

Research of Urban Road Greening Construction

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Abstract: Urban road are the main components of urban form, has the function of connection, regionalization and hold space for pedestrians and motor vehicle traffic, provide hold space for the city's public pipeline, at the same time have a series of effect on urban landscape system, the urban road greening is the important of urban landscapes. In this paper, the road greening research and analyze current situation and existing problems, this paper expounds the present development status of urban road greening, significance and research achievements, and aiming at the problems existing in the road greening put forward the corresponding measures to make the outlook an construction of urban road greening.

Keywords: Urban road greening; Construction measures; Urban form

1. Introduction

The window of the urban roads and urban landscape, is the urban style and features, the outstanding performance of the characteristics of the urban road greening is an important part of city road, also is an important part of urban landscape green space system. How to use well in the city road plant element, and position in time selection, reasonable layout, form an organic garden city road green space system, In improving urban climate, environmental protection, city art and city appearance, rich urban traffic and other party and is of positive significance.

2. Present Problems of the Urban Road Greening Construction

2.1. Ignore the greening and underground pipe network, the contradiction between overhead line

Buried in the underground pipe network on the location of planting large arbors and blindly, plant growth power weakened as a result, even because of root system can't stretch, learn less than the required nutrients and death; In below the overhead wire blind 34 PI eces, weeping willow, planting trees, cause trees line contradictions have to branches, Affected the beautification effect, more serious is windy season, because of branches, not in time cause lines, has a harmful effect on people's life and property.

2.2. One-sided emphasis on greening, ignore the traffic function of road

Planting a tree on the sidewalk not compact shrub walking or cycling; Dense planting on narrower points bring a lot of shrubs, blocking the line of sight of driving. On the island, this contradiction is more outstanding.

2.3. Design form drab and too close

Primary and secondary roads in the same, no characteristic, no innovation, lack of vigor and vitality. High points railings on both sides of a vehicle, appear crowded roads, influence of city appearance.

2.4. Blindly choose alien plant species

Only immediate effect, not to consider long-term interests. Choose without domesticated varieties of alien plants, as a result, due to not adapt to the local ecological environment. Not only caused economic losses, and affect the overall effect of the green.

2.5. Single plant configuration levels, lack of cladding type community configuration form

On some can use stratified type of green space is still adopted "a way the two rows of trees" planting patterns, lack flowers under the trees shrubs and ground cover, did not give full play to the ecological function of the plant.

2.6. The landscape fragmentation is high

Not form a complete corridor network, ignore the urban road green corridor construction, although the green square space new, expanding unceasingly, but no good connection between green corridor and patch.

2.7. Lack of humanistic consciousness

Road greening landscape construction lack to person's Angle as a starting point, to consider how to meet the needs of people of various physical and psychological, forget the road greening landscape design ultimate goal is to provide comfortable and graceful human traffic space. Road greening landscape construction lack of cultural

connotation, can't resonate with the person's psychology, edify sentiment, not rich people's spiritual life.

2.8. Road greening pruning not in time

With the advent of summer, lush trees "hid lamps", "hidden street", "hidden lights". The trees of the sections of the road is too thick, hides some signs, lights, etc., bring safe hidden trouble passing vehicles and pedestrians.

2.9. Disconnect between urban road planning and construction and the urban road greening construction

Urban road planning and construction with urban road greening construction, road construction and road greening cannot be synchronized. Before some of the planning and construction of roads, are often the first to road construction, in the land, had not enough landscaping, LuJian Cheng found on either side of the road greening belt width is not enough, after the land again, Even some land can no longer want to, can not reach the expected effect of greening and landscape, the form is incomplete, different forms of landscape. Some plot redundant construction, make already nervous afforestation funds cause unnecessary waste.

2.10. A serious shortage of urban road greening construction funds

Caused a serious shortage of urban road greening construction funds, greening effect and quality. The virescence maintenance, maintenance cost is low, it is difficult to maintain good greening effect and quality of virescence. In the main channel of government investment, therefore, at the same time, should be many potential in financing, make the urban road greening cost plenty of security.

2.11. Maintenance management does not reach the designated position

"Heavy construction, light tube" is one of the most common problems existing in the urban road greening. On the one hand, because of the lack of road construction funds, insufficient maintenance after construction, afforestation effect is unsatisfactory. Secondly, the lower level of landscaping team better educated and more professionally competent, lack the necessary training. Many maintenance workers of all kinds of garden machinery, plant growth characteristics, curing method is used to master does not reach the designated position, lead to the maintenance, the method is not correct, not in time to cause construction funds, plants, the waste of resources.

Landscape design without planning, multiple cropping pattern, can't form the unified point, line and plane effect, Joe, irrigation, the collocation of grass also casual, seeking rich three-dimensional landscape effect, ignores the function of the road itself, the whole road crowded con-

fusion, plant virescence maintenance has become very difficult. Some roads because design science, not only limited parking space, and traffic is very big, the result is people trample destroyed, trees can't grow and survive.

3. Main Urban Road Greening Construction Measures and Suggestions

3.1. Strengthen the scientific planning of road greening

Road greening department to participate in the planning process to roads, some problem in front of the building. Greening construction should be unified bidding by road greening engineering management department, and construction supervision, improve the level of greening construction. Increased funding for road greening construction and management, further improve the level of art road greening planning and construction management level. Leadership, department coordination, public participation, promote the healthy development of the road greening. Increase green awareness, strengthen the landscape law enforcement, the greening regulations for violation of governance according to law.

3.2. According to the choice of urban road greening plants

Perfect, plant landscape design should not only consider the ecological habit, and be familiar with plants of ornamental performance, but also pay attention to the combination between plant species groups beauty harmony with surroundings. Trees is the main part of the construction of urban road greening, plays a key role in the road greening.

3.3. To strengthen the road greening plant maintenance management

In order to strengthen the management of maintenance and management work, sufficient funds and high-quality professional team is work smoothly and reliable guarantee of the management. At present, should increase the intensity of a contingent of professional virescence training, strengthening virescence work staff re-education, update knowledge, make the urban greening to high-level, high-quality development. At the same time, improve the garden mechanization, accelerate the garden the transformation of scientific research achievements.

3.4. Development road green space, rich road landscape

Strengthen the vertical greening and landscape greening green such as green, tear open wall, extension of urban road green space, rich of road forestation landscape effect. With the development of urban traffic, road traffic, limited space available for road greening. To explore the road greening form, increase the amount of green, rich

road greening landscape, road green space landscape development challenges. Vertical greening, vertical greening, tear open end through green extension road green space, the plane for stereo greening greening development, will be dedicated greening, landscaping and other kinds of park green landscape through the open end, into the road green space landscape, enrich the forms of road greening landscape and the overall effect. Such as in the old town of the city, the road narrow, high building density, population density, road have been unable to planting trees, can adopt vertical greening and decoration flower POTS and other way into the green hall, improve road greening landscape effect. Green wall, make the units special green space and road greening organically integrated, but rich road greening landscape, open field of vision, pedestrian is helpful for the improvement of the whole street unit the external environment, enlarged the scope of the growth of the ecological communities, community species more rich and perfect.

3.5. Strengthen the management of road greening science

We will break industry monopolies, innovation mechanism. Green departments should concentrate all focused on the guidance and management, on the basis of equality to carry out fair competition. During the construction of road greening design, the implementation of the system of public bidding and project supervision. In landscape plant introduction propagation, cultivation give full play to scientific research units, botanical garden, a nursery of their respective advantages and complement each other. For completed road green space can carry out various forms of cooperation, publicity, mobilize the forces of the whole society to strengthen the maintenance and management.

3.6. With ecological landscape concept to carry out the road greening in urban and rural areas

The ultimate goal of road greening in urban and rural areas is to maintain the urban and regional ecological balance. In order to achieve the ultimate goal should be introduced in rural and urban road greening construction of ecological landscape concept, establish the urban and rural road greening ecological goals. Ecological garden is the people, society and natural harmony as the core, with the ecology principle research relationship with the environment of plant individual and community, At the same time, the development of research on plant community, composition, characteristics and interaction, the formation of regular artificial ecological economic system.

3.7. In road greening construction in city features

From the Angle of ecology, the characteristics of different areas, different climate, different cities, there are suitable for the growth of the local plant communities, the

city's history, culture, humanities, characteristics, etc., also need the appropriate vegetation landscape ornament and foil. Therefore, road greening planning should emphasize the continuation of historical context, should be combined with local specific conditions, the road greening design with local topography, climate, living custom, closely combined with the local ecological landscape environment into the city landscape design, For example, according to local were flower plants and shrubs, folk customs, etc, so it will be in the middle of the intangible local culture, the humanities environment into road greening, makes the city's culture better, Not only let the future generations a better understanding of the culture of the city, also let foreign visitors to understand the characteristics and historical and cultural city.

4. Some of the Considerations for Road Greening

Improve the level of plant configuration, reflect city regional cultural features, strengthen the reasonable design of plant community, improve the efficiency of ecological, emphasizes the harmony between human and nature, promote the sustainable development, mainly from the following several aspects.

(1) Some more capacious street (generally refers to the 40-50 meters) on both sides of the tree, when considering the overall effect, shall be planted on both sides of the symmetric tree, because of the asymmetric line tree can make a more symmetric stable road become out of balance.

(2) In a smaller road, can be used in a single plant, the natural type planting and so on, can also adopt flexible and diverse forms such as moved a flower pot cultivation.

(3) The road greening is a dealership for road user scene moving dynamic landscape, therefore, in the process of road greening, should fully consider the continuity of the green.

(4) In terms of greening, the plant of sunlight, moisture, temperature and soil has certain requirements, so in the design of road greening will accordingly to meet the requirements of the plant to the environment. For example, in order to maintain plant life effective soil deep: herb 30 cm, 15 cm, shrubs, small trees 45 cm, 60 cm large shallow root trees, largedeep-rootedness trees 90 cm.

(5) To strengthen the pedestrian overpass, greening under flyovers, highways, there is no denying the fact that cities like highways, overpasses and three-dimensional traffic patterns to ease traffic has a very important role, But it also brought a lot of negative effects to the urban ecological environment, such as shadow, blind Angle, increase the noise, uniform gray tone, this is the difficulty that street greening. To do this, you can in the overpass column is full of up plants, pedestrian bridge with green shade rain, so that those who belonged to "visual pollution" gallop Bridges, overpasses become city one scene,

Beautify the environment and have very good greening effects.

(6) The function of the road greening should take into account the road, such as the sexual life of trees along the road mainly consider shade effect, and the traffic road, planting rows of tall trees on both sides, will keep out the line of sight of the driver, At the same time, the trees in the sun, will produce anti light spot on the road, affect driving safety. For this, the road greening should be according to the function of road, when weighing the pros and cons of various aspects, choose appropriate greening method.

(7) For the green city air quality has two roles: Plant ecological purification effect and to prevent the spread of pollutants. According to the results of the experiments and analysis of trees to prevent the spread of pollutants is mainly controlled by the tree crown density instead of the green, Then tall plant ecological purification effect compared with inhibition, which dominate; In the number of cars is small, the plant purification effect can not be ignored. Therefore, in the process of road greening, should be combined with the feature of pollution concentration, different path according to the different greening plan, for traffic or pure pedestrian channel, should give priority to in order to meet the requirements of landscape, strive to increase the amount of green. Feel in the configuration on both sides for making traffic street tree species, should not be simply emphasizes the increase amount of green, but should notice to motor vehicle exhaust gas dilution and quickly get rid of the street, Suggest the lanes on both sides of the green is given priority to with combination of grass and low shrubs, allocation about now, namely on the grass in the 10 m² design 3 shrubs (excluding hedge), should not be too tight, should be as low as possible, avoid obstacles to stick to the spread of pollutants.

(8) Should try to protect the city streets and natural vegetation on both sides of the original natural legacy, reconstruction of green corridor and habitats, and form the green ecological network, the configuration should conform to the natural law of development, Including abound the seasonal change of artificial plant community and decoys compound plant community, do reasonable collocation, coexistence and co-prosperity.

(9) Must pay attention to the use of plant itself on the green features such as tree, design and color, leaf color, fruit, branches, etc., local history, culture, form a specific environment landscape effect; Stereo feeling of mature trees and tree profile at the same time, through the plant inside and out, and the reasonable application of winding ups and downs of the terrain, make the forest edge line, canopy line has the change of the ups and downs rhythm, form the landscape beauty of rhythm.

(10) On plant species selection, maximize the choose local plant landscaping, this contributes to the local cha-

acteristics of biodiversity protection and recovery, is the embodiment of the traditional culture and national area: For the rich local landscape plants and plant landscape, can be planned properly introduce foreign domestication or vegetation species, but must be adapted to local climate and soil. Because not all plant road environment ideal living environment, this requires choosing tree species should be vitality is strong, can resist soil drought for a long time, waste gas and dust from the cars, the formation of halosols deserts, abundant, reasonable configuration of compound plant ecological communities.

(11) To introduce the concept of green quantity and current rate, green coverage rate of urban greening and other indicators can not be truly reflects the ecological benefits of green land, improve the stereoscopic 3 d green quantity can improve plant community with the outside world mass exchange efficiency of material flow, energy flow and improve the ecological benefits. The humanized urban road green space landscape plant landscaping, should try to choose large leaf area, leaf kind, high photosynthetic efficiency is high, the three-dimension green quantity of plants, increase the leaf area index, green land, promote community photosynthetic efficiency, creating a suitable microclimate environment, improve residents' sense of connection with the natural environment, improve the quality of life.

(12) Strengthened in its plant community updates, and the ability to recover. Famous American ecologist odum pointed out that "human natural can and should use less as far as possible to have a huge role model and process" on nature, Urban road green space configuration of human nature, trying to grasp the area of zonal plant community species composition, structure, characteristic and the law of succession, Change of plant configuration management for the source at the end of the event management and administration, using biological control symbiosis theory to adjust and build to improve the planting structure, to enhance the stability of plant community itself and the resistance, Such as green space of make the most of litter and green manure soil to adapt, to recycle and reuse, form virtuous circle mechanism of colony expense; In plant community in a comfortable environment for beneficial insects and amphibians; Urban green space plant pollution-free control; Using the theory of artificial climax and succession of dynamic balance, form to participate in the succession of nature, natural force equilibrium, stability and beautiful natural landscape, etc.

In short, urban road greening is more than a reasonable layout of Joe, irrigation, grass vegetation green, it is a green, including technology, system, behavior, exist in the structure, function, the system in the process of green, and the mechanism of competition, symbiotic, autogenous includes green, ecological system project.

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