The Proposals Of Landscape Solutions For Highways Environment

Zarif Adilov, Professor Zafar Matniyazov

Abstract: The article emphasizes the fact that in the case of urbanization of intercity roads, a needle leaf conifers and deciduous selection of local and introductory plants, along with giving advice on the use of ornamental plants used for gardening pathways, along with a small architectural structure and a landscape for highways. Nowadays, in the Republic gardening main roads and priority tasks to solve the problems reflected in the following issues.

Index Terms: motor roads, landscaping, ornamental plants, landscape design, introductions, small landscape, architectural devices, innovative landscapes, velvet tracks, pavement, fountains.

1. INTRODUCTION
The article emphasizes the fact that in the case of urbanization of intercity roads, a needle leaf conifers and deciduous selection of local and introductory plants, along with a small architectural structure and a landscape for highways. Nowadays, in the Republic of the countryside, the main roads and priorities to solve the problems reflected in the following issues.
- Use of ornamental plants used for landscaping of highways;
- Application of landscaped ornamental plants in landscape design solutions to local and republic;
- The advantages and characteristics of selected plants depending on the region;
- Recommendations for improving the small landscape architectural equipment used on highways are highlighted in the article.

Roads bring people closer to each other and help to further deepen relationships called friendship, solidarity and reconciliation. At a time when we are facing the twenty-first century, roads must be spacious, flat, and comfortable, which can meet the requirements of that time.

2 THE PRACTICAL SIGNIFICANCE OF THE RESEARCH
Large-scale work is under way in Uzbekistan to create a complex of various types of business that is compatible with the world standards. In the first years of our independence, our state paid great attention to the world market, development of trade and economic relations with the outside world. In particular, construction and reconstruction of transport facilities - highways, bridges and tunnels, airports and airports are underway. The program covers the construction, reconstruction and commissioning of new highways. Moreover, the hardworking people, who are living in this land, should enjoy the benefits of their labor. Today, roads in the country that meet the broad and diverse requirements of the narrow and windy roads are replaced by roads. We have to say that many good works are being carried out in our country so that only trampled roads are left in the memory of the people. In recent years, at the initiative of the head of our state a special attention is paid to the development of transport and communication networks. Taking into account that the Presidential decree of the Republic of Uzbekistan from February 14, 201 of No. UP-4954 "About measures for further enhancement of system of management of the road management" and the Presidential decree of the Republic of Uzbekistan "About the State committee of highways and Republican road fund On the introduction of amendments and supplements to certain resolutions by the President of the Republic of Uzbekistan " the Cabinet of Ministers has made a decision.

Over the years, the construction of highways, the establishment of transport links with foreign countries, the introduction of modern equipment and technology, agriculture specialists can meet today's requirements and a wide range of work has been done to increase their skills. At the same time gardening and landscaping areas adjacent to roads special attention to the organization of these events include the following:
- Organize and systematically carry out works related to the maintenance of roads along the highways of the highways through the unified state policy in the formulation and implementation of modern approaches in the area of regional architectural-artistic design and landscape design of automobile roads;
- rational organization of research work with the use of advanced technologies and international standards in the field of road improvement and gardening considering the climatic conditions in each region of the country;
- Undertaking a thorough study of advanced international experience in protecting motor roads and their structural elements from adverse weather-climatic influences, the introduction of modern methods and technologies that have been most successfully and practically tested to protect motorways from pollution and destruction;
-Procurement and taking into account the jurisdictional requirements of higher and specialized secondary and vocational education institutions on the basis of the design of roads, architectural design landscape design and construction of the training and re-training of highly qualified personnel covers the functions of the organization.

Particularly, steps have been taken to reach the ports of the world by adding the roads of our country to Trans-European and Eurasian routes. The main automobile roads in Uzbekistan are the leader among CIS countries on technical indicators. Compliance of road construction to ecological requirements, level of ecological hazard, which may adversely
affect the state of the environment and the health of the population, adequacy and validity of envisaged measures on environmental protection and rational use of natural resources. It is expedient to use graphic software such as geodetic works, designing of modern electronic equipment, special computer programs, CREDO CAD automobile design software, AutoCAD 2017 and Autodesk Civil 3D in the development of landscape project solutions. It is necessary to take measures to protect the environment without damaging the access to geological, hydrogeological, ecological and other natural conditions created in the design of highways. The development of valuable agricultural land, cemeteries, mosques and other religious structures and buildings, recreation areas, nature reserves, as well as the treatment and prophylaxis of institutions and health areas should be taken into consideration. The environmental impact of vehicles (noise, vibration, and gas is necessary to take into account the effect of dazzling lights). Selection of the highway route should be based on a comparison of options that address technical, economic, ergonomic, aesthetic, environmental and other factors that are closely interconnected. One of the main tasks is to ensure the adequacy of road construction to be implemented in compliance with environmental requirements, the level of environmental hazard that can adversely affect the state of the environment and the health of citizens, adequacy and validity of envisaged environmental protection and rational use of natural resources.

**When designing streets and highways, it is desirable to adhere to the following rules.**

1. Tree planting of streets and highways is one of the complexes of architectural and planning tasks for the settlement. When planting streets and highways, it is necessary to take into account the safety of traffic, the convenience of pedestrian traffic, the peculiarities of the landscape architecture of the region. Settlements along the streets and highways crops to protect the population, noise, dust, gases, improve the microclimate (humidity level, to create a cool places), - the movement of vehicles, pedestrians and road traffic safety management should ensure long.

2. It is assumed that based on the main principles of street planting and roadside planting, it is necessary to take into account the line of crops sown on different streets along roads and roads.

3. Near the highways passing along the boundaries of the wooden slopes it is necessary to leave a striped line with a width of up to 250 meters to the right of the track, to have landscaped landscaping, green planting with resistant trees and shrubs, parking for passengers and parking for cars.

4. The development of streets and roads, planting planning solutions trees and shrubs, lawn grasses and flowers should take into account the morphological and physiological characteristics. As cultivated, it is necessary to use trees and shrubs that are decorative and dense, compact hollow, roadside and weather resistant to climate and ecology.

5. Highway, adjacent to residential areas, public buildings, vehicles, trees and shrubs to protect them from the noise-resistant as well as many types of planting.

6. In high environmental pollution, growing trees and bushes need a large enough space for feeding and large sowing areas. In the case of sowing technology and regular agro-technical arrangements, the durability of the plants increases, timely irrigation of agro-technical measures, early washing of soil to reduce residual reagents, mineral nutrition and organic fertilization, mitigation, reducing and forming.

7. The list of crops for the green planting of streets and motor roads of the settlements is formed according to the general compositional solution of the local soil and climatic conditions, the category of streets and streets, streets, roads and adjacent buildings.

8. It is important to take into account the morphological and physiological characteristics of ornamental plants, soil salinization, durability of the vehicle, and gas and dust absorbing capabilities.

**The project is to the territory of the highway Bio ecological conditions;**

- Effective results are achieved with the use of climatic factors and the use of climatic and local ornamental plants.

Trees, shrubs and flowers planted in the streets protect the population from the heat of the sun, winds, dust, and noise. The main type of street greening is lined beans, which are planted between the corridor and the road section. They are placed in one, two, three or more rows on both sides of the corridor. The outer part of these crops can be filled with green fences in front of the road or groups of trees and shrubs, mostly of billets. Also, among the corridors and houses can be planted along with the evergreen trees, and can also build giant planes along the street. The path, dividing the road section of the road, is greening with respect to its width. When the width of the corridor is 2-3 meters wide, gardens and flowering shrubs and flowers are planted. In the 4-meter highways, the group of lumbered orchards and bushes of trees and shrubs (for example, a virgin artery or grouped with east) is recommended for sale on the beds of the streets. In the 6-meter highways the trees of the second and third species can be sown with bushes. It is desirable to use spheres, shrubs and trees. The road traffic lines, the construction of multi-lane corridor in the land of trees and shrubs can be used to group planting. In this case, the width of the grouped tree plantations should not be less than 4.5-6 meters. Traffic will be accelerated main streets, pedestrians trying to protect from dust and gases on both side of the two-part series in accordance with the purpose of planting trees and bushes of green barriers. Green barracks are also suitable for planting in the outer part of the trees near the houses. If the traffic on the crossroads is arranged in circles, green beaches with a diameter of 15-25 m² will be built in the center. In these spawning islands, one-and-a-year-old flowers, flowering shrubs, small trees, ornamental plants are cultivated in the region.

**Recommended trees and shrubs for greening of saline and saline areas of our Republic**

<table>
<thead>
<tr>
<th>Trees</th>
<th>Bushes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ailanthus High, Paper Tree</td>
<td>Derain red</td>
</tr>
<tr>
<td>Karagachi Androsova and hawkish</td>
<td>Forsythia wifled</td>
</tr>
<tr>
<td>Catalpa gorgeous and ovoid</td>
<td></td>
</tr>
<tr>
<td>Ashwood Sogdian, Purple Canadian</td>
<td>Ligustrum vulgare</td>
</tr>
</tbody>
</table>
In the gardening of highways includes: landscaping and landscaping on both sides of the road, greening of the road (on 1st category roads), greening of crossings, bus stops, planting of places for passengers and drivers. Landscape is mainly the roadside booths that protect the road from collapsing, creating favorable climatic and hygienic conditions ensuring traffic safety. These crops are constructed by sowing in the plains of the reef, and the number of rows is determined by the width of the road. Many line crops that are created at the border of agricultural crops are simultaneously protected areas. In the hilly part of the road, mainly trees and bushes are placed. Series of fences are of special importance in the southern regions of Uzbekistan. However, a number of crops will tilt the transport driver. In order to safeguard traffic, lumbering can be used to build ornamental trees, bushes and their mixed crops. On the way, there are lumbered bushes, shrubs, tall trees and flowers. There are barriers to it, green barriers, or concrete walls. The trees in the division are planted in lawns (on the grass). Backbone scones on bus stops; on both sides of the station - separate or grouped trees of trees and shrubs are created. Where available, stabilizers are placed at the station. In areas where there is an open area, one or more species of small orchards are sown. These places are adapted for holidays.

**Table:**

<table>
<thead>
<tr>
<th>Poplar Turanga, Hawthorn large-fruited</th>
<th>Maca's Honeysuckle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juniper virginsky, Persimmon virginsky</td>
<td>Pyrokanta scarlet and gorodchataya</td>
</tr>
<tr>
<td>Mulberry white, black, red, Ash American, Long-leaved, Chinese, Pennsylvanian</td>
<td>Yucca filamentous and hybrid</td>
</tr>
<tr>
<td>Sophora Japanese, Glediciya Chinese and three-burs</td>
<td>Pyrosticta scarlet and gorodchataya</td>
</tr>
<tr>
<td>Tamaricks, Juniper Chinese</td>
<td>Hibiscus syriacus, soap tree</td>
</tr>
<tr>
<td>Crimea pine, Maclura orange</td>
<td>Eastern biota, white poplar</td>
</tr>
<tr>
<td>Field Maple, Rock Nut</td>
<td></td>
</tr>
</tbody>
</table>

In landscaping, the vegetation of each region is related to the natural environment of this land. For example, in the south, there are many types of local plant species, such as cocoons, cherries, tarragon, glaciers, riverside, cypress, turpanol, poplar, apricot, elm, tortoise, reed;

**Figure 2.1.** This is the city of Nukus near the road crossing reflected in the design part of the project.

It is desirable to use one-year ephemeras at the lower slopes of the mountains. This design project, which is invited to the Nukus motorway ring, focuses on keeping the area beautiful and pleasing throughout the year. In addition to the flower compositions, smaller architectural forms in the form of

**Figure 2.2.** This is the city of Nukus near the road crossing reflected in the design part of the project.

**Figure 3.1.** Stellane design proposal for the city in the entrance to the city of Nukus.
Karakalpak national patterns were used. In the center of the circle is a stove with a height of 10 meters. The main purpose is to have a good view of the road rings, as traffic ramps do not have traffic lights, as in the routes of simple routes, drivers of the vehicle and all drivers should be aware of it. This photo depicts a part of the design project on the highway near Nukus. Here, Karakalpak national patterns are widely used. The center of the free space is equipped with a five-wheel-drive pedestrian with a stop and rest. It is located at a height of about 2.5 meters above sea level because it is a reservoir beneath it, and the water in this bowl is irrigated by the surrounding plants. Stellane design proposal for the city in the entrance to the city of Nukus. This proposal has been used in the Karakalpak ornaments, and the font has been designed to fit these forms. The colors are also widely used in the art of the Karakalpak colors. It is also a project proposal for the roadmap in Karakalpakstan, reflecting the styling of the forms and the Karakalpak national instrument in the center of it. In this proposal, the Karakalpak national ornament is stylised and instinctively expressed. Such structures of reinforced concrete for the cost of the well is planned to build in any weather not lose its quality.
Project proposal of Urgench city road ring. Seasonal flowers were used to make national ornaments. The ancient Khorezm carriage and its huts are embedded in the center of the ring. This project proposal is designed for the city of Urgench, where the flower compositions are the most important. Under the headquarters of the composer’s center, the flower is flowing from the clay and water from the next. The colors of the flowers are selected contrasting to each other.

**CONCLUSION**

All designs are as a real project concepts for the future.

**REFERENCES**


[12] Dobronravova E.A. «Landshaftnyy dizayn», 1.2