



Şehit Ömer Halisdemir Square Urban Design and Landscape Design

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Abstract

Urban squares are one of the most frequently used components of urban open spaces. Squares play important roles in shaping urban landscapes, increasing the quality of space, and gathering urban people. Urban squares are the areas where social unity, social contact and social harmony occur. The people of Çarıkсарaylar felt that there was a lack of a square where they could establish social unity, gather, meet their various recreational needs. Realizing this deficiency, Çarıkсарaylar Municipality requested technical support from Süleyman Demirel University Faculty of Architecture Department of Landscape Architecture for the preparation of an urban square landscape project. The formed project group made observations and evaluations in the field and collected the necessary data. Then, the project group started the design process after meeting with the municipal authorities and the people of the town and creating a list of requirements. For this purpose, preliminary project, final project and detail sheets, planting project, structural project, lighting project and bill of quantities lists were prepared and approximate value calculations were made. Facilities such as seating areas, resting areas, parking areas, sales units, water surfaces, tea and coffee houses, and a martyrdom monument have been designed within the urban square. The project was delivered in January 2018 and was later implemented by Çarıkсарaylar Municipality. In this study, detailed information is given about the usage areas and facilities in the designed project.

Keywords: Çarıkсарaylar Municipality, Urban Open Spaces, Square Design, Landscape Architecture.

Şehit Ömer Halisdemir Meydanı Kentsel Tasarım ve Peyzaj Tasarımı

Öz

Kent meydanları, kentsel açık mekanların en yoğun kullanılan bileşenlerindedir. Kent meydanları peyzajların şekillenmesinde, mekânın niteliğinin artırılmasında, kent halkının toplanmasında meydanlar önemli roller oynamaktadır. Toplumsal birlikteliğin, toplumsal temasın ve toplumsal uyumun gerçekleştiği alanlar kent meydanlarıdır. Çarıkсарaylar halkı sosyal birliktelik kurabilecekleri, toplanacakları, buluşacakları ve çeşitli rekreasyonel ihtiyaçlarını giderecekleri bir meydan eksikliği hissetmekteydi. Bu eksikliği fark eden Çarıkсарaylar Belediyesi Süleyman Demirel Üniversitesi Mimarlık Fakültesi Peyzaj Mimarlığı Bölümü'nden kent meydanı peyzaj projesinin hazırlanması için teknik destek istemiştir. Oluşturulan proje ekibi alanda inceleme ve değerlendirmelerde bulunmuş olup gerekli verileri toplamıştır. Ardından proje ekibi belediye yetkilileri ve belde halkı ile görüşmeler yapıp ihtiyaç listesi oluşturduktan sonra tasarım sürecine geçmiştir. Bu amaçla avan proje, kesin proje ve detay paftası, bitkisel proje, yapısal proje, aydınlatma projesi ve keşif metraj listeleri hazırlanmış olup yaklaşık değer hesaplaması yapılmıştır. Kent meydanı içerisinde oturma alanları, dinlenme alanları, otopark alanları, satış birimleri, su yüzeyleri, çay-kahve evleri, şehitlik anıtı gibi tesis ve kullanımlar tasarlanmıştır. Proje 2018 yılı Ocak ayında ayında teslim edilmiş olup daha sonra Çarıkсарaylar Belediyesi tarafından uygulanmıştır. Bu çalışma kapsamında tasarlanan projede yer alan kullanım alanları ve tesisler hakkında detaylı bilgi verilmiştir.

Anahtar kelimeler: Çarıkсарaylar Belediyesi, Kentsel Açık Alanlar, Meydan Tasarımı, Peyzaj Mimarlığı.

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1. Introduction

Urban spaces are defined as streets, squares, roads, and natural areas of the city that society can use without restriction. Squares are public spaces limited by structural or natural environmental elements (İnceoğlu & Aytuğ, 2009). These spaces are platforms where people can be physically part of a larger community, unlike people's homes, workplaces, or places where they receive education (Zakariya, Harun & Mansor, 2014). These spaces differ depending on their usage patterns in line with the basic and daily needs of urban residents. Squares have an important place among these urban spaces that constitute public areas.

Squares are the core of cities and contain many urban identities, cultures, and social experiences. According to Lynch (1960), squares are elements for understanding and recognizing the city. Squares are also expressed as nodal points that create strong images in cities (Lynch, 1960). Squares are one of the basic structures of cities and are dynamic structures that, surrounded by structural elements, form the basis for many public activities such as gathering, socializing, entertainment, and recreation. From history to the present, city squares are multi-purpose spaces where citizens and visitors meet, come to get away from the difficulties of daily life, relax, rest, gather, and have fun on special days of the city and society (Özer & Ayten, 2005; Şavklı & Yılmaz, 2013). In addition, while squares are the focal point of cities, they can also undertake the functions of gathering and providing partial shelter in adverse urban conditions and emergencies. For this reason, it requires both aesthetic and many functional concerns to be considered and addressed together in terms of design and planning.

When historical urban textures are examined, it is observed that some squares were designed with regular geometric shapes at the intersection of urban roads. Some other squares lacked a geometric order or certain elements and were mostly used at the city entrance or in a certain part of the cities as a resting place for caravans or as a place where trade was carried out and shows, sports, and rituals were held (Akman, 2020; Şavklı & Yılmaz, 2020).

City squares are auxiliary elements that contain the historical and traditional traces of societies and therefore shape the identity of the city. Many city squares are surrounded by historical building elements and form central locations within the urban texture that spreads over time. This ensures that squares, which contain strong ties between the historical texture and identity of the city, have more importance in urban areas.

City squares are a strong focus for residential areas of different shapes and sizes from time to time, depending on their use. The meanings, functions, and geometric shapes of the buildings in the immediate vicinity of the squares vary for the city (Eyüce, 2000).

The designs of urban squares aim to provide open spaces connected to streets and buildings where people can get away from the traffic and busy streets of the city and come together (Zakariya, Harun & Mansor, 2014; Carmona, Heath, Oc & Tiesdell, 2003; Zucker). At the intersections of some of the city's important roads and routes, they are suitable places for many recreational activities as well as transit and rest functions. By providing a flexible infrastructure service, especially in terms of functionalizing large urban spaces, it can be easily changed and developed from time to time with different equipment elements in different time periods.

When examined as a historical process, transformations in the functions of city squares are observed. Before the industrial revolution, while they were gathering areas for the working-class during shift changes, the usage patterns and formal and functional features of squares in today's cities have changed with the development of technology and globalization (Akman, 2020).

Well-designed or planned squares accommodate the functions of many urban parks and public spaces. When they are positioned at easily accessible points of the city, they turn into urban oases, rapid transit points, and breathing green areas of the city.

Çarıkсарaylar Municipality requested technical support from Süleyman Demirel University Faculty of Architecture to prepare an urban square design project to create places for the people of the sub-district to come together, gather, and meet. It was desired to create a social fabric pattern between the requested

square and the buildings. A working group was established within the Department of Landscape Architecture, Faculty of Architecture, Süleyman Demirel University, to prepare the mentioned urban square design project. As a result of the contracts made between the Faculty of Architecture and Çarıkсарайlar Municipality, a square project was prepared by Gül, Akten, Küçük, Çakır & Ezenci (2017), taking into account the city square design principles and providing solutions and suggestions to the demands and problems. In this study, the problems encountered during the design process of the project were stated, and solutions to these problems were suggested. Additionally, the facilities and usage areas in the square were examined.

2. Material and Method

2.1. Material

Çarıkсарайlar is a sub-district in the Şarkikaraağaç district of Isparta province. It is 120 km from Isparta, 113 km from Konya, and 7 km from Şarkikaraağaç (Google Earth, 2023). The population of Çarıkсарайlar is 2,767 (Şarkikaraağaç District Governorship, 2023). The altitude of the sub-district is 1276 (Google Earth, 2023). The study area is located in front of the Çarıkсарайlar Municipality Service Building, is 4950 m² in size, and does not have many altitude differences. The study area is located within the borders of the adjacent area of the municipality, and the right of use belongs to the Çarıkсарайlar Municipality (Figure 1).

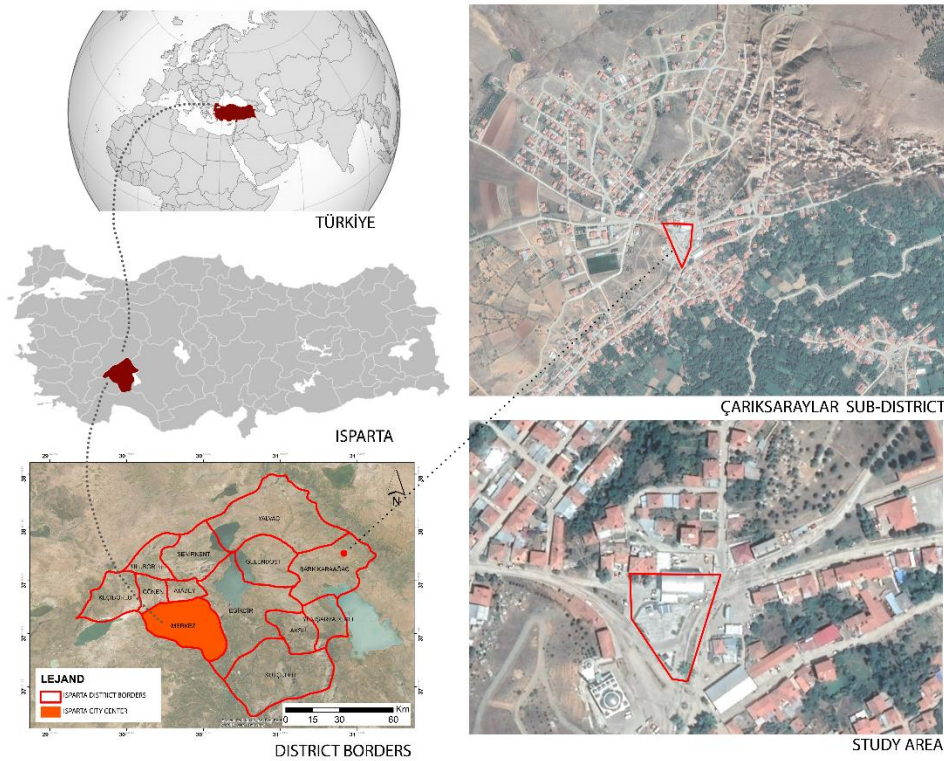


Figure 1. The location of the study area (Google Earth, 2023)

2.2. Method

The site plan created with the map measurements obtained as a result of service procurement by Çarıkсарайlar Municipality, the information obtained as a result of the interviews with the authorities, and the photographs taken were used as materials. NetCAD 5.0 and Autodesk AutoCAD 2017 programs were used for plan drawings, and SketchUp 2017, Lumion 8.3, and Adobe Photoshop CC 2017 were used for modeling and visualization stages.

The study started by determining the boundaries of the study area, and an area analysis was carried out as a result of the information received from the authorities and observations made in the field. Existing uses in the area were examined on-site, and a list of needs was prepared within the framework of dialogues with the authorities and local people. Structural elements and plant materials that are currently in the area and need to be protected have been determined. It is aimed at preserving the minaret structure built in 1953 in the study area and serving as a reference point in the design. In this process,

which started with the decision to rebuild the mayoral building by the mayor of the period, it was decided to organize the 4950 m² area on the south side of the municipality building as a public square that would meet the needs of the local people. Şehit Ömer Halisdemir Square Urban Design and Landscape Project, named by the Municipal Council of Çarıkсарайlar Municipality, consists of the preliminary (idea) project, structural and plantation landscape projects, detail and section sheets, bill of quantities and quantity lists, preparation of tender files, modeling, and animation film preparation.

3. Findings and Discussion

As a result of dialogue with local administrators and public officials, it was stated that the study area is an important area located in the center of the sub-district. Due to various facilities within the municipality service building (such as a coffeehouse, barbershop, market, etc.), the study area, which was a frequent spot for local people, could not be used efficiently. With the reconstruction of the municipality service building, the need for a public square arose. In line with the needs, it was decided to design a ceremony area, coffee-tea house, exhibition and sales stands, pergola and seating units, a martyrdom monument in the name of Ömer Halisdemir, after whom the park is named, a cascading pool, and a parking area for official vehicles in the square.

Spaces consisting of diagonal lines were designed from the system where the entrance of the municipality service building forms the main axis. The working area with elevation differences will serve as a public square where design principles are adopted for everyone and where accessibility is high since it is a public structure. Due to the elevation differences in the area, ramps suitable for disabled access have been designed. In order to ensure material integrity, easily accessible granite and basalt materials used in the region were designed with a guiding design pattern.

The following facilities, uses, and equipment are included within the scope of the design project:

3.1. General Design Fiction

In the realm of urban planning, spatial utilizations have been designed to be linked to the main axis of the municipal service building through its main entrance. Spatial uses at different elevations allowed by the existing land slope add dynamism to the area. Level differences facilitate access to public services with stairs and ramp system solutions.

There are five different entrances to the public square. The first entrance is the entrance to the municipality service building designed for disabled access. The second entrance is associated with the parking lot in the southeast of the area that provides access to the sales units. The third entrance is positioned tangent to the martyrdom monument and is associated with the pergola seating area. The fourth entrance is located next to the minaret structure, which is a landmark in the area. The fifth entrance is designed as the protocol entrance for the events to be held in the ceremony area. Multi-directional entrances to the work area will enable effective use of the area and create a social public square.

In the square design, urban reinforcements to be assembled on-site along with manufacturing details of durable materials with an aesthetic appearance (wooden coating on steel construction, etc.) were preferred. Designed to protect against adverse climatic factors, pergola type seating areas do not have a durable construction and are supported by plant material to give them an aesthetic appearance. The basalt stone used with andesite flooring in the road circulation in the study area creates a guiding effect in the design. By using low and high height lighting in the square, it is ensured that night use is as effective as day use. The use of urban equipment such as garbage bins is also included in sitting-resting areas. A total of 12 pocket car parks, one of which is suitable for disabled use, have been designed within the study area. Thanks to the use of slab stone with turfgrass joints on the parking lot floors, a water permeable floor has been created. The official car parking area is located at the entrance of the municipality service building.

3.2. Ceremony Area

The ceremony area, located in the southwest of the municipality service building, was designed at the upper level to dominate the entire area. Granite and basalt were used in the flooring of the ceremony area, which has a hard surface of 364 m². The glass walls on both sides of the Atatürk bust, surrounded

by a water surface, are designed to be written on with CNC-cut metal plates. The location of the ceremony area in the existing area and its representative images are given in Figure 5.



Figure 5. Ceremony area

3.3. Coffee-Tea House

The coffee-tea house, located at the entrance level of the municipality building, was positioned in its current location and redesigned to serve the local people as a coffee-tea house. The area, arranged on two different elevations, allows for different uses without blocking the view. It is aimed at providing a bioclimatically comfortable resting and viewing experience with the trees and shrubs used in the planting design. The location and representative images of the coffeehouse-tea garden in the existing area are given in the Figure 6.

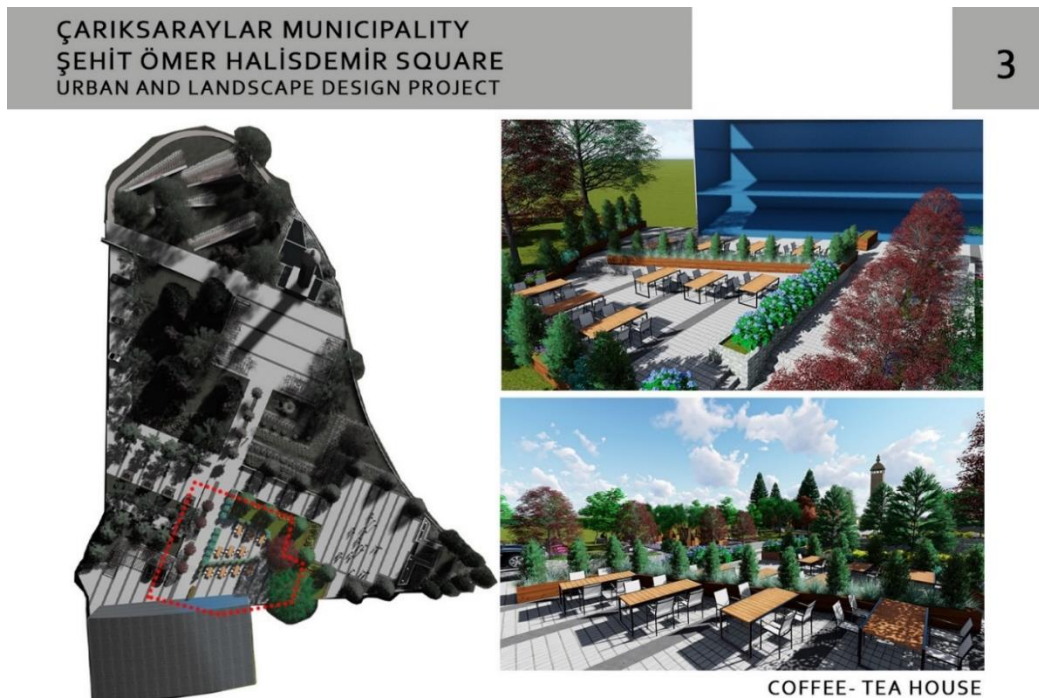


Figure 6. Coffee-tea house

3.4. Sales Units

There are four sales stands at the south-eastern entrance of the area. These sales stands are places where local products from the region can be sold and make an economic contribution to the local people. The stands have a more natural appearance by covering the steel construction with wooden material. The location and representative images of the sales stands in the existing area are given in the Figure 7.



Figure 7. Sales Units

3.5. Minaret and Cascading Pool

The minaret, which is independent of the mosque on the south side of the municipality service building, was built in 1953. The minaret structure, which is the landmark of Çarıkсарaylar sub-district, was preserved and included in the design area. The existing cascading pool, which is old and has lost its functions, has been redesigned. It is thought that the combination of the visual and relaxing effect of water and the lighting design would increase the architectural effect of the minaret. The location and representative images of the minaret and the cascading pool on the existing area are given in the Figure 8.

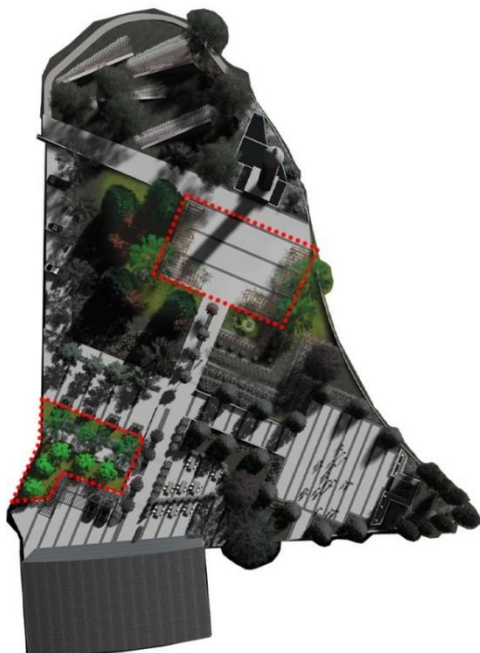


MINARET- CASCADE POOL

Figure 8. Minaret and cascade pool

3.6. Pergolas and Seating Units

Two main seating areas were determined in front of the municipality service building and associated with the minaret. Seating units under pergolas were designed in the area that was designed holistically with the minaret. The martyrdom monument and minaret area have been determined to be the most suitable area for sitting and resting functions. The use of wood was recommended in the manufacture of pergolas in order to provide integrity to the area. The location and representative images of the pergola and seating units are given in the Figure 9.



PERGOLA- SEATING UNITS

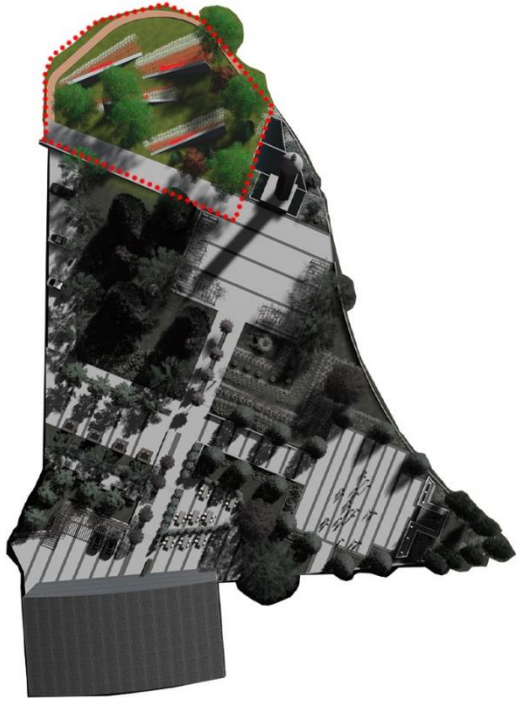
Figure 9. Pergolas and seating units

3.7. Martyrdom Monument

The martyrdom monument, located at the southern entrance of the area, is located on a sloping area. The triangular-shaped walls located on the slope in the area were designed as reinforced concrete parapet walls. The four triangular walls represent the number of martyrs in the sub-district. It is expected that the Turkish flag monuments positioned on the walls made of CNC-cut plexiglass material will be illuminated at night and provide a visual effect. In the planting design, the Turkish flag was emphasized by using ornamental plants with red and white flowers. The location and representative images of the martyrdom monument are given in the Figure 10.

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MARTYRDOM MONUMENT

Figure 10. Martyrdom monument

3.8. Planting Design

In the selection of plant material (trees, shrubs, groundcovers and turfgrasses) ecological requirements and visual aesthetic properties were taken into consideration. Plant materials were selected from species and varieties that are native to the region or adapted to the region and are easy to supply. As it is known, native plant species have less fertilizer, irrigation and maintenance requirements than exotic species. Evergreen and broad-leaved trees, shrubs, ground cover plants, and turfgrasses were used together in plant compositions. Broad-leaved trees used to create shade areas will benefit from the winter sun by shedding their leaves. To reduce the effect of cold winds, evergreen trees were positioned perpendicular to the wind direction Table 1.

Table 1. Plant species/varieties and quantities used in the project area

| Plant Species/Varieties | Pieces |
|---|---------------|
| <i>Pinus nigra</i> | 25 |
| <i>Picea pungens</i> | 13 |
| <i>Prunus cerasifera</i> 'Atropurpurea' | 8 |
| <i>Tilia tomentosa</i> | 9 |
| <i>Acer saccharinum</i> | 10 |
| <i>Yucca filamentosa</i> | 25 |
| <i>Cupressocyparis leylandii</i> | 32 |
| <i>Forsythia intermedia</i> | 34 |
| <i>Juniperus horizontalis</i> | 181 |
| <i>Cupressus macrocarpa</i> 'Goldcrest' | 58 |
| <i>Lavandula officinalis</i> | 23 |
| <i>Euonymus japonicus</i> 'Gold Crest' | 169 |
| <i>Salvia splendens</i> 'Saucy Red' | 178 |
| <i>Artemisia sp.</i> | 111 |

The following work items were included in the contract made within the scope of the Şehit Ömer Halisdemir Urban Design and Landscape Project, which was carried out in cooperation between Süleyman Demirel University Faculty of Architecture, Landscape Architecture Department and Çarıkсарaylar Municipality:

Preliminary Project (1/100): This is the preliminary preparation study for the application project. It is the stage where the project that is intended to be realized in practice is presented, thought about, and ideas carried out according to the current conditions. It allows a rough prediction about the project. It does not contain details because final decisions regarding the project have not been made yet. The preliminary project of the Şehit Ömer Halisdemir Square is given in Figure 2.



Figure 2. The preliminary project of study area

Final Project (1/100) and Detail Sheets: This is the latest structural and plantation application project version. Structural and plantation application details in the areas are delivered as site sheets at 1/50, 1/20, 1/10, and 1/5 scales (Figure 3).

Plantation Design Project (1/100): This is a project that shows the use and details of plant materials. This is a project showing ground covers, turfgrasses, shrubs, and trees (Figure 3).



Figure 3. Final project, detail sheets and plantation design project of the study area

Structural Landscape Design Project (1/100): This is a project showing the hard surfaces (pedestrian paths, vehicle roads, parking lots, perimeter-retaining walls, sports fields, children's playgrounds, ornamental pools) within the study area (Figure 4).

Lighting Project (1/100): This is a project showing the locations of lighting fixtures and the types of lighting. This is a guiding project for installation practitioners, containing all electrical technical information and drawn according to certain national and international standards (Figure 4).



Figure 4. Structural landscape design and lighting project of the study area

Bill of Quantities Lists: A detailed list showing the use of plant and structural materials and reinforcement in quantity. It is the total cost resulting from pricing the quantities found for the project with current unit prices.

Calculating the Approximate Application Cost: It is the amount calculated by multiplying the quantities of all work items in a job at the project stage by the unit prices found by various methods.

After the preliminary project was accepted, other work packages were delivered. Revisions were made after the preliminary project phase due to the merging of two separate parcels by the decision of the municipal council and the change of decision of the local administrators. As a result of the revision, it was decided to use the martyrdom monument within the ceremony area due to cost and to replace the martyrdom monument with gazebos and use it as a seating and rest area.

4. Results

Within the scope of this study, a project team consisting of academic members of the Landscape Architecture Department of Süleyman Demirel University Faculty of Architecture designed an urban square in front of the Çarık Saraylar Municipality Service Building. This square allows the people of Çarık Saraylar sub-district to socialize and carry out cultural and social activities such as gathering, meeting, and resting. While designing the urban square, general landscape design principles and urban square design criteria were taken into consideration. Before starting the design of the square, various observations and measurements were made in the area and face-to-face interviews were held with authorized persons and potential users of the square. As a result of the findings, a requirements list was prepared and the design process began. During the design process, design criteria for everyone were adopted, taking into account the demands of the public. In this sense, ceremony areas, car parking areas, sitting-resting areas, tea-coffee houses, sales units, water surfaces, martyrdom monument and green areas have been created. Plants native to and adapted to the region were used in the planting design of the square. As it is known, native plants need fewer cultural maintenance requirements such as watering, pruning and fertilizing than exotic plants, so a sustainable planting design approach has been adopted.

As a result, the Çarıkсарайlar Municipality Şehit Ömer Halisdemir Square Urban Design Project, prepared according to the landscape design criteria, was delivered to the Çarıkсарайlar Municipality in January 2018. The landscape project, which was received by the municipal authorities with great admiration, was applied to the area by the Çarıkсарайlar Municipality Directorate of Technical Affairs in 2017 and made available to the people of the town. With the application of the landscaping project, an urban square offering modern equipment and facilities was created, taking into account all the demands of the people of the sub-district.

Acknowledgements and Information Note

The article complies with national and international research and publication ethics, and ethics committee approval is not required for the study.

Author Contribution and Conflict of Interest Declaration Information

The article has a single author and there is no conflict of interest.

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