



LANDSCAPING OF HIGHWAYS

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Article history:	Abstract:
Received: 30 th March 2021 Accepted: 10 th April 2021 Published: 29 th April 2021	This article provides suggestions for landscaping highways, decorative landscaping in the partition of roads with heavy traffic, landscaping with spruce and various fruitless trees. It is known that in recent years the growth of traffic, the purpose of decorative landscaping of roads of the Republic, the appearance of planted ornamental plants on the road, reducing its uniformity, giving it a scenic appearance and connecting the road with the surrounding area play an important role.
Keywords: Winter storage works, snow clearing of roads, winter sliding, digging of artesian wells, decorative, strip boundaries, decorative seedlings.	

INTRODUCTION.

The distance of traffic on highways is growing from year to year. The number of long-distance bus routes, freight, trips in private cars is growing. Therefore, decorative landscaping of roads is important.

The main task of road landscaping is to protect the areas allocated for the road from snow and sand avalanches and to implement beautiful architectural equipment and decorative landscaping.

In addition to the establishment of afforestation in landscaping, the following will be done at the expense of allocated funds:

- preparation of fertile soil for planting trees and nurseries;
- growing seedlings;
- maintenance of forests;
- digging artesian wells, etc.

Decorative landscaping of the road dividing the roads with large traffic, landscaping with spruce and various fruitless trees will be carried out. The trees act as a means of blindfolding the oncoming vehicle from the traffic lights, protecting it from the movement of oncoming vehicles. The planting of trees and shrubs on the roads may be intended for technical purposes (protection of roads from snow, creation of fences to protect against sharp winds in areas where the road exits the peaceful zone), as well as for architectural decoration of the road. Snow-protected plants, trees, and shrubs consist of thick, multi-layered strips that protect the snow from wind blowing from adjacent fields. The simplest type of snow-protecting trees and plants are the plant-enclosed enclosures — trees and shrubs that are thickly arranged in two rows, and the snow collects behind them. In snow-covered strips, trees with low horns are usually planted and densely surrounded on the field side. As a result, snow is prevented from flying and as a result, the tree reduces wind speed. Separate lands can and should be allocated for snow protection strips. In this case, the strip to the snow-protective plants will be at the disposal of land users.

MATERIAL AND RESEARCH METHODS.

The purpose of the decorative landscaping of the roads is to give the planted ornamental plants a benefit to the road, reduce its uniformity, give it a scenic appearance and connect the road with the surrounding area. According to the principles of work organization, they are divided into the following types:

- In regular species, trees and shrubs are placed at a fixed distance from each other, in a strictly defined order, parallel to the roadside. To eliminate the uniformity and boredom of regularly planted seedlings, the type of trees is changed from time to time, or other ornamental tree species are added to the list of previously planted trees;

- ornamental species, within the boundaries of a specially allocated strip in this method of landscaping, ornamental seedlings are placed in groups of different sizes and compositions, which are planted in such a way that they are adapted to the environment of intersections and junctions;
- Mixed type, in this method the usual seedlings are placed, especially at the intersections and junctions of highways and access roads to bridges.

Landscaping decorative landscaping projects are developed with the involvement of architects, as designers are required to select the type of trees and shrubs that will grow in accordance with the standard requirements for each section of road.

RESULTS OF RESEARCH.

It is known that afforestation is one of the measures aimed at improving soil fertility, agricultural culture and land reclamation. They significantly alter the natural conditions in the production of agricultural products.

Modern landscaping of roads, increasing the productivity of land and road infrastructure in the road area and reducing the scale of processes such as their maintenance, repair, reduction of winter maintenance costs, prevention of emissions from cars, gases and dust, today's One of the most pressing issues of the day is the role of the road sector as one of the socio-economic sectors in overcoming the financial and economic crisis in our country.

Road landscaping is divided into two main types, namely protective and landscape landscaping.

Protective landscaping includes:

- anti-erosion landscaping - used to protect roads from the destructive effects of atmospheric precipitation and winds;
- snow-protective landscaping - is done to protect the pavement from snow;
- sand-protective landscaping - protects roads from sand cover and includes strengthening of trees and shrubs and sand along the road with plantings;
- Noise gas and dust protection landscaping is carried out in and around residential areas of the road, near the territory of the resort area, medical facilities, nature reserves, national parks and other lands intended for the cultivation of culturally valuable agricultural products.

Landscaping includes landscaping of roads.

Tree species located in the highway area are intended to protect the environment and ensure environmental sustainability in the future and extend the performance of highways. If the roads pass through populated areas, trees will reduce the noise from cars to a certain extent, protect the surrounding growing areas from cold winds in winter and hot winds in summer, trap dust, and reduce harmful microbes in the air.

It should be noted that in calculating the economic efficiency of the construction of green areas, scientists have different approaches to the selection of indicators of protection of road areas.

Most researchers recommend a percentage of hardiness as an indicator. AA Sankevich noted that given the fact that the establishment of afforestation in road areas is a cost that begins to justify itself after a long period (growing season), it is necessary to develop measures to ensure rapid growth of trees and the formation of protected forests. At the same time, firstly, it is necessary to introduce high-growth tree species, and secondly, to apply them to regional techniques.

With the use of modern agricultural techniques in the establishment of afforestation in irrigated lands of Tashkent region, including in the road area, fast-growing tree species reach a height of 4-6 meters at the age of 3-4 years and begin to have a positive impact on adjacent areas. At the age of 10-15, it reaches a height of 12-18 meters and begins to interact in the system.

In calculating the cost-effectiveness of the establishment of region-specific afforestations, the width of the area occupied by it is of great importance, and it determines the cultivated area of land allocated for landscaping.

Studies on the impact of irrigators on cotton yields in areas with strong winds show that when the number of rows is reduced to 1-2, their efficiency decreases sharply. The efficiency of 3-4 rows of trees is 2 times higher than that of low rows, while protecting roads and irrigation systems at the same time.

The first row down the road is a low bush; second row - tall bush; third row-like trees; fourth row-key; the fifth row consists of similar trees and the sixth row of tall shrubs.

The cost-effectiveness of trees increases with increasing wind activity. Consequently, according to M.V. Vereshagin, it is higher in moderately windy regions than in weak winds. The cost-effectiveness of afforestation is particularly evident with increased yields. In areas with moderate winds, yields will increase by 3.9 ts/ha due to trees and shrubs, and by 2.5-5-ts/ha in areas with weak winds. The payback period for tree maintenance costs is set at 4-6 years in strong winds and 5 years in weak winds.

When there is a strong wind, it is only possible to cover all the costs of planting and maintaining trees for a year in exchange for reducing the direct economic damage.

In addition, protective trees have the property of protecting the soil against erosion. The benefits of sheltered trees include people's aesthetic enjoyment and wellness. Roadside barriers also extend the life of highways, provide a microclimate for drivers and passengers, reduce noise from cars when people pass through residential areas, and absorb toxic gases from cars, and so on

CONCLUSIONS:

In short, in healthy and harmonious societies, people always live in pursuit of beauty, goodness, love and happiness of both worlds. At the heart of these aspirations is the planting of trees and the creation of a unique landscape, which is one of the most honorable deeds. Because it is used not only by humans, but also serves the animal world here. But for now, based on our experience, we can say that it is comfortable and pleasant to live and work here, where there is a beautiful variety of nature.

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