

# Research on Enhancement Strategy of Landscape Environment Facilities in Pocket Park—Take the Pocket Park of Shen Bei's Dream Journey as an Example

Xiaodan Zhou

Liaoning Communication University, Shenyang, Liaoning, 110136, China

**Keywords:** Pocket park; Comprehensive analysis and evaluation; Optimization suggestion

**Abstract:** The construction of urban pocket park has greatly improved the uneven distribution of green space in urban parks, and improved the appearance of the city from subtle points through the "stitch" layout construction, which is the renewal of the urban micro-space close to the life of citizens. This paper takes Shenbei Pocket Park for example, makes a comprehensive analysis and evaluation of the current situation of the pocket park, summarizes the problems of the park, and puts forward suggestions for optimization and renovation design, in order to provide references for the construction of high-quality urban pocket parks.

## 1. Introduction

At present, China's urbanization process is accelerating unceasingly, but there are still some forgotten corners in many urban areas and even urban central districts. It is very necessary for these plots to be rebuilt in a planned way to meet the needs of the development of modern urban social life. Urban renewal has become an important grasping and way to promote the high-quality urban development in our country. Pocket park is an important part of urban micro-renewal. As an urban public open space, it carries the important leisure life of citizens and contains unique memories of citizens' life. Because of its small area, flexible layout, and good landscape, ecological and social benefits, pocket park can effectively improve the level of regional greening in the process of urban renewal. Improve regional ecological benefits to meet the needs of surrounding residents for viewing, resting and socializing. However, there will be many problems in the use of pocket parks due to the limitations of area and site conditions[1]. Comprehensive analysis and evaluation of the completed pocket parks are carried out and optimization suggestions are put forward, in order to provide some practical methods and suggestions for the construction and development of pocket parks in the future.

## 2. Pocket park related concepts

Pocket parks, also known as pocket parks, refer to small urban open Spaces, usually scattered or hidden in the urban fabric as patches [2] . It can easily serve the surrounding residents and effectively improve the coverage of the service radius of the park green space. In 1967, Perey Park in the United States opened, marking the birth of the first pocket park. The pocket park is mainly built in densely populated areas, which can not only provide people with physical exercise space, make people relax, relieve pressure, which is beneficial to physical and mental health, but also promote communication between people, increase emotions, and expand social interaction. At present, there are various forms of pocket parks, including various small green Spaces, small parks, street gardens, corner gardens, etc [3]. With the gradual realization of the important role and value of pocket parks in improving urban ecological environment and improving urban quality and people's happiness, the number of pocket parks is increasing. At present, the construction of pocket parks is mainly divided into two types: one is to use the idle land formed by the patch space in the urban public green space to build new parks; the other is to upgrade the existing parks on the basis of existing parks.

The pocket park has the characteristics of small area, flexible site selection, diverse service population, etc. It can make use of the idle land, abandoned land, corner land and the scattered small space generated after the transformation of the urban demolition area, so as to achieve "green spot" and "empty spot", which can effectively meet the needs of people in some high-density urban central areas for landscape green space. Pocket parks are classified according to common layout locations into corner, middle of the block, and cross-block pocket parks [4]. This paper mainly studies the newly built pocket park in the urban public green space, which is also the pocket park in the middle of the block. It is located on the side of the urban municipal road and is open in the direction of the street for pedestrians to approach and cross.

### **3. Shenbei dream travel pocket park comprehensive analysis and evaluation**

#### **3.1 Construction Overview**

At present, most of the pocket parks that have been built in Shenbei New Area are between 100 and 2,000 square meters, which are evenly distributed in the whole area and are open to the public and have the function of rest and communication. The completion of the pocket park has improved the urban environment of Shenbei New District in an all-round way, and has now become a place for leisure and fitness for surrounding residents. The Pocket Park is located in the green space on the north side of Shenbei Road, in front of the South campus gate of Liaoning University of Communication. The main road of the school gate divides the land into two parcels. The park covers a total area of about 7350 square meters, with a regular rectangular shape, length of 210 meters and width of 35 meters. There is No. 30 bus stop on Shenbei Road in the site, and there are disadvantageous landscape factors such as high-voltage line tower in the site. There are more green vegetation and trees in the current situation, and Chinese pine and acacia are growing well.

#### **3.2 Construction characteristics**

In this paper, a comprehensive field investigation is carried out in a targeted way: First, the spatial environment and the characteristics of crowd activities in the pocket park of Shenbei Dream Journey are directly observed by using non-participation observation method, and recorded by means of photos and text, so as to provide first-hand information for later analysis; The second is to experience the field environment of the pocket park as a user. Field research was carried out from the characteristics of the pocket park theme, functional area distribution, plant configuration and maintenance, paving materials and forms, service facilities and other aspects.

First, from the perspective of the characteristic theme, the design considers the current conditions of the land, taking into account the use needs of different surrounding groups and the needs of the site function. The site is mainly used by college students from two nearby campuses and a small number of urban residents. The design theme is to serve the school and highlight the campus culture. The pocket park is designed with the theme of young college students' vigorous pursuit of their dreams. Reflecting the pursuit of college students' dreams, the university campus is also a platform for pursuing dreams, in line with the regional positioning. Second, the distribution of functional areas in the park is clear, respect the status quo of the site, maximize the use of existing green vegetation, and reduce unnecessary interference. The functional areas are mainly divided into theme entrance sculpture area, art and leisure area, imagination area, and communication area, which are integrated with each other to meet the needs of users. Thirdly, in terms of plant configuration and maintenance, the overall landscape of the pocket park is in good shape. The on-site plant investigation and positioning in the early stage of design have shown that the current *pinus tabulaeformis* and *robinia acacia* forests have been well maintained, forming a good green base. In terms of plant selection in design and implementation, plants with low canopy degree are selected, which can open the sight in the direction of the school. The newly designed plant landscape can also connect with the nature of the original greenery. In terms of paving materials and forms, the overall site paving is mainly granite stone, the color is mainly gray and white, the overall color is high, and the difference between the various districts is small. The service facilities are well maintained, the

bar seats and the seat space under the porch frame are diversified, and the crowd can choose when using, and the overall design has a high frequency of use.

### **3.3 Existing problem**

First, in terms of plant maintenance, although the pocket park has formed the effect of abundant upper space and high canopy through the preservation and utilization of existing trees, due to the high density of upper plants in the original site, the light under the forest is insufficient, and the shrubs under the forest lack of light and poor growth, and some shrubs have died. The line of sight between the wall and the school should be shrubs with a height of 1.2-1.5 meters to enclose the boundary of the site, which is conducive to forming a better feeling of the use of the site. In the later period, the plant maintenance of the pocket park is insufficient, and the growth is more chaotic after a period of time.

The second is the lack of functional space. Due to the limited width of the land in the park, the insufficient width of activity space and staying space, some of the activity space is small, in addition, there is a lack of shared bicycle parking area, the lack of parking space for shared bicycles around, and the problem of arbitrary placement of shared bicycles on the scene, which has a negative impact on the road interface of Shenbei Road and affects the regional image.

Third, the park road is the main context of the park, which can be connected in different areas, fully investigate the source and flow direction of users, rationally arrange the location of entrances and exits and the park road, emphasize the accessibility and portability of the park road, and guide users to reach the rest and activity space in the shortest time. In terms of pavement, energy-saving, wear-resistant and corrosion-resistant materials are selected. Ensure the sustainability of pocket park landscape effects and facility use.

## **4. Shenbei dream trip pocket park optimization and promotion strategy**

### **4.1 Establish the city image of park art aesthetics culture**

Provide different values for different life scenes in the city, launch a new urban space aesthetic concept with "art +" and "culture +", create a modern characteristic corner space, and show the open and integrated regional temperament of Shenbei District. The design should excavate traditional national art, engender unique connotations from regional culture, take science and technology as the means of expression, expand the influence of modern art, inheritance and innovation, and make humanized design that leads the public aesthetic concept [5].

### **4.2 Build an interactive system of park wisdom**

Form a digital application innovation integrating play, park management and ecology, including intelligent navigation system, intelligent movement analysis and guardian tree application system. Through big data application system, movement data of users can be summarized and analyzed, and interactive design can be carried out with vegetation, reflecting the artistic conception of harmonious coexistence between man and nature; You can also try mobile seating design to provide convenience for people to socialize in the park. Set up a tree identification system to set up two-dimensional code for major landscape trees, so that students and citizens can scan the code to understand the detailed information of trees, such as family, growth habits, and morphological characteristics, and play the role of science popularization education.

### **4.3 Pay equal attention to construction and management**

Pay attention to pocket park late management. Pocket parks are highly used. Therefore, higher requirements are put forward for plant conservation, park health, facility maintenance, order management and other aspects of late management, so as to improve the quality of life around the pocket park. Improve the level of maintenance and management of pocket parks, do a good job in plant management, facility maintenance, health and cleaning, keep green Spaces clean and beautiful, and jointly maintain the environment of pocket parks. In addition, the selection of facility materials should be as far as possible to choose ecological materials to enhance the comfort of people during

the leisure process. Starting from the actual needs, the implementation of the concept of energy-saving garden, make full use of the existing green conditions, according to local conditions, classified policies, select the best green improvement measures and the most suitable native plants. The area with high density of existing trees was transplanted to improve the light environment of the space under the forest. The new plants give priority to local and suitable plants that are easy to survive, easy to maintain and low-cost, and do not plant valuable trees to ensure the survival rate. We will improve public facilities in a targeted manner. The material of the table, chair and stool should be environmentally friendly and durable, in line with the ergonomic principle, according to the behavioral habits of the crowd, the use of seats, the use of frequency, whether to consider setting in the shade and other factors reasonable configuration. According to the pocket parks of different Spaces, the number of landscape facilities needs should be reasonably calculated, and the layout should be reasonably planned to meet the needs and avoid the waste of resources.

## **5. Conclusion**

As a point space of the city, pocket park can better connect the green land of the city, which is an indispensable part of the urban green space system. It can effectively improve the design connotation of pocket park and enhance the functional space of pocket park. From the perspective of users, it can meet the behavioral needs of people and provide the city with a space for people to relax. Therefore, in the design should focus on creating all kinds of activity space, stimulate the construction of composite space. At the same time, the design carries the historical memory of the region and the cultural spirit of the community, and should be recognizable, pay attention to carrying forward the regional culture of the site, create a humanistic landscape in line with the spirit of the site, and show the style of the city. Keep pace with The Times in the design of the pocket park, build a smart city information service interactive device, regular management, timely adjustment, combined with the requirements of the smart city era, to meet the mobile office and intelligent applications. Designers have to continue to explore the integration of different Spaces, so that the design of the pocket park is closer to life, more comfortable for people to use, and arouse the resonance of the people in the place.

## **References**

- [1] Li Xiaoman. Longbao River on both sides of the road green landscape transformation design. *Southern agriculture*, no. 3, pp. 41-42,47, 2019.
- [2] Zhang Xiaoyan. The application of roof garden in American urban renewal and its implications for China. *Journal of Beijing Forestry University (Social Sciences)*, no. 3. pp. 50-54, 2014.
- [3] Li Chihuahua and Liu Jihua. Research on the construction of new green space under the background of sponge city. *Building engineering technology and design*, no. 4, pp. 563, 2018.
- [4] Ding Feng. Research on landscape elements design of urban pocket park, Anhui Agricultural University, 2016.
- [5] Yu Haiyan and Wang Junjie. Exploration of aesthetic concept in environmental art design. *Beauty and times City*, no. 12, pp.77-78, 2017.