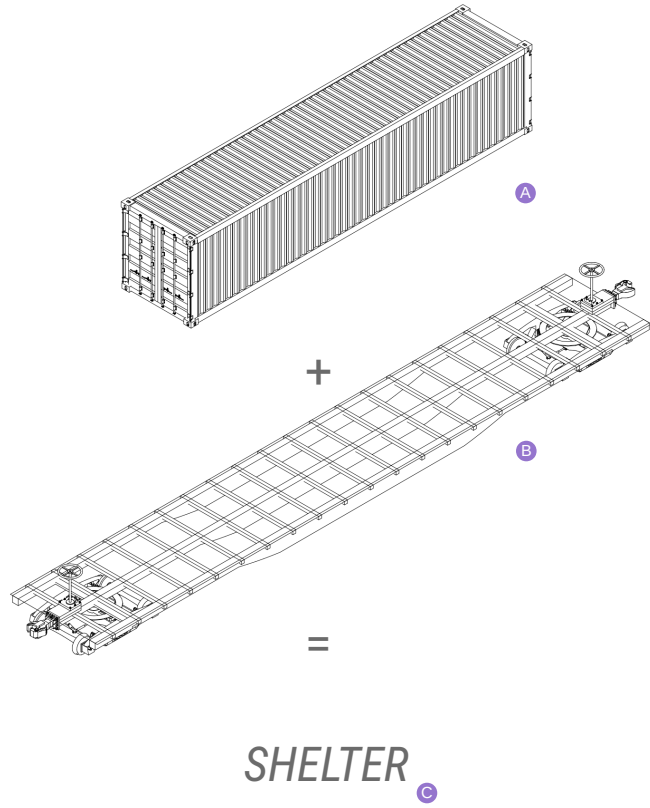
F COMPOST

G BIRD NESTING

H FUNGI-CULTURE

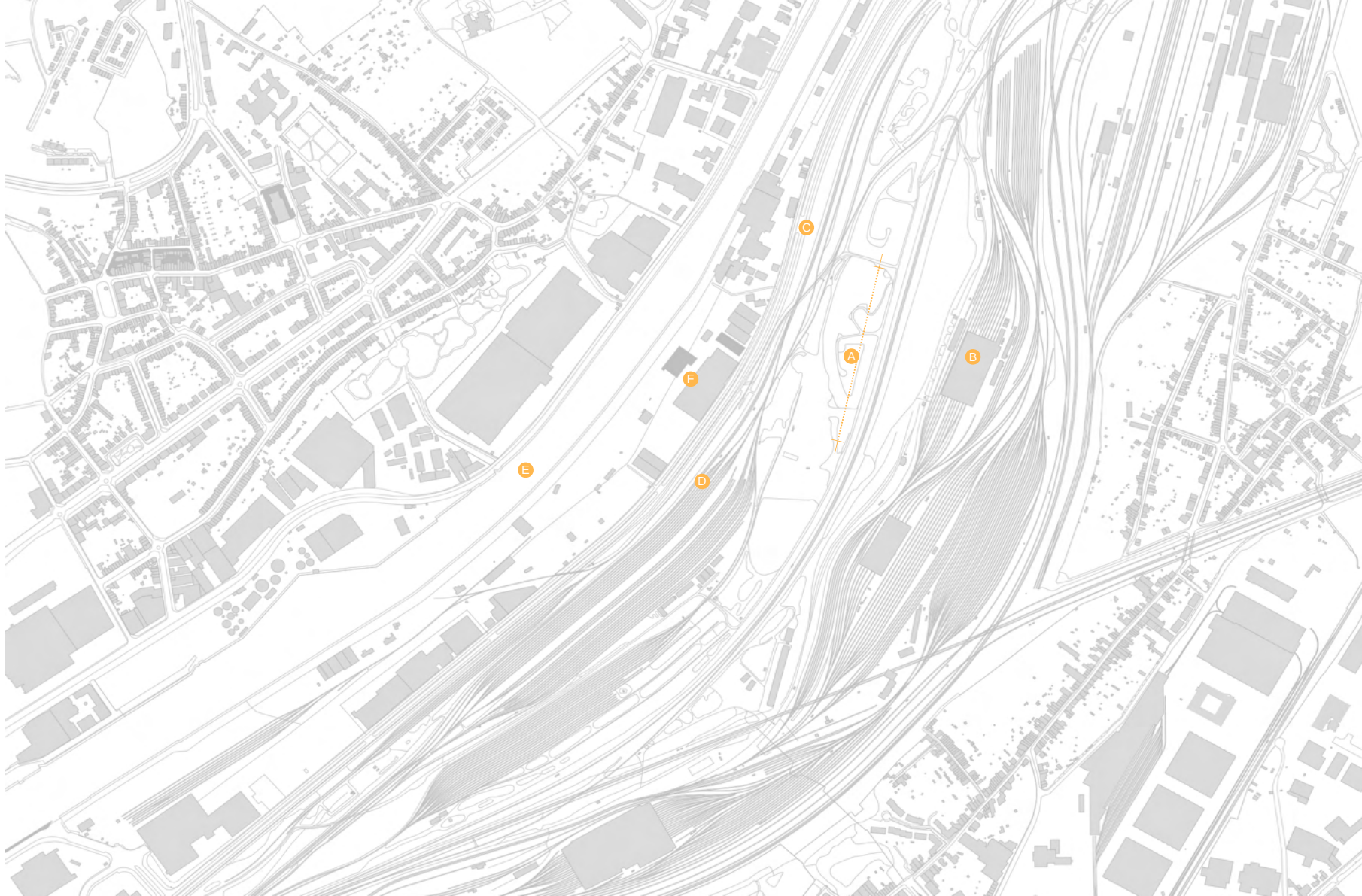


MATERIALS
CONCEPT



PLAN
SITE

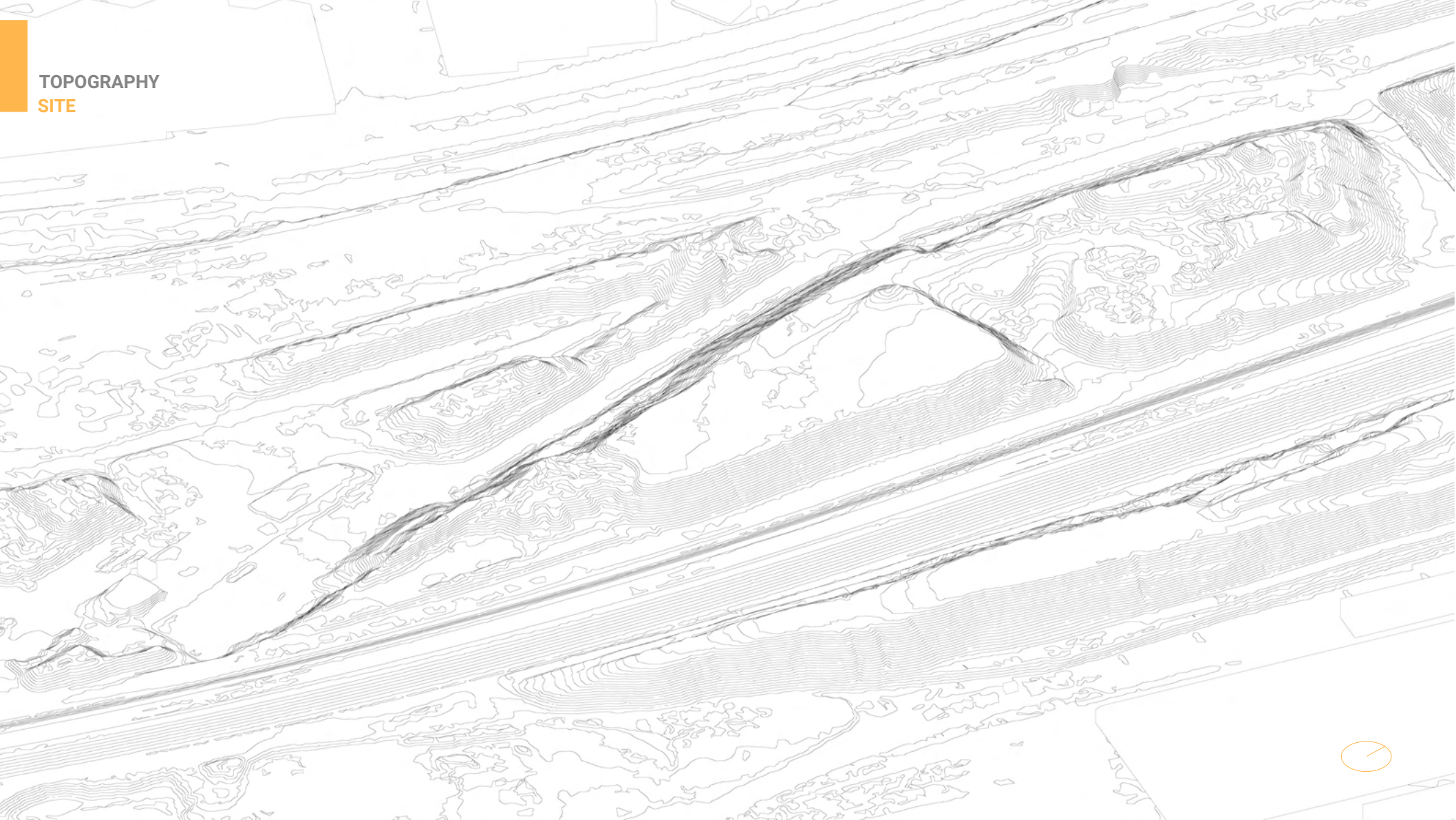
- A SITE
[JOSEPHAT HILLS]
- B ABANDONED
HANGAR
- C BUS STATION
- D WAGON
STORAGE
- E SENNE RIVER
- F INDUSTRIES



HISTORY
SITE



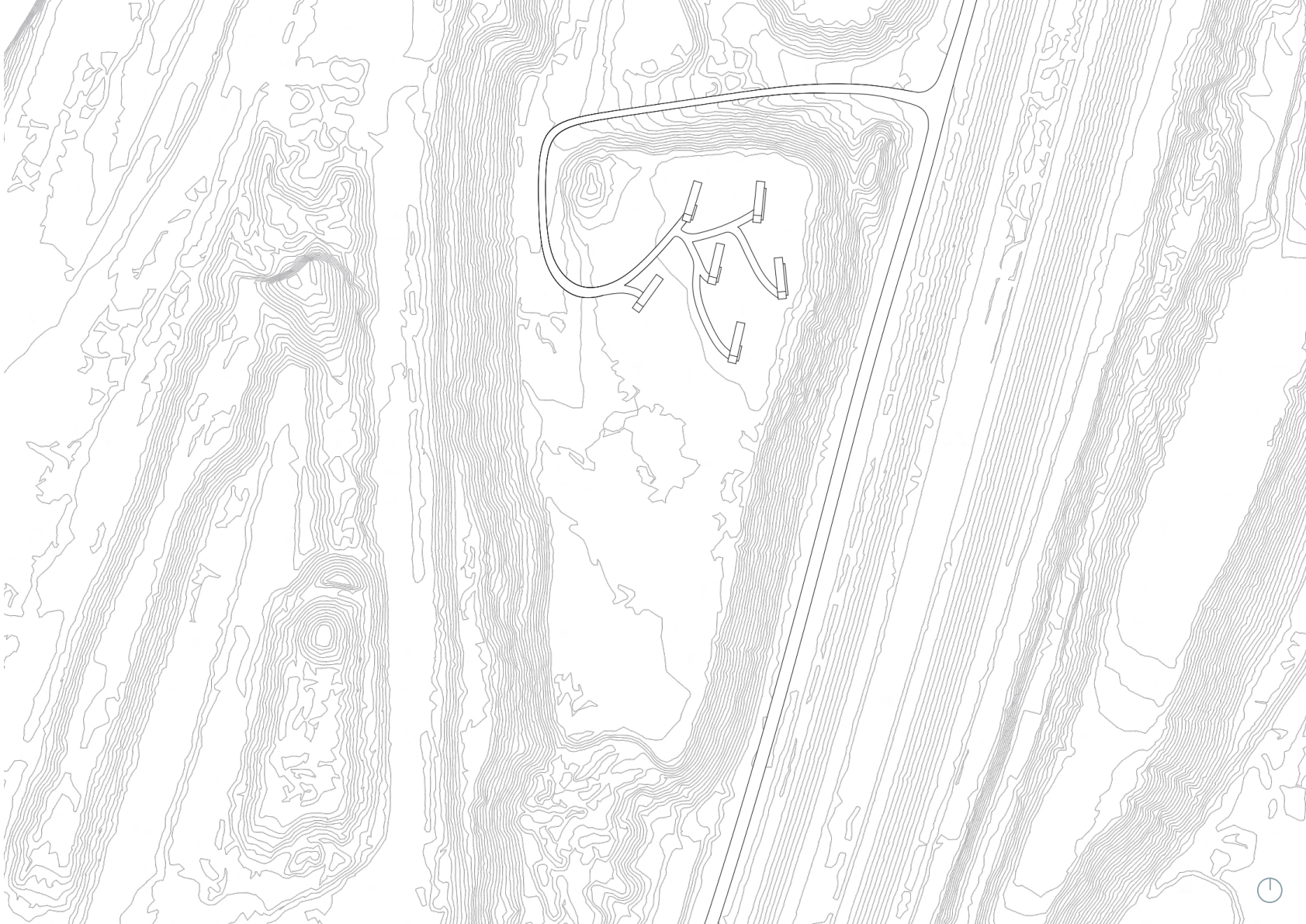
TOPOGRAPHY
SITE



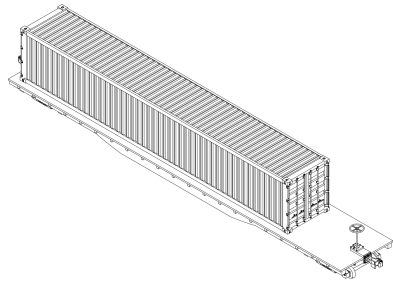
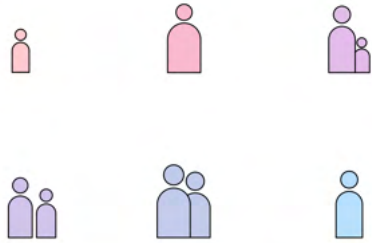
SECTION
SITE



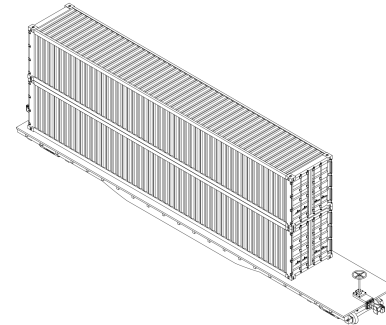
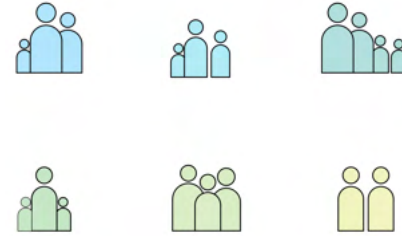
IMPLANTATION
UNIT DESIGN



2 TYPES
UNIT DESIGN

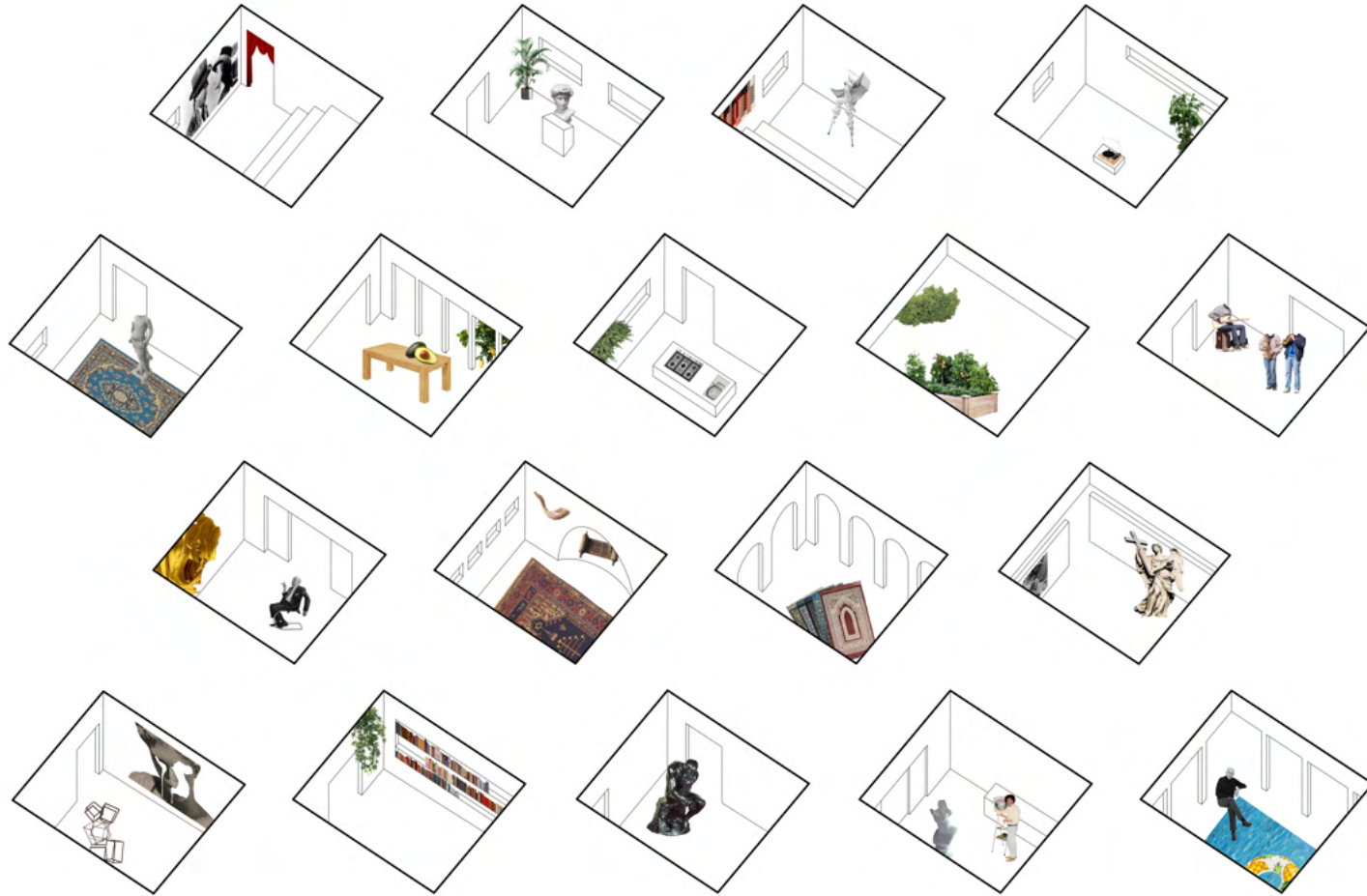


TYPE I [SINGLE]

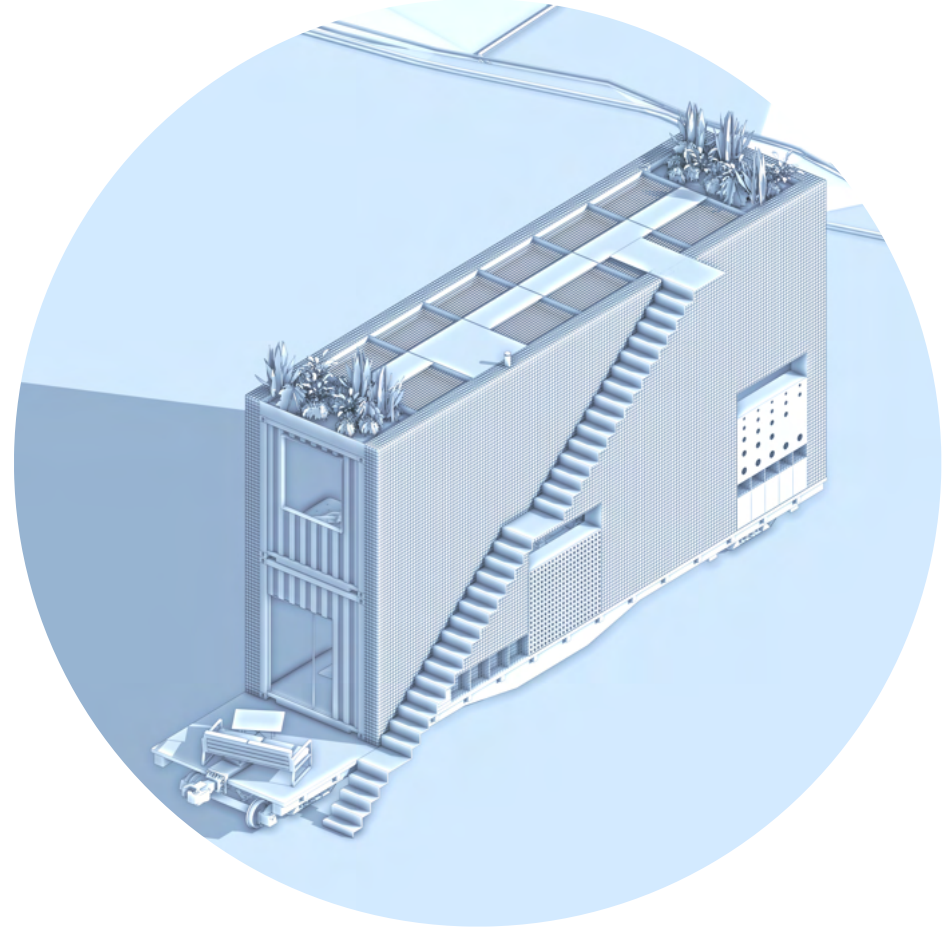
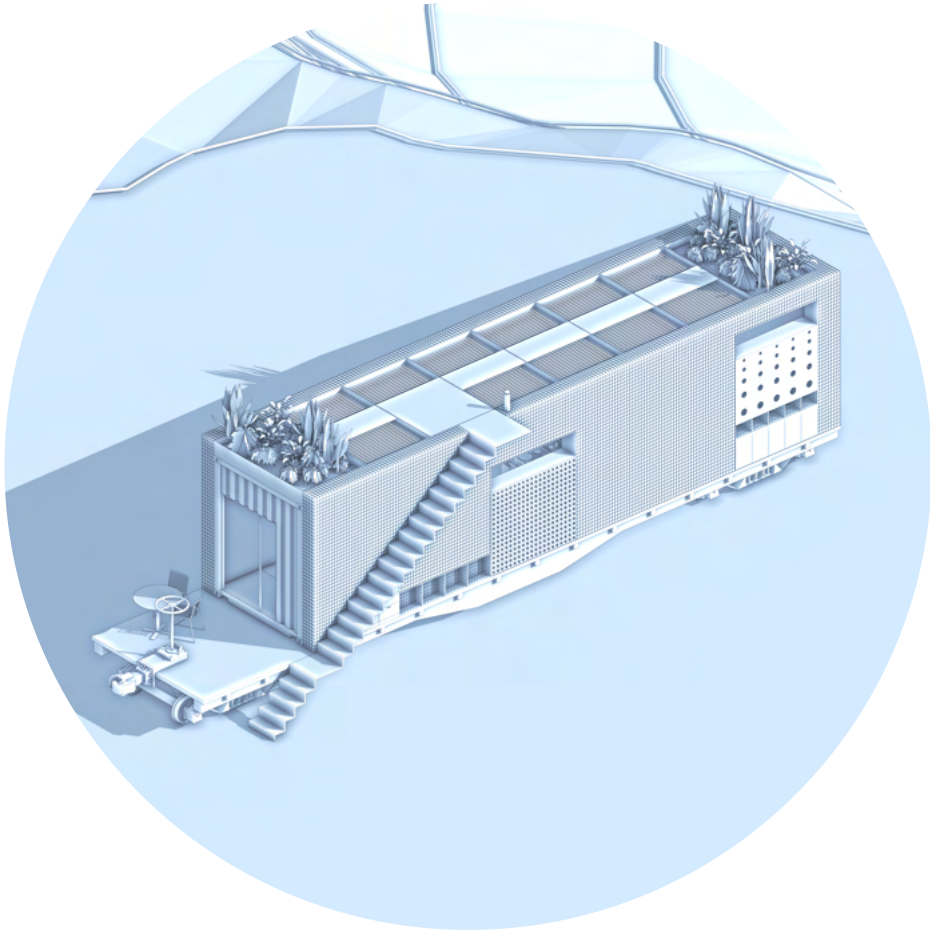


TYPE II [DOUBLE]

INDIVIDUALITY
UNIT DESIGN

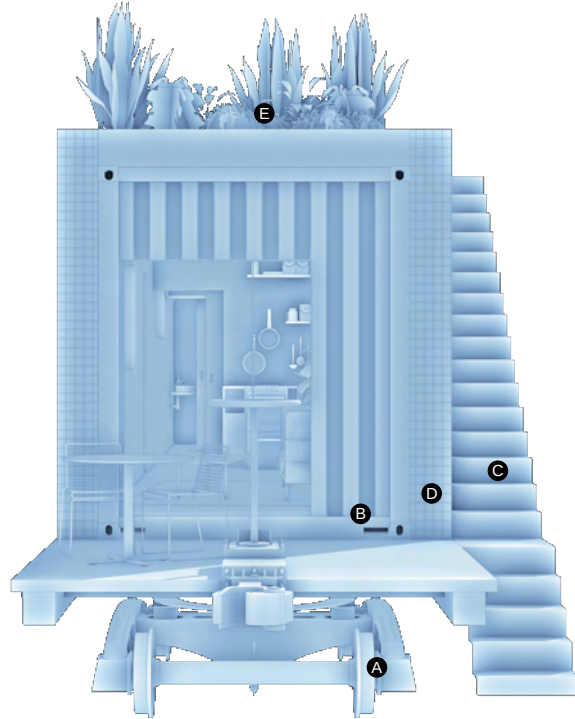


AXONOMETRY
UNIT DESIGN



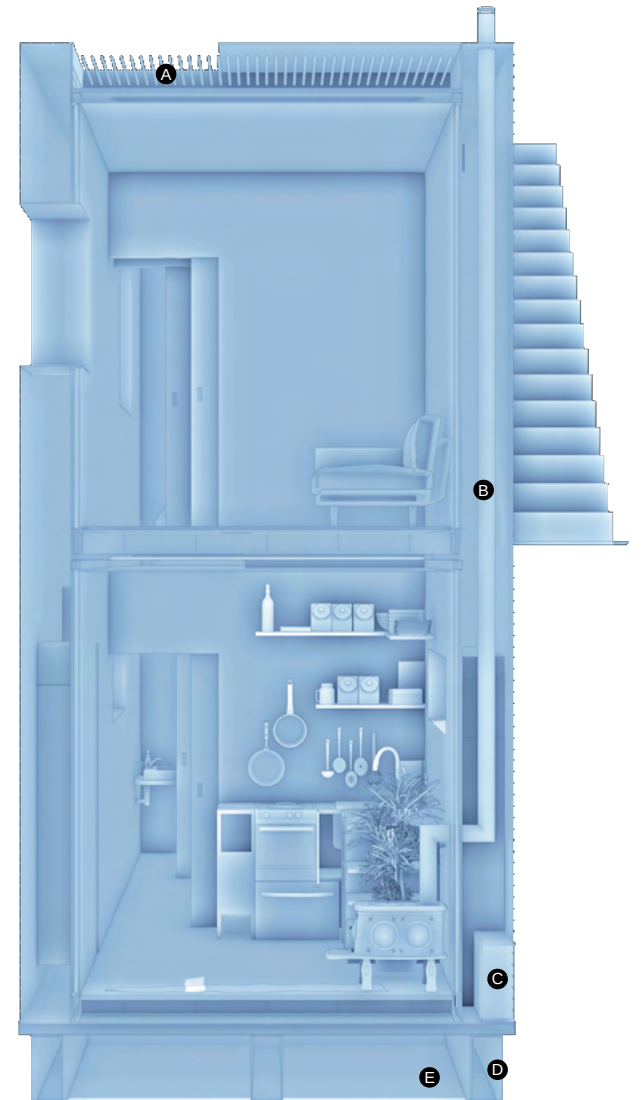
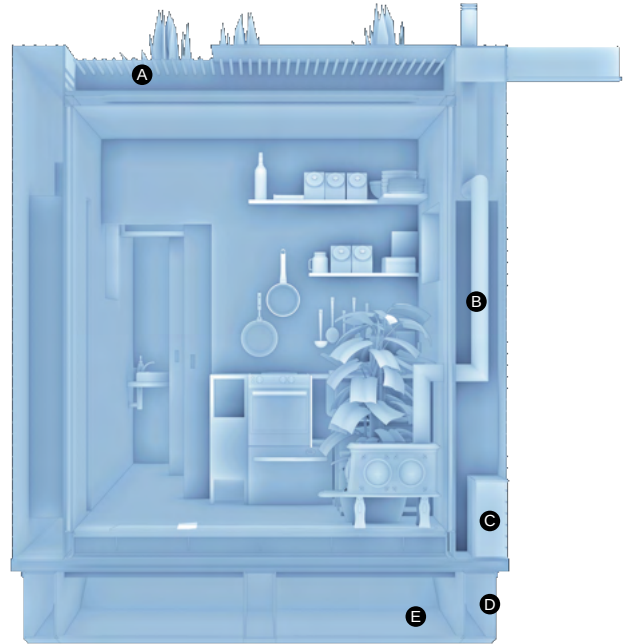
FRONT
UNIT DESIGN

- Ⓐ WAGON
- Ⓑ CONTAINER
- Ⓒ ROOF ACCESS
- Ⓓ BIOMASS ISOLATION
- Ⓔ PERMACULTURE



CUT I
UNIT DESIGN

- Ⓐ AQUA-PHONICS
- Ⓑ VENTILATION
- Ⓒ WOOD STORAGE
- Ⓓ RODENT NEST
- Ⓔ COMPOST TO BIO-GAS TANK



CUT II
UNIT DESIGN

- Ⓐ SOLAR PANEL
- Ⓑ HAY + FOLIAGE
- Ⓒ INSECT NESTING
- Ⓓ CRICKET FARM
- Ⓔ COMPOST INPUT

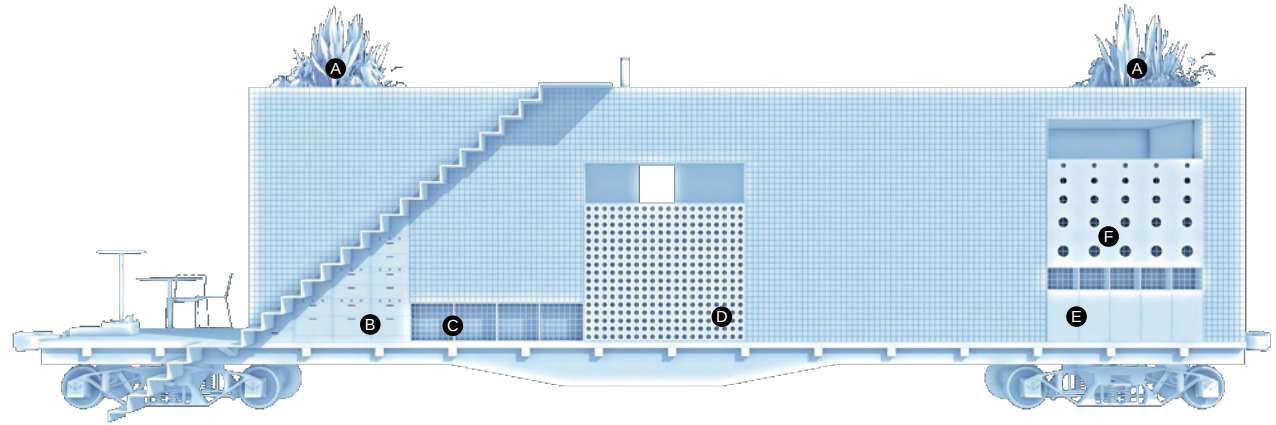


CUT III
UNIT DESIGN

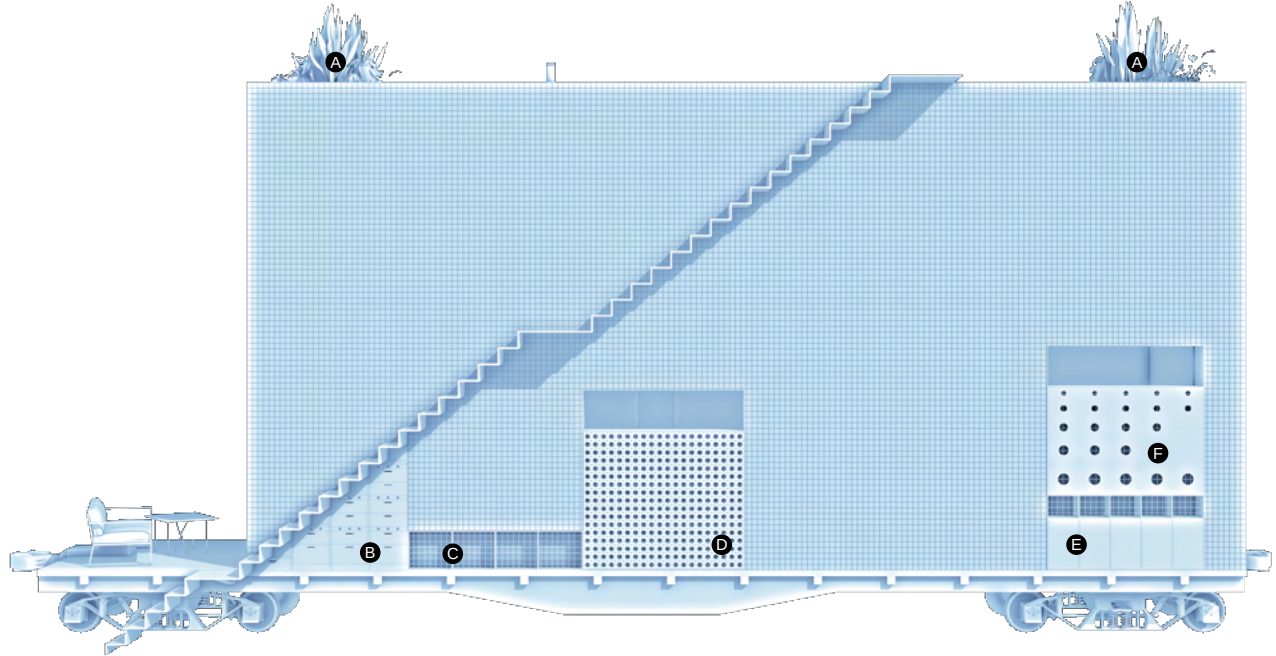
- A** RAINWATER CISTERN
- B** BIRD NESTING
- C** FUNGI-CULTURE
- D** BIOMASS INPUT



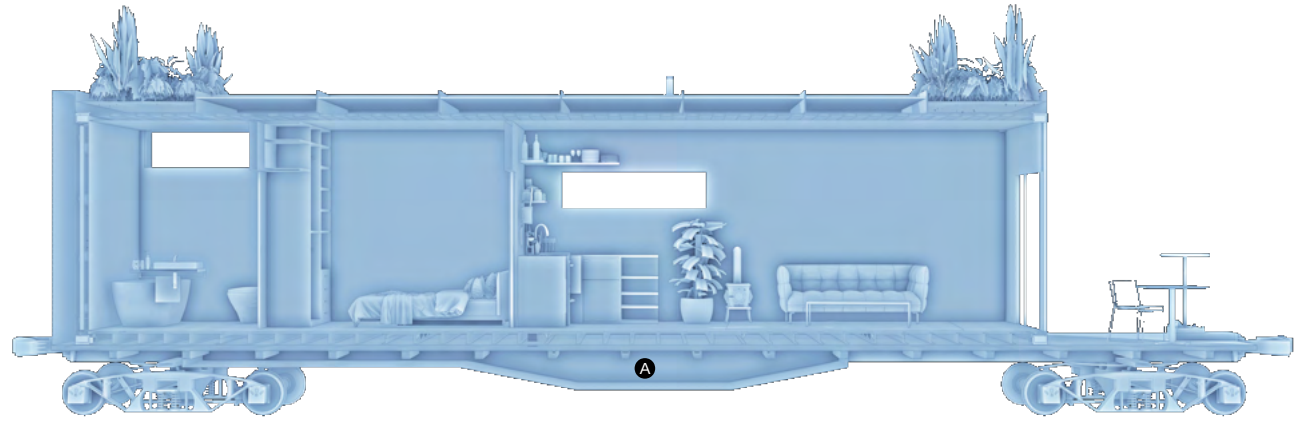
EAST ELEVATION
UNIT DESIGN



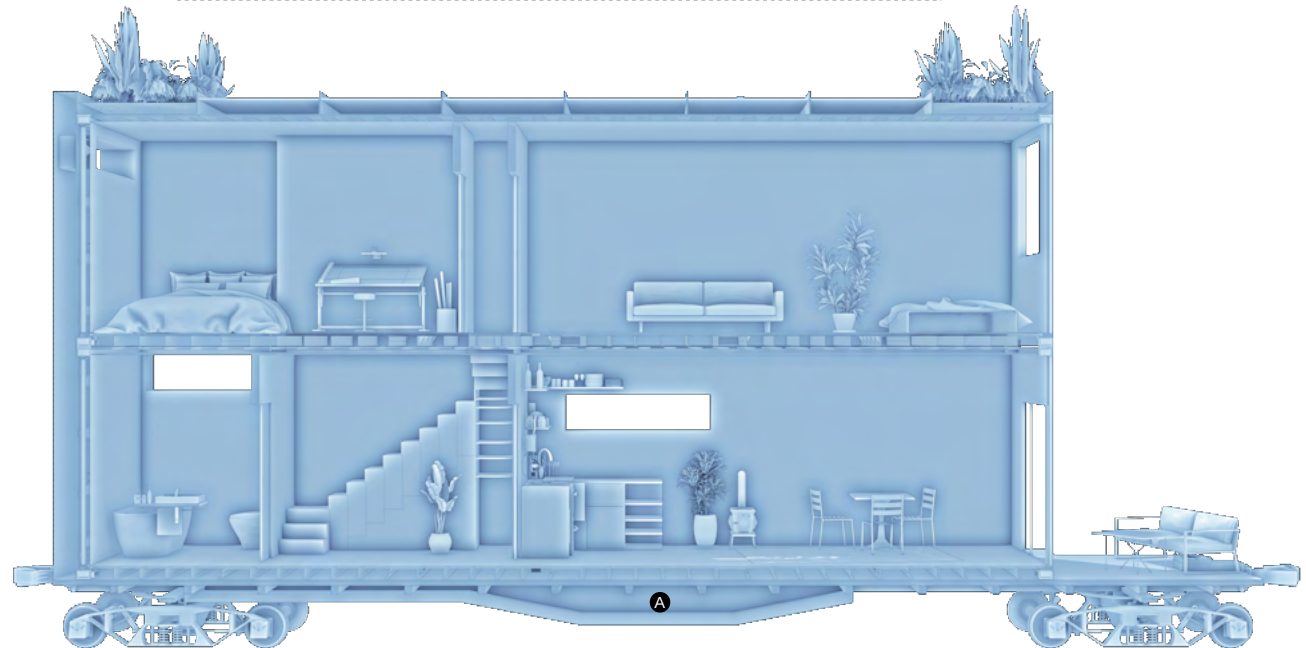
- A** PERMACULTURE
- B** BEEHIVES
- C** WOOD STORAGE
- D** CRICKET FARM
- E** FUNGI-CULTURE
- F** BIRD NESTING



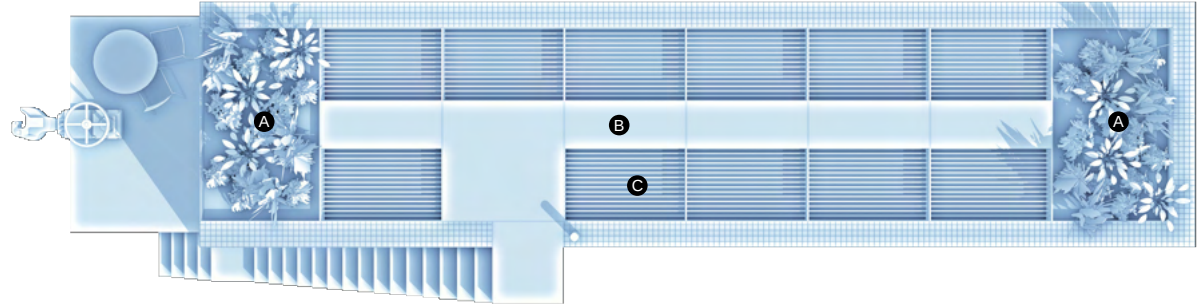
CUT IV
UNIT DESIGN



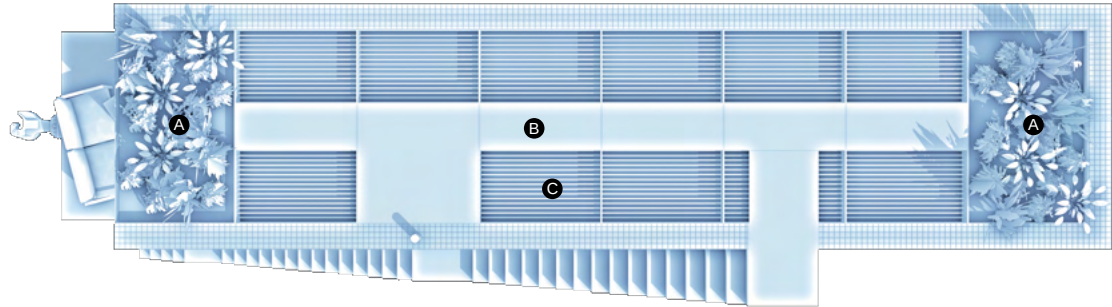
A COMPOST TO
BIO-GAS TANK



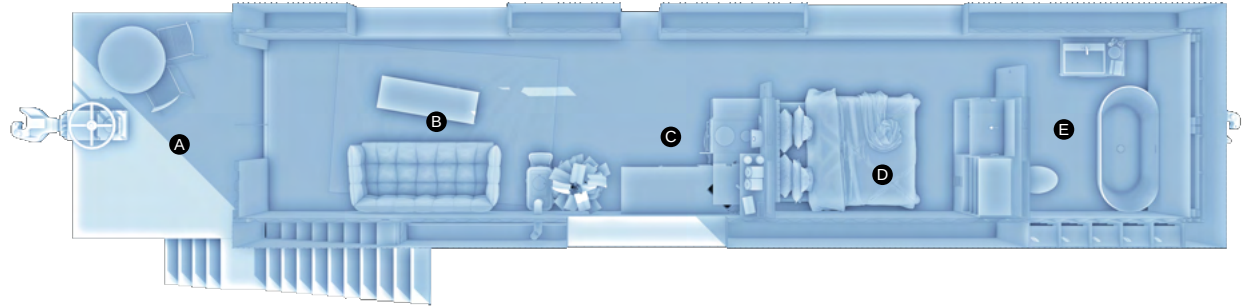
TOP
UNIT DESIGN



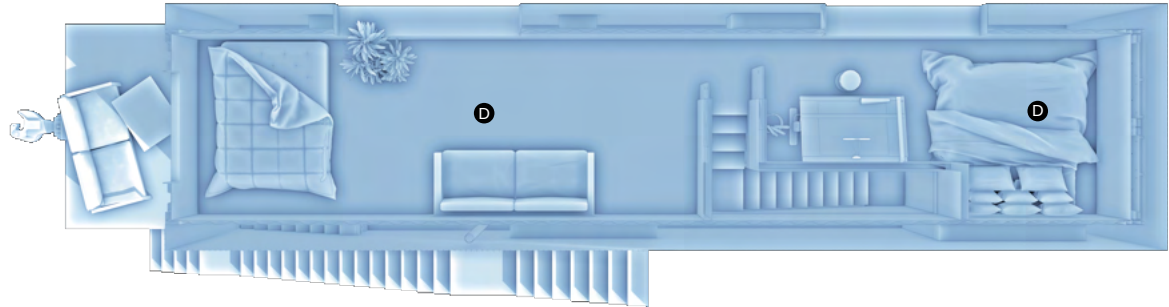
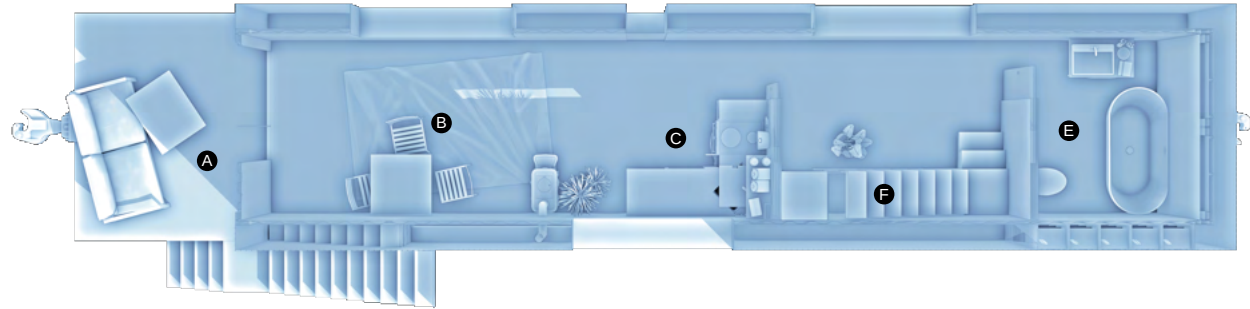
- A** PERMACULTURE
- B** SOLAR PANEL
- C** AQUA-PHONICS



FLOORS
UNIT DESIGN



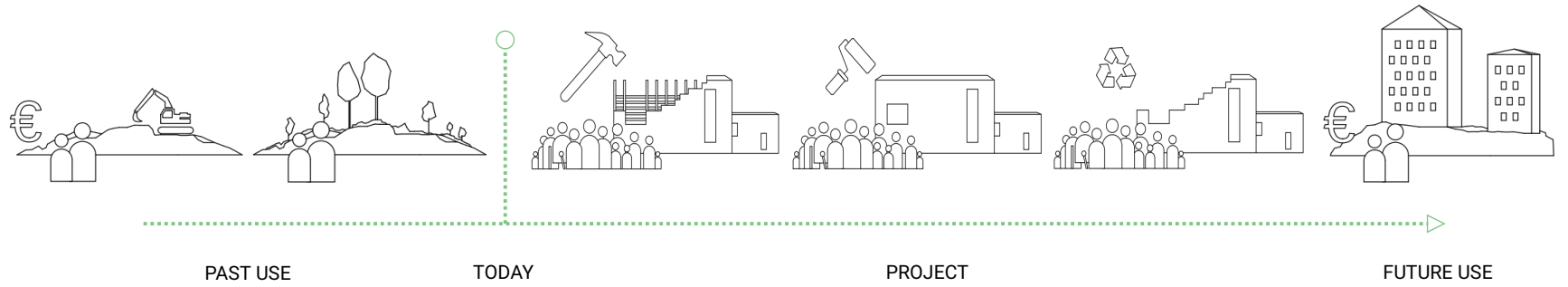
- A TERRACE
- B LIVING ROOM
- C KITCHEN
- D BEDROOM
- E BATHROOM
- F STAIRS



FLOORS
UNIT DESIGN

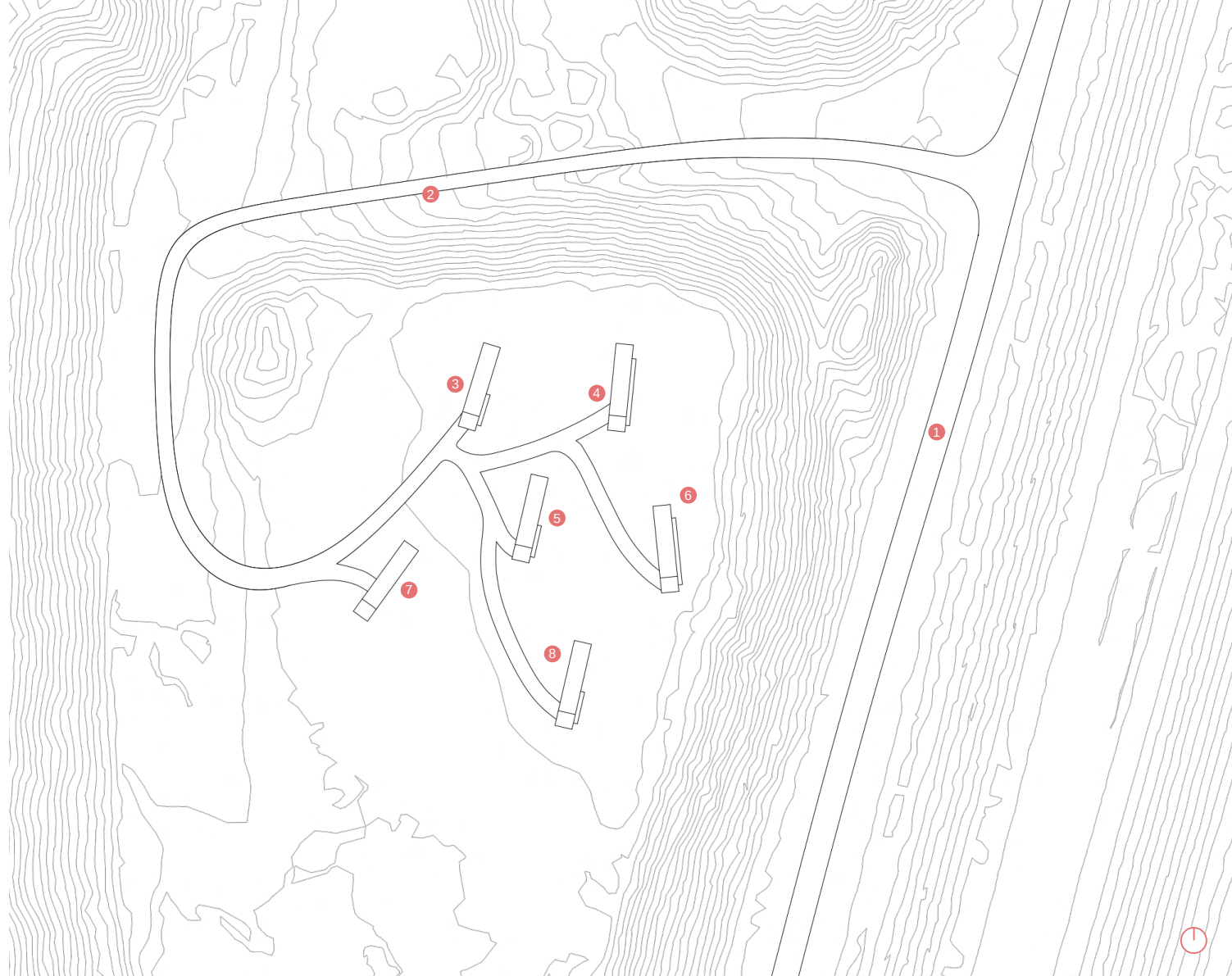


LAND USE
TEMPORALITY



PROGRESSION
ASSEMBLAGES

- ① EXISTING ROAD
- ② BUILD TRACK
- ③ FIRST UNIT
- ④ SECOND UNIT
- ⑤ THIRD UNIT
- ⑥ FOURTH UNIT
- ⑦ UTILITY UNIT
- ⑧ FIFTH UNIT



prefabrication and
individuality
PARADOX

Advantage of prefabrication is efficiency

Prefabrication prevents individuality

Individuality is an essential component of
domestic architecture



Finding a balance between efficiency and
singularity

Computer-based automation coupled with
machine learning could provide a solution

