

CONSERVATION AND TRANSFORMATION OF RAILWAY AREAS:
ISKENDERUN TERMINUS AREA

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

DERYA FİDAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
RESTORATION IN ARCHITECTURE

SEPTEMBER 2012

Approval of the thesis:

**CONSERVATION AND TRANSFORMATION OF RAILWAY AREAS:
ISKENDERUN TERMINUS AREA**

submitted by **DERYA FİDAN** in partial fulfillment of the requirements for the degree of the
Master of Science in Restoration in Architecture Dept., Middle East Technical University
by,

Prof. Dr. Canan Özgen
Dean, Graduate School of **Natural and Applied Sciences**

Prof. Dr. Güven Arif Sargın
Head of Department, **Architecture**

Inst. Dr. Nimet Özgönül
Supervisor, **Architecture Dept., METU**

Examining Committee Members:

Assist. Prof. Dr. A. Güliz Bilgin Altınöz
Architecture Dept., METU

Inst. Dr. Nimet Özgönül
Architecture Dept., METU

Assist. Prof. Dr. A. Ufuk Serin
Architecture Dept., METU

Assist. Prof. Dr. A. Bilge İmamoğlu
Architecture Dept., TEDU

Assoc. Prof. Dr. Bahar Gedikli
City and Regional Planning Dept., METU

Date:14.09.2012

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last name: Derya Fidan

Signature:

ABSTRACT

CONSERVATION AND TRANSFORMATION OF RAILWAY AREAS: ISKENDERUN TERMINUS AREA

Fidan, Derya
M.Sc. in Restoration, Department of Architecture
Supervisor: Inst. Dr. Nimet Özgönül

September 2012, 177 pages

The aim of this thesis is to understand the conservation and transformation problems of railway heritage and to prepare a conservation and transformation principles for Iskenderun railway area. Primarily, it is tried to understand the historical process and the current situation of conservation of railway areas. In addition, in this study theoretical and historical framework of transformation of railway areas is developed in the light of international charters and documents. Transformation examples from Turkey and Europe were searched with analyzing the railway system and transformation approaches of the countries.

In order to prepare a conservation and transformation principles for Iskenderun terminus area, considering the direct relation of the railway site with the port site, a wide border including the port for the study area is chosen and a detailed analyzes were done for whole area.

For this study, the major concern is establishing strong principles in different scales. It is important to guide each conservation and transformation projects in Turkey. For rooted solutions, regulations have to start in the transformation strategies and railway policy.

Keywords: Iskenderun Terminus Area, Transformation, Conservation, Railway Heritage

Öz

DEMİRYOLU ALANLARININ KORUNMASI VE DÖNÜŞÜMÜ: İSKENDERUN İSTASYON ALANI

Fidan, Derya
Restorasyon Yüksek Lisans Programı, Mimarlık Bölümü
Tez Yöneticisi: Öğr. Gör. Dr. Nimet Özgönül

Eylül 2012, 177 sayfa

Bu tezin amacı demiryolu mirasının korunma ve dönüşüm problemlerini anlamak ve İskenderun istasyon alanı için korunma ve dönüşüm prensipleri hazırlamaktır. İlk aşamada demiryolu alanlarının tarihsel gelişimi ve korunmasında günümüz durumu anlaşılmaya çalışılmıştır. Buna ek olarak, bu çalışmada demiryolu alanlarının dönüşümünün teorik ve tarihsel çerçevesi uluslararası belgeler ve tüzüklerle ışığında geliştirilmiştir. Türkiye'den ve Avrupa'dan örneklerle ülkelerin demiryolu sistemleri ve dönüşüm yaklaşımları analiz edilmiştir.

İskenderun İstasyon alanı için koruma ve dönüşüm prensipleri belirlemek için istasyon alanının İskenderun limanı ile doğrudan ilişkisi göz önünde bulundurularak geniş bir sınırı olan liman alanı da çalışma alanına dahil edilmiştir ve detaylı çalışmanın parçası olmuştur.

Bu çalışma için, esas kaygı farklı ölçeklerde güçlü prensipler oluşturmak olmuştur. Türkiye'deki her dönüşüm projesine yol göstermek önemli bulunmuştur. Köklü çözümler için, düzenlemeler dönüşüm stratejileri ve demiryolu politikalarının başlamalıdır.

Anahtar Kelimeler: İskenderun İstasyon Alanı, Dönüşüm, Koruma, Demiryolu Mirası

To My Family

ACKNOWLEDGEMENTS

I express my deepest gratitude to my supervisor, Inst. Dr. Nimet Özgönül for her endless support and guidance throughout the thesis research. I also thank to the jury members, Inst. Assist. Prof. Dr. A. Güliz Bilgin Altınöz, Assist. Prof. Dr. A. Ufuk Serin, Assist. Prof. Dr. A. Bilge İmamoğlu and Assoc. Prof. Dr. Müge Gedikli for their constructive criticism and suggestions.

I am grateful to my family Birsen Fidan, Mustafa Fidan, and Cihan Fidan who have supported in the whole process of the thesis, helped the site survey, provided the necessary connections, and for their infinite love, cheer, support, patience, generosity and encouragements. I am grateful to Talat Çakıroğlu for his support and encouragement at any time I needed. I would like to thank Özgün Özçakır for his endless friendship, peerless companionship, and infinite helps. I would also like to thank to Müge Kruşa, Mesut Dinler, İlker Teker, Merve Özen, Elif Sudan, and Hüma Tülce for their supports and helps. I would also thank to primarily Merve Yıldız and to all my friends for their interests.

I am indebted to Mehmet Saner* for allowing me to use his unpublished paper related to industrial heritage and Emre Madran for allowing me to use his unpublished paper related to the regulations on conservation law. I would also want to thank to TCDD and Iskenderun Municipality for their helps.

* is Research assistant in İzzet Baysal University in department of architecture and candidates to the doctorate program in TU Dortmund University.

TABLE OF CONTENTS

ABSTRACT	iv
ÖZ	v
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	viii
LIST OF FIGURES.....	xi
LIST OF TABLES	xvi
CHAPTERS	1
1. INTRODUCTION	1
1.1. HISTORY OF RAILWAY AND CONSERVATION	2
1.1.1. The Historical Development of Railway	2
1.1.2. Railway and Ottoman Empire	7
1.1.3. Review of Conservation of Railway Heritage	9
1.2. PROBLEM DEFINITION.....	14
1.3. AIM AND SCOPE.....	17
1.4. METHODOLOGY	18
2. TRANSFORMATION OF RAILWAY AREAS	21
2.1. TRANSFORMATION OF RAILWAY AREAS IN EUROPE.....	28
2.1.1. Transformation Process of Railway Areas in three European countries: England, Germany, and France	33

2.1.2. Examples of Transformation of Railway Areas in three Europe countries: England, Germany, and France	38
2.2. TRANSFORMATION OF RAILWAY AREAS IN TURKEY	44
2.2.1. Transformation Process of Railway Areas in Turkey	44
2.2.2. Examples of Transformation of Railway Areas in Turkey	49
2.3. EVALUATION	57
2.3.1. Evaluation of Transformation Examples in Europe	57
3. ISKENDERUN TERMINUS AREA	60
3.1. FEATURES OF THE CITY	60
3.1.1. General Features	60
3.1.2. Urban Pattern.....	67
3.1.3. Historical Background.....	69
3.1.4. Urban Development and Planning Activities	78
3.2. FEATURES OF TERMINUS AREA.....	89
3.2.1. Categories of Edifices.....	92
3.2.2. Open and Built-up Areas.....	95
3.2.3. Registration Status.....	100
3.2.4. Construction years of the Buildings.....	101
3.2.5. Architecture of Edifices	101
3.2.6. Current Use of the Buildings	107
3.2.7. Condition of the Open and Built-up Areas.....	112

3.2.8. Change of the Study Area	114
3.3. EVALUATION	117
4. ASSESSMENT OF ISKENDERUN TERMINUS AREA: VALUE, PROBLEMS, AND POTENTIALS	123
4.1. IN GENERAL	124
4.2. ISKENDERUN TERMINUS AREA	129
4.2.1. Values of Study Area	129
4.2.2. Problems of Study Area	135
4.2.3. Potentials of Study Area.....	139
4.3. EVALUATION	141
5. CONSERVATION AND TRANSFORMATION PRINCIPLES	143
BIBLIOGRAPHY	152
APPENDICES.....	158
A. RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS	158

LIST OF FIGURES

FIGURES

Figure 1. Liverpool and Manchester railway locomotive 'Lion', 1838 (liverpoolmuseums.org Access date: 27.04.2012)	4
Figure 2. The Interior of Euston Station circa 1838 (British Rail (Firm). (1968). The new Euston Station; 1968. London: Public Relations & Publicity Officer.)	5
Figure 3. Seine-Rive-Gauche near Gare d'Austerlitz in Paris. (blog.betonsalon.net Access date: 24.08.2012)	6
Figure 4. The Demolished Air Gas Factory in Ankara. (http://www.mimarlikforumu.com date taken: 05. 08.2012)	13
Figure 5. Before and After of Gazi Station, which is re-used as Restaurant after 2001 (arkitera.com)	14
Figure 6. Mudanya Railway Station is Transformed to Montaigne Hotel.	14
Figure 7. La Promenade Plantée was Transformed from Abandoned Railway Line. (http://www.urbanghostsmedia.com/ Date Access: 08.08.2012)	15
Figure 8. Ghirardelli Chocolate Factory in 1936 and Today. (http://foundsf.org access date: 10.08.2012)	23
Figure 9. Surrey Docks (at the beginning of the 1980s) before transformation and Surrey Quays Shopping Centre (1996) after transformation.	25
Figure 10. Atocha Station from Outside and from the Tropical Garden. (http://www.dailymail.co.uk)	26
Figure 11. The Transformation Project of Oslo Railway Area (http://www.spacegroup.no/projects/oslo, access taken: 20.08.2012)	27

Figure 12. European High-Speed Railway Map in 2012 (http://www.uic.org/ date taken: 20.07.2012).....	32
Figure 13. The Structure of English Railway Network (SCI Verkehr GmbH, 2005).....	35
Figure 14. The Structure of German Railway Network (SCI Verkehr GmbH, 2004)	36
Figure 15. King's Cross Transformation Project prepared by John McAslan + Partners (www.kingscross.co.uk/ date taken: 30.08.2012)	39
Figure 16. King's Cross Transformation Project (http://www.guardian.co.uk/ date: 20.07.2012).....	40
Figure 17. Interior Interventions of King's Cross Railway Station (http://www.guardian.co.uk/ date taken: 20.07.2012).....	40
Figure 18. The former indicates the Stuttgart 21 Project area and the latter one indicates the new relation of the old station, green area, and the new construction. (http://www.bahnprojekt-stuttgart-ulm.de/ access date: 28.09.2012)	42
Figure 19. Stuttgart 21 Transformation Project (http://www.guardian.co.uk/ date taken: 20.07.2011).....	42
Figure 20. Before and After Photographs of Dorsay Station (Former: http://www.musee-orsay.fr Latter: www.triposo.com)	43
Figure 21. Site Plan of the Transformation Project of Ankara Railway Area. (TCDD)	50
Figure 22. The Transformation project of Ankara Railway Area. (TCDD).....	51
Figure 23. The Transformation project of Eskişehir Railway Area (TCDD).....	53
Figure 24. The Development Plan which covers Eskişehir railway area (TCDD Archive).....	54
Figure 25. Transformation project of İzmit Railway Area (Serimer Architecture).....	55
Figure 26. Before and After İzmit Railway Station (TCDD Archive)	56
Figure 27. Transformation Project of İzmit Railway Station (Serimer Architecture)	57

Figure 28. Location of Iskenderun in Turkey and in Iskenderun Bay (Doygun, H., and Alphan, H. (2006) “Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications”, Environmental Monitoring and Assessment, No: 114, pp: 145–155.)	61
Figure 29. Location of Marine Terminals and Position of Iskenderun Port in Iskenderun Bay (http://www.cerrahogullari.com.tr/ports/ Access Date: 13.08.2012)	62
Figure 30. Transportation ways to Iskenderun (on googleearth).....	65
Figure 31. Functional zoning of Iskenderun (on google earth)	68
Figure 32. French Map of Iskenderun Harbor, 1764 (Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA.).....	71
Figure 33. 1858 Plan of Iskenderun. (Urban Planning and Development Dept. Of Iskenderun Municipality, 2012)	80
Figure 34. The plan of Iskenderun prepared by Germans in 1911. (Sandalcı, M. (2005), Iskenderun Dekovil Hatti, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları).....	81
Figure 35. Decovilles on the roads of Iskenderun in the beginning of 20th century. (Sandalcı, M. (2005), Iskenderun Dekovil Hatti, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları).....	83
Figure 36. Cadastral Plan of Iskenderun prepared by French In 1929 (Hüseyin Kanpolat archive).....	83
Figure 37. Urban development of Iskenderun (Doygun, H., and Alphan, H. (2006) “Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications”, Environmental Monitoring and Assessment, Number: 114, pp: 145–155.)	84
Figure 38. Constructed areas of Iskenderun (Cakir, B. (2010), urban coastal settlements: implementation of coastal area assessment model in Iskenderun case, Metu thesis.)	85
Figure 39. 1981 Master Plan of Iskenderun (Bank of Provinces, 2011).....	87
Figure 40. 1/25000-scaled Iskenderun Bay and Near Environs Master Plan (Bank of Providence).....	88

Figure 41. Iskenderun Bay BKAY/ICZM – Iskenderun Sub Region (Dampo Planning, 2011) .	89
Figure 42. Boundary of Study Areas.....	91
Figure 43. Category of Edifices	93
Figure 44. The Terminus and Storage in the Terminus site. (Date taken: 15.12.2011)	94
Figure 45. Open and Built up Areas	96
Figure 46. Open Areas	97
Figure 47. The large open area in front of the Terminus. (wikimapia.com)	98
Figure 48. The Roads and the Gardens between the residential buildings in the Terminus site. (Date taken: 15.12.2011).....	99
Figure 49. The wide open storage areas in the port site. (Date taken: 15.12.2011)	100
Figure 50. The two registered Warehouses. (Date taken: 15.12.2012).....	100
Figure 51. Registration Status	102
Figure 52. Construction Years of the Buildings	103
Figure 53. The Buildings constructed in French Mandate. The former is The Hospital and the latter is a house. (Sermin Çakıcı Archive)	104
Figure 54. The Architectural Details of the Buildings Constructed in French Mandate Period.(Date taken: 15.12.2011)	105
Figure 55. The Customs Office and Warehouses in the Port Site. (Date taken: 15.12.2011)	105
Figure 56. Two of the Residential Buildings Constructed after 1929 until 1949. (Date taken: 15.12.2011).....	106
Figure 57. The Apartment Block Constructed after 1949. (Sermin Çakıcı Archive)	106
Figure 58. The Warehouses constructed after 1975. (Date taken: 15.12.2011)	107

Figure 59. Number of Storey and Building Height	108
Figure 60. Structural System& Construction Material of the Buildings	109
Figure 61. Current Use of the Buildings.....	111
Figure 62. Condition of the Buildings.....	113
Figure 63. 1929 Cadastral Plan of Iskenderun (Hüseyin Kanpolat Archive).....	115
Figure 64. Functional Zoning of 1949 Aerial Photography	118
Figure 65. Functional Zoning of 1975 Aerial Photography	119
Figure 66. Functional Zoning of 1992 Aerial Photography	120
Figure 67. Change of Buildings	121
Figure 68. A Railway Equipment and A Train Wagon in Iskenderun Terminus Site. (Date taken: 15.12.2011)	132
Figure 69. The Empty Buildings (Date taken: 15.12.2011)	133
Figure 70. The Existing view of Iskenderun Port.....	134
Figure 71. The Narrow Gauge Rails in Port Site. (Date taken: 15.12.2011).....	135
Figure 72. Problems of the Study Areas	137
Figure 73. The Cer Atelier Building, Which is Registered but Neglected. (Date taken: 15.12.2012).....	138
Figure 74. A workers' house and a Storage in Terminus area. (Date taken: 15.12.2011)...	138
Figure 75. Potentials of Study Areas	142

LIST OF TABLES

TABLES

Table 1 The religious distribution of Iskenderun people (Urban and Rural) in 1891's Aleppo province yearbooks. (Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3396)	67
Table 2 Urban Population of Iskenderun in Time (Doygun, H., and Alphan, H. (2006) “Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications”, Environmental Monitoring and Assessment, Number: 114, pp: 145–155.)	67
Table 3. Number of township, village and district of Iskenderun in 1897 and in 1908 (Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3396)	79
Table 4. Number of the buildings in accordance to the categories.....	94
Table 5. Current Use Of The Buildings in Railway and Port Area.	110

CHAPTER 1

INTRODUCTION

Railway station and their surroundings have changed since they were first built in the 19th century. As Richards and Mackenzie mentioned 'there is perhaps no more potent or dramatic symbol of the Industrial Revolution than the railways'¹. Railways and the railway buildings have more intense effect than the whole innovations and inventions that took place before and after the Industrial Revolution². While the railways represented the glory of the Industrial Revolution, many changes were imposed to generate the needs with the progressed innovation of society, economy, politics, culture and technologic.³

During the construction of railways, new developments in architecture also took place. Many stations and other buildings that serve to the railways were constructed on the railway lines. These buildings display differentiations from traditional architecture. Despite this different style partially represented the traditional features, the architectural style of the country that construct the buildings was reflected on the buildings. In time, these buildings became attractive points of cities as well as industrial zones that affect the urban development of cities. Equipped with functions for the purpose of construction, these structures, which are marked in a certain period, are separated from other building categories with their own identity and characteristics⁴. As Meyer expresses, they are very

1 Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

2 Başar, M. Emin & Erdoğan, H. Abdullah, (2009). Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları . J. Fac.Eng.Arch. Selcuk Univ., v.24, n.3, Konya.

3 Conceição, A., Multimodal Stations and Its Surroundings: A Sustainable Perspective. Conference Proceedings of the 3rd CIB International Conference on Smart and Sustainable BuiltEnvironments – SaSBE (15-19 June 2009 in Delft)

4 Başar, M. Emin & Erdoğan, H. Abdullah, (2009). Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları . J. Fac.Eng.Arch. Selcuk Univ., v.24, n.3, Konya.

complex buildings that people were confused where to put them as products of architecture⁵:

"The railway station, half factory, and half building represented a novelty in the history of architecture. No other type of single construction joined two bodies so heterogeneous in their form, with a brickwork building destined to passengers and large glass and iron sheds for the parking of trains"

A.G. MEYER

Last few decades, following a recession period, railway system is back on the agenda as a part of many subjects. Numerous governments and state offices architects, city planners, environmentalists, conservators, engineers discuss the future of the railway system, railway areas, and buildings in these areas. Technological improvements (high-speed rail-HSR) in recent years enable to see railway systems as a solution to many problems some of which require safe, cheap, and environmentally friendly transportation system as well as new blood for urban transformation and redevelopment projects. The new vision of railway areas and buildings bring up many debates in addition to the existing problems of railway heritage definition and conservation. The final state of the railways stands in the middle of many urban activities. As a part of industrial heritage, they are both confronting integration attempts. In the light of the aforementioned realities, holistic reviews of conservation and transformation topics are indispensable.

1.1. HISTORY OF RAILWAY AND CONSERVATION

1.1.1. The Historical Development of Railway

After the Industrial Revolution, mechanical power was invented and it has become easier to gain goods with the raw materials getting from colonial countries. The European countries started to produce more than they consume and they began looking for new markets for trade. Transporting the generated goods to the markets would be very expensive by seaway. There was a need for new transportation system to carry those loads

5 Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

easier and in a cheaper way. As such, the railway was the answer to the century's most significant problem.⁶

The railway technology in today's meaning emerged in 19th century in England. The modern railways are made with the invention of vapor machine and its being utilized railway transportation. Richard Trevithick implemented the locomotives working with vapor on to the rails. In 1825, George Stephenson made the vapor locomotive pull the passenger train.⁷

The history of railway is typically divided into three main phases. The first phase is the golden railway phase, which started in the late 19th century and ended in the beginning of twentieth century. This period comprises the invention of railway technology in England and spreading to whole Europe, then to world and becoming the primary transportation way. The second one refers to the after First World War and Second World War times that are called 'post war' phase. Lastly, the third phase is 'Railway Renaissance', which refers to rediscovering of railway center. This period started with the using high-speed railway technology in France in the beginning of the 1970s.⁸

The Liverpool – Manchester railway marks the beginning of railway age with Stephenson's locomotive called 'Lion' and 'Tiger' (Figure 1). Belgium was the second (1844) and France was the third (1848) to have tracks laid. Railway was seen as a vehicle to transport large number of people. In the beginning, at the end of the lines stood the stations, which were the only buildings that did not have any other, function than waiting platforms. However, the journey did not end at the stations that were located at the edges of the cities. Consequently, people needed to use horses within the urban areas.⁹

The effect of railway on the cities started to increase easy transportation and easy mobility of people. The industrialized cities began to expand with the workers who came from rural areas. The fast interaction between cities resulted in modifications in the physical environment, especially city structures and architecture. In addition, the architecture

6 Başar, M. Emin & Erdoğan, H. Abdullah, (2009). Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları. J. Fac.Eng.Arch. Selcuk Univ., v.24, n.3, Konya.

7 Ibid,

8 Banister, D. and Hall, P. (1993), The second railway age. Built Environment, 19(3/4), pp. 157–162.

9 Conceição, A., Multimodal Stations and Its Surroundings: A Sustainable Perspective. Conference Proceedings of the 3rd CIB International Conference on Smart and Sustainable BuiltEnvironments – SaSBE (15-19 June 2009 in Delft)

was effected by easy transportation of construction materials. The surrounding of these areas were shaped by railway.

With parallel to these developments on planning and architecture, the stations, main railway buildings, began to change. The retail facilities were enclosed in stations more than before. The London Euston Station was the first station having a great hall and refreshment rooms separated from the sheds, which were used in other ones (Figure 2). At that, the Stations had larger and more complicated spaces. The stations began to have more facilities those are not exclusively related to transportation such as booking facilities, restaurants, waiting rooms, and hotels.¹⁰



Figure 1. Liverpool and Manchester railway locomotive 'Lion', 1838 (liverpoolmuseums.org
Access date: 27.04.2012)

Moreover, the Industrial Revolution and developments in the railway technology paved the way for distinct societal changes such as labor class movements. In this period, 19th century, ideological groups were moved by the idea of exploitation of labor.¹¹

10 Thammaruangsri, K.P. (2003), Node and Place, a study on the spatial process of railway terminus area redevelopment in central London, unpublished thesis submitted for the degree of PhD in Architecture, University of London.

11 Köşgeroğlu, F.Emrah.(2005) "An Approach For Conservation of Railway Heritage: Assessing and Experiencing The İzmir-Aydın Railway Line", Unpublished Mater Thesis, METU. Ankara.

In the beginning of the 20th century, with the technological improvements, which are the inventions of petrol vehicles and moving from the use of steam system to the electrified system, the existing stations became inefficient and/or obsolete. Many station closures and demolitions took place throughout Europe. Some of the station were expanded or adjusted to the new systems. The world wars caused dramatic changes to railway systems. New stations were affected from modernism movement and particular relation with past. Because of the economic problems resulting from the World Wars during the first half of the century, the existing retail and catering facilities inside the station such as shops, restaurants, and bars became almost residual.

Cities, which expanded and passed beyond the railway sites, became divided with these large areas and structures. Moreover, the infrastructure had rapidly grown from a single railway line to an unwieldy and highly complex network turning to various related facilities such as marshalling areas, goods yards, goods transfer areas, workshops and maintenance posts, passing places, shunting yards and points, depots, power stations and other operational facilities. The beginnings of the deterioration and decay in these sites and their environments are related to this development. The district of Seine-Rive-Gauche located next to Gare d'Austerlitz in Paris is one of the examples of these destroys¹² (Figure 3).



Figure 2. The interior of Euston Station circa 1838 (British Rail (Firm). (1968). The new Euston Station; 1968. London: Public Relations & Publicity Officer.)

12 Thammaruangsri, K.P. (2003), Node and Place, a study on the spatial process of railway terminus area redevelopment in central London, unpublished thesis submitted for the degree of PhD in Architecture, University of London.

After 1970, the railway system was rediscovered and was included to the transportation system. As a result of this, railways became the nodes of the transport networks. In the 1970s a conservation movement emerged to save and upgrade the existing or abandoned stations. The investment in commercial units responded to an increased awareness of the station's operating costs and was accompanied by a reorganization of the profile of facilities. Previously unthinkable facilities such as restaurants, cinemas, business centers, exhibition spaces, conference rooms, performance stages, health clubs, banks and child care centers are now located inside railway stations and especially the principal station in each city.¹³

During the 1970s, there emerged a serious conservation movement in an effort to save and upgrade existing or abandoned stations built over the proceeding 150 years. Moreover, by the 1980s, when the railway was included as a crucial element in transport planning, hundreds of stations had been sensitively modernized or adapted to meet different needs without impairing their characters in England. Several existing stations in London such as Cannon Street, Charring Cross, Liverpool Street, Victoria, and Waterloo Stations were all redeveloped by the 1980s to keep station features in line with the increasing rail.¹⁴



Figure 3. Seine-Rive-Gauche near Gare d'Austerlitz in Paris. (blog.betonsalon.net Access date: 24.08.2012)

13 I Thammaruangsrri, K.P. (2003), Node and Place, a study on the spatial process of railway terminus area redevelopment in central London, unpublished thesis submitted for the degree of PhD in Architecture, University of London.

14 Ibid,

Today, the improvements expand to whole world. People are encourage to use railway transportation. The railway sites are thought as the new generators of the city centers. New lines have been constructing and the sites are tired to be developed in accordance with the technological improvements. However, these processes threatened some sites and structures on it with the development plans and transformation and large-scale regeneration projects.

1.1.2. Railway and Ottoman Empire

After industrial revolution, the political relations had been transformed in countries and weakened empires. Construction of the railways increased economic and politic influence and pressures on underdeveloped countries one of which is Ottoman Empire.¹⁵

The transportation policy of the Ottoman Empire was managed by local managers and was primarily based on military needs of the empire before the railway. This system worked when the empire was powerful and sustained centralization. However, the empire started to lose power in time. As such, remote locations remained in the initiative of local authorities. Thus, the transportation means and the vehicles became inadequate to the existing needs and there were no signs of attempts to reverse the negative situation.¹⁶

In the beginning of the 19th century, the idea of Westernization dominated the empire. In line with this, transportation problems were also on the agenda. The fastest and safest transportation system, railway, was considered to be a solution for the Ottoman governors. It was very significant for economical, military, and political spheres of the empire. For the Ottoman Empire, constructing railways with concessions was more logical rather than a profitable investment. Furthermore, the European countries were pressuring the empire for further concessions in order to establish their areas of influence.

17

15 Tekeli, I. (2011). Toplu eserler (15) Türkiye'nin Kent Planlama ve Kent Araştırmaları Tarihi Y azıları (pp. 47-50). İstanbul: Tarih Vakfı.

16 Yıldırım, İsmail. (2002). Osmanlı Demiryolu Politikasına Bir Bakış, Fırat Üniversitesi Sosyal Bilimler Dergisi, Cilt: 12, Sayı: 1, Sayfa: 311-324, ELAZIĞ

17 Burak, Mehmet Durdu, İngiliz J.R. Pilling'İN Osmanlı Demiryolu İmtiyazını Ele Geçirme Mücadelesi, dergiler.ankara.edu.tr

In the *Tanzimat* Program, a railway transportation system was envisaged to provide transportation vehicles to operate the sources, connecting the agricultural products to the seaway and each other. . As a result of this, the warrant of the first railway line construction in European lands of Ottoman, Cernova-Köstence Line, was given to an English company in 1856. In the same year, the construction warrant of Izmir-Aydın railway line, which is the first line in Anatolia, was also given to an English company.¹⁸

It was during Abdul Hamid's reign that the Turkish railroad system experienced a tremendous growth. There are a number of reasons to this rapid expansion. Abdul Hamid's reign coincided with the era of railroad construction all over the world and Ottoman presented an attractive field for exploitation to foreign capital; this being said, one must underline that the centralization policy of the Ottoman Empire and development of an effective defense system were as equally important . Abdul Hamid sanctioned the construction of railroads and invited foreigners to bring their capital to his land to build railroads¹⁹. Some examples are as following²⁰:

1. The British Railway Concessions (1856-1906)
2. The French Railway Concessions (1883-1910)
3. The Initiative of Ottoman Empire (1871-1875)
4. The German Railway Concessions (1889-1908)
5. The lines under the Russian Rule

Many railway projects found prominent place in the empire's agenda. One of the most popular and significant projects was the Baghdad railway line which marked the external desires of the powerful countries on Ottoman Empire. This line did not connect seaside to the hinterlands, rather it connected Berlin to Baghdad by passing through the middle of Anatolia²¹

18 Yıldırım, İsmail. (2002). *Osmanlı Demiryolu Politikasına Bir Bakış*, Fırat Üniversitesi Sosyal Bilimler Dergisi, Cilt: 12, Sayı: 1, Sayfa: 311-324, Elazığ.

19 Wolf, D. E. (2010). *Crossing the Hudson: Historic bridges and tunnels of the river*. New Brunswick, N.J: Rivergate Books.

20 Köşgeroğlu, F.Emrah.(2005) "An Approach For Conservation of Railway Heritage: Assessing and Experiencing The İzmir-Aydın Railway Line", Unpublished Mater Thesis, METU. Ankara.

21 Yıldırım, İsmail. (2002). *Osmanlı Demiryolu Politikasına Bir Bakış*, Fırat Üniversitesi Sosyal Bilimler Dergisi, Cilt: 12, Sayı: 1, Sayfa: 311-324, Elazığ.

In the First World War, the railway gave limited services to the Ottoman Empire. Even during the Independence War, the Turkish army was not able to use the Ottoman railways properly because of the Occupation Forces, who possessed all railways. After the opening of the Grand National Assembly, the railway, abandoned by the Occupation Forces, was confiscated by the new Turkish government.

1.1.3. Review of Conservation of Railway Heritage

The social, historical, economical, and physical effects of railroads on societies are recognized and investigated all over the world. The historical railroads are recognized as today's representatives of industrial heritage and should be explored under this heading.

22

It is important to determine the position of railway heritage in the conservation framework of historical monuments. What railway heritage is and why it should be conserved are the questions that Peter Burman asked. The term of railway heritage consists of railway buildings, archives, equipments, landscape, and artifacts.²³

Although the railway heritage specialized with its unique site formation and differentiated movables and immovables, it should be evaluated under the title of industrial heritage while looking at the international charters.

The significance of the industrial heritage and railway heritage can be found in the items of international documents related to conservation and historical heritage, which were published before or after the ones related to industrial heritage and railway heritage. In the Venice Charter, Granada Resolutions, and Burra Charter the definitions also cover these sites and buildings.

In the Venice Charter in 1964, the conceptual context was widened for the definition of historic monuments in the item below. The part of the historic event is overlapped with

22 Erkan, Y. K. (2007) Anadolu Demiryolu Çevresinde Gelişen Mimari ve Korunması, yayınlanmamış Doktora Tezi, İTÜ Fen Bilimleri Enstitüsü, İstanbul.

23 Burman, Peter & Stratton, Michael, eds. (1997). Conserving the Railway Heritage. London: E & FN Spon.

railway heritage. It was also explained that the monument should be considered within its context.²⁴

"The concept of an historic monument embraces not only the single architectural work but also the urban or rural setting in which is found the evidence of particular civilization, a significant development, or an historic event. This applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time."

VENICE CHARTER

In 1990 in the Granada Resolutions conservation of Industrial Heritage became more significant.

"The rapid development of industrial civilization, the new types of production and employment resulting from the recent economic crises and technological explosion which is typical of our age and society, have led far - reaching upheavals in whole sectors of industrial activity, with the consequent major changes in urban and suburban landscapes involving the sometimes total disappearance of buildings, installations of vestiges of industrial activity. Today, Europe is becoming aware of the technical, cultural and social value of this heritage as a whole which an important part of the collective memory and European identity, some of whose elements deserve to be protected as part of the heritage."

GRANADA RESOLUTIONS

In the Burra Charter in 1999 (Revised Version), the concept of place was interpreted broadly. Memorials, trees, gardens, parks, places marked by historical events, urban areas, towns, industrial places, archaeological sites and spiritual and religious places were described in the article below.²⁵

"Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views."

BURRA CHARTER

24 Venice Charter, The International Charter for the Conservation and Restoration of Monuments and Sites, 1965, ICOMOS

25 Jokilehto, J. (2005), Definition of Cultural Heritage References to Documents in History, ICCROM Working Group 'Heritage and Society.

Although the debates related to industrial and railway heritage started comparatively late to the others, international studies have been done on this field from the beginning of 1970s.

In 1977, Save Britain Heritage organized a railway exhibition called “Off the Rails; Saving Railway Heritage” in RIBA Heinz Gallery. This was the first time that railway architecture was considered as an architectural heritage.

The increased interest towards the conservation of industrial heritage was reflected on the railway heritage. England was the pioneer country for the conservation of railway heritage just as it was the pioneer in establishing railways. In 1984 “Railway Heritage Trust” was established to designate document and conserve the railway heritage. In 1993, the existing railway act was transformed for the sake of preservation in England. According to this act, a railway heritage committee was formed with the collaboration of National Railway Museum that was founded in 1995 at York within the Ministry of Transportation and Railway Heritage Trust. After three years, in 1996, the Railway Heritage Act was declared. Other European countries as well as the United States, Canada and Australia formed their institutional and legal background after England.

In 1999, the International Council on Monuments and Sites (ICOMOS) released criteria for the railways nominees to the world heritage list. The proposed criteria for internationally significant railways are as following²⁶:

- A creative work indicative of genius
- The influence of, and on, innovative technology
- Outstanding or typical example
- Illustrative of economic or social developments

In 2003, The International Committee for the Conservation of Industrial Heritage (TICCIH) adopted its Nizhny Tagil Charter for the Industrial Heritage, a first international reference text of such recognition to guide protection and conservation in the field.²⁷

26 Coulls, Anthony.(1999). *Railways as World Heritage Sites*. Paris: ICOMOS.

27 Joint ICOMOS – TICCIH, (2011).Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.

In 2005, in order to guide the future generations in heritage railways, Riga charter was created. The charter accompanied the previous charters related to railways and conservation. The main purpose is to see the opportunities for making wise decisions on conserving the heritage railway items.²⁸

In 2011, ICOMOS and TICCIH published a list of Principles to assist in the documentation, protection, conservation, and appreciation of industrial heritage as part of the heritage of human societies around the World.²⁹

Many conservation projects have been completed after that date. However, the increasing number of non-used industrial buildings including railway buildings brings the reusing term as a part of conservation on the agenda. In this respect, many buildings started to be used with new functions. Additionally, in order to integrate these areas to cities new transformation projects that correspond the new policies, technologies and social structure.

In Turkey, the existing legislative regulations do not make a new interpretation on conserving railway heritage. However, it makes possible new improvements in this field.

The relevant law is the Act No. 2863*, put in the action in 1982, for the conservation of cultural heritages in Turkey and railway heritage is also liable to this act. However, although it was stated scientifically important immovable objects within the cultural heritage, however there is no specific definition for either industrial or railway heritage. Also a definition the end of the 19th limits architectural heritage registration.³⁰

The regulations in 2004 with the 5226 law did not change the time limitations or bring an industrial or railway heritage definition. However, it localized structure with the Regional Councils for Conservation of Cultural and Natural Heritage and gave warrant to the municipalities; make the registration of industrial heritage easier. The air gas factories in

28 Riga Charter, Daylesford Spa Country Railway, 2005.

29 Joint ICOMOS – TICCIH, (2011). Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.

* As Emre Madran (2011) indicated in the Kültürel ve Doğal Değerlerin Korunması Alanında Son Yasal Düzenlemeler unpublished article, Act No. 2863 is called "Conservation of Cultural and Natural Heritage" (Kültür ve Tabiat Varlıklarını Koruma Yasası) until 2011. With the governmental degree No: 648 the name of the law is changed to "Conservation of Cultural Heritage Law" (Kültür Varlıklarını Koruma Yasası).

30 Köşkeröğlu, E. (2006, October). Demiryolu Mirası - Korunması. Dosya, 45, 19.

Ankara, Istanbul, and Izmir were registered in this scope. However, with the demolishing of Ankara air gas factory although it was registered, show that even registration is not enough for conserving (Figure 4).³¹



Figure 4. The Demolished Air Gas Factory in Ankara. (<http://www.mimarlikforumu.com> date taken: 05. 08.2012)

With the new regulations in the act in 2011, the acts made in 2004 were reversed. The structure of governmental organizations for conservation is centralized. From now on, the warrants of High Council are increased in order to reduce the approval and operational process. As called "by pass" by Emre Madran, with the new regulations, TCDD can consult to High Council rather than Regional Councils for the projects or planning related to conservation of railway heritage.³²

The conservation of railway movables and immovable were provided by TCDD until recent years. However, for last ten years TCDD made prepared and enforced the restoration projects of registered structures by tender procedure to private companies. Many railway structures have been registered in the scope of Act No. 2863. Ankara Gazi station is one of the reuse examples in the conservation concept (Figure 5).³³

31 Köşkeröğlu, E. (2006, October). Demiryolu Mirası - Korunması. Dosya, 45, 19.

32 Madran, E. (2011). Kültürel ve Doğal Değerlerin Korunması Alanında Son Yasal Düzenlemeler, Unpublished Article.

33 Köşkeröğlu, E. (2006, October). Demiryolu Mirası - Korunması. Dosya, 45, 19.



Figure 5. Before and after of Gazi Station, which is re-used as Restaurant after 2001
(arkitera.com)

1.2. PROBLEM DEFINITION

The problems of railway started in the beginning of the century. The invention of automobile, which is powered by petrol, the technological improvements in railway technology, electrification, caused negation on railway itself and so the structures in comprised. Many railway buildings were abandoned related to these improvements. Following the developments of conservation of railway heritages, these abandoned stations were restored and gained new functions. D'orsay Museum in Paris is one of the most prominent examples of transformation of railway stations. . Mudanya Railway Station, which is transformed to Montaigne Hotel, is one of the first examples in Turkey (Figure 6).



Figure 6. Mudanya Railway Station is transformed to Montaigne Hotel.

Even some lines were left to itself. The park follows the route of the unused Vincennes railway in Paris, La Promenade Plantée, which operated between 1859 and 1969. Because of being partially abandoned for more than a decade, it is repurposed as an urban green space (Figure 7).

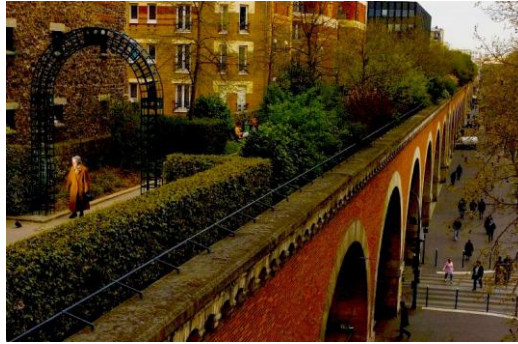


Figure 7. La Promenade Plantée was transformed from abandoned railway line.

(<http://www.urbanghostsmedia.com/> Date Access: 08.08.2012)

The last decades of 20th century were a milestone for railway destiny in the world. Promotions of sustainable transport and land use, the stimulation of local economies, the progress on railway technologies especially HST, the property market cycle, and the impact of globalization are the new factors affect the railway sites. Moreover, many station areas have strategic locations in cities, and the quasi-urban spaces of their interiors, which increasingly serve various functions not related to transportation such as retail shops, cafes, restaurants, supermarkets, clinics, or even libraries and spas, packed within a multi-layered environment. Furthermore, station environs are also the focus of numerous urban restructuring initiatives.

In order to make the railway transportation system an integrated railway system, many studies have been done and many policies have been developed. The construction of high-speed railway throughout Europe in an integrated network is the primary transformation strategy for the European countries. During this process, the improvements on the railway transportation system changed the perception on the areas where railways were built. Today both in Europe and in Turkey, railway stations with their surroundings are

transformed to various redevelopment or urban transformation projects, which changed not only its surrounding but also the image of a whole city. The economic values of these projects have charmed the governments, municipalities, private companies, and local foundations. These irreversible projects expand to whole Europe. Many European architects, city planners, sociologists, conservators, and environmentalists currently discuss these controversial transformations.

After passing to the high-speed railway system, such a process also started in Turkey. Turkish State Railway (TCDD) aims to implement attractive transformation designs on the high-speed lines. On the other hand, the station areas on the 'low speed lines' seem to be redundant. Some of these areas were already sold and some were discarded. However, with the vulnerable locations in the cities, railway sites take the attentions of the municipalities, which seek for unearned income by restoration projects in any case and wanted to utilize those areas by integrating them into the cities, and the governments, which purpose to make the areas attraction points that generates the railway technology. In recent years, many transformation projects have been produced for these areas and in rapid development. Many of such projects on the other hand were generated with too little feasibility study/research.

In the light of these developments, different scaled projects are under development for many sites in Turkey. Furthermore, the ones, which are not on the agenda nowadays, will be will be parts of this process eventually. In the scope of conservation concerns, the lack of legal structure is a big threat for these sites. Registered or not all the properties on these sites are in danger related to the lack of awareness in governmental or nongovernmental, all stages of the society. The alternative usage of the railway and its environs make these sites subjected to large-scale or small-scale transformation projects, which is a part of evaluating by re-using the railway heritage sites.

Iskenderun terminus area, which was built in the beginning of the 20th century by the French, is one of the possible transformation project areas with its potentials related to developing industrial and port activities in the city and the strategic location of the terminus site in the city. The Railway area and the port were operated since they first constructed until the privatization of the port 2012. However, while the port related activities increase in time, the terminus site lost its usage qualities. The decreasing

investments to the area outcomes as a neglected, not functional, but locate in a valuable lands railway site.*

1.3. AIM AND SCOPE

The increasing attention on the railway areas makes the all the railway areas a potential transformation sites. For this thesis, the objective is to exhibit, through European and Turkey railway transformation examples, conservation and transformation principles for railway areas in general and Iskenderun terminus area in particular. In practical terms, the research seeks to offer a guide through railway stations that is subjected to conservation or transformation. The research aims to serve to the interest of planners and designers, through developing a better understanding of how railway stations and their surroundings interact in order to ensure the success of railway area transformation projects in cities.

The thesis primarily seeks to understand the reasons and the historical processes that make the transformation of these areas as a solution for both Turkey and Europe. Furthermore, how much conserving the immovable is the part of these transformations is integral to this research. That is why, both conservation of railway heritage and history of transformation are investigated.

The thesis focuses on Iskenderun terminus area given that it has been one of the most important railway lines of the Ottomans- a part of the Bagdad railway line, and given the logical importance of the area which is directly related to the port. This line has a special place in the history of the Ottoman Empire as well as of Europe. The diversity of the building category, the conserved authenticity renders the area rare in Turkey. The area also stands as a precedent for the upcoming transformation projects due to the challenges it consists.

* When this thesis started to be searched in June 2010, it is seen that a project for this area would emerge in a short period as the railway station areas' transformation projects proceed. In June 2012, a transformation project for the railway area was requested by TCDD from the Iskenderun Municipality. (The information is taken from Municipality as a şifai information)

1.4. METHODOLOGY

The concept of industrialization, industrial heritage, and railway heritage are the initial studies in the literature survey of the thesis related to theoretical background, of which explored in two part.

Firstly, in the first chapter to understand the formation of industrial environment, railway technology, and culture, industrialization and in related to that railway history of Europe, Ottoman State and Turkish Republic were researched through the books, articles, and thesis likewise online sources. In addition, the concept of railway heritage, its definition, and the review of conservation were searched from publications of researchers, international documents, and official websites of related organizations.

Secondly, in the second chapter in order the emergence of transformation concept in the world and the process of transformation of railway areas in Europe and in Turkey were explored with the sociocultural and economical background in the written sources. In the coming parts of this chapter, the transportation policies and railway systems' effects on transformation projects are explored. In order to develop transformation and conservation principles, the results of the legal researches are interpreted. Because of the wideness of the concept and the examples, the European examples are limited with three countries: England as a home of railway, Germany as a participant of the two world war, and France as the first country used HSR. The examples in each country are chosen in accordance with representative features of reasons and results of the projects and implementations. The main problems of the transformation of the railway stations and the surroundings in different scales are explored in detail. The social and economical reasons of transforming the railway sites are explored. Parallel to this, the transformation process of Turkey and the consequences of these areas are examined. Because of the recently coming concept, the examples in Turkey are limited. Thus, primary criteria of the chosen examples are being approved by TCDD. After that that historical importance of the Ankara railway area, the industrial environment of Eskişehir railway area, and with both the industrial environments and the scale of the site Izmit railway area are chosen to exemplify the railway transformation in Turkey.

Iskenderun terminus site is the main case of the thesis. The city comes forward with its natural and industrial environment. Its location and the geographical determiners provide

diverse transportation possibilities and rare structures such as port. In the light of these, Iskenderun and the study area are explored in detailed to define the site properly in the third chapter. The history of Iskenderun and the Baghdad railway lines is presented. Moreover, the architectural features of the buildings in the area and the physical properties of the surrounding area are addressed.

In the fourth chapter, values, potentials, and the problems in different scales from the whole railway system and heritage of Turkey to Iskenderun railway area are exhibited. The international charters are taken as basis for determining the main concepts. Basically sociocultural, physical, and economical reasons are determined to explore.

In fifth chapter, a conservation approach is developed, presented and discussed parallel to the conclusions derived according to general and architectural evaluation. The conservation principles and proposal details are exhibited in this chapter.

For the literature survey, besides the libraries of METU and Bilkent University, the archives of TCDD, TCDD 6nd Regions Directorate was utilized. Additionally, the thesis related to the scope of this thesis were collected from the YÖK Library. In total four master's theses were found; two of them are related to conservation of railway heritage while one is related to history of Iskenderun under the French Mandate and the other is related to Urban Planning of Iskenderun Coastal. Two PhD Theses are found one of which relates to the assessment of discarded railway areas; whereas the other is on conservation of railway heritage. Numerous articles related to the conservation of railway heritage, transformation of railway areas, urban redevelopments, history of railway areas in Turkey and in the world, history of Iskenderun are utilized. The results of the literature survey are presented particularly in the introduction, in the second chapter that dwells upon the transformation process in Turkey and in Europe and in the third chapter, which includes the history of Iskenderun and Baghdad railway lines.

Regarding the visual documentations, aerial photos of Iskenderun in the years of 1949, 1975, and 1992 were taken from the Turkish Air Force Command. The land use maps were taken from the Iskenderun Municipality. The aerial photo of 1930 and the 1929 cadastral plan prepared by the French were taken from Huseyin Kanpolat's personal archives. Historical development of Iskenderun and the terminus site are indicated on these aerial photos.

The land use map is used as a base map of the field survey. An identification number is given to each building in the study area. Moreover, relevant buildings notes and photographs were taken. The database is prepared for Iskenderun terminus area with the information collected in field survey in ARCGIS. The sheets are prepared by using ARCGIS, Adobe Photoshop, and Adobe Illustrator. Each building in the site was documented with the related titles.

CHAPTER 2

TRANSFORMATION OF RAILWAY AREAS

Transformation, which means a marked change, as in appearance or character, usually for the better according to the American Heritage dictionary, is related to the metamorphosis, conversion, turning to, and so³⁵. As a part of developing and changing world, people and accordingly daily life practices are modified³⁶. In the book of *Die Verwandlung*, Kafka describes a transformation that has been still debated whether it is a result of the character wish or of the pressures on him³⁷. Moreover, the change of the other people's acts is also indicated in these debates. Main questions are 'Is this change is a part of natural alteration or a conscious action?' and 'The important part is the object itself or the acts of? '.

In the case of architecture, transformation takes place especially in functional and the behavior of usage context. Looking with the dictionary definition, the change in function, and the behavior of usage in a site or in a single building defines the transformation in architecture. Today, transformation in architectural context is very widespread particularly in historic sites and buildings. However, in the heritage conservation context, it is very significant to examine the process of this transformation in order to understand how much it is natural or by force, or how the users response to this impulse.

Transformation of cities is a continual process parallel to the developments of the civilizations from the beginning. After the industrial revolution, cities physically expanded more rapidly to meet new needs. Furthermore, the social stratifications brought

35 American Heritage Dictionary. (<http://ahdictionary.com> date taken: 17.08.2012)

36 Advisory Council on Historic Preservation, *Adaptive Use: A Survey of the Construction Costs*, Washington, D.C., vol. 4, no. 4, June 1976.

37 In the book of *Die Verwandlung*, Kafka told about a man metamorphoses to a bug.

diversification in habits and in places. That means, new theaters and opera buildings instead aristocratic ones, commercial streets, market areas for bourgeoisie were needed. On the other hand, new housing areas for the working class coming from rural areas were in need. Cities expanded to meet these needs and they transformed into places with multifunction for multiuser. However, in time the planned and unplanned expansion caused many other problems. Epidemic diseases threatened people's lives and political and social stability itself. At the beginning of the 20th century, with the improvement of technology, which was automobiles for those times, the planners planned utopia cities, which were the first examples of idea of better cities³⁸.

In the middle of the century, as a consequence of urbanization, industrialized cities became large building stocks. The cities were densely constructed, it took time to arrive areas, and which demolishing was costly. In the 1950s and the 1960s, planners searched for alternative method rather than cleaning the slum areas. It was understood that **rehabilitation*** of these areas caused less destruction on social life and was economic. By the mid seventies, it became a tenet to preserve built environment and an alternative to meet the space needs. There were obvious benefits to **reuse*** existing buildings such as pure costs and social values³⁹.

In the same period, with the improvements of technology which is related to the change in the production and marketing of the industrial companies, industrial buildings and sites were abandoned. However, industrial buildings dominated the skyline in many towns, and people moved in from the countryside. The large scale soon became an ideal in other spheres where societies function – such as consumption, transportation, construction, agriculture, health care, and education. The large-scale industrial areas and all their buildings emerged as a problem of city fabric.⁴⁰

Firstly, the term of adaptive reuse is used in the USA as an ingredient of rehabilitation. Adaptive reuse is called as such referring to the redundancy of the term 'reuse'. Old

38 Tekeli, İ. (2011). Toplu eserler (15) Türkiye'nin kent planlama ve kent araştırmaları tarihi yazıları . İstanbul: Tarih Vakfı.pp.32

*Rehabilitation: To restore to good condition. American Heritage Dictionary.

*Reuse: To use again, especially after salvaging or special treatment of process. American Heritage Dictionary.

39 Advisory Council on Historic Preservation, Adaptive Use: A Survey of the Construction Costs, Washington, D.C., vol. 4, no. 4, June 1976.

40 Isacson, M., (2011). The Reuse of Large-scale Industrial Areas, Reusing the industrial past by the Tammerkoski Rapids: discussions on the value of industrial heritage. Tampere [Finland: Pirkanmaa Provincial Museum.Pp.54

buildings offered opportunities to perpetuate cultural value; old neighborhoods provided an alternative to planned housing and suburban migration from inner cities⁴¹. Ghirardelli Square in San Francisco is considered to be the first adaptive reuse of an industrial complex. It was formerly **Pioneer Woolen Mill**, then Ghirardelli Chocolate Factory, and today is the prototype for modern malls inside of historic urban structures, typically rehabilitated warehouses (Figure 8). In 1964, after an extensive renovation, the factory was revived as a 176,000 square-foot retail center with a brick-terraced courtyard and restaurants.⁴²

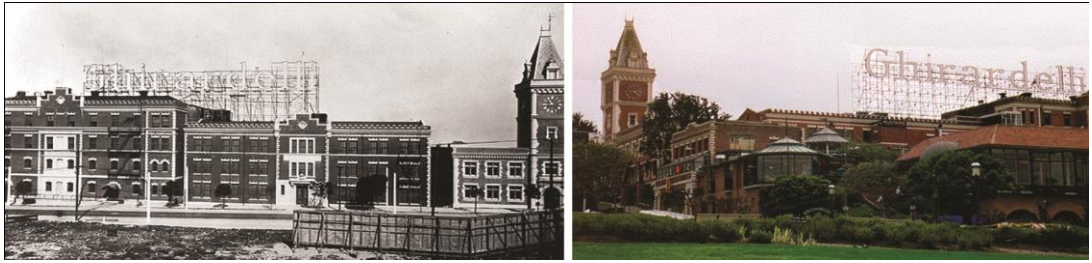


Figure 8. Ghirardelli Chocolate Factory in 1936 and today. (<http://foundsf.org> access date: 10.08.2012)

Adaptive reuse is described as developing a new use for the historic buildings that have potentials to continue their existence. The process is seen as a component of rehabilitation⁴³. In some cases, it is impossible for the building continue its usage with its authentic function. By assuming a new function, the building gains a fresh character. According to Kuban, adapting reuse differentiates from classical conservation methods in terms of including both conservation and transformation activities to the building.⁴⁴

With their large open spaces, industrial buildings are especially available for transformation. There are countless reuse options available for industrial buildings. Some

41 Asia Conserved, Lessons Learned from the UNESCO Asia-Pacific Heritage Awards for Culture Heritage Conservation (2000-2004).

42 Cantell, F.C. (2005), Submitted in partial fulfillment of the requirement for the degree Master of Urban and Regional Planning, Virginia Polytechnic Institute and State University.

43 Ibid,

44 Aydın, D. & Yıldız, E. (2010). Yeniden Kullanıma Adaptasyonda Bina Performansının Kullanıcılar Üzerinden Değerlendirilmesi, METU JFA: 27 (1). 1-22.

of these are museums, art studios, live-work units, offices, residential units, schools, retail, and increasingly more are combining several uses together. Finally, Struever Bros. Eccles & Rouse, redeveloped Baltimore's Inner Harbor with the adaptive reuse of several industrial buildings and new construction.⁴⁵

In the current age of environmental consciousness, demolition of industrial buildings and sites can no longer be justified. The conservation of these buildings and the requalification of the surroundings can only be guaranteed by appropriate reuse. The reuse of industrial buildings has become economically feasible, due to their flexibility, adaptability, and multi-functionality.⁴⁶

Interests in the reuse of redundant industrial areas were increased by the actions of various local and international organizations on the conservation of industrial monuments, by their enlisting on the UNESCO World Heritage List and by national engagement. Dwellings, schools, universities, art centers, museums, as well as leisure activities are among the functions now located in former industrial sites. At the time, it was very important to assure society that such reuse is possible without examining the necessity to retain the sites' identity, etc.

Today, industrial areas offer significant serious potential to meet the needs of the cities. They became parts of large-scale projects with their large areas and fabrics. At the beginning, the only profit in reuse was considered to prevent their demolish; today, this aim is replaced by the concept of conservation. Even at the later date of reusing them, their historic, representational, symbolic, commemorative values excluded.

As a preservation tool, recycling of historic buildings is important and effective. Reuse, adaptive reuse and rehabilitation terms identify with the initial works. It was firstly a method to protect historic buildings from demolishing⁴⁷. However, new developments and new positions of industrial areas in city fabric made them more than places that have reuse potential. Thus, 'transformation' term is used for these areas due to their potential

45Aydın, D. & Yaldız, E. (2010). Yeniden Kullanima Adaptasyonda Bina Performansinin Kullanıcılar Üzerinden Değerlendirilmesi, METU JFA: 27 (1). 1-22.

46 Hinnerichsen, M. (2011). Sustainable Industrial Heritage: Reuse Models and Concepts, Reusing the industrial past by the Tammerkoski Rapids: discussions on the value of industrial heritage. Tampere [Finland: Pirkanmaa Provincial Museum.Pp.61

47 Advisory Council on Historic Preservation, Adaptive Use: A Survey of the Construction Costs, Washington, D.C., vol. 4, no. 4, June 1976.

of generating the whole city with development plans or urban transformation and urban regeneration projects, which aim to create a new image in the cities as in the 19th century. In this period, transformation plans ceased to be utopia and became feasible. For instance, the Docklands project whose the key strategy is to construct large-scale housing projects and attract industry, is a project spread into eight square miles. As a part of this large-scale urban transformation project, many industrial buildings in the area started to be reused (Figure 9).⁴⁸



Figure 9. Surrey Docks (at the beginning of the 1980s) before transformation and Surrey Quays Shopping Centre (1996) after transformation.

Railway buildings within the scope of industrial heritage also offer appropriate spaces to assume new functions. One of the examples of unfunctional buildings is Atocha Terminal, which is the first terminal building in Madrid, Spain. After a competition, the existing station was transformed into a mix-use building by taking the trains out of service and converting places in the building to shops, cafes, information desks, ticket kiosks and a nightclub. Moreover, the concourse has been given a new function of tropical garden (Figure 10). Later, the new terminal was constructed adjacent to the existing one⁴⁹

As a part of industrial buildings, railway sites and structures are part of transformation projects. The large areas in the city centers, which may be the most central location in terms of industrial heritage, they are considered to have potential to transform as a site with its adjacent environment and as integrated areas via large-scale development plans

48 Gizem ERDOĞAN, (unpublished collections.)

49 <http://www.dailymail.co.uk> (date taken: 20.08.2012)

or urban transformation and regeneration projects. The Oslo train station is an example that is transformed as part of large-scale urban redevelopment plans. After a competition, which is organized to solve the chaotic condition of the area showing lack of coherence and flexibility to correspond the function or the city, the project of Space Group was chosen. The project offers a mix- use function consisting of the terminal, shopping mall, and hotel. However, project itself is tried to be the solution to addresses the interruption between the east- west and north-south of the city. In the project, a grand cut is designed to facilitate orientation and provide entrances in each direction to the area and giving a new architectural identity to it (Figure 11). In essence, the existing terminal is converted into a hotel⁵⁰.



Figure 10. Atocha Station from outside and from the tropical garden.

(<http://www.dailymail.co.uk>)

As demonstrated before, railway areas were considered as estates that should be conserved from the beginning of the century. Today, many small scale and large-scale conservation projects exist in the world. However, in this chapter the subject of the transportation, reasons, and the processes of the transportation and common examples are at the forefront.

Today in many cities in the world witness transformation of stations areas with not simple adaptations, but rather all the adjacent areas with the station area are exposed to extreme changes⁵¹. The cities and the cultural heritage in these railway areas are affected directly from these significant interventions. It is essential to understand the reasons and the

⁵⁰ http://www.spacegroup.no/projects/oslo_s (date taken: 20.08.2012)

⁵¹ Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

results of these projects to find solutions and prevent the irreversible consequences of them.



Figure 11. The Transformation Project of Oslo Railway area
(<http://www.spacegroup.no/projects/oslo>, access taken: 20.08.2012)

In order to understand the process of transformation and its products, three countries in Europe are examined with their managerial status, conservation approaches to railway heritages, and the examples of the transformation projects. In accordance with the three phases of railway history, firstly, England is a useful precedent given that it is the birthplace of railway technology, representing the golden age phase. Secondly, Germany is taken into consideration for the post war policies with its rapid development, representing one of the countries that lost the Second World War. France is the final example because of its being the first European country using high-speed railway system, which marks the start the Renaissance phase of the railway history. By means of examples from each country, it is attempt to be indicated how different or similar transportation policies or conservation approaches affect the transformation of railway areas. Moreover, to show the diversities among the countries and contexts, examples with different design concerns are chosen .

The transformation process of Turkey was examined related to the history of urbanization, the legal regulations, and diverse qualified examples. The Turkish examples, because of the very recent concept of railway transformations, are chosen in limited practices. The criteria were that the transformation was already in place or existence of a project according to the signing of a legal agreement.

2.1. TRANSFORMATION OF RAILWAY AREAS IN EUROPE

In the 19th century, stations in cities were constructed as symbols of industrialization opening the gate to a new world. Stations strongly affected different aspects of city development such as mobility, city planning, architecture and urban development. As such, stations gained an identity in relationship with the city. Furthermore, station design was reflected on the establishment of a railroad network. The necessity of rail companies posed new challenges for the cities, not only in terms of urbanization, but also in terms of network construction, network design and architecture. Railway stations extended after the Second World War in many countries to non-places or even negative environments.

After the 1980s, this evolution stopped and a new generation of railway stations and railway neighborhoods are born. Stations are rediscovered, and even reinvented. A renewed sensation of station areas is experienced, improving the integration into the urban fabric. This new trend raises several questions: questions about urban planning and mobility, livability, but also about sustainability, heritage, and social embedding of urban regeneration in historic sites and neighborhoods.

In line with the changes in Europe itself related with the internationalization, the urban pattern in the cities also change. Many redevelopments plans are on the agenda. The railway areas and their adjacent surroundings are at the center of these redevelopment plans as transformation projects. Each project displays much significant information in it⁵²

Many railway transformations in Europe were induced for three reasons. For most of the examples, all of these three are reasons of the transformation⁵³. They trigger each other:

1. Technological improvements (High Speed Rail)
2. Location of the railway areas in the cities
3. Social changes

In the world, parallel to the improvement of global economy, global transportation corridors are aimed to be formed. Railways also go through the structural and technical alterations. In the process of structural alteration, the structure of railway itself and the

52 Bertolini, L. & T. Spit. (1998) *Cities on Rails, The redevelopment of railway station areas*,. London/ New York: E & FN Spon.

53 Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

relations with the governments are queried and reorganized. Today, more than one administrators' activity on the infrastructure of the railway provides increasing competition in sector. Besides, increasing the force of competition with the other transportation systems makes the necessity of the determination the rules. These rules are related to using the infrastructure and the compatibility between the countries. In the process of the technical alteration, technical compatibility of the technical infrastructure are tried to be provided for the international integration of the railways.⁵⁴

Transportation is the oldest companion of European Union. Primary targets for transport are as below⁵⁵:

- Completing the internal market,
- Provide sustainable development,
- Expansion of the main lines to whole Europe,
- Raising Security,
- Developing the international collaboration,

As being the primary transportation system in the world, highway systems cause pollution, accidents, traffic congestion, and limited mobility, which are the driving force of the economy. All those drawbacks resulted in shifting importance to railway system. As a result of this, first started to be used in Japan 30 years ago, high speed trains became widespread in Europe after the 1980s. It was decided to integrate whole European railway network and accomplish a high-speed rail network, which includes central and east European countries. In line with these decisions France, Holland, and Germany railway administrations carried out the high-speed rail project.⁵⁶

The average speed of the high-speed trains, which are designed with steel wheel and steel rail technology and need an appropriate infrastructure for this high speed, is 350 km/hour. As a result of this speed the transporting duration decreases and has a comparative advantage over other transportation systems, airway and highway. With the modifications, it becomes possible to increase the speed of a conventional line to 165-250 km. This is an economic solution and is very popular in the world.⁵⁷

54 UIC, 1998

55 Ibid,

56 Ibid,

57 Ibid,

During the technical alterations, it is tried to provide the compatibility of the technical infrastructure by providing integrity of performance, security, credibility, comfort, and environmental standards. In this context, with the participation of UIC (International Union of Railway) the aims are to develop⁵⁸:

- Easy accessible information of passengers and loads information distribution system.
- European Train control and command system,
- European railway traffic management system,
- European communication system,
- European railway radio system,

In 1999, the European Commission took the decision of compatible technology and infrastructure. They determined fourteen Trans European Networks (TEN) projects that contain the ports, airports, highways and nine railway lines. Four of those nine railway projects are high-speed projects⁵⁹.

The route of the first high-speed train was between Paris and Lyon that opened on 27 September 1981. Today, high-speed lines are in use, or planned, from China to the US and from Argentina to Morocco. A Europe-wide network is under construction in France, Germany, the Benelux, Spain, and Italy. It is used both on land and on the water. Even Britain joined the line them after ignoring high-speed railway for thirty years. In 2007, a high-speed line from London to the Channel Tunnel was constructed⁶⁰. Today, in the European High-Speed map, it is seen the high-speed lines (refers to the more than 250 km/h) extent throughout Europe. (Figure 12)

European countries decided to be parts of a common European high-speed train system while establishing their own interior transportation systems. With this decision, in order to improve Europe together, it is aimed to make projects that highlight the integration and good thinking on transportation systems.⁶¹

58 Commission of the European Communities, Brussels, 12.9.2001.WHYTE PAPER, European transport policy for 2010: time to decide, Brussels.

59 Devlet Planlama Teşkilatı, 2001, Ulaştırma Özel İhtisas Komisyonu Demiryolu Ulaştırması Alt Komisyonu Raporu, no:dpt : 2580– ÖİK: 592, T.C. başbakanlık devlet planlama teşkilatı müsteşarlığı yayıñ Ankara

60 <http://www.independent.co.uk/news/world/europe/life-on-the-fast-track-thirty-years-of-the-tgv-2265455.html>

61 Sevgili, F. (2008), Demiryolu Mülkiyetinde Yer Alan Atıl Taşımacıların Değerlendirilmesine İlişkin Bir Model Önerisi, unpublished doctorate thesis, Gazi University.

However, during these processes, all the countries changed their railway system in order to implement high-speed rail and integrate into Europe. In 1986, with the establishment of the European Economic Area (EEA) it was firstly offered to create a European internal market enabling freedom in the movement of goods, persons, services, and capital. The state of companies including the railway ones, which operated on a national basis and taxes, became profitable with the rising of liberalization, deregulation and competitiveness discourses in the world. In 1991, the directive that all railway companies in the EU should operate without any state subsidies to make them more competitive on the international transport market through better efficiency passed.⁶²

The EU White Book of 2006 stated that the depressed freight transport system could only be made efficient and competitive through an increase in market-oriented measures.

From then on private railway companies are key actors in transportation systems. Consequently the railway policies, demands of the railway companies have to be taken into consideration. They are commercial organizations with economic expectations on railway transportation. For transformation and conservation projects, these companies are the biggest shareholders. Most of the projects require huge investments and not recycled before 5 to 10 years.⁶³

Urban patterns change reflecting the dynamic change in Europe as well as the contextual change brought in by international concessions on transportation policies. For instance, it was agreed that in the stance of the idea that the noisy, crowded railway stations needed to be far from the city. However, population increased, industry improved in time as well. Cities expanded to cover new lands for people and facilities. Every land to build a structure became valuable. On the other hand, usage of the railway transportation decreases. Until the implementation of redevelopment railway transportation, many station areas were excluded. Utilization density decreased drastically. On the other hand, accessibility and attractive capacity increased related to the central location.⁶⁴

62 Rombac, A. & Thul, F. (2007).The European Union, railway privatisation and the attack on workers' living standards.Published by the International Committee of the Fourth International (ICFI). (<http://www.wsws.org/articles/2007/nov2007/euran08.shtml> date taken: 30.08.2012)

63 Devlet Planlama Teşkilatı, 2001, Ulaştırma Özel İhtisas Komisyonu Demiryolu Ulaştırması Alt Komisyonu Raporu, no:dpt : 2580– ÖİK: 592, T.C. başbakanlık devlet planlama teşkilatımüsteşarlığı yayın, Ankara

64 Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

High-speed railway system causes reconsideration of station areas. Since railway transportation became the primary transportation system, railway stations are predicted to be used more than before or not to be used anymore because of the cancelling of the line on which they are located thus, their locations required reinterpretations. These locations are profitable; thus attract interest of railway companies and locals authorities for integration into city life by the profit-making organizations such as railway companies and the municipalities.



Figure 12. European High-Speed Railway Map in 2012 (<http://www.uic.org/> date taken: 20.07.2012)

Social changes and the differentiation of daily life practices directly affect the transformation of railway areas. The needs of the societies changed. Convergence of different inference is the easy way to take the people's attention and increase the utilization density. This aim does not lead to generation of new disused areas. Rather than this, resolving the problems of transportation in the countries and between the countries

is the purpose. In addition, if any disused buildings are made up of, it is aimed to provide the integration to the city and reuse them.⁶⁵

According to Bertolini and Spit (1998), most long term redevelopment plans not only aim to revitalize non-used areas adjacent to the station buildings but also tend to propose the new mixed use districts centered around the railway areas as the 'catalyst' for further urban development. The railway station locations are proposed as potential local centers through these large scale and phased redevelopment plans. For such large-scale redevelopment of the whole station location typical strategies might include the use of vertically stratified.⁶⁶

2.1.1. Transformation Process of Railway Areas in three European countries: England, Germany, and France

England is the homeland of railway. In the 1840s while there were not any railway lines in other European countries, England had lines just about same amount today. There are numerous railway companies leading to competition such that each company has its own station in London. The private companies constructed railways regular land close to each other and most of this old arrangement have been conserved in England⁶⁷

In the 19th century, railway network grew more and more. It had a high financial system based throughout England and also in many other parts of the world, including the United States, until 1914.

In the 1920s, more than 50 companies had financial trouble because of increasing use in highways. In order to raise actions they decided to gather under the four big companies and they called it “grouping”. After the Second World War, the railway lines were nationalized. Railways were examined by government rigidly and was received a public support⁶⁸

65 Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

66 Bertolini, L, &T. Spit. (1998) Cities on Rails, The redevelopment of railway station areas,. London/ New York: E & FN Spon.

67 Sevgili, F. (2008), Demiryolu Mülkiyetinde Yer Alan Atıl Taşımacıların Değerlendirilmesine İlişkin Bir Model Önerisi, unpublished doctorate thesis, Gazi University.

68 Ibid,

After 1980, related to the liberal movement in Europe, although nationalization was considered a way to develop in 1948, after 40 years in 1980s, it turned to inverse direction this policy reversed in line with liberal policies of Thatcher. The conservative government privatized railway along with some other public services⁶⁹

In the UK, British Rail was broken up in 1994 and split into nearly 100 separate companies. Between 1995 and 1997 privatization resulted in the creation of 50 larger organizations⁷⁰. The tracks and infrastructure were handed over to the private group Rail track. The results are⁷¹:

- With the horizontal separation of the operations from infrastructure, administrations were sold to companies and individuals.
- Maintenance and building of infrastructures are sold to private sector.
- Load operations were sold to private sector
- More than 200 hundred companies are established for these concessions.

England is the extreme example of railway privatization. Both load and passenger transportation were distributed among private operators. There were 25 companies and a few small operators. Virgin and GNER operate intercity networks and the others operate the local lines. There are five companies active on load transportation (Figure 13)⁷²

The use of the existing lines continues with adaptation. That is why transformation of the high-speed train stations did not cause disuse of some parts of the network or lines.

In Germany, the first line was built in 1834 caused by obstacles in political unity and conservatism. Lines were short and designed to serve the suburban and local trains. By the 1840s, lines connected major cities, although each German state was responsible for the lines within its own borders. In 1850, a base of a major network was established to sustain

69 European Foundation for The Improvement of Living and Working Condition,(2005). Profile of Railway Sector in England.

70 Rombac, A. & Thul, F. (2007).The European Union, railway privatisation and the attack on workers' living standards.Published by the International Committee of the Fourth International (ICFI). (<http://www.wsws.org/articles/2007/nov2007/eur-n08.shtml> date taken: 30.08.2012)

71 Sevgili, F. (2008), Demiryolu Mülkiyetinde Yer Alan Atıl Taşıma Araçlarının Değerlendirilmesine İlişkin Bir Model Önerisi, unpublished doctorate thesis, Gazi University.

72 Bilgin, V.,Genç, T., Akin, F., Bayraktar, G., Basbug, A., Durgun, S., "21. yy'a Dogru Demiryollarının Modernizasyonu Yeni Bir Gelisme Stratejisi", Demiryol- _s Sendikası Basın ve Halkla _liskiler Dairesi, Ankara, 58, 60,61 (1996).

connection in Europe besides political and financial contribution. In addition to commercial relations with other countries and commercial politics, military and post war policies were also affected by railway transportation system in Germany.

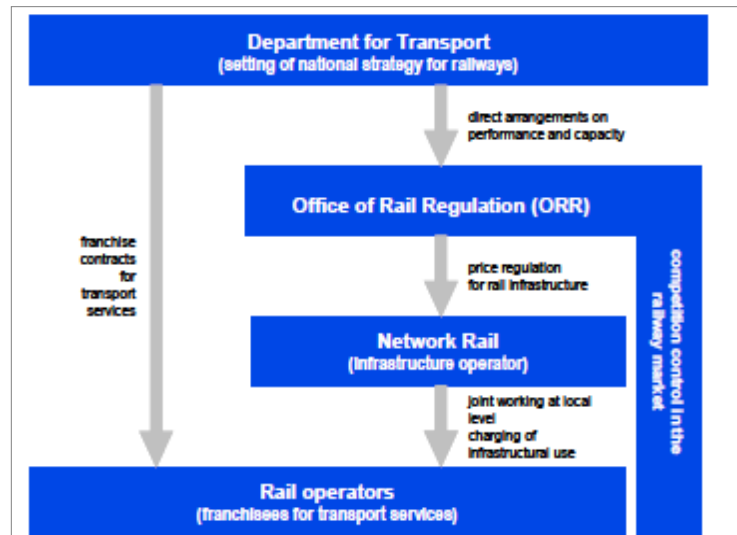


Figure 13. The Structure of English Railway Network (SCI Verkehr GmbH, 2005)

Lacking a technological base at first, the Germans imported their engineering and hardware from Britain, but quickly learned the skills necessary to operate and expand the railways. In many cities, the new railway shops were the centers of technological awareness and training. As such by 1850, Germany became self sufficient in meeting the demands of railroad construction, and the railways were major impetus for the growth of the new steel industry. Observers found that even as late as 1890, their engineering was inferior to Britain's. However, German unification in 1870 stimulated consolidation, nationalization into state-owned companies, and further rapid growth.

The structure of the German railway network, exhibits strong centralism and hierarchy, suggesting different decision makers in different levels are distinctive. These levels products of a federal structure consisting of states and federal governments. Minister

structure and responsibilities differ in each state. Furthermore, some responsibilities are on municipalities and sectoral organizations (Figure 14).⁷³

The privatization of federal railways in Germany took long. The process began with the establishment of Deutsche Bahn (DB) after the railway reform in 1994. The state railway company of the former East Germany merged with its counterpart in West Germany to form Deutsche Bahn AG, fully owned by the German government. In 1999, Deutsche Bahn was separated into five companies. Private companies were allowed to operate freight and regional passenger services for the first time. Despite the privatization of the sector, there was still a differentiation between the public and private railways. Public expression was used only for the companies' or biggest shareholder that was government. Non public companies' partial owners were municipalities or states⁷⁴.

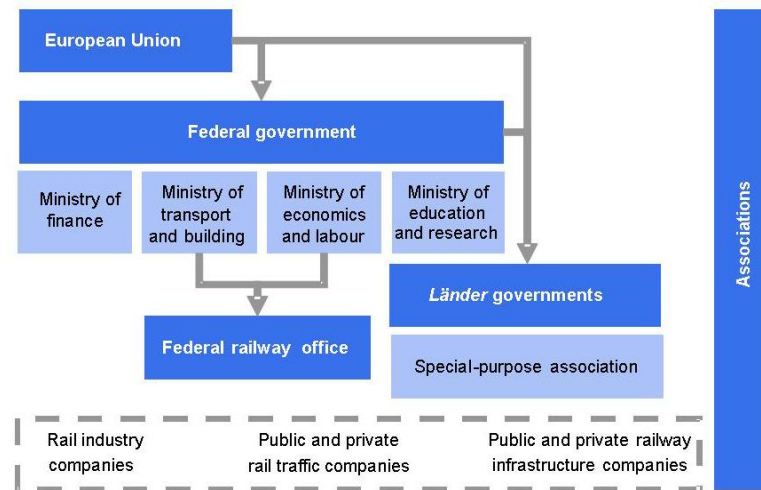


Figure 14. The Structure of German Railway Network (SCI Verkehr GmbH, 2004)

After 1993, DB had a program for recovery and valorization of their railway property in the name of "Project 21".^{*} The main aim was to transform the station areas, which were built

73 Sevgili, F. (2008), Demiryolu Mülkiyetinde Yer Alan Atıl Taşımacıların Değerlendirilmesine İlişkin Bir Model Önerisi, unpublished doctorate thesis, Gazi University.

74 European Foundation for The Improvement of Living and Working Condition,(2005). Profile of Railway Sector in Germany.

^{*}The number of 21 refers to the 21th century. Project 21 is seen as the product of 21. Th century.

in the 19th century. The common concepts of the projects carried everything but the historical parts of the areas underground. The historical parts were to be the parts of the urban rehabilitation projects by conducted by the public administration. They can be perceived as attraction points of the city landscape. The first projects were Leipzig 21 and Koln 21, Stuttgart 21, Frankfurt 21 and Munich 21. However, technological improvements and the integration into the international railway network result in abandoning some railway areas and stations. Firstly, these disused areas are determined by considering the railway terminals, stations, and lines. The determination of disused areas took 2 years. 85 % of these lands were given to DB and 15 % of the lands were given to companies.⁷⁵

In France⁷⁶ railway history began in the beginning of the 19th century with the first attempts found in 1839. At that time, France was behind the other European countries in railway development. Despite some geographical and technological reasons, the main reason was the negative effect of the democratization project on the decision-making system.

In France, railways became a national medium for the modernization of backward regions. Consequently, France built a centralized system that radiated from Paris (plus lines that cut east to west in the south). This design intended to achieve political and cultural goals rather than maximize efficiency. After some consolidation, six companies controlled monopolies in their regions, subject to close control by the government in terms of fares, finances, and even minute technical details. Private operating companies provided management, hired labor, laid the tracks as well as built and operated stations. The system helped to modernize the parts of rural France it reached, but it did not help create local industrial centers. The railways probably helped the industrial revolution in France by facilitating a national market for raw materials, wine, and cheese and imported manufactured products. Yet the goals set by the French for their railway system were defined in moral, political, and military rather than economic terms. Other infrastructure needs in rural France, such as better roads and canals, were neglected because of the expense of the railways, so it seems likely that there were not negative effects in areas not served by the trains.

⁷⁶ The information for this title is taken from <http://www.independent.co.uk/news/world/europe/life-on-the-fast-track-thirty-years-of-the-tgv-2265455.html>

France is the first country that used high-speed railway (HSR system, and thus started the phase of Renaissance of railway .The train a Grande Vitesse started to operate in 1981 between Paris and Lyon. Since then its hub and spoke network has developed considerably and revolutionized the way people travel, taking market share from air and road travel ().

In accordance with the European Union regulations, France rail operations and infrastructure management are separated by establishing French Rail Network (RFF) in 1997, as the infrastructure manager. It focuses on the debt financing and manages the French National Railway Corporation (SNFC), which belongs to the government and comprises hundreds of companies. For the French bourgeoisie, the generous public service pension scheme is not only viewed as a barrier to increasing the rate of profit; its abolition is also an indispensable requirement for the restructuring of the SNCF into a profit-making, internationally competitive organization.

2.1.2. Examples of Transformation of Railway Areas in three Europe countries: England, Germany, and France

King's Cross⁷⁷ in London was built as a break station in 1852 and after a decade its centennial accompanist, St Pancras opened in 1867. King's Cross has always played a vital role in the commercial life of the capital. Today, it has a central position rendering the area a more important part of London than ever before.

After the 1980s related to the changing policies in EU on railway transportation, many redevelopment plans have been prepared for King's Cross railway area. The main aim of these plans is to integrate the Channel Tunnel Rail Link (CTRL)* intersection to promote local benefits. In 2005, John McAslan + Partners' (JMP's) became the lead architects and master planners of transformation of the area.

For integration of the area to the city business administration is tried to be supported by adding new functions like residence, office etc. However, the project involves restorations and interventions as well. Eastern range is restored in 2009. Main train shed, suburban train shed, and western shed buildings were revitalized. According to the master plan in

⁷⁷ The information for this title is taken from www.kingscrosscentral.com

*CTRL is an international rail transport network with associated urban redevelopment

line with infrastructural, social and commercial changes occurring in the area, the is attempted to connect to the massive King's Cross Central scheme, St Pancras, and surrounding context (Figure 15).



Figure 15. King's Cross Transformation Project prepared by John McAslan + Partners
(www.kingscross.co.uk/ date taken: 30.08.2012)

In the west side of the station a semicircular concourse, which will be the new entrance, was built. This hall is complementary to the next station Pancras. Unnecessary buildings were demolished in order to get a wide-open space. In addition to that connection and integration with the subway and the main line were supplied (Figure 16).

“The transformation of King’s Cross Station is a significant piece of infrastructure renewal and place making for London, and like its near neighbor, St Pancras International station, it aims high. The words and images here are a modest salute to this decade-long Endeavour, set for completion to coincide with London’s 2012 Olympics.”

John McAslan

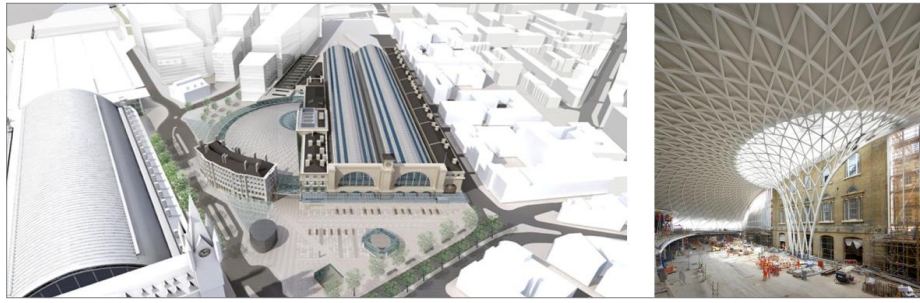


Figure 16. King's Cross Transformation Project (<http://www.guardian.co.uk/> date: 20.07.2012)

The centerpiece of the £500m redevelopment is the new vaulted, semi-circular concourse to the west of the existing station. It has become Europe's largest single-span station structure. The western concourse, which runs alongside the façade of the Western Range, is set to become an architectural gateway to the King's Cross Central mixed-use developments. King's Cross Western Range is the historic station's biggest component and will provide the greatest range of uses. The Northern Wing, destroyed by bombing in the World War II, has been rebuilt in line with its original design. 250m long, 22m high and 65m wide station's Main Train Shed is being transformed by John McAslan + Partners' several major interventions (Figure 17).

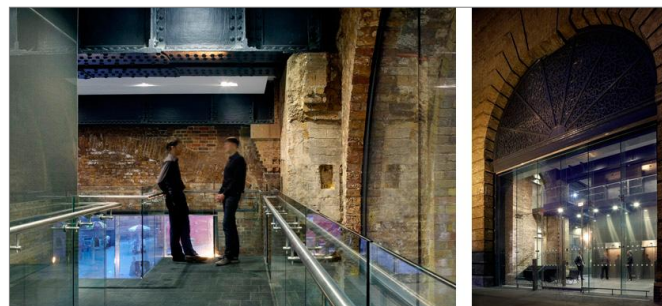


Figure 17. Interior Interventions of King's Cross Railway Station (<http://www.guardian.co.uk/> date taken: 20.07.2012)

Integrating the main and suburban train sheds for the first time created a completely coherent ground plan for passenger movements into and through the station. Improvements to the Suburban Train Shed located to the north of the Western Concourse and Western Range buildings will enhance the operation of its three platforms.

Stuttgart 21 project⁷⁸ come forward from the examples in Germany as a part of Project 21 since it is very significant, special and common example. Terminal is located in the middle of the railway network of Germany but does not connect to it. The project, as a portion of the European high speed route corridor between Paris and Budapest, intends to change the main train station in Stuttgart from a head station to a transit station and sustains an improvement of the train traffic in the surrounding region. It is aimed to make the terminal the most important and central node and decrease the distance between other terminals. With this project, the city tried to be part of the area attaining more modern view. In addition, the design of the terminal is thought to be a prestige for the city. For these reasons, the Hauptbahnhof (current station building) will be converted in museum.

The original rail link between Stuttgart and Ulm was built in 1850 and is no longer able to meet the demands of a modern rail transit. This section of the rail network is part of the European high-speed route, which runs from Paris via Strasbourg, Stuttgart, Munich, and Vienna to Bratislava and Budapest. For this reason, the Deutsche Bahn AG, the state of Baden-Wuerttemberg, the associated region and the city of Stuttgart, the federal government and the European Union have begun to implement one of the biggest railway projects in Europe. The projects consist of the construction of the 60 kilometer long railway line from Stuttgart to Ulm and the transformation of the Stuttgart main railway station from a terminal station to an underground station.

The old railway station located in the center of the city, near the largest green area Schlobgarten. As a part of project 21, Stuttgart 21 also moves the station underground. In the project the green area, Schlobgarten, will be linked to the open space between new district and the old station. A new complex including commercial, entertainment and cultural functions is created. Some of these functions are in the old station and it is possible to reach the stations from the underground tracks. (Figure 18)

78 Ingenhoven, O. u., & Peat, R. (1999). Ingenhoven, Overdiek und Partner - works. Basel: Birkhäuser.



Figure 18. The former indicates the Stuttgart 21 Project area and the latter one indicates the new relation of the old station, green area, and the new construction.

(<http://www.bahnprojekt-stuttgart-ulm.de/> access date: 28.09.2012)

A tunnel reaching the airport and the planned rapid transit route to Ulm will connect the new underground transit station in the heart of Stuttgart. Tunnels in open cut construction, railway and road structures, trough constructions, cuttings, paths, and other engineering structures will be developed. The inner city ring route through the Stuttgart underground will considerably shorten the travel time for passengers. Construction work is scheduled to be completed by the end of 2019. (Figure 19)

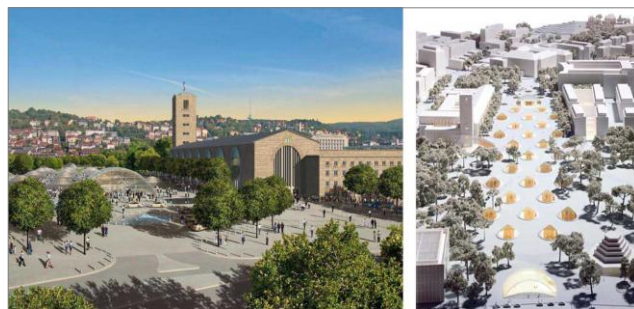


Figure 19. Stuttgart 21 Transformation Project (<http://www.guardian.co.uk/> date taken: 20.07.2011)

Dorsay⁷⁹ (Figure 20) is one of the first transformation examples of railway stations. At the end of the 19th century, Paris- Orieans Railway Company designed d'Orsay railway station in order to carry passengers to a more central area rather than Austerlitz, which was located outside of Paris. The station opened to the public in 1900 with Paris Universal Exhibition. It exhibits the features of its area with iron glass materials in interior and stone cladding in exterior. However, with improving technology vapor trains, which are based for the design of the building, lose the function that of what makes the building nonfunctional.



Figure 20. Before and After Photographs of Dorsay Station (Former: <http://www.musee-orsay.fr> Latter: www.triposo.com)

After 1939 terminal was used only for suburban trains, until 1961 terminal lost all popularity and function. In 1961, the train station was abandoned for good and SNCF, so the government, decided to sell the railway area. In 1978 the building was registered as heritage. After that, it was decided to transform the building to a museum. In 1986, the station opened to the public as a museum, which displays collections of art from the period from 1848 to 1914.

⁷⁹ Information related to this building is taken in [http:// www.musee-orsay.fr](http://www.musee-orsay.fr) web site.

2.2. TRANSFORMATION OF RAILWAY AREAS IN TURKEY

2.2.1. Transformation Process of Railway Areas in Turkey

After industrial revolution, the developing European capitalism did not affect only the cities of industrialized countries, but also the neighboring countries. In non-industrialized Ottoman Empire, this international project, born and developed in Europe, had an impact on the politics and economic structure after the 1840s. Firstly, the Ottoman Empire opened to the capitalist relations in marketing system, and secondly, the modernist elitists had implemented some reforms. In this respect, private and public space concepts in the social structure of the empire became on the agenda. Stratification, possession, individual rights were subjected. Instead of military hierarchy, bureaucratization improved. Hence, after the 1860s especially in the coastal cities, hotels, banks, commercial residences of the time were constructed. All of these brought differentiation in the settlements.⁸⁰

The gradually set imperialist control is reflected on the local dynamics of the empire causing structural alterations, which in particularly progresses on the production activities and the increasing international commerce. A seaway network started to be constructed consisting railway stations and vapor ships. In the light of these improvements, railway, dock, and ports were constructed by the foreigners.⁸¹

While Europe was experiencing the golden age of railway, the Ottomans just started to construct railways. However, this process did not progress free from Europe. In line with the need for new markets, industrialized countries, namely England, France and Germany, became the major participants of the railway structures on the Ottoman lands. Foreign companies which mostly belonged to the aforementioned countries, had railway concessions with the Ottoman Empire and had different influence areas. Via concessions of profit guarantee and operating mines 20 km around of the railway lines, railway buildings expanded through Anatolia. The routes of the lines are determined according to economical and political will of these countries.⁸²

The railway system in Ottoman Empire is developed to integrate to external forces that influence different regions rather than ensuring the completeness of country's domestic

80 Tekeli, I. (2011). Toplu eserler (15) Türkiye'nin kent planlama ve kent araştırmaları tarihi yazıları (pp. 47-50). İstanbul: Tarih Vakfı.

81 Ibid,

82Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara

market. The lines were desperate because foreign companies that did not want to cooperate conducted them.⁸³

The Turkish construction masters learned the new technologies of railway buildings constructed by Europeans. European architects synthesized their modern construction technique and style with the traditional Ottoman architecture. As a result of this, architectural features of many railway buildings were similar. In essence, these similarities were results of political concerns.

After the Independence War, the leading group of the war took the mission of establishing a national republican country initially uncontested government. They developed strategies in spatial scale. Solving the transportation problem was one of the major parts of these strategies. The transportation policies tried to be implemented mostly related to railway system by taking Europe as a model. Constructing factories on the railway lines penetrating small towns was also a part of transportation and industrialization policies⁸⁴.

While Europe was in the post war phase of the railway (referring to the after World War I), the young republic tried to nationalize railways belonging to foreign companies and set a connected railway network in Anatolia. Until 1940, 3208 km railway line were built⁸⁵. Additionally, many railway buildings were built and the railway areas were developed. Furthermore, taking into account of the benefits of transporting load and passengers by seaway,, efforts were made to develop sea transportation. For this reason in the first and second industrial plan building ports in various places, buying and administrating new ships were planned. However, because of the onset of the World War II, these plans needed to be postponed.⁸⁶

During the republican period, the railway buildings, which were built by local architects, were central to independence and revitalization movements. There was an approach of creating own architectural style combining western and local features.

After World War II, along with European countries, Turkey also entered a period of great change. In order to keep pace with the world, multi party system is introduced as a part of

83 Tekeli, I. (2009). Modernizm, modernite ve Türkiye'nin kent planlama tarihi(pp.110-111). Eminönü, İstanbul: Tarih Vakfı Yurt Yayınları.

84 Ibid,

85 Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara.

86 Ibid,

democratization process. Under the catchword 'liberation', it was given more importance to the private sector. The Marshall Plan from USA corresponded to the same period. The Plan introduced regulations bringing mechanization into agriculture, migration from rural to urban areas, rapid urbanization, emerging slum areas in the big cities.. In the 1960s, industrialization efforts increased. The huge organized industrial zones were heaped a little bit far surrounding of the cities.⁸⁷

While Europe is in the post war phase of the railway (referring to the after World War II), the conversion to the highway demanded transportation from to the railway demanded transportation started to take place. The regulations, the differences of government policy and the helps to decrease the negative effects of the war provided the rapid development of the highways while the railways and the seaways were neglected on the grounds of the difficulties of the construction and the administration. The highways, initially constructed for providing connection of railways, became the main transportation system after the 1950s. Besides that, it should be mentioned in railway respect that Turkish State Railway (TCCD) was established in 1953⁸⁸.

Parallel to the decreasing significance of railway transportation policy, buildings started to be built as ordinary buildings and the existing buildings were left to their own fate. Thus, inactivation process of these areas started. Until the high-speed rail system became on the agenda, these areas were ignored.

The 1980s introduced a new period in the world and in Turkey. The nationalization moves in every layer of the government and institutions were reversed. Liberal doctrine introduced centrality of market based policies, open markets promoting profit seeking. Turkey was affected by liberal economic policies comparatively later because of the coup d'état in 1980. In this respect, the liberal policies are for improving the highway system by supporting the other transportation systems, railway, seaway, and airway. The Turkish governments determine the transportation policies by cooperation with other countries and support from them. The main transportation plan was prepared in 1983, but was not implemented. In this period, some regulations have been made related to railway

87 Tekeli, I. (2009). Modernizm, modernite ve Türkiye'nin kent planlama tarihi(p.112). Eminönü, İstanbul: Tarih Vakfı Yurt Yayınları.

88 Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara

properties to the advantage of private enterprises. The railway structures made profits by retailing.

In the 1990s, with the government led by Turgut Özal, the privatization and opening up to world markets took place. Railway areas and their structures became thoroughly redundant. These properties were subjected important evaluations.

Parallel to the main urban aspect, urban transformation, in those years, Department of Immovable Property (Taşınmaz Mallar Dairesi) was established in TCDD in order to:

- collect information of all buildings and estates in one center,
- follow the improvements and gaining values of the estates,
- follow the process of retailing and tendering.

While Europe is in the renaissance phase of the railway (referring to post 1980s), the influence of high-speed rail just arrived Turkey. From then on, conventional lines were abandoned and tried to be sold in order to take load transportation outside the city, establish logistic centers, make terminals desirable places and meet the municipality's demands despite many objections and warnings. Currently the goals on the railway areas are⁸⁹:

- to sell all the estates that are not needed
- to transform all terminals and stations to malls and cultural centers that brings profits
- to increase the income more than 400% from estates
- to complete the development plan to make at least 10 terminals that are integrated to cities to charming center
- to increase the income 100% from each estate to integrate all stations to the cities and to complete the development plan of 16 of them.

Turkey concluded a number of international agreements with other countries, for setting up partnership with the European Union. According to those agreements, Turkish transportation policies were to comply with those of the European Union's based on integrating the transportation system with neighboring countries and then with Europe. In the agreements that Turkey signed, railway accepted as the primary transportation system.

⁸⁹ Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara

In the study related to the railway transportation, Turkey is accepted as a bridge that connects Europe and Asia (Traceca Project)⁹⁰.

The efforts to get unearned income with railway structures continue by increasing. Selling the estates and getting profits in a short time become a governmental politics. For this aim, it is seen the government negotiated with the municipalities to carry the load centers out of the city in order to utilize the railway areas without railway function and transform into desirable centers. Here are the some relevant regulations of TCDD ⁹¹:

- Railway areas in İstanbul, Ankara, İzmir, Adana, Mersin, Gaziantep, Denizli, Aydın, Samsun, Kayseri, Adapazarı, Isparta, Eskişehir ve Balıkesir are subjected to transformation projects related to the large-scale urban transformation projects.
- Some of these areas are to be used just for the social and commercial needs. If the load transportation function continues in the areas, carrying the load transportation to the logistics centers located outside the city are planned such as to Balıkesir, Gaziantep.
- In 2009 TCDD devolved 9 immovable and 25 station or port areas to privatization agency in order to be sold (15.05.2009 date 9/69 number), namely Eskişehir, Kırklareli, K.Ereğli, Kayseri, Karabük, Bor, Niğde, Balıkesir, Selçuk(Çamlık), Denizli, Uşak, Erzurum, Erzincan, Sivas, Muş, Kurtalan, Diyarbakır, Kahramanmaraş, Gaziantep, Konya, Adana, İskenderun, Isparta, Eğridir.
- The nine immovable that TCDD do not need are: Hereke Station building, Adapazarı station area, Kilimli station building, Karabük bayır mah Tic. Mer., Karabük bayır mah Tic. Mer., Karabük bayır mah Tic. Mer., İzmir Konak Mersinli Çayırılık, Amasya Merkez Hızırpaşa , Hatay Dört Yol Yakacık Arsa and Türbe.

Besides these, there are many registered structures and conservation areas, recorded by the conservation councils in railway sites, which made these areas subject to restoration and conservation projects rather than demolition.

90Avcı,S.(2005), Ulaşım Coğrafyası Açısından Türkiye'nin Ulaşım Politikaları ve Coğrafi Sonuçları, ULUSAL COĞRAFYA KONGRESİ, İstanbul Bildiri Kitabı, pp. 87–96.

91Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara

High-speed rail system requires the continuity of the transportation, at least passenger transportation, in particular in the big cities. The main approach is making the termini areas of these big cities very attractive for meeting social change and changing daily life practices. Increasing the commercial activities and utilization become primary aims. Nonetheless, in some parts of the lines, existing infrastructure can be insufficient. The solution is constructing new high-speed routes, which makes some railway station areas redundant. A different transformation approach is to use the area for the social and cultural needs.

Independent from high-speed railway technology, the decreasing popularity of these areas caused them being neglected and become inactive. The locations of these areas become closer to the city center or interrupt the city expansions. In this respect, with the new needs of the cities the attention to these valuable lands increase. These **redundant** railway areas and structures that are not used any more or less used are subjected to transformation projects.

Understanding the railway transformations in Turkey, these different approaches need to be understood. In the light of this, some examples referring to the diverse approaches are examined.

2.2.2. Examples of Transformation of Railway Areas in Turkey

One of the first high-speed railway lines in Turkey is constructed between Ankara and Eskisehir, which are the two metropolitans of Turkey. The two railway areas at the ends of the line are subjected to the transformation projects.

Ankara station area, which was designed by Architect Sekip Akalin in 1937, exhibits the architectural and urban features of the republican period as the capital's station⁹² and represented the new image of the republic and the ideology of modernization. The primary aim of the republic was to set a railway network which centralized in the capital Ankara. Thus, the area has a very significant role in the ideological and political discourse of the early Republican era.

92 Information related to this building is taken from TCDD Archive.

The area is in use without losing its function until now, despite the disregarded policies related to the railway transportation and areas. Talat Pasa Boulevard surrounds the area in the north, Celal Boulevard in the south, connection road between Talat Pasa Bulvarı and Sıhhiye in the east. There are 17 railroads, 5 platforms, Atatürk and TCDD museums, open air train museum, the workers' houses and a guesthouse, the old second region building, technical support buildings and the registered termini building (Figure 21).⁹³

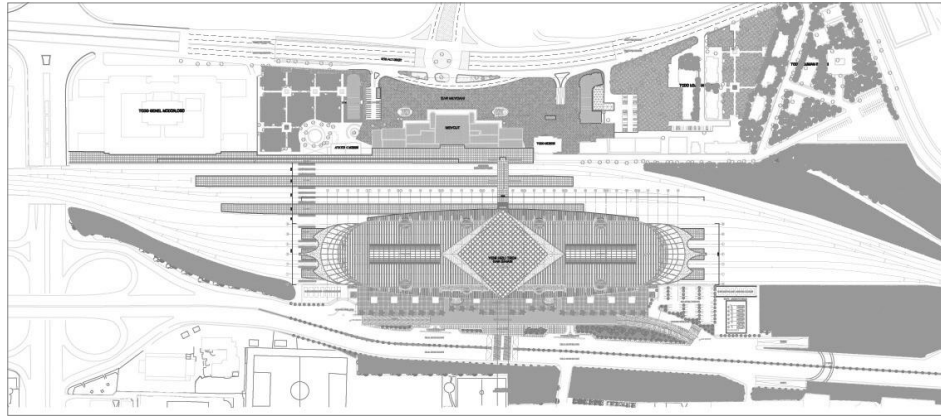


Figure 21. Site Plan of the Transformation project of Ankara Railway Area. (TCDD)

After the high-speed technology was introduced, the area was insufficient to for the new technology. Some infrastructural regulations have been ntedimpleme. However, the existing station was found inadequate and small for the increasing number of the passenger volume. Hence, TCDD prepared a project in 2011 in order to manage the conventional; suburban and high-speed train administration all together and make the area attraction center. (Figure 22)

TCDD wanted a project to supply the new need of the high-speed rail and besides, put up a mix-use building which includes transportation, commercial, social needs of the citizens. In addition, getting a great profit is the main desire of this institution. Existing station building cannot supply all these functions, so parallel to the existing station and the tracks a new building is suggested. The existing station is still in use as a transition area between Talat

93 TCDD Arsivi (Ankara ile ilgili bütün bilgi ve imajlar)

Paşa Street and the new building. TCDD, plans to make an urban scale planning, however the area is just planned in the station area and its close surrounding.



Figure 22. The Transformation project of Ankara Railway Area. (TCDD)

Eskisehir railway area⁹⁴ is located in the other end of the Ankara-Eskişehir high-speed railway line. The station represents the modern Republican city charged to supply the industrial needs. It is located in the junction point of Anatolian railway network. It was serving in its current place since 18 June 1892, for 119 years; with the opening of the line. The station building is the first railway building that was constructed in 1955 after an architectural competition. It is located in a part of the city in a relation with industrial area. In this respect, in 2008, within the registered station building, the conservation council determined the conservation area.

This building becomes a significant symbol of 'the railway city' Eskisehir and conserves its place in city memory. In time with the decreasing use of railway transportation, the station lost its old intensity. However, railway area is located in the city center in a very node point, which is the result of high urbanization in recent years. That makes the area more desirable for diverse institutions. Eskisehir railway area comes forward for also TCDD and the Municipality.

The area is suitable with its physical features, namely size, land use, and so, for the new formations related to new line and structures with its existing fabric and line. The approach of the TCDD is using the area just for passenger transportation by carrying the

⁹⁴ Information related to this building is taken from TCDD.

load transportation to the Hasanbey Logistic Center. By this way, the area can be used for the attractive functions in accordance with the development plan of Eskişehir (Figure 24).

After the launch of high-speed transportation in 2009, many arrangements have been done to the area. At first, the projects were prepared and implemented in cooperation between TCDD and Eskişehir Metropolitan Municipality. In one of the projects, a new mix-used building planned to be constructed parallel to the existing station, which is deemed insufficient to respond to the new high-speed line connections and the needs of the estimated number of passengers. Besides, the existing registered railway station is conserved as a transition building connecting the area to the city center. In fact, the implementation of the project started in 2009.(Figure 23)

TCDD held an architectural competition for the new building that will be operated with the existing station building. The new project is designed to meet the infrastructural needs such as car parking, green area, besides functional needs. With the upper-scale projects, the area is aimed to be a part of urban transformation project. The decisions of the project are given in urban and in building scales.

The urban scale decisions show us the area is used for corresponding the whole city:

- In order to integrate the station area to the city center some part of the line was taken to the underground and three roads passing through on the line were removed.
- A subway connecting the north and south sides of the city for vehicles and pedestrians with a 67.000 m2 car parking area for 2196 vehicles.

The building scale decisions show again the building is planned to be used by all citizens :

- The concept of new structure, symbolizing speed and movement and so in the form of sparkling waves of the sea
- Mix-use functional that there are ticket box offices, checkrooms, TCDD offices, shops, mosques, toilets, cafes and restaurant, cinema halls etc..
- The hotel/business center tower located between the northern side of the new designed main boulevard and the new designed terminal building and the areas including traditional handcraft, shops and cultural center, pools,

- Hotel/business center tower: Reception, lobby, offices, meeting rooms, dining rooms, indoor swimming pool, health club, etc..

However, during the construction, Eskişehir municipality prepared a revision of master plan and changed the location of the station in this plan. It was carried to the east entrance of the city near the sugar factory. The existing railway area was planned as a green and park area.

Izmit railway area⁹⁵, which consists of station building and small-scale railway building such as workers' houses, storages, water depot is located in the junction point of the railway line which starts from east of Izmit and continues to Seka and new promenade. It is close to the new station, marina, and Seka area. The edifices are station building (1870-1873), warehouse (after 1891), shed building (before 1891), workers' houses (end of 19th century), cafeteria(at the beginning of the 20th century), tool room (after 1890), water tank (1873), storages (1980).

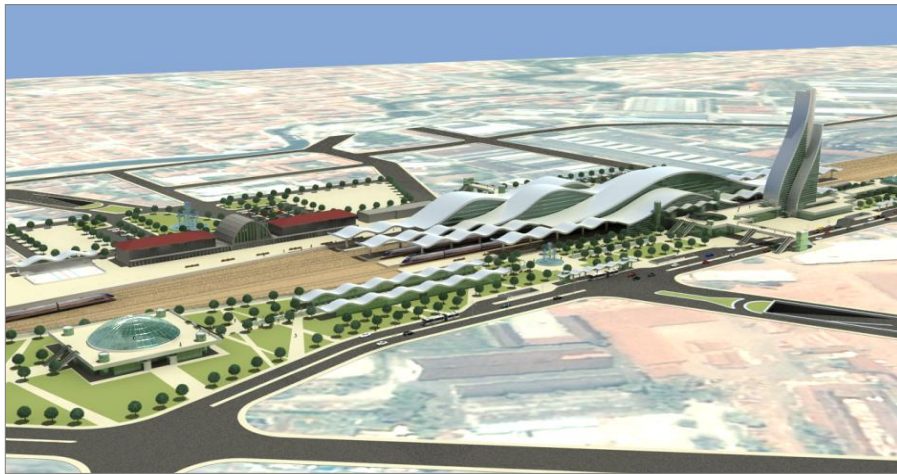


Figure 23. The transformation project of Eskişehir Railway Area (TCDD)

⁹⁵ Information related to this building is taken from TCDD.

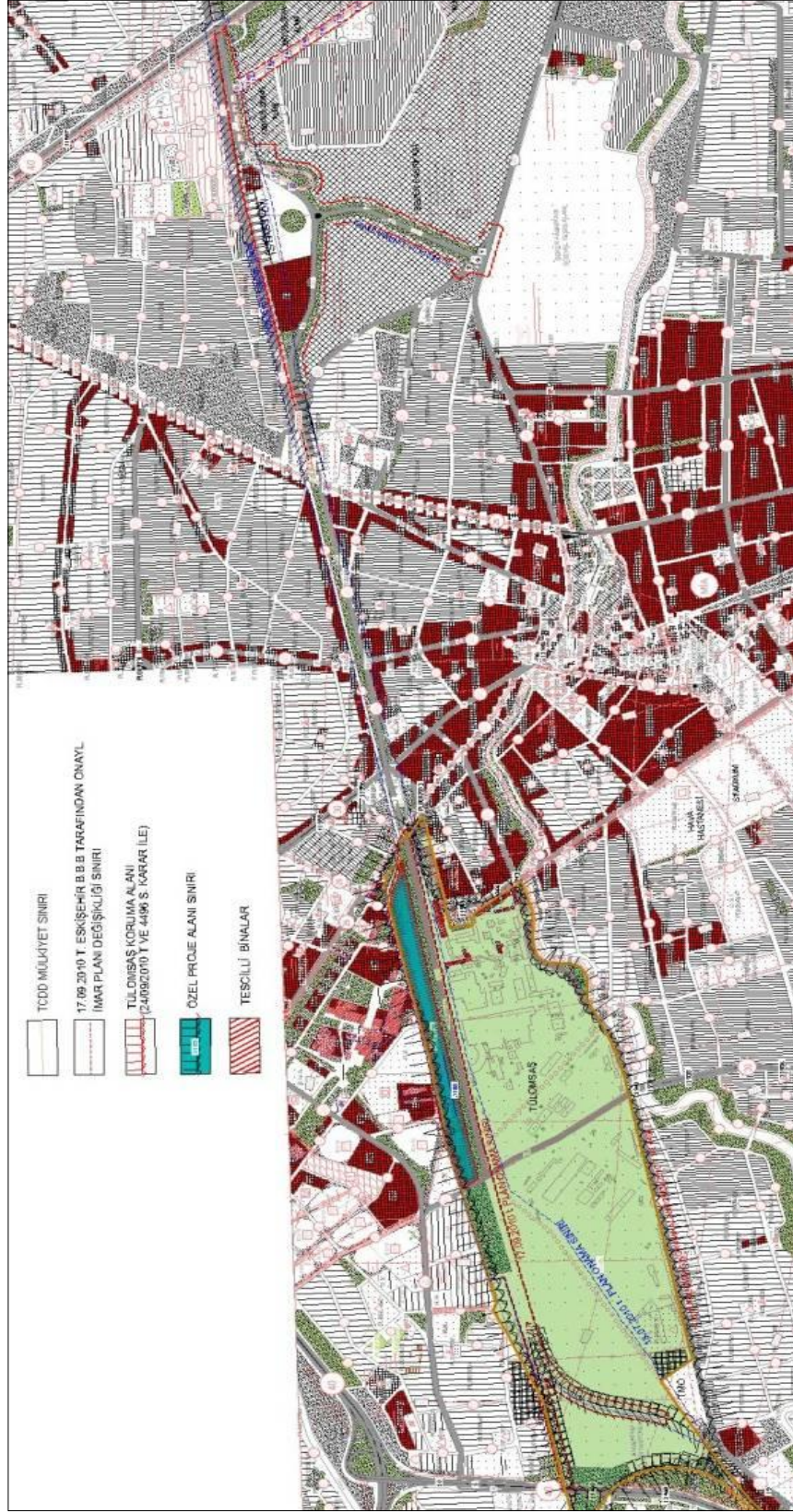


Figure 24. The Development Plan which covers Eskişehir railway area (TCDD Archive)

Initially, the decisions in urban scales were given. In this transformation project,

- The decisions in the site scales are related to the functions (Figure 25):

-

55

The decisions in the building scales are related to the functions:

- There are nine buildings in different scales. Because of the symbolic value of the railway area for Izmit, one of the rail lines and a few locomotives were preserved in the planning. Each building is also restored and transformed to acquire new functions according to the general concept of the area. The open areas became multipurpose open areas to serve cultural and artistic activities.

The station building is transformed to city museum and fine arts gallery (

- Figure 26). In the ground floor the city museum that includes the documentations, present the urban development of Izmit and the equipments, clothes used in the station period. In addition, some commercial facilities exist. In the upper floor, there are educational ateliers (Figure 27).



Figure 26. Before and After Izmit Railway Station (TCDD Archive)

- The warehouse is transformed to café, the shed is transformed into exhibition of archeological edifices, dig building is transformed into museum director offices, tool room is transformed into laboratory for analyzing archeological edifices, the cafeteria is transformed to museum café, the storages are transformed into archeology and ethnography museum⁹⁶.

⁹⁶ Information related to this building is taken from Serimer Mimarlık.

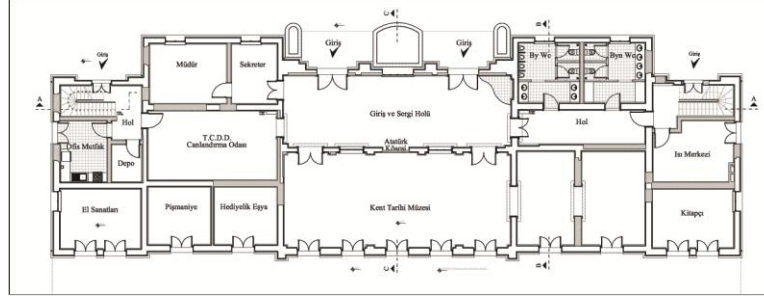


Figure 27. Transformation Project of Izmit Railway Station (Serimer Architecture)

2.3. EVALUATION

2.3.1. Evaluation of Transformation Examples in Europe

In recent years, redeveloping the railway transportation brings utilization of railway areas on the agenda. In Europe, in order to establish an international railway network new policies are created. However, even if their railway policies are unified, operating railway areas differ from country to country, and that affects the interventions done for these buildings and areas. Railway transportation accelerates with high-speed rail. Many new railway lines were constructed for this new system. The stations, especially big ones in the city centers, on these lines are transformed to mix use buildings in order to make these areas attractive points of the cities. Because of the integrated high-speed rail policy, some lines became redundant and the station on these lines became irrelevant. High-speed rail is a very expensive investment that cannot be brought to small cities and towns. Thus, conventional railway system has to be used in these areas. These lines were already malfunctioned. Most of the redundant buildings were transformed into museums, cafes, guesthouses. As a matter of all of these to be grouped, there are three main processes:

First, integration policy of high-speed rail, many new lines are constructed or about to be constructed. As a result of this many nonuse lines and buildings emerged. Second, according to the integration policy of high speed rail existing railway lines were upgraded or are to be upgraded. In this way, existing areas and the building are preserved however; this new system also changed the approaches to the station buildings. As mentioned before station buildings were initially built outside the city but in time with the expansion of the city, these areas became the parts of the cities and became valuable areas for usage.

That is why the existing buildings with highly used high-speed technology are wanted to include many functions in it and the transformation of station areas is very common in Europe. Thirdly, the idleness of high-speed line for the small lines connecting the towns or small cities to each other makes them untouched with their low usage capacity. However, the expanding city situation is still valid for these. They are located in the valuable parts of the city and these areas are desired to be used more effectively. Some small-scale projects were produced for them.

These projects brought some problems with them. With the budget problem and negative reaction of the society, Stuttgart project is a very significant example to define a logical and possible planning and appropriate economical models to afford the projects. In addition, same project shows the importance of the evaluating the environmental inputs and features of the surrounding of the stations. Because of the large-scale of the projects, transformation of these areas brings great interventions. As in the King's Cross Railway area, the new district character and identity of the sites cause big changes in citizens' life. Some of them force to move from the site. In addition to that, for the cases that the stations transform to museums or exhibition halls, it is important to interpret the buildings with their surroundings, that the area have been operating as a whole with its buildings, equipments, and with line itself.

2.3.2. Evaluation of Transformation Examples in Turkey

The transformation of railway areas in Turkey were grouped under three main titles. First, the today's locations of the areas cause the increasing of unearned income of these areas. it can prevent the expanding of the city, it can be left and located in the center of the city like Izmit example, or it can be located in the urban transformation project areas like Haydarpaşa Railway area. The second title is establishing logistic villages outside the cities by carrying railway load transfer. By means of this, it is aimed to integrate the other parts of railway areas into the cities. Finally, as a consequence of high speed rail, some new lines were constructed and new railway stations were built on these lines that render existing station areas irrelevant such as old Polatlı railway area. The existing station areas on the high-speed railway line take the attention. Developing the areas and making them attraction points of the city are the main aims of the new railway policy of TCDD.

1- The transformation projects as a result of increasing rent value of railway areas in the cities

- a. The areas preventing the expansion of the cities
- b. The areas that are not used in the center of the cities
- c. The areas parts of urban transformation projects

2- The transformation projects as a result of establishing logistic villages outside the cities

3- The transformation projects as a result of high speed rail system

- The areas became irrelevant because of the new stations on new high-speed railway line.
- Developing the areas and making them attraction points of the city of the station areas on the high-speed railway lines -

As redevelopment plans are charged continuously changed and adjusted, it does not pay to make the effort to learn. However true this may be for most railway station redevelopment plans, the full scope of the problem is even more apparent when they are compared to different railway sites in Europe. In a European development market, redevelopment strategies for railway station areas could prove increasingly important in attracting or repelling economic activities. In those central cities where the redevelopment of railway areas is impeded by conservation and heritage policies, extra constraints burden the development progress.

CHAPTER 3

ISKENDERUN TERMINUS AREA

The recently railway transformation projects widespread in Turkey. Thus, searching, analyzing, and evaluating the existing and untouched terminus sites become important. Iskenderun terminus site confront more than this features. It is located in one of the most significant coastal and port city in Turkey and in Mediterranean. The developing industrial and transportation activities the city draws the attention to itself.

3.1. FEATURES OF THE CITY

3.1.1. General Features

Iskenderun is the biggest district of Hatay and located in south east of Turkey where the northeast of the Mediterranean littoral turns sharply and creates a protected bay. The acre area of the city is 759 Km². City coordinates are 37-degree north latitude and 36-37 east meridians. The city, which gives its name to the Iskenderun Bay lays between Amanos Mounts located in the east and the Mediterranean Sea located in the west⁹⁷ (Figure 28).

Iskenderun is one of the biggest cities in Turkey with its fourteen towns which, are Akçalı, Arsuz, Azganlık, Bekbele, Denizciler, Gökmeydan, Gözcüler, Karaağaç, Karayılan, Madenli, Nardüzü, Sarıseki, Üçgüllük and thirty-seven villages.⁹⁸

⁹⁷Türkiye, İl İl; Dünü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi(Vol.26,pp.3369-3381). Anadolu Yayıncılık.

⁹⁸ <http://www.iskenderun.bel.tr/> access date: 31.08.2012

Iskenderun Bay, which has a very significant place in Mediterranean Sea, is one of the most important elements of the geography of Iskenderun. Iskenderun Bay, which penetrates between Adana and Hatay provinces, is at the northeastern corner of the Mediterranean Sea with an area of approximately 2275 km, a length of 65 km and a width of approximately 35 km. The bay itself is famous for its intensive port activities, filling plants, industrial facilities, and establishments; especially its iron-steel industry located at the northern part of Iskenderun.⁹⁹

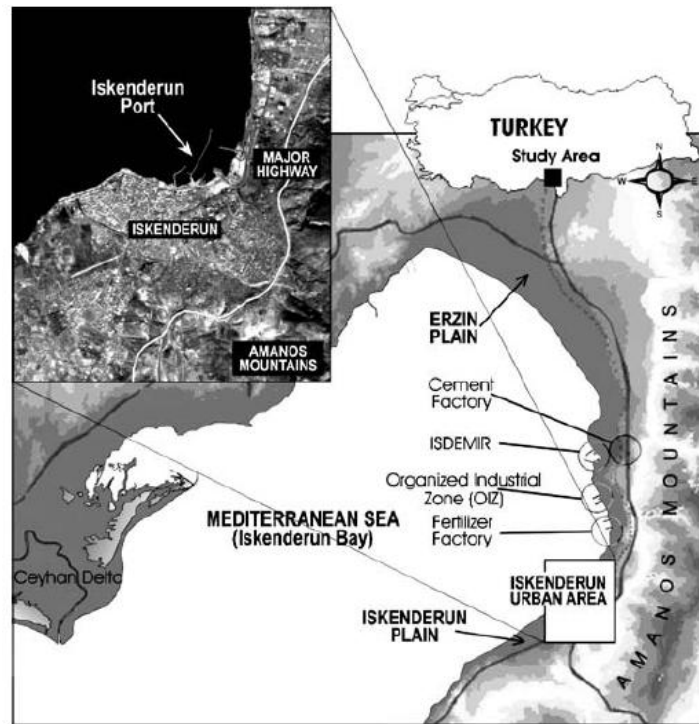


Figure 28. Location of Iskenderun in Turkey and in Iskenderun Bay (Doğun, H., and Alphan, H. (2006) “Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications”, Environmental Monitoring and Assessment, No: 114, pp: 145–155.)

Ports, piers and filling plants are the basic marine industrial structures of the bay. Mainly three ports exist on Iskenderun Bay. Yumurtalık Port is located in Yumurtalık town and thirty companies presently in operation or in phase of being built. Port of ISDEMİR, which

⁹⁹Türkiye, İl İl; Dünü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi(Vol.26,pp.3369-3390). Anadolu Yayıncılık.

has 6 piers, is another port located on Iskenderun Bay. The third one is Iskenderun Port, which is located at the center of Iskenderun and it has 11 piers. There are marine terminals with piers located in the Iskenderun Bay¹⁰⁰ (Figure 30).

- BOTAŞ Oil Terminal and Toros Fertilizer Terminal at *Ceyhan*
- BOTAŞ Oil Terminal, TPAO Pier, Aygaz LPG Filling Plants and Pier, and Mobil Oil Filling Plants and Pier at *Dört Yol*
- Gübretaş Fertilizer Pier and Ekinciler Iron-Steel Industry Pier at *Sarıseki*
- Organized Industrial Estate (OIE), Highways Asphalt Plants Pier, Petrol Ofisi Filling Plants and Pier, and Shell Liquid Cargo Filling Plants at *Iskenderun*

Another important geographical element of Iskenderun is Amanos Mountains, which lay in north- south direction throughout Hatay province. Because of its direction, a narrow plain line, which defines the settlement borders of Iskenderun, is formed. Iskenderun City center and its towns like Denizciler, Payas, Erzin are located in this narrow line.



Figure 29. Location of Marine Terminals and Position of Iskenderun Port in Iskenderun Bay
(<http://www.cerrahogullari.com.tr/ports/> Access Date: 13.08.2012)

100 Çakır, B. (2010). Urban Coastal Settlements: Implementation of Coastal Area Assessment Model In Iskenderun case, unpublished P.H.D. Thesis, Metu.

Iskenderun has a strong relation to outside world because of its location. Two main geographical features of the city, namely the mountains and the bay, shape the methods and system of city transportation. There are four transportation ways connecting Iskenderun to outside: seaway, railway, highway, and airway (Figure 30). With the bay and the protected port, sea transportation becomes possible for the city. Railway and the highway lay in north- south direction through the narrow line like the settlement itself.

Firstly, the port, which is located in the eastern part of the Iskenderun Bay, provides the seaway connection (Figure 30). It has been used to provide shipment between east and west since ancient times. After 1600s, the significance of the port increased and started to be used as a port of Aleppo. After the 1822 earthquake, the port was destructed and could be used partially for a long time. In the beginning of the 19th century, it lost its significance but reclaimed it at the end of the century¹⁰¹. Beginning the middle of the 19th century, the cleanup works started in the port. In 20th century with the discussion of constructing railway line passing through Iskenderun, the port came forward once again.¹⁰² In 1922, under the French mandate the modern port was established in its current location. During the Republican Period, many investments have been done on the port in order to improve the area. In 1972, it became Turkey's second most important port and trade center of the Mediterranean Sea and provided transit transportation to Middle East. In 2010, Limak Investment Company took over the administration warrant of the port for 36 years.¹⁰³ Today, it serves to the Çukurova sub-region and Central Anatolia region. The port has an available location for import, export, and transit transportation. Merchandise, customs brokerage, cargo transportation, and warehousing opportunities exist beside the port facilities.¹⁰⁴

Secondly, two land roads connect city to outside. Hatay- Iskenderun State Highway (D817), which mostly extends toward the shore, passes through the city center dividing the city into two. The city is well connected to the rest of the Turkey also thanks to Ceyhan –Iskenderun Motorway (O-53, E91 - TEM) which encloses the settlement in the starting line of the slope of Amanos Mountain. The two land roads are located in the same direction as the Amanos Mountains that is north- south. E-91 state highway enters

101Türkiye, İl İl; Dünyü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi(Vol.26,pp.3400). Anadolu Yayıncılık.

102Besirli, M. (2004). Bağdat Demiryolu'nun Akdeniz Uzantısı: Toprakkale-Iskenderun Demiryolu ,A.U. *Türkiyat Arastirmalari Enstitusu Dergisi*, v. 23

103Iskenderun Municipality,(2007)

104Türkiye, İl İl; Dünyü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi(Vol.26,pp.3441). Anadolu Yayıncılık.

to Hatay in the Adana border, passes Dörtyol and Iskenderun, arrives Hatay, and then continues to Syria.

Iskenderun has an airway transportation opportunity with Hatay Airport, which is 45 km far from Iskenderun city-center. The airport started to operate in 2007.

The last connection way to the city is the railway. Adana- Kahramanmaraş- Gaziantep railway line turns south near Osmaniye, enters the border of Hatay province, and ends in Iskenderun. The line is 54 km length and there are 17 km length additional connections, namely Yeşilkent, Dörtyol, Yakacık and Sariseki connections¹⁰⁵. The idea of constructing a railway line from Berlin to Baghdad emerged at the end of the 19th century. This line was envisaged to pass also through Iskenderun. Germany built the line beginning between 1902 and 1912 after the warrant concession. During the World War I, the line could not be used. After the war, Iskenderun and the its surrounding fell to the French share. Thus, the right of operating the railway area in Iskenderun belonged to the French. The area, which was nationalized in the Republican Period, is belongs to TCDD today.¹⁰⁶

Iskenderun has an airway transportation opportunity with the Hatay airport which 45 km far from Iskenderun city-center. It was started to be operated in 2007. Moreover, there is a small airport, which was used for military purposes and is not used anymore, near the city center.

The GAP project, Ceyhan- Yumurtalık oil pipeline, construction of oil terminals and loading/unloading docks for fertilizer as well as steel works in Iskenderun influence the density of Iskenderun Bay. The density also increases the extension of Iskenderun Port, which are operated together with railway area in Iskenderun until the privatization of the port area. In addition to that, land transportation networks become a part of this relation by connecting the area to the hinterland and neighboring countries. The loads coming from west through the Mediterranean with ships are unloaded in the port and carried to the railway area by narrow-gauge rails* for transfer. They can be also carried to the area

105Türkiye, İl İl; Dünü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi(Vol.26,pp.3441). Anadolu Yayıncılık.

106Iskenderun Municipality ,2007, Iskenderun, Iskenderun: Turkey.

* Decoville: Narrow-Gauge, railway tracks, which have width between 0,40 m and 0,60 m, took the name of its French inventor Paul Decauville (1846-1922). Sandalcı, M. (2005), Iskenderun Dekovil Hattı, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları

over trucks to be transferred by land transportation. All these three transportation systems are integrated and they work together (Figure 30).¹⁰⁷

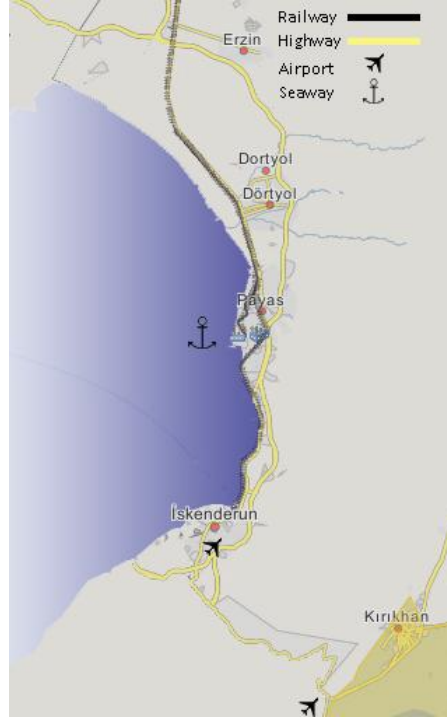


Figure 30. Transportation ways to Iskenderun (on googleeearth)

Iskenderun is one of the most rapidly industrialized cities of Turkey. Especially between 1950 and 1980, industrialization took place very fast. In 1953, the first manure factory, in 1975 the third biggest steel and iron-steel factory (Isdemir) in Turkey and in 1977 a cement factory were built in Iskenderun¹⁰⁸. Today regarding the leading industries iron and steel there are over 35 large industrial enterprises and nearly 100 small industry enterprises in Iskenderun.¹⁰⁹

107 Blue Plan Regional Activity Center Sophia Antipolis, (1994), Iskenderun Bay Project Volume 2, map technical reports series no:90

108 Sonmez, R., Balaban, O. (2009), Iskenderun Körfezi Kıyı Alanları Bütünsel Planlama ve Yönetim Projesi, Planlama Dergisi NO:1

109 Iskenderun Municipality, 2007, Iskenderun, Iskenderun: Turkey.

Until recently, the center of the Mustafa Kemal University (MKU) was located in Iskenderun. However, the campus was carried to 3 km far from Iskenderun city center to locate in closer position to Antakya. Today, MKU Vocational High School is still located in Iskenderun.

Ethnic diversity is one of the prominent social features of the area. This diversity is a feature that has dates back to the Ottoman Period. Collas mentioned in his *La Turquie en 1861* book that there were two hundred dwellings. 1000 people, most of whom were Greek and Armenian tradesmen were living in the city in the 1860s. According to Aleppo province yearbooks, there were Muslims, Armenian Catholics, Greek Orthodox, Armenian Protestants, Armenian Gregorian's, and Jewish people in urban and rural areas of Iskenderun¹¹⁰. The number of the religious allocation of Iskenderun people according to the Aleppo province yearbooks dated to 1891, 1897, and 1914 are shown in Table 1.

Iskenderun and its General officer Jako said: *"The common language is Turkish in the Sancak. Arabian language has widespread however; only Alawi people and Christians use it. Most of the Alawi people, and almost all Armenians, Greek and Orthodox know Turkish."* It can be understood from this report, written in 1936, Arabs, Armenians, Greek, Alawi, and Turkish people lived in Iskenderun in that time. The demographical diversity proved to be a fundamental element in the process of the annexation of Hatay to the homeland. The Turkish government took some precautions to increase the number of Turkish population. Today's population of Iskenderun was affected by such these politics¹¹¹. Today, although there are not any Armenians, Alawi and Arab people compose a great number of the population.

Despite the growth potential of the area given its location and the port, the swampy sites, which dominated most of the inhabitable area, prevented the settlement and development of the city. After the First World War, the French dried-up the swampy sites and removed the biggest obstacle of the city developing. Thus, while the population was 2041 in 1970, it became 11859 by 1940.

110 Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3400

111 Yorulmaz, Ş. (1998). Fransız manda yönetimi döneminde Iskenderun sancağı (Hatay)'nin sosyo-ekonomik ve siyasal durumuna ilişkin bazı kayıtlar (1918-1939), V. Hatay Tarih ve Folklor Sempozyumu.

Table 1 The religious distribution of Iskenderun people (Urban and Rural) in 1891's Aleppo province yearbooks. (Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3396)

	Muslim	Armenian Catholic	Greek Orthodox	Armenian protestant	Armenian Gregorian	Jewish	Total
1891	9987	87	1000	415	-	13	11502
1897	11413	260	1120	422	-	25	13240
1899	14140	-	2373	-	1519	129	18161

After the middle of the 20th century, many investments took place in the city. Firstly, a modern port was constructed and developed in time. Then, transportation, infrastructure, and industry of the area improved. As a result, while the population grew by 2.8 times as Turkey average, the population of Iskenderun grew by 10 times from 1940 to 2000¹¹². The last population census dates back to 2009. According to this census, the urban population of Iskenderun is 190279: whereas the rural population is 128261 and the total population is 318540.¹¹³

Table 2 Urban Population of Iskenderun in Time (Doygun, H., and Alphan, H. (2006) "Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications", Environmental Monitoring and Assessment, Number: 114, pp: 145–155.)

	1870	1940	1970	2000
Population	2041	11859	79279	159149

3.1.2. Urban Pattern

Iskenderun city and its surrounding is a sub-region located in the Çukurova region with which show similarity in social, economical, and physical manners. The boundaries of Iskenderun sub-region are Yumurtalık and Osmaniye in the north, Arsuz in the south. The

112 Iskenderun Municipality ,2007, Iskenderun, Iskenderun: Turkey.

113 <http://www.iskenderun.gov.tr> access date: 14.08.2012

center of the sub region is Iskenderun city and commercial, small arts, and various facilities are dispersed in the city center (Figure 31).¹¹⁴

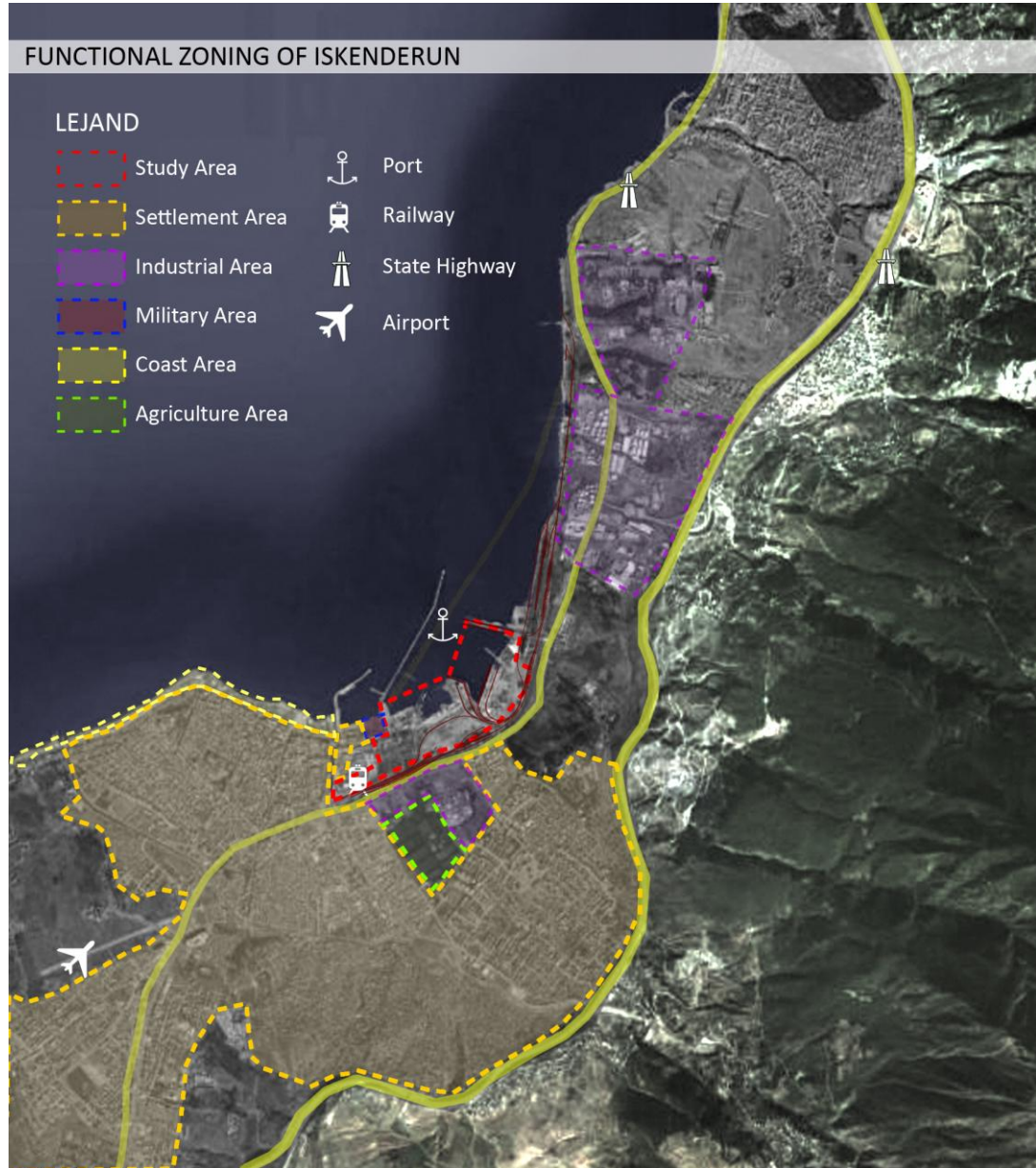


Figure 31. Functional zoning of Iskenderun (on google earth)

114 Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3400

The large-scale industrial facilities in accordance with the region and the country, and the port are the main dynamics paving the way for rapid urban development in the city. The settlement areas compose 64 percent of Iskenderun. The biggest portions of the settlement areas are industrial areas (%16), residential areas in urban (%13), military areas (%13) followed by marine structures like port and pier (%6) in order.¹¹⁵

Since the mountains start to rise very close to the sea and there is a little space to settle on the coastal strip, all the social, cultural, and economic activities take place in this limited area. The north side of the Iskenderun city-center presents a dense and compact form; whereas southern parts present a scattered one. Today, urban area lies along the shore, there are several settlements in varying sizes, also industrial areas, military areas as well as the areas allocated to tourism and recreation. The area, which lies between Iskenderun and ISDEMİR and is located in the north, is generally a settlement area. In the dense parts of the settlement area, there are adjacent residential groups. The establishment of ISDEMİR caused economical and social alterations. New slum areas emerged because of the dense population and settlement.

There are also limited areas covered with forests; first part exists in the area of ISDEMİR, around the apartments of the factory, another part exists between Denizciler and Sariseki settlements, and the final part exists at the southern border of the coastal, within the adjacent area of Karaağaç Municipality.

3.1.3. Historical Background

Iskenderun was called Alexandria, which means Alexandra's homeland in Hellenic language, Alexandria minor in the Roman Ages and Alexandretta during the Crusades. The artifacts found in Karaagac indicate that there had been settlement in the surroundings during prehistoric ages. It is known that Hittites established Kadu Sultanate affiliated during 2000 B.C. and Phoenicians established a colony called "Myriandus" before 1200 B.C. Iskenderun and its surrounding passed into Hurries during the 7th Century B.C. and to the Persian during the 6th Century B.C. King Alexander the Great defeated the Persian

115 Sonmez, R., Balaban, O. (2009), İskenderun Körfezi Kıyı Alanları Bütünsel Planlama ve Yönetim Projesi, Planlama Dergisi NO:1

Empire.¹¹⁶ After the death of Alexander the Great, the name of Alexandria was given to the city in honor of the king. Alexandria remained a small city or a city-state those years, while under the Seleucid domain local autonomy, a municipal coinage was issued by the city. During the Roman and Byzantine ages, Alexandria was still as a small city and took a minor part in the Christian world¹¹⁷. Today there is no historical ruin from the First Era however, from the Middle Era port ruins exist¹¹⁸

In 1517 during Yavuz Sultan Selim's Egypt expedition, Iskenderun got under Ottoman rule for the first time. During this expedition, the Ottomans also conquered Syria, following Iraq's conquest. As a result of these conquests Aleppo became an international entrepot. Exotic products and spices of India, products from Basra, Diyarbakir, and Musul could be found in Aleppo, which became the capitol of the north after the division of Syria as a result of the conquest. To sustain the product shipment, Aleppo needed a port and Iskenderun port was two or three days far from Aleppo. However, the port of Iskenderun was in a very poor condition. The reason of this primitiveness of the port related to the malarial marshes and its result of insalubrious climate. The Ottoman government was pressed by the British, French, and Venetian merchants to open a customs station. In 1590, the desired station was established at the port and in 1612 it became the official port of Aleppo. After that, Iskenderun strengthened its trade and strategic role; its importance increased as a port in the east Mediterranean, in import and export with the Middle East (Figure 32).

During the 19th century, Aleppo lost its importance because of the decline in trade. Furthermore, the hazardous effects of political instability on the local economy and the crises that Europe suffered made the situation worse. Despite these drawbacks, both Aleppo and Iskenderun continued their influence on the Mediterranean trade. However, the biggest blow was the opening of the Suez Canal in 1869. Transit transfers from Iskenderun to Aleppo and then to Baghdad and beyond constituted the principle advantage; however, with the Suez Canal opening there was no longer such an advantage. Nonetheless, the port of Iskenderun did not show any physical improvement

116 Iskenderun Municipality, 2007, Iskenderun, Iskenderun: Turkey.

117 Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA.

118 Iskenderun Municipality, 2007, Iskenderun, Iskenderun: Turkey.

because of the infrastructural problems as well as climate difficulties and the earthquake that happened in 1872 caused a huge damage to the city¹¹⁹.

In 1881, finance inspector Mesut Bey prepared a report for the development of the city. As a consequence of the report seaport was enlarged, Iskenderun-Aleppo highway contraction was accelerated.



Figure 32. French Map of Iskenderun Harbor, 1764 (Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA.)

At the beginning of the 20th century, the city started to improve. The streets were paved, stone houses; offices were built near seaside, and with these, the population increased. Furthermore, the railway line from Berlin to Baghdad was on the agenda and Iskenderun was also located on the line. A concession is signed with Germany for the construction of the railway from Toprakkale to Iskenderun as a part of the Baghdad railway line. Germany

119 Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA.

wanted to control the port beside the railway in order to control the trade in the Mediterranean. In 1912, Iskenderun- Toprakkale line was opened.¹²⁰

On the other hand because of the outbreak of the First World War, the construction in the port did not start. During the First World War, Iskenderun got important due to its strategic location. The railway line provided easy access to the agricultural and the petroleum sources.

At the end of the war, the Allied Forces defeated the Ottomans. Aleppo, which was an Ottoman Vilayet, was divided between the French Mandate, Syria and the new republic of Turkey. These different groups, new entities caused population exchange as the other cities. Before the war, 75 percent of the city was Muslim however, after the exchange the demographic picture reversed¹²¹. Many Muslims left the city and many of the Armenians came to the city from Kilikya. In 1918 as a result of the Mondros Cease-Fire Agreement, the French occupied the city and its surrounding and established the Iskenderun Sanjak. In 1921 with the Ankara Agreement, Iskenderun semi-autonomous Administration was established, until 1938, the city existed as a sub-district of Hatay under the French occupation. The French had a policy to spend their budget primarily on local improvements rather than big investments such as port expansion for their mandate. Because of that, the French suffered from lack of resources for the investments on the port area. As mentioned before the French's coming to Iskenderun changed the destiny of the city. They drained forty-five hectares of marshes around the city, which ended the 300 years of sufferings. In 1939, Hatay parliament decided to join Turkey and Iskenderun became a city connected to the Hatay.¹²²

After Iskenderun became a part of the young Republic, there have been some fundamental changes: the Armenians were forced to leave the city and the 500 years of partner, Aleppo, was cut off from the city because a new port was determined to develop as its own port by the free Syria.

HISTORY OF TERMINUS AREA

120 Iskenderun Municipality ,2007, Iskenderun, Iskenderun: Turkey

121 Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA. pp: 175

122 Dumper, M., Stanley, B., (2007), Cities of the Middle East and North Africa: A Historical Encyclopedia, USA.

The railway adventure of the Ottomans was directly related to the political, social, and economical background of the empire and Iskenderun in that period. The Baghdad Railway line, at the end of which Iskenderun Termini area was located, was one of the most significant lines in that era.

The desire to construct railway lines emerged in the 1830s in the Ottoman Empire. There was an idea to connect Istanbul to Basra by rail. The envisaged line indicatively passed through the center of the country and continued to the Mediterranean and the Red Sea. This desire caused many competitions between various countries and companies. The close relations with the Germans resulted in granting the construction warrant of the project to Germany. However, conflicts did not stop, even increased, and became an international problem.¹²³

The Germans implemented the projects. In the first part of the project, the line between Istanbul and Izmit was constructed with the own capital of Ottomans and accepted as the beginning of the line that end in Basra. Then in 1889, Deutsche Bank and under this institution Anatolian Ottoman Railway Company (Anadolu Osmanlı Demiryolu Şirketi) were established. The Company completed the project on time and the line was opened in one year. Then, construction of Ankara line started. By the end of the 19th century, almost 1000 km long railway line was constructed.

At the end of the 19th century Germans and Ottomans aimed for the Baghdad railway to start from Berlin and end in Baghdad by passing through Anatolia. However, other European countries also had plans and interests in the line. Abdulhamit rejected to agree about constructing Baghdad railway line with France or England. Thus, in 1902 temporary and in 1903 permanent agreement were signed with Germans. In 1903 Baghdad Railway Company was established to construct the line. Baghdad Railway Company in 25 October 1904 completed initially 200 km long Konya- Bulurlu line. The line had been completed easily and had provided great profit.

The Young Turk Revolution affected the future of the line negatively. This new group was against close relations with Germany. In addition to that, the suspension of Sultan II Abdulhamid, debates in the parliament and strike started by the workers in railway

123 Albayrak, M. (1995). Osmanlı- Alman İlişkilerinin Gelişimi ve Bagdat Demiryolu'nun Yapımı. OTAM, 6, 001-038.

administrations put Germany to trump. Despite all these after 1910, Germany improved relations with the Ottoman government. This ended in 1911 with new alliance and new concessions given to Germany. However, the end of the line was concluded as Baghdad rather than Basra. Thus, the negative reaction of England decreased to some degree. In 1911, construction started again and until the First World War 887 km line finished.¹²⁴

Both Ottomans and Germans had economical, military and political interest out of this line.

The Ottoman Empire had great hopes from this line. Firstly, railway would contribute to increase the welfare of the empire. The Ottoman had become dependent on the foreign countries as a result of decrease in production, inadequate trade and transportation despite rich underground and over ground sources on the country territory. In the route of railway production would increase, trade would revive, by constructing water canals and drying swamps wealth would increase¹²⁵. Secondly, Ottoman Empire did not trust England, France, Australia, and Russia. It was known that none of these countries wished Ottoman Empire to exist. If the Islamic politics of second Abdülhamit had succeeded, the Islamic colonies could have revolted causing danger. Thirdly, increasing military failures, loss of wealth and people and demoralization had reduced the trust of the society in the state. These negations occurred because of the deficiency in technology and transportation. The Ottomans could not transfer armies from one place to another because of the poor transportation system and got negative result from the wars and the quelling the revolts.¹²⁶

Germany also had great expectations from this line. Firstly, because of improving industry and increasing population Germany needed new raw sources and markets. However, Germany was too late to find colonies compared to other European countries. That is why using countries that had developed industry and rich sources was a good solution for the Germans. Secondly, Germany wanted a strong political and financial cooperation with the Ottoman Empire against the other European countries. Finally, Germany started to follow

124 Besirli, M. (2004). Bağdat Demiryolu'nun Akdeniz Uzantısı: Toprakkale-İskenderun Demiryolu ,A.U. Türkiye Araştırmaları Enstitüsü Dergisi, v. 23

125 Albayrak, M. (1995). Osmanlı- Alman ilişkilerinin Gelişimi ve Bağdat Demiryolu'nun Yapımı. *OTAM*, 6, 001-038

126 Albayrak, M. (1995). Osmanlı- Alman ilişkilerinin Gelişimi ve Bağdat Demiryolu'nun Yapımı. *OTAM*, 6, 001-038.

the world politics in Wilhelm II Period. Thus, power of Germany should be exhibited to other super powers in the world. Especially shooting England in the Middle East and Sin the use Canal was appropriate from Ottoman lands during a war.¹²⁷

Both of the countries have economical, military, and political benefits from this line.

The construction of the line provided many benefits to Ottoman Empire. Firstly, from now on the Ottoman and Germans were all countries. Secondly, easy transportation proved advantages to the Ottoman reign. For instance, trust in the state increased among the society.¹²⁸

The construction of the line provided many benefits to Germany. Firstly, Germany brought its political, military, and economical ascendancy to Ottoman Empire with Baghdad Railway line. Secondly, Developed German technology beat Ottoman's primitive one and German goods spread all Anatolia. Finally, Ottoman production capability decreased more than before.¹²⁹

After the First World War, central powers including the Ottoman Empire lost. With the Monteux and Sevres Alliance England and France invaded some parts of the Baghdad railway line. Later on, by the Turkish Republic in 1928, the line was nationalized and until 1940 incomplete parts were constructed.¹³⁰

England wanted to take the warrant of construction of the line not because of the connection between Basra and Istanbul. The real aim was to shape the surrounding areas of the lines control Egypt, Mediterranean, and India. From this point of view, while a project became a current issue, to get a port related to Iskenderun and Mediterranean was mentioned in any platforms.

II. Abdülhamid wanted to extend the railway from Iskenderun to Baghdad unconditionally. The most proper proposal came from Wilhelm von Pressel who was the general manager of Asia-Ottoman Railway. With this project, it was aimed to connect Haydarpaşa to Basra by passing through Adapazarı, Eskişehir, Ankara, Kayseri, Malatya,

127 Albayrak, M. (1995). Osmanlı- Alman İlişkilerinin Gelisimi ve Bagdat Demiryolu'nun Yapimi. OTAM, 6, 001-038.

128 Ibid,

129 Ibid,

130 Albayrak, M. (1995). Osmanlı- Alman İlişkilerinin Gelisimi ve Bagdat Demiryolu'nun Yapimi. OTAM, 6, 001-038.

Diyarbakır, Musul, Baghdad. Besides, suburban lines were planned to be extended through Black Sea and central Anatolia. In reality, Von Pressel was planning to construct a very long line from Germany to Basra and to connect this line to port of İzmir, Mersin, İskenderun and Basra. According to Von Pressel's project, the line would reached the untouched mine regions and pose a great economical potential for the Germans.¹³¹

In 1911 port construction, concession with Haydarpaşa Port Company and Toprakkale-İskenderun suburban line concession were signed. The construction of the Toprakkale-İskenderun line started in 1912 and by 1913 line was completed. The line became a gate opening to the west for İskenderun. Today the line provides connection of Mersin, Adana and Gaziantep with İskenderun Port. However, the line at the time did not connect to Baghdad and the shipment desired performance could not be achieved. The Triple Entente bombed the line at some parts. The English and France armies occupied the port of İskenderun. The French army occupied railway area and they built the buildings during their mandate. İskenderun port area has a very significant position for both the İskenderun railway line and the empire's history.

HISTORY OF PORT AREA

İskenderun was used as a port transporting cargos from Persia, Mesopotamia and the Upper Euphrates basin to the west and the cargos from the Mediterranean to the east. The port gained importance at the end of the 16th century and economic potential with the silk trade of Venice, Aleppo, and Tripoli. In the 17th century, the merchants and the cargos coming to Aleppo landed in İskenderun port. According to Katip Çelebi, İskenderun was the pier of Aleppo and the French merchants sustained their trade activities here because of the significant relation between the Marseille and İskenderun port¹³². Collas, said that the all goods from East Anatolia, north Syria, and Mesopotamia. There were two breakwaters which constructed by Australians eased to load and unload the cargos¹³³.

In the beginning of the 19th century, an earthquake destroyed the port and decreased the significance. After a few decades, the Suez Canal was constructed and the direction of

131 Besirli, M. (2004). Bağdat Demiryolu'nun Akdeniz Uzantısı: Toprakkale-İskenderun Demiryolu ,A.U. *Türkiyat Araştırmaları Enstitüsü Dergisi*, v. 23

132 Beşirli, M. (2004). Haydarpaşa Liman Şirketi'ne Verilen İskenderun Limanı İnşa ve İşletme İmtiyazi ve Liman Tarifesi (1911), Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi,11, 179-203.

133 Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3400

the commercial shipment shifted. Hence, the port lost quite importance. Thereupon, the government started cleaning of the port to make it sufficient. Moreover, in 1863 a new pier was constructed. By these studies, the commercial potential of the port increased. Especially, by establishing strong relations with Aleppo, the port became one of the most used ports in the Near East¹³⁴. In order to make this relationship stronger, a land road was planned between Iskenderun and Aleppo and in the 1870s the road was finished.

“Imperial penetration had always begun from ports, but until the coming of the railway the influence of the European powers rarely extended far inland. The railway permitted comparatively easy access to the hinterland; imperialists used railways to integrate and annex territory, and to exploit the resources of the regions surrounding the ports they controlled.”

Anthony Coulls¹³⁵

In the 20th century, parallel to the increasing significance of the Baghdad Railway line, the port gained importance and became more forward with the attempt of connecting the line to the Mediterranean. In 1911, with the concession of constructing Baghdad railway line from Toprakkale to Iskenderun in order to reach Mediterranean, the warrant of renovation and modernization of the port was given to Germany. The Toprakkale-Iskenderun line was constructed, but starting of the First World War interrupted the construction of the modern port¹³⁶. Thus, the small sea vehicles provided the connection between the land and the moored ship¹³⁷.

During the First World War, the port was bombed several times and after the war it was not under the dominion of the Ottomans anymore. This threatened the security of the Ottomans in the Mediterranean¹³⁸.

After the First World War, the port was given to a French company, which constructed the inner part of the port. In 1927, the French constructed the eastern and western water breaker and the south dock for small vehicles. The railroad from termini area to port,

134 Beşirli, M. (2004). Haydarpaşa Liman Şirketi'ne Verilen İskenderun Limanı İnşa ve İşletme İmtiyazi ve Liman Tarifesi (1911), *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*,11, 179-203.

135 Coulls, A.(1999). *Railways as World Heritage Sites*. Paris: ICOMOS.

136 İbit,

137 Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3400

138 Beşirli, M. (2004). Haydarpaşa Liman Şirketi'ne Verilen İskenderun Limanı İnşa ve İşletme İmtiyazi ve Liman Tarifesi (1911), *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*,11, 179-203.

warehouses, lighthouse, and new buildings, which included two buildings for imports, one for exports, one for transit goods and two warehouses for burnable materials, were constructed by the end of 1938.

In 1938 Hatay, including Iskenderun, joined the Turkish Republic. According to the 3714 numbered law, the port was devolved to the state-run General Directorate of Ports. The port was modernized by widening the big pier in 1944 and supplementing mechanical equipment and facilities between 1953- 1956. In 1964, the development of the port continued, the top of dock were completed and was put into service in the same year in 1972 with all the facilities.

On 30.12.2009 with decision no 2004/128 of Privatization High Council and TCDD in accordance with the Transfer of Operating Rights Agreement, the port was devolved to Limak Investment for 36 years until 2047¹³⁹.

3.1.4. Urban Development and Planning Activities

Beginning from prehistoric ages, Phoenicians, Hurries, Persians, Macedonians, Seljuks, Romans, the Byzantines, Syrians, and Ottomans had reigned Iskenderun which is located by the sea giving its back to the mountains. There are not any clues that Iskenderun had an importance more than a village until the Ottoman conquest.

In the 17th century, Aleppo started to use the city as a port by taking the advantage of its protected coast¹⁴⁰. While it was a small settlement, Iskenderun became a significant port city connecting east to west. The importance of the city fluctuated in line with the role of the port until the 20th century. However, Iskenderun did not show a noticeable growth. Despite the appropriate physical features of the land and commercial activities in port, the city remained as a village. The travelers visiting Ottoman Empire in that period noted the marsh sites. As Poujoulat stated in the book of Correspondence D'Orient, there were swampy sites that affected the air of the city and the health of the inhabitants. He also

139 <http://www.tcdd.gov.tr> access date: 05.07.2012

140 Yorulmaz, Ş. (1998). Fransız manda yönetimi döneminde Iskenderun sancağı (Hatay)'nin sosyo-ekonomik ve siyasal durumuna ilişkin bazı kayıtlar (1918-1939), V. Hatay Tarih ve Folklor Sempozyumu.

added that if there were not the swampy sites, Iskenderun would become an important place for commerce¹⁴¹.

A plan of Iskenderun Bay, which was prepared by the Syrian government in 1858¹⁴². In the plan it is seen that Iskenderun is positioned near the sea. There are three piers whose positions exhibit the port activities did not take place in today's position. There is a distinctive road starting from the coast and extending to south. It is understood that the road is Iskenderun-Aleppo road from the following plans.

In the beginning of the 20th century, the plans of the Ottoman government to construct a railway line from Istanbul to Baghdad, affected Iskenderun which was a small city having one township, twenty-four villages and five districts (Table 3). Germany had the warrant to construct the Toprakkale- Iskenderun railway line. During laying the tracks down, they prepared a plan showing the city, the bay, and the mountains in 1911¹⁴³ (Figure 33).

Table 3. Number of township, village and district of Iskenderun in 1897 and in 1908 (Yurt ansiklopedisi (Türkiye, il il; dünü,bugünü, yarını), anadolu yayıncılık, (1982) cilt5, hatay, pp.3396)

	1897	1908
Township	1	1
Village	24	24
District	4	5

In the plan, it is seen that the whole the city was covered by marshes, which extended to the slope of the mountains. The settlements are positioned towards the protective part of the bay and stuck to the natural boundaries of marshes. According to the plan, a road extends through the shore. There is a small pier in the eastern part of the settlement and

141 Açıkgöz, U.F. (2008) A Case in French Colonial Politics of Architecture and Urbanism: Antioch and Alexandretta During the Mandate, unpublished Master thesis, Graduate School of Social Sciences, Middle East Technical University, Department of History of Architecture, Ankara.

142 Iskenderun Municipality, (2012).

143 Sandalcı, M. (2005), Iskenderun Dekovil Hatti, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları

there are not any piers in the location of the present port area. There is a road extending in the north-south direction and connecting the coast road by separating. In the western part, there is a pond and there is a canal extending in the north-south direction passing through the east of the settlement. Besides, name of the some buildings were written. There are two factories and on the opposite edges of the settlement and an arsenal is located near the western edge. There is a depot near the factory in the east. In addition, a customs office is located on the shore. All these building were located near the sea and parallel to it.

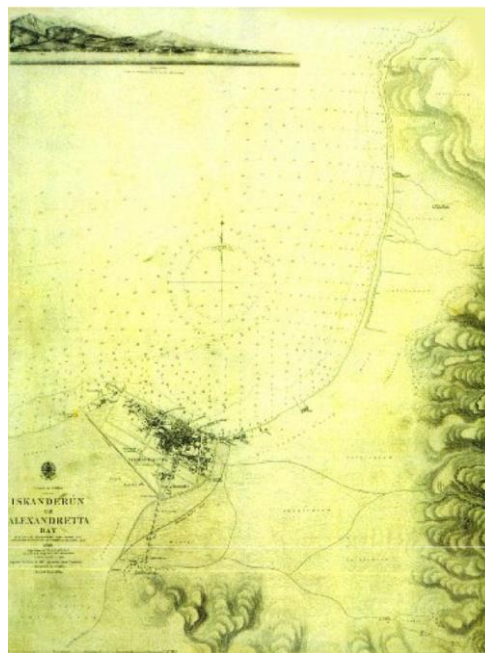


Figure 33. 1858 Plan of Iskenderun. (Urban Planning and Development Dept. Of Iskenderun Municipality, 2012)

In this plan, it is understood that, there was a narrow gauge railway network in the city. There are also stamps that support the existence of these tracks (Figure 35). According to the Mert Sandallı, the Ottoman government tried to solve the marsh issue. They decided to fill the marshes with rubbles to dry out them. The narrow gauge railway network was used to carry these rubbles to the swampy sites. The main alter of these narrow gauge was from the place known as Pınarbaşı today to city center was constructed between 1874 and 1901. The gouges, which were portable and relocated, if needed, were used numerous times for carrying rubbles from Pınarbaşı circuit. The tracks were kept until the 1930s, when the trucks and tractors were put into use. Today there are no more signs of these tracks.



Figure 34. The plan of Iskenderun prepared by Germans in 1911. (Sandalcı, M. (2005), Iskenderun Dekovil Hatti, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları)

After the First World War, the French army entered the city changing its destiny. The French gave importance to drying up the marshes because of preventing the unhealthy conditions these marshy sites caused. They figured out that the marshy water coming from the mountain and staying in the city was the main problem. In order to discharge these waters to sea, they constructed canals, which still exist. Solving marsh area and infrastructure problem, new investments for the city improvement became possible. They constructed two new piers in the port. They built the station building and port buildings. Furthermore, many other buildings such as hospitals, schools, railway buildings were built and settlement areas were extended. This expansion continued until the French armies left the city in 1939. The French also prepared a cadastral plan for the city.

While comparing the French plan to the previous German plan, the most important development is that most of the marshes have disappeared and city started to expand through these swampy sites (Figure 34). It is seen that building blocks and the roads started to take today's shape. The axis of existing Adana-Hatay State highway is seen in the latter plan. Two new piers were constructed in today's location. Some parts of the coast were filled and reformed. The railway and port area were constructed as an integrated complex. The sign of the developing city can be seen in the cadastral plans.

Following the departure of the French and incorporation of the city into the homeland, the politics of the Republic affected the city. Nationalization and developing the transportation and industrialization were the main policies of the Turkish government. Iskenderun became important because of its relation with the bay and given its wide areas available for the industrial areas. The expansion of settlement areas became easier for years in terms of economic development, sectoral variation, urban expansion, and population increase (Figure 37).

At the end of the 1940s the main tools of the city were railway, port and the light industrial and the residence areas that expanded their surroundings. In the east and southeast there were flood sites that prevented starting settlement. West and southwest parts of the city center were empty and unsettled because of the swampy character of the area. Sarıseki, Denizciler, Karaağaç, and Karayılan, which are townships of Iskenderun today, were just small villages and their location was a little far from the coast. Accordingly, the region had no tourism activity at those times.



Figure 35. Decovilles on the roads of Iskenderun in the beginning of 20th century. (Sandalcı, M. (2005), Iskenderun Dekovil Hattı, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları)



Figure 36. Cadastral Plan of Iskenderun prepared by French In 1929 (Hüseyin Kanpolat archive)

In 1970s Isdemir started to be constructed and as a result of that highway of the region gained importance. The canal connecting to the sea in the west and extending to the southeast was firstly recorded in the 1972 aerial photo of city (Figure 38) It is seen that the city widened and settlements emerged on the sides of this canal. ISDEMIR construction started at the beginning of the 1970s. The highway of the region gained strength and importance; some types of industrial activities developed on the coast due to the establishment of ISDEMIR. Accordingly, the village of Karayılan got closer to the coast (to the highway at the same time) and expanded further. Likewise, Sarıseki and Denizciler also got closer to the coast and got larger. Piers were constructed on Sarıseki coast. Iskenderun city-center got larger; constructions started on the west side of the Aşgarbeydi Stream, and the settlement expanded along the stream. Meanwhile, Karaağaç also got larger and closer to the sea; however, macro-form of the settlement was very scattered than the others.

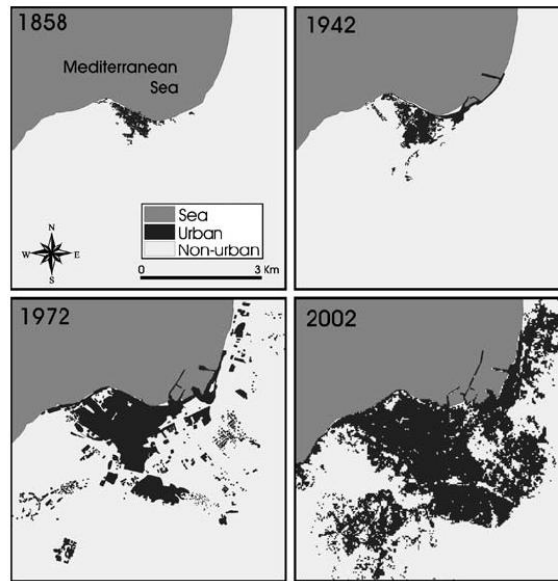


Figure 37. Urban development of Iskenderun (Doygun, H., and Alphan, H. (2006) "Monitoring Urbanization of Iskenderun, Turkey and Its Negative Implications", Environmental Monitoring and Assessment, Number: 114, pp: 145–155.)

In 1992 Iskenderun city center and the port area expanded and they were more compact. In 2006, the north of the city was united because of the expansion. The south side was still scattered. In 1992, Karaağaç and Iskenderun city-center started to get closer to each other. Organized Industrial Estate and its piers in Sariseki expanded and developed, and got closer to ISDEMIR. Iskenderun city-center and its harbor also expanded and developed. Iskenderun city-center got a denser and compact form (Figure 37).

Most of the planning activities related to Iskenderun have developed after the middle of the twentieth century. One 1/100.000-scaled environmental master plan, on two 1/25.000-scaled environmental master plans, a 1/5000-scaled master plan, a 1/1000-scaled implementation master plan (in three phases), and a BKAY plan were for Iskenderun after the 1950s*. Yet the only one plan, which can be found, was prepared before the proclamation of the Republic and dated 1858. The Syrian government prepared it as a coast of Syria. In the plan there is not a modern port and the residential area are located far from the coast. However, the road system can be figured (Figure 38).

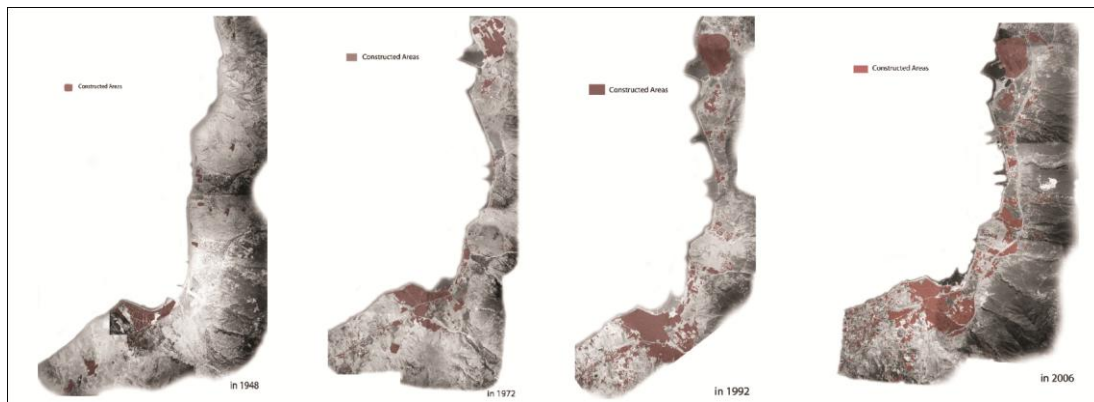


Figure 38. Constructed areas of Iskenderun (Cakir, B. (2010), urban coastal settlements: implementation of coastal area assessment model in Iskenderun case, Metu thesis.)

Since Iskenderun and its surrounding is a sub-region in the Çukurova region, the planning process was conducted in a different way. The Bank of Provinces had the warrant of

preparing plans and prepared the second plan of Iskenderun in the Republican Period in 1969. Today, there is no more detailed information about these plans.

In 1976 in accordance with the contract, the planning developments of Iskenderun were conducted by Istanbul Technical University on behalf of the Bank of Provinces. In the scope of this work, 1/25000-scale environmental master plan and research reports were drafted in 1979 and 1/5000-scale master plan was prepared in 1981. 1/1000-scaled implementation plans were prepared in three phases until 1983.

These different scaled plans, drafted by ITU from 1979 to 1983, cover Karayılan, Sarıseki, Denizciler, and Karaağaç. They refer to conservation of nature and resources, the expanding areas of the settlement, future projects, and calculations, density of the areas as well as the river basins and flood areas. Furthermore, in the plan there are industrial and transportation activity proposals for the port and tourism and secondary house proposal for the south coastal. The new settlement areas are located on the main roads.

After these plans, in 1994, 1/25.000-scaled Iskenderun Bay and Near Environs environmental and in 2006, 1/100.000-scaled Hatay Environmental Master Plans were prepared. The 1/100.000-scaled Hatay Environmental Master Plan was cancelled in 2007 and the 1/25.000-scaled Master plan of Hatay Province is still in progress.

The 1/25000-scaled Iskenderun Bay and its environs Master plan was drafted in 1994. This plan focuses on the transportation systems. Besides that, the plan divided the city as an industrial zone in the north and a touristic zone in the south. The north coastal part, including the port area and the dense housing area, is preserved; however, there are second housing and recreational areas envisaged in the south part. The state highway leaves as it is to preserve the natural properties of south part of the city. The cancelled 1/100.000-scaled Hatay master plan was prepared in 2006 and approved in 2007. This plan includes 1/25000-scaled Iskenderun Coastal Sub Region Plan according to which, the south part of the city is allocated for the touristic facilities such as second houses, the coastal of Karaağaç and the north of the city is allocated for industrial and military zones. Besides, there are also storage units, industry, housing, urban development areas, settled urban areas, and railway, which lie along the coast and end at the center of Iskenderun city. The state highway is extended to Iskenderun – Arsuz – Çevlik – Samandağ, which

may have negative effect on living environment, ecological balance, settlement expansions, and future revisions.¹⁴⁴

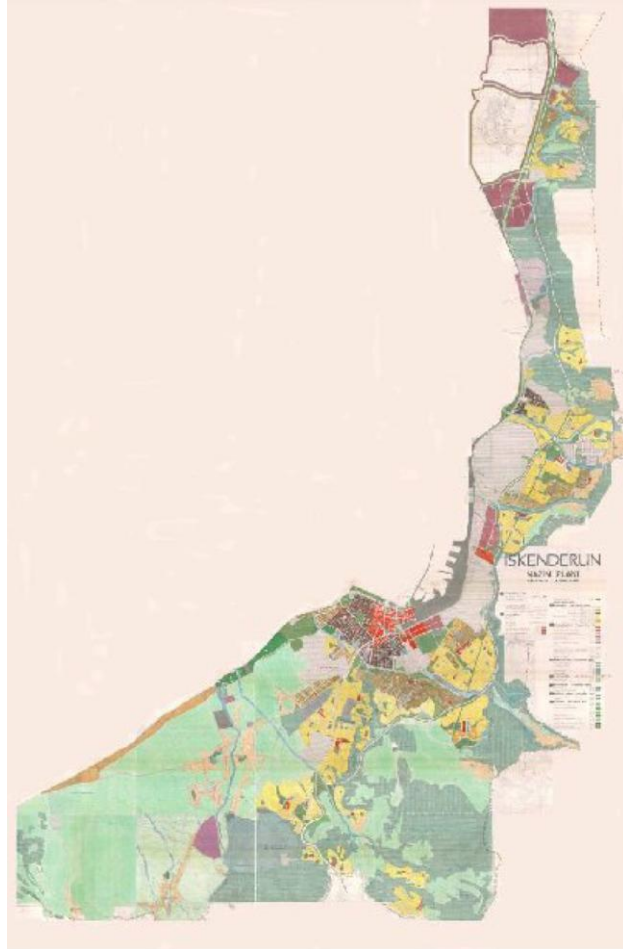


Figure 39. 1981 Master Plan of Iskenderun (Bank of Provinces, 2011)

There is also a 1/25000-scaled Master Plan of Hatay Providence, which is still under progress. According to the drafts of this plan, the dense residential areas in the city center are carried to the areas, which were planned to be recreational areas to decrease the density. Development projects for the canal and protection areas as well as coastal strip are included in the plan. The highway passing throughout the city center seems as a separator dividing the city into two parts one of which has very limited ability in reaching

¹⁴⁴ Iskenderun Municipality, 2007, Iskenderun, Iskenderun: Turkey

to the coast. In other words, the highway divides the city into two parts; one's function is business and recreation, and the other's is housing.

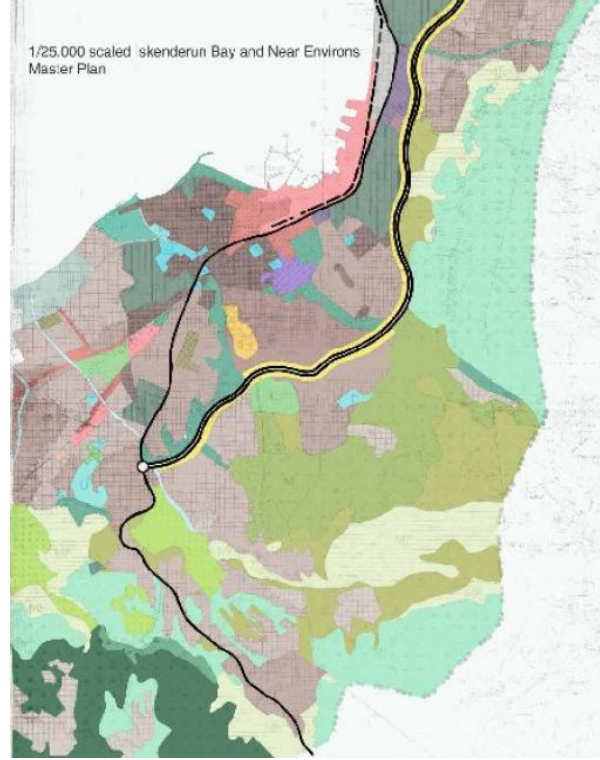


Figure 40. 1/25000-scaled Iskenderun Bay and Near Environs Master Plan (Bank of Providence)

In 2009, Remzi Sönmez as a part of Dampo Planning prepared Bütünleşik Kıyı Alanları Yönetimi/ Integrated Coastal Zone Management Project (BKAY/ ICZM)* for the Ministry of Public Works and Settlement. As Remzi Sönmez and Osman Balaban mentioned (2009) in the coastal cities of the Turkey, there are series of problems related to urbanization, industrialization, tourism and second houses. They also identified Iskenderun with these problems. The aims of this plan are developing a new model of planning and management for solving the current problems of coastal areas. The plan aims to present

" Bütünleşik Kıyı Alanları Yönetimi (BKAY), kıyı alanından sağlanan faydayı en çoğa çıkarmayı ve bunu yaparken kıyıda yer alan faaliyetlerin birbirleri, doğal kaynaklar ve çevre üzerindeki olumsuz etkilerini en aza indirmeyi hedefleyen bir planlama ve yönetim yaklaşımıdır." (ALT TAKİ REFERANS)

the coasts areas having various sources and values and covering many sectors. With this Project in the Iskenderun Bay and the coastal, it is aimed to utilize renewable sources in a sustainable way, conserving authentic and not renewable sources, well-established conservation-usage balance, representing the related groups, and as a good example for other projects (Figure 41).¹⁴⁵

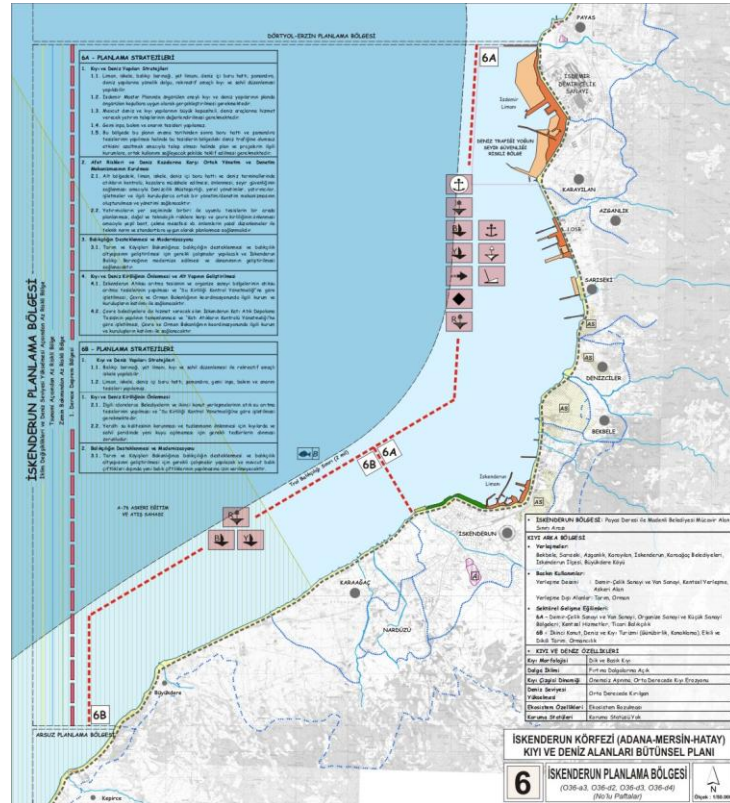


Figure 41. Iskenderun Bay BKAY/ICZM – Iskenderun Sub Region (Dampo Planning, 2011)

3.2. FEATURES OF TERMINUS AREA

Iskenderun city expands on a limited plain and in a curvilinear form from southeast to north between the Amanos Mountain in the east and Iskenderun Bay in the west. The transportation lines are also formed in accordance with these geographical features. The

145Sonmez, R.,Balaban, O. (2009), Iskenderun Körfezi Kıyı Alanları Bütünsel Planlama ve Yönetim Projesi,Planlama Dergisi NO:1

Toprakkale- Iskenderun railway line extends along the coastline in a way parallel to the shore between the Mediterranean and Adana-Antakya state highway (D810) which also extends in north- south direction to Iskenderun city center and then curls towards the northwest direction. Iskenderun Termini area is located at the end of the line, in the curling part of the railway tracks and the state highway. In the south of the terminus area, the port with its surrounding is located (**Hata! Başvuru kaynağı bulunamadı.**). The port connects the termini area to the sea. After the fieldwork, it is understood that Iskenderun Termini area is quite integrated with the port area. Both of the sites operated together for a century under the authority of Turkish Railway States (TCDD). Within this urban tissue, the boundaries of the study area are determined containing these two sites (Figure 42).

The study area is formed in a curvilinear form because of its location between the Mediterranean and the railway tracks with the state highway. Beside these two borders demarcating the borders of the area, there are Tayfur Sökmen Boulevard to the east, and the industrial zone to the north. The study area is defined into two parts for this thesis: the main study area is defined as the legal boundaries of whole termini and port areas; the neighboring study area is the settlement area in between the sea, the city center, and the main study area.

The state highway divides the city into two parts, which are formed from the road to the sea and from road to the slope of mountains. The study area is located at the entrance of the city center as a gate to the city in the 'from state highway to sea' part. The other side of it, the settlement zone stands after the industrialization of the city. At the edge of the road, opposite to the study area, the space is scattered. Most of these areas that are close to the road are agricultural and undesigned areas. The density of the settlement increases getting closer to the mountain hillside. Tayfur Sökmen Boulevard is one of the main alters that connects the shore and the state highway. The other side of the Boulevard is the city center, which is utilized for commercial and residential usage.

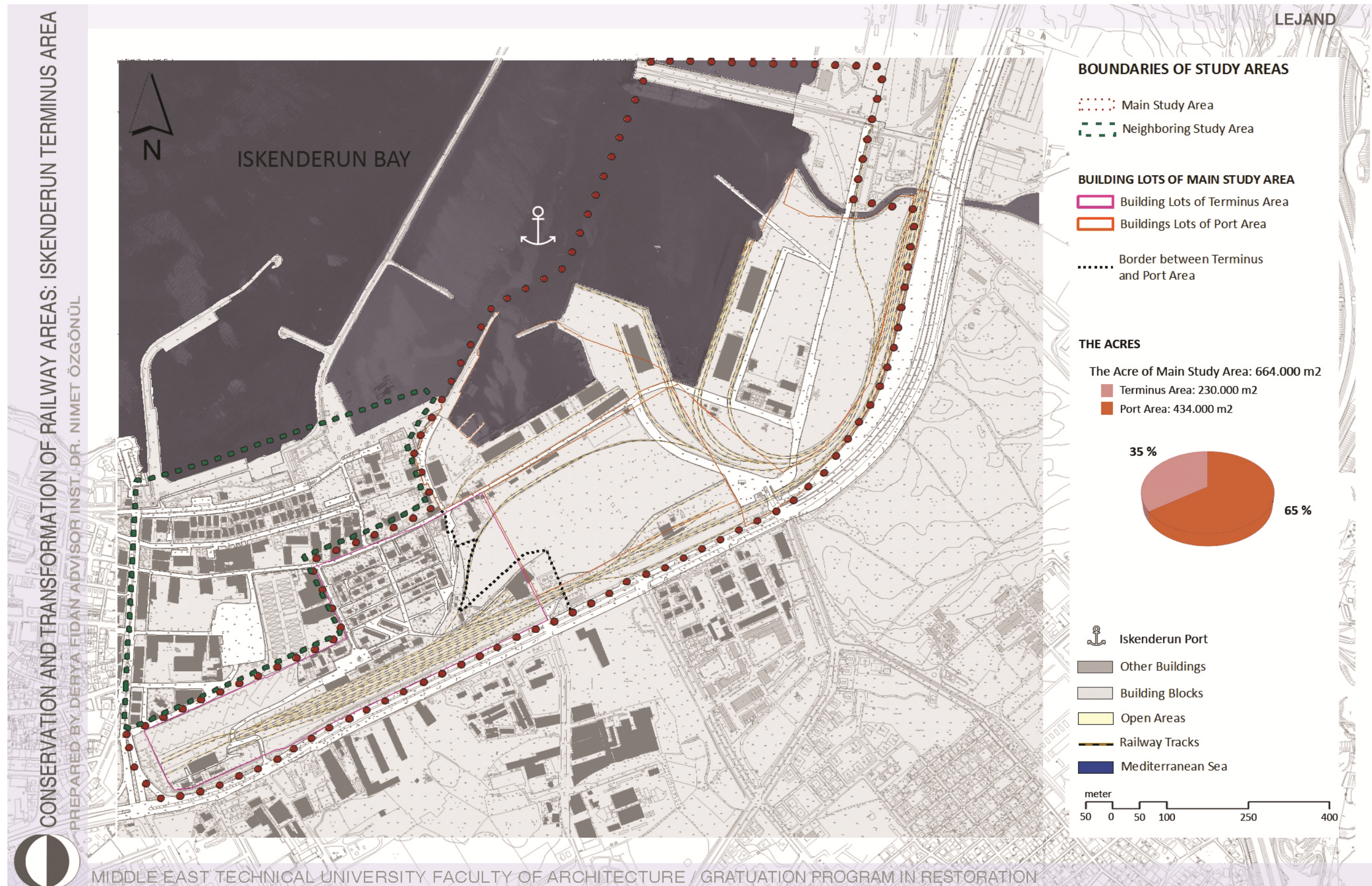


Figure 42. Boundary of Study Areas

On 15.12.2011, the field survey was done by taking photographs and notes for each building in the termini area and general photographs and notes for the port area. The category, current use, structural system, and construction material, number of storey, condition, and change information are gathered from this notes and photographs. The open- built up area, open area information are taken from photographs, notes and the existing plan of railway and port areas was obtained from Iskenderun Municipality. The information of construction years of the buildings are taken from the 1925 dated cadastral plan taken from Hasan Kanpolat Archive; whereas 1929, 1949, 1975, 1992 dated aerial photos are taken from the Commander of Aerial.

3.2.1. Categories of Edifices

Totally 134 buildings exist in the study area. 101 of these buildings are in the terminus area and 33 of them are in the port area. The number of the buildings in each category in terminus area and port area are shown in Table 4. In the terminus site, there are terminus building, residential, administration, maintenance, health, and storage buildings. The terminus building is organized with administration buildings. They are located as a whole group parallel to the railway tracks in the northeast- southwest direction. The station and the administration buildings close to it lay along the tracks. These buildings have similar dimensions and they are small-scaled compared to the other buildings in the area. Number of the residential buildings is more than other types of buildings in the area. Residential buildings are also located in a group. This building category is composed of different scaled buildings. Small-scale buildings are located parallel to the railway tracks. All the residences have at least one additional building as storage. Different scale and different form maintenance buildings, all of which are located parallel to the railway line, exist in the area. Two of them are large-scale buildings and have direct relation with the railway tracks. There is a water depot located independently in the area. (Figure 43).

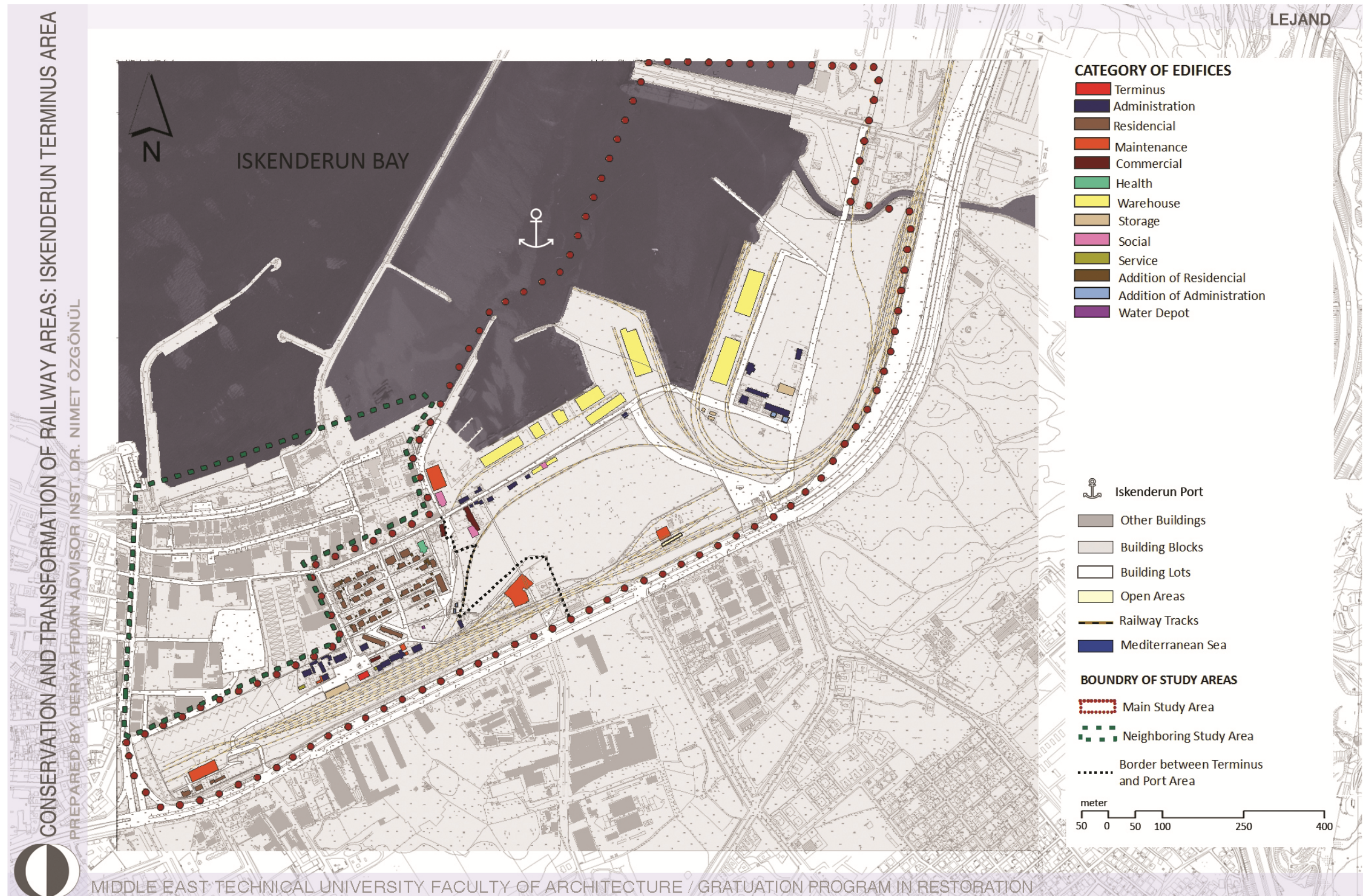


Figure 43. Category of Edifices

Table 4. Number of the buildings in accordance to the categories.

BUILDING CATEGORY	RAILWAY BUILDING	PORT BUILDING
TERMINUS	1	-
ADMINISTRATION	14	14
RESIDENTIAL	39	-
MAINTENANCE	5	1
COMMERCIAL	2	2
HEALTH	1	-
STORAGES	1	4
WAREHOUSES	-	10
SERVICE	2	-
SOCIAL	1	2
WATER DEPOT	1	-
ADDITIONS(of RESIDENCES)	35	-
ADDITIONS(of ADMINISTRATIONS)	-	2
TOTAL	101	33



Figure 44. The Terminus and Storage in the Terminus site. (Date taken: 15.12.2011)

In the port site, administration, maintenance, health, customs, social, and storage buildings, warehouses exist. Although there are more administration buildings, warehouses dominate the area because of their large sizes. There are ten warehouses and all of them located near the sea. The narrow- gauge tracks connect each of them to carry the cargos stored in their surroundings. The other type of buildings is port administration buildings. They are all small-scale buildings and located in a scattered form. A large number of them are located at the entrance of the port area.

3.2.2. Open and Built-up Areas

In order to understand the relations between the open and built-up areas, the pattern they formed as well as the general features of these areas are examined in this study. In Figure 45, the open and built up areas and the proportions of these areas in the study areas area shown.

In the railway area, terminus and administration buildings, residential buildings and their additions, maintenance buildings and storages exist. There are two main alters that connect these buildings and various open areas are formed in between these elements.

Two main roads connect the area to its close environment. These are Adana- Hatay State Highway and Tayfur Sökmen Boulevard connecting the state highway. Beş Temmuz Street, which penetrates in the port area, connects the area to the city center.

Approximately 60.000 m² of the terminus area, which is 190.000 m², is built-up area and the rest is open areas. That means 30% of the terminus area is built-up. The base areas of the buildings differ from 50 m² to 1523 m². The differentiation is also seen in the residential buildings. The small-scale residential buildings have the same site plan layout and 150 m² base area. Two, three, or four of them are located in one building block together in a detached organization. Additional buildings in a rectangular form, average 15 m² were added in the same building block but separately to the residential buildings. There are narrow roads between these building blocks. Their base area is 156 m² and the proportion of the built-up areas to the building blocks change from %25- %30. The large-scale residential buildings, just three, have rectangular form and 500 m² base areas in average.

The administration buildings are located in a more compact way around the terminus and parallel to the railway tracks. They have similar base areas in quantity, which differs from 200 to 300 m². A large open area in front of the terminus associates most of the administration buildings (Figure 47).

The categories of open areas and their distribution in site is shown in Figure 46.

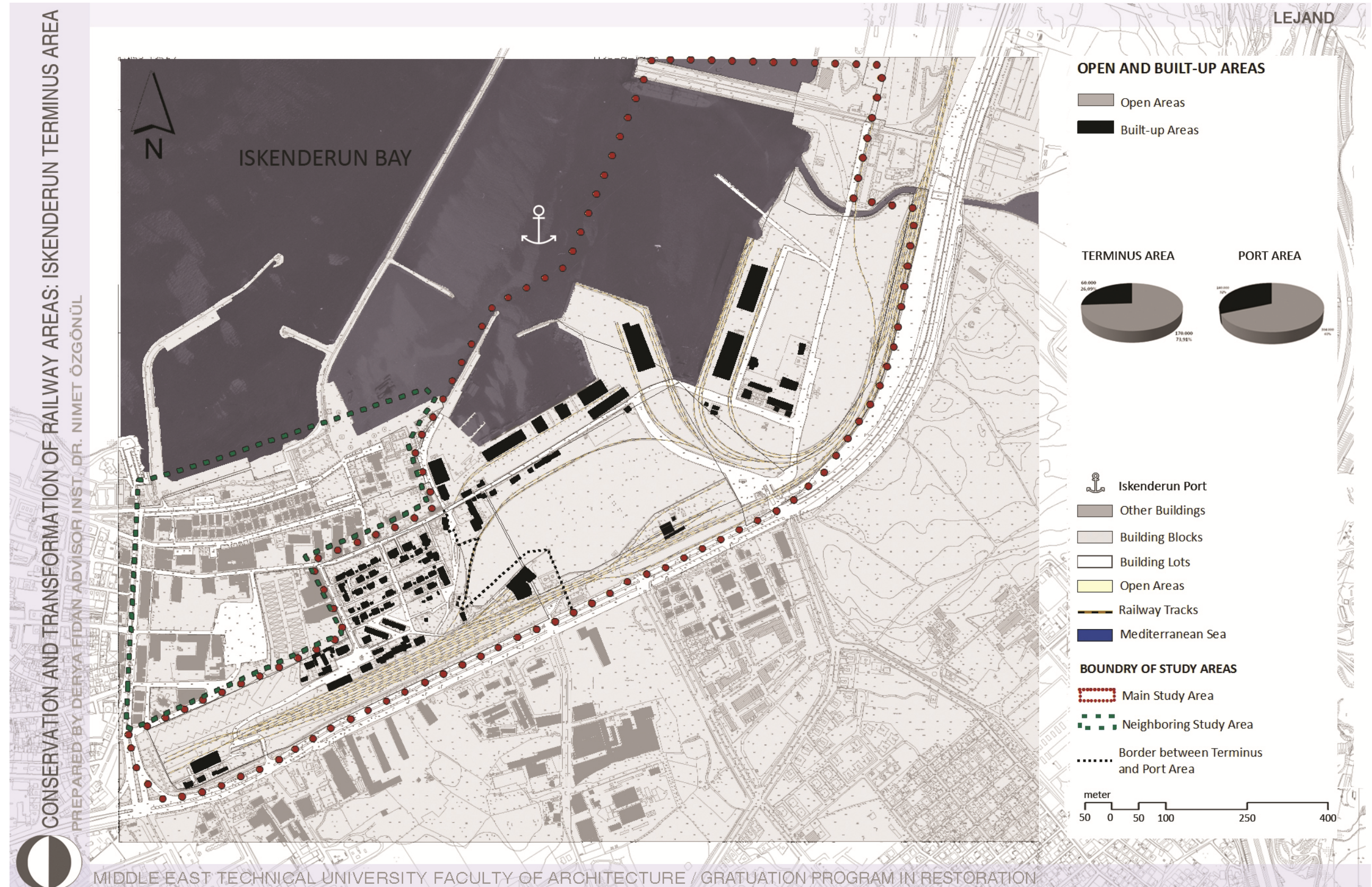


Figure 45. Open and Built up Areas

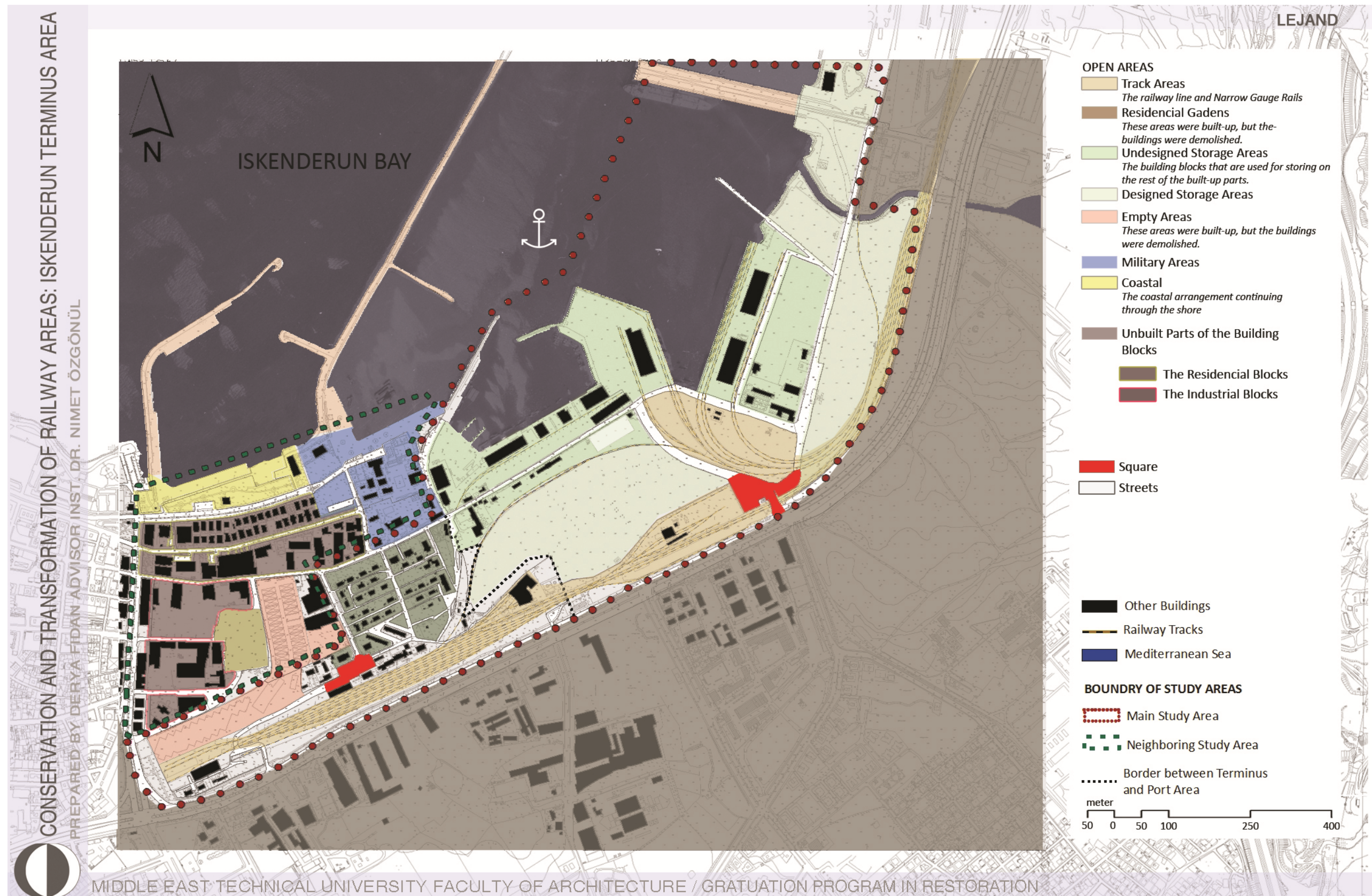


Figure 46. Open Areas



Figure 47. The large open area in front of the Terminus. (wikimapia.com)

140.000 of the port area is built-up area, 520.000 m² and the rest is open areas. That means % 25 of the area is built-up area. The continuance of Beş Temmuz Street in the port area divides the area into two in the northeast- southwest direction parallel to the sea. There are buildings aligning towards this street on both sides. Some of the administration buildings, which gather in two groups and are located far from each other, are deployed at the entrance of the port area. The other group is located in the inner part of the area where it curls towards the north-south direction with the sea, railway tracks, and buildings. They are all small-scale buildings. The other building categories go as the maintenance buildings and warehouses, which are located between the street and the sea in a parallel direction. They both are large-size buildings. The former are located individually a little bit far from other buildings. On the other hand, the latter are located close to each other near the seaside.

In terminus site, as can be stated from the proportions of open/built-up, there are wide open areas: namely squares, parking areas, narrow- gauge areas, the area that railway tracks are laid down, and green areas.

According to the sizes and the surrounding buildings, two squares are seen in the terminus area. The first one is the wide square in front of the terminus that serves to the people travelling. There are the administration buildings, storage, commercial building besides the terminus around the square. Because there is no passenger transportation

anymore, the usage density of the area is low. The second one is a square within the residential blocks that acts as a green area. It is used by the inhabitants of the residential buildings as a transition place. Besides the squares, there are car-parking areas in the study area. The car parking areas are located near the station and residences for the inhabitants and the personnel. The area where the rails are located also forms an open space. These areas are indicated as railway line and narrow gauge railroad lines. The gardens of the residential buildings are composed the major part of the terminus area. The borders between each building and with the streets become unclear for these gardens (Figure 48).



Figure 48. The Roads and the Gardens between the residential buildings in the Terminus site. (Date taken: 15.12.2011)

There are two entrances to the port site. Because of ports' being more secure areas, there is a limited access. One of this is from the state highway usually for the trucks. The other is at the end of the Beş Temmuz Street, which is for both the people and vehicles. Because of the dense cargo transfers, the main open areas are the storage areas. The areas near and parallel to the sea are used for storing simultaneously with unloading the cargos from the ships. Whole the areas remaining from the built parts are used as open storage areas in these places (Figure 49). The goods are unloaded here and transferred to the permanent storage space on trains or trucks.



Figure 49. The wide open storage areas in the port site. (Date taken: 15.12.2011)

3.2.3. Registration Status

The buildings that were registered by General Directorate of Cultural Heritage and Museums in different dates and their distributions in the sites are shown in

Figure 51. In the railway area, General Directorate of Cultural Heritage and Museums registered seven buildings. According to the decisions taken by the Conservation Board, the station and the nearby buildings (seven buildings: terminus, storage, two administration and two maintenance buildings, a service building) were registered before 2001 (Figure 50). Because, the oldest decision dates back to 2001 and the decision of registration of these buildings cannot be found.

On 11.12.2001 with the decision no 4490, the maintenance building, two additional buildings and warehouse were registered. These buildings joined to the conservation area in 28.09.2006 with the decision no 2013. Thus, the boundaries of the conservation area of railway complex were predetermined.



Figure 50. The two registered Warehouses. (Date taken: 15.12.2012)

In the port area, there are not any registered buildings. On 26.01.2011 with the decision no 6741, the TMO silos in the area were offered to be registered, however it was rejected by the council. According to the 23.12.2011 dated expert report*, there is no building that has the properties to be registered in the port area. On 04.05.2012 with decision no 1436, it is mentioned that there is not any objection to demolish the buildings in port area.

3.2.4. Construction years of the Buildings

The period the buildings were constructed have a great influence of the features of the structures. Architectural styles, mainstreams, or approaches affected the character of the edifices. In accordance with the aerial photos and the cadastral plan the construction years of the buildings were determined. The terminus area firstly emerged in the 1929 cadastral plans. In this plan the, main buildings, which are terminus, maintenance, administrations, and storage, are seen as built. Some of the warehouses in the port area were also seen in the plan. In 1949 aerial photographs, most of the residential buildings were constructed. The other residential were built after 1949 until 1975. Some additional buildings and most of the port administration buildings were built after 1975 until 1992. The construction years of the buildings and their distribution in the area are shown in Figure 52.

3.2.5. Architecture of Edifices

The buildings in the railway and port areas are grouped into the ones built in the French mandate period and the Republican period. These buildings exhibit diverse architectural approaches. former reflect the approach of a colonial western country on its Sanjak, on the other hand the latter is a product of an approach of a recently established country trying to find its own architectural identity.

* It is written in the 04.05.2012 decision no 1436 report of file review that : Müdürlüğümüz uzmanlarınca hazırlanan 23.12.2011 tarihli uzman raporunda İskenderun Limanı için "1000 dönümden büyük bir alanda faaliyetini sürdüren İskenderun Liman sahasında, idari binalar, ambarlar, ve silo yapılarının bulunduğu, alanın asfalt, yer yer de toprak olduğu, Hatay ili İskenderun ilçesi, İskenderun Liman sahasında, 2863 sayılı yasa kapsamında korunması gerekli taşınmaz kültür varlığı bulunmamaktadır..." denilmiştir.

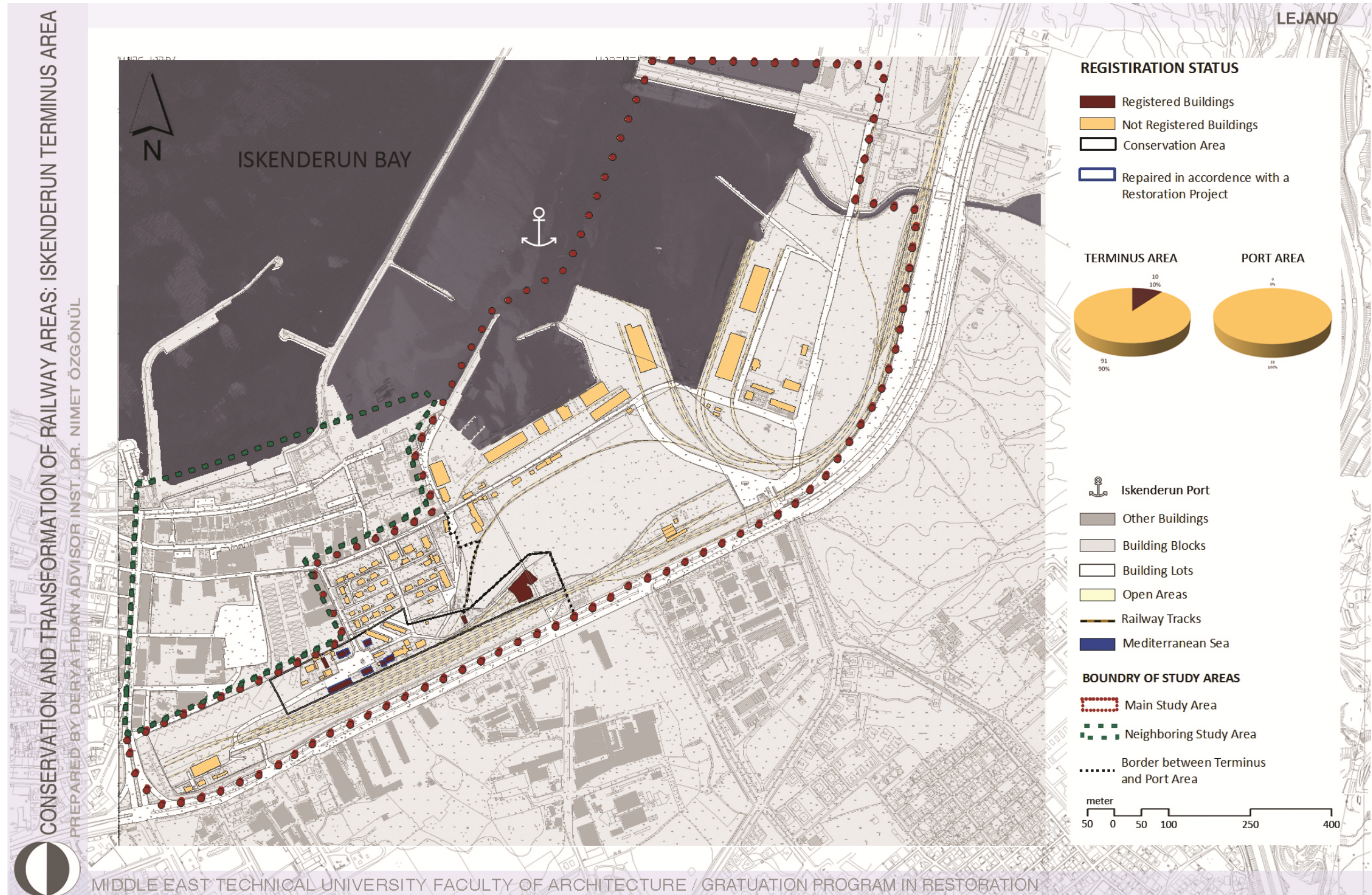


Figure 51. Registration Status

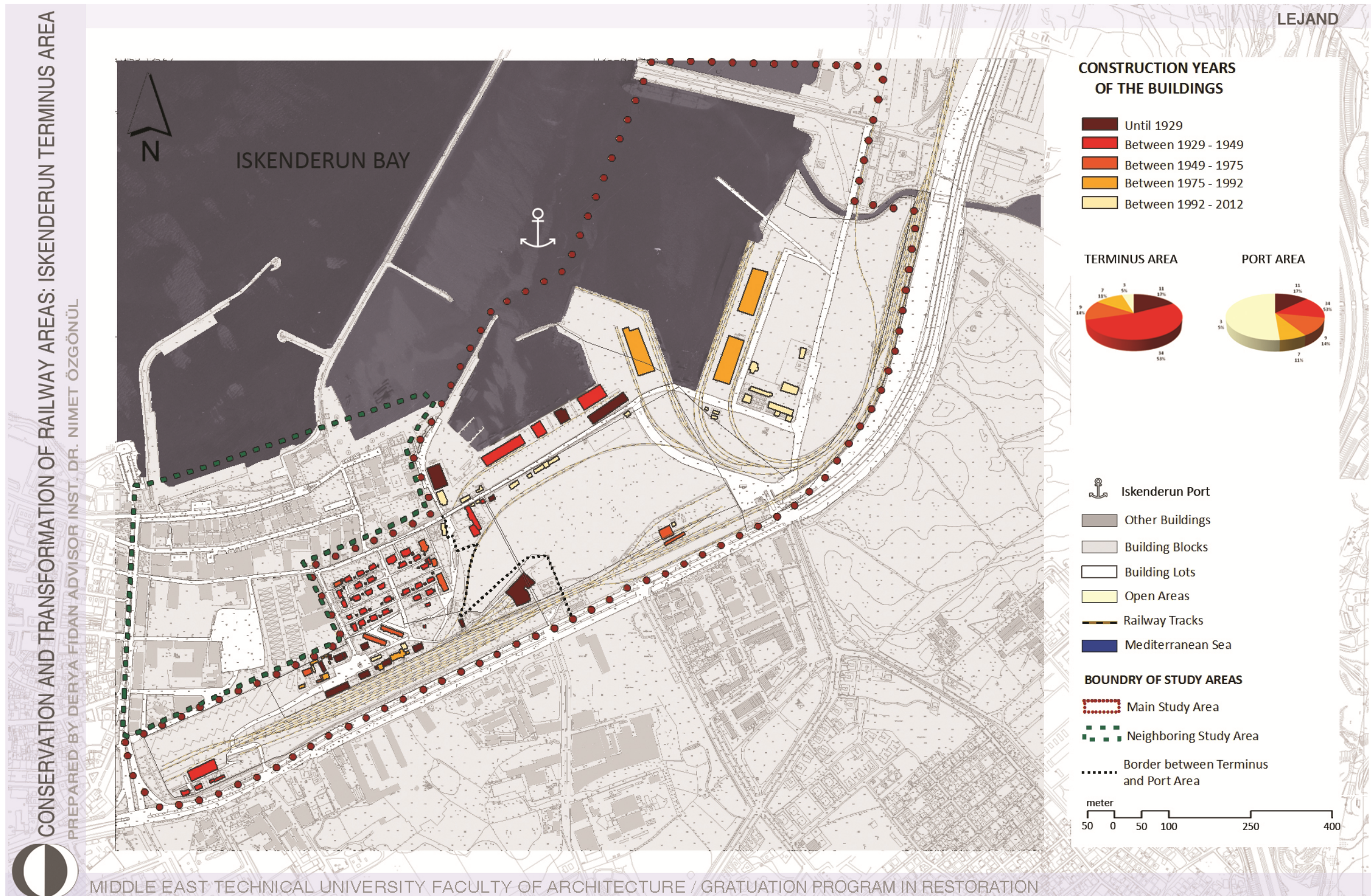


Figure 52. Construction Years of the Buildings

The buildings, built in the French period in terminus area, are not the only buildings from that period in Iskenderun. There are a number of buildings, which were constructed in French mandate period, having survived almost a century. These buildings namely are the Justice Palace, Bank of Syria, Alexandretta Hospital, Konak of Alexandretta, two private residences, Mithat Paşa School, the church, and the library. The buildings constructed by the French in Iskenderun reflect the desire to combine the French architecture with that of the Ottoman architecture and local. The general approach reflects the image of oriental and Islamic architecture.



Figure 53. The buildings constructed in French Mandate. The former is The Hospital and the latter is a house. (Sermin Çakıcı Archive)

In the Terminus area, the terminus and administration buildings in its surrounding are located; whereas the maintenance building stands a little further. The station building is the most representative one of these buildings. Its large eaves, pointed arch openings, monumental stairs, a great number of buttresses make the most attractive building in the area. There are motifs on the corners of the eaves. The administration buildings also carry these properties. They are all low-storey, brick masonry, and articulated buildings. The warehouse, which is located parallel to the tracks with the ones mentioned before, is also a representative building for that period. The articulated façade is the most striking part (Figure 54).



Figure 54. The architectural details of the buildings constructed in French Mandate Period.(Date taken: 15.12.2011)

The buildings constructed in the French mandate period in the port area are the customs office, the social building and two warehouses. The customs office also represents the French architectural approach. It has stone masonry, single storey, rectangular- planned building. In addition, it has arch form openings and flat roof. The warehouses, which are used for storing the goods, are designed according to the functional needs. They have timber frame structural system with brick infill, rectangular plan, large-scale void, high-ceiling, hipped roof, and large openings.



Figure 55. The customs office and warehouses in the port site. (Date taken: 15.12.2011)

The buildings constructed in the Republican Period in the terminus area are the workers' houses. There are almost 25 houses reflecting the general national architectural approach of the Republic. In that period, for the workers' houses typical plans were implemented. They were generally

small, rectangular form, low-storey and brick masonry buildings. One mass is formed for two dwellings. Some of them still have arched openings.



Figure 56. Two of the Residential Buildings constructed after 1929 until 1949. (Date taken: 15.12.2011)

After 1949 as mentioned before reinforce concrete, became the main construction material. This affected the architectural features of the buildings that were constructed in those years. It was possible to construct wide and high buildings with concrete. The four or five storey apartment blocks were constructed after 1949 with reinforces concrete. Their forms are more basic and no ornamentation or articulation exists reflecting the modernism movement in Turkey. However, after those years buildings with different scales started to be constructed with concrete (Figure 57).



Figure 57. The apartment block constructed after 1949. (Sermin Çakıcı Archive)

The main structural system in the area is masonry. Brick is the construction material used for the masonry. The railway buildings in Turkey are generally masonry buildings. While we look at the construction years of the railway, area buildings it is reasonable to use masonry technique. During the 1950s concrete is the common construction material in Turkey. This situation affected the study area. The buildings built after republic area of concrete.

After 1950s, the investments to the railway areas decrease as a part of country policy. So, very few buildings have been constructed after those years in terminus site. However, the activities of the port continue effectively. Three big warehouses were constructed as a part of these running activities(Figure 58).

The number of the storey and the structure of the buildings both in terminus and port site are indicated in the Figure 59 and Figure 60.



Figure 58. The warehouses constructed after 1975. (Date taken: 15.12.2011)

3.2.6. Current Use of the Buildings

Iskenderun terminus area, which was formed a century ago, has been used for both passenger and load transportation until recent years. Nevertheless, today it is used for just cargo transportation.

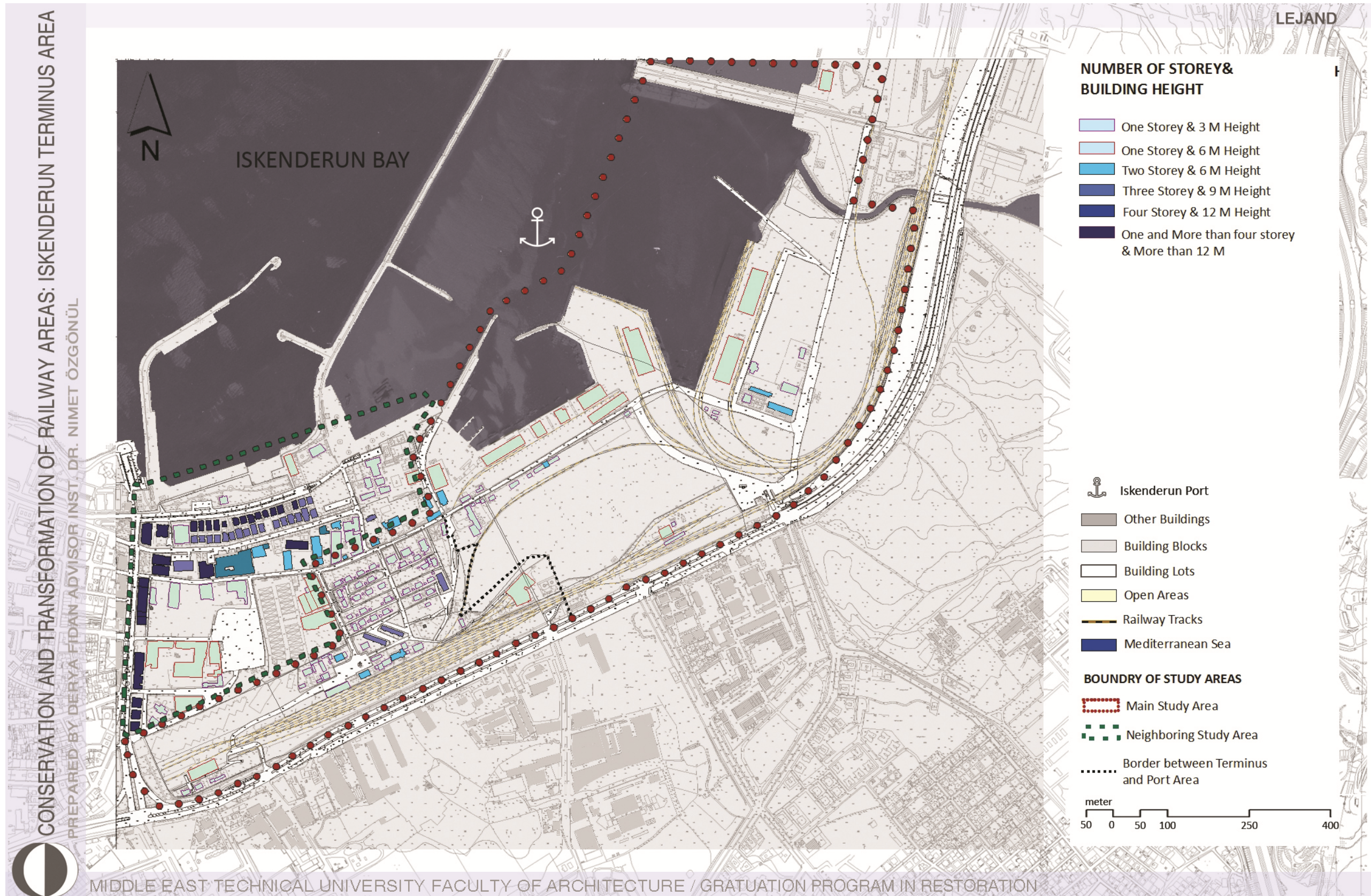


Figure 59. Number of Storey and Building Height

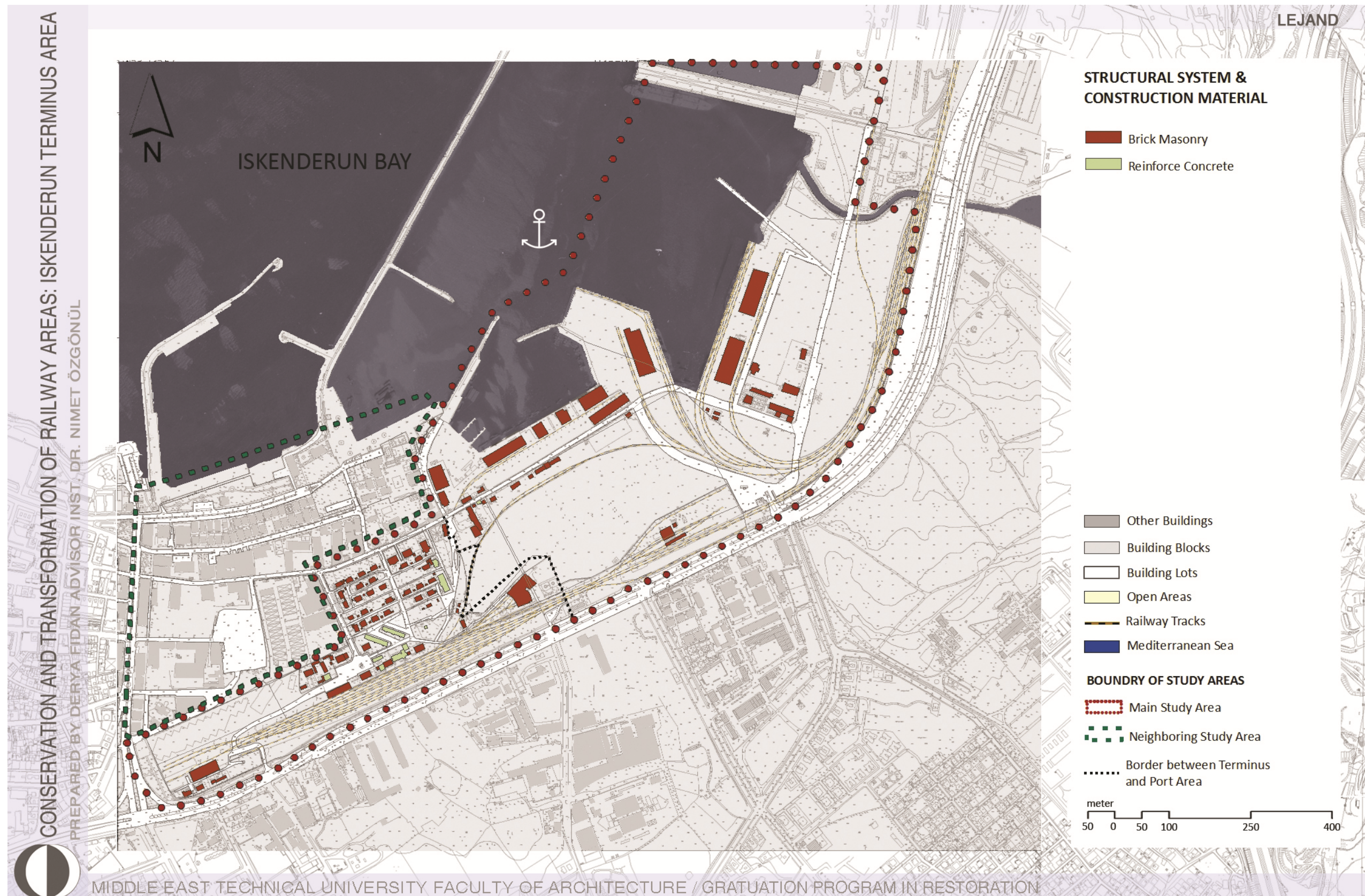


Figure 60. Structural System& Construction Material of the Buildings

The terminus itself is the main building of the area. In order to proceed the load transportation use, the system is required to be operated, the mechanical equipments are required to repaired and maintained. In this respect, there are buildings used for administration and maintenance. With respect to the need of accommodation of the TCDD personnel there are a group of dwellings, which have at least one additional buildings in their gardens. Nonetheless, there are empty buildings scattered in the area. Some of these buildings are located near the dwellings, some of them are into a few administration buildings. There is also a water depot, which is located in the north and a bit far of the tracks, is specific for the railway area. There have not been any construction around it, thus it is located in the middle of a green area.

Table 5. Current Use Of The Buildings in Railway and Port Area.

Current use of RAILWAY BUILDINGS	Current use of PORT BUILDINGS
<ul style="list-style-type: none"> -Terminus -TCDD Installation Building (TCDD TesislerBinası) - Directorate of Road Maintenance and Repair (YolBakımOnarımMüdürlüğü) - Directorate of Logistics (LojistikMüdürlüğü) - Chief of Wagon Service (Vagon Servis Şefliği) - Workers' Houses - Ateliers - Tea House (Çay Ocağı) - TCDD Medicine (TCDD Kısım Hekimliği) 	<ul style="list-style-type: none"> -Port Fire Department (Limani Itfayesi) -Directorate of Customs and Guard (Gumruk ve muhafaza mudurlugu) - Botas Administration Building (Botas Idare Binası) - Directorate of Customs Offices (Gümrükler baş Müdürlüğü) - Alien Intelligence Customs Enforcement (Gümrük Muhafaza Kacak ıstihbarat) - Chief of Port Section (Liman Reyon Şefliği) - İlçe emniyet mudurlugu deniz hudut kapisi buro amirligi - Guardhouse (Nizamiye) -Liman atölyesi -Bar -Restaurant -Warehouse (Reyon Ambar) - Port Warehouses -Sosyal tesisbinası-Liman lokali -Guest house -Port Medicine

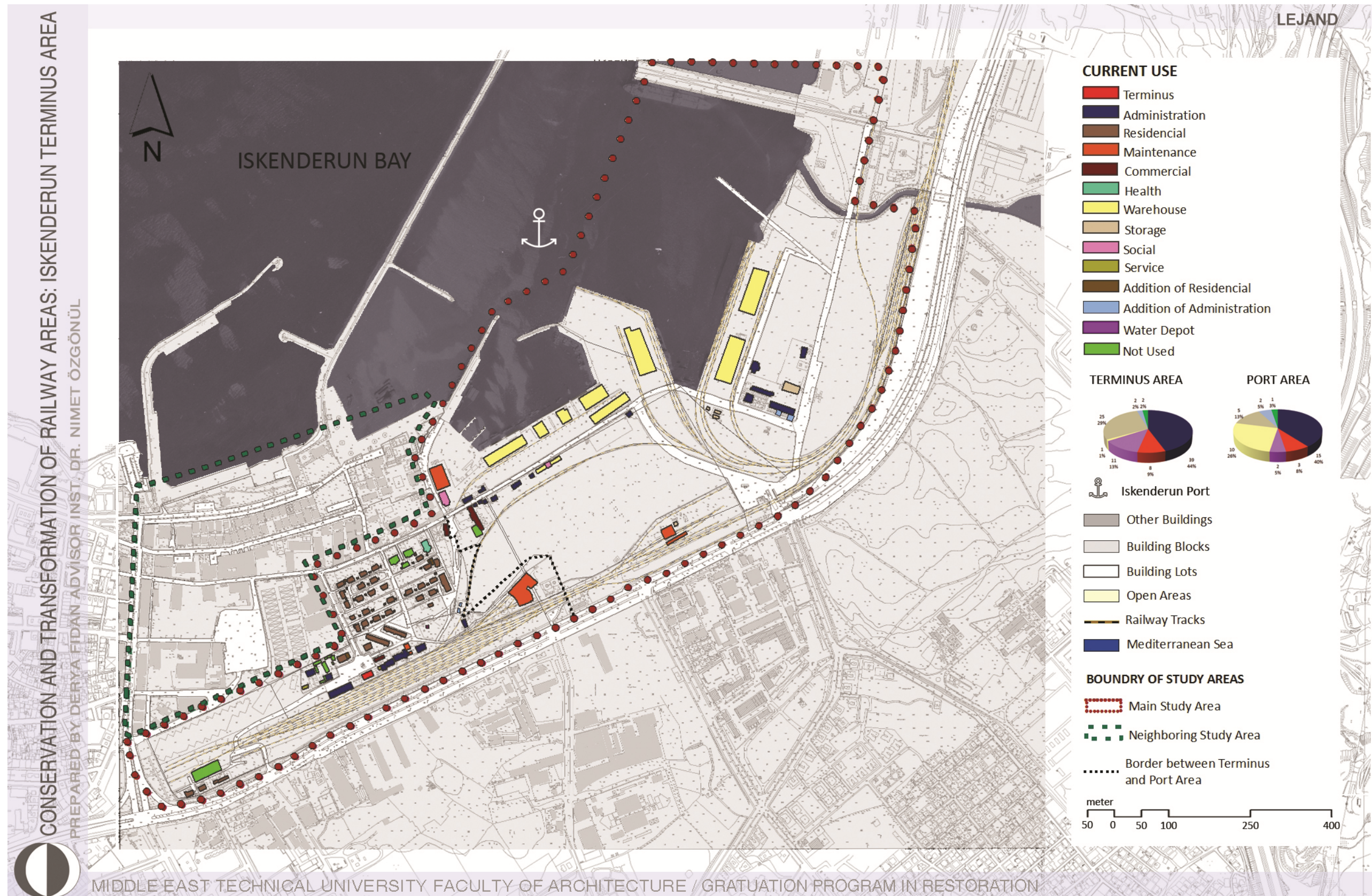


Figure 61. Current Use of the Buildings

In the port area, the main building is the customs office. However, warehouses are the ones that dominated the area with their numbers and sizes. There are also many administration buildings scattered in the area. (Figure 61)

3.2.7. Condition of the Open and Built-up Areas

The main problems of the area can be grouped into two. One is structural problems and the other is material problems. (Figure 62)

In the terminus area, the registered buildings have been repaired within the scope of restoration projects in recent years. Thus, they are in a very good condition today. As such, the buildings in the area generally do not have structural problems. However, because of the neglected years, most of the buildings are in a bad condition in terms of material problems. Especially the additional buildings of the dwelling are in a poor condition. The empty large-scale buildings also indicate structural and material problems, because of being neglected.

In the port area, buildings are generally in a good condition. In fact, some buildings have some facade finishing material problems.

Table 3. The structural and material problem types.

Structural Problems	Material problems
Cracks deformations	<p>Because of the dampness and raining problems,</p> <p>Discoloration</p> <p>Material loss</p> <p>Disintegration</p> <p>Material decay in finishing and elements</p>

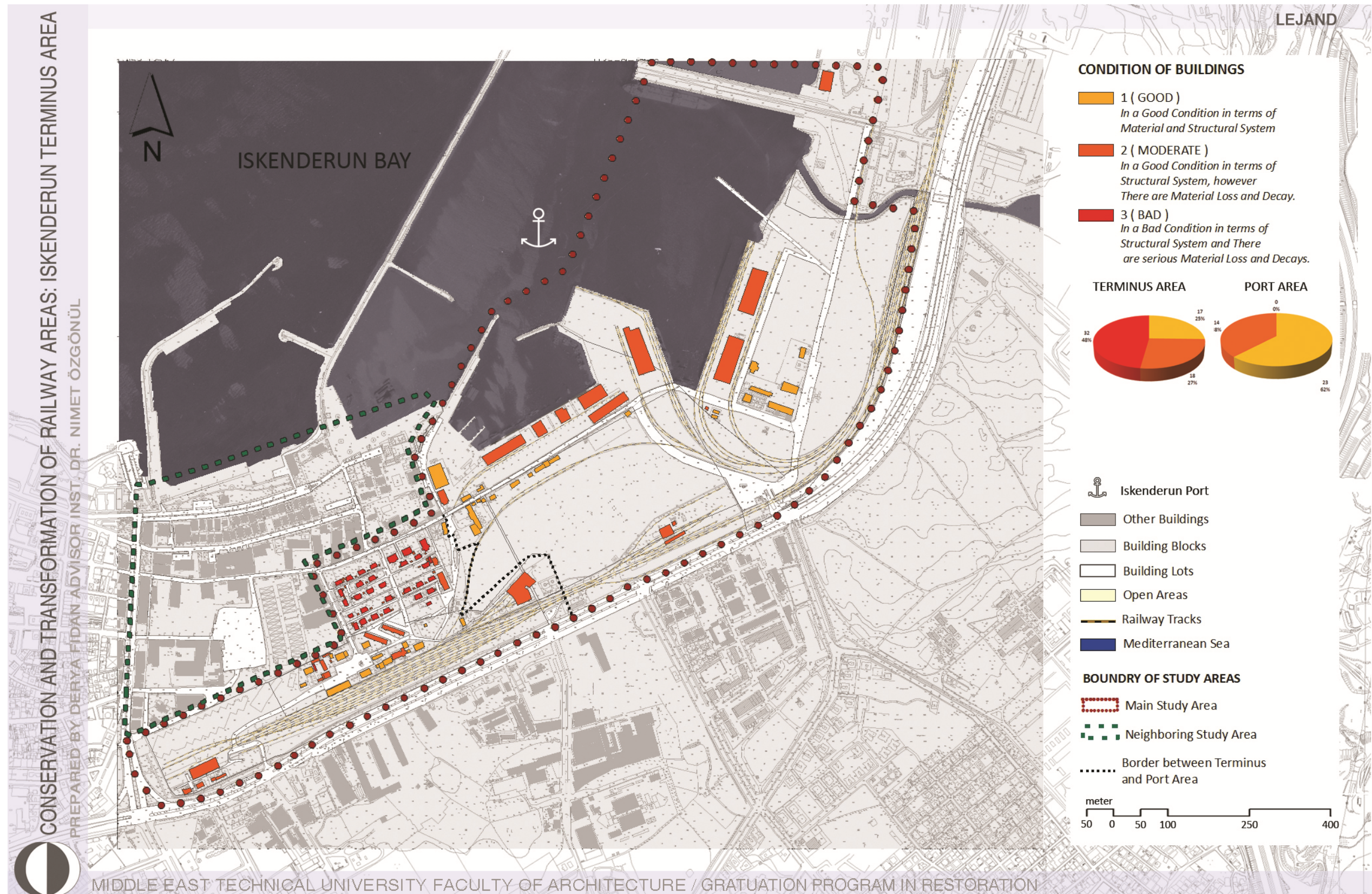


Figure 62. Condition of the Buildings

3.2.8. Change of the Study Area

The historical development of the study area is divided in four phases related to the existing data material. So, the main period are the years between 1911- 1929, 1929-1949, 1949- 1975, 1975- 1992, and after 1992. In the 1929 cadastral plan (Figure 63), the state highway is seen as a village road. This road is located in the south of the area and separates the area from the empty areas in those times. Today, the area is in the city and integrated to the city center in the east however, in 1930 aerial photo, area was a little bit out of the city, and there was an empty area that separated the area from the city center. The same way the industrial zones seemed empty. The relation with the sea of the area also changed. The filling parts of the port could not be seen. The area near the port that currently belongs to the military belonged to the railway area. The axis that lay to the east-west direction and connect the city center and port area, north-south direction roads one of which connects to the station and the other passes through in the back of maintenance building cross the former axis and connect to the village road. There are empty spaces out of the small number of buildings. The residential buildings for the railway workers were not constructed that is why the buildings, their building blocks, and the street pattern could not be seen.

In the 1949 aerial photo (Figure 64), the state road axis became apparent. The relation between the city center and the railway did not change. The area in the south side of the main road was still empty. There was a filling side in the port area through the sea and new buildings were built. The residential area in the railway area can be seen almost the way it is today. Only few buildings were demolished and do not exist today.

In the 1975 aerial photo (Figure 65), it is seen that city expanded to the east and unified with the study area. In the empty area between the city center and the terminus area light industrial buildings were constructed. The existing axes were preserved. The settlement area integrated with the south by expanding from west to east. There were still empty areas in the southeast however; the east was full with the industrial areas. In fact those years referred to the construction of the I.

In the 1992 aerial photo (Figure 66), the politics for railway transportation of the government after 1950s changed. Highway became more important and most of the

investments started to be done highways. That is why while looking at the 1975 aerial photo, there was not big changes. It could be said that the density of the settlement area and the industrial zone increased.

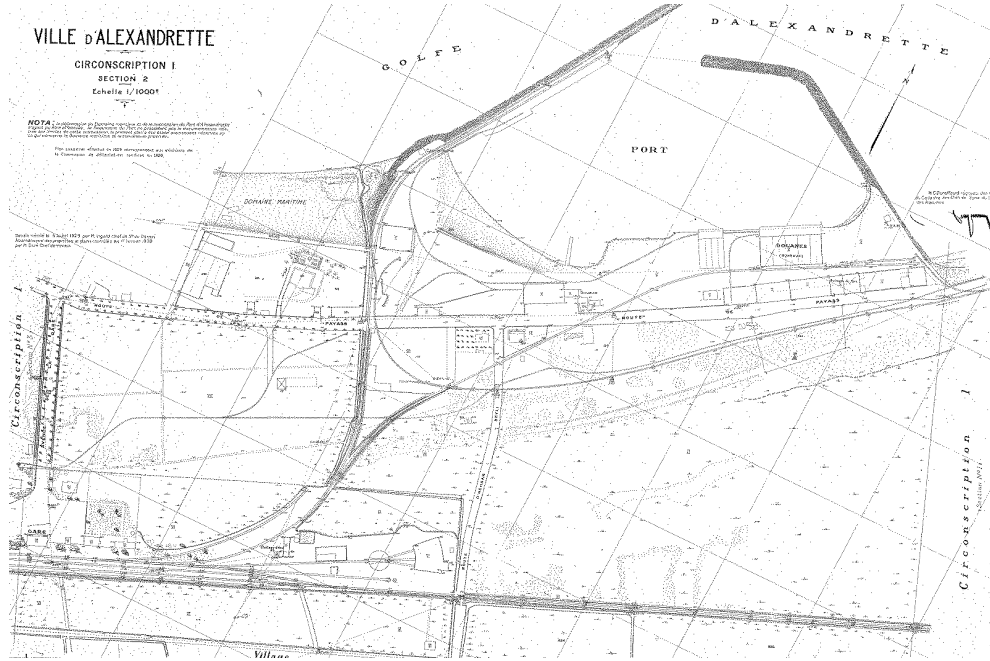


Figure 63. 1929 Cadastral Plan of Iskenderun (Hüseyin Kanpolat Archive)

Change in the buildings is based on the visual observations. As it is seen in Figure 67, it is seen in all buildings in the area, related to maintain the buildings as usable and correspond to the needs of the time . The buildings that are considered to be more valuable according to TCDD are registered and then they were repaired in the scope of the restoration project. These restoration improvements can be considered as simple repairs. The administration buildings and maintenance buildings have passed through some repairs such as change in finishing materials, which are plasters and paints for this area. The residential buildings have changed particularly. In order to adapt the houses to today's conditions many mass additions have been made on the buildings beside the change in the facades and transform its function and get new one. Some of the buildings lost their functions but did not get a new one. Ten buildings are not in use today. Six of these buildings were administration buildings, three of them were maintenance buildings

and one of them was a social building. This means most of the buildings conserve their original function and there is no tendency to transform the buildings in the study area.

Tablo 3. :Change In Buildings

	IN MATERIAL	IN OPENINGS
IN FACADE	<i>Change in window and door paint</i> - deterioration of material - visual preferences	<i>Change in window door dimension</i> - need for sunlight - Material deterioration - Product limitations or standard proportions of products in the market - Trends of the periods
	<i>Change in facade paint</i> - deterioration of material - visual preferences	
	<i>Change in window and door material</i> - insulation - difficulties of maintenance	<i>Removal/addition of window/door</i> - need for sunlight - insulation
	<i>Change in plaster material</i> -deterioration of material	
IN MASS	<i>Extension of existing space</i> -need for a bigger space	<i>Addition of new volume/mass</i> -need for a new space

Before 1929, the French constructed a station building, six administration buildings, and a maintenance building in the railway area as well as two warehouses and an administration building in the port area. Therefore, both railway area and port area became operational. After Hatay's annexation to Turkey, with the improvement policy of the Republic many other buildings were constructed. Most of the residential buildings were constructed between 1929 and 1949. Two maintenance buildings one of which was for the railway area and the other for the port area, three warehouses were also constructed. After decades of establishment of the Republic, with the modernism movement in Turkey apartment blocks started to be built. This movement affected also Iskenderun railway area. After 1949 high storey concrete residential buildings were constructed. In those years, it is seen that construction activities in the railway area decreased because of the transformation policies in Turkey. On the other hand port got more importance. Between 1975 and 1992, six administration buildings in the railway

area and three warehouses in the port area were constructed. most of the buildings in the port area were constructed after 1992. Twelve administration buildings, two social buildings, two small warehouses, four depots were constructed in the port area. One administration, two commercial, one service building, and one maintenance building were constructed in the railway area.

The area started to be constructed in 1929 and until today the construction activities continue. The primary buildings were constructed as the others built by the French in those years. Brick masonry system was the main structural system for the French. After France left the town, in the Republican era, with the aim of improving the railway system and the railway areas, many other buildings were constructed. It is seen that for the lower storey buildings traditional techniques were used on the other hand for the three or more storey buildings, concrete started to be used. After 1949, modernism came to be the main movement in Turkey. All the buildings both low and high storey were constructed out of concrete.

Buildings in the area show a unity of style in architectural manner and the hierarchical approach of TCDD. The First National Architecture era affected the railway architecture as it affected all others. The style used in the buildings is determined by the nationalist politics of the government.

3.3. EVALUATION

Iskenderun has two folded feature for Turkey. One is that the city is one of the port, industrial, and coastal cities in Turkey, the other is that the city is one of the port, industrial, and coastal cities in Eastern Mediterranean. The Iskenderun port is strengthened this relation. In addition to that, the railway line connected to Bagdad railway line and then to the Hicaz Railway line put the city in a strategic point in Middle East. Today, the iron and steel factories that comprise the biggest part of the industrial area and industrial activity, also a part of the exportation and provide significant relations to both Mediterranean and European countries. Thus, Iskenderun is improving and gets importance with its port, railway, and industrial sites.

The main study area, which consists of terminus and port site, is a very dominant part of Iskenderun City both in the size and in operational manner. The study area has been

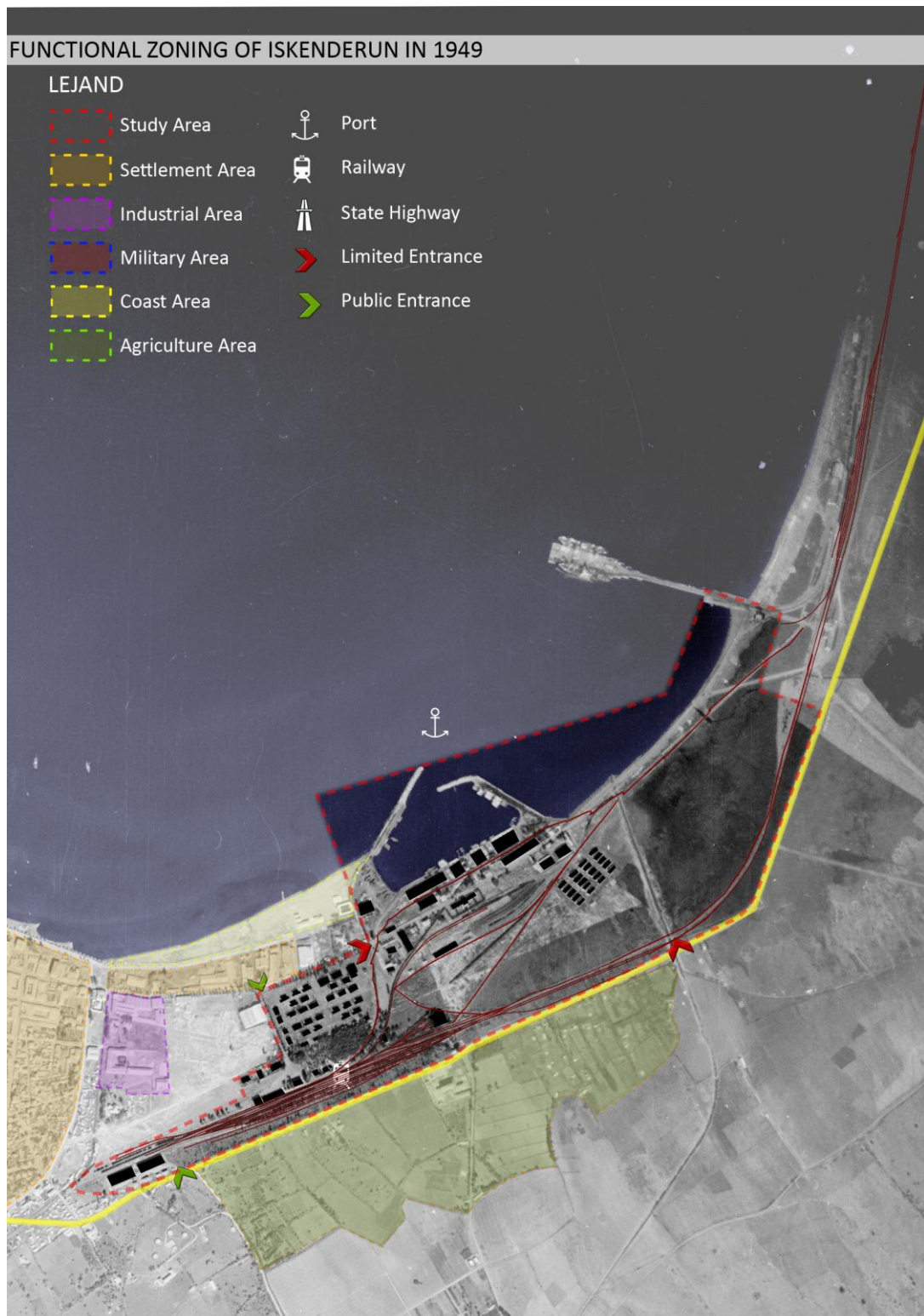


Figure 64. Functional Zoning of 1949 Aerial Photography



Figure 65. Functional Zoning of 1975 Aerial Photography



Figure 66. Functional Zoning of 1992 Aerial Photography

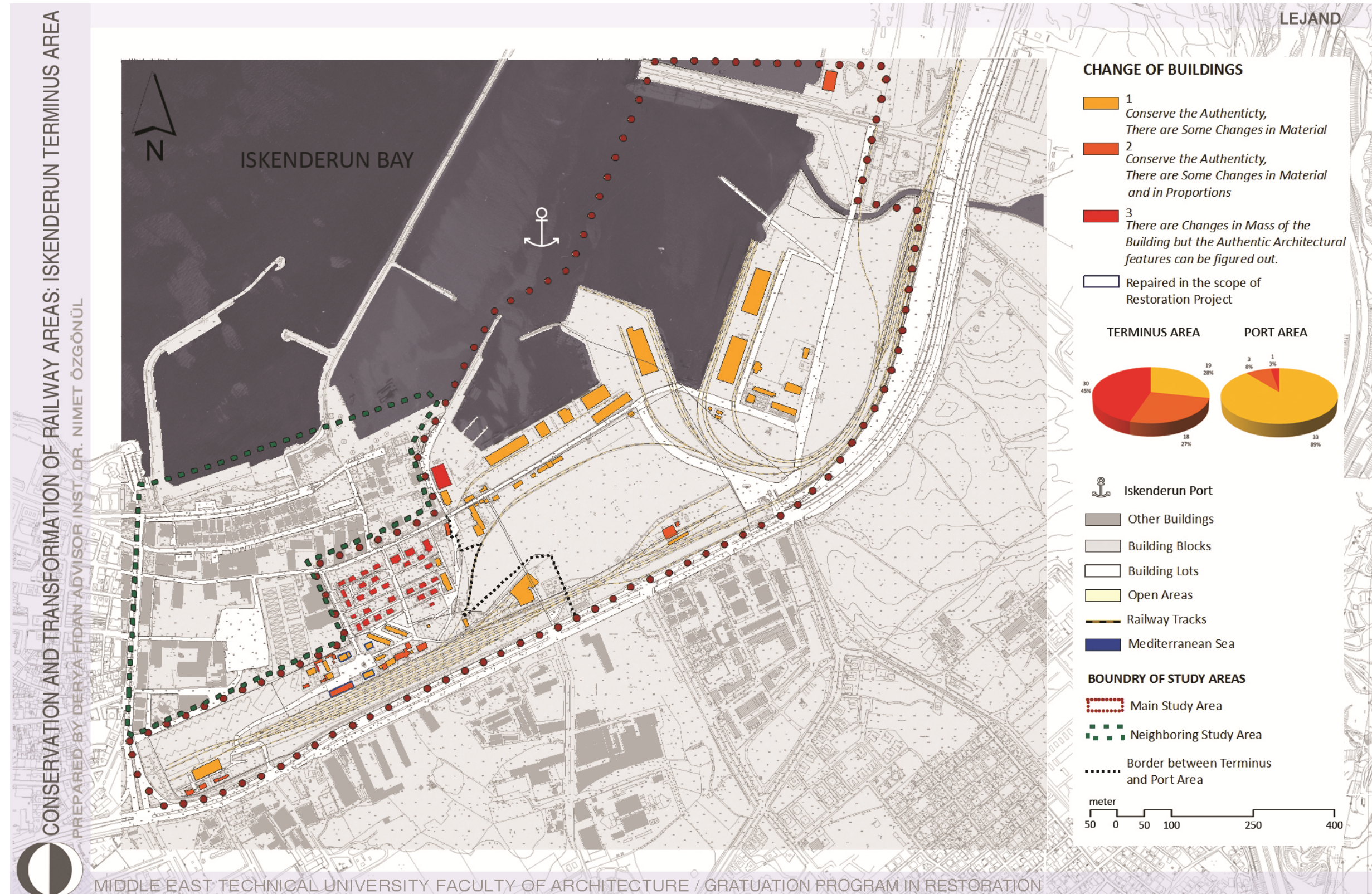


Figure 67. Change of Buildings

dominating the view of Iskenderun castle for a very long time. Despite the increasingly continuing industrial activities, the operation of the study area as a whole stopped. Today, the terminus site and the port site are being operated separately.

The harmony between these sites can be seen in the historical background of the city, the port, and the railway. The construction of the sites and their improving are parallel to each other. Construction activities have been done in every period in each site. These cause the similarities of the buildings and open areas. The railway area is located closer to the city center, while the other is located in the industrial zone. Being port city feature came from prehistoric periods for Iskenderun. However, the establishing the sites area began at the same time.

There are some differences because of the different characteristics and necessities of the ports and railways. One of the examples of this situation is the distinct building types that the areas have. Terminus area have station building, water depot, dwellings specific to a railway site; port area have customs office specific to a port area. The users of the termini area is the personnel and their family, while the port is used by the personnel and the crews of the ships. Because of the international works, port area is more protected than termini area. In fact, termini area is a publicly used space.

On the other hand, because of the separation of the operating hand of the areas and the policy of the country changed in time there occur many differentiations. Today, the owner of the terminus area is TCDD, the others is LİMAK Company. Because of the dense use of the site, the buildings in the port area are looked regularly and so they are in a better condition today. Buildings in both areas have open wide areas. However, terminus area's are empty and the other' is still in use.

CHAPTER 4

ASSESSMENT OF ISKENDERUN TERMINUS AREA: VALUE, PROBLEMS, AND POTENTIALS

Industrial heritage concept emerged in second half of the 20th century and started to be discusses in Turkey after 1990s. As a part of industrial heritage, conservation of railway architecture, which was started to be constructed before the foundation of Republic and continued to be constructed during republican, has also become on the agenda.

Railway buildings are one of the structures that are affected developing and changing technology. Parallel to these developing started from 19th century; most of the railway buildings were lost their function and abandoned. As the living source and evidence of history, these buildings have to be preserved and carried to the future.¹⁴⁶

Conservation decisions whether they are concerned with giving a building “heritage” status, deciding which building to invest in, planning for the future of a historic site, or applying a treatment to a monument—use an articulation of heritage values (often called “cultural significance”), as a reference point. Assessment of the values attributed to heritage is a very important activity in any conservation effort, since values strongly shape the decisions that are made.¹⁴⁷ In order to conserve and transform railway sites, the movable and immovable edifices in these sites, it is very significant to assess the values properly. Railway areas are one of the most accurate sources that have the political, social, cultural and architectural traces of 19th century and the beginning of the 20th century. The railway tracks lay, the hundreds of railway sites designed, the buildings constructed, and the railway equipments are all the parts of the assessment.

146 Başar, M. Emin & Erdoğan, H. Abdullah, (2009). Osmanlı’dan Cumhuriyet’e Türkiye’de Tren Garları . J. Fac.Eng.Arch. Selcuk Univ., v.24, n.3, Konya.

147 Mason, R. ‘Assessing Values in Conservation Planning: Methodological Issues and Choices’, in Assessing the Values of Cultural Heritage, M. de la Torre, Getty Conservation Institute, Los Angeles (2002) 5-30.

In recent decades, the concept of what is heritage has evolved and expanded and new groups have joined the specialists in its identification. These groups of citizens, of professionals from other fields, and of representatives of special interests arrive in the heritage field with their own criteria and opinions—their own “values”— which often differ from our own as heritage specialists.

4.1. IN GENERAL

In the 2001 report of The Getty Conservation recognized and widely accepted methodologies for the assessment of cultural values, under the two main title economic and cultural values¹⁴⁸. However, in the more recent sources the authenticity and integration values, which are directly related the conservation conditions of the cultural assets, became on the agenda¹⁴⁹. The more tangible properties of the last two concepts they were put under the title of physical values. In this respect, the value definitions of the railway buildings are grouped under three titles: sociocultural values, physical values and economical values.

Sociocultural values are related to the concepts of cultural asset and society, and their correlations. In other words, its concern is the objects, buildings, and places and the meanings of them for people and groups. Despite, sociocultural value covers different types of values in it, such as historical, religious, identity, memory, spiritual, and so, the relevant concepts alter in each study.

In the case of Turkey, railway areas, with the date its past goes, have **age value**. History of railway construction started at the beginning of 18th century in Ottoman after a while than European countries, which met this technology a hundred years earlier than Ottoman. Railway heritages have **historical value** with its capacity of convey, embody, or stimulate a relation or reaction to the past. Railway left marks on both Ottoman and Republican period. The struggle of constructing railway, which was a part of westernization policy of Ottoman period, affected all political, military, economical relations and decisions of that

148 Mason, R. ‘Assessing Values in Conservation Planning: Methodological Issues and Choices’, in *Assessing the Values of Cultural Heritage*, M. de la Torre, Getty Conservation Institute, Los Angeles (2002) 5-30.

149 Stovel H. 2007, Effective use of authenticity and integrity as world heritage qualifying conditions. *City & Time* 2 (3): 3. [online] URL: <http://www.ct.ceci-br.org>

period. In the same way, it became an important tool of nationalization and development at the beginning of the Republican period. In fact, in the same years, railway architecture was a part of seeking to create a national style on the public buildings, which means railway is one of the symbols that represent the ideology of that period. Thus, **symbolic value** of railway can be stated.

Termini areas are publicly used areas, which mean structure of the society has a strong input on the usage of the area. As a gate of the city, the stations are used with the public-space, shared-space qualities they have. People coming to the city and the people leaving the city are the main users. In addition to that, the social structure of the personnel and their families, who experience the area in everyday routine, are also affect on the area. In the case of Turkey, because of the ethnical and religious diversity of the population, the social structure becomes more significant in railway sites. In the light of these, railway areas can be assessed that have **social value**.

Railway is a phenomenon that has placed in the special memories of the people in Turkey. Many people, members of educated families, work in railway transportation sector; many families, migrated from other cities, located surrounding of these sites and some people experienced to travel by train. For some people or groups railway has created a common memory, which is called **commemorative value**.

Physical values cover namely sensible and visible concrete values. Physical fabrics of the property, the conveying parts of the site are the main issues. Main concepts of the physical values are authenticity and integrity* values.

In the case of Turkey, railway sites have **authenticity value** at least with its existing. For the structure and elements, preserving original qualities of each structure or element in terms of design, construction technique, and material is the base. Authenticity of mechanical equipment is also the part of this value since it is a fundamental part of production process. The location of the railway areas in cities have changed dependent to the expansion of the cities in time. The purpose of locating these crowded areas outside the city was the main design issue at first. However, today most of them were at the center of the cities. The land value of these areas increases day by day. With high-speed railway

* Stovel H. 2007, Effective use of authenticity and integrity as world heritage qualiifying conditions. City & Time 2 (3): 3. [online] URL: <http://www.ct.ceci-br.org>

technology, the idea of making these areas a mix used centers that will be used for transportation, commercial activities, dwelling, social facilities, and so emerge. That makes a pressure on these areas even they are still used. The profits brought by the complex to the city, the pressures on the area with the development plans, how and to which direction the city plan changed, settlement features around the complex; the natural assets are the items that influenced the existence of the site as a part of **integrity value**.

Economic values are different because they are conceptualized in a fundamentally different way. Consumer-oriented approach got ahead in cultural heritage management and conservation, and accordingly, marketing and “brand” gained importance. Economic values are related to usage and economic potentials of the monument, as well as gaining financial advantage over heritage by its monetary values. Land cost is an important aspect of economic values since heritage assets, especially industrial heritage assets, are subject to demolition most of the time because of their valuable lands in the centers. The current use might be “any purpose”: whether the original or a proposed, new function. Each building in the railway areas has an economic value by being a part of existing building stock. Some of them have been in use since their construction, and some of them were abandoned in past. The possibility of using the existing constructions provides financial benefit for both the owner and the administrator.

In the case of Turkey, at first sight, railway buildings are constructed for just a specific function that sheltering the waiting areas for the passengers. However, there are numbers of re-functioning projects for the railway structures and areas. **Use values** of material heritage refer to the goods and services that flow from it that are tradable and priceable in existing markets. For instance, admission fees for a historic site, the cost of land, and the wages of workers are values. **Market value** equals to monetary worth of structure or remains that can be tradable and priceable. It can be described with worth of a physical edifice, use of it for some function or gaining money over it by paying for entry fees, souvenirs, booklets etc. Each cultural property has to have monetary value: it can be achieved by re-use for any function (revaluing existing building stock), by cultural tourism, by worth of material or land and so. The railway assets, still in use, no matter if they conserve the original function or have a new one, they can still provide physical, social and economic benefits, which refers **continuity in use**.

The changing location of railway sites present new valuable lands seems to create a new image for the city. The railway sites are looked as a generator for the cities today. The potential of integration to the city life is the strongest potential of the railway sites. The wholeness of the area and the unused buildings has potentials for new uses.

Every point of the cities, every life style, and life practices are affected from technological, economical, and social developments. Industrial areas, and terminus and port areas, which are the public spaces of the cities and connect the industrial areas to the cities, are directly related to the technological improvements. Today, these areas face many problems.

From the form of the century's invent, railway areas, which were at the outside of the city to the form of reluctant in the center of the city center, railway areas had a remarkable alteration. The excessive influence of socioeconomically, social, and architectural/urban expectations of 21st century has a hazardous effects on railway areas.

Railway areas, which were designed as a site, today face the problems of changing social life and technological improvements, poor conditions of the built-up and open areas.

The improvement of railway technology is a continuing process since its first inventory. Because of these improvements, some sites and structures were become unavailable to use anymore. However, in recent decades these technological improvements, which specifically refer to high-speed railway technology, accelerate in the Renaissance period of railway. Many lines cannot be adapted to the new system, which is the primary solution to the today's transportation problems and so unavoidable for the governments. Although there are existing lines, new lines are constructed on the same routes. The already existing lines and the railway sites on them become irrelevant. Most of these areas are consist of many registered or historic buildings, equipments, and open area with many values and potentials.

The government policies for the railway transportation are also a major effect on the railway sites. After 1950, the Turkish Menderes government chose to priorities the highways rather than railways. The already established urban sites with their structures, technologies, and operating systems were left to themselves. All the investments stopped, and the areas abandoned for improving highways. That results with numerous in a bad condition or totally demolished buildings, and poor open areas. The a hundred years old

memories were left behind and it is provided not using railways for transportation on purpose. The global politics take the position of national benefits. Today, after decades from Europe, the idea of developing railways become on the agenda. However, the primary purpose is integrating the Turkish railway system to Europe in accordance with the alliance signed after 2000. Thus, the implementations proceed restrictive items of these alliances.

Government has taken over the supervisory and regulatory role due to privatization policies articulated to global structure. In such an environment, the financial support from the government to the cities and city governments reduce and so they have gone into the search for support themselves financially. At this points, municipalities have chance to make financial corporations with private sector in order to make urban transformation projects that should be evaluated with the market values of the areas they for. Nonetheless, for these projects conservation is not the primary concern.

However, the just registration is not a solution for conserving railway heritage as in the example of Istanbul Haydarpaşa station. The projects prepared for this site decontextualise the station, which is one of the most symbolic buildings in Istanbul.

In the meantime, most of the railway areas located in the valuable parts of the cities, closer to the city centers because of the rapid urbanization. While they are located in the hearth of the city, less utilization densities of these areas take the attention. Because of this, today as there are many urban transformation projects covering these areas, there are transformation projects specific to these areas.

Besides the technological improvements or global and government policies, one of the primary problems is that the significance of these sites are not understood by the governments, the organizations, or the people. Even railway sites and structures become irrelevant; the values of these areas are not argued or evaluated. Although, the public awareness related to conservation of historic sites and buildings started to increase in recent years, the railway sites are still new for the people.

The changing locations of the railway sites and so the new economic values of the sites, bring great potential to evaluate these areas. The railway sites are looked as a generator for the cities today. The potential of integration to the city life is the strongest potential of

the railway sites. The wholeness of the area and the unused buildings has potentials for new uses. The technology improvements become potential for some sites as new investments and new projects for these sites.

4.2. ISKENDERUN TERMINUS AREA

4.2.1. Values of Study Area

TERMINUS AREA

Despite Bagdad Railway Line, started to be constructed at the end of the 19th century, is not the oldest railway line in Anatolia, it is one of the first main lines that was started to be built in Ottoman period. As a part of this line, it is possible to talk about **age value** of Iskenderun terminus area in the context of Turkish railway history. Furthermore, the significance that Ottoman attribute to railway itself and Bagdad railway line in the last efforts of surviving made them more striking. The Toprakkale-Iskenderun line was one of the last products of this struggle. Besides that, the area was under the control of Sanjak of French Mandate for almost a decade and French formed the area and developed with the whole city after the First World War. In the republican period, the national policies affected the transportation system together with railways. Until 1960s, so many investments were made to the area. In the light of these, it is understood that the area is directly related to three periods: Ottoman, French mandate, and Republican periods. In this respect, as a witness of all these periods, the area can be assessed as holding **historical value**. In other words, the tracks lay by Germans in Ottoman period, the buildings constructed in French mandate period, and the buildings constructed in the early republican period have historical value because time being they witness. Insomuch as, the buildings constructed in French period are **unique** due to they are being the only railway buildings products of the French Mandate period in Turkey.

In addition, for the Ottoman period railway can be stated as a symbol of westernization, which was the main politics of the Empire after Tanzimat. In the same way, the buildings constructed by French are the symbol of the Sanjak with the other buildings constructed that period in Iskenderun. Iskenderun joined to Turkey after almost a decade of the foundation of republican. That period without Iskenderun, the main aims were

nationalization, industrialization, and reaching to European Standards. After, Iskenderun taken, with its port and railway, it has been a part of many investments. The first buildings constructed after joining to Turkey were the workers' houses, which are built to correspond the increasing need of dwelling after the increasing number of workers as a consequent of developing the area. Given all this, in the area the buildings are constructed because of the politics in each period and that is why they have **symbolic values**. Furthermore, in the context of country policies, these buildings were parts of multiple productions in different periods such as while workers' houses were constructed, there were many other typical implementations in various railway areas in Turkey in the same particular time. That means, these buildings can be stated that have **group value**.

This terminus building, the commercial buildings, the square in front of terminus building, and their use is an important part of **collective memory**. For many years, the terminus building was used for passenger transportation and hundreds of people were passed through the area in a day. On the other hand, today passenger transportation is totally stopped, so few citizens come to the area. Nonetheless, the personnel working here and their families are still the witness of the area as well as daily routines. In a different perspective of view, the area connected the city to Anatolia and was the entrance of the city. This was not a long time ago, thus most of the Iskenderun people still see the terminus as an entrance.

Iskenderun Terminus area is a public space, which means structure of the society has a strong input on the usage of the area. As a gate of the city, the terminus itself is capitalized directly on the public-space, shared-space qualities. People coming to the city and the people leaving the city are the main users most of whom are the Iskenderun society. The structure of the Iskenderun society has been formed various ethnical and religious groups for centuries. Today, Turkish, Kurdish, Arabs, Muslims and Christians, people belongs to Alewi and Hanefi sectarian live together. This variety created a society with different ideas, customs, social behavior, products, or way of life. Located at the meeting point of different cultures encounter-in both sites, it is possible to find the traces of this karma and reading the stories and memories of the past by looking at the social and physical characteristics of the buildings. The first foundations of the terminus site were laid by French, as a part of the investments on Iskenderun, which is comprised with their city understanding. The industrialization and urbanization past of France affect the implementations on their

colonials. For instance, before they made investments to develop port site, they focused on the swampy sites to cease their unhealthy results. French architects designed the site, the buildings and rather than local workers or artisans did not work during the construction. However, after republican, the local people of Iskenderun, who were all different from each other, constructed the buildings.

In addition, the inhabitants of the area are also very significant on the social formation. The existence of a residential site attribute so much to the social properties of the inhabitants, who are the personnel come to the city with the central appoint and live in the dwellings in the area. However, the usages of these dwellings are determined in a hierarchic way. In the two dwellings which are located closer to the terminus, registered and repaired, and were constructed in French period are for the managers, the high storey apartment blocks which are located relatively far are generally for engineers, and finally the workers' houses are for the workers as indicated in its name. This hierarchy is a very strong determiner for the social features of the area. The social stratification in that time period embodied as location, space organization, physical features of the buildings. Under the light of these, Iskenderun railway area and the cited buildings have **social value**. These are needed to be conserved to display these solid differences for feature generations.

In the beginning, the area was located far from the city center and nearby the sea. Its direct relation with the sea was determined the urban features of the area which is preserved until now. In time city extends through north, east, and south. The relation between the city center and port and railway area become closer. Nonetheless, the area have widened and narrowed in the limitations of the state highway, port area, and sea. Today, the area is part of the city center, which makes the area an interface in between some part of the city center and the sea. The each phase the area live through is conserved generally in terms of the main urban fabric. Despite the increasing pressures related to the central position of the railway lands, the area has conveyed. With the light of these, since the area conserve the connection with sea and land, location, it can be stated that have **authenticity value**. Since the physical connection with the expanding city incrementally integrates, it can be assessed that the area has **integrity value**.

Buildings in the area were constructed in different periods. They represent the periods they have been built. There is variety of the building types. The relations of the buildings

to the open areas differ. Each building type has its own relation with the openings. The features of the open areas are also diverse. Any change in buildings or open areas can destroy a kind of relation. That is why existing relations or emerged ones in time are the values of the area. The buildings constructed in French are significant examples of **technical/artistic value**, if evaluated with their architectural features. They are mostly built with structural systems, materials, or techniques within the limits of their period; however the architectural approach of the French architects affects the architectural qualities of these buildings. Regarding the technical equipment, the maintenance buildings preserve their machinery (Figure 68). Industrial complexes, which are still preserving their equipment, should be evaluated as having **technical value**.



Figure 68. A Railway Equipment and A Train Wagon in Iskenderun Terminus Site. (Date taken: 15.12.2011)

The terminus area was constructed to be used for passenger and load transformation at the beginning. In time, in order to increase the capacity of the area many other buildings were built. Besides that, for increasing the welfare status of the personnel by assigning dwellings, a number of houses were constructed. Today, only load transportation continues in the area. Related to this functional loss, the usage density of the area decreased. Today, there are buildings with different use, architectural features, and outside relations. Many of the buildings are still used and even some buildings are re-functioned with the altered operation of the area. In this respect, the buildings using today can be assessed that have **use value**, the ones who continues its authentic function can be stated that have continuity in use value. Nevertheless, there are also many empty buildings that

are waiting to be used again (Figure 69). Each cultural property has a monetary value that can be gained through worth of its land, re-use of the building. For Iskenderun case, the area is much closer to the city center, which make it very valuable lands. That is among the main reason for the demolition: to use the land for new constructions. However, as it is stated and exemplified above, re-use of these areas can also derive income in many ways. The ones are not used can be assessed that have **market value**.



Figure 69. The Empty Buildings (Date taken: 15.12.2011)

PORT AREA

Being a port city has been a primary property of Iskenderun, of which history goes behind to prehistoric era. After 16th century, this property eminently came forward and positioned Iskenderun in the center of political and economical benefits. Even the coming of railway to Iskenderun was related to the existence of the port. Thus, **symbolic value** of the port can be stated. However, the location of the port changed in time. The existing port area was constructed with the terminus area at the beginning of the century in the French Mandate period. Today, the relation of the terminus and the port continues. In the light of these, port area can be stated that have **age value and historical value**.



Figure 70. The Existing view of Iskenderun Port.

Today, Iskenderun is still initially described with its port. Despite port areas were under the TCDD control until 2012, they needed to be more protective and serve a more private usage. The international commerce activities in the area are required customs offices and a more protection because of the policies. As a consequence of this, the users of the area are limited with the Port personnel and the crew of the ships coming to the port. However, the international usage contributes the **social value** of the area.

Port area is bordered with the state highway, the sea, and the terminus area. That is why; it always expands through to the north side of the city. The limited with the strict boundaries parts are conserved in terms of the general organization and operation of site. Besides site scale, the buildings of the area are also conserved in terms of the architectural features, since the continuity of the original function. The relations of the buildings with the open areas continue alike in the past. Operation process includes the open, built-up areas, and relation each other exist in the same way with some differences. The load transferring from the seaside to the inner open storage and loading to wagons or trucks are provided with the decovilles, some of which are still exist (Figure 71). Despite the decreasing transportation of the open fertile, it is conserved the areas served to these activities. Therefore, the port area have both **authenticity** and **integrity values**.

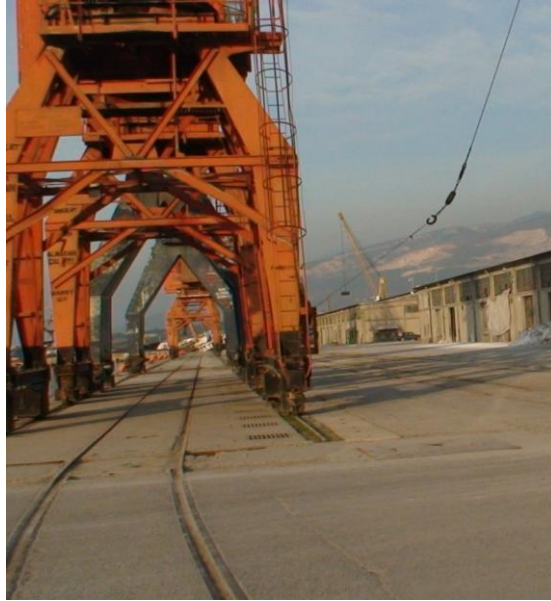


Figure 71. The Narrow Gauge Rails in Port Site. (Date taken: 15.12.2011)

From the beginning of the 20th century, accessing to the oil deposits is the part of the construction of the area, which means the economic value of the site existed from the beginning. The area is integrated with the industrial activities that it is used for transferring the products to the foreign countries. With the developing of industrial sites, the port has become more running. **The economical value** of the port area increase related to this. The building and the area are also still using, so they have **use value**.

4.2.2. Problems of Study Area

In Iskenderun, it is seen a rapid urbanization in particularly after construction of Isdemir Factory in 1973. The rapid expansion process keeps constantly on the agenda the question of choice of location for housing and industry. The increasing migration to the region requires a need for new urban areas and increases the land-values in the limited space conducive to development. In the close environment, the problem of the slum area expansion increases.

The rapid urbanization and industrialization also bring pollution problems. With the factory, wastes and the smokes threatened the sea and the air of the city. There are also still some swampy sites in different parts of the city. These areas also increase the number of mosquito and health problems.

Many development plans were drafted for Hatay and as a sub-region for Iskenderun, however the plans did not implement. The BKAY plan, brought new arrangements for the coastal usage and the pollution problems by supporting the industrialization and the increasing use of port activities, however did not start to be implemented.

Today, there are many restoration implementations in Iskenderun, however there is not an integrated approach for these. The buildings are chosen one by one and projects and implementations processed individually. However, the buildings built in French period should be evaluated together with their contribution to the city as a whole. Most of the streets, building blocks, the pattern they form are based on the French development plan.

The problems of the terminus and port area with their surroundings are indicated in the sheet Figure 72.

TERMINUS AREA

Iskenderun terminus area, which was constructed in the beginning of 20th century and developed continuously until 1960, has functioned despite the stop of investments after 1970 because of the government policies. However, the cease of the passenger transportation, expanding of the city through the terminus site, and the privatization of port area threaten the future of the area.

The main problem starts with the registration process in Turkey. In the area, which has such values, there are only seven registered buildings. The area consist buildings, which are designed for diverse functions in diverse quality but used as a whole in the upper scale. The number of the registered buildings indicates that even in the registration process, the area was not thought as a whole. Furthermore, there are many other buildings needed to be registered such as the workers' houses, maintenance buildings, and so. Beyond these buildings have their own values, they provided the presence and survive of the registered ones. Even some of the registered ones are in poor condition . In addition, even the open areas are uncared-for.

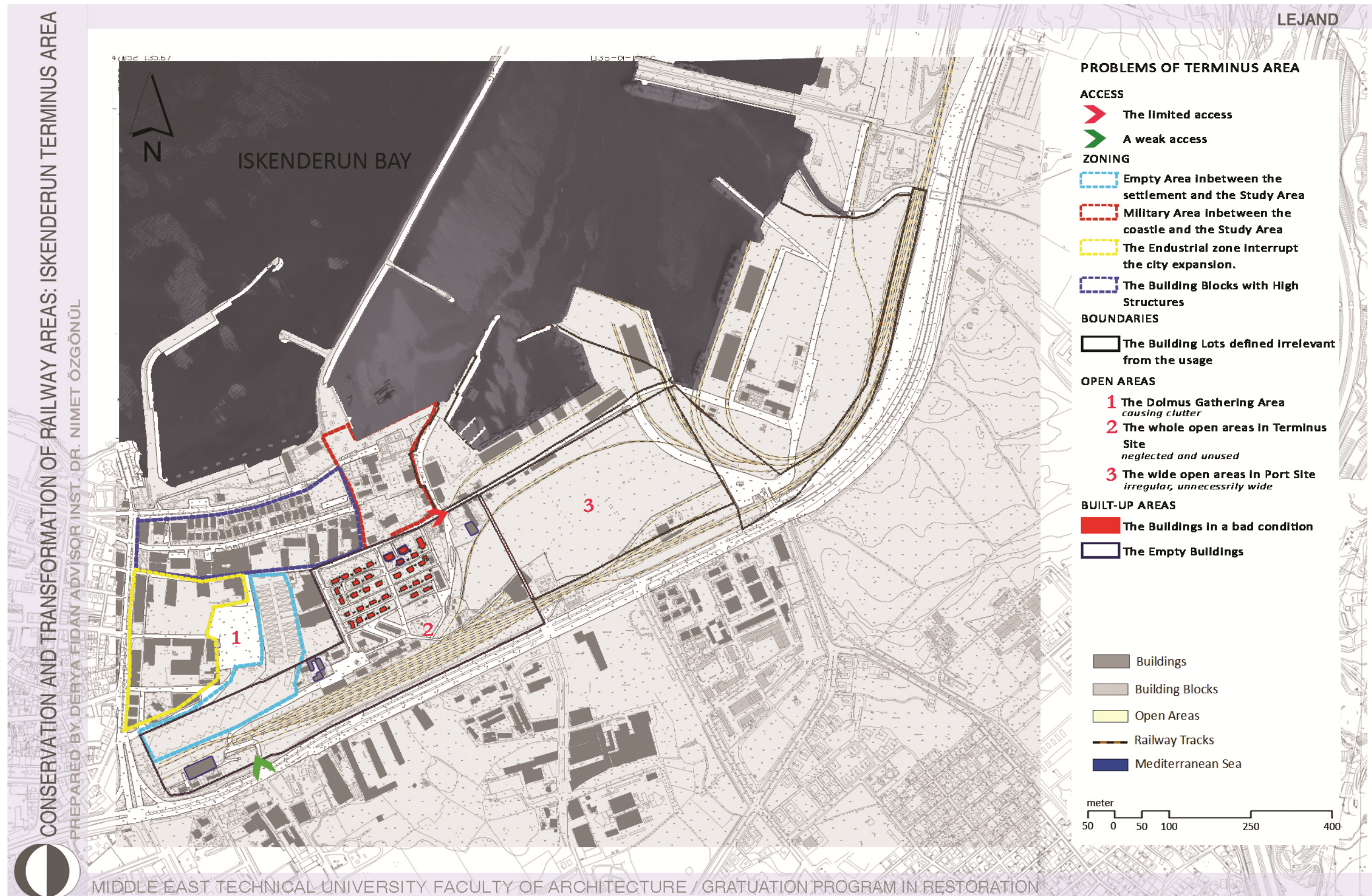


Figure 72. Problems of the Study Areas



Figure 73. The Cer Atelier Building, Which is Registered but Neglected. (Date taken: 15.12.2012)

After 1950, related to the government's transportation policies, the investments to the railway areas have decreased. In fact, after a while, the passenger transportation was stopped. That means number of the workers and engineers decreased. Thus, the houses built for the more personnel, today become unnecessary and so empty. Furthermore, the maintenance buildings, storages and the others were also started to be not used or less used. The decrease of the usage means the increase of the neglected. The cease of the transportation also cause the lost of the major users of the terminus area. The existing users, the personnel, are compelled to live in the buildings in a bad condition. The inhabitants of the buildings started to find new solutions to correspond the needs such as unqualified additional buildings (Figure 74).



Figure 74. A workers' House and a Storage in Terminus area. (Date taken: 15.12.2011)

The conditions of the buildings are not in good state due to poor maintenance. Moreover, the interventions which have been done by TCDD and temporary solutions to the both structural and material problems give damages to the buildings and the station complexes.

Some parts of the adjacent areas are also cause integration to the city problems. One of these is the military area in the north side of the site that prevents the connection with the coastal area. Another one is the height of the buildings of building block in the north side of the area, which interrupts the visual connection. The demolished industrial area zone in west also destroys the direct connection with the city center. The entrance to the termini areas from the state highway passing through the south of the area is also very weak.

PORT AREA

None of the buildings in the port area are registered, despite the values they have. That means the buildings are always in danger of demolishing. In fact, change of the usage of the area after privatization, the new company has a chance to change the whole area, as it wants. Even one of the conditions of the privatization is the improving the area which can result with the change of whole site.

Despite the preserved operational system, the improvements in technology and using containers, rather than bulk cargos is the preferences of the clients for the load transportation. Thus, the buildings used for to cover these open bulk cargos become insufficient.

4.2.3. Potentials of Study Area

Iskenderun is located in a strategic point. Iskenderun Bay is the closest coastal of the Middle East in the Mediterranean. Both the improving industry, easy transportation by all sea, air, rail, and land make the area more significant. Iskenderun port and the other port, which are working in a relation and corporation, may increase the international commerce in the bay and so in Iskenderun.

- The university located between the two cities Iskenderun and Antakya, bring a new mass of users.

- Have a coastal a potential for tourism, the second houses from recent cities. The location of the city in the Iskenderun bay presents many opportunities.

- The commercial activity is very common.

- The strategic position in Mediterranean.

- The international trade activities.

THE TERMINUS AREA

The site has been conserved to the present day and have a potential to integrate to the city as a whole. Despite the decreasing operations, the lost of lands are very few. With the economic values of the area is opportunity for the private companies. Since, an existing fabric exists that decrease the necessary investment to the area. On the other hand, the values of the area provide a ready to operate. The buildings in the terminus area have diverse potentials. Empty buildings and empty building lots, empty open areas are potentials for new uses. The good conditions of the buildings provide the continuity of the usage. The possibility of re-using these areas is a potential. The mechanical equipments, wagons, decovilles, and so are also potentials to interpret the operational system and the history of the area.

Because of the migrations and the university the population of Iskenderun, which are the potential users of the terminus site, increases rapidly. The recent plan drafts are towards the increasing industrial activities in the north part of the city, which is also located north of the terminus area. The increasing industrial activities give a chance to the continuation of the terminus site. The recent regulations for the railway areas are related to transforming the areas for the city needs.

PORT AREA

Iskenderun port is one of the most running ports in Turkey. It is the gate of the city provides the direct relation to the world. The continuing use of the port from the ancient times is the major potential. The close location with Mersin port enables the combined

trade. It is located in between the city center, railway area, and the industrial area. It provide the relations between these areas.

The high capacity of the port asset that have a potential for new investments and increases in trade activities. The GAP project also provide potentials for the site.

4.3. EVALUATION

The assessment of the Iskenderun terminus site is done by defining the site's values, problems, and potentials with the port area. The related international charters and related documents are searched and then appropriate concepts are chosen for Iskenderun case.

The studies in the previous chapter provides us to understand the area and define these manners. Historical background of the city and the study area, provide to understand and define the historical value of the site, or the condition of the buildings provides us to understand and define the problems of the site, or the location of the port provides us to understand and define the potential related to the close relation with the Mersin port. All the assessments in this chapter are linked to the previous chapter.

In the light of these assessments, it can be said that the area have many values and potentials under very different scopes in diverse scales, from regional scale to building scale. On the other hand, many problems are also observed both in the site studies and literature review. In the scope of this study these values are needed to be conserved, the problems are needed to be solved and the potentials are needed to be evaluated. The conservation principles for this site is defined in the manner of these definitions in the following chapter.

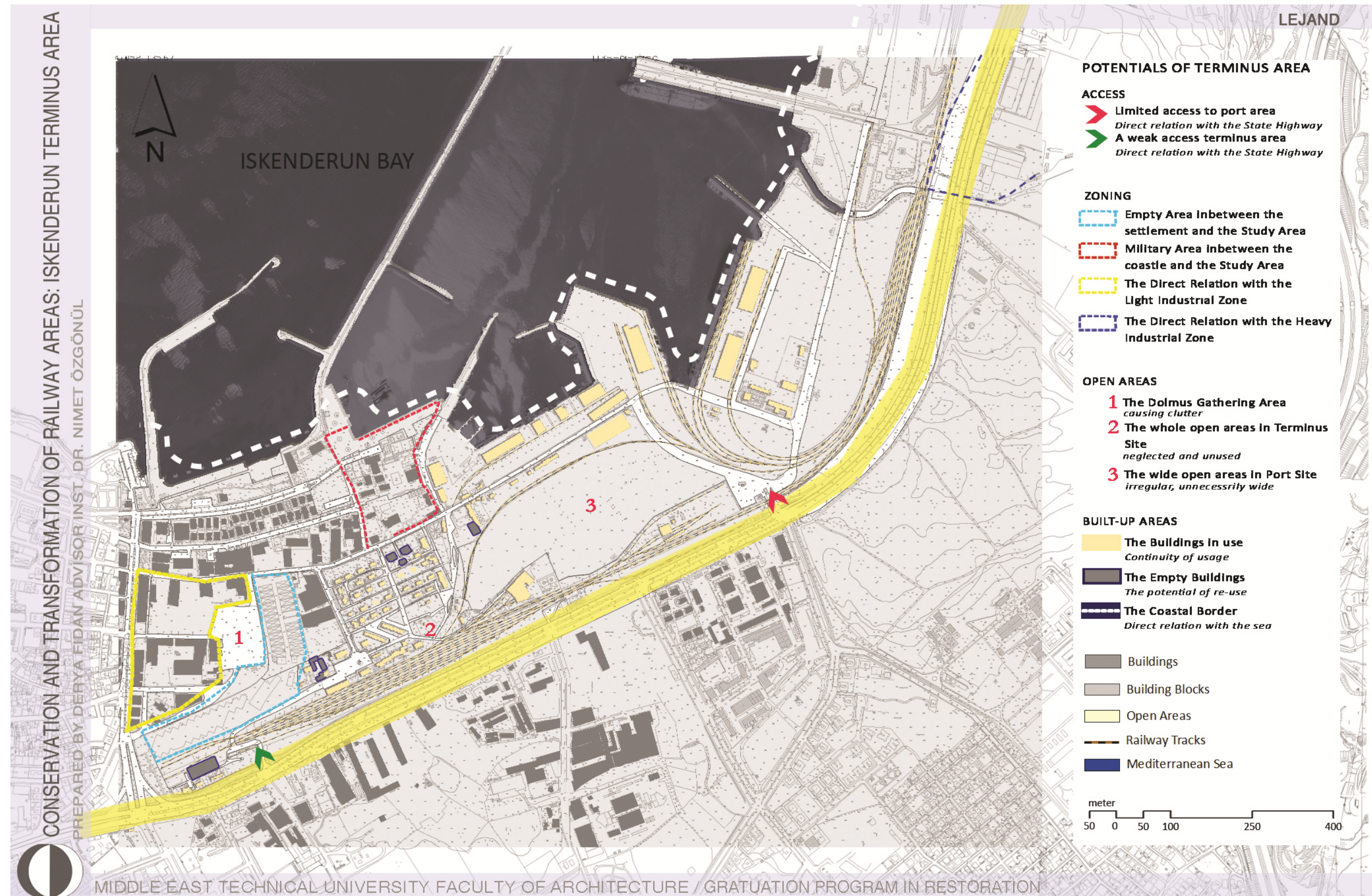


Figure 75. Potentials of Study Areas

CHAPTER 5

CONSERVATION AND TRANSFORMATION PRINCIPLES

The numbers of implementation of conservation and transformation projects for railway areas are limited because of the recent of these concepts in Turkey. Thus, theory is behind the implementations. One of the significant points of the railway heritage is the link between the information and the implementation¹⁵⁰. That is why it is an obligation to form principles for standardization of conserving and transforming railway heritage in Turkey by being aware of the approach can differ in each site, building, or object.

It is aimed to provide guidelines TCDD, municipalities, and private companies concerned with railway conservation issues. The base of the principles of conservation and transformation is value, problems and potential assessments stated in the previous chapter. Thus, socioeconomic, physical, and economic assessments guide the principles.

According to TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes, the main conservation aspects should be as below¹⁵¹:

- I - Document and understand industrial heritage structures, sites, areas and landscapes and their values
- 2 - Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes
- 3-Conserve and maintain the industrial heritage structures, sites, areas and landscapes
- 4- Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research

150 Saner, M. Endüstri Mirası: Kavramlar, Kurumlar ve Türkiye'deki Yaklaşımlar, Unpublished Paper, Abant İzzet Baysal University.

151 Joint ICOMOS – TICCIH, (2011).Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.

Sociocultural impacts are essential to constitution of **awareness** and **documentation**. Today, people, the users, workers, or managers do not know conservation of the railway is necessary or it have such values as a site, building, or an object. It is important to increase the **awareness/interpretation** in every segment of society with publications, academic studies, and educational programs, which put the subject on the agenda. In addition to that, in order to document the buildings in Turkey, a railway inventory needed to be done for every line, and site. This inventory needed to have wide scope of information and so it can be used as a source of future railway conservation projects. **Presentation** the railway sites such as visits of active railway sites and the presentation of their operations as well as the stories and intangible heritage associated with their history is very important for public understanding.

Physical impacts point to the importance of the railway assets and sites surviving until now and the information they have on their physical features. So primarily, all the railway areas in Turkey need to be searched in detail by the experts to determine the conservation boundaries, the buildings, and the objects that need to be registered. The railway heritage is a complex phenomenon that needs to be analyzed, evaluated by many specialists including historians, geographers, economists, socialists, architects, conservators in cooperation with each other. Under the lights of these information, **safeguarding** the tangible and intangible values of railway sites in their natural and cultural settings and social contexts should be provided.

Economic impacts are the main effective concept in railway heritage today. The valuable locations of these areas increase their 'price'. Although they are still in use, they can be subjected to urban projects. Most of the railway areas with their using or not using buildings and continuing or not continuing functions will be subjected to transformation projects in Turkey. In urban areas, especially with development pressure, economic forces threaten railway sites.

At this point, it is important to indicate the effect of TCDD on these economic impacts. In recent years, the approach of the TCDD is to increase the incomes with HSR in the big cities and with new regulations meeting the demands on the areas; for the small cities, increase the incomes by evaluating these areas correspond the demands with no any other

investments to the line or area. Primarily, the approach of TCDD addressing for these areas should change. **Improving the railway transportation and railway sites is the primary subject of TCDD.** In order to provide **passenger transportation** or **load transportation** or **both** for possible sites, the necessary studies should be done immediately.

TCDD should give up privatizing the sites or buildings. In fact, the institution should take the ownership of the areas that it has sold before. The laws should be regulated in accordance with these regulations. For railway areas, the main aspects of transformation are decision of the appropriate use and the sustainability.

DECISION OF “APPROPRIATE USE”

The main function of the railway areas is to provide transportation. However, today most of the railway areas are used only for load transportation. Even some of the areas are abandoned. That is one of the main reasons of the transformation projects they are subjected to.

Appropriate original or alternative and adaptive use is the most frequent way and often the most sustainable way of ensuring the conservation of railway sites or structures in the world. However, in Turkey the diversity is limited. For the abandoned sites, the museum function with the commercial facilities is come forward. On the other hand, for the areas continuing its function of passenger transportation, the mix use is preferred to make use of the dense utilization of the railway transportation. The alternative usages should be considered. The features should be taken in the consideration for the decision of the new uses¹⁵²:

- The ownership of the railway area (today most of the railway areas are owned by TCDD, however there are some sites that were sold. They can be owned by the Municipality, an anonymous foundation, a construction company or an industrial company),
- The stakeholders for the area (TCDD, Municipalities, foundations, universities, and so,
- The usage of the area (continuity of original function, continuity of using with a different function, not using should be analyzed for both site, building, and object scale),

¹⁵² ISACSON,M., (2011). The Reuse of Large-scale Industrial Areas, *Reusing the Industrial Past by the Tammerkoski Rapids*, Pp.53-61

- The physical character and quality of the area (the degree of deconstruction; what is left and what has been removed or destroyed; the degree of pollution and the cost of cleaning up the area, the quality of the building materials),
- The location of the area regionally (at the outskirts or in the centre) and nationally (in a densely populated region with economic- growth or in a depopulated area in economic decline),
- The sociocultural significance of the area (related to the values defined such as historical, symbolic, age, and so.)
- The demand for large-scale projects for different purposes,
- The demand for land for new purposes such as commerce, recreation or tourism
- The process of globalization; how it influences the region and the industrial area.

Despite of the fact that it is suggested that the only owner of the sites should be TCDD, in some cases or any cases that may not be possible. At that point, it is an obligation that the **owners** will not be the only determiners of the use. The multidisciplinary expert teams have to be part of the decision process in order to prevent an inappropriate use.

The stakeholders of each area should be determined.

For the railway sites if they continue any of passenger or load transportation, the continuation of transportation **use** should be conserved as a living facility.

In the case of active industrial structures or sites of heritage significance, it must be recognized that their continued use and function might carry some of their heritage significance and provide adequate conditions for their physical and economic sustainability as a living production or extraction facilities.

TICCIH Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.(number 8)¹⁵³

The **physical features and qualities** of the buildings are very decisive. For some of the railway sites it may not be possible to use the buildings or the scales of the buildings are not proper for every function.

The **locations** of the sites are determinative in terms of the functional integrity concept. The new functions have to be compatible to the surrounding areas. In fact in some cases

¹⁵³ Joint ICOMOS – TICCIH, (2011).Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.

the adjacent areas of the railway areas can be included to the project. Some buffer zones can be determined to provide the integration.

New uses should respect significant material, components, and patterns of circulation and activity. Specialist skills are necessary to ensure that the **heritage significance** is taken into account.

For the all scale projects and the all kinds of **demands** the conservation of the sites and the assets should be preliminary approach. After that in accordance with the previous principles, new use should be determined with the ideas of different stakeholders. The main participant is TCDD and the main aim of this instruction is to conserve and develop the area. The second participants are the municipalities. The direct involvement of the city administration performs a two-fold role: with respect to the city, for the protection of collective interests, and with respect to third party partners, in terms of precise warranties on the decisions made on planning and buildings.

Globalization is affect railway with the international alliances, which are related to integration to the European HSR network. Istanbul-Ankara, Ankara- Eskişehir, Ankara, Konya, Ankara-Sivas high speed lines have been constructing in this respect. The transformation projects on the main termini are also parts of this globalization. The economic demands on these areas and the projects correspond to the desires are seen from the European examples. However, the main approaches to the projects are not analyzed properly. Only the image is taken as a reference. On the other hand, the international charters, decisions of implementations related to railway conservation are not taken interest in. Besides these, increasing international correlations, commerce, industrial activities, and tourists may affect some cities and the railway sites. This impact should be taken consideration.

SUSTAINABILITY

For railway sites and structures, the continued use and function provide adequate conditions for their physical and economic sustainability as a living production.

"Contribute to the sustainable conservation of cultural heritage sites, through promoting public understanding of, and participation in, ongoing conservation

efforts, ensuring long-term maintenance of the interpretive infrastructure and regular review of its interpretive contents."

The Icomos Charter for The Interpretation and Presentation of Cultural Heritage sites no: 5¹⁵⁴

An economic model is needed to be prepared to sustain the continuity of the sites. At this point, it is important to decide the necessities to answer the economic demand on the area. It can be said that the increasing demand harden the sustainability. The chosen use becomes more significant. For the railway areas, self-sufficient may not be enough for some cases. The enough profit is needed to be obtained from these sites to maintain its existence and resist to the future pressure. In the light of these, a model of economic sustainability is needed to be prepared.

Up until now, the historical, physical, contextual background of Iskenderun and Iskenderun termini area, and value, problem, and potential assessments are defined. In respect to these, the principles of railway heritage conservation and transformation are determined. Finally, in this part the model is elaborated for Iskenderun Terminus Area.

In order to conserve and transform the area;

- Iskenderun terminus area as a whole fabric, with the buildings, objects in it should be conserved. A detailed documentation study should be done. Records of the research and conservation of Iskenderun value should be placed in an appropriate archive.
- Terminus Area as a whole has to be registered as "Historic Railway Heritage Site" according to law no: 2863.
- In respect to the authenticity of Iskenderun Terminus Area, it is needed to communicate the significance of the historic fabric and cultural values and protect them from the adverse impact of intrusive interpretive infrastructure, visitor pressure, inaccurate or inappropriate interpretation.
- All of mobile and immobile objects related with the Iskenderun terminus area exemplifying the former technology to be designated one by one.

¹⁵⁴ ICOMOS, (2008). The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites.

- The presentation of the history, symbol, and features of the area should be done with facilities. Some buildings, open areas should be sustained, touristic or educational tours should be organized. Guidebooks, web sites of the site should be prepared.
- The presentation of the continuing railway transportation, even just for load transportation, the system of the operating, the maintenance, repair process of the wagons, the tracks, equipments should also be part of this presentation.
- For port area, it is important to provide the conservation of the area. The warrants of the company should be limited for the interventions to the site and the buildings. The continuing function of port should be conserved. The building is not needed because the turning of the area to cargo port should be maintained even if they are not uses today. (related to the option value, they will be used future)
- The information collected from the study area and presented in the appendix a, which should be accepted as documentation of the buildings, especially the destroyed port buildings. These information are rendered in the sheets in the second chapter to analyze and evaluate the site. Besides that, they should be used for the conservation and transformation process of the site.
- Stakeholders for Iskenderun Terminus area are Municipality, the Mustafa Kemal University, TCDD, Iskenderun people as the users, and the personnel of Iskenderun terminus. In addition to these, a new foundation can be established to represent the last two stakeholders. Today, it is known that a new project is on the agenda for Iskenderun railway area. The existing participants are the municipality and TCDD. As healing information, a commercial usage is thought for the area. The university has an architecture department and conservation program. They should be part of this project process.
- The area should be evaluated with its adjacent areas. Port area, the military area in north and the empty area in west are determined as buffer zones.
- In the port area, the function permanence is already provided related to the demands on sea transportation. Besides this, the port should be operated with the transportation facilities in the termini area. Although, the owner of

the port area is Limak Investment for 36 years, the correlation to provide an integrated operation is possible and strongly advised.

- The military area, that was belonged to port-terminus territory and interrupt the relation with the sea of the termini area today, should be joined to the termini territory again. Thorough this are the relation with the coastal, and the promenade near the shore can be set.
- In order to integrate the area to the city life, the empty buffer zone should be used for new function.
- The possible income methods for the area are
 - the empty dwellings can be retailed. With the new function in the buffer zone, new users can be sustained for the empty dwellings.
 - the commercial activities should be supported. The existing ones should be developed and the new ones in accordance with the new function should be sustained.
 - with the regulations done for the presentation purpose, the users will increase, and this will increase the commercial activities
- The possible use proportion for the buffer zone is that one of the engineering faculties of the Mustafa Kemal University chosen by the faculty administration. With this function, the empty dwellings can be retailed to the personnel of the faculty. A marvel of engineering, factories in the area to have a place where engineer may iy to take part in, or even existing systems, equipment as a tutorial course is a concrete documents, in this context, there are things here you may also collect Engineering for saying, swamps dried sample area for geology engineer the commercial activities can be utilized from the potential users, students, personnel.
- The possible use proportion for the area is Center for studies on Industrial Areas of Eastern Mediterranean Region. Because, both terminus and port area carries the centennial information of their usage. They present the whole information even just with their existence. Moreover, the continuing operating system carries very significant information. Iskenderun is one of the

most important industrial cities in Turkey and in Mediterranean. The wide industrial zones have great potential for city developing.

In conclusion, conserving the railway heritage idea has become more common in Turkey in recent time. Many projects are designed and planned. As seen in the foreign and native examples transformation of the sites are the reason or the results of the projects. The studies, methods, and principles in this thesis is attempted to guide all the projects related to conservation and transformation of termini sites in Turkey despite they all show various features.

The economical inference from the European examples should also one of the points that needed to be considered. The unplanned or inadequate economical approaches for these projects can result as a disaster. Therefore, the multidisciplinary way of these projects should especially cover economists.

The transformation project for Iskenderun Terminus site should initially correspond the preliminary principles defined above. The time, access, bureaucratic limitations prevent more detailed studies. However, the studies related to the site should cover a wide area and be very detailed. The expanding and improving industrial site should also be part of this study as the port. Examples from the railway areas on the Hicaz railway line, or from the USA, the birthplace of adaptive reuse of industrial heritage, and so should be searched. In addition, more examples that are native especially constructed by French or under French mandate should be investigated. The other stations on the Toprakkale-Iskenderun line should be also make part of the project. The conservation and transformation project of Iskenderun should be integrated from beginning to the end.

BIBLIOGRAPHY

AÇIKGÖZ, U.F. (2008) A Case in French Colonial Politics of Architecture and Urbanism: Antioch and Alexandretta During the Mandate, unpublished Master thesis, Graduate School of Social Sciences, Middle East Technical University, Department of History of Architecture, Ankara.

Advisory Council on Historic Preservation, Adaptive Use: A Survey of the Construction Costs.

Albayrak, M. (1995). Osmanlı- Alman İlişkilerinin Gelisimi ve Bagdat Demiryolu'nun Yapimi. *OTAM*, 6, 001-038.

American Heritage Dictionary. (<http://ahdictionary.com>)

Asia Conserved, Lessons Learned from the UNESCO Asia-Pacific Heritage Awards for Culture Heritage Conservation (2000-2004)..

Assessing the Values of Cultural Heritage Research Report, The Getty Conservation Institute, Los Angeles

Avcı, S. (2005), Ulaşım Coğrafyası Açısından Türkiye'nin Ulaşım Politikaları ve Coğrafi Sonuçları, LUSAL COĞRAFYA KONGRESİ, İstanbul *Bildiri Kitabı*, s. 87–96

Aydın, D. & Yıldız, E. (2010). Yeniden Kullanıma Adaptasyonda Bina Performansının Kullanıcılar Üzerinden Değerlendirilmesi, METU JFA: 27 (1). 1-22.

Banister, D. and Hall, P. (1993), The second railway age. *Built Environment*, 19(3/4), pp. 157–162.

Başar, M. Emin & Erdoğan, H. Abdullah, (2009). Osmanlı'dan Cumhuriyet'e Türkiye'de Tren Garları . J. Fac. Eng. Arch. Selcuk Univ., v.24, n.3, Konya.

Bertolini, L. & T. Spit. (1998) *Cities on Rails, The redevelopment of railway station areas*, London/ New York: E & FN Spon.

Besirli, M. (2004). Bağdat Demiryolu'nun Akdeniz Uzantısı: Toprakkale-İskenderun Demiryolu ,A.U. *Türkiyat Arastirmalari Enstitusu Dergisi*, v. 23

Beşirli, M. (2004). Haydarpaşa Liman Şirketi'ne Verilen İskenderun Limanı İnşa ve İşletme İmtiyazi ve Liman Tarifesi (1911), Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 11, 179-203.

Bilgin, V., Genç, T., Akın, F., Bayraktar, G., Basbug, A., Durgun, S., "21. yy'a Dogru Demiryollarının Modernizasyonu Yeni Bir Gelisme Stratejisi", Demiryol- s Sendikası Basın ve Halkla _liskiler Dairesi, Ankara, 58, 60,61 (1996).

Blue Plan Regional Activity Center Sophia Antipolis, (1994), Iskenderun Bay Project Volume 2, map technical reports series no:90

Burak, Mehmet Durdu, İNGİLİZ J.R. PILLING'İN OSMANLI DEMİRYOLU İMTİYAZINI ELE GEÇİRME MÜCADELESİ, dergiler.ankara.edu.tr

Burman, Peter & Stratton, Michael, eds. (1997). *Conserving the Railway Heritage*. London: E & FN Spon

Çakır, B. (2010). Urban Coastal Settlements: Implementation of Coastal Area Assessment Model In Iskenderun case, unpublished P.H.D. Thesis, Metu.

Cantell, F.C. (2005), Submitted in partial fulfillment of the requirement for the degree Master of Urban and Regional Planning, Virginia Polytechnic Institute and State University

Commission of the European Communities, Brussels, 12.9.2001.WHITE PAPER, European transport policy for 2010: time to decide, Brussels.

Conceição, A., Multimodal Stations and Its Surroundings: A Sustainable Perspective. Conference Proceedings of the 3rd CIB International Conference on Smart and Sustainable BuiltEnvironments – SaSBE (15-19 June 2009 in Delft)

Coulls, Anthony.(1999). *Railways as World Heritage Sites*. Paris: ICOMOS.

Devlet Planlama Teşkilatı , 2001, Ulaştırma Özel İhtisas Komisyonu Demiryolu Ulaştırması Alt Komisyonu Raporu , no:dpt : 2580– ÖİK: 592, T.C. başbakanlık devlet planlama teşkilatı müsteşarlığı yayın , Ankara

Dumper, M., Stanley, B., (2007), *Cities of the Middle East and North Africa: A Historical Encyclopedia*, USA.

Güçhan, Neriman Şahin and Kurul, Esra.(2005) '2003-2005 Döneminde Gerçekleştirilen Yeni Yasal Düzenlemeler ve "Koruma Alanına" Etkileri; Bir Ön Değerlendirme', In, "Korumada 50 Yıl", Mimarların Güzel Sanatlar Fakültesi, Mimarlık Bölümü, Kasım 2005, imprinted,İstanbul

ERKAN, Y. K. (2007) Anadolu Demiryolu Çevresinde Gelişen Mimari ve Korunması, yayınlanmamış Doktora Tezi, İTÜ Fen Bilimleri Enstitüsü, İstanbul.

European Foundation for The Improvement of Living and Working Condition,(2005). Profile of Railway Sector in England.

Hinnerichsen, M. (2011). Sustainable Industrial Heritage: Reuse Models and Concepts, Reusing the industrial past by the Tammerkoski Rapids: discussions on the value of industrial heritage. Tampere [Finland: Pirkanmaa Provincial Museum.Pp.61

Ingenhoven, O. u., & Peat, R. (1999).Ingenhoven, Overdiek und Partner - works. Basel: Birkhäuser.

Isacson, M., (2011). The Reuse of Large-scale Industrial Areas, Reusing the industrial past by the Tammerkoski Rapids: discussions on the value of industrial heritage. Tampere [Finland: Pirkanmaa Provincial Museum.

Iskenderun Municipality, (2012).

ICOMOS New Zealand, (1993).Charter for the Conservation of Places of Cultural Heritage Value.

Issawi, Charles.(1980).*The Economic History of Turkey 1800-1914*. Chicago: The University Of Chicago Press.

Joint ICOMOS – TICCIH, (2011).Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes.

Jokilehto J. 2006, World Heritage: Defining the outstanding universal value. City & Time 2 (2): 1. [online] URL: <http://www.ct.ceci-br.org>

Jokilehto, J. (2005), Definition of cultural heritage references to documents in history, ICCROM Working Group 'Heritage and Society.

Jordan, Furneaux R. (1990). *A Concise History of Western Architecture*. Toledo: Thames and Hudson

Köşgeroğlu, F.Emrah.(2005) “An Approach For Conservation of Railway Heritage: Assessing and Experiencing The İzmir-Aydın Railway Line”, Unpublished Mater Thesis, METU. Ankara.

Köşkeröğlu, E. (2006, October). Demiryolu Mirası - Korunması. Dosya, 45, 19

Lami, I.M.(2009). Transformation Processes of Large Railway Stations in Europe: when Urban Quality is directly related to positional value, International Conference on Whole Life Urban Sustainability and its Assessment, Glasgow.

Madran, E. (2011). Kültürel ve Doğal Değerlerin Korunması Alanında Son Yasal Düzenlemeler, Unpublished Article.

Mason, R. 'Assessing Values in Conservation Planning: Methodological Issues and Choices', in Assessing the Values of Cultural Heritage, M. de la Torre, Getty Conservation Institute, Los Angeles (2002) 5-30.

Meeks, Carroll L. V. (1956) *The Railroad Station; An Architectural History*, New Haven: Yale University Press

MOS, (2008). The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites.

Özyüksel, Murat.(2000). *Hicaz Demiryolu*. İstanbul: Tarih Vakfı Yurt Yayınları.

Özyüksel, Murat (1988). *Osmanlı – Alman İlişkilerinin Gelişim Sürecinde Anadolu ve Bağdat Demiryolları*. İstanbul : ARBA Araştırma Basım Yayın.

Riga Charter, Daylesford Spa Country Railway, 2005.

Rombac, A. & Thul, F. (2007).The European Union, railway privatisation and the attack on workers' living standards.Published by the International Committee of the Fourth International (ICFI). (<http://www.wsws.org/articles/2007/nov2007/euran08.shtml> date taken: 30.08.2012)

Quatatert, Donald. (1985).19.yy'da Osmanlı İmparatorluğu'nda Demiryolları, *Tanzimattan Cumhuriyete Türkiye Ansiklopedisi Cilt 6* (1630 – 1635). İstanbul: İletişim Yayınları.

Sabutay, G. Lale Çoygun. (1996). Türkiye'de İstasyon Yapılarının Geçmişten Günümüze Değişimi. Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Fen Bilimleri Enstitüsü, Ankara

Sandalcı, M. (2005), Iskenderun Dekovil Hatti, Osmanlı Bilimi Araştırmaları, Cilt 6, Sayı 2, IU yayınları

Saner, M. Endüstri Mirası: Kavramlar, Kurumlar ve Türkiye'deki Yaklaşımlar, Unpublished Paper, Abant İzzet Baysal University.

Şenyiğit, Özlem. (2002). Adana - Mersin Demiryolu Hattı Üzerindeki İstasyon Binalarının Tarihi ve Mimari Analizi. Çukurova Üniversitesi Fen Bilimleri Enstitüsü, Adana

Sevgili, F. (2008), Demiryolu Mülkiyetinde Yer Alan Atıl Taşımazların Değerlendirilmesine İlişkin Bir Model Önerisi, unpublished doctorate thesis, Gazi University.

Sonmez, R.,Balaban, O. (2009), İskenderun Körfezi Kıyı Alanları Bütünsel Planlama ve Yönetim Projesi,Planlama Dergisi NO:1

Stovel H. 2007, Effective use of authenticity and integrity as world heritage qualiifying conditions. City & Time 2 (3): 3. [online] URL: <http://www.ct.ceci-br.org>

Tekeli, I. (2009). Modernizm, modernite ve Türkiye 'nin kent planlama tarihi (p.112). Eminönü, İstanbul: Tarih Vakfı Yurt Yayınları.

Tekeli, I. (2011). Toplu eserler (15) Türkiye'nin Kent Planlama ve Kent Araştırmaları Tarihi Yazıları. İstanbul: Tarih Vakfı.

Thammaruangsrri, K.P. (2003), Node and Place, a study on the spatial process of railway terminus area redevelopment in central London, unpublished thesis submitted for the degree of PhD in Architecture, University of London.

Tulumtaş, S. (2009). Kentsel Dönüşüm ve Demiryolu Uygulamaları, Toprak Mülkiyeti Sempozyumu, Ankara.

Türkiye, İl İl; Dünü,Bugünü, Yarını. (1982). Yurt Ansiklopedisi. Anadolu Yayıncılık.

Venice Charter, The International Charter for the Conservation and Restoration of Monuments and

Wolf, D. E. (2010). *Crossing the Hudson: Historic bridges and tunnels of the river*. New Brunswick, N.J: Rivergate Books.

www.dailymail.co.uk

www.independent.co.uk/news/world/europe/life-on-the-fast-track-thirty-years-of-the-tgv-2265455.html

www.independent.co.uk/news/world/europe/life-on-the-fast-track-thirty-years-of-the-tgv-2265455.html

www.iskenderun.bel.tr/ access date: 31.08.2012

www.iskenderun.gov.tr

www.kingscrosscentral.com

[www.musee-orsay.](http://www.musee-orsay)

www.spacegroup.no/projects/oslo_s

www.tcdd.gov.tr

Yıldırım, İsmail. (2001). *Cumhuriyet Döneminde Demiryolları*. Ankara : Atatürk Araştırma Merkezi.

Yorulmaz, Ş. (1998). Fransız manda yönetimi döneminde Iskenderun sancağı (Hatay)'nin sosyo-ekonomik ve siyasal durumuna ilişkin bazı kayıtlar (1918-1939), V. Hatay Tarih ve Folklor Sempozyumu.

APPENDIX A.





A.

RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS



RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

				
BUILDING ID	A2	A3	A4	A5
CATEGORY of EDIFICIES	Railway Administration Building	Station Building		
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011			
CURRENT USE	Administration Building Demiryolu mudurlugu	Station Building	Service Building Restroom	Administration Building
ARCHITECTURAL FEATURES	Pointed arch openings. Gable roof with marsillia tiles. Large eaves.	Pointed arch openings. Hipped roof with marsillia tiles. Monumental stairs. Bracings for large eaves. Eave furnishing. Simple iron fencings.	Pointed arch openings. Hipped roof with marsillia tiles. Wooden door.	Rectangular openings. Gable roof with marsillia tiles.
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME			
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.			
CONDITION	1 2 3			
CHANGE	1 2 3	-Change of material of architectural elements -New rain gutter. -Change in Facade paint	-Change of material of architectural elements -Change in facade painting -Change in tile material	-New openings. -Change of material of architectural elements -Change in Facade painting
REGIST. STATUS	REGTR. Not REGTR.			




RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

						
BUILDING ID	A6		A7	A8	A9	
CATEGORY OF EDIFICES	Railway Administration Building		Railway Administration Building	Maintenance Building	Railway Administration Building	
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011					
CURRENT USE	Administration Building		Administration Building Tesisler Binası	Maintenance Building	Administration Building Vagon Servis Şefliği	
ARCHITECTURAL FEATURES	Pointed arch openings. Hipped roof with marsilla tiles. Large eaves.		Rectangular openings. Indicated entrance. Simple form of mass	Large rectangular openings. Gabled roof with marsilla tiles.	Large rectangular openings. Hipped roof with marsilla tiles.	
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME					
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.					
CONDITION	1 2 3					
CHANGE	1 2 3	-Change of material of architectural elements -Change in tile material -Change in Facade paint	-New architectural elements -Change of tile material	-Change of material of architectural elements -Change in facade painting -Change in tile material	-New openings. -Change of material of architectural elements -Change in Facade painting -Change in tile material	
REGIST. STATUS	REGTR. Not REGTR.					





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	A10		A11		B4	
	Maintenance Building		Commercial Building	Maintenance Building	Residential Building	
	Before 1929					
	1929-1949					
	1949-1972					
CURRENT USE	1972-1992					
	1992-2011					
	Maintenance Building		Commercial Building	Maintenance Building	Residential Building	
ARCHITECTURAL FEATURES						
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY	Smaal rectangular openings. Gabled roof with marsilla tiles.				
	BRICK MASONRY					
	CONCRETE FRAME					
NUMBER OF STOREY	ONE S.					
	TWO S.					
	TWO & MEZZ.					
CONDITION	FIVE S.					
	1					
	2					
CHANGE	3					
	1	-Change of material of architectural elements				
	2	-Change in facade painting				
REGIST. STATUS	3					
	REGTR.					
	Not REGTR.					


RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY OF EDIFICES CONST. YEAR					
	C3	Railway Administration Building	C4	C5	C6
	Before 1929		Maintenance Building	Maintenance Building	Railway Administration Building
	1929-1949				
CURRENT USE	1949-1972				
	1972-1992				
	1992-2011				
	Administration Building Yol Bakum Maduridu		Maintenance Building	Maintenance Building	Railway Administration Building
ARCHITECTURAL FEATURES					
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY	Rectangular openings. Hipped roof with marsilia tiles. Simple form of mass.	Rectangular openings. Hipped roof with marsilia tiles.	Rectangular openings. Gabled roof with marsilia tiles.	Rectangular openings. Hipped roof with marsilia tiles.
	BRICK MASONRY				
	CONCRETE FRAME				
	ONE S.				
NUMBER OF STOREY	TWO S.				
	TWO & MEZZ.				
	FIVE S.				
	ONE S.				
CONDITION	1				
	2				
	3				
	1				
CHANGE	1	-Change of material of architectural elements	-New architectural elements	-Change of material of architectural elements	-New openings.
	2	-Change in tile material	-Change of tile material	-Change in facade painting	-Change of material of architectural elements
	3	-Change in Facade paint		-Change in tile material	-Change in Facade painting
	REGISTR.				
REGIST. STATUS	Not REGISTR.				




RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	C7		C8		C9		C10	
	Railway Administration Building		Railway Administration Building		Railway Administration Building		Railway Administration Building	
	Before 1929							
	1929-1949							
	1949-1972							
CURRENT USE	1972-1992							
	1992-2011							
ARCHITECTURAL FEATURES	Not Using		Not Using		Not Using		Not Using	
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY							
	BRICK MASONRY							
	CONCRETE FRAME							
	ONE S.							
	TWO S.							
NUMBER OF STOREY	TWO & MEZZ.							
	FIVE S.							
CONDITION	1							
	2							
	3							
CHANGE	1	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements
	2	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation
	3	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint
REGIST. STATUS	REGTR.							
	Not REGTR.							

RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

				
BUILDING ID	C11	C12	C13	
CATEGORY of EDIFICES	Residential Building	Administration Building	Administration Building	
CONST. YEAR	Before 1929			
	1929-1949			
	1949-1972			
	1972-1992			
	1992-2011			
CURRENT USE	Residential Building	Residential Building	Residential Building	
ARCHITECTURAL FEATURES		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.	
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY			
	BRICK MASONRY			
	CONCRETE FRAME			
NUMBER OF STOREY	ONE S.			
	TWO S.			
	TWO & MEZZ.			
	FIVE S.			
CONDITION	1			
	2			
	3			
CHANGE	1	-Change of material of architectural elements	-Change of material of architectural elements	
	2	-Change in facade organisation	-Change in facade organisation	
	3	-Change in Facade paint	-Change in Facade paint	
REGIST. STATUS	REGTR.			
	Not REGTR.			





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY OF EDIFICES CONST. YEAR	 D1 Residential Building	 D2 Residential Building	 E1 Residential Building	
CURRENT USE	Residential Building	Residential Building	Residential Building	
ARCHITECTURAL FEATURES			Residential Building	Residential Building
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME			Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.			
CONDITION	1 2 3			
CHANGE	1 2 3	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass
REGIST. STATUS	REGISTR. Not REGISTR.			


RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	E2		E3		E4		E5	
	Residential Building		Residential Building		Residential Building		Residential Building	
	Before 1929							
	1929-1949							
	1949-1972							
CURRENT USE	1972-1992							
	1992-2011							
	Residential Building		Residential Building		Residential Building		Residential Building	
			Rectangular Form Building, Rectangular Openings, Gabled Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Gabled Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	
ARCHITECTURAL FEATURES								
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY							
	BRICK MASONRY							
	CONCRETE FRAME							
	ONE S.							
	TWO S.							
NUMBER OF STOREY	TWO & MEZZ.							
	FIVE S.							
	1							
	2							
	3							
CONDITION								
CHANGE								
	1	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements
	2	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation
	3	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint
		- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass
REGIST. STATUS	REGTR.							
	Not REGTR.							





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	E10		E11		E12		E13	
	Residential Building		Residential Building		Residential Building		Residential Building	
	Before 1929							
	1929-1949							
	1949-1972							
CURRENT USE	1972-1992							
	1992-2011							
	Residential Building		Residential Building		Residential Building		Residential Building	
	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	
ARCHITECTURAL FEATURES	STONE MASONRY							
	BRICK MASONRY							
	CONCRETE FRAME							
	ONE S.							
	TWO S.							
NUMBER OF STOREY	TWO & MEZZ.							
	FIVE S.							
	1							
	2							
	3							
CHANGE	1	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements
	2	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation
	3	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint
		- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass
REGIST. STATUS	REGTR.							
	Not REGTR.							





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	E14		E15		E16		E17	
	Residential Building		Residential Building		Residential Building		Residential Building	
	Before 1929							
	1929-1949							
CURRENT USE	1949-1972							
	1972-1992							
	1992-2011							
ARCHITECTURAL FEATURES	Residential Building		Residential Building		Residential Building		Residential Building	
	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY							
	BRICK MASONRY							
	CONCRETE FRAME							
NUMBER OF STOREY	ONE S.							
	TWO S.							
	TWO & MEZZ.							
	FIVE S.							
CONDITION	1							
	2							
	3							
CHANGE	1	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements
	2	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation
	3	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint
		- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass	- Additional mass
REGIST. STATUS	REGTR.							
	Not REGTR.							

RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR	E18		E19		E20		E21	
	Residential Building		Residential Building		Residential Building		Residential Building	
	Before 1929							
	1929-1949							
	1949-1972							
CURRENT USE	1972-1992							
	1992-2011							
	Residential Building		Residential Building		Residential Building		Residential Building	
	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	
ARCHITECTURAL FEATURES	STONE MASONRY							
	BRICK MASONRY							
	CONCRETE FRAME							
	ONE S.							
	TWO S.							
NUMBER OF STOREY	TWO & MEZZ.							
	FIVE S.							
	1							
	2							
	3							
CONDITION	1							
	2							
	3							
	1							
	2							
CHANGE	3							
	1							
	2							
	3							
	Not REGISTR.							
REGIST. STATUS	Not REGISTR.							





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

					
BUILDING ID	F1	F2	F3	F4	
CATEGORY of EDIFICES	Water Depot	Residential Building	Residential Building	Residential Building	
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011				
CURRENT USE	Water Depot	Residential Building	Residential Building	Residential Building	
ARCHITECTURAL FEATURES		Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semipopen Space.	
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME				
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.				
CONDITION	1 2 3				
CHANGE	1 2 3	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	
REGIST. STATUS	REGTR. Not REGTR.				





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

							
BUILDING ID	F5	F6	F7	F8			
CATEGORY of EDIFICES	Residential Building	Residential Building	Residential Building	Residential Building	Residential Building		
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011						
CURRENT USE	Residential Building	Residential Building	Residential Building	Residential Building	Residential Building		
ARCHITECTURAL FEATURES	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.			
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME						
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.						
CONDITION	1 2 3						
CHANGE	1 2 3	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass			
REGIST. STATUS	REGTR. Not REGTR.						





























RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

					
BUILDING ID	F9	F10	F11	F12	
CATEGORY OF EDIFICES	Residential Building	Residential Building	Residential Building	Residential Building	Residential Building
CONST. YEAR	Before 1929				
	1929-1949				
	1949-1972				
	1972-1992				
	1992-2011				
CURRENT USE	Residential Building	Residential Building	Residential Building	Residential Building	Residential Building
ARCHITECTURAL FEATURES					
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY				
	BRICK MASONRY				
	CONCRETE FRAME				
NUMBER OF STOREY	ONE S.				
	TWO S.				
	TWO & MEZZ.				
	FIVE S.				
CONDITION	1				
	2				
	3				
CHANGE	1	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements	-Change of material of architectural elements
	2	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation	-Change in facade organisation
	3	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint	-Change in Facade paint
		- Additional mass	- Additional mass	- Additional mass	- Additional mass
REGIST. STATUS	REGTR.				
	Not REGTR.				





RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

					
BUILDING ID	F13	F14	F15	G16	
CATEGORY of EDIFICES	Residential Building	Residential Building	Health Facility	Port Administration Building	
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011				
CURRENT USE	Residential Building	Residential Building	Health Facility	Administration Building Liman Kaya Seği	
ARCHITECTURAL FEATURES	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.	Rectangular Form Building, Rectangular Openings, Hipped Roof, Semiopen Space.			
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME				
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.				
CONDITION	1 2 3				
CHANGE	1 2 3	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in facade organisation -Change in Facade paint - Additional mass	-Change of material of architectural elements -Change in Facade paint	
REGIST. STATUS	REGTR. Not REGTR.				

RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

BUILDING ID CATEGORY of EDIFICES CONST. YEAR CURRENT USE		G7		G8		G11	
ARCHITECTURAL FEATURES		G7		G8		G11	
STRUCTURAL SYSTEM & CONSTR. MAT.		G7		G8		G11	
NUMBER OF STOREY		G7		G8		G11	
CONDITION		G7		G8		G11	
CHANGE		G7		G8		G11	
REGIST. STATUS		G7		G8		G11	

RESULTS OBTAINED FROM SURVEY FORMS FOR SINGLE BUILDINGS

				
BUILDING ID	H1	H7	H8	H9
CATEGORY OF EDIFICES	Residential Building	Warehouse	Warehouse	Warehouse
CONST. YEAR	Before 1929 1929-1949 1949-1972 1972-1992 1992-2011			
CURRENT USE	Residential Building	Warehouse	Warehouse	Warehouse
ARCHITECTURAL FEATURES	Large scale building, flat roof, rectangular openings	Large scale building, gabled roof, no plaster or paint at finishing	Large scale building, gabled roof, no plaster or paint at finishing	Large scale building, gabled roof, no plaster or paint at finishing
STRUCTURAL SYSTEM & CONSTR. MAT.	STONE MASONRY BRICK MASONRY CONCRETE FRAME			
NUMBER OF STOREY	ONE S. TWO S. TWO & MEZZ. FIVE S.			
CONDITION	1 2 3			
CHANGE	1 2 3	-New openings	-New openings	-New openings
REGISTR. STATUS	REGTR. Not REGISTR.			