The complex of urban planning policy and construction of the city of Moscow

COMMITTEE FOR ARCHITECTURE AND URBAN PLANNING OF MOSCOW CITY

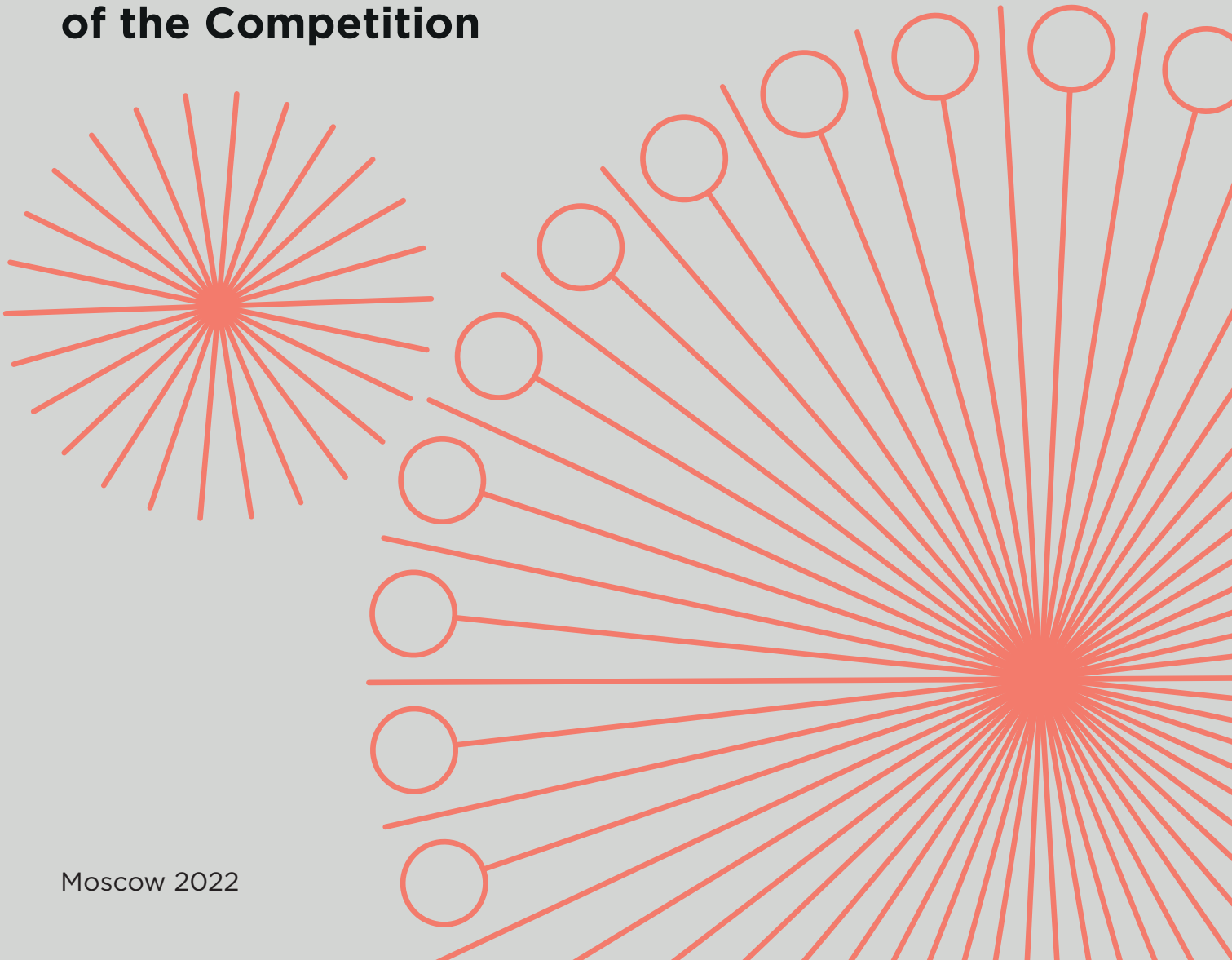
MOSINZHPROEKT COMPANY GROUP

agency for strategic development CENTER

Open International Competition for Development of the Architectural Concept of Moscow Metro Stations

Invitation to participate

Main parameters of the Competition



Moscow 2022

Client
Mosinzhproekt JSC

Contractor
LLC Agency for Strategic Development «CENTER»

Competition website
www.design-metro.ru/en

CONTENTS

COMPETITION

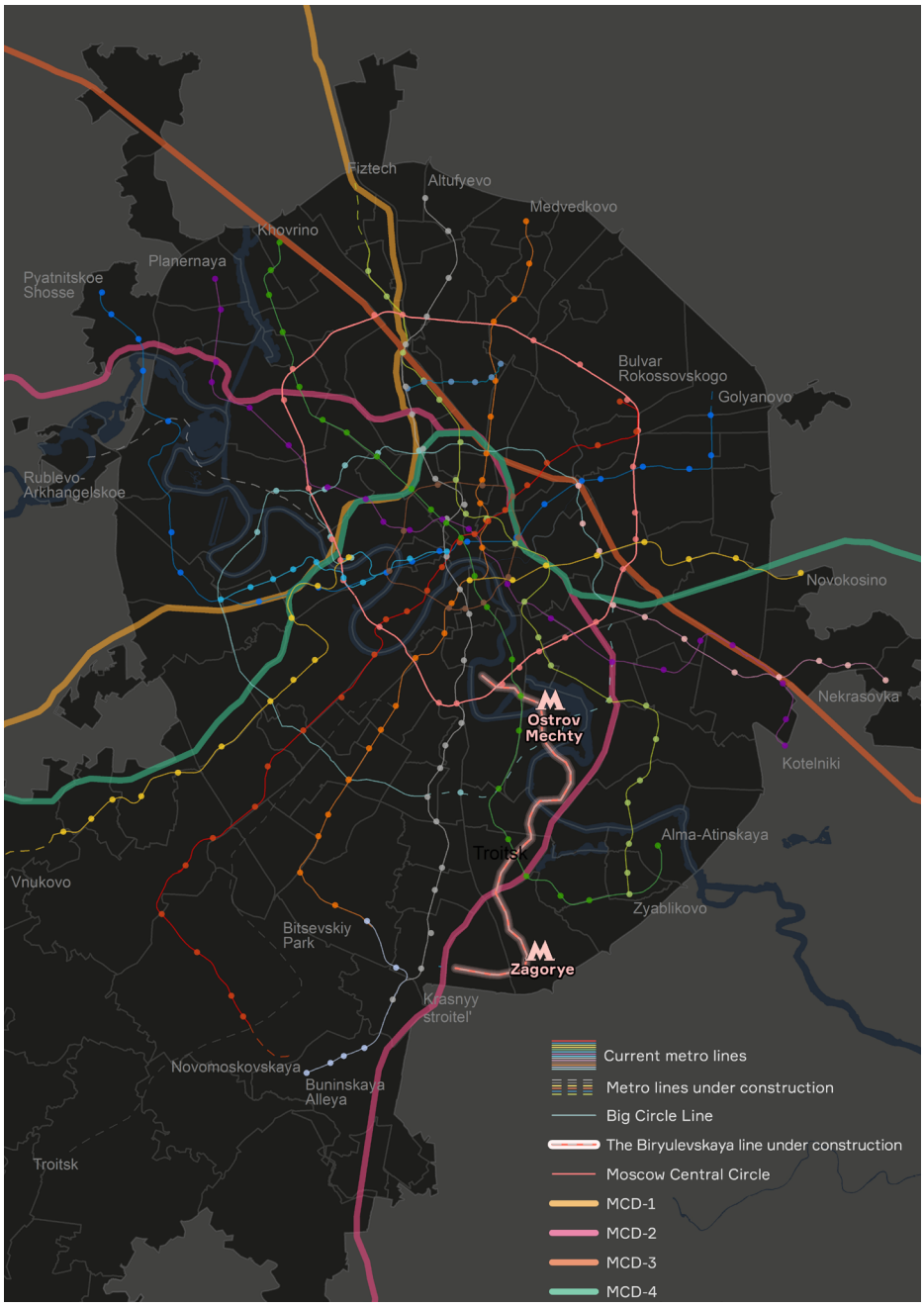


Fig. 1. Layout of projected stations in the Moscow Metro system

Subject

Architectural and artistic concepts of the Ostrov mechty and Zagorye stations of the Biryulevskaya line of the Moscow Metro.

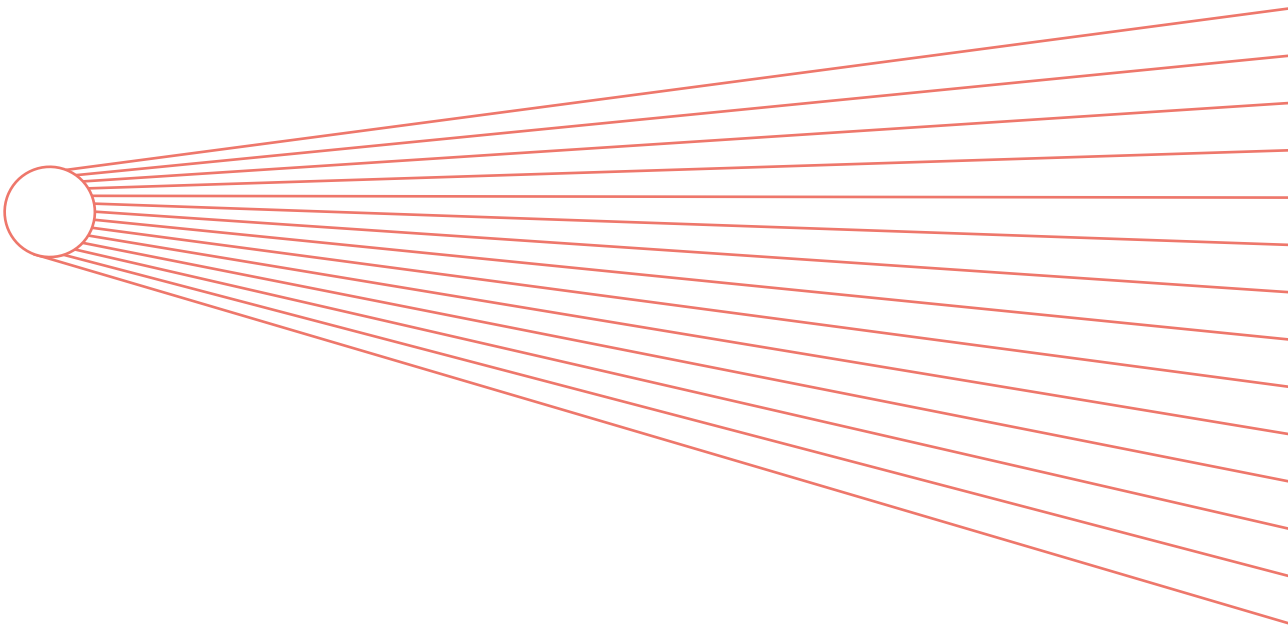
Objective

The objective of this competition is to find the optimal architectural and artistic design for the interiors of passenger zones and entrance halls of the Ostrov mechty and Zagorye stations.

The fundamental design solution shall include architectural solutions for the design, finishing materials, furniture, lighting and non-capital structures of the passenger entrance zones.

The competition proposals shall meet the following requirements:

- artistic solutions of the metro stations shall be harmoniously integrated into the surrounding space and the historical area context;
- artistic solutions of the metro stations are replicable and can be used repeatedly;
- requirements for convenient and safe travel of all categories of the population shall be met;
- adequate functional use of space that will meet every technical requirement of the Moscow Metro shall be provided;
- it is encouraged to use modern technology as well as durable and environmentally friendly materials (natural stone, metal panels);
- stations shall have a unified system of transport navigation in Moscow in accordance with the album «Graphic Design and Constructive Solutions of Navigation Elements in the Metro»;
- the budget for the finishing works of the passenger areas (platform part, entrance halls, crossovers) taking into account the decorative elements and architectural lighting shall amount to RUB **300–350** mln per station. The budget for the construction of ground pavilions shall not exceed RUB 30–35 mln per pavilion;
- only Russian-made materials shall be used.



OPEN INTERNATIONAL TWO-STAGE

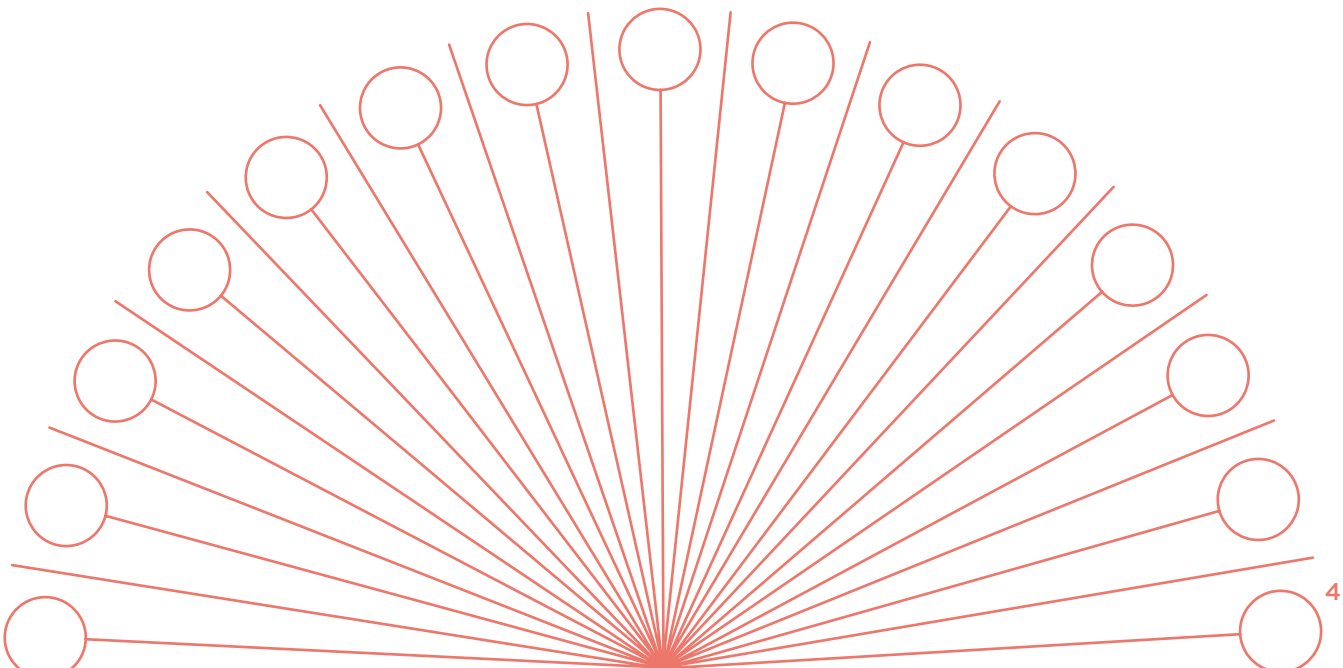
Format

Stage 1 — receipt of applications and selection of Participants based on their portfolio and essay.

At this stage, the expert Jury based on their portfolios, relevant experience, and two essays for each nomination shall select five (5) finalists for each nomination.

Stage 2 — developing the Finalists' Proposals, compiling the rating of proposals based on the Finalists' assessment by the Jury.

As part of the Stage 2, 10 finalists (5 finalists in each nomination) shall develop a completion proposal. During the final meeting, the Jury will select 1 (one) winner who submitted the best completion proposal in each nomination.



COMPETITION PERIOD

MARCH 17,
2022
START OF THE COMPETITION

MAY 20,
2022
JURY MEETING
SELECTION OF FINALISTS

AUGUST 3,
2022
JURY MEETING
SELECTION OF WINNERS

Participants

Russian and foreign (in consortium) architectural companies that are able to attract designers, engineers, planners, and specialists in economics and financial modeling to their team.

Requirements

An architectural bureau registered in the Russian Federation or a consortium of architectural bureaus can become a Participant. Consortiums can include foreign partners.

Finalists

After the first stage of the Competition, 10 finalists (5 finalists in each nomination) will be selected for the subsequent concept development. Each finalist will receive a reward of RUB 400,000 including all taxes and fees.

Winner

For each metro station, the author of the best concept selected during the final jury meeting will be chosen as the competition winner. The winner will be able to conclude an agreement for the development of a Booklet on the station's architectural and urban planning solution in order to obtain a "Certificate of approval for the architectural and urban solution for a capital construction project" and author supervision of design and construction works regarding the proposal development.

COMPETITION SCHEDULE

MARCH 17,
2022

START OF THE COMPETITION, PRESS CONFERENCE

APRIL 5,
2022

KICK-OFF WEBINAR FOR THE COMPETITION PARTICIPANTS

APRIL 28,
2022

APPLICATION SUBMISSION DEADLINE

MAY 20,
2022

JURY MEETING TO SELECT THE FINALISTS

* The organizer can make changes to the Competition schedule.

JUNE 9,
2022

KICK-OFF SEMINAR FOR FINALISTS (IN PERSON)

JULY 12,
2022

SUBMISSION OF COMPETITION PROPOSALS BY FINALISTS

AUGUST 3,
2022

JURY MEETING TO SELECT THE WINNERS

JURY*

*The composition of the Jury is subject to change.

ANDREI BOCHKARYOV

Deputy Mayor of Moscow in the Moscow Government for Urban Policy and Construction, Chairman of the Jury

SERGEY KUZNETSOV

Chief Architect of Moscow, Vice-Chairman of the Jury

YURY KRAVTSOV

Director General of Mosinzhproekt JSC

OLEG SHAPIRO

Architect, Founder of Wowhaus Bureau

VADIM GREKOV

Architect, Managing Director of Mosproekt-4

ALEXANDER TSIMAILO

Architect, Co-founder of Tsimailo Lyashenko Partners Bureau

ALEXANDER KOTENKOV

Head of the Architectural and Planning Association of Territorial Development of Genplan Institute of Moscow

VIKTOR KOZLOVSKY

Head of Moscow Metro

VALERY KIVLYUK

Executive Director, Head of Metro Construction Division of Mosinzhproekt JSC

MIKHAIL NADOT

Acting Deputy Director General on Engineering of Mosinzhproekt JSC

NIKOLAY LYASHENKO

Architect, Co-founder of Tsimailo Lyashenko Partners Bureau

NIKOLAY SHUMAKOV

President of the Union of Architects of Russia, Director General of the Central Architect House, Chief Architect of Mosinzhproekt Institute LLC

KONSTANTIN KHODNEV

Architect, Director General and Partner of DNKag Architectural Group

INITIATOR

MOSINZHPROEKT
COMPANY GROUP

Mosinzhproekt Group of Companies

The leader in the Moscow construction market and one of the largest engineering holdings in Russia. The group of companies implements a full range of works — from the creation of an idea for integrated development of a territory, or the creation of a facility, design, construction, attraction of investments, to the facility's commissioning and real estate administration. The company implemented several landmark projects in Moscow — the Grand Sports Arena Luzhniki, Zaryadye park, the Moscow Concert Hall Zaryadye, the Gymnastics Palace of the Luzhniki Olympic Complex, and the Helikon Opera Theater.

Mosinzhproekt is the operator of the Moscow Metro development program, a participant in the program for the development of Moscow transport hubs, an administration company for civil project construction, the general designer and technical supervisor of the key Moscow road facilities, and a management company for development projects.

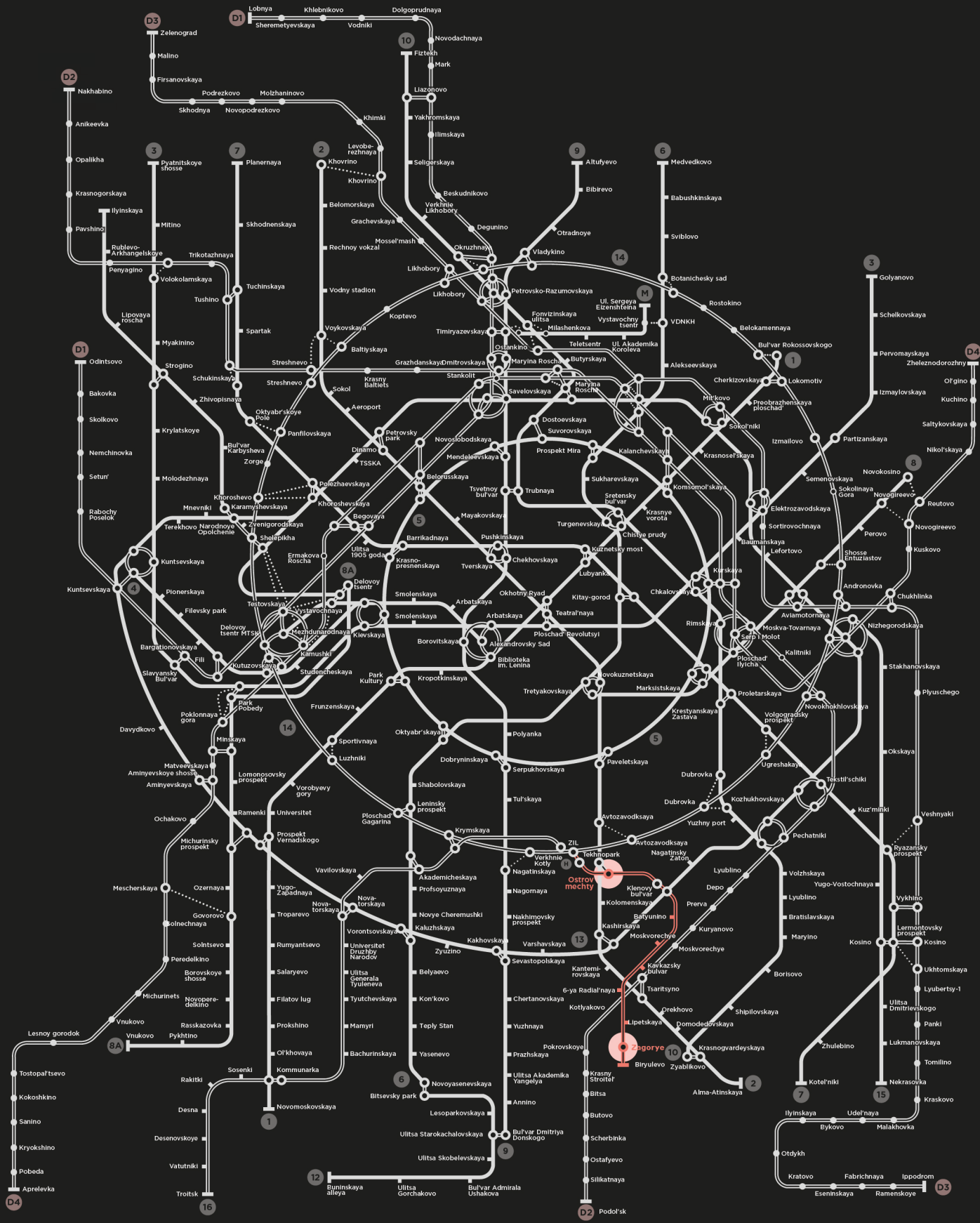
ORGANIZER

agency
for strategic
development
CENTER

Agency for Strategic Development CENTER
The Agency is a Russian analytical and consulting organization that works on multi-purpose projects in the sphere of development and urban planning, in addition to being one of the top operators of various architecture, urban planning, and design competitions. Founded in Moscow in 2014, it deals with matters related to comprehensive land and real estate development and to the quality of the urban environment in more than 60 Russian regions.

The company's portfolio features projects commissioned by major developers, investment companies, land and facility owners, federal and regional authorities, and professional communities.

CONTEXT



MOSOW METRO MAP

METROS
AROUND THE WORLD

The metro system became a basis for transport structure of many megacities. An off-street transport system with high capacity ensures active economic life and connection between urban territories. That is why high requirements are set for metro stations in part of their convenient daily use by numerous passengers, as well as the design quality.

There are 237 metro systems around the world (as of January 2022) with more than 15,000 stations with a total length of about 19,500 km[1].

Three newest metro systems, as well as four longest ones are located in the People's Republic of China (Fig. 2). The New York subway has the most stations in the world. The Moscow Metro is the tenth oldest in Europe and is globally known not only for its age, but also for its special focus on the design of stations.

Metro systems are often combined with other means of transport, both public or private, and form part of the unified transport system of a city or an agglomeration. For example, U-Bahn metro in Berlin is closely related to transfer hubs with S-Bahn city train, which terminal stations are located already at the suburbs of Berlin (Fig. 3). RER network in Paris with similar integration expands beyond Ile-de-France region.

Inside the cities metro stations are combined with bus and tram lines enabling to expand the accessibility level by transport and reach all parts of the district. Such intermodality principle of the public transport is applied in the new bus route network of Barcelona additionally adapted to greater intersection with metro stations[2].

Interceptive parking areas are usually established near metro stations.

Fig. 2. Metro map, Shanghai, China[4]

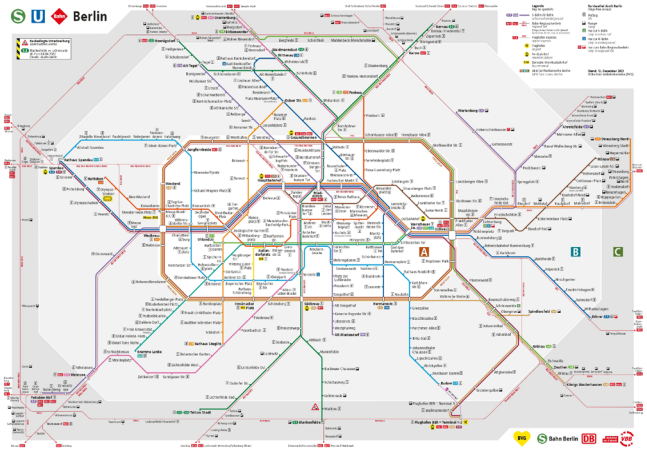


Fig. 3. U-Bahn and S-Bahn map, Berlin, Germany[5]

Metro lines often become «the spine» of urban development with new districts being built and existing districts being developed around them. This principle can be illustrated by Stockholm development plan (Fig. 4) providing for active expansion of the urban area (49,000 buildings by 2035) along metro lines with extension of the latter[3].

[1] https://mic-ro.com/metro/metrostats.html.
[2] https://www.tmb.cat/en/about-tmb/transport-network-improvements/new-bus-network/evolution.

Fig. 4. Metro map, Stockholm, Sweden[6]

Fig. 5. Metro map, Madrid, Spain[7]

Fig. 6. Paracelsus-Bad Station, Berlin, Germany[8]

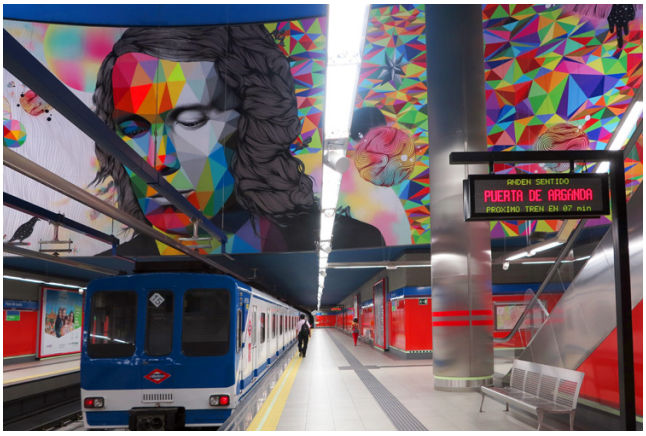


Fig. 7. Paco de Lucia Station, Madrid, Spain[9]

Fig. 8. Rådhuset Station, Stockholm, Sweden[10]

Fig. 9. Longhua Road Station, Shanghai, China[11]

[6] https://upload.wikimedia.org/wikipedia/commons/e/e9/Stockholm_metrosystem_map.svg.
[7] https://upload.wikimedia.org/wikipedia/commons/thumb/c/c1/Madrid_Metro_Map.svg/1688px-Madrid_Metro_Map.svg.png.
[8] https://www.boredpanda.com/beautiful-metro-station-interior-design-architecture.
[9] http://schwandl.blogspot.com/2015/06.
[10] https://wallhere.com/ru/wallpaper/965933
[11] https://upload.wikimedia.org/wikipedia/commons/7/77/Longcao_Road_Station_Line_12_Platform.jpg.

MOSCOW
METRO

The Moscow Metro is the most popular public transport in the city. In Q4 2021 its daily passenger traffic on working days amounted to 7.54 million trips per day. Even in the pandemic period the Moscow Metro system transported over 1.6 billion passenger in 2020.

Historically, the Moscow Metro was created not only for practical needs. The first stations represented the scientific and social progress and similar to the above-ground architecture of public buildings strived to manifest monumentally the ideal society. The traditional care for the visual appearance of stations was maintained in the XXI century with the use of modern materials, approaches and styles.

Metro develops at fast pace. On March 18, 2020 a world record was set in Moscow for simultaneous run of 23 tunneling machines.

Development of the Bolshaya Koltsevaya Line (BKL), which first section was opened in February 2018, became one of the recent large-scale development projects of the Moscow Metro. 10 stations were launched in 2021, namely Terekhovo, Kuntsevskaya, Davydkovo, Aminyevskaya, Michurinsky Prospekt (Fig. 10), Prospekt Vernadskogo, Novatorskaya (Fig. 11), Vorontsovskaya, Zyuzino, as well as Kakhovskaya being a reconstructed station. Each station of the Bolshaya Koltsevaya Line of the Moscow Metro features its own unique design. International architectural competitions were organized and the best and outstanding projects were selected for the design of seven of them (Mnevniki, Terekhovo, Maryina Roshcha, Rizhskaya, Sokolniki, Nagatinsky Zaton and Klenovy Bulvar).

Part of the line has been already providing the transport connectivity at the West of Moscow with its daily passenger traffic of 550,000 people. When the construction is over, the line will become the world longest orbital metro line.

Fig. 10. New station Michurinsky Prospekt, Moscow[12]


Fig. 11. New station Novatorskaya, Moscow[13]

[12] http://msk-news.net/society/2021/03/02/163638.html
[13] https://matveychev-oleg.livejournal.com/5082286.html.

RUSSIAN EXPERIENCE
OF METRO STATION DESIGN

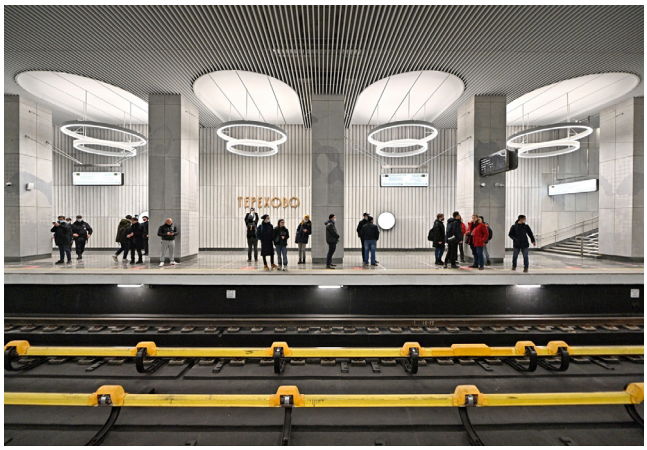


Fig. 12-13. Terekhovo Metro Station (BKL)[14]

Terekhovo Metro Station, Moscow, Russia

Architects/ Buromoscow
Opened/ 2021
Platform type/ side platform

Terekhovo metro station is one of the stations of the Bolshaya Koltsevaya Line of the Moscow Metro. It is located in the middle part of Mnevniki flood plain, which is currently being actively developed and built up with residential blocks and sports facilities. The station is located at the depth of 22.5 meter and has two straight platforms. The main task for the architects was to create a light and bright underground space using round chandeliers in the hall, high portals of entrance pavilions and architectural concrete, which surface reflects and dissipates light. The unique design of the station is in its connection with historical interiors of the Moscow Metro through the use of such details as cannelures, caissons, collonades made in the modern minimalistic style. Another distinctive feature of the station interior is human silhouettes applied on the columns by means of the digital concrete printing technology.

[14] Image source: https://www.archdaily.com/976352/terekhovo-metro-station-buromoscow?ad_source=search&ad_medium=projects_tab.

Fig. 14-15. Solntsevo Metro Station of the Solntsevskaya Line[15]

Solntsevo Metro Station, Moscow, Russia

Architects/ Nefa Architects
Opened/ 2018
Platform type/off-boarding platform

Solntsevo Metro Station is one of the stations of the Solntsevskaya Line of the Moscow Metro. It was opened in 2018 as part of Ramenki — Rasskazovka section. The station is located at the depth of 13 meters and has one off-boarding platform and two underground entrance halls with exits to underpasses. The station design was developed as part of the international architectural competition in 2014. The interrelation with the sunlight reflected in the station name formed the basis of the concept. Ground pavilions with a double-pitch roof were made of the architectural concrete with multiple holes for the penetration of the natural light. The same effect was used in underground halls, but with the use of artificial overhead illumination. The station platform was made in white tones with the used materials reflecting the light, thus putting emphasis on the unique station design.

[15] https://www.archdaily.com/903546/solntsevo-metro-station-nefa-architects

WORLD PRACTICES OF METRO STATION DESIGN

Fig. 16-17. Uruguai Metro Station, Rio de Janeiro[16]

Uruguai Metro Station, Rio de Janeiro, Brazil

Architects/ JBMC Arquitetura e Urbanismo
Opened/ 2014
Platform type/ off-boarding platform

Uruguai Metro Station is located in Tijuca District in the Northern part of Rio de Janeiro. The train parking area was located at the station territory before and was transformed as part of the first metro line expansion project. Entrances to the station are made of glass in the form of irregular geometric figures illuminated at night. This allowed brightening the surrounding urban landscape of the dormitory district. The unique feature of the station platform design is white columns of a non-standard shape, as well as color metal inserts installed on either side of the platform.

[16] https://www.archdaily.com/541071/uruguai-station-jbmc-architects

Fig. 18-19. Porte de Clichy Station of the Paris Metro[17]

Porte de Clichy Metro Station, Paris, France

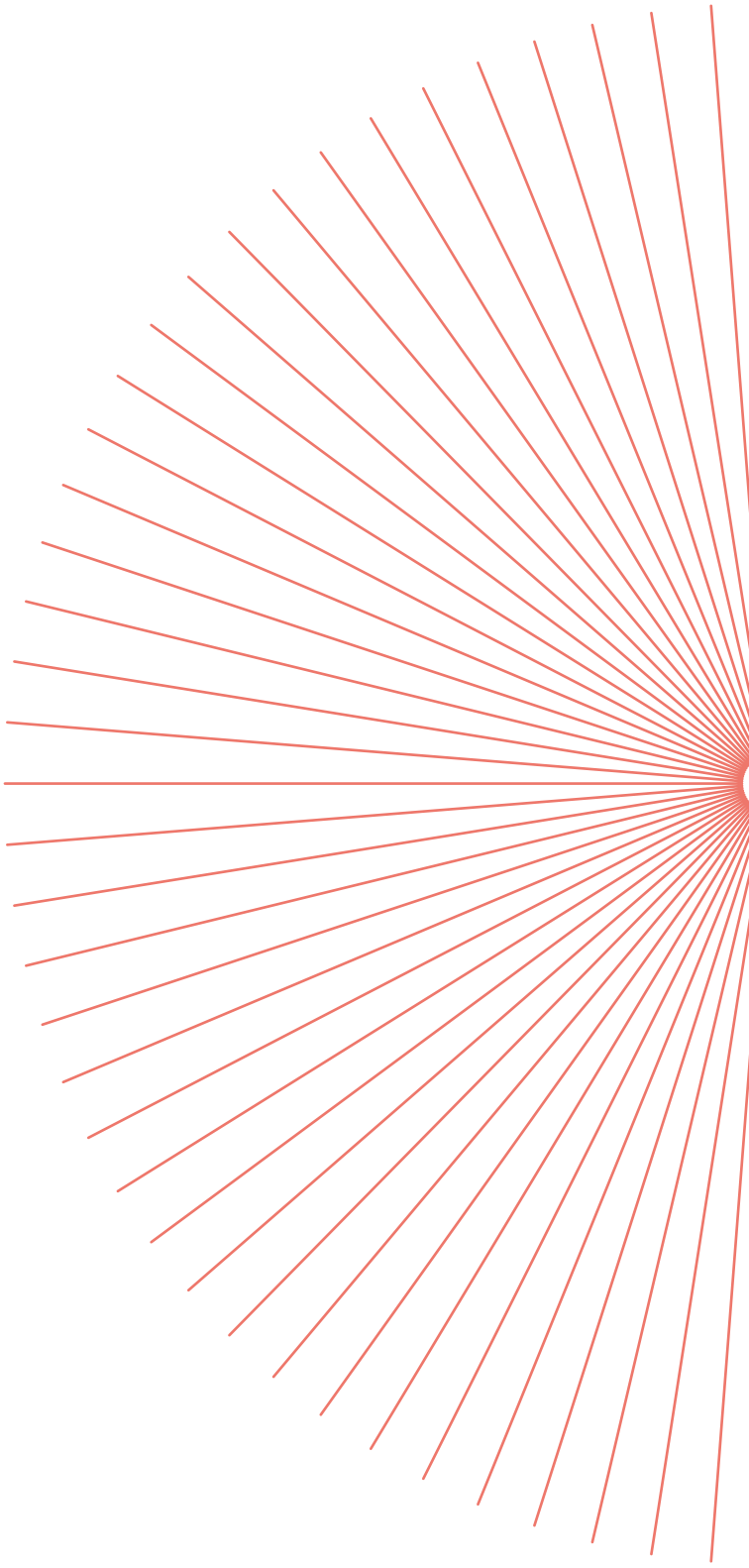
Architects/ AZC — Atelier Zündel Cristea
Opened/ 2021
Platform type/ side platform

Porte de Clichy Metro Station is one of the four stations designed as part of the development project of the Northern section of the 14th metro line in Paris. The station unifies the new line with overland transport stations and another metro line. The design relies on functional and practical solutions. Concrete and stainless steel were the main materials used. The key objective of the project was to create a safe and light space, which is comfortable for passengers. For this purpose light tones, illumination of certain elements (for example, staircases), as well as glazing of some sections of the station were used in the station design.

[17] https://archi.ru/projects/world/17509/severnyi-uchastok--i-linii-parizhskogo-metro.

CONTEMPORARY TRENDS
RECOMMENDED FOR APPLICATION

- Use minimalistic design, simple geometric figures and light tones.
- Reflection of the historical, cultural or functional identity in the architectural image of stations.
- Use of adaptive artificial lighting and natural light in the station design.
- Creation of comfortable and safe space.
- Use of design and architectural solutions that can be applied for the standard design of the metro infrastructure.



GENERAL CHARACTERISTICS
OF BIRYULEVSKAYA METRO LINE

The projected stations «Ostrov mechty» and «Zagorye» will be located on the Biryulevskaya metro line under construction.

The Biryulevskaya metro line will play an important transit role, including thanks to the layout of Klenovy Bulvar station at the Third Interchange Circuit providing residents of the South of Moscow with a high-speed non-surface connection with the city center and decreasing the load on the road network, including Varshavskoe and Kashirskoe Highways and Andropov Avenue.

The line of 21 km long will include 10 stations. They will improve the accessibility of Biryulevo Vostochnoe District and Kuryanovo Micro-District. At that, an additional connection with the territory of Kolomenskoe Moscow State Unified Museum & Natural Reserve will be provided both for the residents of already established micro-districts and the residents of the residential area developed on the territory of ZIL, while the city in general will be granted the transport access to the Dream Island theme park opened in February 2020. The line has a potention to be extended to Scherbinka (the territory of New Moscow) and from ZIL to the city center.

OSTROV MECHTY STATION

About the Station

The projected station «Ostrov mechty» of the Biryulevskaya line of the Moscow Metro is located along the side exit and relief road of Andropov Avenue near the Dream Island theme park.

Characteristic of Ostrov mechty Projected Station

The station is designed to interchange with the existing station «Technopark» of the Zamoskvoretskaya metro line with the arrangement of an overground crossover with the use of moving walkways, with two entrance halls and exits to Andropov Avenue and the Dream Island theme park, to existing and projected residential, business and public buildings, stopping points of ground urban passenger transport.

Type: **underground, subsurface.**
Number of platforms: **1**
Platform type: **off-boarding platform**

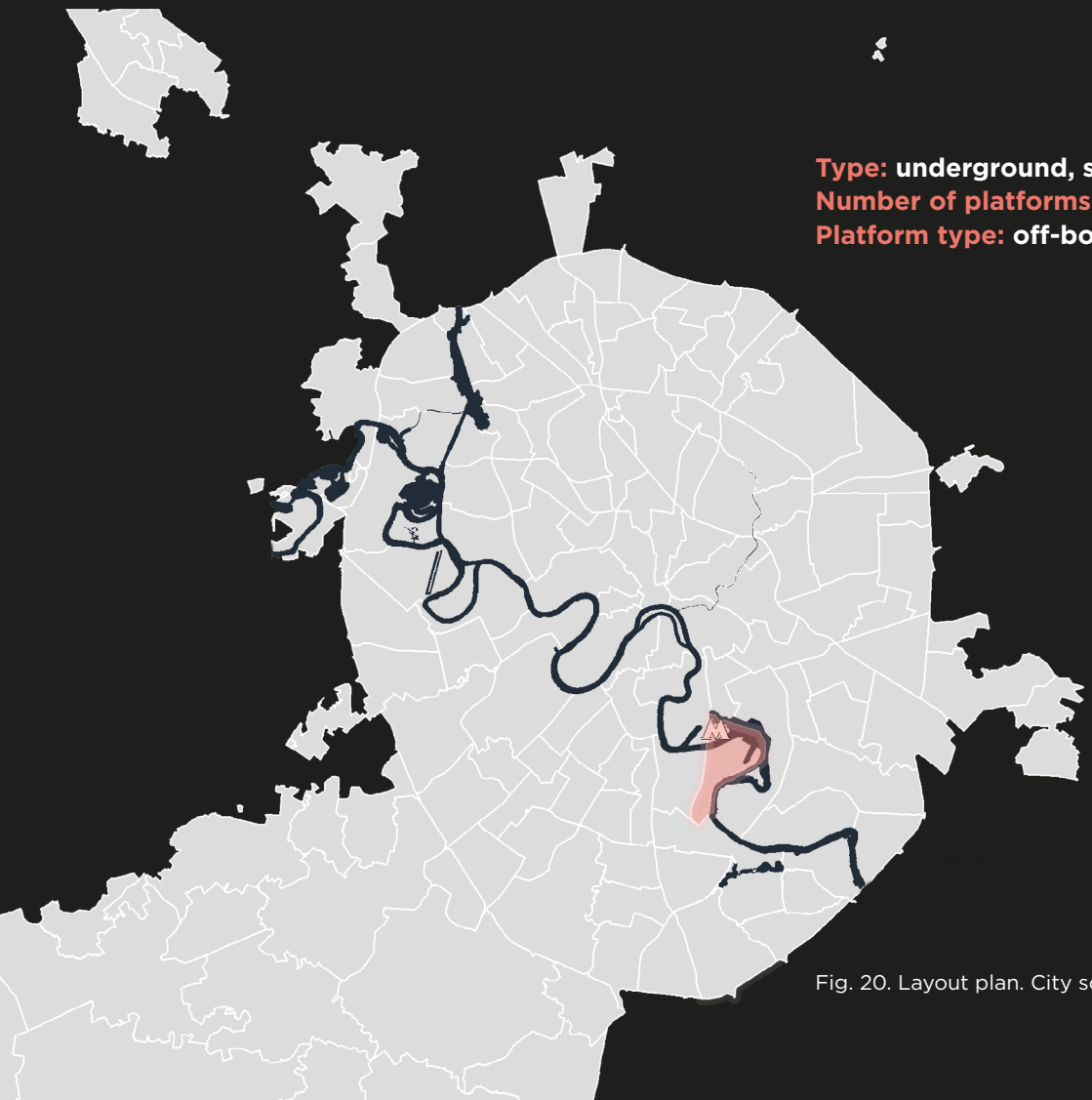


Fig. 20. Layout plan. City scale

OSTROV MECHTY
STATION

SPACE PLANNING SOLUTION

The station complex will be located on a section of the subsurface metro. According to the project, two single-track tunnels approach the station, and as a result, the station is designed with one off-boarding platform. Due to the depth of the approach tunnels, the main volume of the station with one entrance hall is underground. The second entrance hall is ground entrance hall.

There will be a crossover, one entrance hall and a passenger platform in the underground space. On the ground will be placed the second entrance hall with an overground crossover (bridge) to the station «Technopark», stair and elevator descents with pavilions over them, as well as ventilation stalls.

The station complex will consist of several underground levels. Passenger areas will be located in two underground levels, and two above-ground levels:

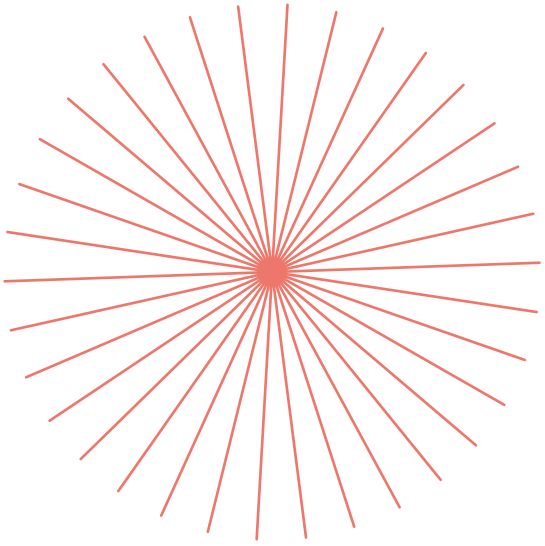
- level of the passenger platform;
- level of one underground entrance hall with a crossover;
- level of the ground entrance hall;
- level of the elevated crossover.

From the station boarding platform there is an exit to one group of escalators leading to the underground entrance hall and to the stairs leading to the transition corridor to the second group of escalators leading to the ground entrance hall.

ORGANIZATION OF PASSENGER TRAFFIC AT THE STATION:

- staircases and elevators to the underpass
- underpass
- underground entrance hall with a ticket office
- escalator run
- passenger platform

- ground entrance hall
- escalator run
- intermediate corridor
- staircases
- passenger platform



NAGATINSKY ZATON DISTRICT

The district is comprised of two semi-islands formed and limited by a bend of the Moskva River. The location has limited transport accessibility, however the construction of new metro stations will provide for its better connection with the rest part of the city.

At the same time, Nagatinsky Zaton is one of the most attractive districts of the Southern Administrative District in part of the real estate market. Key attraction factors are the developed social infrastructure (over 20 public and private kindergartens, 10 schools and colleges, renovated cinema «Orbita»), as well as recreation spaces within comfortable transport distance, which account for almost a half of the district territory.

Many cultural landmarks are located within the district and include the ancient Ascension Church and the Church of Our Lady of Kazan of the Kolomenskoye Museum & Natural Reserve.

The main housing development of the district dates back to late 1960s[18]. Given the existing housing the new construction opportunities in the district are limited with part of the district included into the Housing Stock Renovation Program in Moscow.

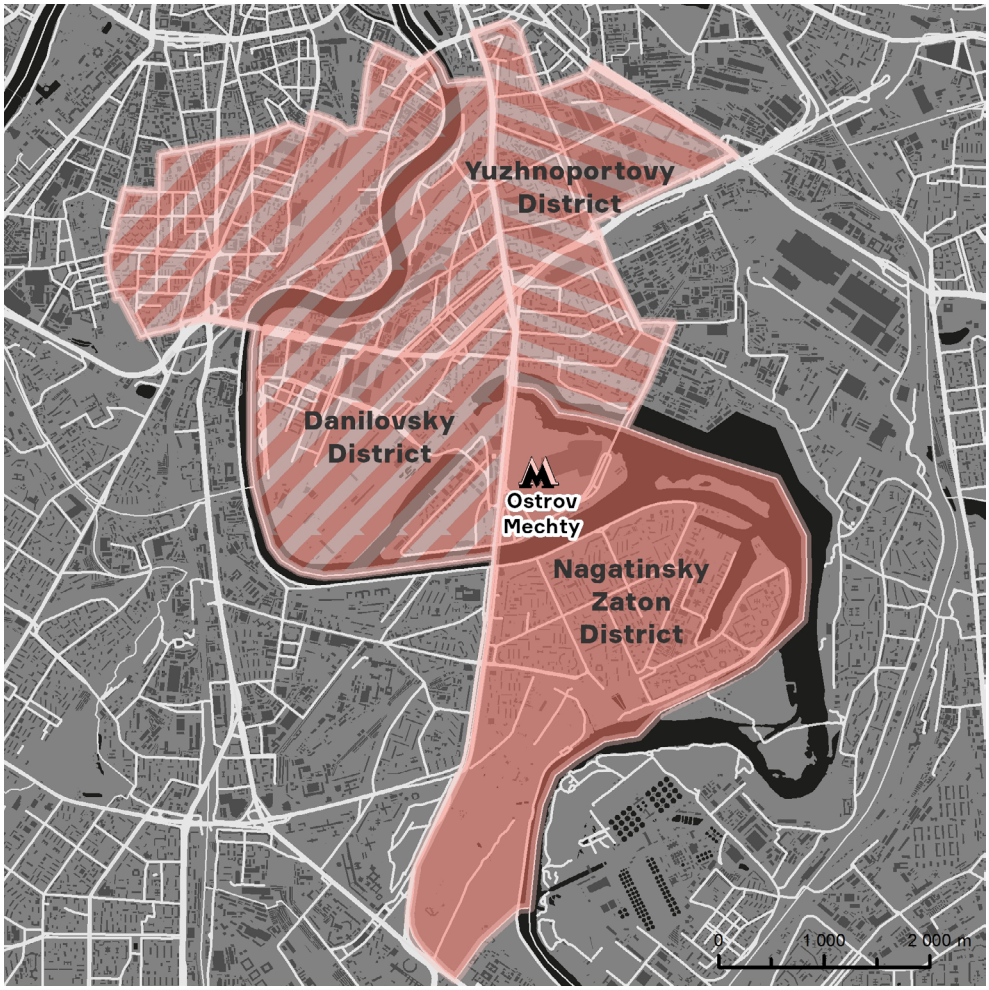


Fig. 21. Layout of the projected station

[18] https://realty.rbc.ru/news/5d03843c9a7947a8e38d669f.

HISTORICAL CHARACTERISTIC OF NAGATINSKY ZATON DISTRICT

The district name was formed from Nagatino Settlement derived, according to various versions, from the phrase “na gati”, i.e. a marshy place, from the Arabic cash designation («nogaty») or from the Russian word «nogatitsa» meaning a clean room. None of the versions have been confirmed until present.

The first mentioning of the settlement dates back to 1331 making it one of the most ancient settlements of the Moscow Region. The settlement comprised of villages of the individual farm type was part of the Kolomenskaya court volost and until 1797 was a personal asset of the monarch. The Nagatino villagers were practicing gardening for sale and were most probably engaged in pilot and shipbuilding activities.

After the Emancipation Reform of 1861, the villagers gained personal freedom, but were also binded by a number of restrictions and mandatory payments. This did not impair the settlement development both in agriculture and industry as a ship repair yard was built here. Meanwhile, the social development took place: a domain school was built, followed by a stone three-year school.

In 1917, the Ogorodniy Gigant collective farm was formed. In 1960, Nagatino became part of Moscow and mass standard housing construction started there.In 1968, the semi-island of Nagatinskaya flood plain was formed as part of the cut-off of the Moskva River.

The name of Kolomenskoe Settlement, which territory formed part of the modern district, derived from the Slavic word “kolo” (now it transformed to “okolitsa”) and can be translated as neighborhood or a cemetery designation — “koloimishche”. The first documentary reference to the settlement dates back to 1331. Over time the settlement became the summer country estate of the tsars.

Unlike Nagatino Settlement, Kolomenskoe maintained its status of the monarch’s personal asset for a long time with existing palaces reconstructed and new palaces built there on repeated occasions.

In 1923, Kolomenskoe was restructured into a state museum & natural reserve.

Fig. 22. Nagatinskaya flood plain[19]

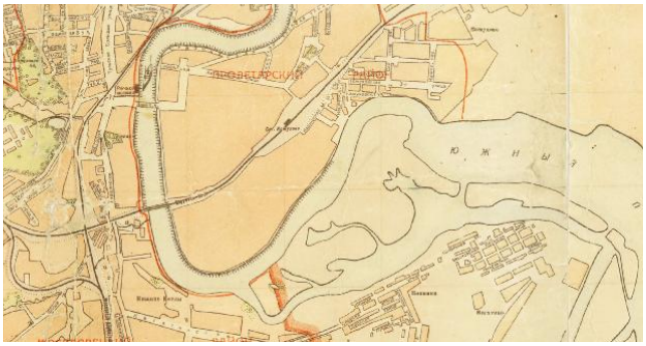


Fig. 23. Old map of Nagatino[20]

[19] https://zen.yandex.ru/media/amo_zis_zil/nagatinskaia-poima-istoriia-5e1beed0e6e8ef00b12dda2b
[20] https://www.yaplakal.com/forum28/st/100/topic1825482.html

THE TERRITORY'S MODERN IDENTITY

Nagatinsky Zaton is a spatially isolated district limited by Andropov Avenue, the Kolomenskoye Museum & Natural Reserve and the Moskva River.

The local identity has the following specifics, amongst others:

- culture: the important attraction point of the city residents is the Nagatino Culture Center opened in 1967; in 2022 the cinema «Orbita» was re-opened after renovation;
- entertainment infrastructure: the Dream Island indoor amusement park is located in the district;
- art: the sculptures by Andrey Aseryants made of recycled industrial waste are installed on the Nagatinskaya Embankment;
- education: the engineering and technical educational institutions, such as the preliminary university of the MIFI National Nuclear University, the Kvantorium children's technopark, the Itelma technopark, as well as the school No. 1523 being one of the best in Moscow are concentrated in the district.

The most famous attraction of the district and the entire city is the Dream Island being the largest indoor theme park in Europe opened in 2020 (Fig. 24).

Fig. 24. Dream Island Park[21]

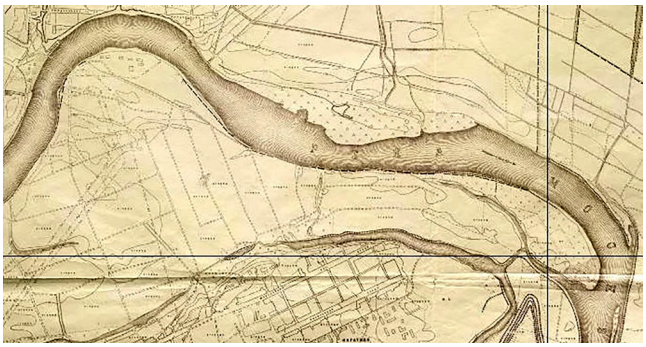


Fig. 25. Old map of Nagatinskaya flood plain[22]

Fig. 26. Nagatino in 1966[23]

[21] https://elot.ru/profile/396898324
[22] https://zen.yandex.ru/media/amo_zis_zil/nagatinskaia-poima-istoriia-5e1beed0e6e8ef00b12dda2b
[23] https://pastvu.com/p/92885

CHARACTERISTICS OF THE COMPETITION
FACILITY AREA

The projected station «Ostrov mechty» will be built near the amusement park with the same name «Ostrov mechty» (Dream Island) at the South of Moscow, at Nagatinskaya flood plain.

Dream Island, the largest indoor thematic amusement park in Europe, became a new point of attraction visited by thousands of people every day.

The station is located between the park and the developing territory of the ZIL industrial zone. Thus, the layout of the metro station has citywide significance, however the pedestrian accessibility of the metro station is higher for residents of the ZIL territory than for the main residential area of Nagatinsky Zaton District, which the construction territory of the station is formally related to.

The station will have a transfer to Technopark station of the Zamoskvoretskaya metro line. Apart of providing access to the Dream Island amusement park for a wider audience, the station will connect the South of the city with the housing development of the ZIL territory and the scientific and educational infrastructure facilities.

Fig. 28. Model of transport accessibility of the competition territory

Fig. 27. Plan of the current use of the territory

According to the plans for the ZIL territory redevelopment and the residential area renovation in the Nagatinsky Zaton District (53 buildings), the number of residential facilities on the territory adjacent to the competition facility will increase in the near future.

At the moment, the city transport corridor (Andropov Avenue) and car parking areas are adjacent to the site of the projected metro station. The natural recreation territories of the Northern and Southern landscape parks, the Dream Island theme park, the Megapolis shopping center and residential areas of three Moscow districts are located within a comfortable walking distance from the projected station.

ZAGORYE METRO STATION

About the Station

The projected station «Zagorye» of the Biryulevskaya line of the Moscow Metro is located along Lipetskaya Street North of the adjoining Lebedyanskaya Street. The station is designed with exits to both sides of Lipetskaya Street, Lebedyanskaya Street, to residential and public housing, and land city passenger transport stops.

Characteristic of Zagorye Projected Station

Zagorye Projected Station is located along Lipetskaya Street. The station will have two entrance halls: the Southern one with exits at the adjacent point of the Eastern part of Lebedyanskaya Street and Lipetskaya Street, and the Northern one. Both entrance halls will have exits to Lipetskaya Street. The Tsaritsyno natural and historical park being the favourite recreation place of Moscow residents is adjacent to the metro station.

Type: **underground, subsurface.**
Number of platforms: **2**
Type of platforms: **side platform**

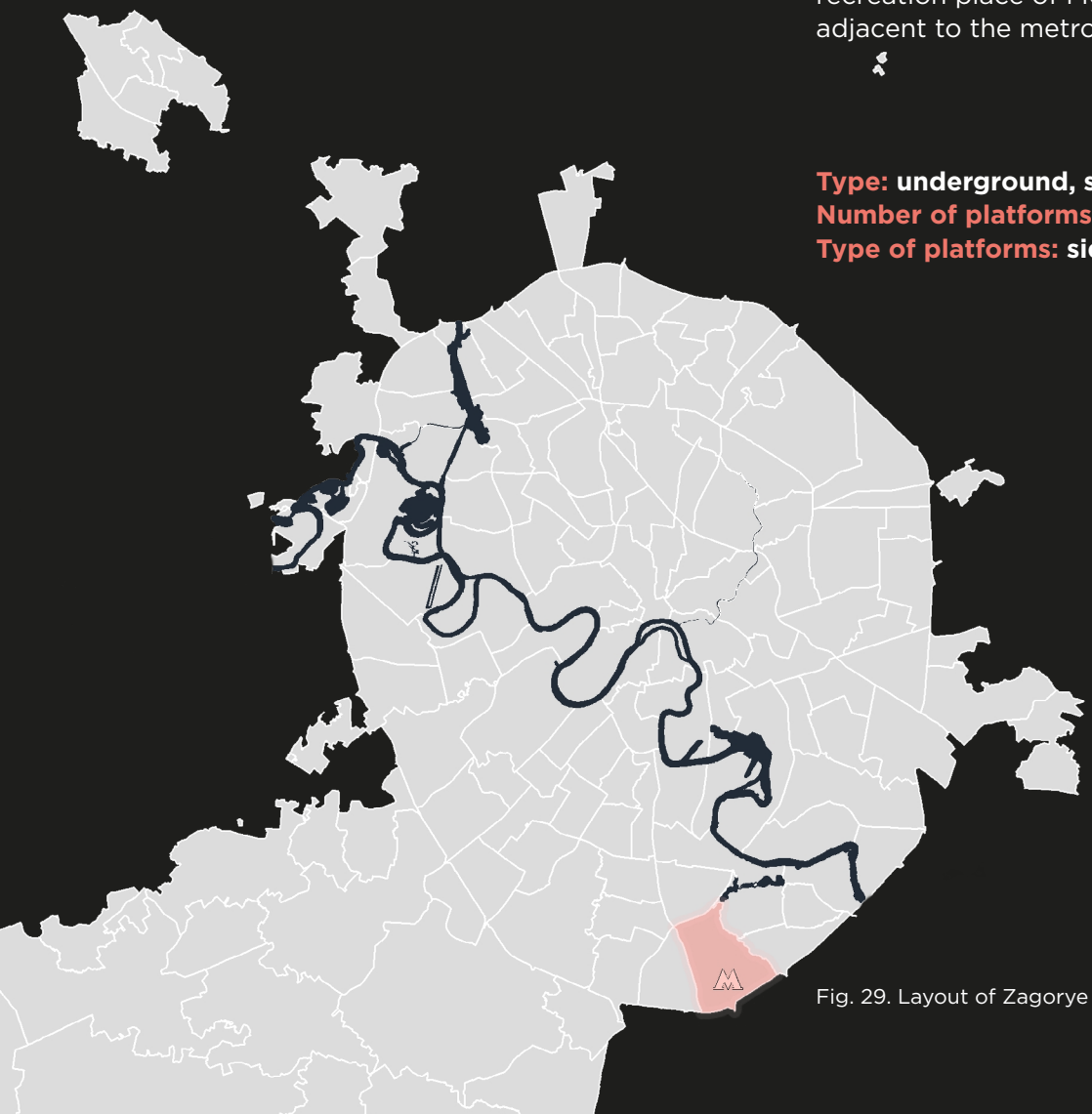


Fig. 29. Layout of Zagorye Metro Station

ZAGORYE
METRO STATION

SPACE PLANNING SOLUTION

The station complex will be located on a section of the subsurface metro. One double-track tunnel approaches the station, and as a result, the station is designed with two side boarding platforms. Due to the depth of the approach tunnel, the entire volume of the station is underground. There will be crossovers, entrance halls, and a passenger platform in the underground space. Only the passenger staircase and elevator pavilions, as well as ventilation stalls will come to the surface.

The station complex will consist of several underground levels. Passenger areas will be located in two underground levels:

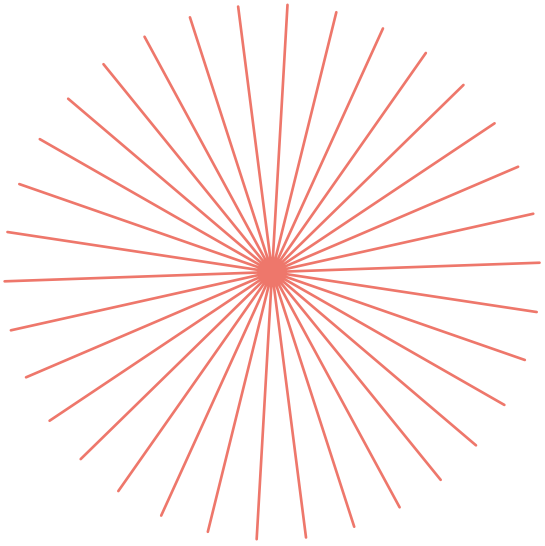
- level of passenger platforms;
- level of the two underground entrance halls and crossovers;

From the station's boarding platforms, there is access to the escalator inclines leading to the underground entrance halls located at the ends of the station.

ORGANIZATION OF PASSENGER TRAFFIC AT THE STATION:

- staircases to underpasses
- underpasses
- underground

- entrance hall with a ticket office
- four escalator runs to the platforms
- passenger platforms



BIRYULEVO VOSTOCHNOE DISTRICT

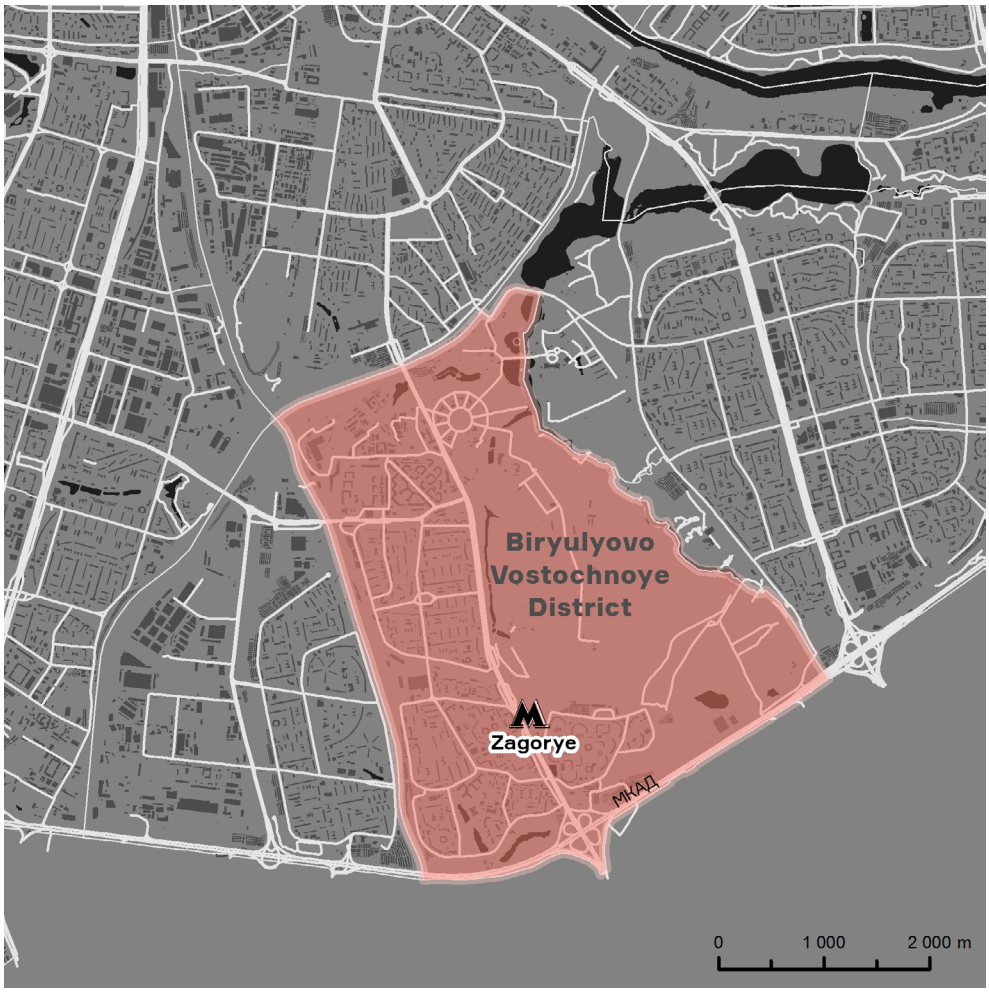


Fig. 30. Layout of Zagorye Metro Station

Biryulevo Vostochnoe District is one of the most transport isolated districts of Moscow limited by linear facilities of Paveletsky and Kursky directions of the Moscow railway and large recreation zones.

The district is considered to be one of the most landscaped thanks to the Biryulevo dendrological park, the Biryulevo forest park, the park named after Herzen and part of the Tsaritsyno Museum & Nature Reserve occupying almost a half of the administrative territory of the district.

The architectural-spatial development type was formed by the late Soviet micro-district standard housing, although the active development of its territory continues. The real estate prices are lower than the average Moscow prices, including due to the absence of a metro station. The district features the developed social infrastructure: sports and recreational complexes, medical institutions, cultural centers and schools.

HISTORICAL CHARACTERISTIC OF BIRYULEVO VOSTOCHNOE DISTRICT

Biryulevo Village was first mentioned in the documents in the XVII century. By the end of the XIX century the village residents were engaged in various activities, in particular the horticulture. In 1900, a worker settlement was established close to the Biryulevo Station of the railway laid in this area. A railway training school, a cathedral, a cemetery, a tea house, and a public house were opened in the settlement.

After 1917 the settlement developed actively and included a wagon and steam train repair depot, a brick yard, and a bread depot. In 1938, the Biryulevo dendrological park was established.

In 1960, Biryulevo was included into the City of Moscow and in 1971 the development of standard housing was started in the district.

Zagorye Village has been also known by documents since the XVII century. The origin of the settlement name is unspecified. Probably, it received its name as it was located on the highest part of this area and when moving towards the settlement from the city center one could get the impression that it seemed to be situated «behind the mountains».

By the end of the XIX century the village residents were engaged in such industries as production of cigarette wrappers, dray carrier's trade, work in cooperative associations and factories. The Krestovnikovy tradespeople, the mansion owners, developed ponds, made parks and laid the highway that lost its significance over time.

After 1917 the village was restructured into a collective farm. However, even after Zagorye became a part of Moscow in 1960 and the development started there in the 1970-ies, it maintained its agricultural importance: the headquarters of the All-Russian Horticultural Institute for Breeding, Agrotechnology and Nursery is located on Zagoryevskaya Street.

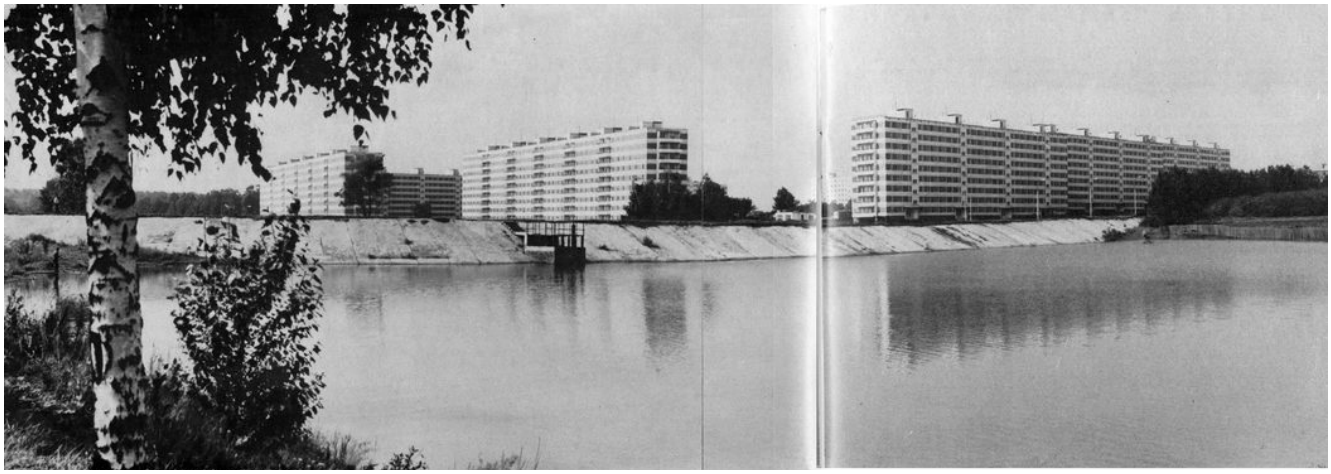


Fig. 31. Zagorye in 1976[24]

[24] https://pastvu.com/p/154598

THE TERRITORY'S MODERN IDENTITY

The spatial isolation of Biryulevo Vostochnoe District has an impact on the identity of the district residents. The local identity has the following specifics, amongst others:

- recreation zones: almost a half of the district territory is occupied by the Biryulevo dendrological park and forest park, parts of the Tsaritsyno Museum & Natural Reserve forming the Tsaritsyno Specially Protected Natural Reserve with a great history; A.I. Herzen is thought to have enjoyed walking through the territory of the park named after Herzen;
- Ogonek Toy Factory: the factory not only has been manufacturing toys for more than half of the century, but also developed a cross-functional stadium with football pitches, a tennis court, and a hockey rink;
- the Tsaritsyno Railway Station building was developed in 1908 by Architect V.K. Filippov in Art Nouveau style;
- The All-Russian Horticultural Institute for Breeding, Agrotechnology and Nursery: since 1930 the institute has been engaged in selective breeding of plants, as well as training of plant selection breeder scientists within its walls;
- self-sustainability: the initial district layout and its isolated development resulted in the developed social infrastructure, including large educational clusters of secondary education and colleges, polyclinics and medical centers.

The construction of metro stations and the renovation of housing facilities will trigger the development of the district making it more comfortable for life and creating conditions for the new development drivers.

Fig. 32. Biryulevo Vostochnoe District[25]

Fig. 33. View of the 2nd and 4th Zagorye micro-districts, 1984 [26]

[25] https://happybabymassage.ru/detskij-massazh-v-rajone-birjulevo-vostochnoe-juao/
[26] https://pastvu.com/p/36390

CHARACTERISTICS OF THE COMPETITION
FACILITY AREA

Zagorye Metro Station is one of three metro stations planned to be built in Biryulevo Vostochnoe District. It will become a key transit point for residents of the whole Southern part of the district enhancing the connectivity of these micro-districts with the city, workplaces located beyond the district area.

The territory around the projected metro station: the planned metro station is mainly surrounded by the housing and is located in the immediate vicinity of Zagorye micro-district.

Nine residential buildings included into the Housing Stock Renovation Program in Moscow and two start sites are located within a comfortable transport distance from the planned metro station. This indicates the possibility of even more active use of the territory in future.

Fig. 35. Model of transport accessibility of the competition territory

Fig. 34. Plan of the current use of the territory

Renovation of residential houses of the massive standard construction period, as well as an open layout of the district create a perspective for further increase in the number of residential facilities and, therefore, the population number and density.

At the moment, the road network sections are adjacent to the projected station site, including Lipetskaya Street being the main transport corridor of the district, car parking areas and the Biryulevo dendrological park. In addition, large-scale residential areas are located within a comfortable walking distance.

IN 2020 AN OPEN INTERNATIONAL COMPETITION WAS HELD FOR THE DEVELOPMENT OF ARCHITECTURAL DESIGN OF PROSPEKT MARSHALA ZHUKOVA AND KLENOVY BULVAR 2 METRO STATIONS

ASADOV Bureau was the winner in the Prospekt Marshala Zhukova nomination (Fig. 36-38).

Fig. 36-38. Winner project for the design of Prospekt Marshala Zhukova metro station[27]

The consortium led by Zaha Hadid Architects was the winner in the Klenovy Bulvar 2 nomination (Fig. 39-41).

Fig. 39-41. Winner project for the design of Klenovy Bulvar 2 metro station[28]

[27] https://archi.ru/russia/87198/dve-stancii-desyat-variantov
[28] https://archi.ru/russia/87198/dve-stancii-desyat-variantov

PRINCIPLES FOR CONCEPT DEVELOPMENT

Proposals from participants shall account for the following:

- general territory layout;
- operational requirements of stations;
- spatial requirements;
- requirements for the appearance of stations;
- requirements for elements and materials;
- requirements for structures of stations;
- functional requirements;
- lighting requirements;
- navigation requirements;
- furniture requirements;
- safety requirements;
- access requirements for limited mobility groups.

Fig. 42. Aminyevskaya Metro Station[29]

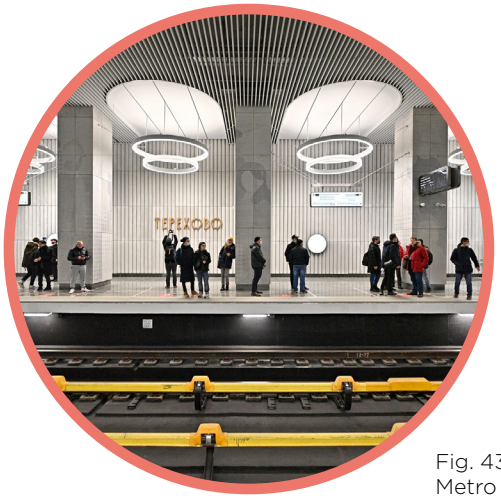


Fig. 43. Technopark Metro Station[30]

Fig. 44. Mnevniki Metro Station[31]

[29] https://stone-prof.ru/about/news/6054/
[30] http://domagazine.ru/design/arhitektura/arhitekturnye-itogi-goda
[31] https://mirtesen.ru/pad/43995507828

Open International Competition
for development of the Architectural
and Artistic Concept of Moscow Metro Stations
“Ostrov mechty” station and “Zagorye” station

Organized by
Agency for Strategic Development CENTER
121069, Moscow
21 Bolshaya Molchanovka St.
6th Floor, Office 13

info@design-metro.ru
e-mail: info@design-metro.ru
+7 (495) 123-45-53

design-metro.ru/en