# VALUE ASSESSMENT AT THE INTERSECTION OF NATURE AND INDUSTRY THE CASE OF ÇAMALTI SALTERN

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

BY IŞILAY TİARNAGH SHERİDAN

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## Approval of the thesis:

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#### **ABSTRACT**

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Çamaltı Saltern is one the most important natural sources in Turkey. It is located in the north of İzmir, within the Gediz River Basin and occupies a vast landscape with its 73 km² land. The saltern, with its long history in salt cultivation, has become a *palimpsest* on which different stories have been written over and over again through centuries. What was once a 4<sup>th</sup> century BC city named Leukai, after its whiteness, surrounded by shallow white salt marshlands turned into a Macedonian saltern, called as "*Halike*" in Byzantine era, became one of the most important tax sources of the Ottoman Empire and materialized in its industrialisation initiatives realized by the foreign investors at the end of the 19<sup>th</sup> century, turned into the showcase of independence in improving the living conditions of the workers during the early years of the nation state of Turkish Republic, created an industrial community, reinforced the formation of an important man-made ecosystem that was acknowledged as a Ramsar site, and eventually took its share in the privatization acts of the government in 2010 and lost its neighbourhood status; yet still *continues to do what it was created for, the salt production*.

This salt production and its salt marshes are of high importance for the migrating birds, especially flamingos as a trademark and they are registered thereof. The site is protected as RAMSAR Area (1998), Special Bird Area, Important Natural Area, Wildlife protection Area, 1<sup>st</sup> Degree Archaeological Site of Leukai (1985), and 1st Degree Natural Site (1986); however, the saltern's elements of this *unique industrial landscape are not registered*, and therefore, in danger of neglect and demolition accelerated by the abandonment after privatization and the lack of awareness.

The thesis, for this reason, aims to decipher the significance and the value of the saltern as an important industrial heritage to clarify its need for conservation. In order to achieve the value assessment, the scope of the thesis is defined with documentation, analysis and value assessment of the late Ottoman and early Republican developments covering the history line from 1863 to 1960. The study will be the first in its category for the Çamaltı Saltern, an industrial landscape that has been able to combine biological diversity including the dance of the flamingos and the music of the rails that has fed the mankind with its salt for hundreds of years.

Key words: Cultural Landscape, saltscape, value assessment, industrial heritage, industrial landscapes

#### DOĞA VE ENDÜSTRİNİN KESİŞİMİNDE DEĞER TESPİTİ CAMALTI TUZLASI ÖRNEĞİ

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Çamaltı Tuzlası, Türkiye'deki en önemli doğal kaynaklardan birisidir.İzmir'in kuzey sınırları içinde, Gediz nehri havzasında yer alır ve 73 kilometrekarelik geniş bir alanı kapsar.

Geçmişi çok eskilere dayanan tuz üretimiyle bu tuzla, asırlar boyu farklı senaryoların tekrar tekrar üzerine yazıldığı bir palimpsest haline gelmiştir. MÖ 4. yüzyılda alanı çevreleyen beyaz tuzcul bataklıklardan adını alan Leukai antik kenti Makedonlar tarafından işletilmiş bir tuzlaya dönüşmüş, Bizans döneminde üretim sürerken "Halike" adıyla anılmış, Osmanlı İmparatorluğu'nun en önemli vergi kaynaklarından biri haline gelmiş ve onun 19. yüzyıldaki endüstrileşme çabalarında yabancı yatırımcılar tarafından şekillenmiş, erken Cumhuriyet Türkiyesi'nin işçi yaşam koşullarını iyileştirme ile bağımsızlık arasında kurduğu ilişkide örneklerden biri olmuş, endüstri topluluğu yaratmış, sonradan Ramsar alanı olarak tanımlanacak olan insan yapımı bir ekosistemin oluşumunu desteklemiş ve son olarak devletin özelleştirme politikalarından 2010 yılında payını alarak "mahalle" ve topluluk yapısını kaybetmiş olmasına rağmen hala yaratımına neden tuz üretimiyle var olmaya devam etmiştir.

Tuz üretiminin gerçekleştirildiği bu bölge ve tuz üretimi özellikle göçmen kuşlar için

oldukça önemlidir ve alanın simgesi haline gelen flamingolar da bunlardan biridir.

Bu sebeple alan RAMSAR Alan'ı(1985), Kuş Cenneti, Önemli Doğal Sit Alanı,

Doğal Yasamı Koruma Alanı, 1.Derece Arkeolojik Sit Alanı (1985), 2. Derece Doğal

Sit Alanı (1985),1. Derecede Doğal Sit Alanı (1986), 3.Derecede Doğal Sit Alanı

(1999) olarak korunmaya alınmıştır ancak bu özgün endüstriyel peyzaj alanının

elamanları resmi olarak tescillenmemişlerdir ve bu yüzden de özelleştirme ve

farkındalık eksikliğinin hızlandırdığı bir ihmal ve yıkım sürecindedirler.

Tüm bu sebeplerden ötürü bu tez, alanın önemli bir endüstri mirası olarak korumaya

olan ihtiyacını ortaya koymak amacıyla önem ve değerinin ortaya çıkarılmasını

hedeflemektedir. Değer tespitinin gerçekleştirilebilmesi için tezin kapsamı geç

Osmanlı ve erken Cumhuriyet dönemlerini kapsayan 1863-1960 yapılı çevrelerinin

dökümantasyon, analiz ve değer tespit çalışması olarak belirlenmiştir. Çalışma

yüzyıllardır tuzuyla insanoğlunu besleyen, flamingoların dansını da içeren biyolojik

çeşitliliği ve raylarının müziğini birleştiren Çamaltı Tuzlası için bu kapsamda yapılan

ilk çalışma olma özelliğini de taşıyacaktır.

Anahtar kelimeler: Tuz peyzajları, değer tespiti, endüstri mirası, endüstri peyzajları,

Camaltı Tuzlası

viii

To my mother

I love you as much as salt<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See Appendix A for the folk tale.

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## LIST OF TABLES

### **TABLES**

Table 1 Factories established by TEKEL (Monopoly)	. 47
Table 2 Categories of World Heritage Cultural Landscapes by UNESCO (Fowler,	
2003)	. 86
Table 3 Criteria for the selection of World Heritage Cultural Landscapes by	
UNESCO	. 87
Table 4: Table showing Theresa Satterfield's table of values and explanations	124
Table 5: Values by Madran&Özgönül	126
Table 6 Summary of value assessments by different sources	128
Table 7 Chart for building typology	207
Table 8 Value Assessment Proposal	269
Table 9 Values and Edifices	282

## LIST OF FIGURES

#### **FIGURES**

Figure 1 Çamaltı Saltern salt stacks, crystallisation pools and Çilazmak Lagoon 1
Figure 2 Density of building stocks within the saltern and a symbolic site section 12
Figure 3 Abandoned lodgings and salt piles in the stack area (Author, March 2016)14
Figure 4 Partially demolished old port 2 (Author, April 2016)
Figure 5 Methodology of the study, adapted from Burra Charter Process
Figure 6 Site plan derived from different sources
Figure 7 Base map and grids
Figure 8 Sumo wrestler purifies the ring with salt from evil spirits (by Jeff Lewis). 30
Figure 9 Trapani Salterns and Windmills (Author, October 2014)
Figure 10 Gandhi picking up the salt
Figure 11 1856 dated decision on the annulment of the contract with Bezirgan Zarifi
Figure 12 History of State Monopoly49
Figure 13 Map showing the salt production in Turkey, by EUSALT, by August 2014
Figure 14 Room-Pillar Mining and Solution Mining Scheme
Figure 15 Çankırı Salt Mine (by Melih Sular)

Figure 16 Salt in Tuz Gölü (Salt Lake)	53
Figure 17 One of the springs of Munzur Tuz in Hiver and Ağa salt beds	54
Figure 18 Production process at Çamaltı Saltern illustrated by Medih Egemen,	
redrawn and translated by the author	55
Figure 19 Illustration of salt landscapes (Author)	57
Figure 20 Wielizcka Salt Mine Interior (by Rafal Stachurski)	58
Figure 21 Illustration from De Re Metallica	60
Figure 22 A map of Sea Salterns around Mediterranean (by Hjalmar Dahm)	63
Figure 23 Salt Museums around Mediterranean (Hjalmar Dahm)	64
Figure 24 Is-Salini Project Area, Yellow-Government Property, Red-Boundaries	66
Figure 25 Qawra saltpans carved in stone today used as steps to go swimming	
(Author, July 2016)	67
Figure 26 Cultural Heritage Map	68
Figure 27 Is-Salina Bay, Salt pans and 4 wooden salt sheds on the right side,	
Restored salt storage as visitor centre to be opened, Interior view of the visitor ce	ntre
and information panels, Other restored salt storage (Author, July 2016)	69
Figure 28 Lepa Vida Spa Centre in saltern offering salt treatments	70
Figure 29 Salt Production in Piran and organization for visiting the park, final vis	sion,
from management plan	72
Figure 30 From top left to bottom right; restored Salt Museum building, restored	
architectural heritage of the Secovlje Soline and cyclers, the embankments, ruins	
inside the saltern, Piran	74
Figure 31 Salinas Rio Maior, A worker at the front and visitors around the site	
(Author June 2016)	75

Figure 32 From top left t bottom right; The entrance sign (date: since 1177), one of
the wooden storages used as tourism office, other used as souvenir shops, and the
restaurants at the entrance (Author, June 2016)76
Figure 33 Salt workers in the valley
Figure 34 From top left to bottom right; Valle Salado Anana, built terraces of salt
pans, a concert in the pans, the foundation building, visiting routes79
Figure 35 Visiting the site from the management plan
Figure 36 Remains of a waterwheel in Cordoba on Tagus River (Author, April 2015)
and Watt's Engine for pumping water, Electric motor power applied to the
waterwheel of Çamaltı Saltern (Author, March 2016)90
Figure 37 Half model of the Crystal Palace, duplicated by a mirror, in V&A Museum
London (Author, June 2015)91
Figure 38 Front facade of the main hall, Ottoman General Exposition, Istanbul, 1863
98
Figure 39 Kayseri Sümerbank Factory complex aerial view
Figure 40 Lingotto Rooftop
Figure 41 İzmir Gas Works, From top left to bottom right: Gas works before the
restoration and abandoned edifices in the campus, restored gas works, open air movie
night in the gas work campus
Figure 42 Before and after photos of the campus buildings, Demolished Liqueur and
Cognac Factory, İzmir Alsancak TEKEL Cigarette Factory, Tobacco Factory as the
Police Headquarters after restoration, The architecture centre after restoration 112
Figure 43 Burra Charter Process
Figure 44 Google Maps image, İzmir, Turkey
Figure 45 İzmir Metropolitan Municipality boundaries and its districts141
Figure 46 Man showing the İzmir Cassaba Railway, 1923

Figure 47 Aerial Photo of the Saltern (by Photographer Turgut Tarhan)149
Figure 48 The saltern and its location
Figure 49 From top left to bottom right; salt was loaded to the trams, trams being carried by the horses to the elevator, salt piles in the pools, electric train carrying the salt to the port, elevator, port 1-1946, modern elevator, trucks delivering the salt, the system of collection along one of the crystallisation pools; collector on the right, the conveyor belts, elevator on the left-2016
Figure 50 Production of salt and its landscape
Figure 51 Timeline
Figure 52 Map of three hills with Leukai
Figure 53 Map of Piri Reis for İzmir and possible illustration of Çamaltı Saltern 163
Figure 54 Document showing the payment
Figure 55 The map of the Gulf and the city of Smyrna (saltern in detail)-18 <sup>th</sup> century
Figure 56 Detailed map of Comte de Choiseul – Gouffier's journey from the
Meander to the Gulf of Edremit – 18th century
Figure 57 Borders of the saltern in different periods
Figure 58 Relative boundaries of the area once called salt sea, Ada and Çamaltı salt beds and 1925 boundary of the Çamaltı Saltern
Figure 59 Maps of the derivation of the Gediz River bed joined, 1887 172
Figure 60 Detail from the derivation map, "Marais Salans" meaning the "Salt Sea"
Figure 61 Map prepared by Arife Karadağ from Captain Copeland's 1887 dated bathymetry map, on the top left there are salt pans by the Italians. (The text "Tuz Tavaları" can be translated as salt pans)
Figure 62 The man of the Gulf of İzmir prepared by the French Navy. 1888 174

on its north and Çilazmak on its south
Figure 64 Tympanum of Vitruvius and Typanum schematic in Çamaltı Saltern, 1946
Figure 65 Examples of active tympana in Çamaltı Saltern (Author, March 2016) . 177
Figure 66 Map of the areas to be irrigated by Gediz, 1907
Figure 67 Old power plant
Figure 68 Document of the tram line, 1915
Figure 69 Tuzçilli 1/125.000 – 1925 and Tuzla Burnu 1/125.000 – 1925 182
Figure 70 Translated and joined maps
Figure 71 Site plan with manager house, lodgings, school, furnace, and hospital, 1936 (TTA Gayrimenkul A.Ş. Archive)
Figure 72 Trams for salt transportation – 1946 (Egemen, 1946)
Figure 73 Document for the construction of the tram line – 1935 (Republic State Archive)
Figure 74 1949 Aerial Photo (HGK Archive)
Figure 75 1953 Aerial Photo, expansion shown with arrows (HGK Archive) 188
Figure 76 Expansion and development plan, 1983 (TTA Gayrimenkul Archive) 189
Figure 77 New TEKEL headquareters site plan, 1979 (TTA Gayrimenkul Archive)
Figure 78 New TEKEL Headquarters, garage, atelier and administrative building at the back (Author, April 2016)
Figure 79 Site plan, plan and facade diagrams of apartment lodgings, 1979 (TTA
Gavrimenkul Archive)

Figure 80 New apartment lodgings in their own neighbourhood (Author, April 2016)
Figure 81 Club house and pagodas in front (Author, April 2016)
Figure 82 Conservation statuses in the area
Figure 83 Flamingos in Shallow Marshland of Homa Fishery and Fishing Shelters (Author, April 2016)
Figure 84 Google Earth view of the flamingo reproduction island (Google Earth ©2016 Basarsoft,Google,DigitalGlobe, TerraMetrics, accessed on August 2016). 195
Figure 85 Flock of flamingos entering the saltern, in the front left the canal locks between the two pools are in open position (Author, August 2016)
Figure 86 Saltpans are reddened as the number of Dunaliella Salina raises in relation to the increase in salt concentration (Author, August 2016)
Figure 87 Bird nest in one of the saltpans, salt washing plant and the technical building on the background (Author, April 2016)
Figure 88 Flock of Flamingos in saltpans (Author, August 2016)
Figure 89 Solid-void analysis of the pans (Author, 2016)
Figure 90 Section of a border between two pools (TTA Gayrimenkul Archive) 201
Figure 91 Section of an embankment supported with a border construction on salt pan side
Figure 92 Water channels built with wood (Author, August 2016)
Figure 93 Wooden border filled with clay (Author, August 2016)
Figure 94 View from Crystallisation Pools to Workers Town (Author, May 2016)203
Figure 95 A house in Kemeraltı, bricks with cavities having solid brick dimensions and similar brick in Çamaltı (Author, April 2016)
Figure 96 The Pink Mansion and Ciğli Train Station (Author August 2016) 218

Figure 97 Vehicle Machines' Hangar project drawings of 1951 and 1953 aerial photo
of its first appearance (TTA Gayrimenkul A.Ş. Archive) (HGK Archive)222
Figure 98 Example of building tracking code
Figure 99 Site plan and southwestern facade of the watchbox (Author, April 2016)
Figure 100 Site plan and view from the northern corner of the locker rooms and
watchbox (Author, April 2016)
Figure 101 Site plan and view from the southern corner of the house? 3 (Author,
April 2016)
Figure 102 Site plan and view from the northern corner of the tympanum 1 (Author, April 2016)
7.pm 2010)
Figure 103 Site plan and view from the western corner of the tympanum 2 (Author, April 2016)
Figure 104 Site plan and salt trams in the southwestern facade of the rail atelier
(Author, April 2016)
Figure 105 Site plan and northeastern facade of the old factory (Author, April 2016)
230
Figure 106 Site plan and northeastern facade of the refectory (Author, April 2016)
201
Figure 107 Site plan and view from the northern corner of the house? 1 (Author,
April 2016)
Figure 108 Site plan and southwestern facade of the fire station (Author, April 2016)
Figure 109 Site plan and southwestern facade of the house? 2 (Author, April 2016)
Figure 110 Site plan and view from the eastern corner of the cinema (Author, April
2016)

Figure 111 Site plan and view from the northern corner of the Pink Mansion (Author,
April 2016)
Figure 112 Site plan and northeastern facade of the lodging type 1 (Author, April
2016)
Figure 113 Site plan and the northern corner of the Lodging Type 2 (Author, April
2016)
Figure 114 Site plan and northeastern facade of the school (Author, April 2016) 239
Figure 115 Site plan and the northern corner of the lodging type 3 (Author, April
2016)
Figure 116 Site plan and the northern corner of the infirmary (Author, April 2016)
241
Figure 117 Site plan and the northern corner of the lodging type 4 (Author, April
2016)
Figure 118 Site plan and the northern corner of the lodging type 5 (Author, April 2016)
2010)
Figure 119 Site plan and the northern corner of the lodging type 6 (Author, April 2016)
2010)
Figure 120 Mosque Lodging western corner (Author, April 2016)245
Figure 121 Site plan and the eastern corner of the hammam (Author, April 2016) 246
Figure 122 Site plan and eastern corner of the refectory and social facility (Author,
April 2016)
Figure 123 Site plan and the northwestern facade of the port 1 (Author, April 2016)
Figure 124 Site plan and the eastern corner of the port building 1 (Author, April
2016)

Figure 125 Site plan and the northeastern facade of the port building 2 (Author, April
2016)
Figure 126 Site plan and southwestern facade of the old power plant (Author, April 2016)
Figure 127 Site plan and southwestern facade of the technical building (Author, April 2016)
Figure 128 Site plan and the western corner of the tympanum 3 (Author, April 2016)
Figure 129 Site plan and the eastern corner of the tympanum 4 (Author, April 2016)
Figure 130 Two inhabitants of the " <i>Çamaltı Neighbourhood</i> ", Yurdanur Baydar and Emel Işık Üreğil, the lodgings on the left and tram line in front of the salt stacks on the right, 1964
Figure 131 Salt stack (Author, April 2016)
Figure 132 Weaknesses and threats diagram
Figure 133 protective Zoning Plan (2005) obtained from Çiğli Municipality 289
Figure 134 Zoning Plan of the Gediz Delta obtained from Gediz OPA document of İzmir Municipality
Figure 135 Diagram of strenghts and opportunities
Figure 136 Abandoned buildings and the crystallisation pools (Author, August 2016)
Figure 137 Palimpsest landscape
Figure 138 Demolished buildings
Figure 139 Current function sheet 145
Figure 140 Current function sheet 175

Figure 141 Current function sheet 187	. 336
Figure 142 Current function sheet 202	. 337
Figure 143 Current function sheet 214	. 338
Figure 144 Current function sheet 215	. 339
Figure 145 Current function sheet 226	. 340
Figure 146 Current function sheet 227	. 341
Figure 147 Current function sheet 236	. 342
Figure 148 Current function sheet 238	. 343
Figure 149 Current function sheet 239	. 344
Figure 150 Current function sheet 246	. 345
Figure 151 Current function sheet 258	. 346
Figure 152 Current function sheet 289	. 347
Figure 153 Original function sheet 145	. 350
Figure 154 Original function sheet 175	. 351
Figure 155 Original function sheet 187	. 352
Figure 156 Original function sheet 202	. 353
Figure 157 Original function sheet 214	. 354
Figure 158 Original function sheet 215	. 355
Figure 159 Original function sheet 226	. 356
Figure 160 Original function sheet 227	. 357
Figure 161 Original function sheet 236	. 358
Figure 162 Original function sheet 238	. 359
Figure 163 Original function sheet 239	. 360

Figure 164 Original function sheet 246	1
Figure 165 Original function sheet 258	2
Figure 166 Original function sheet 289	3
Figure 167 Building height sheet 145	6
Figure 168 Building height sheet 175	7
Figure 169 Building height sheet 187	8
Figure 170 Building height sheet 202	9
Figure 171 Building height sheet 214	0
Figure 172 Building height sheet 215	1
Figure 173 Building height sheet 226	2
Figure 174 Building height sheet 227	3
Figure 175 Building height sheet 236	4
Figure 176 Building height sheet 238	5
Figure 177 Building height sheet 239	6
Figure 178 Building height sheet 246	7
Figure 179 Building height sheet 258	8
Figure 180 Building height sheet 289	9
Figure 181 Condition sheet 145	2
Figure 182 Condition sheet 175	3
Figure 183 Condition sheet 187	4
Figure 184 Condition sheet 202	5
Figure 185 Condition sheet 214	6
Figure 186 Condition sheet 215	7

Figure 187 Condition sheet 226	8
Figure 188 Condition sheet 227	9
Figure 189 Condition sheet 236	0
Figure 190 Condition sheet 238	1
Figure 191 Condition sheet 239	2
Figure 192 Condition sheet 246	3
Figure 193 Condition sheet 258	4
Figure 194 Condition sheet 289	5
Figure 195 Construction date 145	8
Figure 196 Construction date 175	9
Figure 197 Construction date 187	0
Figure 198 Construction date 202	1
Figure 199 Construction date 214	2
Figure 200 Construction date 215	3
Figure 201 Construction date 226	4
Figure 202 Construction date 227	5
Figure 203 Construction date 236	6
Figure 204 Construction date 238	7
Figure 205 Construction date 239	8
Figure 206 Construction date 246	9
Figure 207 Construction date 258	0
Figure 208 Construction date 289	1
Figure 209 Building group 145	4

Figure 210 Building group 175	415
Figure 211 Building group 187	416
Figure 212 Building group 202	417
Figure 213 Building group 214	418
Figure 214 Building group 215	419
Figure 215 Building group 226	420
Figure 216 Building group 227	421
Figure 217 Building group 236	422
Figure 218 Building group 238	423
Figure 219 Building group 239	424
Figure 220 Building group 246	425
Figure 221 Building group 258	426
Figure 222 Building group 289	427
Figure 223 Sheet 1	430
Figure 224 Sheet 2 cont'd	431
Figure 225 Sheet 2 cont'd	432
Figure 226 Sheet 2.	433
Figure 227 Sheet 3 cont'd	434
Figure 228 Sheet 3 cont'd	435
Figure 229 Sheet 3	436
Figure 230 Sheet 4 cont'd	437
Figure 231 Sheet 4 cont'd	438
Figure 232 Sheet 4	439

Figure 233 Sheet 5 cont'd	440
Figure 234 Sheet 5 cont'd	441
Figure 235 Sheet 5	442
Figure 236 Sheet 6 cont'd	443
Figure 237 Sheet 6 cont'd	444
Figure 238 Sheet 6	445
Figure 239 Sheet 7 cont'd	446
Figure 240 Sheet 7 cont'd	447
Figure 241 Sheet 7	448
Figure 242 Sheet 8 cont'd	449
Figure 243 Sheet 8 cont'd	450
Figure 244 Sheet 8	451
Figure 245 Sheet 9 cont'd	452
Figure 246 Sheet 9 cont'd	453
Figure 247 Sheet 9 cont'd	454
Figure 248 Sheet 10 cont'd	455
Figure 249 Sheet 10 cont'd	456
Figure 250 Sheet 10	457
Figure 251 Sheet 11 cont'd	458
Figure 252 Sheet 11 cont'd	459
Figure 253 Sheet 11	460
Figure 254 Sheet 12 cont'd	461
Figure 255 Sheet 12 cont'd	462

Figure 256 Sheet 12	463
Figure 257 Sheet 13 cont'd	464
Figure 258 Sheet 13 cont'd	465
Figure 259 Sheet 13	466
Figure 260 Sheet 14 cont'd	467
Figure 261 Sheet 14 cont'd	468
Figure 262 Sheet 14	469
Figure 263 Sheet 15 cont'd	470
Figure 264 Sheet 15 cont'd	471
Figure 265 Sheet 15	472
Figure 266 Sheet 16 cont'd	473
Figure 267 Sheet 16 cont'd	474
Figure 268 Sheet 16	475
Figure 269 Sheet 17 cont'd	476
Figure 270 Sheet 17 cont'd	477
Figure 271 Sheet 17	478
Figure 272 Sheet 18 cont'd	479
Figure 273 Sheet 18 cont'd	480
Figure 274 Sheet 18.	481
Figure 275 Sheet 19 cont'd	482
Figure 276 Sheet 19 cont'd	483
Figure 277 Sheet 19	484
Figure 278 Sheet 20 cont'd	485

Figure 279 Sheet 20 cont'd	486
Figure 280 Sheet 20	487
Figure 281 Sheet 21 cont'd	488
Figure 282 Sheet 21 cont'd	489
Figure 283 Sheet 21	490
Figure 284 Sheet 22 cont'd	491
Figure 285 Sheet 22 cont'd	492
Figure 286 Sheet 22	493
Figure 287 Sheet 23 cont'd	494
Figure 288 Sheet 23 cont'd	495
Figure 289 Sheet 23 cont'd	496
Figure 290 Sheet 24 cont'd	497
Figure 291 Sheet 24 cont'd	498
Figure 292 Sheet 24	499
Figure 293 Sheet 25 cont'd	500
Figure 294 Sheet 25	501
Figure 295 Sheet 26 cont'd	502
Figure 296 Sheet 26 cont'd	503
Figure 297 Sheet 26	504
Figure 298 Sheet 27 cont'd	505
Figure 299 Sheet 27 cont'd	506
Figure 300 Sheet 27	507
Figure 301 Sheet 28 cont'd	508

Figure 302 Sheet 28 cont'd	509
Figure 303 Sheet 28.	510
Figure 304 Sheet 29 cont'd	511
Figure 305 Sheet 29 cont'd	512
Figure 306 Sheet 29	513
Figure 307 Sheet 30 cont'd	514
Figure 308 Sheet 30 cont'd	515
Figure 309 Sheet 30	516
Figure 310 Sheet 31 cont'd	517
Figure 311 Sheet 31 cont'd	518
Figure 312 Sheet 31	519
Figure 313 Neighbourhood cancellation document page 1	522
Figure 314 Neighbourhood cancellation document page 2	523
Figure 315 Neighbourhood cancellation document page 3	524

# TABLE OF CONTENTS

ABSTRACT	v
ÖZ	vii
ACKNOWLEDGEMENTS	X
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
TABLE OF CONTENTS	xxxi
CHAPTERS	
1. INTRODUCTION	1
1.1 Problem Definition	13
1.2 Aim and Scope of the Study	15
1.3 Sources and Methodology	16
1.4 Structure of the Thesis	26
2. SALT AND INDUSTRIAL HERITAGE	29
2.1 Salt	30
2.1.1 Salt of the Earth	30
2.1.2 Salt of the Ottoman Empire, Salt of the Turkish Republic	40
2.1.2.1 Salt and TEKEL (General Directorate of Tobacco, T	obacco
Products, Salt and Alcohol Enterprises)	45
2.1.2.2 Salt Production and the Sources in Turkey Today	49
2.1.2.2.1 Rock Salts	51
2.1.2.2.2 Lake Salts	52
2.1.2.2.3 Spring Salts	53
2.1.2.2.4 Sea Salts	54
2.1.3 Salt Landscapes and Conservation	57
2.1.3.1 Is Salini, Salina Bay Malta, Sea Salt	66
2.1.3.2 Secoveljske Soline, Slovenia, Sea Salt	70

	2.1.3	.3 Sa	linas de Rio Maior, Portugal, Spring Salt	75
	2.1.3	.4 Va	ılle Salado de Añana, Spain, Spring Salt	77
	2.1.3	.5 Va	llue Assessment in Salt Landscapes and Evaluation	82
2	.2 Inc	dustrializ	zation and Conservation of Industrial Heritage	88
	2.2.1	Industr	ial Revolution	89
	2.2.2	Industr	ialization of the Empire and the Republic	96
	2.2.2	.1 Ge	eneral Evaluation	104
	2.2.3	Industr	ial Heritage and Conservation	106
	2.2.3	.1 Int	ernational Documents on Industrial Buildings and Sites	113
	2.2.3	.2 Va	llue Assessment and Industrial Heritage	116
	2.2.3	.3 Ev	raluation of value assessment studies	129
3. İ	ZMİR A	ND ÇA	MALTI SALTERN	139
3	.1 İzr	mir		140
	3.1.1	Locatio	on	140
	3.1.2	History	<sup>7</sup>	142
	3.1.2	.1 Pro	e-Industrialization	142
	3.1.2	.2 İzr	mir during 19 <sup>th</sup> and 20 <sup>th</sup> centuries and Its Industrial World	143
3	.2 Ça	ımalti Sa	ltern	149
	3.2.1	Locatio	on and Production	150
	3.2.2	History	<sup>7</sup>	157
	3.2.2	.1 Be	fore 1863	161
	3.2.2	.2 Fi	rst Period (1863-1923)	171
	3.2.2	.3 Se	cond Period (1923-1960)	181
	3.2.2	.4 Th	ird Period (1960-1985)	188
	3.2.2	.5 Fo	urth Period (1982)	192
	3.2.3	Physica	al Characteristics	194
	3.2.3	.1 Na	tural Landscape	194
	3.2.3	.2 Bu	ilt Landscape	198
	3.2	2.3.2.1	Pan-scape, Subtractive	199
	3.2	2.3.2.2	Salina-polis, Additive	203
	3.2.3		eneral Evaluation	
	3.2.4	Socio-C	Cultural Characteristics	259
4. V	ALUE A	ASSESM	MENT OF IZMIR CAMALTI SALTERN	265

4.1	Salt Landscapes and Industrial Heritage of Çamaltı	266
4.2	Value Assessment of Çamaltı Saltern and its Industrial Landscape.	270
4.3	General Evaluation	283
5. CON	ICLUSION REMARKS FOR FURTHER CONSERVATION	
INITIA	ATIVES AT THE INTERSECTION OF NATURE AND INDUST	'RY IN
ÇAMA	LTI	2911
BIBLI	OGRAPHY	301
APPEN	NDIX A	319
APPEN	NDIX B	321
APPEN	NDIX C	325
APPEN	NDIX D	329
APPEN	NDIX E	333
APPEN	NDIX F	349
APPEN	NDIX G	365
APPEN	NDIX H	381
APPEN	NDIX I	397
APPEN	NDIX J	413
APPEN	NDIX K	429
APPEN	NDIX L	521



#### **CHAPTER 1**

#### INTRODUCTION

"Let there be work, bread, water and salt for all."

Nelson Mandela<sup>2</sup>



Figure 1 Çamaltı Saltern salt stacks, crystallisation pools and Çilazmak Lagoon (Author, September 2016)

 $<sup>^2</sup>$  <a href="http://www.africa.upenn.edu/Articles\_Gen/Inaugural\_Speech\_17984.html">http://www.africa.upenn.edu/Articles\_Gen/Inaugural\_Speech\_17984.html</a>, last accessed on March, 2016

Once human beings changed their diet after the Neolithic Revolution, they began looking for salt to add to their diet due to eating flesh less. In time, it became so vital that civilizations fought over its sources for ages. It was often referred as the "white gold" and being such an important matter, it gained a great symbolic importance in many cultures all around the world and prospered nations with its economic value.

Salt became one of the first *industries* with its trade, and thus, the first *state monopoly*.<sup>3</sup> This industry relied on two main techniques in obtaining the salt from the nature; evaporating the salty water or mining the rock. These sources are abundant all around the world. The former, solar evaporation of the salty water creating above ground landscapes depends on suitable weather. Therefore, the Mediterranean and its surrounding regions were and still are among the most appropriate places to perform this evaporation process that is bound to heat and wind. There were many salterns operated in the region and for this reason it is often stated as the *common cultural heritage of the Mediterranean*. The Atlantic coasts are presented to have similar culture as well with their salt trade route. The latter, is mined from ancient sea beds that are found underground. Almost no place on earth is without salt for that matter. However, the arrival of the modern geology and technology induced the dispersal of mining to a wider scale than it was before. Both the mining and traditional solar evaporation of salt were affected by the scientific developments and eventually by the industrial revolution.

The industrial revolution rapidly ravaged the world during the 18<sup>th</sup> and 19<sup>th</sup> centuries. The leading events of this revolution such as the developments in cotton industry, the first utilization of the steam engine as a power source alternative to water, and the use of cast iron and steel to meet the needs of industrial production techniques<sup>4</sup> changed the realm of the production and the way of living. As the centrepiece of the epoch, factories grew in size and started to be built almost everywhere now that the dependence on water ended with new ways to obtain power. As the result of their dispersal, the new discourse on their architecture and ideology ravaged Europe.

<sup>&</sup>lt;sup>3</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>4</sup> (Albrecht, 2012, pp. 17-23) and (Morris, 1994, pp. 289-290)

These discourses not only exalted the image of the modern factory, but also started to generate different physical environments that were needed to support the production, such as the *model towns*. The main point in creating these towns was to establish dependency on the factory by means of providing desirable conditions for an industrial community. The traditional rural community left the dominance to newly developed "industrial bourgeoisie" and "industrial proletariat" whose needs were to be satisfied with the new architecture; its materials, construction techniques and spatial properties. With the *paternalistic instincts* of the factory owners, many model industrial towns started to be built such as the city of Chaux, Royal Saltworks of Arc-et-Senans by Claude Nicholas Ledoux and New Lanark in Scotland in 1800 by Robert Owen.<sup>6</sup> Owen's ideas had inspired other industrialists and allowed the dissemination of the idea of an industrial community town. In the 20<sup>th</sup> century Henry Ford took the idea of an industrial town one step further and his ideas influenced the uniform mass produced homes for workers and carried the principles of the mass production and standardization in many constructed communities<sup>7</sup> around the world. As seen, the Industrial Revolution born in England changed how and "where people worked or lived" a great deal over a vast geography. Many nations followed her in self-development and in colonization. While taking advantage of raw materials, the industrialists exported the technology, architecture and the new industrial society with them to their destinations. The vast fertile lands of the Ottoman Empire were ready to be the supplier of raw materials and consequently being at the receiving hand of their technology and architecture during both the Ottoman Empire and the Turkish Republic.

Despite being enthusiastic about industrialization initially, the Ottoman Empire's attempts can be seen in a limited geography – primarily in İstanbul and in İzmir. İstanbul was, of course, the leading city where most of the factories were built. İzmir, with all its potentials as a port city having a fertile hinterland and a cosmopolitan structure, was the second after İstanbul in terms of industrialization acts. The city

<sup>&</sup>lt;sup>5</sup> (Albrecht, 2012, pp. 17-23)

<sup>&</sup>lt;sup>6</sup> <a href="http://robert-owen-museum.org.uk/Robert\_Owen\_1771\_1858/new\_lanark">http://robert-owen-museum.org.uk/Robert\_Owen\_1771\_1858/new\_lanark</a>, last accessed on March, 2016

<sup>&</sup>lt;sup>7</sup> (Abrahamson, 2014, pp. 55-57)

was unquestionably the biggest export port of the Empire; and the second after İstanbul in import.<sup>8</sup> However, in these cities, the industrialization highly depended on foreign investors and minorities, imported machines, technicians, and even workers.<sup>9</sup> Many of the factories belonged to non-Ottoman groups. In case of İzmir, the majority of the trade was already in the hands of the non-Ottoman groups, so the accumulated capital to open new factories could generally be found among them. <sup>10</sup> In addition to this, as the result of state's bankruptcy in 1875, some of the taxes of these factories were also given to *Düyun-u Umumiye* (Administration of the Ottoman Public Debt) in exchange of the state debts<sup>11</sup> and the initiatives of the Empire left as moribund on the verge of the 20<sup>th</sup> century.<sup>12</sup> Both of the cities had the remnants of the era when the administrative structure changed in 1923 with the foundation of the Turkish Republic.

The new state took industrialization as the means to be "independent" and "modern". During the early Republican Period, many initiatives were taken in order to create industrial production centres such as the sugar factories, Sümerbank, coal mines and TEKEL (Tobacco, tobacco products, salt and alcohol enterprises) factories creating corporate brands around the country. There was also an act of transforming and supporting the existing ones, since the factories that were previously operated by the minorities represented the semi-colonial state of the Empire. The improvement of them was a showcase of "independence". The new built factories during this period and the developed ones were not only production centres, but also places to generate the new lifestyle and modern society. The complexes included sport facilities, parks, hospitals, schools, cinemas, and social clubs besides the lodgings for workers. In a way they applied the ideas of Owen and Ford, but also were unique in being the ambassadors of the nationalistic ideals based

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<sup>&</sup>lt;sup>8</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>9</sup> (Martal, 1999)

<sup>&</sup>lt;sup>10</sup> (Çakır, 2012, pp. 363-379)

<sup>&</sup>lt;sup>11</sup> (Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>12</sup> (Clark, 1974, pp. 65-76)

<sup>&</sup>lt;sup>13</sup> (Bozdoğan & Akcan, 2012, p. 94)

on industrialization. Nevertheless, after the 1980s, some of these initiatives were prioritized or some old factories were closed. Turkey experienced many financial ups and downs and at some point industrialization became less active, losing the spirit that governed its early years. Many of the factory campuses were abandoned, demolished or privatized on the verge of the 21<sup>st</sup> century. Their related *identities and* architectural spaces slowly disappeared thereof.

Conservation of the remnants of these industrial heritage sites of both the Empire and the State were not considered up until 1990s, although it had already been 50 years since the first discussions in Europe. According to Barrie Trinder, first initiatives were taken to preserve the industrial areas by the writer L.T.C. Rolt during 1940s in England.<sup>14</sup> The terminology for this area was first created by Michael Rix when he conjoined the term "industrial archaeology" for the first time in 1955. Grown out of the British context, recognition and appreciation of the industrial complexes around the world gained speed after 1970s. In 1973 Association for Industrial Archaeology was founded. 15 TICCIH - The International Committee for the Conservation of Industrial Heritage was established in 1978. Emerging from TICCIH, E-FAITH -The European Federation of Associations of Industrial and Technical Heritage started its operations in 1999.<sup>17</sup> Another formation was the European Route of Industrial Heritage – ERIH. Other organizations also exist such as SHOT, NEKTAR, and ICOHTEC that are concerned with the history of technology and related sites. Despite not being directly related to the industrial roots, DOCOMOMO International - Documentation and Conservation of Buildings, Sites and Neighbourhoods of Modern Movement founded in 1988 is another related formation since an industrial site or a building of production can be valuable for the modern architecture as well as for the industrial history. There are also documents concerning the industrial heritage such as the "Recommendation on the Protection and Conservation of the Industrial, Technical and Civil Engineering in Europe" by European Council in 1990. The

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<sup>&</sup>lt;sup>14</sup> (Saner, 2012, s. pp. 53-66)

<sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> http://ticcih.org/activities/congresses/#gb , last accessed on February, 2016

<sup>&</sup>lt;sup>17</sup> http://www.e-faith.org/home/?q=content/what-e-faith, last accessed on February, 2016

Nizhny Tagil Charter for the Industrial Heritage that was prepared in 1993, the Dublin Principles - "Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes" by ICOMOS and TICCIH released in 2011 and the book "Industrial Heritage Re-tooled: The TICCIH Guide to Industrial Heritage Conservation" published in 2012. Among them the Nizhny Tagil Charter has vital importance since it defines the industrial heritage and industrial archaeology, as follows;

(industrial heritage includes)"...the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education."

(industrial archaeology is) "an interdisciplinary method of studying all the evidence, material and immaterial, of documents, artefacts, stratigraphy and structures, human settlements and natural and urban landscapes, created for or by industrial processes. It makes use of those methods of investigation that are most suitable to increase understanding of the industrial past and present.<sup>18</sup>

In Turkey, the issues concerning the industrial archaeology started to be discussed during the early 1990s. <sup>19</sup> Most of the industrial areas facing the discussions belonged to the government at the time and what was once a large-outside-the-city industrial site started to generate a *potential high profit income spot* for the metropolitan area. Thus, the use of their lands and their *privatization* became a highly controversial topic during the 2000s and posed many problems for their conservations. Gül Köksal

<sup>&</sup>lt;sup>18</sup> (TICCIH, 2003)

<sup>&</sup>lt;sup>19</sup> (Saner, 2012)

was one of the earliest initiators of discussions on their conservations with her PhD thesis focusing on the conservation and reuse proposals for the industrial heritage in İstanbul in 2005. Among other publications, "Dosya 03 Endüstri Mirası" (Folder 03 Industrial Heritage) was published by TMMOB Chamber of Architects in 2006.<sup>20</sup> In the following year, 2007, an atelier was organized in Zonguldak, Turkey, by TMMOB Chamber of Architects for industrial heritage. The book "Endüstri Mirası" (Industrial Heritage) covering the sum of knowledge produced during the event was published in August 2008 by the Chamber of Architects.<sup>21</sup> Following these publications and studies, number of theses and papers started to be published during the 2000s.

The interest in the conservation of the industrial heritage is new, but the conservation of salt landscapes in terms of their contribution to form a culture specific to salt production industry is even newer. There are few examples of salt mines that are amongst the earliest accepted World Heritage Sites, and thus, earliest conserved, such as Wieliczka and Bochnia Royal Salt Mines, Hallstatt-Dachstein/ Salzkammergut Cultural Landscape and From the Great Saltworks of Salins-les-Bains to the Royal Saltworks of Arc-et-Senans, the Production of Open-pan Salt. In the case of Wieliczka Salt Mine, it is the evolution of the production industry that was important in the selection since it has been operated since 13th century, long before the industrial revolution. The same is valid for the salt pans and their landscapes. They had been in use before the industrial revolution; however, the production techniques, the transportation of salt, or the way of living around the salt production changed with the epoch of the revolution. For ages, people collected the naturally accumulating salt from the shores or springs and later with the help of the windmills, salty water obtained from these sources was taken into pools (typically through insolation in lagoons or built pools<sup>22</sup>) and left until it evaporated via sun and wind<sup>23</sup> especially around the Mediterranean region or evaporated in a special

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<sup>&</sup>lt;sup>20</sup> (Zelef, 2006)

<sup>&</sup>lt;sup>21</sup> (Madran & Kılınç, 2008)

<sup>&</sup>lt;sup>22</sup> (Harding, 2013, p. 28)

<sup>&</sup>lt;sup>23</sup> (Karatosun Bahtiyar, 2008)

containers by using fire in parts where solar evaporation cannot be performed.<sup>24</sup> The collected salt through solar evaporation was transported by animals or ships. After the industrial revolution, some of the salt pans continued to use their traditional ways while others adapted to the new techniques. The way of directing the water stopped being depended on the windmills as the waterwheels had the opportunity to be operated by electricity. The transportation got affected by the use of steam power and trains. Trams were built in salterns to transport the goods to their destinations. The tools for collecting, or cracking the salt layers were advanced. However, whether they continued the traditional or industrialized way, they represented a unique example of "combined works of nature and of man". The Dublin Principles states that all examples of "industrial heritage reflects the profound connection between the cultural and natural environment, as industrial processes – whether ancient or modern – depend on natural sources of raw materials, energy and transportation networks." <sup>25</sup>

Salt pans possessed another kind of relationship with their surrounding environment different from the mines, though. Once the pools for solar evaporation were formed, they created a medium in which the amount of salt raised more than the natural amount found in a source. This situation allowed halophilic microorganisms, a phenomenon that grants the playful *colours to the pans from sky blue to vivid red*, to reproduce and create efficient food supply for salt depending animals, especially migrating birds. <sup>26</sup> This way the industry created a man-made ecosystem in time and the production became strictly connected with high biodiversity. Therefore, a change in the method of production or abandonment not only meant the loss of an important culture of the industry, but also the potential of destroying source of food and habitat of the species. As a result, many of these areas started to be restored and conserved lately in a holistic manner as *cultural landscapes*. The Mediterranean basin especially is where these initiatives are taken and it is constantly stated that they share the common natural and cultural heritage of salt-scapes. Apart from their -

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<sup>&</sup>lt;sup>24</sup> (Harding, 2013, p. 28)

<sup>&</sup>lt;sup>25</sup> (ICOMOS, 2011)

<sup>&</sup>lt;sup>26</sup> For more information (Koru, 2004) and <a href="http://www.izmirkuscenneti.gov.tr/alan-bilgileri">http://www.izmirkuscenneti.gov.tr/alan-bilgileri</a> , last accessed on August, 2016

often- being natural conservation or Ramsar Areas, they became important cultural centres where the **know-how** of the production techniques is given high importance to convey to further generations. Moreover, the relations of a community gathering around the salt cultivation and the built up heritage of the production is conserved with care. There are few good examples of such restoration and conservation acts in Malta, Slovenia, Portugal, and Spain for sea and spring salterns. There is currently such an emphasis on conservation of salt production, because there are only 170 salterns detectable out of hundreds that once operated in the Mediterranean since the ancient times.<sup>27</sup> Many of these salterns are all man-made ecosystems, even when they already had the potential as wetlands; they are solidified by the existence of salt industry. It is one of the rare types of industrial production that does not reversely affect the natural reserves of an area but reinforces it, for it solely relies on the circulation of naturally found salty water. Therefore, it is of vital importance to conserve both the industrial and the natural landscapes in salt pans.

There is only one such example in Turkey in terms of sea-salt production marshlands that is the Çamaltı Saltern. However, its conservation measures only concern the natural properties of the area unlike the aforementioned examples. In the region surrounding Çamaltı Saltern many important species live in fresh and salty water ecosystems. The birds, mammals, invertebrates, and fish live in fresh and salty water ecosystems, dunes, lagoons, meadows, and marshlands. *There are more than 270 different species of birds, 80-120 thousand of waterfowls, more than 700 different types of plant species, numerous fish, invertebrates and mammals that live in the Gediz Delta*. Therefore, it represents high *biodiversity*. It is one of the two breeding sites of the Flamingos in Turkey with Tuz Gölü (Salt Lake). There is even one artificial island for them in 6440 m² land inside the saltern and it is the biggest of its kind in the world. A number of 17.000 flamingos were counted that spent the winter in the site. Moreover, 70 pair of the endangered Pelacanus Crispus reside in

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<sup>&</sup>lt;sup>27</sup> Only 90 of them are still operating. For more information <a href="http://www.aegean.gr/alas/medsalinas.htm">http://www.aegean.gr/alas/medsalinas.htm</a>, last accessed on July, 2016

<sup>&</sup>lt;sup>28</sup> (Özbek Sönmez & Onmus, 2006)

<sup>&</sup>lt;sup>29</sup> http://www.izmirkuscenneti.gov.tr/alan-bilgileri, last accessed on August, 2016

Homa Lagoon to breed.<sup>30</sup> Du to all of these factors, the area represents high bio-diversity. Therefore, the values of these ecosystems are widely known and accepted as the site consists of a RAMSAR Area under the responsibility of Orman ve Su İşleri Bakanlığı (Ministry of Forest and Water Affairs); Special Bird Area, 1<sup>st</sup> Degree Natural Site under the responsibility of Çevre ve Şehircilik Bakanlığı (Ministry of Environment and Urbanisation); and 1<sup>st</sup> Degree Archaeological Site under the responsibility of Kültür ve Turizm Bakanlığı (Ministry of Culture and Tourism). However, none of these conservation statuses are concerned with the production landscape of salt and its built heritage. It is the only remaining salt production landscape in a region what once was called as the "Salt Sea" during the Ottoman Empire when once there were 52 small salterns in Çamaltı and Ada salt beds.<sup>31</sup> The saltern is not only the only remaining example of sea use for that matter, but also is among the last remaining 170 ones in the Mediterranean basin. It is a part of both Anatolian and Mediterranean history and heritage.

The current scenery of the salt pans has its core dating back to the end of 19<sup>th</sup> century and the beginning of the 20<sup>th</sup>. It witnessed the industrialization initiatives of both the Ottoman Empire and the Turkish Republic. Its first systematized pools and the second construction of it were performed by Italian teams, once in 1863 as tenants and once in 1906 as a design team commissioned by the Empire.<sup>32</sup> The saltern was also equipped with one of *the first electricity plants* in the Empire by the latter one.<sup>33</sup> There are traces of boundaries of the saltpans and there are remnants of the 19<sup>th</sup> century factory edifices dating back to the period of this Italian tenancy and design. In addition to this foreign dominance, as the result of state's bankruptcy, some of the taxes of the factories were also given to *Düyun-u Umumiye* (Administration of the Ottoman Public Debt) in exchange of the state debts, including the Phocaea salterns' (Camaltı Saltern was a part of Phocaea salterns). These salterns of Phocaea would

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<sup>&</sup>lt;sup>30</sup> http://www.izmirkuscenneti.gov.tr/alan-bilgileri, last accessed on August, 2016

<sup>&</sup>lt;sup>31</sup> (Karatosun Bahtiyar, 2008)

<sup>&</sup>lt;sup>32</sup> (Doğruel & Doğruel, 2000, pp. 110-129)

<sup>&</sup>lt;sup>33</sup> (Dolun, 2002)

have been given to the Greek administration if the Treaty of Sévres had been implemented at the end of the First World War.<sup>34</sup>

However, the Turkish Republic created a different kind of faith for the saltern. It was such an important reserve in 1931 that **İnan** wrote İzmir Çamaltı Saltworks as the most important salt bed.<sup>35</sup> Due to its importance, industrial initiatives were taken in the saltern immediately. The model industrial towns were taken as examples during the early years of the Turkish Republic and applied in the saltern as well as in other sites. As early as the beginning of the epoch, the saltern was equipped with a tram line, ports, power stations, and technical buildings together with a school, a hospital, number of lodgings, and factory buildings. As in other examples of industrial campuses of Sümerbank, sugar factories, coal mines it represented the cultural agent of industrialisation and became one of the surviving *TEKEL initiatives*. Further expansions were also made in 1950s with the Marshall Aid to this evolving industrial landscape<sup>36</sup> and an expansion plan was carried out during the early 1980s.

Today, there are 128 buildings in the saltern most of which are located along the shoreline in a linear organization. The production related facilities, dormitories, lodgings, mosque, school, infirmary and the two ports are located within this organization. The new pump station near the entrance of the bird sanctuary, the administrative buildings near the entrance and the TEKEL Headquarters complex are located along the outer boundaries of the saltern, away from the shoreline. However, the ownership of the production rights were given from government monopoly to private sector in 2010 and the workers' town was evacuated leaving most of the building stock abandoned. There are only the seasonal workers living in the saltern today during the harvest season. The permanent workers are living in the city, and thus, the lodgings, the cinema, the fire station, the social facilities and the school are no longer in use. Among the factory buildings such as the ports, the power plant, the technical building and the tympana, only the tympana are in use with their original

<sup>&</sup>lt;sup>34</sup> (Treaty of Peace with Turkey, 1920)

<sup>&</sup>lt;sup>35</sup> (İnan, 1988, p. 174)

<sup>&</sup>lt;sup>36</sup> (Ertem B., 2009)

functions. The ports are abandoned; the power plant and the technical building are being used as ateliers today.



Figure 2 Density of building stocks within the saltern and a symbolic site section

These edifices that were built are the supporters of the system only; they do not directly affect the production except the tympana. The salt pans of the saltern are the representatives of a factory assembly line with these tympana and the salt cultivation depends solely on the landscape. The way of production with water channels, the tympana, the canal locks, and the use of gravity to direct the sea water makes the *landscape the factory* in this industrial heritage site. Therefore, there is no specific machinery in the saltern, other than the tympanum system and the power plant's electric system, unlike other industrial areas.

All of these initiatives represented the prevailing uses of materials and designs of their time. Nevertheless, the globalization and the change in the politics affected the saltern. New modernization projects changed the built landscape and the salt pan areas were expanded to the south and north. The changes, the unknown value of the site, lack of information and the abandonment of the workers' town accelerated the decay of what once was a lively production neighbourhood. Almost half of the existing edifices are not used today and the harsh environment of the salt devours them day by day.

#### 1.1 Problem Definition

The Çamaltı saltern was chosen as the area to study since *it lacks the recognition as* an industrial heritage site. Although the most dominant feature of the Çamaltı territory lies within its nature, there is also a unique salt production in the very middle of all the aforementioned natural protection areas. Unfortunately, none of them emphasises neither the importance of the industry nor the conservation of its industry-based cultural landscape. There are currently no measures to prevent the unique collaboration of the industrial heritage with the nature surrounding the production from demolishing. In fact, there are already 34 demolished buildings at the site that could be detected from aerial photos taken in 1949 and 1964. Moreover, 74 of the 128 remaining ones are abandoned. Most of the remaining ones are in a derelict state today, accelerated with the effect of mechanization and the decrease in need of man-power. This decrease, causing the workers that lived in the lodgings of the site to move out, forced a community and a care for the buildings to diminish. Combined with the lack of awareness of the history of the saltern, what was once a living factory neighbourhood is a haunted bequest of the salt as it seems now.



Figure 3 Abandoned lodgings and salt piles in the stack area (Author, March 2016)

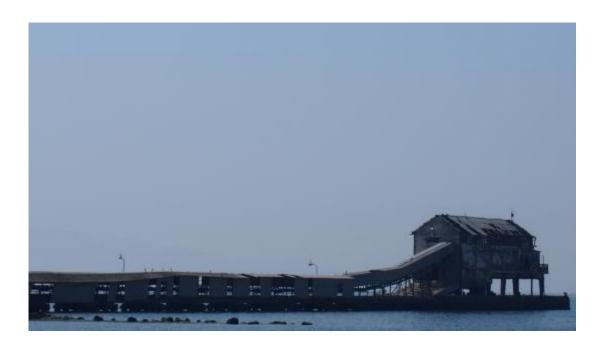


Figure 4 Partially demolished old port 2 (Author, April 2016)

The complex of Çamaltı saltern is the unique example of the unity of traditional salt production that prevailed in the area, possibly since the 4<sup>th</sup> century BC, with the late Ottoman and the early Republican industrial initiatives expressed in a paternalistic manner in Turkey. However, inadequate archive of its documents prior to 1960s, its

unwritten history and its partial abandonment disables the saltern to be understood as an important cultural asset. Therefore, it is of high importance to conduct a study on its unique built heritage so as to *understand the site*. Moreover, the site has never been perceived as a whole with its industrial and natural landscapes in collaboration. Thus, the *assessment of its values* as an important step in the accepted conservation process holds a vital place so as to assure its *conservation as an industrial heritage*. This study focuses on this industrial landscape thereof, before it is demolished completely.

# 1.2 Aim and Scope of the Study

The area was chosen as the case study since it lacks the *recognition as an industrial heritage* and *faces the danger of demolition* despite having significant importance of the area in the history for being the only sea-sourced salt marshes still operating possibly since the 4<sup>th</sup> B.C. in Turkey. There were many questions to be answered to understand the site since the saltern never had a study based on its built landscape before. These questions included;

- What kind of a historical background does the site have and what are the remnants of this timeline?
- What kind of a built- up environment does the site have?
- What is the relationship of the salt industry with the nature?
- Does the existence of a natural reserve contradict with the existence of salt industry and does the conservation of one of them reversely affect the other one?
- Are there similar landscapes, and if there are, what are the conservation policies applied in those areas?
- What are the characteristics of the industrial landscape of the site?
- What are the values of the saltern based on its characteristics and what kind of formations do they emerge from?
- What kind of dangerous situations should be prevented and what kind of
  potentials should be considered so as to present and reinforce the values of
  this built landscape of production?

In order to answer these questions and to understand, document, and lead the way to further studies in the conservation of the saltern, this thesis focuses on this important immovable cultural heritage.

The accepted *conservation process* of such sites starts with documentation, continues with analysis and assessment, and concludes with the development of related principles. As indicated in the Nizhny Tagil Charter for the industrial heritage;

"Public interest and affection for the industrial heritage and appreciation of its values are the surest ways to conserve it. Public authorities should actively explain the meaning and value of industrial sites through publications, exhibitions, television, the internet and other media, by providing sustainable access to important sites by promoting tourism in industrial areas." 37

Thus, it is of vital importance for any potential heritage discourse to clearly perform a study on the meaning and the value of an area for conservation initiatives, especially when a site is as neglected as Çamaltı Saltern in terms of academic studies and public recognition. The thesis, for this reason, aims to decipher the significance and the value of the saltern as an important industrial landscape for its conservation. In order to achieve the value assessment, the scope of the thesis is defined with documentation, analysis and value assessment of the late Ottoman and early Republican developments in the site covering the history line from 1863 to 1960. The projects after the 1960s are excluded since these projects do not correlate with the existing tissue and some are the typical projects of TEKEL directorate that were applied on other sites.

# 1.3 Sources and Methodology

In order to achieve the value assessment study of the saltern, the thesis was based on four main steps including;

• identifying the place and its associations,

<sup>&</sup>lt;sup>37</sup> (TICCIH, 2003)

- gathering information about the site to identify its significance,
- preparing a statement of significance and value assessment,
- evaluating the current situation and preparing concluding remarks for the development of further principles in the future

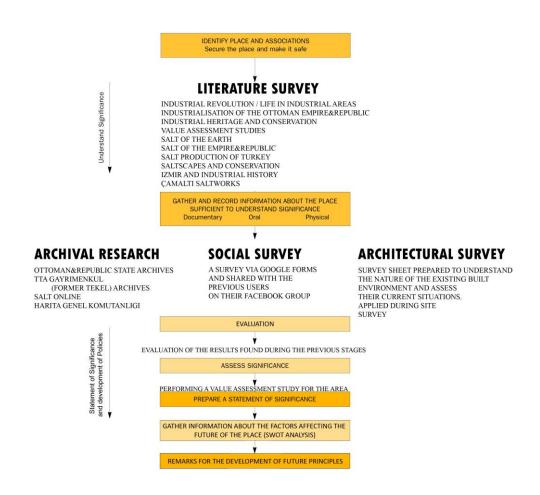


Figure 5 Methodology of the study, adapted from Burra Charter Process

All the collected information from these steps was illustrated and given under three heading in "sheets" in related parts of the study. The illustrations explaining the site are given under the heading of "introduction", the analyses made in order to understand the site and its associations are given under "analysis", and the evaluation of all the previous studies are given under "evaluation".

As the first step, a literature review was conducted on salt in order to gain access to other related sources about the production that created the built landscape of the area. The research focused on salt and its administration in the history of the world and in the Ottoman Empire together with the Turkish Republic. The place salt occupied throughout the ages was investigated in several publications such as books, conference proceedings and papers as well as related websites. There is one extensive book explaining the salt history of the world, written by American journalist Mark Kurlansky in 2003 named "Salt: A World History". At site's scale, despite having such a long history in salt production, Çamaltı Saltern has limited amount of research about its history and none about its architecture. There are four main sources to obtain knowledge on the saltern. The first one is written by Medih Egemen, a chemical engineer, who wrote directly about the saltern in "Türkiye'de Tuzculuk ve Çamaltı Tuzlası" (Salt Production in Turkey and Çamaltı Saltern) in 1946. The other is written by Müfit İlter, former deputy general manager of TEKEL, who wrote "Dünya'da ve Türkiye'de Tuz Endüstrisi ve Ticareti" (Salt Industry and Production in the World and in Turkey) in 1981. There is also a book by Prof.Dr. Fatma Doğruel and Prof.Dr. Suut Doğruel in 2000 named "Osmanlı'dan Günümüze Tekel" (State Monopoly from Ottoman Empire up to Present). Despite written for the monopoly history since the Ottoman Empire, the book also gives information about the site upon mentioning the salt monopoly through ages. There is a fourth book named "Tuz Kitabı" (Book of Salt) edited by Emine Gürsoy-Naskali as the proceedings of a conference on salt. The book gives references and information on salt and on the Camalti Saltern in the papers that were published. Since the area is a natural conservation site, other papers also exist, written by chemical engineers, zoologists and biologists etc. about the surrounding environment of the area. Following this research, where the history of salt overlapped with industrialization, the literature survey expanded to understanding the Industrial Revolution by means of books, articles, thesis and online sources. Its birth, dissemination through Europe, eventually its infiltration into the Ottoman Empire and the Turkish Republic were investigated. The history of İzmir, one of the first industrialized cities during the Ottoman Empire, was also studied both in relation to industrialization and to the saltern. Furthermore, the history of living in an industrial community and related sociological aspects of it were analysed through urban sociology sources. Upon

concentrating on the industrialization, the conceptualization of industrial heritage and landscape were discussed via international documents, books, thesis and online sources. Finally, the international and national scope of the value assessment of cultural heritage was defined via books and related documents. The main documents supporting this research were the Modern Cult of Monuments: Its Character and Its Origin by Alois Riegl written in 1902, the Burra Charter by Australia ICOMOS released in 1979, and the Management Guidelines for World Heritage Sites by Bernard M. Feilden and Jukka Jokilehto in 1998. These documents were concerned with the conservation of heritage; however, they provided valuable information on the value assessment of a cultural assset. The publication Assesing the Values of Cultural Heritage in 2002 focused directly on the issue of the values. The papers of Randall Mason, Assessing Values in Conservation Planning: Methodological Issues and Choices, and Teresa Satterfield, Numbness and Sensitivity in the Elicitation of Environmental Values, in this source provided valuable basis for the assessment of values in relation to both cultural and natural assets within the international scope. In Turkey, the issue was covered by Emre Madran and Nimet Özgönül with Kültürel ve Doğal Değerlerin Korunması written in 2005. There were also researches on the topic. One of them was the PhD thesis of Gül Köksal, who was among the initiators of discussions related to the conservation of industrial heritage. Her thesis İstanbul'daki Endüstri Mirası için Koruma ve Yeniden Kullanım Önerileri was finished in 2005. In her thesis she covered the topic of value assessment in relation to industrial heritage. In 2009, Ayşem Kılınç connected the two topics of value assessment and industrial heritage with her MSc Thesis Value Assessment for Industrial Heritage in Zonguldak.<sup>38</sup> All of these sources enabled to draw the outline for the value assessment of an industrial heritage in relation to natural landscape.

The second step in methodology was the archival research. At first the current operator of the saltern, Binbir Gıda Tarım Ürünleri ve Sanayi A.Ş. was consulted. AutoCAD drawing of the site, information about workers and production process, information about aquaculture and natural conservation in the saltern, the book "Türkiye'de Tuzculuk ve Çamaltı Tuzlası" written in 1946 by Medih Egemen, and the book of "Dünya'da ve Türkiye'de Tuz Endüstrisi ve Ticareti" written in 1981 by

<sup>&</sup>lt;sup>38</sup> Following Ayşem Kılınç, there were other studies conducted on the topic of industrial heritage.

Müfit İlter were taken as sources. Secondly, Çiğli Municipality provided the conservation zoning plan and neighbourhood cancellation document of the Çamaltı Neighbourhood. Moreover, as the result of the literature review, 5 documents and 3 maps were discovered in the Ottoman-Republic State Archives. Since the area was formerly run by TEKEL (State Monopoly), an inquiry was made to the TTA Gayrimenkul A.Ş. (Former TEKEL archive) for the materials related to the saltern. TTA Gayrimenkul A.Ş. Archive provided 29 projects' drawings left in the archive that were built within the confines of the saltern, notes on the construction of embankments and booklet of the salt washing plant. 2 maps of the saltern were downloaded from SALT Online-Salt Research. Last of all, Harita Genel Komutanlığı (General Command of Mapping) Archives provided aerial photos showing the area in 1949, 1953, 1957, 1964, 1970 and 1995. <sup>39</sup>

The third step was based on conducting a site survey by means of utilizing the historic documentation found as the result of the second step and a survey to be applied at the site. As stated in Dublin Principles, article 2, the value "of industrial heritage is intrinsic to the structures or sites themselves, their material fabric, components, machinery and setting, expressed in the industrial landscape, in written documentation, and also in the intangible records contained in memories, arts and customs."40. Therefore, the last two steps of this study focused on identifying the tangible and intangible aspects of the saltern. For the tangible aspect of the study, first the locations of the edifices were detected from the 2D drawings obtained from the Binbir Gıda Tarım Ürünleri ve Sanayi A.Ş. In total 128 buildings that are currently on the site were surveyed in terms of their current functions, original functions, construction dates, number of floors, conditions and building groups. A survey sheet was prepared for the buildings that date prior to 1960. This survey sheet was prepared to have two sections; first one was formed to describe the existing situation and condition, whereas the second one was formed to assess the change in time. The material that the assessment of the change was based on was also given and it was supported with the drawings of the buildings. These drawings

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<sup>&</sup>lt;sup>39</sup> See Appendix B for the complete detailed table of the obtained information from the sources.

<sup>&</sup>lt;sup>40</sup> (ICOMOS, 2011)

were generated by using the exterior dimensions from the measured drawings of the company; however, the internal organizations of the plans were created out of the sketches made in the saltern. In this way, 52 buildings that date back to premodernization of the saltern, before 1960, were analysed in detail. When the original projects were available in TTA Gayrimenkul A.Ş. Archive, these were matched to define the change in time. When original plans lacked, individual observations and aerial photos obtained from the General Command of Mapping were trusted. The data produced out of this study was finalized through graphics and survey sheets at the end. The collected data enabled us to define the built landscape of the saltern. The data gathered in these steps were difficult to illustrate in one map since the landscape was too vast and the edifices within it were rather too small for a general scale. There was also the problem of not having the complete map since the drawings obtained did not have the northern extension. Therefore, 1981 site plan, AutoCAD drawing and google earth were superimposed. (Fig. 5) Moreover, a grid was created on this map in order the study to be effectively conducted and presented. The whole area of the saltern was divided into 310 rectangles and each of the divisions was given numbers from top left till the bottom right. In total 17 sheets were selected out of 310 in which there existed buildings. 3 of these sheets only had a typically constructed power plant having the same properties with the ones found among the buildings in other sheets, and thus, not used in the visualizations of the analyses.



Figure 6 Site plan derived from different sources

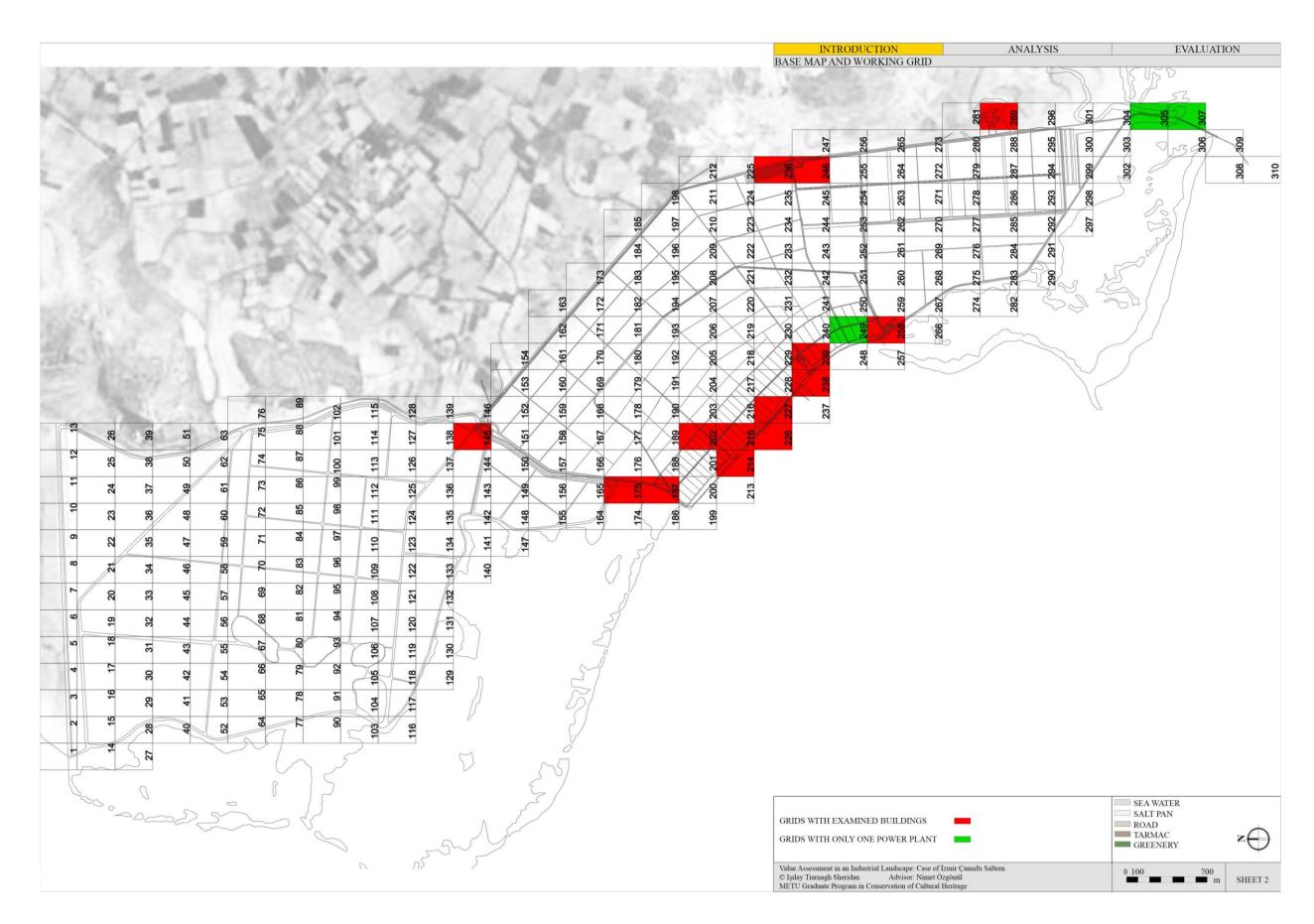


Figure 7 Base map and grids

Finally, in order to shed a light on to the intangible aspects of the study area, a social survey<sup>41</sup> was prepared *as the fourth step* in order to understand the socio-cultural background of the site. Since the previous inhabitants left the area when the operation rights were given to a private company, a survey was prepared online, via google forms. The survey was then shared with the former dwellers of the area through their social platform where they keep in touch constantly. There were two sets in the survey. First set was based on human scale while second set focused on their interaction with the built environment. 28 people answered these questions. Additionally, the social platform allowed the gathering of the dynamic data that the archives were not able to hold, such as the change in the use of the edifices, works done in the area, traditions of salt production and how the saltern had lived before. Of course, such kind of a complex, long history and a total description of the sociocultural frame of the saltern need a more comprehensive study on its own. Thus, this social survey only aims to give a *brief description*.

At last, all of the four aforementioned steps were reviewed on the basis of the theoretical study of value assessment for the Çamaltı Saltern. As a result, the whole list of values was differentiated into two as intrinsic and extrinsic values, and then these were also divided as "the built landscape" and "the natural landscape" for the purpose of this thesis because the built landscape of the industrial production and the natural sources form a mutual and inseparable structure. Not every industrial site possesses such interaction, and thus, this differentiation is based on the coexistence of industry with nature. The values of the built landscape are the result of an assessment made on the properties of the built cultural assets, whereas natural values are inherently present in nature. They are either intrinsic and contribute just by "being" or activated through the initiative of man, as does the sustainability and resource (though this can be either intrinsic or extrinsic) values.

As a result, the unique industrial landscape of the saltern is evaluated using the charts prepared. While doing so an analysis was performed to decipher the problems and potentials in relation to the area. In the light of the prepared value assessment and the

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<sup>&</sup>lt;sup>41</sup> The survey questions can be seen in Appendix C

problem-potential analysis, general policies were summarized in order to lead the way for further conservation initiatives at the end.

#### 1.4 Structure of the Thesis

The study consists of five chapters. The first chapter, introduction, outlines industrial revolution and its consequences in relation to the Ottoman Empire and the Turkish Republic, the initiatives taken to protect the remnants of the epoch, the salt industry within this frame and the Çamaltı saltern. Furthermore, it presents the problem definition, the aim and the scope of the study, the sources and the methodology, and finalizes with the structure of the thesis.

The second chapter tries to explain the phenomenon of salt and its importance throughout the ages. Then, it zooms into the area of the Ottoman Empire and the Turkish Republic later, in order to draw the frame of the substance related to the studied area. It sums up the situation of the production of salt in Turkey today. Moreover, it gives example sites similar to the study area and defines the conservation measures taken for them. The chapter finalizes with an overall evaluation of all these researches.

The third chapter focuses on the industrialization process and its heritage. It begins with the Industrial Revolution in European context as the starting point focusing on the way of living in the factory as well. Then it covers the Ottoman and Republic periods in order to interrelate the Çamaltı Saltern and its evolution within the wider scope of the industrialization acts. Following these, it concentrates on the concept of industrial heritage. Beginning with the research on a value assessment, the chapter finalizes with the final discourse on value assessment and industrial heritage.

The fourth chapter conveys the knowledge on the relation between the Çamaltı Saltern and its surrounding, the research made about İzmir and its surrounding's geographic, historic, economic, social and cultural background including the district of the saltern. The historical records are organized in periods and interweaved with the surveys done in the area. As the result, a whole description of the study area based on its physical and socio-cultural characteristics was given.

The final chapter, the fifth, gathers all the research done from the beginning and reflects the sum of the knowledge into assessing the values of the Çamaltı Saltern and its production landscape. It concludes with the overall evaluation and proposal of policies as the final word of the thesis.

# **CHAPTER 2**

## SALT AND INDUSTRIAL HERITAGE

"You are the **salt** of the earth. But if the **salt** loses its saltiness, how can it be made **salty** again? It is no longer good for anything, except to be thrown out and trampled underfoot."

"You are the light of the world. A town built on a hill cannot be hidden.

Neither do people light a lamp and put it under a bowl. Instead, they put it on its stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your Father in heaven."

Bible Matthew 5:13-16

Salt is the most common yet one of the most important natural phenomenon to man. Being the "salt of the earth", as referred in Bible, has always been used as a positive assumption for a person. It refers to the capacity of the salt in preserving the good qualities of the food. As such, man should be the salt of the world we live in, protecting the moral values and good qualities without losing his will. Throughout the history of humankind, regardless of the nation, language or tradition, this was not the only importance assessed to salt.



Figure 8 Sumo wrestler purifies the ring with salt from evil spirits (by Jeff Lewis <sup>42</sup>)

### **2.1** Salt

#### 2.1.1 Salt of the Earth

Salt is a crystalline compound formed by the reaction of an acid with a base, NaCl. When sodium reacts with chloride, the only family of rocks eaten by humans occurs. Without this rock known as salt, and water, cells could not get nourishment and would die of dehydration. Another use of salt in the field of health is the addition of iodine to salt from the early 20th century in order to protect mothers and babies from iodine deficiency caused diseases, such as the mental retardation. Apart from protecting the mental health, its use saves millions in accidents every year during wintertime by being on the roads. 44

Besides the points salt gained through health and safety in our daily lives today, long before the era of the ice packs, freezers, or machines, salt was the magical ingredient that maintained the mankind's food supply. Pickles, cheese, and olives were prepared

 $<sup>^{42}\,\</sup>underline{\text{http://www.odt.co.nz/news/world/}11902/sumo-champion-weighs-pay-issue}$  , last accessed on November, 2015

<sup>&</sup>lt;sup>43</sup> (Kurlansky, 2003)

<sup>44</sup> http://www.saltinstitute.org/salt-101/, last accessed on April, 2016

with it; meat and fish were preserved with it as stated in oldest Chinese records of preserving fish in brine dating back to around 2000 BC. <sup>45</sup> Since the ancient times, the bread dough, one of the vital elements in man's digest, has contained the same ingredients all over the world; flour, water and a pinch of salt. Poor (ancient) Egyptians lacked the luxury of the pinch of salt, eating flat unleavened bread though. <sup>46</sup> Decrease in blood pressure was controlled with salt and leather finishing was performed with it throughout the course of time. It fostered such importance that it started to be given to the Roman soldiers instead of money. In Latin, "salarium" was the name of the payment. In English, the word "salary" derived from this origin. <sup>47</sup> Plato referred to salt as "especially dear to Gods"; Homer called it as the "divine substance". <sup>48</sup>

This divine substance was so vital that established, named, advanced or ended civilizations. Humans need constant intake of sodium because it leaves the body through excretion. Meat is rich in sodium so populations based on hunting such as Inuit people there is no need for the extra intake of salt. However, cultivating civilizations as Mayans needed to find the salt. According to Anthony Andrews, a city as big as Tikal with 45,000 inhabitants, needed 131 tons of salt annually. They were lucky to have Yucatan Peninsula, for it was the biggest salt producer of sea salt via along its shores in Mesoamerica. As an eventual result of its geographic advantage, salt became their major industry. Regardless of the governments, their growth and safety always depended on their relation to the salt sources. They rose by controlling the salt production, and fell over the decline of its salt trade eventually. <sup>49</sup>

On the other hand, the Celtic culture, the Druids, did not have written history. What we know about them comes from Greek and Roman historians. The names used for them also come from different historians, not from themselves. Romans named them as "Galli" or "Gauls", for example, deriving from another Greek word "hal" meaning

<sup>&</sup>lt;sup>45</sup> (Kurlansky, 2003)

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> (Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>48</sup> (MacGregor & Wardener, 1998)

<sup>&</sup>lt;sup>49</sup> (Coe, 2002, s. 26-30)

salt. They were the salt people establishing cities such as Hallstatt, Hallein and Halych, cities that were named after their Celtic saltworks histories.<sup>50</sup>

The Celtic ones are not the only examples of naming a place after its salt sources. Whenever there existed a salt source, its reflections in names can be traced back via toponymy. In Germany Salzbach (Salt-Stream), Salzburg (Salt-Castle), Salz-See (Salt- Sea); in USA Salt Lake City, the Great Salt Lake and in Pakistan Salt Range (mountains) are amongst the best examples.<sup>51</sup> In Anglo Saxons, a saltworks was a "wich". Thus, in England when the name of a place ends in "wich" it means there we have a piece of story with salt such as Northwich, Middlewich, Nantwich, and Droitwich.<sup>52</sup> In Malta a settlement was named as *Is-Salina*, salina being the nearby saltpans; and there is also Mellieħa, gaining the name from the word origin of "melħ" that means salt in Maltese language.<sup>53</sup> In Turkey names as Tuzla, Tuzcular, Tuzla Mahallesi (as in the case of the Camaltı Saltern) are very common deriving from "tuz" meaning salt. Salt, therefore, can be traced back everywhere around the world. It is formed as the mineral halite and found in the sea water or salt lakes most basically. Salt from sea water can easily be obtained through evaporation. Aristotle wrote about brine spring evaporation during the fourth century B.C. Also Hippocrates wrote on solar-evaporated sea salt during the fifth century B.C.;

"The sun attracts the finest and lightest part of the water and carries it high up; the saltiness remains because of its thickness and weight, and in this way the salt originates." <sup>54</sup>

The Mediterranean offered suitable areas for the sea-salt and small or big enterprises probably started by the Phoenicians. In order to cure the fish they founded salterns in today's Trapani. They are thought to have been the first ones and the ones who have passed this knowledge to a wider context.

<sup>51</sup> (Şahin C., 2012, s. 28-58)

<sup>&</sup>lt;sup>50</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>52</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>53</sup> The information was obtained from personal communications of the author with Maltese locals.

<sup>&</sup>lt;sup>54</sup> (Kurlansky, 2003)

<sup>55</sup> http://courses.washington.edu/sicilia/pdf/Bre%20SaltSicily.pdf, last accessed on November, 2015



Figure 9 Trapani Salterns and Windmills (Author, October 2014)

Once it was understood that the natural solar evaporation of sea water was very affective in the production of salt, people established saltworks all over Europe with a climate suited to solar-evaporated sea salt. Nevertheless, the evaporation was not possible everywhere as in the case of England, where it was possible only when they experienced extremely hot seasons.

At that point, one can think that salt can also be mined from ancient sea beds that are found underground. Almost no place on earth is without salt for that matter. However, up until the arrival of the modern geology and technology, people did not have a specific idea. Civilizations searched for it, once found traded with it, and fought to have control over its sources or its trade as Venice and Genoa.

One of the earliest saltworks is in China in the province of Shanxi sourced from the Lake Yuncheng. There were many fights to take its control. During the summer, when the water evaporated, as Chinese historians state that around 6000 BC people gathered the leftover salt from the surface. Another document describes an outdated way of obtaining the salt by putting ocean water into clay vessels and boiling it until

reduced to pots of salt crystals, a system also used in Europe. <sup>56</sup>In 1066, the Chinese focused on another side of salt, the gunpowder, by mixing potassium nitrate, saltpeter, with sulfur and carbon. The mixture created a powder that had the possibility to produce an explosion. It was one of the first industrial uses of salt.<sup>57</sup>

Rivers were also important for the salt. Rivers, such as The Yangtze, the Nile, the Tiber, the Po, the Elbe, the Danube, the Rhône, the Loire, and the River Mersey as well, had importance in the history of Salt. In 1207, King John approved the establishment of Liverpool on the river Mersey for a new loyal port. During the 19th century it became England's most important port after London. Uses the port of the Industrial Revolution that brought iron to coal and shipped steel. Most importantly, salt made Liverpool the industrial powerhouse of the Kingdom.

Trading salt shaped the economy for almost four millennia, but the power of salt was not only reflected on food, trade or industry. It also affected the religious and daily practices. In all the religions and traditions, salt had its place. In the Torah it was written:

"Rabbi Yudan expounded: It is written, But you are exalted (marom), O Lord, for all time.' (Ps. 92:9) [Marom implies the essence of] eternality (romemut) You give to Your world. You gave the priesthood to Aaron forever; as it says, It is an everlasting covenant of salt [before the Lord for you and your offspring as well.] (Num. 18:19) You gave sovereignty to David forever; as it says, Surely you know that the Lord God of Israel gave kingship [to David over Israel forever—to him and his sons—by a covenant of salt] (2 Chron. 13:5). You gave holiness to Israel forever; as it says, Speak to the whole

<sup>&</sup>lt;sup>56</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>57</sup> Ibid.

<sup>&</sup>lt;sup>58</sup> (Morris, 1994, pp. 289-290)

<sup>&</sup>lt;sup>59</sup> http://www.liverpoolmuseums.org.uk/maritime/archive/sheet/34, last accessed on December, 2015

<sup>60</sup> http://www.liverpoolecho.co.uk/news/nostalgia/new-cheshire-museum-highlights-importance-9393195, last accessed on December, 2015

Israelite community and say to them: You shall be holy, [for I, the Lord your God, am holy.] (Lev. 19:2)" <sup>61</sup>

In a religious practice, Jews eat Challah bread with salt on (Shabbat) Friday nights. Bread is a gift from God and salt preserves it sealing the deal between God and people. It is the same in Islam and Judaism. It seems logical, for salt never disappears, when dissolved in can be evaporated back. In Christianity there is "Sal Sapientia", the salt of wisdom.<sup>62</sup> Also in Bible, being the salt and the light of the earth was given special metaphoric importance.

Other than religious beliefs, in traditional practices, salt was widely used. There were Hittite rituals for birth or rituals against fight in the family that were performed with salt. There is also the first bronze tablet of Anatolia, again belonging to Hittites. It states that all the salt beds and their profits were to be given to the monopoly of Kurunta, the King of Tarhuntaşşa, by Tuthalia the King. Other practices also exist in the region such as using the salt against "nazar", the evil eye. Nazar in Arabic means "the look". In Turkish, it represents the evil power in one person's look that has the capacity to harm a person, animal or an object via illness, disability or death, and in case of an object deterioration and breaking. There are many practices Turkish people used salt against this evil eye such as burying, burning or roasting it probably due to its purifying properties. 64

Egyptians on the other side used it to make mummies probably for its power in preserving. They obtained the salt to be used mostly via evaporating the Nile water. Herodotus gives detailed explanation of the process by using a salt called as the natron:

"The most perfect process is as follows: As much as possible of the brain is removed via the nostrils with an iron hook, and what cannot be reached with

<sup>&</sup>lt;sup>61</sup> <a href="http://www.jtsa.edu/Conservative Judaism/JTS Torah Commentary/Korah Between 5772.xml">http://www.jtsa.edu/Conservative Judaism/JTS Torah Commentary/Korah Between 5772.xml</a>, last accessed on December, 2015

<sup>&</sup>lt;sup>62</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>63</sup> (Gölbaş & Başıbüyük, Anadolu Kültür Oluşumunda Tuzun Rolü, 2012)

<sup>&</sup>lt;sup>64</sup> (Kırımlı, 2012)

the hook is washed out with drugs; next, the flank is opened with a flint knife and the whole contents of the abdomen removed; the cavity is then thoroughly cleaned and washed out, firstly with palm wine and again with an infusion of ground spices. After that, it is filled with pure myrrh, cassia and every other aromatic substance, excepting frankincense, and sewn up again, after which the body is placed in natron, covered entirely over, for seventy days—never longer. When this period is over, the body is washed and then wrapped from head to foot in linen cut into strips and smeared on the underside with gum, which is commonly used by the Egyptians instead of glue. In this condition the body is given back to the family, who have a wooden case made, shaped like a human figure, into which it is put."

"When, for reasons of expense, the second quality is called for, the treatment is different: no incision is made and the intestines are not removed, but oil of cedar is injected with a syringe into the body through the anus which is afterwards stopped up to prevent the liquid from escaping. The body is then cured in natron for the prescribed number of days, on the last of which the oil is drained off. The effect of it is so powerful that as it leaves the body it brings with it the viscera in a liquid state and as the flesh has been dissolved by the natron, nothing of the body is left but the skin and bones. After this treatment, it is returned to the family without further attention."

"The third method, used for embalming the bodies of the poor, is simply to wash out the intestines, and keep the body for seventy days in natron." 6566

During the nineteenth century, those mummies from Saqqara and Thebes were brought to Cairo. What was once glorious body of a noble, ironically, taxed as salted fish in order to be able to enter into the city.<sup>67</sup>

<sup>66</sup> Natron: a hydrous native sodium carbonate used in ancient times in embalming, in ceramic pastes, and as a cleansing agent.

http://www.merriam-webster.com/dictionary/natron, last accessed on July, 2016

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<sup>&</sup>lt;sup>65</sup> (Rosalie, 2014)

<sup>&</sup>lt;sup>67</sup> (Kurlansky, 2003)

Even the cities were formed around a salt lick sometimes. Animals licked roads, caves, and eventually cities, in order to fulfil their need for salt. A salt lick near Lake Erie was an example of such formations made by a buffalo. Thus, the town named after the buffalo as Buffalo, New York.68 Another example would be Taghaza city, a city that was built entirely with salt, including its mosque. Ibn Battuta tells about the city in his Travels in Africa 1325-1354:

"After twenty-five days [from Sijilmasa] we reached Taghaza, an unattractive village, with the curious feature that its houses and mosques are built of blocks of salt, roofed with camel skins. There are no trees there, nothing but sand. In the sand is a salt mine; they dig for the salt, and find it in thick slabs, lying one on top. Of the other, as though they had been tool-squared and laid under the surface of the earth. A camel will carry two of these slabs." 69

"No one lives at Taghaza except the slaves of the Massufa tribe, who dig for the salt; they subsist on dates imported from Dar'a and Sijilmasa, camels' flesh, and millet imported from the Negrolands. The Negroes come up from their country and take away the salt from there. At Iwalatan a load of salt brings eight to ten mithqals; in the town of Malli [Mali] it sells for twenty to thirty, and sometimes as much as forty. The Negroes use salt as a medium of exchange, just as gold and silver is used [elsewhere]; they cut it up into pieces and buy and sell with it. The business did at Taghaza, for all its meanness, amounts to an enormous figure in terms of hundredweights of gold-dust."<sup>70</sup>

The first century AD Roman Pliny the Elder wrote on salt mining in Egypt mentioned houses of salt as well:

"houses built of blocks of salt, quarried from the mountains like stone"

1014.

<sup>68</sup> Ibid.

<sup>&</sup>lt;sup>69</sup> http://faculty.tnstate.edu/tcorse/h120/ibn\_battuta.htm, last accessed on December, 2015

<sup>&</sup>lt;sup>70</sup> Ibid.

"in the vicinity of Utica<sup>71</sup>, heaps of salt occur like hills; when these have hardened under the sun and moon, they are not melted by any moisture and iron cuts them with difficulty."<sup>72</sup>

As seen above, salt was strategic in every field, from food to architecture. Politics were built on salt. Roman Empire used it to attain support from every rank of the society. It sometimes reduced the price in order to do so. Emperor Augustus gave the public olive oil and salt as a campaign before defeating Mark Anthony and Cleopatra. The Romans also used salt to prosper the cities they established. London was supported with the salt of Essex as Rome was supported by Ostia. <sup>73</sup> For a long time, its distribution and control manipulated these politics until the scientific revolution.

During the 18th and 19th centuries, when people began to analyse the salt, much of the interest began to focus around efficient ways to blow people and things. From the beginning of the Industrial Revolution, salt became less important now that food supply was to be preserved with technology. Moreover, there were fast transportation opportunities leading people towards fresh food supply instead of the cured one. However, it still had the power of turning the politics upside down during the 20th century in secrecy. Britain was in charge of the Indian salt at the time, an ingredient that needed to be processed for the sake of the Cheshire. When they were in need of the budget, they proposed to double the salt tax. This rather unimportant touch to salt brought together itself the least expected attribution to salt has ever experienced before, the symbol of "satyagraha" the force of truth as passive resistance. <sup>74</sup> Why the mischievous mind of a great man, Gandhi, focused on salt? His answer was simple; "Everyone ate salt." It was the "common salt", a right to everyone.

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<sup>&</sup>lt;sup>71</sup> Utica is an ancient city located between Cartage and Bizerte in Tunisia.

<sup>&</sup>lt;sup>72</sup> (Healy, 1999)

<sup>&</sup>lt;sup>73</sup> (Kurlansky, 2003)

<sup>&</sup>lt;sup>74</sup> Ibid.

<sup>&</sup>lt;sup>75</sup> (Keay, 2010)

Mahatma Gandhi started a campaign against the heavy salt tax that was a burden to the lower ranks of the society in March 1930. 60.000 people were arrested and the resistance quickly became a struggle for independence. <sup>76</sup> On April 5, Gandhi arrived at Dandi. At 8:30 AM he picked up the natural salt naturally breaking the law. Many had followed his lead and in one week the jails were full with people including Gandhi In 1931 Gandhi-Irwin pack was signed on March 5. Many later criticized the pack but Gandhi thought that it was an achievement because India and England talked as equals finally. <sup>78</sup>



Figure 10 Gandhi picking up the salt<sup>79</sup>

As obvious, salt was humble and simple, yet very vital in every field from a daily life of a worker to a freedom campaign of a leader.

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<sup>&</sup>lt;sup>76</sup> (Kamuran, 2012, pp. 3-9)

 $<sup>\</sup>frac{1}{2}$  <a href="https://www.sscnet.ucla.edu/southasia/History/Gandhi/Dandi.html">https://www.sscnet.ucla.edu/southasia/History/Gandhi/Dandi.html</a> , last accessed on December 2015

<sup>78 &</sup>lt;a href="https://www.swarthmore.edu/library/peace/Exhibits/GandhiWebSite/GandhiReynoldsCorrespondence">https://www.swarthmore.edu/library/peace/Exhibits/GandhiWebSite/GandhiReynoldsCorrespondence</a>
.html , last accessed on Novermber 2015

<sup>79 (</sup>Kurlansky, 2003, p. 350)

#### 2.1.2 Salt of the Ottoman Empire, Salt of the Turkish Republic

Salt was a high profit-area of specialization to all countries for many centuries. Its production, processing, transportation, taxation, sale and protection have always been bound to agreements and laws.

Ottomans used salt in food preservation, finishing of leather, personal use and for their animals. It was also used as a quarantine material. Moreover, it was given as a salary to workers as it was in Rome. Within the boundaries of the Empire, salt was an important income generator exported to Europe through İzmir and Syria. 80 For the rivers, mines, lakes and the seas were thought as state properties, so was the salt obtained from them. The revenues of the saltworks across the country provided one of the greatest sources for the state treasury. There were many grand saltworks including Kıbrıs, Becin, Batnos, İzmir, Menemen, Rodos, Çandarlı, Midilli, Kızılcatuzla, Enez, Gümülcine, Selanik, Ağrıboz, Mora, İnebahtı, Avlonya, Delvine, Tekfurköyü, Koçhisar Lake, Hacıbektaş, Divriği, İzvornik, Boğdan, Eflak, Transilvanya, Raguza and so on. The incomes of these usually belonged to "Padişah *Hassi*<sup>381</sup> or to important state officials. 82 There was a specific scheme for the sale of the salt from a saltworks according to its region, and outside this scheme selling the salt was not possible. Only when a saltworks was not efficient enough to support its own region, then another saltworks was allowed to back up the region with the permission from the state. Most of the salt was sold in the saltworks, imported salt was sold at import gate, and others were sold in secondary sales departments or in retail salt stores in cities. 83 Before 1862, these sources were operated in four ways. "Mültezim" (people who rent the sources that generate income to the Empire) enterprises were given to people by annual cost estimation for 2 years. Later this was extended to 4-or-5 years in order to enable entrepreneurs to profit from their investments. After the increase in interest to salt, the state had decided to give the

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http://www.islamansiklopedisi.info/dia/ayrmetin.php?idno=d160268, last accessed on March, 2016

<sup>80 (</sup>Beyoğlu, 2012, pp. 201-207)

<sup>&</sup>lt;sup>81</sup> Padişah Hassı: Property, land, annual revenue or monthly income belonging to the Sultan, members of the dynasty or important state officials.

<sup>82 (</sup>Demirtaş, 2004)

<sup>83</sup> http://www.camaltituzla.com/tuz/tuzun-tarihcesi, last accessed on July, 2016

rights to a mültezim through auctions. There were also empire enterprises that were too small for entrepreneurs to want to operate, enterprises of the salt bed founders, and tekke, zaviye, aşiret<sup>84</sup> enterprises. All these establishments were responsible to the Ottoman Empire and paid necessary amount of taxes.<sup>85</sup>

There were many problems with the above mentioned ways of handling the salt production. In order to solve them the government decided to transfer the management of the saltworks to a company in 1856. Bezirgan Zarifi Kumpanyası" (Bezirgan Zarifi Company) had an arrangement for 10 years in 1857. However, the results of this decision were insufficient in meeting the expectations. Therefore, in 1860 the contract was terminated and the saltworks were decided to have separate contracts. There are many documents showing contracts of salt, with Bezirgan Zarifi and other people, and we can understand that the saltworks in the Empire changed hand very often at the time.

After 1862, salt monopoly became a direct part of *Rüsumat Emaneti* (Administration of Taxes). This date is accepted as the establishment year of *İnhisarlar İdaresi* (Administration of Monopolies) with the enactment of "*Tuz Nizamnamesi*", the Salt Law, arranging the interactions in how salt works. These arrangements included managements of the saltworks by the government, removal of the rent system – mültezim- from the government, use of the income as banknotes or bonds, ban of import of salt, the establishment of regional offices in order to inspect the production and to sell the salt to wholesale agents, and opening of the salt depots. <sup>90</sup>

Aşiret: A general name given to a nomadic community.

http://www.islamansiklopedisi.info/index.php, last accessed on March, 2016

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<sup>&</sup>lt;sup>84</sup> Tekke/ Zaviye: A place where Sufism was taught under the supervision of a sheikh.

<sup>85 (</sup>İlter, 1981)

<sup>&</sup>lt;sup>86</sup> BOA, A }MKT NZD Dosya No:178 Gömlek No:38

<sup>&</sup>lt;sup>87</sup> Bezirgan Zarifi was a banker in İstanbul.

<sup>88</sup> http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx, last accessed on June, 2016

<sup>89</sup> BOA, A.}MKT MVL. Dosya No:118 Gömlerk No:99

<sup>90 (</sup>Beyoğlu, 2012, pp. 201-207)

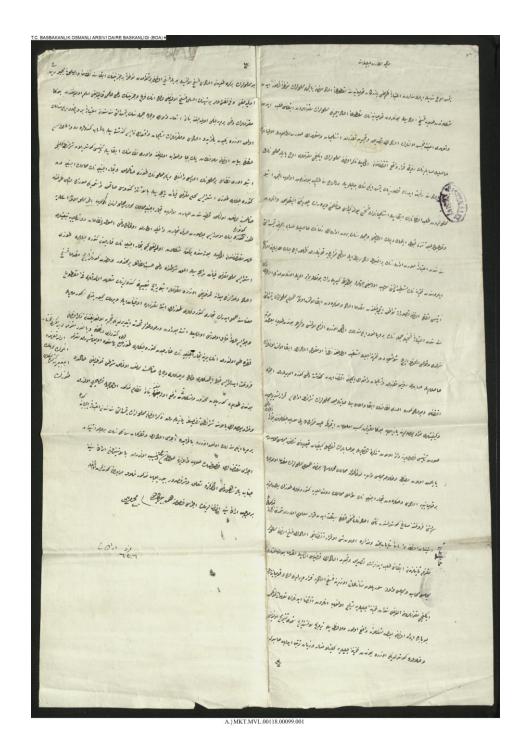


Figure 11 1856 dated decision on the annulment of the contract with Bezirgan Zariff<sup>91</sup>

During the Tanzimat Period (1839-1876), salt generated an immense income for the Empire. However, due to the financial crisis in 1879, salt production was rented to Galata bankers for 10 years as the result of 190 million Frank dept. The bankers

<sup>91</sup> BOA, A.}MKT\_MVL. Dosya No:118 Gömlerk No:99

supported the Ottoman Empire during the war with Russia, and in exchange the state made a pact with them to pay back its debts by securing it with the most solid state revenues; oşür<sup>92</sup>, tobacco and salt.<sup>93</sup> The same year *Rüsum-u Sitte İdaresi* (The Administration of the Six Indirect Taxes<sup>94</sup>) was established and with *Rüsumu Sitte* Kararnamesi (The Administration of the Six Indirect Taxes Law) the profits of the salt, tobacco, and alcohol were given to foreign bankers. 95 The crisis became even more serious in 1881, and thus, the salt production revenues were transferred to Düyun-ı Umumiye (Administration of the Ottoman Public Debt) according to Muharrem Kanunnamesi<sup>96</sup> (Muharrem Enactment) on 20 December 1881. After this decision, the creditor states started scientific researches to operate and improve the processing techniques of salt on Ottoman lands. Moreover, after Trablusgarp (1911-1912) and Balkan Wars (1912-1913), significant portions of the Ottoman saltworks were lost. Soon after started the World War I (1914-1918). Salt became precious and expensive<sup>97</sup>, causing the increase of evasion during the period. Due to the war, there was also lack of workers, and thus, many of the existing ones were minorities. Ottoman state allowed the imported salt and gave up on the customs duty on 14 July 1914 as a result. 98 According to the same year's 12 September dated military law on subsistence and food, a soldier was given 90 gr of bread and 12 gr of salt. Later, with a new directive by Kuvay-ı Milliye (National Armed Forces) and Alaşehir Congress the amount of salt was raised to 20 gr for a day. On 24 December of 1917 a new arrangement was brought to salt to solve the salt problem of İstanbul during the war period. Now 1kg salt was to be sold at 1 kurus<sup>99</sup> and the war tax on salt was removed

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 $<sup>^{92}</sup>$  Oşür: Zakat taken from soil based products.  $\underline{\text{http://www.islamansiklopedisi.info/index.php}}$  , last accessed on March, 2016

<sup>&</sup>lt;sup>93</sup> (Köse, 2001)

<sup>94</sup> http://www.obmuze.com/#rusum-u-sitte-idaresi/zor-yillar, last accessed on March, 2016

<sup>95</sup> http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx, last accessed on June, 2016

<sup>&</sup>lt;sup>96</sup> (Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>97</sup> (Beyoğlu, 2012, pp. 201-207)

<sup>98</sup> Ibid.

<sup>&</sup>lt;sup>99</sup> Ottoman penny.

but still it was insufficient. To meet the demand of İstanbul, Müsellim saltworks were opened and both İstanbul and Edirne were supported with these saltworks. 100

If all these were not enough, according to the 81st article of the Treaty of Sévres, dating to 10 August 1920, one of the most important salt reserves of the Ottoman lands was to be given to Greek administration;

"Until the determination, in accordance with the provisions of Article 83, of the final status of Smyrna and the territory defined in Article 66, the rights to exploit the salt marshes of Phocaea<sup>101</sup> belonging to the Administration of the Ottoman Public Debt, including all plant and machinery and materials for transport by land or sea, shall not be altered or interfered with. No tax or charge shall be imposed during this period on the manufacture, exportation or transport of salt produced from these marshes. The Greek administration will have the right to regulate and tax the consumption of salt at Smyrna and within the territory defined in Article 66.

If after the expiration of the period referred to in the preceding paragraph Greece considers it opportune to effect changes in the provisions above set forth, the salt marshes of Phocaea will be treated as a concession and the guarantees provided by Article 312, Part IX (Economic Clauses) will apply, subject however to the provisions of Article 246, Part VIII (Financial Clauses) of the present Treaty." 102

However, the *Büyük Millet Meclisi* (Turkish Parliament) condemned the treaty. With the Law No. 558 in 26.02.1923, the *İnhisarlar İdaresi* (Monopoly Administration) became state monopoly from 01.03.1923. After the establishment of the Turkish Republic, saltworks continued to operate under *Tuz İnhisarı* (Salt Monopoly).

<sup>&</sup>lt;sup>100</sup> (Beyoğlu, 2012, pp. 201-207)

<sup>&</sup>lt;sup>101</sup> Today Foça.

 $<sup>^{102}</sup>$  http://treaties.fco.gov.uk/docs/pdf/1920/TS0011.pdf , last accessed on March, 2016

# 2.1.2.1 Salt and TEKEL (General Directorate of Tobacco, Tobacco Products, Salt and Alcohol Enterprises)

With the Treaty of Lausanne signed on 24 July 1924, salt production from the sources was transferred to the Republic officially. On 1 June 1927, *Tuz İnhisarı Umum Müdüriyeti* (General Directorate of Salt Monopoly) was established and centred in Ankara. Sales and exports of sea, lake and rock salt were taken under the state monopoly. At the time there were saltworks in Çankırı, Oltu, Hacıbektaş and Sekili. <sup>103</sup> *The most important salt bed was İzmir Çamaltı Saltworks*. <sup>104</sup>

Beginning from 01.06.1930 the administrations of *Tuz İnhisarı İdaresi* (Salt Monopoly Administration) and *Tütün İnhisarı İdaresi* (Tobacco Monopoly Administration) were given to *Maliye Vekaleti* (the Ministry of Finance) with Law No.1660. In 1932 tobacco, alcohol and salt monopolies were gathered under *İnhisarlar Umum Müdürlüğü* (General Directorate of Monopolies) with the Law No.1927 and it was shortened as *İnhisarlar İdaresi* (Monopoly Administration) in 1933 under *Gümrük ve Tekel Bakanlığı* (Ministry of Customs and Monopolies). In 1936, Law No. 3078, another Salt Law, was enacted. Though salt mines were named as state monopoly, refined salt production was given to private sector. The private sector had to send their imports, expenditures and salt transferred to the following month to *İnhisarlar İdaresi* (Monopoly Administration) at the end of each month. 107

The brief history of the monopoly administration can be obtained from their historical chart. According to this chart, the *İnhisarlar İdaresi* was reorganized in 20.05.1946 with Law No.4896 and took the name of *TEKEL Genel Müdürlüğü* (Tobacco, Tobacco Products, Salt and Alcohol Enterprises General Directorate). On

<sup>&</sup>lt;sup>103</sup> (Demirbilek, 2012)

<sup>&</sup>lt;sup>104</sup> (İnan, 1988, p. 174)

 $<sup>\</sup>frac{105}{http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx} \ , \ last \ accessed \ on \ June, \ 2016$ 

<sup>106 (</sup>Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>107</sup> For the Salt Law see

https://www.tbmm.gov.tr/tutanaklar/KANUNLAR\_KARARLAR/kanuntbmmc017/kanuntbmmc017/kanuntbmmc01703078.pdf , last accessed on August 2016

22.02.1952, the right to produce salt was given to individuals and companies with special conditions and on 29.07.1970 with Law No.1318; salt extraction right was given to private companies to meet only their needs. Although Turkey has a massive power in salt production, due to the lack of established production-consumption plans, salt was imported from Egypt in 1977 and in 1978. This situation is known to affect the salt depended industries. The state institution nature of Tekel Genel Müdürlüğü was changed with Law No.2929 in 1983 and became a state economic enterprise. After this, there were 4 institutions; *Tobacco and Cigarette Institution, Alcoholic Drinks Industry Institution, Salt Industry Institution and Marketing and Distribution Institution.* In 1987 the name was changed shortly to *TEKEL*. The Salt Industry Institution was moved with the decision no.410 of the Board in same year to İzmir Çamaltı Saltworks.

This **TEKEL** government initiative established many factories all over the country creating important campuses that became cultural agents of the industrialisation ideal of the Republic. Beginning with the results of the statist perspective of the "First Five Year Industrialization Plan" in 1934 many factories were built among which TEKEL factories and storages have an important potential in the realm of industrial heritage. 108 The factories that were built create a long list and these are given in Table 1. However, the list only gives the available material in the official site of TEKEL today (TTA Gayrimenkul A.Ş.). The numbers of buildings in these campuses are not indicated and each bound to comprehensive study on their own. What can be concluded is that the distilleries, cigarette and tobacco factories and the salterns belonging to the corporation were very important in the industrialization attempts of the Republic. The list does not provide salterns other than Camalti and Ayvalık, possibly due to the nature of salt production that does not rely on factories. Moreover, many of the salt beds have been in use for a long time since the Ottoman Empire, and thus, they were possibly not seen as new enterprises. The names of the salterns that were owned by the TEKEL were given under the privatization initiatives after 1990s.

<sup>&</sup>lt;sup>108</sup> (Özen & Şen, 2006)

Table 1 Factories established by TEKEL (Monopoly)<sup>109</sup>

Year	Factory
Ottoman Empire	
1863	Çamaltı Saltern by Italians
1884	Cibali and İzmir Cigarette Factories
1887	Samsun Tobacco Factory
1890	İstanbul Beer Factory
1895	Adana Cigarette Factory
1896	Bomonti Beer Factory
1897	Samsun Cigarette Factory
1906	Çamaltı Saltern (re-established)
1912	İzmir (Aydın) Distillery (Beer)
Republic of Turkey	
1923	İstanbul Paşabahçe Distillery
1925	Urfa, Malatya, Diyarbakır, Bitlis Tobacco Ateliers
1927	Bitlis Cigarette Factory
1930	İstanbul Liqueur and Cognac Factory
1931	Gaziantep Distillery
	Tekirdağ Distillery and Wine Distillery
1932	Büyükdere Match Factory
1933	Diyarbakır Distillery
1934	Ankara Beer Factory
1935	İzmir Wine Distillery
1936	Table Salt Factory in Çamaltı Saltern
1937	Ankara Cigarette (Climatization) Storages
1938	Sungipek Factory
1939	Malatya Cigarette Factory
1942	Elazığ Wine Tasting Facility

 $<sup>^{109}</sup>$  The table was created in light of the information provided in  $\underline{\text{http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx}} \text{ , last accessed on August 2016}$ 

## (Table 1 cont'd)

	/
1943	Ürgüp Wine Distillery
1944	Kırıkkale Wine Distillery
	Tokat Wine Distillery
	Kilis Suma*(An alcoholic drink obtained by the distillation of grape and fig mash, produced in Turkey) Factory
	Karaman Suma Factory
1962	Çanakkale Wine and Cognac Distillery
1966	Şarköy Wine Distillery
	Uçmakdere Wine Distillery
1967	İstanbul Maltepe Cigarette Factory
1970	Şanlıurfa Wine and Suma Factory
1972	Yozgat Beer Factory
1976	Karaman Wine Distillery
	Adana Cigarette Factory
1984	Ayvalık Saltern
1985	Tokat Cigarette Factory
1992	Nevşehir Distillery
1993	Kelkit Match Factory
1995	Alaşehir Suma Factory
1996	Karaman Suma Factory
1997	Ballıca Cigarette Factory
	Diyarbakır Tobacco Factory
2000	Bilecik Distillery

Although there were many establishments and factories under this directory of TEKEL, many of its branches started to be closed after 1990 as the state adopted new policies based on privatization. In 1994 the production of beer *stopped*. Beginning with 1999 salterns were also given to the private sector including Piliç, Aşkale, Canik, Perobey, Göneli, Hıvır, Kırmızı, Çökender, Kihtik, Bar, Alibaba and Boncuk salterns. In 2000 Hamo, Ağa, Hargün, Yerli/Taytak, Bingöl, Göleris Saltworks were *privatized*. In 2001 with the decision no 2001/06 of the High Board of Privatization,

TEKEL was subjected to privatization. In 2002 Sungipek and İzmir Cigarette Factories were *closed*. İşhan, Akçakoyunlu, Çiçeklikaya salterns were *privatized* followed by Çankırı salterns in 2003. In 2004 Sekili Kaya, Tuzluca, Kağızman; in 2005 Kaldırım, Kayacık and Yavşan salterns were given to private sector. In 2008 the logo of TEKEL was transferred so the name was changed into TTA Genel Müdürlüğü. The last saltworks to be privatized were Camaltı and Ayvalık Saltworks in 2010. Since 2013 the institution has been active under the name of TTA Gayrimenkul A.Ş. Genel Müdürlüğü. 110



Figure 12 History of State Monopoly<sup>111</sup>

## 2.1.2.2 Salt Production and the Sources in Turkey Today

Turkey is very rich in terms of salt. There are wide salt beds and salt can either be gathered from solid or liquid sources. These sources provide 4 natural ways in obtaining the salt; sea based production, lake based production, production through mining underground resources and ground water-based production. 112 Medih Egemen states in 1946 that there are possible 475 salt beds from which many are not in use due to inefficiency. There are 1 vacuum (forced evaporation of extracted saltrefined salt), 9 rock, 3 lake, and 2 sea-sourced saltworks in Turkey today. 113

<sup>110</sup> http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx, last accessed on July, 2016

<sup>111</sup> Ibid.

<sup>&</sup>lt;sup>112</sup> (Egemen, 1946)

<sup>113</sup> For the rest of the map from EUSALT(European Salt Producers' Association) http://eusalt.com/sites/www.eusalt.com/files/page-documents/EU%20Salt%20Map\_final\_0.pdf , last accessed on July, 2016

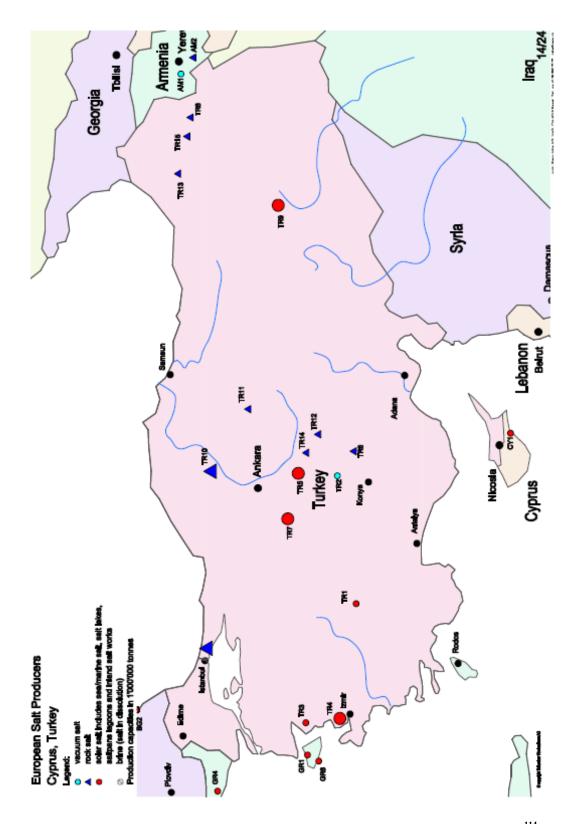


Figure 13 Map showing the salt production in Turkey, by EUSALT, by August  $2014^{114}$ 

 $<sup>^{114}</sup>$  Key; Green-Vacuum Salt, Blue-Rock Salt, Red-Solar Salt (spring, sea or lake source)  $\underline{\text{http://eusalt.com/sites/www.eusalt.com/files/page-documents/EU\%20Salt\%20Map\_final\_0.pdf} \text{, last accessed on July, } 2016$ 

#### 2.1.2.2.1 Rock Salts

Rock salt can be easily found almost everywhere. They are formed by the evaporation of seas of closed inland basins in geological eras. The extraction of rock salt can be done via two different methods; room-pillar mining and solution mining. In room pillar mining the bed is divided into regular rooms and pillars. Solution mining is applicable to the defined salt beds with known capacity. A borehole is drilled towards the source and a pipe is inserted within. Then limnetic water is injected into the pipe. Upon encountering the rock salt, saturated brine is obtained in the salt bed. The brine is then withdrawn towards the surface and evaporation process is applied to it. 117

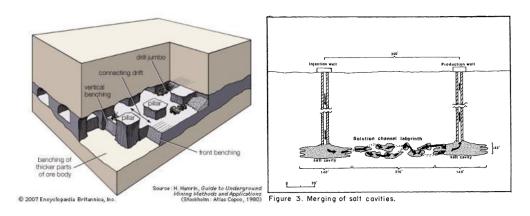


Figure 14 Room-Pillar  ${\rm Mining}^{118}$  and Solution  ${\rm Mining}$  Scheme  $^{119}$ 

Turkey is very rich in terms of these salt beds. Starting from the middle of Anatolian land, Çankırı, Çorum, Yozgat, Sivas, Erzincan, Erzurum and Kars to Iran there are more than 30 rock and spring saltworks. Moreover, in Adana and Siirt there are wide

<sup>116</sup> (Ertem, Engin, & Ertem, 2001)

118 http://global.britannica.com/technology/room-and-pillar-mining, last accessed on February, 2016

<sup>&</sup>lt;sup>115</sup> (Ergin, 1988)

<sup>&</sup>lt;sup>117</sup> (Ergin, 1988)

<sup>119</sup> http://www.kgs.ku.edu/Hydro/Hutch/SaltMining/, last accessed on February, 2016

underground salt beds. 120 Tepesidelik, Çankırı, Sekili and Kağızman are a few of the many salt mines.



Figure 15 Çankırı Salt Mine (by Melih Sular $^{121}$ )

#### **2.1.2.2.2** Lake Salts

Salty water from the lake sometimes taken into evaporation pools and later salt is obtained via sonar crystallizer. In some lakes, the water naturally vaporizes without any added effort. This naturally occurring salt is taken with a scaper cutter. In Turkey lake salterns are mainly based around the Karapınar, Palas and Tuz Gölü (Salt Lake). The most important is the Salt Lake where there are three saltworks named Yavşan, Kaldırım, Kayacık. The thickness of the salt here changes between 3 to 20 cm and it

<sup>&</sup>lt;sup>120</sup> Madencilik Özel İhtisas Komisyonu Raporu <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a>
<u>pdf</u>, last accessed on February, 2016

http://www.dailymail.co.uk/news/article-2508731/Salt-earth-The-5-000-year-old-mines-inside-caves-tunnels-Turkey-use-today.html , last accessed on February, 2016

is 8 cm on average. 122 The salty water is evaporated naturally and the remaining salt is collected.



Figure 16 Salt in Tuz Gölü (Salt Lake)<sup>123</sup>

#### **2.1.2.2.3** Spring Salts

The formation of spring salt water occurs due to the interaction between underground water with rock salts. As the result of this interaction, rock salt dissolves in water and the water is taken from the wells via motor pumps. The water is then channelled into ponds in which it is left for a while to rest. With the help of sun and wind, evaporation of limnetic water occurs. The remaining salty water is transferred to marmor and stone crystalline pools for salt to crystallize. Depending on the weather, the crystallized salt is taken and finally is packed for consumption. These kinds of sources are rather small, and therefore, serve their close proximity in

<sup>&</sup>lt;sup>122</sup> Madencilik Özel İhtisas Komisyonu Raporu <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a>
<u>.pdf</u>, last accessed on February, 2016

 $<sup>^{123}</sup>$  One of the producers of salt from the salt lake is Tuncer Tuz. See <a href="http://tuncertuz.com/">http://tuncertuz.com/</a>, last accessed on February, 2016

<sup>&</sup>lt;sup>124</sup> (Doğanay, 2010)

general.<sup>125</sup> There are many spring salt sources in Turkey among which Aşkale, Karaçoban, Tortum, Ağa and Hiver can be mentioned.



Figure 17 One of the springs of Munzur Tuz in Hiver and Ağa salt beds  $^{126}$ 

#### 2.1.2.2.4 Sea Salts

Sea provides us with the endless reserve of salt and it contains the highest amount of Sodium Chloride. Yet its production is not possible under every circumstance. There are specific conditions to be satisfied in solar evaporation technique as;

- -Impermeable soil structure,
- -Appropriate precipitation-evaporation balance,
- -Suitable relative humidity in the air,
- -Direction and intensity of the wind,
- -Proper size of land,

<sup>&</sup>lt;sup>125</sup> (Ergin, 1988)

<sup>126</sup> http://www.munzurtuz.com/galeri.asp, last accessed on February, 2016

-Proportion of salt in sea water. (Saltiness of the sea water changes according to climate and geography. For example, in Baltic Sea in 1m3 water, there exists 17kg salt, whereas in Red Sea it is as high as 45kg.) <sup>127</sup>

Production from the sea water usually starts in March or April. With the help of the pumps, the sea water is taken into these pools in March and these are transferred to crystallization pools until August or September. Once in crystallization pools, water is kept until 28.5 degrees baumé to let the salt's sedimentation happen. The sediment salt is then collected with manpower and machines depending on the way a saltern operates.

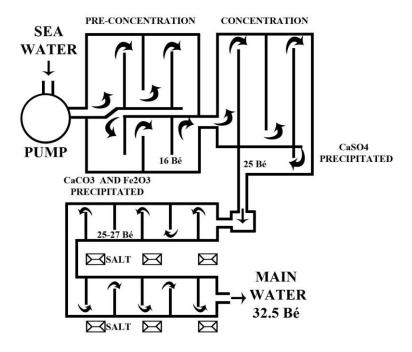


Figure 18 Production process at Çamaltı Saltern illustrated by Medih Egemen, redrawn and translated by the author 129

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<sup>127</sup> Madencilik Özel İhtisas Komisyonu Raporu <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/20htisas%20Komisyonu%20Raporlar/Attachments/20htisas%20Komisyonu%20Raporlar/Attachments/20htisas%20Komisyonu%20Komisyonu%20Raporlar/Attachments/20htisas%20Komisyonu%

<sup>&</sup>lt;sup>128</sup> Madencilik Özel İhtisas Komisyonu Raporu <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a>
<u>pdf</u>, last accessed on February, 2016

<sup>&</sup>lt;sup>129</sup> (Egemen, 1946)

Ayvalık and Çamaltı Saltworks are the only two sea based saltworks that operate today<sup>130</sup> in Turkey. Their regions and climate enables the proper conditions for salt production and both are operated by Binbir Gıda Tarım Ürünleri Sanayi ve Ticareti A.Ş. The most important saltworks is the Çamaltı Saltern since it is the oldest still producing sea sourced salt bed and it is the biggest in this category in Turkey.<sup>131</sup>

<sup>&</sup>lt;sup>130</sup> (Gölbaş & Başıbüyük, Anadolu Kültür Oluşumunda Tuzun Rolü, 2012)

<sup>131</sup> http://www.cigli.gov.tr/default\_b0.aspx?content=1008, last accessed on March, 2016

#### 2.1.3 Salt Landscapes and Conservation

Salt, as mentioned previously, is one of the most vital elements in life. Wherever it is gathered, it creates a unique structure and landscape. These landscapes can either be found under ground or above ground in accordance with their production technique. Salt or salty water can be mined or obtained through evaporation of salty water creating two different types of landscapes. First one expands underground and understandable in sections mostly, while the second one sprawls above the ground level and is experienced by views from the top.

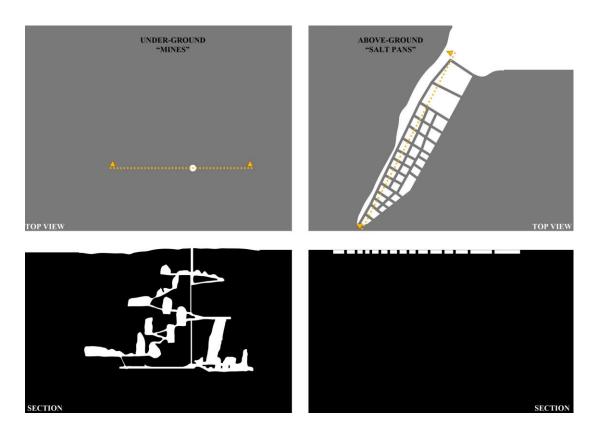


Figure 19 Illustration of salt landscapes (Author 132)

The interest in the conservation of the industrial heritage is new but the conservation of salt landscapes in terms of their contribution to form a culture specific to salt

<sup>132</sup> Underground landscape illustration is based on Wieliczka Salt Mine, above ground is based on Is-Salini Salina Bay.

production industry is even newer. There are few examples of salt mines that are amongst the earliest accepted World Heritage Sites, thus earliest conserved, such as Wieliczka and Bochnia Royal Salt Mines (1978, criteria (iv)) or From the Great Saltworks of Salins-les-Bains to the Royal Saltworks of Arc-et-Senans, the Production of Open-pan Salt (1982, criteria (i)(ii)(iv))). 133



Figure 20 Wielizcka Salt Mine Interior (by Rafal Stachurski<sup>134</sup>)

Although the above mentioned underground salt landscapes have longer history of conservation and abundant sources of information, for the scope of this thesis "above ground landscapes of salt pans" and studies focusing on these were selected since the conservation of salt landscapes above the ground differs from the underground mines with their specific nature.

Due to their newly emerging structure, salt pans have been under protection mostly as RAMSAR areas or wetland protection sites for their natural importance as wetland ecosystems. The example of Trapani salterns of Sicily, mentioned before as the birth place of salt cultivation, explains the situation. The information confirming this was

 $<sup>^{133}</sup>$  For the explanations of the criteria please see <a href="http://whc.unesco.org/en/criteria/">http://whc.unesco.org/en/criteria/</a>, last accessed on July, 2016

<sup>134</sup> http://whc.unesco.org/en/list/32/gallery/, last acessed on August 2016

obtained by contacting *Anna Giordano*, the director of the Natural reserve of Salt ponds of Trapani and Paceco, managed by WWF. She stated that the protection of the Trapani Salinas are under the control of WWF(World Wide Fund for Nature) and the plane they were born from is the institution of a Natural Reserve, that is also a SPA (Special Protection Area for the Bird Directive of the EU) and Ramsar site. Moreover, because salt production is strictly connected with high biodiversity (all, birds, plants, algae, insects and so on), they have the obligation to conserve such economy and the production system (also by the law). The institution of the reserve protects automatically the landscape including the old mills, and to do anything, including the restoration, it is necessary to ask for a permission of the administration protecting the landscape. Above all, she most importantly stated that;

"an industrial method of production, could change the depth of the salt ponds, and the salt level in some of them could change accordingly, as a result changing the source of food and habitat of the birds. At the same time, the end of such production could offer a different habitat but with less opportunity for food and breeding of many species, so the biodiversity could be affected by a loss."

Therefore, it becomes clear that the conservation of heritage related to above ground salterns differ from the ones under the ground since there is a need to consider both the natural and the architectural actions. Moreover, the continuation of the salt production and its heritage becomes important for the natural life.

However, above ground salt heritage is rather a newly emerging topic and there are few sources to consult (in English), although solar evaporation has longer history than many other industrial sites, especially in the Mediterranean Basin. Salt was gathered through evaporation for thousands of years before the technological advancements. Hippocrates described the self-accumulating salt to be used<sup>135</sup> as the result of natural evaporation of sea water. For the region was rich in terms of this type of source, and probably the demand of salt did not exceed the amount of natural salt available, the landscapes of successive evaporation pool system was introduced

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<sup>135</sup> See 2.1 Salt of the Earth

later by the Arabs during the Middle Ages.<sup>136</sup> The earliest description of obtaining salt by solar evaporation was given by *Agricola* in his book *De Re Metallica* in 16<sup>th</sup> century.<sup>137</sup>



Figure 21 Illustration from De Re Metallica

A-Sea. B-Pool. C-Gate. D-Trenches. E-Salt basins. F-Rake. G-Shovel. 138

One of the few forms of studies focusing on this common heritage of the Mediterranean is the "All about Salt" project that is based on four European sites

<sup>136</sup> http://www.aegean.gr/alas/medsalinas.htm, last accessed on June, 2016

<sup>137 &</sup>lt;a href="http://www.aegean.gr/alas/book\_pdfs/introduction.pdf">http://www.aegean.gr/alas/book\_pdfs/introduction.pdf</a> , last accessed on June, 2016

<sup>&</sup>lt;sup>138</sup> (Agricola, 2011, pp. 546-558)

producing salt through evaporation of sea water; The Polichnitos Site in Lesvos-Greece, The Figueira Saltworks in Portugal, The Salinas of Piran in Slovenia, and Pomorie Salinas in Bulgaria. The initiative was taken by the Department of Geography, University of the Aegean aiming to promote the preservation of the salterns that are usually still run by traditional techniques, their presentation for tourism and salt museums.<sup>139</sup> The official site of the initiative gives brief information of the importance of salterns and the possible threats they face today;

"All around the European and Mediterranean coasts, from Brittany (Bretagne) on the French Atlantic coast to the Black Sea and on many islands, some sites still produce salt in the same way – or at least with only minor modifications – as it was done 1.000 years ago. These salinas form a fascinating cultural heritage. They are also important wetlands for breeding and migrating birds and they play a significant economic role. Traditional salinas are valuable for pedagogical, touristic and scientific purposes. The salt is of high quality and they provide jobs for many people. But the traditional salinas are also threatened by abandonment, transformation, aquaculture; new land use etc. The preservation of these salinas is the main target of ALAS. "140

The project had its first meeting in 2000 and the last in 2002. Apart from this project, there are a few other ones for the conservation of salt production landscapes and their industrial heritage. One of them is the Institute of Salt Heritage and Saltscapes, IPAISAL Soluciones S.L. in Universidad Pontificia Comillas / ICAI. The president of the institute is Katia Hueso. The formation explains its aim as;

"The Institute of Salt Heritage and Saltscapes is a private independent organisation devoted to the research, sound use and dissemination of the human, cultural and natural values of saltscapes."141

<sup>139</sup> http://www.aegean.gr/alas/general.htm, last accessed on June, 2016

<sup>&</sup>lt;sup>140</sup> Ibid.

<sup>141</sup> http://eusalt.com/sites/www.eusalt.com/files/page-documents/14%20Hueso-Kortekaas%20Katia%20-

The other initiative is the "Ecosal Atlantis" (Ecotourism in the Atlantic Salt Marshes)" focusing on the traditional salt making on Atlantic Route. It covered Spain, Portugal, France and England to develop a strategy for integral and sustainable development. The project was designed for the period 2010-2013 and supported by Atlantic Area Transnational Programme, Urban Development and European Union. One of the most important outcomes of the project was "traditional salt route of the Atlantic". Others can be summarized as;

- Creation of an inventory
- Training program
- Technical seminars and workshops on heritage
- Producing a monograph on Atlantic salt-pans
- Evaluation of the biodiversity in salt pans
- Establishing guidelines for the development of eco-tourism in Atlantic saltmarshes<sup>142</sup>

 $\underline{\%20 How\%20 Do\%20 SMEs\%20 Valorise\%20 Salt\%20 Works\%20 in\%20 Spain.pdf}\ ,\ last\ accessed\ on\ June,\ 2016$ 

 $<sup>\</sup>frac{\text{142}}{\text{http://ecosal-atlantis.ua.pt/index.php?q=content/ecosal-atlantis-newsletters}}, \text{ last accessed on June, } 2016$ 

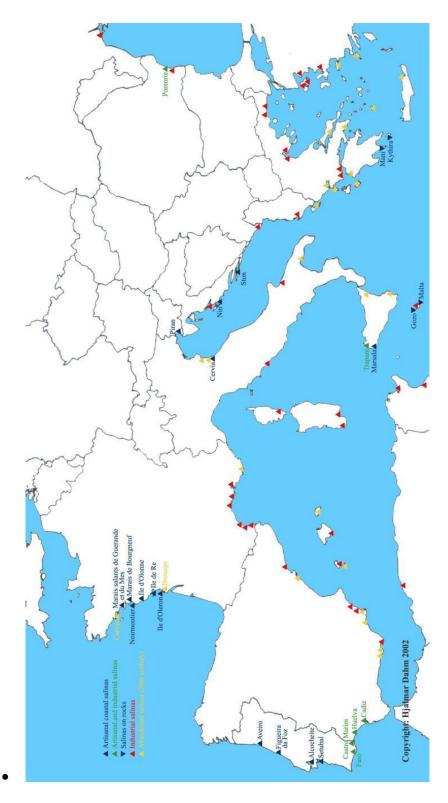


Figure 22 A map of Sea Salterns around Mediterranean (by Hjalmar Dahm $^{143}$ )

<sup>&</sup>lt;sup>143</sup> The map was obtained with the help of Hjalmar Dahm, who prepared the map for ALAS published in 2002, from Professor Theodora Pedonidou. Source: Neves R., Petanidou T., Rufino R., Pinto S. (eds.) (2005) *ALAS – All About Salt – Salt and salinas in the Mediterranean* (<a href="http://www.aegean.gr/alas/final\_publ.htm">http://www.aegean.gr/alas/final\_publ.htm</a>), Municipality of Figueira da Foz – ALAS, Lisbon.



Figure 23 Salt Museums around Mediterranean (Hjalmar Dahm<sup>144</sup>)

<sup>&</sup>lt;sup>144</sup> The map was shared via e-mail by Hjalmar Dahm, who prepared the map for ALAS published in 2002. Source: Neves R., Petanidou T., Rufino R., Pinto S. (eds.) (2005) *ALAS – All About Salt – Salt and salinas in the Mediterranean* (<a href="http://www.aegean.gr/alas/final\_publ.htm">http://www.aegean.gr/alas/final\_publ.htm</a>), Municipality of Figueira da Foz – ALAS, Lisbon.

For this study, cases that were protected as "salt production landscapes" that are above the ground were selected in relation with the aforementioned projects. The criteria for selection for these case studies can be summarized as;

- Having conservation implementations(conservation plan/and or management plan) due to its importance in salt production (available in English)
- Having information available online, in printed media or on site, in English
- Used actively for salt production while being conserved and presented
- Existence of tourism initiatives
- Located in Mediterranean Basin (Salterns of the Mediterranean share a common past and culture as well as technique. As indicated at the introduction part of ALAS book "To obtain salt in the Mediterranean, different people used various techniques: most important was solar evaporation of brine obtained from the sea or inland salt-springs, while salt has also been produced through direct mining of rock salt or ebullition of brine (from the sea and salt-springs). Due to the ideal climatic conditions prevailing in the area, with long, warm, and dry summers and favourable etesian winds, the Mediterranean basin is a region where salt exploitation through solar evaporation in coastal areas has been extensively practised for many hundreds of years."

Qualifying these criteria, 4 case studies were selected surrounding Mediterranean Basin.

- Is-Salina, Salina Bay in Malta was selected due to its importance in Mediterranean salt trade and its project Natura 2000 supported by European Union.
- Secoveljske Soline in Slovenia is selected for their management plan for the natural environment also aiming to protect the salt production in the area.
- Salina Da Fonte Da Bica near Rio Maior, Portugal is selected due to its information available and its project for the promotion of eco tourism of salt pans. Moreover, it is an example of spring salt production with a similar landscape as sea salterns, and thus, creates diversity in examples.

• Valle Salado de Añana in Spain is selected for its management plan available and it is an example of spring salt production creating diversity in examples.

•

## 2.1.3.1 Is Salini, Salina Bay Malta, Sea Salt

Is-Salini Special Area of Conservation (SAC) is located on the northeast coast of Malta between Naxxar and St. Paul's Bay. The area is defined as salt marsh and the total area of the SAC is found on the government land.

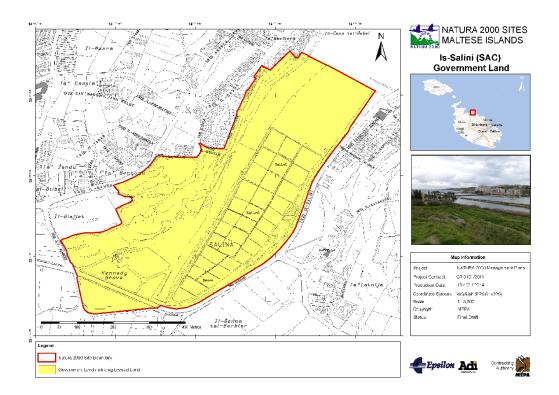


Figure 24 Is-Salini Project Area, Yellow-Government Property, Red-Boundaries<sup>145</sup>

The tradition of salt production on the island has a long history. The quality of the Maltese salt was widely known and upon their arrival, the knights of St. John in 1530

 $<sup>\</sup>underline{^{145}}\,\underline{\text{http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is}\,\underline{\text{Salini\_Annex.pdf}}, last accessed on July, 2016}$ 

invested money for its production and storage. <sup>146</sup> There are remnants of these vast productions around Malta, Comino and Gozo forming very different landscapes mostly in accordance with the rock formations around the island. Today many of them are abandoned or used as coastal facilities.



Figure 25 Qawra saltpans carved in stone today used as steps to go swimming (Author, July 2016)

Is-Salini is one of the last remaining salt production areas on Maltese Islands and it is special for being inside a marshland. Therefore, the area is characterized not only by the existence of salt but also number of endemic species as well as a relatively large number of rare, endangered, and/or locally threatened species. There are salt pans, 4 salt storage sheds, Ximenes Redoubt, and a cross in the middle of salt pans. In order to repair, restore and rehabilitate the salt pans re-activating the salt production (which was abandoned), to protect the natural areas within the SAC (marshland, garrigue), to create public appreciation and use of the site, and to enable environmental and historical education on the ecological importance of the site, a "*Rehabilitation*"

<sup>&</sup>lt;sup>146</sup> Information was obtained from the exhibition inside the visitor centre.

**Project"** was proposed in the saltern <sup>147</sup> under the project Natura 2000. This management plan and the rehabilitation project indicate that the salinas (aboveground salterns) should be conserved as cultural heritage sites with their *cultural*, *economic and aesthetic values* and also as *ecologically important* wetlands in which *biodiversity* can be maintained. <sup>148</sup> The project had a holistic approach aiming to conserve both the natural and the built landscape of the saltern thereof.



Figure 26 Cultural Heritage Map 149

The Salini Rehabilitation Project had three main approaches in the conservation of its environment as;

 $<sup>^{147}\,\</sup>underline{\text{http://www.natura}2000malta.org.mt/wp-content/uploads/}2015/10/Is-Salini~Ch1-6.pdf}$  , last accessed on July, 2016

 $<sup>\</sup>frac{148}{http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is-Salini\_Ch1-6.pdf}$  , last accessed on July, 2016

<sup>&</sup>lt;sup>149</sup> Key; Red-Zone Boundary, Green-Archaeological Research, Blue-Architectural Heritage.
<a href="http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is\_Salini\_Annex.pdf">http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is\_Salini\_Annex.pdf</a>, last accessed on July, 2016

- Phase 1: Afforestation
- Phase 2: Rehabilitation of Kennedy Grove area, garrigue, and marshland
- Phase 3: Restoration of salt pans and building complex



Figure 27 Is-Salina Bay, Salt pans and 4 wooden salt sheds on the right side, Restored salt storage as visitor centre to be opened, Interior view of the visitor centre and information panels, Other restored salt storage (Author, July 2016)

The Nature 2000 Management Plan (SAC) indicates that the salinas are recognized as national heritage sites with *cultural*, *economic and aesthetic values* and also as *ecologically important wetlands* in which *biodiversity* can be maintained.<sup>150</sup>

In light of this management plan, the restoration works were carried as well as natural rehabilitation and conservation of the site. The restoration of the salt pans that were severely damaged during the floods of 1998 and 2003 was carried. The

<sup>&</sup>lt;sup>150</sup> <a href="http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is\_Salini\_Annex.pdf">http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is\_Salini\_Annex.pdf</a>, last accessed on July, 2016

embankment walls and salt pans were restored with respect to the original structure and materials. Moreover, the wooden salt storage huts were restored. The huts will be used for salt production and one of them was designed as a visitor centre. Is In addition to the wooden huts the Ximenes Redoubt and the adjacent structure utilised for the storage of the salt during the Knights period 152, were completely restored. The project is almost complete and waiting for the inauguration

#### 2.1.3.2 Secoveljske Soline, Slovenia, Sea Salt



Figure 28 Lepa Vida Spa Centre in saltern offering salt treatments 153

The Secoveljske Soline is located in Piran, Slovenia. There were numerous salterns in Piran and they were amongst the largest and economically most important, but only a small part of them have been preserved due to the constant effect of urbanisation. The rather smaller saltern in Strunjan and the more extensive one in Secovlje are the ones that were preserved.<sup>154</sup> Today there are salt pans, salt museum

 $<sup>\</sup>frac{151}{http://www.natura2000malta.org.mt/wp-content/uploads/2015/10/Is-Salini~Ch1-6.pdf}$  , last accessed on July, 2016

<sup>&</sup>lt;sup>152</sup> http://www.culturalheritage.gov.mt/filebank/inventory/Knights%20Fortifications/1401.pdf , last accessed on July, 2016

<sup>153</sup> http://www.thalasso-lepavida.si/en/image/medium/30, last accessed on July, 2016

<sup>154</sup> http://www.aegean.gr/alas/book pdfs/chapter1.pdf , last accessed on July, 2016

buildings and *Lepa Vida Thalasso Spa Centre* within the boundaries of Sečovlje Salina Nature Park.

The first known document that mentions the Piran salt-pans is the so-called "Placitum of Risano" in 804 AD when there were small salt pans owned by the monasteries in Piran. At the end of the 14<sup>th</sup> century they began to build successive pools in proper forms. In 1918 the pools were reconstructed by Italians and this affected the quality and quantity of the salt produced in a better way. <sup>155</sup> A project was again developed in 1960 in order to enable industrial salt production. In 1990 *Sečovlje and Strunjan saltpans* were declared as "*landscape parks*." Two years later, in 1992, the Sečovlje salt-pans were included in the list of wetlands of international importance under the auspices of the Ramsar Convention. *The main approach in the conservation* of the saltern ever since then was based on the acknowledgement of the fact that it is necessary to preserve the "*natural and cultural values together*." <sup>156</sup> As the result of such approach, the acknowledgement of the important wetland goes hand in hand with the conservation of its built heritage and the inclusion of people in the process.

In this process, the salina became an area included in specially protected areas of Natura 2000 like the Is-Salini Bay in Malta. The Natura 2000 areas were designated under the Birds Directive - SPA area, and the habitats Directive - PSCI area. Despite all the guaranteed legal protection at the national level (Decree of the Government of the Republic of Slovenia on the park) and the international security framework (designated Ramsar Convention), in various (local and national) planning documents the idea of interference can still be traced in the area of Salina and its transformation. That is why the announcement of NATURA 2000 sites was important, because the state was obliged to protect such areas and properly maintain them. Therefore, the Government adopted the "Regulation on the Management Plan of Sečovlje Salina Nature Park for the period 2011-2021".

<sup>155</sup> http://www.kpss.si/en/history, last accessed on July, 2016

<sup>156</sup> http://www.kpss.si/si/zgodovina, last accessed on July, 2016

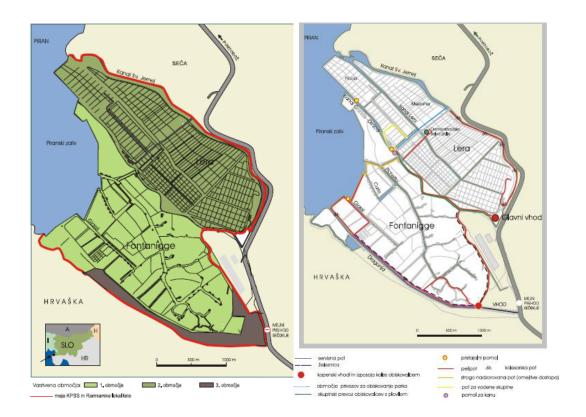


Figure 29 Salt Production in Piran<sup>157</sup> and organization for visiting the park, final vision, from management plan<sup>158</sup>

The plan was based on the applicable regulations and international conventions in the field of nature conservation, assessment and analysis of the state park. At the same time the economic activity of the use of mineral resources by concession, and cultural heritage protection activities within the Museum of Salt were taken care of accordingly.

Some of the plan's visions are given below;

• "Salina will be maintained with human presence and this will not adversely affect the "natural value" and "biodiversity" and does not jeopardize the

Light green:  $1^{st}$  Area, Dark green:  $2^{nd}$  Area, Brown:  $3^{rd}$  Area; Red line indicates the boundaries of the park and Ramsar area

Translation of the key from top left to bottom right: 1-Service path 2-Railroad 3-Inputs for bicycle visitors 4-Mooring zones for visiting the park 5-Collective transport 6-Landing pier 7- Pedestrian and bicycle route 8-Strictly controlled way (access restriction) 9-Route of guided group 10-Canoe pier

<sup>157</sup> http://www.soline.si/ , last accessed on July, 2016

<sup>158</sup> http://www.soline.si/, last accessed on July, 2016

"ecological, biological and landscape values" of the area. It will contribute to the effective protection of the environment, preservation of traditions about the life of people in the pans in the past, maintaining exceptional cultural heritage and rational utilization of natural resources, while offering development opportunities for local people today and future generations.

- Salina will be maintained as a saline ecosystem of international conservation significance, which consists of different salt fields and mudflats, marshes, extraordinary cultural heritage, traditional culture of salt producers and salt.
- Salina will remain with its local population and protect the culture of salt producers.
- To show the traditional medieval salt production, visits and tours of the park and the Salt Museum (three salt-pan buildings were reconstructed to be the "salt museum.") will be established."<sup>159</sup>

To further the developments for the conservation of the site, at the end of 2009, the Sečovlje Salina Nature Park applied the project within the EU's LIFE + nature and biodiversity call for proposals. The five-year project entitled "Man and Nature in Sečovlje Salina" was confirmed by the European Union, and the project was designed to conserve biodiversity in the area of Sečovlje salt-pans. Some of the projects objectives include;

- to establish control over the salina's water regime and to restore the areas that were degraded in the past;
- to raise awareness about the significance of traditional salt-making, which preserves nature and enables sustainable development of the local community;
- to present a good practice model as to the use of traditional methods in the reconstruction of the salina's ecosystems. 160

<sup>159</sup> http://www.soline.si/, last accessed on July, 2016, translated by the author.

 $<sup>^{160}\</sup> http:/\!/\underline{www.kpss.si/en/the-park/park-tasks/project-work/life-mansalt}\ ,\ last\ accessed\ on\ July\ 2016$ 









Figure 30 From top left to bottom right; restored Salt Museum building <sup>161</sup>, restored architectural heritage of the Secovlje Soline and cyclers, the embankments, ruins inside the saltern, Piran <sup>162</sup>

Among all above, what is most striking about the studies conducted so far in the area is the fact that a "salina environment" is accepted as a manmade ecosystem and the exclusion of "man" is not possible in the conservation processes of similar areas. Therefore, the Sečovlje Saltern has been in search for the collaboration of man with nature not only to conserve the natural environment but also the salt production industry in the area.

 $^{161}\,\underline{\text{http://www.kpss.si/en/the-park/Culture/museum-of-salt-making}}$  , last accessed on July, 2016

<sup>162</sup> http://www.kpss.si/en/gallery, last acessed on July, 2016

### 2.1.3.3 Salinas de Rio Maior, Portugal, Spring Salt

Salinas de Rio Maior is located near Rio Maior, in the Valley of Fonte da Bica, Portugal. It is one of the oldest and still producing interior salt pans in Portugal. It is composed of saltpans, wells and wooden sheds as salt depots alongside the pans.



Figure 31 Salinas Rio Maior, A worker at the front and visitors around the site (Author, June 2016)

The oldest information about the existence of salt production in the area dates back to 1177 AD; however, it is believed that salt production existed long before this date, even during the pre-historic times. Within its long history the properties changed hands many times. Today, the saltworks are divided among many owners and "Cooperativa Agricola dos Produtores de Sal de Rio Maior" (Agricultural cooperative of salt producers of Rio Maior) established in 1979 takes care of the works to be done in the area. The main approach adopted in the conservation of this unique area is the acceptance of the built and natural landscapes as a whole. First, in 1997, the area was declared as a "Cultural Heritage Monument" for its tradition in salt production, with its built saltpans and store houses, and it is part of a natural conservation area as well. Thus, the cooperative is in collaboration with the city hall and the Directory of the "Natural Parks of Aire and Candeeiros Mountains" for the development of tourism, since the source of the brine, where the

salt rock is situated, is in the boundaries of this natural reserve of the mountains. For this, the salt collection houses with their curious locks of wood were restored to support the eco-tourism in the area. The public squares and the old river were taken care as well for future access to transport salt to the storehouses. Today the collaboration continues to protect the area with 80 owners corresponding to the %96 of the salt pans.



Figure 32 From top left t bottom right; The entrance sign (date: since 1177), one of the wooden storages used as tourism office, other used as souvenir shops, and the restaurants at the entrance (Author, June 2016)

Another project related to the area was developed by "Ecosal Atlantis" (Ecotourism in the Atlantic Salt Marshes)". Câmara Municipal de Rio Maior was one of the supporters of the event and today, the area is called as "Ecomuseu Salinas de Rio Maior". The Ecomuseum of Salinas de Rio Maior offers various opportunities:

<sup>&</sup>lt;sup>163</sup> Information obtained on site from residents and from a booklet in Portuguese that was published by the "Cooperativa Agricola dos Produtores de Sal de Rio Maior". The text was translated by the author.

service, guided tours, educational services and, more recently, a set of panels that allow us to make the interpretation of natural and cultural environment, in time and space. It is also possible to wander around the salt pans freely and observe the production.

These are the result of ECOSAL Atlantis project and explained as a contributor to strengthen the *cultural identity of the community*, proposing a participatory museological action, interacting with the *local community* and at the same time working with the notion of heritage and preservation in situ. In this context, the Municipality of Rio Maior was awarded the Geoconservation Award 2012 with the application entitled "Diapírico Vale da Bica Source / Ecomuseum Salinas de Rio Maior - *Geological, Natural, Historic and Cultural Heritage*, the Disclosure and Preservation". *This award rewards the recognition of the work that has been done by the local authority, the promotion, preservation and dissemination of salt.* The Geoconservation Award was implemented by the Portuguese ProGEO Group (European Association for the Conservation of Geological Heritage) and awarded by a jury composed of representatives of ProGEO, National Geographic, the Portuguese Geologists Association and the Nature Conservation Institute (ICN).<sup>164</sup>

It is considered as a good example of conservation and sustainable development by means of salt production and eco-tourism.

### 2.1.3.4 Valle Salado de Añana, Spain, Spring Salt

Valle Salado de Añana is located in Añana, Spain and it represents an example of inner salt production, meaning a spring saltern with its spring wells, brine channels and evaporation pans.

ttn://ecosal-atlantis.ua.nt/index.nhn?a=nt-nt/content/ecomuseu-salia



Figure 33 Salt workers in the valley 165

Ongoing researches inform that the start of production of salt in the Salt Valley Añana dates back to about 6,700 years ago. The production was not based on sun and wind then but forced evaporation by combustion of materials. Change from the forced evaporation to natural dates back to the 1st century BC under the rule of the Roman Empire as the result of raise in demand of salt. The change brought together the change in the settlement pattern. Individuals who settled in Añana did not concentrate in a single location, but built their households and stores in the vicinity of the salt landscape. The texts preserved from the 10<sup>th</sup> and 11<sup>th</sup> centuries show that in the valley were at least six villages: Fontes, Terrazos, Villacones, Villanueva, Olisares and Orbón. With the union of the inhabitants of these separate villages in 12<sup>th</sup> century, the Salinas de Añana was formed. The ownership changed hand many times in the course of time. In 1564, King Felipe II took control of all the salt works in the kingdom with "Monopolio de la Sal" (Salt Monopoly). After the 1869 Constitution, the Mining Act was passed and state-owned salt works were sold, ending the salt monopoly. With the effect of changes in 19<sup>th</sup> and 20<sup>th</sup> centuries, salt production became a subject of greed as fast production was aimed instead of sustainable one. Many interventions were made until the mid-20<sup>th</sup> century. 166

<sup>165</sup> http://www.vallesalado.com/img/foto1.jpg , last accessed on August, 2016

<sup>166</sup> http://www.vallesalado.com/pagina.php?id p=8&i=eng , last accessed on July, 2016











Figure 34 From top left to bottom right; Valle Salado Anana, built terraces of salt pans, a concert in the pans, the foundation building, visiting routes 167

Today there is "Valle Salado de Añana Foundation", a non-profit institution in charge of recovering and protecting Valle Salado. The Foundation is the owner of Valle Salado, and has three main approaches in the conservation of this cultural heritage:

- "Recover and preserve the material and environmental culture of the landscape to ensure its *sustainability*.
- Produce top quality salt products using traditional techniques and in a sustainable manner, respecting the ancient "know how" of the salt workers.
   The sale of this salt is already contributing to the self-financing of the project.
- Develop and recover, under an approach open to the public, cultural and tourism initiatives that are becoming the driving force of the social, economic and tourism development of the region." 168

167 http://ecosal-atlantis.ua.pt/index.php?q=book/export/html/59, last accessed on July, 2016

http://www.vallesalado.com/pagina.php?id\_p=130&i=eng, last accessed on July, 2016

In light of these objectives there were several proposals. One of the main activities that have been proposed as an *economic engine* of the project is the production of high quality salt. From the economic point of view and future of the cultural landscape, it is of great importance to enhance the salt industry. The foundation ensures the continuity of the industry and also controls the relationships with restaurants in which the Anana salt is used, giving a product a brand name. Related to the salt industry, *the knowledge on know-how* is another aspect to be conserved. A sustainable future that is based on the continuity of salt production and "know-how" will maintain *the values of authenticity and integrity* of the Salt Valley. The future of the salt passes through the *recovery of the architectural edifices* as well, and therefore, the rehabilitation of some historical buildings linked with the saltworks were proposed to be used as centres of various activities related to salt production, packaging, the leisure activities and educational initiatives. All of these actions are based on a principle of "open to society". 169

Apart from the actions of the foundation, there is a "The Management Plan" that was updated in 2013 for the candidacy of the Salt Valley as a UNESCO World Heritage Site. It is based on a master plan developed between 2000 and 2004 by a multidisciplinary team that documented and studied to guide its values. The team included architects, archaeologists, environmentalists, geologists, economists, landscapers. The plan also gives specific attention to citizen collaboration in the conservation of a "living cultural landscape". The area is stated as Historical and Artistic Monument of National Character in 1984, RAMSAR Area for its wetland ecosystem in 2002, and is in the Tentative List of UNESCO World Heritage since 2014.

The following criteria (iii)(iv)(v) are the ones that the Valle Salado satisfies;

• "(iii) : to bear a *unique* or at least *exceptional testimony to a cultural tradition* or to a civilization which is living or which has disappeared

<sup>169</sup> http://www.vallesalado.com/Propuestas-del-Plan-de-Gestion, last accessed on July, 2016

- (iv): to be an outstanding example of a type of building, architectural or technological ensemble or *landscape* which illustrates (a) significant stage(s) in human history
- (v): to be an outstanding example of a traditional human settlement, landuse, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change"170

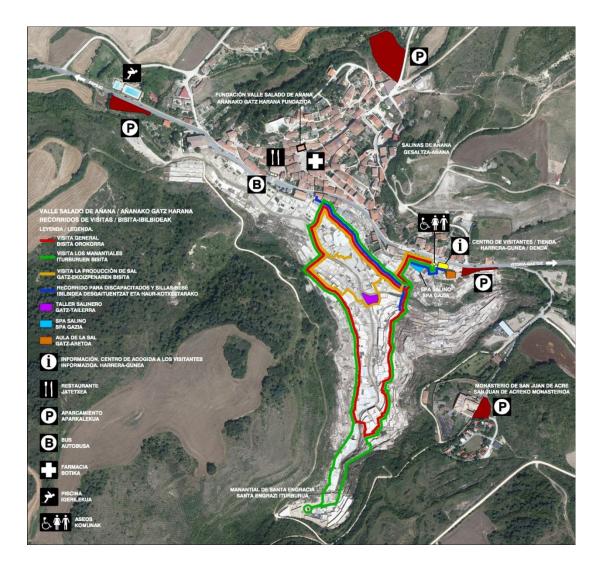


Figure 35 Visiting the site from the management plan<sup>171</sup>

<sup>170</sup> http://whc.unesco.org/en/criteria/, last accessed on July, 2016

<sup>&</sup>lt;sup>171</sup> Translation of the Key from top; 1-General tour, 2-Springs tour, 3-Salt production tour, 4-Disabled tour or tour with a stroller, 5- Salt workshop, 6-Salt Spa, 7-Salt Classroom, 8-Information, 9-Restaurant, 10- Parking area, 11- Bus stop, 12-Pharmacy, 13-Pool, 14-Toilets, http://www.vallesalado.com/Adapted-tour, last accessd August, 2016

The Salt Valley of Añana is a representative of good practice in cultural and environmental heritage *combining management and valorisation example*, as well as the sustainable recovery of all *tangible and intangible values* present in the landscape. Its main strength lies in the support of public institutions, citizens of the territory and in the local community that have the opportunity to participate in a project of restoration and conservation acts. By doing so, public recovery, maintenance work, study and production of salt with tourist visits are made compatible. A living and evolving landscape in which the visitor is the main protagonist was achieved eventually in this way. Once Añana Salt located at the level it deserves, the salt industry is showing it has a future. A sustainable future based on the "know-how" of salineros developed over thousands of years; socially and economically regenerate not only the town but the surrounding region. The viability of the salt production guarantees, on the other hand, maintaining the *values of authenticity and integrity* of the Salt Valley.

## 2.1.3.5 Value Assessment in Salt Landscapes and Evaluation

"In addition to their expected economic value, saltworks are often important historical and cultural sites. In several instances saltworks have been the terrain of action of big historical events, national or international, and this makes them historical museums as such. On the other hand, their ethnological value, although poorly documented, is high. This is related to the architectural aspects of the salinas, to the traditional ways of production and equipment used, to the working and social conditions of the people employed in the salt making, to the product itself as a cultural element, to the local gastronomy based on this product."

Theodora Petonidou<sup>172</sup>

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<sup>&</sup>lt;sup>172</sup> "The Postmodern Saline Landscape In Greece And The European Mediterranean: Salinas For Salt Or What?" <a href="http://www.srcosmos.gr/srcosmos/showpub.aspx?aa=7093">http://www.srcosmos.gr/srcosmos/showpub.aspx?aa=7093</a>, last accessed on July, 2016

As part of the ALAS project, Prof. Theodora Petonidou writes specifically about the values of the Mediterranean Salinas. She states that they have;

### • Economical and historical value

"Mediterranean salinas are recognized among the *most important non-polluting industrial activities* of the area."... "justify the metaphor white gold referring to the economic importance of this commodity, the renowned "edible money" of Cassiodorus."...

### • Cultural value

... "The immense quantity of human energy invested resulted not only to a simple commodity, but also to everlasting cultural features: the saline landscape of the Mediterranean, comprising architectural and technical achievements (devices, equipment, tools, techniques), as well as social aspects such as the salter's life style and manners (materials, housing etc.)"...

# • Ecological value<sup>173</sup>

The evaluation of the afore-studied examples also supports the focus on these values and characteristics of salterns. The highlights of the case studies can be summarized with few points;

- 1. Salterns that are also referred as "salinas" are *manmade ecosystems*. Therefore, the abandonment of the industry in any area would cause the decline of not only the built but also the natural heritage.
- 2. Thus, the conservation of salt production is not only important in terms of cultural heritage but also the natural environment.
- 3. The production of salt is accepted as "cultivation" activity. As a result, many of the salt landscapes are under protection as "agricultural areas" or stated as "nature/landscape parks" regardless of their architectural heritage for some examples. Some of them, on the other hand, are accepted as national monuments as well.
- 4. Whatever the senior title of the accepted conservation procedure is, the conservation was achieved both in terms of built and natural assets. The

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<sup>173</sup> http://www.aegean.gr/alas/medsalinas.htm , last accessed on July, 2016

- salinas are conserved with a holistic approach in the examined examples. In the conservation procedure they included architects, planners, and ecologists and so on.
- 5. Salinas often referred as the means for sustainable development and ecotourism.
- 6. The conservation of salinas was accomplished with the provision of *local development* through sustainability. The process was supported by local authorities, national and international organizations. They created jobs for the inhabitants, conceived local products and brands by including the society into tourism activities.
- 7. *Public participation* in conservation activities, whether a local or a tourist, is a common example in the dissemination of know-how for salt production.
- 8. Integrity, authenticity and biodiversity have a dominant affect in salina conservation that was addressed as geological, historic and cultural heritage. Moreover ecological, biological, economic, cultural, historical, aesthetic values and the landscape value of salt production landscapes are constantly referred in the assessment of site significance.
- 9. Apart from its tangible values, the production created a *cultural identity of a community* wherever it conducted. Thus, *the intangible heritage of salt landscapes* deserves a thorough research as well as the tangible one.
- 10. Salt landscapes are referred as "cultural landscapes". The term comes from the need to identify areas having not only cultural but also natural heritage. Cultural landscapes are cultural properties and represent the "combined works of nature and of man" designated in Article 1 of the World Heritage Convention. They are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.<sup>174</sup> Here the focus of heritage is not only the landscape nor a single building but the whole everevolving landscape. Landscape is no more defined as rural scenery but as the continuously evolving views of an area of ground used for a particular

<sup>&</sup>lt;sup>174</sup> (Operational Guidelines for the implementation of the World Heritage Convention, 2013)

purpose such as city landscape, archaeological landscape, or saltscape. The term was first developed in 1925 when Carl Sauer stated that "The cultural landscape is fashioned out of the natural landscape by a culture group. Culture is the agent, the natural area is the medium, and the cultural landscape is the result."175 Although it was developed as a term at the time, protection of them did not come into the agenda until 1992. In 1972 World Heritage Convention, potential world heritage sites were divided into two categories as "natural" (less human interference the better) and "cultural" (monument and structures as isolated phenomena with little thought of context and landscape.) This resulted in the confliction since the combination of the two was also a common phenomenon in most of the historic sites. Upon realising that, development of the term "cultural landscape" under "cultural" category was achieved in an amendment to the operational guidelines for the implementation of the World Heritage Convention. Also 3 main types of cultural landscapes and criteria for their selection were established. 176 After 1992, in 1993 need for the management of cultural landscapes was brought into the discussion and in 2004 the management guidelines were published. In between 1992 - 2007 several World Heritage Regional Thematic Expert Meetings on Cultural Landscapes were conducted in order to produce site- related solutions for the management of these sites. The last event was 2014 ICOMOS 18th General Assembly focusing on the "Heritage and Landscape as Human Values" consisting 5 different themes as; sharing and experiencing the identity of communities through tourism and interpretation, landscape as cultural habitat, Sustainability through traditional knowledge, community driven conservation empowerment, emerging tools for conservation practice Under the second theme "Landscape as Cultural Habitat" many different types of landscapes were discussed.

Since 1972, IUCN provides technical evaluation and monitoring support for the adoptations of the convention.

<sup>&</sup>lt;sup>175</sup> (Fowler, 2003)

<sup>&</sup>lt;sup>176</sup> (Fowler, 2003)

The most striking point that can be inferred from the meeting was the understanding of landscape as a medium *where tangible and intangible side of cultural heritage come* together. This is very to-the-point explanation in the evaluation of *saltscapes* in specific. They are *cultural landscapes of salt that are organically evolved and continuing* (if not abandoned), in which tangible built heritage and intangible know-how of the production with the community associated with it comes together to create a unique environment.

Table 2 Categories of World Heritage Cultural Landscapes by UNESCO (Fowler, 2003)

Category	Definition
(i)	The most easily identifiable is the <b>clearly defined landscape</b> designed and created intentionally by man. This embraces garden and parkland landscapes constructed for aesthetic reasons which are often (but not always) associated with religious or other monumental buildings and ensembles.
(ii)	The second category is the <b>organically evolved landscape</b> . This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub-categories:  - a relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are; however, still visible in material form;  - a continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time it exhibits significant material evidence of its evolution over time.
(iii)	The final category is <b>the associative cultural landscape</b> . The inscription of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.

Table 3 Criteria for the selection of World Heritage Cultural Landscapes by UNESCO  $^{177}$ 

No	Cultural Criteria
(i)	to represent a masterpiece of human creative genius
(ii)	to exhibit an important <b>interchange of human values</b> , over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design
(iii)	to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared
(iv)	to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history
(v)	to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change
(vi)	to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.
No	Natural Criteria
(vii)	to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance
(viii)	to be outstanding examples representing major stages of earth's history, including the <b>record</b> of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features
(ix)	to be outstanding examples representing <b>significant on-going ecological and biological processes</b> in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals
(x)	to contain the most <b>important and significant natural habitats</b> for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

http://whc.unesco.org/en/criteria/, last accessed on July, 2016

## 2.2 Industrialization and Conservation of Industrial Heritage

"O brave new world..."

Aldous Huxley, Brave New World<sup>178</sup>

In the famous Epic of Manas, it is written that who has salt in his food, is a rich one.<sup>179</sup> The industrial revolution, beginning during the late 18<sup>th</sup> century, changed this destiny of salt, as it did to all other aspects of life, from being a luxury into being a cheap everyday product.<sup>180</sup> Moreover, it changed the production techniques and landscapes at a significant scale in many saltscapes. Thus, it is important to understand this phenomenon briefly in order to understand an industrial saltern.

Due to the industrial revolution, there happened a burst of courageous ideas, inventions, materials and designs throughout the late 18<sup>th</sup> and 19<sup>th</sup> centuries as men had never experienced before.

On the verge of this *brave new world*, *architecture* was one of the driving forces in actualizing the spatial needs of the new way of life and was highly affected by new materials and designs.

How many goodly creatures are there here!

How beauteous mankind is! O brave new world,

That has such people in't!"

http://shakespeare.mit.edu/tempest/tempest.5.1.html, last accessed on January, 2016

180 http://www.erih.net/european-theme-routes/salt.html, last accessed on June, 2016

<sup>&</sup>lt;sup>178</sup> In reference to William Shakespeare's The Tempest, Act V Scene I-II, 203-206

<sup>&</sup>quot;O, wonder!

<sup>&</sup>lt;sup>179</sup> (Günay, 2012, pp. 105-113)

### 2.2.1 Industrial Revolution

The term "revolution" indicates a complete or dramatic change of methods, conditions etc.<sup>181</sup> The *change* in the definition is usually associated with a sudden turn of events, although not always occurred as such in the history of mankind. The French Revolution, as a famous example, happened over rather short span, whereas the Neolithic agricultural revolution spread over time and affected the way of living at a larger scope in terms of geography just as did the industrial revolution. This industrial revolution beginning in 18<sup>th</sup> century changed the world and spread to 19<sup>th</sup> century.

In the second half of the 18<sup>th</sup> century, England was faced with a grand change. That second half witnessed great will and enthusiasm, during which almost every day one new invention was introduced. There are many factors behind this massive explosion of knowledge and action from the 15<sup>th</sup> century onwards. However, the role of the scientific revolution and its effects on the way of how societies think can be distinguished. It is this factor that induced the new inventions during the 18<sup>th</sup> century. In this new era, the growth of population and migrations led challenges. The increase gave importance to "speed" whose prerequisite was a new type of energy that the traditional techniques were not able to meet. To realise the aim, **steam engine** was introduced to the world of machinery however, the first useful engine was not built until 1711. It enabled mechanized process what was once conducted via man/animal power or water/wind wheels leading a larger scale production that was sought after since industrialization basically meant the production based on technology and large-scale mass production.

The steam enabled the acceleration during the first periods of industrialization, although replaced quickly by electricity. Electric motors started to be used as early as

<sup>&</sup>lt;sup>181</sup> (Revolution, 1995)

<sup>&</sup>lt;sup>182</sup> (Martal, 1999)

<sup>&</sup>lt;sup>183</sup> (Morris, 1994, pp. 289-290)

<sup>&</sup>lt;sup>184</sup> (Albrecht, 2012, pp. 17-23)

<sup>&</sup>lt;sup>185</sup> (Martal, 1999)

1870s.<sup>186</sup> Some productions combined the previously known waterwheel with the electric motor power as in the example of Çamaltı Saltern water pumping wheels simply because there was, and still is, no other technology that can lift that large amount of water in such short time yet.

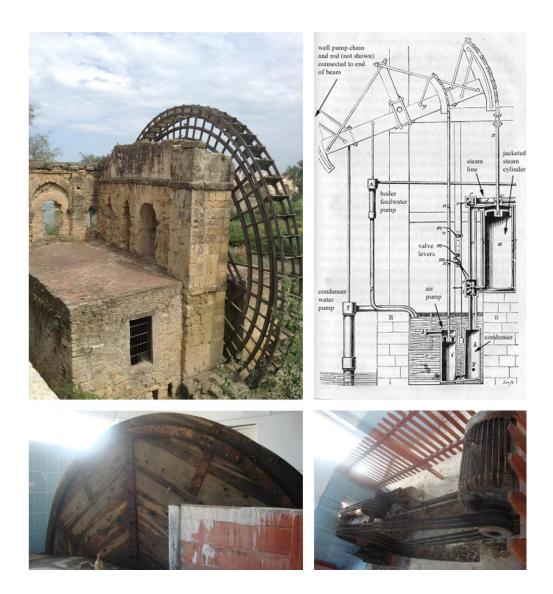


Figure 36 Remains of a waterwheel in Cordoba on Tagus River (Author, April 2015) and Watt's Engine for pumping water<sup>187</sup>, Electric motor power applied to the waterwheel of Çamaltı Saltern (Author, March 2016)<sup>188</sup>

 $\frac{187}{\text{http://www.egr.msu.edu/~lira/supp/steam/}}$  , last accessed on May, 2016

<sup>&</sup>lt;sup>186</sup> (Stearns, 2013)

<sup>&</sup>lt;sup>188</sup> See Chapter 4 for more information

The 19<sup>th</sup> century was characterized by the dissemination of the aforementioned developments occurred in England throughout Europe. One of the means of propagation of England's advancement in industry was "the Great Exhibition" opened on May 1<sup>st</sup> 1851. Even the venue itself, the Crystal Palace was a manifesto towards the conventional ideas from the very beginning. Designed by Joseph Paxton, this iron and glass edifice has sometimes been considered as a revolutionary move forward towards modern architecture.<sup>189</sup> The attending countries soon after took the example of England toward an industrialised future and adopted the tradition of "exhibitions" that would later be called "EXPO".



Figure 37 Half model of the Crystal Palace, duplicated by a mirror, in V&A Museum London (Author, June 2015)

The inventions, architecture and events were all mesmerizing and every field of life was experiencing the winds of change. Of course, the structure of society got affected by the fast-forward pace and took the architecture along with itself to a new future. With the revolution, the transition from an agrarian society to an industrial

.

<sup>&</sup>lt;sup>189</sup> (Watkin, 2005)

one happened and the emergence of new societal structures occurred. The traditional rural society slowly left the dominance to newly developed "industrial bourgeoisie" and "industrial proletariat" whose needs were to be satisfied with the new architecture; its materials, construction techniques and spatial properties. Since the factories broke their ties with water power, production facilities started to be built everywhere. While the new discourses on their architecture and ideology were ravaging Europe, they not only exalted the image of the "modern" factory, but also started to generate other spaces needed to support the production, such as the model towns. The main point in creating these towns was to establish dependency on the factory by means of providing desirable conditions for an industrial community. Yet, what constituted a community?

Anderson identifies three main characteristics, which are commonly used for organic communities, as commonality, continuity and territoriality. 191 Community gathers around -not always but in general- mutual interests and aims. Infrastructure and need for legal protection can be counted as common interest for an organically developed community, whereas in a constructed community, such as a company town, it gathers around the interest in job opportunity through production. The organic community is attached through kinship and friendship. On the other hand, a constructed community remains together via contracts. (An attachment through kinship and friendship can be established later.) The second characteristic, continuity, expresses the balance and endurance of existence within the defined boundaries. While in organic communities there exists a "biological continuity", that is a balance of males, females and other age groups that are able to pass on their own culture through generations 192, in a company town the continuity is assured with the contractual relationships creating the semi-constant community. As long as an employee is granted with the job, he/she and his/her family will be a part of the factory community for years. From time to time, the children of the workers choose the parent's profession enabling the family line to prosper in the factory town for generations to come. A company that

<sup>&</sup>lt;sup>190</sup> (Albrecht, 2012, pp. 17-23)

<sup>&</sup>lt;sup>191</sup> (Anderson, 1971, p. 25)

<sup>&</sup>lt;sup>192</sup> (Anderson, 1971, p. 25)

employs seasonal workers creates a community in motion as well as the semiconstant community, most of the time the same workers travel to the factory region with their families and stay during the ingathering period. The repeated inclusion depends on the factory, not on personal judgement or will although it is a prerequisite. The third, territoriality, signifies the need for an assured and defined boundary. For most people belonging to a location, although not necessarily spending the whole life in the designated area, is an inherent urge. The selection of a geographic point of reference in an organic community belongs to either the person himself or his ancestors. However, in a company town the power of selection belongs to the factory. (Though in some cases can be transferred to offspring.) Thus, the sense of belonging and the creation of corporate identity have to be supported. The idea of a community is concretized with architecture and internalized via experience of the spatial layout by the workers. The subject becomes linked with strong ties to the settlement and the workspace eventually, even though his needs were previously decided and standardized in accordance with the principles of the company, such as the typical worker's housings. According to Ali Cengizkan, in the thought that formed the ideal of worker's housing two main points were to protect the health conditions and the general embracement of having a deserved and well suited type of housing 193 The subject's link with the surrounding turns into appropriation of the property strengthening the tie between the employer and the employee.

These paternalistic instincts took material forms almost synchronously with the effects of the industrial revolution. As early as 1775 in the city of Chaux, Royal Saltworks of Arc-et-Senans was proposed by Claude Nicholas Ledoux. Today it is accepted as the first major achievement of industrial architecture, and thus, is a UNESCO World Heritage Site. Another attempt for such project was in 1800, when Robert Owen founded New Lanark in Scotland around the cotton mill with the intentions of creating healthy living and working conditions. The community had a school and a hospital as well as accommodation for workers. It is included in the UNESCO World Heritage List and this movement influenced Ebenezer Howard in

<sup>&</sup>lt;sup>193</sup> (Cengizkan A., 2009, pp. 15-44)

<sup>194</sup> http://whc.unesco.org/en/list/203, last accessed on June, 2016

creating the concept of the Garden City. <sup>195</sup> Owen's ideas had inspired other industrialists and allowed the dissemination of the idea of an industrial community town. He himself proposed the second in New Harmony, Indiana in 1825. <sup>196</sup> Another actor, Charles Fourier proposed in 1822 an ideal community called "phalanstère" <sup>197</sup>, J. B. Godin built "familistère" at Guise, France between 1859 and 1870 for his iron foundry <sup>198</sup>, and Sir Titus Salt developed Saltaire in around his mills in between 1854 and 1872. The latter complex included carefully constructed hierarchical employees' housing, the Dining Room, Congregational Church, Almshouses, Hospital, School, Institute, and Roberts Park. Its social and moral aims were expressed in UNESCO World Heritage. More examples focused on the issue of housing workers to disable them living in slums and also to control them. These include Kronenberg in Germany in 1873 by Alfred Krupp, Port Sunlight by William Lever from 1889 to 1922<sup>199</sup> during the 19<sup>th</sup> century.

In the 20<sup>th</sup> century Henry Ford took the idea of these industrial towns one step further, as a prominent figure of mass production and mass consumption economy. In the famous dystopia of Aldous Huxley, Ford's being an important turning point in society was marked with the use of AF – after Ford- in reference to a milestone as we use AD or BC today. He was so influential and ground-breaking that his ideas on the roles and responsibilities of the workers started to be called as *Fordism*.

#### Abrahamson wrote that Fordism entailed;

- Production objectives, namely, to produce standardized and interchangeable parts in the most efficient manner
- Organizational principles that emphasized task separation and specialization

94

198 http://www.familistere.com/jean-baptiste-andre-godin/, last accessed on June, 2016

<sup>195</sup> http://whc.unesco.org/en/list/429, last accessed on June, 2016

<sup>196</sup> http://xroads.virginia.edu/~hyper/hns/cities/newharmony.html, last accessed on June, 2016

<sup>&</sup>lt;sup>197</sup> (Watkin, 2005)

<sup>&</sup>lt;sup>199</sup> (Watkin, 2005)

 A reliance on external control over worker's activity, as epitomized by a factory assembly line<sup>200</sup>

Ford applied these ideas into community planning with his Fordlandia (1928), an eventually disastrous enterprise, in Brazil. He established a community town around his rubber plantation, just like an ideal American town.<sup>201</sup> He did not impose the ideas only through architecture. There were also mandatory dances, poem readings and gardening classes for the workers who were the locals of the area in order to assess a new type of community. The famous politician Antonio Gramsci expressed that industrialists, as Ford, wanted to create a new type of person, a person who was a completely rationalistic applier of a strict self-control. To be able to create such environment, the leaders of the industry tried to rule not only the factory activities but also the non-working life. "Life in industry demands a general apprenticeship, a process of psycho-physical adaptation to specific conditions of work, nutrition, housing, customs, etc. This is not something "natural" or "innate", but has to be acquired..."202 Therefore, the routine was the key factor of Ford's assembly line, now applied to men in their everyday life. 203 The main principles of the initiatives of Ford were applied to many factory surroundings with success after WWII. Uniform mass produced homes for workers carried the principles of the mass production and standardization in many constructed communities<sup>204</sup> around the world including the Turkish Republic.

To sum up, starting in England, the Industrial Revolution changed how and where people work or live a great deal over a vast geography. Many nations followed her and these industrialized nations started a quest for raw supplies in foreign lands in order to meet the raised demand as the consequence of mass production techniques. At the time, there were countries that managed to become industrialized and those that were not able to enter the process eventually becoming colonies for raw

<sup>&</sup>lt;sup>200</sup> (Abrahamson, 2014, p. 54)

<sup>&</sup>lt;sup>201</sup> (Barkemeyer & Figge, 2012)

<sup>&</sup>lt;sup>202</sup> (Forgacs, 2000, pp. 281-294)

<sup>&</sup>lt;sup>203</sup> (Forgacs, 2000, pp. 281-294)

<sup>&</sup>lt;sup>204</sup> (Abrahamson, 2014, pp. 55-57)

materials, workforce and markets for finished goods meanwhile having a grasp of the industrial one's architecture and industry. While taking advantage of raw materials, the industrialists exported the technology, architecture and the new industrial society with them to their destinations. The vast fertile lands of the Ottoman Empire were ready to be the supplier of raw materials consequently being at the receiving hand of part of their technology and architecture during both the Empire and the Republic.

# 2.2.2 Industrialization of the Empire and the Republic

19<sup>th</sup> century was a breaking point not only for the European countries but also for the Ottoman Empire. The territory of the Empire was able to answer the need of raw materials and markets that were needed by industrialized countries due to rapid growth in industry and increase in demand. With this potential at hand and its will in keeping up with the pace of the modern world, the Empire started initiatives almost synchronously with Europe. The era was the era of change and *İstanbul and İzmir* were the ones that experienced it the most.<sup>205</sup>

As early as the beginning of the century initiatives started to gain pace. In 1804 a wool mill for uniforms and paper factory near Bosphorus at Hünkar İskelesi were established. Later, a spinning mill near Eyüp in 1827, a leather tannery and boot works at Beykoz in 1830s, the Feshane in 1835, a wool spinning mill operating at İslimiye about 1836, a new saw mill and copper sheet rolling mill near Tophane were built and in the late 1830s both the Tophane cannon foundry and the Dolmabahçe musket works converted from animal to steam power. As seen, reforms mainly focused on military, monetary and administrative issues. However, as the century progressed, they turned their attention to legal, social, economic and cultural assets in a different process. As seen, reforms mainly focused on military turned their attention to legal, social, economic and cultural assets in a different process.

<sup>206</sup> (Clark, 1974)

<sup>&</sup>lt;sup>205</sup> (Martal, 1999)

<sup>&</sup>lt;sup>207</sup> (Clark, 1974)

<sup>&</sup>lt;sup>208</sup> (Kerimoğlu, 2013, pp. 111-119)

First action leading this process in the 19<sup>th</sup> century was the "*Tanzimat Fermant*" (Imperial Edict of Gülhane), prepared in 1839, which marks the official beginning of the Ottoman westernization,<sup>209</sup> and industrialization. The industrialization initiatives of the Ottoman Empire can be analysed in two main periods beginning with the dynamics resulted in the preparation of the *ferman*;

1<sup>st</sup> Period: 1838-1850 Increase in Factory Building

2<sup>nd</sup> Period: 1861-1973 "Islah-ı Sanayi" Commission and its operations

First Period was characterized by dense industrialization acts. There were many factory constructions and materials with new architectural language that was imported. Mechanical equipment and specialists were brought to the Ottoman lands as well. The government supported the private initiatives that wanted to build factories with concessions and tax donations. Since the accumulated capital was largely possessed by the foreign investors, the concessions were mostly used by them and almost all of the factories belonged to those foreigners.<sup>210</sup>

During the second period, the state became passive. It only supported the existing industries, granted new licenses and concessions. The most important problem was the lack of skilled labour. This deficit was overcome with foreign technicians and craftsmen. Ways to benefit from the traditional workforce were not sought after unlike did the already industrialized countries before.<sup>211</sup> On 28 February 1863 İstanbul Exhibition was opened for five months by Sultan Abdülaziz with the aim of introducing the industry to locals, inspired by the Great Exhibition, and another one with the name "Sanayi Sergi-i Umumisi" (Public Industry Exhibition) was organized in 1893.<sup>212</sup> These exhibitions provided bidirectional interaction; Europe took advantage of Ottoman raw materials while Ottoman Empire imported the industrial support. The organizer of these exhibitions was the "Islah-i Sanayi Komisyonu" (Commission for the Rehabilitation of Industry). It was active from 1863 to 1865 and

<sup>211</sup> (Martal, 1999)

<sup>&</sup>lt;sup>209</sup> (Quatert, 1993, p. 11)

<sup>&</sup>lt;sup>210</sup> (Çakır, 2012)

<sup>&</sup>lt;sup>212</sup> (Martal, 1999)

in 1873 it was dispersed. Its main duties were organizing the customs, exhibitions to support the industrialization; to unite the artisans as companies;<sup>213</sup> and establish industry schools.

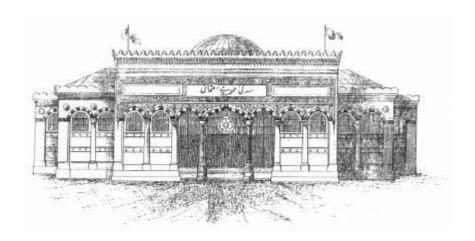


Figure 38 Front facade of the main hall, Ottoman General Exposition, Istanbul, 1863<sup>214</sup>

Although the Empire eagerly tried to follow the initiatives for the industrialization, its financial situation got worse at the end of the 19<sup>th</sup> century. In 1875 the Empire announced its bankruptcy<sup>215</sup> and in order for creditors to obtain their money *Rüsum-u Sitte İdaresi* (The Administration of the Six Indirect Taxes<sup>216</sup>) was established and with "*Rüsumu Sitte Kararnamesi*" (The Enactment of the Six Indirect Taxes) the *profits of the salt, tobacco, and alcohol were given to foreign bankers* in 1879.<sup>217</sup> The crisis became even more serious in 1881 that *Düyun-ı Umumiye* (Administration

214

 $\frac{http://web.archive.org/web/20160304193518/http://publishing.cdlib.org/ucpressebooks/view?docId=ft}{8x0nb62g\&chunk.id=d0e3172\&toc.depth=1\&toc.id=0\&brand=ucpress\&query=Bourgeois}\,,\,last\,accessed on July,\,2016$ 

<sup>&</sup>lt;sup>213</sup> (Seyitdanlıoğlu, 2009)

<sup>&</sup>lt;sup>215</sup> (Kotan, 2014)

<sup>&</sup>lt;sup>216</sup> http://www.obmuze.com/#rusum-u-sitte-idaresi/zor-yillar, last accessed on June, 2016

 $<sup>^{217}\,</sup>http:\!/\!/www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx\,\,,\,last\,accessed\,\,on\,\,June,\,2016$ 

of the Ottoman Public Debt) was established with the Muharrem Kanunnamesi (Muharrem Enactment) in 20.12.1881.<sup>218</sup>

The last periods of the Empire were turbulent, yet the initiatives were still taken at the beginning of the 20<sup>th</sup> century. In order to revive the industry, "*Teşvik-i Sanayi Kanunu*" (Industrial Encouragement Law) was prepared. With this law, some establishments were given a piece of government land, the opportunity of importing the machines, equipment and raw materials without duty, and the new factories were exempted from the construction and production related duties. However, the economic problems prevented the accumulation of the capital necessary for the proper industrialization period. Thus, the efforts for industrialization remained inadequate. Although the economic structure of the empire seemed less different than the European countries at the beginning of the 19<sup>th</sup> century, failing in industrialization, it remained as an agricultural country at the end of the century.

As the successor of the Empire, the economic situation of the Turkish Republic was not bright as the newly established country during its early years. There were the remnants of the industrial acts of Ottoman Empire in *İstanbul and İzmir*; however, their presence was rather negligible.<sup>222</sup> This situation was worsened by the 1929 Economic Crisis that affected the whole world. There was lack of capital accumulation and infrastructure, thus, the economy highly depended on agriculture as if there had not been any affords to industrialize before.<sup>223</sup> The country needed couple of years and different approaches to recuperate herself. In order to analyse these attempts, the industrialization history can be divided into three periods, suggested by many different researchers, including Akyıldız&Eroğlu;

<sup>&</sup>lt;sup>218</sup> (Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>219</sup> (Kaştan, 2003)

<sup>&</sup>lt;sup>220</sup> (Martal, 1999)

<sup>&</sup>lt;sup>221</sup> (Martal, 1999)

<sup>&</sup>lt;sup>222</sup> For more details see (Akyıldız & Eroğlu, 2004)

<sup>&</sup>lt;sup>223</sup> http://www.kalkinma.go<u>v.tr/Pages/60OncesiDonem.aspx</u> , last accessed on April, 2016

• 1<sup>st</sup> Period: Early Republican 1923-1960

• 2<sup>nd</sup> Period: Late Republican 1960-1980

• 3<sup>rd</sup> Period: 1980s and after

Turkish Congress on Economy) held in İzmir in 1923.<sup>224</sup> The congress adopted "Misak-ı İktisadi" (Financial Pact).<sup>225</sup> However, not all of the decisions were fully satisfied due to the changing economics of the world following the 1929 crisis. Yet, from 1923 to 1933 there were still important establishments. One of the inducers of these initiatives was the *Teşvik-i Sanayi Kanunu* (Industrial Incentive Law) enacted in 1927 with the aim of encouraging, protecting and financing the industry.<sup>226</sup> The first initiatives of the first period included Alpullu and Uşak sugar factories in 1926; Bursa and Bünyan weaving mills in 1927; Ankara cement factory in 1928; Istanbul Ford car assembly factory in 1929; Eskişehir sugar factory in 1933. Other important acts were the establishments of the Agriculture Schools and Agricultural Institute in order to support cultivation related industry, Sümerbank and the construction of railways around the country.<sup>227</sup> The industrial plans during 1930s represent the examples of integrated projects with scarce sources.<sup>228</sup>

After 1933 another approach was adopted to establish the industrial foundations of the republic. In 1934 the "First Five Year Industrialization Plan" was prepared.<sup>229</sup> This first plan was a success granting the country factories up to 20. Due to the success, the "Second Five Year Industrialization Plan" was prepared in 1936.<sup>230</sup> However, the outbreak of the World War II in 1939 disabled the plan to be implemented. The war eventually affected the economy and restricted the

<sup>&</sup>lt;sup>224</sup> (Colak, 2013, pp. 213-225)

<sup>&</sup>lt;sup>225</sup> (Gözcü, 2013, pp. 15-31)

<sup>&</sup>lt;sup>226</sup> (Kaştan, 2003)

<sup>&</sup>lt;sup>227</sup> (Doğan, 2013)

<sup>228</sup> http://www.kalkinma.gov.tr/Pages/60OncesiDonem.aspx, last accessed on April, 2016

<sup>&</sup>lt;sup>229</sup> For more details see (Özyurt, 2011)

<sup>&</sup>lt;sup>230</sup> (Kastan, 2003)

investments.<sup>231</sup> Although Turkey did not enter to the war, the effects of it concerned the country at the highest level. The war ended in 1945, but Turkey stayed as an introverted country until 1950s.<sup>232</sup> One of the leading powers at the time, the USA, decided to support Europe financially for recuperation afterwards. In order to realize this aim, the *Marshall Plan* was prepared and Turkey was included for support. The support included four sections as the main grants, lending, indirect assistance, and technical assistance.<sup>233</sup> With all these attempts, a modern country was envisioned, which relied on industrialization.

Within this industrialization and modern country ideals, factories and factory towns had been designed to include the infrastructure both for work and for social interactions. The idea of a community around the factory became a national act towards the modernization ideal, applied in view of development realized by the state all over the country. The factory territories were in fact a product of "modern" planning and architecture including not only production and administrative edifices but also parks, lodgings, hospitals, schools, cinemas, social clubs and sports facilities. Owen's ideas on sanitation in workspace and Ford's dream of creating an ideal society were represented now in the creation of a national identity. Textile based factories such as Sümerbank, sugar factories; Tekel (Tobacco, tobacco products, salt and alcohol enterprises) factories, coal mines of Zonguldak and iron-steel factories of Karabük and other examples show the material evidences of these attempts during the early periods of the Republic.

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<sup>&</sup>lt;sup>231</sup> (Akyıldız & Eroğlu, 2004)

<sup>232</sup> http://www.kalkinma.gov.tr/Pages/60OncesiDonem.aspx, last accessed on April, 2016

<sup>&</sup>lt;sup>233</sup> (Ertem B., 2009)

<sup>&</sup>lt;sup>234</sup> (Zeybekoğlu, 2009, pp. 215-254)

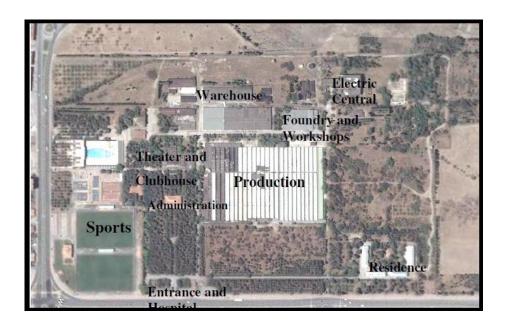


Figure 39 Kayseri Sümerbank Factory complex aerial view  $^{235}$ 

As stated by Sibel Bozdoğan, factories were important both as modern buildings and as the manifestoes of the success of the Republic in keeping up with the "contemporary civilization". Thence, they allowed the dissemination of a new culture via media or by means of social interaction. However, the introverted nature of the economics prevailing the period until 1950s affected the architecture of the industrial realm. Up until 1937 there were no iron and steel production facilities and there were only limited number of factories for the cement production. The basic materials of reinforced concrete, cement, steel, construction equipment, insulations and other necessary elements were imported. Nevertheless, the factories' production buildings seem to receive the import of materials. Factories were important both as modern buildings and indicators of the Republic's success. With their materials and designs representing the "machine aesthetic" of the time, they corresponded to examples of modern unadorned simple geometric forms. On the other hand, the living quarters were more subject to the "local" designs following the

<sup>&</sup>lt;sup>235</sup> (Eldek, 2007)

<sup>&</sup>lt;sup>236</sup> (Bozdoğan, 2002, p. 141)

<sup>&</sup>lt;sup>237</sup> (Coşkun, Aydın, & Uzungüngör, 2011)

<sup>&</sup>lt;sup>238</sup> (Bozdoğan, 2002, p. 141)

"garden city" models. Due to lack of construction material sector, many factory facilities were built with masonry construction techniques and used materials (locally available) such as solid brick, stone and limestone. Apart from the fact that construction technique and materials had limited options, some architects insisted on local materials and low-tech structural systems as well.

The second period started with a military coup in 1960 and three years later the "First Five Year Development Plan" prepared for 1963-1967 period. 241 During this time span, industrial initiatives were given dominance and growth in the field was achieved. With 1968-1972 "Second Five Year Development Plan", investments were planned for chemical industry based factories, cement and glass industries; and the development in rural areas was supported.<sup>242</sup> The architectural realm also got affected for the industrial complexes with the new developments in production. The beforelacking abundance of modern materials, such as concrete, enabled the construction of high rise lodgings in alliance with the raise in population and the common trends of the time.<sup>243</sup> During this period the constructions of apartments increased, the commercial development of the country spread to all urban centres without regional differences, and therefore, uniform building tissue was formed around the country. The standardized apartment life in concrete blocks was the commonly accepted and desired implementation.<sup>244</sup> Moreover, **religious buildings**, which were out of the discussions before this period, gained importance as the result of urbanization and raising inclination towards religious matters.<sup>245</sup>

Third Period started with the changing economics all over the world, when the "globalization" came to the scene, and this period was characterized both with the

<sup>243</sup> (Coşkun, Aydın, & Uzungüngör, 2011)

<sup>&</sup>lt;sup>239</sup> (Coşkun, Aydın, & Uzungüngör, 2011)

<sup>&</sup>lt;sup>240</sup> (Bozdoğan & Akcan, 2012, p. 94)

<sup>&</sup>lt;sup>241</sup> (Akyıldız & Eroğlu, 2004)

<sup>&</sup>lt;sup>242</sup> (Doğan, 2013)

<sup>&</sup>lt;sup>244</sup> (Bozdoğan, 2002, p. 141)

<sup>&</sup>lt;sup>245</sup> (Elmalı Şen, Midilli Sarı, Sağsöz, & Al, 2014)

changes in world politics and the second military coup in Turkey.<sup>246</sup> Although the industry surpassed agricultural activity in 1979, the coup of 1980 disabled the investments until 1983. The first development plan (V) prepared in 1984 and it prioritised the export and import, supported the foreign investment and reorganized foreign capital law.<sup>247</sup>

From that year up to now, the economics have always faced ups and downs, the five year development plans have been released ever since then and the importance of industry has changed from time to time. Some of the factories that were established during the early years were *closed* and others were *privatised*. The new ones that were built during the period followed the previous examples in terms of architecture with new interpretations.<sup>248</sup> In 2008 and 2009 the industry sector began to lag and even declined.<sup>249</sup> However, the country still possesses great potential with its underground and above ground sources in industry.

#### 2.2.2.1 General Evaluation

The history of industrialization in Ottoman Empire and Turkish Republic was rather a rugged process. Although there were many actions during the Empire, Ottoman industrialization highly depended on foreign investors and minorities, imported machines, technicians, and even workers. Many of the factories belonged to non-Ottoman groups. In addition to this, as the result of state's bankruptcy, some of the taxes of these factories were also given to *Düyun-u Umumiye* in exchange of the state debts.

Since the industrial realm was moribund at the beginning of the Turkish Republic, the industrialization act needed more attention. The new state accepted industrialization as a means to be "independent" and "modern". During the early

<sup>248</sup> (Coşkun, Aydın, & Uzungüngör, 2011)

<sup>&</sup>lt;sup>246</sup> (Akyıldız & Eroğlu, 2004)

<sup>&</sup>lt;sup>247</sup> (Doğan, 2013)

<sup>&</sup>lt;sup>249</sup> (Doğan, 2013)

Republican Period many initiatives were taken in order to create industrial production centres. These early years were not only harsh times for the Republic but also for the world; there was a financial crisis in 1929 and World War II from 1938 to 1945. The effects of them were not dissolved until 1950s and the country remained introverted during this period. Since the construction materials were not available fully until 1950s, the architecture during the isolated years gave examples more based on locally available or importable materials. The factory lodgings during this period presented rational and minimalist applications of the logics behind industrialization and they represented the change from traditional living quarters in a sense. For factories were not only production centres, but also places to generate the new lifestyle and modern people, the living quarters were not limited to the lodgings. The complexes included sport facilities, parks, hospitals, schools, cinemas, and social clubs besides the lodgings for workers. They provided a background to understand the social, cultural, and economic conditions of their times. In a way they applied the ideas that ravaged the world, but also were unique in being the ambassadors of the nationalistic ideals based on industrialization.

Following the ascension towards the international arena after the 1960s, understanding of industrialization and its design changed in a radical way. New materials, especially concrete, became more available and dominated the construction sector. The use of prefabrication in industrial buildings spread. The growth in construction materials and techniques combined with population increase made the apartment life desirable. Soon after they were everywhere, losing identity, and a uniform building tissue was formed all around the country. Moreover, religious buildings, which were out of the discussions before this period, gained importance. These factors also affected the factories and their surrounding environment.

After 1980s, some initiatives were prioritized or some old factories were closed. Turkey experienced many financial ups and downs and at some point industrialization became less active. In light of all the aforementioned processes it became possible to understand the political, social, economic and cultural backgrounds of the industrial complexes. Thus, many of the industrial landscapes started to be *recognized as cultural heritage and their conservation became an emerging topic of discussions*.

## 2.2.3 Industrial Heritage and Conservation

The idea of preserving the remnants of the industrial history germinated -not surprisingly- in England, the first industrialized country. Thus, awareness was achieved in the international context through her leadership. According to Barrie Trinder, first initiatives were taken to preserve the industrial areas by the writer L.T.C. Rolt during 1940s in England. He pioneered many actions in order to protect the industrial landscapes when there were no specific actions on the subject at the time being.<sup>250</sup> The professional realization of the field gained a name when a British historian Michael Rix conjoined the term "*industrial archaeology*" for the first time in 1955 while writing on the Industrial Revolution in Great Britain. He stated that the remnants of the industrialization provided useful source of information on the scale and the scope of the process.<sup>251</sup> He wrote about the lack of interest in industrial areas in The Amateur Historian as:

"Great Britain as the birthplace of the Industrial Revolution is full of monuments left by this remarkable series of events. Any other country would have set up machinery for the scheduling and preservation of these memorials that symbolize the movement which is changing the face of the globe, but we are so oblivious of our national heritage that apart from a few museum pieces, the majority of these landmarks are neglected or unwittingly destroyed." <sup>252</sup>

Shortly after the realization of industrial archaeology, an "industrial archaeology research team" was established in 1959 by CBA (Council for British Archaeology) upon the growing popularity of the field.<sup>253</sup> Moreover, the *Journal of Industrial Archaeology* began to be published in 1964. All these developments in England, paved the way for more events to come.

<sup>251</sup> (Martin, 2009, s. 285-297)

<sup>&</sup>lt;sup>250</sup> (Saner, 2012)

<sup>&</sup>lt;sup>252</sup> (Palmer & Neaverson, Industrial Archaeology Principles and Practice, 2001, p. 1)

<sup>&</sup>lt;sup>253</sup> (Palmer, Fifty Years On, 2009)

Grown out of the British context, recognition and appreciation of the industrial complexes around the world gained speed after 1970s. In 1973 Association for *Industrial Archaeology* was founded<sup>254</sup> marking the beginning of series of actions in the field. In 1973 FICCIM – First International Congress on the Conservation of Industrial Monuments was organized in Ironbridge, Shropshire England and in 1975 the ideas spread to Europe with SICCIM – Second International Congress on the Conservation of Industrial Monuments in Bochum, Germany. Following that, Stockholm, Sweden housed the next congress organized in 1978. The most significant aspect of the third one was the change of the name from "monuments" to "heritage" emphasizing the inclusion of sites rather than focusing on the monuments solely. TICCIH - Third International Congress on the Conservation of Industrial Heritage also granted its name to the establishment of TICCIH - The International Committee for the Conservation of Industrial Heritage established in 1978.<sup>255</sup> The committee has been organizing these congresses every three years, leading the actions in the conservation of the industrial heritage. Emerging from TICCIH, E-FAITH - The European Federation of Associations of Industrial and Technical Heritage aims to provide a medium in which contacts and co-operation between volunteers and non-profit volunteer associations in Europe can be established in order to meet, exchange experiences, learn and support activities and campaigns since 1999.<sup>256</sup> Another important formation in the field is the organization of the European Route of Industrial Heritage – ERIH beginning its five year plan in 2002 to 2007. To encourage the appreciation, understanding, protection and promotion of industrial heritage, the European Network of Industrial Heritage was established under the ERIH Interreg II C project. Within this first ERIH, a Master Plan with ideas and activities was developed to promote European Industrial Heritage.<sup>257</sup> The project has been financed by ERDF - European Regional Development Fund and its context and boundaries are subject to ongoing expansion. Other organizations also

<sup>&</sup>lt;sup>254</sup> (Saner, 2012)

<sup>255</sup> http://ticcih.org/activities/congresses/#gb, last accessed on February, 2016

<sup>256</sup> http://www.e-faith.org/home/?q=content/what-e-faith, last accessed on February, 2016

<sup>257</sup> http://www.erih.net/service/topmenu/about-erih.html, last accessed on February, 2016

exist such as SHOT, NEKTAR, and ICOHTEC that are concerned with the history of technology and related sites.

Last but not least, although not directly related to the industrial roots, DOCOMOMO International — *Documentation and Conservation of Buildings, Sites and Neighbourhoods of Modern Movement founded* in 1988 is another related formation. An industrial site or a building of production can be valuable for the modern architecture as well as for the industrial history. The Fiat Lingotto Factory is a superb example of such relation. It was one of the most splendid examples of the modern architecture in its avant-garde, influential and impressive nature. Le Corbusier, who thought that the car should always be present in his architecture<sup>258</sup>, called it "one of the most impressive spectacles of industry".<sup>259</sup>

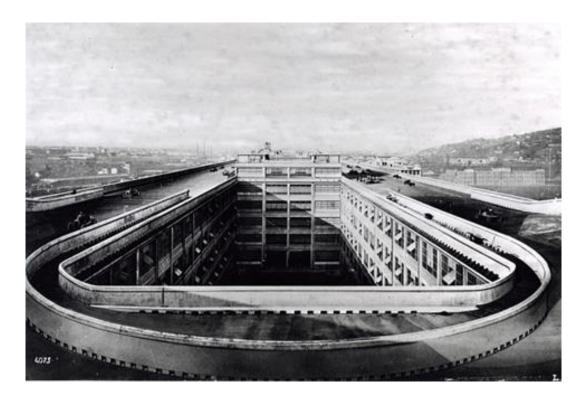


Figure 40 Lingotto Rooftop<sup>260</sup>

 $<sup>\</sup>frac{258}{\text{https://mitpress.mit.edu/sites/default/files/titles/content/9780262015363}}$  sch  $\frac{0001.pdf}{1}$ , last accessed on February, 2016

<sup>&</sup>lt;sup>259</sup> (Kirk, 2005, s. 61)

<sup>&</sup>lt;sup>260</sup>http://www.bbc.com/autos/story/20140825-a-racetrack-in-the-sky, last accessed on February, 2016

Such overlaps can be multiplied between the two organizations. Today, both act as a special advisor to ICOMOS - *International Council on Monuments and Sites* today on modern and/or industrial heritage. To conclude, as seen, the interest and care accelerated after 1973 upon the foundation of the Association for Industrial Archaeology was followed by a series of actions, actors and created an impulse for other initiatives worldwide.

Although there had been an ongoing impulse around the world, Turkey began to discuss its industrial areas later. Despite the fact that it had an immense potential with its industrial history in relation to Europe, first discussions started during the 1990s in relation to project basis topics. Saner divides the emerging approaches and implementations at the time into two as the "adaptive reuse" and the "monumental applications". <sup>261</sup> He associates the first implementations under the first category with the Halic rehabilitation projects. Here although the main aim was not to protect an industrial site, under the general motivation to protect the silhouette and cultural stratification of Halic many important industrial remnants of the Ottoman Empire such as Sütlüce Mezbahası, Feshane-i Amire and Darphane-i Amire were subjects to adaptive reuse. On the other hand, second category included the conservation of monumental industrial buildings. The beginning of these initiatives was marked by the restorations of gas works. The supporters of these initiatives depended on the fact that those buildings constituted a part of collective memory and urban identity.<sup>262</sup> İzmir Gas Works, built in 1862 and restored in 2008, is an example of such kind of conservation initiatives.<sup>263</sup> Today it serves as a cultural centre in which conferences, workshops, concerts and open air movie nights are held.

There are many other conservation examples, especially concentrated in İstanbul, such as the edifices converted from *Darphane-i Amire to İstanbul Museum*; *Tophane-i Amire to Mimar Sinan University Culture and Arts Centre*; *Defterdar Feshane-i Amire to Feshane International Fair*, *Congress and Culture Centre*. <sup>264</sup>

<sup>261</sup> (Saner, 2012)

<sup>262</sup> (Saner, 2012)

<sup>263</sup> http://www.izmir.bel.tr/HaberDetay/4105/tr , last accessed on August 2016

<sup>264</sup> (Cengizkan M. N., 2006)



Figure 41 İzmir Gas Works, From top left to bottom right: Gas works before the restoration and abandoned edifices in the campus<sup>265</sup>, restored gas works<sup>266</sup>, open air movie night in the gas work campus<sup>267</sup>

Moreover, the *industrial complexes of the Republic* are currently becoming the topic of number of academic studies in the realm of industrial heritage. As mentioned before, the factory territories included production and administrative edifices, parks, lodgings, hospitals, schools, cinemas, social clubs and sports facilities. With these infrastructures the *textile based factories of Sümerbank, sugar factories; Tekel* (*Tobacco, tobacco products, salt and alcohol enterprises*) factories, coal mines of *Zonguldak and iron-steel factories of Karabük* and others created specific corporate identities and reflected the spirit of the Republican ideals in industrialization. Nevertheless, when these government institutions started to be *closed-sold or* 

 $<sup>^{265}</sup>$  <u>http://v3.arkitera.com/v1/haberler/2004/10/05/izmir.htm</u> , last accessed on August 2016

 $<sup>\</sup>frac{266}{\text{http://www.cekulvakfi.org.tr/files/images/haber/}18056993548\_i8.jpg}$  , last accessed on August 2016

http://www.milliyet.com.tr/-yildizlarin-altinda-sinemakeyfi/ege/haberdetay/05.08.2011/1422860/default.htm , last accessed August 2016

privatized one by one following the privatization ideals of the governments after 1980s, their related spaces disappeared slowly together with their communities. Some of them were conserved after they lost their original functions, whereas some of them were demolished as in the case of TEKEL İstanbul (Mecidiyeköy) Liqueur and Cognac Factory designed in 1930s and was demolished in 2012.<sup>268</sup>

However, not all of these campuses faced demolition. Upon the raised popularity of the industrial heritage and its conservation, many of these campuses started to be conserved after 2000s. Especially some of the TEKEL buildings started to become desired commodities with *potential re-use projects*. İzmir, having numbers of old tobacco factories and storages of TEKEL, is one of the cities that used this potential in different parts of the city. There is one current example, the *İzmir TEKEL Tobacco Factory built in 1931. It was converted to İzmir Emniyet Müdürlüğü Çankaya Hizmet Binası* (İzmir Police Headquarters Çankaya Service Building) in 2012.<sup>269</sup> The Tobacco Factory in Alsancak was also given to Nevvar Salih İşgören Vaqf in 2013 to be used as an educational facility based on culture and art.<sup>270</sup> Its project is still in progress. Another project is the old *Tobacco Storage of TEKEL in Alsancak converted to İzmir Architecture Centre* in 2013 receiving the *European Centre International Architecture Award* with its project in 2015.<sup>271</sup>

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<sup>268</sup> http://www.arkitera.com/haber/8338/bir-miras-boyle-yerle-bir-oldu, last accessed on August 2016

 $<sup>\</sup>frac{269}{\text{http://www.konak.bel.tr/haber/konaka-tarihi-kentler-birliginden-odul-}156607}$  , last accessed on August 2016

 $<sup>\</sup>frac{270}{\text{http://www.yeniasir.com.tr/kenthaberleri/}2013/11/12/izmire-yeni-kultur-ve-sanat-merkezi}$  , last accessed on August 2016

<sup>&</sup>lt;sup>271</sup> The website of the award gives detailed information about the process. http://www.europeanarch.eu/international-architecture-awards-archive/2015/06/27/izmir-center-of-architecture/, last accessed on August 2016











Figure 42 Before and after photos of the campus buildings<sup>272</sup>, Demolished Liqueur and Cognac Factory<sup>273</sup>, İzmir Alsancak TEKEL Cigarette Factory<sup>274</sup>, Tobacco Factory as the Police Headquarters after restoration<sup>275</sup>, The architecture centre after restoration<sup>276</sup>

<sup>&</sup>lt;sup>272</sup> http://www.agu.edu.tr/tarihce, last acessed on August 2016

 $<sup>{}^{273}\,\</sup>underline{\text{http://www.arkitera.com/haber/8338/bir-miras-boyle-yerle-bir-oldu}}\,,\,last\,accessed\,\,on\,\,August\,\,2016$ 

 $<sup>\</sup>underline{^{274}}\,\underline{\text{http://www.yeniasir.com.tr/kenthaberleri/2013/11/12/izmire-yeni-kultur-ve-sanat-merkezi}$  , last accessed on August 2016

 $<sup>\</sup>frac{^{275}\underline{\text{http://www.konak.bel.tr/files/news/cankaya-eski-tutun-deposu-1jpg\_05-04-2016\_08-18-43.JPG}}{\text{last accessed on August 2016}}\,,$ 

 $<sup>\</sup>frac{^{276}}{\text{http://www.arkiv.com.tr/proje/izmir-mimarlik-merkezi-konsept-projesi-ve-ic-mekan-projesi/3846}}, last acessed on July 2016$ 

Most of these similarly designed former government initiatives stopped productions in the last past 20-30 years, either deliberately or as the result of natural evolution in time, and therefore, lost their importance as industrial complexes. Among them, TEKEL facilities, as an example, privatized the tobacco and alcohol production. As a result, the edifices of related factories were abandoned. Salterns on the other hand, constituted the only production centres left from this heritage since the "salt" was and still is one of the most vital elements of everyday life, unlike tobacco and alcohol. Thus, despite the change in the administrative structure of their properties, they continued to produce salt up until today. However, there are currently no studies on all of the remnants of TEKEL legacy, and on the industrial heritage of the Turkey for that matter. The topic is an evolving one and hopefully will be discussed holistically in the near future.

### 2.2.3.1 International Documents on Industrial Buildings and Sites

One of the first documents on industrial heritage was the "Recommendation on the Protection and Conservation of the Industrial, Technical and Civil Engineering in Europe" by European Council in 1990. In the document Europe's technical, industrial and civil engineering heritage was accepted as an integral part of the historic heritage of Europe.<sup>277</sup>

As mentioned above, TICCIH is one of the main organizations for the conservation of industrial heritage. The first international reference text focusing especially on the industrial heritage was prepared by the organization in 2003 as Nizhny Tagil Charter for the Industrial Heritage. It defines the *industrial heritage* and *industrial archaeology* as stated previously.<sup>278</sup> Within the text there is also emphasis on social, aesthetic, technological, scientific, rarity values and important sense of identity that is very important in the acknowledgement and conservation procedure of industrial heritage. In the acknowledgement procedure, documentation has a prominent stage.

<sup>&</sup>lt;sup>277</sup> (Recommendation No 20 of the Committee of Ministers to Member States on the Protection and Conservation of the Industrial, Technical and Civil Engineering Heritage in Europe, 1990)

<sup>&</sup>lt;sup>278</sup> (TICCIH, 2003) See Chapter I for the definitions.

These documentations should cover descriptions, drawings, photographs and all the necessary supporting documents.<sup>279</sup>

In Turkey, the issues concerning the industrial archaeology started to be discussed during the early 1990s.<sup>280</sup> Gül Köksal was one of the earliest initiators of discussions on their conservations with her PhD thesis focusing on the conservation and reuse proposals for the industrial heritage in İstanbul in 2005. Among other publications, "Dosya 03 Endüstri Mirası" (Folder 03 Industrial Heritage) was released, as part of Dosya periodical published by TMMOB Chamber of Architects in 2006. It hosted 13 cases, and thus papers, focusing on important topics related to the industrial heritage of Turkey.<sup>281</sup> In the following year, 2007, an atelier was organized in Zonguldak, Turkey, by TMMOB Chamber of Architects for industrial heritage. The book "Endüstri Mirası" (Industrial Heritage) covering the sum of knowledge produced during the event was published in August 2008 by the Chamber of Architects.<sup>282</sup>

Another document focusing on industrial heritage at an international scope was the *Dublin Principles* "Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes" by ICOMOS and TICCIH released in 2011 for they wished to expand their cooperation by adopting and promoting the dissemination and use of the principles to assist the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.<sup>283</sup> One of the highlights of the charter is the statement that "in many places, this heritage is still in use and industrialization is still an active process with a sense of historical continuity, while in other places it offers archaeological evidence of past activities and technologies." "284\*Thus, the industrial heritage would have both tangible and intangible heritage values intact and alive in many cases. The tangible includes technology and process, skills, memories and

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<sup>&</sup>lt;sup>279</sup> (TICCIH, 2003)

<sup>&</sup>lt;sup>280</sup> (Saner, 2012)

<sup>&</sup>lt;sup>281</sup> (Zelef, 2006)

<sup>&</sup>lt;sup>282</sup> (Madran & Kılınç, 2008)

<sup>&</sup>lt;sup>283</sup> (ICOMOS-TICCIH, 2011)

<sup>&</sup>lt;sup>284</sup> (ICOMOS-TICCIH, 2011)

social life of workers and their communities. The sustainable conservation of the industrial activity can also enable the know-how to stay alive. Moreover, it was emphasised that "industrial heritage reflects the profound connection between the cultural and natural environment, as industrial processes – whether ancient or modern – depend on natural sources of raw materials, energy and transportation networks." Therefore, the landscape of the industry becomes important in the evaluation process. Another aspect that was focused on is the need for proper documentation and understanding of industrial areas. Combined with the aforementioned statements, it is of high importance to document an industrial site by researching and documenting both of its tangible and intangible aspects.

Although not directly focusing on industrial heritage, The International Conference "Intervention Approaches for the 20<sup>th</sup> century Architectural Heritage" was held in 2011. The adopted *Madrid Charter* – Approaches for the Conservation of 20<sup>th</sup> Century Architectural Heritage provided a source for the conservation of 20<sup>th</sup> century industrial heritage. <sup>286</sup>

The last document on the subject is the book "Industrial Heritage Re-tooled: The TICCIH Guide to Industrial Heritage Conservation" published in 2012. As explained in its introduction, the aim of the publication was to gather modern practices in order to retool the industrial heritage, meaning keeping it up to date as explained by James Douet.<sup>287</sup>

<sup>285</sup> (ICOMOS-TICCIH, 2011)

<sup>&</sup>lt;sup>286</sup> (ICOMOS, 2011)

<sup>&</sup>lt;sup>287</sup> (Douet, 2012)

# 2.2.3.2 Value Assessment and Industrial Heritage

"...not worth his salt."

Petronius, Satyricon<sup>288</sup>

The Roman army required salt for its soldiers and for its horses and livestock. At times soldiers were even paid in salt, which was the origin of the expression "worth his salt". Worth his salt meant deserving the value predefined for a person.

When the matter in question is the value of a cultural asset, "being worthy of the value" becomes more complex and vital, even more multifaceted. Conservation policies should be based on a critical process which starts with a survey, documentation and determination of the essence of cultural and natural values associated with the asset. In the 9<sup>th</sup> article of the Nara document on authenticity it declares that "conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed." However, value is rather a vague notion that can be interpreted by different individuals, groups or communities around the world. Therefore, it is not possible to set rules for a value assessment, but to propose one. There are number of works setting variations of values or works that imply the types that a cultural asset likely to have.

In order to draw a general frame for this study, 8 main sources were studied on the subject of "value" in relation to conservation of cultural heritage. When necessary, other sources are included within. The first ever document focusing on the issue is Alois Riegl's *Modern Cult of Monuments: It's Character and Its Origin* written in 1902. Following that, many different papers, works or dissertations were published and many national/international laws were enacted.

 $<sup>\</sup>frac{288}{\text{http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:latinLit:phi0972.phi001.perseus-eng1:57}}, last accessed on November, 2015$ 

In this study, Riegl's article was followed by papers, charters, dissertations both in relation to cultural heritage in general and to industrial heritage as well. Moreover, Turkish laws concerning the conservation of cultural heritage were analysed in terms of their statements on "values". They are explained briefly and the examples having large number of value types are given with tables in order to be more apprehensible. The selected sources in chronological order are;

- Alois Riegl, Modern Cult of Monuments: Its Character and Its Origin, 1902
- Australia ICOMOS, The Burra Charter, 1979.
- Feilden, Bernard M., and Jukka Jokilehto. *Management Guidelines for World Heritage Sites*. Rome: ICCROM, **1998.**
- Mason, Randall. "Assessing Values in Conservation Planning:
   Methodological Issues and Choices." In Assesing the Values of Cultural
   Heritage, edited by Marta de la Torre, 5-30. Los Angeles: The Getty
   Conservation Institute, 2002.
- Teresa Satterfield, Numbness and Sensitivity in the Elicitation of Environmental Values, *Assessing the Values of the Cultural Heritage*, **2002.**
- Köksal, Gül. "İstanbul'daki Endüstri Mirası için Koruma ve Yeniden Kullanım Önerileri." Unpublished PhD Thesis, Architecture/Restoration, İTÜ, İstanbul, 2005.
- Madran, Emre, and Nimet Özgönül. Kültürel ve Doğal Değerlerin Korunması. Ankara: TMMOB Mimarlar Odası, 2005.
- Kılınç, Ayşem. Value Assessment for Industrial Heritage in Zonguldak.
   Master of Science Thesis, Middle East Technical University, Ankara:
   Unpublished Thesis, 2009.

The first three documents were concerned with the conservation of heritage; however, they provided valuable information on the value assessment of a cultural assset. Randall Mason, Teresa Satterfield and Madran&Özgönül zoomed into the issue of assessing the values of cultural heritage. On the other hand, Gül Köksal

wrote about the industrial heritage and value assessment relatedly. The last source, Ayşem Kılınç's thesis, connected the value assessment and industrial heritage.

As mentioned before, the earliest division of values was written by Riegl, who set forth two types of monuments as deliberate and unintentional. From his words, a deliberate monument is "a work of man erected for the specific purpose of keeping particular human deeds or destinies (or a complex accumulation thereof) alive and present in the consciousness of future generations."289 The "unintentional monuments" on the other hand, are the ones that had no intention of becoming a representative of the history and in fact "the creators of these works..., wanted primarily to satisfy certain practical or ideal needs of their own." They obtained monument status for the modern man associated it with some values. He states that these values have two main titles as commemorative and present-day. The age, found in the monument's old appearance; historical, representing an asset's place in the progress of any creation by mankind, and deliberate commemorative, erected to claim immortality of a moment in the past. These values are the ones he attested as being commemorative, while use, continuity in occupation, and newness, having the sense of completeness being addressed as art value, and appreciating the ageing with deficiencies addressed as relative art value are sub-categories; being the present-day values.290

Following Riegl, historical, archaeological or aesthetic values were included in articles on cultural heritage and interventions.<sup>291</sup> The Declaration of Amsterdam in 1975 states that "In order to enable the population to participate in the drawing up of programmes they must be given the facts necessary to understand the situation, on the one hand through explaining the historic and architectural value of the buildings to be conserved and on the other hand by being given full details about permanent and temporary rehousing." Moreover emphasis on use, aesthetic, artistic and historic values were also given within the text.<sup>292</sup>

<sup>&</sup>lt;sup>289</sup> (Price, Talley Jr., & Melucco Vaccaro, 1996, pp. 69-83)

<sup>&</sup>lt;sup>290</sup> (Price, Talley Jr., & Melucco Vaccaro, 1996, pp. 69-83)

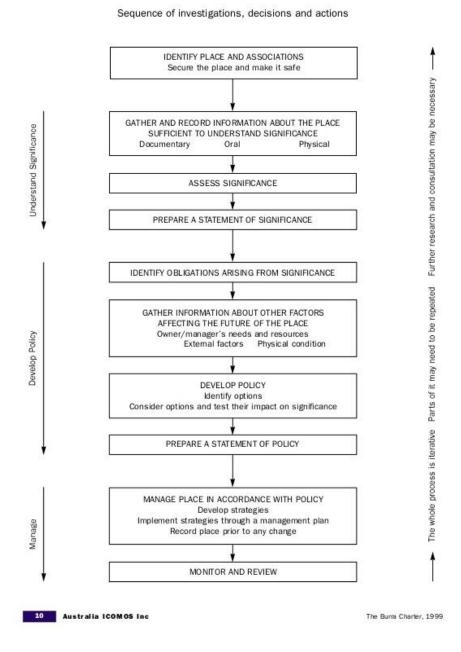
<sup>&</sup>lt;sup>291</sup> (ICOMOS, 1964)

<sup>&</sup>lt;sup>292</sup> (Council of Europe, 1975)

Another addition to the discourse was the ground-breaking Burra Charter prepared by the Australia ICOMOS for places of cultural significance. Article 1 of the charter identifies the *cultural significance* as *aesthetic*, *historic*, *scientific*, *social or spiritual value* for past, present or future generations and shows the place itself as the source. Places of cultural significance are defined also as the provider of *a sense of community* and the living historical records. In order to assess cultural significance, the charter proposes the "Burra Charter Process" in its 6<sup>th</sup> article. The process begins with understanding the cultural significance, then development of policy and followed by management. The 26<sup>th</sup> article gives further information on the process by stating that the studies to understand the place consists of analysis of physical, documentary, oral or other evidence. It also gives specific emphasis on the inclusion of the groups and/or individuals associated with the place by providing opportunities to engage in identifying and understanding the cultural significance of the place.<sup>293</sup>

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<sup>&</sup>lt;sup>293</sup> (The Burra Charter, 1979)



The Burra Charter Process

Figure 43 Burra Charter Process<sup>294</sup>

Although there were no specific actions on values in Turkey at the time, they were emphasised by laws (and later additions to the law). The relative articles of the Law on the Conservation of Cultural and Natural Property (2863) dating back to 1983 are as follows;

<sup>&</sup>lt;sup>294</sup> (The Australia ICOMOS, 1999)

(1) (Amended:14/07/2004 – 5226/1. article)"Cultural property" shall refer to movable and immovable property on the ground, under the ground or under the water pertaining to science, culture, religion and fine arts of before and after recorded history or that is of *unique scientific and cultural value* for social life before and after recorded history.

### (2) Article 15

d) The appreciation of the cost of expropriation shall not be based on the *age, uniqueness and artistic value* of the immovable cultural property.

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f) (Additional paragraph: 17/06/1987 - 3386/5 art.)
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(Amended: 25/6/2009 - 5917/24 art)

... "Upon an application by the owners of the buildings or facilities on these parcels, their current *market value* is determined and paid as per the provisions of Article 11 of Law No 2942" ...

- (3) Article 23 "The following shall be movable cultural and natural property to be protected:
  - a) (Amended: 17/06/1987 3386/9 art.) All kind of cultural and natural property from geological periods, prehistory and recorded history, *having documentary value* in terms of geology, anthropology, prehistory, archaeology and art history reflecting the social, cultural, technical and scientific characteristics and level of the period they belong to." ...
  - b) Due to their importance for national history, documents and goods of *historic value* relating to the National Independence War period and the Foundation of the Republic of Turkey, personal belongings, documents, books, correspondences and similar movables of Mustafa Kemal ATATÜRK. <sup>295</sup>

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http://www.kulturvarliklari.gov.tr/TR,43249/law-on-the-conservation-of-cultural-and-natural-propert-.html, last accessed on February, 2016

In addition to this "Regulation on identification and registration of immovable cultural assets and sites" released in 2012 gives reference to several values to be look for in the process with its 4<sup>th</sup> article;

(So as to be listed) For single buildings; art, architecture, history, aesthetics, local, decorative, symbolic, documentary, functional, material, memorabilia, impression, originality, uniqueness, rarity, homogeneity, as well as maintainability values, (can be sought after) as well as structural condition, material, technological, and stylistic properties (can be sought after). <sup>296</sup>

The importance of these values of cultural heritage was defined in Nara Document on Authenticity in 1994. The 9<sup>th</sup> article states that "conservation of cultural heritage in all its forms and historical periods is rooted in the values attributed to the heritage. Our ability to understand these values depends, in part, on the degree to which information sources about these values may be understood as credible or truthful. Knowledge and understanding of these sources of information, in relation to original and subsequent characteristics of the cultural heritage, and their meaning, is a requisite basis for assessing all aspects of authenticity." Moreover, it continues by saying that authenticity is the qualifying factor for values. The judgement of authenticity can be linked to many factors such as form, design, materials substance function, tradition, technique, location, setting and radically spirit and feeling as well. Thus, the nature of values is subject to different interpretations for having many factors in its evaluation.<sup>297</sup>

Among many of the other interpretations, the one written by Feilden and Jokilehto in 1998 is important in terms of grouping the values. They divide them into two groups: the *cultural value* and the *contemporary social-economic value*. Cultural values depend on interpretations of people. These assessments will determine the general interest rate for the object in question and its surrounding environment. They classify

http://www.resmigazete.gov.tr/eskiler/2012/03/20120313-6.htm, last accessed on August 2016

<sup>&</sup>lt;sup>296</sup> Korunması gerekli taşınmaz kültür varlıklarının ve sitlerin tespiti ve tescili hakkında yönetmelik

<sup>&</sup>lt;sup>297</sup> (UNESCO, 1993)

the cultural values as *identity*, identified through emotional connections of a society to a particular object or place including *age*, *tradition*, *continuity*, *memorial*, *legendary*, *amazement*, *spiritual*, *religious*, *symbolic*, *political*, *patriotic* and *nationalist* characteristics; *technical* or artistic relative value, based on scientific assessments on the importance of design, technical, structural, functional concepts; *rarity*, linking with other similar constructions by type, style, builders, period, region, and determine the sparsity. Contemporary social-economic values, on the other hand, are associated with today's society and its social infrastructure. This group has five sub categories as *economic*, understood as a value that is produced by the asset or conservation work conducted; *functional*, continuity in use or offering a new one; *educational*, containing potential to develop cultural tourism and awareness of culture; *social*, associating with traditional social activities and proper utilization of the resource in modern times; *political*, referring to specific events in the history of an asset in relation to its region or state.<sup>298</sup>

Four years after this publication, The Getty Conservation Institute released "Assessing the Values of Cultural Heritage" in 2002, the first source written directly on the topic of values and assessment. Within the book, Randall Mason states that every conservation decision is based on "values" in "Assessing Values in Conservation Planning: Methodological Issues and Choices". He questions the origin of the values, as before discussed by Alois Riegl, whether they are *intrinsic* (emanate from the artefact and universally recognized) or extrinsic (grow out of the relations between an asset and a community). Moreover he proposes a typology of heritage values with the senior titles as socio-cultural, values of an asset as it has meaning for a defined community; and economic, relative values attached to an asset determined by monetary transactions. Socio-cultural values are identified as historical, depending on an asset's age, its relations to people, rarity/uniqueness, technological qualities, documentary potential; cultural/symbolic, related to affiliations of people with similar background in terms of history, politics, ethnic or work; social, based on shared spatial connections among the people of similar background; spiritual/religious, connected to shared sacred meanings attached to an asset; and aesthetic, meaning visual qualities of an asset. Economic values differ

<sup>&</sup>lt;sup>298</sup> (Feilden & Jokilehto, 1998, pp. 21-26)

from the intangible socio-cultural values in terms of material monetary transactions. The *use* and *non-use* values are the sub-divisions of the senior title. The use value (market value) depends on tradable and price-able properties of an asset, whereas non-use values do not. *Non-use* values often appreciate the *existence*, *use option*, *and bequest values* of an asset under the same category. <sup>299</sup>

In the same book, Theresa Satterfield gives a table of *environmental values* based on studies in "*Numbness and Sensitivity in the Elicitation of Environmental Values*". <sup>300</sup>

Table 4: Table showing Theresa Satterfield's table of values and explanations

Value Category	Definition	
Ecological sustainability	Valuing development that does not compromise ecosystem integrity	
Rights/equity	Deliberations on the rights of nature	
Recreational	Nature as provisioner of a physical challenge	
Philosophical/spiritual/religious	Nature as a philosophical and religious resource, as inspiration for religious/philosophical/spiritual thought and experience	
Aesthetic	Beauty in life and landscape	
Life support	Earth as a biological habitat/home	
Historical/evolutionary	Historical value of nature and landscapes as a record of past processes (geological formation of the earth) and as an evolving system	
Future generations	Recognition of the rights of future generations to a healthy environment	
Population sustainability	Concern about nature as it meets human needs; concern for the equitable division of products of nature among Earth's citizens	
Economic	Commodity value of extracted natural resources	
Employment	Valuing resource-based jobs	
Biodiversity	Valuing the preservation of biodiversity expressed as variety of species (number of species present) and rarity of species	
Place identification	Nationally recognized places—e.g., "the prairies"	

<sup>&</sup>lt;sup>299</sup> (Mason, 2002, s. 5-30)

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<sup>&</sup>lt;sup>300</sup> (Satterfield, 2002, s. 77-101)

Table 4 (cont'd)

Pharmacy	Valuing resources in nature that can cure human illness or have the potential to cure human illness
Wilderness	Valuing the existence of wilderness or wild places
Intrinsic	Value inherent in nature in and of itself, not because it serves some human, biological, or ecological need
Community	Recognition of humans as members of the biotic community and/or valuing the idea of a biotic community
Complexity	Valuing the complexity and intricacy of material systems
Scientific/intellectual/creative	Valuing nature as a basis for creative or intellectual thought
Recovery	Valuing the ability of an ecosystem to heal itself, to recover from natural or anthropogenic devastation
Existence	Valuing the simple possibility that a natural place is out there and in good shape, though one may never see it
Cultural sustainability	Valuing the relationship between cultural and biological sustainability
Cultural symbolization	Wildlife as cultural symbols
Charisma	Valuing nature for its charm and character; emphasis on charismatic megafauna
Oppositional forces	Valuing the struggle between destructive and life-giving forces of nature

In 2003, with the "Icomos Charter – Principles for the Analysis, Conservation and Structural Restoration of Architectural Heritage" it is stated that "value and authenticity of architectural heritage cannot be based on fixed criteria because the respect due to all cultures and also requires that its physical heritage be considered within the cultural context to which it belongs." Moreover, integrity was emphasized since "the value of architectural heritage is not only in its appearance, but also in the integrity of all its components as a unique product of the specific building technology of its time…"<sup>301</sup>

The first publication concerning the issue of "values of cultural heritage" in Turkey dates back to 2005 written by Emre Madran and Nimet Özgönül. As they stated, in order a property to be defined as a cultural heritage and be taken under the legal

<sup>&</sup>lt;sup>301</sup> (ICOMOS, 2003)

regulations, it has to carry certain values and this should grant it with certain qualifications.<sup>302</sup> The values that are identified are given in the table below.

Table 5: Values by Madran&Özgönül $^{303}$ 

Value	Definition
Continuity	Continuing use of cultural asset
Historical	Having connections with historical events or has the age value perspective
Memory	Being inducer of remembrance
Mythological	Being attached to a legend or a story
Artistic&Technic	Covers the design principles, technical, structural and decorational properties, and reflection of its era
Authenticity	Ability to convey the artistic and technic properties until today without a major disturbance
Rarity	Scarce in terms of resemblance
Uniqueness	Without a similar one
Group	Coexistence of similar assets in horizontal or vertical plane. (verticality as archaeological site, horizontality as in the example of building complexes designed to be together)
Plurality	A particular asset type's being in majority in a defined area
Homogeneity	Equal dispersal of similar cultural assets in a defined area
Economic	Having value in economic transactions
Functional	Conserving original function or adaptable to a new use
Traditional	Representing the settled traditions that make up the structure of society, lifestyles and beliefs
Educational	Providing knowledge in terms of cultural asset
Document	Being a source of information

The last two sources, written by Gül Köksal and Ayşem Kılınç, are the sources to be examined for the study of values in the industrial realm of cultural heritage. The acceptance of industrial assets as heritage is rather new as explained before and it is

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<sup>&</sup>lt;sup>302</sup> (Madran & Özgönül, 2005, pp. 61-75)

<sup>&</sup>lt;sup>303</sup> (Madran & Özgönül, 2005, pp. 61-75)

more of a vital importance to decipher the values in industrial realm compared to the other. Its values and significance, as stated in the Dublin Principles with article 2, "of industrial heritage is intrinsic to the structures or sites themselves, their material fabric, components, machinery and setting, expressed in the industrial landscape, in written documentation, and also in the intangible records contained in memories, arts and customs."<sup>304</sup>

The first of the last two sources on industrial heritage is the PhD Thesis written by Gül Köksal with the title "İstanbul'daki Endüstri Mirasi için Koruma ve Yeniden Kullanım Önerileri"in 2005. 10 criteria were determined for the evaluation and reuse of industrial heritage in İstanbul as historical importance, functional importance, cultural importance, symbolic importance, architectural/artistic importance, rarity, continuity, importance for industrial heritage (importance for industrial history with materials, construction or production technique), originality and environmental importance. Originality was divided into five in terms of design, material, construction technique, place and equipment while environmental importance was divided into four as regional, urban, national and international. In accordance with these criteria selected studies were evaluated.<sup>305</sup>

Second source focusing on the issue is MSc Thesis written by Ayşem Kılınç with the title "Value Assessment for Industrial Heritage in Zonguldak" in 2009. The values of cultural heritage were divided into three as intrinsic, extrinsic and economic values. Age, historical, technical/artistic, authenticity/originality, and document values are defined as emanating from a cultural asset itself, and thus, intrinsic, whereas sociocultural, political, aesthetic, educational, symbolic, commemorative, identity, spiritual/religious, mythological, relative art, rarity, uniqueness, group, and plurality values were defined as originating out of the relations between man and an asset, and thus, being extrinsic. Economic values cover use/functional, market and continuity in use values and described to be result of monetary transactions. 306

<sup>&</sup>lt;sup>304</sup> (ICOMOS, 2011)

<sup>&</sup>lt;sup>305</sup> (Köksal, 2005)

<sup>&</sup>lt;sup>306</sup> (Kılınç, 2009)

Table 6 Summary of value assessments by different sources<sup>307</sup>

Kılınç 2009	Age Historical Technical&Artistic Originality Document Extrinsic Socio-cultural Political Aesthetic Educational Symbolic Commemorative Identity Rarity Group Economic Use/Functional Market Continuity in use
Madran& Özgönül 2005	Continuity Historical Memory Mythological Artistic&Technical Authenticity Rarity Uniqueness Group Plurality Homogenity Economic Functional Traditional Educational Document
Köksal 2002	Historical Functional Cultural Symbolic Rarity Continuity Importance for industrial archeology Originality Environmental
Satterfield 2002	Ecological sustainability Rights/equity Recreational Philosophical/ religious Aesthetic Life support Historical/evolutionary Future generations Population sustainability Economic Employment Biodiversity Place identification Pharmacy Wilderness Intrinsic Complexity Scientific/ intellectual/ creative Recovery Existence Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural sustainability Cultural Symbolisation
Mason 2002	Socio-cultural Historical Cultural/Symbolic Social Spiritual Aesthetic Use/Market Nonusc Nonmarket
Feilden& Jokilehto 1998	Cultural Identity Relative Artistic or Technical Rarity Contemporary Socio-economical Functional Social Political
Burra Charter 1979	Acsthetic Historic Scientific Social or Spiritual
Riegl 1902	Age Historical Commemorative Use Arr Relative Art

<sup>&</sup>lt;sup>307</sup> Green; values of the natural environment, brown; national documents studied

### 2.2.3.3 Evaluation of value assessment studies

Through the analysed examples it is possible to state that there are many different articulations of value types. By their nature, age, historical, technical&artistic, document (and thus, educational), group&plurality, authenticity and integrity values can be defined intrinsic as mentioned in couple of the examples. These values emanate from a cultural asset itself depending on its self-structure and prolonged being as individual or in certain amount (although recognized as such by man). On the other hand, socio-cultural and economic values are born out of the interaction of people with an asset. The term socio-cultural represents any relationship among individuals and outcomes of them covering politics, aesthetics, symbolism, myths, commemoration, identity, religion, spiritual motives, and sense of community(can be multiplied). Economic values are generated through monetary transactions and every piece of land/or/an asset has an economic value in that they have the potential to be used. Uses, continuity in use, market and employment values are among these potential conditions.

If an industrial site is the matter of question, depending on its context, the relationship with the nature can grant the site with additional values as *biodiversity*, *ecological*, *geological* and *landscape* values as *intrinsic* ones; *sustainability*(in terms of industry, environment, community and culture) value as *extrinsic* one.<sup>308</sup> The extrinsic values are activated with the initiative of man. The resource depended industrial heritage has the *resource* value that can either be intrinsic in case of a natural source or extrinsic in cases of economic potentials.

As a result, the whole list of values can be divided into two as intrinsic and extrinsic values, and then these can be also differentiated as "the built landscape" and "the natural landscape" when talking about industrial site in relation to natural sources, for the purpose of this thesis. United Kingdom based HCV Resource Network (High Conservation Values Resource Network) identifies four main values. These are biological, ecological, social or cultural values which are considered outstandingly significant or critically important, at the national, regional or global level.<sup>309</sup> Already

<sup>&</sup>lt;sup>308</sup> See Chapter 2 for salt landscapes.

<sup>309</sup> https://www.hcvnetwork.org/about-hcvf, last accessed on April, 2016

including the social and cultural aspects of values, ecological and biological values can be supported with previously examined case studies of salt landscapes. As aforementioned, apart from geological, biological, ecological importance these landscapes possess *landscape value* as well. Not every industrial site possesses such interaction, and thus, this differentiation is based on the coexistence of industry with nature, as in saltscapes previously analysed within the scope of this thesis. The values of the *built landscape* are the result of an assessment made on the properties of the built cultural assets, whereas *natural values* are inherently present in nature. They are either intrinsic and contribute just by "being" or activated through the initiative of man, as does the *sustainability and resource* (though this can be either intrinsic or extrinsic) values. The definitions of these values can be summarized as below.

### I. Intrinsic Values

# I. The Natural Landscape

## a. Geological Value

Geology is the branch of science that is concerned with the processes of land formations of particular areas. A resource-driven industrial site is highly dependent on this value of land. Whether the resource is mined or obtained above the ground, the land formations contribute highly to shaping a culture around the site. (Coal Mines of Zonguldak exhibit a great example for available mining source<sup>310</sup> while a sea saltern is shaped around a marshland or carved on suitable rocks<sup>311</sup>. Both are examples of taking advantage of geological nature of sites.)

<sup>&</sup>lt;sup>310</sup> For more information see (Kılınç, 2009)

<sup>311</sup> See Chapter 2 for examples

# b. Biodiversity&Ecological Value

The criterion (ix) in UNESCO World Heritage Site Selection list denotes that a site is worth preservation when it qualifies "to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals". Furthermore criterion (x) adds "to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation"<sup>312</sup>. Biological process here is related to the plant and animal life of a particular place while ecology is a science that deals with the relationships between groups of living things and their environments in that place. <sup>313</sup> A site can possess these qualities and conserve them while interacting with human presence and activity resulting in the formation of a culture.

## c. Landscape Value

To denote the natural criterion (vii) of the UNESCO World Heritage Site selection list "to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance" can sum up the explanation for the landscape value. A site can qualify such value by having only natural properties or having a formation as the result of man interacting with nature.

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 $<sup>^{312}\,\</sup>underline{\text{http://whc.unesco.org/en/criteria/}}$  , last accessed on May, 2016

<sup>313</sup> http://www.merriam-webster.com/dictionary/ecology, last accessed on May, 2016

# II. The Built Landscape

These values correspond to the intentionally composed man-made properties of the land. (Salt landscapes as mentioned before in chapter 2 are man-made ecosystems, however, the natural properties are not designed or determined by man. The potential exists at the site intrinsically, maybe to a lesser extent, and with the intervention of man they find a better medium to exist.) These can include embankments, houses, sheds, infrastructural systems, production mechanisms and as such.

### a. Age

A cultural asset's having a prolonged being through the course of time is one of the first recognized values. It can be appreciated and understood by every individual of the society. The older an asset gets, the more it gains the age value.

### b. Historical

Historical corresponds to of, relating to, or having the character of history "historical data"<sup>314</sup>. Through its lifetime, an asset witnesses many happenings generating this data either important at individual, national or international scales.

### c. Technical&Artistic

As stated by Madran and Özgönül, it covers an assessment on the design principles, technical, structural and decorational properties, and reflection of an asset's era.<sup>315</sup> In industrial sites, not only architecture but also production techniques and materials are subject to evaluation.

<sup>&</sup>lt;sup>314</sup> http://www.merriam-webster.com/dictionary/historical, last accessed on May, 2016

<sup>315 (</sup>Madran & Özgönül, Kültürel ve Doğal Değerlerin Korunması, 2005)

### d. Document&Educational

Each and every cultural heritage holds information about its era with its form, design, materials, technology, traditions, technique, location, setting and history. Therefore, they provide a source of knowledge (about the other values as well) and potential for its delivery in educational activities.

# e. Group&Plurality

Group value can be explained as the coexistence of similar assets in a defined area. In the case of having a particular asset type in large quantity in a defined area then it includes plurality value as well. Group value can be identified vertical and horizontal as Madran&Özgönül explained before. It can be pre-designed to be as such, or happen to have it transformed in that way. (A building complex can be designed and naturally obtain the value or a traditional setting composed of similar housing units can gain the value for just its achievement on survival.)

# f. Authenticity/Originality

Authenticity, as defined in Madrid Charter, "is the quality of a heritage site to express its cultural significance through its material attributes and intangible values in a truthful and credible manner. It depends on the type of cultural heritage site and its cultural context."<sup>316</sup> It can be sought after as indicated in Nara Document on Authenticity, in an asset's form and design, material and substance, use and function, traditions and techniques, location and setting, spirit and feeling, and other internal-external factors.<sup>317</sup> Though not taken into account as a value type in international sources, it is a criterion for selection of UNESCO World

<sup>317</sup> (UNESCO, 1993)

<sup>&</sup>lt;sup>316</sup> (ICOMOS, 2011)

Heritage list and it was listed as a value by Madran and Özgönül in Turkish sources. It is only natural to include it as it affects the legibility of the cultural asset.

# g. Integrity

"Integrity is a measure of the wholeness and intactness of the built heritage, its attributes and values." 318 An asset can be defined as conserving/or not conserving its integrity when it includes all of its components necessary to the express its other values. It possesses the capacity to reveal the properties and processes that can represent its significance.<sup>319</sup> Not being in the lists of values before, it is a criterion for selection of UNESCO World Heritage just as authenticity, and it also serves to understand the general assessment of other values. In 2013 it was included in the values of cultural heritage list in "ICOMOS Türkiye Mimari Mirasi Koruma Bildirgesi" (Declaration for the Conservation of Architectural Heritage by ICOMOS Turkey). 320

### **B.** Extrinsic Values

#### I. The Natural Landscape

# a. Sustainability

The meaning of sustainability is translated as being "able to last or continue for a long time".321

<sup>&</sup>lt;sup>318</sup> (ICOMOS, 2011)

<sup>&</sup>lt;sup>319</sup> Ibid.

<sup>&</sup>lt;sup>320</sup> (ICOMOS Türkiye, 2013)

 $<sup>^{321}\</sup> http://www.merriam-webster.com/dictionary/sustainability$  , last accessed on July, 2016

### • Environmental & Industrial

In terms of cultural heritage, especially of industrial heritage that is mainly based on natural resources, this can be interpreted as prolonged relationship between the industrial, cultural and biological environments.

# • Community

Environmental & industrial sustainability can also enable the conservation of the related community. The conservation of production techniques, original know-how and sense of belonging in workers can contribute to the organic continuity in an industrial community.

### • Culture

The continuous cycle of production can preserve both tangible and intangible characteristics of industrial heritage. The tradition of salt production, living around the production landscape and associations evolved around an industrial activity can initiate or prolong an existing culture.

# II. The Built Landscape

### a. Socio-cultural

The value is born out of the interaction between a cultural asset and society as "social background, social climate, social duty, social fabric, social issue, social question, social virtue, etc. and the culture of a particular society, people, or period." This senior title has multiple subcategories that can be differently interpreted for other cases. These include:

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<sup>&</sup>lt;sup>322</sup> (Kılınç, 2009)

- Political: The value is attached to an asset when it becomes a symbol for a government or any ideological issue in a material form.
- **Aesthetic:** Aesthetic value is given by people to a heritage asset upon the observation of special quality in art or beauty.
- **Symbolic:** Symbol is defined as an action, object, event, etc., that expresses or represents a particular idea or quality.<sup>323</sup> Thus, a cultural heritage can gain this value by representing a faith or a doctrine.
- Commemorative: An asset has a commemorative value when it enables to preserve a moment from the past at individual, national or international scales.
- **Identity:** Identity is a concept that gathers a group of people or a community and keeps them together. As Feilden and Jokilehto described before, it represents emotional connections of a society to a particular object or place including age, tradition, continuity, memorial, legendary, amazement, spiritual, religious, symbolic, political, patriotic and nationalist characteristics.
- **Spiritual&Religious:** When a cultural asset has attachments to spiritual or religious meanings, it possesses the value. At first glance it might seem unrelated to an industrial site, however, as an example given before, the Wieliczka Salt Mine gains an important part of its reputation due to the religious carvings of the miners.<sup>324</sup>
- **Mythological:** The value can be obtained when an asset or a place is attached to a legend or a story.
- **Rarity:** Rare is defined as seldom occurring or found.<sup>325</sup> A cultural asset might be a rare example in terms of design, material, technique, site etc.

<sup>323</sup> http://www.merriam-webster.com/dictionary/symbol, last accessed on May, 2016

<sup>&</sup>lt;sup>324</sup> For more information http://www.wieliczka-saltmine.com/, last accessed on May, 2016

<sup>325</sup> http://www.merriam-webster.com/dictionary/rare, last accessed on May, 2016

• **Uniqueness:** A self-explanatory term, unique means the only one, single example of such kind.

## b. Economic

Economic values depend on monetary transactions or exchanges that are happening or having a potential to happen. Every place on earth, and thus, a cultural asset, is subject to economics.

- Use: It refers to the valuation of an asset's potentials by consumers. Use value can also cover the "potential use", non-use in other sense as explained by David Throsby, including the existence value born out of an appreciation of a cultural asset's mere existence; option value depending on the possibility of consuming the services to be offered; and bequest value for accepting a heritage as a legacy.<sup>326</sup>
- Market Value: Every property has a potential to be traded as a commodity in a market or through tourism income. Therefore, each has a market value.
- Continuity: The prolonged occupation of cultural heritage contributes to its image and eases the process of conservation. (Think of an example of Galleria Vittorio Emmanuelle II in Milano, or any other historical shopping spot. They are almost always occupied by worldwide famous images as Gucci, Versace, or even McDonald's. It is the case of a prestige, a trial for a claim for longevity, being historical, solid and successful, and thus, aiming for an extended trust beyond time.) As stated in the Dublin Principles Article 8 for active industrial structures or sites "it must be recognized that their continued use and function might carry some of their heritage significance and provide

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<sup>&</sup>lt;sup>326</sup> (Throsby, 2002, pp. 101-117)

- adequate conditions for their physical and economic sustainability as a living production or extraction facilities."<sup>327</sup>
- **Employment:** Active use of a cultural heritage has the potential to create job opportunities. In the case of industrial heritage, resource-driven jobs can contribute to the conservation of the cultural asset and intangible heritage associated with it. (Inclusion of local community, continuity in employment traditions, passing on the know-how)

### C. Resource Value

Resource value is neither a value only present in the built landscape nor it is a value solely existing in a natural environment. It is intrinsic in case of a natural source (such as salt) existing in the nature; however, is extrinsic as well, since both economic and cultural associations create a resource. Typically resources are materials, energy, services, staff, knowledge, or other assets that are transformed to produce benefit and in the process they might be consumed. In terms of industrial heritage that depend on natural sources (intrinsic), or knowhow information and workers (extrinsic), as long as they are in use for production they provide these resources. When they are not active, they still accommodate the potential for the resource intact. (In the cases of abandoned salinas, the rehabilitation projects both induced the salt resource to be used and salt producers' community, culture and know-how techniques that correspond to resource of knowledge.) Moreover, the historical industrial sites provide resource of building stock, heritage asset and a new cultural medium.

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<sup>&</sup>lt;sup>327</sup> (ICOMOS, 2011)

# **CHAPTER 3**

# **İZMİR AND ÇAMALTI SALTERN**

"Once you have killed

the suitors in your house with your sharp sword,

by cunning or in public, then take up

a well-made oar and go, until you reach

a people who know nothing of the sea,

who don't put salt on any food they eat,

and have no knowledge of ships painted red

or well-made oars that serve those ships as wings."

Homeros, Odysseia,

Book Eleven: Odysseus Meets the Shades of the Dead<sup>328</sup>

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 $<sup>^{328}</sup>$  <u>https://records.viu.ca/~johnstoi/homer/odyssey11.htm</u> , last accessed on January, 2016

Apart from being home to Homeros, the writer of the first western literature sources Iliad and Odyssey, İzmir has always been important throughout the history of Mediterranean region.

# 3.1 İzmir

# 3.1.1 Location

İzmir is situated in Turkey's west, within the boundaries of the Aegean Region having a population of 3.965.232 (2011 TÜİK, ADNKS).<sup>329</sup> It is surrounded by the Aegean Sea in the west and today has 30 districts inside the boundaries of the metropolitan municipality including Dikili, Bergama, Kınık, Aliağa, Foça, Menemen, Çiğli, Karşıyaka, Bayraklı, Bornova, Kemalpaşa, Bayındır, Ödemiş, Kiraz, Beydağ, Tire, Torbalı, Selçuk, Menderes, Buca, Gaziemir, Karabağlar, Balçova, Konak, Narlıdere, Güzelbahçe, Seferihisar, Urla, Çeşme and Karaburun.

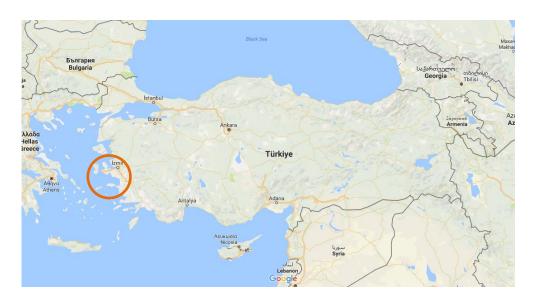


Figure 44 Google Maps image, İzmir, Turkey<sup>330</sup>

http://www.izmirkulturturizm.gov.tr/TR,72613/genel-bilgileri.html, last accessed on June, 2016

 $<sup>\</sup>frac{330}{https://www.google.com.tr/maps/@39.3126403,27.5061239,5z?hl=tr}, last accessed on June, 2016 + \frac{1}{3} \frac{1}{3$ 

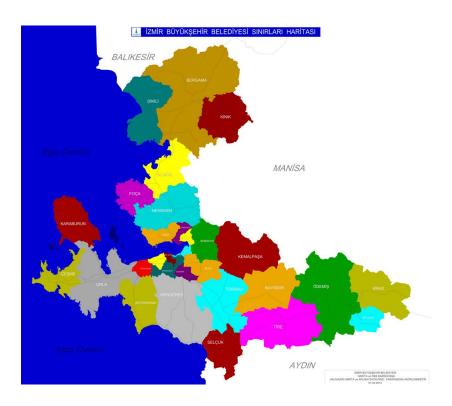


Figure 45 İzmir Metropolitan Municipality boundaries and its districts<sup>331</sup>

The city is located in a gulf surrounded by mountains and is the 3<sup>rd</sup> biggest city in the country. It is surrounded by Madra Mountains and Balıkesir municipal boundaries in the north, Kuşadası Gulf and Aydın province boundaries in the south, Çeşme peninsula and İzmir Gulf in the west, and Manisa province boundaries in the east. There are three streams flowing inside the city boundaries; the lower stream of Gediz River meeting the sea in the south of Foça, Bakırçay meeting the sea in Çandarlı Gulf and Küçük Menderes meeting the sea in the west of Selçuk. The first of two of these streams provide water for the fertile plains of Gediz and Bakırçay.<sup>332</sup>

Summers are hot and dry while winters are lukewarm in the city, representing the typical Mediterranean climate. The annual average temperature is 14-18 °C in the coastal areas. The hottest months are July (27.3 °C) and August (27.6 °C) and during August, the highest level of humidity reaches up to %49. The coldest months are January (8.6 °C) and February (9.6 °C). The average temperature decreases up to 7 °C

<sup>331</sup> https://www.izmir.bel.tr/BuyuksehirSinirHaritasi/125/172/tr, last accessed on June, 2016

http://www.izmirkulturturizm.gov.tr/TR,72613/genel-bilgileri.html, last accessed on June, 2016

during winter due to north and northwest marine air mass. As it can be concluded from the average temperatures, snowfall is very rare except the snow on the surrounding mountains. The average rainfall is 700 mm. annually and more than %50 of this happens during winter and %40-45 during autumn-spring.<sup>333</sup>

With the potential that İzmir contributes, the Aegean region is the second biggest industrial area after the Marmara region. When we look at the industry in the city, we see that there is a highly developed industry based on agriculture. Textiles, garments, food, beverages, beer, tobacco and fodder are among the most important branches of the industry. In addition, iron and steel, petrochemicals, automotive, cement, footwear, fertilizers, agricultural machines and ceramic industry produce both for the domestic and foreign markets. There is also an important Petroleum Refinery in Aliağa. One of the most important branches of the industry in the city is the salt production in Çamaltı Saltern producing raw salt and it provides almost %30<sup>335</sup> of the salt needed in the country with approximately 600.000 tons a year. 336

The city owes all of its potentials to its geographical location and advantages. As a port city, it has always provided raw materials for industry and good transportation facilities enabling the continuity of its industrial importance.

### 3.1.2 History

### 3.1.2.1 Pre-Industrialization

Located in western Anatolia, the history of the city dates back to 8-9 thousands years with current foundlings from the excavations held in Yeşilova Tumulus.<sup>337</sup> There are other archaeological sites within the boundaries of the city marking different periods

333 https://www.izmir.bel.tr/Izmir%E2%80%99inCografyasi/220/195/tr, last accessed on June, 2016

 $<sup>\</sup>frac{334}{\text{https://www.izmir.bel.tr/Izmir\%E2\%80\%99inEkonomikYapisi/126/179/tr}}$  , last accessed on June, 2016

<sup>335 (</sup>Özbek Sönmez & Onmuş, 2006)

<sup>&</sup>lt;sup>336</sup> Information was obtained from the administration of Çamaltı Tuzlası, Binbir Gıda Tarım Ürünleri Sanayi ve Ticaret A.Ş.

http://yesilova.ege.edu.tr/genel-bilgi.html, last accessed on June, 2016

of settlements such as ancient Smyrna in Bayraklı dating back to 3000 B.C. and the one established on Pagus Mountain, Kadifekale, after the invasion of Great Alexander.<sup>338</sup>

With its geography and naturally protected port, the city went through Lydian Kingdom, Persian Empire, Hellenistic Period (after the invasion of Alexander the Great), Roman Period, Byzantine Empire, 39 and experienced many attacks until its final concurrence by the Turks in 1426. 40 There were two other important port cities nearby, Miletus and Ephesus that were affected by the alluvial deposits carried by the rivers the Büyük Menderes and the Küçük Menderes and became inner locations in the area, and thus, losing their importance in the region. İzmir, on the other hand, was established near the mouth of the river Gediz, a river that had a rather slower affect compared with the other two. In order to prevent her from the destiny of others, Ottoman Empire decided to change the path of this river in 1886<sup>341</sup> from the southern direction of the salt production areas towards west. This was not the first time when the path of the river was changed. In many different maps different routes of Gediz is still observable. Therefore, it never lost its place as an important port city and eventually became one of the two most important cities of the 19<sup>th</sup> century Ottoman Empire with its potential to support industrialization initiatives.

# 3.1.2.2 İzmir during 19<sup>th</sup> and 20<sup>th</sup> centuries and Its Industrial World

As explained in Chapter 3, İstanbul and İzmir were the ones that experienced the changes of industrialization the most. There were many reasons for the accumulation of industrial activities in the city. The most important one of these reasons was the vast hinterland the city possessed. From this fertile hinterland, products, such as olives, figs and grapes, were exported to foreign markets. Moreover, the city owned an effective port connected to highways and railways providing ease in transport of

339 http://www.apikam.org.tr/Bagimsiz/izmirin-tarihi, last accessed on June, 2016

<sup>&</sup>lt;sup>338</sup> (Martal, 1999)

<sup>&</sup>lt;sup>340</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>341</sup> (Abensur-Hazan, Apostolou, Boulanger, Maeso, & Lesvigne, 2013)

goods.<sup>342</sup> The fact that the city was a huge market itself was another supporter of its situation in industrial realm at the time. <sup>343</sup> All these reasons enabled İzmir to go to the forefront after İstanbul granting the name as the "*Paris of the East*" as a modern city.

The city's standing out as a Mediterranean port took place in two separate phases. The first phase occurred with the short expansion during the first half of the 16<sup>th</sup> century while the second expansion, longer and more important, expansion started in the middle of the 18<sup>th</sup> century.<sup>344</sup> This second expansion came with the effect of industrialization initiatives happening in Europe at the time. Western European countries, pioneered by Britain and France, started to influence other countries' economy during this century. In this environment, Izmir and its surrounding area became one of the most concentrated areas of capitalist relations led by Britain and France.<sup>345</sup> In this century people from Europe came temporarily to İzmir. However, most of them stayed forming the "Levantine" population of the city. They brought their capital, specialization, production tools and investment plans to İzmir as well as İstanbul during the industrialization attempts of the Empire.<sup>346</sup> Due to the active environment of the following 19<sup>th</sup> century, many factories began to be established in the city. 347 The traveller Christophe Aubin, a person appointed by Napoleon in order to identify trading potentials of the regions outside his rule, visiting the city in 1812 defined İzmir as "the only city in Turkey deserving a definition of a commercial centre."348

One of the reasons of this environment was the presence of the afore-mentioned foreign groups in the city having extensive links with the other ports of the Mediterranean. The lack of strong ties with the *payitaht* (capital city) also promoted

<sup>344</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>342</sup> (Tekeli, 1992, pp. 125-140)

<sup>&</sup>lt;sup>343</sup> (Karataş, 2006)

<sup>&</sup>lt;sup>345</sup> (Kerimoğlu, 2013, pp. 111-119)

<sup>&</sup>lt;sup>346</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>347</sup> (Kerimoğlu, 2013, pp. 111-119)

<sup>&</sup>lt;sup>348</sup> (Kasaba, 1994, pp. 1-23)

the situation. Due to this rather independent nature, the city was given rights to maintain its relationships with the rest of the Mediterranean. Thus, it always had a cosmopolitan population. This population rose significantly towards the end of the century. In 1847 there were 15.000 foreigners, and the number rose up to 50.000 in 1880.<sup>349</sup>

Another reason was the strong nature of İzmir as a port city. This advantage of transportation was supported and widened with the construction of the first railways of Anatolia that was built between İzmir and Aydın by a British Company. With a concession from the state, it was started to be built in 1857 and completed in 1866.

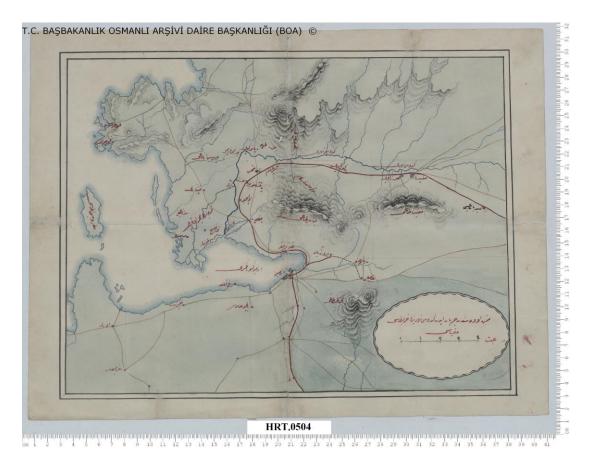


Figure 46 Map showing the İzmir Cassaba Railway, 1923<sup>350</sup>

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<sup>&</sup>lt;sup>349</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>350</sup> BOA, HRT Dosya No: 504 Gömlek No:2

In 1870, Kızıllı – Buca and in 1876, Gaziemir – Seydiköy lines were added to this line. In addition to them, Torbalı – Tire –Bayındır lines and the extension of Sarayköy were established in 1883. The constructions concluded with Ödemiş, Söke, Denizli, Çivril, Dinar and Eğridir lines that were built in1906 and started to operate in 1912<sup>351</sup> forming the southern line of the railways. The northern line İzmir-Manisa-Turgutlu(Cassaba) was built in 1864 by İzmir-Cassaba Railway Company. Its construction started from Basmane station in 1864, continued to Menemen and Manisa in 1865, and finalized with Turgutlu (Cassaba) in 1866.<sup>352</sup>

With all these potentials of the city and its cosmopolitan structure, at the end of the 19<sup>th</sup> century, İzmir was unquestionably the biggest export port of the Empire; and the second after İstanbul in import.<sup>353</sup>

At the beginning of the 20<sup>th</sup> century, the city was under pressure as much as the rest of the Empire. Although the new century was faced with wars in a row, industrial activities did not disappear suddenly. According to the industrial statistics of 1913-1915, there were 282 businesses in the Empire, 62 of which were located in İzmir.<sup>354</sup> The majority of them belonged to Rums and other non-Muslim groups.

During the Independence War (1919-1922), İzmir had witnessed the brutal side of the fight and this affected the city in a bad way. The "Levantines", holding most of the foreign trade interaction, emigrated and the strong ties of the city loosened. Moreover, many factories had to be closed due to the war. As the war ended, the city was left in a bad situation. Nevertheless, its potentials were known. Thus, the 1st Economic Congress of Turkey was organized in İzmir from 20th November 1922 till 4th February 1923. A break was given to the congress and the delegates gathered again on 17th February, this time with the name of "İzmir Economic Congress". The decisions of the congress were to encourage the industry, increase industrial loans,

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<sup>351 (</sup>Köşgeroğlu, 2005)

<sup>&</sup>lt;sup>352</sup> (Ceylan, 2010)

<sup>&</sup>lt;sup>353</sup> (Kasaba, 1994, pp. 1-23)

<sup>&</sup>lt;sup>354</sup> (Martal, 1999)

<sup>&</sup>lt;sup>355</sup> (Karataş, 2006)

granting exemption from customs duty for goods to be imported as raw materials needed for industry, and opening schools to train technical staff. The effect of this event and the related decisions was grand for the city. At the time, there were only 10 factories in İzmir, whereas they rose up to 129 in 1933. Even the first formation among the industrialists occurred in İzmir in 1927 when the "İzmir Industrial Association" was established. All these events continuing up to 1950s were accepted as initiatives to identify the city. 357

The World War II affecting the whole country also affected the industrial initiatives in İzmir. In this environment where the war economics prevailed, industrialization lost its importance to agricultural activities in fig, tobacco, textile, forestry and flour factories. The war ended the sudden migration flows and industrial burst affected the city boundaries. The centre of the city included Karşıyaka, Bornova, Buca, Çamdibi, Altındağ, Gültepe, Örnekköy, Balçova and Yeşilyurt and with loose links there were settlements in Çiğli, Gaziemir and Narlıdere. The growth towards the northern part, including Çiğli, was especially due to the inauguration of the Military airport. This period was characterized more importantly with the planned development acts and these not only granted the city with new features but also the Aegean Region as a whole. A little later, in 1970s, Pınarbaşı, Bornova, Gaziemir, Çamdibi, Kemalpaşa and Çiğli became the industrial zones of İzmir. Moreover, with the 1972 Master Plan of İzmir, the area between Çiğli settlement and the airport was designated as organized industrial zone (Atatürk OSB today). This designation defined the northern development axis of the city that still continues today.

The second immigration waves during the 1980s, industry growing faster than planned and scatter houses around these industrial areas transformed İzmir into an uncontrollably growing city after 1980s. Grown that much, the city was given its

<sup>357</sup> (Karadağ, 2014, pp. 141-150)

<sup>359</sup> (Karadağ, 2014, pp. 141-150)

<sup>361</sup> (Karadağ, 2014, pp. 141-150)

<sup>356</sup> Ibid.

<sup>&</sup>lt;sup>358</sup> (Karataş, 2006)

<sup>&</sup>lt;sup>360</sup> (Karataş, 2006)

"metropolitan" status in 1981.<sup>362</sup> After 1990s the main industrial axis of the city becomes clearer with the previous northern expansion including Karşıyaka-Çiğli-Menemen-Aliağa. Today, the aforementioned organized industrial zone provides an important medium for the industrial organizations.<sup>363</sup>

All in all, it can be seen from the long history of İzmir that it has always been an important port city dazzling with trade and industry. The potential of the city was given by its natural properties and developed by the merchants creating one of the most important cities of the Empire. Its importance was recognized and taken further during the Republic and today the city still conserves its potential in industry. The northern industrial zone that formed after the 1950s, including the Çamaltı Saltern near Çiğli, will continue to provide a medium for the industry probably for many years to come.

<sup>&</sup>lt;sup>362</sup> (Karadağ, 2014, pp. 141-150)

<sup>&</sup>lt;sup>363</sup> (Karataş, 2006)

# 3.2 Çamalti Saltern

"...And it is an exemplary saltern. For if a creature happens to fall in, it shall be transformed into **salt** with the order of the God..."

Tuzla-i Melemeniye

Evliya Çelebi, Seyahatname, 1521<sup>364</sup>



Figure 47 Aerial Photo of the Saltern (by Photographer Turgut Tarhan)<sup>365</sup>

 $^{364}$  (Kent ve Seyyah: Evliya Çelebi'nin Gözüyle İzmir ve Çevresi - I, 2013, p. 13) Text was translated by the author.

 $^{365}\,\underline{\text{http://www.atlasdergisi.com/kesfet/doga-cografya/tuz-cenneti.html}}\;,\,last\,accessed\,\,on\,\,August\,\,2016$ 

#### 3.2.1 Location and Production

The Çamaltı Saltern is situated in the north of İzmir, Turkey. It is a part of the vast Gediz Delta (also referred as Menemen Plain). The 1/5 of this plain covers coastal areas and these coastal parts are characterized by salty marshes and wetlands. The plain is covered with the former traces of the Gediz River, which today meets the sea right above the Çamaltı Saltern by meandering through the plain. Surrounding the wetlands there are agricultural activities, settlements and industrial zones in the area. The saltern is inside the northern expansion of the city, characterized by industrial activities as mentioned before in history of industrialization of the city, within the boundaries of Menemen and Çiğli districts and Sasalı town, but its administration belongs to Çiğli Municipality today.

The saltern is surrounded by İzmir inner gulf in the west, town of Sasalı, Sasalı Nature Park in the east, Menemen district and İzmir Bird Sanctuary in the north. The surrounding area gains its importance with Atatürk Organized Industrial Zone (Atatürk OSB), military airport, Sasalı Nature Park and İzmir Bird Sanctuary. It is possible to reach the site by İZBAN (is a suburban network) and bus, with a car, or by bicycle. It is forbidden to enter with vehicles to the Bird Sanctuary, therefore, many tourists prefer the "BİSİM" (municipal bicycle renting system that covers the coastal region of the city). The gate and the entry of the sanctuary are within the boundaries of the saltern.

The coastal region around the salt production is characterized by shallow marshlands of the Gediz Delta, housing many important species in its fresh and salty waters. The delta covers 40.000 hectares, 20.400 hectares of which are wetlands with different ecosystems. Homa Lagoon, Çilazmak Lagoon and Kırdeniz Lagoons are the three important areas among these wetland ecosystems that are of high importance. These ecosystems' values are widely known and accepted. The site is registered as a RAMSAR Area, Special Bird Area, Important Natural Area, Wildlife protection Area, 1<sup>st</sup> Degree Archaeological Site, and 1<sup>st</sup> Degree Natural Site.

<sup>&</sup>lt;sup>366</sup> (Buldan, 2014, pp. 39-41)



Figure 48 The saltern and its location

This highly fragile ecosystem is reinforced by the vast salt production. The process follows a year-round procedure just as the natural cycle of the environment. Production, or cultivation, of salt from the sea water starts in March or April.

The previous season's residues are taken away first and then the waste water is channelled to the sea. The surfaces of the pools are covered with special type of impermeable clay that is found at the site. This clay is flattened with rollers and if any damage occurs, these are fixed before taking the sea water inside. With the help of the pomp, the sea water is taken into the cold water pools in March. These pools are usually 2-2.5 or 4-4.5 degrees baumé. 367 This level is raised to 6 with the help of the sun. The water is transferred to next pools named "cold water reserves". The remaining empty ones are refilled with sea water once again. The water in cold water reserve pools is kept in 6-9 degrees baumé. During this waiting period the impurities such as CaCO3, Fe2O3 concentrate at the bottom. The water is then transferred into next "reserve water pools" where there are 9-13, 13-17 and 17-20 degrees baumé levels. At this step, CaSO4 concentrates at the bottom and then the water is channelled into "hot water pools" upon reaching 20 degrees baumé. In these pools water is kept up to 25 degrees baumé. These hot water pools are the mother liquor resources of the crystallization pools. Once in crystallization pools, water is kept up to 28.5 degrees baumé to let the salt's sedimentation happen. 368 The tympana are used to direct the water in to the related parts of the channels. All the water flowing during this procedure is based on *gravity*. There are different levels in the channels and in the pools in order to use the gravity work for the easy channelling.

At the end of this process, the concentrated salt is collected with the help of seasonal workers and machines. In case of a thick layer of salt occurrence, then special cutters are used since the man-power remains below the force required despite the shallowness of the pools. However, before the mechanization the harvest depended solely on the workers. They used to form small piles of salt in the crystallisation pools. Then these were loaded to trams being carried by the horses to the elevator.

<sup>&</sup>lt;sup>367</sup> Degree Baumé is used to specify the amount of salt in an area. Information obtained on site.

<sup>&</sup>lt;sup>368</sup> Madencilik Özel İhtisas Komisyonu Raporu <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a> <a href="http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619">http://www.kalkinma.gov.tr/Lists/zel%20htisas%20Komisyonu%20Raporlar/Attachments/133/oik619</a>

The elevator was lifting the salt up and forming the salt pile as a triangular prism. It had its own road parallel to the shoreline and it was located at the end of the crystallisation pools. Workers were organizing its shape around the pile it created. The salt was then carried to the port by an electric tram running along the shore line, parallel to the elevator road. Today, the collection in the pools is performed by salt collecting machines transferring the raw salt to the rows of conveyor belts that deliver it to one of the elevators eventually. The pile is still controlled by the workers at the end.

Since the crystallisation pools are now dominated by the collecting machines, the number of workers necessary to collect the salt was decreased. In a 1982 dated paper the number of the permanent workers was given as  $562^{369}$ , while today the number is only 90. Moreover, the number of seasonal workers was approximately 1.500 and after the mechanization this number decreased dramatically to  $250.^{370}$ 

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<sup>&</sup>lt;sup>369</sup> (Şen, 1985)

<sup>&</sup>lt;sup>370</sup> Information obtained from the company.

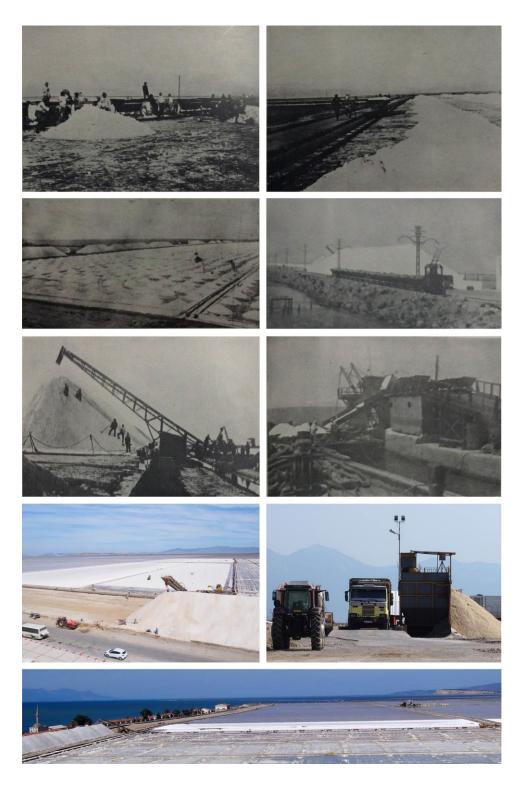
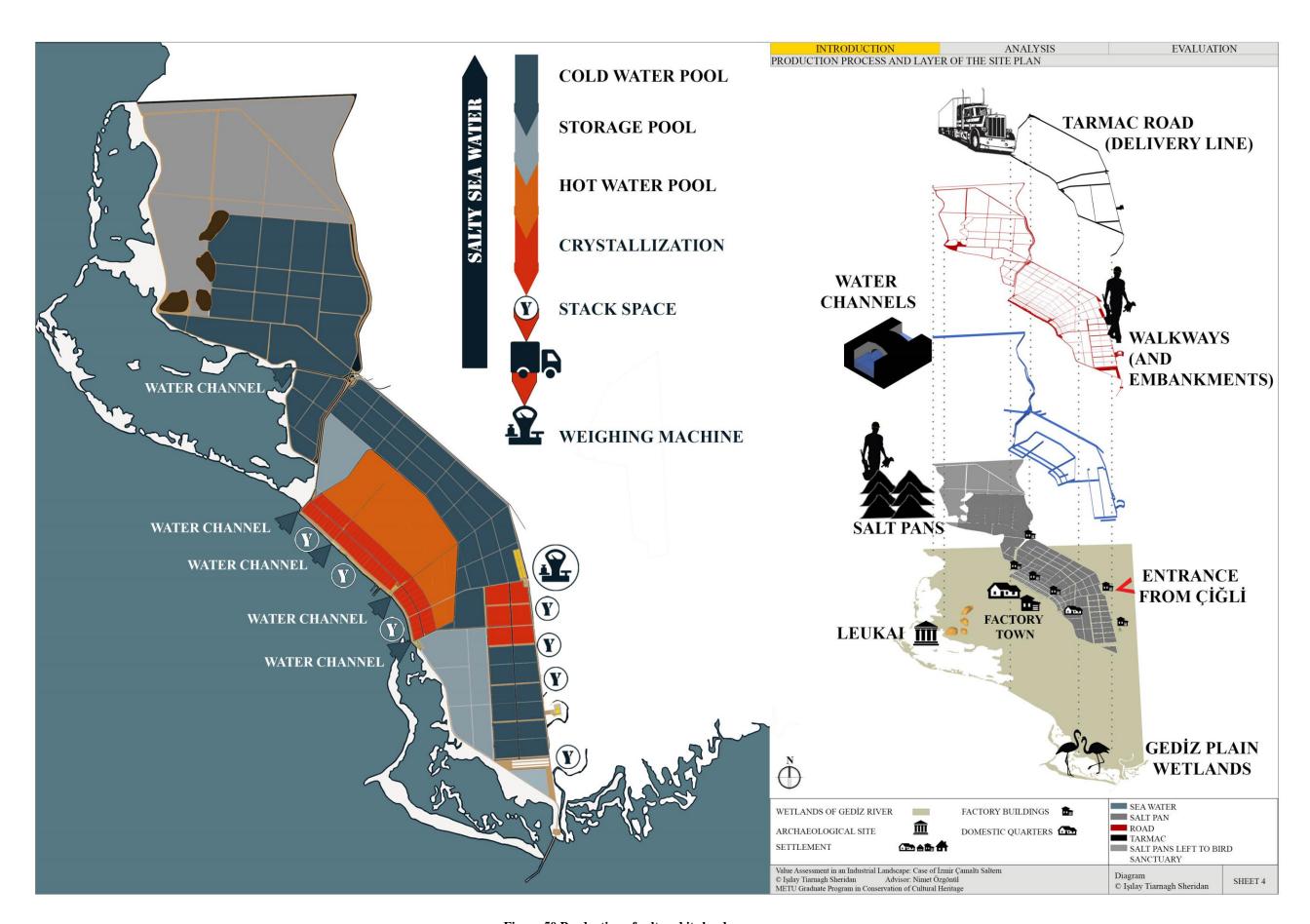


Figure 49 From top left to bottom right; salt was loaded to the trams, trams being carried by the horses to the elevator, salt piles in the pools, electric train carrying the salt to the port, elevator, port 1-1946<sup>371</sup>, modern elevator, trucks delivering the salt, the system of collection along one of the crystallisation pools; collector on the right, the conveyor belts, elevator on the left-2016<sup>372</sup>

<sup>&</sup>lt;sup>371</sup> (Egemen, 1946)

<sup>&</sup>lt;sup>372</sup> Author, August 2016



 $Figure\ 50\ Production\ of\ salt\ and\ its\ landscape$ 

#### **3.2.2 History**

The most dominant feature of the territory lies within its nature; nevertheless, there is also a unique *cultural landscape* that has been shaped by the *interaction of man* with his surrounding environment.

The area of the saltern has been feeding the mankind for thousands of years with its salt. Its story with salt starts probably from the 4<sup>th</sup> century BC and continue up until today. There are no current documents showing a significant interruption in its history. The aforementioned procedure of salt production is still applied today with technological advancements included. The saltern is the carrier of all the changes and challenges of its own history with its built landscape today. To understand the remnants of this past, one has to first understand the stages of its evolution. Within this evolution, there are some clear turning points, and therefore, the information on the history of the saltern and its surrounding environment will be explained in five periods.

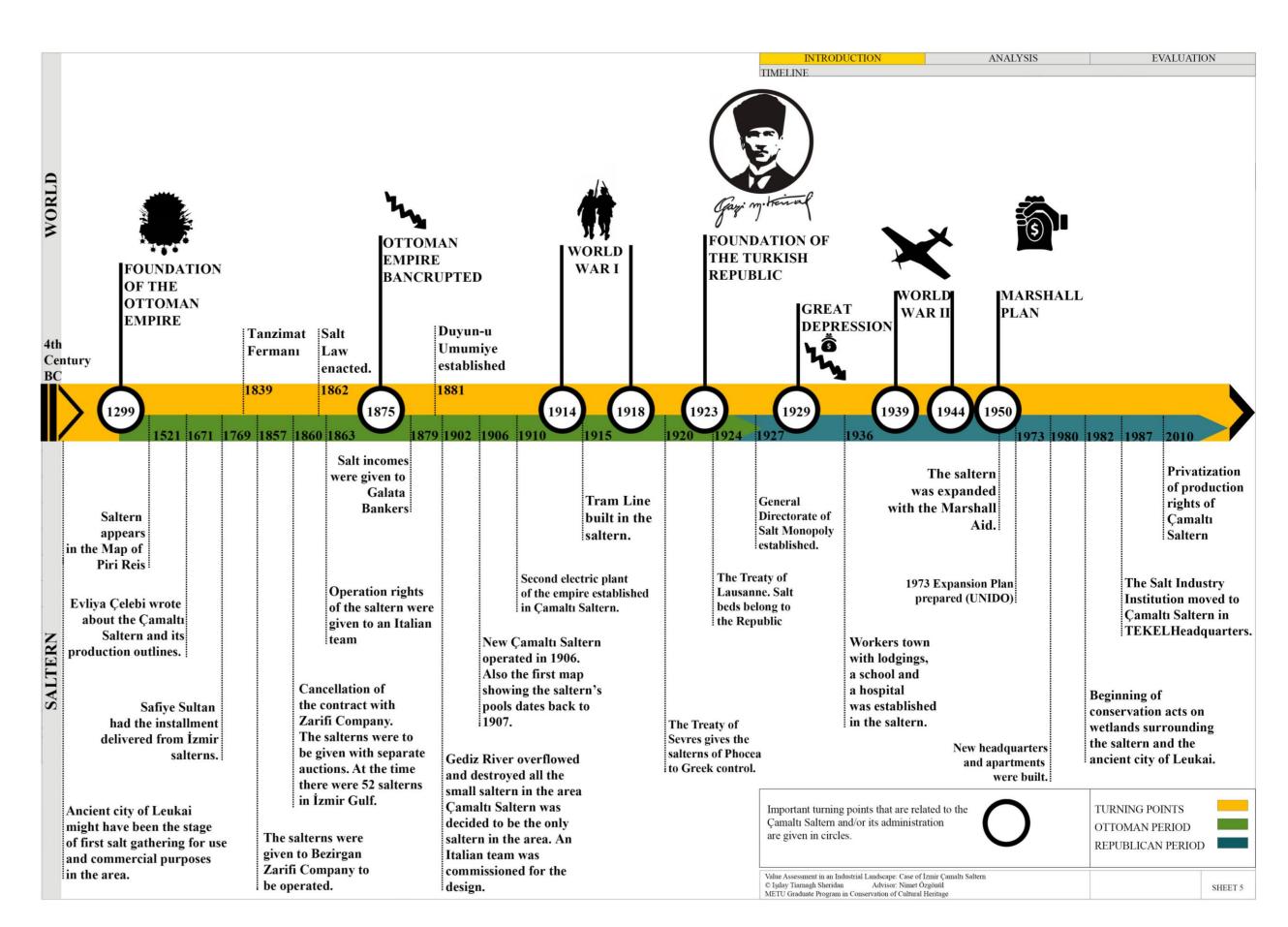


Figure 51 Timeline

#### 3.2.2.1 Before 1863

The earliest record of salt production in Camaltı Saltern can be traced back to 4th century BC with the ancient city of Leukai. . The ancient writers Strabo, Plinius and Diodoros only mention its name. Since the area had been a restricted area for a very long time during the Turkish Republic, conducting archaeological studies were impossible. Therefore, the information on this city is scarce.<sup>373</sup> Numan Tuna states that it may have had its name given due to the surrounding salt marshes since Leukai means in ancient Greek language "the white ground". Situated on two of the three hill tops inside Çamaltı Saltern's northern extension, named Lodos Hill and Abdül Hill, the city was founded in 4<sup>th</sup> century B.C. The location of the three hills has always been surrounded with shallow marine waters and marsh grounds. This geographical advantage enabled the dwellers of the site profit from the sea products, hunt of the wetland animals, alluvial soil farming and eventually salt production. 374 There are no evidences of the salt production today.

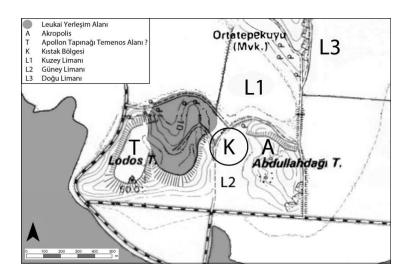


Figure 52 Map of three hills with Leukai<sup>375</sup>

<sup>&</sup>lt;sup>373</sup> (İzmir Arkeoloji Müzesi: Leukai, 2016)

<sup>&</sup>lt;sup>374</sup> (Tuna, 2013, pp. 301-327)

<sup>&</sup>lt;sup>375</sup> The map was created by Numan Tuna. (Tuna 2013) Translation of the legend from top to down; Leukai settlement area, Acropolis, Apollon Temple temenos area, Connection area -from sea to land, North port, South port, East Port.

Further records mention that the salt was collected along these shores during the Macedonians.<sup>376</sup> In the reports of the archaeological site survey conducted on the prehistoric and protohistoric periods of the Menemen region it is stated that the formations of salterns and lagoon fishing should have started during the Roman Period latest. Moreover, it adds that the later 13<sup>th</sup> century written sources stated the flow of Gediz River towards the sea and the existence of lagoons with salterns all over the shores of the Gediz Plain.<sup>377</sup> The name of the saltern was known as "*Halike*" (Though no reference exists for the meaning, the word means salt tax in Ancient Egypt<sup>378</sup>) during this Byzantine Period.<sup>379</sup> The saltern was also used by the Seljuks after their conquest.<sup>380</sup> However, there are currently no illustrations for these periods reached during the study.

The first appearance on a document revealed with the Ottoman Empire, on a map in the world famous book of Kitab-1 Bahriye by Piri Reis, geographer, admiral and cartographer of the Ottoman Empire. In his book of Kitab-1 Bahriye, finished in 1521, we can see the *-possible-* location of the saltern in the shape of an almost crescent near the old bed of Gediz River. This shape can be the indicator of a lagoon in a marshland where salt production becomes naturally possible. Such coastal salt lagoons were one of the main means of production even during the prehistoric period and these places can be seen all around the Mediterranean. Although Piri Reis only states the area as "Menemen Siğları" meaning the "Menemen shallows" he customized the visualization different from regular sea shores indicating a pool-like structure.

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http://www.cigli.gov.tr/default\_b0.aspx?content=1008, last accessed on July, 2016

<sup>&</sup>lt;sup>377</sup> (Çınardalı-Karaaslan, 2016)

<sup>&</sup>lt;sup>378</sup> (Foorbes, 1955, p. 171)

<sup>&</sup>lt;sup>379</sup> (Doğer, 1998, pp. 260-262)

<sup>380</sup> http://www.cigli.gov.tr/default b0.aspx?content=1008, last accessed on July, 2016

<sup>&</sup>lt;sup>381</sup> (Harding, 2013)

<sup>&</sup>lt;sup>382</sup> The text was translated by Dr. Funda Adıtatar, İzmir Institute of Technology.

<sup>&</sup>lt;sup>383</sup> (Şahin İ., 2011)



Figure 53 Map of Piri Reis for İzmir and possible illustration of Çamaltı Saltern<sup>384</sup>

According to this map, the saltern was located approximately on the west side of Sasali-Süzbeyli route and corresponds to a 6 km long shoreline. Near the saltern there also exists a village named after the salt production as Tuzçullu. The village gains its name from the salt production of the Çamaltı Saltern. The name of the saltern was known as Menemen Saltern during the Saruhanoğulları and Ottoman Empire. The village's name also had variations as Tuzcu, Tuzcueli, or Tuzçilli as it is today. All these names start with the word "Tuz" meaning salt. The first name means "a person who produces salt", the second means "hand of the salt producer", and the last one means "with salt freckles". The villagers also support this thesis by saying that their ancestors were "Bohurcu (Buğurcu)" people, meaning people who breed camels for the transportation of salt. Doğer states that the villagers were probably a Yuruk community placed near the saltern by the Ottoman Empire in order to work in Çamaltı, the biggest saltern of the western Anatolia during the Ottoman

<sup>&</sup>lt;sup>384</sup> (Reis, 2002, p. 131)

<sup>&</sup>lt;sup>385</sup> (Şahin İ., 2011)

<sup>&</sup>lt;sup>386</sup> (Doğer, 1998, pp. 260-262)

<sup>&</sup>lt;sup>387</sup> Translated by the author.

reign, and they were freed from the taxes in exchange for their work and transportation services in salt.<sup>388</sup>

Almost 150 years after Piri Reis, Evliya Çelebi, the famous Ottoman traveller who wrote the travelogue *Seyahatname*, mentions the name of the Çamaltı Saltern as *Tuzla-i Melemeniye* (Saltern of the nearby settlement of Melemen). He wandered around the region in 1671-72 and wrote on the saltern as such:

"...ol refikler ile kıble tarafına düz şahralar içre ılgın ağaçları ormanları temaşa iderek menzil-i tuzla-i melemen-i eminde meks idüp temaşa etdik beş akçe miri emanetdir kim hass-ı hümayundur cemi'i germiyan ve aydın ve şarhan ve karahisar vilayetlerine ve'l-hasıl yigirmi dörd sancak yire her sene nice kerre yüz bin deve yükü tuz bundan müstevli olur azim emanetdir yetmiş seksan adem ile enüp binüp hükumat idüp mal-ı padişahi ve kendüye on kise fayizi tehsil ider a'la hükumetdir ve ibret-nüma bir tuzladır zi-ruh kısmından bu tuz içre her ne mahluk düşse bi-emrillah tuz olur..."

"... o arkadaşlarla birlikte kıble yönünde düz ovalar içinden ılgın ormanlarını seyrederek Melemen Tuzlası mevkii'ne ulaştık. Melemen tuzlası hass-ı hümayundan beş yüz akçelik miri emanettir. Bu tuzla, Germiyan, Aydın, Saruhan ve Karahisar vilayetleri ile yirmi dört sancağa her sene kaç yüz bin deve yükü tuz gönderilen büyük bir hastır. Yetmiş-seksen adam ile padişahın malını idare edip kendisi de yüzde on hisse alan güzel bir işletmedir. Ve ibretlik bir tuzladır. Zira içine bir canlı düşse Allah'ın emriyle tuz olur..."389

"... together with those friends, watching the tamarix forests through flat plains in the direction of Quibla, we reached to Melemen Saltern location. Melemen Salt-works is a government property worth of five hundreds akçe run by beneficiaries. This saltern is a nice enterprise transporting several hundred thousand camel loads of salt to twenty-four sanjaks including Germiyan, Aydın, Saruhan and Karahisar provinces. With seventy to eighty

<sup>&</sup>lt;sup>388</sup> (Doğer, 1998, pp. 260-262)

<sup>&</sup>lt;sup>389</sup> (Kent ve Seyyah: Evliya Çelebi'nin Gözüyle İzmir ve Çevresi - I, 2013, p. 13)

men, the enterprise is a nice one running the padişah's property and gets ten percent of the shares. And it is an exemplary saltern. For if a creature happens to fall in, it shall be transformed into salt with the order of the God..."<sup>390</sup>

After his visit to the saltern, Çelebi did not write on any other settlements or spots until he arrived in Melemen. Moreover, according to Şahin, considering the area's travel routes at the time, it would be easier for him to go to directly from Foça (Phocaea) to Melemen instead of going to the saltern first and then to Melemen. For these reasons, it is most probable that he deliberately wanted to see the saltern, the *Tuzla-i Melemeniye* (Çamaltı Saltern).<sup>391</sup>

As Çelebi mentioned, Melemen Saltern was a government property run by beneficiaries like the case in many other salt beds within the Empire. "With seventy to eighty men, the enterprise is a nice one running the padişah's property and gets ten percent of the shares." This system is called mukataa, land allotted from the state or from a foundation owned piece of land and rented by private individuals called "mültezim"s as explained in Chapter 2. We know that this practice was very common and also it was performed in İzmir salterns. From a document dating back to 29 Şaban 1182(Hijri Calendar), 8 January 1769, we get the information that Safiye Sultan's instalment from the İzmir mukataa was delivered to mutasarrıf (administrative chief of a sanjak or brigade in Ottoman Empire<sup>392</sup>) Mehmet Bey. Considering the fact that Safiye Sultan died in 1619, the delivery was probably addressed to her vaqf in 1769.<sup>393</sup>

<sup>390</sup> Translated by the author.

<sup>&</sup>lt;sup>391</sup> (Şahin İ., 2011)

<sup>&</sup>lt;sup>392</sup> (Örenç, 2006, s. 377-379)

<sup>&</sup>lt;sup>393</sup> Ersin Doğer mentiones that the taxes of the Menemen had been collected by the Hafsa Sultan Vaqf since the 16th century. During the 18th century the citizens of the area complained about the illegal collectors under other names. The government found them right and stated that the tax could only be collected by the Hafsa Sultan Vaqf. (Doğer, 1998, p. 87) Bearing in mind that the sultan died in 1534, it can be deduced that Safiye Sultan's installment paper states a similar situation.



Figure 54 Document showing the payment 394

Maps dating to the same century (18<sup>th</sup>) show salt marshlands between Foça and İzmir named as *Salines*, meaning "the salterns" and give an evidence of salt production in the area at the time.

<sup>&</sup>lt;sup>394</sup> Ottoman Archives C.ML. Dosya No: 7 Gömlek No: 274. Document translated from Ottoman Turkish to Modern Turkish by Inst. Abdürrahim Özer, Bilkent University Department of History



Figure 55 The map of the Gulf and the city of Smyrna (saltern in detail)- $18^{\text{th}}$  century  $^{395}$ 

<sup>&</sup>lt;sup>395</sup> (Abensur-Hazan, Apostolou, Boulanger, Maeso, & Lesvigne, 2013, p. 91)



Figure 56 Detailed map of Comte de Choiseul – Gouffier's journey from the Meander to the Gulf of Edremit – 18th century  $^{396}$ 

 $<sup>^{396}</sup>$  (Abensur-Hazan, Apostolou, Boulanger, Maeso, & Lesvigne, 2013, p. 199)

Although *mültezim* enterprises for these salt beds were very common at the time, they generated many problems for the Empire to cope with during the 19<sup>th</sup> century. Therefore, in 1857 all the salterns' management were given to a company with the patronage of the Bezirgan Zarifi<sup>397</sup>, an important banker during the reign of Abdülhamid.<sup>398</sup> This attempt was not as successful as it was thought to be. Thus, the contract was cancelled in 1860 and every salt bed was to be given with separate auctions with a document dated 20 Muharrem 1277(Hijri) 8 August stating that the saltern contracted to Zarifi Bezirgan Company from the year of 1273 (1856/57) would be abolished and given with separate auctions.<sup>399</sup>

In this 19<sup>th</sup> century, the most important export product of the area was salt, so the demand to operate the salt pans was high. Moreover, it created immense employment opportunities with no less than 1.500 seasonal workers for harvest, 32 boats with a crew of 10 (320 in total) and up to 800 port staff to conduct loading-unloading in the silos. Therefore, after the abolishment of the contract in 1860, Çamaltı Saltern was modernized due to its potential and importance. Beginning with 1863, the architecture and landscape of the Çamaltı saltern changed at a more different pace than before. Change in the ownership, state debts, modernization, wars, the establishment of the Turkish Republic and further political and economic factors induced the change. These changes in between 1860-2016 can be grouped in four periods in accordance with the corresponding thresholds as 1863-1923, 1923-1960, 1960-1982 and 1982 so as to link the history with the built landscape more easily.

<sup>&</sup>lt;sup>397</sup> A\_}MKT\_MVL Dosya No:118 Gömlek No:99. Document translated from Ottoman Turkish to Modern Turkish by Inst. Abdürrahim Özer, Bilkent University Department of History.

<sup>&</sup>lt;sup>398</sup> (Akan, 2014)

<sup>&</sup>lt;sup>399</sup> A\_}MKT\_MVL Dosya No:118 Gömlek No:99.

<sup>400 (</sup>Karatosun Bahtiyar, 2008)

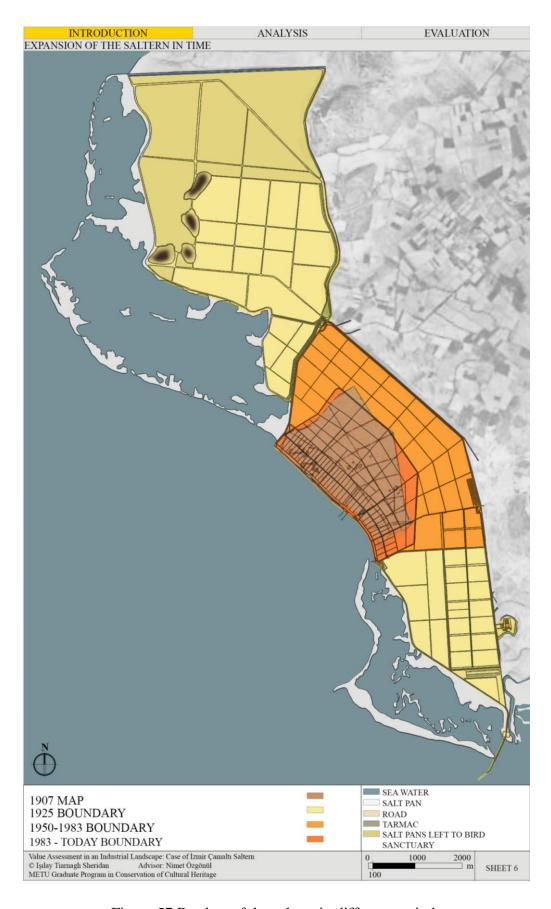


Figure 57 Borders of the saltern in different periods

## 3.2.2.2 First Period (1863-1923)

In 1862, the Salt Law was enacted and salt monopoly was directly given to *Rüsumat emaneti* (Administration of Taxes). One of the most important actions of it was to establish salt depots in various places.<sup>401</sup> At the time, there were 52 small salterns starting 14 miles from the shores of Foça (Phocaea), from the beginning of the current estuary of the Gediz River, in Çamaltı and Ada salt beds. The collected salt at the end of the process used to be transported to the port in Foça on boats. There were four salt depots built in the port of Foça and the collected salt was stored in them to be later loaded to the ships under the supervision of the warehouse officers.<sup>402</sup>

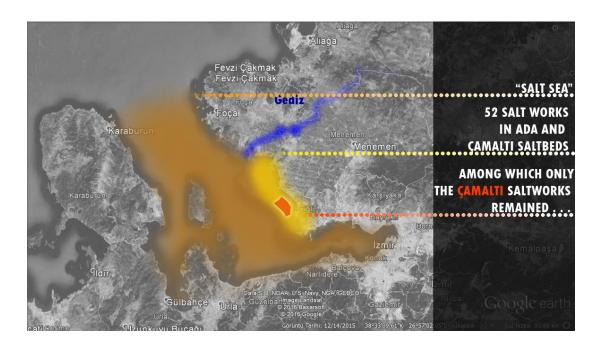


Figure 58 Relative boundaries of the area once called salt sea, Ada and Çamaltı salt beds and 1925 boundary of the Çamaltı Saltern

During the period, the new estuary of the Gediz (former 17<sup>th</sup> century bed, filled itself and Gediz started to flow towards the inner gulf in the south direction as in the map of Piri Reis) was created in 1886 in order to prevent the river fill the gulf of İzmir<sup>403</sup>

<sup>402</sup> (Karatosun Bahtiyar, 2008, pp. 32-35)

<sup>&</sup>lt;sup>401</sup> (Doğruel & Doğruel, 2000, p. 1)

<sup>&</sup>lt;sup>403</sup> (Abensur-Hazan, Apostolou, Boulanger, Maeso, & Lesvigne, 2013)

from the southern direction, the one indicated as in Piri Reis map, of the Çamaltı Saltern to today's western direction. As obvious from the maps, the River changed its bed often since 16<sup>th</sup> century AD. A 1887 dated map in French named *Dérivation du Guédiz - Plan Général - Des travaux exécutés pour la protection des salines d'Ada et de Tchamalti* (Derivation of Gediz – General Plan – Work performed for the protection of the saltern in Ada and Çamaltı) also shows a new arrangement of the Gediz river in its new position on the upper side of Kozluca to protect the Ada and Çamaltı Salterns. This map indicates the sea inside the gulf as *Marais Salans* meaning the "Salt Sea".



Figure 59 Maps of the derivation of the Gediz River bed joined,  $1887^{404}$ 

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<sup>&</sup>lt;sup>404</sup> PLK\_p\_6583\_0001 and PLK\_p\_6583\_0002 joined.



Figure 60 Detail from the derivation map, "Marais Salans" meaning the "Salt Sea"

Before the change of Gediz shown on the map, the right to produce salt was taken by the Italians in 1863 for the Çamaltı Saltern. The Italians built the first organized pool systems and production facilities in the area. In a map organized by Arife Karadağ from the Captain Copeland's 1887 dated bathymetry map this new pools can be observed.

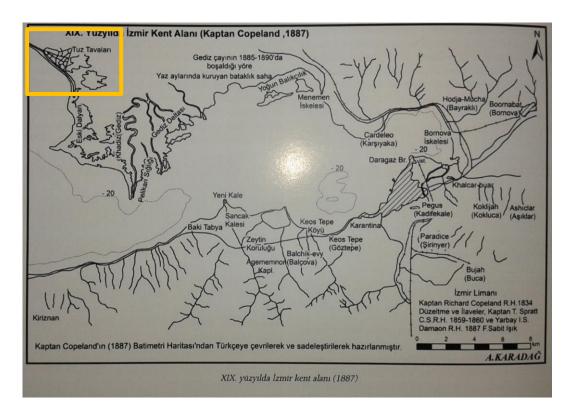


Figure 61 Map prepared by Arife Karadağ from Captain Copeland's 1887 dated bathymetry map, on the top left there are salt pans by the Italians. (The text "Tuz Tavaları" can be translated as salt pans) 406

 $<sup>\</sup>frac{\text{405}}{\text{http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx}}\text{, last accessed on July, 2016}$ 

<sup>&</sup>lt;sup>406</sup> (Karadağ, 2014, p. 140)

Another map that the formation of the salt-pans can be observed is the 1888 dated map of the Gulf of İzmir prepared by the French Navy. The name of the study was Atlas des Ports Etrangers, Smyrne, 1888, Cinquième Livrasion, 1889. From this map it can be deduced that another lagoon existed between the Homa and the Çilazmak Lagoons, which can correspond to the Piri Reis's indication of a crescent, and the Çamaltı Saltern was established by dividing this natural pool into pans of salt production. There is no name for the salt pans on the map; however, while all the lagoons were named as "pêcheries", meaning the fisheries, "débarcadère", meaning the port, is written in front of the salt-pans possibly used for the transportation of salt. The northern corner of the first core of the saltern and its rather straight shoreline might have derived from the boundaries of this lagoon. These boundaries can be traced from this map onwards in 1907 and 1925 maps corresponding more or less to each other.

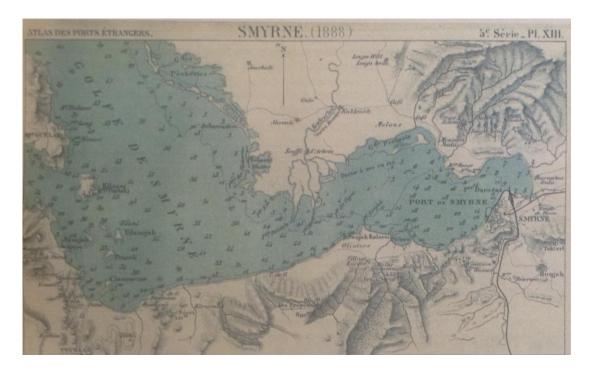


Figure 62 The map of the Gulf of İzmir prepared by the French Navy, 1888<sup>407</sup>

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<sup>&</sup>lt;sup>407</sup> (Atay, 2003, s. 53)



Figure 63 Detail from the map showing the divided lagoon and the fisheries of Homa on its north and Cilazmak on its south  $^{408}$ 

When the crisis of the Ottoman finance became serious in 1881, *Düyun-u Umumiye* was established. The salt production revenues were transferred to this administration according to Muharrem Enactment<sup>409</sup> in 20.12.1881. All of the salt incomes of the Foça salterns belonged to *Düyun-u Umumiye* at the time and they produced 300.000 *okka*<sup>410</sup> worthy of 250.000 Ottoman Liras. In order to collect the salt revenue, there was a directorate office in Foça port.<sup>411</sup> Towards the end of the first 10 years of this directorate, some improvement projects for the salterns were prepared. In between 1892-1894, a cooperation was established with France to enhance the production and administration of salt. However, due to lack of financial sources, the projects were

<sup>&</sup>lt;sup>408</sup> (Atay, 2003, s. 53)

<sup>409 (</sup>Gürsoy-Naskali, 2012)

<sup>&</sup>lt;sup>410</sup> An Ottoman weight measurement unit. 1 okka = 1282,945 gr

<sup>&</sup>lt;sup>411</sup> (Karatosun Bahtiyar, 2008)

never realized.<sup>412</sup> Nevertheless, after the overflow of Gediz, the saltern gained a new aspect in design and technology eventually.

The Gediz River overflowed in 1902 destroying most of the rather small salterns in the area. After this unfortunate event, a decision was made to have one single saltern instead of small ones in the region. As a result, larger Çamaltı Saltern was established in its former position in 1906 with a team from Italy and with the Italian technology<sup>413</sup> that is still visible today.

A very clear example of this is the existence of the waterwheels called "tinpuna" or "tumpana" in Turkish. The engines for the lifting of water in the saltern dating back to the Italian era are still called as such without any translation. The word derives from the word "Tympanum<sup>414</sup>" as described by Vitruvius in his book of "Ten Books on Architecture". There are 4 tympana buildings in the saltern today and we can observe 3 of them in a 1925 dated map. The 4<sup>th</sup> one is seen first in 1949 aerial photo and has 2 tympana inside. The wooden parts of these tympana are changed at intervals but the system and the buildings are conserved according to the information gathered on site. The illustration of the tympanum used in the Çamaltı Saltern was given by Medih Egemen in his book. Türkiye'de Tuzculuk ve Çamaltı Tuzlası. Its compartments are not linear as in the case of the waterwheel on Tagus River mentioned before<sup>415</sup> but spiral. These are operated with electricity today.

<sup>&</sup>lt;sup>412</sup> (Doğruel & Doğruel, 2000, pp. 110-129)

<sup>&</sup>lt;sup>413</sup> (Doğruel & Doğruel, 2000, pp. 110-129)

<sup>&</sup>lt;sup>414</sup> (Vitruvius, Mimarlık Üzerine On Kitap, 2005)

<sup>&</sup>lt;sup>415</sup> See Chapter II – 2.2.1 Industrial Revolution

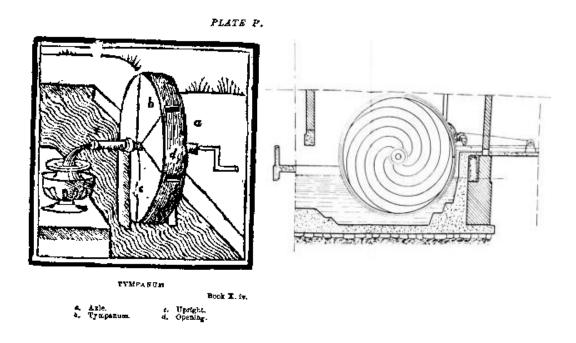


Figure 64 Tympanum of Vitruvius $^{416}$  and Typanum schematic in Çamaltı Saltern,  $1946^{417}$ 



Figure 65 Examples of active tympana in Çamaltı Saltern (Author, March 2016)

Another remnant from the Italian era is seen on the saltern's landscape. In a 1907 dated map showing the areas to be irrigated by Gediz, we see the earliest plan indication of the pools corresponding more or less to the core of the saltern today. On

 $<sup>\</sup>frac{\text{416}}{\text{https://www.loebclassics.com/view/LCL280/1934/pb\_LCL280.393.xml}}$  , last accessed on March, 2016

<sup>&</sup>lt;sup>417</sup> (Egemen, 1946)

top of these pools it is written "Çamaltı Saltern" in Ottoman Turkish. The salt village Tuzçullu has its name written as "Tuzculu/lar".

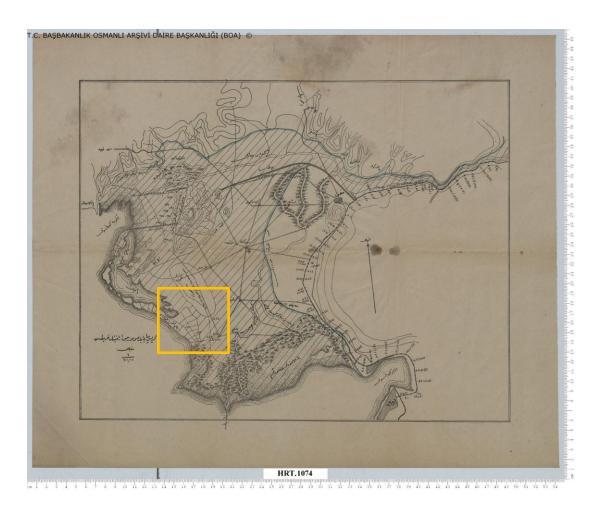


Figure 66 Map of the areas to be irrigated by Gediz, 1907<sup>418</sup>

Following the Italian team's technology and new establishment, an electric power plant was built in 1910, possibly to operate the new system. The electricity services were also given by private foreign enterprises at the time with the permission from the Empire on the basis of a law enacted on 10 July 1910 as "kamu yararına ilişkin imtiyazlar" (privilege in view of public benefit). 419 Upon the new establishment and

<sup>&</sup>lt;sup>418</sup> HRT\_h\_01074\_00001. Gediz Çayı Meyil Rakımının Haritası, Scale 1/100.000. Document translated by Leyla Etyemez Çıplak.

<sup>&</sup>lt;sup>419</sup> (Anonymus, 1981)

development, the saltern raised its capacity to 160.000 tons becoming a regular business. The 118kW production facility of the saltern was one of the first power plants in Turkey with its capacity. Following this, other plants were established in İzmir in 1912; for the DDY (state railways) with 82 kW, for the İzmir Wine Factory with 54 kW and for the Wool Fabric Factory with 80 kW capacities.<sup>420</sup> It is obvious that the saltern had the highest power supply of its time.



Figure 67 Old power plant 421

Right after the establishment of the saltern's new structure, the Empire started to experience great loss in lands and salt beds thereof. After Trablusgarp and Balkan Wars, a significant portion of the Ottoman salterns were lost. Soon after started the World War I and Çamaltı Saltern became precious. During the war starting from 1914, those who worked for the saltern were usually minorities. They were paid more than other workers in other operations and had 48 hours paid leave of absence. The continuity in salt production of the Çamaltı salt bed enabled the inhabitants of

<sup>421</sup> (Egemen, 1946)

<sup>&</sup>lt;sup>420</sup> (Dolun, 2002)

İzmir access to salt almost %50 cheaper than İstanbul. 422 One year after the beginning of the war, a tram line was also established in 1915 in the saltern so as to gather the salt collected from the pools. The document of this tram line states that the military needed 1 thousand kilos of salt to be transported to Bandırma. However, it says that the weather conditions were bad at the time and the nearest train station of Çiğli was 14 kilometres away. Therefore, there was a need for the transportation of the trams and railways from the iron mines to Çamaltı Saltern.

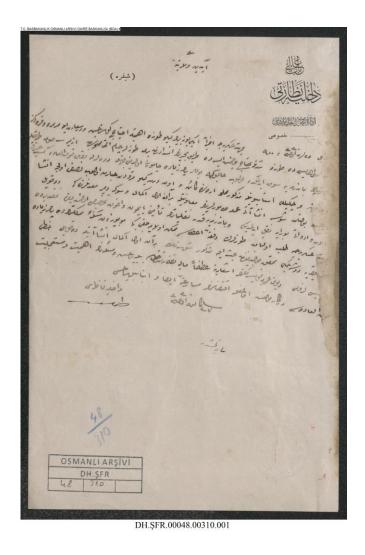


Figure 68 Document of the tram line, 1915<sup>423</sup>

<sup>422</sup> (Beyoğlu, 2012, pp. 201-207)

<sup>&</sup>lt;sup>423</sup> BOA, DH.ŞRF. Dosya No: 48 Gömlek No: 310

The saltern had already fed mankind thousands of years at the time and it was obvious that it will continue to do so with its infinite source. The area was so fertile in salt that it had a separate article, the 81<sup>st</sup> article, in the *Treaty of Sévres*, dating to 10 August 1920, one of the most important salt reserves of the Ottoman lands was to be given to Greek administration.<sup>424</sup> However, the *Büyük Millet Meclisi* (Turkish Parliament) condemned the treaty.

### **3.2.2.3** Second Period (1923-1960)

With the Law No. 558 in 26.02.1923, the *İnhisarlar İdaresi* (Monopoly Administration) became state monopoly from 01.03.1923. After the establishment of the Turkish Republic in 1923, salterns continued to operate under *Tuz İnhisarı* (Salt Monopoly). With the Treaty of Lausanne signed on 24 July 1924, salt was transferred to the Republic officially.

Two 1925 maps obtained from SALT Online showing the areas of "Tuzla Burnu" and "Tuzçilli" give the earliest clear evidence of the historical core that is preserved today. Different from the 1907 map, the area has a more regularized pool system and indication of the existing architectural edifices giving more information about the site. Most of the saltern can be seen in one map; only the northern corner is indicated in the other one. Here, the indication of an abandoned saltern, "metruk tuzla mahali", inside the Homa Lagoon reinforces the potential use of these natural pools for salt cultivation.

 $<sup>^{424}</sup>$  See Chapter 2 for the detail of the article.  $\underline{\text{http://treaties.fco.gov.uk/docs/pdf/1920/TS0011.pdf}}, \\ \text{last accessed on March, 2016}$ 



Figure 69 Tuzçilli 1/125.000 – 1925 and Tuzla Burnu 1/125.000 – 1925  $^{425}$ 

http://saltresearch.org/ , last accessed on March, 2016

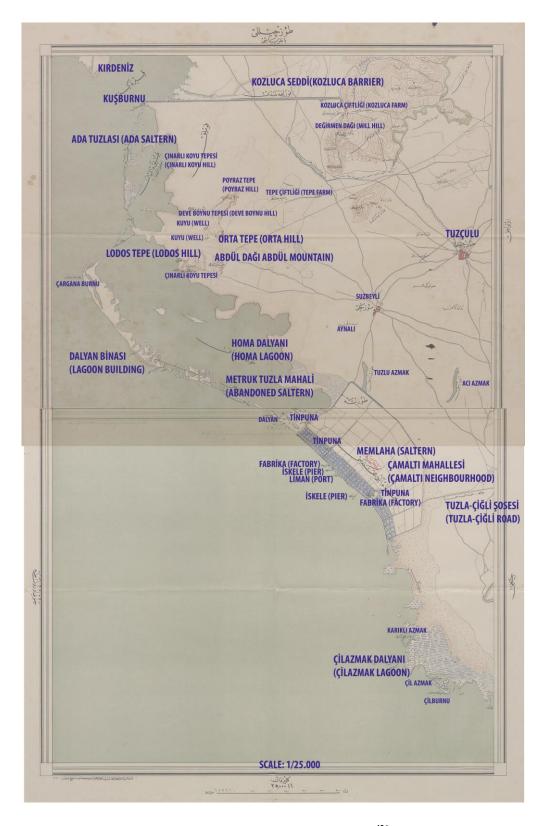


Figure 70 Translated and joined maps 426

 $<sup>^{\</sup>rm 426}$  The maps were translated by Prof. Ömür Bakırer and Leyla Etyemez Çıplak in 2015.

In 1927 June 1, *Tuz İnhisarı Umum Müdüriyeti* (General Directorate of Salt Monopoly) was established and centred in Ankara. Sales and exports of sea, lake and rock salt were taken under the state monopoly. The most important salt bed was *İzmir Çamaltı Saltern* in 1931<sup>427</sup>, and thus, projects started for the workers living in the area immediately, as in the *examples of model industrial towns*. Modernity not only exalted the image of the factory via its creation of new architectural language, but also started to generate its own spaces in need, such as the model towns. The main point in creating these towns was to establish dependency on the factory by means of providing desirable conditions for an *industrial community*. With these paternalistic instincts and aims in creating a community, *lodgings*, *hospital*, *school with five classrooms were built as well as the ateliers* in Çamaltı Saltern in 1936.

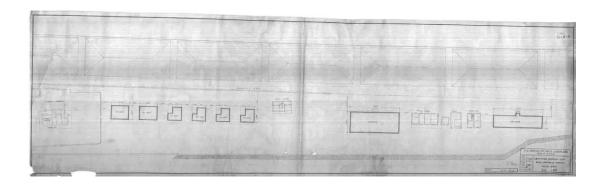


Figure 71 Site plan with manager house, lodgings, school, furnace, and hospital, 1936 (TTA Gayrimenkul A.Ş. Archive)

Another establishment was the *new tram line* built in 1935 for the transportation of salt inside the saltern.

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<sup>&</sup>lt;sup>427</sup> (İnan, 1988, p. 174)







Figure 72 Trams for salt transportation – 1946 (Egemen, 1946)

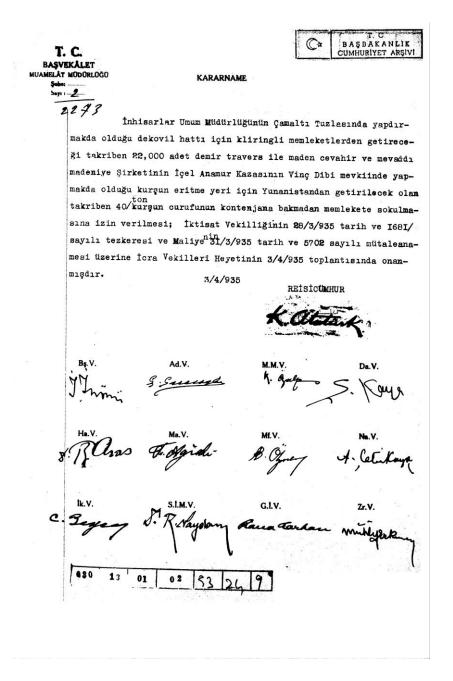


Figure 73 Document for the construction of the tram line – 1935 (Republic State Archive)<sup>428</sup>

At the time there was an economic crisis in 1929 affecting the whole world as well as Turkey and the World War II followed it in 1939. Moreover, the Turkish Republic was just built and had no infrastructure in producing the modern construction materials. Only the production facilities of the saltern were built with metal structures and solid brick infill. The lodgings, the school, the hospital and other

<sup>428</sup> BCA, 030\_0\_18\_01\_02\_53\_24\_009

domestic quarter edifices were built with local materials as solid brick and stone masonry. Reinforced concrete was used only in the construction of some of their slabs.

According to the news in 1942 dated "İktisadi Yürüyüş" journal, upon the takeover of the saltern by the İnhisarlar İdaresi, many investments were made and export rose in a significant amount. However, during this period the saltern conserved its 1925 boundaries.



Figure 74 1949 Aerial Photo (HGK Archive)

When the World War II ended, the period of introversion ended as well. In 1947 there was Marshall Plan to support the countries that suffered through the war. With the help of the aid received, the saltern was expanded in between 1950-1952. Its capacity was raised from 160.000 tons to 400.000 tons.<sup>430</sup> In 1950, Çamaltı Saltern was the only one exporting the salt. With the direct help, start credit, fuel tanks were

<sup>429 (</sup>Doğruel & Doğruel, 2000, pp. 110-129)

<sup>&</sup>lt;sup>430</sup> (Doğruel & Doğruel, 2000, pp. 110-129)

ordered from European countries. With domestic allocations, the first and the second parts of the expansion works of the water collection pools and the third part of the expansion consisting of the crystallization pools were completed. Concrete shipment pier was also constructed. Moreover, Çiğli-Çamaltı road construction was initiated.<sup>431</sup>



Figure 75 1953 Aerial Photo, expansion shown with arrows (HGK Archive)

## **3.2.2.4** Third Period (1960-1985)

In 1973 an application was made to United Nations Development Organization. To analyse the production conditions, a team conducted a research and proposed adjustments to raise production capacity to 1.000.000 tons with UNIDO report.  $^{432}$  However, although some alterations were made starting from 1975, the production capacity is 500.000 - 600.000 tons today.

<sup>&</sup>lt;sup>431</sup> (Türkiye'de Marşal Planı, 1952, p. 53)

<sup>&</sup>lt;sup>432</sup> (Doğruel & Doğruel, 2000, pp. 110-129)

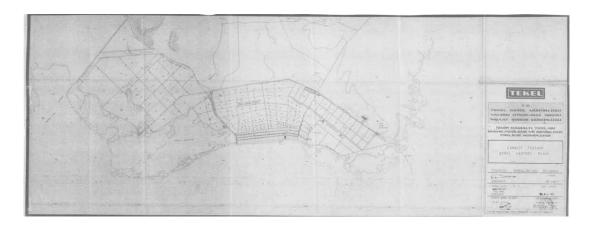


Figure 76 Expansion and development plan, 1983 (TTA Gayrimenkul Archive)

Beginning with the 1960s, new global economic dynamics started to play a role in the construction sector. Reinforced concrete and precast concrete had production facilities within the republic, and thus, they started to appear in the field of factory design. The first reinforced concrete building in the saltern is the Tuzla Mosque built in 1963. By the 1980s, these new materials started to be used more extensively. The atelier building, a watchbox, typical power stations to be applied around the site and signal separation centre, energy station, 2 typical garages, an administration block, workers' lockers, new apartment lodgings, a club house, a carpentry atelier, a social building for 20 workers, a social services building and the water tank were all built towards the end of 1970s and the beginning of 1980s. There is one different system in the atelier building that was built with reinforced concrete precast elements. The administration area of today was also organized at this time. Before there was only one small building at the entrance. This was knocked down, and a new watchbox was built in its place. Moreover, 6 administrative buildings, one signal separator plant, and an infirmary were built.

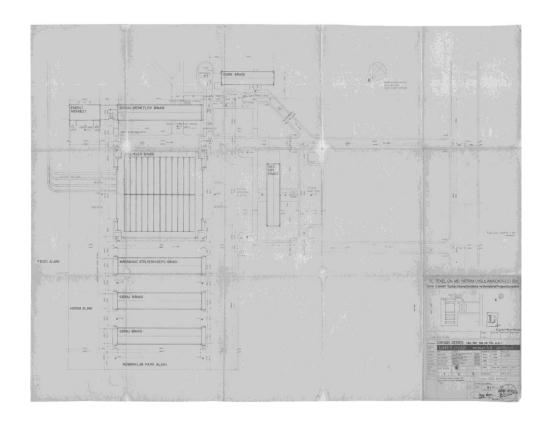


Figure 77 New TEKEL headquareters site plan, 1979 (TTA Gayrimenkul Archive)



Figure 78 New TEKEL Headquarters, garage, atelier and administrative building at the back (Author, April 2016)

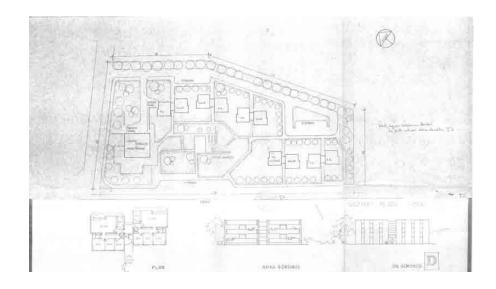


Figure 79 Site plan, plan and facade diagrams of apartment lodgings, 1979 (TTA Gayrimenkul Archive)



Figure 80 New apartment lodgings in their own neighbourhood (Author, April 2016)



Figure 81 Club house and pagodas in front (Author, April 2016)

#### **3.2.2.5** Fourth Period (1982-...)

The conservation initiatives in the area started with the beginning of the 4<sup>th</sup> period. The wetlands were declared as wild life conservation areas in 1982. In 1985, the hills of the ancient city of Leukai were granted with the first degree archaeological conservation site, the reeds were declared as first degree natural protection site, and the rest of the wild life conservation area was declared as the second degree natural conservation site. The importance of these wetlands was recognized internationally as the site was included in the RAMSAR Areas with approximately 20.000 hectares. With its inclusion, Gediz Delta became among the 13 such sites in Turkey. Following this, İzmir Conservation Council for the Cultural and Natural Assets raised the second degree natural conservation site status of the area to the first degree. In 2005 Ministry of Nature and Forestry started a plan to conserve the wetlands of the plain with the Wetland Management Plan that was adopted on 13 June 2007 and approved by the National Wetland Commission to be applied for five years. During this process Absolute Conservation Area, Wetland Area, Ecological Impact Zone and Buffer Zone were defined and conserved. The area of its implementation covers 30.000 hectares excluding the buffer zone. 433 The Camalti Saltern is situated right in the middle of afore mentioned conservation boundaries.

The Salt Industry Institution was moved to the new headquarters in the saltern with the decision no.410 of the Board in 1987. Following this, although it was forbidden to construct any structures within the boundaries of the 1<sup>st</sup> degree natural site after 1980s, a machine hangar in 1990 and a salt washing plant in 1997 were built inside the saltern. They were sued and not used after. The salt washing plant was an ineffective project and was demolished partly after the privatization due to instability in its infrastructure. Apart from these large scale projects, smaller prefabricated structures were added to the built landscape of the saltern up until today.

The administration of the saltern changed in 25.03.2010. The operation rights were given to Binbir Gıda Tarım Ürünleri Sanayi ve Ticareti A.Ş. with the sale procedure. The same was applied to Ayvalık Saltern that was given to the same company.<sup>434</sup>

<sup>433</sup> http://www.izmirkuscenneti.gov.tr/alan-bilgileri, last accessed on March, 2016

 $<sup>\</sup>frac{434}{http://www.ttagayrimenkul.gov.tr/tr/kurumsal/sirket/tarihce.aspx} \text{, last accessed on March, } 2016$ 

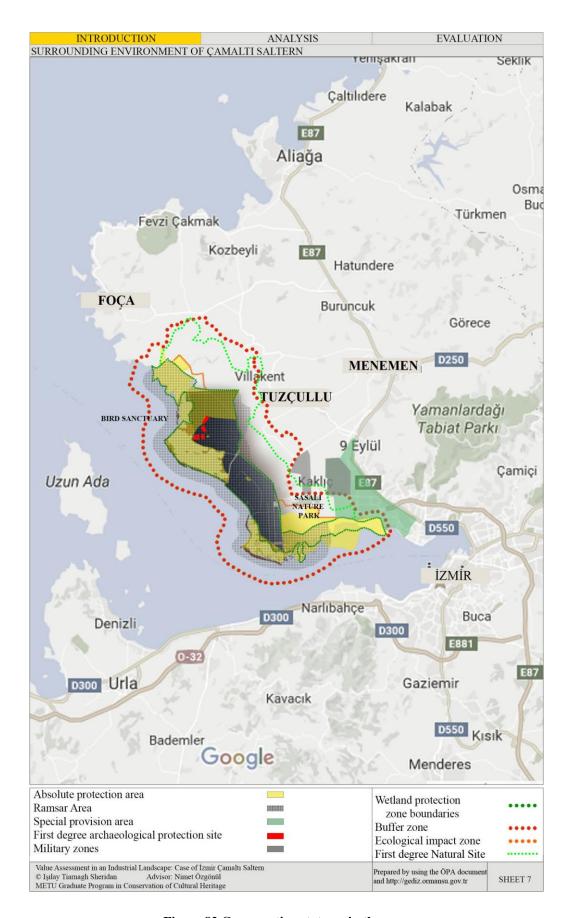


Figure 82 Conservation statuses in the area

## 3.2.3 Physical Characteristics

The physical formations of the saltern owe their existence to the mutual relationship of nature with man. The area has geological properties of a wetland, and related to this, it has abundant source of impermeable clay to be used for the construction of saltpans, optimum weather conditions, efficient amount of salt in the sea water and effective breeze for the evaporation of brine. Mankind learnt how to value these properties of the nature and created a production landscape around it. The resulting industry not only fed the mankind, but also the site-specific species with its salt for thousands of years. The elements of this collage of salt consist of natural formations and built environment. Therefore, in order to analyse the properties of the physical environment, we can divide it into two groups as the *natural landscape* and the *built landscape*.

## 3.2.3.1 Natural Landscape

Before the intervention of man, the land of the Gediz Delta was probably a vast plain, partially consisting of marshlands.



Figure 83 Flamingos in Shallow Marshland of Homa Fishery and Fishing Shelters (Author, April 2016)

There are three lagoons around the saltern; Homa Lagoon, Çilazmak Lagoon and Kırdeniz Lagoons. These are not only important for the natural wildlife but for the fishing as well. There are shelters for the fishermen next to Homa Lagoon and these fishermen are allowed to enter the site with the permission of the company. There is also the Bird Sanctuary of İzmir in the north of the saltern. It is currently the biggest natural wildlife area in Europe and the only conservation area in Turkey within this category. Seven of the saltpans of the Çamaltı Saltern were given to the sanctuary. Moreover, there is a flamingo reproduction island in one of the salt pans that is the biggest in artificial production island in the world. In 2016, it is estimated that around 14.000-15.000 baby flamingos were born in the area.



Figure 84 Google Earth view of the flamingo reproduction island (Google Earth ©2016 Basarsoft,Google,DigitalGlobe, TerraMetrics, accessed on August 2016)

<sup>435</sup> http://www.izmirkulturturizm.gov.tr/TR,77449/cigli.html, last accessed on July, 2016

<sup>436</sup> http://www.izmirkuscenneti.gov.tr/alan-bilgileri, last accessed on July, 2016

 $<sup>\</sup>frac{437}{\text{http://www.yeniasir.com.tr/yasam/2016/08/15/kus-cennetinde-flamingo-senligi}}{\text{July, }2016}$  , last accessed on July, 2016



Figure 85 Flock of flamingos entering the saltern, in the front left the canal locks between the two pools are in open position (Author, August 2016)

There are more than 270 different species of birds, 80-120 thousand of waterfowls, more than 700 different types of plant species, numerous fish, invertebrates and mammals that live in the Gediz Delta. Therefore, it represents high *biodiversity*<sup>438</sup> today. The Çamaltı saltern and its salt production support this high biodiversity. There are many *platforms* for the birds *to nest* that are built by the operating company. Some of the endangered species visit the saltern every year, including its trademark flamingos that depend highly on salty water ecosystems. These uniquely beautiful creatures gain their colour by feeding themselves with "*Dunaliella Salina*", an invertebrate that grants the salterns their *vivid eye-catching colours* all around the world. As a result, the flamingos redden as well since the Dunaliella Salina is high in  $\beta$ –carotene.

<sup>&</sup>lt;sup>438</sup> (Özbek Sönmez & Onmuş, 2006)

<sup>&</sup>lt;sup>439</sup> Information was obtained from the company.

<sup>&</sup>lt;sup>440</sup> Information was obtained from the company.



Figure 86 Saltpans are reddened as the number of Dunaliella Salina raises in relation to the increase in salt concentration (Author, August 2016)



Figure 87 Bird nest in one of the saltpans, salt washing plant and the technical building on the background (Author, April 2016)



Figure 88 Flock of Flamingos in saltpans (Author, August 2016)

## 3.2.3.2 Built Landscape

The manmade formations in the area date back to 4<sup>th</sup> century B.C. most probably. However, with the evidences in hand, the earliest man-made landscape is dated to Piri Reis map in a shape of a crescent as mentioned before. The illustration of the formation of the salt pans, on the other hand, was not seen until the 1888 and 1907 dated maps. For the first clear evidences of the built environment, the 1925 dated map is the earliest reference so far<sup>441</sup> in which some of the elements can be read. 3 tympana, 2 factories, tram line along the coast, 2 piers and 1 port are shown and other than these there are 22(?)<sup>442</sup> edifices unidentified. The structure of the salt pans is clearly seen.<sup>443</sup>

The salt pans of the saltern are the representatives of a factory assembly line with the tympana. The edifices that were built are usually the supporters of the system only; they do not directly affect the production. (In case of above mentioned factories in 1925 map, they were possibly used for the packaging of the salt) Being separated in

198

<sup>&</sup>lt;sup>441</sup> There are other maps in the Ottoman Archive that were not reachable since they were in need of restoration. Therefore, earlier data might be obtained during further studies.

<sup>&</sup>lt;sup>442</sup> The total number of the buildings is bound to research since not all of the edifices were shown in the same manner.

<sup>&</sup>lt;sup>443</sup> The map is previously given in the history, see 4.2.2.2 The First Period.

function, the pans and the buildings are different in a sense they communicate with the natural ground as well. The salt pans are *subtractive*, whereas the edifices are *additive* over the environment. Therefore, these two groups will be discussed under two topics. How these two were built and analysed will be given as "*pan-scape*" and "*salina-polis*".

## 3.2.3.2.1 Pan-scape, Subtractive

The pans are constructed by subtracting the marshes, building an embankment around and pressing the clay found at the site that is impermeable. If their grounds are damaged, they are again fixed with clay once the pools are emptied at the end of the harvest season. They are then pressed with rollers in order to create a solid impermeable layer and the pool will be filled with water from the sea. Unless the established pool is filled with brine, these are left empty, creating an image of a carved piece of land. The first pools that receive the sea water are the largest ones. The smallest of these pools has dimensions of approximately  $530 \times 410$  metres. These dimensions get smaller as the process furthers and the last pools of crystallisation are the smallest in dimension. There oldest crystallisation pools have  $320 \times 110$  metres dimensions, whereas the newly adapted crystallisation pools near the entrance are  $530 \times 450$  metres.

444 The term is conjoined by the author.

<sup>445</sup> The term is conjoined by the author.

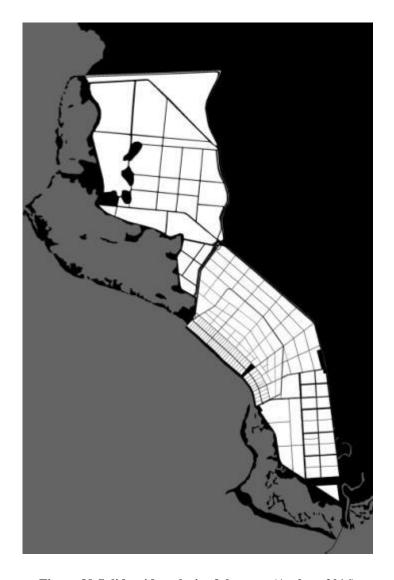


Figure 89 Solid-void analysis of the pans (Author, 2016)

The borders between these pans are created by the use of wood planks supported with wood stakes and the space in between them is filled with clay. Water channels are created in the same way, unless they were built with concrete beforehand. These channels are supported with wooden joists at intervals throughout the channels. Surrounding these pools at intervals there are embankments that are supported with the border system on their facades interacting a salt pan. In this system, there are also wooden canal locks all around in order to direct the water between the pools.

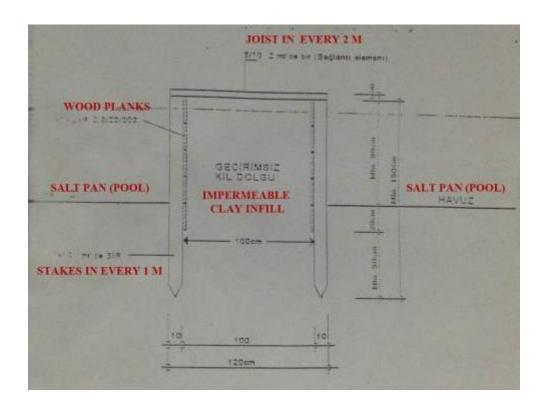


Figure 90 Section of a border between two pools (TTA Gayrimenkul Archive)

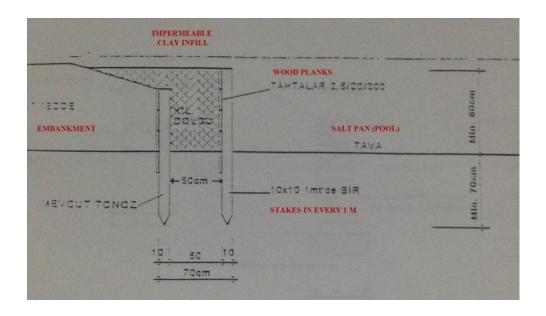


Figure 91 Section of an embankment supported with a border construction on salt pan side.



Figure 92 Water channels built with wood (Author, August 2016)



Figure 93 Wooden border filled with clay (Author, August 2016)

#### 3.2.3.2.2 Salina-polis, Additive

-polis: a state or society especially when characterized by a sense of community.<sup>446</sup>



Figure 94 View from Crystallisation Pools to Workers Town (Author, May 2016)

The term *Salina-polis* here conjoined so as to define a community, and a state, that depended on the production of salt. The *salina* part of the term was fulfilled with the built environment, whereas the notion of a state/a community was created by the contractual relationships of the production creating the *semi-constant* and *in motion* inhabitants. The construction of the built up areas of this salina-polis is achieved by an additive touch to the infinite lowlands of the Gediz Delta.

This built-up environment consists of 128 edifices and one designed park area today. Most of these edifices lacked the documentation on their constructions. Therefore, during the site survey, construction techniques and materials were given importance since these properties enabled to date and to understand all of the edifices based on the obtained projects from the archives. The projects were examined and the gathered knowledge was applied on the site to decipher the 128 edifices' data. In order to ease the presentation and tracking, each building was given a number. If in any analysis section there is a difference between the components of an edifice, these are illustrated separately. However, the total numbers are given according to the main function of the building. For example, three of the four tympana have additions. The construction date of the tympanum was given as the construction date of the

<sup>446</sup> http://www.merriam-webster.com/dictionary/polis, last accessed on June, 2016

tympanum building. The extension's date was illustrated in the site plan; however, the whole building was included in the numbers of the buildings sharing the tympanums construction span.

As aforementioned, 128 buildings exist on the site. The 74 of these buildings are not in use anymore. 6 of the in-service edifices serve as administration, 4 as tympanum, one as a mosque, one as an infirmary, 2 as dining halls, and 3 as dormitories, one of which also has a dining hall inside. The technical buildings of the production are divided into three sub-sections during this study as T1 (Carpentry, Atelier), T2 (Storage, Power Plant), T3 (Dressing and Shower/Toilet Facilities). Today there are 15 T1, 11 T2, and 8 T3 technical buildings operation in the saltern. However, the previous built landscape had a different organization before the privatization in 2010. Most of the abandoned buildings were in service when there was a community living in the saltern. Originally there were 9 administration buildings, 5 dormitories, 33 lodgings, one hospital, one mosque, one primary school, 8 social buildings, and 4 tympana. The number of technical buildings was 25 for T1, 16 for T2, and 10 for T3 type of functions. 12 buildings' original functions could not be found during this survey due to lack of information. Hall the site of the production of the survey due to lack of information.

In general, the buildings in the area are low-rise masses. 88 of the 128 buildings are one-storey high masses and 22 buildings have higher ceilings than others. There are only 5 buildings dating back to the pre-1960s period that have two stories. These are house 1, pink mansion, technical building, old power plant, and port 2 building 2. Other than these edifices, there are 3 more two-storey high buildings. There are 5 apartment blocks and one administration block having three storeys. There is only one building higher than 3 storeys and it is the salt washing facility's tower.<sup>449</sup>

Most of the existing edifices are in usable state; however, since they are not in use there is a possibility of change in these conditions in the near future. Apart from the fact that they are abandoned, the harsh weather of salty environment creates many

<sup>447</sup> For the illustrations on the site plan see Appendix E

<sup>448</sup> For the illustrations on the site plan see Appendix F

<sup>&</sup>lt;sup>449</sup> For the illustrations on the site plan see Appendix G

problems for the critical ones. 38 buildings are in good condition in terms of structure and material, while they might have some minor problems in their finishing materials or not. 36 buildings have fair condition meaning no structural problem, but surface deterioration in material. 33 buildings are in medium condition with slight structural problems, material loss besides material decay, slight deformations but the buildings are stable. Almost all of the abandoned lodgings are categorized as medium, but there is a possibility for them to be in severe condition in near future. 11 edifices have severe condition with deeper structural problems, severe material decay and loss, structural decay, but they are still stable. On the other hand, 7 buildings are already collapsed partially.<sup>450</sup> In an analysis conducted by examining the 1949, 1953 and 1964 aerial photos it is seen that 34 buildings at the site have been demolished and not observable today.<sup>451</sup>

The remaining buildings can be dated in four different periods. The historical timeline division is used here once more since some of the buildings lack any information on their construction or date. These are dated in accordance with their construction techniques and materials. There are ten buildings in total that can be dated to the 1863-1923 period, and 43 buildings that were built between 1923 and 1960. These two periods correspond to the scope of the study. Starting with the construction of the mosque in 1963, there are 42 buildings built in 1960-1985 period. Although construction is forbidden, there are 29 buildings which have been built since 1985.<sup>452</sup>

These periods also correspond to different types of constructions in terms of technique and material. These buildings can be analysed under five different groups that were identified as the result of the site survey. These are named as group 1, group 2, group 3, group 4 and group 5. The first three groups were built before 1960s. Group 1 date back to 1863-1923 period, while group 2 and 3 date back to 1923-1960. Group 4 and 5, on the other hand, were built between 1979-1985 and 1985-2016 periods. There are 12 group 1, 32 group 2, 8 group 3, 58 group 4, 9 group

<sup>&</sup>lt;sup>450</sup> For the illustrations on the site plan see Appendix H

<sup>&</sup>lt;sup>451</sup> For the analysis of the demolished buildings see Appendix D

<sup>&</sup>lt;sup>452</sup> For the illustrations on the site plan see Appendix I

5 buildings and there are 9 exceptions that do not share the same properties with the rest. 453

As seen, the first three groups built before 1960 and the last two built after have properties in common among themselves. Therefore, they are identified in two different columns in the table as well.

<sup>453</sup> For the illustrations on the site plan see Appendix J

Table 7 Chart for building typology

PERIOD& HARMONY MATERIALS &TECHNIQUE	BEFORE 1960	AFTER 1960
GROUP 1  Thick Stone  Masonry Walls, or,  Hollow Brick  Masonry Walls  with Wooden  Roof(if no intervention was made)	Old Factory(19), Hause 1(21), Fire Station(22), House 2(23)	
*Existence of Arched Openings	Cinema(24), Pink Mansion(26), Refectory and Social Facility(52), Hammam(50)  Tymapanum 1(8), Tympanum 2(12), Tympanum 3(84), Tympanum 4(105)	
GROUP 2  Masonry Load Bearing Walls of Stone and Solid Brick Combined, Concrete or Wooden Slabs	Lodging Type 1(28), Lodging Type 2(29,30,31,32,33), Lodging Type 3(35,36)	









Lodging Type 4(38, 39, 40, 41), Lodging Type 5(42, 43, 44, 45, 46, 47), Lodging Type 6(49, 54, 55,56,57,58,59,60,61), Locker Rooms and Watchbox(4)









Infirmary(37), School(34), Watchbox(2), Small Storage (16)

## **GROUP 3**

Metal Frame Structures with Solid Brick Infills)







Old Power Plant(70), Port 2 building 1(66), Port 2 Building 2(68), Office(67)









Rail Atelier and Dorm(17), Refectory(20), Port 1 (63), Extension Toilets(77)

# **GROUP 4**

Reinforced

Concrete

Structures







Power Stations (1, 6, 14,27, 71, 80, 81, 104, 106, 124, 126, 127, 128) and Signal Separation Centre (89)



Ateliers (9, 10, 85,87), Administration (11), Old scale (13), Toilets (18)



Locker Rooms (25), Locker Rooms (49), Mosque(53), Watchtower(65), Storage(72)



Toilets (73, 100), Refectory (74), Laboratory Storage (82)



Watchbox Entrance(90), Administrative Offices (91,92,93,94,96)



Locker Rooms (102), Washing Rooms(103), New Office (95), Club House(107)

	Apartment Lodgings(108,109,110,111,112), Garages(113,114), Carpentry (116), Administration (123)  Watchboxes New Quarter(115,117,120), Locker Roms (118), Social Services (121), Energy Plan (122)
	Water Tanks(78,125), Second Pump Station(7)
GROUP 5 Prefabricated Buildings	
	New Pump Station (3), Machine Hangar (15), Ateliers Building exterior and Interior (119)
	Dorm(51), Dorm(64, 97, 101), Laboratory 1 (83)



Storage (99)

# **EXCEPTIONS**

Wood Frame

Brick masonry(?)

Demolished wall

New Metal Frames



House 3(5), Technical Building(76), Old Factory Wall and Ateliers(62), Wooden Storage(86)





Salt Washing Plant(79), Atelier, Gas Station and Storage covers (69, 75, 80)

## **Group 1**

The built landscape of the Çamaltı Saltern differs from the previously mentioned factory towns in having an earlier settlement in the area. As mentioned before, Italians built the landscape of the saltern twice; once in 1863 and then in 1906. Their constructions include three tympana, old factory (?), house 1(?), house 2(?), fire station, cinema, pink villa, hammam, refectory and social facility buildings. These 12(?<sup>454</sup>) remnants of the period, built in between 1863 and 1923, have masonry loadbearing walls that are of either thick stone or brick. The brick is unique, seen only in some of the historic quarters in İzmir. It has the same dimensions of the solid bricks, but has six cavities inside (in two rows). In the historical part of Kemeraltı shopping centre, there are examples of such constructions dating back to the 19<sup>th</sup> century. This brick is widely used except the tympana, the old factory, the cinema, and the hammam buildings that have stone masonry walls.



Figure 95 A house in Kemeraltı, bricks with cavities having solid brick dimensions and similar brick in Camaltı (Author, April 2016)

These edifices with masonry load-bearing walls have wooden slabs (although some have concrete floors on ground level and steel roofs as later additions today) and

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<sup>&</sup>lt;sup>454</sup> It is not clear whether some of the edifices are connected or not. See Appendix I for details.

wooden roofs. The ceilings below the roof are covered with wooden laths and they were plastered. The openings are generally arched except the horizontal rectangular openings of the old factory, small square openings of the hammam and vertical rectangular openings of the pink mansion (the building has semi-circular arched openings as well). They all have higher floor heights than regular one-storey buildings. Some of them show similarities with the other 19<sup>th</sup> century buildings of İzmir. The train station of Çiğli (nearest train station to the saltern), built in 19<sup>th</sup> century shares similarities especially with the pink mansion. They share the similar construction technique, window and door casing frames and quoin stones on the corners of their facades. They represent the architectural tendencies of their epoch.



Figure 96 The Pink Mansion and Çiğli Train Station (Author, August 2016)

#### Group 2

"According to the Turkish nationalists of the early republican period, the fact that the rich Zonguldak mines were owned and administered by European countries was an indicator of the Ottoman semi-colonization. Therefore, improving the living conditions of the workers during the early years of the nation state was a matter of Turkish independence itself." 455

As explained in the previous chapters, the early years of the Turkish Republic gave great importance to the advancement of industrial initiative. Therefore, the industrial

<sup>&</sup>lt;sup>455</sup> (Bozdoğan & Akcan, Turkey: Modern Architectures in History, 2012, p. 94)

towns that were applied all around the world since the second half of the 19<sup>th</sup> century were taken as models and many industrial complexes were built in this way. The paternalistic representations of previous examples were applied in the formation of the existing built landscape of Camaltı Saltern during the Turkish Republican Period. They were in correspondence with the industrialization actions of the government. In addition to the buildings of group 1 dating back to the Italian Period, construction of 15 detached 12 semi-detached lodgings, also house 3, also school, also hospital, one tympanum, also power plant, also technical building, also ateliers and some other buildings that do not exist today was performed creating the company town in between 1923 and 1960. As explained in the Chapter 3, the materials and designs of the time tend to be minimalistic and the use of local materials was widespread in the domestic quarters. Therefore, the edifices of the workers town, except the production buildings, have masonry load bearing walls of stone and solid brick used together. They are all one-storey high edifices, except the small watchbox with two low ceiling heights. Their floors are made of wood or concrete. The spaces are usually covered with wooden slats on top unless there is a reinforced concrete slab, and there is a wooden hipped roof above. In the case of a concrete ceiling, the wooden roof construction was built above this slab. The roofs are covered with roof tiles and their facades are plastered and painted.

## **Group 3**

This group of buildings was built in the same period with the group 2 buildings. The difference in this group is the selection of materials and construction techniques specifically for the production related buildings. The old power plant is a very fine example of the division of construction techniques at the site. The power plant part where the electric system was performing was built with metal frame, whereas the garage and lodging part was built with a masonry structure. This old power plant, port 2 buildings 1 and 2, the rail atelier, the dorm, and port 1 are the historical examples of this period. The office (?) building (building no: 67) near the port 2 building 1 and the extension toilets (building no: 77) are not seen up until the 1995 aerial photo; however, they share the same features of this group. Therefore, they are not included in the survey sheets. The refectory building is not seen until 1995 as

well; nevertheless, it carries a special profile in its architecture. The 1910 power plant has pictures in Medih Egemen's book written in 1946. The columns and windows of this building share great resemblance to the refectory building. This building might have existed in another spot and rebuilt with the same materials in its current position. There are no clear evidences, but this edifice is included in detailed survey sheets to provide this information for further studies. The former two were probably built with the existing materials on the site with different design since these two do not have historical background and coherent design. These buildings have metal frames with posts, beams, and diagonals with solid brick infills. All the floors of these buildings are concrete. They have metal gable roofs with trusses and some of them are covered with roof tiles, whereas some have corrugated roof panels today. The facades of these buildings are plastered and painted.

#### **Group 4**

The edifices built after the 1960s and during the 1970s' modernization project do correlate neither with the previous small scale development of the site nor with the silhouette of the landscape. The construction materials, heights, mass sizes and site plan designs show different kind of characteristics that can be found elsewhere in Turkey at the time. Some of the projects were even applied as group projects in other TEKEL factories. These are given as building groups, but not studied thoroughly as the pre-modernization period edifices. The mosque, the power plants, the signal separation centre, the ateliers (building no: 9, 10, 85, 87), the toilets (building no: 18, 73,100), the locker rooms (building no: 25, 49, 102), the watchtower (building no: 65), the storage (building no: 72, 82), the refectory (building no: 74), the entrance watchbox, the washing room, the club house, the second pump house, the new lodgings as apartment blocks, the new TEKEL headquarters and the administrative buildings in the entrance are the examples of this group. As given previously in the historical timeline of the saltern, the new apartment blocks were built as a housing estate far away from the previous ones. They are three-storey high apartments with two housing units on each floor. In the same area there is the club house of the workers and there are pagodas in front of this edifice, near the sea side. There is a park on the site as well. The other building group that was indicated as the "facility area" is the administrative quarters of today. They were also built within their own site as a group of six buildings. The new TEKEL headquarters follows the same spirit of having its own estate. It was built in the most "out of sight" part of the saltern. It consists of two garages, one carpentry atelier, three watchboxes, one ateliers building, one social services, one locker rooms building, one administration, one power plant, one energy station and one power tank. All of the edifices in this group have reinforced concrete structures with/or without hollow brick infills. Their slabs are reinforced concrete as well. Some of them have flat roofs; especially the new headquarters have all flat roofs, whereas some have hipped roofs with wooden structure and covered with roof tiles. Their facades are all plastered and painted except the water tank of the new quarters. It was left as exposed concrete.

## **Group 5**

This group represents the buildings that were built with precast reinforced concrete members or prefabricated structures that are usually built after the 1980s. The ateliers building of the new TEKEL headquarters, the machine hangar, and the new pump stations all have precast concrete members. Apart from these structures, there are four dorms, a laboratory building and a small storage that have prefabricated structures. Some of the roofs have steel structures covered with corrugated roof panels while some have wooden roofs covered with roof tiles. Their facades are plastered and painted.

## **Exceptions**

There are three edifices that are the only samples of their kinds. One of them is the wood frame construction with solid brick infill, house 3, in the northern edge of the saltern. There is one another wooden frame structure used as storage. Its facades are covered with wood as well. It is covered with corrugated roof panels. There is a stone masonry wall with stone masonry columns intact left from the demolished building near port 1. Today building number 62 stands on its outer edge. The third exception is the technical building. It probably has solid brick masonry construction with brick

masonry columns; it is not clear. There is also a secondary metal frame built later to support the structure. The edifice has elongated rectangular windows and a metal roof with trusses. There are many contradictions to place this edifice to a specific group. Another exception is the metal frame tower of salt washing. The last one is the shelters built in different spots of the saltern. The one adjacent to the building no: 69 is a metal frame structure covered with corrugated panels.

There is one specific structure that was not on the table. This one is the old vehicle machines hangar, built in 1951 and demolished between 1995 and 1997(In its place today stands the salt washing tower, built in 1997). It has special metal profiles that do not exist in other structures of the site. This metal frame was covered with panels. This project is the only one with a designer name clearly written as project master engineer *Enver Köksal*. It is the only demolished edifice with a project available, and thus, it is important to mention the project here.

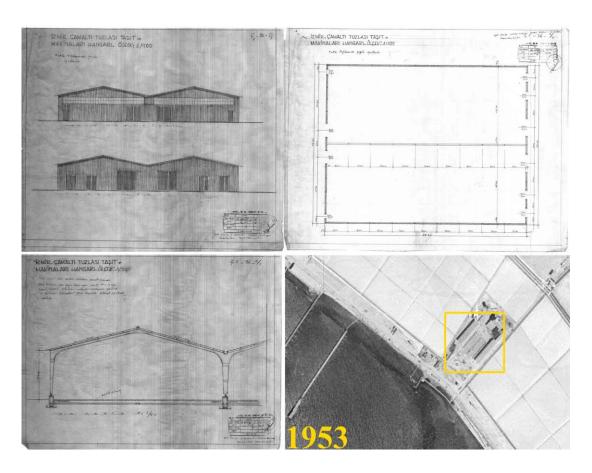


Figure 97 Vehicle Machines' Hangar project drawings of 1951 and 1953 aerial photo of its first appearance (TTA Gayrimenkul A.Ş. Archive) (HGK Archive)

There were challenges in the presentation of such vast land with so many edifices, but with such small dimensions as explained in the introduction. It is not possible to explain the components of this area regardless of their position on the map. However, they cannot be illustrated in one key map. Therefore, the description of the built environment will start from the top northern part of the row of buildings, from there it will go down to southwestern edge, and after the first edifice it will follow the order of the grid numbers until the southern end. Each building has a number in this direction as well. A site plan will be presented in accordance with the grids. A brief description will be given with photos in this chapter. The edifices have also detailed site plan and detailed analysis in their survey sheets in Appendix K. These survey sheets have *address* line in which the *grid number/building number* is given in order to enable easy tracking (The method is created not only because the saltern is so big in size but also there are no official addresses for the buildings today). For example; 227 (Grid) / 52 (Building).

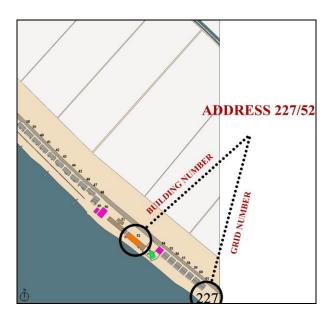


Figure 98 Example of building tracking code

In the same way, the analysis sheets of current function, original function, construction date, number of floors, condition and structure can be traced.

# 1. Watchbox (145/2) (Appendix K, Sheet No:1)



Figure 99 Site plan and southwestern facade of the watchbox (Author, April 2016)

The edifice is situated just outside the northern end of the 1950 expansion. It was probably built with the expansion project in 1950-1952. It has thicker ground floor walls and on the first floor the walls get thinner. Therefore, this small square-ish edifice possibly has stone masonry and solid brick load-bearing walls. It has dimensions of 2.45 x 2.90 m. There is a reinforced concrete slab covering the first floor. Its facades are plastered and painted.

#### 2. Locker Rooms and Watchbox (145/4) (Appendix K, Sheet No:2)



Figure 100 Site plan and view from the northern corner of the locker rooms and watchbox (Author, April 2016)

The edifice is situated just outside of the northern end of the 1950 expansion, right next to the old pump. The current pump building is a new one; however, in the old photos there exited a building with a similar size. This building was probably built in between 1953 and 1964. The two have a garden in their southwest. The watch box is situated next to this new building on the northern edge of the 1950 expansion. It is a rectangular masonry building along southeast to northwest direction covered with a hipped roof. It has dimensions of 4.50 x 8.50m. It has one wooden addition on the south-eastern facade. There are four entrances; two in the northeast, one in the northwest and one on the southwest.

The edifice is a masonry building, but the material is not detectable. Both the floor and ceiling are reinforced concrete. On this reinforced concrete roof slab, there is a wooden roof covered with roof tiles. The facades are plastered and painted.

#### 3. House? 3 (145/5) (Appendix K, Sheet No:3)



Figure 101 Site plan and view from the southern corner of the house? 3 (Author, April 2016)

The edifice is situated just outside the northern end of the 1950 expansion. It is possibly connected to the saltern since there were no other settlements nearby and built between 1950 and 1964. It has its own garden with a pool in the north-western side. The building is a "U" shaped mass along northeast to southwest direction with the tips of the "U" looking towards northwest. The original structure is an elongated rectangle with dimensions of 4.90 x 12 m. It has two units under a gable roof. These units have two separate entrances on the north-western facade.

The building is the only wooden frame structure in the area. It has brick infill covered with wood laths and plastered on top. The floors are wooden and the spaces are covered with wooden slats on which there exists a wooden roof covered with wood planks. The facades are plastered and painted.

## 4. Tympanum 1 (187/8) (Appendix K, Sheet No:4)



Figure 102 Site plan and view from the northern corner of the tympanum 1 (Author, April 2016)

The edifice is located at the northern edge of the pre-modernization border of the saltern, in between the two rows of crystallization pools. In the earliest map of the area, the 1925 map, the building can be seen. Therefore, it was probably built between 1863 and 1923. It is accessed from the road that is available to the fishermen of the Homa lagoon. On the other side of the water channels, there are shelters of these fishermen. The edifice is connected to these water channels and has a garden on its southwestern side for growing different plants. It is a one-storey high square (10 x 10 m) masonry mass covered with a wooden hipped roof. Moreover, it is the only tympanum that does not have a mass addition. It has two entrances, one in southeast and one in northeast.

The edifice was built with a masonry structure. However, it is not possible to detect its materials.(wall thickness points out to stone, though) The slab is covered with concrete today. It has a wooden hipped roof covered with wooden panels underneath. The roof is covered with roof tiles. Its facade is plastered and painted.

## 5. Tympanum 2 (202/12) (Appendix K, Sheet No:5)



Figure 103 Site plan and view from the western corner of the tympanum 2 (Author, April 2016)

The edifice is the second tympanum from top left to bottom right. It is accessed through a road perpendicular to the sea shoreline and located in between the two rows of crystallization pools. In the 1925 map the building was indicated. Therefore, it was probably built between 1863 and 1923. The edifice is connected to the water channels and has a garden on its south side for growing different plants. It is originally a one-storey high masonry mass with dimensions 6.60 x 7.20 m. It is covered with a reinforced concrete slab on which there is a wooden hipped roof. The mass had an extension between 1923-1949. The extension is a one-storey high rectangular masonry mass covered with a wooden hipped roof. The dimensions of this extension are 15 x 4 m. This dimension also includes the greenhouse adjacent to the masonry building. The greenhouse was built with a wooden frame and a gable roof. This complex has three entrances; one from the garden to the greenhouse, one on the southwestern facade and one on the northeastern facade.

These edifices were built with a masonry structure. However, it is not possible to detect its materials. The slabs are covered with concrete today. The two masses have separate wooden hipped roofs covered with roof tiles. Its facade is plastered and painted.

#### 6. Rail Atelier and Dorm (215/17) (Appendix K, Sheet No:6)

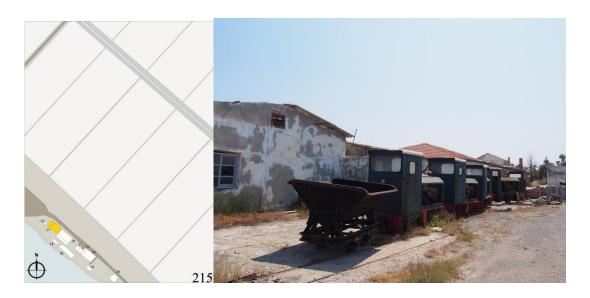


Figure 104 Site plan and salt trams in the southwestern facade of the rail atelier (Author, April 2016)

The mass has three edifices in connection to each other. They were probably built between 1923 and 1949 considering their construction materials and design. The rail workshop is the first one on the site plan from top left to bottom right organization. This is connected to the second workshop with an addition between the masses. These edifices are one-storey high elongated rectangular masses with dimensions of 15 x 27 m together. The first workshop extends along northeast to southwest direction, whereas the semi-detached second workshop and the dorm extend along northwest to southeast direction. The masses are covered with three gable roofs. The connected two workshops have three entrances; one facing towards the crystallization pools and salt stack area, the second facing to northwest, and one at the back opening to the sea. There are remains of rails from the previous tram line going inside the first workshop and continuing to the second one. The dorm facing to stack area has two entrances.

The edifice has a metal frame with a solid brick infill. There are posts and diagonals within the wall structure. The slab is covered with concrete. It has metal roof with trusses. The roofs are covered with corrugated roof panels. The facades are plastered and painted.

#### 7. Old Factory (215/19) (Appendix K, Sheet No:7)



Figure 105 Site plan and northeastern facade of the old factory (Author, April 2016)

The edifice is the second one on the site plan from top left to bottom right organization. It is aligned with the rail workshop and dorm group. Upon superpositioning the 1925 map and current drawing, it corresponds to former factory building. Thus, it was probably built between 1863 and 1923. Adjacent to this large building with dimensions of 30 x 14.50 metres, there are two mass additions and all of these masses are one-storey high elongated rectangles in the northwest to the southeast direction. The addition mass is 30 x 6 metres in dimension. The main edifice has four entrances; two facing to the salt stack area and two at the rear edges in the northwest and the southeast. On the northwestern rear facade there is a massive buttress. On the other rear side there is a trace of a similar one. The additions have three entrances one of which serves the main building as well.

The edifice has a stone masonry structure. Its walls are thicker than any other edifices in the complex, except the hammam building. It has tiles on the ground, of which the structure is not visible, and a wooden roof structure covered with roof tiles. Its facade is plastered and painted.

#### 8. Refectory (215/20) (Appendix K, Sheet No:8)



Figure 106 Site plan and northeastern facade of the refectory (Author, April 2016)

The edifice is the third building from top left to bottom right organization and it is not in line with the rest of the other buildings. It is located behind the old factory?, near the sea side. There are no clear evidences of its construction date. However, its construction technique and materials point out to 1923-1960 period. It is a one-storey high edifice with steel structure and has an elongated rectangular mass in northwest to southeast direction with dimensions of 38 x 10 metres. It is covered by a flat roof. It has four entrances; one in the northwest, two in the northeast and one in the southeast.

The edifice has metal frame structure, with metal posts, beams and diagonals filled with solid bricks. Its slab is covered with concrete. There are steel posts inside the edifice in the shape of small ladders that are nowhere to be found at the site. The roof is formed with metal beams covered with corrugated roof panel. The walls are plastered and painted.

## 9. House? 1 (215/21) (Appendix K, Sheet No:9)



Figure 107 Site plan and view from the northern corner of the house? 1 (Author, April 2016)

The edifice is the first unit on the site plan after the old factory and a small square from top left to bottom right. It dates back to the Italian design period (1863-1923). Although it is not clear without an individual project at the building scale to show its relations with the adjacent masses, with its current appearance it has dimensions of 10 x 8 metres. It is a two-storey high brick masonry building with a gable roof. It forms a group with the following three edifices; the fire station, the house 2 and the cinema. There are currently two entrances to the building both being in the northwest. One of these entrances was clearly created afterwards. The second floor is reached via an exterior stairway adjacent to the southwestern facade; however, the originality of this design is bound to further surveys.

The edifice was built with brick masonry structure (each brick having 6 hollow cores inside). The ground floor has wooden slab while the first floor has reinforced concrete slab and above there is a wooden gable roof with plastered wooden strips below. The roof is covered with corrugated roof panel. Its facade is plastered and painted.

#### 10. Fire Station (215/22) (Appendix K, Sheet No:10)



Figure 108 Site plan and southwestern facade of the fire station (Author, April 2016)

The edifice is adjacent to the house 1 in the northwest and house 2 in the northeast and was built between 1863 and 1923. Although it is not clear without an individual project at the building scale to show its relations with the adjacent masses, with its current appearance it has dimensions of 8.5 x 10 metres. It is a one-storey high brick masonry building with a gable roof. It forms a group with house 1, house 2 and the cinema. It has two entrances along the same axis from the southwestern facade and northeastern facade. Although it is not visible today, in the aerial photographs until 1970 there existed a small dock in front of the building.

The edifice was built with brick masonry structure (each brick having 6 hollow cores inside). The slab was constructed with reinforced concrete and there are railways on the ground. The roof is composed of metal trusses covered with corrugated roof panel. Its facade is plastered and painted.

#### 11. House? 2 (215/23) (Appendix K, Sheet No:11)



Figure 109 Site plan and southwestern facade of the house? 2 (Author, April 2016)

The edifice is adjacent to the house 2 in the northwest and the cinema in the northeast. It was built in 1863-1923 period. Although it is not clear without an individual project at the building scale to show its relations with the adjacent masses, with its current appearance it is a rectangular one-storey high brick masonry building with a gable roof. It has dimensions 4.30 x 17 m with the addition made in between 1949 and 1964. It forms a group with house 1, house 2 and the cinema. It has two entrances along the same axis from the southwestern facade and the northeastern facade. There is another rectangular brick masonry edifice attached to it in the southeastern facade with a separate gable roof. Although it is not visible today, in the aerial photographs until 1970 there existed a small dock in front of the building.

The edifice was built with brick masonry structure(each brick having 6 hollow cores inside). It has a wooden slab and a wooden gable roof structure covered with roof tiles. The adjacent extension is also brick masonry with hipped wooden roof covered with roof tiles. The facades are plastered and painted.

# 12. Cinema (215/24) (Appendix K, Sheet No:12)



Figure 110 Site plan and view from the eastern corner of the cinema (Author, April 2016)

The edifice is the last one of the group of 4 buildings; house 1, the fire station and house 2 from top left to bottom right organization. It was most probably built between 1863 and 1923 considering its construction properties and location. It is a one-storey high rectangular masonry building along the northwest to southeast direction with the dimensions of 17 x 2.50 metres. Today there are no adjacent buildings on its southeast facade; however, from 1949 photos till 2002, it is seen that there were other edifices adjacent. Today it has two entrances, one from the sea side and one at the southwestern rear facade.

The edifice is a masonry structure combining the use of rubble stone and solid bricks. The walls are stone masonry while the openings are created by the use of brick arches. The whole space has a metal gable roof with corrugated roof panels. Its facade is plastered and painted.

Although it has always been referred by the inhabitants and the workers as "cinema", it gained this function after 1970. Before that, it was used as a technical building.<sup>456</sup>

<sup>&</sup>lt;sup>456</sup> Information obtained from the previous resident İbrahim Şimşek.

#### 13. Pink Mansion (Manager Lodging) (215/26) (Appendix K, Sheet No:13)



Figure 111 Site plan and view from the northern corner of the Pink Mansion (Author, April 2016)

The edifice is located separately after the cinema. It was built between 1863 and 1923. (Some of the former inhabitants state the construction date as 1886, but there is no written evidence) It is surrounded by its own garden wall in which there are palm trees. There is a pool in the northeaster side of the garden. There is an exit from this garden towards the sea and through that a dock is within the reach for the mansion. The masonry building consists of two adjacent rectangles forming an almost squareish mass covered with a gable roof and located adjacent to the north-eastern side of the garden wall. The north-eastern rectangle has dimensions of 12 x 7 metres and the adjacent one has 15.50 x 7 metres. The edifice has three entrances today. Two of the symmetrical entrances are located on the north-western and the south-eastern facades. The third one is located on the south-western façade.

The edifice was built with a masonry structure alternating the use of stone and solid bricks (each brick having 6 hollow cores inside). The ground floor and the second floor have wooden slabs. There is a wooden hipped roof that is covered with plastered wooden laths at the bottom and with roof tiles on the top. The roof of one of the rectangle masses is supported with steel bracings. Its facade is plastered and painted on both levels.

## 14. Lodging Type 1 (215/28) (Appendix K, Sheet No:14)



Figure 112 Site plan and northeastern facade of the lodging type 1 (Author, April 2016)

This edifice is the first detached lodging on site plan from top left to bottom right organization. It was built in 1936 side by side with another one that was demolished in between 1995 and 2002. It is entrance faces towards the crystallization pools and the salt stack area in the northeast. In front of the edifice, there is a small terrace marking the entrance, and the building is elevated by three steps from the level of the road. On the sea side, there is a terrace looking to the greenery and the sea beyond. There is a low surrounding wall starting from this edifice to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps at intervals to reach the docks nearby. As every other edifice, it has a small dock nearby. It is a one-storey high masonry building with dimensions of 10.65 x 8.25 m. The mass is a square with a hipped roof carried by a concrete slab.

The edifice was built with a masonry structure combining the use of stone and solid bricks. The floor is made of wood. The spaces are covered with a reinforced concrete slab and a wooden hipped roof was constructed above. The roof is covered with roof-tiles. Its facade is plastered and painted.

<sup>&</sup>lt;sup>457</sup> For the analysis of the demolished buildings see Appendix D

#### 15. Lodging Type 2 (226/29-30-31-32-33) (Appendix K, Sheet No:15



Figure 113 Site plan and the northern corner of the Lodging Type 2 (Author, April 2016)

These edifices are a group of five lodgings designed in the same way. They were built in 1936 as a group of 6, but the one adjacent to the school wall was demolished in between 1995 and 2002. Their entrances face towards the crystallization pools and the salt stack area in the northeast. In front of them, there are small terraces marking the entrance, and some of them are surrounded with fences. These buildings are elevated by two steps from the level of the road. On the sea side, there are terraces looking to the greenery and the sea beyond. There is a low surrounding wall starting from the lodging type 1 to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps inside this wall at intervals to reach the docks nearby. These lodgings are one-storey high square (8.25 x 8.25 m) masonry masses with a hipped roof carried by a concrete slab.

These lodgings were built with a masonry structure combining the use of stone and solid bricks. The floors are made of wood. The spaces are covered with a reinforced concrete slab on top and a wooden hipped roof was constructed above. The roof was covered with roof tiles. Its facade is plastered and painted.

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<sup>&</sup>lt;sup>458</sup> For the analysis of the demolished buildings see Appendix D

#### 16. School (226/34) (Appendix K, Sheet No:16)



Figure 114 Site plan and northeastern facade of the school (Author, April 2016)

The school was built right after the row of detached lodgings from top left to bottom right organization in 1936. It has its main entrance towards the crystallization pools and the salt stack area in the northeast. It is surrounded all around, including its own garden in the northwest, with a wall. In front of this garden, there is a narrow greenery along the facade and the building is elevated from the road by three steps. Adjacent to the south-western wall of the garden there is a base for Atatürk's bust. The school building is a one-storey high masonry building with dimensions of 29.05 x 12.50 metres. It has an elongated rectangular mass with a hipped roof. The building has two entrances today; one in the northeast and one in the northwest.

The building has a masonry structure alternating the use of rubble stone and brick. It has concrete and wooden floors. The spaces are covered with a reinforced concrete slab on top and a wooden hipped roof was constructed above. The roof is covered with roof-tiles. Its facade is plastered and painted.

#### 17. Lodging Type 3 (226/35-36) (Appendix K, Sheet No:17)



Figure 115 Site plan and the northern corner of the lodging type 3 (Author, April 2016)

There are two semi-detached houses in between the school and the hospital built in 1946. They are the first semi-detached lodgings from top left to bottom right organization. Their entrances face towards the crystallization pools and the salt stack area in the northeast. In front of them there are small terraces marking the entrance, elevated by three steps from the ground level. On the sea side, there are terraces looking to the greenery and the sea beyond. There is a low surrounding wall starting from the lodging type 1 to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps inside this wall at intervals to reach the docks nearby. These lodgings are one-storey high masonry buildings with dimensions of 17.75 x 7.25 metres. They have elongated rectangular masses having two adjacent square-ish units under a hipped roof.

These lodgings were built with a masonry structure combining the use of stone and solid bricks. The floors are made of wood. The spaces are covered with a reinforced concrete slab on top and a wooden hipped roof was constructed above. The roof is covered with roof tiles. Its facade is plastered and painted.

## **18. Infirmary (226/37) (Appendix K, Sheet No:18)**



Figure 116 Site plan and the northern corner of the infirmary (Author, April 2016)

The hospital (infirmary today) was built right after the two semi-detached lodgings from top left to bottom right organization in 1936. It has its main entrance towards the crystallization pools and the salt stack area in northeast. In front of it, there is a narrow greenery along the facade and the building is elevated from the road by three steps. On the sea side, there is a large garden. There is a low surrounding wall starting from the lodging type 1 to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps inside this wall at intervals to reach the docks nearby. The school, two lodgings and the hospital has a dock in the middle of their group. The hospital is a one-storey high masonry building with dimensions of 29.05 x 7.25 metres. It has an elongated rectangular mass with a hipped roof. The building has three entrances today; one in the northeast, one in the southwest and one in the southeast.

The building has a masonry structure; however, it is not possible to understand its materials since it is newly restored. It has epoxy covered floors. The spaces are covered with a reinforced concrete slab on top and a wooden hipped roof was constructed above. The roof is covered with roof tiles. Its facade is plastered and painted.

## 19. Lodging Type 4 (227/38-39-40-41) (Appendix K, Sheet No:19)



Figure 117 Site plan and the northern corner of the lodging type 4 (Author, April 2016)

There are four semi-detached houses after the hospital from top left to bottom right organization built in 1923-1949 period. Their entrances face towards the sea in the southwest. In front of them, there are small terraces marking their entrance, elevated by three steps from the ground level. There is a low surrounding wall starting from the lodging type 1 to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps inside this wall at intervals to reach the docks nearby. In the middle of these four lodgings there is one dock for the group. These lodgings are one-storey high masonry buildings with dimensions of 17.75 x 7.25 metres. They have rectangular masses having two adjacent square-ish units under a hipped roof.

These lodgings were built with a masonry structure combining the use of stone and solid bricks. The floors are made of wood. The spaces are covered with wood slats on top and a wooden hipped roof is constructed above. The roof is covered with roof tiles. The facades are plastered and painted.

## 20. Lodging Type 5 (227/42-43-44-45-46-47) (Appendix K, Sheet No:20



Figure 118 Site plan and the northern corner of the lodging type 5 (Author, April 2016)

There are six semi-detached houses in a row after the type 4 lodgings built in 1946. Their entrances face towards the crystallization pools and the salt stack area in the northeast. In front of them there are small terraces marking the entrance, elevated by three steps from the ground level. On the sea side, there are terraces looking to the greenery and the sea beyond. There is a low surrounding wall starting from the lodging type 1 to continue all the way until the hammam that separates the edifices from the shoreline. There are two steps inside this wall at intervals to reach the docks nearby. For this group of lodgings there are two docks near them. These lodgings are one-storey high masonry buildings with dimensions of 17.75 x 7.25 metres. They have elongated rectangular masses having two adjacent square-ish units under a hipped roof.

These lodgings were built with a masonry structure combining the use of stone and solid bricks. The floors are constructed with wood. The spaces are covered with wood slats on top and a wooden hipped roof is constructed above. The roof is covered with roof tiles. Their facades are plastered and painted.

# 21. Lodging Type 6 (227/49-55-54-56-57-58-59-60-61)(Appendix K,Sheet No:21-22)



Figure 119 Site plan and the northern corner of the lodging type 6 (Author, April 2016)

There are nine semi-detached houses after the lodging type 5 from top left to bottom right organization. They were built in 1923-1949 period. Their entrances face towards the sea in the southwest. In front of them there are large mass additions almost as big as their own sizes. The low surrounding wall starting from the lodging type 1 continuing all the way until the hammam that separates the edifices from the shoreline ends in front of the first lodging type 6. After the first of lodging type 6 there are 5 other buildings and the rest 8 of these lodgings continue afterwards. These lodgings are one-storey high masonry buildings with original dimensions of 11.70 x 6.60 metres. The extension has dimensions of 4.70 x 11.70 metres. They have rectangular masses having two adjacent square-ish units under a hipped roof.

These lodgings were built with a masonry structure combining the use of stone and solid bricks. The floors are made of wood. The spaces are covered with wood plates (the extensions have flat reinforced concrete slab on top only) on top and a wooden hipped roof was constructed above. The roof is covered with roof-tiles. Their facades are plastered and painted.

One of the lodgings (building no:54) was restored and today it is used as toilet facility for the mosque. The edifice is one of the nine semi-detached houses after the lodging type 5 from top left to bottom right organization. In front of it, there is a large mass addition almost as big as its own size. It has its own surrounding wall and creates a garden in which it stands with the mosque. It is a one-storey high masonry building with a rectangular mass having two adjacent square-ish units under a hipped roof. Its original dimensions are  $11.70 \times 6.60$  metres. The extension has dimensions of  $4.70 \times 11.70$  metres. With the addition it has a square shaped mass and three entrances; one for the guesthouse and two for the toilets.



Figure 120 Mosque Lodging western corner (Author, April 2016)

#### 22. Hammam (227/50) (Appendix K, Sheet No:23)



Figure 121 Site plan and the eastern corner of the hammam (Author, April 2016)

There is a wide court-like space after rows of lodgings. The hammam building is the first one on the northern edge of this space, right after the lodging type 6. It was probably part of a complex of buildings built in 1863-1923 period. It stands where there were remains of a wall in the vicinity of the today's building seen in 1949 aerial photo. It might have been rebuilt with its own materials. It is a one-storey high masonry building with a rectangular mass in southwest to northeast direction under a gable roof. It has dimensions of 11.75 x 19 metres. It has three entrances; two in the southeast and one in the northwest.

It is a masonry structure possibly stone; however, it is not directly visible. The wall thickness resembles the old factory building's walls. The floors are concrete today. The spaces are covered with reinforced concrete slab on which the wooden roof was constructed. The roof is covered with corrugated roof panel. The facades are plastered and painted.

#### 23. Refectory and Social Facility (227/52) (Appendix K, Sheet No:24)



Figure 122 Site plan and eastern corner of the refectory and social facility (Author, April 2016)

There is a wide court after rows of lodgings. The refectory building is the last one on the southern edge of this space. It was once part of a complex of buildings where there were 10(+-1, not clear photo) buildings. It was built in 1863-1923 period since it possesses similarities with the building complexes of the pink mansion, the house 1, the house 2, the fire station and the cinema. It is a one-storey high masonry building with a rectangular mass in the southeast to the northwest direction. It has 46 x 11 metres long facades. There are four small mass additions outside. The main edifice has six entrances today; five in the northeast and one in the southwest.

It is a masonry structure, possibly brick; however, it is not directly visible. The floors are concrete paved with tiles. The spaces are covered with wood plates on top and there is a wooden gable roof above. The roof is covered with corrugated roof panel. The facades are plastered and painted.

The edifice was used as a refectory during the 1970s; however, before the cinema moved to its current building (before 1970), this edifice served as a cinema.<sup>459</sup>

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<sup>&</sup>lt;sup>459</sup> Information obtained from the previous resident İbrahim Şimşek.

## 24. Port 1 (237-238/63) (Appendix K, Sheet No:25)



Figure 123 Site plan and the northwestern facade of the port 1 (Author, April 2016)

The edifice is situated at the end of a port way delivery line in the sea. It was built between 1923 and 1946 since Medih Egemen shares its photos in his 1946 building.<sup>460</sup> It is a one-storey high rectangular mass with a circular platform on top along the southwest to the northeast direction. It is approximately 205 metres long from the shoreline till its end point. It is not covered today and also it is not clear whether the mass under the platform was used as a space. The edifice is unreachable today.

The edifice has metal frame, with posts, beams and diagonals, with an undetectable infill. It also has stone masonry filling between two of its slabs. It has a metal platform on top and rails until the shoreline. The facades are plastered.

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<sup>&</sup>lt;sup>460</sup> For more information see (Egemen, 1946).

#### 25. Port 2 Building 1 (238/66) (Appendix K, Sheet No:26)



Figure 124 Site plan and the eastern corner of the port building 1 (Author, April 2016)

The two connected edifices are situated along the shoreline between the end of the lodgings and the electric plant. They were built in 1953-1964 year span according to the aerial photos. The first one is on the road side while the other is attached to it from the seaside. The former is situated on the northwest to the southeast direction with dimensions of 6.70 x 15 metres and the latter one is perpendicular to this one from its mid-axis having dimensions of 16.70 x 4.20 metres. Both of them are rectangular masses covered with gable roofs. The first mass has two entrances on the northwest and the southeast. The second one is open on its southwestern facade towards the port. In historic aerial photos, there are rails going inside of these two.

The edifices have metal frames, with posts, beams and diagonals, with a solid brick infill. They are covered with metal gable roofs with corrugated roof panels. All the floors are concrete. The gable roofs were constructed with metal trusses and are covered with corrugated metal sheet. The facades are plastered and painted.

#### 26. Port 2 Building 2 (238/68) (Appendix K, Sheet No:27)



Figure 125 Site plan and the northeastern facade of the port building 2 (Author, April 2016)

The edifice is situated at the end of the port way delivery line that extends 215 metres long in the sea. It is connected to the port building 1 and was also built in 1953-1964 year span. It is a two-storey high rectangular mass along the southwest to the northeast direction with the dimensions of 23.45 x 8.30 metres. It is covered with a gable roof. The delivery line enters the building from the second floor on its northeastern facade. The entrance of the building is located on the north-eastern facade as well.

The edifice has a metal frame, with metal posts, beams and diagonals, with a solid brick infill. All the floors are concrete. It has a metal gable roof with corrugated roof panels. The facades are plastered and painted.

#### 27. Old Power Plant (238/70) (Appendix K, Sheet No:28)



Figure 126 Site plan and southwestern facade of the old power plant (Author, April 2016)

The power plant is situated in between salt stack areas, right in front of the crystallization pools on the opposite side of the row of buildings of the sea side. It was built as two adjacent masses in 1938. One of them is the power plant building and the other one is a garage with lodging. The power plant is a wide rectangle with dimensions of 20.30 x 11.60 metres along the northwest to southeast axis. The garage and the lodging mass is another rectangle along the southwest to the northeast with dimensions of 9.70 x 14.45 metres. The power plant has a gable roof, whereas the garage/lodging has a hipped roof. The plant has two entrances as from the southwest and the northeast. The lodging has two accesses as well; one from the southwest and one from the southeast.

The plant has a metal frame, with posts, beams and bracings, with solid brick infill. It is covered with metal gable roof with roof tiles on. The garage/lodging has a masonry structure, possibly brick; however, it is visible only in some parts. All the floors are concrete paved with tiles today on the ground floor. The lodging has wooden floors and tiles on wet spaces. There is a reinforced concrete slab and a wooden hipped roof above. The roof is covered with roof tiles. The facades are plastered and painted.

#### 28. Technical Building (239/76) (Appendix K, Sheet No:29)



Figure 127 Site plan and southwestern facade of the technical building (Author, April 2016)

The edifice is situated perpendicular to the shore line on the edge of a square in between the first row of crystallization pools where once there were complex of factory buildings. In this complex it probably had a twin building as seen in 1949 aerial photo. There are also two rectangular edifices in 1925 map in the same spot, but these are smaller masses. Therefore, the edifice must have been built in 1823-1949 period in place of the previous one. It is an elongated rectangular mass with dimensions of 17.5 x 60 metres in the southwest to the northeast direction. It is a two-storey high building covered with a gable roof. There are two entrances to this mass one from the southwest and one from the northeast. Along this axis there is a pathway through the building.

The plant has (possibly) brick masonry structure with brick masonry columns. There is also a metal frame, with posts, beams and bracings. It is covered with metal gable roof with corrugated roof panel. All the floors are concrete. The gable roof was constructed with metal trusses. The roof is first covered with wooden roof planks and it is covered with corrugated metal sheet. The facades are plastered and painted.

#### 29. Tympanum 3 (239/84) (Appendix K, Sheet No:30)



Figure 128 Site plan and the western corner of the tympanum 3 (Author, April 2016)

The edifice is the third tympanum from top left to bottom right. It was built in 1863-1923 period. It is accessed through a road perpendicular to the sea shoreline and located in between two rows of crystallization pools. The edifice is connected to the water channels and has a garden on its south side with a pool inside. It is a one-storey high square-ish masonry mass covered with a wooden hipped roof originally having dimensions of 7.20 x 6.66 metres. This mass had an extension between 1923-1949. The extension is a one-storey high rectangular masonry mass covered with a wooden hipped roof. It has dimensions of 4.30 x 15 metres including the greenhouse. This greenhouse was built with a wooden frame and a hipped roof. This complex has four entrances; one in the northeast and one in the southwest from the garden to addition mass, and two in the southwest of the main tympanum mass.

The edifice was built with a masonry structure; however, it is not possible to detect its materials (wall thickness points out to stone, though). The greenhouse has a wooden frame structure with glass panels. The slab is covered with concrete today. The three masses have separate wooden hipped roofs covered with wooden panels underneath. The roof is covered with roof tiles. Its facade is plastered and painted.

#### 30. Tympanum 4-5 (258/105) (Appendix K, Sheet No:31)



Figure 129 Site plan and the eastern corner of the tympanum 4 (Author, April 2016)

The edifice is located at the southern edge of the pre-modernization border of the saltern. It does not have indications in the 1925 map, therefore, it must have been built between 1925 and 1949. The edifice is connected to the water channels and has a garden on its north-eastern and south-eastern sides for growing different plants. It is a one-storey high square-ish masonry mass covered with a wooden hipped roof. It has dimensions of 10.80 x 11.90 metres. It also has a small mass addition in the north-eastern facade. This mass has its own entrance. The main building has five entrances; one on the northeast, one on the northwest, one on the southeast and two on the south-western facade.

The edifice was built with a masonry structure; however, it is not possible to detect its materials(wall thickness points out to stone, though). The spaces are covered with a reinforced concrete slab and a wooden hipped roof was constructed above. The roof is covered with roof tiles. Its facade is plastered and painted.

### 3.2.3.3 General Evaluation

Çamaltı Saltern has a complex landscape that has been shaped by mankind for salt production possibly since the 4<sup>th</sup> century B.C. Today the existence of 1863-1923 and 1923-1960 periods' built landscapes show how the industry worked and how it affected the built environment during both the Ottoman Empire and the Turkish Republican epochs. Nevertheless, there are further additions made after the 1960s that do not correlate with this unique collaboration. Due to most of their rather gigantic masses, their relations with the low-rise skyline, construction techniques and materials, the last two periods of 1960-1985 and 1985-2016 represent problems in some parts. The machine hangar, the new TEKEL headquarters and especially the salt washing facility are the *most problematic* ones for not only the architectural language of the built environment, but also for the natural conservation statuses of the area.

Apart from these incoherent building types, there are numerous other problems in the examined 52 buildings of the 1863-1960 period. One of the problems is presented by the buildings that are not in use anymore. 74 of the 128 buildings are abandoned facilities. It means that more than %50 of the building stock is out of use. 39 of the examined 52 buildings are among the abandoned ones. The main reason of this situation is the deconstruction of the sense of belonging<sup>461</sup> since it is the domestic quarters that are abandoned mostly. Today there are only seasonal workers living inside the saltern for a period of time. Most of the permanent workers live in the vicinity or in İzmir and they commute by service busses. This means that there is no one internalizing and taking care of the site just because it is their environment. There are only small gardens, especially around tympana buildings, in which the guards of the system continue their original occupation of non-seasonal period that is farming. However, in its original character, Çamaltı was a neighbourhood, taken care of by its own community. This community was shaped by the paternalistic instincts of the industry, an industry that existed due the natural landscape, while the

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<sup>&</sup>lt;sup>461</sup> The term is used by the author to explain the issue of first building an identity, sense of belonging by contractual relationships and then demolishing it by simply annulling the contracts. It is not a generally used term.

community itself shaped the built landscape of the saltern. The representations of these mutual and complex relations were alive up until 2010s.

Another problem is the continuous change in the functions of the buildings and the change in their organizations thereof. Of course, the continuous use posed some problems despite its potential in the maintenance of the edifices. Almost all the buildings, except the lodgings, were used for several different functions in different periods as in the example of the edifice what was called as the cinema. The original function and the organization of the building are unknown. What is clear is that it was used as the technical building until the early 1970s and then started to be used as the cinema. To do so, all the arched window openings of the edifice were either closed or converted into smaller rectangular openings. There is also a possibility of a change in the roof structure and interior design so as to obtain the one large space a cinema needed. After the end of the social activities in the site, it now serves as storage from time to time and due to lack of maintenance the before-covered traces of the alterations are now more visible. Such situations and other similar changes disable the clear reading of the remnants in many cases, especially in the Italian quarters, including the cinema, that were built in the 1863-1923 period. Only certain function known in this period is the tympana edifices for water lifting. Among these, one tympanum preserves its original mass, other two of this period have mass additions and there are changes in their openings and plan schemes as well. Other Italian era edifices mostly preserve their facades, or give clues about their original facades; however, their plans were highly altered and their original functions are unknown. The Pink Mansion is the only one preserving almost all of its unique components.

The buildings of the 1923-1960 period are generally in a better situation due to their more stable functions. For the domestic quarters, it can be stated that all of the lodgings have alterations; however, they all are detectable either from their original documents or from the traces that exist in the buildings. The most common alteration is the small additions on their southwestern facades possibly to be used as storages. The second change is the conversion of the entrance terraces, or retracted entrances, into interior spaces. Other than these two prominent changes, the demolition of the kitchen walls and combining this space with one of the

adjacent wet spaces is very common among the types 1, 2, 3, and 5. The most dramatic of all changes can be seen in *lodging types 4 and 6*. In type 4 the entrance was created by demolishing one of the wet spaces and adding a room in the northeastern façade where the possible original entrance was designed. Furthermore, the kitchen was enlarged by removing the wall between one of the wet spaces and the kitchen. Yet, it is still possible to detect these changes. In type 6, although it is possible to read the original outline of the mass and plan, there is a large mass addition almost as wide as the lodging itself. There is one toilet, one room and one entrance space within this mass addition. One unit of this type is also used as a public toilet next to the mosque today. The lodging part is altered by removing its kitchen, but it preserves the rooms. The addition mass was converted to accommodate four toilets, two in male and two in female compartments. For the factory quarters, it can be stated that they preserve their intactness today, but they do have small additions. The rail workshop and dorm complex have only one small addition connecting two separate masses. Possibly they were all reached from different entrances and this is the only observable change today. The technical building has a secondary metal frame supporting its structure and roof, possibly added after 1980s, and there are two office additions on its north-western façade built after 1995. The port 1 building does not have any alterations. It is partially collapsed and not reachable today. The port 2 building 2 has office additions but other than that there are no observable alterations. All of these edifices have plain and single spaces under one roof. Therefore, the change they faced was not as radical as the Italian and domestic quarters. The old power plant is the only edifice in this category with more complex organization and mass. It is composed of two different units as the power plant and the lodging. There are two main additions to this mass. The power plant has an early addition in between 1949 and 1957 and the balcony on the second floor of the lodging was converted to be the part of the room in another period. Overall, it is possible to state that domestic quarters had the exterior mass additions and alterations in their wetspaces, whereas the factory buildings were less prone to change with their one-space organizations during their lifetime.

The third problem is the *conditions of the edifices*. Now that all of these edifices are abandoned mostly, only 38 buildings out of 128 that are in use are restored for the production. Only 9 of them are pre-1960 edifices. In total 69 buildings are in a

critical state, since unless they are used or restored there is a high chance for them to become severely damaged. 39 of the 52 pre-1960 buildings share this danger and 4 of these 52 are already partially collapsed.

All of these problems of abandonment, continuous change and lack of maintenance severely threaten this industrial landscape. There *are already 34 demolished buildings* detected from 1949 and 1964 aerial photos and if no precautions are taken soon, almost all of the industrial heritage of the area will be lost forever, causing an important rupture in the *urban memory*.

# 3.2.4 Socio-Cultural Characteristics

**Socio-cultural:** related to the different groups of people in a society and their habits, traditions and beliefs.<sup>462</sup>



Figure 130 Two inhabitants of the "*Çamaltı Neighbourhood*", Yurdanur Baydar and Emel Işık Üreğil, the lodgings on the left and tram line in front of the salt stacks on the right,  $1964^{463}$ 

 $^{462}~\underline{\text{http://dictionary.cambridge.org/dictionary/english/sociocultural}}$  , last accessed on July 2016

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 $\frac{https://www.facebook.com/photo.php?fbid=1106455826056006\&set=pcb.1049923851727258\&type=3\&theater}{3\&theater}, last accessed on August 2016, uploaded by Zeki Oğuz.$ 

The area of the Çamaltı Saltern was probably inhabited long before the establishment of the workers' housing units during the Republican Period. The Italian era units that are believed to be housing units can signify the situation. Furthermore, the first detailed map of the area, 1925 map, shows buildings other than the factories. Since the salt production through evaporation does not rely on mainly the architectural edifices, it can be concluded, for now, that couple of the buildings that did not survive can be the domestic quarters for workers. Nevertheless, it is a fact that the Republican establishment is the first one initiating a social fabric that had lived almost 90 years before the change in the administration in 2010. Such kind of a complex and long history and a total description of the socio-cultural frame of the saltern would need a more comprehensive study on its own. Here, the general characteristics that were gathered during the field and social surveys will be summarized.

From the establishment of the Turkish Republic till the privatization of the production rights in 2010, the population of the Çamaltı Saltern constituted two types of inhabitants; *temporary and permanent*. The temporary residents were the seasonal workers, though many of them worked for couple of seasons coming back each year to the saltern. There is a study made by Erkan Şen in 1985 about the socio-economic structure of the seasonal workers of the Saltern and the general characteristics of salt production. He gives a brief description on the duties of both the permanent and the temporary workers. Connecting his division with the community types generated in the Chapter II of this thesis, the inhabitants of the site can be analysed under two sections; *semi-constant community* as permanent workers and their families and the *community in motion* as the seasonal workers.

The first group, semi-constant community, was the one granting the area its "neighbourhood" status in administration. Şen states that there were 562 permanent staff composed of technicians, workers and officers existed in 1982 many of whom generated the semi-constant community of the saltern. They were responsible for the pre-production preparations from March to July, and from July to November they

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<sup>464</sup> For more details see "Çamaltı Tuzlası'nda çalışan Mevsimlik İşçilerin Sosyo-Ekonomik Yapısı ve Tuz Üretiminin Ana Çizgileri". Accessed:

http://dergipark.ulakbim.gov.tr/ecd/article/view/5000128786, last accessed on November 2015

supported the production. In between November and March, they conducted the general maintenance at the saltern. Here was a strong bond between these workers and the saltern. As aforementioned, people seek for an assured and defined boundary. For most people, belonging to a location is an inherent urge. In case of Çamaltı, the selection of a geographic point of reference belongs to the factory, as in other company towns. However, in some cases it can be transferred to offspring. According to the information gathered from the human resources hiring the workers, some families passed on the tradition of being a salt worker. Moreover, people who were born in Çamaltı Saltern also became salt workers very often. He in this way, generations of families continued to live in the saltern.

Apart from the information gathered on the site, majority of the information on the socio-cultural background of the saltern gathered by the social survey prepared within the scope of this thesis. Currently there are no permanent inhabitants in the site and the housing units are abandoned thereof. The seasonal workers are using the dormitories during the ingathering period. The previous permanent inhabitants moved out after the privatization of the operation rights in 2010. However, they were so attached that they have formed two Facebook groups today to communicate. One of them is "Sadece Tuzla" and the other one is "Çamaltı Tuzlası". The social survey for this study was shared with the inhabitants through these platforms since no one is living in the saltern anymore. There is even one group of inhabitants who have built an apartment named "Tuzla (Saltern)" in Çiğli to continue living together when they moved from the site. 467

The shared survey was answered by 28 people. 25 of the 28 participants lived inside the saltern. 18 of them lived more than 10 years. 27 of the participants stated that they would still like to live. All of the participants said yes to the question whether they would describe their origin as "Çamaltı" showing how the working conditions led to create an institutional identity. All of the participants stated that they were happy to live in the saltern because they had strong neighbourhood relations and

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<sup>&</sup>lt;sup>465</sup> (Şen, 1985)

<sup>&</sup>lt;sup>466</sup> Information was obtained on site.

<sup>&</sup>lt;sup>467</sup> Information obtained from Serpil Şekerli whose grandparents lived in this apartment.

deep sense of community. There were many interactions verifying and strengthening the bond among the inhabitants. For example, they had a football team called "Tuzlaspor" (Saltern-spor) and football was one of their main social activities. Others included swimming from the docks or sitting on them with neighbours at nights, fishing, weddings and celebrations in social facilities or in the club house, movies shown at the cinema, school shows, theatre plays, and some organized events. Ibrahim Şimşek told his memories about one of these events that took place in the cinema building. It was the theatre of Muzaffer Güler, a famous Turkish theatre actor who came for a play during the 1970s in the saltern. Moreover, one of the most interesting of these organized events was the concert of Aşık Veysel. One of the participants, Fahriye Nur Kesil, stated during her mother's youth, Aşık Veysel came to perform in the saltern<sup>468</sup>. She was among the participants who had long line of settlement in the area. Her granddads were workers of the saltern. Her mother was born there, met and married her father in the saltern as well. Moreover, all of her aunts and uncles were from "Tuzla". Her father had to change his job he had in the saltern due to the privatization of operation rights. Another participant İbrahim Simsek said that he moved to saltern due to his family and then he was also employed in the salt production, where he had worked for 30 years by the time he retired. These examples show how the tradition of salt production and the sense of community passed on to generations in a factory town, similar to an organic community. This sense of community was reinforced through the given social activities, as stated by the inhabitants. However, towards the end of 1980s and the beginning of the 1990s, many of these activities disappeared. The cinema was not functioning anymore, the school was closed and there was only the club house that was active. It was an important culture and a way of living in an industrial site and 27 of the participants stated that the area was historically important thereof. They also stated that the saltern is important because of its long history in salt production and apart from its wetlands, the trams, the trademark salt stacks, the pink mansion, the old lodgings, the cinema, the docks, and all the production related machine

<sup>&</sup>lt;sup>468</sup> The year of this concert is not certain; however, considering the fact that Aşık Veysel died in 1973, his concert must have taken place during the 1960s.

should be preserved for future generations to recognize how they worked and lived once. Today there are 90 permanent workers, none of whom live inside the saltern.

The other part of the community was composed of the temporary workers, as the community in motion. They used to arrive right before the harvest and work for approximately 2 months for gathering the salt from September till November. For each harvest period their number rose up to 1.500. This procedure is still valid, although their numbers declined significantly to 250 workers per harvest season.<sup>469</sup> As Şen stated, the selection of these seasonal workers was performed by people called "çavuş" (sergeant) for each "vinç" (crane). Each salt pan used to have specific amount of workers collecting the salt and they were called as cranes. 470 A group of people were carrying the salt before the technical advancements, so probably the origin of the term derives from this word. 471 The sergeants were responsible for collecting people from their villages every year. Each group would then be called as "1st vinc workers", "2nd vinc workers" and so on. These groups also included the permanent inhabitants. The dormitories of the seasonal workers were also given names according to this division. These workers from the same regions worked together and lived together. The reason behind this long-lived tradition lies under the very basic concept of family bonds. When workers come from the same region or village they work more harmoniously and since most of them are related, any problems that could rise from the arguments would be avoided. This tradition partially still continues today; however, main selection is the responsibility of the human resources now. Another production related tradition that disappeared today is the enthusiasm of each crane in gathering the salt. Back in the previous days, each vinç would bid on finishing the ingathering first in their section and for every vinc an animal was sacrificed at the beginning.

It is possible to state that these two types of communities had strong ties with the saltern whether they worked for a short period of time or they lived following their

<sup>469</sup> Information was obtained from the company.

<sup>&</sup>lt;sup>470</sup> (Şen, 1985)

<sup>&</sup>lt;sup>471</sup> The association was created by the author. There are no sources available explaining why the workers were called as such.

ancestors. Unfortunately, with the privatization in 2010, the status of this lively "Çamaltı Neighbourhood" was abandoned in 2013<sup>472</sup> and its status of neighbourhood was cancelled due to not having any inhabitants left in the area with the council decision number 2014/15 in 10/03/2014.<sup>473</sup> This marks the beginning of a new epoch in which only the community in motion continues to exist.

<sup>&</sup>lt;sup>472</sup> The inhabitants were given 3 years of time to move out. Information was obtained from the current operator.

<sup>&</sup>lt;sup>473</sup> See Appendix L for the document taken from Çiğli Municipality.

# **CHAPTER 4**

# VALUE ASSESMENT OF İZMİR ÇAMALTI SALTERN

"I shivered in those solitudes

when I heard

the voice of

the salt

in the desert."

Pablo Neruda, **Ode to Salt**<sup>474</sup>



Figure 131 Salt stack (Author, April 2016)

 $<sup>^{474}\,\</sup>underline{\text{http://www.csee.umbc.edu/~stephens/POEMS/neruda}}$  , last accessed on December, 2015

### 4.1 Salt Landscapes and Industrial Heritage of Camalti

In Çamaltı, the landscape is still in use and industrialization is still an active process with a sense of historical continuity, while offering archaeological evidence of past activities and technologies. It has held an important historical record in the production of salt, possibly since 4<sup>th</sup> century BC if the city of Leukai obtained salt as stated by Numan Tuna. Although there are no current evidences of such early cultivation, there are records showing the cultivation of salt during the Macedonians, Byzantines, Seljuks<sup>475</sup>, and the Ottoman Empire before it became an industrial site during the last years of the Empire. It was *one of the first state monopolies, and thus, one of the first areas to become industrialised*. The "İnhisarlar İdaresi" (Monopoly Administration) was established in 1862 and as early as 1863 when the Çamaltı Saltern was designed with the systematized pools by the Italians. The property rights and taxes belonged to the Empire, but the operation was performed by the Italian team with "mukataa" system. As the years progressed, the saltern was re-established with the newest technological advancements and one of the earliest power plants in the Ottoman Empire in 1910.

Upon the establishment of the Turkish Republic, the saltern became one of the first venues in which the state-based nationalistic ideals of industrialisation were applied immediately. During this period, many initiatives were started to be taken in order to create industrial production centres. These were not only the means of production, but also agents to generate the new lifestyle and modern people. The complexes included factory edifices, sport facilities, parks, hospitals, schools, cinemas, and social clubs besides the lodgings for workers thereof. Many of the established corporate brands such as the *sugar factories*, *Sümerbank factories and TEKEL quarters* became the representatives of these industrialisation policies either by constructing new facilities or enhancing the already existing ones. The Çamaltı Saltern, established in 1910 just 13 years before the new government, was at the receiving hand of the development initiatives in its existing landscape. It was equipped with a school, an infirmary, lodgings, power plants, ports and other factory buildings until 1960. After this date, the new lodgings, new headquarters for the Salt

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<sup>475</sup> http://www.cigli.gov.tr/default b0.aspx?content=1008, last accessed on July, 2016

Industry Institution, the machine hangar and the salt washing facilities were added until its privatization. Throughout this history line, the continuity and developments in salt cultivation and entrapment of brine enabled the reinforcement of the unique man-made ecosystem depending on the salty water. It was both the result of geological character of the site and the man's collaboration with the natural resource. In this way, built industrial and natural landscapes progressed hand in hand mutually for a very long time creating an *important cultural landscape*.

This mutualism ended when, in 2010, its operation rights were given with privatization, as happened in other TEKEL facilities. During the long history of the privatization beginning with 1980s, many of the TEKEL establishments were sold and privatised. As a result, the edifices of related factories were abandoned due to their terminated functions as tobacco, cigarette and alcohol enterprises. Salterns on the other hand, constituted the only continuing production centres left from this heritage since the "salt" was and still is one of the most vital elements of everyday life, unlike tobacco and alcohol. Thus, despite the change in the administrative structure of their properties, many salterns continued to produce salt. However, the industrial town of the Çamaltı Saltern was evacuated as the other TEKEL buildings since they lost their uses. There are only the seasonal workers living in the saltern today during the harvest season. The permanent workers are living in the city, and thus, the lodgings, the cinema, the fire station, the social facilities and the school are no longer in use. When it comes to the factory buildings such as the ports, the power plant, the technical building and the tympana, only the tympana are in use with their original functions. The ports are abandoned since the transportation of raw salt is done by trucks of the buyer companies, not by the ships anymore. The power plant and the technical building are used as ateliers for different repair works from time to time. Therefore, the remnants of the industrial legacy of the saltern wear off day by day.

To prevent this fate of extinction, the area should be understood holistically with its built and natural environment together as in the previously examined examples.<sup>476</sup> Due to its complex structure of its existence with natural and built environment, the

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<sup>&</sup>lt;sup>476</sup> See Chapter 2 for more details.

Camaltı Saltern stands at a unique position today compared to other salt-scapes or industrial landscapes around the world. It is not only a traditional salt-scape legacy, a natural conservation site, a wildlife protection area, an archaeological site but also the representative of an industrial landscape with its TEKEL heritage. However, it is not being perceived as such, and it has been under protection only with its natural properties, that in fact, depend highly on the dynamics of the salt production. This is the result of the newly emerging understanding of industrial heritage in Turkey where the cultural significances of such industrial sites are not apparent to people generally. Therefore, the collaboration of the salt landscape and industry should clearly be identified, interpreted and explained in order such sites, where the mutual relationship of nature and industry prevail, to be protected. The most important step in this process is the identification of the site's values so as to name it as a cultural heritage site. In a landscape as introverted as the Camalti Saltern, the identification of the values such as integrity, authenticity and biodiversity has a dominant importance in saltern conservation to address them as geological, historical and cultural heritages. The ecological, biological, economic, cultural, historical, aesthetic values and the landscape value of salt production that is constantly referred in the assessment of the declaration of significance in other salterns is of utmost importance as well. Moreover, as stated in "Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar)" they constitute "resource of great economic, cultural, scientific, and recreational value, the loss of which would be irreparable;..."477, and thus, they provide the basis for an industrial landscape that "reflects the profound connection between the cultural and natural environment, as industrial processes - whether ancient or modern - depend on natural sources of raw materials, energy and transportation networks."478 For this reason, it is a necessity to combine the values existing in the natural landscape with the ones generating out of the built one.

Therefore, a chart was prepared including the value types that were defined in the  $3^{rd}$  chapter so as to summarize them and they were applied to the Çamaltı Saltern

<sup>&</sup>lt;sup>477</sup> (UNESCO, 1971)

<sup>&</sup>lt;sup>478</sup> (ICOMOS, 2011)

exclusively. There exist two main classifications in the proposed chart as vertical and horizontal divisions. Horizontally they are differentiated as "intrinsic" and "extrinsic" values. These two categories are connected to their vertical subclassifications as "the built landscape" and "the natural landscape". The resource value that explained outside these classifications due to its specific character is also included in the chart. The industrial landscape of Çamaltı Saltern is associated with these values, and connections were made through explanations based on the entire research.

**Table 8 Value Assessment Proposal** 

	INTRINSIC VALUES	EXTRINSIC VALUES
THE BUILT LANDSCAPE	Age Historical Technical/Artistic Document&Educational Group&Plurality Authenticity Integrity	Socio-cultural  (Identity, political, aesthetic, symbolic, commemorative, spiritual, religious, mythological, rarity, uniqueness,can be multiplied)  Economic  Use  Market  Continuity  Employment
THE NATURAL LANDSCAPE	Geological Biodiversity/Ecological Landscape	Sustainability Industrial/Environmental Community Culture
Resource V	alue <sup>479</sup>	

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<sup>&</sup>lt;sup>479</sup> See Chapter 3 for the differentiation of the resource value.

### 4.2 Value Assessment of Camalti Saltern and its Industrial Landscape

# I. Intrinsic Values of the Natural Landscape

# a. Geological Value

Due to its very own nature, salt deposits on the shallow lands near the sea side. Furthermore, the local marsh soil has necessary impermeability to keep the brine in the pools. The only operation done is to flatten the ground with a roller before the production cycle. Thus, the geological properties of the land highly support the salt production.

### b. Biological/Ecological Value

The biological value of the Çamaltı Saltern on a natural scale is a widely approved and appreciated one both in national and international scale. The whole production area and some of its extensions are bound to RAMSAR Area, 1<sup>st</sup> degree Natural Site, Natural Protection Area. Within these areas, due to the interactions between the members of the wildlife in salt marshes, the quality of salt produced can rise or fall. Some of the interactions between the species can even clean the brine (the salty water of the ocean) resulting a higher quality while the production of salt providing food for some of the bird species such as the trademark flamingos that feed themselves with living substances some of which enable them to go pink. Another example can be given on a halophilic salt bacterium called Dunaliella Salina that induces the evaporation needed in the production. This bacterium also causes the different colour schemes of the salt pans granting the saltern its unique and *enchanting landscape*. The importance of all these interactions is what grants the Camalti Saltern its salt production and entire landscape. There exists a natural balance, and thus, exists the industrial activity. This is not an industrial activity that consumes the natural source. Just the opposite, the end of such production might change the habitat completely, and thus, the biodiversity could be affected by a loss.

### c. Landscape Value

There is an intrinsic beauty created by the combination of the man-made and the natural landscape in the saltern. The eternal plain of the Gediz River contrasting the high hills on the other side of the gulf, the Aegean Sea and the deposited salt creating the white shores of exceptional natural beauty, the ever changing dynamic colours of the saltpans, the industrial edifices lining the salt pans in harmony with the flatland (except the new developments after the 1980s) compose a genuine landscape that is rare to find elsewhere. There is no sea saltern in the world that looks like another one in the world since these landscapes are site-specific, defined by the geological nature of the area.

### II. Intrinsic Values of The Built Landscape

# a. Age Value

The Salt landscape of the area has been in use possibly since the 4<sup>th</sup> century BC. It had witnessed ancient civilizations, Macedonians, Byzantines, Seljuks, Ottoman Empire, and Republican Period before it gained its current status. We encounter the first organized plan of the saltpans in a 1907 dated map, and this core corresponds more or less to 1925 dated boundaries around which further 2 expansions have been added up till today. To sum up, the saltern posesses 25 centuries of salt extraction, 153 years of built heritage with its Italian quarters, 91 years of panscape, and 80 years of republican industrial heritage. For that, all of the examined pre-1960 built landscape has age value, except the refectory building since it was built after 1970;however, still possesses the information of previous power plant of 1910 in its structure.

Moreover, the production of salt in Çamaltı Saltern area had an uninterrupted history. Although many fluctuations happened through the course of time that

could have caused a fracture in the production cycle, the saltern has survived government changes, wars, and financial difficulties. Thus, the *continuity* is one of the most important qualifications of the area.

### b. Historical Value

The saltern provides historical data with a long line of events mentioned formerly under the history of the area. Within this long history, the saltern has experienced many important events before it gained its final status. We know from the Ottoman Archives that this saltern was an important one and it had a high profit margin. Thus, the right to operate this saltern was subject to the auction system and many important transactions happed such as the auction of all the salterns to one company under the guaranty of the Banker Zarifi, a person who had significant relations with the Ottoman Palace and later initiated the establishment of Düyun-u Umumiye to which all the salt taxes were given in exchange of the Ottoman debts. Salt tax was a guaranteed income, and therefore, it was an important card to play with. It was so important that İzmir's saltern area, so called "salt sea" as referred in French maps, was included in the *Treaty of Sevrés* with a separate article. It was first organized by the Italians during the last periods of the 19<sup>th</sup> century and the first years of the 20th, showing the traces of the architectural and technological advancements of its time. Upon the establishment of the it was modernized in accordance Turkish Republic, with the economic/political plan of the government. A worker's town was established and many people since then had established associations with the place up until the area was privatized. It was expanded twice after the republic; once during 1950s with the Marshall support when it received grant for expansion and once during 1980s with a UNIDO (United Nations Industrial Development Organization) project. All these events reveal an important historical data encompassing the history of the saltern, history of the region and furthermore, the history of the Ottoman Empire and Turkish Republic. This data not only covers a national history, but also international and even personal histories of the saltern workers. The Italian quarters, the Republican workers' town and mechanical equipment are the conveyors of the historical data.

#### c. Technical/Artistic Value

Although most of the architectural remnants in the site are not elaborate examples of artistic and technical properties, except a few, all of them reveal their properties and histories and the sum of this knowledge composes the history of the whole site. Here the main point is to evaluate the efficiency and continuity of the production and its related spatial organizations. As pointed out previously, the heritage potential in the area does not only rely on its architectural capacity. The history is expressed through the production landscape. While there exists a change in materials and adjustments in technology, the *successive pools* to evaporate the sea salt has been in use for centuries now and this is the most important technical property within the site. The second most important element of production is the use of tympana in order to transfer the sea water into the channels. Vitruvius mentioned about the system in his book *De Architectura* dating back to 1<sup>st</sup> century BC. The system is still affective since the 1st century BC. The reason is simple; large amount of water can only be channelled through this system that no new technology overrules today. There is a little advancement applied to the tympana in the saltern by means of facilitating a motor for their rotation only. This technology and the channel systems dating back to the same period enables one to observe the Italian technology that is still visible today.

Apart from the successive pool system, architectural remnants of the saltern provide evidence of the change in construction technic, material, workmanship and design strategies. From the masonry 19<sup>th</sup> century Italian buildings to Early Republican Period worker's town and to the steel frame structured technical departments, the site provides a profile of the scientific, technic, economic and politic reflections on architecture. Moreover, couple of the buildings like the old power plant, the fire station, old factory and the

technical building provide technical equipment and Devlet Malzeme Ofisi (State Supply Office)'s furniture still left there today.

#### d. Document&Educational Value

The area bears witness of the long history line of salt production in the region. Not only it provides historical and architectural evidence of its periods, but also its unique nature provides many researchers from the fields such as chemistry, biology, ecology to gather valuable information. These areas and researches contribute to the salt production and its landscape as well. For example, studies on the aquaculture of the saltern concern the colours of the pools and production of pure salt in the salt pans.

Educational Value is valid for many fields of researches. Geography branches of the universities are already organizing site trips to the saltern any time of the year. Moreover, primary schools and high schools are visiting the site as part of their education as well. Apart from these, the area provides educational opportunities for biologists, chemists, historians, architectures, urban planners, and many other branches. What is more, if properly managed, the saltern has the potential to hold educational value in passing on the knowhow of traditional salt production as well.

#### e. Group&Plurality

According to Madran and Özgönül two differentiations exist for *group value* as vertical (Composition) and horizontal (Complex). In Çamaltı Saltern there is a complex of buildings and landscape elements corresponding to different construction dates, periods, materials, and structural systems. These correspond to groups as the Ottoman Period Italian expansion buildings and Early Republican workers' town in which also there exist groups of lodging types.

**Plurality** is defined as having a quantity of a specific building type in a limited physical area by Madran and Özgönül. The workers' housing units are the examples of such kind of accumulation in the saltern. There are different typologies, as mentioned before, but each type has groups.

# f. Authenticity/Originality

There are many additions and alterations within the boundaries of the saltern; nevertheless, almost all of them are detectable. This is well understood through the survey sheets applied to the architectural remnants within the area. Although the plan schemes are slightly altered via extensions, the general layout is readable in most cases. Forms, designs, materials and techniques defined were usable in order to detect the timeline of construction history in the saltern where there exists no information on a structure's data. Therefore, the chart on the survey was used in order to decipher the authenticity of a building. If the edifice did not have information available on its origin and had more than one thick in 3<sup>rd</sup> and 4<sup>th</sup> degrees, then it was declared as having lost its authenticity. In cases of one thick in these degrees, it meant that the edifice still produced valuable data on its authentic existence. The old factory, the house 1, the fire station, the cinema, the pink mansion, the refectory and social facility, the tympana, the lodging types 1-2-3 and 5, school, the watchbox, the watchbox and the locker rooms, the old power plant, the technical building, the ports 1 and 2, the rail atelier and dorm have authenticity value for preserving the traces of their original designs.

Evaluating the authenticity in a larger scale, the design of the pools of the panscape are preserved as original, extensions have not altered the visibility of the general layout of the periods. Here, it should be noted that this is an evolving landscape. Therefore, the assessment on the panscape cannot rely on strict conservation of the pool dimensions. Instead, they are accepted as having the authenticity value because they clearly preserved the transitions' marks on the landscape and original boundaries intact. The production technique in accordance with the landscape is continuing as well except the

decrease in the number of workers due to machine technology equipped in the ingathering of salt.

### g. Integrity

The wholeness and intactness of all the components of a cultural asset defines its integrity. Due to the changes in the original properties of many built landscape elements of the saltern, integrity exists only in few. Although they conserve their construction techniques and façade elements, in most cases the plan organization is highly altered. The pink mansion, the tympana, the lodging type 1-2-3 and 5, the old power plant, the port 2 and salt pans are the ones conserving their integrity, though they all still have alterations. However, the power plant has many of its components intact, for example, despite having many alterations in its plan. Even its switchboard exists today with its operation system.

# III. Extrinsic Values of the Natural Landscape

### a. Sustainability

# **Environmental - Industrial Sustainability**

There has always been a prolonged relationship between industrial, cultural and biological environment in the saltern. The salt source of the saltern is the Aegean Sea that will continue to provide the area with salt for many centuries to come. For the production of salt is performed via non-destructive methods, the industrial cycle will continue to regenerate itself according to its nature as long as the area is being protected together with its environmental properties.

### Community

Although the permanent residents of the saltern have already left, the continuity in salt cultivation will employ the community in motion as long as there are no radical changes in the mode of production. It might also enable the salt community of Tuzçullu village to further their relationships with the saltworks together with the continually working seasonal community.

### Culture

The continuous cycle of salt cultivation can preserve both tangible and intangible characteristics of the saltern. The traditions existing in workers' employment, the "vinç" and "çavuş" system, common terms used, the way of living in and around the saltern can initiate or prolong an existing culture based on salt-scape.

### IV. Extrinsic Values of the Built Landscape

#### a. Socio-cultural Values

The Çamaltı Saltern's land was previously known and written in documents as "Çamaltı Neighbourhood". The 1925 dated map verifies this name as well. It was probably inhabited long before the establishment of the workers' housing units during the Republican Period. Nevertheless, it is a fact that the Republican establishment initiated a social fabric that had lived almost 100 years before the change in the administration in 2010. This granted many values to the saltern.

**Political Importance:** During the Ottoman Period, Çamaltı source was given via auctions to the operators. It was an important source so it belonged to Padişah Hassı. A 17<sup>th</sup> century document states that a tax had

been collected on behalf of Safiye Sultan, one of the most important women of the Ottoman Empire. This qualifies the political power the area held during the Empire. As mentioned previously, it was also included in the Treaty of Sevres, received Marshall Support and a UNIDO project for expansion. During the early phases of the Republic it was equipped with workers' town, factory buildings and socio-cultural infrastructure in accordance with the state politics of the time explained under the industrialization of the Republic. Furthermore, the area was part of a military site before it was announced as a natural site due to its strategical location at the entrance of the inner Gulf of İzmir.

Aesthetic Value: Aesthetic qualities of the Pink mansion, the house 1, the fire station, the house 2(Partial façade), the refectory&social facility and the old factory can be appreciated due to their being representatives of the 19<sup>th</sup> century design, material and construction technique. On the other hand, the tympana, the old power station, the technical building, the ports 1 and port 2 can be recognized with their machine aesthetics while the lodgings are the symbols of the early understanding of a republican industrial community and relevant design strategies. Moreover, the panscape of the saltern in relation with the wetland ecosystem creates a divine testimony of the aesthetic beauty in the collaboration of man and nature.

**Symbolic:** The Çamaltı Saltern's workers' town is a symbol of Republican industrialization ideals with the lodgings, the school, the hospital (infirmary), the old power plant, the ports 1 and port 2, and the rail atelier. Moreover, the saltpans are the symbols of human creative genius and outstanding use of sea water. It is part of the Mediterranean cultural landscapes of salt that are only 170 today, and therefore, partially symbol of a long-lived tradition.

Memory/Commemorative: The salt production, the way of living, the social activities, the rituals performed and their associated places

preserved moments of the industrial past of the saltern. It was an important medium creating the collective identity of an industrial community.

**Identity:** Upon the social survey that was explained in the methodology part, it is seen that a social structure was very well established and the neighbourhood **identity** was well preserved.

**Rarity&Uniqueness:** Çamaltı Saltern is, as mentioned before, the biggest sea sourced saltern of Turkey. Furthermore, its mutual relationship with its biological/ecological interrelations adds up to its rare found nature. The architectural remnants of the salina-polis and the panscape are rarely found in such cooperation as well. It is a living example of both Ottoman and Republican industrialization initiatives.

Apart from the fact that it is a rarely found landscape as explained above, Çamaltı Saltern has a unique nature created by its long historical background. Since unique means being without a like or equal, it is possible to associate the industrial landscape of Çamaltı and number of its edifices with this value type. Although it might be similar to other sea sourced salterns of the Mediterranean region, the dynamics that created and affected it, such as the Italian technology, Republican establishments and expansions, has formed a landscape that is hard to find an equal. In any case, any sea saltern would be unique even for its panscape since each and every one of them is designed according to their own geographical properties. Therefore, there is no similar example of Çamaltı's landscape in the world.

### b. Economic Values

#### **Use/Function Value**

Almost all of the buildings were abandoned today at Çamaltı Saltern except the administrative buildings, the electrical plant, the tympanum buildings, the dining halls, the mosque and couple of other technical buildings. The ones that are necessary for current production are being restored by the company. However, they all possess the potential to be reused with further projects.

#### **Market Value**

Every commodity on earth eventually has a market value. In case of the Çamaltı Saltern, its operation rights were to be given via an auction in 2010 for 21 years. With this method it was given to the highest bidder. This is one of the many scenarios that can verify its market value potentials. Another one can be gained through a possible tourism project or an educational facility.

### **Continuity in Use**

This statement defines the situation in which Çamaltı Saltern stands in. It has been in use for thousands of years now. Combining with the resource value that it is not possible to be drained away, the continuity in its use raises public and market interest that have the potential to further its continuous use. This will provide physical, social and economic benefits as Riegl stated.

**Employment:** The saltern already provides many workers with employment opportunities. However, in further conservation acts it also

creates potential employment for engineers, architects, city planners, biologists, ecologists and so on.

### V. Resource Value

Aegean Sea provides the saltern with natural resource of "salt". The climate, the geography, also biology and also ecology of the area supports the ingathering of the source. However, these are not the only resources it provides through natural landscape. The know-how of the salt production is also a resource of knowledge that mankind acquired via observing the nature. Moreover, the historic built landscape of the saltern holds the potential resource of cultural heritage asset. They also create an important resource of building stock.

Table 9 Values and Edifices<sup>480</sup>

Resource*			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Il Landscape Extrinsic		ity	Culture																											+	
	Extrinsic	Sustainability	Community																											+	
Natura	e Natura	Sus	Industrial & Environmental																											+	
d by the	Values Added by the Natural Landscape Intrinsic Extrinsic		Landscape																											+	
s Adde			Biodiversity & Ecological																											+	
Values			Geological																												
Extinsic			Employment Potential	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
		omic	Continuity							+		+							+		+	+	+	+						+	
		Economic	Market	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
			Use	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+	
	nsic		Political Importance	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+		+	
	Exti		Aesthetic	+	+	+	+		+	+		+	+	+	+	+	+	+	+	+			+	+	+	+				+	
ape		ultural	Symbolic						+			+	+	+	+	+	+	+	+	+			+	+	+	+	+	+		+	
Landsc		Socio-cultural	Rarity&Uniqueness	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+			+	+	+	+		+		+	
Values of the Built Landscape Intrinsic			Memory/Commemorative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+				+	
			Identity	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	
			Integrity						+			+	+	+	+		+						+			+				+	
			Authenticity	+	+	+		+	+	+		+	+	+	+		+			+	+	+	+	+	+	+	+			+	
			Document & Education	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
	ntrinsic		Group&Plurality	+	+	+	+	+	+				+	+	+	+	+	+	+	+										+	
		oitsinA&lasindooT	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+		
			Historical	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+			+	
			əgĄ	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	
Source	Characteristic	Subdivision	Values	Old Factory	House 1	Fire Station	House 2	Cinema	Pink Mansion	Refectory & Social Facility	Hammam	Tympana (4 of them)	Lodging Type 1	Lodging Type 2	Lodging Type 3	Lodging Type 4	Lodging Type 5	Lodging Type 6	Infirmary/Hospital	School	Watchbox	Watchbox&Locker Rooms	Old Power Plant	Technical Building	Port 1	Port 2 Buildings 1&2	Rail Atelier&Dorm	Refectory	House 3	Salt Pans	

 $<sup>^{480}</sup>$  \* Wetlands are not evaluated in this chart, their contribution to the existence of other values are indicated instead.

### 4.3 General Evaluation

As the result of the study, the results are evaluated in the light of the administrative, physical, cultural and social aspects of the area. These are given under four topics as weaknesses, threats, strengths and opportunities.

#### **Problems**

The most important weakness of the area is that it is rather away from the city centre and due to its massive size on a flat land, it is not easily decipherable. Moreover, it has *strict boundaries* and the *entry is forbidden*. Therefore, residents of the city generally acknowledge its existence; nevertheless, do not have an idea about its history and heritage. There is also the effect of area's being a military zone for a very long time beginning with the Turkish Republic, and thus, an official document from the government was usually required. There are examples of such documents in State Archives. Today it is no longer a military site. It is run by a private company, and for the sake of the production, the entry is prohibited. The fishermen around the lagoons can pass through with a card provided by the company. This causes the site to continue its life out of sight.

Another weak point of the site is its buildings that are mostly in a derelict state today due to the evacuation of the residents of the factory town. This epoch of abandonment was accelerated with the mechanization and technological advancement as well. There are 128 buildings today, 74 of which are abandoned. 39 of the 52 historically important buildings surveyed during this study are among the abandoned edifices. 33 of these buildings are in medium condition meaning that they have slight structural problems, material loss besides material decay, slight deformations, but the buildings are stable. Almost all of the abandoned lodgings are categorized as medium, but there is a possibility for them to be in severe condition in the near future. On the other hand, 4 of these buildings are already collapsed partially. In an analysis conducted by examining the 1949, 1953 and 1964 aerial photos it is seen that 34 buildings at the site have already been demolished. Moreover, the developments after the 1980s damage the visual integrity of the site. The unnecessarily massive sizes of the new TEKEL headquarters, the apartment

lodgings, the machine hangar and especially the salt washing facility's tower dramatically interrupt the continuity in scale and design. The facility is based on raw salt production; therefore, there is no need for such large-scale structures. Indeed, all of these edifices are abandoned today.

The above-mentioned evacuation and mechanization in production caused the social structure to be damaged in two ways. First of all, the secondary link with the community of Tuzçullu was already lost when the mode of transportation changed from camels to trams during the 19<sup>th</sup> century, but the inhabitants of the Tuzçullu village continued to work for the cultivation. However, there are no references or links today to identify this connection although the village's residents were solely positioned to provide workers for salt. Secondly, the loss of the neighbourhood character that happened when the residents were dismissed caused the neighbourhood status to be cancelled and the community to disperse. As the result, the landscape became the haunted bequest of traditional salt production and once lively neighbourhood of an industrial community.

Apart from the problems of the site there are some serious threats as well. One of the most important threats in the conservation of this area is its ownership status. It is a government property; however, the production rights are given to a private company. The current owner of the production rights is in collaboration with the natural conservation of the area and for the cultural heritage conservation as well. Nevertheless, their contract is valid for 21 years beginning with 2010. After 2031, this situation can change and even worsen if the built heritage of the area is not registered. The properties of the site as a cultural heritage might be lost forever.

Apart from its own dynamics within, the area faces outsider effects of an expanding city. For example, before the privatization of the operation rights, there was a project for a floating container terminal inside the boundaries of Çamaltı Saltern in 2004 because the current port was no longer enough. Considering the fact that even the military flights changed their routes in order not to scare the migrating birds, the busy trade port idea was controversial from the very beginning. Therefore, the project was eventually cancelled due to its possible impact on the ecological balance

of the wetlands.<sup>481</sup> There is a possibility of such harmful projects in the future since the saltern has been and will always be at the centre of discussions due to its advantageous location.

Other than the administrative problems, the physical environment of the saltern is severely threatened by the abandonment and the lack of maintenance thereof. 39 of the 52 historically important buildings surveyed during this study are no longer in use and 33 of these buildings have slight structural problems, material loss besides material decay and slight deformations, but the buildings are stable. Considering the harsh climate of salt and lack of maintenance, *unless they are registered and protected*, there is a high chance for them to become *demolished* in the near future.

Another threat is the *loss of traditional know-how of salt cultivation*. The mechanization has taken over the production system. Considering the fact that the main character is seen as an investment area, not a cultural heritage site, this is a natural result of the process. Today there are still seasonal workers to harvest the salt; however, their number significantly decreased from 1.500 to 250 per harvest season due to this mechanization. Moreover, since the dispersed community living inside the saltern had contractual relationships with the former administrative body of TEKEL, the neighbourhood character cannot be revived. Therefore, there is the risk of losing the *human presence* in this industrial heritage site although the long-lived tradition of salt cultivation and the built landscape is the result of the continuity of collaboration between *man and nature*. The loss of this relationship has the potential danger of destroying the site's integrity since without one of its main components; it can no longer exist as a cultural heritage site.

 $<sup>\</sup>frac{481}{\text{http://www.radikal.com.tr/turkiye/liman-iptal-camalti-kuslarin-}722175/}$  , last accessed on July, 2016

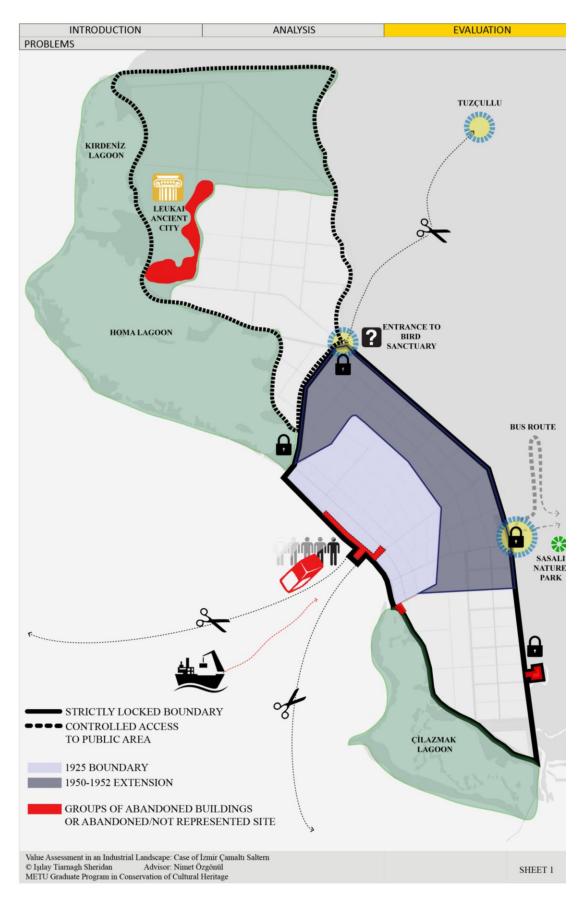


Figure 132 Weaknesses and threats diagram

#### **Potentials**

The area is very powerful in terms of transportation, educational facilities, recreational opportunities, architectural and technical heritage, biological and ecological importance. Despite being quite away from the city centre, the area is well connected to the public transportation. The nearest *train station is Çiğli* that was built in the 19<sup>th</sup> century and historically related to the saltern. From this station there is a *direct bus* stopping in front of the entrance. From the saltern it is forbidden to enter inside the bird sanctuary by car. However, the Municipality of İzmir offers *Bisim (Bicycle İzmir) rental system* and everyday many tourists visit the bird sanctuary by bicycles through its gate that stands inside the boundaries of the saltern.

Another powerful feature of the area is its character of maintaining the industry in nature. The coexistence of industry and wildlife mutually protects one another. The confinement of salt creates a better medium for wetland animals while their existence enables a better quality of salt. The effort of the current owner in building suitable nests for the wildlife is the powerful side of the area at the moment. Moreover, the saltern is very rich in architectural and technical heritage with its still operating water circulation system, 19<sup>th</sup> and 20<sup>th</sup> century buildings and traditional salt cultivation heritage. It is the only sea-sourced saltern in Turkey and owns the largest salt-scape. It is one of the 170 remaining salterns, 90 of which still operating, of the Mediterranean cultural heritage and has a very long history in the cultivation of salt.

Due to its power in both natural and built environment, the area offers infinite source for not only the industry, but also for the *educational activities*.

All of these strong characteristics of the site offer some important opportunities. The most important among them is the site's potential to form a medium for an *ecotourism*, a type of tourism that enables visiting the natural areas by protecting them, conserving the built environment, sustaining the inclusion of man. This derives firstly from the saltern's location. It is *between the Sasali Nature Park and the Bird Sanctuary*. The three could form a source for a recreational zone where man can discover the nature, history, architecture and technology that prevail in the landscape. Secondly, the architectural heritage and the industrial production can support the

They all are already connected by a *bicycle route* and tourists pass the saltern without stopping. There is an opportunity to connect the public routes of train and bus with the bicycle, since the bird sanctuary cannot be visited by car, and this route can include the Tuzçullu village as well. All of these possibilities can be linked to the Protective zoning plan (2005). There is a recreational and fair area in Çiğli and there is a Ö.P.A. Özel Proje Alanı, arıtma tesis alanı içinde özel projesine göre düzenlenecek alan, fidanlık, piknik alanı, doğal yaşam parkı (Special Project Area in purification plant boundaries that will be regulated according to a project of plantation, picnic area, or nature park) beginning from the entrance of the saltern towards the fair ground in the plan.

Within this potential trio, the saltern already serves as an open air museum for educational institutions, from primary schools to the geology and biology departments of the universities. There are often site excursions in order to experience the wetlands and the salt production. This can be put into use together with an education on the conservation of cultural heritage. The area has 52 historically important buildings that need further conservation projects and this can be turned into a unique experience of *experimental conservation education*. There is also a potential for the industrial archaeology, history, biology, and ecology researches. These edifices can serve as the necessary infrastructure for an open air museum; can induce different modes of transportation to the site through sea or land; can be used for public informing, tourism offices and educational facilities. These are all applied principles in afore-mentioned case studies, and are successful in conveying the heritage of salt. For that matter, the Camalta Saltern not only has the potential to experience the salt culture, but also the industrial heritage. All the sum of the research areas can be used as an educational opportunity that can create employment as well. The loss of human presence can be recuperated by the inclusion of public into these activities. In this way, the traditional know-how of the salt cultivation, the environmental properties, architectural heritage and the socio*cultural background* of the site can be preserved holistically.

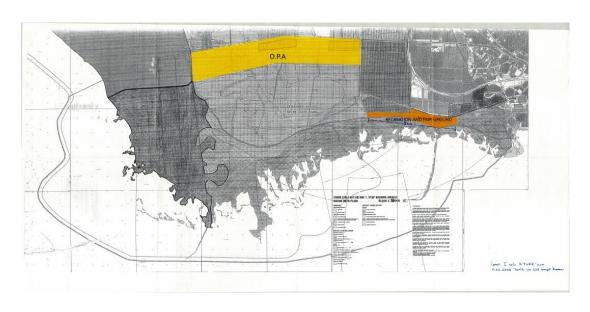


Figure 133 protective Zoning Plan (2005) obtained from Çiğli Municipality

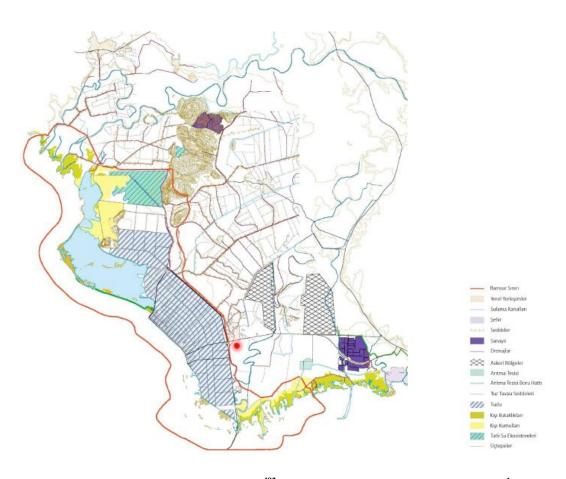


Figure 134 Zoning Plan of the Gediz Delta<sup>482</sup> obtained from Gediz OPA document of İzmir Municipality

<sup>482</sup> Red line: Ramsar boundary, purple: industrial zone, crossed hatch: military zones, blue line hatch: saltern, yellows: marshlands and dunes, green line hatch on blue ground: freshwater ecosystem

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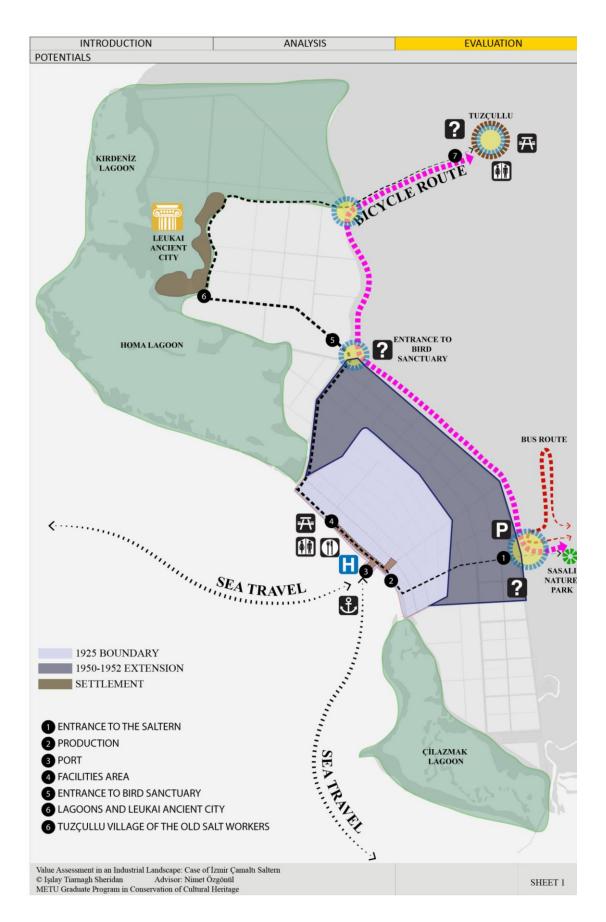


Figure 135 Diagram of strenghts and opportunities

### **CHAPTER 5**

# CONCLUSION REMARKS FOR FURTHER CONSERVATION INITIATIVES AT THE INTERSECTION OF NATURE AND INDUSTRY IN ÇAMALTI

"Being the "salt of the earth", as referred in Bible, has always been used as a positive assumption for a person. It refers to the capacity of the salt in preserving the good qualities of the food. As such, man should be the salt of the world we live in, protecting the moral values and good qualities without losing his will."483



Figure 136 Abandoned buildings and the crystallisation pools (Author, August 2016)

 $<sup>^{483}</sup>$  Quoted from Chapter 2

The saltern, with its long history in salt cultivation, has become a *palimpsest* on which different stories have been written over and over again through centuries. What was once an ancient city named Leukai, after its whiteness, surrounded by shallow white marshlands turned into a Macedonian saltern, called as "Halike" in Byzantine era, became one of the most important tax sources of the Ottoman Empire and materialized in its industrialisation initiatives realized by the foreign investors, turned into the showcase of independence in improving the living conditions of the workers during the early years of the nation state of Turkish Republic, created an industrial community, reinforced the formation of an important man-made ecosystem that was acknowledged as a Ramsar site, and eventually took its share in the privatization acts of the government and lost its neighbourhood status; yet still *continues to do what it was created for, the salt production*.

Therefore, it is of great importance to do what salt has done for thousands of years in protecting the good in all. This study should be the salt in the conservation of this neglected and almost demolished heritage, leading the way to preserving its values and good qualities without losing its authenticity and integrity.

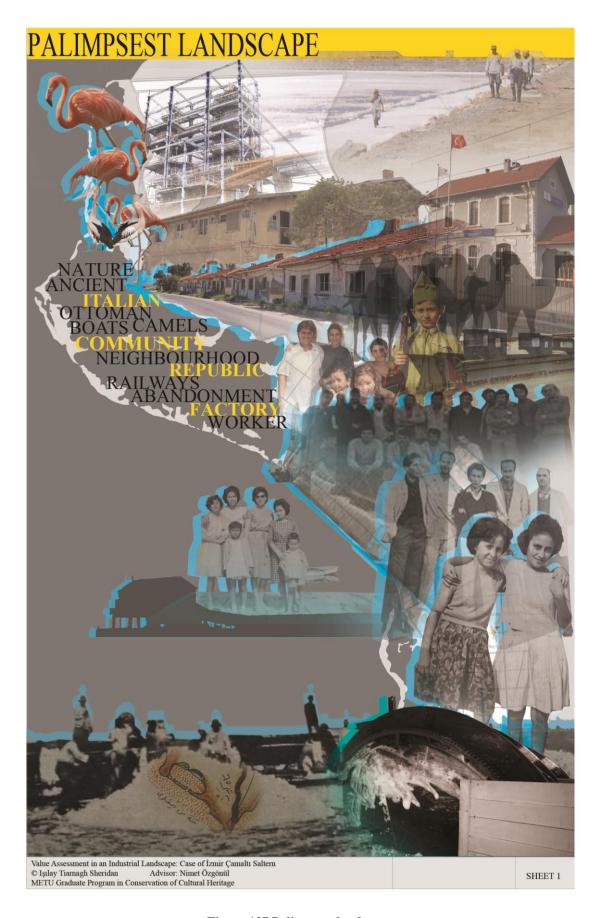


Figure 137 Palimpsest landscape

The site has always been an enclosed area without access to public in spite of being a public commodity; has never showcased its production in spite of being the main element of daily life; and has never revealed its history in spite of being an important cultural landscape. Thus, such powerful area having age, historical, technical&artistic, document&education, group&plurality, authenticity/originality, integrity, socio-cultural, and economic values as well as geological, biological&ecological, landscape, sustainability, and resource values remained silent for a very long time.

However, now a new search emerges for its public recognition and in order to protect this heritage from perishing day by day, the *new story on this palimpsest has to be written by the conservation actions*. In order to generate *public interest and affection for the industrial heritage and appreciation of its aforementioned values* following principles are proposed in the light of the laws and international documents:

- The 52 of the edifices studied within the scope of this study and the
  historical boundaries of the saltern should be registered under the Law
  on the Conservation of Cultural and Natural Property (2863) and
  should be declared as a cultural property for all of its values deriving
  from its built landscape.
- The saltern should be accepted as "geological, natural, historic, and cultural" heritage.
- Relatedly, it should be declared as a *Cultural Landscape* and become a *World Heritage Site* with its outstanding universal value, authenticity, integrity and competence in qualifying the criteria (i) (ii) (v) (vii) (ix) (x). The conservation initiatives should be based on this potential of the site and they should qualify the management requirements of UNESCO.
- The saltern's connections in the country, in the Mediterranean Region and in the world should be deciphered together with an extensive study on its socio-cultural background.
- As a cultural landscape, it should be recognized as a "continuing cultural landscape", still evolving and producing. It has always been

conserved for its natural properties; however, it should be understood that without the salt production the man-made ecosystem cannot maintain its integrity. Therefore, the built and the natural landscape of the site should be conserved accordingly.

- The conservation should neither jeopardize the needs of salt production nor the needs of architectural, sociological, ecological, biological, and landscape values of the salt-scape.
- As an important industrial site, the saltern should be evaluated within the *scope of regional and local development plans* with its industrial landscape.
- The study should be based on a multi-disciplinary work. In the
  conservation process and the sustainable development, urban planners,
  architects, engineers, economists, sociologists, scientist and other
  related groups must be employed due to the multi-faceted nature of
  the site. The immediate vicinity of the saltern should be carefully
  studied by these professions.
- In the light of their studies, in order to assure its conservation holistically with both its natural and built heritage, a *Regulation and Management Plan* should be prepared.
- The way of production with its channels, tympana, canal locks, use of gravity to direct the sea water, two boundaries of the 1925 and 1950 should be preserved as historical evidences of site's evolution since the *factory is the landscape* in this industrial heritage site.
- For each one of the 52 buildings analysed in detail to guide the further studies, there should be *measured survey*, *restitution and restoration projects* immediately since the harsh weather washes them away day by day. Moreover, as stated in Nizhny Tagil Charter, "continuing to adapt and use industrial buildings avoids wasting energy and contributes to sustainable development. The continuity that re-use implies may provide psychological stability for communities facing the sudden end a long-standing sources of employment.<sup>484</sup>

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<sup>&</sup>lt;sup>484</sup> (TICCIH, 2003)

- During this procedure the *authenticity and the integrity* of the built heritage must be given priority to avoid further loss of cultural heritage.
- To preserve and show the tradition of salt cultivation and to acquire the necessary acknowledgment of both the Ottoman and the Republican industrial heritage, the already existing regional and aerial visits and tours should be adopted for an open air museum since it is important to "present and communicate the heritage dimensions and values of industrial structures ideally be located at the heritage sites itself where the process of industrialization has taken place"...<sup>485</sup>
- The existing regional tours in the area should be enriched by the inclusion of the saltern. A potential route that can combine Sasali village, Sasali Nature Park to Bird Sanctuary and to Tuzçullu village can be established to for a complete sense of a recreational zone.
- Moreover, further links should be created to related sites. In applying such principles the *collaboration with other salterns of the Mediterranean* can be sought after in order to create a "salt route" among the shared cultural heritage of sea salterns.
- Within the region, *sustainable development* and *eco-tourism*<sup>486</sup> should be encouraged. Through them, visiting the natural areas by protecting them, conserving the built environment, sustaining the inclusion of man by involving the interpretations of participants of the process and education will be possible.
- *Salt museum* should be established to convey the history of the biggest saltscape in Anatolia through ages.
- This *does not mean the establishment of an edifice* solely. It should form an *experience rather than an object*, in which the traditional know-how of salt cultivation, the sense of community in such kind of

<sup>&</sup>lt;sup>485</sup> (ICOMOS, 2011)

<sup>&</sup>lt;sup>486</sup> Eco-tourism for the Gediz Delta has already been proposed with the 2005 Protective Zoning Plan.

- industrial activity and the history of thousands of years of knowledge passes on to the next generations.
- There are many abandoned edifices and open areas in the saltern that can be equipped with the infrastructure of this experience, as aforementioned. It is important to recover and preserve them to ensure the potential sustainability.
- In this process, the needs of the operating bodies must be included in solutions. There are common examples around such large salterns to find this balance, as shifting of opening hours according to the production cycle, controlled entry and guided tours to poise the amount of visitors both for the sake of the production and for the wildlife. These implementations should be searched widely.
- By proposing the inclusion of the aforementioned different groups, a "participatory museology" action can also be induced by means of which working with previous community members, seasonal and permanent workers, administrators and visitors can be enabled. This would especially serve to conserve the intangible side and the "genius loci" of the cultural landscape since the main character of this landscape is the collaboration of man and nature.
- The process of sustainable development should include the recovery of not only the *tangible but also the intangible values* present in the landscape.
- Therefore, the traditions of operation such as the "vinç" and "çavuş" system, the ingathering rituals and the working groups should be preserved.
- The saltern has always existed with the inclusion of human factor. Thus, it must be maintained with a policy of human presence. In the conservation process, the preservation of socio-cultural and physical environment together is a must. "Groups and individuals with associations with the place as well as those involved in its management should be provided with opportunities to contribute and participate in identifying and understanding the cultural

significance of the place." Therefore, it was essential to conduct a social survey in order the previous inhabitants of the saltern to express the *very true nature* of the area during this study. Many of them stated in their opinions that the saltern should be conserved together with their experiences, memories and their existence.

- However, there is the fact that the advancement of technology in production reduces the need for manpower. The existing community is already lost. Since this situation is inescapable, because they were the contractual workers not the indigenous inhabitants, the "human presence" must be included in the acts of conservation, cultural events, in the maintenance of traditional know-how of salt cultivation and conveying this via educational infrastructure.
- With this concept, the saltern can become a medium in which opportunities to be present at the site are offered not only on salt production but also on education and conservation practices.
- By applying all these suggested conservation initiatives, the process of the saltern should stand for a "good practice" and an example in the coexistence of industry with nature.

To sum up, the vast land of Çamaltı Saltern should be evaluated not only with its natural characteristics, but also with its rich history and built heritage, with its tangible and intangible values and its potential in creating an integrated conservation approach in this one of a kind cultural landscape. It is the lack of such kind of recognition that caused so many losses in the salt-scape for many years, thus, in order to stop this neglect and demolition from happening, above mentioned principles must be considered immediately in regional and local scales. It is only possible to achieve this upon appreciating the cultural significance of this site that means "aesthetic, historic, scientific, social and/or spiritual value for past, present or future generations. Cultural significance is embodied in the heritage site itself, its setting, fabric, use, associations, meanings, records, related sites and related

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<sup>&</sup>lt;sup>487</sup> (The Australia ICOMOS, 1999)

objects. 488 Therefore, an approach should be devised to reveal what is already within the site, within the collaboration of man and nature and exhibit it to the public appreciation. The new epoch of the saltern should be created through this appreciation, with human presence, with public participation since it is of utmost importance to conserve the physical and socio-cultural heritage of this industrial landscape in the consciousness of next generations.

And only then, we can "let there be salt for everyone".

<sup>&</sup>lt;sup>488</sup> (ICOMOS, 2011)

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### **APPENDIX A**

### THE KING AND HIS DAUGHTERS

### Pakistan Folk Tale

There was once a king who had several daughters. To the first he said, "How do you love me?"

"I love you as sugar," said she.

To the next he said, "And how do you love me?"

"I love you as honey," said she.

To the third he said, "And how do you love me?"

"I love you as sherbet," said she.

To the last and youngest he said, "And how do you love me?"

"I love you as salt," said she.

On hearing the answer of his youngest daughter the king frowned, and, as she persisted in repeating it, he drove her out into the forest.

There, when wandering sadly along, she heard the tramping of a horse, and she hid herself in a hollow tree. But the fluttering of her dress betrayed her to the rider, who was a prince, and who instantly fell in love with her and married her.

Sometime after, the king, her father, who did not know what had become of her, paid her husband a visit. When he sat down to meat, the princess took care that all the dishes presented to him should be made-up sweets, which he either passed by altogether or merely tasted. He was very hungry, and was longing sorely for

something which he could eat, when the princess sent him a dish of common spinach, seasoned with salt, such as farmers eat, and the king signified his pleasure by eating it with relish.

Then the princess threw off her veil, and, revealing herself to her father, said, "Oh my father, I love you as salt. My love may be homely, but it is true, genuine and lasting, and I entreat your forgiveness."

Then the king perceived how great a mistake he had made, and there followed a full reconciliation.<sup>489</sup>

<sup>&</sup>lt;sup>489</sup> (University of Pittsburgh)

### APPENDIX B

## LIST OF SOURCES AND INFORMATION GATHERED

SOURCE	INFORMATION
Binbir Gıda Tarım Ürünleri ve Sanayi A.Ş.,	-AutoCAD drawing of the site -Information about workers and production process
Çamaltı İzmir	-Information about aquaculture and natural conservation in the saltern -Book of Medih Egemen, "Türkiye'de Tuzculuk ve Çamaltı Tuzlası", 1946.
	-Book of Müfit İlter, former deputy general manager of TEKEL, "Dünya'da ve Türkiye'de Tuz Endüstrisi ve Ticareti", 1981.
TTA Gayrimenkul A.Ş., Ankara	-Notes on the construction of water channels and embankments -Booklet of the salt washing plant
	<ul> <li>Projects;</li> <li>Old Power Plant (1938, 2 plans, 1 section in single sheet, 2 elevations,)</li> <li>Police Office (1959,4 elevations in one sheet)(does not exist today)</li> <li>Plan of a detached lodging (1937,original plan and revision plan in one sheet)</li> <li>Semi-detached lodging (1946, plan, section, 3 elevations in single sheet)</li> <li>Partial site plan of the industrial town(1936, plans of existing buildings including pink mansion, 3 officer lodgings and</li> </ul>

- furnace; top views of the new buildings including 2 detached lodgings with 3 rooms, 4 detached lodgings with 2 rooms, a school and a hospital.
- Vehicle Machinery Hangar (1951, one plan in 1 sheet, 1 partial section in 1 sheet)( does not exist today)
- Port project (1939, plans and sections of details, unknown place)
- Port project (unknown date unknown place, top view and two side views)
- Site plan of new TEKEL headquarters (1979,)
- Atelier Building (1983, 2 plans in separate sheets, 4 sections in one sheet, 4 facades in 2 separate sheets)
- Watchbox (unknown date in 1979 site plan area-possibly during 1980s, plan, section and 4 facades in one sheet)
- Typical power stations to be applied around the site and signal separation centre(1983, plans in 1 sheet, 1 section and 1 elevation for each in one sheet)
- Energy station (1981, plan in 1 sheet, 2 sections and 1 elevation in 1 sheet)
- 2 Typical garages (1980, plan in 1 sheet, 2 sections in 1 sheet, 4 elevations in 1 sheet)
- Administration Block (1981, 3 floor plans in separate sheets,
   1 section in 1 sheet, 2 sections in another sheet, 2 elevations in
   1 sheet and two other in other separate sheets,)
- Workers' lockers (1981, 1 plan in 1 sheet, 2 sections in one sheet, 4 elevations in one sheet)
- New apartment lodgings (1979, site plan with a diagram of typical floor plan in one sheet, 2 sections and 4 elevations in 1 sheet)
- Club House(1983, 2 plans in separate sheets, 2 sections in 1 sheet, 4 elevations in 2 separate sheets)
- Carpentry atelier(1980, 1 plan in 1 sheet, 3 sections in one sheet, 4 elevations in one sheet)
- Social building for 20 workers(1977, 1 plan, 1 section, 4 elevations in one sheet)

General Command of	<ul> <li>Social services building (1980, 1 plan in 1 sheet, 4 sections in one sheet, 4 elevations in one sheet, 3 details in one sheet)</li> <li>Water tank(1982, site plan in 1 sheet, 1 plan in one sheet, 1 section, 2 elevations and 3 details in one sheet, 1 section and 2 elevations in 1 sheet)</li> <li>General site plan of expansion (1983)</li> <li>Site plan showing the drinking water arrangement (Date is no longer visible, possibly after 1950s before 1980)</li> <li>Site plan (date unknown, after 1980)</li> <li>Site plan showing cadastre boundaries(date unknown, after 1980)</li> <li>Site plan(date unknown, after 1980)</li> <li>Site plan(1981)</li> <li>Locomotive garage(1992, 2 plans in 1 sheet, 2 sections in 1 sheet, 4 elevations in 1 sheet)</li> <li>(The archive might have more documents, but at the time of this study above listed ones were the only ones available)</li> <li>-1949/1953/1957/1964/1970/1995 Flights cover the saltern. Aerial photos of these years are obtained from the archive.</li> </ul>
Mapping, Ankara	-(1957 Photo is of low quality and only the general borders of the site is visible)
Salt Online, İstanbul	-1925 Maps of Tuzçilli and Tuzlaburnu, 1/125.000. The map of Tuzlaburnu show almost all the saltpans except the northern corner, which is situated in Tuzçilli map. They are obtained through the website. <sup>490</sup>
Ottoman and Republic State Archives, Ankara	- Document showing that Safiye Sultan's instalment from the İzmir <i>mukataa</i> was delivered. (1768, document translated from Ottoman Turkish to Modern Turkish by Inst. Abdürrahim Özer, Bilkent University Department of History)  -Cancellation of the contract made with Bezirgan Zarifi Company for

<sup>490 (</sup>Salt Araştırma, 2016)

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	the ownership of the rights to produce salt in every saltern and giving
	this right to others who are interested separately via auctions(1860,
	document translated from Ottoman Turkish to Modern Turkish by
	Inst. Abdürrahim Özer, Bilkent University Department of History)
	-Tram line to be transported from iron mines to Çamaltı Saltern to
	provide the army with salt (1915, document translated from Ottoman
	Turkish to Modern Turkish by Inst. Abdürrahim Özer, Bilkent
	University Department of History)
	-Maps of derivation of Gediz general Plan – work performed for
	the protection of the saltern in Ada and Çamaltı,1887
	-Map showing the areas to be irrigated by Gediz, 1907
	-Map of railways, 1887
	-About the import of 22.000 iron bars for the tram line that was being
	built in Çamaltı Saltern (1935)
	-Expansion of Çamaltı and Yavşan Salterns (1950)
Çiğli	-Protective zoning plan (2005)
Municipality,	-The document for the cancellation of neighbourhood status of the
İzmir	Çamaltı District (since there are no inhabitants anymore)

### APPENDIX C

### **SOCIAL SURVEY OUESTIONS**

### Bölüm 1/2

- 1. Adınız, Soyadınız (İsteğe Bağlı)
- 2. Yaşınız
- 3. Aslen nerelisiniz?
- 4. Eğitim durumunuz
- 5. Şu anki ikamet yeriniz neresi?
- 6. Çamaltı Tuzlası'nda hangi sebeple bulundunuz?
- 7. Tuz üretiminde çalıştınız mı?
- 8. Evet ise(Hayır ise "Tuz üretiminde çalışmadıysanız" sorusuna geçiniz)
- 9. Üretimde kaç yıl çalıştınız?
- 10. Tuz üretim tesislerinden ve imkanlarından memnun muydunuz?
- 11. Tuzladaki göreviniz ne idi?
- 12. Memnunsanız/Değilseniz neden? Kısaca açıklayabilir misiniz?
- 13. Tuz üretiminde çalışmadıysanız hangi sebeple alanda bulundunuz?
- 14. Tuzladan hangi sebeple ayrıldınız?
- 15. Tuzlada (Çamaltı Mahallesi'nde) konakladınız mı?(Hayır ise "Çalışırken tuzlada konaklamadıysanız" sorusuna geçiniz)
- 16. Çamaltı Mahallesine ne zaman taşındınız?
- 17. Çamaltı Mahallesine neden taşındınız?
- 18. Mahallede kaç yıl yaşadınız?
- 19. Mahallede yaşamaktan memnun muydunuz?
- 20. Memnunsanız/ Değilseniz neden? Kısaca açıklayınız.
- 21. Mahallede nasıl bir lojmanda kaldınız?
- 22. Lojmanı kaç kişiyle paylaştınız?

- 23. Lojmanlar sizin için/aileniz için yeterli miydi?
- 24. Yeterli değilse sebeplerini kısaca belirtiniz.
- 25. Hala yaşamaya devam etmek ister miydiniz?
- 26. Kendinize "Çamaltı Mahalleliyim" der misiniz? Kendinizi alana ait hissediyor musunuz?
- 27. Tuzla çalışanlarıyla/komşularınızla hala görüşüyor musunuz?
- 28. Çalışırken tuzlada konaklamadıysanız neden?
- 29. Tuzlada yaşamadıysanız konakladığınız yer neresiydi?
- 30. Konakladığınız yerden tuzlaya ulaşımı nasıl sağlıyordunuz?
- 31. Tuzlanın imkanlarından faydalandınız mı? (Sosyal tesis, yemekhane, okul, hastane vb.)
- 32. Tuzlada bulunduğunuz dönemde hangi yapılar vardı? (eski lojmanlar, yeni lojmanlar, sinema, köşk, garaj, teknik şube, marangozhane vb.)
- 33. Tuzladaki etkinlikler nelerdi? (Tiyatro, sinema, gösteriler, düğün vb.)
- 34. Sosyal tesisler nasıl kullanılıyordu? (Çalıştığınız dönemde yok ise "yoktu" yazınız.)
- 35. Sinema aktif olarak kullanılıyor muydu? (Çalıştığınız dönemde yok ise "yoktu" yazınız.)
- 36. Sinema, sosyal tesis ve lokali yalnızca tuzla çalışanları mı kullanıyordu? (Yoksa çevre yerleşimlerden de katılım var mıydı?)
- 37. Tuzlayı ilk gördüğünüz an hissetiklerinizi kısaca paylaşır mısınız?
- 38. Tuzlanın sizce tarihi önemi var mı?
- 39. Evet/Hayırsa neden?
- 40. Tuzlanın içinde bulunduğu sulak alan sizce önemli mi?
- 41. Evet/Hayırsa neden?
- 42. Tuzla sizin için değerli mi?
- 43. Değerli ise/Değilse neden?Kısaca açıklayabilir misiniz?
- 44. Tuzla ile ilgili sizlerin anılarının korunması gerektiğini düşünüyor musunuz?
- 45. Tuzlada özel olarak beğendiğiniz yapı/yapılar/üretim araç-gereçleri var mı? Kısaca yazınız.
- 46. Tuzlanın doğası ve kuş cenneti sizce korunmalı mı?
- 47. Tuzlanın ve tuz üretiminin içinde bulunduğu kuş cenneti ve sulak alanla bir bütün oluşturduğunu düşünüyor musunuz?

- 48. Tuzlada korunması gerekiyor diye düşündüğünüz yapı/yapılar/üretim araçgereçleri var mı? Kısaca yazınız.
- 49. Tuzlanın gelecekte nasıl bir yer olması gerektiğini düşünüyorsunuz?

#### Bölüm 2/2

- \*Bu bölümdeki sorular zorunlu değildir.
  - 1. Tuzlayı düşününce aklınıza gelen ilk 3 kelimeyi yazınız.
  - 2. Tuzlayı, yapıları ve doğasını kısaca anlatır mısınız?
  - 3. Tuzladaki yaşamı kısaca anlatır mısınız?
  - 4. Tuzladaki çalışma ortamını kısaca anlatır mısınız?
  - 5. Konakladıysanız, Çamaltı Mahallesini gelecek nesillere nasıl anlatırdınız?
  - 6. Tuzlaya dair unutamadığınız bir anınızı bizimle kısaca paylaşabilir misiniz?
  - 7. Alanla ilgili eklemek istedikleriniz varsa lütfen bizimle paylaşın.

#### APPENDIX D

#### **DEMOLISHED BUILDINGS**

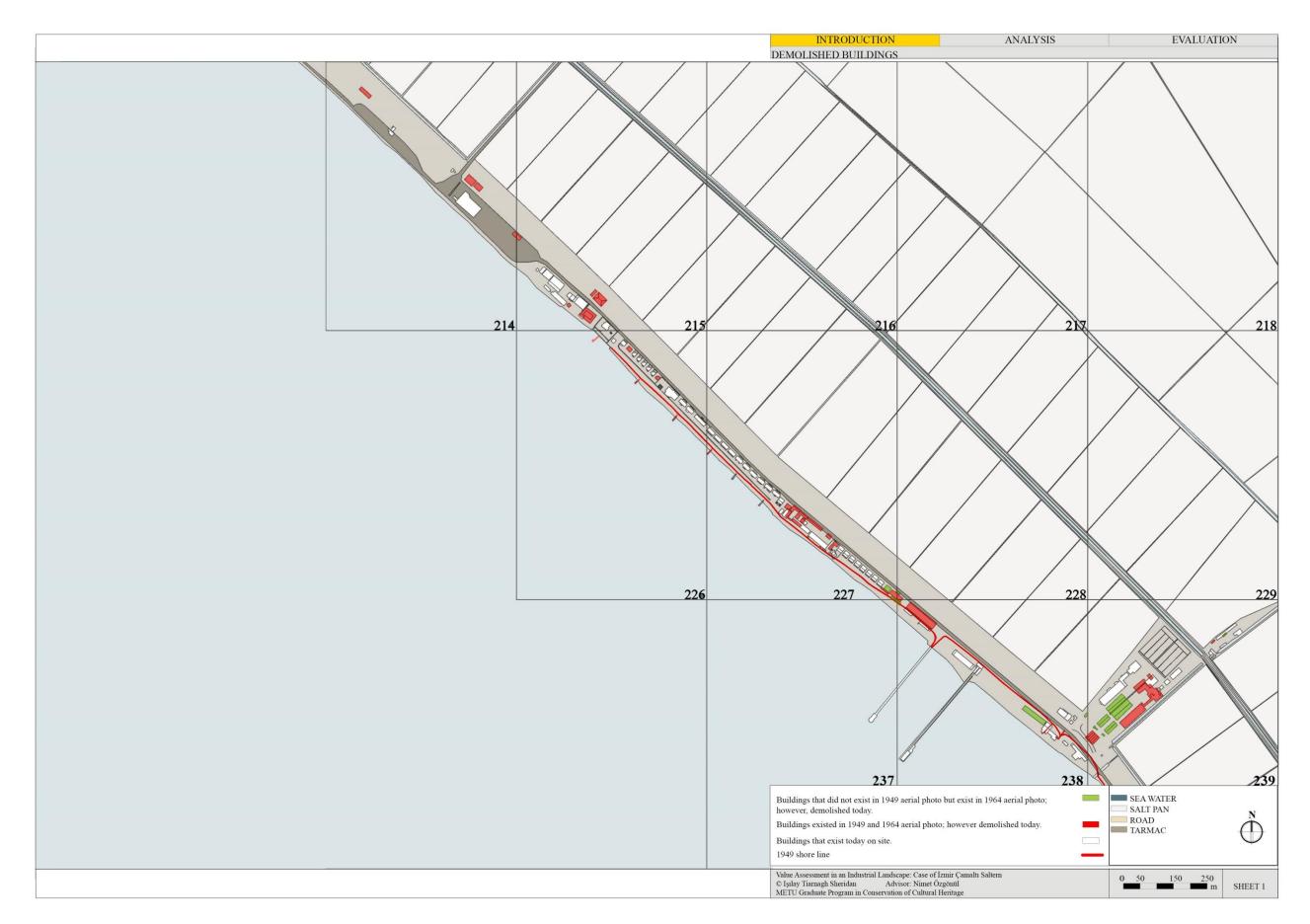


Figure 138 Demolished buildings

# APPENDIX E

# **CURRENT FUNCTIONS OF THE BUILDINGS**

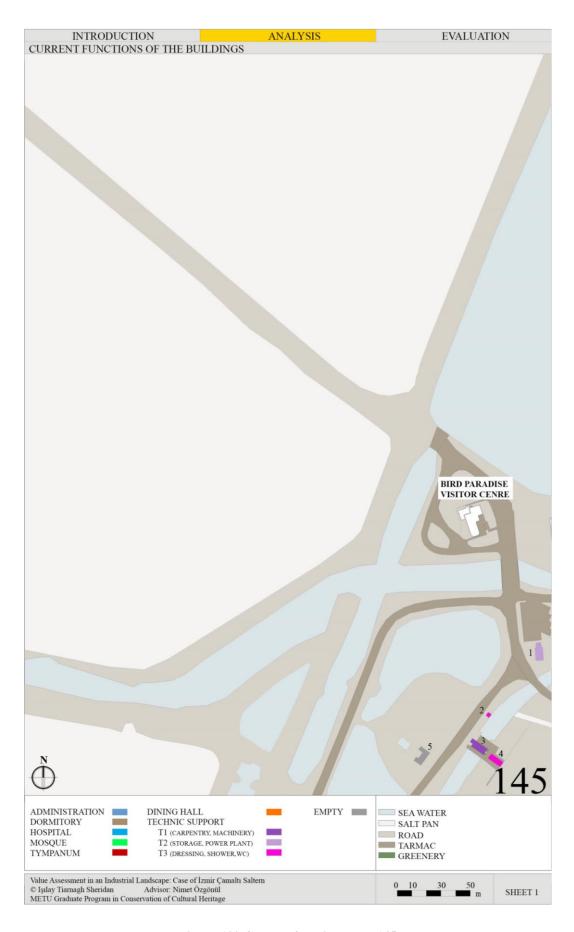


Figure 139 Current function sheet 145

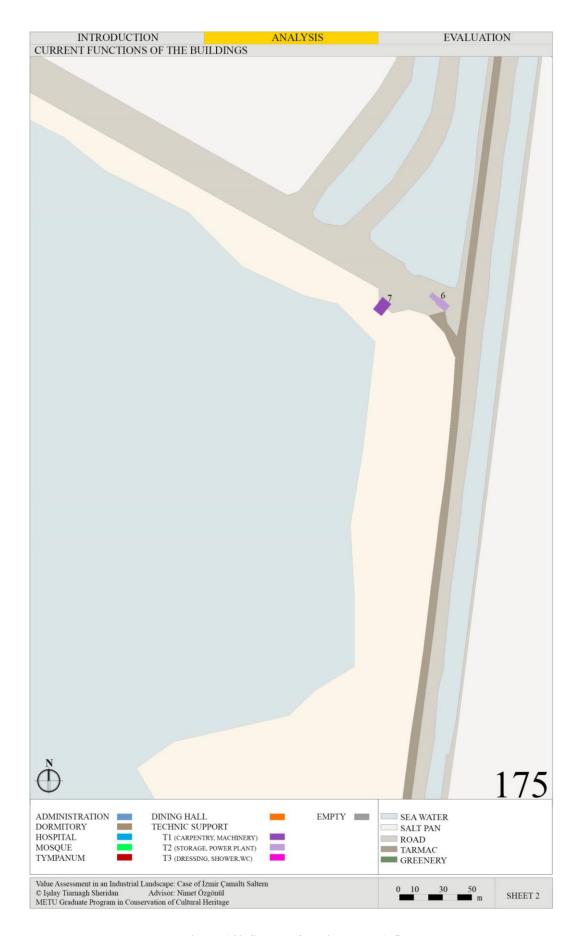


Figure 140 Current function sheet 175

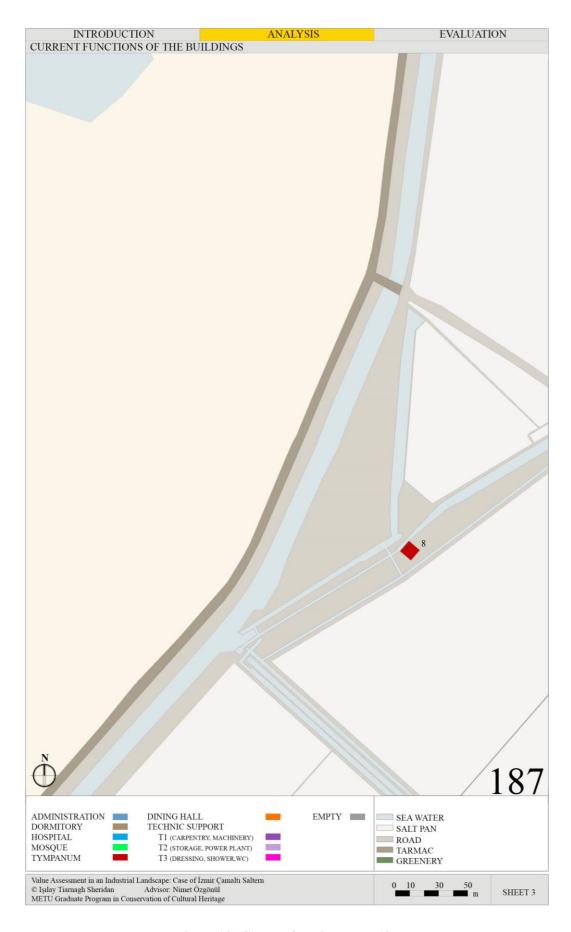


Figure 141 Current function sheet 187

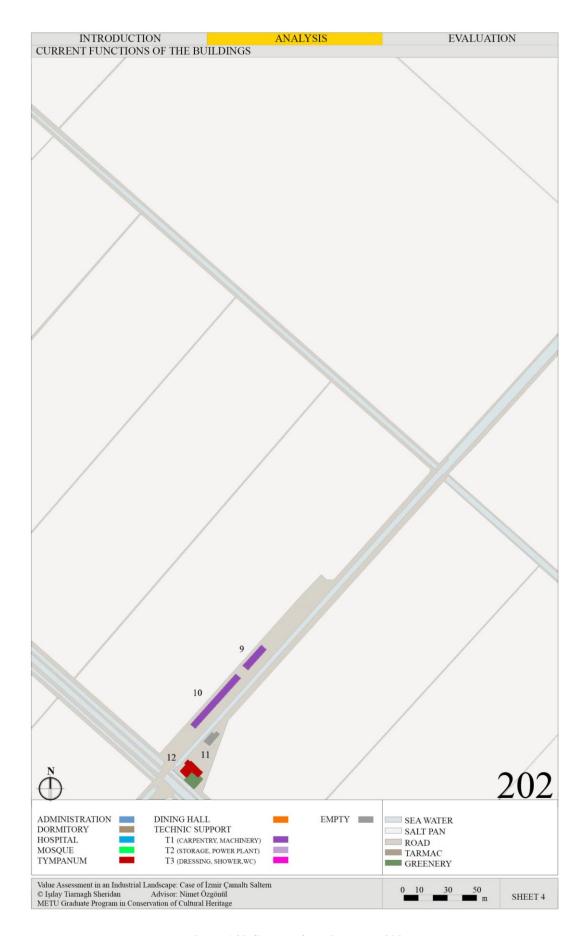


Figure 142 Current function sheet 202

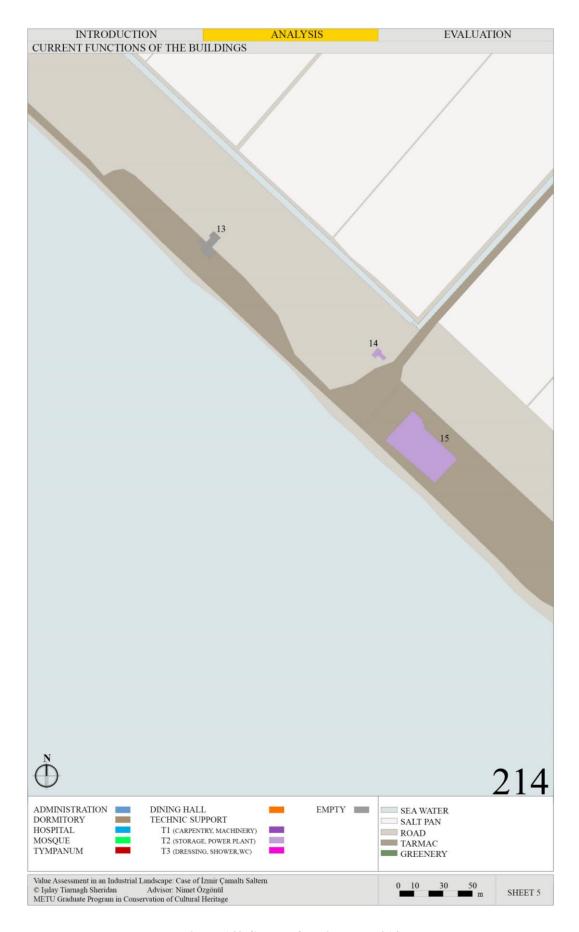


Figure 143 Current function sheet 214

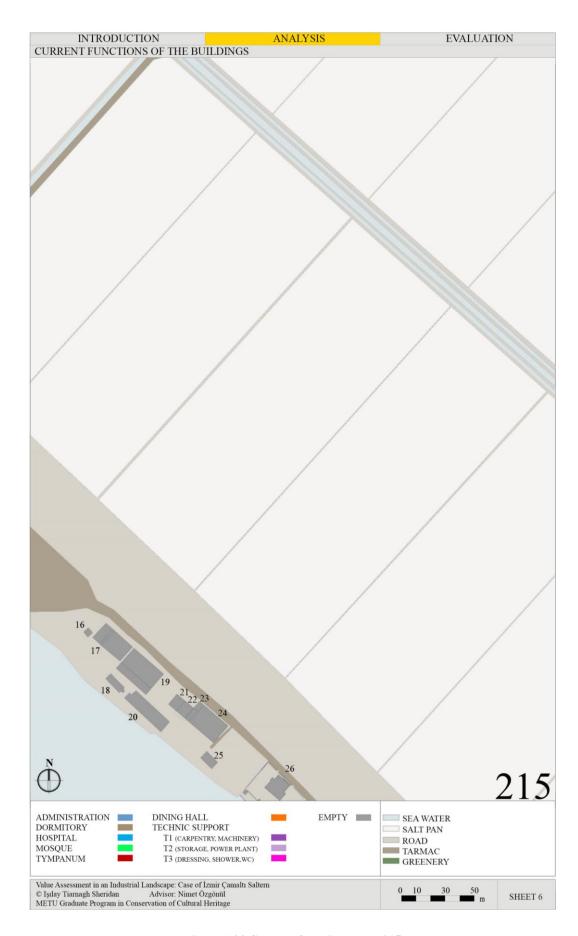


Figure 144 Current function sheet 215

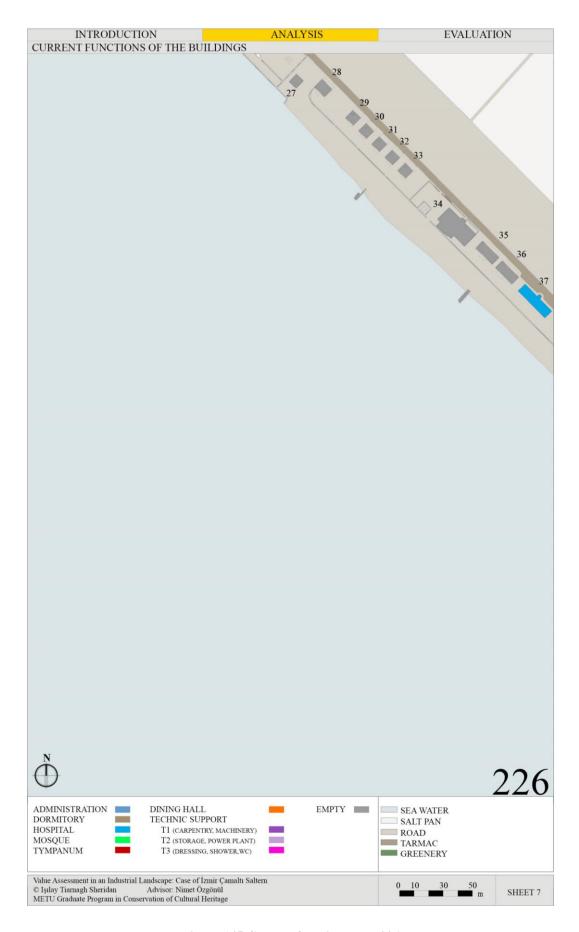


Figure 145 Current function sheet 226

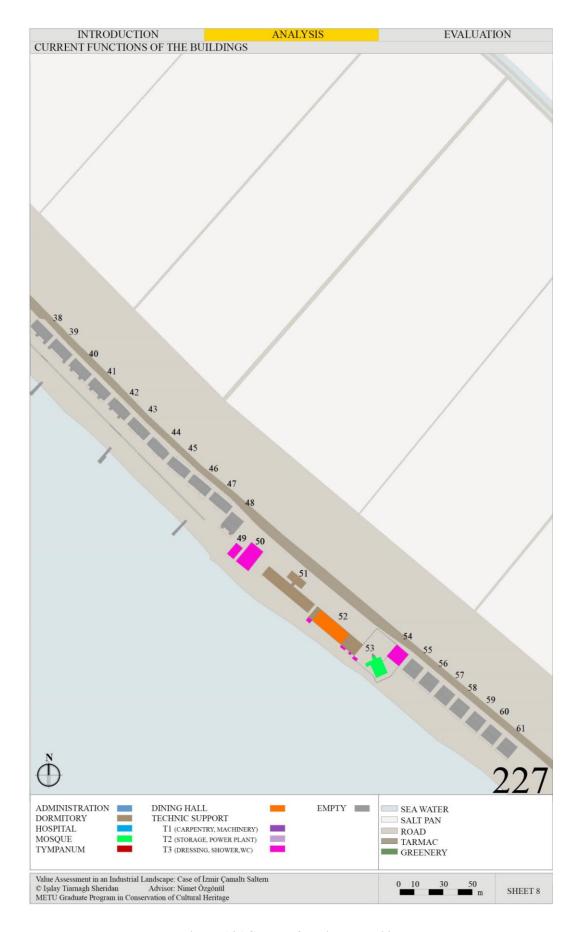


Figure 146 Current function sheet 227

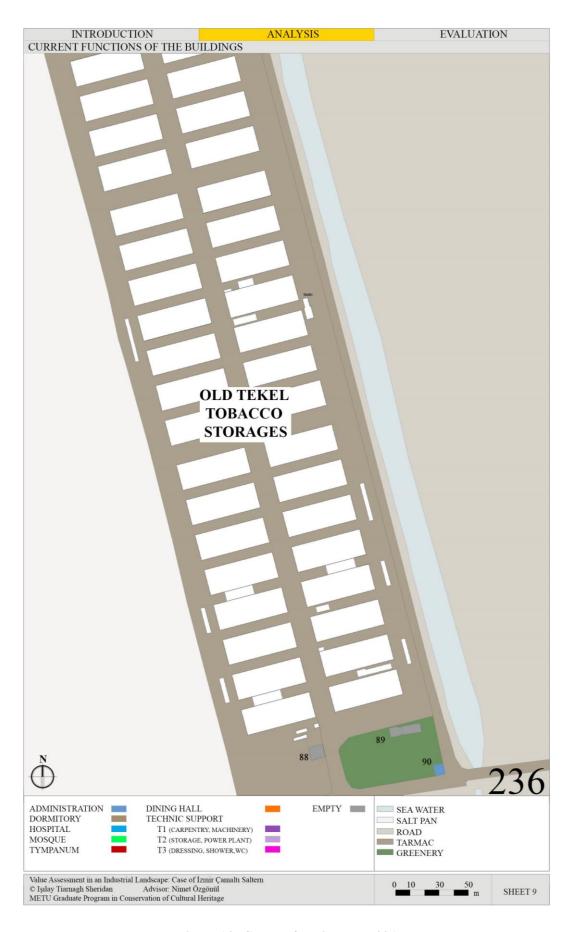


Figure 147 Current function sheet 236

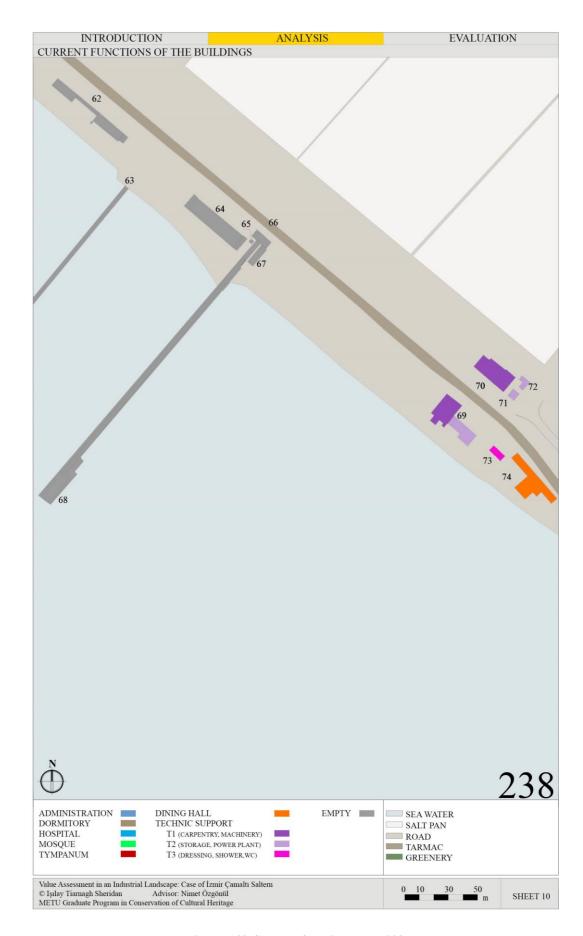


Figure 148 Current function sheet 238

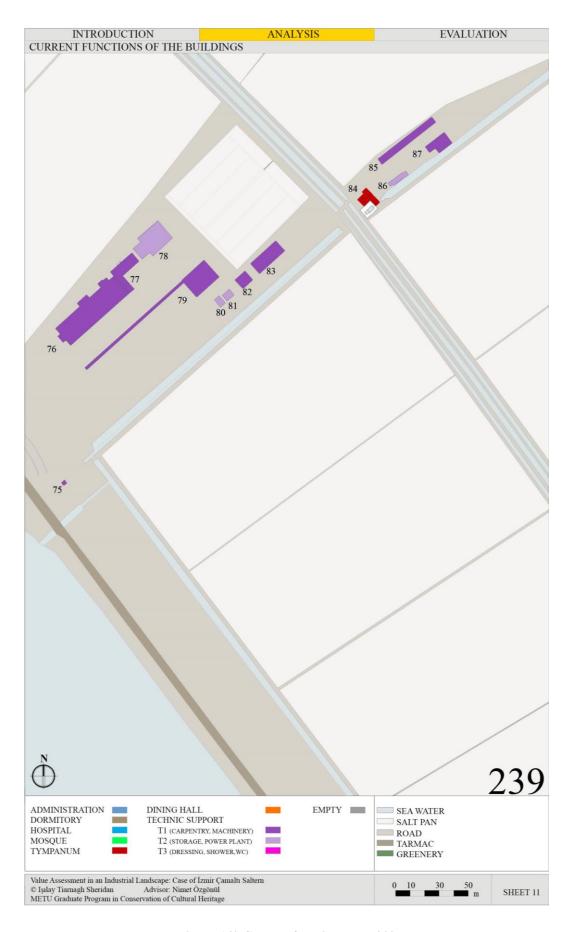


Figure 149 Current function sheet 239

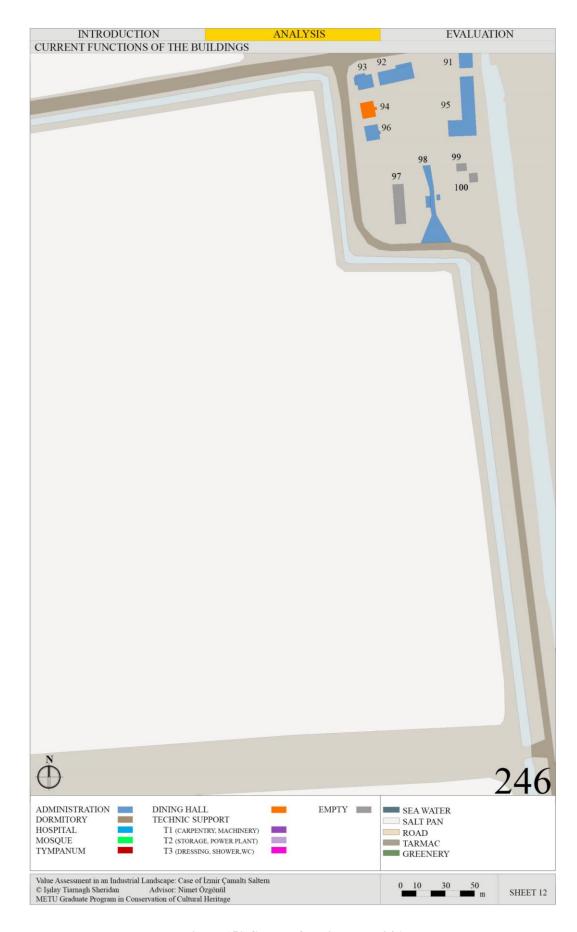


Figure 150 Current function sheet 246



Figure 151 Current function sheet 258

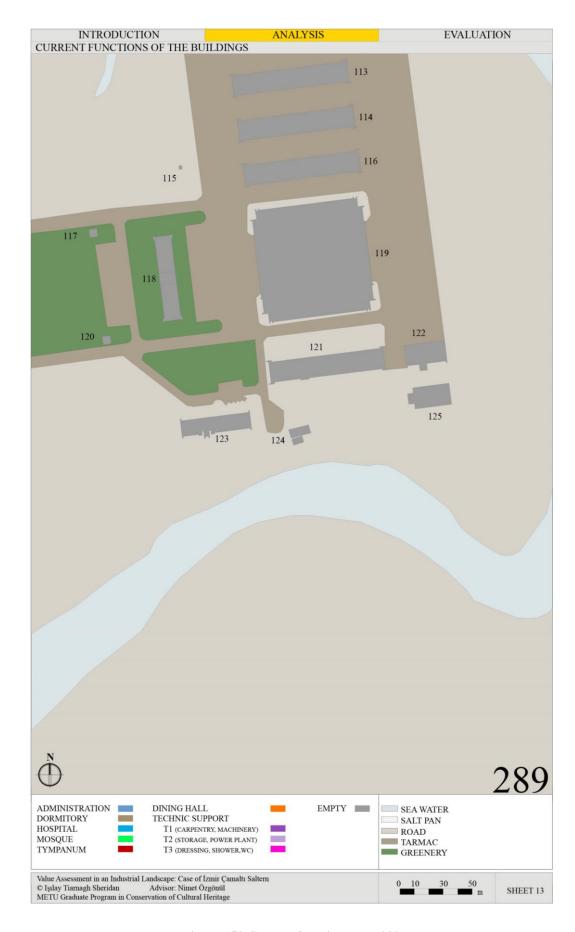


Figure 152 Current function sheet 289

# APPENDIX F

# ORIGINAL FUNCTIONS OF THE BUILDINGS

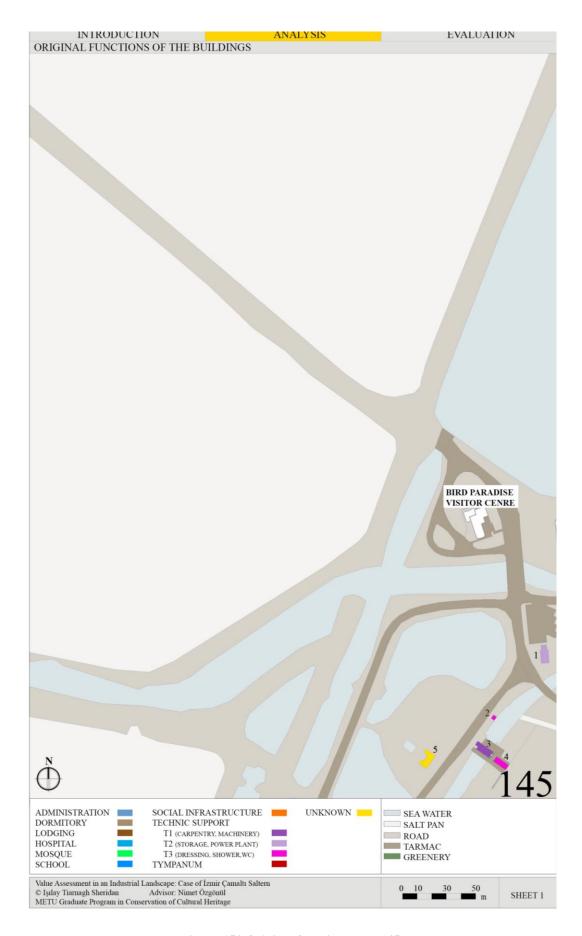


Figure 153 Original function sheet 145

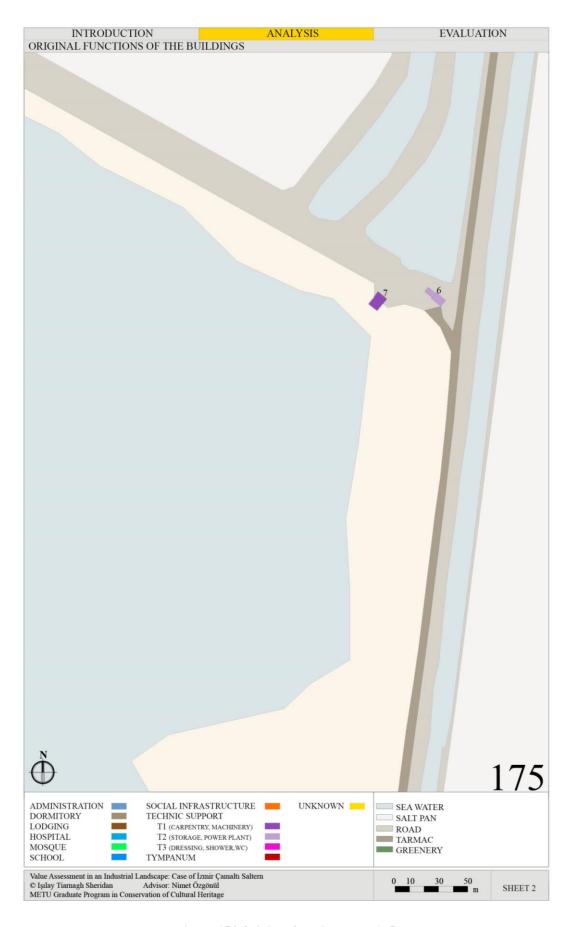


Figure 154 Original function sheet 175

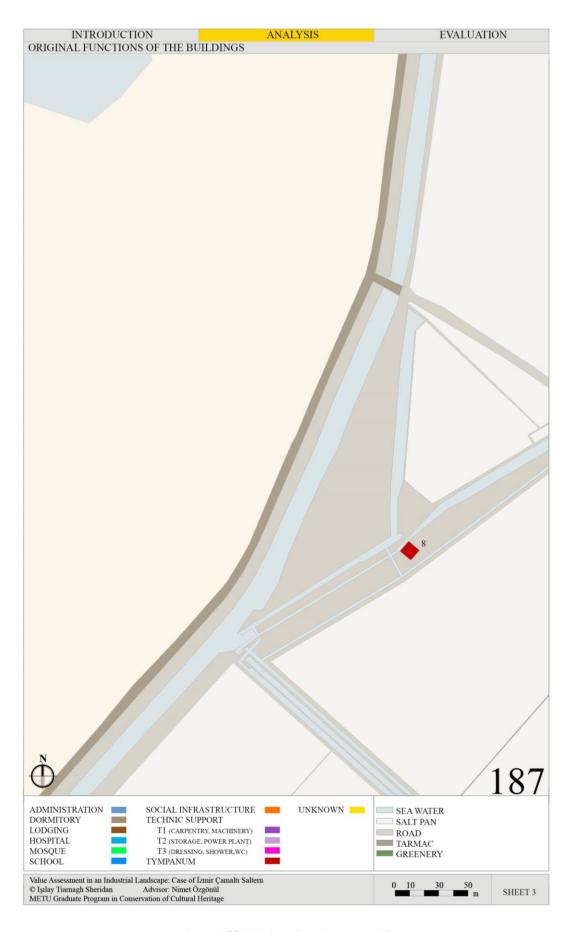


Figure 155 Original function sheet 187

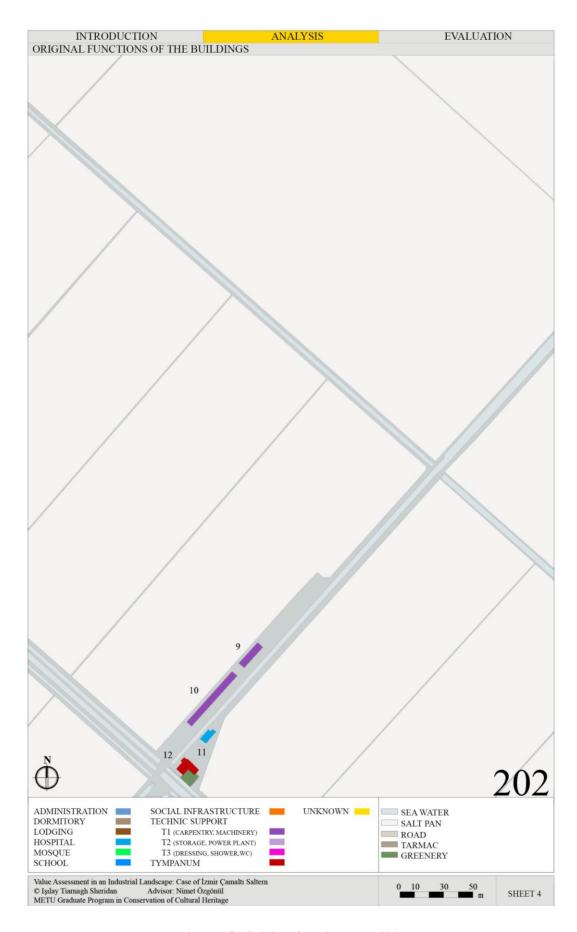


Figure 156 Original function sheet 202

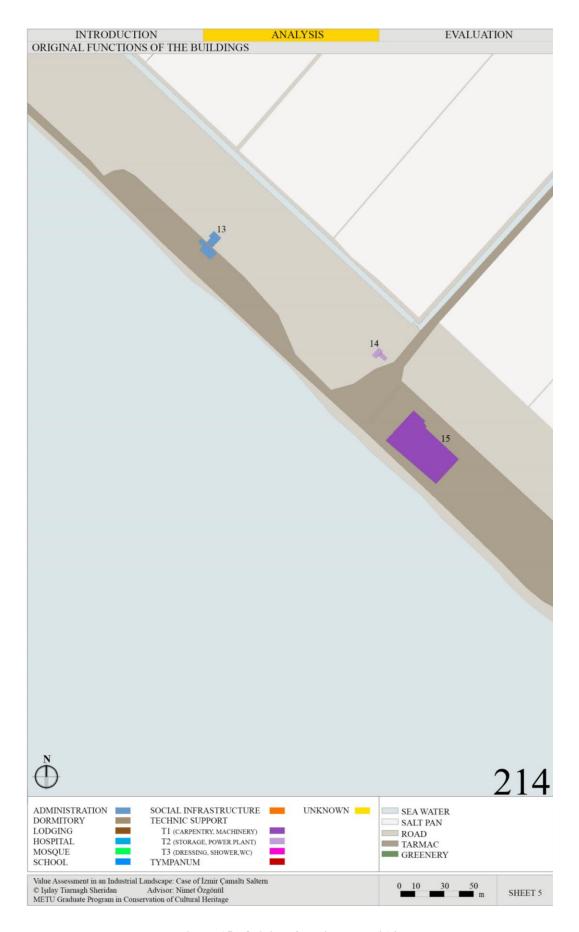


Figure 157 Original function sheet 214

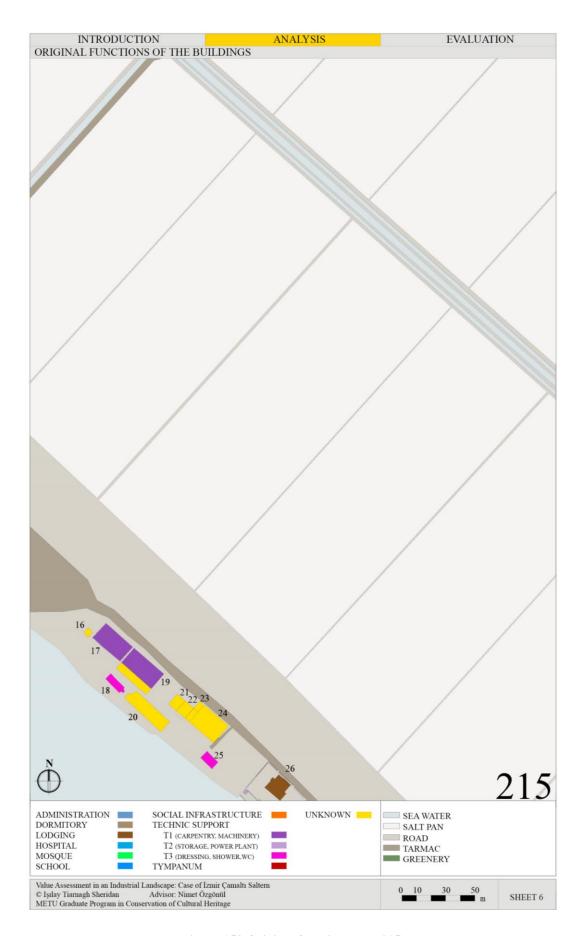


Figure 158 Original function sheet 215

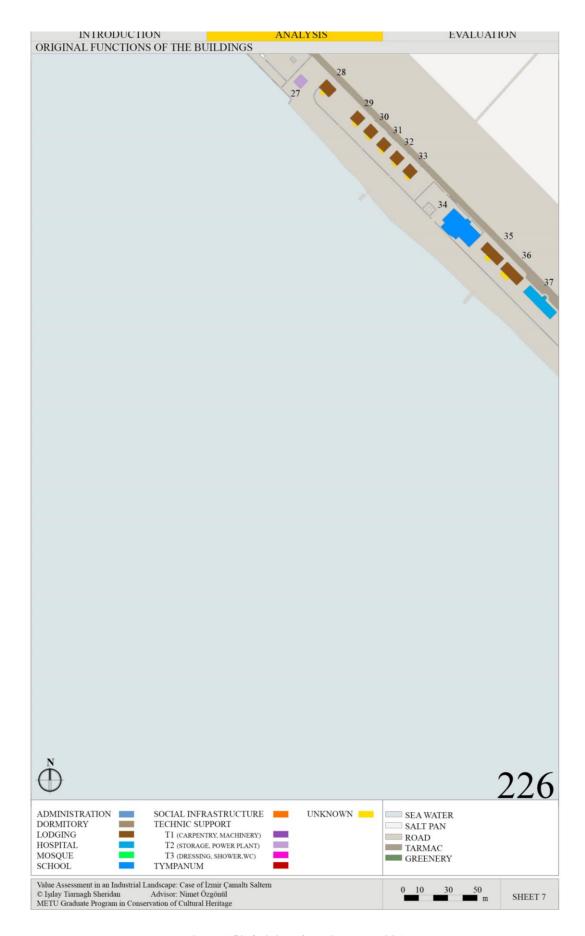


Figure 159 Original function sheet 226



Figure 160 Original function sheet 227

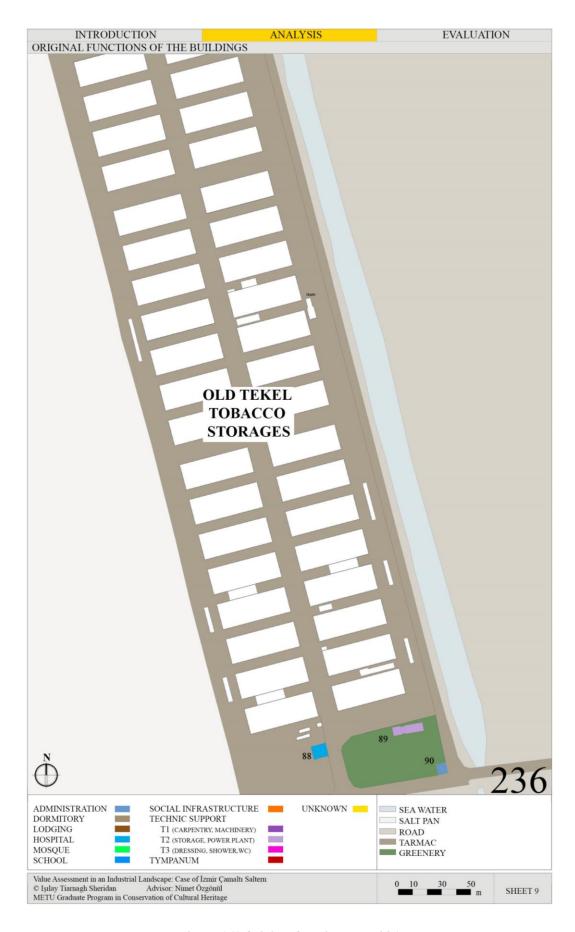


Figure 161 Original function sheet 236

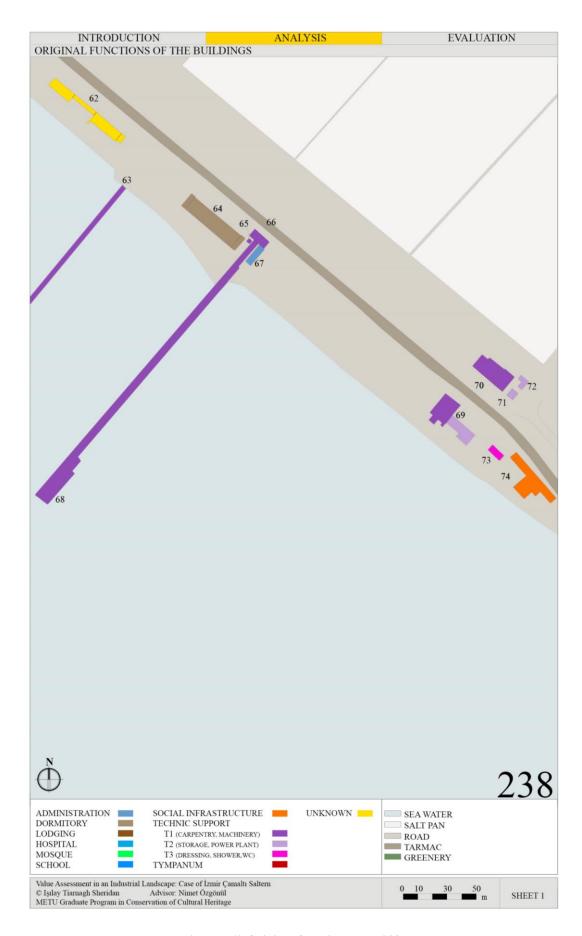


Figure 162 Original function sheet 238

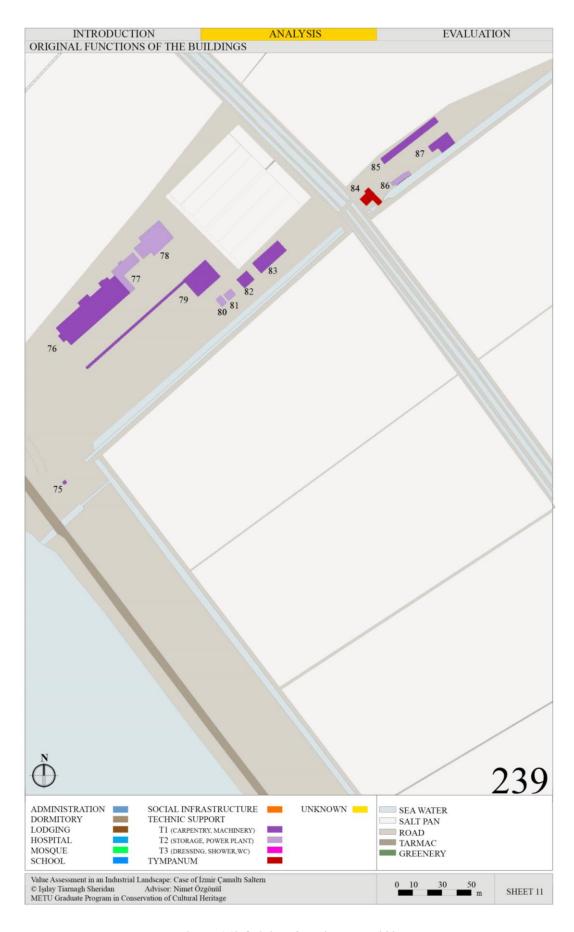


Figure 163 Original function sheet 239

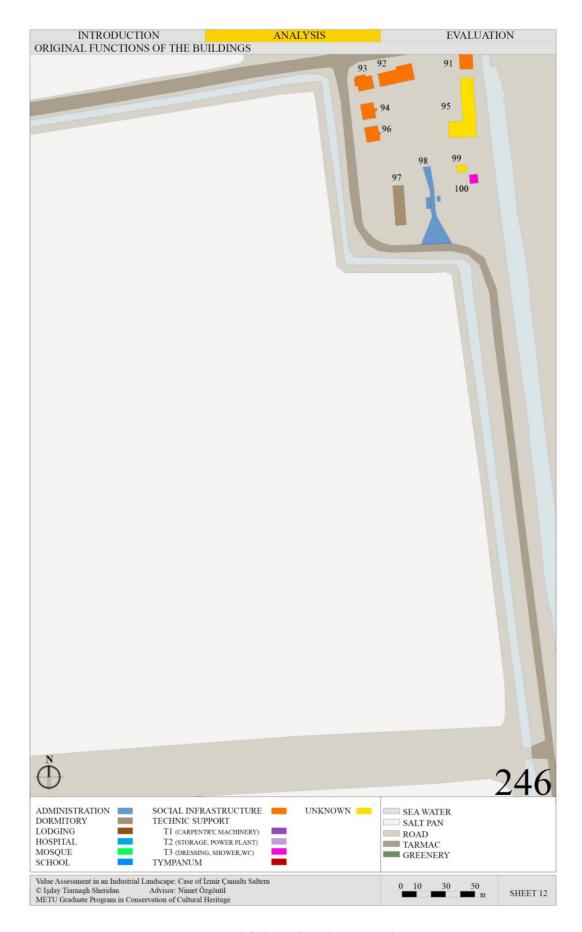


Figure 164 Original function sheet 246



Figure 165 Original function sheet 258

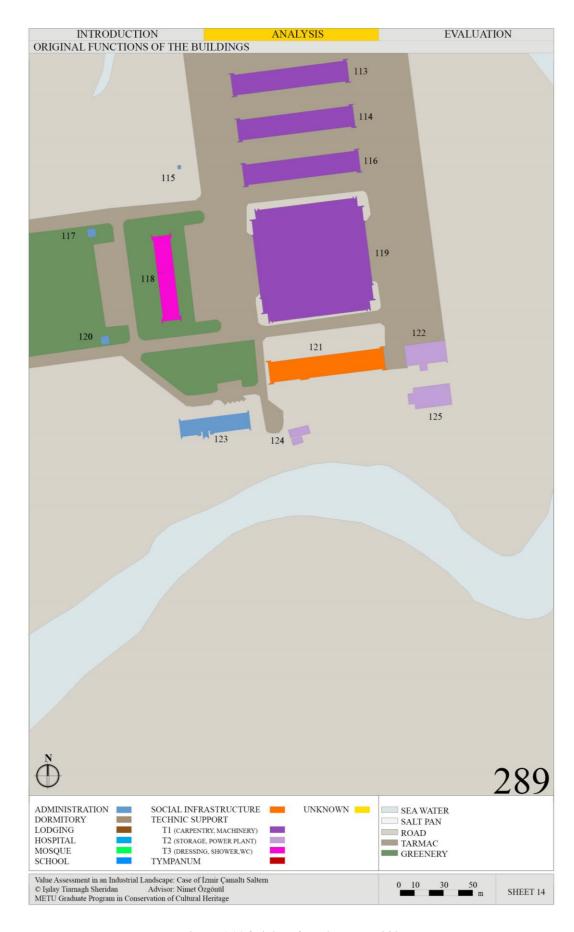


Figure 166 Original function sheet 289

# APPENDIX G

# **BUILDING HEIGHTS**

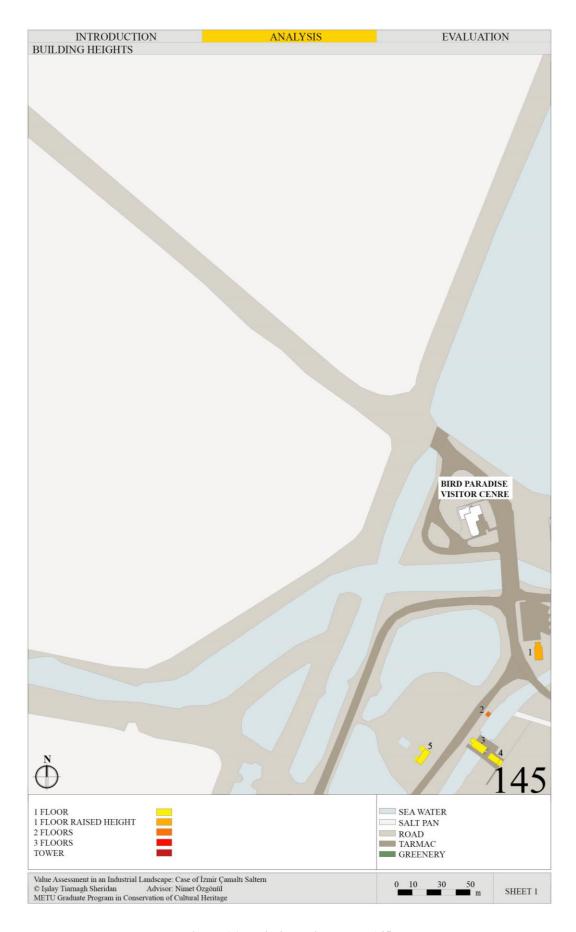


Figure 167 Building height sheet 145

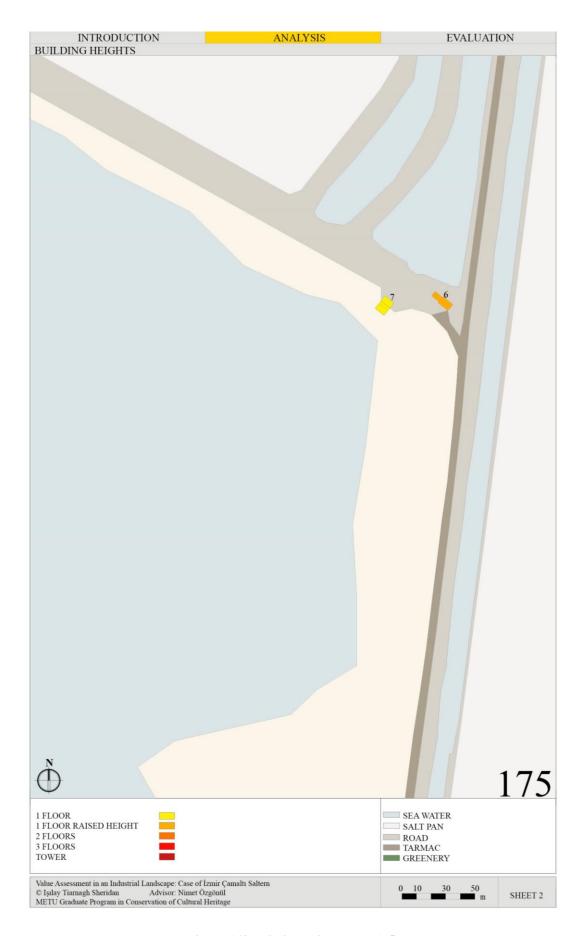


Figure 168 Building height sheet 175

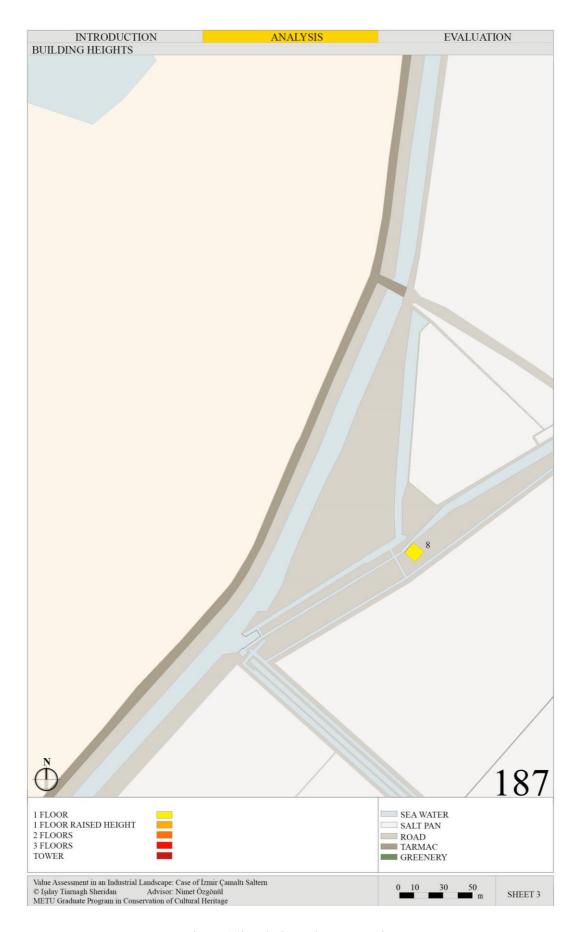


Figure 169 Building height sheet 187

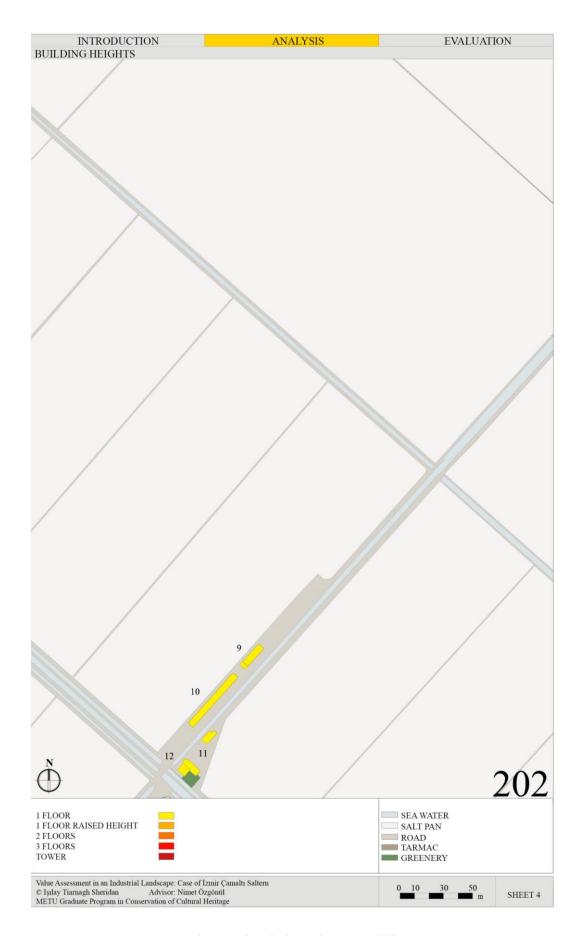


Figure 170 Building height sheet 202

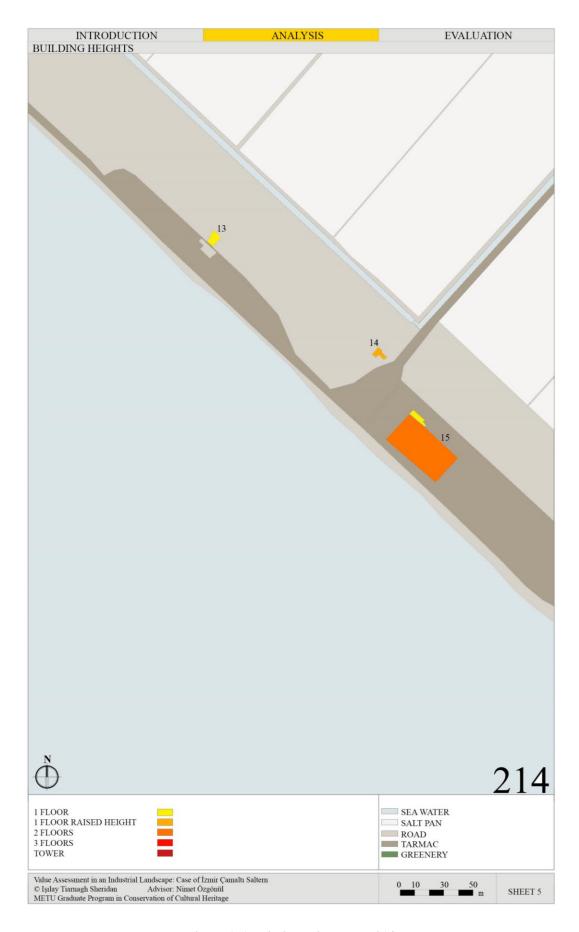


Figure 171 Building height sheet 214

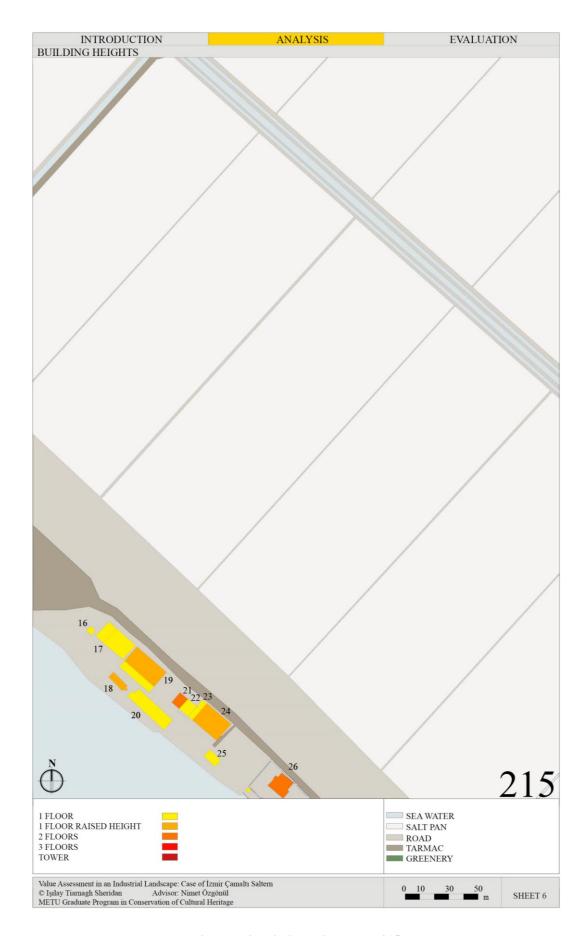


Figure 172 Building height sheet 215

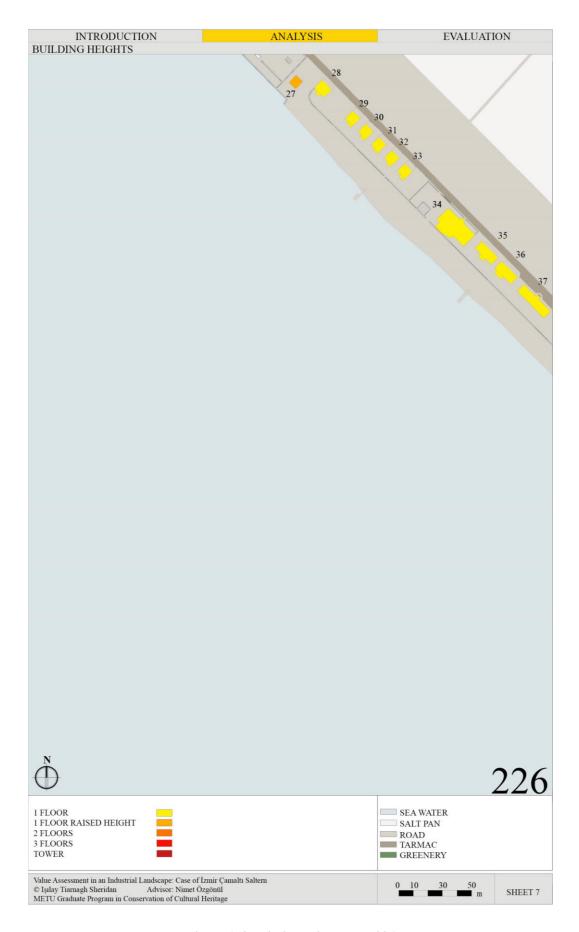


Figure 173 Building height sheet 226

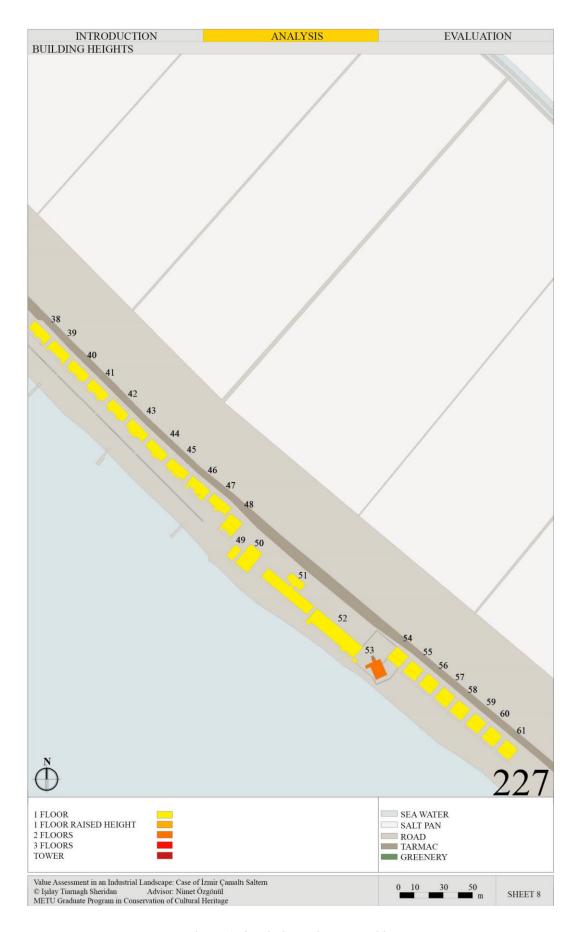


Figure 174 Building height sheet 227

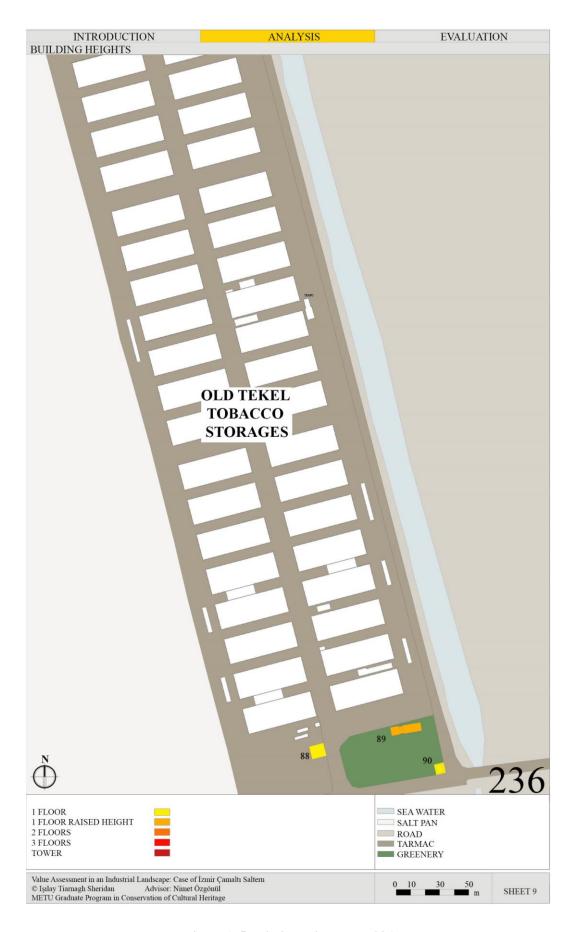


Figure 175 Building height sheet 236

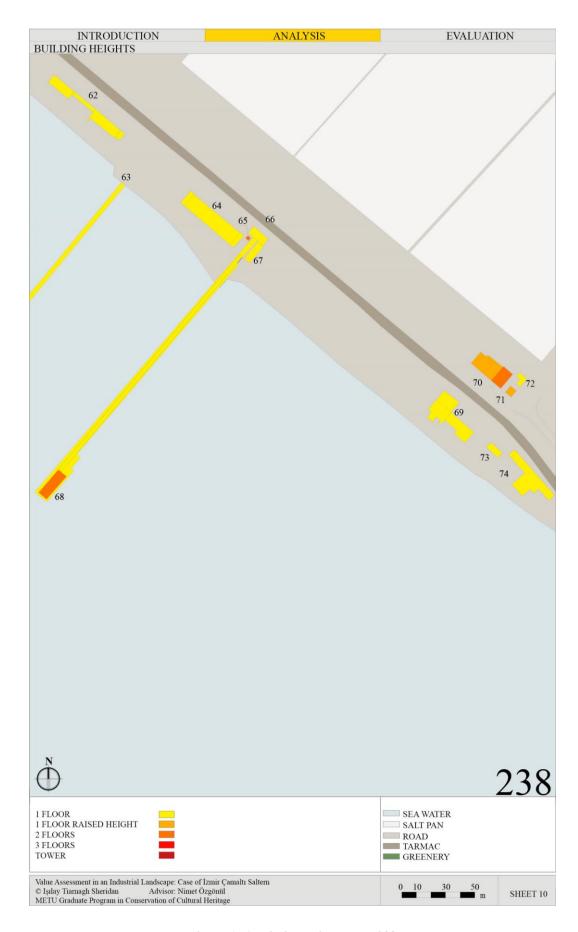


Figure 176 Building height sheet 238



Figure 177 Building height sheet 239

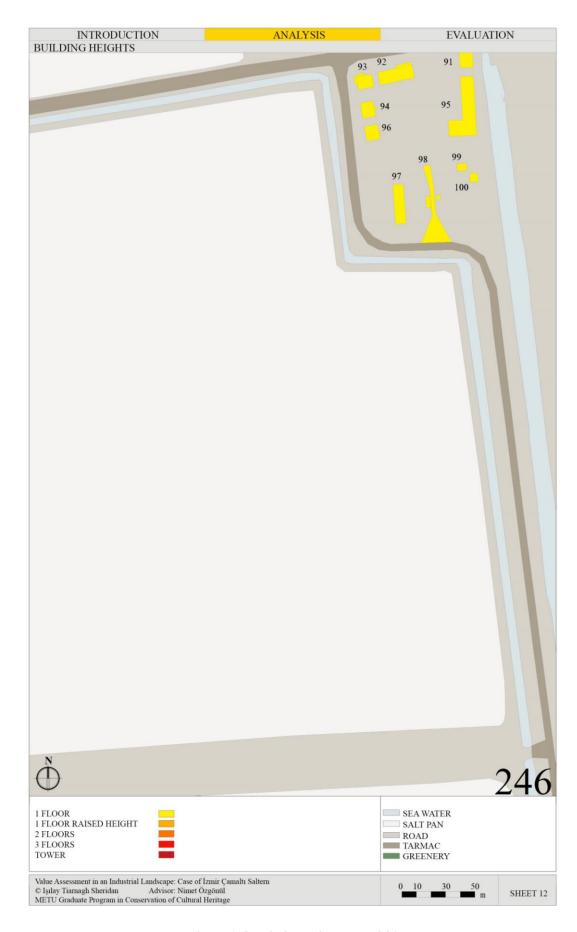


Figure 178 Building height sheet 246



Figure 179 Building height sheet 258

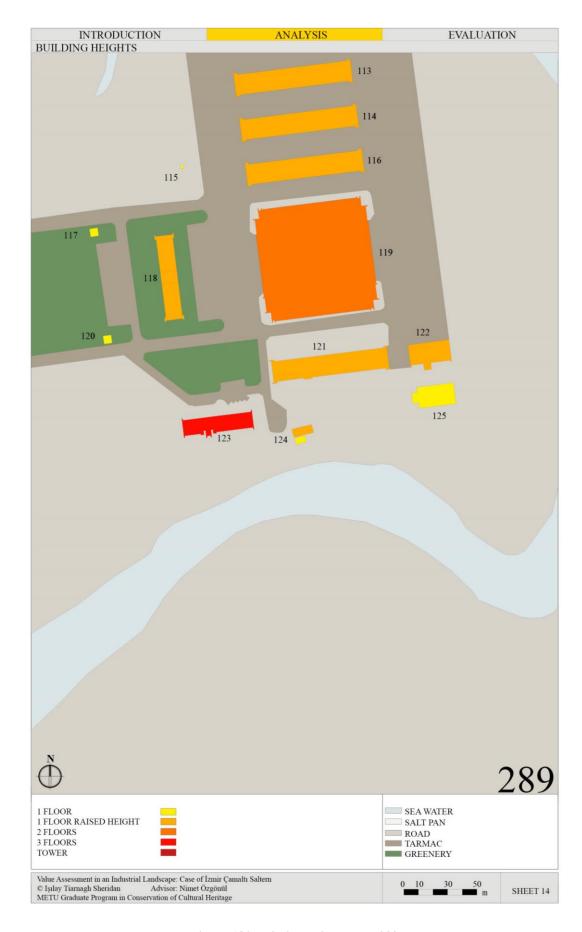


Figure 180 Building height sheet 289

# APPENDIX H

## CONDITIONS OF THE BUILDINGS

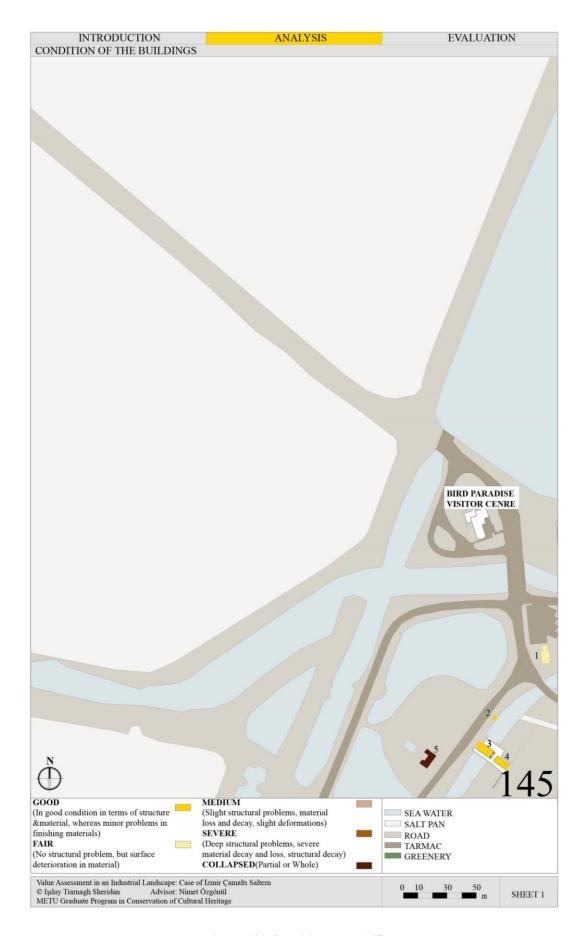


Figure 181 Condition sheet 145

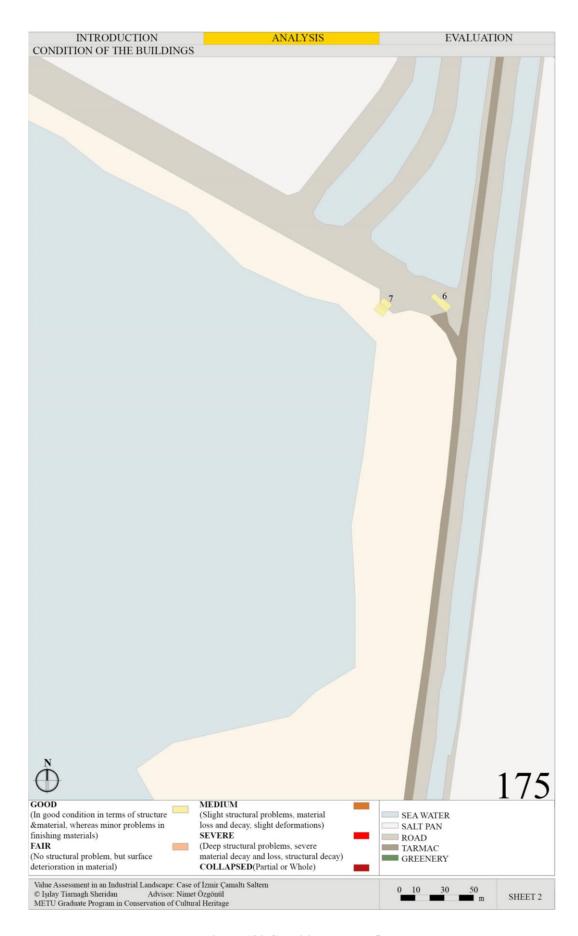


Figure 182 Condition sheet 175

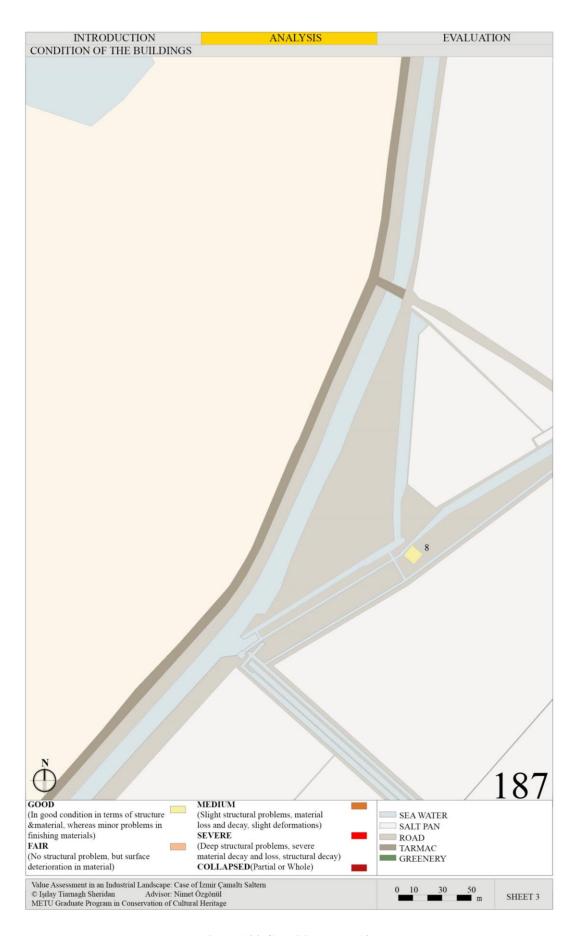


Figure 183 Condition sheet 187

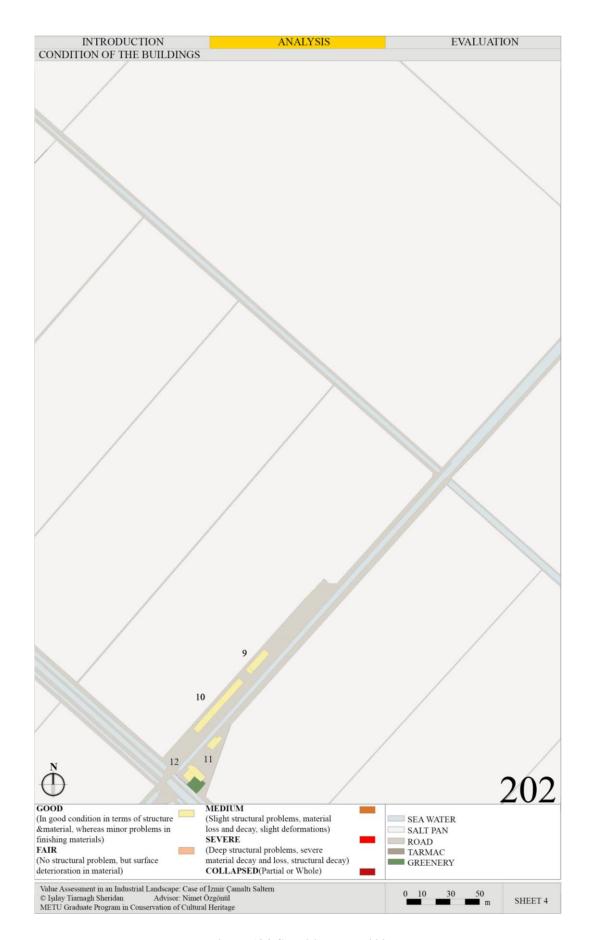


Figure 184 Condition sheet 202

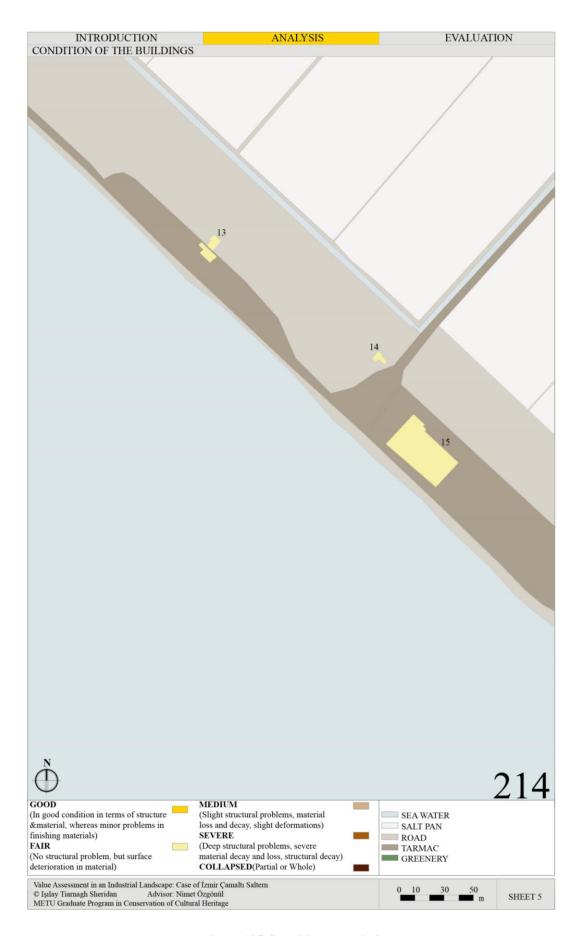


Figure 185 Condition sheet 214



Figure 186 Condition sheet 215

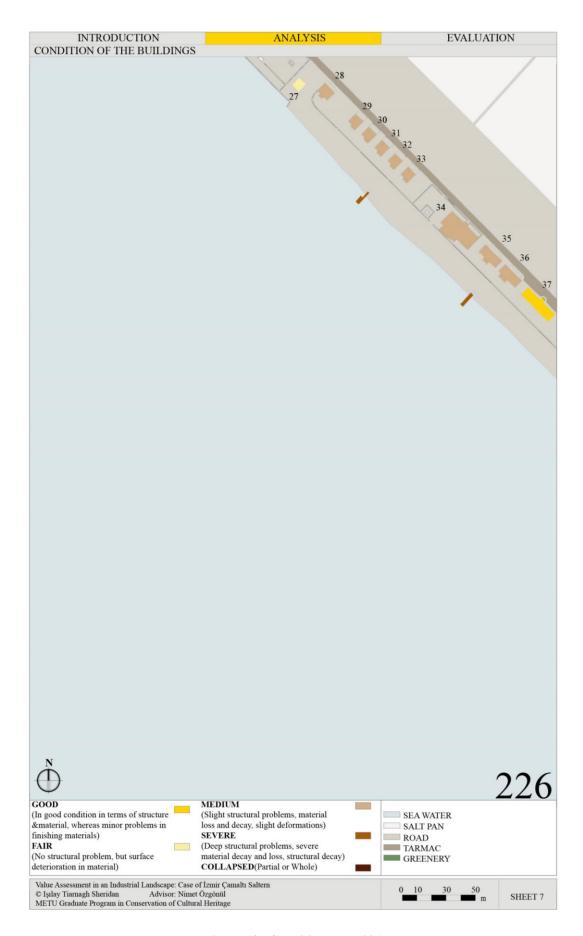


Figure 187 Condition sheet 226

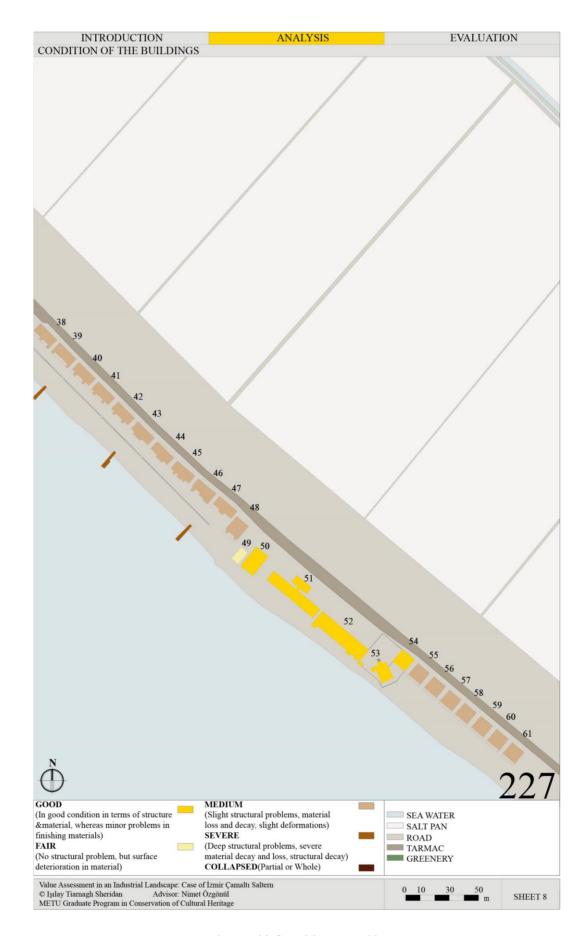


Figure 188 Condition sheet 227

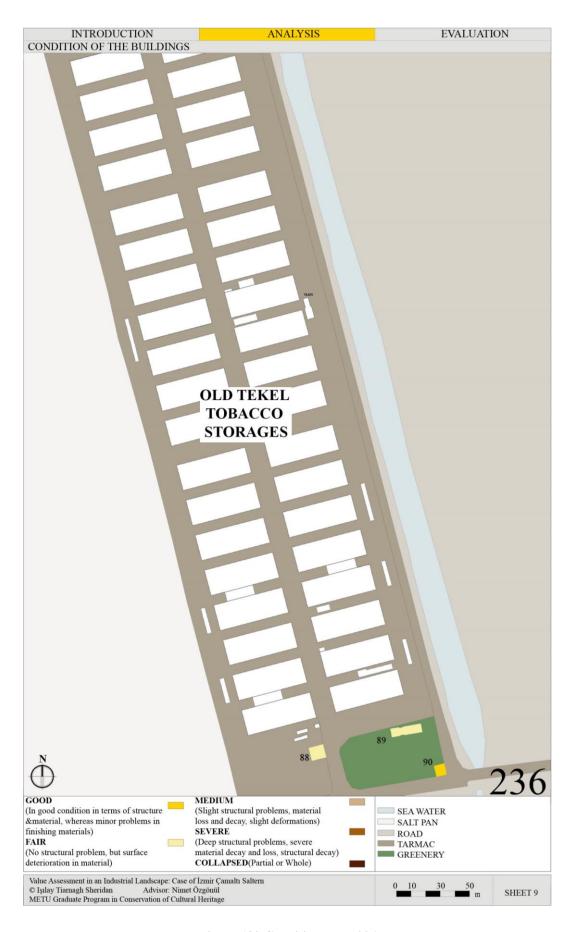


Figure 189 Condition sheet 236

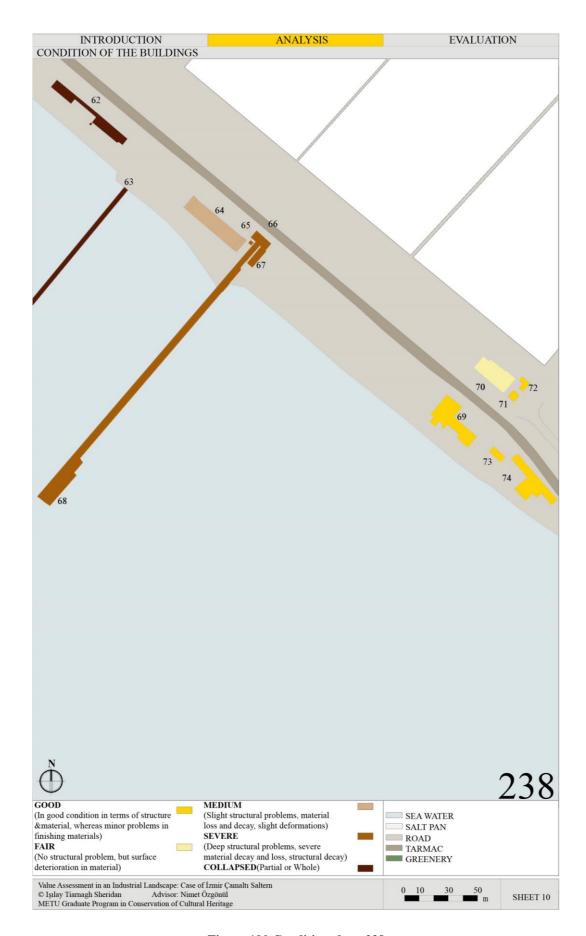


Figure 190 Condition sheet 238

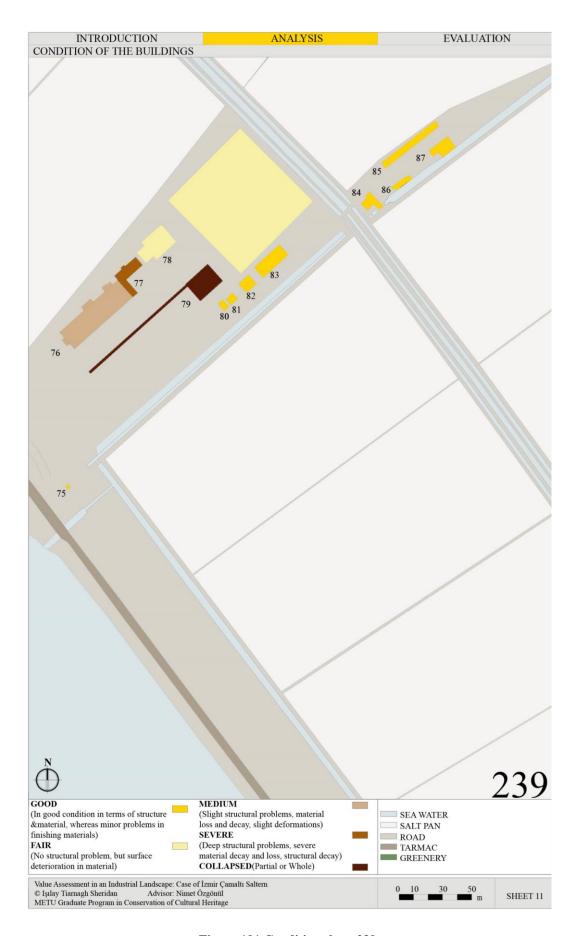


Figure 191 Condition sheet 239

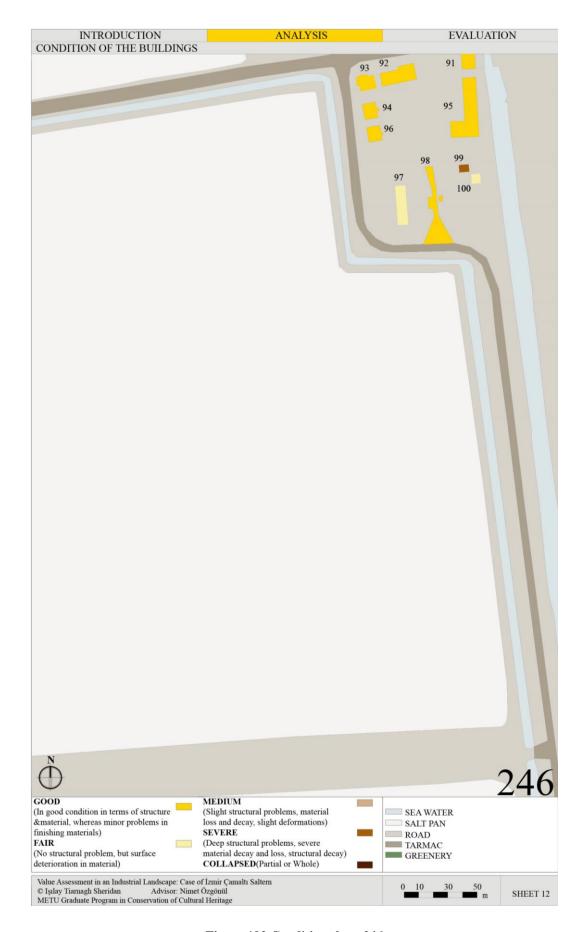


Figure 192 Condition sheet 246



Figure 193 Condition sheet 258



Figure 194 Condition sheet 289

# APPENDIX I

## CONSTRUCTION DATES OF THE BUILDINGS

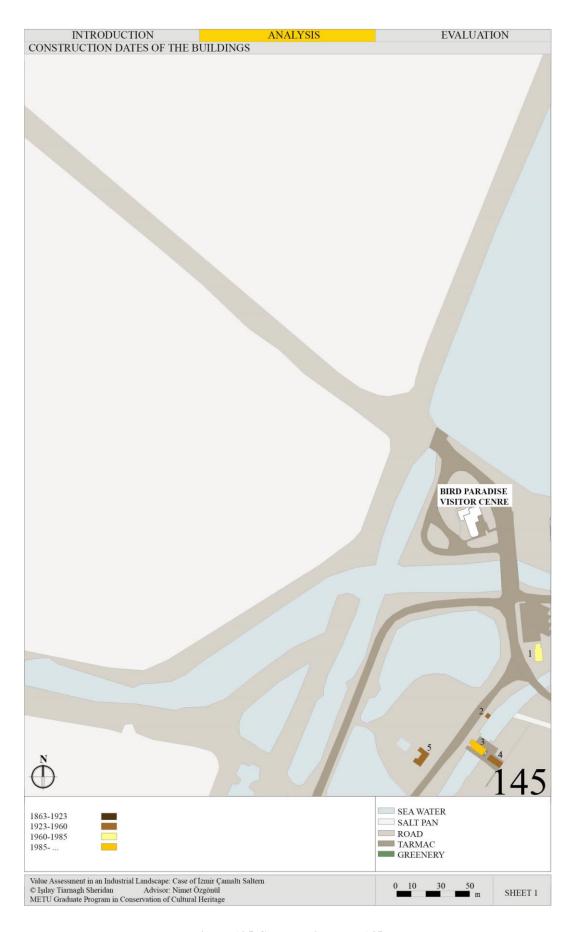


Figure 195 Construction date 145

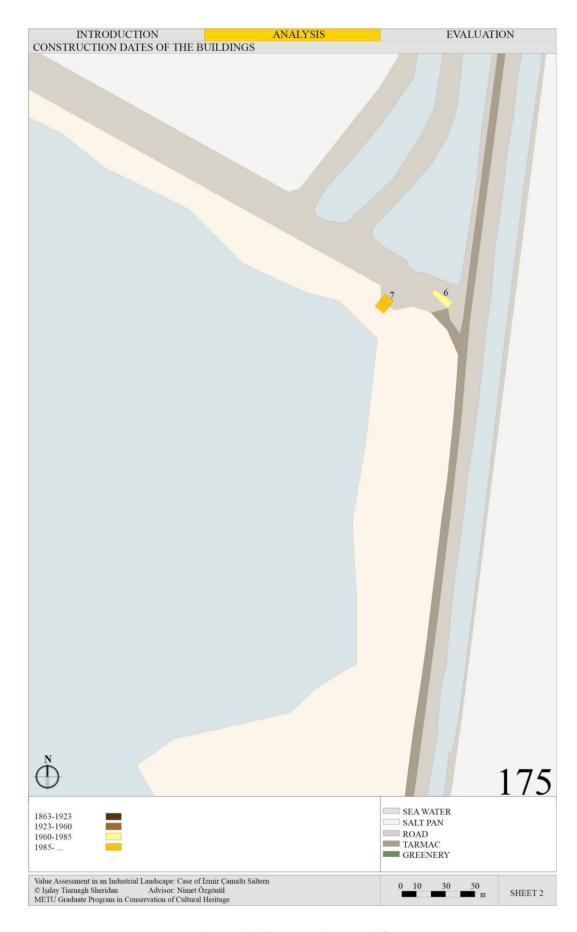


Figure 196 Construction date 175

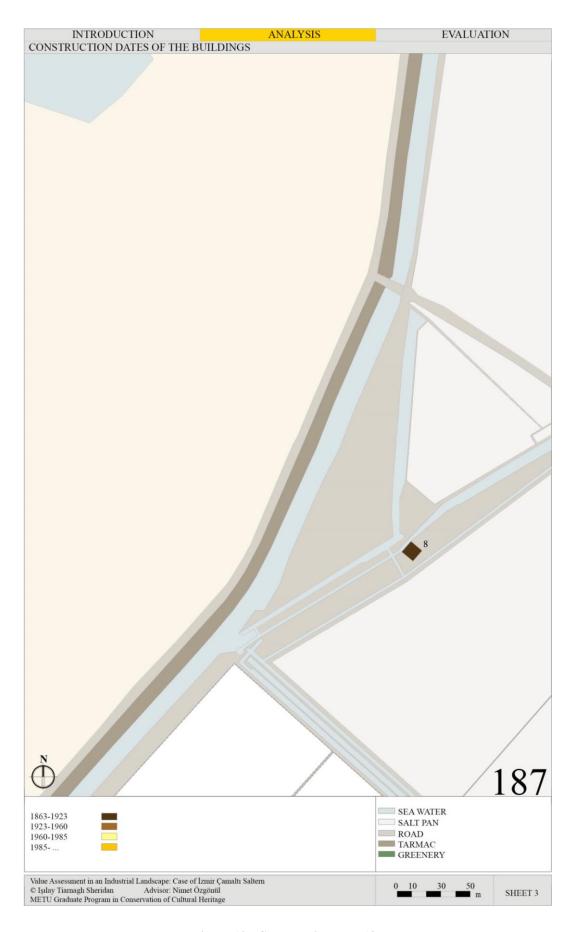


Figure 197 Construction date 187

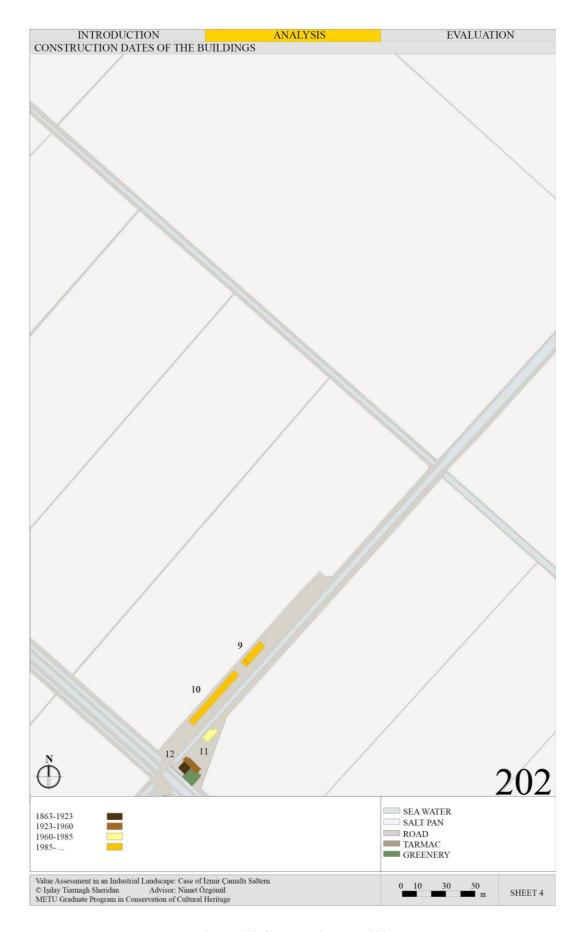


Figure 198 Construction date 202



Figure 199 Construction date 214

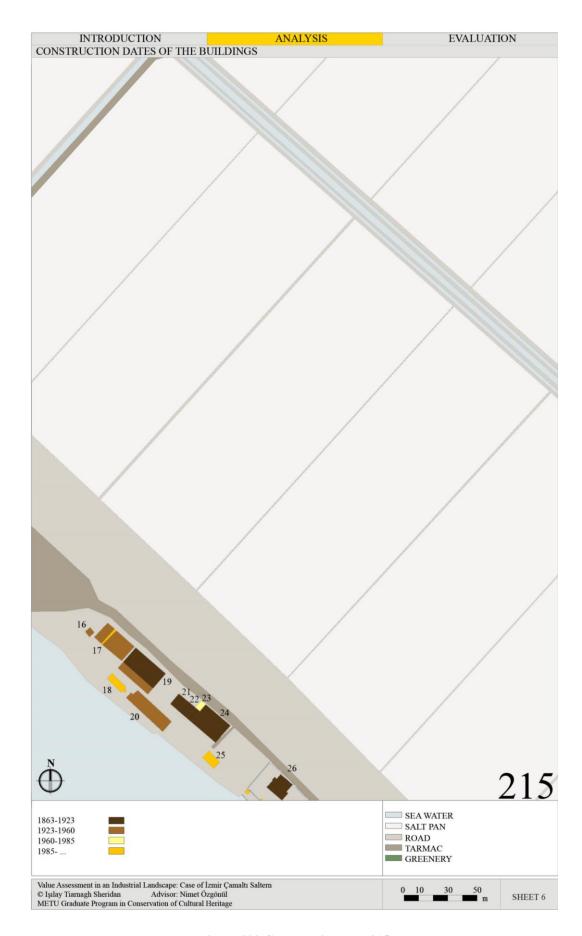


Figure 200 Construction date 215

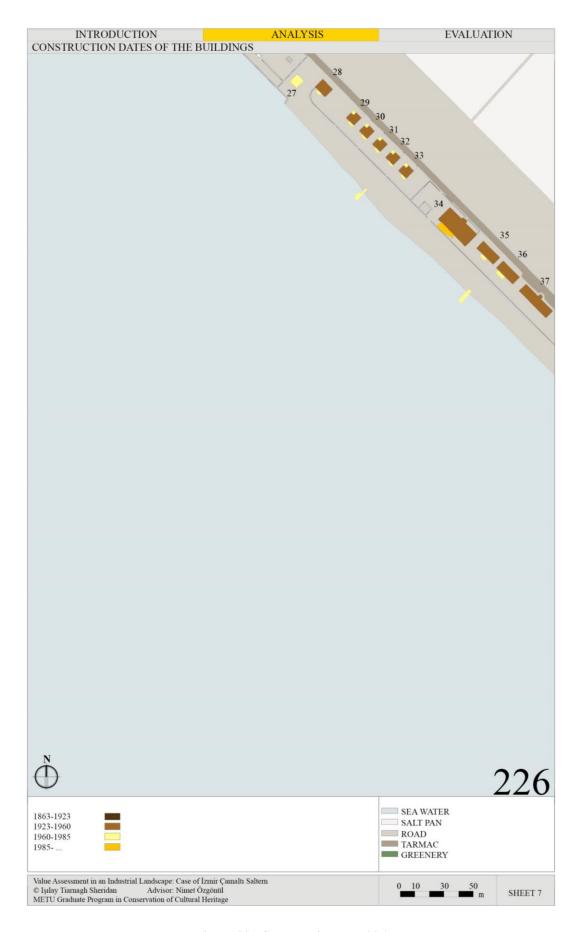


Figure 201 Construction date 226



Figure 202 Construction date 227

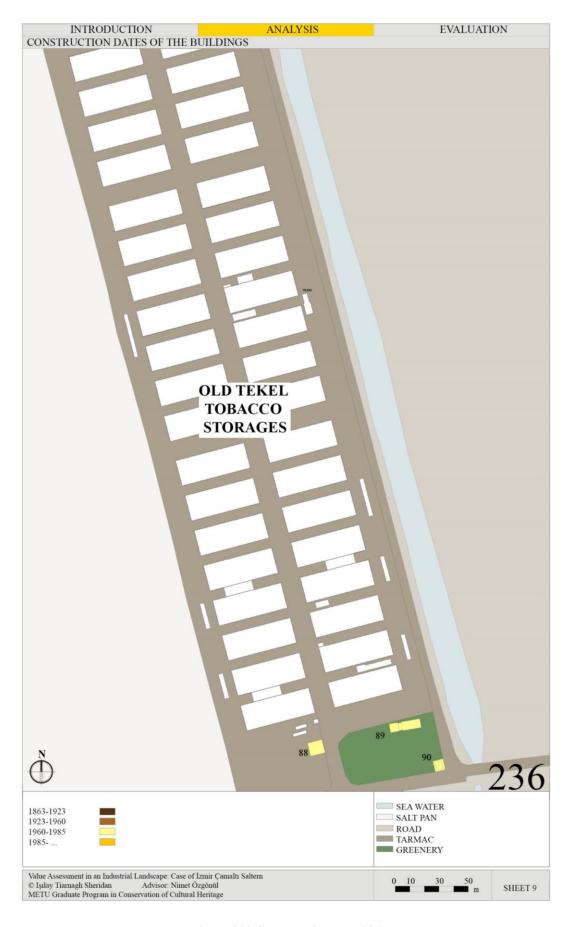


Figure 203 Construction date 236

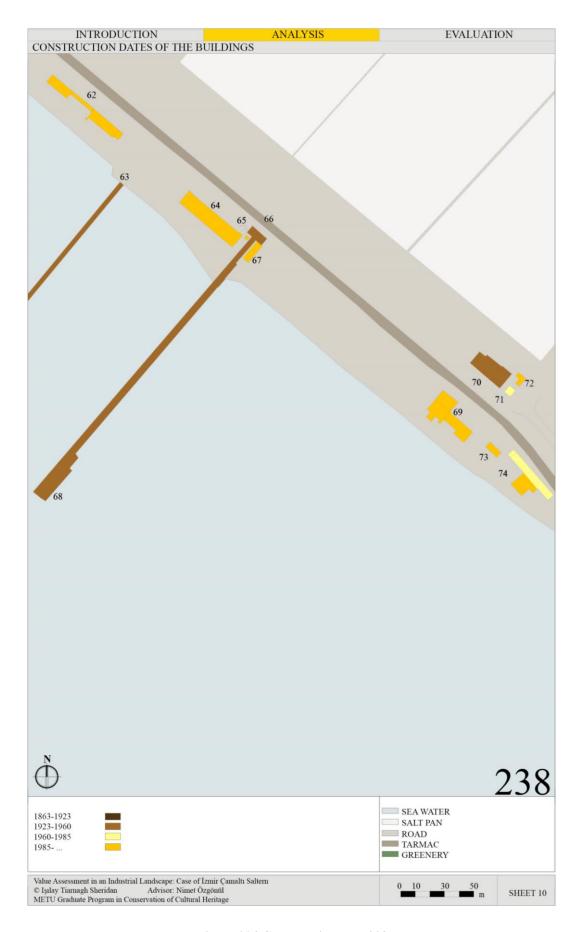


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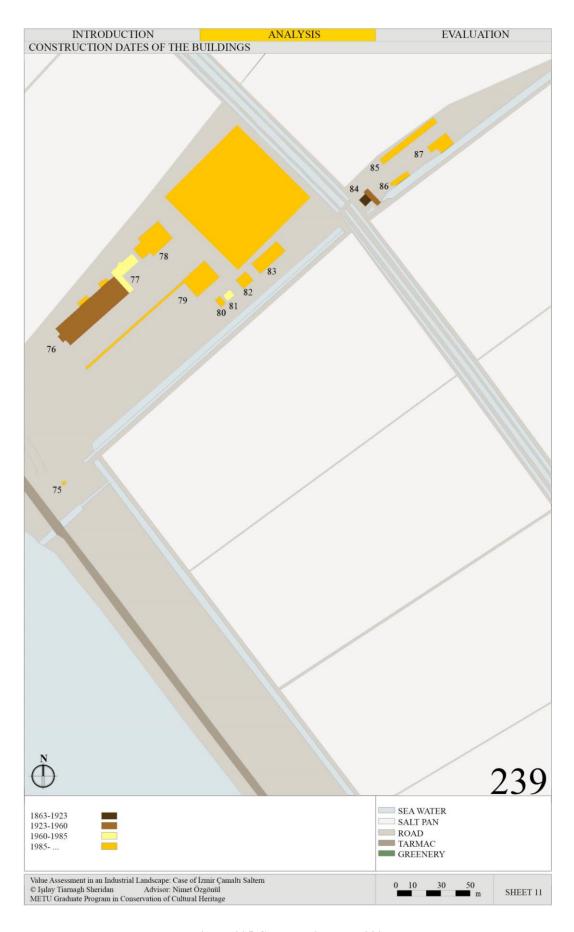


Figure 205 Construction date 239

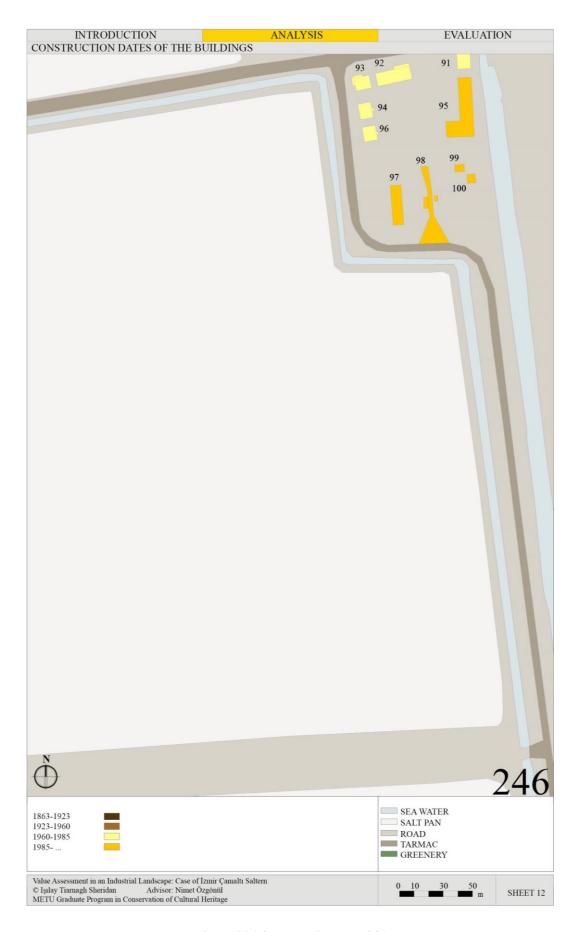


Figure 206 Construction date 246



Figure 207 Construction date 258

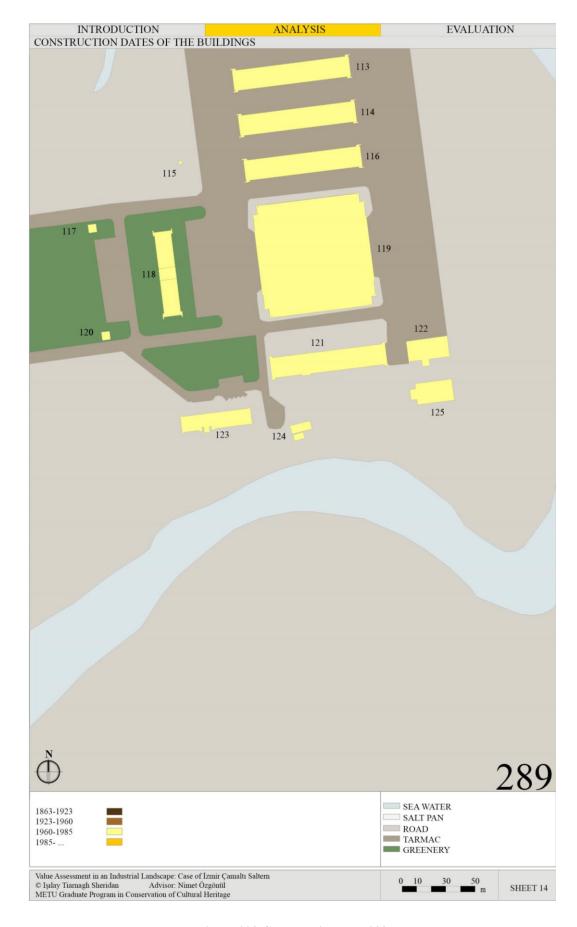


Figure 208 Construction date 289

## APPENDIX J

## **BUILDING GROUPS**

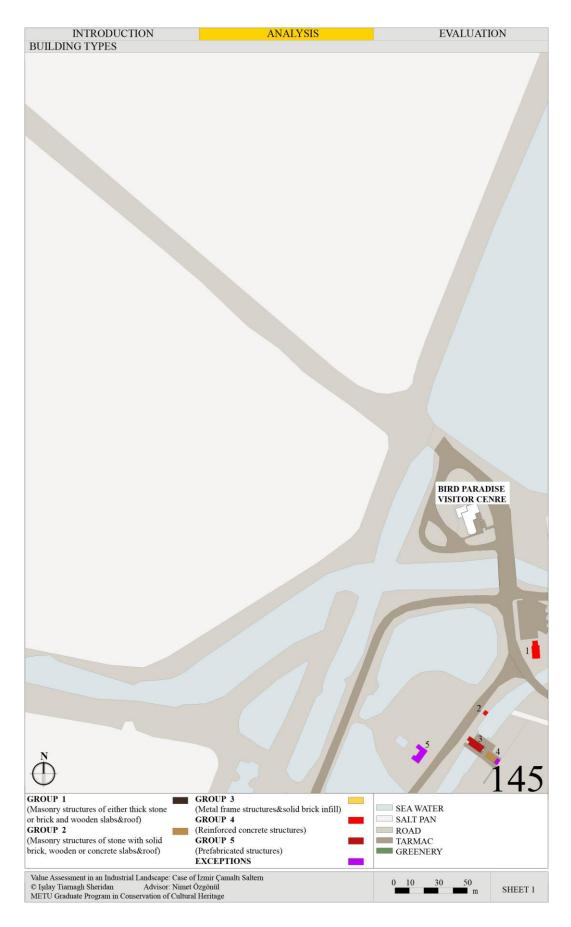


Figure 209 Building group 145

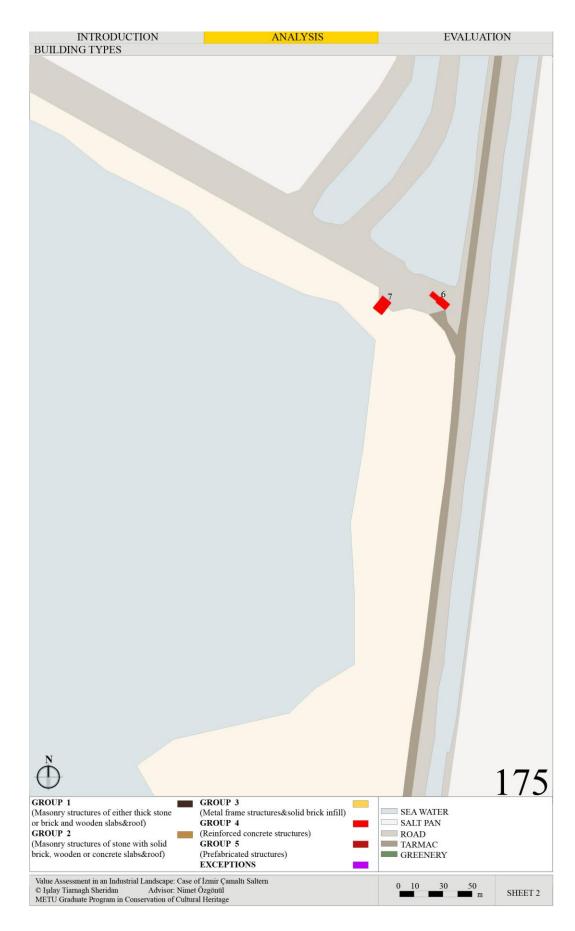


Figure 210 Building group 175

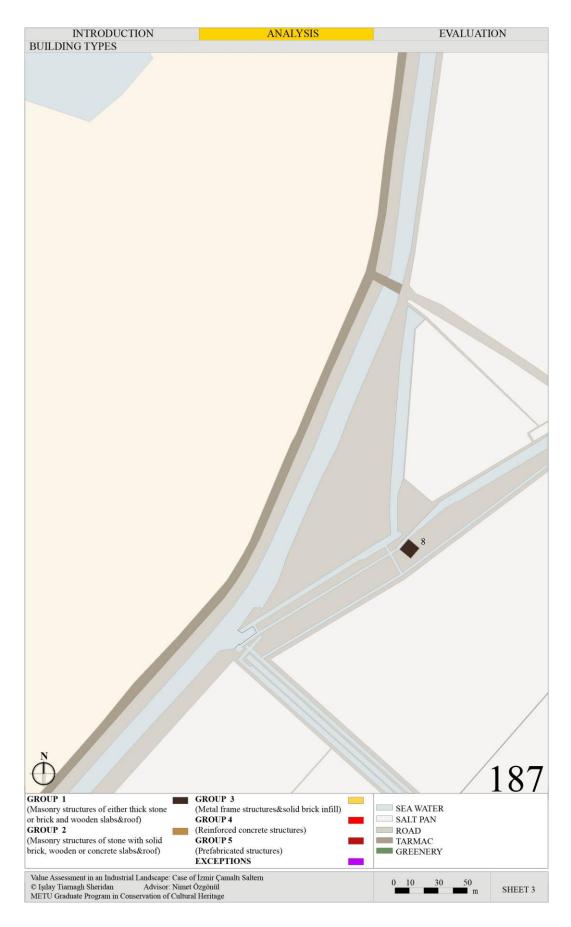


Figure 211 Building group 187

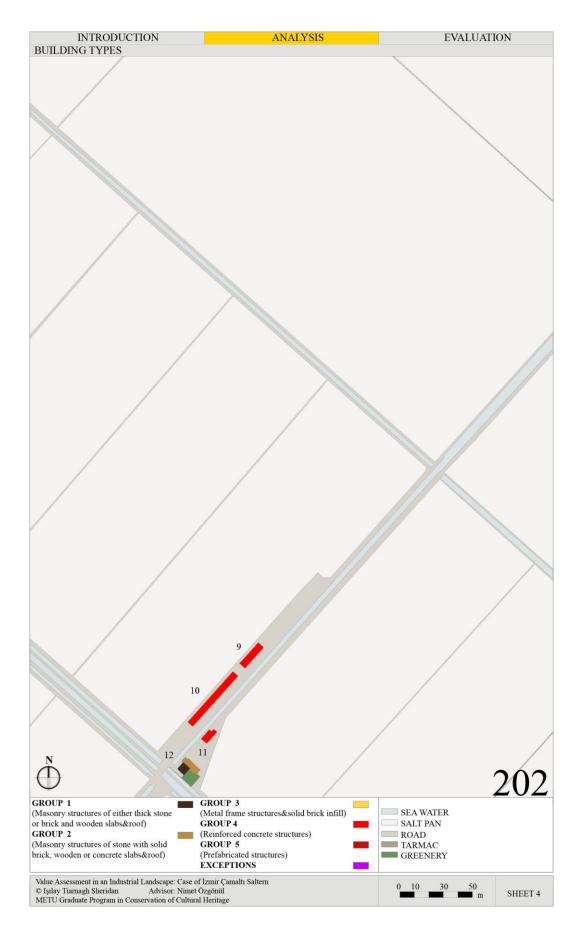


Figure 212 Building group 202

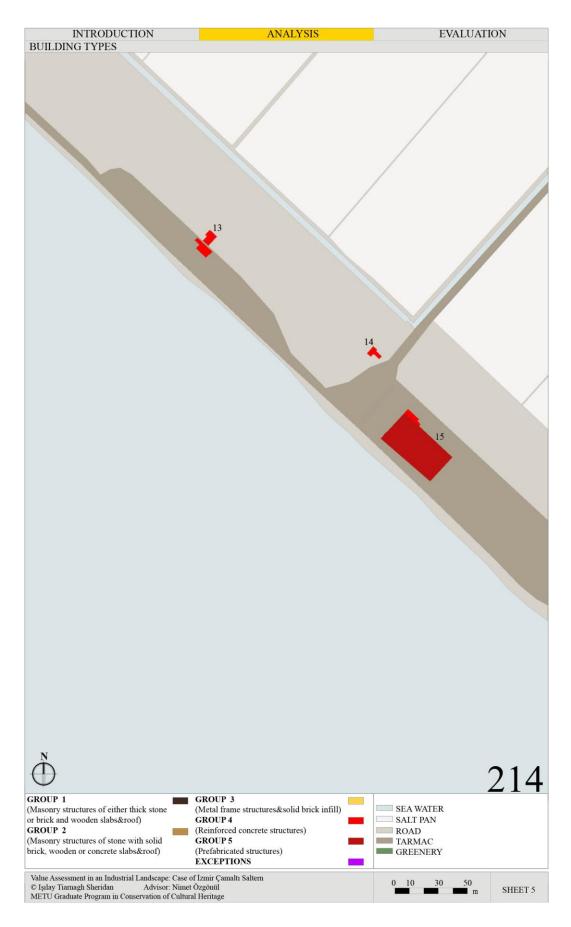


Figure 213 Building group 214

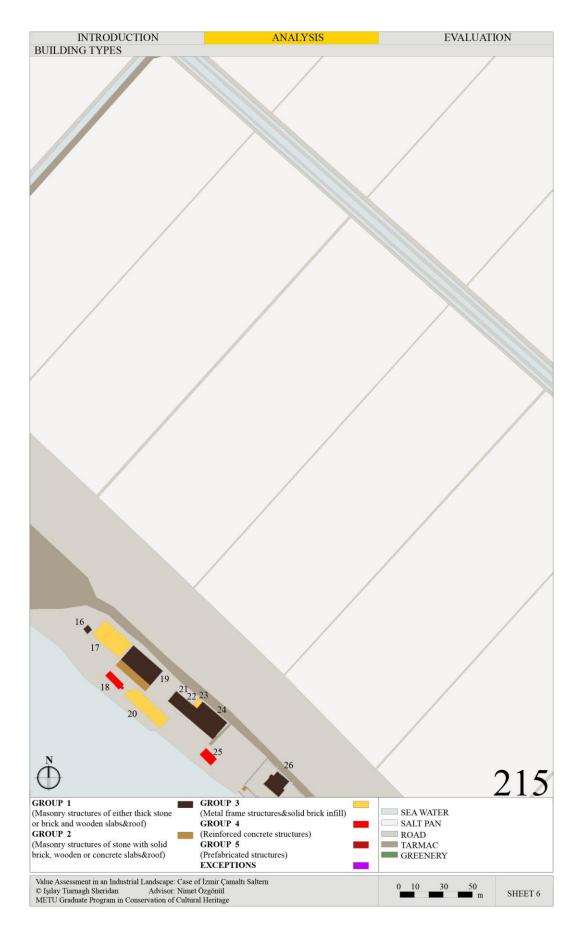


Figure 214 Building group 215

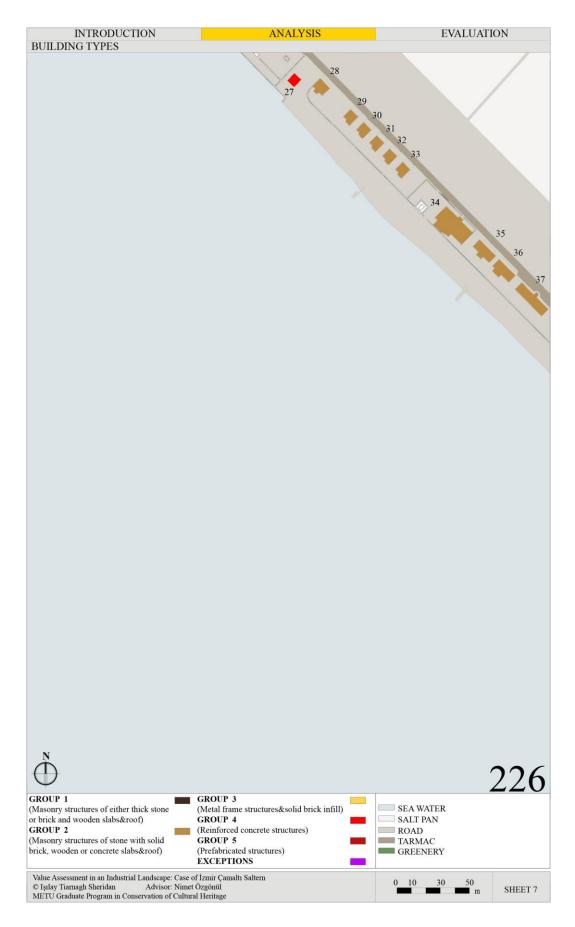


Figure 215 Building group 226

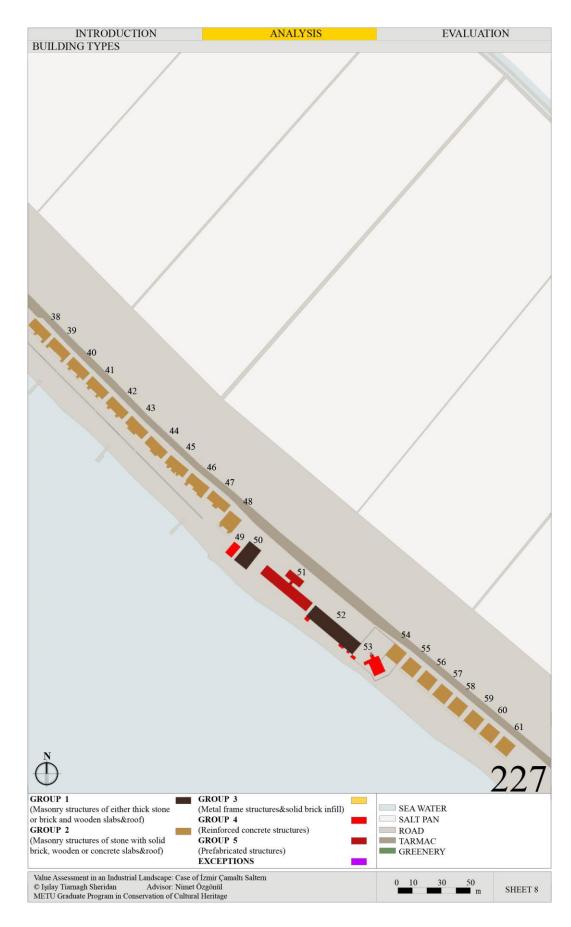


Figure 216 Building group 227

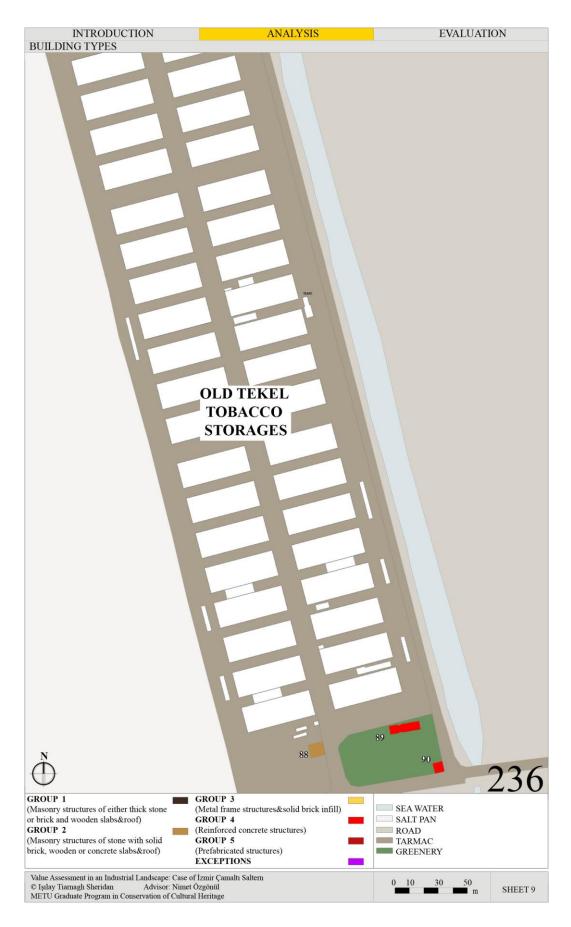


Figure 217 Building group 236

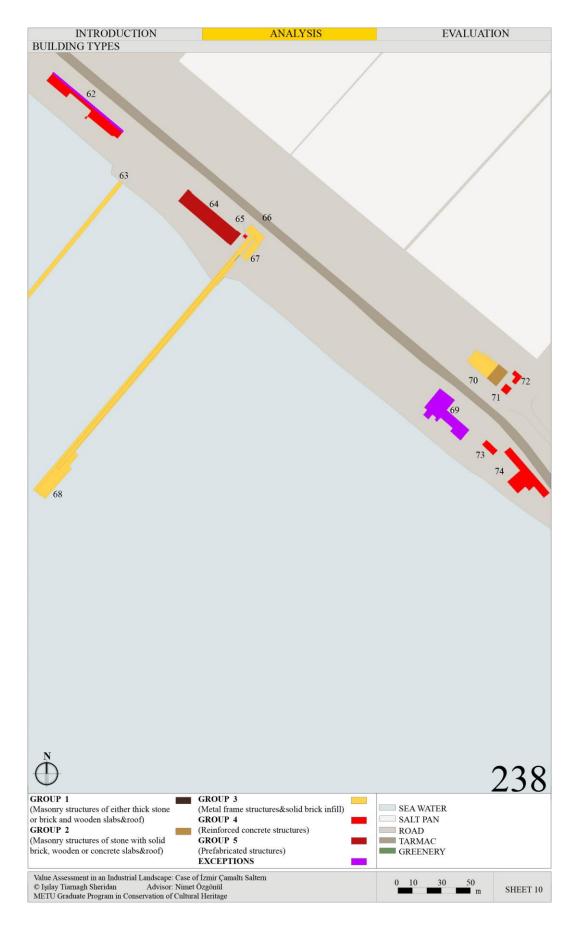


Figure 218 Building group 238

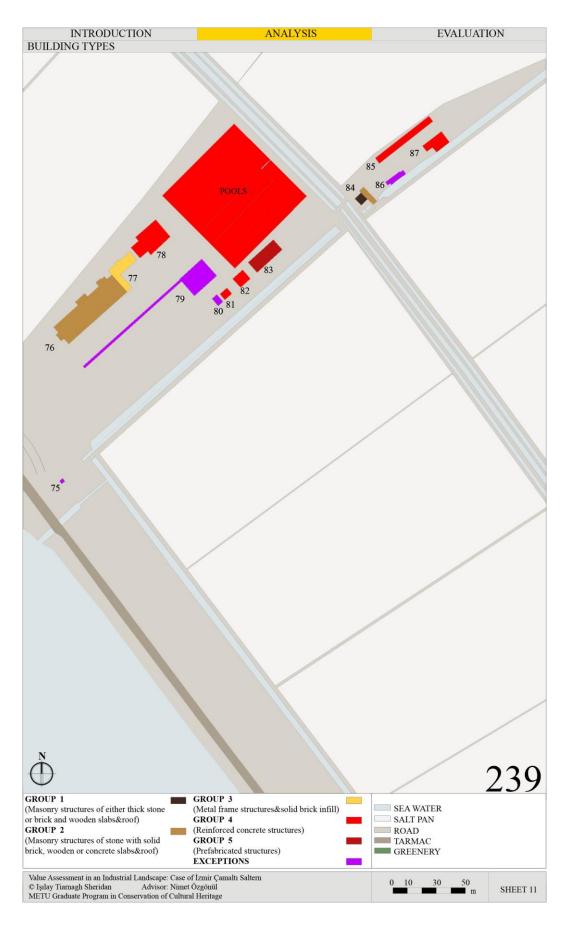


Figure 219 Building group 239

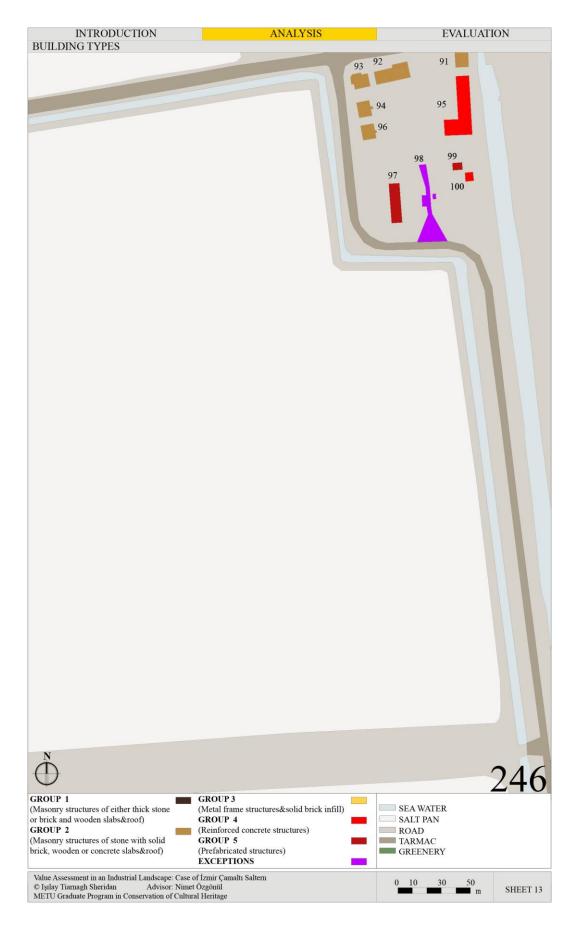


Figure 220 Building group 246

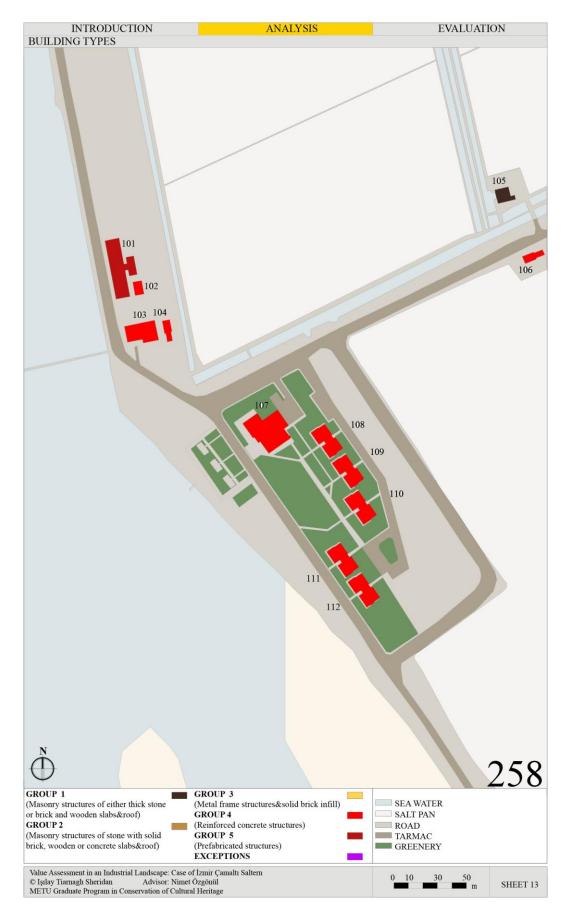


Figure 221 Building group 258



Figure 222 Building group 289

## APPENDIX K

## **SURVEY SHEETS**

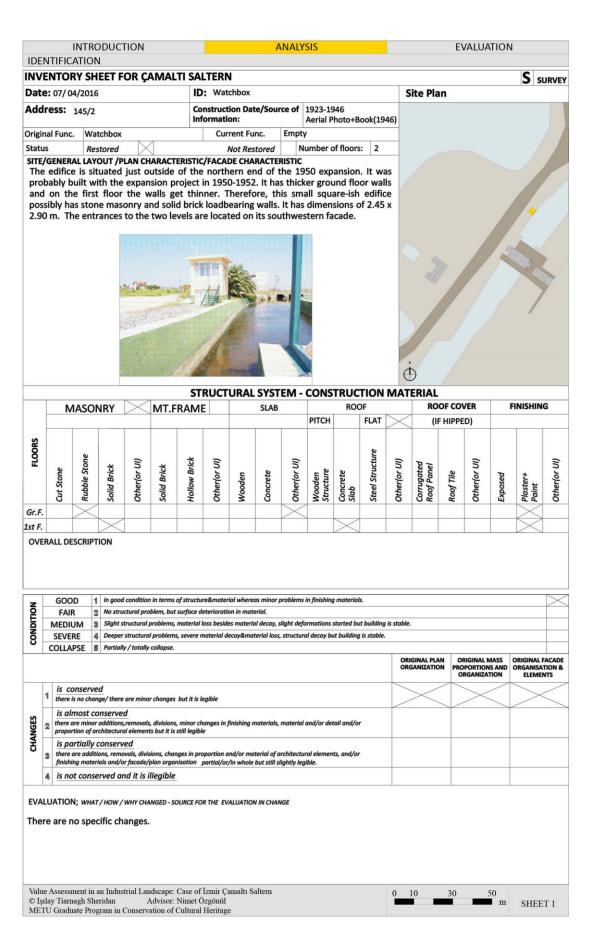


Figure 223 Sheet 1

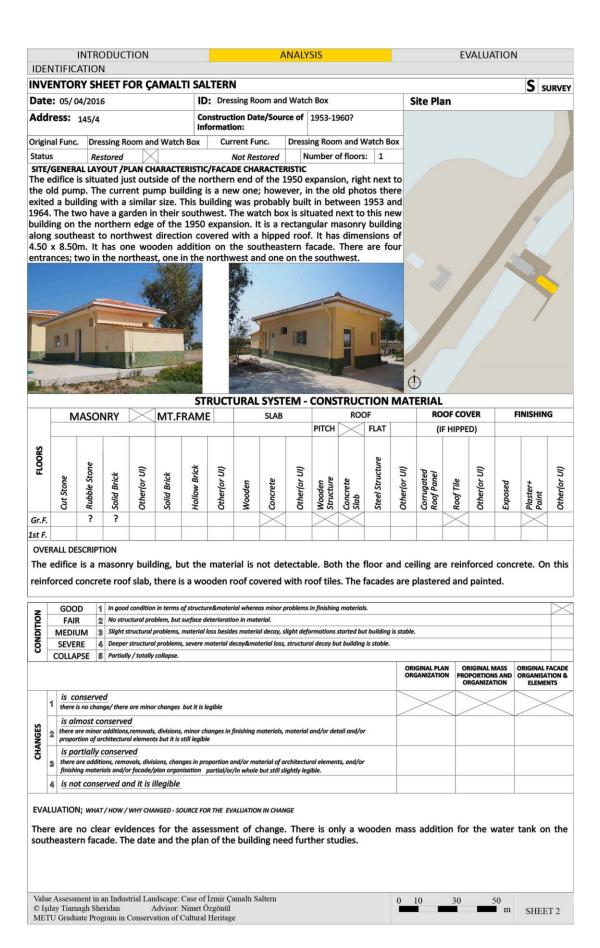
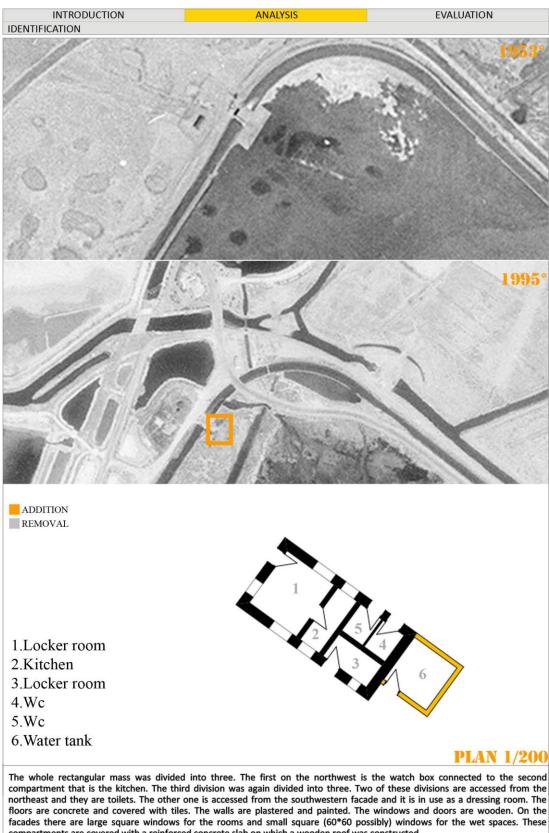


Figure 224 Sheet 2 cont'd



compartments are covered with a reinforced concrete slab on which a wooden roof was constructed.

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Figure 225 Sheet 2 cont'd

IDENTIFICATION

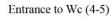




Locker room (1)









Locker room (1)

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SHEET 2

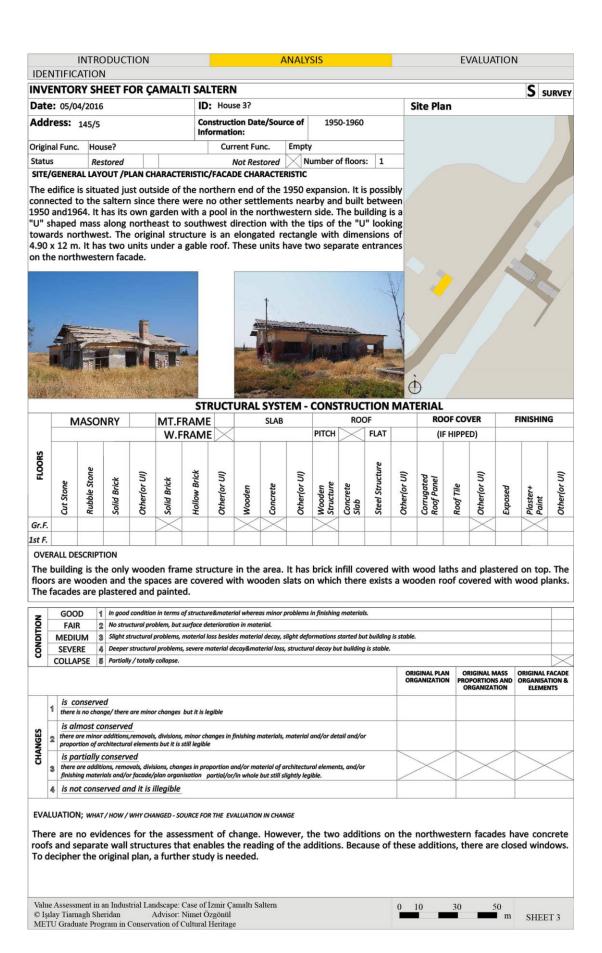


Figure 227 Sheet 3 cont'd



Figure 228 Sheet 3 cont'd



Figure 229 Sheet 3

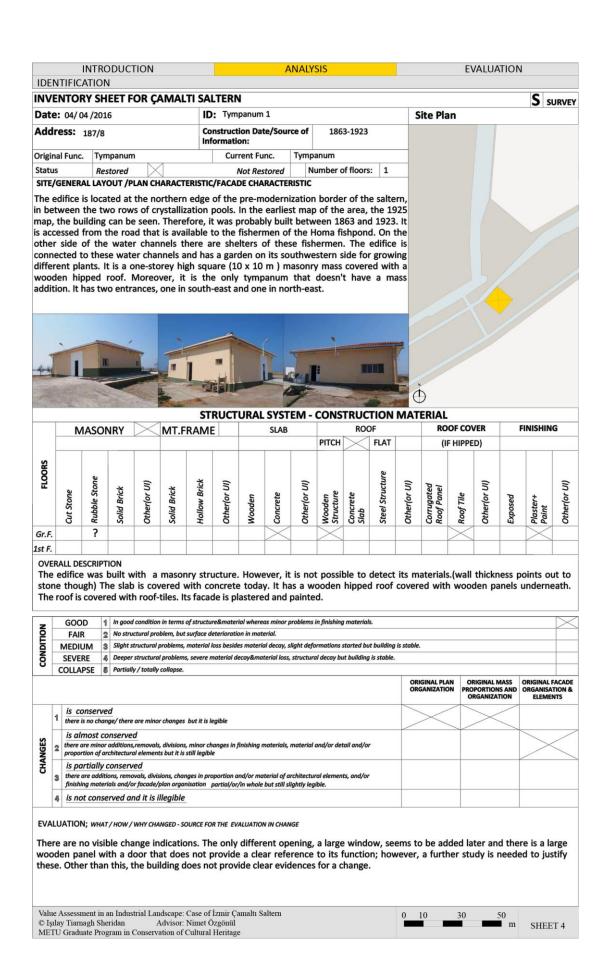


Figure 230 Sheet 4 cont'd

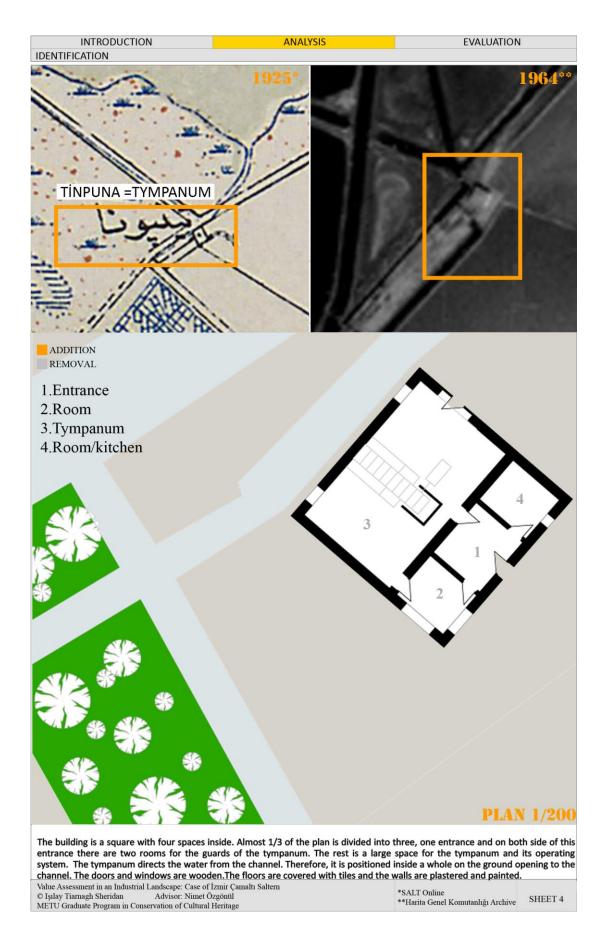


Figure 231 Sheet 4 cont'd



Tympanum (2)



Tympanum (3)



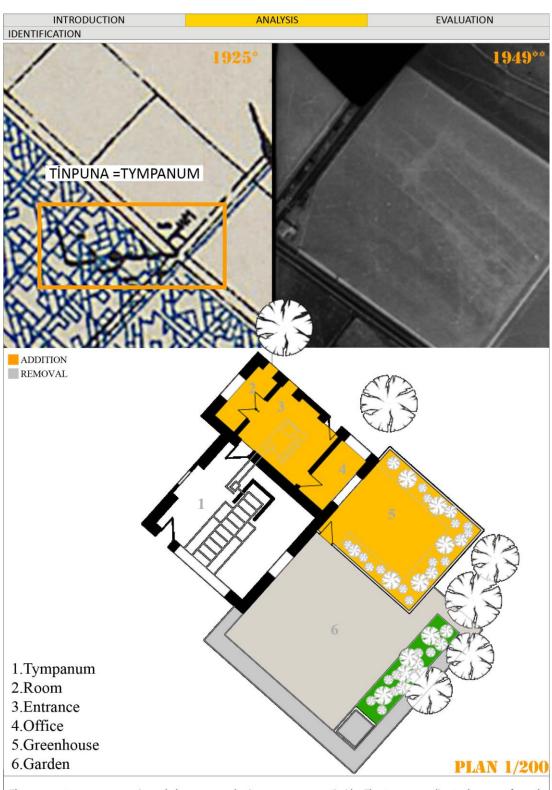
Water chnnel to tympanum

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Figure 232 Sheet 4



Figure 233 Sheet 5 cont'd



The square tympanum mass is a whole one space having one tympanum inside. The tympanum directs the water from the channel, therefore it is positioned inside a whole on the ground opening to the channel. The added rectangular mass is divided into three spaces; one entrance and two rooms on both sides. In the entrance space, there is a motor for the operation of the tympanum connected through a hole on the wall. From the southeastern room of this extension the greenhouse is reachable through an opening on the wall. The greenhouse is connected to the garden. The doors and windows are wooden. The floors are covered with tiles and the walls are plastered and painted.

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SHEET 5

Figure 234 Sheet 5 cont'd





Greenhouse (5)

Entrance and engine for the tympanum (3)





Tympanum detail

Tympanum (1)

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Figure 235 Sheet 5

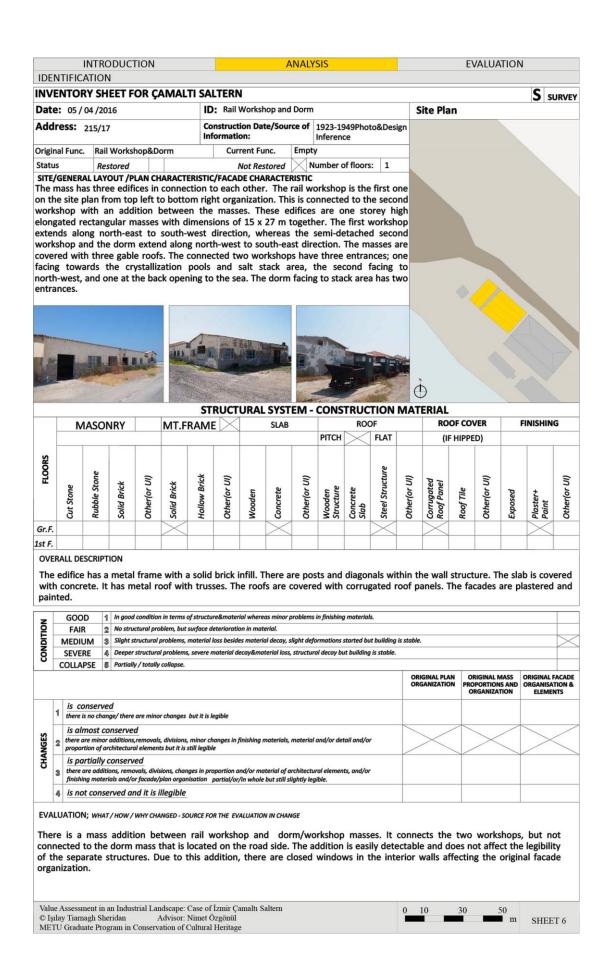


Figure 236 Sheet 6 cont'd

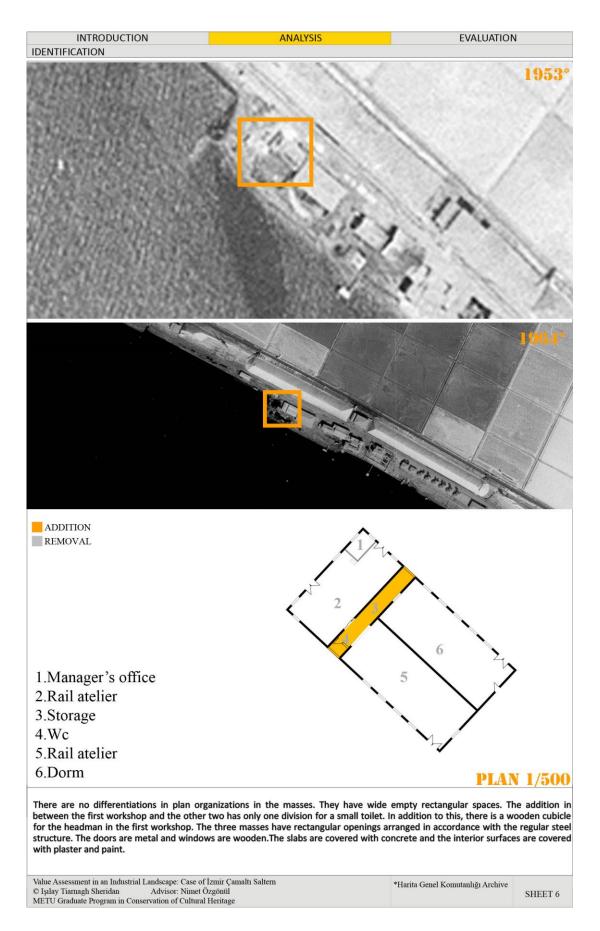


Figure 237 Sheet 6 cont'd





Dorm (6)

Rail atelier (5)



Salt trams outside the atelier



Sign of the manager's office (1)



Manager's office (1) and rail atelier (2)



Rail atelier and tools (5)

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Figure 238 Sheet 6

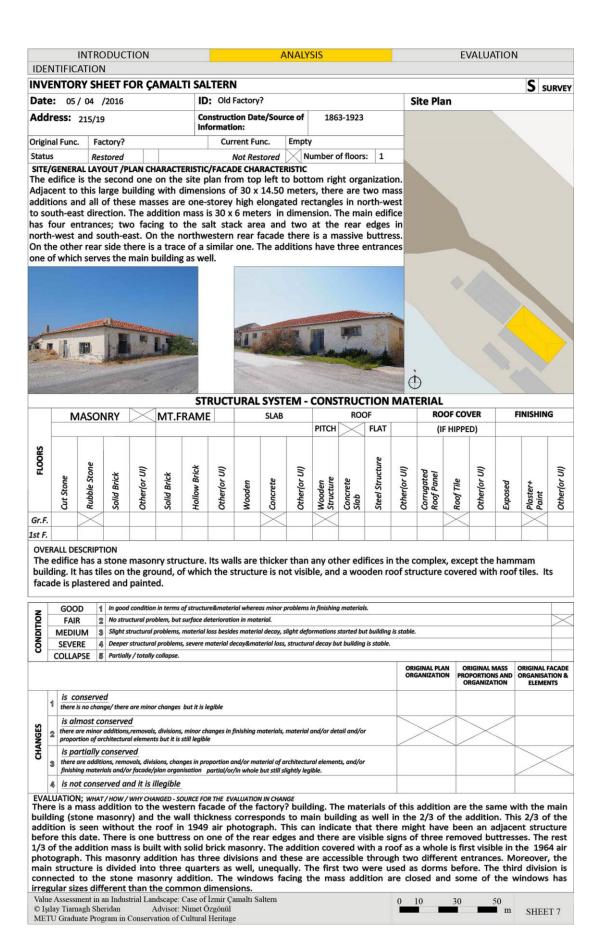
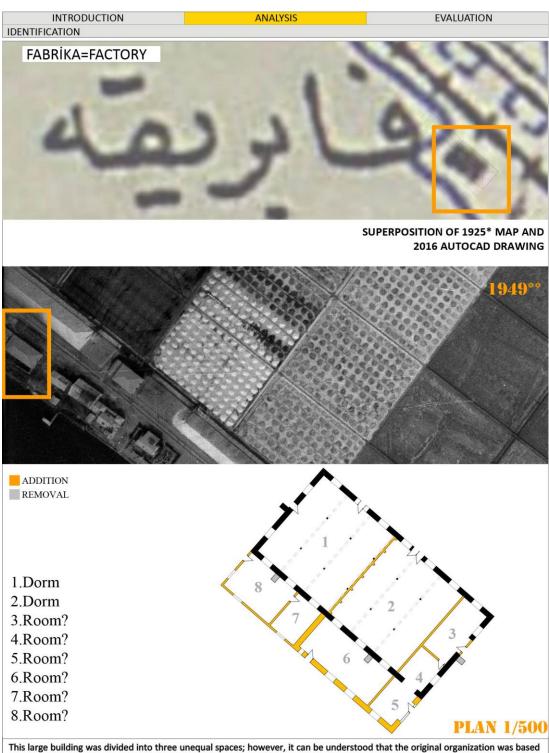


Figure 239 Sheet 7 cont'd



This large building was divided into three unequal spaces; however, it can be understood that the original organization was based on one large space. (Since it has the potential to be a former factory building, it is more likely to have one single space for stacking.) This space was divided into 7 sections by 6 axes vertically and 3 sections by 2 axes horizontally. At the intersection of these axes there are wooden posts supporting the roof structure together with struts. Today the first three vertical sections correspond to one space and the second three correspond to another. The last section forms a rectangular space with an access to the stone masonry addition. The second part of the stone masonry addition is accessed through another individual entrance. The brick masonry addition has an entrance from the northwestern rear facade and has two spaces inside. These spaces all have rectangular openings, except the last one axis wide section in the main building having a large window, and the ones on the side of the addition are closed. All the rooms have concrete covered slabs. The doors and windows are wooden. The ceiling is wooden and the structure above has a wooden structure as well.

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Figure 240 Sheet 7 cont'd



Figure 241 Sheet 7

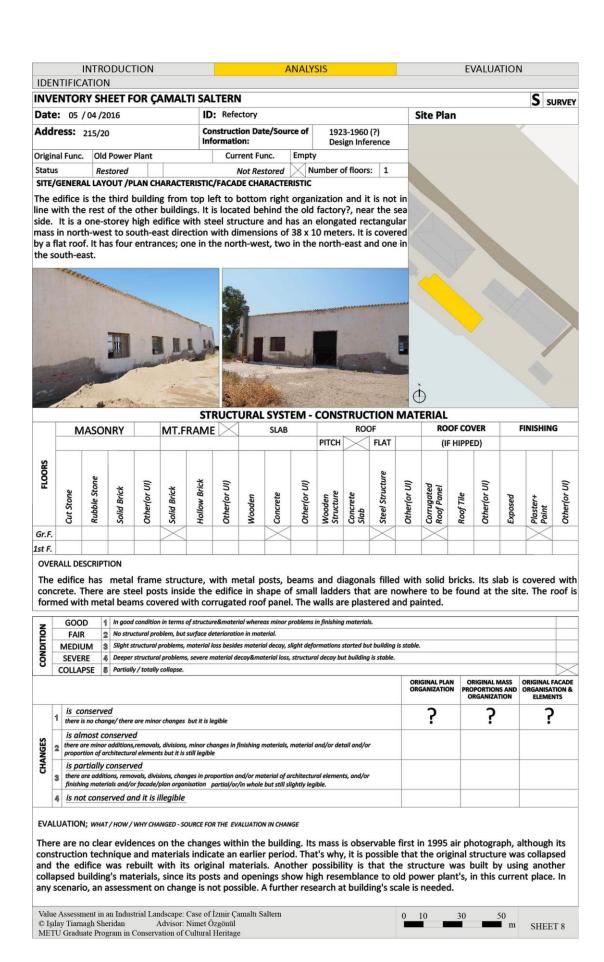
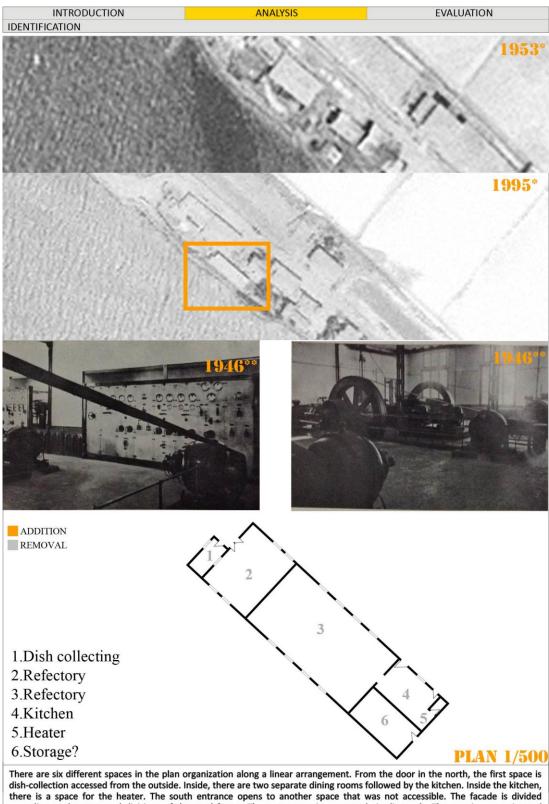


Figure 242 Sheet 8 cont'd



according to the structural divisions of the steel frame. There structure is supported via diagonals. The openings are situated within the modules of the frame with square-ish proportions. The spaces are paved with tiles. The doors and windows are metal profiled. The roof is formed with metal beams supported with ladder-shaped and "I" shaped columns inside these spaces. The roof is covered with corrugated roof panel and the interior walls are plastered and painted.

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Figure 243 Sheet 8 cont'd

INTRODUCTION ANALYSIS EVALUATION IDENTIFICATION



Refectory (3)



Heater (5)



Refectory (3) to Kitchen (4)



Kitchen (4)



Refectory and demolished wall (2)



Dish collecting (1)

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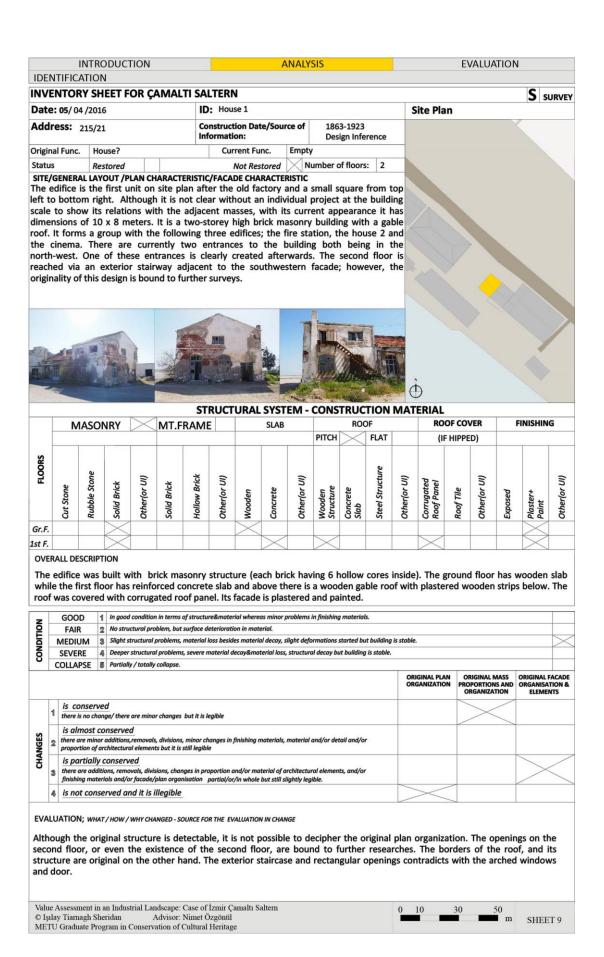


Figure 245 Sheet 9 cont'd

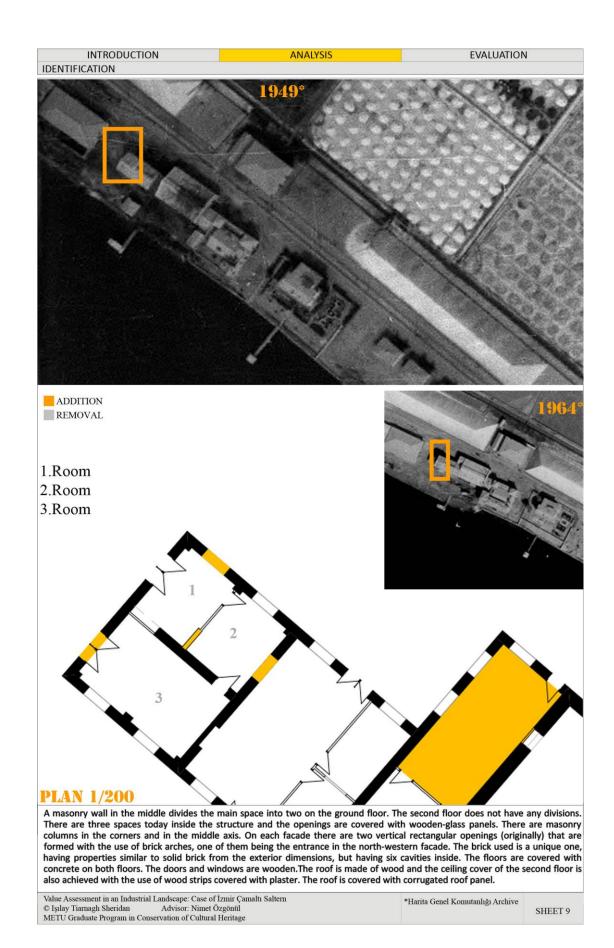


Figure 246 Sheet 9 cont'd

Figure 247 Sheet 9 cont'd

SHEET 9

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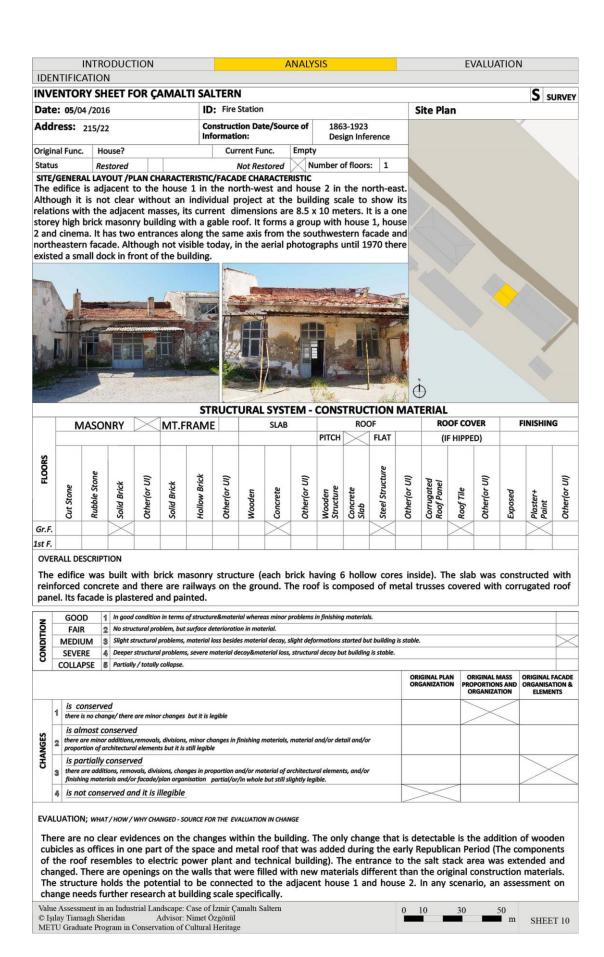


Figure 248 Sheet 10 cont'd

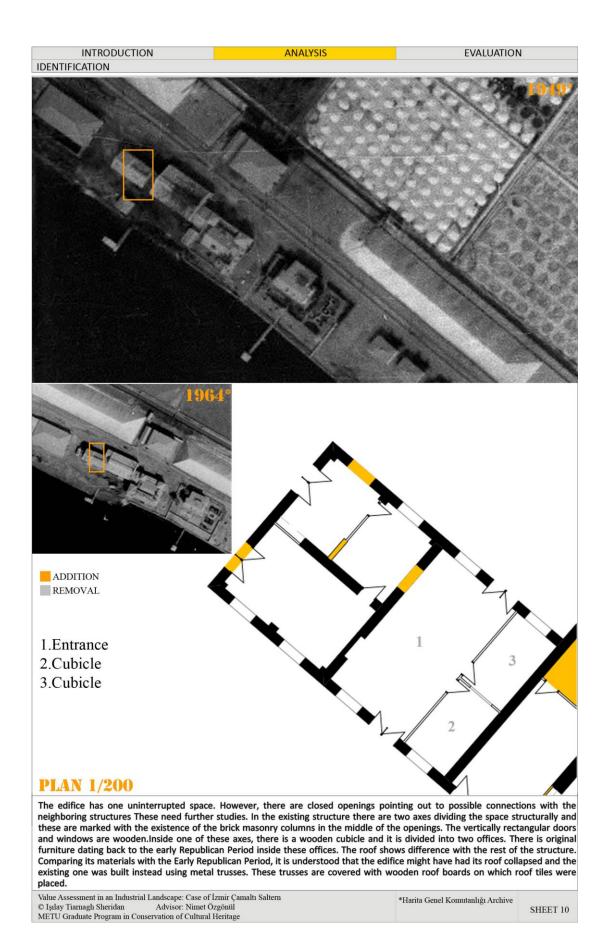


Figure 249 Sheet 10 cont'd

Figure 250 Sheet 10

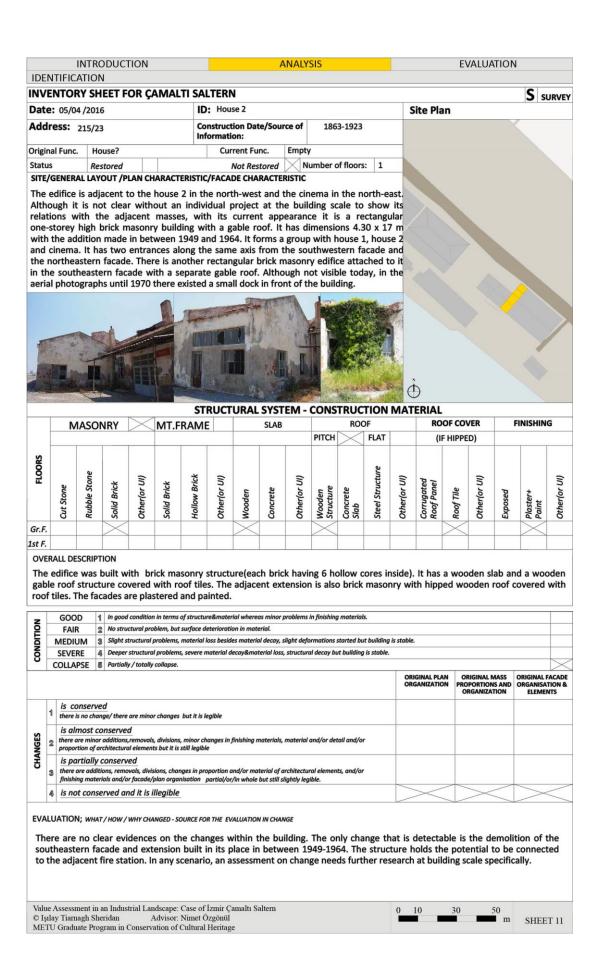
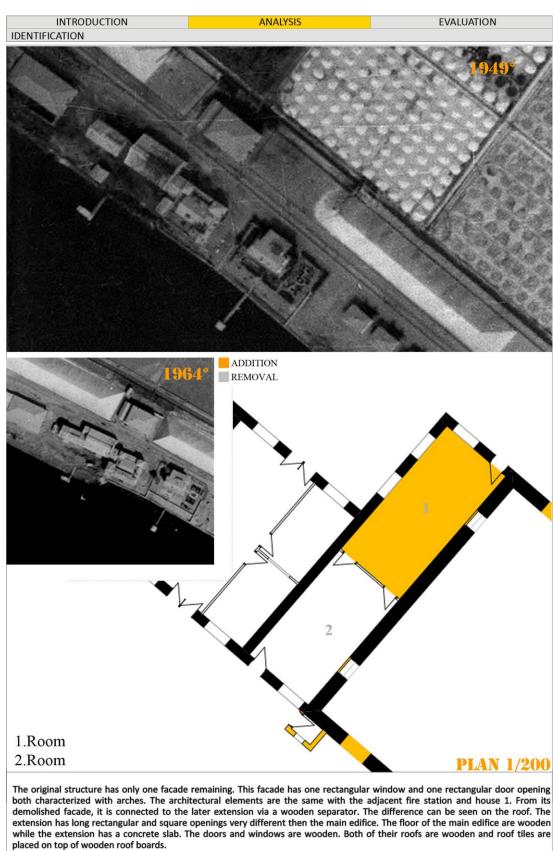


Figure 251 Sheet 11 cont'd



placed on top of wooden roof boards.

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Figure 252 Sheet 11 cont'd

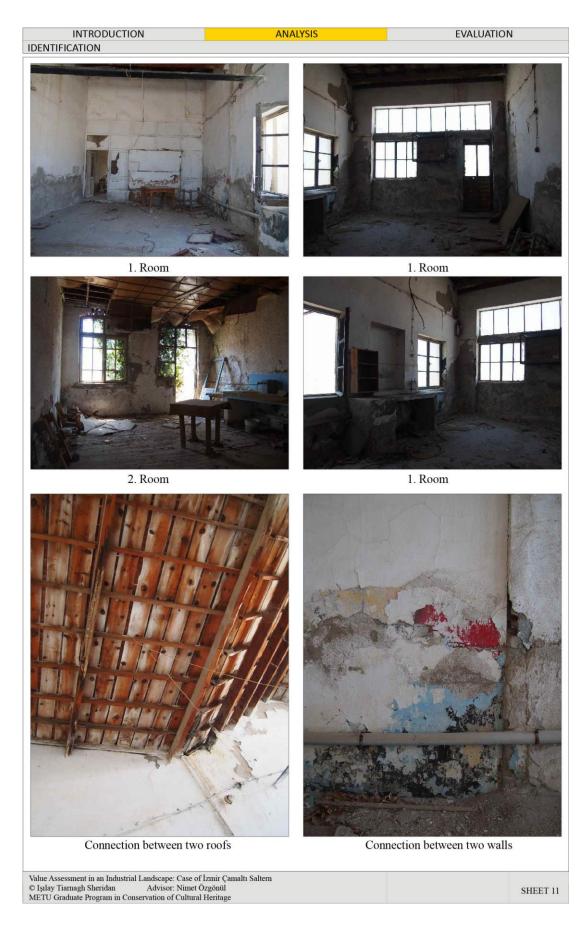


Figure 253 Sheet 11

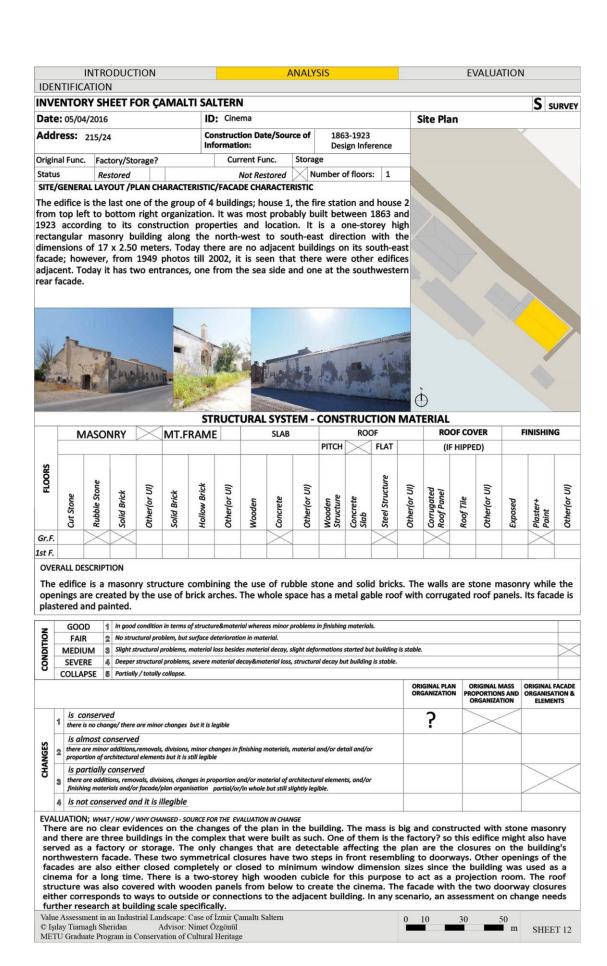
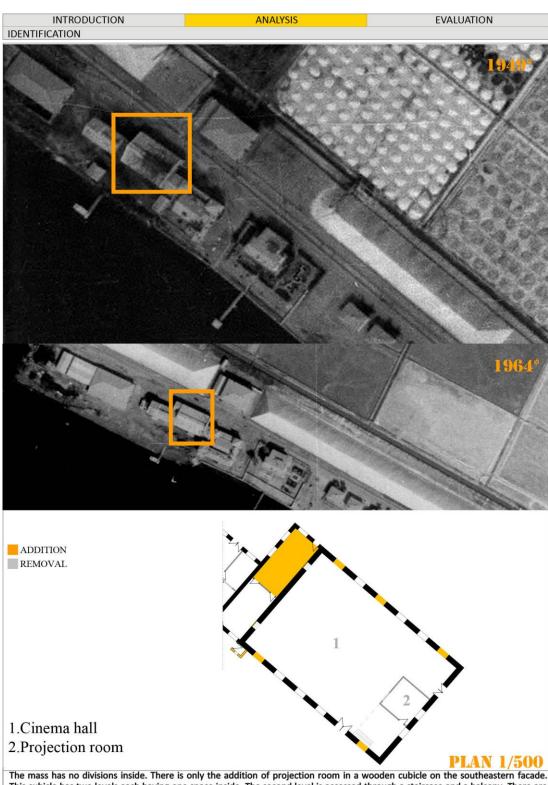


Figure 254 Sheet 12 cont'd



The mass has no divisions inside. There is only the addition of projection room in a wooden cubicle on the southeastern facade. This cubicle has two levels each having one space inside. The second level is accessed through a staircase and a balcony. There are traces of closed windows with arched openings on northeastern and southwestern facades, two additions of doors on southwestern and southeastern facades, two closure of doorways on the northwestern facade. The walls are plastered and painted and then there are remains of wooden claddings on top. The slab is concrete and the roof has a steel construction. In aerial photos of 1949, 1953 and 1964 the roof has an elevated skylight in its mid-axis as the one the fire station has today. In 1970 aerial photography there is a change into simple gable roof. The changes were possibly performed during the conversion of the building into a cinema.

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Figure 255 Sheet 12 cont'd



Projection room (2)

Cinema hall and screen wall (1)





Closed row of windows

Cinema hall walls and windows







Closed window opening

One of the closed door openings on screen wall

Altered window

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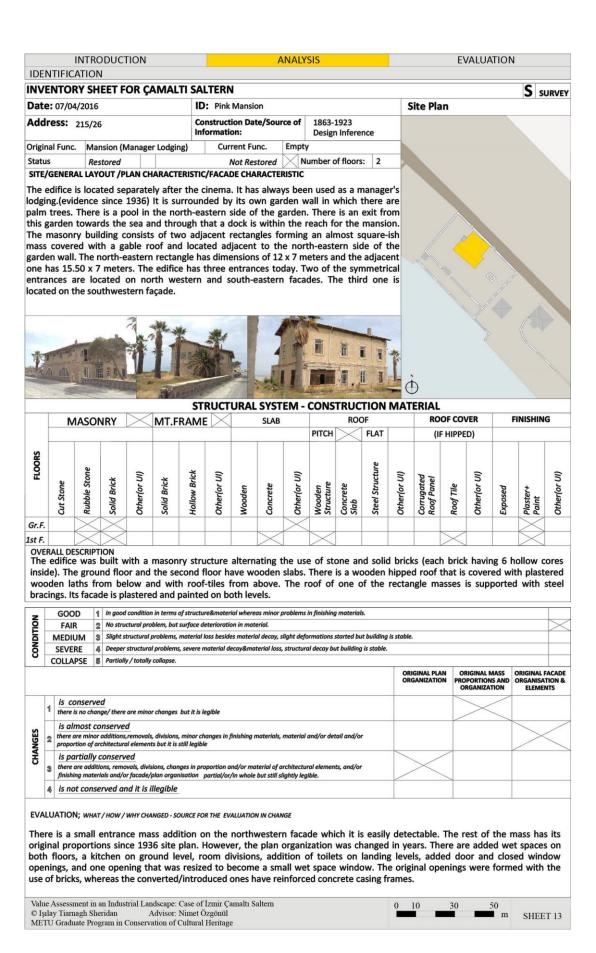
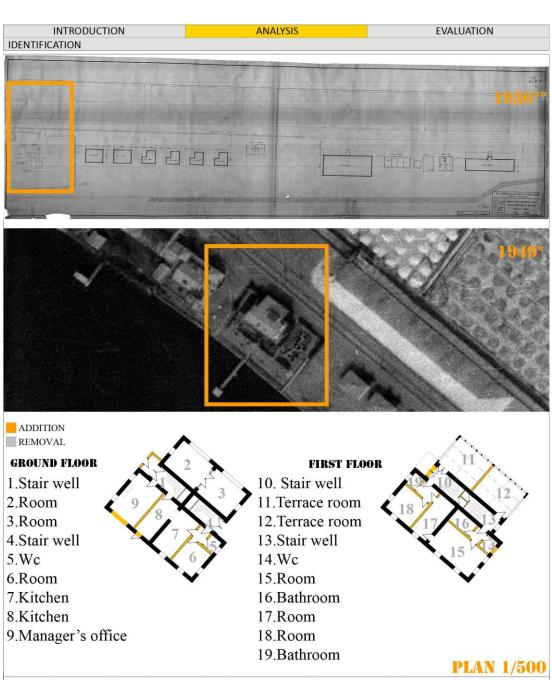


Figure 257 Sheet 13 cont'd



The mass is composed of two adjacent rectangles. Between these two, there is a stairwell with two separate wooden stairs and they are accessible from the doors in north-west and south-east. (On their landings, there are additions of toilets.) This might be an indicator of two houses under the same roof. Today the whole building serves as one unit as seen in a 1936 dated site plan. There are four rooms, a kitchen and a toilet on the ground floor. The kitchen has two spaces and can be accessed right next to both staircases. The northeastern rectangular mass has two rooms separated with a wooden glass panel and the semi-circular windows on the northeastern facade that are unique. The two semi-circular and two rectangular windows both have double windows. Allt the windows and doors are wooden, except the two metal entrance doors. In the main room that was named as "memur mahfeli" (officer's room), there is an addition of a fire place. On the first floor, there are five rooms, two toilets and one bathroom. The bathroom, toilets and three of the rooms are located inside the southwestern rectangular mass. The northeastern mass was constructed with a wooden frame on this floor, but the gable wooden roof was supported with steel brackets. There is a separator wall in the middle. However, it is obvious that it is an addition since there are traces of continuity in the load-bearing steel brackets of the roof inside the wall. These steel brackets support the wooden beams. These two rooms have unique windows with ventilation openings above throughout the northeastern facade. On the northwestern and southeastern facades there are semi-circular openings same as the ground floor ones. The wet spaces all around the building are covered with tiles, ground floor rooms and the first floor have wooden slabs. The doors and windows are wooden. The walls are plastered and painted. The southwestern mass with staircases included is covered with a gable roof and it continues to cover the northeastern mass as a one way pitched roof.

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Figure 258 Sheet 13 cont'd

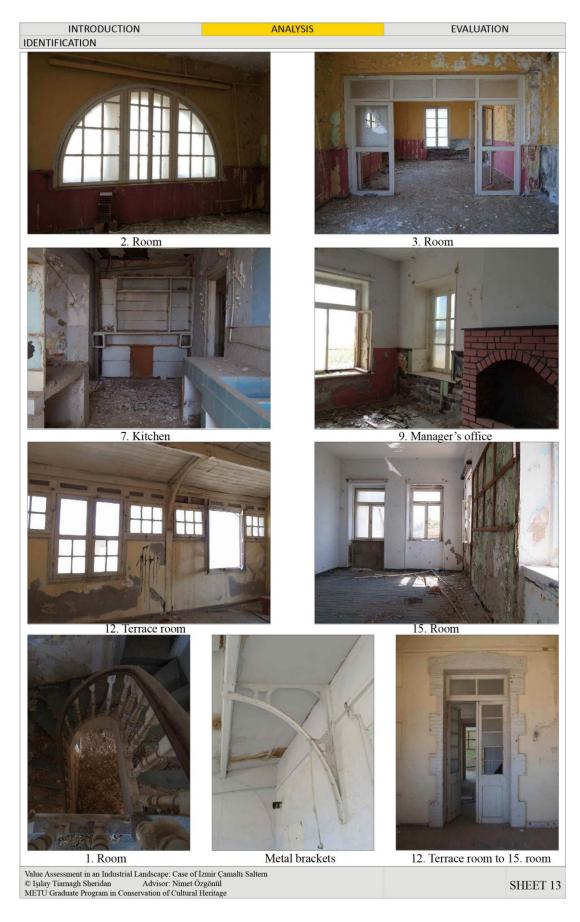


Figure 259 Sheet 13

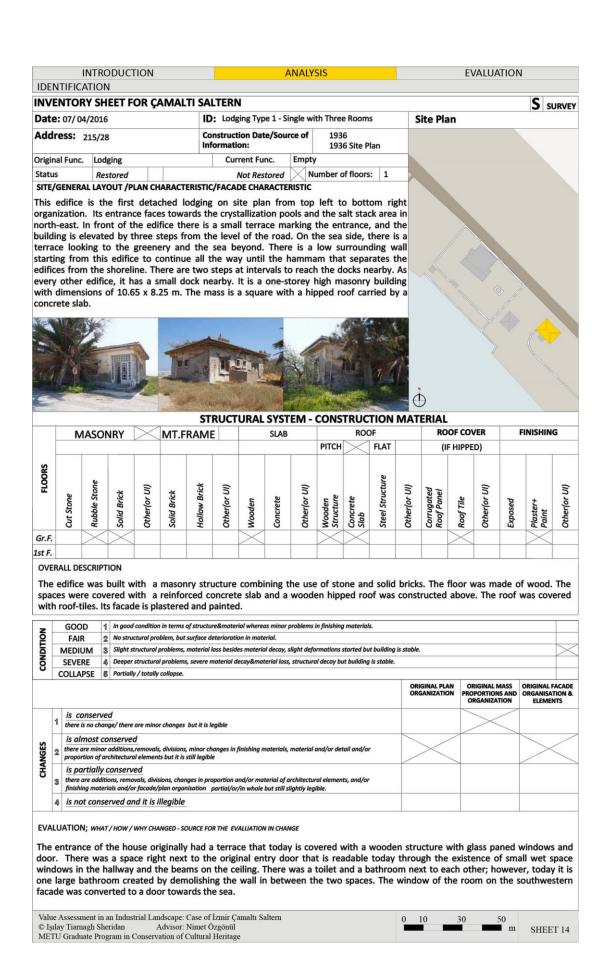


Figure 260 Sheet 14 cont'd

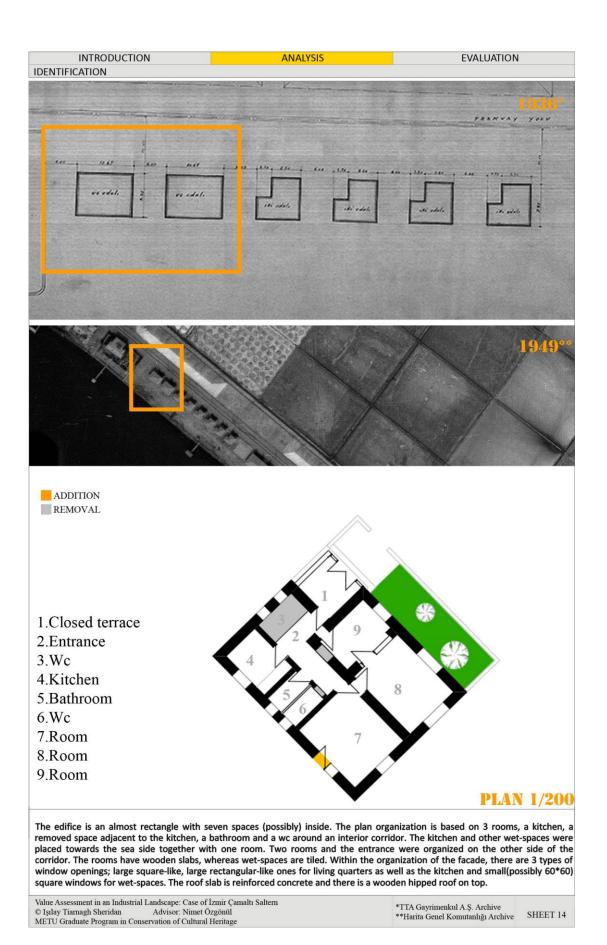


Figure 261 Sheet 14 cont'd



Figure 262 Sheet 14

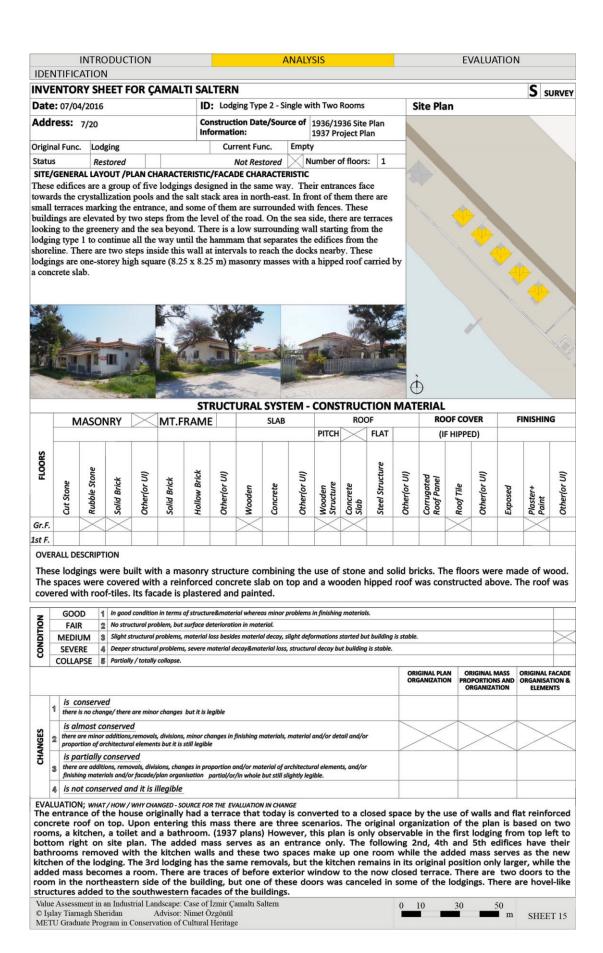
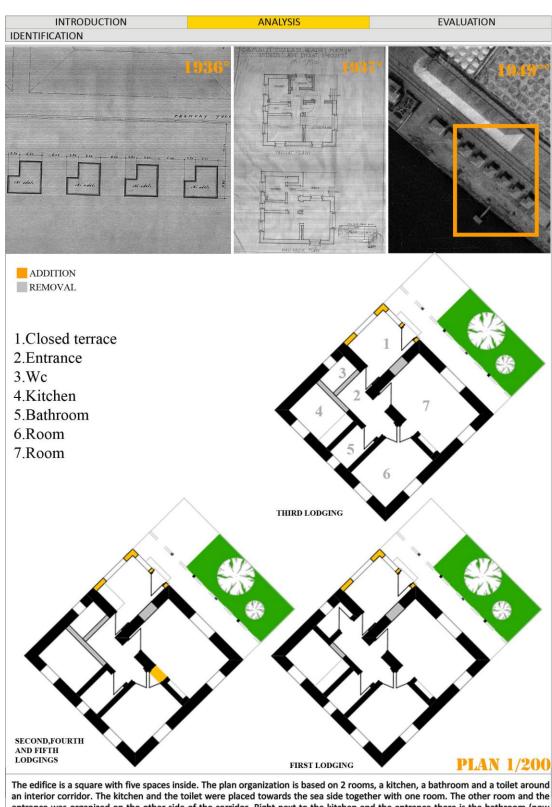


Figure 263 Sheet 15 cont'd



The edifice is a square with five spaces inside. The plan organization is based on 2 rooms, a kitchen, a bathroom and a toilet around an interior corridor. The kitchen and the toilet were placed towards the sea side together with one room. The other room and the entrance was organized on the other side of the corridor. Right next to the kitchen and the entrance there is the bathroom (now toilet in all of them). The rooms have wooden slabs, whereas wet-spaces are tiled. Within the organization of the facade, there are 3 types of window openings; large square-like for the kitchen and the bedroom, large rectangular-like for the living room as well as the kitchen and small(possibly 60\*60) square windows for wet-spaces. The roof slab is reinforced concrete and there is a wooden hipped roof on top.

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Figure 264 Sheet 15 cont'd



Figure 265 Sheet 15

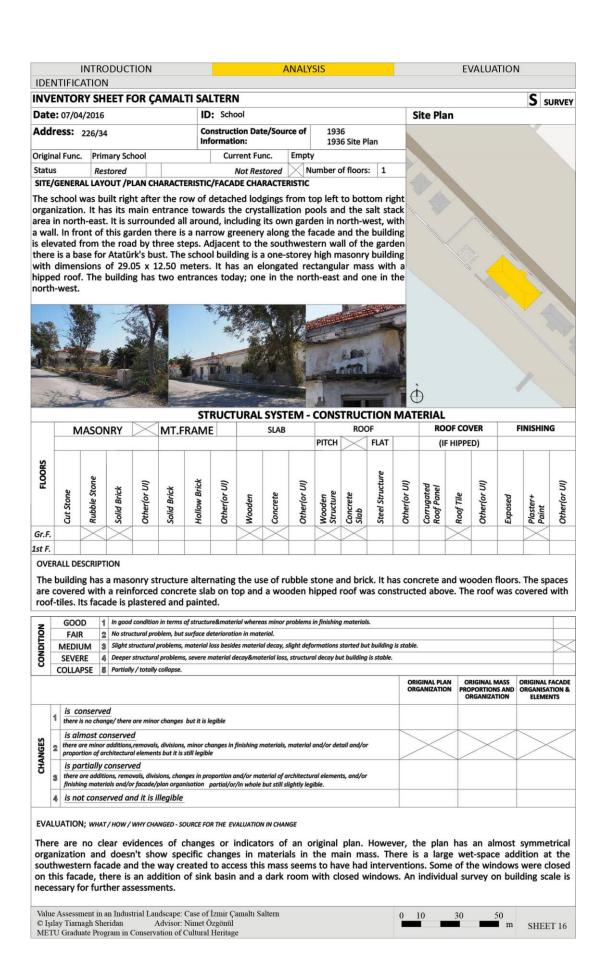
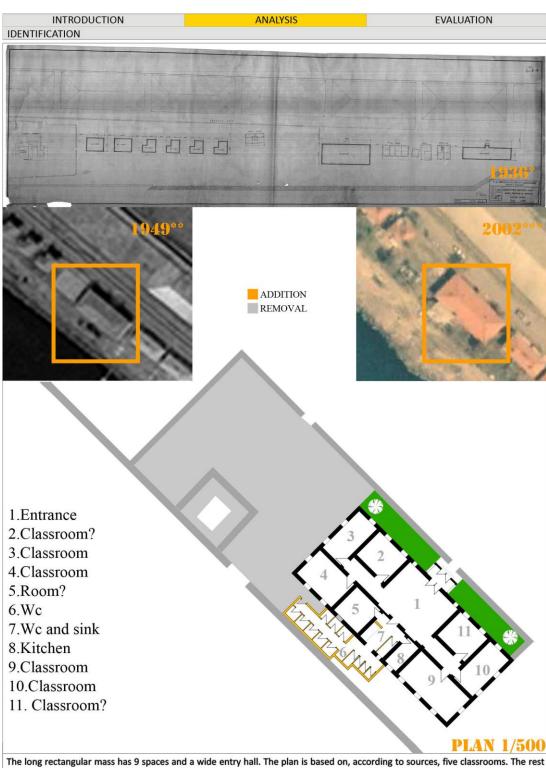


Figure 266 Sheet 16 cont'd



of the spaces were probably wet-spaces, teachers' chamber and a headteacher's office. Today there is a passage to the wet-space addition mass and from the entry hall this mass is accessed directly. On one side of the access corridor there is a toilet and a kitchen, and on the other side there is a sink basin and a dark room with a closed window. Other than these spaces, there is no specific distinction between the compartments. The wet-spaces are tiled, the corridors and the addition have concrete floors while the rooms have wooden floors. The doors and windows are wooden. Within the organization of the facade there are 3 types of window openings for the spaces; large square ones, vertically rectangular ones on both sides of the main entrance and in the toilet near the kitchen. The walls are plastered and painted. There are brick masonry columns in the hallway walls. The roof slab is reinforced concrete and there is a wooden hipped roof on top.

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Figure 267 Sheet 16 cont'd

Figure 268 Sheet 16

SHEET 16

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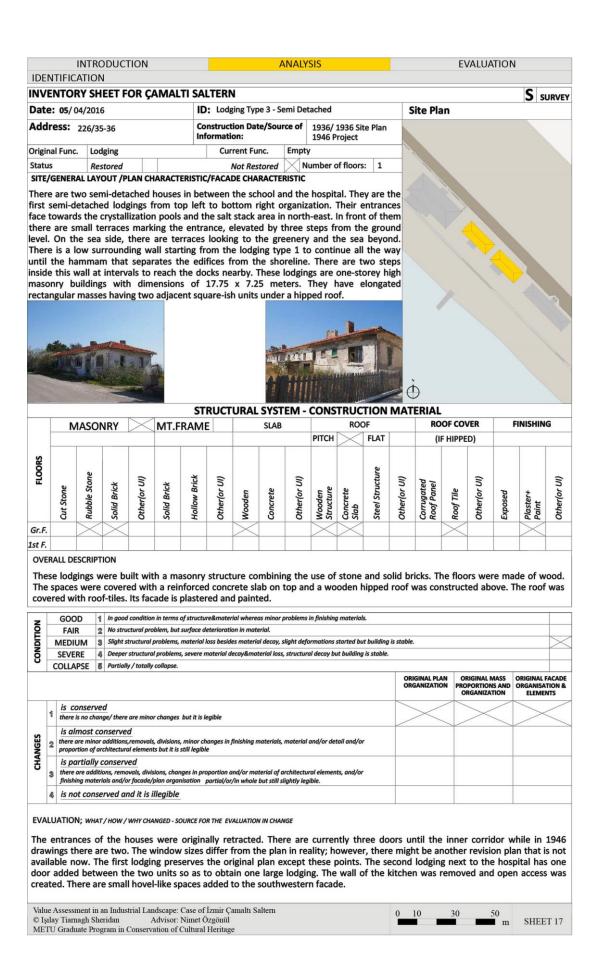
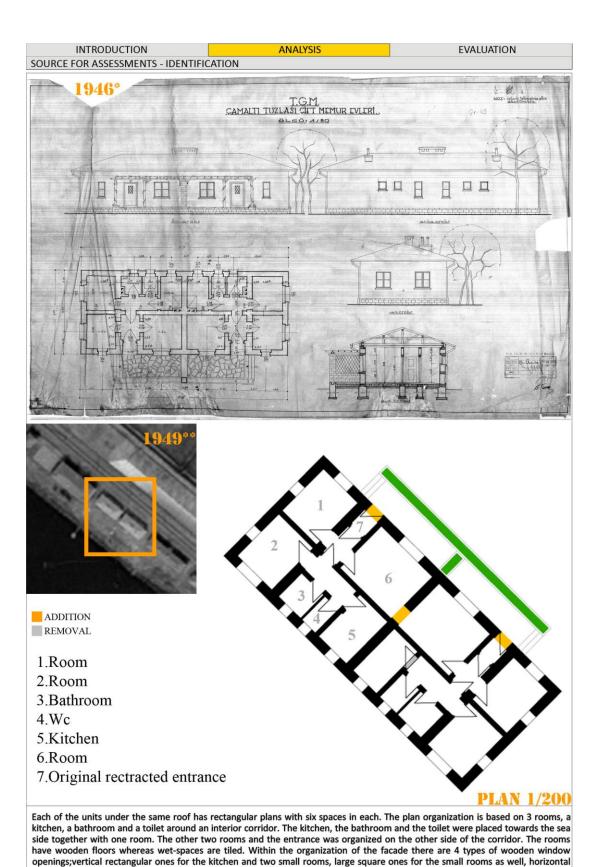


Figure 269 Sheet 17 cont'd



walls are plastered and painted. The roof slab is reinforced concrete and there is a wooden hipped roof on top.

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rectangular ones for the big room and small(possibly 60\*60) square windows for wet-spaces. The doors are wooden as well. The

Figure 270 Sheet 17 cont'd

Figure 271 Sheet 17

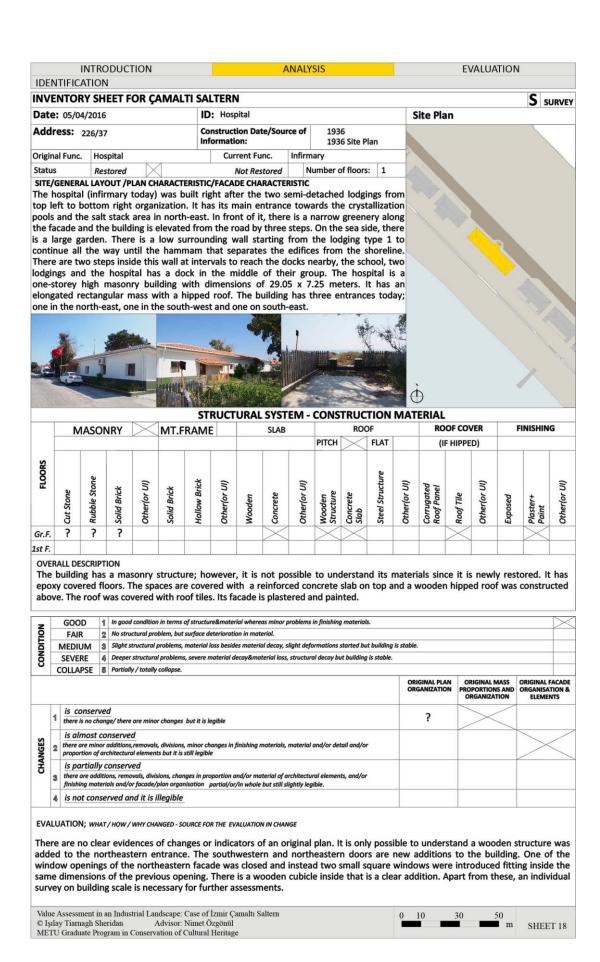


Figure 272 Sheet 18 cont'd

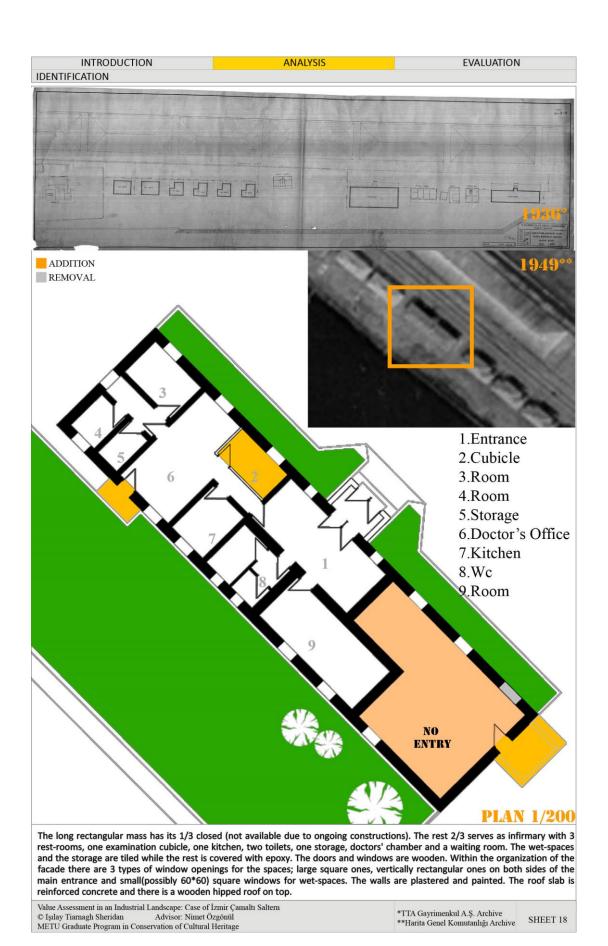


Figure 273 Sheet 18 cont'd





Cubicle (2)

Doctor's Office (6)







Room Corridor (3-4-5)



Entrance



Kitchen (7)



Room(9) and Toilet Entrance(8)



Room (9)

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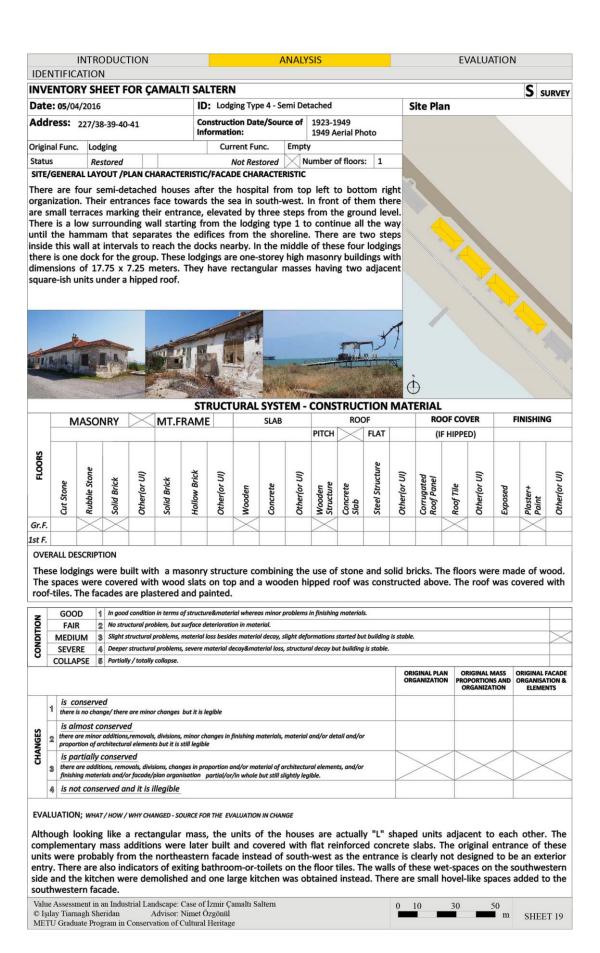
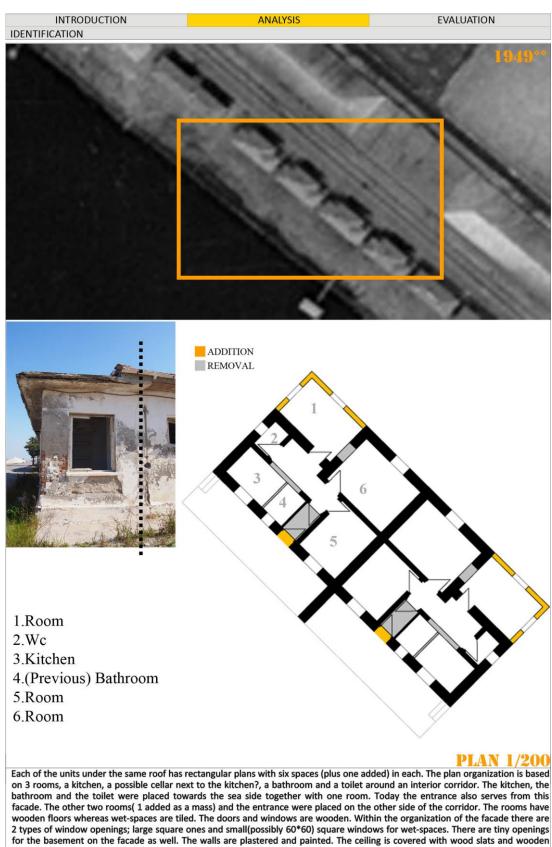


Figure 275 Sheet 19 cont'd



hipped roof was constructed above.

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Figure 276 Sheet 19 cont'd

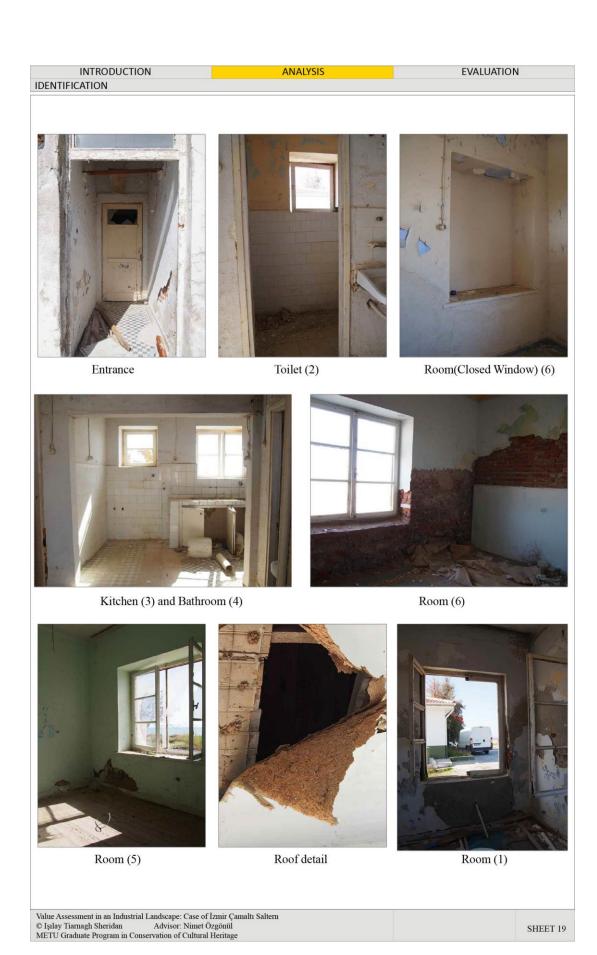


Figure 277 Sheet 19

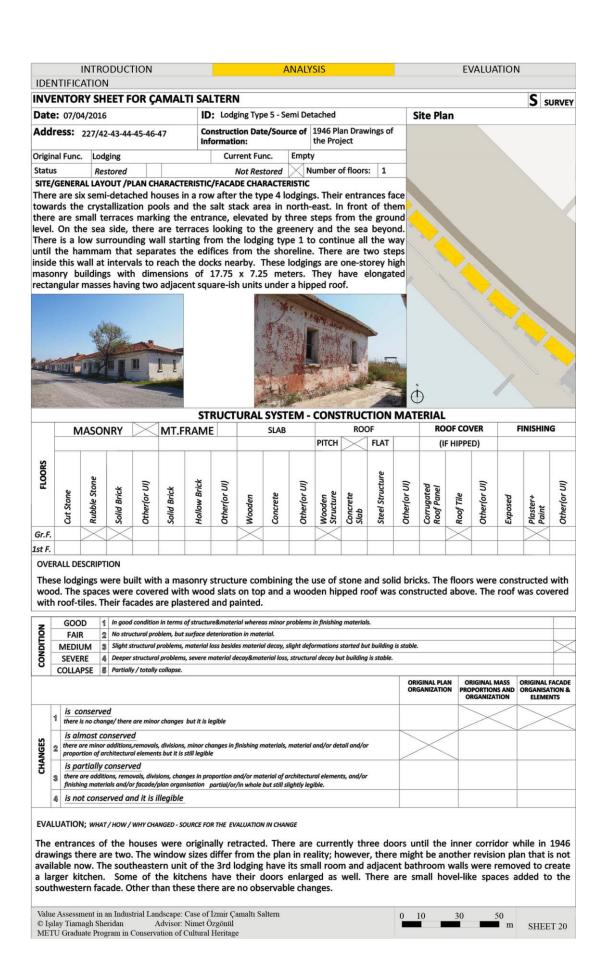
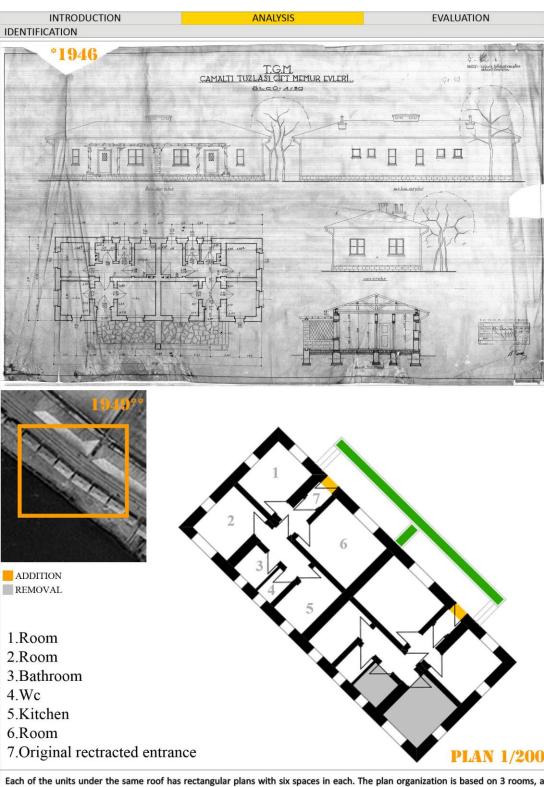


Figure 278 Sheet 20 cont'd



Each of the units under the same roof has rectangular plans with six spaces in each. The plan organization is based on 3 rooms, a kitchen, a bathroom and a toilet around an interior corridor. The kitchen, the bathroom and the toilet were placed towards the ses side together with one room. The other two rooms and the entrance were organized on the other side of the corridor. The rooms have wooden floors whereas wet-spaces are tiled. The doors and windows are wooden. Within the organization of the facade there are 4 types of window openings; vertical rectangular ones for the kitchen and two small rooms, large square ones for the small rooms as well, horizontal rectangular ones for the big room and small(possibly 60\*60) square windows for wet-spaces. The walls are plastered and painted. The ceiling is covered with wood slats and a wooden hipped roof was constructed above.

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Figure 279 Sheet 20 cont'd







Entrance

Original entrance (7)

Room (1)





Kitchen and Bathroom (4-5)

Kitchen with altered entrance (5)







Original kitchen (5)

Bathroom (3)

Wc (4)

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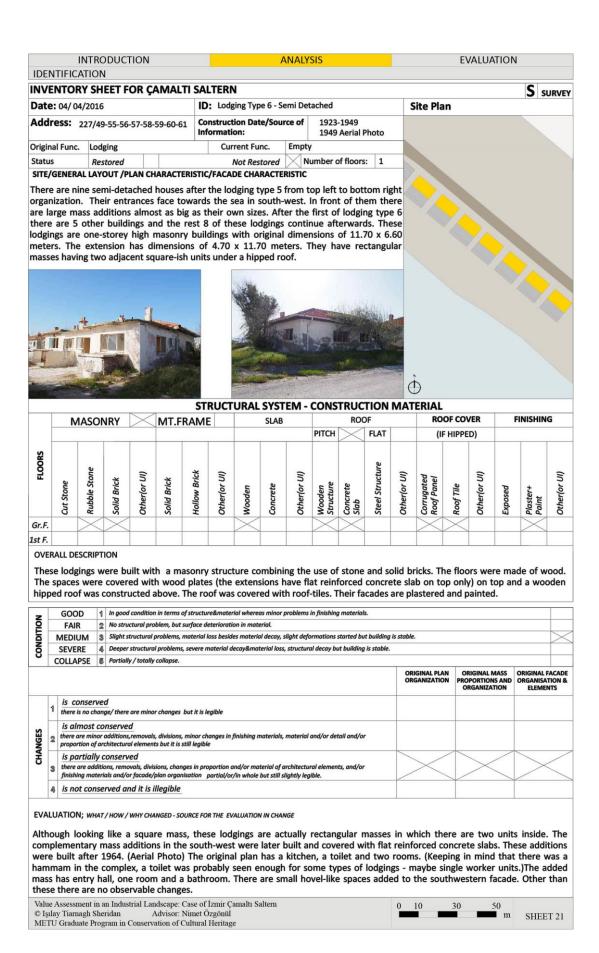
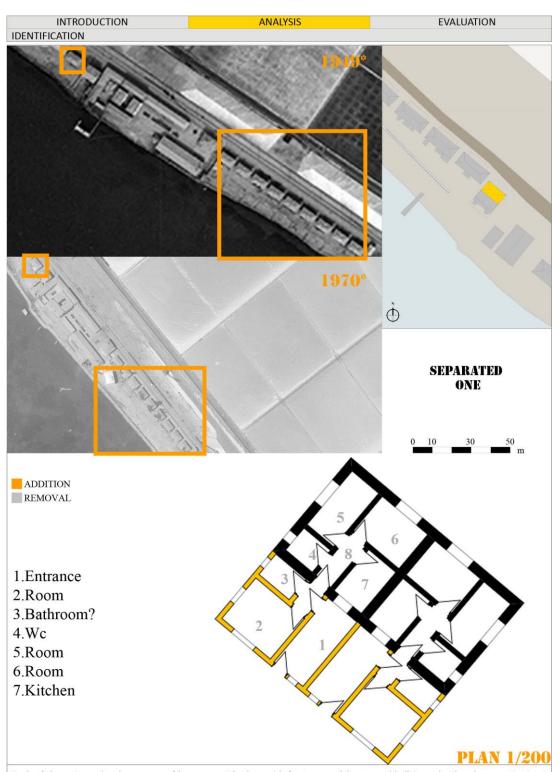


Figure 281 Sheet 21 cont'd



Each of the units under the same roof has square-ish plans with four spaces (plus two added) in each. The plan organization is based on 2 rooms, a kitchen, and a toilet around an interior corridor. The kitchen and one room were placed on one side; the other room and the toilet were placed on the other side. The new room and the bathroom were added in front of the original entrance toward the outer edge. The entrances were converted to be side by side whereas in original they correspond to the mid-axis of each unit. The rooms have wooden floors whereas wet-spaces are tiled. The doors and windows are wooden. Within the organization of the facade there are 3 types of window openings; large square ones, large vertically rectangular ones and small(possibly 60\*60) square windows for wet-spaces. The walls are plastered and painted. The entrance is covered with corrugated roof panel. The ceiling is covered with wood slats and wooden hipped roof was constructed above.

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Figure 282 Sheet 21 cont'd

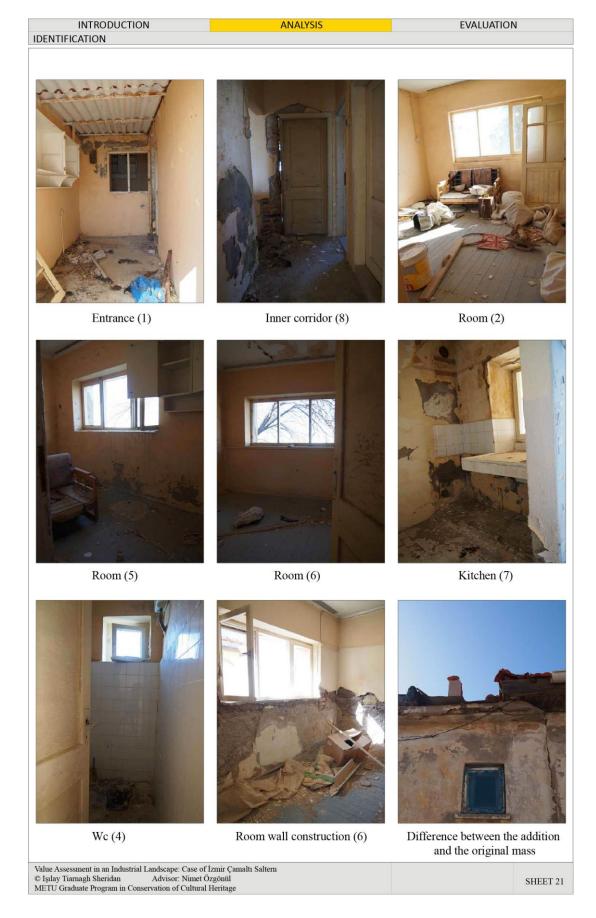


Figure 283 Sheet 21

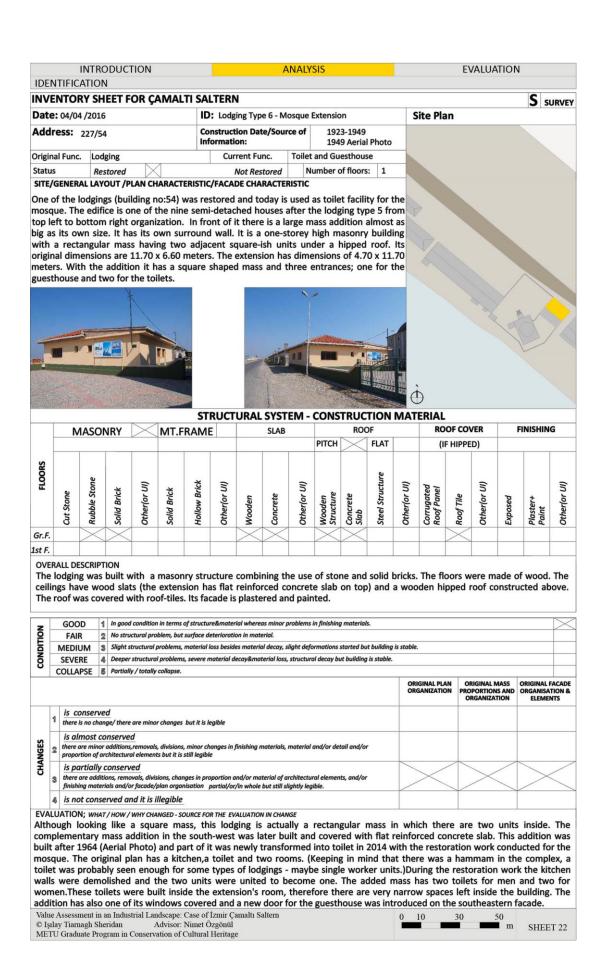


Figure 284 Sheet 22 cont'd

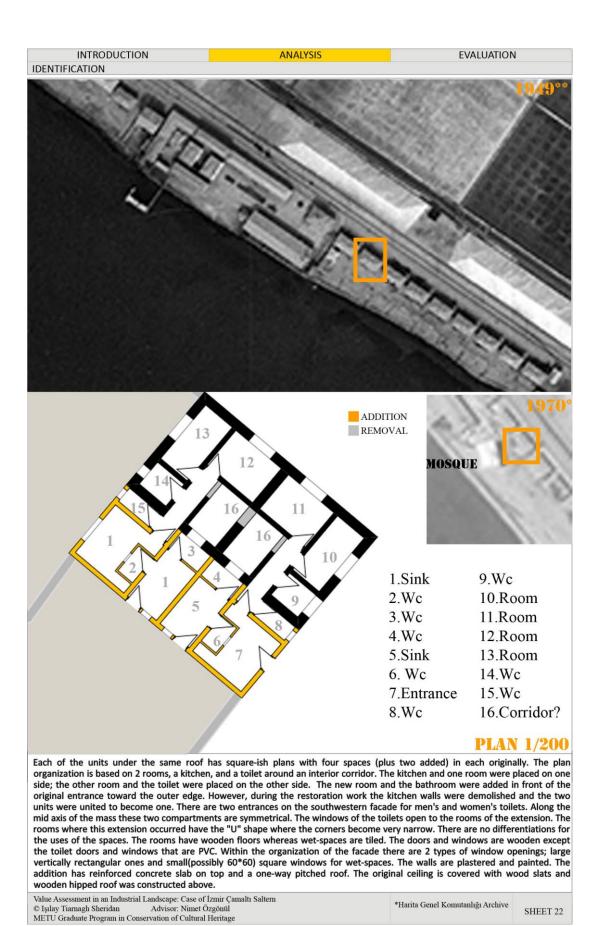


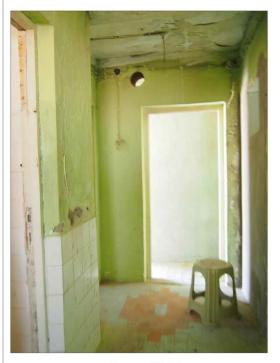
Figure 285 Sheet 22 cont'd



We window (6) opening to the entrance (7)



Entrance, closed window opening (7)



Rooms (10-11)



Corridor? (16)

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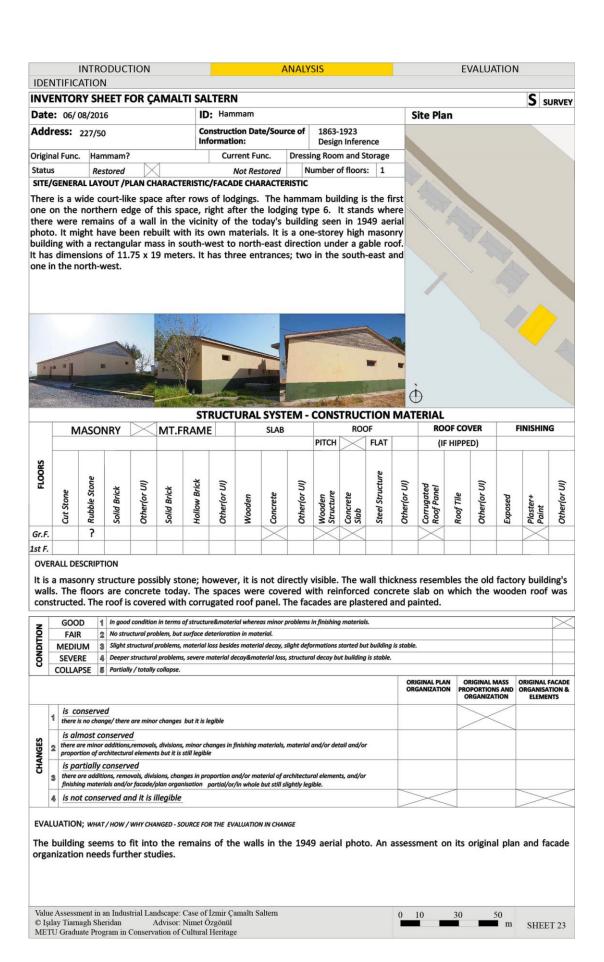
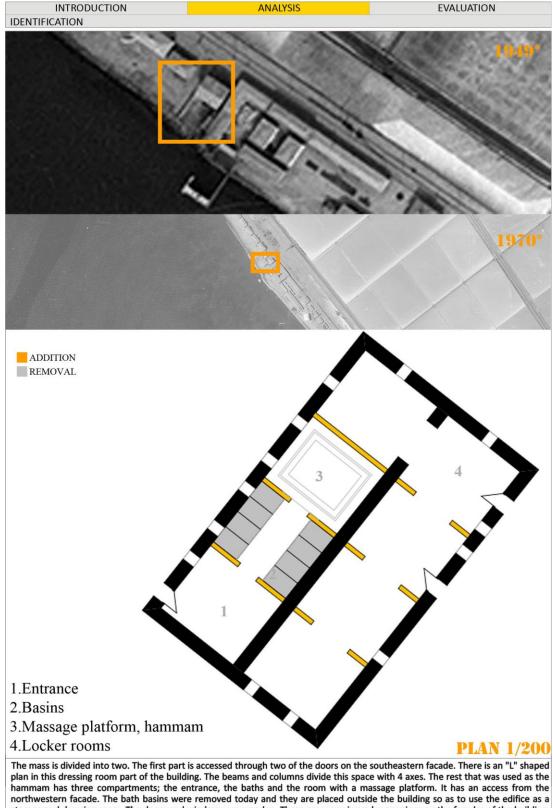


Figure 287 Sheet 23 cont'd



storage and dressing room. The doors and windows are wooden. There are many irregular openings on the facades of the building, all small, of square-ish and of rectangular shapes. The floors are covered with concrete and marble. The walls are plastered and painted. The spaces are covered with a reinforced concrete slab and wooden hipped roof on top of it.

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Figure 288 Sheet 23 cont'd



Entrance and detached basins (1)



Demolished basin platforms (2)



Massage platform as storage (3)



Massage platform as storage (3)



Locker rooms (4)



Locker rooms (4)

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Figure 289 Sheet 23 cont'd

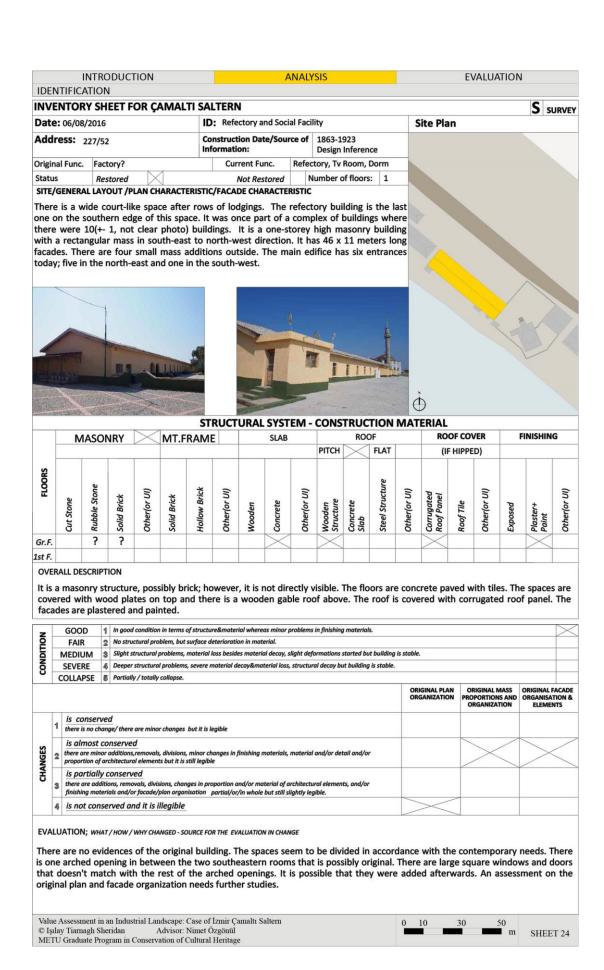
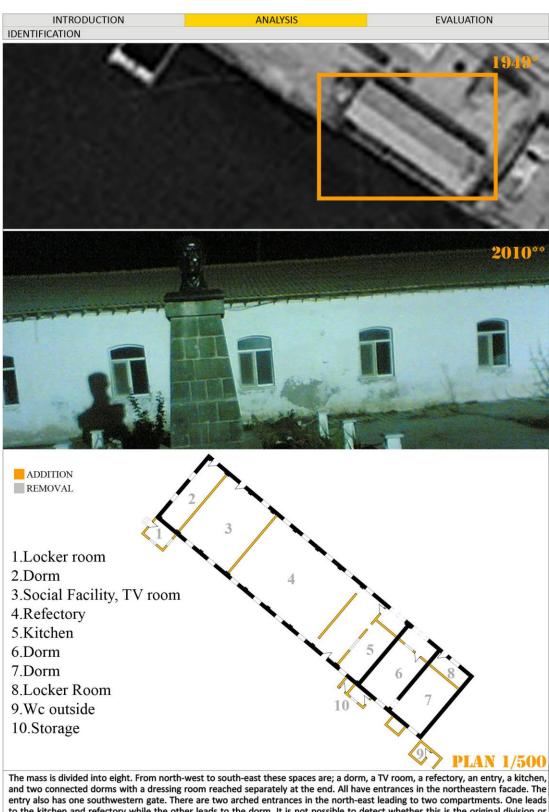


Figure 290 Sheet 24 cont'd



The mass is divided into eight. From north-west to south-east these spaces are; a dorm, a TV room, a refectory, an entry, a kitchen, and two connected dorms with a dressing room reached separately at the end. All have entrances in the northeastern facade. The entry also has one southwestern gate. There are two arched entrances in the north-east leading to two compartments. One leads to the kitchen and refectory while the other leads to the dorm. It is not possible to detect whether this is the original division or not, but it is highly possible. Almost all of the windows and doors have vertical rectangular arched openings, except the additions and they are all wooden. The floors are covered with concepts and tiles. The walls are placeted and painted. The and they are all wooden. The floors are covered with concrete and tiles. The walls are plastered and painted. The spaces are covered with wooden slats and wooden hipped roof on top of it.

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Figure 291 Sheet 24 cont'd



Figure 292 Sheet 24

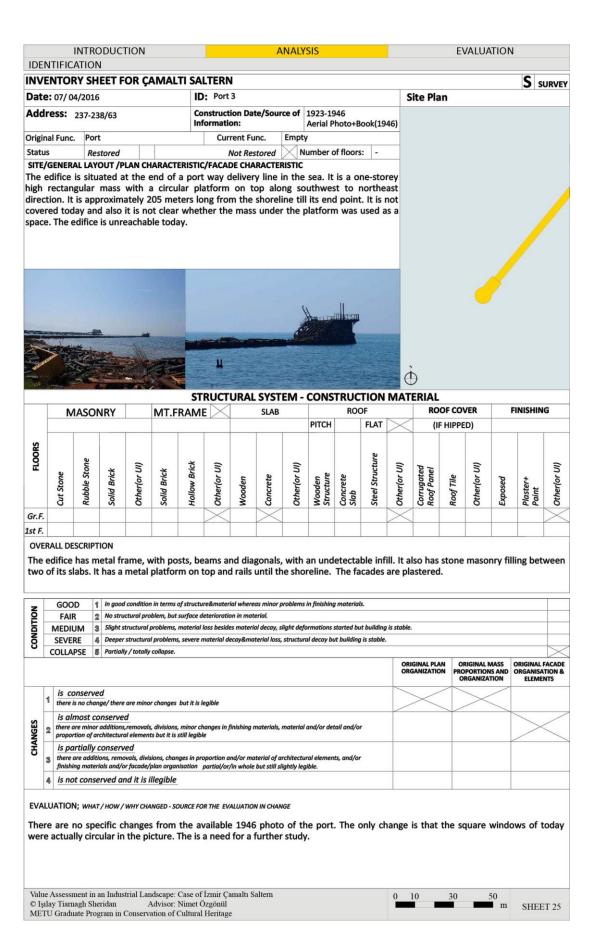


Figure 293 Sheet 25 cont'd

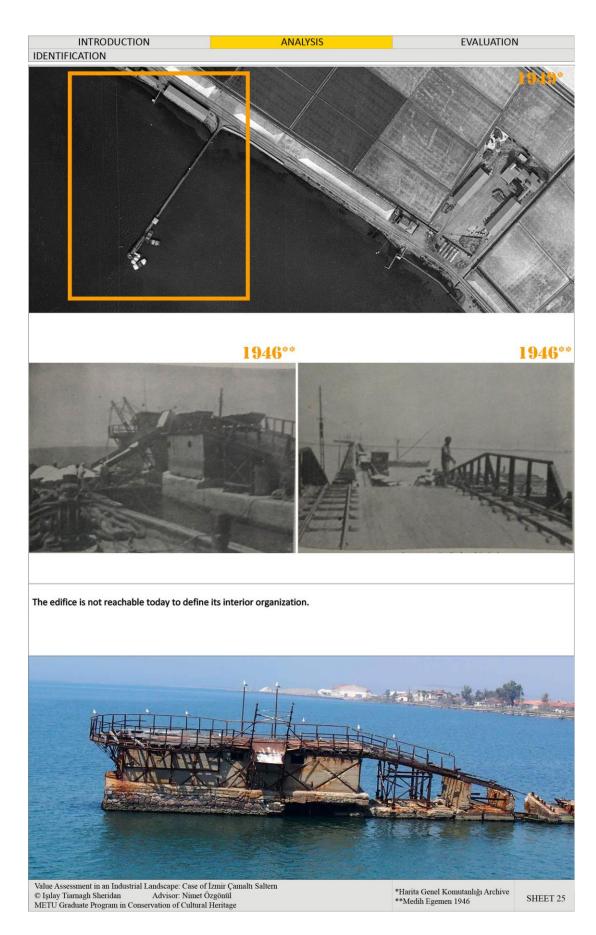


Figure 294 Sheet 25

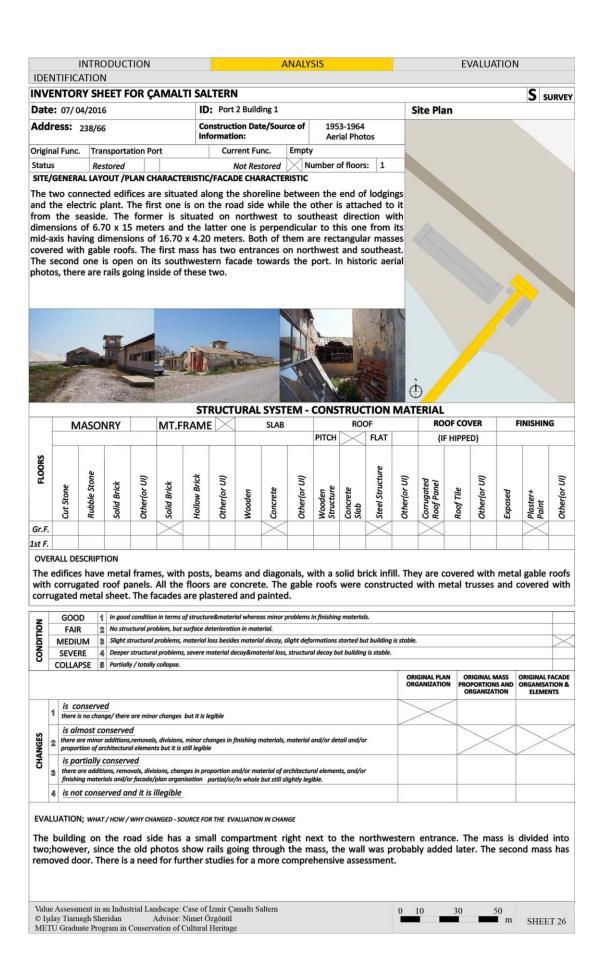


Figure 295 Sheet 26 cont'd

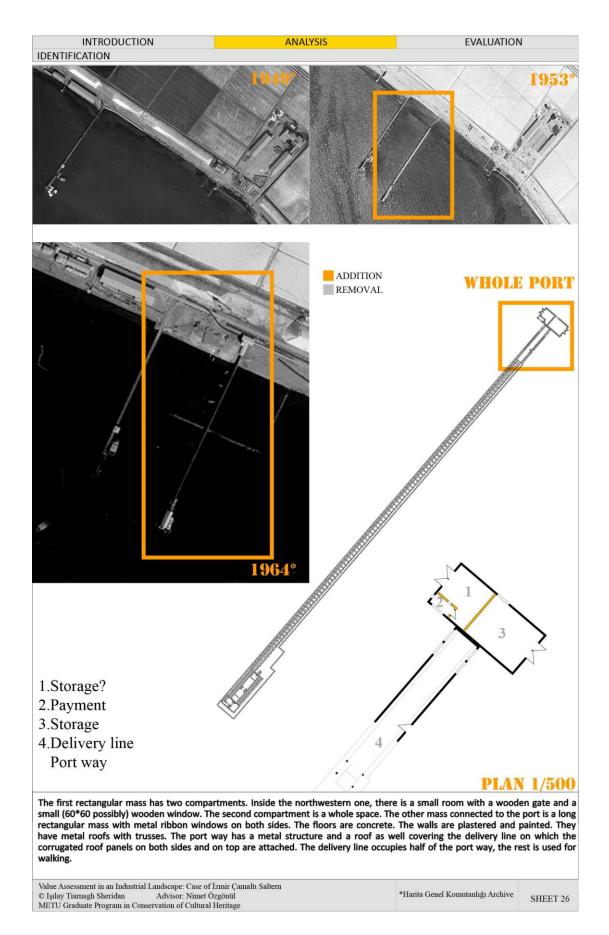


Figure 296 Sheet 26 cont'd

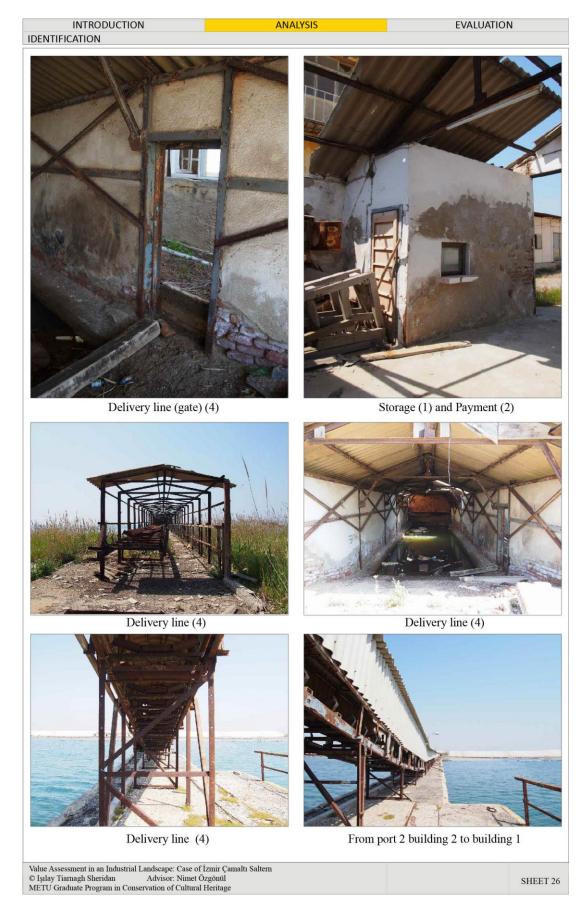


Figure 297 Sheet 26

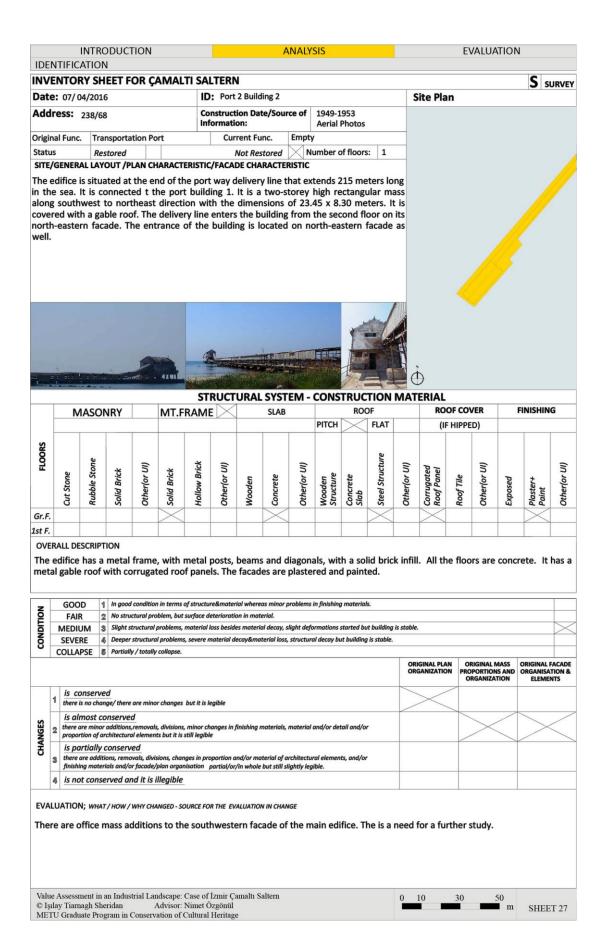


Figure 298 Sheet 27 cont'd

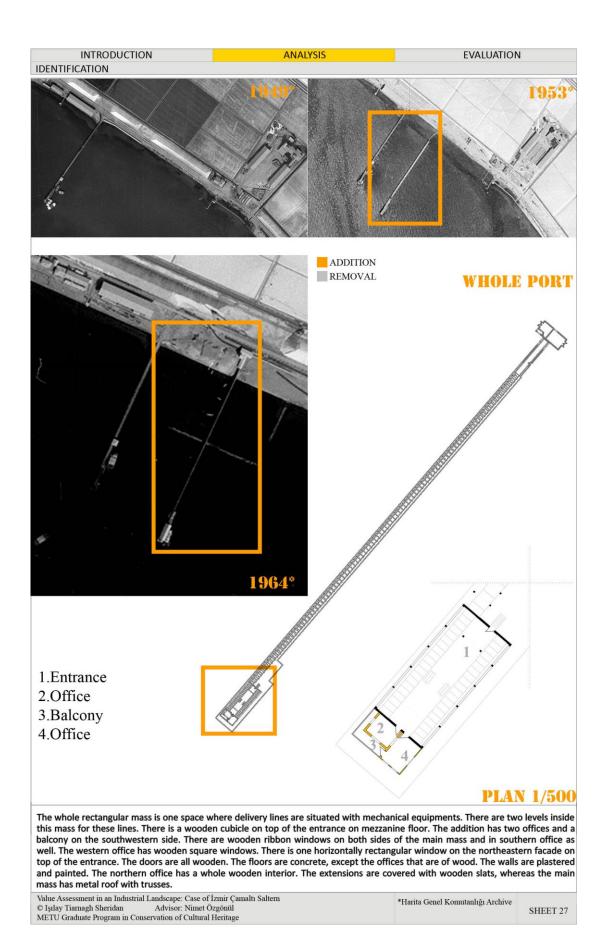


Figure 299 Sheet 27 cont'd





Office entrances (2-4)







Office (2)

Office (4)







Balcony (3)

Entrance from the mezzanine level Delivery line up to mezzanine level

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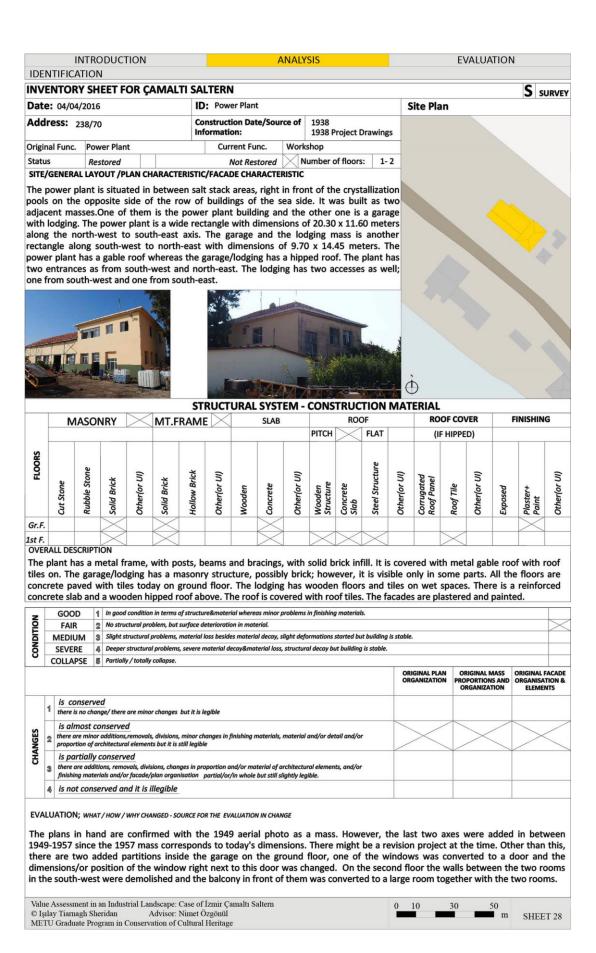
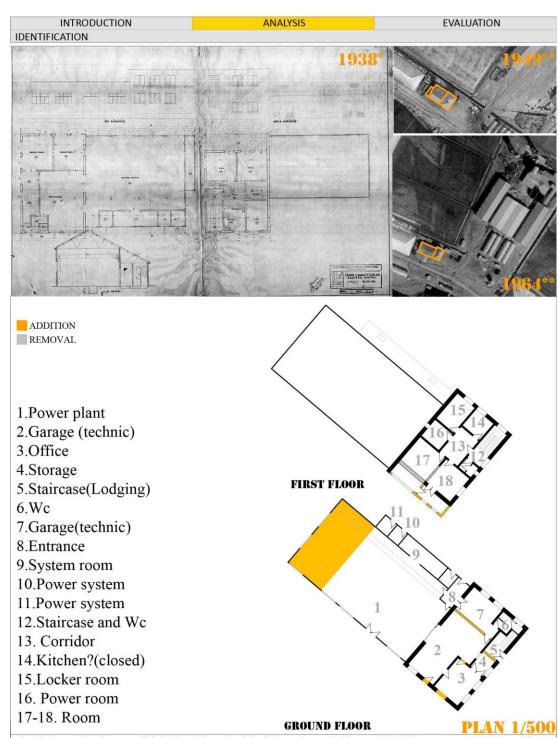


Figure 301 Sheet 28 cont'd



The plant mass has three parallel divisions. The part of the first row is reached from outside. These correspond to three different rooms for technical equipments. The rest of this linear compartment is used by the second division in which the mechanical system of the electric boards were placed. The largest space, the third division, houses the rest of the electric systems and a cubicle for the chief. The garage has two service rooms in south-west, a garage, a toilet and a staircase to first floor. The lodging on the first floor has 3 rooms, a kitchen, a bathroom, a toilet and originally a balcony that was closed today. All the floors are covered with tiles on the ground level. On the first floor the wet spaces are covered with tiles while the rooms have wooden floors. The doors and windows of the plant are metal whereas the garage/lodging has wooden ones. Within the organization of the facade there are 3 types of window openings; large horizontally rectangular ones in the power plant, square-ish large ones for the garage and lodging, small (possibly 60\*60) square window for the wet-space on the first floor and a large two-storey high vertically rectangular paned glass for the stairwell. All the interior walls are plastered and painted. The lodging has reinforced concrete slab on and wooden hipped roof was constructed above. The one-storey high power plant has metal gable roof.

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Figure 303 Sheet 28

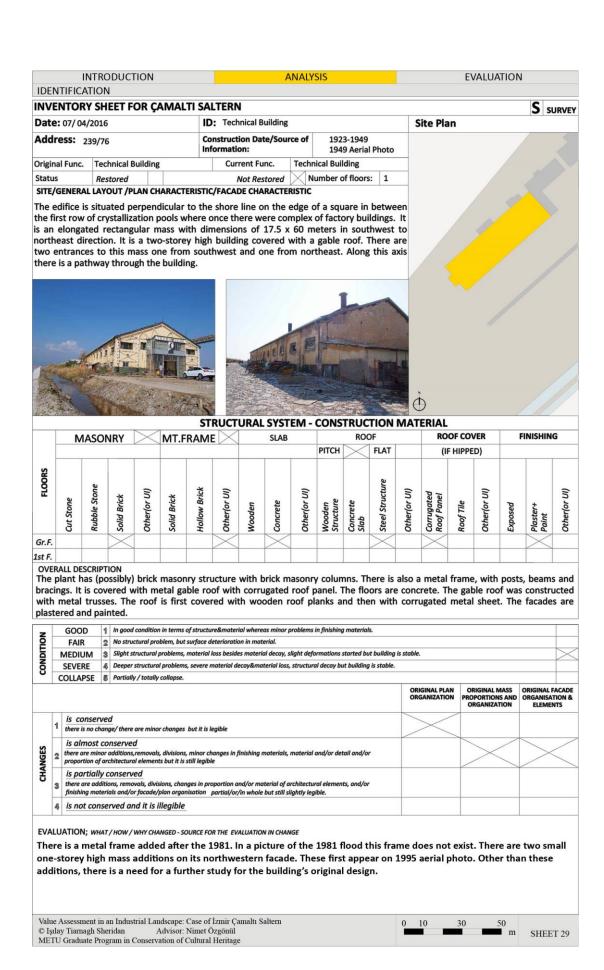
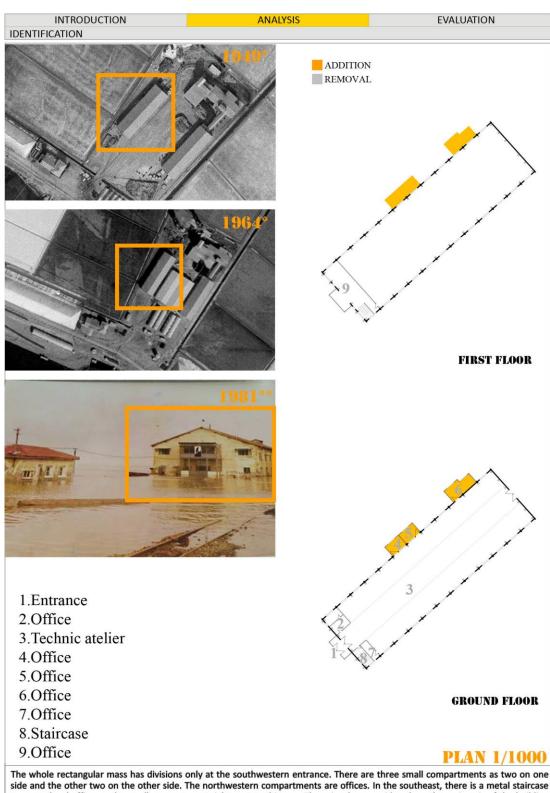


Figure 304 Sheet 29 cont'd



The whole rectangular mass has divisions only at the southwestern entrance. There are three small compartments as two on one side and the other two on the other side. The northwestern compartments are offices. In the southeast, there is a metal staircase to upper level offices and a small compartment right next to this one. There is a long corridor along the main axis of the building right until the northeastern entrance. On both sides, there are places for mechanical equipments. The two added office masses are achieved from these spaces. The floor is concrete. There are horizontally rectangular metal windows on each structural divisions. Different than these, there are wooden square windows on the front facade. There is also a metal structure marking the entrance that also previously served as an office on the second level. These spaces are covered with a metal roof with trusses on which wooden planks were placed.

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\*\*Harita Genel Komutanlığı Archive \*\* Nurgun Çetin (Sadece Tuzla SHEET 29)

Figure 305 Sheet 29 cont'd





Technic atelier (3)

Staircase (8)





Window and wall detail

Technic atelier and roof detail (3)





Office (2)

Offices (4-5)

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Figure 306 Sheet 29

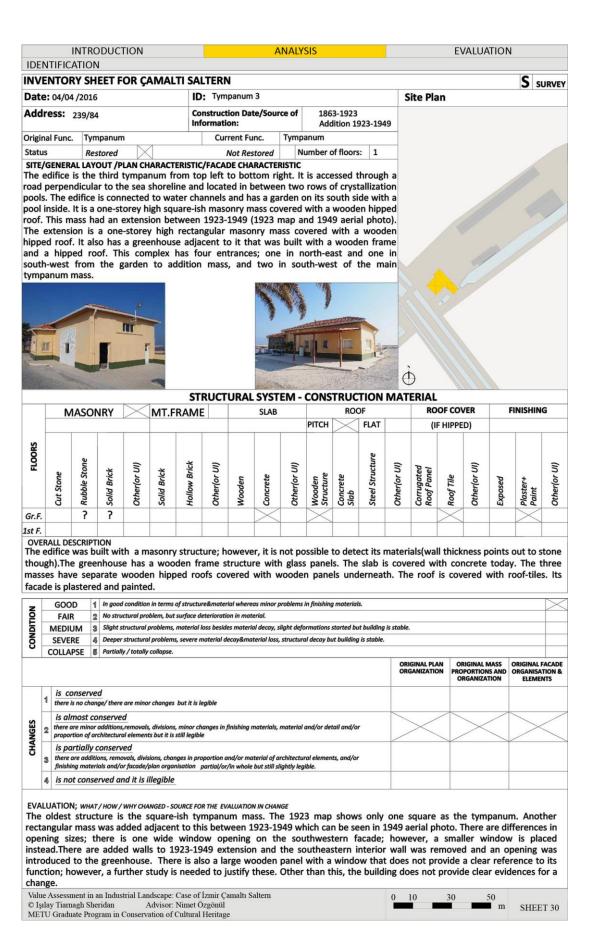


Figure 307 Sheet 30 cont'd

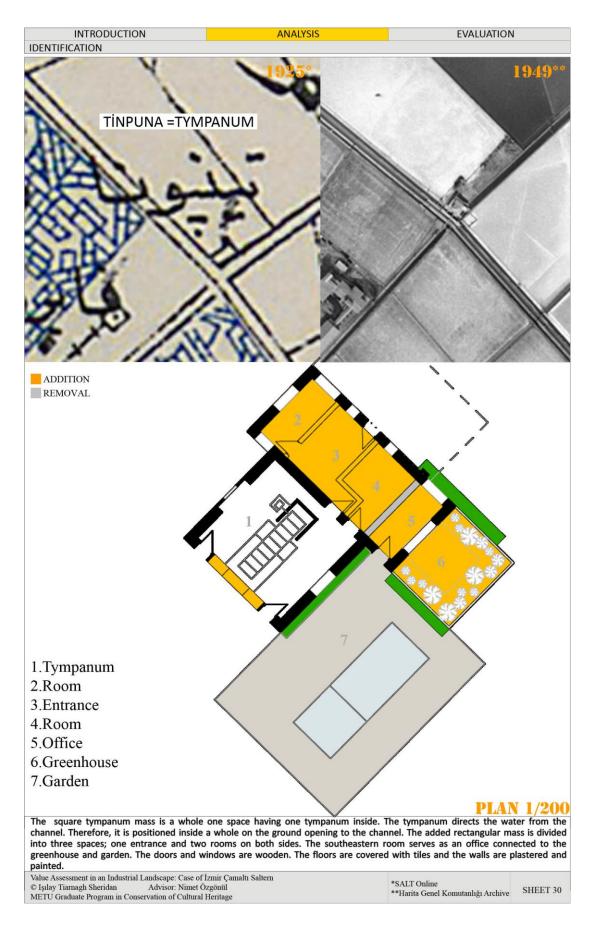


Figure 308 Sheet 30 cont'd





Tympanum (1)



Tympanum (1)



Doors to (3) entrance and room (4)



Greenhouse (6)



Office (5)



Garden and greenhouse (7)

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Figure 309 Sheet 30

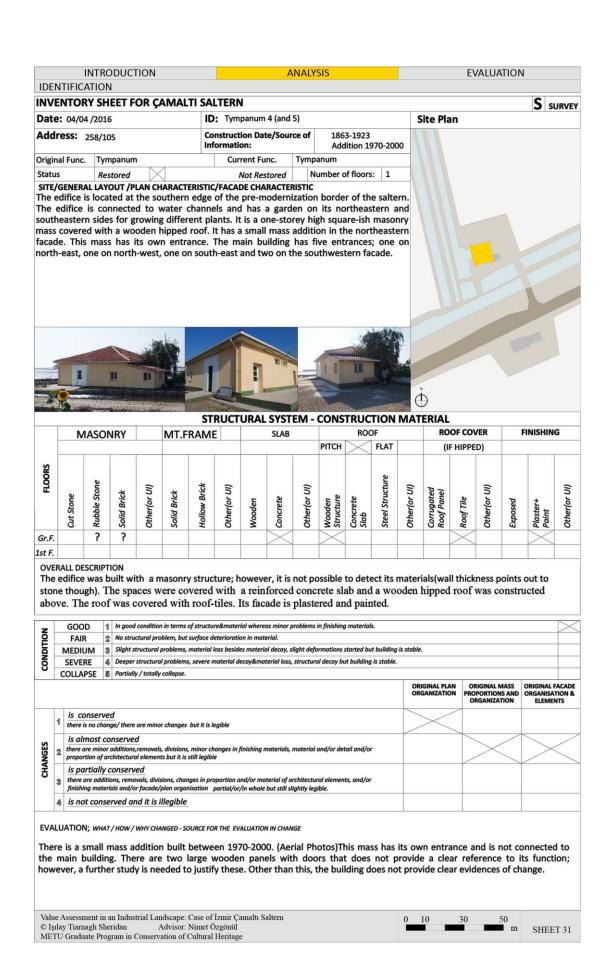
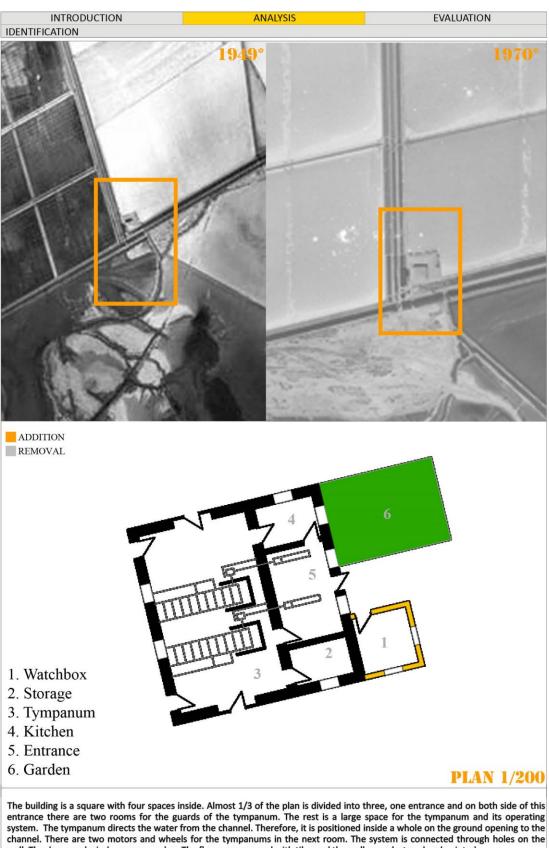


Figure 310 Sheet 31 cont'd



wall. The doors and windows are wooden. The floors are covered with tiles and the walls are plastered and painted.

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Figure 311 Sheet 31 cont'd

INTRODUCTION **ANALYSIS EVALUATION** IDENTIFICATION Tympanum (3) Entrance and engines (5) Tympanum (3) to kitchen (4) Garden (6) Kitchen to tympanum (4) Value Assessment in an Industrial Landscape: Case of İzmir Çamaltı Saltern © Işılay Tiamagh Sheridan Advisor: Nimet Özgönül METU Graduate Program in Conservation of Cultural Heritage

Figure 312 Sheet 31

## APPENDIX L

# NEIGHBOURHOOD CANCELLATION DOCUMENT

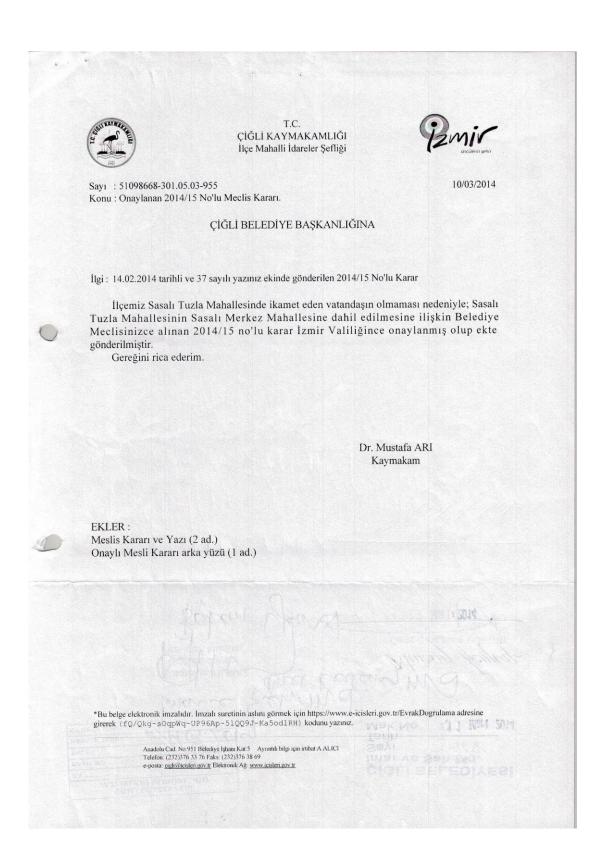


Figure 313 Neighbourhood cancellation document page 1

#### İZMİR İLİ ÇİĞLİ BELEDİYESİ MECLİS KARARI

Karar Tarihi:07.02.2014

Karar Sayısı: 84516765-301-05/15

Meclis Başkanı: Av. Metin SOLAK Belediye Başkanı

#### Meclis Toplantısına Katılan Üyeler:

CEMAL VAHİD, ZAFER MAĞDEN, VELİ KASAP, MAHMUT ÖZÇİFT, ERKAN GÜL, BAYRAM TANRIÖVER, HÜSEYİN BENZER, ZAFER ŞAHAY, MUHLİS YILDIRIM, MESUT AKIN, ÖNDER ÖZDEMİR, HÜSEYİN GÜLER, MUSTAFA BAHÇEBAKAN, DOĞAN GÜL, KURTCEBE NOYAN, BAŞAK TÜLAY ÇİFTÇİ, ABUBEKİR SIDDİK SOYSAL, İRFAN ESKİN, FUNDA ÖZÇOBAN, BURAK BALCI, M.GÜRKAN MANAV, MUSTAFA AKAR, HABİB BOZDAĞ, DİLEK ERDEM TUFAN, EMİNE BELGE.

### Meclis Toplantısına Katılmayan Üyeler:

ALİRIZA AKDAĞ, MİKAİL POLAT, ŞEREF BEKTAŞ, ÇETİN YURTSEVER, ALİ KARABAY, ATİLLA ATLI.

Konu: Tuzla Mahallesi.

Belediyemiz Meclisinin 03.01.2014 Tarihli birleşiminde Komisyonlarımıza havale edilen; Meclis Üyelerimizden; Veli KASAP, Zafer MAĞDEN, Bayram TANRIÖVER, Mikail POLAT, Mahmut ÖZÇİFT, Mesut AKIN, Cemal VAHİD, Doğan GÜL, Mustafa BAHÇEBAKAN, Muhlis YILDIRIM, Başak Tülay ÇİFTÇİ, Hüseyin GÜLER, Erkan GÜL ve Ali KARABAY tarafından verilen yazılı önerge.

Tuzla Mahallesinin Mahalle sıfatının kaldırılmasını veya Sasalı Mahalle Muhtarlığına bağlanmasını arz ederiz. Denilmekle konu komisyonlarımızda görüşüldü.

Yapılan görüşme sonucunda;

Tuzla Mahallesinin Sasalı Mahalle Muhtarlığına bağlanmasına komisyonlarımızca oy birliği ile karar verildi. Denilmektedir.

Yukarıda metni yazılı İmar, Hukuk, Mahalle Bölünmesi ve Sınır Tespit Komisyonlarının Raporları meclisimizde okunarak, müzakere edilmiş olup; Tuzla Mahallesinin Sasalı Mahalle Muhtarlığına bağlanmasına Meclisimizce oy birliği ile karar verilmiştir.

MECLIS BAŞKANI

Av. Metin SOLAK Belediye Başkam KÂTİP ÜYE

KÂTİP ÜYE

Zafer ŞAHAY Meclis Üyesi

Doğan GÜL Meclis Üyesi

1

Figure 314 Neighbourhood cancellation document page 2

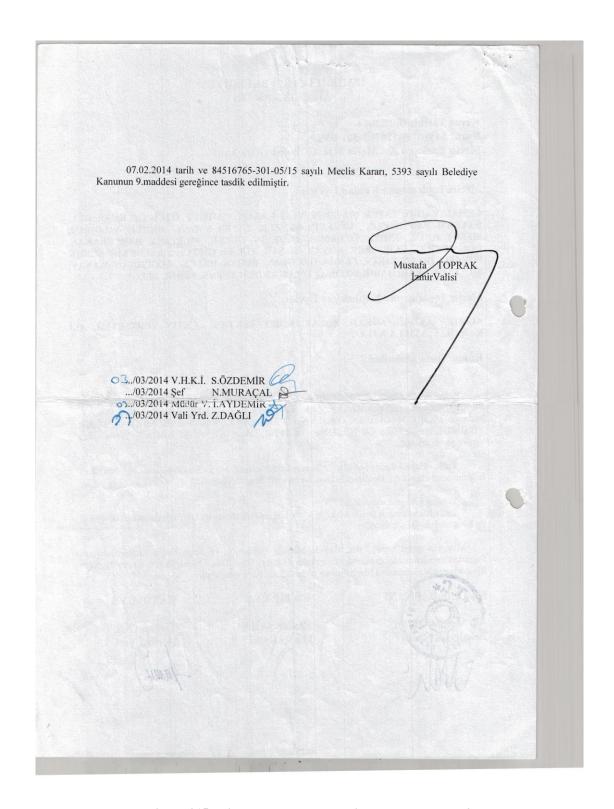


Figure 315 Neighbourhood cancellation document page 3