

Dedicated lanes for public transport in Bishkek city

BRT (Bus Rapid Transit) – a method of organizing a bus service that is characterized by higher performance than conventional bus routes (speed, reliability, carrying capacity), in some respects, the bus rapid transit systems are comparable to light rail transport systems.

Goals and objectives of the project: to connect the southern part of the city with the center of Bishkek city. Further, the BRT (Bus Rapid Transit) system connects the residential areas of Bishkek city with the city center.



Benefits of developing dedicated lanes for public transport:

Economy: the system is convenient and efficient as the rail transport system, but requires much less financial resources.

Space Saving: a bus with a capacity of 50 people takes up 8-10 times less space than 15 cars with 1-2 passengers. The bus saves urban space!

Ecology: buses are planned to run on gas, which will not pollute the environment.

City Image: a high-quality, bus-based transportation system that meets the needs of fast, convenient and cost-effective urban mobility!

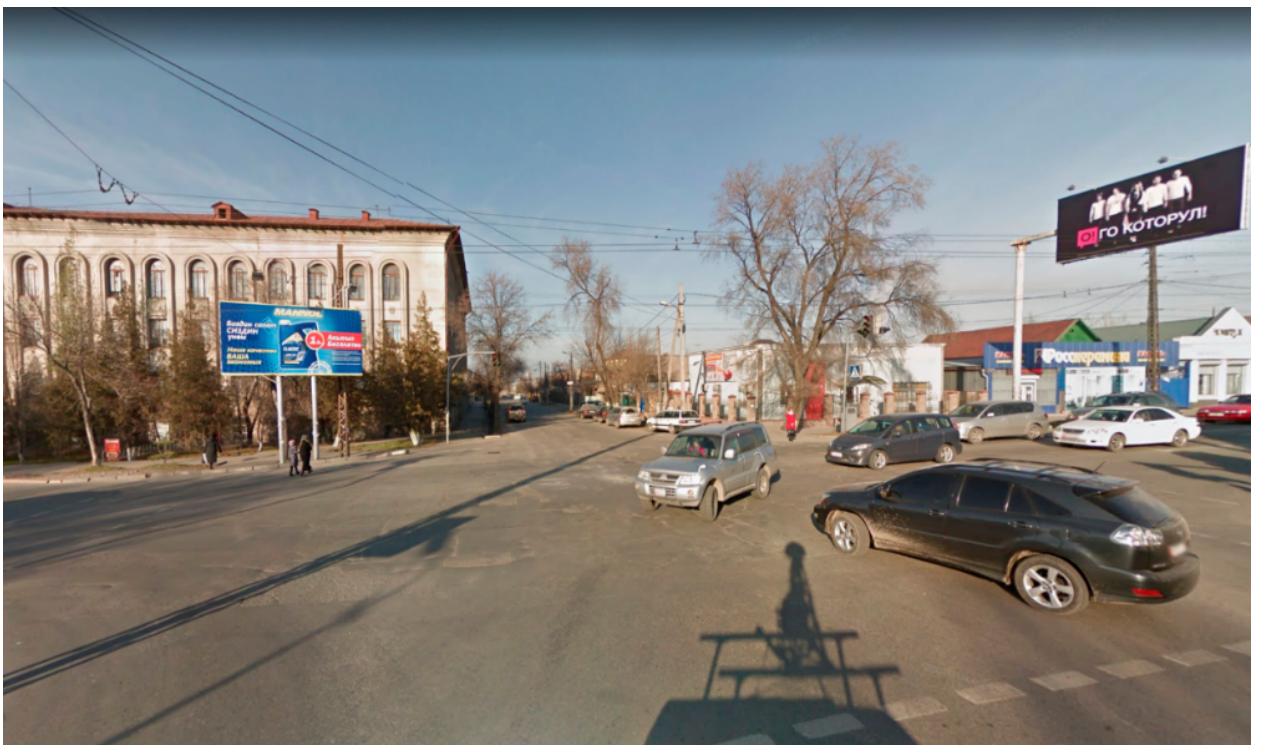
Safety: dedicated lanes have little contact with other vehicles, which will affect the percentage of accidents involving buses!



Current situation

Problems:

- Traffic jams on the main streets and not only;
- Air pollution;
- Road traffic accidents (RTA);
- Loss of a sense of community.





Schematic of the movement of the 1st step.

Step 1 offers the connection of the south zone to the city center along Tokombaev Ave. further along Zhukeev Pudovkin (Ibraimov) street, following along the Moscow st. and Kyiv st.

Length 17.5 km, 50 stops.

Schematic of the movement of the 2d step.

Step 2 features the connection of the south and western microdistricts of the city along Tokombaev Ave. further along the Chortekova st., Gagarin st., D. Sadyrbaev st., continuing to the market "Dordoi" on Blvd. Molodaya Gvardia and along the northern bypass road.

Length 29.0 km, 80 stops.



The main difference between buses operating on a dedicated lane is that the dedicated lanes form a full line without breaks, get on and exit not at stops, but through special terminals, which are entered through turnstiles.



The improvement of the boulevard on Ch. Aitmatov Avenue -A. Masaliev Street

Aim and task of the project

The project will ensure the preservation and increase the area of green spaces within the city and its nearest suburbs to increase the regeneration capacity of the city's atmosphere and create sanitary protection zones for industrial areas, cultural and mass recreation zones.

Schematic design for the improvement of the boulevard on Ch. Aitmatov Avenue -A. Masaliev Street



The project provides for the organization and improvement of the boulevard in the Southern planning district of Bishkek on Masaliev Street - Ch. Aitmatov

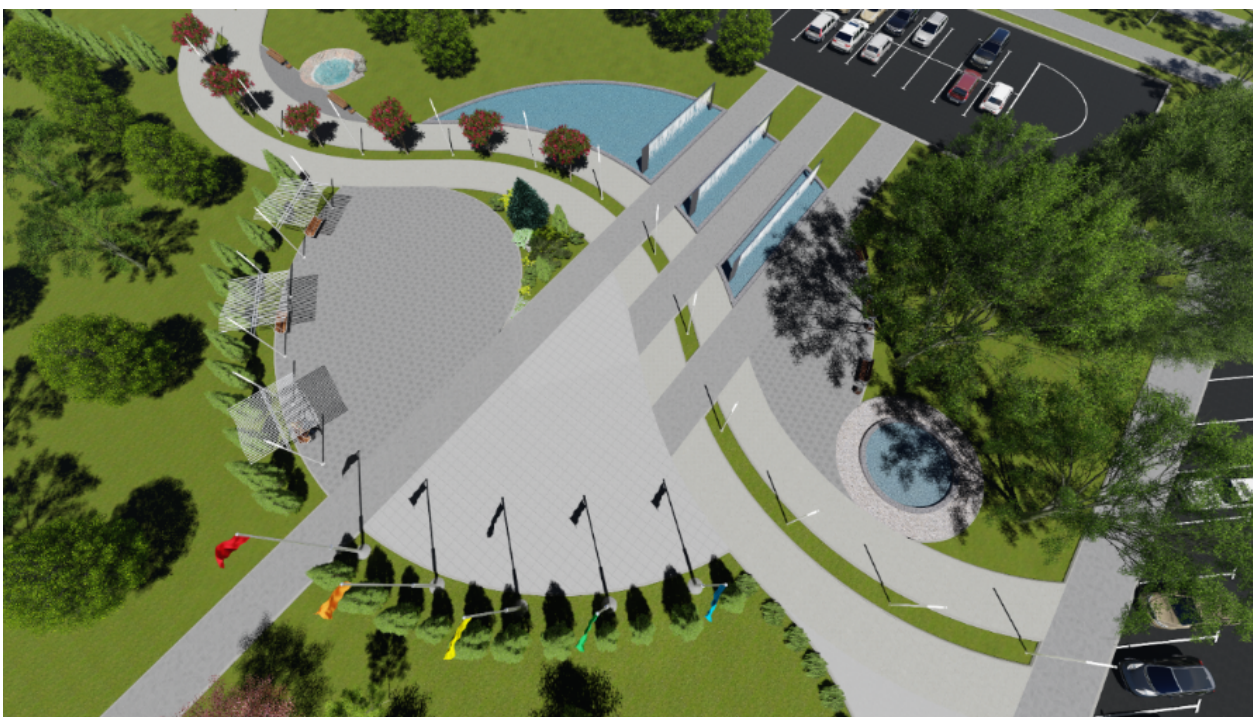
According to the Detailed Design Plan of the South Zone of Bishkek, this area belongs to the territory of the city boulevard. On the north side of Masaliev street, an entrance group is provided in the form of an open area with a fountain group and decorative landscape elements. Also, a front east entrance is provided with the organization of entry and parking to the Gallery building. In addition, the territory of the boulevard provides areas for adult recreation and playgrounds for children.

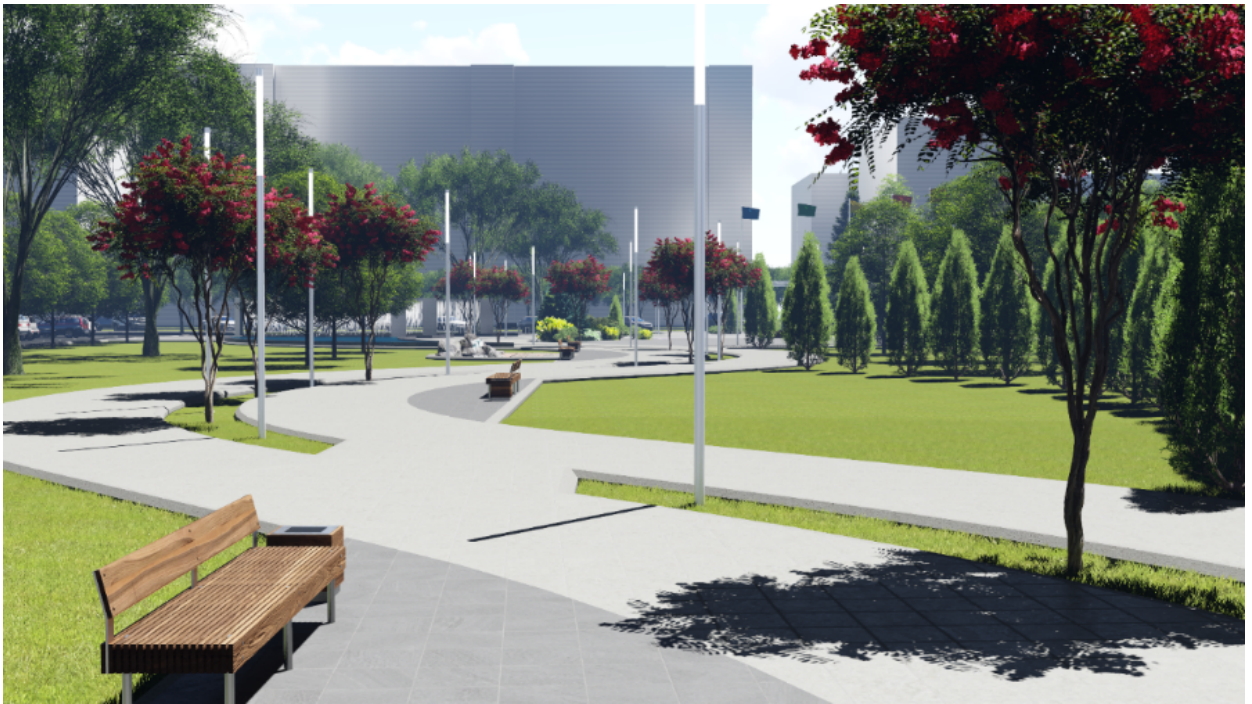
General Plan:

Total area within the roadway - 34.09 ha

- The total area within the red line - 26.69 ha
- The length of the section within the roadway of Masaliev Street to Semetey Street - 2830 m
- Length within the red line - 1916 m
- Section width - 125 m
- Landscaping area - 18.95 ha
- Surface area - 7.74 ha
- Asphalt concrete pavement - 8798.03 m².

Schematic design for the improvement of the boulevard on Ch. Aitmatov Avenue -A. Masaliev Street







WASTE RECYCLING PLANT IN BISHKEK

More than 2 billion tons of municipal solid waste are generated worldwide every year.

According to a World Bank study, by 2050 the annual amount of waste will increase by 70% to 3.4 billion tons, and in low-income countries

The mass of waste that ends up in the municipal landfill contains the following proportions of valuable fractions:

- Paper and cardboard - 10%
- Plastic - 8%
- Glass - 8%
- Metal - 1%
- Textiles - 1%
- Food waste – 49%
- Other types of waste – 22%

Total amount of waste in the current landfill: 248,000 tons;

Total daily amount of waste dumped in the landfill average: 1000-1250 tons;

The main groups of costs for the project, if you arrange them in descending order, will look as follows (according to the costs of a similar plant in Russia):

- profit - 30%;
- taxes - 15%;
- investments - 20%;
- interest on a possible loan - 10%;
- variable costs - 15%;
- fixed costs - 10%.

Preventing garbage management failures, including effective recycling and recovery of valuable secondary materials, is now key to human health and safety as well as environmental and economic well-being.



Currently, Bishkek MSW is taken to the only active landfill in the city - Bishkek sanitary landfill. The landfill covers an area of 36 hectares and has favorable geological and hydrogeological conditions. The Bishkek landfill receives MSW for disposal from Alamedinsky aiyl okmotu, Shopokov aiyl okmotu, Arashan aiyl okmotu, Lower Ala-Archa aiyl okmotu, Tash-Dobo aiyl okmotu, villages Lebedinovka, Prigorodnoye and Maevka.

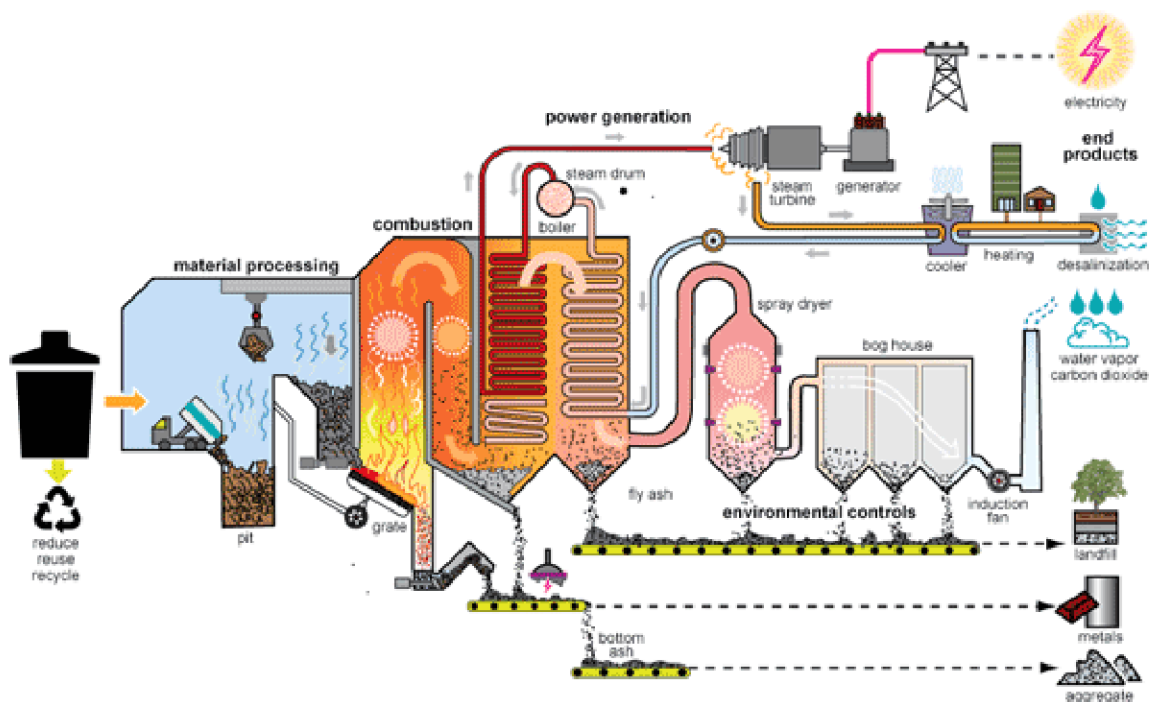
At the moment, the city does not use a system of organized collection of secondary raw materials from the population. Recycling of raw materials is carried out partly by the private and partly by the informal sector. Existing recycling companies are ready to increase the amount of purchased materials in case the initiative to build a waste sorting facility proves successful.

The analysis carried out in 2012 revealed the main problems that need to be solved to increase the income of waste collection companies:

- Underestimated size of the client base and, as a consequence, underestimated income while actually providing waste disposal and landfill services to a much larger number of city residents;
- relatively low level of payment collection from clients for the services provided;
- Significant and stable or gradually increasing level of accumulated accounts receivable;
- The level of tariff for waste removal and disposal in Bishkek is lower than in other cities of the Kyrgyz Republic and selected for comparison CIS cities.

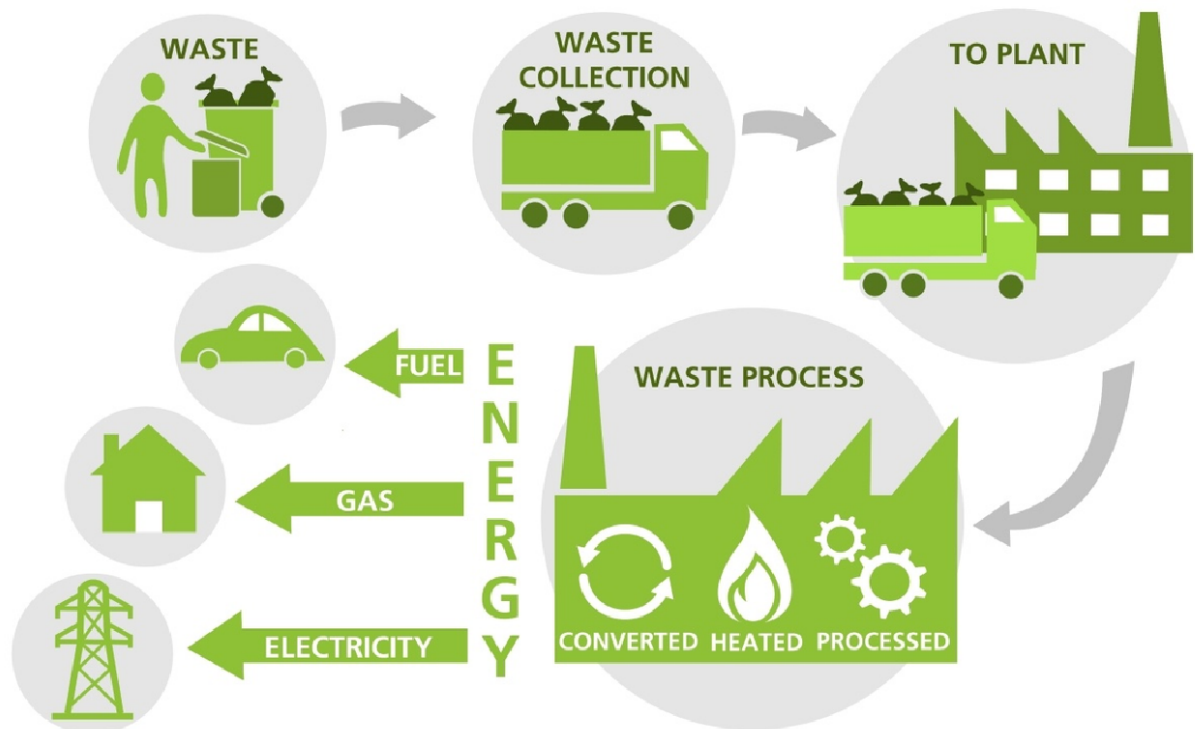


WTE (WASTE-TO-ENERGY) technology is an energy recovery process that converts chemicals from waste into useful forms of energy, such as electricity, heat or steam.



Business benefits of WtE technologies:

- Reducing waste disposal by more than 90%;
- reduction of hazards and potential fines for environmental damage;
- generation of its own electric or thermal energy.



The electricity generated by a typical incinerator with a capacity of 100,000 tons per year is roughly equivalent to the electricity consumption of 20,000 european households and will be supplied to the national grid.

Sources of income of the enterprise:

- payment for recycling;
- received from waste producers;
- sales of electrical or thermal energy, as well as steam;
- sales of recovered products, including metal.

Development project for the coastal areas of the Ala-Archa, Alamudun, and the Great Chui Canal of Bishkek.

Project goal

To improve the environmental situation in Bishkek by increasing the greenery area, improving the microclimate and sanitary and hygienic conditions of the territory and improving the health of the population.



DESCRIPTION

Implement a project to develop the coastal areas of the Ala-Archa, Alamudun and Great Chui Canal of Bishkek, taking into account the division into lots and the inclusion of land for landscaping.

The length of the river Ala-Archa within the city limits - 24 km

The length of the river Alamedin within the city limits - 27,4 km

Designing and realization of offers taking into account modern tendencies and technologies of the organization of similar territories, depending on area location, a relief of district and other factors, will allow to give each area a unique shape.

The advantages of the development of the coastal areas of the Ala-Archa, Alamudun and the Great Chui Canal :

- esthetic look
- eco-friendliness
- comfort
- street discharge
- safety
- circulation

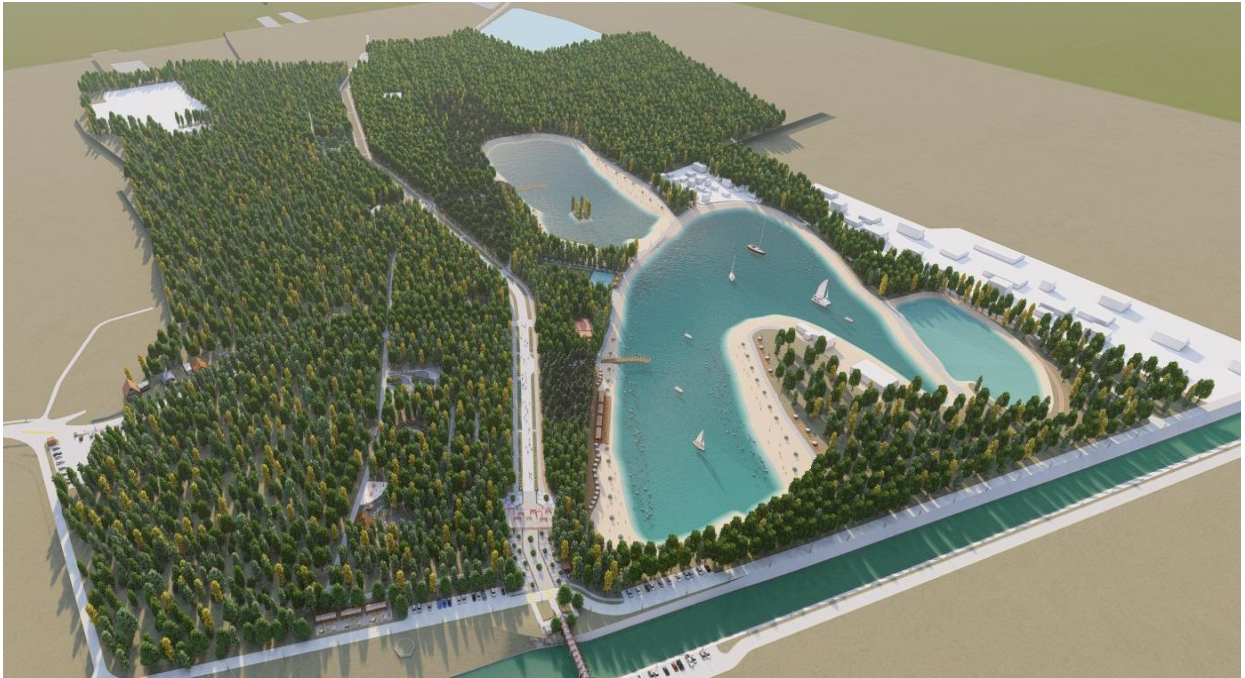


It is possible to provide sites for business centers, restaurants, cafes, boutiques, accessory stores, gyms, supermarkets, spa centers, entertainment children's areas, and more.

Improvement project in the “Karagachev Grove” Park

Project goals

Ensuring the attractiveness of the Park of Culture and Recreation in Karagachev Grove, improving the environmental situation of Bishkek, and creating a harmonious architectural and landscape environment. Formation of tourist attraction, favorable social microclimate, ensuring a modern level of landscaping and aesthetics of the park.



Objectives

- Preservation and increase of the area of green spaces in the city and the nearest suburbs;
- Transformation and improvement of the territory of the park “Karagachev Grove”;
- Improving the quality of elements of external landscaping;
- Increase of ecological culture and ecological consciousness of the population;
- Conservation and development of green spaces.

Park “Karagachev Grove” is the largest park of culture and recreation in the north of Bishkek. The area of the 1st stage of construction was about 80 hectares. The park has clear advantages over other parks:

- Significant magnitude;
- Availability of water bodies: Lake Komsomolskoe and lake Pionerskoe;
- Transport connection with Yelebesova st. and Shabdan Baatyr;
- The best conditions of airing and comfort of climatic conditions;
- The possibility of gradual development.

The total area of the park "Karagachev Grove" according to the Scheme of boundaries of the territory was 128.34 hectares.

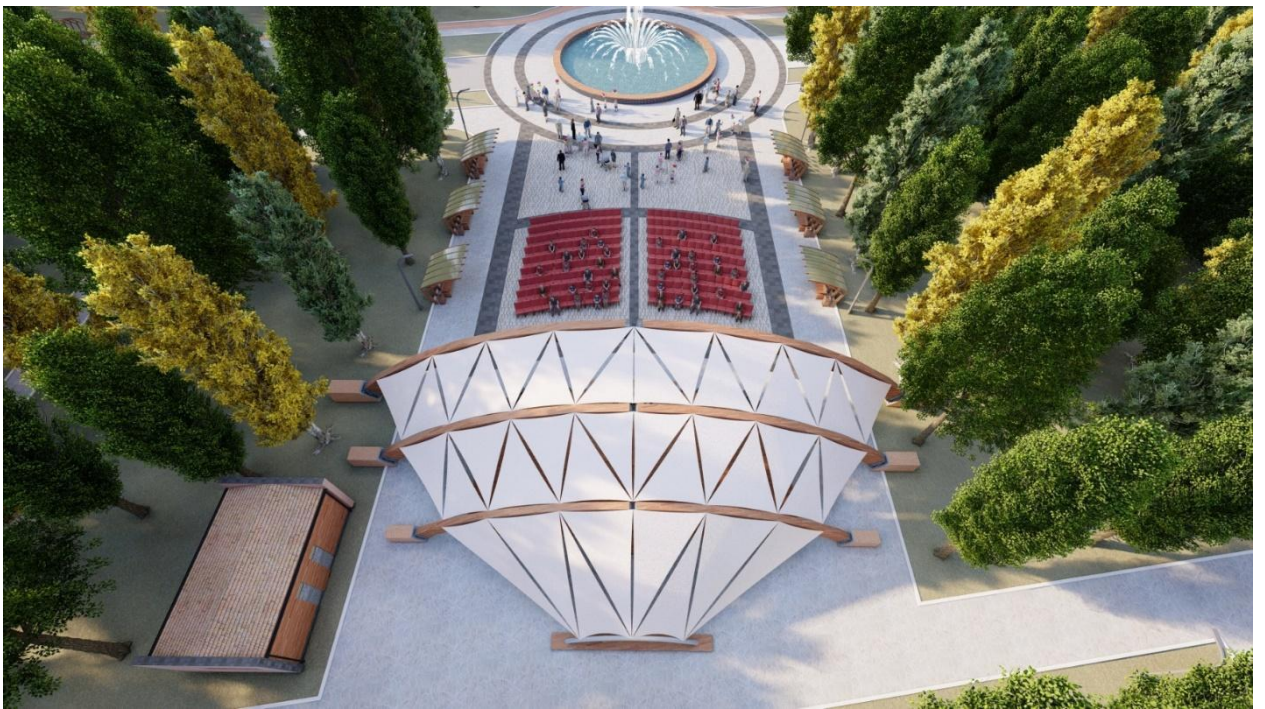
The area of the grove – 140 hectares;

Forested and the rest marshland – 90 hectares;

Possible attendance of 15 thousand people a day.

Draft project for the improvement of the park "Karagachev Grove"





Investment project «MULTI-STOREY PARKING ON THE TERRITORY OF BISHKEK city»

Project:

Creation of multi-level parking lots by involving a private partner in the construction and management of the facility.

Project objectives:

- Construction of at least four multi-level parking lots with a capacity of 500 cars;
- Unloading of the city's congested roads;
- qualitative management of the created objects through the introduction of modern technologies.



Analysis of the situation

The existing surface municipal parking lots along the roads provide only a small amount of parking space, which in no way covers the real demand and needs of citizens.

Due to the limited area of the city for the creation of new parking and parking spaces along the roads, the proposed project involves the construction of multi-tiered municipal parking lots for vehicles with a capacity of 500 cars and more.



International experience



The 900-car spaces in Santa Monica car park has become the highlight of the entire area, setting the tone and aesthetic vector for the urban environment, as well as meeting modern sustainability standards.



Parking lot in the Netherlands, characterized by rich landscaping, the architects complemented it with many flower beds with live plants.



Alternative Car Park Tower is a futuristic car park project from Mozhao Studio that won the best proposal in a competition held in Hong Kong.

Bishkek City Hall proposes to implement the project "Multi-storey car park in the territory of Bishkek city" to unload the city's busy roads and reduce the level of car exhaust gases and thereby improve the environmental issues.