Prosperity and Growth Are Mutually Beneficial-Landscape Design of Meihe Park in Zhengzhou Airport

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Abstract: In the context of modern urbanization and rapid urban expansion, large-scale urban green space is vacant. Driving the development of urban green space has become a new trend of urban development in China. This paper takes the landscape design of Meihe road Meihe belt green space Park in Xinzheng City of Henan Province as the research object. Through the design of "Prosperity and Growth Are Mutually Beneficial", combining the theme with the concept of ecological design, and taking the change process of people's healthy growth as the main line of the whole park green space development, we hope to present the public with a unique idea, reasonable and appropriate modern landscape planning method of urban suburban green space.

1. Introduction

"Park green space" is an important part of urban construction land green space system and municipal public land. It is an important indicator to show the overall level of the city and the quality of life of residents. For a city constructed by reinforced concrete, having a piece of public green space is the most valuable resource. Its existence plays a leading role in the city. It affects people’s health, way of thinking, behavior and emotion through visual experience, so as to play a psychological role in regulating people’s health. In today’s era of green water, green mountains and beautiful rural development, a large number of urban green space has been driven and guided to the trend, to achieve sustainable development. Excellent landscape should be appropriate, natural and appropriate, form a unified whole with the environment, and highlight its own cultural characteristics at the same time. How to reasonably protect and regenerate urban open space, improve people’s lifestyle and quality of life, continue the city’s historical and cultural context, and build ecological landscape diversity is worthy of our consideration.

2. General situation analysis

Meihe park is located in the north of central Henan Province, on the side of Meihe belt of Meihe road in Zhengzhou City, close to Xinzeng International Airport and core area. It is about 1000 meters long from north to South and 600 meters wide from east to west, with a total area of about 60 hectares.

2.1 Human factors

Zhengzhou is located in the transition zone between the middle and lower reaches of the Yellow River and the northeast wing of Funiu Mountains to the Huang Huai plain. It has a continental monsoon
climate in the north temperate zone with four distinct seasons. It is an important birthplace of Chinese civilization, a national famous historical and cultural city, one of China’s eight ancient capitals, and one of China’s six major sites. Zhengzhou has been the capital for five times in history. It is the hometown of Xuanyuan Yellow Emperor, the ancestor of Chinese culture. It has immovable cultural relics (as shown in Figure 1).

2.2 Advantage
In the future, the experimental area, the central city of Zhengzhou and the central city of Kaifeng will present the trend of "Golden Triangle of Central Plains". The northern part of the base is used to develop the aviation logistics industry, and the western part is a comprehensive industrial park, including the Taiwan Industrial Park and Foxconn supporting industrial park, which continue the existing processing and manufacturing industrial functions. Industrial land is arranged along both sides of the four port linkage Avenue. In the future, a regional headquarters base will be planned on the east side of the river. Through the construction of greening, supporting facilities and leisure facilities, the overall quality of the environment will be improved, and a good office and living environment will be created for the surrounding practitioners. The base is located in the southeast of the main canal of the South-to-North Water Diversion Project, facing the old city of Yuanling. A production service port sub center is planned, and a large number of people will be injected into this area in the future.

2.3 Disadvantages
Meihe park is at the edge of the green space system planning. There are a large number of shelter belts and original ecological ponds in the site, and some brick walls are piled up. Yuanling ancient city park is the nearest large park to the project. The planning of Meihe landscape system should focus on how to coordinate with the green space system around Yuanling ancient city, and the ecology and design are appropriate. The project base is located next to the waterfront landscape belt of South to North Water Diversion in the "two axes, two belts, three centers and many points" landscape system of airport district. Two Landscape Lakes are planned in the south of Meihe River and around Yuanling ancient city. Therefore, the planning of the project should also focus on the overall consideration of the water system around Yuanling ancient city.

3. Design conception
The theme of the cultural design of the park is "prosperity and growth, adaptability and suitability", which means that people germinate and grow as luxuriant as plants, and the scene of each growth stage is suitable for the design of the park. In line with the concept of green ecological design, the theme is used as the streamline throughout the whole design. While stabilizing the basic functional space, the overall spatial layout of the park is basically formed. The main line goes through the growth process of "source" of cosmic cell element distribution square, "birth" of embryo shaped artificial lake, "Youth" of juvenile activity square, and "strong" of strong adults, and then to "decay" of decayed trees and plants, and finally to "return" of ancient and rare years (as shown in Figure 1). Every place and every point should be as appropriate as possible.
4. master plan

The design concept of the park is based on ecological design and green design. It should not only meet the needs of people, but also consider the protection of the natural environment and ecological environment. It should consider the harmony of human society nature and composite ecosystem. It should be developed from the overall, long-term and clean and healthy design concept, based on the principle of people-oriented. In terms of overall spatial layout, there are main entrance, central square area, waterfront viewing area, ecological oxygen bar, leisure square, green viewing area, children’s recreation area and other areas, which are respectively named "Siyuan Square", "Happy World", "Liuhua Pool", "Keyin Forest", "Liuang Square", "Yunzhen Square", "Dicui Terrace" and "Sunshine Grass Slope" (as shown in Figure 2).

The park is divided into ground characteristic footpath, bicycle lane and air footpath, with a variety of sight and road, dynamic and static combination, density combination, fire lane, vehicle lane, pedestrian lane, running footpath, sightseeing footpath and other paths are interspersed with different scenery, non-interference, with the help of the original dense forest hedgerow and other plants through the scenery, barrier scenery, borrow scenery, to create a variety of space atmosphere for visitors.
5. Space node design

This project divides different forms of nodes through different functional spaces, and takes "prosperity and growth" as the concept. The flowing linear road runs through the whole park, creating an arc landscape axis. The types of nodes are mainly leisure, ornamental and ecological. Square leisure, children’s Park, wetland ecological plant area, sunshine lawn, small park and other types of parks are arranged to meet the requirements of "going out to see green, 500 meters to see Garden", convenient for nearby recreation, and meet the different tourism needs of different types of people (as shown in Figure 3).

"Source": the entrance square of the center is paved with cell, molecule, atom and other element patterns, which are combined with the surrounding dynamic water and characteristic commemorative sketches to form a large activity square for people to gather and gather here, and guide signs such as signs are set up to guide people to the various districts of the park. The linear and circular landscape pool design of the road surface echoes with the surrounding Meihe river system. The depth of the pool is 0.4 meters. The lower data depth is adopted, and the modern design is considered from the perspective of safety.

"Health": to the left of the entrance of the park comes the ecological design site, which not only retains the original high-quality trees, but also plants a large number of dense peach trees, which complement each other visually and olfactorily. In order to keep the balance of earthwork, many reservoirs in the site should keep the existing reservoirs as far as possible and be planned to reduce the waste of resources and over development. The design concept of Liuhua pool is "birth" -- a newborn baby, giving birth to an embryonic shape. People on the underground trail, the establishment of a white Gallery, connecting nodes and roads, pass through the flower glasses and squares, and tour around the pond. The metasequoia planted in the pond are sheltered, which not only creates the space environment, but also protects the ecological environment (as shown in Figure 4).
"Young": the northwest side of the park is the square design of "young" and "middle-aged", with the theme of "young" in the process of human growth. Considering that there are children’s amusement facilities at the southeast entrance of the park, it is convenient for the residents in the right residential area, and they don’t want to go deep into the park to play with children. At the same time, the northwest recreation area echoes the southeast corner. In the design, modern design style is used, simple and ingenious entertainment device is combined with the material of formula on the ground, so that children can experience different intellectual leisure sports on the basis of reducing material and energy consumption.

"Spectacular": the north side of the park is close to the main road of the city, which is a secondary landscape entrance. It is still designed as a medium-sized square, with more leisure and distribution space. The central part and the air trail strengthen the landscape sequence organization of the main axis of the whole East-West landscape, while the south-east and north-east entrance square provides the basis for it to form the skeleton connection relationship. There are many abandoned bricks and tiles in the original situation, so the design of the site is mainly based on the processing of waste stones, supplemented by wood materials, giving it ecological design.

Then to "decay" and "return", life has gone through a circle, from rotten trees and withered plants to returning to nature. People climb mountains and look far away, even small hills, will make us feel and sigh about the growth we have experienced in this life. In the design and treatment of "return", we still maintain the original earthwork site, combining with plant planting planning, placing sketches and rest places, continuing the geomorphic characteristics of the site, which can be viewed and moved on. Among them, due to the height of the terrain, you can overlook the modern science and technology "water curtain" in the distance, and see the endless interpretation of multi-layer angle and multi-layer space (as shown in Figure 5)!

6. Conclusion
The landscape design of Zhengzhou Meihe green space Park combines the design theme of "prosperity and growth, mutual growth and suitability" with the concept of ecological design. Through the change process of people’s healthy growth and the brick laying of various elements, cultural sketches, facilities,
and characteristic topography, it fully shows a modern art ecological urban green space park. It refines the site and regional culture, skillfully combines with the requirements of modern ecological green space, and preliminarily discusses how to make use of the surplus urban green space to maximize its utilization and create a green space. Blessing people and giving back to ecological nature.

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