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CREATIVE TRANSITION

Rethinking Cultural Heritage in Montenegro
Adaptive Reuse of Fortress Spanjola

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ABSTRACT

Fortress Spanjola is an autonomous fortification located in Herceg Novi, a seaside city in Boka Bay, Montenegro. The fortress's roots date back to 15th century and Turkish era. Later on, it was developed through era of Spaniards, Venetian administration, Austro-Hungarian empire, Yugoslavian Kingdom and was used as a military fortification all the way to Second World War, when it became a prison. In 1980s it became recognized as the cultural heritage of Herceg Novi but was not taken into the process of valorisation and revitalization until 2010.

Today, the fortress is included in the Spatial Urban Plan that considers transforming old military structures into tourist zones and mixed-culture, catering and service activities that promote cultural and

architectural heritage, all with a goal to extend the tourist season. As the main development projects that are taking place in Boka Bay according to this plan are tourist accommodations embodied in exclusive luxury resorts, our idea is to use Spanjola Fortress as a promotion of cultural and creative values, openness and wide accessibility both for tourists and Montenegrin citizens.

The intention of this thesis is to give a new life to the fortress through a reuse project that will house a creative hub. The hub will bring together international and local artists with complimentary activities, providing them with conditions to make and market their products, while at the same time including the local community and enhancing the touristic offer of this region. The intervention

consists of several actions embodied in the unified reuse approach – building new volumes within the existing ones, always respecting the existing state of the art through geometry and distancing.

Even though the new volumes are placed in the position of the old, respecting the existing geometry, there is a clear distinction of the new built achieved through scale of the volumes and their materiality. While preserving its identity, the Fortress Spanjola receives a new life, setting in motion a new kind of approach to reuse in Montenegrin context, both with project's program and design approach.

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01 History

Introduction

Fortress Spanjola is an autonomous fortification located in Herceg Novi, a seaside city in Boka Bay, Montenegro. Montenegrin seaside, specifically Boka Bay, represents the core of the country's history and heritage. The old urban conglomerations within the bay, whose roots date back to Illyrian era, Ancient Greece and Rome, form a primary role in this discourse.

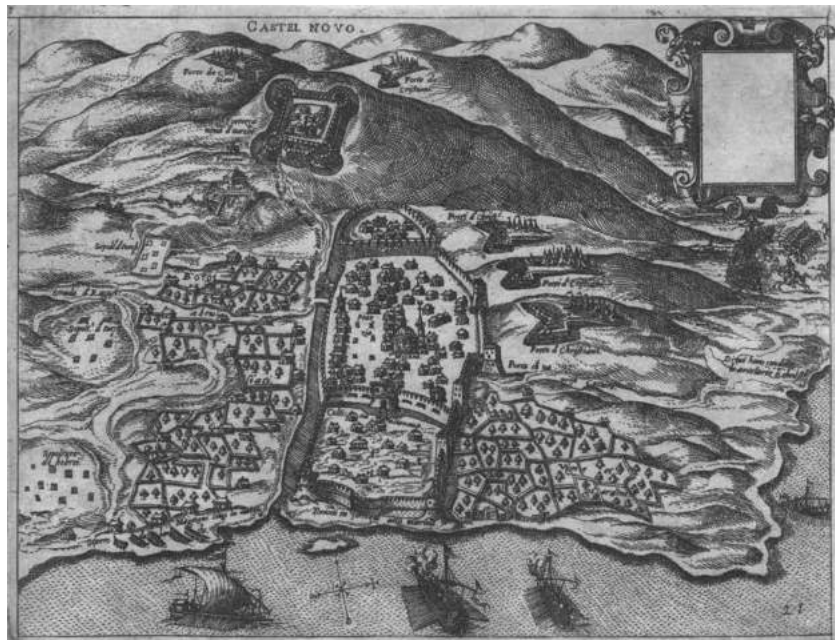


Figure 1 - Castel Nuovo, G.F. Camotio, published in Venice, 1574

City development through centuries

Herceg Novi is the largest and youngest urban conglomerations in Boka, with rich cultural heritage that is barely touched until now. The roots of the city date back to 1382, when the Bosnian king Tvrtko chose to form a new town on the site of the current city, with an intention to develop it as a significant trade, maritime and craft center under the name of Sveti Stjepan. As one of the youngest cities in Adriatic, the city was also known as Novi, Kastrum Novum, Kastel Nuovo. The name under which it's known today stems from the rule of Herceg Stjepan Vukcic Kosaca, when it experienced significant prosperity and development. In 1482 the city was taken over by the Ottoman Empire. Besides forming the main urban conglomeration of the city, the Old town of Herceg Novi, the Turks also formed the urban zone of Gornji Grad (Upper Town), where Fortress Spanjola is located. Both the fortress and the city itself were later developed and influenced through era of Spaniards, Venetian administration (see Figure 1), Austro-Hungarian empire (See Figure 2,3) and Yugoslavian Kingdom, later on Republic of Yugoslavia.



Figure 2 - Plan of Herceg Novi under Austro-Hungarian rule, ca 1815



Figure 3 - Watercolour drawing of Herceg Novi under Austro-Hungarian rule, ca 1837



Figure 4 - Photo of Herceg Novi 1935, era of Kingdom of Yugoslavia

The micro location of Gornji Grad, developed by Turks, was a topographically and strategically important position. Located on the hill above the Old Town, with clear views of the sea, the first footprints of Spanjola were formed with regular rectangular plan and a defensive crown, indicating its use for military observation and defence purposes. (see Figure 5). Later on the fortification was strengthened with a round tower (see Figure 6). In 1538, when the Spaniards occupied the city of Herceg Novi, the fortress was developed to host a triangular fortress of cylindrical towers (see Figure 7), and was named Spanjola, a name that survived to current date. When the Turks took over the city again in 1548, they reinforced the newly created fortification and later, in 1572, developed it to form a quadrangular fortress of round towers based on the existing one (see Figure 8). During the rule of Venetian Republic (1687-1791), the fortress formations were not changed, but improved and counted to be used for military purposes.

During the rule of Austro-Hungarian empire (1797-1918), some objects within the fortress were modified and reconstructed (see Figure 9), while the biggest works were done in the outer perimeter with introduction of prison bunkers and sunken water tanks (see Figure 10). In 1918, the Yugoslavian army takes over the fortress and continues to use it for military purposes. From then on, the fortress becomes less used, with its final military purpose during the Second World War, when it was used as a prison. After the Second World War, the fortress becomes military property of socialist Yugoslavian army, who added the concrete canopee to adapt the fortress to their needs (see Figure 11). Spanjola became registered as a cultural heritage site in 1982. However, the fortress's significance and state was not valorized until 2010 and has only recently been included in the Spatial Urban Plan of Herceg Novi.



Figure 5



Figure 6

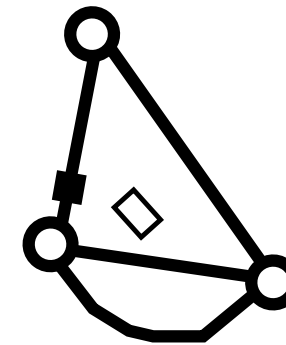


Figure 7

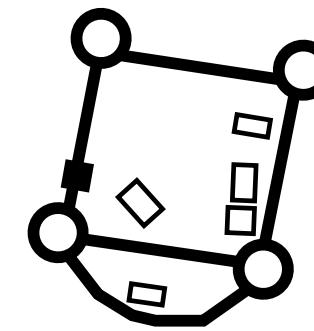


Figure 8

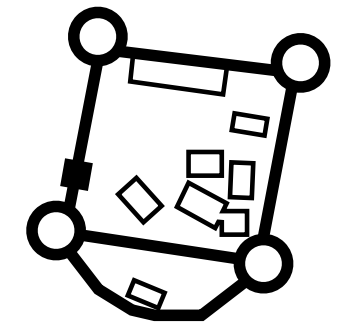


Figure 9

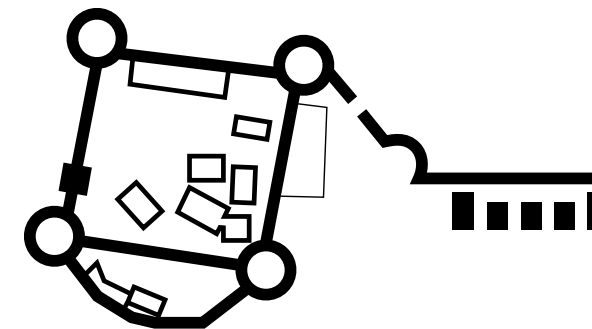


Figure 10

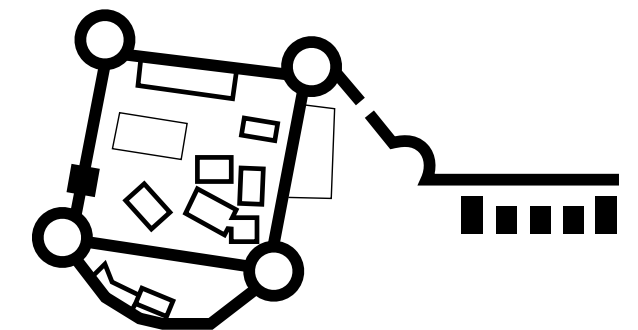


Figure 11

02 Current state of the City

Herceg Novi in Montenegro

The city of Herceg Novi is located on the far southwest of Montenegro, it belongs to the coastal region and occupies the entrance to the territory surrounding Boka Bay. On the west and northwest, Herceg Novi Municipality borders with Croatia and Bosnia & Herzegovina, while on the east and north east it borders with two other main cities in Boka Bay, Kotor and Tivat.



Figure 12 - Map of Montenegro

The city's approach to heritage sites

In the last couple of years, the heritage sites of Boka Bay have been taken into consideration for conservation and reuse. The municipality of Herceg Novi itself houses a great number of the bay's heritage sites, mostly military fortification that date back to Ottoman or Austro-Hungarian era.

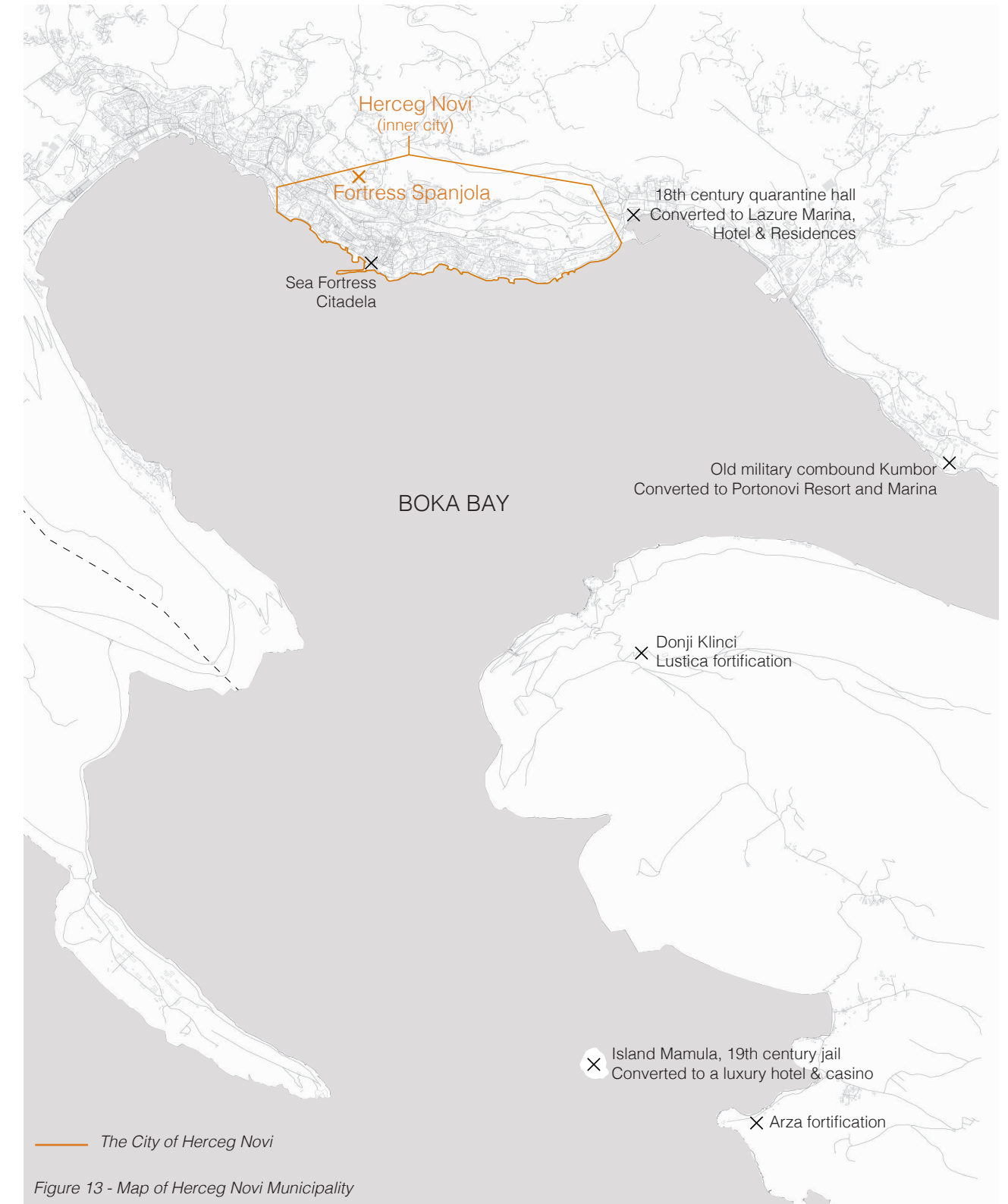
However, there is a rather weak approach to strategy of reuse, led mainly by economic interests, where these sites are usually privatized and handed over to the highest bidder. Always with a goal to only promote Montenegro as a luxury, high end destination, these sites are usually converted to luxury resorts, hotels and casinos, leaving the country with only a singular approach to tourism. Besides, these high-end facilities manage to emphasize the social and economic differences within the country, excluding and isolating the local citizens.

In the last couple of years, the local administration has started to move towards a more integrated approach for reuse of cultural heritage, proved by the new plan.

The Spatial Urban Plan of Herceg Novi tackles tourism resources and architectural heritage as the two main aspects:

1. The conversion of military zones into tourist zones. This is envisaged for following locations: Kumbor, Arza, Mamula and Donji Klinci in Lustica.
2. The architectural heritage of Herceg Novi, including the Sea Fortress, Mamula and Fortress Spanjola as locations for mixed-culture, catering and service activities that promote cultural and architectural heritage. The main goal is to extend the tourist season in the service of promoting architectural heritage.

As the main development projects that are taking place in Boka Bay according to this plan are tourist accommodations embodied in exclusive luxury resorts, the idea is to use Spanjola Fortress as a promotion of different kind of touristic offer, focused on cultural values, openness, and wide accessibility both for tourists and Montenegrin citizens.



Urban fabric of Herceg Novi

Herceg Novi today is the largest urban conglomeration in the Bay. It's a city that lives the whole year round, proved by the facilities we encountered when we started analyzing its urban fabric. The city is well connected by the costal road and the highway leading to the city centre and to the rest of the country. Because of the city's small size, it's easy to move around by bike or on foot.

The Old Town and coastal area have high presence of touristic facilities, mainly consisting of hotels, bars and restaurants.

Churches and squares can be found as the main cultural points of reference and are considered as touristic attractions of the city. The beaches within the city are rocky, while the attractive long beaches are located on the peninsula opposite the Old town, reachable by boat. The touristic offer mainly focuses on traditional seaside tourism. The cultural and architectural heritage of the city is partly neglected, used only for touristic site-seeing purposes or, when reused, to house services such as hotels or restaurants.








Figure 15 - Urban fabric of Herceg Novi - road classification

Roads classification

- Main roads
- Secondary roads
- Small local roads

Current State of the city

Distance fortress - city centre

-  Distance by car: 3 minutes
-  Distance by bus: 6 minutes
-  Distance by bus: 12 minutes

12

Current State of the city

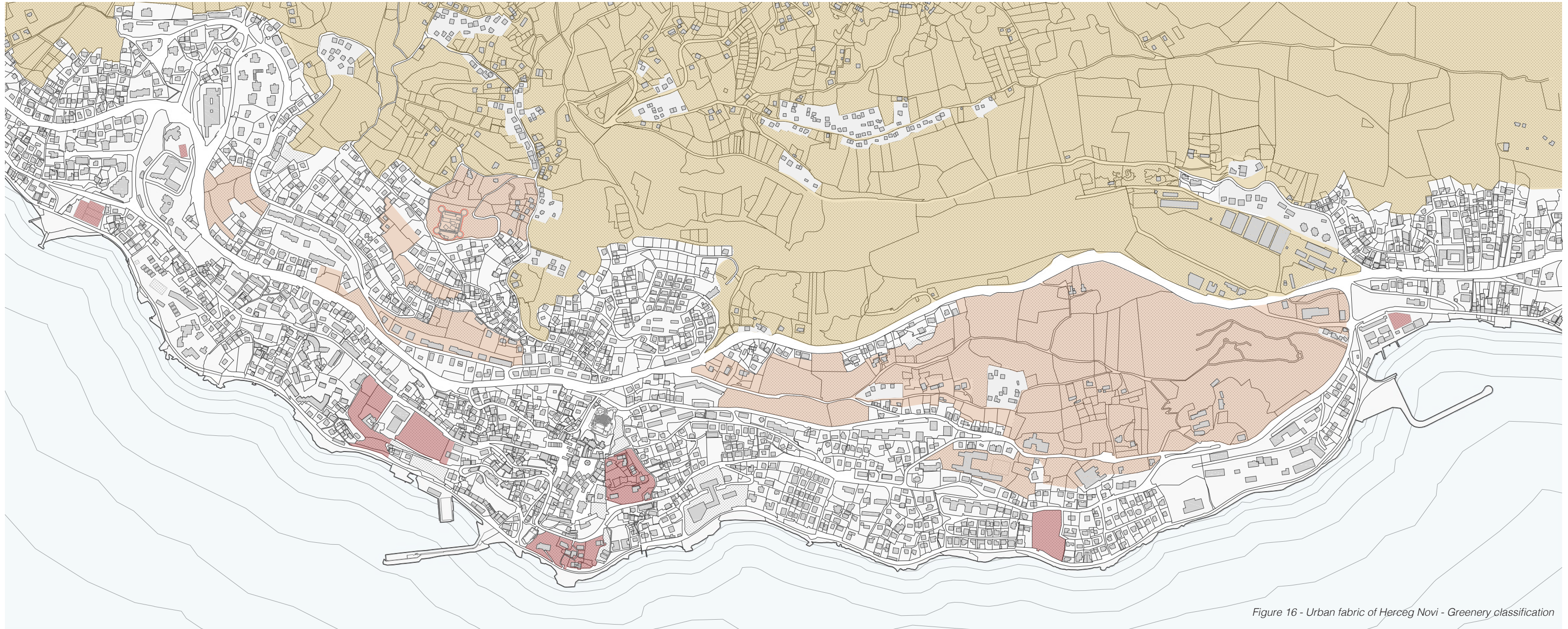


Figure 16 - Urban fabric of Herceg Novi - Greenery classification

Legend

- Urban green
- Unused green
- Agricultural fields



Figure 17 - Urban fabric of Herceg Novi - Facilities

Legend

- Services
- Cultural building
- Main squares
- Hotels
- Beaches

Places of interest

- | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> 1. Hospital 2. School 3. Spasa church 4. Kuca nobelovca museum 5. Local museum 6. Post office 7. Spanjola Fortress | <ul style="list-style-type: none"> 8. Theater 9. Antuna church 10. Bus station 11. Atelier La Forest 12. Dvorana park square 13. Public pool 14. Port | <ul style="list-style-type: none"> 15. Kotromanić square 16. Forte mare 17. Gradska square 18. Kanli Kula amphitheater 19. Arhangela Mihaila church 20. Public library 21. Josip Benkovic art gallery | <ul style="list-style-type: none"> 22. St. Jeronim square 13. Music school 24. Jeronima church 25. Leopolda church 26. Citadella 27. Citadella square 28. Ivan Goran Kovacic school | <ul style="list-style-type: none"> 29. Milan Vukovic school 30. Hospital |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|

Local Events

What also makes Herceg Novi a city that lives the whole year round is its festivals. One of the oldest and most famous ones is the 'Mimosa Festival' that takes place in February and is a celebration honoring flowers, most of all the mimosa flower, which abundantly blossoms during winter while the rest of Europe is covered in snow.

Besides Mimosa festival, most of these events happen throughout the summer season (April-September), and are mostly focused on music and theater as creative outlets. These events usually take place in the old town streets and its - Kanli Kula and Sea Fortress Citadela.



Figure 18 - The Old Town of Herceg Novi



Figure 19 - HAPS - Herceg April Theater Festival



Figure 20 - Herceg Novi Film Festival



Figure 21 - Mimosa Festival

OCTOBER

NOVEMBER

DECEMBER

JANUARY

FEBRUARY

MARCH

APRIL

MAY

JUNE

JULY

AUGUST

SEPTEMBER

winter season winter season winter season winter season winter season winter season winter

summer season summer season summer season summer season summer season summer season summer

Mimosa Festival

Celebration honouring flowers, most of all the mimosa flower, which abundantly blossoms during winter while the rest of Europe is covered in snow

HAPS Festival

Herceg April Theater Festival shows the most intriguing professional and amateur performances that have been experienced in the previous year.

Bruna Špiler Solo Singers

International competition of solo singers.

Days of Music

International classic music festival.

Sunny Stairs

Music festival. Takes place in Kanli Kula.

Square of books International book fair.

Film Festival

Montenegro film festival held since 1987 in Kanli Kula and Sea Fortress.

Guitar Art Fest

Festival promoting guitar artists.

HANDS

Days of creativity, event that includes local artists and craft enthusiasts, bringing together artists, audiences and consumers

03 Fortress Španjola

State of the art

Španjola Fortress today is an abandoned site surrounded by residential housing on its south and west side and dense tall greenery on the north and east side. The fortress itself consists of two main parts:

1. The fortress perimeter walls with four round towers which house old military facilities.
2. The Austro-Hungarian prison bunkers on the east side of the site, sunken in the ground, hidden by surrounding greenery.

The south side of the fortress offers beautiful panoramic views of the sea and surrounding landscape.



Figure 22 - Fortress Španjola



Figure 23 - Fortress Španjola

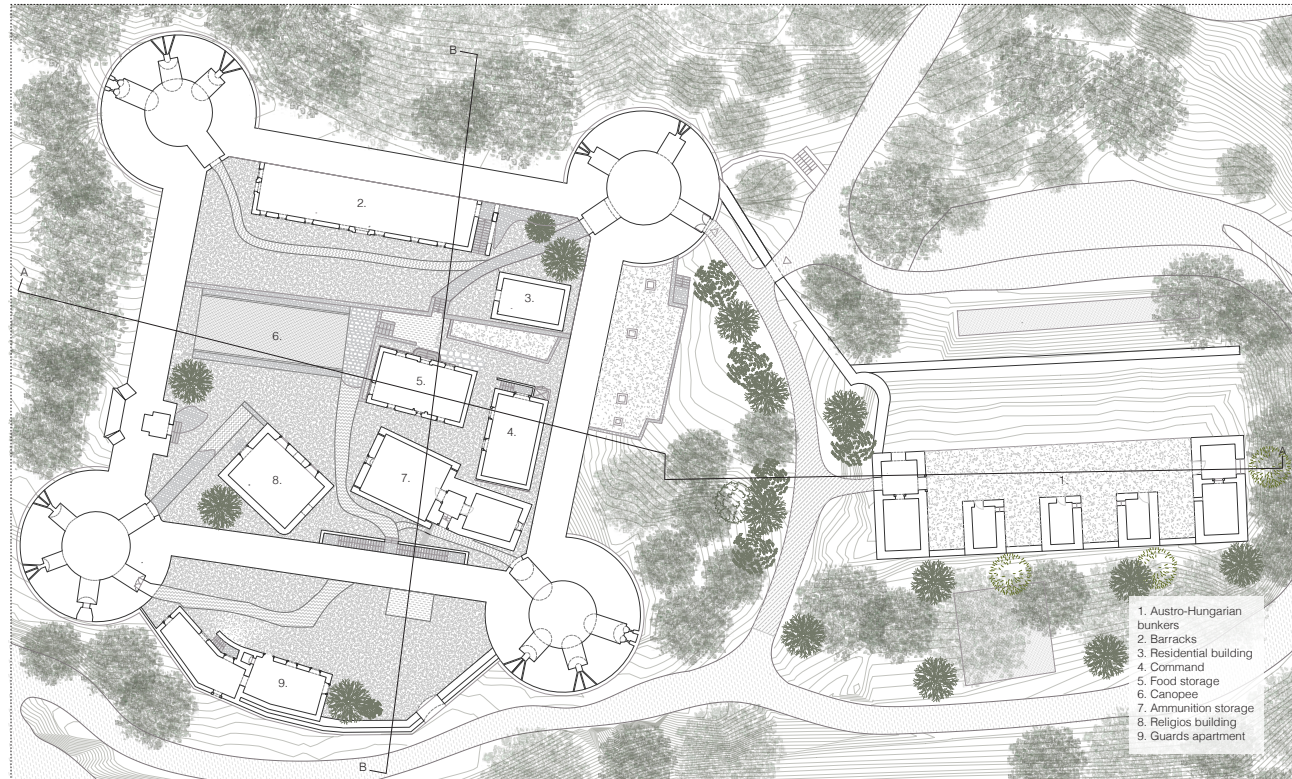


Figure 24 - State of the art plan

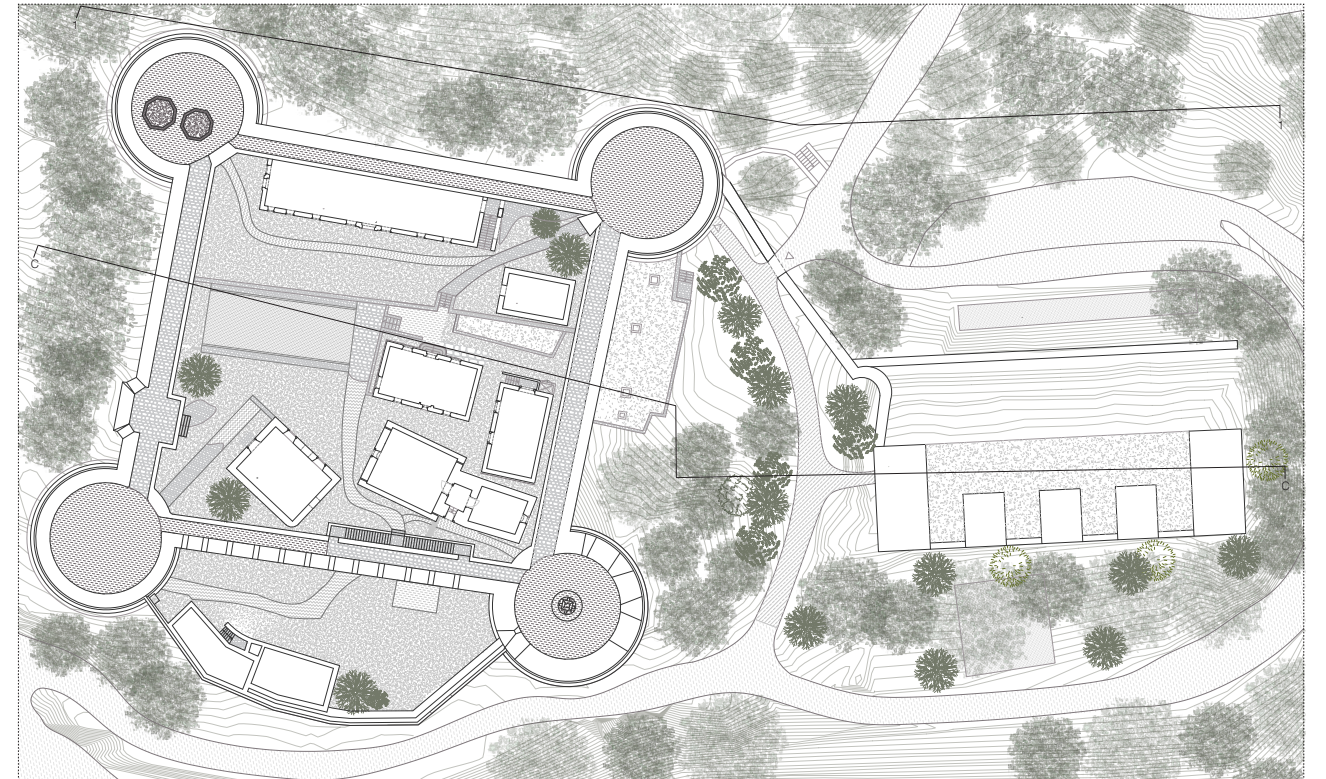


Figure 27 - State of the art roof plan

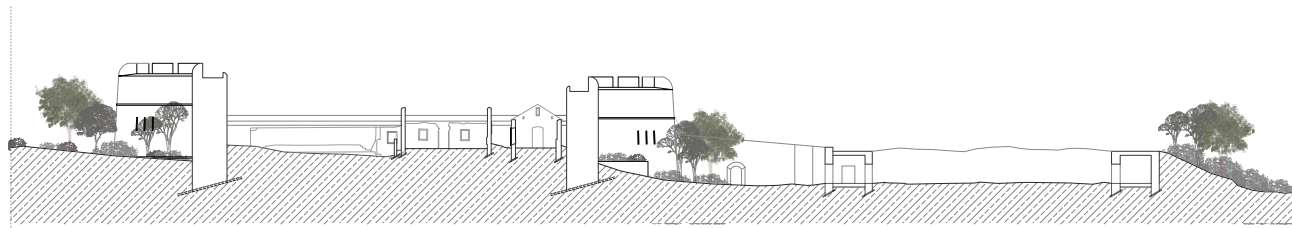


Figure 25 - State of the art section A-A

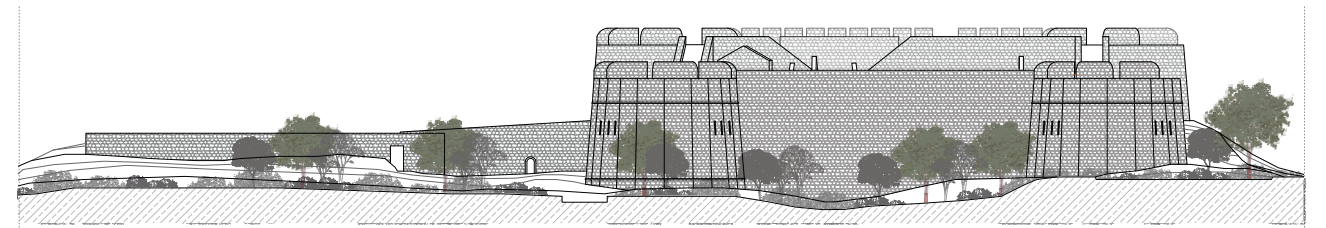


Figure 28 - State of the art Elevation 1-1

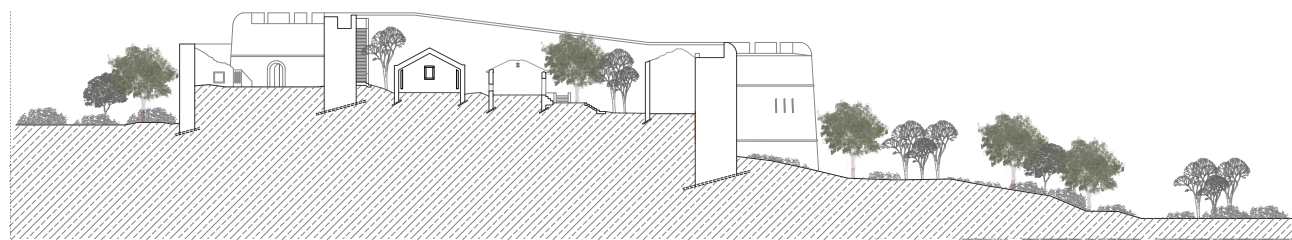


Figure 26 - State of the art section B-B

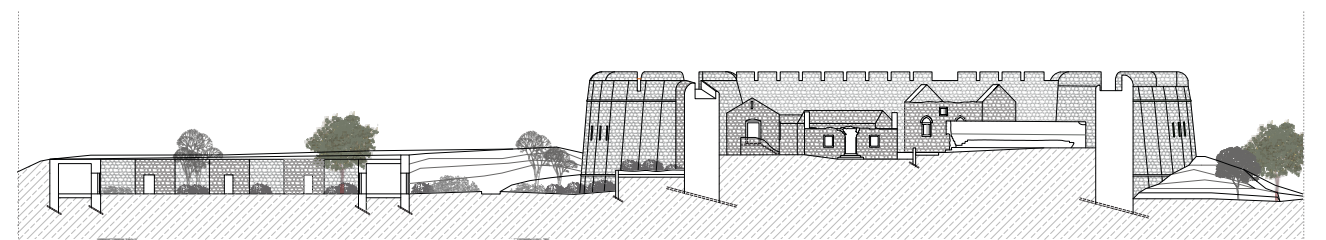


Figure 29 - State of the art section C-C

Fortress description

The whole of the fortress site is accessible. Although heavily infiltrated with greenery, Španjola is considered to be an attraction, often visited by locals and tourists.

The original pavement is only preserved in certain points. The fortress perimeter walls are mainly in good condition, high walls inhabited with occasional greenery. On their top they form a panoramic walk where the two south

bastions offer beautiful views of the sea and surrounding landscape. The original pavement of the panoramic walk is still visible, made of local stone 'Bokit' in regular rectangular shape, occasionally infiltrated with greenery, while the pavement of the bastions is not preserved. The thinnest and lowest part of the wall forming a 'railing' for the path, facing the interior of the fortress, is partially ruined.



Figure 30 - Fortress Španjola



Figure 31 - Fortress Španjola

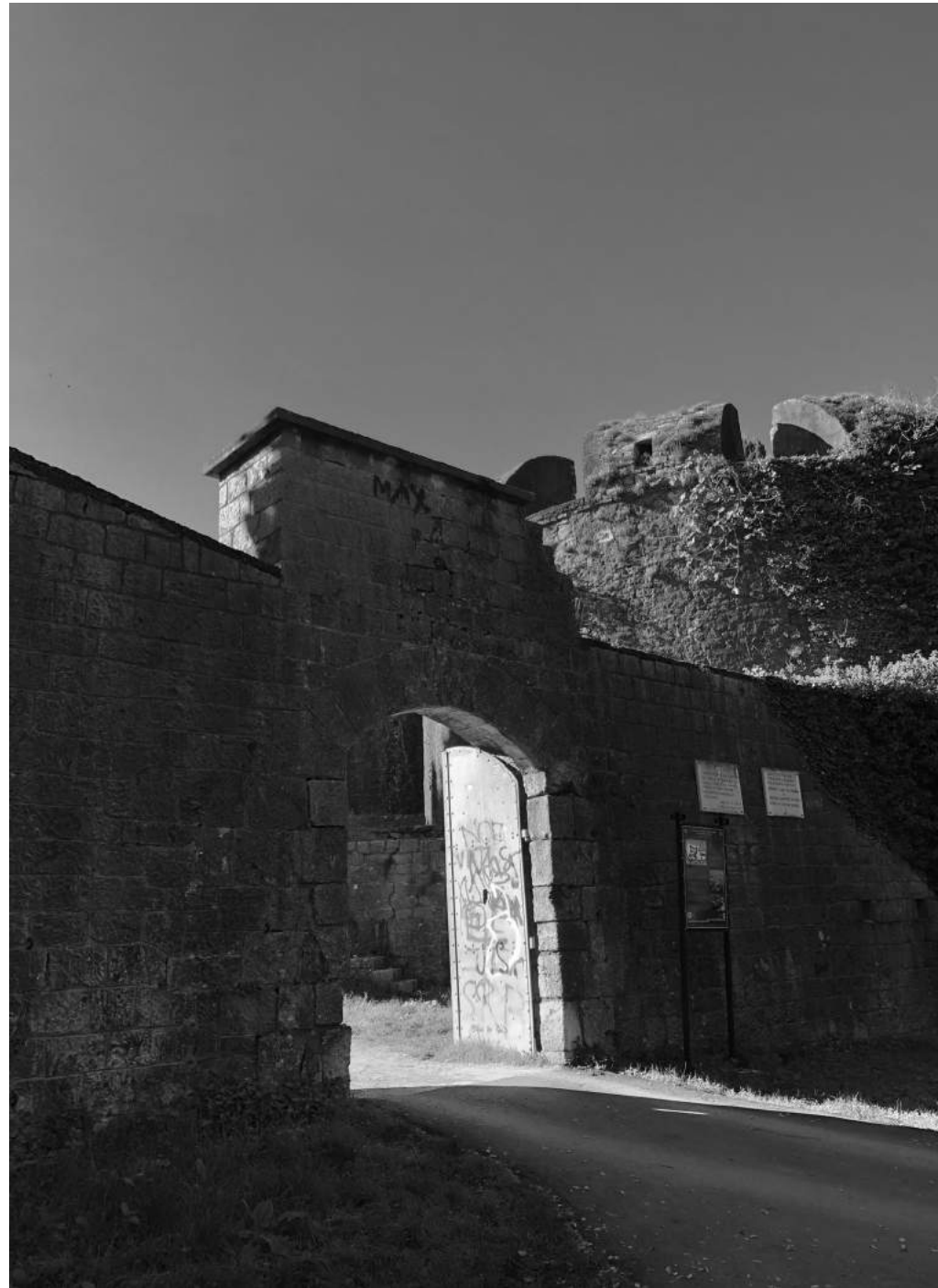


Figure 32 - Main entrance

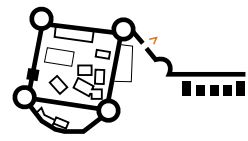
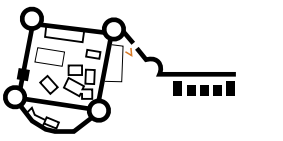


Figure 33 - Main entrance bastion



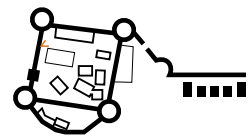


Figure 34 - Old barracks building



Figure 36 - Panoramic walk

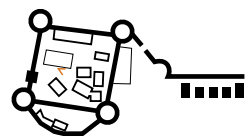


Figure 35 - Old storage and depot buildings

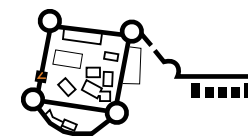


Figure 37 - Panoramic walk

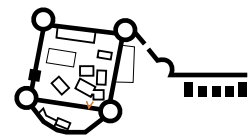


Figure 38 - View from panoramic walk

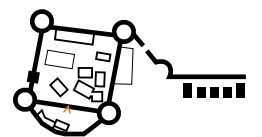


Figure 39 - View from panoramic walk

Building schedule

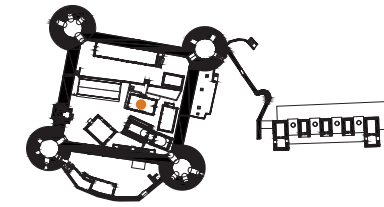
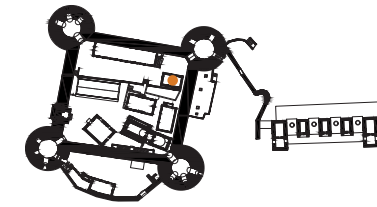
The main cluster of buildings on the interior of the fortresses are partially ruined. Almost none of them have roofs and are heavily infiltrated with greenery. The building façades are only formally preserved. All of the buildings and the perimeter walls are made from local stone, today known as 'Bokit stone' or 'Pietra di Cattaro'. The stone is untreated and irregularly shaped and stacked.

In order to analyze the state of the art of each building itself, we decided to create a building schedule which provided us with information about the form, and to certain extent, state of the building.

Location map

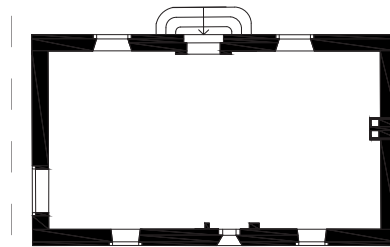
Residential Building

Housing - Command



Plan

Scale 1 2 3 4

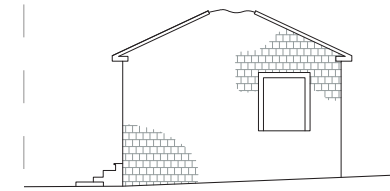
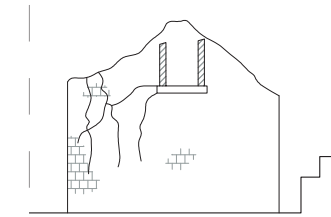


Size 26m²
Wall thickness 65cm

Size 50m²
Wall thickness 54cm

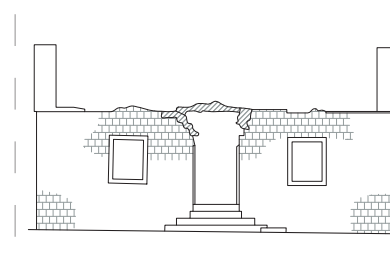
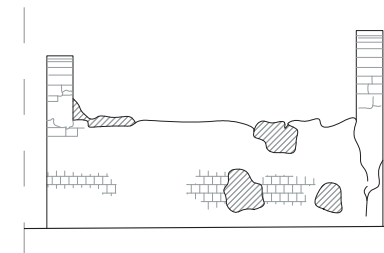
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors 1
Max. height 4.7m

No. of floors 1
Max. height 5.5m

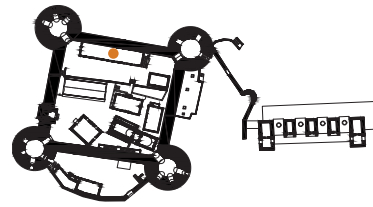
Materiality
Walls
Roof

Stone
N/A

Stone
N/A

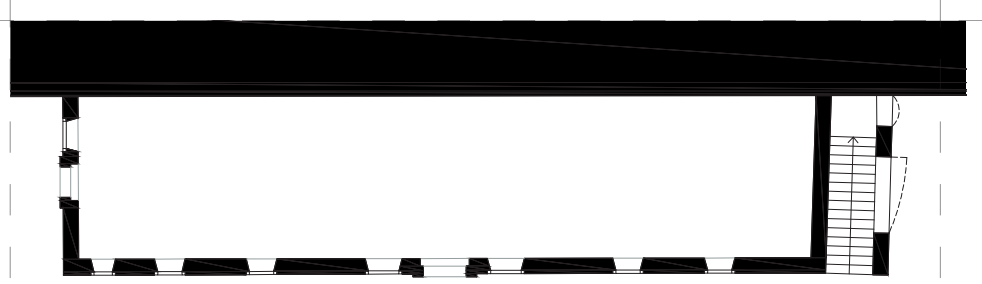
Location map

Barracks



Plan

Scale 1 2 3 4

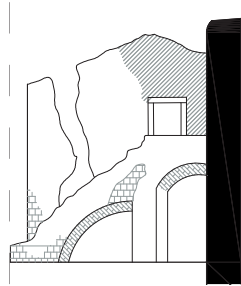


Size
Wall thickness

112m²
65cm

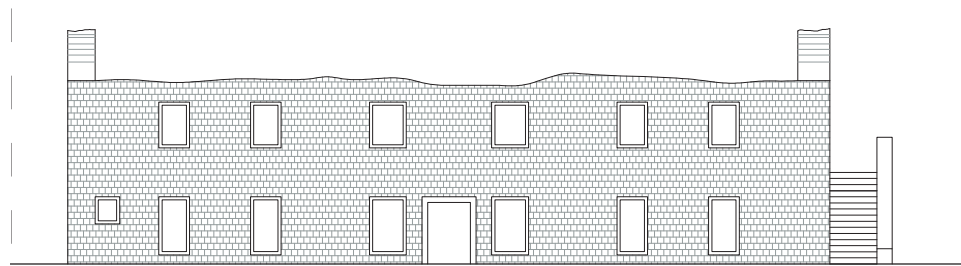
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors
Max. height

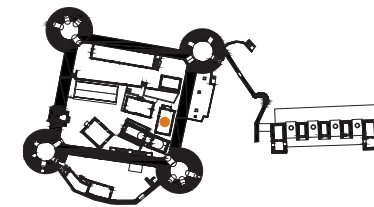
2
7.5m

Materiality
Walls
Roof

Stone
N/A

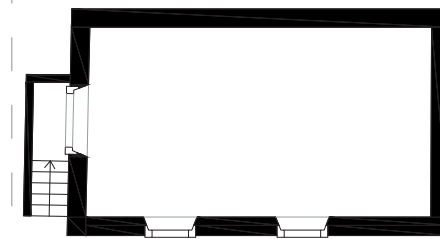
Location map

Food storage



Plan

Scale 1 2 3 4

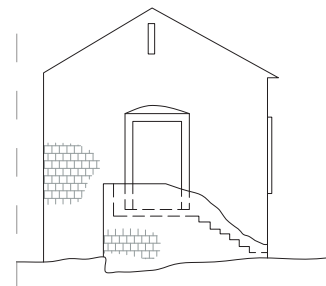


Size
Wall thickness

45m²
52cm

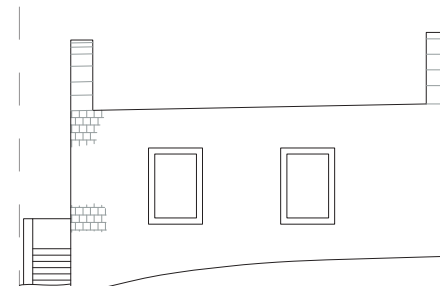
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



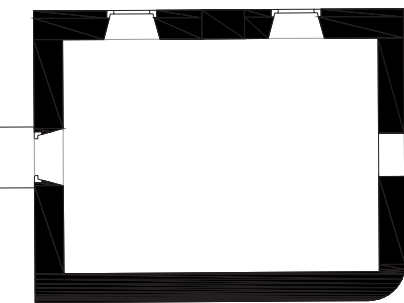
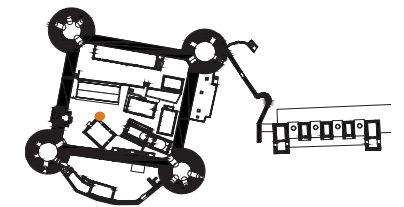
No. of floors
Max. height

1
6.7m

Materiality
Walls
Roof

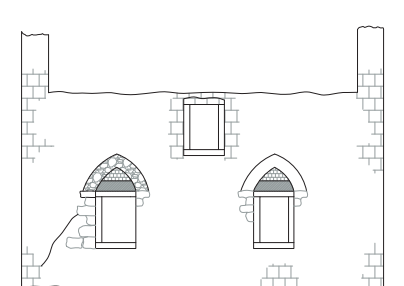
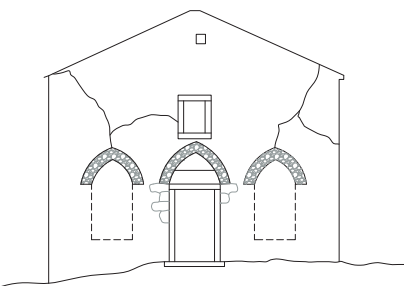
Stone
N/A

Religious building



Size
Wall thickness

60m²
80cm



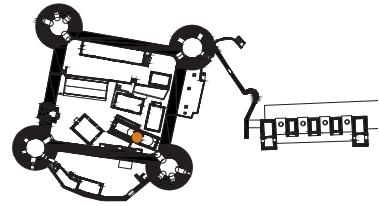
No. of floors
Max. height

1
8.5m

Stone
N/A

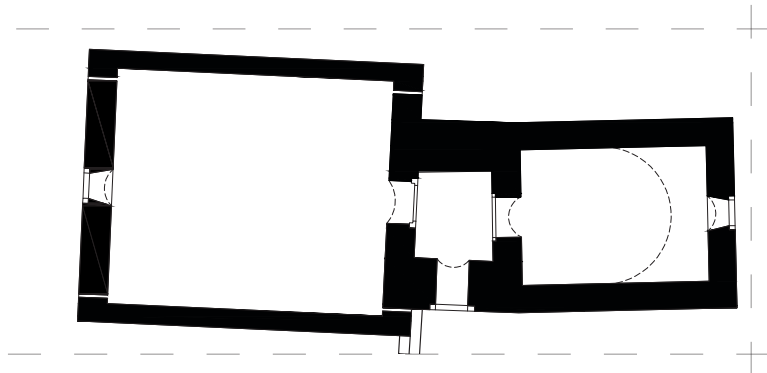
Location map

Ammunition storage



Plan

Scale 1 2 3 4

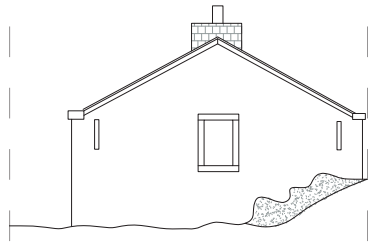


Size
Wall thickness

50m²
80cm

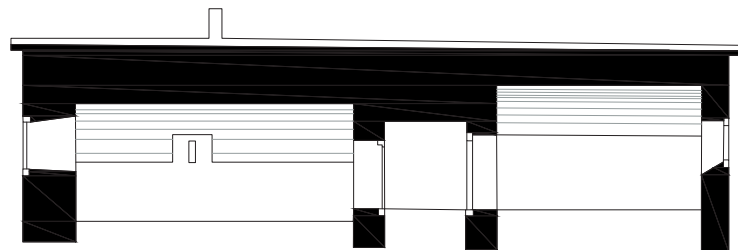
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors
Max. height

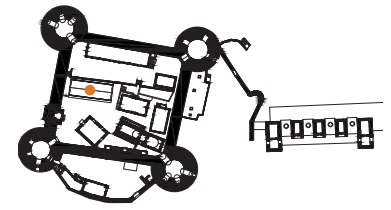
1
5m

Materiality
Walls
Roof

Stone
N/A

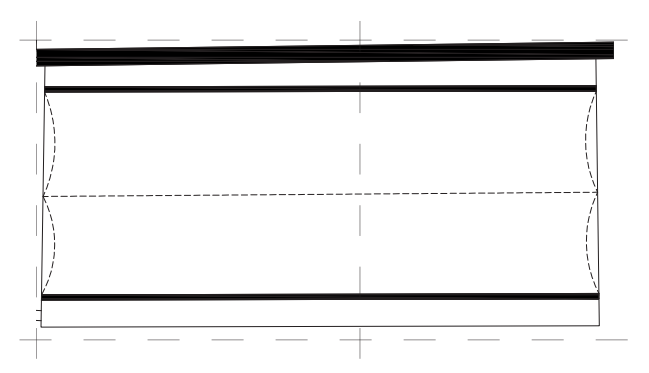
Location map

Canopee



Plan

Scale 1 2 3 4

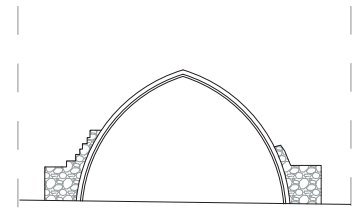


Size
Wall thickness

103m²
16cm

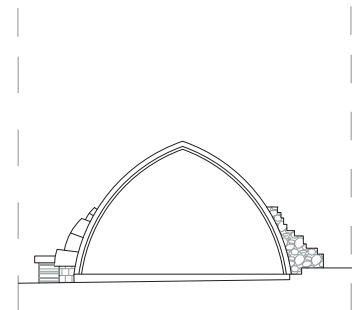
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors
Max. height

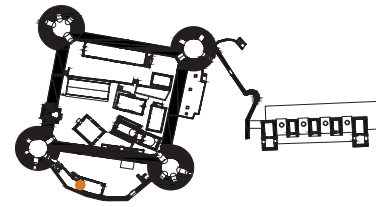
1
3.8m

Materiality
Walls
Roof

Stone
N/A

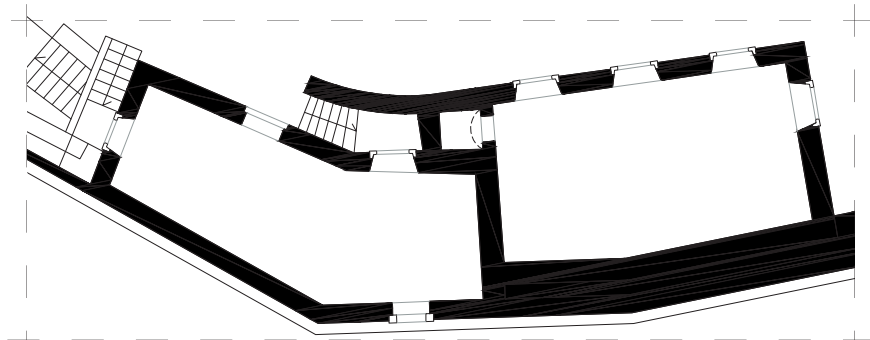
Guard and guard's officer apartment

Location map



Plan

Scale 1 2 3 4

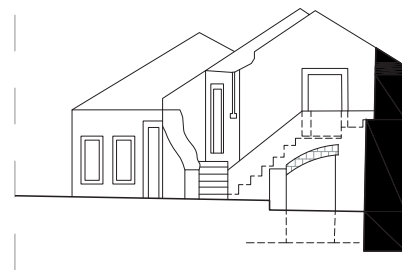


Size
Wall thickness

70m²
60cm

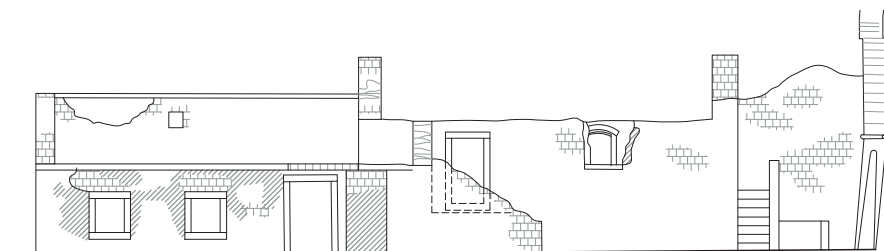
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors
Max. height

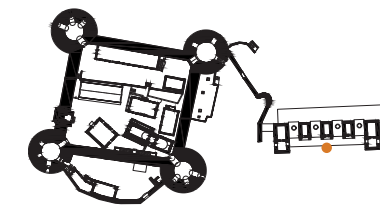
1
5.5m

Materiality
Walls
Roof

Stone
N/A

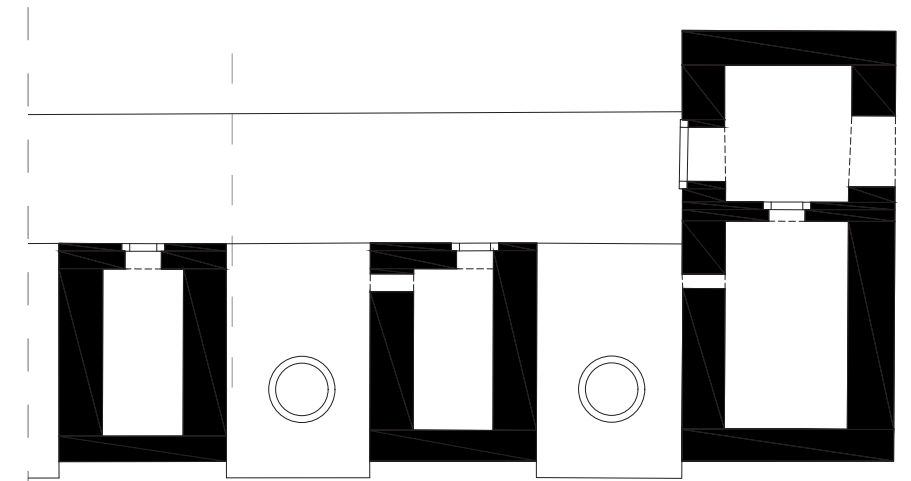
Austro-Hungarian bunkers

Location map



Plan

Scale 1 2 3 4

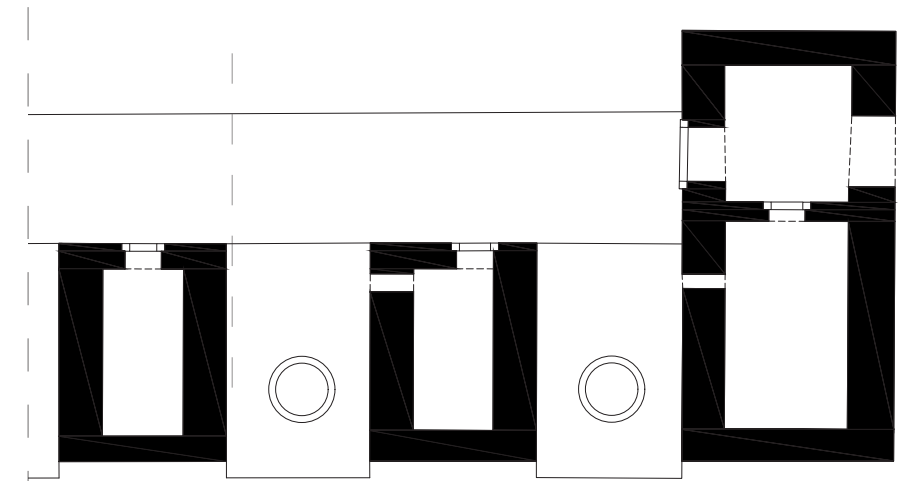


Size
Wall thickness

175m²
1m

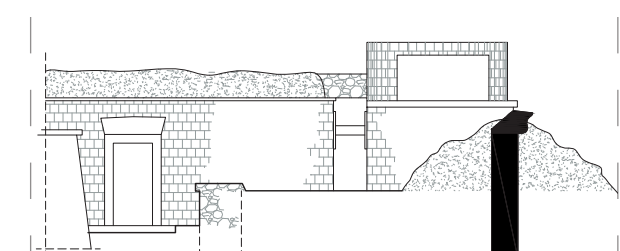
Short elevation

Scale 1 2 3 4



Long elevation

Scale 1 2 3 4



No. of floors
Max. height

2
3m

Materiality
Walls
Roof

Stone & cement
Steel profiles, mortar and soil

04 Program

Macro program in city context

Besides the Spanjola Fortress, the city of Herceg Novi houses two other fortresses – Forte Mare (Sea Fortress) and Kanli Kula, both part of the Old Town. Forte Mare is used as a touristic attraction with a café and open cinema, while the Kanli Kula is used as outdoor theater. They both house Festivals promoting film and music, as well as occasional concerts. The three fortresses are walking distance from each other, which is why we believe that they can programmatically work together to enhance the cultural and artistic offer of the city.



1. Fortress Spanjola Cultural Hub

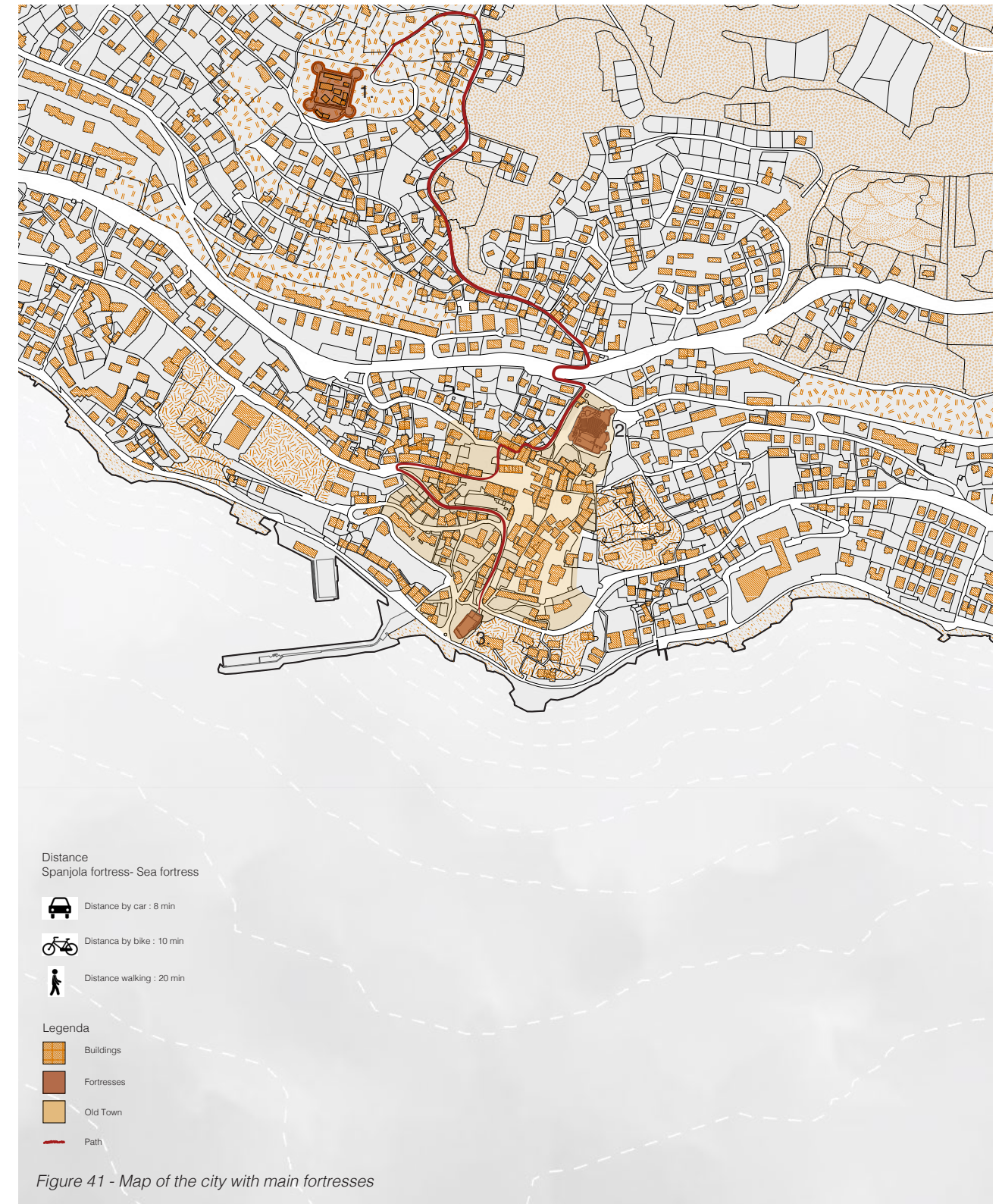


2. Kanli Kula Outdoor theatre



3. Sea fortress Open cinema and cafe

Figure 40 - Photos of main fortresses



Micro program - Spatial Urban Plan of Herceg Novi, UNDP Competition and program references

The Spatial Urban Plan of Herceg Novi, mentioned before, considers fortress Spanjola as a part of cultural heritage military zones that are to be converted and reused for cultural and touristic purposes. The purpose of the fortress, as stated in this plan, is "to provide social contents, a mixed center-culture and catering service activities in order to promote the cultural and architectural heritage, which would allow the extension of tourist season, all in the service of promoting architectural heritage... Spanjola Fortress can have other uses – congress hotel, unique hotel, historical hotel, ecological hotel, five-star category hotel...in accordance with the development needs of the Municipality".

As seen in the extracted paragraph, the idea of program in this Plan is not clearly defined - the Fortress could be both a cultural center and a hotel. Considering current developments of cultural and architectural heritage embodied in projects like Mamula Island Hotel, Aman Hotel Sveti Stefan, Lazure Hotel and many more,

the fortress can easily be placed in the hands of the highest bidder and become a part of luxury resorts and hotels cluster forming on Montenegrin coastline.

However, the Montenegrin Ministry of Culture, in collaboration with the UN, formed an international competition with an aim to provide a reuse solution for the fortress that will develop and promote cultural and artistic activities, valorize cultural heritage and preserve its specificities. The competition objective proposes an international creative hub and artists in residence program. The program is supported by the 17+1 Initiative, focused on improving and monitoring cultural cooperation between China and Central and Eastern Europe. The Centre develops and facilitates the communication and networking between the official representatives from the area of culture, ensures the collection and distribution of information related to the promotion of ties between PR China and CEEC. The Centre particularly focuses on building and strengthening the professional and artistic abilities and creativity among

the youth.

Program references

The 798 Art District in Beijing is located in abandoned factories from communist era. The large, light filled spaces were perfect for painters and sculptors. designers and other creatives looking for cheap or free rent. The Artist District formed later on offers artist promotion and management, art fairs, events and exhibitions.

The Swatch Art Piece Hotel in Shanghai is an artist residency focused on creative exchange. Artists can engage in individual or joint projects and can benefit from using both individual and communal workspaces.

The DAAD Program in Berlin is an international residency program, offering grants to artists in fields of visual arts, film, literature, music and sound. The awardees are offered with time and space for work, without being obliged to produce. The program fellows are invited to actively engage with Berlin's cultural scene and different communities in the city.



Figure 42
The Swatch Art Piece Hotel, Shanghai



Figure 43
798 Art District, Beijing



Figure 44
17+1 Initiative, China with Central and Eastern Europe



Figure 45
DAAD Artists in Berlin Program

Otium
 Production - on site
 Curious minds
 Future generations

Art Hotel
 Local culture
 Creativity
 Identity
 Enclosed spaces

Freedom
 Integration
 Multiuse spaces
 Production

Outdoor space
 Outdoor performance
 Inclusion

Cultural heritage

Network
Pop-up store
 Temporary spaces

Exhibition
 Montenegro

Bar
Conference
 17+1

Restaurant
 Nature
 Promotion

Isolated
 Not isolated
Storage

Conservation and rehabilitation of important cultural heritage sites in Montenegro with stimulation of creative industries and contemporary creativity, including ideas and infrastructure, with an emphasis on innovation in cultural and artistic creation. Establishment of a "17+1" Creative Hub inside Spanjola Fortress to enhance international collaboration, with a goal to provide the best structural support to different cultural expressions, as well as artistic and creative practices. Inclusion of local community and local events, promoting Montenegro as an artistic and creative destination.

Innovative architectural-urbanistic solution for reconstruction of cultural heritage inside Spanjola Fortress

Conservation and rehabilitation of important cultural heritage sites in Montenegro with stimulation of creative industries and contemporary creativity, including ideas and infrastructure, with an emphasis on innovation in cultural and artistic creation. Establishment of a "17+1" Creative Hub

Research
Art studios
 Conservation
 Education
Administration
Gallery
 Auctions
 International
 Connection
 Accessibility
 Exchange
Open space
 Green
 Sea view
 Incontro
 Tourism
 Engagement
 Richness of program
 Local Culture
 Flexibility
 Public art
 Sharing
Library
Retail
 Herceg Novi
 China
Canteen
 Rent a spaa
 Catalyst
Co - Working
 Festivals

MUNICIPALITY PROGRAM

UNDP PROGRAM

OUR PROGRAM

SERVICES

COMMERCIAL

INFO + EDUCATION

ART AND DESIGN

EVENTS

- Hotel
- Turistic facility
- Cultural heritage
- Art studio for sculpture
- Art studio for painting
- Wood workshop
- Photo studio
- Residence
- Conference Room
- Administration
- Storage
- Restaurant
- Canteen
- Bar
- Outdoor spaces
- Cultural Hub 17+1
- Studios
- Production workshops
- Artists in residence
- Multiuse spaces
- Conference Room
- Exhibition spaces
- Gallery
- Auctions
- Bar
- Dance space
- Canteen
- Retail Space
- Outdoor spaces
- Festivals
- Local events
- Administration
- Digital courses
- Study spaces
- Library
- Co-working
- Music space

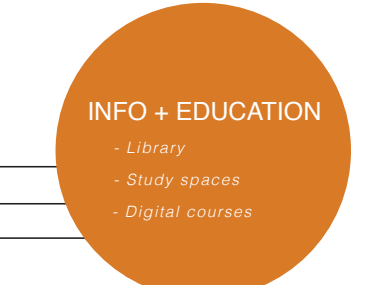
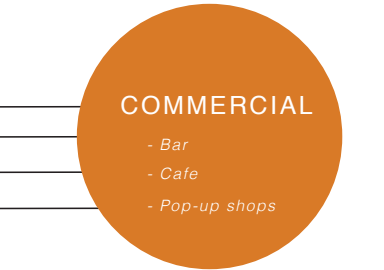
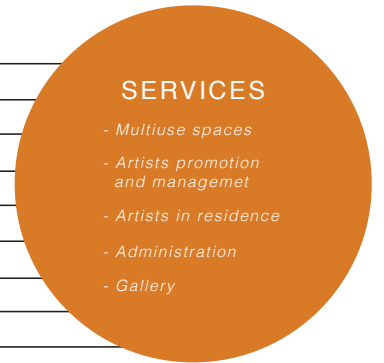
- Multiuse spaces
- International collaborations
- Co-working
- Gallery
- Artists in residence
- Conference Room
- Administration
- Storage
- Auctions

- Bar
- Restaurant
- Cafe
- Retail Spaces

- Library
- Study spaces
- Digital courses

- Exhibition spaces
- Cultural Hub 17+1
- Art studios
- Workshops
- Photo studio
- Dance studio
- Music rooms

- Courtyard
- Festivals
- Local events



Proposed program

The intention of this thesis is to give a new life to the fortress through a reuse project that will house a creative hub with artists in residence. The main goal of the program is to provide the best structural support to different cultural expressions, as well as artistic and creative practices. In this way, residents may decide for themselves what their focus is within the creative industries, from traditional to contemporary forms, with the selection criteria set for first residents.

In this sense the new creative hub will bring together artists with adequate or complementary activities that can support the commercialization of an artistic product, providing them with the conditions make and market their products, and affirming Montenegro as a creative destination for different artists. The new complex will host the spatial

and technical facilities for the production and presentation of cultural and creative activities within the complex of Spanjola Fortress.

The two main parts of the fortress have led to the general use allocation. The Austro-Hungarian bunkers are transformed to house artists in residence and their studios, while the buildings within the fortress perimeter walls house facilities used both by artists and the general public - the workshop labs, music and dance labs, exhibition spaces, library, photo studio, bar, café and services. The variety of activities taking place in Spanjola Cultural Hub are organized in accordance with local festivals, intensifying the relationship between the local community and the international artists housed in the hub (see Figure 41).

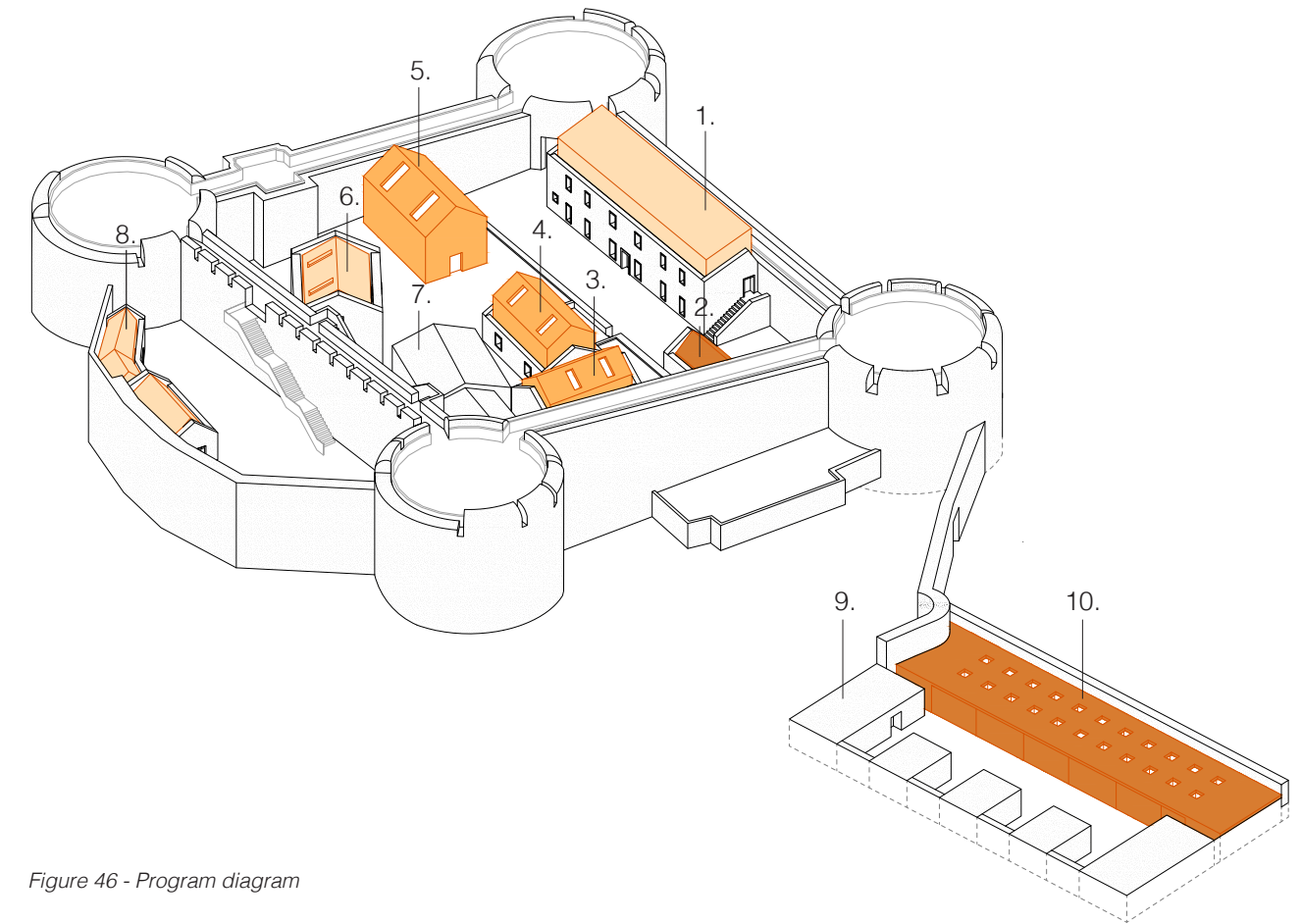


Figure 46 - Program diagram

LEGEND

- Fortress
- Accessible by general public
- Accessible by lab users
- Accessible by Artists

Functions

1. Exhibition
2. Administration
3. Wood workshop
4. Clay workshop
5. Music and dance studio
6. Library
7. Photo studio and storage
8. Bar and café
9. Artist residences
10. Artist studios

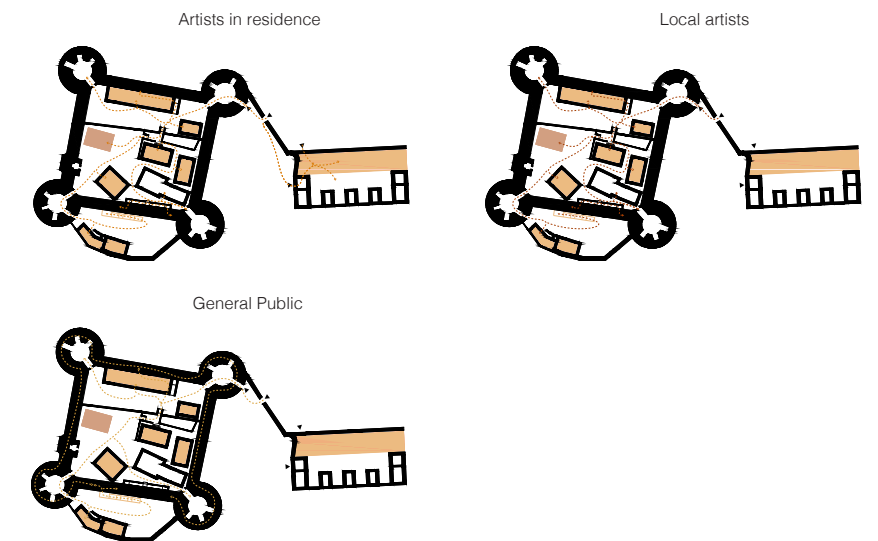
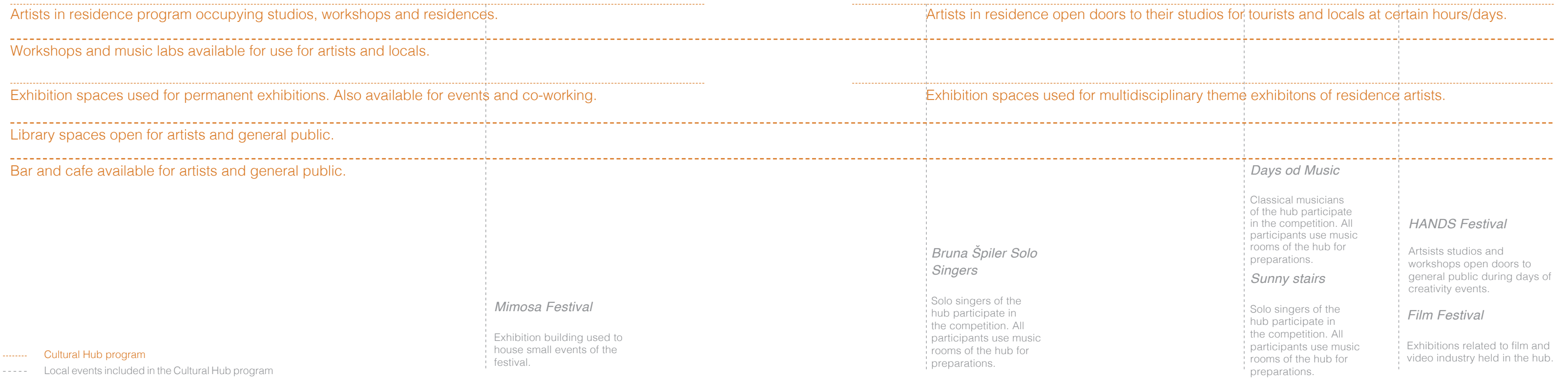


Figure 47 - Circulation diagram

OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER

winter season winter season winter season winter season winter season winter summer season summer season summer season summer season summer



..... Cultural Hub program
 ----- Local events included in the Cultural Hub program

Figure 48 - Program timeline

05 Reuse approach & architectural proposal

Defining the host type

In order to define a reuse approach, we tried to identify the type of our host building. Considering the specificities of our structure, while at the same time using the book by Lilliane Wong, "Adaptive Reuse", we managed to identify fortress Spanjola through several host typologies.

Our host structure is a complex that is not bound to a single building, so it is a *group host*. Preserving its primary use in its historical context - a military structure – with its perimeter walls and bastions, we have a variety of separate volumes with different rooflines that need to be reused with a unifying strategy.

We can also identify fortress Spanjola as a *relic host*, a structure that is a relic of the past. Besides the high fortress walls and bastions that represent a military structure from 15th century, within the complex there is also a religious building. Showing traces of a mosque converted to a church, it reveals historical changes that the structure went through. Therefore, it is a representation of a variety of cultures that influenced it over centuries, leading to its state of the art today that we must respect.

Lastly, if we look at separate single volumes, we can identify our host as a *semi-ruin host*. Each building is missing elements from its original structure – most of them do not have roofs. They behave as a framework of envelopes whose design interventions can sustain insertions and additions, based on the state of the structure and the new use.

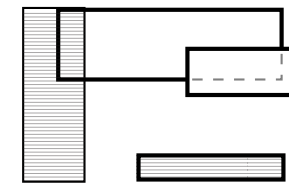


Figure 49 - Group host

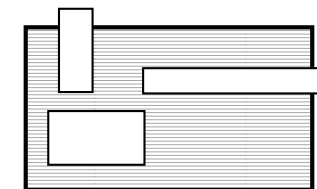


Figure 50 - Relic host

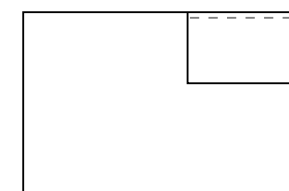


Figure 51 - Semi-ruin host



Reuse approach & concept

Our intervention consists of several actions embodied in the unified reuse strategy – building new volumes within the existing ones, always respecting the existing state of the art through geometry and distancing. After inserting and modelling the new volumes to follow the traces of the existing structures, we decided to extrude them (See figure 54). This design decision was led by several factors – firstly, to house activities of the buildings, and secondly to visually emphasize the presence of the new life in the fortress.

In order to define the heights we considered both the old functions of the existing buildings and the new functions inserted through our project. For this reason we have organized the buildings according

to a hierarchy where the tallest building is the one of the exhibition, highlighting its function of connection between the ground floor and the promenade floor.

Further on we have the library building, where the new volume inserted remains at the same height as the existing one, the old church, to underline its importance and sacredness.

The three buildings dedicated to workshops are higher than the existing volumes, but are all following the same height in order to show their common function. They are lower compared to the exhibition and the library but higher than the service buildings such as the bar and the administrative building.

The buildings within the existing volumes did not

provide enough space to house all parts of our program, so we decided to add a new volume. Design strategy for this addition followed several rules. First of all, the footprints of the new building are aligned with the footprints of the existing building standing opposite. Secondly, the form of the new volume obeys to the form of the original structures on site, with a pitched roof and rectangular plan. These design decisions were led by the unified reuse approach whose main goal is to provide a new life for the complex while always respecting the existing building.

(See Figures 52,53,54)

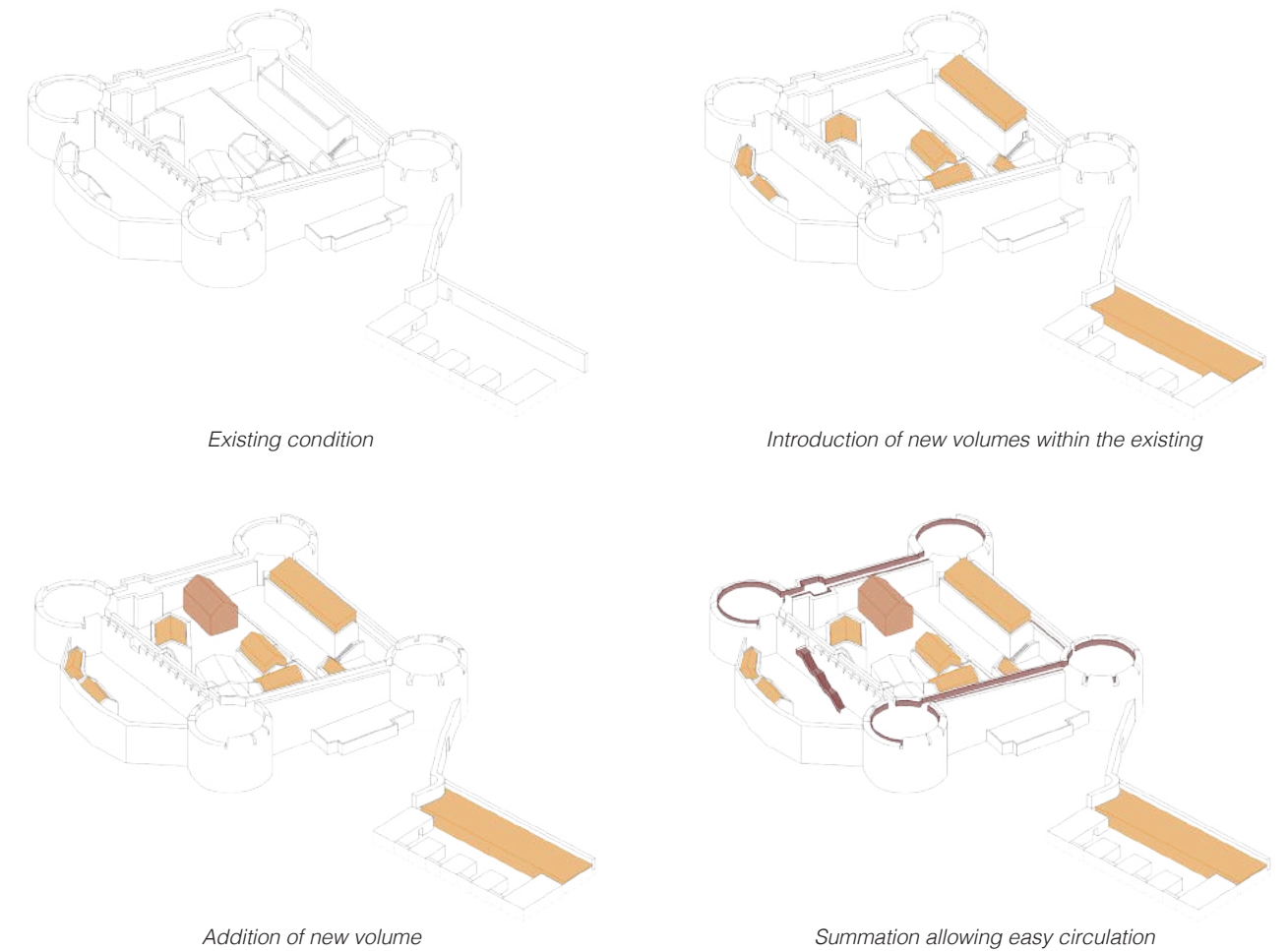


Figure 52 - Reuse approach diagram

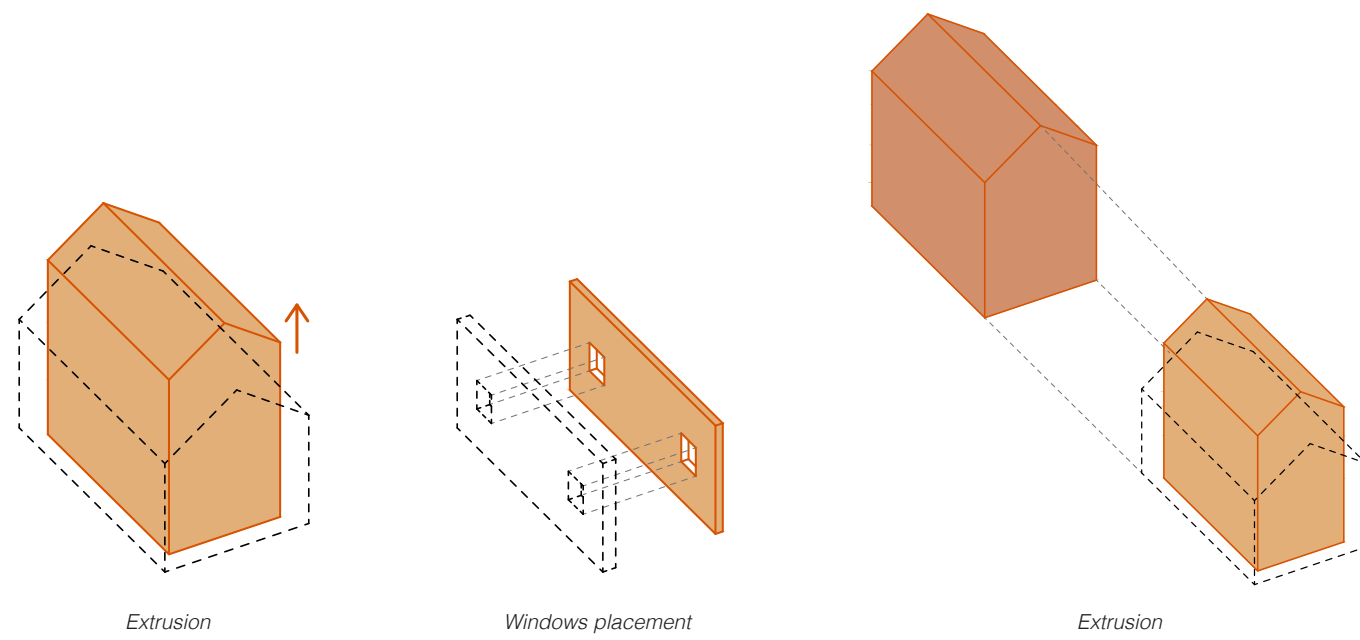
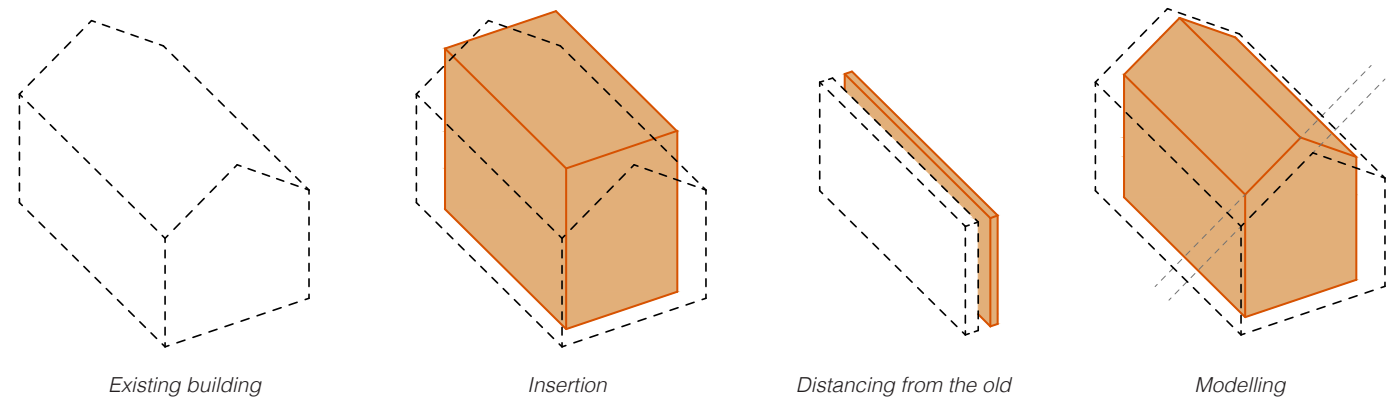


Figure 53 - Reuse approach diagram

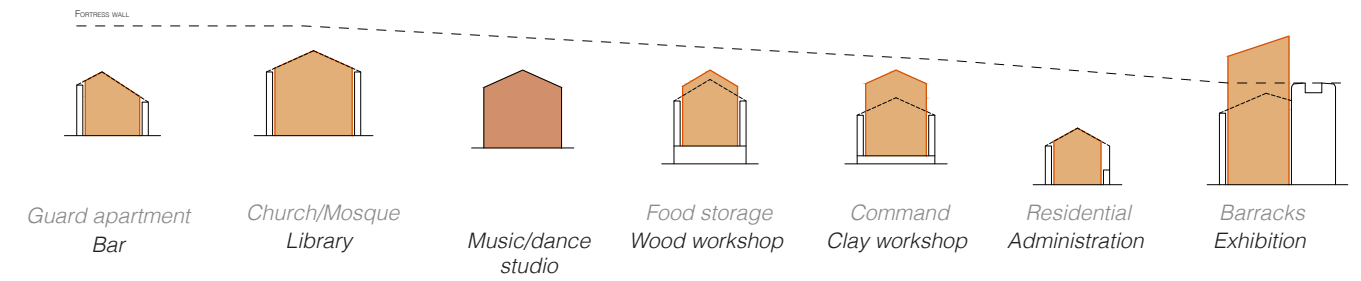


Figure 54 - Heights diagram

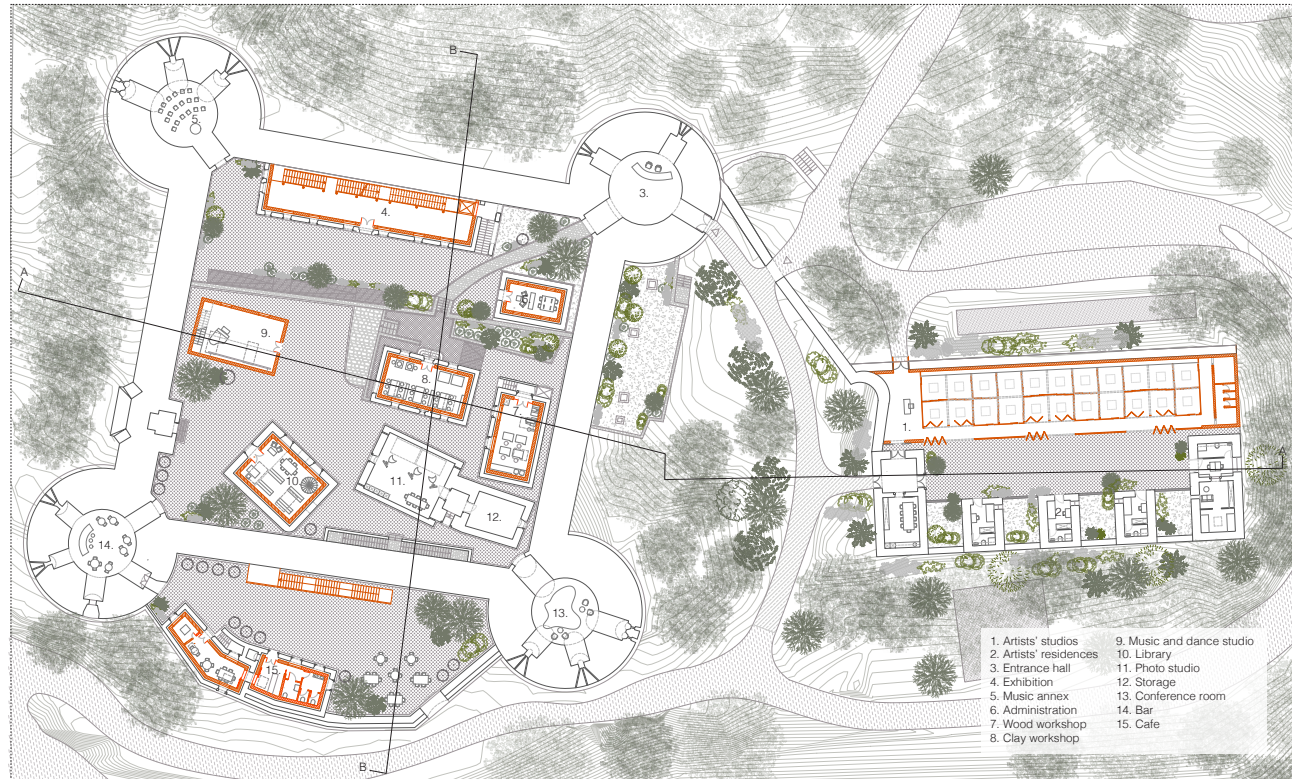


Figure 55 - Proposed Masterplan

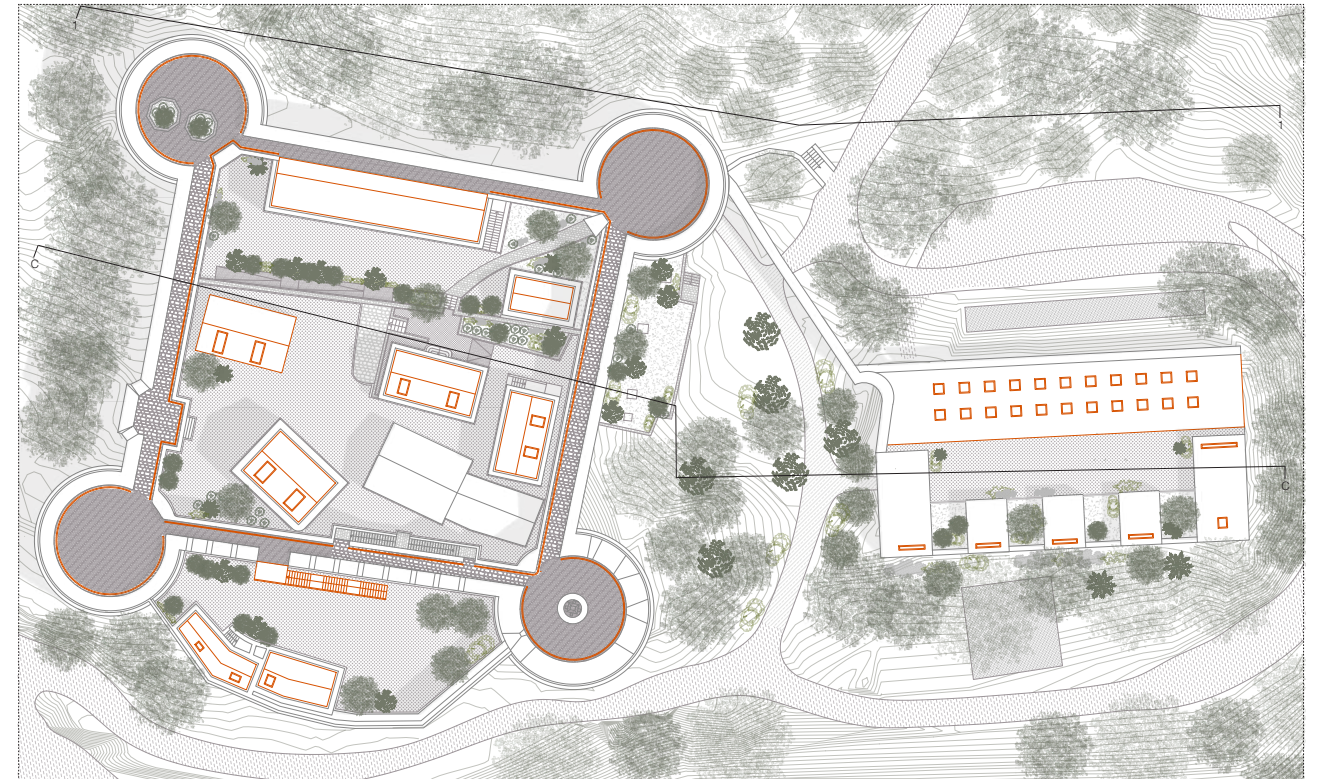


Figure 58 - Proposed Roof Plan

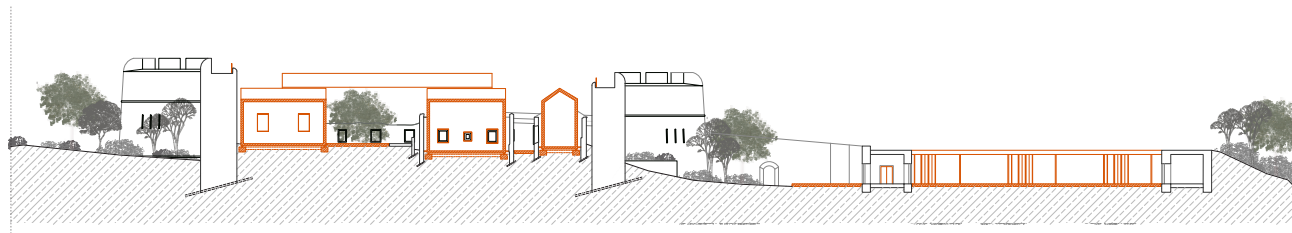


Figure 56 - Proposed section A-A

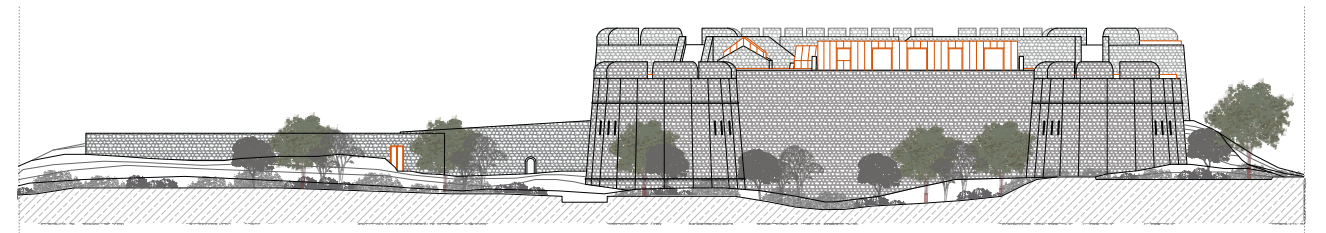


Figure 59 - Proposed Elevation 1-1

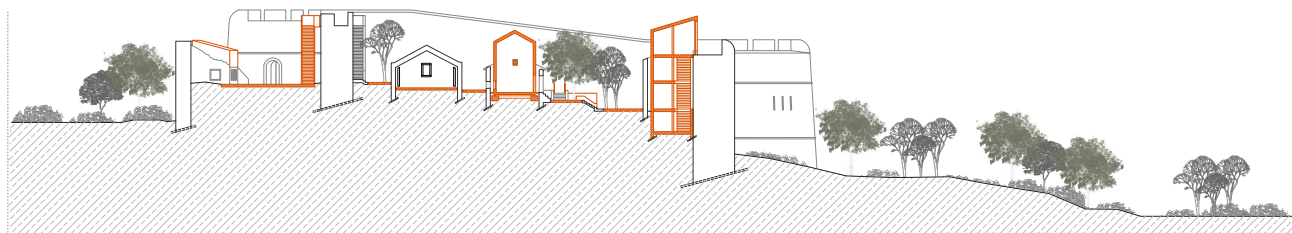


Figure 57 - Proposed section B-B

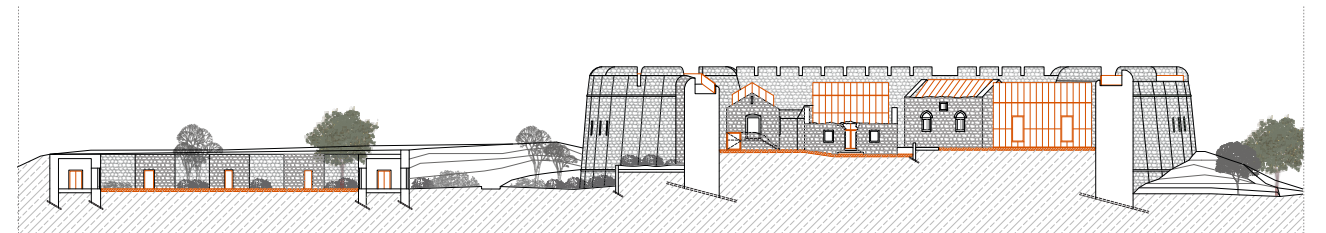


Figure 60 - Proposed section C-C

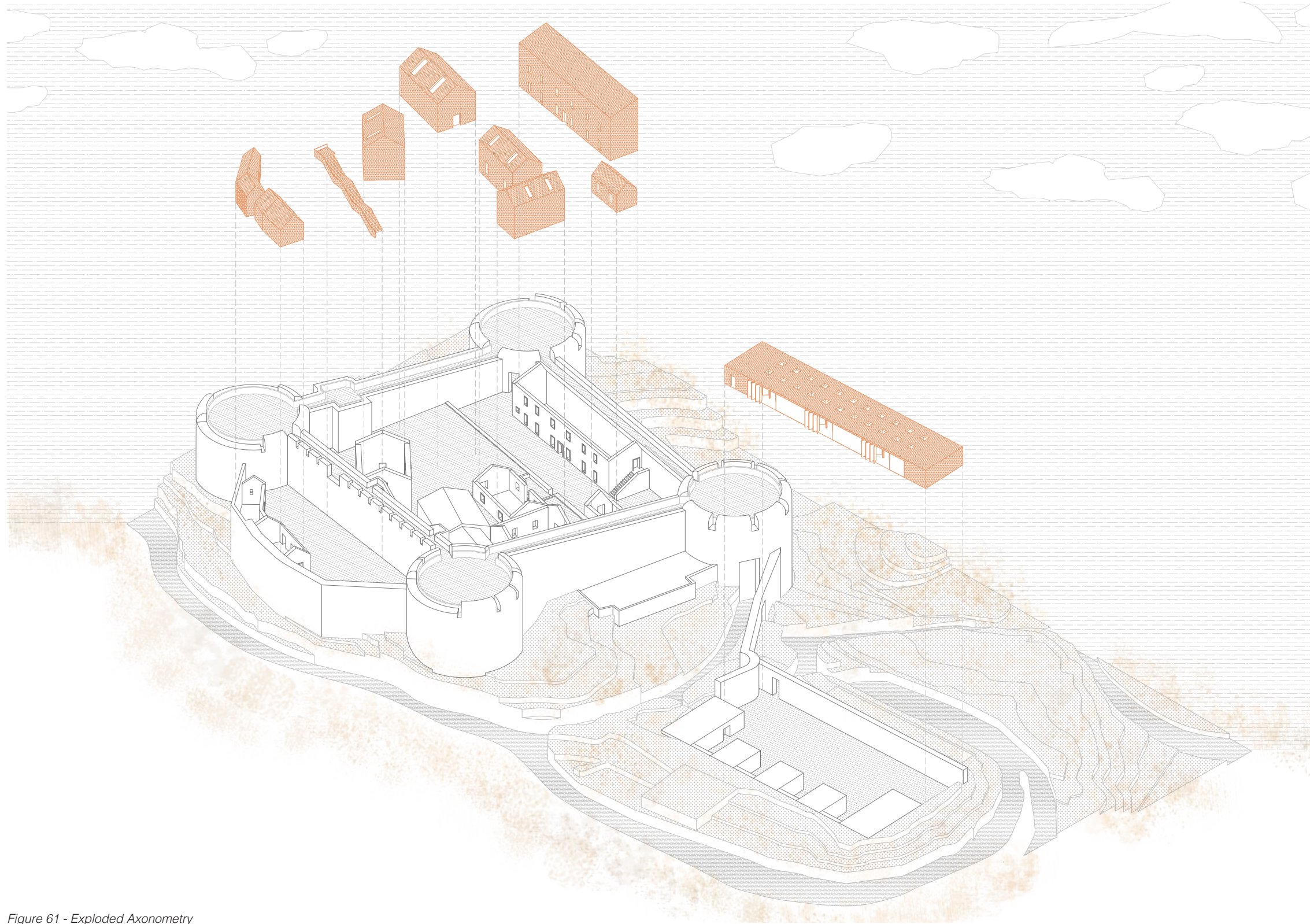


Figure 61 - Exploded Axonometry



Figure 62 - Music and dance studio

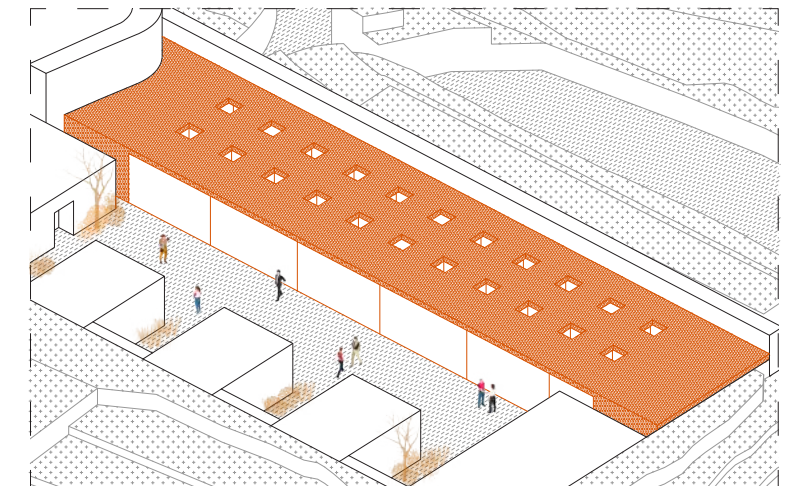


Figure 63 - Artist studios and residences

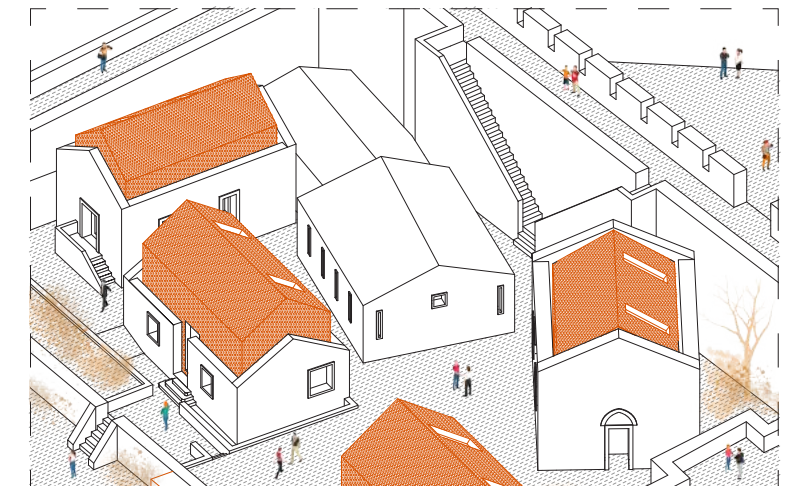


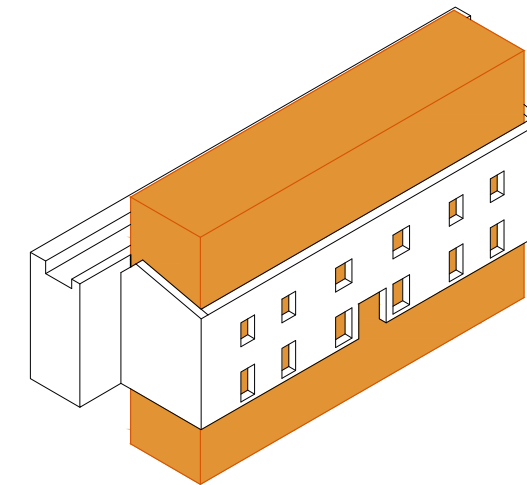
Figure 64 - Workshops and library

After designing the main structure of our masterplan we decided to deepen the study of some buildings within the fortress complex, in particular the one of the exhibition and the one of the artists' studios.

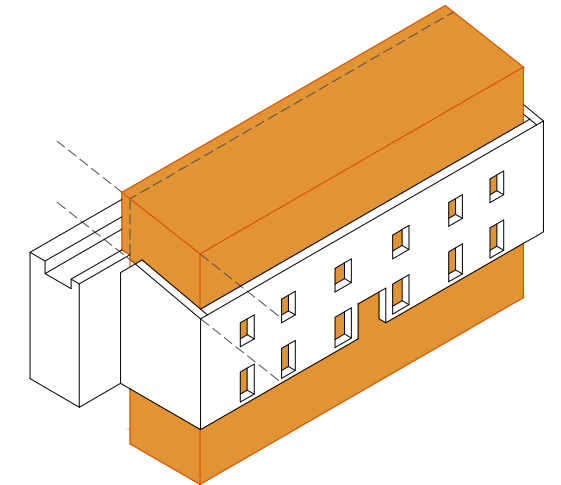
Exhibition building is the biggest and most complex building on site, an only case where the new volume comes in direct contact with the old. Designed to follow the general 'box within the box' concept, this building touches the old structure in order to give access to the panoramic walk at the top of the fortress. Therefore, the idea was to design the staircase as the main element of the building,

always visible, adjacent to the old wall. (See Figure 59) In this way, there is a visual connection between all floors of the building, so that the visitor can appreciate the exhibition set up as a whole.

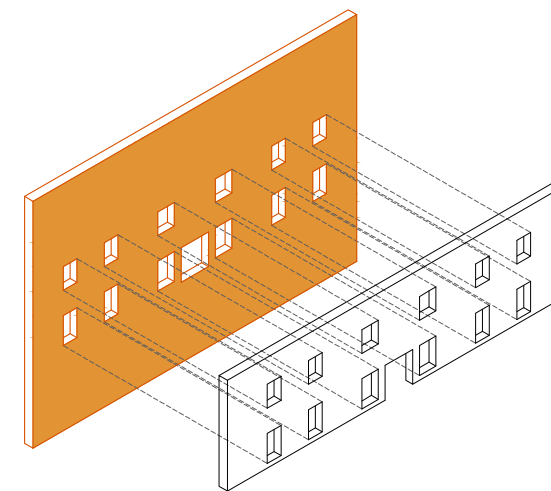
Regarding the design of the facade we decided to keep the same openings of the existing building on the main facade, adding new windows only on the rear facade of the building, which runs along the entire raised walkway. In this way we could illuminate the top floor of the building while at the same time create a visual connection with the external panorama.



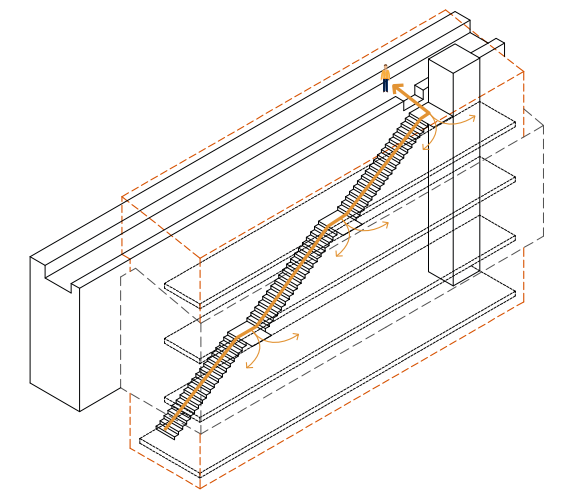
Insertion



Modelling



Window placement



Circulation

Figure 65 - Exhibition building diagrams

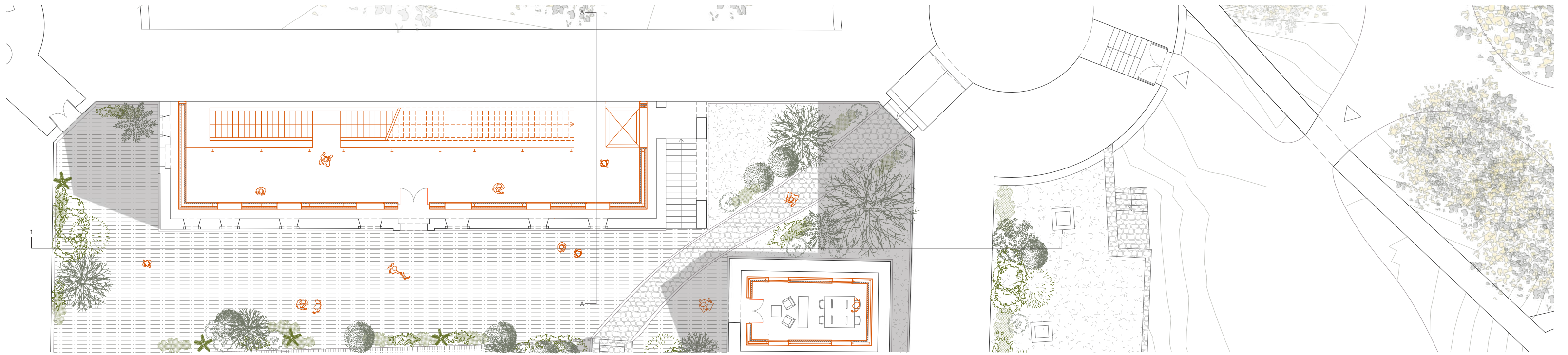


Figure 66 - Exhibition ground floor plan

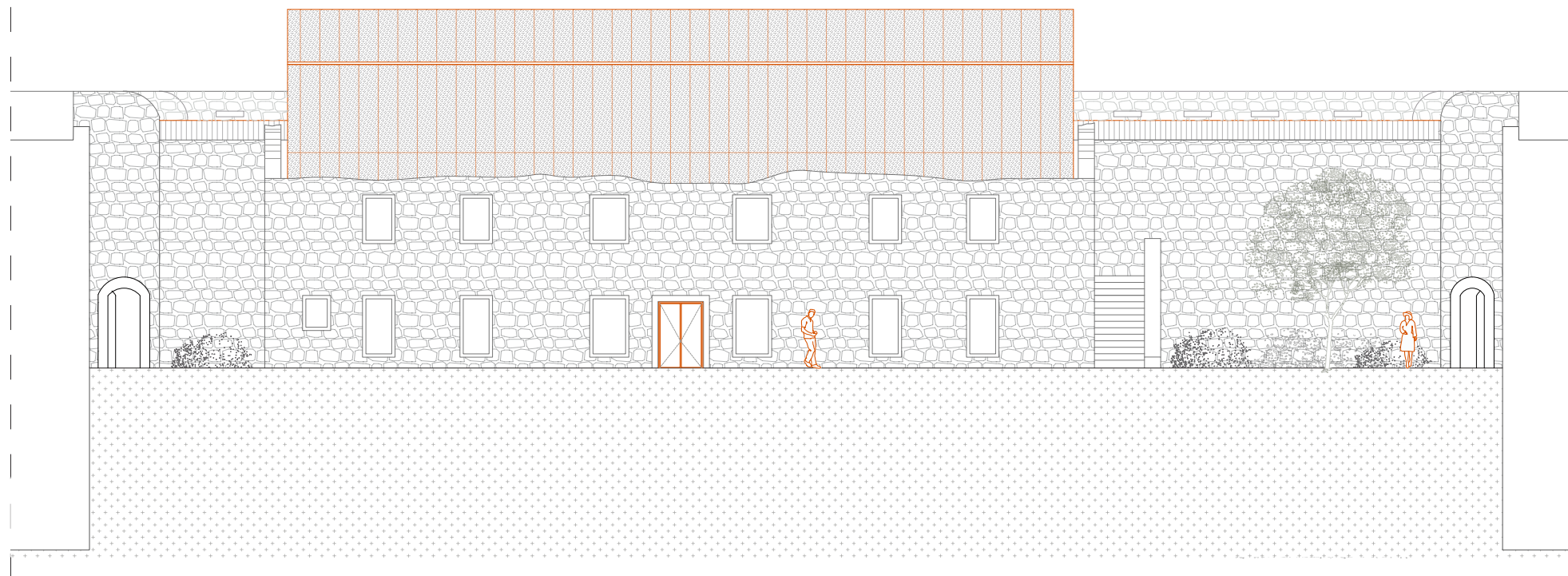


Figure 67 - Exhibition elevation 1-1

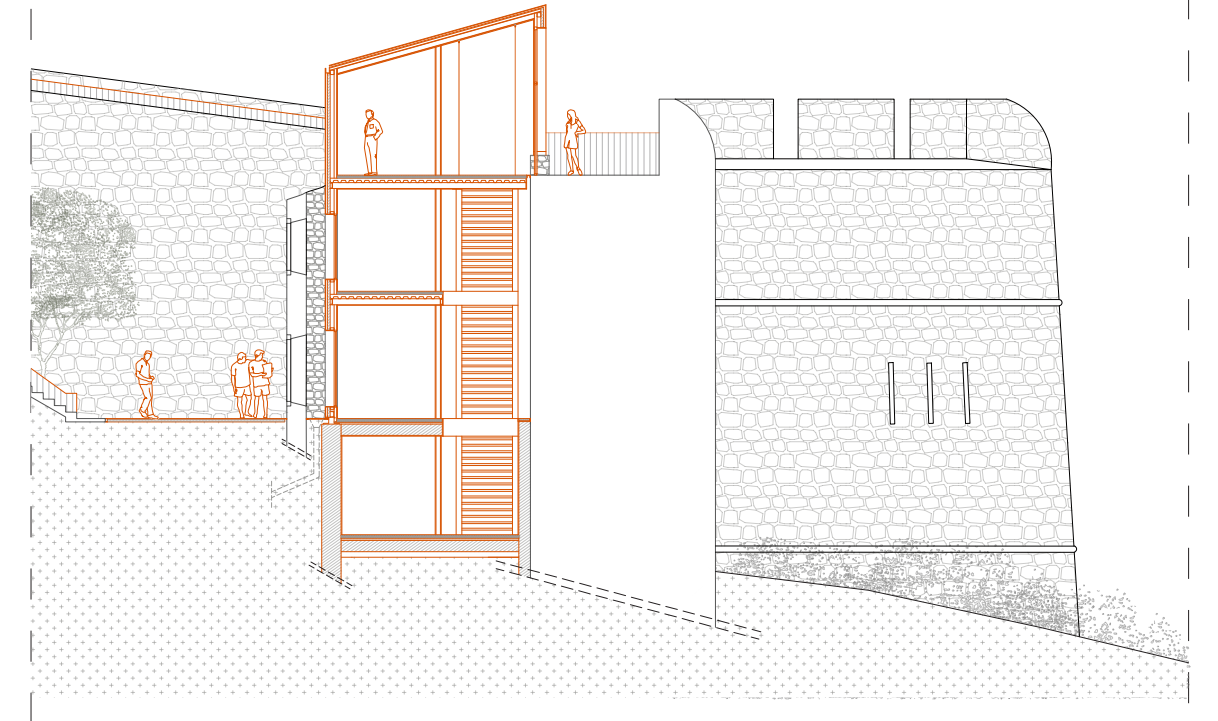


Figure 68 - Exhibition section A-A

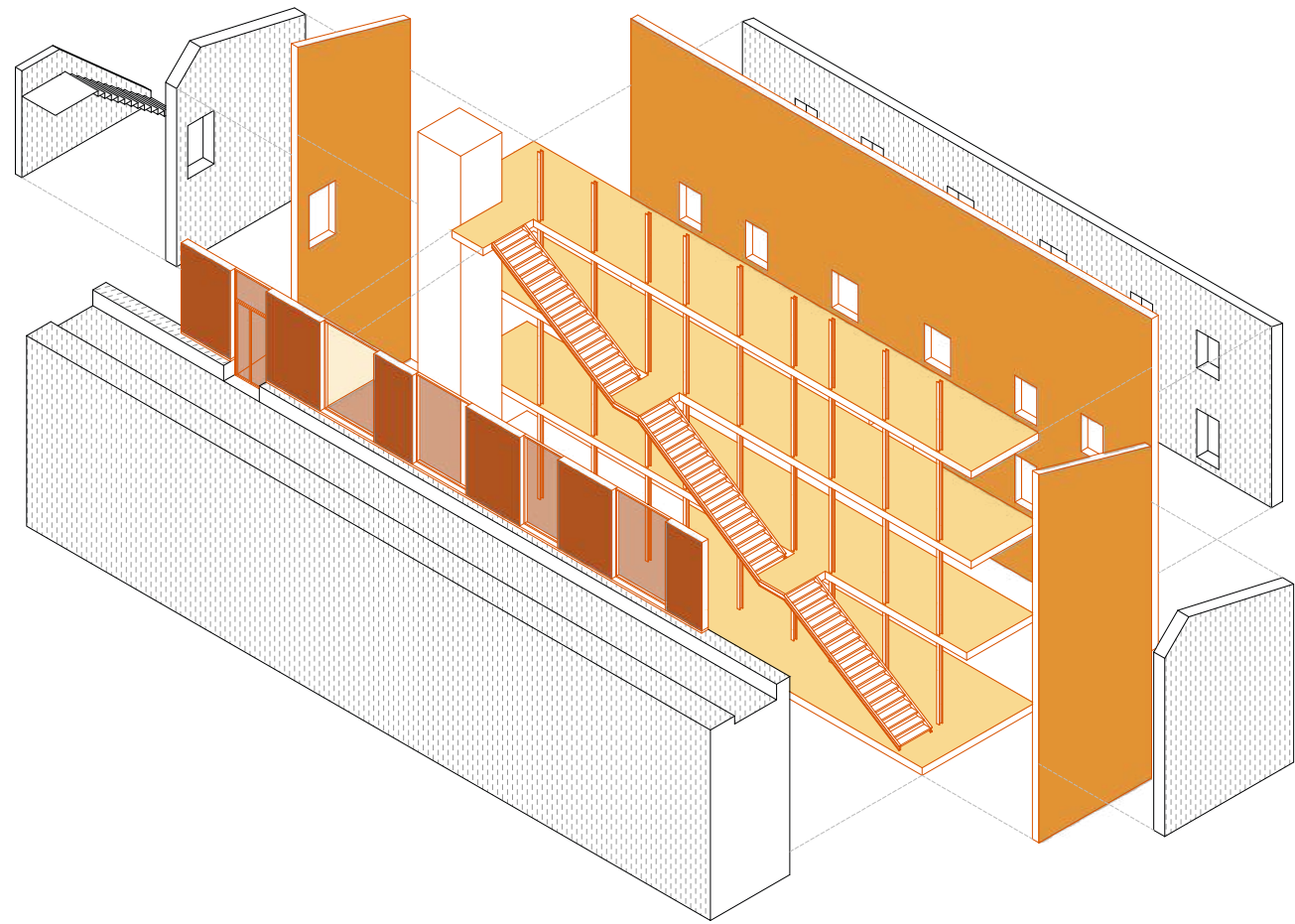


Figure 69 - Exhibition exploded Axo



Figure 70 - Exhibition vizualization

Artist studios

Another part of the project that we have decided to further develop is the one of the Austro-Hungarian Bunkers. The bunkers are located outside the main structure of the fortress, and for this reason we thought they could be the ideal place to allocate a more secluded area for the artists. The existing bunkers are used to house the private residences of the artists, while the new building, placed behind the existing retaining wall, houses the studios. These two are joined by the inner courtyard that allows for natural light and easy circulation. The new building that houses the artist studios is imagined as a dynamic space. This is achieved with the

introduction of movable walls that allow for different spatial configurations to adapt to the specific activity the artist is performing or creating. The first configuration presents the starting position forming separate rooms for individual artists' studios. By sliding and folding interior panels the rooms can transform to bigger spaces, depending on the needs of the artist. By further internal division sliding and folding both the façade and the hallway panels, it's possible to achieve a complete open space configuration, that can be used for exhibitions or big scale work, allowing direct connection to the inner courtyard.

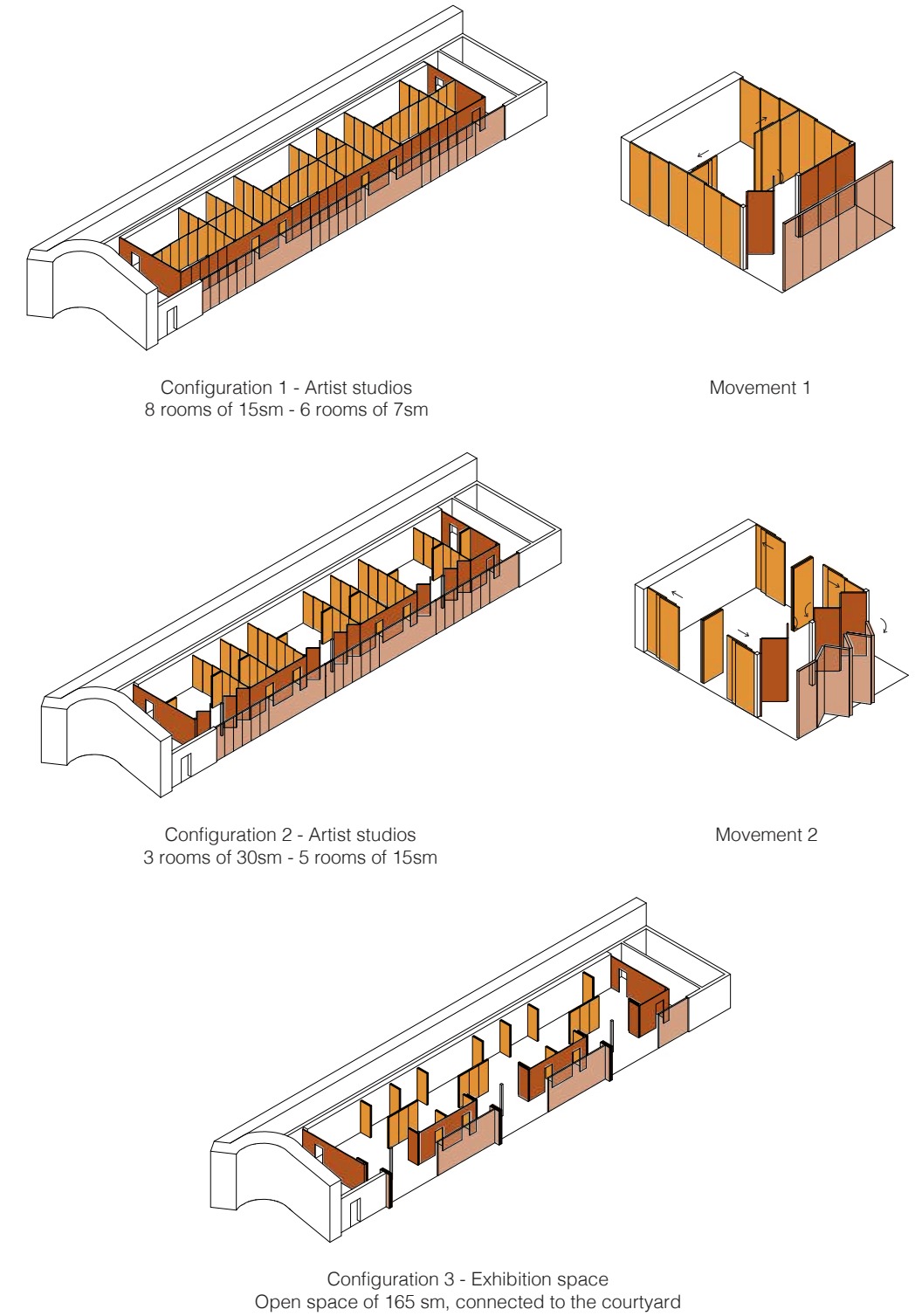


Figure 71 - Artist Studios configuration diagrams

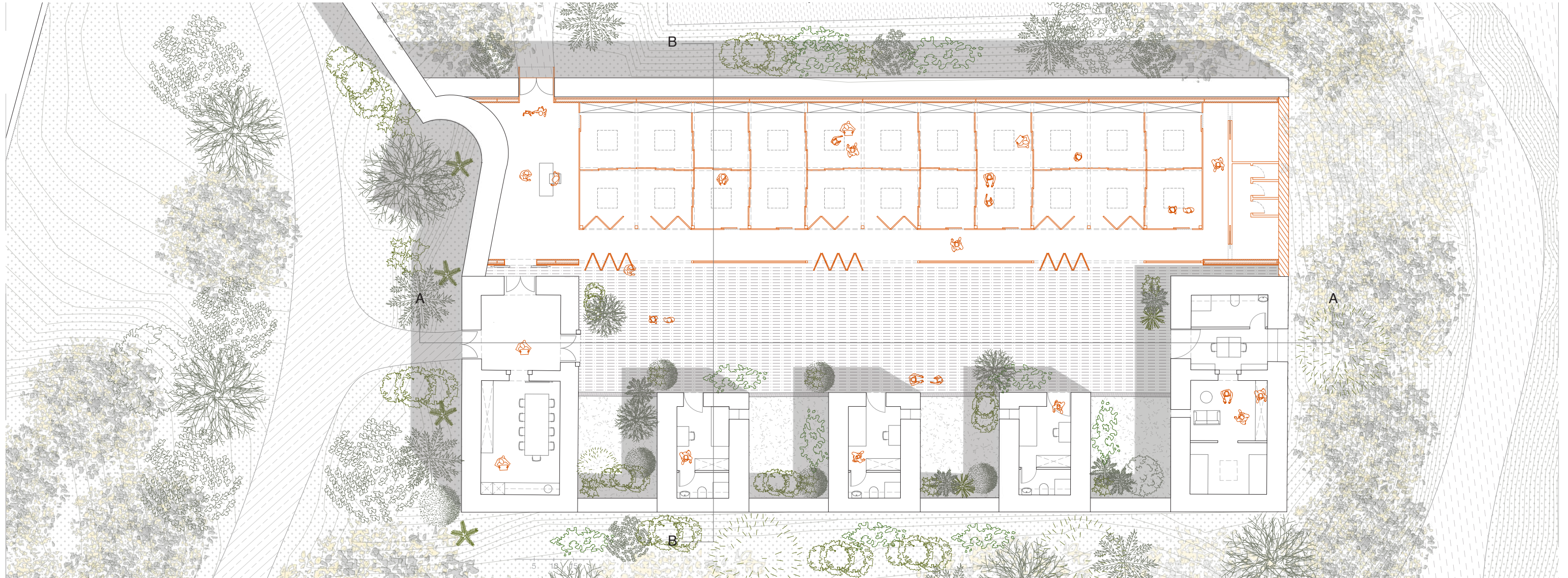


Figure 72 - Artist Studios Plan

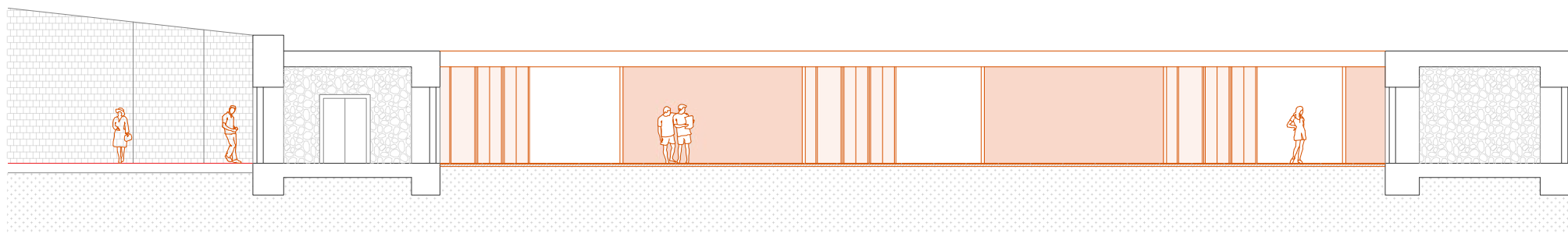


Figure 73 - Artist Studios Section A-A

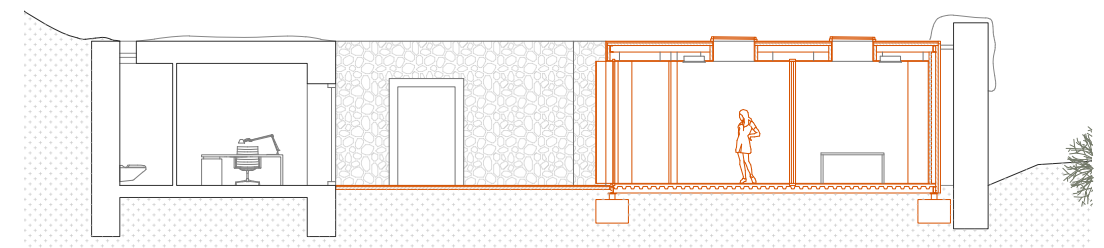


Figure 74 - Artist Studios Section B-B

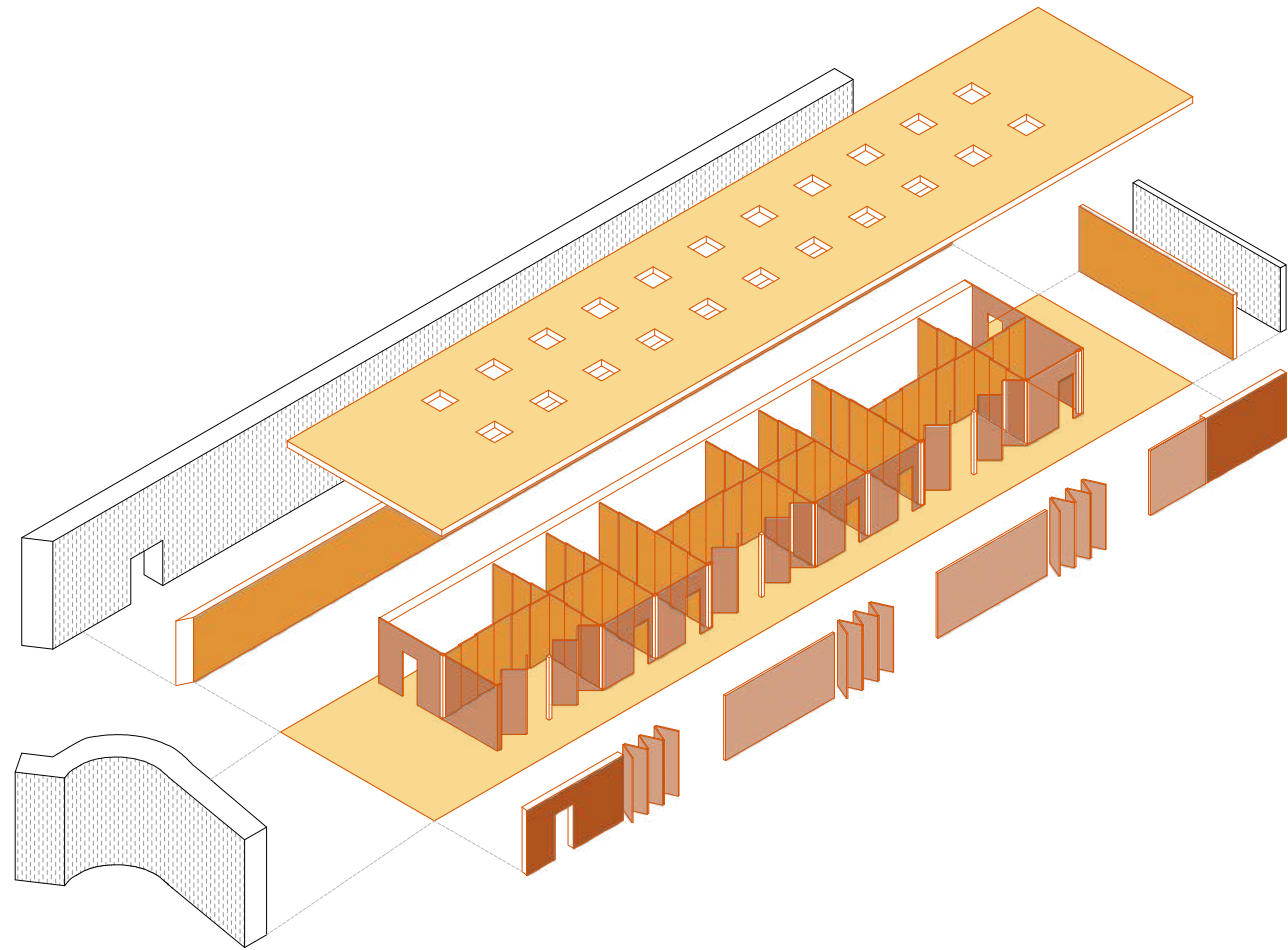


Figure 75 - Artist Studios exploded axo



Figure 76 - Artist Studios vizualization

The materiality and the structure of the new buildings is chosen to follow the general concept where the old is always respected. Therefore, we wanted to use a light structure of dry construction, made by a prefabricated system that consists of steel structure, interior insulation and façade sandwich panel. For the cladding we decided to use the local Bokit stone tiles also known as Pietra di Cattaro. Spanjola fortress is made of this same stone,

whose extraction site is in Herceg Novi, 5km from the fortress site. While the fortress stone is rough and untreated, our stone tiles are treated in a new, modern way, that gives them a smooth finish and seamless texture. In this way there is a clear differentiation between old and new, while at the same time respecting the existing materiality and sourcing a local material.

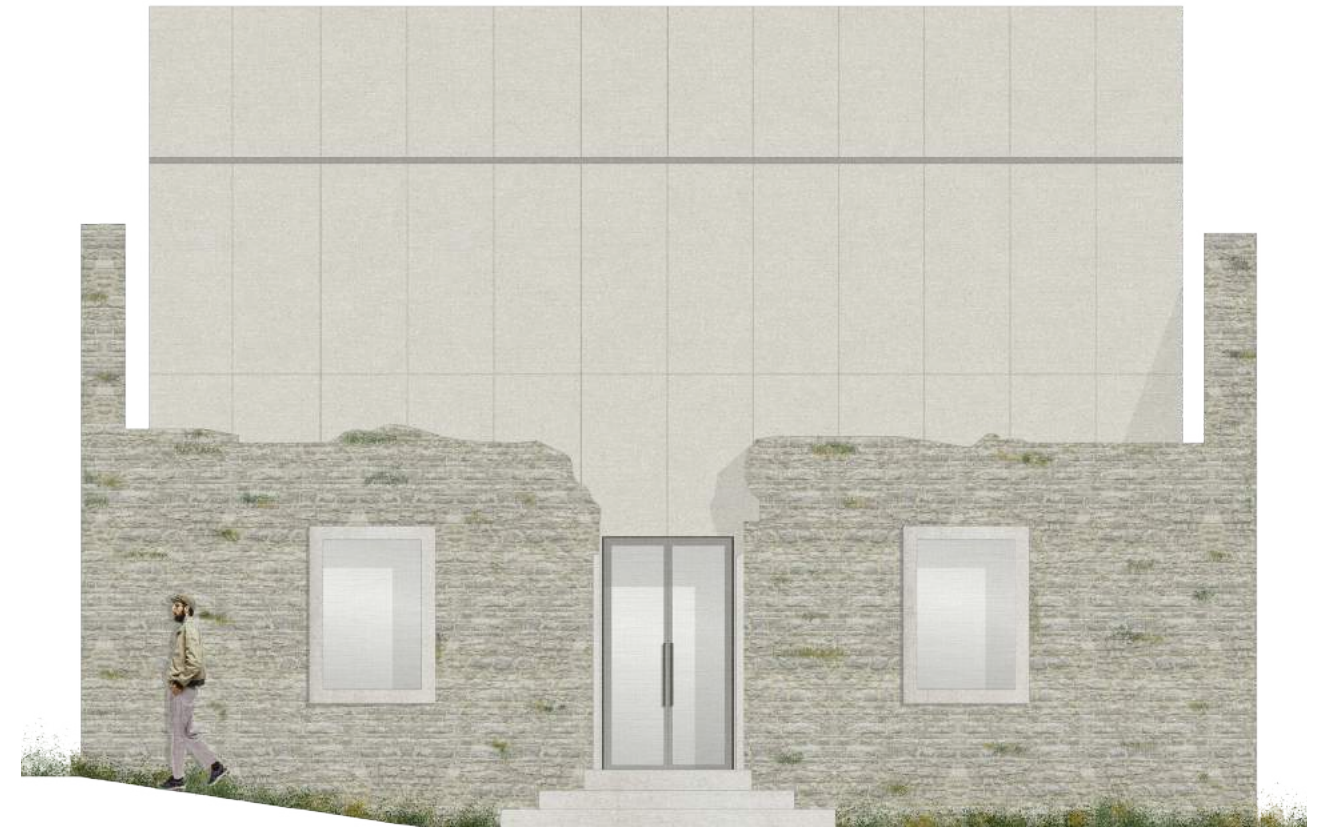
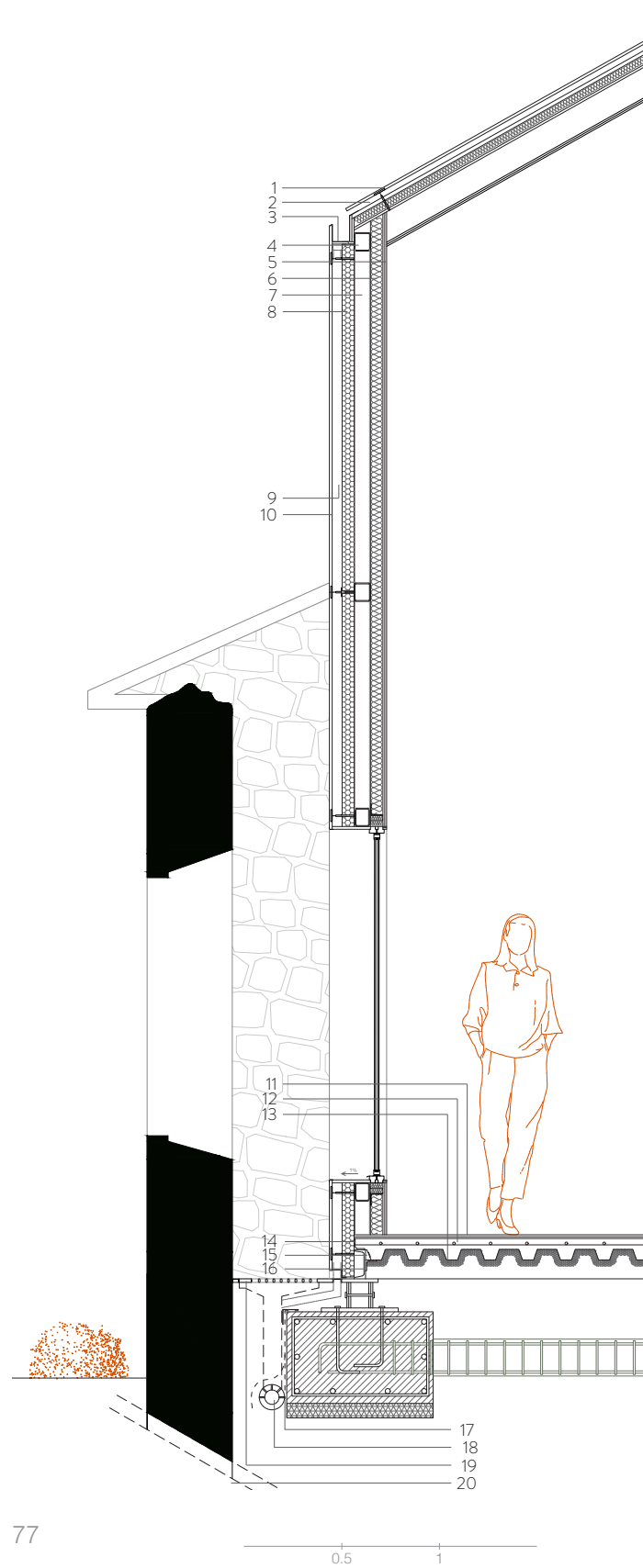


Figure 77 - Facade Elevation Detail



- 1 Stone tile finish 'Bokit' (Pietra di Cattaro) in fine smooth polish, white colour - 1.5cm
- 2 Galvanized sheet omegas tracing to hold the roof tiles 'Bokit'
- 3 Galvanized steel perimeter gutter for collecting water from the roof, hidden behind the wall finish tile
- 4 Beam tubular profile rectangular section
- 5 Wall finish - 2cm
- 6 Thermal insulation - 7cm
- 7 Main steel structure I beams - 10cm
- 8 Facade sandwich panels made of 5mm thick sheet inside and outside, with interior polyuretane insulation 6cm thick, fixed to the main structure.
- 9 Tile cladding system with hidden fixtures, connected to the main steel structure.
- 10 Wall finish tile 'Bokit' (Pietra di Cattaro) in fine smooth polish, white colour - 1.5cm
- 11 Floor finish 2cm
- 12 Concrete compression layer
- 13 Polyurethane insulation
- 14 L steel profile for compression cap fixture
- 15 Angular profiles for compression cap fixture
- 16 Steel profile UPN 160
- 17 Vertical waterproofing
- 18 Drainage pipe system
- 19 Perforated pavement for collecting water and dirt into the drainage piping system
- 20 Old (existing wall)

Figure 78- Facade Section Detail

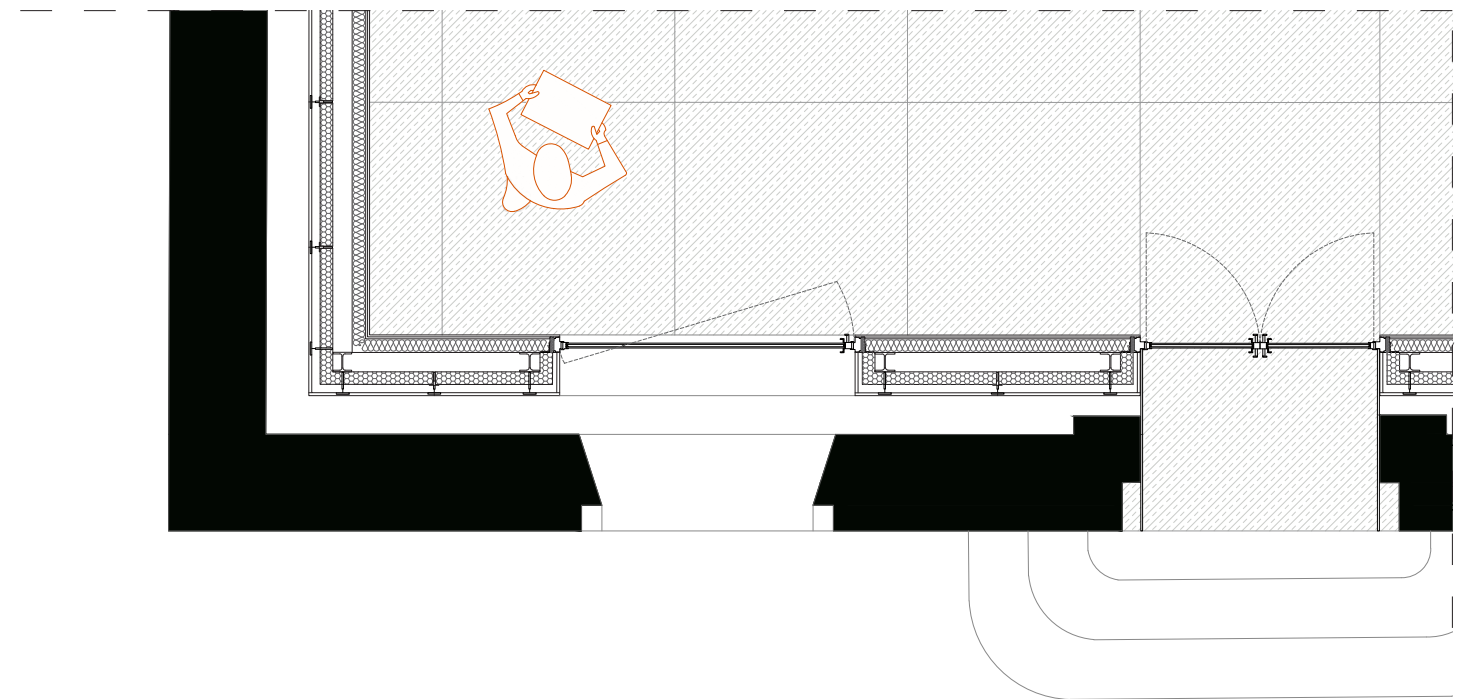


Figure 79 - Facade Plan Detail

06 Conclusion

The idea behind this project was to give a new character to fortress Spanjola while at the same time preserving its identity. Our reuse approach played a key role in the design process, establishing a new kind of perspective on cultural heritage in Montenegrin context.

One of the main prerogatives was to demonstrate that it is possible to introduce a different touristic offer that includes local community and attracts new visitors. The program proposed by our project is a starting point for transforming Montenegro from a purely seaside tourism destination to a cultural and creative one. The potential of this initiative based on a vast and dynamic program involving national and international actors, can act as a springboard putting in motion similar initiative in other parts of the country.

Our design approach shows a different attitude towards cultural heritage than the one seen in Montenegro so far. Our decisions were based on respecting the state of the art, retaining the existing identity of the complex distinguished by traces of time. The insertion of new volumes follows the traces of the old, although fully separated from the existing. The existing structures remain untouched, while the presence of the new volumes depicts a new life of the fortress as a cultural hub.



Figure 80 - Visualization

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