METAPLASIS

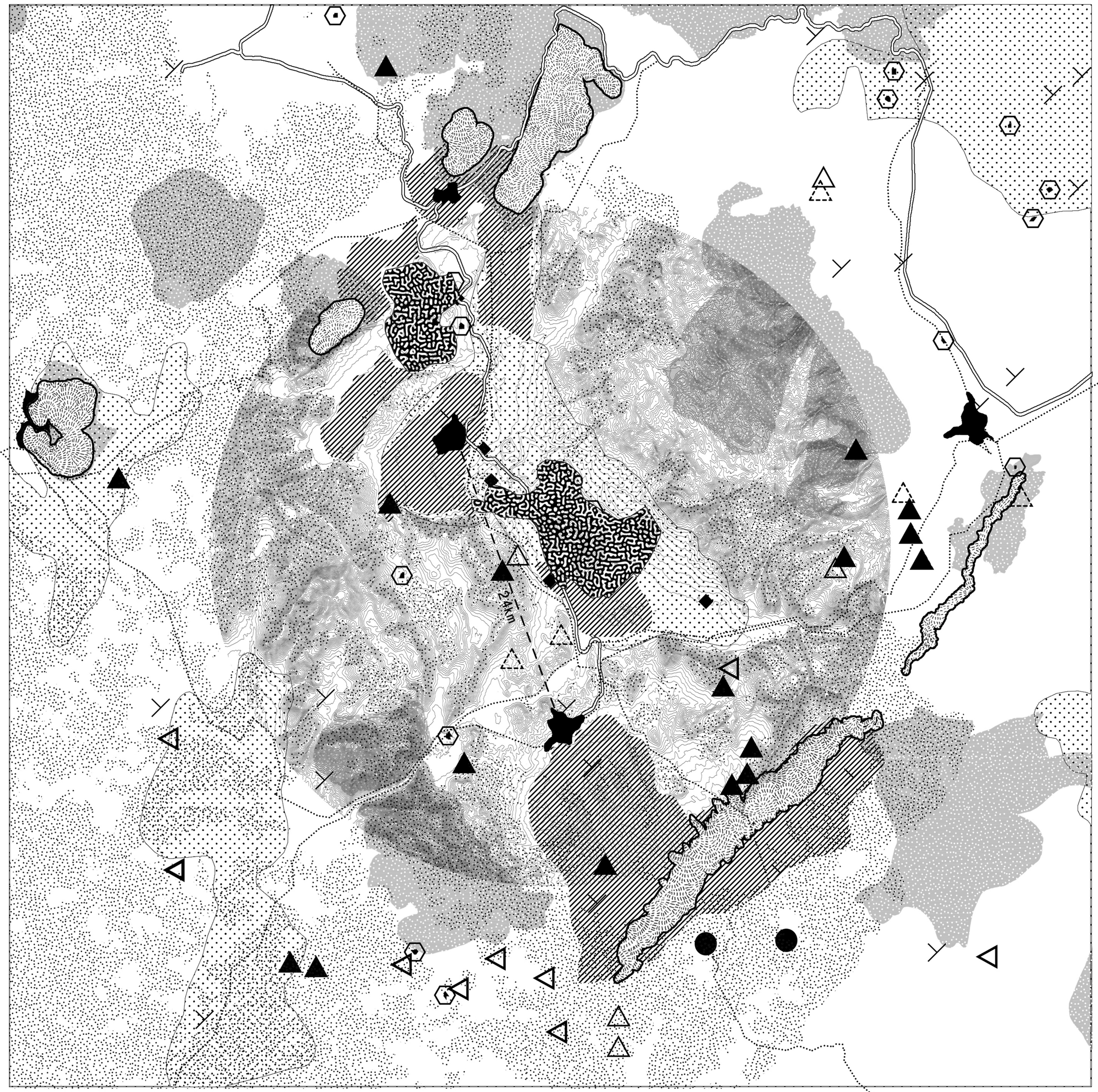
Scenarios for recovery of post-extraction territory of Eordaia Region

Μεταπλάσσω /Metaplaso/ : ancient Greek =¨*μετα*¨ /me ’ ta/ (adv) = change[1], the passage to something new[2], something that follows chnonologically something else[3] + “*πλαθω*” /pláťťō/ plat^{h}yō/ (v) = form[1] shape[2] sculpture[3]

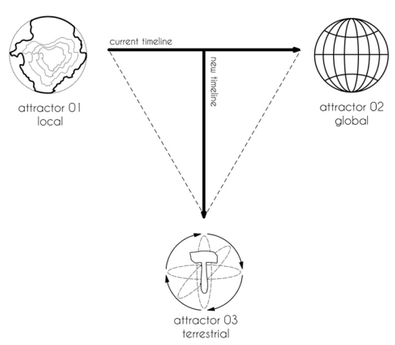
Metaplasis = to create something anew by changing its form or shape

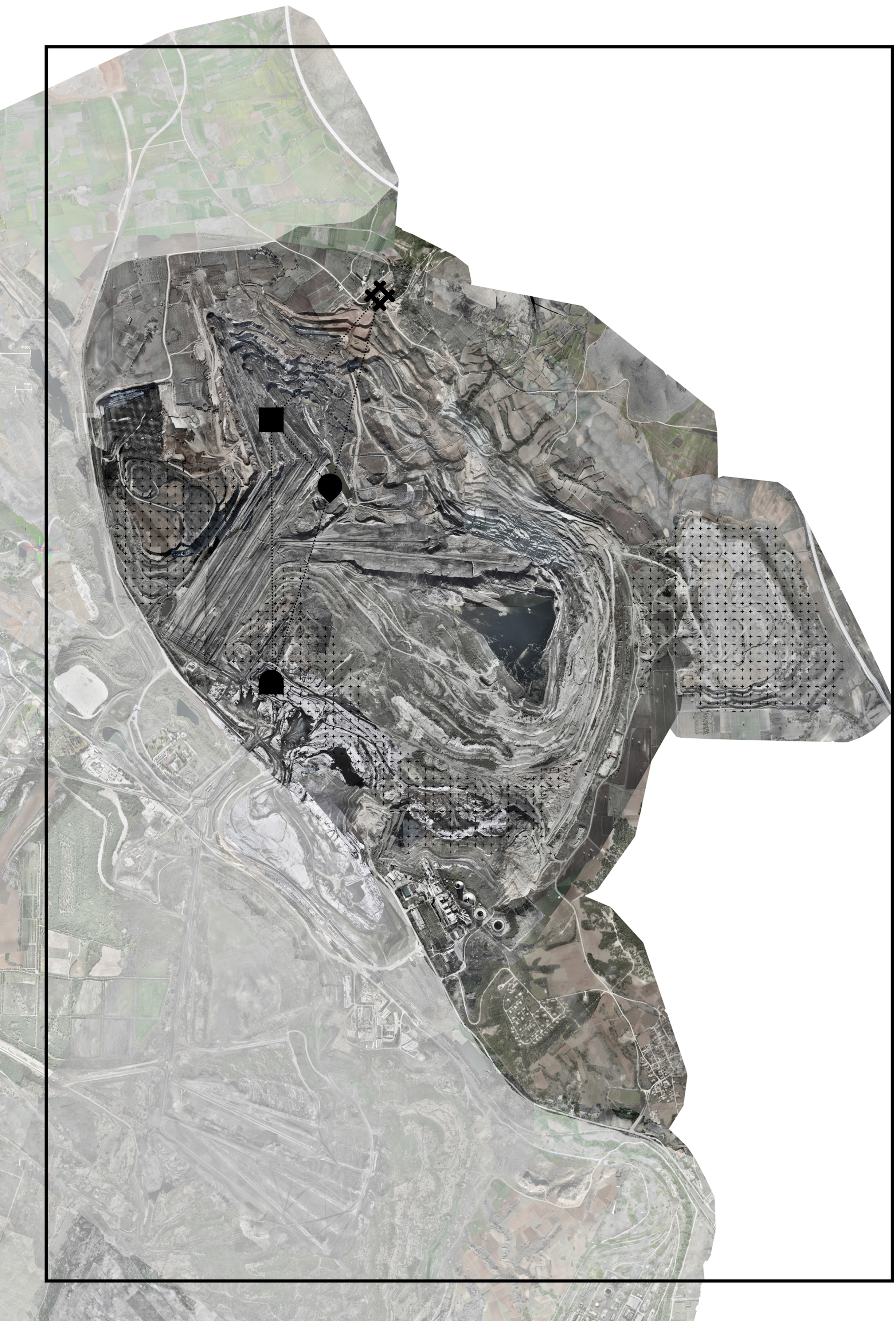


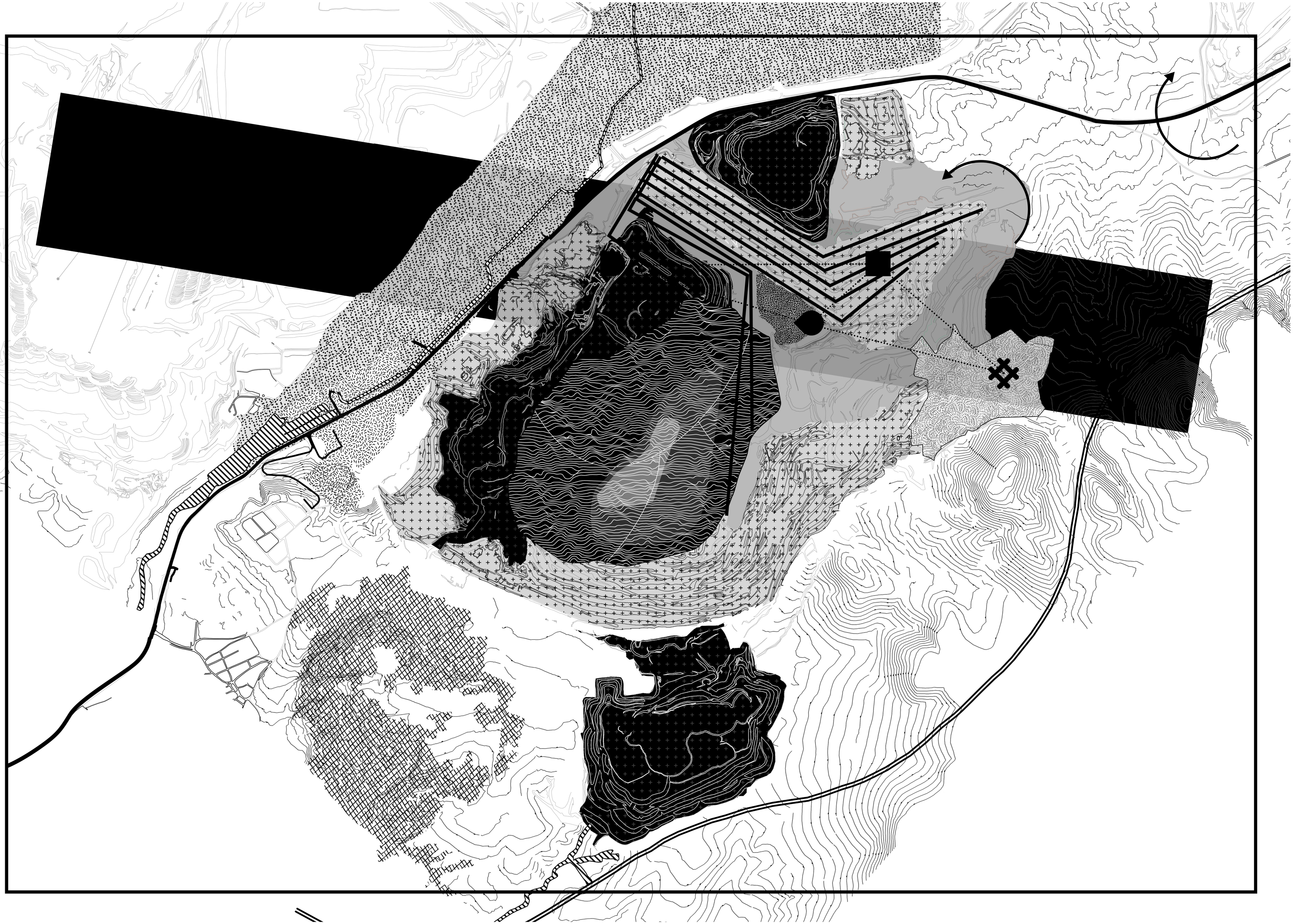


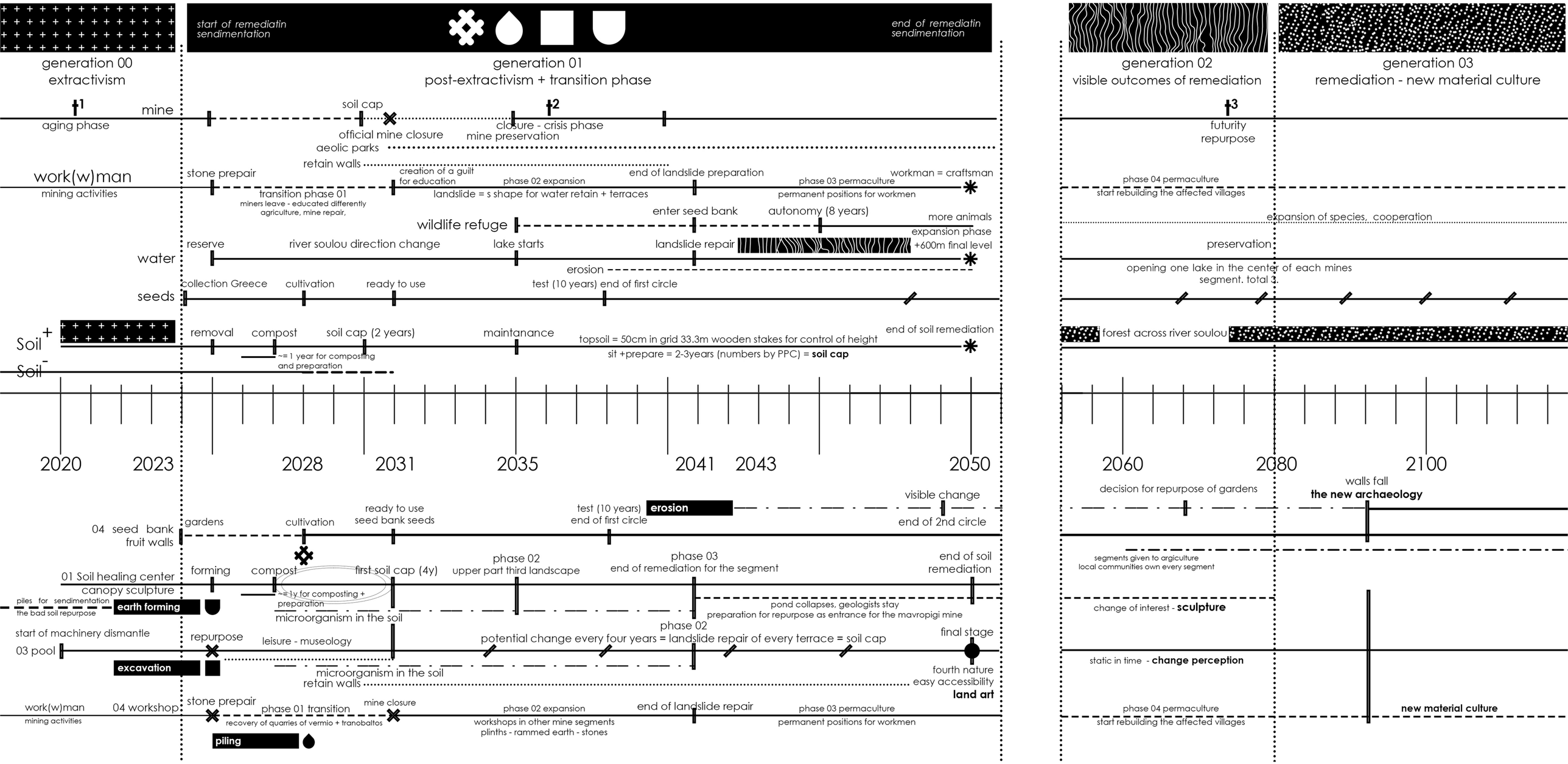


natural habitat
underground water
lake
agriculture
quarry
quarry closed
quarry industrial support
quarry secondary
lignite mine
lignite mine large
sewage
biomass centres
city
industry








start of remediatin sendimentation
end of remediatin sendimentation
generation 00
extractivism
generation 01
post-extractivism + transition phase
generation 02
visible outcomes of remediation
generation 03
remediation - new material culture
1
aging phase
mine
soil cap
official mine closure
2
closure - crisis phase
mine preservation
aeolic parks
retain walls
3
futurity
repurpose
work(w)man
mining activities
stone prepair
creation of a guilt for education
phase 02 expansion
end of landslide preparation
phase 03 permaculture
workman = craftsman
transition phase 01
miners leave - educated differently
agriculture, mine repair,
landslide = s shape for water retain + terraces
permanent positions for workmen
phase 04 permaculture
start rebuilding the affected villages
wildlife refuge
enter seed bank
autonomy (8 years)
more animals
expansion phase
+600m final level
expansion of species, cooperation
water
reserve
river soulou direction change
lake starts
landslide repair
preservation
erosion
opening one lake in the center of each mines segment. total 3.
seeds
collection Greece
cultivation
ready to use
test (10 years) end of first circle
Soil +
removal
compost
soil cap (2 years)
maintanance
end of soil remediation
topsoil = 50cm in grid 33.3m wooden stakes for control of height
~= 1 year for composting and preparation
sit +prepare = 2-3years (numbers by PPC) = soil cap
forest across river soulou
Soil -
2020
2023
2028
2031
2035
2041
2043
2050
2060
2080
2100
visible change
test (10 years)
erosion
end of first circle
end of 2nd circle
decision for repurpose of gardens
walls fall
the new archaeology
04 seed bank
fruit walls
gardens
cultivation
ready to use
seed bank seeds
segments given to argiculture
local communities own every segment
01 Soil healing center
canopy sculpture
forming
compost
first soil cap (4y)
phase 02
upper part third landscape
phase 03
end of remediation for the segment
end of soil remediation
~= 1y for composting + preparation
piles for sendimentation
the bad soil repurpose
earth forming
pond collapses, geologists stay
preparation for repurpose as entrance for the mavropigi mine
change of interest - sculpture
microorganism in the soil
phase 02
start of machinery dismantle
repurpose
leisure - museology
potential change every four years = landslide repair of every terrace = soil cap
final stage
03 pool
excavation
microorganism in the soil
retain walls
fourth nature
easy accessibility
land art
static in time - change perception
work(w)man
mining activities
04 workshop
stone prepair
phase 01 transition
mine closure
phase 02 expansion
end of landslide repair
phase 03 permaculture
phase 04 permaculture
start rebuilding the affected villages
recovery of quarries of vermio + tranobaltos
workshops in other mine segments
plinths - rammed earth - stones
permanent positions for workmen
new material culture
piling

M1
ARCH
WORKSHOP

contrary - opposition

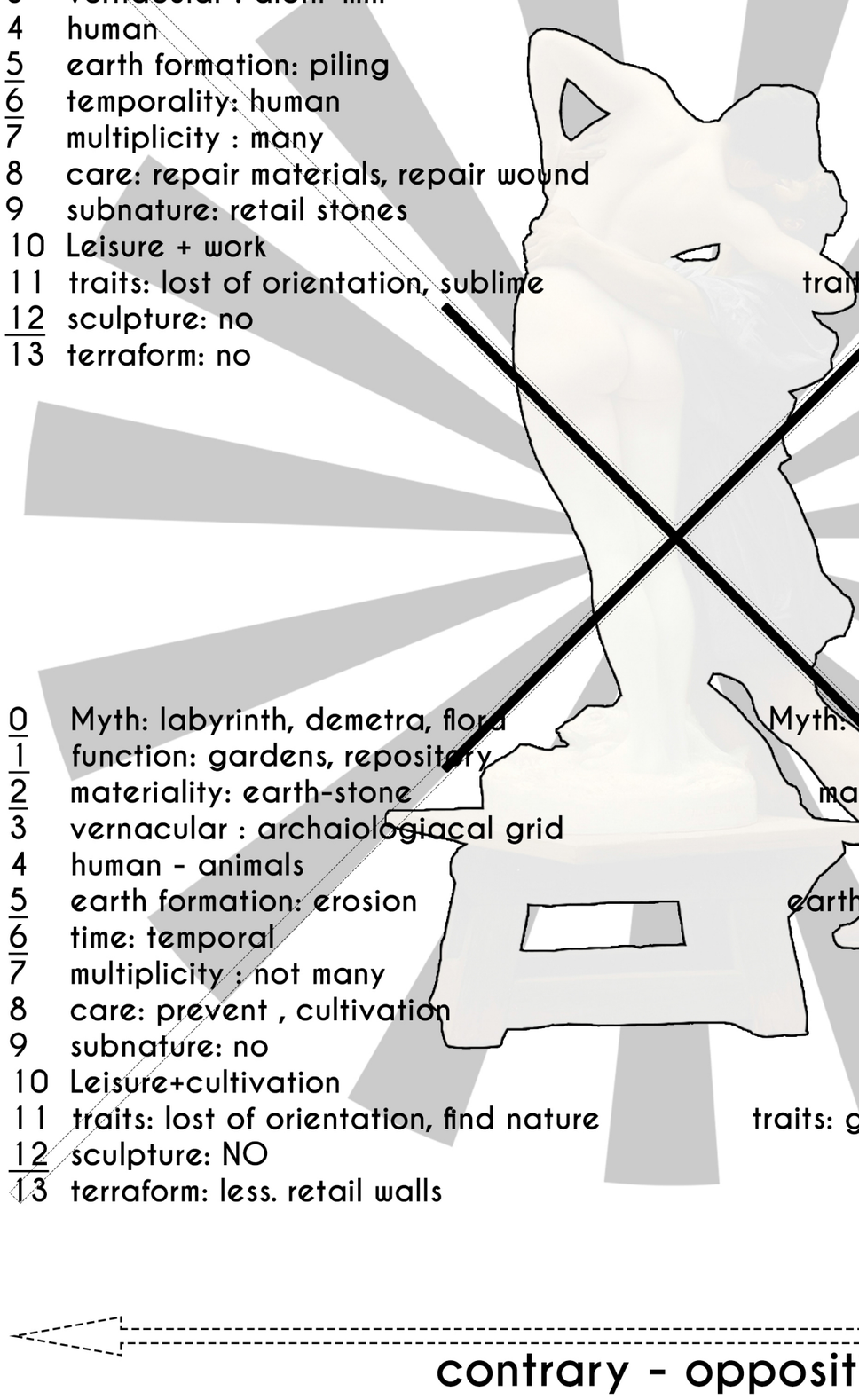
M2
LANDSCAPE
POOL

architecture deixis

landscape deixis

0	Myth: Hephaistos, fragment
1	function: workshop
2	materiality: stone
3	vernacular : aloni=mill
4	human
5	earth formation: piling
6	temporality: human
7	multiplicity : many
8	care: repair materials, repair wound
9	subnature: retail stones
10	Leisure + work
11	traits: lost of orientation, sublime
12	sculpture: no
13	terraform: no

Myth: persephone	0
function: pools, gathering	1
materiality: earth + concrete	2
vernacular: cistern	3
human - animals	4
earth formation: extraction	5
time: semi-perpetual	6
multiplicity: not replicable	7
care: preserve the wound	8
subnature: stratigraphy	9
Leisure	10
traits: lost of orientation, sublime	11
sculpture: land art	12
terraform: brutal	13



0	Myth: labyrinth, demetra, flora
1	function: gardens, repository
2	materiality: earth-stone
3	vernacular : archaiologiacal grid
4	human - animals
5	earth formation: erosion
6	time: temporal
7	multiplicity : not many
8	care: prevent , cultivation
9	subnature: no
10	Leisure+cultivation
11	traits: lost of orientation, find nature
12	sculpture: NO
13	terraform: less. retail walls

Myth: pygmalion, medusa - monster	0
function: soil recovery	1
materiality: concrete from earth	2
vernacular : cistern	3
human - animals	4
earth formation: mold - earth form	5
time: perpetual	6
multiplicity : not many	7
care: prevent , cultivation	8
,subnature: mud	9
work	10
traits: grotto , statue becomes alive	11
sculpture	12
terraform: less brutal	13

-M2
NOT ARCH
GARDENS

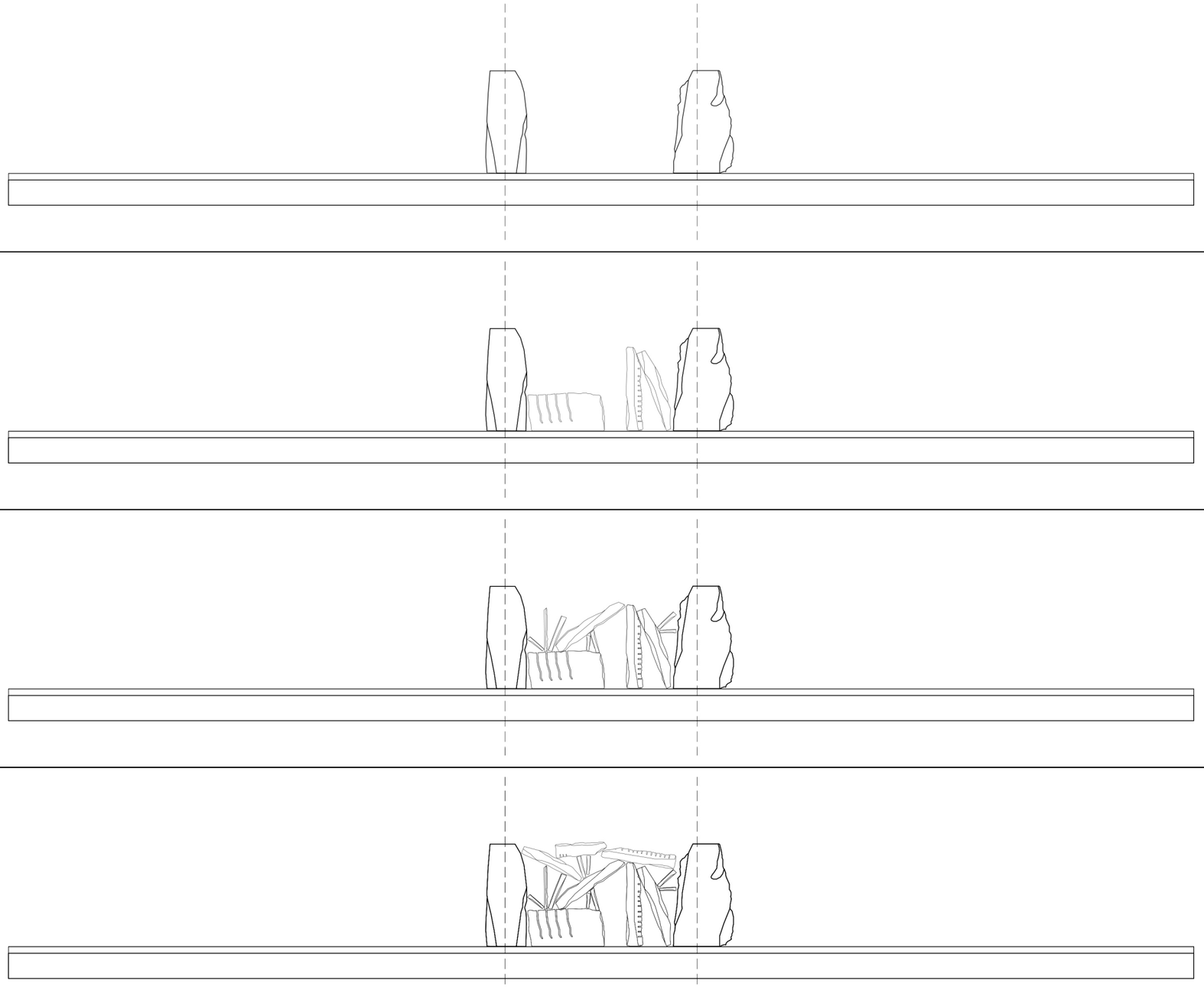
contrary - opposition

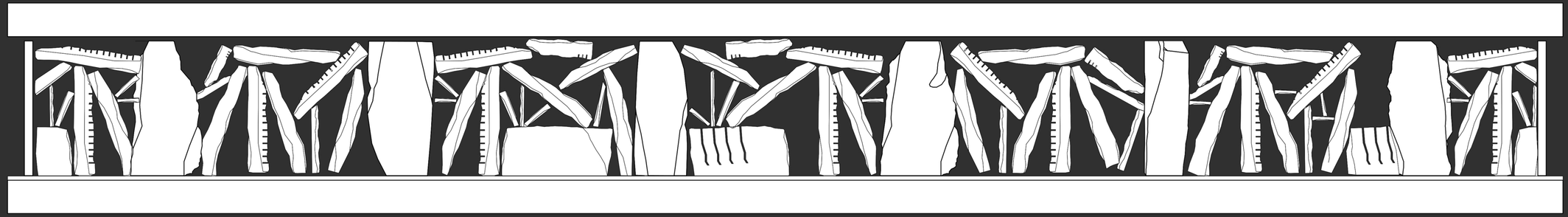
-M1
NOT LAND
CANOPY




+615m
+614m
+613m
+612m
+611m
+613m
+612m
S01
R11 501
-0.00m = +606m
+610m
-0.00m = +606m
1.00
12.00
-1.00m = +605m
37.00
S01

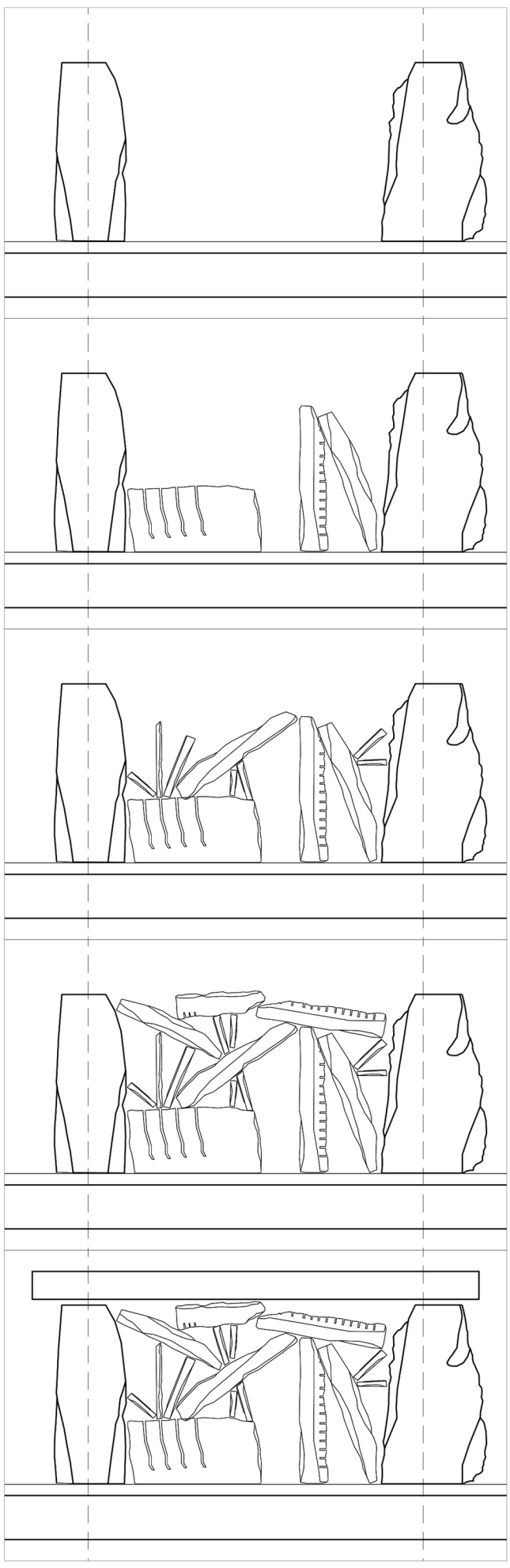
PLAN 1:150

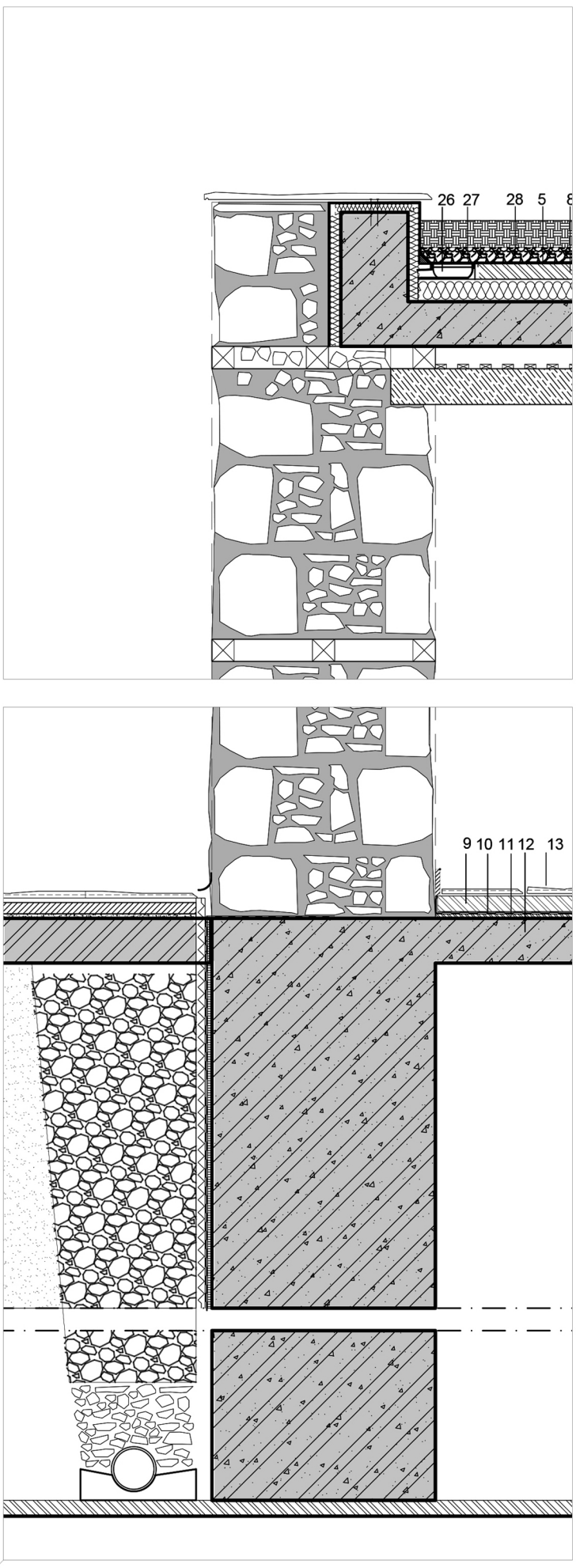




SOUTH ELEVATION 1:75

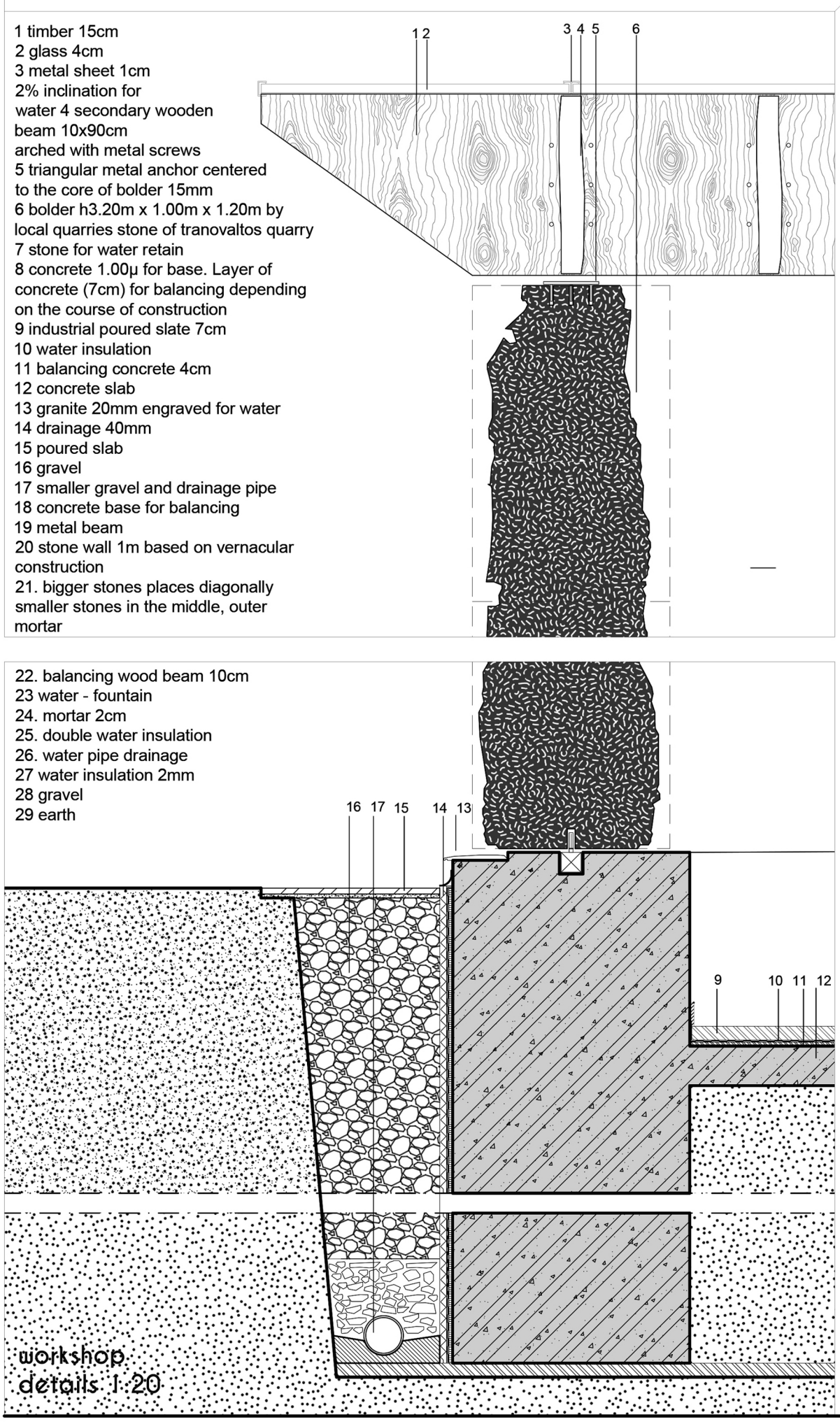


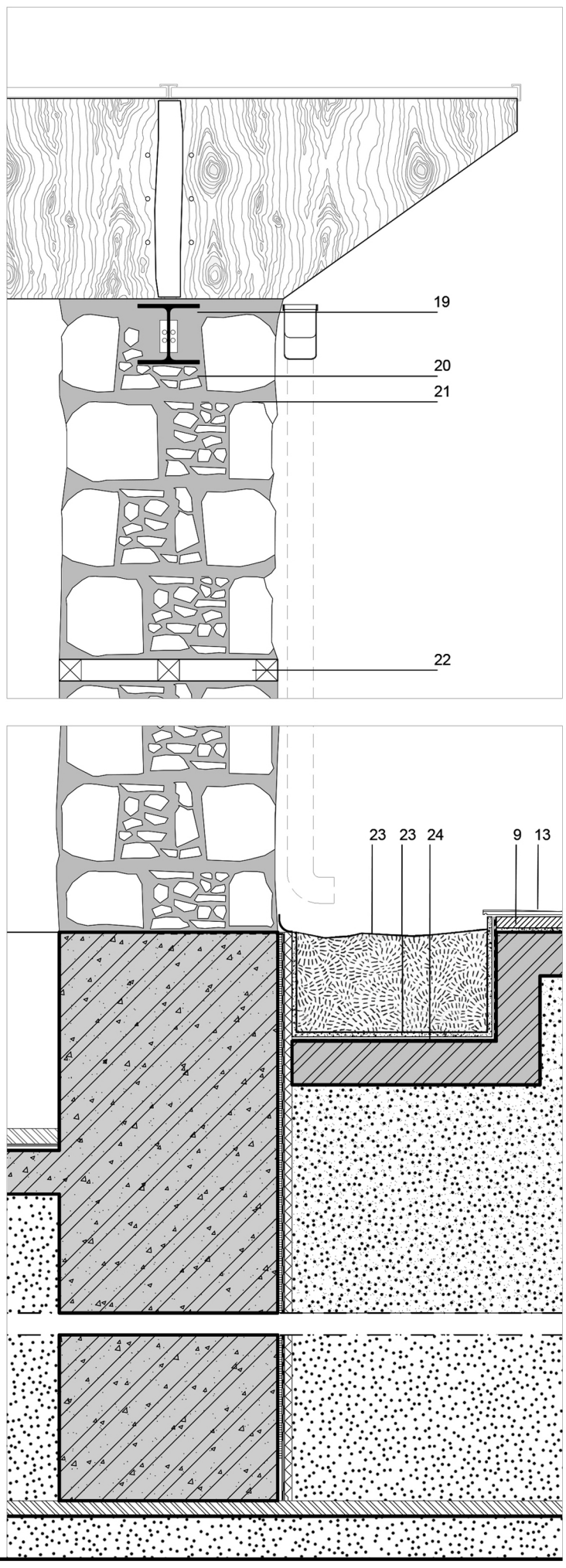




1 timber 15cm
2 glass 4cm
3 metal sheet 1cm
2% inclination for
water 4 secondary wooden
beam 10x90cm
arched with metal screws
5 triangular metal anchor centered
to the core of bolder 15mm
6 bolder h3.20m x 1.00m x 1.20m by
local quarries stone of tranovaltos quarry
7 stone for water retain
8 concrete 1.00μ for base. Layer of
concrete (7cm) for balancing depending
on the course of construction
9 industrial poured slate 7cm
10 water insulation
11 balancing concrete 4cm
12 concrete slab
13 granite 20mm engraved for water
14 drainage 40mm
15 poured slab
16 gravel
17 smaller gravel and drainage pipe
18 concrete base for balancing
19 metal beam
20 stone wall 1m based on vernacular
construction
21. bigger stones places diagonally
smaller stones in the middle, outer
mortar

22. balancing wood beam 10cm
23 water - fountain
24. mortar 2cm
25. double water insulation
26. water pipe drainage
27 water insulation 2mm
28 gravel
29 earth





workshop
details 1:20

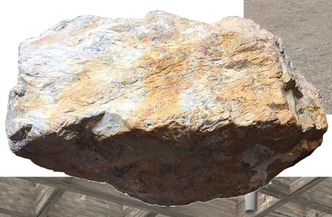


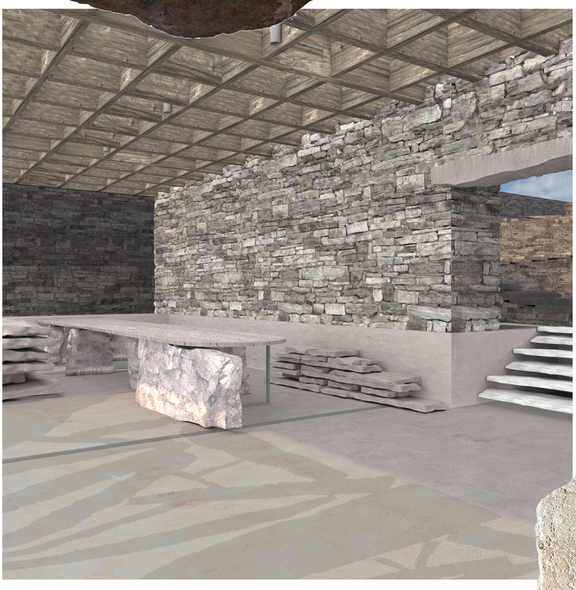


In an non-static solution, the tools of the architect adapt. Design domesticates tools from vernacular, as the grain mill (aloni) is reorganised as a center of the workshop that follows the technics of stone. Stones from regional quarries are piling together to reform a hybrid form of workshop. However more crucial is to use as a tool the mentality of the craft(wo)men to treat their objects with passion, proximity, understanding. The way of manufacturing, altering and assembling with care adapts to the transition phase of a mine. The coal mines need not the workshop, but the workshops mentality.





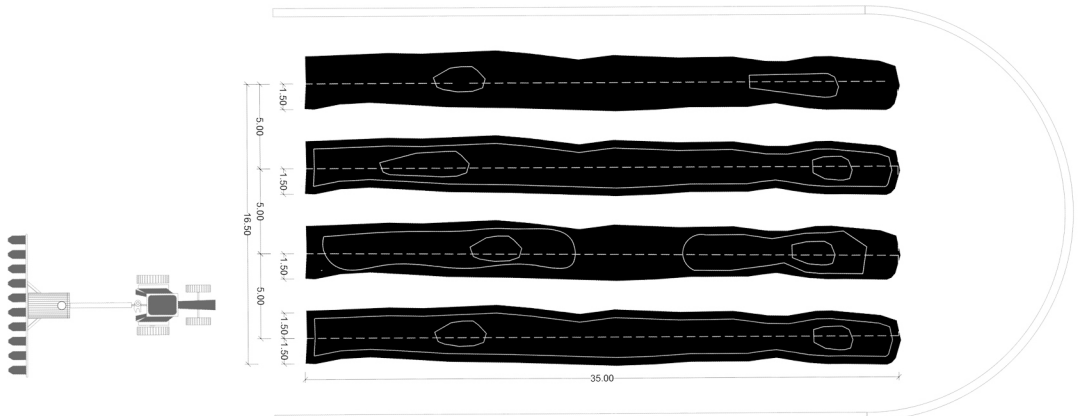


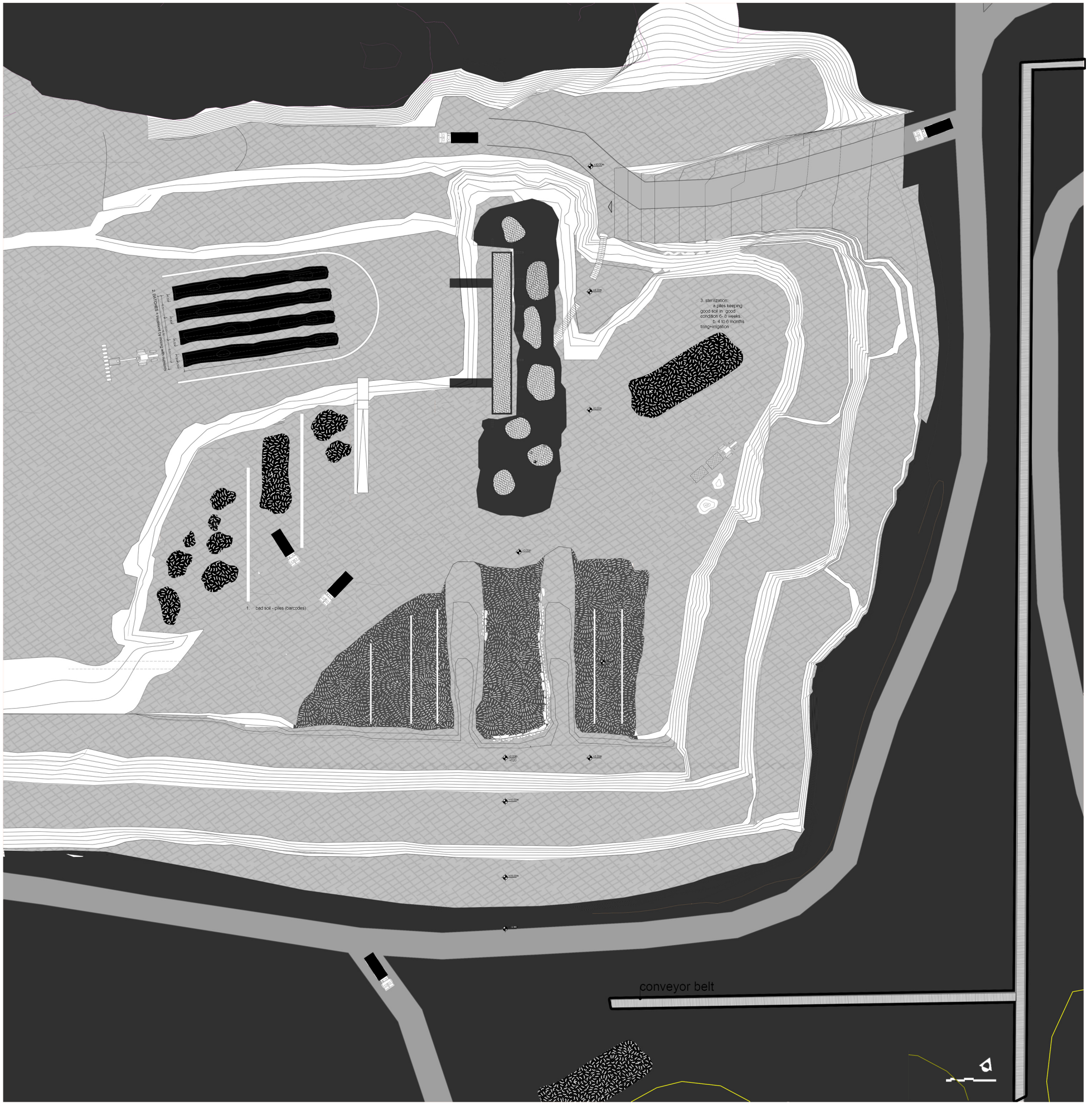


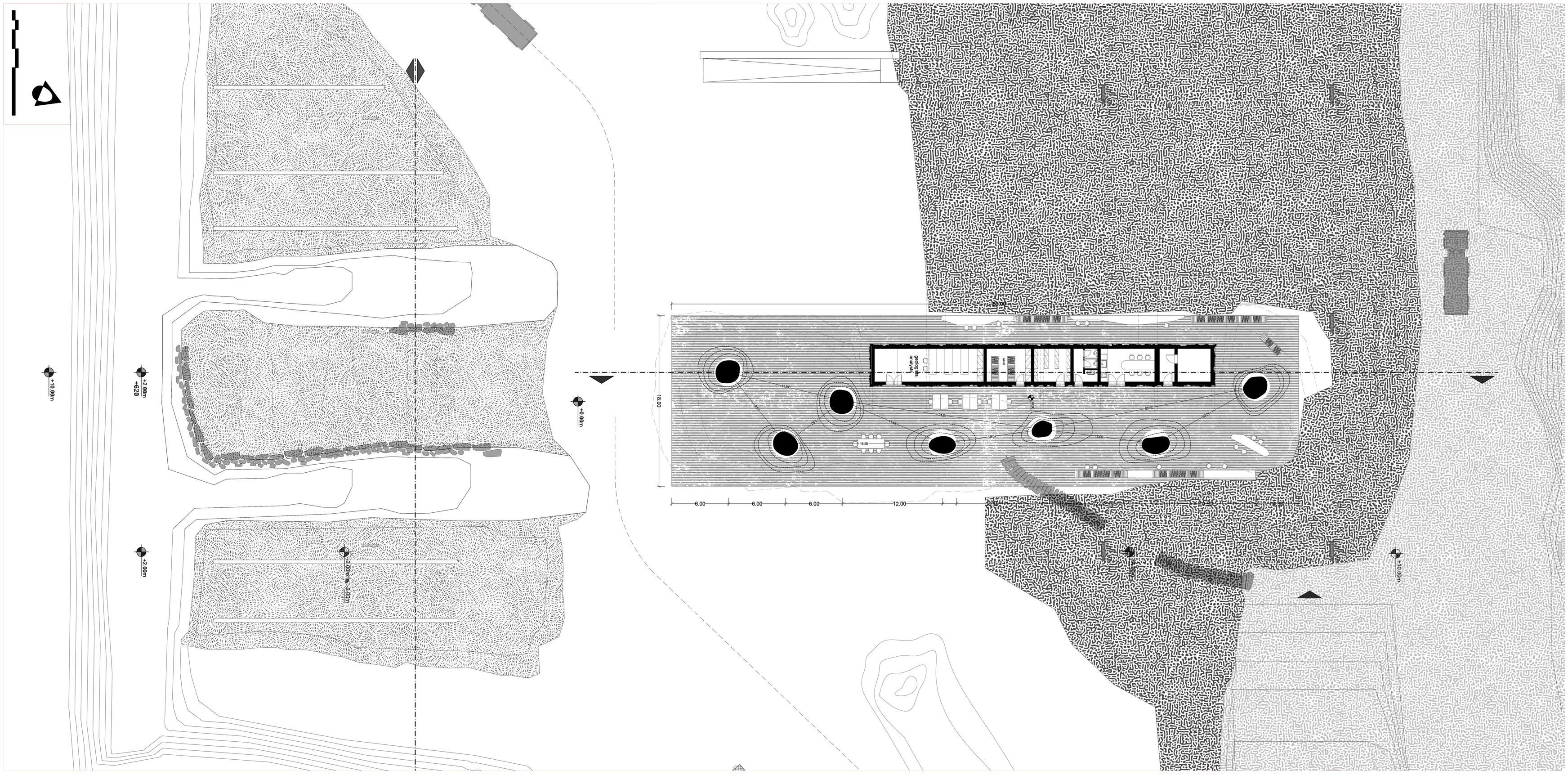




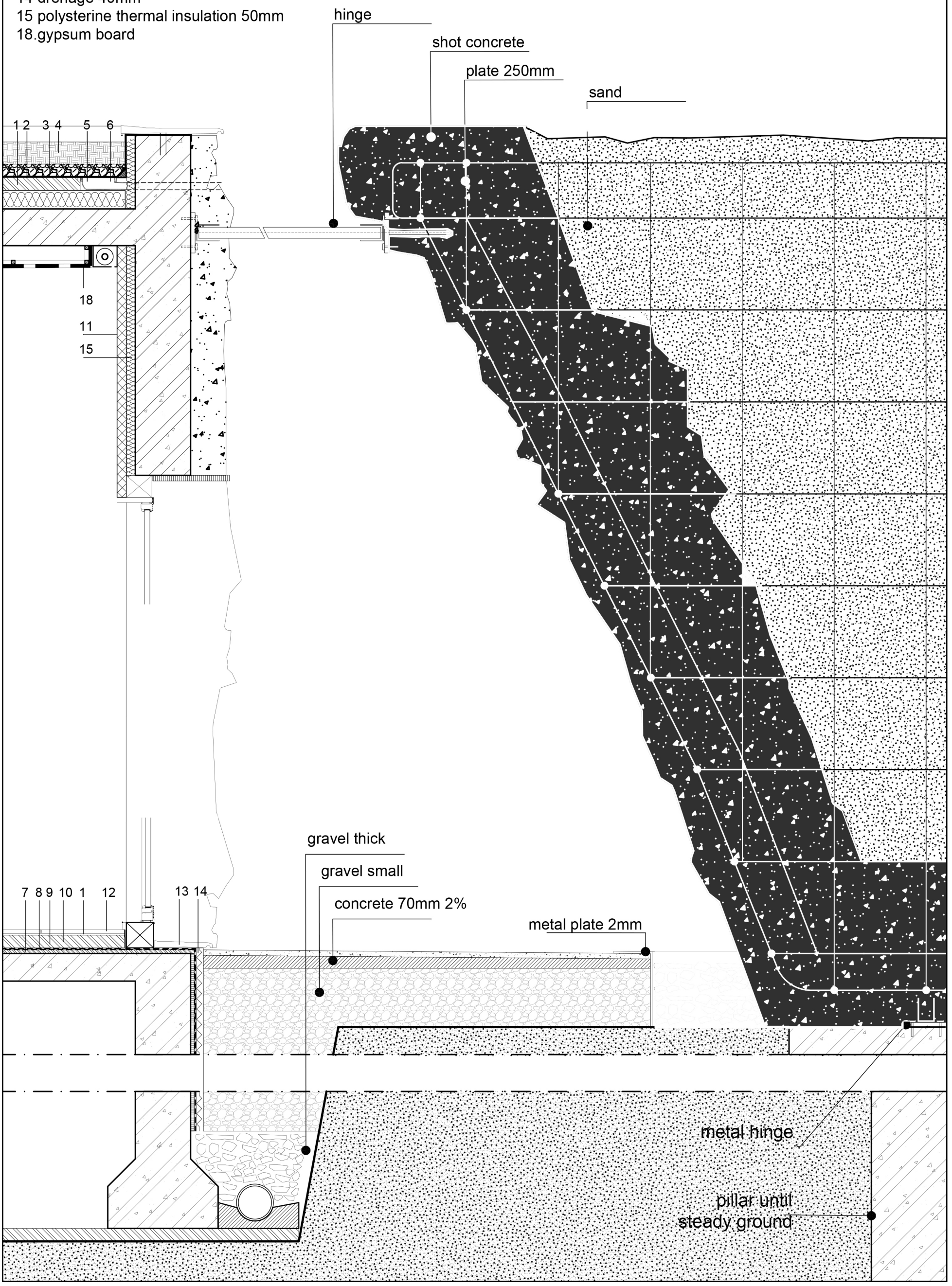



1.50
5.00
1.50
5.00
16.50
1.50
5.00
1.50
1.50
35.00


3. sterilization:
a.piles keeping
good soil in good
condition 6- 8 weeks
b. 4 to 6 months
tiling+irrigation
2. DITCHES + treatment by mixing with manure
1. bad soil - piles (barcodes)
conveyor belt


+10.00m
+2.00m
+820
+2.00m
+2.00m
+0.00m
+10.00m
18.00
6.00
6.00
6.00
12.00
18.50
Sculpture
Sculpture
+2.00m
+0.00m
+4.50
+10.00m

1 concrete 70mm
2 water proof membrane 2mm
3 gravel 40mm
4 earth
5 gutter
6 metal plate 5mm
7 concrete for balancing 4cm
8 water proof membrane 2mm
11 plaster board
12 ceramic tile 20mm
13 granite 20mm engraved for water
14 drenage 40mm
15 polysterine thermal insulation 50mm
18.gypsum board









Soil is perceived as an object, entity. Its remediation, by composting, mixing with niutrients creates a new landscape, similar to a factory, but now a factory of repair. In this repairing process, the pursuit of lost wounded nature, the architect needs to change. Then the process of soil remediation starts with a form molded by it, the same soil that used in sendimentation, the waste, leftover of extraction. A canopy as a healing center, a soil center made of soil.

This irregularity questions the notion of the architect as crafts(wo)man. We do not have a mental image of the end product, but the different steps that lead to that. Motor schema is an organization procedure and not a description or drawing of the actual form. It lacks a fixed or geometric morphology, it is flexible. "A craft work has not a predetermined result, the procedure is predetermined." (Spuybroek, 2010, p.31-34)

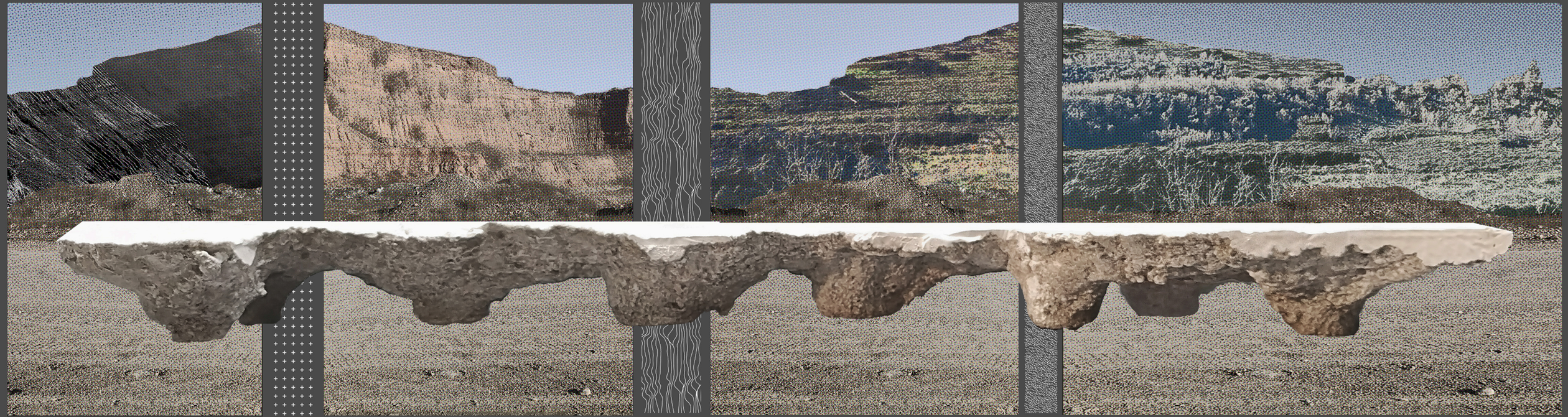


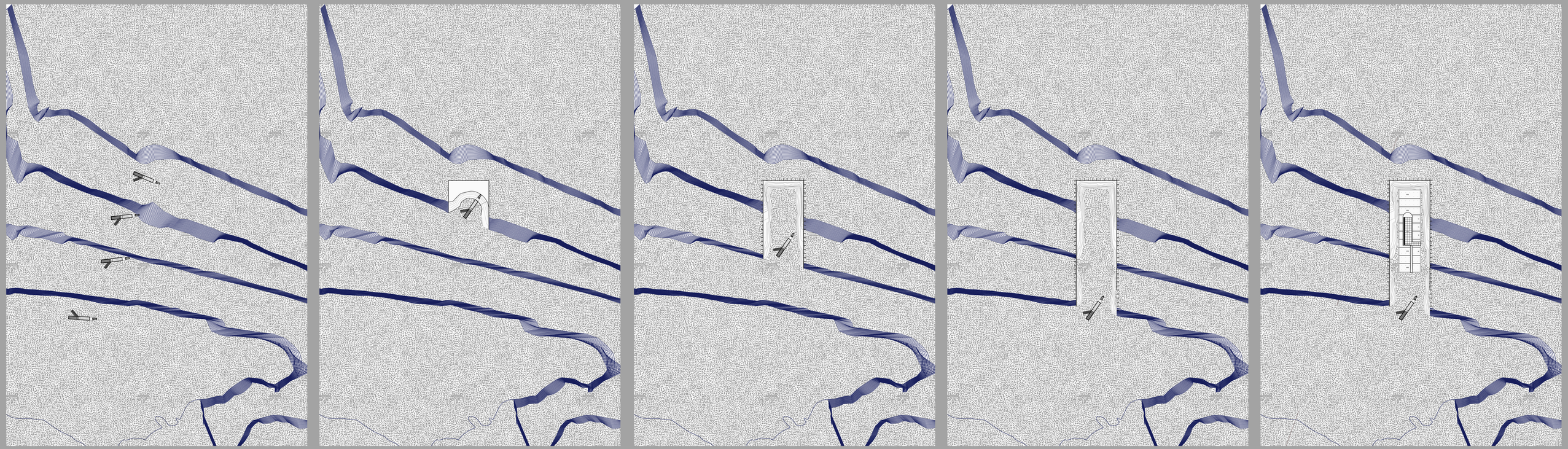


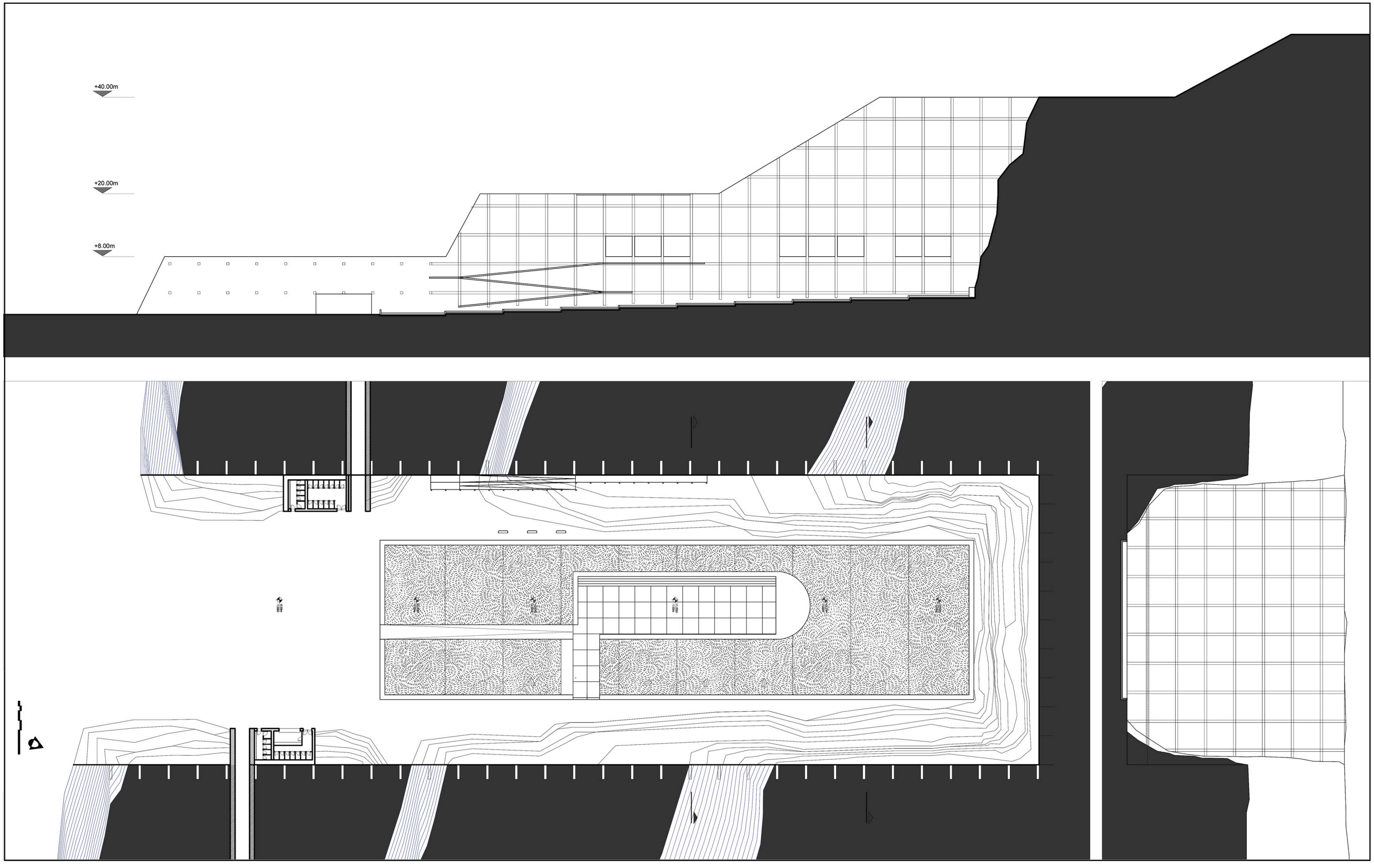


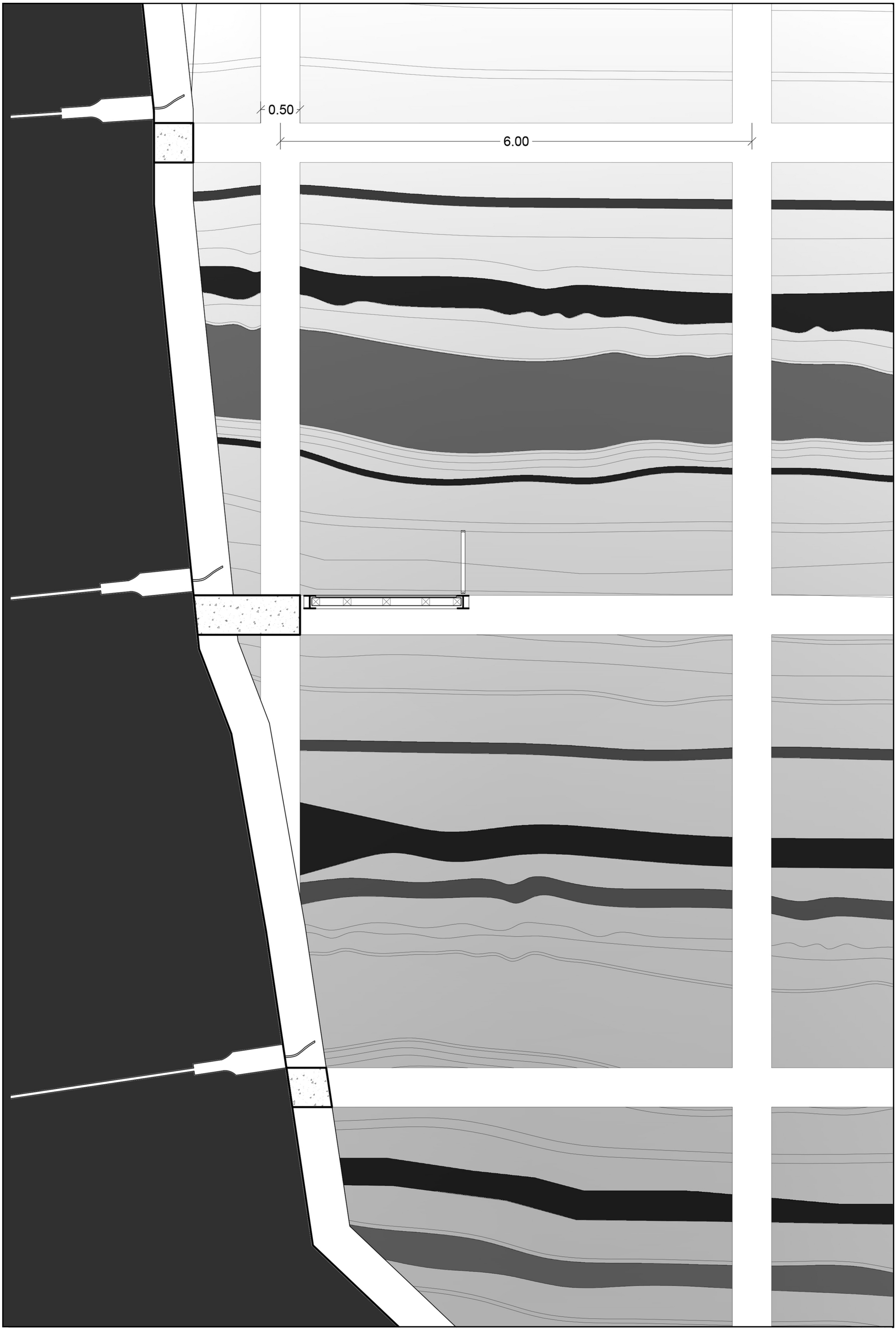






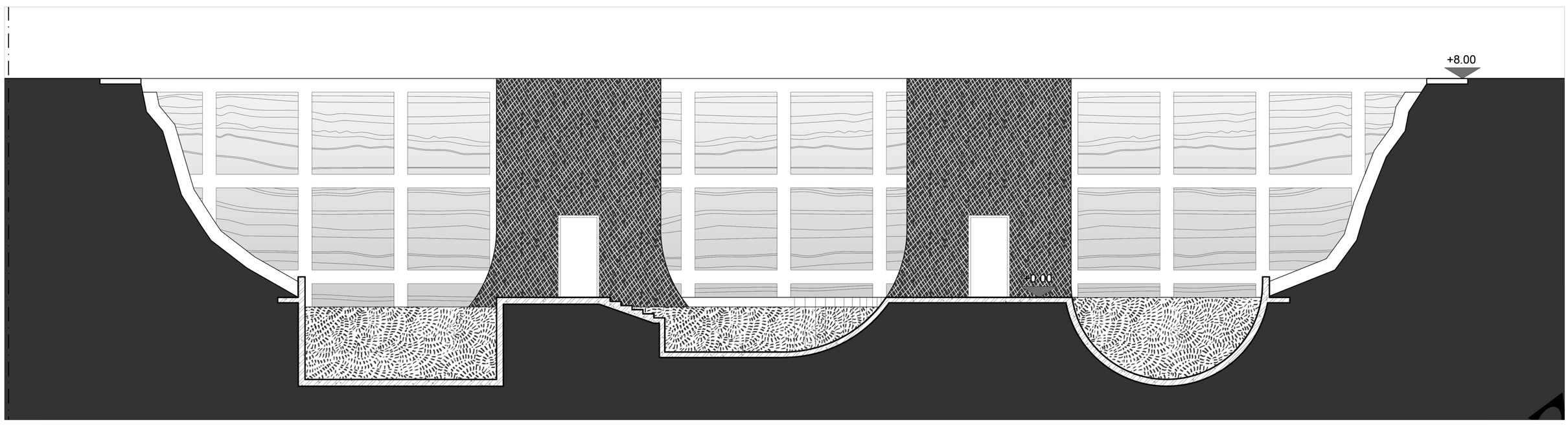



+40.00m
+20.00m
+8.00m


0.50
6.00

P01

P01





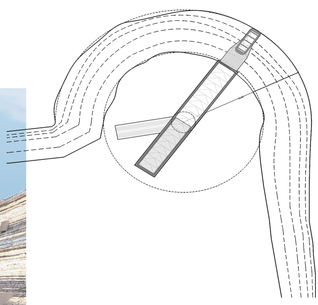


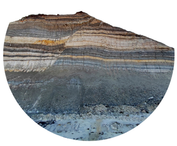
"The sublime, as defined by Kant, stemmed primarily from a feeling of inadequacy in the face of superior powers" (Vilder, p52). As mines represent mountains upside down, an anthropogenic landscape, they hold this character. But uncanny is more. Space of uncanny, according to philosopher Burke, is "a space that mental space where temporality and spatiality collapse" (Vidler, p39). They are an open wound.

In an open pit mine main protagonist is the bucket-wheel. Its purpose is to extract lignite. its dimensions define extraction and shape of the mine. BLUE here is used to extract and create a series of pools, revealing the stratigraphic layers of eordaia mine. stratigraphy related to the hidden histories or earth The wound that extraction has created is intensitided, unraveling narratives, leaving a mark of memory.



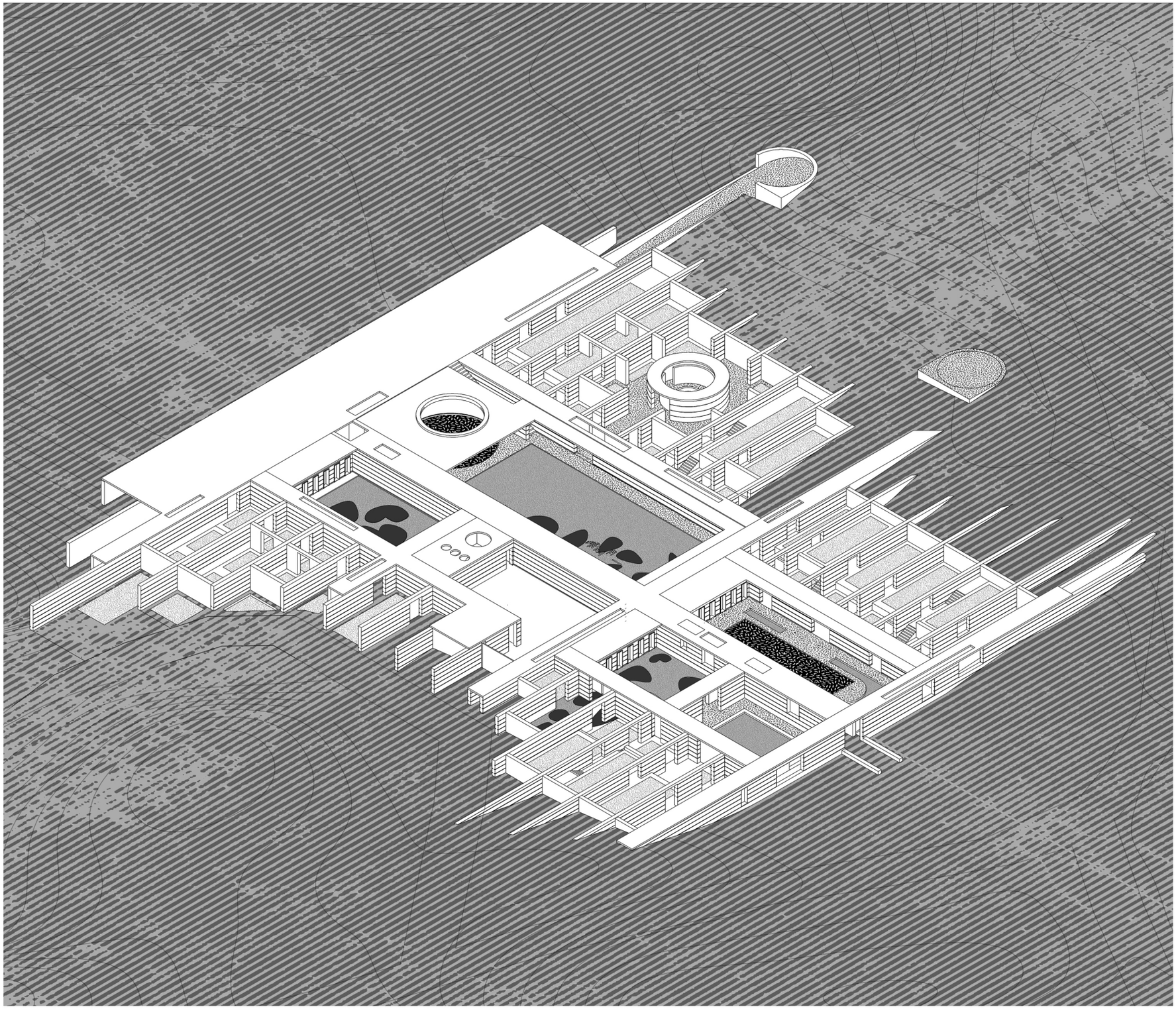













MAVROPIGI

storage external

truck entrance

gardens exploration

gardens cultivation

gardens cultivation

art zone

+0.00m

+3.50

+4.50

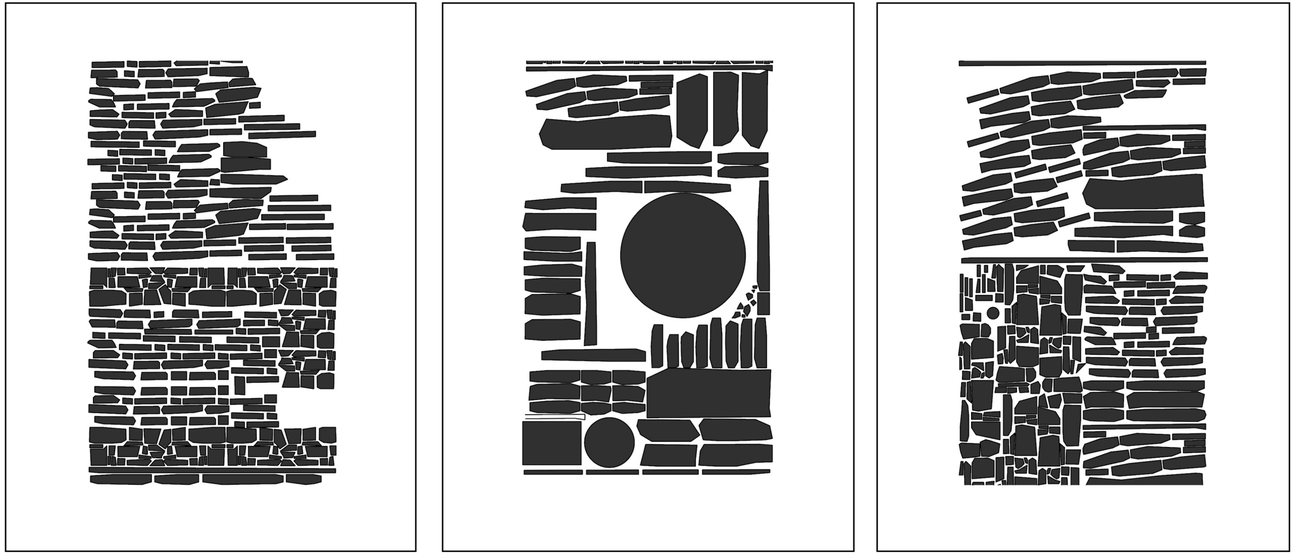
+5.50

+1.50m

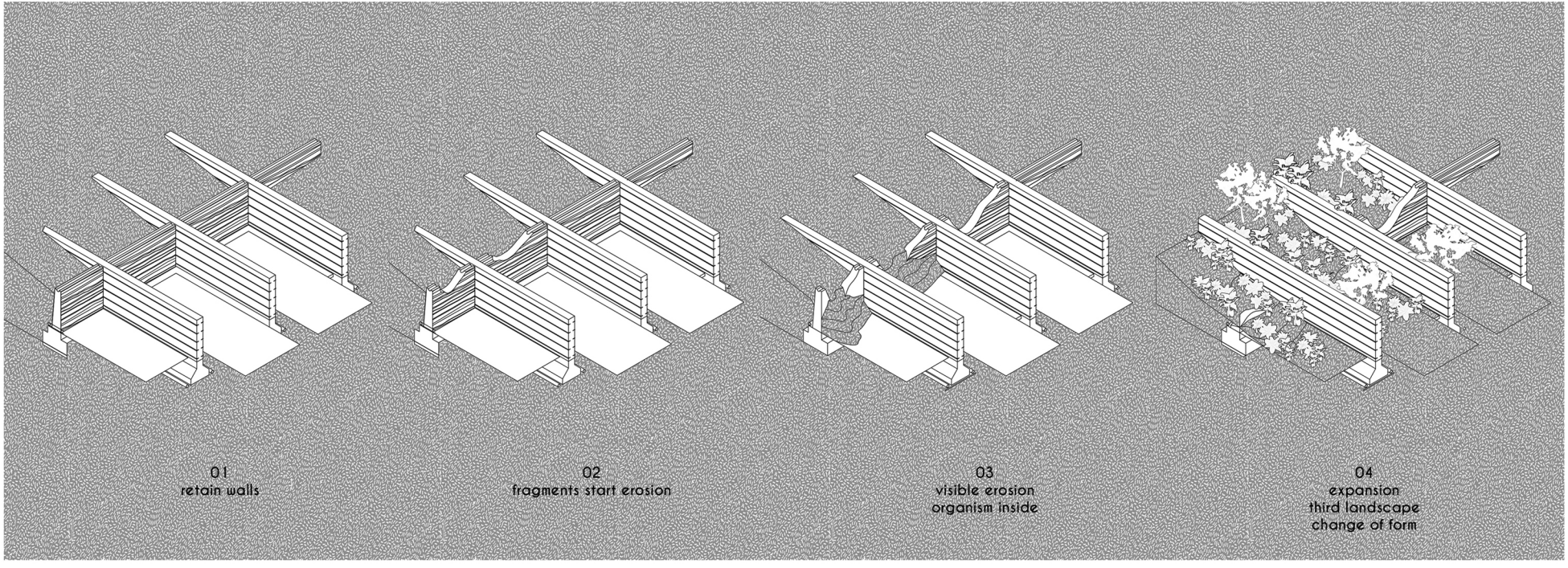
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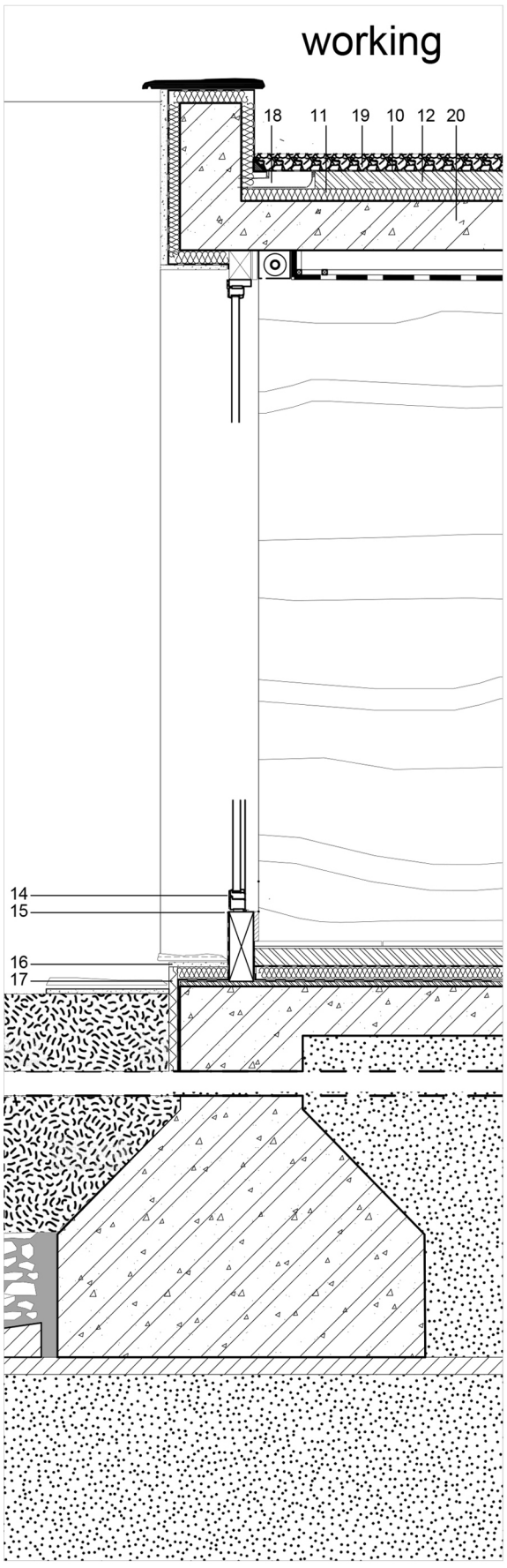
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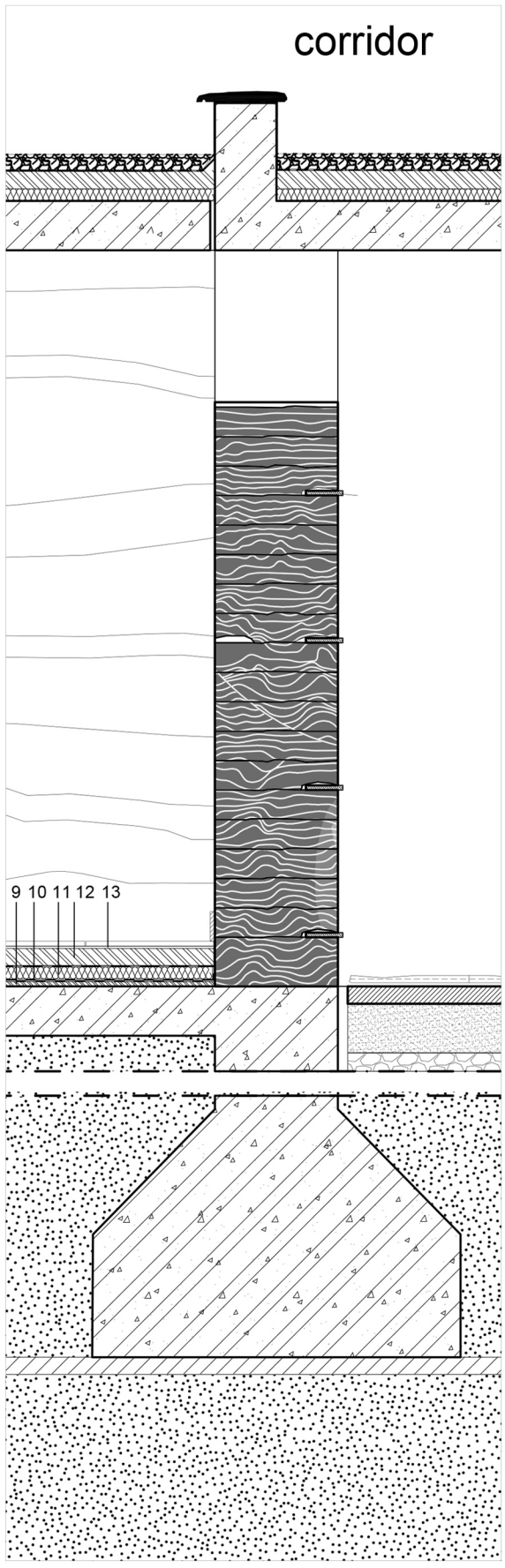
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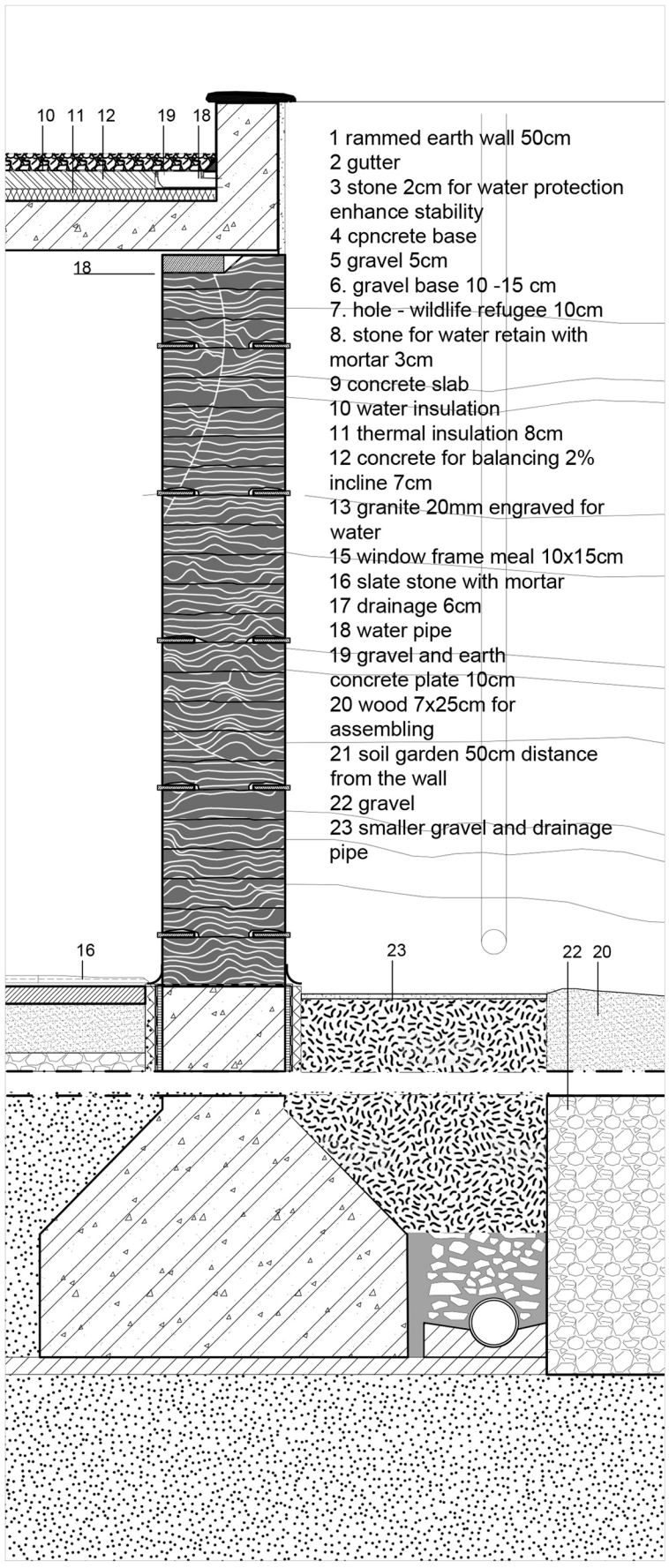


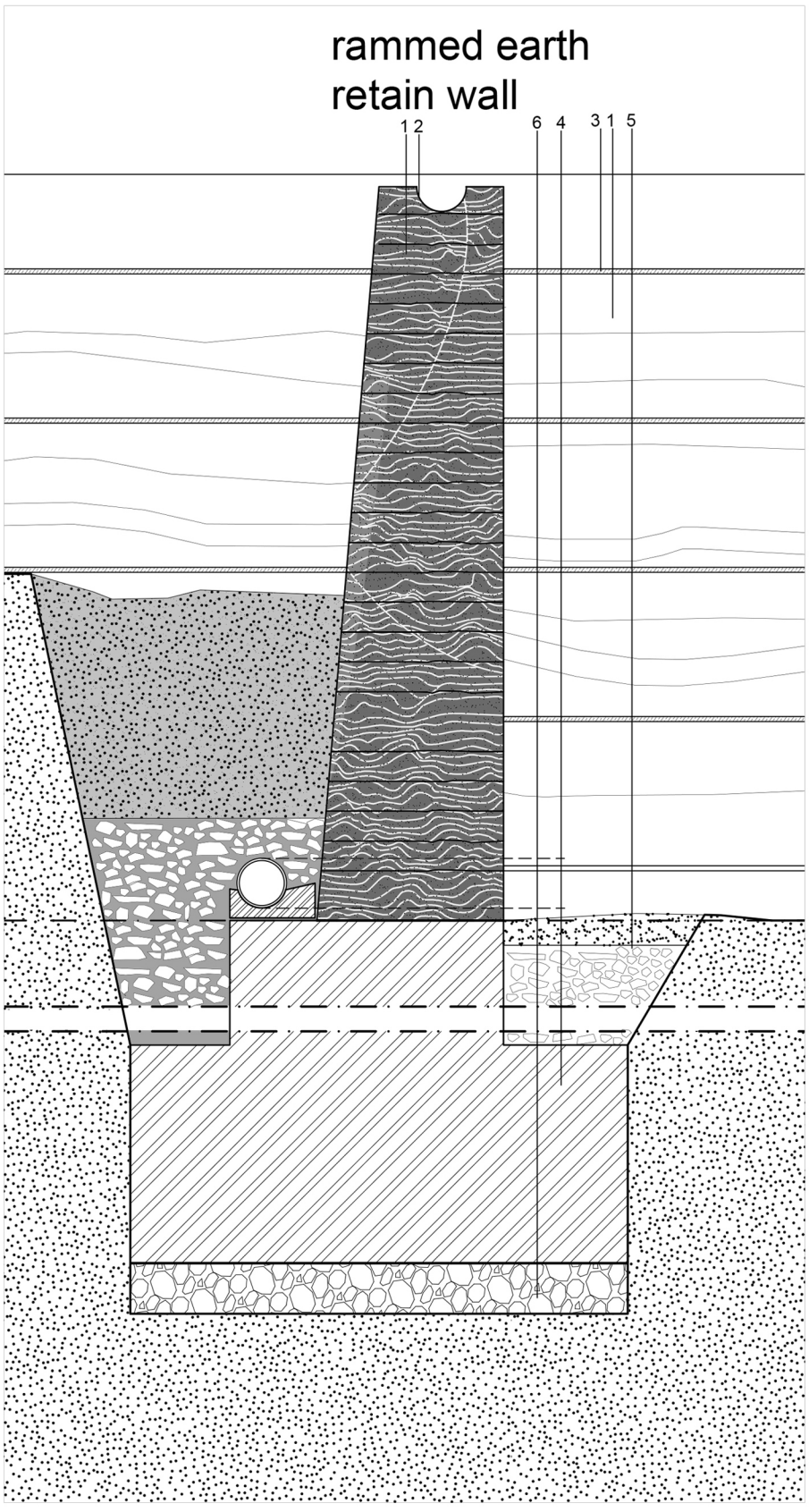
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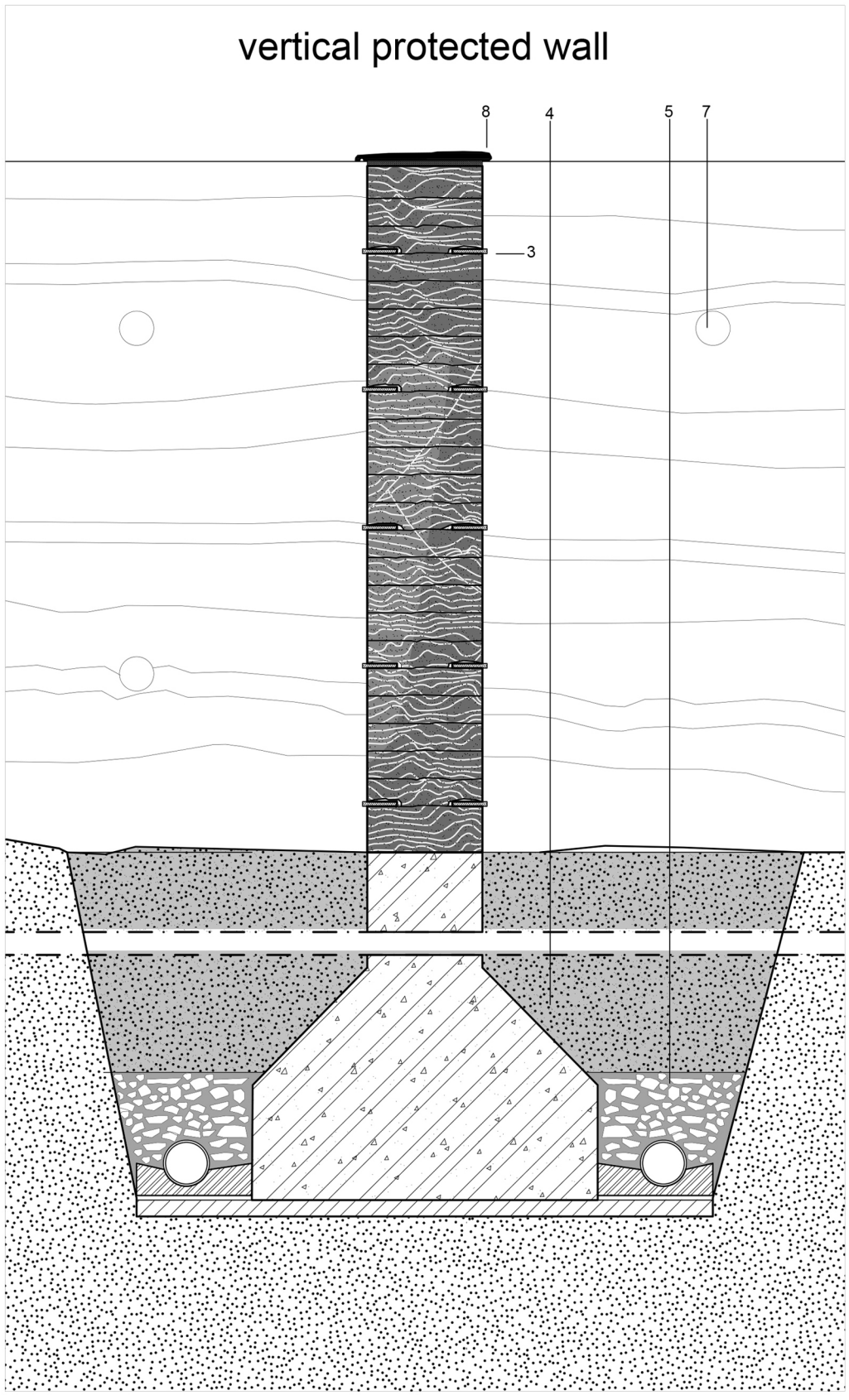

01
retain walls
02
fragments start erosion
03
visible erosion
organism inside
04
expansion
third landscape
change of form


working
18 11 19 10 12 20
14
15
16
17


corridor
9 10 11 12 13


10 11 12 19 18
18
16
23
22 20
1 rammed earth wall 50cm
2 gutter
3 stone 2cm for water protection enhance stability
4 cpncrete base
5 gravel 5cm
6. gravel base 10 -15 cm
7. hole - wildlife refugee 10cm
8. stone for water retain with mortar 3cm
9 concrete slab
10 water insulation
11 thermal insulation 8cm
12 concrete for balancing 2% incline 7cm
13 granite 20mm engraved for water
15 window frame meal 10x15cm
16 slate stone with mortar
17 drainage 6cm
18 water pipe
19 gravel and earth concrete plate 10cm
20 wood 7x25cm for assembling
21 soil garden 50cm distance from the wall
22 gravel
23 smaller gravel and drainage pipe

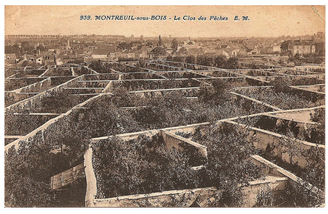

rammed earth
retain wall
1 2
6 4
3 1 5

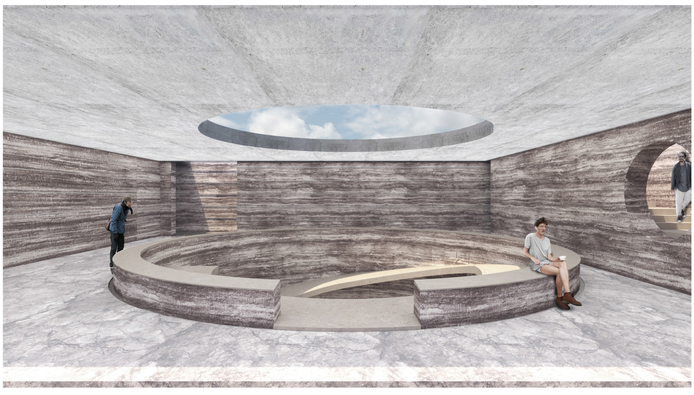

vertical protected wall
8
4
5 7
3



The new archaeology

The new is supported, stands on the old and evolves. Old is the ground, the seed, the fertilizer for the new to grow. Every move, action, story, exploitation leads to a continuum conjugation of time. Human agency is the plough, the catalyst and tool for new to develop. The quality of the tool defines the character of new. Old is a part of the new, either in the form of wound or memory. New is the fruit, until it becomes part of the ground again. There is no permanence, everything flows.



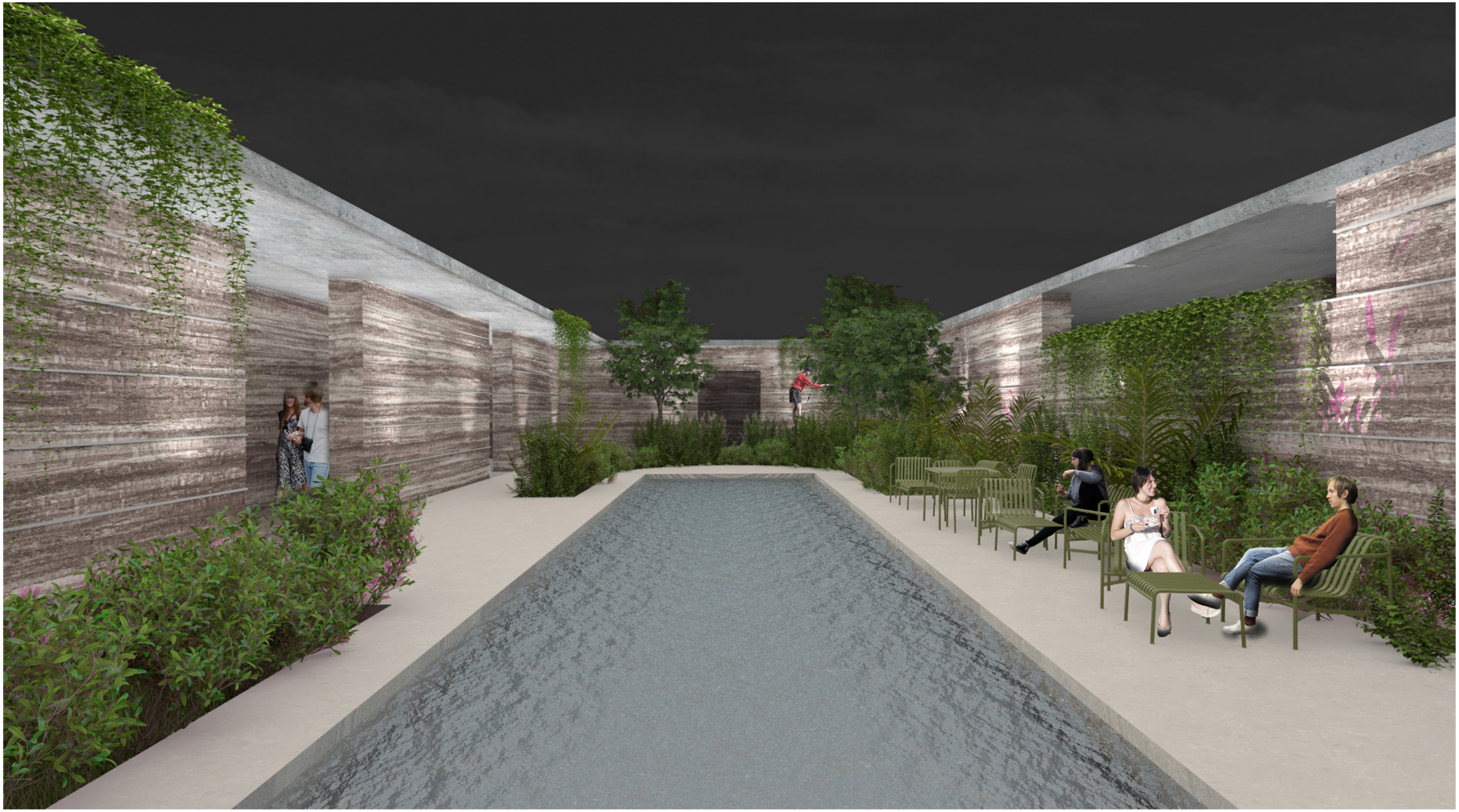




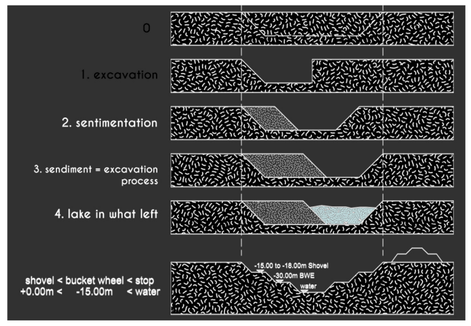


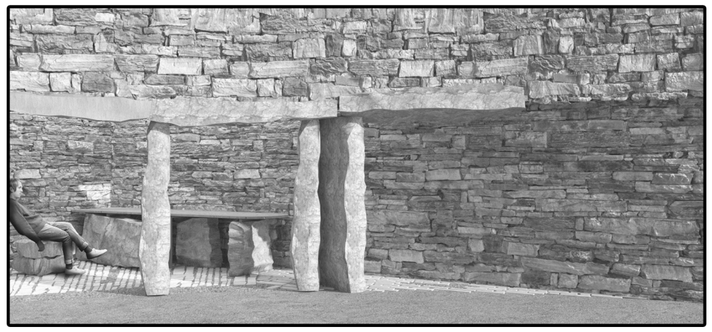




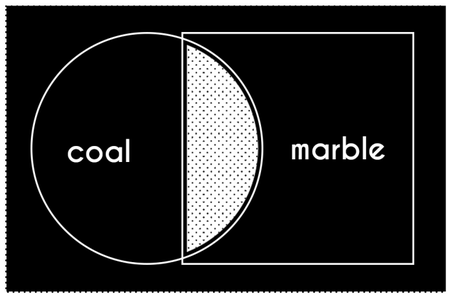


METAPLASIS





hylophormilm = ύλη (matter) + μορφή (form)



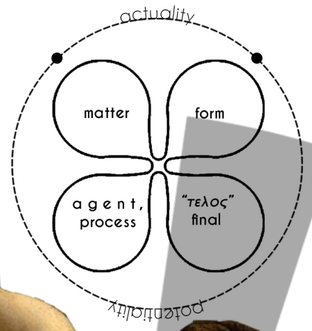
extraction



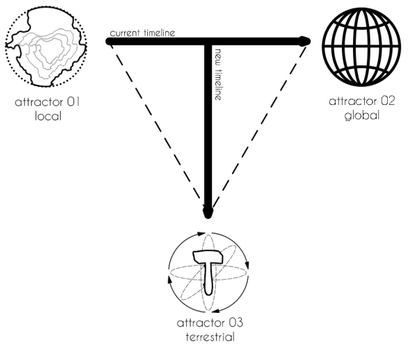
stratigraphy

coal
"λίθος ανθρακος" = anthrax

marble
"μαρμαρο"= shining stone





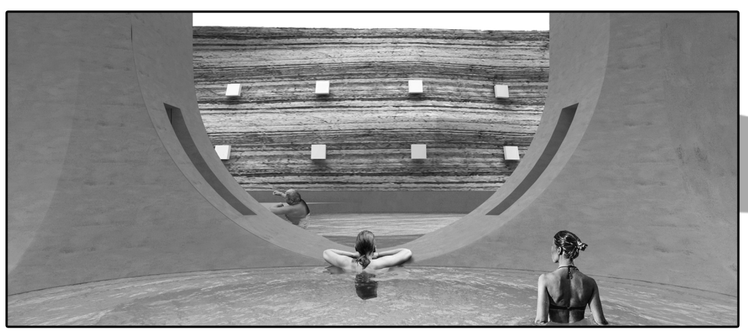


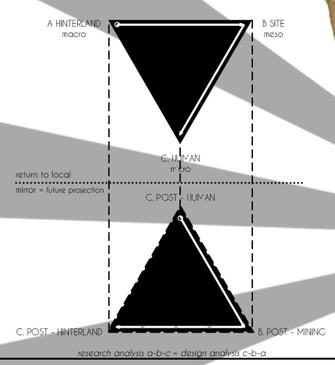


NEW ARCHAEOLOGY



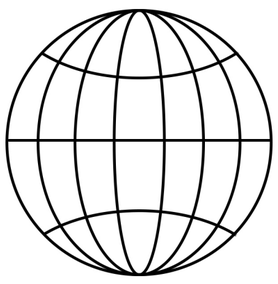


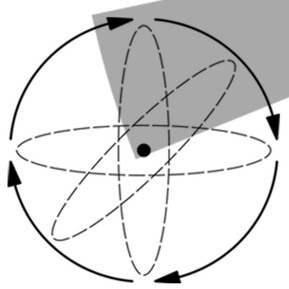




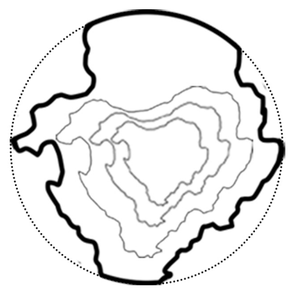
perception	cheap factory+industry workman (labor)	wealth architecture craftsman
time	temporal not durable	perpetual durable
Matter formation tentiality)	sedimentary rock fossil fuel earth layers of strata	metamorphic rock stone earth (temp+ pressure)
eration	industry = combustion energy (intangible)	industry , carving architecture (tangible)







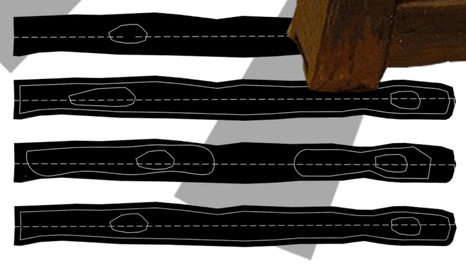
RETHINK FORM
REPAIR CHANGE MYTH



human agency
human

material agency
nature, non human









Human+ / Nature-

HA+ ⇄ MA-



ENTITIES

POST HUMAN