

Suggestions on Green Transformation of OCT Creative Park South Area based on Industrial Sites

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Abstract: This paper aims to put forward the scheme and strategy of green reconstruction of the south district of OCT Creative Park based on industrial sites. Through the analysis of the planning, landscape, function, architecture and management of the industrial site in the south area of OCT Creative Park, the paper puts forward the innovative design scheme, the improvement of green design and the introduction of environmental protection industry and innovative technology and other green transformation schemes. Through the literature review and research methods, these schemes are discussed and analyzed, and the final conclusion is drawn.

Keywords: OCT Creative Park; Industrial Site; Green Transformation; Innovative Design

1. Analysis of industrial sites in the south district of OCT Creative Park

1.1 Planning

(1) Positioning and location: The south area of octa Creative Industry Park is reasonably positioned, and the construction status is consistent with the positioning during the planning period. It is located in a location with convenient transportation, strong accessibility, numerous surrounding residents and large flow of people.

(2) Resources: There are enough merchants in the park. Except for 3 stores under renovation and 1 vacant store, other areas are occupied by normal business entities.

(3) Space and function: Rich types of space, sufficient underforest space, sufficient open space, green coverage in line with user needs. Various functional Spaces are well distinguished, with

ample rest space and access space effectively separated by height difference. Open space has wide vision and good ventilation. The restaurants and other consumption shops are well scattered, and the environment is well maintained, which brings a good sense of experience to people in outdoor space activities.

1.2 Landscape

- The overall greening is relatively insufficient

The coverage rate of green space is 33.69%, lower than the average of 43% in Shenzhen. From the data, the green space rate of South Creative Park is relatively insufficient. Through our analysis and interviews with site management personnel, we know that the reason is that the buildings in the park occupy a large area, but most of the buildings have tiled roofs, and the roof green space is few, so the greening rate of the whole park is lower. However, if the buildings occupy a large area, the greening rate of the creative park will become considerable.

- The rate of shade is low

The plants in the park are mostly native tree species such as palm trees and pollowi trees. Although planting and maintenance are relatively easy, the canopy of these books is small, resulting in low shade rate, and it is hot to walk on the main road in sunny days.

1.3 Function

- (1) Some infrastructure service functions need to be improved

The following results can be obtained through questionnaires and field investigations: The waste disposal in the park is relatively proper, and the respondents (74.47%) generally believe that the rest facilities are sufficient and comfortable, but the park needs improvement

in the setting of the sign system, toilet and air problems (for the questionnaire of the park's sign system, the respondents scored 4, the toilet scored 2, and the air problems were field research).

Specifically, the accessibility of toilets is not strong or the number is not reasonable enough, the signage system is not easy to identify and use, there is no smoking area, and the passageway has the problem of oil smoke collusion. In the future, the park should strengthen the construction of these aspects to ensure the basic needs of users.

(2) There are differences in the evaluation of art, culture and business climate

On the one hand, through communication with practitioners in the art field of the park, the construction of the park is convenient for art exchange, inspiration stimulation and various creative activities, which is reflected in the large gathering of practitioners in the field of art, creativity and design in the park, and the park has many art galleries and other Spaces, which the respondents are satisfied with. In terms of creating a business atmosphere, 84% of respondents believe that the green transformation of the park has "increased a lot" or "increased a little" on the attraction of the park and the image and competitiveness of the merchants in the park. Meanwhile, the service personnel of the catering industry of the Park believe that the park is a good choice for business operation, which is reflected in the large radiation range of the park and the large flow of people. Moreover, the management of the park is also conducive to business operation.

On the other hand, however, another respondent said that she felt sorry for visiting the park and hoped that the park would add or create some landmark region-specific check-in points to enhance the park's appeal. Moreover, according to the field research conducted by the members of the group, compared with the North district, the southern district has less artistic atmosphere and more commercial and working atmosphere. In terms of business atmosphere, a waiter from the catering industry said that the park has been lonely a lot in recent years, and the passenger flow is less than before.

1.4 Architecture

- Poor use of roof space

According to the satellite map, part of the roof of the OCT Creative Park is made of slanted tiles, while the rest is made of flat roof. However, no roof greening is used or implemented, which greatly wastes the roof space.

- The entrance of the building makes people uncomfortable

According to the analysis of the questionnaire results, more than half of the respondents of the randomly selected architectural entrances think that they are depressing, especially the entrances, which make people feel uncomfortable. As a friendly creative park, we should pay attention to the visitors' feelings in this respect.

1.5 Management

(1) Insufficient investment in cultural construction

Through interviews with the site management staff, we learned that the new development of the park in the future will be more inclined to artistic creation and cultural inheritance. Due to the nature of an emerging city in Shenzhen, as well as being a super first-tier city, Shenzhen has a relatively young urban style, so correspondingly, it lacks a relatively thick and precipitated cultural heritage. The same goes for this site, which has advanced technological and artistic flavor but lacks depth and thickness. Therefore, it is more necessary to increase its cultural heritage and confidence.

(2) Green facility management needs to be improved

The overall green coverage rate of the park site is very high. During the research process, we often saw the park staff taking care of the green plants. We also learned from the interview that the park regularly trims these green plants and regularly kills mosquitoes. However, the effect is very small. According to our own experience of the use of the plants in the process of research and the experience of other users in the interview, the mosquito phenomenon in the park is still serious even with the regular elimination work. Due to climatic and geographical factors, this problem exists almost all year round, so the management of this area needs to be improved and enhanced.

2. Green transformation plan and strategy of the South District of OCT Creative Park based on industrial sites

2.1 Innovative design scheme

(1) Protection and restoration measures of industrial sites

In the scheme and strategy of green transformation of OCT Creative Park South, the protection and restoration of industrial sites is an important consideration. Through the protection of industrial sites, the historical and cultural heritage can be preserved and the basis for the green transformation can be provided. In terms of restoration measures, a combination of protective restoration and functional restoration can be adopted, which not only protects the original appearance and historical value of industrial sites, but also enables them to adapt to the needs of modernization.

(2) The introduction and cultivation of creative industries. As a creative park, the green transformation of OCT South needs to pay attention to the introduction and cultivation of creative industries. By introducing creative and innovative enterprises and projects, the creative atmosphere and competitiveness of the park can be enhanced. At the same time, it is also necessary to attract more excellent creative enterprises and projects to the park by nurturing creative talents and providing an innovative and entrepreneurial environment for creative industries.

(3) Integration of cultural and artistic elements. In the green transformation, emphasis should be placed on integrating cultural and artistic elements to enhance the artistic atmosphere and cultural connotation of the park. The park can be built into a landmark with cultural and artistic value through art installations, sculptures and other means. At the same time, various cultural activities can be held to attract more people's participation and attention, and enhance the visibility and influence of the park.

(4) Integration of industry and city with community sharing. Green transformation requires the integration of industry and city to create a comprehensive park suitable for both work and life. In the green transformation of the south district of the OCT Creative Park, multi-functional public Spaces can be built to provide various convenience facilities and services to meet people's diverse needs. At the same time, community participation can also be encouraged to jointly build the park and realize resource sharing and common development of the community.

(5) Smart parks and technological innovation. In the plan and strategy of green transformation, the concept of smart park can be introduced, and advanced scientific and technological means and technologies can be used to improve the management and service level of the park. Through intelligent facilities and systems, the efficient utilization and management of various resources in the park can be realized. At the same time, it can also encourage scientific and technological innovation, promote the integration of creative industries and technology, and enhance the innovation ability and competitiveness of the park.

(6) Pay attention to the protection and inheritance of cultural heritage. In the transformation of industrial sites, it is also very important to pay attention to the protection and inheritance of cultural heritage. The historical culture of industrial sites can be passed on through the establishment of cultural museums, cultural blocks and other means, while attracting more tourists to visit them.

(7) Carry out creative cultural activities and exhibitions. In the operation of the park, it is also very helpful to carry out creative cultural activities and exhibitions. Activities such as creative and cultural festivals, art exhibitions and design competitions can be held to attract more young people and entrepreneurs to the park to start their own businesses, while also injecting new cultural elements into the park to enhance its cultural charm and brand influence.

2.2 Improve the green design

The plan and strategy of green transformation in the south area of OCT Creative Park aims to improve the environmental quality of industrial sites and create a pleasant and livable creative park. To this end, our primary consideration is to improve the green design, and one of the important strategies is to add tall courtyard shade trees. By planting these tall trees, we can effectively provide more shade and shade space for the park, and create a comfortable environment for people to rest and work. Introduce diverse plant landscapes and landscaped wa-

ter bodies. By introducing diverse plant landscapes and landscape water bodies, a richer and more diverse natural atmosphere can be brought to the south area of OCT Creative Park. The types of plant landscapes can include different kinds of flowers, shrubs and lawns, as well as various forms of landscaped water bodies, such as fountains and artificial lakes. The integrated use of these landscape elements will add a unique charm to the park and attract more people to visit and work there.

Ecological wetlands and rainwater collection systems will be built. To improve the sustainability of OCT Creative Park South, we also plan to build an ecological wetland and rainwater collection system. Eco-wetlands can effectively purify wastewater and provide ecosystem services, such as water purification and biodiversity conservation. At the same time, rainwater harvesting systems can collect rainwater and store it for irrigation and landscape use within the park. The implementation of these measures will help reduce dependence on external water resources and achieve sustainable development of the park.

2.3 The introduction of environmental protection industries and innovative technologies

(1) Restoration and protection of the ecological environment. In order to realize the green transformation, it is necessary to restore and protect the ecological environment in the south area of OCT Creative Park. By planting vegetation and ecological restoration, the green area can be increased, and the air quality and ecological environment of the park can be improved. At the same time, strengthening the management and protection of water resources and building rainwater collection systems and sewage treatment facilities can effectively reduce the waste and pollution of water resources. Through the restoration and protection of the ecological environment, a healthy and comfortable ecological environment can be created for the south district of the OCT Creative Park.

(2) The construction and promotion of circular economy. In order to realize the green transformation, it is necessary to build and promote the circular economy model. Through the construction of waste resource utilization facilities and recycling systems, the generation of waste and environmental pollution can be reduced. At the same time, promoting sustainable production and consumption patterns and encouraging enterprises and residents to adopt measures of energy conservation and emission reduction can realize the effective use of resources and environmental protection. Through the construction and promotion of circular economy, double benefits of economy and environment can be provided for the green transformation of the south district of OCT Creative Park.

(3) Social participation and shared development. In order to achieve green transformation, social participation and shared development need to be strengthened. Promoting public awareness and participation in environmental protection through environmental education and publicity activities can promote the popularization and promotion of green concepts. At the same time, encouraging enterprises and social organizations to participate in the construction and management of green projects can achieve resource sharing and complementary advantages. Through social participation and shared development, broad support and cooperation can be provided for the green transformation of the south district of the OCT Creative Park.

Conclusion

Through the analysis and research of industrial sites in the south district of OCT Creative Park, this paper puts forward a series of green transformation schemes and strategies based on industrial sites. These schemes include innovative design scheme, perfecting greening design and introducing environmental protection industry and innovative technology. The implementation of these plans can improve the environmental quality of OCT Creative Park South, enhance its image and functions, and promote its sustainable development.

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