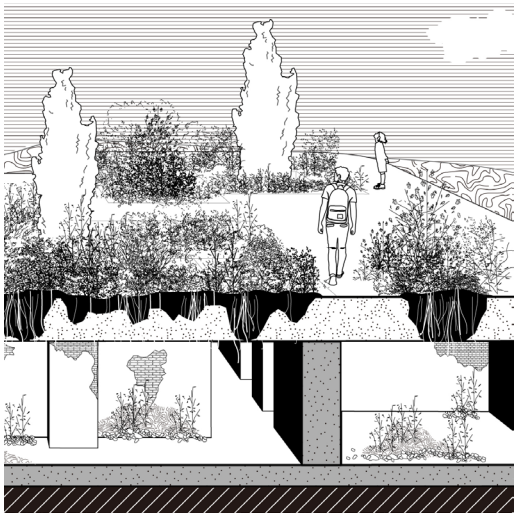
ATLANTIC WALL RUINS: THE REVERIE BEFORE OBLIVION.

Atlantic Wall ruins, history and memory in Den Helder



Landscape Architecture
Graduation Studio 2022 - 2023
Place & Memory

Report

Tutors
Saskia De Wit
Aleksandar Staničić

Student
Borui Xiong (5559537)

TU Delft Faculty of Architecture and the Built Environment

CONTENT

RESEARCH ESSAY

Prologue
- Field trip in Den Helder
- Personal fascination & motivation

Introduction
- Decaying Atlantic wall and evolving Den Helder
- The potential of post-war ruins
- Methodology

Glossary
- Background information
- Values of post-war ruins
- Post-war ruins between transformation and Design

Landscape biography of defence line in Den Helder
- Initial construction of “Stelling Den helder"
- Construction of Atlantic wall during WWII
- Atlantic wall development after the war
- The special character of Atlantic wall in Den Helder

Atlantic wall in modern city
- Atlantic wall Memorial route in Den Haag
- Bunker garden in Saint Nazaire

Values of post-war ruins
- Post-war ruins as unintentional monuments
- Post-war ruins as terrain vague
- Ruinous quality & values

Between ruin and non-ruin
- Intervention approaches for post-war ruins
- Ruin and Non-ruin
- Dealing with fading history and memory
- Intervention principles for post-war ruins

MANIFESTO & CONCEPT

Living dynamics of Atlantic wall ruins
- Post-war ruins in Den Helder
- Manifesto
- The Dune of Atlantic wall ruins
- Non-ruin and ruin complex of Den Helder

Language of Atlantic wall ruins
- Atlantic wall ruins typology
- The terrain
- The crack
- The brick

New walls and Atlantic wall ruins
- Conceptual prototype
- Concrete wall
- Plant wall
- Debris wall
- Gabion wall
- New walls in the dune

DESIGN PROPOSAL

The sleeping ruin - echo with the history(static decay)
- Overview
- Hiden bunker
- Wall Assemble
- Dune terrace

The growing ruin - visualize the decay
- Overview
- The triangle of time
- Bunker 151
- The abandoned wash house

The drifting ruin - decay or reborn
- Overview
- Gabion of ruin

The Inaccessible ruin - unkown beauty

Conclusion&reflection
Bibliography

RESEARCH ESSAY

Introduction

Glossary

Landscape biography of defence line in Den Helder

Atlantic wall in modern city

Values of post-war ruins

Between ruin and non-ruin

Abstract

Post-war ruins as the reverie before complete oblivion

By exploring the intersection between post-war ruins and the city of Den Helder, history and memory, this project will examine the potential of post-war ruins in dealing with the fading history and memory of the past. Based on Pierre Nora's concept of sites of memory (lieux de mémoire), with the landscape biography study of Den Helder's defence line, the research proposes that Atlantic wall ruins, as carriers of history, can become new sites of memory in Den Helder. The design outcome will elaborate a new type of modern memory: experiential memory, which is freshly generated in ruins, based on people's understanding of history, direct experience and spontaneous reflection and subjective imagination.

Based on the notion of landscape palimpsest, Alois Rieg's definition of monument values and case studies related to post-war ruins, this study proposes a design approach that starts with the qualities of ruins, that is to enhance the ruinous qualities during the decaying process and the decaying effect on the surrounding environment. The attention will be paid to the historical function and construction methods of the Atlantic wall ruins, the landscape context, current spatial characteristics, materiality and sustainability.

To sum up, this project promotes a more open attitude towards post-war ruins and accept the fact that things decay and disappear. Ruins are our direct contact with history, therefore participating in the process of decay is our direct memory of the intangible history. This project regards ruins as a process rather than just an object on a physical level. It further explores how landscape components, spatial atmosphere and public participation reveal the value of the ruins and influence the decaying process of ruins. The post-war ruins will be used as a medium to remind people to reflect on the past and look forward.

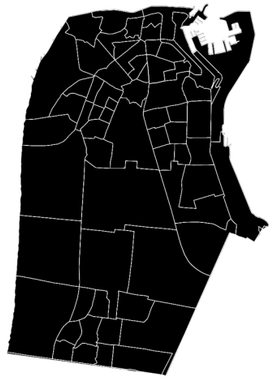
Figure.1 The Last Stand. The gradually sinking Atlantic Wall ruins on the beach (photo from Marc Wilson, 2013)

Pierre Nora, a French historian, introduced the concept of "sites of memory" (Les Lieux de Mémoire). According to Nora, sites of memory are physical or symbolic places where people gather to commemorate or remember important events or figures from the past. He argues that these sites have become increasingly important in modern societies, as they provide a sense of collective identity and continuity in a rapidly changing world. Nora emphasizes the role of memory in shaping national and cultural identities, and sees sites of memory as a way of preserving and transmitting this collective memory to future generations.

The Netherlands

North-Holland Province

Den Helder



The coast

The dune

The neighborhood

The fortresses

Personal fascination and motivation

The Atlantic wall ruins

During our field trip in Den Helder, I was intrigued by the beauty of the Atlantic Wall ruins. The strong concrete and crumbling walls against the backdrop of the soft dunes created a captivating contrast. The tranquility of the surroundings allowed for reflection and contemplation. The city of Den Helder, with its quite and peaceful atmosphere, seemed to echo the presence of the ruins. My preference for the Atlantic Wall ruins in Den Helder starts from this amzing combination of spatial atmosphere.

Retracing my journey in landscape architecture, for me, the charm of the landscape lies in an unknown transformation. I have always been drawn to details such as textures, tiny plants, subtle changes in light and shadow. The landscape is always changing because of environmental influences, plant growth, weather changes, etc. This change, whether it is growth or decay, reveals a fascinating beauty through these subtle details.

These subtle beauty are easily found in ruins, because they are abandoned and untended, allowing plants to grow freely and materials to rot naturally, and many unexpected but overlooked stories are happening in the ruins. When I observed the Atlantic Wall ruins closely, their intricate and diverse textures, the growth and decay of plants, the broken patterns and spatial components all led me to have a more profound feeling towards the past of this place. These bunker ruins in the dunes seem to tell me more about the past than the exhibits in the Fortress Museum.

Therefore I also wish that the echoes of the Atlantic Wall ruins would be heard and the beauty of the ruins would be sensed by more people.

Atlantic wall

The Atlantic Wall was a coastal defence system built by Nazi Germany between 1942 and 1944 to defend against an anticipated Allied invasion of Nazi-occupied Europe from the United Kingdom during World War II. This defence system runs along the coast of several European countries facing the Atlantic Ocean, from the northern tip of Norway to the border of Spain and Portugal.The system was about 4,300 km long and included thousands of individual fortifications.The fortifications included colossal coastal guns, batteries, mortars, and artillery, and thousands of German troops were stationed in its defences. (Kaufmann, 2012, p.12,)

Den Helder as a military-defence city

Den Helder is located in the northern part of the North Holland province. Surrounded by sea, it has a rich history, especially the war history due to its special location. Den Helder suffered badly during World War II as it was an important part of the Atlantic Wall. A total of 88 sturdy bunkers were built in Den Helder as part of the Atlantic Wall, some of which still remain today.

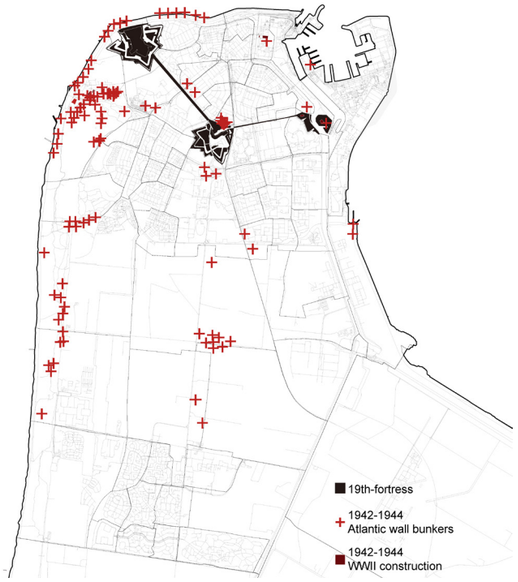
Even before the Second World War, Den Helder served as a military defence site for a long time. Den Helder had an old defense line that was built in the 19th century to protect the naval base and the access to the North Sea. This defense line included several forts and batteries, such as Fort Kijkduin and Fort Erfprins. During the Second World War, the Germans occupied the Netherlands and built the Atlantic Wall. They incorporated the existing fortifications into the Atlantic Wall system and added new bunkers, anti-aircraft batteries, and other defensive structures.

After the war, many of the Atlantic wall fortifications were demolished or removed. But in Den Helder, due to its relationship with the old defence line, some were preserved and are now open to the public as museums or historical sites, like the Fort Kijkduin.

Atlantic wall defense system across the Europe

North Holland province, the Netherlands

Military defence system in Den Helder



Kaufmann, J. E. The Atlantic Wall: History and Guide. Pen & Sword Military, 2012.
“Geschiedenis.” Stelling Den Helder, 24 Nov. 2021, stellingdenhelder.nl/geschiedenis/.

Nowadays, there are a lot of bunker ruins scattering throughout Den Helder. They mainly belong to the "newly" built Atlantic wall, which was not built based on the old defence line system.

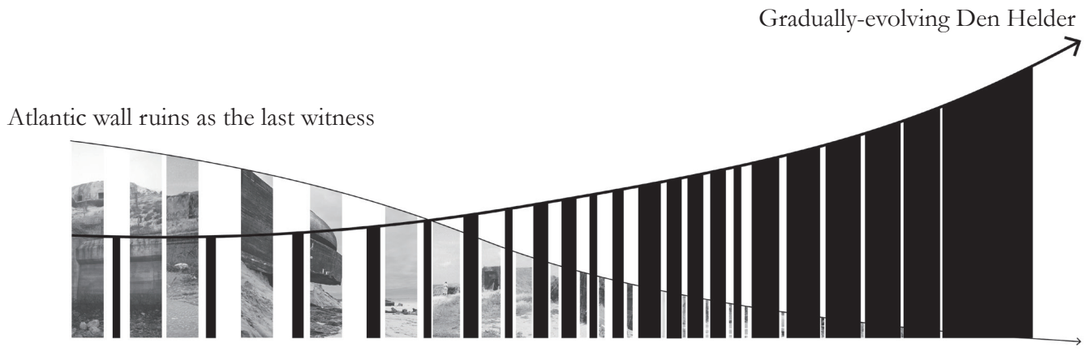
On one hand, Den Helder has been evolving since the war ended, leaving less space for these “useless” ruins. How these ruins will exist in the increasingly diverse urban context is a thorny question. These bunkers possess an internal location to the current city yet external to modern society. Their complex historical background makes them a heterogeneous, controversial, or even traumatic element in the gradually-crowded city.

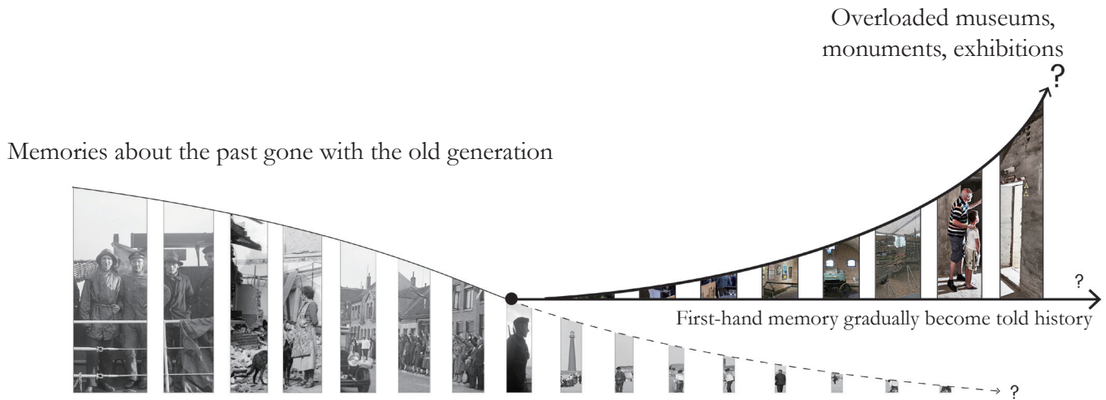
On the other hand, Atlantic Wall ruins are the physical remnants of the controversial history and inaccessible memory. They indeed reveal history, which, whether glorious or traumatic, is always an undeniable part of Den Helder. Because the generation that actually experienced war is aging, memories of this distant past are fading away. For the new generation, who do not obtain direct experience with the historical events, the ruins therefore no longer represent pain or guilt, but curiosity or excitement. They do not experience the historic events in person, so it's hard for young people to understand and empathise with it. The history carried by these ruinous bunkers is likely to be overwhelmed. This situation prevents them from reflecting further on the history, thus losing this part of indirect memory which is already incomplete.

After WWII, an increasing number of memorial projects appeared, such as museums, monuments, parks, ‘Gedenksteine’, etc. All these memorial projects show the effort to preserve and archive the past events. However, the overloaded memorial landscape does not seem to succeed in eliciting public empathy for the past events.

Especially for people who have never been through war, these memorial approaches seem to be in vain (Schofield, 2011). Memories of the historical events seem to have lapsed with people who had actually been through it. The neglect of the intrinsic value of such heterogeneous spaces like Atlantic wall ruins can further lead to oblivion and disappearance of Den Helder's layered history and landscape context.

From a more long-term perspective, as interactions between people and cities constantly evolve, palimpsest layers keep growing with it, generating new ruins as well. Many valuable ruins are perceived as ugly and should be replaced with something new. Meanwhile, some people are obsessed with archiving, resulting in a meaningless storage of overloaded information. These opposite approaches are both not efficient in dealing with the fading history and memory. They only foster a meaningless quest for something new and beautiful and produce an endless succession of ruins. **Without a wise and sustainable way of dealing with these continually accumulating ruins, could it mean that the past has been completely forgotten by the time the ruins are completely gone; or does it mean a mindless storage of ruins as an illusion of rendering disappeared memories traceable.**





Schofield, Hugh. “Hitler's Atlantic Wall: Should France Preserve It?” BBC News, BBC, 13 Sept. 2011, https://www.bbc.com/news/world-europe-10632543.

This research examines the potential of Atlantic wall ruins in articulating history, generating fresh memory and challenging the negative attitude towards these ruins. Rather than searching for new identities and functions for Atlantic wall ruins that enable the ruins to fit into the modern city context, this research explores how these ruinous qualities will enable history and memory reveal themselves in-between the ruins. This research is guided by the following main question:

How to reveal the value of post-war ruins in modern society while maintaining their ruinous qualities?

That means fully utilising the qualities of the ruins themselves to reflect their value, rather than giving them new values through new constructions, so that the ruins will be accepted in the modern city and society, and their beauty and meaning will be appreciated.

The following sub-questions are expected to clarify the history background and complex relationship between Den helder and Atlantic wall ruins. They also explain the value and unique spatial qualities of ruins, providing theoretical support and guidance for subsequent design approaches.

1 - What is the relationship between the Atlantic Wall and Den Helder? What is the condition of the Atlantic Wall ruins in other modern cities?

Den Helder has been served as a major naval base for a long time and was fortified with bunkers, artillery, and other defensive structures along its coastline.

The Atlantic Wall is part of this fortification system and investigating the relationship between them helps to understand the Atlantic Wall with the local historical and cultural context.

2 - What values can be ascribed to post-war ruins? What kind of ruinous qualities can contain these values? How do these values deal with the disappearance of history and memory?

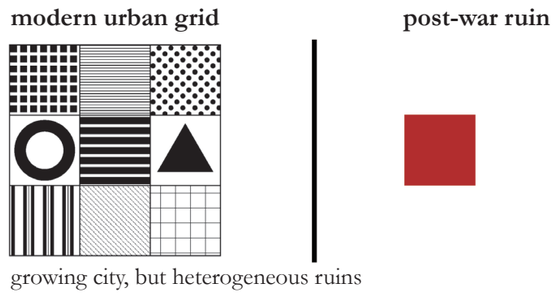
Nowadays, post-war ruins possess different values now due to the particularities of their historical context. So the study into the value of the post-war ruins helps to understand why the post-war ruins are in opposite conditions and helps to figure out the position of the Atlantic Wall ruins in Den Helder when dealing with the fading history and memory.

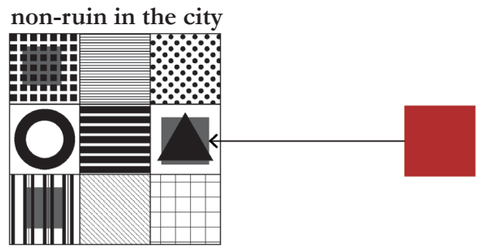
3 - What are the potential interventions for ruins to embody their values and ruinous qualities? What impact will these interventions have on the Ruins?

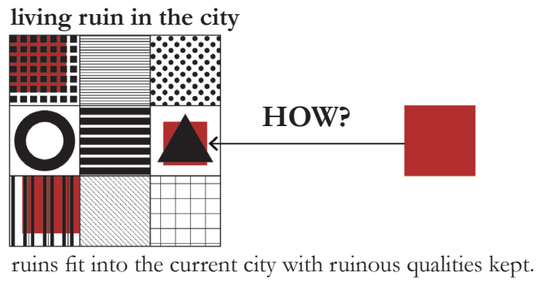
Examining the different intervention approaches and their impact on the subsequent transformation of post-war ruins helps to find a balance between the original ruins and the 'new ruins' that emerge from the interventions.

4 - What are the post-war ruins and non-ruins respectively? What are the pros and cons respectively?

The dialectic between ruin and non-ruin helps to find the appropriate narrative to fit the Atlantic Wall ruins into Den Helder and helps to further evaluate the values of the Atlantic Wall ruins in Den Helder and their impact on the city.



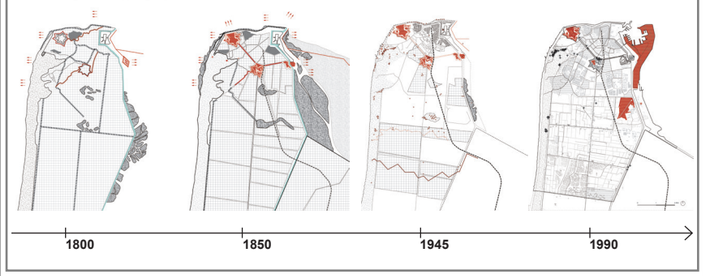




RESEARCH

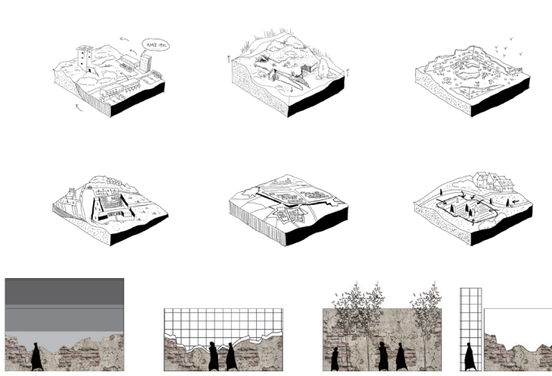
Field research

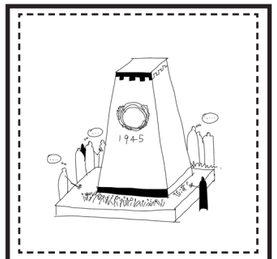
Landscape Biography



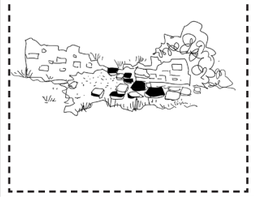
Theory background

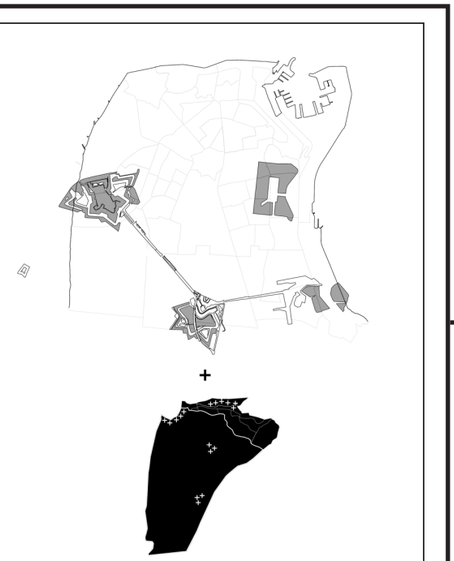
Argumentation





Non-ruin
or
Ruin





FASCINATION — PROBLEMS — POSTION — PRINCIPLES — DIALECTICS — MANIFESTO — CONCEPT

EVALUATE

DESIGN PROPOSAL

BACKGROUND INFORMATION

DEN HELDER

Den Helder is a city located in the province of North Holland, Netherlands. It is situated at the northernmost point of the mainland and is known for its strategic coastal position. It has a long history as the Dutch naval base and famous for its old defence system, which was built by order of Napoleon. During WWII, Den Helder was occupied for the construction of Atlantic wall. The city of Den Helder has expanded a lot since the war and now there are three major communities. Its natural beauty is characterised by the coast and dunes.

DEFENCE LINE

In general, a defence line or fortification line is a geographically-recognizable line of troops and armament, fortified and set up to protect a high-value location or defend territory.

In Den Helder, the defence line, also known as the " Stelling Den Helder", mainly consists of the fortress of the 19th century ordered by Napoleon, such as Fort Erfprins and Fort Kijkduin, strategically positioned to defend the city's harbor and entrance to the North Sea. Today, these 19th-century fortresses and defensive structures in Den Helder are often preserved as historical landmarks and tourist attractions. Visitors can explore the well-preserved fortifications, learn about the history of the defence system of Den Helder.

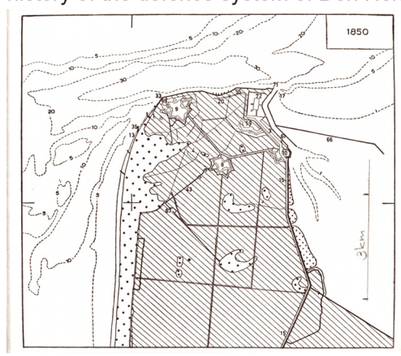


Figure.2 Den Helder in 1850. The defence line (stelling Den Helder) ordered by Napoleon was almost completed in 1850. (image from Regionaal Archief Alkmaar, 1952)

ATLANTIC WALL

The Atlantic Wall was an extensive coastal defense system constructed by Nazi Germany during World War II. It was built between 1942 and 1944 along the coast of continental Europe and Scandinavia to defend against an anticipated Allied invasion from the United Kingdom. The fortifications included coastal guns, batteries, and thousands of German troops. The construction of the wall was ordered by Hitler and involved over half a million French workers. Today, remnants of the Atlantic Wall can still be found in the countries where it was built. (Kaufmann, 2012, p.12)

Figure.3&4 Atlantic wall. Atlantic wall bunkers in Den helder during WWII. Most of them were situated in the dune and coastal line. (Photo from Fritis Lamberts, 1943)

POST-WAR RUINS

Post-war ruins refer to the physical remnants of buildings, infrastructure, or structures that were damaged, destroyed, or left abandoned in the aftermath of a war. Post-war ruins can take various forms, such as damaged buildings, partially destroyed landmarks or abandoned former military installations. Post-war ruins have value and meaning in many aspects, such as: architecture, history, collective memory, culture, etc. Due to its special historical context, renewal interventions for post-war ruins are often controversial.

Nowadays, in Den Helder, the post-war ruins mainly consist of scattered Atlantic Wall bunkers. Most of the 19th century fortresses have been repurposed and refurbished so that they are no longer the original ruins it once were.

Figure.5 Post-war ruin of Den Helder.In 1941, destroyed buildings in Den Helder during WWII. (Photo from Regionaal Archief Alkmaar, 1941).

ATLANTIC WALL RUIN

In this research, Atlantic Wall ruins refer to the physical presence of the remnants of the Atlantic Wall bunker at this present time. After half a century of abandonment and neglect, some of these ruins may have partially collapsed or been reclaimed by nature, with vegetation and sand engulfing the once imposing structures. Unlike the Atlantic Wall bunkers that have been repurposed as museums or monuments, the ruins are left unattended. Nowadays, the unattended and open nature of these ruins allows for a more immersive and creative exploration. The rugged and weathered appearance of the ruins adds to their visual intrigue and evokes a sense of historical weight.

Figure. 6 Atlantic wall ruin in Den Helder. Collapsed underground bunker in the Grafelijkheids dune of Den Helder. (Photo from BoruiXiong, 2023).

ATLANTIC WALL NON-RUIN

Atlantic Wall Non-Ruin refers to structures or elements associated with the Atlantic Wall that have not fallen into a state of decay or been abandoned. These non-ruins include bunkers, fortifications, or other architectural features that have been preserved, renovated, or repurposed to meet the current demands. Non-ruins are actively maintained, protected, and often serve as museums, monuments, or tourist attractions. They may have undergone restoration or adaptive reuse to showcase their historical significance, modern functions and provide insights into the military defenses of Den Helder.

Figure. 7 Atlantic wall non-ruin in Den Helder. Well-maintained Fort Kijkduin, used as museums. (Photo from BoruiXiong, 2023).

Kaufmann, J. E. The Atlantic Wall: History and Guide. Pen & Sword Military, 2012.

VALUES OF POST-WAR RUINS

Monuments were originally created to preserve important human deeds or events for future generations. The Modern Cult of Monuments: Its Character and Origin' (1903), by Rigel, describes three categories of monuments, their values, and development in modern times. Post-war ruins can be regarded as unintentional monument.

INTENTIONAL MONUMENT

Intentional monuments are created with the explicit purpose of commemorating or preserving a particular moment or event in the consciousness of future generations.

Figure. 8 Statue of Liberty.Statue of Liberty is a colossal neoclassical sculpture on Liberty Island in New York City. It is seen as an icon of freedom and a symbol of welcome to immigrants arriving by sea. (photo from Yunan, 2019)

UNINTENTIONAL MONUMENT

Unintentional monument refers to a structure, site, or object that becomes a symbol or representation of historical, cultural, or social significance without originally being intended as such(Riegl, 1903, p.3). Unintentional monuments emerge organically over time through a collective recognition of their importance.

Figure. 9 Atlantic wall in Den Haag. Although been abandoned for over half a century, it can remind people of the war time. (photo from Borui Xiong, 2023)

AGE-VALUE MONUMENT

Age-value monuments, as described by Riegl, are characterized by the significance attached to their antiquity or the passage of time. These monuments derive their value from their age and the historical context they represent. The visible appearance and physical condition of the monument often reflect its age.

Figure. 10 Colosseum. The Colosseum is an elliptical amphitheatre in the centre of the city of Rome, Italy. It has a long history of almost 2000 years. (photo from Alessandroferri, 2008)

TERRAIN VAGUE

Terrain vague is a concept from Ignasi de Solà-Morales i Rubió. It refers to a concept used in urban planning and architecture to describe transitional or undefined spaces within a city or urban environment. Terrain vague often refers to areas that are neglected, abandoned, or undeveloped, lacking a clear purpose or designated use. Terrain vague spaces often arise as a result of urban decay, economic changes, or shifting urban dynamics. These spaces can be found between buildings, along waterfronts, in vacant lots, or in the periphery of urban areas.

Terrain vague are characterized by their ambiguous nature and lack of specific function, allowing for a degree of flexibility and potential for adaptation. They can become spaces for artistic expression, community engagement, or innovative design, offering a unique contrast to the more structured and planned aspects of the cityscape.

HISTORICAL VALUE

Historical value refers to the significance or importance of an object in relation to the past. It is based on its association with historical events, individuals, or periods.

AGE VALUE

Age value means the significance attached to the age or antiquity of an object. It denotes the value derived from the artifact's historical context, visible appearance, and physical condition, which reflect the passage of time.

ART VALUE

Art value refers to the aesthetic or artistic qualities of an object.It encompasses factors such as creativity, beauty, craftsmanship, innovation, and artistic expression. However, Art value is often subjective and varies based on cultural, historical, and individual perspectives.

USE VALUE

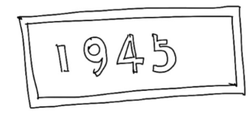
Use value denotes the practical or functional utility of an object. It is embodied in the modern context, refering to the usefulness or benefits it provides to individuals or communities. Use value can vary depending on the purpose, context, and intended function of the artifact.

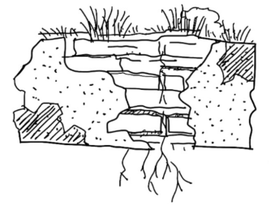
CULTURAL VALUE

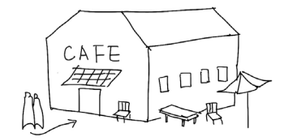
Cultural value refers to the significance and meaning of an object within a particular culture group or society. Cultural value is relative and has a highly local character.

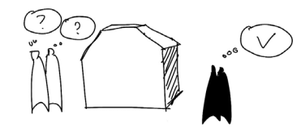
SOCIAL VALUE

Social value refers to the impact or benefits that an object has on society and its members at present. Social values are generated in the interaction between an object and its surroundings, and this interactive process can be either obviously visible or invisible.









POST-WAR RUINS BETWEEN TRANSFORMATION AND DESIGN

PRESERVATION
Preservation refers to the act of protecting and maintaining something in its existing state, particularly with regards to cultural heritage and historic sites. It involves the careful maintenance, conservation, and safeguarding of structures, artifacts, or areas of significance to prevent deterioration or loss.

RESTORATION
Restoration involves the process of returning something to its original or intended condition. In the context of ruins, restoration focuses on repairing and rebuilding deteriorated or damaged elements of a structure or site.

REUSE
Reuse refers to the adaptation or repurposing of an existing structure or site for a different function or use than its original purpose. It is a subsequent extension of preservation and restoration. Because of preservation and restoration, the reuse of ruins can be realized. Reusing a ruin involves finding new functions for abandoned or neglected structures, which are often in a relatively good condition and suitable for use without too much new constructions.

TRANSFORMATION
Transformation is highly related with time. It is more of a process than a one-time approach. (Braae, 2015, p. 288) Transformation does not start entirely from a blank sheet of paper, but mostly extract and process what is already on the palimpsest to create a new context, a new understanding and reflection between ruin and the modern city.

DESIGN
All the above four methods belongs to the catalogue of Design. But design in a traditional sense refers to creating something new, it seldom "look backward", but always look forward in terms of time dimension(Braae, 2015, p. 289). When dealing with ruins, design in a traditional meaning focuses more on creating something new that might overweigh the original ruin.

SITE OF MEMORY
Site of memory(French: A lieu de mémoire) is a term used in heritage and collective memory studies popularised by the French historian Pierre Nora. Site of memory can be locations, both physical and symbolic, that hold significance in the collective memory of a society. These sites can be natural or artificial and range from tangible places like archives and monuments to intangible concepts like rituals and commemorative actions(Nora, 1996, p.19).

HISTORY
The study and interpretation of past events, particularly those involving human societies. According to Nora, history refers to the objective and factual accounts of past events, reconstructed through research, analysis, and documentation(Nora, 1996, p.10).. History is a discipline that aims to establish an accurate and comprehensive understanding of the past based on evidence and critical inquiry.

TRUE MEMORY
Memory is a living phenomenon that evolves and is influenced by remembering, forgetting, and manipulation. It is affective, magical, and subjective, tied to specific groups and individuals. Nora defines true memory as authentic, lived experiences and recollections of individuals and communities. It is the subjective and personal remembrance of events, emotions, and impressions that contribute to the formation of an individual's identity and understanding of the past. It is the lived experience and interpretation of historical events that are passed down and preserved through generations.

True memory is a vital component in the process of remembering and constructing a comprehensive understanding of history(Nora, 1996, p.15).. While official historical narratives tend to focus on significant events, dates, and figures, true memory delves into the everyday lives, emotions, and personal stories of people who may have been overlooked or marginalized in traditional historiography.

MODERN MEMORY
Nowadays, memory is no longer the true memory, but comes from indirect sources. Therefore, modern memory can be regarded as history, which relies on material records and external support (Nora, 1996, p.8). In this aspect, the modern memory is the same as history, that can also be reconstructed and reproduced. Pierre therefore proposes three forms of modern memory, that is archival memory, duty memory and distance memory.

Archival-memory refers to the collective memory that is preserved and documented in archival records, such as documents, photographs, and audio and video recordings (Nora, 1996, p.13).

Duty-memory highlights the responsibility and obligation individuals and communities feel towards remembering and preserving their own history.(Nora, 1996, p.15).

Distance-memory, as described by Pierre Nora, is a term that refers to our contemporary relationship with the past (Nora, 1996, p.16). It highlights a significant shift from the traditional understanding of memory as a continuous and retrievable entity to a fragmented and elusive one. In distance-memory, there is an emphasis on the discontinuity and disconnection between the present and the past.

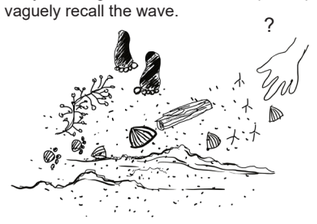
EXPERIENTIAL MEMORY
Based on the above notions about history and memory, this study aims to put up a new category of the modern memory, called experiential memory. It represents a contemporary approach to understanding history that values personal experiences, encourages active engagement, stimulates imagination and creativity, and aims to strengthen the relationship between history and the contemporary city. During the interaction, a dynamic and inclusive perspective on the past will be formed, enabling individuals to forge meaningful connections with history and shape their own narratives of the past and future.

sand brought by wind

wave comes

sand pattern changed by wave, covered by shells, stones.....

somebody walking on the beach and pick up the shell, vaguely recall the wave.



dive into the wave, feel it, although it is not the same as the previous one.

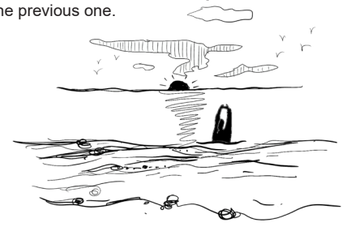


Figure. 11 Den Helder in 1694. Map of Den Helder in 1649, with a National naval port. (image from Rijkswaterstaat collection, 1955)

1781
The transformation of the channel “het Nieuwe Diep” into a war port was started, and three coastal batteries were built.

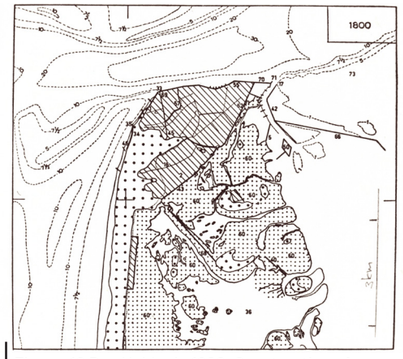


Figure. 12 Den Helder in 1800. Construction of military defence on the east side. (image from collectie Regionaal Archief Alkmaar, 1952)

1800
After the English occupation, the Dutch began to construct a wall around the Oude Helder, and various smaller works were built for defense purposes.

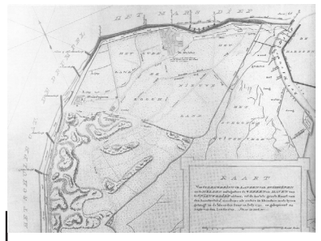


Figure. 13 Den Helder in 1811. City grid before the construction of defence line. (image from Pieter de Nijs, 1811)

1811
Napoleon visit Den Helder

Napoleon Bonaparte ordered the construction of the Defence Line Den Helder(stelling Den Helder), which turned the village into a heavily fortified fortress system.

Figure. 17 Den Helder in 1814. Defence line consists of Fort Kijkduin, Fort Erfprins, Fort Dirks Admiraal , Huisduinen, Den Helder and the Willemsoord a. (image from Regionaal Archief Alkmaar.1814).

1814 in construction

The Koegras polder and North Holland Canal, Fort Oostoever and Fort Westoever built for harbor defence are all in construction.

Figure. 18 Den Helder in 1864. The Willemsoord complex was mostly formed, with some of the dockyards and workshops already completed. (image from Noord-Hollands Archief,1864).

1822 Willemsoord

Willemsoord was also part of the maritime defence project ordered by Napoleon. Construction began in 1822 and continued to be reinforced until 1866.

Figure. 19 Den Helder, 1850. The defence line was formed

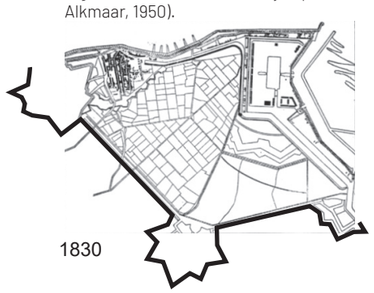
1835-1900
Defence line reinforced constantly

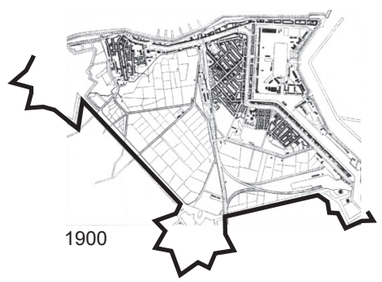
Improvements made in defense of Den Helder, including installation of modern artillery and construction of fortified positions under the Vestingwet, which regulated the defence of the country against enemy attacks. Every existing fort and position was reinforced and new works were built.

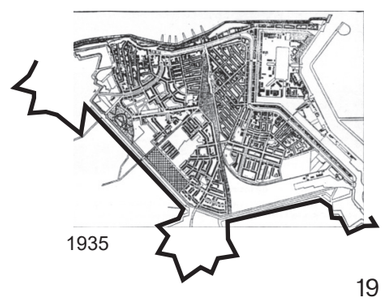
Figure. 14-16 Three fortress in 1812. Construction of fortresses and the surrounding villages. (Collection from Regionaal Archief Alkmaar, 1812).

1830 - 1935 Old Den Helder expansion

Figure. 20-22 Den Helder city expansion. The urban area of Den Helder expands towards the defence line(Collection from Regionaal Archief Alkmaar, 1950).







“Geschiedenis.” Stelling Den Helder, 24 Nov. 2021, stellingdenhelder.nl/geschiedenis/.

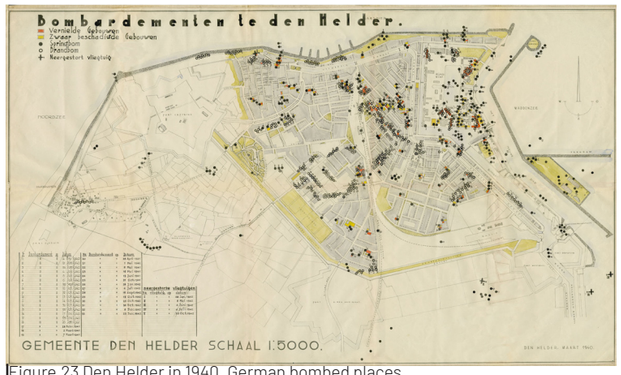


Figure.23 Den Helder in 1940. German bombed places. (Collection from Regionaal Archief Alkmaar, 1940).

1940 WWII: German invasion

May 10, 1940, German forces invaded the Netherlands and occupied Den Helder.

Figure.24-27 Den Helder during WWII. Den Helder was heavily destroyed by bombing in WWII. (Collection from Regionaal Archief Alkmaar, 1944)

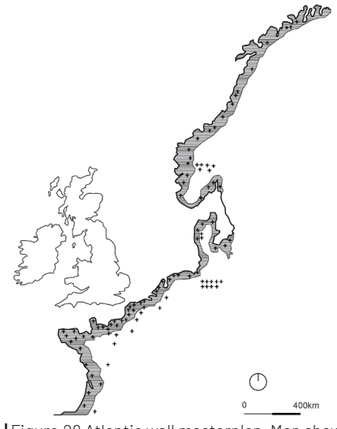


Figure.28 Atlantic wall masterplan. Map showing fortified areas of the Atlantic wall system. (information from Rose et al. (2002))

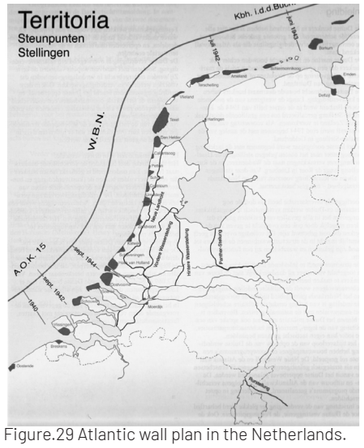


Figure.29 Atlantic wall plan in the Netherlands. Atlantic Wall construction sites in the Netherlands. (image from Rolf, Bunkers in the Netherlands,2005)

Figure.30 Atlantic Wall in Den Helder. Defence area and sites of the Atlantic wall covers almost the entire Den Helder in 1942. (image from Atlantikwall Centrum, 1942)

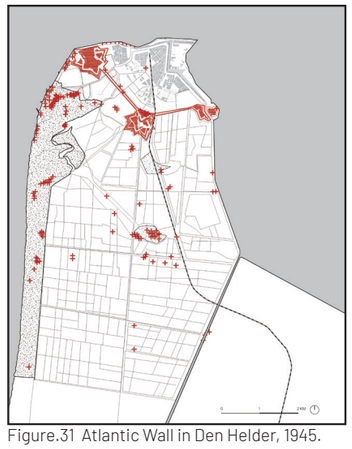


Figure.31 Atlantic Wall in Den Helder, 1945. Atlantic wall was constructed around Den Helder.

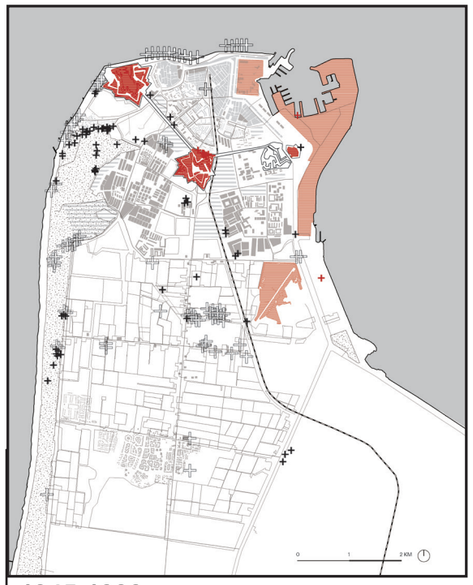
1942-1945
construction of Atlantic Wall

1942-1943
German forces construct a series of bunkers and coastal batteries in the area around Den Helder as part of the Atlantic Wall. These defences are designed to prevent an Allied invasion of the Netherlands. In 1942, the German defence line border was moved to the south, making Julianadorp part of the Atlantic Wall.

1943
German forces increase their fortifications in Den Helder, constructing more bunkers and defences. The city became an important naval base for the German navy.

Figure.32-43 Atlantic wall bunkers in Den helder during WWII. Most of them were situated in the dune and coastal line. (photo from Fritis Lamberts, 1943)

"Geschiedenis." Stelling Den Helder, 24 Nov. 2021, stellingdenhelder.nl/geschiedenis/.



The Atlantic Wall was built to seal off Festung Europa, but it failed to prevent the Allied invasion of Normandy on June 6, 1944. After the war, the demolition and removal of bunkers and fortifications started shortly after the war, with hundreds of thousands of mines cleared from the beaches, the sea, and the dunes. The bunkers were also used as emergency housing during the reconstruction years.

After the war, a few bunkers that were in good condition served as training grounds for the navy in Den Helder. Still today, the fort Erfprins are used by the navy.

In the 1960s, many bunkers on the Zeeland and South Holland islands were demolished because they were seen as a threat to the safety of the coast and dune.

In 1980, the majority of the naval base was relocated to the new harbour on the east side of Den Helder. The old defence lines are gradually out of use.

1945-1990
Liberation & Demolition of Atlantic Wall

Figure. 44 Kroontjesbunker being repaired, 1960. (photo from Flak Gruko, 1960)

Figure. 45 Kroontjesbunker used as training field by navy, 1965 (photo fromFlak Gruko,1965)

Figure. 46 Kroontjesbunker used as training field for scouts, 1978 (photo from Flak Gruko, 1978)

Figure. 47 Atlantic wall center in Den Helder on fire in 2009, (photo from stelling denhelder, 2009)

Figure. 48 newspaper about removing the bunkers in the dune. (Collection from Regionaal Archief Alkmaar, 1958)

1945- 1980 after war reconstruction

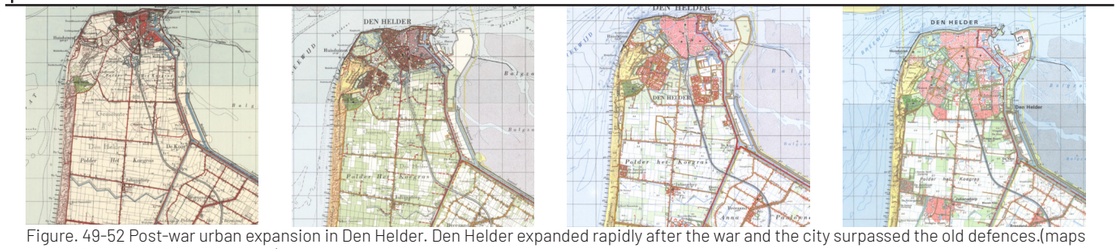
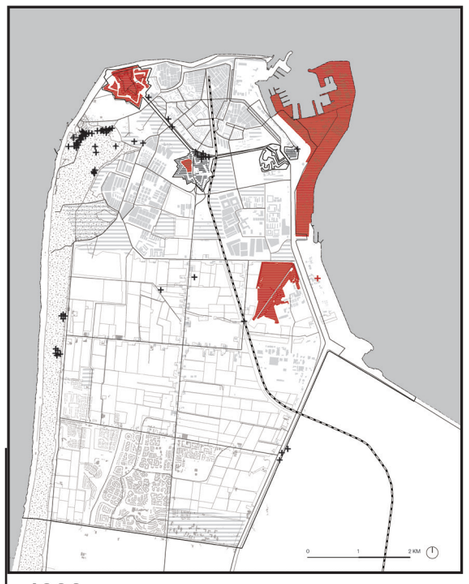


Figure. 49-52 Post-war urban expansion in Den Helder. Den Helder expanded rapidly after the war and the city surpassed the old defences.(maps from https://www.topotijdreis.nl/)

The above information are summarized from: “History of the Atlantic Wall.” Holland, geschiedenisvanzuidholland.nl/verhalen/verhalen/history-of-the-atlantic-wall/. Accessed 14 May 2023.



Among the remaining bunkers, some small-scale ones became unattended ruins and are slowly disappearing.

However, a few of these bunkers have been given a new purpose over time, being used to store ammunition, archives, and art, to grow mushrooms or as museums or holiday homes.

Since 1989, the Stelling Den Helder Foundation has been working to preserve, restore, and utilise military objects in Den Helder. Over the past 25 years, significant progress has been made, including the renovation and commissioning of Fort Kijkduin, which was eventually restored in 2015. Around the same time, work started on refurbishing the Defense Line Den Helder; volunteers have renovated this together with Stichting Stelling Den Helder. Today, the section between Sportlaan and Middenweg is visible again as a line dike.

1990-now
Growth and decline of Atlantic Wall

Figure. 53 People visit atlantic wall center. (Collection from Regionaal Archief Alkmaar, 2009)

Figure. 54-55 Fort museums in Den Helder. The fortress of the old defence line is now used as a museum and military training base.(photo from Borui Xiong,2022)

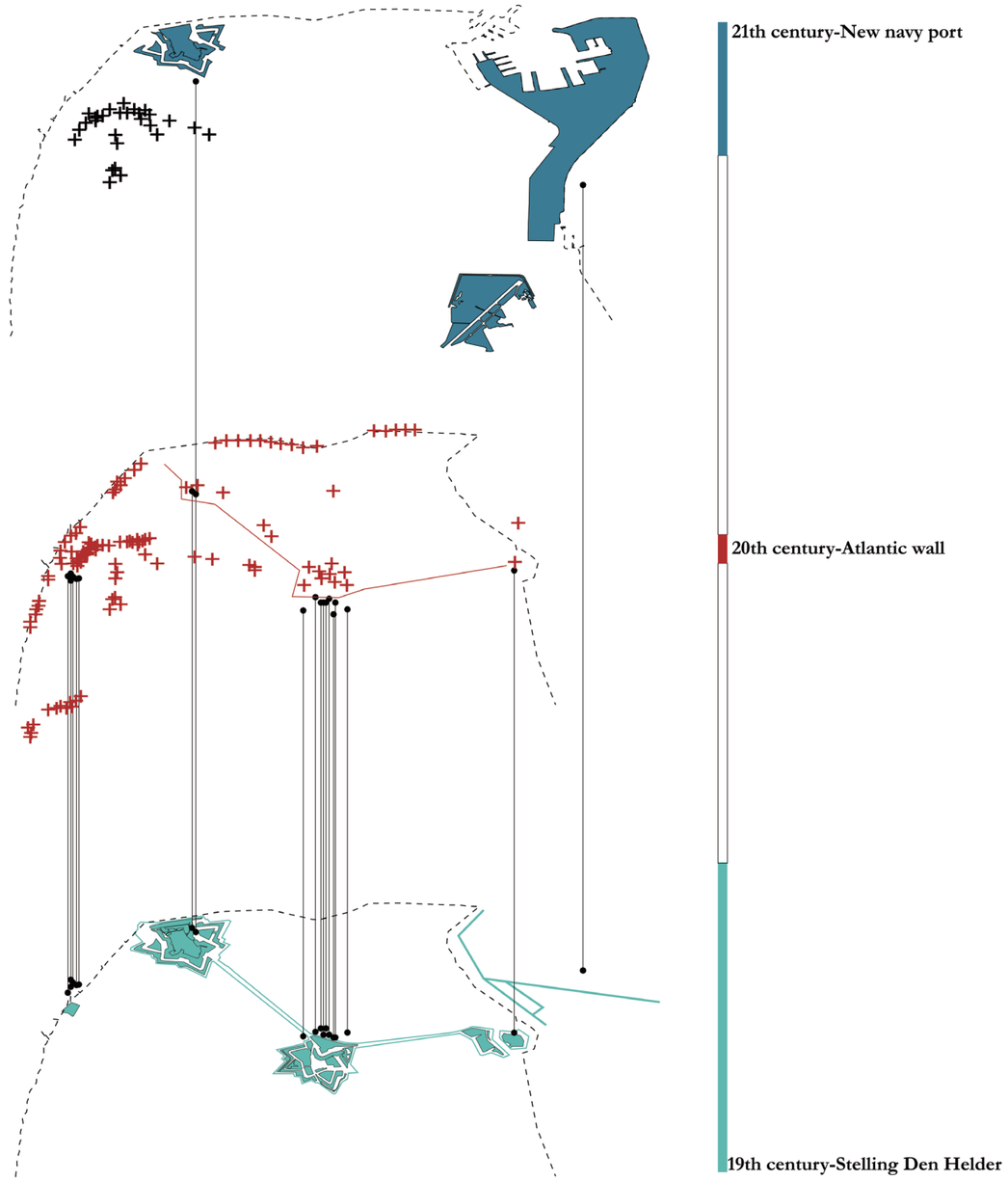
Figure. 56-63 Bunker ruins in the dune. The Atlantic Wall bunker in the dunes is gradually becoming ruined, invaded by vegetation and structurally damaged. (photo by Flak Gruko, 2016)

From the above analysis it is clear that the defence system of Den Helder has been constructed and modified over the centuries. There are three main time periods: the 19th century military fortification and the Williamsoord harbour, the 20th century Atlantic Wall defence during the Second World War and the new naval harbour in the 21st century.

The military base at Den Helder is now no longer centred around the old defence line, because the working mechanisms of the old defences are no longer applicable to modern defence systems. New military base around the eastern harbour. Only the Fort Erfprins is still functioning as a military training field. As a result, these giant concrete constructions are in very different conditions in Den Helder. Some of them have been transformed into historical museums or monuments, while most of them are abandoned ruins.

In terms of modern functions and positions of Atlantic wall, there are two different conditions. **It is clear that the Atlantic Wall at Den Helder is special in that they are partly related to the old defences.** The Atlantic Wall as part of the old defences is better maintained and appreciated by the locals. But the other scattered Atlantic Wall bunkers were abandoned and became ruins in the dunes.

What is the difference between these Atlantic Wall ruins scattered in the dunes and the Atlantic Wall bunkers that have been transformed into museums and monuments? Do they have a different value and significance?



Different conditions of Atlantic wall in modern cities

In order to further investigate the different conditons of the Atlantic Wall in the modern city after the war, the following examples give an idea of how the Atlantic Wall evolved after the war in Den Hague and St Nazaire.

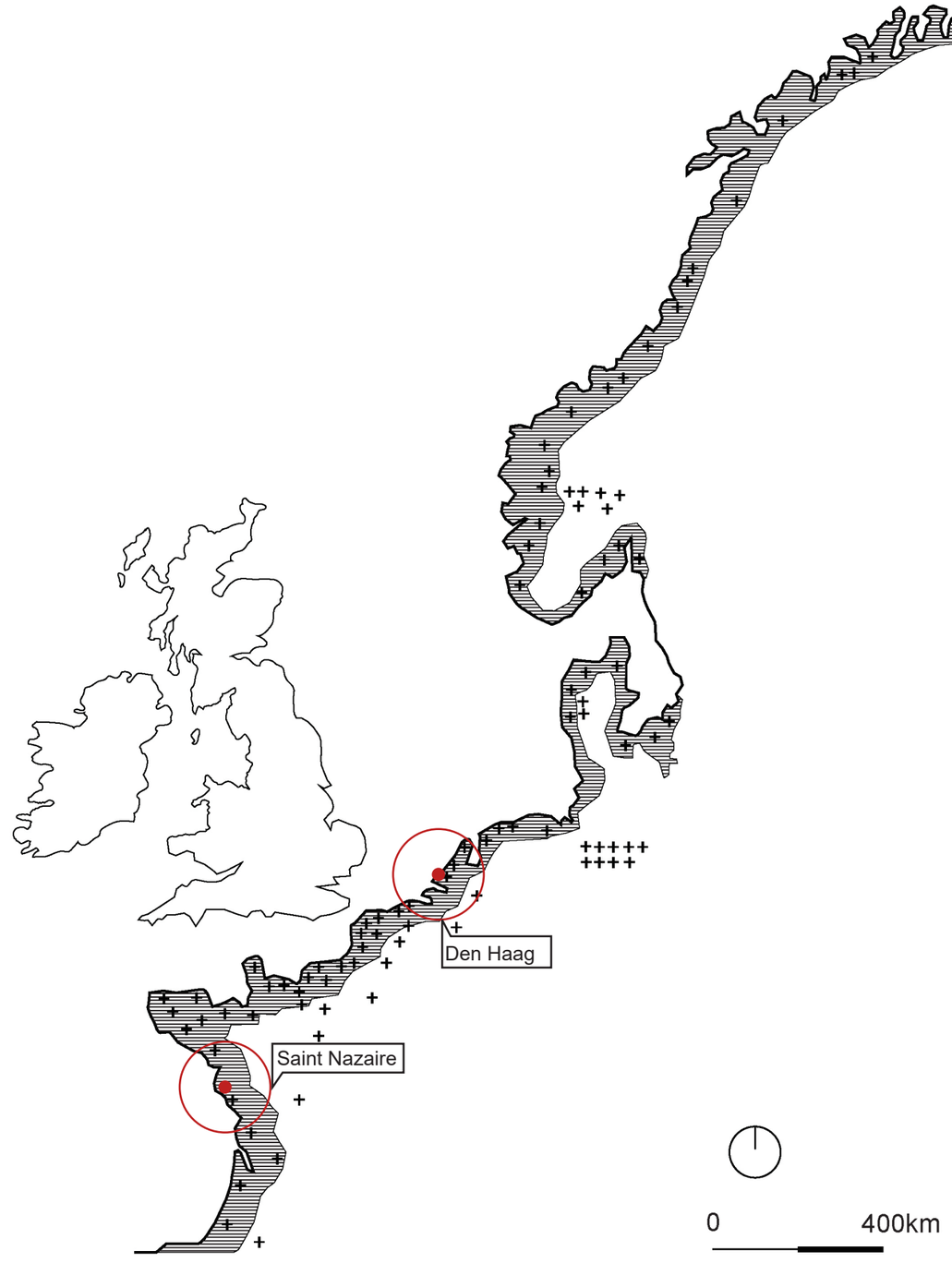


Figure. 64-66 Atlantic wall in Den Haag. Bunker ruins and viewing platformalongside the Scheveningen beach. (photo from Borui Xiong,2023)

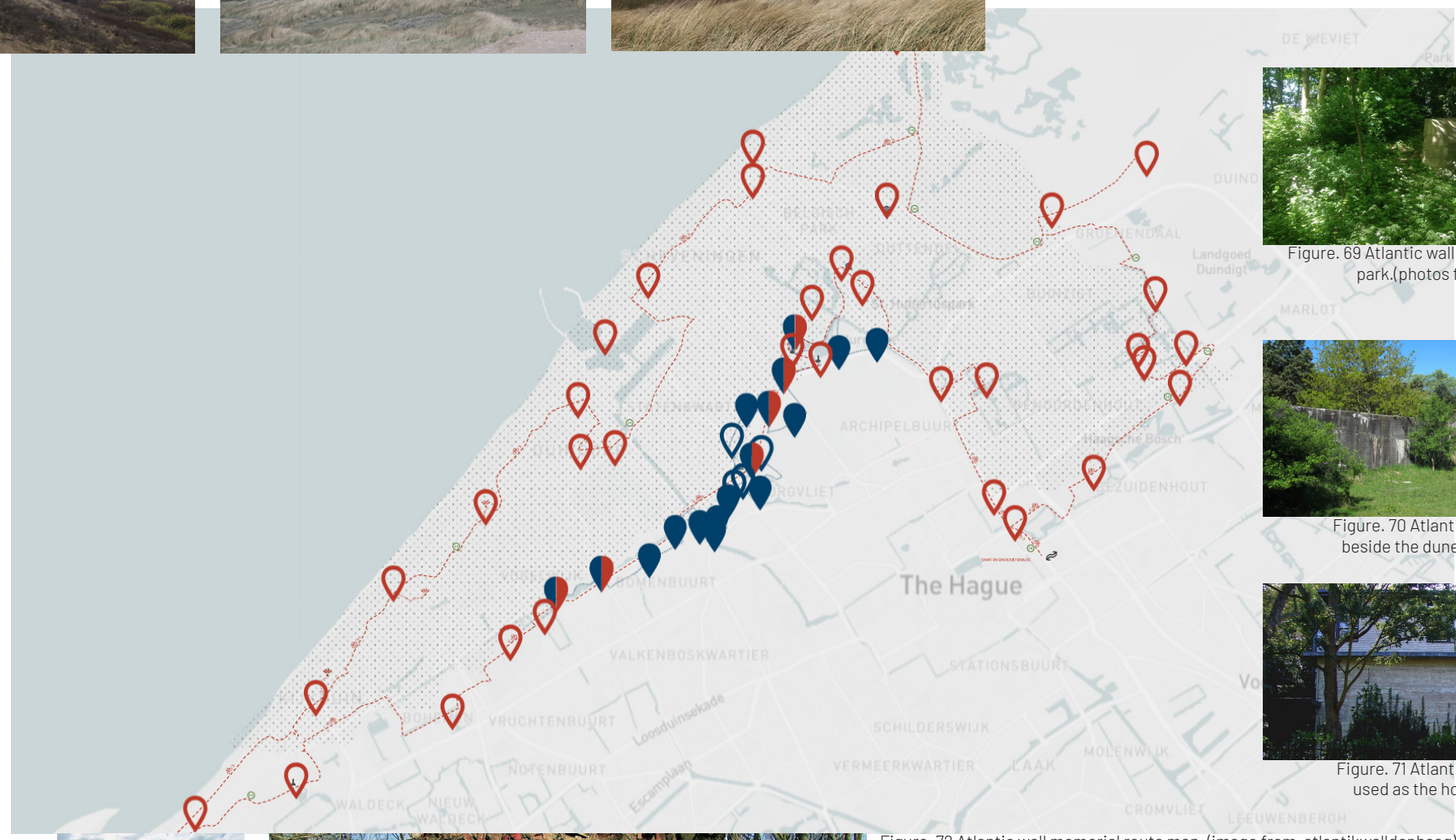


Figure. 72 Atlantic wall memorial route map. (image from atlantikwalldenhaag)

Figure. 69 Atlantic wall in Den Haag.Atlantic wall in the park.(photos from atlantikwalldenhaag, 2016)

Figure. 70 Atlantic wall in Den Haag.Atlantic wall beside the dune sightseeing path.(photos from atlantikwalldenhaag, 2016)

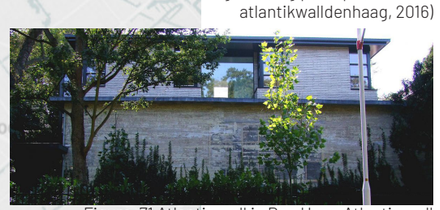


Figure. 71 Atlantic wall in Den Haag.Atlantic wall used as the housing foundation. (photos from atlantikwalldenhaag, 2016)

Figure. 67 Atlantic wall in Den Haag. A half-buried bunker in the dune. (photo from Trace of war , 2015)

Figure. 68 Atlantic wall in Den Haag. Monument of Rubble. (photos from atlantikwalldenhaag, 2016)

During the German occupation of the Netherlands in World War II, The Hague and Scheveningen were heavily affected by the construction of the Atlantic Wall, resulting in the demolition of thousands of homes and trees to make way for bunkers and barricades. Scheveningen was designated as a Stützpunktgruppe due to its strategic location, with important objects nearby. After the war, many of the defences were removed, but some bunkers were left standing and reused for various purposes. The area has since become an international city for peace, justice, and security.

Six routes have been designed: Noordwijk-Lisse, Katwijk-Wassenaar, The Hague-Scheveningen, Hoek van Holland-Westland, Voorne and Goeree. These trails allow for a better exploration of these remnants of war.

Most of the ruins of the Atlantic Wall in The Hague remain in a state of unattended ruin, but they are linked by these paths, allowing public access. Other bunkers and buildings that are already in the urban area have been rebuilt or renovated for new functions and have been integrated into the new urban environment around them.

"History of the Atlantic Wall." Holland, geschiedenisvanzuidholland.nl/verhalen/verhalen/history-of-the-atlantic-wall/. Accessed 14 May 2023.
Surlinio. "Overzicht Atlantikwall Museum Den Haag." Atlantikwall, www.atlantikwallmuseum.nl/nl/atlantikwall/. Accessed 14 May 2023.

Figure. 75 Sedum garden. The shrubs and flowers have become more exuberant, contrasting with the hard structure and rough texture of the bunker. (photo by Gilles Clément, 2012)

Figure. 74 Garden of Tremuli Woods. Poplar trees grow out of the roof of the bunker. (photo by Gilles Clément, 2012)

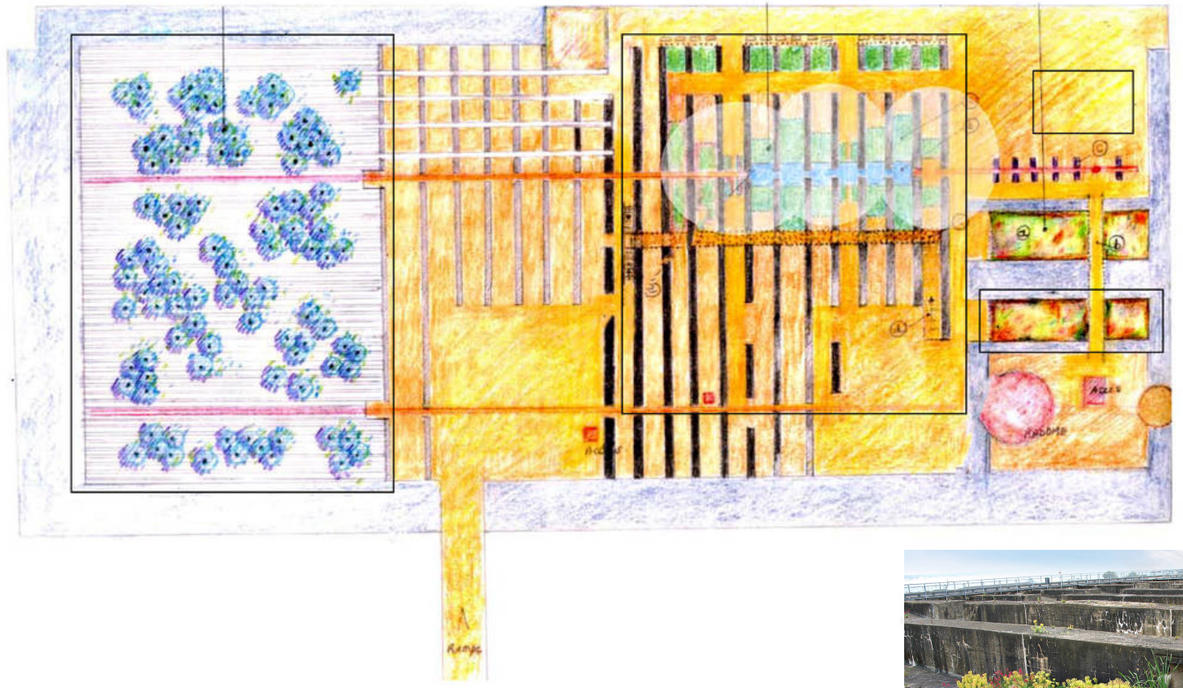


Figure. 73 Plan of Jardin des Orpins' general planting. (plan drawing by Gilles Clément)

Figure. 76 Label Garden. The vibrancy of the plants contrasts with the old concrete walls, bringing new life to the bunker. (photo by Gilles Clément,2012)

Saint-Nazaire, France, is a port city. During the Second World War, German troops arrived in Saint-Nazaire in June 1940 and the port was immediately used for submarine operations. The German army built the submarine base on the basis of the original port space. After the war, the submarine base remained abandoned for a long time.

In 2009, Gilles Clément designed and constructed a third landscape garden based on the original structure of the submarine. This is a project consisting of three public gardens. Based on the spatial characteristics of the different parts of the submarine base, the gardens were mainly created by planting species adapted to the dry climate, the light and the thin soil. Thus, the three gardens turned out to be the Garden of Tremuli Woods, the Sedum garden, and the Garden of Labels. The gardens and the abandoned submarine base complement each other and bring new life to this long-abandoned post-war military building.

Coloco. “Jardins Du Tiers-Paysage.” Area, 12 June 2017, www.area-arch.it/en/jardins-du-tiers-paysage/.

Figure. 77 Alois Riegl. Aloïs Riegl still young, in his student days. (photo from Collection of the Arheološki Muzej, Split, Croatia. 1875)

Monuments were originally created to preserve important human deeds or events for future generations. The Modern Cult of Monuments: Its Character and Origin' (1903), by Alois Riegl, describes three categories of monuments, their values, and development. This article divides monuments into intentional monuments, unintentional monuments (historical monuments), and time-valued monuments. These monuments all have commemorative value. According to the different characteristics of monuments, Rigel distinguishes three different kinds of commemorative values in monuments; intentional value, unintentional value (historical value), and age value.

These three categories are not mutually exclusive, and their values and characteristics can overlap with each other. For example, age-value can also be a characteristic of unintentional monuments.

INTENTIONAL MONUMENT

Intentional monuments are created with the explicit purpose of commemorating or preserving a particular moment or event in the consciousness of future generations. They are intentionally designed to convey a specific message or significance. These monuments are often built to honor individuals, commemorate historical events, or represent cultural and societal values.The key characteristic of intentional monuments is their deliberate creation with a commemorative intent. They are intended to serve as a lasting reminder of a specific person, event, or idea, ensuring that it is not forgotten over time. These monuments can take various forms, including statues, memorials, plaques, or architectural structures.

UNINTENTIONAL MONUMENT

Unintentional monument refers to a structure, site, or object that becomes a symbol or representation of historical, cultural, or social significance without originally being intended as such(Riegl, 1903, p.3). Unintentional monuments emerge organically over time through a collective recognition of their importance. Unintentional monuments often arise from ordinary or everyday objects, buildings, or landscapes that acquire symbolic meaning due to their association with significant historical events, cultural movements, or societal changes. They may include ancient ruins, dilapidated buildings, abandoned industrial sites, or even natural formations, in terms of both tangible and intangible.

The unintentional monument provides insights into the complex interplay between human activities and the built or natural environment, thus contributing to the understanding of our shared heritage, identity, and the narratives that shape our collective memory.

AGE-VALUE MONUMENT

According to Alois Riegl, unintentional monuments refer to structures or objects that were not originally created to serve as monuments but have come to be seen as such over time due to their historical, cultural, or aesthetic significance. (Riegl, 1903, p.3) They may be architectural, natural, or cultural landmarks that have become iconic or symbolic in some way, and are often associated with the collective memory or identity of a community or society. Examples of unintentional monuments may include ruins, abandoned buildings, graffiti, street art.

Compared with the intentional monument, the memorial function of unintentional monuments is a contemporary attachment based on people's feelings and perceptions of past events. In addition to their commemorative value, unintentional monuments also have historical value and age value. These absolute values are derived from the objects themselves, in terms of the context, structure, materiality and condition, which provide a window into the past and convey a sense of the passage of time.

- Historical value: unintentional monuments can serve as reminders of historical events. They can provide a deep insight into a certain period of time or events, but the choice of that historic moment is left to our subjective preference.(Riegl, 1903, p.5)
talk more about aw ruins how they revel

- Age value: unintentional monuments can be valuable simply because of their age. The fact that they have survived for so long can make them fascinating and important.

In terms of the relative values, which means the values that a monument offers to modern man, there are art value and use value. Art value is related with the changing aesthetic appreciation and contemporary Kunstwollen (or the artistic will). On the one hand, the historical and age value of unintentional monuments provides a unique aesthetic quality and context that contributes to the art value, which lies in their aesthetic appeal and the emotional responses they evoke in viewers. They may not have been intentionally created as works of art, but they possess qualities that make them beautiful, interesting, and thought-provoking. Their natural decay and the traces of time can also add to their artistic value. On the other hand, there is a purely artistic value independent of historical development. As a physical object, the unintentional monument also embodies the artistic intentionality and contemporary aesthetics of the culture or society that created it, even though it was not intentionally created as a work of art.

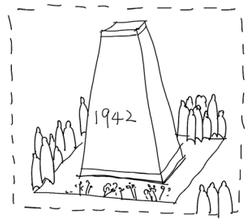
In terms of this pure art value of an unintentional monument, the "kunstwollen" is expressed through the unintentional monument, and the art value of the monument is a reflection of that expression. This pure art value claims to be related with contemporary aesthetics and is historically independent as it may not truly have existed in the past.

- Art value, according to Riegl, depends on Kunstwollen(Riegl, 1903, p.6)***. This implies an awareness of the ruinous beauty also corresponds to a contemporary aesthetic system and has a time-related significance, otherwise, it would not be possible.***

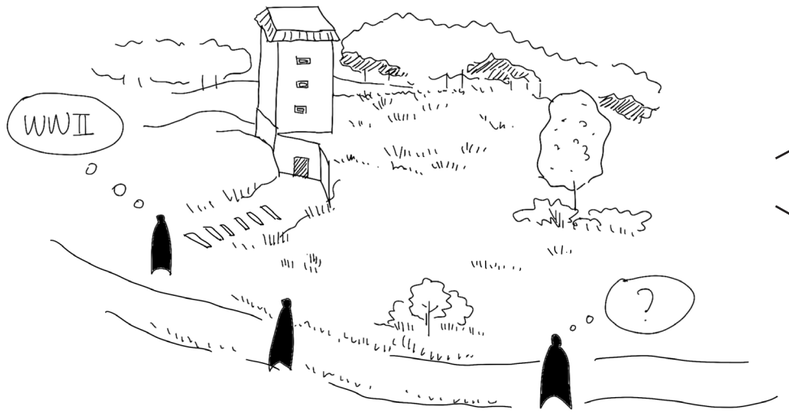
Additionally, unintentional monuments are objects or structures that were not created to be monuments but have acquired symbolic significance over time. This suggests that the unintentional monument had a wider range of practical functions, which add the use value. The unintentional monuments can serve as markers of historical events, as reminders of social or political movements, or as symbols of identity or belonging for particular communities. For example, an old building that has become a landmark due to its historical or cultural significance may serve as a tourist attraction or as a venue for events or exhibitions.

- Use value is self-explanatory, meaning the possibility of ruins to be used again as a physical remnant.

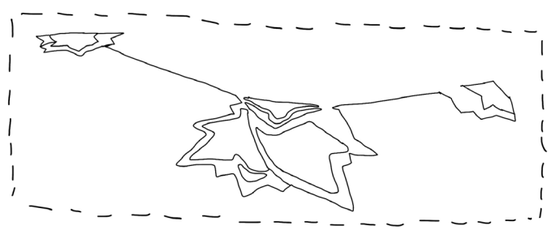
Intentional monument



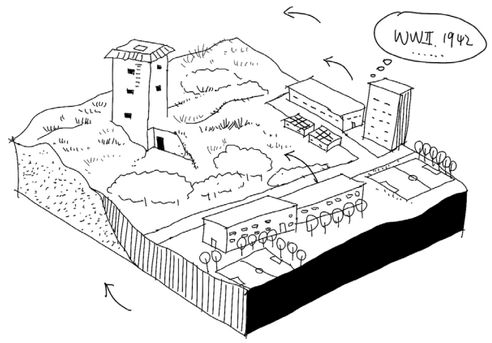
Unintentional monument



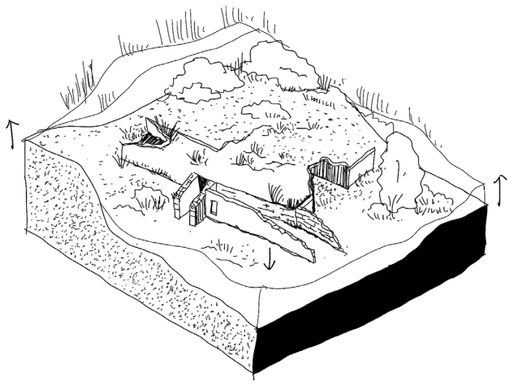
Age-value monument



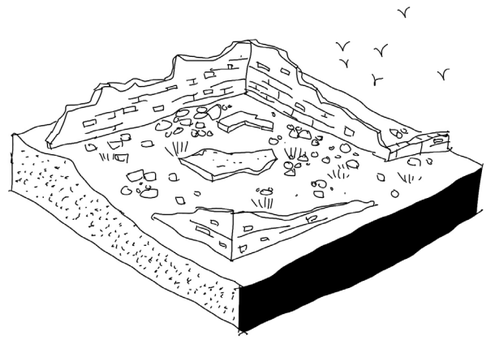
Historical value



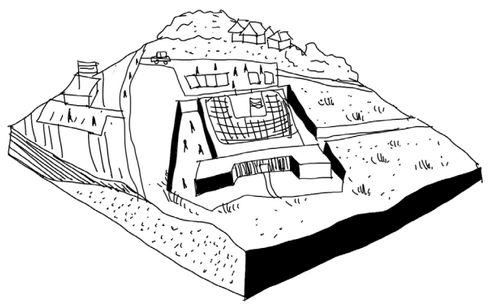
Age value



Art value



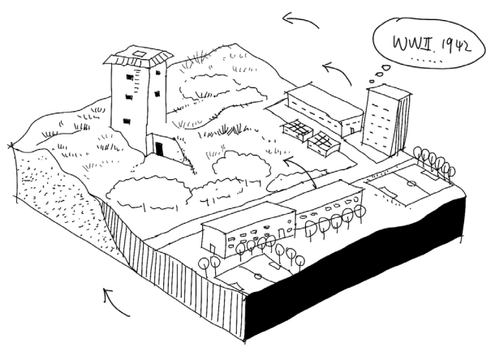
Use value



For post-war ruins, like the Atlantic wall in Den Helder, they were not originally created with the intention of becoming a monument, but they have come to symbolise the destruction and devastation of war, as well as the resilience and rebuilding efforts of communities. In many cases, post-war ruins are the only physical remnants of a particular historical event or period, and as such, they carry significant historical, cultural, and emotional value. Therefore, post-war ruins can be regarded as unintentional monuments.These values mentioned earlier are correspondingly present in the post-war ruins.

The concept of "kunstwollen" is based on the idea that art is not created in isolation, but is rather shaped by the historical and cultural context in which it is produced. It was developed by Riegel and used to analyse the development of art across different historical periods, and to understand the relationship between art and the society in which it is created.

Historical value

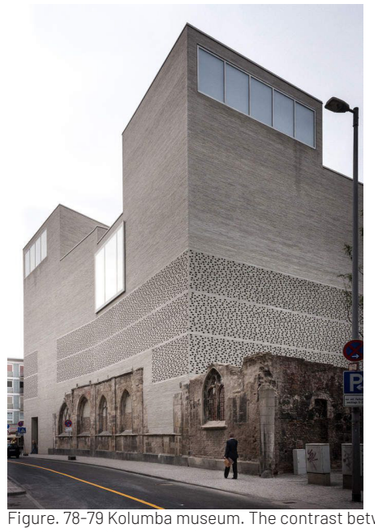


The Kolumba Museum, Cologne
Peter Zumthor

The Kolumba Museum in Cologne, Germany, was founded in 1853 and rebuilt by architect Peter Zumthor after it was destroyed in World War II. The new building designed by Peter Zumthor transfers the sum of the existing fragments into one complete building, becoming part of the architectural continuum.

The museum's design respects and integrates the ruins of the Gothic church and the 1950s chapel into the new building. The museum's location and design serve as a reminder of the destructive effects of war. In terms of materiality, the use of traditional materials and techniques in the museum's construction, such as Kolumba stones and clay plaster, highlights the continuity of historical building practices of the church.

Besides, the museum's collection includes a wide range of art and artefacts that reflect the cultural and historical significance of the region, from mediaeval art to contemporary works. The spatial atmosphere allows visitors to experience the past and present simultaneously, creating a deeper understanding of the historical value of the site.



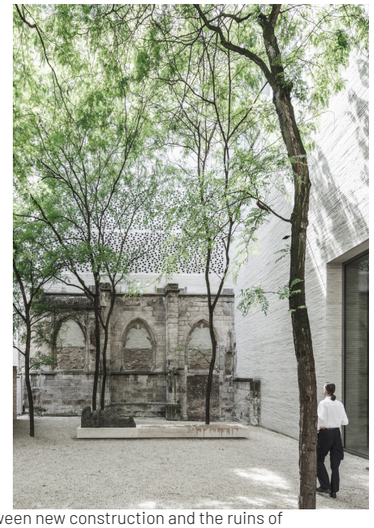
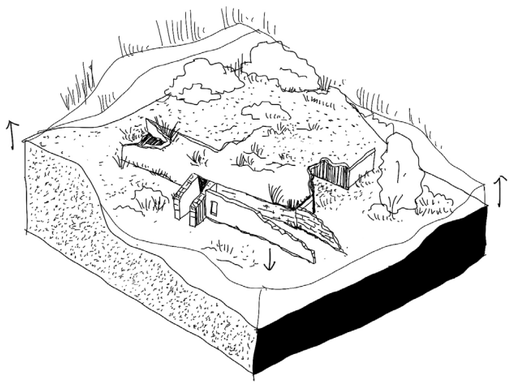


Figure. 78-79 Kolumba museum. The contrast between new construction and the ruins of the Kolumba Museum indicate previous church, conflicts. (photo fromRasmus Hjortshoj. 2015)

Figure. 80 Kolumba museum. Ruin exhibiton and mixed facade of Kolumba Museum. (photo from Borui Xiong, 2022)

Age value



Kaiser Wilhelm Memorial Church, Berlin

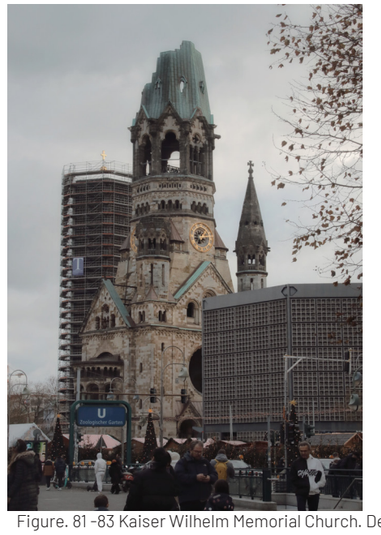
Egon Eiermann

The Kaiser Wilhelm Memorial Church, also known as the Gedächtniskirche, is located in Berlin, Germany. The church was built in the 1890s and was severely damaged in a bombing raid in 1943, leaving only the damaged spire and parts of the entrance hall remaining.

The church was severely damaged during a bombing raid in 1943, and its ruins have been preserved as a reminder of the destruction caused by war. In 1961, a new church was built next to the ruins, which features stained-glass windows and a hexagonal design. The juxtaposition of the old and new structures creates a unique visual experience and symbolises the importance of preserving the past while moving forward.

The church's age value is evident in its architectural style. The original church was built in the neo-Romanesque style, which was popular in Germany in the late 19th century. This style is characterised by its use of round arches, barrel vaults, and thick walls, which are reminiscent of the architecture of the Roman Empire. The damaged spire, which was preserved and incorporated into the design of the new chapel, is also an important example of neo-Gothic architecture.

Another important sign of the age value is that the church was built in the late 19th century and survived both World War I and World War II, making it a witness to many historical events, including two world wars and the fall of the Berlin Wall. Its age value lies not only in its original construction in the late 19th century but also in the fact that it survived the devastation of two World Wars and was carefully preserved as a reminder of the impact of war on society. The trace of time on this building serves as a reminder of the city's turbulent past.



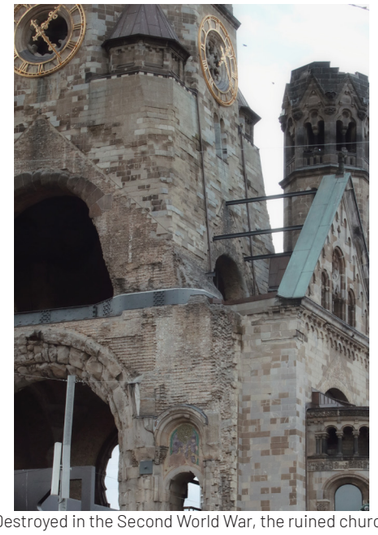
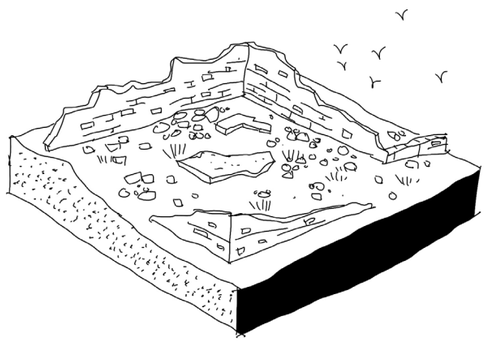


Figure. 81 -83 Kaiser Wilhelm Memorial Church. Destroyed in the Second World War, the ruined church has been preserved. The broken bricks reveal the passage of time.
(photo from Borui Xiong, 2022)

Art value



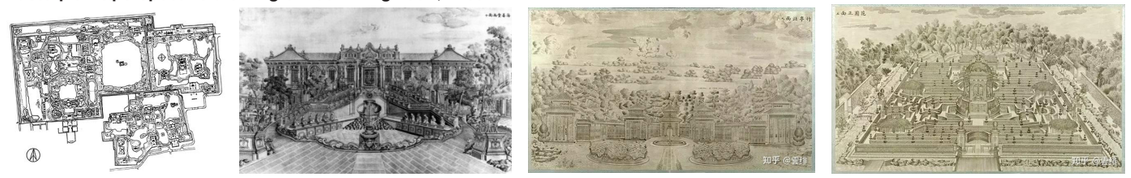
Old Summer Palace, Beijing

The Old Summer Palace, also known as the Yuanmingyuan, was a vast imperial complex located in Beijing, China, that was originally built in the 18th century and was considered a masterpiece of Chinese art and architecture. However, it was destroyed during the Second Opium War in 1860.

The Old Summer Palace can hold significant artistic value in contemporary cities. The Palace's ruins serve as a powerful reminder of China's complex and tumultuous history, as well as a symbol of the country's resilience and cultural heritage. The Palace's intricate architecture and design, blending Chinese and Western styles, also offer artistic and aesthetic value.

Nowdays, the ruins stand as a powerful reminder of China's tumultuous history, including foreign invasion and cultural destruction. The palace's surviving elements, such as its lakes, waterways, and temples, have been restored and renovated, but the above-ground structures remain in ruins, serving as a poignant symbol of the past. Besides, the Palace's ruins can inspire artists and designers in various ways, from incorporating its architectural elements into modern designs to using it as a subject of artistic expression, such as paintings, sculptures, and photography.

Masterplan &perspective drawing of Yuan Ming Yuan, 1709



gardening

<Forty Views of the Yuanmingyuan> , 1744

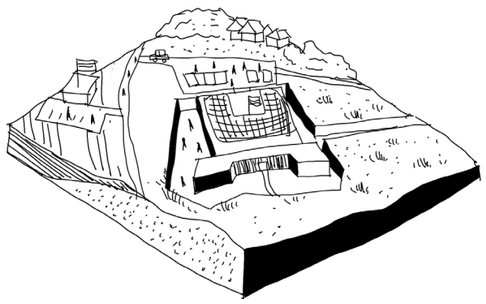
poetry and painting

old photos of Pavillions and Pagoda after war, 1873-1900

architecture

Figure. 84-96 Yuanmingyuan. The comparison between the original state of the Yuanmingyuan and the post-war ruins shows that both conditions have a certain art value.(photo from Chinadaily, 2015)

Use value



Hilldegarden Bunker, Hamburg

The Hilldegarden project is a proposal by a team of local residents and architects in Hamburg's neighbourhood of St. Pauli to repurpose a war bunker dating back from the 1940s. Because of its strong structure, which was designed to withstand bombs and other forms of attack during World War II, the bunker has the possibility of being reused. Additionally, the bunker's elevated location and large footprint provide ample space for repurposing, making it an attractive option for developers looking to add more mixed-use facilities to the area. The project seeks to create a "green mountain" garden atop the disused roof of the bunker, along with a range of mixed-use projects that increase its height by several stories.

Hilldegarden presents an interesting case study of how post-war ruins can be repurposed and given new life while also preserving their historical significance.By repurposing the disused roof of the bunker into a public garden and adding mixed-use facilities, Hilldegarden offers a new use value to the site while also allowing people to interact with and appreciate the historical value of the structure. The garden offers a space for relaxation and enjoyment, while the mixed-use facilities provide a range of services for the community, from a kindergarten to a hotel.

In this way, Hilldegarden serves as a meaningful public space in contemporary cities by providing a tangible connection to the past while also contributing to the present and future needs of the community. It is an example of how post-war ruins can be transformed into useful and dynamic spaces that contribute to the cultural and social fabric of cities. The fact that the project is sustainable and eco-friendly further adds to its use value in contemporary cities, where sustainability is becoming an increasingly important concern.

Figure. 97 Hilldegarden Bunker in 1950. The surrounding area of the bunker was still desolate. (photo from Hilldegarden.org)

Figure. 98 render of the new proposal. The new proposal aims to create a 'green hill' garden on the abandoned roof of the bunker, as well as a series of mixed-use projects that will increase its height by several storeys. (image from archdaily, 2017)

Terrain vague

Terrain vague is a term coined bylgnasi de Solà-Morales to describe **abandoned, obsolete, and unproductive spaces in the contemporary metropolis or underutilised urban spaces that are in a state of transition, neither fully occupied nor fully vacant.** (Morales, 1995, p.84) These spaces are often undefined and without specific limits, and they represent a form of absence in the city. According to Solà-Morales, terrain vague spaces are valuable because they offer an alternative to the productive logic of the late capitalist city, and they can manifest themselves as spaces of freedom. These spaces should not be reincorporated into the productive logic of the city but should be assimilated into the city's fabric without obliterating or imitating it. Architecture should respond to the qualities of terrain vague by embracing it into the urban fabric, instead of focusing solely on forms, the distant, optical, and figurative.

Mutability is one of the central qualities of terrain vagues according to Solà-Morales(Morales, 1995, p.84). Besides, terrain vague has the following characters:

- Marginality: Terrain vague is often located on the margins of urban areas, in between or at the edges of different land uses.

- Neglect: These spaces are often neglected and abandoned, with no clear ownership or purpose.

- Ambiguity: Terrain vague is often characterised by an ambiguous or undefined character, with no clear boundaries or programmatic intent.

- Informality: These spaces are often used in informal or unregulated ways, such as for temporary parking, storage, or waste disposal.

- Potentiality: Despite their negative connotations, terrain vague spaces are often seen as having potential for new and innovative uses, such as community gardens, public art installations, or pop-up markets.

Solà-Morales(Morales, 1995, p.87) **specifically mentions ruins as an example of terrain vague spaces in his writings.** He argues that these ruins have value in their state of decay and lack of productivity, and that they offer the potential for new forms of urban life and alternative uses. These ruins are often the result of war or other forms of destruction, and they can include buildings that have been partially or completely destroyed and are no longer being used. These ruins often have a sense of ambiguity and undefined boundaries, as they are no longer functioning as they were intended and are often in a state of decay. These spaces can also serve as a reminder of the past, preserving traces of history and cultural memory. Additionally, they may provide a sense of freedom and anonymity, as they are often undefined and without specific limits, thus triggering spontaneous activities and societal bonds.

Figure. 99 terrain vague example. An abandoned and not used area in the middle of a residential area and the train station. (photo from Borui Xiong, 2022)

Post-war ruins as terrain vague

To further explore the value of post-war ruins in the contemporary city, this part will focus on their value as terrain vague. Post-war ruins share many characteristics of terrain vague, such as being abandoned, neglected, and undefined spaces that have lost their original purpose. They are often disconnected from the surrounding urban fabric, and their future use and development is uncertain. Moreover, ruins often become spaces of liminality and transgression, where new, temporary uses and activities emerge, such as urban exploration, graffiti, and informal settlements. Post-war ruins can be seen as examples of terrain vague in specific historical contexts and in the process of urban transformation.

Compared with other types of "terrain vague" space, post-war ruins are often the result of deliberate destruction during conflict or military defense construction, like the Atlantic wall. Therefore, they often have a more pronounced sense of trauma and historical significance, as they may be associated with specific events or periods of violence. Besides, post-war ruins may be more structurally unstable or dangerous than other types of terrain vague, due to the conflict or their original function. This can make them more difficult to navigate or repurpose and may require special safety considerations in any attempts to reclaim or reuse them. As their surroundings continue to grow, post-war ruins also interact with the community and become subconsciously integrated into the cultural system of the place, forming a consensus and a social effect. Therefore, post-war ruins can have both cultural value and societal value in modern cities, as they may be important to the communities in which they are found and can serve as symbols of identity and heritage.

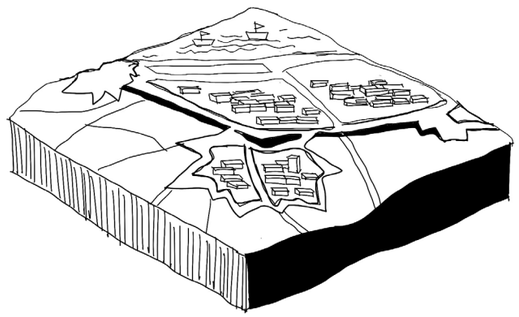
The cultural value indicates a sense of identity and pride of individuals and communities, as well as a tangible connection to the past. The cultural meaning of the ruins is commonly recognised, connected to the common beliefs and values of the group, mutually interpreted with the other cultural components and developed together. Therefore, the cultural value of post-war ruins is reflected in their relationship with the cultural context of a specific place.

That is to say, the precise cultural meanings and interpretations associated with post-war ruins may vary depending on its local historical and cultural background. The social value of post-war ruins is reflected mostly in their interaction with modern cities. Post-war ruins can serve as reminders of forgotten or overlooked events, individuals, or communities and can also bring attention to social and political issues that may have been previously ignored. The ruins' physical presence in the city can also serve as a focal point for collective remembrance and reflection, bringing individuals and communities together to engage in dialogue about shared experiences and histories. Additionally, unintentional monuments can serve as a form of resistance to dominant narratives and power structures, highlighting alternative perspectives and histories that may have been marginalized, twisted or suppressed.

Figure. 100 Atlantic wall ruins as terrain vague. An abandoned bunker in the dune of Den Helder.(photo from Borui Xiong, 2023)

Solà-Morales, I. (1995). Terrain vague. Harvard Design Magazine, (4), 84-91.

Cultural value



Dutch water line

The Dutch Waterline((Dutch: Hollandsche Waterlinie), represent a unique example of hydraulic engineering for defence purposes. They were built between 1815 and 1940 and consist of forts, dikes, sluices, pumping stations, canals, and inundation polders. The Dutch Waterline is significant culturally as it reflects the special knowledge and skills of the Dutch people in hydraulic engineering for defence purposes since the 16th century.

The Dutch Waterline is an important symbol of national pride and identity for the people of the Netherlands. It is an example of the Dutch people's innovative spirit in the field of hydraulic engineering. The Waterline also represents a significant period in the country's history when the Netherlands was facing constant threats of invasion and occupation, and the line of defence was critical for national security. In this sense, the Water Defence Lines are not just a physical structure, but also a reflection of Dutch identity and cultural heritage.

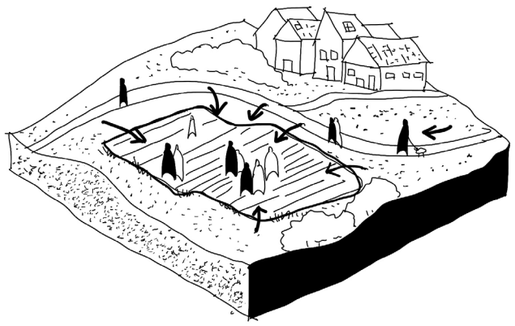
The Dutch Waterline is an important reminder of the cultural significance of hydraulic engineering and its role in shaping the country's past and present. The Dutch waterline is not only about war, but can also be narrated together with water systems, agriculture, etc. At the same time, the approach adopted by the Dutch waterline is linked to its unique geographical character. **The memories and background stories of this post-war ruin are unique to the Netherlands, so that even a mere ruin can trigger exclusive experiences and memories.** The new interventions on the old Waterline is also an example of how cultural heritage can be preserved and reinterpreted for modern-day use. The Waterline is a living cultural landscape that can be explored, appreciated, and enjoyed by visitors and locals alike.

Figure. 101 Dutch water line. Largerly overgrown concrete bunker in a field as part of the historic Dutch Waterline world heritage. (Photo from Frans Blok,2021)

Figure. 102 Dutch water line. Overgrown Dutch group shelter, part of the New Dutch Waterline, built in 1939. This concrete bunker is situated near the village of Heukelum, Gelderland. Although it is ruinous, it is as well recognized by the local people. (Photo from Ruud Morijn,2019)

"Dutch Water Defence Lines." UNESCO World Heritage Centre, whc.unesco.org/en/list/759/%EF%BC%89. Accessed 14 May 2023.

Societal value



Guihu

Xindu Guihu Park is located in the western suburb of Xindu County, 18 kilometres from Chengdu, with an area of 40,000 square metres and a water surface of about 20,000 square metres. It is the former residence of Yang Sheng'an, a famous scholar of the Ming Dynasty, and was named after the laurel trees planted all around the lake.

Guihu Park is built around the old city ramparts, with a form and spatial layout that echoes the linear spatial forms that remained within the ramparts. The ramparts were originally the boundary of the old city, which is now in the centre of the city due to urban expansion. Guihu Park was formerly the residence of a highly respected local scholar, and the city is now gradually expanding along this garden. This remaining section of the ramparts is therefore closely linked to all aspects of the social changes in the area.

Figure. 103 Old city ramparts. In ancient times, social activity took place along the perimeter of the city ramparts. (image from Sichuan University archive)

Figure. 104 The modern urban grid is gradually extended out from the old city ramparts and the axial relationships are still clearly visible. (image drawn by Borui Xiong)

CONTEXT | CONDITON | COMPOSITION | MATERIALITY | NARRATIVE | SPATIAL ATMOSPHERE | FUNCTION

HISTORICAL VALUE

The historic value mainly depends on the character of the historical event and its impact on the surrounding environment. The manifestation of historical value depends mainly on contemporary narrative approaches, which indicate specific time periods, signs, events, etc.

AGE VALUE

The existing conditon, composition and materiality of the ruins often reflects the age value. Conditon and composition demonstrate the architectural style and construction techniques used at the time of their creation.Age value manifests itself through the decaying materials, as the visible deterioration of the structure can be a visual reminder of the passage of time and the effects of decay on the built environment.

ART VALUE

Art value can be effectively realised by applying contemporary aesthetic preferences and interventions to ancient ruins. The contemporary kunstwollen determines whether the ruins have the potential to reveal art value that is compatible with modern society. Artistic value can be reflected by many visual ruinous qualities, such as shape, texture, colour, and composition.

USE VALUE

The use value can be reflected in their potential for adaptive reuse or repurposing in modern times. The historical function and modern function of the ruins are very important in reflecting the use value, which depends on whether the ruins can meet people's current and future use needs. Also, the physical condition and structural stability determine the feasibility of their reuse.

CULTURAL VALUE

Cultural values are site-specific and are mainly expressed through the context of the site and the narrative approach.

SOCIETAL VALUE

Social values are expressed through the interaction between the ruins and the modern urban environment, for example in terms of function and spatial atmosphere. Context can also have an impact on the social value of ruins.

Figure. 109 broken ruin of Kaiser Wilhelm Memorial Church. The broken bricks reveal the passage of time. (photo from Borui Xiong, 2022)

Figure. 110 broken ruin of Yuanmingyuan. (photo from Chinadaily)

Figure. 111 well-maintained bunker structure (photo from archdaily)

Figure. 104 The modern urban grid is gradually extended out from the old city ramparts and the axial relationships are still clearly visible. (image drawn by Borui Xiong)

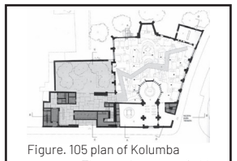


Figure. 105 plan of Kolumba museum. The combination of old and new construction is a way to show historical value(image from Archdaily)

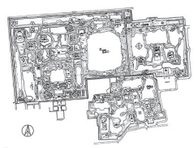


Figure. 112 traditional Chinese garden layout of Yuanmingyuan (photo from Chinadaily)

Figure. 113-116 different types of textures and materiality of ruins. (photos from Borui Xiong, archdaily, Hilldegarden.org,Ruud Morijn)

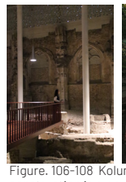


Figure. 106-108 Kolumba museum. The combination of old and new construction is a way to show historical value(photo from Borui Xiong, 2022)

Figure. 117 Kolumba museum. ruins and new walls Ensemble. (photos from Borui Xiong, 2022)

Figure. 118 Hilldegarden. old bunkers used as new community complex. (photos from Hilldegarden.org)

Figure. 119-120 Guihu. old city ramparts serve as city park and public space. (photos from Lian Chen)

Does the Atlantic Wall have a corresponding social and cultural value in the Netherlands? If not, how would the social and cultural value of the ruins of the Atlantic Wall be perceived?

From the above case and theoretical studies, it is clear that the two main categories of value of post-war ruins are complementary. Regarding ruins as monuments is more concerned with the intrinsic values embodied in the ruins themselves, which are the basis and underpinning of them as terrain vague. Regarding ruins as terrain vague is more focused on the effects and influences that arise from the interaction of ruins with the contemporary urban context. Today, due to the special contexts of post-war ruins, the site-specific social and cultural value of such ruins almost determines whether their own intrinsic value can be elaborated.

For example, the Atlantic Wall and the Dutch Waterline fortification, both located in the Netherlands but with different backgrounds and functions, are now presented in very different conditions. The Dutch Waterline was built by the Netherlands as a defence system to prevent military attacks on the country and has a completely opposite historical background and function to the Atlantic Wall. Today, the Dutch Waterline is an UNESCO National Monument and there are many conservation developments in progress, such as bunker 599, Werk aan het Spoel,etc. These fortifications are regarded as highly valued cultural heritage and are also becoming popular public spaces within contemporary cities. This process is due to the historical context and mission of the Dutch waterline, which was built to protect the Netherlands and form part of the common cultural identity of the Dutch people. Moreover, the waterline is not only a military defence system, but also interconnects with the local cultural context like Dutch hydraulic engineering and agriculture. This is why the Dutch waterline is valued and protected.

In contrast to the Dutch waterline, the Atlantic wall, a fortification built by the Germans during the occupation of the Netherlands during WWII, now exists mostly in ruins. Except for a few bunkers that have been turned into museums, the rest of the Atlantic Wall ruins are in a ruinous condition.

Its historical context has resulted in the Atlantic Wall not being able to fit into the contemporary cultural narrative of the Netherlands, further blocking the fulfilment of its social, historical and other values. This is why the Atlantic Wall exists in a large amount of isolated ruins.

The historical context and function of the Atlantic Wall makes it very difficult for it to be valued and appreciated in the Netherlands. Such a situation might imply the slow withering away of the Atlantic wall ruins, an incomplete narrative of this history if in the end only the lone Atlantic Wall Museum remains. This history may be demolished by this controversial but inconclusive process.

We cannot deny the fact that the historical context of the Atlantic Wall is monolithic and isolated in the Netherlands, and that it cannot be integrated into the Dutch cultural system in general. However, as a whole, the Atlantic Wall as a large-scale military defence system in WWII has intrinsic values (historical, temporal) that outweigh its site-specific values (eg. social values, cultural values). It would be unwise to deny the Atlantic Wall its potential to articulate history and evoke memory because it does not fit into the local social and cultural belief system.

Dutch waterline, regarded as national monument.

For the Atlantic Wall, it is important to think of the value of the Atlantic Wall in a broader sense, **considering the Atlantic Wall in a specific location as part of a whole system** and not just as a bunch of isolated fortresses, values should be defined in an inverse way. Through the articulation of its intrinsic values, new identities and contemporary connections are formed, thus evoking its social and cultural values.

The right or wrong of history has been evaluated and the values of the ruins of the Atlantic Wall should be highlighted in order to lead people to confront their history, to understand it and to reconcile with the past.

In the case of Den Helder, the Atlantic wall ruins are treated differently from other places in the Netherlands. **Part of these Atlantic Wall ruins are valued because of the historical context of Den Helder as a military fortified town and the overlapping attributes of Atlantic Wall and the Old Defence Line. The Atlantic Wall can be considered as part of the historical and cultural system of this place,** although this period of history is very thin and isolated. This phenomenon suggests that the values of Den Helder's Atlantic Wall ruins are more likely to be appreciated and recognised by the public.

Atlantic wall, largely abandoned.

Preservation, Restoration, reuse and Transformation as ruin design practices

Ellen Braae pointed out in the book beauty redeemed that preservation, restoration, reuse, and transformation are four different approaches when dealing with ruins, each with its own goals and methods, but they are not mutually exclusive. In fact, they can often complement each other and be used in combination to achieve a desired outcome.(Braae, 2015, p.278)

Preservation refers to maintaining the existing situation, no matter if it is a rotten and broken ruin or a remnant in relatively good condition.

Restoration involves the process of bringing a ruin back to its original state, or as close to it as possible. Restoration is often used for the ruin of high art or historical significanc and protect it as an artefact, rather than to repurpose it for new use.

Reuse involves the adaptation of a ruin for a new purpose. Reuse often relates with ruins with a quite well-mainained structure and condition. This approach recognizes the potential of a ruin for new construction or development. Reuse may involve alterations to the original structure to accommodate the new use, while most of the functions rely on the original ruin structure. (Braae, 2015, p.278)

The theory of transformation is about changing something pre-existing into something else, with a connection between 'before' and 'after.'(Braae, 2015, p.280) This change may be of a material, immaterial, or process-related nature. Transformation means to convert or change form and includes both process and object. The designer's standpoint is central to transformation, as they change both thinking and practices through reworking the material form over time. Transformation is often used when the original structure is too damaged or has little value in its current state, and when there is a desire to create something entirely new and innovative.

Fragmented ruins

Ruins in a better condition

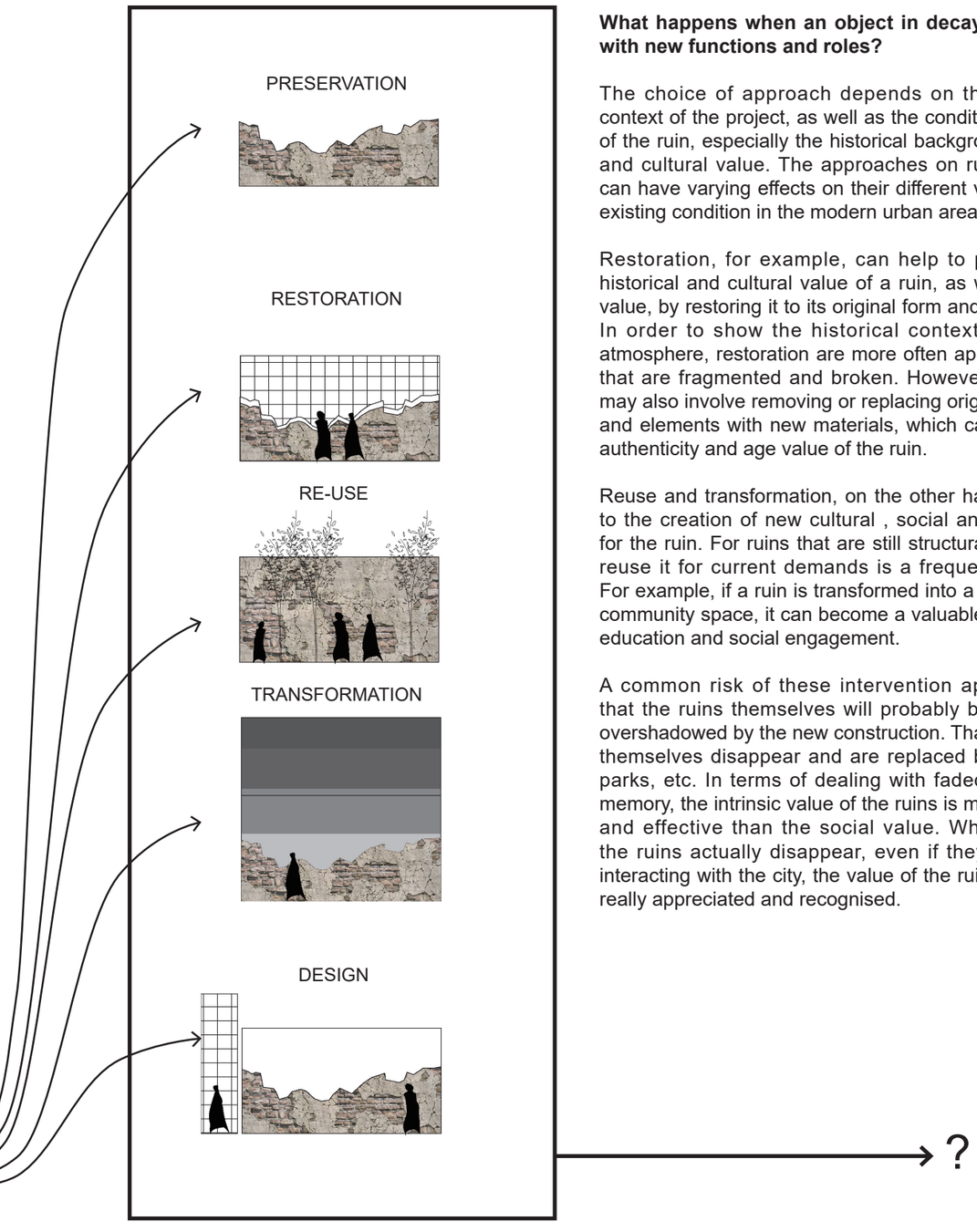
Transformation and traditional design

In the field of ruin intervention, transformation can be seen as a design practice. But it is distinctive from design in the traditional sense. They both in the creation of new forms from pre-existing objects. The main difference between design and renovation is that design focuses more on creating something new and compatible with contemporary aesthetics and function inspired by the ruins, while transformation attempts to collaborate with the ruins themselves to create something new while retaining their historical, age and cultural values.

According to Ellen, design, in the traditional sense, is primarily concerned with the creation of something new and novel, often through the materialisation of an idea.(Braae, 2015, p.281) In contrast, transformation is rooted in a pre-existing object and is concerned with direct exploration, intervention, and dialogue with the object to create something different.

Transformation is a more time-oriented approach that includes both spatial and temporal production. (Braae, 2015, p.280) It is concerned with the actual change as both product and process, and is characterised by transitions and driving forces, exchanges, challenges, and goals that mark the movement from one state to another. It is less focused on novelty and more concerned with the evolution and adaptation of pre-existing objects.

Both design and transformation can be applied together. The two approaches can be complementary, with design used to frame and contextualise the transformational process, or they can be in conflict, with design seeking to replace the ruins with new structures that do not retain any of the original character or history. transformation can be considered a way of design. While traditional design is typically focused on creating something entirely new, transformation involves working with existing structures or ruins to create something new that retains some of the original character and history of the site. This can involve a range of design interventions, from restoration and preservation to adaptive reuse and transformation. Ultimately, the goal of transformational design is to create something that is both new and respectful of the site's past, while also addressing the needs and aspirations of the present.



What happens when an object in decay is attached with new functions and roles?

The choice of approach depends on the goals and context of the project, as well as the condition and value of the ruin, especially the historical background, societal and cultural value. The approaches on ruins in return can have varying effects on their different values and its existing condition in the modern urban area.

Restoration, for example, can help to preserve the historical and cultural value of a ruin, as well as its art value, by restoring it to its original form and appearance. In order to show the historical context and spatial atmosphere, restoration are more often applied on ruins that are fragmented and broken. However, restoration may also involve removing or replacing original materials and elements with new materials, which can impact the authenticity and age value of the ruin.

Reuse and transformation, on the other hand, can lead to the creation of new cultural , social and use values for the ruin. For ruins that are still structurally complete, reuse it for current demands is a frequent approach. For example, if a ruin is transformed into a museum or a community space, it can become a valuable resource for education and social engagement.

A common risk of these intervention approaches is that the ruins themselves will probably be completely overshadowed by the new construction. That is, the ruins themselves disappear and are replaced by museums, parks, etc. In terms of dealing with faded history and memory, the intrinsic value of the ruins is more important and effective than the social value. When traces of the ruins actually disappear, even if they are closely interacting with the city, the value of the ruins will not be really appreciated and recognised.

Braae, Ellen. Beauty Redeemed: Recycling Post-Industrial Landscapes, Ikaros, Risskov, 2015, pp. 278–305.

PRESERVATION

RESTORATION

RE-USE

TRANSFORMATION

DESIGN

RUIN

Figure.121-122 remained ruins of Yuanmingyuan and Berlin wall (photo from Chinadaily, ABC News)

Figure.123 Yuanmingyuan. restored water body with remained ruins. (photo from Chinadaily)

Figure.126 Yuanmingyuan ruins.Ruins used as public tourist site. (photo from BBC News)

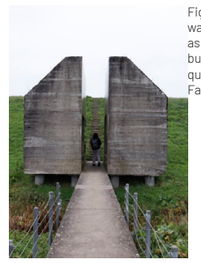


Figure.127 Dutch waterline. Bunker 599 as national monument, but keep ruinous quality. (photo from Fazhong Bai)

Figure.126 Kolumba Museum. The refurbished ruin is now used as museum. (photo from Rasmus Hjortshoj)

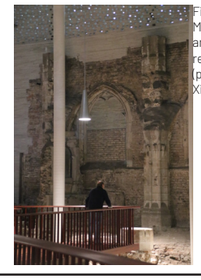


Figure.128 Kolumba Museum. A mix of ruins and new structures that reflect transformation. (photo from Borui Xiong, 2022)

Figure.130 Berlin wall open museum. A new structure has been built around the ruins of the Berlin Wall, enclosing it to form a public museum. (photo from Borui Xiong 2022)

Between ruin and non-ruin

NON RUIN

museum **monument**

Figure.124 Fortification in Xi'an, China. The Xi'an City Wall has been maintained to preserve its original appearance. It is now regarded as a monument. (photo from Chinadaily)

Figure.125 Kolumba Museum. The restored church is still functioning as part of the museum. (photo from archdaily)

exhibition

Figure.129 Fort Werk aant Spoel. The bunker was gradually transformed into a popular public place that. (photo from Archdaily)

Figure. 81 Kaiser Wilhelm Memorial Church. A new building was built beside the ruin. (photo from Borui Xiong, 2022)

What all methods have in common is that they all turn the ruins into something different, whether it is a fully restored ruin or a museum monument with a new function, etc. The ruins have long since ceased to be ruins themselves. In this case, the ruins seem to have disappeared. Yet the starting point for intervention is often to represent the value of the ruin, is this paradoxical? The difference between ruins and non-ruins is that ruins often have a higher historical, age and cultural value, but non-ruins can better represent the use and social value of the original ruins. According to the theory about site of memory of French historian Pierre Nora, both ruins and non-ruins can be used as sites of memory to preserve history and generate modern memory for people.

Site of memory(lieu de mémoire)

"A lieu de mémoire is any significant entity, whether material or non-material in nature, which by dint of human will or the work of time has become a symbolic element of the memorial heritage of any community " (Nora, 1996, p.4)

Site of memory*(lieu de mémoire)* may refer to any place, object or concept vested with historical significance in the popular collective memory, such as a monument, a museum, an event, a symbol.

Sites of memory are like shells left on the shore after the tide of living memory has receded. In other words, these are physical locations or objects that remain as a reminder of the past even after the people who directly experienced it are gone. The shells on the shore are a metaphor for these "sites of memory," which serve as a tangible link to the past even after the memories associated with them have faded. This phrase highlights the importance of these "sites of memory" in preserving memories of a community or group, and ensuring that they are not lost to history.

The site of memory is like a transfer station in the process of the gradual supersession of true memory by history, where true experiences and feelings about the past are processed within the frame of history and become the modern memory for the future generations.

History and memory

According to Nora, memory and history are not synonymous but rather in opposition to each other. Memory is a living phenomenon that evolves and is influenced by remembering, forgetting, and manipulation. It is affective, magical, and subjective, tied to specific groups and individuals. History, on the other hand, is a reconstruction of the past, always incomplete and intellectual. It calls for analysis and criticism and aims to suppress and destroy memory. Memory is rooted in concrete experiences and objects, while history focuses on temporal continuities and relations between things. History seeks to establish a "true" memory through critical discourse.

Modern memory

Nowadays, memory is no longer the true memory, which originated from direct experience, but comes from indirect sources. Therefore, modern memory can be regarded as history, which relies on material records and external support (Nora, 1989, p.13). The modern memory is the same as history, that can also be reconstructed and reproduced. Pierre therefore proposes three forms of modern memory:

- archival-memory: the collective memory that is preserved and documented in archival records, such as documents, photographs, and audio and video recordings (Nora, 1989, p.13).

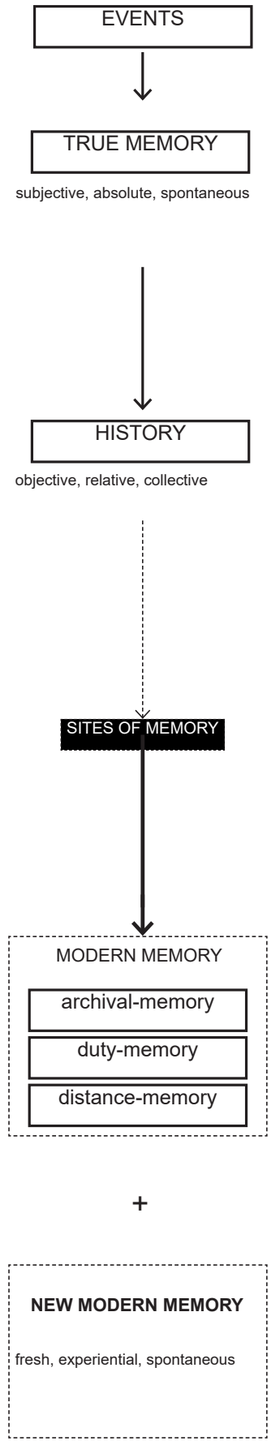
- duty-memory: the moral obligation to remember and honor the victims of historical events (Nora, 1989, p.15).

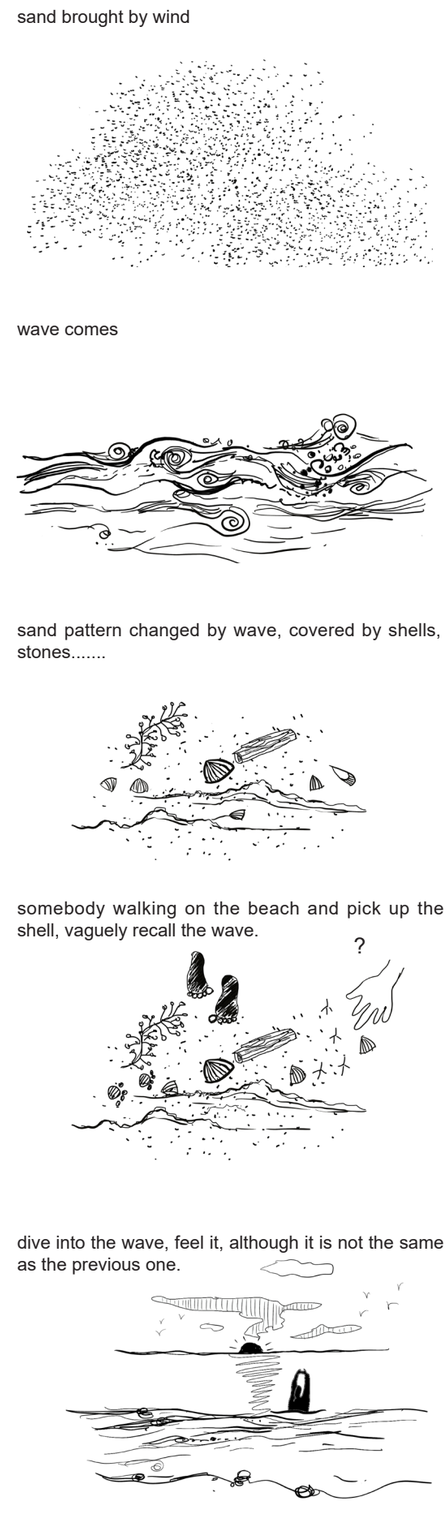
- distance-memory: the modern understanding of the past as something that is fundamentally discontinuous and separate from the present (Nora, 1989, p.16).

New Modern memory

Based on the concept of site of memory and the special qualities of ruins, a new kind of modern memory is proposed, namely, experiential memory, which is freshly generated in ruins, based on people's understanding of history, direct experience and spontaneous reflection and subjective imagination.

Nora, Pierre, and Lawrence Kritzman. "From Lieux de Memoire to Realms of Memory." Realms of Memory: Rethinking the French Past: V. 1: Conflicts and Divisions, Columbia University Press, New York, 1996, pp. 4–6.
Nora, Pierre. "Between Memory and History: Les Lieux de Mémoire." Representations, no. 26, 1989, pp. 7–24. JSTOR, https://doi.org/10.2307/2928520. Accessed 13 Dec. 2022.





Within this theoretical framework, ruins, just like museums and monuments, can also be seen as a site of memory.

In general, Non-ruin can be more effective in dealing with archival and duty memory. For archival memories, it relies on material records and external support, such as documents, photographs, and audio and video recordings. Non-ruin sites of memory such as museums and archives can provide a wealth of information and resources for researchers and the general public to learn about and understand history. For duty memory, it is the moral obligation to remember and honour the victims of historical events, as non-ruins can serve as intentional and designed memorials, such as monuments, museums, and commemorative spaces. These intentional memorials can serve as symbols of remembrance and provide a space for reflection and commemoration.

Ruin can be more effective in dealing with experiential memory, which is a form of modern memory that is generated through direct experience and spontaneous reflection in the physical space. Ruins are tangible and physical remnants of the past, which can evoke a sense of history and provide a direct link to the events that occurred in that space. This experiential memory can be particularly powerful for visitors to ruins, as they can see and touch the physical remnants of the past, allowing them to form a more direct and personal connection to history.

In the case of Den Helder, Atlantic Wall is valued in Den Helder because of the historical context of Den Helder as a military fortified town and the overlapping attributes of Den Helder's Atlantic Wall and the Old Defence Line. The Atlantic Wall can be considered as part of the historical and cultural system of this place, although this period of history is very thin and isolated. Therefore, based on Pierre’s theory about the site of memory, **in Den Helder, the Atlantic Wall ruins can also be seen as a type of site of memory that serve as a physical manifestation of historical events and as a way for people to connect with and remember their past.**

Intervention principles for post-war ruins

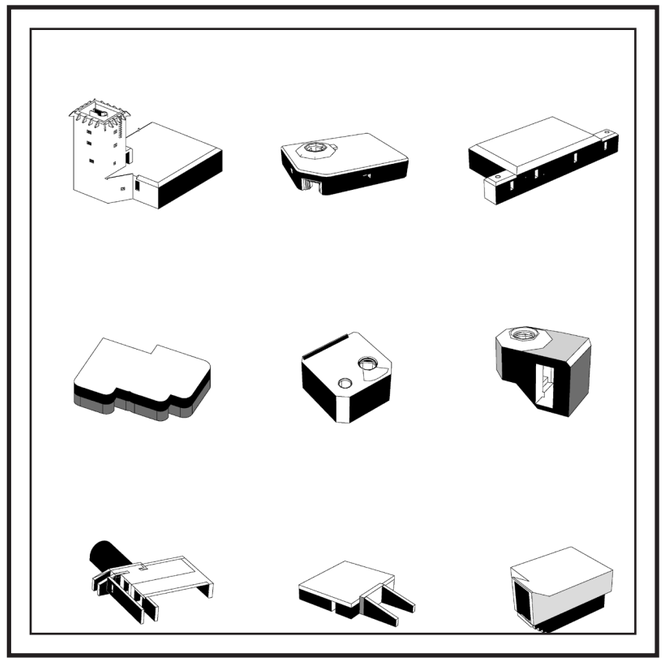
- Preserve and enhance the ruinous spatial qualities and sense of place.

- Resist the urge to tidy them up or integrate them too closely with modern urban systems.

- Maintain their isolated and heterogeneous character.

- Create opportunities for people to engage with the ruins in a free and spontaneous way.

- Provide information and context about the historical significance of the Atlantic Wall and its role in World War II to ensure that the public can reflect and learn from this important piece of history.



DESIGN PROPOSAL

Living dynamics of Atlantic wall ruins

Language of Atlantic wall ruins

New walls and Atlantic wall ruins

The sleeping ruin - echo with the history

The growing ruin - Visible decaying process

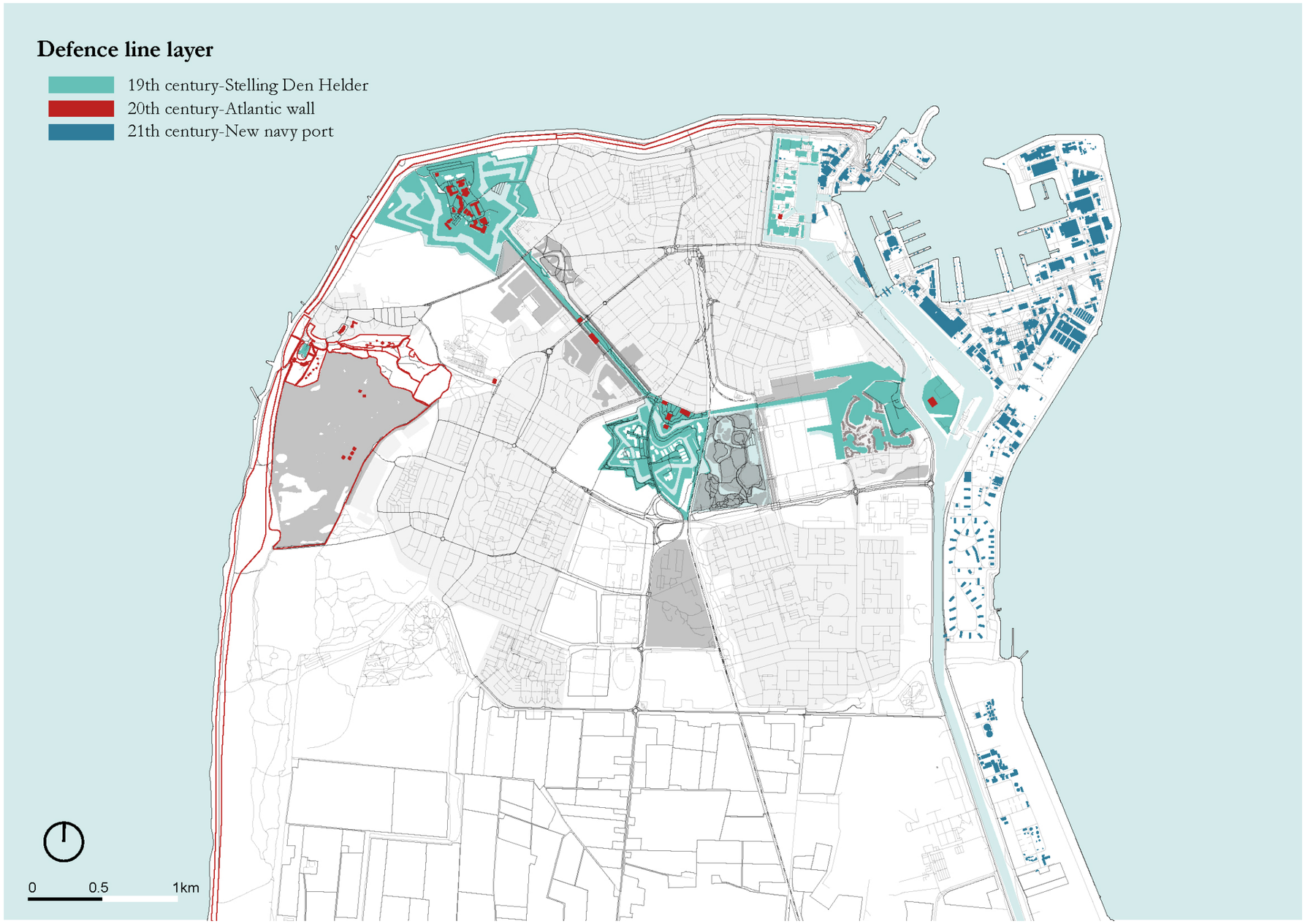
The drifting ruin - decay or reborn

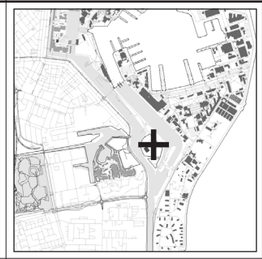
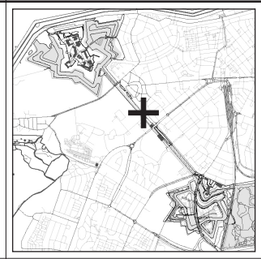
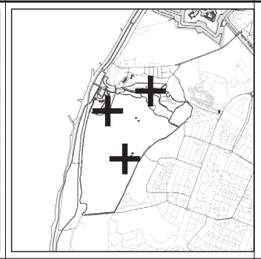
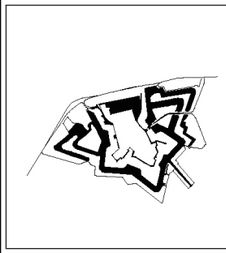
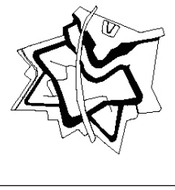
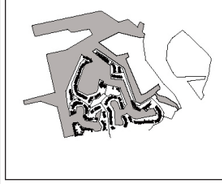
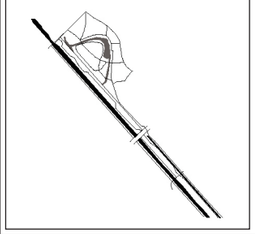
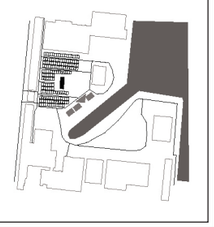
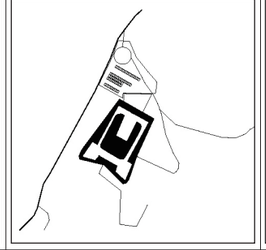
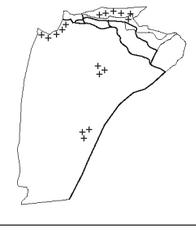
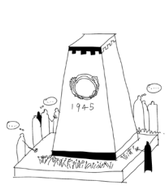
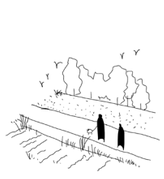
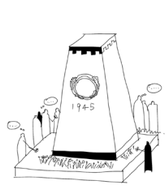
The Inaccessible ruin - unkown beauty

As the previous analysis shows, over the centuries the defence of Den Helder has developed in three categories: the 19th century stelling den helder, the Atlantic Wall of the Second World War and the modern naval port. The first two, which have gradually degenerated into useless ruins because their function is no longer applicable to contemporary defence systems. After the WWII, the Old Defence Line and the Atlantic Wall have been treated and processed differently. In recent years, some of these old fortifications, which are structurally intact and in a good condition, have been turned into museums or monuments. Nowaday, these post-war ruins in Den Helder can also be divided into two types: **Non-ruin and Ruin.**

For Non-ruins, such as the Fort Kijkduin museum, can be better connected to the city of Den Helder. Most of the Non-ruins belongs to the Old Defence Line thta situate alongside the residential area. In terms of function, they meet the people's demands for education and recreation. In terms of spatial organisation, they fit in with people's activities today. On a more ideological level, people tend to regard this type of historical remnants as a teaching omniscient, an ephemeral symbol, a reminder for the public not to forget history. But the uniformity and neatness that Non-ruin presents is the exact opposite of the sense of place that exists in a military fortress like the Atlantic Wall. The carefully displayed exhibits in the museum are arguably piecemeal and detached from history. A history that loses its context may prevent further reflection and understanding of historical events.

For the ruins, most of them belongs to the Atlantic wall in the dunes. They are disconnected from the modern city, such as the road system, the green space system, and residential area. But their isolated, heterogeneous character preserves precisely the spatial qualities and sense of place intrinsic to the war-time atmosphere. These seemingly wild and chaotic conditions were also originally the conditions in which the Atlantic Wall was situated during the war time. In contrast to the well-organised museums and monuments, the ruins allow people a more free and open space to think, and to engage in broader and more creative activities, such as graffiti, spontaneous exploration, etc.



Category								
location								
composition								
function/condition	military training ground	 monument	farm & Brewery	residential area	 waterfront park	 monument	museum	ruins
context								

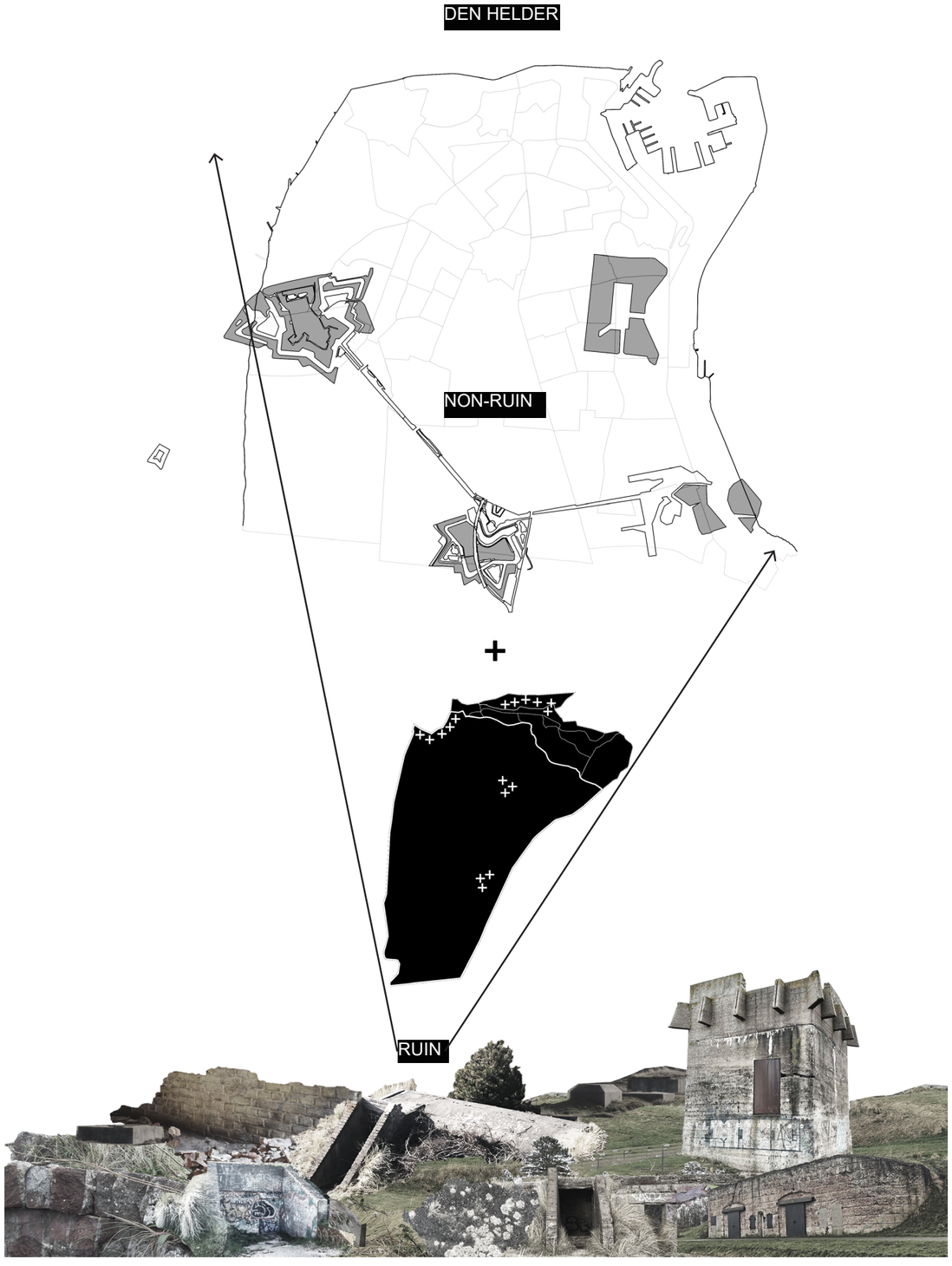
Manifesto

Living ruin dynamics as the reverie before oblivion.
Let the echo to be heared

This project proposes to regard post-war ruins as a type of site of memory, in which history is articulated and commemorated, new memories and a more open attitude towards ruins are generated. Rather than being redefined as other sites, such as museums or monuments, the idea is to make decaying ruins as the living ruin dynamics. It is not just a symbol, educator or reminder about history, but a process that allows people to step into history from the ruins, to gain a deeper understanding of the ruinous beauty, the impulse to think and imagine the future relationship of ruins and city. By restoring the link between the ruins and the contemporary landscape context, the social context and the cultural context so as to meet current educational, recreational and other demands. Meanwhile, the existing spatial qualities and decay processes of the ruins will be emphasised in order to maintain the intrinsic qualities of the ruins.As a result, the value of post-war ruin itself will be recognised, a more rational and open attitude towards controversial ruins and the history behind them will be established.

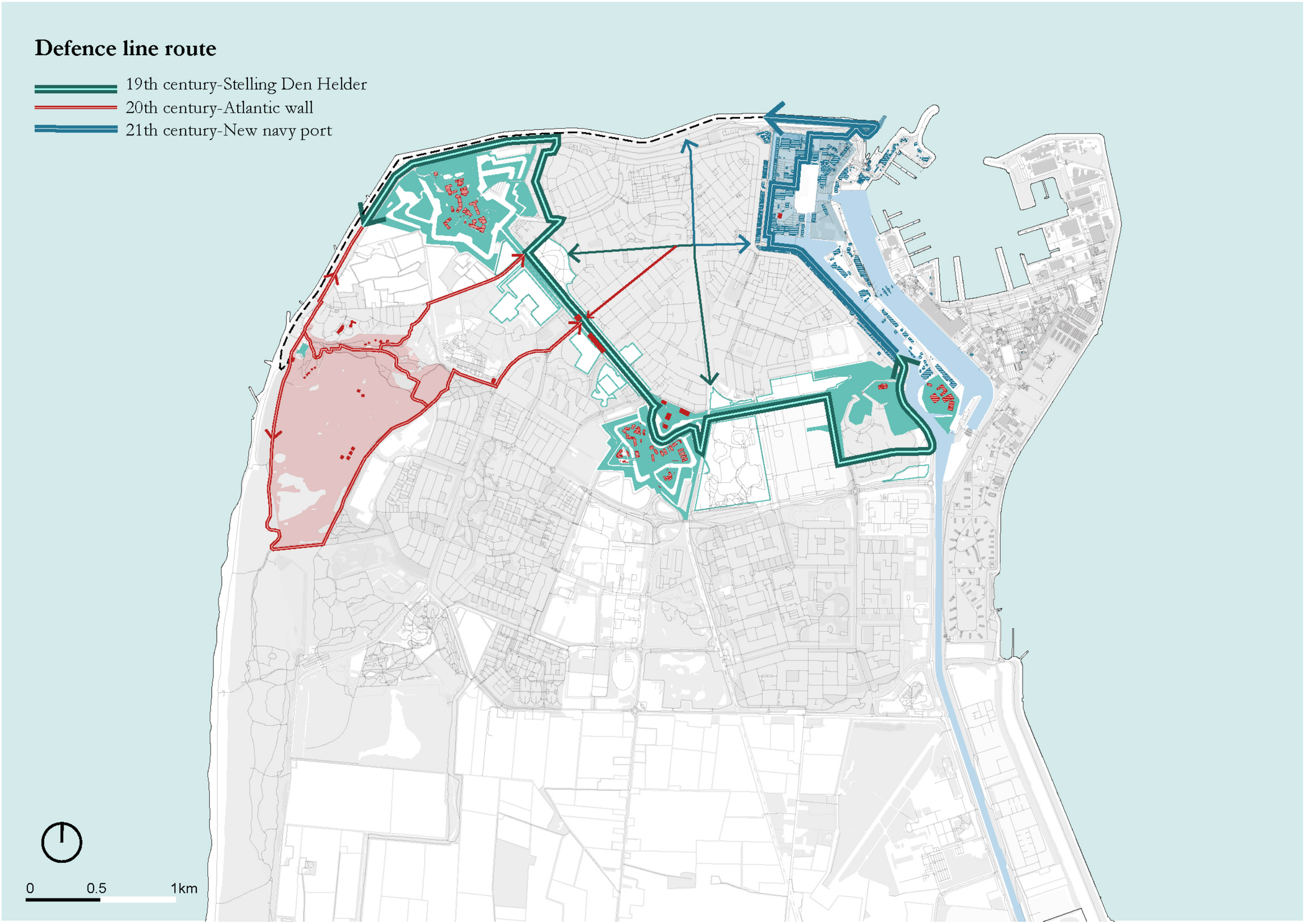
To justify the feasibility of this proposal, the design will begin with the dialectical intervention principles derived from the case study of the ruins. Based on the scattered character of the Atlantic Wall ruins in Den Helder, connections between the Atlantic Wall ruins and other systems will be established at an urban scale through a series of routes and small-scale spatial interventions. Within these nodes, the attention will be paid to the historical function of the ruins, the context, current spatial characteristics, materiality and sustainability. Together or independently, this series of interventions will tell the story of how the Atlantic Wall ruins have become a new layer of Den Helder's cultural heritage and work in synergy with other types of remnants to preserve history and create a new urban memory. The design is not only intended to promote a deeper understanding of the history, but also for people to accept that it is not necessary to store all the ruins that have accumulated over time in order to archive the history. The living ruin dynamics will breed new histories and memories. It is a series of circular chain reactions triggered by the ruins between real memory, history, and modern memory. Such an attitude towards the ruins will allow history to be well maintained in this everlasting cycle. Memories will take root in people's minds as they participate in this circular process. Therefore, the physical remains of the past may eventually fade away and the past will be forgiven, but not forgotten.

This attitude promotes a new perception and definition of the city's cultural heritage: the ruins are understood as a process of development in synergy with the city rather than merely as an object. This approach is precisely the opposite of museums, monuments etc., but provides a more sustainable development approach for the increasingly overloaded cultural heritage.

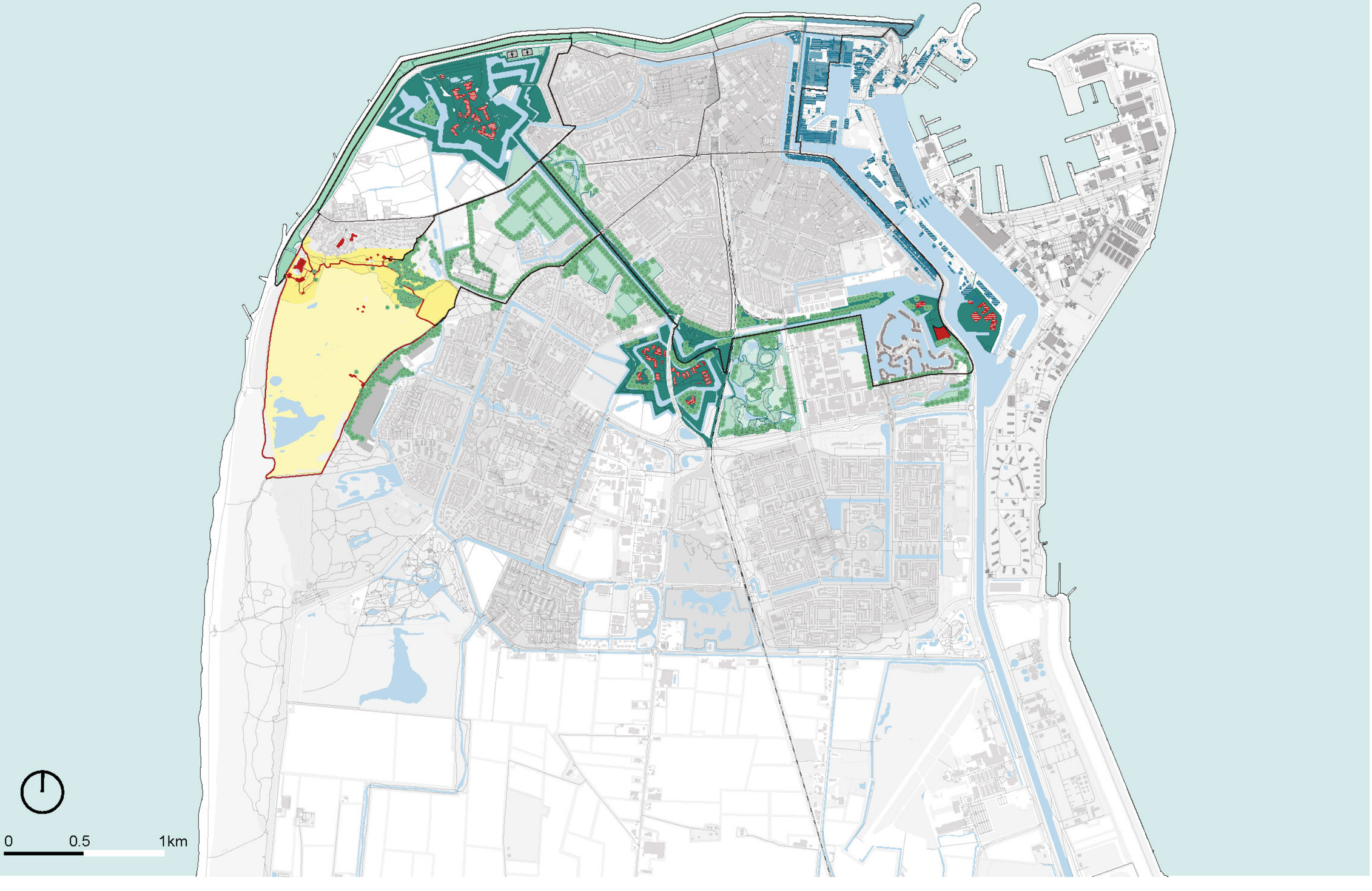


Defence line route

19th century-Stelling Den Helder
20th century-Atlantic wall
21th century-New navy port



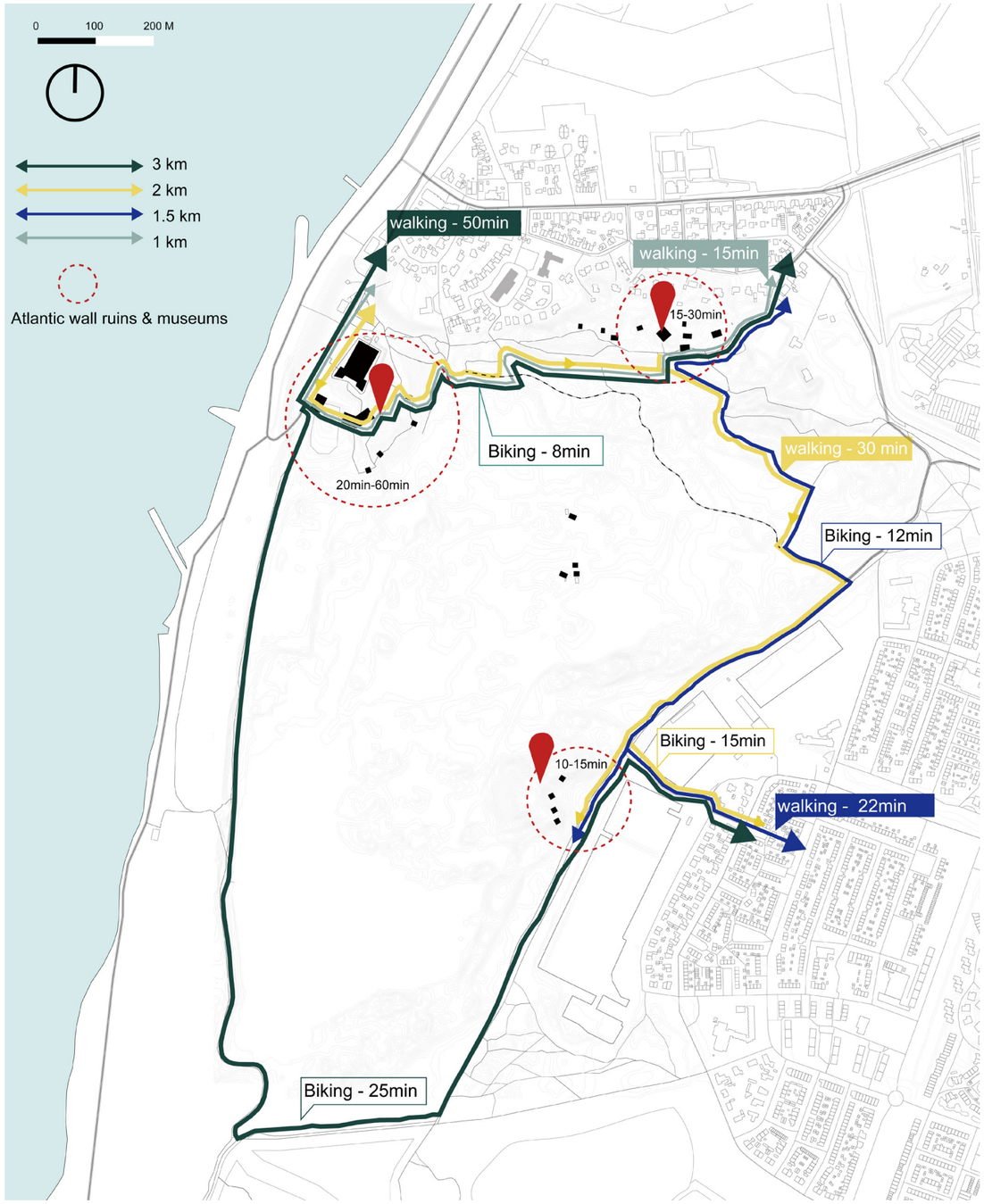
Integrated network of Den Helder Defence line

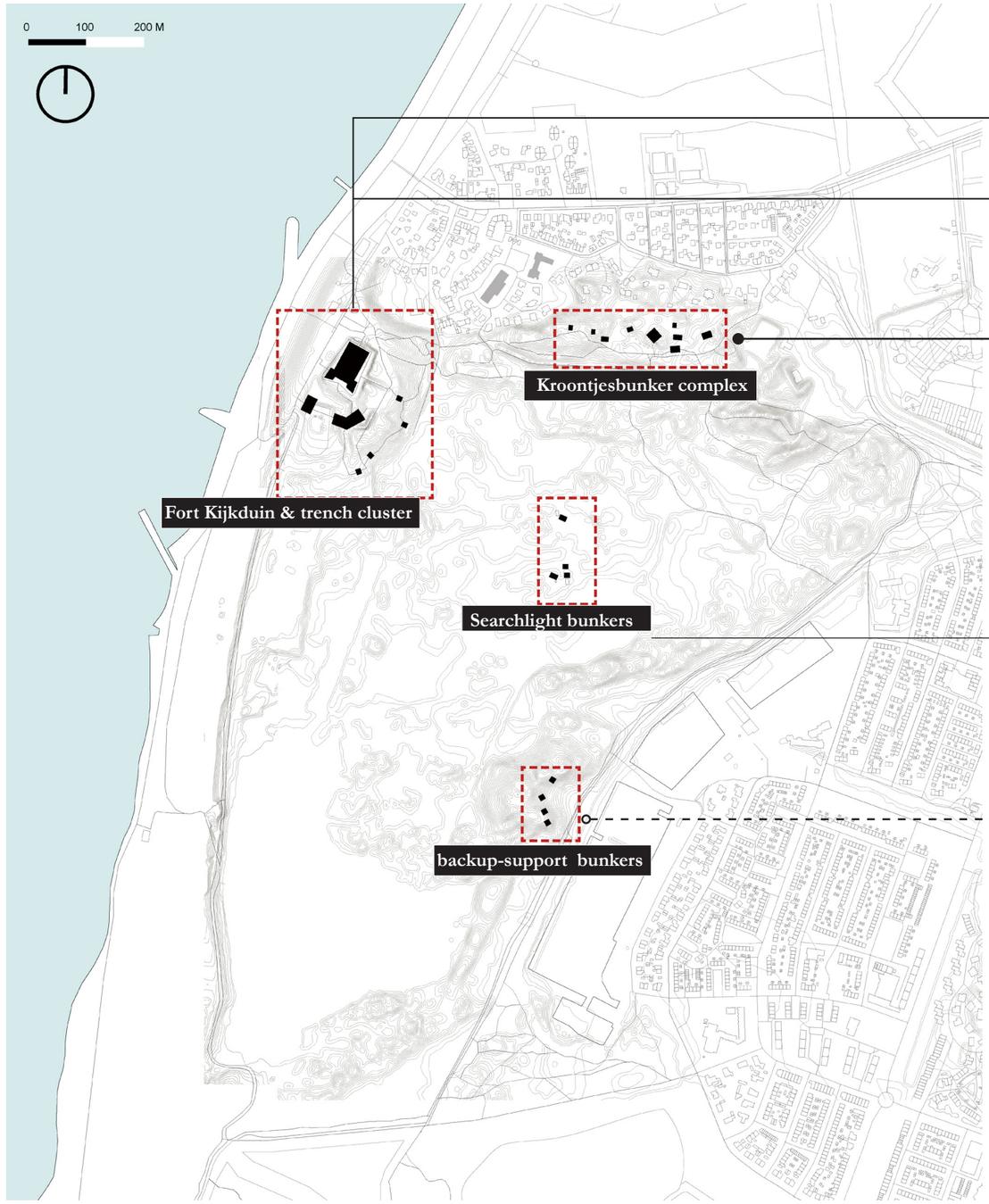


Fortkijkduin museum
Kroontjesbunker museum
Bunker ruins
Grafelijkheids dune
Bunker ruins
Bunker ruins

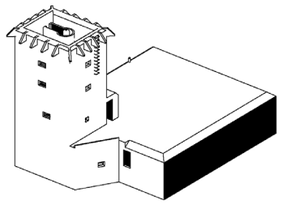
Viewing point

Routing system



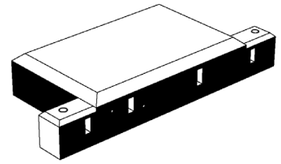


Level 1 - Permanently battery : most important and strong



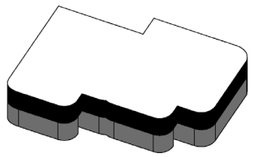
watch tower

signal station

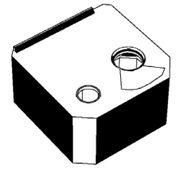


casemate

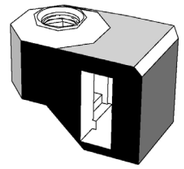
Level 2 - Reinforced battery : lightly armed and defensible



shelter for machines

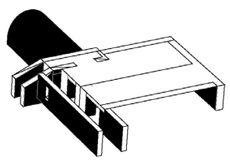


shelter for gun

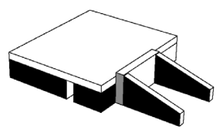


casemate

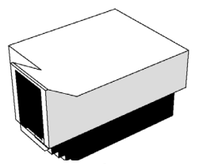
Level 3 - backup support battery : fragile, logistic support



wash house



parking lot



water tank

Different decaying conditions - materiality & texture

Level 1 - Permanently battery

STATIC

Almost intact

Level 2 - Reinforced battery

DYNAMIC

Eroded surface with diverse textures, main structure survived

Level 3 - backup-support battery

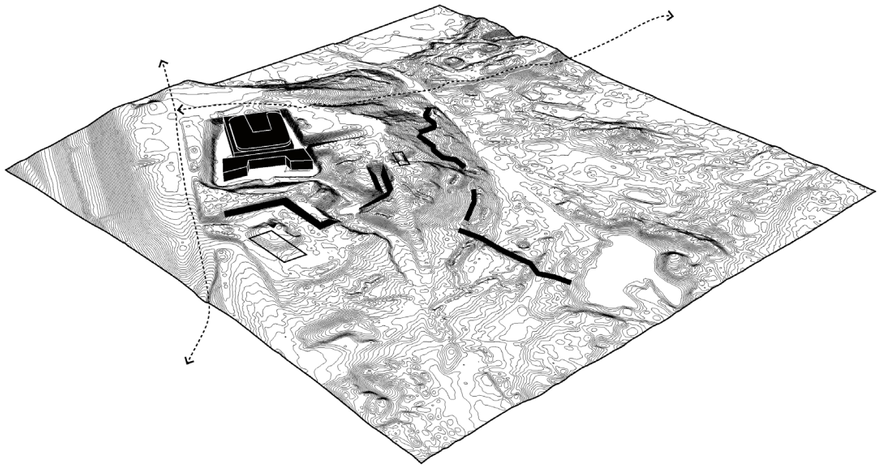
BROKEN

Main structure deterioration, falling bricks, sand and plants everywhere

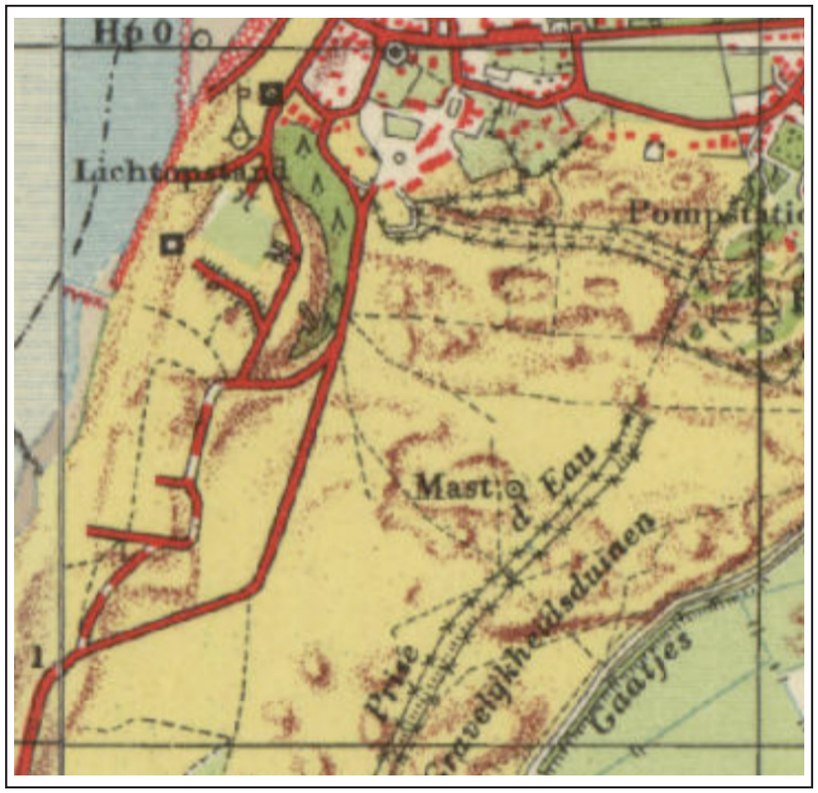
Fort Kijkduin & trench cluster

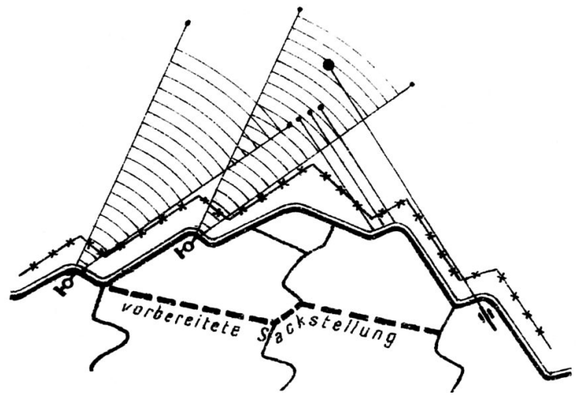
Atlantic wall ruins with

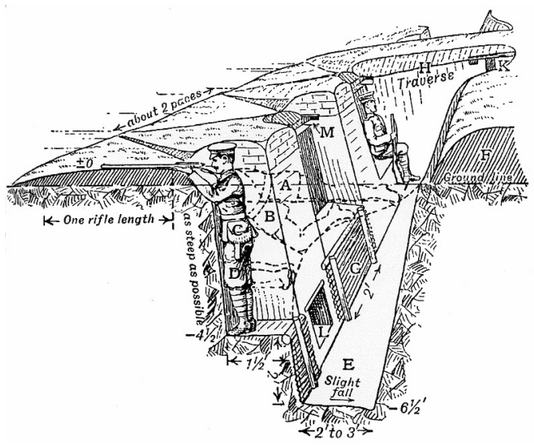
Terrain

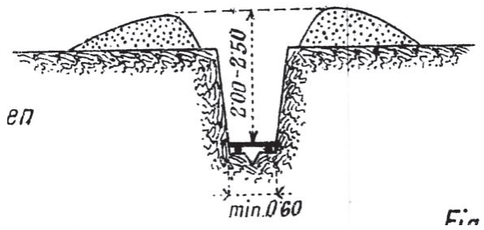


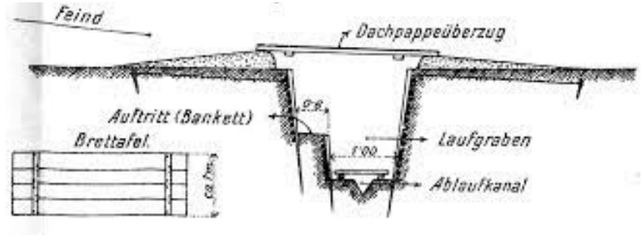
1940-1945: Atlantic wall trench during WWII



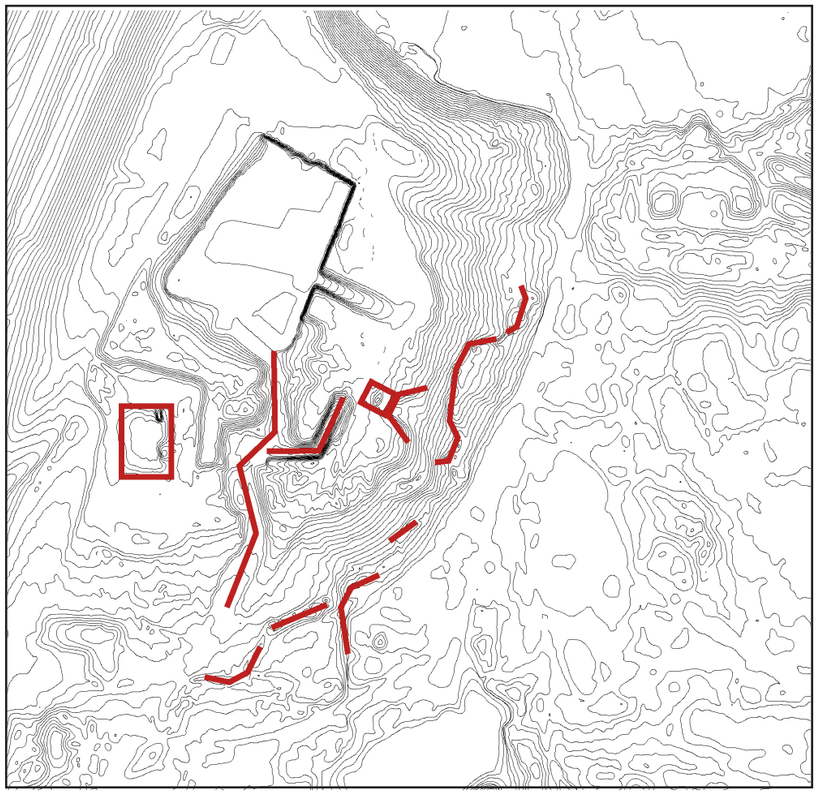


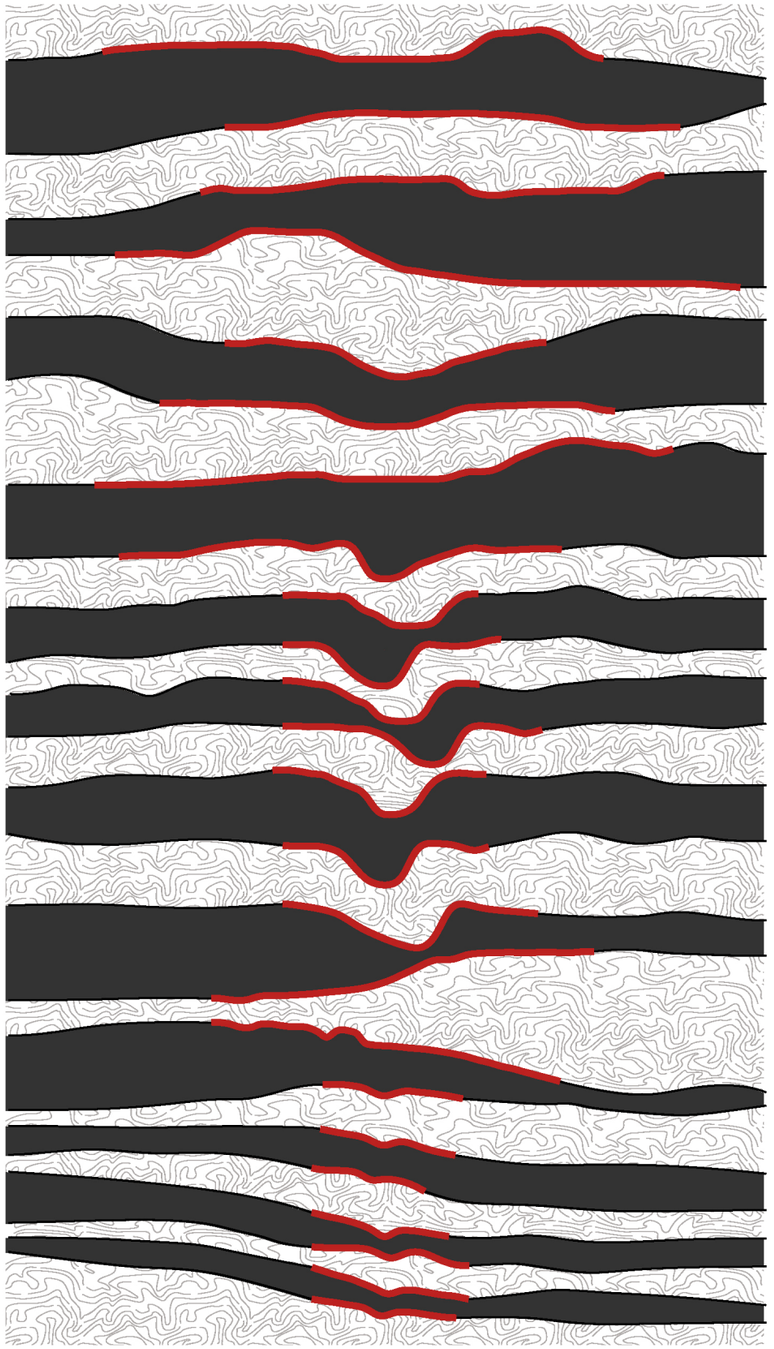




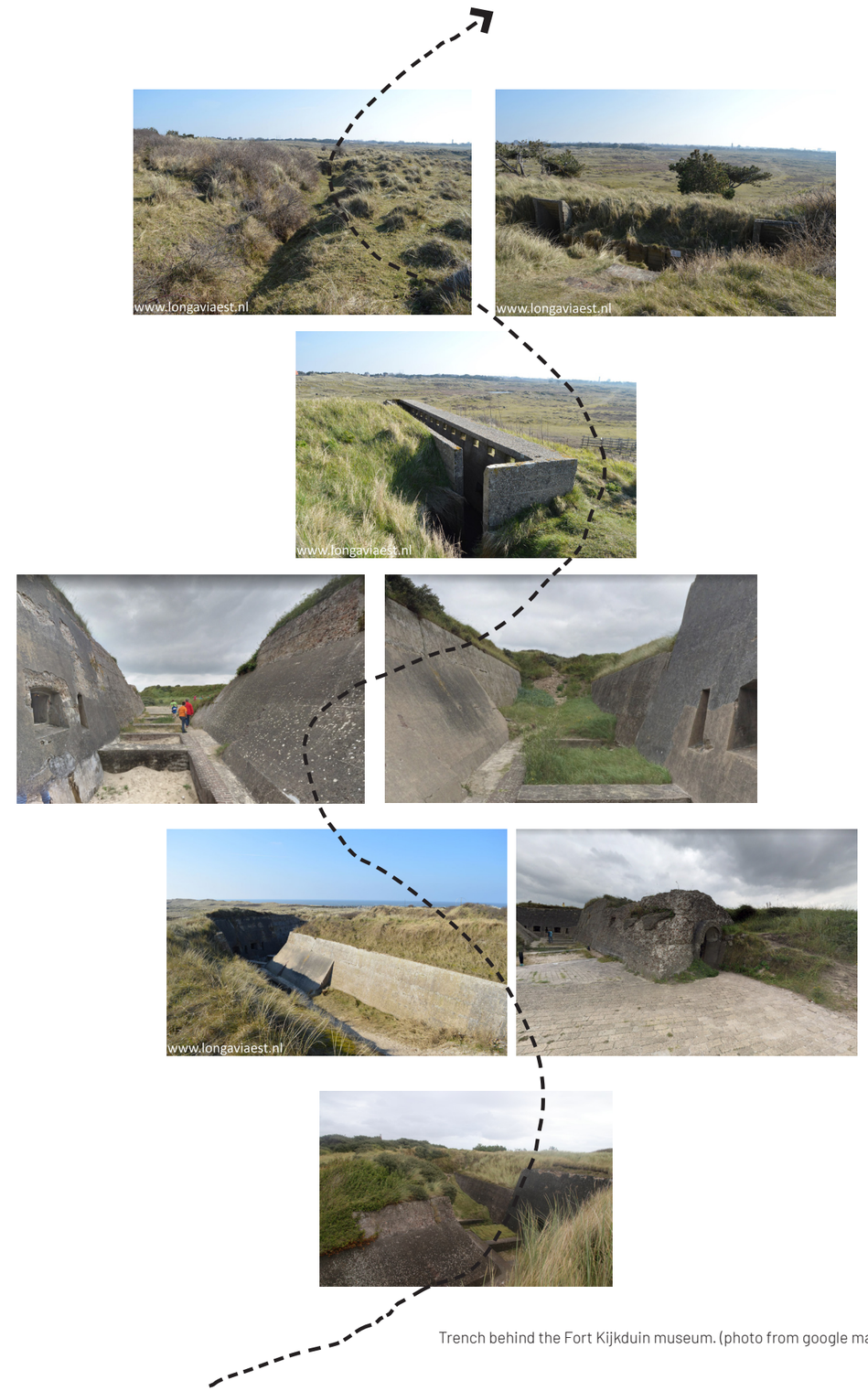


After 1945: mutual influence between Atlantic wall trench and dune





2023: Fort Kijkduin Museum with trench as backyard

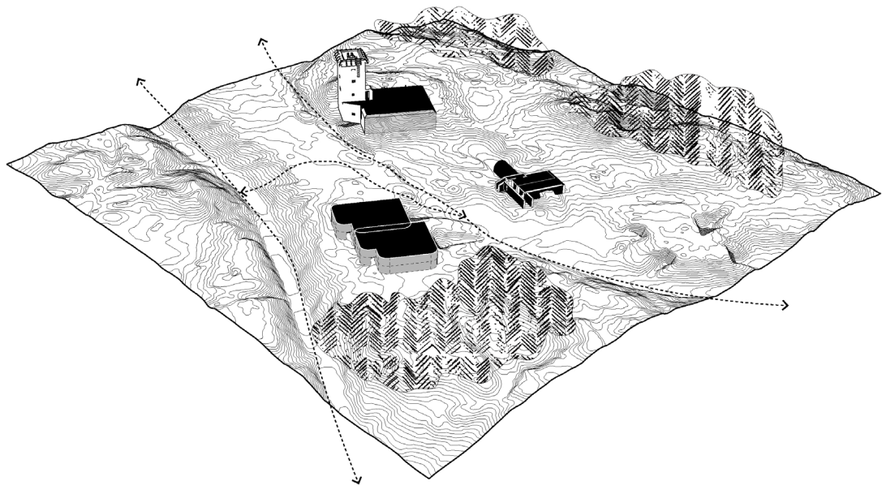


Trench behind the Fort Kijkduin museum. (photo from google maps and www.longaviaest.nl)

Kroontjesbunker complex

Atlantic wall ruins with

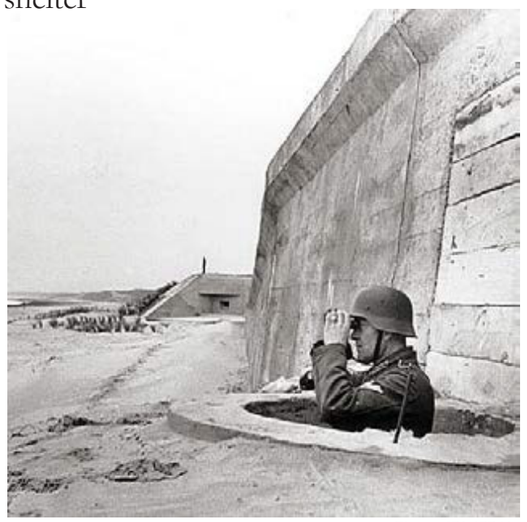
Crack



1940-1945: Atlantic wall bunker cluster near Huisduinen

shelter

shelter



radar station

Figure 131-133 Kroontjesbunker functions during the WWII . (Photo from Regionaal Archief Alkmaar)

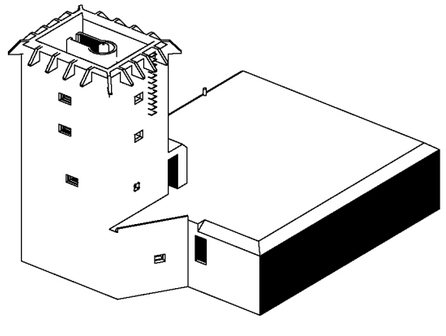
2023: Kroontjesbunker Museum & surrounding ruins

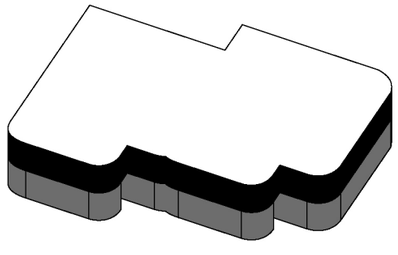
level 1 - Fl250
(used to be a radar station, now function as museum, known as the crown bunker)

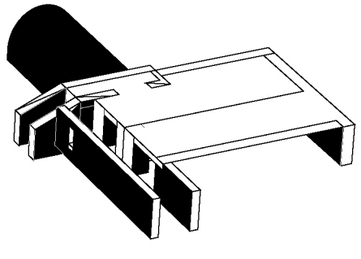
level 2 - M151
(used to be a shelter for machine)

level 3 - Wash house
(used to be a shelter and wash house)

Different degrees of decay

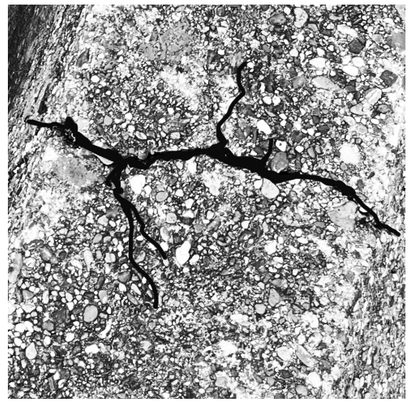






lightly-eroded

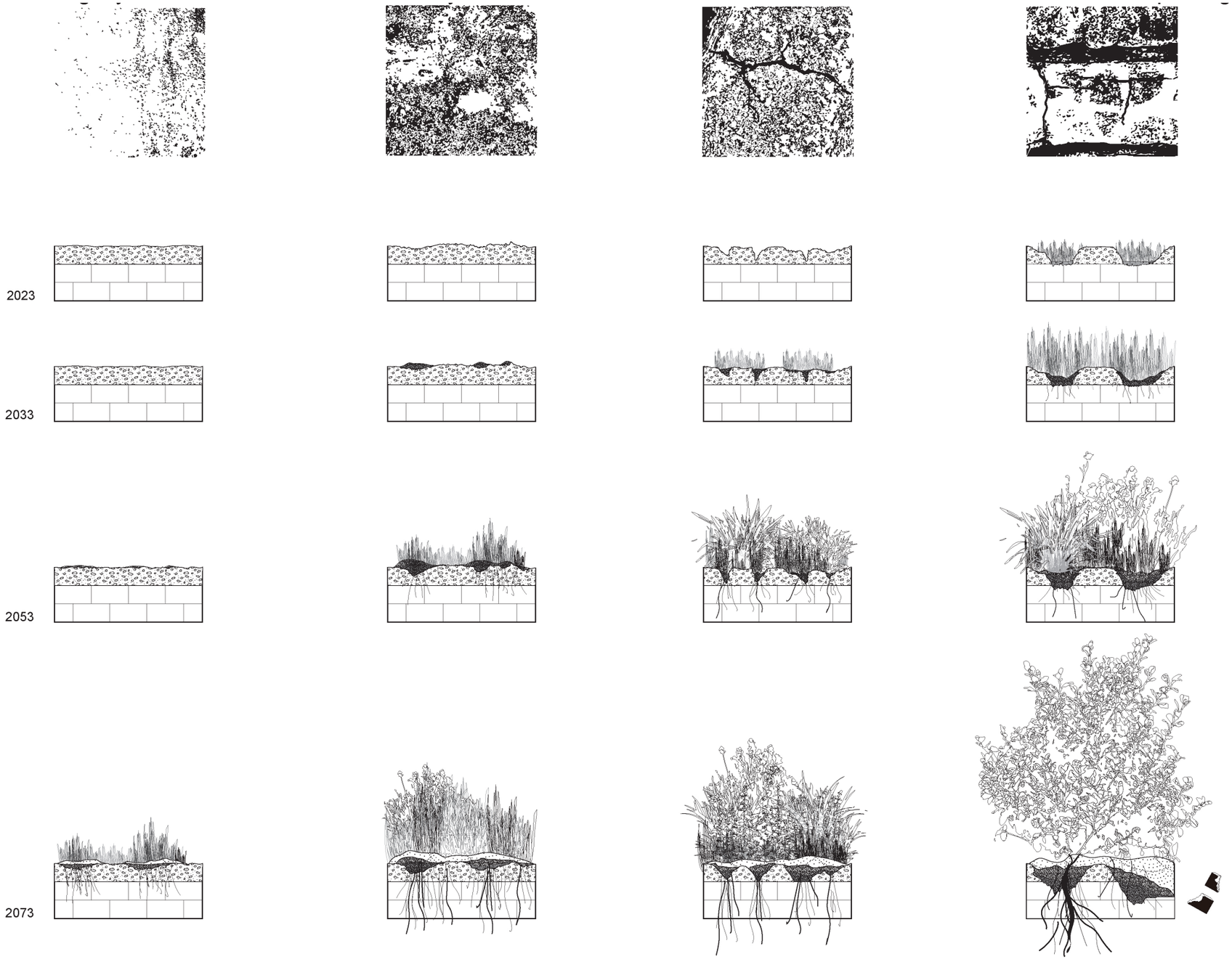
heavily-eroded



surface crack

deep crack

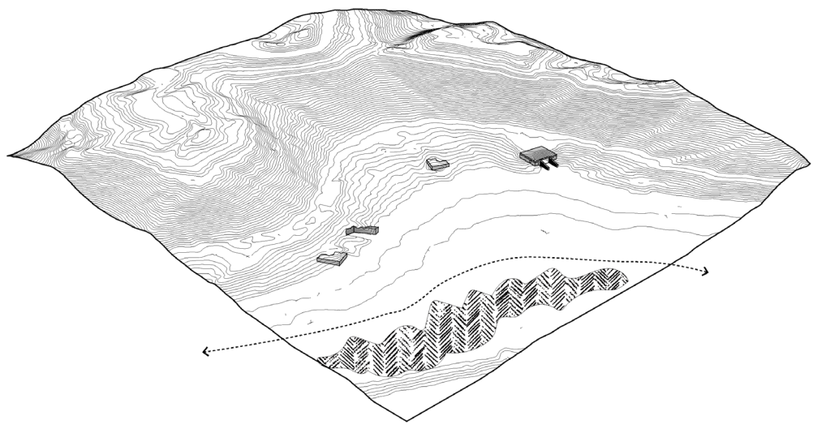
2023 - 2073: natural decay process without intervention



Backup-support bunkers

Atlantic wall ruins with

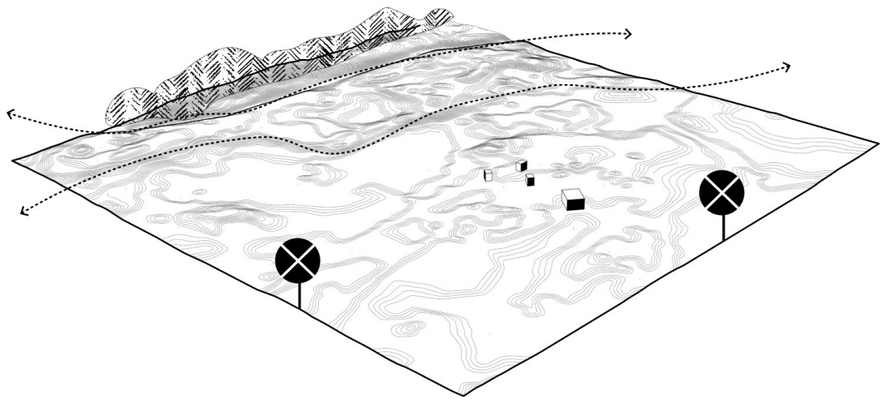
Brick

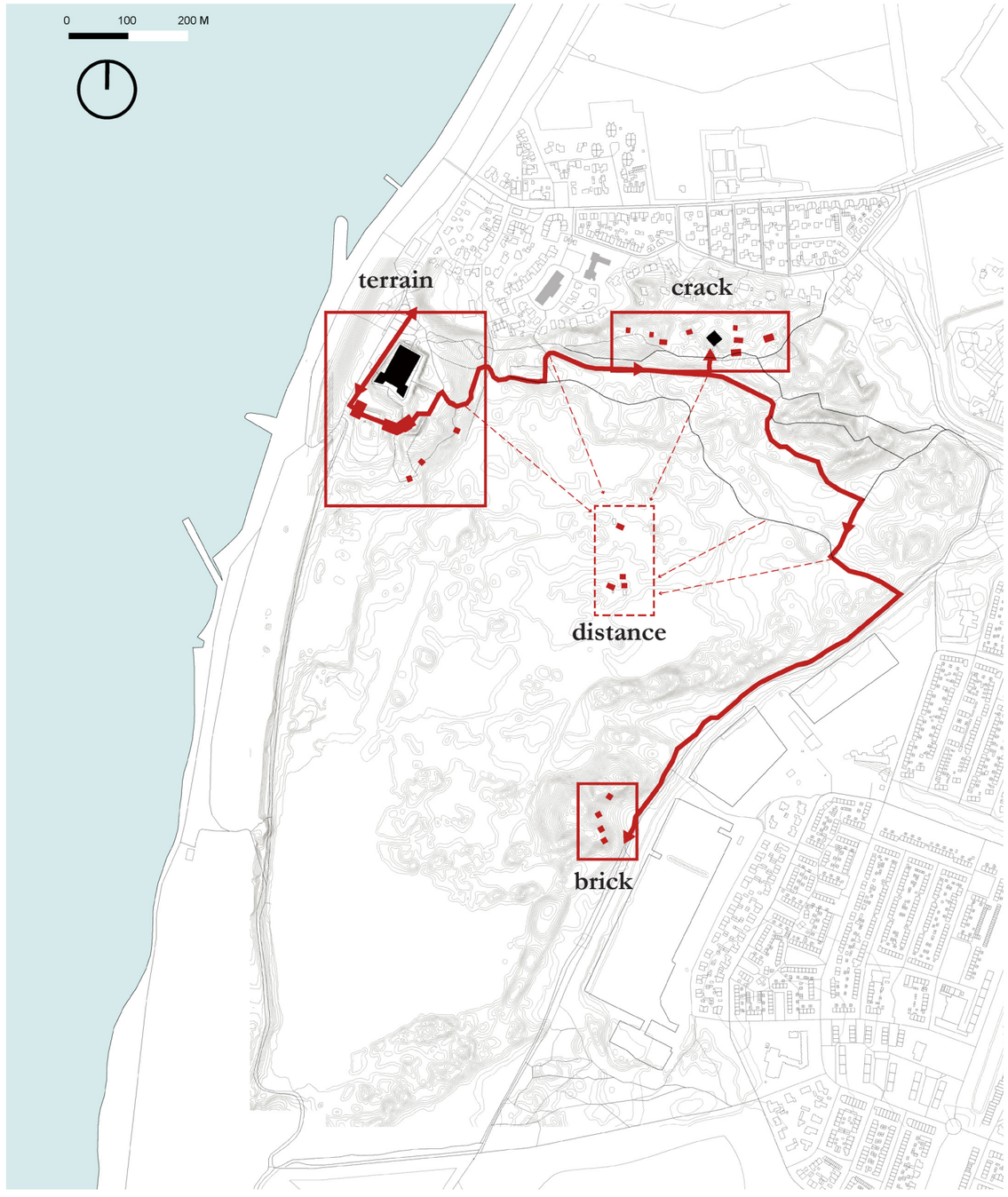


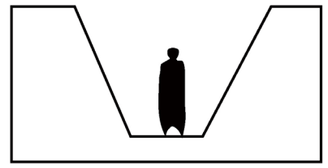
Searchlight bunkers

Atlantic wall ruins with

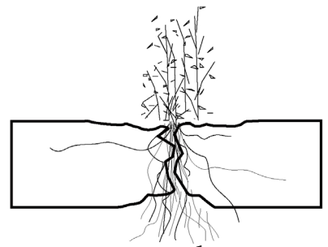
Distance





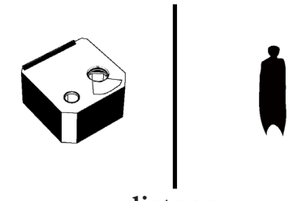


terrain



crack

brick



distance

Materiality

Concrete

Local materials

Reclaimed bunker bricks and concrete

Transformation

Concrete wall

Plant wall

Debris wall

Gabion wall

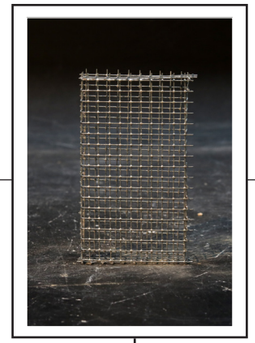
2023

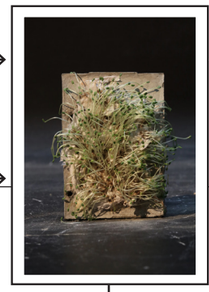
2033

2053

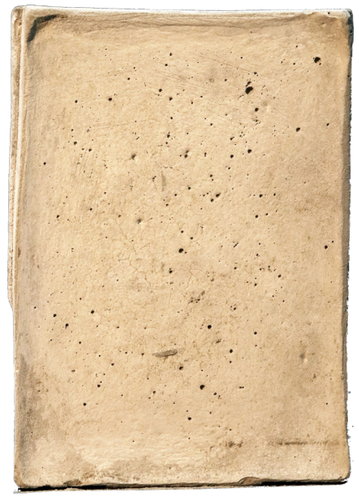
2063

2073



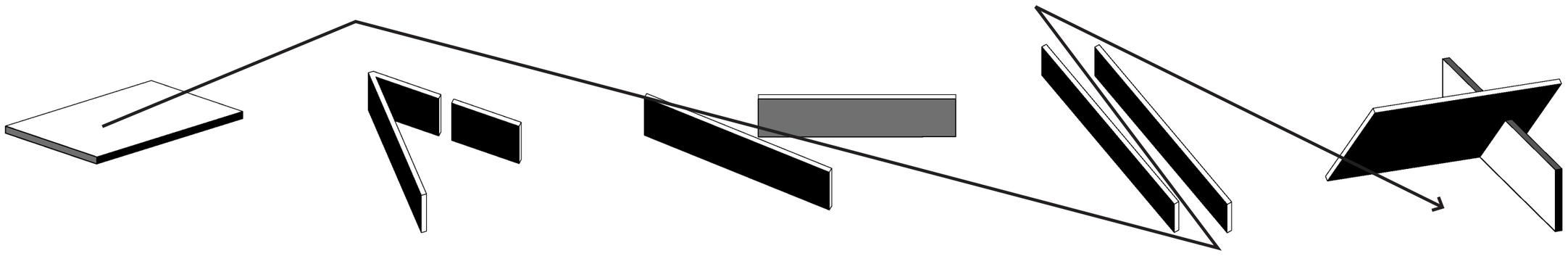


Concrete wall - Spatial combination



concrete wall is made of smooth and solid concrete

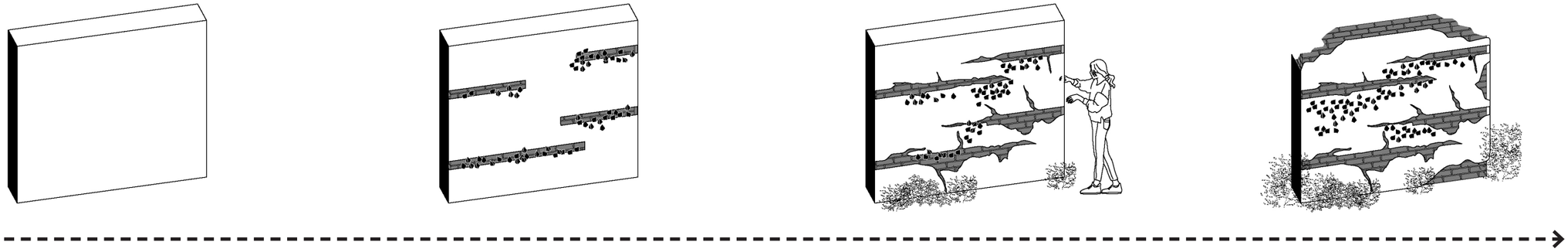
It can be used to shape various spatial relationship between people and ruins.



Plant wall - Time process

Plants will slowly intrude into the wall

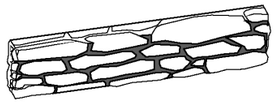
Plant growth and cracks in the wall reflect the time process

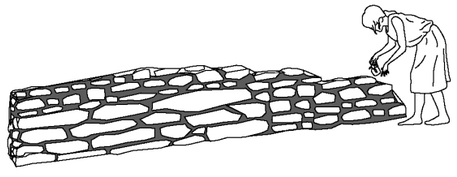


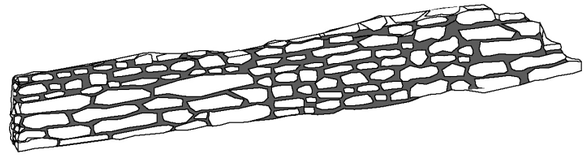
Debris wall - Time process

Reclaimed bricks and concrete blocks from the crumbling bunkers are gradually being constructed as walls.

Residents from the surrounding community will also take part in the wall-building programme.



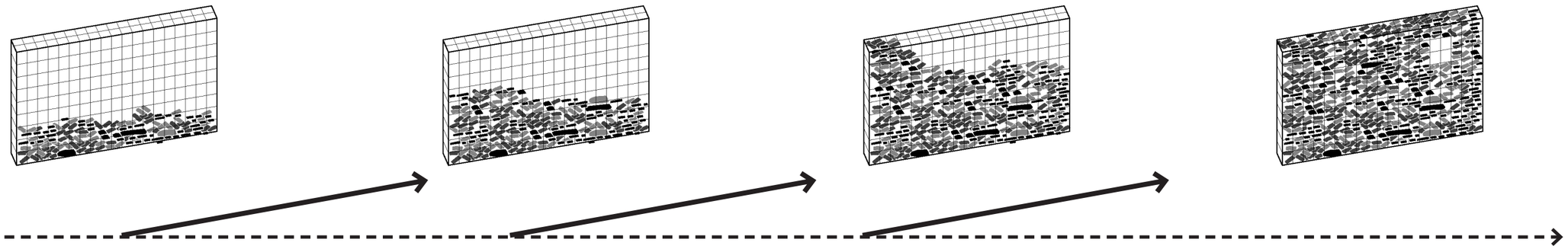


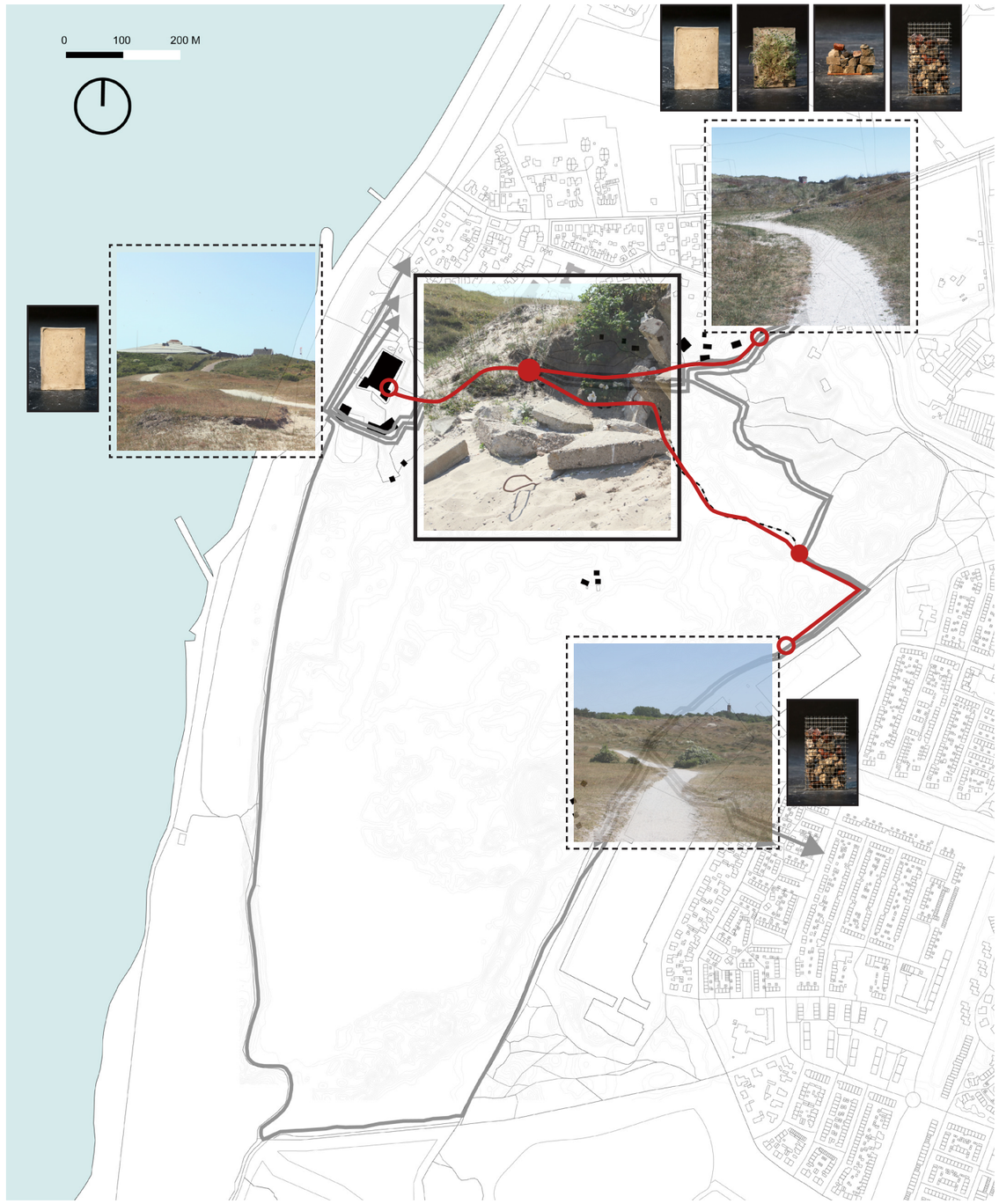


Gabion wall - Symphony of Time & Space

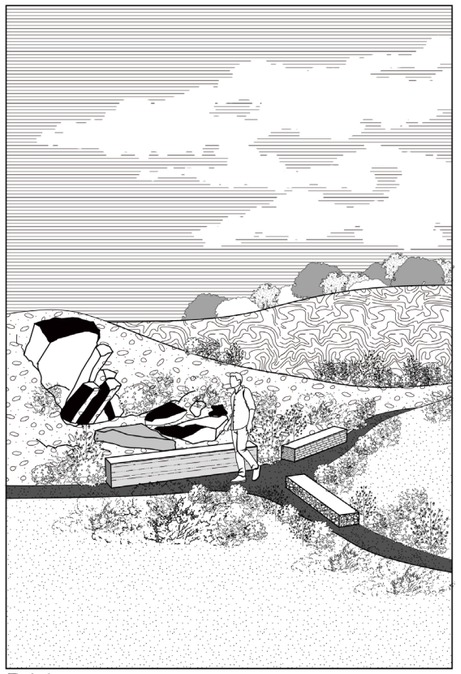
Reclaimed bricks from the crumbling bunkers are gradually filled into the gabion.

The growing gabion wall and the collapsing bunker





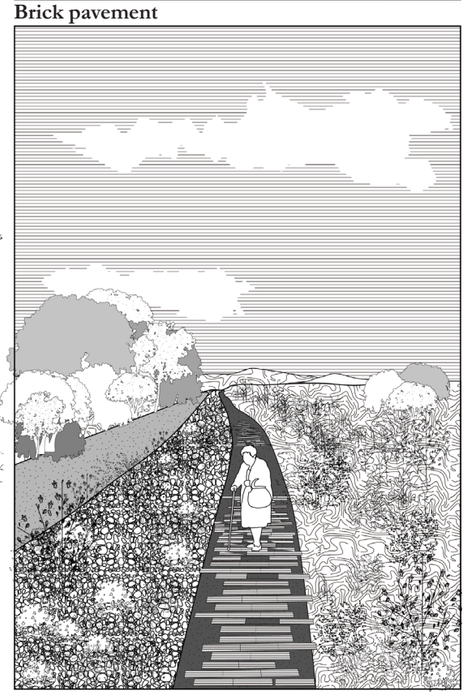
Bench



Guiding sign

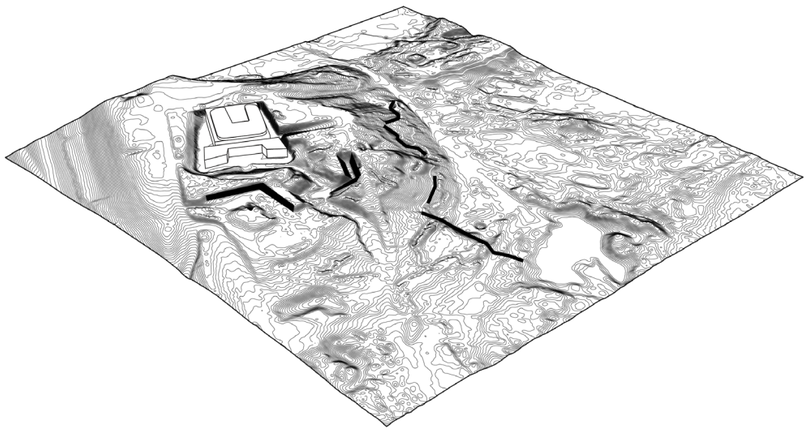
Brick pavement

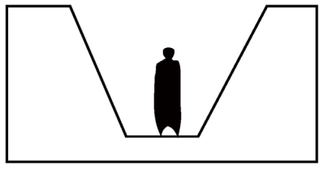
Brick pavement



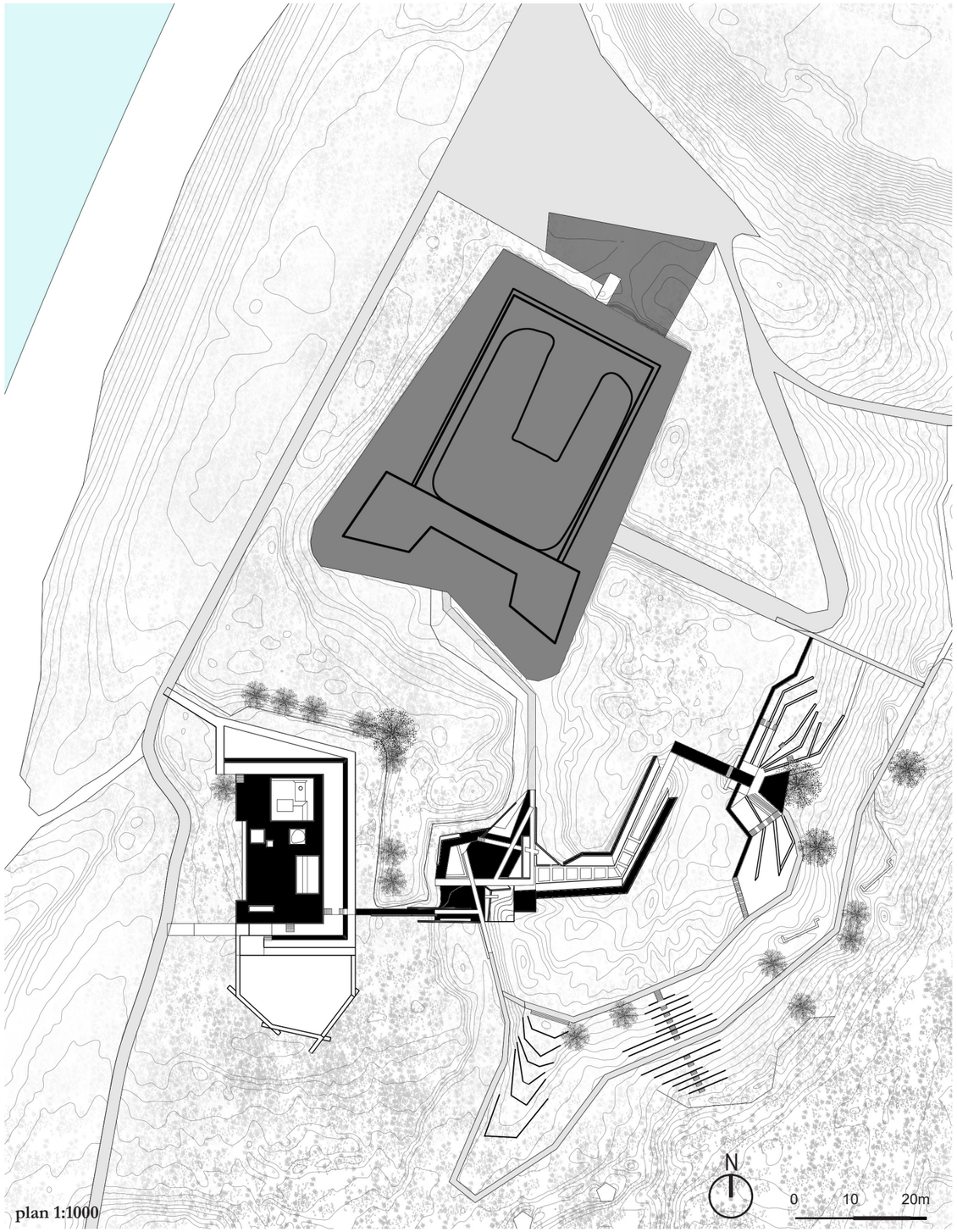
THE SLEEPING RUIN

Terrain





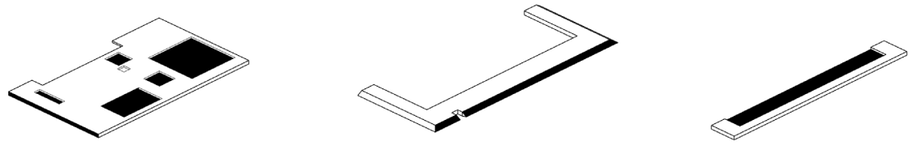
Walk through the history



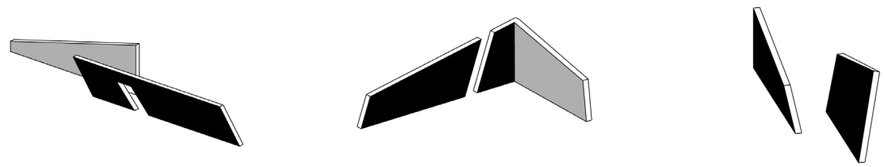
plan 1:1000

Spatial gesture

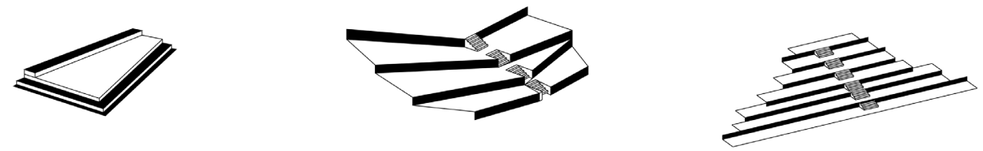
Platform

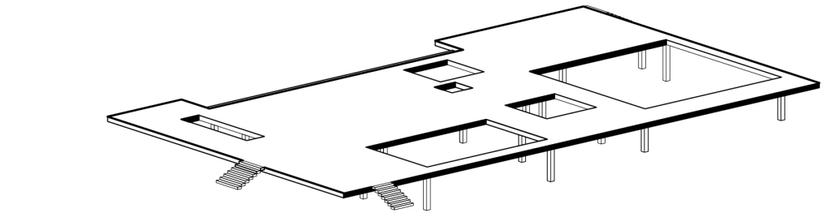


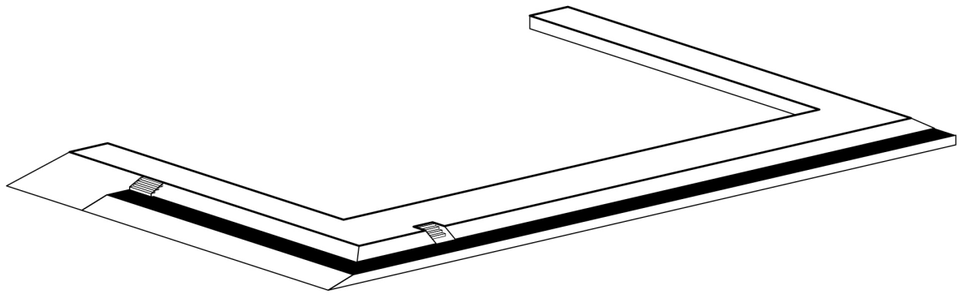
Wall

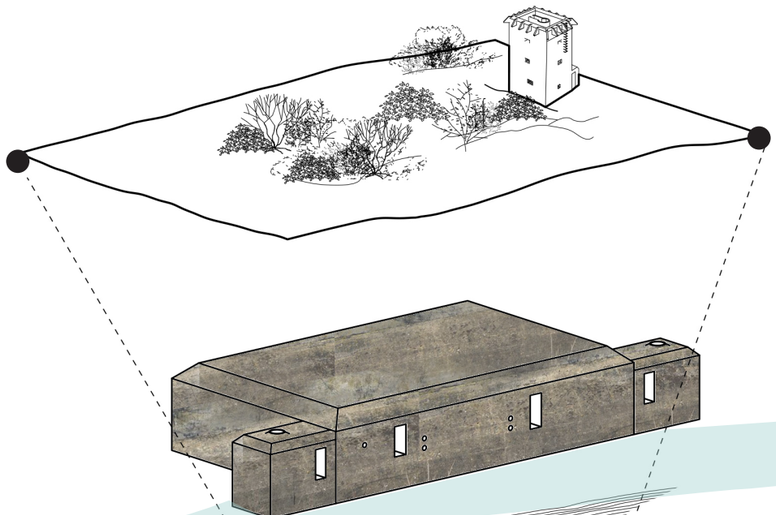


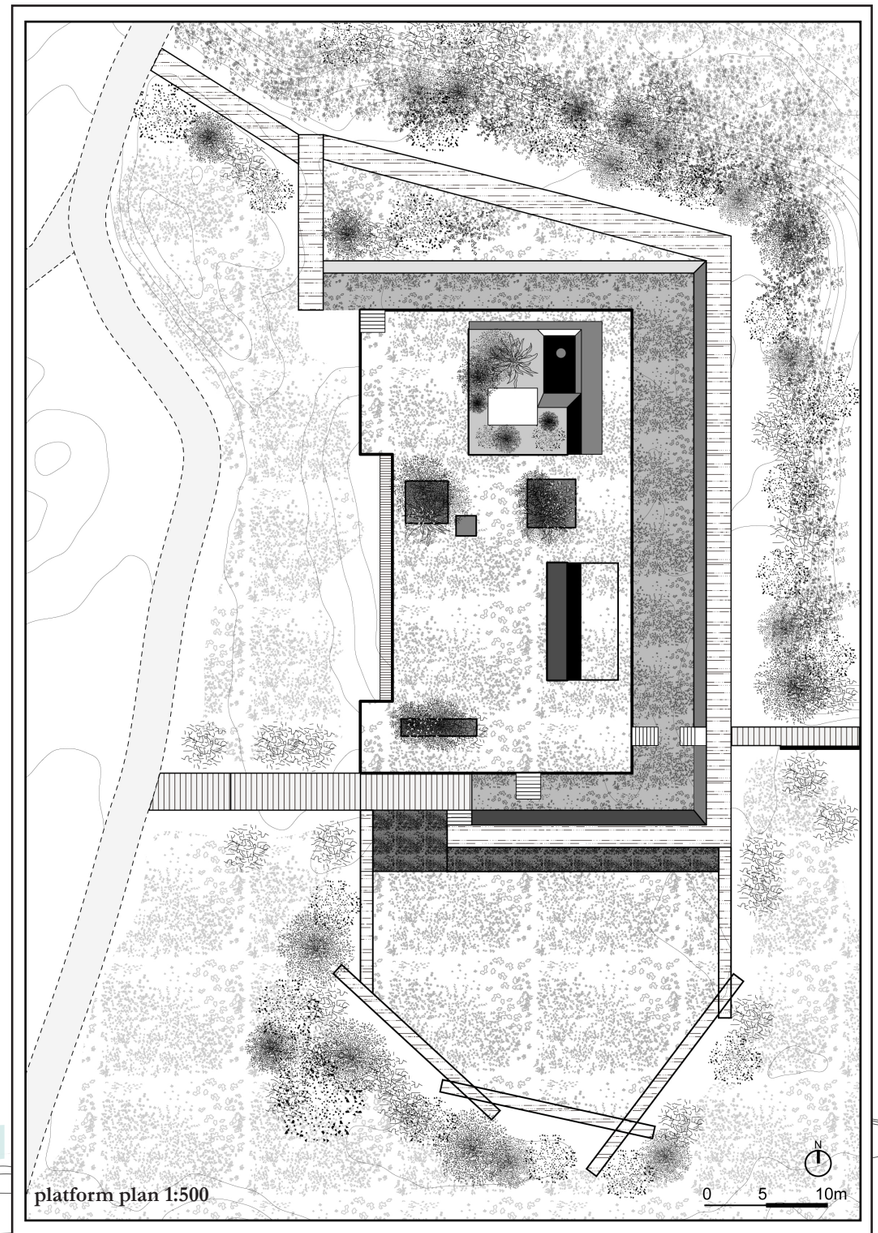
Terrace



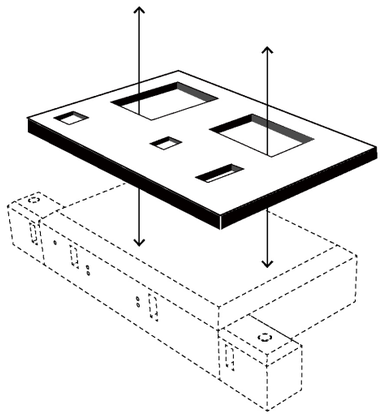


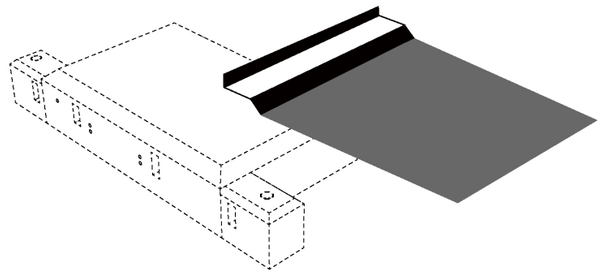


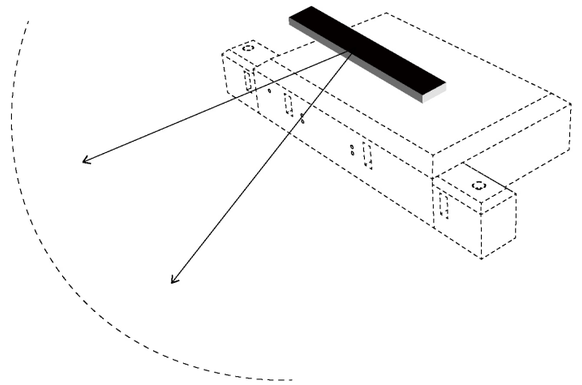


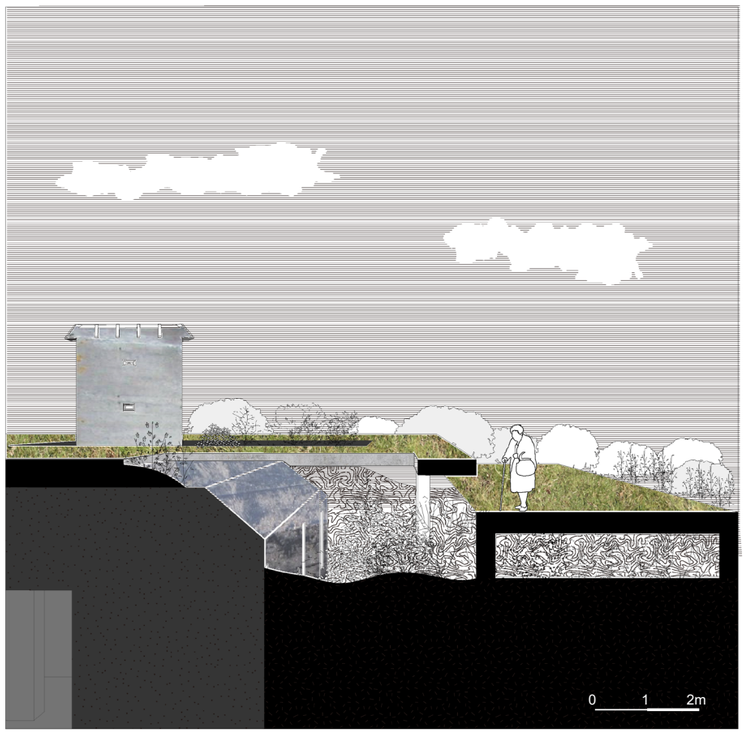


platform plan 1:500

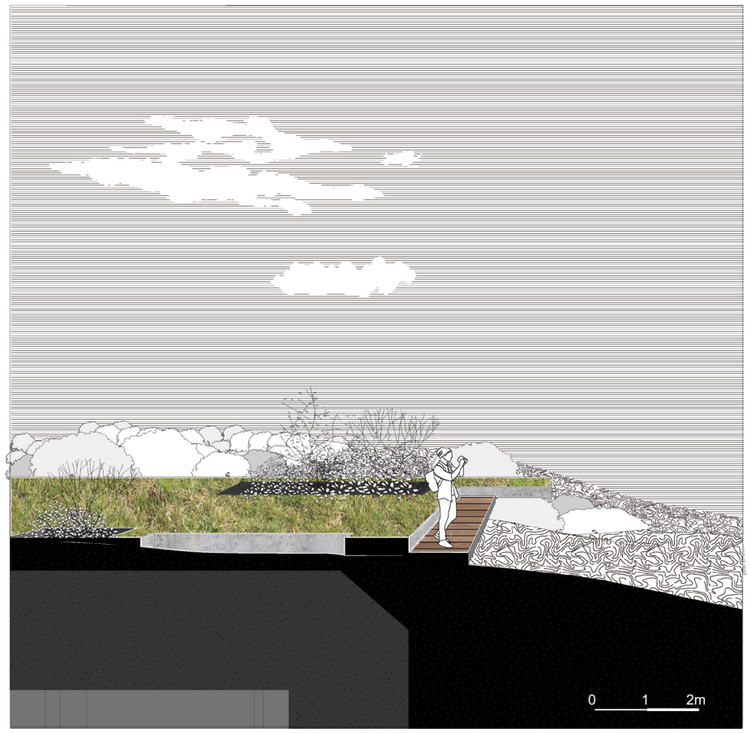


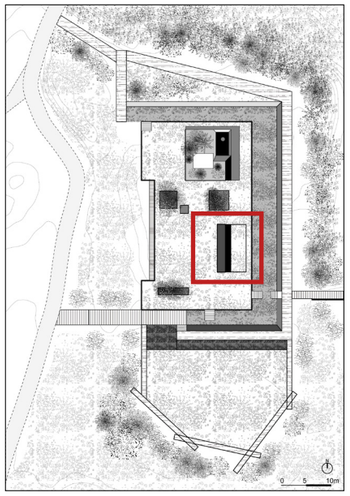





0 1 2m

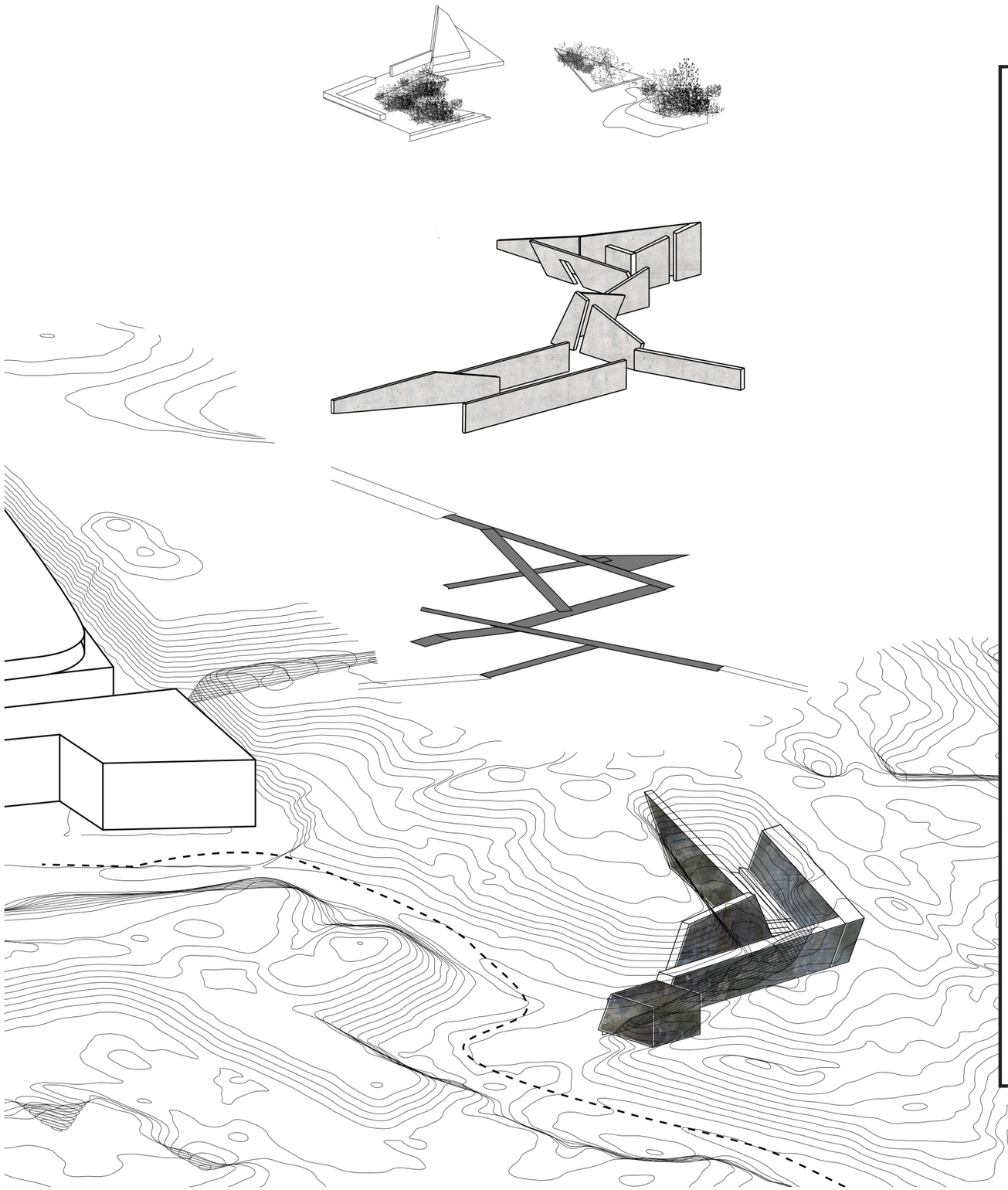
0 1 2m

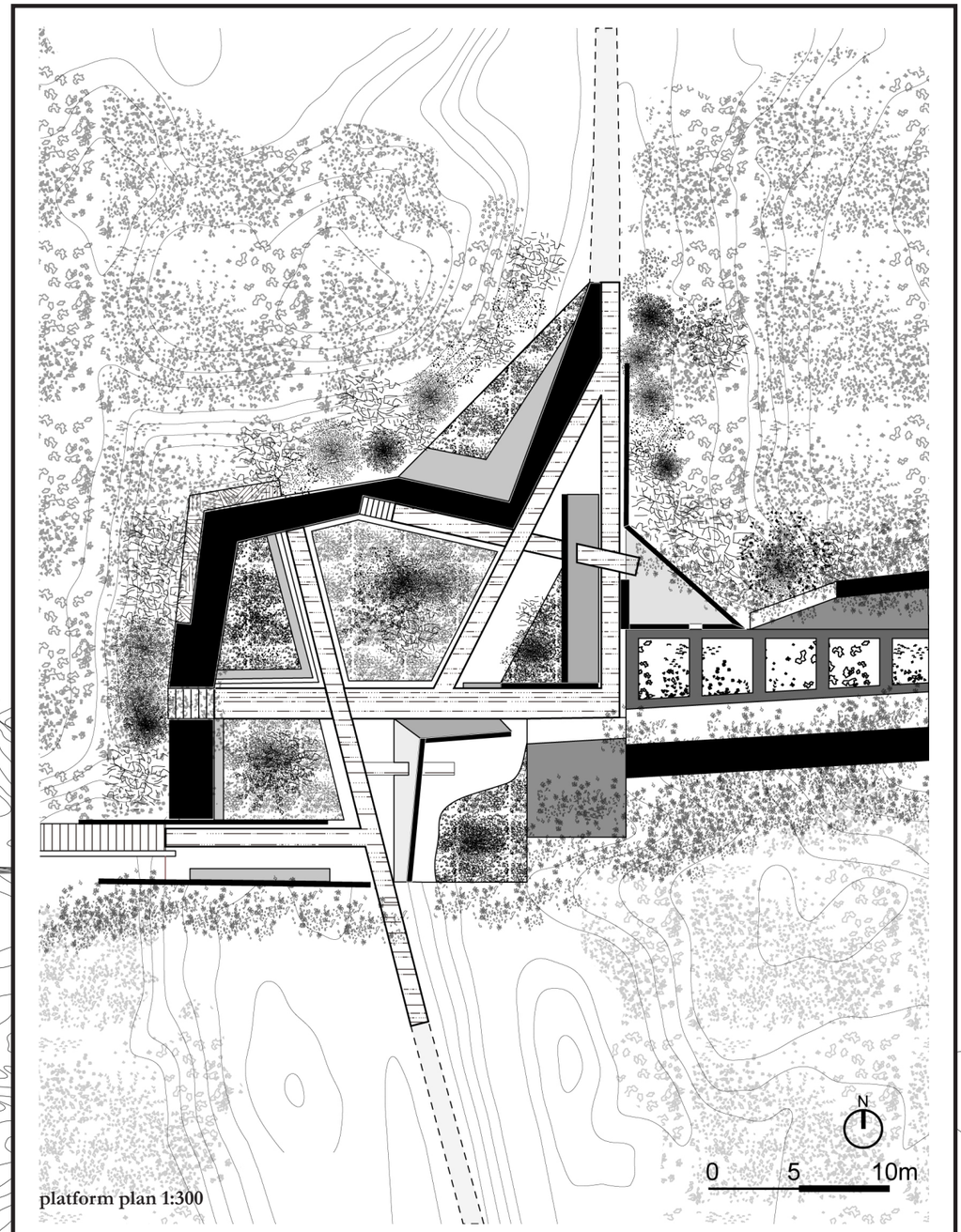

0 1 2m



The platform and the hiden bunker

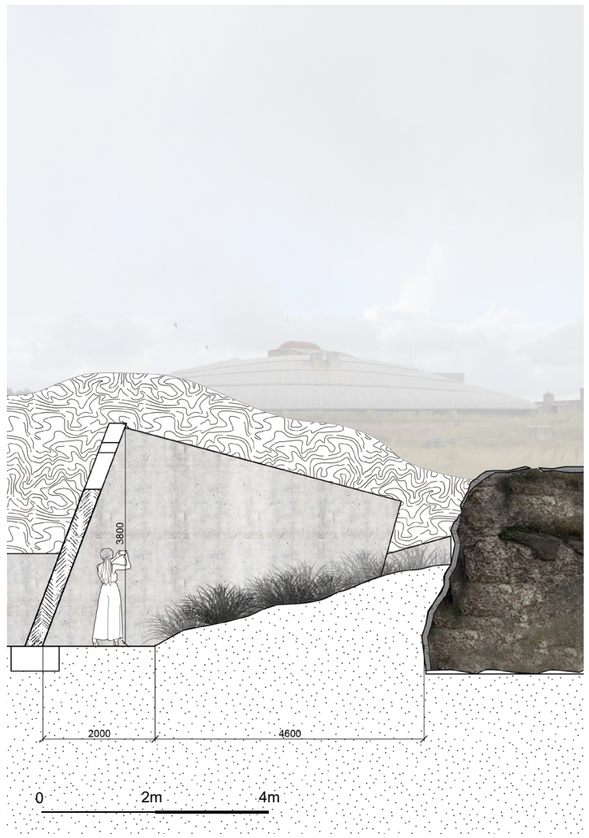
The grassy platform frames the underground bunker. Directing people's attention to the once neglected ruins, which is an opening for people to reflect and empathise.

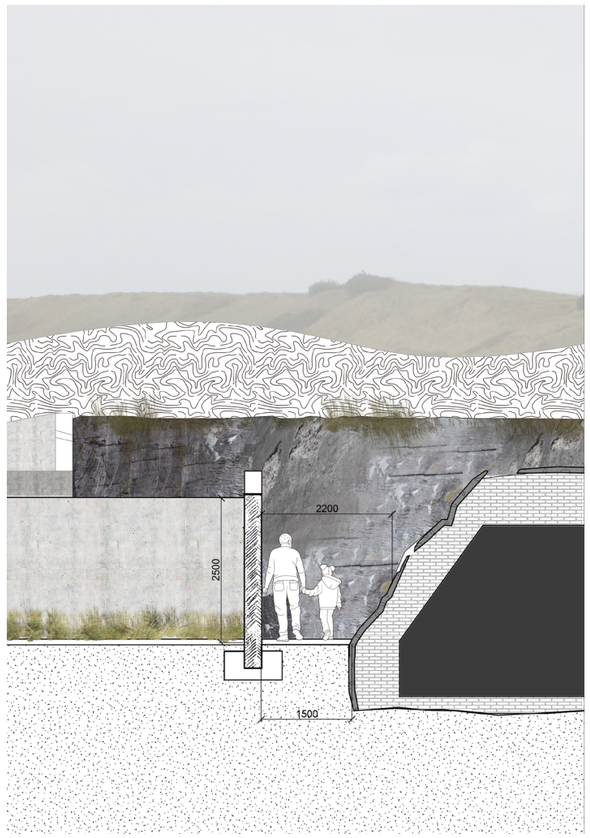


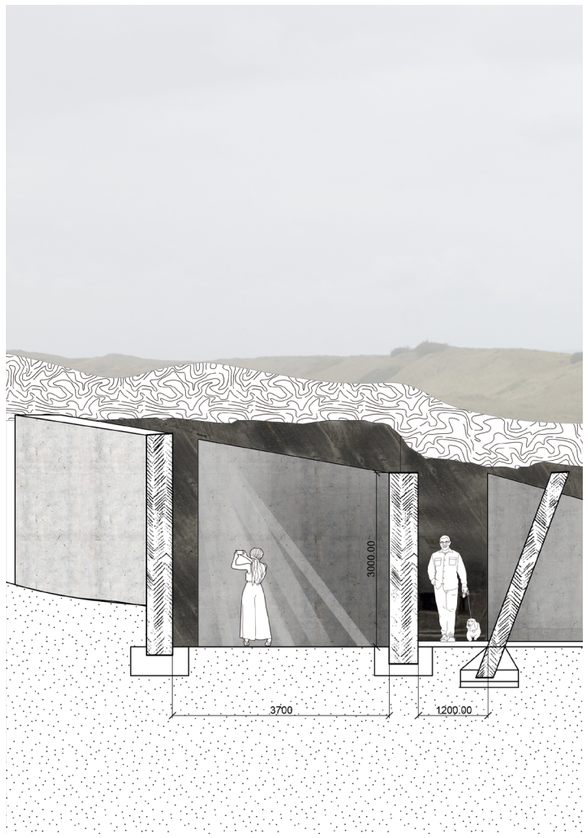


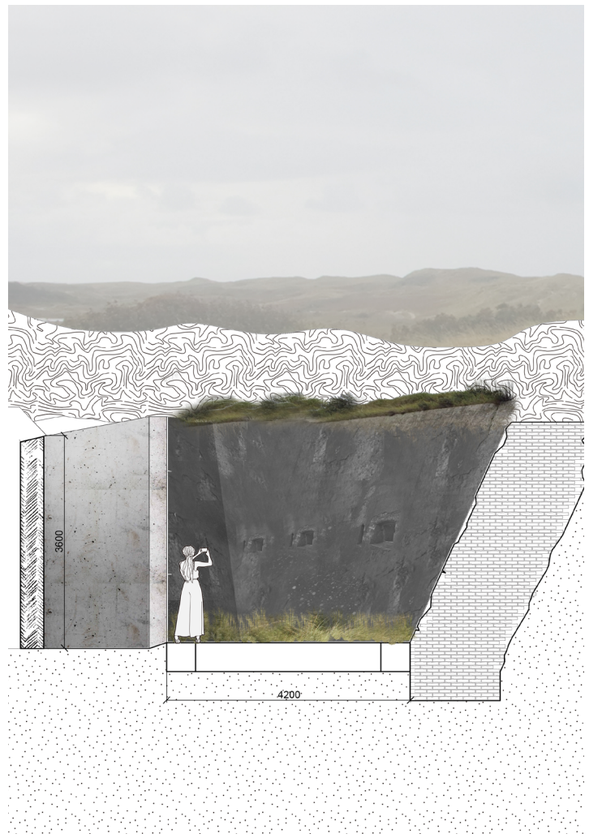
platform plan 1:300

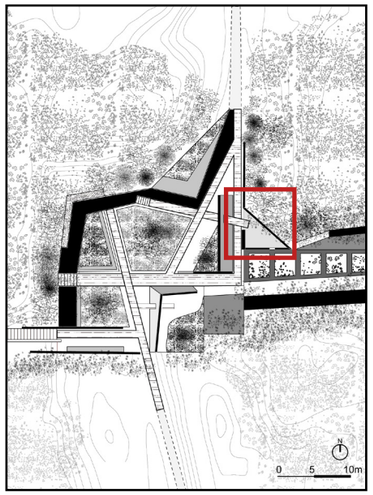
Various relationships between new wall assemble, people and the ruins.











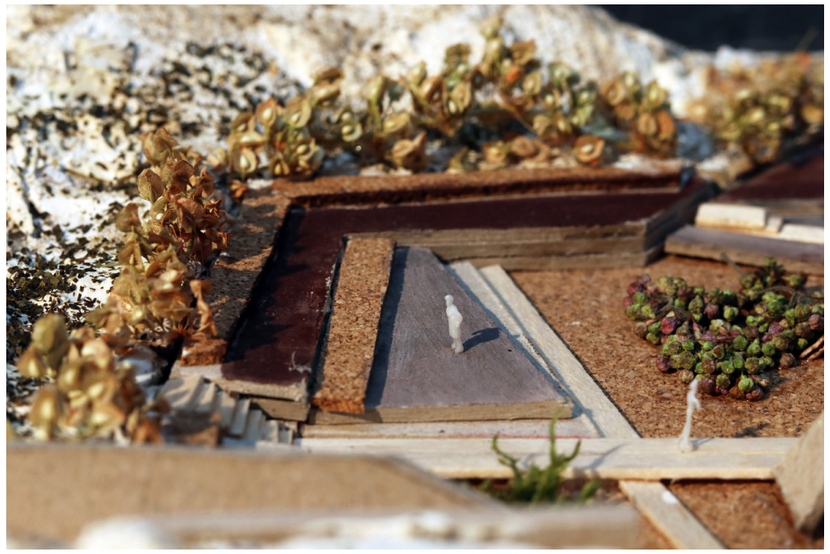
The wall assemble

The smooth texture of the concrete walls contrasts with the texture of the ruins. The enclosed space and frame formed by the three concrete walls enhances this contrast and the tension of the space

Model

Gathering point

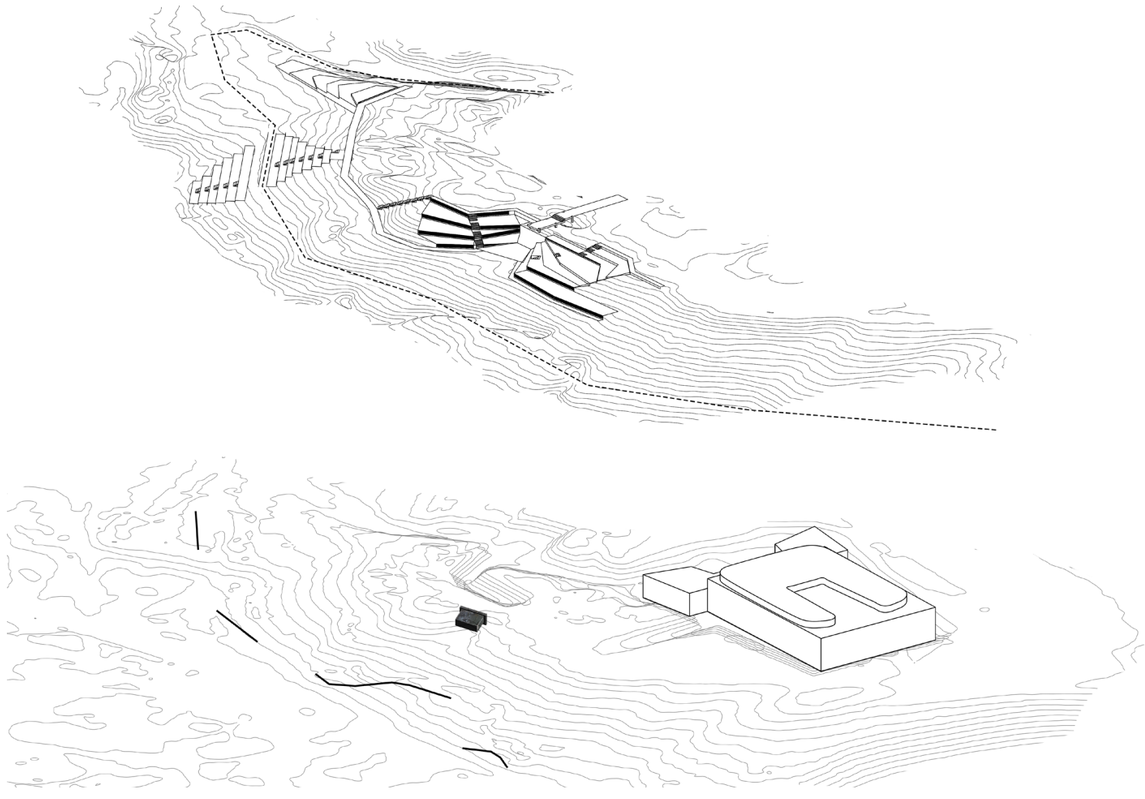
Feel the rough surface of the ruins closely.

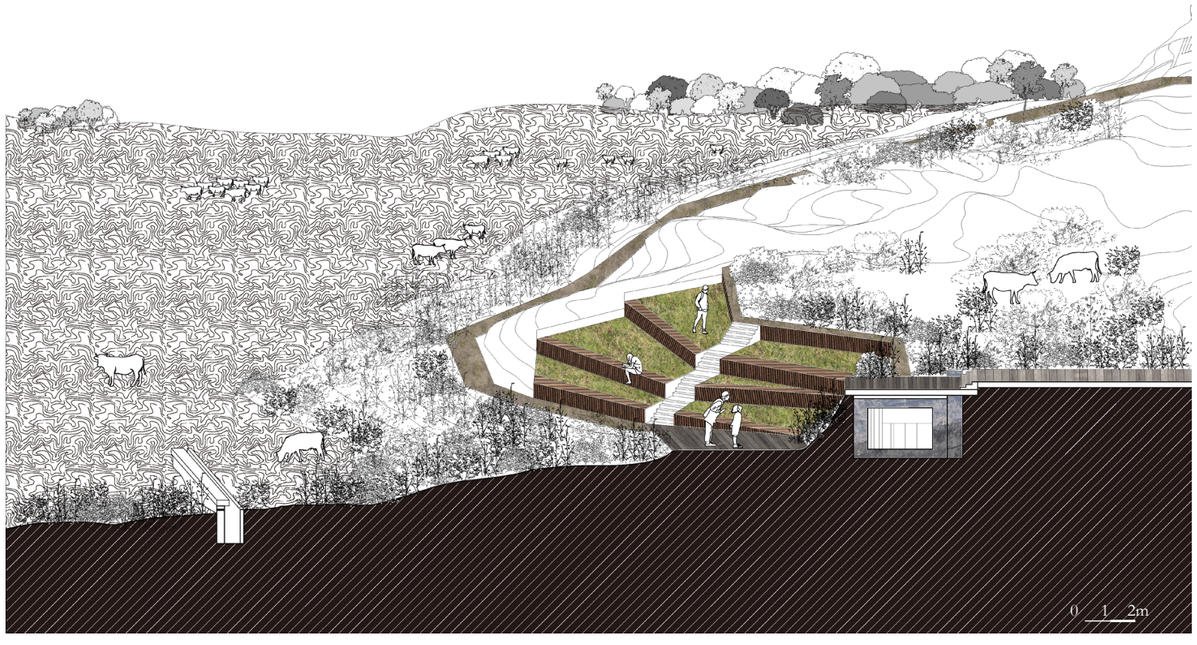


A distant view of the trench ruins from the terrace

Tilted walls create spatial tension.

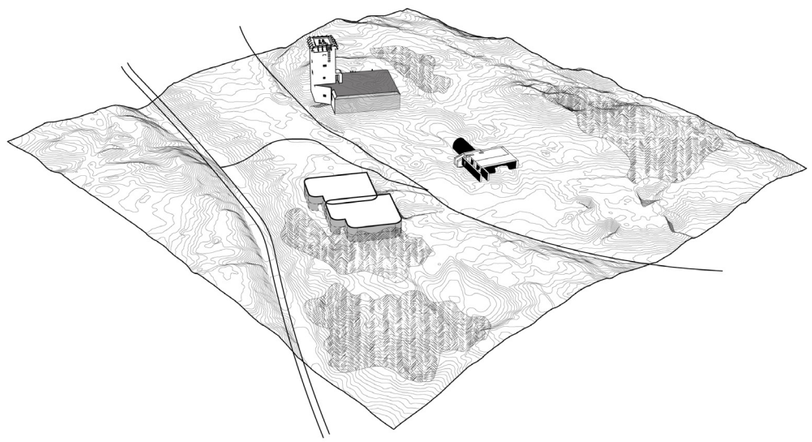
The terraces along the existing terrain create viewing points towards the dune and ruins

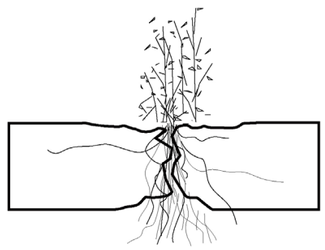




THE GROWING RUIN

Crack

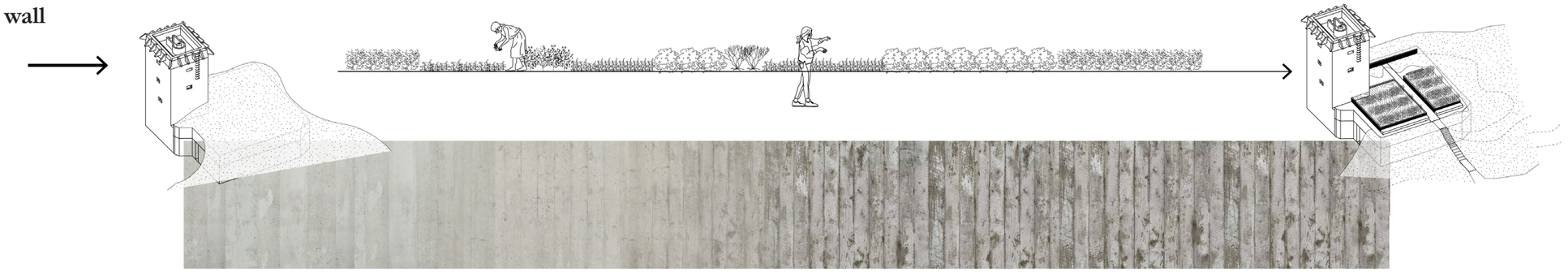




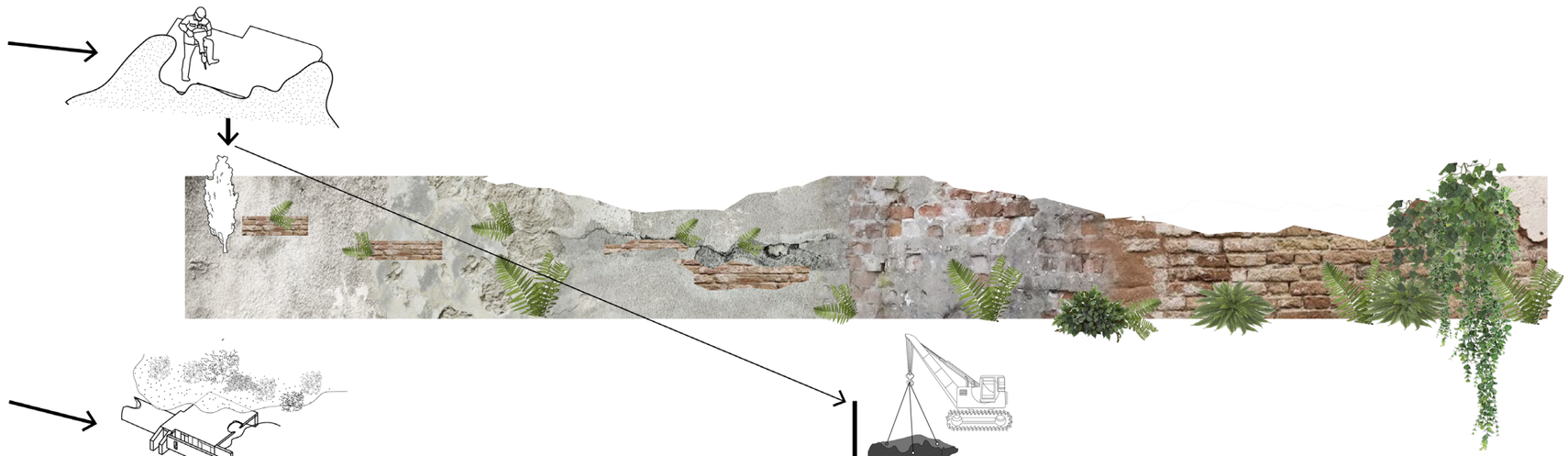
Get involved with the decaying process

Intervention strategy

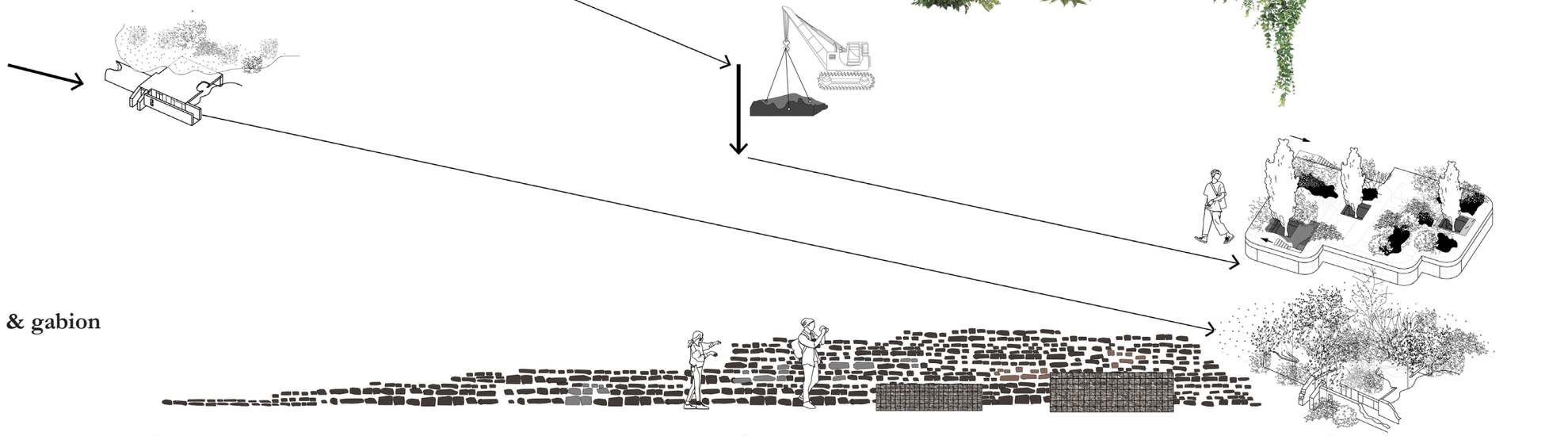
Concrete wall



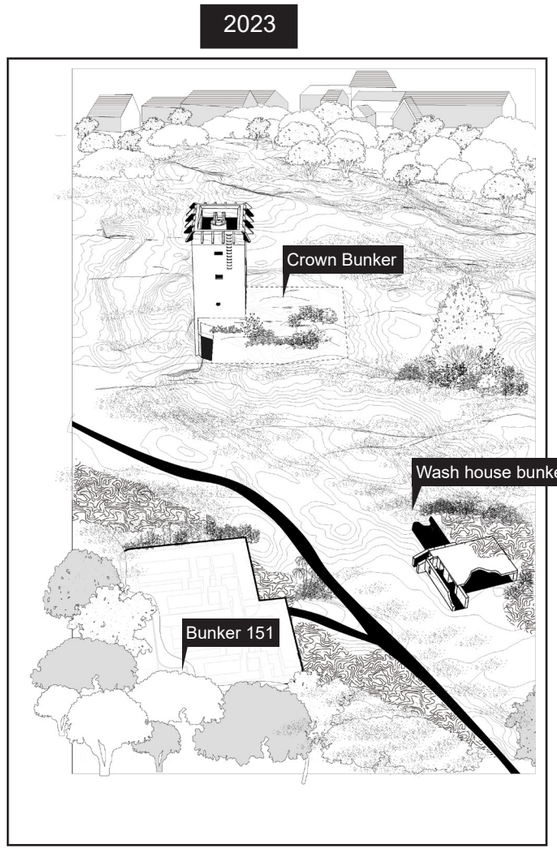
Plant wall



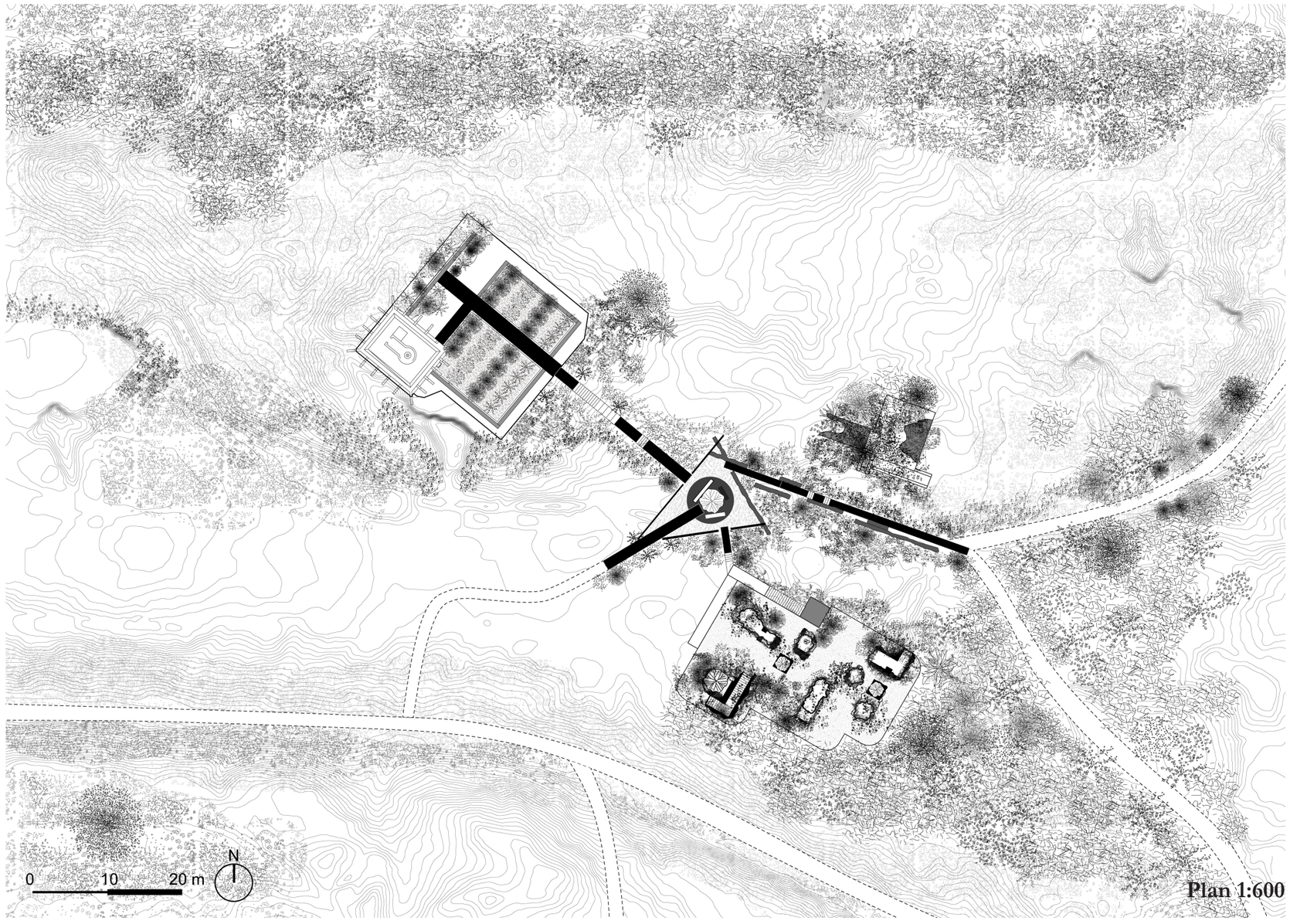
Debris wall & gabion



Existing bunker complex

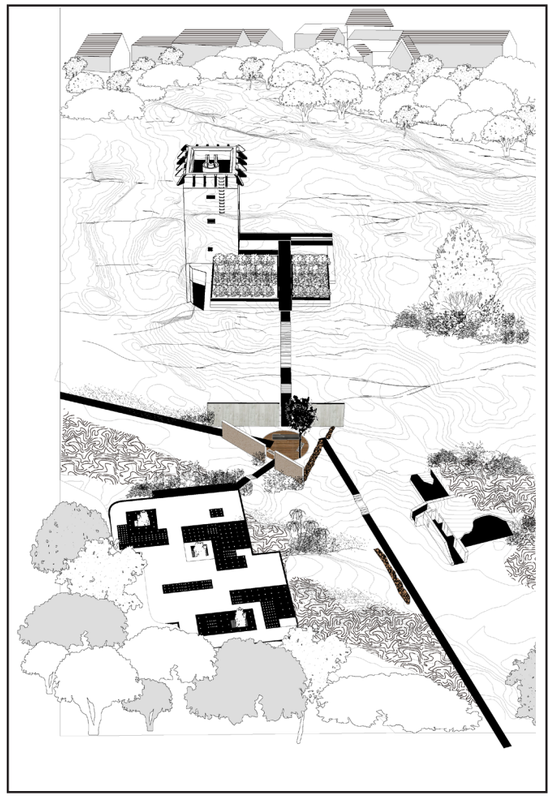


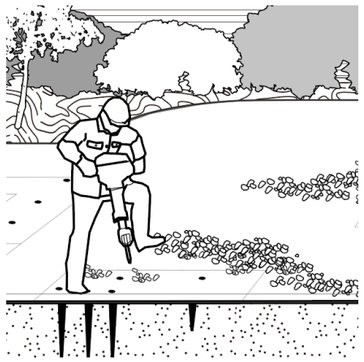
Design proposal

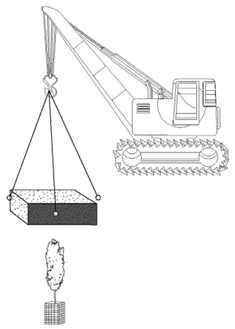


First-round intervention

2023



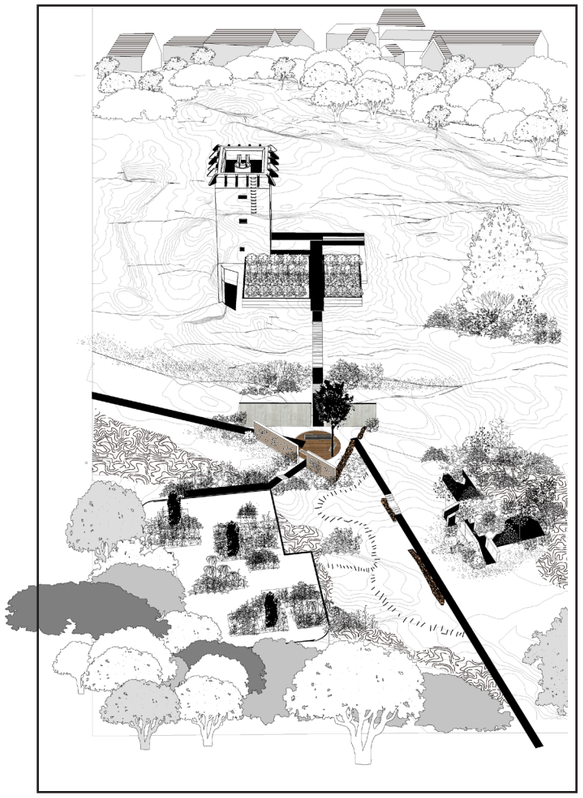


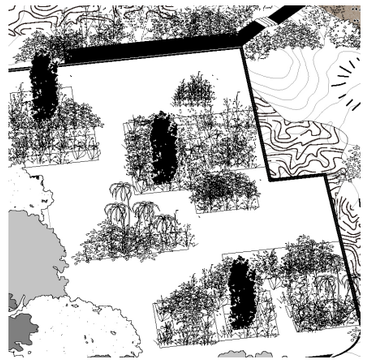


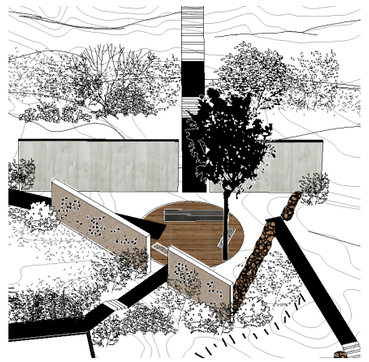
- Drilling holes on the roof of M151 with varying depth and patterns.

- Placing Populus in the roof window openings.

2053





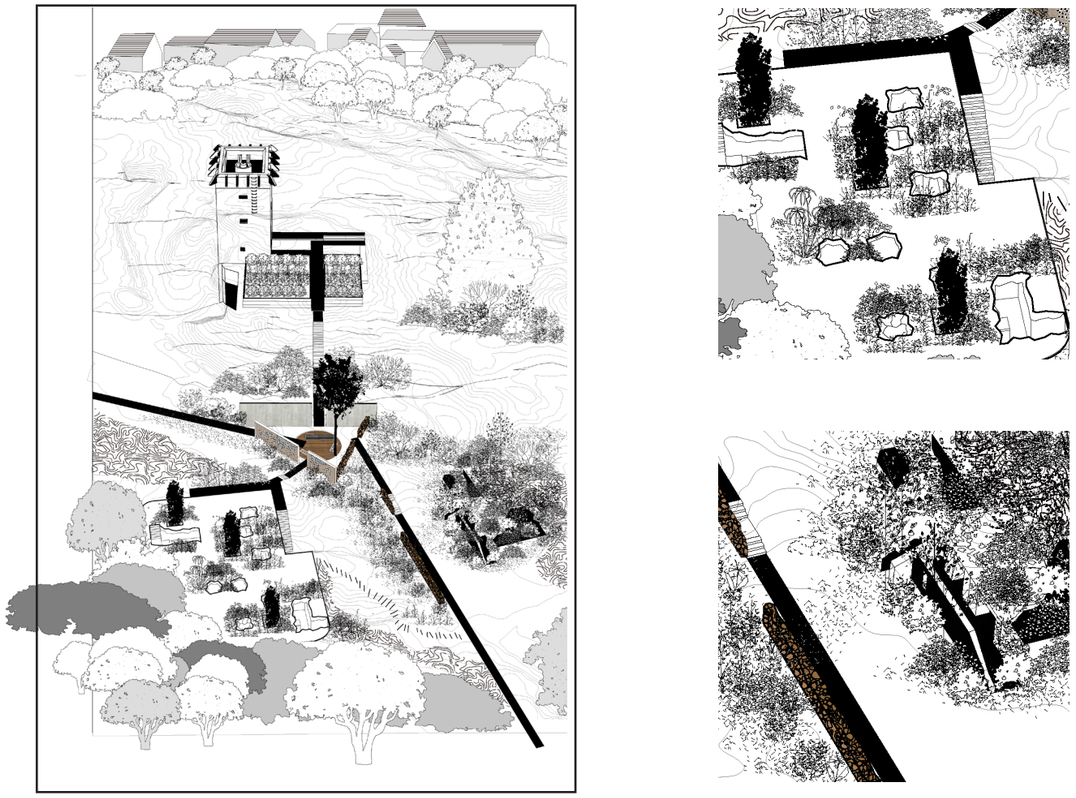


- Plants gradually taking over the roof and the walls

- Cracks continues to expand

Second-round intervention

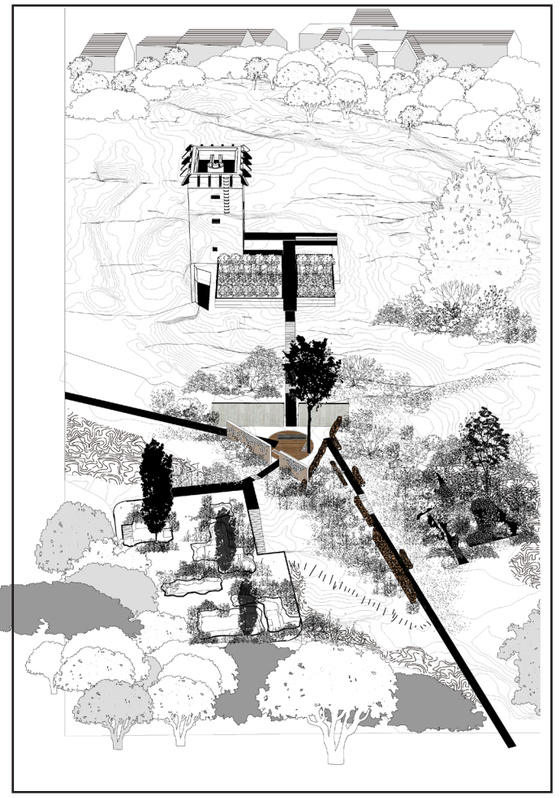
2073

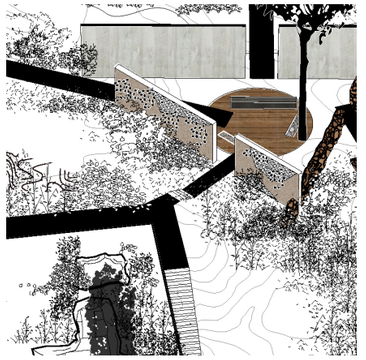


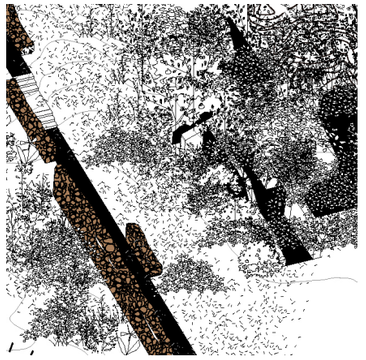
- Removing heavily damaged roof areas and adding safety nets.

- Reusing concrete fragments from the removed roof to stack new walls.

2123



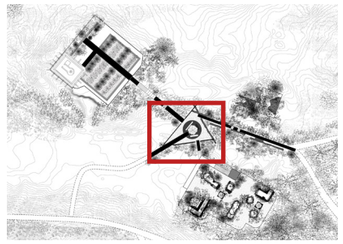


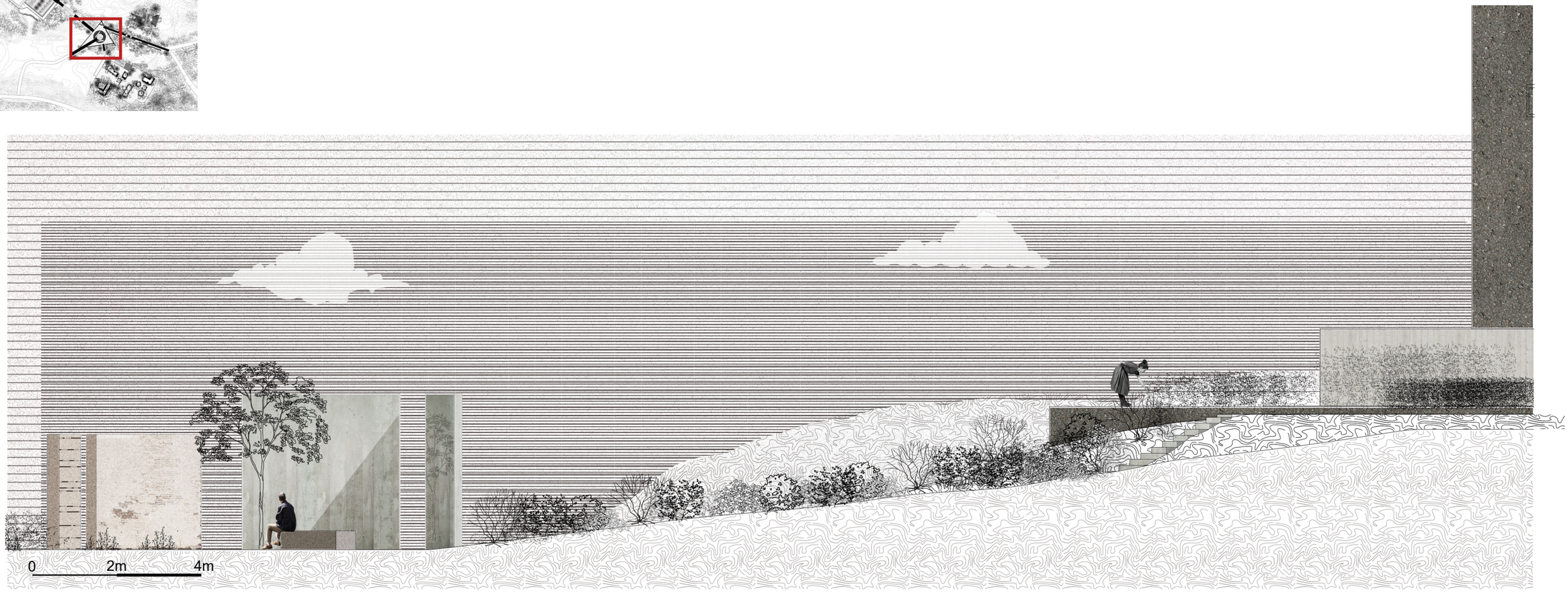


- Scattered bricks and debris allow plants to grow

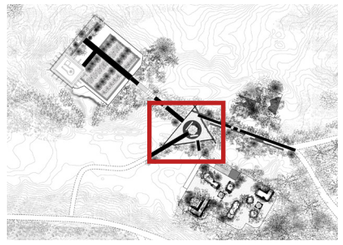
- Excavated bunker bricks being stacked up as the debris wall or put into the gabion

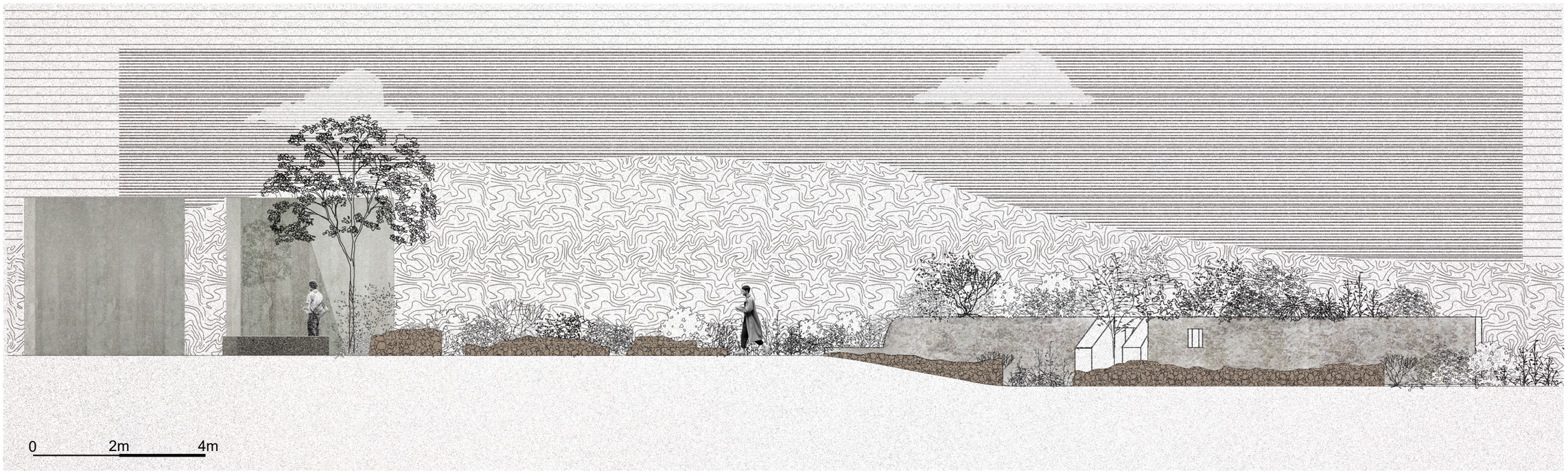
2023 **The smooth concrete walls reflect the cracked walls and time flows between them.**



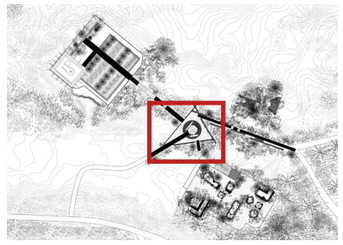


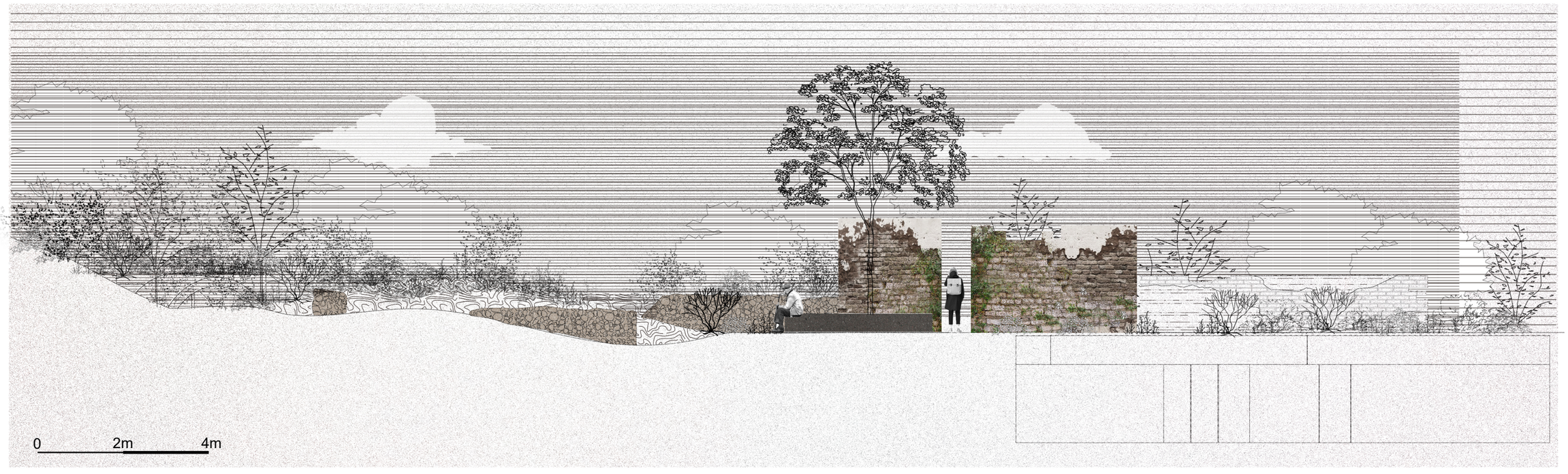
2073 **The plants slowly invade the bunkers and the removal of the underground bunker roofs begins, the fallen bricks will be used to stack up into new walls.**



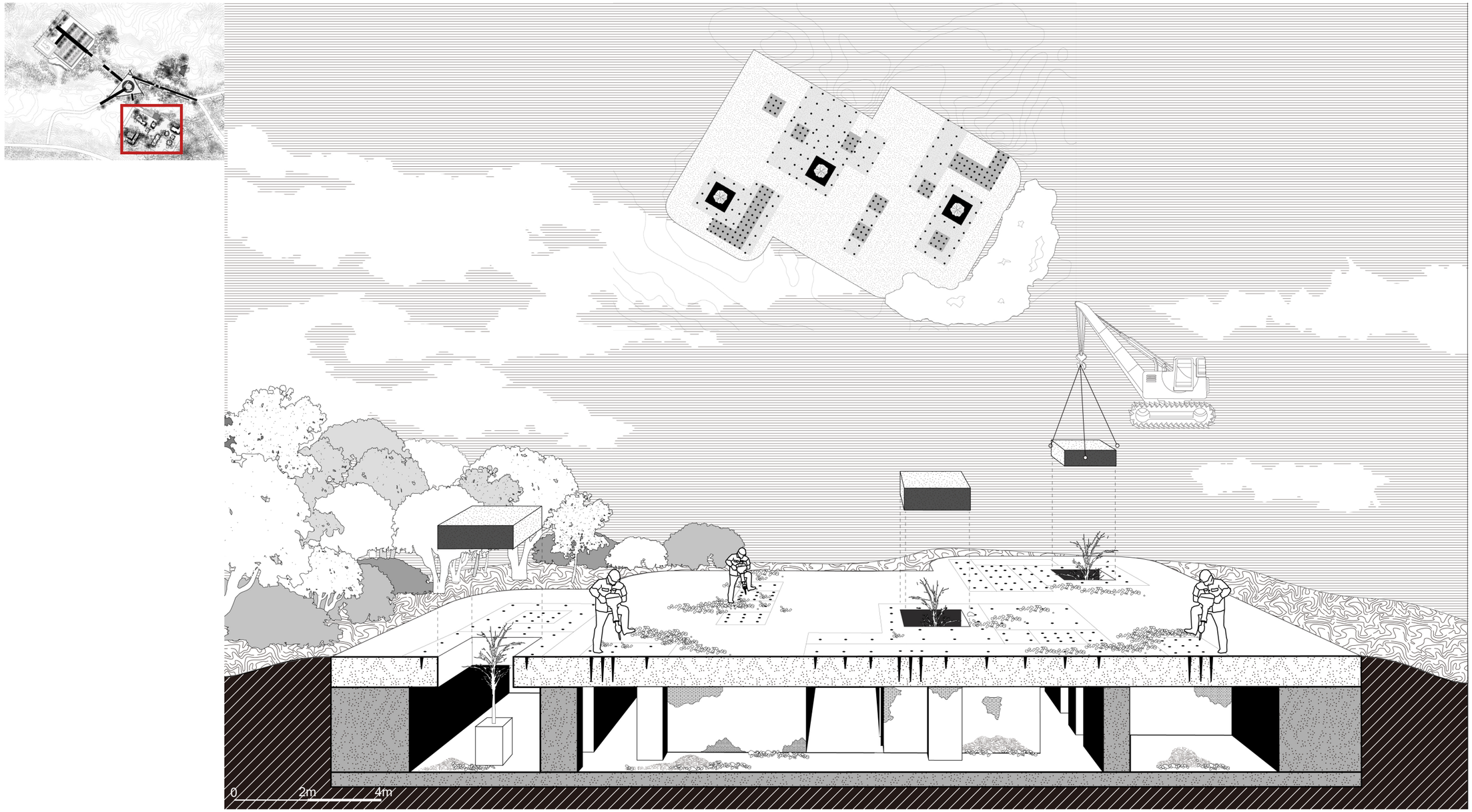


2123 **The plants are gradually gaining ground on the brick wall, which displays more traces of decay, with the wall peeling off and the internal brickwork showing through.**

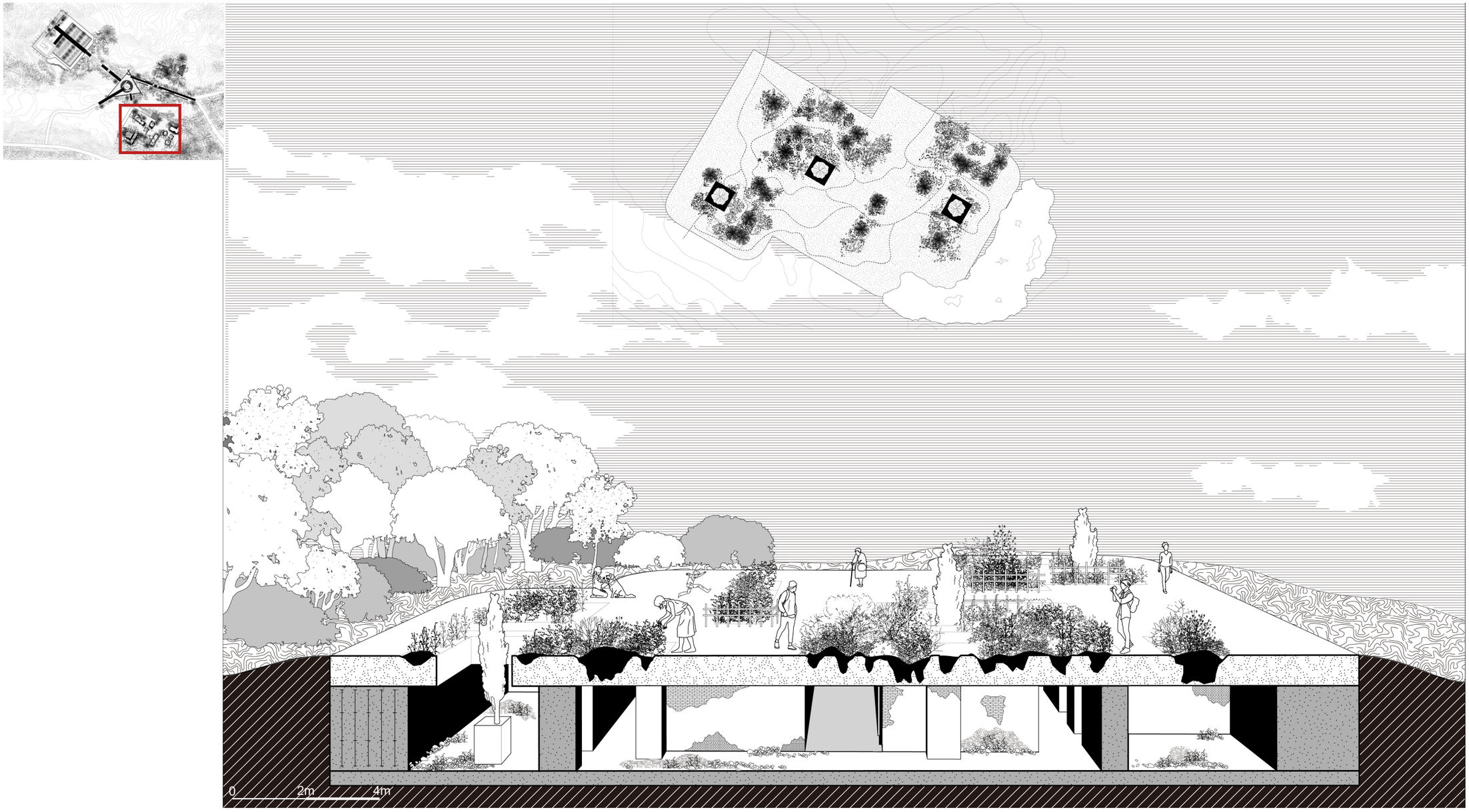




2023 - Drilling

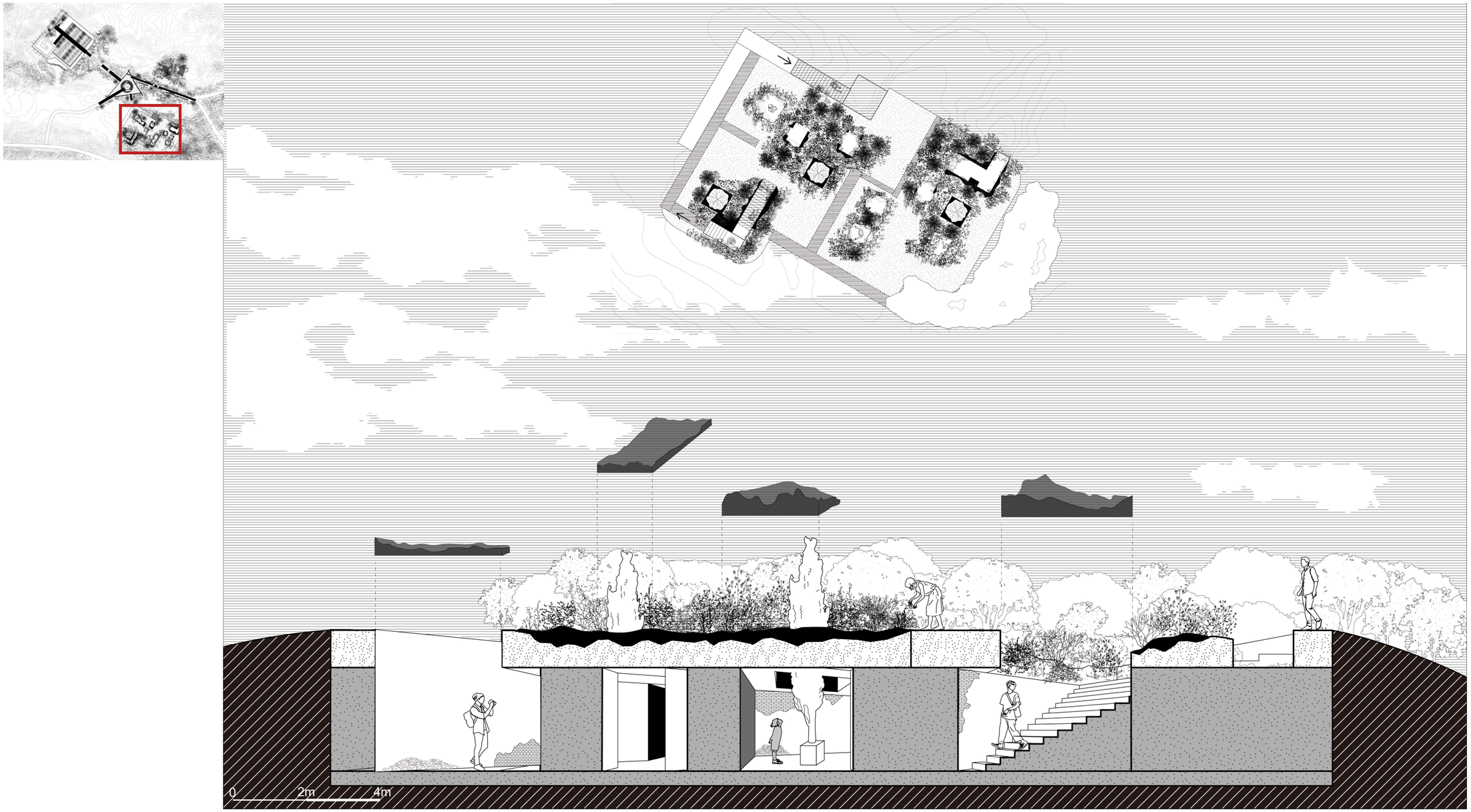


2053 - Plants growing



2073 - Limited accessible area

2073 - Remove the weak roof



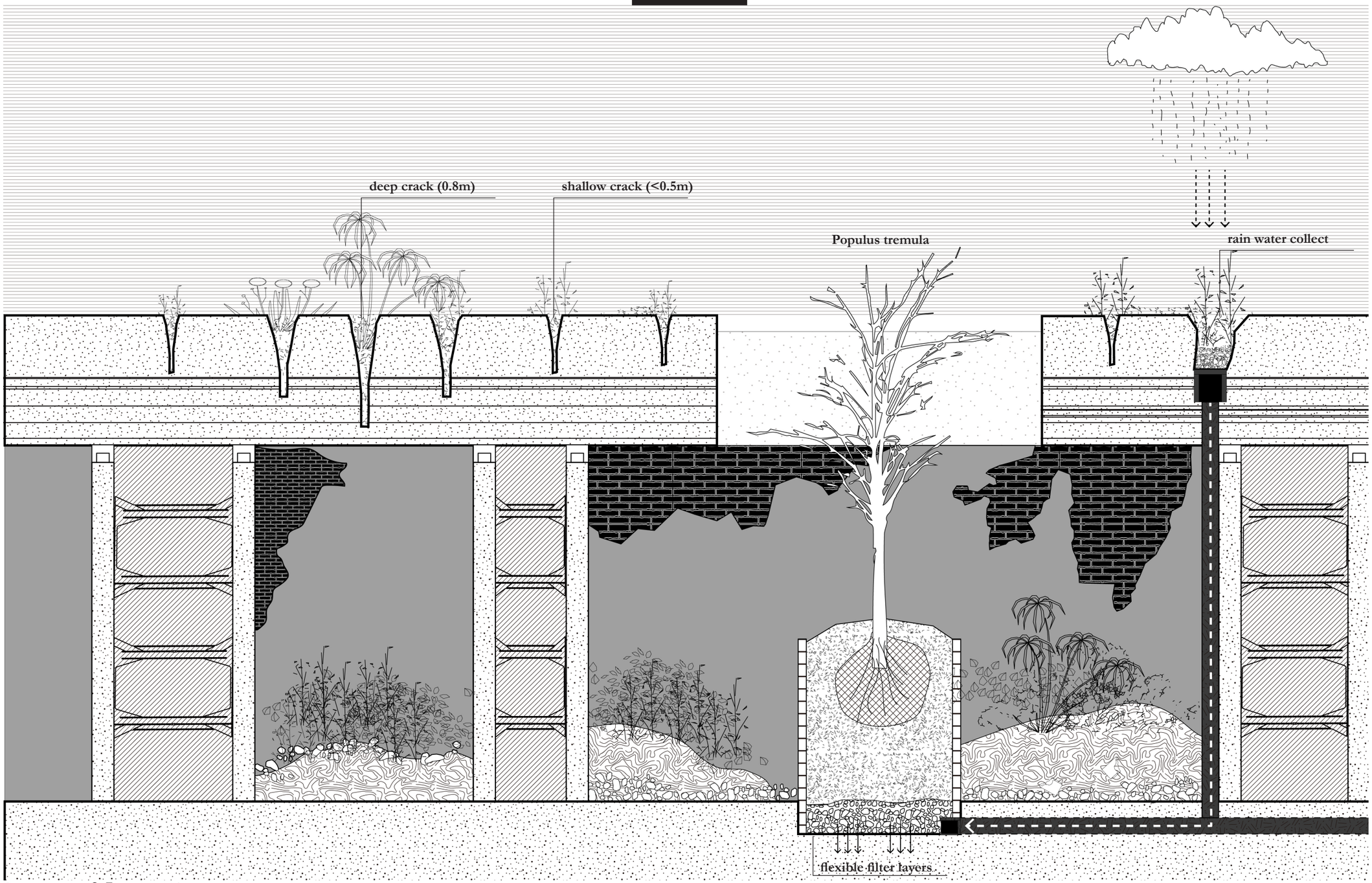
2123 - Accessible underground area

Underground

Underground Populus

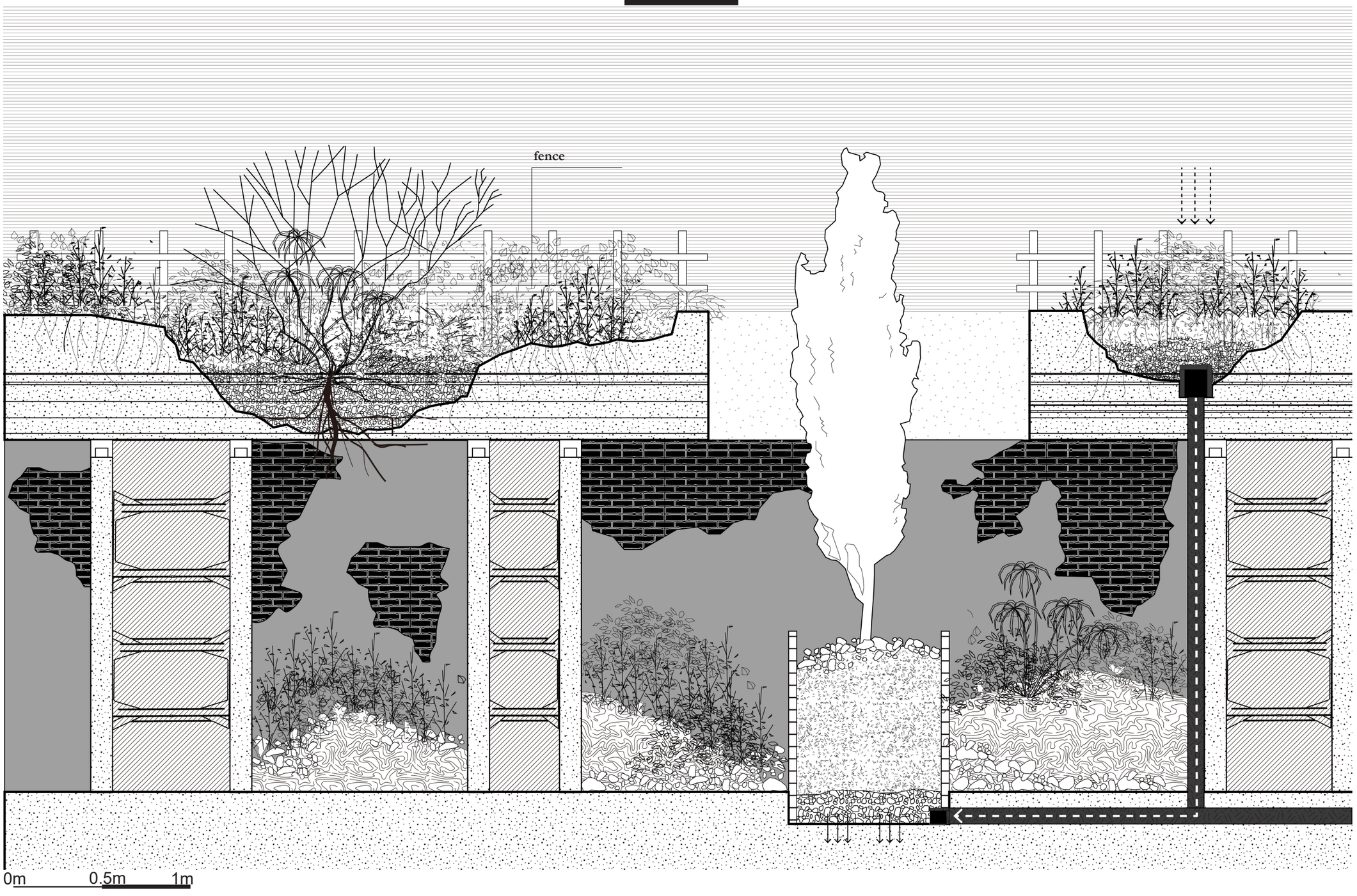
Construction details - Plants & drainage

2023



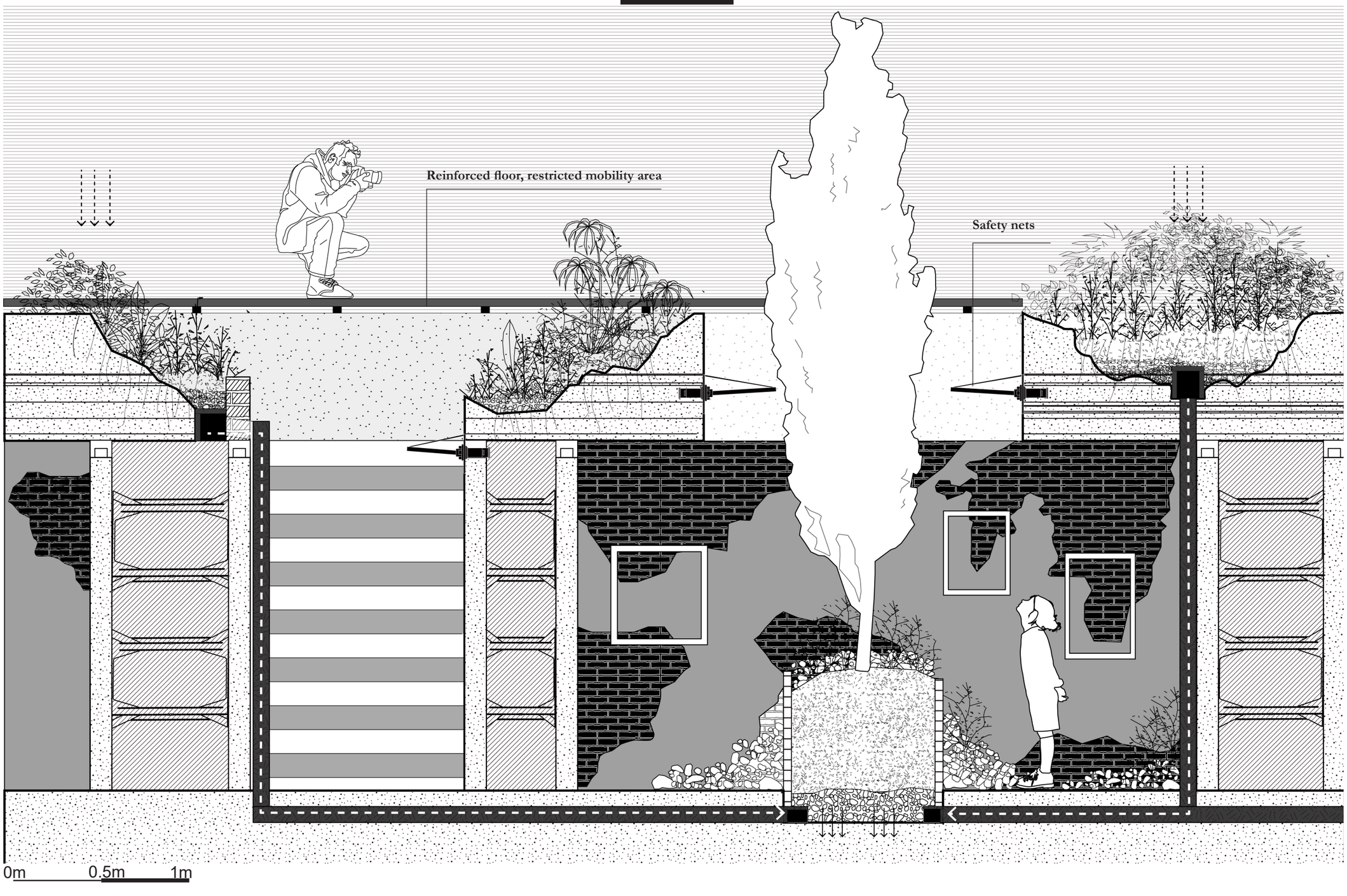
Construction details - Security issues

2053

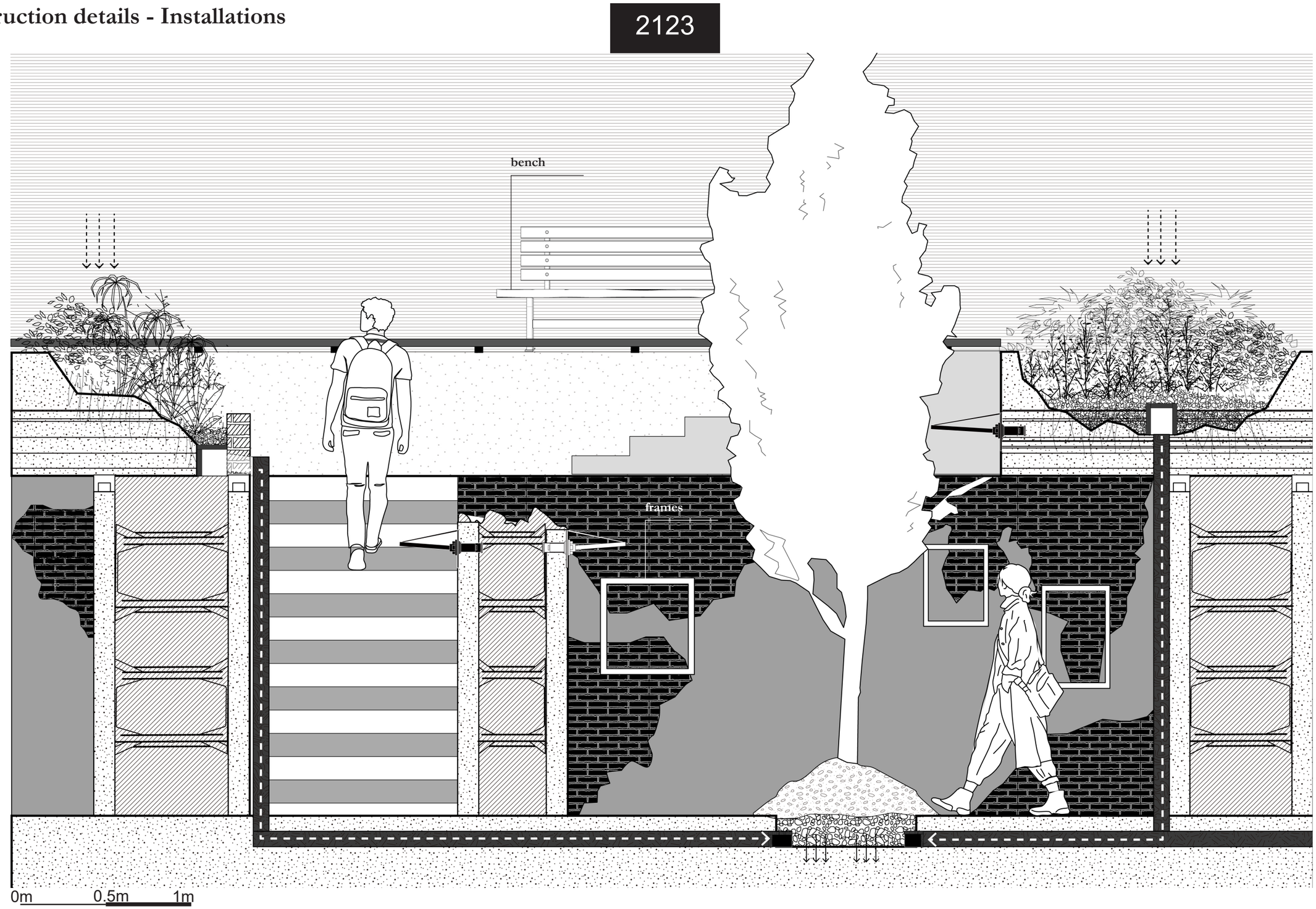


Construction details - Security issues

2073

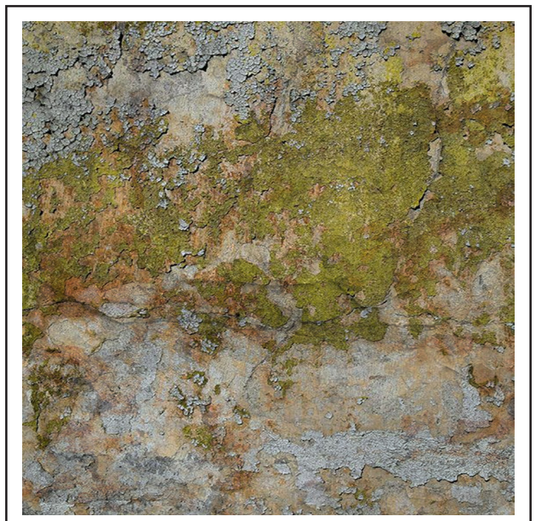


Construction details - Installations



Decaying textures exhibition

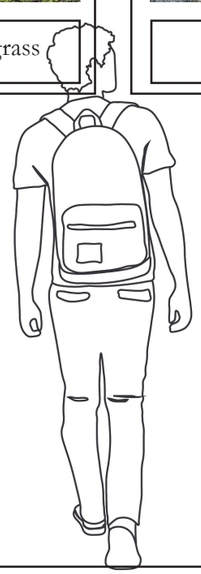
initial cracks

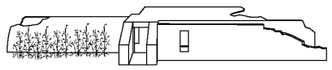


Mosses and lichens

More extensive moss and very light grass

Plants gradually covering the surface





2023

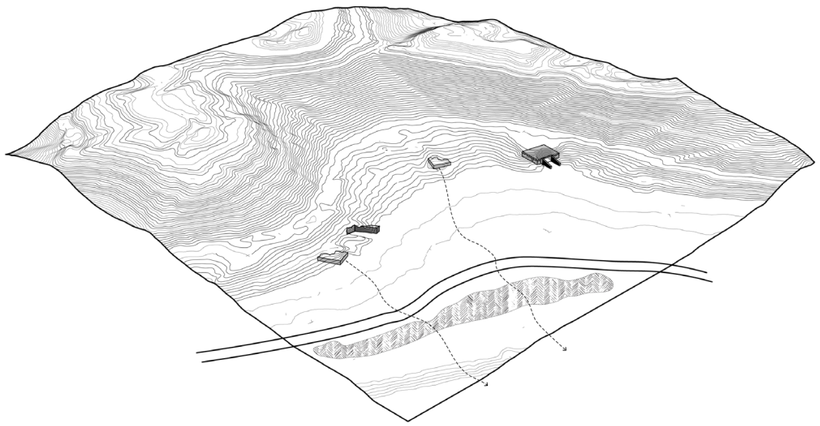
2053

2073

2123

THE DRIFTING RUIN

Brick

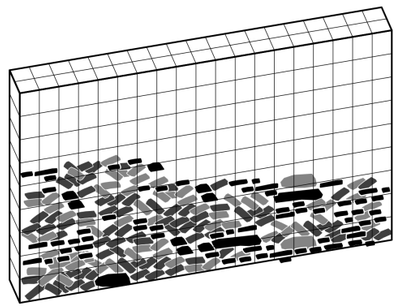


Let go of ruins

Brick reclaimation

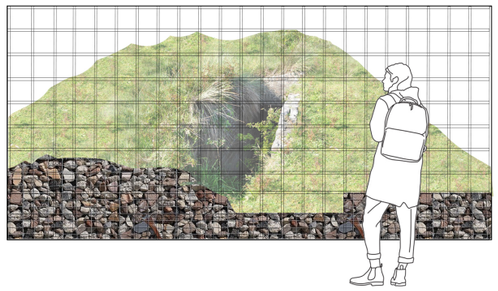
Excavation work with volunteers

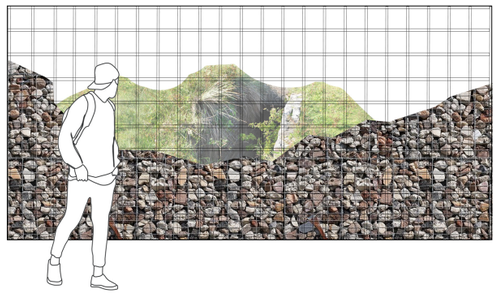
Collecting and sorting bricks

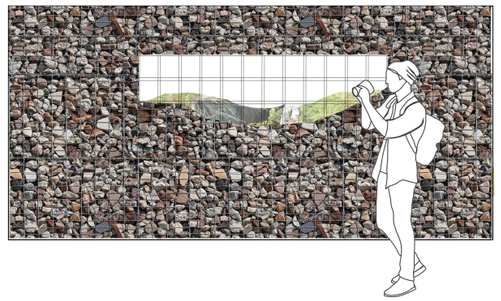


Fill the gabion

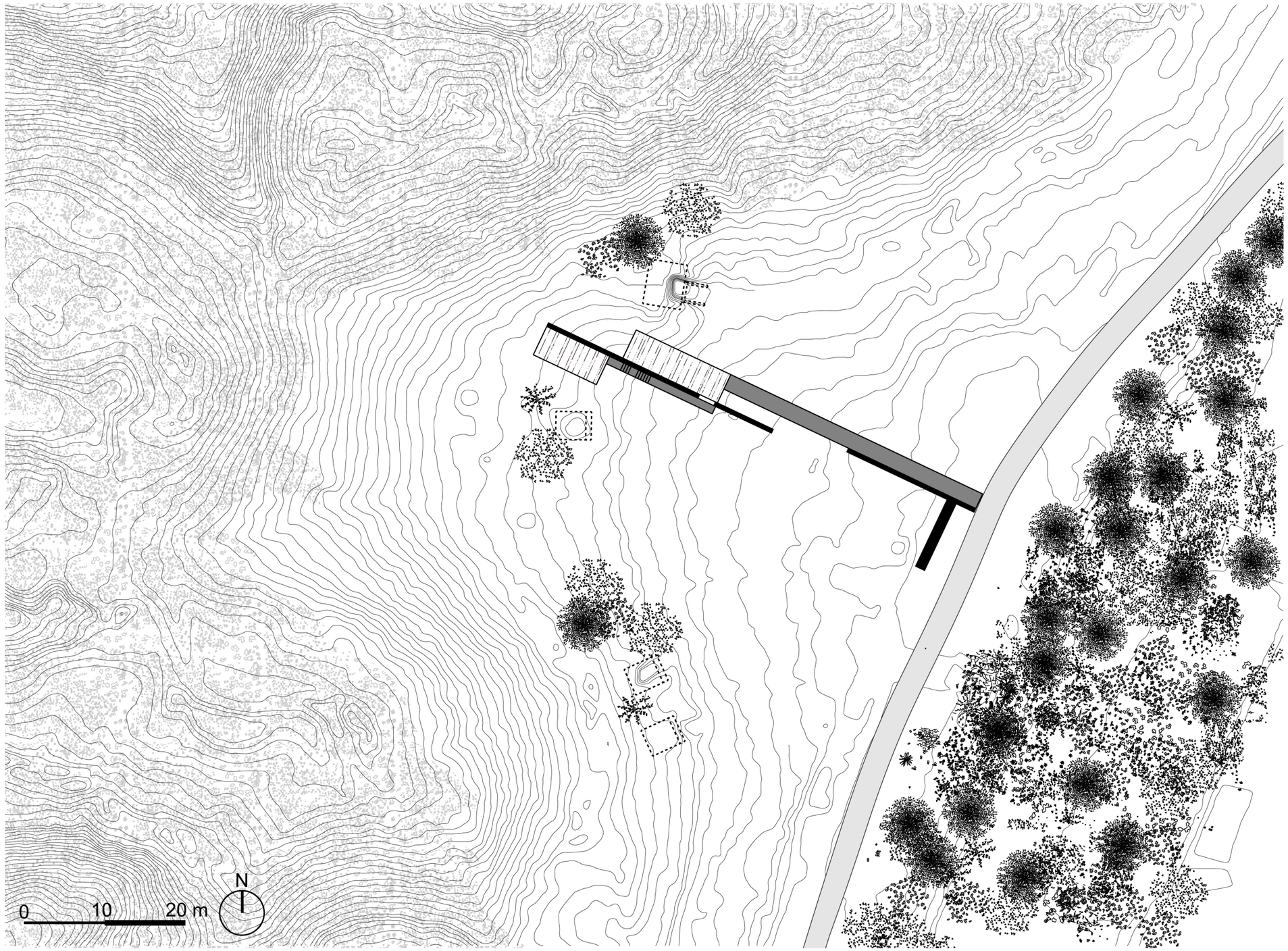
The undertow of time and space







Plan 1:500



The undertow of Atlantic wall ruins, history and fresh modern memory

The absence of ruins

Model

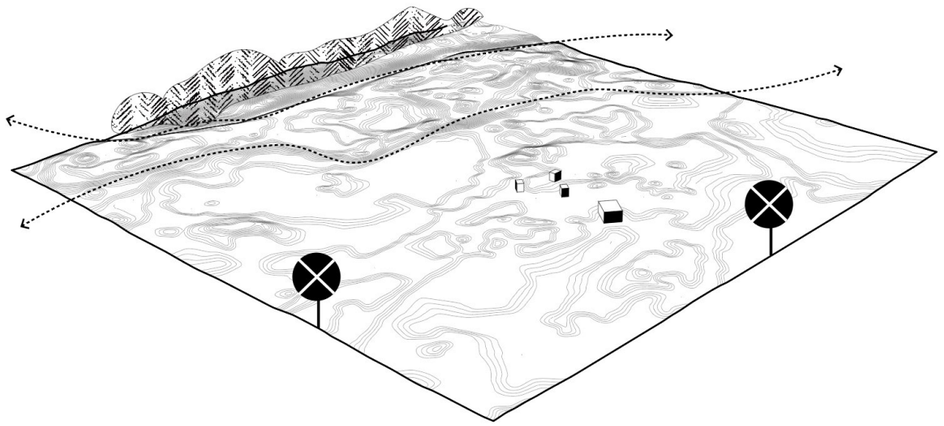
Excavation work with volunteers

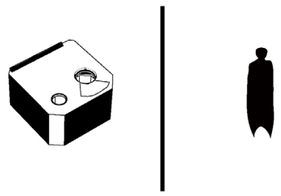
See ruins through the gabion lens

The absence of ruins

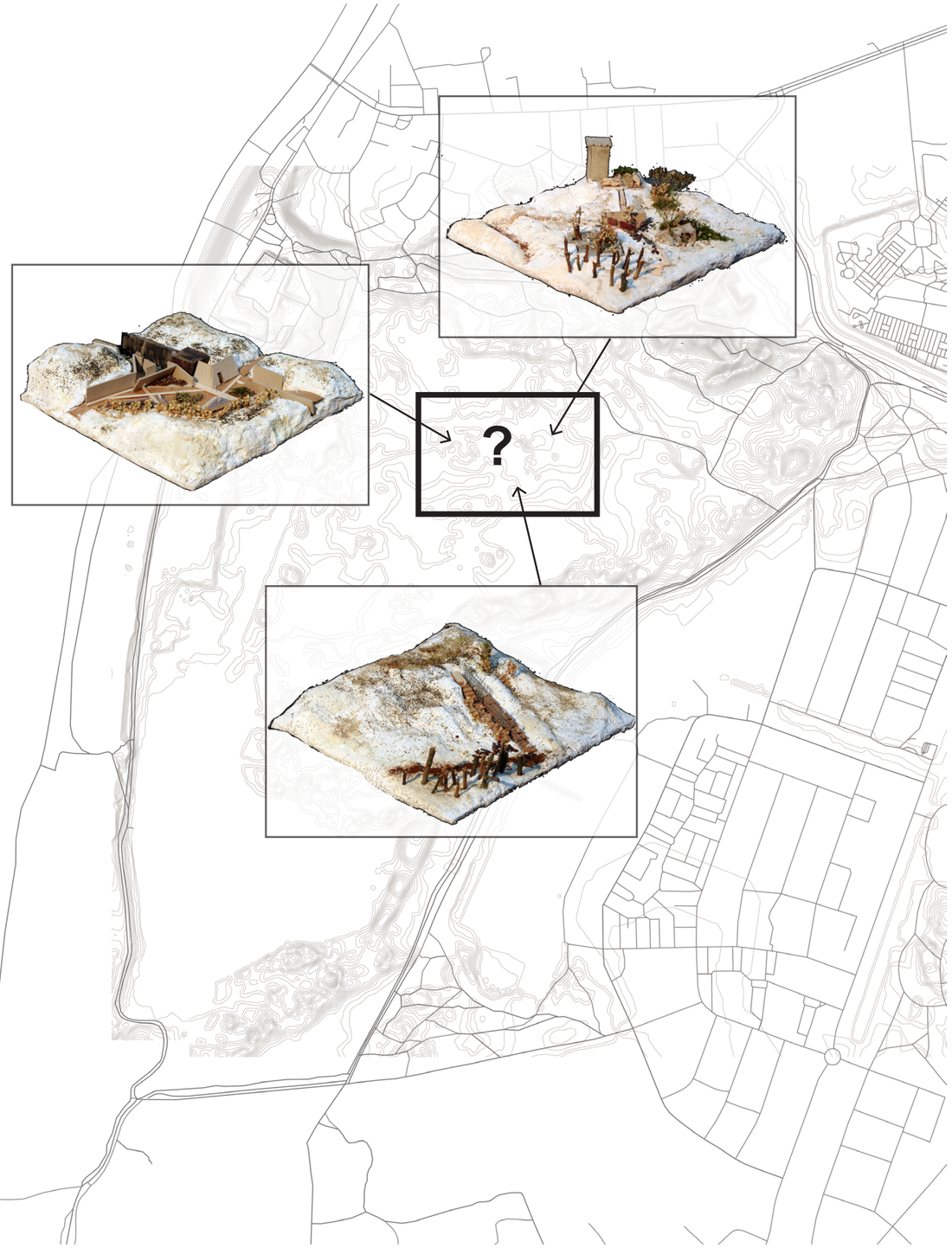
THE INACCESSIBLE RUIN

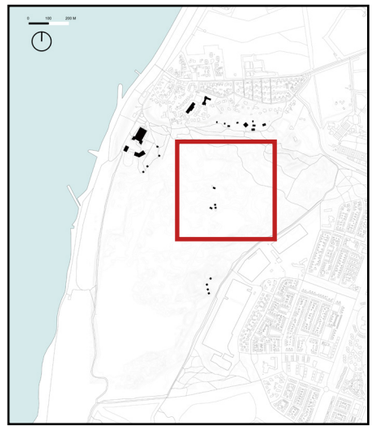
Distance





the next chapter





Distant ruins, both spatially and temporally

The ruins of the Atlantic Wall will eventually disappear, either buried by dunes or decomposed due to erosion and taken over by nature. This would be the end of the ruin story but also the begining of another new chapter.

CONCLUSION & REFLECTION

Conclusion

The Atlantic Wall ruins at Den Helder are a neglected and controversial part of the Den Helder defence system. This part of the history carried by the ruins has also been hidden. The different conditions and ways of dealing with this history presented by the post-war ruins in Den Helder also make it crucial to rethink the relationship between ruins and the city.

When considering the modern functions and positions of the Atlantic Wall, there are two distinct conditions. The Atlantic Wall structures directly connected to the old defence line are better preserved and appreciated by the local community. On the other hand, the scattered Atlantic Wall bunkers in the dunes have been left abandoned, resulting in them decaying into ruins. In general, there is no difference in value and significance between these two categories of Atlantic Wall ruins. Therefore, In Den Helder, as a counterpart to the non-ruins, the Atlantic Wall ruins have the potential to become a valuable place of memory, offering a more vivid, interactive experience that engages people with history. Together, non-ruins and ruins will enable this history to be better maintained.

The paradox of dealing with the Atlantic Wall ruins in Den Helder is that the values of ruins are rooted in their qualities, such as historical value and time value are linked with the crumble structure. However, these qualities form a spatial atmosphere that is often perceived as a negative and ugly image, thus leading to the ruins not being appreciated. Thinking the other way round, the abundant natural succession and decaying texture within ruins also become precious qualities in the well-organized urban grid. Therefore, if they are transformed into well-organized public spaces, the values that existed in the decaying ruins also disappear. In this case, the values that will be revealed are more likely to be new values that belong to a modern context and often have nothing to do with history. The design starts with the ruinous characters and emphasizes the natural succession and decaying phenomenon. A new set of structures is introduced that evolves together with the ruins to further enhance these ruinous characters. Through contrast, reflection and reconfiguration the ruinous qualities are preserved or enhanced. Meanwhile, the relationship between people and ruins is reshaped in terms of space, activity and perception. In this process, people are guided to contemplate on the time and historical transformations, the past and future that ruins carry. When people's attitudes towards ruins change, the value of ruins will be self-evident.

On a broader scale, this project adopts a landscape perspective in approaching architectonic post-war ruins, challenging the common practice of fully restoring or renovating such ruins. This approach has the potential to inspire similar strategies in other cities with post-war ruins, promoting a more balanced and sensitive treatment.
Embracing decay means viewing the ruins as a process that co-evolved with the surrounding context, rather than as a static object. It provides a transformational paradigm for dealing with the large number of post-war ruins and challenges the endless archiving of historical remnants. It means there is no need to store everything that has accumulated over time in order not to forget. With the experiential memory that emerges from participation in the decaying ruins, people will have their own vibrant memories of the past. The past can exist not only in the museum archives, but also in our minds and imaginations.

Reflection

This project explores the intertwined relationship between Atlantic wall ruins and Den Helder, focusing on the history and memory associated with these ruins. The design outcome focuses on the decaying process and various ruinous qualities, considering historical function, construction methods, landscape context, spatial characteristics, materiality, and sustainability.

Reflection on research

The research into intervention approaches on post-war ruins indicates that restoration, preservation and reconstruction are the common solutions to dealing with these abandoned, dysfunctional constructions nowadays. These approaches often result in the ruins being overshadowed by well-organized new constructions. This phenomenon prompts me to question the starting point of interventions on ruins, which are often intended to represent the value of ruins. However, they often result in transforming the ruins into something different and present values that are not originally possessed by the ruins. It is undeniable that these non-ruins are well integrated into the urban fabric, but at the same time they are detached from the historical context, telling the history with a newly made-up narrative. My reflection on this phenomenon is whether such an approach also contradicts the value of the ruins themselves, that is, the disapproval of decay, the belief that history should be properly archived, displayed and presented to the public, and that decaying ruins are ugly and should be replaced by new structures. The non-ruin presented by these interventions is in fact not the ruins themselves, which are the last witnesses of historical events. These non-ruins always present history with a sense of absence that stems from a disconnection from the historical context, or rather the absence of the ruins. Therefore, it is critical to reflect on the role of ruins in modern cities when dealing with the fading history and memory.

Reflection on design

In order to enable ruins to be recognised in the modern city, their value needs to be represented. But the paradox is that the value of ruins is often found in ruinous qualities, and it is these qualities that make ruins a negative and ugly image, so that they are not embraced within the development of modern cities. Therefore, the design needs to weigh the values and qualities of ruins in the way they are presented, and consider how ruins can be gradually integrated into the modern urban context without losing their qualities.

Based on the previous research, my design proposal is to keep or enhance the ruinous quality in the design, both in terms of spatial form variation and the materiality changes that occur during decay, in order to compensate for the impact on the ruins themselves after human intervention. The design outcome takes into account four types of ruinous characters that exist in the Atlantic wall ruins, namely: terrain, crack, brick and distance. By introducing different types of new walls, this design aims to enhance the ruinous qualities of these Atlantic wall ruin clusters, evoking a sense of the passage of time and decay, which leads to a more profound reflection on this part of history and proceeds towards the future relationship between Den Helder and Atlantic wall ruins. These four characters and approaches to ruins each correspond to a different value. For example, the high concrete walls are used to reflect the historical and time value of the ruins.

A combination of smooth concrete walls with a different texture is used to enhance the terrain. The contrast between the new walls and the rough texture of the ruins creates various spatial relationship between people and the ruins, thus fostering a sense of spatial tension and enclosure of the trench ruins and slowly bringing people into this part of history. The natural phenomena such as cracks and plant invasion on the surface of the ruins reflect their decaying beauty, that is, their art value. The intermittent interventions preserve the heterogeneity of the ruins and also lead people to participate in the decaying process, enhancing the social value of the ruins while making their art value more understandable to more people.

The relationship between the ruins and the dune context is approached by combining conceptual typology with the shifting views created by the topographical undulations of the dunes. Intersections of existing paths in the dunes are selected as viewing points and marked by installations. For example, at the intersection leading to the drifting ruin, intermittent brick paving will be used to gradually guide people towards the gabions. As the dunes are a natural recreational area in Den Helder, different routes have been planned according to the location and characteristics of these ruin clusters, linking them to the surrounding beaches, forests and other natural areas.

In terms of the relationship between these Atlantic wall ruin clusters and the whole of Den Helder, the Atlantic Wall ruins in the dunes will be recognized as one layer of the Den Helder defence system, which will show the transformation of Den Helder defence system together with the old defence line and the new naval port, providing a more profound understanding of Den Helder as a military defence town. In contrast to the old defence line in the city center, which are functioning as monuments, museums, etc., the Atlantic Wall ruins in the dunes will serve as a living dynamic, that provides a more vivid and interactive experience for people. The intervened Atlantic Wall ruins will add a once-forgotten chapter to the history of Den Helder's defence system. As a result, these ruins and the non-ruins will be mutually complementary, telling this part of history together.

The main dilemma I encountered during the design process was how to differentiate the new design from the original ruins. Because I was trying to preserve or enhance the ruin's qualities as much as possible, this meant that the new intervention could be mixed with the original ruins, resulting in undifferentiated ruins that fail to serve the purpose of revealing the values. Therefore, in addition to the interventions targeted at the ruins themselves, a new set of design language has been used, that is, this new set of walls, which have many similarities to the original Atlantic Wall ruins, but are different in terms of spatial organization, materials and subsequent maintenance. These new spaces and constructions further enhance the various characteristics of the ruins and compensate for the missing qualities.

The subject of decay always has a negative association. A chaotic scrapyard is the exact opposite of the mainstream's ideal living environment. This dichotomy is what I need to weigh up in the design. Admittedly, aesthetics and preferences are a very personal matter and this chaotic aesthetic of ruins is not something that everyone can embrace. The idea of this project is to make people aware of the value of ruins and accept their deterioration or even their disappearance, allowing them to age well. This concept is easy to understand theoretically, but in the design process many practical factors need to be taken into account. The process of integrating landscape interventions into theoretical and practical situations also requires a great deal of negotiation and compromise.

Reflection on the master programme

I regard my graduation project as a reflection of the knowledge I have gained throughout the Master Programme. The previous courses have given me a more comprehensive understanding of how Landscape Architecture performs at different scales, over time, and how people perceive it. Throughout the year I have been constantly recalling this acquired knowledge and reflecting on it in relation to my graduation project, my personal perceptions of Landscape Architecture. Meanwhile, it is an opportunity to learn about other knowledge, expanding my existing knowledge and constantly updating my understanding and position on landscape. The entire final project is a process of critical review and forward looking, which pushes the boundaries of my knowledge and imagination of the field.

BIBLIOGRAPHY

Nora, Pierre. “Between Memory and History: Les Lieux de Mémoire.” Representations, no. 26, 1989, pp. 7–24. JSTOR, https://doi.org/10.2307/2928520. Accessed 14 May 2023.

Kaufmann, J. E. The Atlantic Wall: History and Guide. Pen & Sword Military, 2012.

“Geschiedenis.” Stelling Den Helder, 24 Nov. 2021, stellingdenhelder.nl/geschiedenis/.

“Den Helder during the War Years.” Visit Wadden, www.atlantikwall-wadden.nl/en/bezoek/den-helder/den-helder-in-de-oorlogsjaren. Accessed 14 May 2023.

“History of the Atlantic Wall.” Holland, geschiedenisvanzuidholland.nl/verhalen/verhalen/history-of-the-atlantic-wall/. Accessed 14 May 2023.

Surlinio. “Overzicht Atlantikwall Museum Den Haag.” Atlantikwall, www.atlantikwallmuseum.nl/nl/atlantikwall/. Accessed 14 May 2023.

Alois Riegl, ‘Der Moderne Denkmalkultus: Sein Wesen und seine Entstehung’ (Vienna: Braumüller, 1903). Republished in Alois Riegl, Gesammelte Aufsätze, ed. K. Swoboda and H.

Sedlmayr (Vienna-Augsburg: Filser, 1929). Translated as ‘The Modern Cult of Monuments: Its Character and Its Origin’, trans. Kurt W. Forster and Diane Ghirardo, Oppositions 25 (1982): 21–51.

Carolyn Ahmer (2020) Riegl’s ‘Modern Cult of Monuments’ as a theory underpinning practical conservation and restoration work, Journal of Architectural Conservation, 26:2, 150-165, DOI: 10.1080/13556207.2020.1738727

Braae, Ellen. “Design as Intervention Outline for a Transformation Theory.” Beauty Redeemed: Recycling Post-Industrial Landscapes, Ikaros, Risskov, 2015, pp. 280–305.