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THE RESTORATION PROJECT OF THE OLD AGRICULTURAL BANK BUILDING IN MERSIN

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Approval of the Graduate School of Natural and Applied Sciences

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ABSTRACT

THE RESTORATION PROJECT OF
THE OLD AGRICULTURAL BANK BUILDING IN MERSIN

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This thesis subjects the old Agricultural Bank Building in Mersin, which is one of the important traditional late 19th and early 20th century buildings of Mersin and which reflects important architectural features of that period.

The main scope of this thesis is to prepare a conservation and restoration project for the "Old Agricultural Bank Building" which will pass the historical, architectural, cultural values of the building to the next generations.

The study is composed of six subjects. In the introduction, short description of the building is given stating its significant architectural values. It is continued with the aim of the study, as well as the framework and methodology of the study.

The second topic covers the documentation of the building and its nearby environment describing its present state together with the location of the building within Mersin and the general settlement characteristics of the nearby environment. The documentation continues with analysis of the building related to the building elements and materials; construction techniques; structural system; physical problems covering the material deteriorations and structural deformations; and finally evaluation of changes.

The third subject comprises research related to the historical background of the building as well as the nearby environment within the historical development of Mersin. It is followed by the fourth topic, which covers comparative study of the physical and architectural

features of the building with examples from bank and entrepot/depot buildings as well as other traditional buildings that belong to same period in Mersin.

During the fifth subject, which is the restitution stage, evaluation related to the exploration of the previous states of the building is carried out. The study concludes with the last section, which covers the evaluation of collected information up to this phase stating the values, problems, potentials of the building. Finally, it is completed with proposal decisions related to the conservation and restoration of the building.

Keywords: Conservation and Restoration, Bank Buildings, the Agricultural Bank, Entrepot/Depot Buildings, Mersin.

ÖZ

ESKİ ZİRAAT BANKASI YAPISI
RESTORASYON PROJESİ, MERSİN

NAYCI, Nida
Yüksek Lisans, Restorasyon Y. Lisans Programı, Mimarlık Bölümü
Tez Yöneticisi : Nimet ÖZGÖNÜL

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Bu tezin konusu Mersin'in önemli geç 19.- erken 20. yüzyıl dönemi geleneksel yapılarından bir tanesi olan ve yapıldığı dönemin önemli mimari özelliklerini yansıtan eski Ziraat Bankası Binası'dır.

Çalışmanın amacı 'Eski Ziraat Bankası Yapısı' nın içerdiği özgün mimari, tarihi ve kültürel değerlerin, hazırlanacak koruma ve restorasyon projesi ile koruma altına alınması ve gelecek kuşaklara aktarılmasının sağlanabilmesidir.

Çalışma altı bölümden oluşmaktadır. Giriş bölümünde yapının önemli özelliklerinin anlatıldığı kısa bir tanım ve çalışmanın amacı verilmektedir. Bununla beraber çalışmanın kapsamı ve her aşamının içeriği ile beraber yöntemi aktarılmaktadır.

İkinci bölüm, yapıya ve yakın çevresine yönelik gerçekleştirilen belgeleme çalışmalarını kapsamaktadır. Belgeleme çalışmalarının ilk aşaması, yapının Mersin kenti içindeki konumu, yakın çevresinin dokusal özelliklerini ve yapının mevcut durumunu tasvir etmektedir. Belgeleme çalışmalarının ikinci aşaması olan analizler başlığı altında ise ; yapı elemenları ve malzemeleri; yapım tekniği; taşıyıcı sistem, malzeme bozulmaları ve yapısal deformasyonları içeren fiziksel bozulmalar ve de yapıdaki deişmişliklere yönelik gerçekleştirilen incelemeleri içermektedir.

Üçüncü bölüm, Mersin kenti tarihi gelişimi içinde yapının ve yakın çevresinin tarihi sürecine yönelik gerçekleştirilen tarihi araştırmayı kapsamaktadır. Dördüncü bölüm, yapının

fiziksel ve mimari özelliklerinin eş dönem banka yapıları, antrepo/depo yapıları ve geleneksel Mersin yapılarıyla karşılaştırıldığı karşılaştırmalı çalışma aşaması yer almaktadır.

Restitüsyon değerlendirmelerinin yer aldığı beşinci bölümde, yapının önceki dönemlerine ait özgün durumları araştırılmıştır. Çalışma ; önceki aşamalardan elde edilen bilgilerin değerlendirilmesi ile yapının içerdiği değer, problem ve potansiyellerin ortaya konduğu ve de bu değerlendirilmeler ışığında yapının korunması ve onarımına yönelik karar önerilerinin üretildiği altıncı bölümle sonuçlanmaktadır.

Anahtar Kelimeler: Koruma ve Onarım, Banka Yapıları, Ziraat Bankası, Antrepo/Depo Yapıları, Mersin.

To My Precious Family and Lovely Nephews...

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CHAPTER 1

INTRODUCTION

Mersin has developed as an important eastern Ottoman port-town after 1850s according to the new trade activities of the changing world. This new type of commercial life generated within the cities during this period has introduced new type of buildings into their architectural context, such as commercial khans, entrepots, bank buildings. The old Agricultural Bank Building, which has been one of the important 19. century traditional commercial buildings of Mersin, has witnessed the historical development of the city with its different important urban role(s) took place during its multi-phased historical background. Today, there are few examples left from the traditional commercial buildings of Mersin. It is located on the Uray Street, which has been developed as the main historical commercial, social and cultural axis of the city between 1850-1920s.

It has multi-phased historical background through which it has been functioned with different uses. It has been used as an entrepot building, as a merchant bank by the famous merchant Mavrommati and as the branch office of the Agricultural Bank through these phases. The building has been called as "the old Agricultural Bank Building" by the citizens of Mersin since the use of the building as a branch office between 1933-1978 has played important commercial and social roles in the daily life of the community.

With its important urban roles through its phases, the building reflects the architectural, cultural and economical values of the traditional buildings of Mersin. The aim of this study is to find out the historical, architectural, cultural values of the building as well as preparing a restoration project related to its conservation in order to pass those values to the next generations. With the original features it possesses in means of construction materials and techniques, architectural elements, plan schemes, etc., it reflects the architectural characteristics of traditional buildings in Mersin; while with its former owners, it supplies valuable information related to the social and cultural historical background of the city.

However, this vulnerable and important building has been suffering from neglect and inadequate uses causing impairs in the original characteristics of the building. This is the

common problem of most of the traditional buildings existing in Mersin today. So, the detailed study of this building is important for the vulnerable information it possesses through its architectural, historical, cultural background. On the other hand, the discussions on the problems occurred throughout the building and decisions related to its conservation and restoration will lead a model for other buildings in Mersin facing similar situations. Hence, the main scope of this thesis is defined as:

- To analyze and evaluate the characteristics of the building understanding its architectural, physical and cultural values as well as exploring its historical values related to the original condition(s) and changes occurred through its historical development.

- To discuss the problems of the building including the *physical problems* stemming from material deteriorations and structural deformations within a scientific framework; and problems related to *changes and interventions* occurred through its historical phases so that appropriate conservation decisions could be proposed.

- Within the light of analysis and evaluation phases, to prepare a conservation and restoration project for the "Old Agricultural Bank Building" which will pass the historical, architectural, cultural values of the building to the next generations

- To put forward a framework including the conservation and restoration criteria that will be an example for other traditional buildings located in the nearby environment in Mersin having similarities in means of values and potentials as well as with the problems they are suffering from.

The study mainly includes documentation stage, which covers the survey of the building through measured drawings and verbal documentation phases. Analysis phase of documentation stage includes survey related to the exploration of existing situation of architectural and physical properties of the building. To achieve this five topics have been studied: Studies related to the building elements and materials, construction materials and techniques and structural system are carried out so as to understand the architectural characteristics of the building. At fourth step, the physical problems of the present state of the building related to the material deteriorations and structural deformations have been discussed. At the fifth step, analysis related to the changes and traces are studied.

During the historical research stage, the historical background of the building and its nearby environment is searched within the historical development of Mersin. This section is followed by comparative study stage; during which the architectural and physical aspects of the building is compared with traditional bank buildings and traditional entrepot/depot buildings as well as other traditional buildings constructed in same period in Mersin. In the restitution stage, the original schemes of the building according to its historical periods have been established.

Finally, within the light of information gathered through the analysis, historical research, comparative study and restitution stages, evaluation related to the values and problems of the building have been established. This is followed by the decision proposals related to the restoration and conservation of the building. The decisions have included proposals for the site and the building itself covering decisions related to changes, physical problems, new programme with its required additions and finally implementation phases that will be carried on during the restoration studies.

1.1 FRAMEWORK OF THE STUDY

The study consists of six stages including *survey stage*, during which documental information related to the building is carried out; *analysis stage* where the building is analysed in means of its building elements, construction materials and techniques, structural system, physical problems and changes; *historical research stage*, exploring the historical significance of the building within the city and nearby environment it is located; *comparative study stage* encompassing the values of the building by comparing it with other traditional bank and entrepot/depot buildings as well as other traditional buildings constructed in same period in Mersin; *restitution stage*, establishing the original schemes of the building according to its historical periods; and finally *restoration stage*, where decisions related to restoration and revitalization of the building are proposed according to the results of altogether evaluation of previous stages.

- In the survey stage, the building was documented through site survey, graphical and written documentation phases. During the site survey, information related to the existing situation of the building including its physical characteristics, materials used, construction techniques and deformations is collected. Besides, in order to produce the scaled drawings of the building, measured surveying is completed at the site.

After the completion of the site survey, the scaled drawings of the building with details showing the architectural elements and ornamentations are produced during the graphical documentation phase. Besides, details information related to the materials and construction techniques applied in the building are produced so as to be used in the further stages of the study. Graphical documentation is completed with photos taken from the building. The documentation studies have been finalized with written documentation of the building, through which descriptive information related to the building is given.

- During the analysis stage, architectural and physical characteristics of the building are explored through materials, structural system and construction techniques and materials analysis. Besides, physical problems related to the material deteriorations and structural deformations together with sources causing to these problems are defined during this stage. Finally, analysis related to the changes found out throughout the building by survey of traces and clues is carried out.

- In the historical research stage, the historical value of the building within the city it is located as well as within the same type of buildings constructed in same period is studied. By this way, historical background of the building has been evaluated together with changes occurred through its historical development.

- Comparative study includes comparison of the building within the other traditional buildings. By this way, similarities of the original architectural and physical aspects of the building within other traditional bank and entrepot/depot buildings have been evaluated. The third comparison has been carried out with other traditional late 19 - early 20. century buildings constructed during same period in Mersin.

- Restitution stage puts forward the historical periods of the building together with the alterations and interventions occurred on the building. Besides, the original schemes of the building related to these historical phases are established in order to visualize the historical and existing situations of the building together.

- In the final step, decisions related to the conservation of the building are established through the restoration project prepared. The decision proposals have included proposals for the site and the building itself covering decisions related to changes, physical problems, new programme together with its required additions and finally implementation phases that will be carried on during the restoration studies.

1.2 METHODOLOGY OF THE STUDY

1.2.1 SURVEY STAGE

1.2.1.1 Site Survey Documentation

The initial survey studies of the building started in June 2002, when it was selected as a case study for the Summer Workshop- "Koruma Amaçlı Belgeleme Çalışması", which was organized by the Faculty of Architecture in Mersin University. During the workshop, sketches related to the plans, elevations and four sections of the building are produced.[1] Afterwards, the dimensions of each drawing in order to produce scaled drawings were taken by applying hand measurement and optical measurement techniques together.

Hand measurement method based on triangulation and linear techniques by using conventional instruments such as plumb bob, steel rods and steel tapes. In the optical measurement, coordinates in x,y,z plane are identified for the selected points by using optical measurement tool-Trimble Geodemeter 5500 p model. At first, a closed polygonal network including 26 polygonal points and 128 reading points is structured. By this way, all the points are connected to each other and to the whole system. To control the reading points obtained by the tool, the numbers of the points are depicted onto the site sketches. During the optical measurement phase, the technician of the firm has attended the site survey.

In order to produce the plans, *23* polygon points around and in the building, to which the reading points in the building were connected, were determined through optical measurement. Than, the coordinates for corners of each space -128 reading points at total- are obtained. By this way, overall location of each space is settled according to the polygonal network. Than, the location of architectural elements and other details are gathered by hand measurements. The first and second floor plans as well as the site plan were measured by optical and hand measurement techniques together, while the mezzanine and roof plans were measured by hand measurement techniques since it was impossible to apply the optic measurement tool in these floors. In the site plan, the coordinates of the garden and the important trees as well as the coordinates related to the corners of the nearby buildings are obtained.

In the survey of sections, hand measurement techniques are applied only. The vertical dimensions of elements are gathered according to the datum lines passing at 1.50 m level in the ground floor, at 4.50 m level in the ground floor plan and 5.50 m level in the mezzanine

[1] The initial site survey studies have been carried out by the faculty members of Mersin University: Tuba Akar, Meltem Uçar, Işıl Polat, İrem Dizdar and technician Semih Yıldız from Istanbul

floor. For the measure of elevations optical and hand measurement techniques together are applied together. At first, the coordinates related to the corners of the building and location of the architectural elements are obtained with the optical tool. Than, details related to architectural elements and others such as plaster deformations, cracks, traces, etc are obtained through hand measurements according to the datum line. For east and south elevations, optical measurement technique could not be achieved, since it was not suitable to have eyesight for optical measurement. Thus, their dimensions were taken by hand measurement techniques according to the datum line.

The second phase of the survey study started after the building is decided to be studied as a thesis subject during which existing survey studies are detailed in different phases as measured, photographic and written documentation phases. For this, the site sketches and hand measurements produced during the workshop are obtained from the University and controlled. Then, the detailed survey studies including production of own sketches and completion of missing measurements through triangulation and linear measurement techniques are carried on. Information related to the plans, sections, elevations and architectural elements are completed by producing different sketches. The missing dimensions through these sketches have been obtained with hand measurements. The architectural elements and details are also measured with hand measurement. In the following phase of the site survey information related to the ornamentations and profiles of the sills, jails and cornice on the elevations are carried on. For this, it is applied to the Mediterranean Municipality and asked for an fire hose car in order to reach to the details. The ornamentations are depicted onto the sketch papers by using coal pencil and the profiles of the sills are obtained by using profile tools. The site survey study is completed with the survey of the site and its nearby environment. The sketches related to the present condition of the site is done depicting information related to the buildings, entrances, types of open areas as garden or auto park area and characters of the floor coverings. The corners of the nearby buildings are depicted to the site plan while the optic measurement of the plan of the building. The building types and number of storeys of the buildings in nearby environments as well as the types, characters and traffic circulation of the streets have also been depicted onto the survey sketches. During the site survey, photographic survey is also carried out including the nearby environment, the site and old Agricultural Bank Building from general aspects to details with exterior and interior properties.

1.2.1.2 Graphical Documentation-Measured Drawings

After the completion of the site survey, an office work is carried on in order to produce the scaled drawings of the building and the site. The files including the coordinates of the points were passed from the tool to the computer. By using the conversion program of the firm, the points were transferred into raw format and to the AutoCAD 2000 media respectively. After all the points were transferred into the CAD program the drawings of the plans are completed by connecting the points to each other according to the site sketches. After the creation of the spaces initially by this way, rest of details such as openings and architectural elements are created according to the information obtained through conventional measurement techniques. The production of the elevation and section drawings are completed similarly. In the last phase, the information related to the site plan and nearby buildings are added to the plan drawings according to the information coming from cadastre plans, which were obtained from the archives of Administration of National Estate and Administrative Unit of Land Registry of Mersin. The details regarding to the greenery, pavements, street furniture, etc. are added according to the site sketches and photographs. For the heights of the nearby buildings in the elevation and section drawings a definite storey height is given to the buildings. For the information related to elevation elements, photographs are used.

By this way, scaled drawings including 4 plans, 3 ceiling plans, 4 elevations and 17 sections related to the building are produced in 1/50 scale. The site plan showing the nearby environment is produced in 1/500 scale. Besides, detail drawings of architectural elements are produced in 1/20 scale, and drawings of ornamentations and profiles of sills are produced in 1/1 scale. (Drawing 1.1) For the photographic documentation, 350 photographs were taken showing exterior views from the elevations, the roof and the nearby buildings; interior views of each space and finally details related to architectural elements, construction techniques and traces observed in the building. The photographs were taken by Canon E 500 classics and Sony DX 75 digital cameras. The ones taken by the classic camera are scanned in order to transfer into computer media.

1.2.1.3 Written Documentation-Description

Written documentation includes the descriptive documentation of the nearby environment and the building itself. During the description of the nearby environment, information related to Mersin and the Uray Street is given in order to define the physical characteristics, functional uses and existing situation of the urban tissue where the building is located. During the site description information related to the physical properties of the buildings, number of storeys and entrances to them are given together with features related to

the open areas including entrances to site, type of open area as garden or auto park and character of the floor coverings, important trees and street furniture.

The description of the building itself includes information related to the general characteristics of the building. At first general information related to the location, accessibility and general plan characters of the building is given. Secondly, exterior description of the building is given. The four elevations are described starting from the main entrance façade – the north façade- continuing in counter clockwise direction. Their descriptions include general dimensions of the facade, the dimensions of the openings like doors, windows together with architectural elements located within the openings as well as other architectural elements like jails and cornices have been given. It is followed by the description of the construction material and techniques; finally physical condition of the façade. These information are given in clockwise direction and according to the storeys from bottom to top.

Information related to the interior description of the building is carried out through the description of each space starting from the ground floor to upper floors. In each space, the general shape and total dimensions of the space is given at first together with their accesses and location within the building. The spatial description continues with detailed descriptions of flooring, superstructure and walls respectively. The floorings and superstructure are described with their construction materials and techniques as well as type of finishing/covering elements. The walls are described starting from the entrance wall and continuing in clockwise direction. For each wall, its total dimensions, the location of openings with their locations from corners vertically and horizontally, the types of architectural elements, the construction materials and techniques of the walls is given. Finally, information related to the physical condition and traces/changes observed within the space is given.

1.2.2 ANALYSIS STAGE

1.2.2.1 Analysis on Building Elements and Materials

During the analysis of the building elements stage, the building elements are documented so as to understand the physical and architectural characteristics of the building. At first, the building elements are classified according to their functional use as; structural elements; partition elements; architectural elements; finishing and covering elements and service fitting elements. Than, typological studies have been carried on for each group in order to define their properties including materials and construction techniques.

1.2.2.2 Analysis on Construction Materials and Techniques

During the analysis on construction materials and techniques stage, the details related to the construction techniques observed throughout the building are defined with details drawings including descriptive information and photographs related to the construction material. Finally, the mapping of the defined techniques throughout the building is depicted onto the scaled drawings.

1.2.2.3 Analysis on Structural System

The structural system analyses includes principles of load distribution throughout the building and the behaviours of the structural elements under these loads. The last part includes the relation between the structural design and the building type (functional use) of the building. These information is given through relational figurative drawings. At final, the mapping of defined structural system analysis throughout the building is given onto the scaled drawings of the building.

1.2.2.4 Analysis on Material Deteriorations and Structural Deformations

Evaluation related to the condition of existing situation and physical problems of the building is carried on through analysis on the material deteriorations and structural deformations. The investigations base on visual analysis of weathering forms on the site and mapping of the observations onto the survey drawings in result. By mapping, the distribution of the decays throughout the building is visualized in order to understand the causes and factors of the problems.

1.2.2.5 Analysis on Changes

Analysis on changes in the building has been carried on in order to understand the characteristics of the building related to its original architectural and physical properties together with its continuities and/or discontinuities throughout the periods. With this respect, the changes in the building is analysed under addition, alteration, removal and missing topics by investigating the 'traces' coming from the building.

The evaluations base on evidences related to trace, remain or object itself as well as differences in construction material, technique or design and inadequate construction technique.

1.2.3 HISTORICAL RESEARCH STAGE

During historical research stage, information related to the history of the building as well as historical background of the nearby environment and Mersin are explored. Historical

analyses related to the building is carried on through written, visual and oral sources so as to find out the historical aspects of the building like its construction date, historical periods, original uses and changes originated in the building.

For the written documents archives of the Agricultural Bank, the Municipality, Administration of National Estate and Administrative Unit of Land Registry are searched. Through the old photographs of Mersin, the ones showing the building and the nearby environment are collected. Thus, the historical changes within the building and its context are tried to be visualized through visual documents. In order to understand the original functional use of spaces, people who used to work at the building during the period when it was Agricultural Bank, were invited to the building and interview with them were done. By this way, verbal information related to the building has been obtained through oral historical research.

In order to evaluate the historical values of the building within the historical development of the city and the nearby environment, historical research related to Mersin and the Uray Street are studied through written documents including earlier researches, notes of travellers; and visual documents including old photographs, historical maps. Finally, in order to understand the architectural aspects of the building related to its functional use as a bank and an entrepot building, research related to the historical development of banking and the bank buildings between 1850-1950 is studied.

1.2.4 COMPARATIVE STUDY STAGE

After the completion of the historical research phase, comparative study including the evaluation of the studied building with other traditional buildings having similarities is carried out. During the comparative study phase, three types of traditional building groups have been studied: Traditional bank buildings, traditional entrepot/depot buildings and with other traditional late 19 - early 20. century buildings constructed during same period in Mersin. By this way, the comparison of the building with others has been established. Secondly, these information are used during the restitution of the original phases of the building. During the historical research related to the building, it is understood that the building has served as a branch office of the Agricultural Bank between 1936-2001. So, one of the major topics in comparative study has been obviously on traditional bank buildings. Through the historical research related to banking and the bank buildings, the comparison of the building with its bank function is achieved among other bank examples.

On the other hand, during the evaluation of the traces and alterations through the analysis stage, it is understood that the building has probably housed depot function in its

previous period. In order to define these traces and find out the physical and architectural properties of the building in the restitution studies, a comparative study on depot/entrepot buildings has been carried on. Thus, the second comparative study subject has focused on entrepot and depot buildings of late 19. and early 20· century examples. By this way, the functional use, spatial organization and general architectural features of this building as a depot/entrepot building if this period is compared with other examples from same period.

Through the analysis of these two building categories, it is understood that the bank buildings and depot buildings which have been constructed before the Republican period has been constructed according to the local traditions in construction materials, techniques and architectural styles. Therefore, at third step a comparative study on traditional buildings of same period located in the nearby environment has been carried out. In this study, a comparison of the building with others in means of construction materials and techniques, structural system, architectural elements and architectural style is done. The results of the studies related to each topic have been depicted as typological charts giving detailed information related to the subjects of comparison.

1.2.5 RESTITUTION STAGE

Restitution phase, which aims to define the original physical aspects of the building, is composed of two phases. In first phase, historical periods of the building are defined according to the results of the information coming from the historical research and evaluation of traces/changes coming from the building itself. By this way 5 important historical phases have been defined parallel to the historical development of the building.

During second phase, restitution schemes of the building are produced in order to visualize the historical physical aspects of the building enabling comparison between the past and present situations. Studies related to the exploring of historical periods and restitution are carried out for both the site and the building. Plan scheme and elements, structural and architectural elements are searched during the preparation of restitution projects. They are established according to the sources of information. These information have been categorized according to the sources they are obtained from as follows:

- The building itself including the traces and remains
- From archive documents
- Comparative study within the building
- Comparative study on traditional bank buildings
- Comparative study on traditional entrepot/depot buildings

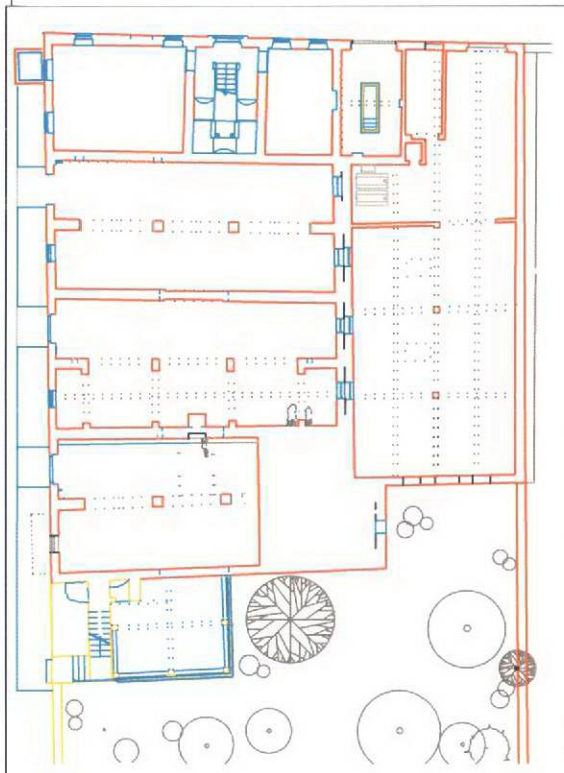
- From old photographs
- From the oral historical research with people who have worked in the Agricultural Bank during 1960s

These sources of information have been used in order to find out the existence, location, actual dimensions, form, material, construction technique and details of the proposed element in the restitution drawings. According to the evaluation of these data coming from different sources reliability degrees are established. By this way, ten degrees of reliability degrees are defined and mapped onto the restitution drawings.

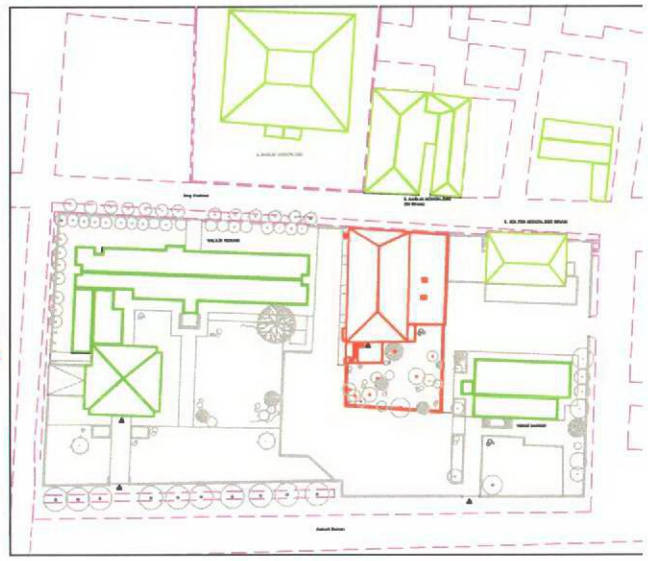
1.2.6 RESTORATION STAGE

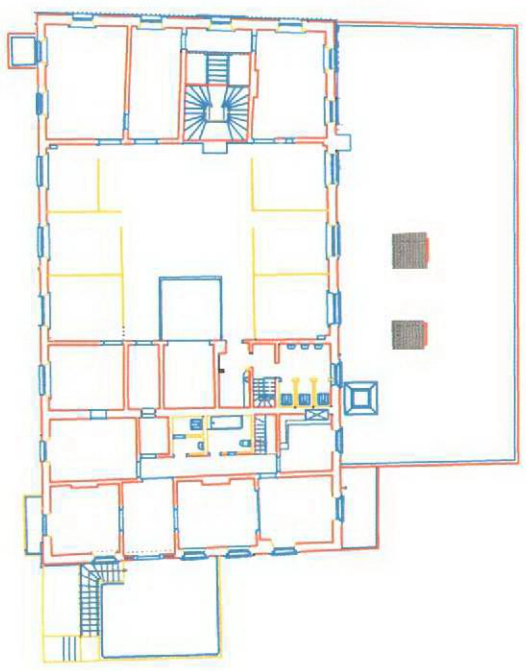
At final stage, within the light of information gathered through the analysis, historical research, comparative study and restitution stages, evaluation related to the values and problems of the building have been established. At the beginning of this stage, the site and the nearby environment where the building is located have been evaluated in means of values, problems and potential observed. Arguments related to the building has included four topics as evaluations related to its cultural, historical, architectural and documentary values; related to changes and interventions occurred through its historical phases together with results of these changes; physical problems including material deteriorations and structural deformations with sources of these problems; and finally evaluation of spaces to find appropriate new functions for each according to their properties.

During the restoration study decisions related to the conservation of the building have been established. The decisions, which have included proposals for the site and the building itself, have been defined in six topics. At first, decisions related to further investigations on the site are established. At the second stage, intervention decisions related to the changes occurred throughout the historical phases of the building are defined. In the third stage, interventions types related to the physical problems covering the structural deformation and material deteriorations have been established. The forth decision topic includes proposal related to a new function together with its required additions for the building. This is followed by decisions related to environmental situation of the building covering site proposals have been defined. Finally the study has been concluded with implementation phases that will be carried on during the restoration studies. The types of intervention groups for each topic have been defined in detail and they are mapped onto the scaled drawings. At final, the proposed situation of the building after application of all these decisions are established through restoration project drawings.













MEASURING METHODOLOGY

THE BUILDING	
	Optic Measurement with Total Station
	Direct Hand Measurement with Triangulation
	Direct Hand Measurement with Linear Dimensions (width, heigth, depth)
	Optic Measurement and Direct Hand Measurement
	Optic Measurement and AERIAL-5 program
NEARBY ENVIRONMENT	
	Sections surveyed with measuring techniques
	Sections added from Conservation Plans
	Sections added from Current Plans
	Sections added from Cadastral Plans
	Sections added from Photographs

Drawing 1.1 Methodology of Measured Survey

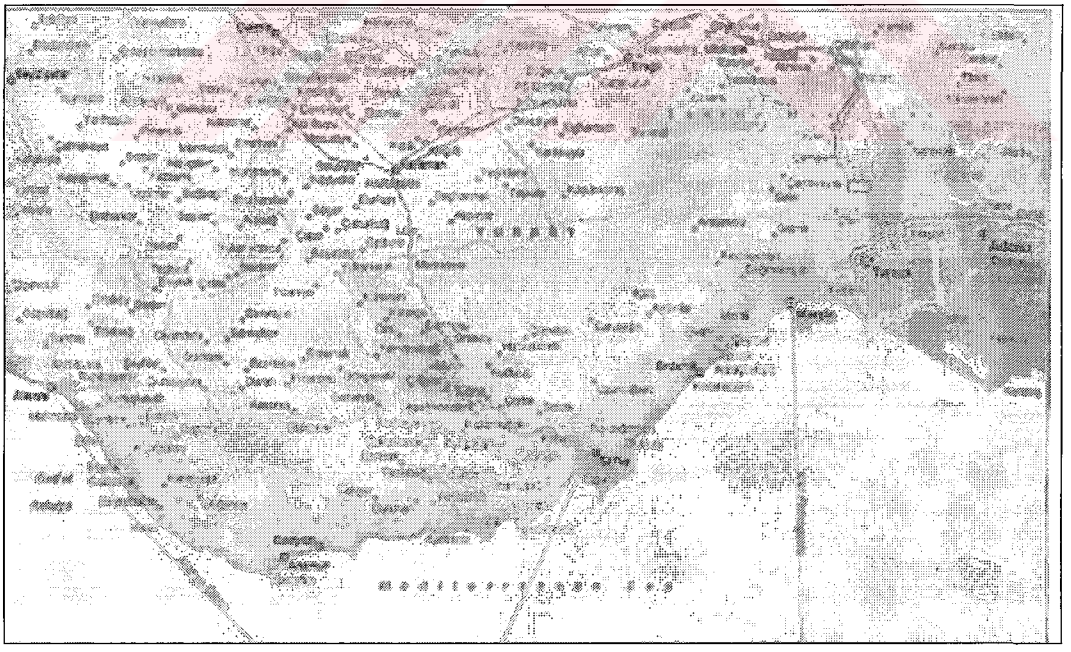
CHAPTER 2

DOCUMENTATION

2.1 DESCRIPTION

2.1.1 MERSIN

The central district of Mersin Province is located by the coast of the Shore of Mersin, on west side of the terrain of Cukurova, which is 5-10 m above the sea level. Today, Mersin is the second biggest city of the Cukurova region after Adana. It is bordered by the cities of Tarsus from east, Erdemli and Silifke from the west and by the province of Aksaray from the north. It is surrounded by the Taurus Mountains from the Central Anatolia on the north and by the Mediterranean Sea on the south. The port of Mersin is one of the important ports of the Mediterranean region together with Antalya and Iskenderun. (Figure 2.1)



2.1 Location of Mersin

The city takes benefit of sea and land transportations directly. Since it doesn't have direct air transportation, it gets benefit from the Adana airport which is located 68 km. away from the center.

Mersin is connected to the port cities of Cyprus, Middle East and other Mediterranean countries through its port. By land transportation, it is connected to Antalya and West Anatolia through Silifke; to Konya and Central Anatolia through Mut, to the South East Anatolian cities, Ankara and other Middle Anatolia cities through Tarsus. The railway transportation, which dates back to 1886, is one of the other important land transportation types of the city. It is connected to the Anatolia rail-way line through Tarsus- Yenice Station.

The port of Mersin which has been an important external gate for the region throughout history has become the second important port of the country with its capacity in recent years. After 1980s, port of Mersin was an important port for not only Turkey but also for Mediterranean and Middle East region. Its hinterland includes beside Cukurova region, some parts of Central, East and Southeast Anatolian cities.

2.1.1.1 Physical Layout

2.1.1.1.1 Important Circulation Axes throughout the City

The physical layout of the Mersin has been generated in east-west direction along the Mersin shore. Different types of transportation axes including railway, land and sea transportation lines meet at the Kurtuluş Square, which can be accepted as the east gate of the city. (Drawing 2.1)

The center of the city is approached along the İsmet İnönü Boulevard and the Istiklal Street from the Kurtuluş Square. With the construction of the contemporary highway of Mersin, which passes through the city in west-east direction, the connection of the city to the neighbor cities Tarsus and Erdemli is achieved through this axis.

The main circulation throughout the city is supplied through the two main axes –Inönü Boulevard and the Istiklal Street- in east-west direction; and through the Hastane and Kuvayi Milliye Streets in north-south direction. The axis lying in east-west direction connects the residential areas in the west part of the city towards the commercial and industrial parts lying in the east parts. Therefore, the daily flow of the city occurs dense traffic along these axes.

The railway is the second land transportation type which connects the city to the Adana-Tarsus direction. The railway line coming from Adana-Tarsus direction stops at the north part of the Kurtuluş Squre. It is connected to the center of the city through Istiklal Street in west direction and through the Kuvayi Milliye Street in north direction.

Towards the east section of the Ataturk Park, the contemporary port of Mersin, which has been constructed during 1980s, is situated. The land of Mersin port stretches towards east until the area of Mersin Free Zone is located. The connection point of the port is situated at the south portion of the Kurtuluş square.

2.1.1.1.2 Built up-open Areas

With the financial improvements in the Mersin port after 1960s, the city has gone into rapid growth, which has resulted with densed and highrised built-up areas in the physical structure of the city. The number of storeys of the physical structure of the city consist of five and above five storey height buildings especially along the important commercial axes, which are Hastane, Kuvay-ı Milliye, Istiklal Streets and Inonu Boulevard.

There are few open areas within the dense built-up structure of the city. The existing open areas are located by the coast of Mersin, which is obtained by the fill of the sea.

The Ataturk Park, which is one of the largest recreational areas of the city, is located on the south part of the Inonu Boulevard. It expands from the Mersin port in east section, towards the western sections of the city. The Cumhuriyet Square is another important social area of the city, which is used for the cultural occasions. It is located at the eastern part of the commercial district.

2.1.1.1.3 Land Use

The old and new commercial areas are located in the southeast part of recent city, especially along the Atatürk and İstiklal Streets in south-west direction and along the Hastane and Kuvay-i Milliye Streets in north-south directions. These areas have developed as the central business district (CBD) of the city. With the construction of new commercial buildings – especially the Mersin Skyscraper- the CBD has been expanded along the Hastane Street towards north. (Drawing 2.2)

On the eastern part of CBD, social areas are located; while in the eastern parts, the governmental and social units areas have developed. The governmental units are situated especially along the Uray Street. The residential areas are located rather on the northern and

western part of the city. Today the city is expanding towards north and especially west directions with newly erected residential areas. The southeast part of the city, where the commercial activities are situated stays limited, since the city can not expand towards east due to the location of industrial and port areas.

The historical districts of Mersin stay within the commercial center of the city. Therefore, due to the fact that the commercial use expands towards north, the traditional residential and commercial building types in the historical districts have been replaced with contemporary commercial uses.

The areas on the way from Tarsus to Mersin are generated as the industrial and depot zones, after the construction of the contemporary port and the foundation of the Mersin Free Zone. The railway line coming from Adana-Tarsus direction, which stops in this area, is also connected to this zone.

2.1.1.2 Nearby Environment and the Uray Street

2.1.1.2.1 The Physical Characteristics

The old Agricultural Bank building is located on the Uray Street, which has been developed as the main axis of the commercial district of Mersin -the Camişerif District- after the second half of the 19. century.

This old context stays within the eastern part of the commercial center of the city today. The importance of the Uray Street, has decreased by the construction of the Istiklal Street on the north and the Inonu Boulevard in the south. However, the street has still dense vehicular and pedestrian traffic since it connects the governmental units of the city to the commercial areas located at the west.

This historical context was developed according the Administrative Regulations, which had introduced rules in city planning after 1850s. The physical structure consist of perpendicular streets intersection each other with regular intervals and occurring rectangular perpendicular building lots.

The buildings have direct relation with the streets, since there are mostly commercial functions. The governmental buildings and some of the traditional residential buildings that are located within the gardens are accessed indirectly from the streets.

The built-up structure includes traditional buildings and contemporary buildings the physical characteristics of which are different than each other. The traditional buildings have been generally constructed with two-storey height; while the contemporary buildings have multi-storey especially on the main axis. The storey heights of the traditional buildings are higher than the contemporary ones. In addition to this, some of the traditional buildings have basement and roof floors, which differentiate their architectonic characters and physical appearance from the contemporary ones.

The superstructures of the traditional buildings consist of pitched roofs covered with Marsilian type of roof tiles, while the contemporary buildings have commonly flat roofs. Since the traditional construction techniques of Mersin is affected from neo-classical style, their facade characteristics cover stone decorated windows, doors and sills. (Drawing 2.3)

The existing open areas are generated due to the destruction of some of the traditional buildings. These areas are now being used as auto parks. (Drawing 2.3) The largest public open area of the city –the Ataturk Park- lays in the southern part of this zone along the coast line.

2.1.1.2.2 Building Use

Having been developed as the historical commercial and governmental district of Mersin, the nearby environment of the Uray Street includes various traditional commercial, governmental, social, religious and residential buildings dating back to late 19. and early 20. centuries. Mostly governmental and social functional uses are located around the Uray Street. (Drawing 2.3) Among them; Latin Italian Catholic Church, the old Mersin Secondary School, the old Custom Office Building, the Gurani House, the Nusratiye Mosque, the old Governmental Building, the Old Agricultural Bank Building, Sursoc Khans, and the old Mosque are the important buildings and landmarks of this period. Some of these traditional buildings have been continuing their original functional uses. These buildings have been registered during different periods, by the Adana Regional Council of Preservation Council of Natural and Cultural Objects.

By the growth of the city after 1970s, the some of the commercial and governmental functions have been carried towards west. However, the Uray Street and the nearby environment continue to be an important center for the city with its governmental and existing traditional functions.

The old governmental function of the area continues since some of the historical buildings in this context belong to the treasury. In addition to this, some of the new buildings have been constructed with governmental facilities. Among them Administration of Justice, Police Station, Administration of Monopoly, Office of the Director of Finance, Governmental Building are the important ones, which form landmark for the environment. The historical buildings that belong to the treasury and have been re-functioned with governmental uses are: Main building of the Directorship of Health (the old governmental building), the secondary building of the Directorship of Health, Carsı Police Station (an old residential house), secondary building of the Directorship of Culture (an old commercial building) and the Unit of Finance (the old Agricultural Bank).

Other existing monumental buildings have continued their original functions. These are: Sursok Khan I, Sursok Khan II, Tas Khan and the Ottoman Bank -continuing their commercial uses- ; 3 Ocak Scool –continuing its social use- ; the Old Mosque, the Nusratiye Mosque (the old Maroni Church), Latin Italian Catholic Church -continuing their religious uses-.

Since residential use in this environment has decreased almost totally, the traditional residential buildings or the ones having both residential land commercial uses are either empty, or partially used for other uses. During 1990s, a restoration project for a group of houses and studies related to rehabilitation of the street between these traditional houses as "Artists Street (Sanatçılar Sokağı)" has been carried on. After these changes, revitalization of the traditional buildings for the social uses such as art centers, exhibition or concert halls and cultural units has become common.

2.1.1.3 Location and Site Description

The old Agricultural Bank is one of the important historical buildings of Mersin. It is located on building lot 2 of the building block 1048, which belongs to Camiserif District of Central Mersin. The building lot covers an area of 9245 m2, 2000 m2 of which is occupied by the old Agricultural Bank Building. The site is surrounded by the Uray Street from the north, the Inonu Boulevard from the south, by the 31. Street from the east and by the 33. Street from the west. (Drawing 2.4)

The site on which the building is located includes three other buildings besides the old Agricultural Bank building: A traditional building that is being used by the Cultural Municipality; the new building of the Mersin Government, which was constructed in 1985 and the new building of the Toros (Uray) Tax Office, which was constructed in 1986. They are all located

on the same parcel. The ownership of these two traditional and two contemporary buildings belong to the Treasury since 1978 [1]. All of the buildings have governmental use.

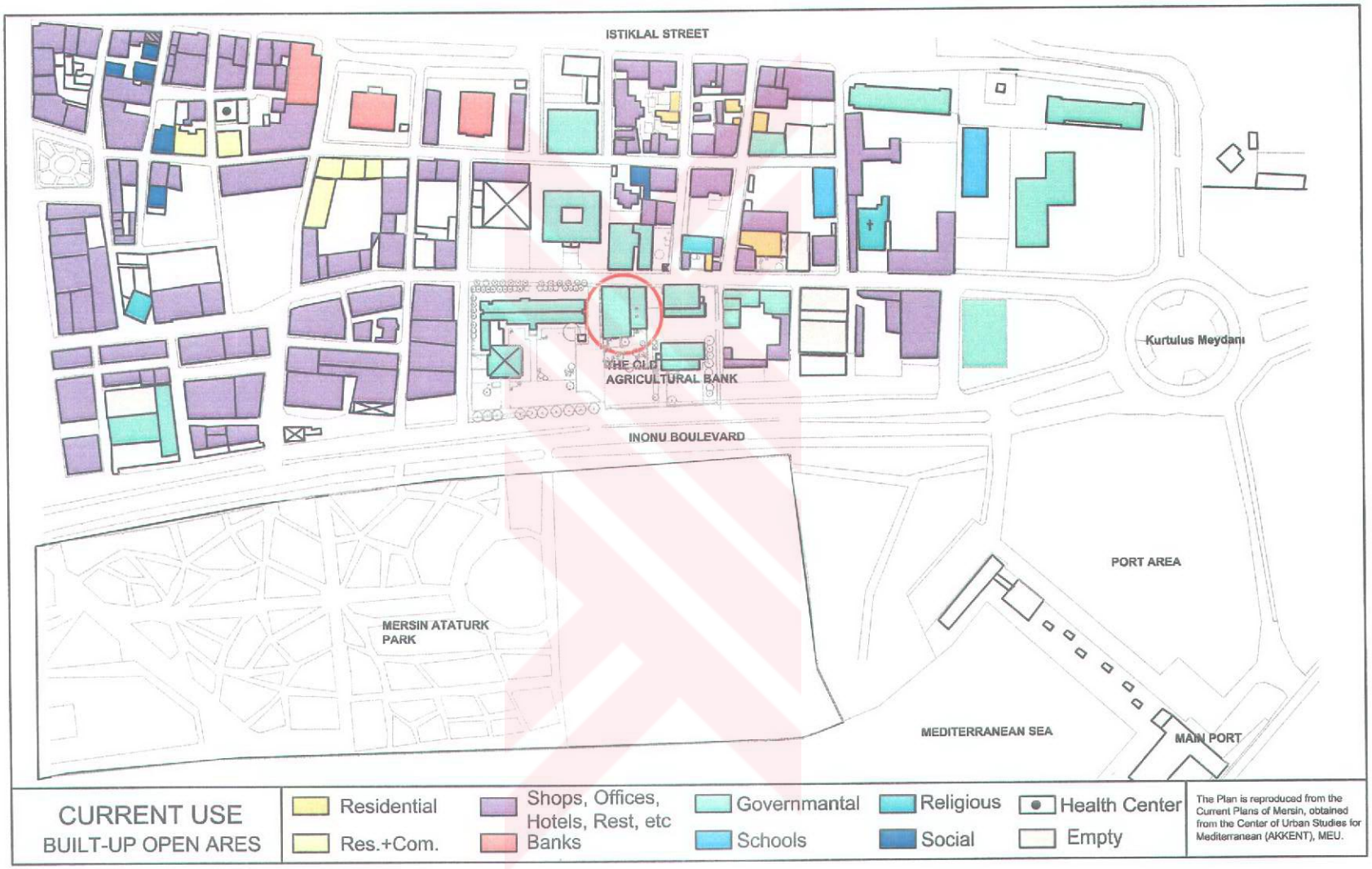
The traditional building that is located on the east of the old Agricultural Bank is a two-storey cut stone building with pitched superstructure. It has been recently restored by the Cultural Municipality; and re-functioned as a governmental office. It has entrances from the Uray Street at the ground floor level and from west at the first floor level. The building of the Governor's Office, which is located at the west of the old Agricultural Bank Building, has been constructed with four storey height. It has an L-shaped plan. It has two entrances both from the Uray Street and the Inonu Boulevard. The public entrance to the building is supplied from the Uray Street, while the office units are accessed from the south. The open area on south portion of the building is designed as garden.

The Uray Tax Office is located at the south of the building of the Cultural Municipality. It has four-storey height with terraced roof. It is entrance is located from the south portion of the building, which is accessed from the Inonu Boulevard. The open areas among these official buildings are arranged as garden and auto park. The old Agricultural Bank building has also garden on the south portion of the building. There are important palm trees located in the garden. Auto park sections have screed or asphalt covering. The south auto park is entered from the Uray Street having access between the old Agricultural Bank and the Governmental Building, while the auto park between the Cultural Municipality building and the Uray Tax office is accessed from the 33. Street.

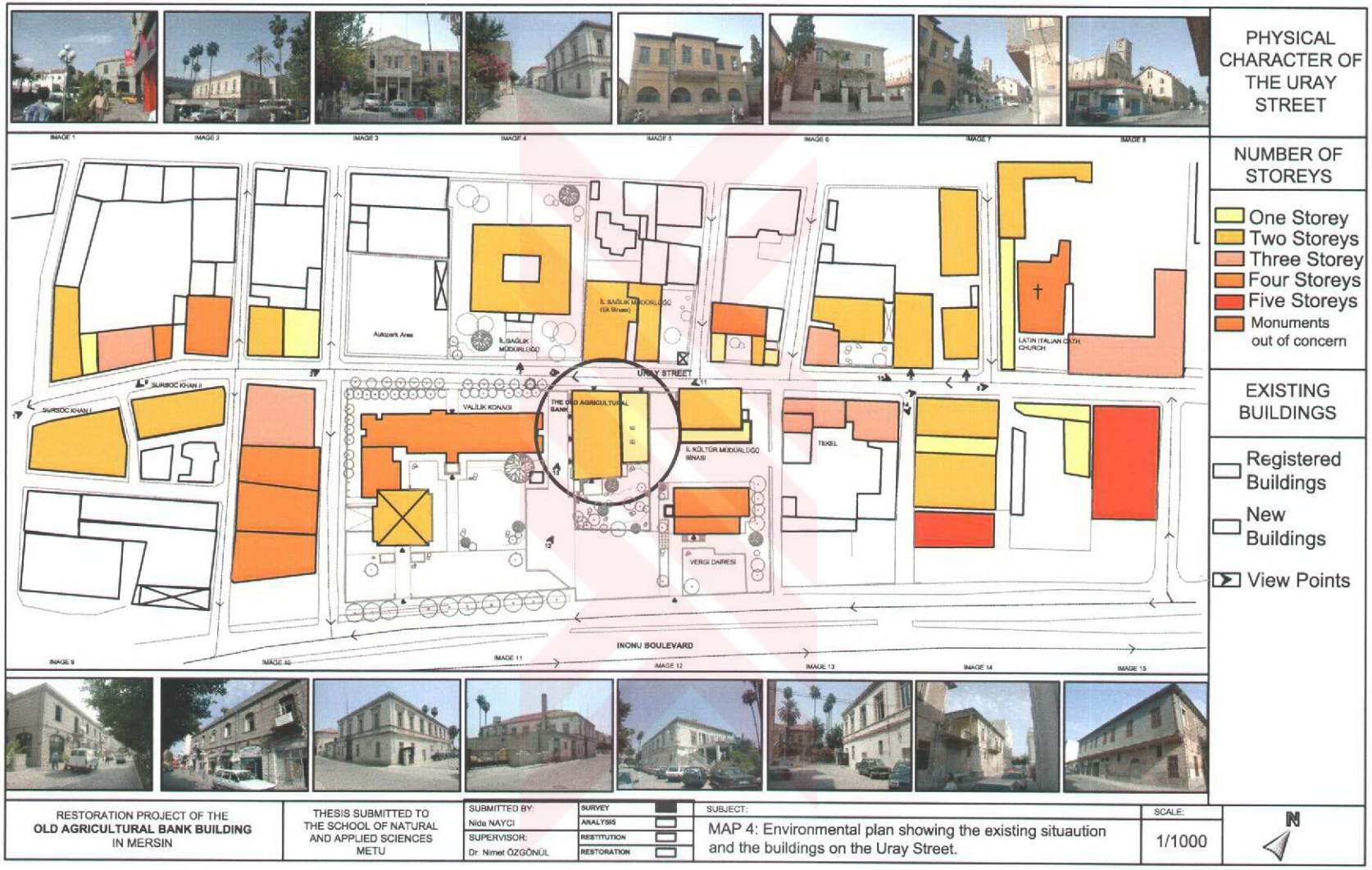
The topography of the site has a slope of 0.70 m level difference between the south and north edges of the site, where the level of the north portion stays above. On the north portion of the site and the Uray Street, there is the Old Governmental Building and the traditional building that was constructed during the Republic Period. It is now being used as the Health Municipality office. On the west portion of the old Governmental building, there is an empty lot, which has been occurred after the destruction of the old Selanik Bank Building.

[1] Detail in historical research of the building.

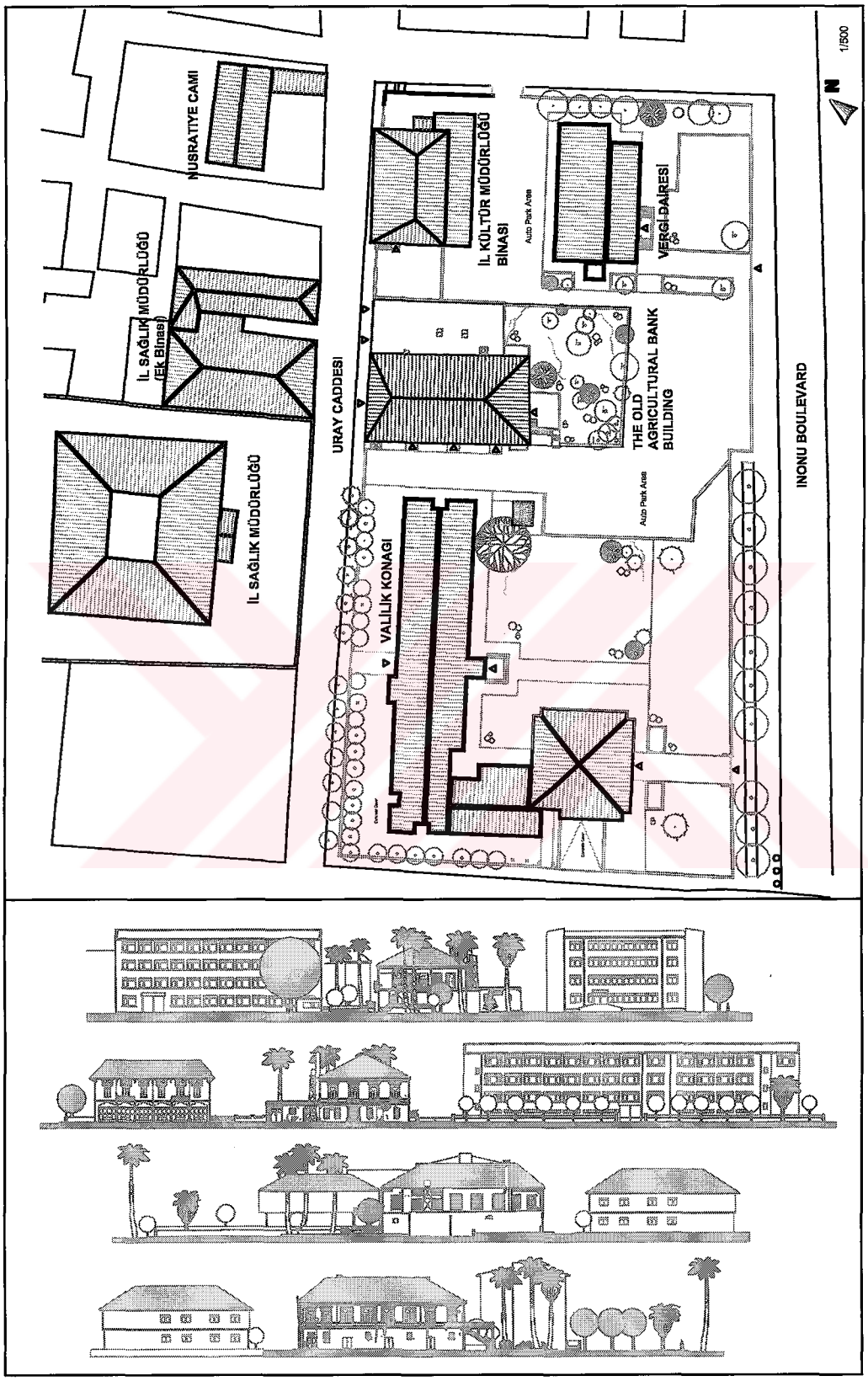
Drawing 2.1 Location within the city



Drawing 2.2 Current use in the nearby environment



Drawing 2.3 Physical context of the Uray Street



Drawing 2.4 Site Plan

2.1.2 DESCRIPTION OF THE OLD AGRICULTURAL BANK BUILDING

2.1.2.1 GENERAL PLAN SCHEME

The building consists of two buildings adjacent to each other: A two-storey height main building covering an area of 17x32 m with a pitched superstructure and a single storey depot building covering an area of 10x25.5 m with a terraced superstructure. The depot building is located adjacent to the main building from the east. On the south portion of the main building there is a terrace, which is supported by RC columns. It covers an area of 8.10x15.90 m together with the stairs leading to the terrace.

The building group is located on the north-mid section of the building lot and positioned in NW-SE direction with their narrow sides lying by the Uray Street. According to the –0.10 level of the Uray Street, the two buildings are located onto 0.00 level on the north end and onto –0.50 level on the south end. This means, there is a sloping on the site with 0.50 m level difference, where the building is located.

The main building has composed of three sections with different functional uses: a bank section, a dwelling section and depot section. The bank section is located in first floor and in the north portion of the ground floor of the building with an entrance from the ground floor level on the Uray Street. This entrance is also the main access of the building. The dwelling section, which houses living spaces, is located on the south portion of the second floor of the building. The entrance to the dwelling section is reached from the stairs located on the south terrace. The building has mezzanine floor which can be viewed from the east facade. This mezzanine floor, which is located on the north-east portion of the building, is reached from both dwelling and bank sections on the first floor. The depot section within the main building, which consists of three depot units, is located on the ground floor of the building with three separate entrances for each unit from the west.

The depot building consists of two sections: a store unit in 3.51x6.15 m dimensions; and a storage section with L-shape. The north wing of the storage has 6.44x9.67 m dimensions, while the south wing has 14.75x9.48 m dimensions. The depot building has two entrances from the Uray Street one of which leads to the store unit, while the other leads to the storage section.

2.1.2.2 EXTERIOR DESCRIPTION - FACADES

2.1.2.2.1 The North Facade

The north facade is the entrance facade of the building where the main access from the Uray Street is located. It is composed of two parts: the facade of the main building with its two-storey height in the west portion; and the facade of the depot building on the east with one-storey height. There is no discontinuity in the facade between the two adjacent buildings. (Figure 2.2)



Figure 2.2 View from the Uray Street



Figure 2.3 The north façade

- Main Building

The north facade of the main building is 17.28 m in length and 8.80 m in height from the ground level until the roof level above the cornice. The facade arrangement is divided into two vertically by the cut stone first-floor-level jail passing horizontally from west edge of the building to the east edge. (Figure 2.3)

On the ground floor, the entrance door is located asymmetrically under the level of the second window in the first floor from east corner. Its location is 5.36 m away from the west corner of the building. It is a two winged timber door with glazed upper sections (EDT2G-1 type) having 1.40 m width and 3.04 m height. The door is located into a SD-1 type door sill, which is a pediment sill supported by projecting columns on each side. On the glazed section of the door wings of the entrance door there is a GD B-01 type of wrought iron grill with an implementation of TZB letters indicating "Türkiye Ziraat Bankası". On east side of the entrance door, there are two EW T2L-4 type windows located 0.81, 2.90 m away from the east corner respectively. On the west side of the entrance door there are two EW T2L-4 type windows (0.95x1.88 m) located 1.87, 7.09 m away from the west corner respectively. Each window has

GW B-01 type iron grills. Between the two windows on the west side of the entrance door, there is a trace on the plaster indicating a latter addition into a previous opening on the wall. It is roughly a rectangle with dimensions of 1.24 m in length and 2.76 m in height and located 5.04 m away from the west corner.

Besides the cut stone first-floor-level jail (Type Ja 1-A), which emphasizes the flooring at the height of 3.57 m, there are cut stone window-sill-level jails (Type Ja 2) at the height of 4.69 m and cut stone roof-cornice- jail (Type Ja 3) at the height of 8.33 m. On the first floor level there are four EW T2L-1 type windows (1.10x2.20 m) located symmetrically according to the facade. Their locations are 2.11, 6.14, 10.18, 14.11 m away from the west corner respectively. They are situated into cut stone window sills (S 3-w type). The pitched roof superstructure with Marsilian roof tile covering is projected approximately 0.50 m away from both east and west corners of the building.

The whole north facade of the main building is out of cut stone masonry wall. It is plastered and painted in white color accept from the window sills, which are left unpainted and the entrance door, which is painted in dark brown. The main problem observed in the north façade of the main building is rising damp problem which rises until 1.50 m above the ground level. Around the openings there are detachments in plaster finishing in flaking forms. On the cut stone window and door sills and horizontal jails, there is black crust deposition due to the atmospheric pollution.

- Depot Building

The north facade of the depot building is 10.40 m in length and 4.10 m in height. There are two entrances from the Uray Street, to the storage and retail units. These entrances with ED M2L-1 type doors (2.46x2.68 m and 2.15x2.72 m) are located 7.25 m and 0.90 m away from the east corner respectively. On each door there is a rectangular opening with dimensions of 2.19x0.50 m and 1.86x0.41 m respectively leading light to each space.

Between the two doors, there is a window opening 0.96x0.98 m in dimensions located 1.75 m above the ground level and 4.63 m away from the east corner of the building. The terraced superstructure of the depot building is finished with a reinforced concrete jail projected 0.18 m from the wall and a parapet wall with 0.39 m height above it. The RC jail is situated as the continuity of the first-floor-level jail (type Ja 1-A) on the north facade of the main building.

The north facade of the depot building is out of cut stone masonry wall plastered and painted in white as the north facade of the main building. From the depot building there is a chimney out of brick masonry with 0.86 m width projecting adjacent to the east wall of the main building and rising approximately 9.10 m high from the depot building. Behind the chimney, there is a metal water tank of the central heating system of the bank that is located on the terrace of the depot building. The main problem observed in the north façade of the main building is rising damp problem as observed in the main building. There are blind detachments and contour scaling in plaster finishing especially around the openings.

2.1.2.2.2 The West Facade

The west facade of the building is 32.00 m length with 9.36 m height in north corner and 9.66 m height in south corner. The ground floor and first floor are separated from each other with the first-floor-level jail (type Ja 1-A) that is located 4.35 m from above the ground level on the north corner. (Figures 2.4 and 2.5)

At the ground level portion of the facade, there are three entrances leading to each depot spaces, which are located 8.28, 16.43 and 24.60 m away from the north corner of the building respectively. The doors of each entrance are ED M2-1 type doors with 1.62x2.24 m dimensions.



Figure 2.4 West Façade of the building



Figure 2.5 West Façade of the building

On the north side of the first entrance door from the north corner, there are two EW T2L-4 type windows (0.95x1.88 m) leading to the same interior space. They are located 1.58, 4.60 m away from the north corner and 1.40, 1.38 m above the ground level respectively. In each window, there is GW B-01 type wrought iron grills fixed into the opening.

There are three EW MF-1 type windows (0.71x1.12 m) located 12.82, 20.87, 29.13 m away from the north corner of the building and 2.07, 2.15 and 2.31 m above the ground level respectively. Beside the cut stone first-floor-level jail (type Ja 1-A),which emphasizes the first flooring, there are cut stone window-sill-level jail (type Ja 2) at the height of 5.23 m and cut stone roof-cornice- jail (type Ja 3) at the height of 9.24 m according to the north corner. The three rows of jails are lying horizontally from north corner towards the south corner of the building.

The second storey portion of the west facade above the first-floor-level jail is divided into three horizontally. The first and third portions from the north corner of the building are projected 0.06 m away according to the mid portion of the building. The first portion is 7.21 m, second portion is 16.23 m and the third one is 8.54 m in length. The first and third portions are arranged symmetrically according to the mid portion. In the first portion there are two EW T2L-1 type windows (1.10x2.20 m) with S 3-w type cut stone window sills. They are located at 5.23 m height according to the north corner. In the mid portion there are four EW T3L-1 type windows (1.65x2.61 m) with S 2-w type cut stone window sills, which are located 5.26 m above the ground level. In the third portion d m above the datum line, there is one EW T2L-1 type windows (1.10x2.20 m) with S 3-w type cut stone window sill and ED T2GL-2 type balcony door (1.10x3.12 m) with S 3-D type cut stone door sill respectively. There is GD A-01 type iron grills fixed into the door opening. The balcony is 3.66 m in length and 0.21 m in width located 0.38 m away from the south corner. There is Ba-M1 type iron balustrade on the balcony with 0.87 m height.

The whole west facade is out of cut stone masonry wall. The eave of the pitched roof is projecting approximately 0.50 m away from both north and south corners of the building. The facade is plastered and painted in white color accept from the window and door sills, which are left unpainted. There are 3 rows of downspouts out of plastic collecting water from the roof and carrying them to the ground. They are located 0.48, 14.80 and 31.72 m away from the north corner of the building. The down parts of the pipes are missing. Therefore the continuity of the pipes are cut above the ground level.

On the south section of the west facade there is a reinforced concrete terrace with 0.18 m slab thickness and 5.61 m length. The terrace is supported by the reinforced concrete beams and columns with 3.12 m height which are located above the ground terrace. The ground terrace has 1.16 m height from the ground level and reached with six steps. There are stairs leading to the terrace, which are seen in the west facade. There are Ba-M2 type iron balustrades on both terraces and the stairs. On the south side of the terrace, there is the

garden of the bank and auto park area respectively. The floor slab, beams and columns of the terrace are painted in white.

The main problem observed in the west façade is blind detachment of the cement plaster from the stone masonry walls especially in mid portion of the building. There is black deposition on the cut stone surfaces of the window sills and roof cornice. There are material loss as contour flaking and structural cracks in RC elements of the terrace.

2.1.2.2.3 The South Facade

The south facade is composed of two parts: the facade of the main building with its two storey height in the west and the facade of the depot building with one storey height on the east. There is no discontinuity in the facade between the two adjacent buildings. (Figures 3.6 and 3.7)

- Main Building

The south facade of the main building consists of two portions with different lengths in the ground floor level and first floor level. The ground floor has 4.41 m height and 19. 61 m length, while the ground floor portion has 17.27 length and 4.85 m height. The ground floor projects approximately 2.40 m from the first floor. The first floor portion of the facade is seperated from ground floor with the first-floor-level jail, which is out of cut stone.

There is a reinforced concrete terrace located 3.27 m away from west corner with 0.18 m slab thickness and 6.84 m width. The terrace is supported by three reinforced concrete columns and beams with 3.14 m height, which are located above the ground terrace. The ground terrace is 1.14 m high from the ground level and reached with five steps. There are stairs leading to the terrace, which are located 2.04 m away from the north corner having 1.2 m width. There are Ba-M2 type iron balustrades on both terraces and the stairs.

On the first floor, 5.45 m away from the west corner, there is an entrance from the terrace towards the dwelling section of the building. The entrance has ED T2GL-1 type door (1.39x3.16 m) with S 4-D type door sill and GD B-02 type wrought iron grills fixed into the door frame.



Figure 2.6 South façade of main building



Figure 2.7 South façade of the depot building

On both sides of the door opening there is EW T1L-1 type window (0.58x2.25 m) with S 4-w type window sills. The windows are located at 5.38 m height above the ground level.

On the east side of the terrace door, there are three EW T2L-2 type windows (1.35x2.33 m) with S 4-w type window sills, that are located 7.80, 5.24 and 2.62 m away from the east corner of the building respectively. On the west side of the entrance door, there are two EW T2L-2 type windows (1.35x2.33 m) with S 4-w type window sill, that is located 2.89 d m away from the west corner of the building and 5.40 m above the ground level. All these four windows have GD B-02 type wrought iron grills fixed into onto the window sills.

The Ja 1A type jail starts from the west corner of the building until 1.56 m when it is cut and followed by Ja 1B type jail until the terrace border. Beside the cut stone first-floor-level jails (Ja 2), which emphasizes the flooring at the height of 5.54 m, there is cut stone roof-cornice- jail (Ja 3) at the level of 9.48 m according to the datum line. The Ja 2 type jail has only 0.65 m length on the south facade, while the cornice jail lies horizontally from west corner towards the east corner of the building. The eave of the pitched roof is projecting approximately 0.50 m away from both north and south corners of the building. The ground floor portion is out of stone masonry wall with cut stone exterior face. It is plastered and painted with white color. The second floor portion is out of cut stone masonry wall, which is painted except from the window and door sills.

The main problem observed in the south façade of the building is contour scaling in plaster material especially on the east portion of the ground floor. On the rest of the plaster finishing there is granular to crumbly disintegration of plaster material. The rising damp problem can be visualized on the ground floor level. There is oxidation problem observed in the metal grills and balustrades. The timber door and window elements have been suffering from tiny cracks occurred due to the exposure to UV lights and swelling and shrinkage cycles

of the timber material. On the east portion of the terrace, there is a local destruction of the stone masonry wall in order to install the clean water pipes, which has resulted with material loss in structural scale. In the RC beams and columns of the terrace there are structural cracks and flaking problem in the concrete material.

- Depot Building

The facade of the depot building is 10.35 m in length and 4.86 m in height. West portion stays behind the ground floor of the main building, which is projecting 2.32 m away. There are three windows openings without window element leading ligth into the storage unit. They are located 2.03 m (1.02x0.96 m), 3.73 m (1.42x0.64) and 6.00 m (1.05x0.98 m) away from the east corner respectively. Each window opening has GW A-1 type iron grills fixed into the opening and concrete projection against rain located above the opening. (Figure 1.6)

The south facade of the depot building is out of cut stone masonry wall plastered with cement plaster and painted into yellow. From the depot building there is a chimney out of brick masonry with 0.86 m width projecting adjacent to the east wall of the main building and rising approximately 9.00 m height from the depot building. In front of the chimney, there is a metal water tank of the central heating system of the bank that is located on the terrace of the depot building. As in the main building, the main problem observed on the east façade of the depot building is detachment of cement plaster from the stone masonry wall. The sallination and dampness areas can be visualized on the surface. On wet portions there are local micro biological colonization areas with greenish color. On the east corner, there is structural crack in stone masonry wall which has caused by macro vegetation growth.

2.1.2.2.4 The East Facade

The east facade is composed of two portions: The facade of the second storey of the main building and the facade of the depot building. The superstructure of the main building has pitched roof covered with Marsilian type roof tiles, while the depot has terraced superstructure. (Figure 2.8)

- Main Building

On the east facade, the second storey of the main building with 31.05 m in length and 5.02 m in height can be seen only, since the ground floor stays behind the depot building. The windows of the mezzanine floor in the first floor are also located on the east wall. The ground

floor of the main building seen from the east facade has 5.24 m length and 5.03 m height. There is a window opening (0.78x0.85) located 2.10 m away from the south corner and at 2.68 m height according to the ground level. There isn't any window element or grill fixed into the opening.

On the south part of the east facade, there are two EW T2L-1 type windows (1.12x2.20 m) with S 4-w type window sills that are located 1.58 and 4.65 m away from the west corner of the building respectively. They are placed at 4.87 m height from the ground level according to the north corner. They have GW B-03 type wrought iron grills fixed onto the window sills. In the mid portion of the facade, there are three EW T3L-1 type windows (1.65x2.61 m) with S 4-w type window sills, located 7.78, 11.95 and 15.90 m away from the south corner of the building respectively and at 5.29 m height. Each window has GW B-03 type wrought iron grills fixed onto the window sills.

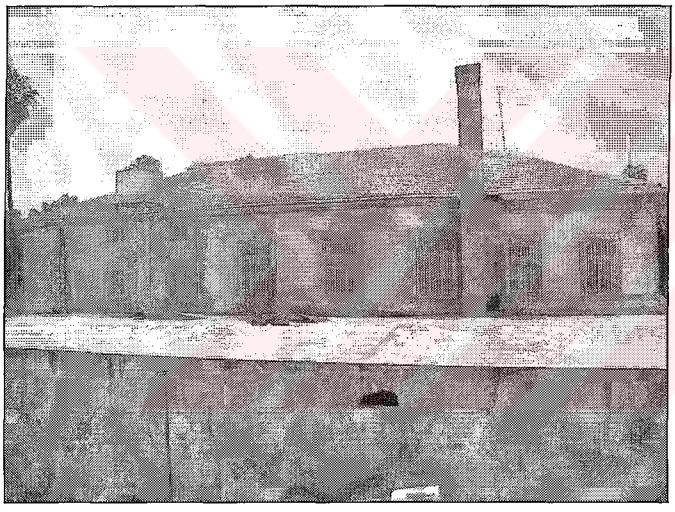


Figure 2.8 East façade



Figure 2.9 Detail from east facade

On their south, there are two EW T2L-3 type windows (1.37x1.60 m) with S 4-w type window sills, which are located 5.86 and 9.85 m away from the west corner. They have GW A-02 and GW B-03 type iron grills fixed onto the window sills in the same respect. Above them, there are two windows that belong to the mezzanine floor. The mezzanine floor windows are EW T2-1 type windows (1.41x0.90 m) with S 4-w type window sills, which are located 5.62 and 9.69 m away from the south corner of the building respectively at 8.08 m height according to the south corner. They have GW A-02 and GW B-03 type iron grills fixed onto the window sills in the same respect.

From the depot building there is a chimney out of brick masonry with 0.90 m length projecting adjacent to the east wall of the main building -between the sixth and seventh windows from the south- and rising approximately 9.00 m higher from the depot building. 14.00 m away from the chimney, there is a metal water tank of the central heating system of the bank that is located on the terrace of the depot building.

The east facade of the building is out of cut stone masonry wall. It is painted into white; accept from the window sills which are left unpainted. The north portion is plastered with cement plastered until the chimney.

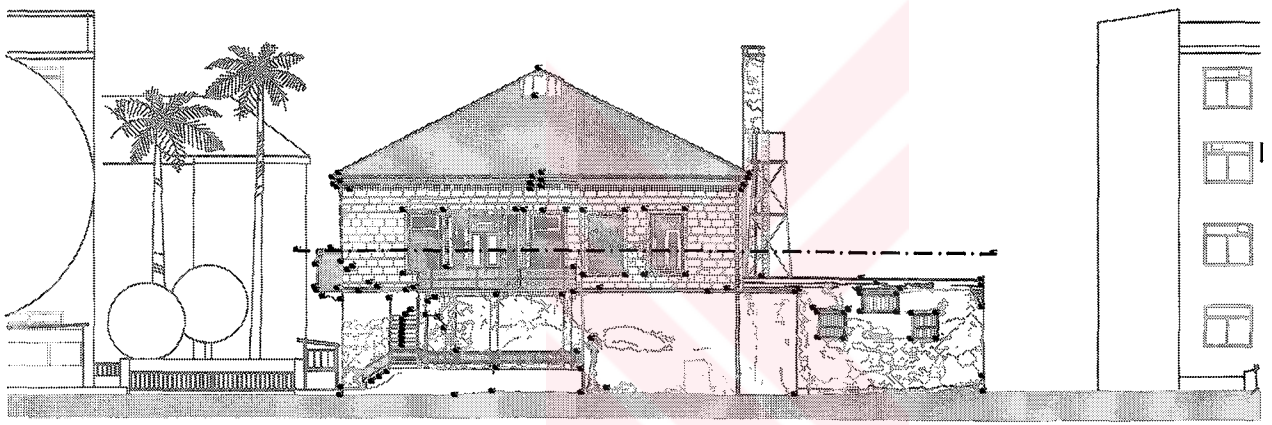
The east façade is the most decayed façade of the building (Figure 2.9). There is granular to crumbly disintegration of stone material which is has paint finishing. The water on the terraced superstructure of the depot buildings collects on the meeting point of the east façade of the main building since there isn't appropriate drainage system of the terrace. This causes serious material loss on the stone and plaster materials of the east façade. There is macro vegetation observed on the east façade due to damp problem. One of these macro vegetations has caused saw type structural crack on the stone masonry wall. On the cut stone surfaces of the roof cornice and window sills, there is black deposition problem due to atmospheric pollution.

- Depot Building

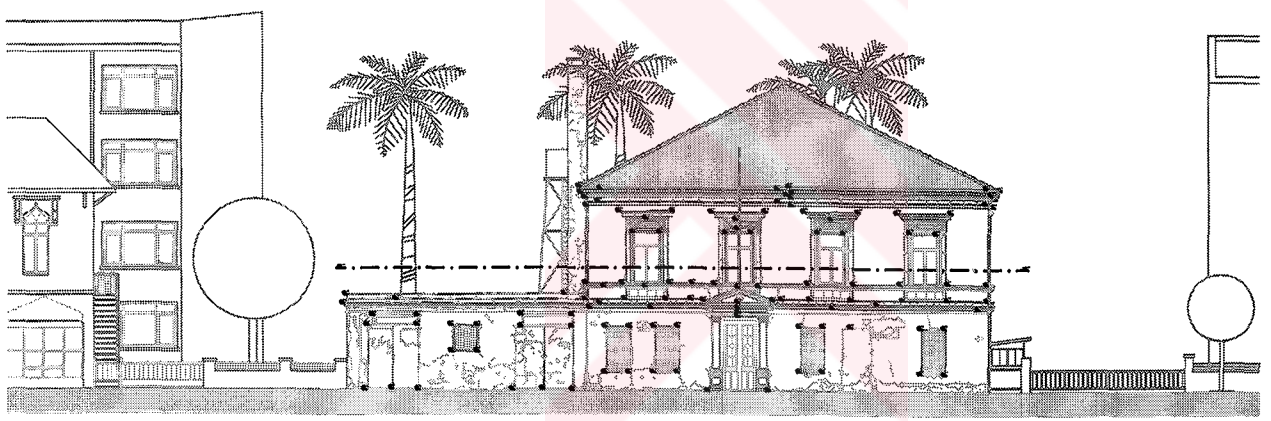
The east facade of the depot building is 25.81 m in length, 4.87 m in height and located 5.25 m away from the south corner of the building. There isn't any opening on this wall. At the north portion there is a local collapse which creates a hole on the wall.

The south wall of the depot building is out of cut stone masonry wall plastered with cement plaster and painted into yellow.

The main problem observed on the east façade of the depot building is detachment of cement plaster from the stone masonry wall. The sallination and dampness areas can be visualized on the surface. On the south portion of the stone masonry wall there is a serious structural crack, which has caused by a macro vegetation growth.

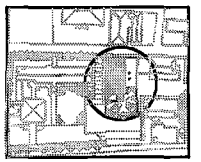


NORTH ELEVATION



RESTORATION PROJECT
OF THE
OLD AGRICULTURAL BANK BUILDING
IN MERSIN

KEY PLAN



THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF
NATURAL AND APPLIED SCIENCES
METU

SUBMITTED BY:	SUPERVISOR:
Nida NAYCI	Dr. Nimet ÖZGÜNOL

SURVEY TEAM:
Tuba AKAR, İrem DİZDAR, Nida NAYCI, Işıl POLAT, Meltem UÇAR, Semih YILDIZ

SURVEY ■	ANALYSIS
RESTITUTION	RESTORATION

MEASURED DRAWINGS

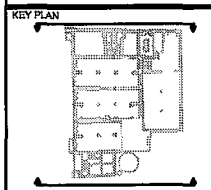
LEGEND
- Measured Parts
- Surrounding Buildings

SHEET

SUBJECT:

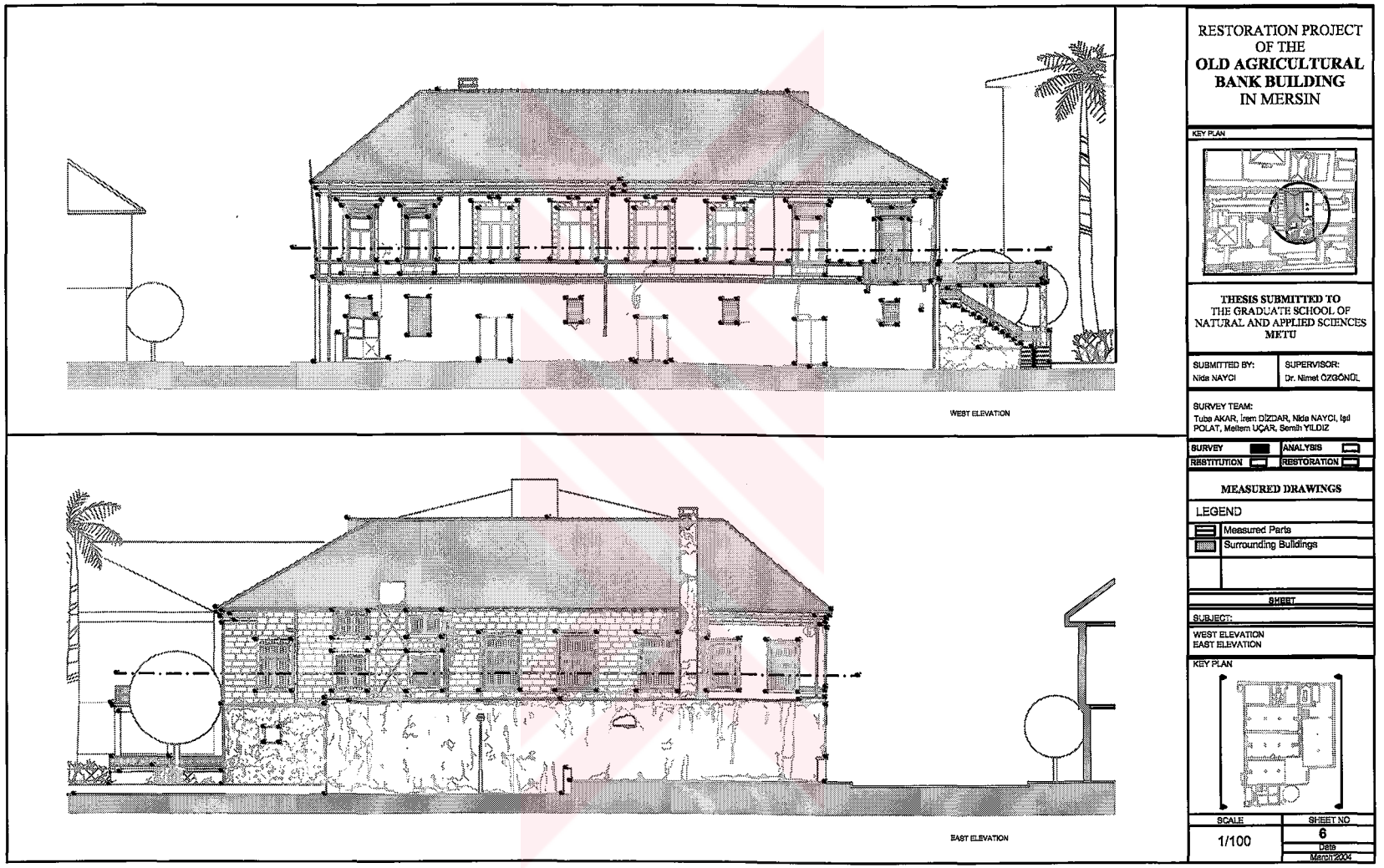
SOUTH ELEVATION
NORTH ELEVATION

KEY PLAN



SCALE	SHEET NO
1/100	5
	Date: March 2004

Drawing 2.5 North and South Elevations



Drawing 2.6 East and West Elevations

2.1.2.3 INTERIOR DESCRIPTION

2.1.2.3.1 Ground Floor

- **Main Building**

The ground floor of the main building consist of bank section -space G01, G02 and G03- which is located in the north portion of the building and depot section –space G04, G05 and G06- which is located in the south portion of the building. On the southern part of the main building there is a ground terrace which is 1.00 m elevated from the ground and staircases leading to the terrace in the first floor level.

2.1.2.3.1.1 Space G01

It is the entrance space of the bank section from the Uray Street, where the staircase leading to upstairs is located. It has a rectangular shape with 3.67 m width and 6.20 m length. The space is in two storey height with 8.56 m and located at –5.32 m below the datum line. It has mosaic tile flooring (FL MT1 type), and timber ceiling (CE T1 type).

The north wall of the space, where the entrance door ED T2G-1 type (1.40x3.04 m) is located, is 0.97 m away from the east corner. On the east wall of the space there is a double winged timber door with lighting window (ID T2L-1 type), which has 1.13x2.64 m dimensions and which is located 0.22 m away from the north corner It supplies entrance to the G02 space.

The west wall has 6.19 m length and 8.54 m height. There is ID T2L-1 type door (1.14x2.62 m) which leads to the space G03 in the ground floor. It is located 0.24 m away from the north wall. In the first floor level, there is timber flooring located at the north wall with 3.78 m in length and 1.50 m in width, supplying passage between the spaces 102 and 104. On the south wall there is the staircase ST c-1, which leads to main bank hall section in the first floor. The space under the staircases is converted into a closed space by addition of double winged metal doors (1.18x1.75 m), which are located on each side of the staircases. All the walls of the space are stone masonry walls which are plastered and painted. The main problem observed in the space is local detachments in plaster material.

2.1.2.3.1.2 Space G02

Space G02 is located in the north-east corner of the main building and accessed from the space G01 only. It has a rectangular shape with 3.73x6.14 m in plan dimensions and 3.60

m in height. The flooring is mosaic tile flooring (FL MT1 type). The original ceiling is covered with timber sheathings (CE T3 type).

The west wall of the space with 3.60 m height and 6.16 m width is the entrance wall, where the ID T2L-1 type timber door (1.13x2.64 m) is located 0.20 m away from the north corner. The south wall has 3.78x3.59 m dimensions, where 3.78 m is the length. There is not any architectural element on the south wall.

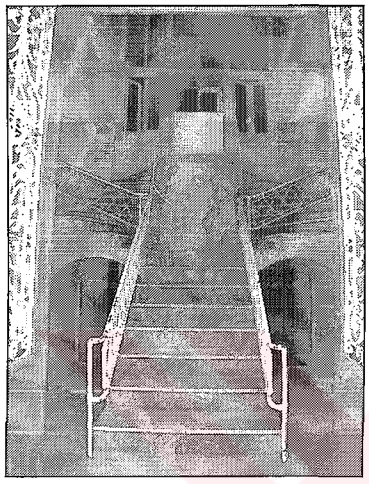


Figure 2.10 Space G01

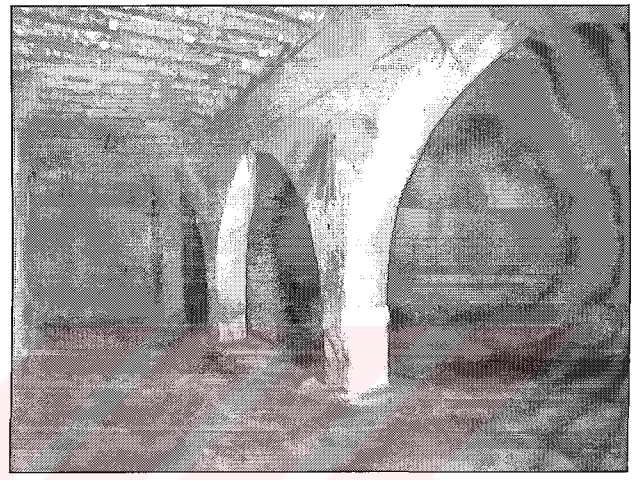


Figure 2.11 Space G04

On the east wall (6.14x3.61 m), there is a timber cupboard/shelf (1.17x2.65 m), which is located 2.60 m away from the south wall. The north wall of the space has 3.73 m length and 3.59 m height. There are two EW T2L-4 type windows (1.05x1.95 m), which are located at – 4.61 m according to the datum line and 1.28, 6.48 m away from the west wall respectively. All the walls of the space are stone masonry walls with plastered and painted finishing.

2.1.2.3.1.3 Space G03

Space G02 is located in the north-west corner of the main building at – 5.37 m below the datum line. It is accessed from the space G01 only. It has a rectangular shape with 7.81x6.22 m dimensions, where 7.81 is the dimension of the north wall of the space. The space has mosaic tile flooring (FL MT1 type), and covered ceiling with plywood sheets (CE T3 type). The east wall of the space with 3.26 m height and 6.20 m length is the entrance wall, where the ID T2L-1 type timber door (1.13x2.64 m) is located 0.20 m away from the north corner. The south wall is 7.47 m in length and 3.26 m in height, without any architectural element. The west wall of the space has 6.22x3.26 m dimensions. There are two timber EW T2L-4 type windows (0.95x1.88 m), which are located at -4.58 m level according to the datum

line and 1.00, 4.07 m away from the south wall approximately. The north wall is in 3.25 m height and 7.81 m length. There are two timber EW T2L-4 type windows (0.95x1.88 m), which are located at – 4.55 m level according to the datum line and 1.28, 6.48 m away from the west wall approximately. The walls are stone masonry walls which are plastered and painted.

There is rising damp problem observed at the ground level of the space, which has resulted with contour scaling in plaster finishing material. The scraped portions are serious especially under the window openings. From the scarped portions it is understood that the dampness problem has also caused material disintegration in the stone materials of the wall itself.

2.1.2.3.1.4 Space G04

Space G04, which belongs to the depot section of the building, is located at the southern part of the bank function spaces in the ground floor. It has an access to the outside through the main door located on the west door. The east and west walls of the space are parts of the east and west walls of the main building also. The space has rectangular shape with 16.26x7.42 m dimensions, where 7.42 is the distance between the north and south walls of the building.

The flooring is at the –6.02 m level according to the datum line and has a screed covered finishing. The superstructure of the space, which is at –1.52 m level according to the datum line, is divided into three portions, where the mid portion consists of vaulted flooring, while the west and east portions consists of timber flooring. The width of the east portion of timber flooring is 4.33 m from the east wall, while the width of the west portion of timber flooring is 4.25 m from the west wall.

The flooring is supported by the north and south walls at the ends, while they are supported by a row of arches at the mid span. The row of stone masonry arches is located 3.46 m away from the south wall and has 0.60 m thickness. It consists of three pointed arches, ARCH 2a, ARCH 2b and ARCH 2c which are located 1.51, 6.30 and 10.71 m away from the west wall respectively. They are supported by stone masonry piers, with 0.60x0.60 m dimensions. They are located 5.72, 10.10 m away from the west wall. ARCH 2a has a semi-circular profile with 4.20 m span distance and 2.25 m springing height. ARCH 2b is a pointed arch with 3.79 m span distance and 2.27 m springing height. ARCH 2c has a pointed profile with 4.10 m span distance and 2.42 m springing height.

The west wall of the space with 4.48 m height and 7.47 m length is the entrance wall, where the ED M2-1 type metal door (1.62x2.24 m) is located 0.82 m away from the north

corner. There is EW MF-1 type metal window (0.72x1.12 m), which is located 1.56 m away from the south wall and at –6.02 m level according to the datum line. The north wall of the space has 4.50 m height and 15.90 m length. There are closed arches as far as it is observed under the scraped portions of the plaster. There is a closed half-arch HARCH 1 located 1.25 m away from the west corner. There are two closed arches observed ARCH 1a and ARCH 1b located 1.75 and 5.82 m away from the west corner respectively. The arches are supported by stone piers having 0.60 m length.

The east wall has 7.42x4.51 m dimensions, where 7.42 is the length of the wall. There are two window openings (0.98x0.90 m), which are located at –3.36 m level according to the datum line and 1.53, 5.60 m away from the south wall approximately. They have metal frames and iron grills only, without any glazing. The south wall has 16.26x4.48 m dimensions, where 16.26 is the length of the wall. There is a trace of a closed arch on the plaster of the wall, which is located 6.46 m away from the west wall. All the walls stone masonry walls with cement plastered finishing. The main physical problem observed on the walls is dampness rising from the ground. The sallination and wet areas can be visualized from the cement surface, which has resulted with contour scaling of finishing material in some portions. The problems observed in the floorings are sagging problem both in timber and vaulted floorings. The plaster finishing of the vaulted flooring is seriously detached.

2.1.2.3.1.5 Space G05

Space G05 belongs to the depot section of the building. It has an access to the outside through the main door located on the west door. The east and west walls of the space are the part of the east and west walls of the main building also. The space has an approximately rectangular shape with 16.30x7.30 m dimensions, where 7.30 is the distance between the north and south walls of the building. The height of the space is 4.26 m. The flooring is at the –5.76 m level according to the datum line with screed finishing. The superstructure of the space is at –1.54 m level according to the datum line.

The space is divided into two portions with partial walls and two reinforced concrete columns located 3.20 m away from the north wall. The walls and columns are connected to each other with reinforced concrete beams. The stone masonry walls are projecting 1.90 m from the west wall and 2.31 m from the east wall. The two reinforced concrete columns (0.42x0.70 m) are located 5.59 and 9.93 m away from the west corner.

The superstructure of the space is supported by the north and south walls at the ends, while they are supported by a row of reinforced concrete beams and columns at the mid span. The superstructure is divided into two portions with this row also. The north portion is divided into three portions horizontally. The mid portion consists of vaulted flooring, while the west and east portions consist of timber flooring. The length of the east portion of timber flooring is 4.30 m from the east wall, and the length of the west portion of timber flooring is 4.27 m from the west wall.

The south portion is constructed with timber flooring and vaulted flooring partially. The portion 4.28 m away from the west wall and the portion between the 2.95 and 4.31 m away from the east wall are constructed with timber flooring; while the rest portions are constructed with vaulted flooring.

The west wall of the space with 4.25 m height and 7.57 m length is the entrance wall, where the ED M2-1 type metal door (1.62x2.24 m) is located 0.87 m away from the north corner. There is EW MF-1 type metal window (0.72x1.12 m), which is located 1.29 m away from the south wall and at –3.32 m level according to the datum line.

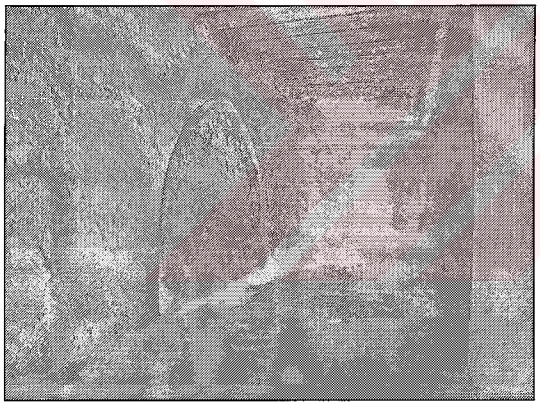


Figure 2.12 Space G05



Figure 2.13 Space G06

The north wall of the space has 4.27 m height and 16.29 m length, without any architectural element. There is a cut stone masonry arch (ARCH 3) located 6.54 m away from the east wall. It is supported by stone masonry piers on the wall. It has 3.38 m span distance, 2.20 m springing height according to the springing line which is located at the –4.91 m level according to the datum line. The arch is closed and filled with rubble stone masonry wall. The east wall has 4.26 m height and 7.12 m length. There are two window openings (0.98x0.90m), which are located at –3.41 m level according to the datum line and 1.56x 5.60 m away from the south wall approximately. They have metal frames and iron grills.

The south wall has 16.31x4.28 m dimensions, where 16.31 is the length of the wall. There is a stone masonry arch (ARCH 4) located 5.96 m away from the west wall. It has a 3.82 m span, 2.20 m height and located at the –4.70 m level according to the datum line. The arch is closed and filled with cut stone masonry wall. In front of the arch, there is stone masonry pier attached to the arch with 0.77x1.00 m dimensions, which is located 7.66 m away from the west wall. There are rectangular (0.35x0.39 m) reinforced concrete columns attached to the south wall, which are located 1.54, 5.57 and 10.04 m away from the west wall approximately.

All the walls are stone masonry walls. Except from the wall that is used to fill the arch in the north wall, they have brownish mud mortar. Main weathering problems observed extensively in the space are detachment and material loss of the building materials. There is granular to crumbly disintegration of plaster, mortar and stone materials. According to the intensity of the problems, material loss as in contour scaling/flaking or breaking out forms are observed. In some portions there are fissures in the stone materials. The timber elements used with masonry elements as bonding beams or flooring beams have fiberisation problems due to high water content and formation of holes problem due to insect attacks. Holes born by insects accelerate the fiberisation of the timber material.

Both in vaulted and timber floorings, there is sagging problem seriously. The brick vault portions between the I beams have lost their horizontal axes. In some portions of timber flooring due to water problem, the timber elements have been seriously decayed.

2.1.2.3.1.6 Space G06

As space G04 and G05, space G06 belongs to the depot section of the building. It is located on the south-west corner of the main building. The west wall of the space is a part of west wall of the main building also. It has an access to the outside through the main door located on the west door. The space has rectangular shape with 11.71x7.78 m, where 7.78 is the distance of the west wall.

The flooring is at the –6.08 m level according to the datum line with screed finishing. There is a level difference in the floor. The portion in the south-west part of the floor (4.23x6.05 m) is raised 10 cm higher than the rest of the floor level. The superstructure of the space consists of timber flooring and vaulted flooring. The portion between 4.70 m away from the east wall and 3.36 m away from the north wall is vaulted flooring, while the rest of the superstructure is timber flooring. The superstructure is left uncovered.

The space is divided into two portions with a row of arches located 3.45 m away from the north wall. They are coded as ARCH 5a, ARCH 5b and HARCH 5c, which are located 1.56, 5.66 and 9.45 m away from the west wall respectively. They are supported by stone piers (0.60x0.60 m). The ARCH 5a is semi-circular arch with 4.20 m span distance and 2.18 m springing height. The ARCH 5b is a pointed arch with 3.40 m span distance and 2.38 m springing height. The profile and actual measures of the HARCH 5c can not be defined since it is cut by the west wall of the space. The west wall of the space with 7.77 m length and 4.48 m height is the entrance facade of the space. It is entered through the metal the ED M2-1 type metal door (1.62x2.24 m), which is located 0.85 m away from the north corner. There is EW MF-1 type metal window (0.72x1.12 m), which is located 1.22 m away from the south wall and at –3.70 m level according to the datum line.

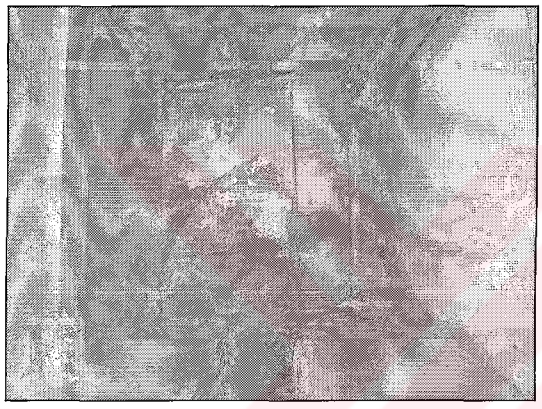


Figure 2.14 Space G09

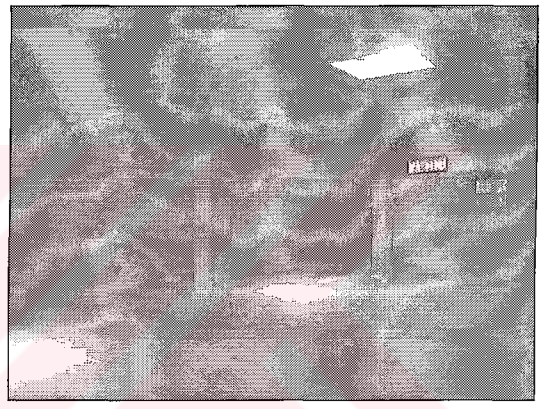


Figure 2.15 Space G12

The north wall has 11.71 m length and 4.50 m height. There is a cut stone arch (ARCH 4) located 5.88 m away from the west corner. It has 3.82 m span distance and 2.20 m springing height. It is closed with cut stone masonry wall. The east wall has 7.46 m length and 4.45 m height, without any opening or architectural element. The south wall has 11.61x4.48 m dimensions, where 11.61 is the length of the wall. There isn't any opening or architectural element on the south wall. But, there are remains of timber beams, which are located at the –2.48 m level according to the datum line and 1.56 m away from the east wall. There are also traces of a closed arch which remains under the plaster approximately 5.90 m away from the east wall and at the –3.30 m level.

Main weathering problems observed extensively in the space is granular to crumbly disintegration of plaster, mortar and stone materials. According to the intensity of the problems, material loss as in contour scaling/flaking or breaking out forms are observed. In some portions there are fissures in the stone materials. The timber elements used with masonry elements as bonding beams or flooring beams have fiberisation problems due to

high water content and formation of holes problem due to insect attacks. Holes born by insects accelerate the fiberisation of the timber material. Both in vaulted and timber floorings, there is sagging problem seriously. The brick vault portions between the I beams have lost their horizontal axes. The timber brackets which are placed to support the vaulted flooring in space G06 are totally degraded. In addition to this, there is material loss in structural severity degree in some portions of the timber flooring as in space 124. In some portions of timber flooring due to water problem, the timber elements have been seriously decayed.

2.1.2.3.1.7 Space G07

Space G07 is located in the south-east corner of the main building. It has an only access from the space 115 in the first floor. Since the stairs in the 115 is removed, this space could not be entered. Thus, it could not be surveyed in details. It makes a projection (2.10x4.76 m) from the south-east corner of the main building towards outside. The projected section has one storey height with a terraced superstructure which is located. On the east wall, which is the part of the exterior east wall of the main building, there is a rectangular window opening (0.80x0.80 m) located 2.09 m away from the south corner.

2.1.2.3.1.8 Space G08

Space G08 is the semi-open space which is covered by the RC terrace located on the south portion of the main building. It has rectangular shape with 6.83 x 5.76 m dimensions. It has screed covered platform which is raised 1.20 m above the ground level. There are five RC columns located on the platform supporting the RC slab flooring of the terrace. On the north-west corner of the space, there is a rectangular space with 1.27x1.20 m dimensions. This small space has cut stone vaulted superstructure, which supports the part of the staircases leading to the terrace. It has an entrance located on the south with 0.80 m width.

The main physical problems observed in this space is the structural decay of the RC slab flooring of the terrace due to the oxidation of the metal rods in the infrastructure of the flooring. The oxidation has caused flaking of the concrete cover over the metal rods.

- **Depot Building**

The depot building is consisted of two sections: a store unit including a single space (space G10) and a storage section including 3 spaces (space G11, G12 and G13) with separate entrances for each section from the Uray Street.

2.1.2.3.1.9 Space G09

The space G09 is located in the north-west portion of the depot building. It has an entrance from the Uray Street. The north wall is a part of the north wall of the depot also. The space has a rectangular space with 6.15x3.51 m dimensions, where 6.15 is the length of the north wall. The flooring, which is at the –5.51 m level according to the datum line, has screed finishing. The superstructure of the space, which is at –1.41 m level according to the datum line, is out of reinforced concrete slab flooring. The slab is supported by a reinforced beam at the middle, which is 2.96 m away from the north wall. It has a 0.30 m width.

The north wall of the space is the entrance facade with 3.51 m length and 4.05 m height. It is entered through the metal ED M2L type metal door, which is located 0.33 m away from the east wall. The west wall has 6.16 m length and 4.03 m height, without any opening. There is not any opening on the south wall either, which has 3.48 m length and 4.08 m height. Starting from the ground up to the ceiling of the space, there is an attached 0.18x0.71 m brick masonry chimney located at 0.63 m away from the west wall. The dimensions of the east wall are 6.16x4.04 m, where 6.16 is the length. There is a stone masonry column (0.43x0.15 m) located 2.85 m away from the south wall.

The main weathering problems observed in space G09 is detachment of plasters on the surfaces due to the rising damp problem. The detachment is seen seriously especially on the south wall of the space. Under the scraped portions the traces of closed arch is observed. The RC slab flooring superstructure has structural decay problem due to the oxidation of the metal rods in the infrastructure of the flooring. The oxidation has caused flaking of the concrete cover over the metal rods.

2.1.2.3.1.10 Space G10

The space G10 is located in the north-east portion of the depot building, which has an entrance from the Uray Street. The north wall of the space is a part of the north wall of the depot building also. It has a L shaped plan. The flooring, which is at the –5.58 m level according to the datum line, has screed finishing. The superstructure, which is at –1.45 m level according to the datum line, is out of reinforced concrete slab flooring. The slab is supported by walls at the edges and by the beams in the mid parts.
The north wall of the north wing which has 4.06 m length and 4.16 m height is the entrance facade of the space. It is entered from the Uray Street, through ED M2L type metal door (2.17x2.75 m), which is located 0.54 m away from the east corner. There is a rectangular

opening located at the top of the door with dimensions of (1.86x0.45 m) leading light inside. The north wall is cut stone masonry wall with RC lintel on the door opening.

The west wall, which separates the G10 from G11, has 5.19 m length and 4.08 m height. It is out of concrete block masonry wall. The north wall of the second portion, which separates the G10 from G12, has 5.19 m length and 4.16 m height. There is an opening (0.85x2.25 m) leading to the space G12, which is located 0.35 m away from the east corner. The west wall of the second portion of the space is constructed adjacent to the east wall of the main building. The south wall of the space G10 separates the space from G13. It is concrete block masonry wall, with 9.50 m length and 4.16 m height. There is a wide opening which leads to the space G13 (3.21x3.70 m) located 1.23 m away from the west wall of the space. The west wall of the space is out of stone masonry wall in 9.67 m length and 4.05 m height and without any opening. The main weathering problems observed in space G10 is detachment of plasters on the surfaces and granular disintegration is stone material of the wall due to the rising damp problem.

2.1.2.3.1.11 Space G11

The space G11 has an only access from the space G12. The north wall of the space is a part of the north wall of the depot building also. It has a rectangular space with 2.15x4.90 m dimensions, where 2.15 is the length of the north wall. The superstructure of the space, which is at –1.30 m level according to the datum line, is out of reinforced concrete slab flooring and supported by walls from the edges. The north wall is out of stone masonry wall with 2.16 m length and 4.06 m height. There is a rectangular window opening (0.95x0.98 m) to the Uray Street, which is located 1.01 m away from the west wall. The lintel of the window opening is out of concrete.

The west wall of the space is out of stone masonry wall with 4.97 m length and 4.06 m height. The south wall is out of reinforced concrete wall. There is an entrance (0.85x2.25 m) from the space G10. The west wall of the space is out of concrete block masonry wall with 4.87 m length and 4.08 m height.

2.1.2.3.1.12 Space G12

Space G12 is located at the south portion of the depot building. The south and west walls of the space are the outer walls of the depot also. The space has rectangular plan with 9.25x14.75 m dimensions, where 9.25 is the length of the south wall. The flooring is at –5.58 m level and superstructure is at –1.53 m level according to the datum line. The flooring has

screed covering, while the superstructure is out of reinforced concrete slab flooring. The superstructure is supported by masonry walls at the edges and RC columns at the mid spans.

There are two rectangular RC columns (0.32x0.36 m) that are located 4.42 m away from the east wall; and 4.56, 9.55 m away from the south wall respectively. The walls and columns are connected to each other with RC beams horizontally. There are three rows of beams laying in N-S direction and two rows laying in W-E direction. There are two rectangular roof windows (1.02x1.48 m) at the ceiling, which are located 6.75, 11.67 m away from the south wall respectively. The north wall of the space is out of concrete block masonry wall with 9.48 m length and 4.09 m height. There is a wide opening which leads to the space G10 (3.21x3.70 m) located 1.20 m away from the east wall of the space. The west wall has 14.75 m length and 4.05 m height. The south wall has 9.25 m length and 4.08 m height. There are three window openings located 1.47 m (1.00x0.92 m), 3.21 m (1.40x0.62 m), and 5.45 m (0.97x0.95 m) away from the east wall respectively. They are located at –3.90, -2.93 and –3.92 m according to the datum line in same respect.

The west wall has 14.61 m length and 4.07 m height. There are three window openings (1.10x1.00 m) located 4.57, 8.35 and 12.31 m away from the south wall and at –3.35 m level according to the datum line.

2.1.2.3.2 First Floor

2.1.2.3.2.1 Space 101

Space 101 is the main bank hall section, which is entered from the space 105 located in the space G01 at first floor level. It is located at the mid part of the first floor of the main building. The east and west walls of the space are exterior walls of the building. It is a wide single space with 16.25x11.51 m dimensions, where 16.25 is the distance between east-west walls. The space is arranged like a wide sofa which has accesses to the front spaces of 102,103, G01 and 105 that are located at the north portion of the building and the spaces 106, 107, 108 and 109 that are located at the south portion.

The flooring which is at -1.54 m according to the datum line is divided into three portions, where the mid portion consists of vaulted flooring, whereas the west and east portions consists of timber flooring. The width of the east portion of timber flooring is 4.30 m from the east wall; while the width of the west portion of timber flooring is 4.25 m from the west wall. The timber flooring parts have timber boarding finishing with 9-13 cm timber

boards. The vaulted flooring portion has mosaic tile finishing. (FL MT1 type) The ceiling, which is located at +3.12 m level, is timber ceiling with CE T1 type.




Figures 3.16-3.17 Space 101

The north wall is the entrance facade of the space since it is connected to the space G01 through this facade. It has 16.25 m length and 4.66 m height. There are four doors on this wall which supply entrances to the space located at the north portion of the building. There is ID T2L-2 type timber door (1.26x3.04), which is located 3.05 m away from the west corner leading to the space 102. Space 103 is entered from the ID T2GL-1 type timber door (1.30X3.00), which is located 5.16 m away from the west corner. The entrance to the space 101 from the space G01 is supplied through the opening DW T-A (3.64X4.23), which is located 7.98 m away from the west corner. There is an ID T2L-2 type timber door (1.26X3.04), located 12.03 m away from the west corner and supplying entrance to the space 105.

The east wall of space 101 has 11.52X4.67 dimensions, where 11.52 is the length of the building. There are three EW T3L-1 type timber windows (2.63X1.70), which are located at -0.70 m level according to the datum line and 0.67, 4.71, 8.70 m away from the north corner respectively. Under each window sill, there is a niche for radiator. The south wall, which has 16.28 m length and 4.65 m height, supplies accesses to the spaces located at the south portion of the building. There are three door elements and a wide opening element on this wall. The ID T1L-1 type timber door (0.97x3.00), which is located 5.05 m away from the east corner leads to the space 109. The entrance to the space 108 from the space 101 is supplied through the opening D M-A (2.42x2.90), which is located 6.88 m away from the east corner. Space 107 is entered from the ID T1L type timber door, which is located 5.12 m away from the west corner. The wing of the door element is missing. There is ID T2L type timber door (1.16x3.00) located 3.21 m away from the west corner and supplying access to the space 106. The west wall of space 101 has 11.50 m length and 4.68 m height. There are three EW T3L-1 type timber windows (2.63X1.70), which are located at -0.69 m level according to the

datum line and 0.87, 4.88, 9.02 m away from the south corner respectively. Under each window sill, there is a niche for radiator.

The single 101 space is divided into six sub-places with later added timber plywood walls, which are located on the timber flooring portions within the main space. They are coded as spaces 101a, 101b, 101c, 101d, 101e and 101f. Spaces 101a (3x3.90 m), 101b (4.25x3.85 m), and 101c (4.25x3.85 m) are located on west portion, while 101d (4.28x3.96 m), 101e (4.27x3.68 m) and 101f (4.25x3.55 m) are located on east portion. Each space has rectangular space with 2.87 m height. They are all accessed from the main 101 space hall separately.

All the walls of the space are out of cut stone masonry walls with plaster finishing. The main problem observed in the space 101 is loss of material and detachments in plaster materials. The flaking of plasters is seriously observed especially on the east wall of the space due to the water drainage problem of the superstructure of the depot building. One of the factors that have caused decays is the water coming from the roof resulting with the decays on the corners of the spaces. There is sagging problem in the vaulted flooring, in which the brick vaults have lost their horizontality.

2.1.2.3.2.2 Space 102

Space 102 is located in the north-west corner of the first floor of the main building. It has an access from the space 101 and 103. It has a rectangular shape with 4.62x6.55 m in plan dimensions and 4.65 m in height. The flooring, which is at -1.56 m level according to the datum line, is timber flooring with 9-13 cm sized timber boarding finishing. The superstructure of the space, which is located at + 3.13 m level according to the datum line is covered with plastered decorations. (CE T1 type)

The south wall, where the entrance from the main bank hall section -space101- is located, has 4.48 m length and 4.63 m height. The door is ID T2L-2 type timber door (1.26X3.04) and located 0.20 m away from the east corner. The west wall is 6.70 m in width and 4.66 m in height with two EW T2L-1 typed windows (1.10x2.20) located 1.52, 4.48 m away from the south corner respectively. Under each window, there is timber shuttering for radiator. The north wall has 4.83 m length and 4.68 m height. On the north wall, there is one EW T2L-1 type window (1.10x2.20) located 1.52 m away from the west corner. Under the window there is timber shuttering for radiator. East wall has 6.55x4.67 dimensions, where

4.67 is the height of the wall. There is ID T1L-1 type timber door located 0.57 m away from the south corner, which supplies entrance to the space 103.

All the walls of space 102 are out of cut stone masonry with plastered and painted finishing except from the east wall, which has sheeting coverings.

2.1.2.3.2.3 Space 103

Space 103 has access to the space 101, 102 and 104. It has 2.91x6.45 dimensions with 4.69 m height and located at -1.54 m according to the datum line. The construction technique of flooring is timber flooring with 0.09-0.13 m sized timber boarding finishing. The superstructure of the space, which is at +3.15 m level according to the datum line, has plastered finishing.

The south wall is the entrance facade of the space, since it is entered from the main bank hall section through this wall. It has 2.91x4.67 dimensions, where 4.67 is the height of the wall. The ID T2GL-1 type timber door (1.30X3.00) is located 1.24 m away from the east corner. The west wall has 6.57x4.66 m dimensions, where 4.66 is the height of the wall. There is ID T1L-1 type timber door located 0.57 m away from the south corner, which supplies entrance to the space 102. The north wall has 2.91 m length and 4.68 m height with EW T2L-1 type window (1.10x2.20) located 0.45 m away from the south corner. The east wall has 6.45x4.67 dimensions, where 6.45 is the length. There is ID T2GL-1 type timber door located 0.32 m away from the north corner, which supplies entrance to the space 104.

All the walls are out of cut stone masonry with plastered and painted finishing. There is sagging problem in timber flooring.

2.1.2.3.2.4 Space 104

Space 104 is constructed as a mezzanine floor in space G01, which supplies passage between space 103 and 106 like a bridge. It has a rectangular shape with 3.74x1.43 dimensions and located at -1.53 m according to the datum line. It is separated from the space G01 with timber balustrades (BA T1 type) located at the south edge of the floor. The construction technique of the flooring is timber flooring with 0.09-0.13 sized timber boarding finishing. The other three sides of the space are the walls of the space G01, which rises up to the first floor level. On the west wall there is ID T1GL-1 type timber door located 0.34 m away from the north corner, which supplies entrance to the space 103. On the north wall of the

space, there is EW T2L-1 type window (1.10x2.20) which is located at -0.68 m level. On the east wall, there is another timber ID T1L-1 type door leading to the space 106. It is located 0.32 m away from the north corner.



Figure 2.18 Space 104 within space G01



Figure 2.19 Space 118

2.1.2.3.2.5 Space 105

Space 105 is the corner space which is located at the north-east corner of the first floor of the building. It has two accesses from the spaces 101 and 104. The space has a rectangular shape with 4.12x6.25 m dimensions and 4.74 m height. The flooring is constructed in timber flooring technique and has timber boarding finishing. The ceiling, which is at +3.16 m level, has plastered finishing. The north wall, where the main entrance from the main bank hall section –space 101- is located, has 4.33 m length and 4.75 height. The ID T2L-2 type timber door (1.26X3.04) is located 0.04 m away from the west corner. There is also IW T1-1 type timber window (0.43x0.60), which is located at -0.78 m level according to the datum line and 1.96 m away from the east corner. The west wall has 6.32 m length and 4.72 m height. 2.50 m after from the south corner the thickness of the wall increases 0.20 m from the wall, continuing with this thickness 1.58 m towards the north wall. On the west wall, there is a ID T1-1 type timber door located 0.31 m away from the north corner, which supplies entrance to the space 104. On the north wall, which has 3.97 m length and 4.73 m height, there is EW T2L-1 type window (1.10x2.20) located 1.29 m away from the west corner. The east wall has 6.18x4.71 m dimensions where 6.18 is the length of the wall. There are two EW T2L-1 type window (1.10x2.20) located 0.92, 3.62 m away from the north corner of the wall.

All the walls of the space are out of cut stone masonry wall, with plaster finishing. There is loss of material and detachments in plaster material. The flaking of plasters is seriously observed especially on the south-east corner of the space due to the water coming from the roof. On timber flooring there is sagging problem.

2.1.2.3.2.6 Space 106

Space 106 is located at the south-west portion of the main bank hall section and has an access from the space 101 only. It has a rectangular shape with 4.12x6.25 m in plan dimensions and 4.72 m height. The flooring, which is at -1.54 m level according to the datum line, is timber flooring with 0.09-0.13 m sized timber boarding finishing. The superstructure of the space, which is at +3.16 m level according to the datum line, is covered with timber ceiling (CE T1 type). The north wall is the entrance facade of the space, since it is entered from the main bank hall section through this wall. It has 4.38x4.70 dimensions, where 4.38 m is the length of the wall. The ID T2L type timber door (1.16x3.00) is located 3.20 m away from the west corner. The east wall has 3.78 m length and 4.70 m height. The south wall of the space has 4.35x4.72 m dimensions, where 4.35 is the length of the wall. There is an opening (0.91x2.10 m), which is closed later with plywood, located 1.03 m away from the east corner. The west wall of the space has 3.78 m length and 4.73 m height, with EW T3L-1 type timber window (2.63x1.70 m), located 0.88 m away from the south corner. All the walls, except from the east wall, are out of stone masonry wall, with a plastered-painted finishing.

2.1.2.3.2.7 Space 107

Space 107 is located at the south portion of the main bank hall section. It is connected to the space 101 on the north and to the space 115 located on the south. It has a rectangular shape with 1.83x3.72 m in plan dimensions and 4.72 m height. The flooring is timber flooring with 9-14 m sized timber boarding finishing. The superstructure of the space is covered with timber ceiling (CE T1 type). The north wall has 1.81 m length and 4.73 m height; with a ID T1L type timber door located 0.47 m away from the west corner. It supplies access to the space 101. The east wall has 3.71x4.73 m dimensions, where 3.71 is the length of the wall. There isn't any opening on this wall. The south wall has 1.85 m length and 4.70 m height. There is a ID T1L type timber door located 0.27 m away from the west corner, which supplies access to the space 115. The west wall is 3.75 m in length and 4.70 m in height. There isn't any opening on the west wall either.

All the walls are out of stone masonry wall with plaster finishing. There is flaking problem on plaster material from the cut stone wall surfaces.

2.1.2.3.2.8 Space 108

It is located on the south portion of the space 101 from the middle. It is connected to the space main bank hall section only. It has a rectangular shape with 2.95x3.72 m in plan

dimensions and 4.73 m height. The flooring, which is located at -1.53 m level according to the datum line, is vaulted flooring with mosaic tile finishing (FL MT2 type). The superstructure of the space, which is at +3.15 m level according to the datum line, is covered with timber ceiling (CE T2 type). The north wall is the entrance facade of the space, since the only opening from the space 101 is located on this wall. It has 2.95 m length and 4.70 m height. The entrance to the space 101 is supplied through the opening type D M-A (2.45x3.00), which is located 0.25 m away from the west corner. The east wall has 3.70 m length and 4.72 m height; the south wall has 2.96 m length and 4.73 m height; and the west wall has 3.73 m length and 4.71 m height respectively. There aren't any other openings on these walls.

2.1.2.3.2.9 Space 109

Space 109 is located on the south portion of the space 101. It is connected to the space 101 on the north, to the space 111 located on the south. It has a rectangular shape with 1.51x1.75 m in plan dimensions and 4.69 m height. The flooring is timber flooring with screed finishing. The superstructure of the space is covered with timber ceiling (CE T2 type). The north wall has 1.75 m length and 4.68 m height, with ID T1L type timber door located0.38 m away from the east corner. It supplies access to the space 101. The east wall has 1.50x4.70 m dimensions, where 1.50 is the length of the wall. There is a ID T1 type timber door leading to the space 112. It is located 0.60 m away from the north corner. The south wall has 1.75 m length and 4.71 m height. There is an opening located 0.22 m away from the east corner and which supplies access to the space 110. There is not any opening on the west wall, which has 1.72 m length and 4.69 m height. There is a rectangular chimney space -which is not used today- on the north end of the wall with 0.44x0.64 m dimensions.

2.1.2.3.2.10 Space 110

It is located on the south of space 110, with an only access to this space. It has a rectangular shape with 1.75x2.11 m in plan dimensions and 4.70 m height. It has timber flooring with screed finishing and timber ceiling (CE T1 type). The north wall has 1.76 m length and 4.71 m height with an opening (1.24 m width) located 0.22 m away from the east corner. It supplies access from the space 109. The east wall has 2.12 m length and 4.69 m height; the south wall has 1.76 m length and 4.71 m height; and the west wall has 2.10 m length and 4.72 m height respectively. There aren't any openings on these walls.

2.1.2.3.2.11 Space 111

It is located between the space 110 and 112, with an access to each space. There is a timber staircase located in the north portion of the space and leading to the space 201 in the mezzanine floor. The space 111 has a rectangular shape with 1.25x3.70 m in plan dimensions and 4.72 m height. It has vaulted flooring with screed finishing and timber ceiling (CE T1 type). The north wall, which is out of stone masonry wall, has 1.31 m length and 4.71 m height. There isn't any opening on this wall. The east wall has 3.67 m length and 4.73 m height, with a ID T1L type timber door located 1.12 m away from the north corner. It supplies access to the space 112. The south wall has 1.25x4.71 dimensions, where 1.25 is the length of the wall. The west wall with 3.68 m length and 4.72 m height, has a ID T1L type timber door located 3.35 m away from the south corner. It supplies access to the space 110 and its wing is missing.

2.1.2.3.2.12 Space 112

Space 112 is located at the south-east portion of the main bank hall section with an access from the space 111. It has rectangular shape with 2.96x3.64 m in plan dimensions and 4.74 m height. The flooring, which is located at –1.52 m level according to the datum line, is vaulted flooring with ceramic tile finishing (FL CT3 type). The superstructure of the space is covered with timber ceiling (CE T1 type). The north wall has 2.96x4.72 m dimensions, where 2.96 is the length of the wall. There are three water basins located on the north wall. The east wall has 3.63 m length and 4.70 m height. There is a EW T2L type timber window located 1.10 m away from the north corner. There is not any opening on the south wall, which has 2.95 m length and 4.75 m height. The west wall has 3.66x4.72 dimensions, where 3.66 is the length of the wall. There is ID T1 type timber door, which is located 1.11 m away from the north corner and which supplies access to the space 111.

The space 112 is arranged functionally as a restroom with toilet spaces 112a, 112b and 112c. Each sub-place is separated with a wall that has 2.20 m height and is located 1.52 m away from the south wall of space 112. Leading to each toilet space, there are ID T1L-4 type timber doors located 0.14, 1.17 and 2.20 m away from the east corner respectively. All the exterior walls of space 112 is out of stone masonry walls with ceramic finishing up to 1.20 m height and plastered finishing at the rest.

2.1.2.3.2.13 Space 113

It is located at the northwest corner of the dwelling section in the first floor. It is accessed from the space 115 located at the east. The space has a rectangular shape with

5.05x3.60 m in plan dimensions and 4.70 m height. The flooring, which is located at –1.53 m level according to the datum line, is timber flooring with d-d cm timber boarding finishing (FL T1 type). The superstructure of the space is covered with timber ceiling (CE T1 type). The east wall, which is the entrance facade of the space, has 3.55 m length and 4.71 m height. There is a ID T1L-2 type timber door (0.90x2.95), which is located 0.12 m away from the south corner and which supplies access to the space 115. The south wall has 5.06x4.71 dimensions, where 5.06 m is the length of the wall. There isn't any opening or architectural element on this wall. The west wall has 3.66 m length and 4.75 m height, with EW T2L-1 type timber window (1.10x2.20 m) located 1.14 m away from the south corner. The north wall of the space has 5.05x4.69 m dimensions, where 5.05 is the length of the wall. There is an opening, which is closed later with timber sheeting plywood 2.35 m away from the east corner.

All the walls of the space are out of cut stone masonry walls, except from the east wall, which is out of timber skeleton wall. There is plaster detachment problem partially observed on the walls.

2.1.2.3.2.14 Space 114

Space 114 is located which supplies passage from spaces 107 to 115. It has a rectangular shape with 1.68x2.15 m in plan dimensions and 4.72 m height. The flooring is timber flooring with 10-15 cm timber boarding finishing (FL T1 type). The superstructure of the space is covered with timber ceiling (CE T2 type). The north wall has 1.68 m length and 4.75 m height, with a closed entrance (0.92x2.10 m) from the space 107 located 0.12 m away from the west corner. The east wall of the space has 2.14x4.71 m dimensions, where 2.14 is the length of the wall. The south wall has 1.68 m length and 4.71 m height, with ID T1L type timber door located 0.10 m away from the west corner. The door wing element is missing. It supplies access to the space 115. The wall has 2.15 m length and 4.70 m height. All the walls of space 114 are out of stone masonry walls with plastered finishing.

2.1.2.3.2.15 Space 115

Space 115 has a corridor function, which supplies access to the spaces at four sides and connects them to each other. It has a L shaped plan. The flooring, which is located at –1.52 m level according to the datum line, is vaulted flooring with ceramic tile finishing (FL CT1 type). The superstructure of the space is covered with timber ceiling (CE T1 type).

The south wing has 7.87x1.20 m dimensions, while the north wing which is located at the north-east portion of the south wing has 1.25x2.32 m dimensions. The north wall of the

south wing has 6.63 m length and 4.68 m height. There are three doors on this wall which supply entrances to the space located at the north portion. There is a ID T1L type timber door, which is located 0.10 m away from the west corner leading to the space 114. Space 116 is entered from the ID T1L type timber door, which is located 1.95 m away from the west corner. The entrance to the space 117 is supplied through the ID T1L-2 type timber door (0.90x2.53), which is located 4.05 m away from the west corner. There is IW T1-3 (0.45x1.42) type timber window leading light into the space 117, which is located 1.12 m away from the east corner. The west wall of the north wing, which has 2.25 m length and 4.68 m height, is constructed out of brick masonry technique until 1.85 m height and timber skeleton technique at the rest. There is ID T1L-3 type timber door (0.90x2.85), which is located 0.05 m away from the south corner of the east wall. It supplies access to the space 118. The south wall, which is out of stone masonry wall, has 7.89 m length and 4.70 m height. There are accesses to the spaces 121 and 123 from the south wall. The space 123 is accessed from a ID T1L-3 type timber door (0.90x2.90), which is located 0.09 m away from the east corner. There is a wide opening DW T-B (1.83x2.94), which is located 0.10 m away from the east corner. It supplies access to the space 121. The west wall has 1.20 m length and 4.70 m height. There is ID T1L-2 type timber door (0.90x2.95) located at the south corner, which supplies access to the space 119.

2.1.2.3.2.16 Space 116

The space 116 having toilet functional use is located between spaces 114 and 117. It is accessed from the space 115. It has a rectangular shape with 4.68 m height. The flooring, which is located at –1.54 m level according to the datum line, is vaulted flooring with ceramic tile finishing (FL T2 type). The superstructure of the space is covered with timber ceiling (CE T4 type). The space is divided into two sections with a partition wall that has 2.08 m height and that is located 1.06 m away from the north wall. The sub-space 116a is accessed from a door located on this wall. The flooring of space 116a is at –1.43 m level.

The south wall, which is the entrance facade of the space, has 1.78 m length and 4.71 m height. There is a ID T1L-2 type timber door located at the west corner of the door supplying entrance from the space 115. On the same wall, there is a IW T1-02 type timber window (0.55x0.85) located at 1.23 m level. It lies from west to east corner of the wall. The west wall has 2.18x4.71 m dimensions, where 2.18 is the length of the wall. The north wall of the space 116 has 1.76 m length and 4.69 m height. There is an IW TF-1 type timber window (1.60x2.08) located at 1.80 m level. The east wall has 2.15 m length and 4.70 m height with a IW TF-2 type timber window located. The window leads light into the space from space 117.

2.1.2.3.2.17 Space 117

The space 117 having bath function is located between spaces 116 and 115. It is accessed from the space 115. It has a rectangular shape with 2.56x2.12 m in plan dimensions and 3.10 m height. There is bath sink with 0.80 m width and 2.05 m length located at the northwest corner of the space. The flooring is vaulted flooring with mosaic finishing and the superstructure is covered with timber ceiling (CE T4 type). The south wall, which is the entrance facade of the space, has 2.56 m length and 3.11 m height. There is an ID T1-3 type timber door (0.77x2.15) located at the west corner of the door supplying entrance from the space 115. On the same wall, there is a IW T1-3 type timber window (0.45x1.42) located at -0.77 m level. It supplies light from the space 115. The west wall of the space has 2.14 m length and 3.13 m height. There is an IW T1-2 type timber window located at 0.75 m level leading to the space 116. The north wall has 2.57x3.10 m dimensions, where 2.57 is the length of the wall. There isn't any opening on this wall. The east wall, which has 2.10 m length and 3.12 m height, is constructed out of brick masonry technique until 1.85 m height and timber skeleton technique at the rest.

2.1.2.3.2.18 Space 118

The space 118 has kitchen function. It is located at the northeast portion of the dwelling section with an access from the space 115. It has It has a rectangular shape with 3.00x3.35 m in plan dimensions and 2.52 m height. The flooring is vaulted flooring with ceramic tile finishing (FL CT2 type) and timber ceiling (CE T1 type). The west wall, which is the entrance facade of the space, has 3.38 m length and 2.50 m height. There is a ID T1-3 type timber door (0.77x2.15 m) located at the south corner of the door supplying entrance from the space 115. The west wall is constructed out of brick masonry technique until 0.58 m height and timber skeleton technique at the rest. The north wall, which is out stone masonry wall, has 3.00 m length and 2.54 m height. There is a fume uptake with 1.28 m length and 0.28 m width located at the west of the north wall. The east wall, which is the outer wall of the building also, has 3.32 m length and 2.50 m height. There is EW T2L-3 type timber window (1.15x1.56) located at –0.67 m level. The south wall has 2.98x2.52 m dimensions, where 2.98 is the length of the wall. There isn't any opening on this wall.

2.1.2.3.2.19 Space 119

It is a living space that is located at the southwest corner of the first floor of the building. It is accessed from the space 121. It has a rectangular shape with 3.95x3.98 m in

plan dimensions and 4.74 m height. The flooring is timber flooring with 0.18X0.25 m timber boarding finishing (FL T2 type).

The superstructure of the space is covered with timber ceiling (CE T1 type). The east wall is the entrance facade of the space having 3.98 m length and 4.72 m height. There is an ID T1L-2 type timber door (0.90x2.95) located 1.21 m away from the south corner supplying entrance from the space 121. The south wall has 3.95 m length and 4.71 m height with EW T2L-2 type timber window (1.15x2.21) located at –0.68 m level. The west wall has 4.01x4.69 m dimensions, where 4.01 is the length of the wall. There is a ED T2GL-2 type timber door (1.14x3.12) located 1.11 m away from the south corner supplying access to the balcony space 120. The north wall has 3.96 m length and 4.70 m height. 1.21 m after from the west corner, the thickness of the wall increases 0.20 m from the wall continuing with this thickness in 1.53 m towards the east wall. There isn't any opening on this wall.

2.1.2.3.2.20 Space 120

It is the balcony space that is located at the south of the west elevation. It is accessed from the space 119. It has a rectangular shape with 3.51 m length and 1.05 m depth. The flooring is out of reinforced concrete slab supported by cut stone consoles. It has mosaic tile floor finishing. There is Ba M1 type iron balustrades with 0.85 m height on three sides of the balcony.

2.1.2.3.2.21 Space 121

It is arranged as a sofa which supplies access to the dwelling section from the outside and passage among the spaces 115, 119 and 122. It has a rectangular shape with 2.98x4.30 m in plan dimensions and 4.73 m height. The flooring is timber flooring with 0.18X0.25 m timber boarding finishing (FL T2 type). The superstructure of the space is covered with timber ceiling (CE T1 type).

The south wall is the entrance facade of the space since it is connected to the outside through this facade. It has 2.95 m length and 4.72 m height. The access is supplied through the ED T2GL-1 type timber door (1.40x3.15) located 0.61 m away from the east corner. On each side of the entrance door, there is a EW T2L-2 type timber window (1.15x2.20) located at –0.67 m level according to the datum line. The west wall has 4.30 m length and 4.71 m height with a ID T2L-4 type timber door (1.20x3.00) located 1.52 m away from the south corner. It supplies access to the space 119. The north wall has 2.98x4.72 m dimensions,

where 2.98 is the length of the wall. There is a wide opening DW T-B (1.83x2.94), which is located at the east corner. It supplies access to the space 115. The west wall has 4.28 m length and 4.72 m height with a ID T2L-4 type timber door (1.20x3.00) located 1.51 m away from the north corner. It supplies access to the space 122.

2.1.2.3.2.22 Space 122

It is located between spaces 121 and 123 at the south portion of the building. It has a rectangular shape with 4.50x3.92 m in plan dimensions and 4.74 m height. The flooring is timber flooring with 0.18X0.25 m timber boarding finishing (FL T2 type). The superstructure of the space is covered with timber ceiling (CE T1 type).



Figure 2.20 Space 115



Figure 2.21 Space 121

The west wall can be accepted as the entrance facade of the space since it is connected to the space 121 through this facade. It has 3.95x4.71 m dimensions, where 3.95 m is the length of the wall. The access is supplied through the ID T2L-4 type timber door (1.20x3.00) located 1.18 m away from the south corner. The north wall has 4.47 m length and 4.70 m height. 1.48 m after from the west corner the thickness of the wall increases 0.25 m from the wall, continuing with this thickness in 1.55 m towards the east wall. There isn't any opening on this wall. The east wall has 3.90 m length and 4.70 m height with a DW T-C type wide opening (2.31x2.95) located 0.69 m away from the north corner. The wings of this element are missing. It supplies access to the space 123. The south wall has 4.55x4.75 m dimensions, where 4.55 is the length. There are two EW T2L-2 type timber windows (1.15x2.20) located 0.35, 2.95 m away from the east corner respectively.

The east and west walls of the space 122 is constructed out of timber skeleton wall while the north and south walls are constructed out of cut stone masonry walls. They are all plastered and painted.



Figure 2.22 Space 121

2.1.2.3.2.23 Space 123

It is located at the southwest corner of the building with two accesses from the space 122 at the west side and from the space 115 at the north side. It has a rectangular shape with 4.20x3.86 m in plan dimensions and 4.73 m height. The flooring is timber flooring with 0.18X0.25 m timber boarding finishing (FL T2 type). The superstructure of the space is covered with timber ceiling (CE T1 type).

The west wall which has an access to the space 122 has 3.57 m length and 4.70 m height. The entrance is supplied through a DW T-C type wide opening (2.31x2.95) located 0.68 m away from the north corner. The wings of this element are missing. It supplies access to the space 122. The north wall has 4.23 m length and 4.69 m height with a ID T2L type timber door located 0.11 m away from the west corner. It supplies access to the space 115. The east wall has 3.86x4.71 m dimensions, where 3.86 m is the length of the wall. There is a EW T2L-2 type window (1.15x2.20) located 1.08 m away from the north corner and at –0.67 m level. The south wall has d m length and d m height with a EW T2L-2 type window (1.15x2.20) located 4.17 m away from the west corner and at –0.69 m level.

The west wall of the space 123 is constructed out of timber skeleton wall, while the rest north-east and south walls are constructed out of cut stone masonry walls. They are all plastered and painted.

2.1.2.3.3 Mezzanine Floor

2.1.2.3.3.1 Space 201

It supplies passage from the first floor of the bank section to the mezzanine floor with a two-armed timber staircase, which is located at the south wall of the space. The space has a rectangular shape with 1.25x3.70 m in plan dimensions and 2.02 m height. The flooring, which is located at 1.20 m level according to the datum line, is timber flooring with d-d cm timber boarding finishing (FL T2 type). The superstructure of the space is covered with timber ceiling (CE T1 type).

The south wall is out of cut stone masonry wall, having 1.25x2.04 m dimensions, where 2.04 is the height of the wall. The west wall has 2.01 m height and 3.68 m length. It is out of timber skeleton wall. There is a ID T1 type door (0.70x1.84) located 0.38 m away from the north wall, supplying passage to the space 202. The element of the door is missing. The north wall, which is out of cut stone masonry wall, has 1.25x2.02 m dimensions, where 1.25 m is the length. The east wall has 2.00 m height and 3.67 m length. There is a ID T1 type door (0.70x1.83) located 0.47 m away from the north wall. It supplies entrance from space 201 to 203.

2.1.2.3.3.2 Space 202

It is located as the northwest corner space of the mezzanine floor. It is accessed from the space 201. It has a rectangular shape with 1.76x3.70 m in plan dimensions and 4.03 m height. The flooring, which is located at 1.20 m level according to the datum line, is timber flooring with 0.18-0.25 cm timber boarding finishing (FL T2). The superstructure of the space is covered with timber ceiling (CE T3 type).

The entrance facade of the space is the east facade, which has 4.00 m height and 3.70 m length. The door, which supplies passage from the space 201, is a ID T1 type door (0.70x1.84) located 2.58 m away from the south wall. The south wall is out of cut stone masonry wall, having 1.76x4.05 m dimensions, where 4.05 is the height. The west wall has 4.02 m height and 3.71 m length. The north wall has 1.73x4.03 m dimensions, where 4.03 is

the height of the wall. It is out of cut stone masonry wall. There is the upper window of the door ID T1L of the space 101 in the first floor. It is located 0.39 m away from the east corner.

2.1.2.3.3.3 Space 203

Space 203 is located at the northeast corner of the mezzanine floor. It has two accesses; from space 201 and from space 204. It is rectangular in plan with 2.96x3.63 dimensions and 2.01 m height. It has timber flooring with timber floor boarding finishing (FL T2 type) and timber ceiling with type CE T3.

The east wall, which has 2.03 m height and 3.64 m length, has an access to the space 201, through the ID T1 type door (0.70x1.84) located 2.49 m away from the south wall. The construction technique of the wall is timber skeleton. The north wall has 2.90x2.03 m dimensions where 2.90 is the length. It is out of cut stone masonry wall. The west wall has 2.01 m height and 3.63 m length. There is a EW T2 type window (1.20x1.10) located 1.21 m away from the north wall. The south wall, which has 2.01 m height and 3.00 m length, is out of timber skeleton wall. There is a ID T1 type door (0.70x1.84) located 1.85 m away from the west corner, supplying access to the space 204.

2.1.2.3.3.4 Space 204

It is the southeast corner space of this floor. It has two accesses from the spaces 203 and 205. It is rectangular in plan with 3.00x3.35 dimensions and 2.01 m height. The flooring, which is located at 1.21 m level according to the datum line, is timber flooring with 0.18-0.25 cm timber boarding finishing (FL T1 type). The superstructure of the space is covered with timber ceiling (CE T3 type).

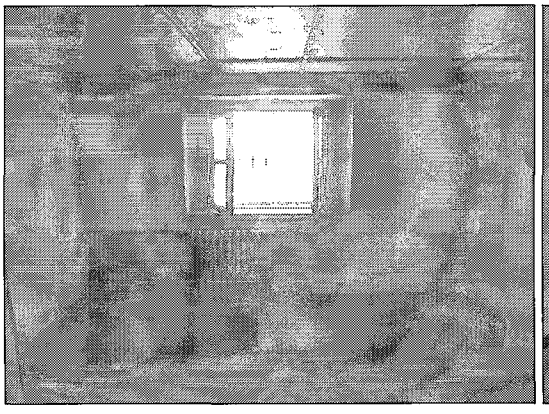


Figure 2.23 Space 203



Figure 2.24 Space 204

The north wall, which supplies access to the space 203, has 2.02 m height and 2.98 m length. It is out of timber skeleton wall. The west wall, which is the exterior wall of the building, is cut stone masonry wall. It has 3.35x2.01 m dimensions, where 3.35 is the length of the wall. There is a EW T2 type window (1.20x1.10) located 0.90 m away from the north corner. The south wall has 2.02 m height and 2.98 m length. It is out of cut stone masonry wall. The west wall, which has 2.03 m height and 3.40 m length, supplies access to the space 205. The door is ID T1 type door (0.70x1.84) located 1.33 m away from the south corner. The construction technique of the wall is timber skeleton.

2.1.2.3.3.5 Space 205

It supplies passage from the dwelling section at the first floor to the mezzanine floor with two-armed timber staircases, which is located at the north wall of the space. The flooring has landing space function for the staircase and bridge function at the same time supplying passage between the spaces 204 and 206. It has visual access to the space 116 of the dwelling section and separated with timber balustrades from it. The timber flooring has 0.10-0.20 cm timber boarding finishing (FL T1 type). The superstructure of the space is covered with plywood covering (CE T3 type).

The east and west walls of the space are out of timber skeleton partition walls, while the north wall is out of stone masonry wall. The east wall has 2.02 m height and 2.30 m length. There is a ID T1 type door located 1.36 m away from the north corner. It supplies access to the space 204. The west wall has 2.30x2.03 dimensions where 2.30 is the length of the wall. There is ID T1 type door located 1.42 m away from the north corner, supplying access to the space 206.

2.1.2.3.3.6 Space 206

It is the southwest corner space of the mezzanine floor. It has a rectangular shape 2.55x2.10 m dimensions. The flooring is located at 1.69 m level according to the datum line, which is 0.53 cm higher than the rest of the spaces in this floor. It is located at 3.18 m according to the datum line. The flooring is covered with mosaic and the ceiling is covered with plywood covering.

The east wall is the entrance facade of the space since it is connected to the space 205. It has 2.12 m length and 1.52 m height. The access is supplied through the ID T1 type door located 1.33 m away from the north corner. The south wall has 2.55 m length and 1.50 m

height; the west wall has 2.08 m length and 1.51 m height; and the north wall has 2.56 m length and 1.53 m height. On the northeast corner there is a chimney space with 0.35x0.35 m dimensions.

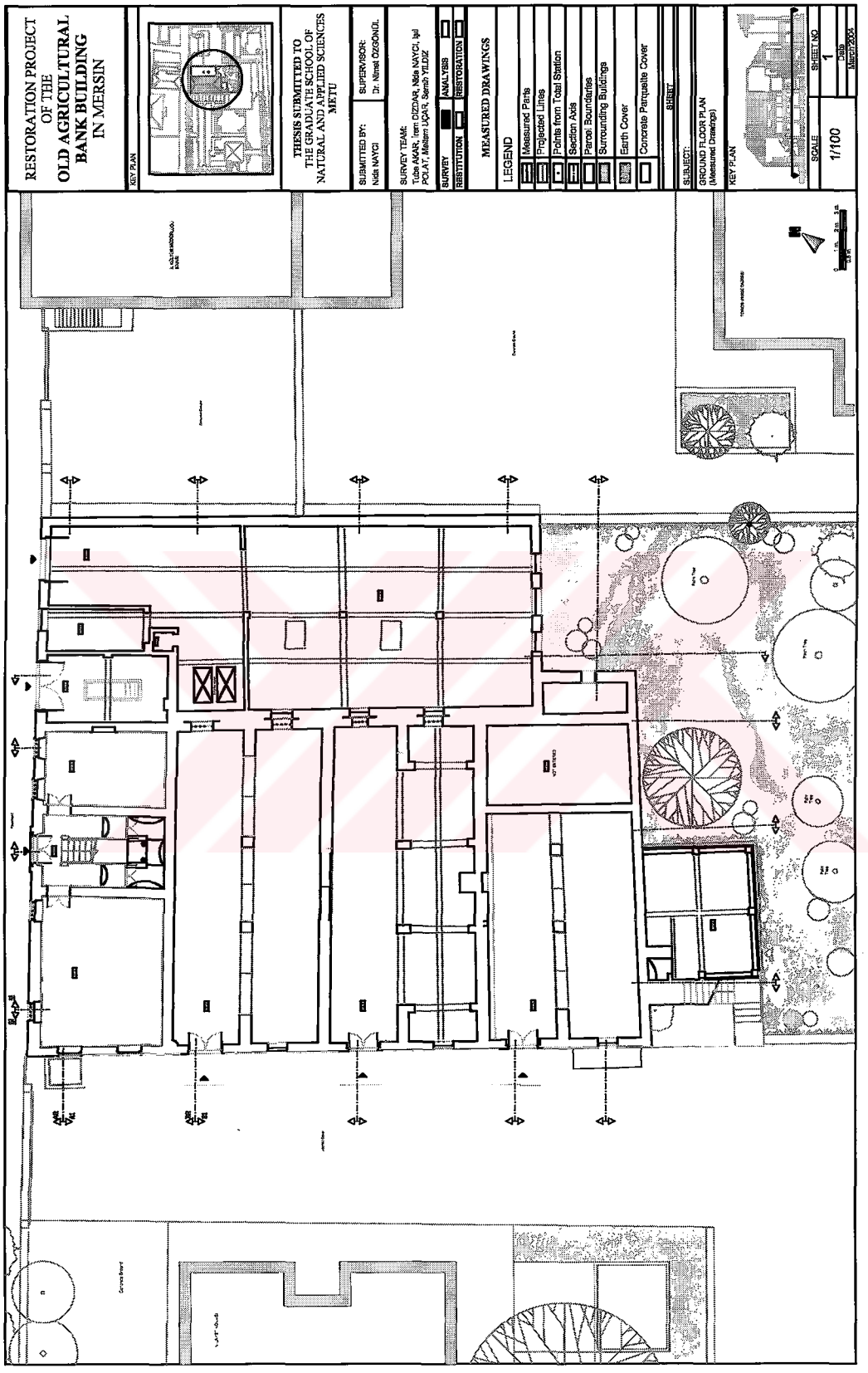
2.1.2.3.4 Roof Floor

The roof floor consists of single space, which is bordered by the superstructure of the main building. It has a rectangular shape with 16.45 m in east-west direction and 31.10 m in north-south direction. The flooring is timber flooring which covers the first and mezzanine floors of the main building. The whole elements of the superstructure including the main trusses and secondary structural elements as well as finishing elements can be viewed since they are exposed. There are five brick chimneys having approximately 0.45x0.45 m dimensions located within the roof floor. Two of them are located on the south portion, one of them is located on north portion and one is located on the east of the space 301, while one of them is located on the west portion of space 301.

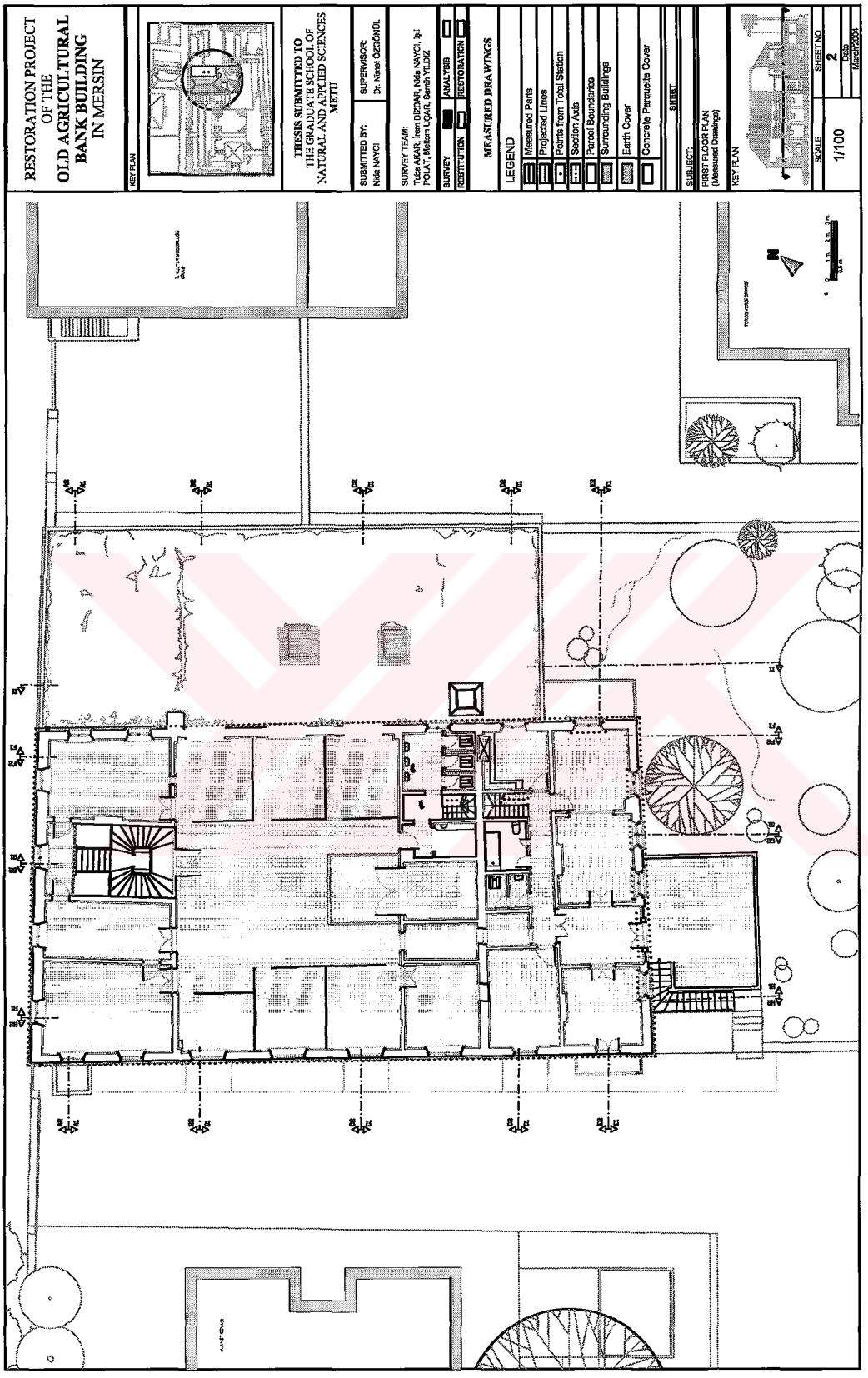
The main physical problem observed in the roof floor is sagging and degradation of timber elements due to swelling and shrinkage cycles. The heat closed within the roof also causes deformation of timber material. There is also insect attack problem observed with their holes on each element.

2.1.2.3.4 .1 Space 301

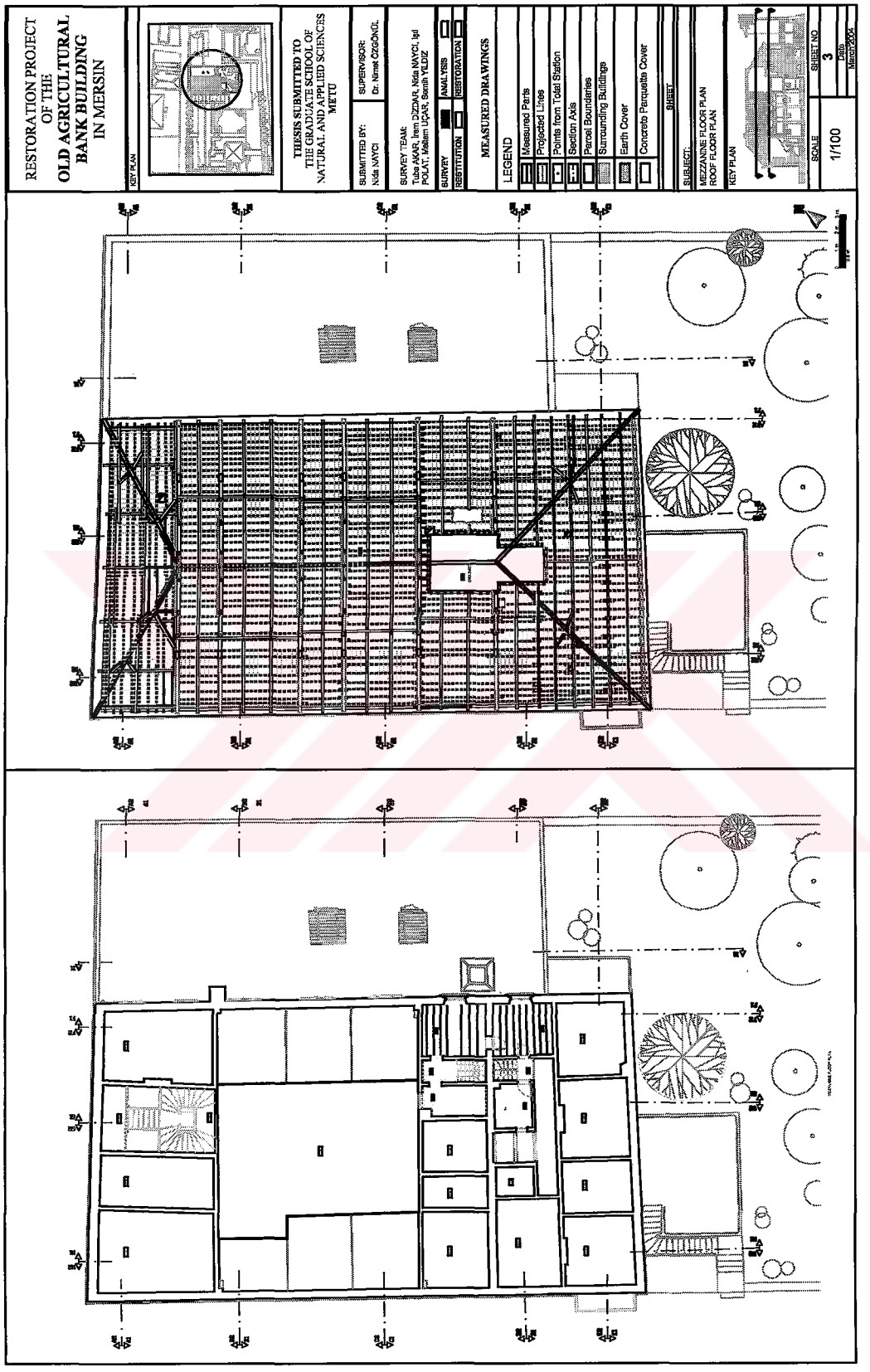
There is a rectangular space located on the south portion of the roof floor. It consists of two rectangular sections with 3.39x3.93 m dimensions on the north and 2.65x2.05 m dimensions on the south. There aren't any openings on the walls of the space. The whole walls are out of timber frame walls without finishing material on the exterior facades.



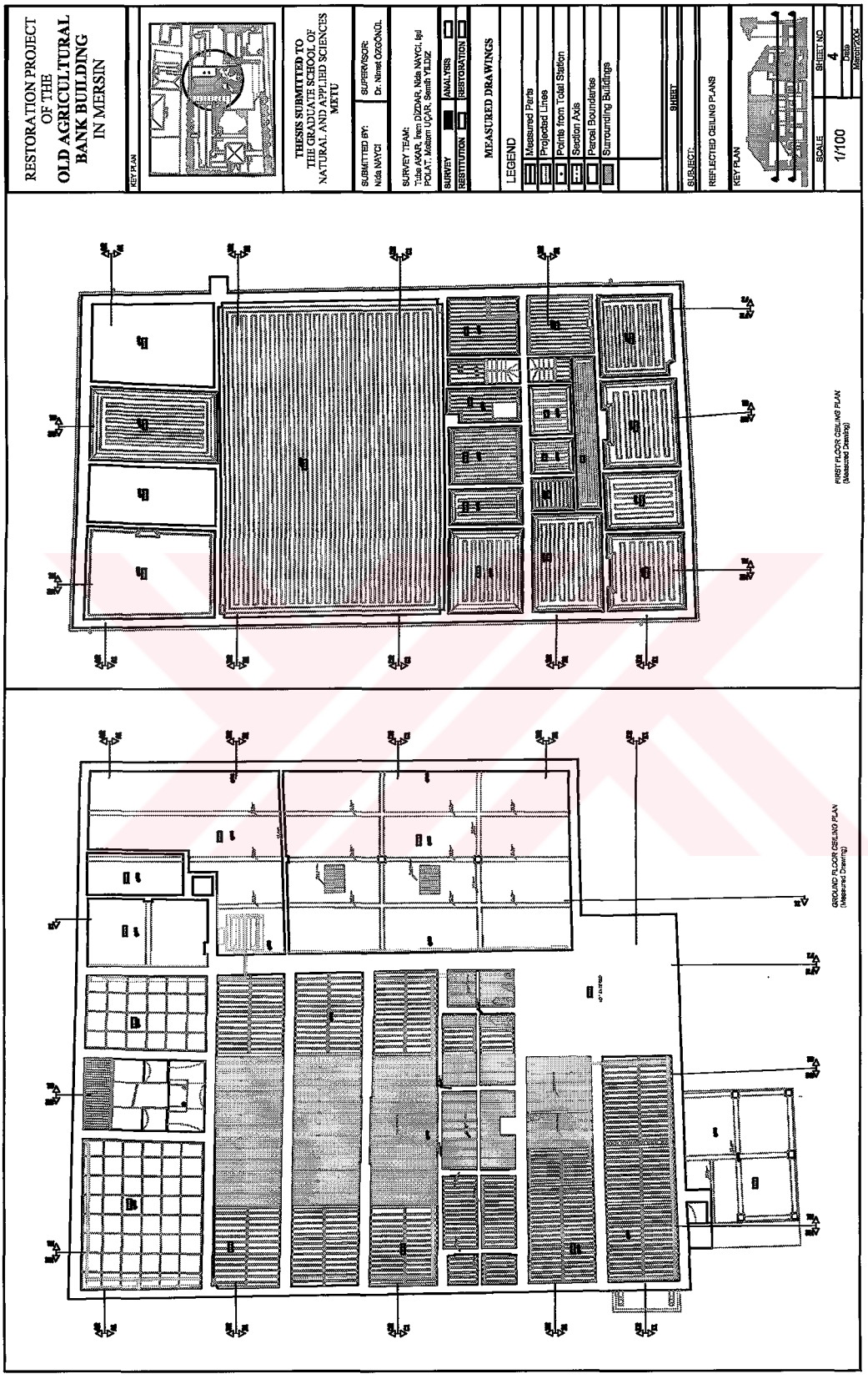
Drawing 2.7 Ground Floor Plan



Drawing 2.8 First Floor Plan



Drawing 2.9 Mezzanine and roof floor plans



Drawing 2.10 Reflected ceiling plans

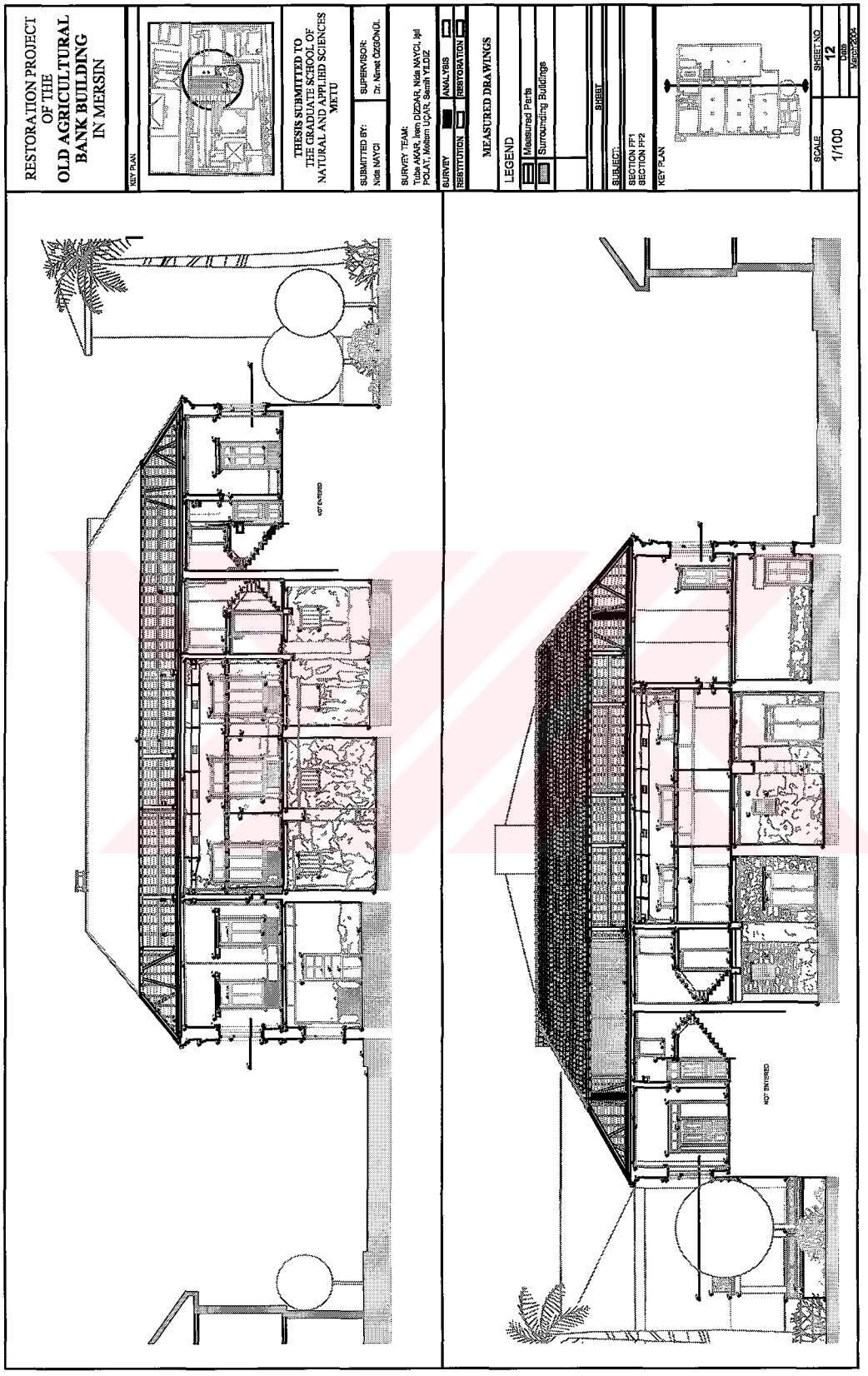
Drawing 2.11 Sections AA1 and AA2

Drawing 2.12 Sections BB1 and BB2

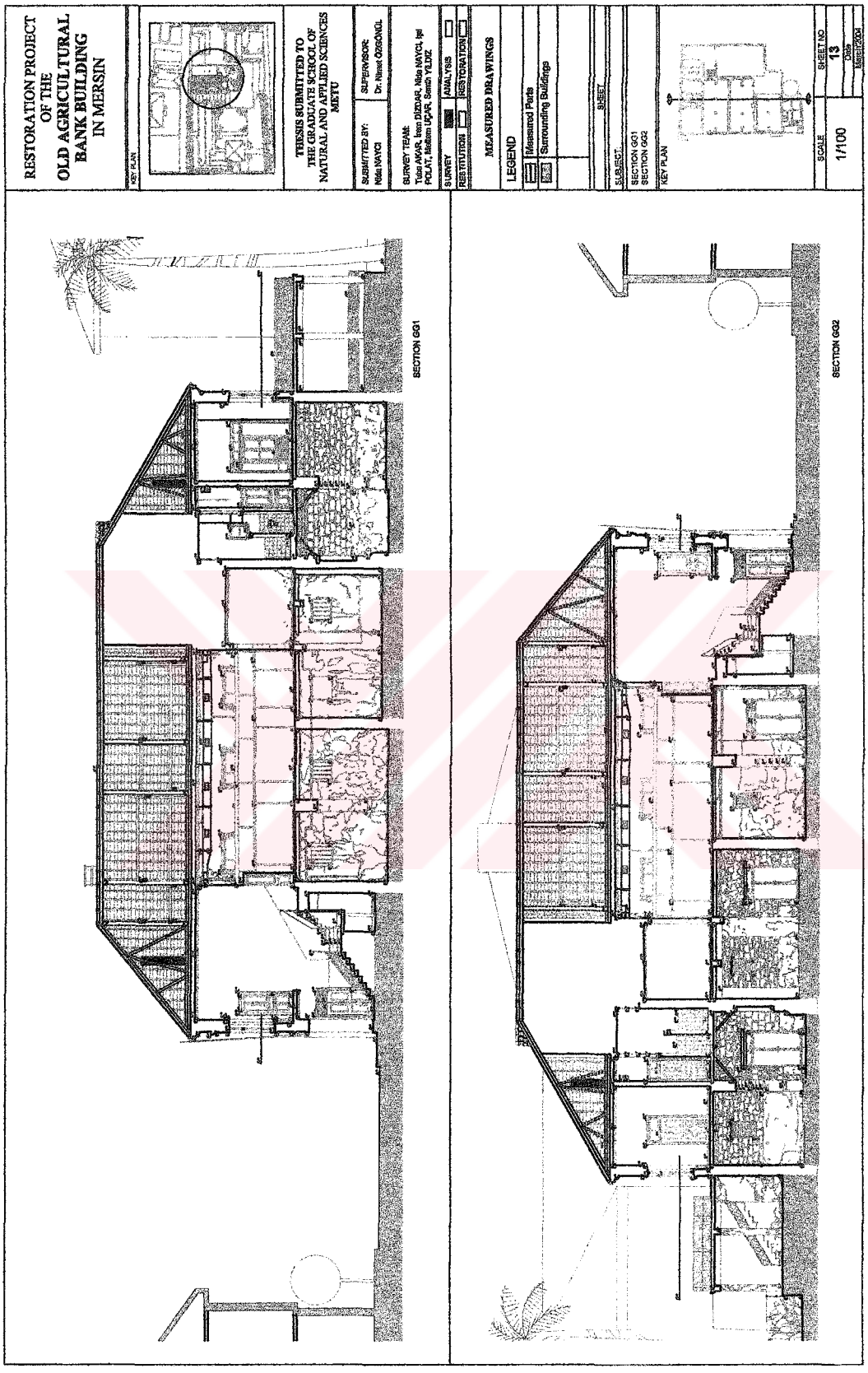
Drawing 2.13 Sections CC1 and CC2

Drawing 2.14 Sections DD1 and DD2

Drawing 2.15 Sections EE1 and EE2



Drawing 2.16 Sections FF1 and FF2



Drawing 2.17 Sections GG1 and GG2

Drawing 2.18 Sections HH1 and HH2

2.2 ANALYSIS OF THE BUILDING

Within the analysis stage, examinations related to the physical and architectural features of the building including the building materials and elements, the construction techniques and structural system are studied. Having defined the characteristic aspects of the building, analysis related to the physical problems of the building covering the material deteriorations and structural deformations is carried out. Finally, analysis related to changes observed through the building has been completed by the evaluation of traces observed during the survey. All the topics argued during this part have been established according to the visual investigations carried on through the survey of the building.

2.2.1 BUILDING ELEMENTS AND MATERIALS

During the analysis of the building elements stage, the building elements are documented so as to understand the physical and architectural characteristics of the building. At first, the building elements are classified according to their functional use as; structural elements; partition elements; architectural elements; finishing and covering elements and service fitting elements. Than, typological studies have been carried on for each group in order to define their properties including materials and construction techniques.

2.2.1.1 STRUCTURAL ELEMENTS AND MATERIALS

The initial categories related to the structural elements of the building are established as vertical, horizontal and superstructure elements. Vertical structural elements are classified according to their construction technique as masonry elements, frame elements and composite elements. Under each heading, types of elements as wall, piers or columns are defined with respect to their materials. (Drawing 2.19)

2.2.1.1.1 Vertical Elements

2.2.1.1.1.1 Masonry Elements

Vertical masonry elements include masonry walls and piers. There are four groups of masonry wall elements with respect to their construction materials and techniques. Stone masonry wall type 1 (SMW1) is the exterior walls of the main building in the ground floor level, which are constructed in masonry technique. They have approximately 55-60 cm thickness. The unit elements of these walls consist of cut-stones at the exterior face; and rough cut stone with rubble stone with varying sizes at the interior faces. Since there isn't any demolishment

from the section of the wall, we do not have information related to the materials used within the wall section. Mud mortar with brownish color is used as a binding material with varying thickness of 4-7 cm.

Stone masonry wall type 2 (SMW2) consist from rough cut stone and rubble stone materials that are used compositely. It has a thickness of 55-60 cm. As in the SMW1 type walls, the binding material is mud mortar with 5-6 cm thickness. In addition to this, there are timber bond beams observed at some parts. The interior walls which lay in east-west direction separating the spaces G04, G05 and G06 in the ground floor from each other are constructed with this type of stone masonry walls. Stone masonry wall type 3 (SMW3) has thickness between 50-60 cm. Its unit material is out of cut stone materials at both faces of the wall. Exterior walls of the main building in the second floor level as well as interior walls of ground floor spaces G01, G02, G03 and south wall of the space 101 in first floor are out of this group. The actual dimensions of the unit cut-stone materials used in the main building can not be defined since both faces are plastered. In addition to this, the interior materials can not be observed since there isn't any demolishment from the walls. They have lime mortar as a binding material.

The exterior walls of the depot building are also in this group with cut-stone material as unit material and cement mortar as binding material. There are two types of stone material used in these elements. In the north and west walls of the depot building, the cut-stone materials having 30-65 cm length and with and approximately 50 cm height are used; while in the south and east walls of the depot building cut-stones with 35-50 cm length and 20 cm height are used. Stone masonry wall type 4 (smw4) consists of walls constructed from cut-stone elements with 20-30 cm thickness. Lime mortar is used as binding material. Most of the interior walls of the first floor of the main building are constructed with this group. Since all the interior faces are plastered, we can not get information related to the actual sizes of the cut-stone unit materials.

Stone masonry piers are constructed for the support of arches. The rows of spanning arches located in the ground floor spaces G04 and G05 are supported by rectangular piers having 60x60 cm dimensions. They have profiled finishing in east and west sides of the springing level. Arches located on the walls are also supported at their springing level by stone piers which are located in the wall. The last row of stone constitutes from profiled stone.

As far as it is observed under the scraped plastered portions, the construction materials of these piers consist of cut-stone materials. There is not any information related to the sections of the piers since, there aren't any demolishment in these elements.

2.2.1.1.1.2 Frame Elements

Vertical frame elements include timber posts, iron columns and reinforced concrete columns. Timber posts are used as separate structural elements only in the roof floor. Although the main supporting elements of the superstructure are timber truss elements, numerous timber posts are used for the support of the sections which can not be supported by the trusses. Especially, on the meeting edges of the four roof facades, rectangular timber posts are used as main supporting elements of the ridges and rafters. Most commonly rectangular posts with 0.08x0.08 m dimensions are used.

There are two iron columns used in the building in order to support the staircase type STc-1 which is located in the space G01. They have circular shapes with 0.20 m diameter. The landing space where the two arms of the stair meet is supported by a cut-stone vault (VA 2 type). The VA 2 type vault is filled with concrete converting the void of the vault into a massive rectangular fill. This filled section is supported by two circular iron columns. They have 20 cm diameter and 1.50 m height. On the top and bottom ends of the columns, there are circular rings which are used to fix the columns to the concrete fill above and the ground below respectively with iron dowels. There are reinforced concrete columns in the ground floor of the main building in order to support the reinforced concrete beams and/or slabs. They have rectangular shapes with 0.30 x 0.30 m dimensions. They don't have any plastered finishing. In space G05, they are used as with reinforced concrete beams in order to support the vaulted and timber floorings above. The reinforced concrete slab of the south terrace is also supported by reinforced concrete columns that are painted in white. In addition to this, reinforced concrete columns are used as the main supporting elements of the terrace of the depot building. The terrace is supported by masonry walls on four sides, while the spanning surface is supported by columns.

2.2.1.1.2 Horizontal Elements

Horizontal structural elements indicate spanning elements used in the building. According to their construction techniques, there are masonry vertical elements and frame vertical elements.

2.2.1.1.2.1 Masonry Elements

- **Stone Arches**

There are masonry horizontal elements constructed with spanning purposes. Stone arches are used to span openings within wall surfaces. Stone vaults are constructed for span

of narrow openings in staircases, while brick vaults are constructed as a part of vaulted construction to span wide floor openings.

There are stone arches in the ground floor of the building. There are two groups of arches: Spanning arches and arches located on the wall. The second group -arches located on the wall- are later closed spanning arches. Some of them stay behind the plaster finishing of the walls. All of the arches are constructed out of cut-stones that are supported by masonry stone piers. As far as it can be observed under the scraped plasters, there are five arches located on the walls. AR 1a, AR 1a and AR 1c are located on the north wall of the space G04. Their actual opening dimensions and springing heights can not be obtained since they stay behind plasters. The AR 3 is located in the north wall of the space G05 and the AR 4 is located on the north wall of space G06. AR 3 has pointed profile with 3.38 m opening and 2.20 m springing height. The profile of the AR 4 cannot be defined due to the masonry wall located in the north elevation of the arch. In addition to these arches, there are three half-arches located on the masonry walls, which are closed later in same manner. HAR 1 is located on the north wall of the space G05, while HAR 2a and HAR 2b are located on the wall portions passing through the space G06. Among them, most the stones of HAR 2a has been dislocated while constructing the infill wall. It is hardly observed as half arch. The profiles of the half-arches could not be defined either.

The second group of arches is the spanning arches. There are five spanning arches that can be observed totally. AR 2a, AR 2b and AR 2c, which establish a row arches, are located in the middle of the space G04. AR 2a has semi-circular profile with 4.20 m opening and 2.25 m springing height. AR 2b has pointed profile with 3.79 m opening and 2.25 m springing height. AR 2c has pointed profile. It has 4.10 m opening and 2.42 m springing height. AR 5a and AR 5b are located in the middle of in the middle of the space G06. The third arch of this row is cut by the partition wall located on the east of the space. Thus, this section of the arch is coded as HAR 3, since there isn't information related to whether the arch continues behind the wall or not. AR 5a has semi-circular profile with 4.20 m opening and 2.18 m springing height. AR 5b has pointed profile. It has 3.40 m opening and 2.38 m height.

- **Stone Vaults**

Stone vaults are used as the main supportive structural elements of the staircases for supporting of the staircases STc-1, which is located in space G01; and STc-2, which is located in the south terrace.

STc-1, consists of three portions supported by 5 stone vaults. Each symmetrically arranged double L-shaped portion is supported by cut-stone vault (VA 1); while their south

wings are supported by the cut-stone half vaults (HVA 1). VA 1 type has depressed semicircular profile spanning 1.23 m opening with 0.98 m springing height. Their springing level is located at 1.50 m above the ground level. They have 1.15 m width. VA 3 type vaults have semicircular profiles with 0.68 m springing height, 1.90 m width and spanning 1.32 m opening. The landing space, where the two stairs meet, is supported by the vault (VA 2). It has semicircular profile spanning 1.95 m opening. It has 1.12 m springing height and 1.32 m width.

STc-2 is constructed as a L-shaped stairs. The south-north direction wing of the stairs is supported by a masonry wall, while the rectangular steps in the east-west direction wing are supported by the cut-stone vault (VA 4). The vault has 0.90 m opening and located 1.78 m from the ground with a 0.54 m springing height.

- **Brick Vaults**

Brick vaults are the structural elements of the vaulted flooring construction, which are applied in some portions of the flooring in the first floor.

The main supporters of the vaulted flooring are metal I beams located in north-south direction with approximately 0.50-0.60 m intervals. Each interval is passed by the brick vaults including 4-5 rows of bricks in east-west direction. The unit material of the brick vaults consist of hollow bricks with 0.15x0.25x... dimensions. Brick rows are constructed with cross fall technique in north-south direction. The brick vaults are used within the construction of the vaulted floorings of spaces 109, 110, 111, 113, 117, 118 and 119; east portion of the corridor space 116 and in the mid portion of the space 101.

2.2.1.1.2.2 Frame Elements

- **Timber Beams**

Timber beams are the main structural elements of the timber flooring constructions, which are applied in roof, mezzanine and some portions of the first floors. They have rectangular shape with varying sizes. Commonly, 0.08 x 0.15 m sized beams are used for the support of floorings and ceilings. In the meeting points of the timber and vaulted floorings larger-sectioned rectangular timber beams (0.15 x 0.15) are used.

The beams are laid in north-south direction in the superstructure of the ground floor space G04, G05 and G06. Since the flooring of spaces G02 and G03 are covered with ceilings, their beams can not be observed from the ground floor. But, since the floors boarding of these spaces are laid in direction, they might be laid in east-west direction. In the mezzanine floor, the floorings of spaces 201, 202, 203 and 204 might consist of timber beams

laying in east-west direction by looking at directions of timber floorings. The roof floor consists of timber flooring beams, which are not covered with timber flooring boarding. Only, ceiling boarding of the first floor are nailed to these beams. All the beams in the roof floor lay in south-north direction except from the north portion, where the beams lay in west-east direction.

- **Metal Beams**

There are metal I beams and metal rectangular beams (metal bars) used as structural spanning elements in the building. Metal I beams are used to span flooring openings, while metal rectangular bars are used as lintels of window openings. There are two types of flooring applied in the main building: timber flooring and vaulted flooring. Metal I beams are used as important spanning elements of these two types of flooring construction.

In timber flooring they are used for supporting of timber flooring into the stone masonry walls. As far as it is observed under the plastered parts, they are located on stone masonry walls in the first flooring level. The actual sizes of these types can not be observed, since they stay in the wall. As far as it can be seen, they have approximately 0.15-0.20 m height. In vaulted flooring they are placed in south-north spanning direction onto the stone masonry walls so as to support the brick vault portions of the vaulted flooring construction. They have 0.08 m width and 0.18 m height. The metal beams used as lintels of window openings are observed in the exterior windows of first floor. They have rectangular shape located into the window sill.

- **Reinforced Concrete Beams**

There are rectangular RC beams both in the main building and in the depot building. In the space G05, they are constructed together with RC columns in order to support the timber and vaulted floorings in that space. As far as the traces are concerned they later addition sections. In addition to this, they are used as horizontal supporters of post-lintel construction of the south terrace in the main building and in the depot building. In both cases, they are supporting the RC slabs.

- **Reinforced Concrete Slabs**

RC slab with approximately 0.15 m thickness, are constructed as flooring of the south terrace in the main building. They are supported by RC columns and beams. From the scratched parts the steel mesh within the slab can be observed. In addition to this, the roof terrace of the depot building is constructed in RC slab technique. It is supported by RC columns and beams in the middle portions and by masonry walls at the edges.

2.2.1.1.3 Superstructure Elements

The superstructure of the main building is supported by timber truss elements. There are six trusses which are located in east-west direction in the roof. They are supported by east and west exterior walls of the main building. They are spanning approximately 16.55 m length. Each truss has 4.41 m height. The truss members consist of rectangular timber beams connected to each other with metal clamps. The main beam has 0.08x0.20 m, the main rafters has 0.06x0.19 m, the main rater has 0.16x0.20 m and other timber elements used as bonding and diagonal beams are out of 0.07x0.15 m dimensions.

2.2.1.1.4 Binding Materials And Elements

2.2.1.1.4.1 Mortar

There are three types of mortar observed in the building according to their ingredients: Mud mortar, lime mortar and cement mortar. Mud mortar has yellow-brownish color with big aggregates; while lime mortar has white color with fine aggregates. Cement mortar has grey color. Mud Mortar is used a binding material of stone masonry walls (SMW-Type 1 and SMW-Type 2) in the ground floor. Lime mortar is used in cut stone masonry walls with type SMW-Type 3 in the ground floor of the main building. Cement mortar is used as a binding material in the partition wall of SMW-Type 5, which consists of rubble stone and rough cut stone unit materials with various sizes. The approximate thickness of the mud mortar in this wall is 5-6 cm. Cement mortar is also used in cut stone masonry walls of depot building, which are SMW-Type 3. The thickness of cement mortar is 2 cm.

2.2.1.1.4.2 Metal

Metal is used as a bonding material in the construction of trusses in the superstructure. They have rectangular shape with 0.45 m length and 0.045 m length dimensions. They are used in order to fix the main rafters in the hinge points. In addition to this, in the construction of the entrance door, metal clamps are used in order to fix the cut stone pieces of the pediment.

2.2.1.2 Partition Elements

Partition elements are grouped according to their construction materials, functional use and location as in the classification of the structural elements. There are vertical and

horizontal partition elements which have been constructed as walls and ceilings within the building. The walls are grouped into four with respect to their construction materials:

2.2.1.2.1 Masonry Elements

Stone Masonry Wall Type 5 (SMW5)

This type of masonry walls includes rubble stone with different sizes as unit material and thickness of 50 cm. The binding material is cement mortar with 6-10 cm thickness. There is one wall element from this group constructed in the building. It is constructed in order to fill the arch opening originally located in the masonry wall between the spaces G04 and G05.

Brick Masonry Walls (BMW)

As far as observed during the survey of the building, the brick masonry walls are used together with timber skeleton walls compositely. They are situated as a base under the timber skeleton walls (see section 4.1.2.3). However, in the legend a group for this type of wall is established due to the possibility for coming across one in future studies since all the interior walls could not be surveyed yet.

Concrete Block Masonry Wall (CBMW)

This type of masonry wall consists of concrete block material with 18 cm height, 30 cm length and 20 cm width with cement mortar binding material. It is used as a partition element in the depot building to separate the spaces G12 and G14.

2.2.1.2.2 Frame Elements

Timber Skeleton Walls

There are timber skeleton walls which are used as partition elements within the building. They are constructed with timber skeleton technique without infill. According to their construction materials, there are two types of timber frame walls.

In first group, there is wooden lath covering the surface on both faces. The frame elements of the wall can not be observed since they are plastered. As far as it is surveyed, the rough-cut timber rough cut wooden laths are nailed onto the frame elements. The wooden laths are plastered with lime plaster type 1 (*"kıtıklı sıva"*), fine plaster and paint respectively. The thickness of this wall type is 20 cm. They are used in spaces of first floor and mezzanine floor. In the walls of the mezzanine floor, there is metal mesh nailed onto the wooden laths so as to increase the touching efficiency of the plaster. In the second type of timber skeleton walls, the wall is clad with wood laths and plastered from one side only. This type of wall is

seen in the roof floor space. The wall is cladd and plastered only from the inside of the space, which can not be entered.

Plywood Construction Walls

There are plywood construction walls located in space 101 in the main building. The plywood sheets with 0.04m thickness have approximately 3.70 m length and 2.80 m height. The frame of the construction, to which the plywood sheets are fixed, consist of rectangular timber elements with 0.04x0.04 m dimensions.

2.2.1.2.3 Composite Elements

There are composite walls which are composed of two different techniques: brick masonry technique and timber skeleton technique. Up to a level brick masonry wall is constructed with 15 cm thickness. The rest of the wall is constructed with timber frame technique without infill and clad with wood laths. The thickness of the timber frame portion is 20 cm. As far as it is observed during the site survey, the west wall of space 120 and east wall of space 118 are constructed with this technique. In space 118 the brick masonry portion continues up to 1.60 m height, while in the wall of space 120 it continues up to 0.55 m height.

2.2.1.3 ARCHITECTURAL ELEMENTS

2.2.1.3.1 Doors

There are twenty-nine door openings in the building, two of which are located the in the depot building, while the rest belong to the main building. The classification of the door elements have been grouped according to their material, form, details respectively (Drawing 2.20). They are grouped according to the materials of the door element as timber (DT) or metal (DM). Secondly, the sub-groups according to the number of the wings, existence of glazing on the wing and existence of the lighting window are established: i.e. (DT2GL). Finally, the types in each group according to the differences in their design are established and numbered separately: (DT2GL-1). In order to specify the location of the element they are indicated as exterior door (EDT2GL-1) or interior door (IDT2GL-1). According to these criterias, eight typological groups are established, two of which are metal doors. The rest of the typological groups are timber door groups.

The typological groups of timber doors are as follows: Double glazed-wing doors without lighting window (DT2G); double glazed-wing doors with lighting window (DT2GL); double wing with lighting window (DT2L); single glazed-wing doors (DT1G); single wing doors with lighting

window (DT1); single wing doors without lighting window (DT1L). The goups of the metal doors are established as follows: double wing metal doors without lighting window (DM2) and double wing metal doors with lighting window (DM2L).

- **Exterior Doors**

According to these criterias there are six types of exterior doors, four of which are timber door groups and two are metal door groups. The main entrance of the building which is located at the Uray Street, is a (EDT2G-1) type door. The balcony door, which is located at the west facade of the building, is a (EDT2GL) type door with a typology code 1. The entrance of the dwelling section, which is accessed through the terrace located at the south of the building, is a (EDT2GL) type door with a typology code 2. The depot doors of the main building are (EDM2) type doors, while the doors of the depot section are (EDM2L) type doors. (Drawing 2.26)

- **Interior Doors**

There are four typological groups for the interior doors. The doors of the space G02 and G03 in the ground floor are (IDT2L-1) type doors. In the first floor, there are three types (IDT2L) group; three types (IDT1L) group doors and three types (IDT1) groups.

In the mezzanine floor there are two types (IDT1) groups.

2.2.1.3.2 Windows

There are 44 window openings in the main building, while there are 7 window openings in the depot building. The windows in the bank and dwelling sections of the main building have window element with their glazing and wings. Whereas, there are only frame elements without any glazing and window wing in the window openings of in the depot section of the main building. The windows at the depot building have only opening or just frame element.

The typological groups of the window elements are categorized according to the material of the element initially; as: timber windows (WT) and metal windows (WM). Being all in rectangular forms, the sub-groups are established according to the number of the wings, existence of glazing on the wing and existence of the lighting window respectively. Finally, each sub-group is coded with a number indicating the difference in the design of wings. In order to express the location of the window as it is located whether inside or outside they are coded as exterior windows (EWT) or interior windows (IWT) at the beginning. (Drawing 2.21)

According to these criteria, six typological groups for timber windows and one typological group for metal windows are established:

Three winged timber windows with lighting window (WT3L); two winged timber windows with lighting window (WT2L); two winged timber windows without lighting window (WT2); single winged timber windows with lighting window (WT1L); single winged timber windows without lighting window (WT1); and fixed timber glazing window (WTF). Since all the metal frame windows are without glazing they are grouped as (WMF) indicating "metal frames without glazing".

- **Exterior Windows**

In the main building there are thirteen windows and window openings at the ground floor, all of which are located as exterior elements. Six of them are WT2L type windows. Four of them are located at the north elevation, while two of them are located at the west elevation. They all have mosaic sills inside. Three WMF type windows without glazing are located at the west elevation leading to the depot units at the ground floor. On the east elevation of the main building, there are five window openings with WMF type. They are also for leading light to the depot sections at the ground floor level.

In the first floor of the main building, there are twenty-five windows located at the elevations. Four of them, which are WT2L type windows, are located at the north elevation. The opening of each window is framed with S 3W type window sill from the outside. Within the plane surface, there are stone sills. The niches underneath the sills are arranged as location to fit the radiators. (Drawing 2.25) On the west elevation there are seven windows. Three of them are WT2L type windows same as the ones on the north facade. The types of the sill are the same as well. The two are located at the north portion of the facade, while the one is located at the south portion. The rest four windows are located on the mid portion of the west elevation. They are WT3L type windows with wide openings. Their openings are framed with S 2W type window sills. Within the plane surface, there are stone sills. situated inside forming space to fit the radiator.

There are six windows located at the south elevation at the first floor level. Four of them are WT2L type windows framed with S 4W type window sills from the outside. The rest two are WT1L type windows, which are located at each side of the terrace door. They are framed with S 4W type window sills. On the east elevation, there are eight windows located at the first floor level and two windows located at the mezzanine floor level. They are all situated within S 4W type window sill from the outside. In the first floor level, there are three WT3L type windows at the mid portion of the elevation. On each side of them, there are two WT2L type windows. In the mezzanine floor level, there are two WT2L type windows located at the same position with the first floor windows.

At the depot building there are seven windows on the walls and two roof windows leading light to the inside. All the windows in this section are either WMF type windows without glazing, or just openings without frames. One of them is located at the north elevation and three of them are located at the south wall. Three of them are located at the east wall, in the same position of the windows of the depot section of the main building.

- **Interior Windows**

There are five interior windows which are located at the first floor. There of them are WT1 type windows, while two are WTF types. One of the WT1 types is located between the spaces 101and 105. The rest are located in the spaces 117 and 118.

2.2.1.3.3 Wide Openings

There are four speacial designs for the wide openings within the main building, all of which are located at the first floor level. They are grouped as WOM indicating that they are wide opening elements. One of them is out of wide metal grilled door wings designed for the safe-room (space 109) leading to the main hall (space 101) of the bank section. It is coded as WOM indicating that its construction material is out of metal. The rest three elements, which are out of timber material, are grouped as WOT elements. The elements in this group are composed of door and window elements designed together. They are categorized into sub-groups with respect to the difference in the composition of the wings and construction details. Each sub-group has coded with a letter as A, B and C. Type WOT-A is located at the space 101 supplying access from the ground floor of the main building to the first floor. The WOT-B type element is located between the spaces 119 and 123. The WOT-B is located between the spaces 124 and 125. The wings of this element are missing. (Drawing 2.22)

2.2.1.3.4 Sills

The sills are designed in order to frame door or window elements at the elevations. Being all out of cut stone material, the sills are classified with respect to their construction details and forms. Secondly, the sub-groups are defined according to the location of the sill whether as window or door opening. (Drawing 2.24)

By this way, four groups of sills are defined with respect to their construction techniques and details. S1-D is the type, where there is a cut-stone pediment carried with column imitative plasters. Each element has neo-classical decorations. This type of sill is located to frame the entrance door on the west elevation. The pediment is constructed out of cut stone pieces which are fixed to each other with metal clamps. On the top of the pediment, there is a

later addition metal flag column. In S2-W type sills, there are bossage cut stones embracing the window opening. On the top, they are designed as lintel arch, with a higher key-stone at the middle. They are located at the mid portion of the west elevation around the WT3L type windows. There are four at total.

S3 type sills, indicate the group that are constructed out of profiled stones embracing the opening. There are consoles, supported with ornate cut-stones at the top of the opening. This type of the sill is used at both window and door openings. The S3-W type sills, which are given to the window sills, are used at the windows on the north and west elevations with WT2L type windows. There are seven at total. The S3-D type sill is used for the door opening leading to the balcony at the west elevation. It has same details with the ones used in the window openings. S4 type sills are out of straight sills without any decoration. They are used for both window and door openings on the south and east elevations.

2.2.1.3.5 Grills

There are several grills used in the exterior window and door openings of the building. The types of the grills are classified according to their construction materials and construction techniques. Since all the grills are made out of wrought iron material, they are coded as "GI". They are divided into subgroups according to their location, details and forms. (Drawing 2.23)

According to the location, they are categorized as window opening grills (GIW) and door opening grills (GID). The two sub-groups for each heading are defined according to their construction details. The first sub-group (GIW-A and GID-A) consist of linear bars without any decoration which are situated horizontally or vertically within the opening. The second sub-group (GIW-B and GID-B) covers the ones that have ornamentations with different motives.

2.2.1.3.6 Jails And Cornices

There are cut stone jails used on the facades of the building in order to emphasis the horizontality. There are three groups of jails embracing the building according to their vertical location. The first row is first-floor-level jail situated at first floor level. The second row is situated at the window sill level of the first floor. The third jail row is the cornice that is situated on the eave level of the building. They are dividing the facade into three portions vertically.

They are classified according to their construction details and techniques. They are all out of cut stone. Having different details in profiles, each level jail contributes a different group. Being all out of cut stone, jails are coded as (Ja type). The first floor level jail is coded

as (Ja1); the window sill level jail is coded as (Ja2) and the cornice jail is coded as (Ja3). (Drawing 2.24) The cornice jail (Ja3) is encircling the building during north, west and south elevations horizontally from one end to other. In the east elevation, it lasts until 1.38 m from the north corner and until 1.73 m from the south corner. The window sill jail (Ja2) is encircling the building during the north, west elevations. In the south elevation it lasts until 0.58 m from the west corner. In the east elevation it is cut 1.32 m away from the west corner.

There are two types of first floor jail (Ja1) according to profile details. Ja1-A is the group that passes from one corner to other during the north and west elevations. In the south elevation after it continues 1.56 m away from the west corner, there is another type of jail with a different construction profile. It is coded as Ja1-B. It lasts until the east corner of the main building. The Ja1-A is cut with the balcony in the west elevation, and the Ja1-B is cut with the terrace in the south elevation.

2.2.1.3.7 Staircases

There are four staircases in the building. According to their construction technique and materials they are divided into two groups. The first group STt are timber construction technique stairs. The STt-1 is located in the space 112 and in the north wing of space 116. They are two-armed stairs without landing space supported by the masonry walls and the timber posts with 8x8 cm dimensions. Each step has rectangular shape with approximately 25 cm width, 80 cm length and 2-3 cm thickness. In the turning point the steps have trapezoidal shape in order to continue raising without interruption. At the landing space they have rectangular balustrades with (Ba-M2) types.

The second group staircases which are coded as (STc type) have composite construction techniques and materials. STc-1 is located in the space 101 supplying access from the entrance to the bank hall section of the main building. The STs-2 is located in the south terrace of the building. The two sub-groups have similar construction techniques, while they differ in design compositions of supporters and stairs as well as materials of steps. They are both supported by cut-stone vaults.

STc-1 have two portions constructed with different techniques. The first portion is composed of linear one armed stair supported by a masonry wall. Since it is plastered the technique and material of the support and each step can not be observed. As far as seen the steps are covered with cut-stone finishing with 2-3 cm thickness. The second portion consists of symmetrically arranged double L-shaped stairs. The north wing of each stair is supported by cut-stone vault (VA 1); while their south wings are supported by the cut-stone half vault

(HVA 1). The landing space where the two stairs meet is supported by another cut-stone vault (VA 2). It also supports the half vaults. The VA 2 is filled with concrete converting the void of the vault into a massive rectangular fill. It is supported by two iron columns with 20 cm diameter. As far as it is understood from the traces, this filled part is a later addition. The two landing spaces where the stairs connect with each other are covered with cut-stone finishing.

STc-2 is constructed in order to supply access from the ground to the south terrace. It has a L-shaped stairs raising upwards without bein interrupted with a landing space. The south-north direction wing of the stairs is supported by a masonry wall. Since it is covered with plaster, the technique and material can not be observed. They have rectangular shape having approximately 25 cm width and 120 cm length. At the turning point of the stair, the steps have trapezoidal shape in order to continue raising without interruption. The rectangular steps in the east-west direction wing are supported by the cut-stone vault (VA 3). All the steps of the (STc-2) are out of mosaic.

2.2.1.3.8 Balustrades

There are balustrades used in the staircases, terrace and balcony of the main building. The balustrades are classified according to their construction material and techniques. According to their material they are classified as timber balustrades (Ba-T) and metal balustrades (Ba-M). (Drawing 2.23)

There are two types of timber balustrades with respect to their construction techniques and details. The type Ba-T1 has a circular shape in plan with changing dimensions along the body from down to up. It has been produced out of timber massive body which is carved with a profile. They are used at the bridge-like floor located in the first floor level of space G01, which supplies passage from space 103 to space 104. The second type of timber balustrades (Ba-T1) are used with staircase type (STt-1). They have single rectangular shape with approximately 5x5 cm dimensions. They are located in the arms and landing space of the staircases. The metal balustrades are used in the rest of staircases, the terrace and the balcony. There are two types of metal balustrades with respect to their construction materials and techniques. The (Ba-M1) has been constructed out of wrought iron material with ornamentations totally; while the frame of (Ba-M2) has been made of metal pipes connected to each other. Within its frame, there are wrought iron panels situated. All of the metal balustrades are painted into white.

2.2.1.3.9 Fume Uptake

There is a fume uptake located in the space 120, which is functioned with kitchen use. It is situated in the north masonry wall having rectangular shape in plan with 0.58 m depth and 1.25 m length. It has a large opening mouth which gets narrower until the chimney level with a curvilinear body. The opening is located at 1.75 m above the ground, and the chimney level starts at the first floor ceiling level height. The construction material of the fume-uptake can not be defined since it has cement plaster finishing. (Drawing 2.23)

2.2.1.4 FINISHING AND COVERING ELEMENTS

The classification of finishing and covering elements are established according to their location, materials and construction techniques. With respect to their location they are grouped as finishing materials of walls, floorings, ceilings and superstructure. (Drawing 2.29)

2.2.1.4.1 Wall Finishes

The walls are commonly plastered and painted. According to the materials there are two types of plasters: Lime plaster and cement plaster.

There are three types of lime plasters according to their ingredients. Lime Plaster- Type 1 is yellow-white in color including big aggregates and straw pieces. The Lime Plaster Type 2 includes fine aggregates with smaller size. The third type has reddish color with big aggregates. It has an approximate thickness of 2-3 cm. Cement plaster consist of cement material with grey color. There are various layers of painted used as finishing material on the surfaces. They are applied onto each other in time. As far as observed during the site survey, during some applications, the initial paint layers are tried to be scraped away before the application of new ones. Besides, the colors of each paint layer have been mixed in some sections. Therefore, defining the actual numbers of layers by looking at the colors can be difficult. As far as it is observed, there are various combinations of plaster layers applied on the wall finishes. In WC, bathroom and kitchen spaces in the building floor tiling are also applied onto the wall surfaces as finishing materials up to a level.

2.2.1.4.2 Floor Finishes

According to their materials there are five groups of floor finishing and covering elements: Timber boarding, mosaic tiles, ceramic tiles, leveling concrete and mosaic applications.

Timber boarding construction is applied together with timber flooring construction. The rectangular boarding with 2-3 cm thickness is nailed onto the rectangular timber beams in opposite direction of the beams. There are two types of timber floorings with respect to the sizes of unit materials. The FL T1 consists of floor boarding with 9-13 cm width, while the FL T2 group includes 18-25 cm boarding. The spaces 108, 121, 122, 123 and 124 in the ground floor; and in spaces 201, 202, 203 and 204 timber flooring type 1 (FL T1) is applied. In the rest of spaces, FL T2 type is used. The boarding in spaces of 102, 103 and 105 lay in north-south direction, while in the rest of spaces, timber boarding lay in east-west direction.

Mosaic tiles are applied onto screed covering in the ground floors and onto the vaulted construction in the first floor. The types of mosaic tiles are classified into three with respect to their size, color and shape. The FL-MTL 1 includes rectangular tiles with cripple decoration on white background. With respect to the sizes of unit material there are two sub-types in this group. The tiles with 0.30x0.30 m size are applied in the spaces G02 and G03 in the ground floor. The ones with 0.20x0.20 m size are applied in the ground floor space G01 and in the mid portion of the space 101 in the first floor. The second type of mosaic flooring FL-MTL 2 consists of cripple decoration on dark background with 0.20x0.20 m size. The floorings of space 109 and in some portion of the FL-MTL 1 application in the space 101 have this type of finishing. The third group FL-MTL 3 constitutes 0.20x0.20 m sized mosaic tiles having circular decorations. They are applied onto the Reinforced concrete slab flooring. The south terrace and west balcony of the main building are covered with this type of finishing. (Figure 2.25)

There are four types of ceramic tiles with respect to decorations, since they all have 0.20x0.20 m sizes. The first group FL-CTL 1 includes tiles with white-black color. The corridor space of 106 in the first floor and the space underneath the staircases STc-1 are covered with this type of finishing. The second ceramic tile group consists of decorated tiles with circular shapes in red and black color. They are also named as "Italian Type ceramic". (Figure 2.26) It is applied in the flooring of the kitchen space 119. The third group includes decorated mosaic tiles with circular shapes in white and brown color (Figure 2.27). The flooring of WC space 113 has this type of finishing. The fourth group includes contemporary ceramic tile with white color. They are applied in WC space 117 in the first floor.

Besides this, leveling concrete and mosaic finishing have been applied in some of the spaces. The ground floor spaces from G04-G09 in the main building and the whole spaces of the depot building have screed cover. The spaces 110 and 111 in the first floor have also screed finishing. As far as it is understood from the traces, they are later addition coverings. The bathroom space 118 in the first floor and the space 206 in the mezzanine floor are covered with mosaic.

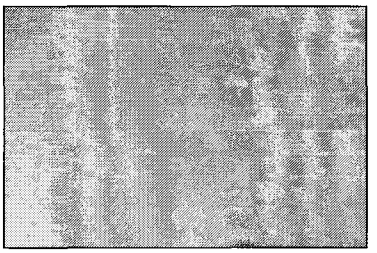


Figure 2.25

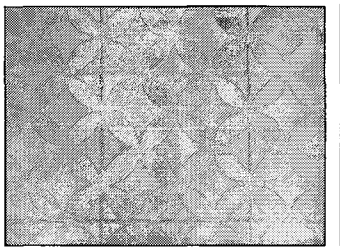


Figure 2.26

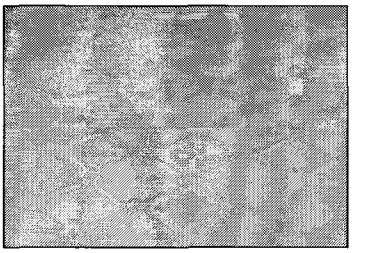


Figure 2.27

2.2.1.4.3 Ceiling Finishes

The ceilings of space G02 and G03 in the ground floor have ceiling finishing, while the rest of spaces are left without ceiling. Instead, the construction elements of flooring can be observed in these spaces. In the ground and mezzanine floors all the spaces have ceiling finishing elements. According to their materials there are two types of ceiling finishes: Timber and plaster finishing. (Drawing 2.28)

There are three types of timber ceilings with respect to their construction techniques. The first group (CE T1) constitutes the timber ceilings constructed with profiled laths. The meeting points of timber boarding which lay longitudinally from wall to wall are covered with timber elements having 3-4 cm thickness. There are two sub-types in this group with respect to the application of the profiled laths. In first group (CE T1a) linear timber elements lay parallel to the timber boarding, while in the second group (CE T1b), they are constructed making rectangular frames. In both cases, three rows of timber boarding parallel to the wall surfaces are constructed with overlapping technique establishing a frame around the ceiling area. (CE T1a) type of application is observed in ceilings of spaces G01, 101, 107, 108, 114, 122, 123, 124 and 125. (CE T1b) are applied in the ceilings of spaces 109,110-111, 112, 113 and 120.

The second group (CE T2) consists of timber boarding with approximately 0.15 m thickness constructed with overlapping technique lying longitudinally from wall to wall. At the end portions, one row of timber boarding is constructed parallel to wall surfaces establishing a frame around the ceiling area. The ceilings of spaces 116, 118 are constructed with this technique. The third group timber ceiling (CE T3) includes the plywood constructions. Its construction technique bases on rectangular plywood sheets nailed onto rectangular timber frame elements with 3-4 cm thickness. This type of construction are applies onto original timber ceilings in the ground and mezzanine floors. The spaces G02 and G03 in the ground floor and the spaces 202, 203 and 204 in the mezzanine floor are covered with this technique.

The plastered finishing groups are classified into two with respect to their techniques. The first group (CE Pl1) includes plaster finishing constructed with sunken ceiling technique. The ceiling of 102 is constructed with this manner. The meeting points of the wall and ceiling edges have curvilinear surface with plastered profiles laying parallel to the wall surfaces. At the mid portion of the east wall, there is a rectangular decoration with curvilinear faces. The second group (CE Pl2) includes the direct application of the plaster without any decoration. The ceilings of spaces 103 and 105 have this type of finishing.

2.2.1.4.4 Roof Finishes

The roofing has Marsilian roof tile finishing which are lying parallel to the inclination direction of the roof facades. They are applied onto the timber boarding located over the rectangular timber rafters of the superstructure. There is a black water insulation sheeting between the tiles and the timber boarding.

2.2.1.5 SERVICE INSTALLATIONS

There are service installations/fitting element within the building related to heating/ventilation, drainage systems and electricity equipments.

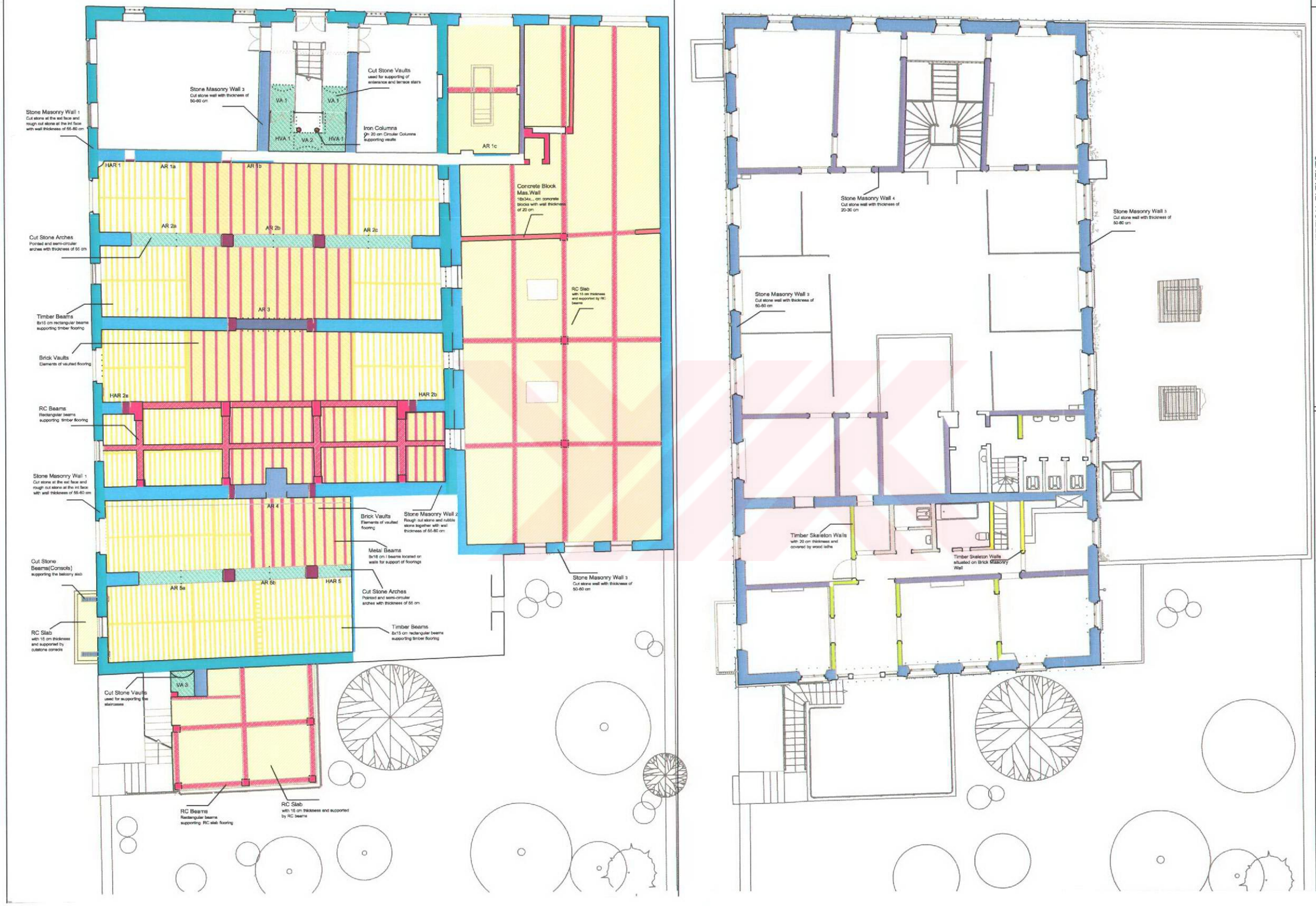
There are two types of drainage service within the building: Rainwater disposal and waste water disposal. The rainwater disposal is achieved through the circular PVC pipes passing around the building in eave level collecting the water coming from the roof facades horizontally and passing them to the downspout pipes, which are located in the west, south and east elevations. They have circular sections with approximately 10 cm diameter.

The waste water pipes can be observed in the superstructure of the ground floor spaces G05 and G06. They are dug into the vaulted floorings horizontally and into the masonry walls vertically. The pipes collecting waste water from the toilet spaces 113 in first floor are collected in the superstructure of the space G04. The waste water pipes of the kitchen, WC and bathroom spaces of the dwelling portion of the main building are observed in the superstructure of the space G05. They are collected vertically through the masonry walls and connected to the main collector which passes through the north wall of the space G05. It has inclined level which is in its highest point in the east corner, while it reaches to the ground floor level in the west end of the wall. The pipe leaves the building from west portion of the north wall of the space G05.

There is central heating system equipment located within the main building. It consists of two main heating tank located in the depot space G12, water tank located in the roof of the depot building and radiators located in whole spaces within the main building that are not used with depot function. The elements are connected to the each other with circular metal water pipes passing vertically and horizontally within the building. In order to supply ventilation within the building, there are air ducts passing within the building. It consists of rectangular metal air ducts suspended to the ceilings with metal chains. The heating of the ventilation of the bank section is achieved by the air ducts located in space 101 passing along four sides of the ceiling. The spaces in the dwelling section are ventilated by the air duct passing from space 114 to space 120. The rooms are ventilated with holes opened in the walls supplying air circulation from the ducts to the room spaces. The two ventilation ducts are connected to each other horizontally at the roof level. The main provider of the air ducts is located in the roof floor. The ceilings of spaces 201 and 111 are broken in order to situate the vertical connections of the ducts.

As far as observed from the traces and according to the information obtained during the oral history interviews, these heating and ventilation equipments are later additions -which are applied in 1960s. There are circular pipes observed in the corners of the main space 101. They are situated into the rectangular boxes. They belong to previous heating system.

Besides all these, there are numerous electricity wires passing either through or above the surface of the walls supplying electricity to the whole spaces within the main building except the ground floor spaces G04 and G05. The electricity box is located on the entrance wall of the space G01.



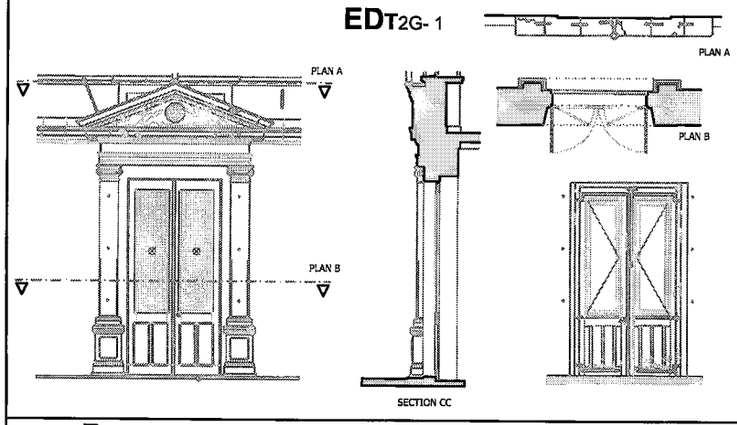
Drawing 2.19 Analysis on Structural Elements and Materials

ARCHITECTURAL ELEMENTS- DOORS

TIMBER DOORS

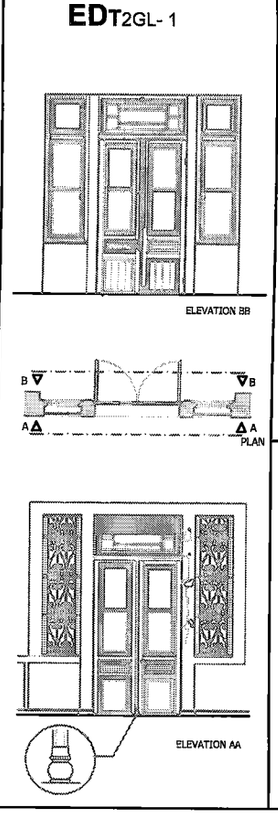
DT2G Double Glazed-Wing Doors without Ligthing Window

EDT2G- 1

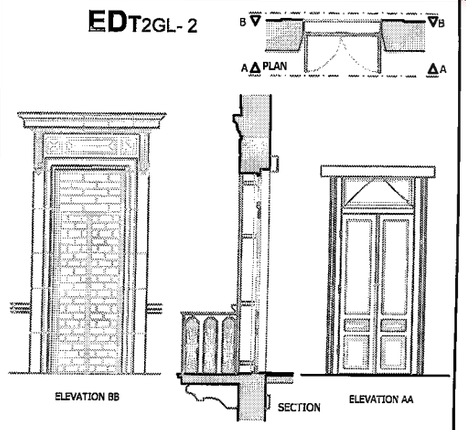


DT2GL Double Glazed-Wing Doors with Ligthing Window

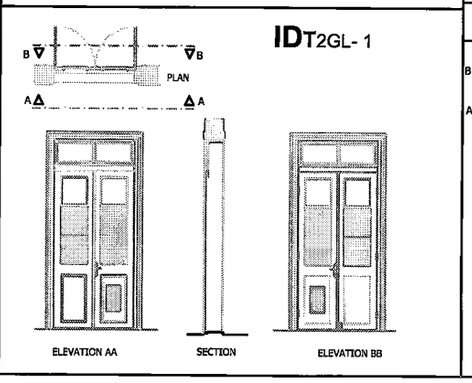
EDT2GL- 1



EDT2GL- 2

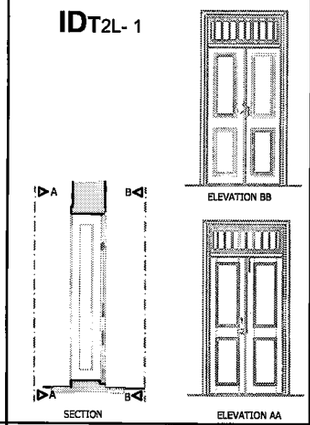


IDT2GL- 1

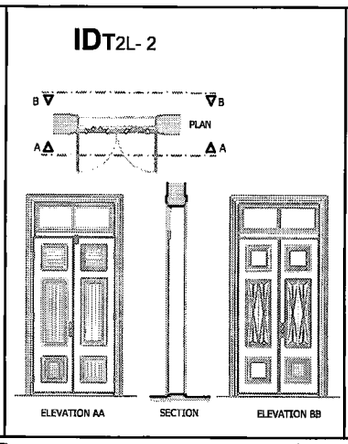


DT2L Double Wing Doors with Ligthing Window

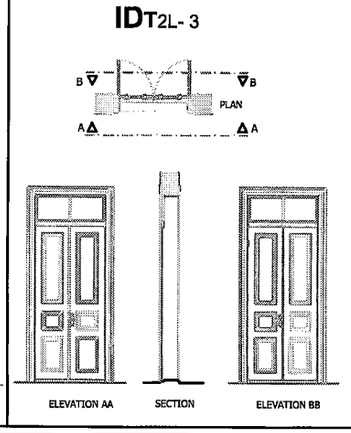
IDT2L- 1



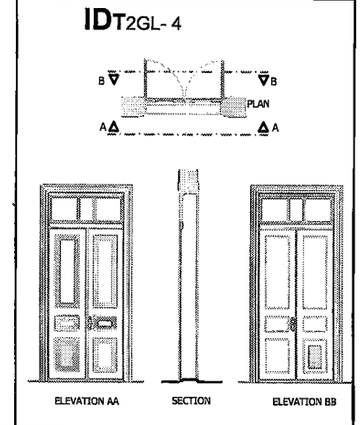
IDT2L- 2



IDT2L- 3

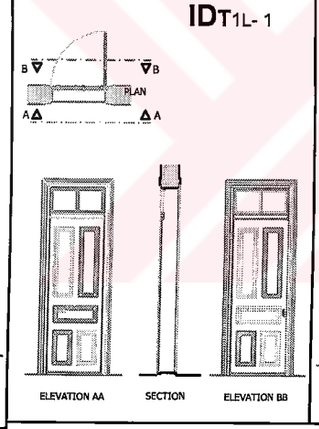


IDT2GL- 4

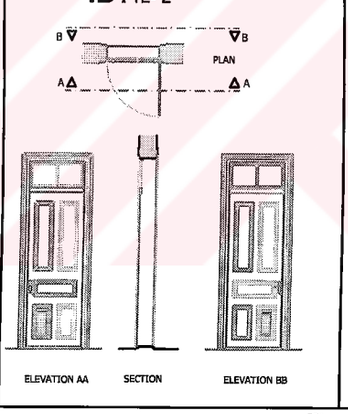


DT1L Single Wing Doors with Ligthing Window

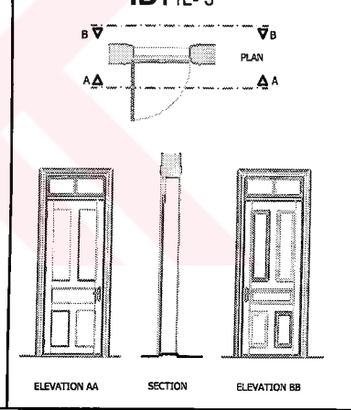
IDT1L- 1



IDT1L- 2

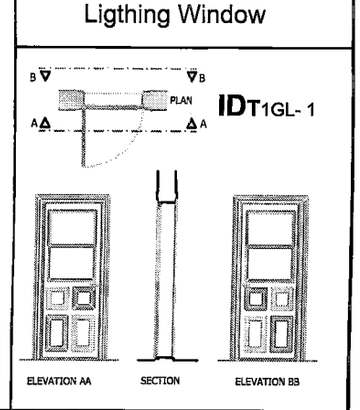


IDT1L- 3



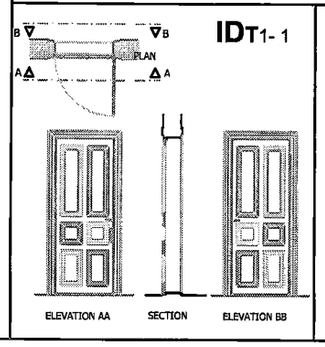
DT1GL Single Wing Glazed-Doors with Ligthing Window

IDT1GL- 1

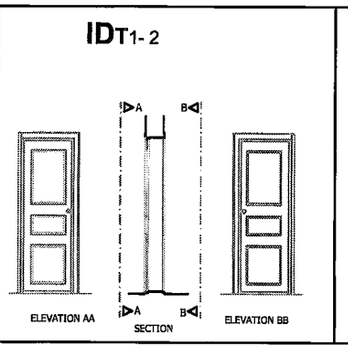


DT1 Single Wing Doors without Ligthing Window

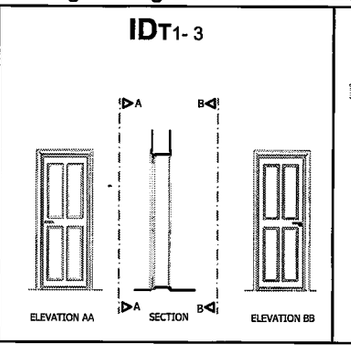
IDT1- 1



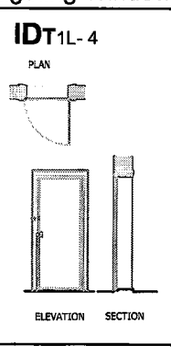
IDT1- 2



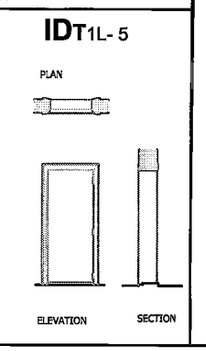
IDT1- 3



IDT1L- 4



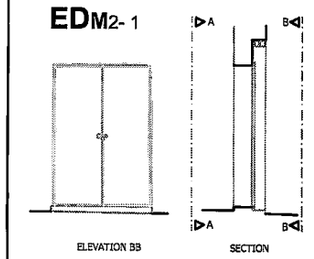
IDT1L- 5

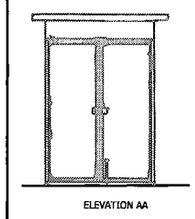


METAL DOORS

DM2 Double Wing Metal Doors without Ligthing Window

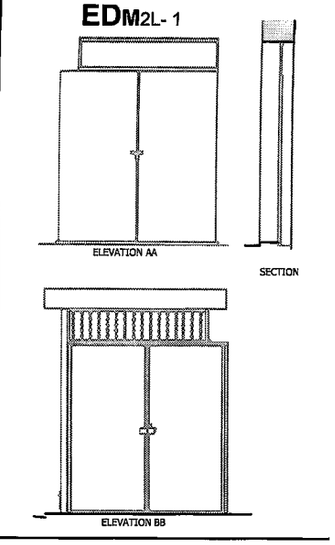
EDM2- 1





DM2L Double Wing Metal Doors with Ligthing Window

EDM2L- 1



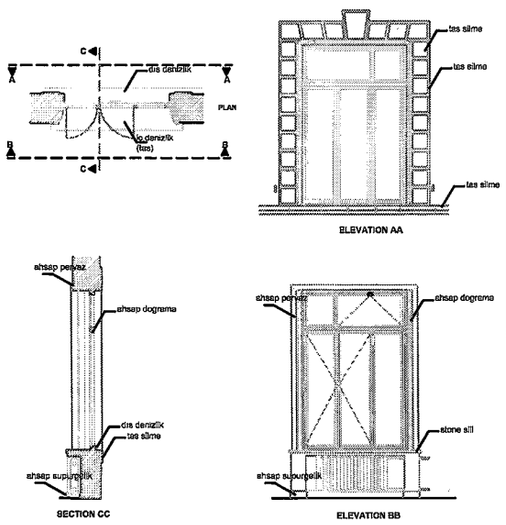
Drawing 2.20 Typology of Architectural Elements- Doors

ARCHITECTURAL ELEMENTS- WINDOWS

TIMBER WINDOWS

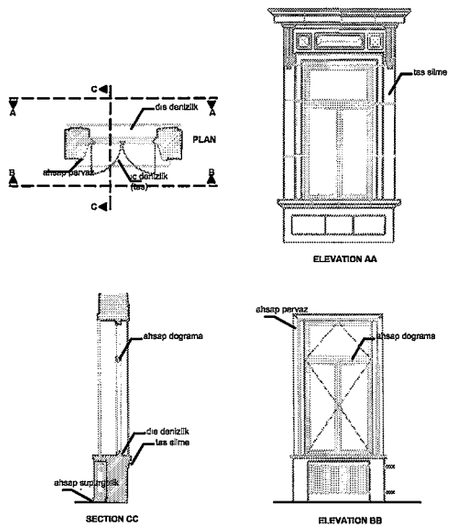
WT3L Three Winged Timber Window with Ligthing Window

EWT3L- 01

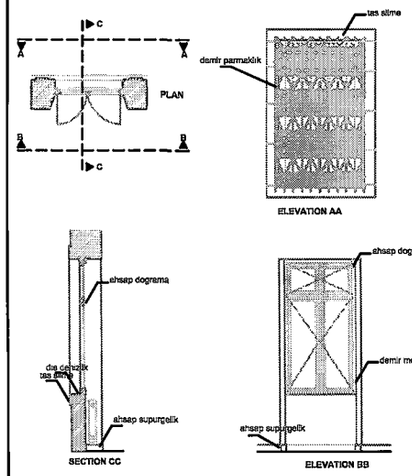


WT2L Double Winged Timber Window with Ligthing Window

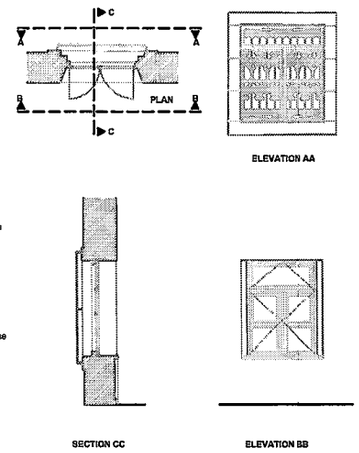
EWT2L- 01



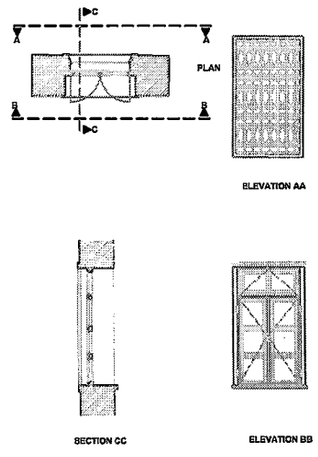
EWT2L- 02



EWT2L- 03

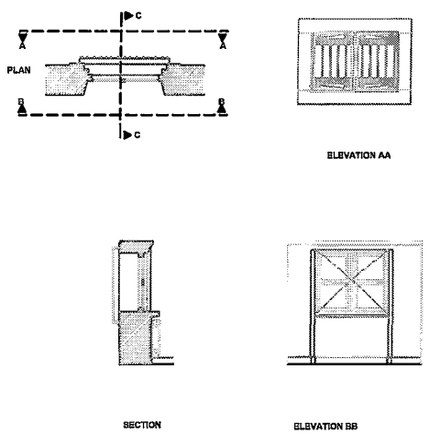


EWT2L- 04



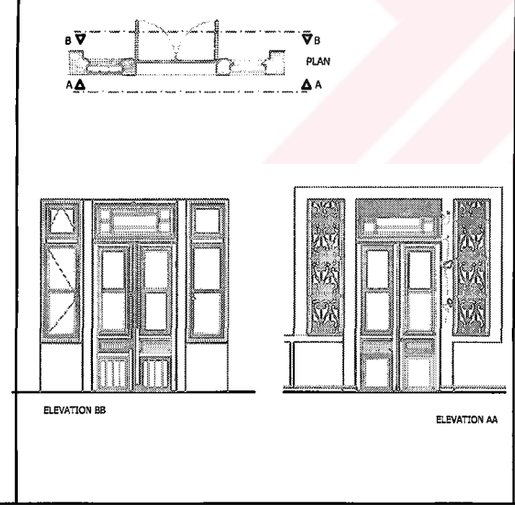
WT2 Double Winged Timber Window without Ligthing Window

EWT2- 01



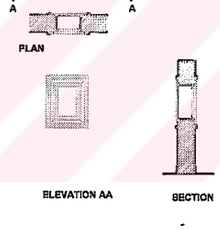
WT1L Single Winged Timber Window with Ligthing Window

EWT1L- 01

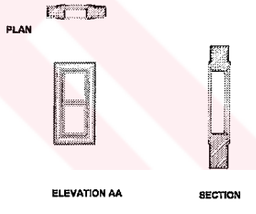


WT1 Single Winged Timber Window without Ligthing Window

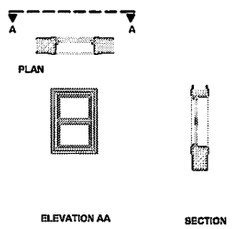
IWT1- 01



IWT1- 03

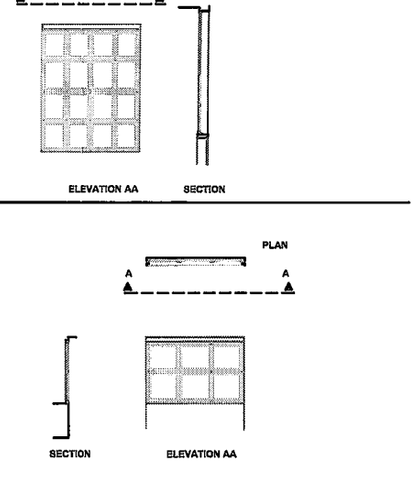


IWT1- 02



WTF Fixed Timber Glazing-Window

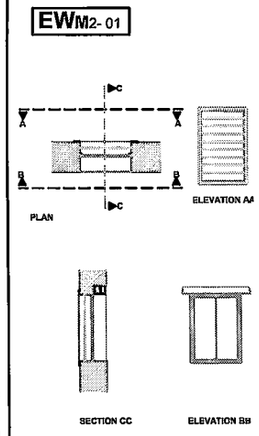
IWTF- 01



METAL WINDOWS

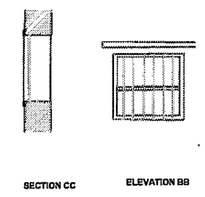
WM2 Double Winged Metal Window without Ligthing Window

EWM2- 01



WMF Metal Frames without Glazing

EWMF- 01



Coding:

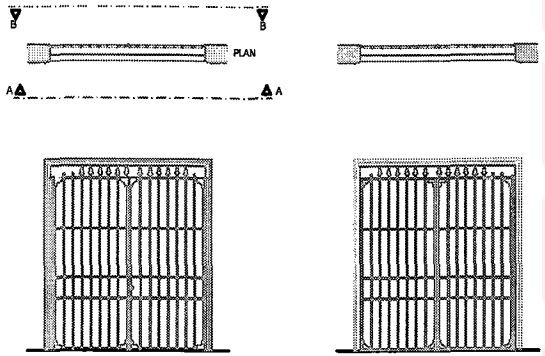
EWT1L- 3

- 3 — Code of the element
- L — Existance of light windo
- 1 — Number of Wings
- T — Material
- W — Window
- E — Exterior/ or Interior

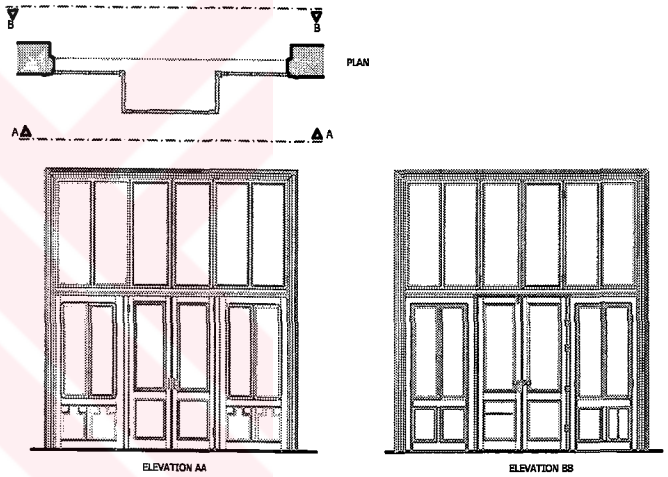
Drawing 2.21 Typology of Architectural Elements- Windows

WIDE OPENNINGS

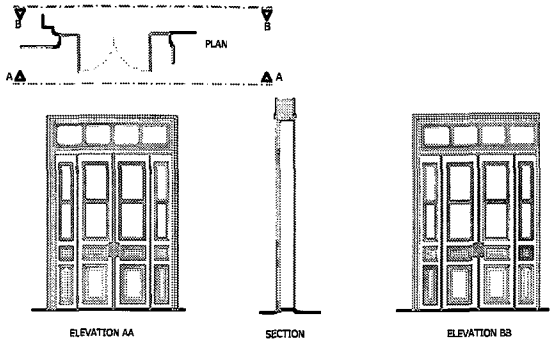
WOM



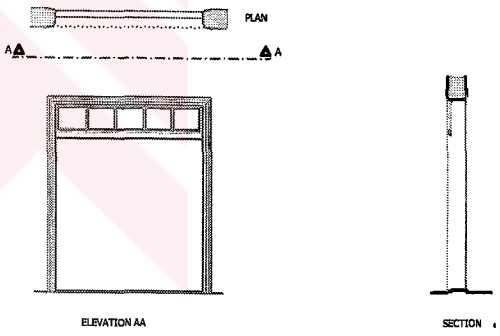
WOT- A



WOT- B

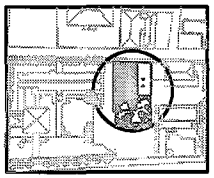


WOT- C



RESTORATION PROJECT
OF THE
OLD AGRICULTURAL BANK BUILDING
IN MERSIN

KEY PLAN



THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF
NATURAL AND APPLIED
SCIENCES
METU

SUBMITTED BY:	SUPERVISOR:
Nida NAYCI	Dr. Nimet ÖZGÖNÜL

SURVEY ☐	ANALYSIS ■
RESTITUTION ☐	RESTORATION ☐

SHEET:

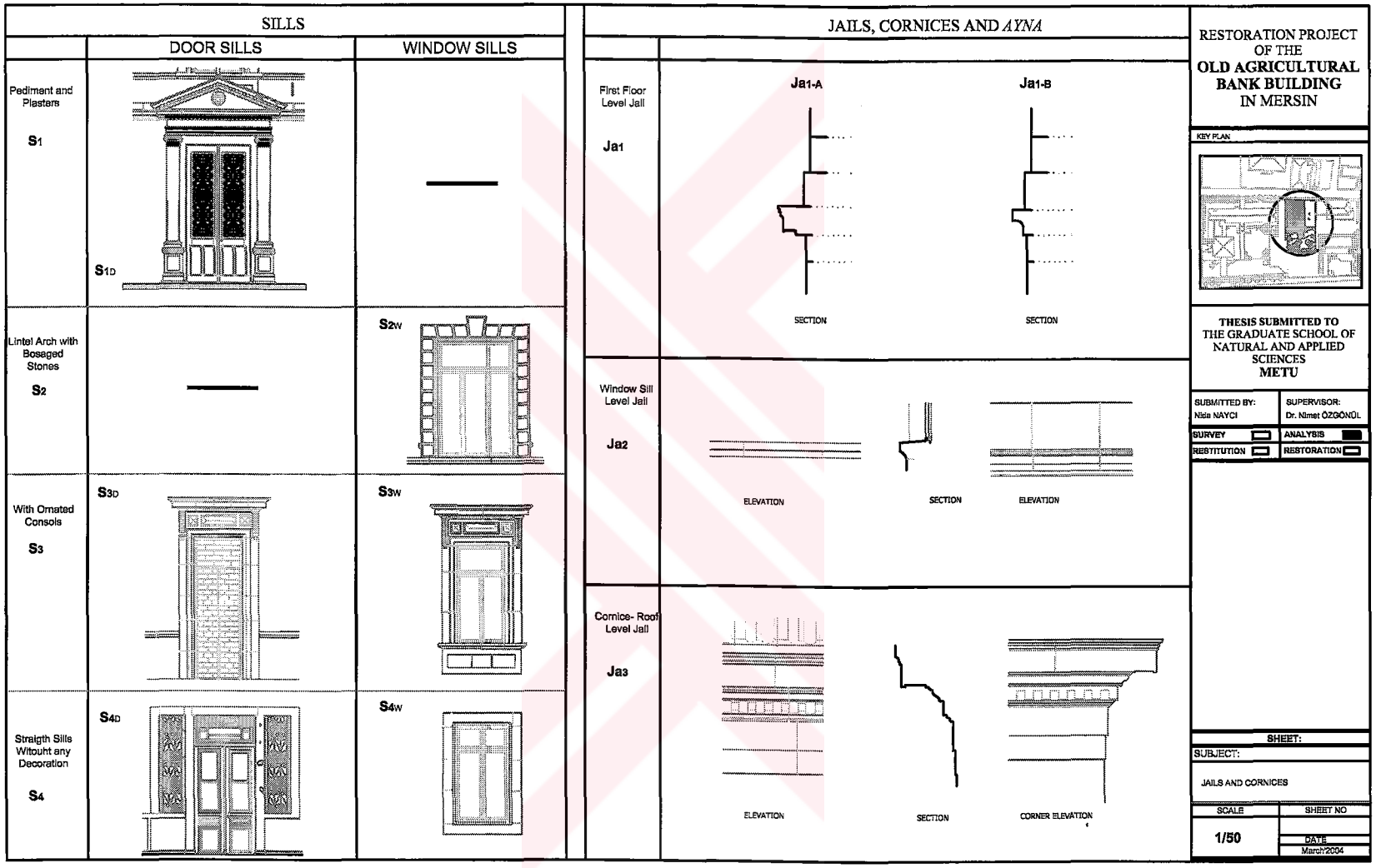
SUBJECT:

WIDE OPENINGS

SCALE	SHEET NO
1/50	
	DATE: March'2004

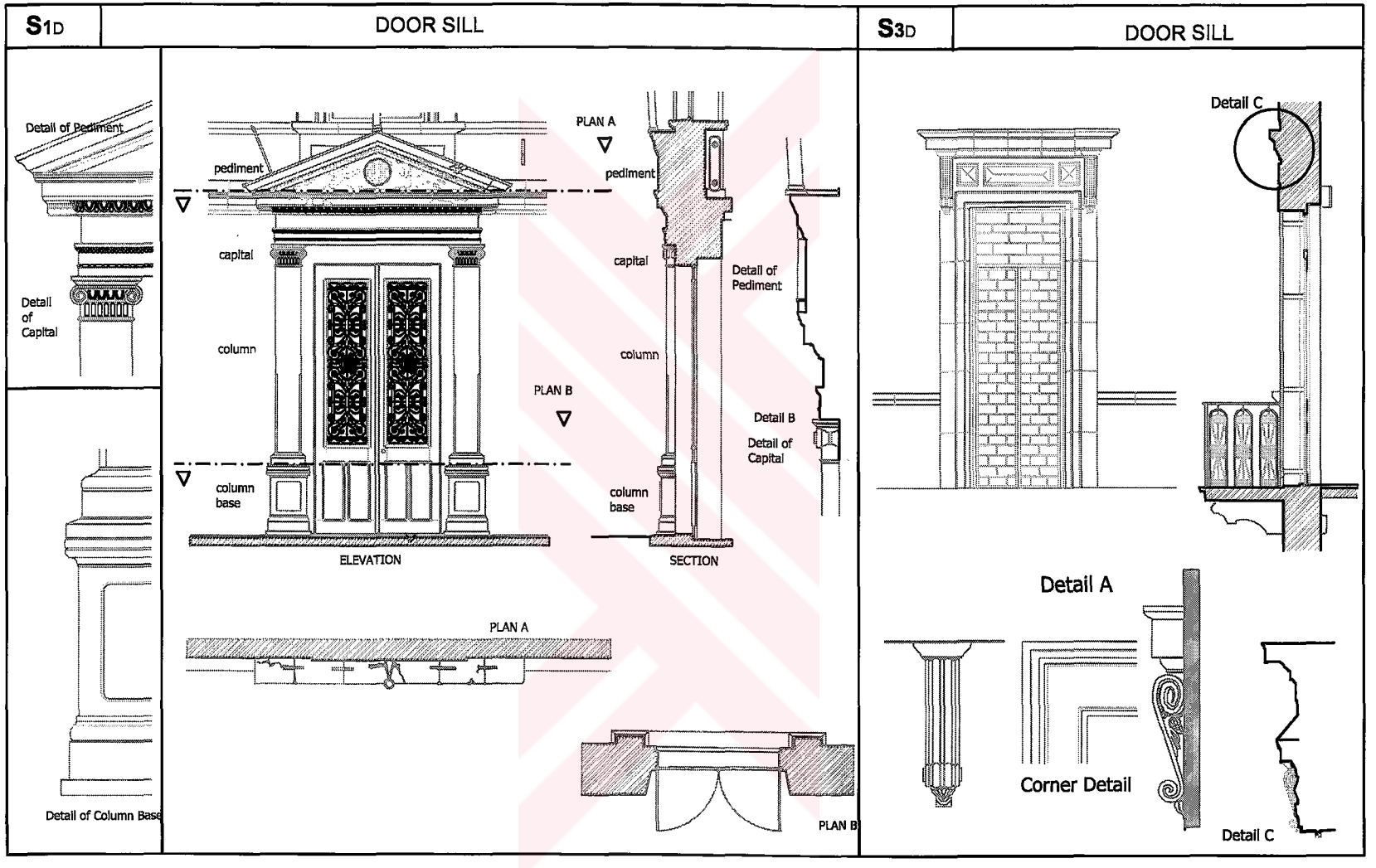
Drawing 2.22 Typology of wide opening elements

Drawing 2.23 Typology of architectural elements



Drawing 2.24 Typology of Sills and Jails

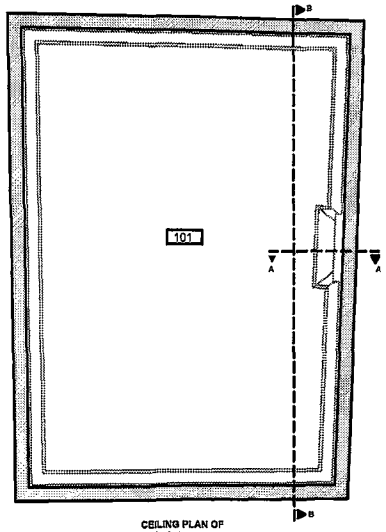
Drawing 2.25 Details of window sills



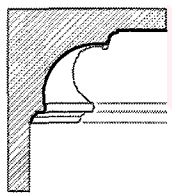
Drawing 2.26 Details of door sills

PLASTERED CEILINGS

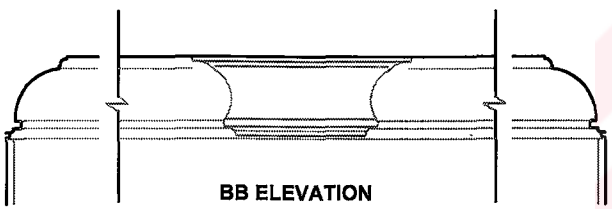
CE P1: Sunken Ceiling



CEILING PLAN OF SPACE 101



SECTION AA

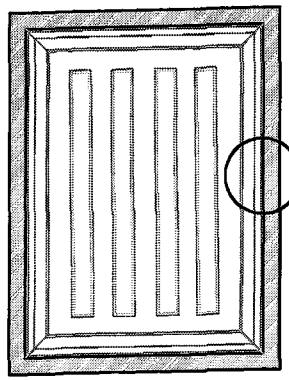


BB ELEVATION

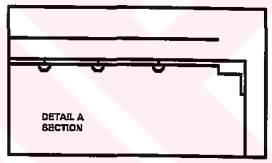
TIMBER CEILINGS

CE T1- With Profiled Laths

CEILING PLAN OF SPACE 123

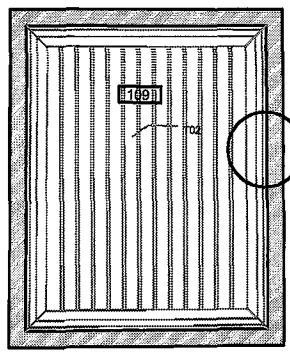


DETAIL A

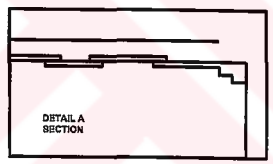


DETAIL A SECTION

CE T2- Overlapping Ceiling



DETAIL A

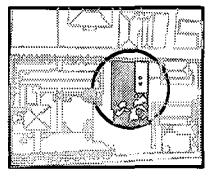


DETAIL A SECTION

CEILING PLAN OF SPACE 109

RESTORATION PROJECT OF THE
OLD AGRICULTURAL BANK BUILDING
IN MERSIN

KEY PLAN



THESIS SUBMITTED TO THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES METU

SUBMITTED BY:	SUPERVISOR:
Nida NAYCI	Dr. Nimet ÖZGÖNÜL

SURVEY ☐	ANALYSIS ■
RESTITUTION ☐	RESTORATION ☐

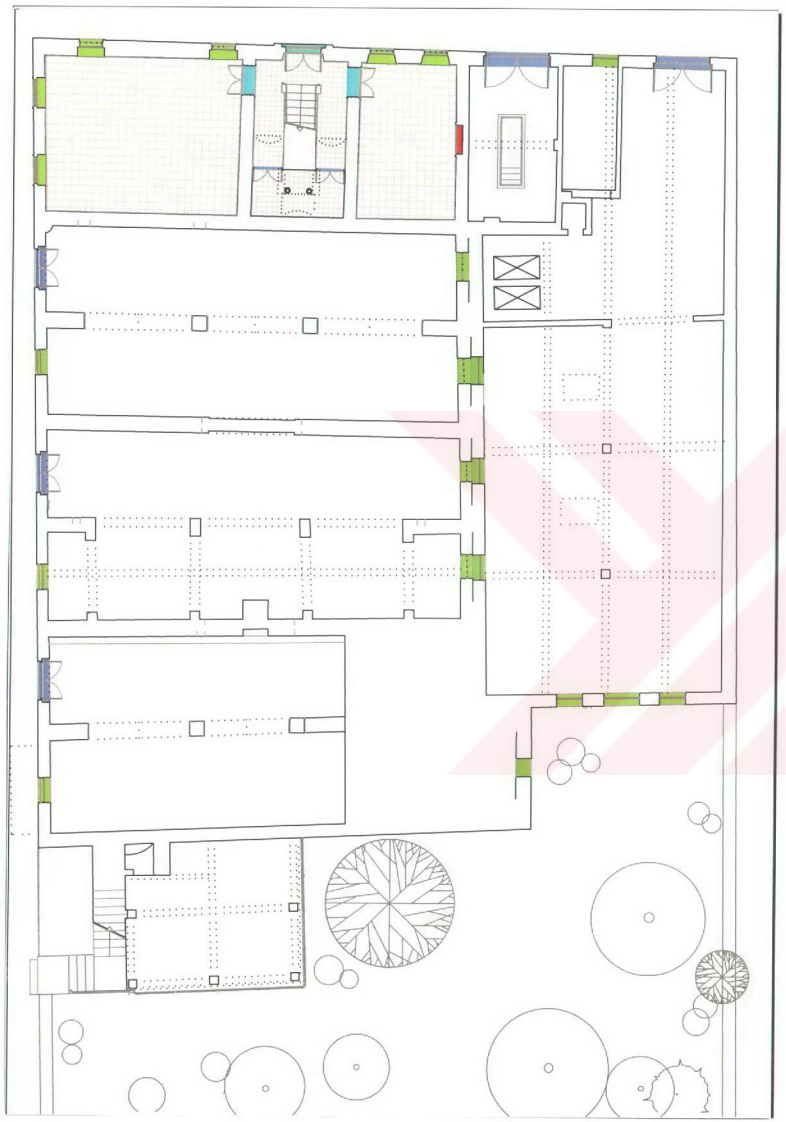
SHEET:

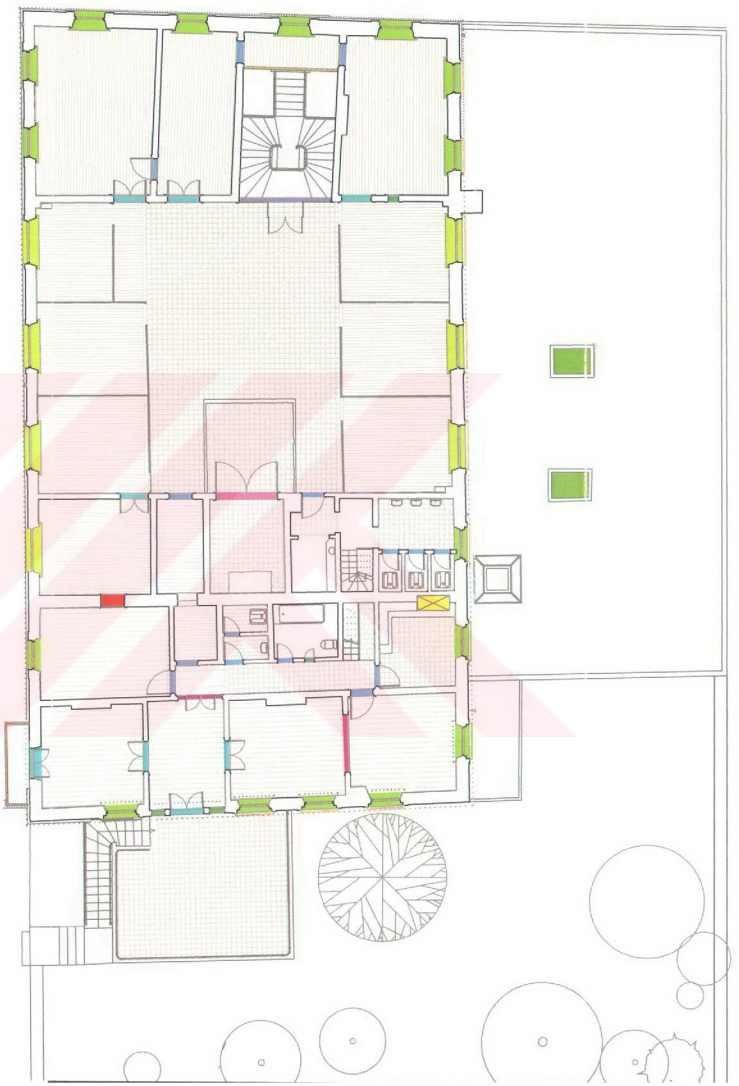
SUBJECT:

FINISHING ELEMENTS AND MATERIALS

SCALE	SHEET NO
1/50	
	DATE: March'2004

Drawing 2.27 Typology on Ceiling Finishing Elements





OPENINGS

DOORS
- DT2L: Timber Double Wings and Ligth Window
- DT2: Timber Double Wings
- DT1L: Timber Single Wing and Ligth Window
- DT1: Timber Single Wing
- DM2L: Metal Double Wings and Ligth Window
- DM2: Metal Double Wings

WINDOWS
- WT3L: Timber Three Wings and Ligth Window
- WT2L: Timber Double Wings and Ligth Window
- WT2: Timber Double Wings
- WT1L: Timber Single Wings and Ligth Windows
- WT1: Timber Single Wings
- WTF: Timber Fixed Glazed
- WMF: Metal Framed Without Glazing
- WO : Just Openning Without Any Elements

WIDE OPENINGS
- DWT- A
- DWT- B
- DWT- C
- DWT- D

SHELVE & Cupboards
- S1
- S2

GRILLS
- GI L1
- GI L2
- GI O1
- GI O2

SILLS
- SL D
- SL W1
- SL W2
- SL W3

JAILS, CORNICES

JAILS
- Ja 1a
- Ja 1b
- Ja 2
- Ja 3

ROOF CORNICE

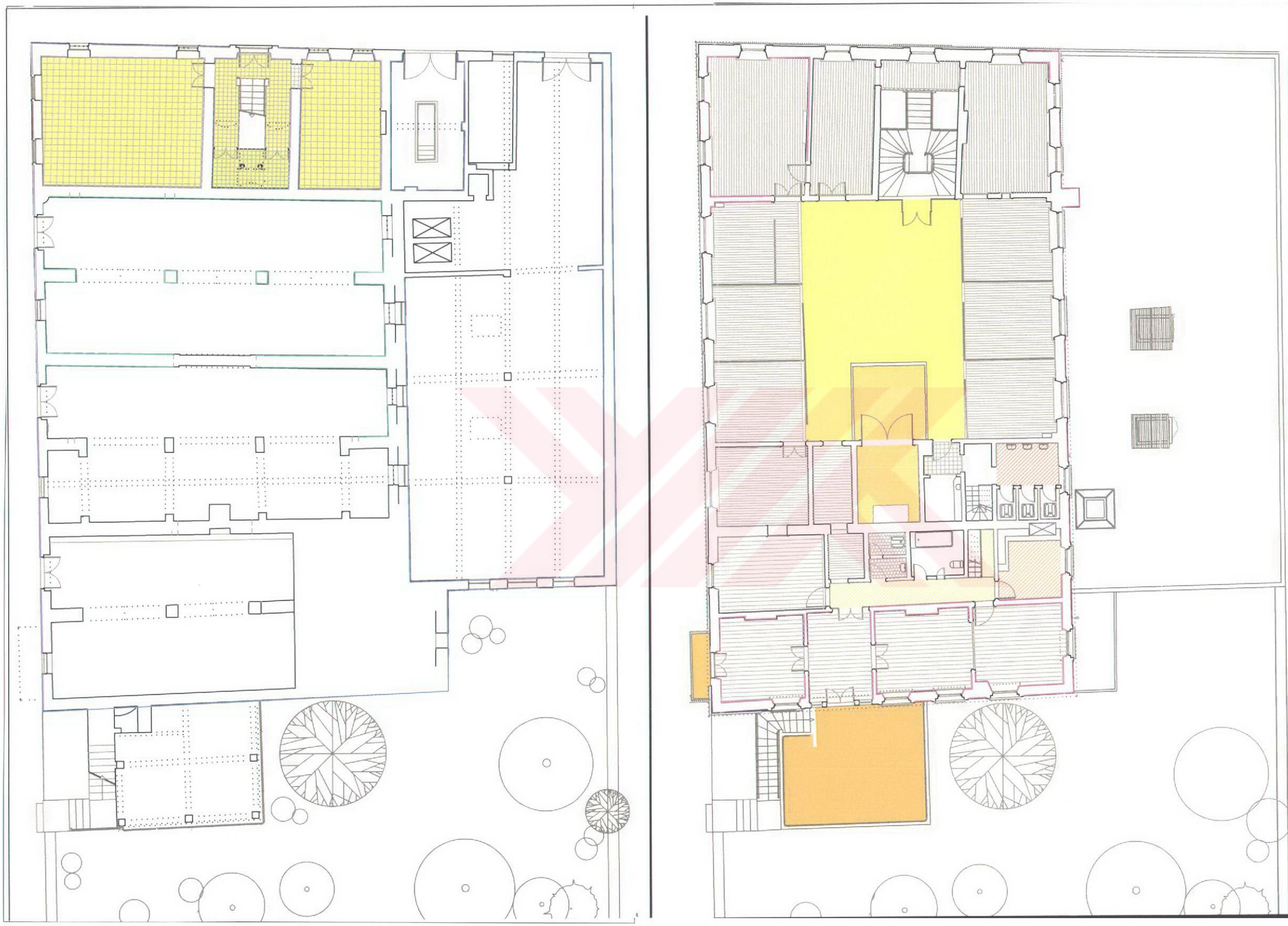
OTHER ELEMENTS

STAIRS
- ST T
- ST M
- ST St

Balustra.
- Bl T1
- Bl T2
- Bl M1
- Bl M2

Fume Uptake

Drawing 2.28 Types of Finishing Elements and Materials



Drawing 2.29 Typology of Ceiling Finishing Elements

2.2.2 ANALYSIS ON CONSTRUCTION MATERIALS AND TECHNIQUES

Masonry and frame constructions are the common construction techniques in the building. According to the construction materials and techniques they are classified into subgroups.

2.2.2.1 MASONRY CONSTRUCTION

Masonry construction technique is widely used in the construction of vertical and horizontal elements in the building. Among the vertical elements, most of the walls and all the piers are constructed with masonry technique. In addition to this, some of the horizontal spanning elements including arches, vaults are constructed with masonry technique also. Types of masonry construction techniques are classified according to the construction materials and techniques.

2.2.2.1.1 Vertical Elements Constructed With Masonry Construction Technique

Vertical elements constructed with masonry construction technique include walls and piers. According to the construction materials observed, three groups are established in masonry walls: Stone masonry walls, brick masonry walls and concrete block masonry walls. (Drawing 2.30)

- **Stone Masonry Walls**

According to use of construction material and technique there are five types stone masonry wall constructions observed in the building. The first group (SMW1), which is applied at the exterior walls of the main building in the ground floor level, has 55-60 cm thickness. The unit materials consist from cut-stones at the exterior face; and rough cut stone with rubble stone at the interior faces. Since the walls are plastered from the outside the actual sizes of cut stones can not be defined. But, from the scraped corners, it is observed that their height changes between 18-35 cm. Besides, lime mortar with 1-2 cm thickness is used as bonding material. At the interior faces mud mortar was used as bonding material with thickness between 5-6 cm. The sizes of the rubble stone and rough cut stones at the interior faces vary. Regular cut stones with big sizes are used in the construction of interior corners and door openings. Since there isn't any demolishment in the walls, we do not have enough information related to the construction technique and materials used in the wall sections.

In this technique the spanning for door openings in the ground floor are supplied by reveal arches and timber lintels. Rectangular timber lintels with 0.10 m height are located as

lintel of the opening. However, the load of the wall is supported by the reveal arch which is located at the top of the timber lintel. The arches are constructed with rough cut stones during the construction of the walls. Between the timber lintel and the arch there are teo stone rows, which fill the portion between them. How the door opening is constructed from the exterior face can not be defined since they are plastered.

The second group stone masonry construction technique (SMW2) includes the rough cut stone and rubble stone masonry construction at both faces. The thickness of the walls are 55-65 cm. Mud mortar with thickness of 5-6 cm are used as bonding materials originally. But, there are later interventions to the joints in some portions, where cement mortar applications are established. The unit materials have been processed randomly. With some intervals, timber bond beams are used horizontally.

In order to supply passage through the walls, wide openings are located in the walls. These openings are spanned with cut stone arches, which are supported by stone piers within the masonry walls.

Stone masonry construction type 3 (SMW3) has thickness between 50-60 cm. Its construction technique includes cut stone materials used at both faces of the wall. This technique is applied in both of the main building and the depot building.

The actual dimensions of the cut-stone materials used in the main building can not be defined since both faces are plastered. Their height changes between 0.20-0.35 m. Lime mortar is used as binding material. During the construction of the openings at the exterior walls rectangular cut-stone window and door sills are constructed together with the wall. In all types, rectangular metal lintels are fixed into the sill for the span of the opening.

The exterior walls of the depot building are also constructed with this technique. There are two types of stone material used. In the north and west walls of the depot building, the cut-stone materials having 30-65 cm length and with and approximately 50 cm height are used; while in the south and east walls of the depot building cut-stones with 35-50 cm length and 20 cm height are used. In all walls cement mortar is used as binding material. The window and door openings located on the walls are spanned with rectangular concrete lintels.

Stone masonry wall type 4 (smw4) consists of cut-stone materials with 20-30 cm thickness. Lime mortar is used as binding material. This technique is applied in some of the interior walls of the main building. Since all the wall surfaces are plastered, and there isn't any demolishment within the walls, we can not observe detailed information related to construction materials or techniques in these walls. Stone masonry wall type 5 (smw4) consists of rubble

stone masonry construction with 50-60 cm thickness. Cement mortar with 5-6 cm thickness is used as the binding material.

- **Piers**

Stone piers, which are used in order to support the arches in the ground floor, are constructed with masonry technique. Since there are two types of arches as spanning arches and arches located on the wall, the piers are constructed according to that.

In the case of spanning arches, piers are located at the intersection points of two arches. The arches have rectangular shapes with 60x60 cm dimensions. The actual construction technique of the piers can not be defined since there isn't information related to the section of the piers. As far as observed under the scraped plastered portions, cut stones are used as unit materials. The last cut stones which are located at the springing level, are profiled stones. In the case of arches located on the wall, the piers are located at the underneath of the arches. The piers are constructed with the construction of the SMW2. They consist of cut stone rows, with a profiled cut stone at the springing level.

2.2.2.1.2 Horizontal Elements Constructed With Masonry Construction Technique

The horizontal elements constructed with masonry technique include arches which are constructed for spanning openings in the walls and vaults that are used for spanning narrow floorings.

- **Arches**

All the arches in the building are constructed with cut stone masonry technique. Cut stones have approximately 0.28x0.50x0.55 m sizes where 0.55 is the width. Lime mortar with 1-2 cm thickness is used as binding material. They have pointed or semi-circular profiles. They are supported by stone piers. In pointed profiled arches there isn't a single keystone. Instead, 9 rows of cut stones constitute one arm of the arch that are symmetrically arranged on each side. In the arches in the space G06, there are rectangular holes located on each side of the interior face of the arches.

In the row of arches, the portion between the two arches is filled with rubble stones in varying sizes.

- **Vaults**

The construction materials and techniques of the arches could not be observed during the survey stage since they are all plastered without any detachments.

- **Vaulted Flooring**

The vaulted flooring construction, which are applied in some portions of the flooring in the first floor, consist of metal I beams and brick vaults located between them. The main supporters of the vaulted flooring are metal I beams located in north-south direction with approximately 0.50-0.60 m intervals. They are placed in south-north spanning direction onto the stone masonry walls so as to support the brick vaults. They have 0.08 m width and 0.18 m height. Each interval is passed by the brick vaults including 4-5 rows of bricks in east-west direction. The unit material of the brick vaults consist of hollow bricks with 0.15x0.25x... dimensions. Brick rows are constructed with cross fall technique in north-south direction. The voids between the metal I beams and the brick vaults are filled with infill material and concluded with finishing layer. As finishing material mosaic tiles, ceramic tiles or mosaic are applied.

2.2.2.1.2.1 Analysis on Foundation of Arches and Vaults

During the evaluation of construction techniques of arches and analysis, their foundations and type of profiles are also analyzed. The analysis of profiles have been carried out by evaluating their dimensions in means of opening, height of center, height of springing, distance between center and springing, and radius and the relations among them. By evaluation of number of centers and relation between center and springing the type of the profile is determined. According to all these criteria, it is understood that most of the arches located at the ground floor are pointed and semi-circular arches. The types of vaults used for support of staircases are semi-circular and depressed vaults. (Drawing 2.32)

2.2.2.2 FRAME CONSTRUCTION

Some of the vertical, horizontal elements as well as the superstructure of the building are constructed with timber frame construction techniques. (Drawing 2.31)

2.2.2.2.1 Vertical Elements Constructed With Frame Construction Technique

- **Timber Skeleton Walls**

Timber skeleton construction are used for some of the partition walls in the first and mezzanine floors of the building. There are two types of techniques. In timber skeleton wall construction Type 1 (TFW1), there are vertical main supporters that consist from rectangular timber studs. We don't have information whether there are diagonal timber elements are used or not since all the surfaces are plastered. As far as it is observed under the scraped portions of plasters, in this type, two sides of the walls are covered with roughly cut wooden laths having 3-4 cm thickness. The plaster is applied onto these wooden laths. In the applications of

the walls of the mezzanine floor, wire mesh is nailed onto the wooden laths so as to increase the plaster application efficiency.

The timber skeleton wall construction Type 2 (TFW2) is observed in the space located at the roof floor. The main structural elements consist from vertical timber studs (0.08x0.15 m) and diagonal elements (0.07x0.12 m) located between them. Among the main vertical elements there are secondary vertical elements (0.07x0.12 m) located with 0.50-0.60 m intervals. The construction is covered only from interior surface with wood laths in 3.4 cm thickness. The interior surface has lime plaster finishing. From the exterior there aren't wooden lath and plaster application.

The third type of timber frame construction consists from timber frame elements and plywood sheets inserted among them. The rectangular frame elements with 0.04x0.04 m dimensions are connected to each other vertically and horizontally establishing a frame. Plywood sheets are nailed onto the frame elements. By this way, the later added sections in the space 101 are constructed creating partition wall and ceiling surfaces.

2.2.2.2.2 Horizontal Elements Constructed With Frame Construction Technique

- **Timber Flooring**

The floorings of the roof, mezzanine and some portions of the first floor are constructed with timber flooring construction techniques. Timber flooring construction consists of rectangular timber beams (0.08 x 0.15 m) used as main spanning elements. They are supported by the masonry walls generally. As it is observed in the ground floor, they are supported by the metal I beams located on the masonry walls in the first floor level. Between the main beams perpendicular to them, timber beam pieces are placed with some intervals. In the intersection points of the timber and vaulted floorings larger-sectioned rectangular timber beams (0.15 x 0.15) are used.

In order to support the first floor walls constructed in south-north directions, timber beams and I beams are located next to each other so as to increase the load bearing capacity against the load of the walls as a beam. Timber boarding with 1-2 cm thickness is used as the finishing materials. They are nailed onto the timber beams in opposite direction. Commonly, two types of timber boarding with thickness between 0.09-0.13 m and between 0.18-0.25 m are used.

2.2.2.2.3 Superstructure Constructed With Frame Construction Technique

- **Timber Truss Construction**

The main supporters of the superstructure consist from six timber trusses supported by the west and east walls of the main building. They span the building from one end to another. The triangular truss consist of two main beams (0.08x0.20 m), two diagonal rafters (0.05x0.19 m) and three vertical posts (0.16x0.20 m) connected to each other with bolding method. For the connections, rectangular metal elements with 4-5 cm width and 0.45 m length placed on each facade of the element. They are bolded with dowels through these metal pieces. The secondary structural elements consist of diagonal elements and horizontal bonding elements connecting each main structural element to each other. Onto the main rafters of the trusses under tile roof tiling boarding are located in the opposite direction of the trusses. Black water insulation sheeting is load onto the timber boarding. Finally, Marsilian roof tiles with approximately 0.25x0.45 m dimensions are situated as finishing layer.

2.2.2.3 POST AND LINTEL CONSTRUCTION TECHNIQUE

There are reinforced post-lintel constructions applied in the building. The elements of post and lintel construction consist of reinforced concrete columns, beams and slabs. There are three types of applications. In PL 1, there are reinforced concrete post and lintels only. The vaulted and timber flooring in the space G05 is supported in the mid portion of the space by this technique. The RC columns have rectangular plans with 0.30x0.30 m dimensions.

In PL2, the RC columns (0.30x0.30 m) and beams support the RC slab flooring as in the south terrace of the building. The RC slab has approximately 0.20 m thickness. From the scraped portions, the steel rods of the structure can be observed. The north edge of the terrace is supported by the masonry wall of the building.

2.2.2.4 COMPOSITE CONSTRUCTION TECHNIQUE

- **Timber Frame Walls located on Brick Masonry Walls**

There are composite walls which are composed of two different techniques: brick masonry technique and timber skeleton technique. Up to a level brick masonry wall is constructed with 15 cm thickness. The rest of the wall is constructed with timber frame technique without infill and clad with wood laths. The thickness of the timber frame portion is 20 cm. As far as it is observed during the site survey, the west wall of space 120 and east wall of space 118 are constructed with this technique. In space 118 the brick masonry portion continues up to 1.60 m height, while in the wall of space 120 it continues up to 0.55 m height.

2.2.3 STRUCTURAL SYSTEM

The structural system analyses include principles of load distribution throughout the building and the behaviors of the structural elements under these loads. The last part includes the relation between the structural design and the building type (functional use) of the building. Three principles of structural systems are applied in the building: Load bearing system, frame system and arched system. (Drawing 2.33)

The load bearing system elements consist of continuous elements as walls, and single elements as piers. The arched system elements include transition elements as arches and space covering elements as vaults.

Horizontal frame elements include timber beam flooring, (RC) slab flooring, RC beams which transmits the floor loads towards vertical structural elements. (RC) columns supply vertical load distribution. In addition to this, the superstructure has trussed system which is a special structural design of frame system transforming load both vertically and horizontally.

The superstructure consists of pitched roof which has four inclination faces. As parallel to the inclinations, the loads of the superstructure are distributed in four direction towards the exterior walls of the building. Most of the load of the superstructure is supported by truss elements which lay in east-west direction spanning 16 m. The wide span of the superstructure is achieved through trussed system that transmits the loads through truss members to the bottom ends of the truss, where they connect to the load bearing walls. The truss elements are supported by east and west walls of the main building.

The exterior walls are the main load bearing walls of the building since they transform the vertical loads of the superstructure and bear against lateral loads. Most of the load coming from the superstructure are transformed through the east and west walls. The north and east exterior walls support the rest of the superstructure loads coming from north and south facades of the roof respectively.

The flooring elements transmit their own loads and the live loads of the first floor to the load bearing walls. The direction of the load distribution from floorings towards walls in the first and mezzanine floors are shown in Figure. In the ground floor, the interior load bearing walls transform the load coming from the first floor to the foundations. There are arches located on these walls in order to span wide openings in the walls. The load of the arches is distributed towards the pillars.

2.2.4 MATERIAL DETERIORATIONS AND STRUCTURAL DEFORMATIONS

Evaluation related to the condition of existing situation and physical problems of the building is carried on through analysis on the material deteriorations and structural deformations. The investigations base on visual analysis of weathering forms on the site and mapping of the observations onto the survey drawings in result. By mapping, the distribution of the decays throughout the building is visualized in order to understand the causes and factors of the problems. (Drawings 2.34 and 2.35)

2.2.4.1 WEATHERING FORMS

The classification of weathering forms are established under five groups: Discoloration, detachment, material loss, fissures/deformation and finally, structural deformations.

Discoloration/deposits states alteration in original color of the material. The change of color originates either physically as a result of deposits or chemically due to chemical weathering. There are five types of discoloration/deposits due to their causes observed in the building. In case of high water content, the surface of the material gets darker color than its original state. In state of loose salt deposits, a film of efflorescence turns the surface into white due to the deposit of the crystallized salts on the surface. The deposits of microbiological forms cause a green-brown bio film on the surface as a result of colonization of micro flora and bacteria. The original color generally changes into green-brown color. In the fourth group, black deposition is observed mainly due to deposition of air pollutants from the surface. In discoloration due to oxidation, chromatic alteration due to chemical weathering of metal material occurs.

Detachment groups, compromise the degradations in materials which cause voids in the infrastructure of the material. There are five types of detachment according to their formations as granular disintegration, crumbly disintegration, formation of holes, fiberisation and blind detachment. Granular disintegration states the detachment of material from the surface in granular sizes/ smallest particles like powder. They are commonly observed in the stone and plaster materials. In crumbly disintegration, the detachment occurs in larger compact pieces of irregular shape from the surface. Formation of holes which cause mass degradation in the material is observed in timber materials. The holes are formed by insects, which eat away the material while boring longitudinal holes within the section.

Fiberisation, which is observed in timber materials, compromises mass degradation of timber due to swelling and shrinkage cycles and exposure to the UV lights. These affects

decrease and weakens the density of the mass. Blind detachment occurs in connection faces of finishing materials such as plasters from the main material. When the contact is weakened the finishing material is liable to disconnect and detach from the main material.

Material loss, which has moderate damage level, is observed in two forms as contour scaling/flaking and outburst. In contour scaling/flaking type, there is uniform loss of material in layers parallel to the surface. In outburst, the material loss occurs by break out of large compact fragments from the material.

Fissures/deformation forms the fourth group of weathering form, which has severe damage level on materials. Fissure compromises the tiny cracks occurring within the material such as plaster, stone or timber. They may stem from the change of water content or swelling-shrinkage cycles. Deformation compromises the loss of original form of materials such as timber or metal.

The last group includes structural deformations, which constitute the very severe damage level. It includes structural cracks, sagging and material loss. Structural cracks are commonly observed in masonry elements through their joints. Sagging, which is observed in flooring elements, states the loss of horizontal axis of the structural elements and displacement from its original position. The structural material loss compromises the severity of break out of material in structural scale.

2.2.4.2 DAMAGE LEVELS

These groups define the visual form the deterioration as well as the damage categories with respect to their weathering rates. The damage categories are grouped under five degrees as: Very slight, slight, moderate, severe and very severe damages. From discoloration to structural deformation, the density and severity of the damage increases from micro processes to macro weathering. (Fitzner)

2.2.4.3 CAUSES OF WEATHERINGS

The observations related to weathering forms throughout the building are discussed with assessments of factors causing them in order to find appropriate solutions related to the sources of these problems during the conservation process of the building. The causes are classified in four groups as physical, chemical, biological and environmental causes. Each group is defined with factors leading to these causes.

Among the physical causes, 'rising damp', which constitutes the rising up of ground water through the walls, is the most extensively problem observed in the building. It accelerates several weathering forms. All the masonry walls in the ground floor suffer from rising damp problem resulting with high water content.

Rain penetration states the passage of rain water through the superstructure due to lack of water installation in the roofing. This problem is observed on some walls in the first floor and on the ceilings of the mezzanine floor spaces. Faulty rainwater disposal stems from the inadequate construction details and loss of material in the rainwater. This problem causes the physical problems on the facades mostly. Faulty plumbing covers the problem of inadequateness in the wastewater disposal.

Chemical causes mainly cover the problems occur due to chemical reactions in the material. Atmospheric pollution, contact with cement materials, and internal reactions of construction materials of RC elements are important factors causing chemical degradations in the building. Due to the location of the building in the city, it is affected from pollutants produced by the traffic. The atmospheric pollutants including harmful compound particles deposit on the surface causing soiling problem that can be observed visually. In further stages, they get into chemical reactions with the stone or plaster material. This problem is observed mostly on the stone finishes of the facades such as door and window sills. The effect of atmospheric pollutants can be seen on the portions which are not washed by rainwater well, such as under balcony.

In state of contact with cement materials, the soluble salts in cement based materials penetrate the original materials -such as stone, brick, plaster and mud- causing salt crystallization there. The third group states the chemical reaction occurring in the reinforced concrete based elements due to the ongoing reactions of salt and cement in the mixture of the material. With the effect of the humidity in the environment the steel mesh in the element gets oxide and joins to the chemical reactions process. This results with disconnection of the cement and oxide iron bars from each other, which threatens the element with structural risk.

Biological causes affecting the formation of physical weathering consist of two groups: Growth of plant and insect attacks. The growth of plant occurs in macro scale, which is commonly observed in the joints of masonry elements. In their further case they cause very severe problems in structural elements. Insect attack affects commonly the timber materials. The insects which bear holes and channels by eating away the material cause mass degradation in timber elements. In further cases, this may result with severe risks in structural elements.

Environmental origin effects cover exposure to the UV lights and thermal effects. They cause degradation of material by changing the characteristic of the material, such as in timber. Lack of dilatation precautions accelerate their effect on materials which can be visualized as alteration of original color.

2.2.4.4 EVALUATION OF THE PHYSICAL CONDITION OF THE BUILDING

2.2.4.4.1 Weatherings Observed

Main weathering problems observed extensively in the building is detachment and material loss of the building materials especially in the ground floor. (Figure 2.28) There is granular to crumbly disintegration of plaster, mortar and stone materials on the facades of the ground floor spaces. According to the intensity of the problems, material loss as in contour scaling/flaking or breaking out forms are observed. In some portions there are fissures in the stone materials. The timber elements used with masonry elements as bonding beams or flooring beams have fiberisation problems due to high water content and formation of holes problem due to insect attacks. Holes born by insects accelerate the fiberisation of the timber material.

In the second floor, the main problem is the blind detachment of the plaster material from their contact surface. These cause fissures on the plaster which can be visually observed. There are detachments in finishing layers of ceilings. The east wall of the second floor suffers from dampness problem, which result with high amount of detachments in plaster and disintegration of stone material.

In the mezzanine floor, the high water content in ceiling elements causing fiberization of timbers is a main problem. In the superstructure, timber elements are affected from thermal effects and swelling/shrinkage cycles occurred in the roof. This has resulted with tiny cracks/fissures and deformations in timber elements.

There are structural cracks due to vegetation observed in the masonry elements of the building. (Figure 2.29) There is a saw-tooth type of crack on the second floor level of the east wall of the building. In the depot building, there is a severe crack in the south-east corner, which expands towards east and south walls respectively. The walls are displaced from the corner related to the crack. The growth of macro plant accelerates the crack with its roots moving through the walls.

Both in vaulted and timber floorings, there is sagging problem seriously. The brick vault portions between the metal I beams have lost their horizontal axes. The timber brackets which are placed to support the vaulted flooring in space G06 are totally degraded. In addition to this, there is material loss in structural severity degree in some portions of the timber flooring as in space 124. In ceiling and flooring of space 202, is partially destroyed in order to install the ventilation equipment.

In some portions of timber flooring due to water problem, the timber elements have been seriously decayed. (Figure 2.30) The reinforced concrete elements especially the RC slabs and beams have serious structural problems due to the chemical reactions in the infrastructure. (Figure 2.31) There is material loss as flaking in the concrete portion of the elements due to the oxidation occurred in the steel rods. This problem is observed especially in the RC slab of south terrace and the space G10.

2.2.4.4.2 Factors Causing The Physical Weatherings

The reasons of physical weathering mainly depend on uncontrolled water movements throughout the building, contact with cement materials, inadequate material applications and improper interventions carried on throughout the building. Furthermore, the abandonment of the building recently accelerates the degradations.

The main water movement through the building stems from rising damp problem which is observed in all masonry walls of the ground floor. The visible water height on the facades is observed as 0.50-1.00 m from the ground since evaporation occurs due to contact with the sun. However, from the interior walls, it is understood that the water rises up to first floor in most portions.

The main source causing the rising damp problem probably stem from the geological conditions, which may contain high amount of underground water coming from the sea. The concrete and screed floor coverings all around and in the building lead to raise of underground water upwards through the capillaries of stone and mud mortar materials of the masonry elements. Besides, the cement plaster and mortar applications on the surfaces prevent evaporation of rising damp to the atmosphere. They increase the height and amount of water rising upwards. In addition to this, the high content of soluble salts in cement materials penetrate into original materials (i.e. stone, plaster and mortar) with the existence of rising damp and cause salination problems. Under these conditions, the

The second water source is the rain water which penetrates from the roof. As far as observed in the building, in some periods of the building the lack of water installation has caused high amount of on the ceilings of the first floor and on some corners of the interior walls. But, the existing situation shows that recently some precautions are taken by renewal of dilatation in the superstructure.

The third source of water originates from faulty plumbing, which covers rain and waste water disposals. In the facades the rainwater downspouts are missing. This result with washing of the facades with collected water. The installations belong to the waste water disposal have water linkage problem, which cause as blind detachment of plaster in the first floor and material loss of mud and stone material in the ground floor.

The atmospheric pollution affects the facades elements especially the cut-stone window and door sill portion. They cause black deposition on the stone which may cause weathering of stone materials in further stages.

The results of inadequate construction details harm the east of the main building most. The construction of the depot building adjacent to the main building wall causes dilatation problems between the two buildings. Moreover, inadequate slope of the terrace of the depot building collects water in the intersection of the terrace roof and east wall of the main building. These cause detachments in the plaster and disintegration of the stone as well as supply suitable conditions for the growth of macro plants in the joints of the east wall. They cause structural cracks.

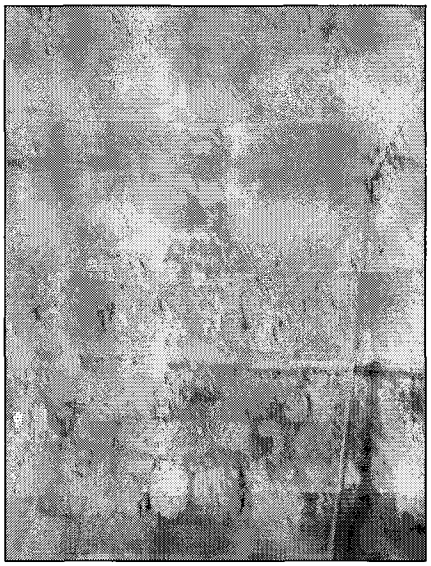


Figure 2.28 Weatherings on masonry elements

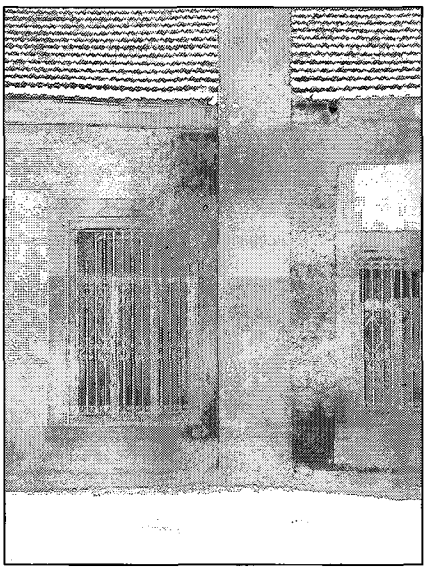


Figure 2.29 Weatherings on east facade

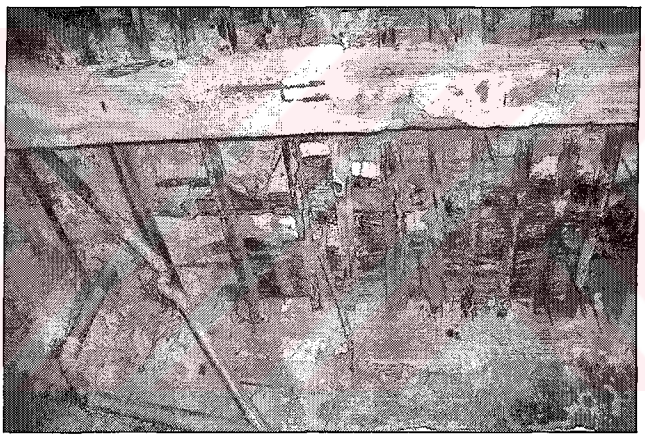


Figure 2.30 Weatherings in timber flooring

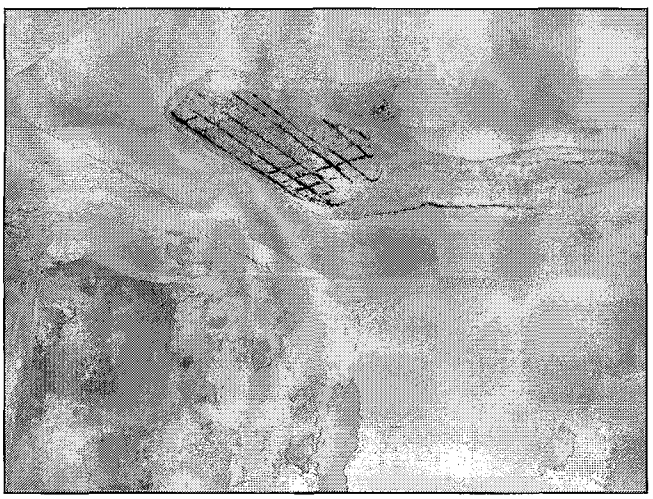


Figure 2.31 Weatherings in reinforced concrete slab

A) ELEMENTS CONSTRUCTED WITH MASONRY CONSTRUCTION TECHNIQUES

A1) VERTICAL ELEMENTS

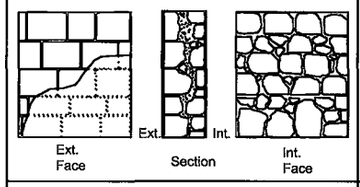
STONE MASONRY WALLS

(Construction Technique of Openings & Openning Elements) NOTES

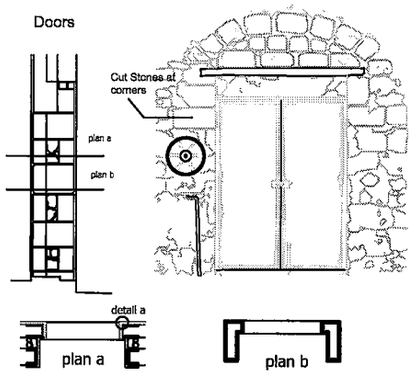
CONSTRUCTION MATERIALS:

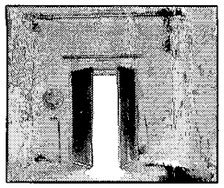
SMW1

Unit Elements	Cut Stones at the ext. face & rough cut stone with rubble stone at the int. face
Binding Material	Lime Mortar* (exterior face) Brownish Mortar* (interior face)
Finishing	Lime Plaster and paint (ext. face) Cement Plaster (int. face)
Thickness	55-65 cm.



OPENINGS: Arch. Elements

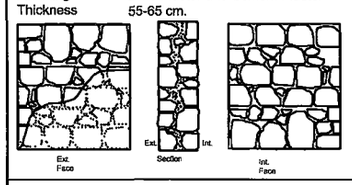




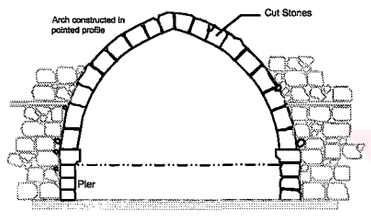
In this technique the spannig for door openings in the ground floor are supplied by *load distributing* arches and timber lintels. Rectangular timber lintels with 0.10 m height is located as lintel of the opening. However, the load of the wall is supported by the *load distributing* arch which is located at the top of the timber lintel. The arches are constructed with rough cut stones during the construction of the walls.

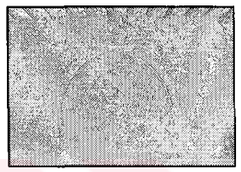
SMW2

Unit Elements	Rough cut stone with rubble stone at both faces
Binding Material	Brownish Mortar*
Finishing	Lime Plaster and Cement Plaster
Thickness	55-65 cm.



OPENINGS: Arches & Piers





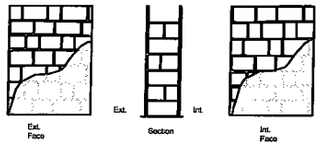


In order to supply passage through the walls, wide openings are located in the walls. These openings are spanned with cut stone arches, which are supported by stone piers within the masonry walls.

The unit materials are coarsed randomly. With some intervals, timber bond beams are used horizontally.

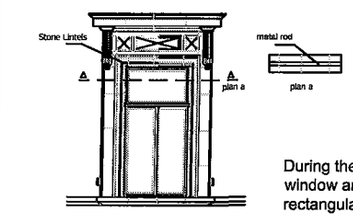
SMW3

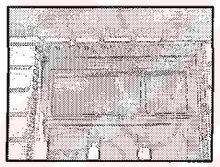
Unit Elements	Cut stone at both faces
Binding Material	Lime Mortar*
Finishing	Lime Plaster*
Thickness	45-50 cm.



OPENINGS: Arch Elements

SMW 3a/ Walls in the Main Building

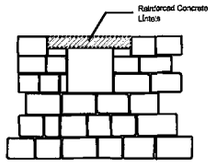




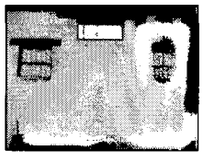
During the construction of the openings at the exterior walls rectangular cut-stone window and door sills are constructed together with the wall. In all types, rectangular metal lintels are fixed into the sill for the span of the opening.

OPENINGS: Arch Elements

SMW 3b/ Walls in Depot Building



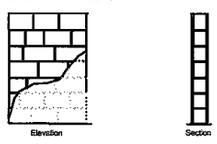
The window and door openings located on the walls are spaned with rectangular concrete lintels.



There are two types of stone material used. In the north and west walls of the depot building, the cut-stone materials having 30-65 cm length and with and approximately 50 cm height are used; while in the south and east walls of the depot building cut-stones with 35-50 cm length and 20 cm height are used. In all walls cement mortar is uaed as binding material.

SMW4

Unit Elements	Cut stone at both faces
Binding Material	Lime Mortar*
Finishing	Lime Plaster*
Thickness	20-30 cm.



OPENINGS: Arch. Elements

NOT APPLICABLE

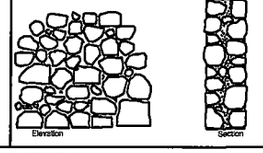
This technique is applied in some of the interior walls of the main building. Since all the wall surfaces are plastered, and there isn't any demolishment within the walls, we can not observe detailed information related to construction materials or techniques in these walls.

A1) VERTICAL ELEMENTS (walls continued)

(Construction Technique of Openings & Openning Elements) NOTES

SMW4

Unit Elements	Rubble stone
Binding Material	Cement Mortar*
Finishing	Cement Plaster*
Thickness	50-60 cm.



OPENINGS: Arch. Elements

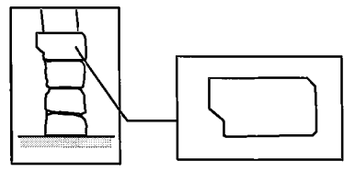
NOT EXISTING

A1) VERTICAL ELEMENTS (Piers)

PIERS

PIERS

Unit Elements	Cut Stones
Binding Material	Lime Mortar* (t=1-2 cm.)
Finishing	Lime Plaster and/or Cement plaster
Thickness	55-65 cm.



In the case of spanning arches, piers are located at the intersection points of two arches. The arches have rectangular shapes with 60x60 cm dimensions. The actual construction technique of the piers can not be defined since there isn't information related to the section of the piers.

Tha last cut stones which are located at the springing level, are profiled stones.
In the case of arches located on the wall, the piers are located at the underneath of the arches. The piers are constructed with the construction of the SMW2.

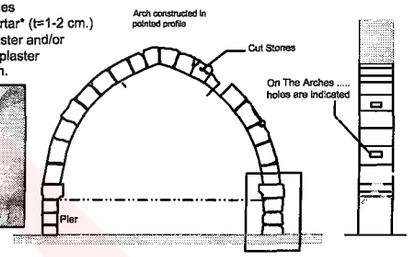
A2) HORIZONTAL ELEMENTS

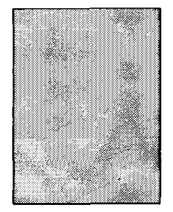
CUT STONE ARCHES

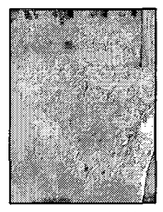
ARCHES

Unit Elements	Cut Stones
Binding Material	Lime Mortar* (t=1-2 cm.)
Finishing	Lime Plaster and/or Cement plaster
Thickness	55-65 cm.





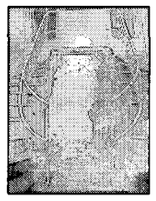






All the arches in the building are constructed with cutstone masonry technique. Cut stones have approximately 0.28x0.50x0.55 m sizes where 0.55 is the widht. Lime mortar with 1-2 cm thickness is used as binding material. They have pointed or semi-circular profiles. Thay are supported by stone piers. In pointed profiled arches there isn't a single keystone. Instead, 9 rows of cut stones constitute one arm of the arch that are symetrically aaranged on each side.

VAULTS



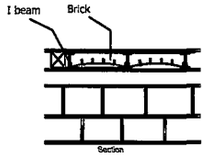
Cut stone vaults are constructed in order to support the staircases. They either carry the slab or the steps of the stairs. The construction details of the vaults cannot be analysed since they are all plastered and there are no demolished sections.

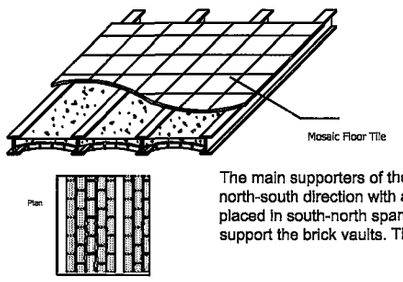


VAULTED FLOORING

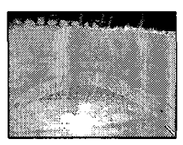
VAULTED FLOORING

Main Elements	I Beams 8X18 cm.
Secon. El. (Infills)	Brick
Supporter	I Beams (H=18 cm.)
Finishing	Mosaic Tiles (20x20 cm) or Screed









The main supporters of the vaulted flooring are metal I beams located in north-south direction with approximately 0.50-0.60 m intervals. They are placed in south-north spanning direction onto the stone masonry walls so as to support the brick vaults. They have 0.08 m width and 0.18 m height.

Drawing 2.30 Construction Materials and Techniques I

B) ELEMENTS CONSTRUCTED WITH TIMBER FRAME CONSTRUCTION TECHNIQUE

Some of the vertical, horizontal elements as well as the superstructure of the building are constructed with timber skeleton (frame) construction techniques.

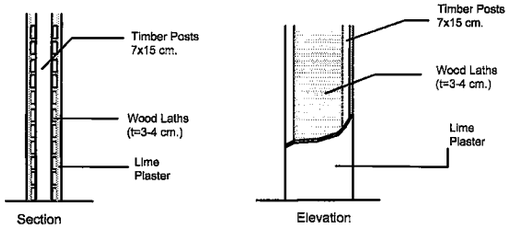
B1) VERTICAL ELEMENTS

TIMBER SKELETON WALLS

TFW1

CONSTRUCTION MATERIALS:

Main Elements	Timber Posts 7x15 cm.
Secondary Elements	Timber Horizontal Beams
Finishing	Wood Laths & Lime Plaster *
Thickness of the Wall	20 cm.

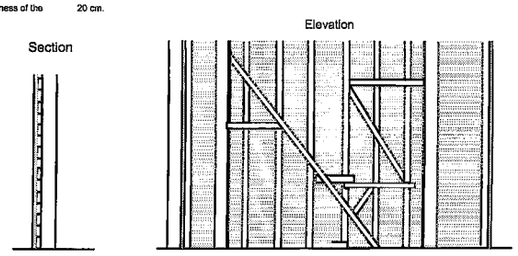


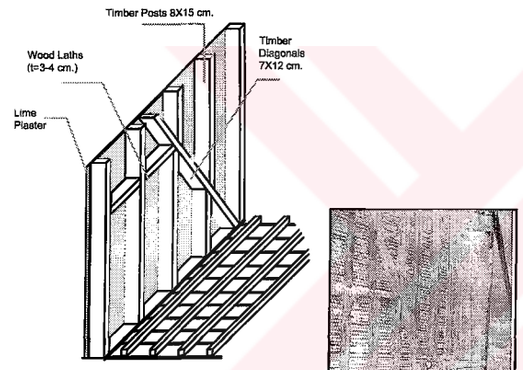
In timber skeleton wall construction Type 1 (TFW1), there are vertical main supporters that consist from rectangular timber studs. We don't have information whether there are diagonal timber elements are used or not since all the surfaces are plastered. As far as it is observed under the scraped portions of plasters, in this type, two sides of the walls are covered with (rougly cut) wooden laths having 3-4 cm thickness. The *plaster* (type of plaster?) is applied onto these wooden laths. In the applications of the walls of the mezzanine floor, wiremesh (kümesteli) are nailed onto the wooden laths so as to increase the plaster application efficiency.

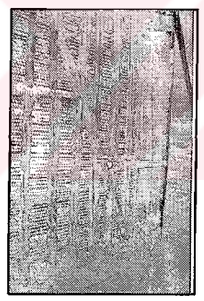
TFW2

CONSTRUCTION MATERIALS:

Main Elements	Timber Posts and Diagonals 7x15 cm.
Secondary Elements	Timber Horizontal Beams
Finishing	Wood Laths & Lime Plaster *
Thickness of the Wall	20 cm.



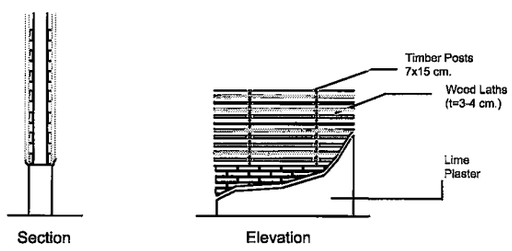


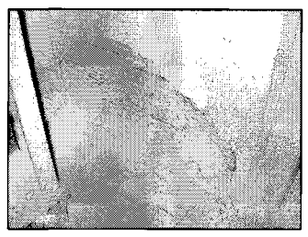


The timber skeleton wall construction Type 2 (TFW2) is observed in the space located at the roof floor. The main structural elements consist from vertical timber studs (0.08x0.15 m) and diagonal elements (0.07x0.12 m) located between them. Among the main vertical elements there are secondary vertical elements (0.07x0.12 m) located with 0.50-0.60 m intervals. The construction is covered only from interior surface with wood laths in 3.4 cm thickness. The interior surface has lime plaster finishing. From the exterior there aren't wooden lath and plaster application.

C) ELEMENTS CONSTRUCTED WITH COMPOSITE CONSTRUCTION TECHNIQUE

BM&TF Wall **Brick masonry and Timber Frame Wall**





There are composite walls which are composed of two different tachniques: brick masonry technique and timber skeleton technique. Up to a level brick masonry wall is constructed with 15 cm thickness. The rest of the wall is constructed with timber frame technique without infill and cladded with wood laths. The thickness of the timber frame portion is 20 cm.

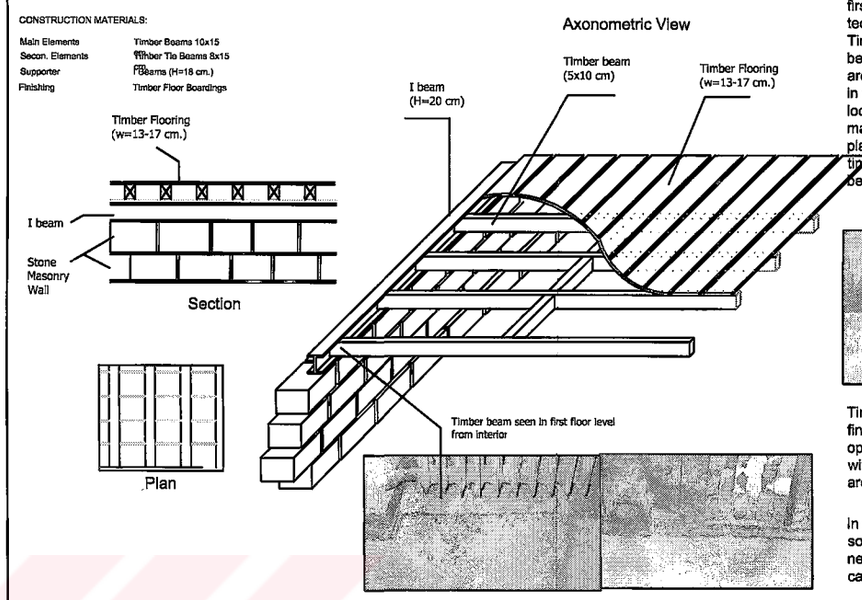
B2) HORIZONTAL ELEMENTS

TIMBER FLOORING

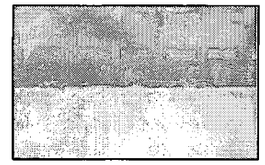
TFL

CONSTRUCTION MATERIALS:

Main Elements	Timber Beams 10x15
Secon. Elements	Timber Tie Beams 8x15 cm.
Supporter	I Beams (H=18 cm.)
Finishing	Timber Floor Boardings



The floorings of the roof, mezzanine and some portions of the first floor are constructed with timber filoring construction techniques.
Timber flooring construction consist of rectangular timber beams (0.08 x 0.15 m) used as main spaning elements. They are supported by the masonry walls generally. As it is observed in the ground floor, they are supported by the metal I beams located on the masonry walls in the first floor level. Between the main beams perpendicular to them, timber beam pieces are placed with some intervals. In the intersection points of the timber and vaulted floorings larger-sectioned rectangular timber beams (0.15 x 0.15) are used.



Timber boardings with 1-2 cm thickness are used as the finishing materials. They are nailed onto the timber beams in opposite direction. Commonly, two types of timber boardings with thickness between 0.09-0.13 m and between 0.18-0.25 m are used.

In order to support the first floor walls constructed in south-north directions, timber beams and I beams are located next to each as in figure so as to increase the load bearing capacity against the load of the walls as a beam.

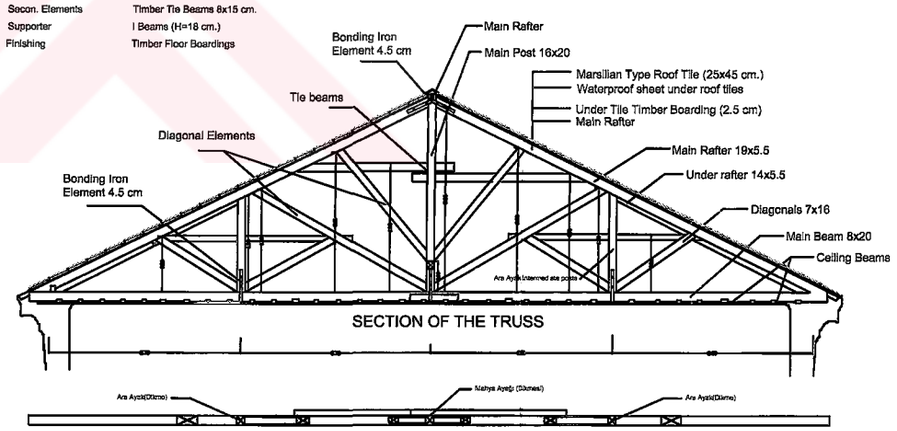
B3) SUPERSTRUCTURE

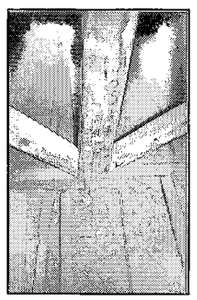
TIMBER TRUSS

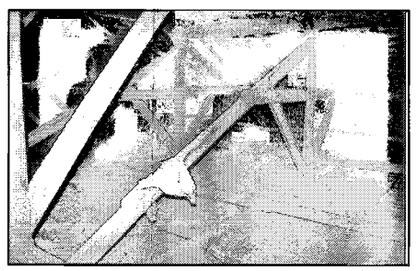
Truss

CONSTRUCTION MATERIALS:

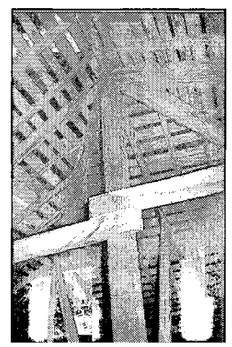
Main Elements	Timber Beams 10x15 cm.
Secon. Elements	Timber Tie Beams 8x15 cm.
Supporter	I Beams (H=18 cm.)
Finishing	Timber Floor Boardings





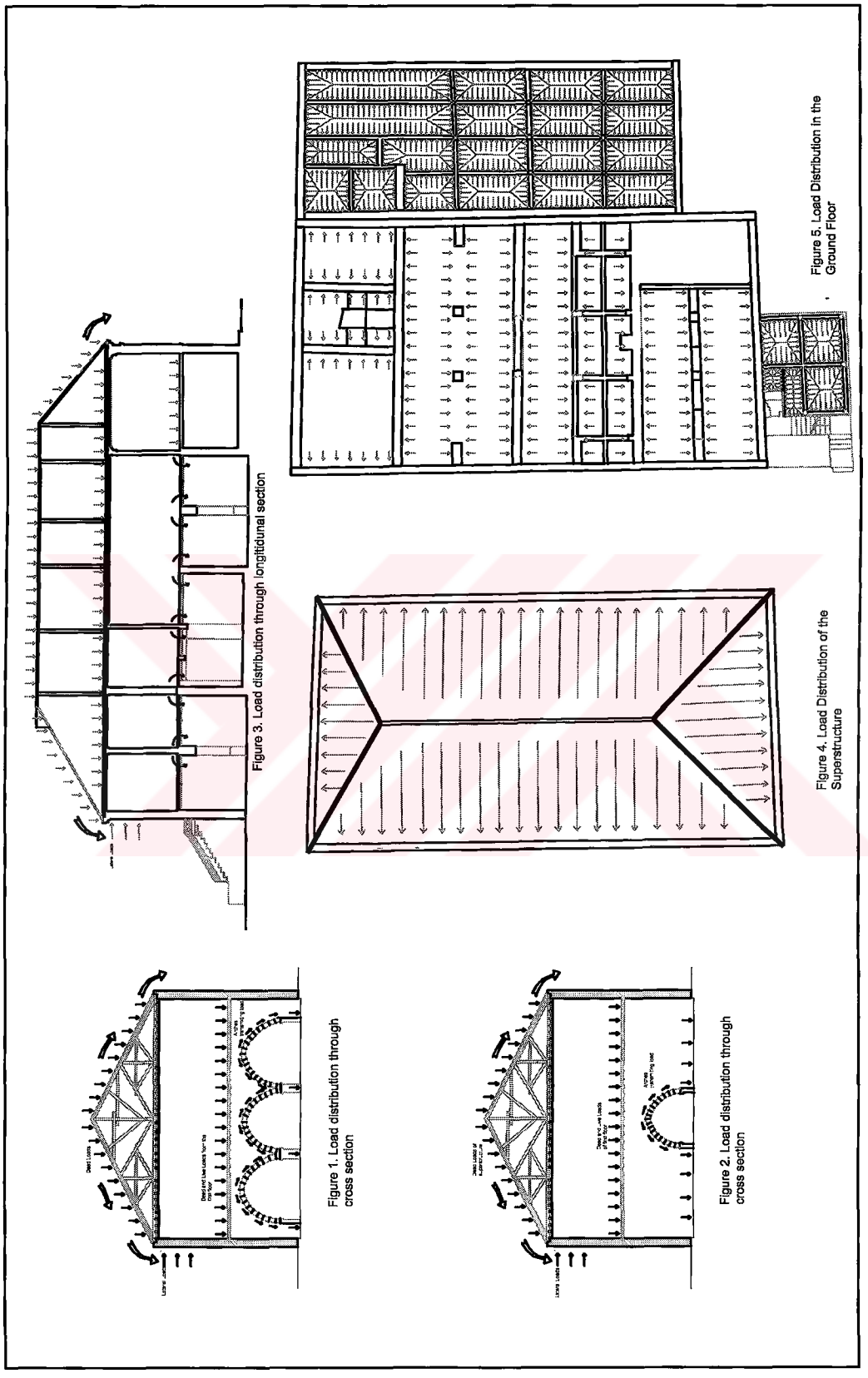


The main supporters of the superstructure consist from six timber trusses supported by the west and east walls of the main building. They span the building from one end to another.
The triangular truss consist of two main beams (0.08x0.20 m), two diagonal rafters (0.05x0.19 m) and three vertical posts (0.16x0.20 m) connected to each other with bolding method. For the connections, rectangular metal elements with 4-5 cm width and 0.45 m length placed on each facade of the element. They are bolded with dowels through these metal pieces. The secondry structural elements consist of diagonal elements and horizontal bonding elements connecting each main structural element to each other. Onto the main rafters of the trusses under tile roof tiling boardings are loeated in the opposite direction of the trusses. A black water insulation sheeting is laod onto the timber boardings. Finally, marsilian roof tiles with approximately 0.25x0.45 m dimensions are situated as finishing layer.

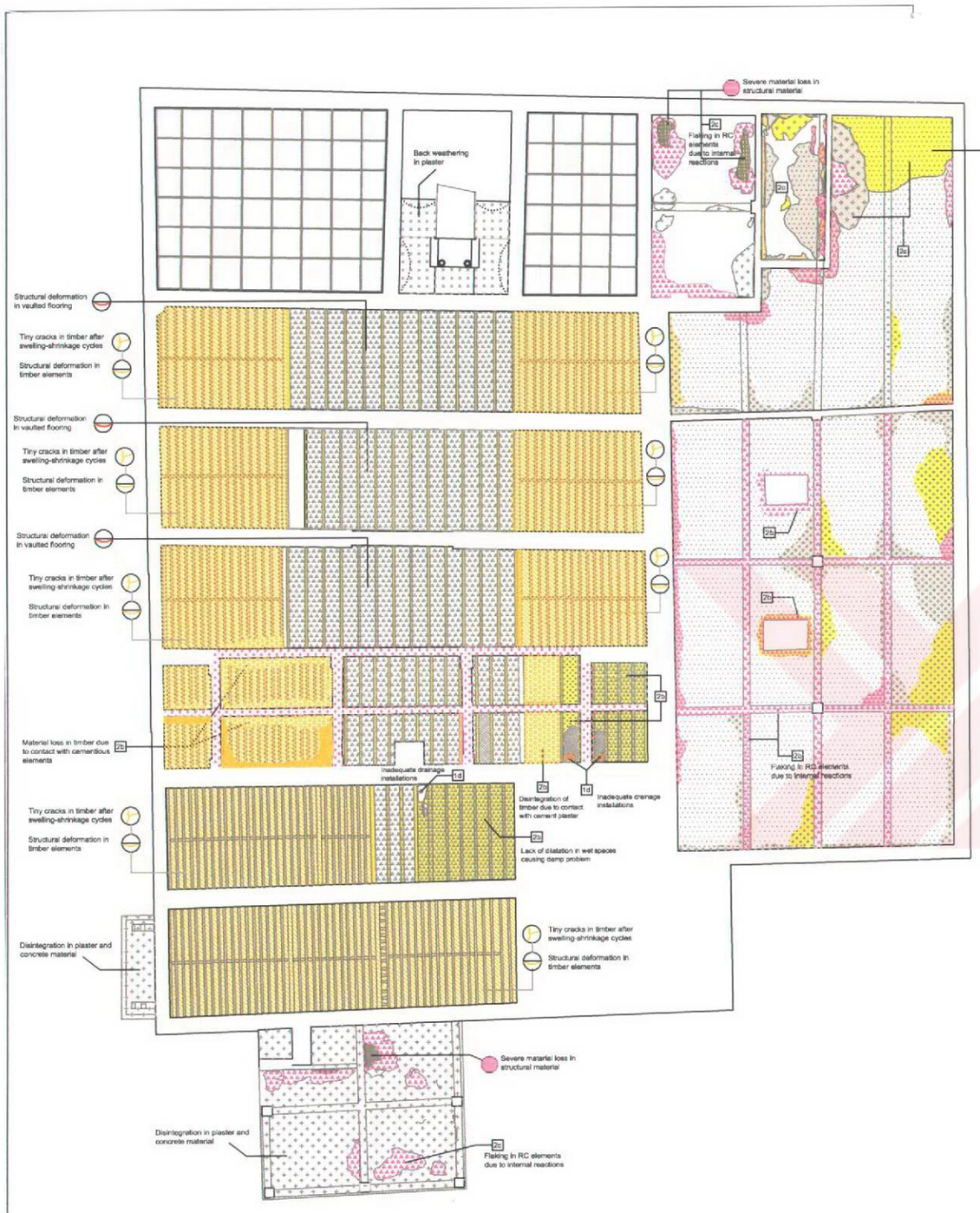


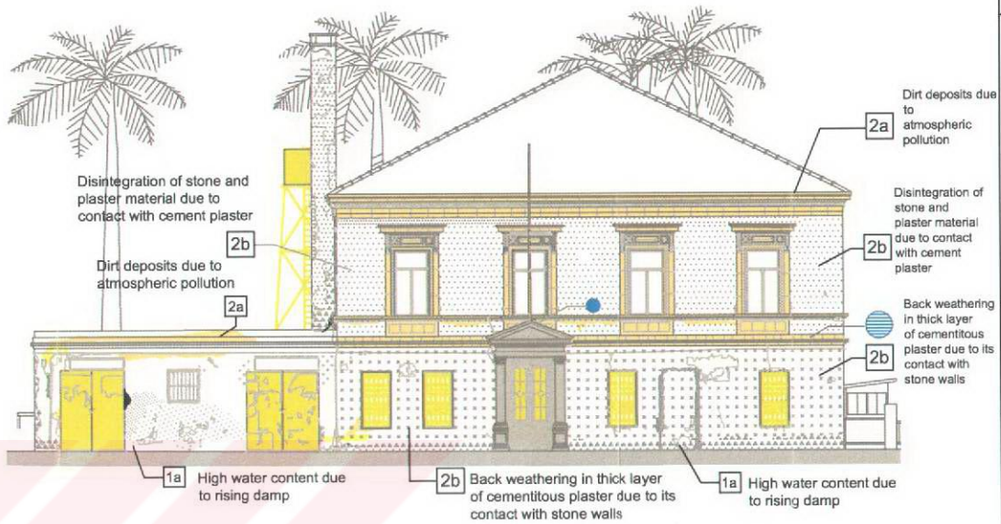
Drawing 2.31 Construction Materials and Techniques II

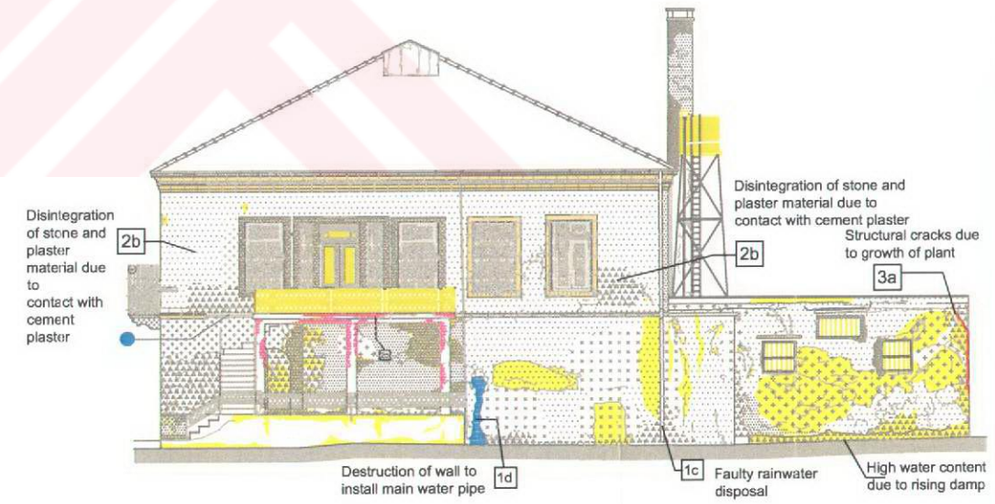
Drawing 2.32 Analysis on foundation and profiles of arches and vaults



Drawing 2.33 Analysis on structural system







MATERIAL DETERIORATIONS

DISCOLORATION/ DEPOSITS	Discoloration Due to High Water Content	
	Discoloration Due to White Deposits, Efflorescences	
	Discoloration Due to Biological Colonisation	
	Discoloration Due to Black Crusts, (Dirt Deposits)	
	Discoloration Due To Oxidation	
DETACHMENT	Granular Disintegration (Disintegration of the material in small particles)	
	Crumbly Disintegration (Disintegration of the material in bigger pieces)	
	Formation of Holes (Mass Degradation in timber due to insect attacks)	
	Fiberisation (Mass Degradation of Timber due Swel./Shrink.Cycle & UV Ligths)	
	Blind Detachment (Detachments in connection face of finishing materials such as plaster, from the main materials)	
MATERIAL LOSS	Contour Scaling/Flaking (Loss of material as layers paralel to the surface)	
	Breakout (Loss of material as big particules broken from the main material)	
FISSURES/ DEFORMATION	Material Cracks (Tiny cracks in stone material due to moisture; or in timber, plaster due to swelling/shrinkage affect)	
	Deformation (Loss of original form in timber ot metal elements)	

MATERIALS

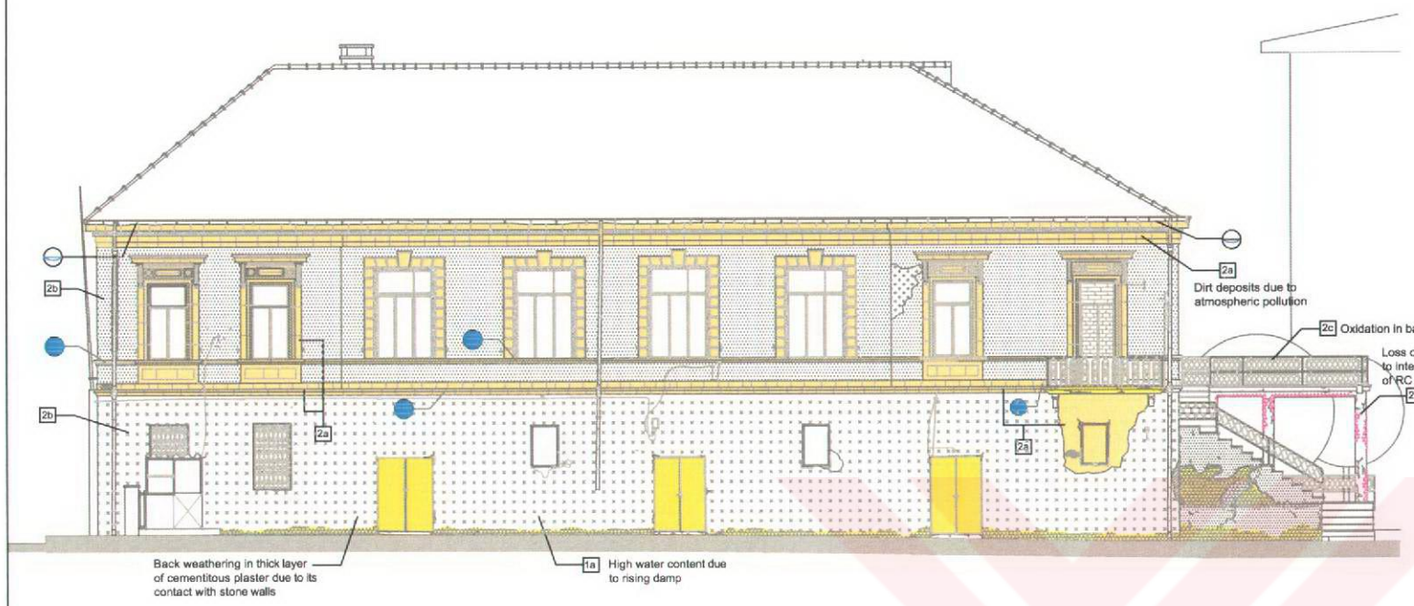
Stone	Plaster	Metal
Brick	Mortar	Plastic
Timber	Concrete	

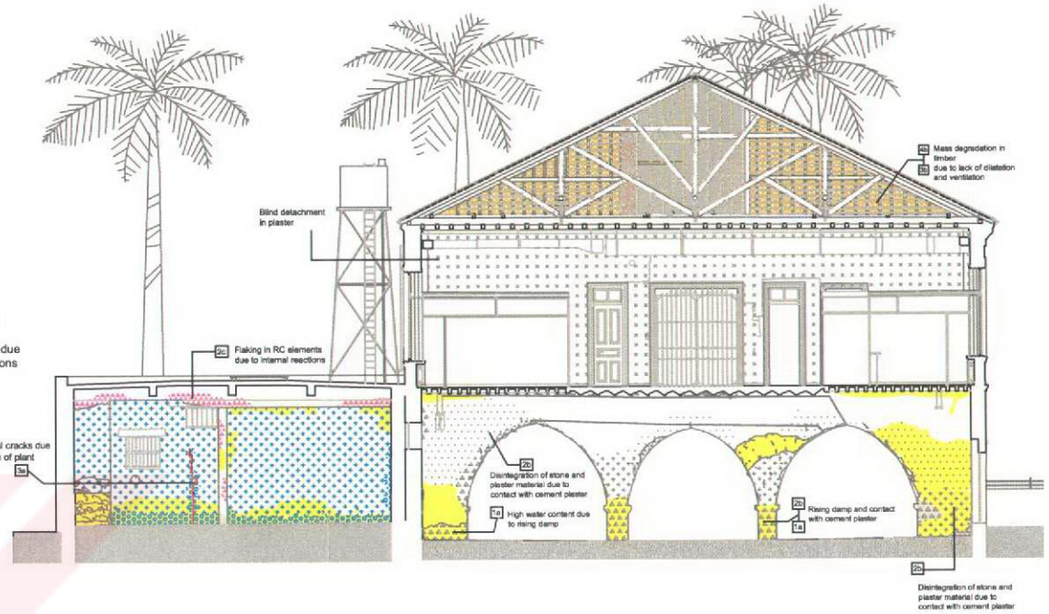
STRUCTURAL DEFORMATIONS	Structural Cracks (Due to Vegetation)	
	Sagging/bending (Loss of horizontal axis)	
	Material Loss (Break out of material in structural scale)	

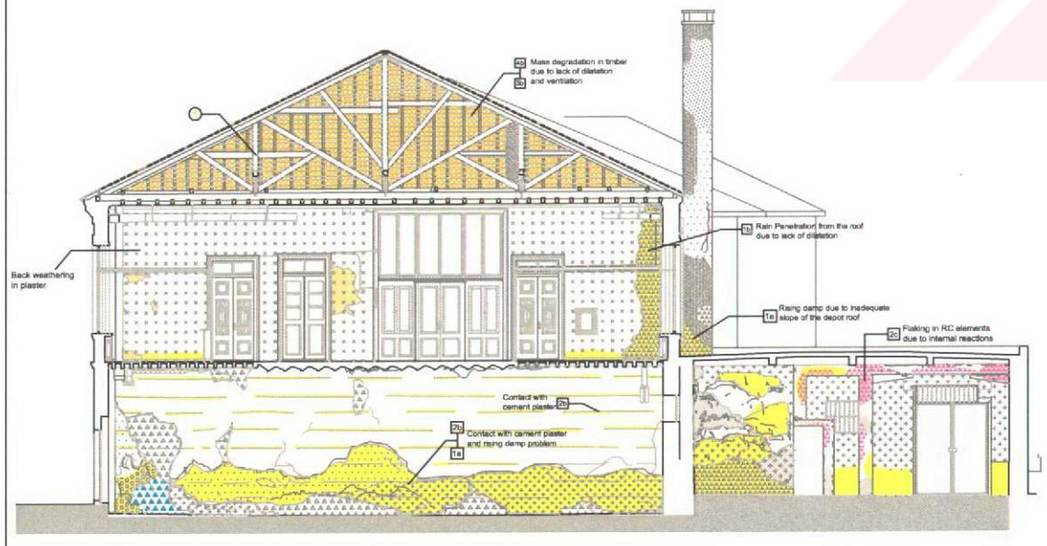
CAUSES OF DETERIORATIONS & DEFORMATIONS

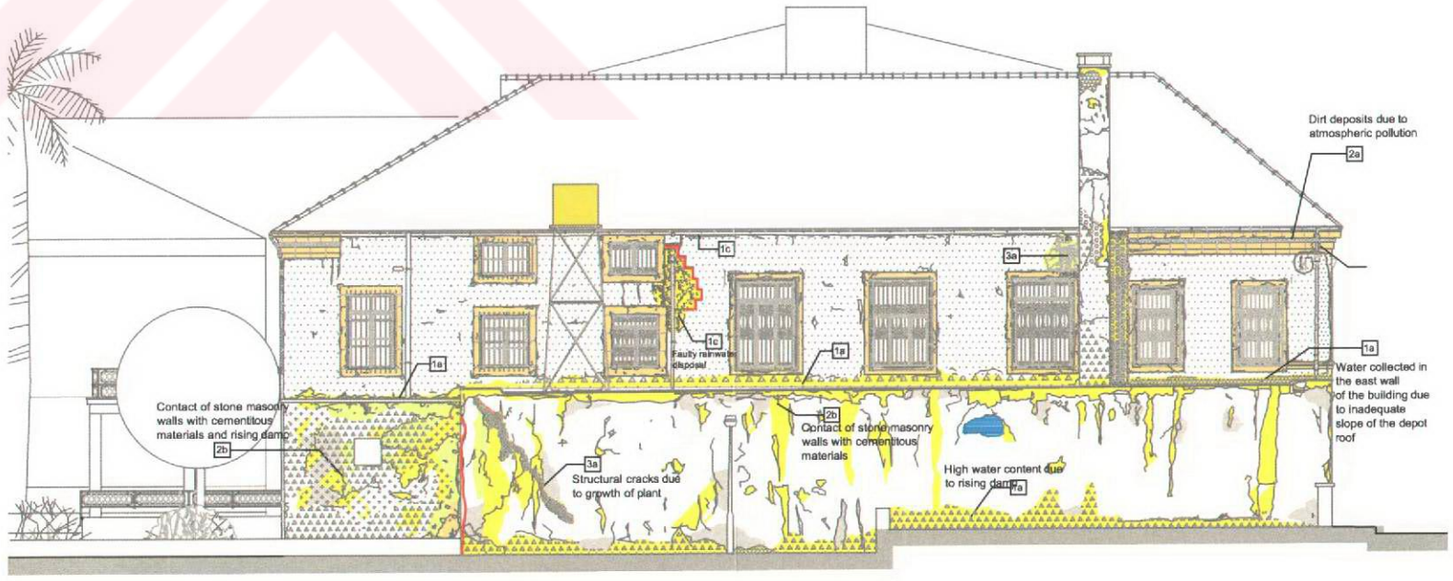
1) PHYSICAL CAUSES:	
a. Rising Damp	Inadequate construct interventions Geological conditions
b. Rain Penetration	Lack of Construc. Details
c. Faulty Rainw Disposal	Lack of Construc. Details
d. Faulty Plumbing	Inadequate Installations
2) CHEMICAL CAUSES:	
a. Atmospheric Pollution b. Contact with Cementitous Materials c. Internal Reactions of Constructional Materials	Environmental factors Inadequate interventions
3) BIOLOGICAL CAUSES:	
a. Growth of Plant b. Insect Attacks	
4) ENVIRONMENTAL CAUSES:	
a. Exposure to the UV Ligths b. Thermal & Humidity Effects	Lack of Dilatation and Ventilation

Drawing 2.34 Analysis on Material Deteriorations and Structural Deformations









Drawing 2.35 Analysis on Material Deteriorations and Structural Deformations

2.2.5 CHANGES IN THE BUILDING

Analysis on changes in the building has been carried on in order to understand the characteristics of the building related to its original architectural and physical properties together with its continuities and/or discontinuities throughout the periods. With this respect, the changes in the building is analyzed under addition, alteration, removal and missing topics by investigating the 'traces' coming from the building.

The evaluations base on evidences related to trace, remain or object itself as well as differences in construction material, technique or design and inadequate construction technique. (Drawings 2.36 and 2.37)

The west wall of the depot building is constructed inadequately adjacent to the east wall of the main building. Besides, the concrete lintels, which are contemporary construction materials, are used within the stone masonry wall construction. This shows that the exterior walls as well as its RC superstructure is later added constructions. The chimney and the water tank which is located on the terrace of the depot building are also later addition elements.

2.2.5.1 EVIDENCES ON ELEVATIONS

There are evidences showing that the finishings on the elevation of the main building are later added. From the un-scraped portions in corners of the entrance door of space G04, it can be observed that regularly cut-stones which have flash surface finishing are used for the construction of the exterior face of the walls. The exiting plaster posses cement material in its mixture. Moreover, there are severe displacements in plaster in some portions of the west elevation, which would not have happened if plaster applications had been original. In addition to this on the east and south elevations the cut stones are painted directly without plaster applications. The altogether evaluation of all these evidences show that the exterior facades of the main building used to have un-plastered cut-stone finishing and they have been plastered later.

On the north wall, between the two ground floor windows located at the west portion of the entrance door there is a later closed opening, which starts from the ground level up to 2.77 m with 1.25 m width. As far as observed in detail, the plaster finishing is applied in same period with the closing of this opening.

The second examinations on the facades are carried on for facade elements. On the window frames of north and west elevation, there are hinges located on the frames. This

shows existence of shutter elements on the windows once, which is missing now. The construction techniques of the iron flag column, which is located on the top of the pediment of the entrance door, show that it is a later construction. From this point on, it can be evaluated that the circular iron tubes (pipes) which are located on each side of the windows on the north and west elevations are also later added since they have similar construction material with it. They are also used to hang little flags on each side of the window. The iron grills located on the ground floor windows are also later additions since their construction detail and designs are contemporary.

The doors and windows located on the west wall of the ground floor spaces G04, G05 and G06 are altered by replacement of original elements. The construction details of the metal shutters of the windows and the inadequate construction technique of the metal doors show that they are not original elements designed to fit there. The balcony on the west wall has RC slab flooring supported by cut stone consoles. From the interior facades, there are traces around the supporters showing that some interventions are made. This may due to the alteration of the slab of the balcony.

The terrace has RC slab flooring supported by RC beams and columns, which are contemporary construction elements. Moreover, the steps of the staircases leading to the terrace are out of mosaic. This shows that the terrace is constructed into its existing form later. But the opening leading to the terrace in the first floor level from the building as well as the cut stone vault supporting the landing space of the staircases are original. Therefore, altogether evaluations of these traces show that there had been a previous element instead of the recent terrace which was reached by staircases and supplied entrance to the first floor of the building. But, information related to the actual form of this element and the staircases are not enough to define them exactly.

The downspouts of the rainwater drainage pipes are latterly added, because on the cut-stone jail, the original location of the pipes is observed. There are remains of metal hinges on the frames of the windows in the south elevation showing the existence of window shutters which are missing now. The iron grills on this elevation are fixed onto the window sills inadequately showing that they are later additions. Besides, there are traces related to an existence of a previous shutter element for the entrance door. It was probably fixed onto the door sill.

In the east elevation, the iron grills of the window openings are later additions due to the same reasons defined for the south elevations. Besides, the rain drainage pipes are fitted inadequately later.

2.2.5.2 EVIDENCES IN THE GROUND FLOOR

In space G01, there are alterations observed related to the staircase. The original structural system of the staircases base on symmetrically arranged vaults supporting the landing spaces and steps. The main landing space where the two stairs meet is supported by the cut-stone vault (VA 2). But, with later interventions, the VA 2 is filled with concrete converting the void of the vault into a massive rectangular fill. It is supported by two iron columns with 20 cm diameter. As far as it is understood from the traces, this filled part is a later addition. The balustrades which are constructed out of water pipes are also contemporary additions. In addition to this, the metal is also later additions.

In spaces G02 and G03 the cement window sills and mosaic skirting are later additions. According to the construction technique of the mosaic skirting the mosaic tiling of these spaces are later applications. The north wall of the space G04, have arches which are closed later with masonry walls. (Figure 2.32) As far as observed from the scraped portions of the plasters, three piers supporting the arches are found out. The row of arches which are closed lately, consist of a half arch and two arches starting from west corner of the wall. (Figure 2.33) The pointed arch which is located at the south wall of the space is closed later with rubble stone masonry wall. (Figure 2.34)

In space G05, there are RC post and lintels supporting the superstructure of the space in the mid portion of the space. Since they are contemporary elements, it is obvious that they are later additions. According to the structural needs, there must have been original elements in the place of them, with the same supporting function. The arch that is located on the south wall of the space is closed latterly with cut stone masonry walls.

In space G06, the east wall of the space is latterly constructed as a partition wall with different construction materials than the rest of the walls cutting the third arch inadequately from the middle. On the south masonry wall, there are some traces observed under the scraped portions, showing existence of a previous opening which has been closed after. Above the third arch and on the south wall there are timber remains which belong to flooring beams. On the south wall of the space there are remains of timber beams. (Figure 2.35)

On the east windows of the spaces G04, G05 and G06, there are timber frame remains which probably belong to previous architectural elements such as timber shutters. All the flooring of these are covered with screed. So, we have no information related to the character of original floorings. On the west portion of the south terrace, there is a platform raised from the ground and constructed with fill of rubble stone. There are some traces on the east corner

of this platform showing that something there is closed and plastered, and some water pipes are connected to this area. These evidences should be investigated further, since they may belong to a water source used before.

2.2.5.3 EVIDENCES IN THE FIRST AND MEZZANINE FLOORS

The plywood partition walls and ceilings that are constructed in the main hall, are later addition (Figure 2.36). From the traces on the flooring it can be evaluated the previous use of space with banking hall function. There must have been desks on each side of the east and west portions of the space located on the intersection of timber and vaulted flooring portions. In addition to this, similarly there must have been a cash point in front of the safe room. The locations of the previous furniture can be concluded by evaluating the flooring. The heating system equipments including vertical, horizontal pies and radiators as well as metal air ducts are later additions.

The passage between the spaces 108 and 115 are later openings. The shelf between the spaces 114 and 107 is converted from a previous opening into a shelf. The toilet spaces in spaces 111 are later constructions since the relation of the partition wall with the window of the space is inadequate. The flooring covers of the spaces 110 and 111 are also later additions since the screed is applied onto the timber flooring. The architectural element of opening connecting the spaces 123 and 124 are missing.

In the mezzanine floor the floor level of the 201 cuts the door element of the space 101 inadequately. This shows that the flooring of this space is constructed later than the door element. In addition to this, some portions from the ceiling and flooring of this space is partially demolished in order to locate the later added ventilation ducts. The roof space which is located above the space 109 is constructed latterly, as far as observed from the window located in the north wall of space 117.

The original timber ceilings of mezzanine floor are covered with plywood sheets as precautions against the water penetrating from the roof. (Figure 2.37)

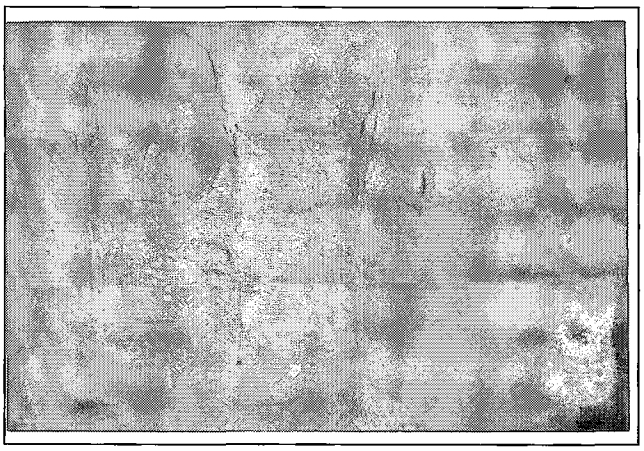


Figure 2.32 Closed arch in space G04

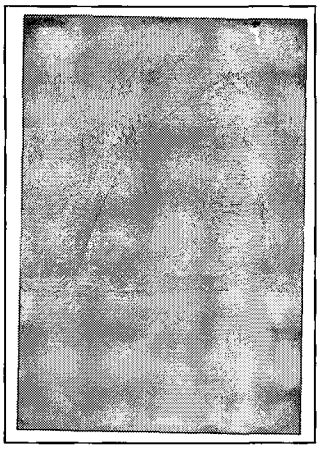


Figure 2.33 Closed arch

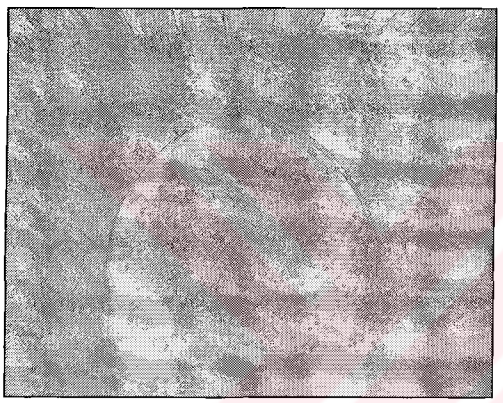


Figure 2.34 Closed arch in space G05

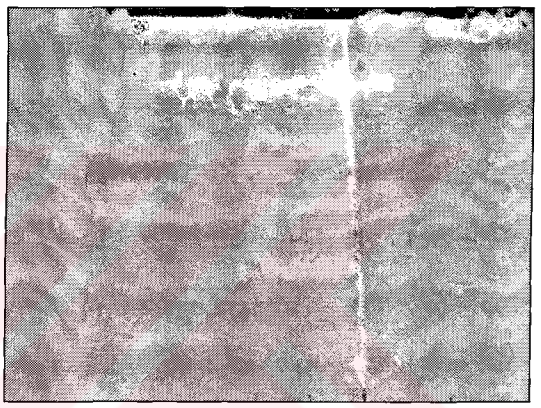


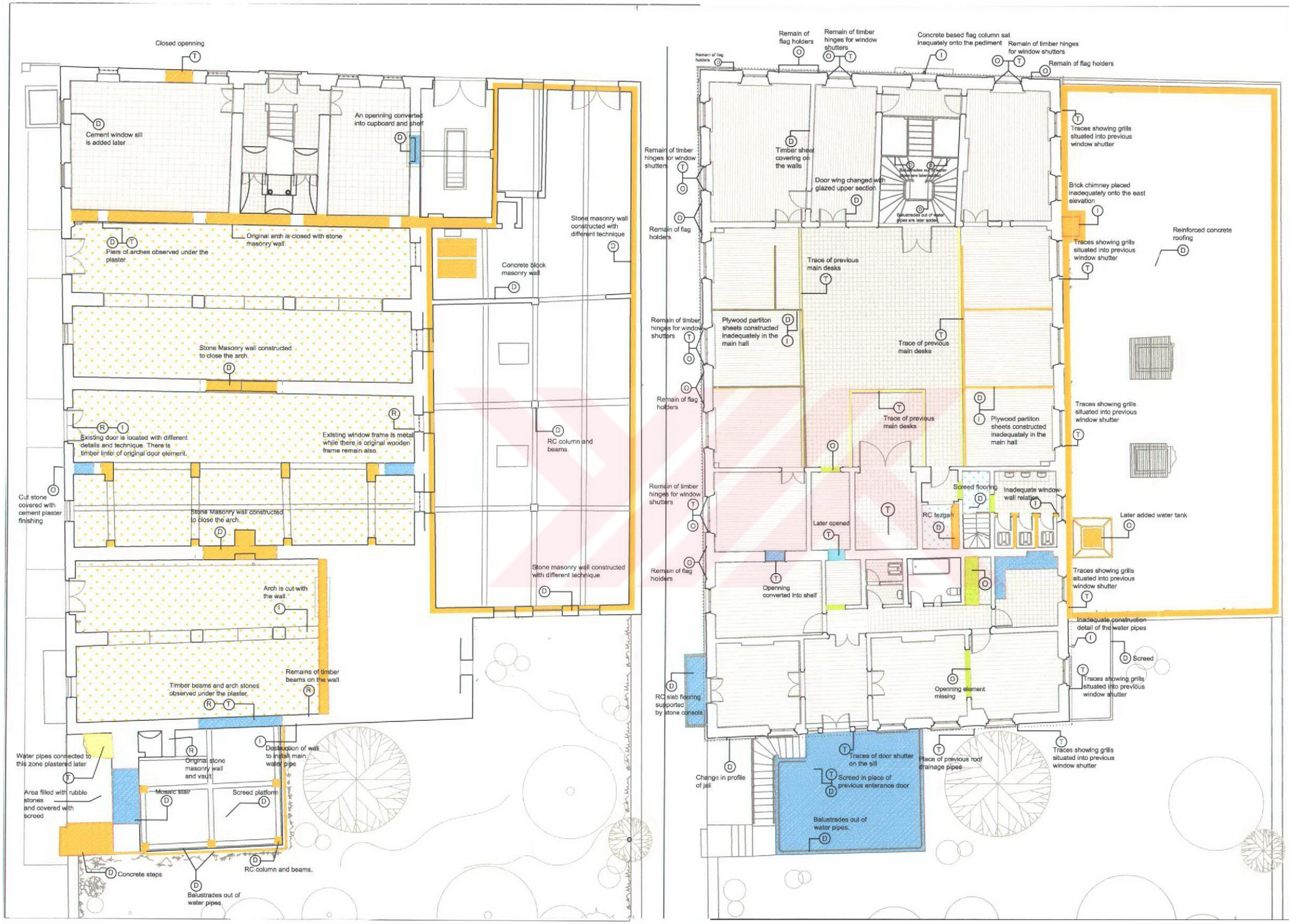
Figure 2.35 Timber beams in space G06



Figure 2.36 Plywood walls in space 101



Figure 2.37 Plywood ceilings in space 101



ANALYSIS ON ALTERATIONS AND CHANGES

*CHANGES

- ADDITION
- ALTERATION
- MISSING
- REMOVAL
- DEMOLISHMENT
- UNIDENTIFIED
- TRACES

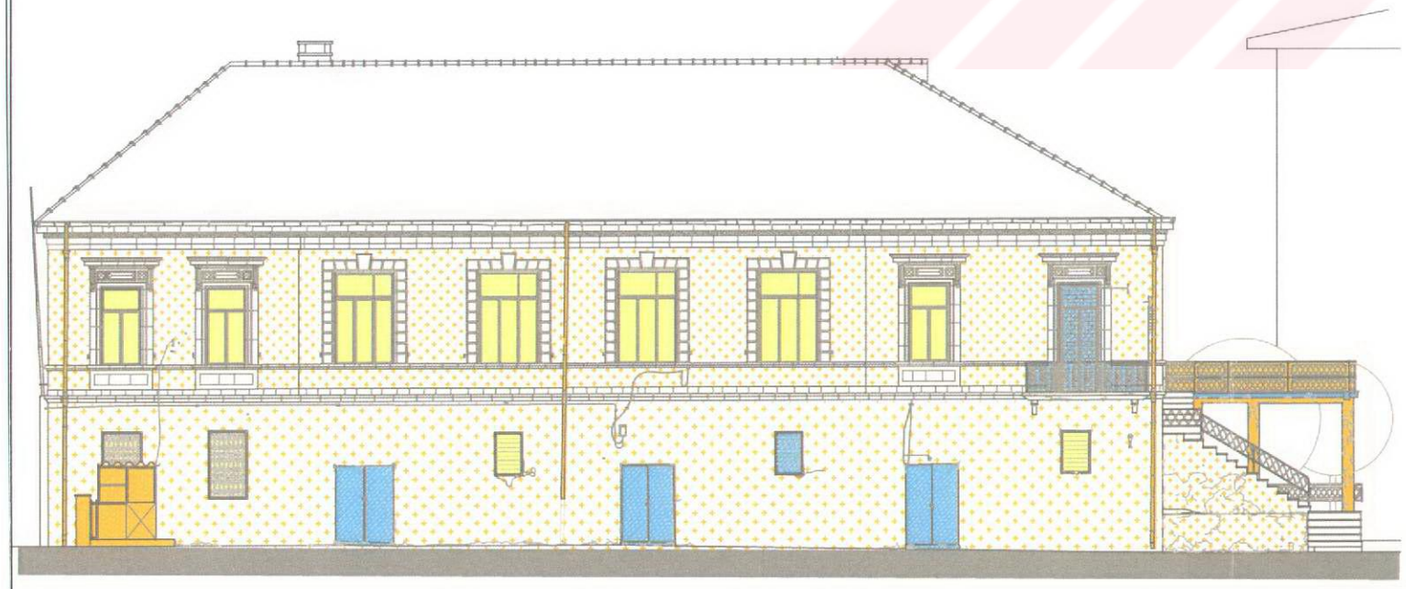
*TYPES OF EVIDENCE:

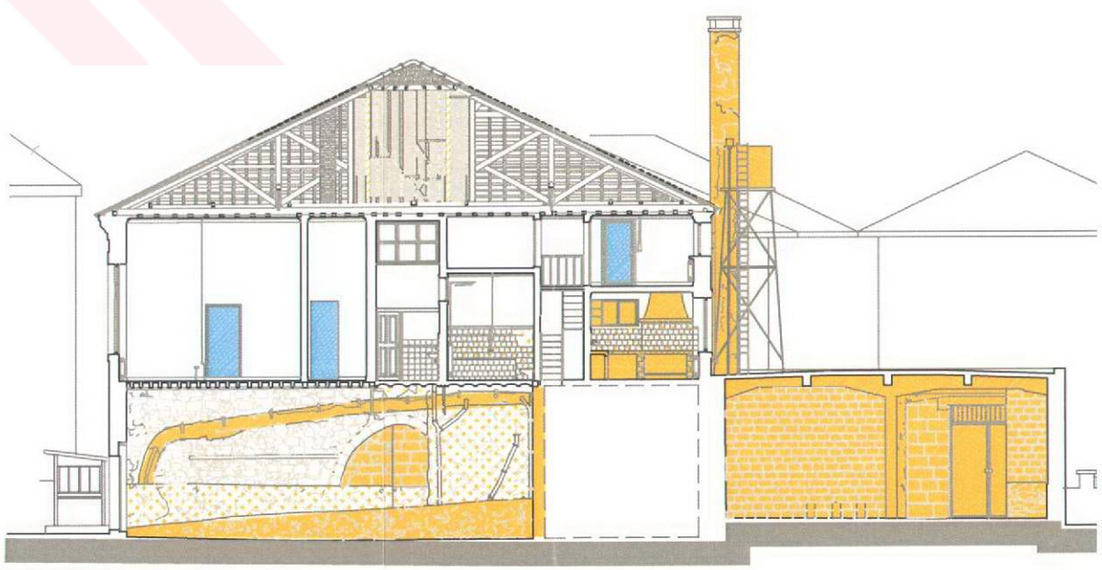
- (R) Remain
- (T) Trace
- (O) Object Itself
- (D) Difference in Material Construction Technique or Design
- (I) Inadequate Construction Detail

Drawing 2.36 Analysis on Changes









Drawing 2.37 Analysis on Changes

CHAPTER 3

HISTORICAL RESEARCH

3.1 HISTORICAL DEVELOPMENT OF MERSIN

The name of Mersin is thought to have come from the ancient Turkmen group called "Mersinoglu", who had settled in the region during Ottoman period. Evliya Celebi also mentions about a village called "Mersinoğlu" on his visit to the region in 1671.[1]

Cukurova and Icel regions have been one of the oldest settlement areas of Anatolia due to its important location on important commercial routes of Anatolia. Therefore, throughout history this region has housed important civilizations, who have founded important cities. Although Mersin is located in such a historical region, the foundation of the city of Mersin goes back to mid 19. century only when commercial and economical activities in Cukurova region increased intensively. Due to its convenient shore capacity it was developed as the port of the region. Today within the borders of the settlement area of Mersin, there are remains of prehistorical and ancient cities. However, these settlements do not have historical relationship with the foundation of real city of Mersin, who has been founded and developed after 1850s.

- **Before 1850s**

The traces of prehistoric settlements from the Neolithic period until Hytites settlements are found after the excavations of "Yumuktepe" historic hill, which was found for the first time by J. Garstang between 1936-1939. Yumuktepe lays 3km. away from the city center.[2] From the excavations it has been understood that the settlement layers in Yumuktepe hill goes until the Islamic periods. The region of Mersin was settled by the Hytittes between 1650-1200 B.C., and later on settled by the Dors during the ancient period. The most important ancient city of the region after Tarsos (Tarsus) was the "*Soloi*" (Soli), which is 10 km. away from the center of Mersin.

[1] Yurt Ansiklopedisi, "Icel", Vol.4, pg. 3631.
[2] Yurt Ansiklopedisi, "Icel", Vol.4, pg. 3633

Although there was not an important city in the place of Mersin at that period, the region stayed under the dominance of Persians during between 546-331 B.C. until the arrival of Alexander the Great to the Anatolia.[3] During this period there was the ancient settlement of "*Zephirium*", on the location of today's Mersin. The traces of this settlement are thought to have been the ones that had been found during the excavations of the "Halkevi" construction.[4] Tarsus became an important port city of the region during the Seleucos Period, while Mersin stayed as a minor settlement area. The government of the Seleucos ended in 101 B.C. and the region went under the control of the Romans. Roman commander Pompei, had attacks on Soloi due to the establishment of navy pirates and got the control of the city soon. He built up the city from the beginning. Therefore the city started to be called as Pompeiopolis.[5]

After the separation of the Roman Empire in 395 B.C. as Eastern Roman Empire and Western Roman Empire, the region of Mersin passed under control of Eastern Roman Government, which was called as Byzantine Empire later. The region was attacked by the Arabian groups during the period of the Omer the caliph. In the time Emevians the city was captured by the Arabians, and re-captured by the Byzantines in the 10. century. Although in the mid 11. century the Seljukids captured the region, with the help of the groups of Crusaders, there was an Armenian Principality in the region in 1080. In 1375 it was connected to the principalities, which was governed by Memlukids until the region was captured and controlled by the Ottoman Empire, Yavuz Sultan Selim.

The city of Mersin and its surrounding region went under the control of the Ottoman Empire in 1516 by Yavuz Sultan Selim. Until the rebel of the governor of Egypt Province, Kavalalı Mehmed Ali Pasha, the region was ruled by the Ottoman government. Mısırlı Mehmed Ali Pasha, who was the son of the Egypt Province governor, captured Mersin together with Cukurova and ruled the region for 8 years between 1832-1840. In 1839, when the Kutahya Pact signed with Ottoman Empire, the region passed under the control of the Ottomans again and has stayed as an Ottoman city until the foundation of the Turkish Republic in 1923.[6]

- **After 1850s**

Although it inhabits one of the oldest settlements of Anatolia, such as Yumuktepe, which goes back to prehistoric ages, Mersin is one of the newest cities of Turkey. It has been

[3] Yurt Ansiklopedisi, "Icel",vol.4, pg. 3636.
[4] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 23
[5] Yurt Ansiklopedisi, "Icel",vol.4, pg. 3636.
[6] Yurt Ansiklopedisi, "Icel",vol.4, pg.3657.

established as a settlement approximately after 1830s.[7] When the written information coming from the notes of travelers who traveled the region between 19th-20th century and the Ottoman archives of the same period are evaluated, it is understood that Mersin stays as a small and unimportant settlement until 1850s. According to the travelers' of the first half of the 19. century Mersin was a small fishermen village out of few cottages.

The first knowledge comes from the famous traveler Evliya Celebi, from his visit to Cukurova in 1671. His visit to the region captured a line from Silifke towards Tarsus. From his notes he tells about a small Turkmen settlement named as "Mersinlioglu" in the location of today's Mersin city. Captain Beaufort, who visited the region in 1812, mentions a settlement called "Mersina" as a small settlement consisting from a few cottages.[8] An English traveler called Kinnier, had also visit to the region in 1814 and gave information about Adana and Tarsus. However, through his notes he doesn't give any information about a settlement called Mersin. In 1818 Mersin was described by Francis Beaufort, as "nothing but e few huts on the shore".[9] Labord, who visited the region in 1825 like Kinneier, also gave information about Adana and Tarsus without any information about Mersin.[10]

Direct information about Mersin can be seen especially in the travels done after these dates. The first important information comes from Charles Texier, who visited the region on a line from Silifke to Adana in the 19th century and published the book called "Asia Minor" in his return to France. He gives detailed information about Silifke, Tarsus and Adana, while little information do we get about Mersin. He tells that Mersin had founded on the ancient city called "Zephirium" and mentions that if excavations could have been done, the remains of the ancient could have been found. He also mentions about the situation of the harbor of Kazanlı that because of the filling of the harbor, ships get difficulty to reach to the shore.[11]

In the beginning of the 20th century a book called "Uhuvetin 1909 Takvimi" was published by the Greeks who had lived in Mersin. In the book it was stated as ".. Mersin was a settlement which consisted from a few fisherman cottages out of mud...".[12] From the information coming from the Ottoman archives, it is understood that Mersin was a village and officially belonged to the Gokceli sub-provinces of Tarsus county of Adana province of Ottoman Government in 1840. In 1852 it became a bigger settlement as sub-province that

[7] S. Develi, "Dunden Bugune Mersin", Mersin, 1990.
[8] Basgelen N., "Bir Zamanlar Mersin", Arkeoloji ve sanat yayınları, pg.5.
[9] Toksöz M., "An Eastern Mediterranean Port-Town In the Nineteenth Century"
[10] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 50.
[11] Yurt Ansiklopedisi, Icel,vol. 4, pg. 3657.
[12] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 53.

belonged to the same province. In 1864, it became a county of Halep Province of Adana Province independently from Tarsus, and in 1877 became a county of Adana Province. [13]

In the 1880 dated archive it was written that; "...county of Mersin belongs to the Sub-province of Gokceli". Finally, in the archive of 1892, it was written that "the village of Mersin was developing larger while it was a small settlement in 1841, since more ships started to reach to the city[14]. In 1888 Mersin became a Province and Tarsus became its county. Mersin was one of the five Provinces of Adana Province[15]. Another important Ottoman archive is about a declaration which was sent by Sultan Mecid to the Adana Province. In that period Mersin harbor belonged officially to Tarsus county of Adana Province. The increase in the number of the ships arriving to the city caused the increase in the commercial life of the settlement. Thus, some people started to ask for permission from the government of Adana Province in order to rent the lands on the coast of the harbor so that they would construct residential or commercial buildings. Due to the increase in the number of the applications in this respect, Adana Government applied to the Central Government to ask about the official procedure. After the central government had examined the situation, it was understood that there wasn't any record about the harbor of Mersin in the Istanbul Tax Office.

Therefore, as an application of that period related to the regulations concerning construction in the unregistered lands, these lands were first registered as an ownership of "Bezmi Alem Sultan Foundation". Later on, the rent or selling procedures of the lands to the applicants were directed according to the regulations of foundation. The decision was declared and sent to the Adana Government with an empiral edict signed by Sultan Mecid. These lands declared in the firman are in the location of today's Eski Camii area[16]. Some of the buildings in this district were constructed on the lands of Bezmi Alem Sultan Foundation, and this information can be seen in their title deed archives.

3.1.1 Commercial Activities In Mersin

3.1.1.1 The Port of Mersin

One of the most important historical events of the region was the fill of the port of Tarsus, which was the most important ancient city of the region during the Roman period. The port has been filled with the alluvium carried by the Berdan river and started the decline of the splendor of the city of Tarsus.

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[13] Yurt Ansiklopedisi, Icel,vol. 4, pg. 3657.
[14] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 53.
[15] Yurt Ansiklopedisi, Icel,vol. 4, pg. 3658.
[16] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 54.

There were several ports in the region of Adana, such as Tarsus, Yumurtalık and Karatas. However, they were not as efficient as Mersin, since Tarsus harbor had started clogging and the other two, needed rehabilitation. Although the harbor of Mersin was not so functional because of its lack of protection against waves, it offered suitable shelter for ships under heavy weather conditions due to its lighthouse besides the harbor.

Thus, small settlement of Mersin gained importance and turned out to become the harbor of Cukurova with the filling of the Tarsus harbor -Karatas- in the beginnings of the 19. century. The growth of Mersin depends on the growth of its port during 19. century. The initial residents had come from nearby regions of Capadoccia, Syria, Lebanon and Egypt as well as nearby Cukurova.[17] They generally lived on agriculture and fishing. Three basic factors generated in the region accelerated the development of the port of Mersin as well as the city of Mersin during this period. The first historical factor was the occupation of Adana region by İbrahim Pasha between 1832 and 1840. Ibrahim Pasha who won the struggle against Ottoman armies had arrived in Adana in 1832 and stayed in Cukurova for 8 years, during which directed the region as an independent province. He dealed with the social and economic life of the region and played an important role in the development of these respects.[18] Due to the investments of Mehmed Ali Pasha in order to make Cukurova become one of the important agricultural and industrial centers of Anatolia, Mersin became the port of the region, which connected it to the rest Ottoman, and foreign country ports.

The second factor was the construction of the Suez Canal in 1860s, which caused an increase in the importance of the Mersin as a port city. The construction needed raw material for timber, and Cukurova was selected as a source of this raw material. This situaiton increased the trade and exportation of timber from the harbor of Mersin to the Egypt. During that period many merchants came from Egypt and Lubnan settled in Mersin. In the initial years of the port, during 1860s, there was not a proper dock in Mersin. Sailboats used to anchor near the seashore, while the porters who were working in the water had carried out loading unloading of goods[19].

Third factor that caused the development of Mersin was the broke out of American Civil War in 1881 in the North America, which had been the most important center of the cotton export for England. This situation caused the Cotton Supply Association of Great Britain to

[17] B. Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg.89.
[18] Yurt Ansiklopedisi, Icel,vol. 4, pg. 3639.
[19] S. Develi, Dunden Bugune Mersin", Mersin, 1990, pg. 143.

search for new lands that would supply raw material-cotton. They searched throughout Anatolia and India as well. One of the regions that they booked to develop the production of cotton was Cukurova region. Therefore the production of cotton from Çukurova accelerated since the demand of cotton from Britain had increased [20]. Together with England; Germany and France became aware of the potential of Cukurova in the production of cotton, that would supply enough raw material that they needed. Thus, they started to make investments in order to increase the capacity of agriculture and trade of cotton in Cukurova [21].

The most suitable way of collection of the harvested cotton that was collected in the inland was carried through land transportation. The best way to export collected goods to the foreign countries or other ports of the Ottoman Empire was through sea transportation. The new transportation potentials of the region and the investments of the foreign firms had increased the trade in the region. In the 1870s, Mersin became an important port-town with high rates of export and import activities from a small natural quay.[22]

In order to improve the land transportation quality and potential of the region, England started to produce projects to construct railway line through Cukurova, which would collect the goods throughout the region and bring them to Mersin in order to export them from the port. They preferred railway type of land transportation since after the industrialization periods in European countries, the technology of trains increased in the railway transportation and it became cheaper and faster than highway transportation. With the financial supports of the foreign firms, the construction of Adana-Mersin railway line started in 1884 and completed in 1886. At the beginning of the 20. century, Germans, who had increased their affect on Ottoman Empire, took the control of the railway line in 1906 and in 1908 they made it became a line of Bagdat-Istanbul line.[23]

With the construction of the railway between 1886-1909, the transportation lines of Mersin had reached its highest capacity. The flow of goods that were initially being treated in the region was accelerated, and the amount of the cotton exported from the harbor was raised. The city became the beginning and finishing point of the regional commerce and

[20] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg.19.
[21] Develi S., "Dunden Bugune Mersin", Mersin, 1990, pg. 52.
[22] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.
[23] Yurt Ansiklopedisi, Icel,vol. 4, pg. 3648.

integrated into the world market.[24] After 1885s it became an important port serving the region covering provinces of Adana, Konya, Nigde, Kayseri and Sivas. [25]

During 1890s, Mersin port was in the center of the trade of not only Cukurova but also Middle Anatolia and South-east Anatolia as well. Sea trade and transportation were achieved to the countries of England, France, Egypt, and other European cities as well as other Ottoman ports such as Alexandre, Beyruth and Selanik. By the end of the 19. century, the among the exported goods, cotton, timber, wool and wheat were in the first place while among the imported goods fabric cloth was the first.[26] As the export and import activities rose in the port, the existing port became insufficient for the import and export activities. Therefore, as demands for new ports had increased with the contribution of both public and private initiatives, new docks were constructed. By 1895, there were seven docks in Mersin.[27] (Figure 3.1)

By the turn of the century, Mersin was an important network of commercial activity. In 1899, Mersin superseded Izmir in the export of grain or crop. The cotton market in Mersin and the trade activity was as important as in Izmir, Istanbul and Alexandria. In 1901, trade of Mersin had reached its highest value, when compared to other large ports of the Eastern Mediterranean. Mersin became the one where largest number of ships from variable European countries stopped at. By 1908, Mersin had become the most important trade outlet of this large area with population of 22,000. [28]

3.1.1.2 The Tramlines within the Commercial Activities

One of the most important transportation features of commercial activities in the city was the tramline, which supplied the carriage of cargoes. The transportation of the goods from the fabrics or the railway station to the docks, where the import or export of the goods would take place, was supplied by tramline transportation. There were two tramline axes passing through the city. (Figure 3.1)

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[24] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.
[25] B. Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg.90.
[26] Yurt Ansiklopedisi, Icel,vol. 4, pg.3645.
[27] B. Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.
[28] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg.19.

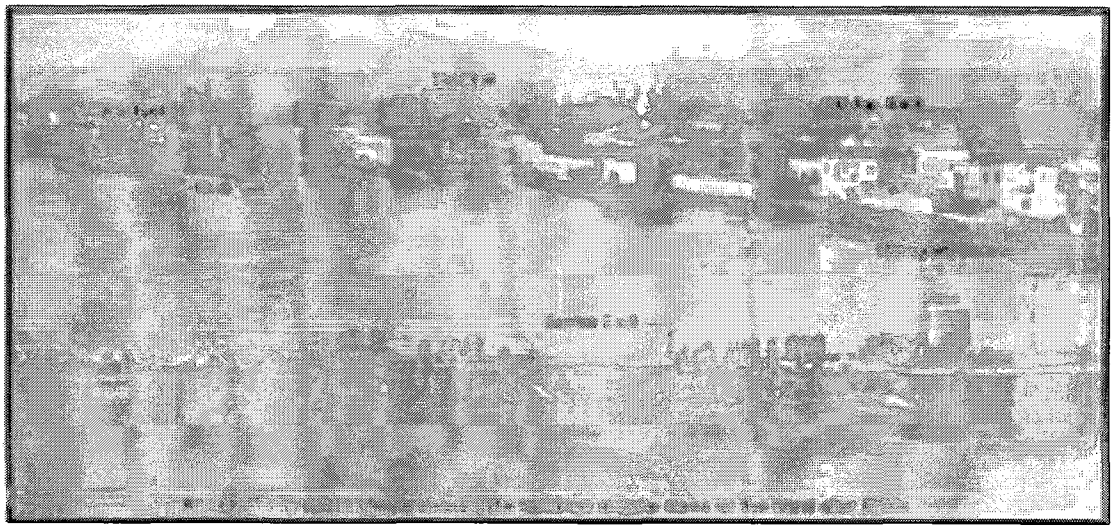


Figure 3.1 An old photograph showing the site and its nearby environment.

Until the 1920s, the railroad in Mersin was the east gate of the city with its station. It wasn't going along the seashore throughout the city. However, instead of it, a tramline was connecting the railway station to the local docks that were severally constructed along the shore.[29] After the occupation of the French in Mersin, the tramline was lined of (deconstructed) and reconstructed between the railway Station and the Gumruk Square, passing through **"Uray Street"**, which was the commercial axis of the city. [30] The tramline consisted of three or four carriages, pulling by a locomotive working with steam.

By the railway transportation, all the goods collected from inlands of Cukurova and other regions were brought to the Railway Station in Mersin. Then, these goods were carried through the commercial axis, Uray Street, to the docks in order to board the goods onto the ships waiting in the harbor. Mostly, these goods were carried and put in the entrepots along this axis before they were boarded onto the ships. After the construction of the tramline ("dekovil") between the Custom Square and the Railway Station, the carriage of goods was continued on this line.

3.1.2 Physical Layout

By the 19. century, there were two main axis that supplied the main circulation throughout the city: İstasyon and Hukumet streets, which laid parallel to the coast line in west-east direction, and Hastane Street, which laid in the north-south direction. Later, the

[29] B. Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg. 100.
[30] S. Develi, Dunden Bugune Mersin", Mersin, 1990, pg. 80.

name of İstasyon-Hastane Street was renamed as "Uray Street", due to the existence of the Municipality on the street.[31] (Figure 3.1)

The Hastane Street that laid in the north-south direction was connecting an old Greek district, which was located in the inland of the city, where today's Osmaniye district locates. The east-west directional İstasyon Street was an commercial axis connecting the Railway Station which was opened 1886, to the Custom Square and and to the docks located at the shore. This street than started to be named as Uray Street and today it is still called with the same name. Uray Street was the main commercial axis of the city during this period. The other axis of Cakmak Street was the east border line of the city. The railway station that was opened in 1886 laid on the east side of this road. By the turn of the 20th century, Mersin was an important port-town with four inns, two hotels that served for the travellers regularly, two baths, ninety entrepots, two staem mills and a water mill.[32]

The first districts of Mersin before in the 19. century were Camiişerif, Mesudiye, Mahmudiye, Nusratiye, Kiremithane ve İhsaniye districts. Among these districts Camiiserif district, whose old name was "Frenk District", is the oldest trade center for the city. Therefore all the commercial buildings of the city were located in this district. The important commercial buildings were located along the main axis of İstasyon and Hukumet street.[33] By the turn of the centry, the town stretched out day by day towards west. New neighbourhoods with new buildings were erected. One of these newly erected districts was Hamidiye District with 25 dwellings[34]. On the north of Camiiserif district lay Mesudiye and Nusratiye districts, which were both located on the east of Hastane Street. Mahmudiye and Kiremithane districts, which were located on the west of Hastane street consisted of large greenery areas on the north. (Figure 3.2)

Before the establishment of the Republic, the development of Mersin was planned according to the regulations that were prepared during the Tanzimat Period with grid-pattern consisted of perpendicular streets intersecting at right angles and producing rectangular lots. This grid-pattern can be seen today in some old districts of the city such as Mesudiye, Mahmudiye and Camii Serif Districts. The streets and the main axis were either in north-south direction perpendicular to the seashore or in east-west direction parallel to the shore.[35]

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[31] The word "Uray" meant municapility in Turkish.
[32] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.
[33] S. Develi, Dunden Bugune Mersin", Mersin, 1990.
[34] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.
[35] B.Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg. 100

During the planning developments after the establishment of the Turkish Republic, in the 1930s Austrian urban planner Prof. Hermann Jansen was asked and invited to Mersin in order to prepare the further urban plan of the city. Jansen had also prepared the plan of Ankara, Tarsus, Adana, Gaziantep, Ceyhan and İzmit. Prof. Herman Jansen prepared the first urban plan of Mersin after the establishment of Turkish Republic in the 1930s. He started his studies in 1935. He visited Mersin in November 1935, but since the cartographic map of the city was complete yet, he had to wait for it until it was completed by Hikmet Serdengecti in October 1936. Because of such delays he could finish his studies in the beginning of 1938 and the Ministry of Interior Affairs approved his urban plan in March 1939.

According to the plan, the city is composed of three parts as Industrial District, central Business District and Residental Districts The central Business District of Mersin would lay from the fair area towards the 'New Administrative center' upon the already existing commercial center. The industrial district would cover the port with its existing facilities and would lie between the railway station and the sea till the fair area. The residential districts would lie towards west and north of these two parts.[36] During the preparation of the city plan, one of the important criterias of Jansen was the protection of the historical buildings with laws throughout the city. Furthermore, he advised to close the streets in the old districts of the city to the vehicular traffic and supply greenery.

3.2 DEVELOPMENT OF THE URAY STREET AND ITS NEARBY ENVIRONMENT

The area bordered by the Istasyon Street at north, the Inonu Boulevard at south, Kurtulus Square in the east and Cumhuriyet Square in the west had developed as the historical commercial and governmental center of Mersin after 1850s. Parallel to the development of the commercial life of the city, several buildings were constructed in this area, some of which still survive today. The main core of trade activities developed on Uray Street and its nearby environment. (Figure 3.3)

Therefore, examples related to the traditional buildings gather mostly in this region. The building categories consist of commercial buildings (commercial khans, entrepots, bazaar, offices, retails, banks, etc.); public buildings (mosque, church, bath, schools, etc); governmental buildings (the old Governor's office, etc) and residential buildings (residential and commercial and residential buildings). The area on the northern part of the Istasyon Street and the western part of the Cumhuriyet Square possesses mostly traditional residential buildings.

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[36] B.Beyhan, "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.

Since the Uray Street was the important commercial axis of the old Mersin, important governmental, commercial, religious and residential buildings of the city had been located along the street. On both sides of the Uray Street (south and north sides), laid Custom buildings, hotels, commercial khans, entrepots, banks, churches, the Old Mosque, Governors Office, Municipality, many commercial shops, and large houses of that belonged to rich merchants. On the south side there were several docks along the coastline. Uray Street and the Yoghurt Bazaar were points of dense connection of commercial activities where Muslim and non-Muslim people acted. The important nodes of the commercial activities were Azakhan, Tashan, Sursok Han.

In addition to this, due to the existence of the "dekovil" line passing along the street, there was a need for the storage of the goods that were being carried by the line after and before their shipping. Thus, construction of depots and entrepots constructed either separately or together with other types of buildings were very common. The original silhouette of the Uray Street had been consisted of two storey heighted buildings with pitched roofs. The buildings on the southern part of the Uray Street, including the old Agricultural Bank, had been laying along the old coast line of the city. They used to be the buildings located on the coast, until the interventions for the fill of the sea and the construction of the Mersin port was completed during 1970s.

The buildings related with the trade activities of that period played important roles: 1- In the field of transportation: Station buildings, wharfs, post offices, entrepots, hotels; 2-In the field of economics: Banks and trade centers; 3-In the field of bureaucracy: State buildings like custom office, governmental building, municipality, etc.[37] (Figure 3.3) During 1950s, with the construction of the Municipality Building on the Ataturk Street, the governmental focus on the Uray Street has been decreased and transformed towards west. In time, some of the historic commercial functions have been carried towards western sections of the city around the new Municipality Building. The residential functions have also flowed towards western and northern sections of the city as the development of new districts.

Due to these changes, the area has gone under strong pressure of demand to replace the old two-storey buildings with higher new buildings. Although today the decisions of the Mersin Urban Conservation Project prevent this, the construction of the new buildings before the preparation of the Project and the interventions for the filling of the sea have already destroyed the old texture of the environment. After the changes in the commercial life and

[37] Ülkü, C. "19th Century Commercial Buildings in Mersin", Mersin, the Mediterranean and Modernity, Colloquim Proceedings, Urban Center of Mersin University, Mersin, 2001.

trade activities of the city with the construction of the Mersin port, new depot areas were constructed out of the city along the Tarsus route within the industrial areas

After these urban interventions, the physical context has changed very much. The buildings have been separated from the sea, facing the Inonu Boulevard and the Atataurk Park instead. Besides, new buildings constructed within the context have destroyed the original two storey-height character of the context with their 3 to 5 storey heights. (Map 4)

3.3 HISTORICAL RESEARCH RELATED TO THE BUILDING AND ITS SITE

During the studies related to the historical research of the building and its site, archives of the Center of Urban Studies of Mersin University; Akdeniz and Greater Municipalities of Mersin; General Directorate of Land Registers in Mersin; Adana Regional Council for Conservation of National and Cultural Properties; General Directorate (Head Office) of the Agricultural Bank in Ankara and the existing branch office of the Agricultural Bank in Mersin have been searched in order to find out any kind of written document related to the building and the site it is located. By this way registry documents as well as current maps and conservation plans showing the nearby environment are obtained.

Parallel to the studies carried out in the archives of these institutions, visual documents about Mersin (old photographs, serials, old maps, etc) giving visual information about the historical situations of the building and its nearby environment have been obtained from the Center of Urban Studies of Mersin University. Besides, an interview with the collectionist Ali Merzeci is carried out to apply his knowledge in dating of the old photographs and to gather additional information about the old photographs.

On the other hand, interviews with Hanri Atat, who had worked in the building during the Agricultural Bank period in 1960s and with Huseyin Fındık, who had worked in the bank between1960-1978, have been carried out. In addition to this, old people who have been working on the Uray Street for a long time are interviewed to gather information about the building.

Historical research phase is completed through written documents (books, essays, thesis, etc) having information related to the historical context of this area and the buildings in Mersin. By this way, the development of the nearby environment and changes occurred in the site are found out as well as the historical development of the building itself. Finally, a framework including information coming from different sources related to the past and recent situations of the building and its site is established. The most significant and reliable

information related to the building and the site is gathered from the archive documents of the head office of the Agricultural Bank in Ankara. According to the information coming from these documents, it has been found out that the Agricultural bank has bought the building in 1933. The historical development of the building and the site can be informed through archive documents, while the information related to the previous period of the site before 1933 can only be obtained through the search of the old photographs of Mersin and the historical research related to the physical context of the Uray Street.

3.3.1 Before 1933

The site is located at the Frank District, which has been developed as the commercial district of Mersin after 1850s. The original silhouette of the nearby environment, in which the site is located, has consisted of single or two storey buildings. These buildings are generally governmental, commercial and large scale entrepot buildings. There are also residential buildings including commercial activities in their ground floors. The Governmental Building, which has been constructed during 1880s at the opposite corner of the site, has become an important landmark of the context. After its construction the name of the main axis passing from the north of the site- the Gumruk street- has been called as -Hukumet Street-. By the construction of the Municipality Building on this street later, it has been named as the Uray Street as it is today still called. (Figure 3.5)

As far as it is observed through the old photographs which is dated to period between 1900-1930s showing the site and its nearby environment, it is visualized that the site is located close the local docks, from where the goods are loaded to small ships. Between 1910-1930s, a tramline ("dekovil") has been passing through the Uray Street, which was the new name of previous Hukumet Street. This tramline, which connects the Custom Square and the Train Station to each other, has been used for the carriage of goods from the Station to the entrepots and from the entrepots towards the docks located on the shore respectively. So, besides commercial buildings, there have been large amount of depot/entrepot buildings, which have been used for the storage of these goods. Some of them are one-storey entrepot buildings having flat roofs, while some have pitched roofs covered with Marsilian roof tiles.

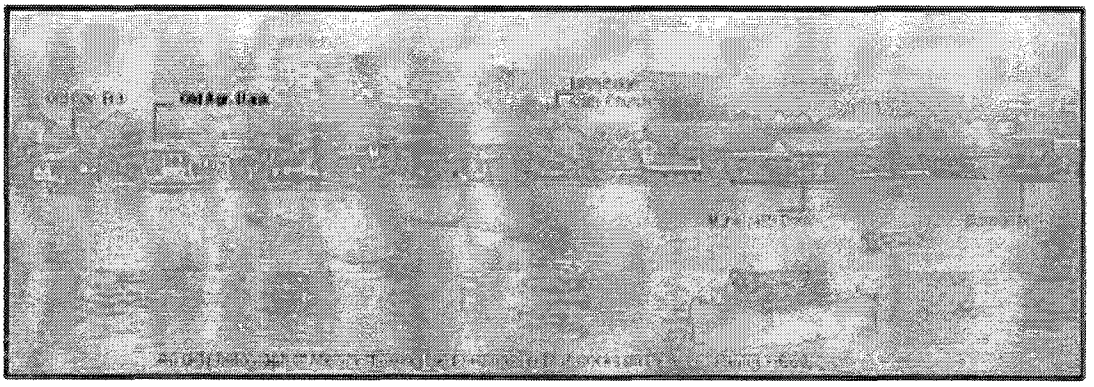


Figure 3.2 An old photograph showing the site and its nearby environment.

Since, this context was an important and highly demanded commercial center, the built environment has been changing a lot and very fast. These physical changes have originated as floor additions and removals or total renewals of the buildings. As far as it is observed through the old photographs which is dated to period between 1900-1930s showing the site and its nearby environment, it is visualized that there used to be two storey buildings located on the east portion of the building from both south and north sides (Figure 3.2).

3.3.2 After 1933

The Agricultural Bank has bought the building in 1933, which is located on the building lot 2 of building block 6 with 1210 m2 from the Mavrommati Family, who were one of the famous residents and merchant of Mersin having cotton farms and factories in the northern districts of Mersin[38]. He had large lands of cotton and olive trees as well as a big factory of cotton, which were all located in the northern part of the city[39]. He used to export these goods to foreign countries from the Mersin port. After the Agricultural Bank has bought the building from the Mavrommatis, they converted to the building into their Mersin branch office with residential section for the family of the general manager of the bank. They have bought the building lots 2, 5 and 9 together. (source: the Archive of Construction Unit, General Directorate of the Agricultural Bank, Ankara).

During this time, information related to the building comes from an old map, which has been prepared map by the famous Austrian city planner H. Jansen between 1936-1939. One of the important criterias of his plan was the protection of the historical buildings with laws throughout the city. Furthermore, he advised to close the streets in the old districts of

[38] According to registry documents obtained from the archive of the General Directorate of the Agricultural Bank in Ankara, they bought the building from Y. Mavrommati in 1936. Therefore, the owners of the building during the 1. and 2. phases are guessed as the Mavrommati Family as well.
[39] S. Develi gives information about the factory and farm lands belonged to the Mavrommatis during that phase.

the city to the vehicular traffic and supply greenery. So, he depicted the important historical buildings that he evaluated as landmarks of the city during that period into his plan. One of them was the building of the Agricultural Bank, which is shown on the opposite corner of the Governmental Building. As it is understood from his plan, the building of the Agricultural bank has been one of the important landmarks of the city then.

According to the information obtained from during the oral history interviews, the Agricultural bank has added coal storage next to the east portion of the building during 1960s. (Figure 3.5) In 03.09.1974, the building is registered as a traditional building with official decision number 7958 by the General Council of Monuments and Sites in Ankara. (source: The Greater Municipality of Mersin). In 25 February 1976, the head office of the Agricultural Bank in Ankara has sent an official letter to the General Manager of the Mersin branch office stating that the building and the parcel would be passed to the treasury since the contemporary governmental and treasury buildings would be constructed on the site. They ask to define the cost of the building according to the current value so as to sell to the treasury. (source: the Archive of Construction Unit, General Directorate of the Agricultural Bank, Ankara).

One of the other important factors that have caused deep changes in the context of the site was the urban interventions for the fill of the sea and the construction of the Mersin port during 1960-70s, when the Inonu Boulevard and the Ataturk Street are constructed. After these constructions, the physical context of the environment has changed very much. The buildings have been located away from the coastline facing the Inonu Boulevard and the Atataurk Park instead. Besides, new buildings are constructed on the boulevard in front of the traditional buildings. The traditional buildings are replaced with new constructions. These new buildings have started to destroy the original context and silhouette of the street with their 3 to 5 storey-heights. The existing open areas are generated due to the destruction of some old buildings, such as the old Selanik Bank. During 1978-79 the building blocks 9, 7 and 6 have been passed to the treasury. They are united into a single lot with new ID of building block 1048, building lot 2 with 9364 m2, which has still the same ID (Fifure 5.3). (source: National Real Estate Directorate in Mersin).

In 1981 the treasury has applied to the Council of Monuments and Sites, for the destruction of existing traditional buildings located in the site and the approval of the projects of the tow modern buildings that would be constructed.

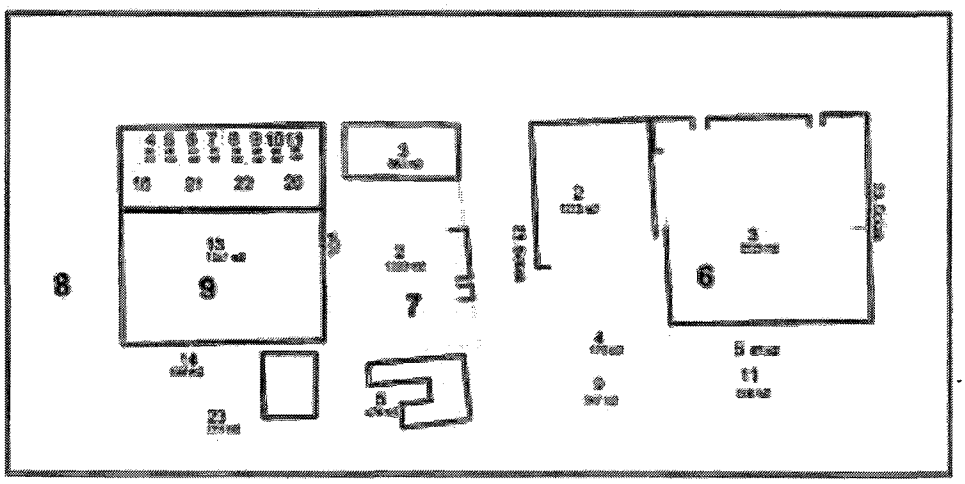


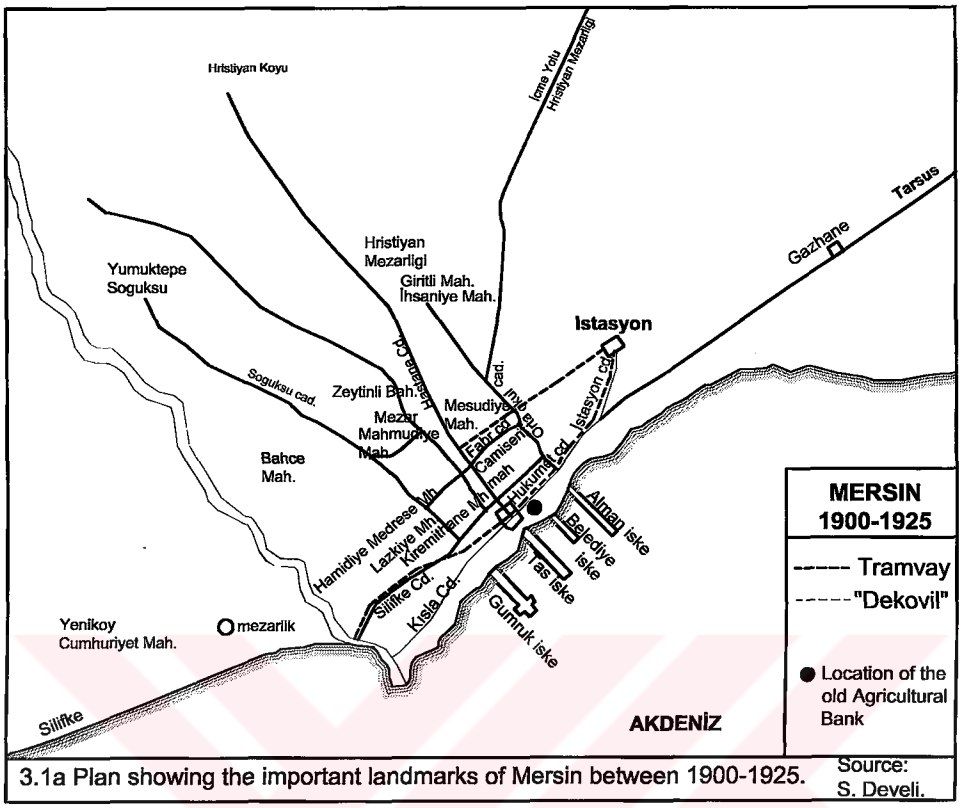
Figure 3.3 The parcel boundaries during 1970s

The council, let the destruction of the existing traditional buildings except the two ones with registration numbers of 22 (the old Agricultural bank) and 43. They also asked to reduce the floor height of the Governmental Building to 4 floors since it would be located on a historical site. (source: National Real Estate Directorate in Mersin).

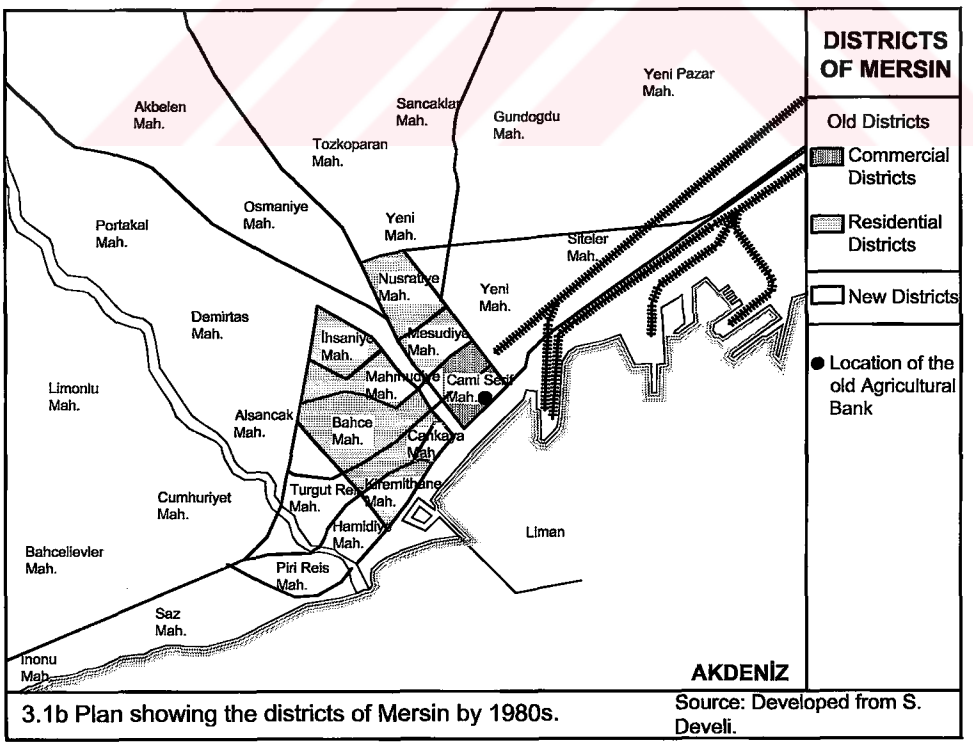
With the completion of the construction of the Governmental Building and the Uray Tax Office Building, the site has become into its existing situation. Since 1985, there have been two registered traditional buildings and two new buildings located on the site together, all of which belong to the treasury. During these years, the Administration of Justice has used the old building of the Agricultural Bank for a while and then by the Administration of Finance Office as "Muhakemat Mudurlugu" for a long time with appropriation of the treasury. (Figure 3.5)

In 1992, the Urban Conservation Map of Mersin has been prepared. According to the plan the site the building was located has been stayed within the boundaries of the Mersin Urban Site and declared as the Official Institution Site. The plan has been revised in 1997, in which the boundaries of the Urban Site have got narrower. But, the building and partial of the site have continued to stay within its boundaries. (Source: The Conservation Map of Mersin obtained from Akdeniz Municapilty of Mersin).

In 2002, the "Muhakemat Mudurlugu" has moved from the building. The Mersin University has applied to the National Real Estate Directorate and the Municipality of Culture for the appropriation of the empty building stating that they would use the building as a Cultural Center of the university. With the approvals of related institutions, the use of the building has passed to the University.

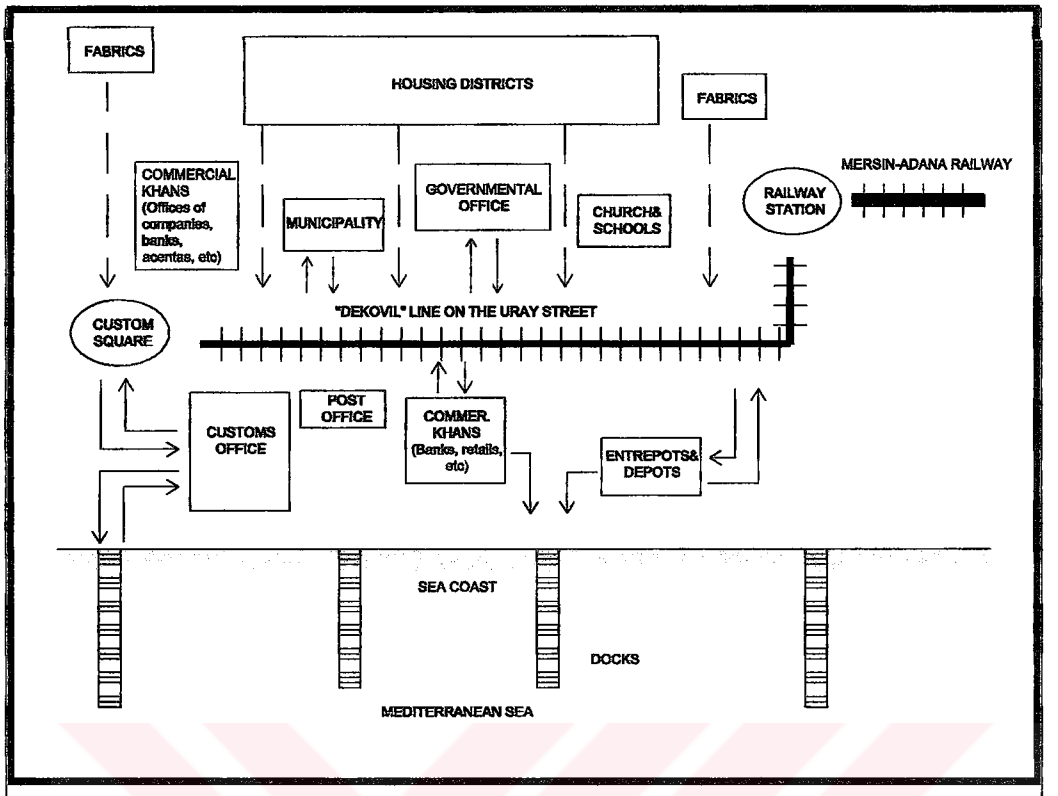


3.1a Plan showing the important landmarks of Mersin between 1900-1925. Source: S. Develi.

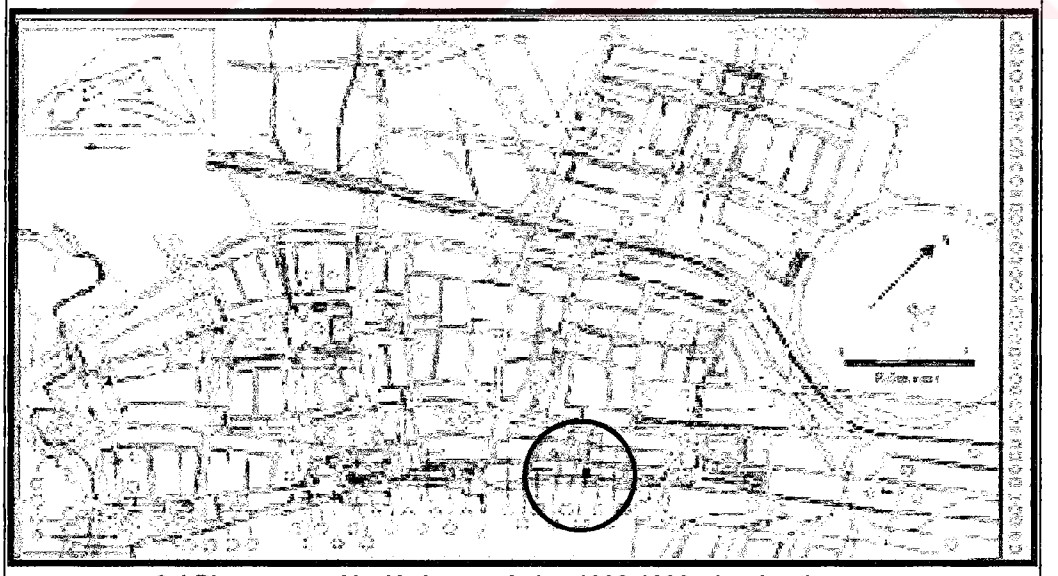


3.1b Plan showing the districts of Mersin by 1980s. Source: Developed from S. Develi.

Drawing 3.1a-1b Physical layout of Mersin and the location of the building during 1920s



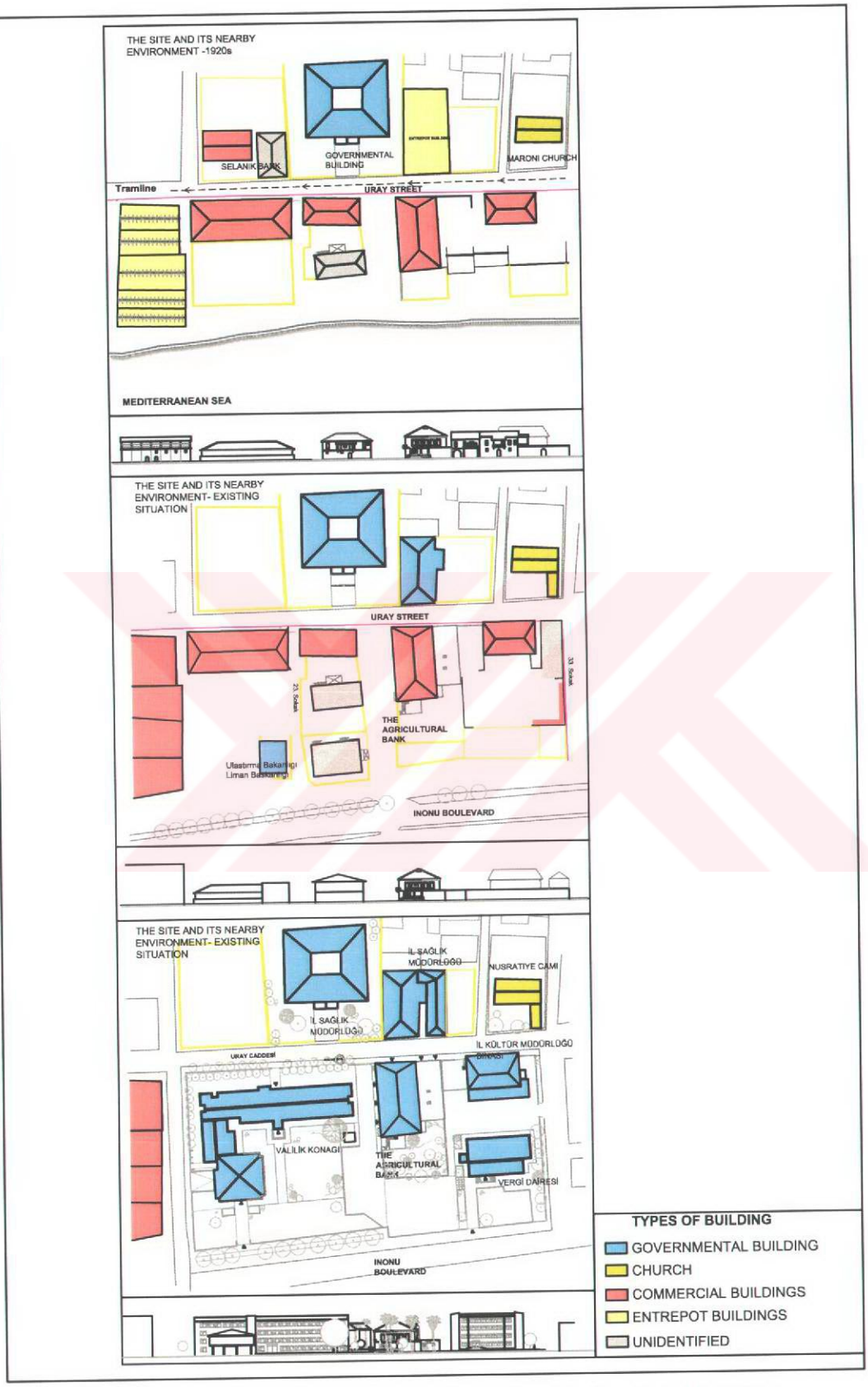
3.2 Scheme showing the daily commercial activities along the Uray Street during the late 19- early 20. century.



3.4 Plan prepared by H. Jansen during 1936-1939, showing the Agricultural Bank Building (source: B. Beyhan)

Drawing 3.2 and 3.4

Drawing 3.3 Physical layout of the Uray Street and types of buildings during 1920s.



Drawings 3.5a, 3.5b and 3.5c Historical development of the the site and its nearby environment

CHAPTER 4

COMPARATIVE STUDY

The results of historical research related to the building have shown that the building has served as a branch office of the Agricultural Bank between 1936-2001. On the other hand, during the evaluation of the traces and alterations through the analysis stage, it is understood that the building has probably housed depot function in its previous period. So, one of the major topics in comparative study must be obviously on traditional bank buildings. Through the historical research related to banking and the bank buildings, the comparison of the building with its bank function is achieved among other bank examples.

In order to define these traces and find out the physical and architectural properties of the building in the restitution studies, a comparative study on depot/entrepot buildings must be carried on. Thus, the second comparative study subject has focused on entrepot and depot buildings of late 19. and early 20· century examples. By this way, the functional use, spatial organization and general architectural features of this building as a depot/entrepot building if this period is compared with other examples from same period.

Through the analysis of these two building categories, it is understood that the bank buildings and depot buildings which have been constructed before the Republican period has been constructed according to the local traditions in construction materials, techniques and architectural styles. Therefore, knowing that the traditional buildings constructed in Mersin have been constructed with similar construction traditions, a comparative study on traditional buildings of same period located in the nearby environment has been carried out. In this study, a comparison of the building with others in means of construction materials and techniques, structural system, architectural elements and architectural style is done.

4.1 COMPARATIVE STUDY ON BANK BUILDINGS

During the research related to the bank buildings, it is understood that the development of the architecture of the bank buildings is different than the development of the banking system in means of time and process. So, in order to evaluate the architectural features of historical bank buildings, the historical development of banking must be studied as well as

buildings themselves (Table 4.1). Therefore, at the beginning of this comparative study subject, brief information related to the historical development of banking after 1850s is given.

4.1.1 HISTORICAL DEVELOPMENT OF BANKING IN OTTOMAN EMPIRE

4.1.1.1 Between 1850s-1923 / Before Republican Period

After the declaration of the Administrative Reforms in 1839, Ottoman Empire had gone into deep changes in the management of financial-economical fields of the state. The classical Ottoman type of land and tax management ("dirlik düzeni"), which continued for centuries as the major system of the empire, was not a sufficient economical model anymore in the 19th century's world economy. After the new regulations in the economic and financial fields, taxes started to be collected by the state, who paid the salaries of the government officials.[1] Some problems occurred in the control of the money, which was being managed according to the new regulations. Usury and bankers spread around the country, causing deep harms in the economy of the state. In addition to this, bankers who have been uncontrollable in native and foreign debts became a real problem for the Ottoman economy. Moreover some bankers founded a foreign bank called Banque de Constantinople (Istanbul Bankası) in 1847.

Due to the rising problems, need for new regulations in the management of the economy became inevitable in the Ottoman state. During the same period due to the war defeats need for money in the Ottoman Empire had raised. Thus, this fact caused the state search for new sources, such as banking system in order to obtain money: This new banking system would be in such a way that, it would supply money for the treasury immediately in case of need for money, would regulate the disorder in the management of Ottoman economy, and finally would act as a mediator between the Ottoman State and the foreign capital in payment of long-term debts. Therefore, with this aims Ottoman Bank, which was the first bank in the Ottoman Empire, was founded in 1863. The Ottoman Bank had been founded under the control of the foreign capitals of French and English groups. The Paris and London committees took the decisions of the bank. The Ottoman State had only the directorship of the bank, which was in Istanbul. On the other hand, foreign countries used to demand high amounts of interest when they gave debt to the Ottoman state.[2] After the foundation of the Ottoman bank the rivalry and competition between the banks had raised and foundation of new banks followed each other. The first banking system has based on giving credits to the merchants being linkage between the merchants and the customers. They have provided

[1] Yüzgün, A., "Ziraat Bankası", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 4, pg. 771.
[2] Thobie, J., "Osmanlı Bankası", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 4, pg. 878-904.

"Merchandise Service" ("Emtia Servisi"), which has meant putting control on the goods of the customers, while giving credits to them.

Against the dominance of the merchants in the economy and the banking system, Mithad Pasha, who was the governor of the Niş Province, established the 'Memleket Sandıkları'in 1876. According to Mithad Pasha, agricultural sector was the major sector of the Ottoman economy. Thus, the problems of this important had to be solved by giving agricultural credits to farmers. However, this organization didn't have enough economical source in order to supply the credits and could not solve the money problem. Therefore, a new system in the control of these credits became inevitable, resulting with the foundation of the Agricultural Bank, which was opened with new hopes in 15 August 1888. The first law of the Agricultural Bank was declared in that time. [3] Since the foreign banks were not willing to give credits, the need for credit for the farmers was met by the newly founded native bank, Agricultural Bank. Therefore, in a very short time, Agricultural Bank became a very popular bank as being the first bank that used to give agricultural credits to the farmers and spread around Anatolia with many branch offices. By the year 1888, several branch offices in the local cities including the Mersin branch office, opened their service.[4]

Banking developed very rapidly and became very important in the trade activities. Thus, between 1850-1920 several branch offices of European Banks and national banks as well as local banks spread throughout the country. Between the years 1867 and 1898, the Ottoman Bank had opened 31 branch offices, 20 of which were in the Ottoman empire. The branch offices could consist of offices and agency. Between 1899 and 1914 the number of the branch offices, one of which was opened in Mersin, had raised up to 52. One of the important banks founded during this era, was the Banque de Selanique (Selanik Bank), which was established by the financial supply of the Italian family Allatini living in Selanik. Although, it was established as a local bank, it became an important bank that opened branch offices throughout country. Among the existing banks, only the Agricultural Bank was a native bank, which had been founded with Ottoman capital without any foreign support.[5] Foreign banks used to give credits for merchants, while Agricultural Bank preferred giving agricultural credits for farmers. Foreign banks are said to be linkage between non-Muslim merchants and foreign firms. Against the dominance of the foreign merchants and foreign banks throughout the country, "Ittihat ve Terakki Cemiyeti" tried to spread the understanding of "national economy"

[3] A. Yüzgün, "Ziraat Bankası", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 4, pg. 772.
[4] J. Thobie, "Osmanlı Bankası", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 4, pg. 878-904.

[5] J. Thobie, "Osmanlı Bankası", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 4, pg. 878-904.

and the "Muslim-Turk businessmen". They have acted in the foundation of "Itibar-i Milli Bankasi" in 1917. Between 1909-1923, with the effects of these ideas, national banking spread especially through the Aegean region with the aims of supplying their own credits to the local Ottoman farmers or merchants.

During this period, 24 national banks were founded some of which were: "Aksehir Milli İktisat Bankası", Aksaray (1911); "Aydın Milli Bankası", Aydın (1914); "Konya Ahali Bankası", Konya (1918); "Milli İktisat Bankası", İstanbul (1918); "Kayseri Milli İktisat Bankası", Kayseri (1916); "Eskisehir Ciftci Bankası", Eskisehir (1918); "Adapazarı Emniyet Bankası", Adapazarı (1919); "Osmanlı Itibari Milli Bankası", İstanbul (1917).[6] The national banks were generally founded in local Anatolian cities, like Aydın, Manisa, Eskisehir, Karaman, Konya, etc, which have been located along the railway axis, through which raw material transportation was densely flowing. These banks, which were trying to act against the foreign banks and the banks supported by foreign capitals, couldn't stand against them so long. Most of them have been closed due to economical difficulties by 1930s.

The second factor in development of banking between 1914-1923 was the I. World War and the Independence Wars, which were brought economical stagnation in the commercial life of Ottoman economy. During this period an important role of the banks rather than trade activities had been introduced: To supply money for the armies. Therefore, during the years of wars various branch offices of foreign banks were opened according to the existence of the armies of the foreign countries in that region. For instance, between 1919-1922 Banque D'Orient, Banque D'Athenes, National Bank of Greece were founded in Izmir during the occupation of Greek Armies in Izmir. In south regions, which were occupied by the French groups, it is seen that mostly Franch Banks opened branch offices in cities like Antakya, Adana, Mersin, etc.

4.1.1.2 After Republican Period

The banking system of the new government has developed with the "Izmir İktisat Kongresi", which was organised in Izmir in 1923. During the congress the ideas of "national and independent economy" and the "national banking" were emphasized. After this congress, a new period started for banking system throughout the country: "state banking". With the new regulations in the economical management of the new Republic, several national banks were established by the government: "Is Bankası TIB" (26 August 1924), "Sanayi ve Maadin

[6] U. Genc, Ege Bölgesi'ndeki Tarihi Banka Yapıları (1915-1930), Basılmamıs yüksek lisans tezi, Fen Bilimleri Enstitusu, Dokuz Eylul Universitesi, 2001, pg. 29.

Bankası" (1925), "Emlak ve Eytam Bankası" (1926), "Merkez Bankası" (1925). Besides the central national banks, foundation of local banks, which were specialized in specific purposes, were continued in Anatolian cities. Between 1924-1929, 43 national banks and 14 foreign banks were acting throughout Turkey.

4.1.1.3 Historical Development of Banking During 19. Century in Mersin

The increase in the commercial activities after 1880s throughout Mersin gave rise to new type of commercial functions, such as banking, exchange office, Industrial chambers, etc. Banking started to develop in Mersin for the first time and became very important in the trade activity, since Mersin became an important focal point of money, merchants and customers. This factor resulted with the opening of several branch offices of European and national banks as well as local banks throughout the city. [7] The important national and foreign banks that were opened in the city before the Republican Period were: the branch office of the Agricultural Bank (1888), Deutsche Orient Bank (1914), Atina Bank (1900s), Banque Francaise Des pays D'Orient (1915-1923), La Banque Francaise de Syrie (1900s). They are generally located on the commercial district of the city, where the daily trade activities occurred densely. According to the information coming from the Ottoman archives, the Agricultural Bank office was located in the Governmental Building when it was first opened and started to serve. As Toksöz indicates, some of these banks acted on behalf of the foreign firms that were conducting commercial business in the city. For instance, Francaise de Syrie and Banque D'Athenes had begun to work with this manner with French and Greek capital. These banks became linkage between the non-Muslim merchants and firms abroad.

Since the important role in the commercial life had been understood deeply by the foreign residents of Mersin, they invited their countrymen to open banks in the town. This resulted with the establishment of small local banks such as the bank of Mavrommati (Banque Mavrommati et Fils), who was a famous foreign resident and merchant of Mersin[8]. Ottoman bank has been opened in 1904. After the Republican Period, the commercial importance of the city has continued. Therefore, new branch offices of banks were opened during this period, while some of the early branch offices of previous banks were closed according to the changes in the economical frame of the new country. Selanik Bank (1926) and France Bank of Melaniki Sarkiye (1927) were opened during these periods. Besides, local banks or offices

[7] Yurt Ansiklopedisi, "Icel", volume 4, pg.3645.
[8] M. Toksöz, "An Eastern Mediterranean Port-town in the Nineteenth Century", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002.

that carried out banking operations in the city were established by the residents of the city such as Karaman Bank (1931) or Mersin Bank.[9]

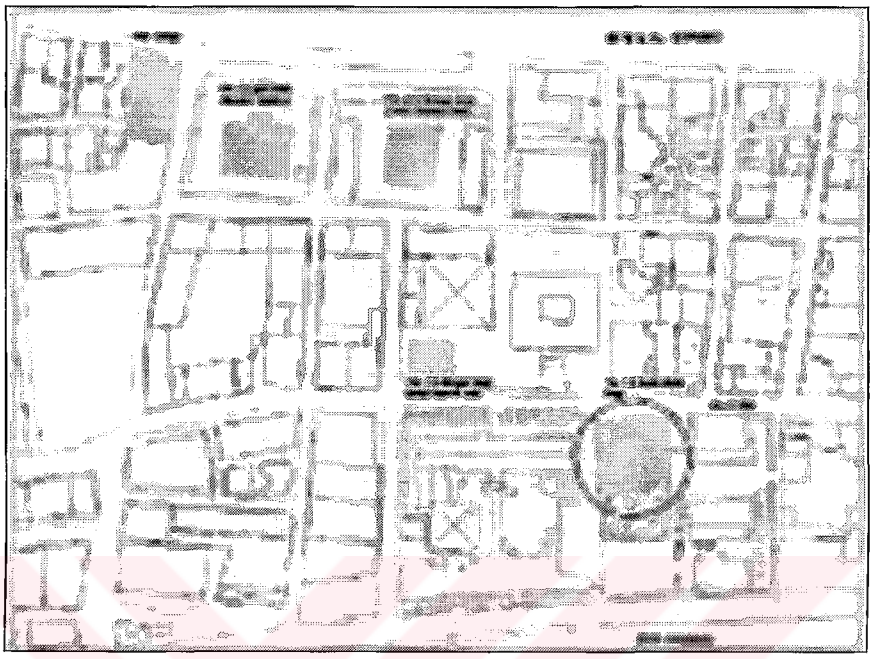


Figure 4.1 Location of bank buildings during 1930s in nearby environment of the Uray Street.

The new commercial axis of Mersin after 1920s has become the Istiklal Street, which was opened in the northern of the Uray Street. Therefore, the new banks of this second period – "Merkez Bankası", "Is Bankası" have been constructed on the Istiklal Street. With the changes in the commercial axis of the city from the Uray Street towards Istiklal Street during this period, the Ottoman Bank has opened another entrance on the north façade, the old of which had been located on the south facade. (figure 4.1)

4.1.2 HISTORICAL DEVELOPMENT OF BANK BUILDINGS

4.1.2.1 Location within the cities

During 1850-1920, banks have spread through the country especially in the Ottoman cities with high concentration of trade activities. Several national and foreign banks opened branch offices in the port cities like Istanbul, Izmir, Mersin, Iskenderun and Samsun; and in the ones that are located on the railway lines like Adana, Antakya, Ankara, Afyon, Eskisehir, Bursa, etc. The banks were located in the commercial districts of the cities, especially on the

[9] B. Beyhan. "Modernizmin Damgasını Vurduğu Mersin: Bir Yorum", XIX. Yüzyılda Mersin ve Akdeniz Dünyası, Mersin Üniversitesi, Mersin, 2002, pg. 93.

transportation axis of the goods. Therefore, they were close to the commercial buildings like khans, entrepot/depots, agency, exchange market, etc.

The foreign banks and bankers had gathered mostly in the Galata-Beyoglu districts in Istanbul, since the Voyvoda Street, was the main axis of the trade activities as well as bank offices during that period.[10] This region developed as the economical center of the Ottoman Empire between 1850-1920s. Many branch offices of European and Ottoman Banks gathered there. The street gained a new identity with high concentration of the banking activities as well as bank offices in 1910s. Thus, the street started to be called as "Bankalar caddesi" from than on. In other local cities, such as Izmir, Selanik the banks are located in the commercial districts similar to Istanbul. For example, when the Selanik Bank was established in 1887 by the Allatini Family, it was located in the 'Frank District', which was the commercial center of Selanik with khans. In Izmir, the existing banks were opened in the commercial district named as 'Frank District' during that period, where depot buildings, commercial khans, exchange building were located.

After the foundation of the Turkish Republic, a new political, social and economical formation period started. The economical center of the new country was the Ulus region in Ankara. Thus, the newly founded national banks as well as the existing ones such as Ottoman Bank and the Agricultural Bank started to build their central management offices in the new capital of the republic. Therefore, Ulus region developed as the heart of the economical management of the new government.

4.1.2.2 Architectural Features

4.1.2.2.1 Before the Republican Period

Since banking has developed first in Venezia and other Mediterranean cities of Europe during 15.century; the first bank designs, which have focused on central main bank hall, developed after 17. century. They had impression of large-scale residential buildings from exterior. The bank architecture has been accepted as a building category during 19. century in Europe.[11] Through all these periods, the spatial criterias have been originated according to the requirements of the banking function and the services provided by them. The development of bank buildings in Ottoman, has started in Galata region of Istanbul, where the first banks of

[10] E. Edhem; Bankalar Caddesi – Osmanlı'dan Günümüze Voyvoda Caddesi, Yapı Kredi Bankası Yayınları, Istanbul, 2000.
[11] U. Genc; Ege Bölgesi'ndeki Tarihi Banka Yapıları (1915-1930), Basılmamış yüksek lisans tezi, Fen Bilimleri Enstitusu, Dokuz Eylul Universitesi, 2001, pg. 36.

the empire have been founded.[12] They were generally designed by foreign architects. The most significant building constructed during this period was the head office building of the Ottoman Bank, which was designed by Alexandre Vallauri in 1892. However, the construction of the bank buildings has stayed limited since the banks developed as a new type of commercial function in the commercial life of the cities. The first banks opened during 1850-1900s served generally in the buildings that they rented or bought. They adapted the existing buildings architecturally according to their functional needs. For instance:

When the Ottoman Bank was first established in 1863, the head office in Istanbul, started its service in a small building on the street parallel to Voyvoda Street in Galata region. They could construct their own building as a bank building in 1892, 19 years after their establishment. By the time 1910s when the Voyvoda Street turned out to be "Bankalar Caddesi", the only designed bank building was the head office of the Ottoman Bank. All the rest of the bank offices were serving in existing multi-storey khans, which had already been constructed. The head office and the director center of the Agricultural Bank, which stayed is Istanbul 1926, serviced between 1888-1891 in the upper floor of the building belonged to "Ticaret ve Nafia Nezareti" in Cagaloğlu. It consisted of four rooms. This building is now being occupied by Genaral Directory of National Education of Istanbul province.[13] It was decided to construct an individual building that would belong to the administrative center of the Agricultural bank afterwards. Thus, the building that now belongs to Union of Istanbul Police headquarters (Istanbul Emniyet sandığı) was constructed and the head office moved into that building in 1891.

When the Selanik bank was founded by the Allatini family in Selanik in 1888, the head office started its service in the Allatini Khan which belonged to the same family. They had their head office constructed in 1907-1908, 20 years after its establishment, by the Italian architect Vitealiano Poselli. According to these results, it can be pointed out that construction of a bank building for bank function is rarely seen during this period, since it depended on the economical power and financial capacity of that bank in that city. The ones constructed according to the bank function were designed and constructed according to the local traditions and techniques. Due to the fact that adapting (converting) an existing building into a bank building predominated the originally designed bank buildings during this period, we have few examples for constructed buildings according to bank function. On the other hand, in the case of adapted examples when the branch offices left their buildings, those buildings were re-

[12] U. Genc; Ege Bölgesi'ndeki Tarihi Banka Yapıları (1915-1930), Basılmamış yüksek lisans tezi, Fen Bilimleri Enstitusu, Dokuz Eylul Universitesi, 2001, pg. 38.
[13] N. Hazar, 1863-1983 T.C. Ziraat Bankası, Ziraat Bankası Yayınları, Ankara, 1986, pg. 293.

adapted by the following users. Therefore, survey of such examples in order to understand how they adapted the buildings according to their functional needs are also difficult.

Under these circumstances, information related to the architectural features of the bank buildings in this period is obtained from the archive documents of the old banks (Ottoman Bank, Selanik Bank, Agricultural Bank), which are searched by the Ottoman historians. By searching the written documents such as letters, newspaper advertisements, etc the historians have given information related to the architectural features and criteria applied in the bank buildings and bank spaces during this period. The impression of the bank should show that it is the focus of financial and economic center. They must be attractive enough to give citizens and customers the impression of financial power and safety. Thus, within the economical possibilities, they tried to design their buildings according to these criteria. The appearance of the bank building has depended on its financial potential and business capacity in the commercial life of that city. Mostly, the architectonic articulation in the facade organizations has been constructed according to the architectural stylistic approach applied on that building. Thus, the appearances of the buildings have been affected by local traditions, existing trends in that region or the designer of the building.

4.1.2.2.2 After the Republican Period

After 1920s, designing the bank buildings according to bank function before the opening of the bank offices became common. The initial examples were born in Ankara, when the bank buildings started to be constructed in Ulus region. The new government invited famous architects to design the buildings such as G. Mongeri and C. Holzmeister.

The architecture of the bank buildings during this period has developed after the construction of the head offices of the national state banks in Ulus region. Especially the buildings of the Ottoman Bank, Agricultural Bank and TC Isbank buildings, which were designed by Italian architect G. Mongeri. The plan schemes of these banks have been consisted of central main bank hall with high ceilings located at the ground floor with office spaces surrounding it. The high spaces of the main hall have provided with office spaces located at the mezzanine floors. In some examples, the main hall is arranged as an atrium. The upper storeys are functioned with office uses of the management staff of the bank. The safe room is located at the basement floor. They were constructed according to the characteristics of the I. National Style with characteristic decorations and ornamentations on facade organizations. With the effects of this stylistic approach, the monumentality of the buildings is emphasized with facade articulations and corner towers. The new construction criteria of architectural features applied on the bank buildings in Ankara affected the

construction of the branch offices in other cities as well. Thus, during this period, in the construction of the bank buildings, prototypes and design standards were developed which increased similarities between each other.

4.1.2.3 The Functional Services and Spatial Organisations in Bank Buildings

Between 1850-1930s the functional services of the bank buildings and their spatial organizations were as: Customers services (credit, portfolio, account, merchandise etc), rented safe boxes service for the customers; and accounting, communication and management services organised for the bank itself. Besides, auxiliary functions such as service for the personnel, archive and storage are located within the bank functions.[14]

For the spatial organisations of these services and functions some criteria were important. The services for customers were located in the main bank hall, which was organised to bring the employees and customers together. The main money of the bank was kept in the safe room, which was located in the safest part of the building. In some banks beside the main safe box, there were small boxes for customers for the rented safe box service. The control of the money was supplied by the cash unit, which was located in the main hall. The cash point should have spatial relation both with the main hall and the safe room. The management units were located in the manager rooms in such a way that they could control the main hall and have indirect relation with the employees. The communication service was located in the communication rooms, which could be arranged separately. Archives, which were important to conserve the documents of the banks, were located in archive rooms. Besides, there were service rooms for the personnel such as WC, kitchen. In some examples there were storage spaces where the coal or wood the buildings was kept. Usually, spatial organization of these functions except from the storage function was located within the main bank building. For the Merchandise Services, large spaces were needed for the storage of the goods. This spatial arrangement was not obliged to be solved within the main bank building. the branch offices of the Ottoman Bank in Izmir[15] and the Selanik Bank in Istanbul[16] have rented depot/entrepot buildings located close to the railway axes used for transportation of the goods. But, it is understood that in branch offices of local cities like Afyon[17], they located the storage of the goods in the ground floor within the bank building.

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[14] M. Berke, Selanik Bankası'ndan Interbank'a 110 Yıllık Mazi, Interbank Yayınları, Istanbul, 2000, sf.209.

[15] C. Atay; Kapanan Kapılar, İzmir Hanları, İzmir Büyükşehir Belediyesi Yayını, 2003.

[16] M. Berke; Selanik Bankası'ndan Interbank'a 110 Yıllık Mazi, Interbank Yayınları, Istanbul, 2000, sf.209

[17] S. Aktüre; "Osmanlı Devleti'nde Taşra Kentindeki Değişimler", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, volume 3, sf.891.

Whether a bank building is constructed or it is adapted, there were definite issues in order to achieve conditions of comfort in banking spaces related to the bank function. *(Table)* All these information is obtained through the written documents in the archives of the old banks, which are searched by the Ottoman historians. It is understood that all the bank buildings tried to achieve these criterias as possible as they could manage:

For the main bank hall section, where the customers meet the employees, control of crowded people and easy contact between customers and bank employees was an important criterion. In order to increase the efficiency of employees, good quality of sunlight and air ventilation as well as light, fresh and hygienic effect should have been achieved. To achieve these conditions, large interior environment with single space and high ceilings were constructed for the main bank hall sections. More openings, less walls with high number of big sized windows were located as architectural elements. Light colors were used for the interior finishing to supply hygienic effect. The manager offices were separated from the main bank hall and closed in order to supply controlled relation with employees and customers. The safe room was located in the safest part of the building usually on the basement. It had relation with cash point from the main hall where the official of the cash point could access in a controlled way. In some examples, where iron safe boxes were rented for the customers, the customers could enter to the safe room through a controlled access. Archives were important to keep the written documents related the banks. So, main precautions had to be taken against fire and safety. Therefore, they were also located in the safe parts of the building.

These properties are seen generally in big-programmed banks. The actual program and plan characteristics of the local banks cannot be studied since there are very few examples from this period.

With the changes in the banking activities after 1920s, functional services of the bank buildings have gone into some changes also. Some of the functional services of previous period have changed according to the new trends of banking facilities. Firstly, the Merchandise Service ("Emtia Servisi") has disappeared since the rules and conditions of giving credits to the customers started to change. By the disappearance of this Merchandise Service, need for such spaces have also been eliminated.

Bank spaces always improve themselves to supply better working conditions for both their employees and customers. The spatial criteria required during the previous period continued during this era also. However, they always got benefit from the advances in the technologies to achieve better conditions. For instance, active systems started to be located

within the buildings in order to increase the conditions of comfort in the spaces, which had to be supplied with passive system in the previous period.

4.1.3 ARCHITECTURAL FEATURES OF BRANCH OFFICES OF AGRICULTURAL BANK

The branch offices of the Agricultural Bank, which were opened in 1888, lasted as an official institution until 1924. Due to the economical reasons, most of the branch offices of the bank were opened and serviced in the governor's offices in local cities at the beginning. According to N. Hazar whether the branch offices occupied the buildings that belonged to them or that they hired between 1889-1892 and if there were any standards in functioning of these spaces cannot be clearly identified since there were not such information in the sources.[18]

On the other hand, in the first years of the Agricultural bank there were two types of offices in cities as branch offices and credit union offices ("Sandık Binaları"). They had more simple plan program than branch offices and different arranged plan organizations. The credit union office of Sandıklı, which was constructed in 1905, is an example for this type. It was a simple building occupied 100 square meters. As Hazar states, the one in Hayrabolu, which was demolished in 1957, was similar to the Sandıklı building. He also indicates that there aren't examples of branch offices survived from that period. [19]

After the Republican Period, administration of the Agricultural Bank has started to supervise construction of the general directory office in Ankara as well as the branch offices and houses of the employees. During this period the project of the general directory office in Ulus, Ankara and the branch offices in Aydın and Manisa were designed and drawn by G. Mongeri, who was appointed as the supervisor of the Agricultural Bank. These examples have affected the other branch offices constructed in other cities.

New functional criteria became an obligation for the branch offices after 1920s. There had to be residential sections for the manager and vice manager with their families. Therefore a new function –residential use- is introduced into the bank programs. In most of them, the residential section was designed with the bank program, which was located at the ground floor. They were located at upper storeys with different entrances. In some examples the residential sections have been constructed separately as another building. As far as it is

[18] N. Hazar, 1863-1983 T.C. Ziraat Bankası, Ziraat Bankası Yayınları, Ankara, 1986, pg.322.
[19] N. Hazar, 1863-1983 T.C. Ziraat Bankası, Ziraat Bankası Yayınları, Ankara, 1986, pg.323.

searched through the archives of the Agricultural Bank, it is understood that they have continued converting existing buildings into their branch offices. The number of these examples is very few. The only example for this is in Giresun.

4.2 COMPARATIVE STUDY ON ENTREPOT/DEPOT BUILDINGS

4.2.1 Historical Development of the Entrepot/Depot Buildings

New developments in trade activities in the Ottoman Empire during 19th century have affected the physical structures of the cities. The new commercial activity has based on the collection of harvested goods from inlands of the country to the port locations. The collected goods have been transported with railway lines until the port cities. By the sea transportation from the port cities, they have been exported to the foreign countries. The port cities have become the focal points, where the State has opened to the foreign countries. Istanbul, Izmir, Mersin and Trabzon were important port nodes of each region. Besides them Giresun, Ayvalık, Iskenderun used to be the other ports that contributed in the trade activities of these regions.

Port cities have become exchange points of the type of transportation, where the collected goods have been stored for a while. On the other hand, initial hand process of the raw material is completed in the storage areas as well. This new way of transportation has necessitated new types of models and organisations in the commercial activities. New types of models have been introduced in the organisation, administrative and communication of these activities. The "mobile traders" of the past periods have started to settle within the cities. The physical structure of the port cities have included new types of buildings such as commercial khans, banks, post offices, custom buildings as well as the residents of the traders who have settled in the cities.

In the transportation of the goods, depot and entrepot buildings have played an important role. In the scheme of the trade activity, merchants are not in direct relation with the goods anymore. The negotiator firms such as banks deal with the selling of the good. Therefore, the new prestige commercial districts of the port cities include bank buildings and commercial khans. The "bedestens" of the 16th century have left their places to the station buildings, entrepots and hotels.[20] The necessity for large storage areas have occurred not only in the port cities, but also in the transit trade centers which are located on the railway

[20] I. Tekeli; "Tanzimat'tan Cumhuriyet'e Kentsel Dönüşüm", Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi, Volume 3, İletişim Yayınları, Istanbul, 1985

lines inside the country. Cities like Bursa, Eskisehir, Afyon, Ankara, Adana, etc have developed as important commercial inland cities on the axis of the railway transportation lines.

4.2.2 Examples From Entrepot Buildings

The depot/entrepot functional use is an important issue in building typology of traditional commercial buildings of Mersin. There are three types with this manner in Mersin. The simplest configurations in plan schemes are observed in one-storey depot buildings[21]. Their plan schemes are arranged so that they are opened to the street with wide openings. Today, there are very few examples have left in Mersin which belong to this group. So, the information related to the architectural features of these building types can be surveyed through the old photographs of Mersin. From the photographs, the properties related to mass articulation and facade properties of the building can be visualized at least. There have been probably two sub-groups as single unit ones and the ones consisting of multi units. As far as observed from the photographs it is understood some depot buildings have been constructed with storage function only, while some include office/store uses together with storage function at the ground floor as well. The second group includes depot function located at the ground floor with office function in the upper storeys. In the third group, the depot function in the ground floor with residential units located at the upper floors. In the third group, the depot function is located at the ground floor, while upper storeys are occupied with residential uses. These examples have more small plan areas, than the other groups. (Table 4.2)

As far as understood from the surviving examples and the old photographs the architectural characteristics of these buildings consist of thick masonry walls, which have been constructed according to the local construction techniques of that period in Mersin. Their superstructure consists of either timber pitched roof or flat roof. The examples with flat roof are generally observed through the old photographs since we they have been destructed now. They might have been constructed with either vaults or in vaulted flooring technique. The depot/entrepot sections have big heights with small openings located generally close to the top to supply safety. The door openings usually consisted of wide openings having timber or metal wide wings. In some examples, folded type elements have been used.

One of the most important port cities of Ottoman economy was Izmir, which had played an important role in the trade activities of the Empire especially after 19th century. All the goods collected from the inlands of the Aegean region have been exported from Izmir. After the construction of the Izmir port in 1875, the flow of goods increased and necessitated large

[21] C. Ulku; "19th Century Commercial Buildings in Mersin", Mersin, the Mediterranean and odernity, Colloquim Proceedings, Urban Center of Mersin University, Mersin, 2001

storage areas within the city before they are exported or after they are imported. Khans were the important commercial buildings that were used for the storage of the goods during this period. They were called as "Depot Khans".[22]

Depot Khans were different than the classical commercial khans with the changes in the transportation type of goods. Some of them had storage function only while some possessed both storages and offices used by traders who were waiting for the goods. In some of the khans the goods had been simply processed before they were exported. So besides storage spaces, there were spaces also for this purpose. The depot khans were located especially close to the port and industrial areas as well as along the railway transportation axis. The districts "Eski Osmanlı Gumrugu", "Hukumet Caddesi", "Saman Iskelesi" used to be the areas where depot khans were densely located before the construction of the Izmir port. "Konak" and "Yemis Carsısı" Khans developed after the construction of the port.

The examples from depot khans of Izmir selected for the comparative study in this chapter are the ones having similar plan types with the studied example in Mersin. The khans arranged around a courtyard and the ones with "arasta" type plan schemes haven't been included. According to their plan schemes the depot khan buildings can be categorized into groups. In this manner the first group consist of single unit and single storey examples having storage function only. The second group consists of multi units opening to each other with depot functions in a single storey. The third group includes the ones having depot and office function together especially with office units in the upper floors. The fourth groups include multi storey examples, which have corridor type plan schemes in their ground floors. Some of the examples in fourth group have depot function only with central aisle arranged like a corridor. In some of them office and depot spaces are arranged together in the ground floor and connected to each other with corridors.

The general architectural features of the selected examples consist of one or two storeys khans constructed out of thick stone masonry walls to be strong and safe enough especially against fire. Some of them have been constructed roughly just for purpose, while some have been constructed with good workmanship with cut stone masonry walls and neo-classical decorations on their facades. Their superstructures generally consist of timber pitched roofs or vaults. In some of them vaulted flooring has been used for the superstructure. The floorings in two or more storeys khans were generally constructed with vaulted flooring technique. In some examples with pitched super structure there are lighting windows in the superstructure. The windows are generally located at the top in order to provide safety. But in

[22] C. Atay; Kapanan Kapılar, İzmir Hanları, İzmir Büyükşehir Belediyesi Yayını, 2003.

some examples, there are regular window openings leading to the storage areas. The door openings are generally arched wide openings in order to supply entrance of goods. The windows have generally metal shutters, while door elements generally consist timber or metal wings.

There are few examples from that could be reached as examples from other port cities. As far as observed from other port cities like Ayvalık, Hanya, Giresun, etc it is understood that they have similarities with the examples in Mersin and Izmir, in means of plan schemes, construction technique, structural system and architectural elements. Besides, the port cities depot buildings have played an important role as a building function in cities like Afyon, Eskisehir, Bursa, etc which are located at the railway transportation axis of the goods during that period. There are examples from Afyon, in one of which the branch office of Ottoman Bank has been located at the upper storey of depot spaces.

4.3 COMPARATIVE STUDY ON TRADITIONAL BUILDINGS IN MERSIN

The examples for comparative study among traditional buildings in Mersin have been selected within the nearby environment of the Uray Street according to their construction technique and materials; structural, architectural and finishing elements. By this way 20 buildings, which posses similarities with the Agricultural Bank in means of architectural characteristics and which show the construction traditions in Mersin during the 19th and early 20 th century, are studied in detail. Their properties are depicted onto the table including verbal explanations and sketches. (Tables 4.3a and 6.3b)

The types of selected commercial buildings are as following:

One storey retails (2); inns (2); buildings ground floor used as store/shop, upper floors as office (5); bank building (1); buildings ground floor used as store/shop, upper floors as residential (7).

4.3.1 General Architectural Features

4.3.1.1 Physical Characteristics

The traditional buildings in Mersin consist of one storey or two storey buildings. Today, since very few examples for one storey buildings could have survived, there are mostly two storeyed buildings. The superstructure of the traditional buildings consists of generally pitched roofs with Marsilian roof tiles as finishing material. In some examples, terraced roof is observed for the superstructure. Physical characteristics of these buildings are enriched with

the existence of basement, mezzanine and roof floors. One of the architectural features observed in the buildings, are projections, which include closed and open projections. They are important facade elements. The facade organisation is affected and enriched by the existence sub floors (basement, mezzanine, roof floors), and projections. The existence of them is reflected to the facades resulting with variations in the elevations.

4.3.1.2 Construction Techniques and Materials

The common construction technique in traditional buildings of Mersin consists of cut stone masonry and timber frame techniques in vertical elements; while timber flooring and vaulted flooring are applied in construction of horizontal elements. The exterior walls of the buildings are constructed with cut stone masonry techniques for whole facade or cutstone techniques at ground floor and timber skeleton techniques at first floor. The buildings located on the Uray Street are mostly cut stone buildings since they had been constructed as the important and impressive buildings of that period. The interior walls are generally constructed with cut stone masonry or timber skeleton wall techniques. In some buildings, as in old Agricultual Bank building, the stone masonry construction technique consist of cut stone at the exterior face and rough cut stone at the interior face, where the wide openings of door and window is spaned with rough cut stone arches.

The use of tension bars within the cut stone masonry are seen in some examples, due to the locations of metal wedges on the facades. All the cut stone buildings have cut stone floor jails on the facades. For the drainage of rainwater collected from the roof, a space is left on the jail in order to locate the downspouts.

Metal I beams are observed as the main supportive element of vertical structural elements in most buildings. They are located within the cut stone masonry walls, which can also been observed from the exterior facades in some examples. Rectangular timber beams are placed on each side of the I beam in order to increase the strength capacity as well as to avoid the metal left exposed to the outer conditions. They are used for the support of the projections also, where they are situated on the cut stone projection consoles. According to the later interventions the original flooring techniques have been altered partially or totally with contemporary techniques. As far as it is observed the original floorings consist of timber flooring and vaulted flooring techniques. Metal I beams are observed as main supportive elements of floorings especially in the projections sections. For the span of wide openings or in order to support floorings, semi circular and pointed arches with large spans were constructed especially in commercial buildings and residential+commercial building types.

In large spaces, more than one row of arches are constructed respectively, while in small retails one row of arch is constructed only. In some buildings they are located at the exterior walls to supply opening towards the street. The interior staircases of traditional buildings consist of timber or stone stairs, while exterior staircases consist of stone staircases. In the construction of stone staircases, cut stone arches and/or vaults are used to support the steps or landing spaces. In few examples the metal I beams with large sections are used to support the cut stone steps of the staircases. The original steps are cut stone materials, but in some cases mosaic steps are observed where as later alterations. Metal balustrades are common balustrades types used with stone stairs.

There are two types of projections: closed projections and open projections -in other words balconies-. Open projections -balconies- are constructed in two techniques: as vaulted flooring or as monolithic stone plates supported by consoles. Vaulted construction technique consist of hollow bricks that are supported between metal I beams. Metal circular brackets are used to support the vaulted slab. The finishing materials of vaulted floorings are mosaic or ceramic tiles. In stone plates technique, the plates are connected to each other with metal clamps. From the connection edges they are supported by either cut stone profiled consoles or ornated metal consoles. The closed projections are constructed with timber skeleton elements. There are two types of applications in this manner. In first case, theye are constructed as timber frame wall covered with wood laths that are plastered in final stage. They are supported by cut stones consoles or metal I beams. In the second case, the projection is designed as architectural element consisting of timber partition elements that are not plastered (ie in buildings with reg no 18, 55, 63). They are supported by ornated metal consoles. In the span of the window openings at the exterior facades, metal beams are located into the cut stone window sills. The window sills may be either single monolithic stone or flat arch consisting of 3 or 5 cut stone pieces. In both cases, the rectangular beams are used.

4.3.2 Architectural Elements

4.3.2.1 Exterior Elements

In order to evaluate the facade characteristics of the traditional buildings architectural elements (doors, windows, shuuters, grills, sills and jails), projections and decorations on the elevations are studied considering their materials and construction details. The buildings especially located on the Uray Street and Ataturk Street are constructed with neoclassical styles, affects of which are seen especially on the design of elements and their decorations.

The door openings for commercial units generally include cut stone arched openings with large spans. Since most of the original frame elements had been altered with contemporary elements (usually metal frames), we have very few original examples left today. (buildings with reg. No 49 and 55) They have two and four winged massive timber door elements. The circular sections were closed with metal grills. The doors of the small openings in the commercial units and entrance or balcony doors of the residential units consist of arched or straight lintel door types including timber door elements. Some of them have arched lighting window located at the top. The balcony doors have shutters as in window elements. Most of them are located into cut stone sills, which are decorated with neoclassical motives or ornamentations. The buildings have pedimented upper sections supported by columns on each side similar to the entrance door of the old Agricultural Bank Building.

There are various types of window openings located at the exterior walls. According to the their dimensions; there very narrow windows which are opening to basement or depot units; medium sized openings enlightening the rooms; and large openings leading light to sofa sections. The last group generally located on courtyard facades rather than street facades. According to their forms, there are circular or straight linteled windows. The original frame elements usually consist of timber material with two winged and upper lighting window and *giyotine* type designs. The lintels which consist of either single cut stone element or several cut stone pieces, are supported by metal beams situated into the lintel. In case of multi stone applications, they are constructed in flat arched form. Most of the windows have windowsills with decorated with neo-classical figures and ornamentations. The use of shutters is very common. There are two types of applications: the shutters located at the sill and the ones located onto the window frame. Metal grills are commonly used in window openings when the shutters are missing, in balconies as balustrades and in the arched sections of wide openings. In cut stone constructions jails are used as important horizontal decoration elements especially on first floor level. Cornice jails are also observed in some examples.

4.3.2.2 Interior Elements

Some of the studied buildings could not be entered and surveyed from the interior, since they are not being used nowadays. Among the surveyed ones, few examples related to the interior architectural elements lasted with their original form and designs today due to alterations. Thus, study on the original character of the interior elements with their construction details and materials has stayed limited when compared to the information obtained from the exterior elements.

Interior architectural elements of traditional buildings consist of staircases, doors, and windows commonly. In addition to them, cupboards/shelves, fireplace/fume uptakes are important elements of residential buildings. Interior staircases consist of either timber stairs or stone stairs. They generally lead to the interior sofa (hall) that is located into the first floor. The circulation to the rooms is supplied from this sofa. In such cases the staircase is divided from the sofa with large glazed wide opening. For the support of stone stairs especially in the public buildings, cut stone arches or vaults are used. The steps generally consist of stone or mosaic steps. Timber balustrades rather than metal ones are used in interior staircases. As far as it could be observed, the window and door elements are generally made out of timber material. The door elements with two wings and a lighting window are the most common door type used for rooms. The sofas are located both in the ground floor and in the first floor in residential buildings. In both cases, they include openings of windows to lead light into the spaces. The openings in sofas (halls) located at the first floors consist of wide openings where door and window elements designed together with large glazed sections. Colored glazing is also used in some examples. In residential buildings timber cupboards and shelves can be seen. In kitchen places, there are fireplaces or fume uptakes.

In almost all examples, the interior walls have plaster and paint finishing. Only in commercial spaces like depots, retails, etc located at the ground floor, the interior walls are left exposed without finishing material. The original floorings of traditional buildings consist of timber flooring and vaulted floorings. The floorings of living spaces is generally used constructed out of timber flooring with timber boarding as finishing materials. In wet spaces (bath, WC, kitchen) and in some circulation areas like sofas vaulted flooring is used. Their finishing materials compose of ceramic and/or mosaic tiles. In some buildings, marble is used as the finishing material. In addition to this, the spaces located on the ground are covered with ceramic or mosaic tiles that are applied on screed. In some spaces, like wet spaces, depots, etc, mosaic or screed cover is applied as finishing material. The common finishing in superstructure of the spaces are timber ceilings. There are two techniques observed throughout the surveyed examples: Overlapping or profiled laths technique. In some examples, decorated timber ceilings are observed especially in main living spaces.

4.4 EVALUATION

Within the light evaluation of plan schemes and architectural characteristics of the entrepot buildings through typological studies show that the initial plan layouts of this building have been designed according to the depot function. It has been constructed as an entrepot building according the local construction materials and techniques applied in Mersin. The

building, which has been altered from entrepot building, has been constructed according to the local construction techniques applied in the late 19th and early 20th century buildings in Mersin. There are various similarities in means of construction materials and techniques as well as interior and exterior architectural elements. As in most of the traditional buildings constructed on the Uray street and in the nearby environment, the building has two-storey and a mezzanine floor cut stone masonry building with pitched superstructure.

The building is constructed with thick stone masonry exterior walls as observed in many examples in the nearby environment. The details observed in the construction technique of the stone masonry are similar when compared with other examples. For instance, the use of the metal I beams horizontally in the cut stone masonry walls to support the floorings, construction of reveal arches to span the door openings the ground floor, use of metal rods for the span of the windows in the upper floors, types of window and door sills can be observed in other examples also. One of the common vertical structural elements applied in traditional buildings of Mersin during that period is the arches spanning wide openings, which are constructed to support the floorings. In this building they are used as the main supporting elements in the ground floor. In addition to this, the use of the timber and vaulted floorings throughout the building is also similar. Commonly, timber floorings are constructed in living spaces, while vaulted flooring are preferred in wet spaces and circulation spaces. In this building, the distribution of the flooring types have similar preferences as vaulted flooring is constructed in wet spaces and spaces having high circulation traffic, while timber flooring is constructed in low-circulated areas. The use of cut stone vaults for the support of the staircases is also common. The facade elements and ornamentations are similar to the characteristics of other buildings. The cut stone window and door sills, roof cornices and the cut stone balcony supporting elements belong to characteristics of the traditional buildings in Mersin. The interior architectural element including windows, doors and wide openings have also similarities among other examples.

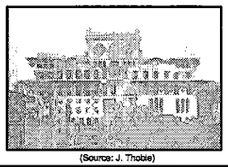
The evaluation related to traditional bank buildings within the light of information coming from the historical research related to the building shows that the Agricultural Bank building has bought and adapted a late 19. – early 20. century traditional Mersin building into its branch office during 1933. During the interventions while they are converting the building into their branch offices, they tried to achieve requirements of banking services and functions. Thus, important and significant changes have occurred especially in the inside of the building. They have also got benefit from local construction techniques during this process.

Table 4.1 Comparative Study on Bank Buildings

BEFORE REPUBLICAN PERIOD (1860-1920s)

Designed Buildings

Ottoman Bank, Istanbul Head Office



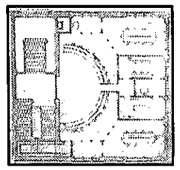
(Source: J. Thobie)

Architect : Alexanderia Vaullari
Cons. Date : 1890-1892

Style : Eclectic style with Neo-classical front facade, and Orientalist rear facade

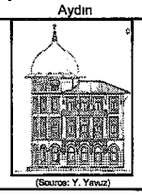
Architectural Features :
*Three storeys over a basement floor. The safe room with safeboxes are located in the basement floor. The main bank hall is located at the ground floor, while offices are located at upper storeys.

Original plan drawn by the architect



(Source: E.Eldem)

"Milli Aydın Bankası" and a Mosque Aydın

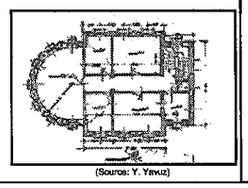


(Source: Y. Yavuz)

Architect : Mimar Kemalettin
Desg. Date: 1913

Note: The project which was designed by Mimar Kemalettin isn't constructed

Architectural Features :
*Three storeys over a basement floor. On the corner of the building there is a circular floor located at the roof level.
* Three floors are arranged for bank functions while the circular tower floor is arranged as a mosque.



(Source: Y. Yavuz)

Credit Union Office, Sandıklı



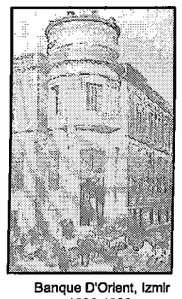
(Source: N. Hazar)

Architect : Unknown
Cons. Date : Before 1910s

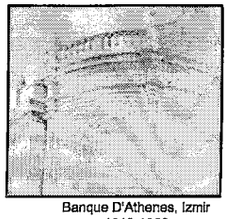
Style : Neo-classical
Architectural Features:

In the first years of the Agricultural Bank, there are two types of function and offices in cities: Credit Union Offices and Branch Offices.
This credit union building has a very simple fan with 100 m2 area. *N. Hazar

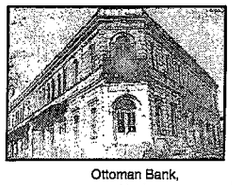
Converted, Adapted Buildings



Banque D'Orient, Izmir
1900-1920s
(Source: C. Alay)

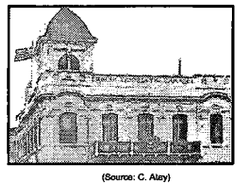


Banque D'Athenes, Izmir
1919-1922
(Source: C. Alay)

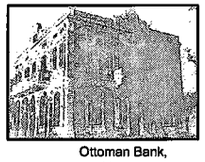


Ottoman Bank,
Usak
(Source: U. Genc)

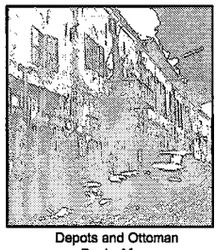
National Bank of Greece
Izmir, 1919-1922
Previous Function:
Exchange Building



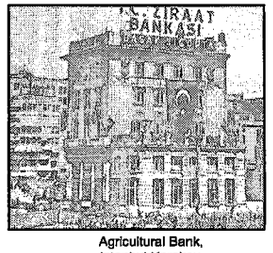
(Source: C. Alay)



Ottoman Bank,
Manisa
(Source: U. Genc)



Depots and Ottoman
Bank, Afyon
1900s
(Source: S. Aktüre)

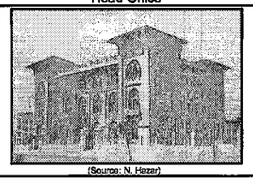


Agricultural Bank,
Istanbul-Karakoy
1908
(Source: N. Hazar)

REPUBLICAN PERIOD (1920s-...)

Designed Buildings

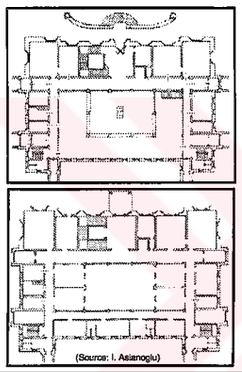
Agricultural Bank, Ankara Head Office



(Source: N. Hazar)

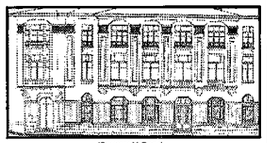
Architect : G. Mongeri
Cons. Date : 1926-1929

Architectural Style : Characteristics of I. National Style in facade organisation, mass articulation and ornamentations
Architectural Features :
* Three storeys over a basement floor and pitched superstructure
* Safe Room is lcoated at the basement floor,
the offices are arranged around the main hall in the ground and mezzanine floors



(Source: I. Aslanoglu)

Agricultural Bank, Izmir

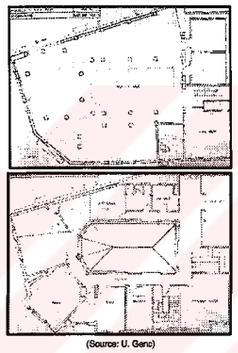


(Source: U.Genc)

Architect : Unknown
Cons. Date : 1930

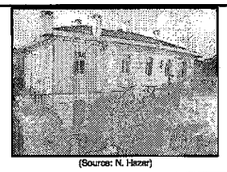
Architectural Features :
* Three storeys over a basement floor
* The ground floor includes main bank hall with offices around it, while the last two floors include the residential units.

* The residential section is accessed from a different entrance, while the bank section is entered from the corner.



(Source: U. Genc)

Agricultural Bank, Manisa



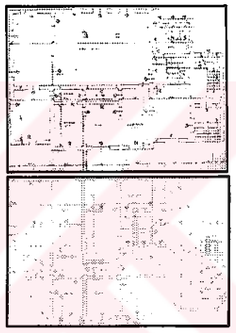
(Source: N. Hazar)

Architect : G. Mongeri
Cons. Date : 1926-1929

Architectural Style : Characteristics of I. National Style in facade organisation and mass articulation

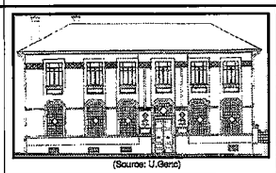
Architectural Features :

* Two storeys over a basement floor
* The safe room is located at the basement floor. The ground floor includes main bank hall with office units with a central entrance. The first floor includes residential section. It is accessed from staircases located next to the building.



(Source: U. Genc)

Agricultural Bank, Kutahya



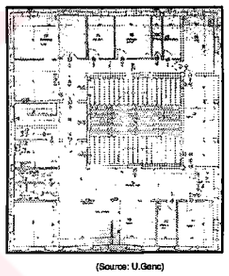
(Source: U.Genc)

Architect : G. Mongeri
Cons. Date : 1929-1931

Architectural Style : Characteristics of I. National Style with neo-renaissance decorations in facade organisation, mass articulation

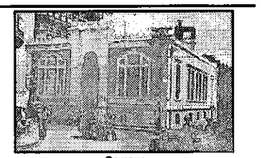
Architectural Features :

* Two storeys over a basement floor
* The safe room is located at the basement floor. The ground floor includes main bank hall with office units with a central entrance. The first floor includes residential section. It is accessed from staircases located within the building from another entrance.



(Source: U.Genc)

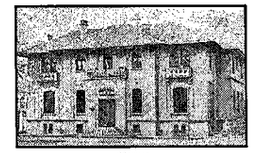
Other Branch Offices of Agricultural Bank



Samsun
Architect : Unknown; ? Date : 1926



Eskişehir
Architect : Unknown, Date : 1926

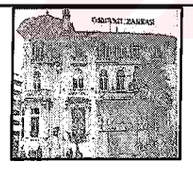


Konya
Architect : Unknown Date : 1926



Eskisehir
Architect : Unknown Date : 1926

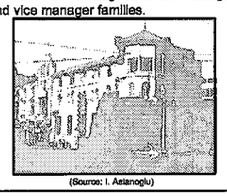
Ottoman Bank, Izmir



(Source: I. Aslanoglu)

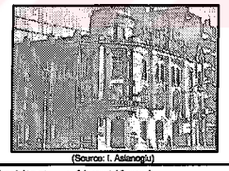
Architect : G. Mongeri
Cons. Date : 1926

Architectural Style : Characteristics of I. National Style in facade organisation, mass articulation and ornamentations
Corner tower emphasizes the monumentality of the building
Architectural Features :
* The safe room is located at the basement floor. The main bank hall with office units arranged around it is located at the ground floor. The first floor houses office rooms. The main hall is designed as an atrium with top ligthing connecting the ground floor and first floor to each other. on the thirs floor, there are three residential units designed for the manager and vice manager families.



(Source: I. Aslanoglu)

(The old Bank of Rome), Izmir



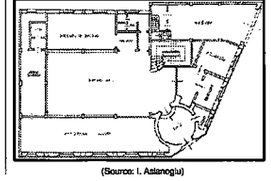
(Source: I. Aslanoglu)

Architect : Ahmet Kemal
Cons. Date : 1930-1932

Architectural Style : Characteristics of I. National Style in facade organisation, mass articulation and ornamentations
Corner tower emphasizes the monumentality of the building
Architectural Features :
* Three storeys over a basement floor

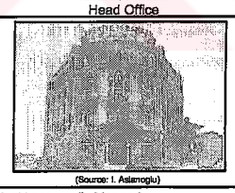
* Half of the building is designed as bank building and half is designed as embassy of USA.

* In the Bank section the ground floor includes main bank hall with office units around it. The last floor is arranged as special office units another than bank function.



(Source: I. Aslanoglu)

Isbank, Ankara Head Office



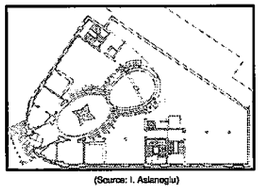
(Source: I. Aslanoglu)

Architect : G. Mongeri
Cons. Date : 1929

Architectural Style : Characteristics of I. National Style with neo-renaissance decorations in facade organisation, mass articulation

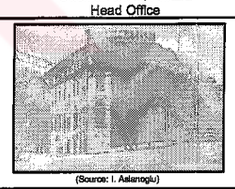
Architectural Features :

* Four storeys over a basement floor
* The safe room is located at the basement floor. The main bank hall with office units arranged around it is located at the ground floor.
Bank hall is enligthened with top ligthing. The shape of the hall section is have circular forms.



(Source: I. Aslanoglu)

Ottoman Bank, Ankara Head Office



(Source: I. Aslanoglu)

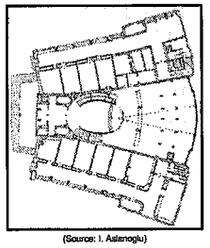
Architect : G. Mongeri
Cons. Date : 1926

Architectural Features :

* The safe room is located at the basement floor. The main bank hall with office units arranged around it is located at the ground floor. The last two floors are arranged for residential uses.

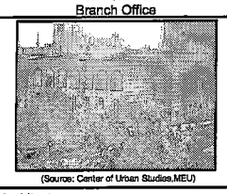
Sumerbank, Ankara Head Office

Architect : G. Mongeri
Cons. Date : 1929



(Source: I. Aslanoglu)

Isbank, Mersin Branch Office

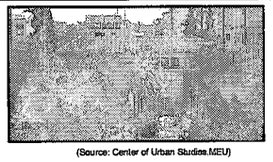


(Source: Center of Urban Studies,METU)

Architect : ——
Cons. Date : 1930s

Architectural Features : The buildingis located on the Istiklal Street with a corner entrance. In facade organisation, mass articulation the monumentality is emphasied.

Merkez Bank, Mersin Branch Office

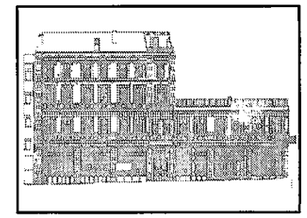


(Source: Center of Urban Studies,METU)

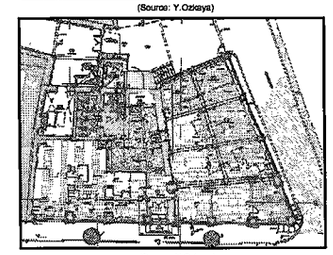
Architectural Features : Constructed with the architectural features of the period in mass articulation and facade arrangements.

Converted/Adapted Buildings

Agricultural Bank, Giresun



(Source: Y.Ozkaya)



(Source: Y.Ozkaya)

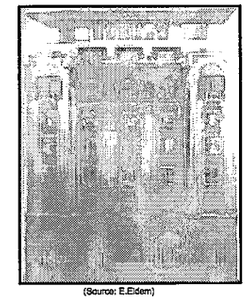
As Y. Ozkaya states in his report, the building has been constructed probably during the period between late 19. and early 20. century with a neoclassical style it was probably belonged to a foreign resident of Giresun, who was a marchant dealing with export of knuts that used to be the important exported goods to the foreign countries. The building was a commercial building with ground floor spaces housing depot functions, which was probably used for stroage of knuts.

The Agricultural Bank had bought the building arounc 1945s, and converted it into a branch office with bank function on ground and 1. floors, and residents on 2. and 3. floors.

IsBank, Istanbul

After 1930s- The banks, which had constructed their general head offices in Ankara opened branch offices in Galata,Istanbul. Instead of constructing new buildings, they rented of bought existing khans and converted them according to their needs.

Isbank, Galata Branch Office
Istanbul



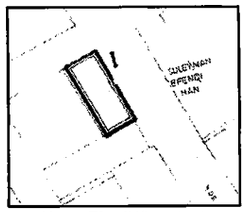
(Source: E.Eldem)

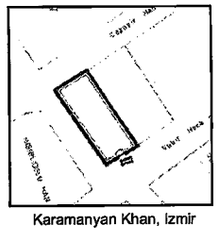
Architect : Unknown
Cons. Date : 1918

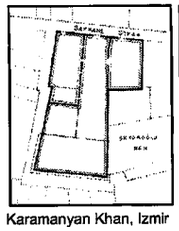
Isbank has moved into the building in 1953
Original function of the building is Commercial Khan

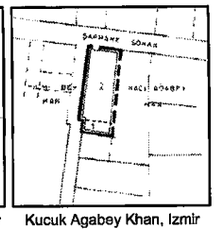
Table 4.2 Comparative Study on Entrepot/Depot Buildings

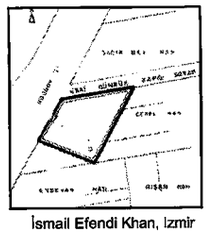
Single Unit; Single Storey Depot Function

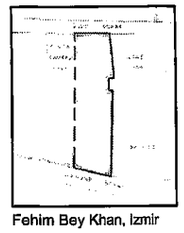

Ahmet Efendi Khan, Izmir
(Source: C. Atay)

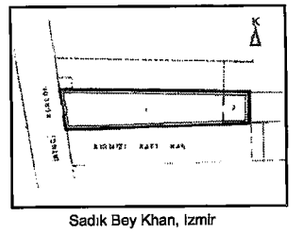

Karamanyan Khan, Izmir
(Source: C. Atay)

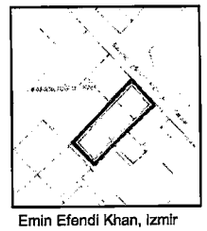

Karamanyan Khan, Izmir
(Source: C. Atay)


Kucuk Agabey Khan, Izmir
(Source: C. Atay)

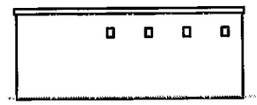

İsmail Efendi Khan, Izmir
(Source: C. Atay)

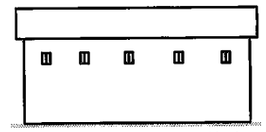

Fehim Bey Khan, Izmir
(Source: C. Atay)


Sadık Bey Khan, Izmir
(Source: C. Atay)


Emin Efendi Khan, Izmir
(Source: C. Atay)

Single storey entrepot buildings with pitched or vaulted flooring superstructure.

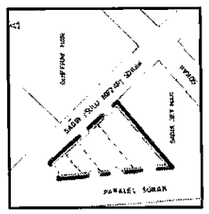

Mersin

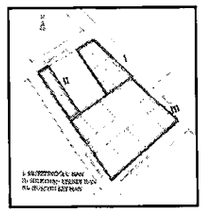

Mersin

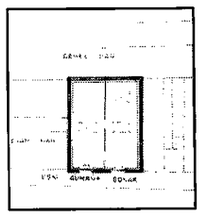


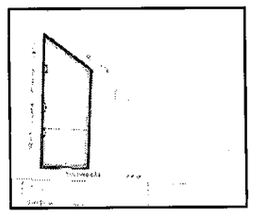
The figurative scheme showing the types of entrepot buildings searched through the old photographs of Mersin.

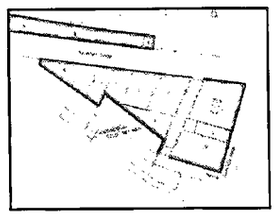
Multi Unit; Single Storey Depot Function

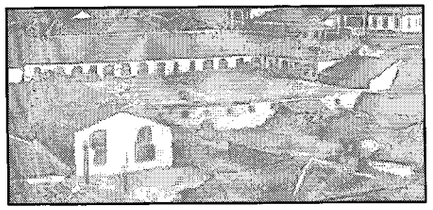

P. Allioti Khan, Izmir
(Source: C. Atay)


Muezzinoglu Khan, Izmir
(Source: C. Atay)

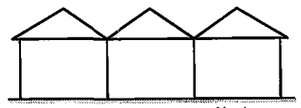

Nisan Khan, Izmir
(Source: C. Atay)

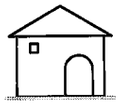

(Source: C. Atay)

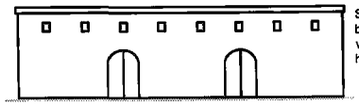

Maarif Khan, Izmir
(Source: C. Atay)


Mersin

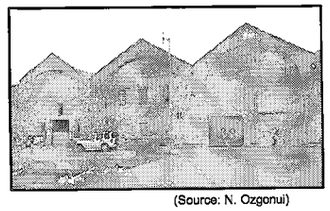
The figurative scheme showing the types of entrepot buildings searched through the old photographs of Mersin.


Mersin




Mersin

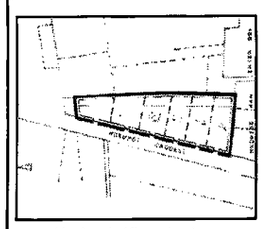
Single storey entrepot buildings with flat roof with varying floor heights.

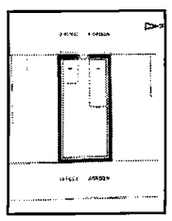

(Source: N. Ozgonul)

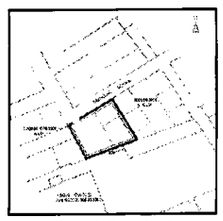
Entrepot buildings of Hanya, Greece
Single unit depot buildings with vaulted superstructure. They were attached to each other with a central passages located on the walls seperating each other.

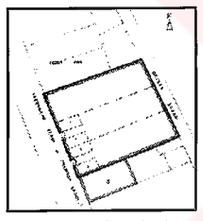
Ground Floor with Depot; Upper Storeys With Office Function

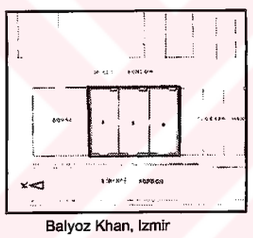
Multi-Unit Type

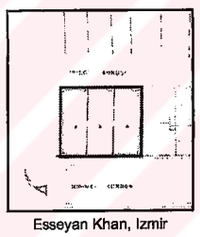

Kesisoglu Khan, Izmir
(Source: C. Atay)

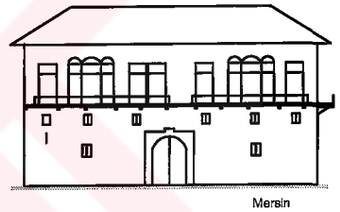

Nisli Khan, Izmir
(Source: C. Atay)


Maarif Khan, Izmir
(Source: C. Atay)

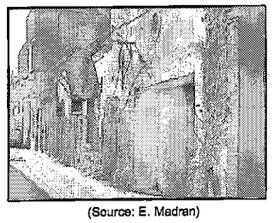

Whittall Khan, Izmir
(Source: C. Atay)


Balyoz Khan, Izmir
(Source: C. Atay)

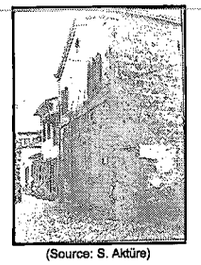

Esseyan Khan, Izmir
(Source: C. Atay)


Mersin

The example searched through the old photographs of Mersin.

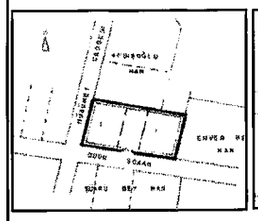

(Source: E. Madran)

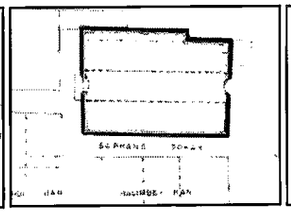
Example from Ayvalık

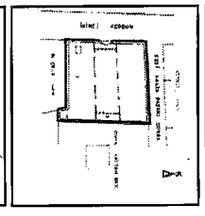

(Source: S. Aktüre)

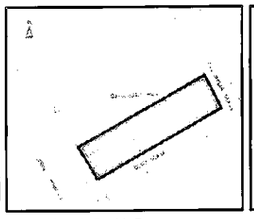
Depot Building from Afyon

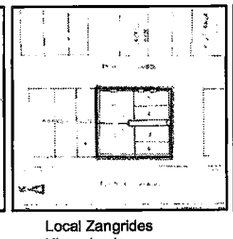
Corridor Type

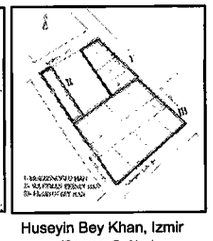

Medrese Han, Izmir
(Source: C. Atay)


Pederi Han, Izmir
(Source: C. Atay)


(Source: C. Atay)


Kucuk Sadık Bey Khan, Izmir
(Source: C. Atay)

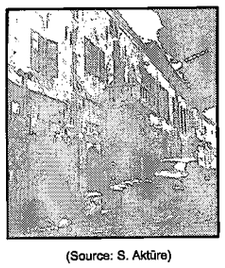

Local Zangrides Khan, Izmir
(Source: C. Atay)


Huseyin Bey Khan, Izmir
(Source: C. Atay)


"İl Kültür Md. Binası", Mersin


"eski Gumruk-Kambiyo Sefligi", Mersin


"Gazioglu-Karaman Mülkü", Mersin


(Source: S. Aktüre)

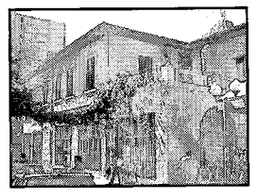
Depots in the ground floor and branch office of the Ottoman Bank located in the first floor Afyon

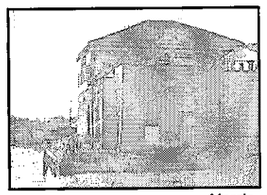
EVALUATION

According to their plan schemes the depot khan buildings can be categorized into groups. In this manner the first group consist of single unit and single storey examples having storage function only. The second group consists of multi units opening to each other with depot functions in a single storey. The third group includes the ones having depot and office function together especially with office units in the upper floors. The fourth groups include multi storey examples, which have corridor type plan schemes in their ground floors. Some of the examples in fourth group have depot function only with central aisle arranged like a corridor. In some of them office and depot spaces are arranged together in the ground floor and connected to each other with corridors.

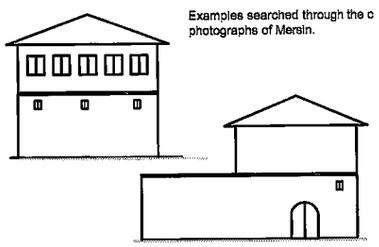
The general architectural features of the selected examples consist of one or two storeys khans constructed out of thick stone masonry walls to be strong and safe enough especially against fire. Some of them have been constructed roughly just for purpose, while some have been constructed with good workmanship with cut stone masonry walls and neo-classical decorations on their facades. Their superstructures generally consist of timber pitched roofs or vaults. In some of them vaulted flooring has been used for the superstructure. The floorings in two or more storeys khans were generally constructed with vaulted flooring technique. In some examples with pitched super structure there are lighting windows in the superstructure. The windows are generally located at the top in order to provide safety. But in some examples, there are regular window openings leading to the storage areas. The door openings are generally arched wide openings in order to supply entrance of goods. The windows have generally metal shutters, while door elements generally consist timber or metal wings.

Ground Floor with Depot; Upper Storeys With Office Function


Mersin


Mersin

Entrepot buildings located in the ground floor with a commercial office or residential section located at the upper floors. The upper floor can be totaly or partially located on the entrepot section.



Examples searched through the c photographs of Mersin.

Table 4.3a Comparative Study on Traditional Buildings in Mersin

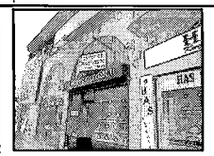
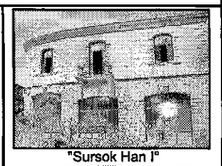
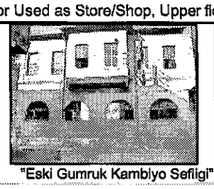
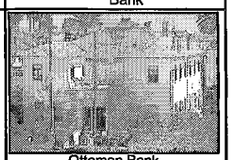
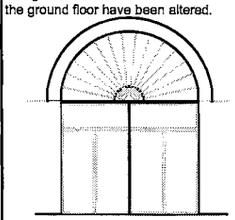
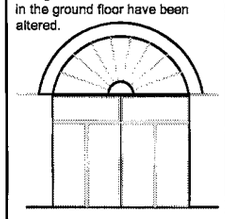
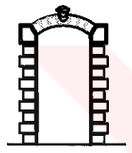
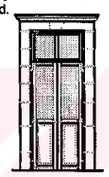
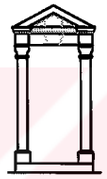
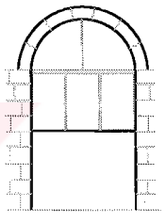
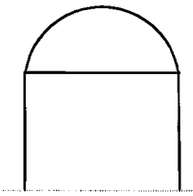
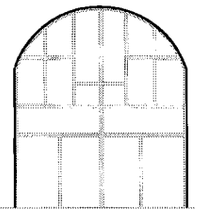
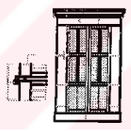
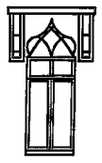
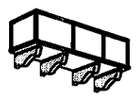
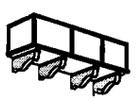
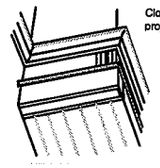
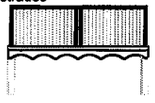
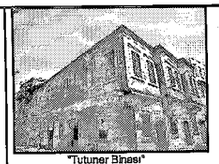
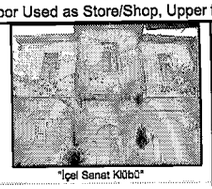
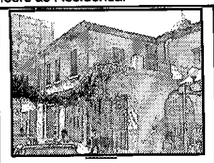
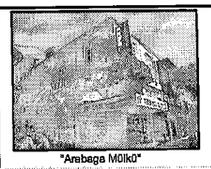
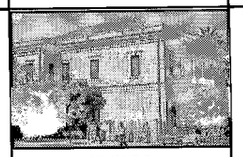
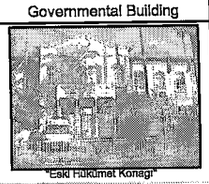
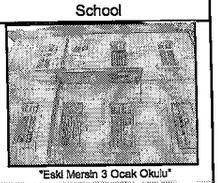
Building Type			Commercial One-Storey Shops/Retails		Commercial Inns		Commercial Ground Floor Used as Store/Shop, Upper floors as Office					Commercial Bank
												
	Name / Registration No				"Sursok Han II"	"Sursok Han I"	"Gazioglu-Karaman Mülkü"	"Gazioglu-Karaman Mülkü"	"Eski Gumruk Kambiyo Sefligi"	"İl Kültür Md. Binası"	"Eski Ziya Pasa Gazinosu"	Ottoman Bank
	Location/ Address		Camiserif District Uray Street	Cankaya District Ataturk Street No:20	Camiserif District Uray Street	Camiserif District Uray Street	Camiserif District Uray Street	Camiserif District Uray Street	Camiserif District Uray Street	Camiserif District Uray Str No:15	Camiserif District 5230 str. No:2	Camiserif District İstiklal Street
			Reg No: 67	Reg No: 68	Reg No: 50	Reg No: 51	Reg No: 10	Reg No: 12		Reg No: 43	Reg No: 29	Reg No: 25
	Building Use		Commercial/ Shop	Commercial/ Shop	Commercial Building	Commercial Building	Commercial	Commercial	Commercial	Commercial	Public/ Social Building	Commercial/ Bank Building
	Number of Storeys		1 storey	1 storey & later added mezan. floor	2 storeys	2 storeys	2 storeys heigth with mezan. floor		2 storeys	2 storeys heigth	2 storeys	2 storeys with a basement floor
Structural Elem.	Vertical Elements		* Cut Stone exterior walls	* Stone masonry exterior walls * Semi Circular arches for spanning wide openings of store units at ground floor	* Stone masonry exterior walls with alternating cut stone and brick rows.	* Stone masonry exterior walls with alternating cut stone and brick rows.	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls * Interior walls have been altered with reinforced concrete elements after restoration works	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls * Interior walls have been altered with reinforced concrete elements after restoration works
	Horizontal Elements		* Semi Circular arches for spanning wide openings of store units at ground floor	Floorings have been altered with RC elements after restoration	* Depressed arches for spanning wide openings of store units at the ground floor *Floorings have been altered with RC elements after restoration	* Depressed arches for spanning wide openings of store units at the ground floor *Floorings have been altered with RC elements after restoration	* Interior floorings could not be surveyed	* Interior floorings could not be surveyed	* Semi Circular arches for spanning wide openings of store units at ground floor	Floorings have been altered with RC elements after restoration	* Pointed arches on ground floor * Floorings could not be surveyed	Floorings have been altered with RC elements after restoration
	Superstructure		Pitched Roof with wide eave	Terraced Roof without eave/	Pitched Roof with wide eave	Pitched Roof with wide eave	Pitched Roof with wide eave	Pitched Roof with wide eave	Pitched Roof with wide eave	Pitched roof with wide eave	Pitched Roof with narrow eave	Pitched Roof with wide eave
Architectural Elements	Exterior Elements	Doors & Door elements	* Original elements for enterances in the ground floor have been altered. 	* Original elements for enterances in the ground floor have been altered. 	* Original elements for enterances in the ground floor have been altered. 	* Original elements for enterances in the ground floor have been altered. 	* Metal 2 winged enterance door * Original elements for enterances in the ground floor have been altered. 	* Pedimented enterance door sill. The original door element could not be surveyed since it is filled with concrete 				* 2 winged timber enterance door with ligthing upper window
		Door Sills	—	—	* Ornated cut stone sills around the enterance openings	* Ornated cut stone sills around the enterance openings	Cut stone sills	Cut stone sills with pedimented upper section supported by columns	—	* Pediment imitation ornament on wide openings at the ground floor	—	NA/ Altered
		Windows & Window Elements	—	—	* 4 winged timber window with upper ligthing window 	* 4 winged timber window with upper ligthing window 	* Timber 2 wings and ligthing window with 2 winged timber shutters 	* Pedimented enterance door sill. The original door element could not be surveyed since it is filled with concrete 	* 4 winged timber windows * Giyotine type timber windows 		* 4 winged timber window 	* 2 winged timber window with upper ligthing window * 2 winged small sized timber windows for service spaces on north elevation/ altered
		Window Sills	—	—	* Ornated cut stone sills around the window openings	* Ornated cut stone sills around the window openings	Cut stone sills for rest windows in 1 floor	Cut stone sills for rest windows in 1 floor	1.	Cut stone sills with ornated upper section for arched windows	—	* Ornated stone window sills on ground floors
		Projections & Projection elements			* Balcony with stone *plaks* supported by cut stone ornated *konsols* 	* Balcony with stone *plaks* supported by cut stone ornated *konsols* 	Timber closed projection supported by metal ornated *consols* 	Balcony with stone *plaks* carried by metal ornated konsols and metal balustrades 	Closed projection 	Vaulted floor balcony supported with iron brackets and metal balustrades 	—	No projection but terrace on north elevation
		Jails/Cornices	—	—	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	
		others	—	—								
	Interior Elements	Doors & Door elements	NE/ Altered	NE/ Altered	NE/ Altered	NE/ Altered	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed	NE/ Altered	* Interior elements could not be surveyed	Stone sills *madalyons* on south and north walls
		Windows & Window Elements	NE/ Altered	NE/ Altered	NE/ Altered	NE/ Altered	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed	NE/ Altered	* Interior elements could not be surveyed	NE/ Altered
		Stairs	NE/ Altered	NE/ Altered	NE/ Altered	NE/ Altered	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed	NE/ Altered	* Interior elements could not be surveyed	NE/ Altered
		Fireplace/davl.	NE	NE	NE	NE	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed	NE	* Interior elements could not be surveyed	NE
		Cupboard/shelves	NE	NE	NE	NE	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed	NE	* Interior elements could not be surveyed	NE
		other										
Finishing Elem.		Walls	Plastered ext & int walls	Unplastered exterior walls	Painted exterior walls	Painted exterior walls	Plastered finishing on exterior walls	Unplastered exterior walls		Painted exterior walls	Plastered exterior walls	Unplastered exterior walls
		Floors	Altered/ plastered	Altered/ plastered	Altered/ plastered	Altered/ plastered	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Interior elements could not be surveyed		NA	Altered/ plastered
		Ceilings										
		Superstructure	Marsilian type roof tiles	Screed	Screed	Screed	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles

Table 4.3b Comparative Study on Traditional Buildings in Mersin- continued

Building Type	Commercial+Residential Ground Floor Used as Store/Shop, Upper floors as Residential							Residential	Public Governmental Building	Public School
		 "Tutuner Binası"	 "İçel Sanat Kübü"	 "İçel Sanat Kübü"		 "Arebaga Mölkü"	 "Eski Gulnar Otell"	 "Atatürk Evi"	 "Eski Hükümet Konagi"	 "Eski Mersin 3 Ocak Okulu"
Name / Registration No		"Tutuner Binası"	"İçel Sanat Kübü"	"İçel Sanat Kübü"		"Arebaga Mölkü"	"Eski Gulnar Otell"	"Atatürk Evi"	"Eski Hükümet Konagi"	"Eski Mersin 3 Ocak Okulu"
Location/ Address	Cankaya District Mucahitler Str No:2	Camlserif District Mucahitler Str No:23	Camlserif District	Camlserif District	Kiremthane District 4701 Street No:2	Cankaya District Ataturk Street No:22	Camlserif District		Camlserif District Uray Street	Camlserif District Istiklal Street No:1
Building Use	Reg No: 38 Commercial+ Residential	Reg No: 49 Commercial+ Residential	Reg No: 63 Commercial+ Residential	Reg No: 62 Commercial+ Residential	Reg No: 70 Commercial+ Residential	Reg No: 69 Commercial+ Residential	Reg No: 55 Commercial+ Residential	Residential	Reg No: 24 Public/ Governmental Building	Reg No: 18 Public/ School
Number of Storeys	2 storeys heigth	2 storeys heigth			2 storeys heigth with mezan. floor	2 storeys heigth with mezan. floor	2 storeys heigth with roof floor	2 storeys heigth with basement floor	2 storeys	2 storeys with mezan. floor and basement
Structural Elem. Vertical Elements	* Cut Stone exterior walls Interior walls could not be surveyed * Semi-circular arches for door openings on ground floor	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls; cut stone and timber frame interior walls	* Cut Stone exterior walls; cut stone and timber frame interior walls	* Cut Stone exterior walls * Interior walls could not be surveyed	* Cut Stone exterior walls and timber frame interior walls	* Cut Stone exterior walls and timber frame interior walls	* Cut Stone exterior walls; cut stone and timber frame interior walls	* Cut Stone exterior walls * Interior walls have been altered with reinforced concrete elements after restoration works	Cut stone exterior walls
Horizontal Elements	Interior floorings could not be surveyed	* Timber flooring as can be seen from the stores on the ground floor	* Timber flooring in living spaces and vaulted flooring in wet spaces as well as terrace	* Timber flooring in living spaces and vaulted flooring in wet spaces as well as terrace	* Semi Circular arches for spanning wide openings of store units at ground floor	* Semi Circular arches for spanning wide openings of store units at ground floor	* Pointed arches for span of store unit at ground floor * Timber flooring in living spaces	* Timber flooring in living spaces and vaulted flooring in wet spaces as well as terrace	Floorings have bean altered with RC elements after restoration	NA
Superstructure	Pitched Roof with wide eave	Pitched Roof with narrow eave	Pitched Roof with narrow eave	Pitched Roof with narrow eave	Pitched Roof with wide eave	Pitched Roof without eave	Pitched Roof with wide eave	Pitched Roof with narrow eave	Pitched Roof with wide eave	Pitched Roof with narrow eave
Architectural Elements Exterior Elements Doors & Door elements	* 4 winged timber door	* Depressed-Arched enterance door for resident with single metal wing/altered	* 2 winged timber enterance door with arched lighting window	* 2 winged timber enterance door with arched lighting window	* 2 winged metal ent.door with arched lintel * Timber 2 wings and ligthing window with 4 winged timber shutters for the balcony	* Timber 2 wings and ligthing window with 4 winged timber shutters for the balcony * Semi-Arched enterance with metal grills for store units in thr ground floor	* 2 winged timber enterance door with semi circular arch of lighting window	* Pedimented enterance door sill. Ornated metals on door element.	* 2 winged timber enterance door with ligthing upper window	* Metal 2 winged enterance door with stone lintel
Door Sills	Cut stone arched sill for ent. door	Cut stone arched sill for ent. door		Cut stone sills with pedimented upper section supported by columns	Cut stone arched sill for ent. door Cut stone sill for balcony door	Cut stone sill for ent. door Cut stone sill for balcony door	Cut stone arched sill for ent. door	Cut stone sills with pediment supported by columns	* Ornated Stone frames around the enterance doors	Cut stone sills for ent. doors
Windows & Window Elements	* 4 winged timber windows with 2 winged lighting windows in semi-circular upper openning * 2 winged timber windows with ligthing window and traces of shutters on the window sills	* 2 winged timber shutters * 2 winged timber massive shutters for store units on ground floor	* 2 winged timber windows and ligthing window with 4 winged timber shutters		* 2 winged timber windows and arched lighting window on the enterance door * 2 winged timber windows and ligthing window with 2 winged timber shutters	* 3 winged timber windows and arched lighting window with colored glazing on the enterance door * 2 winged timber windows and ligthing window with 4 winged timber shutters	* 2 winged timber windows and arched lighting window * 2 winged timber windows and ligthing window with 2 winged timber shutters	* 2 winged timber windows and ligthing window with 4 winged timber shutters	* 2 winged timber window with upper ligthing window	* 2 winged with ligthing timber windows and traces of shutters on the sills * Arched windows on the basement floor
Window Sills	Cut stone arched sill for arched windows	Cut stone sills for windows	Cut stone sills for windows	Cut stone sills for windows	Cut stone arched sill for arched windows	Cut stone arched sill for arched windows	Cut stone sills for windows	Cut stone sills for windows	* Ornated Stone frames around the window openings	Cut stone sills for whole windows
Projections & Projection elements	Timber closed projection carried by metal ornated *consols*	* Vaulted floor balcony supported with iron brackets and metal balustrades		* Closed projection	* Vaulted floor balcony supported with iron brackets and metal balustrades * Terrace on south elevation	* Balcony with stone *plaks* carried by metal ornated konsols	* Closed projection supported on cut stone *konsols*		* Balcony on the enterance supported by stone columns with ornated capitals and ornated stone balustrades	
Jails/Cornices	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills	Stone floor and cornice sills
others	Stone chimney & **roof lighting window					Stone chimney & **roof lighting window		Chimney	*medalyons* on the enterance pediment	
Interior Elements Doors & Door elements	* Interior elements could not be surveyed	* Interior elements could not be surveyed	* Wide, glazed timber windows with ligthing window for sofa	* Wide, glazed timber windows with ligthing window for sofa	* Interior elements could not be surveyed	* Wide openning for sofa with 2 winged timber glazed door and 2 winged timber windows with ligthing windows	* Wide, glazed timber windows with color glazed, semicircular arch ligthing window for sofa	* Wide, glazed timber windows with color glazed, ligthing window for sofa	NE/ Altered	* Interior elements could not be surveyed
Windows & Window Elements	* Interior elements could not be surveyed	* Interior elements could not be surveyed			* Interior elements could not be surveyed	* 2 winged timber windows for small openings of mez. floor	* 2 winged timber windows from rooms to sofa	* 2 winged timber windows from rooms to sofa	NE/ Altered	* Interior elements could not be surveyed
Stairs	* Interior elements could not be surveyed	* Interior elements could not be surveyed	Stone stairs supported by I beams		* Interior elements could not be surveyed	Stone stairs with u-shaped turn	Stone stairs with straigth access in the courtyard	Stone stairs covered with marbel	NE/ Altered	* Interior elements could not be surveyed
Fireplace/davl.		* Interior elements could not be surveyed	Fireplace in the kitchen located at the kitchen	Fireplace in the kitchen located at the kitchen	* Interior elements could not be surveyed	Fireplace in the kitchen	Fireplace in the kitchen located at the kitchen	Fireplace in the kitchen located at the kitchen	NE	
Cupboard/shelves	NA	* Interior elements could not be surveyed			* Interior elements could not be surveyed				NE	
other		* Interior elements could not be surveyed			* Interior elements could not be surveyed					
Finishing Elem. Walls	Painted exterior walls	Ext walls; plastered on ground floor	Unplastered ext & plastered int walls	Unplastered ext & plastered int walls	Unplastered exterior walls	Unplastered ext & plastered int walls	Unplastered ext & plastered int walls	Unplastered ext & plastered int walls	Unplastered exterior walls	Unplastered ext & plastered int walls
Floors	* Interior elements could not be surveyed	* Interior elements could not be surveyed	Timber flooring boards for living spaces and mosaic tiles for service spaces and sofa	Timber flooring boards for living spaces and ceramic tiles for service spaces and sofa	* Interior elements could not be surveyed	Timber flooring boards for living spaces and Italian type ceramic and mosaic tiles for service spaces	Timber flooring boards for living spaces and ceramic tiles for service spaces after restoration	Timber flooring boards for living spaces and ceramic tiles for service spaces and sofa	Altered/ plastered	* Interior elements could not be surveyed
Ceilings										
Superstructure	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles	Marsilian type roof tiles

CHAPTER 5

RESTITUTION

5.1 HISTORICAL PHASES OF THE BUILDING

Definition of historical phases of the building base on evaluations of traces coming from the building itself as well as information gathered through historical research related to the building. Under the light of information obtained from these sources and evaluation of traces coming from the building itself, historical background of the building have been defined.

By this way 5 important historical phases have been defined parallel to the historical development of the building. The exact dates of the first two phases cannot be defined since there are not written documents about these phases, while the last three phases depend on information coming from archives.

5.1.1 FIRST PHASE (Before 1905)

The date related to this phase comes from on an old photograph taken from the tower of the Latin Italian Church showing the nearby environment of the building (Figure 5.1). During the historical research through the old photographs showing the building and its nearby environment the photographs have been evaluated together with the collectionist A. Merzeci. He has stated the date of this photograph as 1904-1905 since this photo has been a part of serial. As far as it is visualized from the photograph, the second storey of the building has not been constructed yet. The exact restitution related to the situation of the building during this period cannot be evaluated since most of the buildings located at the site have been either destructed or changed a lot. The real information supplied from this photo can be evaluated only after detailed studies related to the restitution of the other buildings are carried out. But what is obvious about this photo is that the second storey of the building has not been constructed yet during by the time 1904-1905.

Depending on the examinations of traces and alterations observed throughout the building as well as the information coming from this old photograph, the building had probably

been constructed at first as a single storey stone masonry entrepot building. The building might have been constructed for storage of the goods, which were transported through the Uray Street and loaded onto the small ships waiting on the docks. (Drawing 5.1)

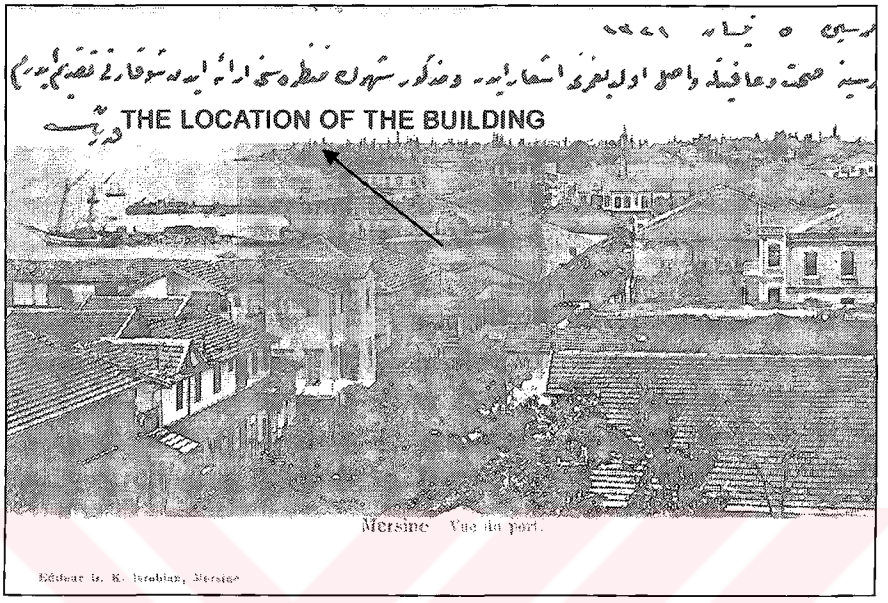


Figure 5.1 An old photo taken from the tower of the church between 1900-1905, when the second storey of the building hasn't been constructed yet

The plan scheme of the building might have been consisted of three depot spaces located in east-west direction having access to each other. The whole building has entrance from north and south portions. Each section is connected to each other with a central arch located on the masonry wall separating them. The building might have had two entrances from south and north portions. The south entrance has been established according to the evaluation of traces coming from the building itself, while the north entrance has been established according to the analysis on circulation scheme of the building and comparative study on depot buildings. The actual dimensions and proportions of the building have been wider than its recent situation. The north and south walls are in their recent locations while the east and west exterior walls are located further. The first depot section located at the north portion has consisted of four aisles formed by three axes of rows of arches located in east-west direction. Each arch row includes six arches spanning between 3-4 m distance. The second and third sections consist of two aisles formed by arch row including five arches.

There are alternatives related to the superstructure of the building. During that phase the superstructures of entrepot and depot buildings consist of terraced roof with little inclinations or timber pitched roofs with variable forms. For the restitution of the

superstructure alternatives for the roof are given its probable orientation, form and dimensions according to comparative study on other buildings. The form and direction of the supporters of the roof has been defined according to the evaluation of direction of the structural design of masonry walls and arched rows. They were the main supporters of the super structure. The restitution of the superstructure has been established according to the comparative study on depot buildings and the traditional buildings of Mersin. Today there are remains of timber beams depicted on the south wall of the building. These beams might have belonged to a mezzanine floor, which has probably been partially located. Thus, the actual height of the building and the superstructure has been defined according to the existence of a mezzanine floor.

5.1.2 SECOND PHASE (1905-1933)

The second phase was defined according the evaluation of traces observed in the building and the archive documents of the Agricultural Bank, which states that the building was bought from the famous merchant Mavrommati. He might have used this building with depot function for the storage of goods since he had large lands of cotton and olive trees as well as a big factory to process them, which were located in the northern part of the city[1]. He used to export these goods to foreign countries from the Mersin port.

During this phase important physical changes have been carried out throughout the building. The building has come to its actual dimensions and recent proportions. The traces point out a demolishment occurred during this phase, resulting with destruction of the west and east portion of the building. So, the building has got narrower from west and east by the construction of the east and west walls of the main building into their recent locations, while the walls laying parallel to north-south direction have been changed according to the new arrangements. There are also old photographs of Mersin from 1920s, including the building with its two storey body (Figure 5.2). The reason for the fact that space G08 and the space located at the southeast portion of the ground floor has been probably because of these changes occurred this phase. While some changes and arrangements occurred in the ground floor, the second storey of the building has been constructed in its recent situation.

The north portion of the ground floor has been changed with interventions. The first arch row is removed, while the arches of the second arch row are closed with stone masonry walls converting it into a massive wall. The spaces of G01, G02, G03 and G08 are

[1] S. Develi gives information about the factory and farm lands belonged to the Mavrommatis during that phase.

established by constructing the walls between them. G01 is designed as an entrance space leading to the first floor with two storey height while rest of them are arranged according to store functions having entrance to the Uray Street. The stairs in the space G01 is located in its recent location supported by stone vaults.

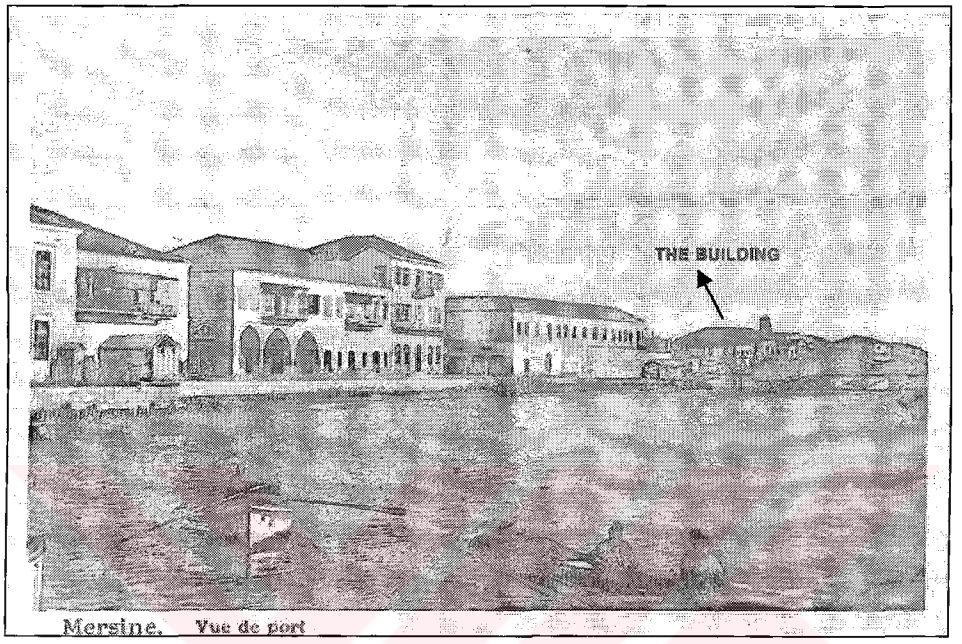


Figure 5.2 The building with its two storey in the old photograph of Mersin from 1920s.

The new depot portion has consisted of three sections each of which consisted of two aisles separated by an arch row. Each arch row has included three central arches and a closed half arch on each side. The first and fifth arches of arch rows were cut by the east and west walls of the main building. Thus, remains of these half arches on each west and east portion are closed and converted into massive walls. The plan scheme of existing depot spaces are re-arranged with the construction of the west wall on which three doors are located. The south entrance on the exterior wall of the building is closed. Thus, each space is opened to outside from west doors, while they are connected to each as in the first phase.

The first floor was constructed out of stone masonry exterior walls with its recent proportions and dimensions with a mezzanine floor located on the east wall. According to the old photographs showing the building before 1920s, the superstructure and the first floor of the building was constructed in this form. Exact restitution information related to the plan scheme of the first floor during this phase cannot be depicted by the evaluation of traces from the building only. Additional information is required. The only information comes from the title deeds obtained in the archives of the Agricultural Bank in Ankara, which includes descriptive

information related to the number of the spaces of the building saying "...fevkani 3 oda, tahtani 2 sofa ve 10 oda...". This gives the situation of the building when the Agricultural Bank bought the building from the Mavrommati family. However, since we cannot conclude which spaces are mentioned exactly, this information stays limited. (Drawings 5.2a and 5.2b)

By evaluation of the structural system, construction techniques and architectural style of the building during this phase, the building seems to house two sections located adjacent to each other. The north portion is reached through the entrance hall space entered from the Uray Street, while the south portion is entered from the south exterior door in the first floor level. They don't have access to each other in the first floor. The north portion might have been constructed according to bank function. The construction design of the superstructure, which is supported by timber trusses spanning 16 m wide, stems from the aim of creating a single unique hall without any interruption. Thus, the east and west exterior walls support the trusses creating a huge single hall space, which might have been used as bank hall. The main bank hall is located as a sofa, while the spaces located on the north and south portion of it is arranged like spaces opening to the sofa. They might have been functioned with bank uses also. However, in this point the exact use of these spaces especially the safe room cannot be defined.

The section located at the south portion of the building might have been arranged according to another commercial function. However, the exact restitution of the spaces and the plan scheme of this section during this phase cannot be defined either. By the evaluation of traces in the balcony and terrace sections and comparative study on traditional buildings in Mersin, they have been constructed in their original form and material during this phase. According to that, the balcony consist of cut stone plaque supported by cut stone consoles, while there is another balcony on the south portion which supplies entrance to the south section of the building. The exact dimensions and proportions of the balcony and the staircase leading to it cannot be exactly depicted.

The mezzanine floor has been constructed during this phase but rather different than its recent proportions. Since the east windows of the mezzanine floor are original, it is obvious that the spaces leading to these windows exist in this phase also. But the spaces on their east portion have been altered later. Therefore, the exact plan scheme and the location of staircases leading to it are not definite. The exterior window and door openings are closed with shutters during this phase. The doors of the entrepot sections are out of timber doors. The windows located on the ground floor have massive timber shutters, while the windows and doors at the first and the mezzanine floors have timber Venetian blind type shutters.

Therefore, it is understood that during this phase, the depot function in the ground floor continued with re-organised spatial arrangements. The north portion of the ground floor has included a central entrance space leading to the bank section at first floor together with store/retail uses located at each side. They have all been accessed from the Uray Street.

5.1.3 THIRD PHASE (1933-1960s)

The fourth phase starts with the movement of the Agricultural Bank into the building converting it into their Mersin branch office in 1933. They established important changes in order to adapt the build according to their necessities. They converted the building into a branch office with a residential section as it is seen in some examples of the branch offices of the Agricultural Bank in other cities. (Figure 5.3)



Figure 5.3 The old photo of Mersin during 1930s, showing the docks and the building on the shore

They re-functioned the bank section of the previous phase for their bank uses and the commercial section into the dwelling of the manager and his family. The depot spaces in the ground floor have been converted into archives of the bank. During this phase, the store/commercial use of ground floor spaces G02 and G03 have been merged with bank uses by opening doors towards G01. Their accesses to the Uray Street and to the G08 are closed. The main intervention in the first floor is carried out for the safe room. In order to supply a security zone for the safe room a space that cannot be entered from anywhere is

constructed above it. Its walls are out of timber frame walls. In order to create service rooms for personnel toilet spaces are constructed in space 112. (Drawings 5.3a and 5.3b)

The restitution information related to the use of bank spaces is gathered through the oral history research. According to that, the main bank hall, which housed the main banking activities, has included desks on each east and west side of the main hall separating the personnel from the clients. Behind the desks, there are desks of the personnel. The north spaces opening to the main hall have belonged to the manager, vice manager and supervisor respectively. The space located at the southwest portion of the main hall belongs to the supervisor. The space 107, where the telephones are located, is used for communication service. The space 108 is the safe room, where the main steel safe box has been located. In front of the safe room, there is the desk of the cash point that is reached from the main hall.

The ground floor spaces of the depot function of previous phase have been re-functioned with archive uses. The arched accesses between each section has been closed with stone masonry walls converting each section into an individual space. They might have been closed in different times, since the types of partition walls closing the arches are different: One of them is rubble stone masonry while the other is cut stone masonry. In order to support the flooring of the safe room, where the heavy safe box is located, a cut stone masonry wall (1.00x1.00 m) has been constructed next to the south wall of space G05. There have been timber shelves located on the interior walls of the archive spaces in order to put archive documents.

In order to convert the south portion of the first floor into a dwelling section, some interventions have been carried on. The toilet, bath and kitchen spaces have been added. The south terrace is constructed in front of the south entrance door by removing the open projection of the previous phase. By this way, the recent plan scheme and spaces of the residential section have been established. The space 119 is used as the entrance hall (sofa), while the spaces 121 and 122 have been used as living room and dining room. The spaces 120 and 113 are used for bedroom. The original plan scheme of the mezzanine floor has been altered during the construction of the security space above the safe room. During this phase the bank section and the residential section don't have any accesses to each other during this phase neither from the first floor nor from the mezzanine floor.

The shutters of the exterior doors and windows have been removed during this phase. On the other hand, the arch row in the space G06 is altered with RC columns and beams. The slab of west balcony has been altered with RC slab. From the old photographs of the building showing this phase, local chimneys projection from the building are observed. The

building might have been heated with local stoves. In order to locate the service fittings of wastewater disposal pipes, inadequate interventions have been carried out on the superstructure and interior walls of ground floor spaces.

After 1920s, the Uray Street has been the main axis of the city, where the celebrations of the foundation of the Turkish Republic have been performed. During the official celebrations, flags are attached on facades of the public and governmental buildings. Thus, during this phase iron pipes are attached on each side of the windows in the first floor of the north and west façade of the bank section in order to hang flags during the celebrations. Besides a main flag column above the entrance door is located.

5.1.4 FOURTH PHASE (1960s-1978)

During 1960s, some interventions have been carried out in order to upgrade conditions of the comfort within the building. Thus, active central heating and ventilation system have been located within the building. In order to achieve this, the depot section in the east portion of the main building, which is used as wood or coal storage, has been constructed. The boiler of the central heating system is located here and the pipes of the system are distributed to the building starting from this point. A chimney and the cold-water tank are constructed above the terrace of the depot. The pipes of the heating system are circulating throughout the main building vertically and horizontally. In the bank section in order to locate the radiators, special spaces and timber boxes are constructed under the windowsills.

In order to supply active ventilation throughout the building, metal air duct boxes are located throughout the building. The blower of the system is located in the space 110. The system circulates through the building in the main bank hall of the bank section and in the corridor of the residential section. Each room is connected to the air ducts with small blowing openings located at the top of the walls. During this phase, the east wall of the space G06 is constructed. A timber staircase leading from the residential section to this section is added. This space, which is controlled and accessed from the residential section only, might have been established in order to locate the control units of heating and ventilating systems of the house. With the construction of the terrace, the iron balustrades of the exterior windows of the east wall are added to supply security.

5.1.5 FIFTH PHASE (1978-2001)

During this phase, the bank and dwelling sections have been re-functioned with administrative office uses. The space G04 is plastered with cement plaster. The archive spaces are converted into storage units. The furniture of the bank hall is removed. In order to create more office space, timber plywood partition walls and ceiling are constructed into the single main bank hall. Passages between the north and south sections are opened through the space 112 in the first floor and between spaces 203 and 204 in the mezzanine floor are opened.

5.1.6 EXISTING SITUATION (2001-)

The building is appropriated to the use of the Mersin University in order to use it as "Cultural House". Recently the building is empty.

5.2 RELIABILITY DEGREES IN THE RESTITUTIONS OF PHASES

During the preparation of the restitution projects of the building; plan schemes, structural and architectural elements are searched according to the information obtained from different sources. These information have been categorized according to the sources they are obtained from as follows:

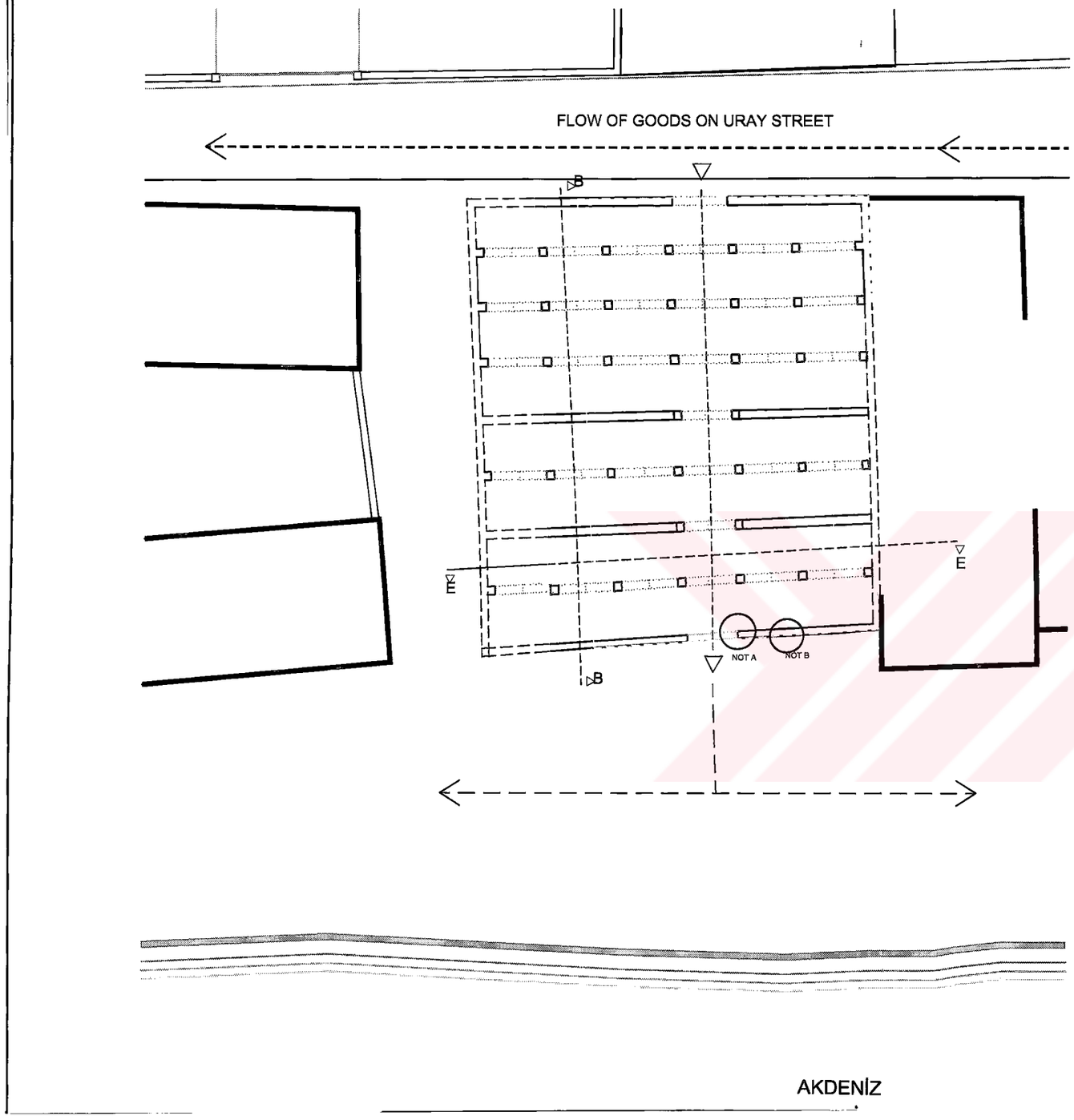
- The building itself including the traces and remains
- From archive documents
- Comparative study within the building
- Comparative study on traditional bank buildings
- Comparative study on traditional entrepot/depot buildings
- From old photographs
- From the oral historical research with people who have worked in the Agricultural Bank during 1960s

These sources of information have been used in order to find out the existence, location, actual dimensions, form, material, construction technique and details of the proposed element in the restitution drawings. According to the evaluation of these data coming from different sources reliability degrees are established. By this way, ten degrees of reliability degrees are defined and mapped onto the restitution drawings for each phase. (Tables 5.1a and 5.1b). The reliability degrees are as follows:

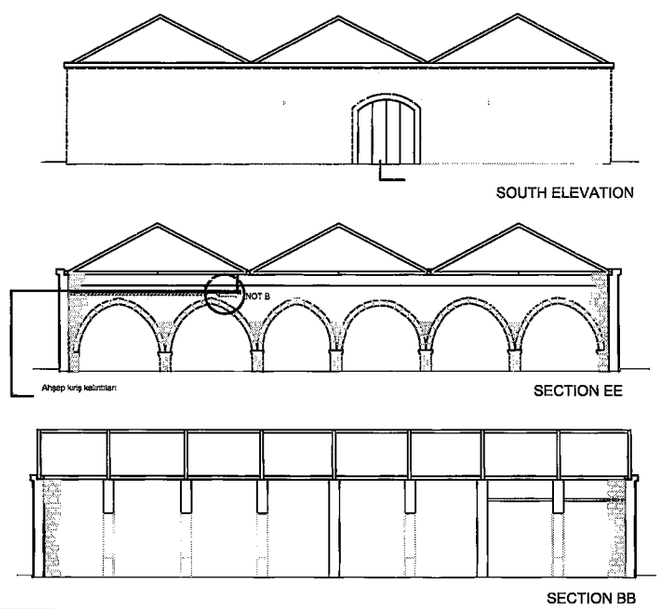
1. degree reliability: Existence, location, actual dimensions (x, y, z), form, material and construction technique and details are known from the traces/remains of the object itself.

2. degree reliability: Information related to its existence, location, actual dimensions (x, y, z) and material are obtained from the traces/remains of the object itself, while form and construction techniques are known from the comparative study within the buildings.
3. degree reliability: Information related to its existence, location are obtained from the traces/remains of the object itself, while actual dimensions (x, y, z), material, form and construction techniques are known from the comparative study within the buildings.
4. degree reliability: Information related to its existence, location and dimensions (x, y, z) are obtained from the traces/remains of the object itself, while material, form and construction techniques are known from the comparative study on traditional buildings in Mersin.
5. degree reliability: Information related to its existence and location are obtained from the traces/remains of the object itself, while actual dimensions (x, y, z), material, form and construction techniques are known from the comparative study on traditional buildings in Mersin.
6. degree reliability: Information related to its existence and location are obtained from the traces/remains of the object itself, while actual dimensions (x, y, z), material, form and construction techniques are known from the oral history and comparative study on bank buildings.
7. degree reliability: Information related to its existence, location, z dimension, form are obtained from the old photographs; while actual dimensions (x, y), material and construction techniques comes from the comparative study on traditional Buildings in Mersin.
8. degree reliability: Information related to its existence, location and dimensions (x.y) is obtained from the remains/traces coming from the building itself, while dimension (z), form, material and construction technique is obtained from comparative study on traditional buildings in Mersin.
9. degree reliability: Information related to existence, location, dimensions (x, y, z), form, material and construction technique is obtained from the comparative study within the building.
10. degree reliability: Information related to its existence comes from architectural necessity; while location, actual dimensions (x, y, z), material, form and construction techniques come from the comparative study on traditional Buildings in Mersin.

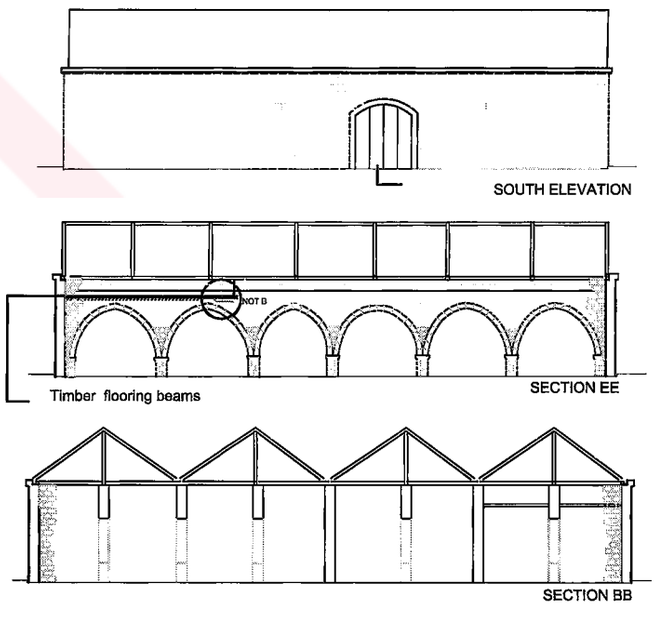
1. PHASE OF THE BUILDING (Before 1905) - ENTREPOT BUILDING



I. ALTERNATIVE

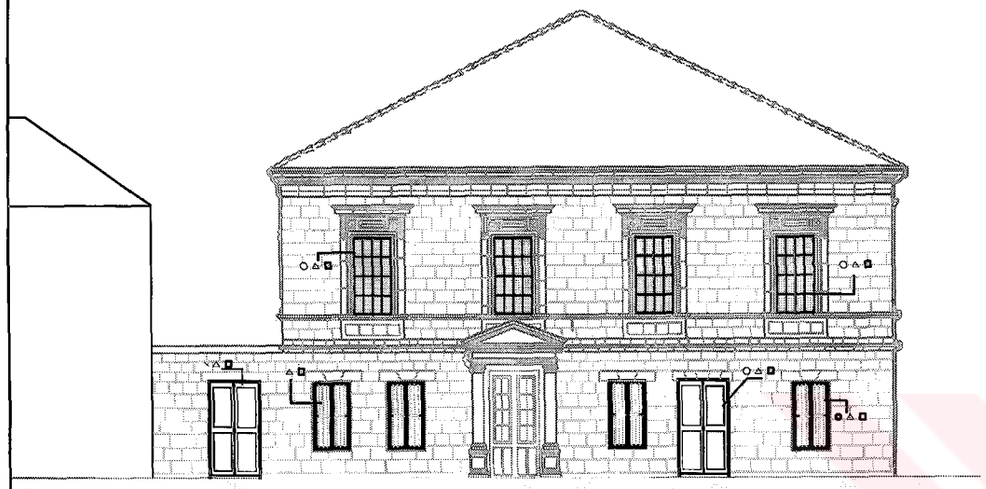


2. ALTERNATIVE

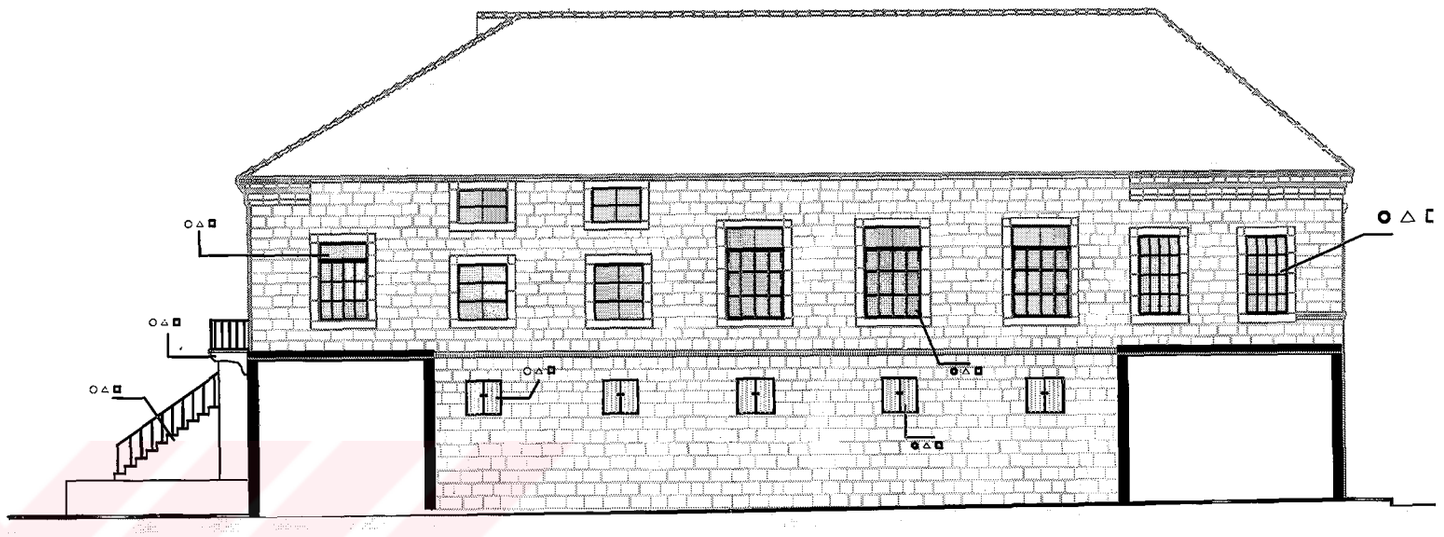


Drawing 5.1 Restitution-Phase 1

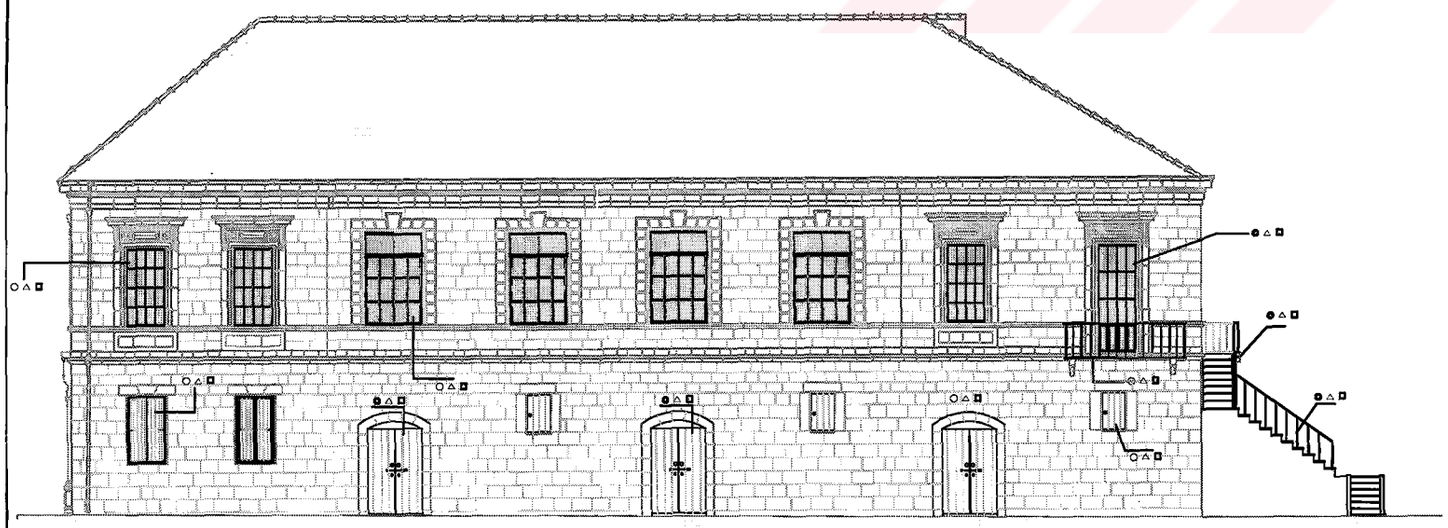
2. PHASE OF THE BUILDING (1905-1933) - I. BANK PERIOD



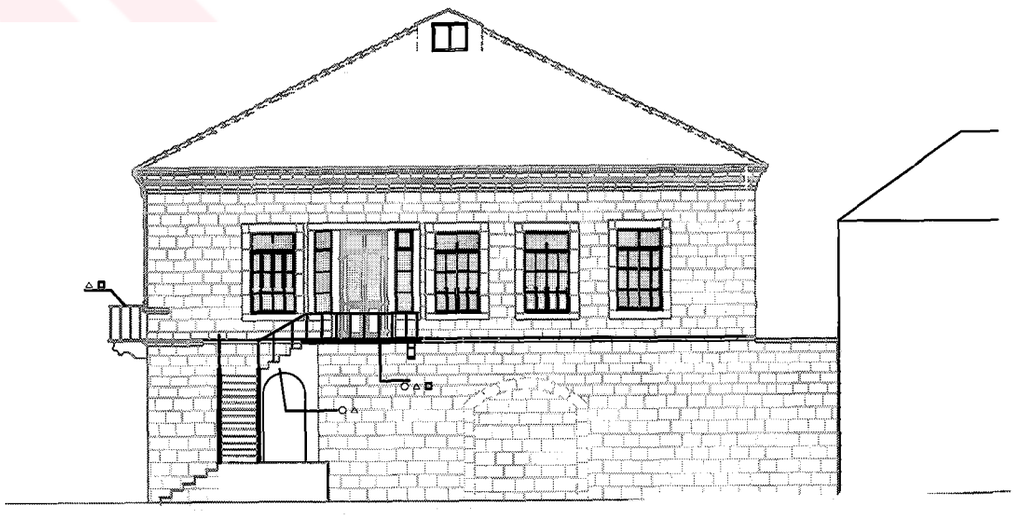
NORTH ELEVATION



EAST ELEVATION

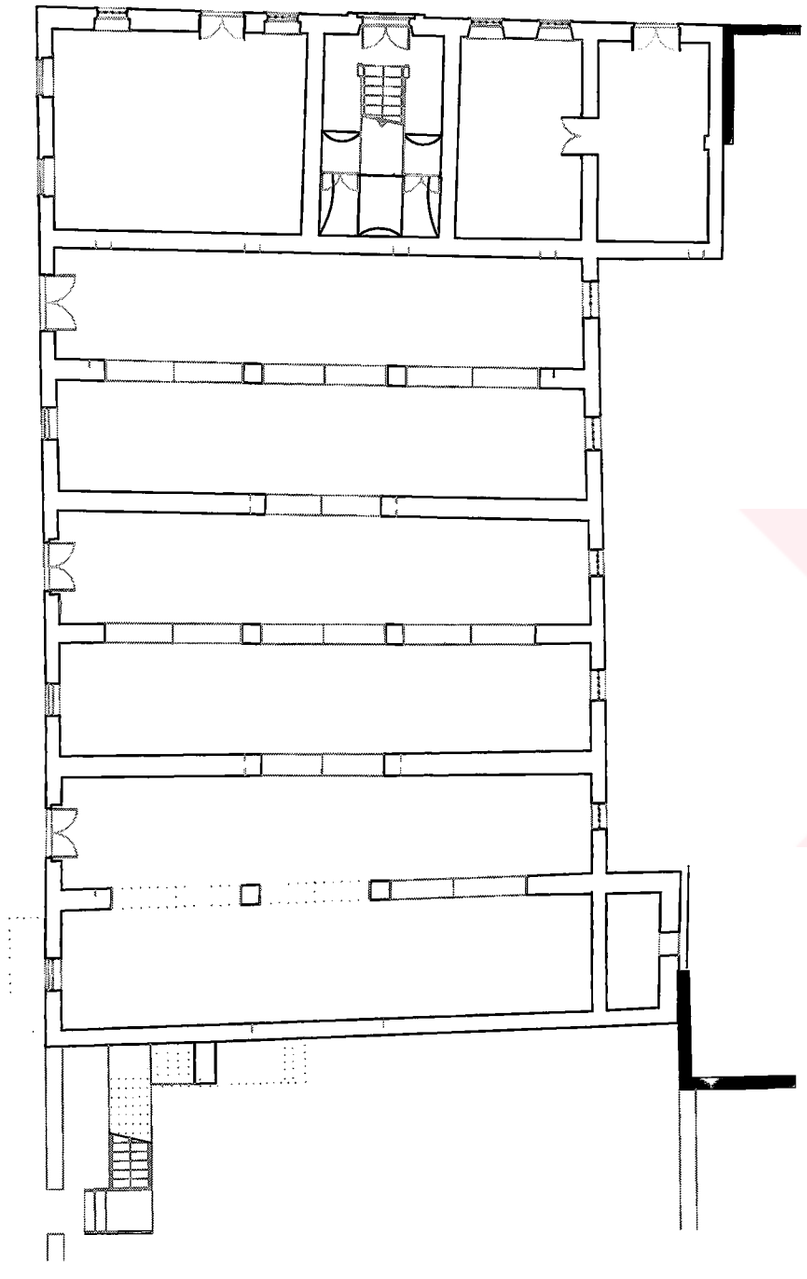


WEST ELEVATION

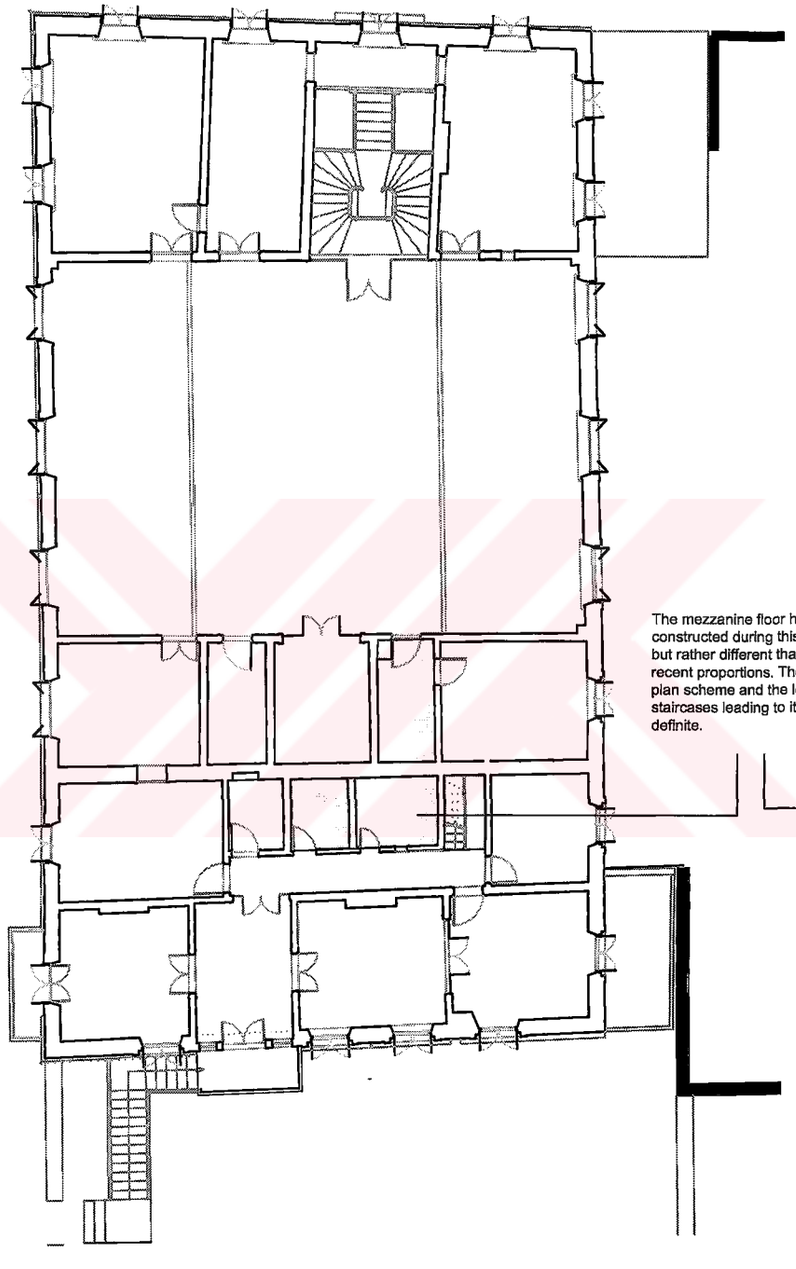


SOUTH ELEVATION

2. PHASE OF THE BUILDING (1905-1933) - I. BANK PERIOD

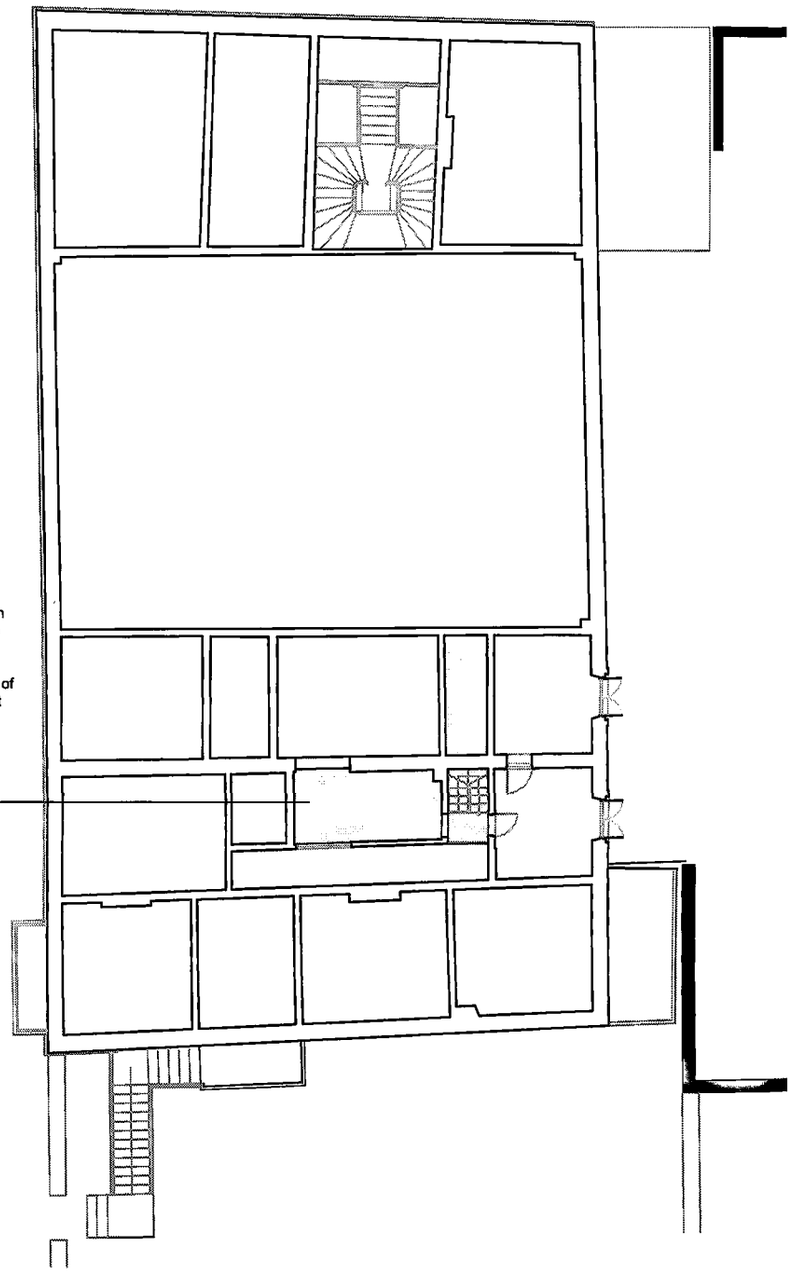


GROUND FLOOR PLAN



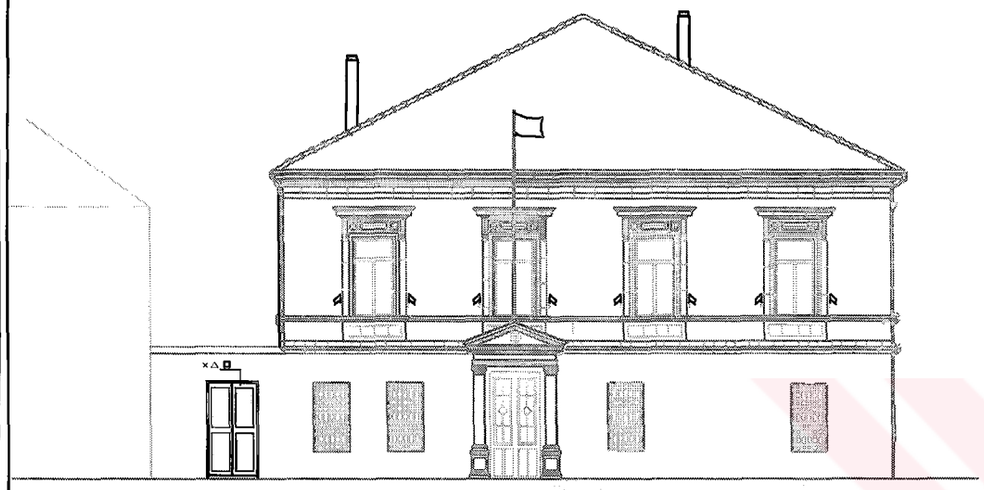
The mezzanine floor has been constructed during this phase but rather different than its recent proportions. The exact plan scheme and the location of staircases leading to it are not definite.

FIRST FLOOR PLAN

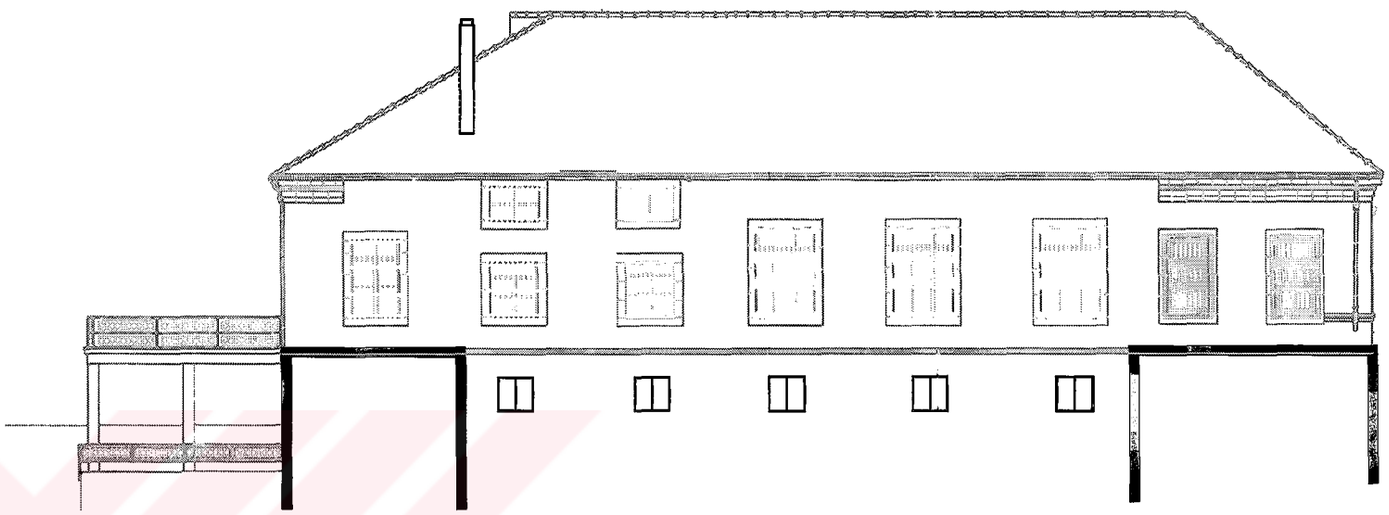


MEZZANINE FLOOR PLAN

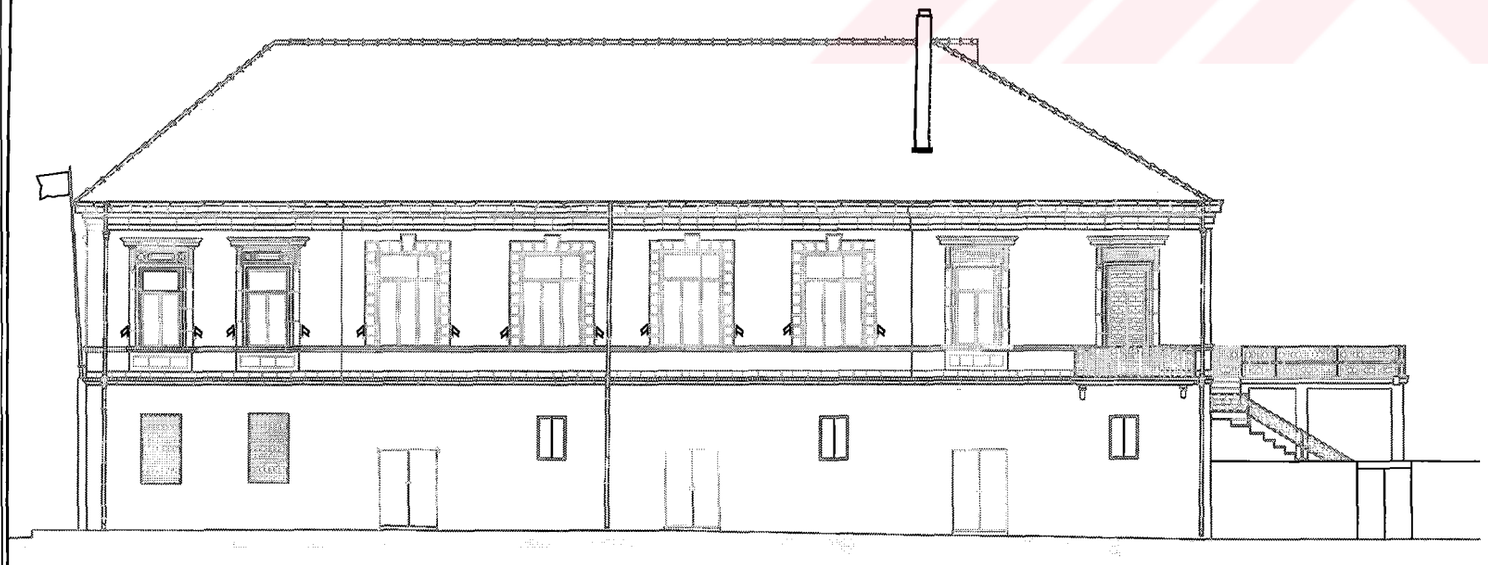
3. PHASE OF THE BUILDING (1933-1960s) - II. BANK PERIOD / AGRICULTURAL BANK



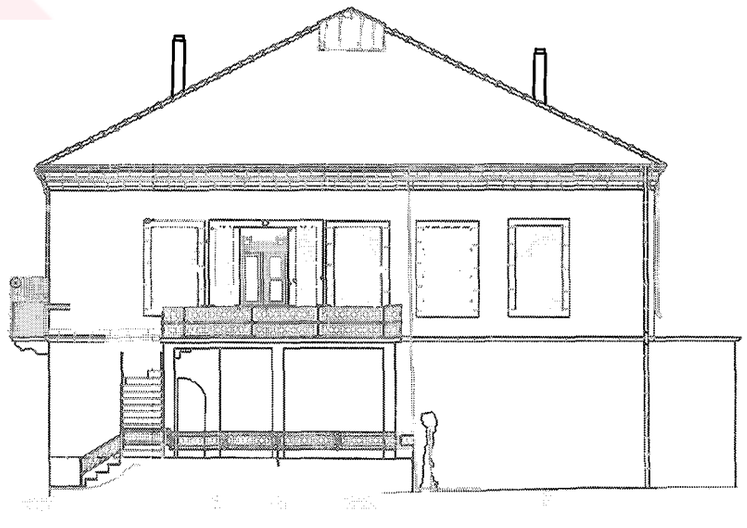
NORTH ELEVATION



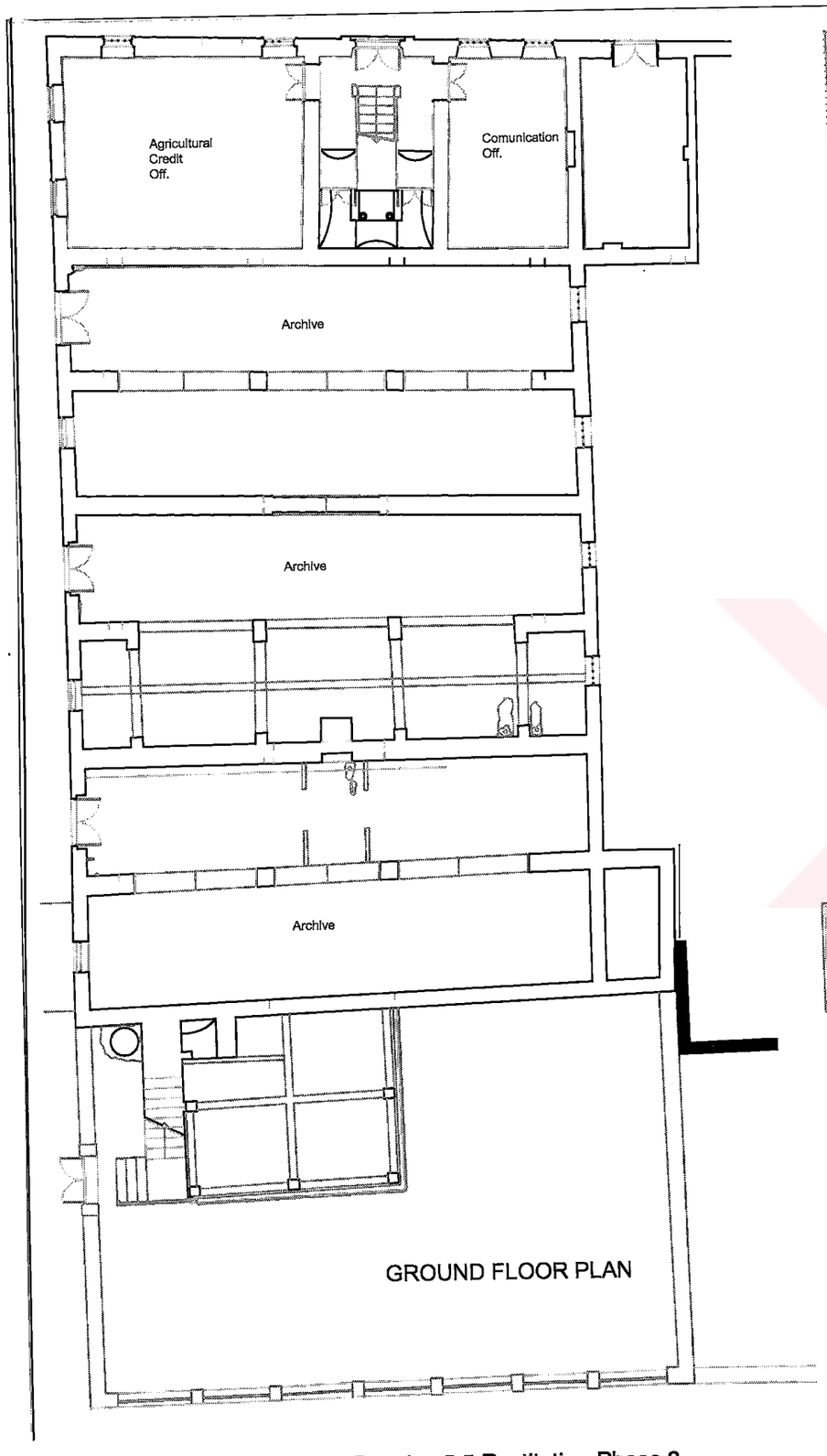
EAST ELEVATION



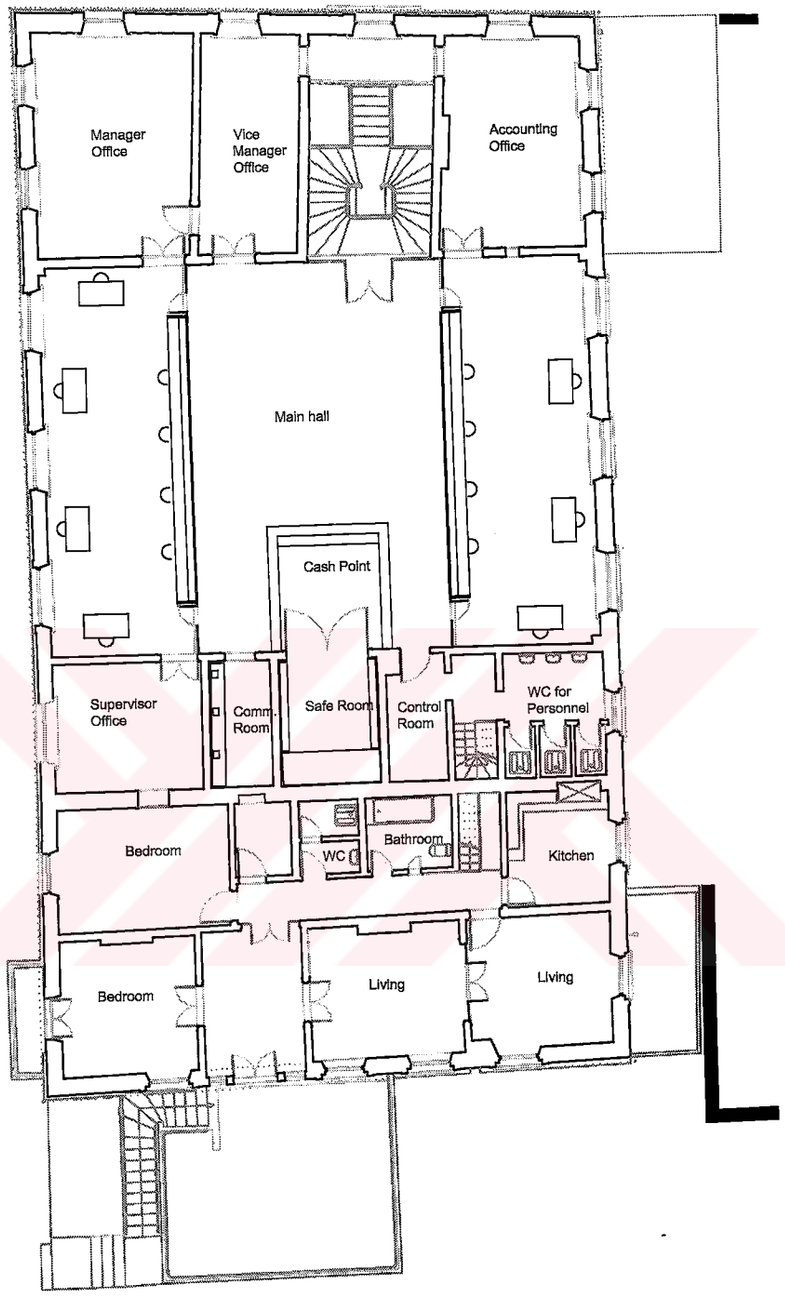
WEST ELEVATION



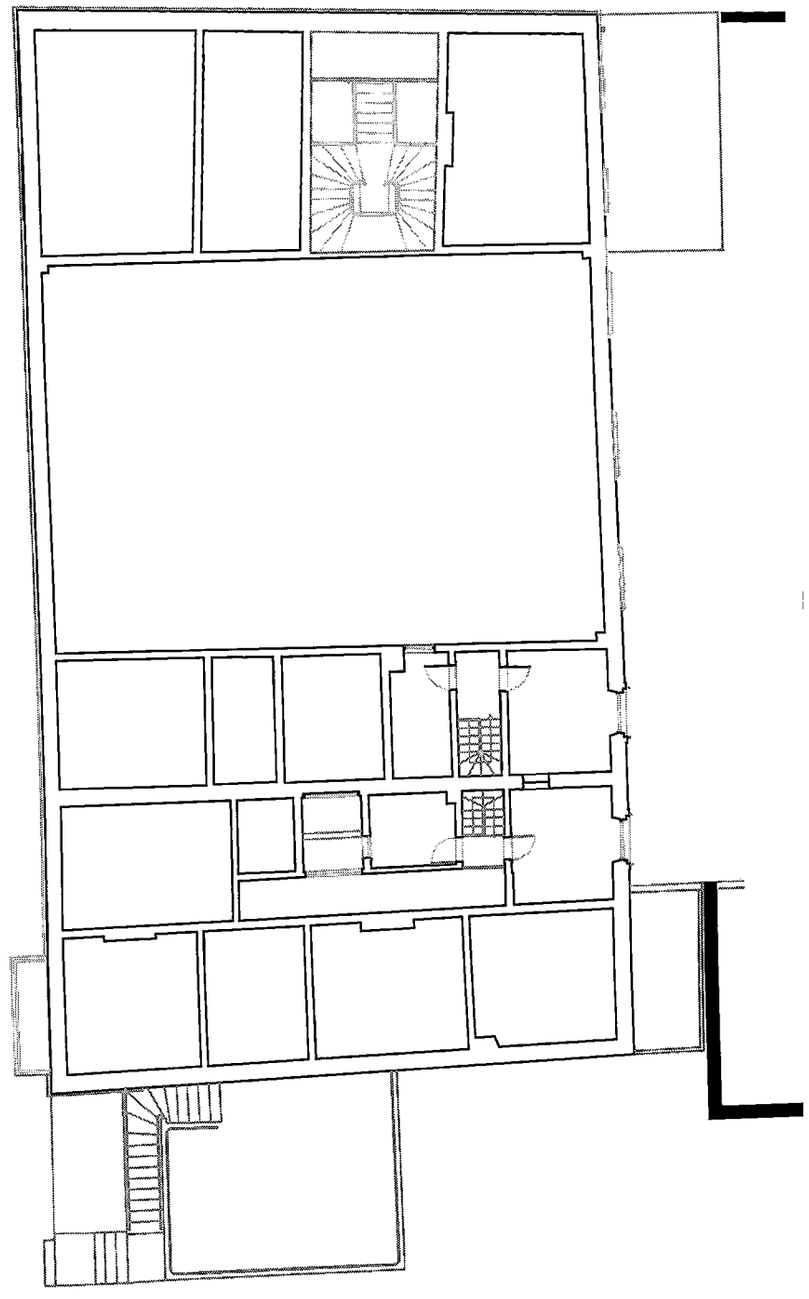
SOUTH ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN



MEZZANINE FLOOR PLAN

Drawing 5.5 Restitution-Phase 3

Table 5.1a Sources of information and reliability degrees in restitution

	Issue	Sources Of Information in Restitution: Existance	Location	Dimension: X	Dimension: Y	Dimension: Z	Form	Material	Construction Technique/ Detail	Reliability Degree
1.PERIOD	* The 4.row of arches	●	●	□	□	□	□	□	□	3
	*The south entrance	●	●	●△	●△	●△	△	△	△	5
	* Mezzanine Floor	●	●	●	●	△	△	●	□	8
	*The north entrance	×	□	□	□	□	□	□	□	9
	* The east and west walls of the building	×	△	□	□	□	□	□	□	9
	* The 1.row of arches in north portion	□	□	□	□	□	□	□	□	9
	* The 1. arches in west portion of each row	□	□	□	□	□	□	□	□	9
	* Superstructure	×	△	△	△	△	△	△	△	10
2.PERIOD	* The exterior opening of G02 at the north facade	●	●	●	●	●	△	△	△	4
	* The door opening between G03 and G08	●	●	●	●	●	□	□	□	3
	* Exterior doors of spaces G04, G05, G06 located on west facade	●	●	●	●	●	△	△	△	4
	* East windows of space G04, G05 and G06.	●	●	●	●	●	△	△	△	4
	* West windows of space G04, G05 and G06.	●	●	●	●	●	△	△	△	4
	* Shutters of windows, type EW$_{T2L-01}$, on north, west and east elevations	●	●	●	●	●	△	△	△	4
	* Shutters of windows, type EW$_{T3L-01}$, on east and west elevations	●	●	●	●	●	△	△	△	4
	* Windows, type EW$_{T2L-04}$, on ground floor of north and west elevations	●	●	●	●	●	△	△	△	4

Table 5.1b Sources of information and reliability degrees in restitution (continued)

2.PERIOD (continued)	* Balcony on west facade	●	●	●	●	△	△	△	△	4
	* Balcony on south facade	●	●	△	△	△	△	△	△	5
	* Shutters of windows on east elevation	●	●	●	●	△	△	△	△	4
	* Shutter of balcony door, type ED72GL-2 on west elevations	●	●	●	●	△	△	△	△	4
	* Shutters of windows, type EW72L-02, on south elevation	●	●	●	●	△	△	△	△	4
	* Shutters of terrace door, type ED72GL-01 on south elevation	●	●	●	●	△	△	△	△	4
	* Downspout of rainwater drainage on south facade	●	●	△	△	△	△	△	△	5
3.PERIOD	* Furniture of bank hall (Desks)	●○	●○	○	●	○	○	○	○	6
	* Furniture of safe room (Safebox)	●○	●○	○	○	○	○	○	○	6
	* Door element of space 107	●	●	●	●	□	□	□	□	2
	* Door element of space 114	●	●	●	●	□	□	□	□	2
	* Chimneys	▲	▲	△	△	▲	△	△	△	7
	* Flag columns on the north and west elevations	●■	●	●	●	●	●	●	●	1
4.PERIOD	* Depot building in east portion	●■	●■	●	●	●	●	●	●	1
	* Chimney and water tank on the terrace	●■	●■	●	●	●	●	●	●	1
	* East wall of space G06	●□	●	●	●	●	●	●	●	1
	* Staircases from space 115 to G06	●	●	●	●	□	□	□	□	2

● Trace/Remain ▼ Archive Documents □ Comparative Study within the building ○ Comparative Study on bank buildings

▲ Photographs ■ Verbal Information/oral history △ Comparative Study on trad. buil. in Mersin × Architectural Necessity

CHAPTER 6

RESTORATION

Within the light of information gathered through the analysis, historical research, comparative study and restitution stages, evaluation related to the values and problems of the building have been established. At the beginning of this stage, the site and the nearby environment where the building is located have been evaluated in means of values, problems and potential observed.

Arguments related to the building covers four topics as evaluations related to its cultural, historical, architectural and documentary values; related to changes and interventions occurred through its historical phases together with results of these changes; physical problems including material deteriorations and structural deformations with sources of these problems; and finally evaluation of spaces to find appropriate new functions for each according to their properties.

During the restoration study decisions related to the conservation of the building have been established. The decisions, which have included proposals for the site and the building itself, have been defined in six topics. At first, decisions related to further investigations on the site are established. At the second stage, intervention decisions related to the changes occurred throughout the historical phases of the building are defined. In the third stage, interventions types related to the physical problems covering the structural deformation and material deteriorations have been established. The forth decision topic includes proposal related to a new function together with its required additions for the building. This is followed by decisions related to environmental situation of the building covering site proposals have been defined. Finally the study has been concluded with implementation phases that will be carried on during the restoration studies. The types of intervention groups for each topic have been defined in detail and they are mapped onto the scaled drawings. At final, the proposed situation of the building after application of all these decisions are established through restoration project drawings.

6.1 EVALUATION RELATED TO THE URAY STREET AND ITS NEARBY ENVIRONMENT

6.1.1 Values

As it is stated in the historical development of Mersin, the Uray Street and its nearby environment had developed as the main commercial, governmental and social district of Mersin after 1850s. Therefore, important landmarks of the city such as the old Governmental Building, the old Mosque, the Latin Italian Catholic Church have been constructed in this area. On the other hand there are traditional residential buildings showing the social and cultural features of daily life of past periods. (Drawing 6.1a)

Hence, these buildings reflect historical, architectural, documentary, cultural and social aspects of that period. They have **architectural values** showing the traditional characteristics in construction materials, techniques and architectural features of the late 19th and early 20th century buildings developed in Mersin. These buildings are the witnesses of the **social and cultural values** of the community, so they have documentary values. Besides, they possess **historical values** in the collective memory of the city by reflecting the common history they have shared.

6.1.2 Problems

Main problem observed in this context is the destruction of historical buildings, which stem from lack of conservation consciousness in both local administrative governors and the public. The Azakhan, old Custom Buildings, the Ayos Georgios Church are examples for historical landmarks of Mersin destructed afterwards. The destruction of the traditional buildings stems from the demand to replace them with new buildings due to the high profits in commercial income of the region. New buildings have destroyed the original physical character of the historical context with their improper heights, masses, proportions and architectural features. On the other hand, the urban interventions after 1960s to fill the sea for the construction of the Inonu Boulevard and the Ataturk Park changed the original silhouette of the old Mersin coast. (Drawing 6.1b)

The traditional buildings in this context are either empty or densely used. The ongoing commercial activities in the region cause pressure on traditional buildings forcing them with dense uses and inconvenient new functions. This fact has caused inadequate interventions and accelerated alterations on traditional buildings, which give harms to the historical values of the buildings. The second problem of the traditional buildings is the abandonment and

neglect which cause deterioration and deformation problems in buildings. They are in bad conditions some of which need urgent physical interventions.

6.1.3 Potentials

Although the original character of the context is harmed with contemporary interventions, the historical remarks of the historical city can be still visualized through the existing buildings. The architectural and physical characteristics of the city can be surveyed (evaluated) and the historical memory related to the social and cultural values of the public can be revival. The location of the Uray Street and the nearby environment is close to the central business district of the city. The commercial activities of the city have stretched towards west along the Ataturk and Istiklal streets, after the city has developed enormously after 1970s. But the commercial importance of this region still continues especially in west portion. Thus, these ongoing commercial activities in the site occur economic potential for the traditional buildings. The east portion of the Uray Street possesses governmental units are located in this area. On the other hand, since it is surrounded by the Cumhuriyet Park, Ataturk Park, it is close to the shopping areas and recreational facilities of the city. Therefore, the role of the Uray Street and the nearby environment in the daily life of the town still keeps its importance.

There are empty buildings especially in the east portion of the Uray Street. These buildings have potentials to be re-used with adequate functions that will help in the improvement of the site. Recently, there has been an increase in the public consciousness in significance of historical values of Mersin and conservation of historical buildings after a group of residential buildings have been restored for social and cultural purposes.

6.2 EVALUATION RELATED TO THE BUILDING

6.2.1 Its Cultural, Historical, Architectural and Documentary Values

Through the research of historical development of Mersin and the building itself, it is understood that the old Agricultural Bank Building is one of the important commercial buildings of the 19th century commercial life of Mersin. It has played a very important urban role in the trade activities generated on the Uray Street and on the historical docks of Mersin port during that period with the entrepot function located in the ground floor and the bank function located in the upper floors.

Since many of the traditional commercial buildings in Mersin have been destructed, the historic, documentary and cultural importance of the building increases. The building reflects the regional characteristics of construction technique, materials and details as well as architectural styles applied on traditional buildings constructed between 1850s-1950s in Mersin. On the other hand, archive documents of the building show that this building belonged to Mavrommati Family, who were one of the most famous foreign residents of Mersin. Mersin was developed and founded by people coming from different cultures after 1850s. The reflection has formed variety in the architectural styles of and characteristics of the traditional buildings constructed during that period. Thus, this building is very important being a part of such examples. It reflects light to the social and cultural variety of the local resident as well as their buildings.

As stated in the historical development of banking and bank buildings, it is really difficult to find examples from bank buildings, which are designed according to the bank function before 1920s. Hence, this building has important architectural significance among the bank buildings typology since it has been constructed according to bank function before 1920s. According to the historical research related to the traditional entrepot buildings, which had been developed as an important commercial building type especially in port towns after 1850s, it is understood that there are limited examples stayed in its original state from traditional entrepot buildings in historical port cities like Mersin, Izmir, Ayvalık, etc. today. Therefore, evaluation of the original schemes and characteristics of this building as an entrepot and a bank is very important for further typological studies related to the bank and entrepot buildings constructed in Ottoman port towns after 1850s. Besides, it is one of the rare examples housing the two functions in one building. When all these facts are considered, this building has significant documentary value for Mersin citizens with its former owners, original functions, building characteristics and architectural style reflecting the social, cultural and architectural aspects of Mersin between 1850s-1950s. Besides it possesses documentary value for researches studying bank and entrepot building types constructed after 1850s in Ottoman cities.

6.2.2 Changes Occured throughout its Phases

One of the important features in the building is the understanding the historical phases of the building and the evaluation of changes occurred throughout these phases. The results of these changes together with their positive or negative effects should be considered properly so that appropriate conservation approaches related to changes can be defined during decisions stage. (Drawings 6.2a and 6.2b) As it has been found out through historical

research and restitution studies, it has been understood that the building has housed three important historical phases throughout its historical development.

In first phase, the building has been constructed as an entrepot function, which was one of the important building types located on the Uray Street during that period. We have little information related to the actual proportions and physical appearance of the building during this period due to the changes occurred in following phases of the building. However, it can be evaluated that; the plan schemes and spatial use of the building has been generated at first in the ground floor according to the spatial criterias of entrepot buildings with wide spanning arches defining the spaces. The authentic character of plan scheme generated during this period has occurred as a result of being an entrepot building. During this period, the building has been constructed according to the traditional construction materials and characteristics of applied in Mersin.

At its second phase, the building has been used by the famous merchant Mavrommati as a local bank (Banque de Mavrommati et Fils). There have been important physical changes in the ground floor; while the second storey has been constructed according to the characteristics of local traditions applied in late 19th and early 20th century traditional buildings of Mersin. During this period the building has reflected the aesthetic and artistic features of these type pf buildings, with its cut stone exterior finishing; cut stone window and door sills, jails, roof cornices with neoclassical decorations and figures; timber shutters as well as original balcony which was probably out of marble. The building has been one of the attractive and prestige buildings of Mersin located on the Uray Street-which was the main social, cultural and commercial axis of the city.

The original plan scheme of the building has consisted of a merchant bank, which has based on the Merchandise Service. So, the ground floors have been used to house depot spaces for the storage of the goods, while in the north portion store/retail units are located which are opened to the Uray Street. In the first floor, the main bank section has been located, while the south section has been used as office section of the merchant himself. Being able to evaluate the general architectural characteristics and plan schemes of this period, it can not be defined the actual features of the plan schemes especially in the first and mezzanine floor due to the changes occurred in following periods. In the third phase, the building has been converted into the Mersin branch office of the Agricultural bank. From now on, we can visualize and evaluate the changes done by the Agricultural Bank in order to adapt the building according to their architectural necessities. Since the main criteria generally carried out in branch offices of the Agricultural bank during this period was to

design bank function together with residential section for general manager within the same building. Thus, the changes occurred during the third phase has been to convert the south section of the first floor into a residence, while the bank section located at the north portion has been continued with some physical changes. These changes have been done in order to increase the spatial and functional capacity of the bank program from a local bank into a branch office of a state bank.

Therefore, there have been spatial changes such as the construction of a space onto the safe room to provide security zone on the safe room, the conversion of the space 112 into toilet spaces of bank personnel. In the ground floor, since there has been no need for depot use for storage of goods as in the Merchandise type bank programs, the spaces have been converted into archive units. Filling of arched openings between them with stone masonry walls has separated them from each other. During this period, the architectural elements on the facades have been removed, and the exterior facades of the walls have been plastered. The balcony on the west elevation has been replaced with RC slab flooring, while the open projection element in the south façade, which has supplied entrance to the building in the previous period has been replaced with RC terrace.

Conversion from first phase of the building to its second phase is important in showing us the transformation of a commercial entrepot building into a local bank with Merchandise Service. The new plan arrangements are important to show us the planametric features of a branch office of the Agricultural Bank, which has been occurred after an adaptation of an existing building against its constructed examples. However, the loss of original architectural elements especially on facades and the cement plasters applied on cut stone exterior walls have caused impair of original architectural characteristics of the building, which has used to be reflecting the traditions of previous period. Besides, the plan scheme of the ground floor in the depot section of the building with accesses to each other has been lost with the closing of these passages. Moreover, the alterations of original elements with RC elements have destructed loss of information in original architectural features of the building.

The changes occurred during the fourth phase by the construction of the depot section on the east portion and the installation of central heating and ventilation systems throughout the building has caused physical and aesthetic problems in the fabric of the building. The removals of the original furniture of the main bank hall space and the safe room during the fifth phase of the building have caused loss of original furniture of the Agricultural bank. Moreover, the division of the main bank hall space into small units with timber plywood

vertically and horizontally separating the space vertically and horizontally has caused impair of the authentic features of the space, which has been a single space with high ceiling.

Within the light of these evaluations, it can be stated that the first and second phases are important in showing significant periods related to the building, while the third period has both positive and negative effects with the interventions occurred during this phase. The fourth and fifth periods have caused impairs in characteristics of the building giving physical and aesthetic harms to the fabric of the building.

6.2.3 Pysical Problems (Material Deteriorations and Structural Deformations)

Main weathering problems observed extensively in the building is detachment and material loss of the building materials especially in the ground floor. There is disintegration of plaster, mortar and stone materials on the interior facades of the ground floor spaces. Material loss as in contour scaling/flaking or breaking out forms are observed. In some portions there are fissures in the stone materials. The timber elements used with masonry elements as bonding beams or flooring beams have fiberisation problems due to high water content and formation of holes problem due to insect attacks. Holes born by insects accelerate the fiberisation of the timber material. In the second floor, the main problem is the blind detachment of the plaster material from their contact surface.

The east wall of the second floor suffers from dampness problem, which result with high amount of detachments in plaster and disintegration of stone material. In the mezzanine floor, the high water content in ceiling elements causing fiberization of timbers is a main problem. In the superstructure, timber elements are affected from thermal effects and swelling/shrinkage cycles occurred in the roof. This has resulted with tiny cracks/fissures and deformations in timber elements. There are structural cracks due to vegetation observed in the masonry elements of the building. In the depot building, there is a severe crack in the south-east corner, which expands towards east and south walls respectively. The walls are displaced from the corner related to the crack. The growth of macro plant accelerates the crack with its roots moving through the walls. Both in vaulted and timber floorings, there is sagging problem seriously. The brick vault portions between the metal I beams have lost their horizontal axes. The timber brackets which are placed to support the vaulted flooring in space G06 are totally degraded. In addition to this, there is material loss in structural severity degree in some portions of the timber flooring as in space 124. In ceiling and flooring of space 202, is partially destroyed in order to install the ventilation equipment. In some portions of timber flooring due to water problem, the timber elements have been seriously

decayed. The reinforced concrete elements especially the RC slabs and beams have serious structural problems due to the chemical reactions in the infrastructure.

The reasons of physical weathering mainly depend on uncontrolled water movements throughout the building. Among them, 'rising damp', which constitutes the rising up of ground water through the walls, is the most extensively problem observed in the building. It accelerates several weathering forms. All the masonry walls in the ground floor suffer from rising damp problem resulting with high water content. Rain penetration problem is observed on some walls in the first floor and on the ceilings of the mezzanine floor spaces. Faulty rainwater disposal stems from the inadequate construction details and loss of material in the rainwater. This problem causes the physical problems on the facades mostly. Faulty plumbing in the wastewater disposal also has caused deterioration of floorings in wet spaces.

Atmospheric pollution, contact with cement materials, and internal reactions of construction materials of RC elements are important factors causing chemical degradations in the building. Due to the location of the building in the city, it is affected from pollutants produced by the traffic. The atmospheric pollutants including harmful compound particles deposit on the surface causing soiling problem that can be observed visually. This problem is observed mostly on the stone finishes of the facades such as door and window sills. In state of contact with cement materials, the soluble salts in cement based materials penetrate the original materials -such as stone, brick, plaster and mud- causing salt crystallization there.

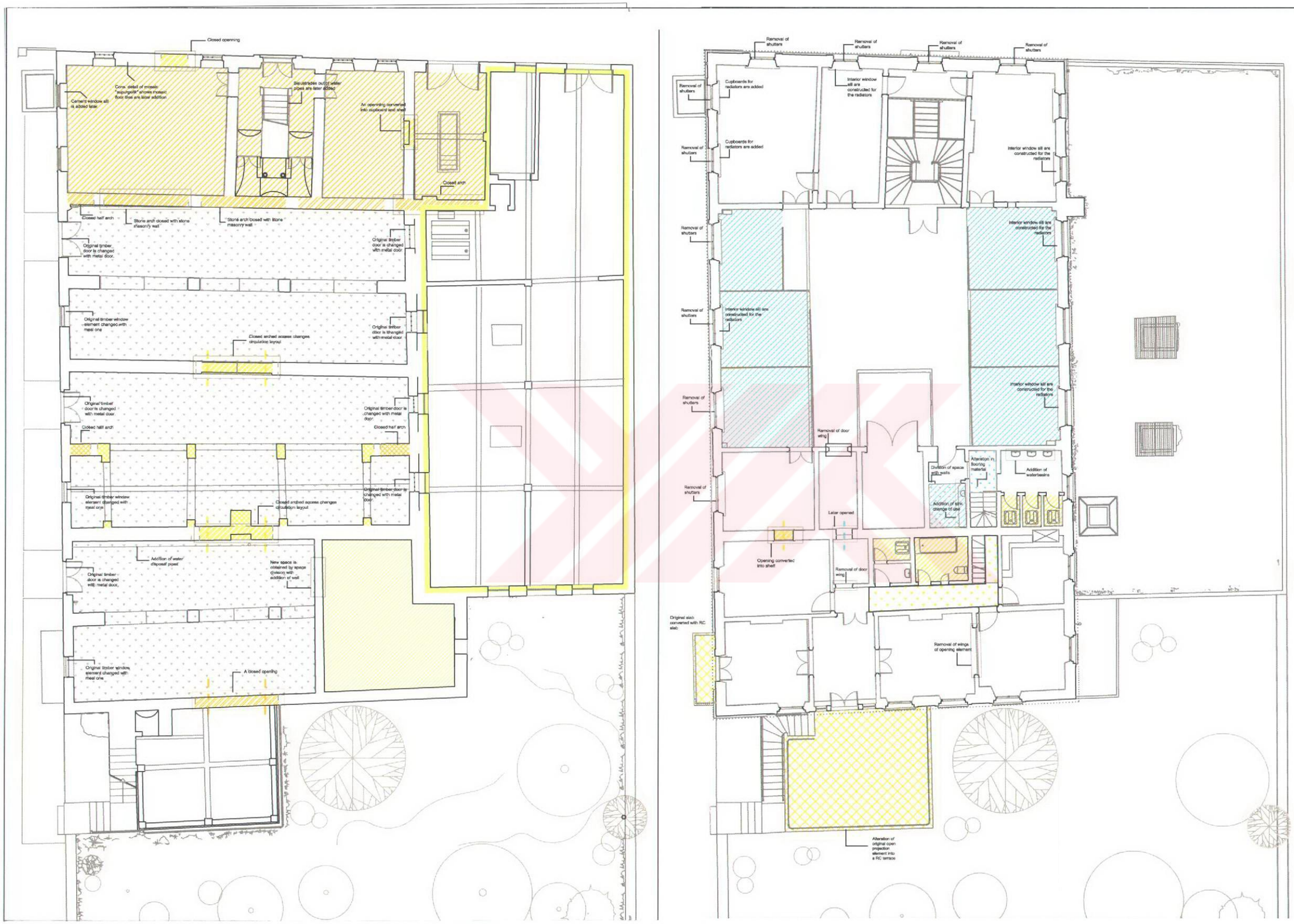
The results of inadequate construction details harm the east of the main building most. The construction of the depot building adjacent to the main building wall causes dilatation problems between the two buildings. Moreover, inadequate slope of the terrace of the depot building collects water in the intersection of the terrace roof and east wall of the main building. These cause detachments in the plaster and disintegration of the stone as well as supply suitable conditions for the growth of macro plants in the joints of the east wall. They cause structural cracks.

6.2.4 Spaces and Spatial Features

As it is stated in the historical research related to the building, the building has been abandoned since 2001. In order to make the building carry on its wealth, a new function should be given to the building. Before defining the decisions related to the new function, the evaluation of spaces has been carried out related to their circulation layouts, original use, architectural characteristics and condition of comforts in order to understand their physical and architectural capacities as well as requirements. (Drawings 6.3a-6.3b and Tables 6.1a-6.1b).

Drawing 6.1a Evaluation of Nearby Environment- Values and Potentials

Drawing 6.1b Evaluation of Nearby Environment- Problems



EVALUATION OF CHANGES AND INTERVENTIONS IN THE BUILDING

TYPES OF CHANGES/INTERVENTIONS

SPATIAL ALTERATIONS/ INTERVENTIONS

- Space (Mass) Addition
- Space addition by space division
- Change in circulation layout, access

ALTERATIONS RELATED TO ARCHITECTURAL ELEMENTS

- Addition, removal or alteration of partition, architectural and service elements

ALTERATIONS RELATED TO FINISHING MATERIALS

- Addition, removal or alteration of finishing mat. on flooring, ceiling or wall surfaces

STRUCTURAL INTERVENTIONS

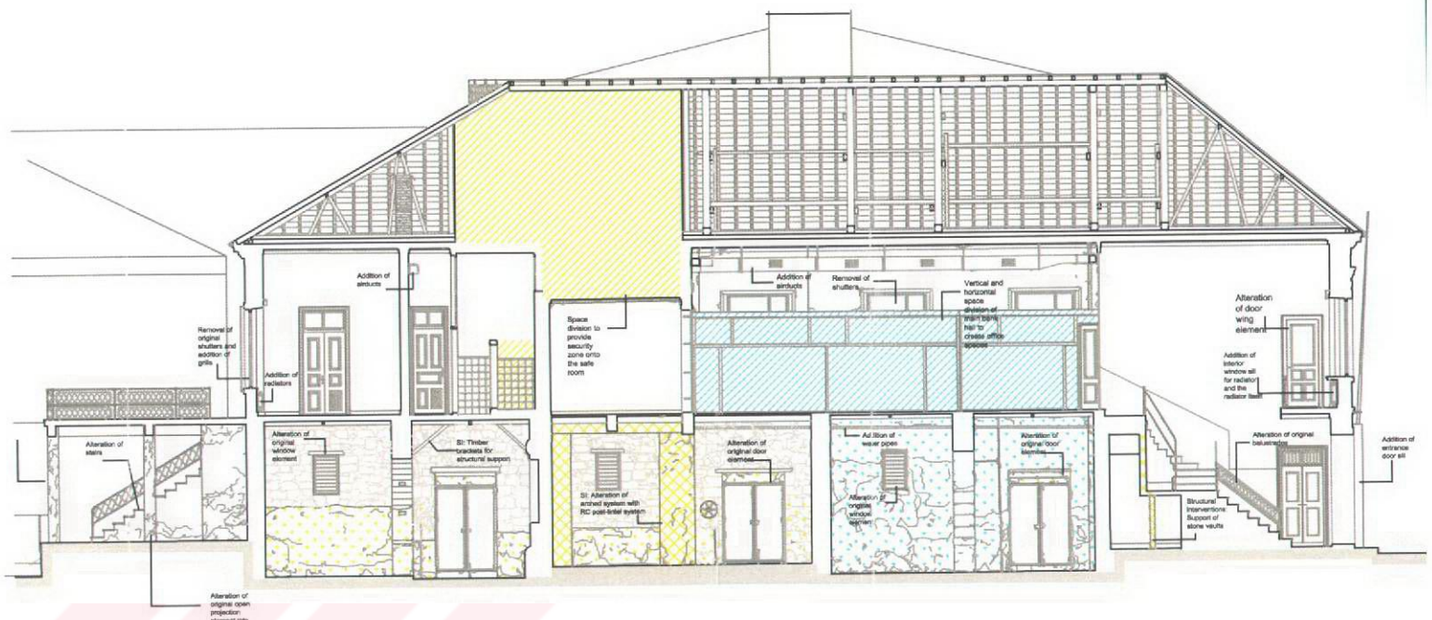
- Interventions related to structural element of the building

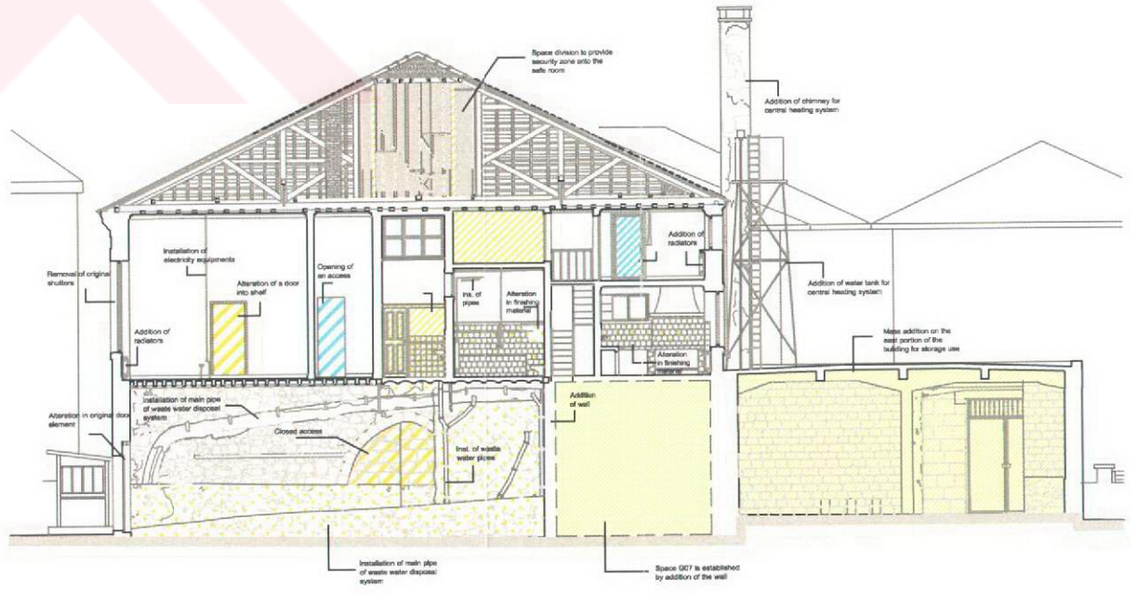
HISTORICAL PHASES

- 2. Phase I. Bank Period (Mavromati Bank)
- 3. Phase II. Bank Period (Agricultural Bank)
- 4. Phase II. Bank Period (Agricultural Bank)
- 5. Phase Treasury Period ("Muhakemat Mudurlugu")
- Changes/interventions the period of which cannot be defined

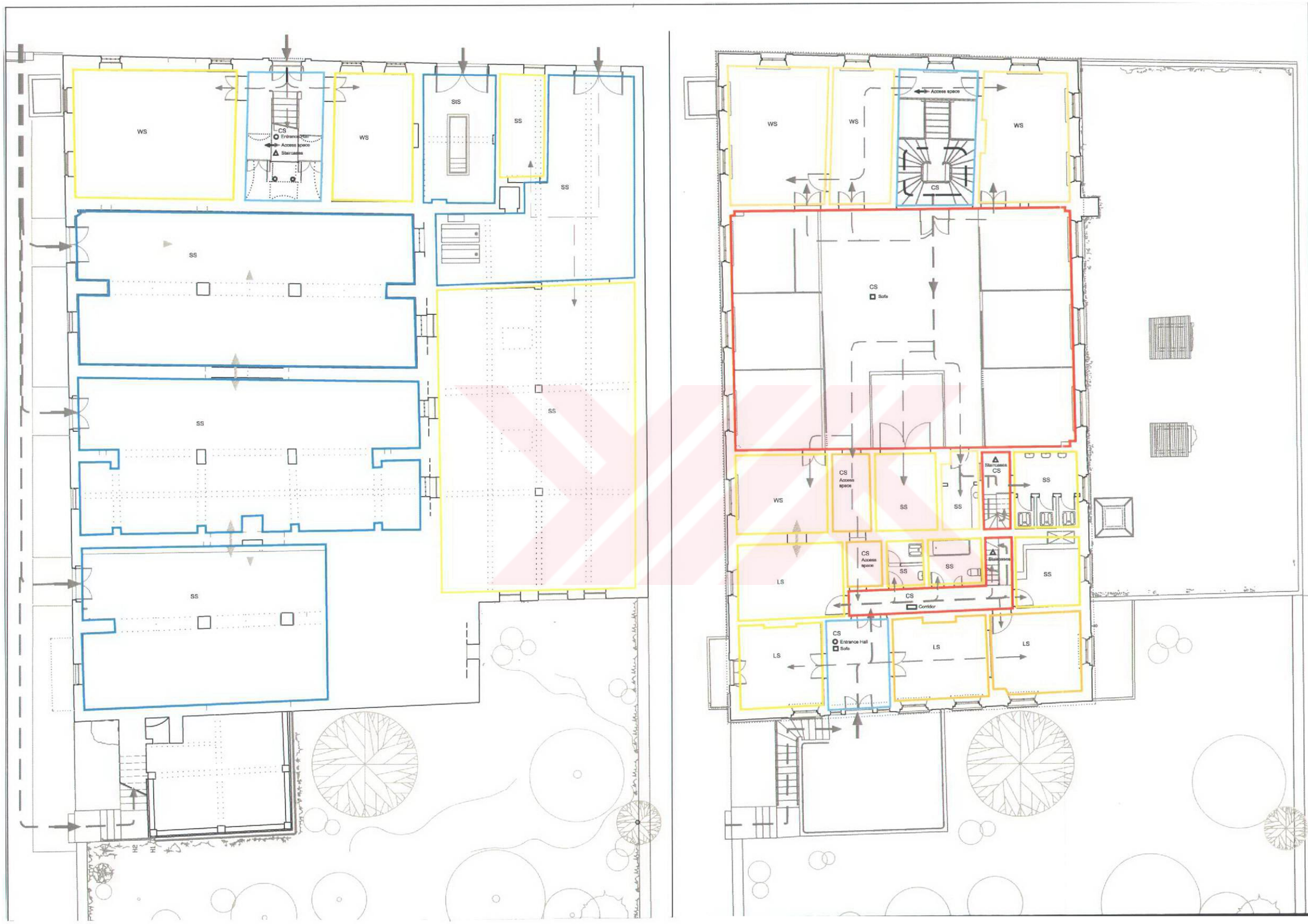
Drawing 6.2a Evaluation of Changes in the Building







Drawing 6.2b Evaluation of Changes in the Building



ANALYSIS OF SPACES

CIRCULATION LAYOUT AND ACCESS

ACCESS

Access from outside

Access from interior spaces

Closed access

PUBLICITY/PRIVACY HYEARCHY

Spaces entered from street

Spaces entered from street and more than two interior spaces

Spaces entered from three or more spaces

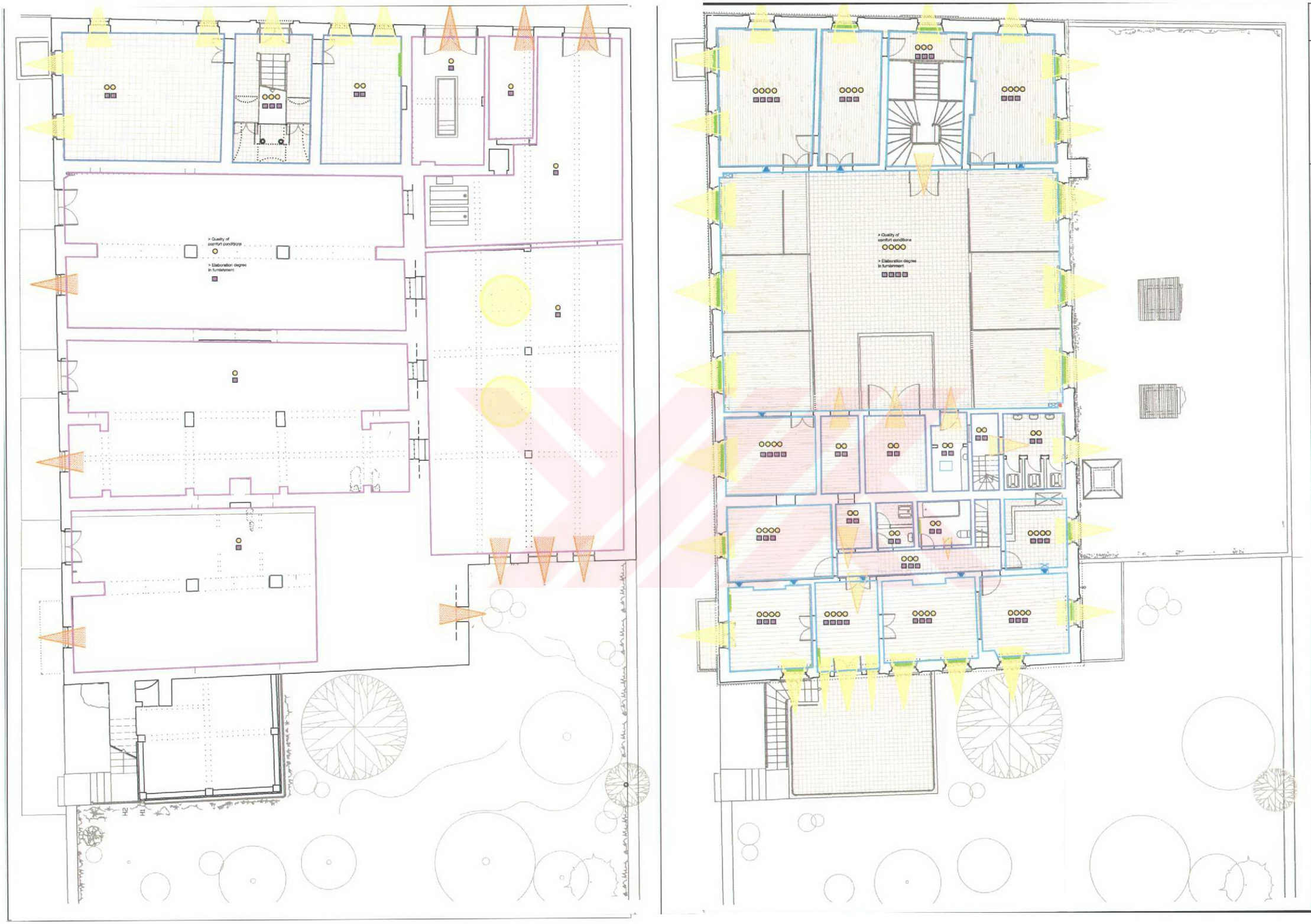
Spaces entered from two spaces

Spaces entered from one space only

USE OF SPACES

Circulation Spaces	CS
as Entrance Hall	○
as Corridor	▭
as Sofa	□
as Staircase Hall (vertical circulation)	△
as Access Space - Supplies access between two spaces	◂▸
Service Spaces	SS
Storage, Kitchen, Bathroom, WC	
Store Spaces	StS
Working Spaces	WS
Office uses	
Living Spaces	LS

Drawing 6.3a Evaluation of Spaces



CONDITION OF COMFORTS IN SPACES

SOURCE OF LIGTH

- Direct light entering through large glazed exterior windows
- Indirect light entering through interior doors and windows
- Direct light entering through small exterior openings

SOURCE OF VENTILATION

- existance of both natural and mechanical ventilation
- Natural ventilation only
- None of natural or mechanical ventilation

ORIENTATION TO OUTSIDE

- Extroverted- Exposed to outside — Ext
- Introverted- Without relation with outside — Int

EVALUATION OF QUALITY

*Condition of Comfort

- Extroverted spaces having high quality of lighting and ventilation conditions. ○○○○
- Extroverted spaces having medium quality of lighting and ventilation conditions. ○○○
- Introverted spaces having poor quality of lighting and ventilation conditions. ○○
- Introverted spaces having very poor quality of lighting and ventilation conditions. ○

*Elaboration Degree in Furnishment

- Existance of architectural elements (window, door, wide opening and interior window sill), flooring and ceiling
- Existance of architectural elements (window, door, others), flooring and ceiling
- Existance of architectural elements (window or door only) flooring and ceiling
- No original architectural elements and without flooring and ceiling element

Drawing 6.3b Evaluation of Spaces

Table 6.1a Evaluation of Spaces

Space	Dimensions		Entrance	Floor	Ceiling	Architectural Elements					Conditions of Comfort		Original Function(s) (with order)	Additional Requirements	EVALUATION
	Area	Height				Stairs	Door	Window	Cupboard	Others	Quality of Light	Quality of Ventilation			
Space G01	22.82 m^2	8.60 m	*Entered from outside-Uray Street	Mosaic Tile	Plywood	ST C-1	ED 2TG -1 ID 2TL -1	——	——	——	Suf. light entering from exterior window and door	Sufficient passive ventilation from exterior door	Circulation: Ent. hall	Existing installation needs rehabilitation/ renewal	Main entrance hall connecting the north portion of the first floor to the Uray Street
Space G02	48.36 m^2	3.27 m	Access from G01	Mosaic Tile	Plywood	——	ID 2TL -1	EW 2TL -4	——	——	Sufficient light entering from exterior windows	Sufficient passive ventilation from exterior door	Store; Bank office	Existing installation needs rehabilitation/ renewal	Can be evaluated as office space in relation with outside
Space G03	23.21 m^2	3.62 m	Access from G01	Mosaic Tile	Plywood	——	ID 2TL -1	EW 2TL -4	Timber shelf	——	Sufficient light entering from exterior windows	Sufficient passive ventilation from exterior door	Store; Bank office	Existing installation needs rehabilitation/ renewal	Can be evaluated as office space in relation with outside
Space G04	117.9 m^2	4.45 m	*Entered from outside Closed access from G05	Screed	super-structure itself	——	ED 2M -1	EW MF -1	——	——	Dark space with poor light entering from small ext. window	Poor ventilation from small exterior window	Entrepot/depot Bank archive	Needs artificial ventilation and lighting	Large areas entered from street having acceess to each other can be evaluated as exhibition halls with artificial lighting. The indoor activites can be supported with outdoor activities.
Space G05	115.7 m^2	4.28 m	*Entered from outside Closed access from G04 and G06	Screed	super-structure itself	——	ED 2M -1	EW MF -1	——	——	Dark space with poor light entering from small ext. window	Poor ventilation from small exterior window	Entrepot/depot Bank archive	Needs artificial ventilation and lighting	
Space G06	87.35 m^2	4.50 m	*Entered from outside Closed access from G05	Screed	super-structure itself	——	ED 2M -1	EW MF -1	——	——	Dark space with poor light entering from small ext. window	Poor ventilation from small exterior window	Entrepot/depot Bank archive	Needs artificial ventilation and lighting	
Space G07	Not Surveyed	Not Surveyed	Access from 115	Not Surveyed	Not Surveyed	Missing	Not Surveyed	Not Surveyed	Not Surveyed	Not Surveyed	Not Surveyed	Not Surveyed	Entrepot/depot Bank archive	Not Surveyed	Large area can be evaluated as part of exhibition hall with location of service units.
Space G08	40.27 m^2	3.30 m	Terrace	Screed	Plaster	Concrete steps	X	X	X	Ba M-2	X	X	X	X	Open space can be integrated with garden activities as sitting corner.
Space G10	21.55 m^2	4.15 m	*Entered from outside-Uray Street	Screed	Screed	——	ED 2ML	——	——	——	Dark space when the ext. door is closed	Poor ventilation when the door is closed	Store; Storage	Needs artificial ventilation and lighting	Storage area with entrance to the street
Space G11	10.45 m^2	4.15 m	Access from G12	Screed	Screed	——	ED 2ML	——	——	——	Dark space with poor light entering from exterior windows	Poor ventilation from small exterior window	Sevice -Storage	Needs artificial ventilation and lighting	Large and dark interior space entered from street can be used with seminar rooms where film, dia presentations can be done.
Space G12	61.44 m^2	4.15 m	*Entered from outside-Uray Street	Screed	Screed	——	——	EW MF	——	——	Dark space with poor light entering from exterior windows	Poor ventilation from small exterior window	Sevice -Storage	Needs artificial ventilation and lighting	
Space G14	136.68 m^2	4.15 m	Access from G12	Screed	Screed	——	——	EW MF	——	——	Dark space with poor light entering from exterior windows	Poor ventilation from small exterior window	Sevice -Storage	Needs artificial ventilation and lighting	
Space 101	187 m^2	4.70 m	Accesses from G01 and 102, 103, 105, 106, 107, 108, 109	Mosaic Tile	Timber	——	DW T-A, D M-A ID 2TL -2	EW T3L -1 IW T1L -1	——	Interior window sill for radiators	Good quality light entering from exterior windows	Sufficient pass. ventilation from ext. windows Active vent. with airducts	Main Hall for bank	Existing installation needs rehabilitation/ renewal	Large circulation area connecting the north and south spaces to each other with good quality of comfort conditions. Suitable for public study activities, such as library.
Space 102	30.74 m^2	4.72 m	Accesses from 101 and 103	Timber	Plastered		ID 2TL -2 ID 1TL -1	EW T2L -1	——	Int. win.sill with tim. wings for radiators	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Bank office	Existing installation needs rehabilitation/ renewal	Can be used as study rooms or office areas with good quality of light.
Space 103	18.95 m^2	4.72 m	Accesses from 101, 102 and 104	Timber	Plastered	——	ID 2GTL -2 ID 1TL -1	EW T2L -1	——	Interior window sill for radiators	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Bank office	Existing installation needs rehabilitation/ renewal	
Space 104	5.37 m^2	4.70 m	Accesses from 103 and 105	Timber	Timber	——	ID 1TL -1 ID 1GL -1	EW T2L -1	——	Ba T-1 Interior window sill for radiators	Sufficient light entering from exterior windows	Sufficient pass. ventilation from ext. window	Access space	Existing installation needs rehabilitation/ renewal	Circulation area connecting the space 103 and 105.
Space 105	25.85 m^2	4.71 m	Accesses from 101 and 104	Timber	Plastered	——	ID 2TL -2 ID 1TL -1	EW T2L -1 IW T1L -1	——	Interior window sill for radiators	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Bank office	Existing installation needs rehabilitation/ renewal	
Space 106	16.50 m^2	4.69 m	Access from 101	Timber	Timber	——	ID 2TL -2	EW T3L -1	Timber shelf	Interior window sill for radiators	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Bank office	Existing installation needs rehabilitation/ renewal	Can be used as study rooms or office areas with good quality of light.
Space 107	6.72 m^2	4.71 m	Access from 101 and 114	Timber	Timber	——	ID 1TL	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Bank office	Needs artificial ventilation and lighting	
Space 108	10.82 m^2	3.30 m	Access from 101	Mosaic Tile	Timber	——	* D M-A	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Safe Room	Needs artificial ventilation and lighting	Speacial corner which will support the function located at the main hall emphasizing a "special and safe niche" within it.
Space 109	2.38 m^2	2.58 m	Access from 101,110 and 111	Screed	Timber	——	ID 1TL	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Service	Needs artificial ventilation and lighting	Suitable for service functions

Table 6.1b Evaluation of Spaces

Space 110	3.65 m^2	2.57 m	Access from 109	Screed	Timber	——	——	——	——	Concrete counter and sink	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Service	Needs artificial ventilation and lighting	Suitable for service functions
Space 111	4.65 m^2	2.60 m	Access from 109 and 112	Screed	Timber	ST T-1	ID 1TL	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Circulation	Needs artificial ventilation and lighting	Suitable for service functions with artifical heating and ventilating conditions.
Space 112	10.80 m^2	2.60 m	Access from 111	Ceramic Tile	Timber	——	ID 1TL ID 1TL -4	EW T2L	——	washbasin and toilets	Sufficient light entering from exterior windows	Sufficient pass. ventilation from ext. window	Service- toilet	Existing installation needs rehabilitation/ renewal	Service functions-toilet spaces
Space 113	18.05 m^2	3.30 m	Access from 115	Timber	Timber	——	ID 1TL-2	EW T1L-2	——	——	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Bank office	Existing installation needs rehabilitation/ renewal	Can be used as study rooms or office areas with good quality of light.
Space 114	3.60 m^2	4.70 m	Access from 107 and 115	Timber	Timber	——	ID 1TL	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from ext. window	Service	Needs artificial ventilation and lighting	will supply connecting the south and north portion of the first floor.
Space 115	11.96 m^2	4.70 m	Accesses from 113, 114, 116, 117, 118, 121 and 123	Timber Ceramic Tile	Timber	ST T-1	DW T-B ID 1TL -3 ID 1TL -2	IW T1L-3	——		Sufficient light entering from exterior windows	Sufficient passive and active ventilation	Service -storage	Existing installation needs rehabilitation/ renewal	will supply connecting the south and north portion of the first floor.
Space 116	3.80 m^2	4.60 m	Access from 115	Ceramic Tile	Timber	——	ID 1TL -2	IW T1L-2	——	washbasin and toilet	Dark space with poor light entering from interior windows	Poor ventilation conditions through interior door and windows	Service - WC	Needs artificial ventilation and lighting	Can be used as with toilet function
Space 117	5.48 m^2	3.10 m	Access from 115	Mosaic	Timber	——	ID 1TL-4	IW T1L-3		water sink and toilet	Dark space with poor light entering from interior windows	Poor ventilation conditions through interior door and windows	Service -Bathroom	Needs artificial ventilation and lighting	Can be used as with toilet function
Space 118	9.96 m^2	2.52 m	Access from 115	Ceramic Tile	Timber	——	ID 1TL -3	EW T2-1	timber cupboards	counter, fume uptake	Sufficient light entering from exterior windows	Sufficient passive and active ventilation	Service -Kitchen	Existing installation needs rehabilitation/ renewal	Can be used with kitchen service for new office uses which will continue original function.
Space 119	15.70 m^2	4.70 m	Access from 120 and 121	Timber	Timber	——	ED T2GL -2 ID T2L -4	EW T2L-2	——	——	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Living space	Existing installation needs rehabilitation/ renewal	Can be used for groups as meeting or resting places.
Space 120	3.66 m^2	Balcony	Access from 119	Mosaic Tile	X	——	ED T2GL -2	X	X	Ba M-2	X	X	Balcony	X	will be evaluated as a part of the space 119
Space 121	12.67 m^2	4.72 m	*Entered from outside Access from 115, 119 and 122	Timber	Timber	——	DW T-B ED T2GL -1 ID T2L -4	EW T2L-2 EW T1L-1	——	——	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Circulation	Existing installation needs rehabilitation/ renewal	will be used as the main entrance to the spaces located at the south portionof the building.
Space 122	17.66 m^2	4.70 m	Access from 121 and 123	Timber	Timber	——	DW T-C ID T2L -4	EW T2L-2	——	——	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Living space	Existing installation needs rehabilitation/ renewal	Can be used for groups as meeting or resting places.
Space 123	16.16 m^2	4.70 m	Access from 115 and 122	Timber	Timber	——	DW T-C ID T2L -4	EW T2L-2	——	——	Quality light entering from exterior windows	Quality ventilation with passive and active systems	Living space	Existing installation needs rehabilitation/ renewal	Can be used for groups as meeting or resting places.
Space 124	39.30 m^2	Terrace	Outdoor space Access from 121	Mosaic Tile	X	ST C-2	ED T2GL -1	X	X	Ba M-1	X	X	Terrace	X	Supporting the outdoor use of garden
Space 201	4.70 m^2	2.04 m	Access from 111, 202 and 203	Timber	Timber	ST T-1	ID T1L	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Circulation	Needs artificial ventilation and lighting	will continue its circulation use
Space 202	6.18 m^2	2.05 m	Access from 201, roof floor	Timber	Timber	——	ID T1L	——	——	——	Dark space with poor light entering from interior door	Poor ventilation conditions through interior door	Service -storage	Needs artificial ventilation and lighting	Can be used with archive function
Space 203	10.88 m^2	2.07 m	Access from 201 and 204	Timber	Timber	——	ID T1L	EW T2-2	——	——	Sufficient light entering from exterior windows	Sufficient pass. ventilation from exterior window	Service -storage	Existing installation needs rehabilitation/ renewal	Can be used with archive function
Space 204	9.95 m^2	2.05 m	Access from 203 and 205	Timber	Timber	——	ID T1L	EW T2-2	——	——	Sufficient light entering from exterior windows	Sufficient pass. ventilation from exterior window	Service -storage	Existing installation needs rehabilitation/ renewal	Can be used with archive function
Space 205	2.82 m^2	2.06 m	Access from 115, 204 and 206	Timber	Timber	ST T-1	ID T1L	——	——	——	Dimly lit with indirect light coming throgh door	Sufficient pass. ventilation from doors	Circulation	Needs artificial ventilation and lighting	will continue its circulation use
Space 206	5.36 m^2	1.53 m	Access from 205	Mosaic	Timber	——	ID T1L	——	——	——	Dark space with poor light entering from interior door	Poor ventilation conditions through interior door	Service -storage	Needs artificial ventilation and lighting	Can be used with storage function

6.3 GENERAL CONSERVATION AND RESTORATION APPROACH

The main scope of conservation should be the preservation of the cultural, historical and architectural values of the building. The original characteristics of the building related to its architectural style, construction materials and techniques, structural system should be preserved. The authenticity of the plan layout and spaces should be kept.

The historical periods of the building should be examined carefully with their significant values. The effects of changes throughout the historical periods of the building should be evaluated in detail so as to define their negative or positive effects on the original features of the building related to its plan layout, spatial use and physical appearance. The evaluations should be carried out in means of:

- Additions that reflect an important historical period,
- Additions that don't reflect a period and impair original architectural characteristics and design aspects of the building related to its architectural style, construction material and techniques, spatial organisation, etc
- Alterations that reflect a significant period in the historical development of the building and reflect additional information related to these changes,
- Alterations that destroy the original architectural values of the building by impair of original physical characteristics and design aspects of the building,
- Removals that cause loss of architectural and physical aspects of the building.

The conservation approach should define types of interventions for each case.

Solutions related to the physical problems that base on material deteriorations and structural deformations throughout the building should be found out. Precautions related to the sources of these problems should be taken in order to prevent further problems. The deteriorated sections should be repaired as much as possible rather than replace.

The existing situation of the building is empty without no use. For the future of the building, it is evitable to give a new function to the building. While, deciding the new function, appropriate use for the building should be provided compatible with original architectural and physical aspects of the building. The new installations required according to the necessities of the new function should be compatible with the original materials. They should be reversible as much as possible.

6.4 INTERVENTION DECISIONS

6.4.1 DECISIONS RELATED TO THE SITE

In its existing situation there are two traditional buildings and two contemporary buildings located within the site. The open areas around the traditional buildings have been arranged as auto park area with asphalt and concrete finishing, while the open spaces around the new buildings have been designed as greenery. This situation has to be changed by giving more importance and respect to the traditional buildings. (Drawing 6.19) The west portion of the old Agricultural Bank Building is being used as a parking area for the official vehicles of the Governmental Office, which parks very close to the building. Besides, the south portion of the garden has also been arranged as an auto park, where over 40 cars have been parking everyday. The close location of the cars to the building creates environmental problem by causing physical and visual threat for the building. The open spaces within the buildings on the site must be re-arranged. The use of west and south portion of the building as a car parking area has to be prevented and the vehicular entrance to the site from the Uray Caddesi must be closed. This entrance must be arranged for pedestrian entrance only, which will lead to the exhibition spaces located on the ground floor of the building. The requirements for the car parking can be solved in south portions of the two contemporary buildings, which will be entered from the Inonu Boulevard.

The building lives with its environment. So, the indoor and outdoor activities should be integrated as much as possible. For this, the parking area on the south portion of the site can be converted into greenery and designed for recreational activities such as outdoor exhibitions, performances, etc. Moreover, the pedestrian passage on the west portion of the building can be designed as a kind of Pedestrian Street, which leads to both this area and the indoor exhibition spaces located at the ground floor of the building. The asphalt and concrete cover around the building should be removed. Instead of it, stone parquet and greenery areas should be applied according to the landscape design.

6.4.2 DECISIONS RELATED TO THE BUILDING

6.4.2.1 Survey Investigations and Excavations

As far as it is searched during the analysis survey stage of the study, it has been found out that there are important traces especially in the ground floor of the building, which have stayed under the cement plasters. The discover of these information will be useful in completion of the missing information related to restitution studies of the building. Moreover, in

some portions such as floorings of space G04, G05, G06; the space G07; the ceilings of spaces G02 and G03; etc. the new information must be evaluated in order to define the intervention decisions related to them. (Drawing 6.4)

Therefore, at the beginning of the restoration studies, survey investigations including local excavations and "raspa" on the walls must be carried out according to the plan prepared to show the locations of the searching points. The screed cover in the ground floor should be excavated in order to search for the original floor level of the building and whether there is an original floor cover or not. Since the interior cement plasters are later additions, they can be removed where necessary during the investigation studies so that traces staying under them can be gathered. They must be carefully removed away not to give harm to the original stone and mortar material behind them. By this way these information should be searched:

The actual proportions and number of closed arches on the north wall of Space G04; the closed south entrance on the south wall of ground floor, the closed entrance on the north wall of the space G02, the cupboard/shelf on east wall of the space G03; the original construction technique of west doors of G04, G05 and G06; the relation at the connection corners of the west and east of the building and the walls n east-west direction. The east wall of space G09 must be searched for to understand whether it is an original cut stone wall or later added by comparing its construction materials and technique with other wall types.

Besides the "Raspa" of cement plasters from the walls, the later added east wall of space G06 should be removed in order to search for the space behind it. The information coming from this space must be added onto the survey drawings. The plywood-sheeting on the ceilings of the space G02 and G03 must be removed in order to visualize the original ceiling finishing. In both cases, intervention decisions related to them will be given according to the evaluation of new information obtained.

6.4.2.2 Interventions related to Changes

Changes are inevitable throughout historical development of the building since additional requirements or necessities are introduced into the building. However, these changes should not cause the impair of original characteristics of the building and must be compatible with it. As it is stated before, the first and second phases are important in showing significant periods related to the building, while the third period has both positive and negative effects with the interventions occurred during this phase. The fourth and fifth periods have caused impairs in characteristics of the building giving physical and aesthetic harms to the fabric of the building. While evaluating the results of these changes, the following criterias will be watched out:

- The additions that reflect original architectural characteristics, traditional techniques and details of that period will be preserved, while the ones that don't reflect a significant period causing physical and aesthetic problems on the original architectural features of the building in means of architectural unity, spatial organisation, construction techniques and materials, structural system will be intervened.
- The alterations that supply formation of a historical period of the building will be kept, while the alterations that have caused impair of important information related to original characteristics of the building will be replaced with original materials or elements to give idea related to original aspects of the building.
- The missing information, which occurred by removal or destruction of elements, should be re-gained to the building if they reflect important and significant information related to original architectural characteristics of the building. We should pass this information to the people by completing the missing data related to them. But, the main criteria while doing this must be not to create any speculations and assumptions.

So, within these respects, the first and second period will be preserved; while the decisions related to the third period will be given according to the degree of reliability. The information related to the original character of alterations and missing parts will be given according to the reliability degree. The additions of fourth and fifth period will be removed. While defining the intervention types related to these changes in means of additions, alterations and missing/removals, the source and reliability degrees of information will be evaluated in order to prevent assumptions and speculations. By this way, intervention decisions related to changes have been defined with three sub topics as additions, alterations and missing/removals. (Drawings 6.5 and 6.6)

6.4.2.2.1 Additions

The main criteria in definition of intervention decisions related to additions are as follows:

- Additions that reflect a significant and important historical period of the building will be preserved,
- Additions that don't reflect a period and aren't in harmony with the building by destroying the original architectural features, preventing the original character or causing physical problems of the building will be removed. If these added parts are architecturally needed but their existing situation cause physical and aesthetic

problems in the building they will be rehabilitated or replaced with new construction material and technique.

- Additions that don't have any positive or negative effect can be kept,

By this way, the additions related to the fourth and fifth phases of the building will be removed. These are: The partition plywood walls and ceilings located at the main bank hall, the screed cover and concrete counter in space 110, the chimney and water tank on the terrace of the depot building, the all service fittings of the central heating and ventilation systems, the partition walls toilet spaces in space 112, the east wall of space G06, the partition walls filling the arches between space G04-G05 and G05-G06, the grills on window sills, screed cover on ground floor space, the cement plasters on exterior and interior facades of cut stone walls in ground floor, the paint from cut stone walls on east and south walls as well as window and door sills.

The terraced roof of the depot building will be removed and changed with contemporary material and structure.

6.4.2.2.2 Alterations

The intervention criteria against to alterations are as follows:

- Alterations that are parts of formation of an important period in the historical development of the building will be kept,
- Alterations that destroy the original architectural characteristics of the building will be replaced with original materials and techniques according to the degree of reliability related to the original element in order to prevent speculations or assumptions. To do so, they should be evaluated according to the degree of the reliability. So:
  - 1. degree reliability: will be replaced in its original location with original material, dimension, form and construction technique.
  - 2. degree reliability: will be replaced in its original location with original dimensions and material but simple form and construction technique.
  - 3. and 4. degree reliability: will be replaced in its original location with original material in simple form, probable dimension and modern construction technique.
  - 5. and 6 degree of reliability will be replaced, if they are architecturally needed with modern material, dimensions and technique.
  - 7., 8. and 9. degree of reliability: will not be replaced.

▪ Alterations that don't have any positive or negative effect and don't give harm to the building will be kept.

The replacement interventions that will be carried out according to this criterias are:

The RC columns and beams in space G05 with row of stone arches, the RC flooring of west balcony with marble flooring, the door and window elements of depot spaces.

6.4.2.2.3 Missing/Removals

Removals that cause loss of information related to architectural and physical aspects of the original state of the building will be completed with original materials and techniques according to the degree of reliability as:

- 1. degree reliability: will be completed in its original location with original material, dimension, form and construction technique.
- 2. degree reliability: will be completed in its original location with original dimensions and material but simple form and construction technique.
- 3. and 4. degree reliability: will be completed in its original location with original material in simple form, probable dimension and modern construction technique.
- 5. and 6 degree of reliability will be completed, if they are architecturally needed with modern material, dimensions and technique.
- 7., 8., 9. and 10 degree of reliability will not be completed.

The completion interventions with this respect covers: The shutters of exterior windows, the door elements in spaces 107, 111, 114 and 123.

6.4.2.3 Physical Problems Of The Building (Material Deteriorations And Structural Deformations)

Physical interventions related to weatherings in the building necessitate altogether evaluation of problems related to their decay types as well as the sources causing these problems in order to define appropriate solutions. Otherwise, inappropriate interventions may lead worse and further problems in future resulting with the destruction of the efficiency in conservation interventions. (Drawings 6.7 and 6.8) Application of all required interventions is a long-term process. What is important is to define the phases of interventions with correct order so as to increase the efficiency of results by achieving to overcome the decays with appropriate solutions. Thus, the classification of intervention phases will supply a strategic planning and management of conservation/restoration interventions. By this way correlation among different intervention techniques related to different problems can be achieved in time.

This fact can only be achieved under the supervision of specialists in material conservation and structural engineering.

There is a fact that architect is a just organizer who has to be in contact with these specialists to overcome the problems in this phase of study. Thus, structuring a model including the implementation phases of interventions will direct her/him to be aware of in which step she/he will study with specialists. (Table 6.2) Finally, it should be kept in mind that physical treatment of building and taking the results takes some time. So, applications should be carried on slowly with patience. Each step should be checked and evaluated once more according to the results of the previous one. In some cases, the stopping of the source of decay prevents more than one decay form, so there becomes no need for following interventions that have been decided before. The building can be cured with minimum intervention and maximum efficiency.

6.4.2.3.1 Completion of Diagnostic Study

During the site survey stage, visual analysis related to the material deteriorations and structural deformations have been completed by showing their decay forms and distributions. These studies should be supported with additional studies. So, at the beginning of the conservation interventions, the actual definition of diagnostic study related to material and structural weatherings should be completed through additional investigations. In this phase, the building should be examined and checked with specialists in structural engineering and material conservation. These investigations should include some tests as *in-situ tests* (ie, digital image processing, infrared thermography, ground penetrating radar, ultrasonics, etc) to understand the types of decays with estimations related to depth, severity and source of problems; and *laboratory tests* (ie, tests on physical, mechanical, chemical properties of original materials, properties of weathered materials, comparison between the healthy and decayed materials, etc) to supply the characterization of building materials and mechanisms of decays.[1]

- Evaluation of Results

After the completion of the diagnostic study related to physical weatherings, the results should be evaluated in order to define the interventions types according to the sources of problems and severity degrees of decay forms.

[1] A. Moropoulou, "Rising Damp: Diagnosis Treatment", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004.

6.4.2.3.2 Interventions related to Main Sources of the Problems (to Prevent the Uncontrolled Movement of Water in the Building)

In the third step, intervention decisions related to the main sources causing the problems throughout the building should be given. Since most of the reasons for physical weatherings of materials mainly depend on uncontrolled water movements throughout the building especially in the ground floor, the dehydration of the walls should be achieved to prevent this.

Actions against the rising-damp, which means the raise of ground water upwards through the walls of the building, should aim to prevent the source of the water by constructing a barrier at the water absorption and to evaporate the existing absorbed water away from the building. First of all, to stop the absorption of the ground water a drainage system should be constructed around the building and insulation sheets should be inserted in the foundation level of the masonry walls. Besides, the cementious materials applied as plasters and mortars especially in the ground floor should be removed away from the building since they accelerate the decay of the original stone, timber and plaster materials[2]. Through the wall at a level close to the ground an impermeable solid layer out of metallic, plastic, stainless steel material can be inserted into the wall by cutting the wall with speacial devices[3]. At the second step, the evaporation should be achieved. If it is needed, the water can be evaporated from the building with additional active techniques. There are different possible techniques for this, such as electrical systems (passive electro-osmosis, active electro-osmosis, low pressure injection, etc.)[4]

In addition to the construction of the drainage system, the superstructure of the building should be checked against water penetration from roof. According to the evaluation of traces and changes in the building, it is understood that in some time serious problem related to the penetration of the water from the building occurred resulting with decay of timber ceiling in the first and mezzanine floor spaces. So, later the roof is repaired with water insulation and this problem is prevented. However, for long term performance of the building, the existing roof should be checked again. If necessary, they should be replaced with suitable ones. The plumbing of rainwater disposals through the roof and elevations has fults especially on the east wall resulting with severe decays in stone material of masonry walls. The existing

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[2] In section "Interventions for Changes", they are also decided to be removed since they are defined as later additions that decrease the original architectural values of the building.

[3] G. Biscontin "Techniques and Materials for Treating Rising Damp", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004.

[4] A. Moropoulou. "Rising Damp: Diagnosis Treatment", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004.

drainage system should be replaced with adequate materials and systems so that uncontrolled water movements throughout the facades can be stopped.

6.4.2.3.3 Repairs of Decayed Portions

In the fourth step, repair of decayed portions should be carried out according to the severity of damage categories from very severe damages to very slight damages.

6.4.2.3.3.1 Structural Deformations

The interventions related to the structural deformations are classified as strengthening, completion and replacement interventions. The interventions in each case must be decided under the supervision of a structural engineer.

- **Strengthening Interventions**

- In Masonry Elements: At the begining of the studies, the load bearing capacity of the masonry walls throughout the building should be checked by a structural engineer before and during the restoration interventions. If it is needed the structural strength and load bearing capacity of the ground floor masonry walls should be increased with appropriate techniques.

There are structural cracks on the east wall of the main building and east wall of the depot building. These cracks must be intervened after the analysis related to the actual source of these cracks have been carried out by the engineer. The growth of big plants causing the cracks has to be treated with special medicals and tools. Afterwards, according to the degree and type of crack, structural reinforcement can be supplied with grouting of repair material or with other techniques that will be suggested by the statical engineer.[5] One of the serious problems observed in vaulted flooring is sagging from their horizontal axis. In such cases, after the removal of original flooring tiles correction of deformations can be done with injection method. Afterwards the original tiles can be applied again. The structural strength of the cut stone vaults of entrance staircases has to be controlled also. Because, in the past due to some reason the original cut stone vaults have been supported with concrete fill and iron columns. The reason for the necessity for such a structural intervention should be examined with an engineer to understand whether it was due to a problem or just to increase the load bearing capacity of the stairs against the dense use of the new function given to the building as the branch office of the Agricultural Bank.

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[5] B. Fitzner; "Damage Cathegories on Stone Monuments- Monument Mapping and Insitu Measurements", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004

- In Frame Elements:The structural elements of the timber truss should be checked to decide whether additional requirements should be taken. If so, the truss elements should be strengthened from their joints with additional metal clamps.

One of the important structural decays observed in the frame elements is the weathering of reinforced concrete elements due to oxidation of reinforcement bars. This problem is seriously observed especially in the terrace section. Since the terrace section is decided to be preserved showing an important period of the building, this problem shoud be intervened in-situ. For this, the oxided layers has to be cleaned and the concrete sections has to be strengthened with grouting of concrete mixture. The roof of the depot section, which is decided to be replaced with contemporary materials and techniques, will not be cured structurally with this manner.

- **Completions**

There are material loss in structural degree in some portions of masonry walls caused due to local destructions of the walls. These portions should be completed with same kind of stone material and mortar. The second important material loss problem observed in the masonry elements is the loss of mortar in the joints. After the interventions related to remove the existing cement based plasters and mortars from the original materials will also cause additional loss in original mortars. Therefore, after these steps are completed, the loss portions in mortar material should be repointed with repair materials. The repair materials should be in same composition with original material in means of mechanical and chemical characteristics.

- **Replacements**

In vaulted flooring of wet spaces (space 112, 116 and 117) due to water penetration problem the bricks of vaulted flooring has degraded seriously. In addition to this, the I beams have been rusted. In these sections, where the unit materials are to decayed to be repaired, the vaults should be renewed with same type material and construction technique after the oxidation problem in the I beams are intervened. In some portions of timber floorings the timber elements have been too decayed to be repiared. In these portions, the decayed element has to be replaced with same type material and and technique. The timber bonding beams in the masonry walls are totaly decayed due to high water content. They must be renewed with same type material.

6.4.2.3.3.2 Material Deteriorations

- **Repair, Adhesion, Completion and Replacement Interventions**

Material loss of plaster material as in contour scaling/flaking form are observed in some portions of the original plaster layers especially in the ground floor. The loss parts should be completed with repair plaster materials. The composition of the repair material should be in same physical and mechanical composition with the original materials. So, laboratory tests should be done in order to design the repair material before the application in the site.

According to the degree of decays, the lost parts as big particles from the original stone materials will be repaired if necessary with mortar which will be designed according to the mechanical characteristics of the stone material. The application will be needed especially in the joint sections of the masonry walls. One of the important decay forms observed is blind detachment of plasters especially on the interior plasters of first and mezzanine floors. After they are analyzed further, adhesive repair materials should be injected where necessary to strengthen the holding capacity of the back surface of the plaster material. Formation of holes in timber material which is observed in the ground and roof floor timber elements cause degradation of timber sections. Treatment against the wood boring insects has to be done with adequate technique that will be defined by the specialist. One of the other problems observed in timber materials is the fiberisation that is observed especially exterior architectural elements. They should be treated so that the strength of the sections will be increased.

In all repair treatments these criterias should be considered:

Since the intervention of incompatible repair materials such as cement mortars and plasters on masonry walls increases the weathering of original materials, the repair materials should be designed according to the material characteristics of the original materials which have been defined through laboratory test in the first phase. This can only be achieved through the laboratory test of the original materials while preparing the repair mortars and plasters. The designed repair materials should have compatibility tests before they are applied in-situ.

- **Cleaning Interventions**

The cleaning interventions consist of cleaning of deposits from the original materials and elements. The cleaning interventions compromise cleaning of biological colonisation, rusted layers and black crusts. In each case, the technique and tools of the cleaning process has to be defined by the specialist.

For the biocolonisation on the surfaces, first of all the evaporation of water from the walls should be achieved. In addition to this the microclimatic control in means of ventilation and heating of interior environment in the ground floor should be achieved. If these precautions will not be sufficient to stop the biological colonisations, than additional biocidal treatments should be carried out. The dirt deposits on the exposed stone window and door sills should be cleaned. If possible, the black crust layers should be wetted with special instruments and than removed with paper bulbs after they get soft. The washing of the surface or sand blasting methods should be avoided since they remove patina of the stone material causing it become more exposed to the atmospheric conditions.

Oxidation is observed on metal elements such as reinforcement bars in the RC elements, the metal clamps used as bonding element and I beams in floorings. In each case, the oxidation cause decay of main structural concrete, timber and stone elements in their contact surfaces. So, the oxided layers on the metal surface should be removed and preventive consolidants should be coated on the surface to stop the contact with atmosphere. The surface consolidant should be selected according to the material characteristics of the original timber, stone and concrete materials in each case so that it will not give harm to them.

6.4.2.3.3.3 Preventive Consolidations

At final stage after the repair of the decayed portions, preventive precautions related to the increase mechanical strength and durability of long term performance of the building materials if and where necessary with consolidants. The purpose of the consolidation treatment should be to improve the mechanical characteristics of the decayed portions and to stabilize the strong parts if necessary. The choice of appropriate consolidant should be done according to the material characteristics of the original building materials that have been defined in the first phase. While applying the consolidant the compatibility with the original material should be checked. A sample from the deteriorated section should be tired and watched for a while at first. The durability of the consolidant material, the depth of penetration in the treated material should be examined. The original material should "breath" after the consolidant material is applied.[6]

The consolidation interventions will include followings:

The disintegrated stone materials should be consolidated with appropriate consolidants and mechanical connection of stones should be achieved with interventions.[7] The timber

[6] L. Farmakalidis; "Consolidation Treatments against Salt Decay", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004.
[7] A. Moropoulou; "Rising Damp: Diagnosis Treatment", ITECOM Advanced Study Course: Innovative Technologies and Materials for the Conservation of Monuments, Athens, 2004.

elements should be consolidated against wood boring insect attacks as well as fire protection. In addition to this, the exposed timber elemets against UV light should be coated with preventive layers. The metal elements should be coated with anti-rusty consolidants against oxidation.

6.4.2.4 New Function

6.4.2.4.1 Definition of the Program

As stated before, the building has been abandoned since 2003 and has been appropriated to the Mersin University to be used as "Cultural Center".

While proposing a new function to the building the architectural, historical and aesthetic values of the building, its existing situation and location within the city, the physical capacity, authenticity of spatial uses should be altogether evaluated. On the other hand the University should aim missions against the public in means of increasing the public awareness in conservation of cultural heritage, which is still lack in the citizens.

By evaluating all these facts, the use of the building as a "Culture Center" of the University is defined as an appropriate and potential new function as long as these criterias (targets) are achieved:

- The building should be conserved by keeping it alive.
- The authenticity of the building must be preserved letting it display its own historical, architectural and aesthetic identity rather than the new functions.
- The worn out of the building due to usage must be prevented. The selected functions should be adapted according to the physical capacity of the spaces.
- It should attrack the citizens to the traditional tissue of the Uray Street making them experience the traditional architecture of the building and the nearby environment.
- The proposed functions and the way it is re-used should contribute positive effects in daily life of the nearby environment especially for the other traditional buildings located in the nearby environment.
- The building should re-gain its important impression in the collective memory of the public, which has been forgotten since the abandonment of the Agricultural Bank from the building.
- The building must become a cultural, social and communication center which will bring together the citizens and the University providing the presentation of artistic, scientific and research studies of the students and the academicians to the public.

- It should supply a creative environment and opportunity for the students of Fine Arts, Architecture and Jewelry Design Departments to display their products of designs or art objects to the public within the body of a historic building.
- Additionally, educational programs including seminars, film/dia presentations, meetings related to archaeological, historical, architectural researches should be carried out. By this way, the education of the public and increase of awareness in means of conservation of cultural heritage can be achieved.

- Finally, the building should sustain itself economically by supplying its own incomes to overcome its expenses.

Therefore, **the main important target of the University must be to educate the citizens and increase the public awareness in means of the conservation of the cultural heritage** rather than physical exploitation of the building itself. Thus the functions introduced to the building is a tool to achieve this education mission. **This building must become a model** for the other traditional buildings in nearby environment and **attract attentions to the appropriate conservation and re-use of the traditional buildings in Mersin.**

Stating all these criterias, the actual program of the function and organisation model of the management of the building is defined as:

The building will be managed by the "Restoration and Conservation Center" and "Center of Urban Studies" of the Mersin University. Because; These two centers have been studying together having mission in means of increasing public consciousness in conservation of cultural heritage. They have been organizing national and international conferences as well as scientific studies. They have started together a long-term project in "Documentation Project related to Traditional Buildings within the Urban Conservation Site of Mersin". This will be a long term study with additional studies related to oral history interviews and archive researches. In addition to this, they try to push the local governors to supervise conservation and restoration projects related to traditional buildings within the city. Therefore, they have been acting densely for a while to push the public and the governors to attribute into conservation studies and save the existing cultural heritage together.

This building will be an important node for these centers where they will manage their studies and monitor traditional buildings. They will also provide a research center and small library for researches who want to study through the archives of these centers. Besides their

own actions and organisations, these centers will manage the appropriation of the building to other departments of fine arts, history, archaeology, etc. as well for organisations such as exhibitions, presentations, seminars and meetings. The ground floors, which possess more public character spaces than first floor, will be arranged for these functions. Therefore all, the building will be used as **"Research and Culture Center" (Araştırma ve Kültür Merkezi) of the Mersin University.** The first floors will be re-functioned with research activities which will be directed by the "Restoration and Conservation Center" and "Center of Urban Studies" of the Mersin University; while the ground floor spaces will be re-functioned for cultural activities for Departments of Fine Art. The program will include:

- Ground Floor:
- Exhibition halls
- Cafe-Bar
- Multi Purpose Room and its Foyer
- Administrative Unit
- Store for Bookshop
  - First Floor:
- Main Research Hall
- Computer Research Room
- Group Study Room
- Office Rooms for units: Center of Restoration and Conservation and Center for Urban Studies
- Meeting Rooms
- Lounge- Rest Rooms
- Kitchen
- Toilets
  - Mezzanine Floor:
- Archive Rooms
- Storage units

6.4.2.4.2 Decisions related to New Installations

6.4.2.4.2.1 Service Equipments

There are existing installations related to water supply, wastewater disposal, electricity, mechanical heating and ventilating systems. As it is stated in the evaluation related to changes and interventions in the building, they cause physical and visual problems. So, they should be renewed by preparing plans related to each of them including following criterias:

- **Electricity**

There are existing electricity cables passing through the spaces in the first floor and ground floor spaces G01, G02 and G03. But, the present cables are in bad condition near to decay and also weak against fire. Besides, their present situation causes visual pollution passing both through the spaces and the exterior facades of the building. Therefore, the existing cables will be removed and a new project related to electricity network will be prepared. There aren't any electricity installations in the ground floor spaces G04, G05, G06, G07, G10, G11, G12. According to the plan they will be illuminated for the first time. There is an electricity box in the entrance hall G01, which is hang on the north wall. It will be removed and the new electricity box will be placed in the space under the staircases, which can be used as control unit room for this. In order to avoid dangers against fire and to avoid visual pollution, the cables will be installed in metal pipes or rectangular boxes. This will also supply easiness in the maintenance of the cables in case of necessity.

- **Clean Water and Waste Water Pipes**

The existing pipes related to clean water and wastewater disposal create both physical and visual problems in the building since they are inadequately installed. Vertical wastewater disposal pipes pass through the vaulted flooring in the spaces G05 and G06 vertically while the main collector passes horizontally through the north facade of the G06. Since the existing pipes have been installed inadequately they cause aesthetic problems resulting with impair in original design of the building. Moreover, they cause visual pollution. The water pipes have been installed with bad workmanship that has caused material loss in plaster due to linkage of water especially in the Space 112. The present water pipes are also passing in an unaesthetic way causing visual problems. Therefore, the present pipes will be renewed. They will be with good workmanship in order to avoid water linkage.

- **Heating and Ventilating Systems**

There is a present central heating and ventilation mechanical system passing throughout the building. The central heating system include radiators which are located at the first floor spaces, and water pipes which are passing through the building. The existing pipes have been installed inadequately giving harm to the fabric of the building. Therefore, the existing pipes will be removed and a new system will be installed. The ground floor spaces will be heated with room type split systems so that their microclimatic condition will be controlled as well. Existing ventilation air ducts cause aesthetic and visual problems in the building. They will be removed. The control of active air circulation and ventilation will be supplied by

room type split systems where necessary. The control room for these systems will be located in the depot section. Their project will be prepared.

6.4.2.4.2.2 New Furnishings

According to the requirements of the new functions, new installations will be applied to the building. The main criterias in new furnishings is that the materials and construction techniques must be compatible and reversable as much as possible with the building. Additions must be respectful towards the building by not over weighing its original architectural and physical features. They shouldn't avoid to visualize the authenty of the building. They have to be designed in harmony with each other as well as the original architectural and aesthetic aspects of the building. The details of each element has to be prepared according to these criterias. The new installations should be designed so that it will start a new period in the life of the building.

6.4.3 ORGANISATION MODEL AND FINANCIAL FRAMEWORK

The building has been abandoned since 2003 and has been appropriated to the Mersin University. So, the building will be managed by the University. **"Research and Culture Center" (Araştırma ve Kültür Merkezi) of the Mersin University.** The first floors will be re-functioned with research activities which will be directed by the "Restoration and Conservation Center" and "Center of Urban Studies" of the Mersin University; while the ground floor spaces will be re-functioned for cultural activities for Departments of Fine Art. The restoration works will be financed by the University. Supportive sources should be searched as donation fund where local institutions, citizens can contribute. Meanwhile, co-operataion with the Agricultural Bank should be achieved in the memory of traditional use of building as the branch office of the bank during one of the important phases of the building. So their financial support should be asked. The economical survive of the building on its own after the completion of the restoration work should be solved by renting the ground floor spaces to individual organisations and the store function for the "Doner Sermaye" of the University at the ground floor can be located.

6.5 IMPLEMENTATION PHASES OF THE INTERVENTIONS

In order to achieve efficiency during the implementation of these decisions, a site programme should be organised so that the steps of the restoration studies can be structured. By this way, seven stages are suggested through the implementation of these decisions. (Table 6.3) At the begining of the study; organisations for the start of the restoration works

should bo completed. For this, financial framework and organisation model of the restoration has to be defined. Besides, the project groups for each implementation topic has to be established including the specialists in material conservation and structural engineering. According to the neccessities and requirements of the functional units that will be located in the building, the actual programme should be finalized by carrying out interviews with the new-users. Meanwhile, by cooperation with the other users of the buildings located in the site, a common environmental and landscape project should be prepared. The pedestrian and vehicular entrances as well as the location and use of open areas (as exhibition, garden or auto park areas) have to designed according to this cooperation.

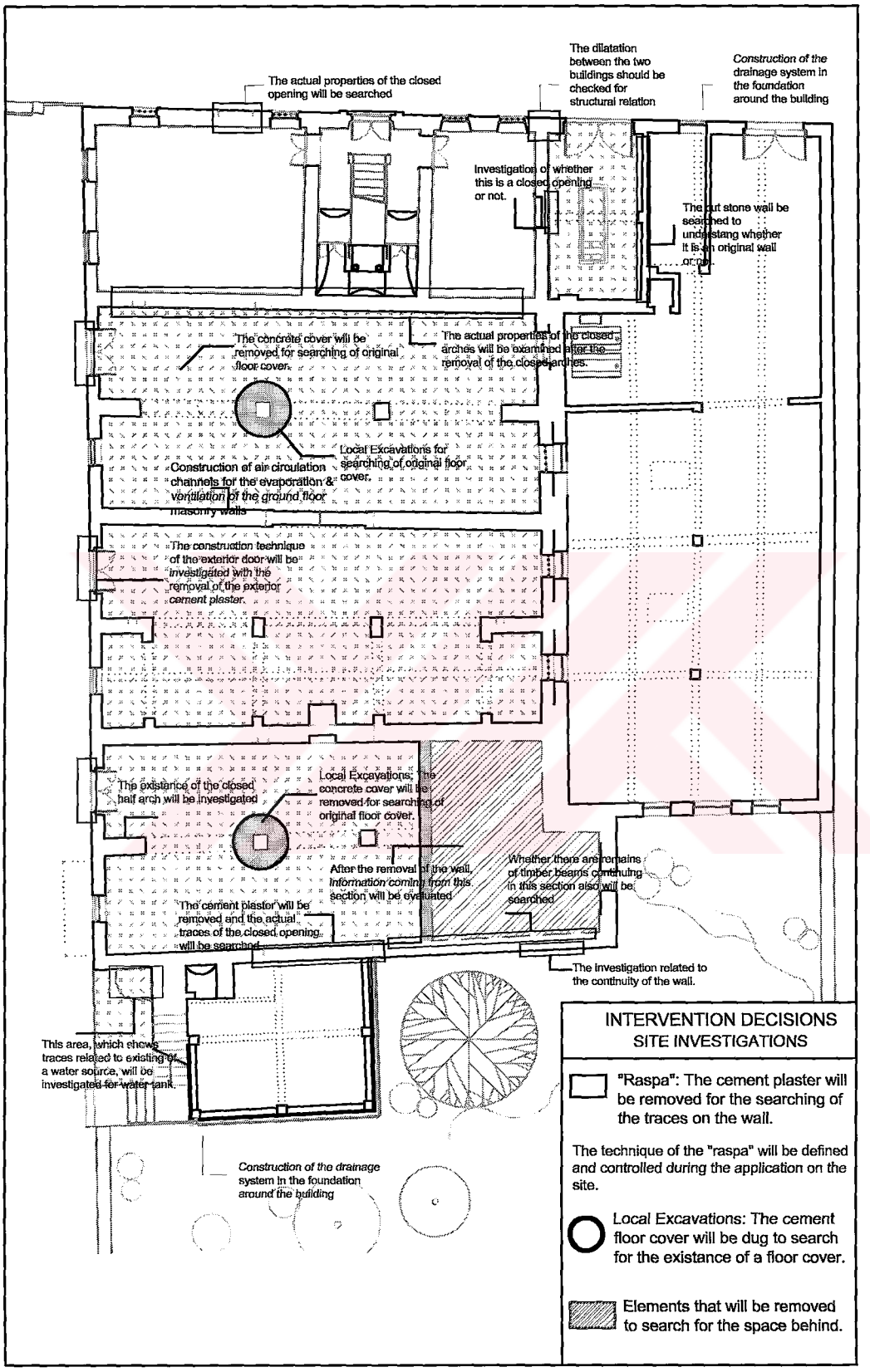
At the second stage; the diagnostic study and survey investigations related to the building and the site must be completed. At first, the building has to be examined by the specialists. The structural analysis of the building has to be carried out by the structural engineer. The definition of material weatherings and their diagnostic study in the building must be completed with additional test that will be supervised by the specialist in material conservation. These tests should include "in-situ tests" (such as digital image processing, infrared thermography, ground penetratimg radar, ultrasonics, etc), which scopes understanding the degree and source of decays as well as depth of weathering; and "laboratory tests", which aims to cathegorize the building materials and decay mechanisms. The laboratory tests include tests to understand the mechanical, physical, chemical properties of the materials; properties of weathered portions and comparison between healthy and decayed materials. The survey investigations and excavations on the site have to be organised related to the traces. Besides all these, the implementation projects covering new furnishings, service installations (mechanical, heating, electrical systems), details of architectural elements that will be designed according to the reliability degree criteria and landscape project.

At the third stage, the results of the second stage has to be evaluated. The results of structural analysis and material tests should be evaluated with the specialists and the physical intervention groups have to be checked and re-defined if necessary accordingly. Moreover, the results of laboratory tests on materials should be used in design of compatible restoration materials and in the choice of the appropriate consolidant materials that will be applied during the repairment and consolidation phase of restoration tasks. According to the results of new information coming from the survey investigations including "raspa" and excavations throughout the building, must be evaluated in definition and check of intervention groups. The results have to be evalauted also in the update of restitution schemes of the building with additional information.

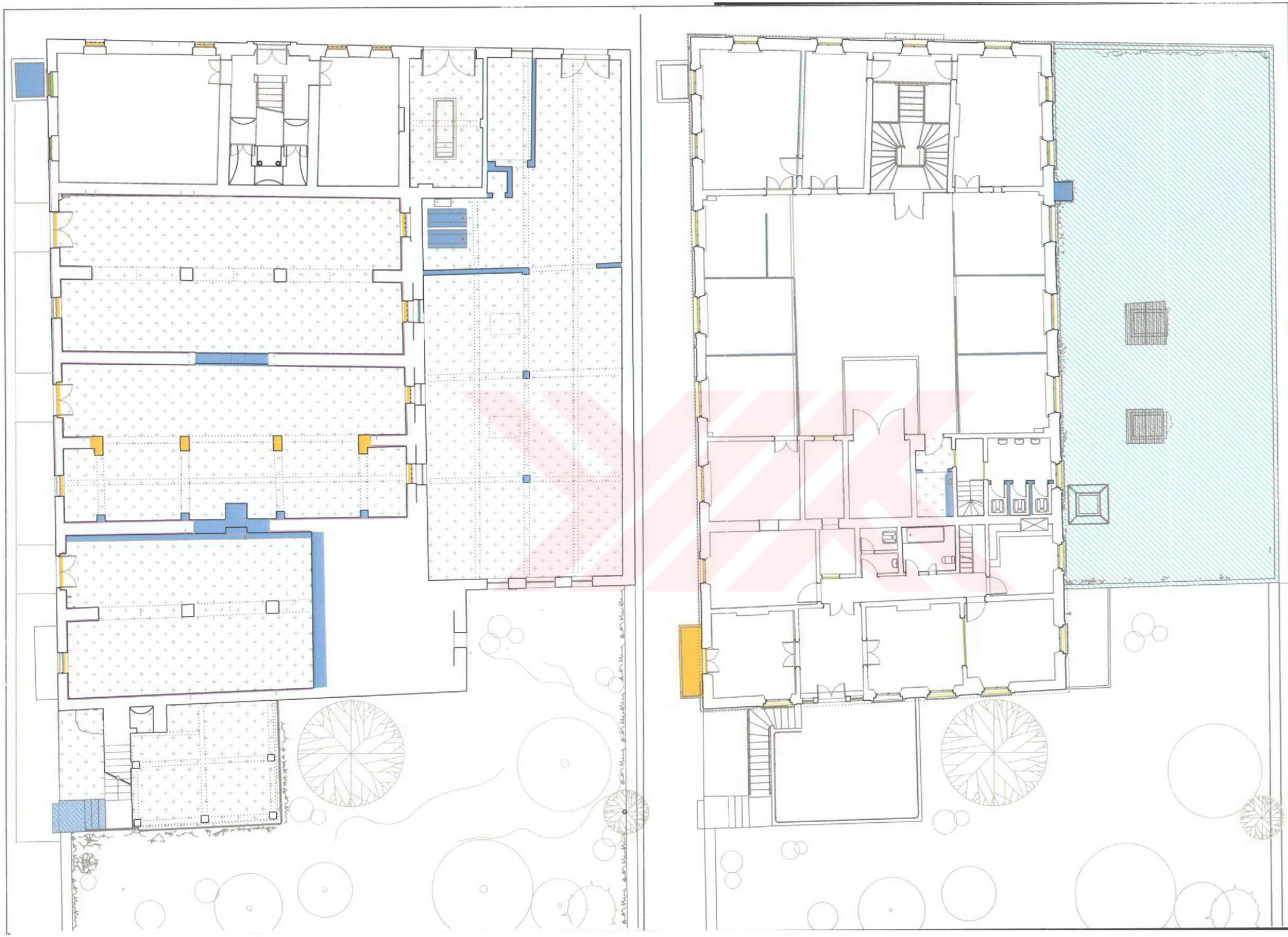
During the fourth stage, the removals according to the results of decisions related to changes should be carried out. During the removal activities, the type of removal should be cared since each intervention needs specialized techniques, tools and workmanship. The material removals should be cathegorized as the removal of the screed floor coverings, removal of cement plaster from stone masonry wall facades ("raspa"), removal of paint from stone materia and removal of paint from timber elements. During the removal of building elements, the removal of the architectural elements (such as plywood sheeting, wall etc) will be easy; while removal of structural elements has to be controlled by the statical engineer.

In the fifith stage, structural interventions including interventions related to the sources of the problems should be carried out. During the interventions related to the sources of the problems, the drainage system in foundation level around the building, air circulation channels for the evaporation and ventilation of the ground floor masonry walls and renewal of roof drainage must be constructed. Besides, the structurally decayed portions have to be repaired. For this, the structural strength of the masonry elements with low structural strength should be increased with adequate techniques. In addition to this, the strengthening, completion and replacements in stone masonry, timber frame and RC concrete elements should be carried out. Moreover, the structural elements that are decided to be replaced during the decisions related to changes, should be replaced during this stage. This intervention topic includes the replacement of the exisitng superstructure of the depot building with steel construction and the RC columns and beams in space G05 with stone masonry arches.

Within the sixth stage, installation of service equipments and material conservation interventions can be carried out. The location of the service elements related to the heating, clean water supply, waste water disposal and electricity systems should be defined. Furthermore, according to the results of evaluations during previous stages, material conservation interventions including repair, adhesion, completion and replacement interventions in decayed portions and cleaning interventions on surfaces has to be completed. At final, consolidation/preventive precautions should be carried out in order to increase the material strength and long term durability of the original materials. At the seven stage, which is the final step, the new furnishings should be installed according to the implementation projects. They must be reversible as much as possible. The studies can be finalized with environmental interventions, which will supply new organisation in the pedestrian and vehicular traffic within the site, replacement of existing asphalt covers with stone pavements and installation of street furnitures related to outdoor activites in harmony with the building.



Drawing 6.4 Decisions related to site investigations and excavations



INTERVENTION DECISIONS RELATED TO CHANGES

A) INTERVENTIONS RELATED TO ADDITIONS: REMOVALS

Additions that don't reflect a period and destroy the architectural features the building will be removed

- The removal of screed floor cover
- The removal of cement plaster from the stone masonry wall surfaces- "Raspa"
- Removal of paint from stone surfaces
- Removal of building elements
- If they are architecturally needed they will be replaced with new construction material and technique

B) INTERVENTIONS RELATED TO ALTERATIONS: REPLACEMENT

- Alterations with 1. degree reliability will be replaced in its original location with original material, dimension, form and construction technique.
- Alterations with 2. degree reliability will be replaced in its original location with original dimensions and material but simple form and construction technique
- Alterations with 3. and 4. degree reliability will be replaced in its original location with original material in simple form, probable dimension and modern construction technique*
- Alterations with 5. and 6. degree reliability: will be replaced if they are architecturally needed with modern material, dimensions and technique.

* In stone arches in space G05 will be constructed with same material and construction technique, probable dimension. The connection parts will be defined with change of color in the mortar.

C) INTERVENTIONS RELATED TO REMOVALS: COMPLETIONS

- Removals with 1. degree reliability: will be completed in its original location with original material, dimension, form and construction technique.
- Removals with 2. degree reliability: will be completed in its original location with original dimensions and material but simple form and construction technique.
- Removals with 3. and 4. degree reliability: will be completed in its original location with original material in simple form, probable dimension and modern construction technique.
- Removals with 5. and 6. degree reliability: will be completed if they are architecturally needed with modern material, dimensions and technique.

Drawing 6.5 Decisions related to Changes





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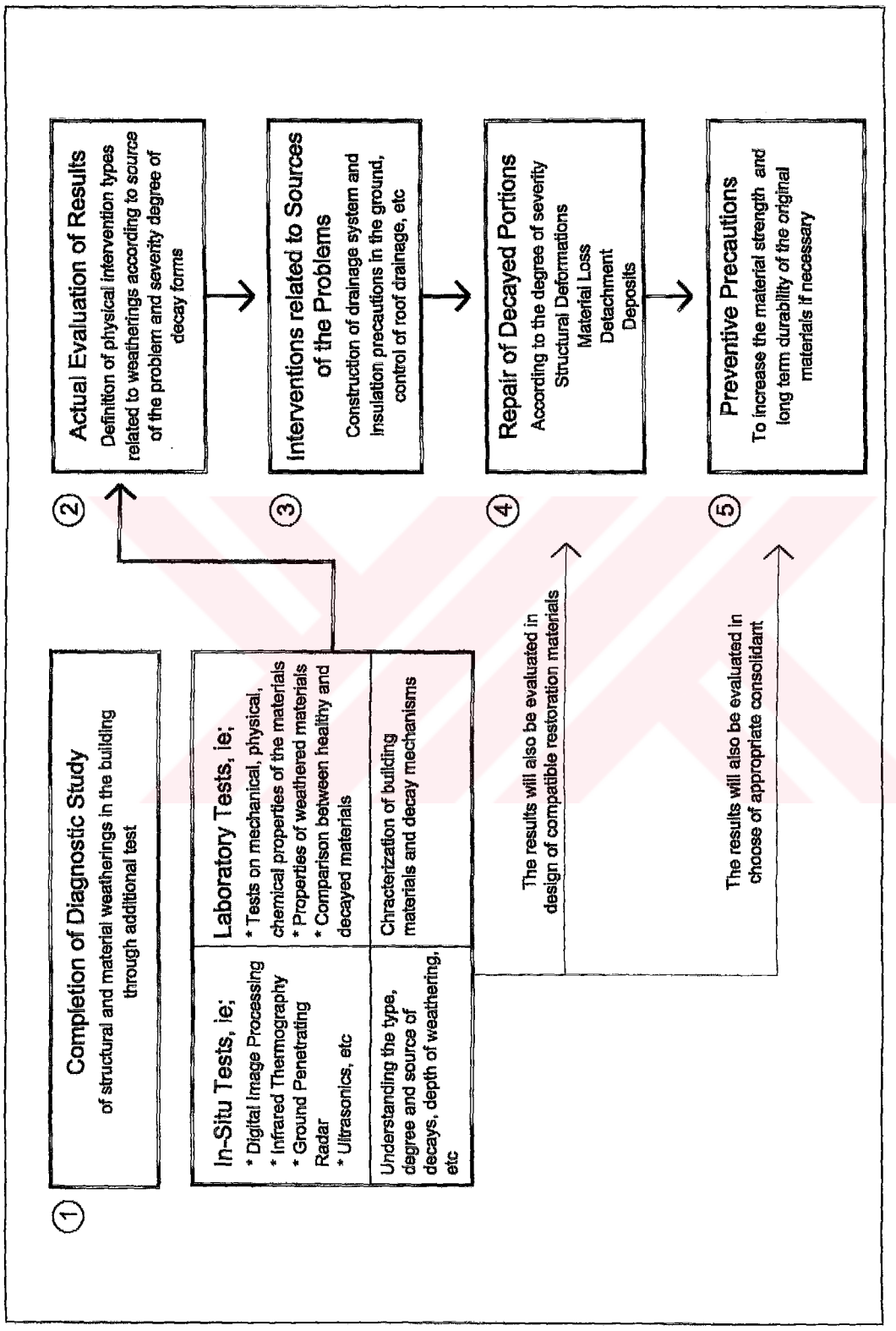
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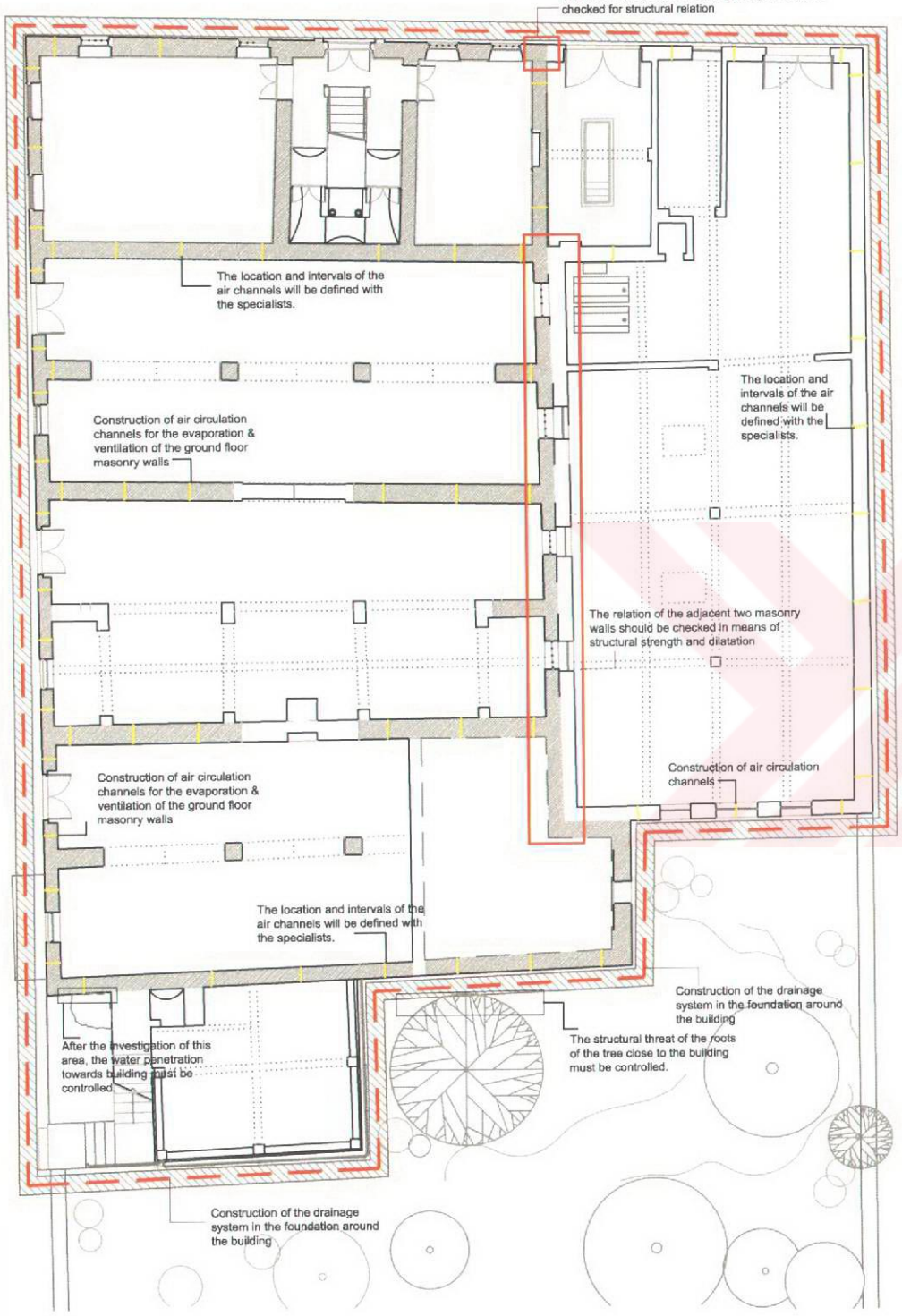
C) INTERVENTIONS RELATED TO REMOVALS: COMPLETIONS

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- Removals with 3. and 4. degree reliability: will be completed in its original location with original material in simple form, probable dimension and modern construction technique.
- Removals with 5. and 6. degree reliability: will be completed if they are architecturally needed with modern material, dimensions and technique.

Drawing 6.6 Decisions related to Changes

Table 6.2 Stages that should be followed during the decision making process related to physical problems







INTERVENTION DECISIONS
RELATED TO PHYSICAL PROBLEMS

A) INTERVENTIONS RELATED TO SOURCES OF PROBLEMS

- Construction of the drainage system in the foundation around the building
- Construction of air circulation channels for the evaporation & ventilation of the ground floor masonry walls
- Control/Renewal of roof drainage

B) REPAIR OF DECAYED PORTIONS

B1) STRUCTURAL DEFORMATIONS

B1-a) Strengthening

- In Masonry Elements
  - Increasing the structural strength in the infrastructure of the masonry elements with low structural strength capacity by grouting from the jointings.
  - Treatment of plant growths and strengthening of structural cracks in masonry walls
  - Correction of the deformations in vaulted flooring and stone vaults
- In Frame Elements
  - Strengthening of timber truss elements from their joints with additional metal clamps
  - Strengthening of RC elements in flaked portions with grouting

B1-b) Completion

- In Masonry Elements
  - Completions of missing portions in masonry walls with same type material
  - Re-pointing of emptied joints in masonry elements with repair mortar material

B1-c) Replacement

- In Masonry Elements
  - Replacement of bricks in vaulted flooring sections having decayed due to water penetration problem with same type mat. and tech.
- In Frame Elements
  - Replacement of degraded timber material that are too decayed to be repaired with same type material and technique

B2) MATERIAL DETERIORATIONS

B2-a) Repair, Adhesion, Completion and Replacement

- Completion of plasters with repair plaster material
- Injection of adhesive repair material to increase strength of contact surface into detached parts
- Treatment against degradation of timber beacuse of insect attacks

B2-b) Cleaning

- Removal of biofilms with special medicals and tools
- Removal of dirt deposits layers with special techniques and tools
- Removal of oxided layer and application of preventive consolidant

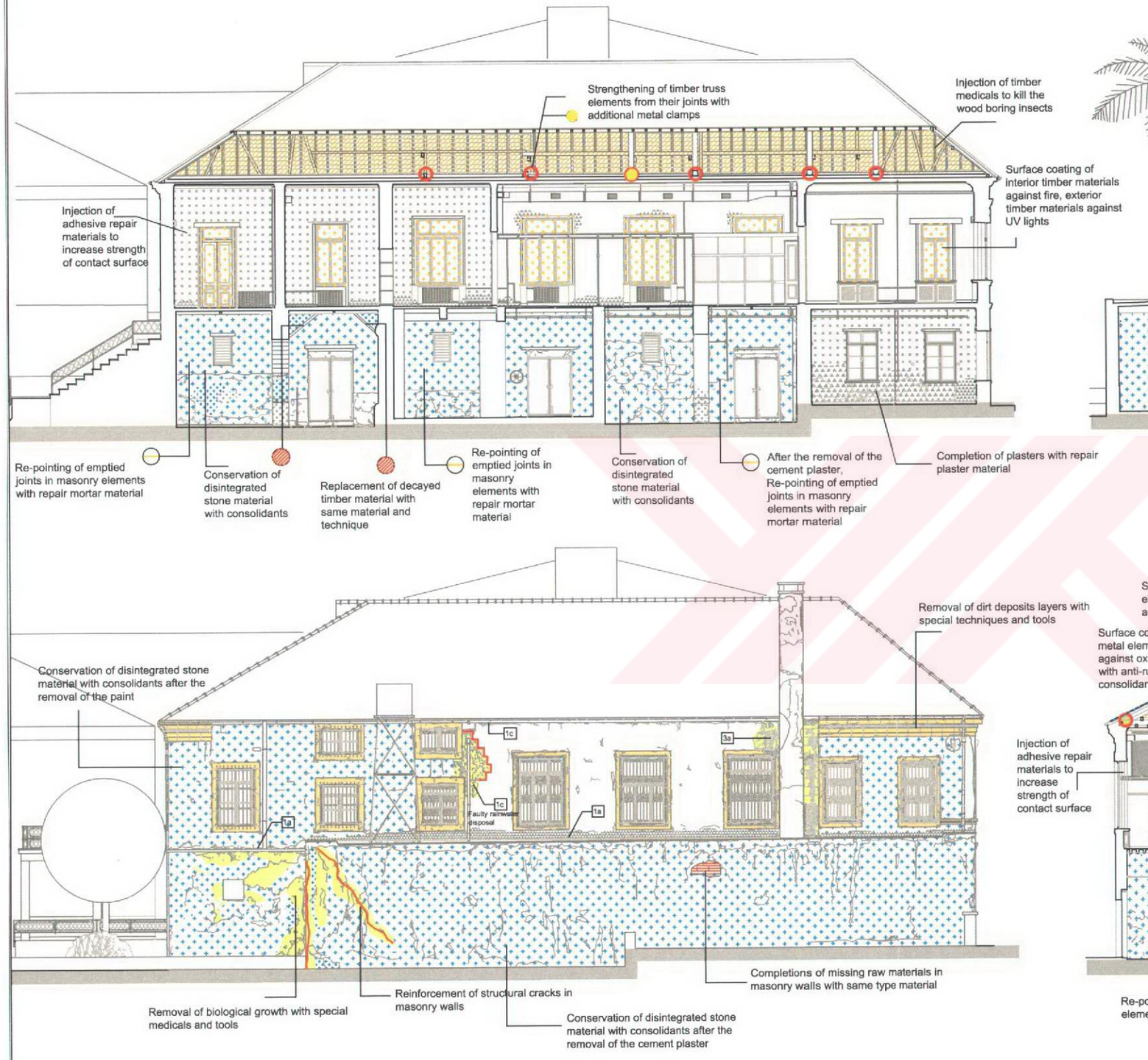
C) PREVENTIVE CONSOLIDATIONS

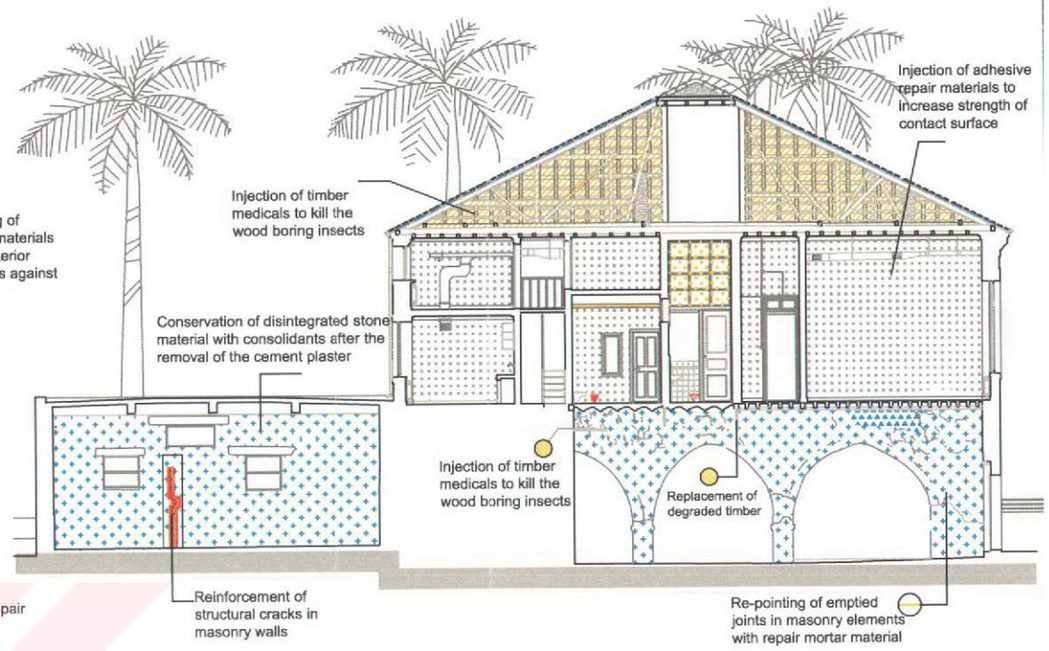
- Conservation of disintegrated stone material with consolidants
- Surface coating of interior timber material against fire, exterior timber materials against UV lights
- Surface coating of metal elements agains oxidation with anti-rusty consolidants

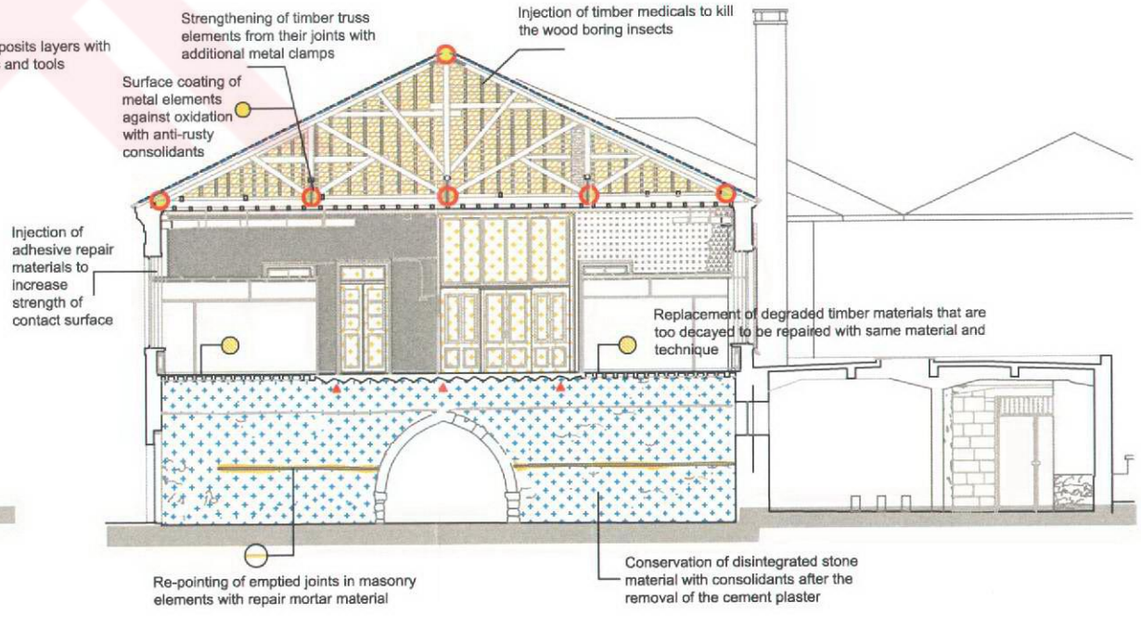
a The repair materials should be designed according to the material characteristics of the original materials which have been defined through laboratory test. They must have compatibility tests before they are applied in-situ.

b The appropriate consolidant must be chosen according to the material chracteristics of the original building materials.

Drawing 6.7 Decisions related to Physical Problems







Drawing 6.8 Decisions related to Physical Problems

Table 6.3 Implementation Phases

IMPLEMENTATION PHASES

INTERVENTION GROUPS

- Decisions related to Survey Investigations and Excavations
- Decisions related to Changes
- Decisions related to Physical Problems
- Decisions related to New Program and New Installations
- Decisions related to the Site
- Decisions related to Organisation Model and Financial Framework

STAGE 1

ORGANISATION FOR RESTORATION WORKS

- Structuring the Financial Framework and Organisation Model of Restoration studies.
- Definition of the project teams for each step including specialists in material conservation and structural enginnering.
- Finalization of the new program according to the necessities of the users.
- Cooperation with the users of other buildings located in the site to produce a common environmental project

STAGE 2

COMPLETION OF DIAGNOSTIC STUDY AND INVERSTIGATIONS IN-SITU

- Structural Analysis of the Building by a structural enginner
- Completion of Diagnostic Study for material weatherings in the building through additional tests with in situ and labarotary studies

In-Situ Tests, ie;	Laboratory Tests, ie;
* Digital Image Processing * Infrared Thermography * Ground Penetrating Radar * Ultrasonics, etc	* Tests on mechanical, physical, chemical properties of the materials * Properties of weathered materials * Comparison between healthy and decayed materials
Understanding the type degree and source of decays, depth of weathering, etc	Chracterization of building materials and decay mechanisms

- Survey Investigations and excavations on the site
- Definition and check for intervention groups according to the results of information
- Update of restitution schemes of the buildings with additional information
- Preparation of implementation projects according to the topics: Statical Projects; Service Installations: Mechanical and Heating System Projects; Details of Architectural Elements that will be produced according to reliability degrees and Details of New Furnishings; Landscape Project.

STAGE 3

EVALUATION OF RESULTS

- Definition of physical intervention types related to weatherings according to source of the problem and severity degree of decay forms
- The evaluation of results in design of compatible restoration materials for and choice of consolidant materials that will be used for repairment and consolidation tasks

STAGE 4

REMOVALS according to the results of decisions related to the changes

- Material Removals:

  Each interventions needs specialized techniques, tools and workmanship.
  The removal of screed floor coverings
  The removal of cement plaster from the stone masonry wall surfaces- "Raspa"
  Removal of paint from stone surfaces
  Removal of paint from timber elements
- Removals of Building Elements:

  Removal of architectural elements, plywood sheetings, etc.

  Removal of structural elements has to be controlled by the statical engineer.

STAGE 5

STRUCTURAL INTERVENTIONS including interventions related to the sources of physical problems

- Interventions related to Sources of the Problems

  Construction of the drainage system in the foundation around the building

  Construction of air circulation channels for the evaporation & ventilation of the ground floor masonry walls

  Control/Renewal of roof drainage
- Repair of Structurally Decayed Portions

  *Increasing the structural strength in the infrastructure of the masonry elements with low structural strength
  *Strengthening, completion and replacements in stone masonry, timber frame and RC concrete elements.
- Replacements:

  Structural Elements that will be replaced. The superstructure of the depot section. The RC column and beams with stone masonry arches in space G05

STAGE 6

INSTALLATION OF SERVICE EQUIPMENTS & MATERIAL CONSERVATION

- Installations of service equipments:

  Location of service elem. related to the heating, clean water supply, waste water drainege and electricity systems.
- Material Conservation Interventions

  *Repair, Adhesion, Completion and Replacement interventions in decayed portions
  *Cleaning interventions on surfaces
- Consolidations/ Preventive Precautions

  Application of consolidants to increase the material strength and long term durability of the original materials

STAGE 7

INSTALLATIONS OF NEW FURNISHINGS & ENVIRONMENTAL DESIGNS

- Installations of new furnishings:

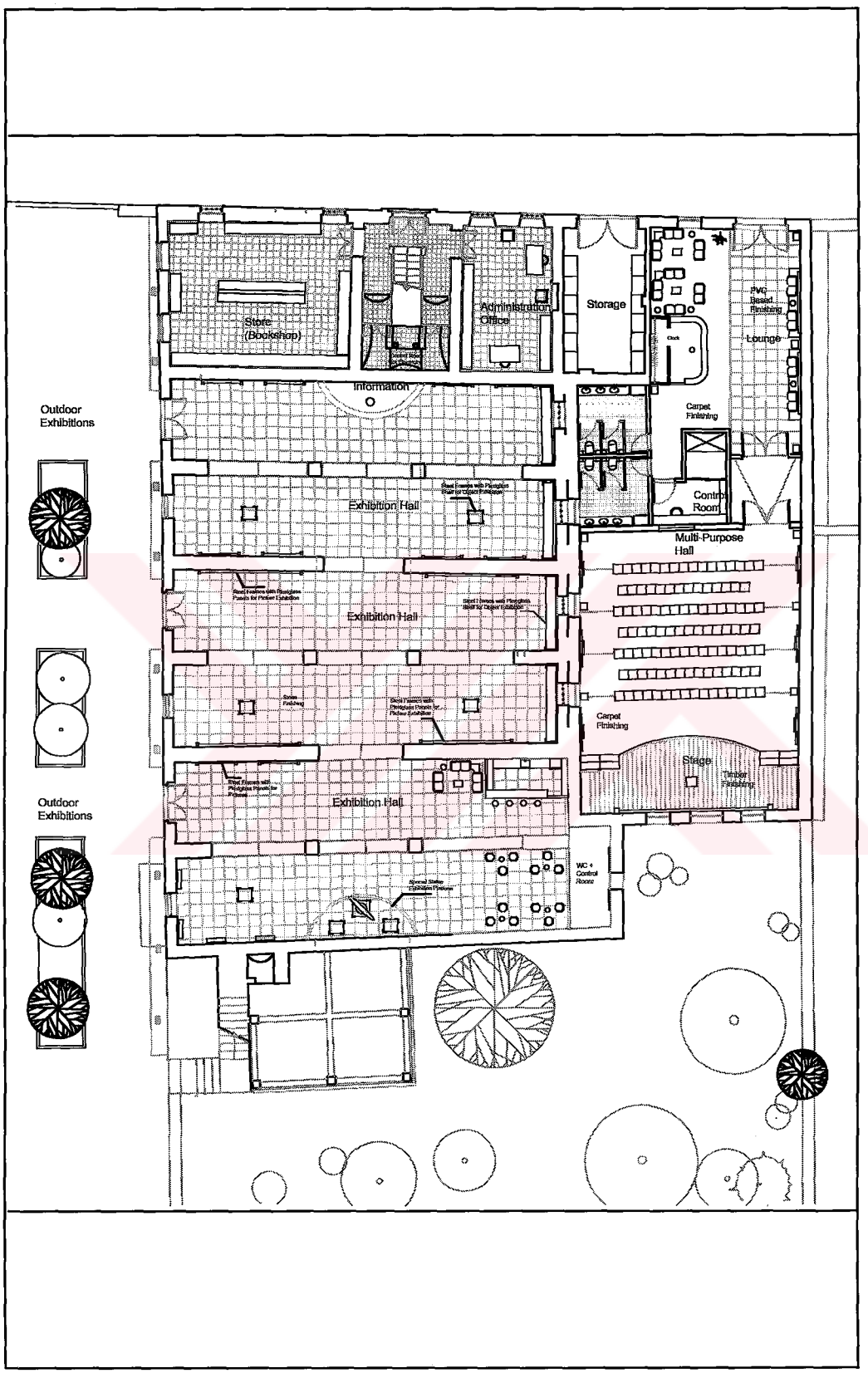
  According to the implementation projects.
  They must be reversible as much as possible.
- Environmental Interventions

  The new organisation in the car and pedestrian traffic.

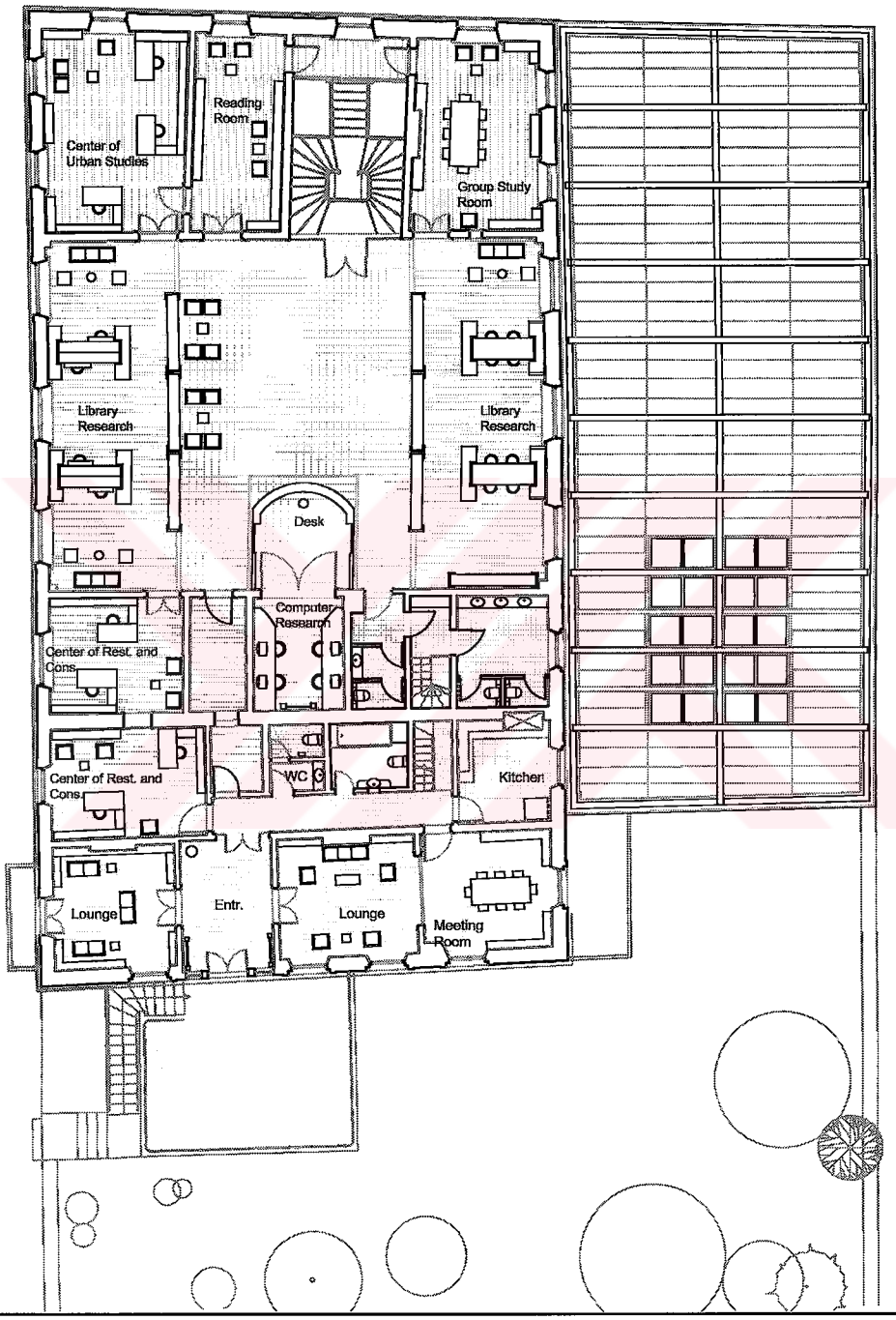
  Replecament of asphalt and concrete covers with stone pavements

  Installation of street furnitures related to the outdoor activities in harmony with the building

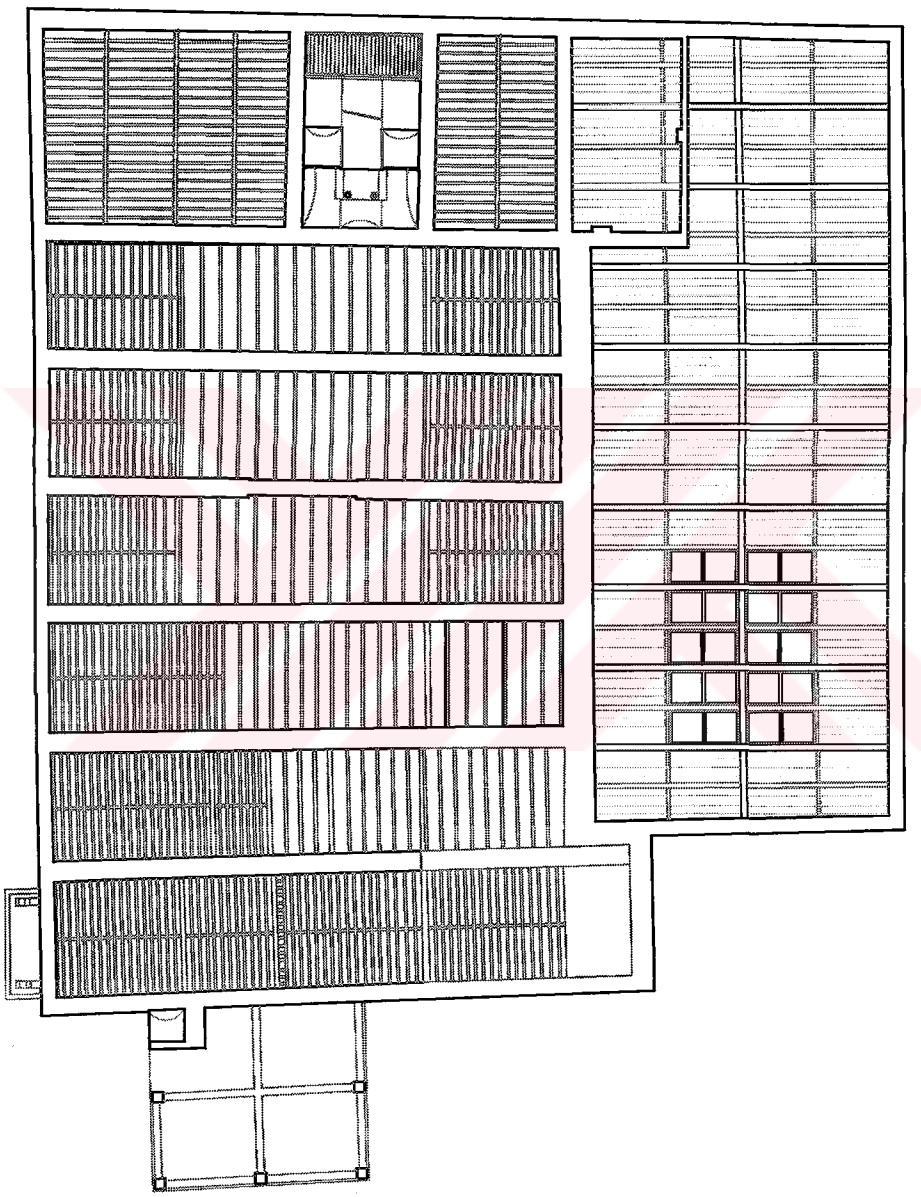
FINALIZATION OF RESTORATION INTERVENTIONS



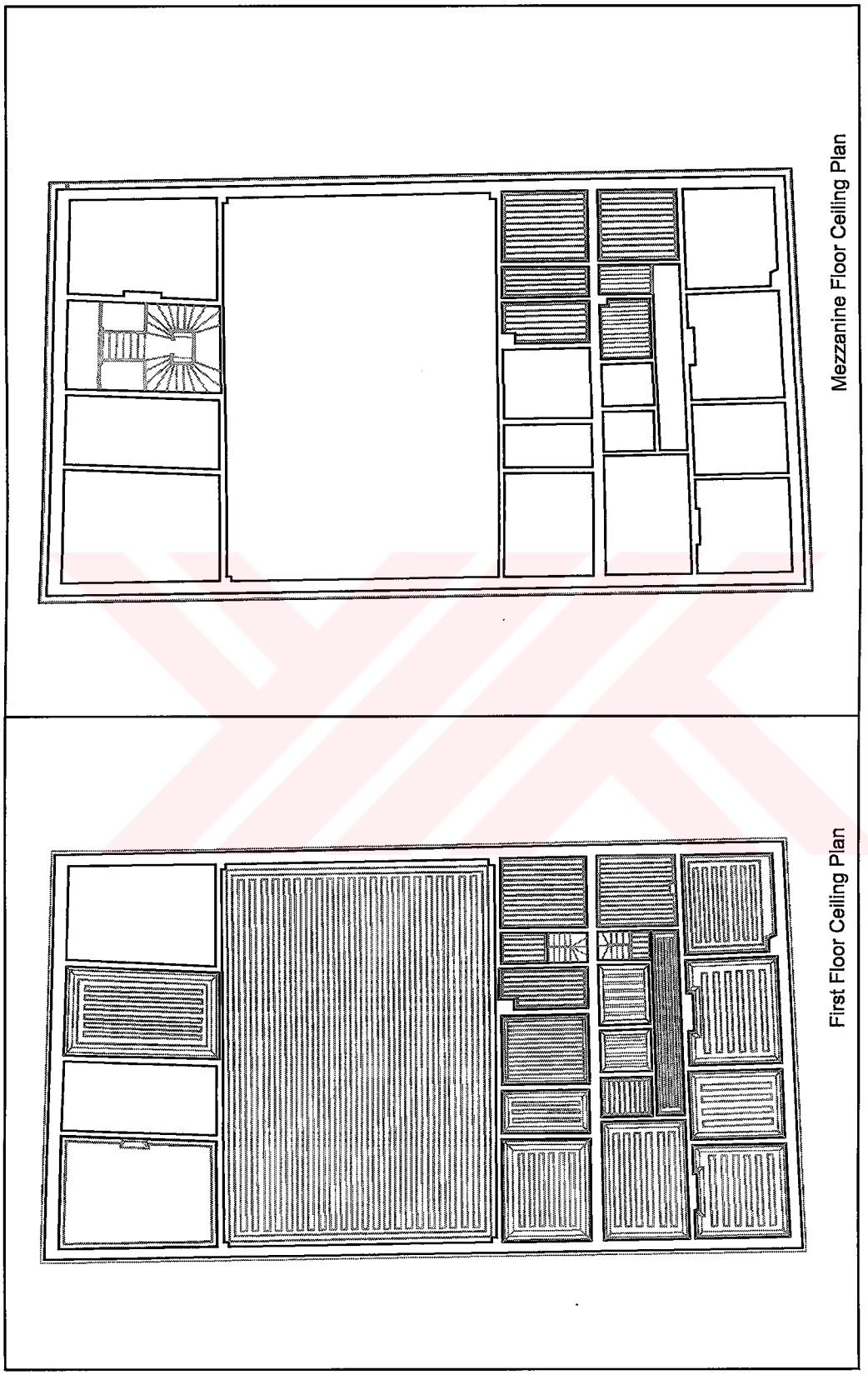
Drawing 6.9 Restoration Proposal- Ground Floor Plan



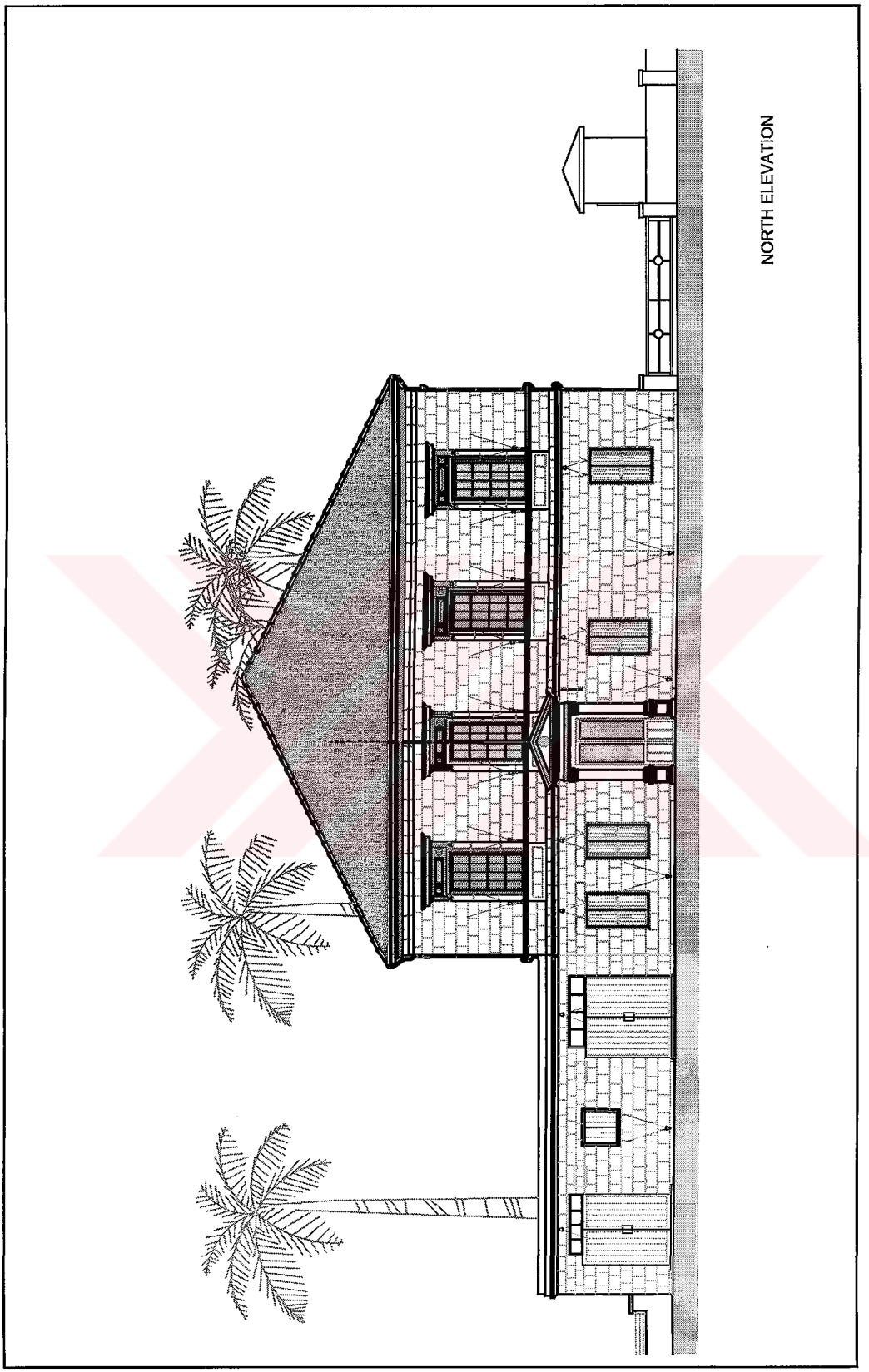
Drawing 6.10 Restoration Proposal- First Floor Plan



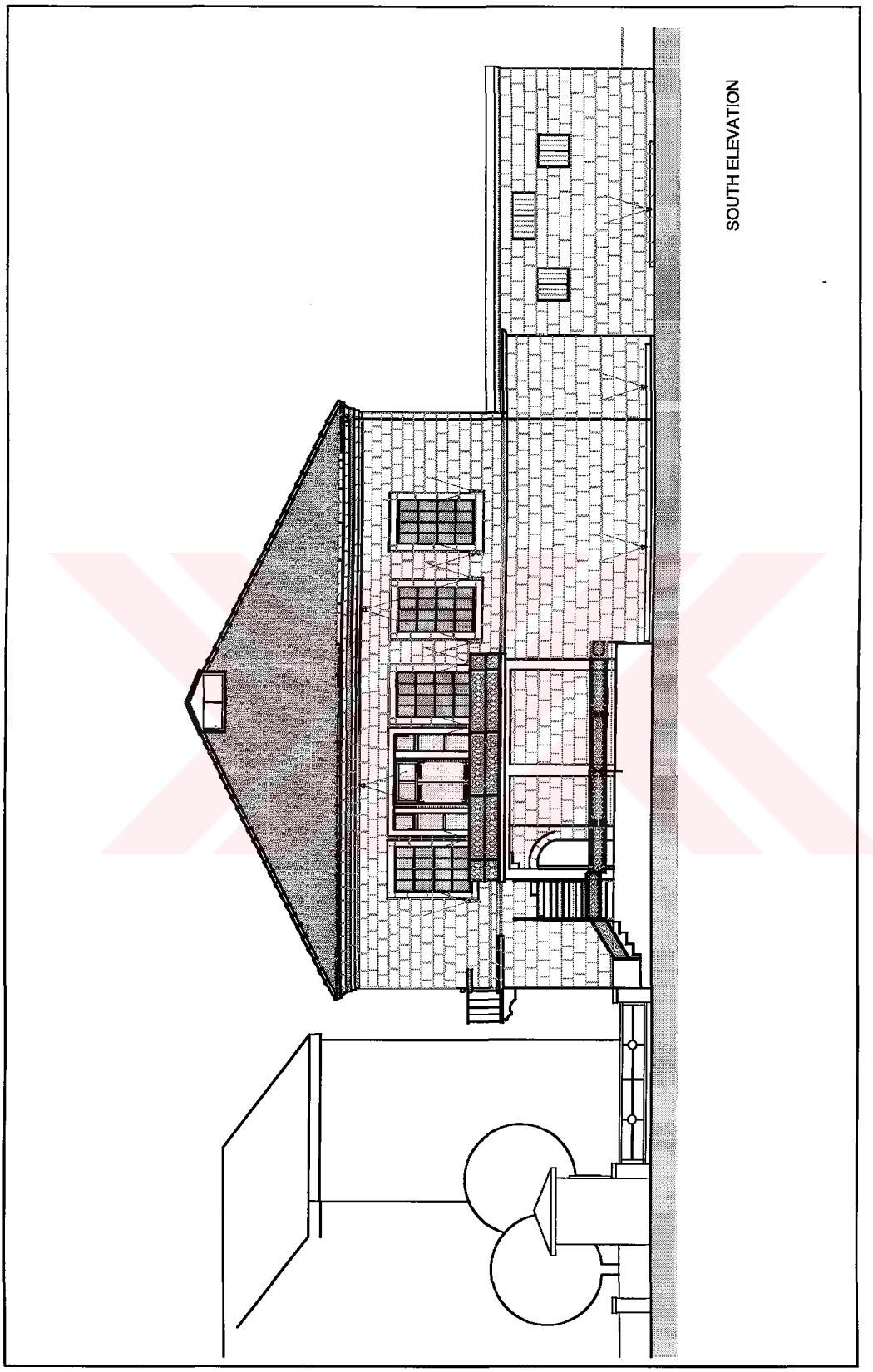
Drawing 6.11 Restoration Proposal- Ground Floor Ceiling Plan



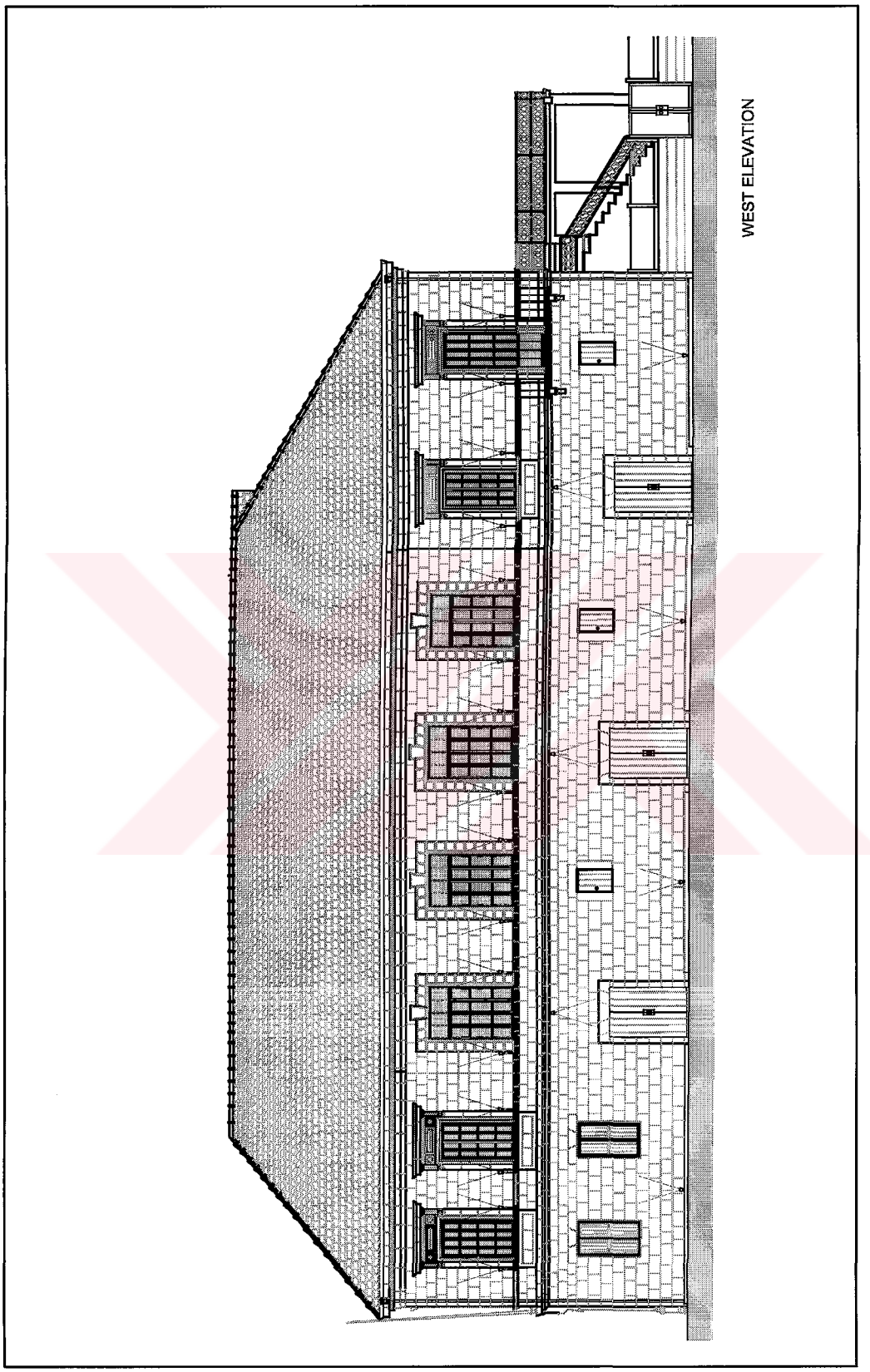
Drawing 6.12 Restoration Proposal- First and Mezzanine Floors Ceiling Plan



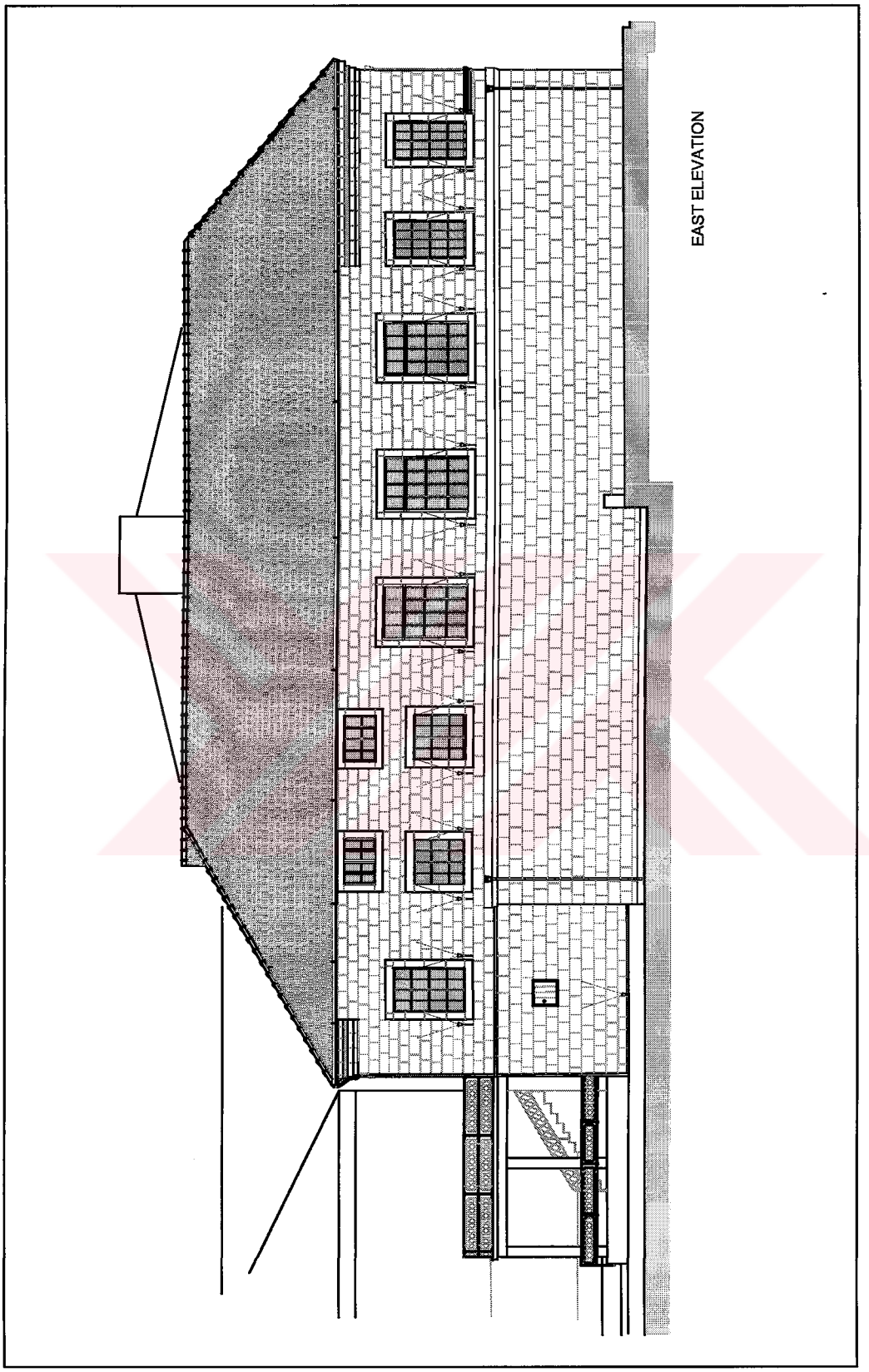
Drawing 6.13 Restoration Proposal- North Elavation



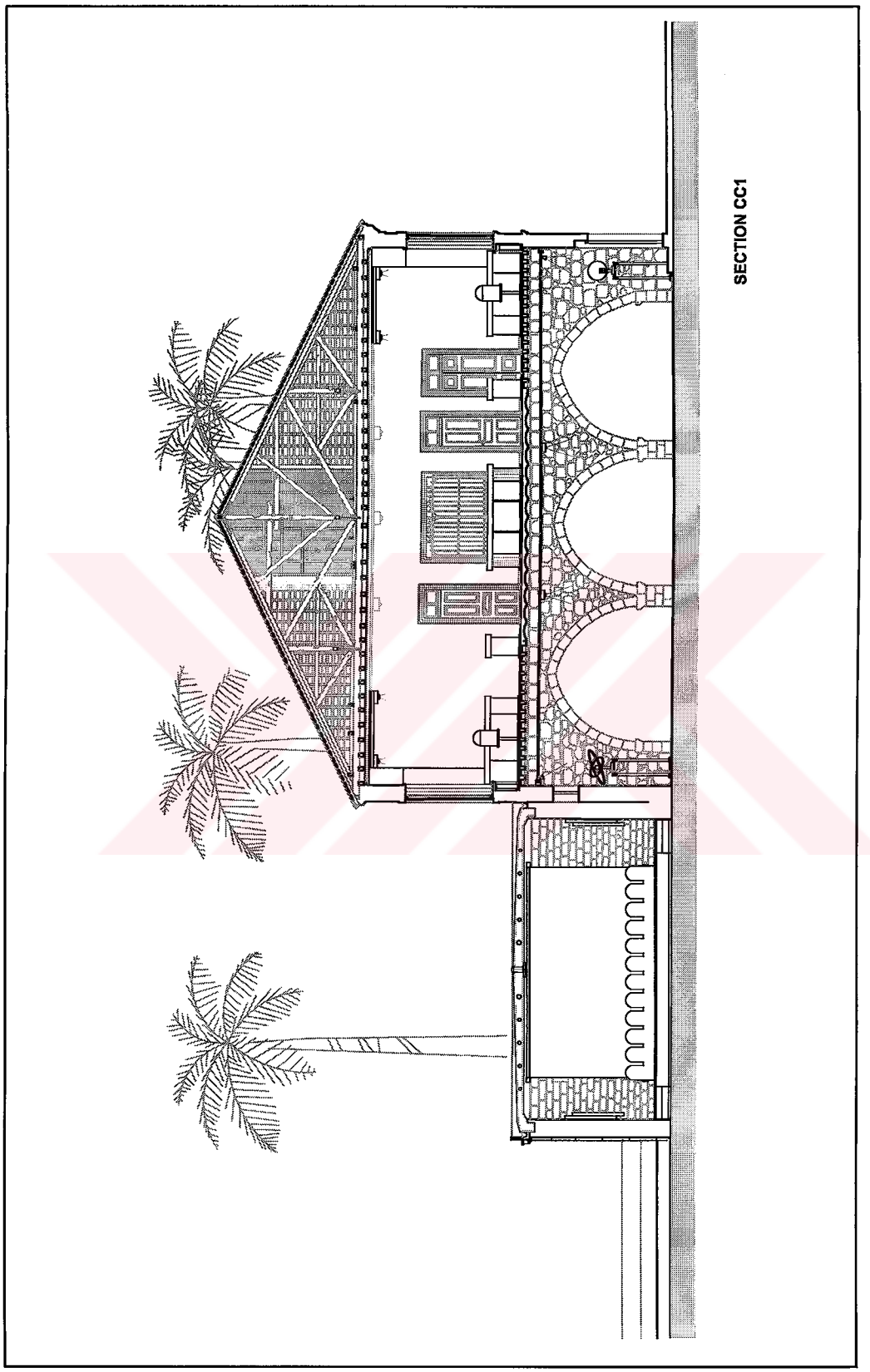
Drawing 6.14 Restoration Proposal- South Elavation



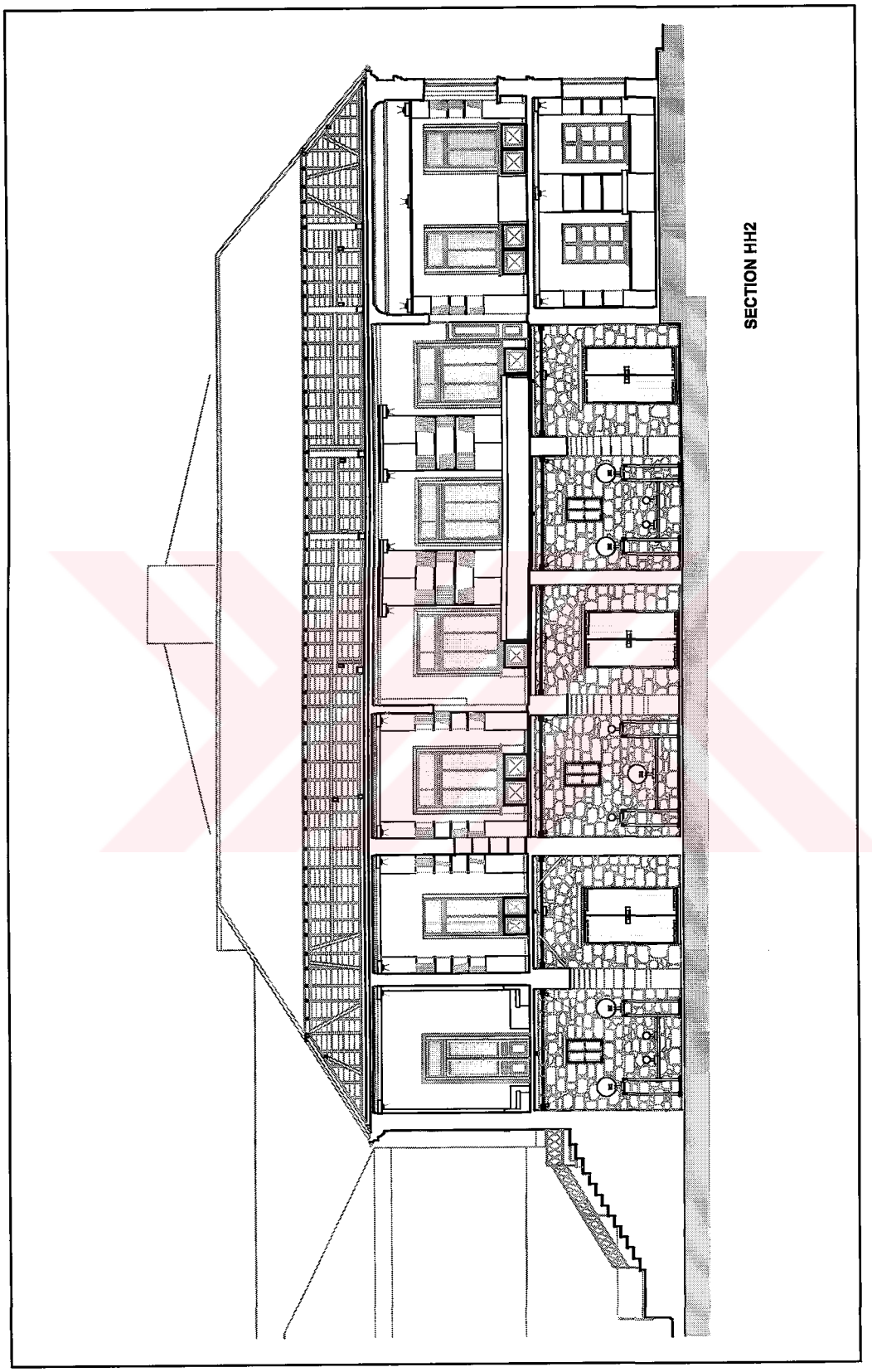
Drawing 6.15 Restoration Proposal- West Elavation



Drawing 6.16 Restoration Proposal- East Elavation



Drawing 6.17 Restoration Proposal- Section CC1



Drawing 6.18 Restoration Proposal- Section HH2

İL SAĞLIK MÜDÜRLÜĞÜ

İL SAĞLIK MÜDÜRLÜĞÜ

URAY STREET

THE OLD AGRICULTURAL BANK BUILDING

Pedestrian Entrance

İL KÜLTÜR MÜDÜRLÜĞÜ BİNASI

VALİLİK KONAGI

Guard Unit

Open Area Exhibition

Palm Tree

Open Area Exhibition Shelters

Guard Unit

Open Area Exhibition Shelters

VERGİ DAİRESİ

Pedestrian Entrance

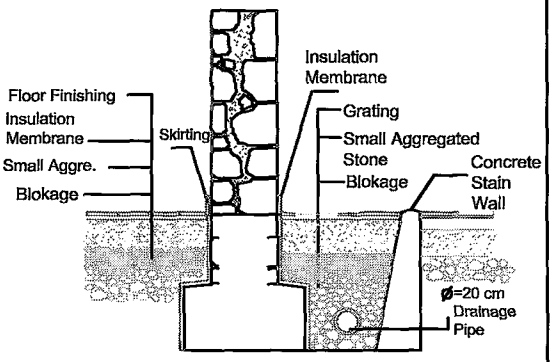
Autopark

Autopark

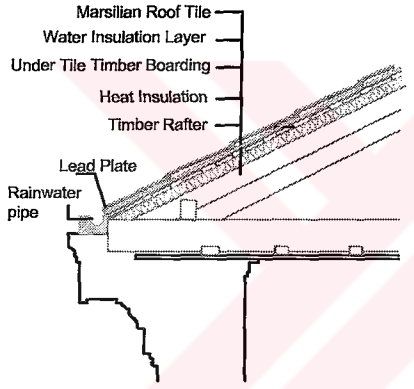
INONU BOULEVARD

Drawing 6.19 Restoration Proposals- Site Plan

Detail 1: Construction of the drainage system in the foundation around the building

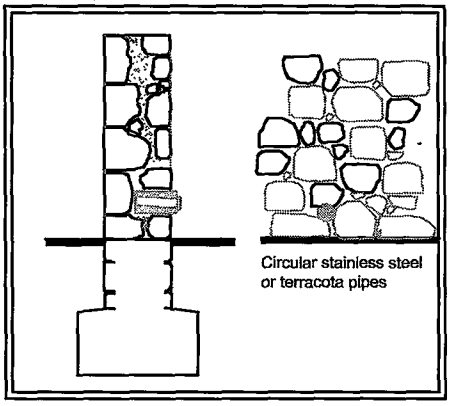


Control/Renewal of roof drainage

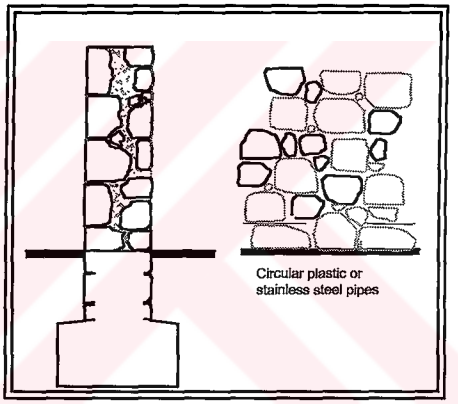


Construction of air circulation channels for the evaporation & ventilation of the ground floor masonry walls

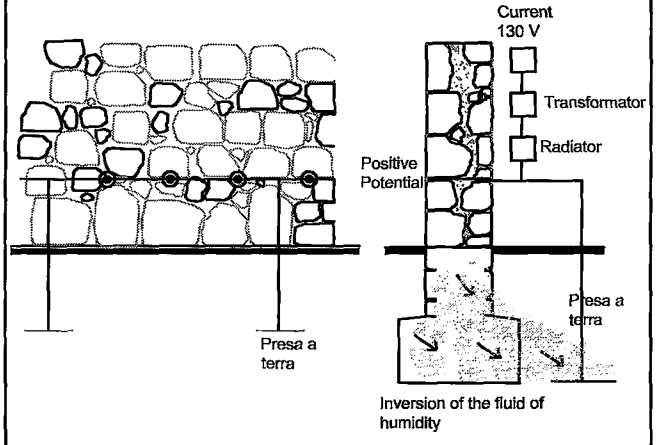
Alternative 1- Atmospheric siphons (Knapen tubes)



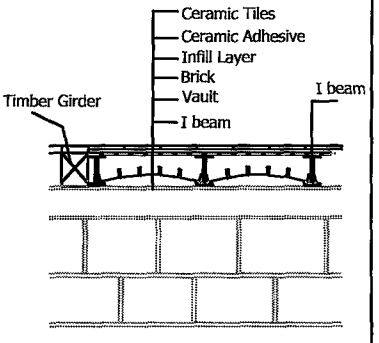
Alternative 2- Use of impermeable layers



Evaporation of the Building- Passive Osmosis System



Detail 4: Flooring of Wet Spaces in Newly Constructed Vaulted Flooring



Drawing 6.20 Restoration Proposal- Details

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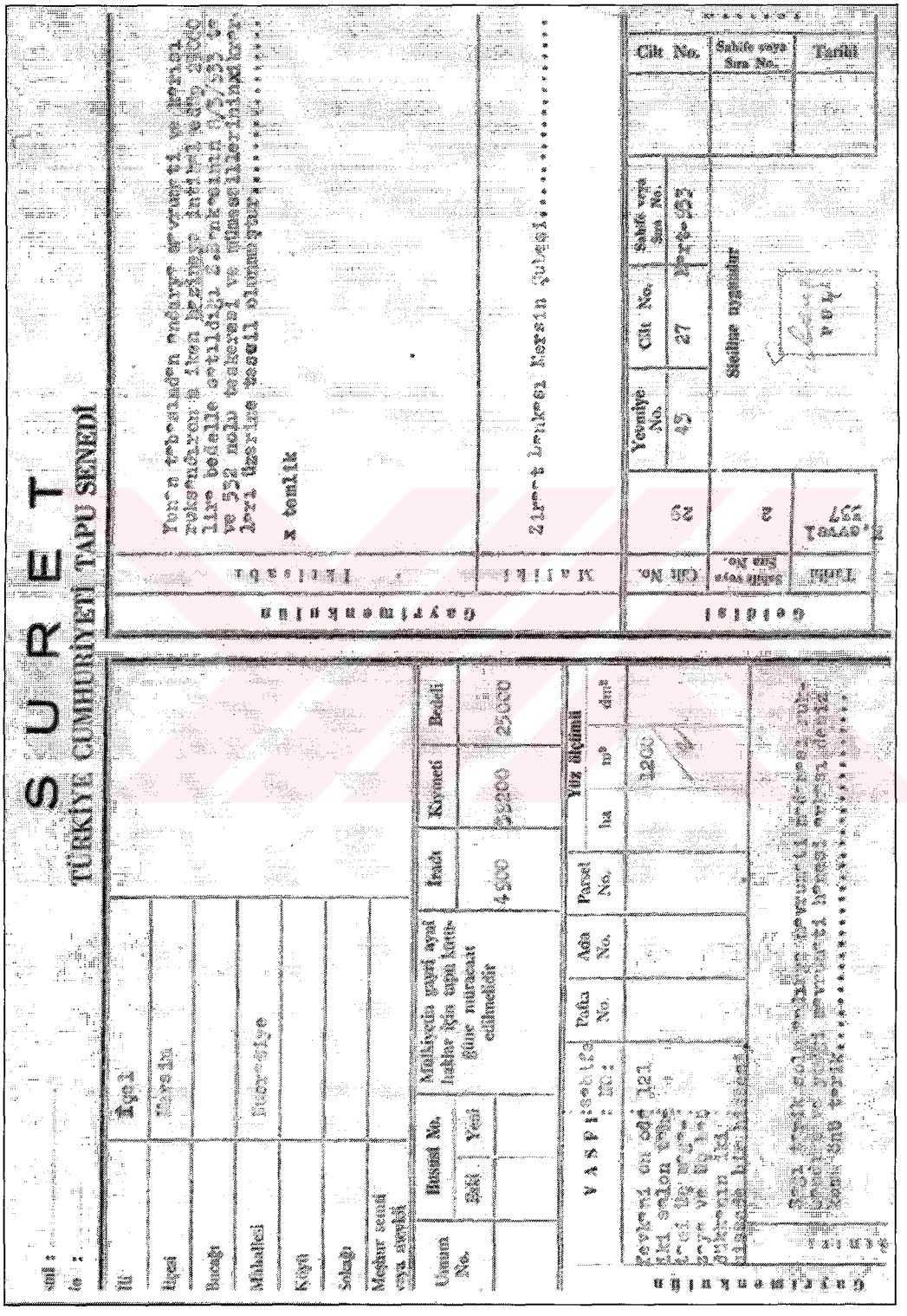
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APPENDICES



Source: The Archive of the General Directorate of the Agricultural Bank, Ankara

SURET

TÜRKİYE CUMHURİYETİ TAPU SENEDİ

Cilt No. | Sahife veya Sıra No. | Tarihi

Source: The Archive of the General Directorate of the Agricultural Bank, Ankara



Source: The Archive of the General Directorate of the Agricultural Bank, Ankara

Source: The Archive of the General Directorate of the Agricultural Bank, Ankara