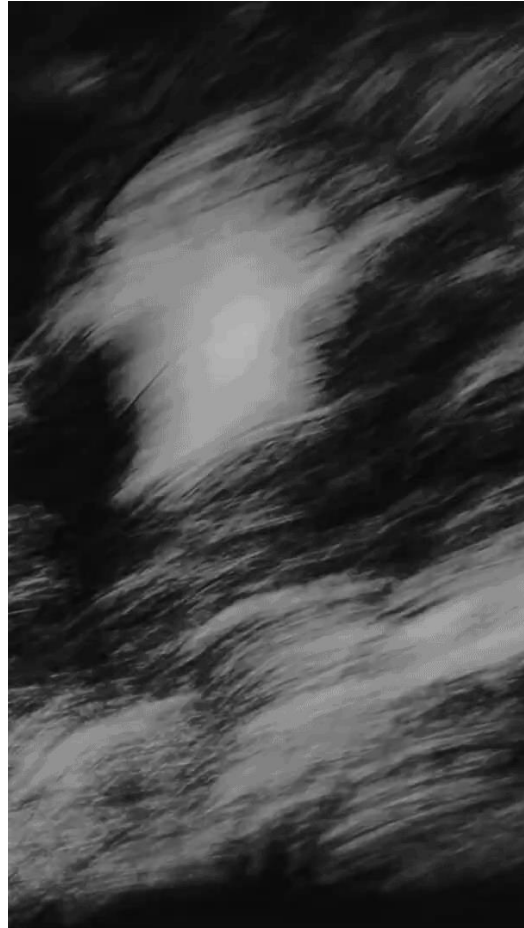


Jilles Rodenburg
4861809

Borders and Territories
P5 Presentation

O.R.G. Rommens
Ir. P.H.M. Jennen
Ir. M.G.H. Schoonderbeek
Dr. J.H. Heintz



NEO-UPPER TBILISI



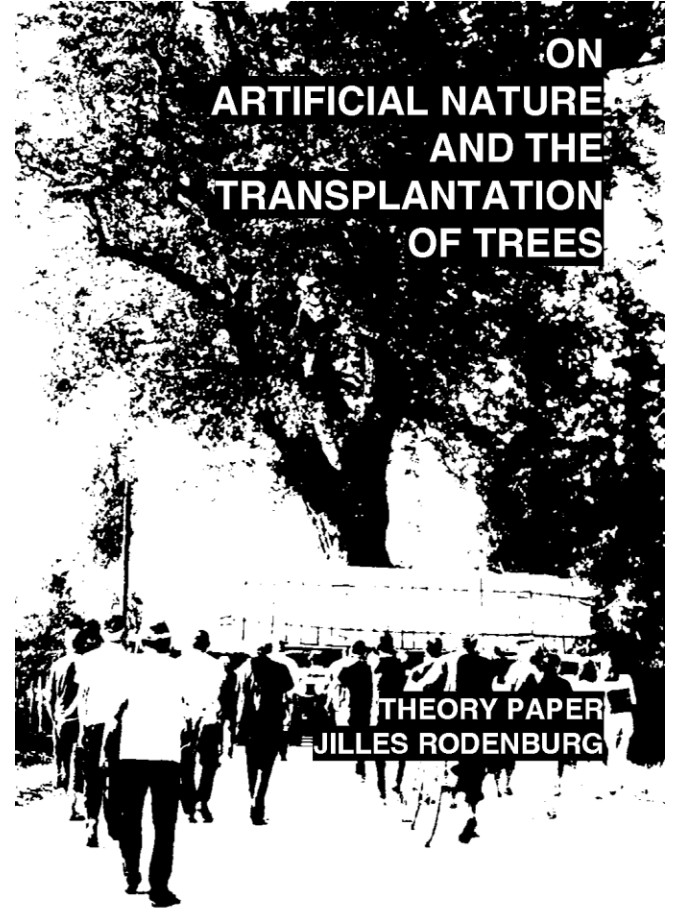
Nature as static and aesthetic

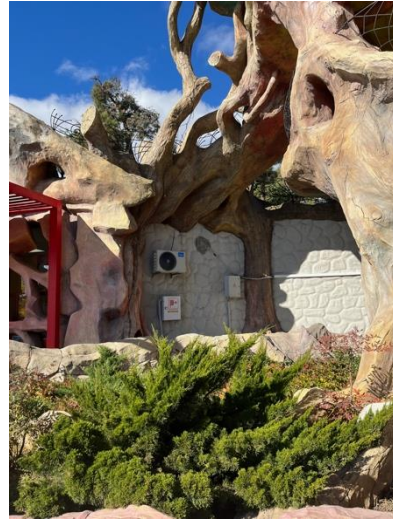
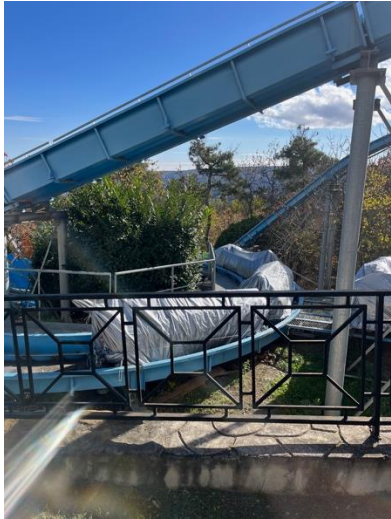


Commodification (of Nature)

Taming the Garden

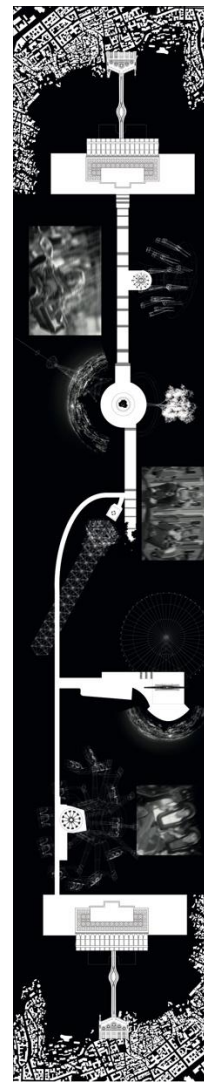
Salome Jashi, 2021

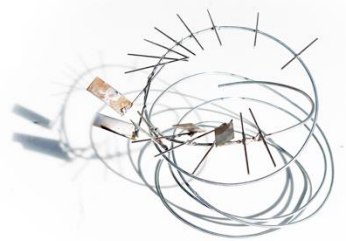
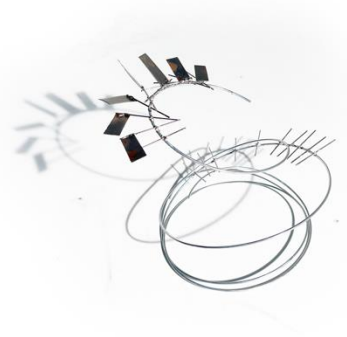




Orienting Escape Through Disorientation

Mapping



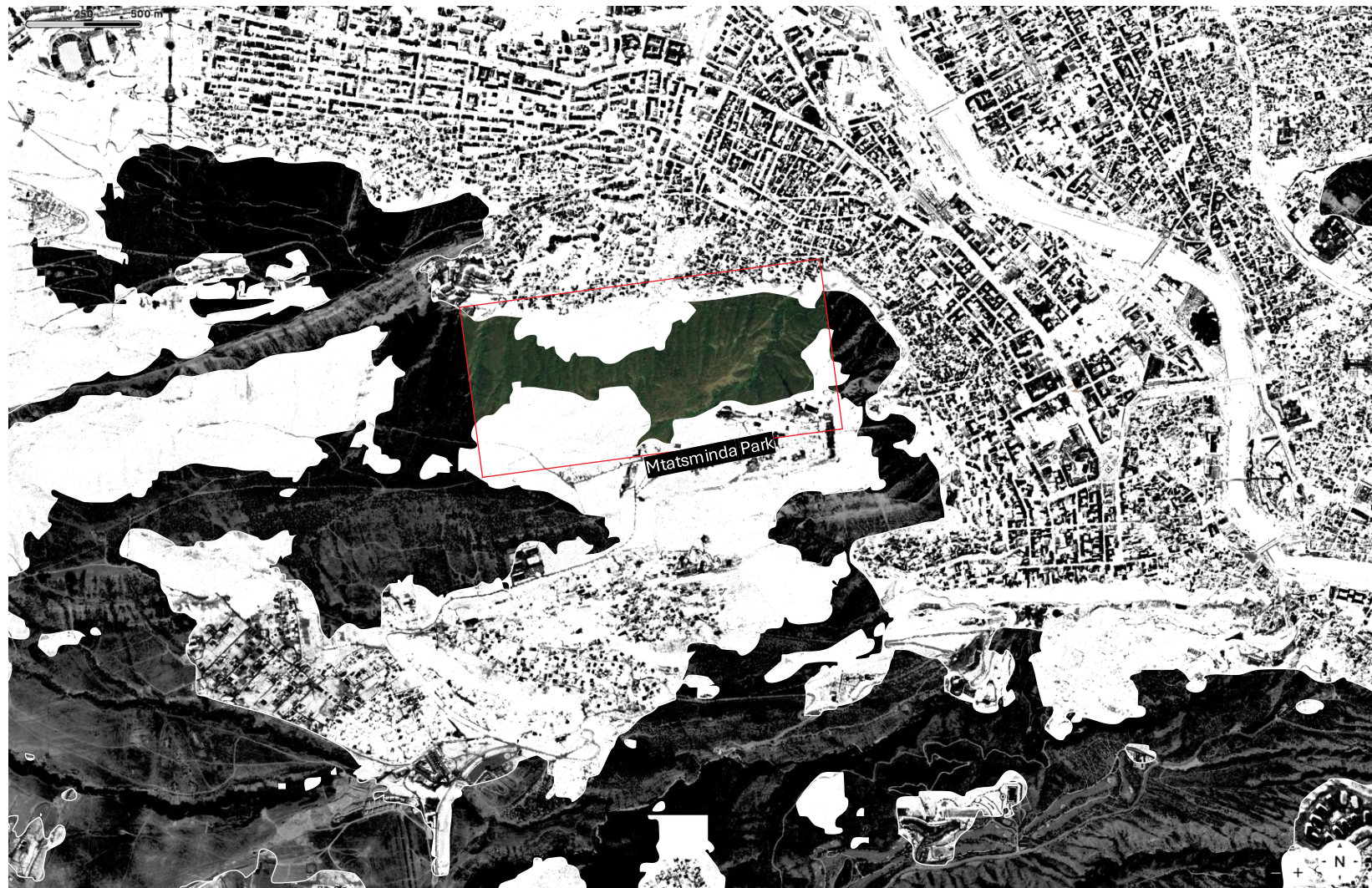


'natural'



'playful'

'cultural'

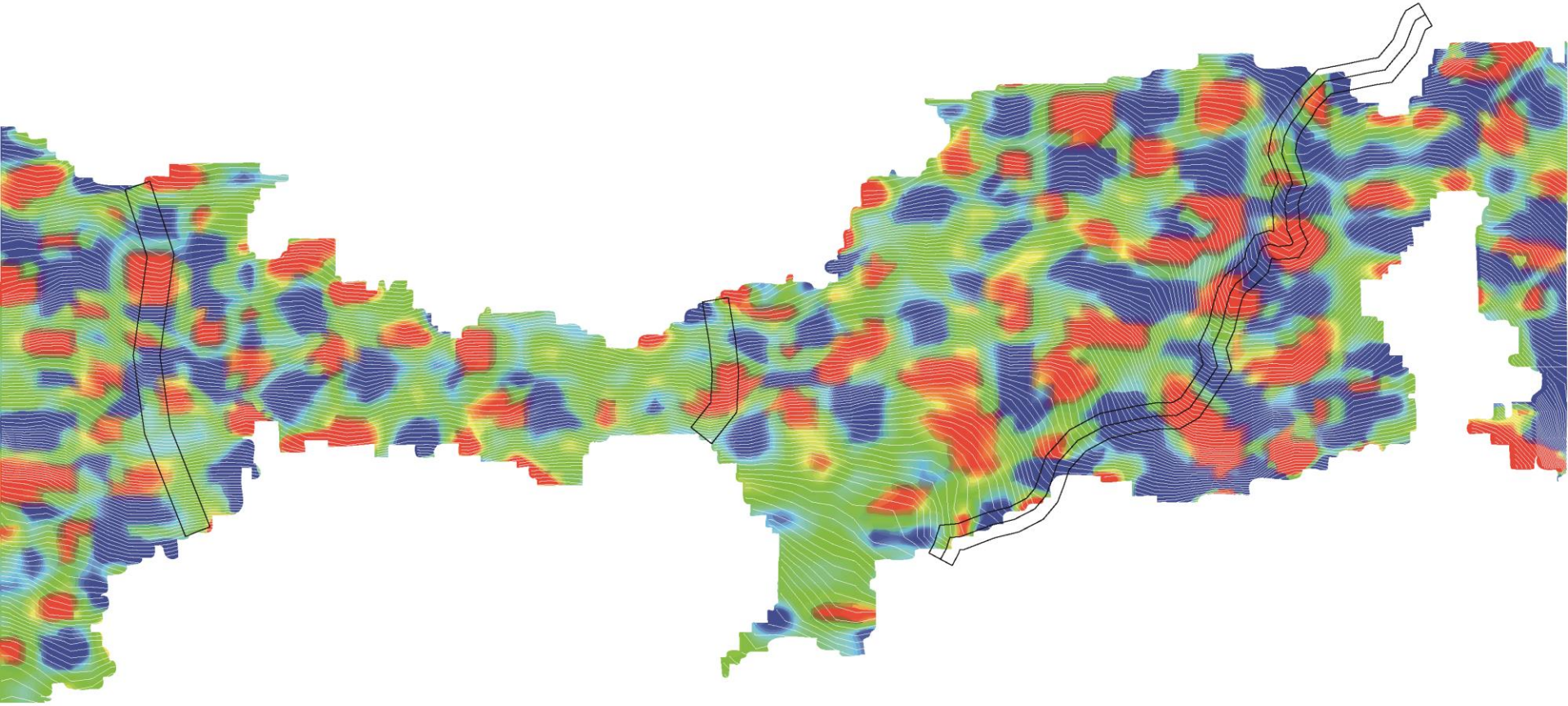




The Sprouting

Slope Steepness ▲
//Curvature Analysis
1:5000

Blue - Green - Red
Gentle ----- Steep

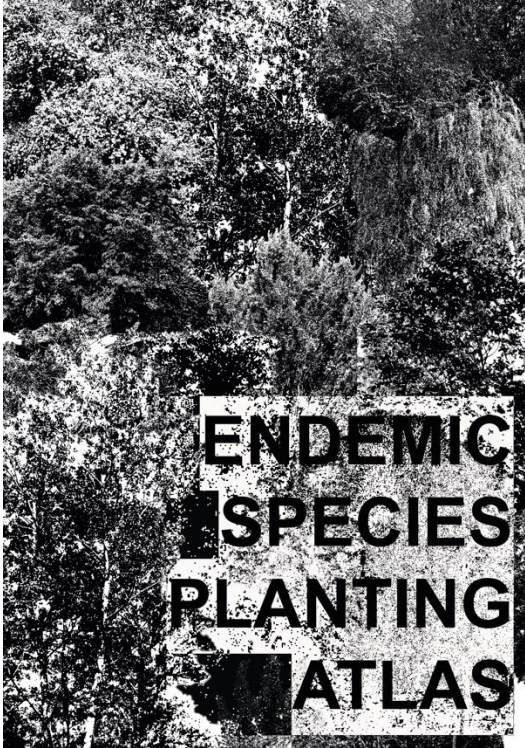


Blue - Slope: Gentle
Soil Depth: Deep
Soil Moisture: Moderate

Green - Slope: Moderate
Soil Depth: Moderate-Deep
Soil Moisture: Moderate-Dry

Red - Slope: Steep
Soil Depth: Shallow-Moderate
Soil Moisture: Moderate-Dry

Black Lines - Water Collection
Lower Regions
Soil Moisture: Moderate-Wet



Rocky

Species	Height (m)	Soil Depth	Soil Moisture
<i>Quercus macronthera</i> (Persian oak)	20-30	Deep	Dry-Moderate
<i>Carpinus orientalis</i> (Eastern hornbeam)	6-15	Shallow-Moderate	Dry-Moderate
<i>Betula pendula</i> (Silver birch)	15-25	Shallow-Moderate	Dry-Moist
<i>Celtis caucasica</i>	10-15	Shallow-Moderate	Dry-Moderate
<i>Populus tremula</i> (European aspen)	15-25	Shallow-Moderate	Dry-Moderate
<i>Pinus georgica</i>	5-12	Moderate	Dry-Moderate
<i>Pinus caucasica</i>	5-10	Moderate	Dry-Moderate

Ecological Role
 Dry forest oak; slope stabilizer
 Coppice tree; slope stabilization
 Pioneer; colonizes disturbed land
 Bird-attracting dry woodland tree
 Pioneer; supports pollinators
 Native fruit; pollinator-friendly
 Transition zone tree; supports insects

Species

Species	Height (m)	Soil Depth	Soil Moisture
<i>Pinus brutia</i> var. <i>phlysa</i> (Phytsian Pine)	15-25	Moderate-Deep	Dry-Moderate
<i>Pinus eldarica</i> (Afghan Pine)	10-20	Moderate	Dry
<i>Pinus sylvestris</i> (Scots Pine)	20-35	Moderate-Deep	Dry-Moderate
<i>Laurus nobilis</i> (Bay Laurel)	5-10	Moderate	Dry-Moderate
<i>Arbutus andrachne</i> (Greek Strawberry Tree)	5-10	Shallow-Moderate	Dry-Moderate

Ecological Role
 Pioneer; stabilizes dunes/slopes; habitat for birds/insects
 Drought-tolerant pioneer; urban-tolerant, wind/sand barrier
 Cold-tolerant pioneer; supports wide biodiversity
 Aromatic understory tree; supports Mediterranean-type scrub ecosystems
 Understory shrub-tree; drought-adapted, supports pollinators

Deep soil

Species	Height (m)	Soil Depth	Soil Moisture
<i>Quercus robur imeretina</i>	25-35	Deep	Moderate
<i>Tilia cordata</i> (Small-leaved lime)	20-30	Deep	Moderate-Moist
<i>Ulmus minor</i> (Field elm)	20-30	Deep	Moderate
<i>Carpinus betulus</i> (European hornbeam)	20-25	Moderate-Deep	Moderate
<i>Zelkova carpinifolia</i>	20-35	Deep	Moist
<i>Populus nigra</i> (Black poplar)	20-30	Deep	Moist
<i>Populus nigra</i> 'Italica' (Lombardy poplar)	20-25	Deep	Moist
<i>Populus alba</i> (White poplar)	20-30	Moderate-Deep	Dry-Moist

Ecological Role
 Canopy former; supports biodiversity
 Nectar source; pollinator-friendly
 Riparian; field-edge diversity
 Coppiceable; mid-canopy structure
 Relict species; conservation focus
 Riparian; stabilizes riverbanks
 Fast growth; visual barrier
 Floodplain tree; erosion control

Species

Species	Height (m)	Soil Depth	Soil Moisture
<i>Abies nordmanniana</i> (Caucasian Fir)	30-60	Deep	Moist
<i>Picea orientalis</i> (Oriental Spruce)	25-45	Deep	Moist
<i>Taxus baccata</i> (Common Yew)	10-20	Moderate-Deep	Moist-Moderate
<i>Prunus laurocerasus</i> (Cherry Laurel)	5-12	Moderate-Deep	Moderate

Ecological Role
 Native canopy tree; shade-tolerant; supports mosses, birds
 Native conifer of humid forests; supports rich biodiversity
 Shade-tolerant; long-lived; supports birds, mycorrhizal fungi
 Dense evergreen shrub; provides cover for birds

Wet soil

Species	Height (m)	Soil Depth	Soil Moisture
<i>Ulmus minor</i> (Field elm)	20-30	Deep	Moderate
<i>Pterocarya pterocarpa</i>	20-30	Deep	Wet
<i>Zelkova carpinifolia</i>	20-35	Deep	Moist
<i>Populus nigra</i> (Black poplar)	20-30	Deep	Moist
<i>Populus nigra</i> 'Italica'	20-25	Deep	Moist

Ecological Role
 Riparian; bird/insect host
 Riverbank stabilizer; riparian species
 Relict tree; valuable habitat
 Windbreak; erosion control
 Linear planting; rapid growth

Species

Species	Height (m)	Soil Depth	Soil Moisture
<i>Picea orientalis</i> (Oriental Spruce)	25-45	Deep	Moist
<i>Abies nordmanniana</i> (Caucasian Fir)	30-60	Deep	Moist
<i>Taxus baccata</i> (Common Yew)	10-20	Moderate-Deep	Moist
<i>Prunus laurocerasus</i> (Cherry Laurel)	5-12	Moderate-Deep	Moderate-Moist

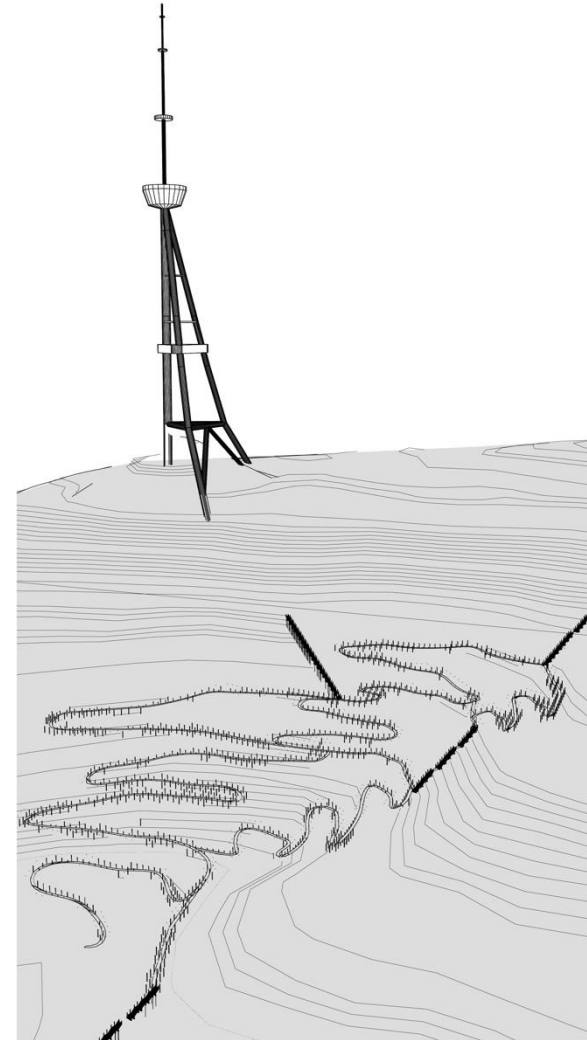
Ecological Role
 Found in moist mountain valleys; habitat for birds and insects
 Grows in moist mountain habitats; retains soil, shades forest floor
 Survives in shady, moist ravines; supports fungi and birds
 Tolerates moist woodland soils; dense understory layer

SOIL DIVISION

1:25.000 Mtatsminda North Side



1:25.000



Cooler Climate
Warmer Climate

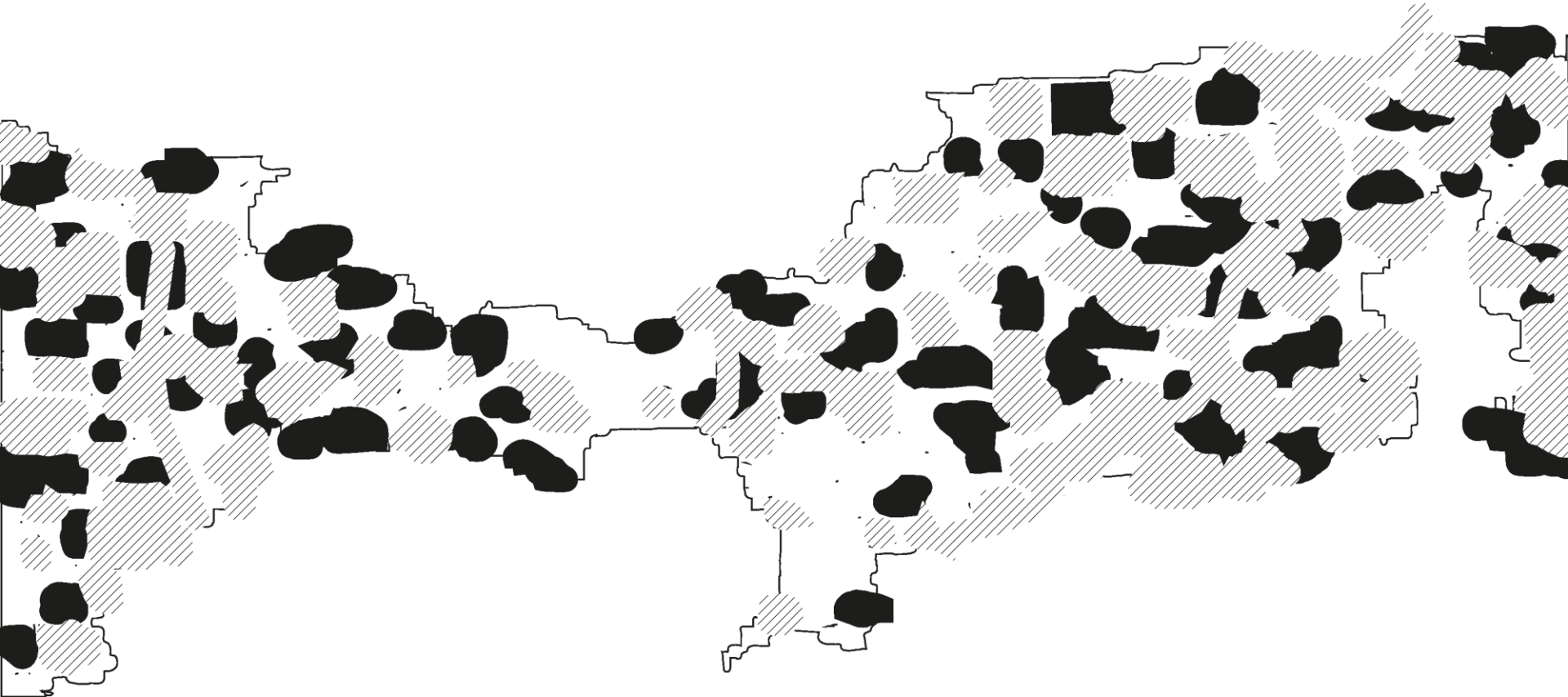
Trail:
Column Grid:
Existing Trees:
Sight Lines:

Monitoring Station: 1 every 3x3 sections
Mountain Entrance: 1 every section
Platforming: 1 every corner inbetween two grid columns
Stairs: 1 every slope > 40° in sight-line



1:500 Site Plan



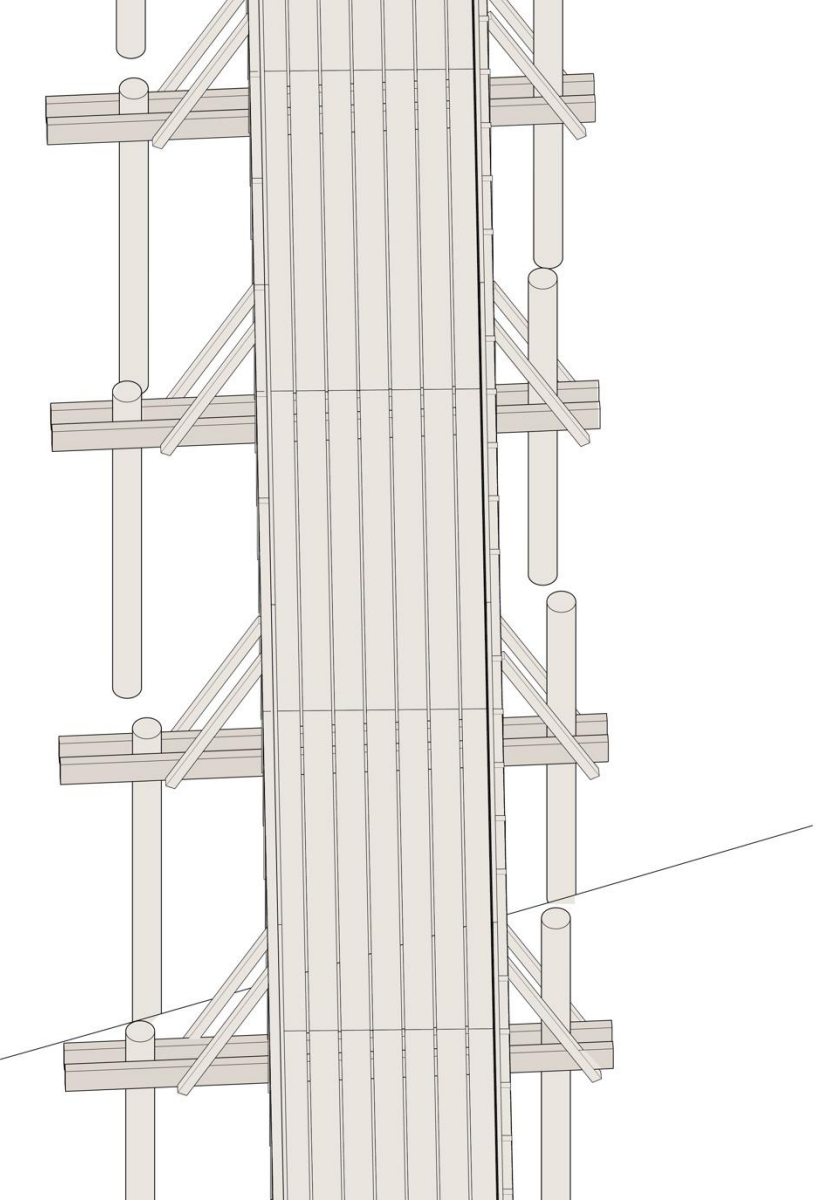
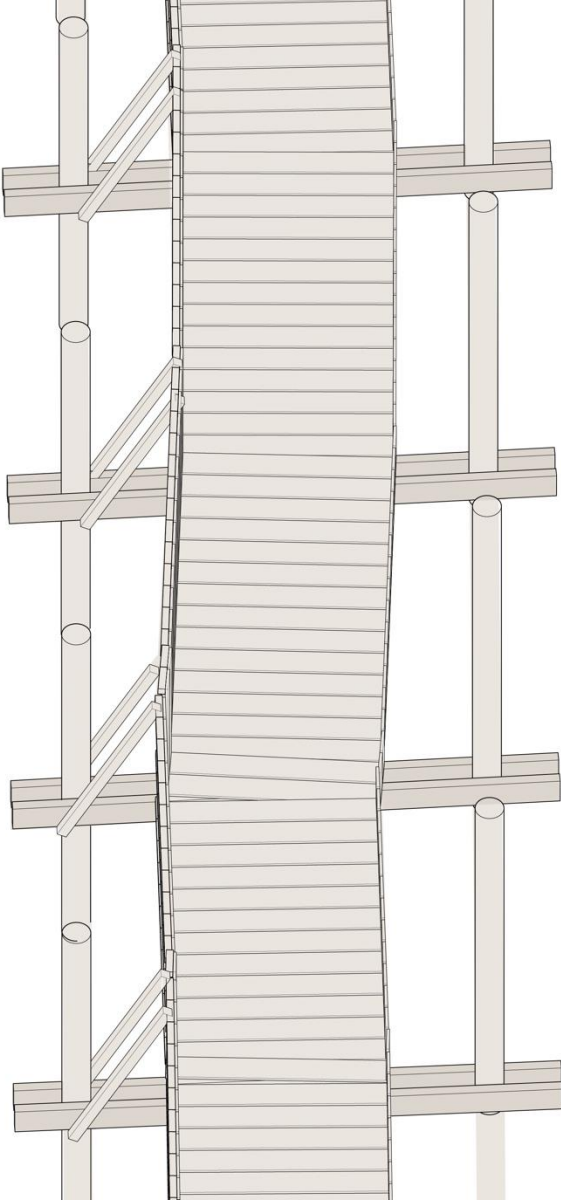


Lined - Deep, Moist, Wet Soil

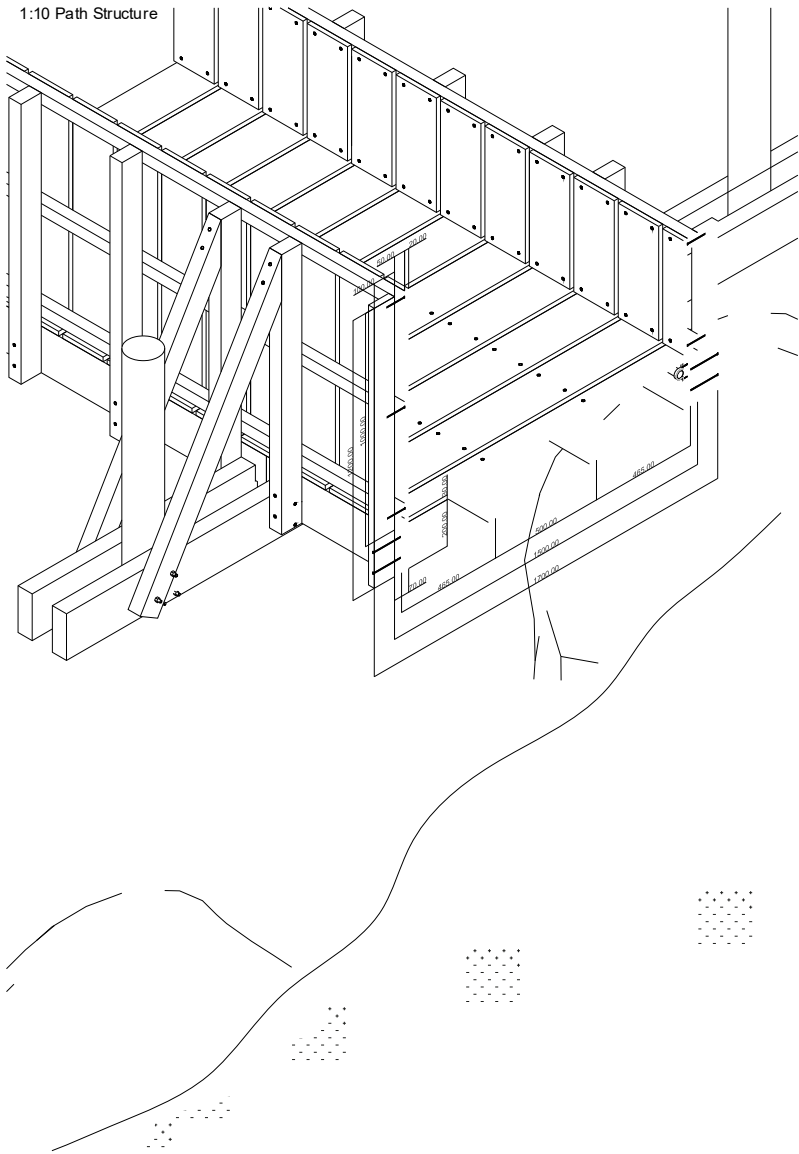
min 1.5 - 3 degrees celcius

Black - Shallow, Rocky Soil

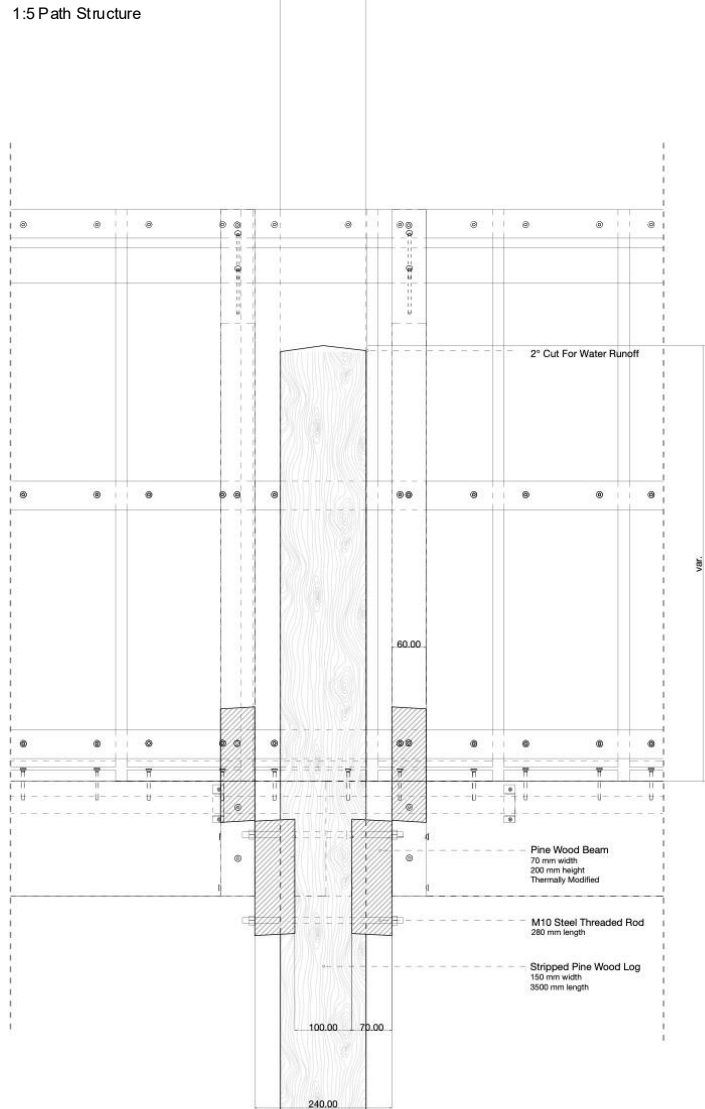
plus 1.5 - 3 degrees celcius

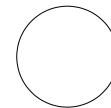
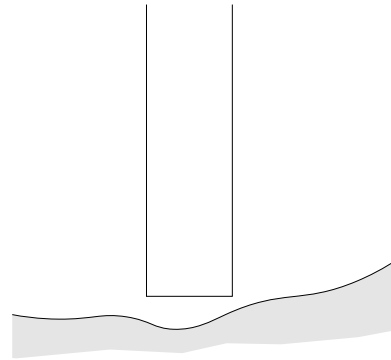
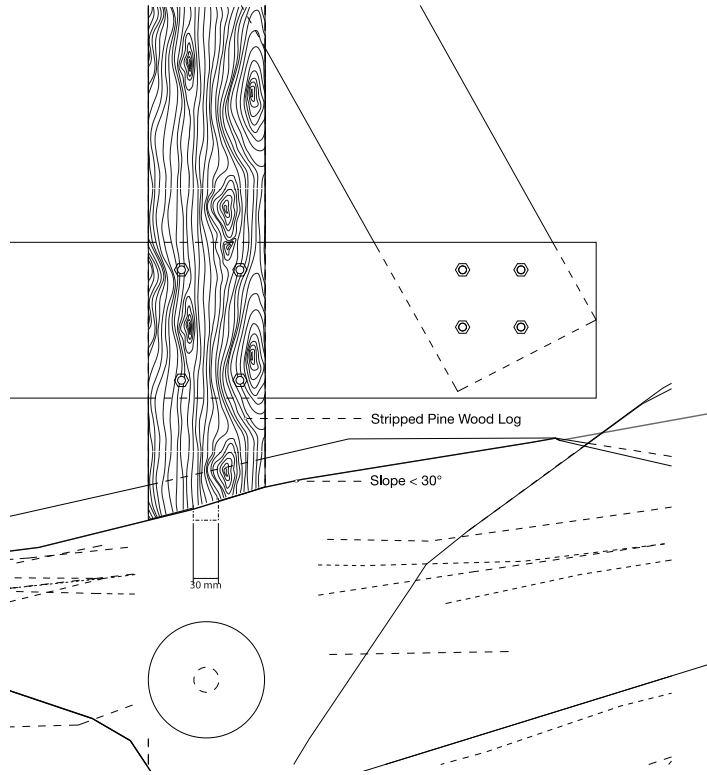


1:10 Path Structure

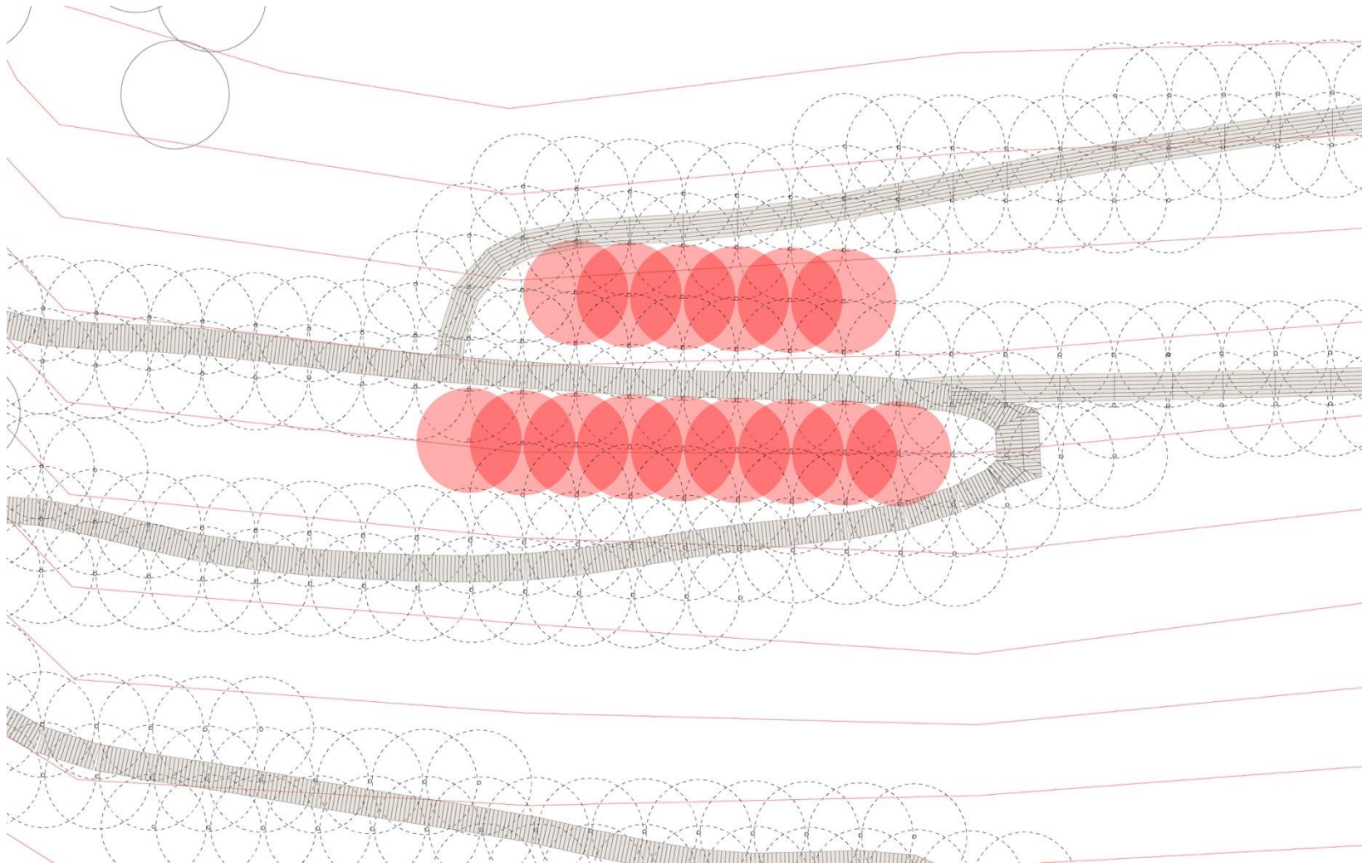


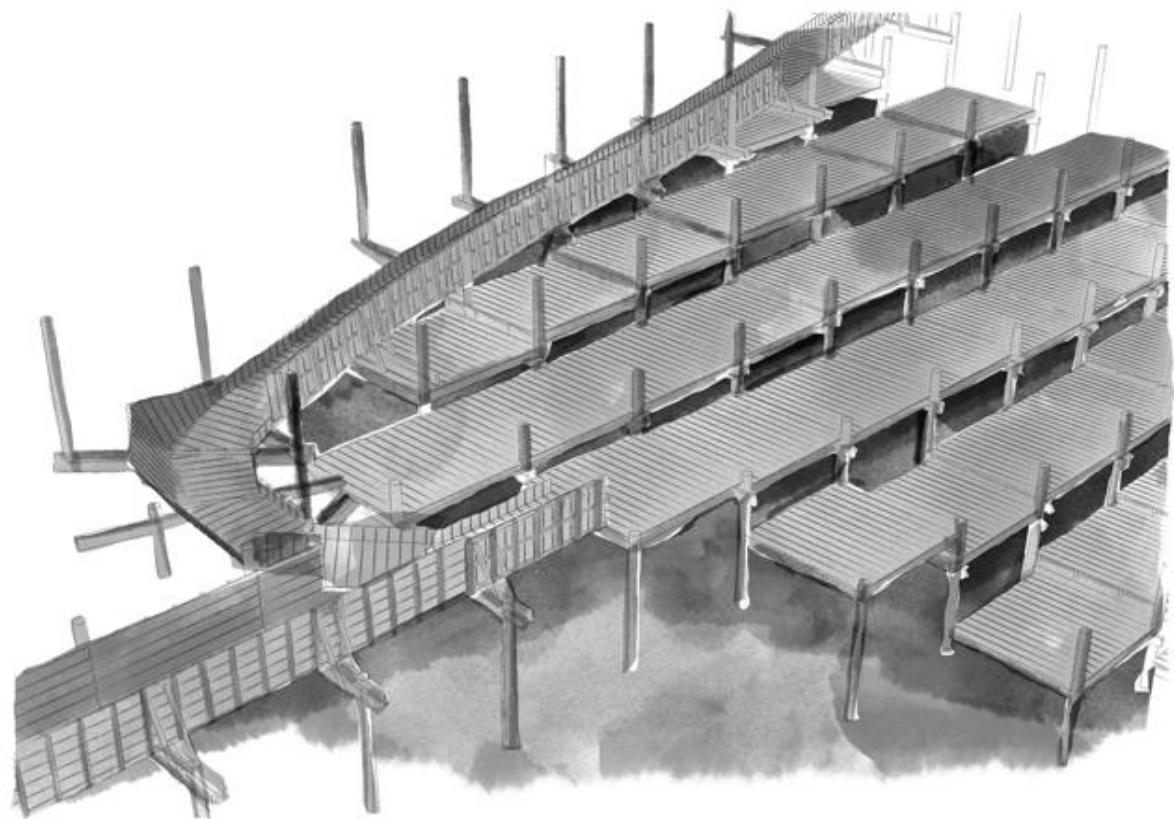
1:5 Path Structure



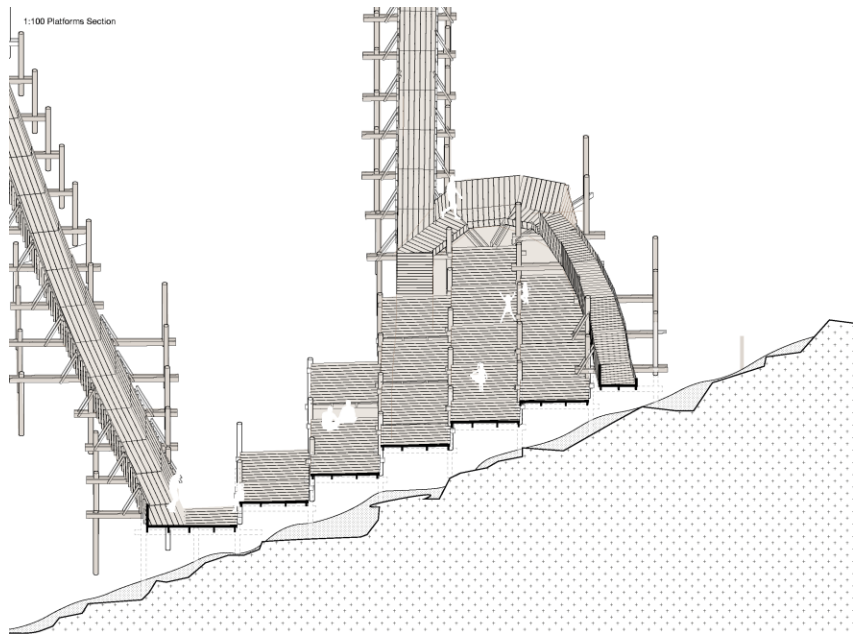


- Depending on:
- Slope
 - Water
 - Soil depth
 - Weight
 - Distance to last Rod

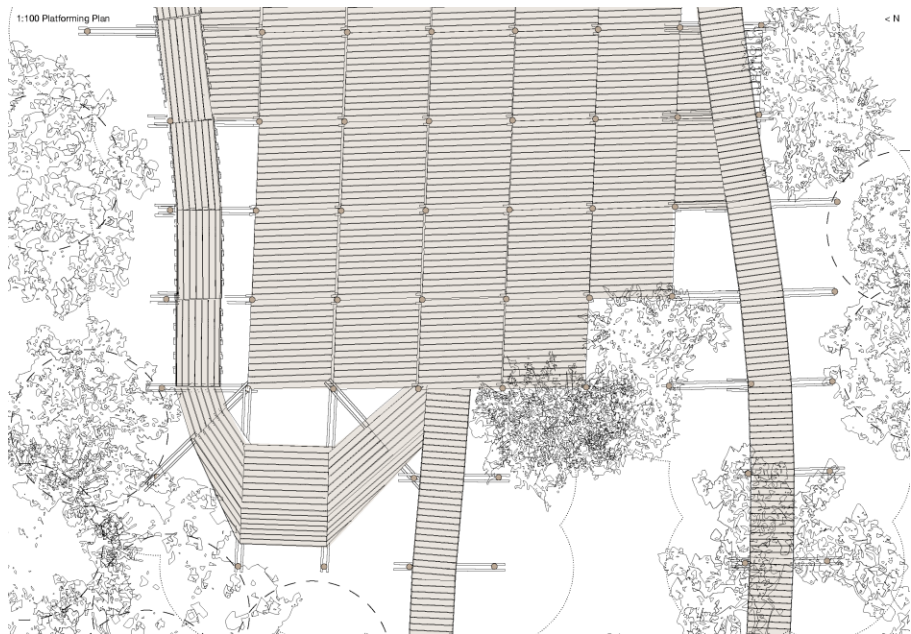




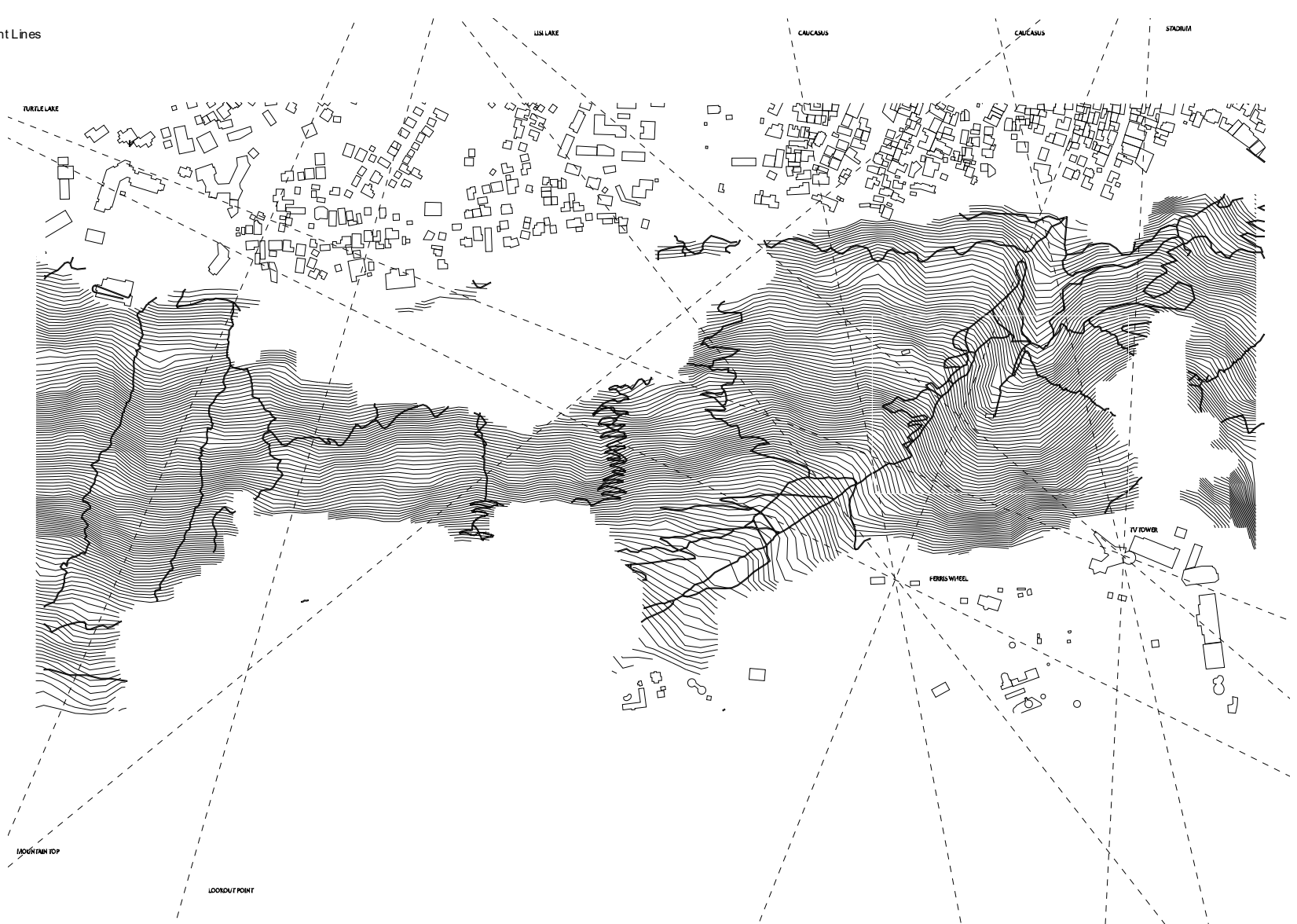
1:100 Platforms Section

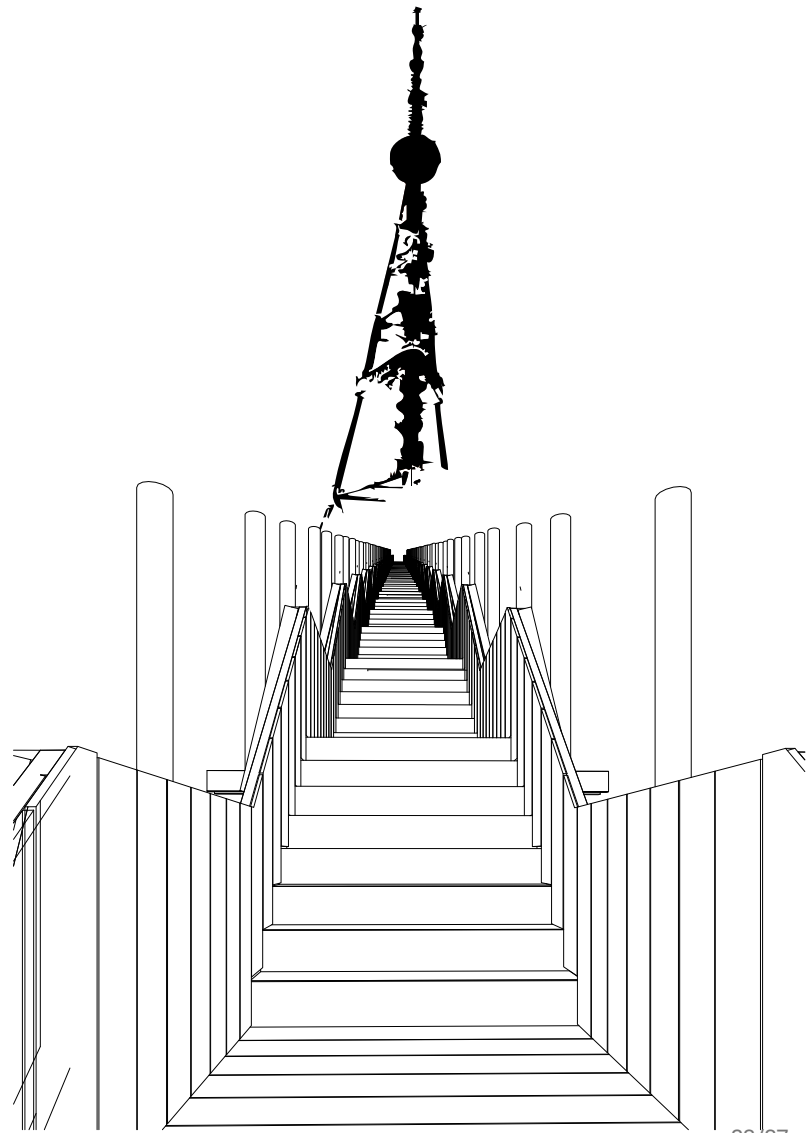
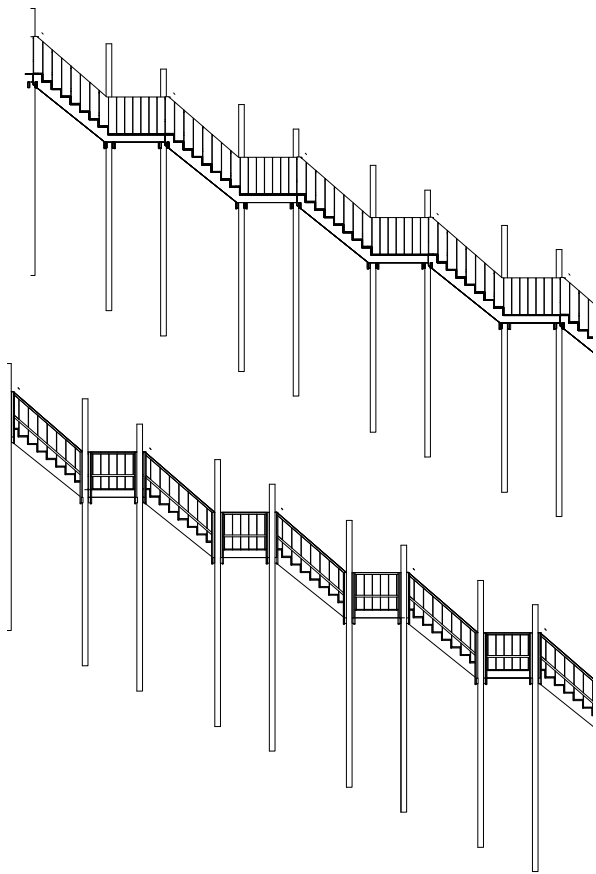
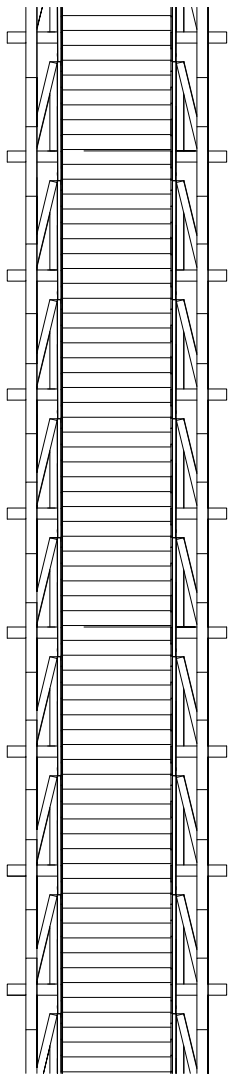


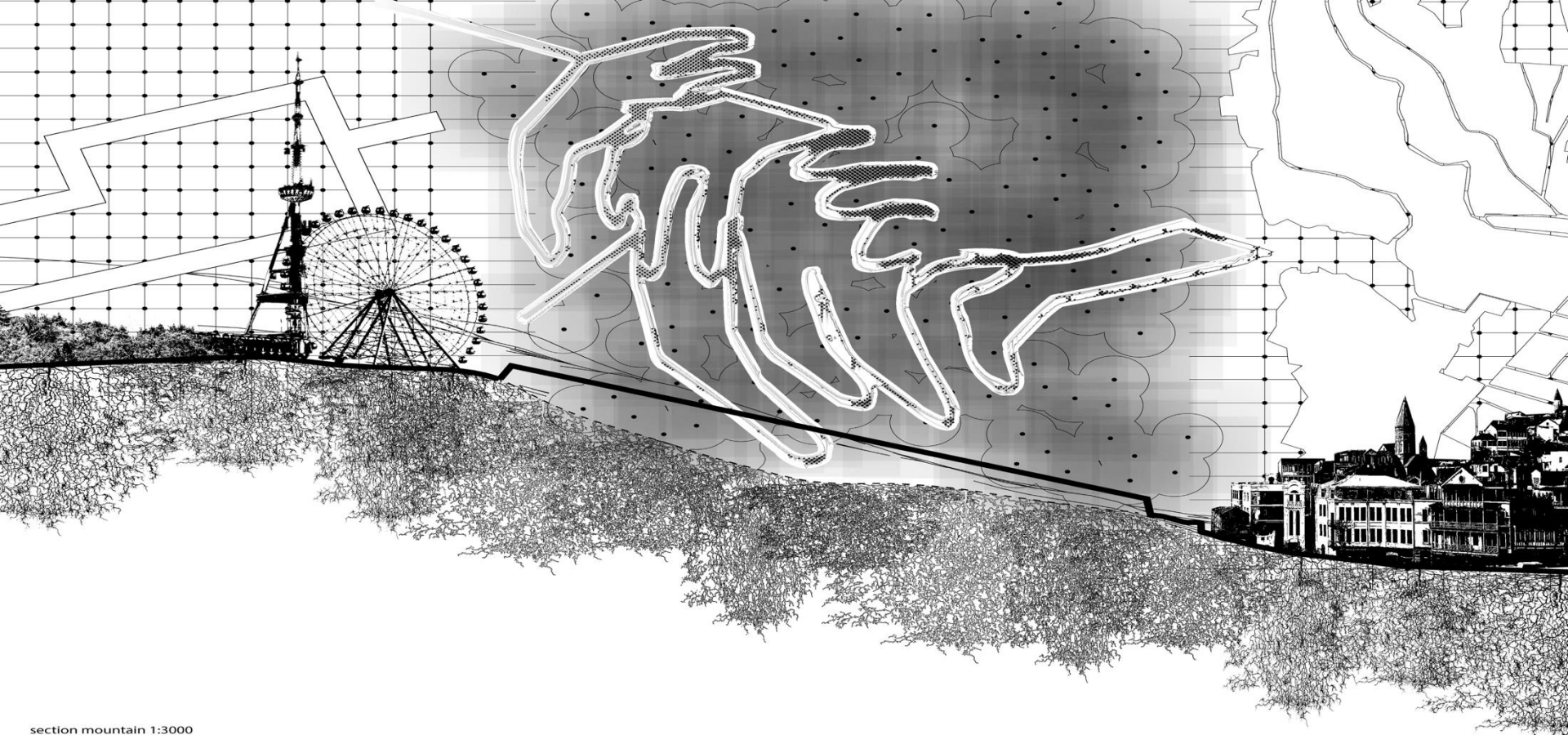
1:100 Platforming Plan



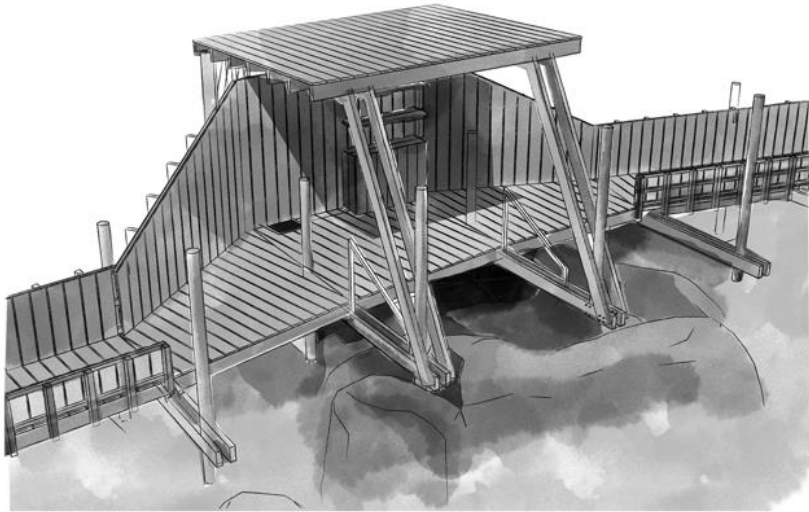


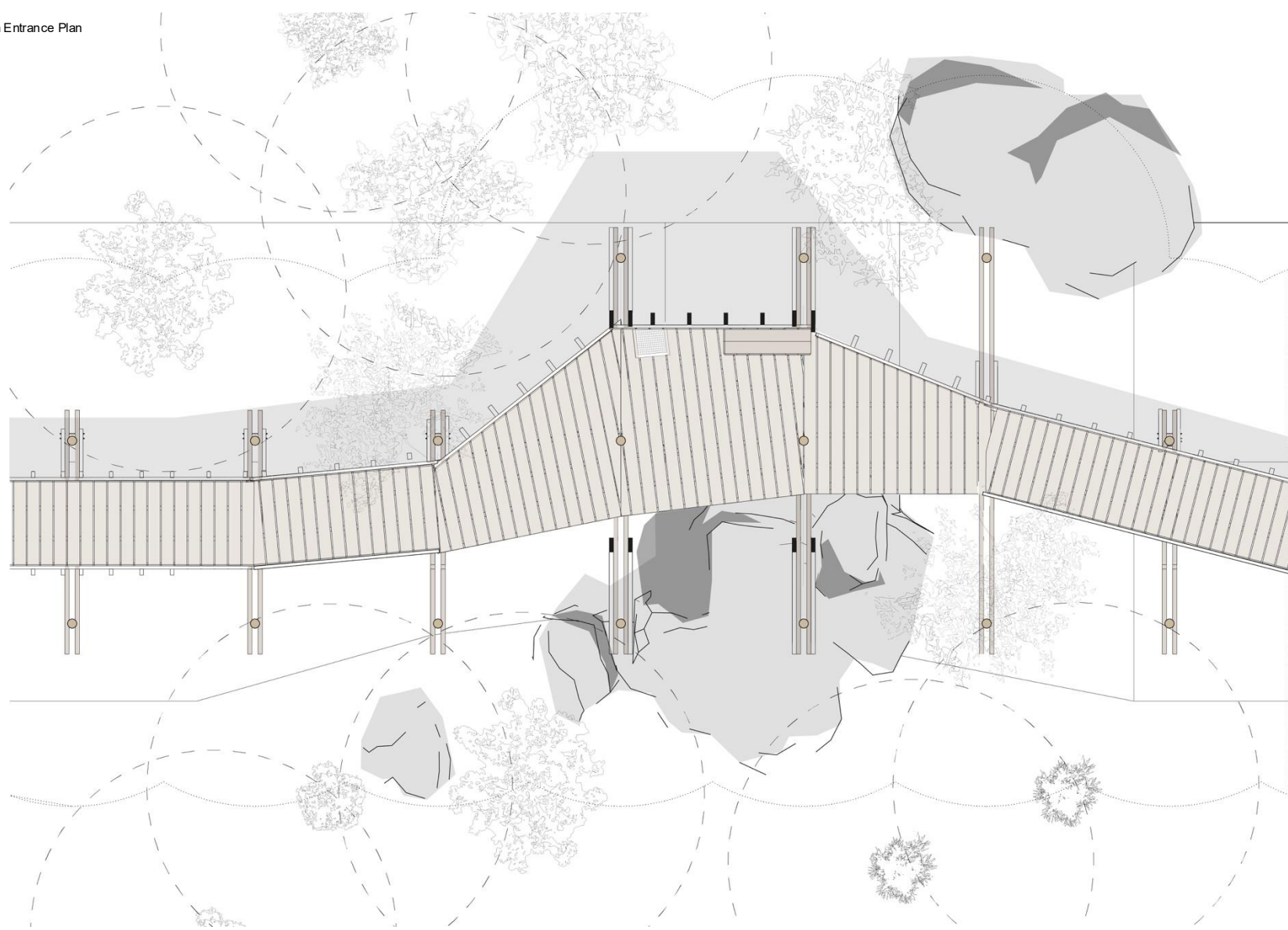


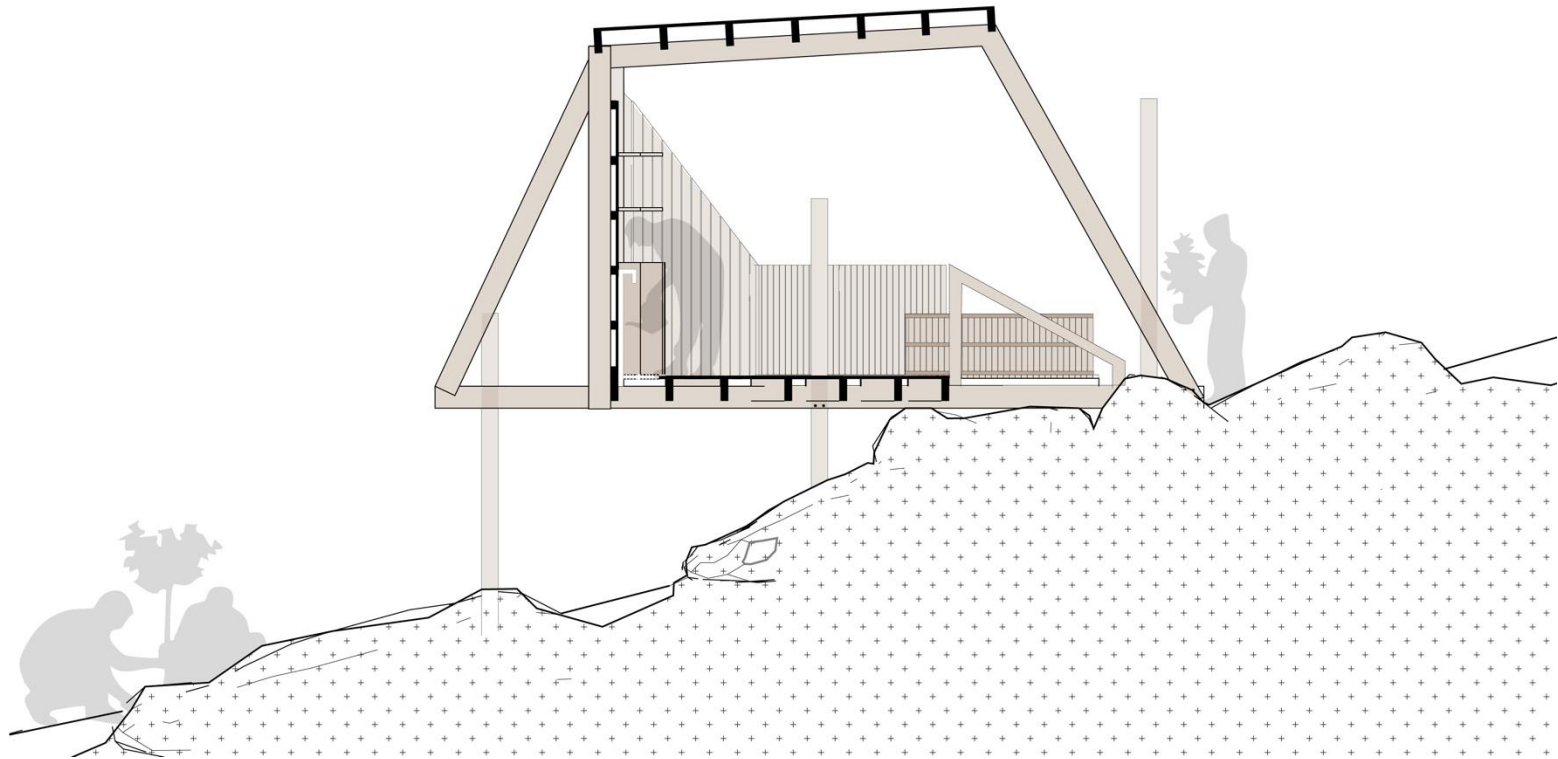




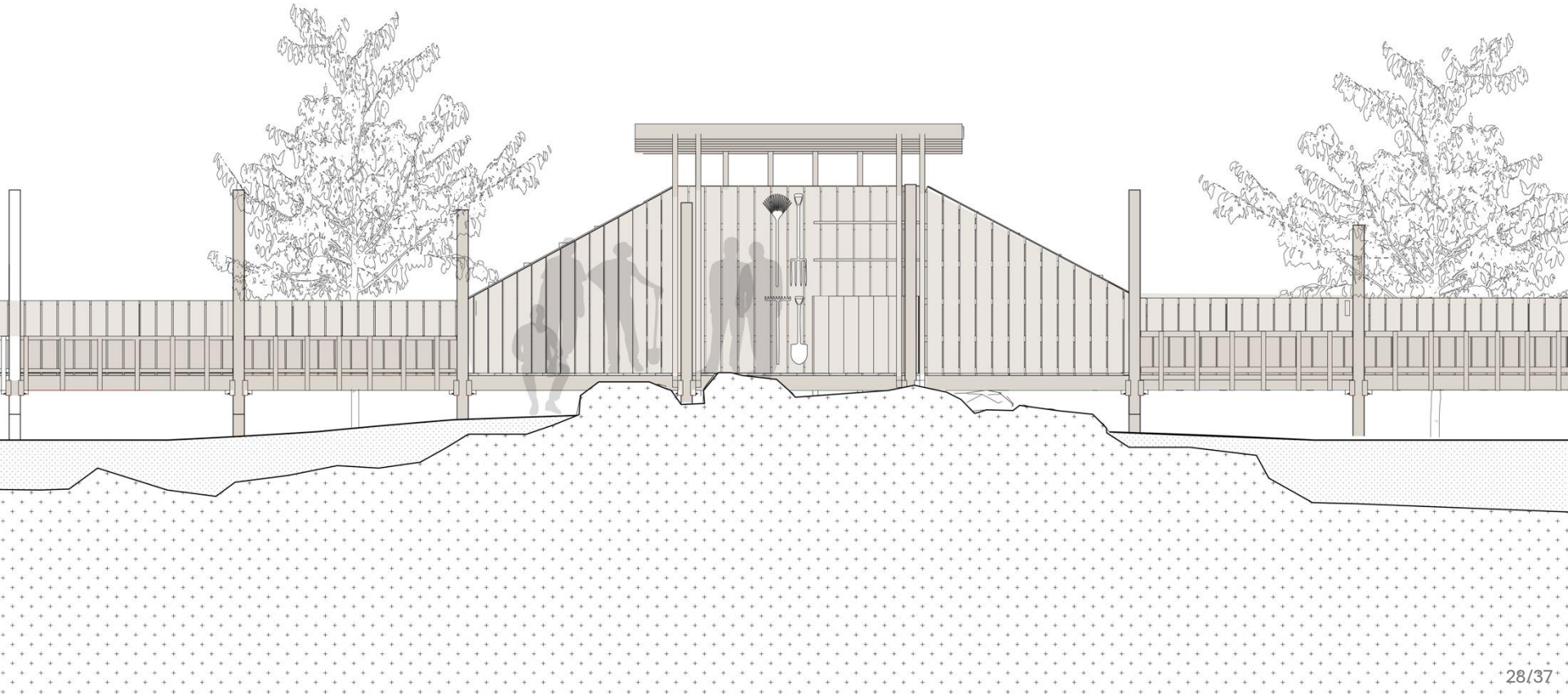
section mountain 1:3000







1:50 Mountain Entrance Elevation



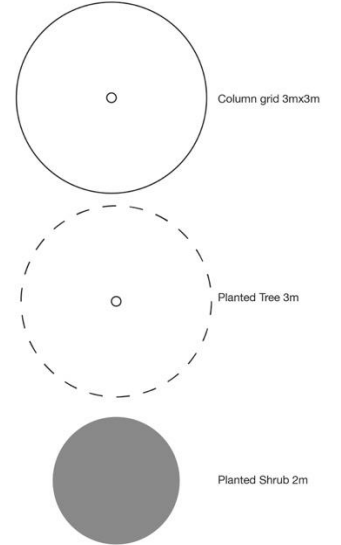
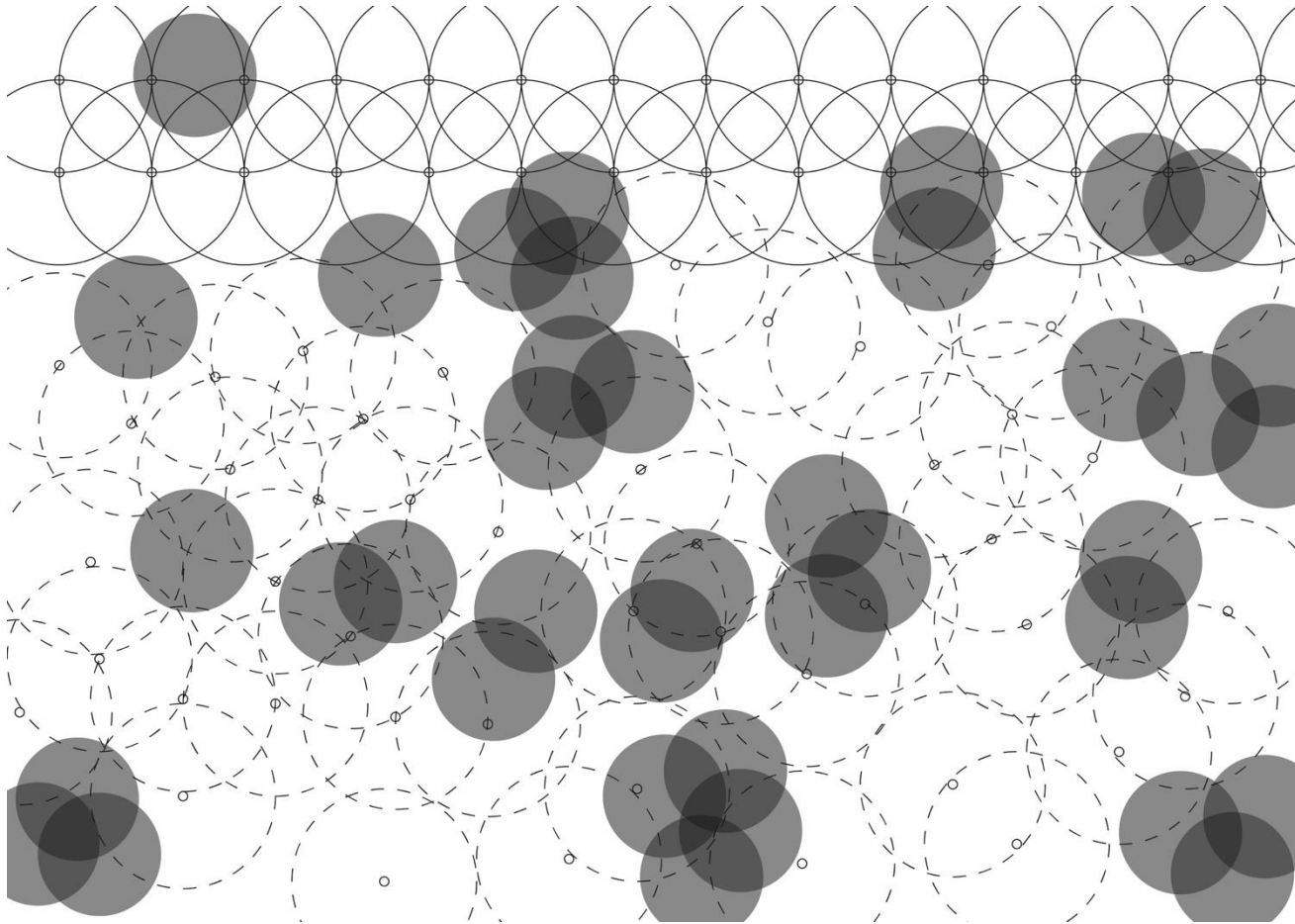
Local Nurseries

Volunteers and Workers

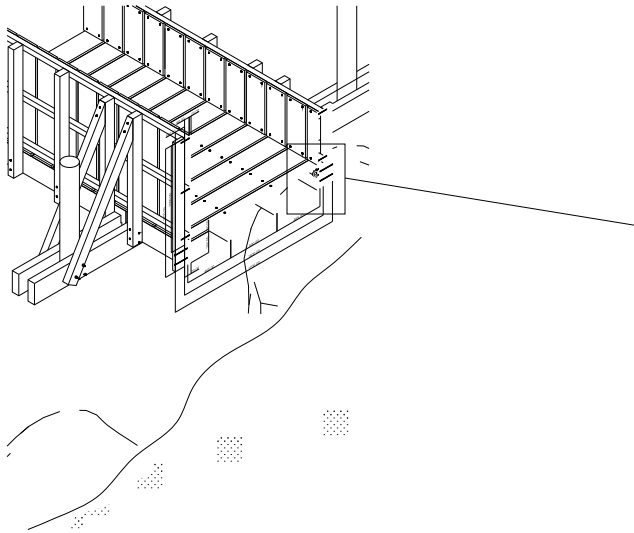
Trail

Entrance

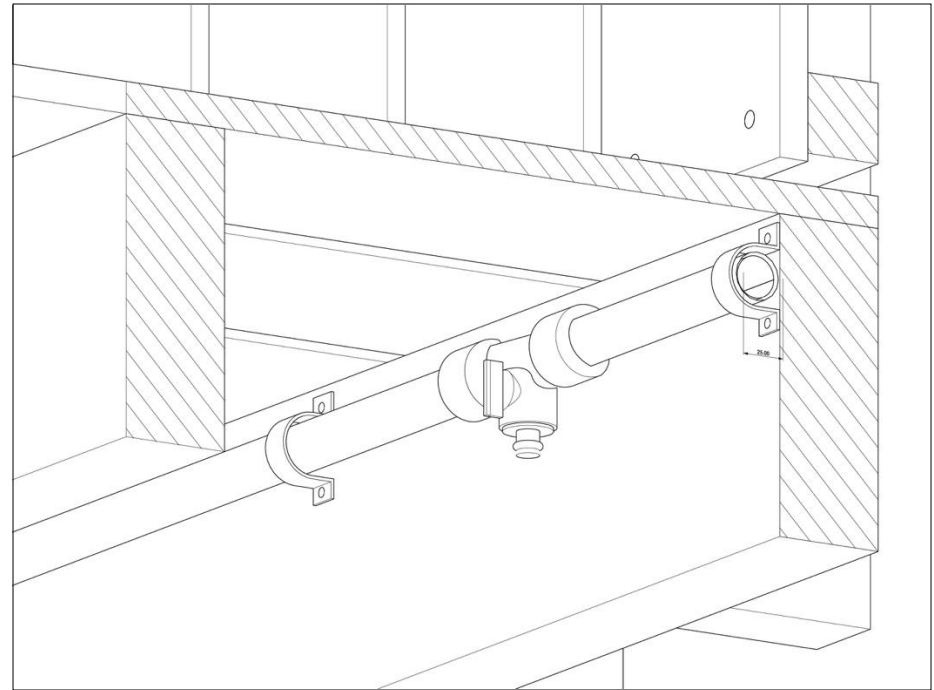
Mountain



Wells and Reservoirs along Kura River → GWP water treatment → Tbilisi Water Supply → Mtatsminda Park → Neo-Upper Tbilisi

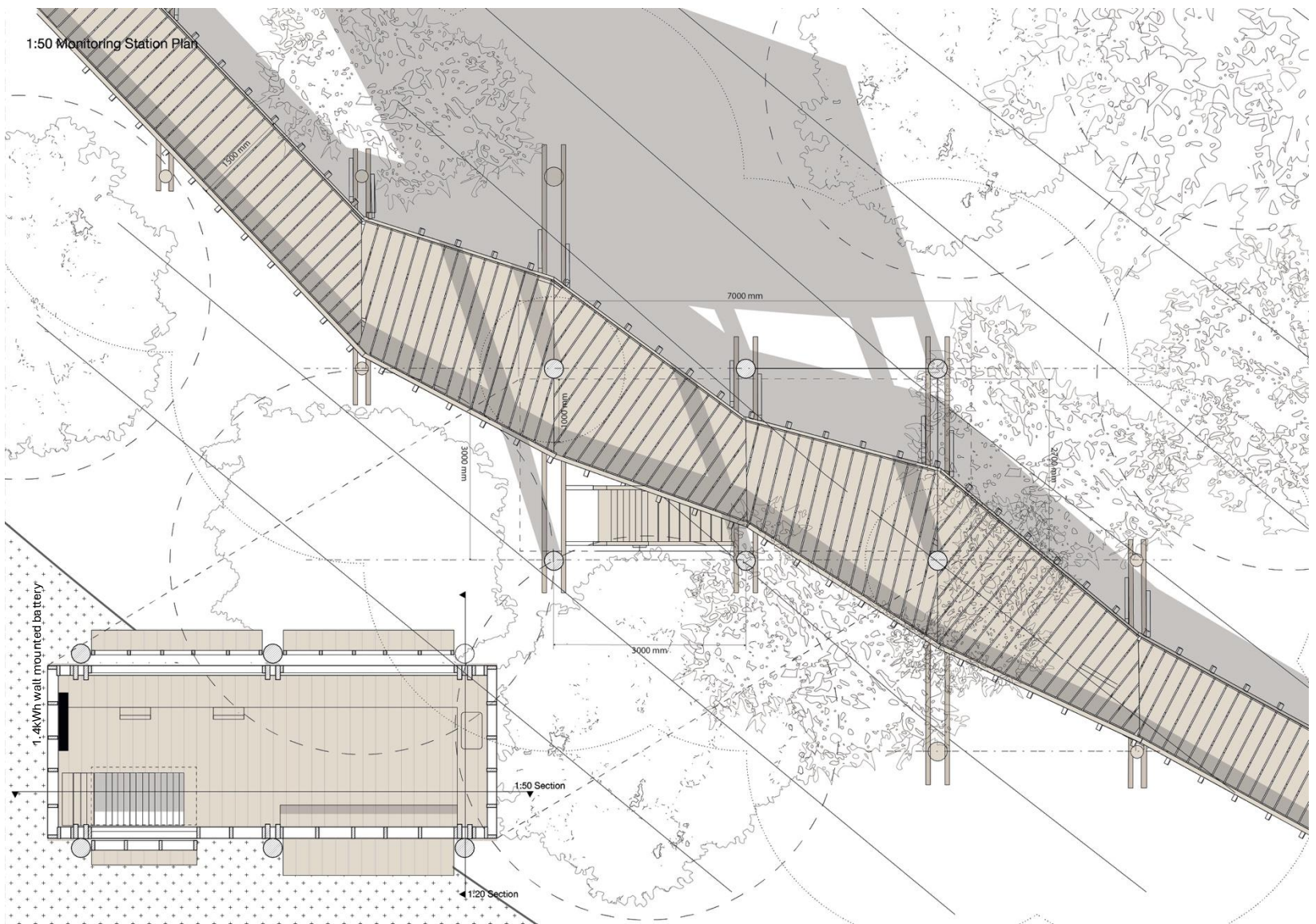


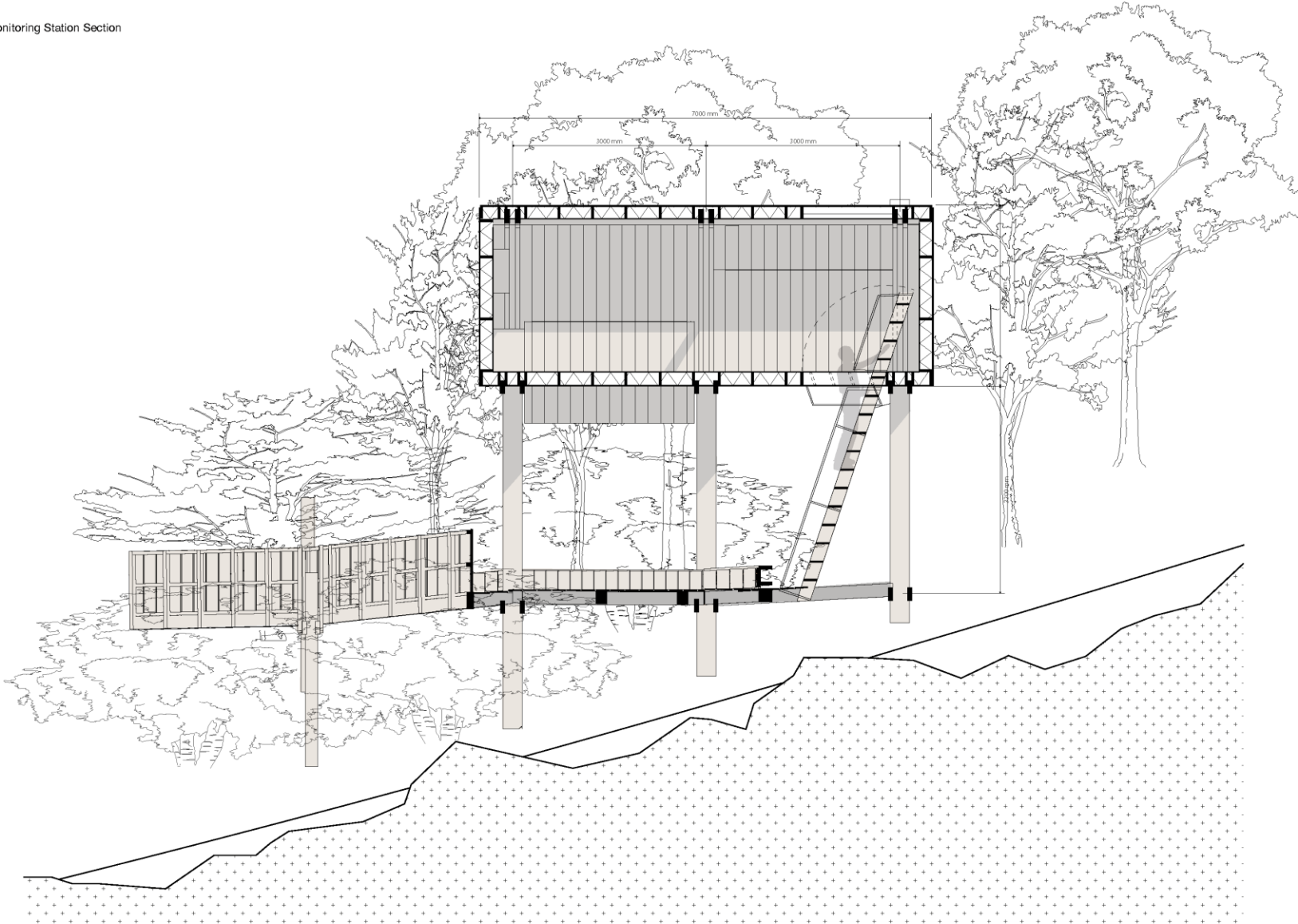
1:5 Water Access Point



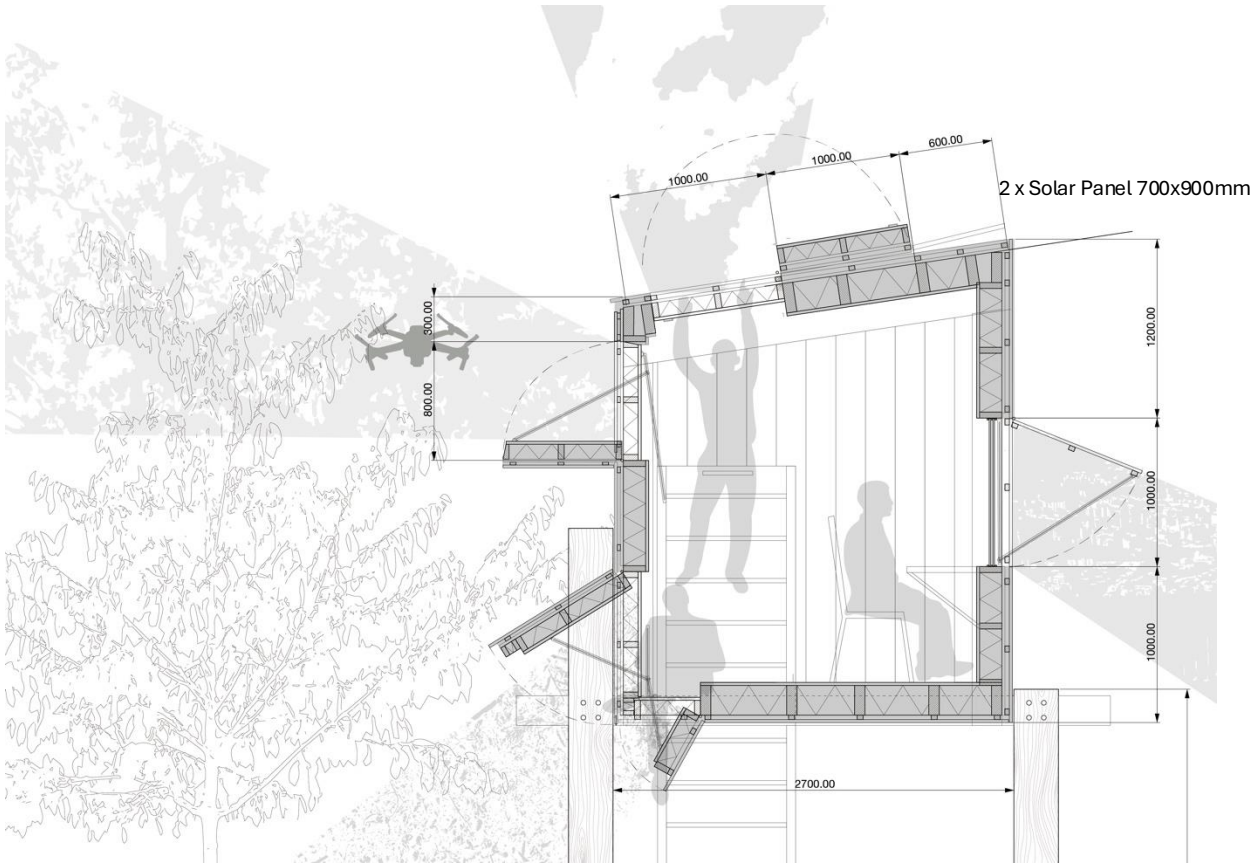
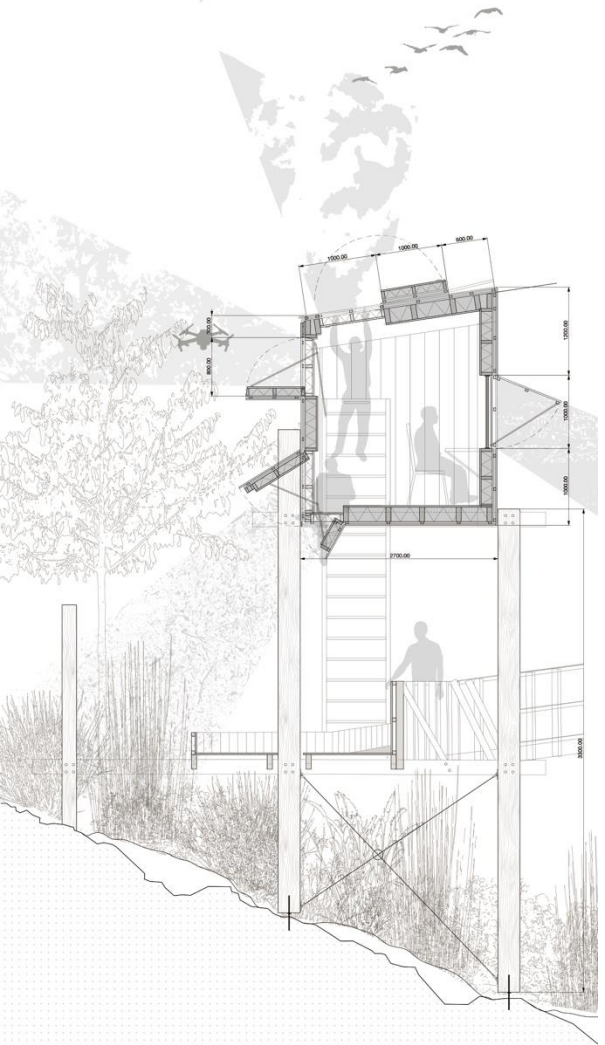


1:50 Monitoring Station Plan

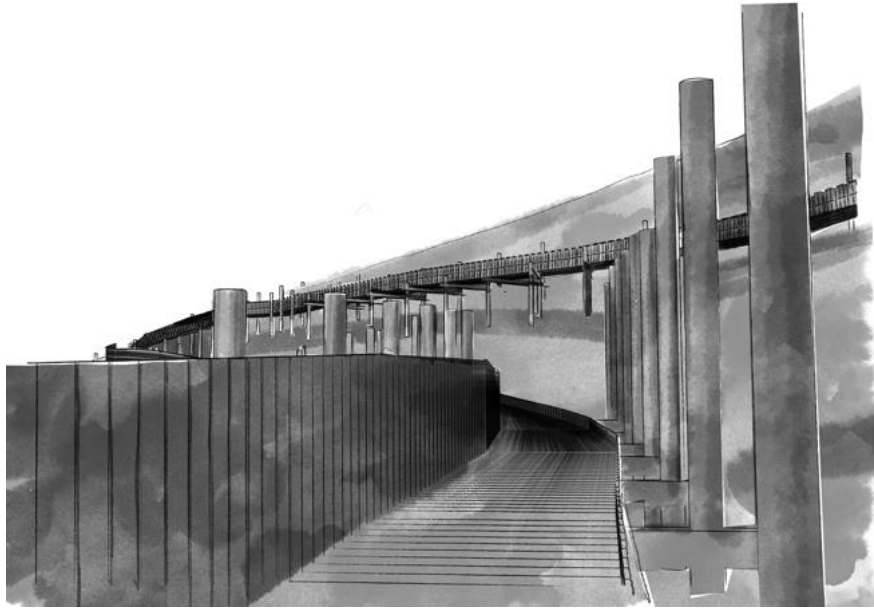




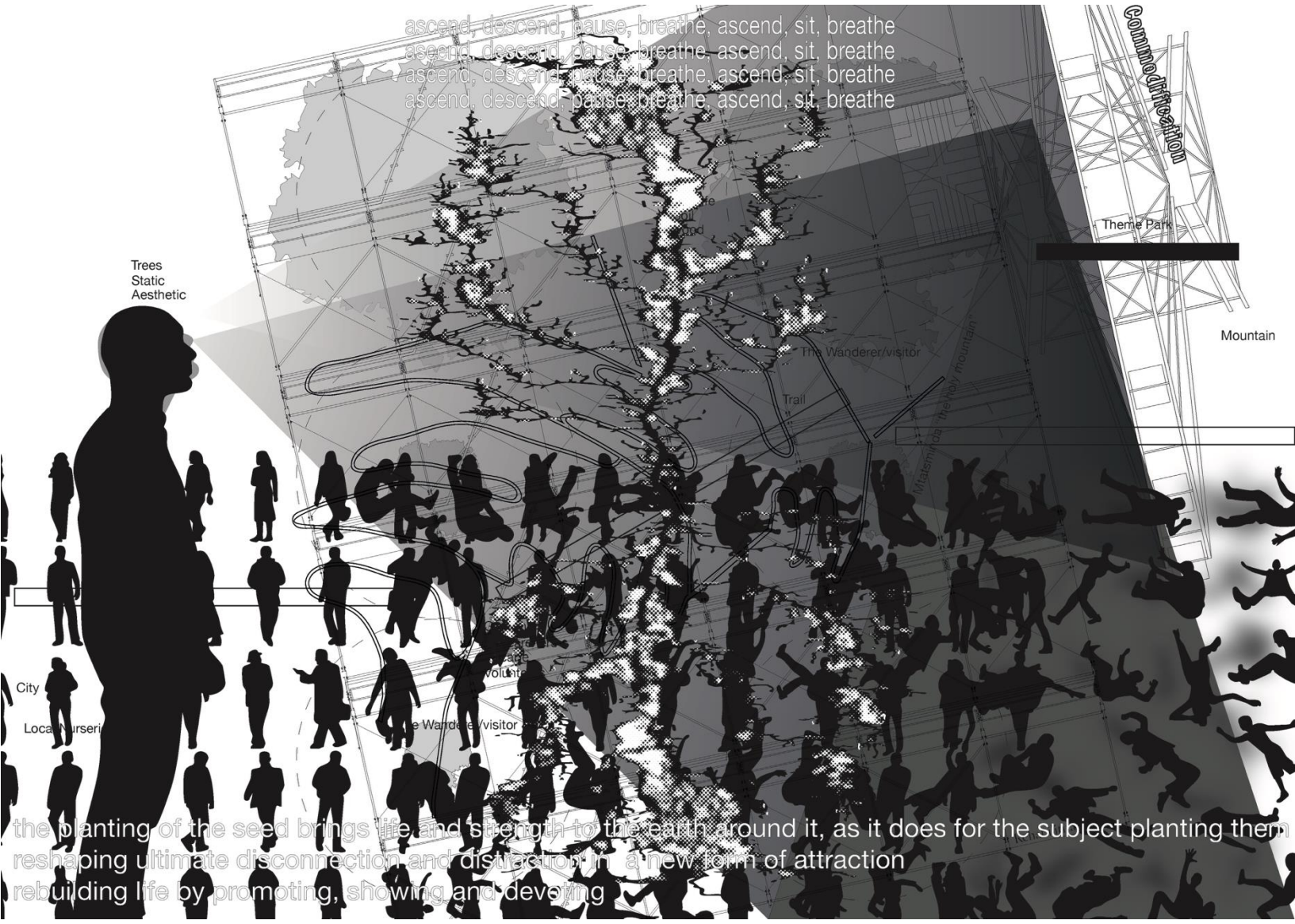
1:20 Monitoring Station Section







ascend, descend, pause, breathe, ascend, sit, breathe
ascend, descend, pause, breathe, ascend, sit, breathe
ascend, descend, pause, breathe, ascend, sit, breathe
ascend, descend, pause, breathe, ascend, sit, breathe



Trees
Static
Aesthetic

Theme Park

Mountain

The Wanderer/visitor

Trail

Mountain
The Wanderer/visitor

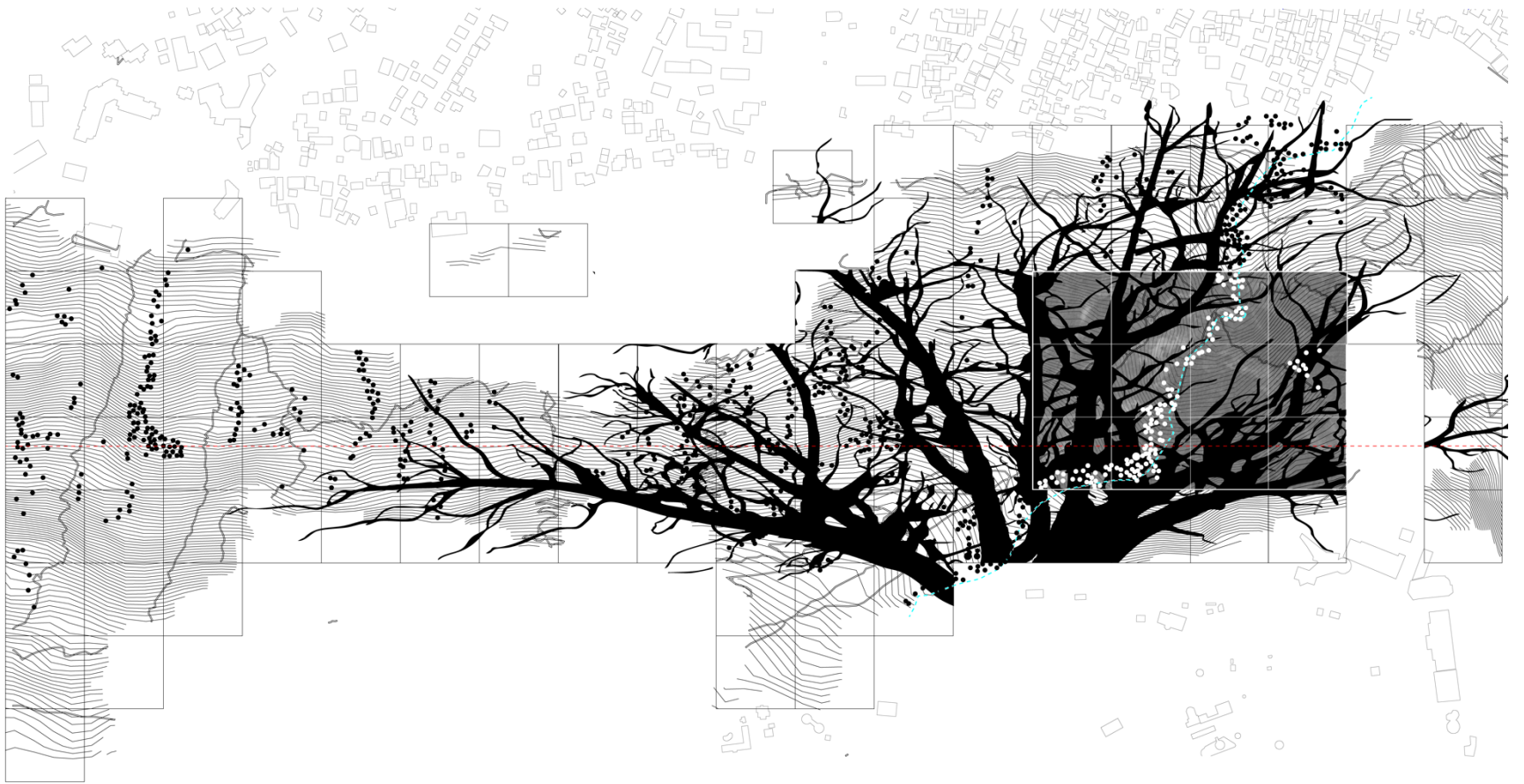
Volunt

The Wanderer/visitor

City

Local Nursery

the planting of the seed brings life and strength to the earth around it, as it does for the subject planting them
reshaping ultimate disconnection and distraction in a new form of attraction
rebuilding life by promoting, showing and deverting



1:25,000

