

A Bastion Written Over Time :
Architecture as Palimpsest at Väikese Rannavärava bastion

Studio : Methods of Analysis and Imagination

How can architectural design re-activate the overlooked historical layers of Tallinn's Old Town to reconnect local residents with the city's past while responding to contemporary urban life?



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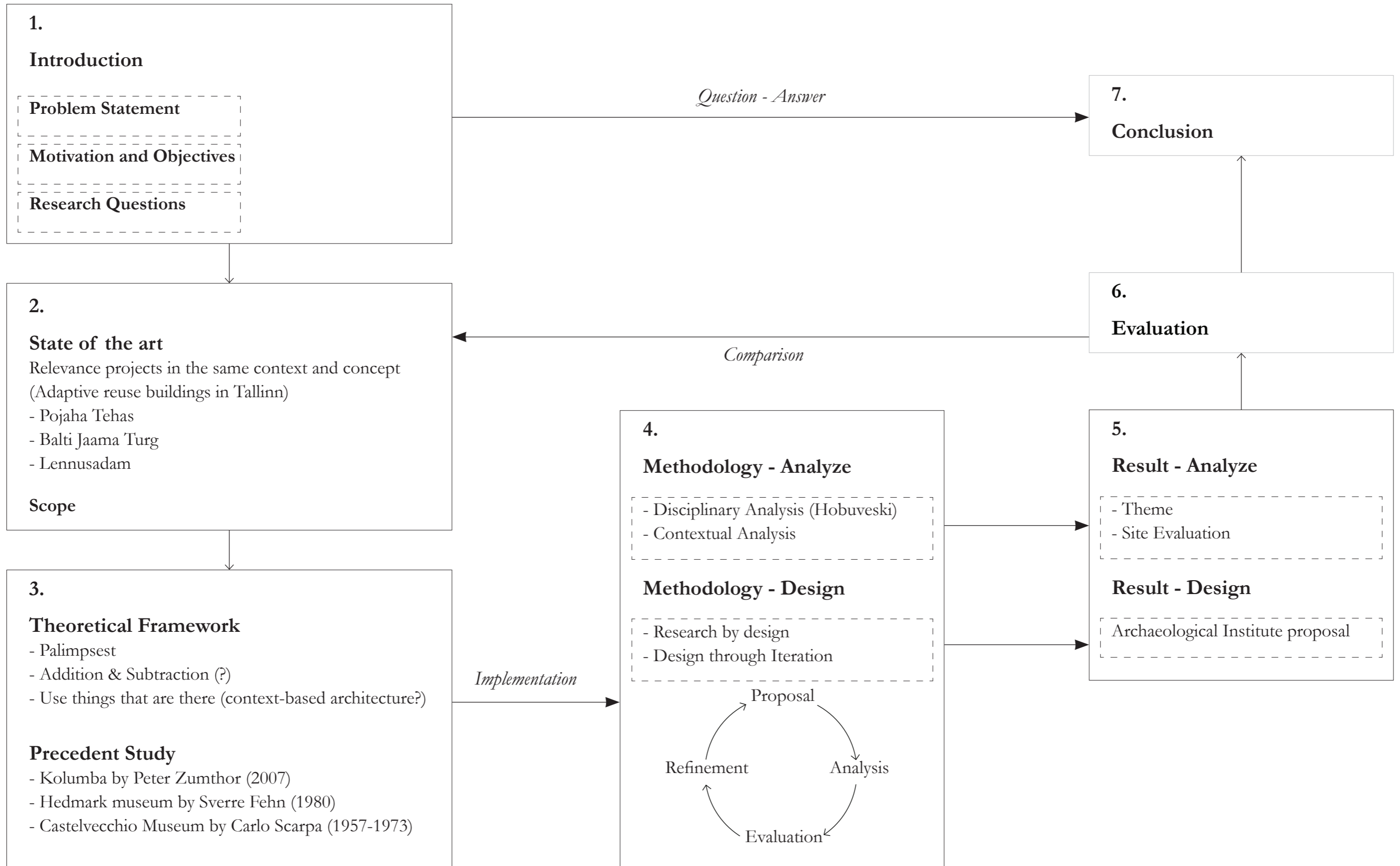
Prologue

My first experience of Tallinn felt like a collage, almost like existing in a different time period all at once, from medieval to the era of independence in the 1920s, and the Soviet era. Rather than forming a continuous narrative, these layers appear fragmented, overlapping, and unevenly visible.

Urban space in Tallinn is treated as a scene, chasing a certain image of what they see as utopia. From a marketable medieval town to a modern city expressed through smooth, shiny curtain walls. These are not accidental, but the image is produced through selection and omission. The attempt to hide traces of the Soviet period is evident; fragments of brutalist architecture are hidden behind glass facades, reflecting an ongoing discomfort with the past and its associated memories. (Havik, 2000)

My fascination with this condition came from my personal interest in working with adaptive reuse projects, but it was the intensified presence of multiple temporal layers - and the tension between them that became the starting point of this project.

Research Plan Diagram



Problem Statement

Tallinn's Old Town faces two interconnected challenges that compromise its social vitality and architectural integrity.

1. The Old Town's design prioritizes tourism over local life, resulting in a socially hollowed historic center

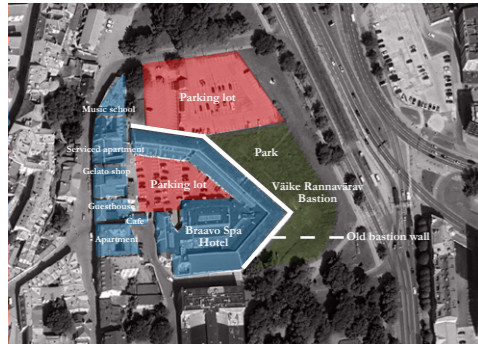
Today, Old Town Tallinn is largely designed and programmed for tourists, as shown in [fig.1]. The area around the site is dominated by tourist-oriented programs. These include service apartments, hotels, and restaurants.

In 2024, Tallinn Deputy Mayor Joosep Vimm said the Old Town would become a theme park for tourists to admire its buildings [fig.2] (Tooming, 2024). The Medieval center has also been called a living museum, mainly for tourism [fig. 3]. (Rudi, 2023). The number of visitors per resident even exceeds that in Venice: Tallinn had over 1960 visitors per resident, while Venice had about 470 per resident in 2023 (Talk et al., 2023).

As the number of tourists grows, the sites are dominated by short-term uses such as hotels, shops, and restaurants (Postma et al., 2018). An interview from the Social and Spatial scale workshop further revealed that the rising costs have made the area unaffordable for the locals. As a result, local residents are gradually being displaced, and while the old town remains active, it lacks the presence of everyday life.

2. The surrounding green belt and buffer zones remain largely under-activated

An extensive greenbelt is part of the protected setting of Tallinn Old Town; it is a buffer zone that helps spatially prevent intrusive development, guides the reading of the Old Town silhouette, and creates distance between the old and new areas. However, at Väike Rannavärv Bastion, despite its strategic location between the Old Town and the tram station, the area remains underutilized, functioning as an open parking lot [fig. 4]. Rather than providing a meaningful usage for the city, the greenbelt here fails to support local use or serve as a bridge connecting urban infrastructure.



[fig.1]



[fig.2]



[fig.3]



[fig.4]



[fig.5]



[fig.6]

3. Tallinn's historical traces are present but treated superficially, functioning more as tourist backdrops than meaningful links to the city's past.

Tallinn's historical layers are highly visible yet often experienced only at the surface level. At Väike Rannavärv Bastion, the historic limestone wall remains as a renovated fragment of the medieval defense system. Braavo Spa Hotel is attached to the bastion wall but operates independently, serving tourists and gym members [fig.5]. The wall is perceived as an intended medieval image, creating a physical separation between the interior and the surrounding green belt [fig.6].

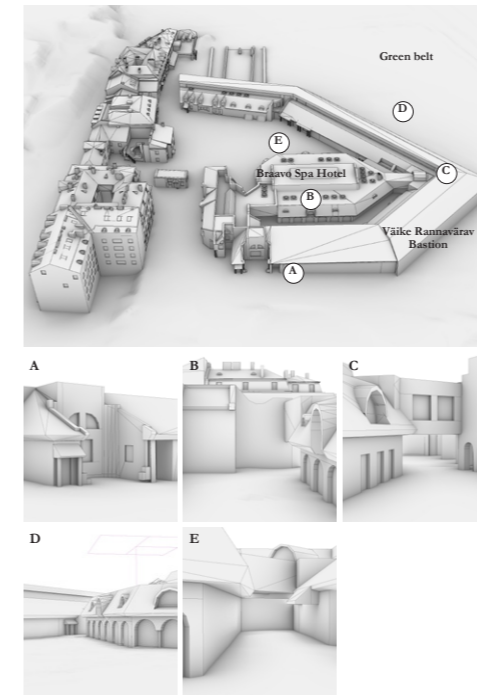
Tallinn Deputy Mayor Madle Lippus asserted the point, "There is a need for destinations in the Old Town that are relevant to the local population." (Rudi, 2023) Creating spaces where locals and visitors can visit, engage, and use will make the historical layers even more present and renew their relevance.

Motivation and Objectives

Background of the site

The site is located in Old Town Tallinn, a UNESCO World Heritage Site with a strong conservation framework and a tourist-driven narrative. The site is divided into two unique spatial conditions by the historic bastion wall. On one side, the outer part of the bastion is an open greenbelt area and parking lot facing the contemporary urban area of the Rotterman quarter, a redeveloped industrial district. On the other side, facing Tallinn's medieval Old Town is the Braavo Spa hotel. Sharing the same bastion wall, the wall's shape also guided the hotel's geometry. [fig.7] The site can be understood by its high historical value, social disengagement, and underutilized space at the urban threshold.

The aim is to reinterpret the bastion wall - from a historically defensive structure, a wall that functions as a physical barrier, to become a bridge that negotiates the



[fig.8]

Architectural Ambition

The proposal redefines the wall as a spatial device that enables interaction across it. Instead of preserving it as an object, the design engages it through cuts, insertions, framing views, and the placement of programs that allow visitors to pass through and along the wall.

Spatial Challenge

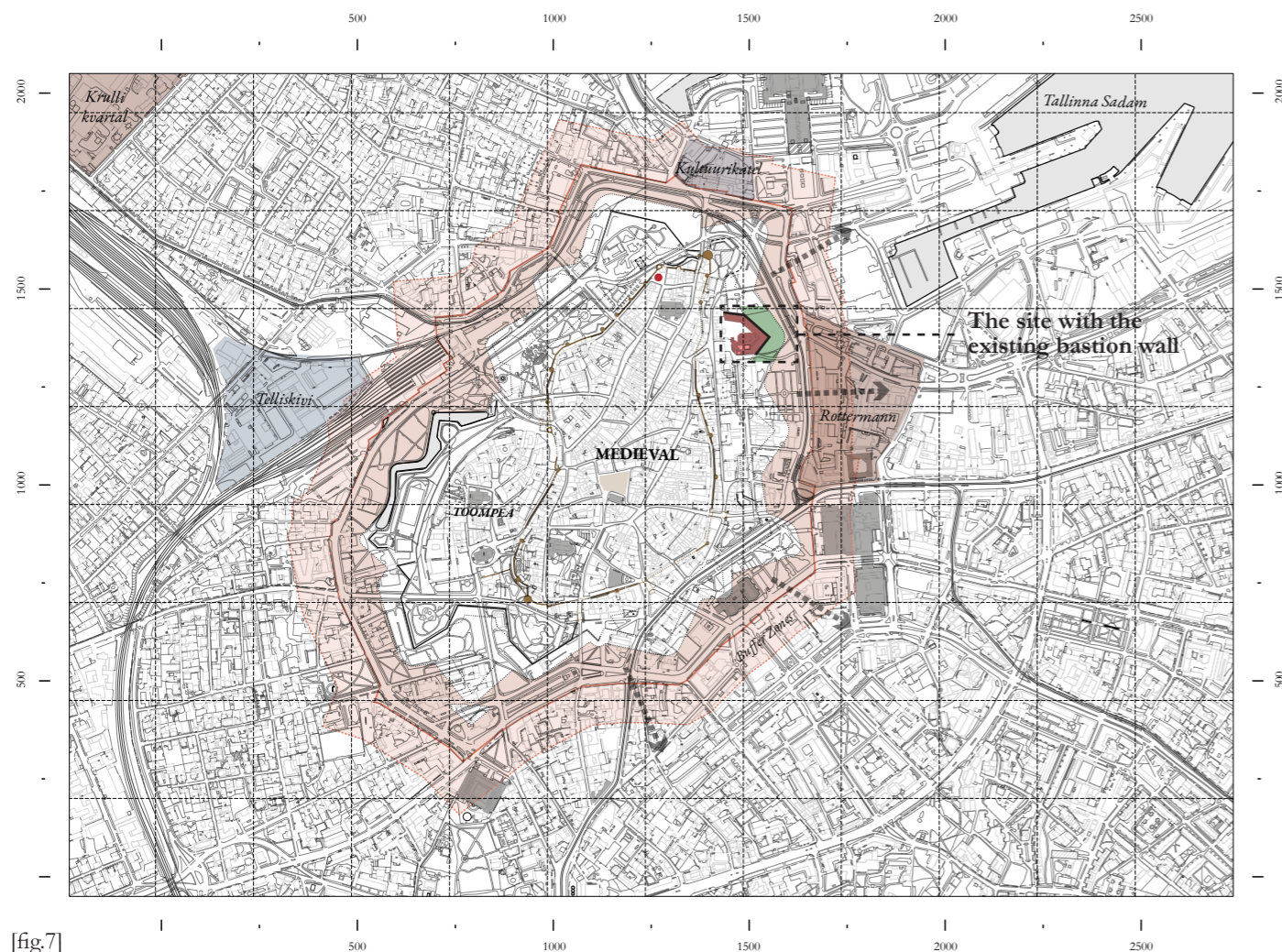
Currently, the hotel is invisible, blocked by the bastion wall when looking from the tram station. The only entry point is to access from within. There are also several existing elements on the site that complicate the situation. This includes the hotel's varying elevations, irregular residual pocket space, unclear circulation, its structure [fig.8] (C, 2014), and hidden historical features such as the tenaille wall. Together, these factors form design guidelines for the architectural intervention.

Technical Challenge

Technical strategy negotiates between selective subtraction and addition. Some parts of the existing hotel structure are retained, while non-essential elements with irregular, unusable spaces are removed to improve spatial efficiency. New volumes and openings are added in response to the site's varying elevations, creating a continuity pathway between levels while maintaining the integrity of the existing structure.

Cold weather in Tallinn presents another challenge. Intervening in an existing medieval structure with limited documentation requires cautious adaptation, particularly regarding thermal performance.

These constraints of working with existing structures through storytelling strongly align with Tallinn's condition as a city layered in time. It challenges me to design not from a blank slate, but through negotiation - prioritizing and balancing narrative, technical limitations, program, and spatial design. The approach is something I have never really explored before and would like to pursue in this studio. Rather than treating these aspects separately, the project allows me to realize how deeply they inform and shape one another.



[fig.7]

Research question

“How can architectural design re-activate the overlooked historical layers of Tallinn’s Old Town to reconnect local residents with the city’s past while responding to contemporary urban life?”

Sub questions

Research question

“Which layers are currently invisible or underused?”

“How do different temporal rhythms (daily, seasonal, and event-based) and user groups activate and shape each programmatic component of the project?”

Design questions

“How can design reveal these temporal layers of information?”

“How can a building’s identity emerge from the fragmented temporal layers of Tallinn?”



[fig.9]



[fig.10]



[fig.11]



[fig.12]



[fig.13]



[fig.14]

Relevance

There are numerous architectural projects in Tallinn that already deal with adaptive reuse. For instance, Pojaha Tehas [fig.9], a former rubber factory that was converted into a cultural center from around the 2010s; Balti Jaama Turg [fig.10], a market that was once an old railway maintenance building; and Lennusadam [fig.11], which was once a seaplane hangar and is now the National Maritime Museum. However, these projects largely operate through a clear distinction between an “old” stage and a “new” use.

There are also several adaptive reuse projects built within historic fortifications. For instance, the Waterlinie Museum by Penne Architects with Rapp+Rapp and West 8 [fig. 12], Museum Fort Vechten by Studio Anne Holtrop [fig. 13], and Fort van Hoofddorp by Serge Schoemaker Architects [fig. 14] have mostly been transformed into museums, cultural hubs, restaurants, and public spaces aimed at public education. These repurposed designs are all built entirely within the historic structures; they are highly introverted and respect the shape of the existing heritage elements, leaving the geometry of the bastions exactly as it was. The renovations focus primarily on the interior, leaving the exterior space open for public use.

This thesis addresses a complex temporal condition by focusing on multiple, overlapping historical layers rather than a single, linear transformation. It seeks to break away from this conservative approach - where the design is confined entirely within the existing walls - to give more presence to the site. By asserting its own architectural identity while still respecting and referencing the existence of the Väike Rannavärv Bastion, the design allows the site to gain a stronger contemporary presence.

This topic is urgent for both architectural quality and knowledge production. It explores how time, memory, and contemporary life can coexist spatially rather than in separate phases.

Scope

The design's overseeable field is adaptive reuse within historic urban environments, focusing on architectural palimpsest as a guiding framework. It examines how architecture can help reinterpret traces of the past, make time legible, and create spatial experiences that show different temporal conditions.

Rather than proposing a full restoration or replacement, the focus is on strategic interventions. The goal is to decide what to keep, what to remove, and what to reveal. The approach is to work with the site rather than treat it as a blank slate.

To test these ideas, the proposal combines two programs - an archaeological institute and a flea market. The Archaeological Institute is highly relevant to Tallinn, a city that still continues to uncover its past. It provides spaces where different temporal conditions are present - from archival and preservation functions, to active workshop and learning space, and the future research exhibition space. The current archaeological museum is not easily accessible to the public; therefore, making the building public and locating it at the edge of the old town creates an opportunity to engage both locals and visitors.

A secondary program is a flea market, an event-based program referencing its previous presence on the site and its strong connection to local activity. It brings a more cyclical use, contrasting with the permanence present in the institute.

Together, the two programs establish a framework for testing how different experiences of time can coexist within a single area.

Programs

Archaeological Institute

Archaeological exhibition space
Learning Space
Library
Workshop
Reading Room
Open Archive
Storage
Research and conservation laboratories
Office space
Cafe

Flea market

Stalls
Eating / gathering area
Amphitheater (public space)

Theoretical Framework

The concept of **palimpsest** is crucial to the project.

“A palimpsest is a manuscript or piece of writing material on which the original writing has been effaced to make room for later writing, but of which traces remain.” (“Palimpsest,” 2025)

It describes a condition in which traces of previous layers remain visible beneath new interventions. When applied in architecture, it suggests that design is not a replacement but an accumulation of layers shaped by time, use, and transformation.

The approach aligns with Kevin Lynch's discussion from the book *What Time Is This Place?* [fig.15] where he discusses physical environments and the human perception of time.

“Layering” is a deliberate device of esthetic expression—the visible accumulation of overlapping traces from successive periods. Each trace modifies and is modified by the new additions. This creates something like a collage of time.” (Lynch, 1972b)

It supports the reading of the built environment, composed of layers that are partially visible, hidden, and all carrying different degrees of significance. Time is not a linear sequence but accumulative. Instead of separating past and present, my proposal allows time to coexist through sequence, movement, and material presence.

Building on this discussion, André Corboz, a Swiss historian, emphasizes that erasure is as significant as addition when considering architectural layers.

“Man does not simply add to these layers, he also erases them.” (Corboz, 1983)

[fig.16]

The task of architecture and planning is careful rewriting; it is a necessary process for creating new, relevant meaning.

Another reference is the dialogue *A Feeling of History* [fig.17] between Peter Zumthor and architectural historian Mari Lending, in which he argues for creating new spaces that evoke the soul of the past without imitating it through material, light, or absence. (Zumthor & Lending, 2018) Their discussion is useful for the project because it supports my design approach, which focuses on atmosphere, materiality, light, and spatial sensitivity rather than reproduction.

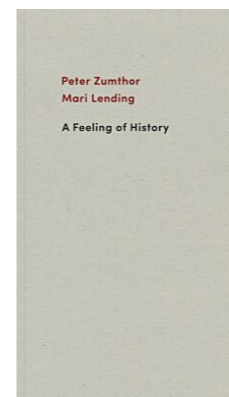
Together, the theoretical framework first establishes a basis for the project's argument: architecture can reveal time through calibrated intervention. Furthermore, it asserts that historical traces should not merely be preserved as remnants, but rather activated through design to make them legible in the present.



[fig.15]



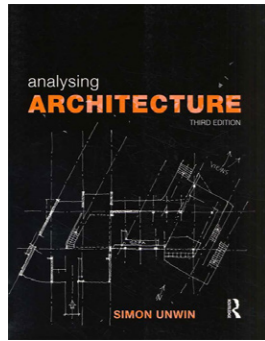
[fig.16]



[fig.17]



[fig.18]



[fig.19]

Answering to sub question
How can design reveal these temporal layers of information?

The article in the OASE “Context” volume [fig.18] highlights the importance of context through an example of The Ern and Chamber, demonstrating that without cultural specificity, the distinction is unclear. (Context, n.d.) This condition is linked to the pursuit of autonomy in architectural design, which often results in an abstract, detached formal response to the surrounding environment. Similarly, in the chapter “Use things that are there” from *Analyzing Architecture* [fig.19], Simon Unwin argues that architecture does not start from a blank slate.

Even when built with the same program on a different site, the building will respond differently, shaped by the existing physical elements, traces of use, memories, and spatial conditions. (Unwin, 2009)

Therefore, in this project, design decisions will be strongly guided by context. Existing conditions are not constraints but tools. They let spatial experiences emerge through engagement with the site’s accumulated temporal layers.



[fig.20]

Castelvecchio Museum
Carlo Scarpa

“Time through spatial expression”

- Pocket spaces and voids
- Geometry
- Frame



[fig.21]

Hedmark museum
Sverre Fehn

“Time through sequence”

- Sequential experience
- Speed



[fig.22]

Kolumba
Peter Zumthor

“Time through tectonic”

- Materiality
- Traditional and modern
- Atmosphere

Precedent Study

Answering to sub question
How can time be communicated in architectural design?

Precedent Studies and Architectural Strategy

Precedent studies are selected from architectural work that deal with heritage through poetic sensitivity and careful design decisions, as this is the approach I strive to achieve in my own project. Rather than treating historical structures as static artifacts, these precedents demonstrate how time can be communicated differently from tectonic, sequence, and spatial experience.

Castelvecchio Museum by Carlo Scarpa [fig.20] reused the Medieval fortification and transformed it into a public cultural building, revealing history through spatial expression, such as cuts, pauses, bridges, and framed views.

Hedmark Museum by Sverre Fehn [fig.21] is built over a medieval palace and barn, with a ramp that runs through the existing building. The design communicates a temporal narrative as an experiential journey.

Kolumba Museum by Peter Zumthor [fig.22] is built over an archaeological ruin. The tectonic material expression of brick walls allowing light to come in contributes to the overall atmosphere and stillness of the experience.

While each project emphasizes these aspects differently - cutting and framing, sequencing and movement or material expression, they share a common approach in reinterpreted history through design. The precedents help inform my design strategy by demonstrating how new architecture can make historical layers legible without imitation, allowing time to be experienced rather than explicitly told.



[fig.23]

Material Precedent Studies

The project utilizes material strategies from three architectural precedents. Material choice becomes the defining element of the design as it shapes the identity of each building facade: the face meeting the newly developed area, the enclosed face looking toward the Old Town, and the transitional zones in between.

Louvre Lens, SANAA [fig. 23]

The design utilizes glass and semi-reflective panels that alternate between transparency - allowing views directly through and reflectivity, which constantly shifts according to its surroundings. This material strategy communicates visual lightness and captures the ever-changing, transient moments of the area.

Melbourne Holocaust Museum, Kerstin Thompson Architects [fig. 24]

This project demonstrates various types of brick expressions, playing with porosity and how light passes through a masonry facade. The size and rhythm of the brick openings are designed to respond directly to the internal programming behind them.

Natural History Museum of Lille, Snobetta [fig. 25]

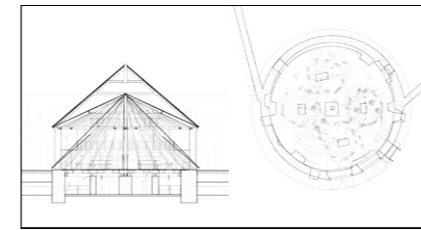
This renovation shows how wood, glass, and brick can work together in complete harmony. Here, timber acts as a bridging element between the weightless transparency of glass and the grounded heaviness of stone. The exposed timber adds warmth to the overall atmosphere, making the architecture feel less formal and more down-to-earth.



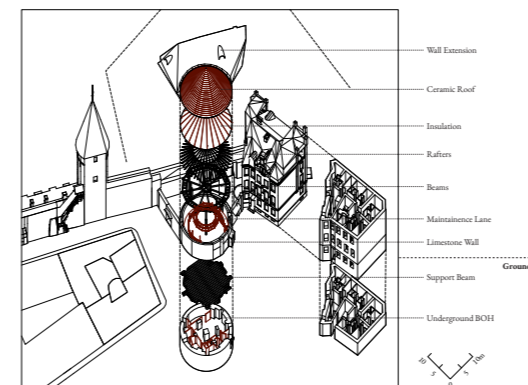
[fig.24]



[fig.25]



[fig.27]



[fig.28]

Methods

With these precedents in mind, the project adopts research through design as the main methodology, using adaptive reuse as a starting point and temporal layers as an analytical lens.

Analytical Methods

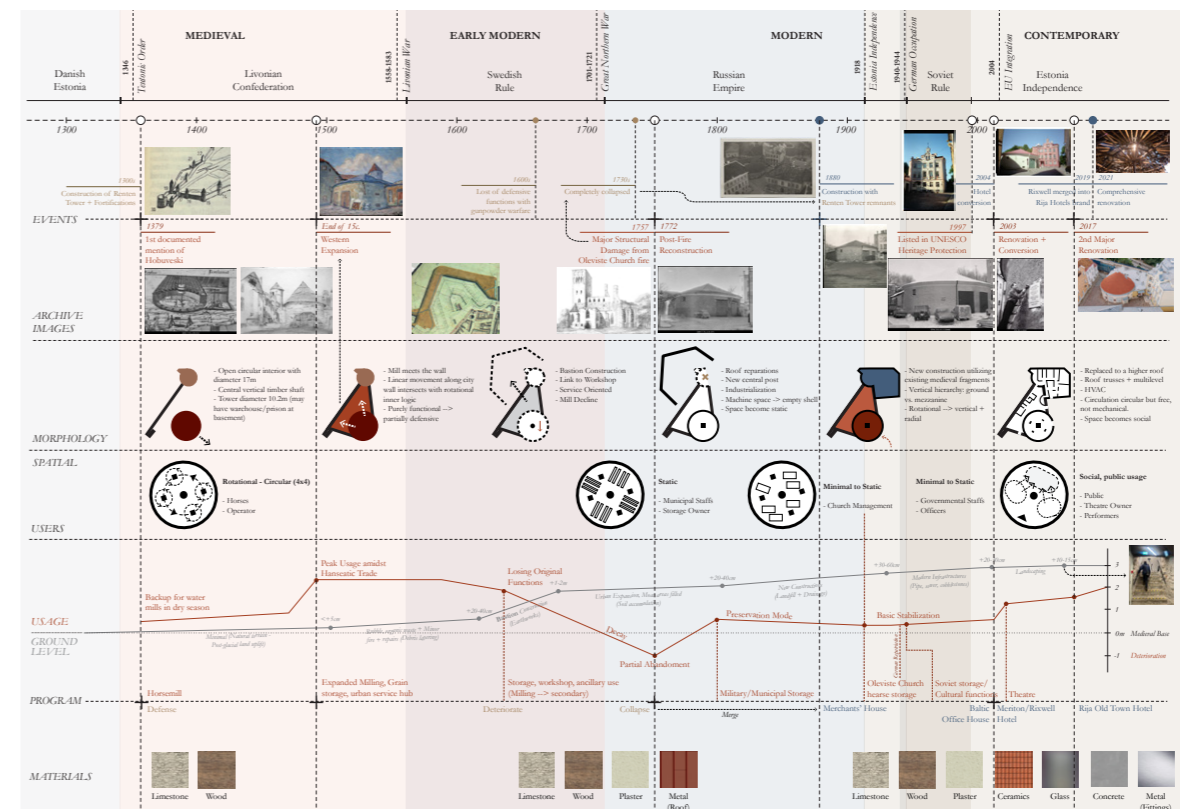
Disciplinary Analysis: Learning from Adaptive reuse
(Pair work with Chuah Hao Feng)

The case study Hobuveski is chosen because it has undergone multiple programmatic transformations over its lifetime.

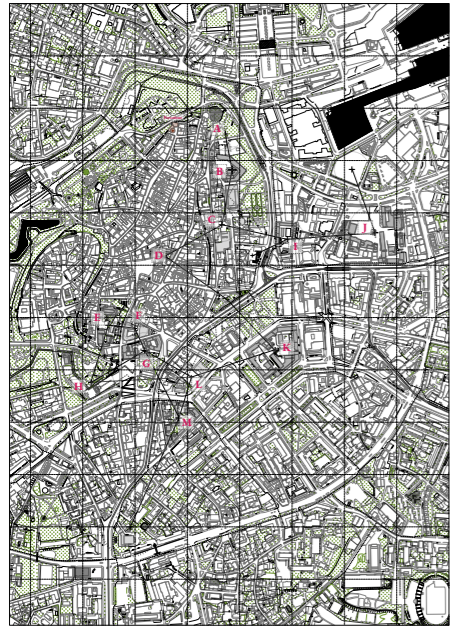
A timeline of changes in different periods [fig.26] helped reconstruct the building narrative, clarifying factors behind each transformation.

Overlaying plans and sections from the past to the present helps me understand how the building has adapted over time. The method shows continuity and change, highlighting elements that remain the same and how space is used differently. [fig.27]

A complementary exploded diagram illustrates construction materials; different colors distinguish the old structure from newer additions. [fig.28]



[fig.26]



Contextual Analysis: Basis for Site Selection
(Pair work with Chuah Hao Feng)

Contextual analysis [fig.29-30] takes place at multiple scales - urban, architectural, human, and detailed, forming the basis for site selection [fig.31-34]. The criteria for site selection include the presence of multiple temporal layers, proximity to the East Buffer ring between the old town and newer developments, and clear opportunities for adaptive reuse.

This analysis identifies qualities such as density, pocket spaces, and geometry as key influences on spatial experience. Porosity, speed, and thresholds affect movement, while material and intersections are analyzed to evaluate tectonic aspects of the site.

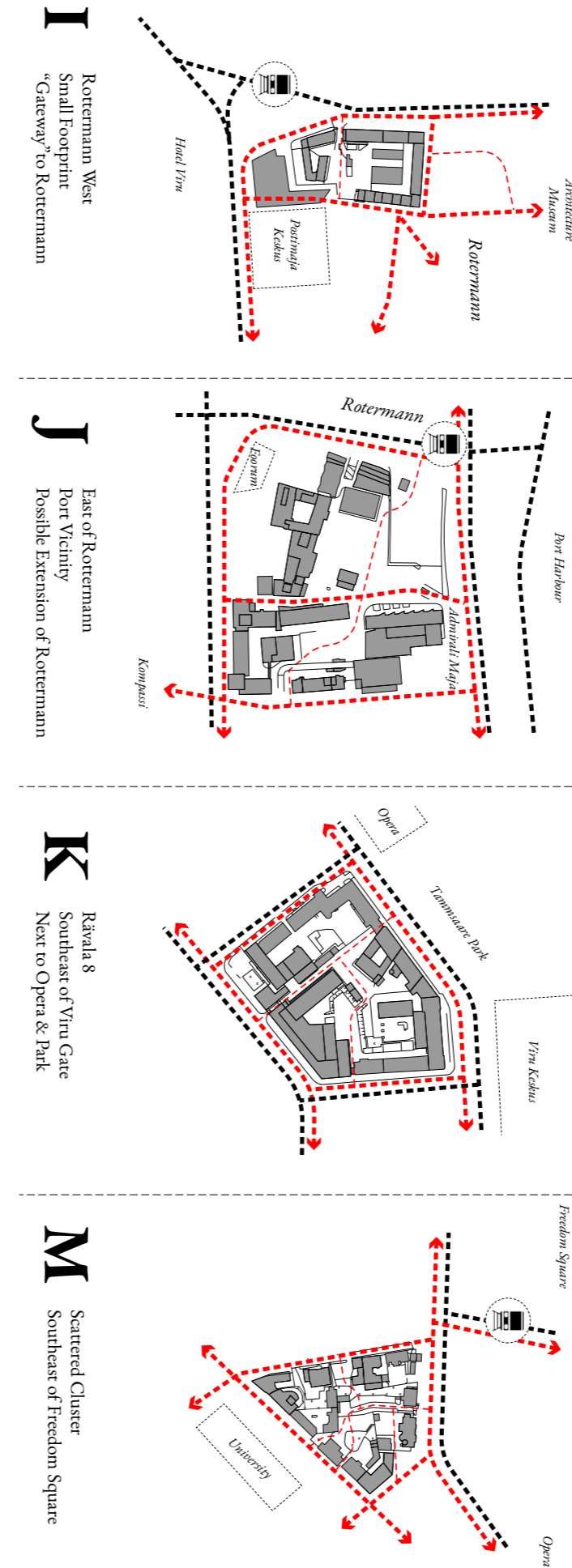
These observations were translated into three guiding design principles for my project: Condense & reveal, Slow & permeate, and Stitch & Expose.

[fig.29]



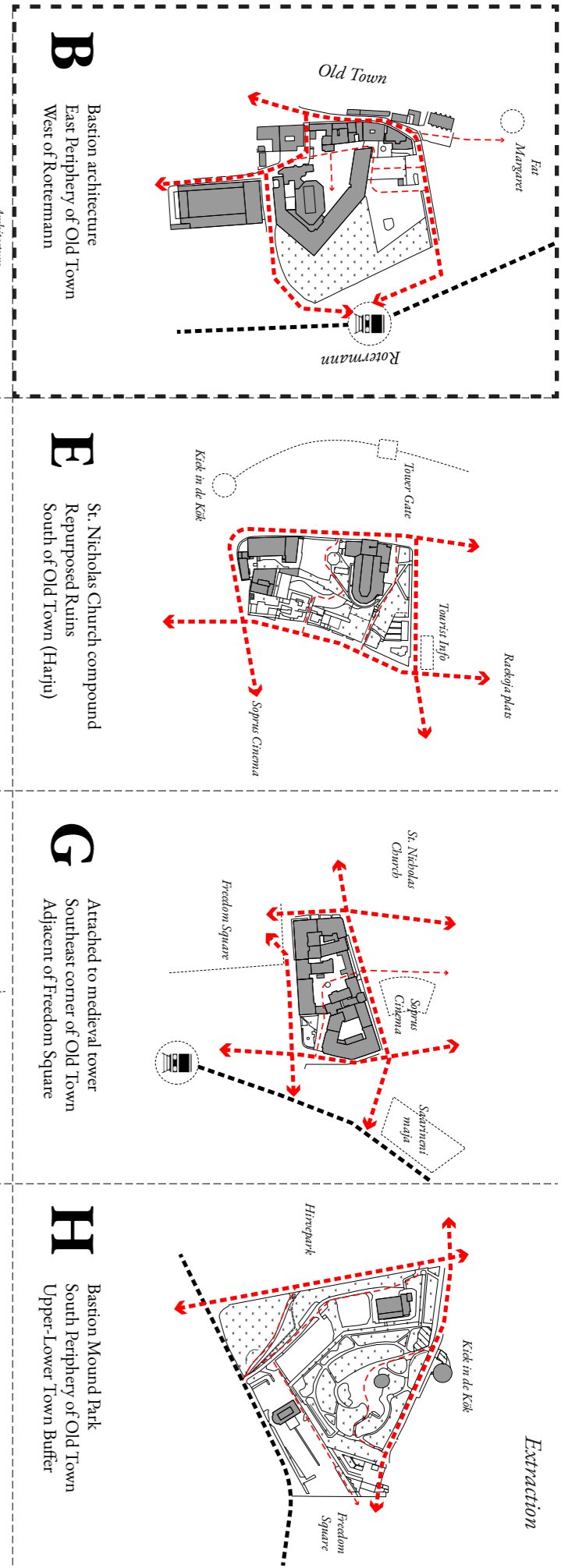
[fig.30]

Potential site extraction - Urban scale



[fig.31]

Chosen site - B



Potential site extraction - Architectural scale

I Abandoned industrial buildings & ruins with active commercial ring
Contemporary top-up intervention

Site: 2350 m²
Void: 1025 m²

J Bus parking area
Massive Parking spaces (+with in)
Office + hotel clusters with minimal residences on the west

Site: 9500 m²
Void: 4950 m²

K Abandoned office building
Residence clusters
Tallinn University Academic Library

Site: 6900 m²
Void: 2700 m²

M Diverse building cluster
Residences + Commercial
Private Parking Lot

Site: 3500 m²
Void: 1700 m²

Chosen site - B

B Repurposed bastion for hotel & gym
Vicinity with many guesthouse
Underutilized green with parkings

Site: 6630 m²
Void: 4100 m²

E Medieval site with different levels
Public space utilized for events
Touristic spot

Site: 4525 m²
Void: 2750 m²

G Courtyard sequencing privacy
Commercial + Residential
Medieval Wall integration

Site: 2475 m²
Void: 700 m²

H Bastion with underground passages
Sunken conditions in-between
Underutilized greens & parking

Site: 8500 m²
Void: 7000 m²

- till 16c. Medieval
- 16c - 17c. Swedish
- 17c - 19c. Isarist
- 1900 - 1940. Independence
- 1944 - 1990. Soviet
- 1990 - now. Contemporary

Chosen site - B

B

E

G

H

Potential site extraction - Human scale

I

J

K

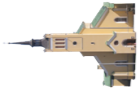
M

[fig.33

[fig.32

Potential site extraction - Detail scale

Extraction



Limestone
Concrete
Metal
Plaster
Glass

till 16c.
16c. - 17c.
17c. - 19c.

H



Limestone
Metal
Terracotta
Plaster
Concrete
Glass

till 16c.
17c. - 19c.

G



Limestone
Brick
Plaster
Terracotta
Concrete
Glass

till 16c.
16c. - 17c.

E



Limestone
Plaster
Terracotta
Concrete
Glass

16c. - 17c.
17c. - 19c.

B



[fig.34]

Chosen site - B



Limestone
Plaster
Concrete
Metal
Glass

17c. - 19c.

M



Stone
Plaster
Concrete
Metal
Glass

17c. - 19c.

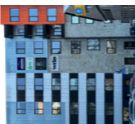
K



Limestone
Plaster
Metal
Concrete
Glass

17c. - 19c.

J



Limestone
Metal
Terracotta
Concrete
Glass

16c. - 17c.
17c. - 19c.

I



1880-1900



[fig.35]

1885-1890



[fig.36]

1905



[fig.37]

1920



[fig.38]

1980



[fig.39]

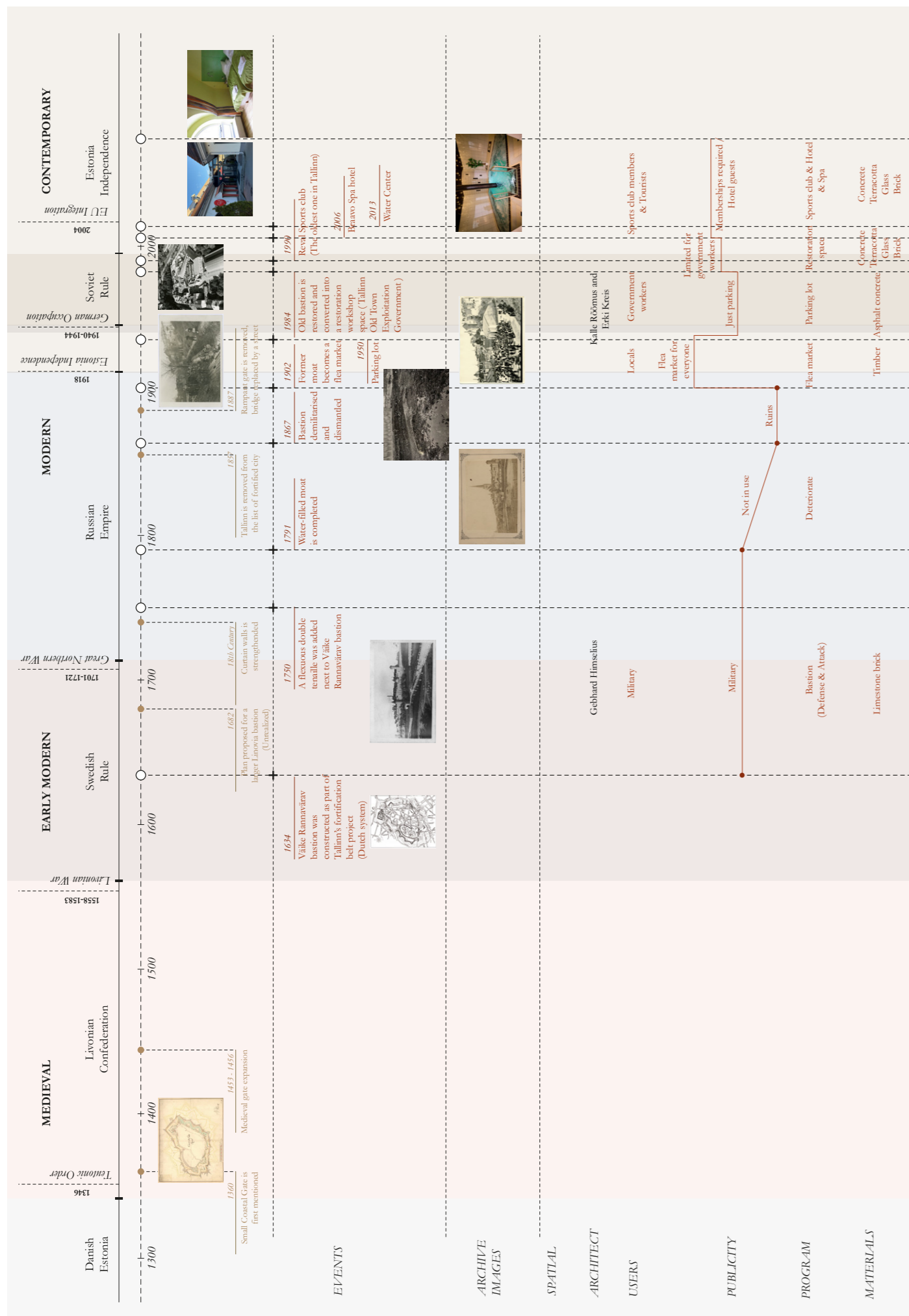
Answering to sub question
Which layers are currently invisible or underused?

Site-Specific Analysis: Väike Rannavärv Bastion

Archival images [fig.35-39], map [fig.40], and timeline [fig.41] are used to trace the transformation of the site from a defense mechanism program to a period of underuse, to an informal flea market activation, then being used by the governmental workers as a restoration office with workshop space, and finally turned into a hotel with a spa that targets tourists and people with gym memberships. These help evaluate public accessibility and social relevance.



[fig.40]



[fig.41]

Answering to sub question
Which layers are currently invisible or underused?

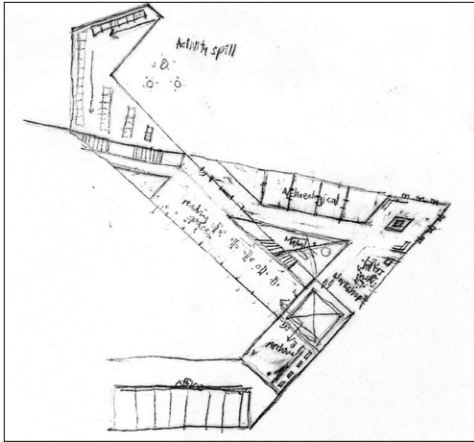
Heritage Impact Assessment and Program Evaluation

Guidance on Heritage Impact Assessments for Cultural World Heritage Properties is used to evaluate the site's value today and guides decisions about which past programs could be meaningfully reintroduced. ("Guidance on Heritage Impact Assessments for Cultural World Heritage Properties," 2011) [fig.42]

The spatial value of the hotel is currently low and limited to design; the restoration office might be less relevant today despite its civic role; and the flea market holds strong relational and use value for local engagement. Rather than focusing solely on restoration, the site offers an opportunity to reintroduce elements that have been missing such as flea market.

Programs	Spatial value	Material value	Narrative value	Use value	Relational value
Bastion	Functions as a defensive structure, using water as a barrier and the wall as the city's first line of protection. Its height allows surveillance, while narrow openings enable defense with minimal vulnerability.	Constructed from local limestone sourced from nearby quarries, a material abundant in Tallinn. Traditional construction techniques reinforce its durability and historical authenticity.	Strongly tied to Tallinn's historical context, when the city required robust defenses against foreign attacks. The bastion directly represents the city's military and political needs of its time.	Highly used and essential during its time as part of Tallinn's defensive system.	Relates to the general population as a collective structure built for the protection of the city and its people.
Flea market	Temporary, informal stall structures that can be easily assembled, dismantled, and relocated. The spatial flexibility supports short-term activities and adapts well to changing needs.	Lightweight timber structures that are easy to construct, dismantle, and transport. The material choice supports temporary and informal use.	Represents everyday local life and informal exchange. Its temporary nature reflects a bottom-up use of space rather than formal urban planning.	Popular and well-used by locals, as supported by archival evidence. Its disappearance is likely due to its informal and unstructured nature rather than lack of demand.	Closely connected to local residents, supporting daily needs and small-scale vendors.
Restoration office	Part of the old wall is reused as a building element, but it lacks a meaningful spatial relationship with the interior and functions mainly as a backdrop.	Reuses traditional limestone to respect and visually align with the existing bastion wall. Material continuity reinforces historical presence, though spatial integration remains weak.	Responds to a critical historical moment when decisions had to be made about whether to preserve or demolish the old town. The program reflects an ideological shift toward heritage conservation.	Well used during the period when restoration decisions were urgent. Today, the function no longer needs to be located on this site due to reduced pressure on old town redevelopment.	Directly related to governmental and professional sectors, but indirectly affects everyone through city planning and heritage decisions.
Parking lot	Leftover vacant land is used as surface parking, similar to many other empty plots in Tallinn. The space has no defined spatial quality beyond accommodating cars.	Finished with asphalt, a practical and utilitarian surface appropriate for vehicular use but lacking character.	Has no meaningful narrative connection to the bastion or to Tallinn's contemporary urban vision. It contradicts the city's ambition to become less car-centric.	Actively used in its current condition.	Primarily relates to car users.
Hotel + Sports + Spa facility	Part of the old bastion wall is reused without a meaningful spatial connection to the original structure. Added volumes create awkward, underused pockets, while columns disrupt circulation and blocked window openings limit daylight and outward views.	The bastion wall retains its limestone material, while attached hotel volumes use white walls and a green roof following the bastion's geometry. Glass windows and decorative terracotta tiles are added, though their relevance remains unclear.	Lacks narrative relevance to the bastion and conflicts with Tallinn's long-term goals (2030/2060) of prioritizing local life over tourism in the old town.	Hotel occupancy is around 50%, with negative reviews focused on layout and building condition. The sports facility is used but limited to paying members, while the spa is redundant due to the nearby Kalev Spa.	Caters mainly to tourists and paying gym or spa members.
Park	A flat open field with grass and scattered trees. Despite its size, the lack of spatial definition, paths, or focal points results in very limited use.	Grass planted directly on soil with some existing trees. Material treatment is minimal and does not encourage active use.	Aligns with the idea of Tallinn's green belt and the broader ambition to increase public green space. However, this narrative is not translated into actual use or experience.	Despite its presence, the park is underused due to the lack of paths, seating, and public programs.	Intended for public use, but its potential remains unrealized.

[fig.42]



[fig.43]

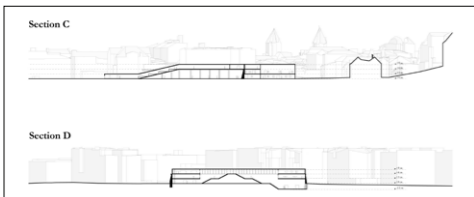
Design methods - Research through design

The design methods each week involve posing a short question to answer, then testing it through iterative exploration rather than making an immediate decision. Depending on the questions, the process sometimes involves finding references to similar case studies or systems for comparison, and at other times it involves testing possibilities. The question operates across different scales from micro to macro investigation.

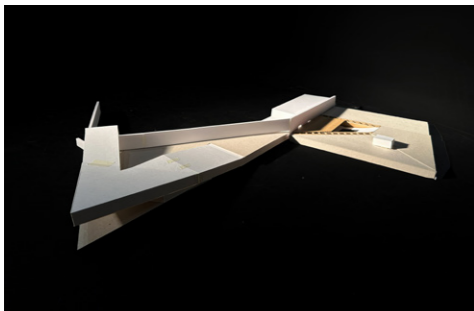
Design iterations are used across various media, including sketching plans [fig.43] and sections [fig.44], physical models [fig.45], 3D computer models [fig.46], and perspective drawings [fig.47].

The process is intentionally exploratory, where several options are developed. These options are critically evaluated both individually and as complementary strategies, allowing strengths from different iterations to inform design decisions. The process follows a cycle of testing, evaluation, refinement, and repetition as new questions arise. In this way, design is not only the final outcome but an active method of researching that constantly informs and reshapes the architectural proposal.

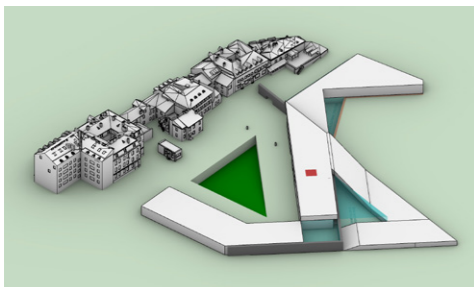
Working across scales, the process is often not linear. The design constantly shifts between detail and overall composition, ensuring that each part contributes to the project as a whole.



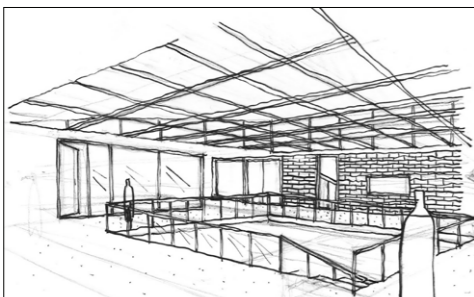
[fig.44]



[fig.45]



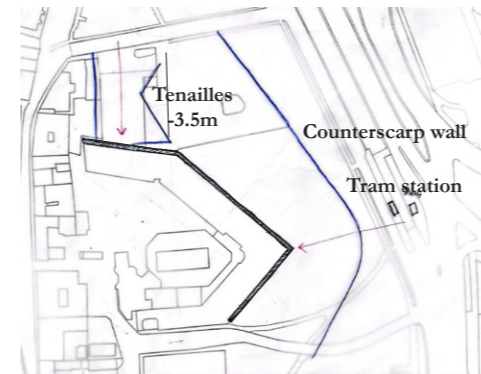
[fig.46]



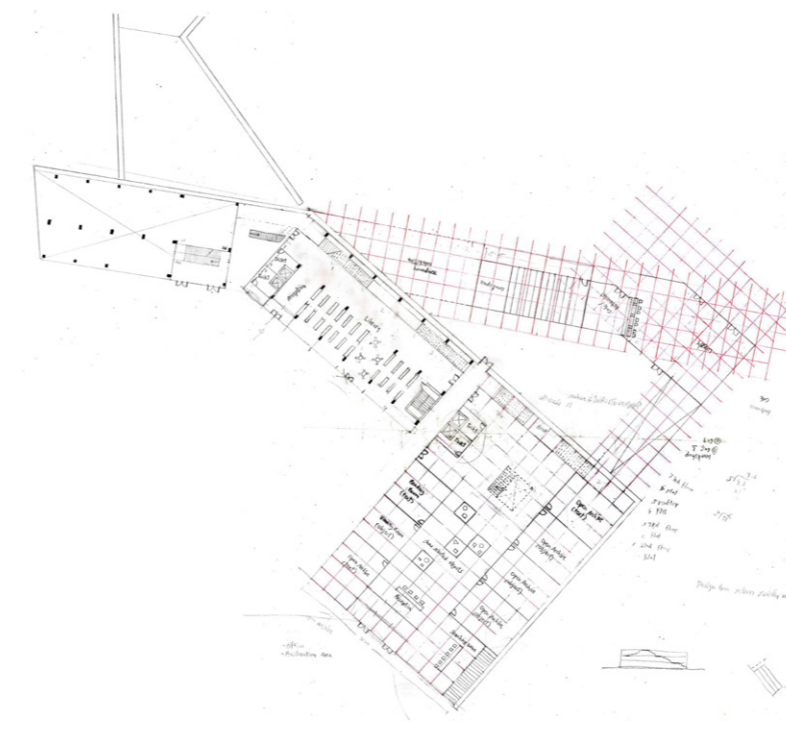
[fig.47]



[fig.48]



[fig.49]



[fig.50]

Results

The project's results are developed from a series of short questions posed weekly within a research-through-design approach. Rather than providing immediate answers, each question informs specific design decisions that, together, shape the final proposal.

Questions

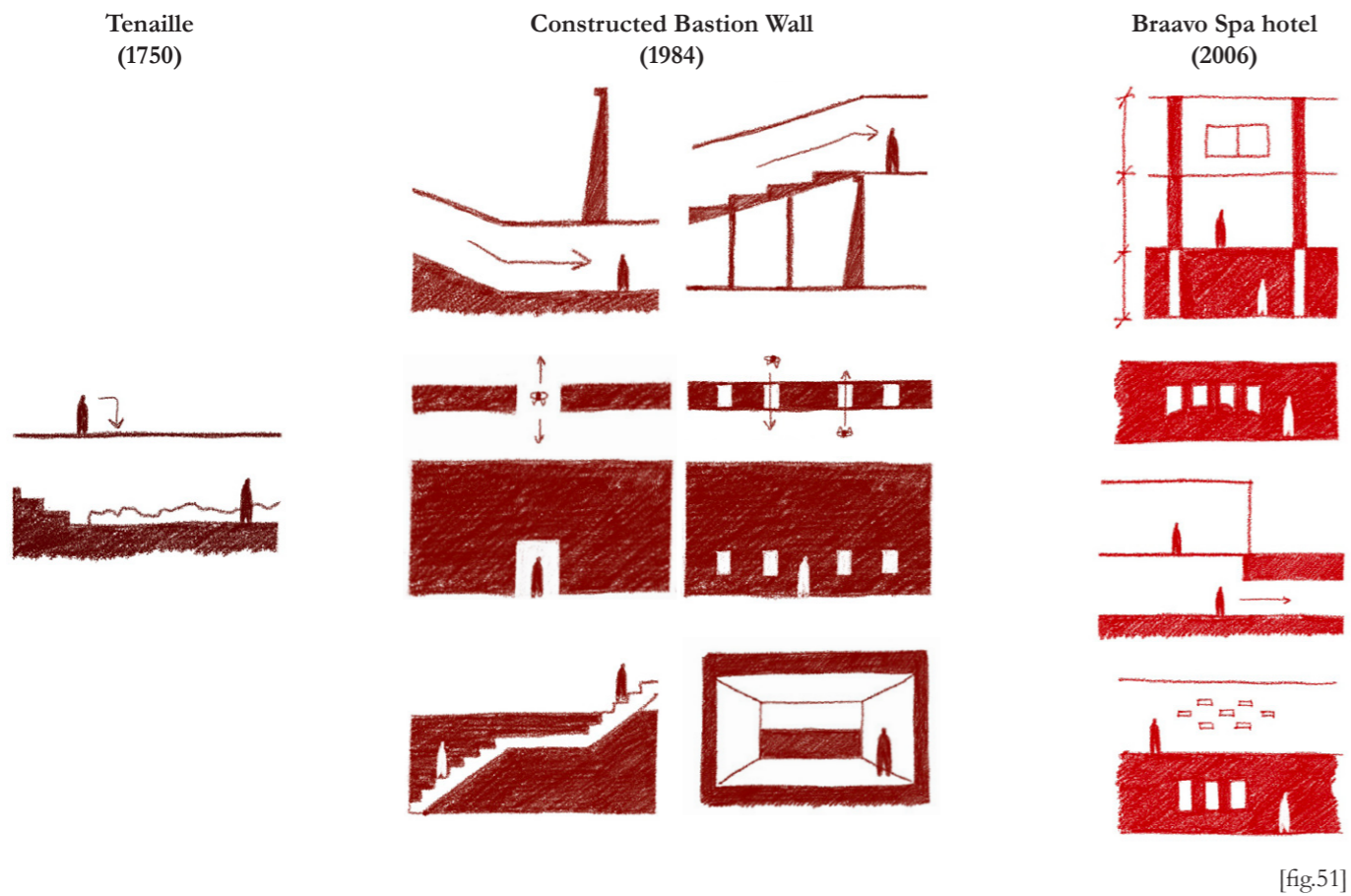
1. Working with Existing : what to keep, remove, and reveal?

A key decision was to determine which sections of the existing hotel to retain, guided by thorough spatial analysis of both the exterior and interior. The structural elements marked in red are preserved [fig.48] since they support the geometry of the proposal and reinforce the bastion wall as a guiding axis.

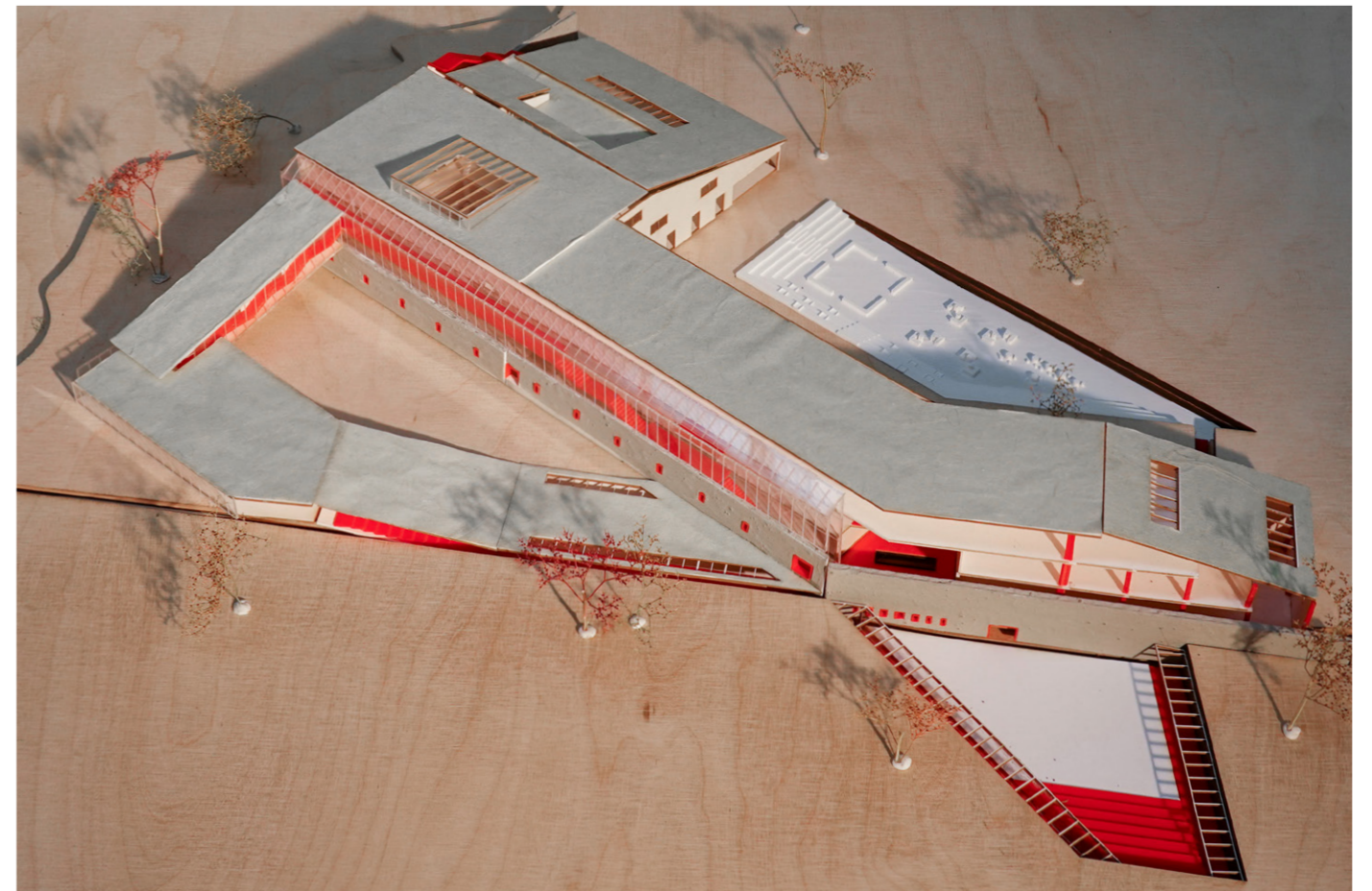
In addition, the northern part of the hotel already contains an underground volume, creating an opportunity for a new entrance next to the old tenaille remnants, approximately 3.5 meters below the current ground level. This approach minimizes excavation while allowing the project to reconnect to a hidden historical layer on site. [fig.49] The design reduces unnecessary demolition while reintroducing another time layer.

New interventions are shaped by extending the line of the bastion wall, forming a contemporary counterpart that reads as a modern bastion, in continuity with the historical context. [fig.50]

The project addresses multiple historical layers, from the past to the future. The oldest layer, tenaille remnants, is uncovered and displayed at the northern entrance. The current bastion wall is a precise reconstruction of the original, accentuated in several ways: framing, promenading beside, underneath, above, below, and through it, so users can interact with its form from multiple perspectives. The Braavo Spa Hotel represents another layer in time. Existing structures, floor levels, and openings are retained and treated differently from the newly added elements, making the distinction between old and new legible. Rather than blending these layers into a single narrative, the project allows each period to remain visible, revealing the site's ongoing transformation through time. In the diagram, different shades of red indicate distinct historical periods, highlighting each temporal layer within the building [fig.51]. When combined into a physical model, these various layers become highly visible within the design, yet remain subtle. [fig.52-55]



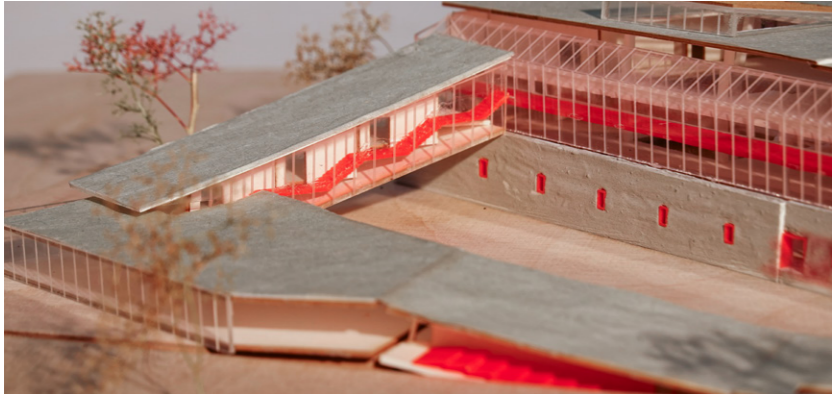
[fig.51]



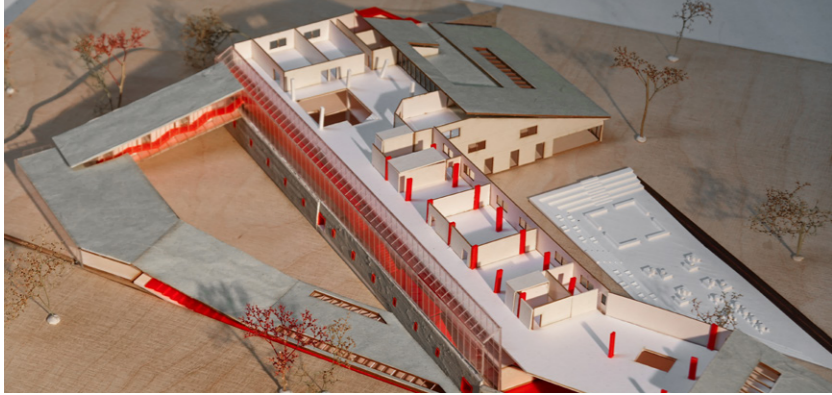
[fig.52]



[fig.53]



[fig.54]



[fig.55]

Time is also reflected in program choices. The past appears in the archaeological section and archive space, where objects encapsulate history. The present is expressed through accessible areas like the library and learning zones. [fig.56] Temporary programs, such as event spaces and flea markets operate seasonally [fig.57-58]. The future emerges in a laboratory and an experimental exhibition space where new archaeological and preservation methods are developed and displayed.



[fig.56]



[fig.57]



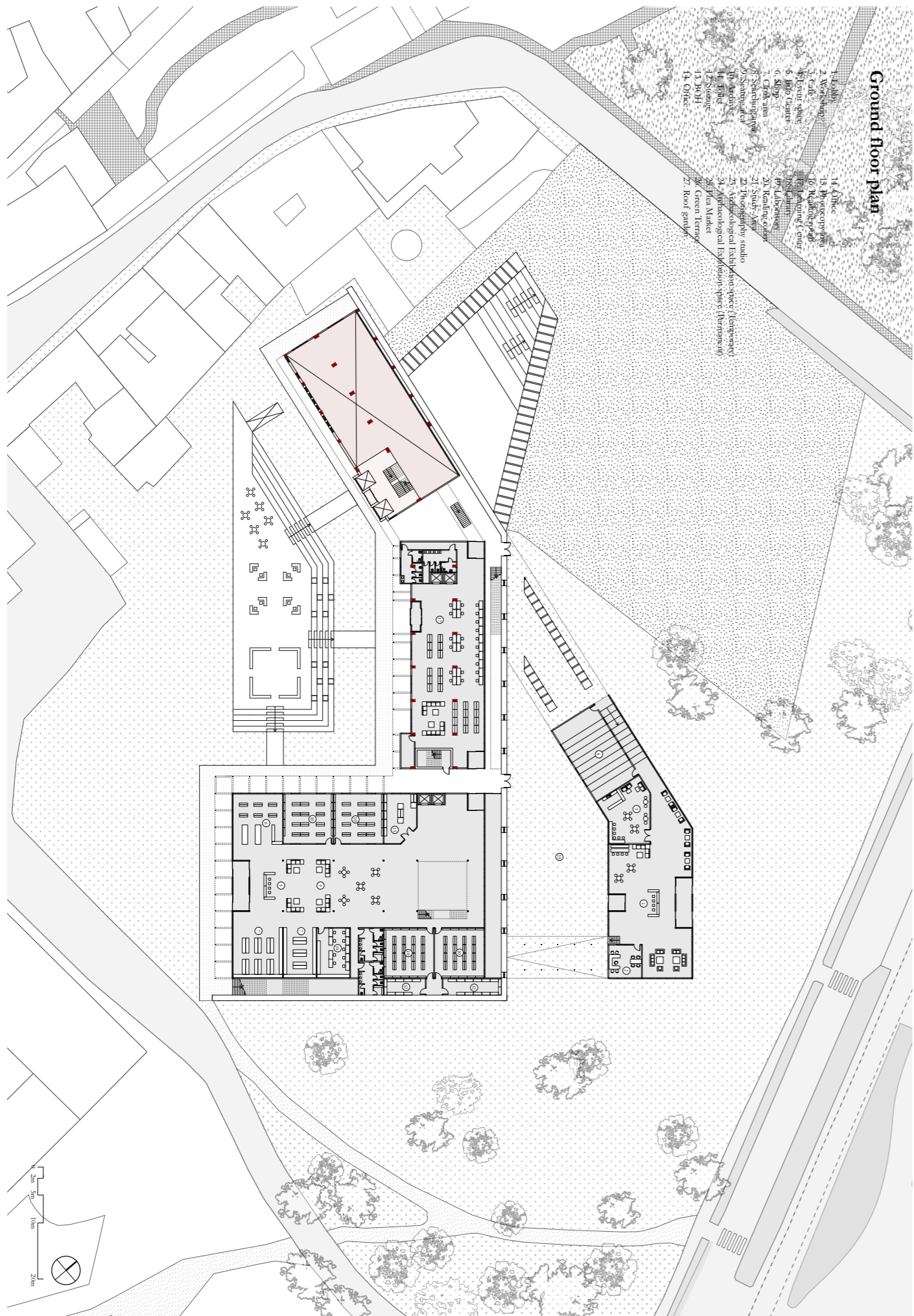
[fig.58]

2. How to activate the site?

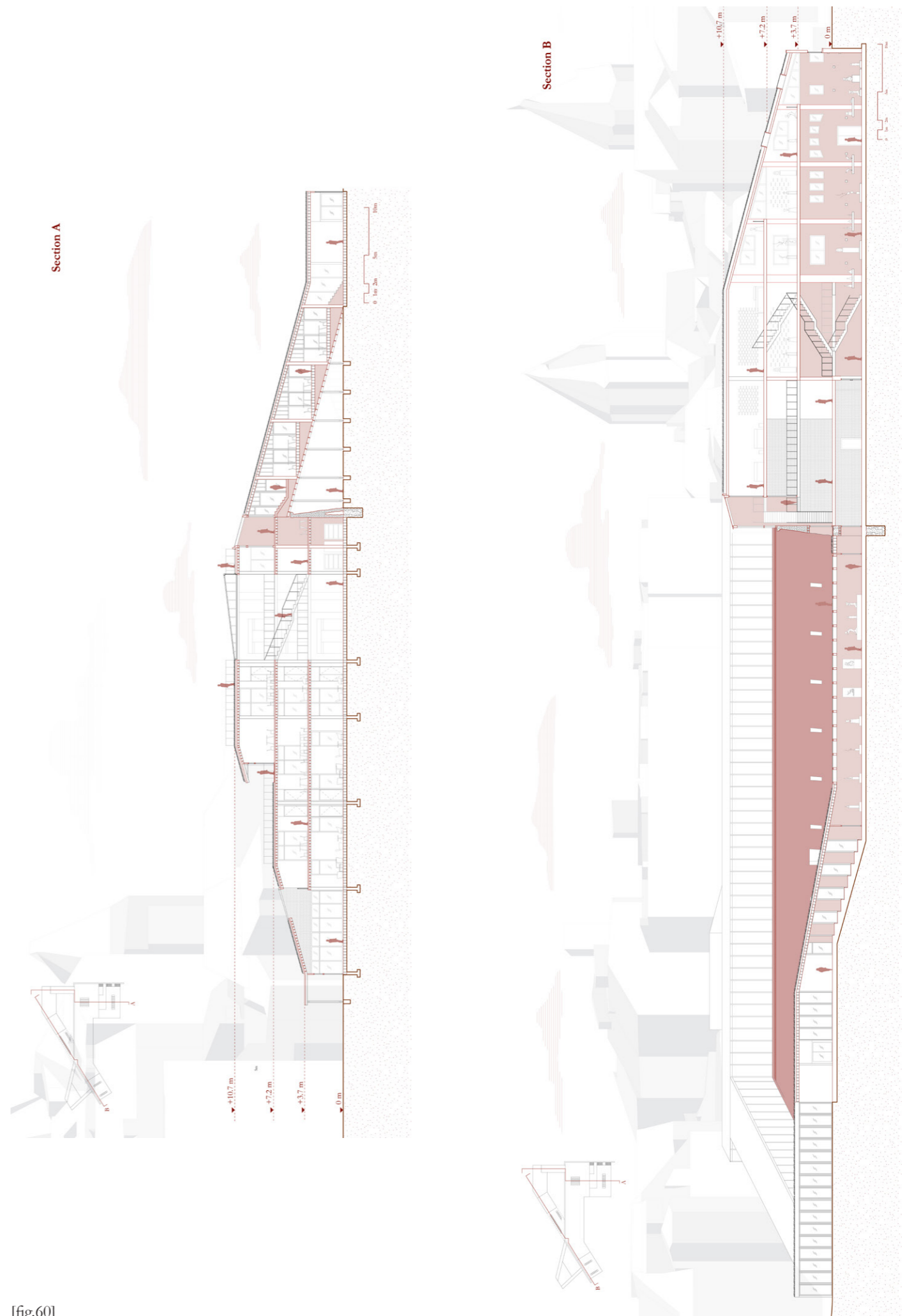
The site is activated by introducing a new volume in front of the bastion wall to increase visibility and presence from the tram station, and gives the project a stronger presence in the urban context. Instead of relying on one main entrance, the proposal uses several access points to make the site more open and flexible. [fig.59] These include the main entrance at the front volume, from the Northern entrance at the tenaille area, from the Southern entry through the archive building, from the wall itself as you pass through the flea market space, and from within, next to the library. [fig.60]

Collectively, these entrances help transform the previously introverted site into an open, connected sequence of spaces, further reinforcing the project's core aim of reconnection.

Upon entering, visitors are guided up or down from two sides of the building. Those going up can visit the workshop space, then move directly to the laboratory area and the archive space beyond the wall. The action of crossing over this wall highlights the obstacle while keeping it completely intact. Meanwhile, the path leading downward utilizes the steps as an event space; from there, visitors pass through the temporary exhibition area [fig.61], cut through the wall itself, and enter the existing underground volume, which has been converted into a permanent archaeological exhibition space. [fig.62]



[fig.59]



[fig.60]



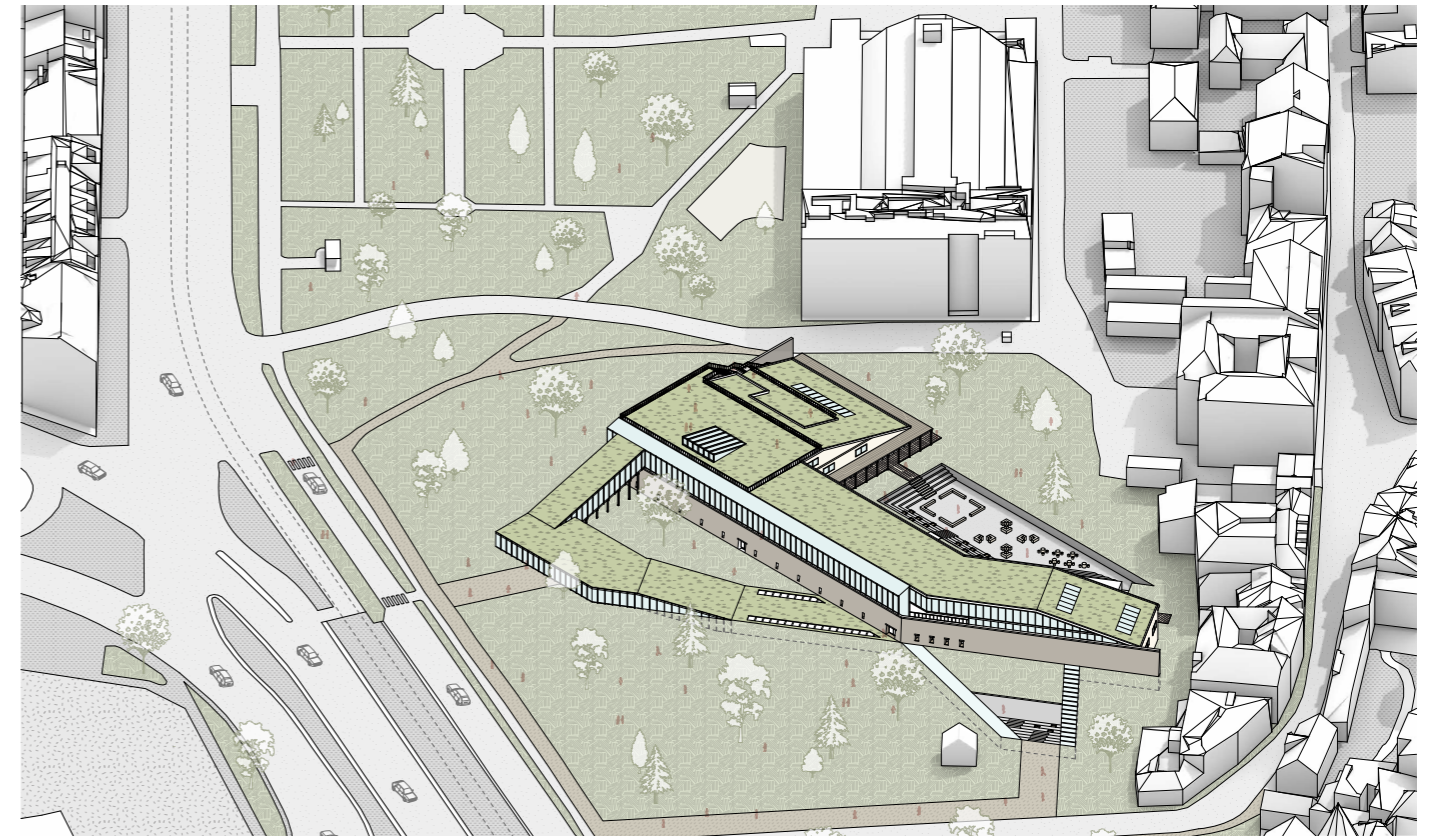
[fig.61]



[fig.62]

Because the proposal builds on part of the existing greenbelt, green space is reintroduced within the project itself. This happens through the public green space within the wall, as well as through a green roof and a green terrace on the archive building. These spaces are accessible to the public for everyday use. This way, the project helps maintain the role of greenery in the urban fabric while advancing the broader goal of public engagement. [fig.63-65]

Program and circulation are resolved through a series of plans. Together, they helped clarify spatial logic, how people move through space, and the overall volume. [fig.66-68]



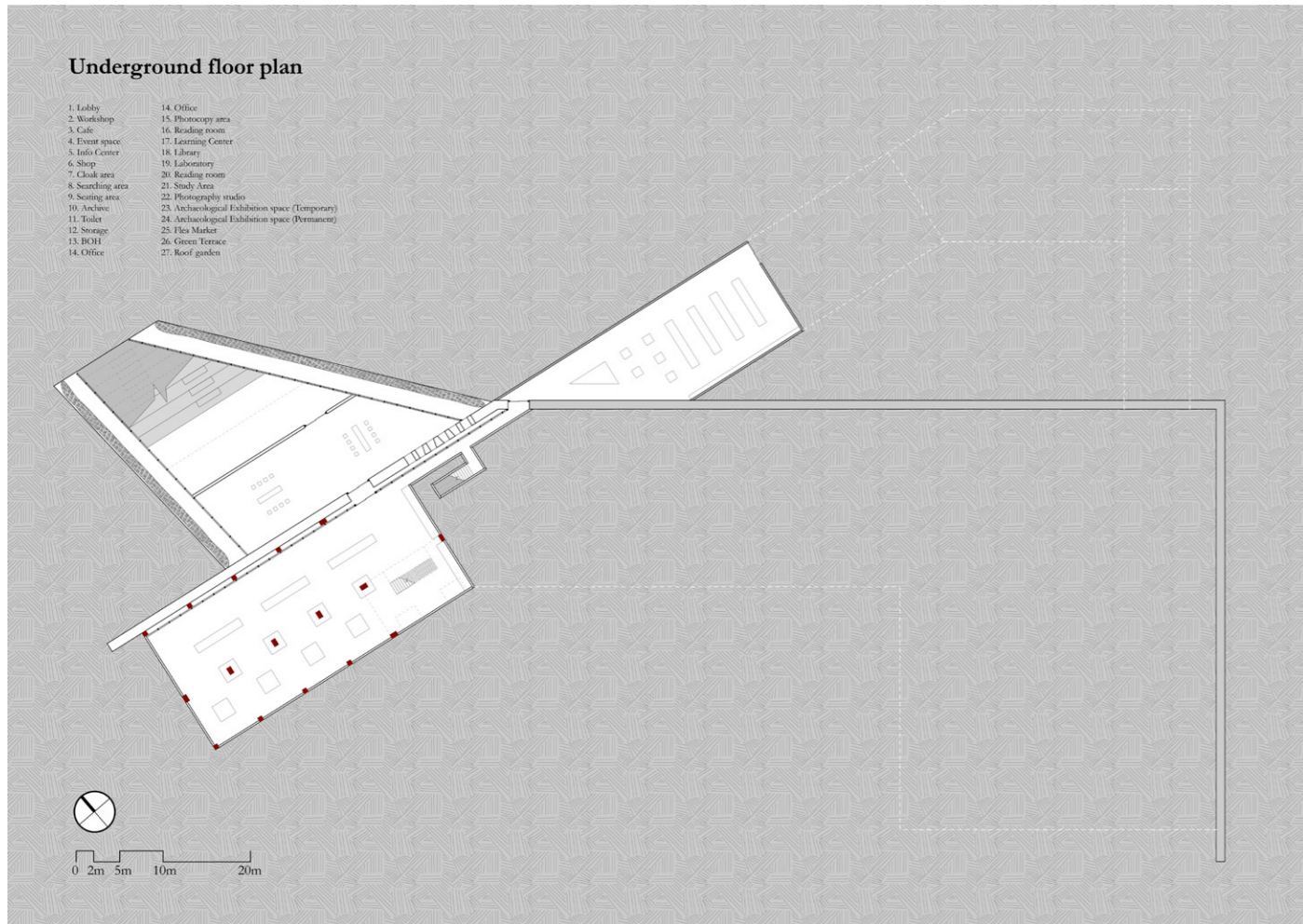
[fig.64]



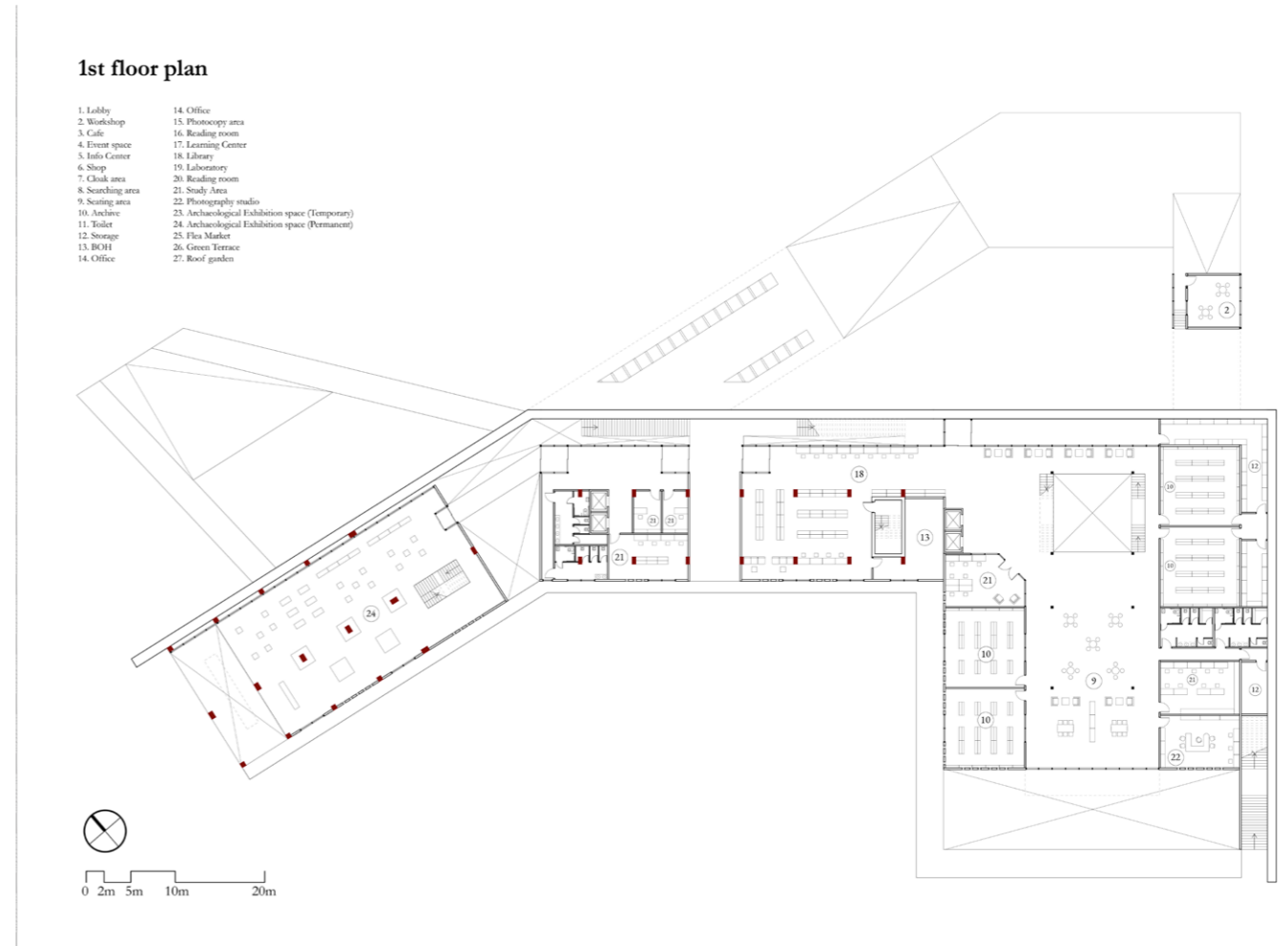
[fig.63]



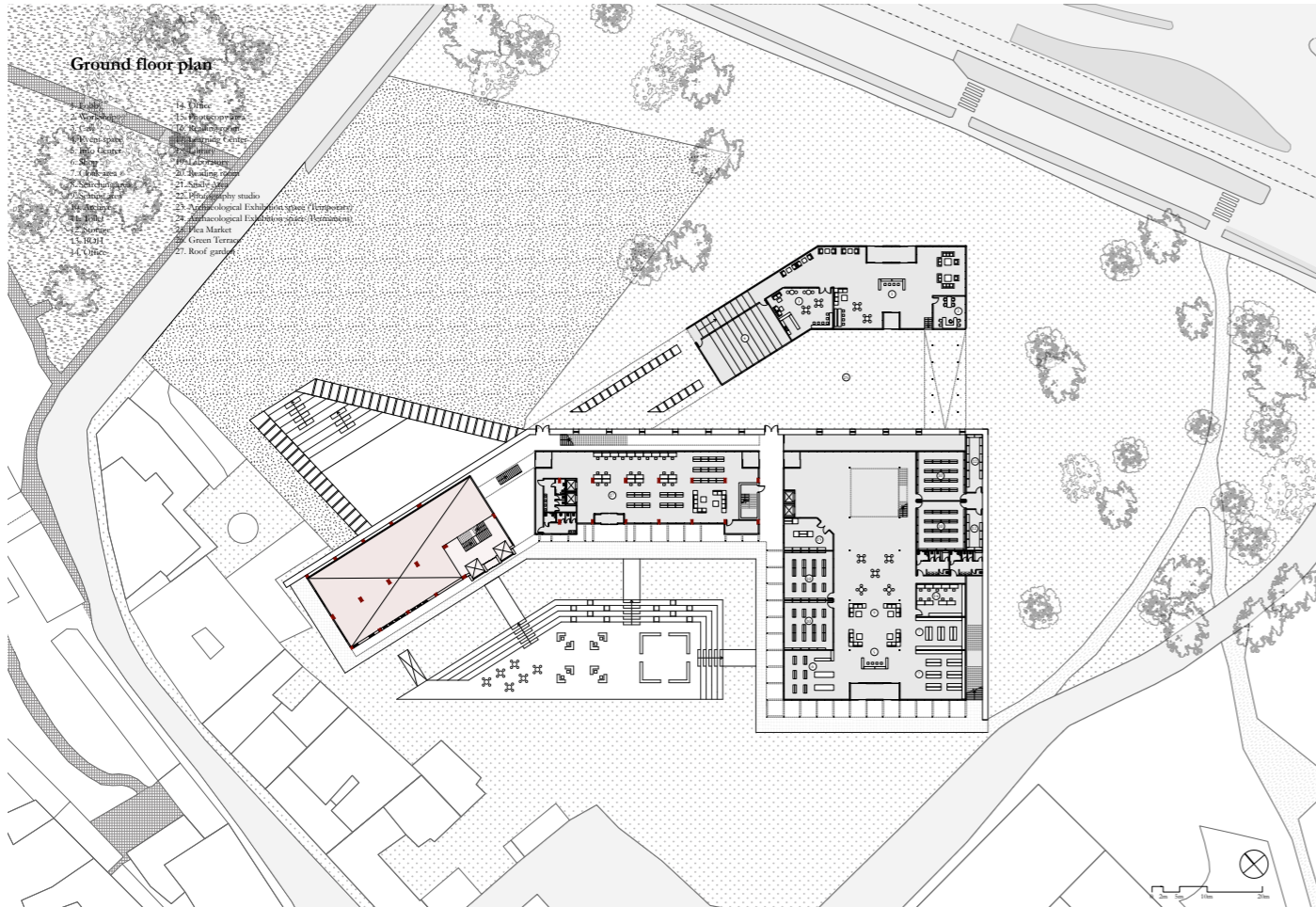
[fig.65]



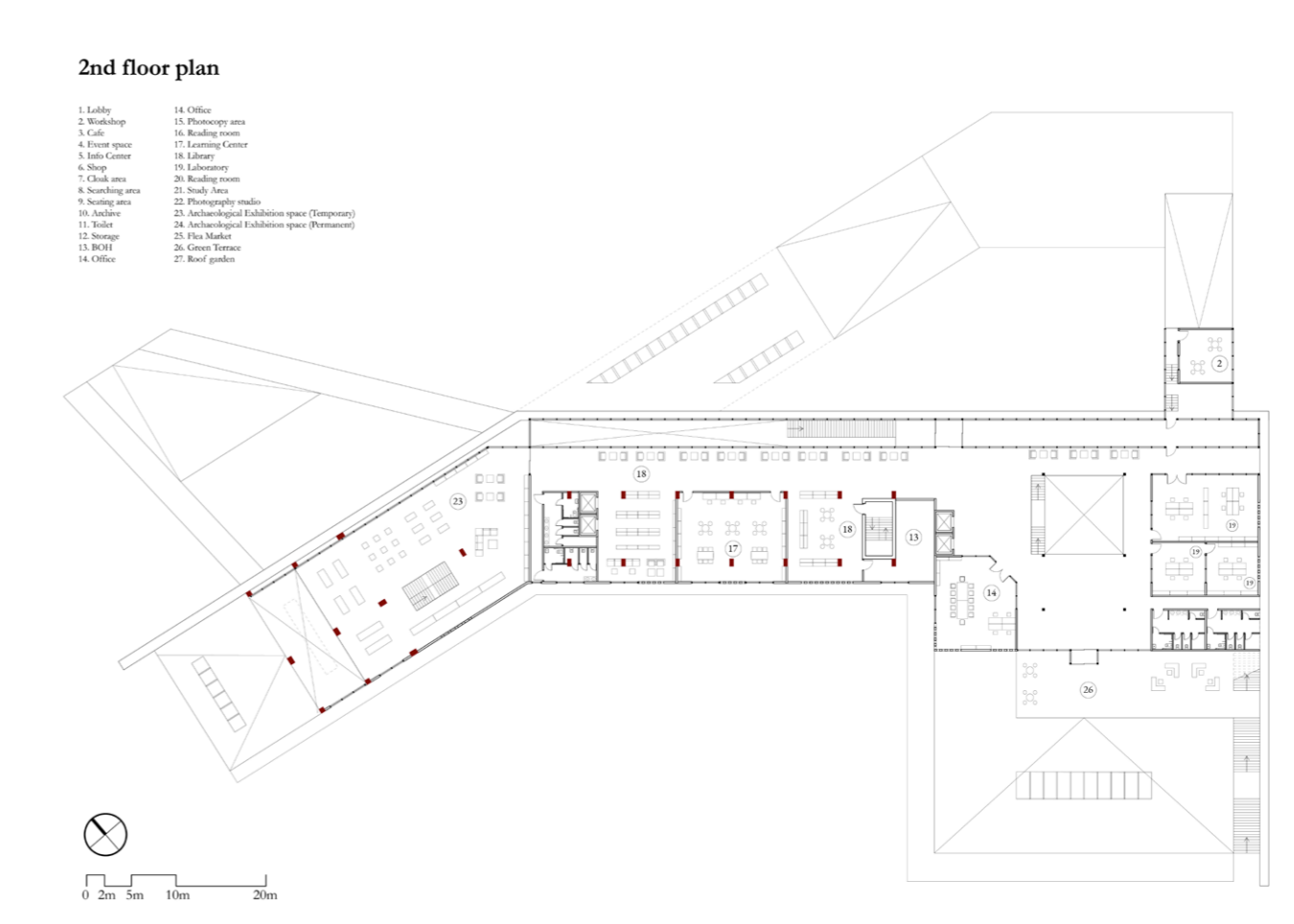
[fig.66]



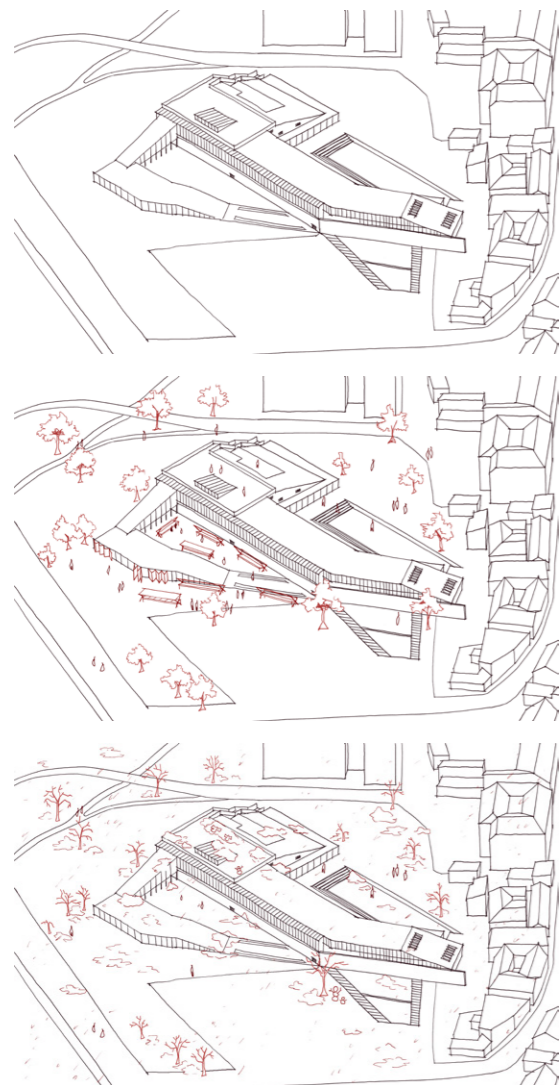
[fig.68]



[fig.67]



[fig.69]



The site is activated through seasonality. During the summer or on days with special events, the space under the lifted volume and the courtyard space inside the front volume can be used for a flea market; the facade can open up to house these activities, attracting an even larger audience to the area. Meanwhile, during the winter months, the facade remains enclosed and the programs are contained within the volumes. [fig.70]

[fig.70]

3. What is the Architectural Identity?

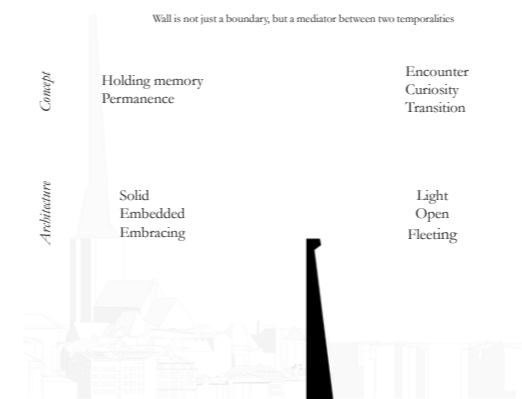
To show the diversity of spatial atmospheres, the project develops two architectural conditions on two sides of the bastion wall.

In front of the wall, the architecture becomes open, lightweight, flexible, and fleeting, suitable for a temporary program of events, workshops, and flea-market spaces. While the back is more embedded and permanent, it carefully preserves the site's archaeological memory. [fig.71]

Material choices reinforce the identity of each part of the project. The front volume is primarily constructed in timber with a glass facade, creating transparency and reflecting the surrounding contemporary city. [fig.72-73] At night, it glows outward, inviting people. By contrast, the interior section uses beige limestone brick, a Tallinn-sourced material, matching the bastion wall. [fig.74-75] Timber interiors provide warmth. [fig.76] This approach integrates the building with the old town and maintains historical continuity history.

Unwrapped facade designs are tested on both sides of the wall to understand how the building is situated within the environment. It helps evaluate how the project appears from different directions. The goal is to ensure the building feels like it belongs in Tallinn's skyline without losing its own identity.

This deliberate contrast effectively reflects the dual-site condition while maintaining a coherent overall composition on the site where it is situated. [fig.77]

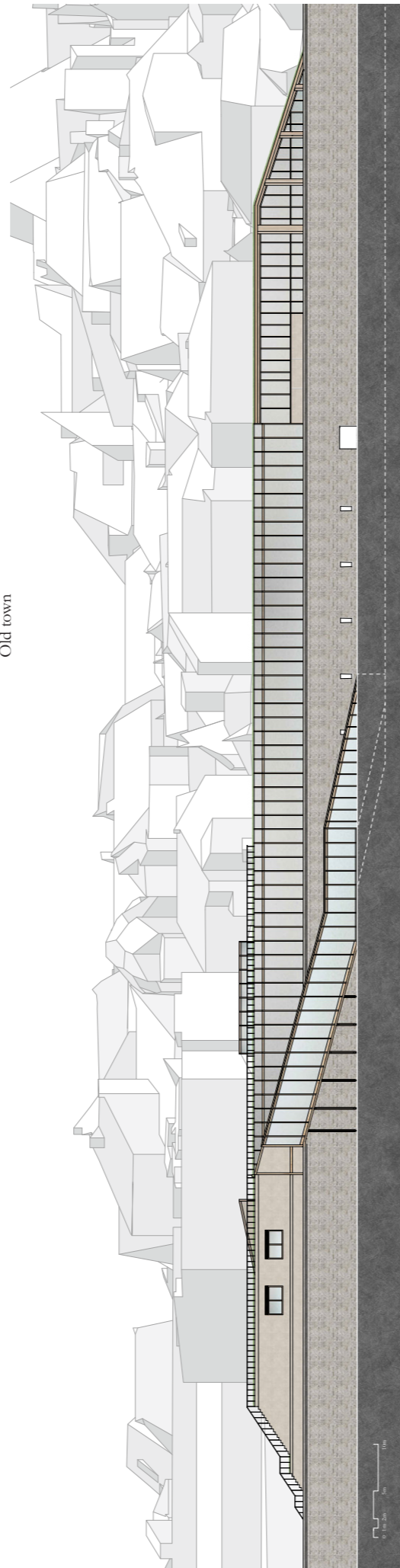


[fig.67]

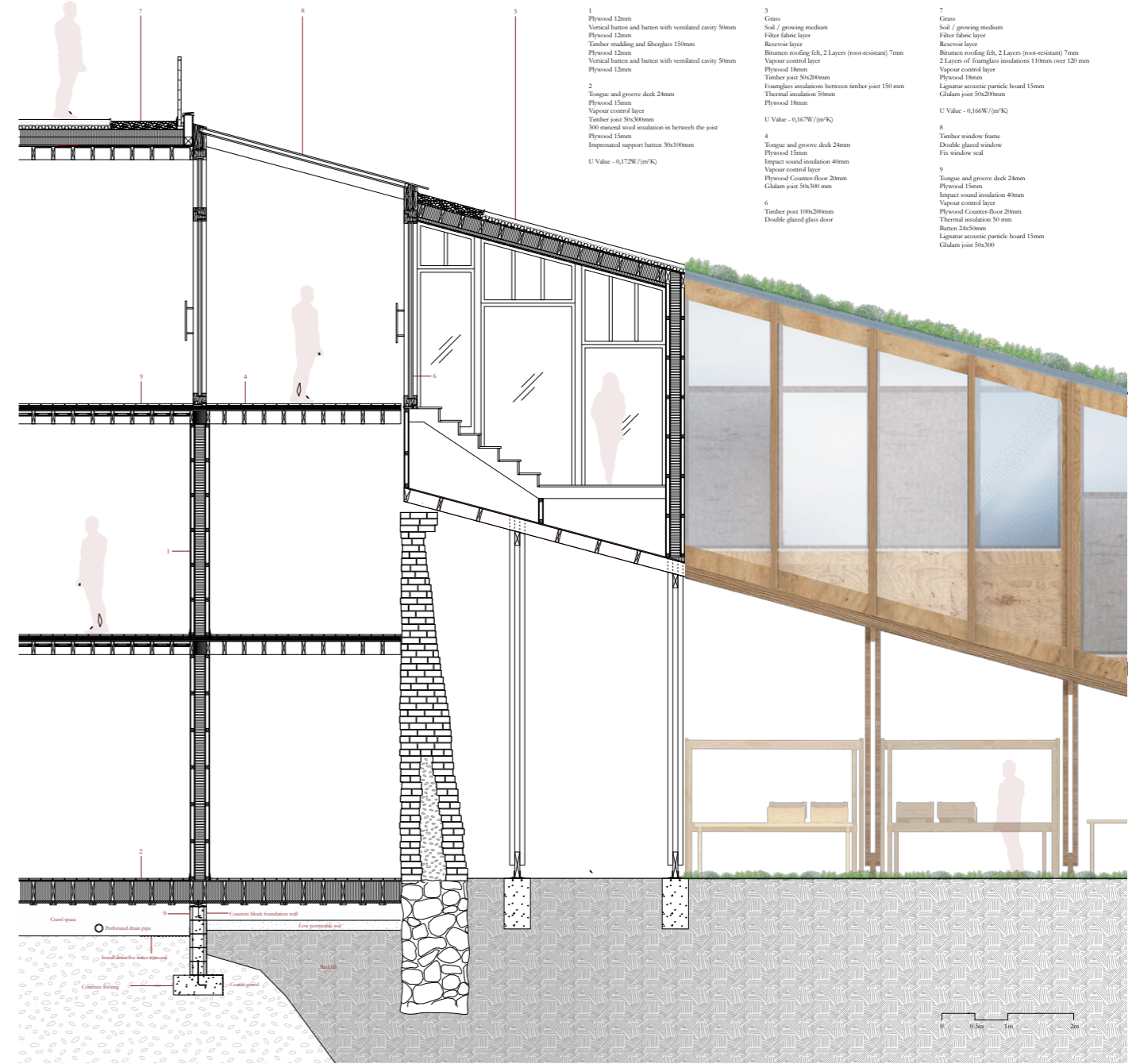
Newly developed area



Old town



[fig.72]

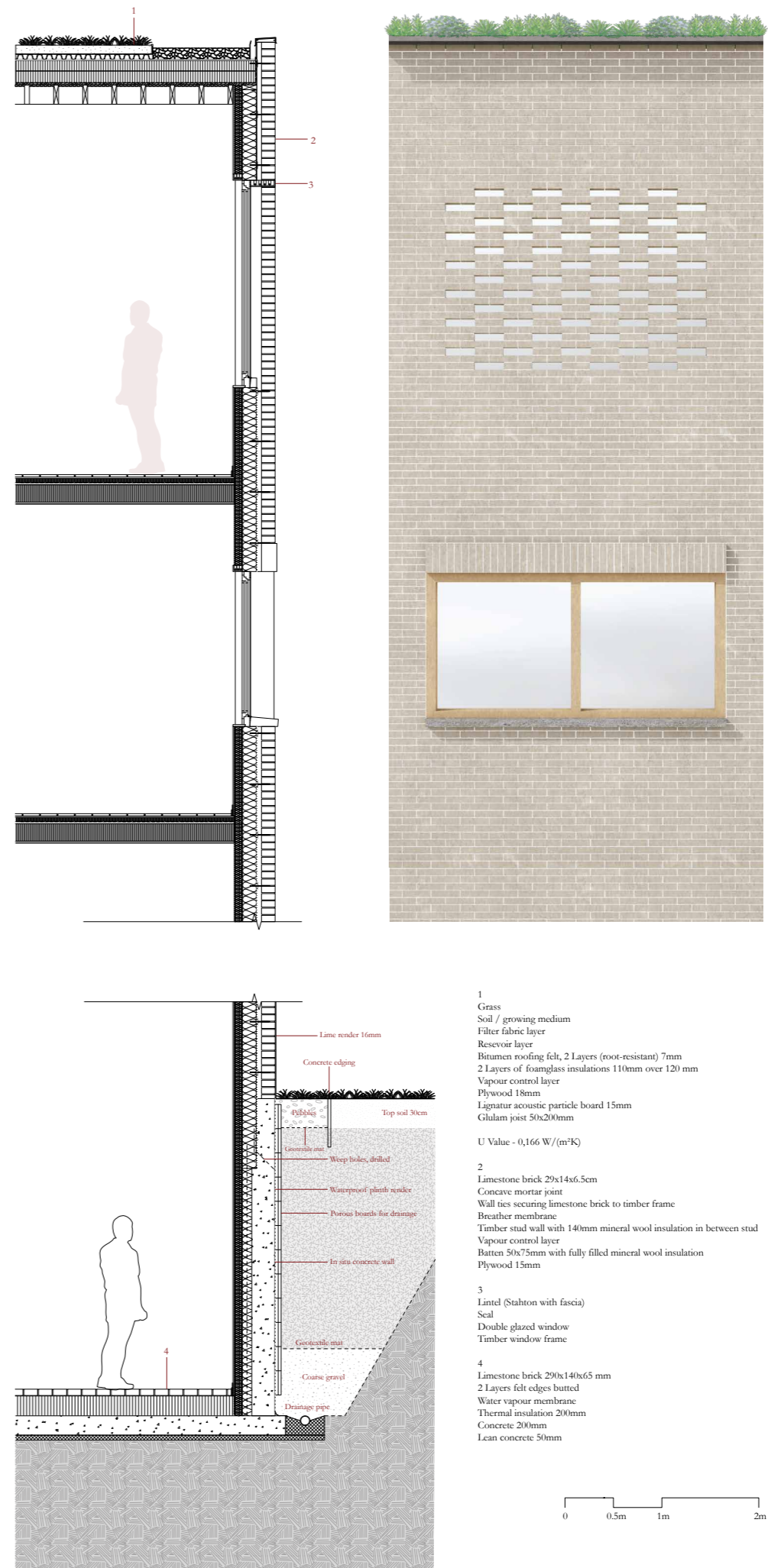


- | | | | | | | | | |
|--|--|---|------------------------------|---|-----------------------|---|----------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Plywood 12mm | Tongue and groove deck 24mm | Gas | Tongue and groove deck 24mm | Gas | Timber post 100x200mm | Gas | Timber window frame | Tongue and groove deck 24mm |
| Vertical batten and batten with ventilated cavity 50mm | Plywood 15mm | Soil / growing medium | Plywood 15mm | Soil / growing medium | Double glazed window | Filter fabric layer | Double glazed window | Plywood 15mm |
| Plywood 12mm | Vapour control layer | Filter fabric layer | Impact sound insulation 40mm | Filter fabric layer | Fix window seal | Recessed layer | Fix window seal | Impact sound insulation 40mm |
| Timber slatting and fibreglass 150mm | Timber post 50x300mm | Recessed layer | Plywood Counter floor 20mm | Recessed layer | | Bitumen roofing felt, 2 Layers (root-resistant) 7mm | | Plywood Counter floor 20mm |
| Vertical batten and batten with ventilated cavity 50mm | 300 mineral wool insulation in between the joint | Bitumen roofing felt, 2 Layers (root-resistant) 7mm | Glulam post 50x300 mm | Bitumen roofing felt, 2 Layers (root-resistant) 7mm | | Vapour control layer | | Glulam post 50x300 mm |
| Plywood 12mm | Impregnated support batten 30x100mm | Vapour control layer | | Vapour control layer | | Plywood 18mm | | Thermal insulation 50mm |
| | | 300 mineral wool insulation in between the joint | | 300 mineral wool insulation in between the joint | | Thermal insulation 50mm | | Plywood 18mm |
| | | Plywood 15mm | | Plywood 15mm | | U Value - 0,167W/(m²K) | | U Value - 0,167W/(m²K) |
| | | U Value - 0,172W/(m²K) | | U Value - 0,172W/(m²K) | | | | |

[fig.73]



[fig.74]



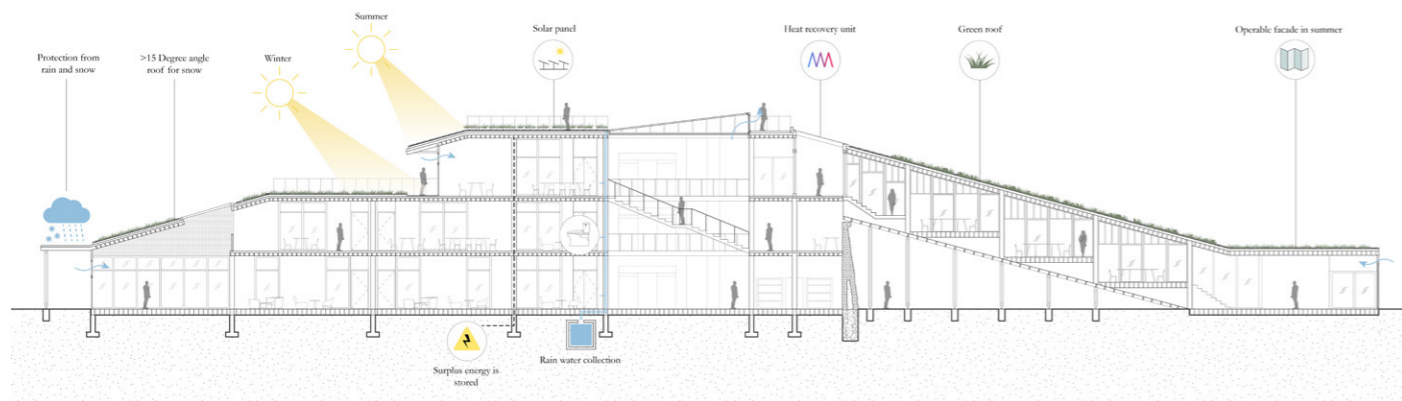


[fig.76]



[fig.77]

The building is designed to withstand the cold climate of Tallinn. A 15-degree slanted roof and snow stoppers are used to ensure the building performs well in winter conditions and can manage the heavy snow load. U-values are carefully calculated to optimize the thermal insulation properties of the structure. Additionally, high thermal mass materials are integrated into the interior structure to stabilize indoor temperatures. Sheltered corridors are integrated throughout the building to protect visitors from the sun, rain, and snow. Additionally, most of the roofing consists of a green roof, with designated areas for solar panels. Below the main volume, rainwater storage and an aquifer system are utilized. [fig.78]



[fig.78]

The results are the architectural proposal that negotiates between these two site conditions, between the inside and outside of the bastion wall. Through selective demolition, strategic intervention, and layered programming, the project transformed the site from a state of separation into one of connection. [fig.79]

By revealing hidden historical elements, reactivating underused space, improving accessibility, and introducing new programs, the proposal creates an engaging urban environment where different rhythms of time coexist. Rather than preserving history as a static image, the design treats it as an active and evolving condition, resulting in an architectural project that makes time legible and allows one to experience the past, present, and future simultaneously.



[fig.79]

Evaluation

Evaluation on the Methodology & Process

The project treats design as a form of inquiry; it is not merely about producing a final product, but rather about a process of careful negotiation. Utilizing a research-through-design methodology and continuous iteration allows the project to achieve high precision. Tackling each question systematically week by week ensures a thorough approach across multiple scales, from the urban, to architectural down to the human and material detail. When these decisions are combined, the project is continuously reevaluated and adjusted as a whole.

Using various mediums such as photographs, sections, plans, and physical models helps evaluate design options and supports decision-making. Because the project does not deal with a single issue but rather layers complex information ranging from history and programming to spatial experience, this process provides clear reasoning for each choice. Furthermore, the design's evolution is clear. Seeing how the design develops over time, allowing previous ideas to be revisited and reintegrated when necessary.



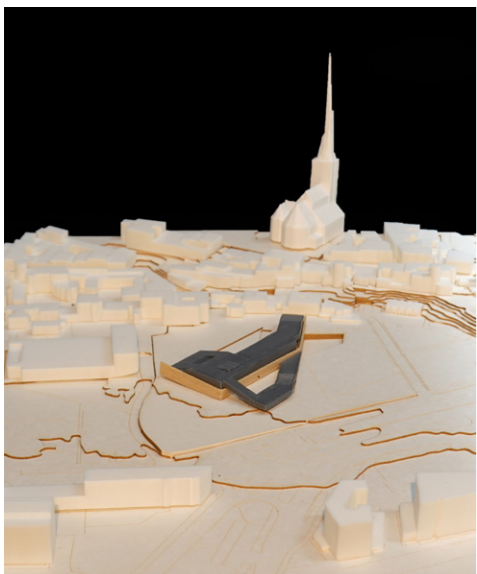
[fig.80]

Evaluation on Heritage Impact Assessment

Just as the existing Braavo Spa hotel is evaluated using a Heritage Impact Assessment (HIA), a parallel form of assessment is conducted on the current proposal to identify gaps and determine how the project can be further improved and developed.

Spatial Value

The current proposal possesses high spatial value. The original layout's numerous kinks and unused pocket spaces, which were previously restricted to certain guests, have been transformed [fig.80]. The bastion wall is now fully integrated and engaged. Accessibility has been significantly improved, and the project creates new experiences that extend beyond the form of the existing bastion - creating unique moments where different temporal layers intersect out of the existing conditions. [fig.81]



[fig.81]

Material Value

Material value is increased relative to the original condition. Material usage is employed to represent the distinct identity of each part of the building while referencing the historic material palette of both the bastion wall and Tallinn. Rather than replicating the past, the material choices, from limestone brick, timber and glass create a deliberate contrast that clearly communicates the intersection of different eras.

However, the current iteration only addresses time from the past up to the present context. To improve this aspect, further consideration should be given to how the materials will age. This future aging process can be intentionally planned and expressed through tectonics. Additionally, because the proposal involves the partial demolition of the hotel, further study on reusing those old construction materials should be explored.

Narrative Value

Narrative depth is the proposal's highest achievement considering the programming is now deeply relevant to both local residents and tourists in Tallinn. The project reveals the layers of the site's history - uncovering the past of the Tenaille ruins since 1984, highlighting the constructed wall, and integrating the old Braavo Hotel structure.

By introducing new programs with explicit connections to time, the site becomes far more sophisticated and richer than the original hotel, where the bastion wall functioned merely as a decorative urban element.

These programs include:

The Past: An archive and archaeological institute.

The Present: A learning center and library space.

The Future: A laboratory.

Cyclical Time: A flea market.

Use Value

From the archaeological archive, learning center, and workshop spaces to the library, exhibition areas, flea market, and public zones, the project ensures there is a space for everyone. A key consideration to be further studied is determining how active these spaces remain when no formal events are taking place. It will be crucial to map exactly where and in what moments different user groups will intersect.

Relational Value

The project holds high relational value as it reconnects the defensive wall to the public. By introducing an archaeological institute, it establishes a public interface linked directly to the city's past. Through strategic spatial design, the proposal transforms the historic bastion wall into an active civic space deeply embedded within contemporary urban life.

Ultimately, the project argues that meaningful heritage intervention emerges not from mimicking or restoring the past, but from its careful articulation. By maintaining a deliberate tension between history and transformation, the proposal allows the historical and the contemporary to coexist without losing their individual identities. The architecture therefore becomes a mediator between past and present, demonstrating how historical infrastructure can remain relevant within an evolving city while continuing to reveal the significant historical value embedded within it.

Conclusion

Architectural Concept & Spatial Strategy

The project is a contemporary reinterpretation of the bastion, highlighting the multiple temporal layers accumulated on-site through the deliberate actions of excavation, highlighting, framing, subtraction, and addition. By overlaying past and present information, the project establishes a meaningful connection that allows the site's history to be read directly from its physical form.

Through this proposal, the bastion is no longer just a flat, two-dimensional image decorating the medieval town's skyline; instead, it gains depth, becoming a space where people can live and experience history. The building's protruding form directly invites people in from the adjacent tram station, while additional entrances to the north and south increase the site's porosity, allowing fluid movement in all directions. The bastion wall, which was once used for separation and defense, now produces connection. Its physical presence remains a monument for historical reflection, while its new programming makes it highly relevant to the contemporary context.

Programmatic Diversity & Public Engagement

The site is now accessible and relevant to a wider audience, moving beyond the exclusive domain of tourists or hotel guests. Researchers can work within the dedicated archive spaces and laboratories. Simultaneously, locals and tourists can visit the learning center to explore Tallinn's archaeological past, view present-day research findings, participate in restoration workshops, or attend conferences. On specific days, the building opens its facade for a local flea market, inviting the public to engage with the space.

Additionally, a public square and a green roof are introduced as a "third place" where everyone can gather. This approach reactivates the previously underutilized green belt and effectively gives back to the public landscape that the building occupies.

Materiality, Climate, & Connection

Historically, the bastion wall acted as both a physical and mental barrier separating two contrasting conditions: the modern city and the medieval town. The project bridges this divide, demonstrating how an architectural identity can be formed with care and respect by using material choices, construction techniques, and climatic context as primary design drivers.

To achieve this, the material choices establishes a deliberate atmospheric dialogue:

Glass & Transparency: Used to represent the modern city, glass physically reflects the surrounding, fleeting environment. Its transparency and lightness create an open, inviting space that fosters spontaneous encounters.

Local Limestone: Chosen as a direct reference to the historic bastion wall, limestone brings a sense of permanence and solidity to the portions of the building located within the wall, signaling where archaeological memory in the archive is held and protected.

The Timber & Glass Corridor: Designed along the wall, this corridor acts as a transient, threshold space. It minimizes physical impact on the historical fabric while serving as a crucial thermal buffer zone tailored to Tallinn's cold climate. As a primary circulation route, it continuously highlights the presence of the wall, ensuring visitors to be aware of the relationship between the old and the new.

In summary, the project serves as a model for navigating the tension between a historic urban image and a bustling modern city. It shows the site relevant to the present day without forgetting its past. The past is neither falsely restored nor rebuilt, but rather selectively revealed and highlighted.

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[fig.2]

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[fig.3]

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[fig.22]

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[fig.23]

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Appendix

[fig.24]

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[fig.25]

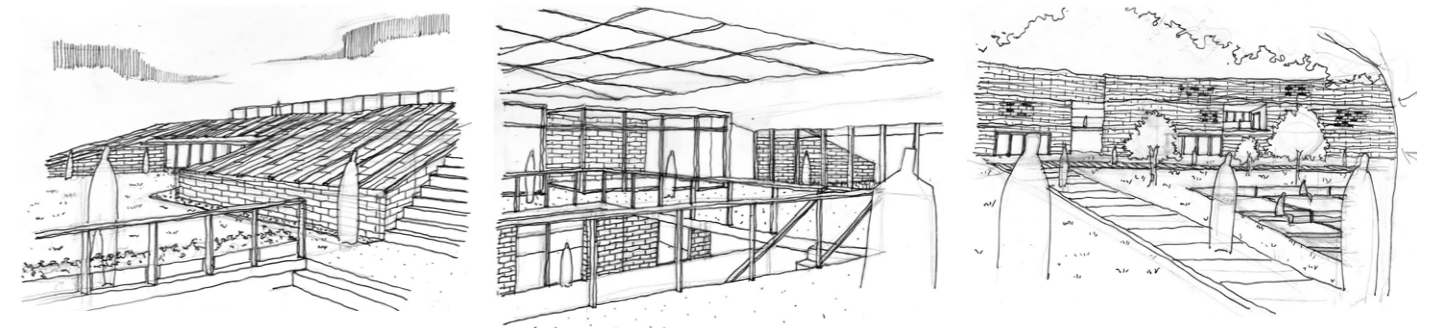
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[fig.35-40]

Museums Public Portal - Vaade linnale Väike-Rannavärava juurest. Näha osa linna kind. . . (n.d.). https://www.muis.ee/en_GB/museaalview/2042630

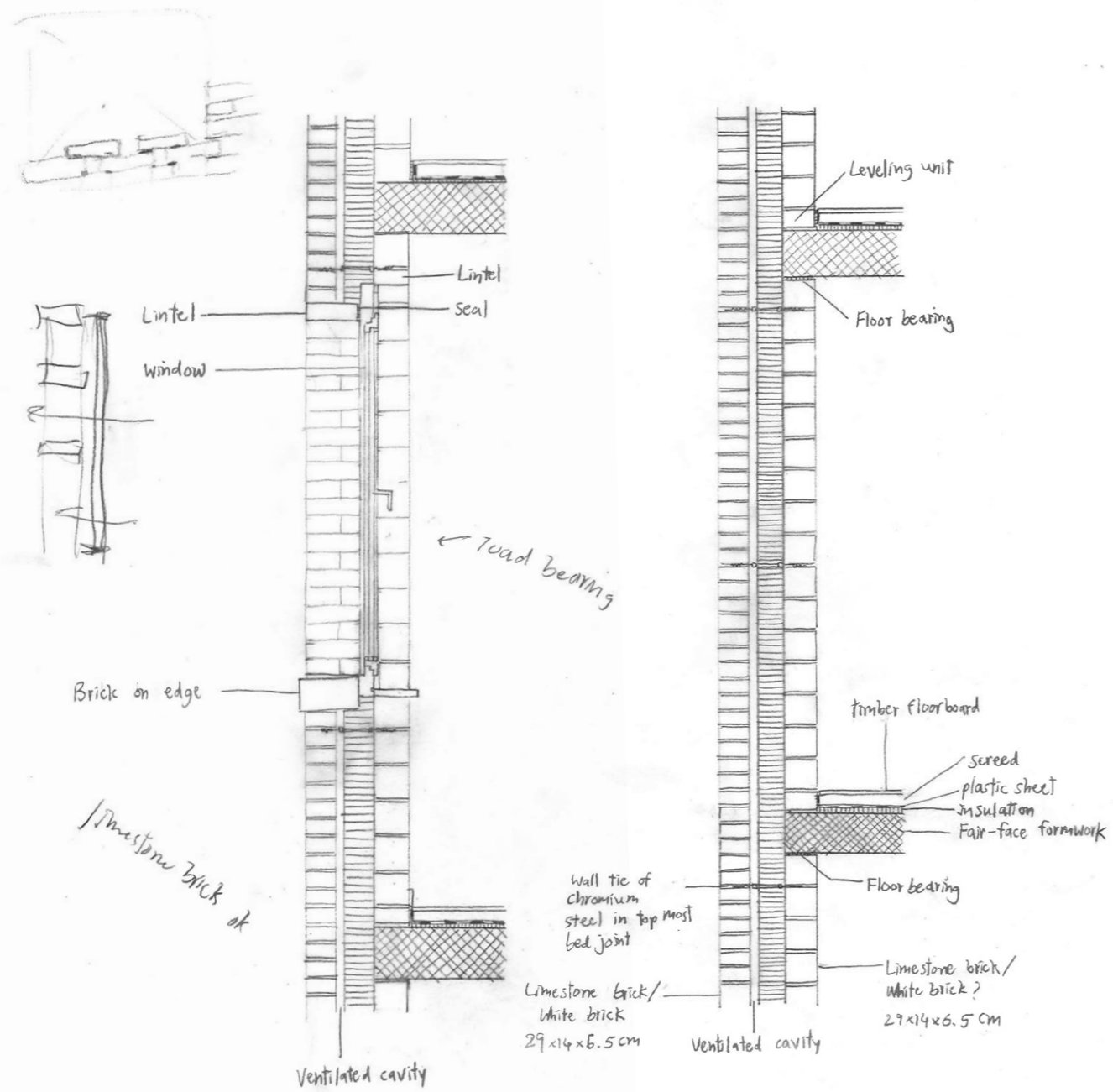


Atmospheric sketches



On a human scale, perspective sketches are used to understand how various actors, including researchers, visitors, and the public, experience the space [fig.52]. Designing certain scenes through perspective drawings allows me to focus on a particular view, consider which materials and details are suitable for the scene, and decide what to add to enhance the atmosphere and what to remove.

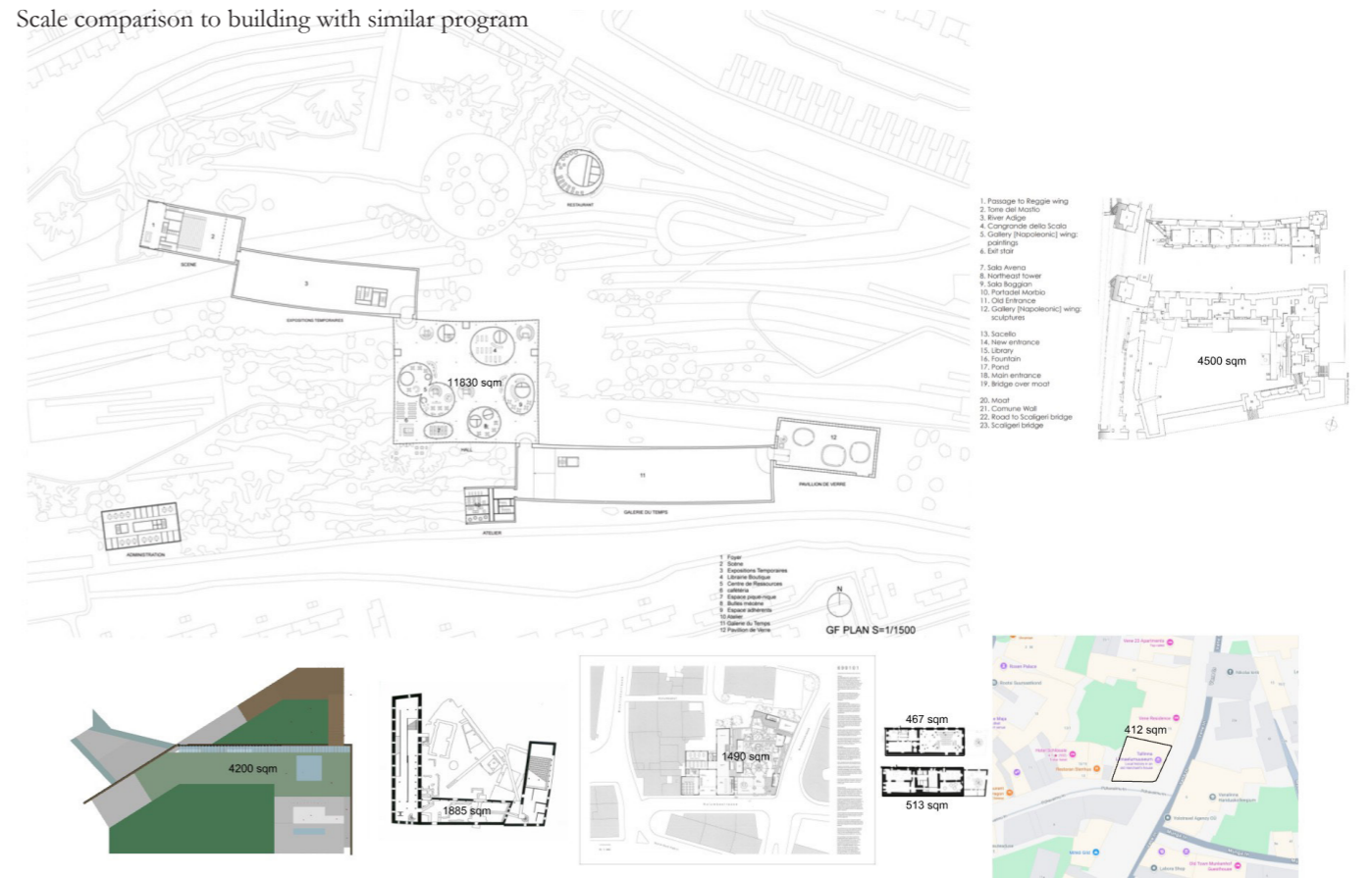
Detail sketches



RIPA [S]
UR [CH]

1:20

Scale comparison to building with similar program



Study model on the entrance at the Tenaille area

