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## **NEW WINE ARCHITECTURE IN RAHOVEC**

Teuta Jaha-Hoxha

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College for business and technology  
Department of architecture and spatial planning

**NEW WINE ARCHITECTURE IN RAHOVEC**  
**MASTER THESIS**

Teuta JAHA-HOXHA

May / 2017

Prishtina



College for business and technology  
Department of architecture and spatial planning

Master thesis  
2007-2008

Teuta JAHA-HOXHA

**NEW WINE ARCHITECTURE IN RAHOVEC**

Supervisor: Prof. Dipl.-Eng. Dr.-Sc. Caroline JÄGER-KLEIN

May / 2017  
Prishtina

A Thesis Submitted in Fulfilment of the Requirements for the Degree of  
Master of Science (M.Sc.)  
Architecture, Spatial Planning and Project management / Reconstruction and  
Conservation

## ABSTRACT

*Municipality of Rahovec<sup>1</sup> is one of the Kosovo municipalities, known as a wine growing place since ancient times, with an area of 275, 5 km<sup>2</sup> and 71.522 inhabitants*

*Viticulture in Rahovec is relatively well developed. There are two main wine cellars for grape processing and wine production. i) Stone Castle found in 1975 and, ii) Bodrumi i Vjeter (Old Cellar) build in 1953-54. In addition, it is important to mention here that in Rahovec are dozens of small family wine cellars.*

*“Bodrumi i Vjetër” have a production capacity of 5.000.000 million L, and it used to be a social enterprise, however, since 2006 was privatized and belongs to NTP Haxhijaha. This master thesis uses winery “Bodrumi i Vjetër” as a case study.*

*The aim of this master thesis is to present an alternative design of the wine cellar i.e. an idea how a wine cellar nowadays should look and be designed, reconstruction and conservation of “Bodrumi i Vjetër”. At the same time, make a conceptual analysis of the entire location where the wine cellar is located and give suggestions. Winery have an architecture style like an agriculture building cooperated in the area with agriculture land<sup>2</sup>, during 1953-54, and build with stone walls and suitable bricks. After privatization in 2006 by Haxhijaha family, the owner was interested in renovating the original building with the latest design trends. Therefore, this building I consider as a case study.*

*By renovating this traditional wine cellar, which was industrial and closed to the public, I aim to make it accessible to the public. Therefore, there is a potential to encourage tourists to visit Rahovec not only for buying the wine, but also visit the vineyards where they can taste the grape, visit the winery where they can see wine processing (during the season) and, finally wine tasting complemented with traditional food. In addition,” Bodrumi i Vjetër” will provide accommodation for visitors within the area in cooperation with the Tourism Information Center in the city of Rahovec, as well as, they will provide day tours<sup>3</sup> depending on what the visitors want to see/experience during their stay, also other different activities.*

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<sup>1</sup> Plani zhvillimor komunal Rahovec(Municipal development plane Rahovec),p 18

<sup>2</sup> See Fig. 41 taken during 1954 where it can be seen have it looks that time building with location

<sup>3</sup> <http://www.kosovoguide.com/?cid=2,166,209&view=all>

## ABSTRACT

*Komuna e Rahovecit<sup>4</sup> është njëra prej komunave të Kosovës, e njohur si vend që miret me kultivimin e verës që nga kohërat e lashta, me një sipërfaqe prej 275, 5 km<sup>2</sup> dhe 71.522 banorë*

*Veraria në Rahovec është relativisht mirë e zhvilluar. Ka dy bodrumet kryesore të verës për përpunimin e rrushit dhe prodhimin e verës. I) Stone Castle e ndërtuar në vitin 1975 dhe ii) Bodrumi i Vjetër I ndërtuar në vitin 1953-54. Përveç kësaj, është e rëndësishme të përmendim këtu se në Rahovec janë dhjetra bodrumet të vogla familjare të verës.*

*"Bodrumi i Vjetër" ka një kapacitet prodhues prej 5.000.000 milion L, dhe ka qenë një ndërmarrje shoqerore, megjithatë, që nga viti 2006 u privatizua dhe i takon NTP Haxhijaha. Në këtë punim masteri si rast studimi është mare bodrumi i verës "Bodrumi i Vjetër".*

*Qëllimi i kësaj teze të magjistraturës është të prezantojë një dizajn alternativ të bodrumit të verës, pra një ide se si një bodrum vere duhet të duket dhe të projektohet, si të bëhet rindërtimi dhe ruajtja e objektit të "Bodrumit të Vjetër". Njëkohësisht, të bëjë një analizë konceptuale të gjithë lokacionit ku ndodhet bodrumi I veraris dhe të jepen propozime. Objekti I veraris ka një stil arkitekture të një ndërtese bujqësore që bashkërendon mirë në zonën me tokë bujqësore<sup>5</sup>, e ndërtuar gjatë vitit 1953-54 me mure guri dhe tulla të plota. Pas privatizimit në vitin 2006 nga familja Haxhijaha, pronari ishte i interesuar në rinovimin e ndërtesës origjinale me tendencat e fundit të projektimit. Prandaj, këtë ndërtesë e konsiderova si një rast studimor.*

*Duke rinovuar këtë bodrum tradicional të verës, i cili ishte industrial dhe i mbyllur për publikun, qëllimi është ta bëjmë atë të qasëshëm për publikun. Prandaj, ekziston potencial për të inkurajuar turistët që të vizitojnë Rahovecin jo vetëm për blerjen e verës, por edhe për të vizituar vreshtat ku mund të shijojnë rrushin, të vizitojnë verarin, ku mund të shohin përpunimin e verës (gjatë sezonit) dhe, së fundi ta degustojn verën të plotësuar me ushqim tradicional. Përveç kësaj, "Bodrumi i Vjetër" do të sigurojë akomodim për vizitorët brenda zonës në bashkëpunim me Qendrën e Informimit të Turizmit në qytetin e Rahovecit, si dhe do të ofrojnë turne ditore<sup>6</sup> në varësi të asaj cka vizitorët dëshirojnë të shohin / përjetojnë gjatë qëndrimit të tyre si dhe aktivitete të tjera të ndryshme.*

<sup>4</sup> Plani zhvillimor komunal Rahovec (Municipal development plane Rahovec),p 18

<sup>5</sup> See Fig. 41 taken during 1954 where it can be seen have it looks that time building with location

<sup>6</sup> <http://www.kosovoguide.com/?cid=2.166.209&view=all>

## ACKNOWLEDGMENT

The decision to take the master thesis "*Renovation and reconstruction of the old wine cellar in Rahovec*" formerly known as "NBI Rahovec" which is now after privatization called NTP "Haxhijaha" Rahovec "Borumi i vjetër" (Old Cellar working unit), was inspired by my late father.

This thesis I dedicated to my father, Rejhan Jaha, who began his career as agronomist in 1972 at this wine cellar and died during working time there, consequently and tragically ending his career in this field in 1990, during which time he was General Director of the firm.

Another matter to be proud of is that this wine cellar after the privatization became a property of the same family where my late father belonged, Haxhijaha family. This is another reason that inspired me to do the work that treats the wine cellar as a cultural heritage monument, business source and family tradition in the wine and brandy production. This trade provides a substantial income for the families involved. My grandfather and his generation have created many friendship ties outside Rahovec and Kosova, selling the grape, brandy and wine, which tradition continues today.

I would like to thank my family, friends, colleagues and my mentor for their encouragement and continual support throughout my study. Without their help, this degree would not have been possible.

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## List of abbreviations

MDA- Municipal Development Agenda

MDP- Municipal Development Plan

NBI- Ndërmarja bujqësore industriale (Industrial agricultural cooperation)

NTP- Ndërmarja tregtare prodhuese (Trade production cooperation)

MAFRD- Ministry of agriculture, forestry and rural development

# 1 INTRODUCTION

This study tends to realize a new approach of designing a wine cellar specifically” Bodrumi i Vjetër” in Rahovec. Through the renovation and reconstruction of the existing wine cellar, it is intended to achieve a composition between the space for technical production and aesthetic- relaxing space for visitors. The owner of the cellar expressed the importance of the production structure based on inputs and outputs which should fulfil his own defined requirements, but at the same time also, it is important the hospitality through reception which should be unique in the sense that maximize the number of visitors, their needs and experience.

## 1.1 Objectives

During my online research, I found an interesting article that leaves you with interesting impressions as well. This made me think that in fact we should all take into account serious changes in management, organizing and the easiest way to approach tourists in the Rahovec wine cellars.

In this particular article, it is described how in 2012 a few international visitors had visited Rahovec and its wine cellars. During their visit, they have noticed that the cellars do not have any real practice and tradition, on how to keep their cellars open for the visitors. Even though that day they have managed to visit the wine cellars, the way the event took place was not in the most organized manner, having a lack of an agenda or a professional tour guide, and making the visit an ad-hoc one.

I will cite a part from the article: “Still, the vineyards "shop" is really just the warehouse. When we arrived, accompanied by the Rahovec Tourism director, we needed to wait while the guard phoned the owner - he wanted to make sure it was okay that we were there for a tour. We got the sense that Kosovo's vineyards aren't used to visitors.”<sup>7</sup>

If we look at the way things have changed or prospered nowadays, in 2017, it can be stated that minor advancements and improvements have been made in this particular field. Hence, if you decide to go to the wine cellars for a visit there is a possibility for the visitor to be followed by a tour guide. Although in many cases, these tours are followed by the wine cellar owners or any other official working for the company who takes on the role of a tour guide. In order to achieve this, a visitor has to pay a fee of 10 euros per person or more, depending

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<sup>7</sup> <http://merlinandrebecca.blogspot.com/2012/07/old-barrels-and-concrete-cellar.html>

on what kind of a menu the tourist is interested. Whether they do like to include only wine tasting and bread & cheese on their menu or they want to have lunch or dinner to be served with within the cellar. Lunches and dinners are arranged well in advance by contacting the particular cellar either by phone or e-mail, or by contacting the Tourism Information Center in Rahovec.

## 2 HISTORY

### 2.1 Geographical position of Kosova

Territory of the Republic of Kosova is positioned in the central part of the Balkans, which is crisscrossed with many roads in Europe. Kosova, which has 10,887.00 square kilometers, shares its boundaries with four countries that whom is interconnected. Kosova lies between 41.51 and 43.16 and 20.01 and 21.48 geographical coordinates. It consists of two planes, Kosova and Dukagjini planes, which are surrounded by hills and mountains, which are 300-400 meters above the sea level. This is an ideal climate for wine production.

Wine cultivation in this corner of the Europe goes back to the ancient times. With this culture, where involved different people throughout the history, like Illyrians, Celts, Greeks, Romans etc. In the last century, between the First and Second World War, insect Phylloxera<sup>8</sup> devastated European grape plantations in this region. This was the reason why this kind of grapes was replaced by a new.

In order to regenerate vineyards, in 1932 the first modern vineyards plantations were established in Rahovec, (Figure 1). Subsequently, in 1948 in Landovicë near Prizren a second significant vineyard plantation was created. In 1956-57 began the intensive development of wine cellars. The first modern wine cellar was built in 1952 in Landovicë, as well as in Rahovec. In 1953, Rahovec wine cellar was operational.

Between 1970 and 1989, viniculture and winemaking production in Kosova accelerates, consequently reflecting in plantations increase. During this period, the wine started to be exported overseas. A very positive factor that helped this process was the state ownership of the plantations as opposed to the private plantations that was above 50%. This ratio was the best one in the Former Yugoslavia.

There were other locations as well where the winemaking and viniculture was established in Kosova like in: Theranda (Suherekë), Malisheva, Gjakova, Prizren and Istog.

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<sup>8</sup> <https://en.wikipedia.org/wiki/Phylloxera>



*Figure 1. Vineyard in south east of the Rahovec<sup>9</sup>*

If we look the statistics before the massive expulsion of the Albanian workforce by the Serbian regime in the beginning of the 1990s and of those after that, we could see that the 40% of the vineyard were uprooted. The overall area of vineyards in Kosova in 1992 was 9469 hectares, but this area is significantly reduced to 5631 hectares, mostly because they were neglected and intentionally abandoned by the Serbian regime.

## **2.2 Background of Rahovec municipality**

Rahovec one of the municipalities of Kosovo, located in Anadrinia region. Anadrinia is known as a vineyard and winery region. At the administrative level, Anadrinia lies in the municipality of Rahovec with 35 settlements/villages, (Figure 2). This region is known since medieval time that lies near the central flow of the Drini i Bardhë River.

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<sup>9</sup> <http://www.kosovoguide.com/?cid=2,165,926>, Photo by Ermal Meta

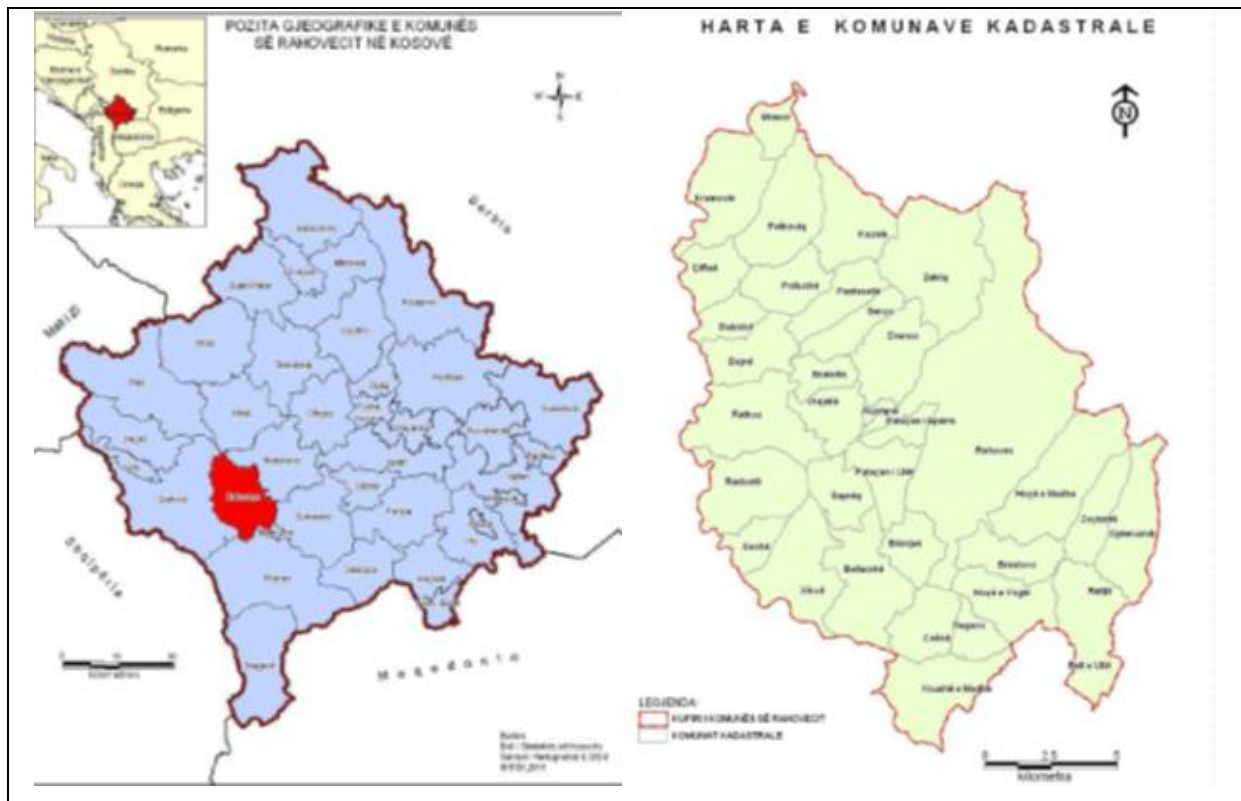


Figure 2. Kosovo Map and geographical position of Rahovec and municipality map<sup>10</sup>

It has an area of 275, 5 km square<sup>11</sup>, with 35 settlements and with 71.522 inhabitants<sup>12</sup>. There are 34 rural settlements, while only one settlement is urban. Above sea level elevation of these settlements varies of 310m (Krusha e Madhe and the new part of the settlement, specifically settlements lying on the eastern bank of the river “Drini i Bardhë), up to 920 m above sea level elevation is Zatriq village. Based on the above sea level elevation these settlements are divided into valleys, plain fields, hills and mountains.

The vineyard zone of Rahovec for grape processing and wine production consists of 24 private companies licensed by the MAFRD (Table 2) as well as several small family cellars. However, the biggest two cellars, are:

1. ”Bodrumi i Vjetër” in Rahovec was constructed in 1953 with the capacity of 4.200.000 million or 420 vans now as a property of NTP “Haxhijaha”.

<sup>10</sup> <http://kk.rks-gov.net/Rahovec/getattachment/Municipality/Assembly/Plani-Zhvillimor-Komunal/PZHK--Rahovec-final.pdf.aspx>, p.14 and 17

<sup>11</sup> Plani zhvillimor komunal Rahovec(Municipal development plane Rahovec) p 17, <http://kk.rks-gov.net/Rahovec/getattachment/Municipality/Assembly/Plani-Zhvillimor-Komunal/PZHK-Rahovec-final.pdf.aspx>

<sup>12</sup> Plani zhvillimor komunal Rahovec(Municipal development plane Rahovec),p 18, <http://kk.rks-gov.net/Rahovec/getattachment/Municipality/Assembly/Plani-Zhvillimor-Komunal/PZHK--Rahovec-final.pdf.aspx>

2. Wine Cellar “Brnjaka I” the property of “Stone Castle” constructed in 1975 with capacities of 1740 vans or 17.400.000 million liters.
3. Wine Cellar “Brnjaka II” property of “Stone Castle” near to the facility “Brnjaka I” which is being used since 1982 with a capacity of 2630 vans or 26.300.000 million liters.<sup>13</sup>

### **2.3 Viniculture region of Anadrinia**

Anadrinia is a well-known wine making region. This administrative part of Rahovec has 35 villages and lies on the banks of the river Drini i Bardhë. This was a well-known region in a medieval time as well.

It is located from northwest to southeast direction with a length of 32km long and 15km wide. Total area is 426.49 square kilometers and it is situated 420 above the sea level.

Private wine makers of Rahovec have always been renowned for table grape cultivation, cellar building and brandy making.

### **2.4 Archaeology and written sources**

There are plenty of artefacts which testify that viniculture has been cultivated in this region since ancient times. According to the Albanian historian Mark Krasniqi<sup>14</sup> in village Reti near Rahovec a Latin scripture has been found written on two marble stones. The text is without religion symbols containing only floral motifs of vines, leaves with grapes with a flowerpot, which is clearly pagan. In addition, similar ornaments have been found on the banks of Rimmik River and all this marble stone (plates) are exposed at the Kosova Museum in Prishtina.

In the Big Helvetie Tekke’s yard in Rahovec there is an ancient plate with a pagan element that is thought to originate from the times when the ancient Illyrian tribe the Dardans were in decline and the Romans were establishing themselves in the region (Figure 3). In the same yard a big ancient amphora could be found which is believed to have been used as a wine or grain storage. This amphora was found at the so-called Hamzaga’s tombs in Rahovec.

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<sup>13</sup> Data from MAFRED/Vine Institute in Rahovec, Str. Xhelal Hajda-Toni,

<sup>14</sup> Krasniqi, Mark. Glasnik Muzeja Kosova i Metohije II, Orahovac, Antropogeografske monografije Varosice, published on 1957, page 90,91



Figure 3. (Left) Stone set in Large Tekka (Teqja e madhe) and (Right) Old dishes set in Large Tekka<sup>15</sup>

On 1953 during digging the foundation for construction of wine cellar today “Bodrumi i Vjetër” in southeast direction were found two huge jars were on of them have capacity for 400 L, metal money, the edge of the spear, etc. which date from Roma-Illyrian time, also was found one small statue of the elephant which is from period of II-III century b.c. (Figure 4)



Figure 4. Small elephant found in foundation of Vine cellar “Bodrumi i Vjetër”<sup>16</sup>

According to the written documents, we know that the winemaking was going on in this region in XIV century as well. Professor Mark Krasniqi in Vuković brothers’ carts has found

<sup>15</sup> Municipal development plan (MDP)

<sup>16</sup> Krasniqi, Mark. Glasnik Muzeja Kosova i Metohije II, Orahovac, Antropogeografske monografije Varosice, published on 1957, page 91



that Rahovec was a property of the Hilandar Monastery, which comprised of huge areas of vineyards, arable land, and meadows etc. all those accepted in Stefan's Cristobel.

In the Ottoman Empire's documents, there are records that this region had an established winemaking tradition when they took over, but according to these records from 1470 to 1519, there were loads of abandoned vineyards.

Rahovec as a winemaking place is mentioned also in the oral tradition through epic songs, according to which an ancient Albanian aristocrat Leke Dukagjini drunk wine from this region, "Ura e Fshejt" bridge builders did that as well, and it is mentioned in the epic battle of Bajram Aga's Halil Hamza siege.

*"Bajram Aga, oh noble man  
Prepare my seymens  
In Rahovec we are going  
we'll drink wine and brandy  
we'll drink wine as much as we can  
Halil Hamza, we will encircle"*

*"Bajram –age, o burre zotni,  
Bomni gati sejmen't e mij;  
N'Rahavec dona me hi,  
Do t'pijm' vene e do t'pijm raki.  
Vene do t'pijna sa te dojna,  
Halil Homzen ta rrethojna!"*

All these facts tell that the winemaking and viticulture in this region have a long a rich tradition. Even today, the people of this region continue to do so with the same zeal and pride.

## **2.5 Agro-ecological conditions of viticulture region of Rahovec – climate factors**

### **2.5.1 Air Temperature**

Rahovec region is characterized as one of the best places in Kosova for agriculture, because of good arable land and weather conditions. It has a moderate continental climate with a Mediterranean influence. A yearly rainfall is 765mm and the average temperature is 11.68°C. The hottest month is July with soaring temperatures up to 38.5°C, and during the winter the temperatures can drop up to -14.5°C (MDP, page 71)<sup>17</sup>.

This region's temperatures are suitable for vine cultivation. The vegetation period starts from 7 April and it ends on 31 October, so 270 days of vegetation allow cultivation of different varieties of vegetation.

In the Table 1. below are listed some temperatures from the last decade.

Table 1. Temperatures throw years

Year	Min.	Max.
1995	-15.5	34.0
1996	-9.0	37.5
1997	-9.5	39.0

### 2.5.2 Sunny days

The sunlight reaches its strongest peak in July and August with 290 to 300 hours per month, 66-67% of overall day. During the year there are approximately 2079 hours of sunlight, and during the vegetation period 1633 hours, which is an optimum time for viniculture.

The percentage of cloudy days as a main sunlight conditions, changes during the year in the opposite spectrum of the sunlight. It is mostly cloudy in January (7%) and it decreases in August (2.7%) and during the winter it increases again. As you can see the cloudiest days are in November and May (3-4 days a month), and less in June and September (10-13 days).

### 2.5.3 Rain falls

The amount of the rain falls, especially during the vegetative period, alongside the air and temperature is the most important element in vine development. In Rahovec the average rainfall is 719mm from which 400mm during the vegetation period (April-October), and 319mm during the winter time.

The rainfall reaches its maximum in November with 100mm, and then it decreases until March, and starts to increase again in the spring until June (82mm maximum). The smallest amount of rainfall is in August (40mm). The yearly differences in rainfall are 60mm or 8.3%. The yearly rainfall amount tells us that the viniculture region of Rahovec is in the boundary of Mediterranean and Continental climate. During the year, there are 130 days with rainfall or more than 0.1mm. These figures reflect the November – June stage and it is evenly spread, with 11-13 wet days a month, including July. In October, there are 7-8 days a month. On average during the year, there are 24 days with intense rainfall, with up to 10mm in a day. The snowing happens during the winter from November to March. During the year, there are in average 34 days with snow and its frequency reaches highest point in January (12 days a month).

<sup>17</sup> <https://kk.rks.gov.net/Rahovec/getattachment/Home/PZHK--Rahovec-final.pdf.aspx>

#### **2.5.4 Air moisture**

The best indicator of air moisture is the relative air moisture, which happens during the air saturated with vapor. The best time to measure air moisture is at 2pm, which is the hottest part of the day and it has the minimum moisture. The relative air moisture changes during the year, with the highest peak in December and January (85-88%) and the lowest in July and August (66-67%). During the vegetation period it varies from 66-77%. While the average relative moisture of the air at 2pm is very low during the all months, even during the vegetation period, which varies from 50-61%. The lowest point is in April (14%).

#### **2.5.5 The soil**

The soils factor alongside the climatic one has a huge say when it comes to the viniculture. This region has different soil categories, where most of it is suitable for this culture. The quality of the soil in this region has been shaped by different geological influences. The most important factors that have shaped the soil here are position, weather, vegetation and hydrography. The best soil types for the vine are Vertisol (Smonicë), pseudo clay, diluvium, Kambisol, Kalkokambisol, Koluvijum, Vertisol e eroduar (Smonicë), etc.<sup>18</sup>.

The basic geological ingredient of the soils here is: limestone, serpentine, etc. This geological ingredient has influenced the formation of different types of soil in this region.

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<sup>18</sup> MAFRED, Prishtina Agriculture University, Municipality of Rahovec, Summary of work, First Symposium of, Viniculture and Vine making of Kosova, Koha print-Prishtine, September 2005, page 38-39

### 3 WORLD CONTEXT OF WINE CELLARS

In the world today we can find many wineries design from famous architects, as are wineries in Austria (Loisium Langenlois in Austria;), in Italy (Ceretto Aziende Vitivinicole, Alba, Piedmont<sup>19</sup>; Villa Vignamaggio, Greve in Chianti, Tuscany; Planeta's Cantina dell'Ulmo, Sambuca di Sicilia, Sicily<sup>20</sup> ), in USA (The Dominus Winery in NAPA valley, California;), in Spain (Valdemonjas Winery by Agag+Paredes projects from a hillside in Spain<sup>21</sup>), etc. In this paper I selected to present three of them as examples, which are explained in material below.

#### 3.1 The Dominus Winery in NAPA valley, California, USA

The Dominus winery built in Napa, California in the USA, was designed by the Swiss architects Jacques Herzog and Pierre de Meuron. The property which is owned by Christian Moueix has called for greater attention of the media in the year of 1997 when the winery celebrated its inauguration; not only for the reason that this winery was a referring point for the new architecture but because it also resembled globalization on the whole. Mr. Moueix left his sound and secure villa in France only to explore new opportunities in the US wine market.

“The Dominus Estate winery is perfectly integrated into its landscape, offering panoramic views of the vineyard and hillsides. With its gabion facade, the winery seems to dissolve into its surroundings, an intentional effect, underscoring the importance of the vineyard in the production of a great wine.”<sup>22</sup> For Herzog and de Meuron's, the winery was the first project outside of Europe.

The winery it has dimension: 446' x 26' x 80' (136m x 8m x 24m), tilt-up concrete structure with gabion exterior cladding. Gabions are filled with basalt rocks from the nearby American Canyon, which provide insulation from heat and cold and allow natural light to filter into interior spaces.

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<sup>19</sup> <http://www.ceretto.com/en/experience/art-design>

<sup>20</sup> <http://www.italymagazine.com/featured-story/three-best-wineres-visit-italy#sthash.ShvwZ3o0.dpuf>

<sup>21</sup> <https://www.dezeen.com/2016/12/19/valdemonjas-winery-agag-paredes-ribera-del-duero-spain-architizer-a-awards/>

<sup>22</sup> <http://dominusestate.com/the-estate/architecture/>



*Figure 5. Views from Dominus winery<sup>23</sup>*

The building has an interesting architecture, located in the middle of vineyards, incorporated very beautifully within nature. Has built with a combination of materials: the concrete construction and ascribed on the outside by tubular frameworks made of steel in the shape of baskets filled with stones. The buildings' function is agricultural, it has the function of a wine cellar, and it serves for administration purposes and as a wine warehouse.

<sup>23</sup> <https://www.pinterest.com/marialucimara/dominus-winery-herzog-de-meuron/>

# DOMINUS ESTATE WINERY

YOUNTVILLE, CA - NAPA VALLEY

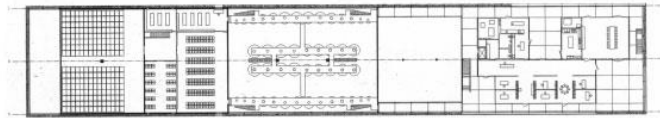
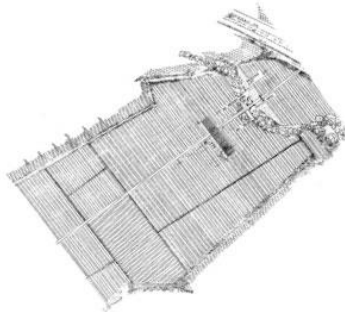


**Architects:** HERZOG + de Mueron  
**Clients:** Christian Moueix and Cherise Chen-Moueix  
**Location:** Yountville, Napa Valley, California, USA  
**Use:** Winery, Agricultural, Offices, Warehouse  
**Project year:** 1995. (first project in United States)  
**Year of construction:** 1996-98.  
**Cost:** \$5,400,000  
**Square footage:** 50,000 sq ft (4,600 m2) structure  
**Useable surface area:** 4,100 m2.  
**Soil type:** Loam, Heavy Clay, Gravelly Volcanic  
**Site:** 124 acres, 103 acres planted  
**Size:** 333' long, 82' wide, 30' high  
**Materials:** reinforces concrete and gabion cladding on steel tube frame

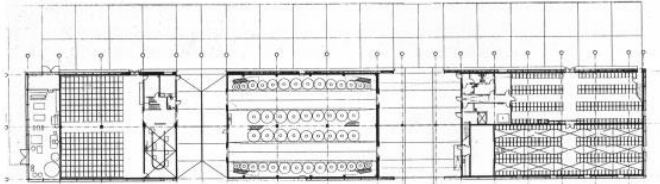


**Sustainability:**

- erosion controls protect the hopper creek watershed, home to Native Salmon and other species
- dry farming conserves water
- passive cooling of the winery reduces energy consumption
- cover crops naturally replenish the soil, prevent erosion and support beneficial insects for pest management
- electric golf carts conserve gasoline, minimize dust and reduce soil compaction
- owl boxes and bluebird houses provide homes to natural predators of vine pests and rodents



Upper level plan



Ground level plan



East elevation



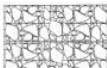
North elevation



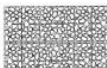
Longitudinal section on East elevation



Office level - largest stones



Mezzanine level - medium stones



Cellar level - smallest stones

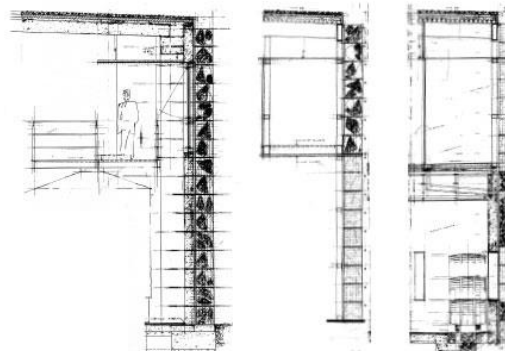


Figure 6. Planimetry of Dominus winery<sup>24</sup>

<sup>24</sup> <https://www.pinterest.com/pin/199636195958626093/>

### 3.2 LOISIUM LANGENLOIS in Austria

Loisium Langenlois in Austria builds on 2001-2006 different from functioning "Dominus winery" Napa, USA, is conceived as wine cellars combined with Hotel, Resort & Spa.

Famous architect Steven Holl, one of the most renowned contemporary architects, designed the LOISIUM hotel, the WeinErlebnisWel. The hotel has 82 hotel rooms, lobby, bar, cigar lounge, restaurant, conference rooms and Aveda Spa, a perfect symbiosis, the building blends into the landscape and gives the wine a new setting. The size of the building is 6,999.97 m<sup>2</sup> (75,347 sq. ft.)

Located on the edge of the town of Langenlois, 60 minutes west of Vienna, on a gently south-sloping vineyard, a new wine center and visitors' facility is built celebrating the rich local heritage of a magnificent wine vault system. This historic subterranean network, which includes stone passages that are 900 years old, underlies the urban plan of the town. The building is divided up into three areas: under the earth – the cellars accessible to visitors, in the earth – the wine/visitor center, and above the earth – the hotel with a fine restaurant, conference and meeting facilities, an Aveda spa and 82 guest rooms which are in perfect harmony with the wine.

Like the grid of the city, the geometric spacing of the vineyard rows is continuous through the landscape connecting the three elements. The 53m X 53m square plan is aligned with the strict geometry of the surrounding vineyard rows. Offering a variety of activities and room types, the Loisium Hotel Wine and Spa Resort offer guests and visitors a variety of experiences. Earth like materials and palette combined with the views of the surrounding landscape create a strong connection and relationship of the hotel to its context. Public functions including the lobby, a wine themed restaurant, bar, cigar lounge, conference and meeting facilities, and wellness and spa area are located on the ground floor with views open to the surrounding vineyard. An inviting courtyard and terrace provides outdoor seating. Eighty-two (82) guest rooms are located in two upper floors. While the ground floor is transparent and open, the upper floors are more private.

The LOISIUM Wine & Spa Resorts are resorts located in two distinct wine regions: Loisium in Langenlois, Lower Austria, and the Loisium in Ehrenhausen, Styria.

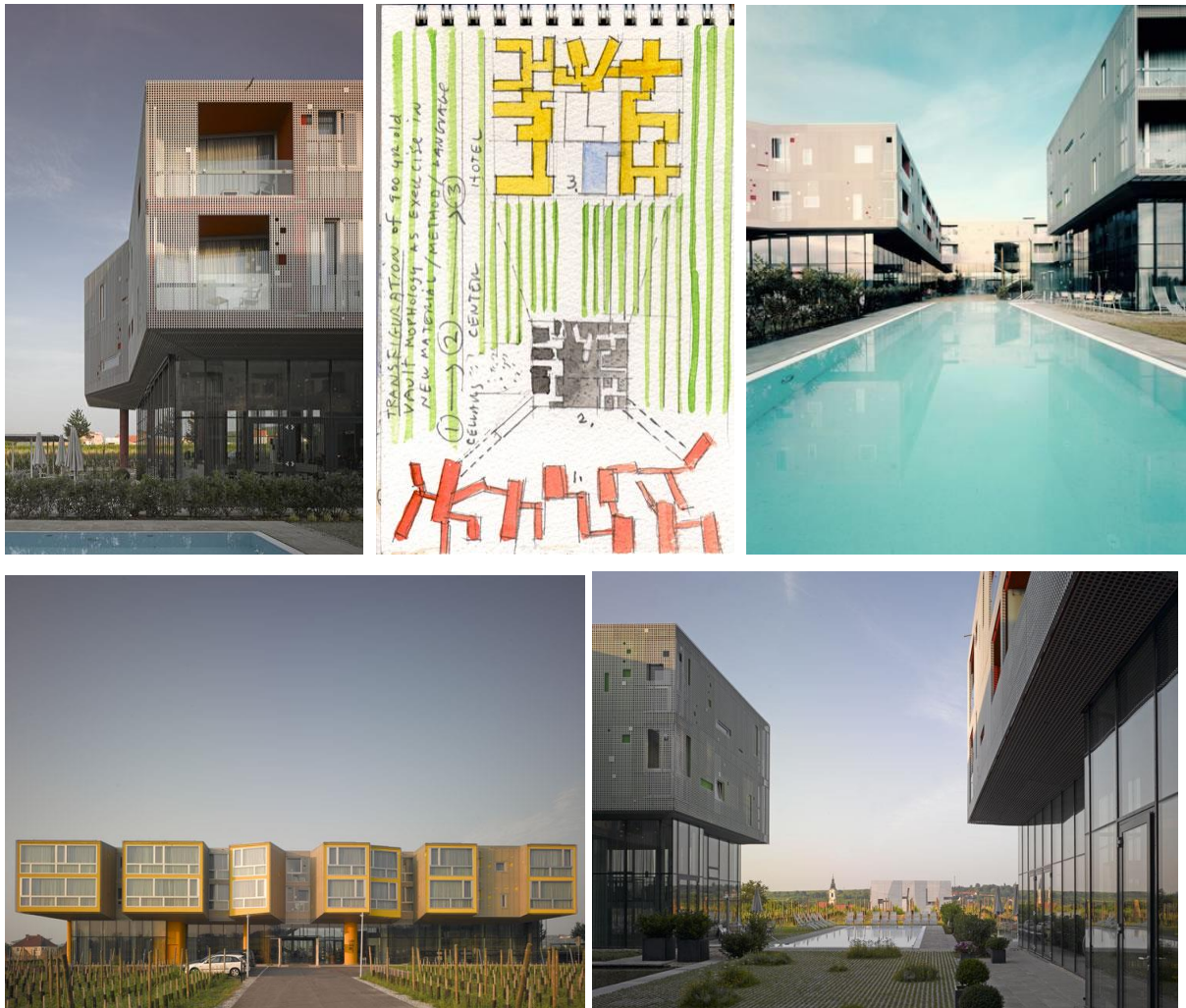


Figure 7. Views from hotel Loisium Langenlois<sup>25</sup>

The cellar, apart from the cultivation of grapes, wine production and other grape products is combined with touristic activities. The cellar is open for tourists; it has its own hotel, which offers comfortable accommodation by combining the stay of tourists with other touristic activities. Tourists depending on their length of stay have the opportunity to do grape harvesting of their own, to see the process of grape processing, wine production as well as cease relaxation at the Resort & Spa offered by the hotel. In addition, the tour package is combined with many other activities outside of the cellar such as a walk in nature, jogging and picnic, cycling, an opportunity to play golf, listen to music, a possibility to visit the cultural-historical objects of the surrounding area, etc.

<sup>25</sup> [http://www.loisium.com/en/langenlois/news-resort/?&utm\\_source=google&utm\\_medium=cpc&utm\\_term=loisium%20langenlois&utm\\_campaign=EN%20-%20BRAND%20Langenlois&gclid=Cj0KEQjwi7vIBRDpo9W8y7Ct6ZcBEiQA1CwV2IohO7Dadwb9Ic\\_hujufPoXCIqSFAliO4PgEQBJo84QaAvQb8P8HAQ](http://www.loisium.com/en/langenlois/news-resort/?&utm_source=google&utm_medium=cpc&utm_term=loisium%20langenlois&utm_campaign=EN%20-%20BRAND%20Langenlois&gclid=Cj0KEQjwi7vIBRDpo9W8y7Ct6ZcBEiQA1CwV2IohO7Dadwb9Ic_hujufPoXCIqSFAliO4PgEQBJo84QaAvQb8P8HAQ)





Figure 8. Views from exterior and interior of Loisium Langenlois hotel<sup>26</sup>

The cellar has its own web page with all of its information listed in it, including contacts, accommodation reservations and the possibility for the tourists to make its own selection of activities during the stay in Loisium Langenlois hotel and the wine cellar. Part of Loisium it is also Loisium Southern Styria. LOISIUM Ehrenhausen is located directly on the oldest wine

<sup>26</sup> [http://www.loisium.com/en/langenlois/news-resort/?&utm\\_source=google&utm\\_medium=cpc&utm\\_term=loisium%20langenlois&utm\\_campaign=EN%20-%20BRAND%20Langenlois&gclid=Cj0KEQjwi7vIBRDpo9W8y7Ct6ZcBEiQA1CwV2IohO7Dadwb9Ic\\_hujufPoXCIqSFAliO4PgEOBJo84QaAvQb8P8HAQ](http://www.loisium.com/en/langenlois/news-resort/?&utm_source=google&utm_medium=cpc&utm_term=loisium%20langenlois&utm_campaign=EN%20-%20BRAND%20Langenlois&gclid=Cj0KEQjwi7vIBRDpo9W8y7Ct6ZcBEiQA1CwV2IohO7Dadwb9Ic_hujufPoXCIqSFAliO4PgEOBJo84QaAvQb8P8HAQ)

trail in Austria, for 2.5 kilometers, the “neutral road” forms the border between Austria and Slovenia.

Some opinions about Steven Holl's Loisiium from different people:<sup>27</sup>

*'Steven Holl's Loisiium project is an original and unique total strategy, already a landmark in architectural history'.*

– Dietmar Steiner, *Domus* 893, June 2006

*' Standing in sharp contrast to the baroque houses that line the streets of Langenlois, Austria, the Loisiium hotel and wine spa is a colorful, boxy assemblage of glass and aluminum. The building, designed by Steven Holl, is the culmination of a larger project begun three years ago, with the reconstruction of a historic wine vault system and the creation of a wine centre for visitors. Not yet a year old, the hotel has already become a modernist landmark in this bucolic wine-growing region about an hour west of Vienna'.*

– Josephine Minutillo, *Azure*, May 2006

*'Steven Holl's intoxicating mix of wonky facades and triple-height voids at a winery project in the sleepy Austrian village of Langenlois has left locals drinking the architect's health'.*

– Naomi Stungo, *RIBA Journal*, December 2003

*'American architect Steven Holl has created a striking, aluminum clad hotel, inspired by the shape of a crumpled wine foil. The overall impression is one of a consistency of surprises, as new details emerge, becoming clearer with the passage of time'.*

– Guy Dittrich, *Sleeper*, June 2006

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<sup>27</sup> <http://www.stevenholl.com/projects/loisiium-hotel>

### 3.3 Wine Pavilion R. Lopez De Heredia (Zaha Hadid Architects) in Haro, Spain

Around 1877 Don Rafael Lopez de Heredia began the design and construction of the complex that today is known as the López de Heredia bodega (winery), the oldest in Haro and one of the first three bodegas in the Rioja region, Spain. Today the estate covers an area of 53,076 square meters including 19,718 square meters of buildings, 3,433, 41 square meters of which are underground cellars up to 200 meters long and descending to an overall depth of 15 meters. 12.900 Bordeaux oak barrels are stored in the heart of a mountain within cells. Each part of the cellars built and added into over a period of a hundred years, has been given a name. These names are: "La Bodega Vieja" (The Old Cellar), "La Bodega Nueva" (The New Cellar), "La Bisiesta", "La Dolorosa", "La Bodega de Reservas", "El Caladillo", "El Frontón" (The Pelota Court), "El Cementerio" and "El Calado"

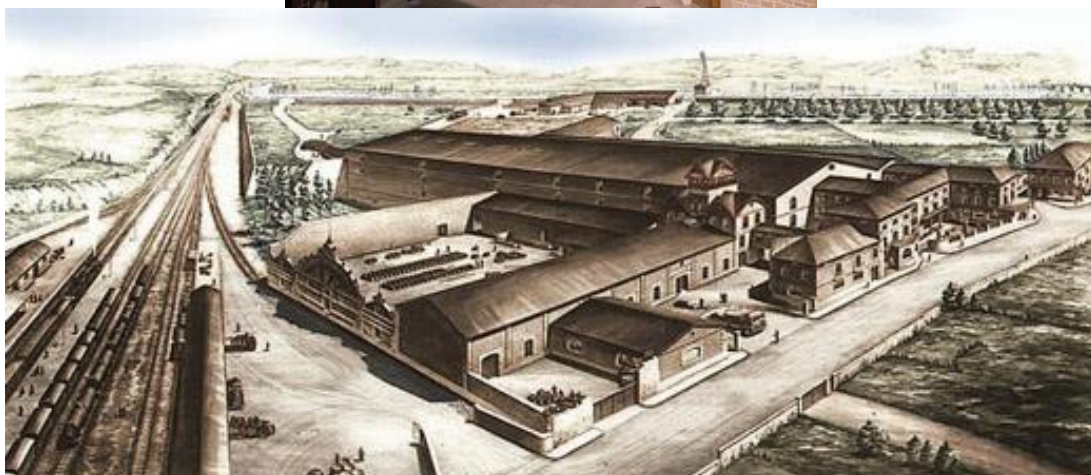


Figure 9. View of the winery with its tower "Txori-Toki" tower<sup>28</sup>

<sup>28</sup> Source: <http://www.lopezdeheredia.com/english/arquitectura/arquitectura.html>

During 2001-2006 in Haro was build a Pavilion for Rafael Lopez de Heredia Vina, which have 800m2. The owners of the winery engage Zaha Hadid Architects to design this project, a design to safeguard one of Lopez De Heredia's treasures. Beside the restoration of their great-grandfather's shop, the request of the family was to restore the modernist stand and use it in the Food and Drink Fair of Barcelona to celebrate 125th anniversary of the winery. Originally commissioned as a new pavilion to contain an older pavilion restored from the early 20th century where this becomes a bridge between the past, present and future evolution of its world – famous bodegas.<sup>29</sup>

The stand had to be located in the open air. For this reason, and so that the stand could recover its former splendor and utility, they thought of creating an exterior structure that would cover it and protect it. (See photo below).

Made from timber and designed in a fine-de-siècle style, the old pavilion became a jewel within the new container<sup>30</sup>. Like a series of Russian dolls, the new pavilion itself would eventually be housed within the new extension at the bodegas – creating another layer within the larger composition.

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<sup>29</sup> <http://www.lopezdeheredia.com/english/arquitectura/frasca.html>

<sup>30</sup> <http://www.zaha-hadid.com/design/r-lopez-de-heredia-wine-pavilion/>

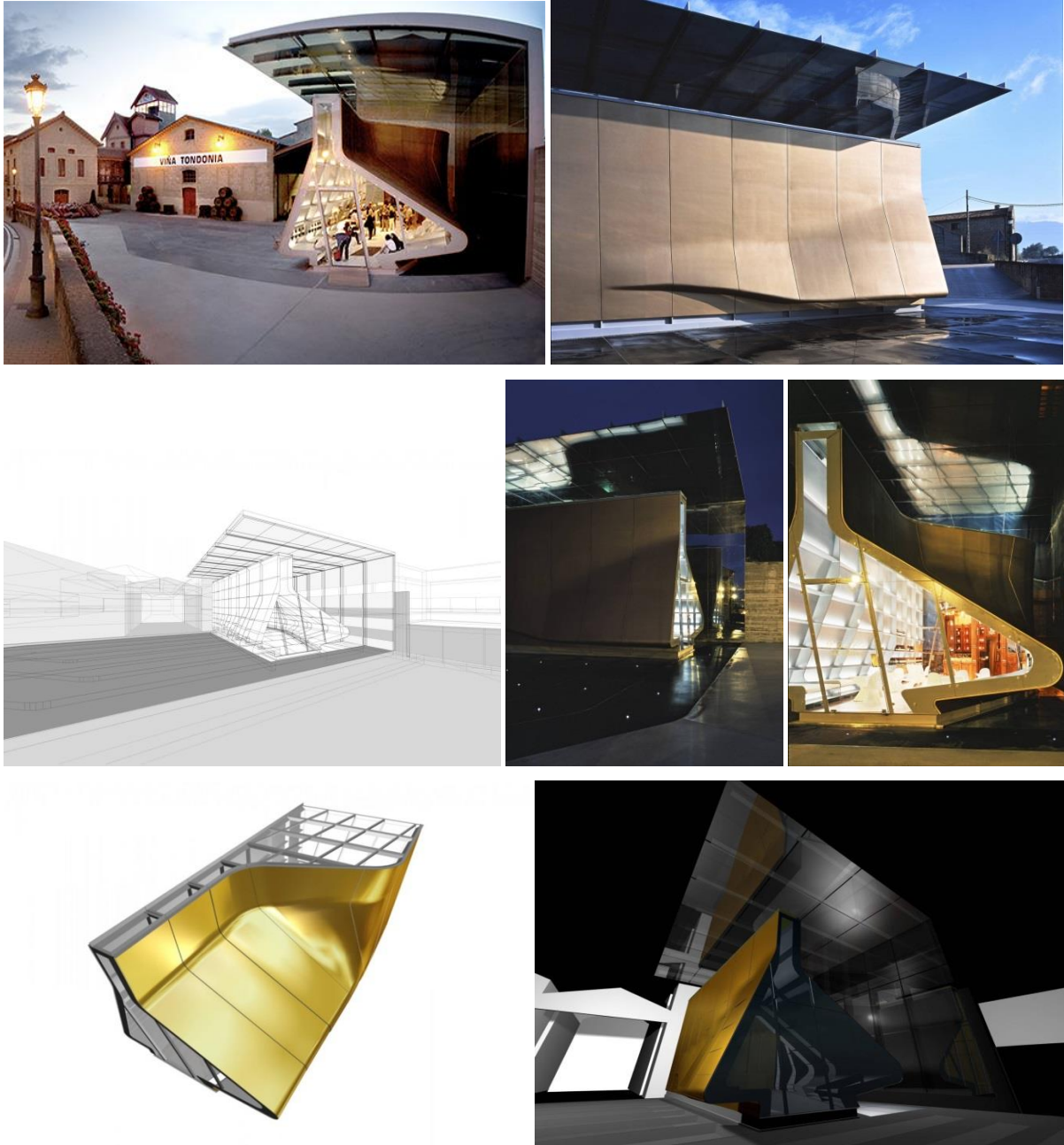


Figure 10. Zaha Hadid<sup>31</sup> Stand at López de Heredia<sup>32</sup>

<sup>31</sup> Source: <http://www.zaha-hadid.com/design/r-lopez-de-heredia-wine-pavilion/>

<sup>32</sup> Source: <http://www.lopezdeheredia.com/english/arquitectura/frasca.html>

## 4 KOSOVO CONTEXT OF WINE CELLARS

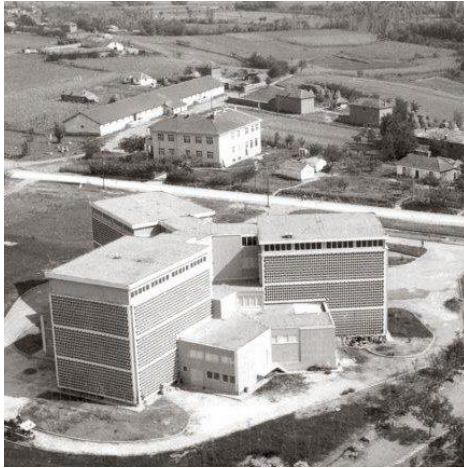
In the Kosovo territory before the Kosovo 1999 war period, Kosovo had wine cellars not only in Rahovec. These cellars existed in Theranda (Suhareka), Malisheva, Gjakova, Krusha e Vogel, Landovica (Prizren) and Istog. However, today, none of these cells are functional except for the ones in Rahovec. The last Kosovo war highly impacted the economy of this region and thus, the cellars which were considered to be governmental properties before started to get destroyed and be left in the mercy of time. Also, the privatization process had a huge impact on these cellars not to get reactivated because not all of them have been privatized a special spin-off. Except for the “StoneCastle” and the “the Old Cellar” (Bodrumi i Vjetër) in Rahovec which are highly functional today the other ones we can easily say that they do not function at all or nor do they exercise any other activity.

### Picture of the wineries on Kosovo territory



*Figure 11. Landovica, Prizren<sup>33</sup>*

<sup>33</sup> Source: Teuta Jaha-Hoxha, 2017



a)



b)



c)



d)



e)

Figure 12. Vinery in Suhareka<sup>34</sup>

<sup>34</sup> Source: Fig. a) <http://www.albaniapress.com/lajme/9747/SI-DUKEJ-THERANDA-NE-VITET-50-ta.html>;  
Fig. b) <http://enologjia.com/agroKosova-holding-suhareke/>; Fig. c), d) and e) Teuta Jaha-Hoxha, 2017



Figure 13. Krusha e vogel, Prizren<sup>35</sup>

Based on data from the winery institute in Rahovec, 24 wineries are licensed where 18 are located in Rahovec, two in Hoqa e Madhe (Rahovec), two in Gjakova, one in Prizren and one in Suhareka.

Table 2. Register of licences wineries from wine institute<sup>36</sup>

Nr.	Emri i kompanisë	Rruga, Street	Selia
1	"Stone Castle Vineyards&Winery"	Brnjaka p.n.,	Rahovec
2	NTP "Haxhijaha"	Gëzim Hamza	Rahovec
3	NTP "Muja"	Xhelal Hajda – Toni nr. 13	Rahovec
4	Shpk" Rahoveci"	Sadik Shala	Rahovec
5	Shpk" Dea"	Kongresi i Manastirit nr. 3	Gjakovë
6	NTP " Agro-alf"	Vllezrit Frashëri	Rahovec
7	NTP " Rahvera AB"	Hasan Prishtina	Rahovec
8	NTP" Daka"	Xhelal Hajda	Rahovec
9	N.T.SH. "BAHHA"	Bajram Veliu nr. 34	Rahovec
10	NTP " Sefa"	Xhelal Hajda	Rahovec
11	"Biopak – Shpk"	Rruga Tranzit	Rahovec
12	N.P.SH. "ALBATROS"	"Besim Shala" p.n.	Prizren
13	"Kosova Wine sh.p.k	" Vëllezrit Haradinaj"	Rahovec
14	N.P.T " Altini"	"Xhevat e Alajdin Elshani"	Rahovec
15	N.T.SH. "Safran &Ko"	Cërmjan	Gjakovë
16	"Theranda Wine" sh.p.k.	Shirokë, Zona Industriale	Shirokë
17	P.T.P "Hoçanska Vina"	Hoqë e madhe	Hoqë e madhe
18	"SUNNY HILLS"Sh.p.k.	Gëzim Hamza	Rahovec
19	Tradita sh.p.k	Radostë	Rahovec
20	T.P.P. " Vinarija Manitašević	Hoqë e madhe	Hoqë e madhe
21	N.P.T " Astra - Vera"	Kullat Binjake	Rahovec
22	"IGOR VEČEVIĆ IB."	Hoqa e Madhe	Rahovec
23	"GZIM VUQETRNA B.I"	8 Dëshmoret e Pashtrikut p.n.	Rahovec
24	" Stone Castle" L.L.C.	Brnjaka p.n.,	Rahovec

<sup>35</sup><https://www.facebook.com/138416789554541/photos/a.463819363680947.103649.138416789554541/844331648963048/?type=3&theater>

<sup>36</sup> source: Department of vineyards and vinery of MAFRED, Rahovec





Figure 14. Some of the wineries in Rahovec presented in Orto photo

In the year of 2012 in the South region of Kosovo, Rahovec in particular, initiated and established a project in cooperation and partnership with the municipality of Suhareka and Malisheva. This project was successfully supported and funded by the EU managed by the European Union Office in Kosovo, called “Wine Routes and the Development of Wine Culture in the South of Kosovo”. As part of the project an informative catalogue has been established which serves as specifically for tourists called “Wine Tourism in South of Kosovo” (Figure 15) which gives out information about the wine cellars and its locations. Wine routes include the route that connects Malisheva, with Rahovec and Suhareka. Under this research project which has been done over the wine cellars in this region, also it has been invested in the vertical signalization of the location of the wineries specified along the “Wine routes” where a wine house has also been established (Figure 16).

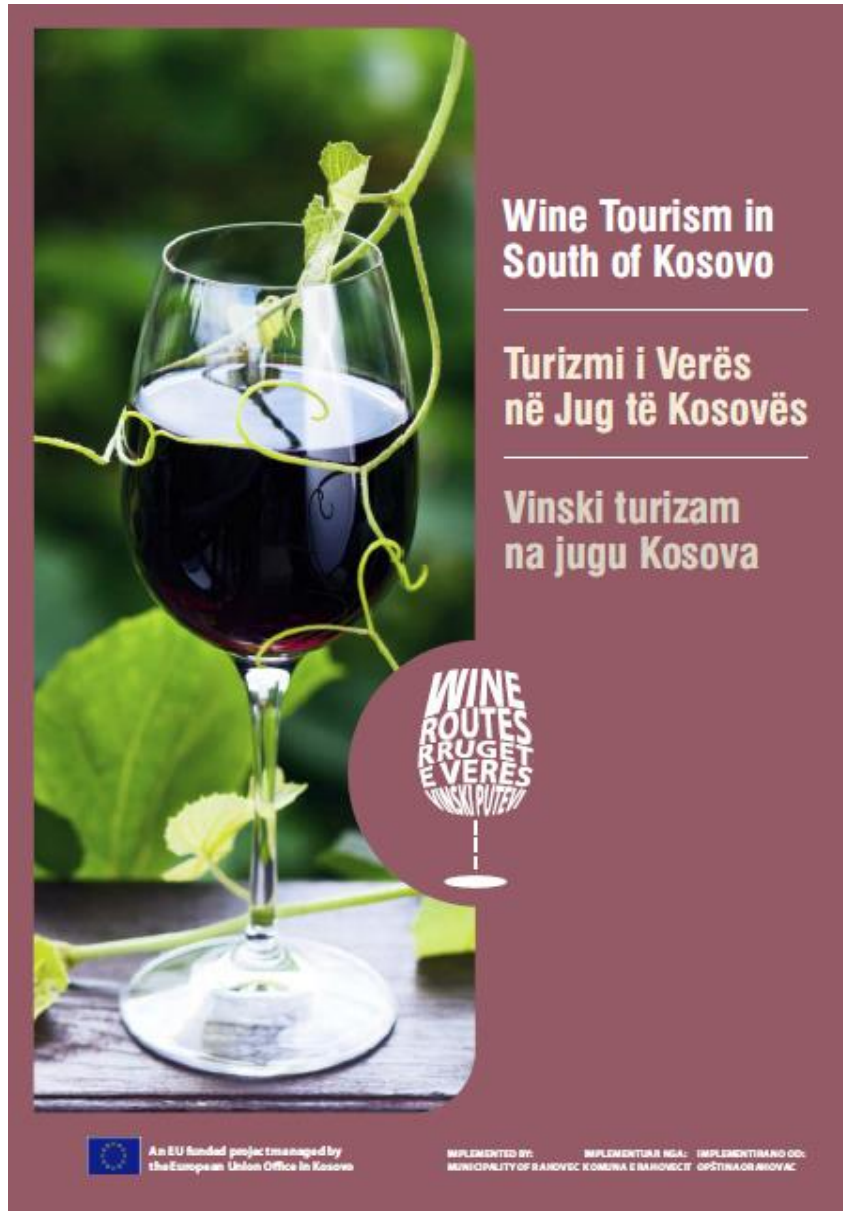


Figure 15. Cover of catalogue “Wine tourism in south of Kosovo”<sup>37</sup>

Although, the establishment of the “Wine House” is located in the area along the Xërxë - Rahovec road, close to the Stone Castle winery, where you can buy and taste wines of the whole southern region. The building has an architecture of a traditional house completed on the outside with a wooden facade and stones and on the inside was used bricks as the vanishing of the wall.

<sup>37</sup> Rahovec Wine Routs Catalogue, cover page: “Wine tourism in south of Kosovo”.



*Figure 16. Wine house, Rahovec<sup>38</sup>*

The wine house has a wine tasting lab and lab analysis as well as a wine tasting room. This house also has a wine showroom, where tourists can buy wine, raki and the grape juice called “Shira”.

Every year on the end of the first week of September (7, 8, 9 of September) there is an organizing of the Grape Harvesting (Figure 17) which has now become traditional in the

zone. The festival welcomes local and regional visitors because each year it has the goal of expanding internationally.

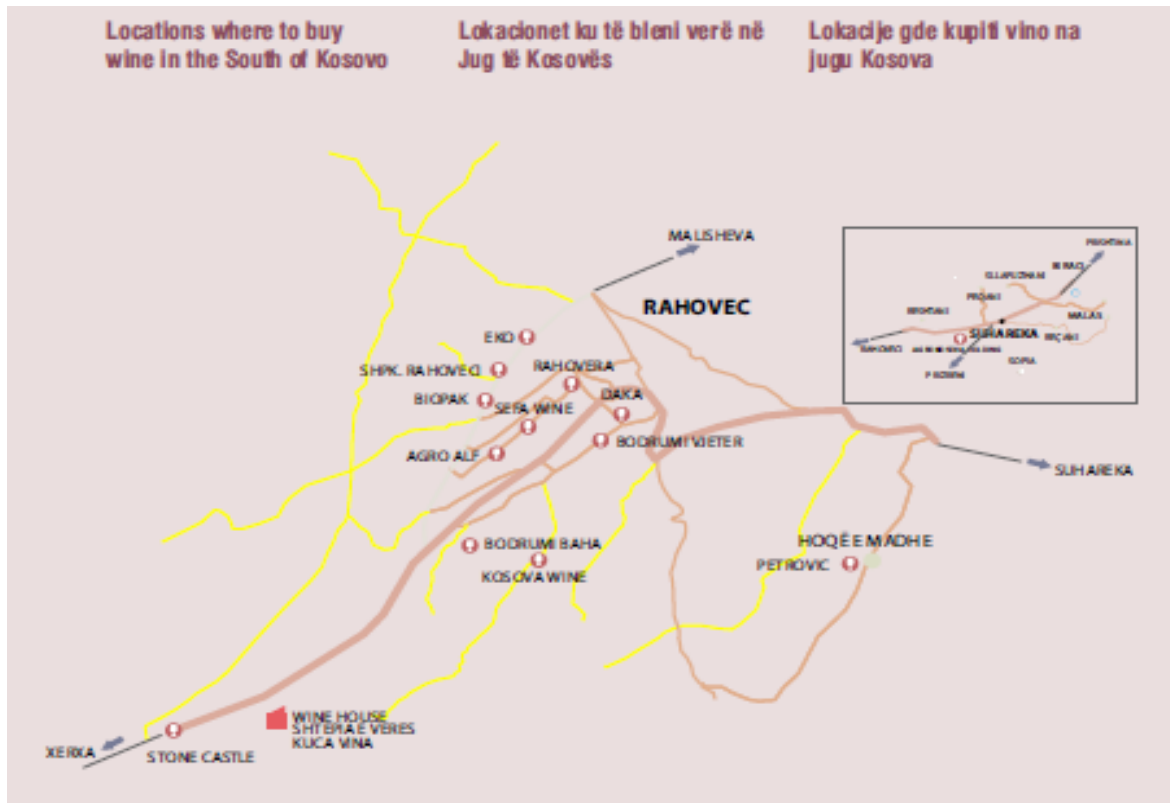


Figure 17. Wine festival picture and vineyards<sup>39</sup>

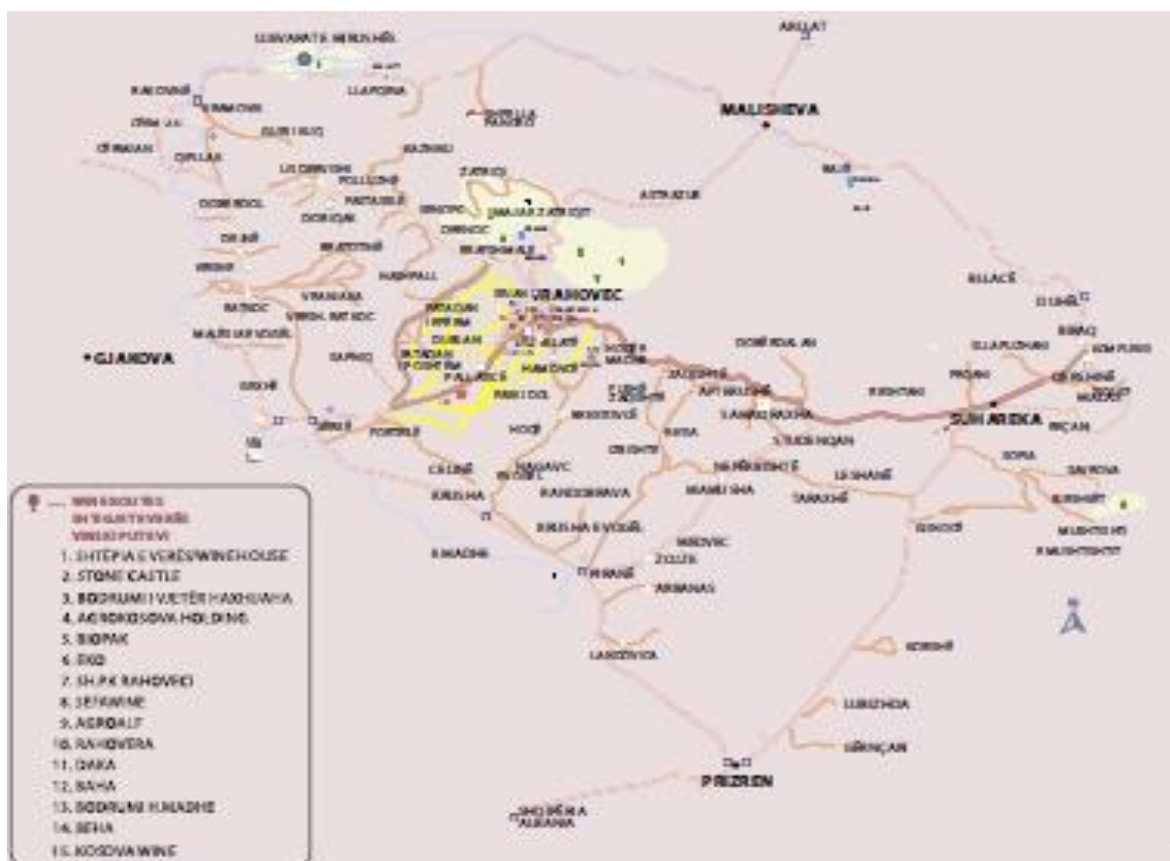
The project has also produced maps which are presented in the catalogue (Figure 18/a) where the identifications of the cellars have been made to help orientation of the tourists.

<sup>38</sup> Rahovec Wine Routes-Catalogue: “Wine tourism in south of Kosovo”, p.10

<sup>39</sup> Rahovec Wine Routes-Catalogue: “Wine tourism in south of Kosovo”, p.11



a)



b)

Figure 18. Map from wine catalogue “Wine tourism in Kosovo”<sup>40</sup>

This map includes a major one (Figure 18/b) which describes its wine routes starting from Malisheva, through the Rahovec cellars and up to the final point in Suhareka. Wine roots have an estimated length of 33 kilometers, but its total surface of the wine routes is bigger, since in this part exist other producers, as well as other tourist attractions.

The vertical identification signpost along with some signposts of the map as in Figure 19 and Figure 20 are placed along the road of wine routes that shows characteristic zones of the region especially the region of Rahovec. However, negative is that the map shows the places where you can buy the wine, but it does not exactly clarify the location where you may be at, where you have stopped.



Figure 19. Vertical signalisation located near vineyards in entrance of Rahovec city<sup>41</sup>

<sup>40</sup> Rahovec Wine Routes-Catalogue: “Wine tourism in south of Kosovo”, p.7-8

<sup>41</sup> source: Teuta Jaha-Hoxha,2017



*Figure 20. Vertical signalisation of wineries “Stone Castle”<sup>42</sup>*

In addition, a tourist leaflet has been published where through a map (Figure 21) it is very clear to see the points of interest about the city of Rahovec. In this map, you will be able to see that many wine cellars including the industrial wineries and the family wineries are listed on it, accommodation, restaurants and other interesting historical points of interested have

<sup>42</sup> Source: Teuta Jaha-Hoxha, 2017

been listed there as well. This map can be found online and at the Tourism Information Center but not in town, hence the reason why it should definitely be presented on the information boards in the city of Rahovec.

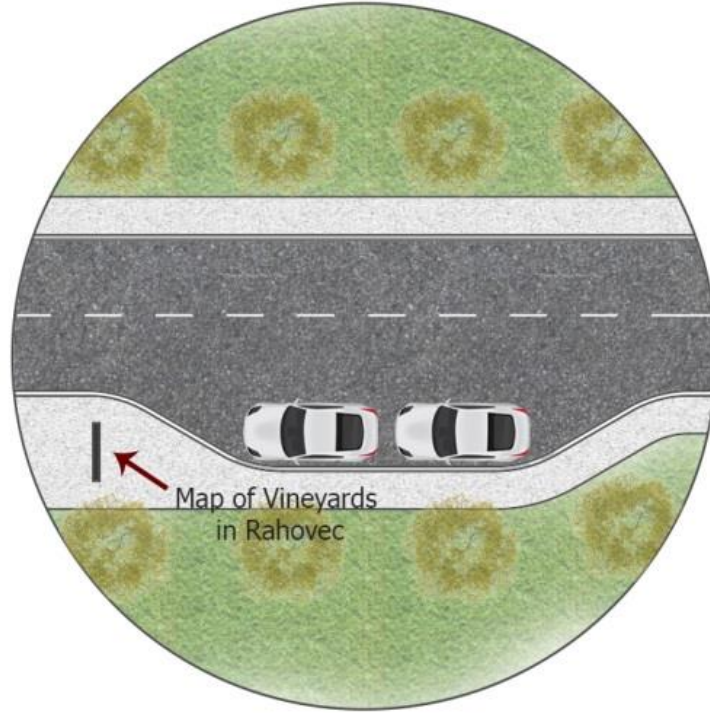


Figure 21. Tourist map of Rahovec<sup>43</sup>

If you come in Rahovec and you are with car, you are willing to visit your point of interest and you look for space to stop in front of vertical signalization. There for it was important to identify stopping point to plan and design them. I design as example stopping point with minimum two parking places where visitors can park car, to read the map, find where they are that moment and where they went to go (Figure 22).

<sup>43</sup> [http://www.kosovoguide.com/repository/docs/Rahovec\\_map\\_en\\_web.pdf](http://www.kosovoguide.com/repository/docs/Rahovec_map_en_web.pdf)





*Figure 22. Proposed detail of car stop in front of vertical signalization map with wineries in Rahovec*

Locations where are proposed to be located parking places also vertical signalization together with a map of the winery's in the territory of Rahovec municipality are:

- Regional roads in three entrances to the Rahovec: from Prishtina, from Xërxë and from Suhareka;
- Roundabout in city center;
- In entrance to Hoqa e Madhe;
- Near a petrol station "Kosova Petrol" in front of Hotel Park and in front of all winery's which are in the map.

Some of the problems find in existing vertical signalization of the maps are the reason why it has been suggested for a new proposal for this informative area as it is new design in Figure 23. This is the very first challenge, which the tourist is being faced when visiting Rahovec. He/she has to know where they are in Rahovec and where they want to go, thus, there have to exist map that is very stable and with detailed information of the area. The map below in Figure 23, it is designed in that way have it can be readable and clear for everyone. Visitor will now where it is that moment where is reading map showing with sign "You are here" (or" I am here").

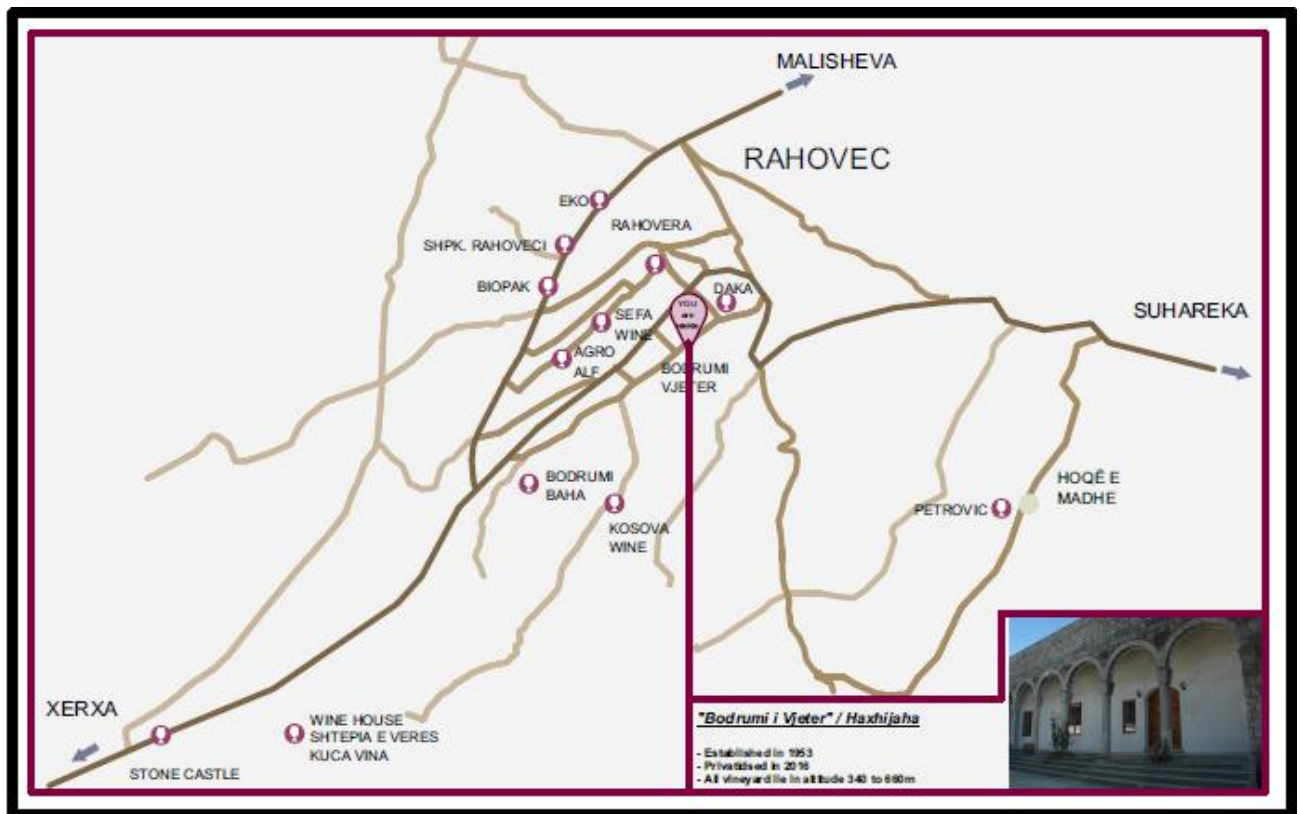


Figure 23. Proposed new map of Rahovec with locations of winery for stops

#### 4.1 Wine cellars in Rahovec municipality

*“Wine and architecture have a long history together. If architecture is frozen music, then wine is liquid weather. Each transmutes something into a whole greater than the sum of its parts. But beyond this metaphorical kinship, wine has often inspired (and funded) the creation of grand architecture, and vice versa.”<sup>44</sup>*

In the Rahovec vinedresser area for processing and production of wine grapes, from 24 private companies licensed by MAFRD<sup>45</sup> mention and presented in Table 2. I analyzed four of them in architectural aspect, those are:

- “Stone castle”;
- “Biopak” Shpk;
- “Kosova wine”;
- “Bodrumi i vjetër”.

<sup>44</sup> <http://www.winesur.com/blogs/wine-and-architecture,dt.14.09.2012>

<sup>45</sup> MAFRED- ministry of agriculture, forestry, and rural development

#### 4.1.1 “STONE CASTLE” Wine cellar

Ex. N.B.I Rahovec, was established in 1953 because of the successful continuity of this activity in Rahovec. By the year 1957, the company has been part of the international wine market. Over the years (80) has taken an export about 32 million liters of wine in the German market.

Stone Castle Vineyards and Winery L.L.C. Headquartered in Bërnjakë, Rahovec is privatized in July 2006 where the agreement is signed and strengthened between the Kosovo Agency of Privatization and the new owners for the sale of the former “NBI Rahovec” in Rahovec.



a)



Imagery ©2016 CNES / Airbus, Map data ©2016 Google 20 m b)



c)

Figure 24. a & b location of wine cellars in google map, c) building of wine cellar “Stone castle”<sup>46</sup>

According to the contract (n.531 of date 31.07.2006) is transferring ownership for 99 years to the Stone Castle Vineyards and Wine L.L.C. By hereditary (carried over from former NBI Rahovec). Property of Stone Castle Vineyards and Winery includes an agricultural area of 2200.14 ha. Where, construction and technological facilities catch surface on 23ha03ari13m<sup>2</sup>. Agricultural land is located throughout the municipality of Rahovec. Viticulture and Vine

<sup>46</sup> Source: a) and b)

[https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV7IE7JEib40x4CDbpMU&hl=en\\_US&ll=42.367236425603174%2C20.618199810203578&z=17](https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV7IE7JEib40x4CDbpMU&hl=en_US&ll=42.367236425603174%2C20.618199810203578&z=17); and c)

[https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV7IE7JEib40x4CDbpMU&hl=en\\_US&ll=42.368243134077844%2C20.619261964973475&z=16](https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV7IE7JEib40x4CDbpMU&hl=en_US&ll=42.368243134077844%2C20.619261964973475&z=16);

cellar "Stone Castle" in Rahovec is the largest in Kosovo and one of the largest in the Balkan region.



a)



b)

Figure 25. Stone Castle: a) Before renovation, b) After renovation-in 2016<sup>47</sup>

The company is committed to continue the long tradition which with fully right, boasts population of this side, with grape cultivation and wine production in the Rahovec Valley.

<sup>47</sup> Source:

[https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV71E7JEib40x4CDbpMU&hl=en\\_US&ll=42.368243134077844%2C20.619261964973475&z=16;](https://www.google.com/maps/d/viewer?mid=1t5YDLiOKV71E7JEib40x4CDbpMU&hl=en_US&ll=42.368243134077844%2C20.619261964973475&z=16;)



Figure 26. Stone castle vineyard and interiors of wines<sup>48</sup>

Main activity of the winery is production of grapes, fruits and variable crops, production of wine, strong alcoholic beverages and non- alcoholic drinks from the grapes also sales and promotion of alcoholic and non-alcoholic drinks from the grapes.

The architecture of the building is industrial one, constructed with concrete, reinforcement and steel which is used in halls where is bottling of wine. Property where is located wine cellar is divided in two part from the regional road Rahovec-Xërxë where on one side which is lower part of the road is administrative building and production of white wines with number of vertical tanks. On upper part of the road is building where wine cellar is built under the earth. In this building are bodegas, wooden barrels and INOX tanks with red wine.

#### 4.1.2 “BIOPAK” Shpk Wine cellar

"BioPak" Sh.P.K Rahovac, Kosovo it is the successor of the company NTP Murati, founded in 1989 and “Rahovec” Sh.p.k.

Vineyard and cellar-Cantina "BioPak" Sh.P.K. it is located on the western part of the city of Rahovec, and in the way of "UCK" Str. the transit road Malishevë - Rahovec - Xërxë.

Copartner of the company is Ismet and Nysret Haxhimurati.



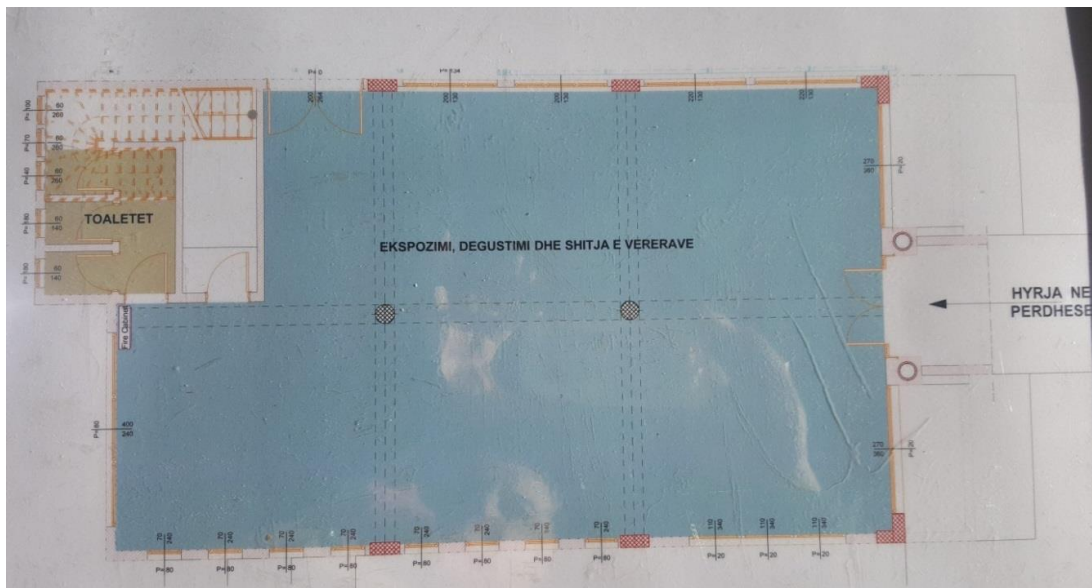
Figure 27. BioPak wine and vineyards<sup>49</sup>

Production capacity of wine in this wine cellar is 5000 hl, so in addition to grapes produced in the vineyard of its, BioPak buys additional amount of its co-operators coming from Rahovec municipality.

Machinery, equipment and technology are from the recent years, including building, scale, acceptance spot of grapes, redirect pumps, squeeze-pressure, fermentation, dishes for all of the testimony made from INOX with a capacity of 10-500 hl., cooling system, the stabilization - Comoros, distillery, and filling/bottling lines with a capacity of 2000 liters per hour.

During 2016 they got support a grant from EU found where they build a new wine cellar with all standards. Building have floors -2B+P and was built with concrete foundation, where also all walls of basement floor are reinforced concrete.

**Layouts of the building:** On the Ground floor is organized entrance, wine tasting room, showroom, toilet, hall and stairs.



*Figure 28. Ground floor, “Biopak”*

On basement floor -1, it is organized store room with steel tanks-reservoirs, acceptance of grape, cutting of grape, stairs, elevator also entrance in -1 level.

<sup>48</sup> <http://africathoughts.blogspot.com/2012/07/old-barrels-and-concrete-cellar.html>

<sup>49</sup> source: Nysret Haxhimurati, owner of winery “Bio Pak”, 2012

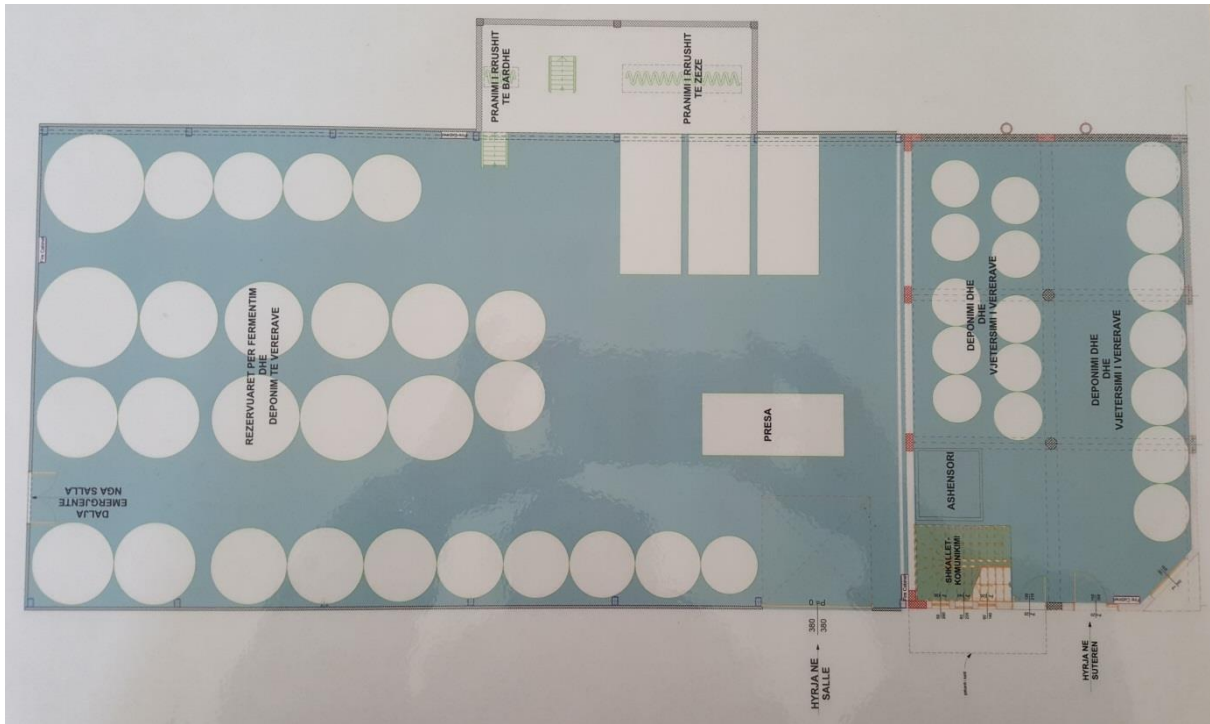


Figure 29. Basement floor -1, “Biopak”<sup>50</sup>

On Basement floor -2, are organized: store room for barrels wine and stairs<sup>51</sup>

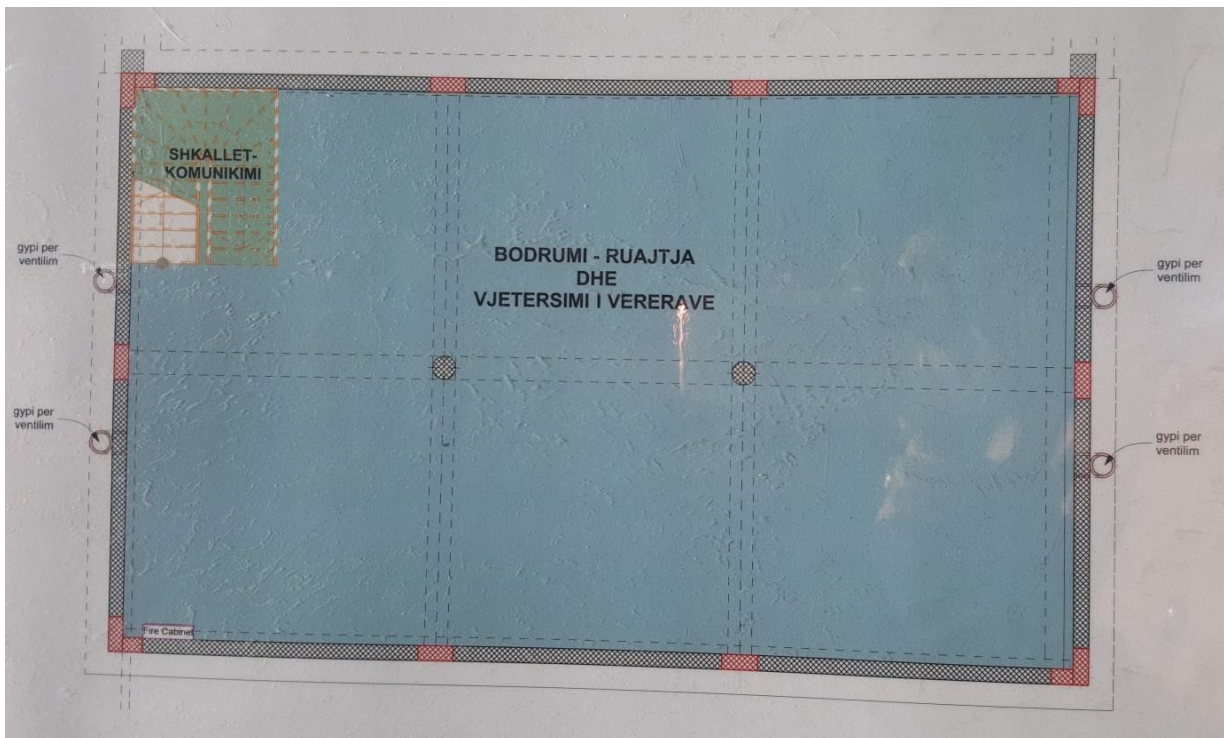


Figure 30. Basement floor -2, “Biopak”

<sup>50</sup> source: Nysret Haxhimurati, owner of winery “Bio pak”, 2017

<sup>51</sup> Source: Teuta Jaha-Hoxha, 2017





Figure 31. Photo of winery “Biopak”<sup>52</sup>

<sup>52</sup> Source Teuta Jaha-Hoxha, 2017

#### 4.1.3 Wine cellar “KOSOVO WINE”

Kosovo WINE Sh.P.K wineries from Rahovec was establish in the year of 2011, it is located in the southeastern part of Rahovec and it is surrounded by the vineyards of that area. Its core activities are the production of high quality wine and other alcoholic products since this winery has a long tradition in this field. Thus, it is important to mention that the Soil Sphere or the old barrel made of soil and the stone with Illyrian writings in it, dating way back to 2000 years ago, have been found in the place where the object is now built which is a great proof that in this place wine has been produced since ancient times. Kosovo WINE facility possesses an object of an area of 2150m<sup>2</sup> divided into 4 floors and it is covered completely. This company is very well equipped with the latest technology for the selection of grapes and up to the acceptance and processing of grapes, and lastly processing and producing wine and raki, in accordance with the highest European standards, which is also proven by the Standardization Certificate of ISO 2000 (HACCP). The winery started its work in time for the grape harvest in 2015, with the latest modern equipment. The work includes the pneumatic system for the pressing of grapes and fermented in the stainless steel barrels, where the system for the controlling of temperature during the fermentation process is included.



Figure 32. Views of “Kosovo vine”<sup>53</sup>

<sup>53</sup> Source: Directory of Urbanism, Municipality of Rahovec, all floors of the project, 2017

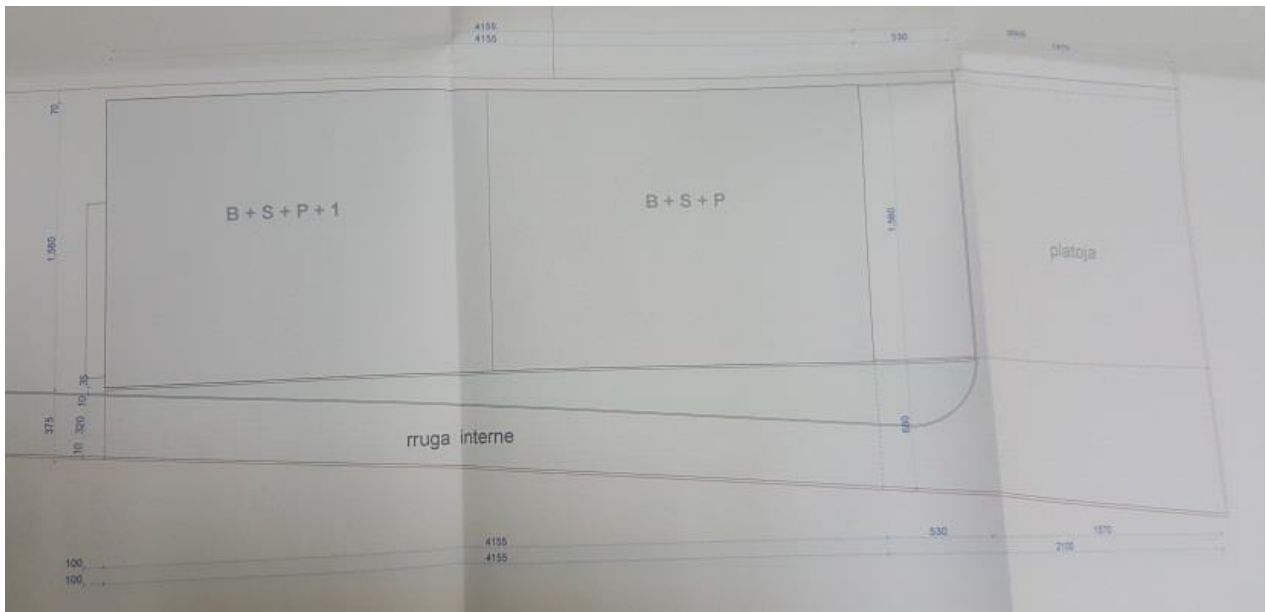


Figure 33. Layouts of the building: Location

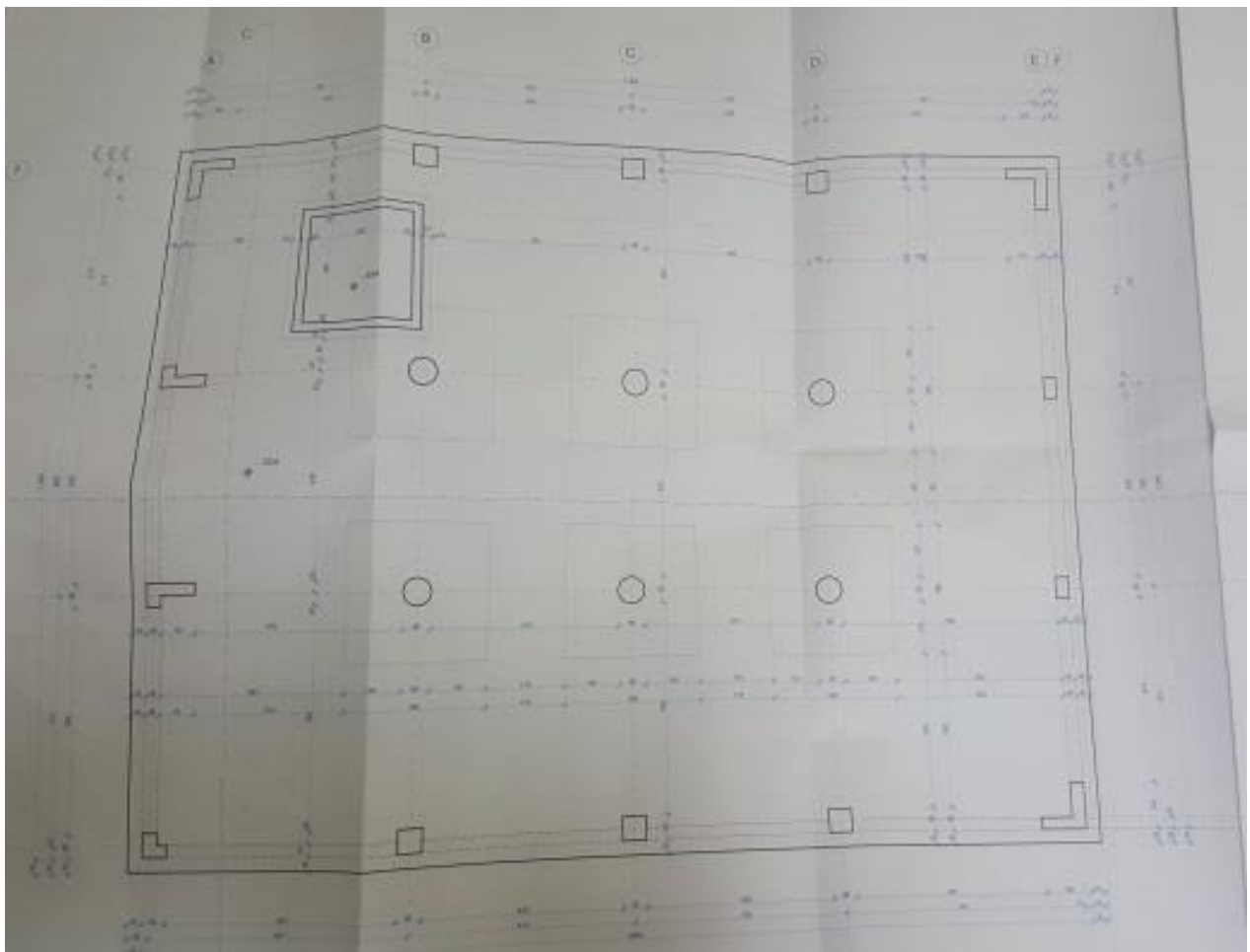
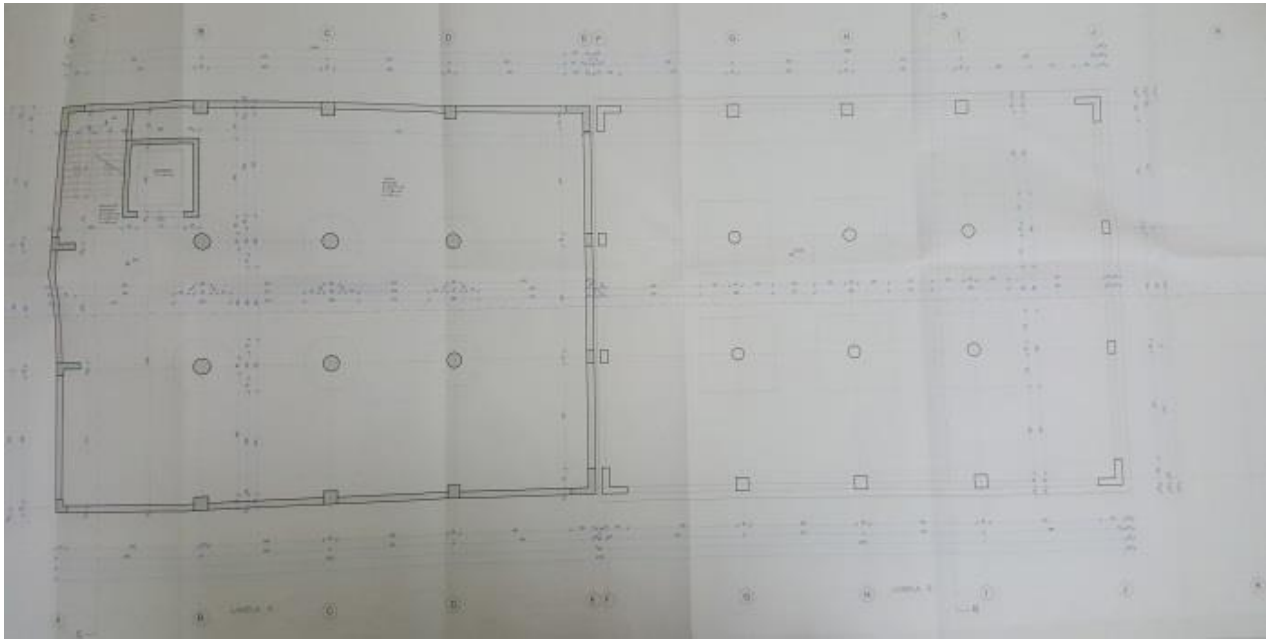
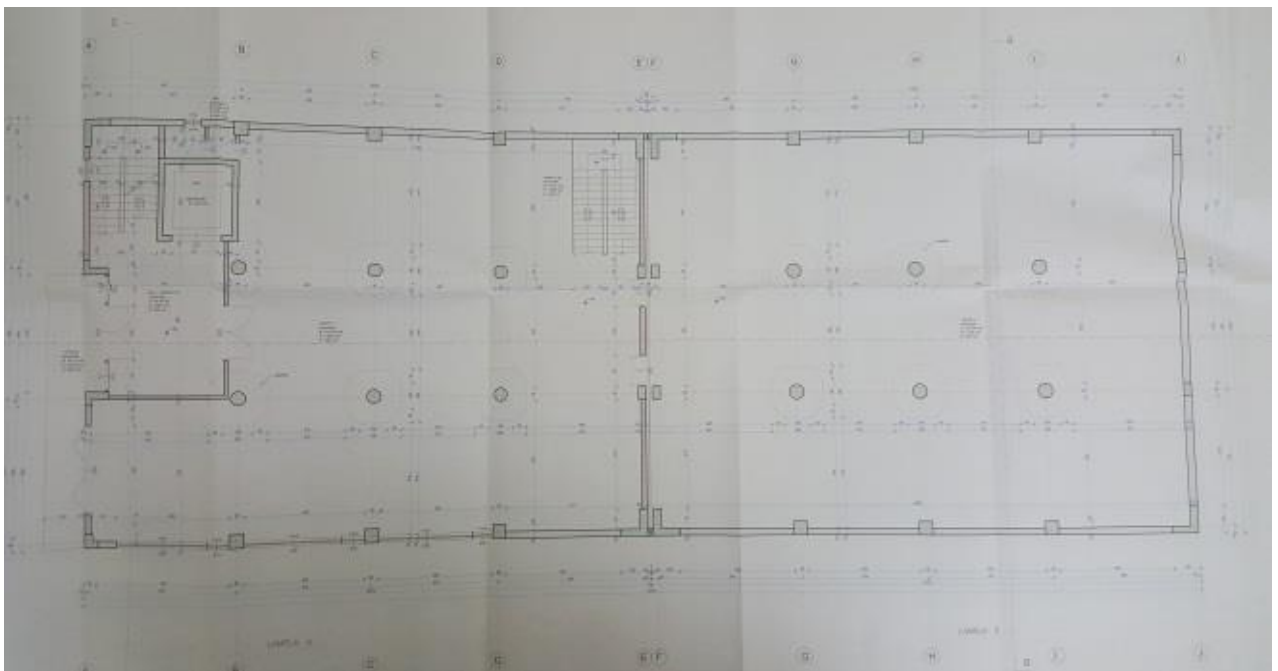


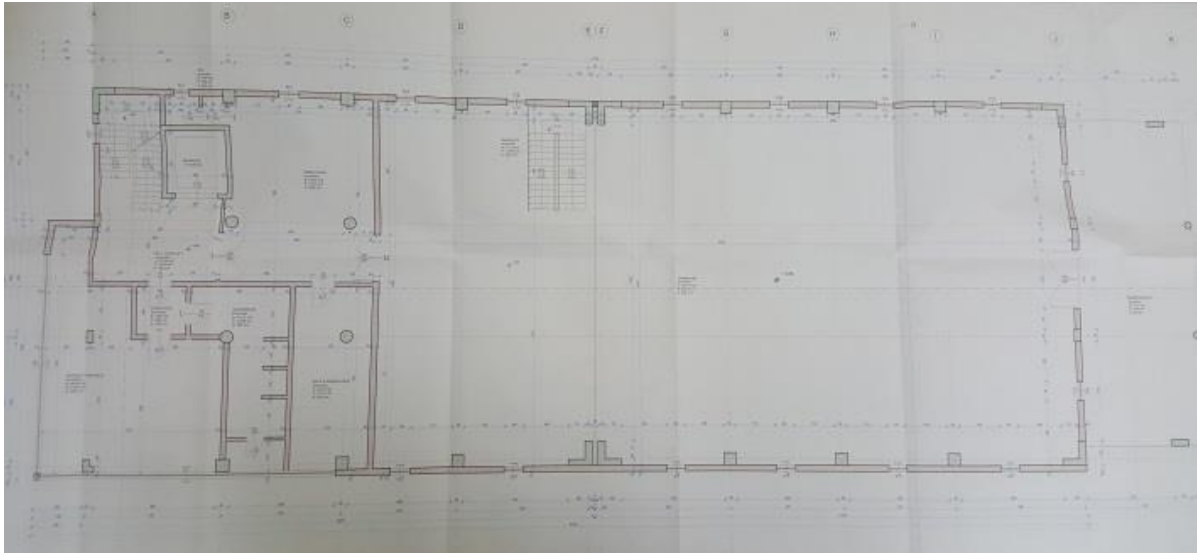
Figure 34. Basement "Kosovo vine"



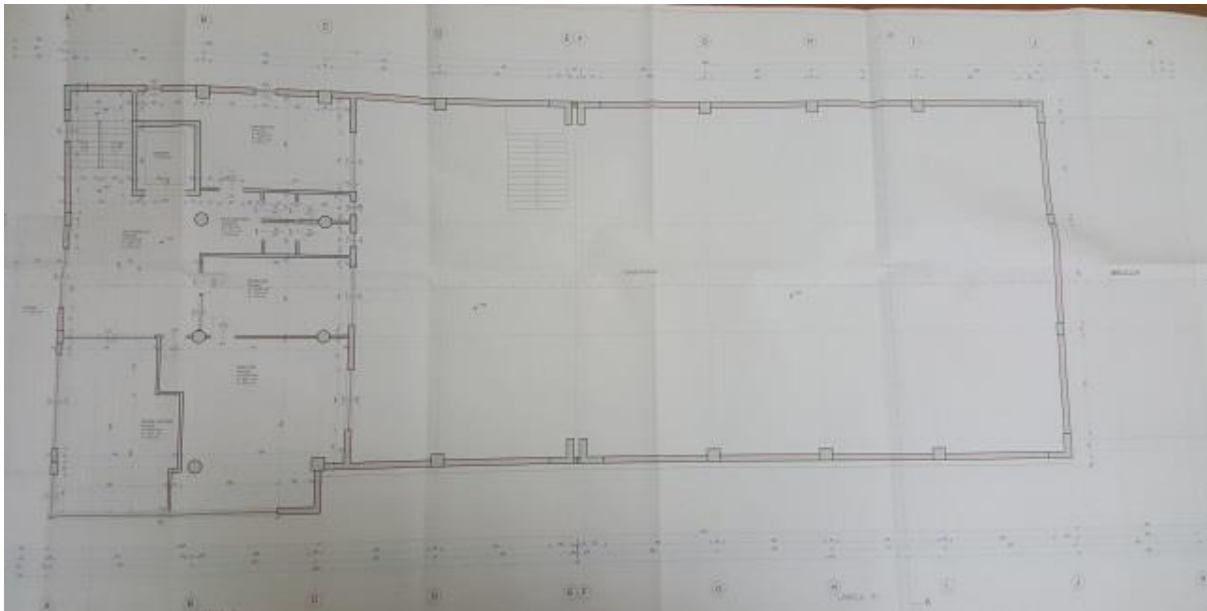
*Figure 35. Suterren “Kosovo vine”*



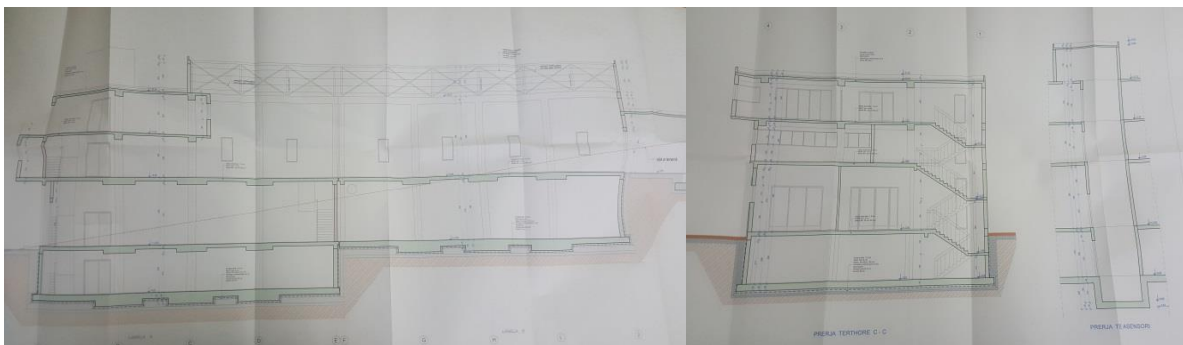
*Figure 36. Ground floor “Kosovo Vine”*



*Figure 37. Floor 1 "Kosovo Vine"*



*Figure 38. Floor 2 "Kosovo vine"*



*Figure 39. Sections "Kosovo Vine"*

Dimensions of the building is 41.50 x 15.60m and have five floors, Basement, Suterren, Ground floor and two upper floor (B+S+G+2). The building has two lamellas, lamella A and B. Lamella A have four floors, B+S+G+1 and Lamella B have two floors S+G.

**Basement** is organized with store for wine barrels, elevator and stairs. **Suterren** is organized in Lamella A, where is elevator, stairs, hall, filled lines, store of final products and 16 tanks with 10.000 l capacity for wine where in Lamella B are stored 40 tanks with 10.000l capacity for wine.

On **Ground floor** in Lamella A is elevator, stairs, hall, WC/toilet, room for workers, cloak-room, filled line, store for chemicals, pressing and 12 tanks with 15.000l capacity for wine, where in Lamella B is room for 36 tanks with 15.000l capacity for wine.

On **Firs floor** are stairs, elevator, toilets, hall, tasting room, laboratory, secretary and director. Gross areas of floors are: Basement: 322.00 m<sup>2</sup>, Suterren: 648.00 m<sup>2</sup>, Ground floor: 760.00m<sup>2</sup> and First floor: 210.00 m<sup>2</sup>.

Construction of the facility is the skeletal system with carrying reinforcement pillars and beams MB-40. The foundations are reinforced SOLETE D=40cm and 80cm, MB-30. Ceilings are with reinforced massive slab d= 25cm. The roof is constructed with truss steel in two-side slop. Walls in the basement and suterren are constructed with reinforced concrete MB-40, thickening 25cm and 30 cm. Other outside and inside walls are constructed with ceramic bricks.

#### 4.1.4 “EKO” N.T.P. “Muja” Wine cellar



Figure 40. “Eko” N.T.P. “Muja” Wine Cellar<sup>54</sup>

N.T.P.” MUJA” enterprise is privately owned, the owners of the enterprise are Mr. Mustaf N. Hoxha and his brother Bekim N. Hoxha with 50 % capital ownership.

Since 1990, both of them manage the enterprise successfully. It means that this enterprise has a long tradition in private business for producing of wine and grape brandy (alcohol). Wine and brandy producing from grapes (as a raw material) has a long history, this activity the owners have inherited from their ancestry.

” Muja” enterprise is production, trade and service enterprise whose activity is preparation of grapes and production of alcohol and non-alcohol drinks.

The residency “Muja” enterprise is in Rahovec in Str. “Xhelal Hajda-TONI”, n.26. Its activity this enterprise development in the working local, which is exit to Rahovec, Str. “UCK”, regional road Xërxë - Rahovec - Malisheva, in the first km on the road to Prishtina with surface of 135m<sup>2</sup>, it has a good infrastructure, enough space for parking its and the clients; vehicles. This enterprise has 5.3 hectare vineyards with what the entrepreneur covers 90% of the current needs with grapes as raw material for producing its products such as brandy, wine and grape drinks.

<sup>54</sup> Source: Mustaf N. Hoxha, owner of “Eko” winery, 2012

The enterprise possesses necessary equipment's for the production of grape products, but their capacity and technological level is not satisfying all requirements of the current market. With name "Eko" is cold the brand of the vine. Building of wine cellar "Eko" is located in family house. On basement and ground floor is winery where on two upper floors is living area for the owner's family. Building have basement, ground floor and two floors (B+P+2), constructed with reinforced foundation and with walls, which do not have any architectural value as a culture building.



*Figure 41. Wines of "Eko" Wine cellar<sup>55</sup>*

<sup>55</sup> Source: Mustaf N. Hoxha, owner of the winery "Eko", 2012



## **5 DOCUMENTATION OF THE CASE STUDY “Bodrumi i Vjetër” WINE CELLAR**

Analyses of the winery “Bodrumi i Vjetër” for this master theses I have done during three periods of time, on 2008, 2012 and 2016/2017 where result of this study are presented on this document.

### **5.1 The history of wine cellar “Bodrumi i Vjetër” and its Location**

Built in 1953 “Bodrumi i Vjetër” (Old Cellar) which in the same year started production as well, is a plant of technical – production and service space.

The building has a special and characteristic architecture style, and it is one of the oldest wine cellars in Kosovo. From the architecture of the building it looks like farm building with six arcades (Figure 42) in a front facade where is main entrance which create an entrance open and covered hall. Also arcades are and in right lamella on both sides, five arcades on left part of right lamella and 12 on right side. building have small windows open on walls which associating on farm building. From the Figure 42, picture taken during 1954 it can be seen that building is laying in agriculture area cooperated in location very well. Also in the back of the picture you can see three biggest building where first from the left is secondary school, in the medal is primary school and third in the left is Post building and the other small buildings around associated on small farms ore winery’s. Building itself have very beautiful architecture for that time but also those day reflect same.

The building has two floors, basement and ground floor. Ground floor surfaces have 3064m<sup>2</sup> and the basement have 1657m<sup>2</sup>. The capacities of the wine cooler storage are 50.000hl.

The” Bodrumi i Vjetër” until June 2006 was a component part of the winery of Rahovec called NBI “Rahovec”. Since then it privatized and is now a private property, renamed to the “Bodrumi i Vjetër” and it is a working unit under the NTP “Haxhijaha” Rahovec.

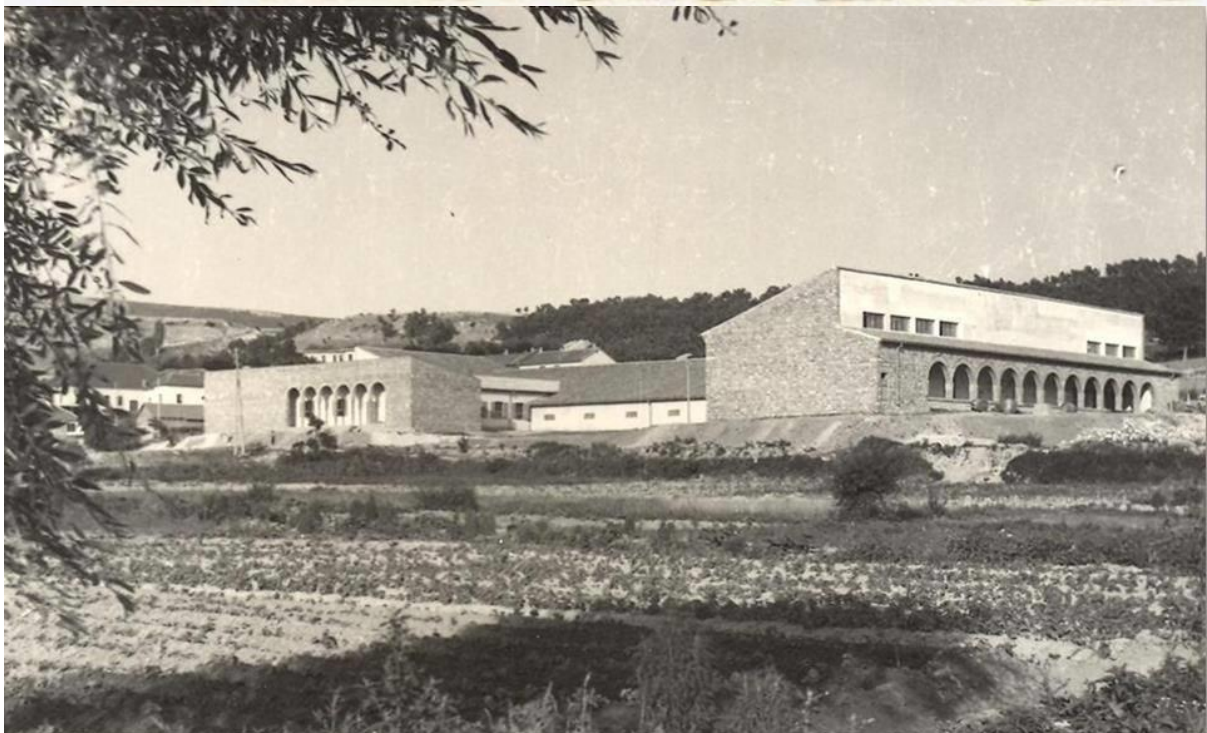
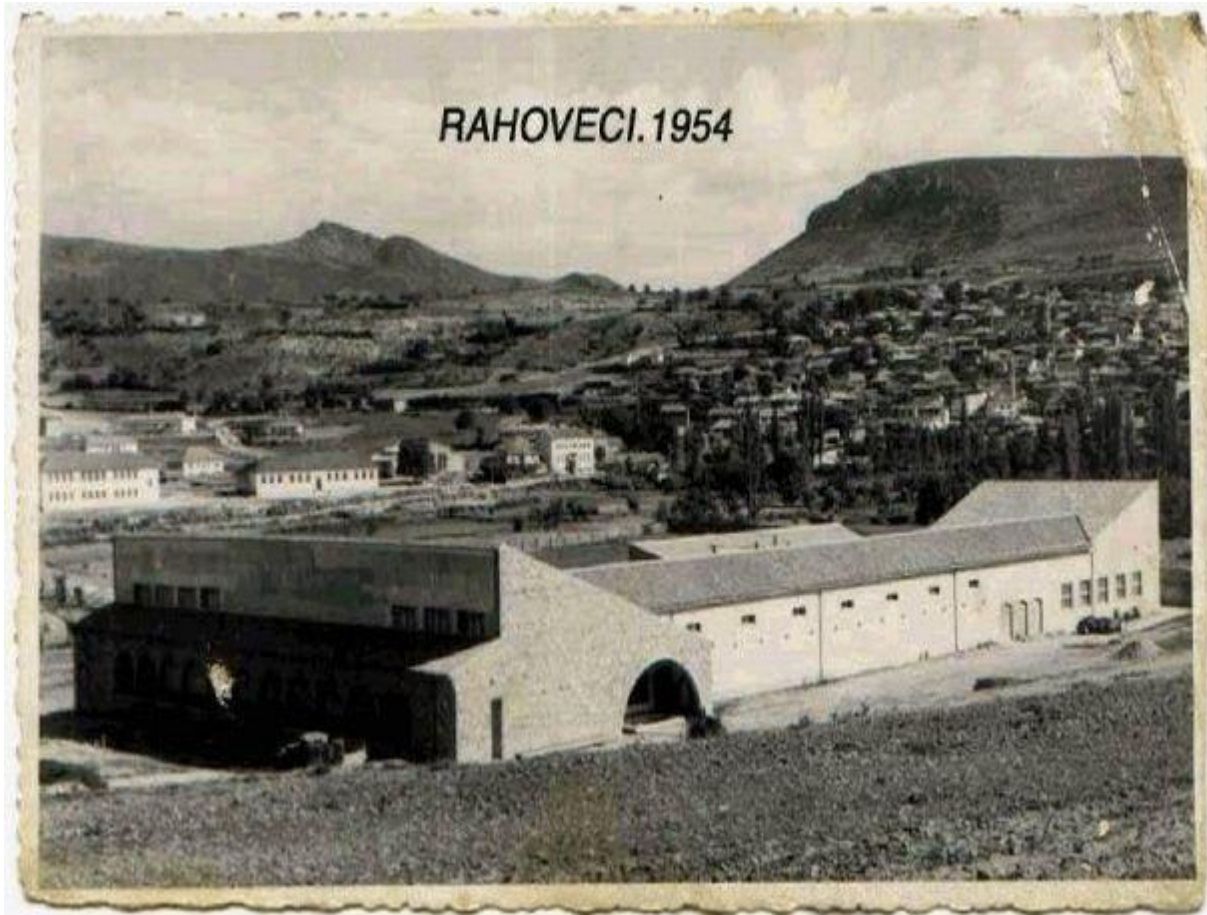


Figure 42. Photo of Bodrumi i Vjetër in 1954<sup>56</sup>

<sup>56</sup><https://kk.rks-gov.net/Rahovec/City-guide/Galery/Test-Album.aspx>

”Bodrumi i Vjetër” continues to be inheritress line or continuation of tradition and of the ancient and on the other hand, it indicates the self-ancient of grape, wine and brandy production in these territories. The genesis of grape cultivation and wine production in these territories does not start in 1953, but dates back from the time of Illyrians, 2000 years ago. There are evidences of this, such as statements done by many archaeological relics of different times, written resources, oral data and other things that today are protected in the museum of Kosovo and other countries as well. Some of these evidences are exposed in Rahovec (Teqja e Madhe).



*Figure 43. Photo of Bodrumi i Vjetër today<sup>57</sup>*

“Bodrumi i Vjetër” Wine cellar does not own the vineyards (only 5ha family property) therefore, it is supplied by private individual grape producers, and it is normally done in the form of cooperation. Currently cooperates with 450 producers of regular grape. There are certainly plans for the near future to establish about 200 ha new vineyards.

In 2006 when the wine cellar “Bodrumi i Vjetër” was privatized it received and processed about 2000 t. Grapes were supplied by private farmers.

<sup>57</sup> Source: Nevzat Haxhijaha, 2012



Figure 44. Wine yards of the Haxhijaha family owner of Wine cellar “Bodrumi i vjetër”<sup>58</sup>

The wine cellar “Bodrumi i Vjetër” possesses modern technology (Figure 45), as digital weighing – machine, Two reception places, one for white grape and one for red grape. Equipment for fermentation technology is with a different size and constructed with the latest technology, from INOX material also for the wine reserve vessel are from steel material. In winery exist complete link for stabilization, filter for filtration of wine, line for filling/bottling, cooling refrigerator, it possesses a laboratory, distillatory for distillation of wine as well as other equipment’s.

Exploitation capacity currently is about 60%. Cool storage cellar of the” Bodrumi i Vjetër”, now produces eight different types of wines, with packages of: 0, 25 lit, 0, 75 lit, 1, 00 lit.” Bodrumi i Vjetër” under the NPT Haxhijaha meets European standard for wine making, starting from the bottle, label, bottle taps, etc.



<sup>58</sup> Source: Nevzat Haxhijaha, owner of “Bodrumi i Vjetër”



*Figure 45. Facilities for storing the wine<sup>59</sup>*

### 5.1.1 Wine production- Process

There are five basic steps to making wine: 1. Harvesting, 2. Crushing and pressing, 3. Fermentation, 4. Clarification, and 5. Aging and bottling.

Steps for making red wine and white wine are essentially the same, with one exception. Making fortified or sparkling wines is also another matter; both require additional human intervention to succeed and into this paper will not be part of this analyses (Figure 46).

<sup>59</sup>Data from “Haxhijaha” and <http://merlinandrebecca.blogspot.com/2012/07/old-barrels-and-concrete-cellar.html>;

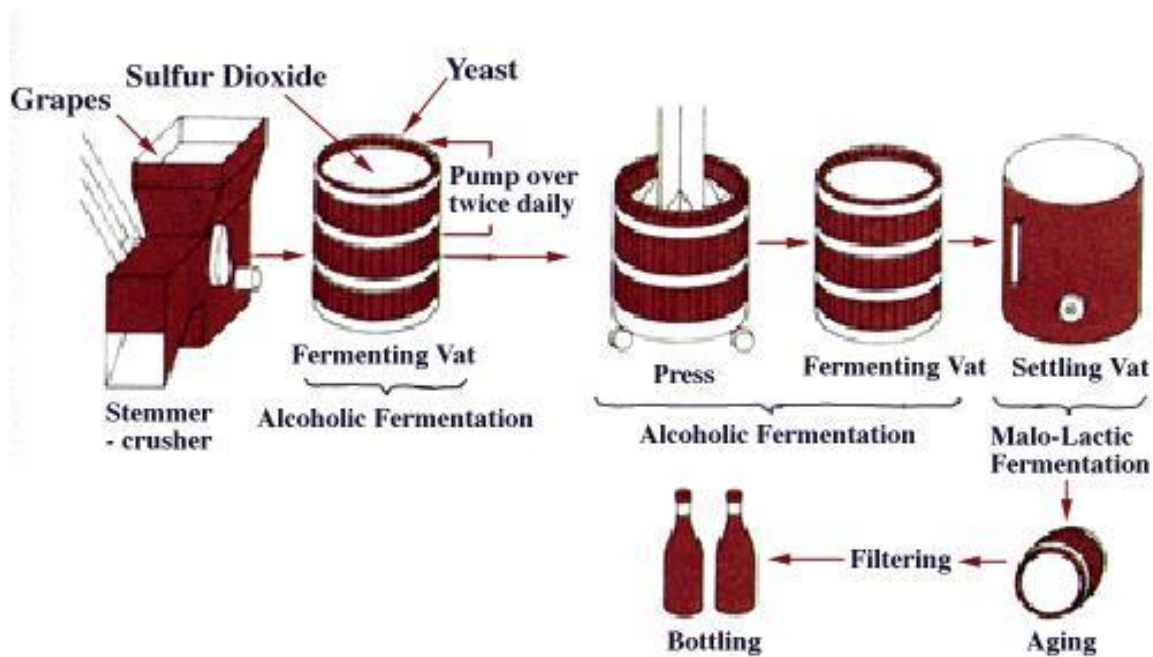


Figure 46. Wine production process<sup>60</sup>

## 5.2 Location

Wine cellar "Bodrumi i Vjeter"<sup>61</sup> is located in urban zone in the central part of the city of Rahovec, near to the city park, and sports hall (Figure 47). The building is constructed in terrene with very small slop, oriented on south-east. Main entrance is on south from secondary road "Gezim Hamza-Piktori".

At the time when the building was built (60 years ago) this location was in the suburb of the city of Rahovec, as it can be seen in the photo of 1954 (Figure 42), and there were no other facilities in the area expect the agriculture fields such as vineyards etc. Now days, however, it is an urban area with no vineyards at the sight.

The building type is B+P, with a total surface of 3900 m<sup>2</sup> (Ground floor 3100m<sup>2</sup> and the basement is 800m<sup>2</sup>) The object is built with a very constructed system made of concrete and massive walls with its thickness measuring up to 32 to 52cm. The outer and interior walls are built with bricks, two or three sequential which makes the constructive system massive and which is partially stunned with horizontal reinforcements. Some of the outer walls include stones coated on them such as the frontal and sidewall. The wall on the front side of the object where it is also the entrance of the building is built with stones, which includes work of eight arches and six columns.

<sup>60</sup> PPP of Yoan Chelin

<sup>61</sup> [http://bodrumivjeter.com/Bodrumi\\_i\\_Vjeter/](http://bodrumivjeter.com/Bodrumi_i_Vjeter/)



Figure 47. Orth photo were highlighted part present total area of the location of vinery “Bodrumi i Vjeter”<sup>62</sup>

<sup>62</sup> Source: owner of “Haxhijaha- Bodrumi i vjeter” vinery, Nevzat Haxhijaha, Geodet Armend Metbala and Geographer Idriz Shala, 2017



Figure 48. Orth photo of location “Bodrumi i Vjetër” larger scale<sup>63</sup>

<sup>63</sup> Source: Owner Nevzat Haxhijaha, Geodet Armend Metbala and Geographer Idriz Shala, 2017



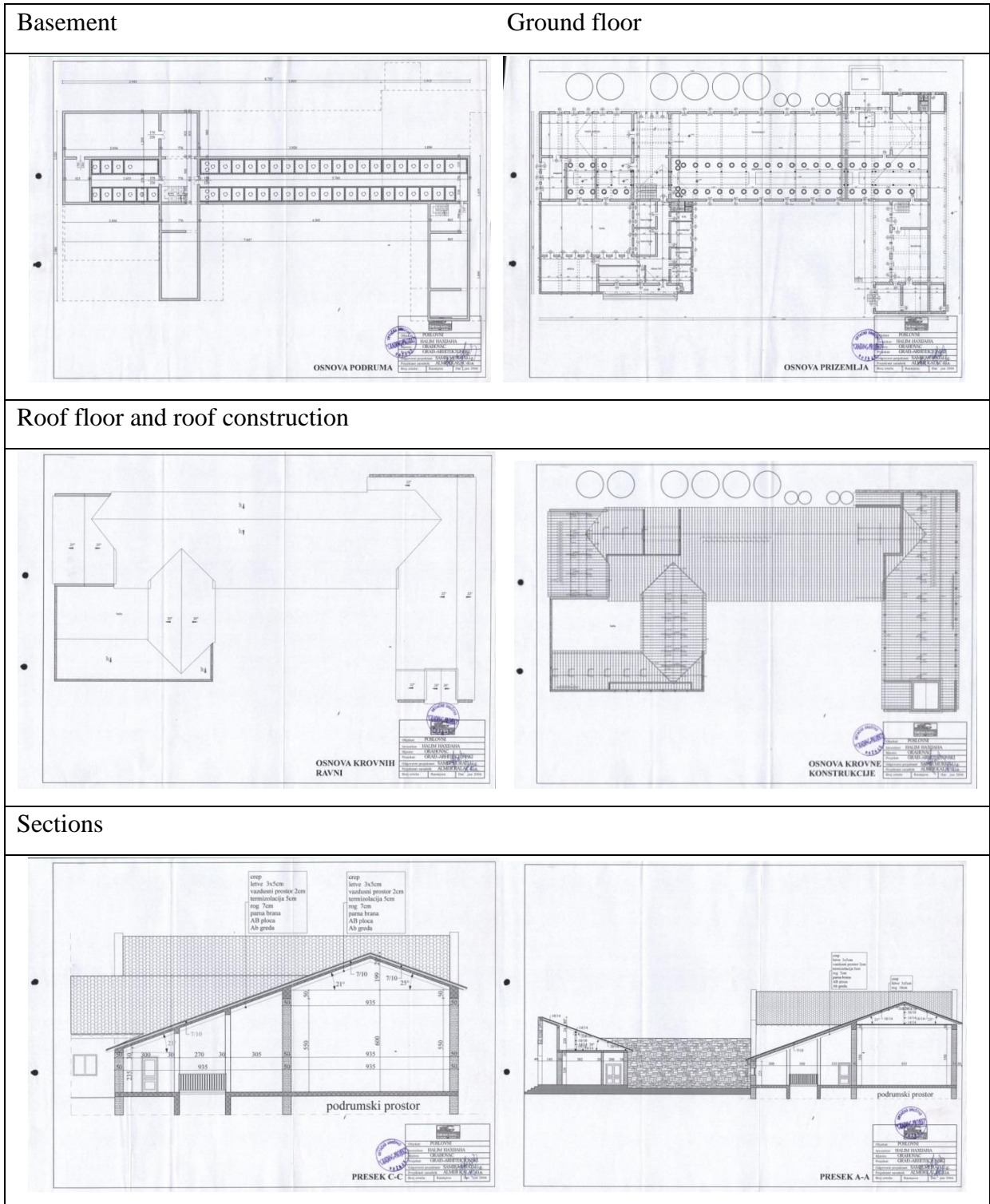
The original Project of the winery building was designed it was impossible to find. The current owners do not have it in their archive since the building faced damage and burning of it back in 2005 and all of the documentation has burned as well. In addition, the original designed project in the archive of the municipality of Rahovec, the Urbanism Directorate in particular, has not found. Thus, the only source is the new project for the renovation and restoring of the building. On 2006, was design and constructed according to the real situation and conditions in the field, with all of its existing dimensions. “Bodrumi i vjetër” (The Old Cellar), wine cellar in 2004 has experienced a burning fire which has caused damage to the facility. The entire roof has burned, the inventory together with all doors and windows with which made one of the biggest damaged parts of the facility. Only the right side facing the entrance has remained without being burned as it can be seen in Figure 49, part highlighted with yellow color.



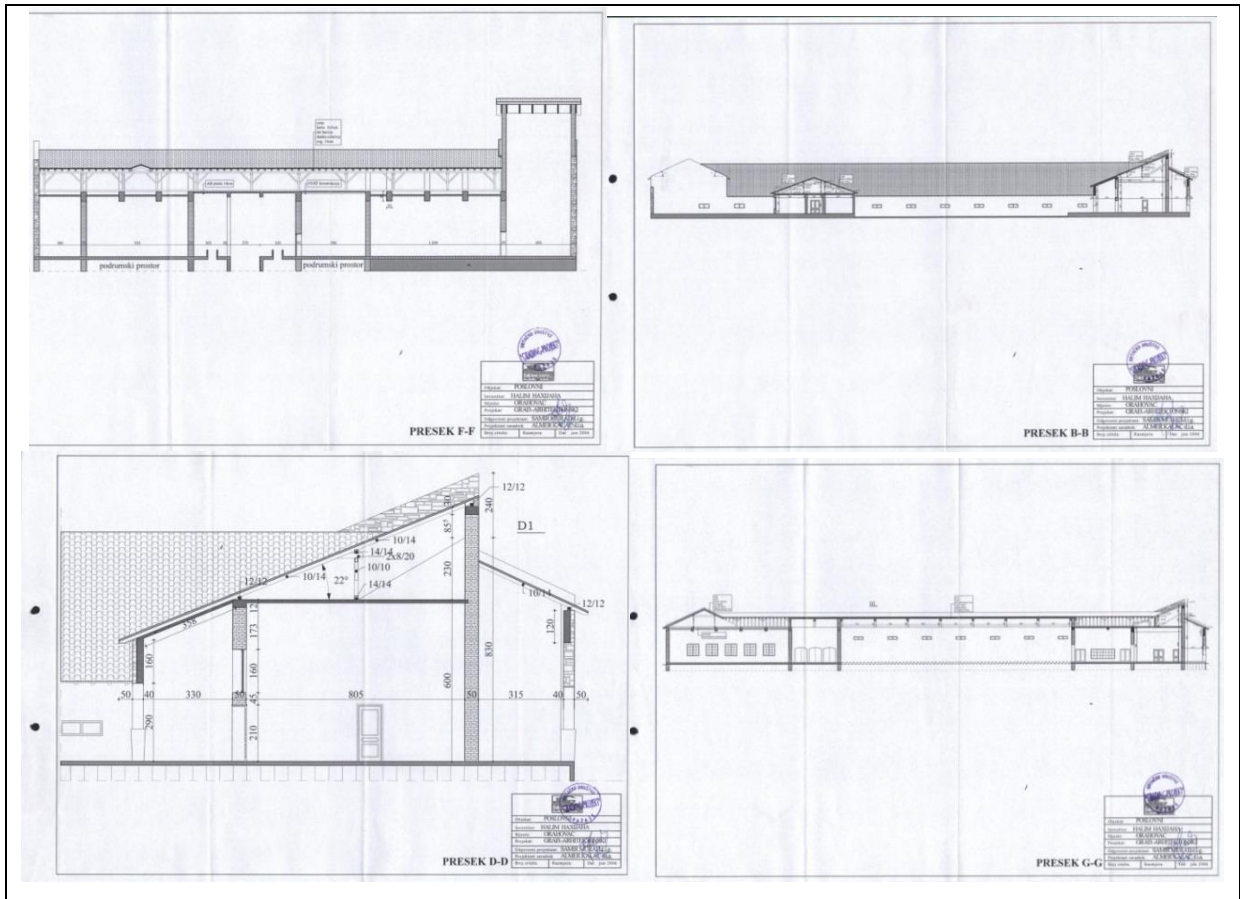
*Figure 49. Orth photo of burned part of winery in 2005<sup>64</sup>*

<sup>64</sup> source: Nevzat Haxhijaha, 2012

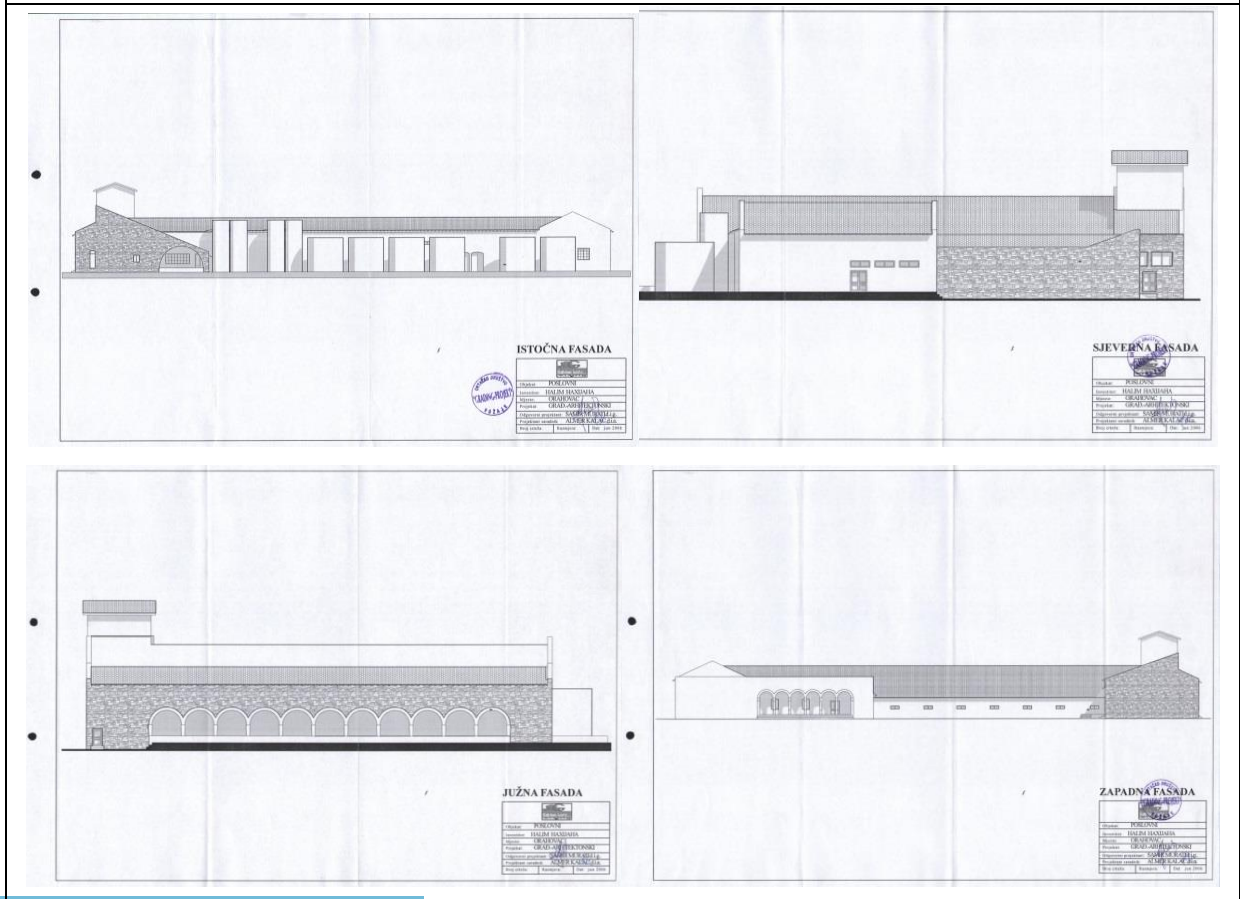
### 5.3 Existing Plans of wine cellar “Bodrumi i vjetër” and its descriptions<sup>65</sup>



<sup>65</sup> Source: Nevzat Haxhijaha, 2012



Views



Below in Figure 50, are presented 3D designs/renders done from contracted company by owners of wine cellar “Bodrumi i vjetër” where during 2005-2006 it was done the first phase of reconstruction of the burned part of roof construction.

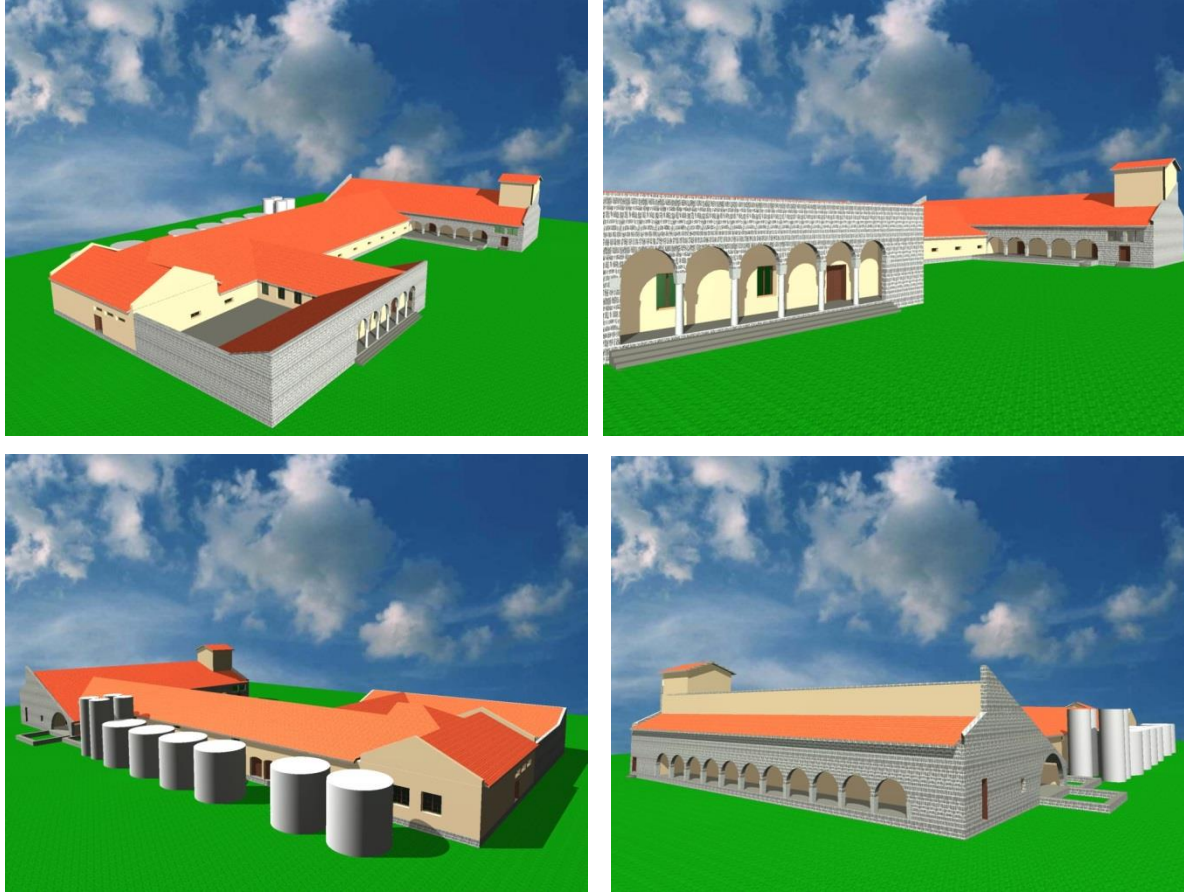


Figure 50. Bodrumi i Vjetër, renders of reconstruction phase 2006<sup>66</sup>

Vinery building is constructed from basement and ground floor and have irregular form, like “∩”. Total area of the **Basement** is 1658 m<sup>2</sup>. The walls in the basement of existing building are constructed from reinforced concrete stiffed with reinforced concrete pillars. The existing floor is paved with concrete. Ceiling are built with concrete construction

In the basement are organized area for depositor, wooden barrels for wine storage –Baric, and communication hall with stares.

**Ground floor** is constructed with brick walls where thickness is from 38-52 cm, which are stuffed with reinforced constructive pillars. Total area is 3065 m<sup>2</sup>. The floor is paved with concrete where the ceiling is constructed with reinforced concrete slab, and plastered with cement mortar. Walls are with brick which are plastered with cement mortar.

<sup>66</sup> Source: Nevzat Haxhijaha owner of Bodrumi i vjeter, renders of reconstruction phase 2006, 2008

Windows and doors are made of wood. Roof construction is reinforced concrete slab, with thermos and hydro-isolation installed and covered Mediterranean tiles.

Below are presented layout of the building, basement and ground floor, drawn based on scanned plans presented above, where it can be seen functionality of the building haw it was before 1999.



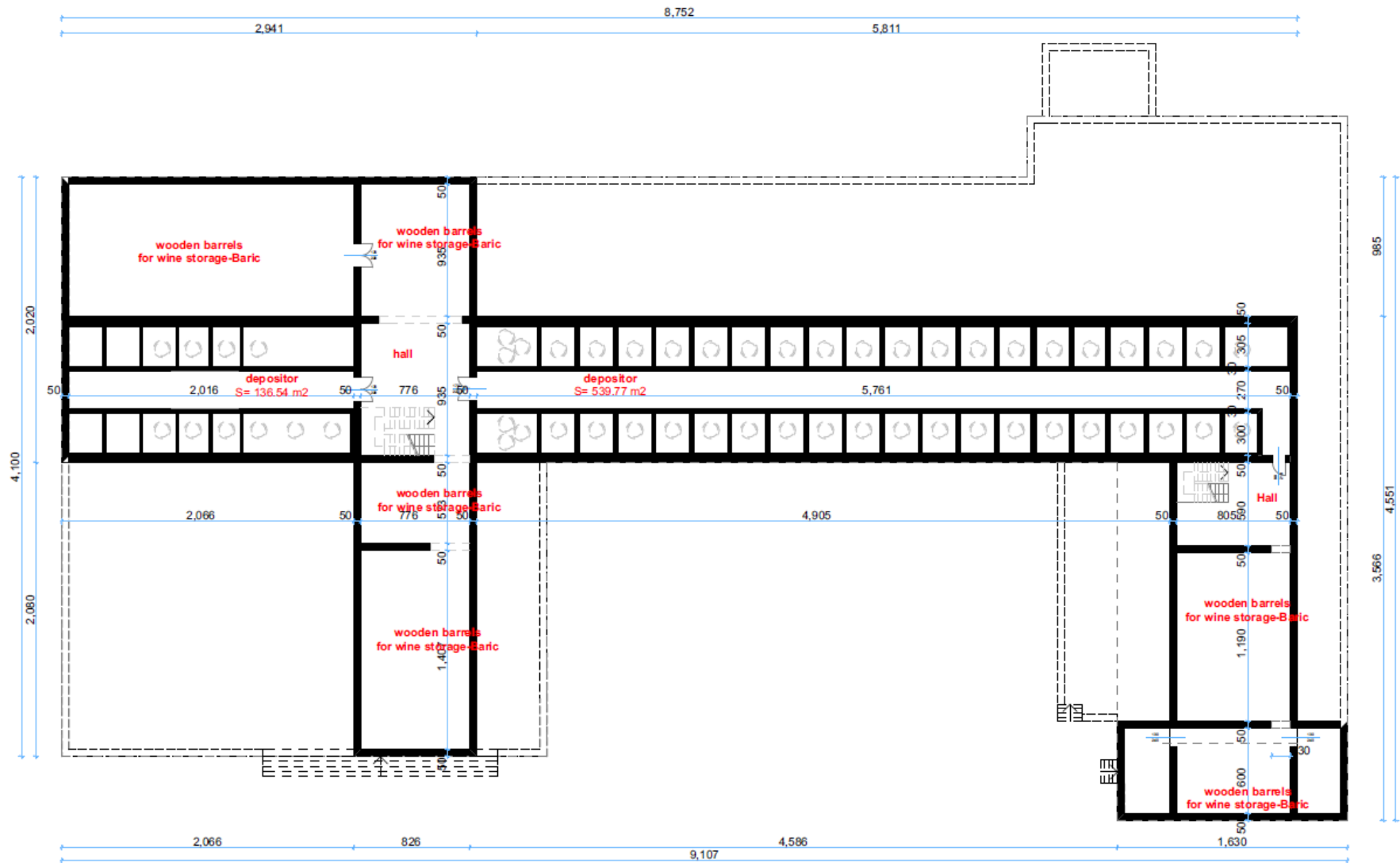


Figure 52. Basement floor plan of winery "Bodrumi i Vjetër" (ex-NBI-Rahovec before privatization)

During the field research, I managed to talk to the owners of the cellar, the experts of the winery field as well as I managed to visit the facility. Seeing the facility from outside gives you an impression that is a modest space with some alcoves. However, by entering the building simultaneously will change the opinion. The cellar provides the opportunity to taste the experience of wine making as the process of grape harvest, fermentation, filling, package up to the wine tasting - it is all there in the same building.

Therefore, this projection attempts to develop a unique experience for the visitor from begging of the process of grape harvest to fermentation, filling and packaging to wine tasting as well as, visitor would be directly included in all activities that the wine brings with modern culture of our life.

New owners to mass renovate the building of “Bodrumi i Vjetër” with privatization (2006). Owner’s plans for the future to invest gradually and to do further renovations, to improve the functionality and content of the building. It will take time because that is affecting financial assets that were not able to immediately finalize renovation.

#### 5.4 Photo documentation of current state

In pictures below taken during 2012 and in 2017 we can see some small interventions. In first picture, we can see that they cut two trees, which were planted on two corners of the front side of the building. In addition, intervention in second picture where trafo station pillar is removed, and it was organized parking plot.



*Figure 53. Entrance<sup>67</sup>*

<sup>67</sup> Teuta Jaha-Hoxha, 2017, office of waiter in front of entrance door of location “Bodrumi i vjetër”



2012

2017



Figure 54. Picture taken during 2012 and 2017<sup>68</sup>

<sup>68</sup> Teuta Jaha-Hoxha, 2012 and 2017

2012

2017



*Figure 55. Picture taken during 2012 and 2017<sup>69</sup>*

2012

Atrium / closed garden

2016



Figure 56. Atrium close garden<sup>70</sup>

<sup>69</sup> Source: Teuta Jaha-Hoxha, taken during 2012 and 2017

<sup>70</sup> Source: Teuta Jaha-Hoxha, Atrium / close garden, taken during 2012 and 2016



Figure 57. Picture of surroundings of the winery building<sup>71</sup>

<sup>71</sup> Teuta Jaha-Hoxha, 2012-2016



Figure 58. Interior of wine cellar<sup>72</sup>

<sup>72</sup> Source: Teuta Jaha-Hoxha, 2012-2016



Figure 59. Renovation of interior of building in 2016<sup>73</sup>

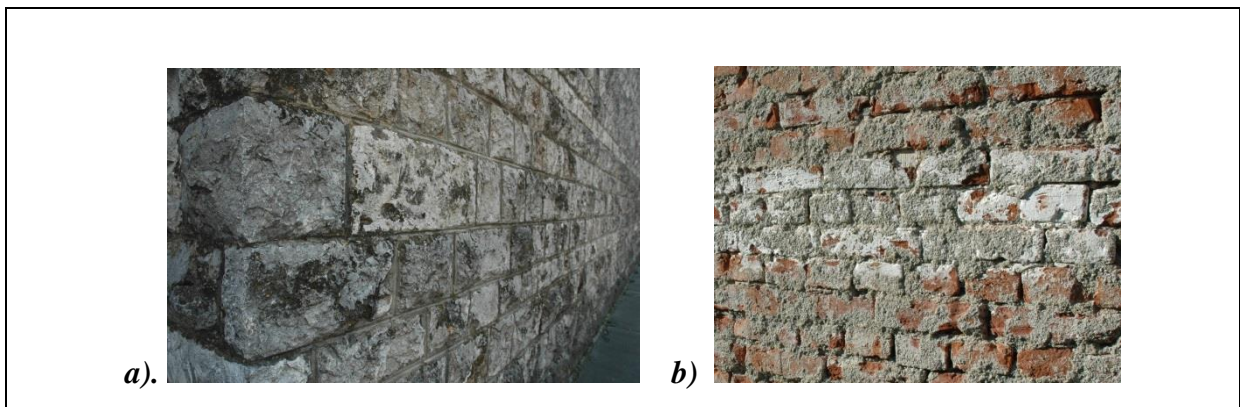


Figure 60. Material used in existing walls of the building: a) external wall with stone; b) external wall with bricks without plaster<sup>74</sup>



Figure 61. Material used for interior wall in tasting room and flooring in building after renovation in 2016<sup>75</sup>

<sup>73</sup> Source: Teuta Jaha-Hoxha, 2017

<sup>74</sup> Source: Teuta Jaha-Hoxha, 2017

<sup>75</sup> Source: Teuta Jaha-Hoxha,

## 5.5 Reconstruction of “Bodrumi i Vjetër” after privatization (2006)

Second Reconstruction was done during 2016 which included covering with concrete slab of open part in depository room in ground floor which was covered with tiles flooring. Crashing and pressing was dislocated in another rooms of building as it can be seen below in drawings. Also all new roof was constructed in entire building.

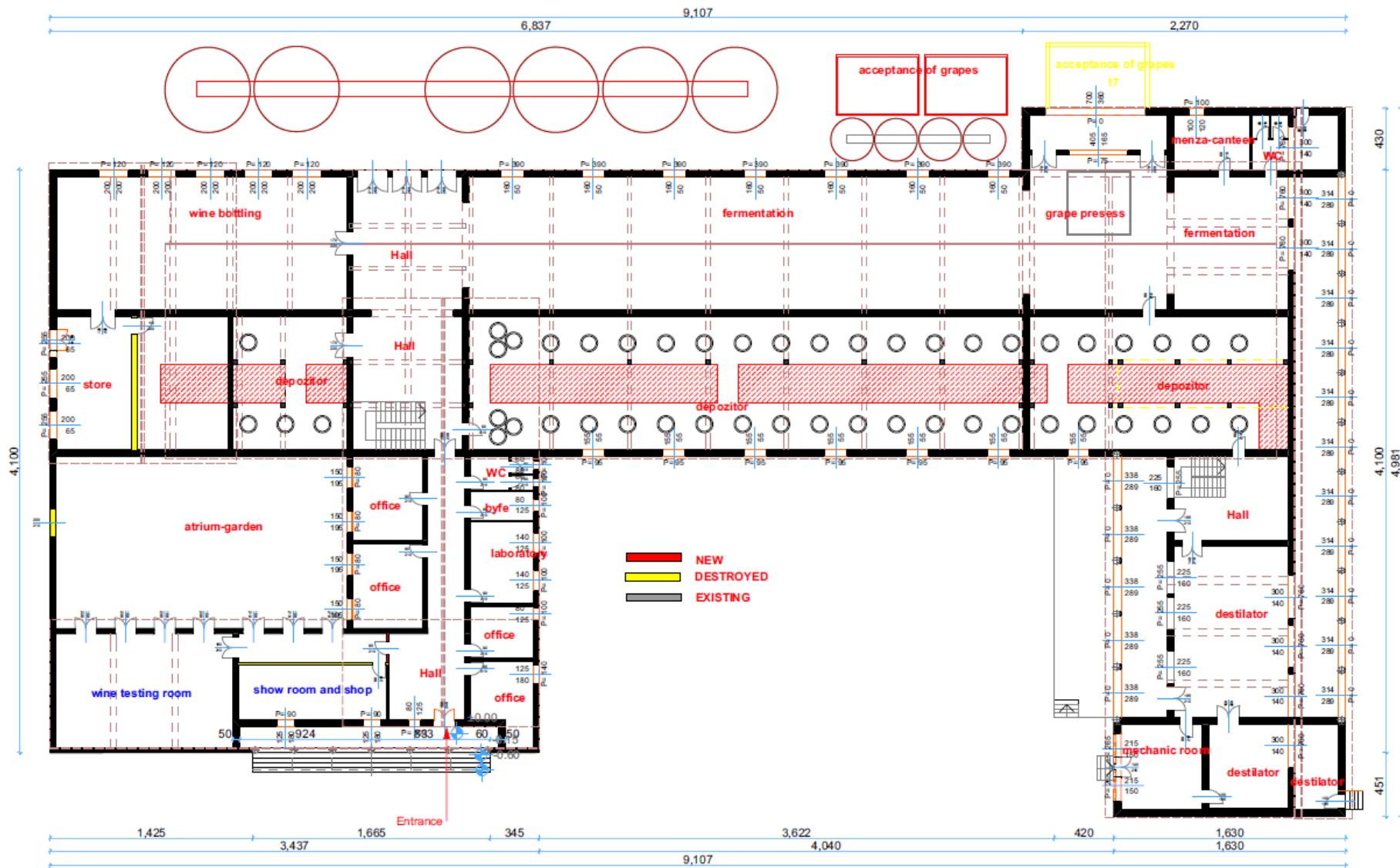


Figure 62. Reconstruction of Ground floor of winery "Bodrumi i Vjeter" of N.T.P. Haxhijaha in 2016



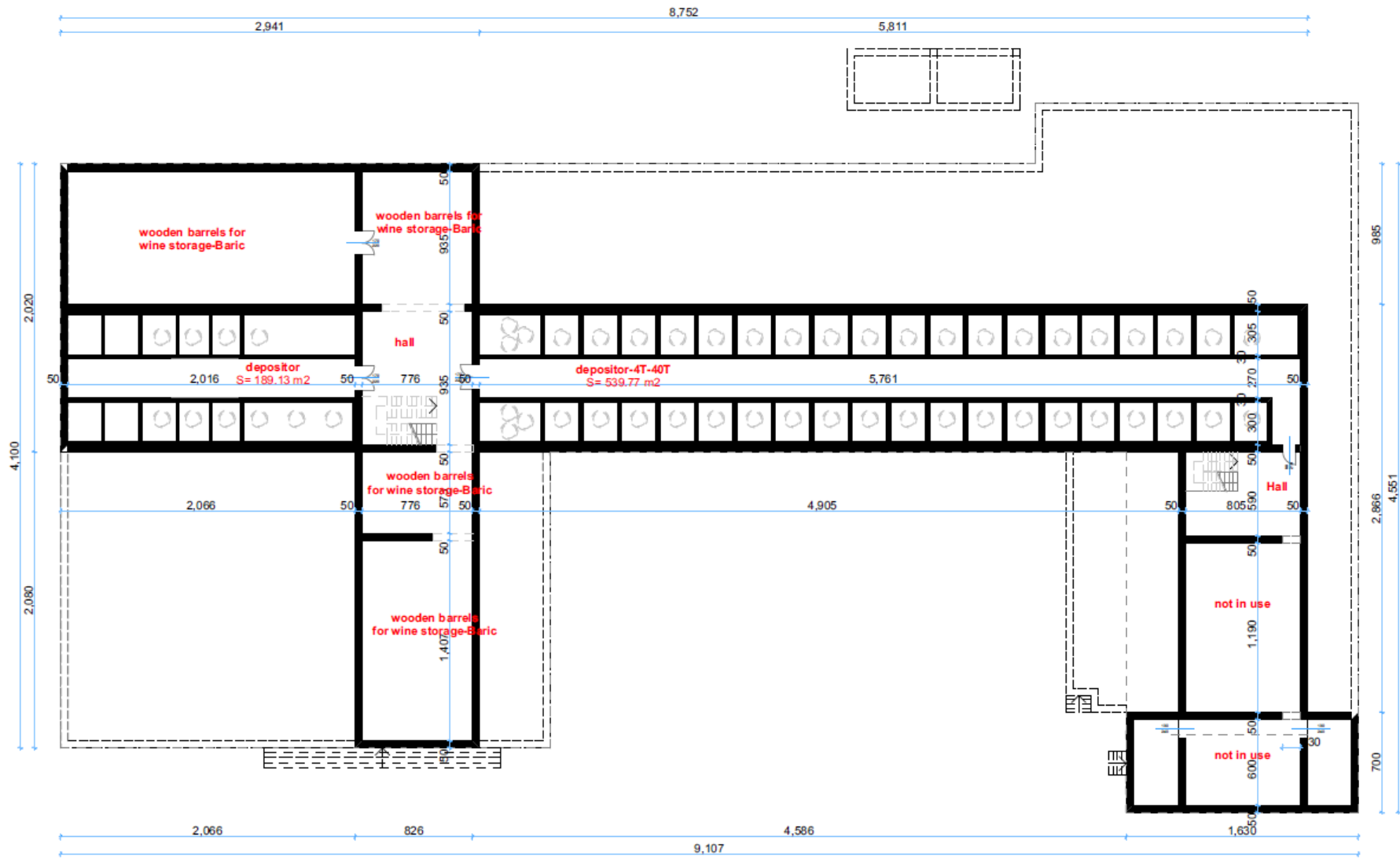


Figure 63. Reconstruction of Basement floor of winery “Bodrumi i Vjeter” of N.T.P. Haxhijaha” in 2016

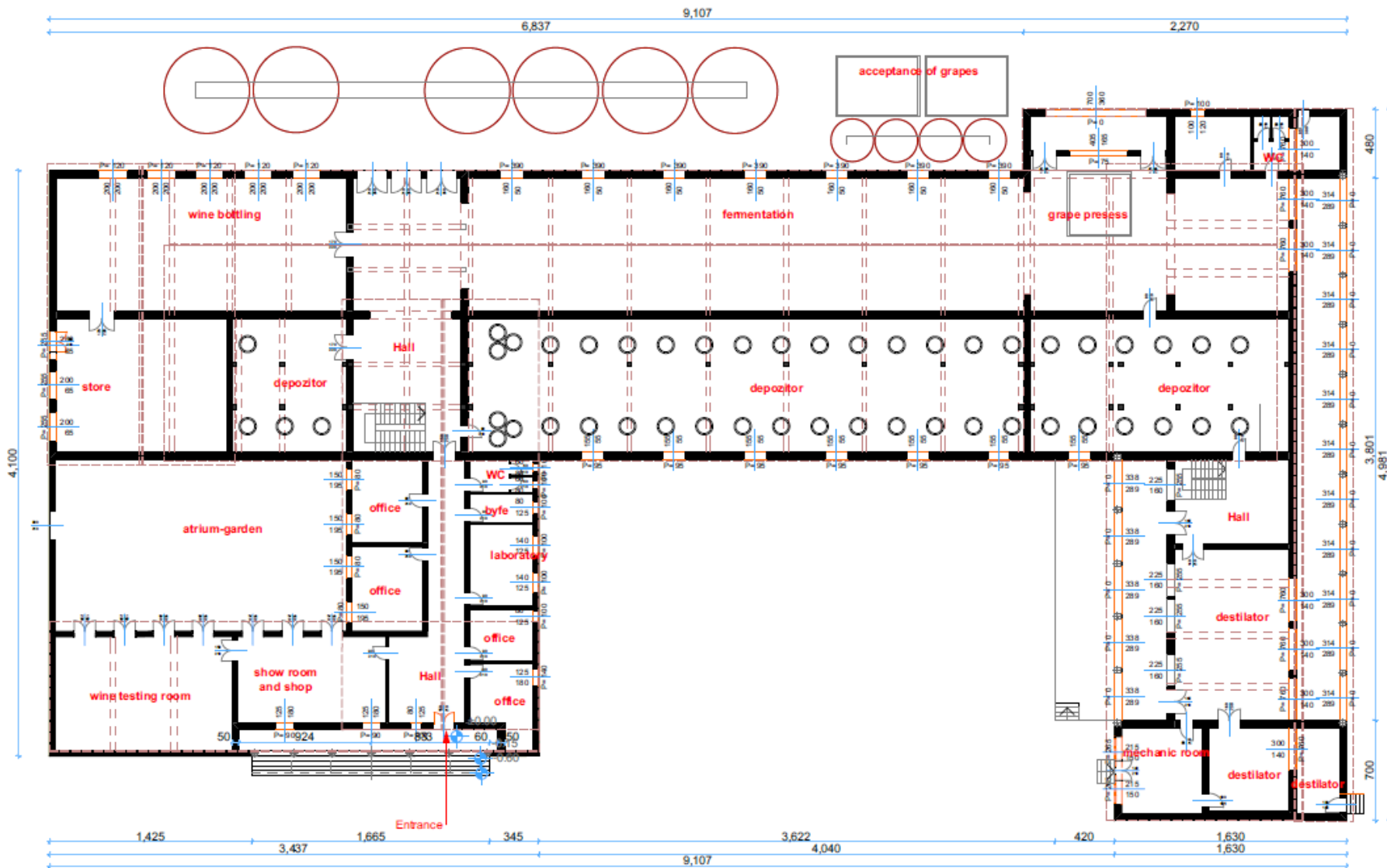


Figure 64. Today-Ground floor of winery "Bodrumi i Vjeter" of N.T.P Haxhijaha, reconstructed in 2016

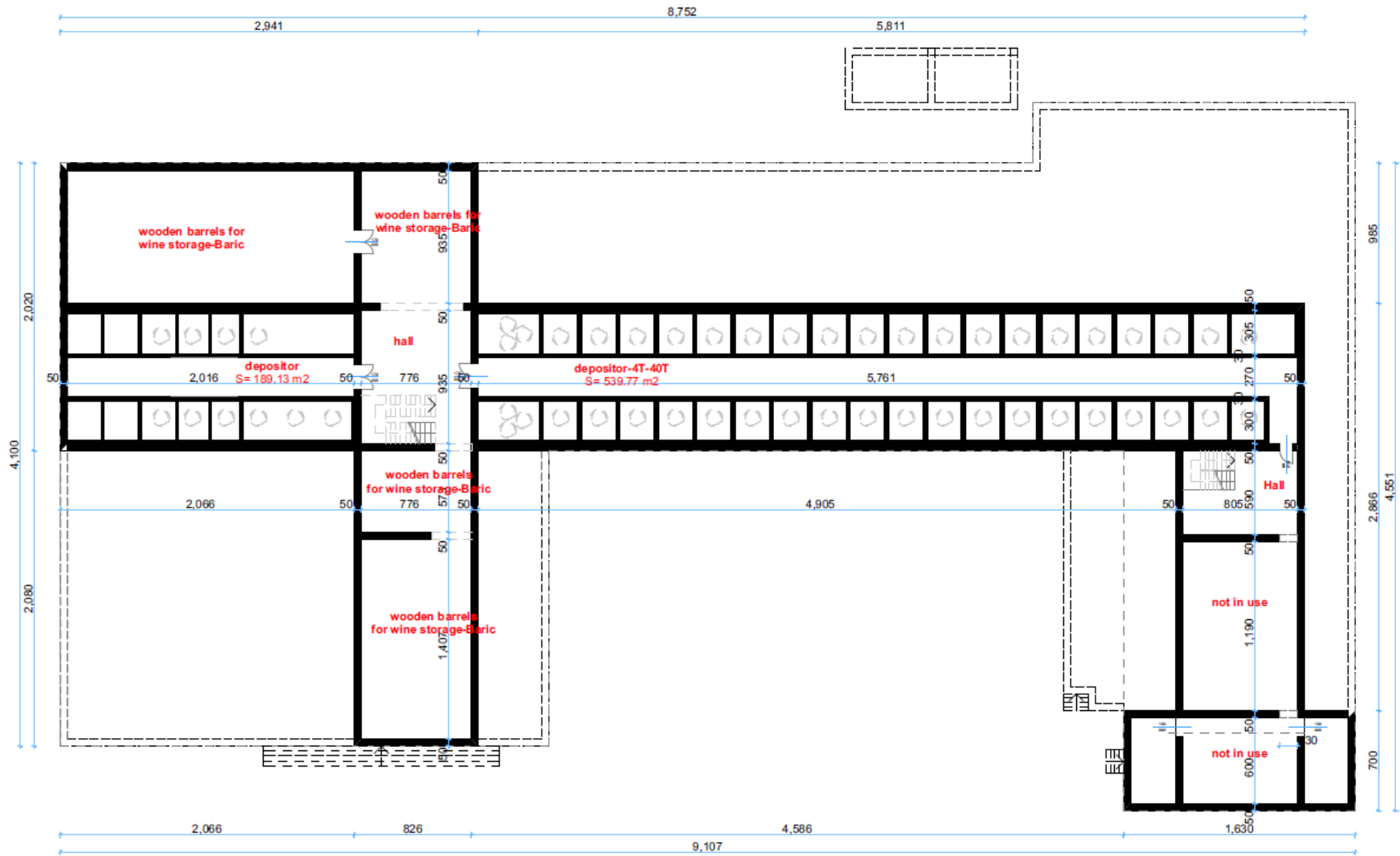


Figure 65. Today-Basement floor of winery “Bodrumi i Vjeter” of N.T.P. Haxhijaha”

## 6 “NEW WINE ARCHITECTURE IN RAHOVEC” - Project of reconstruction and extension of wine cellar “Bodrumi i vjetër” New proposal

By analyzing and studying the current state of the project and the building of “Bodrumi i vjetër” winery, I tried to reach that any intervention that would take place to be the best for the building and the enterprise, giving importance to the building itself and not to lose identity. Some ideas are analyzed and discussed, how to make wine cellar more visited, more open to the public and in trendy with time and functionality, as are wine cellars today in the world.

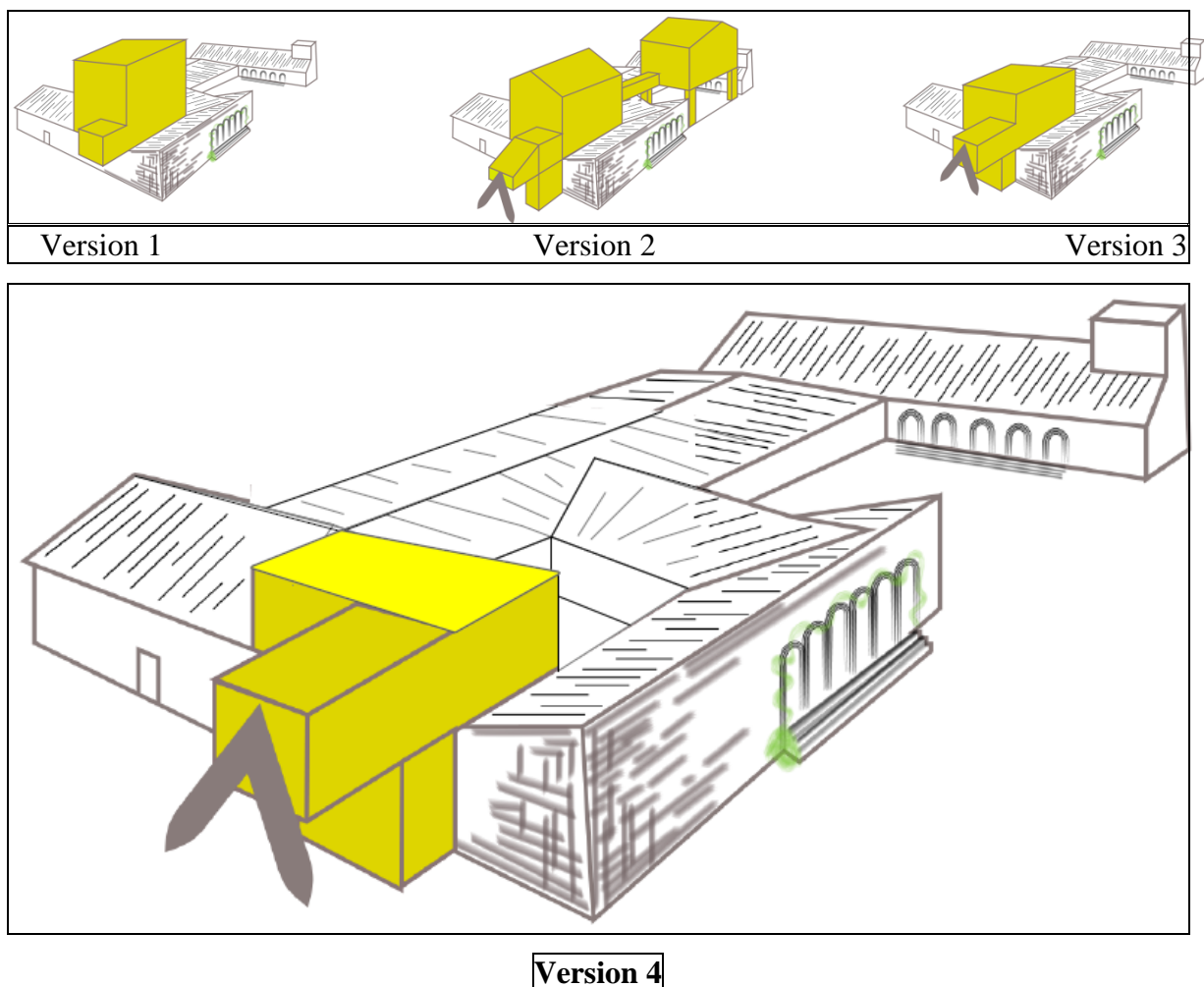


Figure 66. Versions of analyses don for intervention in the building

	Description	Positive	Negative
Version 1	New construction of six floor building with restaurant and accommodation on upper floors	<ul style="list-style-type: none"> <li>- Have accommodation incorporated</li> <li>- Nice view from accommodation rooms</li> </ul>	<ul style="list-style-type: none"> <li>- No entrance in restaurant from outside of the building</li> <li>- Risk that accommodation will not be fully used as Rahovec is a small town</li> </ul>
Version 2	New construction of two buildings connected by bridge with a restaurant and accommodation on upper floors	<ul style="list-style-type: none"> <li>- Have restaurant and accommodation with more spaces</li> <li>- Nice view from accommodation rooms and from restaurant</li> <li>- Have entrance from outside visitor's in a restaurant</li> </ul>	<ul style="list-style-type: none"> <li>- More expensive investment</li> <li>- Risk that accommodation will not be fully used because Rahovec is a small town</li> </ul>
Version 3	New construction of six floor building also with outside visitors' entrance to a restaurant and accommodation on upper floors	<ul style="list-style-type: none"> <li>- Have entrance from outside visitor's in a restaurant</li> </ul>	<ul style="list-style-type: none"> <li>- Risk that accommodation will not be fully used because Rahovec is a small town</li> </ul>
Version 4 (Selected)	New building only restaurant in two floors without accommodation. Entrance in restaurant from outside and inside of the building.	<ul style="list-style-type: none"> <li>- Have entrance from outside visitor's in a restaurant</li> <li>- Nice view from restaurant</li> <li>- Accommodation will be in area around winey in private sector which will have impact in local business development</li> <li>- Separation of visitor's part from administration part.</li> <li>- Less investment for reached goal</li> </ul>	<ul style="list-style-type: none"> <li>- No accommodation incorporated into building</li> </ul>

*Table 3. Positive-Negative table of versions*



Figure 67. Location of winery in relation with surroundings

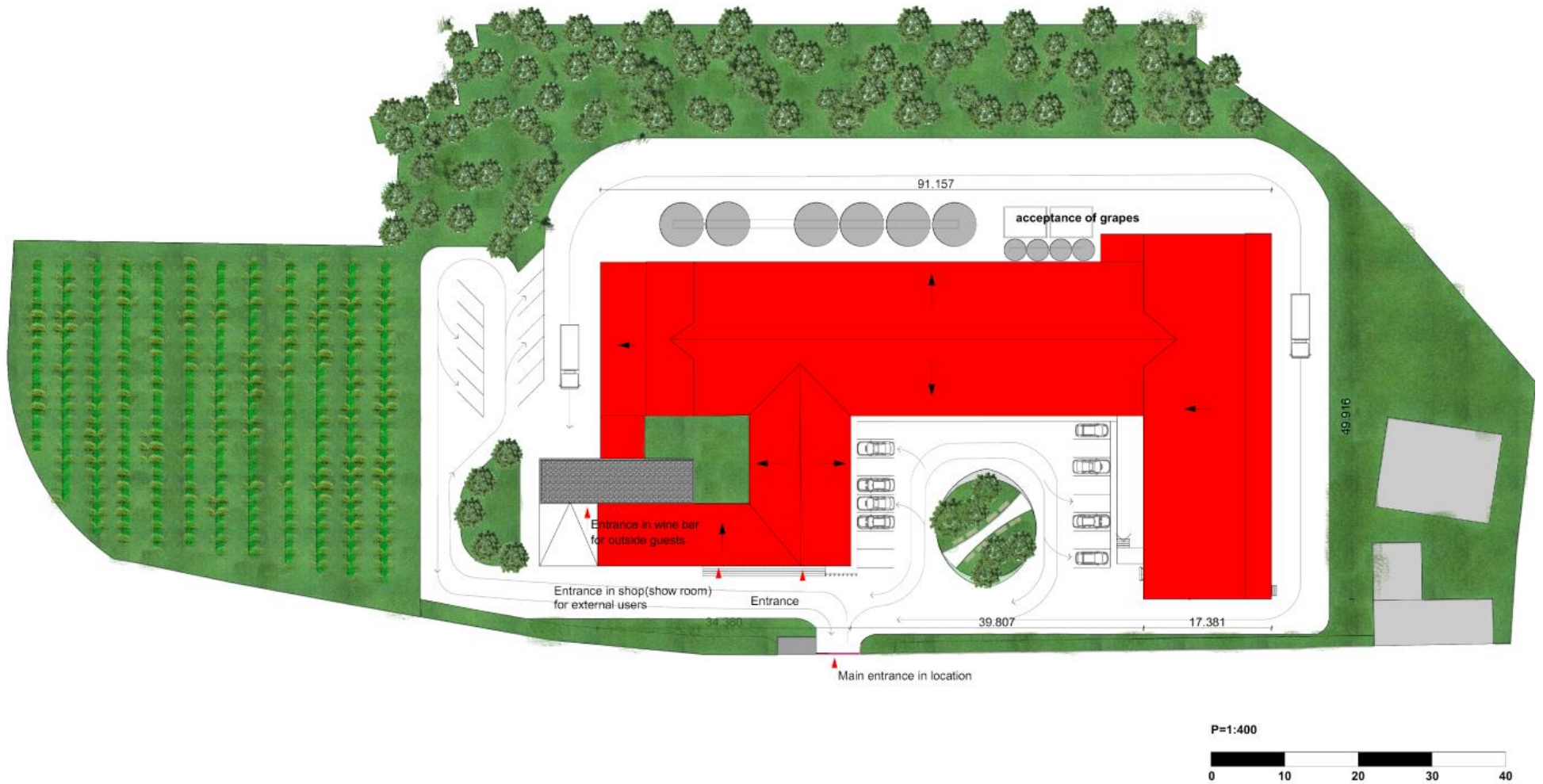


Figure 68. Spatial analyses-new planning of the location

## "Bodrumi i Vjeter"-proposal

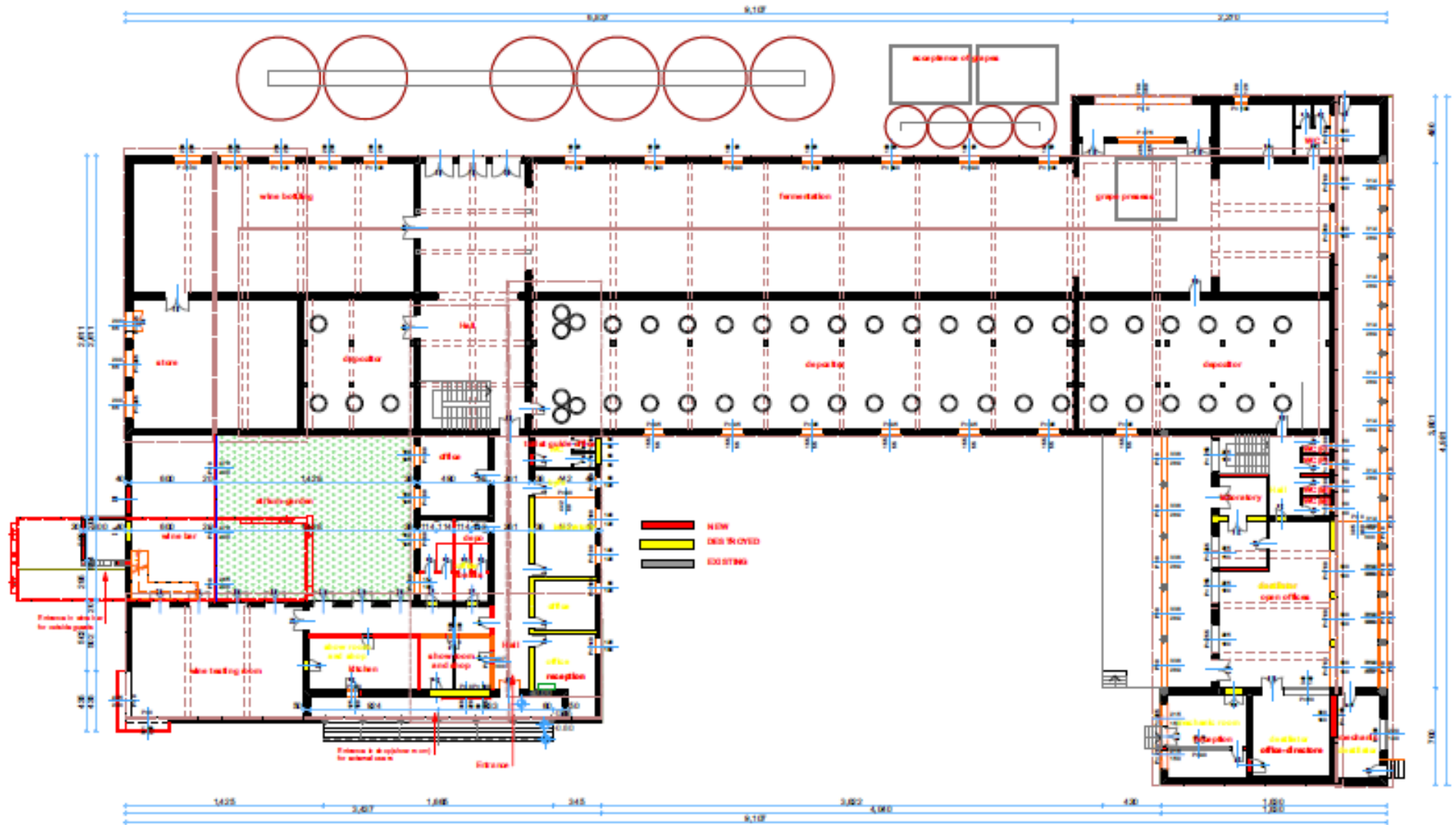


Figure 69. Version 4, selected - Ground Floor Plan-Proposed reconstruction



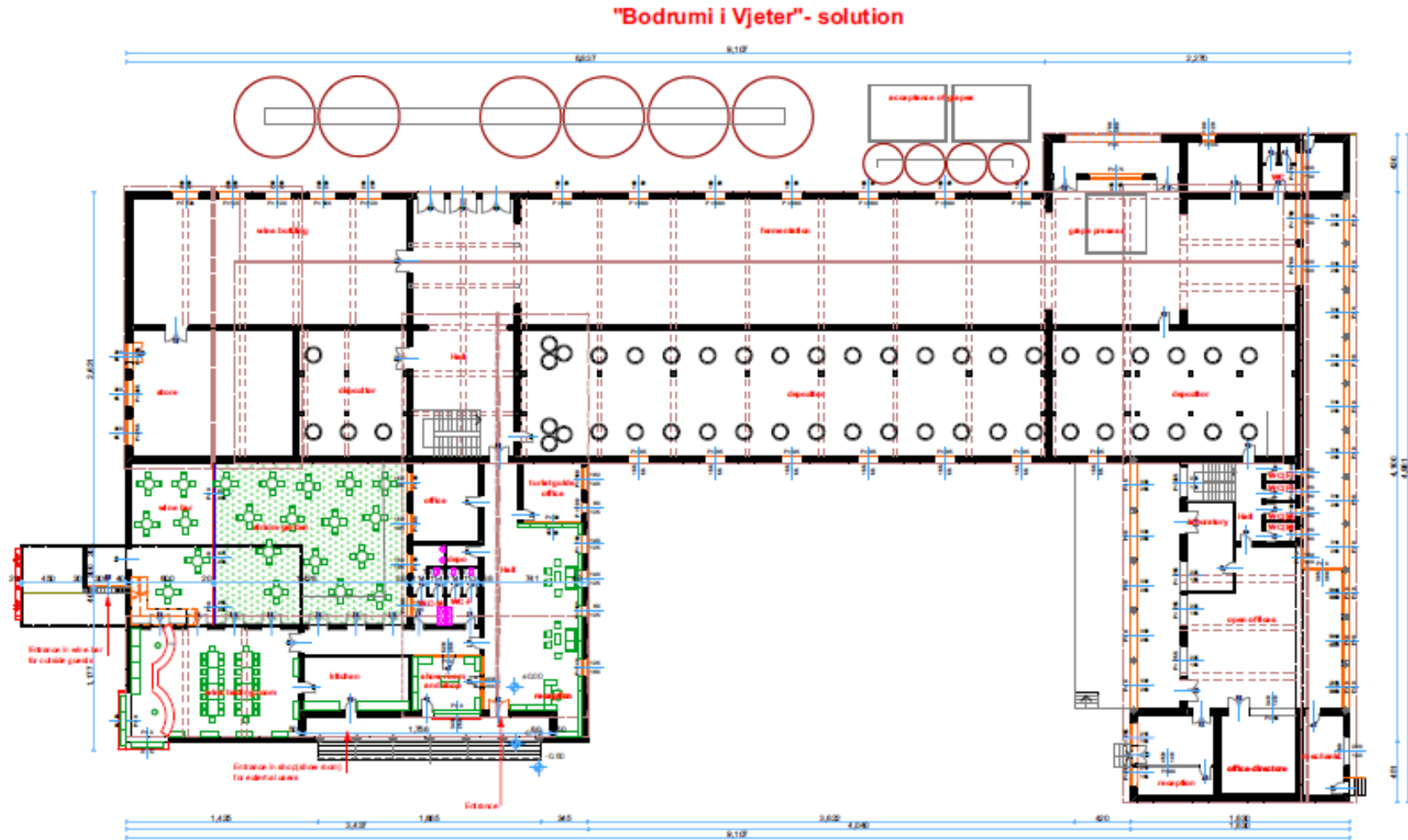


Figure 70. Proposed reconstruction - Ground floor plan

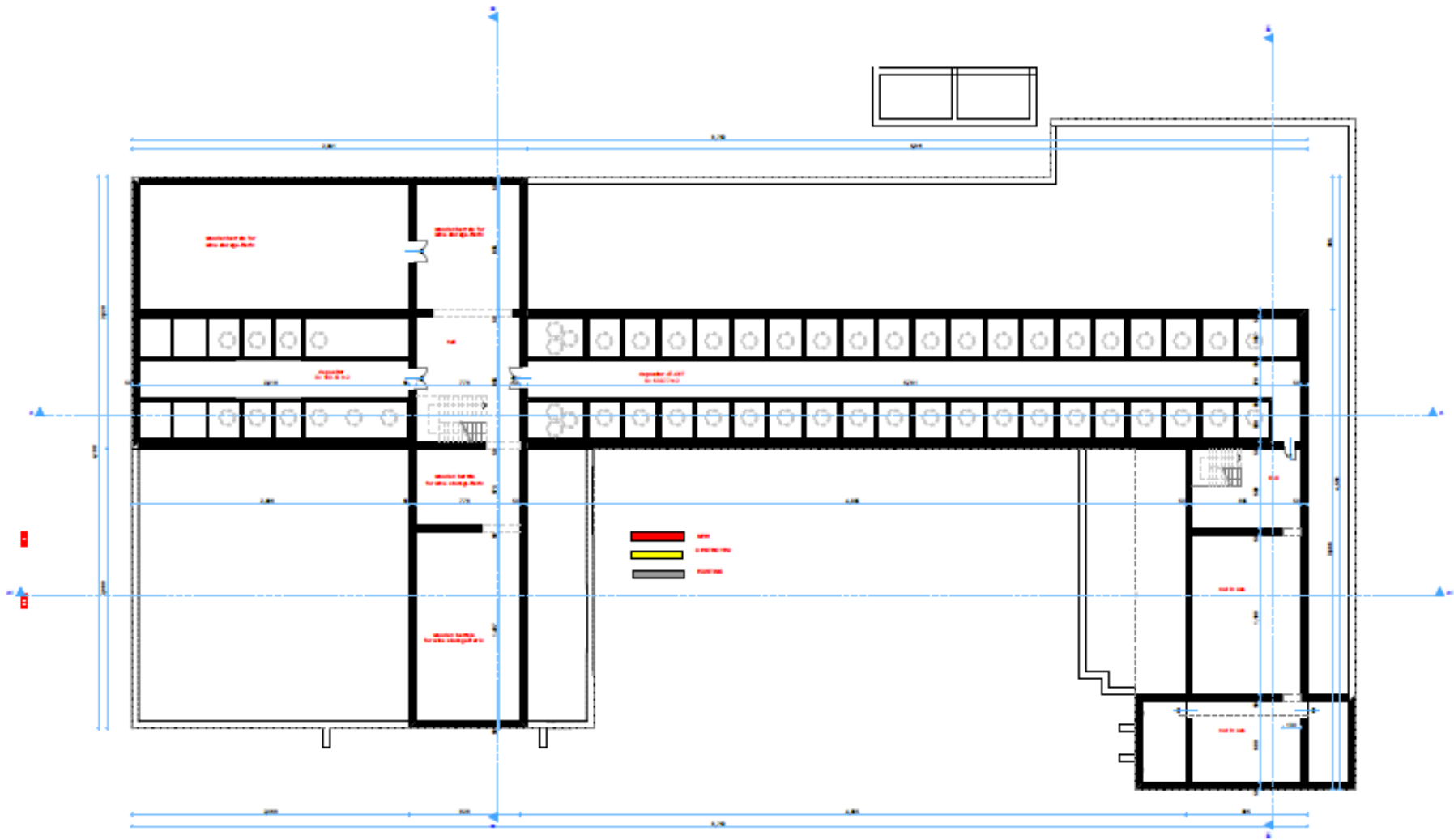


Figure 71. Basement floor - No intervention in structure only in usage of the rooms

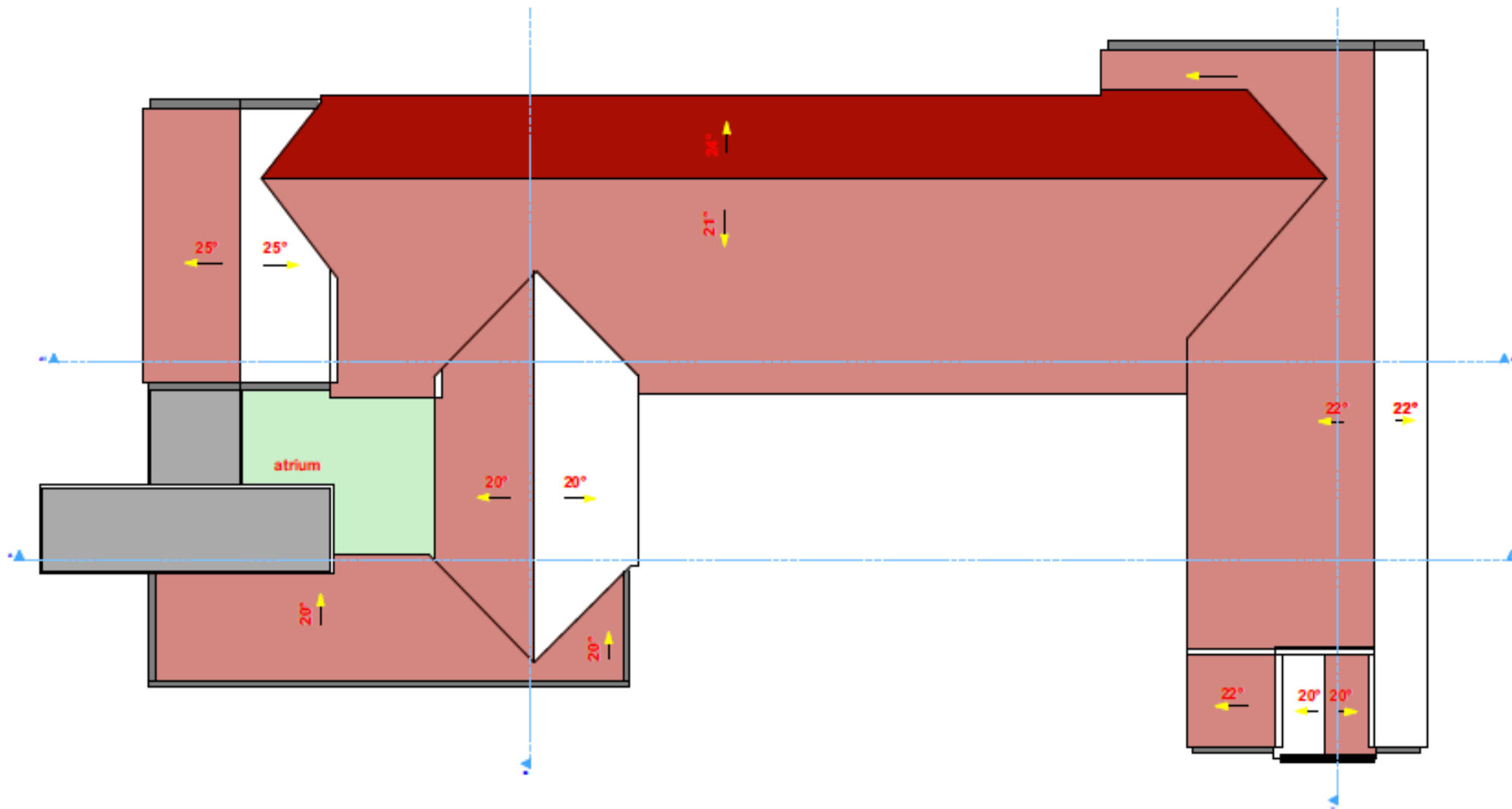
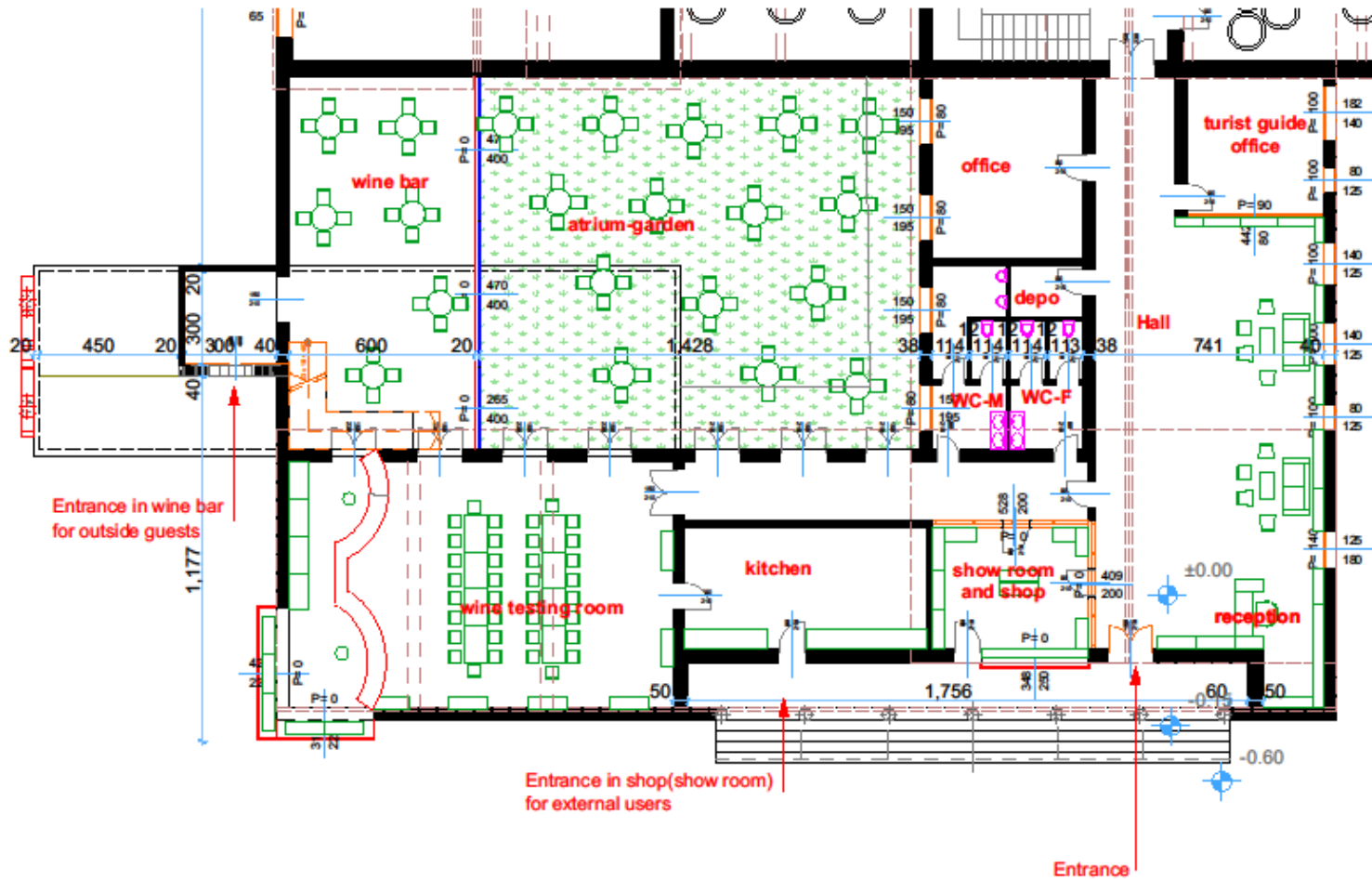


Figure 72. Roof plan

Drawing of the plan below under Figure 72. a), and b) present interventions on the left part of the building which it is planned to be used for visitors. The administration has moved to the right part of the building except tourist guide office which is organised on left side of the building. Also restaurant, show room, tasting room, restaurant with kitchen and toilet are organised on this part. Restaurant have two floors, basement and first floor, also have an entrance from outside and other one from inside of the building. The reason why restaurant has two floor is because from the first floor have a very beautiful view on the city of Rahovec which motivate visitors to come to visit this place. The shop is located in that place of the building where visitors will need always to pass through that way where stimulate visitors to buy something as souvenir.

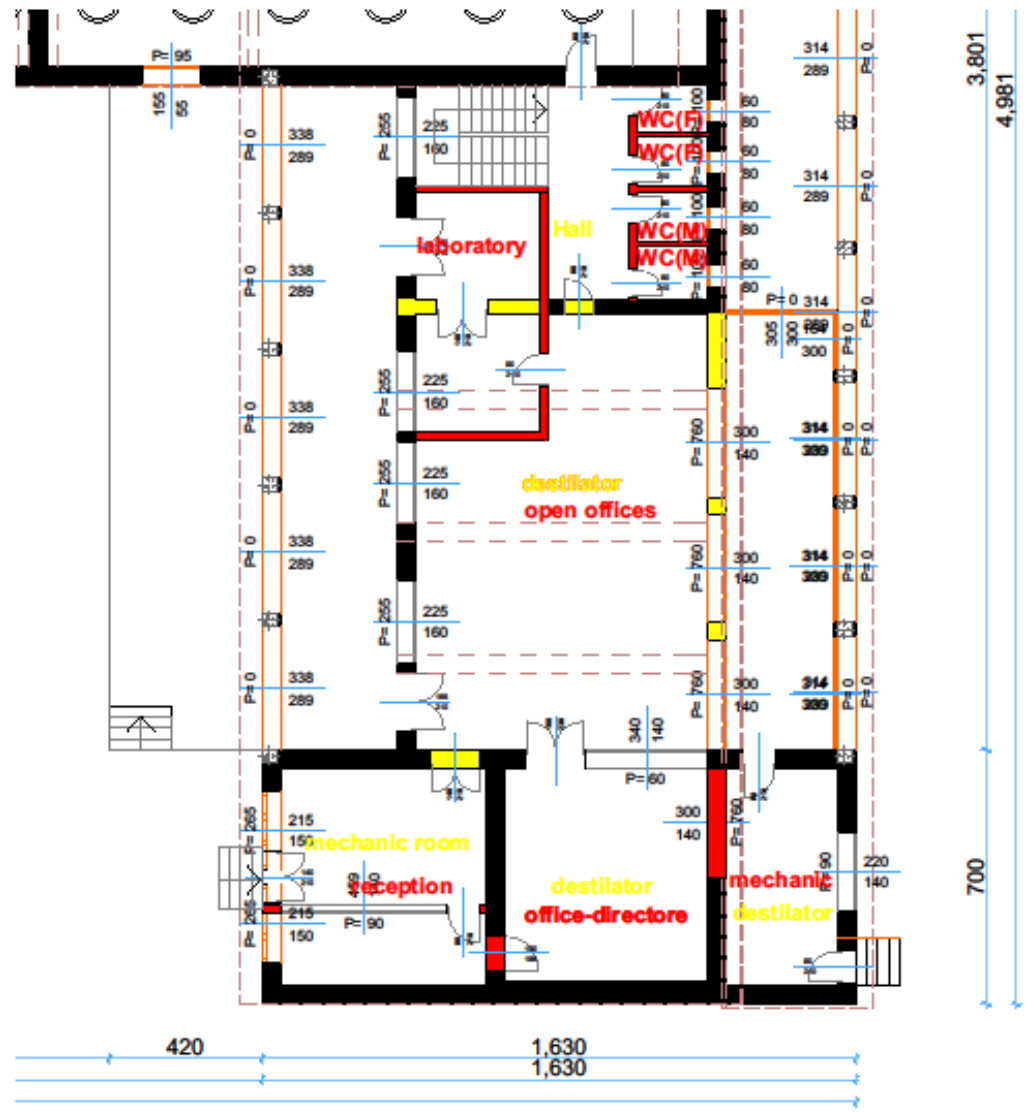
On the right part of the building as it can be seen under Figure 73. a) and b) is organised administration. Offices are organised as open offices for all employees, separately is organised laboratory, toilets, also director's office, which have views of employees through the window. In this part of the building are located also reception for employees and mechanics room.



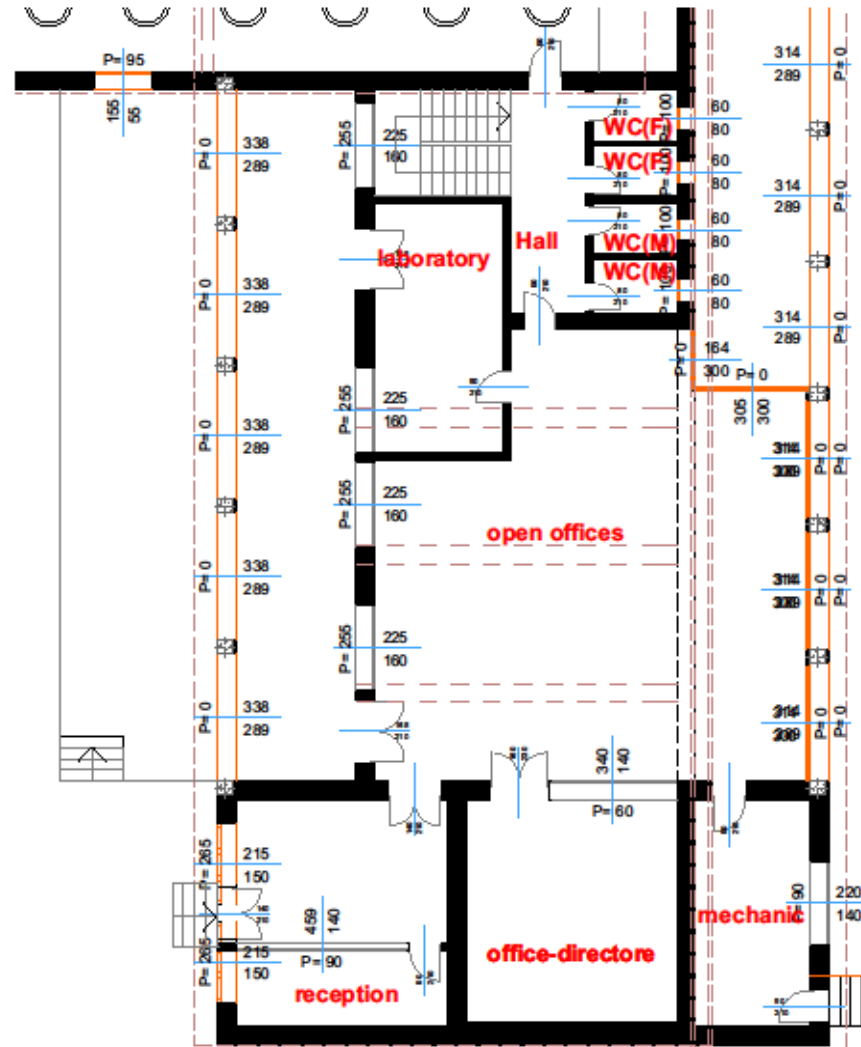


b)

Figure 73. Detail of left part of the building, a) proposed changes; b) final solution)



a)



b)

Figure 74. Detail of left part of the building, a) proposed changes; b) final solution



## Sections

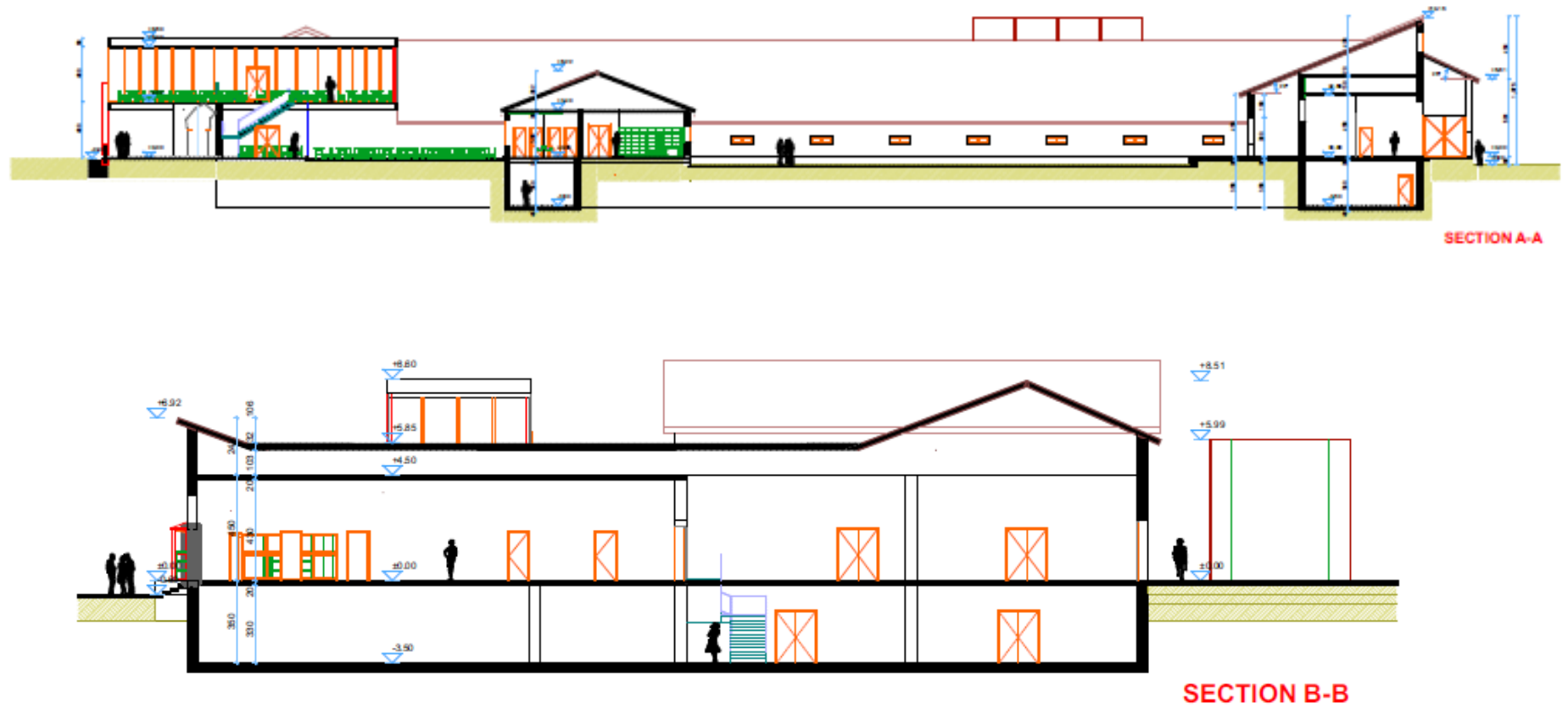
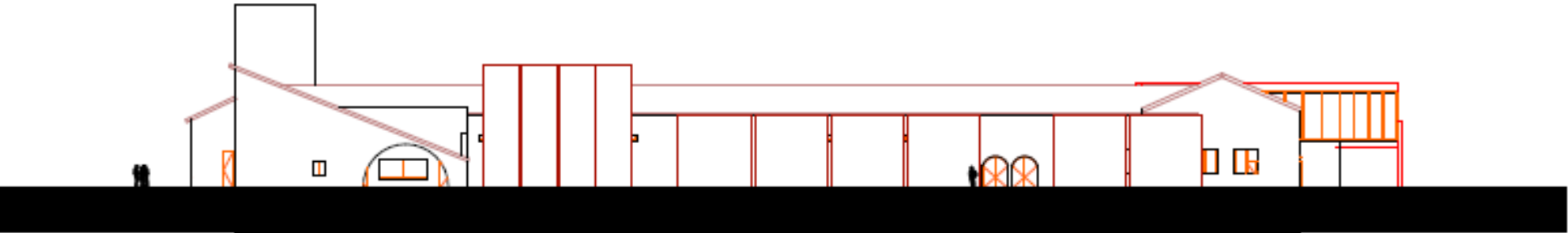
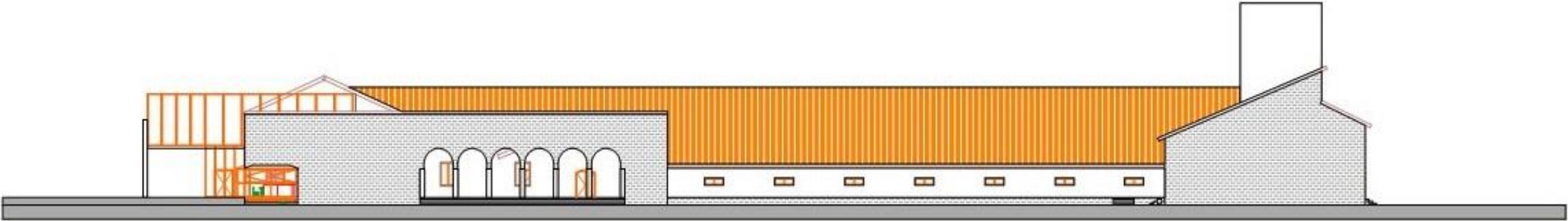


Figure 75. Section: A-A and B-B

Facades



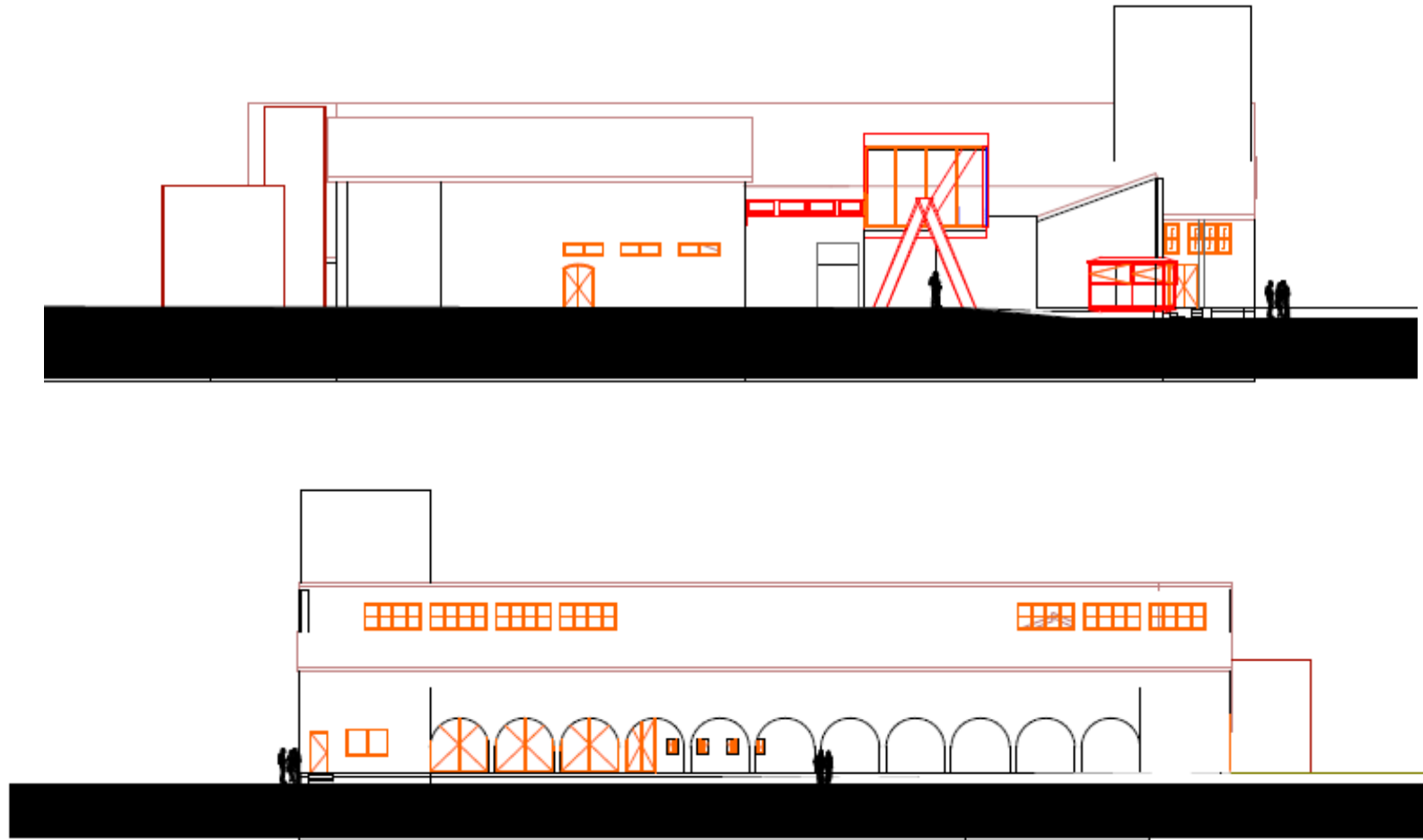


Figure 76. Four sides of facades

### 3D Views







*Figure 77. 3D Views*

For the roof cover-tails, it is proposed to be used photovoltaic system. When you think of photovoltaic systems automatically, your mind goes to those large panels, which are awkwardly installed on rooftops. Although the environmental impact of those are practically zero, their architectural impact is not similar!

Alternative energy has become a lot cheaper than it used to be when the public was presented to it. Still, nowadays solar panels are hardly the aesthetically pleasing objects we want them to be. These tails are made from natural clay or slate slabs and have small solar panels applied to the flat side facing the sun. They are easy to install and have a high enough energy yield. There are also transparent solar shingles, which have an even less aesthetic impact. They are weather resistant and have similar characteristics to traditional tiles, with the only difference being the material: Plexiglas or PMMA, that allow a 90% passage of natural light.<sup>76</sup>



Figure 78. Detail of proposed roof cover<sup>77</sup>

<sup>76</sup> <http://www.goodshomedesign.com/generate-cheap-green-electricity-from-sunlight-with-solar-roof-tiles/>

<sup>77</sup> <http://www.goodshomedesign.com/generate-cheap-green-electricity-from-sunlight-with-solar-roof-tiles/>

## **6.1 Building layout with new proposed visitors' line**

The plan of the cellar with a new solution (alternative plan) would enable the facility to have the movement line (see Figure 79 & 80) for the visitor inside the cellar, visiting all processes of wine making; starting from visit the vineyard, grape harvest, process of crush out, elimination of residues, vessel filling, and fermentation up to degustation



Floor plan- Visitors line proposal

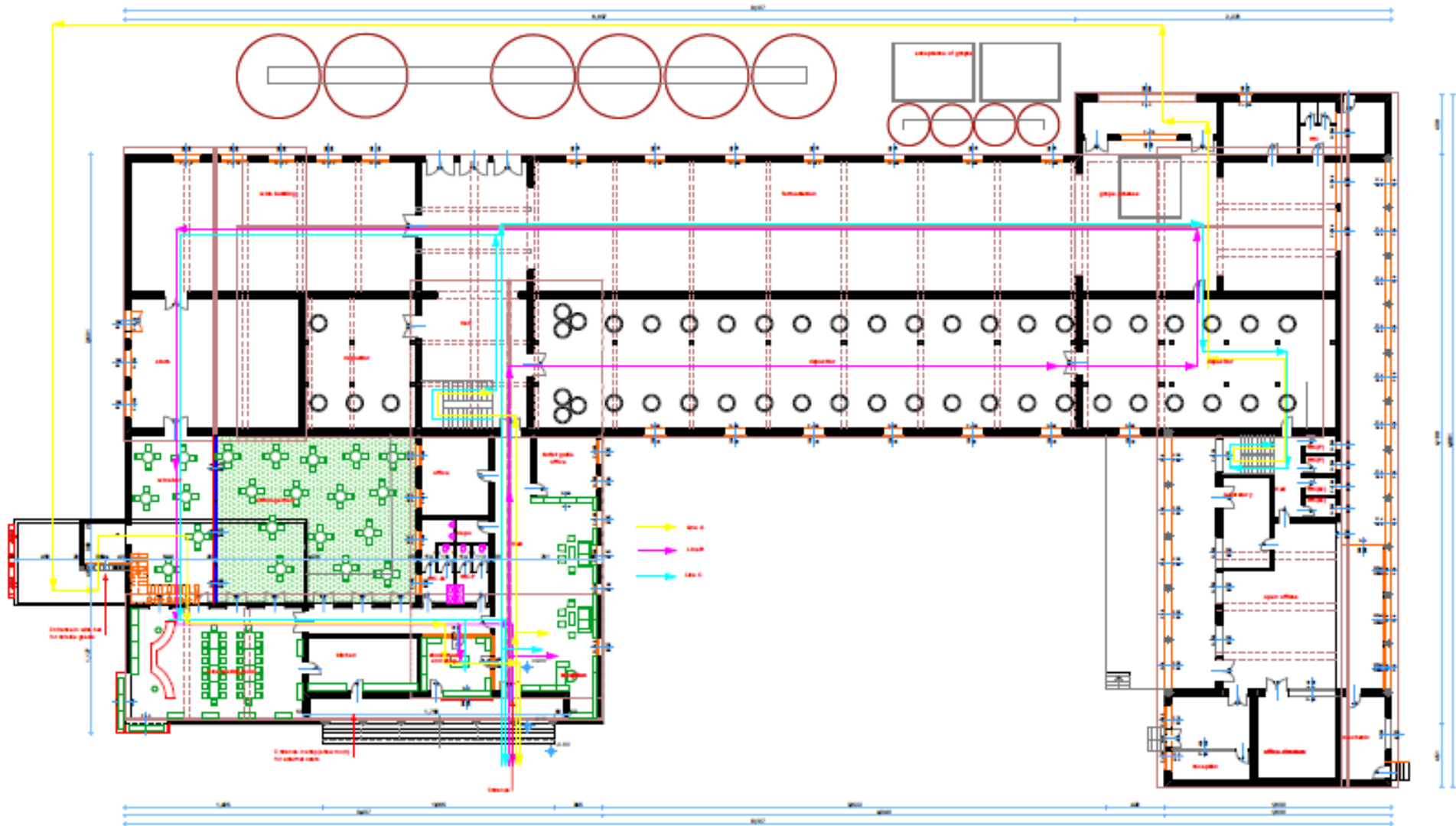


Figure 79. New proposal: Line for visitors ground floor

Basement plan- Visitors line proposal

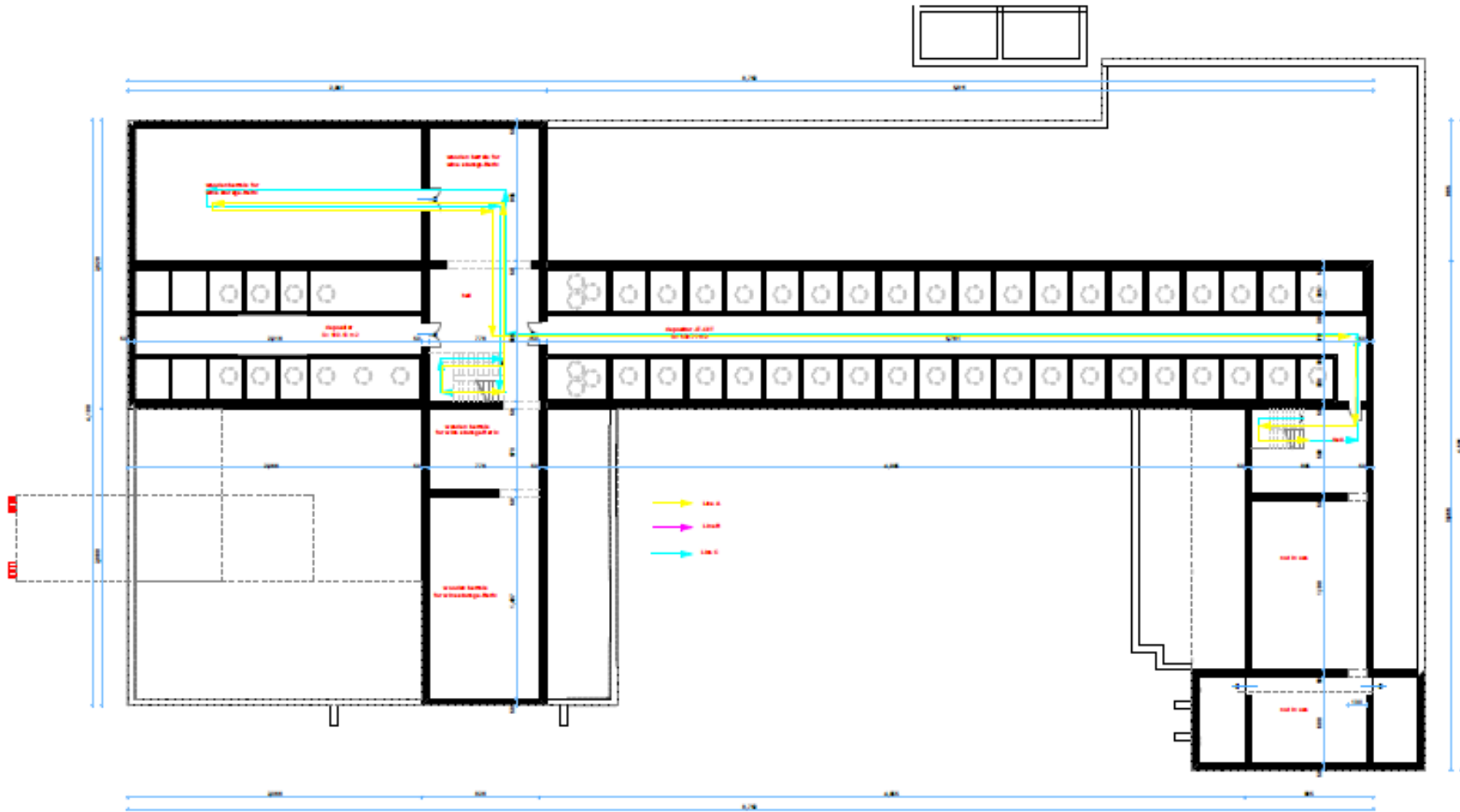


Figure 80. New proposal: Line for visitors Basement Floor



*Figure 81. Detail of walking line<sup>78</sup>*

<sup>78</sup> Teuta Jaha-Hoxha, Proposed detail of walking lines for the visitors, through the building

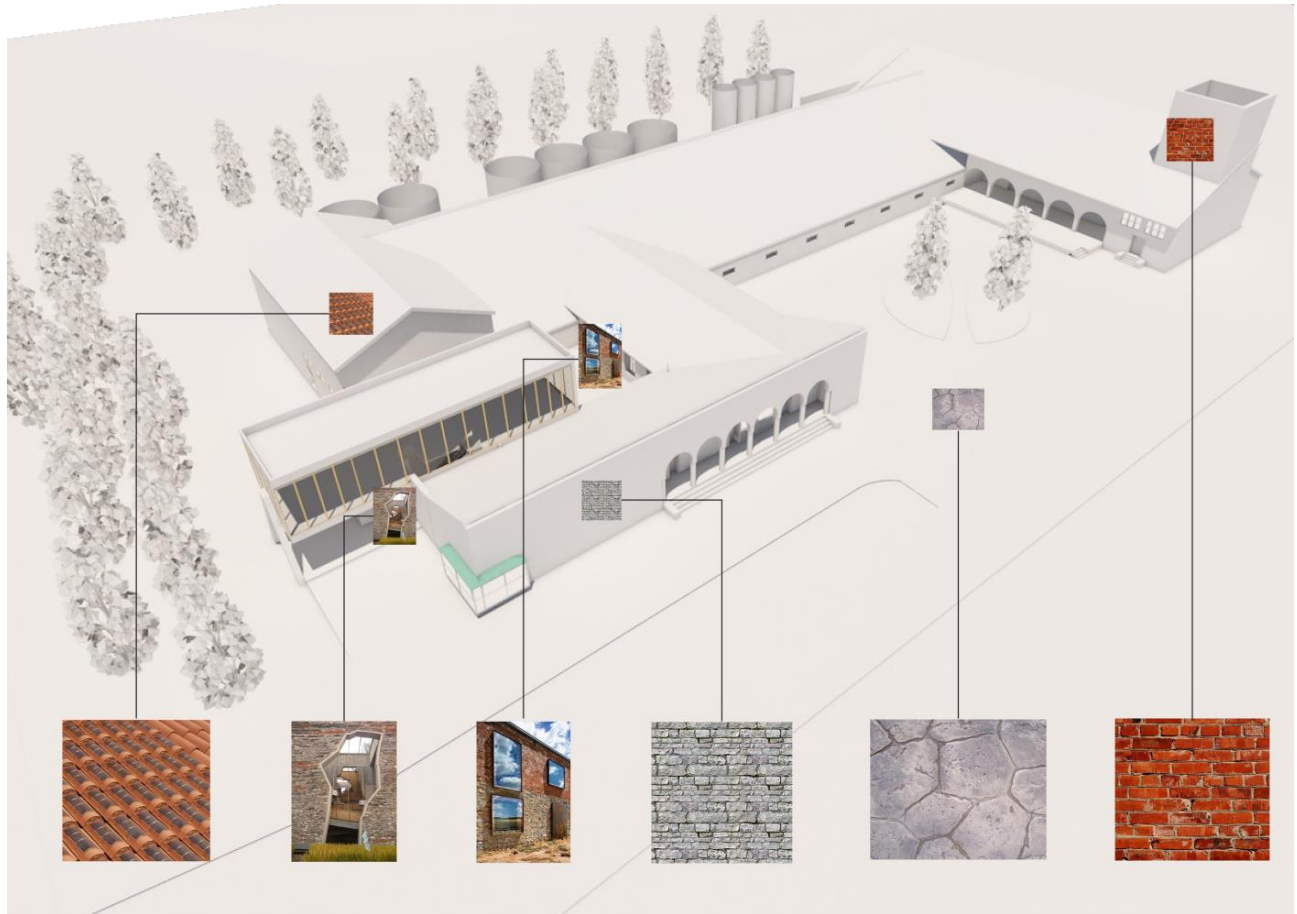


Figure 82. Materialization of facade of building and stairs

The restaurant has two floors. Part of restaurant which is in ground floor it is expended into atrium and have the exit in the yard – atrium. It is surrounded by four sides with high walls facing the stones, which would create relaxing ambiance for the visitors whereby they can taste different wines combined with delicious traditional food such as: wheat wafer, cheese, flija (traditional pie), tomato, pepper etc.



*Figure 83. Proposed details for interior<sup>79</sup>*

<sup>79</sup> Teuta Jaha-Hoxha taken in Razma Resort-Shkoder, Albania, 2012-2016

Due to the space of location in the center part of Rahovec, as the cellar is not large it is planned to have small vineyards in that location. This is plausible by planting vine trees in the free spaces on the left part of the location already has which would provide the experience of the vineyards for the visitor. This would complement the experience of the visitor for wine making whereby it would feel as they are visiting the vineyard in the rural area, i.e. the first phase of wine making, and then walk through the cellar where they would witness the rest of the follow up phases of wine making, starting with grape harvest to grape processing etc.

Internal garden is a closed space that would create a feeling of closeness and calmness for a total relaxation, a small waterfall could be built which would make the impression that one is far away from the suburb, a space where there is no inhabitation, since the building in question is in the urban zone of the city.

The whole essence of the renovation and reconstruction is to get the opening of the facility for the public and the connection of the facility with the nature (landscape) since, the current location does not allow this – geographical location of the caller is within the city, surrounded with constructions, concrete and asphalt.

In the future as next faze within the yard on the east part of location on the hilly part, it is suitable to build 4 little houses which would be for the use of visitors. Or can be build new building as are proposed on version 1,2 ore 3 describe in text above. This would enable the visitors to stay for more than a day visit if they wish to stay where they can disconnect themselves from the daily work stress and relax with the rest of their family, friends and work colleagues. The main entrance open space where is reception for visitors is projected for multi usages, also can be used as an art gallery for conferences, seminars, workshops, events and different celebrations.

## 7 CONCLUSION

During drafting the master's thesis, I made numerous analyzes about the existing wine cellars in Kosovo, namely Rahovec. Studies from their conceptual point of view, geographic reach, access to the wine cellar facility, as well as their architectural and substantive solution. From these analyzes and studies, I have noticed that so far it has not been given at all or very little importance to reconstruction of existing wine cellars based on a new modern design style and function. Wine cellars have to be open to the different visitor and tourist not only local also ones from outside of Rahovec and Kosova itself, which are not few of them who are interested in this area and this type of tourism. Wine cellars also have to be designed in such a way have can attract visitors to visit it as an object of architectural value. The visitor wants to convey the technological process, starting from the vineyard gathering grapes, to the wine production, as well wine tasting. Accommodation can also be provided with more than one daily visit to Rahovec in existing hotels and motels or in the individual B & B accommodation provided with traditional local food. So far, some of the existing wine cellar facilities have made minor changes in their facilities by opening wineries for tourists, with small interventions in the facility structure providing spaces for wine tasting and a small store for sale of wine and grapes. Although much more needs to be done to be more attractive to the visitor. I believe that this project could influence the development of vineyards and wine tourism of the "Bodrumi I vjetër", but not only, also can be a positive example for other wine cellars to follow the same way of development with reconstruction and revitalization of their existing wineries.

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[METY%2FVLP%2FPLpresentation%2F2008%2FWine%2520Production-  
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[http://bodrumivjeter.com/Bodrumi\\_i\\_Vjeter/](http://bodrumivjeter.com/Bodrumi_i_Vjeter/)

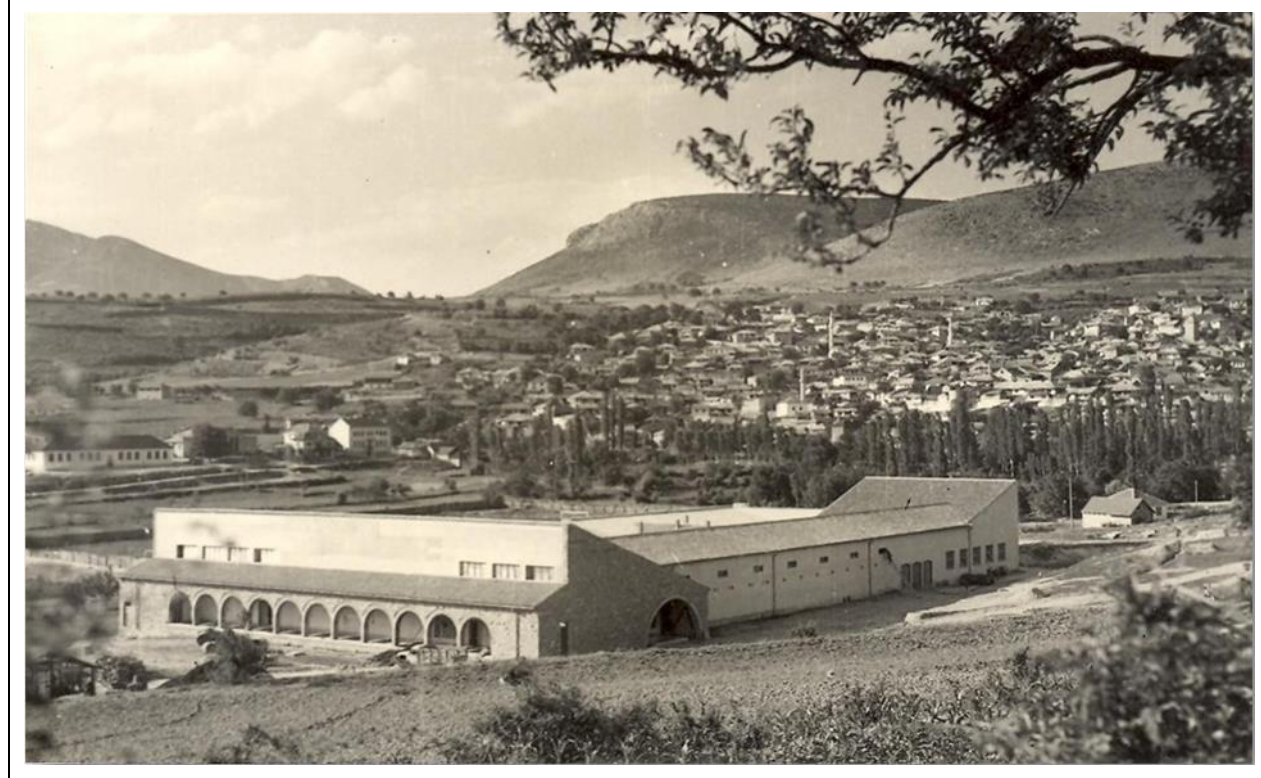
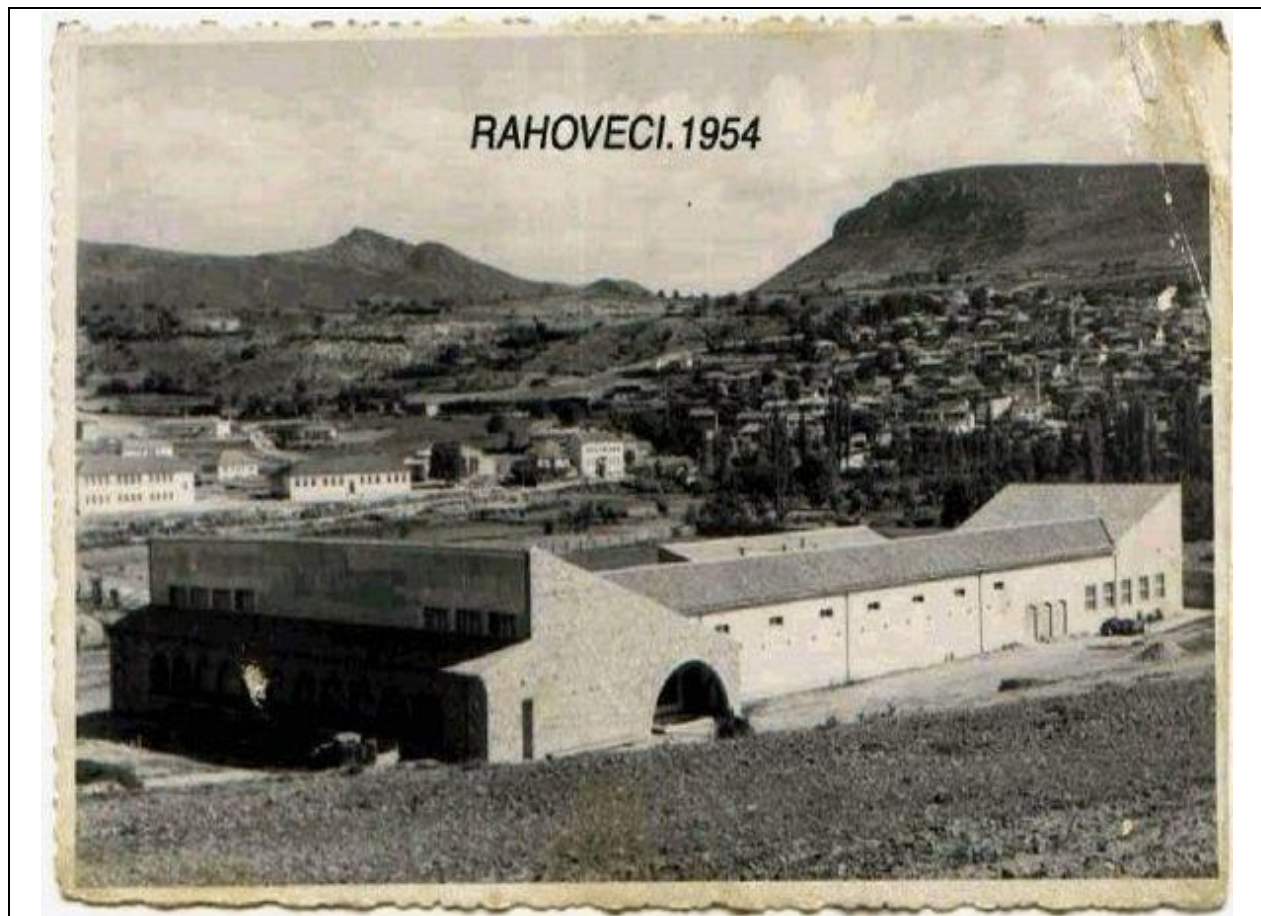
<http://enologjia.com/wineries/?lang=en>

## 8 ANNEXES

Different photos from wineries in Kosova

Winery photos of “Bodrumi i Vjetër” throught the years:





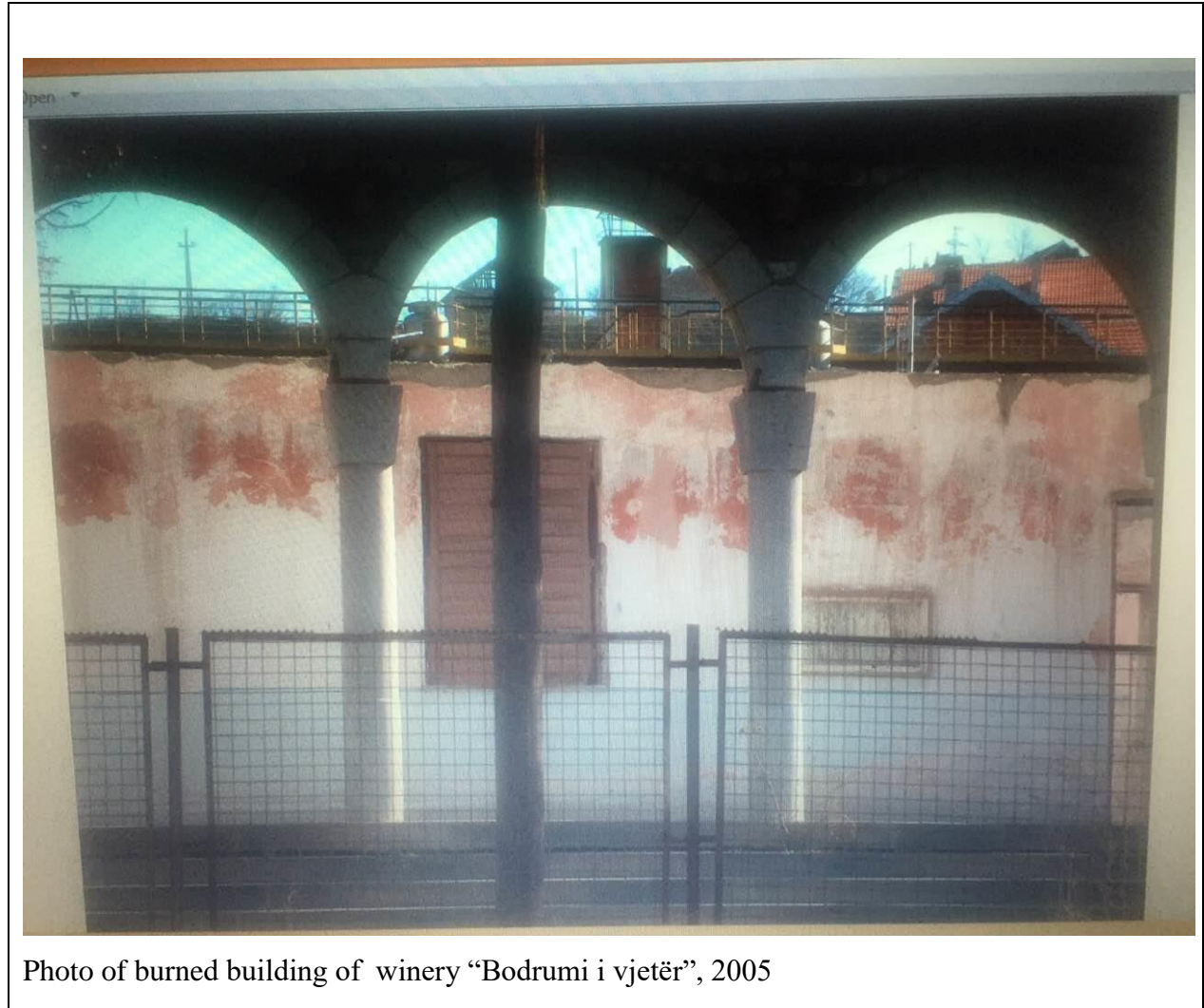


Photo of burned building of winery “Bodrumi i vjetër”, 2005









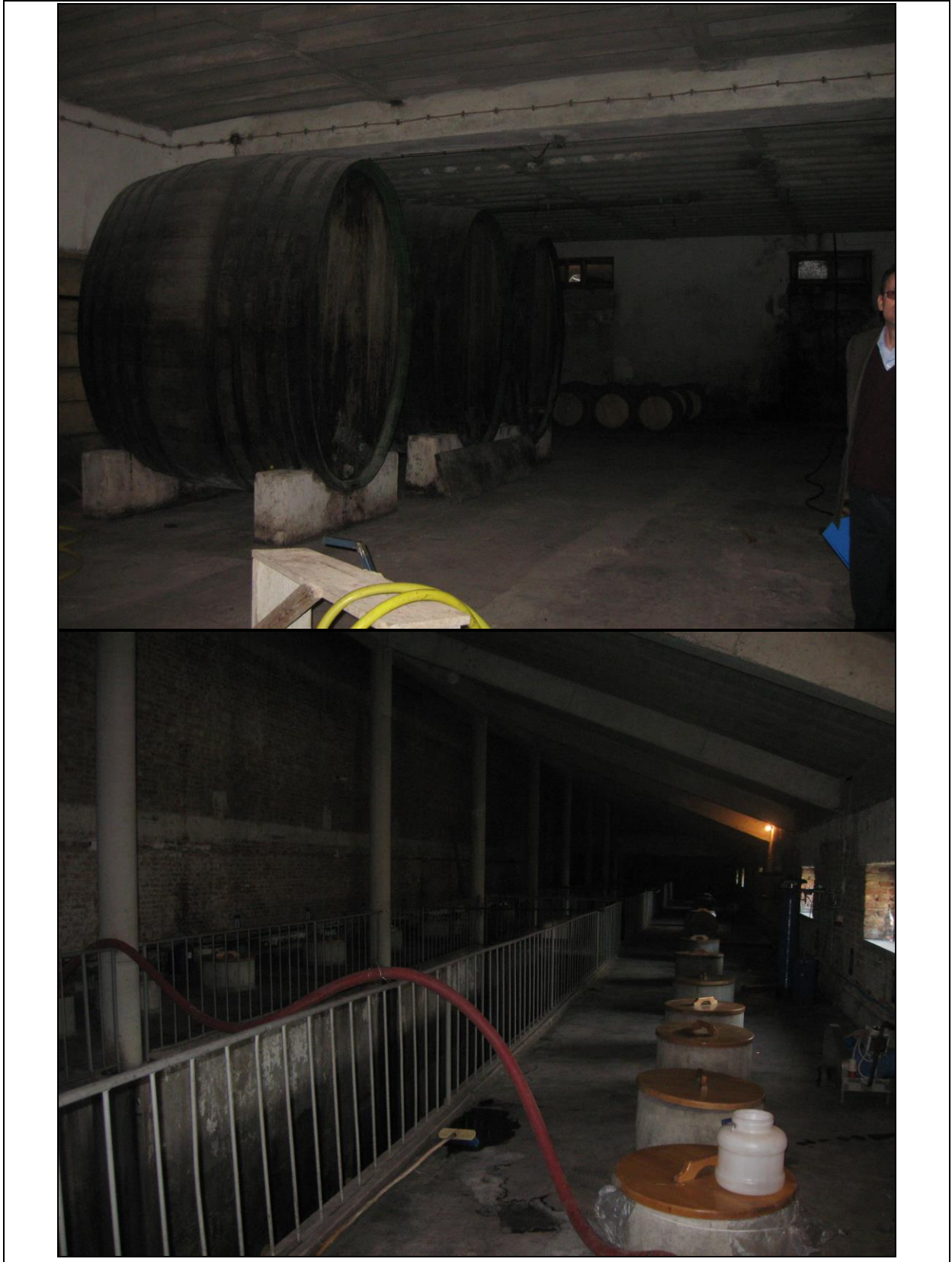


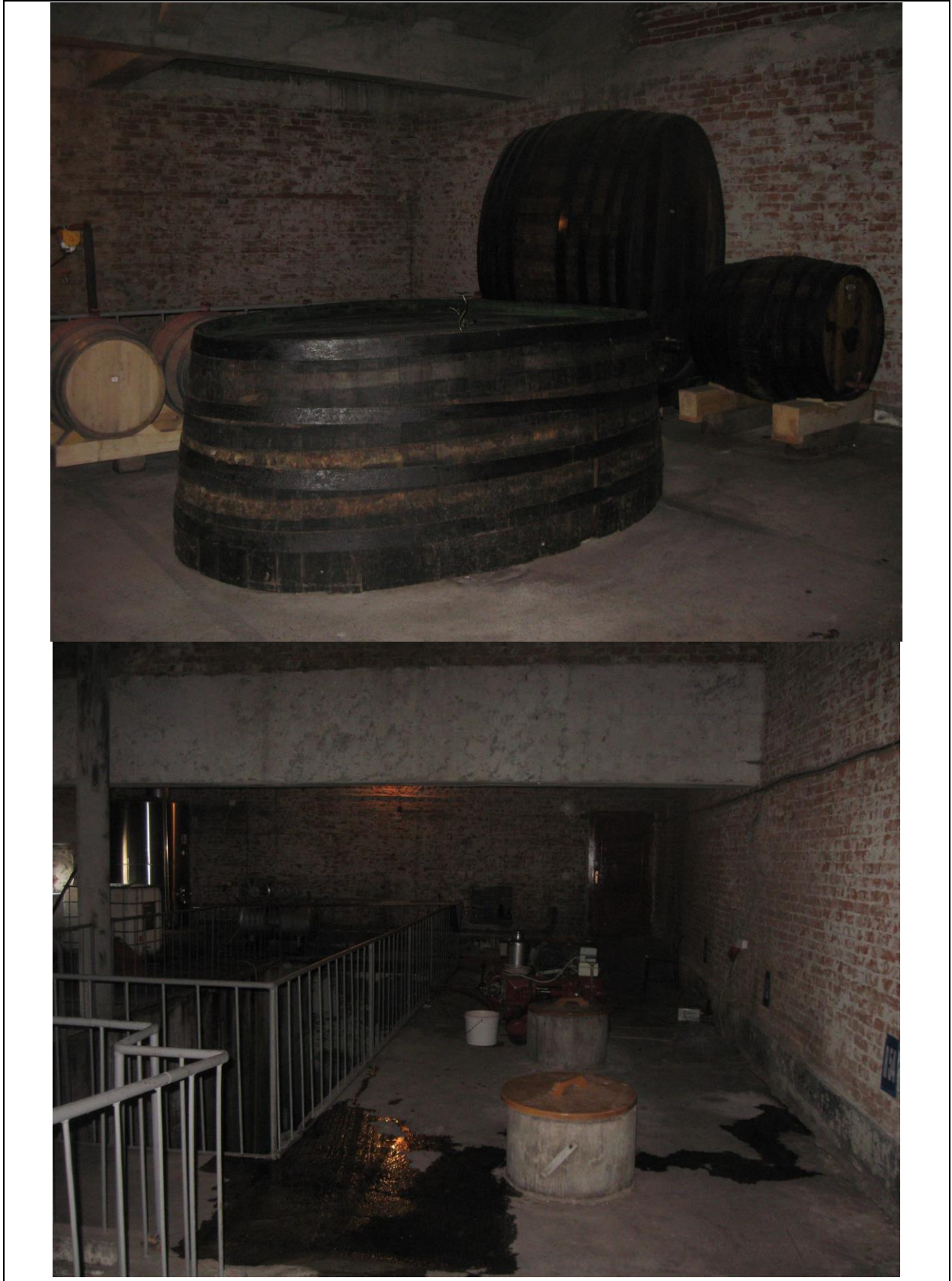


Basment of “Bodrumi i Vjetër” winery



























Winery "EKO" N.T.P Muja, Rahovec









Wine yards in Rahovec



Theranda winery wine

“Biopak” winery













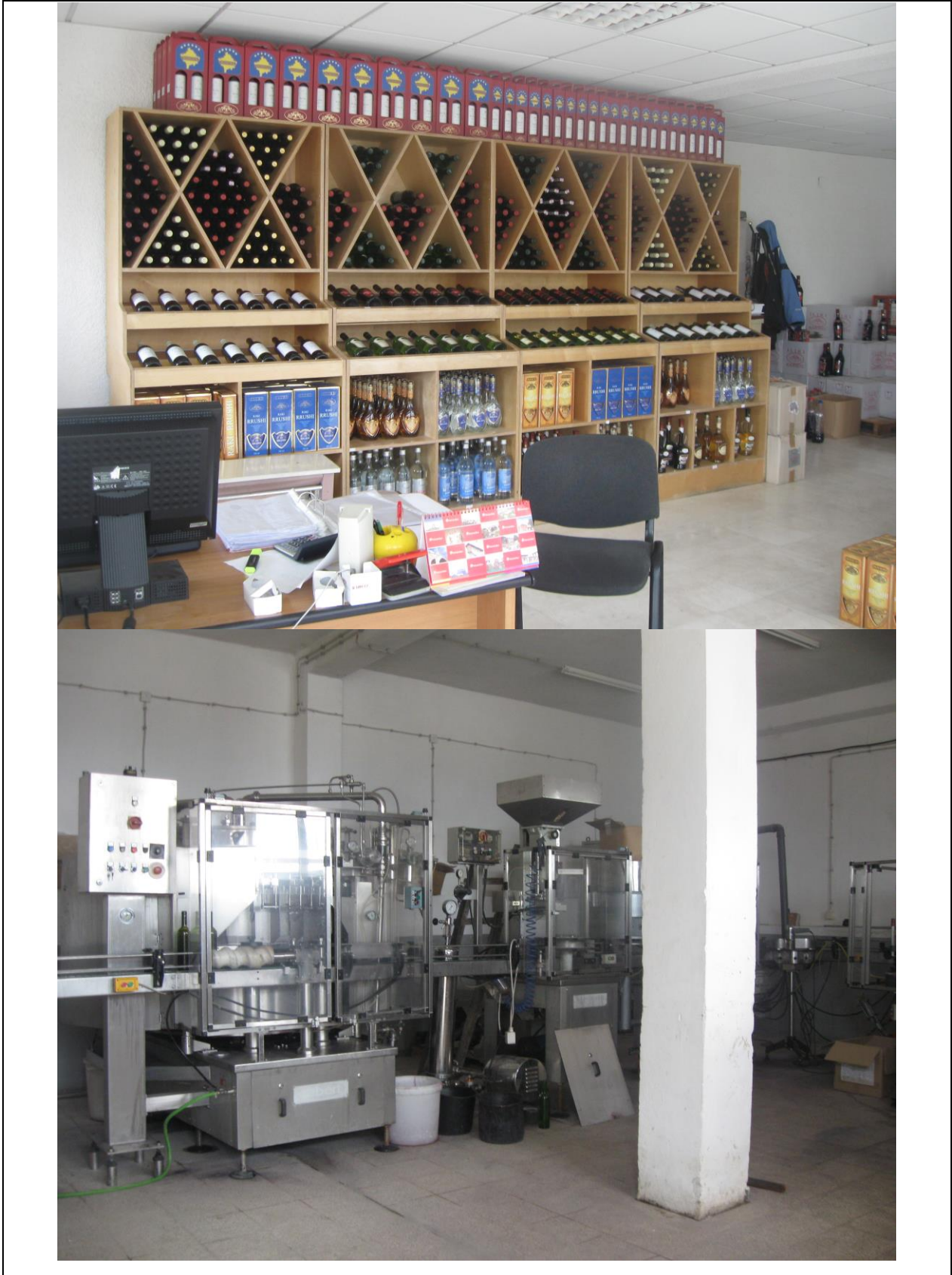














Below are picture from diferent wineryes in the world and diferent objects from enterier and exterier which inspired me to draft and design my master thises.





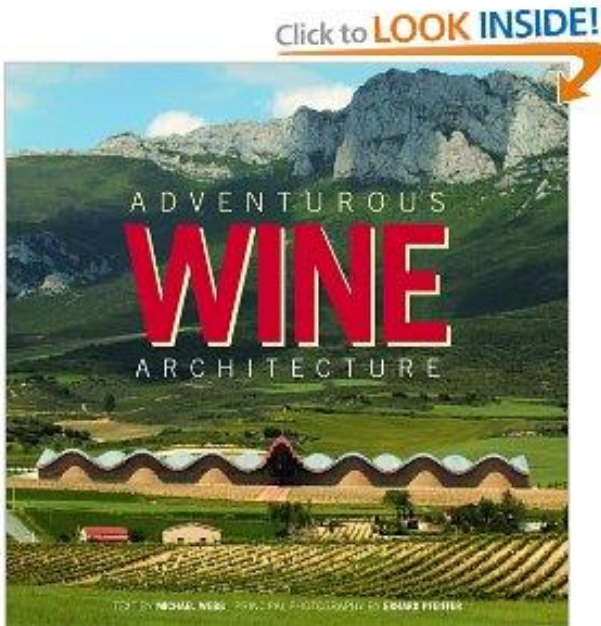






Winery Lopez de Heredia / Zaha Hadid





# WEINARCHITEKTUR WINEARCHITECTURE

Vom Keller zum Kult The Winery Boom





