

They may look different. The “basket-cabinet” technique, this is a small area, bounded completely, or a typically dense hedge. There is a basket with a raised flowerbed for indoor plants that are planted for the summer period of the year, where students can study flower science. The project includes a playground for walking animals that live in the office “animal world” and green classes for students of the scientific society interest groups, as well as a stage for events and classes of the Ecotheater group. On the sides of the entrance part there are “health trails” with various filling. The patio also includes a basket with a tree-shrub group of plants and raised flower beds.

Own space. This is a minigarden with a space theme on an area of 50 m². The idea of this garden is low-maintenance. This is a place of solitude, relaxation. The garden is fenced with a hedge. Flower beds are designed in the form of orbits and are located on different levels. This applies to vertical gardening. In the middle there is an art object made of metal and glass in the form of spaceships. It houses solar panels that supply electricity to flood lights and automatic watering for plants. There are benches on the territory, repeating the basic shape of the site. This project is a good example of how you can create a secluded place in a small area, hence the name “Own Space”.

Conclusion. New things in landscape design appear infrequently, but this means that a plot created in accordance with modern trends will not lose relevance for a long time. All trends are united by one thing – the desire for nature.

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PROMISING CONSTRUCTION WAYS OF ACCESS ROADS TO FOREST HIGHWAYS ON GROUNDS WITH LOW SOILS BEARING CAPACITY

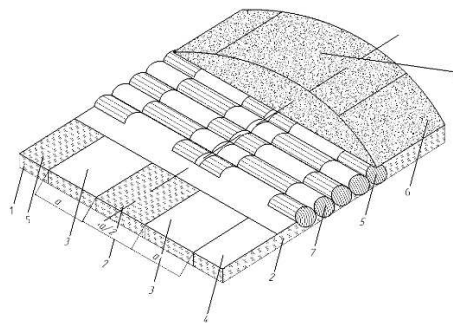
The subject of this work is access roads to forest highways which play an important role in forestry. They come in the form of roads, trails, paths and provide access to forested areas, help to implement various forest operations, such as cutting trees, timber transportation, and forest plantations management. However, it is necessary to take into account the area ground conditions to ensure their reliability and durability while planning and constructing access roads.

The purpose of this work is to study promising ways to arrange accesses to forest roads on the grounds with low bearing capacity of soils and

to develop recommendations for choosing the best method. When building roads, it is important to make the construction economically profitable and the road should have a long service life. In order to improve the serviceability and increase the service life of access roads to forest highways on bases with low soils bearing capacity, promising methods of their construction were developed.

One of such methods is the forest road construction on the bases with low soil bearing capacity; it consists in the following: ruts are formed in the process of roads exploitation, the ground of the inter-track space from the road axis is moved and distributed into the ruts, a trough profile of the road carpet is formed and consolidated along the length and width of this trough profile, then the first layer of the flexible geosynthetic material is rolled out on the road surface, its width is equal to the perimeter of the trough profile of the carpet, and the layer of the geosynthetic material is spread over the road.

It is also possible to single out the method of road structure building on soils with low bearing capacity, in which the surface of the prepared base of weak soil is covered by a combined layer of geosynthetic material and transverse wooden elements. The layer is implemented in geosynthetic material, with the distance of at least 0.1 of its width. It is done by rolling out this material along the length of the road bed, the width of which includes the width of the two-wheel drive, the width of inter-track space and the width of two shoulders.



1 - weak foundation; 2 - wheel pipeline; 3 - inter-track space; 4 - roadsides; 5 - geosynthetic material; 6 – wooden elements; 7 – crescent-shaped profile

Fig.1. Trough profile of forest road pavement formation.

A wide range of road-building machinery is used for this operation, for making access roads to forest highways, such as: a wheel loader, a tractor with mounted excavator equipment, a trailed scraper, a motor grader, a trailed motor grader, a dump truck, which facilitates the implementation of this method. The result of our scientific work is a demonstration of the prospects of this method in the forest complex.

To summarize, the usage of a road with geotextile allows to increase the service life of forest roads and to reduce the cost of road construction when transporting timber.