# Literature Review of the Urban Road Landscape Design Ideas

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**Abstract:** Urban road landscape design is a complex synthesis, it is necessary to realize the function of the road itself, but also to meet the modern urban life's requirements, adhere to people-oriented, in line with local culture characteristics as well as for the city's image and keep saving natural resources as the design principles, to the unity of the people, vehicles, road, landscape height, designed in line with the people higher pursuit of city road. In this paper, the road landscape design train of thought for the spindle of the literature review.

Keywords: Urban road; Landscape design; Design ideas

### 1. Introduction

Urban roads for cities like blood vessels of the human body, is a framework for the city and the basis of urban traffic and transport. Urban space as part of the composition of the road, in addition to meet the transportation function, division and convenient neighborhood building layout, we must also consider the urban landscape design requirements. With the development of society, urban roads become increasingly important space for outdoor activities, the construction of a traffic not only to meet the functional requirements, but also ecological and beautiful green landscape road, will bring clean and fresh feeling, but also to the construction of the city into the infinite life. It is the urban landscape of the network and it can improve the quality of urban ecological environment, to achieve harmony between man and nature purposes. Therefore, good urban road landscape design is very important, it can meet the requirements of people, vehicles and environmental landscape, unifying people, vehicles, roads, buildings and the surrounding environment. They will become a dynamic and static coordination harmony of landscape painting. Among these, the various types of urban road landscape design ideas is especially important.

## 2. The Planting Design Roads

Road planting, can enrich the road landscape along the way, improve along the roads and landscape coordination, improve the driving comfort, make the whole region, including roads, landscape more beautiful, to improve traffic conditions, direct the eye, shading, and reducing the tension of driving, eliminate the visual fatigue, ensure the traffic safety, alleviate the harm caused by traffic, improve the environment along the road. When planting trees, we should consider the regional characteristics of the natural environment along the line conditions, determine the location of planting, scope and types. For some of the unsightly street views available continuous intensive green trying to cover up, to beautify road capacity results. Green design is dynamic road green landscape, pattern requires concise, structured, rich colors, coordinated with the surrounding environment.

## 3. The Design Form of the Road

Due to the rapid road in the city, its height, width, scale to deal with urban design traditional landscape fully taken into account in order to reduce the fast road's fragment to the traditional landscape and the surrounding environment. Especially to control the height of the freeway to avoid the traditional emphasis on the building facade as the ratio between the damage fruit. If necessary, it can be opened with a ground-mounted height gap between buildings. Whether road line straight, curved, has its own aesthetic characteristics, it should be based on dynamic visual characteristics of linear necessary landscape analysis, such as the high-speed line for high demands, if the line does not fit well, it will not only affect the landscape of the road, but also cause accidents or even increase. To study the dynamic point line from a long-term point of view, only considering combining the driving function and aesthetic principles, the beauty of lines on the road can be fully reflected, then it can create rich dynamic landscape. In addition, the road alignment design should be combined with the ambient atmosphere and terrain conditions. For example curved road full of changes, with the extension of the people's point of view, the scenery along the road also will be constantly changing, lively, giving a strong human touch. And the straight line gives a solemn feeling. In a word, it should reflect humanistic consciousness, and different line for urban traffic trunk road, due to the stress path attribute, is characterized by the pursuit of clear on the goal. This pursuit is to rely on the route of shortcut convenience, reflected on the planning and design of the road alignment and

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coordination wiring landscape. Wiring directly form the landscape characteristic become the main problem of this kind of road landscape design. Therefore, the wiring emphasizes its "show place" property to break only as path and rendering space drab and inflexible. At the same time, due to the outstanding properties of the path, the road users quickly reach the goal of high-speed travel.

### 4. The Design of Road Transport Facilities

Traffic facilities is unimpeded traffic safety guarantee. Traffic facilities and landscape design is the unity of contradiction, reasonable transportation facilities will enhance the landscape design of the road, otherwise it will destroy Parkway. Sign, the sign design should give priority to with attached type, and the door frame should not be used. They can be laid at the outside of the machine non-separation zone, close to motorized vehicles, to facilitate the driver promptly and clearly distinguish the traffic sign information to make the right judgments . We should strengthen the role of marking in the city, through good line designed to direct traffic flow. So as to ensure the installation of traffic facilities to fulfill the function of the landscape and meet the design requirements.

## 5. The Combination of Road Space Landscape Design

After the analysis of the main road landscape design landscape elements and ambient atmosphere, space starting elements such as roads, roadside architecture, attractions, space facilities comedy, greening are organized. But no shortage of styles to form a neat continuous function space. For carefully selected pieces, lighting, finishing touch. Urban roads generally refers to pieces arranged on the sidewalk and building space abdicate chair, orange, tables, flower pots, flower beds, flower racks, signs, barricades and booths, gallery and sculpture. Some of these facilities constitute the space environment, often with small patterns, beautiful shape to decorate the space, so that would have been a very ordinary environment becomes seductive beauty, play a finishing touch, improve the entire realm of art space environment, strengthen the atmosphere.

### 6. The Design of the Underground Part

In the road landscape design, it was easier to ignore the state of the underground part of the fact, however, the aerial parts of the landscape reflected our eyes is affected by the condition of the underground part. For example, if there are underground subway and street, due to the entrance must be set in the usual trail, it will affect the width of the road constitute, or you must consider the location of the set. In addition, since the position of the pipe determines the thickness of the soil, the planted on the road to the selection of tree species will bring restrictions. In order to achieve the desired effect of road landscape, it must be seriously considered what conditions are necessary, if possible, we can adapt to the method of determining the scope, indicated the status of the underground part of the elements.

## 7. Floor Covering Design

The road pavement ground should be flat to minimize the elevation changes. When the ground elevation changes, should be clearly marked, such as the use of eye-catching colors, choosing different performance of paving materials under different climatic conditions, such as in hot and rainy south, it should be used absorbent, rough surface materials during the rainy season from slip effect, while in the northern cold areas should be selected poor water absorption, rough surface and rigid materials, nonslip frost and difficult to damage. The choice of paving materials and the color designed can strengthen the image of the landscape in the commercial street.

# 8. The Natural Scenery, Human Factors Considerations

Considering about the natural scenery and cultural elements, on the one hand, it can help reflect the style and features of the city, on the other hand, it can reduce fatigue in moving and increase interest and pleasure trip. Therefore, we should try to organize road environment using the scenic spots around the road, Places like road ahead, it should be a good way to combine landscape on both sides of the road and other connected; meanwhile it should also be well organized between humanistic landscape, historical cultural sites and scenic spots along the road to make it complement each other. It not only adds interest to travel, but also enriches the landscape beauty of the city roads.

## 9. To Consider Human Activity

Before the design, it is necessary to consider what specific activities were in the road. Because recurring activities in these roads are a prerequisite for the design, but also the object of landscape design and control. In the design process of the pedestrian street, understanding the characteristics of pedestrians is necessary. "Walk" is the most basic means of transportation ,not depended on any of tools and techniques, but also the slowest means of transportation, contacted most closely with the street environment. Therefore, the requirement for the quality of walking environment is also the highest. If walk in a slow speed, we can obtain different effects with windows landscape, focus on landscape elements is much higher, and vision is more open. Beautiful streets created only by a few leading designers is impossible, and it is the product of highly social consciousness.

## **10. General Image Element Analysis**

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The content of urban impression is related to the physical form, and it can be divided into five categories: road, area, node, boundary and marks. But the medium scale influence the road image elements in the order like that: buildings, places, roads, signs, borders, area. The results are shown in Table 1.

Table	1.	The	road	image	elements
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Element type	Building	Site	Road	Signs	Border	Area
Number of samples	20	15	14	9	9	2
Rate	100%	75%	70%	45%	45%	10%

## **11.** For the Integrity and Coordination Considerations

Considering the overall continuity of design, it requires the designer from the overall to consider the way as an integral part of the urban space system, the urban road space systems into the urban landscape, then we can combine urban green space system with urban water systems. Pay attention to the spatial arrangement of the contact, the vehicle and the surrounding built, it can provide people with the opportunity to contact with vast nature and create a good road space. Putting the road space and landscape elements into a particular space-time continuum to be combined and expressed full of reaction urban evolution. This evolution makes a positive contribution. We should try to do so in time and space to maintain continuity. Therefore, in cross-section road design, road should not be confined to the red line to be considered. Combined construction abdicated red line, integrated cross-sectional consideration to the public with a complete harmonization of the outdoor public space.

### **12.** Conclusion

By comparing with other designs, we can conclude some content and design requirements, and the results are shown in Table 2.

#### Table 2. Design content and design requirements

Category	Content	Design requirements				
Rest facilities	seat table and stool	has certain capriciousness, with comfortable and elegant preferred				
Sanitation	ash-bin modelling concise	easy to clean, wear resistance, combined with more rest facilities				
Sanitation	drinking fountains	function and the combination of decoration, ensure visual clean feeling				
Sanitation	public toilets	set at rest or near the site construction market supporting part, have convenient contact with best communication places				
Utilities	booth	excellent, major in chic, choose the crowds gathering places utilities magnetic car phone color striking, local surround close, the line of sight but fully sound insulati performance is good				
Environment sign	roadmap	to choose crowds gathered for places, smart and beautiful, and can reflect the characteristics of location				
Environment sign	tourist map	select the places where crowds gathered Settings, smart and beautiful, and can reflect the characteristics of location				
Environmental logo sign	fence	concise, simple but elegant color and generous				
Greening facilities	planting container can	have certain liquidity, resistance to wear				
Other facilities	lamps	concise and lively colour				

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