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## **Urban Landcape Design Principles in Historical Environments, a Case Study on Zeyrek, İstanbul<sup>1</sup>**

**Selma ÇELİKAY<sup>1</sup>, Hilal ÖZDEMİR<sup>2</sup>**

<sup>1</sup>University of Bartın, Faculty of Forestry, Department of Landscape Architecture, Bartın, TURKEY

<sup>2</sup>Landscape Architecture, Istanbul Metropolitan Municipality, Istanbul, TURKEY

### **Abstract**

Historical environments, which contain evidences traditional life styles, architectural styles, artistic sensibilities in regard to the past times, have been damaged and vanished due to globalization, fast consumption and technological development. The aim of this study is to emphasize that while historical urban textures have been increasingly damaged, there is an urgent need to develop urban landscape design principles about historical environments in the context of sustainability of them. Thus, cultural and natural properties adding historical value to study area were determined, and environmental relations of them were revealed. Determining present conditions and problems in Zeyrek quarter, they were criticized from urban landscape design point of view and suggestions for the quarter area were presented. Suggestions for protection of traditional street texture and building styles, improvement of life conditions of community and improvement historical environmental consciousness of community were presented.

**Keywords:** Historical environment, urban landscape design, urban design, Zeyrek.

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## **Introduction**

The deterioration process in historical environments gave rise to thoughts on protection. The idea of protection, containing movable cultural properties, besides immovable cultural properties, and historical areas including cultural properties, was extended its scope. It was proceeded to protect and survive historical city centers bringing the past to present with monuments and civil architecture samples.

In addition to historical continuity, protection of historical environments is important from the aspect of doing what is necessary in the age. It is required that these environments ought to be protected and developed with urban design approach. Urban design gains significance as an effective process which offers alternatives from regional to building scale, for occurrence of physical and socio-cultural urban characteristics. Determination of the values to be protected and integration with the modern life would be realized by urban design projects to demand multidisciplinary works. It is necessary that historical environments with physical and cultural values should be integrated with daily life's conditions in the context of the major target regarding to protection-reanimation- development. This aim can be realized by urban landscape design process. Urban landscape design with detailed projects can create urban spaces suitable for both local conditions and historical characteristics of the places.

Zeyrek District originated Byzantine period has a historical importance (Tosun, 1998). It experienced an unavoidable huge change in the time from regional characteristics point of view. Fast, intensive consumption and technological reasons, which are the major problems of historical environments, had a great effect on Zeyrek District. This historical district unplanned in accordance with the vehicle traffic had been face to face the intensive traffic. Because of this reason, historical texture had experienced definitely visual changes. However, some buildings in the district still keep on their authentic characteristics. At this point, urban design has an important role to protect these historical and cultural values and restoration them in an appropriate way with their original situations. Urban landscape design is also the other important tool to enable integrity and sustainability of urban landscape. Therefore, urban design and urban landscape design constitute the whole design strategies in historical environments.

## **Urban Landscape Design Principles in Historical Environments**

Urban landscape design principles for historical environments can be defined as following topics;

- Making planning and design with the protection-reanimation-development principle
- Providing sustainability of the identity of "historical city"
- Creating of urban spaces perceivable from the point of time and space
- Creating of spatial solutions for using of urban space , thinking of the needs of every users
- Physical and socio-cultural integration
- Creation of urban landscape containing cultural environment of the past
- Considering human scale



- Determination of the priorities of natural and cultural values to be protected
- Determination of the reasons and factors causing deterioration of historical environment
- Determination of design standards by means of multidisciplinary work
- Considering urban landscape elements harmonic with their region from the color, texture etc. characteristics
- Protection of traditional street and building style
- Giving priority to pedestrians for fast and safety transportation by means of pedestrianization projects in historical districts
- Rehabilitation of traditional architectural samples and giving new functions to them
- Determination of new architectural typologies harmonic with traditional architecture
- Determination of historical landscape characteristics
- Increasing environmental quality by means of greenery elements
- Production of flexible spatial solution
- Analyzing of all physical, socio-cultural, economic, political, technological effects guiding to design
- Revealing the needs of urban user
- Integration of housing, commercial, administrative areas, and traffic systems with open green spaces
- Making design guides suitable for regional characteristics
- In preparation of design guides, considering physical, social, economic and political conditions
- Multidisciplinary work and collaboration in order to realize all principles mentioned above

### **Case Area: Zeyrek**

Zeyrek quarter located in the city core of İstanbul, in the urban site area, which contains traces of two great civilizations, Byzantine and Ottoman, has historical monuments and civil architecture samples (Taşkın, 1997). Zeyrek is a special quarter which should be conserved and maintained the cultural heritage as a historical city center. The quarter in Fatih district on historical peninsula, is now in bad condition due to the fact that density and misuses damage the historical urban texture (Figure 1).

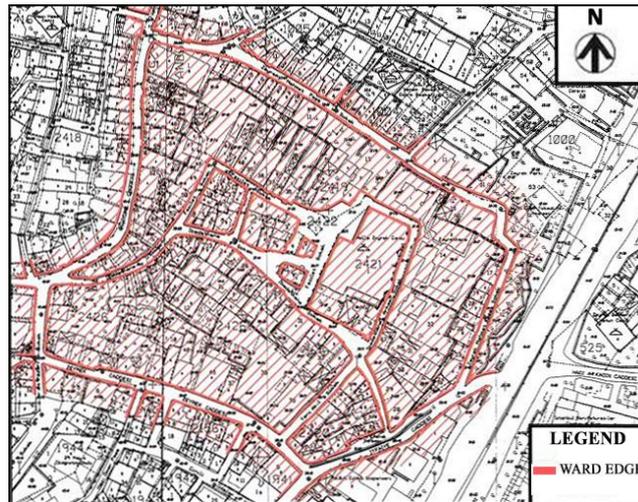


Figure 1. Historical Peninsula and the Location of Zeyrek District (Özdemir, 2007).

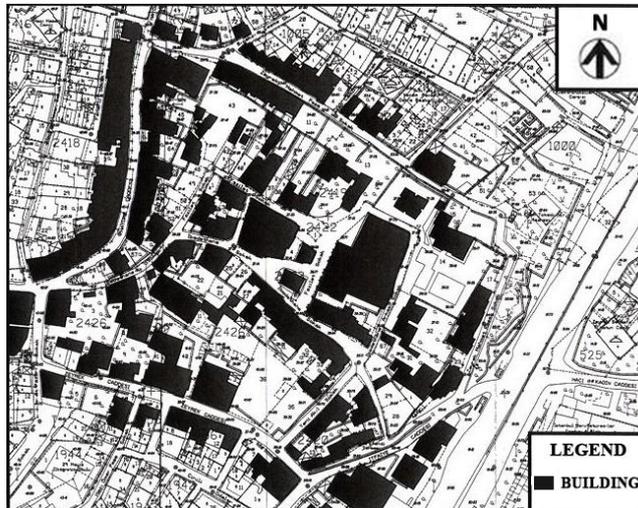


Figure 2. Case Area in Zeyrek District (Özdemir, 2007).

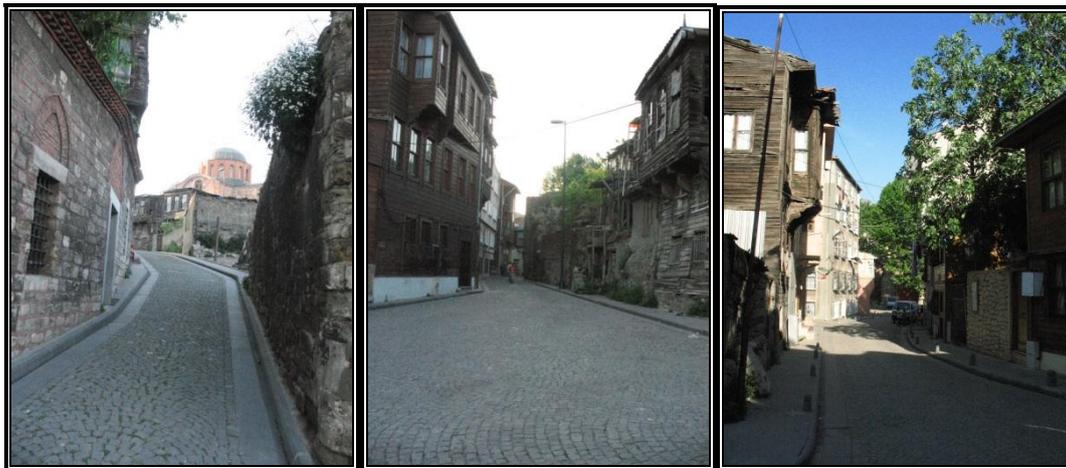
Case area selected in Zeyrek District has both historical and religious buildings, in addition to traditional houses (Figure 2). Current street texture and building analysis in the case are shown in Figure 3 and Figure 4. Narrow streets are surrounded with the walls or building facades (Figure 5, 6).



**Figure 3.** Street Texture on the Case Area (Özdemir, 2007)



**Figure 4.** Building Analysis on the Case Area (Özdemir, 2007)



**Figure 5.** Urban Landscape on İbadethane Street (Özdemir, 2007).



Figure 6. Urban Landscape on Fazilet Street (Özdemir, 2007).

In historical environments, urban texture was formed in the frame of building customs and economic facilities besides of natural determiners (Ahunbay, 2004).

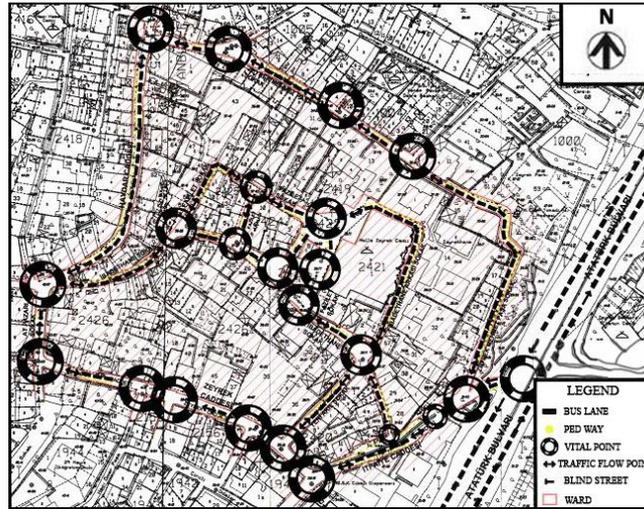


Figure 7. Transportation Analysis on the Case Area (Özdemir, 2007)

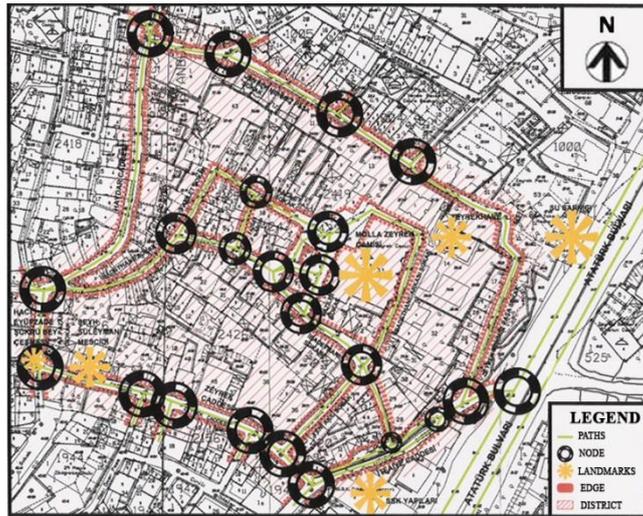


Figure 8. Image Analysis of the Case Area (Özdemir, 2007)

Image analysis is of significance especially from the point of perception of the environment. According to Lynch, there are five basic elements forming the image of the city (Lynch, 1960). Paths, nodes, edges, districts and landmarks are five determining factors creating the image of the environment we look. At the same time, these five elements guide to urban design studies and projects which aim to create more perceptible urban environment (Figure 8).

### Results and Suggestions

The results of the case study and suggestions have been grouped under two main topics; urban planning and urban design.

#### Urban Planning

The suggestions on urban planning were taken into account under the topics of land uses and transportation.

#### Land Uses

Looking at the actual land uses in the case area, it is revealed that there is an urgent need of public green spaces in Zeyrek District. Considering every groups of community, playing areas for children, sport areas, exhibition and open museum, parks, recreational areas can be created by new land uses in the district. Molla Zeyrek Mosque is of great importance in the district as an attractive center from the religious point. Thus, the building and surroundings, which constitute a large public spaces, need to be cleaned and restoration and to be provided a secure area. Analyzing current land uses in the case area (Figure 9), new uses have been proposed and public green spaces have been increased. All of empty lands have been evaluated and most of them have been proposed to be used for green areas while some of them for house garden (Figure 10). On some parcels new buildings have been proposed providing them harmonic with traditional ones.

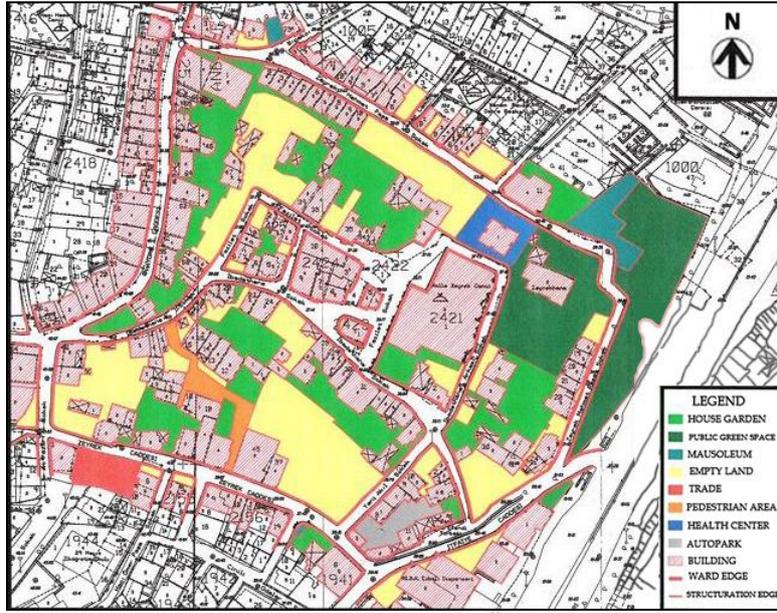


Figure 9. Actual Land Uses (Özdemir, 2007)

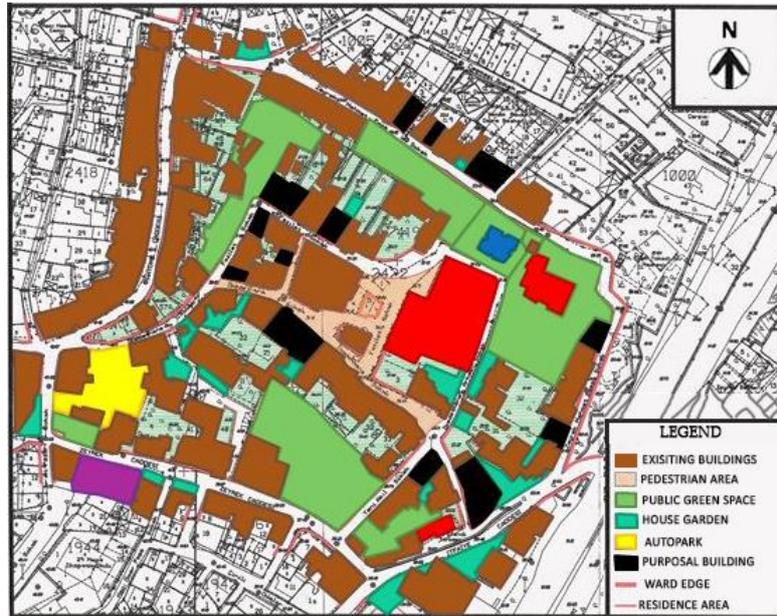


Figure 10. Land Uses Proposal

## Transportation

Analyzing actual using of streets for transportation, it was revealed that ergonomic and secure urban spaces are needed for pedestrians in the district (Figure 7, 9). From this point of view, pedestrian areas were made larger and a pedestrian square was created in front of Molla Zeyrek Mosque. This suggestion is of great important for providing perception of the mosque from the all distances of square and for comfortable pedestrian space (Figure 10).



## **Urban Design**

It can be realized by multidisciplinary works that balance between cultural and physical harmony in historical environments can be enabled. In this context, urban design has to be an indispensable tool in every scale of protection and development plans. Urban design guides also will be an effective tool in order to determine regional physical condition and to conduct authentic applications. The aim of protection-reanimation and developing can be reached by mean of flexible design guides foresightedly prepared. Thought of protection has to contain responsibility of today and the future of human (Bektaş, 2001). Urban design is an important tool for re-functioning historical building to be protected and sustained. In the context of urban design, buildings and urban landscape proposals in the district have been emphasized.

## **Buildings**

There are a lot of considerations regarding all buildings in the case area. Firstly, permission should not be given to build the buildings with high level destroying historical texture. It is necessary to clean and make the buildings having bad facades harmonic with historical environment. Historical monuments and traditional architectural samples should be investigated. The other urgent action is restoration, integration and re-building of the most buildings. Determining traditional architecture styles, new architectural typologies should be composed so that new buildings can be harmonic with authentic buildings in the historical district. Traditional architectural samples in historical urban texture should be re-functioned with public uses like cultural centers, libraries, museums, in which cultural activities will be, in order to provide sustainability of traditional architecture. Determination of physical and socio-cultural necessities of this historical city center where has symbols and monuments of Byzantine and Ottoman cultures is our major responsibility from the historical heritage protection point of view. As an attractive center for two religions, Molla Zeyrek Mosque should be rehabilitated for identification of our cultural richness and evaluation of tourism potential of district. If secure and comfortable environment is provided, tourism can be developed.

Considering above approaches, actual and proposal facades of the buildings on surroundings of Molla Zeyrek Mosque and of the buildings in İbadethane Street and Fazilet Street were drawn (Figure 11-13). Revealing actual situation of the buildings, proposals were suggested in order to protect and sustain traditional texture. It was targeted to provide physical and socio-cultural integration in this district where housing are densely and to transform an urban landscape environment befitting to cultural environment in the past.

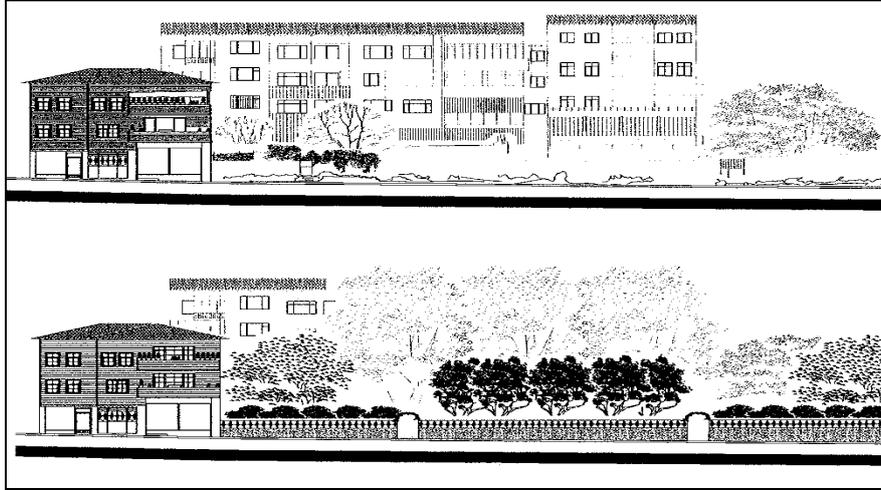


Figure 11. Actual and Proposal Facades and Landscape Elements (Özdemir, 2007)

### Urban landscape

City constitutes the whole with all structural and botanic components. It is recommended that the whole needs sensitive considerations targeting the creation of quality and livable environment. It is essential issue that if natural landscape characteristics in the district are observantly determined, urban design aiming protection and developing can be reached at desirable level.

In regard to proposal facades and silhouettes, creation of urban landscape suitable for physical and socio-cultural needs of urban life was aimed, and protection of traditional texture and integrity were considered. Urban quality in the district must be increased by means of urban furnitures which harmonic with traditional street and building style, and plant elements integrated with authentic identity of the region. With these principles, *Acacia dealbata*, *Platanus orientalis*, *Cercis siliquastrum*, *Tilia tomentosa*, *Buxus sempervirens*, *Hydrangea macrophylla* "Hortensia", *Syringa vulgaris*, *Jasminum officinale*, *Lonicera sempervirens*, *Visteria sinensis*, *Rosa sp.*, *Tulipa sp.*, and *Vinca major* plants have been proposed for vegetation design in İbadethane and Fazilet Streets (Figure 11-13).

Because of densely housing and building in the district, these edge elements have casted shadows upon the streets. Due to moderate climatic conditions the region has humid environment. These factors are determiner for landscape and planting design.

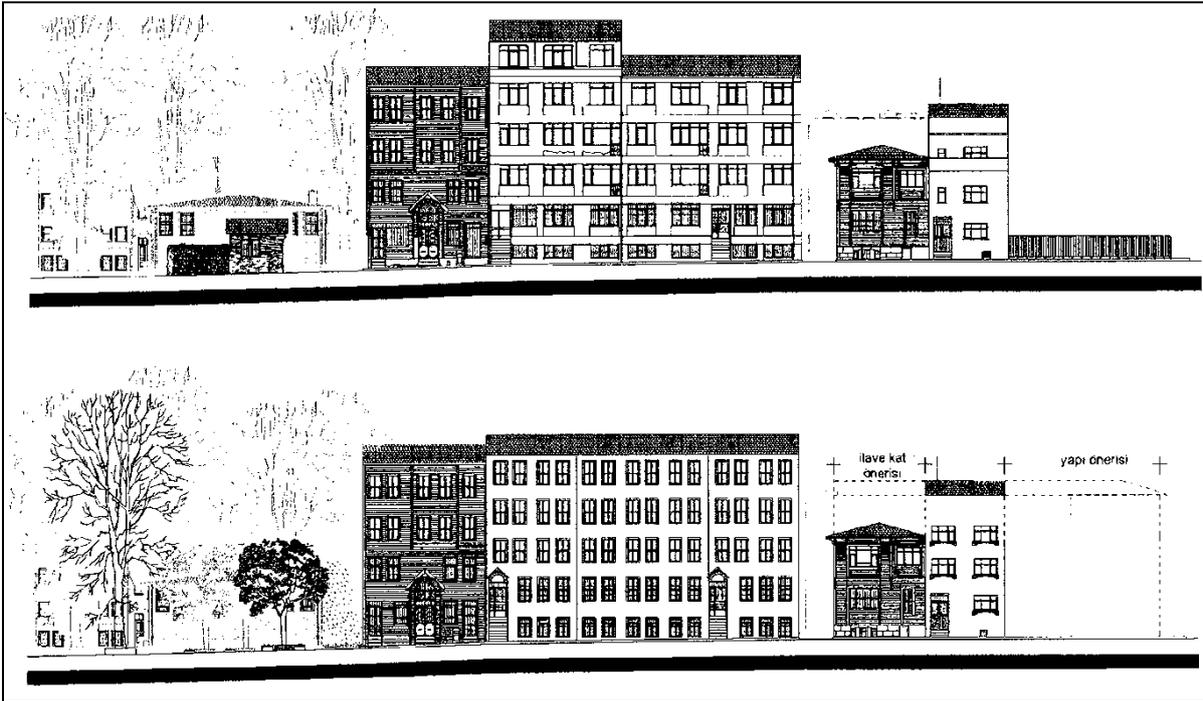


Figure 12. Actual and Proposal Facades and Landscape Elements (Özdemir, 2007)



Figure 13. Actual and Proposal Facades and Landscape Elements (Özdemir, 2007)



Green space ratio has to be increased in the district for both protection of historical buildings and green space needs of the dwellers. As a solution to green space necessity, public green spaces were proposed on empty lands in the case area (Figure 10). Housing gardens located in the case area have a potential to increase green spaces. They can be organized and transformed from bed gardens to a good quality environment (Figure 10). With this aim, it is necessary that considering characteristics like color, texture, form etc. they should be greenery seemly with landscape characteristics and the whole environment. In addition, pedestrian area between İbadethane Street and Zeyrek Street needs greenery elements and sitting elements from functional and attractive using point of view.

### **Design Guides**

Design guides are guiding books including technics, methods and standards developed for a selected area (Konuk, 1992). As tridimensional guides, in urban design guides the spatial rules were written by the designer about the environment where she wants to see (Çelikyay, 1995). In an urban design guide, there are a lot of details were determined from building material to the handle of a door or window. These guides prepared taking into account natural and landscape characteristics, socio-economic and cultural conditions, traffic problem etc. produce spatial solutions and make easy application process. Design guides are also important application tools for urban design projects.

### **Conclusion**

Maintenance of historical continuity and harmonisation of historical environment with the whole city are bound to good connection of upper scale and subscale. Urban design has therefore an important role to make a bridge between urban planning and architectural design.

It is only provided by urban landscape design process that constitution of the physical and social character of the city and harmonization with historical places are needed to multidisciplinary studies of experts on urban and social issues.

Urban landscape design aims to provide physical and social urban integrity. Therefore, in addition to increasing of environmental quality, it is essential that urban users can comply with this environment, protect and adopt their living area. Community is also responsible for protection and sustainability. Housing in the district to be transformed to cultural activity centers is of importance for sustainability of this district having historical value. All proposal ideas constituted the infrastructure of protection-rehabilitation and developing process of Zeyrek District. By this means, it can be possible to enable sustainability of this district with all authentic values and historical texture, as an important historical environment. Furthermore, it is necessary to consider the following issues in order to enable realization of planning and design approaches, studies and projects conducted for community so that both they live comfortable environment and historical values are protected.

- Participation of the community
- Consciousness of historical and cultural protection
- Sufficient financial resources
- Having common role of all urban actors administrators, planners, architects, non-governmental organizations, academicians on the issue of protection of historical environments



As emphasized in this case study, if urban landscape design principles are adopted to guide for both protection and sustainability, transformation of actual cities from damaged historical environment to quality livable places.

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