



Use of Modern Requirements in Beautification and Landscaping of City Streets

Axmedov J¹; Mirzaolimov A²

¹ Candidate of Technical Sciences, Associate Professor, Fergana Polytechnic Institute, Uzbekistan

² Master, Fergana Polytechnic Institute, Uzbekistan

<http://dx.doi.org/10.18415/ijmmu.v8i7.2878>

Abstract

The development of any country is assessed on the basis of the well-being of its villages and cities, the culturally well-organized landscapes, the smoothness of the roads and corners, the pleasant scenery. Building the country's cities in harmony with nature will ensure its beauty and create a healthy eco-environment.

Keywords: *City; Streets; Landscape Architecture; Trellis, Wilderness; Curb; Mixborder; Green Barriers; (Fences); Vases; Baskets; Hanging Baskets; Retaining Walls; Mountaineering; Rockeries; Landscaping; Landscaping; Ornamental Trees; Shrubs; Flowers; Ecology*

Introduction

The organization of the reconstruction of cities, the formation of their aesthetic image eliminates autonomous development, harmonizes ecological, socio-economic issues, balances, integrates new, high-quality, while preserving the natural resources and historical and cultural potential of urban integration based on natural, functional requirements. The need to raise the bar is now being implemented programmatically by the state.

Landscape design devices and their architecture is one of the most important areas of landscape architecture associated with the creation of a scenic and healthy functional environment that is easy to use aesthetically need to have.

Landscape architecture and landscape devices. There is a complex organic connection between these two words, and the history of landscape architecture is rich with landscape devices as a whole. While landscape architecture is a general term, landscape devices are elements that complement it materially, giving quality and content to all its objects, elements associated with landscape-related miniature architectural forms, all of which are all are landscape shaping devices. Landscape architecture devices are so numerous and diverse that in order to study them, it is necessary to look at the field as a separate topic and take a deeper complex approach to the issue. The classification system of landscape devices was first developed, which was divided into four major groups;

- 1 to landscape devices related to terrain;
- 2 to landscape devices related to water basins;
- 3 devices of landscape architecture associated with small architectural forms;
- 4 is divided into plant-related devices of landscape architecture.

Landscaping devices of the first group include retaining walls, stairs and ramps, alleys, squares and their pavements, alpinaries and rockeries, tents, china, chabutras, and landscaping devices of the second group include pools and ponds, decorative pools, fountains, waterfalls and waterfalls. whites, bridges, fences and gates to the third group, pavilions (kiosks), pavilions, rotunda, bolustrades, park furniture, decorative walls (chairs) and finally, to the fourth group trellises, pergolas, included sleepers, vultures, curbs, mixborders, green fences, (fences), vases, baskets, hanging baskets, containers, and labyrinths.

Results and Discussion

Architects were involved in the project, which included small architectural structures, landscaping and landscaping.

As early as 1938, S. Soldatov developed the requirements for the architectural organization of highways, saying: "When creating the architectural organization of highways, the road engineer has two main tasks."

1. When all known elements are added, the road should form an integral architectural structure.
2. as a holistic architectural structure it should be in harmony with the landscape around the road.

Using the simplest concepts in plural theory, one can imagine the role of landscaping in the overall system of a highway project. The system consists of the following parts: the landscape, which is considered as a theoretical view of the road: architecture is the art of construction used to give the road a complete artistic look; the highway is considered an engineering structure.

In addition, the system includes a system of technical aesthetics, which ensures that the road is beautiful and artistically decorated; a landscape design that ensures that the road is in harmony with the landscape and a landscape architecture that allows the use of landscape elements in the decoration of the road.

Technical aesthetics, landscape design and landscape architecture Highways landscaping make up the landscape architecture project system.

Scenic architectural design of road beautification is the basis of science and art to ensure safe and comfortable traffic on highways.

Road architecture should serve two purposes: to create an integrated architectural ensemble that blends in with the roadside landscape along the entire road; ensure that traffic is safe and comfortable.

The road architectural design has two purposes: first, when determining the route, its compatibility with the main, large elements of the surrounding landscape, and secondly, the individual road sections.

The second project is not easier than the first, because two mutually exclusive methods are used to solve it, the buildings around the road are adapted to the green environment, or the existing project is a car under construction. buildings will be built, the road will be landscaped and decorated depending on

what the road looks like. The purpose in road architecture has formed the following main parts of it: creation of the architectural composition of the road: road construction in space; part of the rules and methods of adapting the road to the landscape is to create a landscape project; construction of objects (sometimes called optical tracing) that are suddenly focused as part of an architectural set to make driving safer and more comfortable; road beautification and decoration as part of human and vehicle maintenance activities.

Each architectural object, including every architectural object on the highway, must perform two functions — ideological, artistic, and practical.

In the case of road architecture, the most well-known way is to drive in space, that is, to "ensure that the road is smooth in space, taking into account the surrounding landscape." The limit of the length of the straight line is determined by its relation to visibility, the radius of the curves is adjusted, the angles of rotation in the plan and the degree of average curvature of the long part of the road are also determined. The implementation of landscaping is a long-term, complex creative process on the technology of creation, which involves the solution and implementation of many production problems. Green building practices: creating gardens and parks; or this or that population or habitats beautification; selection of plants suitable for different soil and climatic conditions; architectural structures, reservoirs, roads, playgrounds, placement and grouping of plants according to sculptures; includes planting and caring for plants.

Today, all cities and villages of the country are being modernized. In the green areas, our people spend their free time on holidays, various cultural events (Navruz, Independence Day and various holidays).

Most importantly, this green plant world, made up of a variety of deciduous and pine trees, shrubs and flowers, will have its own ecological significance. These include:

- Protected trees planted in rows along the streets reduce smoke and gases and noise in the air; ornamental foliage and pine trees produce phytoncides, substances that kill harmful microorganisms in the air;
- In summer, the temperature of the asphalt road rises to 80°C. Ornamental plants reduce the temperature and create favorable conditions (microclimate);
- Several species of ornamental foliage and pine trees, shrubs and flowers along the roadside, as well as lush green lawns adorn the city streets.

Specialists in biology, ecology, landscape qualities of green plants, the main methods of creating compositions in green building, the system of habitat landscaping, the design of green spaces, the scope of the main work to keep them in good condition will need to have in-depth knowledge of Trees, bushes and flowers planted in the streets protect the population from the scorching heat of the sun, winds, dust and noise. The outdoor plantations are of scenic importance and are intended for short-term recreation. The size of the fields depends on the width and direction of the street, the direction of pedestrian and transport traffic, the width of the reserve area between the corridor and the carriageway, as well as the distance from the corridor to the houses.

The main type of street landscaping is row crops, which are planted between the sidewalk and the carriageway. They are arranged in one, two, three or more rows on each side of the aisle. The outskirts of these crops may be filled with green barriers in front of the carriageway or groups of trees and shrubs, mostly conifers.

It is also possible to plant trees in alleys between the corridors and houses, as well as to create alleys along the streets.

Additional categories of street crops include: house crops; green islands that control movement; vertical landscaping of building walls and loggias is used.

The corridor, which divides the carriageway, will be planted with greenery. When the width of the corridor is 2-3 meters, lawn and flowering shrubs and flowers are planted. In 4-meter walkways, group or row crops of small-branched trees and shrubs are recommended on the lawn level (for example, a row of virgin spruce or a grouping of it with oriental biota). In the 6-meter corridors, trees of the second and third categories can be planted mixed with shrubs. In this case, it is advisable to use spherical, branched trees.

In front of the houses there are separate small gardens or open "courtyards" - crops in the form of curdeners. It is recommended to plant green fences around the trees, and in the middle - fruit or ornamental trees, shrubs, flowers and plants that grow on trees.

Trees, shrubs, and flowers, as well as flowering shrubs and vines, are planted in rows and groups along the sidewalks. Trees are planted 3-5 meters from the house wall, and shrubs - 1.5 m. It is recommended to plant trees in the streets, mainly along the lawn.

Group plantations of trees and shrubs can be used to build a multi-lane corridor near the roadway. In this case, the width of the lawn with group plantings should not be less than 4.5-6 meters.

To protect pedestrians from dust and exhaust fumes on busy highways, it is advisable to plant two rows of trees and shrubs on both sides of the carriageway. It is recommended to plant green fences, as well as outside the trees in front of the houses.

If traffic at intersections is organized in a circle. In the center of it are green islands with a diameter of 15-25 m. Flowers (roses), flowering shrubs, small trees, and herbaceous plants are planted on these lawn islands.

Plumbing and other underground facilities should be considered when planting trees on the streets. The branches of the trees should not touch the hanging power line.

Depending on the direction of the streets, the requirements for greenery to protect against heat and heat will vary.

Latitudinal streets (street axis from west to east, houses face north on one side, south on the other) and longitudinal streets (street axis from north to east) to the south, the surface of the houses is oriented from east to west).

On wide streets (houses facing north), only sidewalks need to be shaded. If the houses are multi-storey, their shade falls on the corridor, so it is possible to plant crops sparingly, without blocking the architecturally significant buildings. On the opposite side, only the sidewalk is shaded, as the north side of the house is less heated (compared to the east and west sides of the house), so there is no need to shade them. On wide streets, trees of medium height are planted on both sides of the corridor, or between the corridor and the carriageway.

Tall trees are used to shade sidewalks and buildings on longitudinal streets; they are located between the corridor and the carriageway; if possible (if the corridor is not close to buildings and houses) - trees will be planted on both sides of the corridor (in this case, an alley will be created). The fields are filled with trees in front of the houses: they block the buildings, improve the indoor air temperature, and reduce noise.

There are two types of street landscaping:

- 1) new, non-green streets will be improved under the project;
- 2) There are crops on the streets, but they are outdated, aged, diseased, or have little landscape character and are prone to reconstruction.

Reconstruction can completely or partially replace the trees. There are three options for a complete overhaul:

- a) all trees in the streets will be cut down and new trees will be planted;
- b) 2-3 trees are planted and new ones are planted;
- c) every 50-100 meters the crops are cut and replaced with new ones. Partial transformation will leave only young crops or a few older trees with scenic.

There are many different ways of landscaping the streets of our country. On the small, narrow streets, the trees are mostly planted in two rows. The wide streets are lined with trees on one or both sides of the aisle. These include planting trees between the carriageway and sidewalks, decorating with flowers in front of public buildings, gardens and curbs around houses, grouped shrubs along roadsides, green barriers in front of buildings and houses.

Tree and shrub species are diverse. There are green streets with valuable species. For example: summer oak, silver and field maple, Japanese safflower, Canadian cucumber, chestnut and others.

The use of ornamental plants in landscaping should be based on their ecology and biology. Indoor pine, for example, is affected by the cold during the harsh winters. Because it can withstand a minimum of -27 oC. Some of them may grow buds on the tips. But the seedlings can completely lose their decorative properties. Because all the leaves and twigs fall off, except for the new ones that come out of the tip, and as a result, they lose their appearance. The new leaves do not support his life.

You can also plant cypress, oak, chestnut, birch, virgin spruce, and ash. These trees keep the weather cool. Cypress is native to the Mediterranean islands of Cyprus. That is why the name is cypress. It is resistant to frost up to 25 degrees, the landscape is very beautiful tree. The Virgin Spruce can withstand minus 37 degrees. It is resistant to cold, heat and drought, the leaves are green all year round and give off a good odor.

According to experts, some trees give a person strength, while some trees regulate blood pressure and have a positive effect on the heart and nervous system.

Trees improve the sanitary-hygienic condition of the environment. It repels strong winds and produces phytoncides that kill harmful microbes produces. Also important is the fact that conifers are green in winter and summer. As a result, it absorbs dust and cleans the air for twelve months of the year.

In our opinion, oak, linden, chestnut, birch, magnolia, as well as coniferous trees such as pine and spruce are the most suitable varieties for the improvement of the environment and the beauty of cities and villages in the local climate.

There is no doubt that oaks are among the trees that clean the air. Each oak can be described as a unique plant that converts gases into oxygen and recycles them. All species are long-lived. Oaks that live more than a thousand years are also common. Due to its beauty and resistance to adverse conditions, it is widely used in urban landscaping. New species of oak, such as large-fruited, chestnut-leaved oak, which is fast-growing, resistant to pests and diseases, and distinguished by its cypress shape, have also been successfully tested at the Botanical Garden. Especially beautiful is the chestnut-leaved oak, which retains its greenery until the frosty days of winter.

Linden trees are also widely used for landscaping, but they do not play a significant role in the green appearance of Shahrizabz. At the same time, in our climate, very beautiful varieties of linden can be

grown, such as hairy, American, Caucasian, European, large-leaved. These varieties have a beautiful appearance, the leaves are thick, provide good shade, give off a fragrant scent when the leaves bloom, and give a very useful nectar.

Chestnut is one of the most beautiful plants in the city. It is especially beautiful when it is in bloom. It grows into a big tree in 20-25 years. True, the young shoots are more resistant to summer heat and environmental influences. However, this feature is also important in nature conservation as a mirror of air purity.

In many countries, birch is one of the leading plant species in both forestry and landscaping. Birch is a very beautiful species with a white body and colored (pink, white, brown-dark red, dark) body, which can be widely used in urban landscaping.

Magnolia, a beautiful tree that blooms in early spring, also helps with landscaping.

Coniferous trees are essential for maintaining the ecology of the urban environment. It is known that the Crimean and Eldor pines, Virgin and Canadian spruce, long-leaved and thorny spruce, eastern biota, in addition to cleaning the air from dust, produce phytoncides that kill harmful microbes.

In recent years, new species of conifers such as zarnab, cypress, metasequoy, ginkgo have been growing very well. With good care, conifers grow well, have a beautiful, clear appearance, and grow up to 70-80 cm per year. These species and varieties belong to the group of plants with high phytoncide activity - they produce 0.55 mg / m of phytoactive substances.

In addition, conifers clean the air better than broad-leaved plants, especially in populated areas, where the air is dusty and deciduous trees "rest" after the fall, ie in autumn, winter and early spring. Even in summer, conifers perform a more effective sanitary function than deciduous trees: their phytoncides clean the air of harmful microbes and renew it with their fragrant ethers and resins. For this reason, conifers should be grown not only on the streets and squares, but also in schools, children's institutions and yards.

We can't imagine the modern development of gardening without bushes. In addition, most of the ivy blooms thickly. Nowadays, in the neighborhoods and in the courtyards, you can find all sorts of ivy that adorns the surroundings. Forsythia, Japanese quince, chubushnik, Pissard plum, cornus can be widely used in landscaping.

They are also accompanied by live walls made of flexible ligustrum. Nor mushkis a little more whimsical, but the beautiful leaves that do not fall off even in winter give it beauty.

During the engineering and construction works, the design and estimate documentation provides for landscaping of the building, as well as its surroundings. When constructing or renovating new businesses, residences, it is important to fully assess the extent to which these buildings are compatible with existing plantations, and to try to preserve existing trees as much as possible.

In recent years, in all major cities of the country, the landscaping of areas adjacent to modern buildings has become a picture of the creation of large green lawns with more ornamental plants. This principle is fully applicable to the opening of large buildings. Justifies because prioritizing architecture and landscape harmony is a priority, and landscaping is a disturbing tool. Such complexes are pleasing to the eye.

It should be noted that the appearance of trees and shrubs, which are recommended as green plants, is carefully selected, and it is not just a matter of adapting the plants to local natural conditions. Landscape, ease of care and other aspects are also taken into account. In general, the whole range of landscaping varieties used in Uzbekistan creates a beautiful microclimate for the population and is aimed at beautifying the appearance of cities and villages.

Landscaping of streets and roadsides also requires special attention. When planting trees in such places, it is necessary to take into account the specifics of the roads, traffic congestion, the proximity of children's and medical institutions, residential areas. Green plants, together with buildings and other industrial facilities, form a complex. Remember, caring for trees, flowers, lawns means caring for people, the growing generation in the first place.

Conclusion

In addition to maples, there are other allergens. For example, the feathers of apples, peaches, plums, and ants cause discomfort to people who are exposed to the environment. Therefore, it is very important to plant greenery properly and use the plants properly. Fruit trees, for example, do well in rural areas and gardens, and maples can be used to beautify historical monuments and nature.

We are convinced that the traditions of the Uzbek people, inherited by nature in the field of creativity and gardening, combining new directions of landscaping and landscaping, contribute to the sustainable development of greenery in cities and villages, our country. 'serves to make the hall a better manifestation.

References

- Dosakhmetov A.O. (2001) Landscaping of residential areas. Text of lectures, Tashkent.
- Jasurbek Omonjon Ogli Nononov. (2020) FARG'ONA VILOYATIDAGI MADANIYAT VA ISTIROHAT BOG'LARI // Science and Education.
- Kayimov A. (2005) Landscape construction. Textbook. Tashkent.
- Nabiev M.N., Mirzaolimov A. (2021) Greening and Landscaping of the City Streets. The American Journal of Applied Sciences. 3 (05), 240-244.
- Qalandarov M.M. (2013) Landscaping. Tashkent.
- Rusanov F.N. (1951) Ozelenenie in the architecture of the cities of Uzbekistan. Tashkent.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).