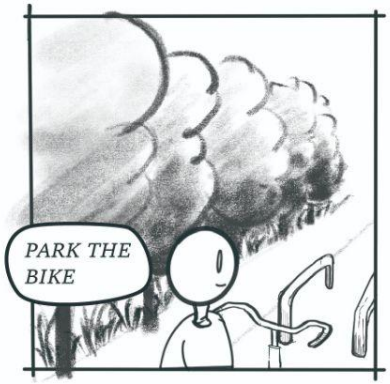
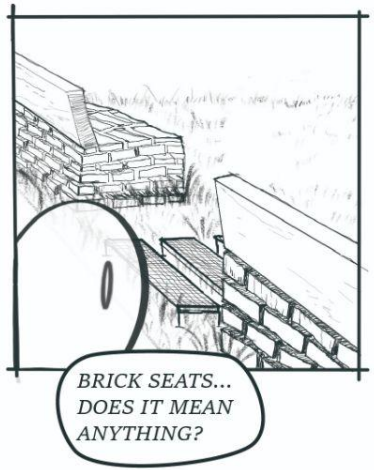
Integrated Mobility

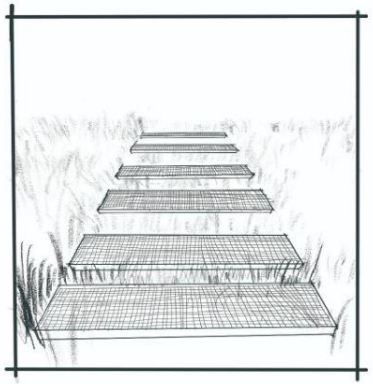
Improve the Accessibility to Military Heritage in Soesterberg

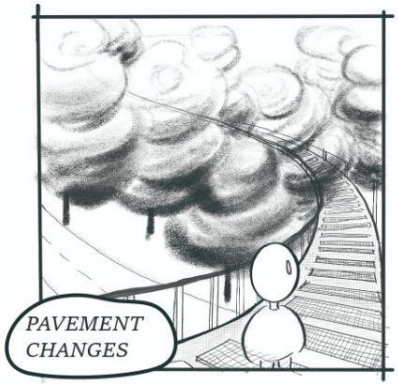
P5
Urban Fabric Lab
Flowscape Graduation Studio
Landscape Architecture Track

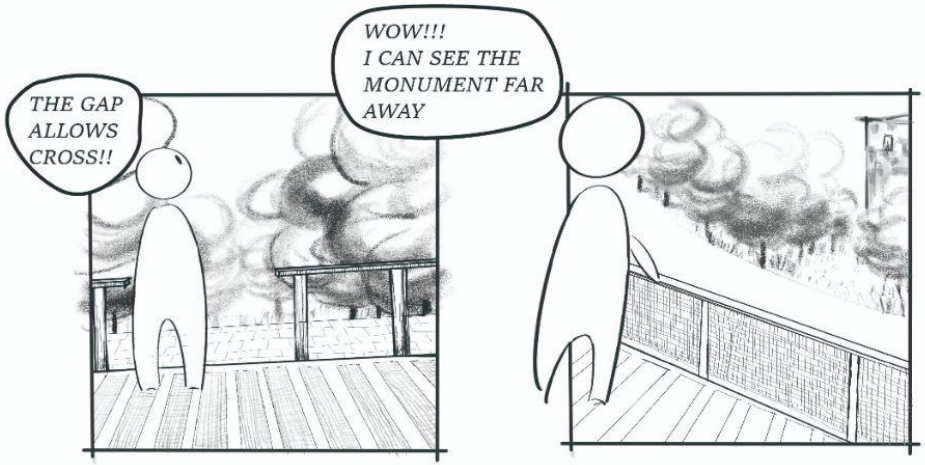
Yan Liang
2022.06.24

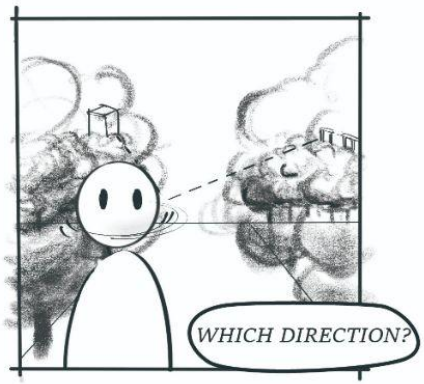

PARK THE BIKE

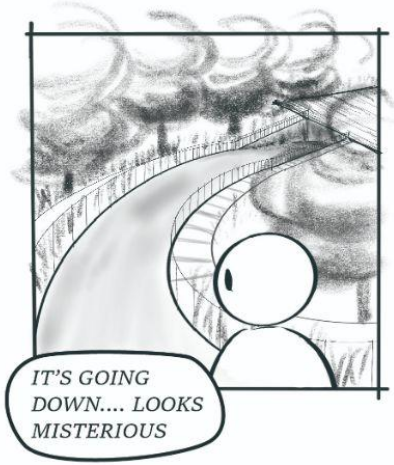

BRICK SEATS... DOES IT MEAN ANYTHING?

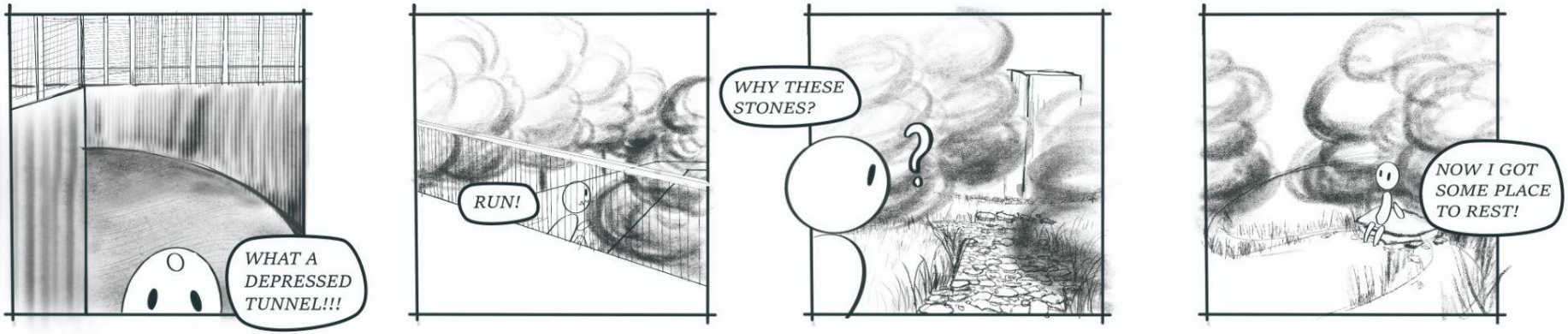


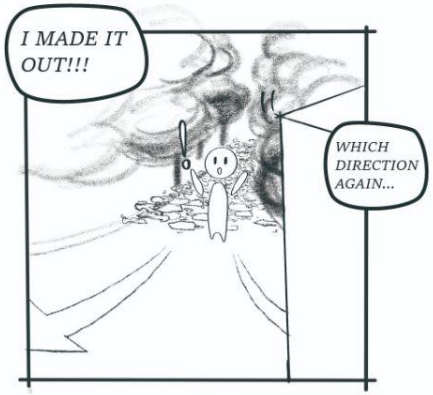

PAVEMENT CHANGES

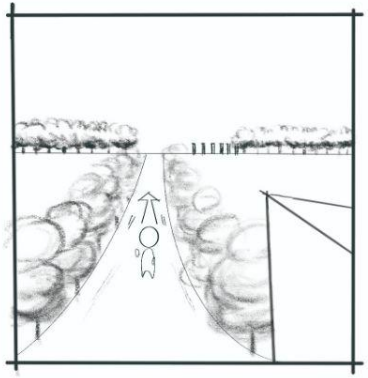

THE GAP ALLOWS CROSS!!
WOW!!! I CAN SEE THE MONUMENT FAR AWAY

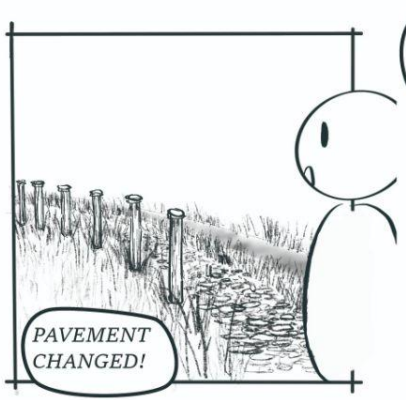

WHICH DIRECTION?

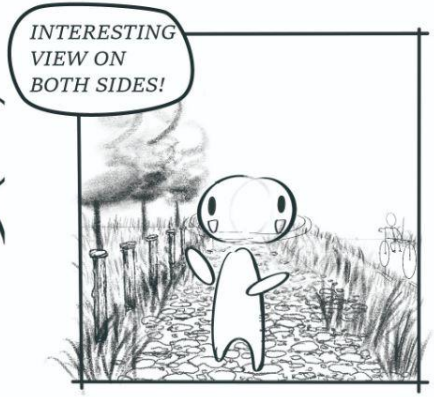

IT'S GOING DOWN.... LOOKS MISTERIOUS


WHAT A DEPRESSED TUNNEL!!!
RUN!
WHY THESE STONES?
?
NOW I GOT SOME PLACE TO REST!


I MADE IT OUT!!!
WHICH DIRECTION AGAIN...



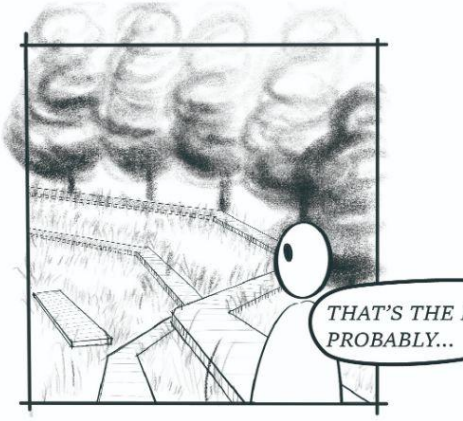

PAVEMENT CHANGED!


INTERESTING VIEW ON BOTH SIDES!

PAVEMENT CHANGES!

LOOKING DOWN IS A LITTLE BIT SCARY

HI! WHERE ARE YOU COMING FROM?


THAT'S THE
PROBABLY...

INTRODUCTION

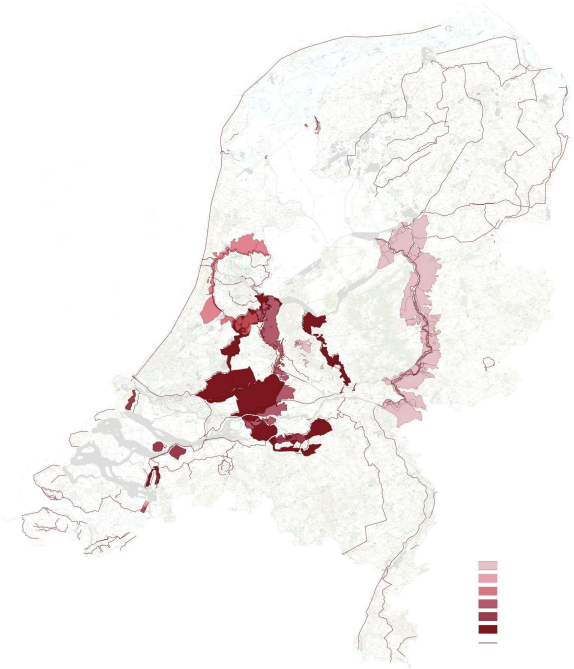
Comics / Topics / Locations / Fieldwork

Military Heritage

Forest Landscape

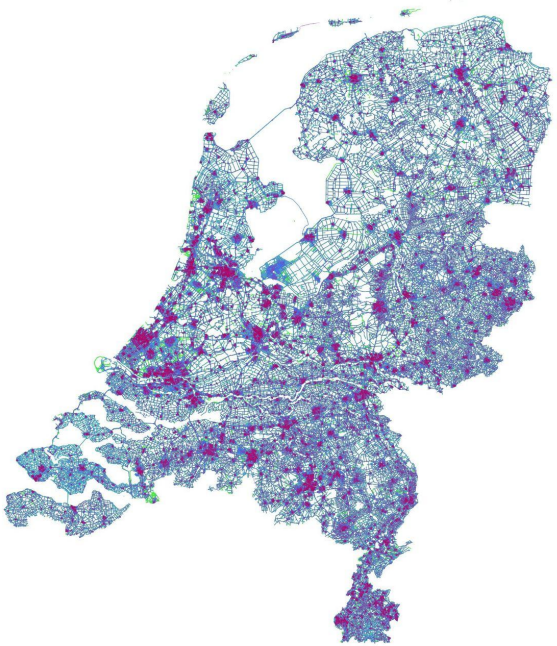
Urbanization

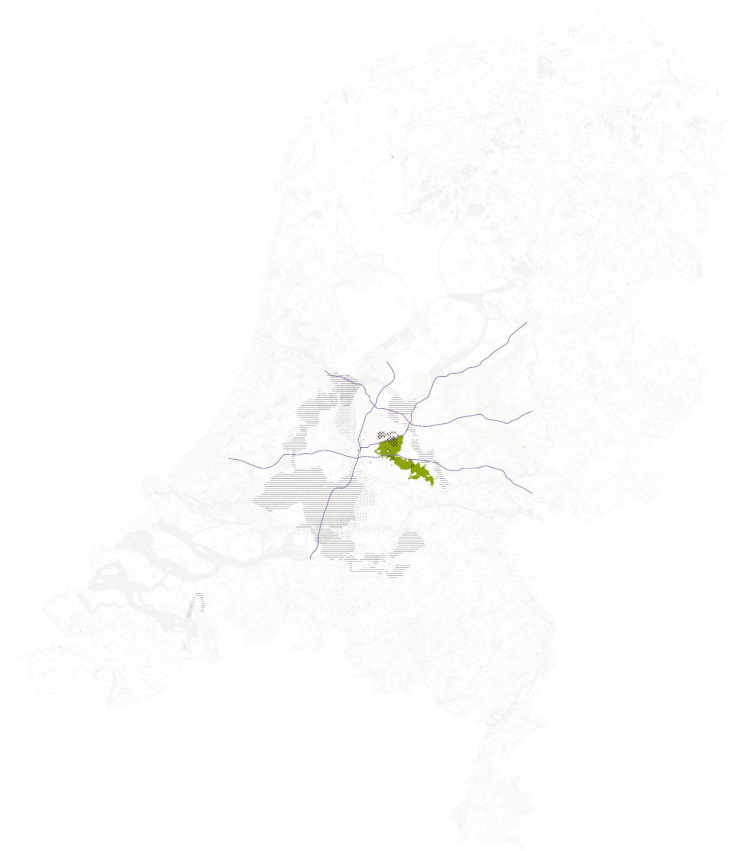
Military Heritage

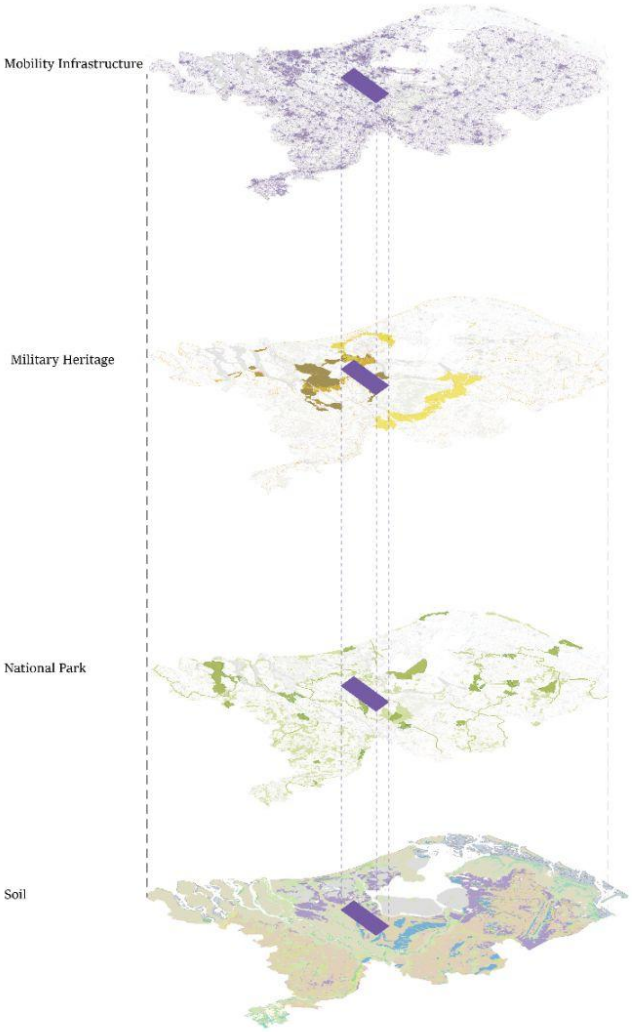


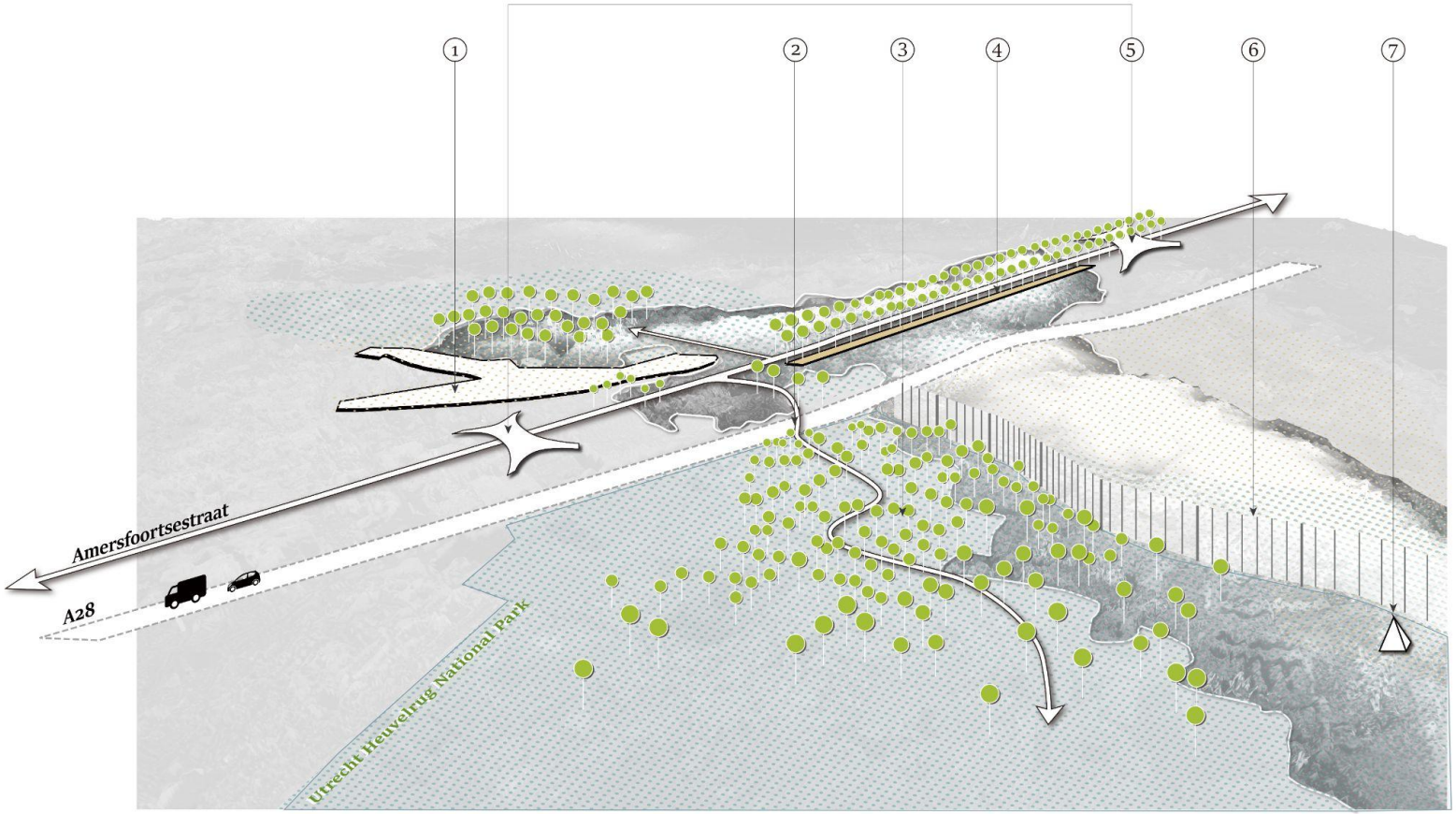
Green Structure

Mobility Network

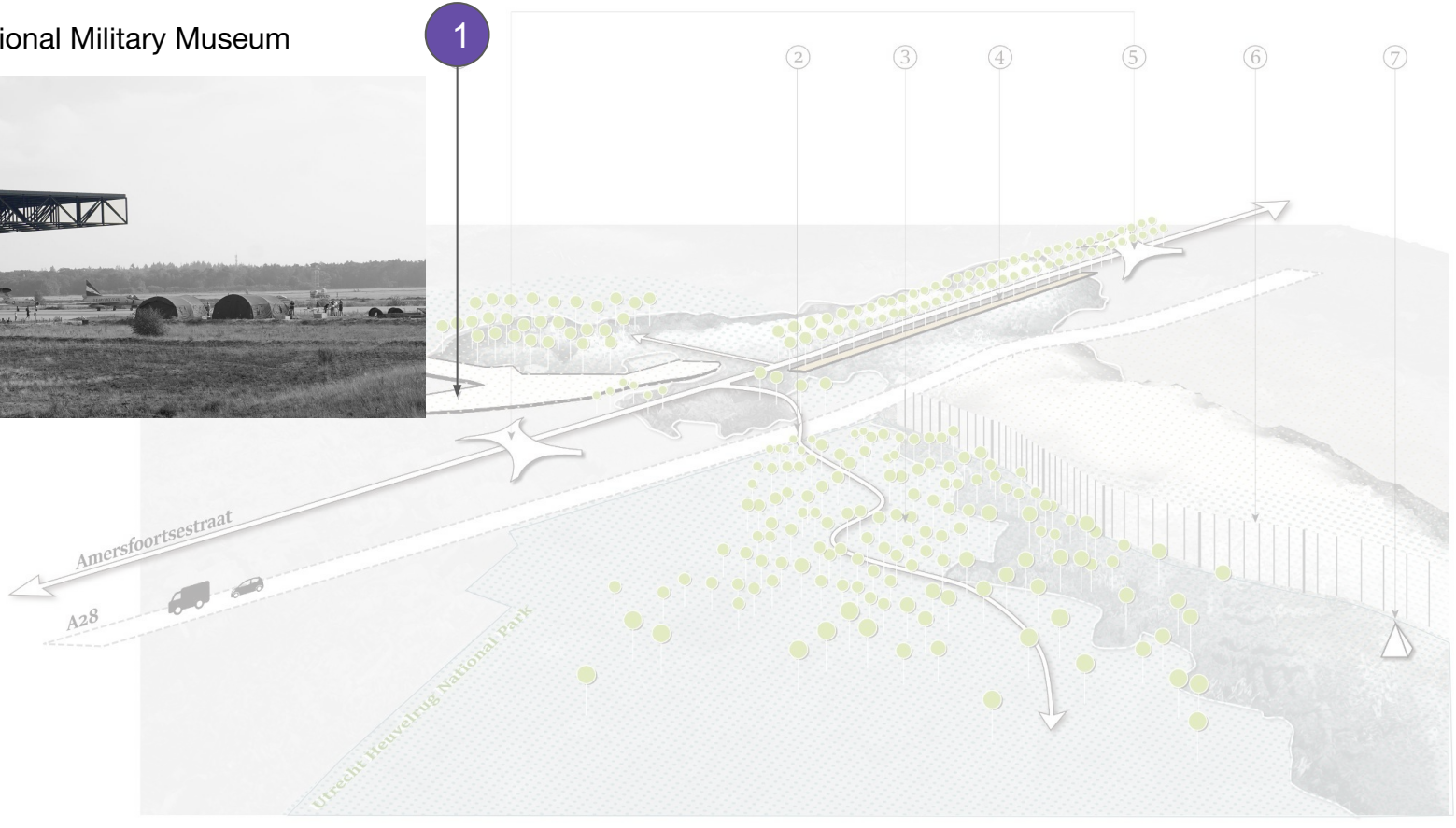




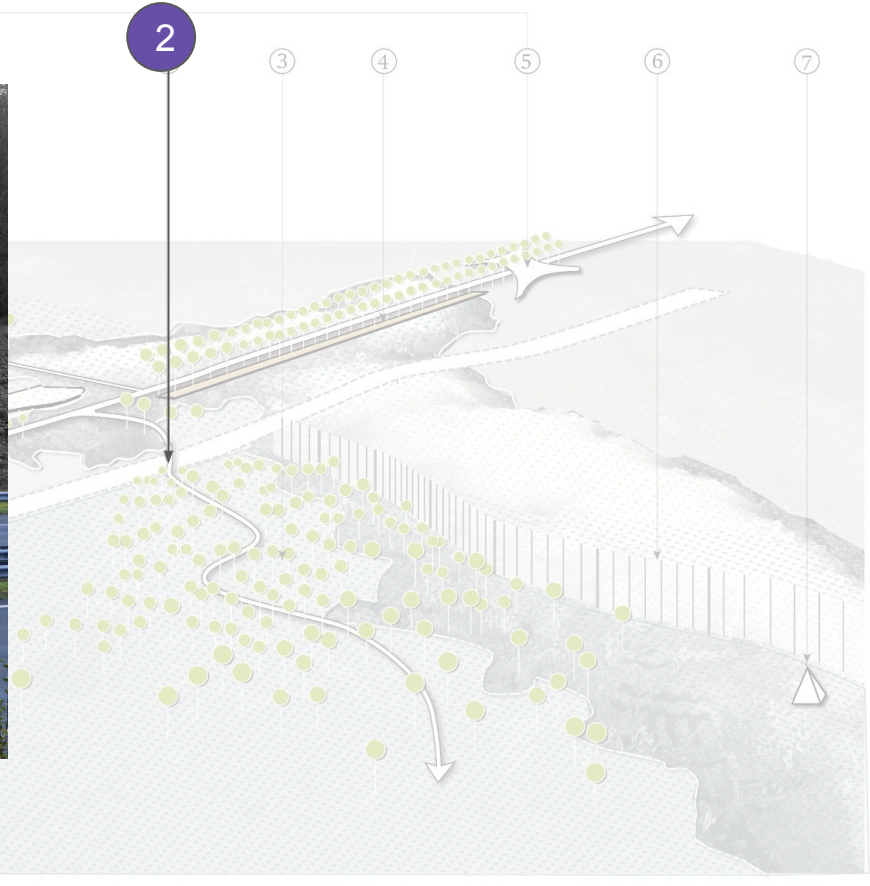

Mobility Infrastructure
Military Heritage
National Park
Soil


1
2
3
4
5
6
7
Amersfoortsestraat
A28
Utrecht Heuvelrug National Park

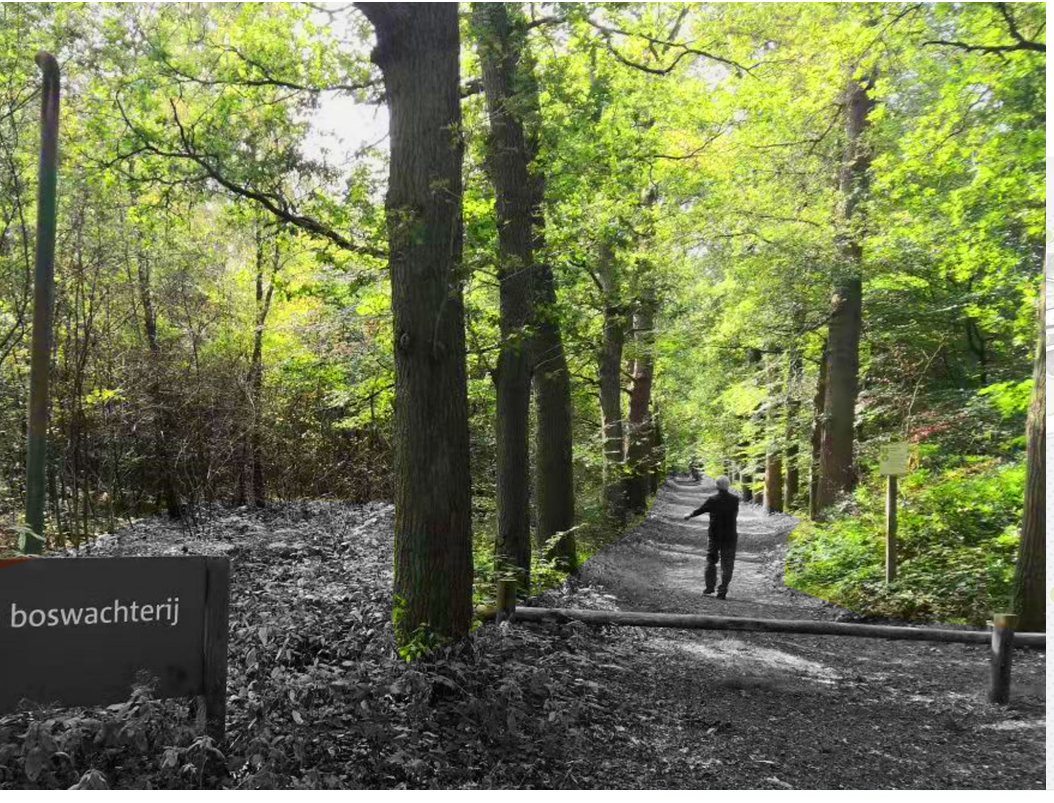
Soesterberg National Military Museum

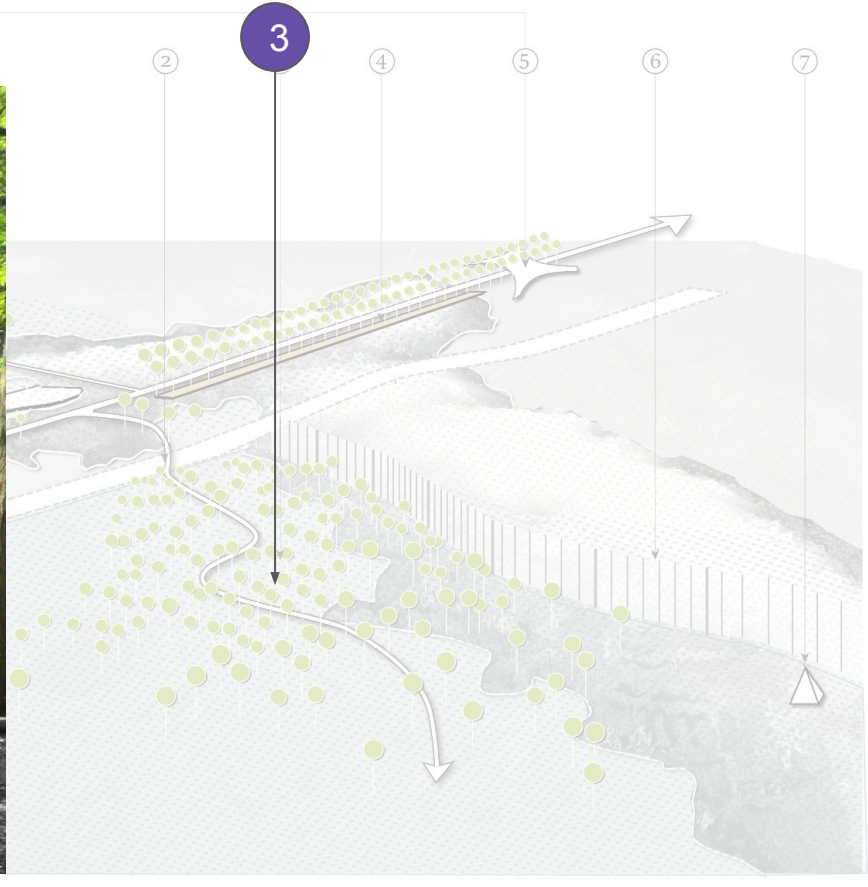


A28 Highway

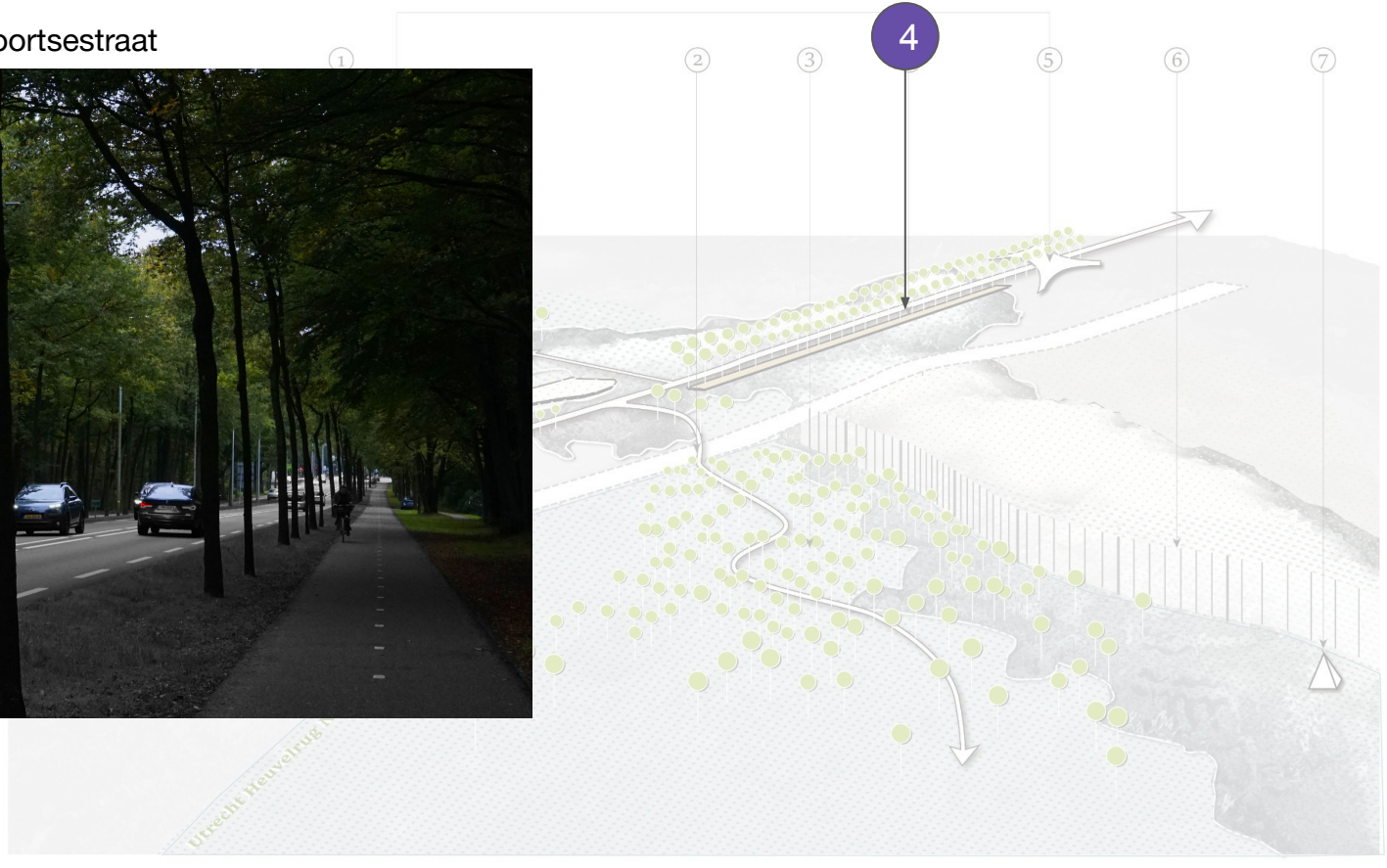


Utrecht Heuvelrug National Park



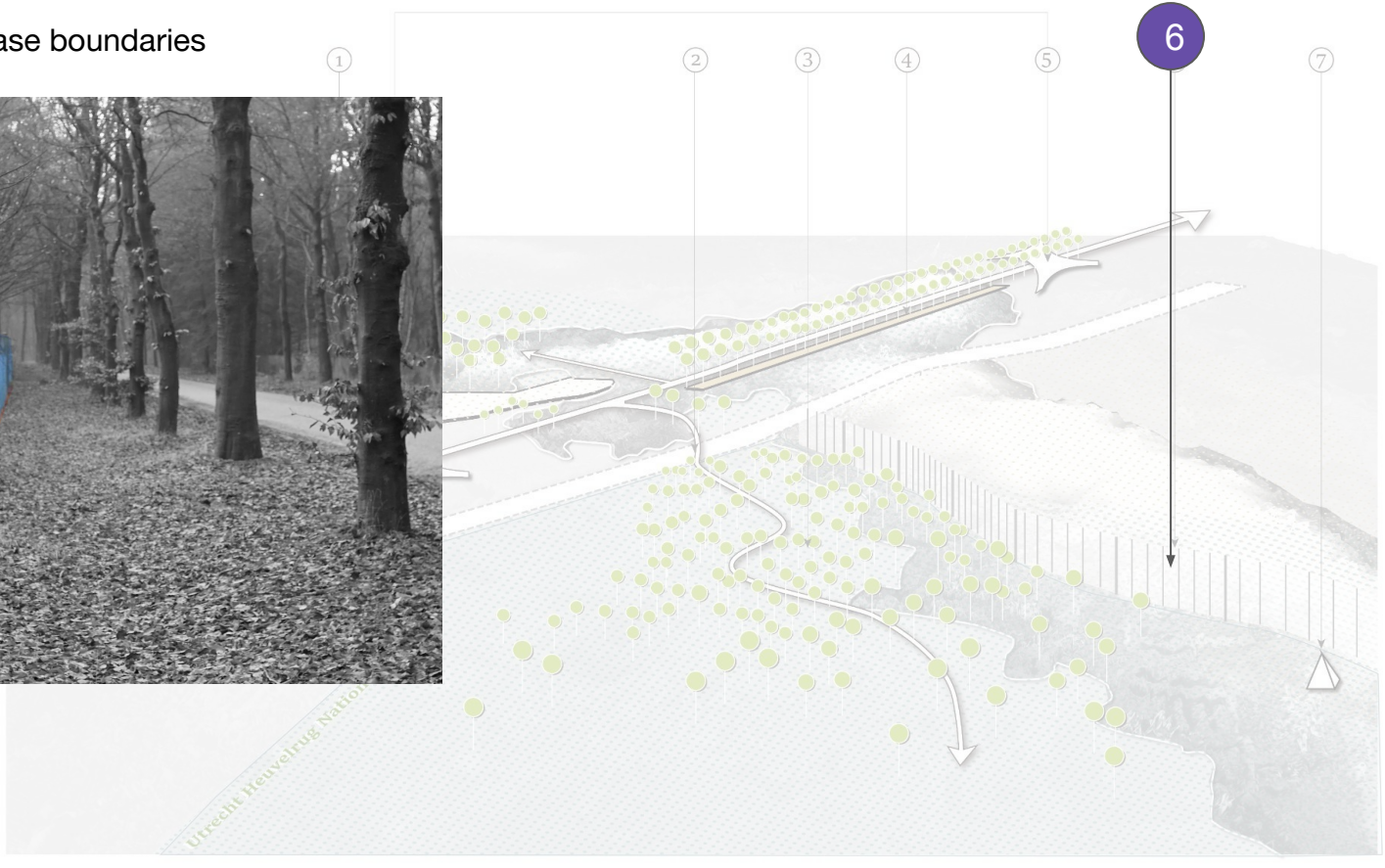


Amersfoortsestraat

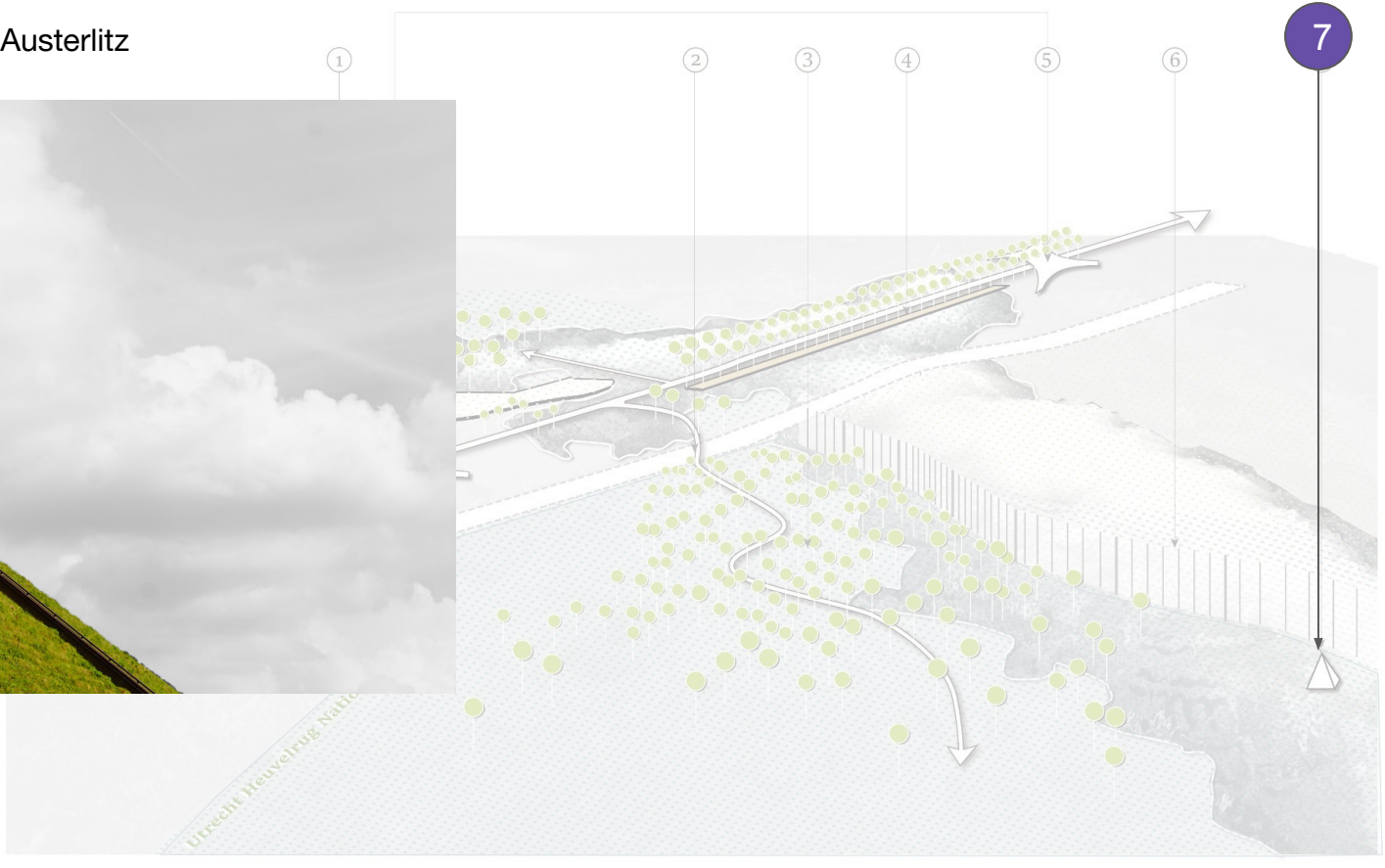


Ecoduct

Military training base boundaries



Pyramid of Austerlitz



PROBLEM FIELD

Fragmented heritage sites / Fragmented roads / Monocultural forest

PROBLEM STATEMENT

The current cultural experience between each heritage sites is disconnected and the physical access logic behind the cultural heritage sites are omitted in the singular forest environment.

PROBLEM STATEMENT

fragmented heritage sites

fragmented road system

The current cultural experience between each **heritage sites** is disconnected and the physical **access logic** behind the cultural heritage sites are omitted in the **singular forest environment**.

monocultural forest

Fragmented heritage sites

large domain

medium domain

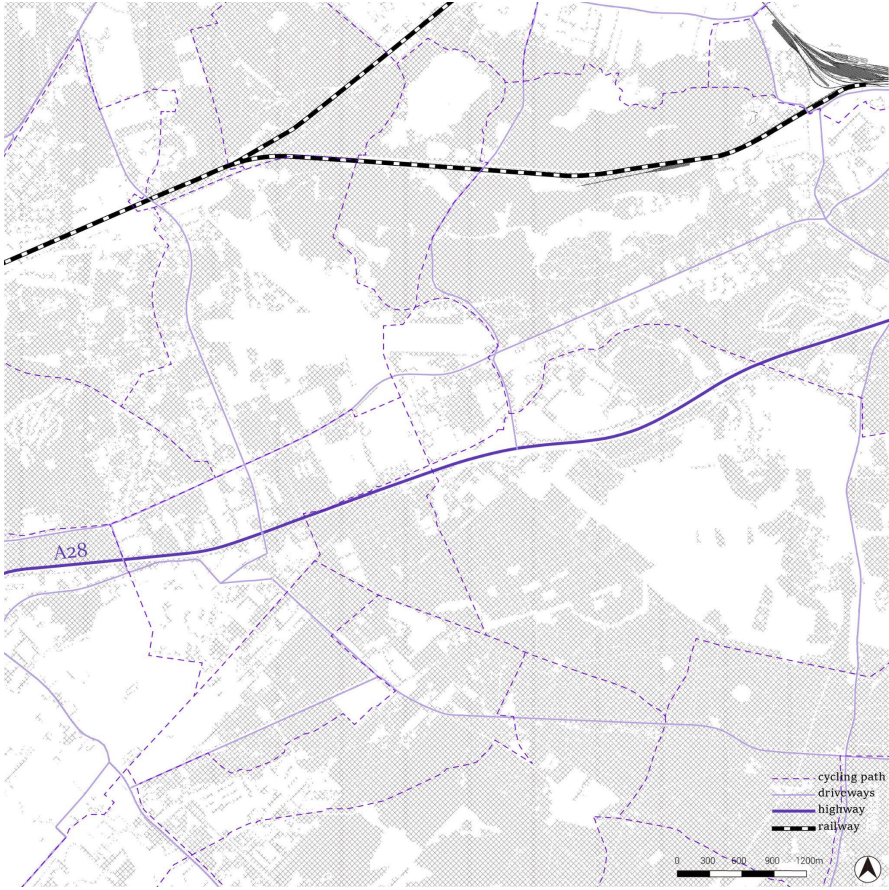
small domain

Fragmented heritage sites | **Fragmented roadsystem**

car lanes

cycling path

foot path



Fragmented heritage sites | Fragmented roadsystem | **Monocultural forest**

spruce&pine forest

RESEARCH QUESTION

The current cultural experience between each heritage sites is disconnected and the physical access logic behind the cultural heritage sites are omitted in the singular forest environment.

How to improve the accessibility, understandability and presentation of the military heritage in a forest environment?

How to improve the

accessibility, understandability

and presentation

of the military heritage in a

forest environment?

What is the definition of heritage accessibility?
How to increase the accessibility in different mobility systems?

Spatial accessibility

Degree of difficulty (time, distance, transportation type…)
Diversities of options for people to choose

Intellectual accessibility

Feelings and visions when approaching (knowledge, awareness, experience, intuition….)

How to improve the

accessibility, **understandability**

and presentation

of the military heritage in a

forest environment?

How can people understand the story behind by perceiving and involving in the landscape?

Identity of heritage

Memory of a place: Symbols, spiritual significance, cultural representatives, time and periods…

How to improve the

accessibility, understandability

and **presentation**

of the military heritage in a

forest environment?

What are the principles of presenting a heritage landscape?

Interpretation of heritage

Harmoniously inserted interventions represent heritage identities and add value to the cultural significance.

How to improve the

accessibility, understandability

and presentation

of the military heritage in a

forest environment?

What is the natural approach to diversify the monoculture forest?

Forest diversity (in this project)

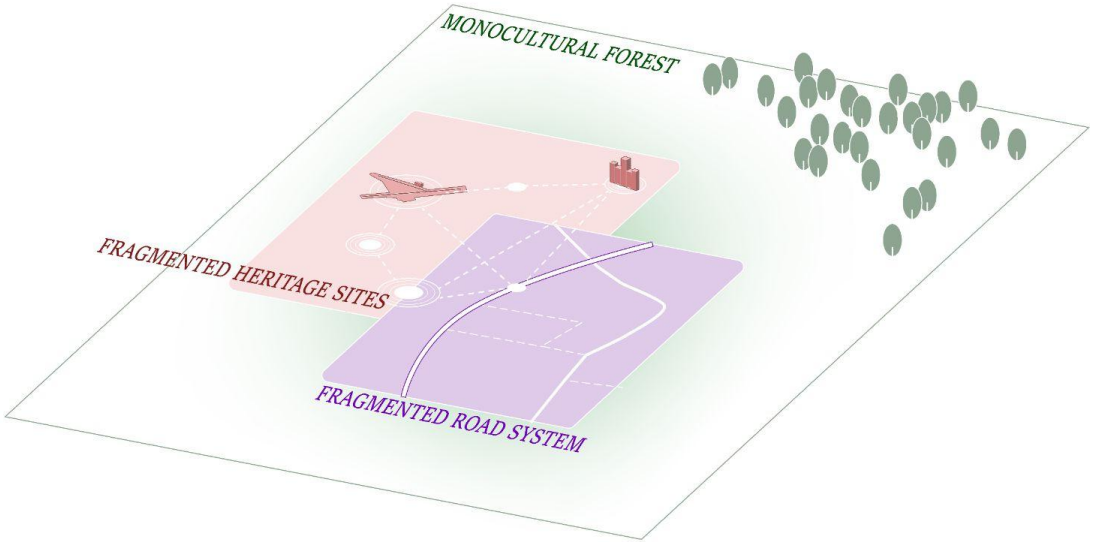
From monocultural to defensive, diversified forest

ANALYSIS

Accessibility
Understandability
Presentation
Forest diversification

RESEARCH QUESTION OBJECTIVES

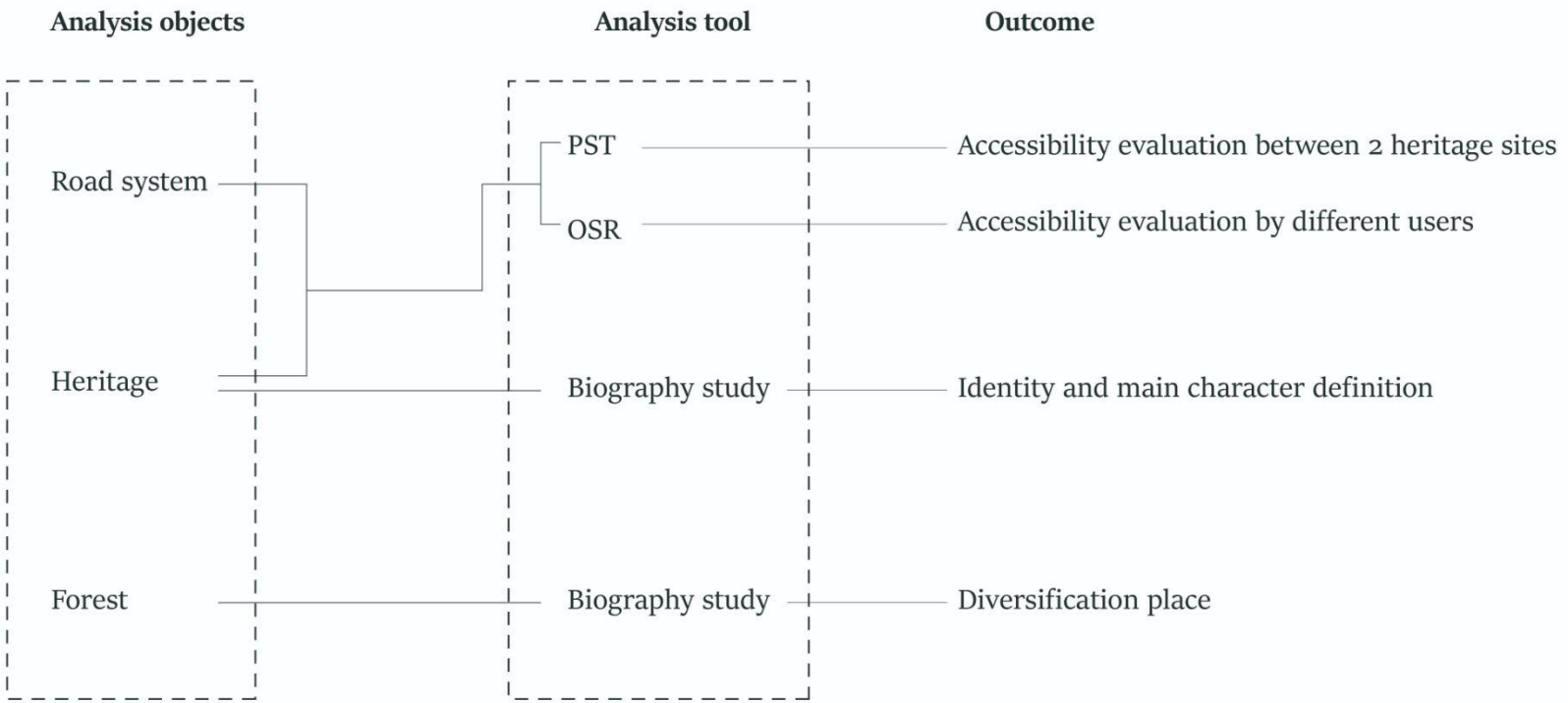
PROBLEM FIELDS



ANALYSIS

Accessibility / Heritage identity / Forest diversification

ANALYTICAL FRAMEWORK

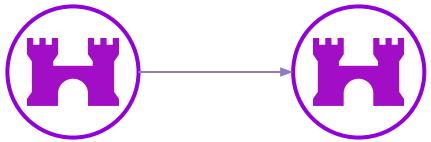


Accessibility evaluation

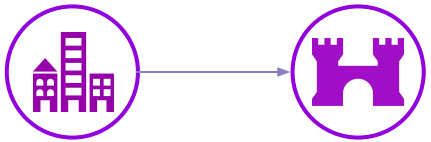
Heritage identity

Road in forest

1. Between heritage sites



2. Socio-Accessibility



PST: Attraction betweenness

Which roads are the most likely to be taken between specific sites and locations?

OSR

Which roads are the FASTEST/SHORTEST way to take between two locations under specific mobility mode?

Accessibility

1.between heritage sites

Cold war

World War Ⅱ

French Times

World War Ⅰ

Accessibility

1.between heritage sites

Accessibility

1.between heritage sites

High accessibility

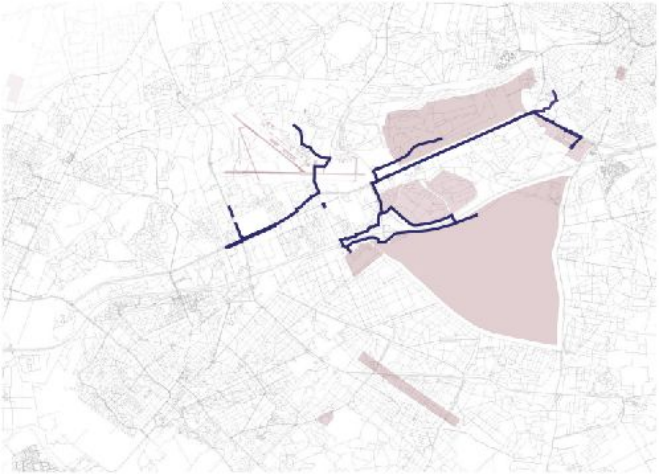
Medium accessibility

Low accessibility

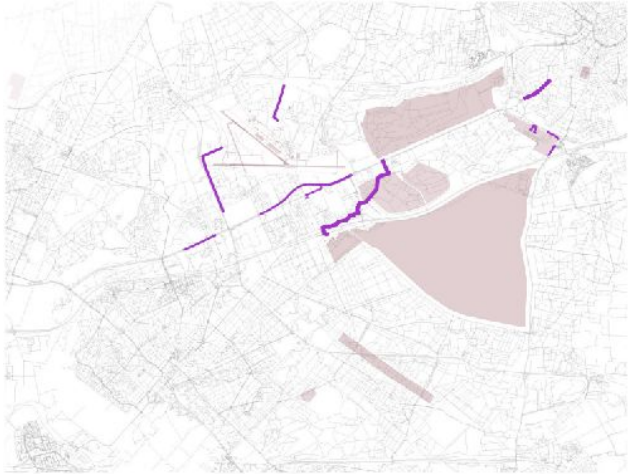
Accessibility

1.between heritage sites

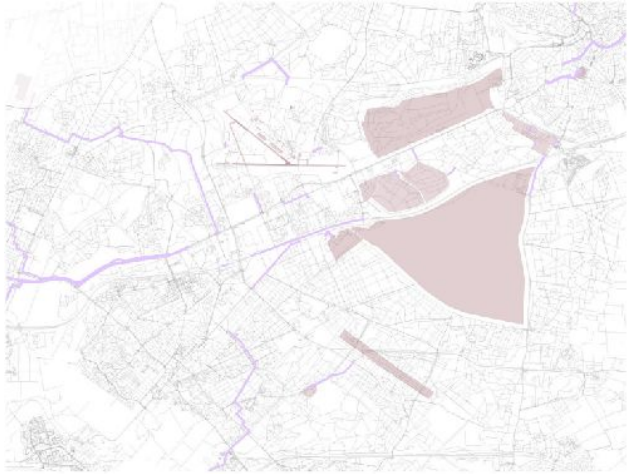
High



Medium



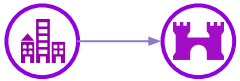
Low

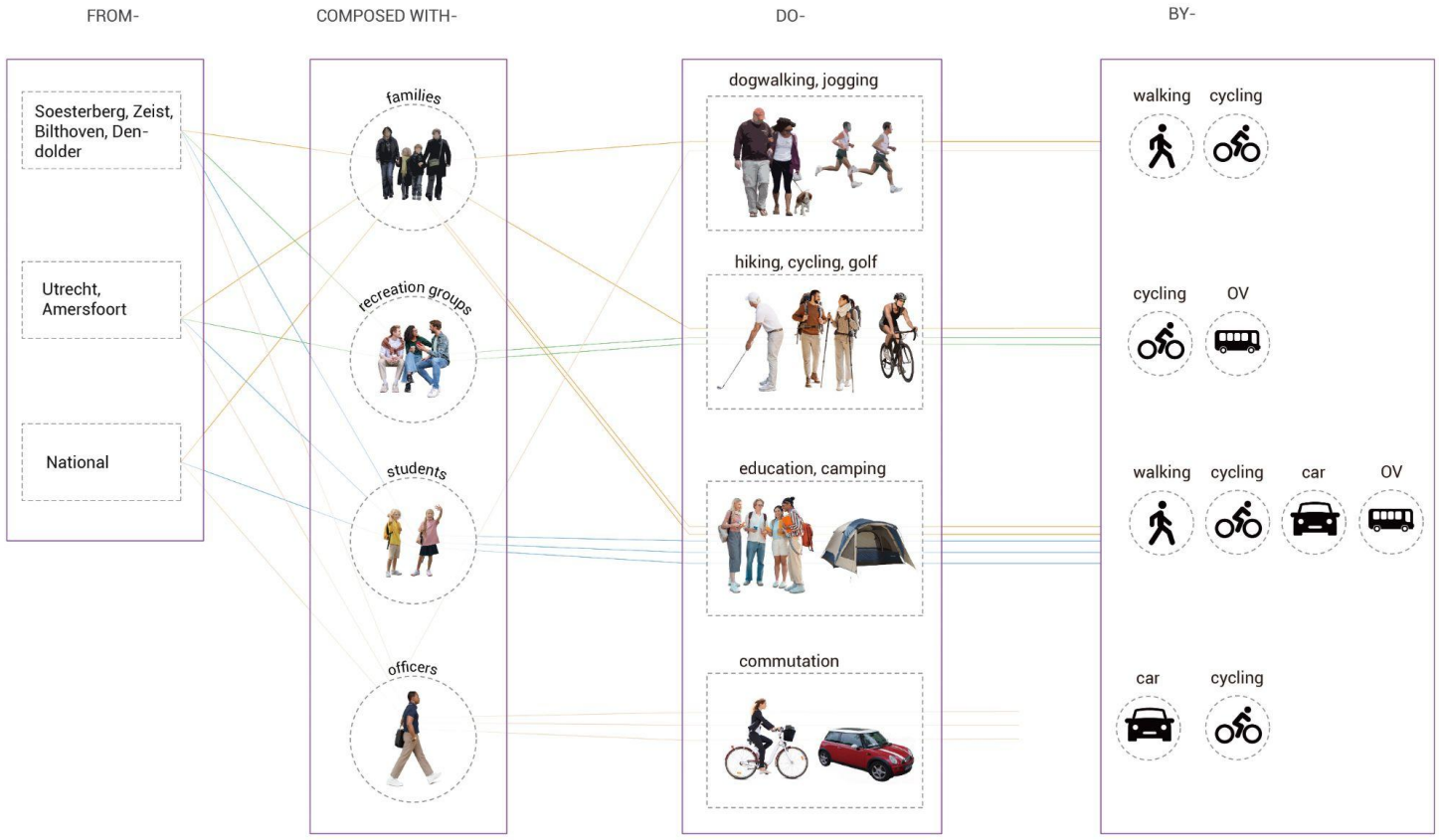


Accessibility

| Heritage Identity | Forest

2.socio-accessible





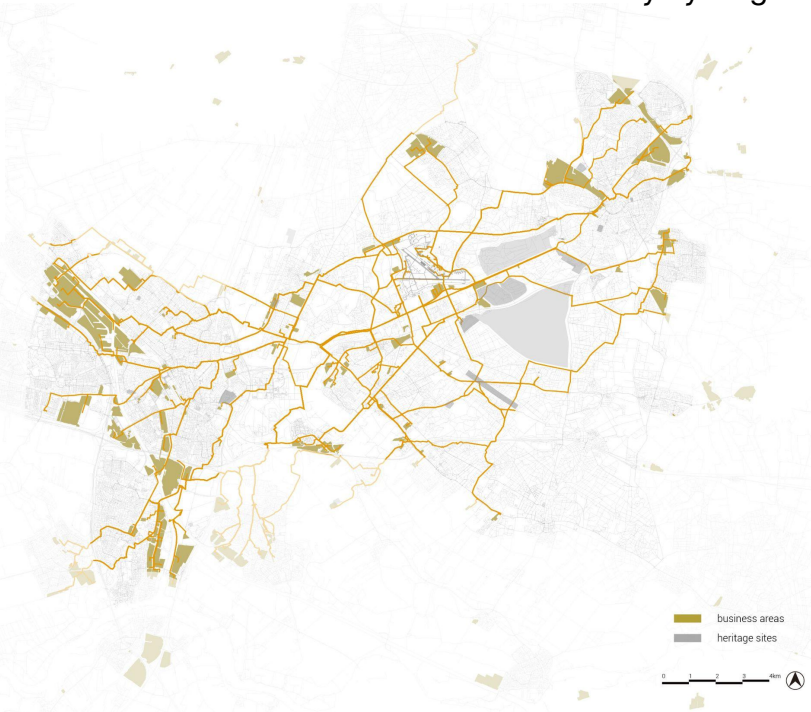
Accessibility

2.socio-accessible

families

officers

by cycling



by car

Accessibility

2.socio-accessible

on foot

by cycling

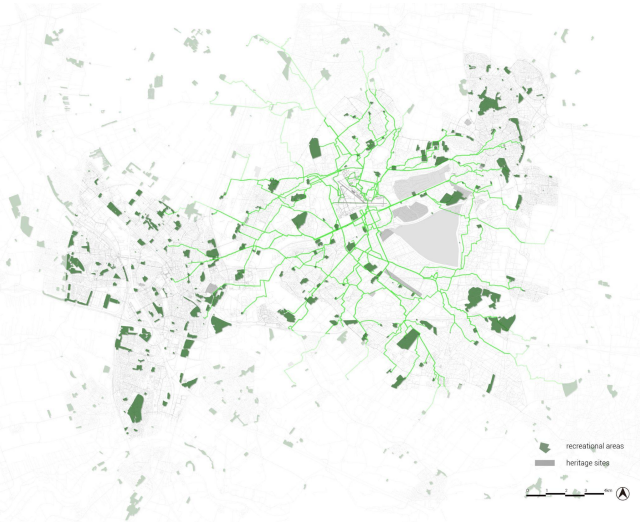
by car

Accessibility

2.socio-accessible

recreation groups

on foot

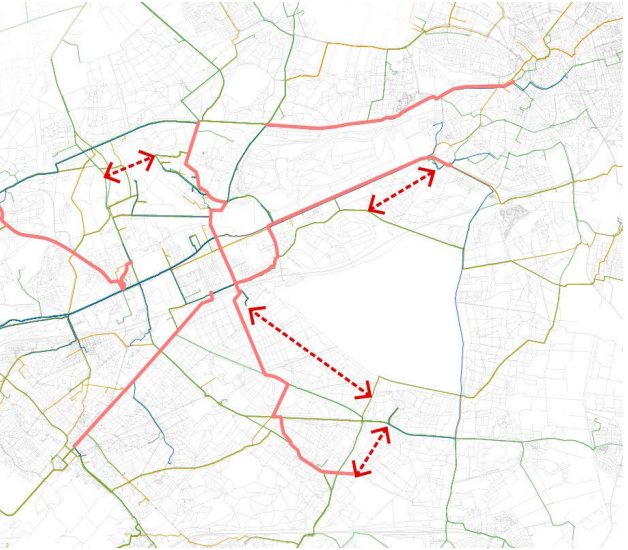


by cycling

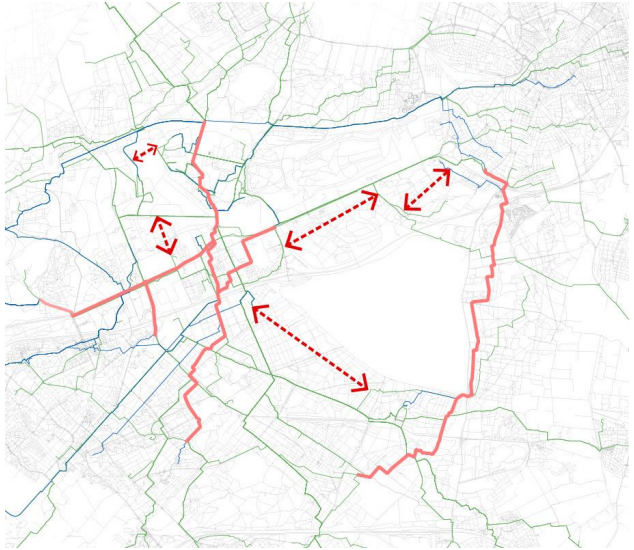
by car

Need new connections ***Most preferred-more diversities***

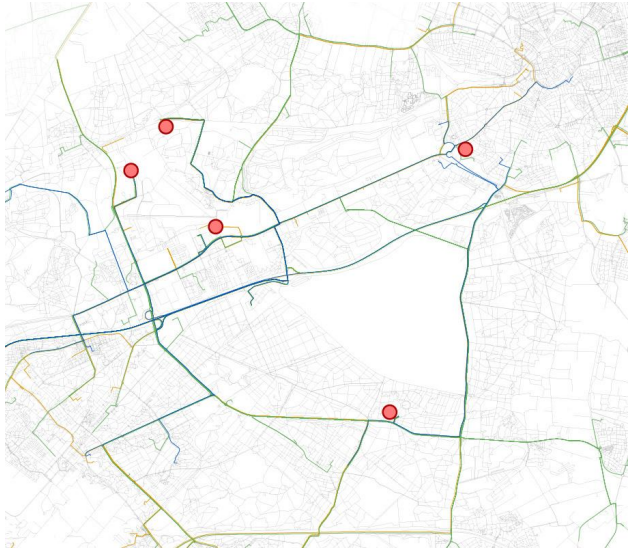
Cycling routes



Walking path

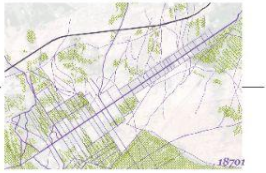


Car parking



Military heritage biography

PALIMPSEST



LANDSCAPE

woods disappearance — *heathland* — *sandy moor*

MILITARY

1650-1672

1672

Kamp Zeist

Zeist was surrounded on the northeast side by an extensive heathland, as a military training ground

the heath below Zeist was used by the farmers for grazing their sheep

1787

Another troops gathered on the Leusderheide. Near Zeist, the pro-principal army set up camp

1804

Pyramide van Austerlitz

dominant and constructed by French

1818

Kamp bij Zeist

not permanent, only for training in summer

1863

1870

Leusderhei

became a closed military area

INFRASTRUCTURE

Estates

Countruction of country estates

Soester section: Sterrenberg, Moer Berry Mountain, Bloemheuvel and the Oude Tempel; Zeister side: Dijnselburg, tapstede Huys ter Heijde, Zandbergen, Heylbergen and Beukbergen.

Amersfoortsestraat

60 meters wide
three rows of oak trees on either side
generously sized building plots
public-private partnership
houses of Zandbergen, Beukbergen

Railway

the railway line Utrecht-Amersfoort-Zwolle was put into use

Military heritage biography

forest regeneration

1907

1910

1914-1918

WW I

1944

Bombardment

1940-1945

Kamp Amersfoort

Camp Amersfoort was not a concentration camp. It was a small and makeshift camp under the supervision of the Sipo/SD. More than 35,000 inmates who were imprisoned in the camp.

1950

After 1950

Mobilization Complexes

MOB complex is the name for a complex of military buildings with associated infrastructure. Most of the complexes were built between 1951 and 1961.

Railway

a narrow-gauge railway was built, a tap at Huis ter Heide to the camp of Kamp van Zeist

Soesterberg Airfield

a crowd puller for flying demonstrations
NATO Airbase
Royal Netherlands Air Force
base for a squadron of the American Air Force

Women's Village

many Belgian refugees who were housed in the Kamp van Zeist (12,000 soldiers) and Albertsdorp (their wives and children) on the Amersfoortsestraat

Highway A28

Wars in 4 Times & characters involved

Forest

Forest modification biography

Deforestation — The deforested landscape was extraordinarily open.

Afforestation — Different categories of forest: estate forest, the park forest, the production forest

Diversification

Late middle ages

Grazing of cattle in the Bos in Elst was banned

In 1480 one third of the forest was allowed to be cut down every year, but the largest and strongest trees had to remain, because of the cover for the game

1478

only largest trees remain

17th century

The groves supplied coppice and bark for tannic acid extraction (for tanneries)

1714

Disappeared completely

Hunting

end of 18th century

Agricultural and forestry experiments started

The heath was seen as unproductive, fallow ground.

19th century

Large scale planting

1850

Forestry area

1900

Wood factory

Expansion of railway

1930

Deciduous forest

Pests and diseases

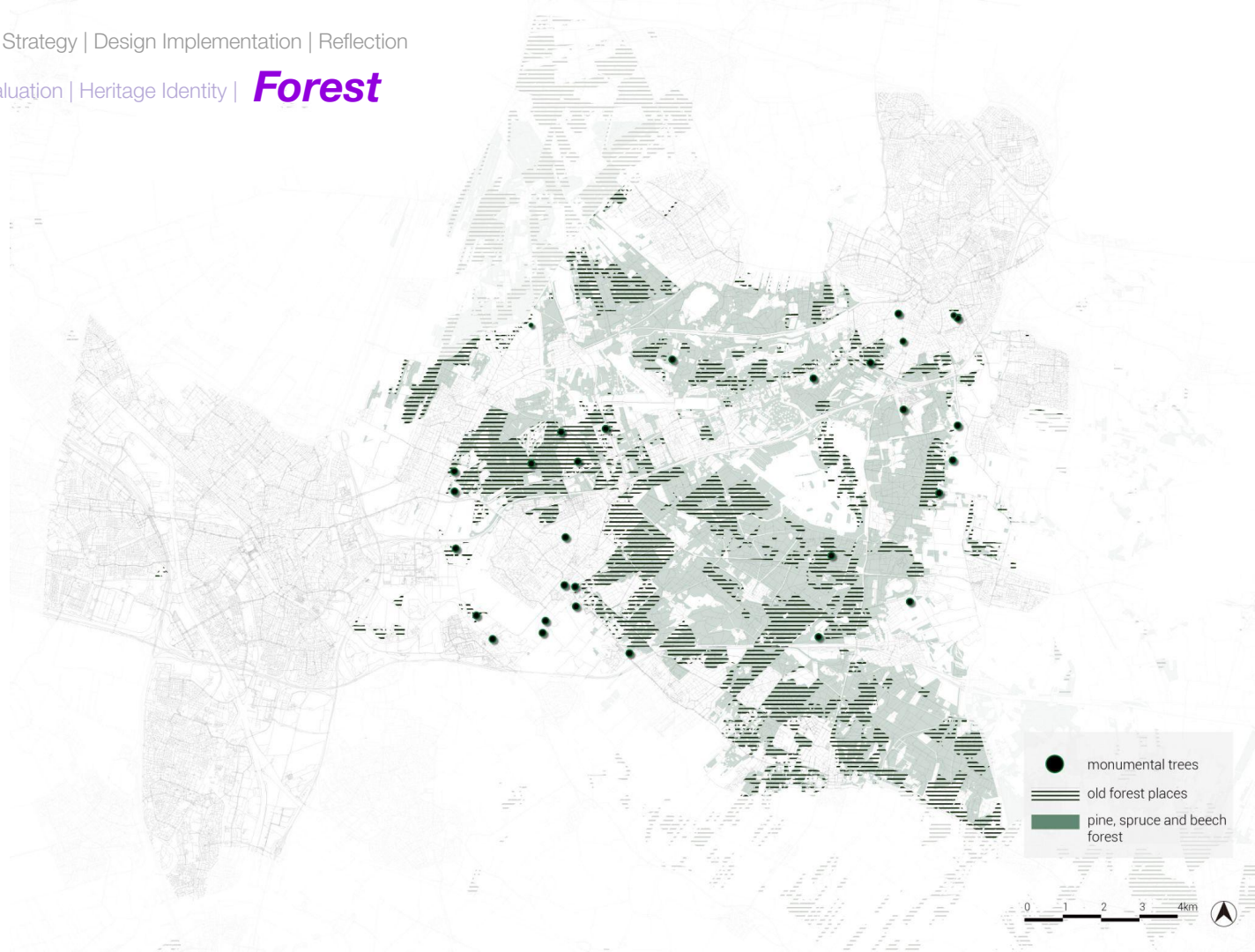
20th century

Spontaneous forest

1. coniferous to decidous

preserve old forest and monumental trees

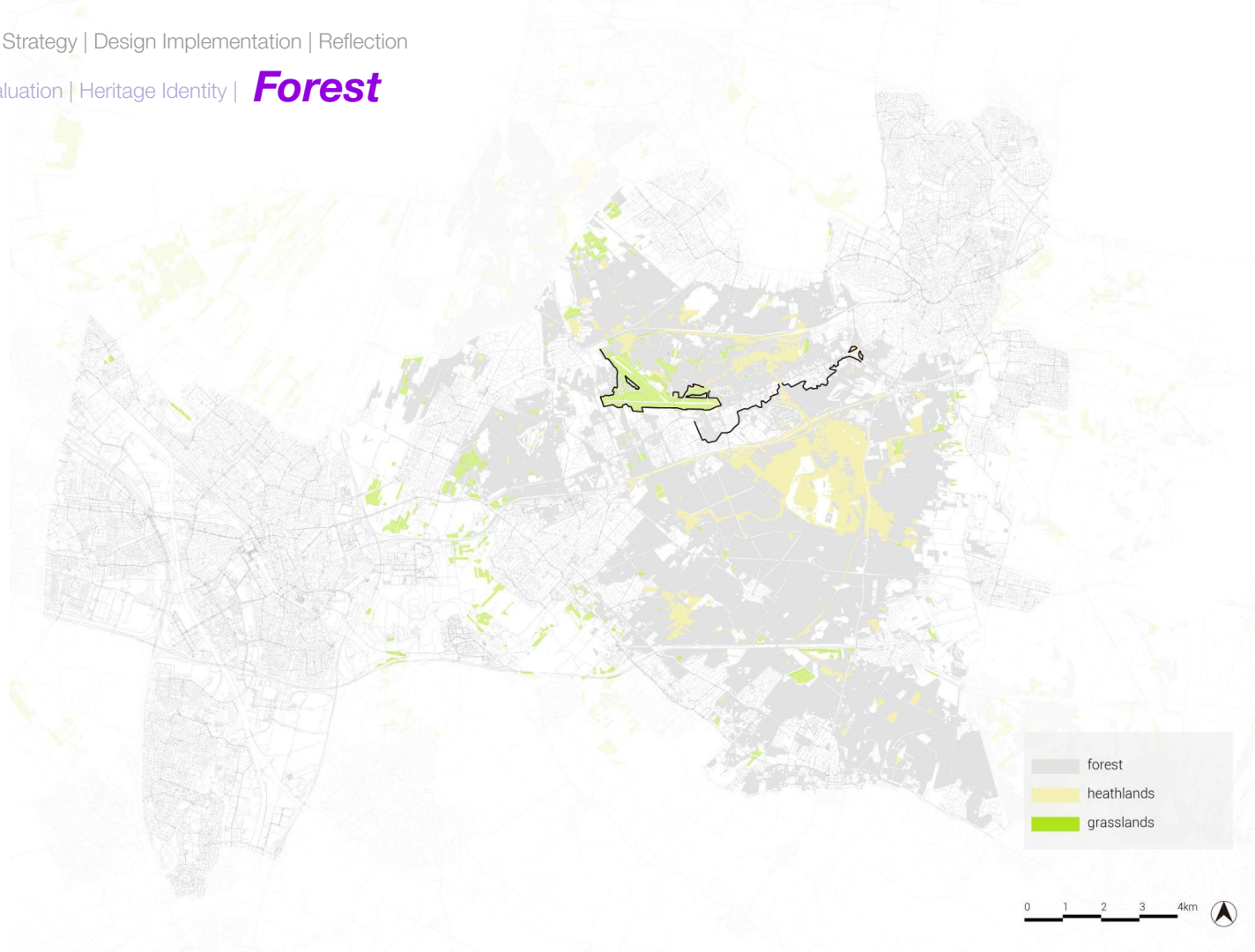
forest thinning from spruce



2. More trees

government's plan of adding 600000 trees in 2020-2030

the fringe between forests and urban infrastructures could be a choice

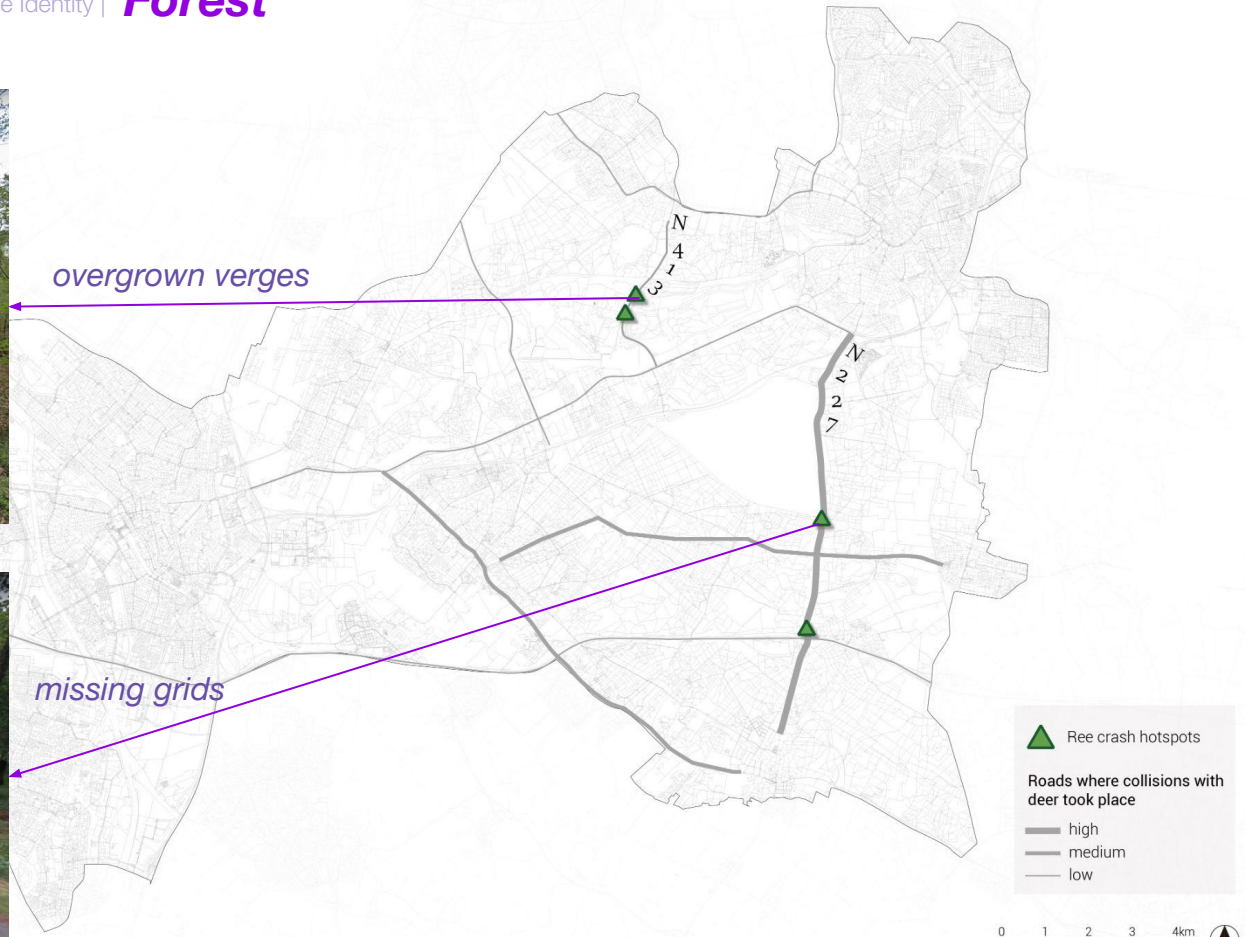


3. Animal crash

It is estimated that there are *more than 10,000* collisions with Ree in the Netherlands every year.

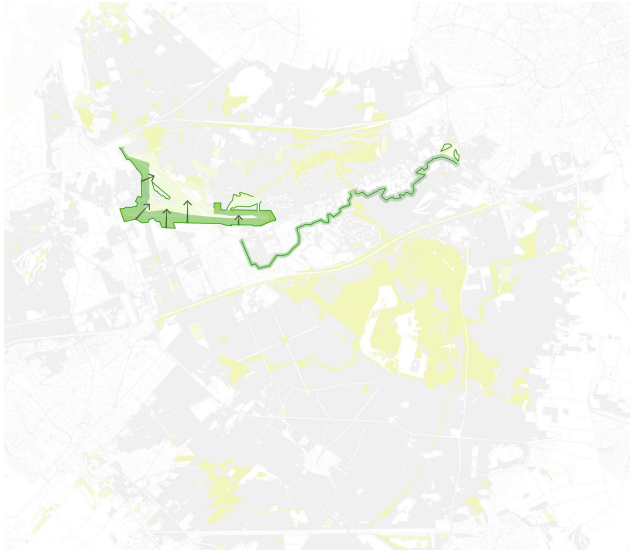
overgrown verges

missing grids



1. Forest diversification: preservation and thinning

2. Forest expansion: tree plantings on the fringe



3. Animal crash: overgrown verges and grids

DESIGN ASSIGNMENTS

Heritage recognition

people perceive, feel and transfer the emotions into mental awareness of heritage instead of arriving there without recognition.

Socio-accessible

the new road system meets the requirements of different groups of people as much as possible

Forest diversification

forest with diversified species

DESIGN STRATEGIES

Space / Historical elements extraction / Forest thinning

Space

How to conclude the spacial strategies from analysis?

between high accessible roads and low accessible roads

socio-need connections

forest fringe

identified heritage patterns/roads

high accessible roads

socio-preferred roads

military training boundaries

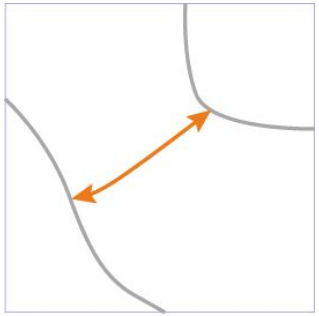
high&medium accessible roads

between socio-preferred roads

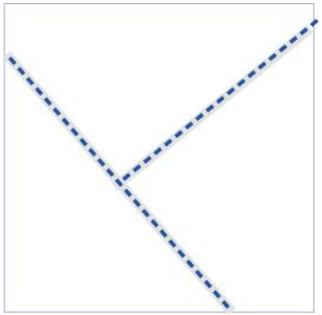
forest thinning

military training boundaries

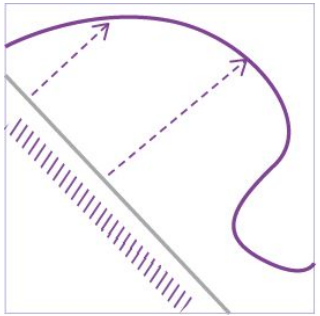
animal crash spots



CONNECT



REUSE



DIVERSIFY

AVOID

How to realize the “understandability” and “presentation”?

Cold War

Aircrafts

Steel

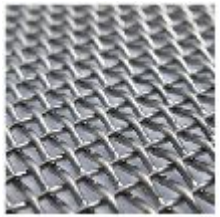
Asphalt(black)

Space | **Historical elements extraction** | Forest thinning | Planning

How to realize the “understandability” and “presentation”?

World War Ⅱ

“Palestina Express”



Wire(black/silver)

Cinder(black and grey)

Space | **Historical elements extraction** | Forest thinning | Planning

How to realize the “understandability” and “presentation”?

World War I

Sheltered house

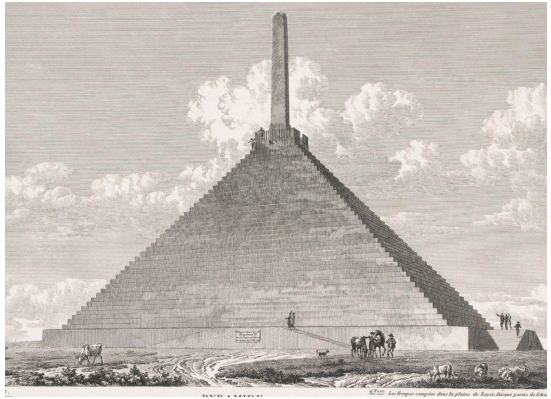
Belgium refugee monument

Bricks(red)

Wood plank

How to realize the “understandability” and “presentation”?

French times



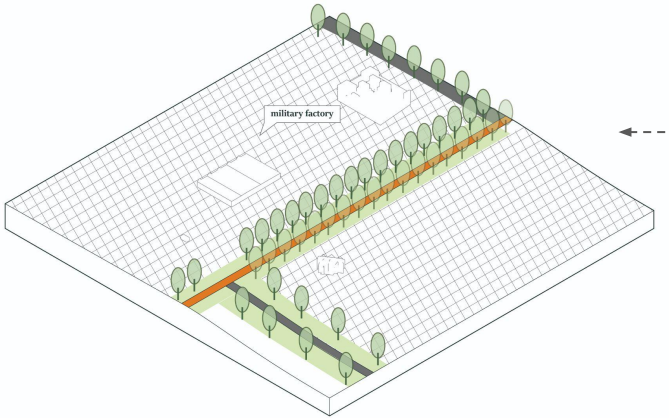
Pyramid

Stones

How to turn the coniferous forest to decidous forest?

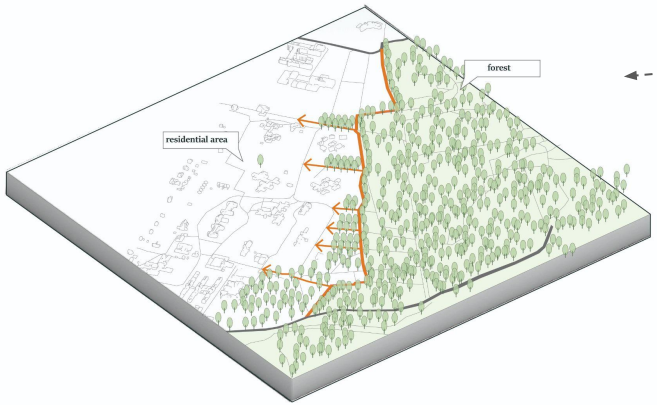
Connect

Add connecting path
(urban environment)
M



Connect

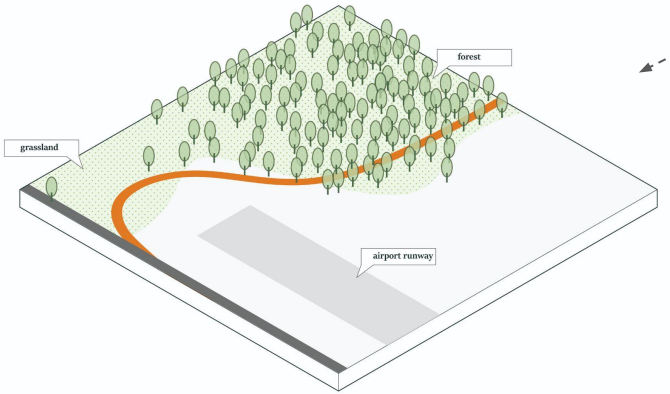
Add connecting path
(in forest)

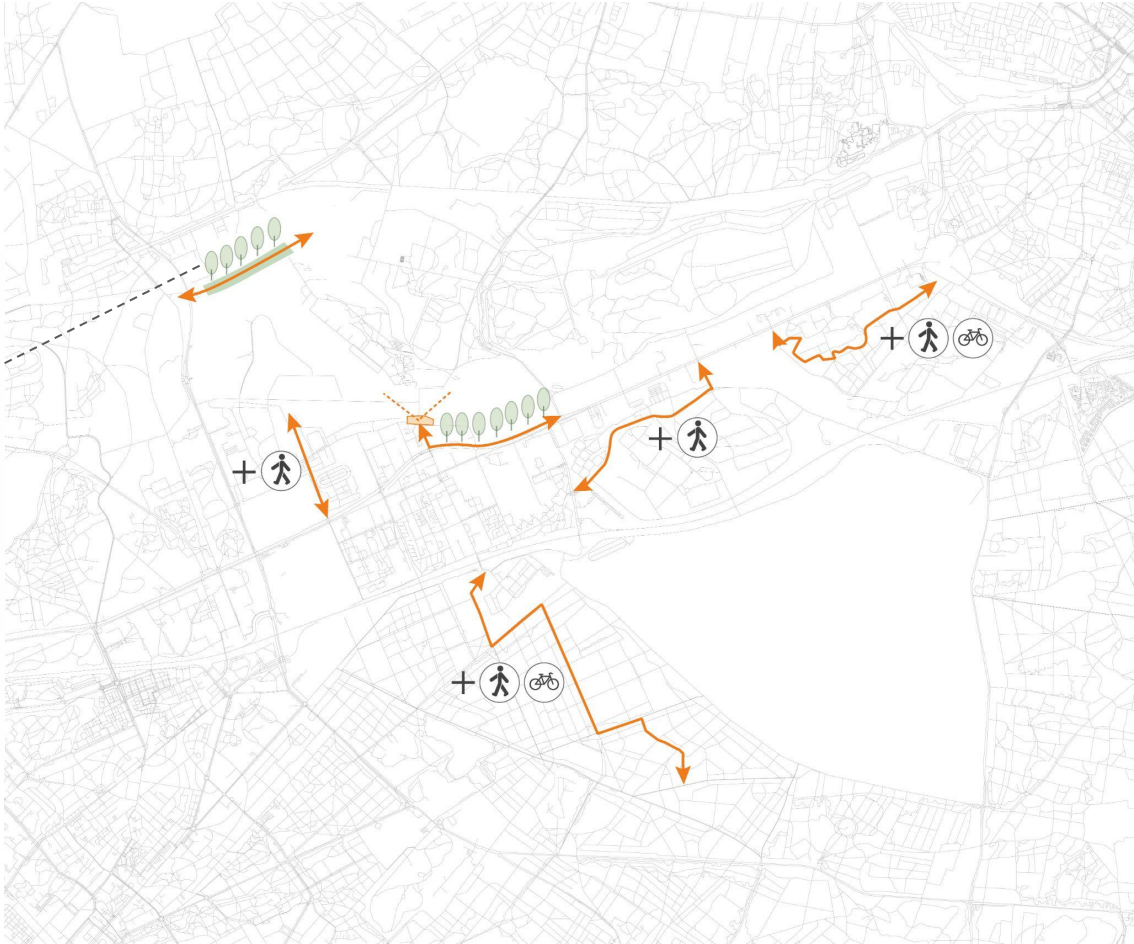


Connect

Forest-grasslands walking path

M

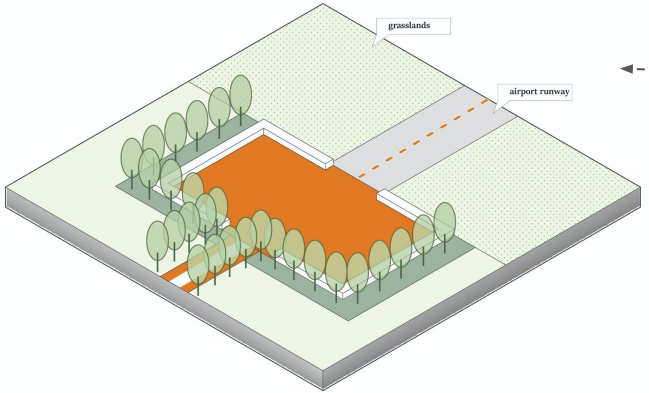


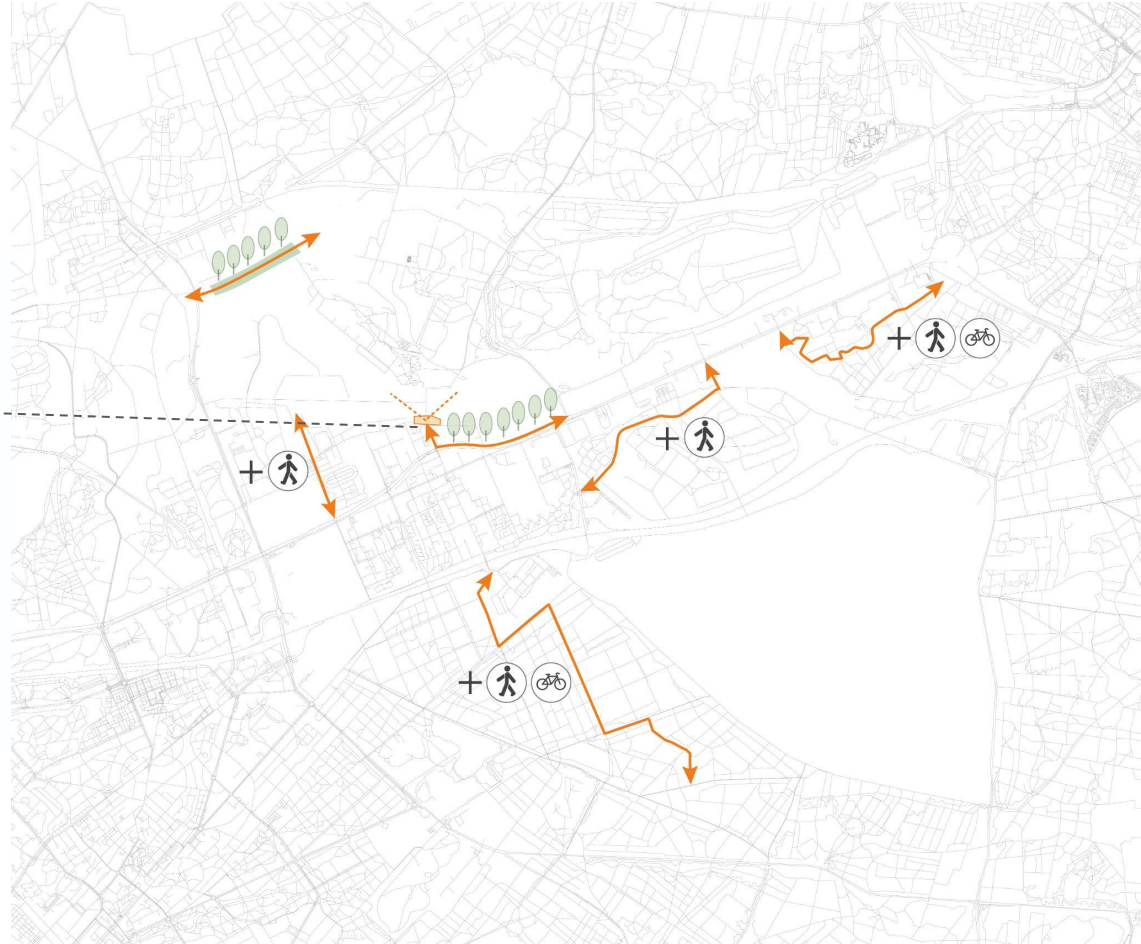


Connect

Open entrance with oriental path

S

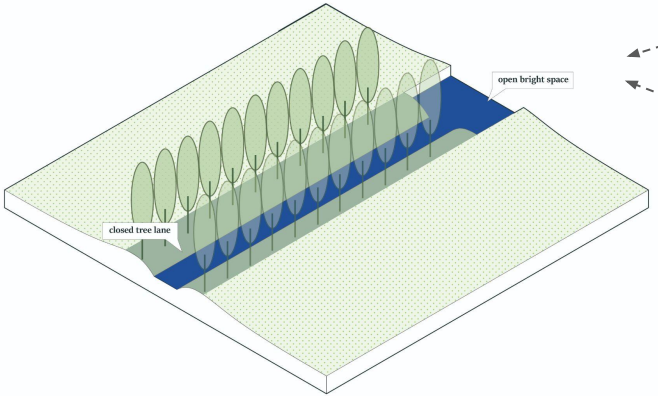


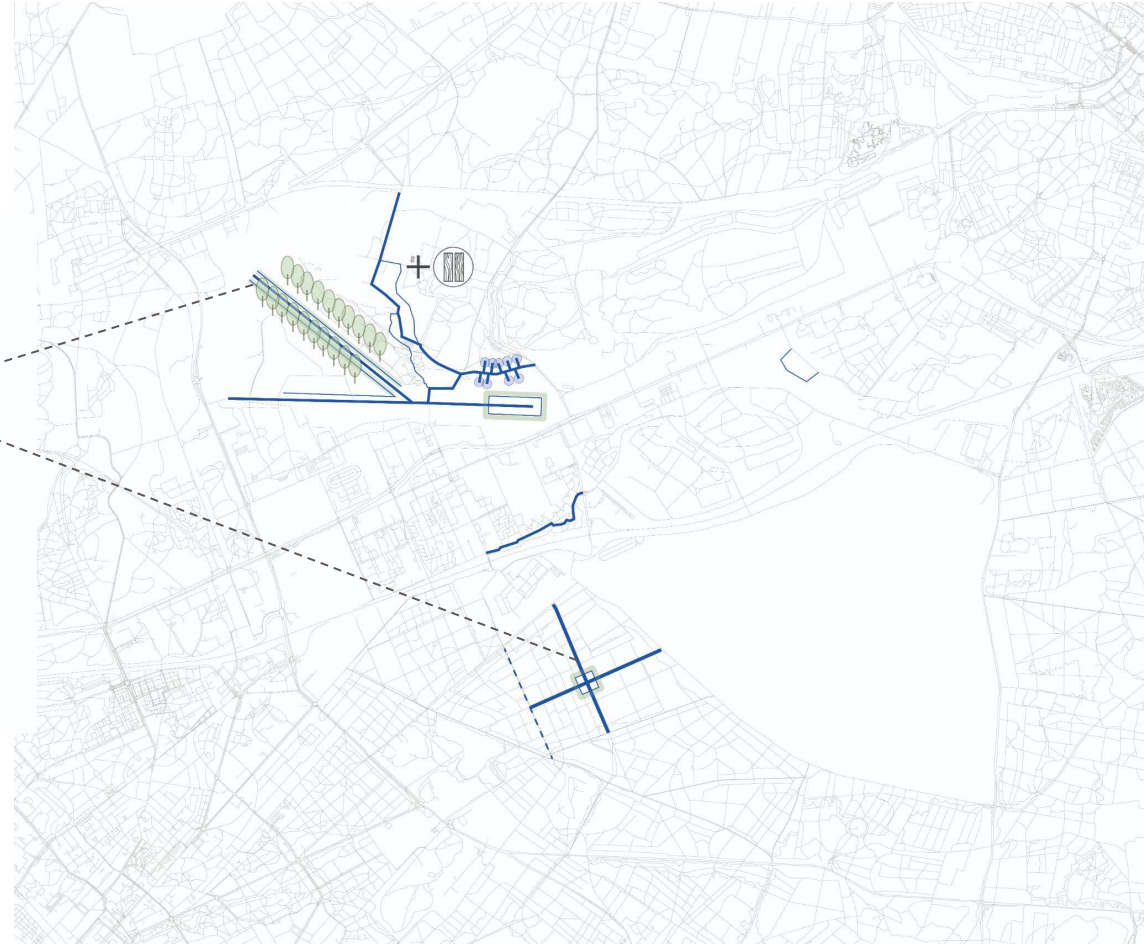


Reuse

Monumental avenue

S

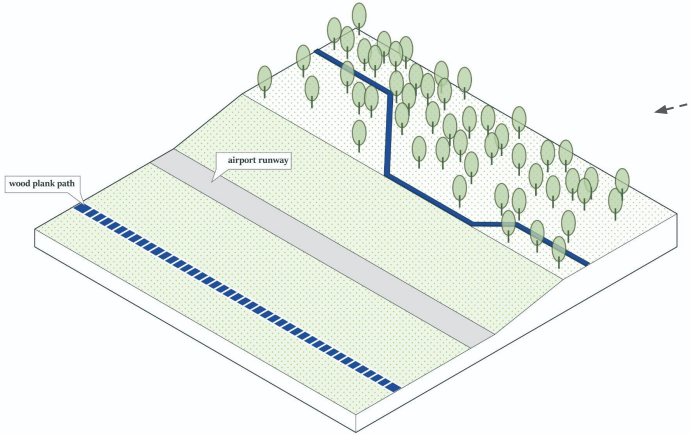


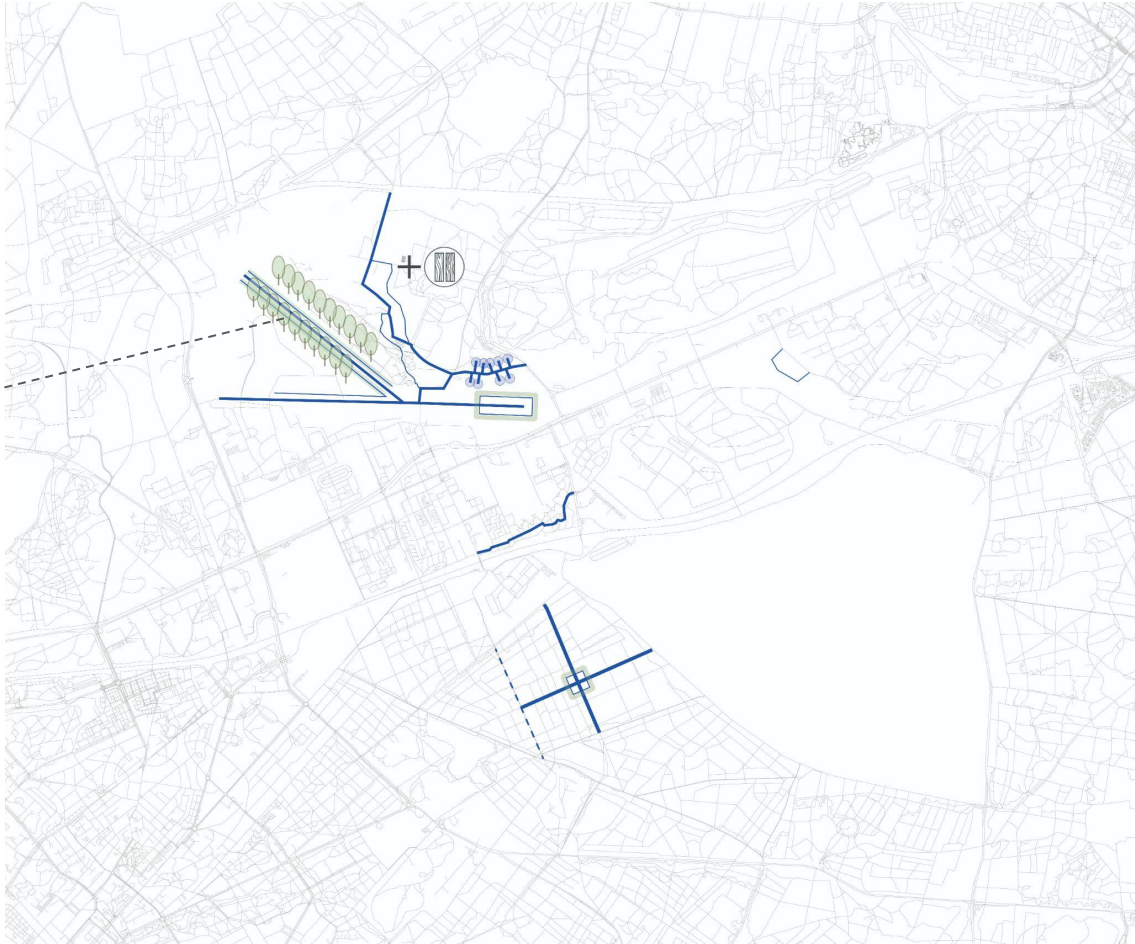


Reuse

Parrallel wood planks path

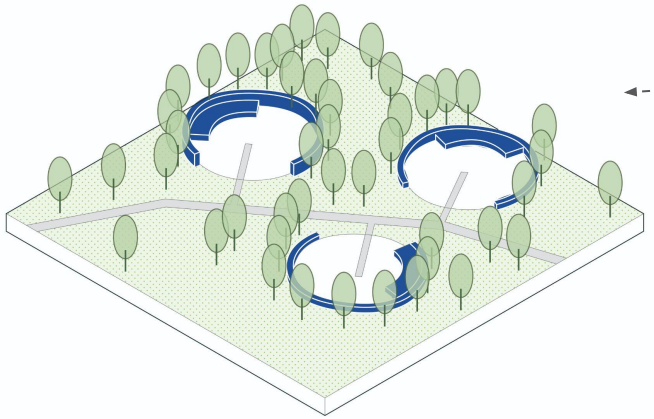
M

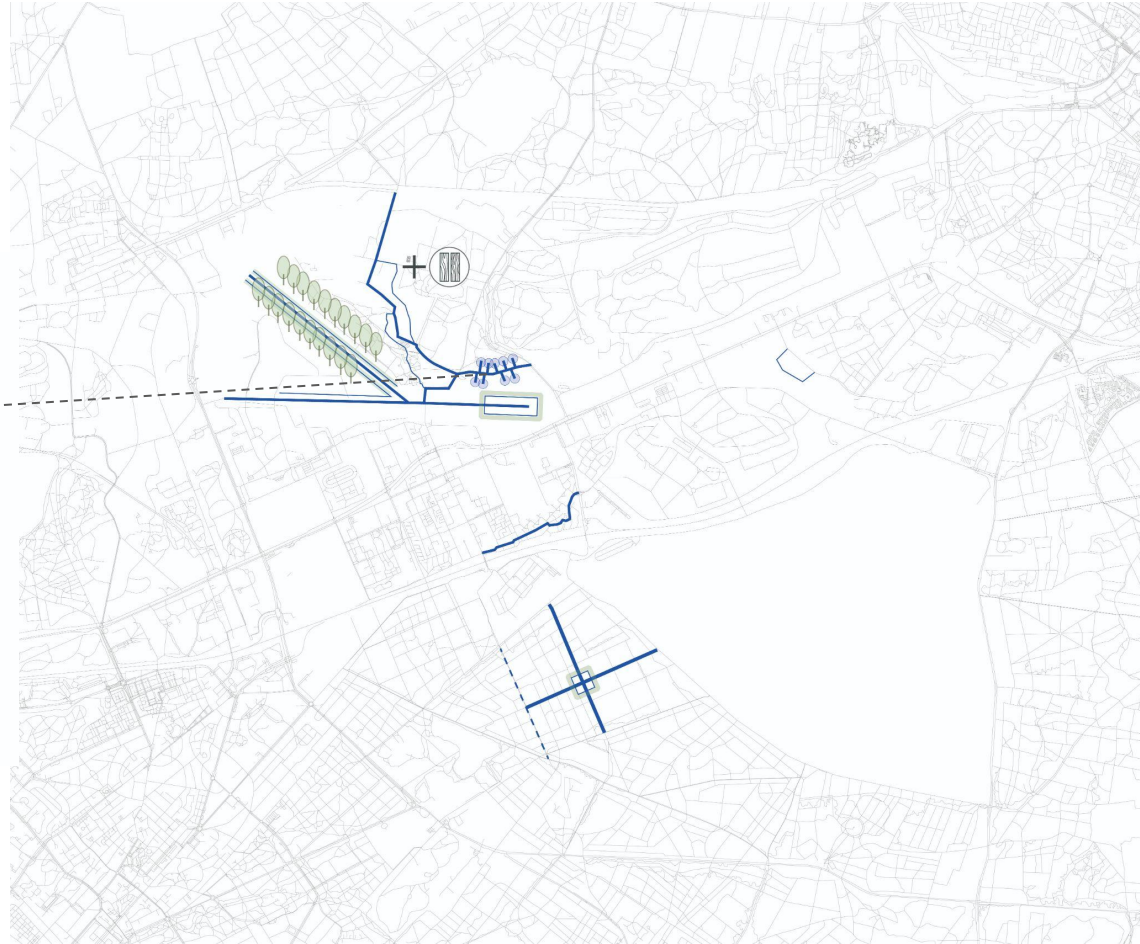




Reuse

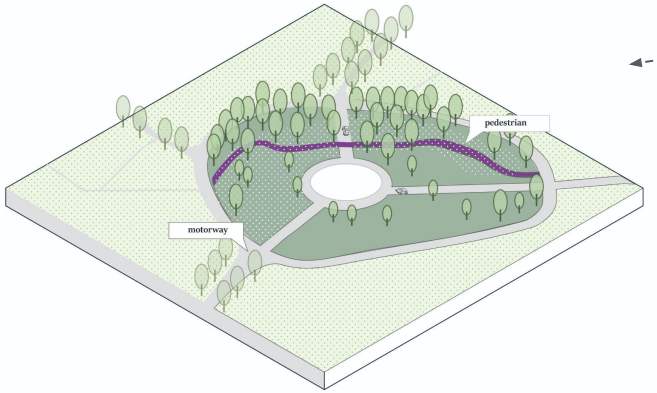
Education square
M





Diversify

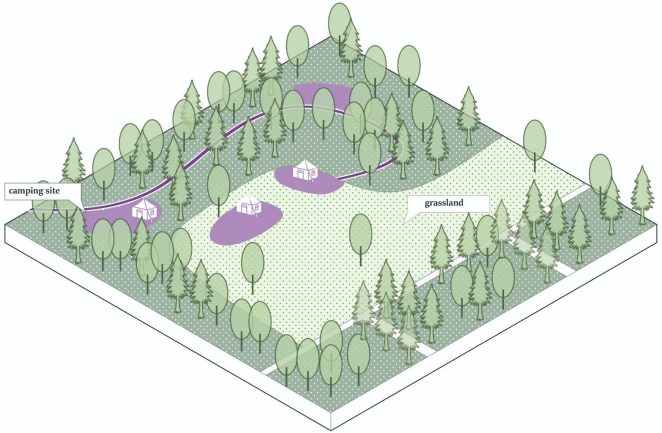
Forestry infrastructure park
M



Diversify

Mixed forest park with camping sites

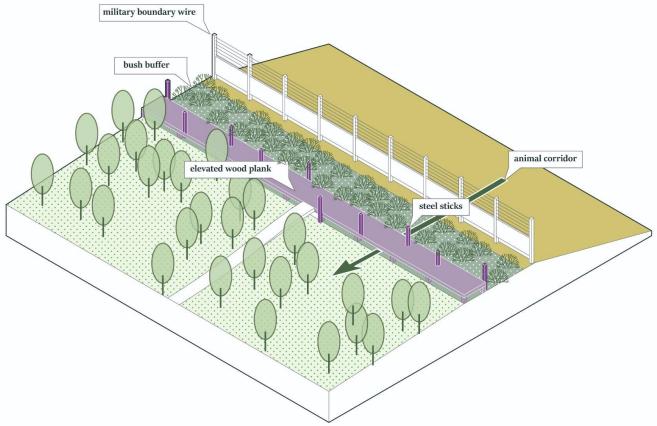
M



Diversify

Symbolism installations/grids
parallel to military boundary

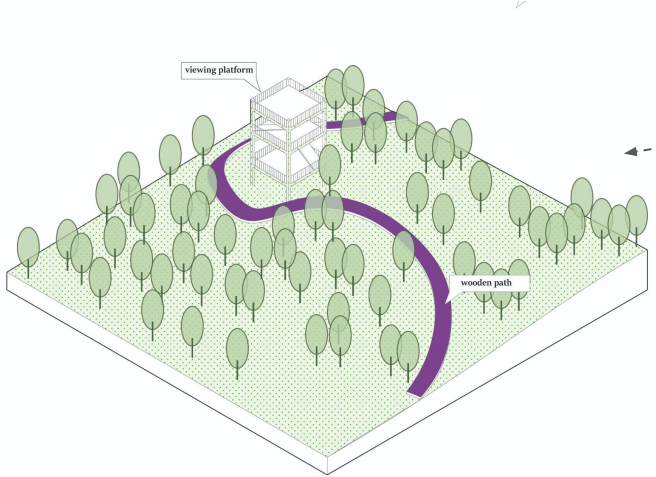
S



Diversify

Lookout platform/watchout tower

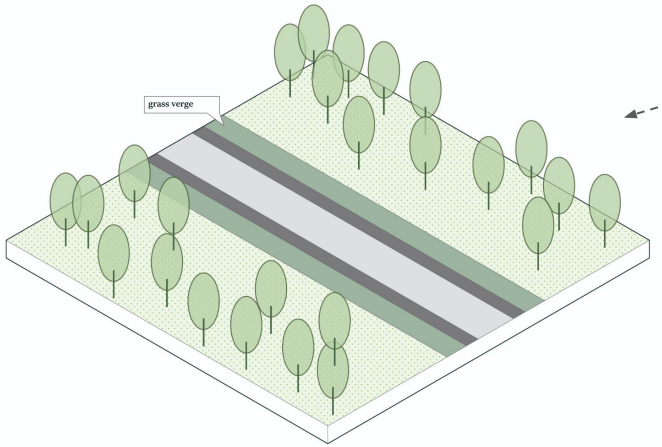
S

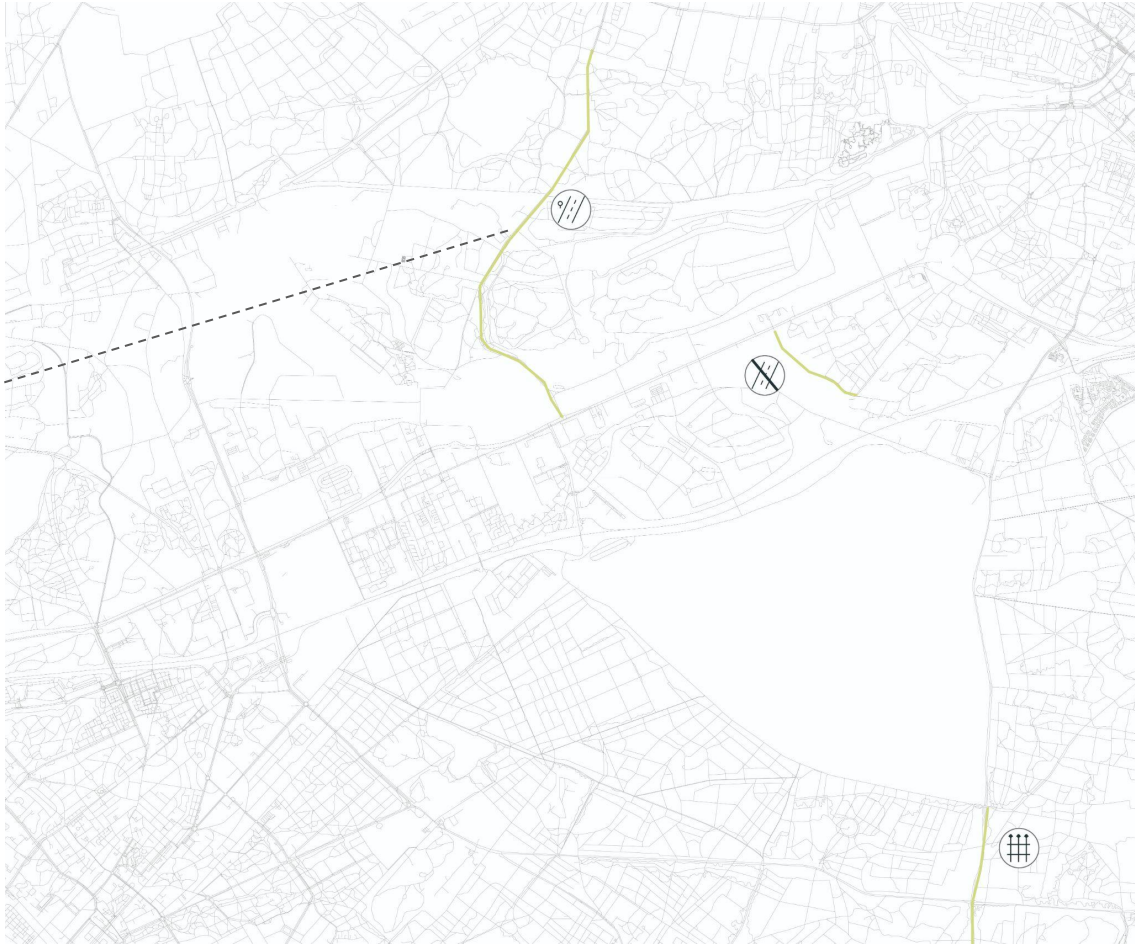


Avoid

Removal of forest and/or thickets

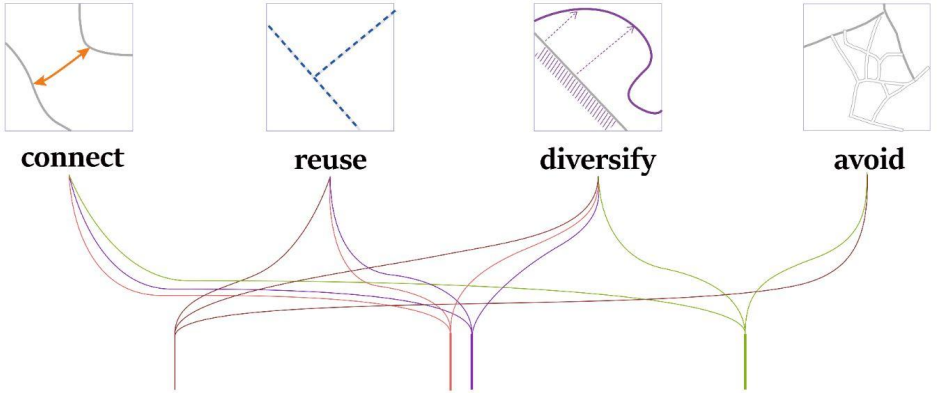
S





SPATIAL EXPRESSIONS

DESIGN STRATEGIES

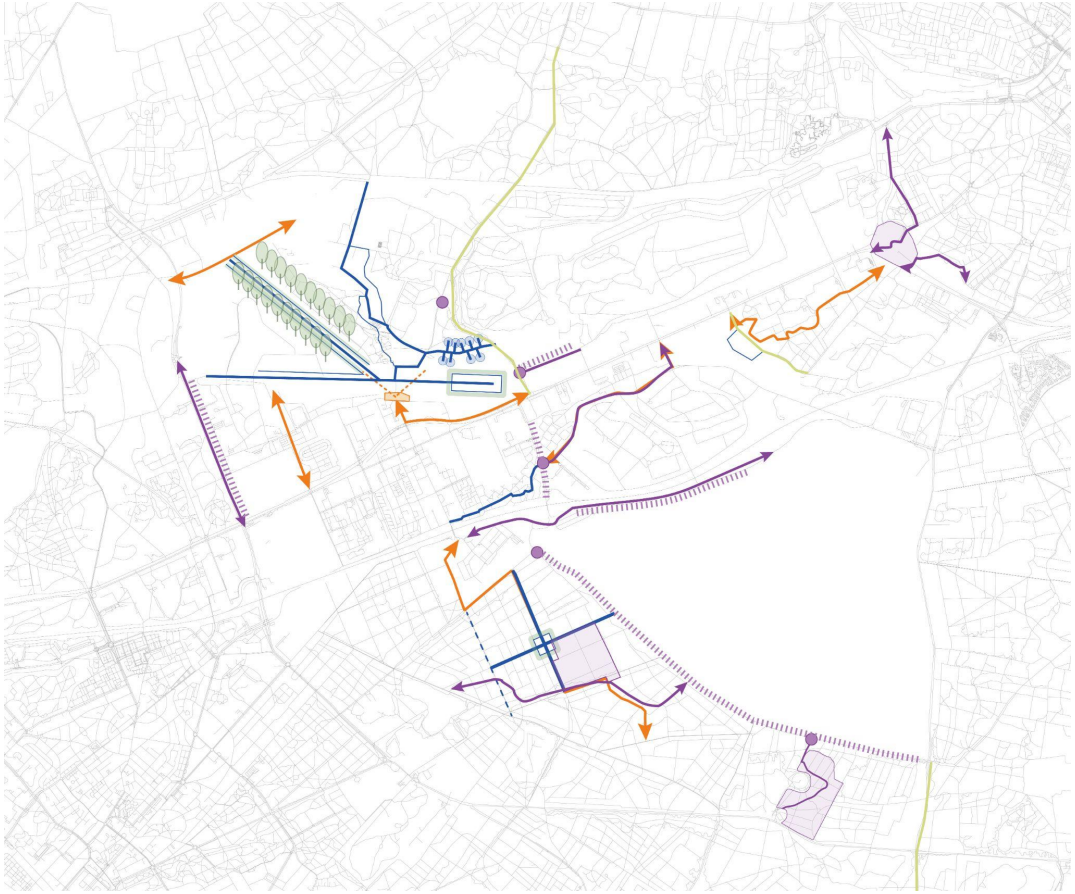


DESIGN ASSIGNMENTS

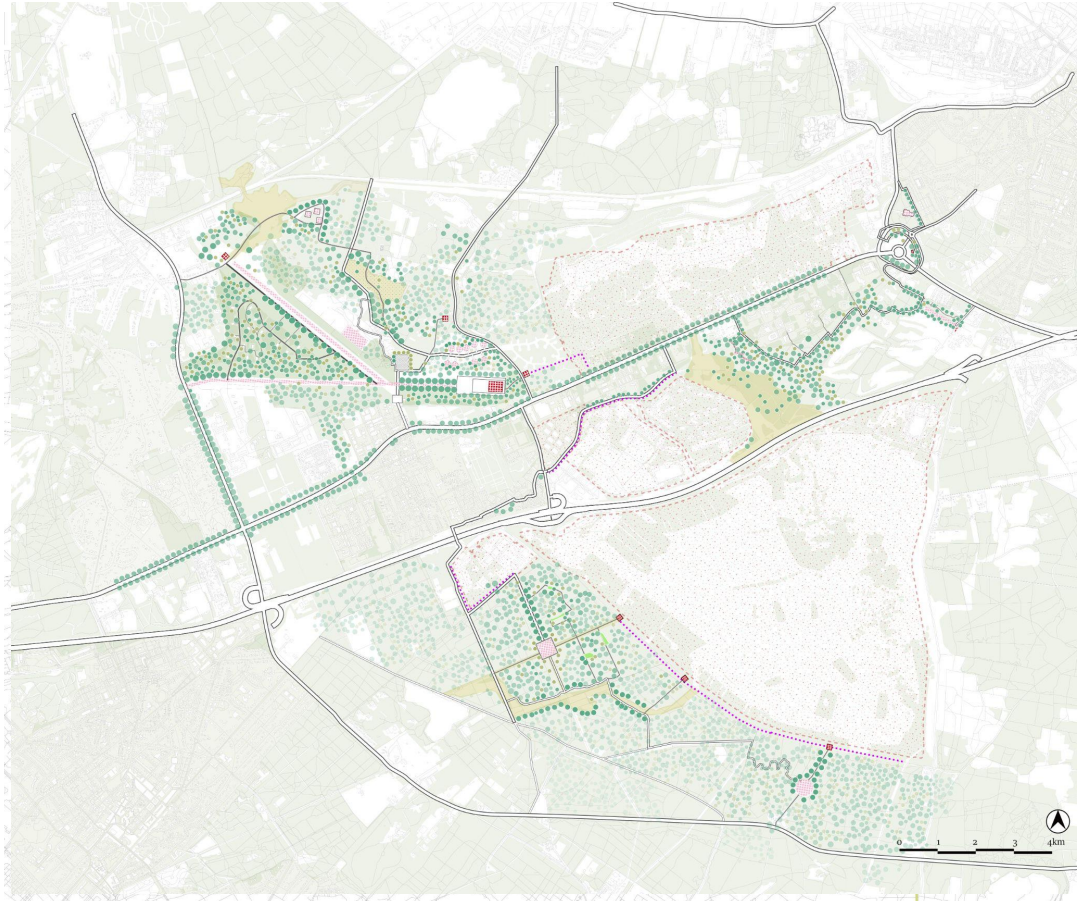
heritage recognition

socio-accessible

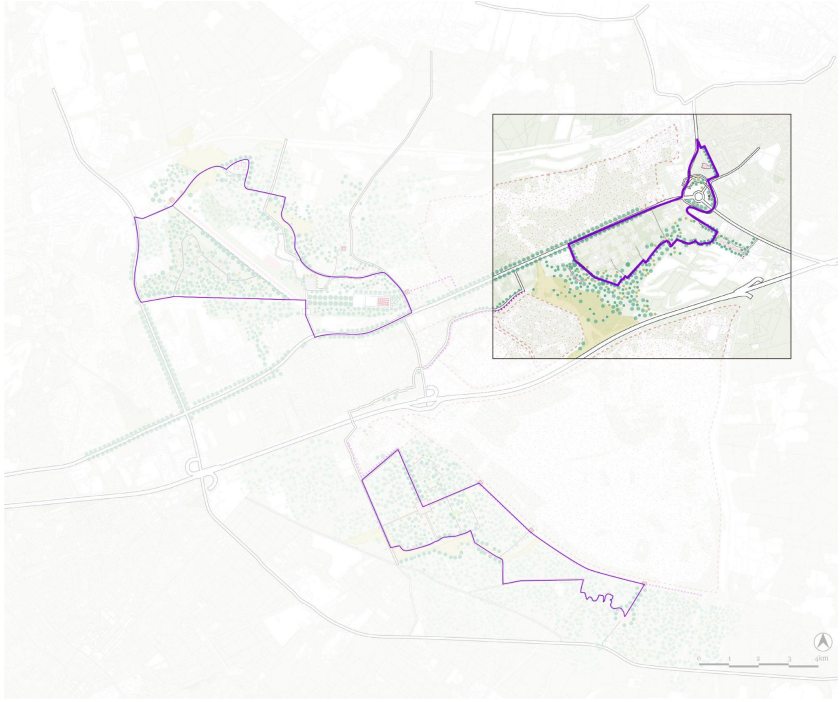
forest diversification

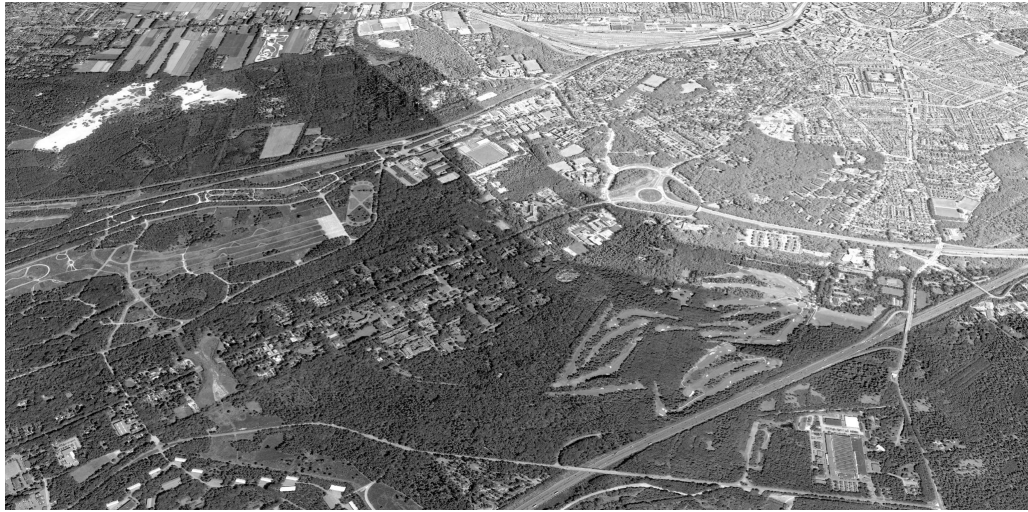


REGIONAL VISION



LOCAL LOOP





LOCAL LOOP

Feelings&forms / Socio-accessible / Masterplan / Nodes&line

Feelings&Forms

How to implement the 'historical elements extraction' strategy in the local scale?

How to show it by materials, colors, plantings...?

Diversification & detailing

Installations: Wire mesh fence, brick/wood seats,
Pavement: Steel mesh steps, wooden plank, bricks sitting,
Plantings: Oak tree lines, single tree square, tree avenue

How to translate the feelings into spatial expressions?

Form

Sit, Observe, Play, Surrounded, Tunnel, Enclosed, Twisted path...

How did characters experience at that time?

Feelings

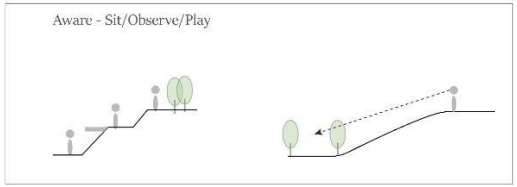
Aware, Welcome, Struggling, Desperate, Trap

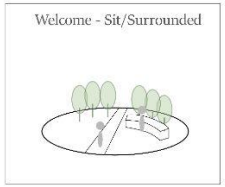
Heritage sites

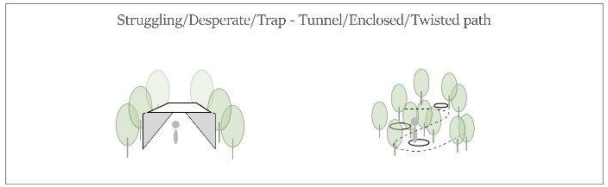
Feelings&Forms

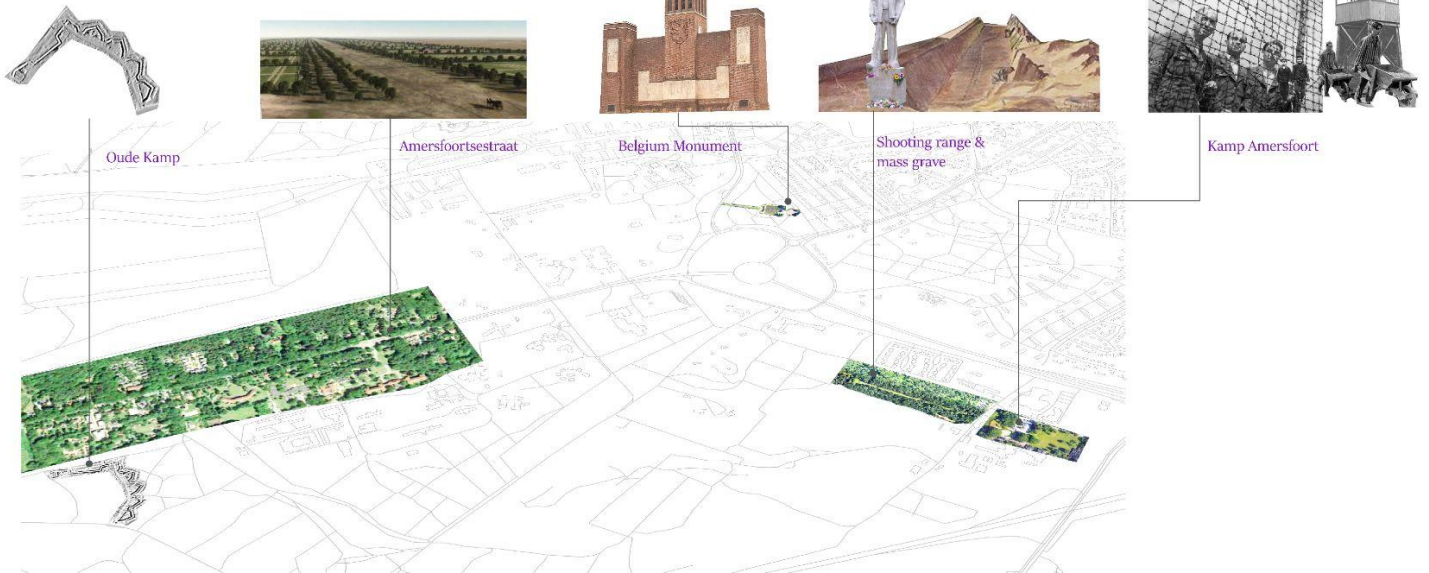
Diversification & detailing

Feelings &Form









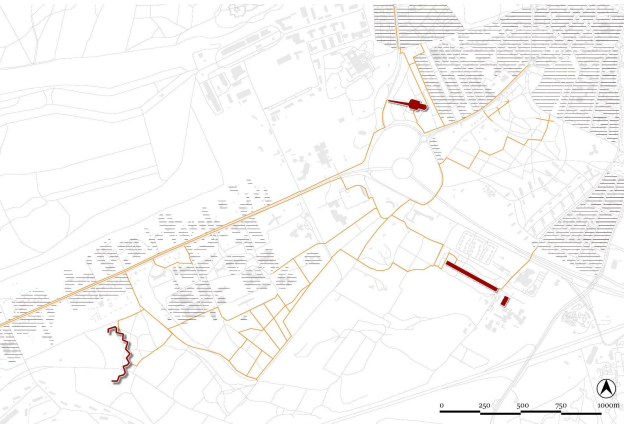
Heritage sites

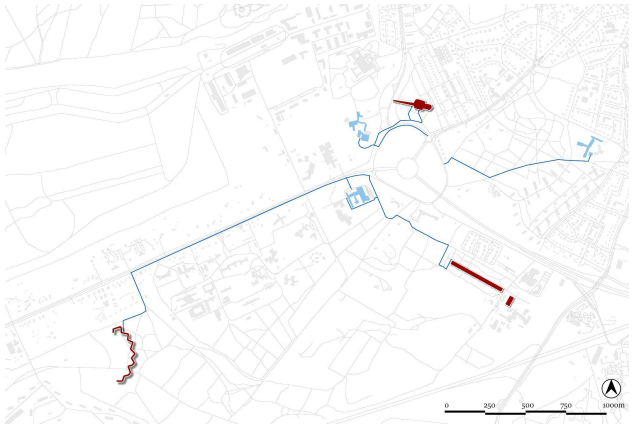
How do the functional areas get access to the heritage site?

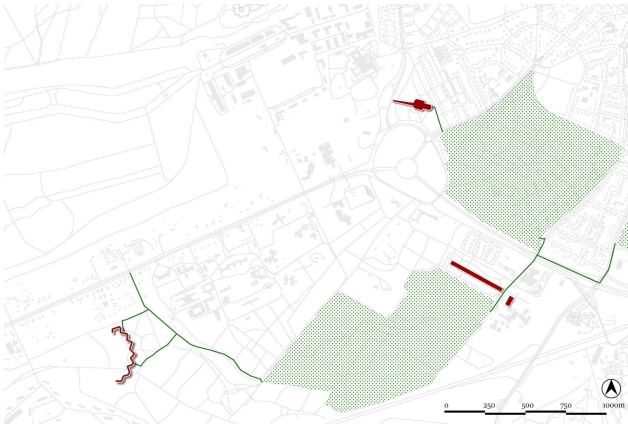
families

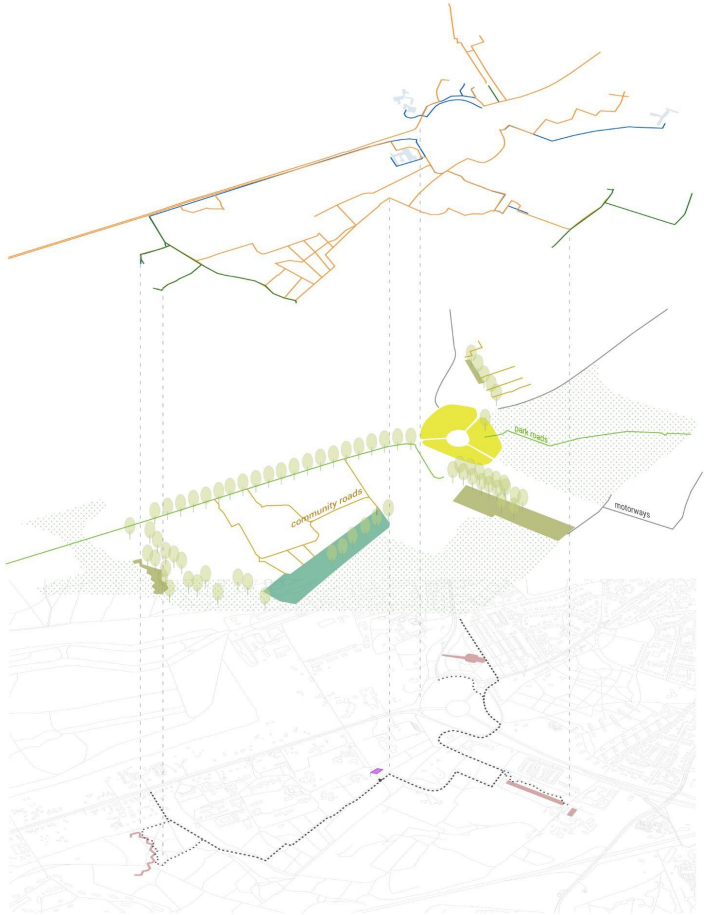
students

recreation groups



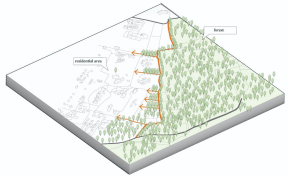




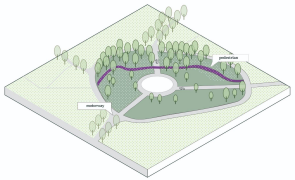


- Mobility forestry park
- Heritage theme park
- Community park
- Current recreational park

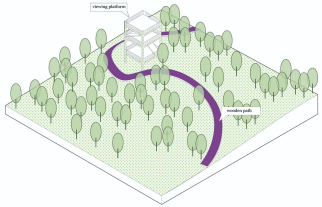
Connect



Diversify(infrastructure park)



Diversify(lookout)



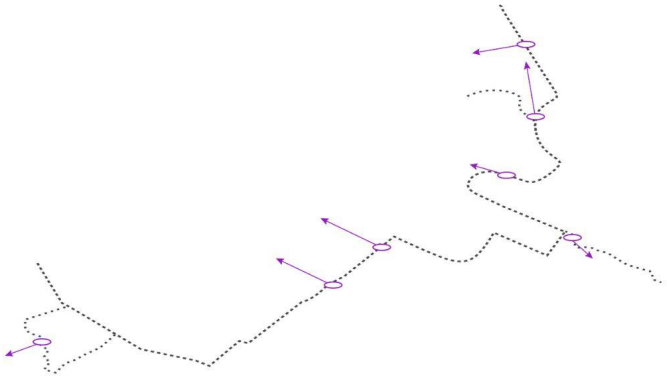
1. Belgium monument garden entrance
2. Pedestrian bridge to view the Belgium monument
3. Tunnel in the woods
4. Clink paths and stone seat in forest
5. Monumental installation
6. Viewing platform
7. Wooden path and sandy pitch in Oude Kamp

A. Belgium monument
B. De Stenen Man
C. Kamp Amersfoort
C. Oude Kamp

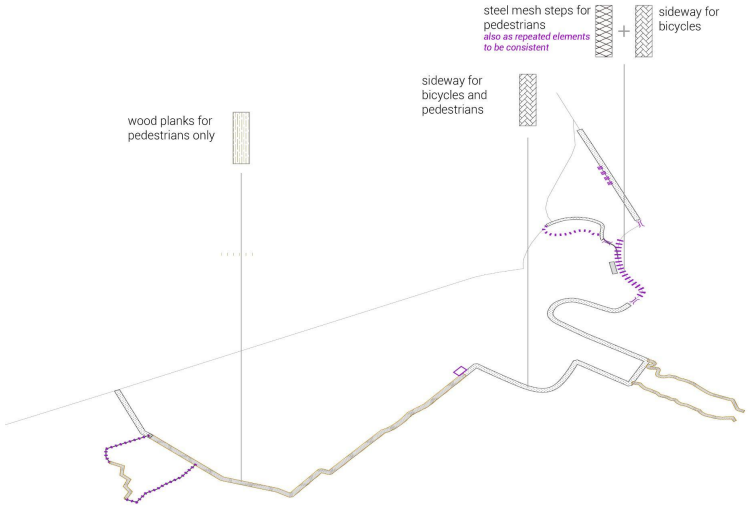
0 250 500 750 1000m

How to make the 'presentation' 'spatial planning' strategy tangible in the local scale?

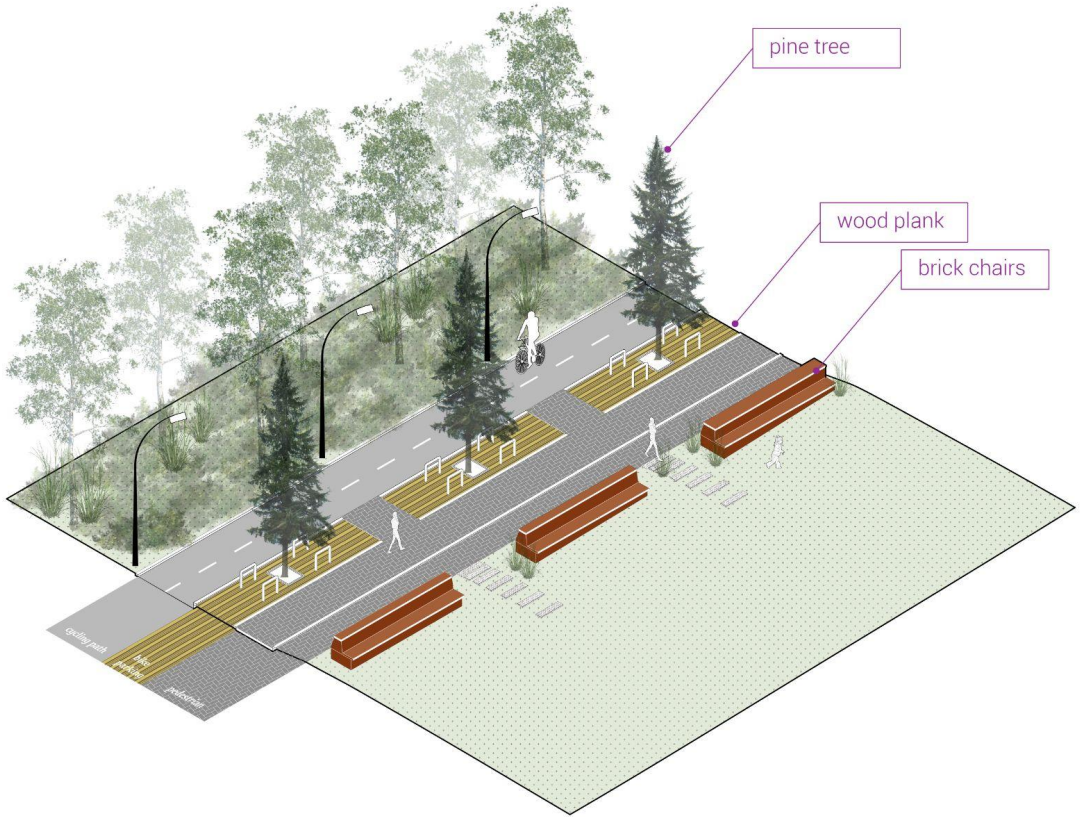
NODES (7)



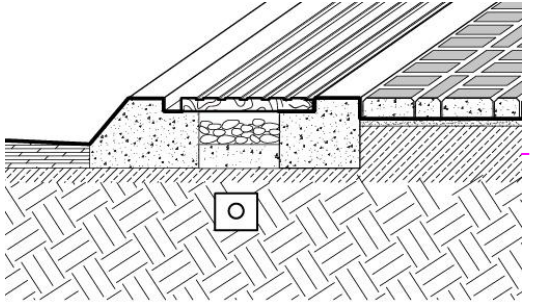
LINE (4)

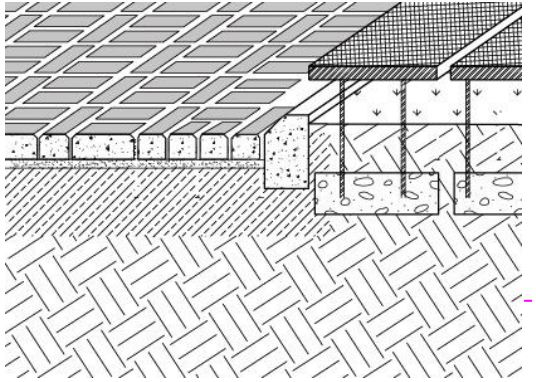


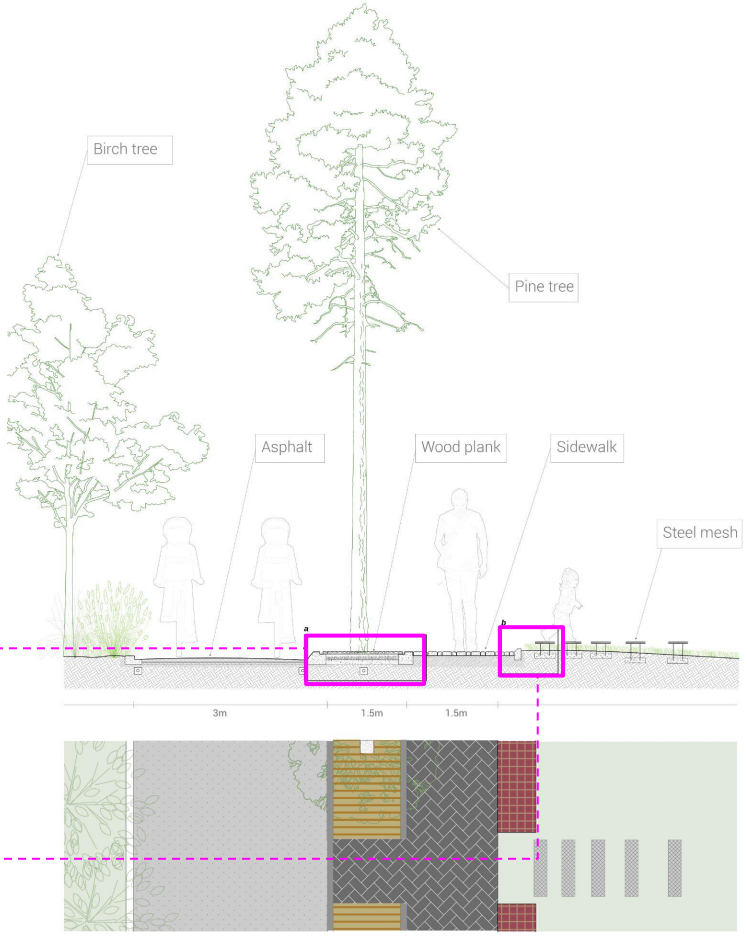
Line01 Sidewalk - Wood plank - Steel mesh steps



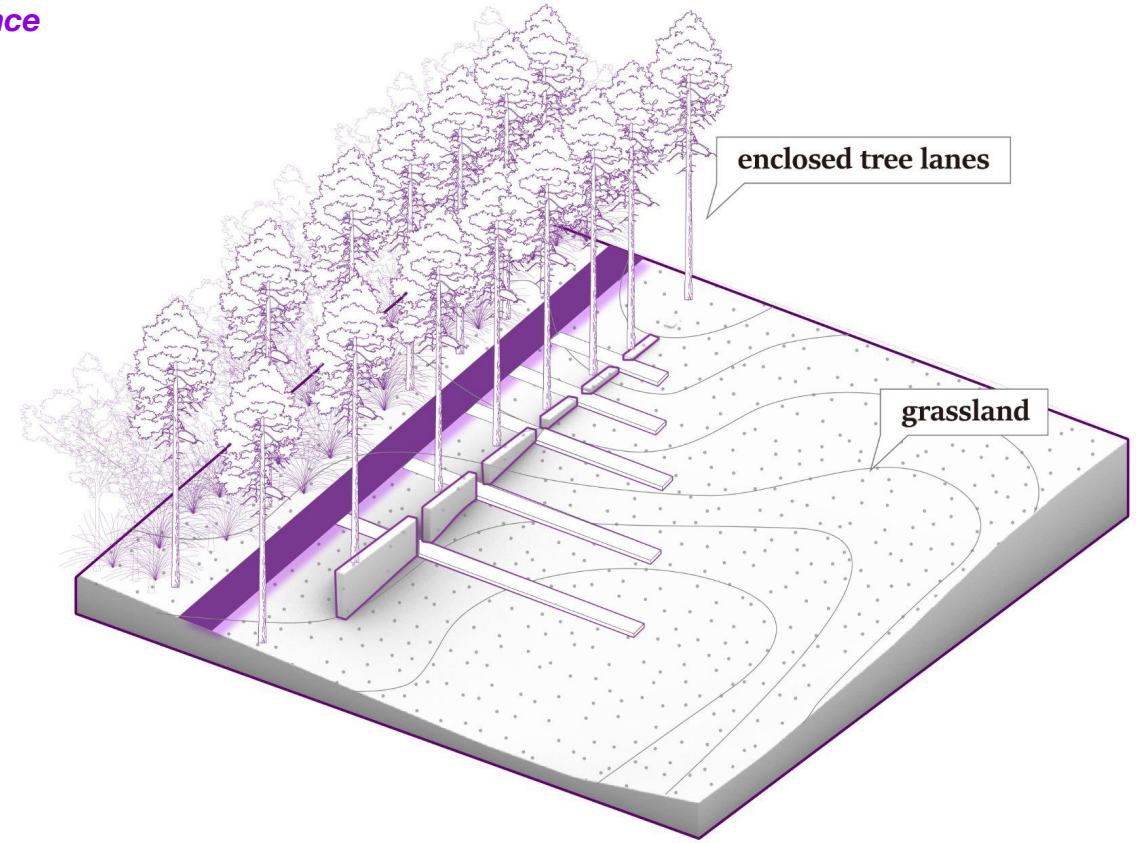
Line01 Sidewalk - Wood plank - Steel mesh steps



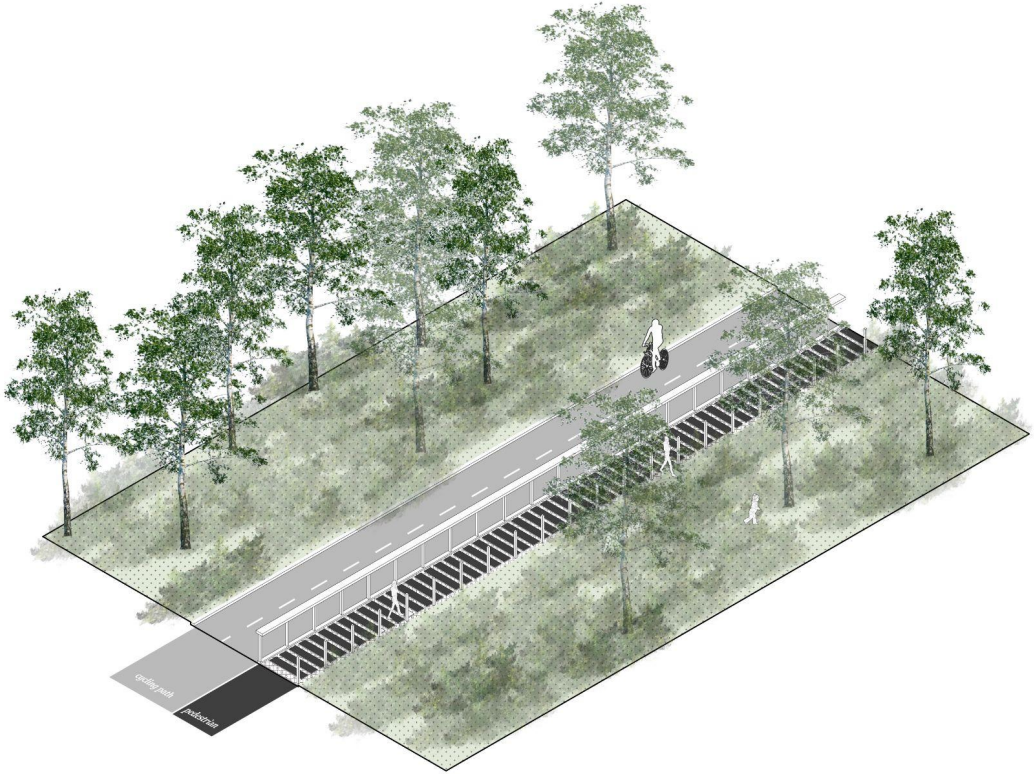




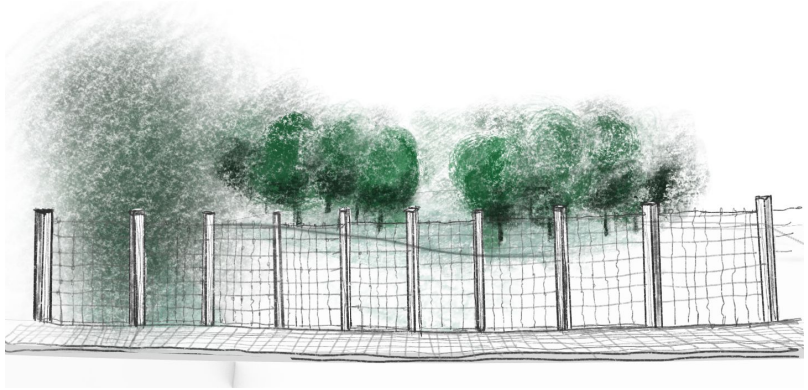
Node01- Belgium monument garden entrance

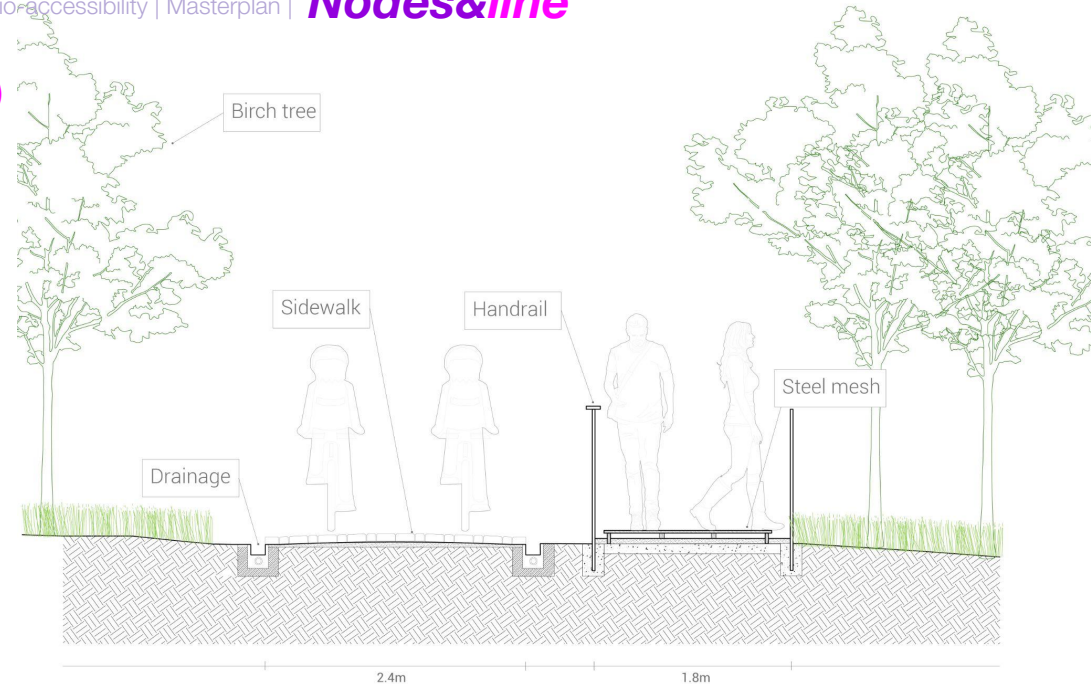


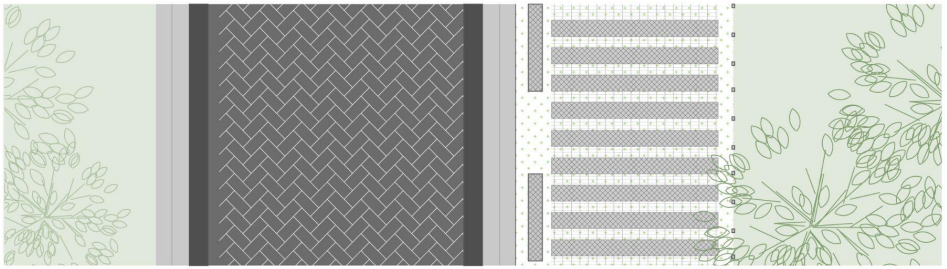
Line02- Steel mesh as a repeated element(pavement)



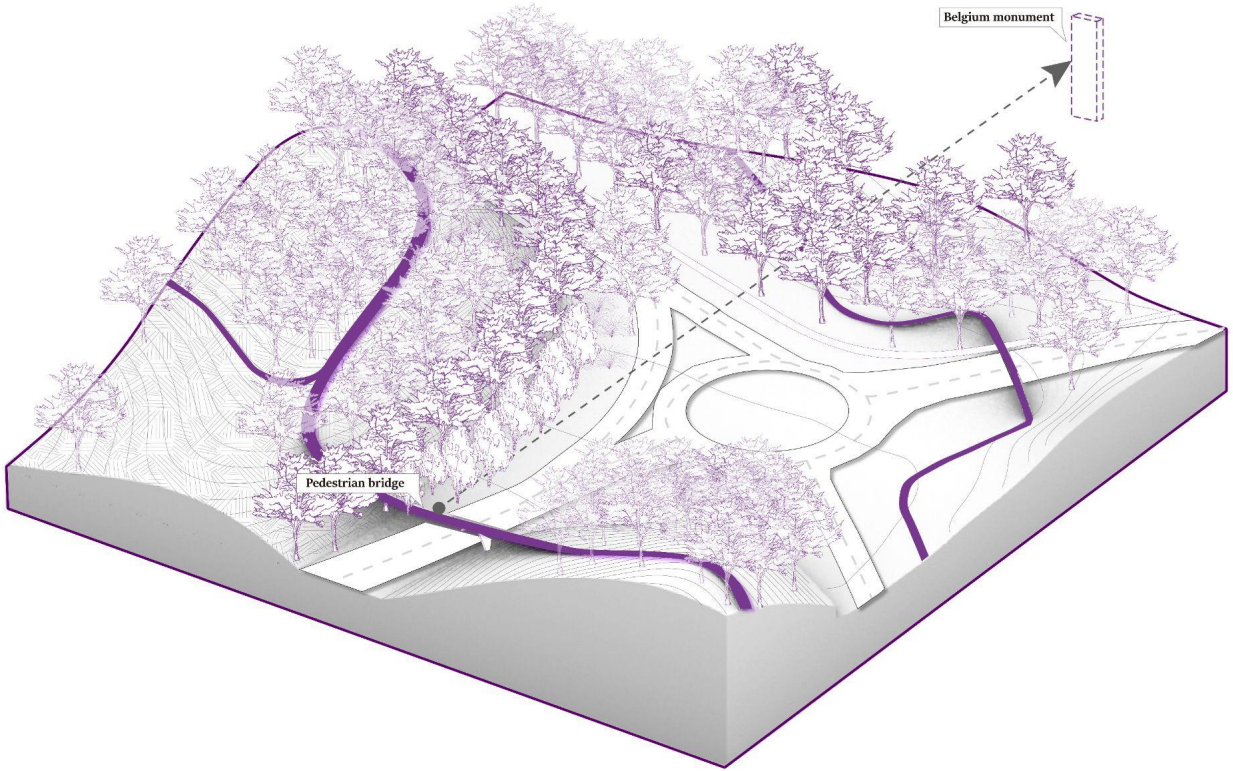
Line02- Steel mesh as a repeated element(pavement)



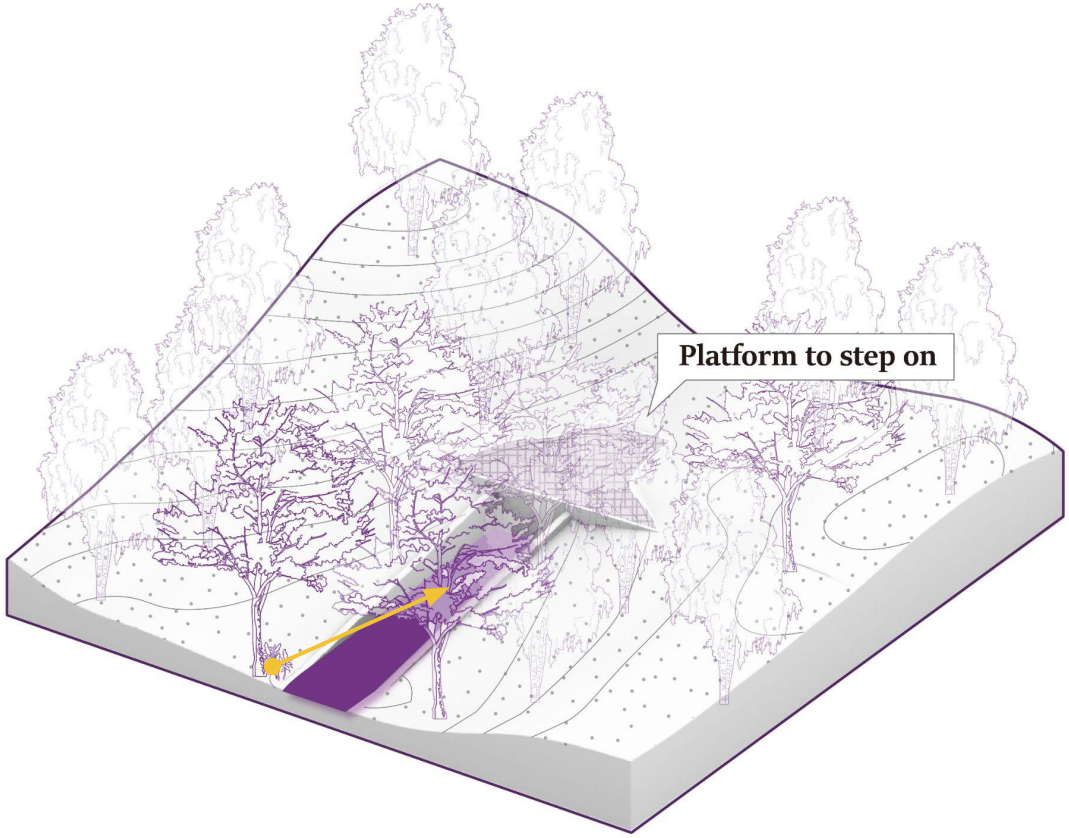




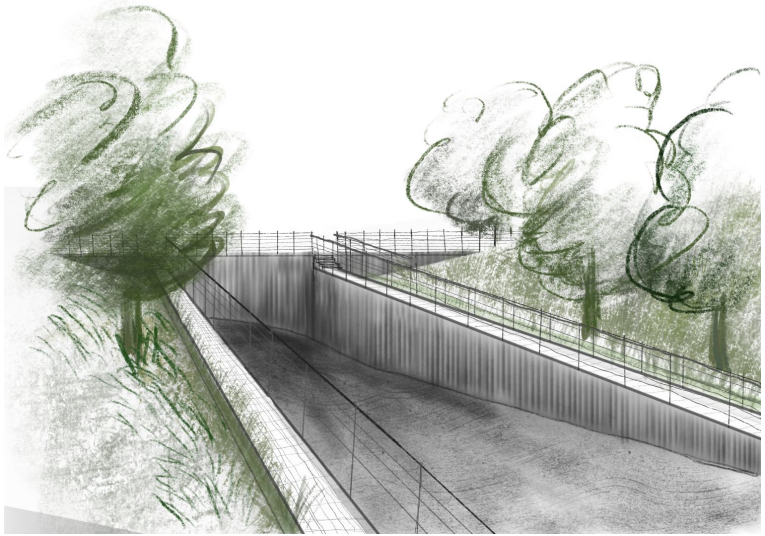
Node02- Pedestrian bridge to view the Belgium monument



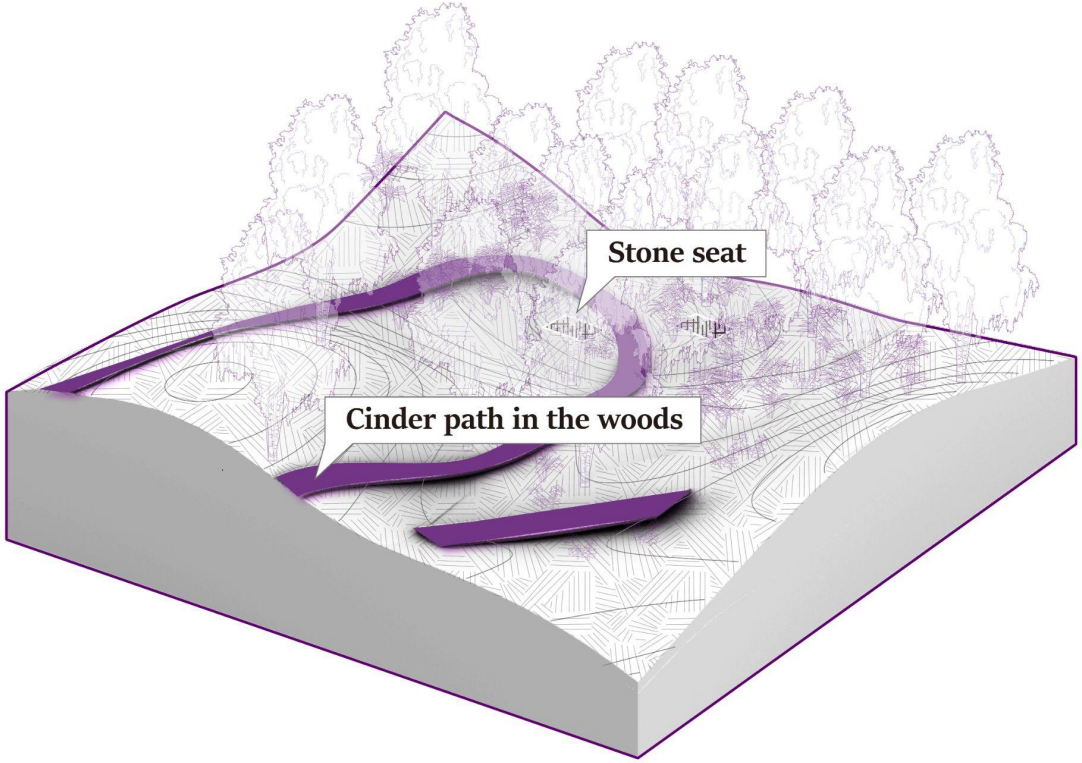
Node03- Tunnel in the woods



Node03- Tunnel in the woods

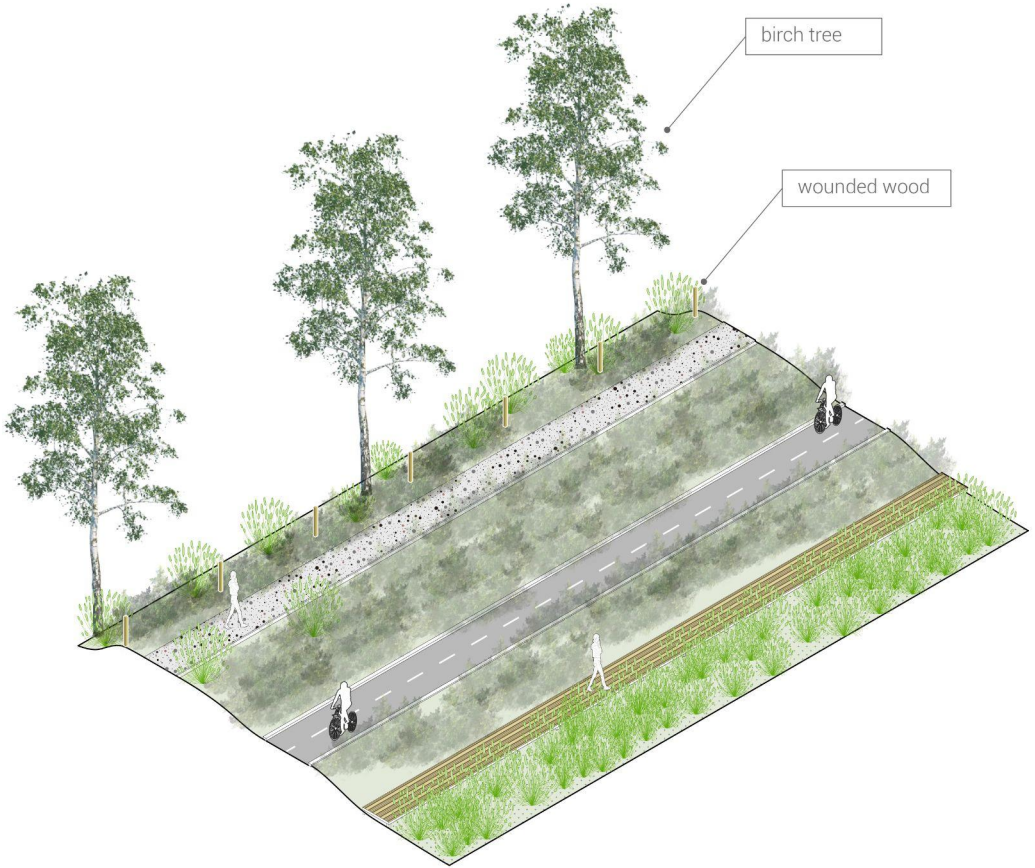


Node04- Cinder paths and stone seat in woods

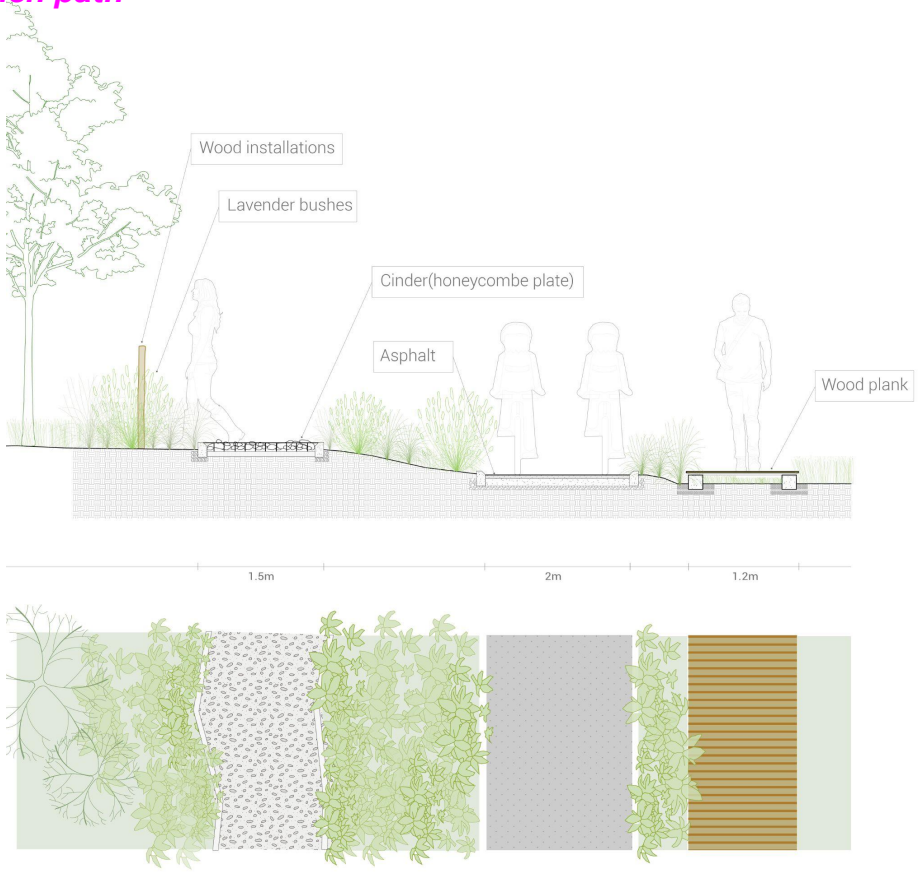


Node04- Cinder paths and stone seat in woods

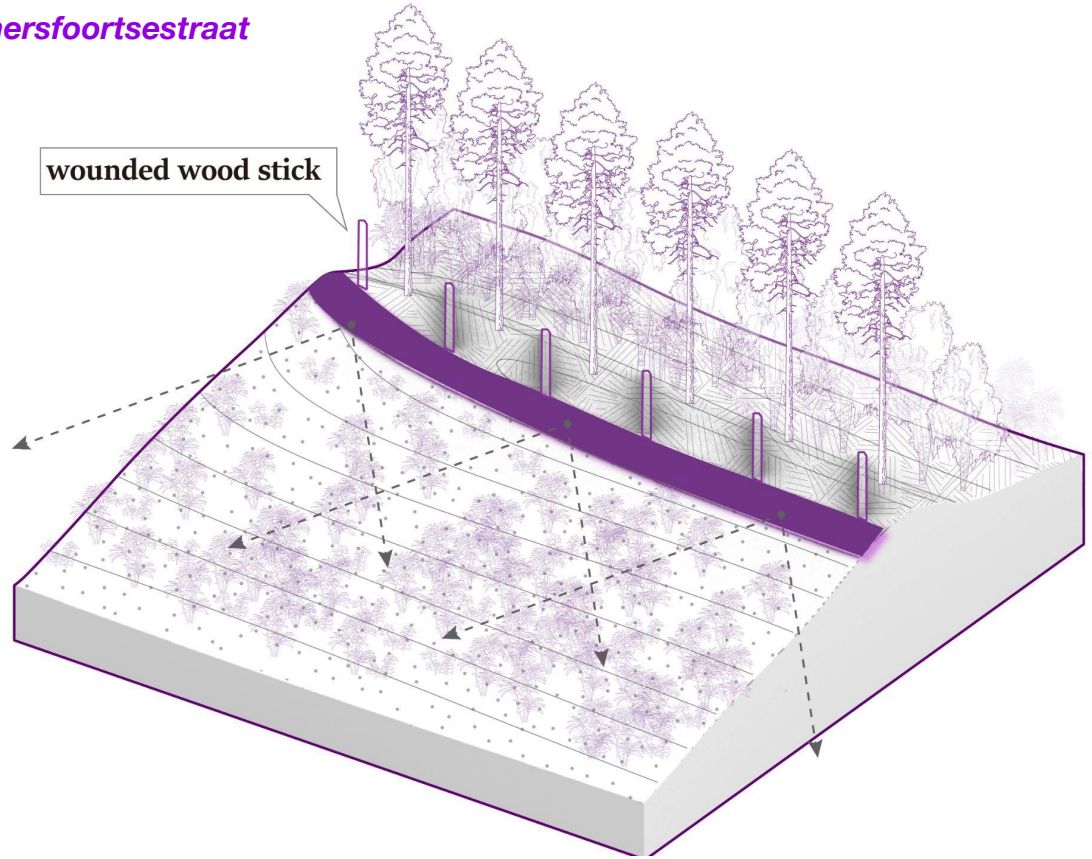
Line03 Gravel - Asphalt - Wooden path



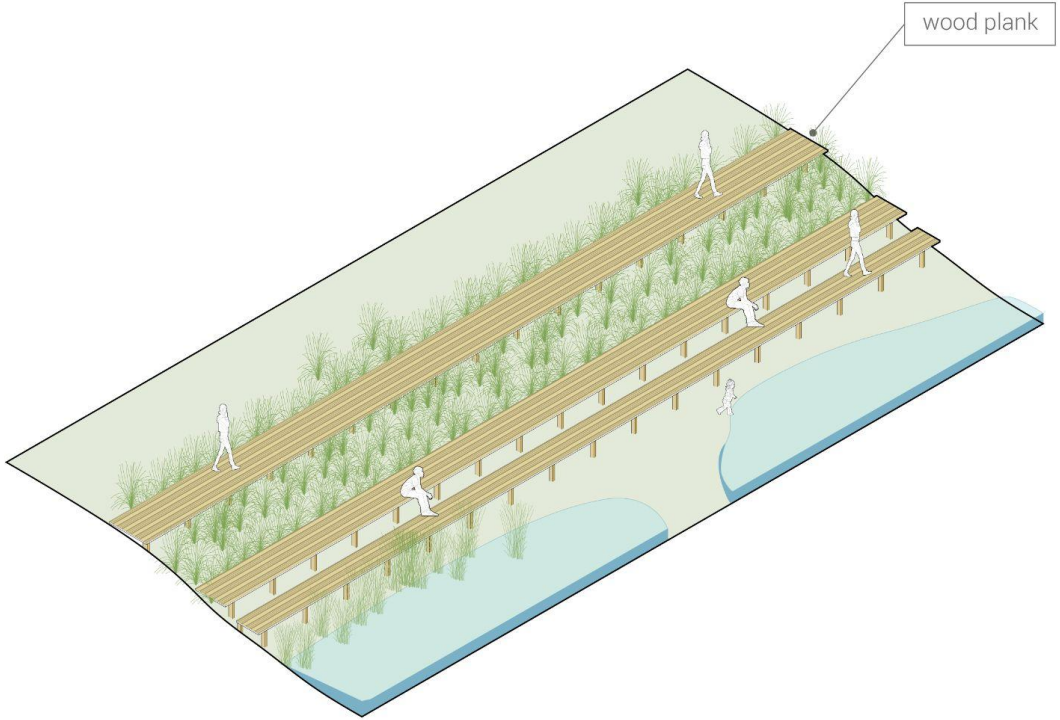
Line03 Gravel - Asphalt - Wooden path



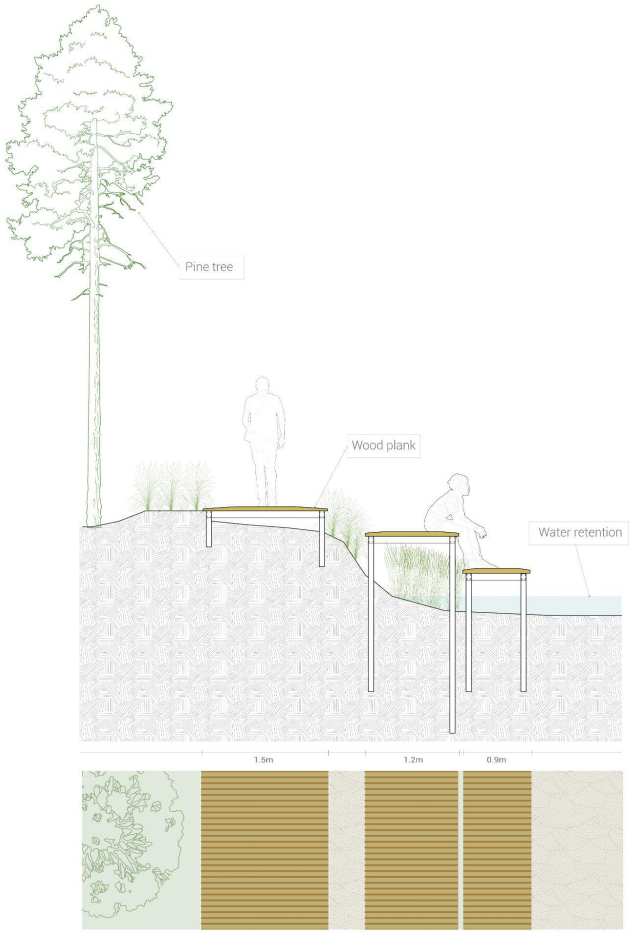
Node05- Lifted path to have an overview of Amersfoortsestraat



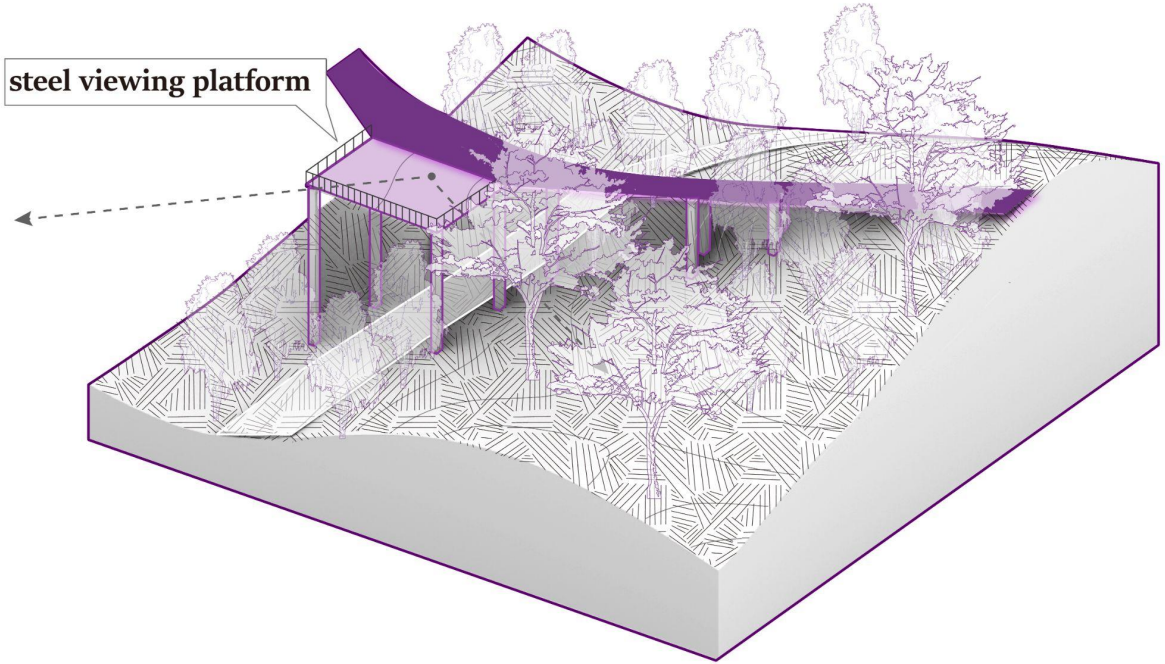
Line04 Lifted wooden path



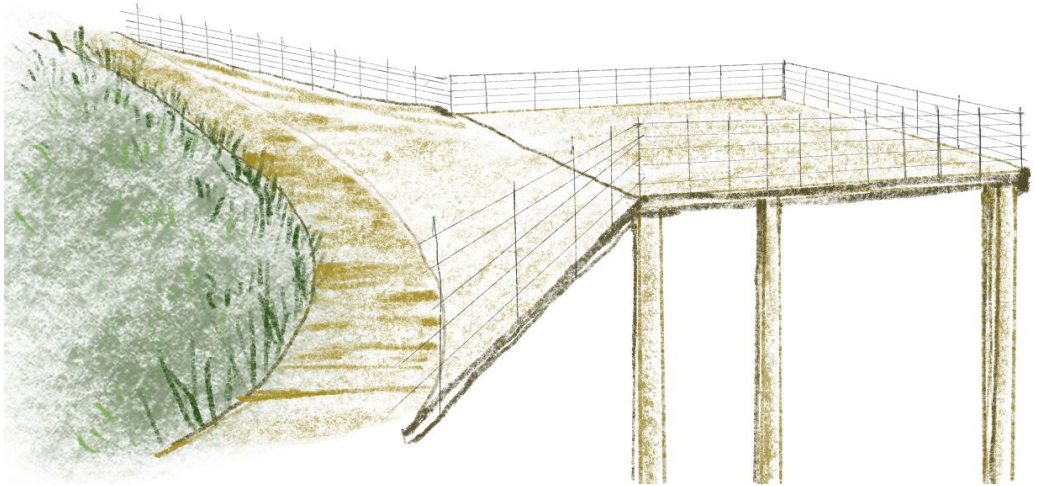
Line04 Lifted wooden path



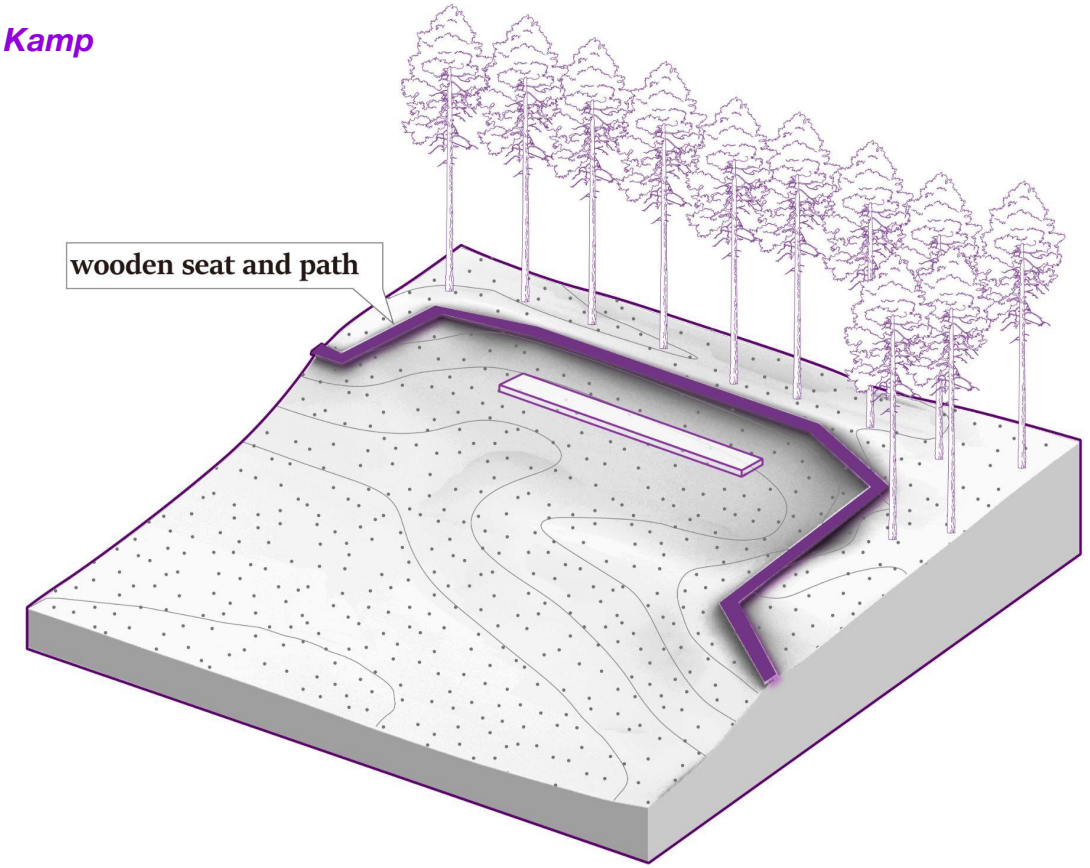
Node06- Viewing platform towards Amersfoortsestraat



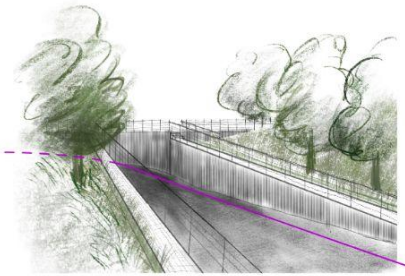
Node06- Viewing platform towards Amersfoortsestraat



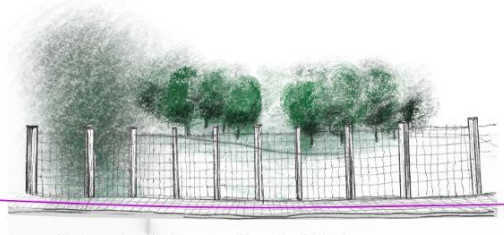
Node07-Wooden path and sandy pitch in Oude Kamp



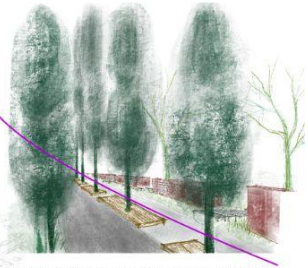
Sequential perspectives



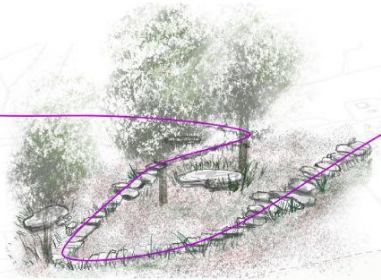
03-Tunnel in the woods



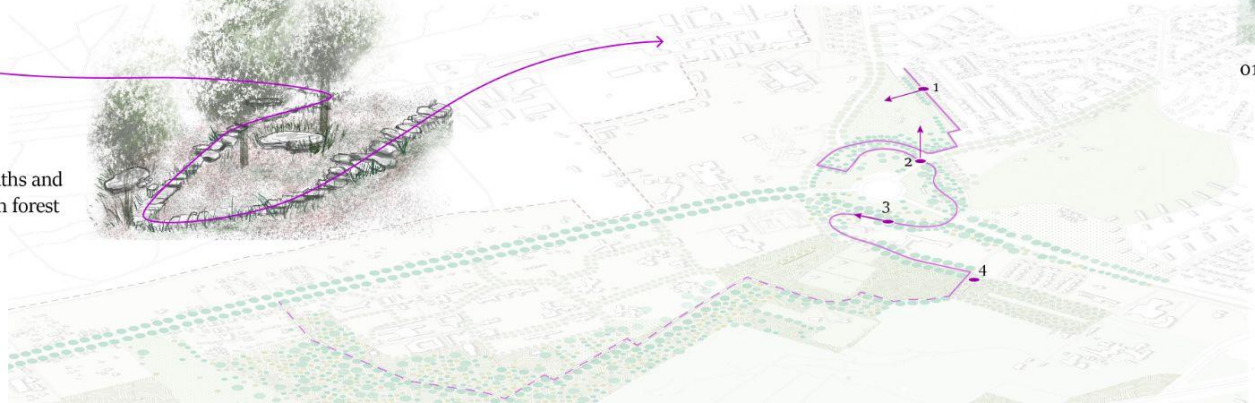
02-Pedestrian bridge to view the Belgium monument



01-Belgium monument entrance



04-Clink paths and
stone seat in forest

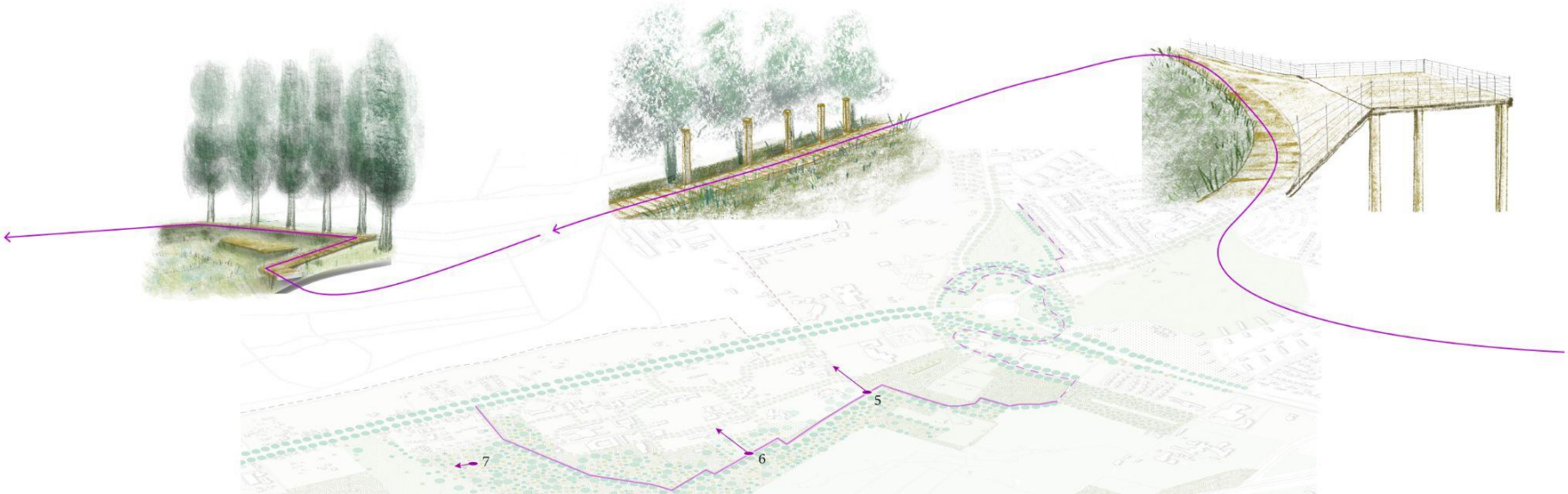


Sequential perspectives

07-Wooden path and sandy pitch in Oude Kamp

06-Lifted path to have an overview of Amersfoortsestraat

05-Viewing platform towards Amersfoortsestraat



REFLECTION

Research and design

Interwoven process of defining and specifying

Challenges during the process

Same war - different culture perspectives - different experiences

Reflection about my role

As a designer and a participant

As a landscaper and an urbanist

THANK YOU !