The Hidden Boundary

exploring the **spatial** and **temporal** continuity in Den Helder's Defence Line area

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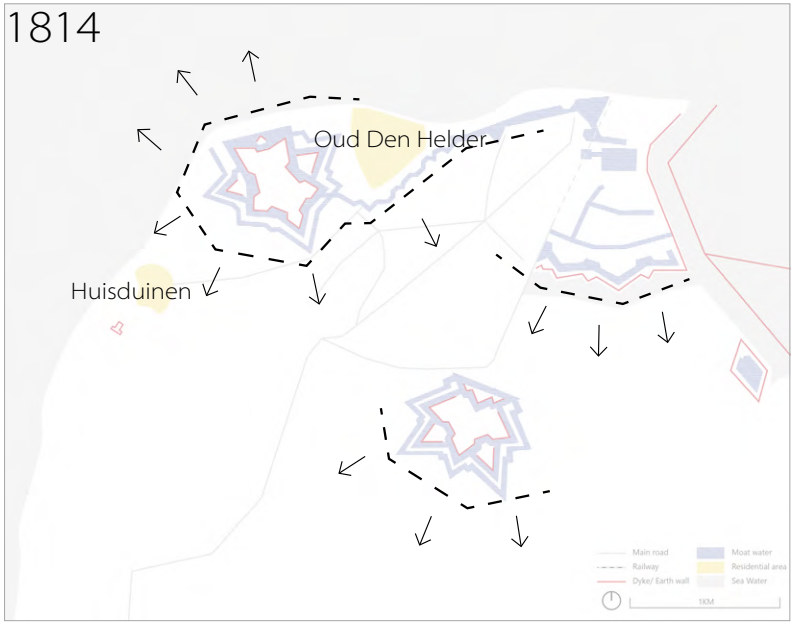
Second Mentor: Oscar Rommens

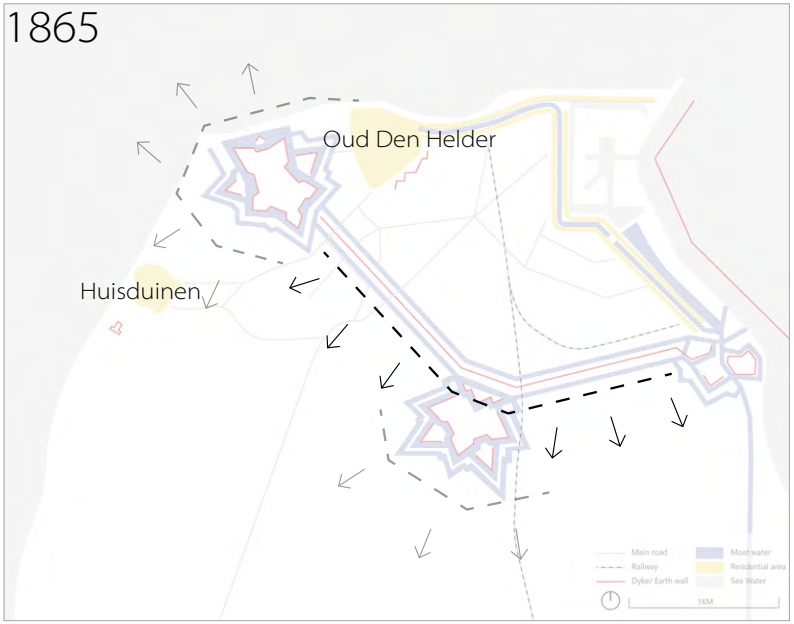
23.06.2023

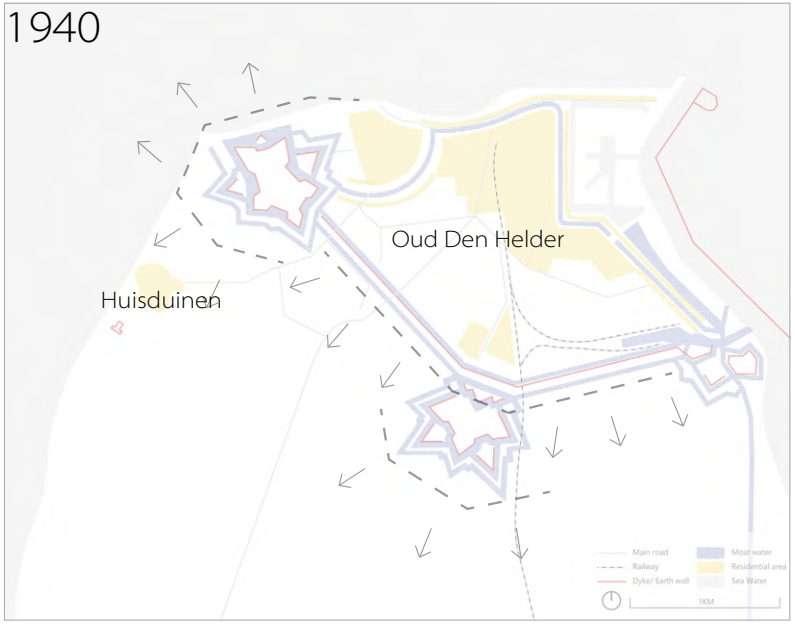
Introduction
Location: Den Helder, NL

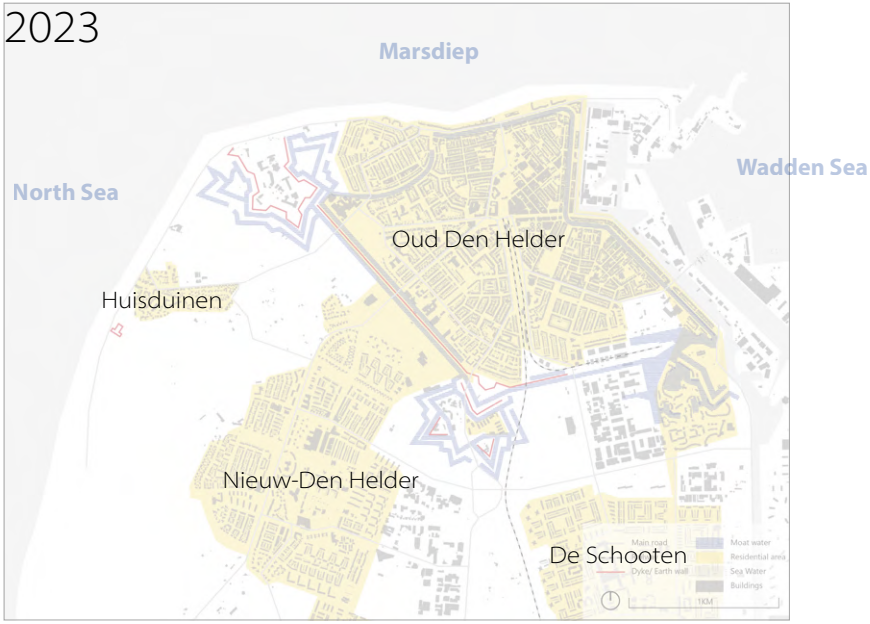
2313

Den Helder's Defence Line









ZONE
30

G-768-FB

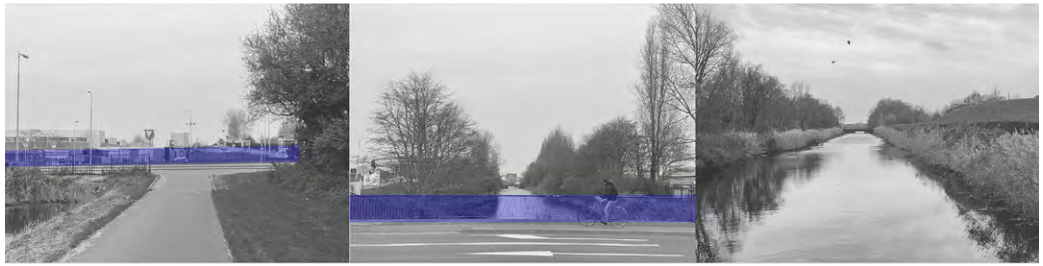
welkom.

GREAT
RESET

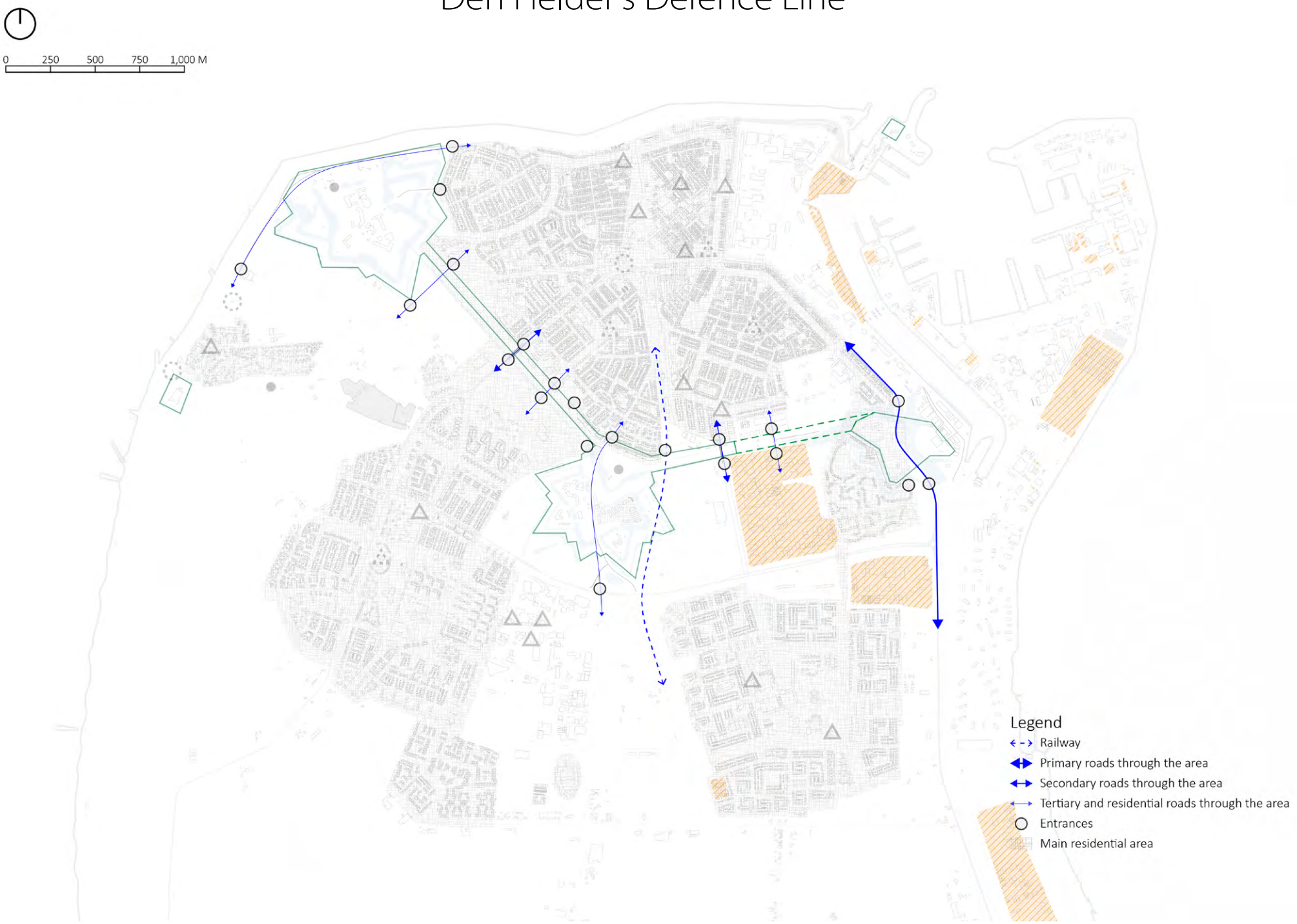
Grasdijk
fietspad

Den Helder's Defence Line

Den Helder's Defence Line



Den Helder's Defence Line



What about our history?

Continuous space?

Spatial experience?

Research Question:

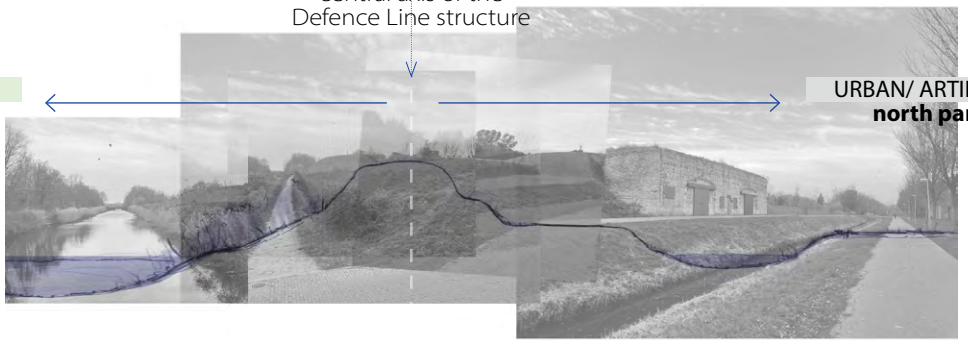
How to **reactivate** and develop
a **multi-functional boundary** area and surrounding landscapes
based on the exploration of **spatial** and **temporal continuity**?

Den Helder's Defence Line - 7 Zones

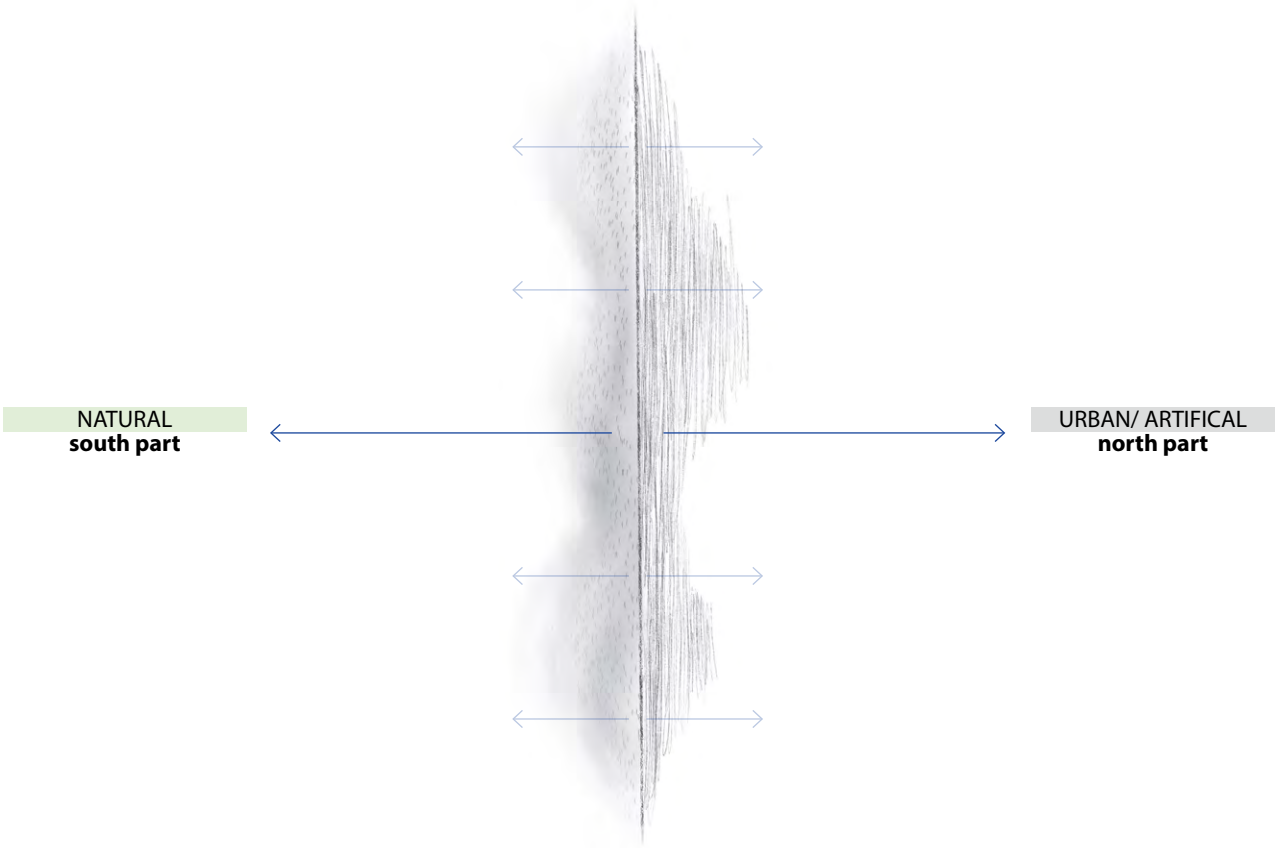
central axis of the
Defence Line structure

NATURAL
south part

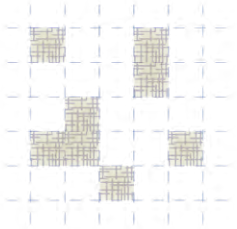
URBAN/ ARTIFICAL
north part



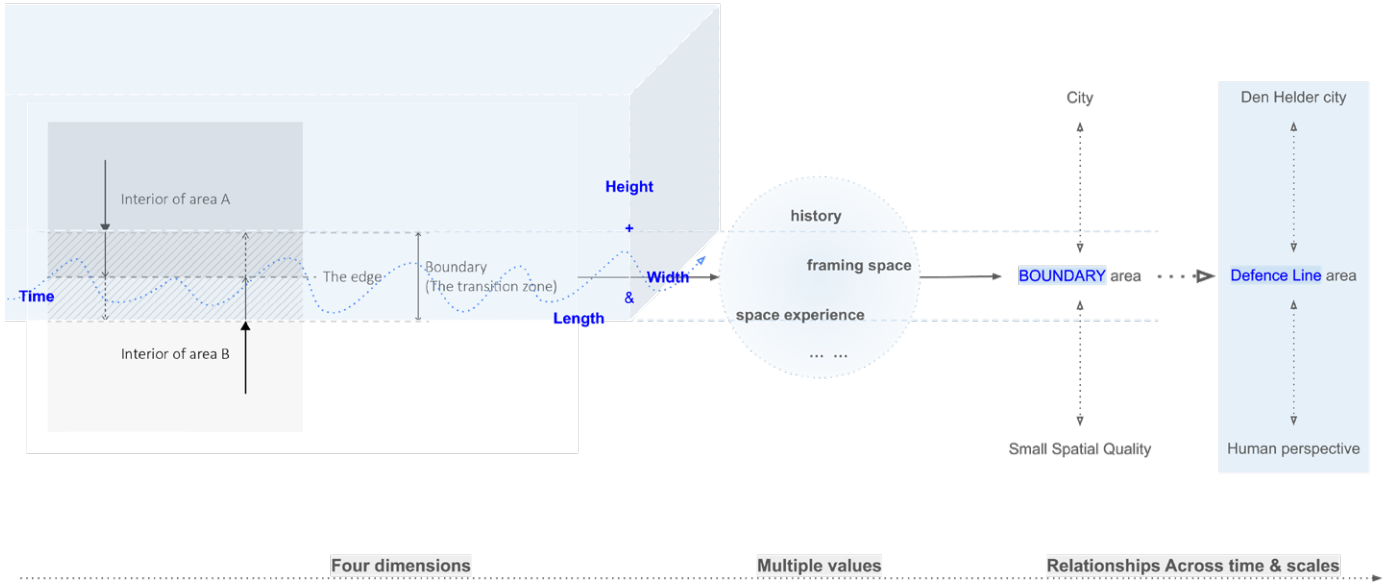
Concept
A contrasting boundary landscape



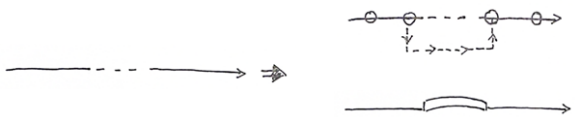
Concept
A contrasting boundary landscape

	NATURAL south part		URBAN/ ARTIFICAL north part
planting patterns		← – – – – →	
plant species		← – – – – →	
spatial environment		← – – – – →	
wall structure		← – – – – →	

Four Dimensional Boundary

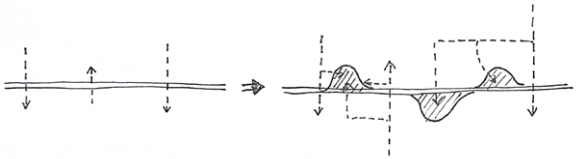


Four Dimensional Boundary



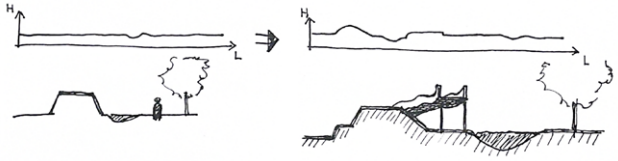
Physical/ Visual/ Conceptual Connection

'Length'



'Slowing-down'/ Meeting Points/
Diverse Transitional Public Spaces

'Width'



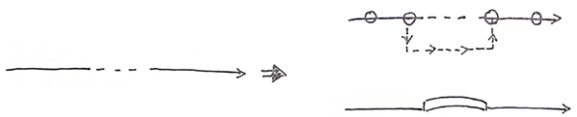
Enrich the spatial variation of
different heights

'Height'

different spatial environment created by different
materials (views changing through time)

'Time'

Principle 1 --- Length of Boundary



Physical/ Visual/ Conceptual Connection

'Length'

'Slowing-down'/ Meeting Points/
Diverse Public Spaces

'Width'

Enrich the spatial variation of
different heights

'Height'

Relationship Between Materials and Nature;
spatial experience in different time

'Time'

Principle 1 --- Length of Boundary

guiding points; linked by journey about the war or about the various spatial experiences

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guiding points; linked by journey about the war or about the various spatial experiences

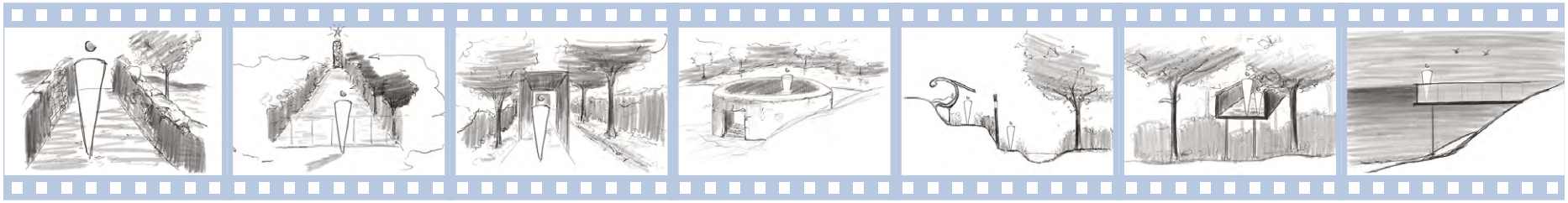
The state of war

1 Bombed — 2 Homeless — 3 Destoryed City — 4 Commemorate and Remembered — 5 Commemorate and Remembered — 6 City Reconstruction — 7 Peaceful Days

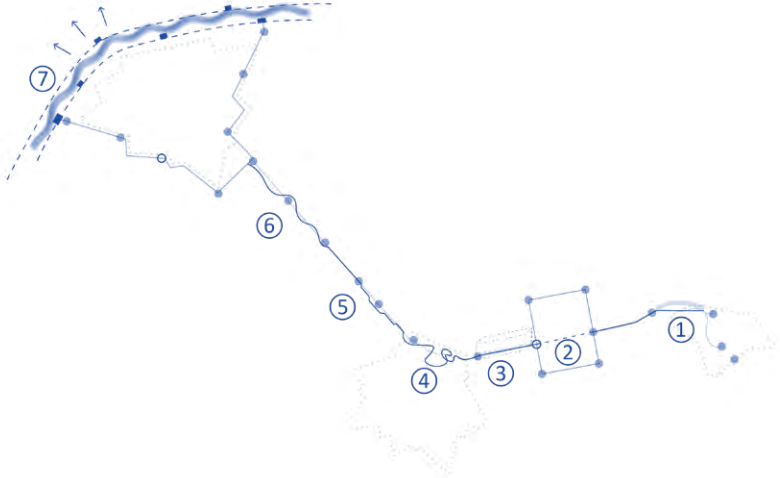
Change of space atmosphere

Rural Discontinuous Peaceful Waterside space Open	Discontinuous Confusing	Linear Orderly	Clear Harmonious Open Dynamic	Linear Orderly	Wild Random Confusing	Picturesque Peaceful Calming Relax Open

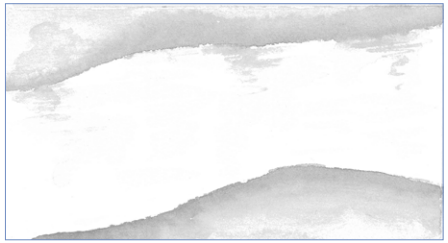
Design hypothesis

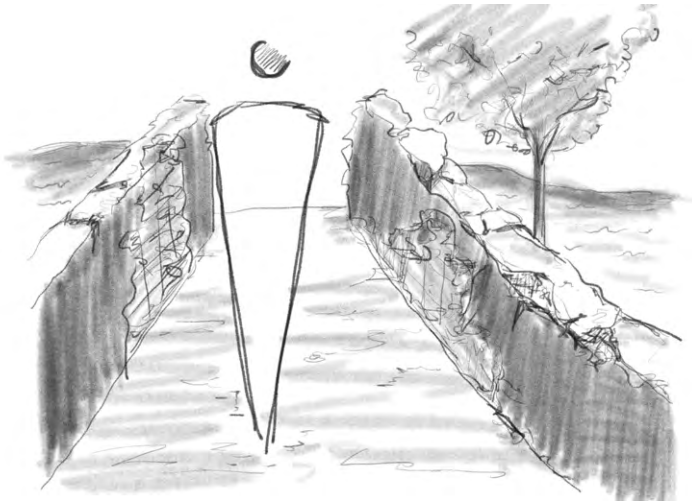


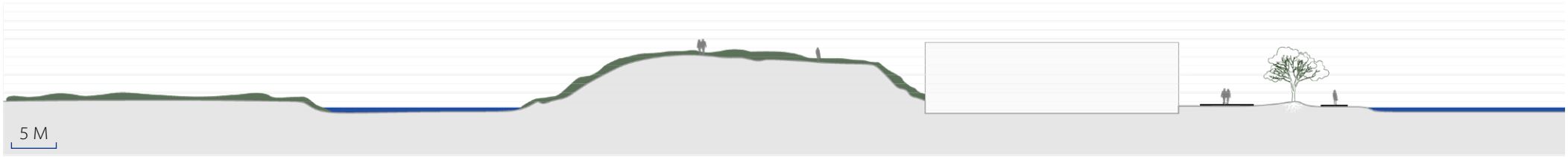
‘Broken’ Bridge (Entrance)	Inaccessible Corridor	Framed Path	Bunker Ruin Viewing	Defence Line Experience Area	Undulating Elevated Path	City Balcony



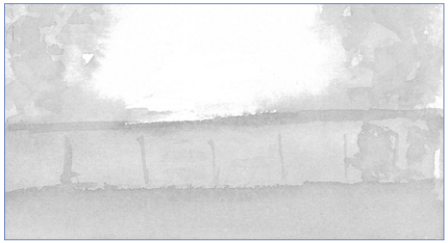
Zone 1 - Fort Westoever Area

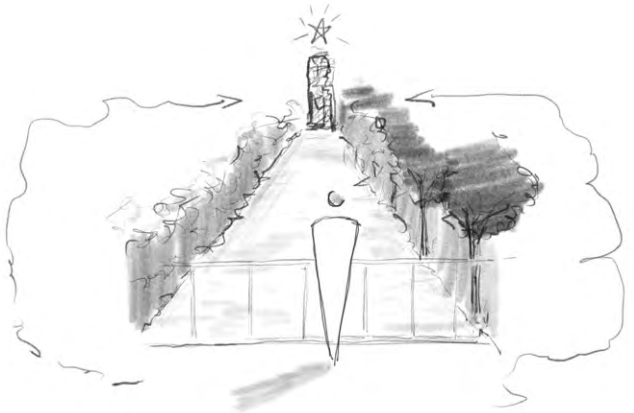


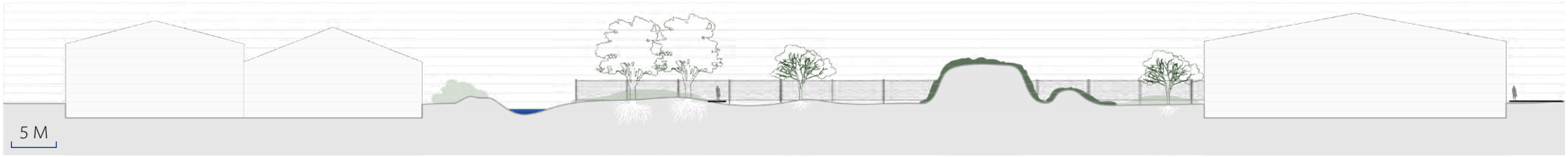


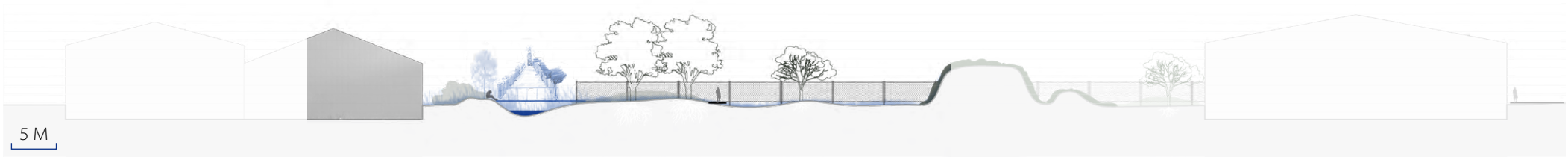


Zone 2 - Industrial Area

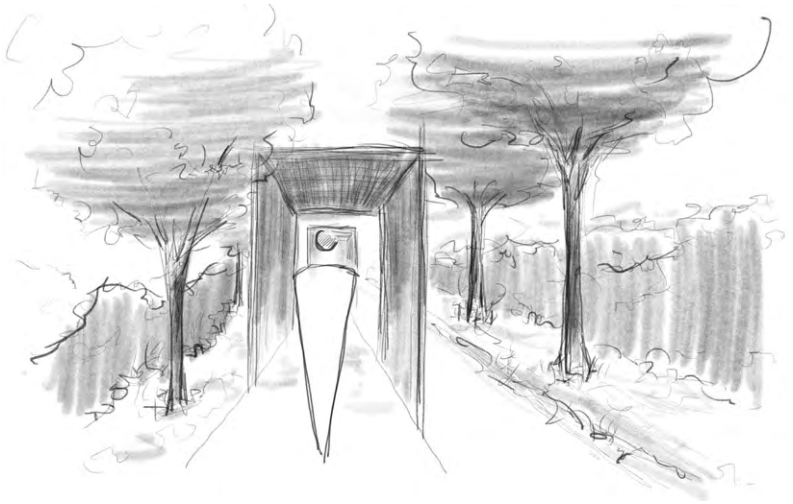




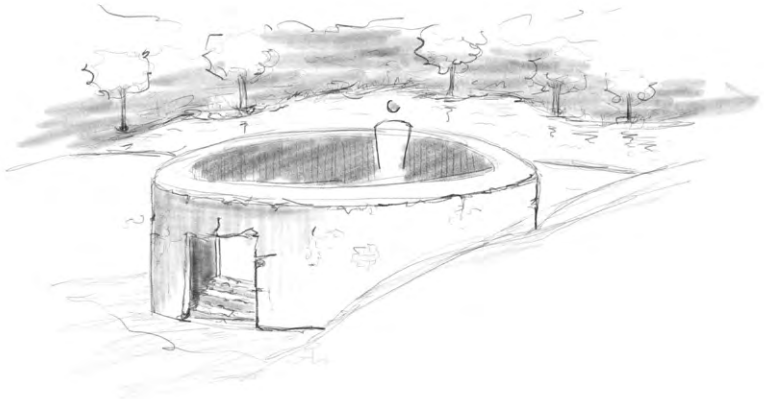


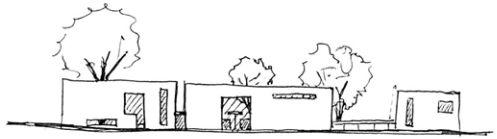


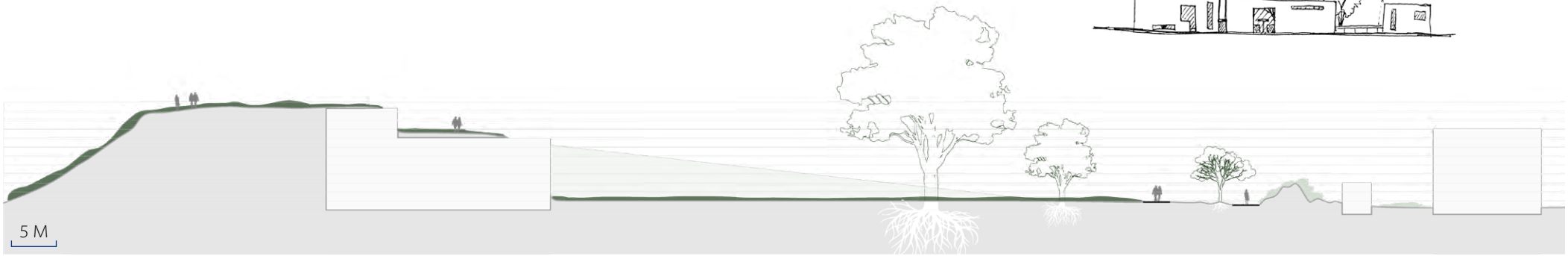
Zone 3 - Corridor Area

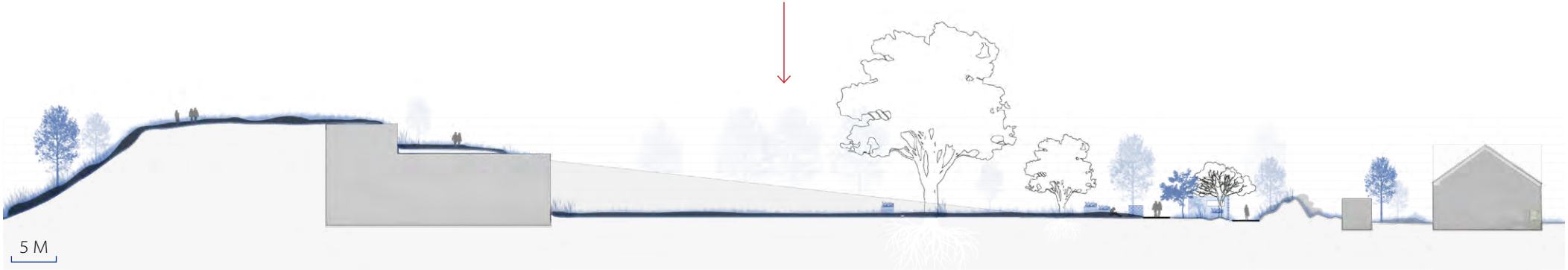


Zone 4 - Defence Line In-between Area

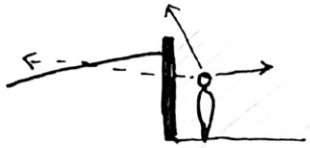


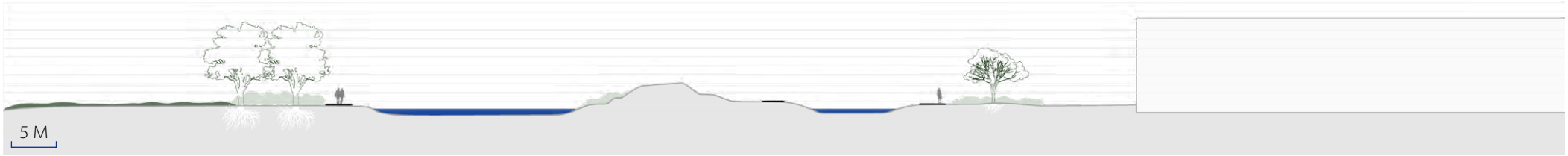


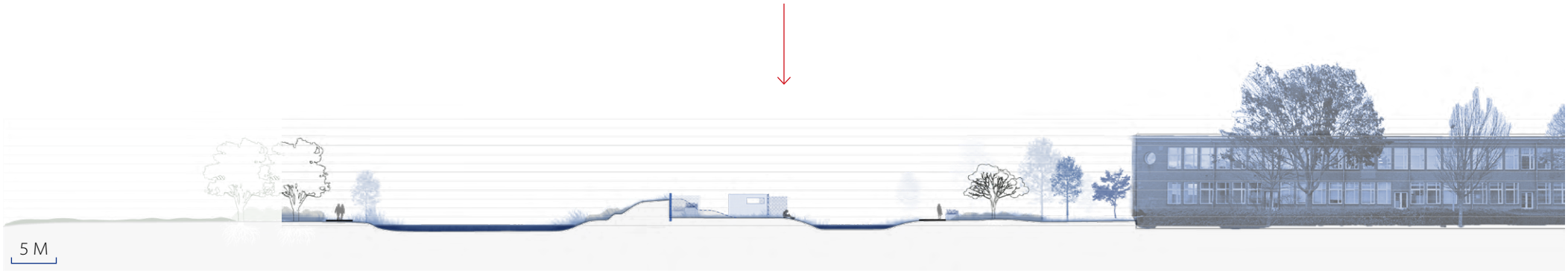




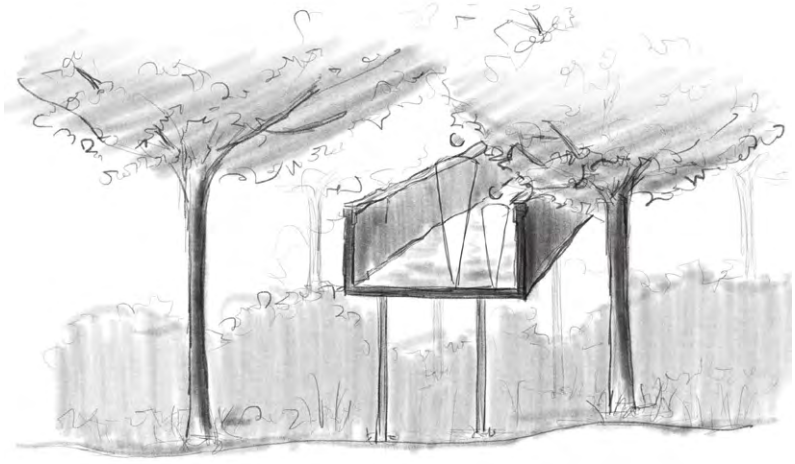
Zone 5 - Defence Line Linear Area

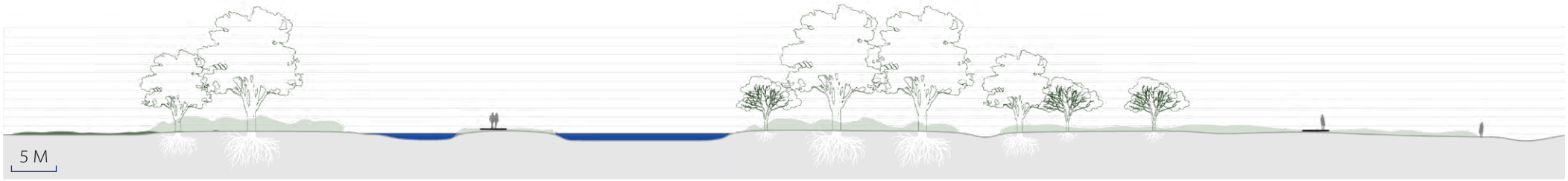


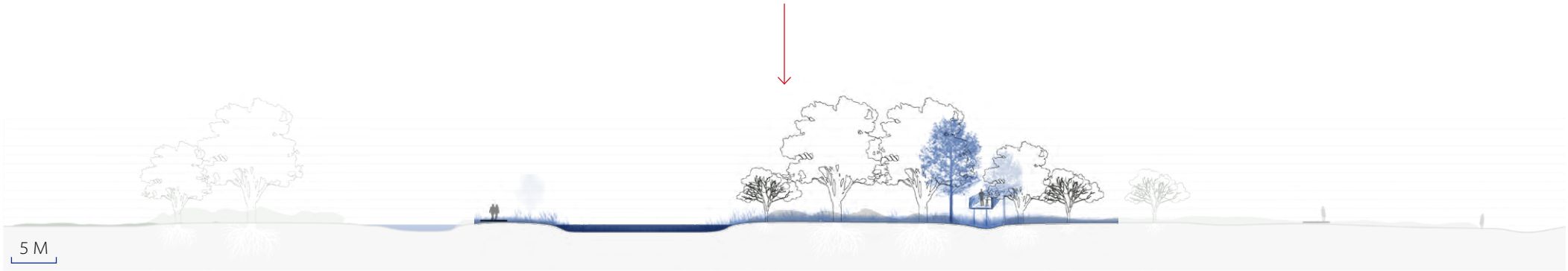




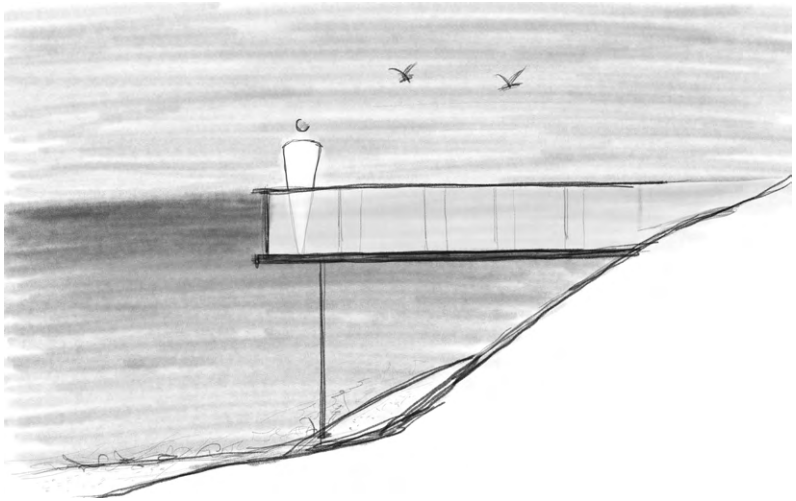
Zone 6 - Timor Park Area

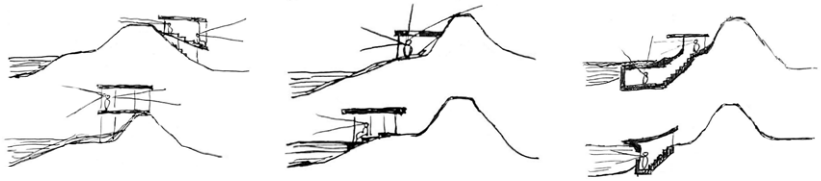


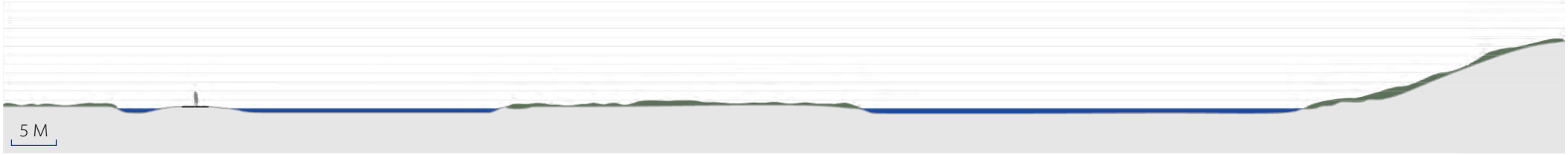




Zone 7 - Polder & Seaside Area



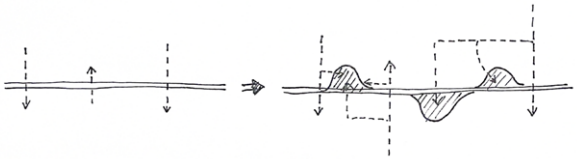




Principle 2 --- Width(transition) of Boundary

Physical/ Visual/ Conceptual Connection

'Length'



'Slowing-down'/ Meeting Points/
Diverse Public Spaces

'Width'

Enrich the spatial variation of
different heights

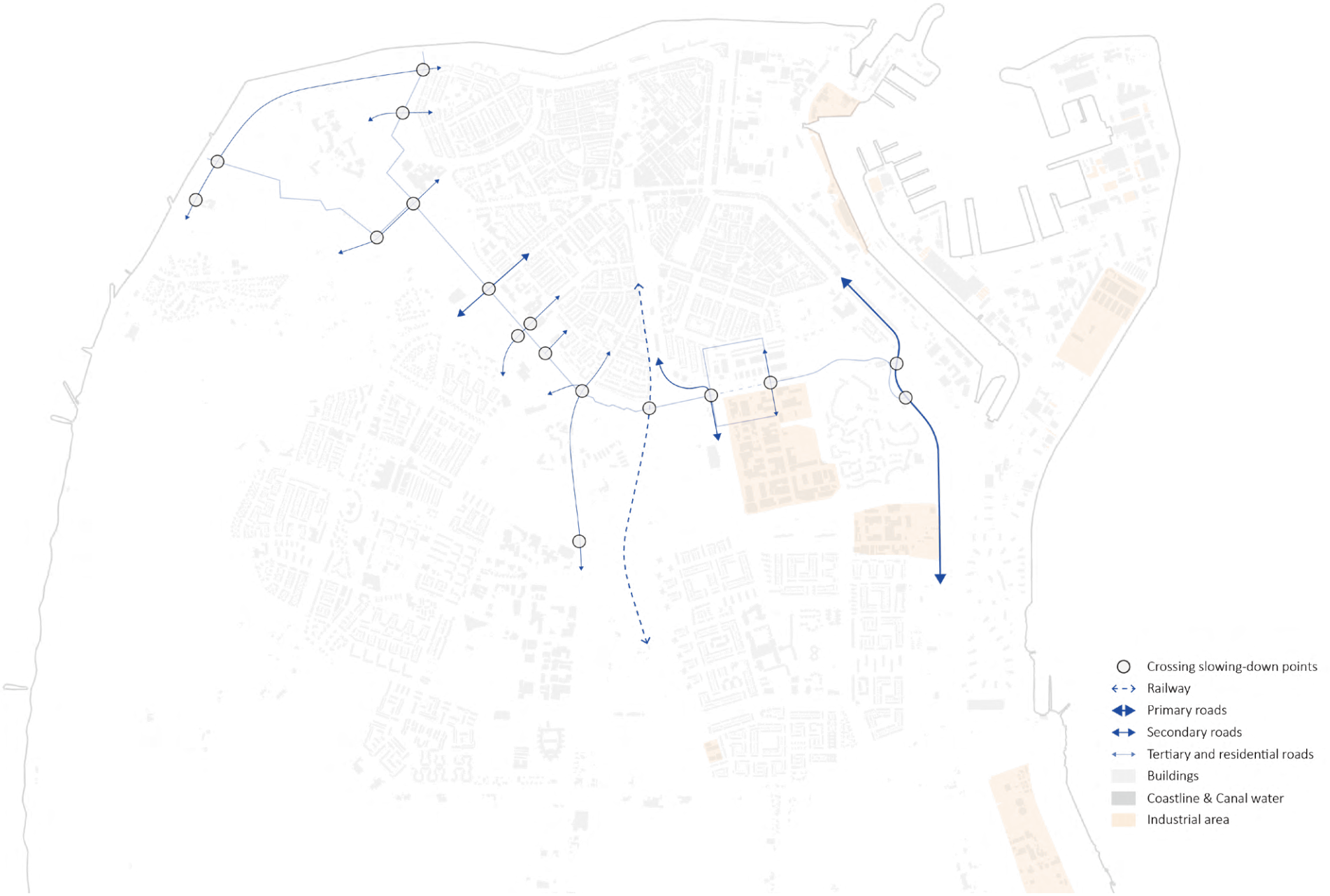
'Height'

Relationship Between Materials and Nature;
spatial experience in different time

'Time'

Principle 2 --- Width(transition) of Boundary

dynamic connection to residential areas;
slowing-down 'meeting point' beside crossroads



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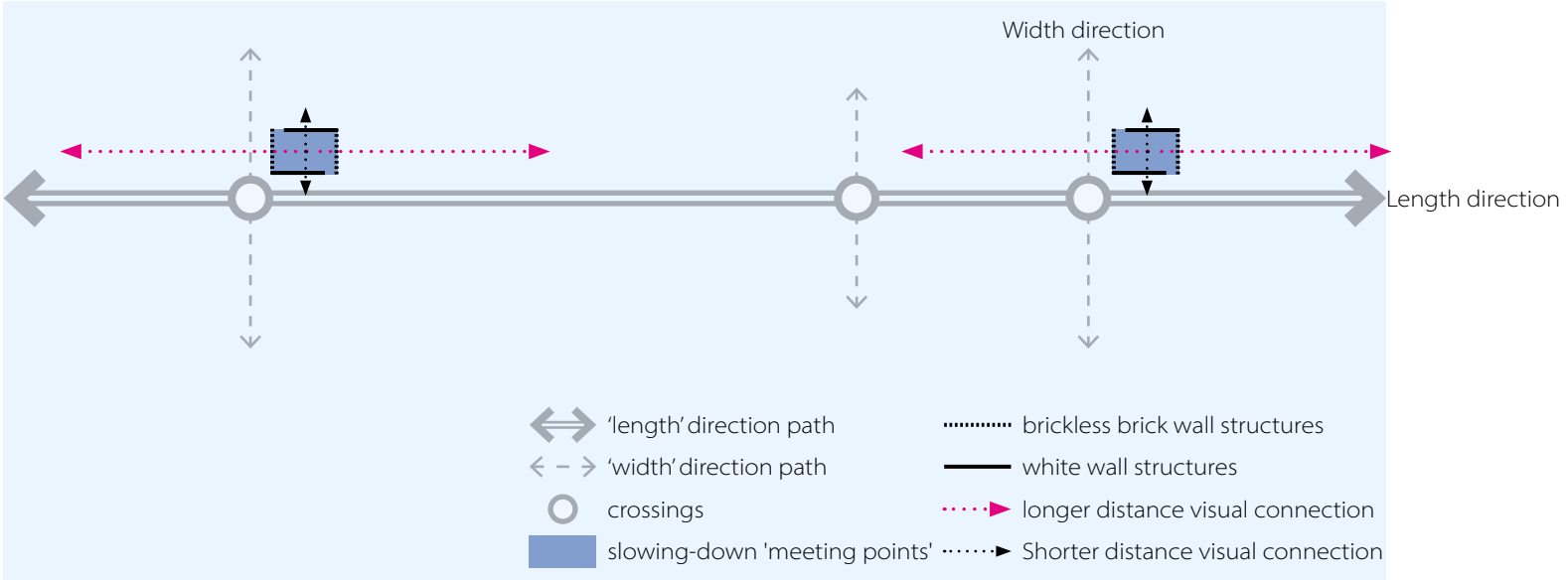
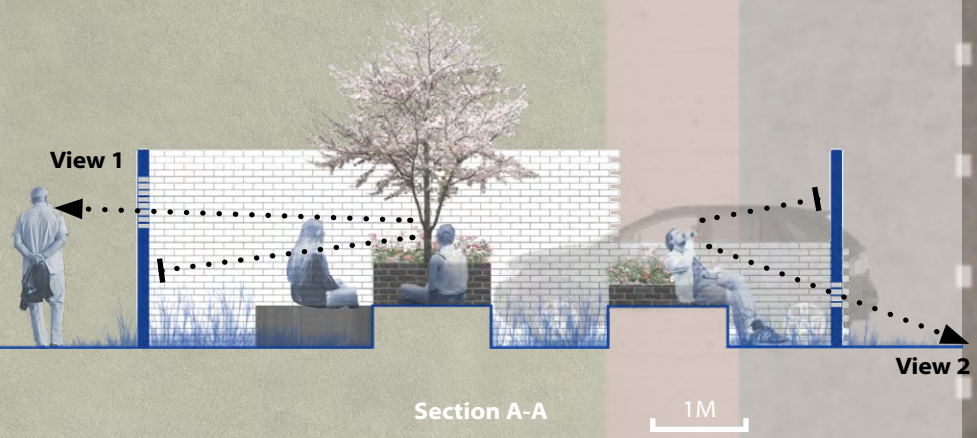
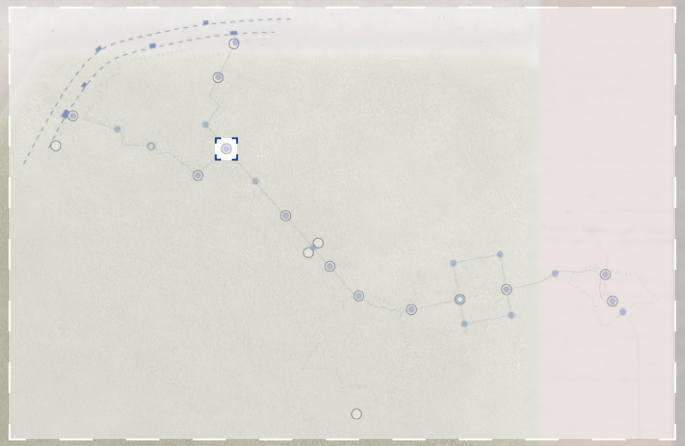


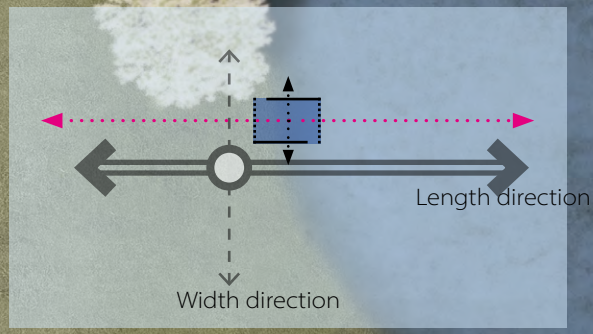
Crossing Road Design Example

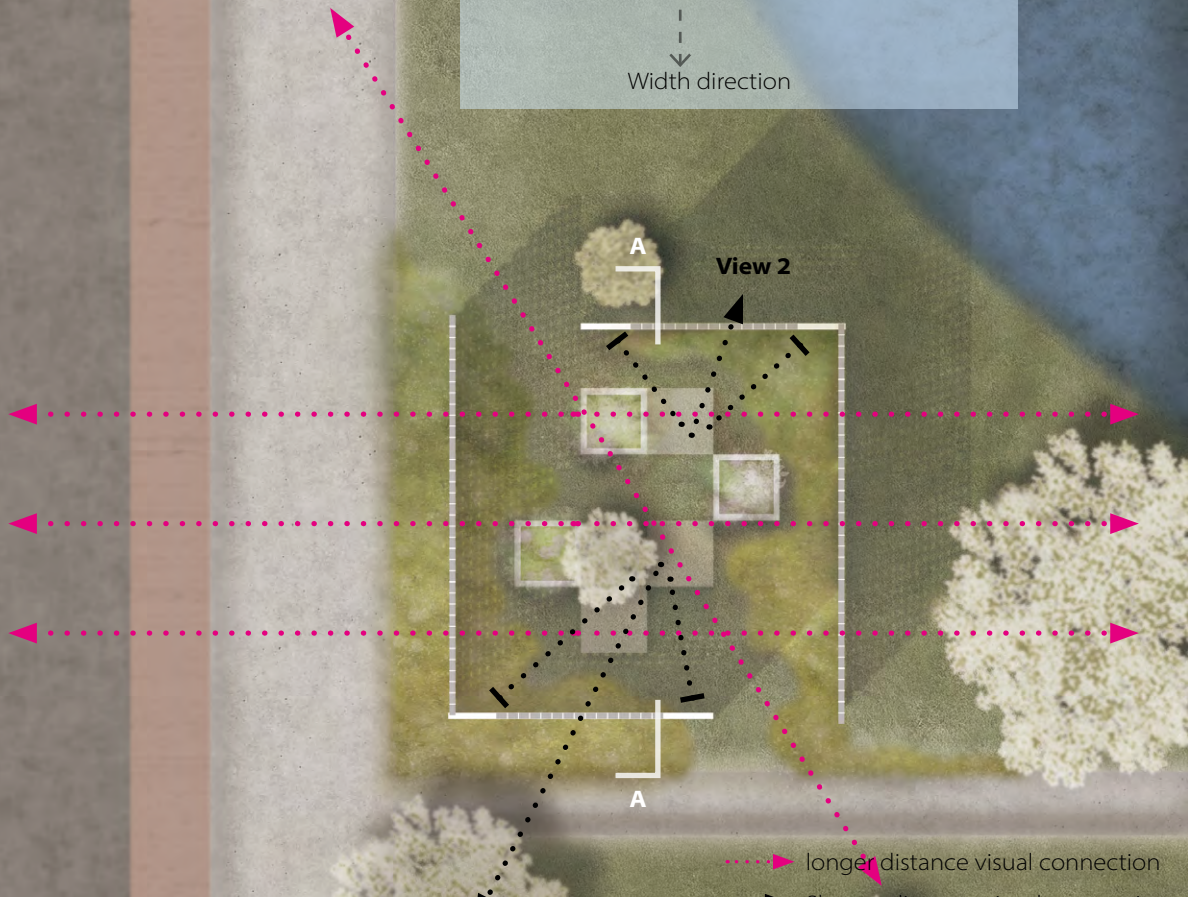


Section A-A

1M







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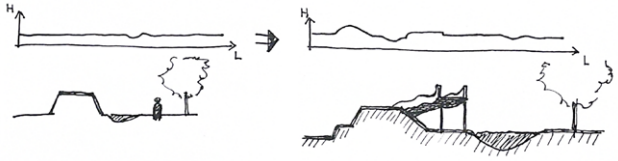
Principle 3 --- Height of (Undulating) Boundary

Physical/ Visual/ Conceptual Connection

'Length'

'Slowing-down'/ Meeting Points/
Diverse Public Spaces

'Width'



Enrich the spatial variation of
different heights

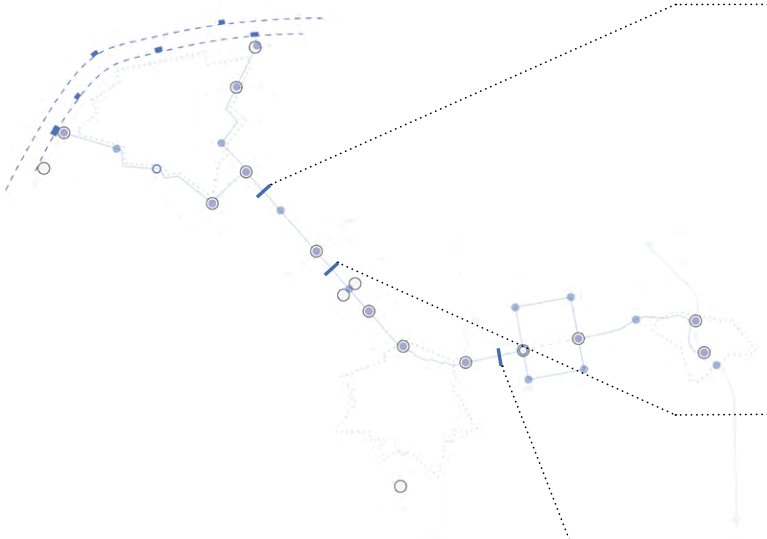
'Height'

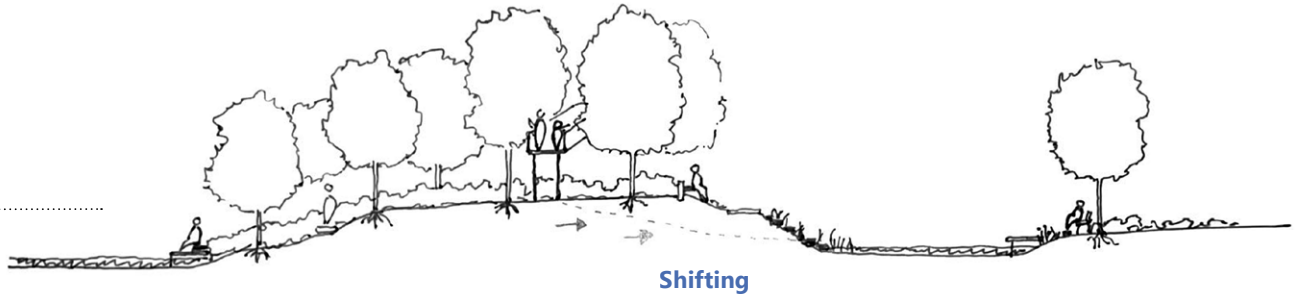
Relationship Between Materials and Nature;
spatial experience in different time

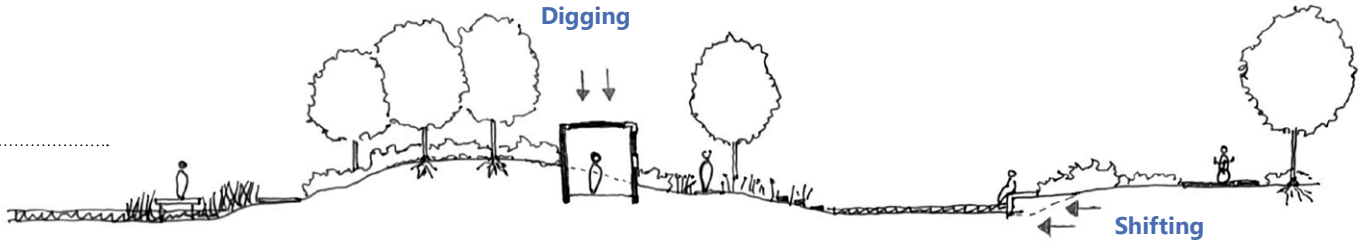
'Time'

Principle 3 --- Height of (Undulating) Boundary

to deal with the topography; spatial experience of high or low location







Principle 4 --- 'Time' of Boundary

Physical/ Visual/ Conceptual Connection

'Length'

'Slowing-down'/ Meeting Points/
Diverse Public Spaces

'Width'

Enrich the spatial variation of
different heights

'Height'

Relationship Between Materials and Nature;
spatial experience in different time

'Time'

Principle 4 --- 'Time' of Boundary

Relationship Between Materials and Nature; Spatial experience in different time

brickless brick walls (can been seen through)

concrete and
bricks made of raw mud (unfired bricks)

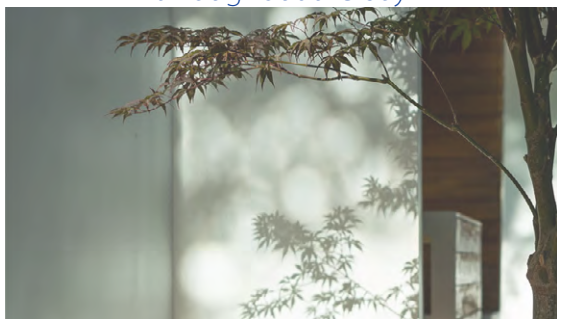
bricks were pushed out with pressure washers

showed traces of time on the walls

white walls

made of thick white steel or bricks

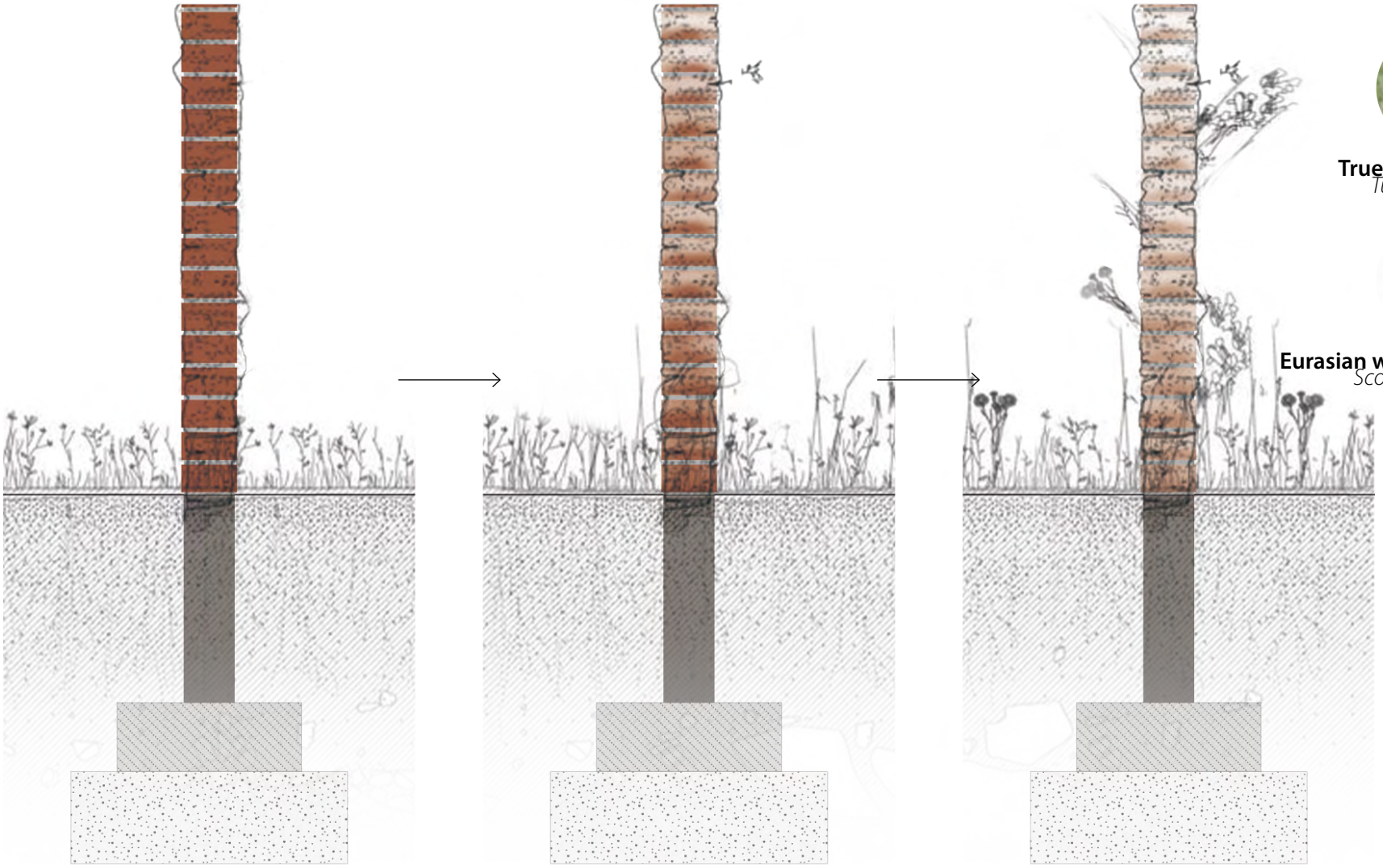
with nice shadow changes throughout the day



wooden piles (as fort outline/boundary's guiding lines)

Principle 4 --- 'Time' of Boundary

Relationship Between Materials and Nature; Spatial experience in different time

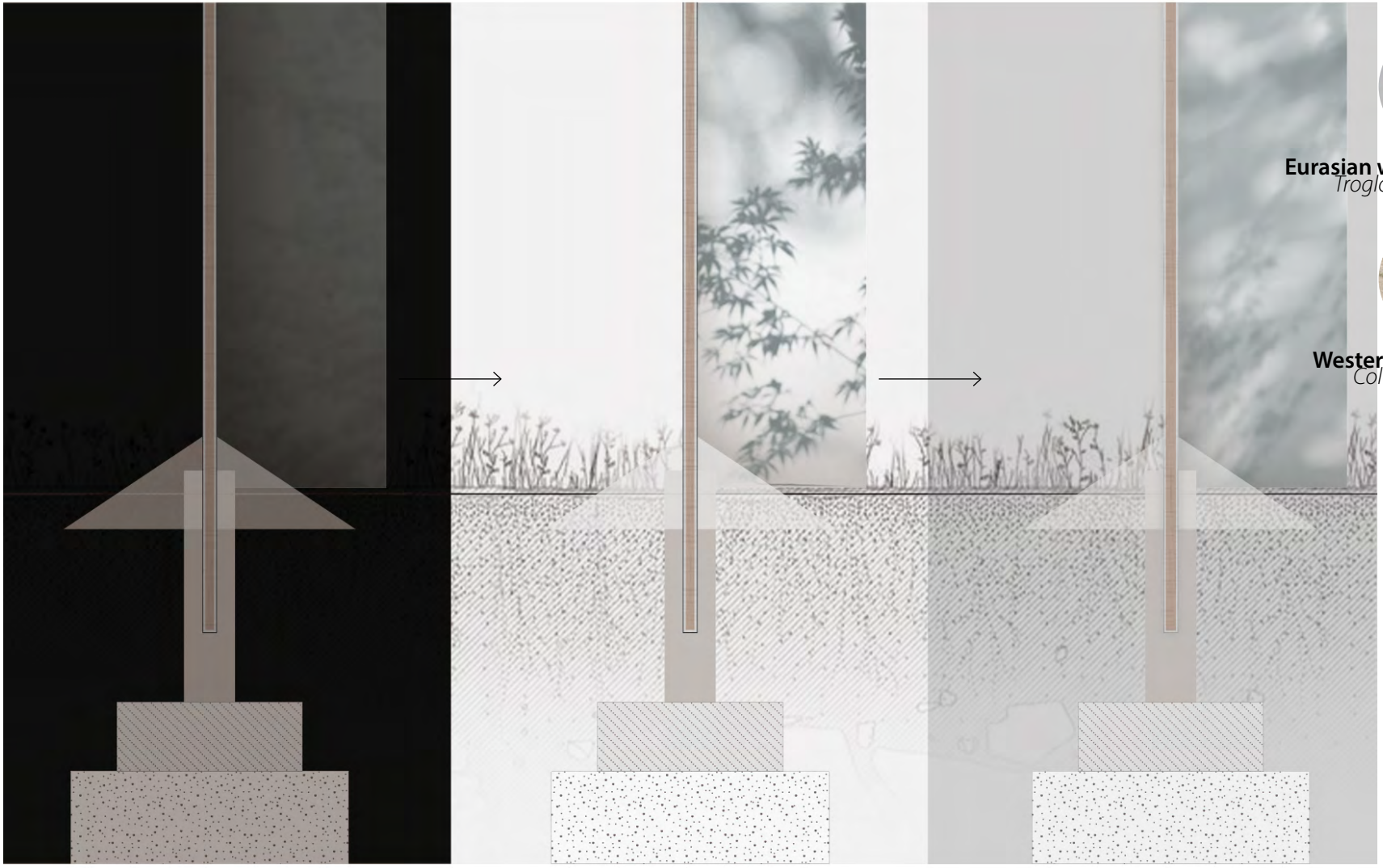


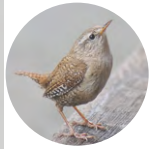
True thrush (Merel)
Turdus merula

Eurasian woodcock (Houtsnip)
Scolopax rusticola

Principle 4 --- 'Time' of Boundary

Relationship Between Materials and Nature; Spatial experience in different time



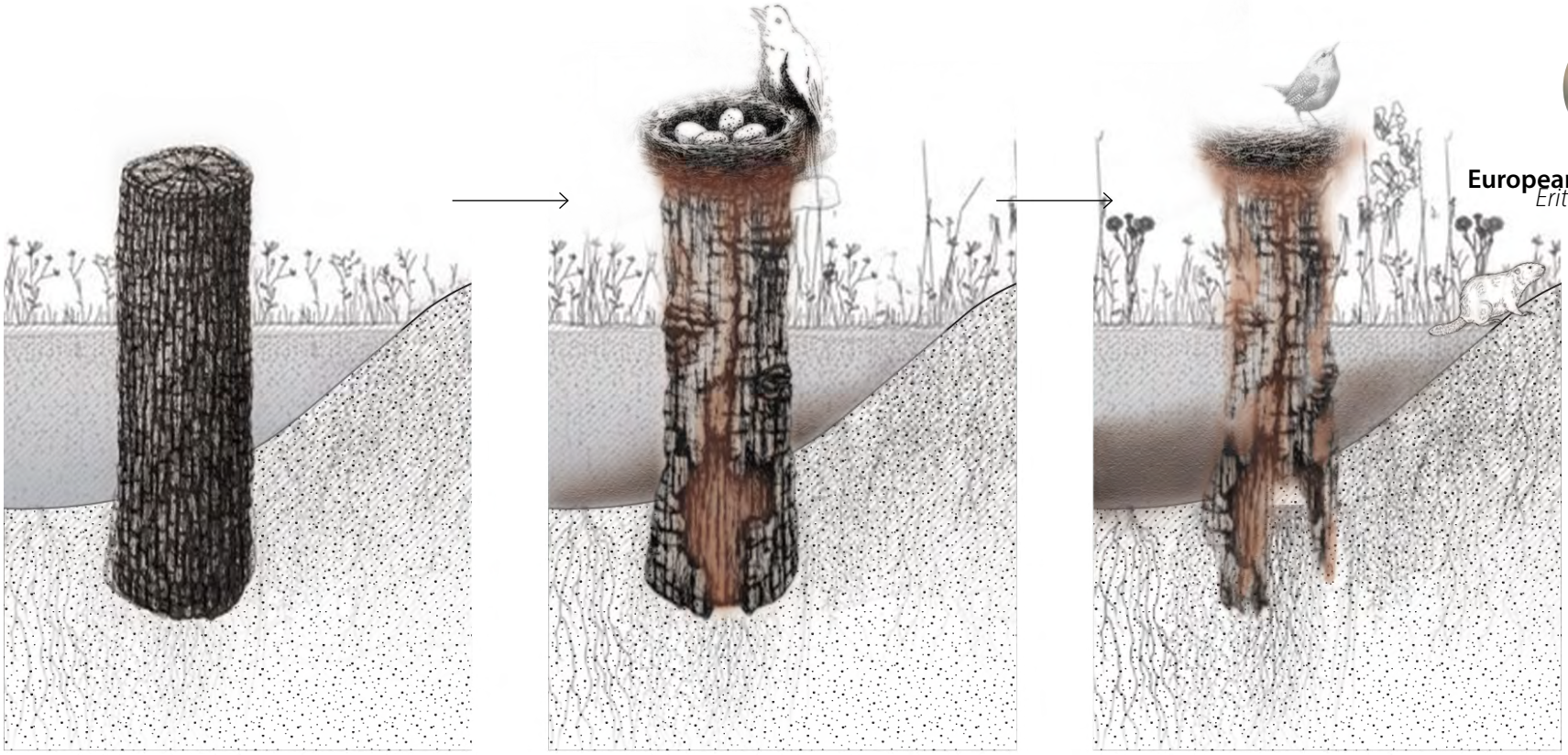


Eurasian wren (Winterkoning)
Troglodytes troglodytes

Western jackdaw (Kauw)
Coloeus monedula

Principle 4 --- 'Time' of Boundary

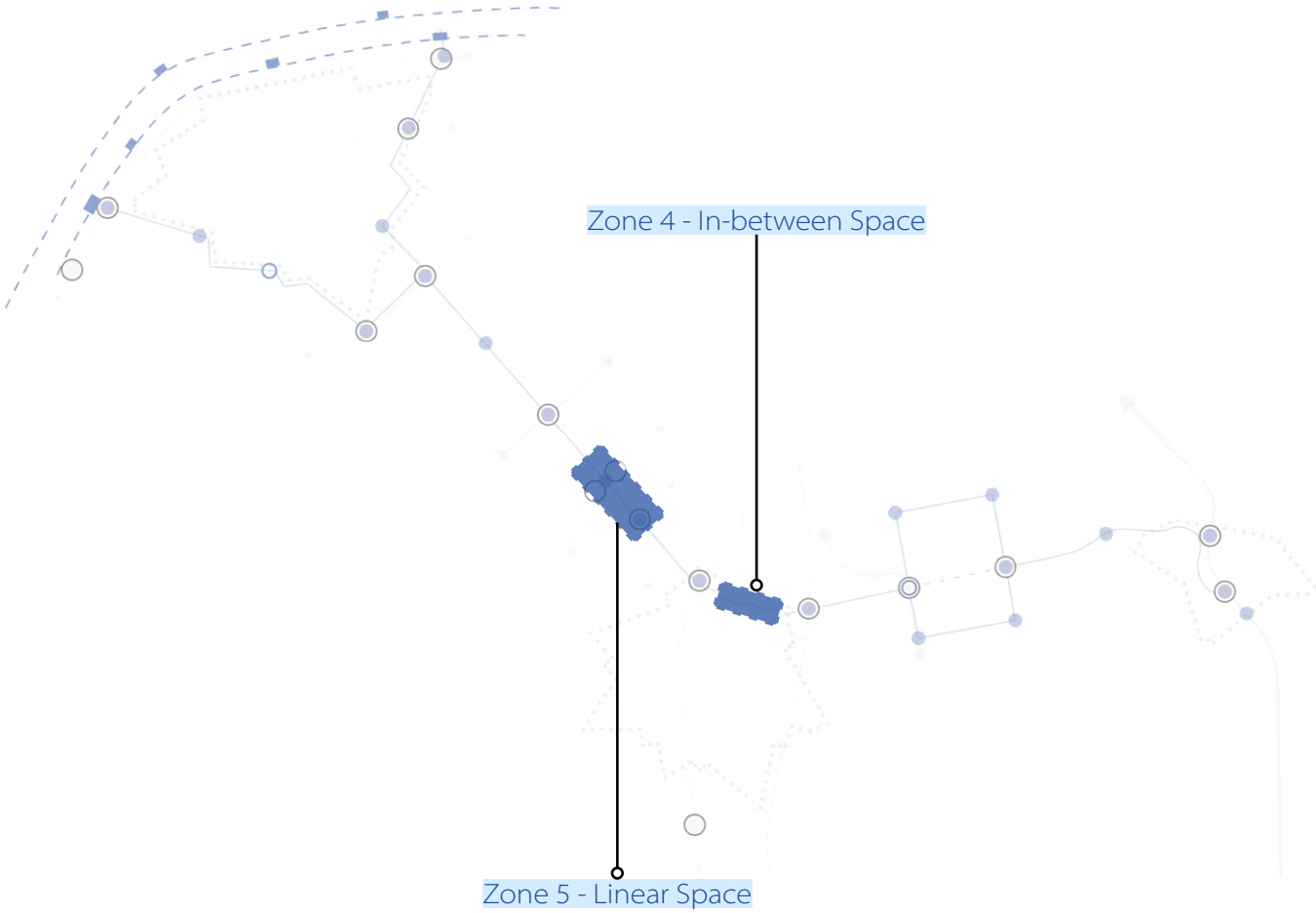
Relationship Between Materials and Nature; Spatial experience in different time



Marsh warbler (Bosrietzanger)
Acrocephalus palustris

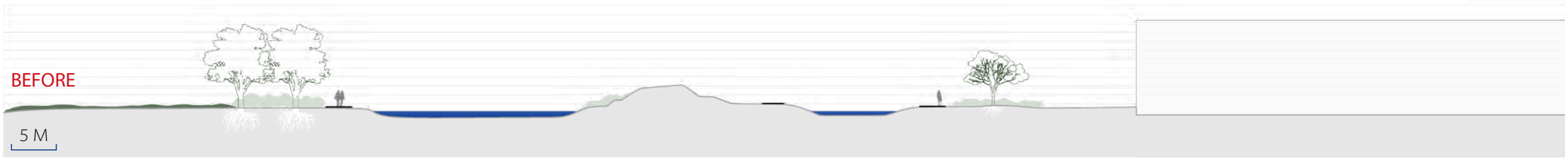
European robin (Roodborst)
Erithacus rubecula

Four Dimensional Combination Design

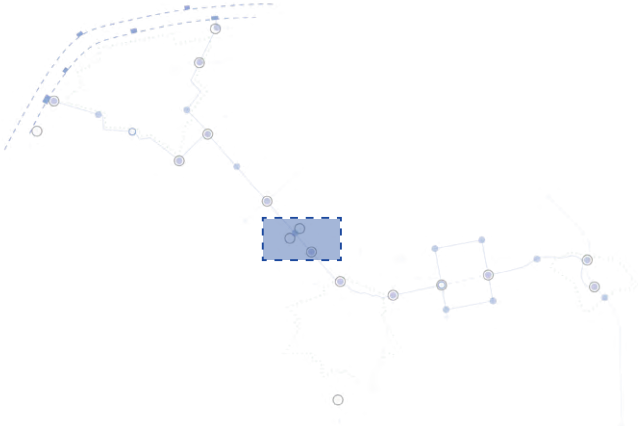


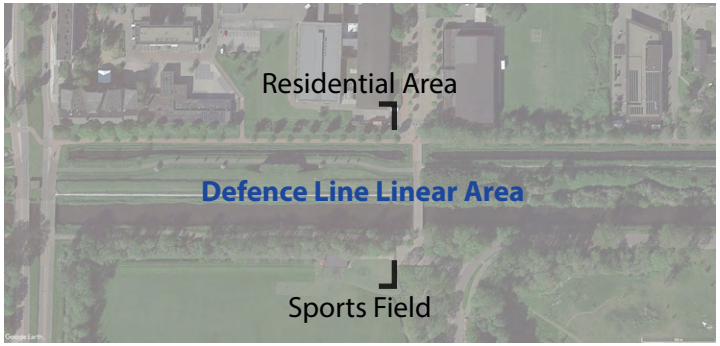
Zone 5 - Defence Line Linear Area

Zone 5 - Defence Line Linear Area

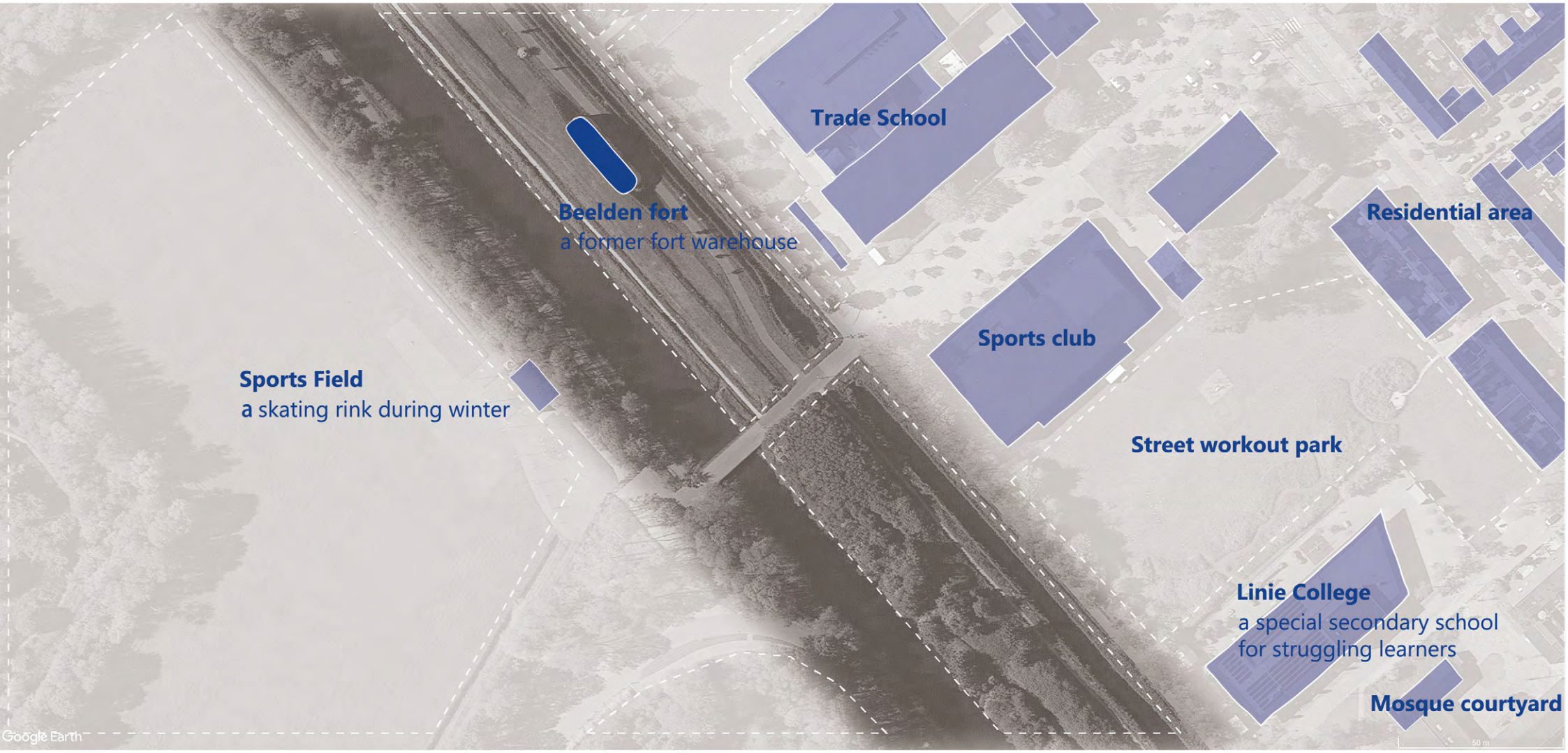


Sports Field | **Defence Line Linear Area** | Residential Area





Current Environment



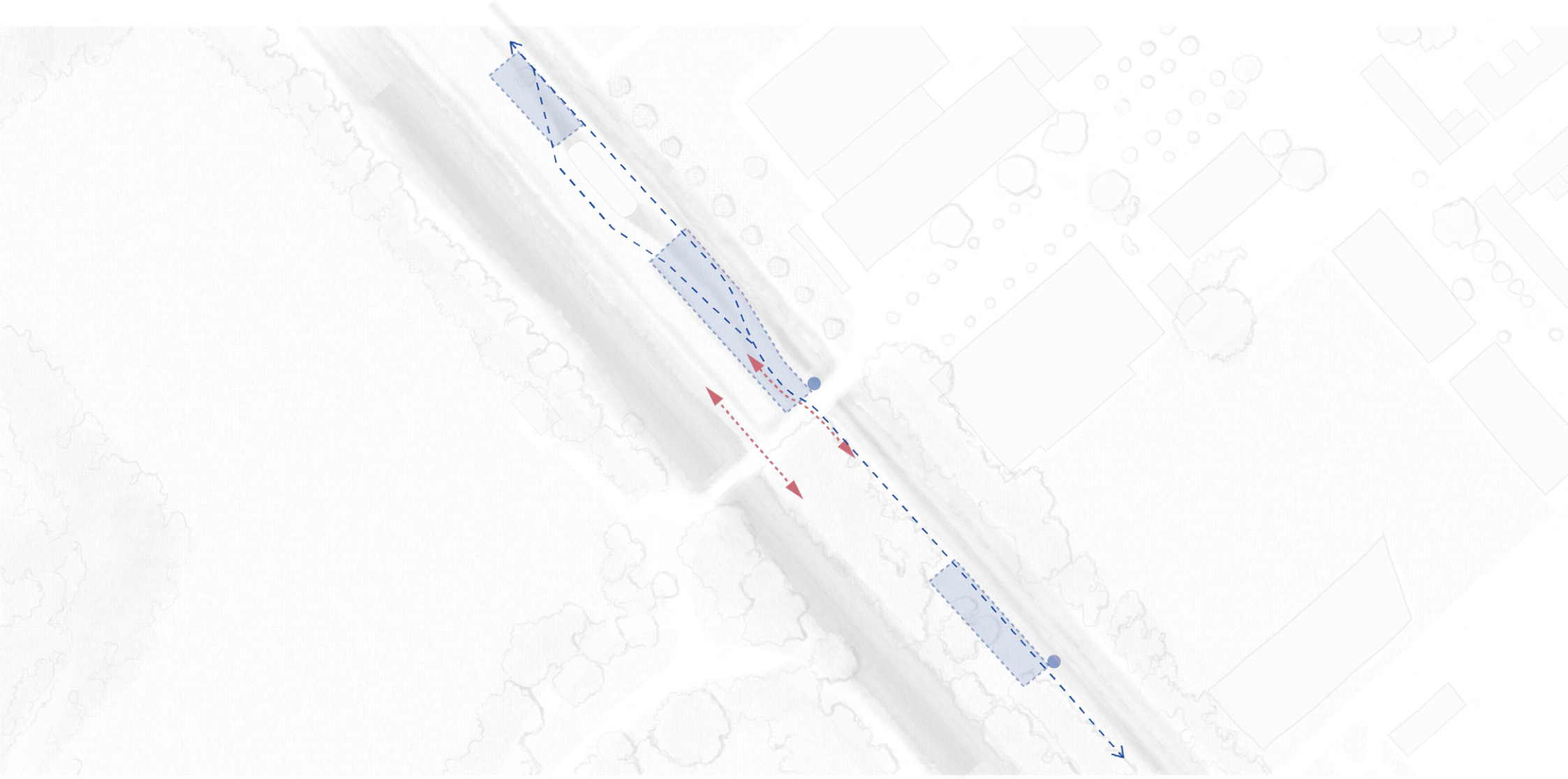
Natural surface

Former fort

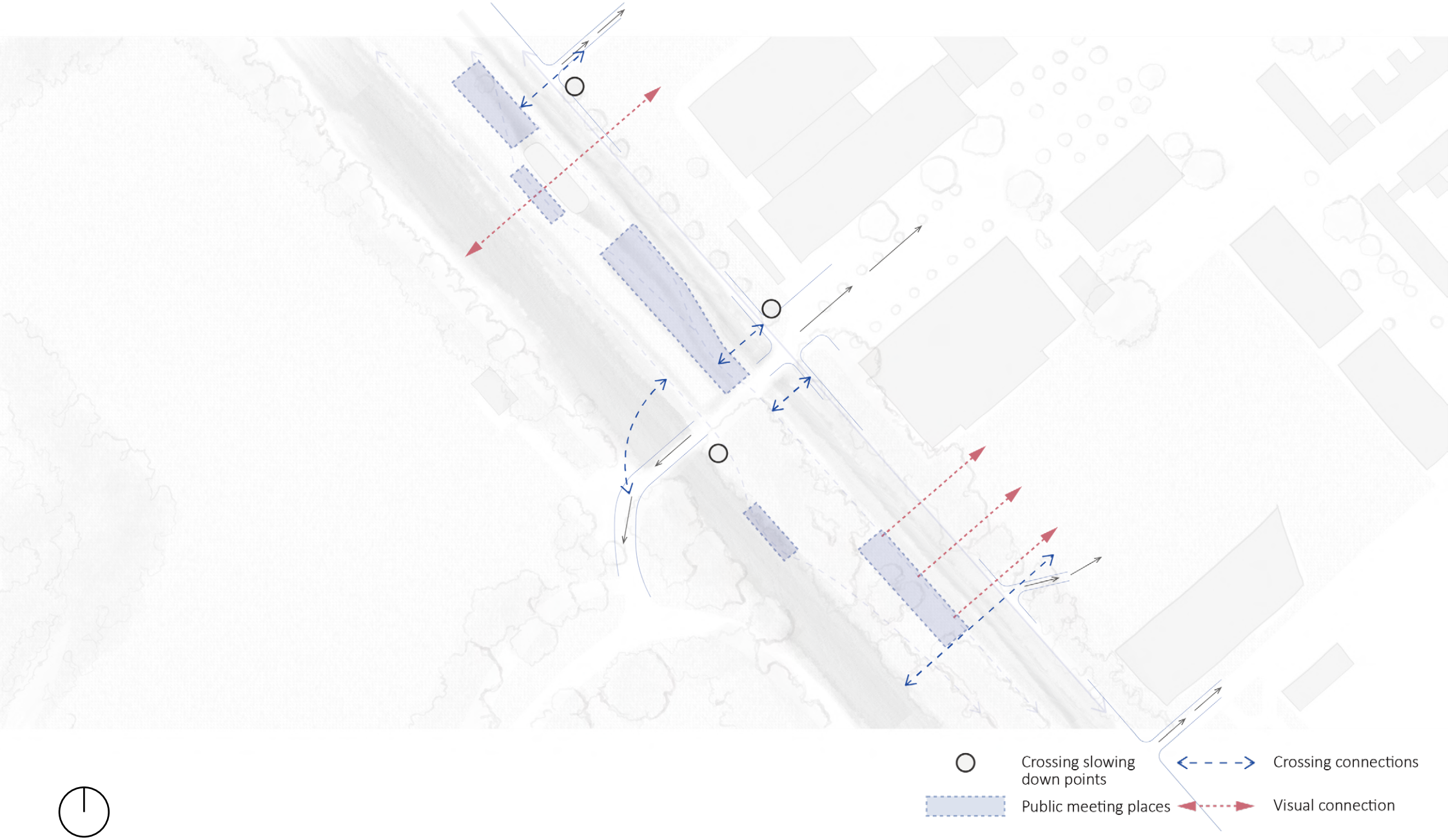
Building

Current Physical and Visual Connection

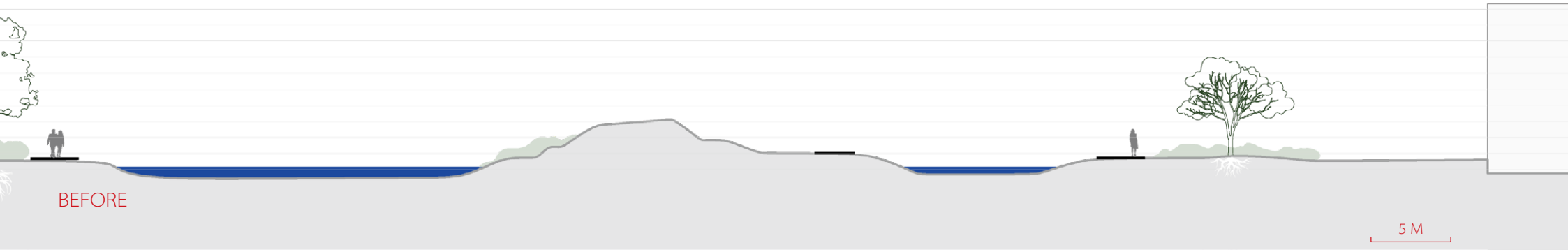
Principle 1 --- Length of Boundary

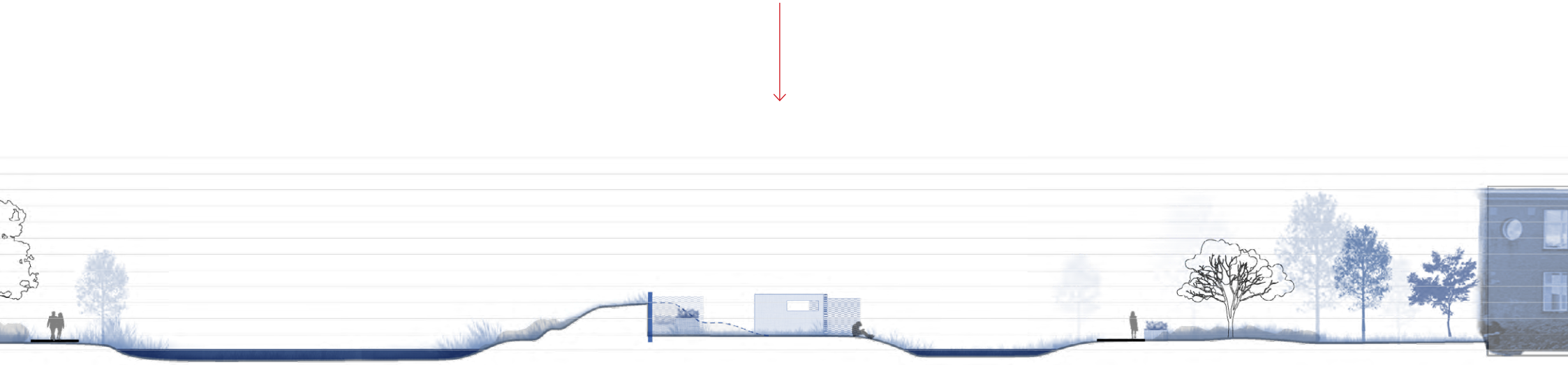


Principle 2 --- Width(transition) of Boundary

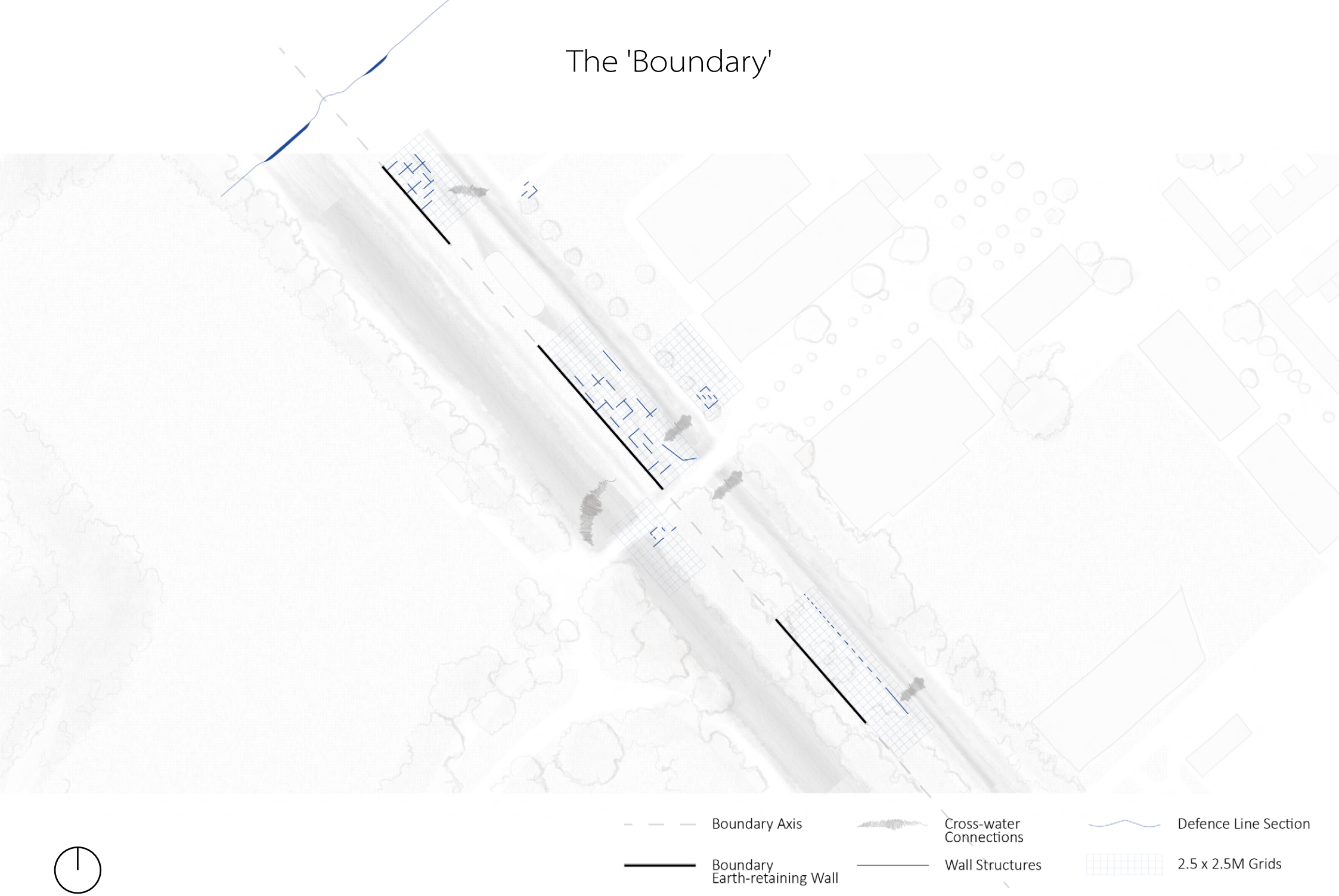


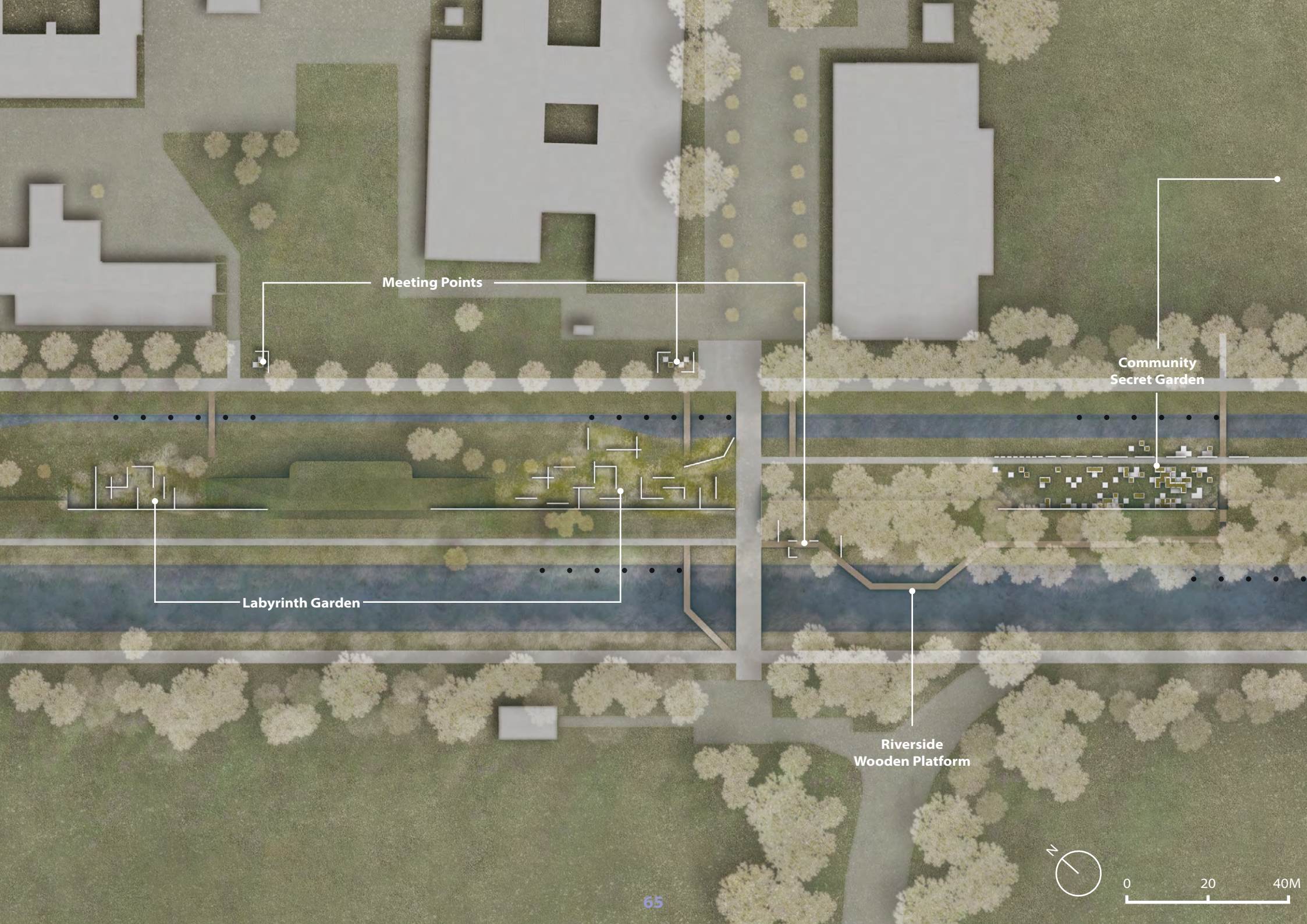
Principle 3 --- Undulating Boundary



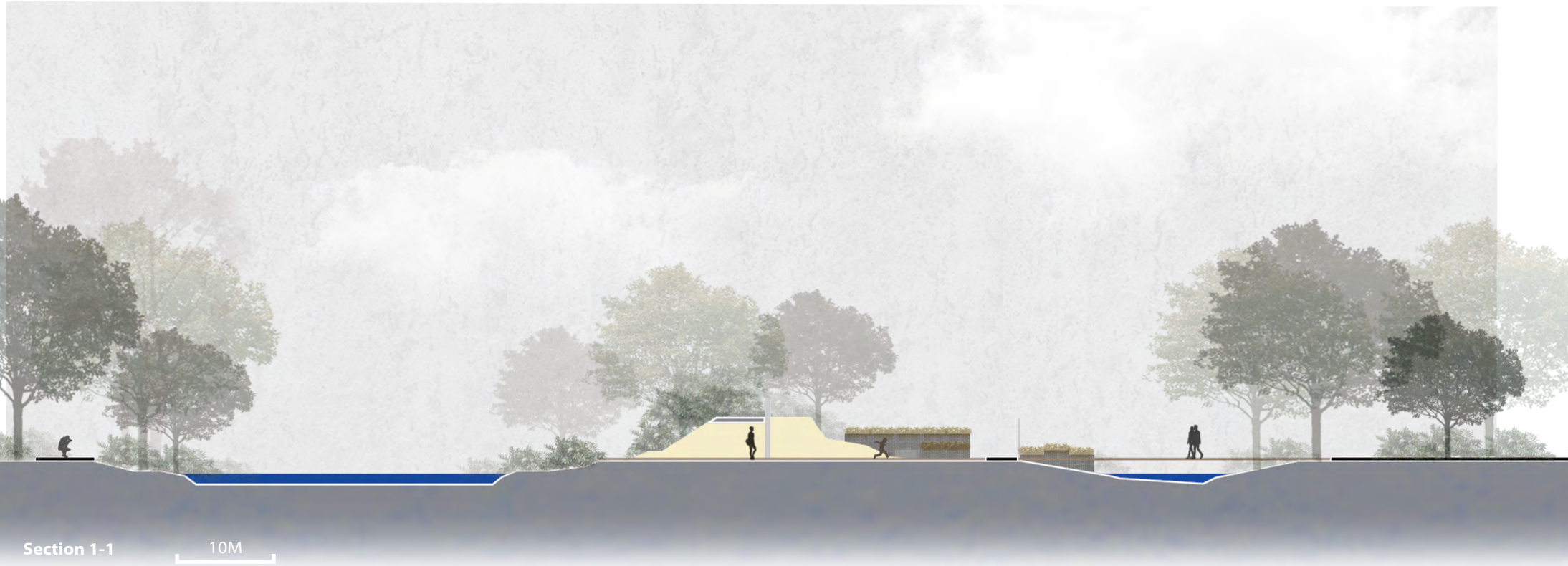


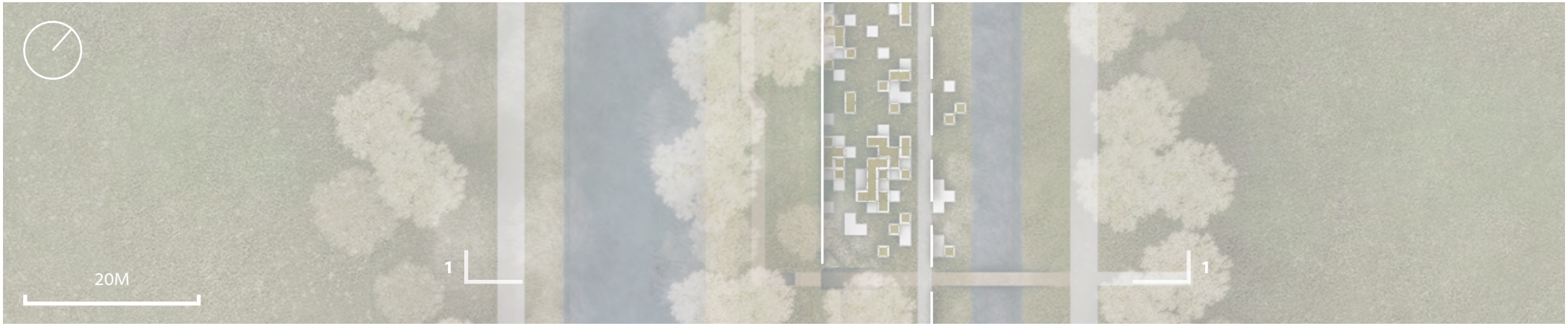
The 'Boundary'

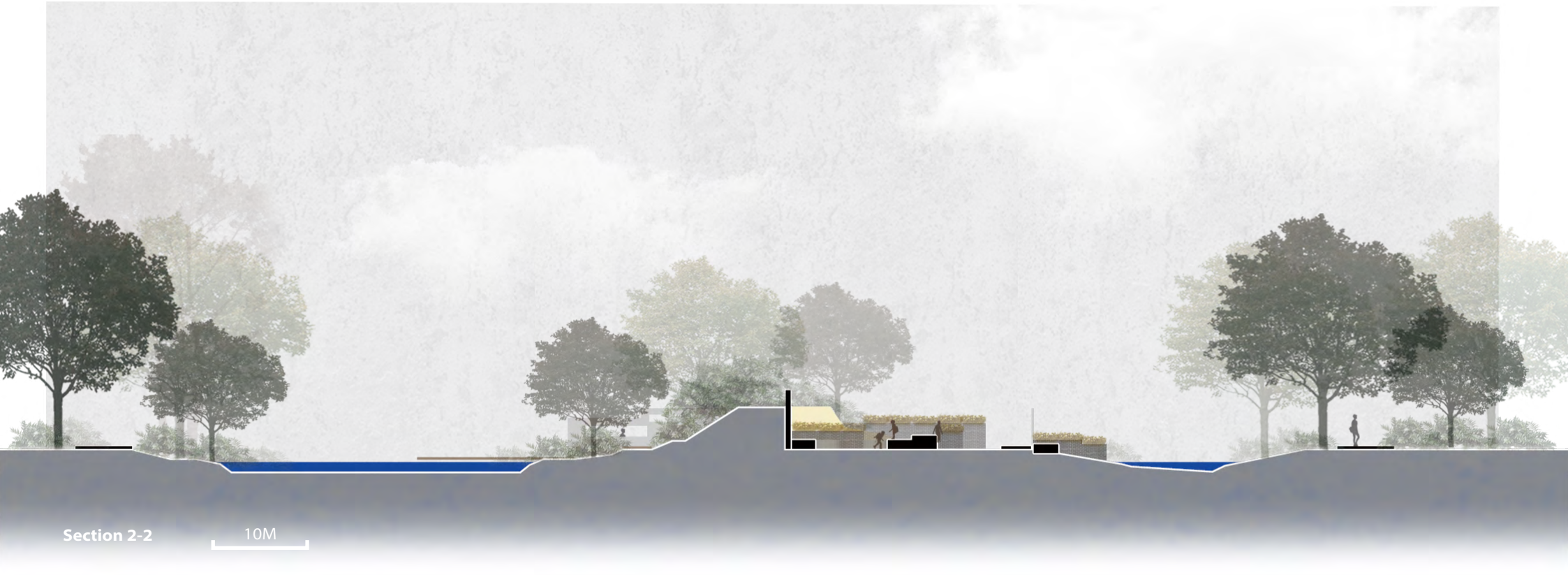


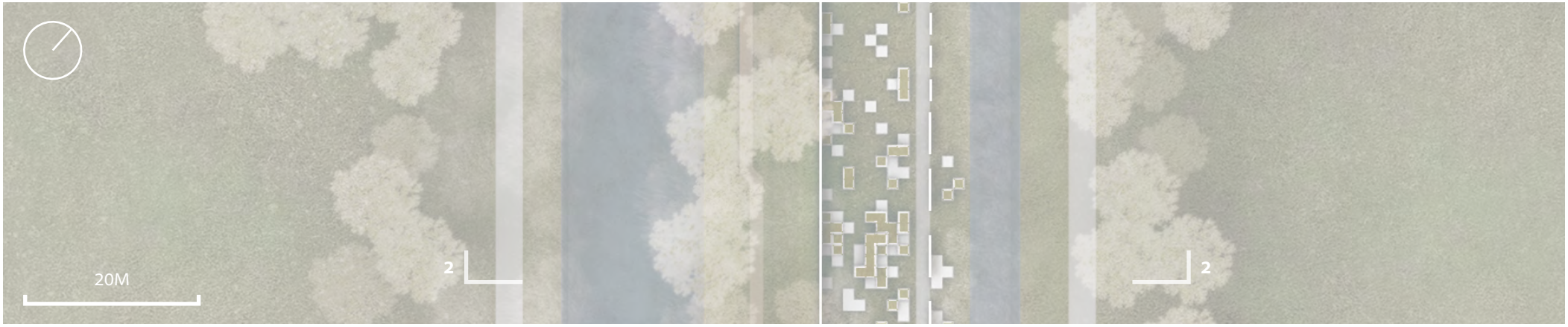

Meeting Points
Community
Secret Garden
Labyrinth Garden
Riverside
Wooden Platform
N
0
20
40M

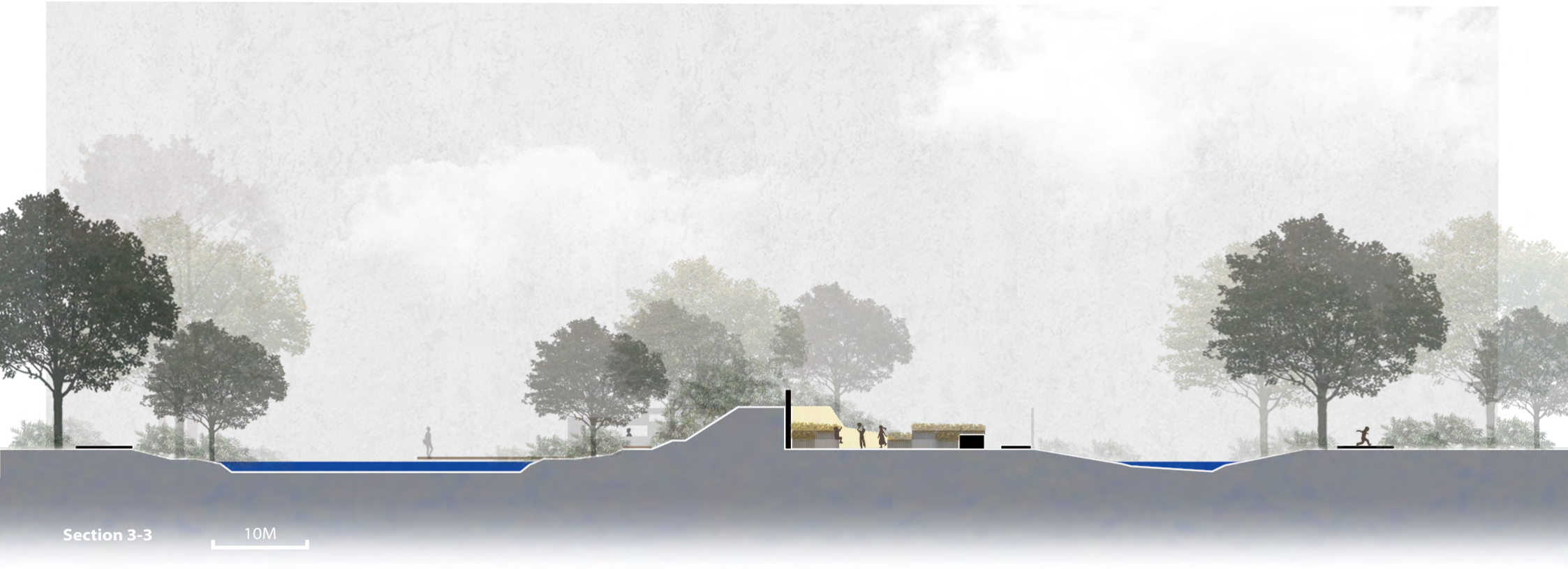
9
8
7
6
5
4
3
2
1
9
8
7
6
5
4
3
2
1
N
0
20
40M

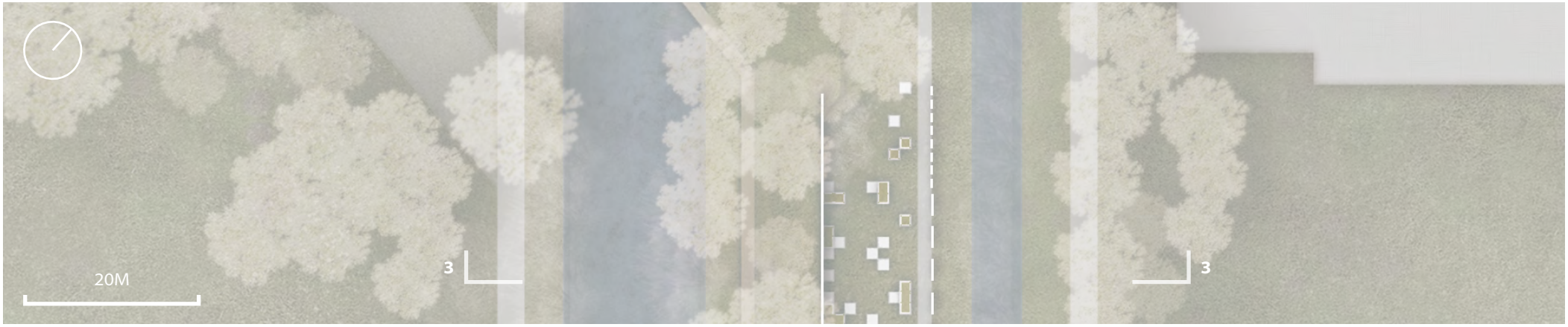

Section 1-1
10M

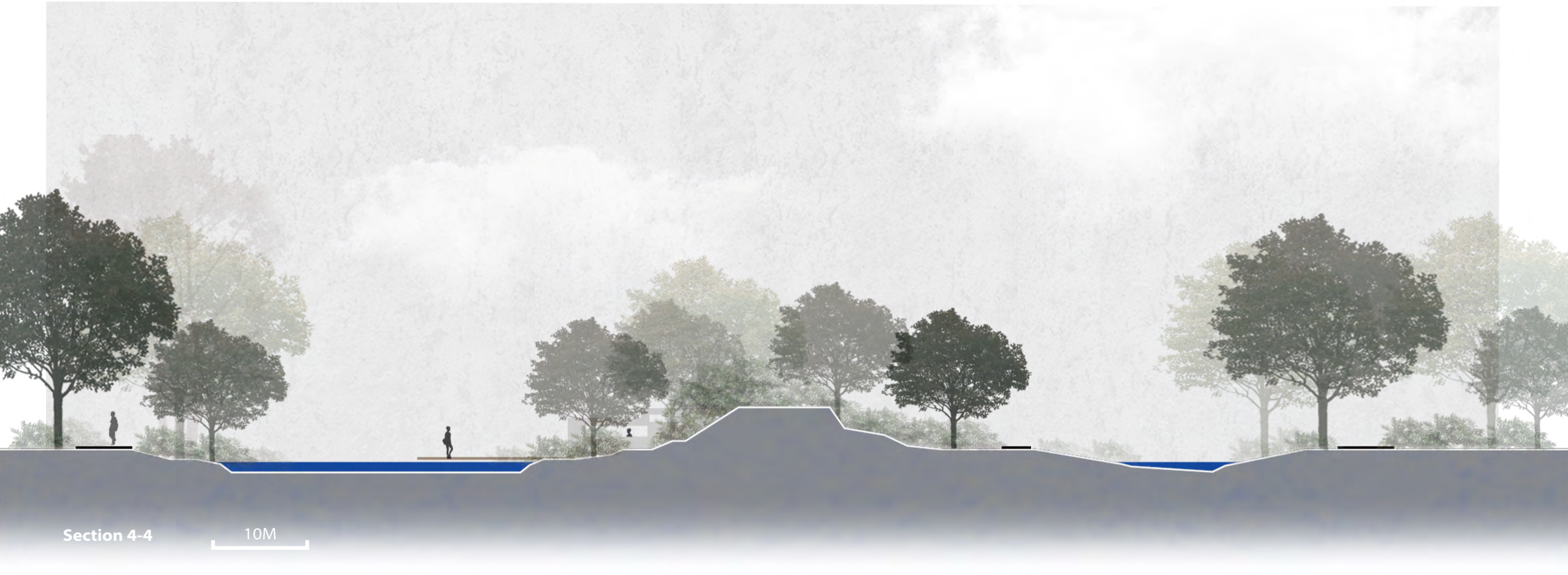

20M
1
1

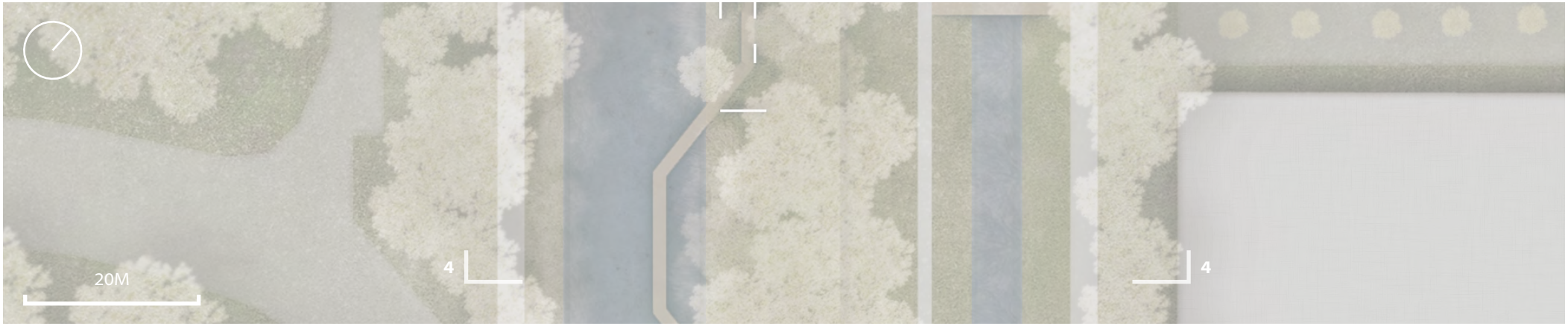

Section 2-2
10M


20M
2
2


Section 3-3
10M

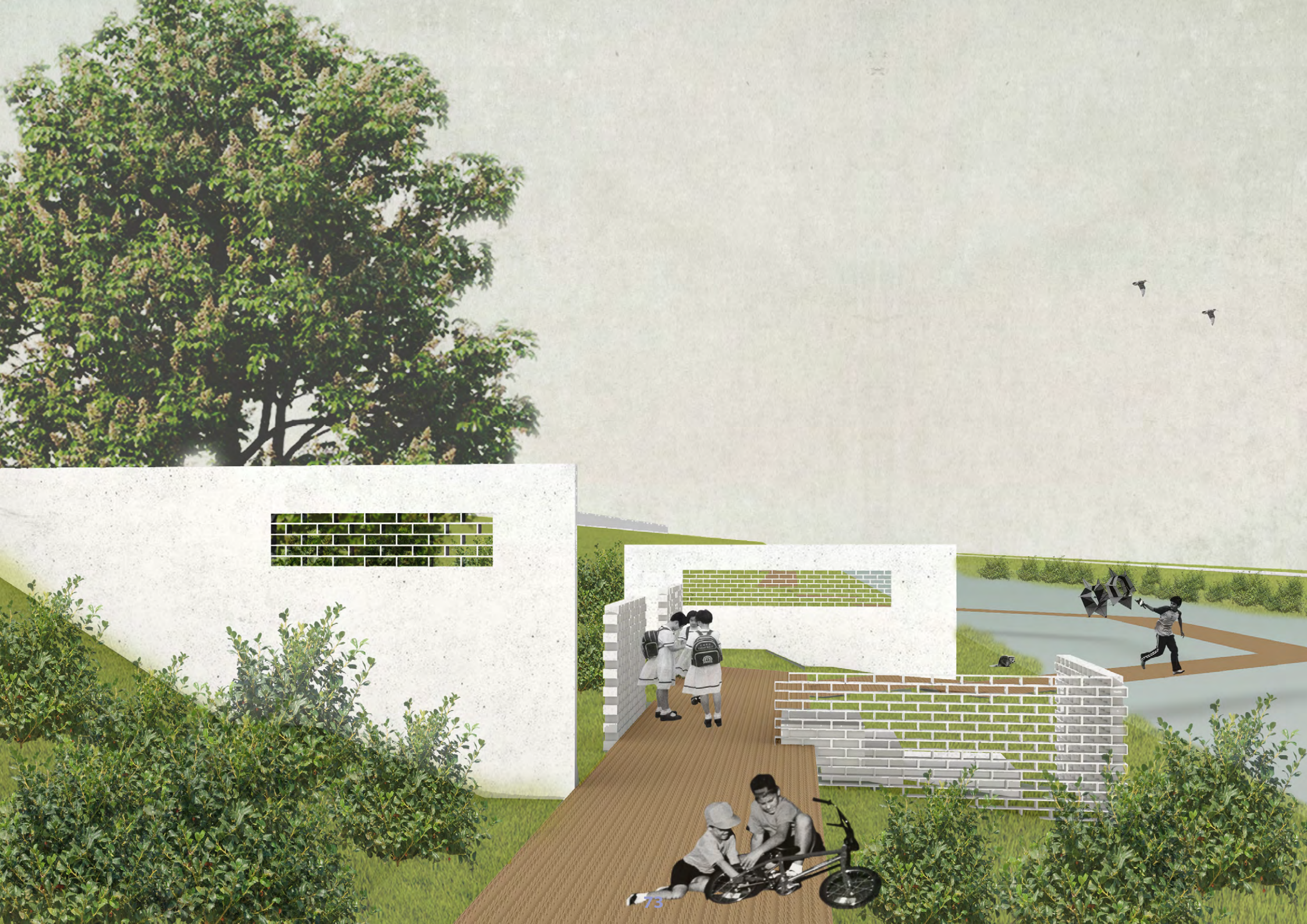

20M
3
3

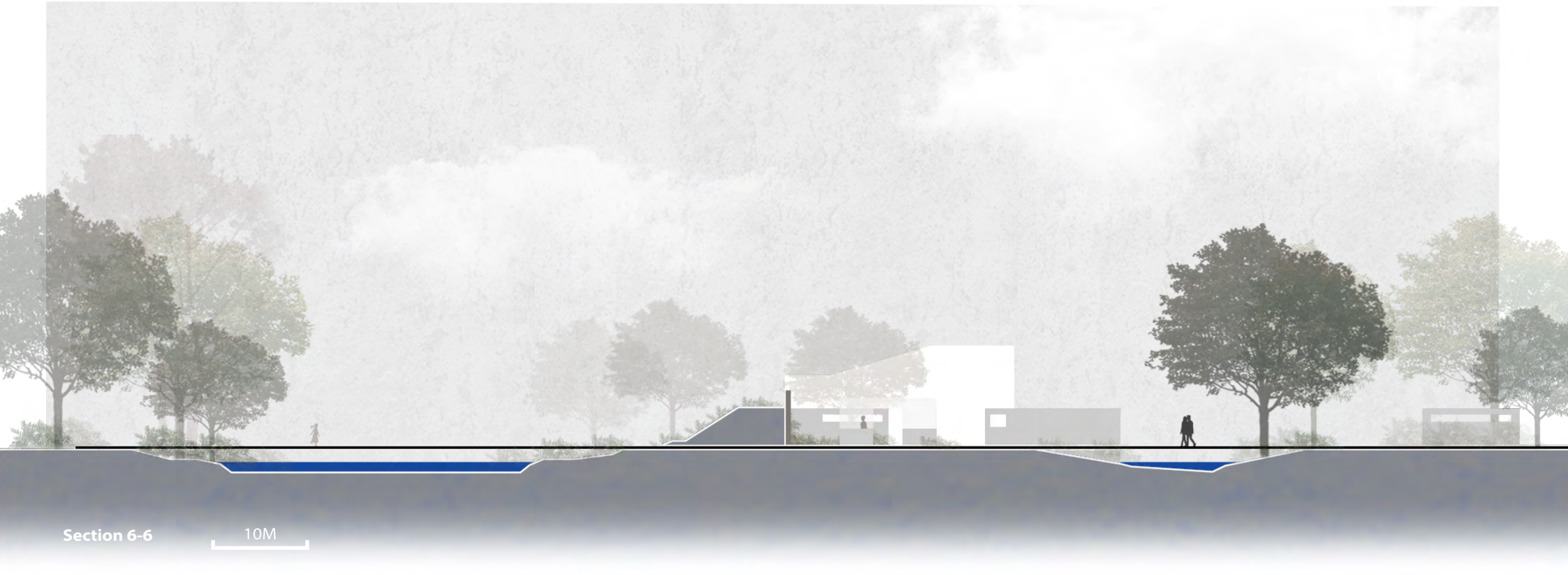

Section 4-4
10M


20M
4
4

Section 5-5
10M

20M
5
5

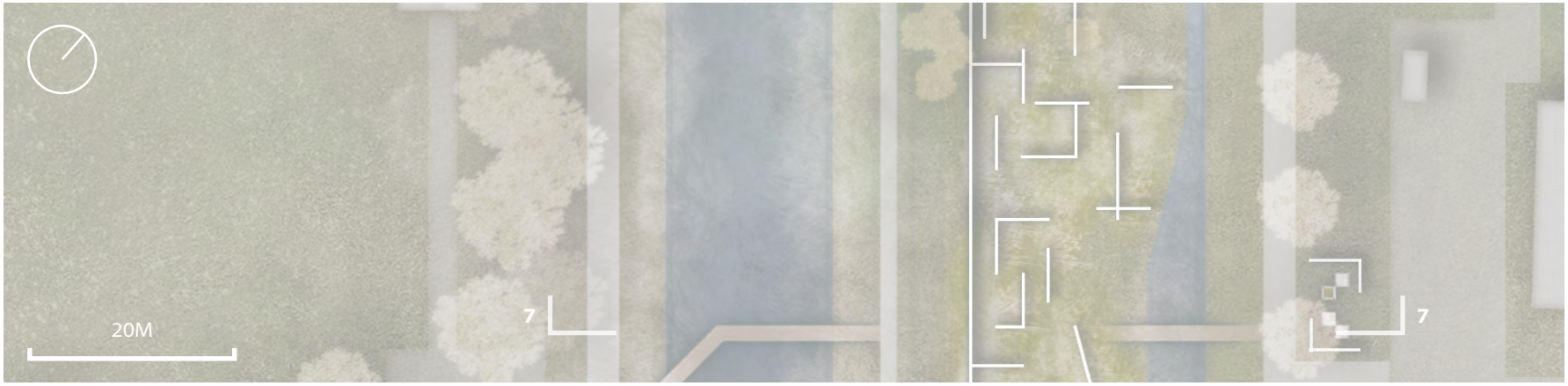



Section 6-6
10M

20M
6
6

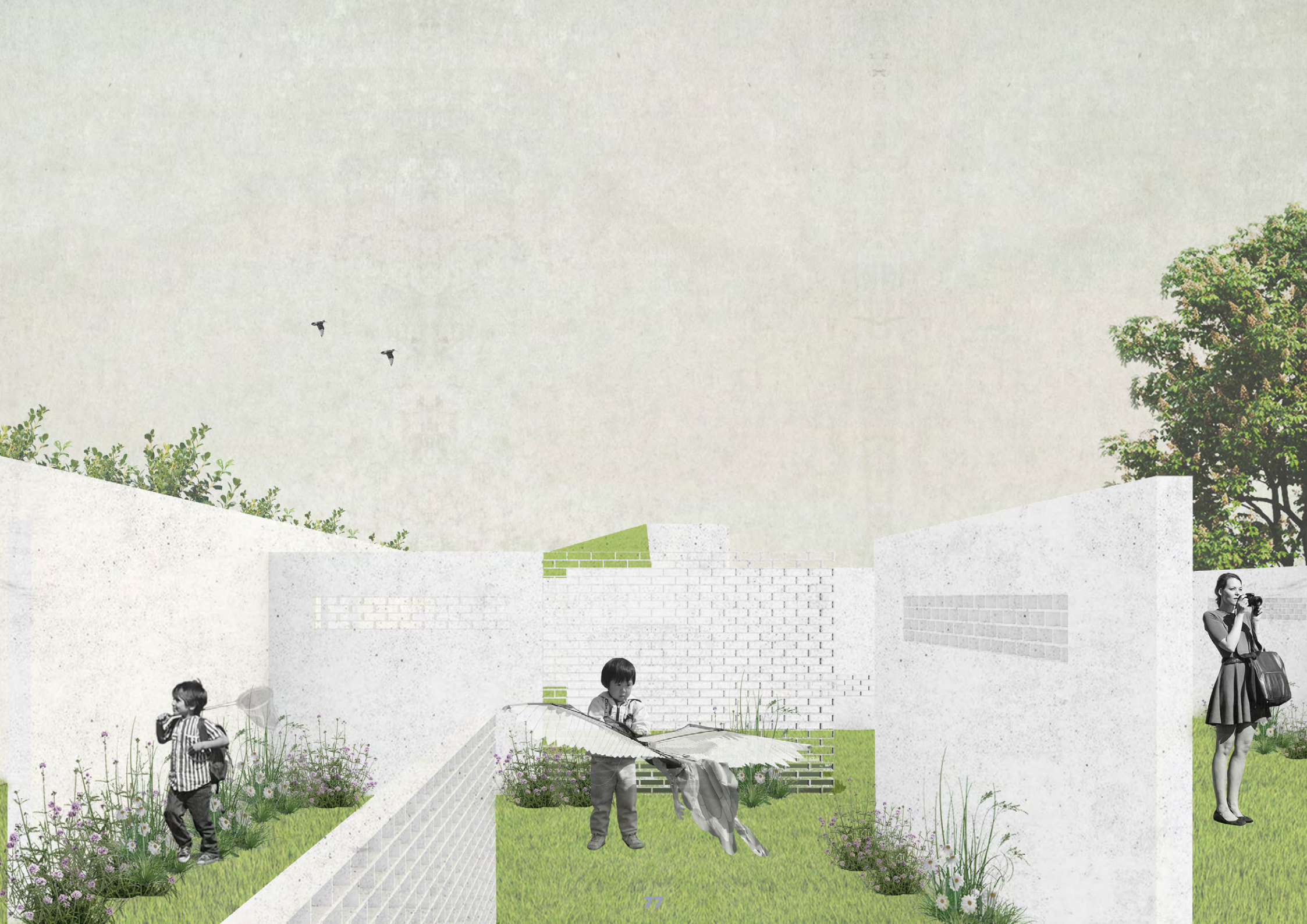
Section 7-7

10M



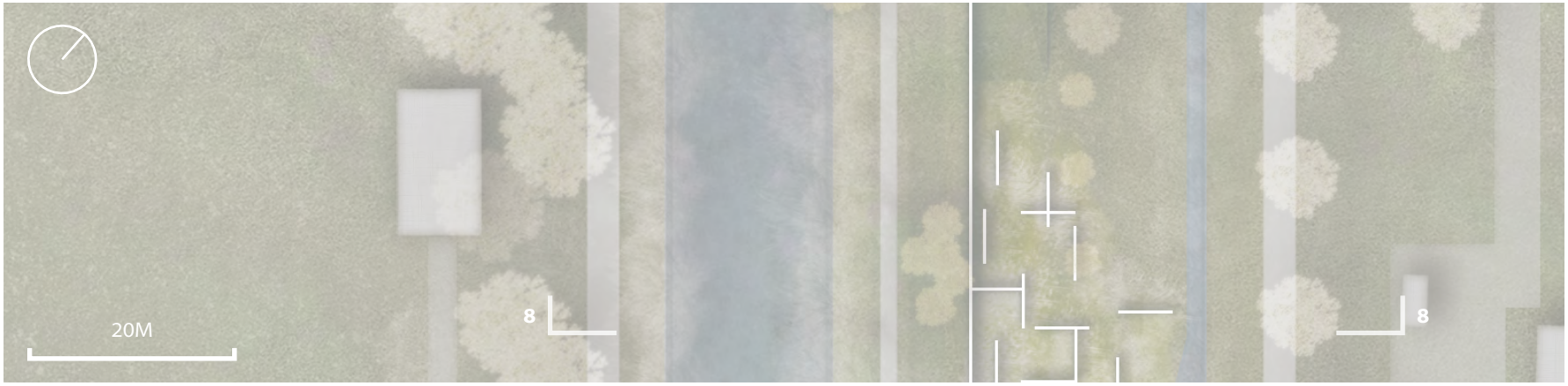
Crataegus monogyna

Taxus baccata 'Fastigiata'



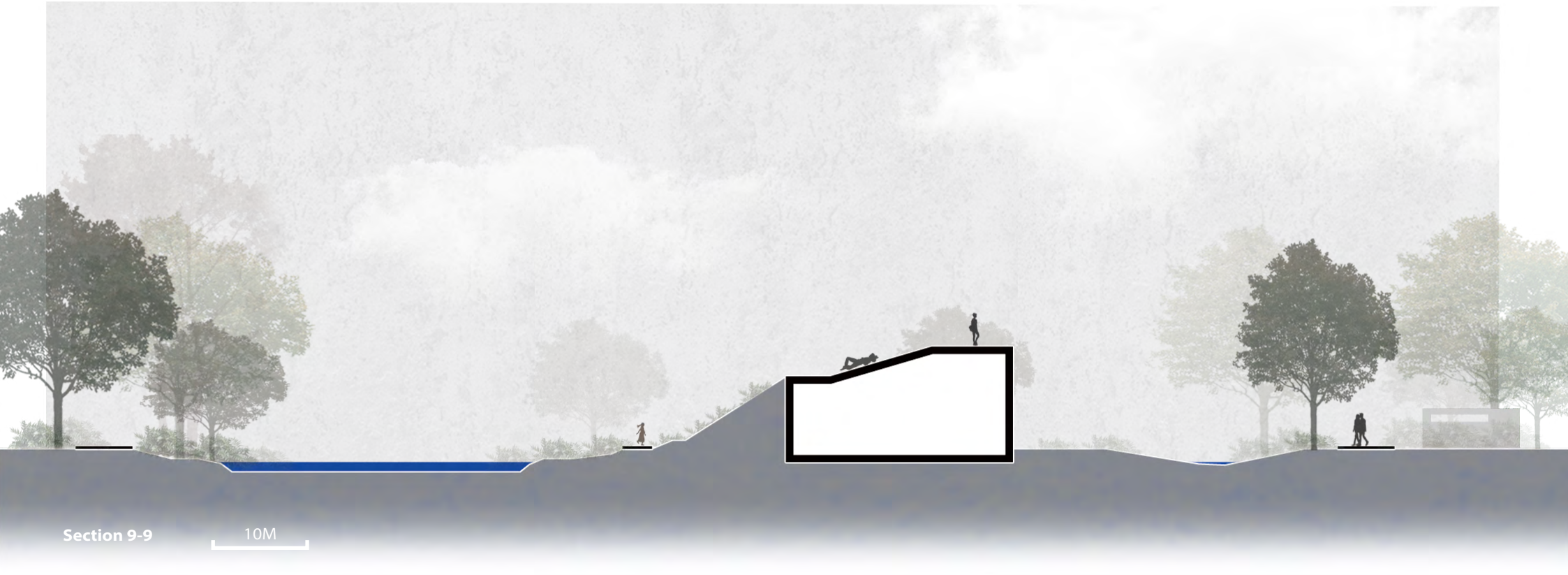
Section 8-8

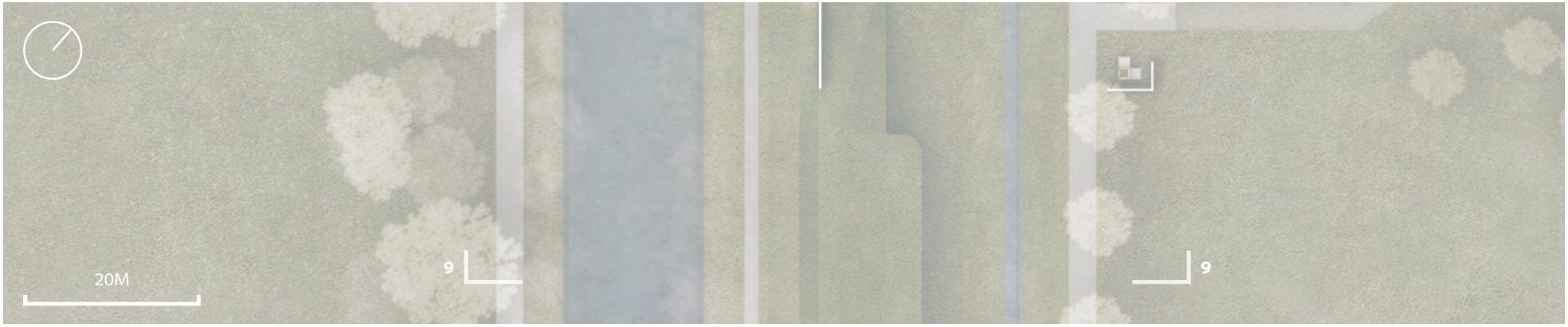
10M

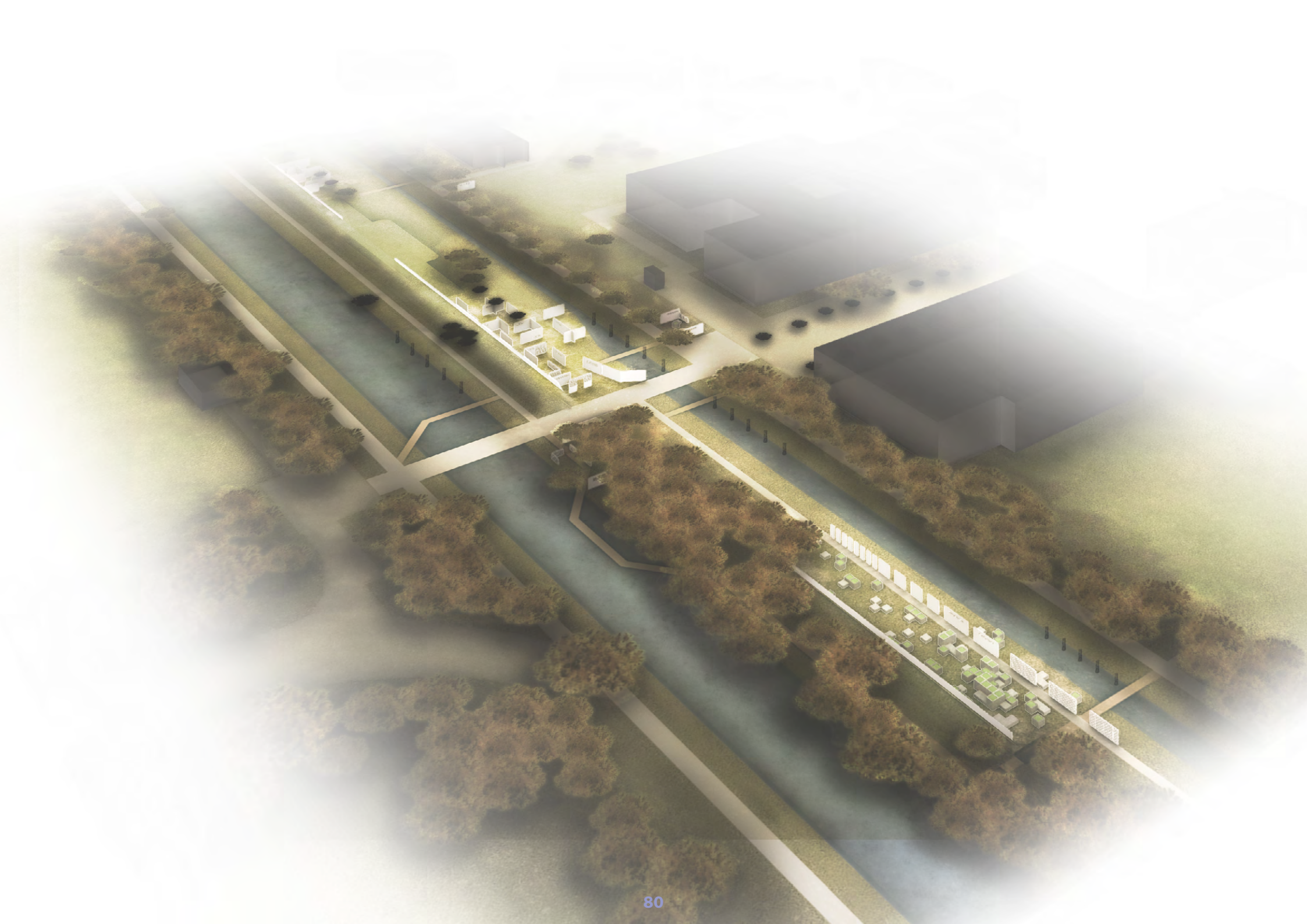


Crataegus monogyna

Taxus baccata 'Fastigiata'


Section 9-9
10M


20M
9
9



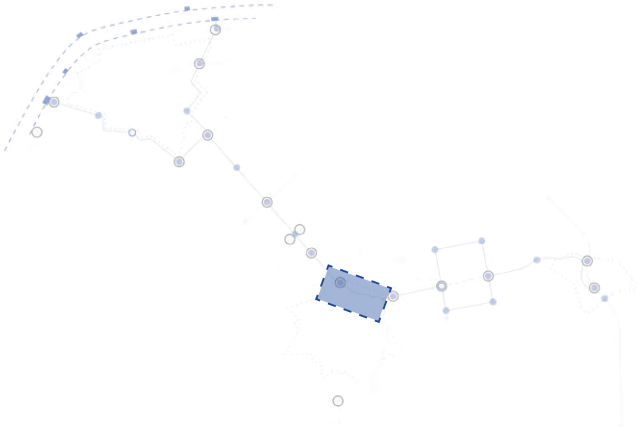
Zone 4 - Defence Line In-between Area

Zone 4 - Defence Line In-between Area

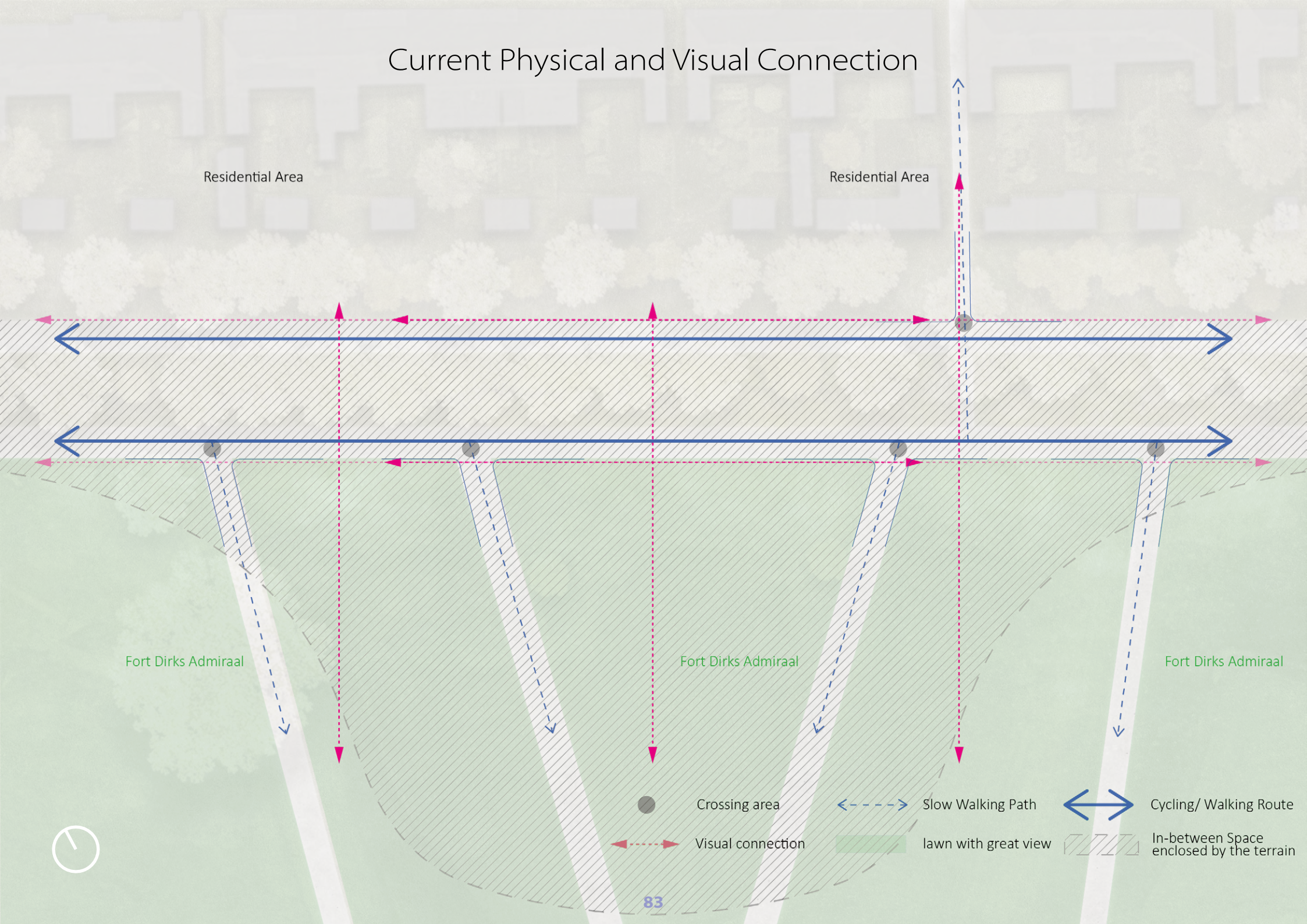
Fort Dirks Admiraal

Defence Line In-Between Area

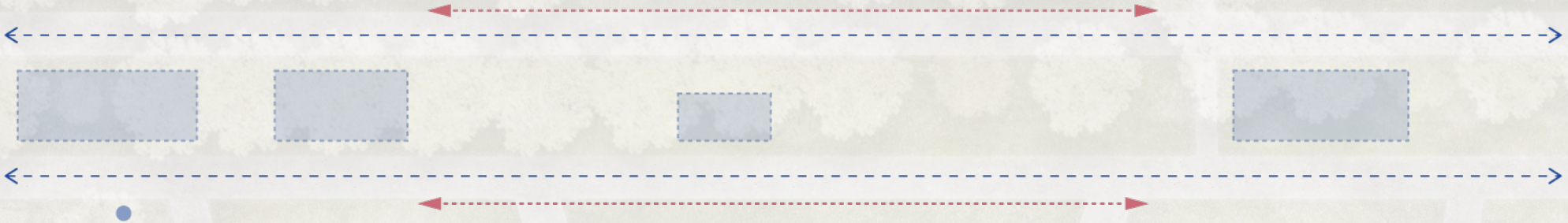
Residential Area

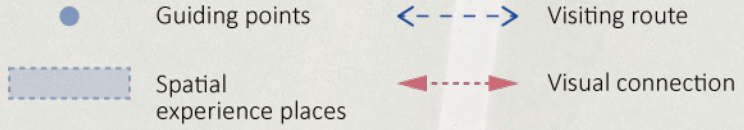


Current Physical and Visual Connection

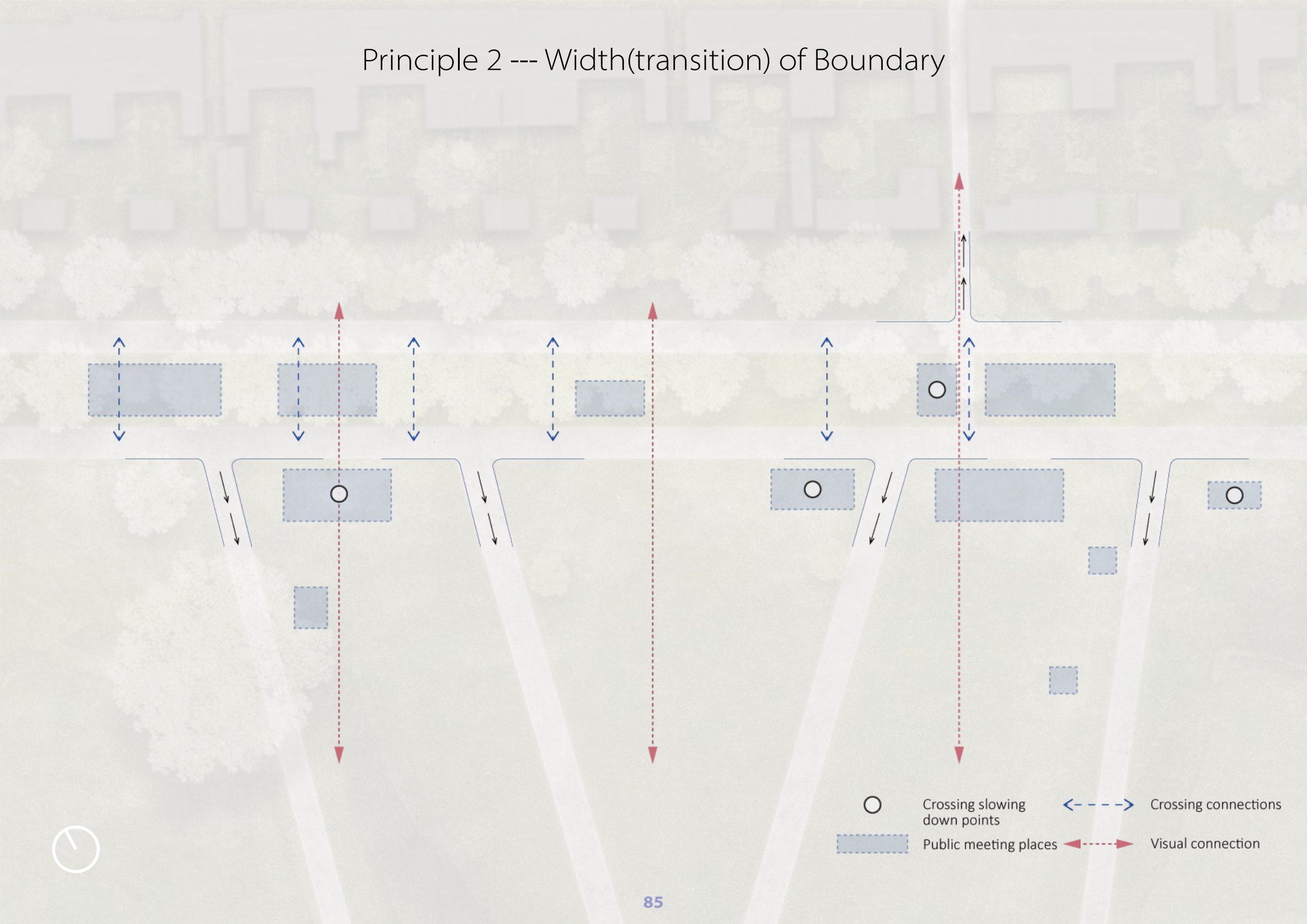


Principle 1 --- Length of Boundary

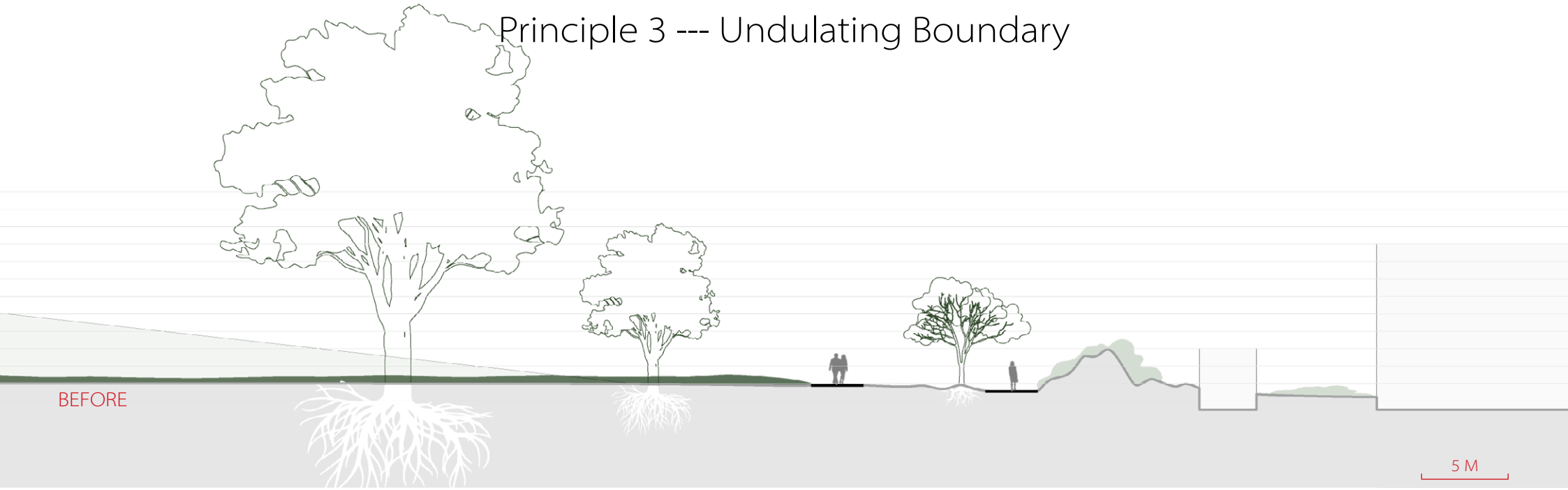




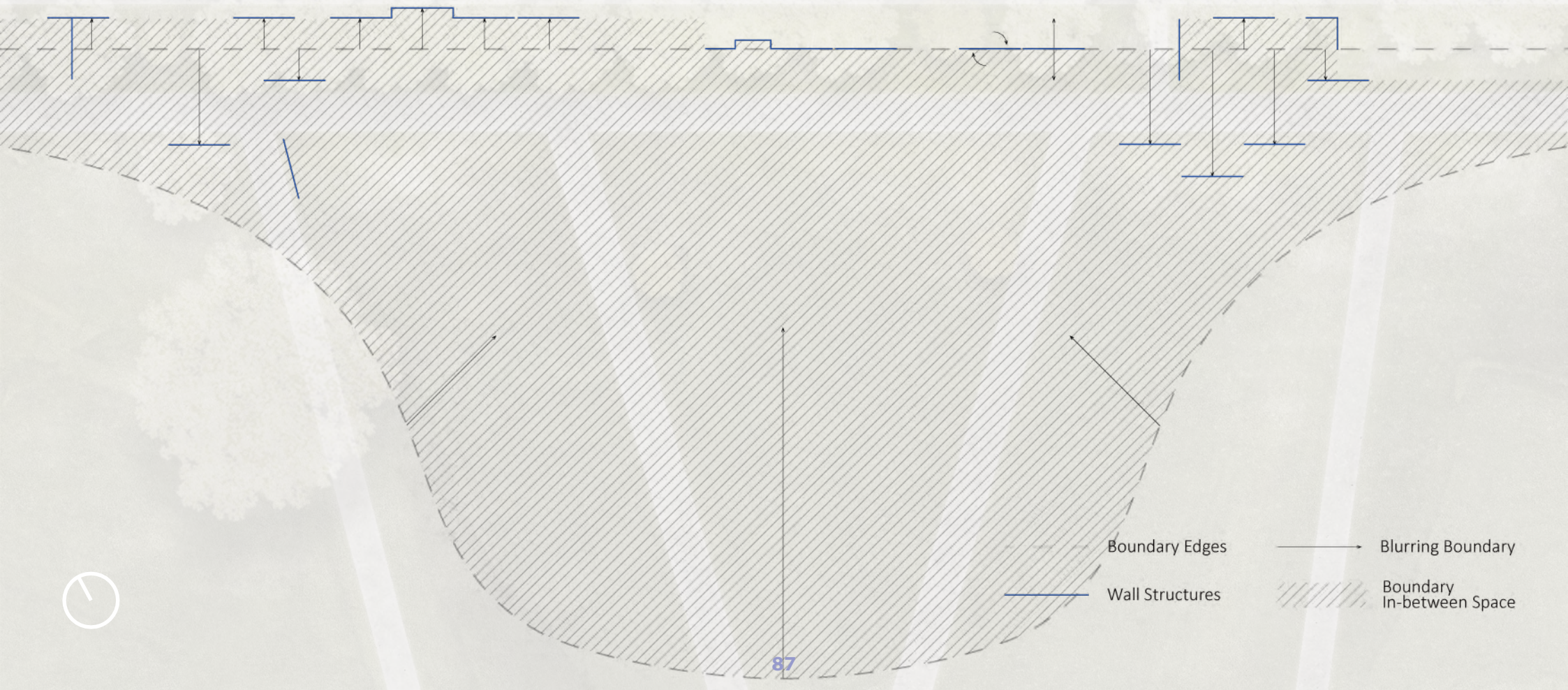
Principle 2 --- Width(transition) of Boundary



Principle 3 --- Undulating Boundary



The 'Boundary'



Interactive Wall Installation
Guiding Wooden Piles
Community Secret Garden
Meeting Points
N
0
5
10M

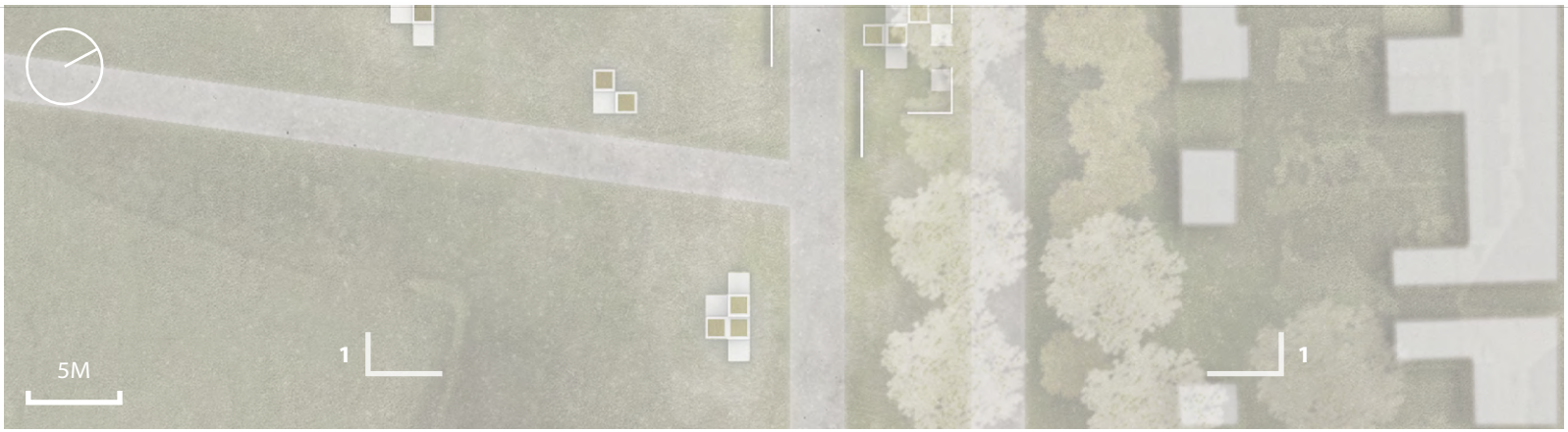
9
8
7
6
5
4
3
2
1
9
8
7
6
5
4
3
2
1
N
0
5
10M

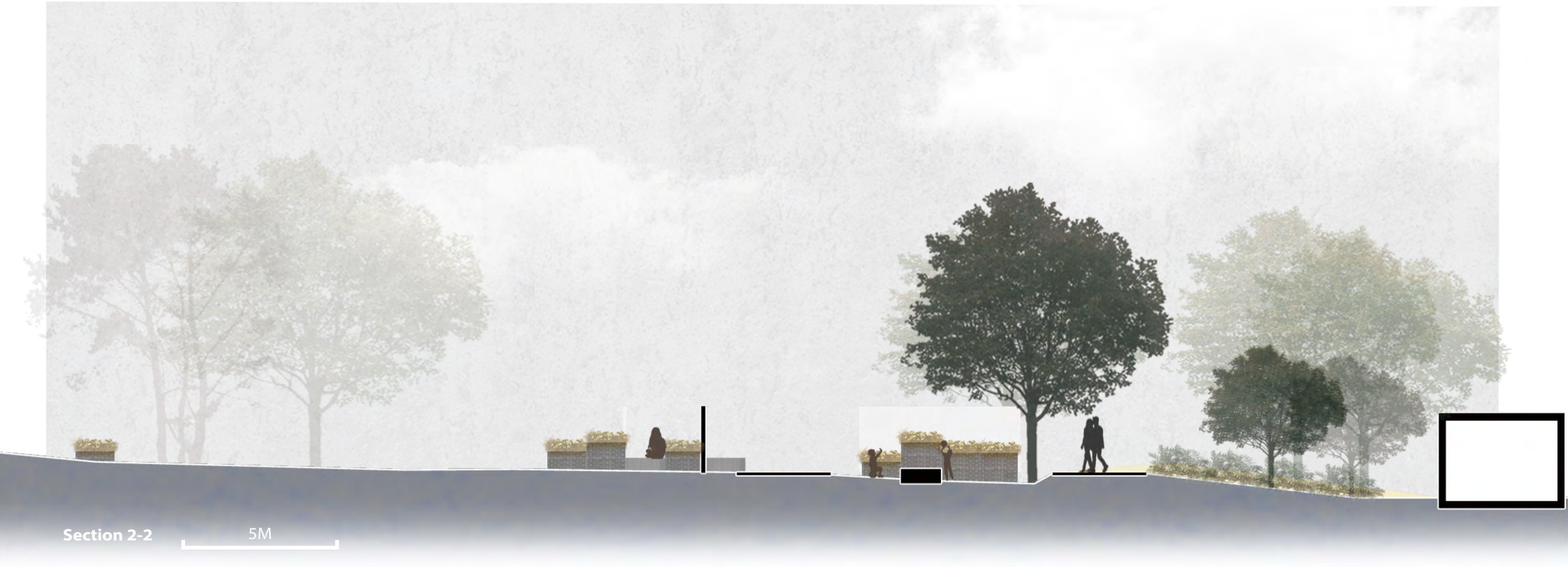
Section 1-1

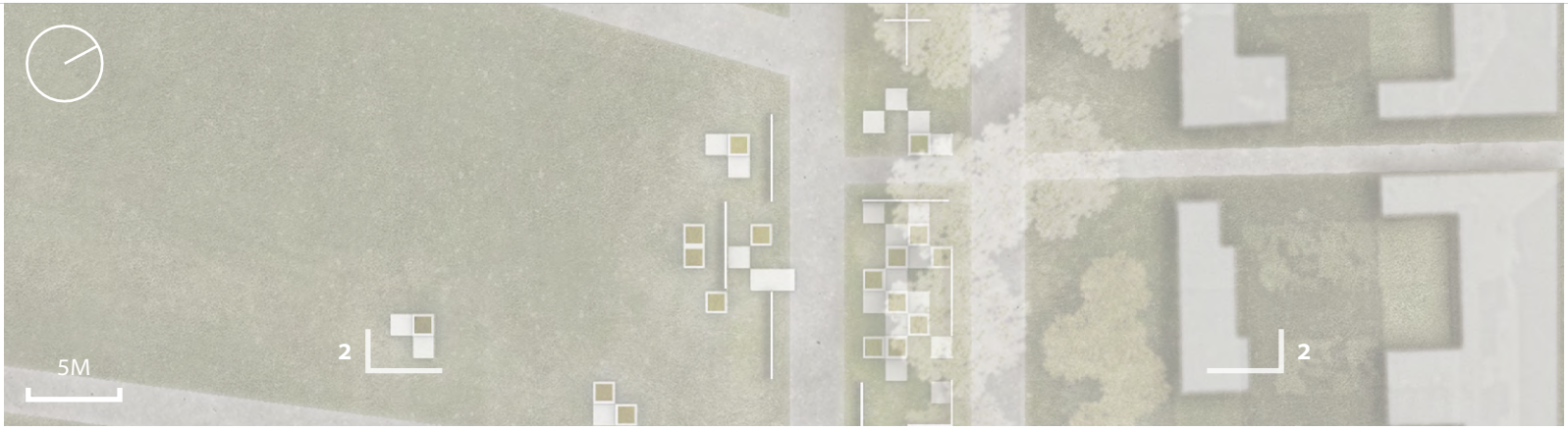
5M

Acer palmatum

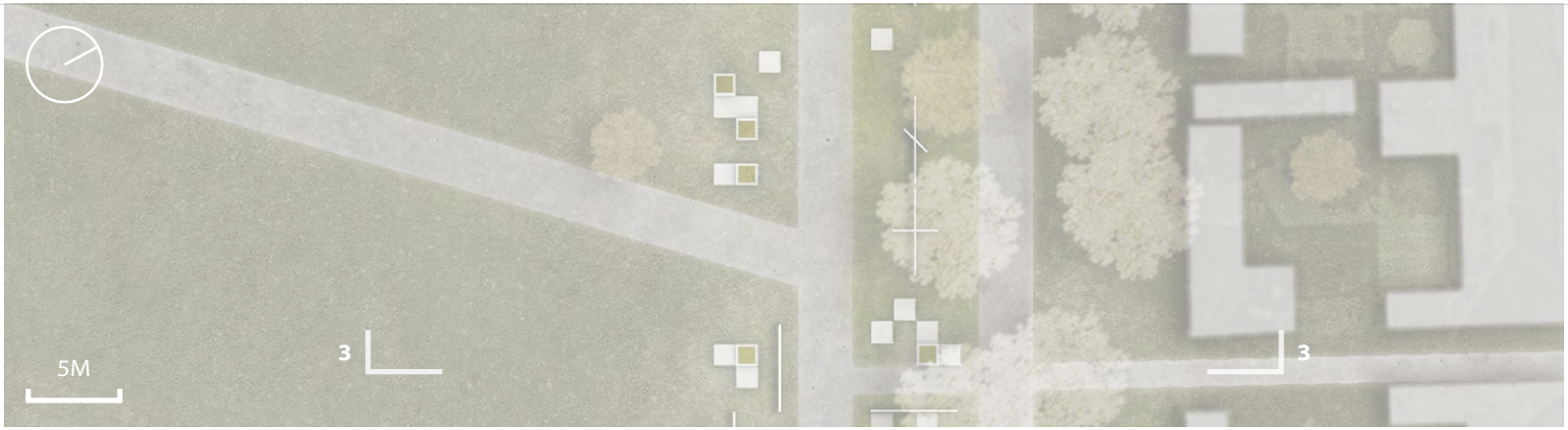
Betula pendula 'Youngii'




Section 2-2
5M


5M
2
2

Section 3-3 5M



Section 4-4
5M

5M
4
4

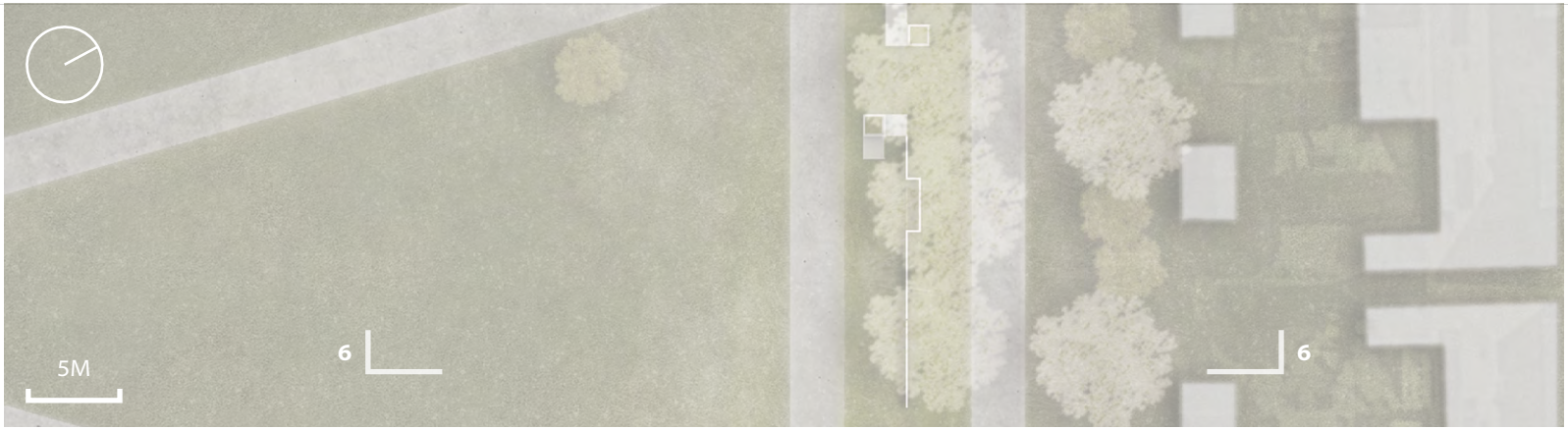
Section 5-5
5M

5M
5
5

Graffiti Painting Wal

Prunus serrulata

Prunus cerasifera 'Nigra'

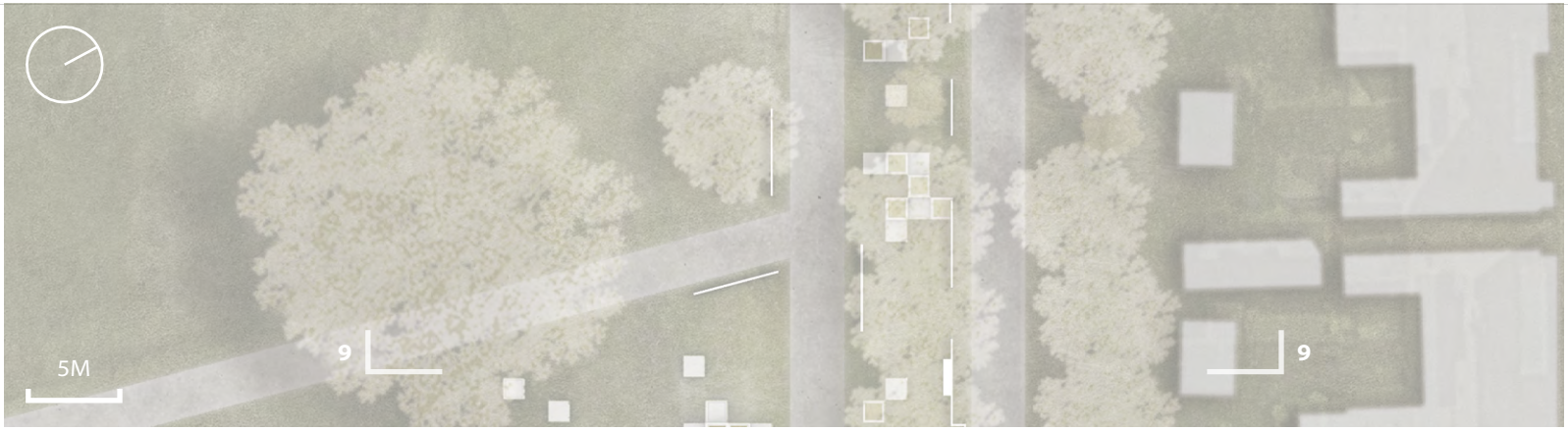


Section 7-7
5M

5M
7
7

Section 8-8 5M

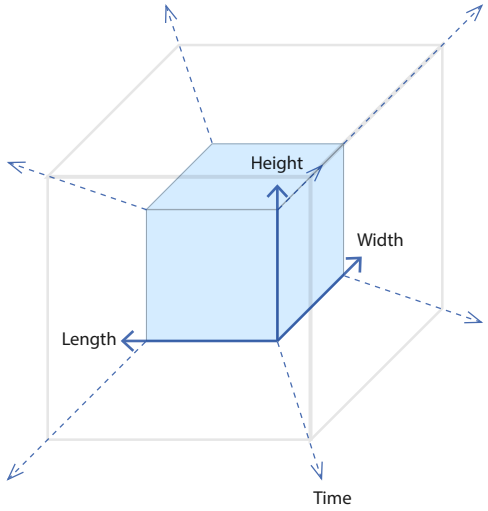
Section 9-9 5M

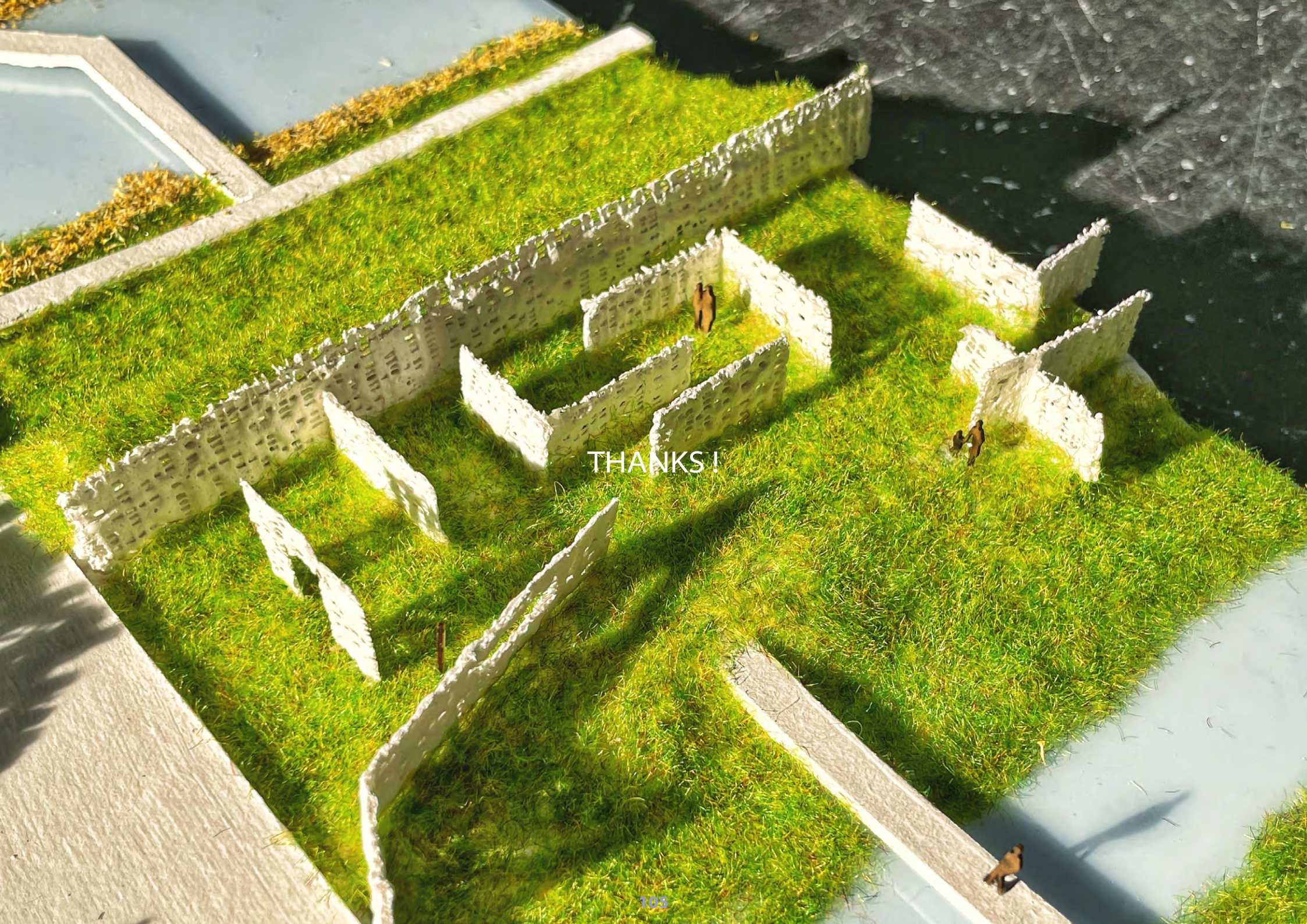


Conclusion and Reflection

--- Research Question ---

How to **reactivate** and develop
a **multi-functional boundary** area and surrounding landscapes
based on the exploration of **spatial** and **temporal continuity**?




THANKS !