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# STITCHING

PETRZALKA'S INCOMPLETE FABRIC

Maria Shinshinova | ARCHIP |

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# | INTRODUCTION |

# RESTATE THE ESTATE

## Project Statement

The icon of modern architecture in Slovakia cultivates itself in the housing estate of Petrzalka with its distinctive block of flats (ie. the panelak).

Being one of the largest and most dense estates in central Europe, it is ironically the most empty estate of Bratislava with vast unused open spaces. Constructed in the 1970s, its vision was never fully realised and it quickly became another concrete bedroom community of the eastern block, lacking public and cultural amenities.

The city of Bratislava is undergoing major transformations with investments focusing on creating its new identity. However, like in the neighbouring countries, the housing estates are widely unconsidered which creates a missing link in urban regeneration of the city. Despite the lack of attractiveness, the apartments in socialist estates play an important role in the local housing stock. But, due the lack of investment and delayed renovations, the reputation of these estate is rapidly decreasing, creating a threat that the estates in post-socialist cities will experience the same decline as the estates in the Western cities.

The project attempts to restore the modernist estate through re-incorporating previously unfinished ideas with addition new ones responding to contemporary needs, in such a way that the old can be renovated and completed, and thereby not transform but enhance the local character.



**| HOUSING ESTATES |**

# HOUSING ESTATES OF THE WEST

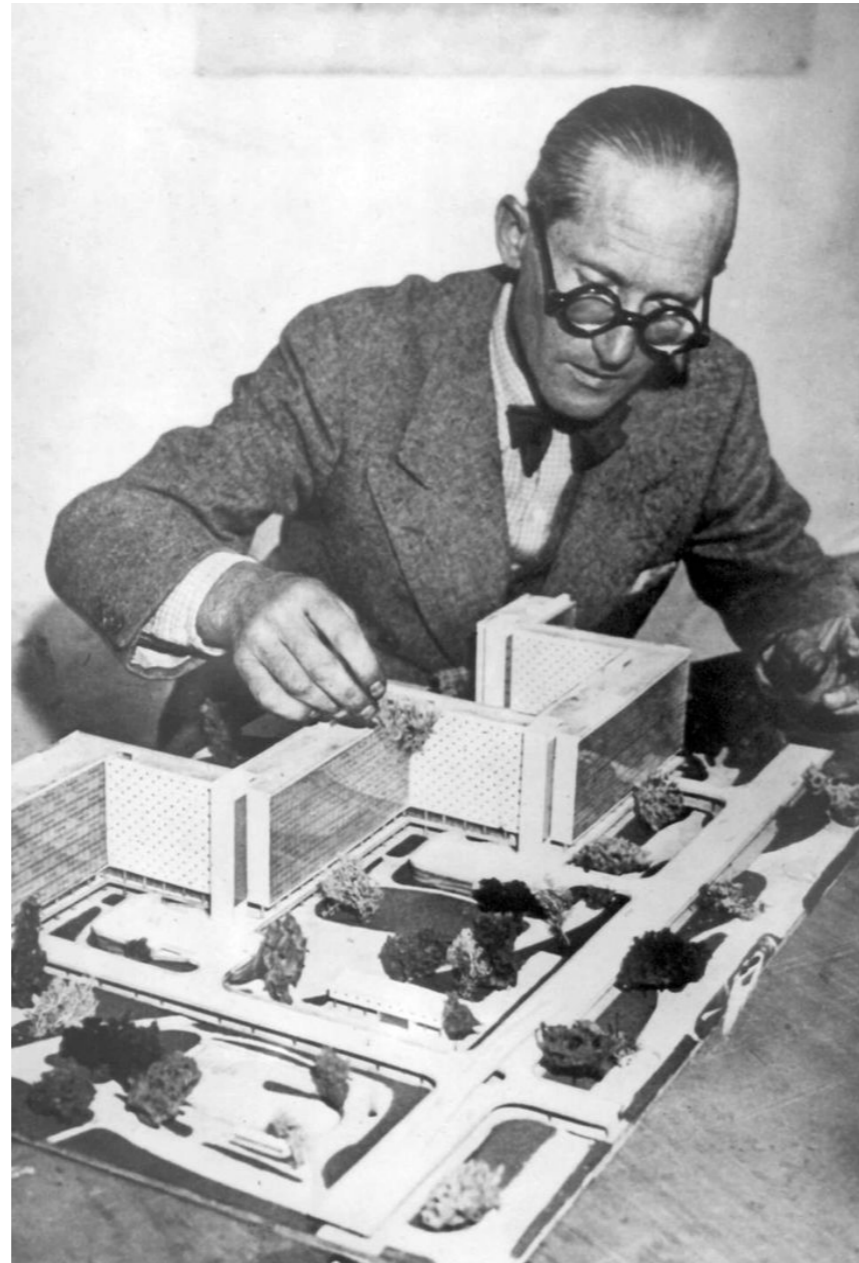
## From Great Solution to Great Problem

In the years after WW2, when economy began to flourish, with big investments came new possibilities which had its impact on cities. During this period of rising economy, political institutions aimed their attention to improve living conditions, which was expressed in constructing extensive housing projects.

The large housing projects are referred to by a variety of terms. In this project, the estate is defined as a functionally and territorially independent residential area, built in the second half of the 20th century, on the edge of a city in an open land. The size of the large housing estate is at least 2 000 housing units that are separated into residential sectors. The independence of housing estates is also expressed in its operational self-sufficiency, they are supplied by the basic and higher public facilities like shops, primary education, medical and cultural centers, greenery, playgrounds and sports facilities.

Large housing estates have been linked to the modernist movement that emerged from the functional city. In the 1930s, the theme of the 'Functional City' was a culmination of CIAM's major themes of the 'minimum dwelling unit' and the 'rational site planning'. The Athens Charter, published in the 1933, explored a vision for a new city that promoted mono-functions like dwelling, work, leisure and circulation to be separated, while concentrating on the benefits of collective organization.

The new estates were perceived as a sign of modern, better times. According to modernist ideas, new neighbourhoods were filled with huge housing blocks and typical built on the outskirts, far from the old city centers.



Le Corbusier presenting Ville Radieuse at a CIAM meeting in 1930.  
Source: 99percentinvisible.org

The decline and criticism of estates in the western world began, in the 1950s, numerous decades earlier than in the eastern countries.

Series of factors have precipitated the physical, economic and social decline of the housing estates. Idealistic and modern lifestyle, which had to be advantage of the neighbourhoods, in reality quickly became highly criticized and the popularity of the estates started to de-escalate. Monotonous appearance, lack of identity and inhumane scale led to doubts if the cities should be developed like this. Urban activities like street life, spontaneous interactions and mix of facilities were lost due to mono functionality and spatial separation.

The fastness and cheapness of the constructions resulted in poor quality houses. Large amount of common spaces, like corridors, staircases and lobbies resulted in high maintenance costs, which were had to meet. As the places were badly maintained, it did not attracted people to live there by will, but by to their financial situation, middle class always chose different type of accommodation.

Social segregation followed by increased unemployment rates and criminal activity. As these factors accelerated the neighbourhood decline, bad image and stigma was both a result and a cause for the decay.

These circumstances led to a shift in housing policies in the western countries, following by extensive rehabilitation projects of large housing estates. The reconstruction began with technical renewal, succeeding by participatory approach and final phase of integrated transformation strategies were and still are adopted.



The collapse of Pruitt-Igoe in 1972 due to its failure.  
Source: commons.wikipedia.org

# SOCIALIST ESTATES

## Evolution

The large housing estates in Western Europe make up less than 10% of the housing stock, compared to 40% in the post-communist Eastern European cities. While in the west housing estates have been on the forefront of the debate, the discussion on Eastern Estates has been extremely delayed.

Although, Eastern and Western estates look familiar, their key difference is presence of the totalitarian symbolism acting as a constant reminder of the oppression felt under communism. The Soviet Union developed the biggest housing program of the 20th century, not only to combat the post-war housing crisis but most importantly to spread its political ideologies. While ideal urban projects were rarely realized in the west, the Communist bloc, was a great playground theoretical paradigms of modernism where combined with central planning, allowed the ideas of modern urban design to be fully implemented.

The totalitarian control used city planning to construct its ideologies. Almost all building land was owned by the government and the public developer was the one and only builder.

With ongoing housing shortages the need to build bigger, faster and cheaper increased. In order to set goals and control the achievements, 5-year development plan was introduced with an aim to built on average more than 2 million housing units yearly. In order to be economically feasible and fastly constructed, a new method was required. Using prefabricated concrete panels and stacking them together reduced the construction time by 30%. This required maximum standardisation therefore, the panels were assembled in multiple but homogeneous typologies that were replicated across nations spreading the symbol of authority.



Novi Beograd, Belgrade, Serbia  
Source: flickr.com



Jižní Město, Prague, Czech Republic  
Source: svjbrandlova.cz

The initial ideology of Socialist Realism, where the building was a picture of politics representing power, toned down with the death of Stalin in 1953. A new vision and ideal of Soviet architecture was created. Characterized by simplicity, austerity of the form and economy of layout. Buildings achieve appealing appearance through its purpose, good proportions and proper use of materials, structures and detailing, rather than through the use of decorative ornamentation.

A Socialist city was about providing uniform living conditions for all, with an equal distribution of social and communal services within the district, or the micro-rayon, establishing uniform allocation of recreational parks, sports and access to public transport.

The housing policy in the East followed a controlled command structure, everyone was entitled to a dwelling and allocation was not income reliant. This created a social-mix within the districts, however, it also discouraged a social community to emerge as applicants were allocated according to availability rather than preference of location and residents often did not share common interests. A large bedroom community where everyone remains largely anonymous. By the end of 1970s the social housing distribution was in a state of chaos with extensive waiting lists, where preference was based on institutional, professional and hierarchical positions which caused distrust within the society.



A round house, an anomaly, within an estate in Moscow, Russia.  
Source: Felix von Schwaneuwede



An estate in Gdansk, Poland with Europe's largest residential building.  
Source: commons. wikipedia.org

# SOCIALIST HOUSING ESTATES

## Current State

Since the fall of communism in 1989, the East has been in transition to a market-based economy. Fifty years of centrally controlled housing market left the socialistic cities with a lack of differentiation of dwelling types, overcrowding caused by vast waiting lists, and low residential mobility.

Privatization of the housing stock led to repurchase of plots and apartments, which allowed owners to decide upon its modifications. This brought unclear responsibilities on who should maintain common properties and the large number of owners make management of renovation difficult. As a consequence, many estates are not maintained, outdated and old with uncertain future. Increased vehicle ownership added the intensity on the existing infrastructure and the need for parking spaces increased.

Market-led economy emerged new types of housing, where the middle class quickly relocated. People started choosing other forms of living and estates remain at the bottom of the market, consequently attracting residents who cannot live elsewhere. Monotonous social composition of inhabitants create social segregation. Residents with a poorer quality of life, high unemployment, and low income have an impact on the neighbourhood's reputation.

Despite the lack of attractiveness, the apartments in socialist estates play an important role in the local housing stock, but the lack of investment and delayed renovations rapidly decrease the position of the estates. Transformation needs to address the years of imposed architectural style and urban design, the loss of control over housing developments from location to type of dwelling as well as the loss of community life.



Inhumane scale of forms and vast empty spaces.  
Source: Robert Hlavaty



Unused public space lacking maintenance.

### Problems of the estates

The problems of socialist mass housing were evident during their final stage of construction and can be classified into three basic categories: socioeconomic problems, urban-architectural problems and structural-technical problems.

The socio-economic problem includes the property relationships, operation and maintenance of the panel buildings, relationship of citizen with the estate and public safety of the estates.

The urban-architectural problems are expressed in the dependence of the estate on the city, transport connections, inhumane scale, limited architectonic expression resulting in aesthetic monotony and uniformity, limitations of the flats and absence of defined public space.

Structural-technical problems are directly linked to the material quality of prefabricated parts and the poor quality of their assembly.

Although, the majority of problems are connected to incomplete and poor-quality realisation, many of the complaints are direct result of the implementation of the principles of the Athens Charter and modern urban design in general. Besides, the open spatial arrangement of the housing estates fails to establish the social content, interaction and communication. People do not know what to do with all the open social space, which triggers antisocial behaviour.



Lack of building maintenance.



Public space in between the buildings is occupied by cars.  
Source: bafoxy.sk



# REGENERATION STRATEGIES

## Learning from the West Implementing in the East

As renovation in Western Europe began decades ago, the East can learn from their practices. It is fundamental to start the rehabilitation programs at an early stage, before the future decline of the housing estates. Three periods of renewal policies can be distinguished in western cities.

### Technical renewal of the 1980s.

Initial interventions were purely technical: improving management, adding extra entrances to buildings, dividing long corridors, removing parking buildings, or adding public facilities, playgrounds and more. However, the results were disappointing, as expensive physical enhancements provided only temporary relief. It became clear that to achieve long lasting changes, socio-economic and cultural issues must be addressed.

### Participatory approach

The social aspect of regeneration was addressed in the 1990s, focusing on the involvement of different investors and stakeholders. Physical improvements and program diversification was achieved by self organisation of the community. Aside from physical improvements, there was a focus on programs to improve neighbourhood safety, training strategies to increase employment, and school infrastructure improvements. Residents' social integration was ensured by social, economic, and cultural initiatives. Such targeted initiatives and collaboration with residents produced better results: resident social composition improved, and most estates became stable and normal parts of the local housing market.



Facade renovations in Slovakia  
Source: Miroslava Brooks/Behance

### Policies of complex interventions and demolition

Beginning of new century recognized that most deprived estates, with severe social issues, required more dramatic interventions. Downsizing buildings became a popular strategy. Partially demolished low-rent flats shifted the population's social mix. Empty land was used to build higher-quality residences in order to attract families with a higher or moderate income as well as brought possibilities to build other types of programs.

Even though, the situation in the eastern Europe differs, some practices still can be considered. To begin with, technical renewal could be a good place to start when it comes to housing estates renovation in post-socialist cities, since it is vital to ensure that areas are both technologically and economically viable. Second, demolition is a drastic approach since it destroys social structures and forces residents to leave. Furthermore, given the current economic and housing conditions in post-socialist cities, total demolition of big housing estates is not a viable option. Finally, citizens' participation ensures better and more lasting outcomes.

It has been proved that simply refurbishing houses is insufficient. As a result, in post-socialist cities, in addition to planned building renovations, more comprehensive regeneration strategies should be developed, emphasizing the integration of neighbourhoods into the city structure, diversifying housing typologies, improving public space quality, and developing a mix of functions and programs. Such solutions would be beneficial for the future of local neighbourhoods as well as sprawling post-socialist cities. Existing urban areas will be transformed, allowing post-socialist cities to expand in a more sustainable manner.



Transformation includes facade renovation and an extension.  
Source: gutgut.sk



Downsizing of a panel building.  
Source: archdaily.com

# REGENERATION STRATEGIES

## **Poly-centric Development**

Neighbourhoods must be transformed into entire districts and incorporated into city visions and strategies. Socialist estates are positioned on the outskirts of cities, which is causing traffic congestion as residents daily commute to the city centres, where the majority of jobs, commercial, and cultural institutions are located. Peripheral neighbourhoods will become new sub centres if cities are developed poly-centrally. The development of new uses in the sub centres and their integration into the existing urban fabric provides new quality to estates while reducing car movement to the city centres. Poly-centric development is a viable option in socialist cities because they were previously planned that way, meaning there is a structure that can be re-used.

## **Transport strategies**

Micro-districts were planned along major city arteries and large-scale housing estates have extensive road and public transportation networks, using these advantages is important.

## **Poly-functional strategies**

Mono functionality is a key problem of huge housing developments. It is critical to adapt the neighbourhood to new lifestyles by adding new uses and activities. The original intention of the estate was self-sufficient district with complete range of amenities. Essentially multifunctional principle was never consistently implemented, resulting in mono-functionality and increasing traffic demands.

Within the housing estates high population density is achieved with a small share of built up area, directly creating preconditions for poly-centric development with good economic conditions for wide range of functions.

## **Fine-grain poly-functionality**

At an object or a block level direct contact with functions, efficient to mix both horizontally and vertically.

Virtually non-existent in housing estates, unlike the traditional urban structure, with the exception of experimental projects with integration of civic amenities into the elevated ground floor of panel housing and underground floor were reserved as technical and storage spaces.

## **Medium-grain poly-functionality**

At a level of a cluster, or group of buildings the poly-functionality is the most economical and rewarding. Integrates basic and higher civil amenities within the estate's structure with optimal accessibility. These not only satisfy the daily needs of the residents but also provide jobs. In the estates, many of these projects were delayed and eventually abandoned.

## **Coarse-grain poly-functionality**

Poly-functionality at the level of zone, locality or even district can to form a unique character of the area. It was the separation of housing from work that is considered the fundamental problem of the estates.

## **Diversifying living typologies.**

The better-off society in post-socialist cities now prefers larger and more comfortable houses than apartments in large estates. As a result, having alternative housing typologies inside the neighbourhood would attract inhabitants with greater incomes, as well as singles and young families to generate social mix. In post-socialist cities, where demolishing buildings is not an option, new typologies can emerge on the outskirts of neighbourhoods, along main streets, or in low-density areas.



Small scale participatory interventions done by residents create nicer environment and bring community together.

# THE STORY OF BIJLMERMEER

## Precedent

As Amsterdam was booming in the post war years, planning institutions proposed an immense plan for a satellite city housing 1/7th of whole Amsterdam population. The district was built from nothing, without any existing connection to the city's network, such scale project was never implemented before in Netherlands. The project for Bijlmermeer, constructed in the late 1960s, was imagined as a pilot-project of how the cities of the future should look like.

The design was formulated using CIAM blueprint with almost unquestionable adoption of its principles. Bijlmermeer plan adopted divisions of functions and zoning, the mobility infrastructure was designed using two-level system; pedestrians and cyclists used street level, while fast traffic operated on a raised level. The architectural expression was also formulated in CIAM terms, high-rise buildings and big open spaces were glorified. The adoption of CIAM was at the same time criticized, because in time of designing most of the principles applied were already challenged.

Soon after its completion, concrete slabs failed to compete with semi-detached housing that were rapidly developing in the towns surrounding the city. Instead of becoming the city of the future, Bijlmermeer became one of the most problematic neighbourhoods, with continuous flow of starters in the housing that had few options on the market. Problems like rising crime levels, large number of illegal immigrants and high unemployment were characterizing Bijlmermeer. These issues were first recorder in the 1982 however, it was only after a cargo plane crash in 1992 following media attention, that the state became interested in Bijlmermeer's problems. Consequently, the neighbourhood became problematic and unattractive, housing poorest families of the country, instead of high middle class as envisioned.



Honeycomb arrangement of block of flats.  
Source: bijlmermuseum.com

“The Problem with the Bijlmermeer was that it was unchangeable, uncompromising. The Bijlmermeer had been designed from above in the 1960s by a bureaucratic machine.”

Baart

### Unforeseen socioeconomic circumstances

The project was rushed and lacked collaboration with other institutions. The planners neglected future socio-economic projections. The design planned with almost luxurious 4-5 room apartments, however with stagnation of the 70s, the target group's purchasing power lowered significantly, as well as Amsterdam lost more than 20% of its population which naturally solved the housing shortage, leaving newly constructed Bijlmermeer empty. With an inflow of migration and help of government subsidies, the neighbourhood became a district of immigrants. By the year 2000, 70% of inhabitants non-natives. However, high rent led to multiple families living in one apartment, resulting in concentration of poor. Although, the socio-economic processes are not entirely predictable, they do occur in the modern society and need to be incorporated into the design, the uniformity of the project and lack of diverse housing make Bijlmermeer very sensitive for changes.

### Incomplete implementation

In the process of construction, many problems arose, mainly due to higher financial costs and lack of cooperation between different departments. The various collective parts that played an important role in the design were never implemented. “Eyes on the street” was absent as ground floor remained empty, leaving feeling of vulnerability.

While the idea was that with the use of big scale structure would lead to communal perception, it did just the opposite of that. The inhumane scale of open spaces, long galleries and large dimensions of the buildings felt alienating. The lack of facilities resulted in a city without a heart, unable to adapt to social dynamics.

“One day a jumbo jet fell from air and made a start with the destruction.”

Koolhaas



Bijlmermeer after plane crash.  
Source: bijlmermuseum.com

# REGENERATION OF BIJLMERMEER

## Precedent

When the problems of Bijlmermeer became known to all, the debate on how to regenerate began. As the political institution responsible for the renewal liked the idea of demolition, the question was whether it would be a complete renewal, or renewal of smaller parts.

Small intervention like addition of elevators and colouring of concrete walls were done, but it was not enough to regenerate the area. The professionals started believing that the only way to improve Bijlmermeer is to change its housing supply. The renewal proposal was created by city of Amsterdam and the housing corporation.

High-rise apartment blocks have been replaced by single-family housing with gardens, to attract middle class to impoverished areas, using marketing of new constructions.

Around 50% the houses were demolished, between 1992 and 2010, and high-rise structures were reduced from 95% to 45%. With the change in housing sector from previously 92% of Bijlmermeer apartment being in the social rental sector to only 55%, the proposal hopes to change in the social mix of the neighbourhood.

The renewal project used the same idea as the original plan to significantly transform the housing market, as well as to attract middle-class families. Today, most of the high-rises are demolished and crime rates are down, but the negative image is still defined by the zip code. The vision of the renewal can be criticized. The regeneration plan treats Bijlmermeer as a pseudo-historical area, which it has never been, and imitates the design of suburban housing. But at the same time erases most of its urban tissue. At the end of the day, the regeneration was treated just as the estate's original plan, as a bureaucratically drafted plan.



Regeneration introduced alternative housing typology, single family units in townhouses.  
Source: bijlmermuseum.com



First plan highlights demolished structures and second one new buildings after renewal.  
Source: failedarchitecture.com

## An alternative solution from OMA

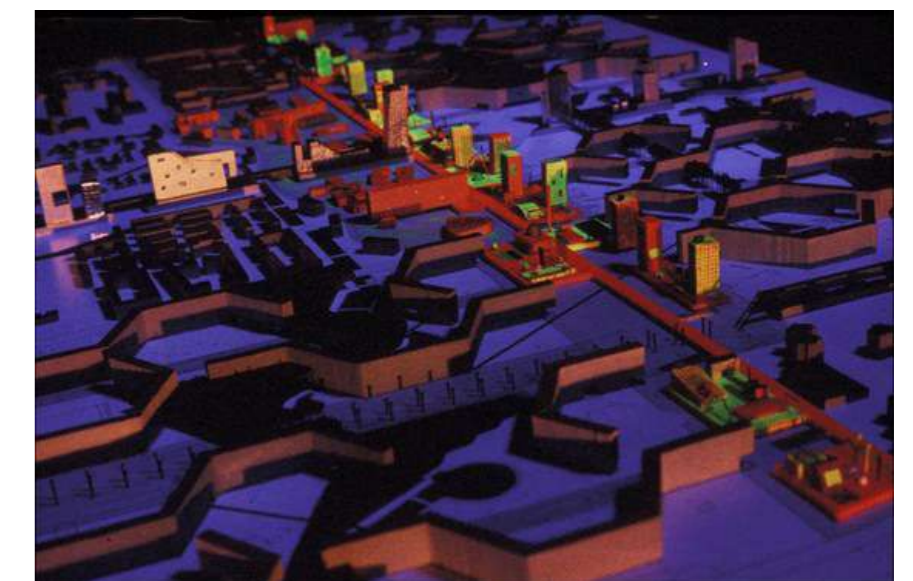
The office of OMA prepared a redevelopment plan of Bijlmermeer in 1986, on the demand of the director of housing department in that time. The concept of the design was to glorify the concrete slabs and preserve apartment buildings, while focusing on transformation of the open space in between.

Restoring the void by introducing variety of activities, introducing store fronts and services on the ground floor under the road, subdividing and differentiating the green spaces and densifying the urban fabric through new residential sectors. The public space was subdivided into multiple strokes in which various public functions were placed like such as sport centre or an outdoor cinema. New program of the area was concentrated within the 'Bijlmer Strip'. The plan consisted of two new structures, situated on two main roads, one the strip with towers and other with urban villas.

Although the plan was never implemented, it served as a framework and opposition of total demolition of Bijlmermeer.

“The Bijlmer offers boredom on a herous scale. Its monotony, harshness and even brutality, it is ironically, refreshing.”

Koolhaas



OMA proposal of densifying strip.  
Source: OMA

# LACATON & VASSAL

## Transformation of post war housing

The architectural office of Lacaton&Vassal is highly interested in the transformations of post-war housing. Although there is a trend to de-construct the high-rise housing estates, which would worsen the housing deficit, Lacaton and Vassal consider demolition bizarre. The transformation aims to respond to the needs in more economic, effective and qualitative way. The idea behind their approach is to enrich the existing and add rather than replacing something with new. They argue that, transforming, adding and reusing is more rational than demolition and new construction.

The context is perceived through its own special quality, making observation of both buildings and atmosphere the starting point. Sometimes the outcome might even be a conscious decision to change nothing, like it was the case with Place Léon Aucoc, Bordeaux. That as a project proposed nothing apart from maintenance works, as the square is already beautiful.

A report done by the architects, titled PLUS, claims that per flat the demolition is almost 10x more expensive than transformation.

Although it might not solve the social problems, transformation offers and interesting hybrid and might aid in building positive image of the estates.

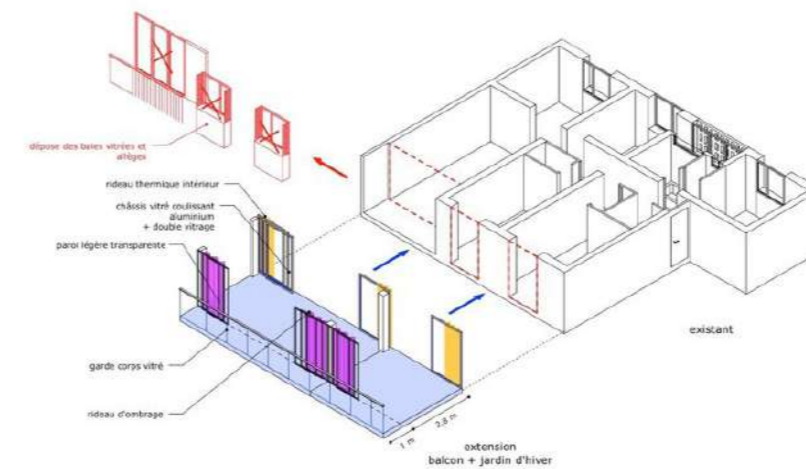
In Bordeaux, 2016, the project of transforming 530 dwellings included addition of extensions of winter gardens and balconies. Goal was to give opportunity for each apartment to have more light, space, use and views.

Through the project, often criticized social housing produces well performing dwellings, reformulate the typologies and improves conditions of living.

“Never demolishing, never removing or replacing, but always adding, transforming and reusing”  
Gustavo Gili



Place Leon Aucoc, Bordeaux, an example of conscious decision to do nothing.  
Source: Lacaton & Vassal



Transformation of 530 dwellings, 2016, Bordeaux.  
Source: Lacaton & Vassal



PLUS, an extensive research on transformation of post-war housing.  
Source: Lacaton & Vassal

**| BRATISLAVA |**

# BRATISLAVA

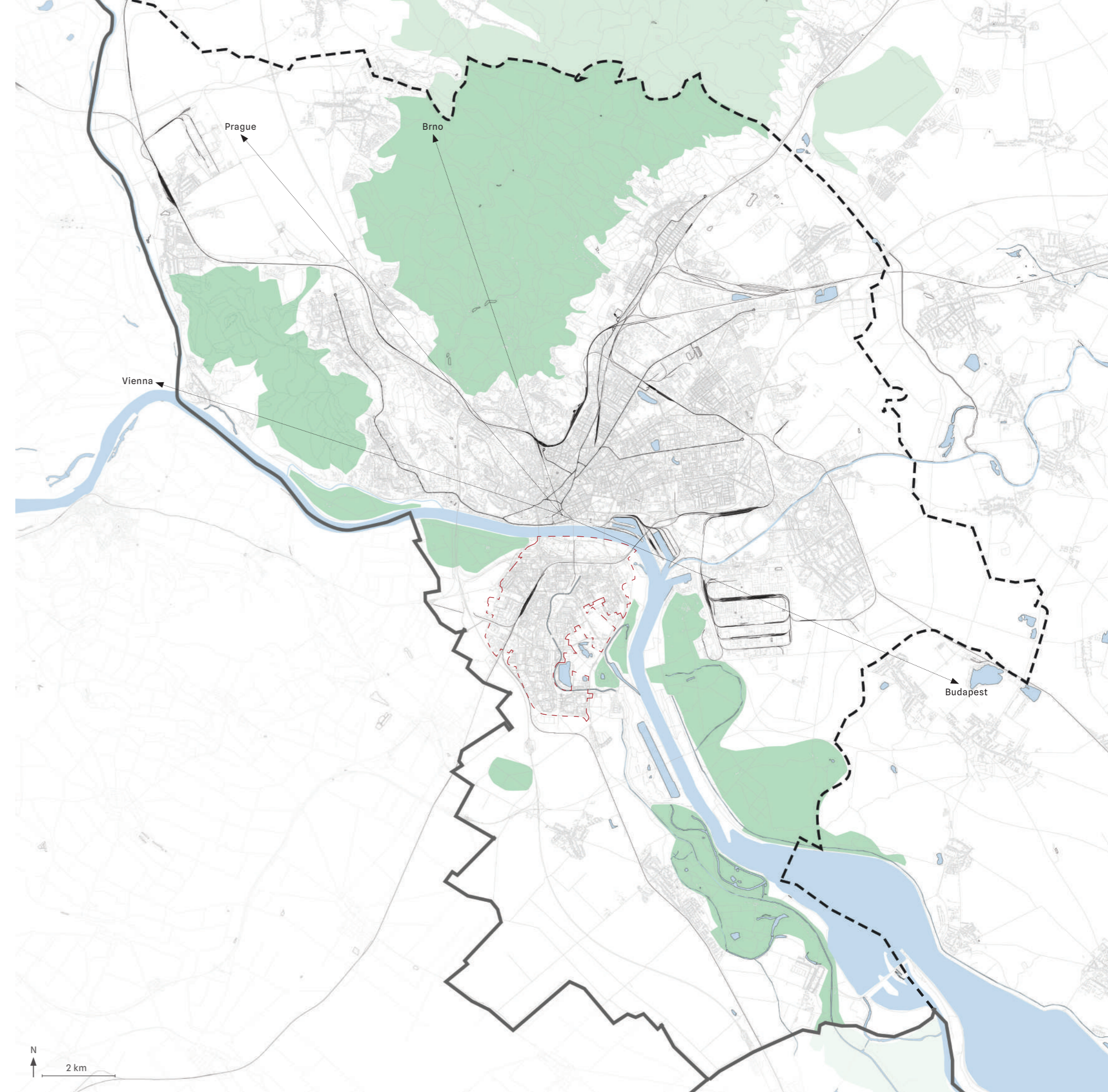
## Overview of the City

Bratislava is sits on the edge of Slovakia and borders Austria and Hungary. It was created at the entrance gate to the Carpathian Basin and benefits from its location on the Danube River. The capital of the Slovak Republic is also its largest administrative centre. Located only, 65 km from Vienna (creating a metro-region agglomeration with Bratislava) and 193 km from Budapest, city's character was and is being strongly influenced by it's neighbours. This unique positioning serves as inspirations for local designs, but at the same time it is a competition which Bratislava constantly struggles to match.

The geographical position of Bratislava is clearly defined by its natural (the Small Carpathians mountain, the Danube river) and political (country) barriers, which defines the spatial structure and development of the city.

As a former communist country, Bratislava is a gateway between the eastern and the western European countries, which is clearly reflected in architecture and urban morphology.

After entering the European Union, Slovakia's economy was thriving, becoming one of the fastest-growing economies in the euro-zone. As the investments increased, the construction boomed, transforming the city's identity from a socialist one to western.



# HISTORICAL CONTEXT

## The Story of City Planning

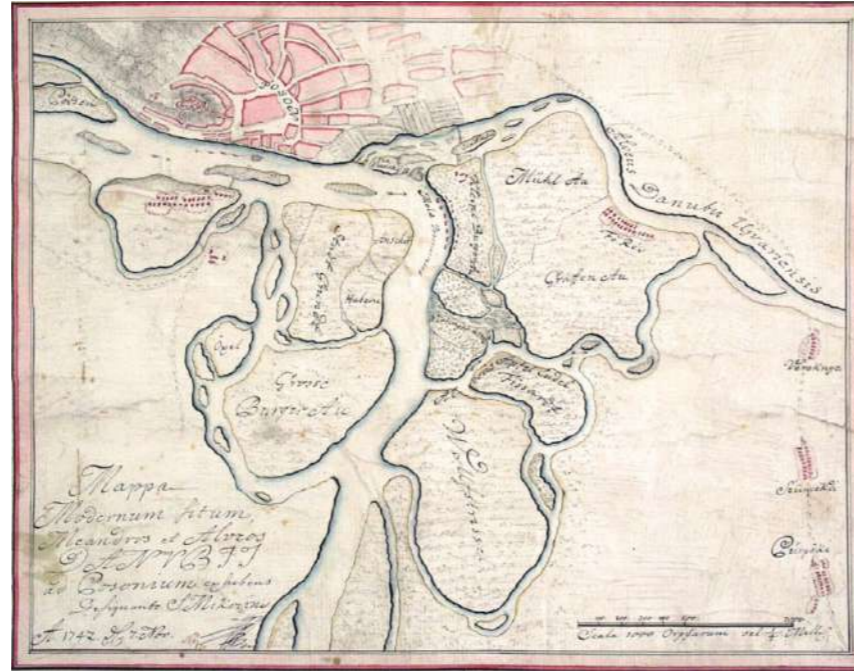
Bratislava emerged through gradual evolution of a prehistoric settlement by natural factors, the Lesser Carpathians and the Danube. Particularly all urban radials emerge outwards from one historical intersection of two ancient trading routes, the Amber way from Adriatic to the Baltic, and the Danube way. The city started to shape itself under the rule of Maria Theresia, when Hungary reached greater stability and construction boomed. In the 1785, Bratislava counted 31,710 making it the largest urban settlement in entire Hungarian Kingdom at the time.

### Industrialisation

During the industrial era, Bratislava began to undergo a process of modernisation. Emerging industries brought the necessary rail infrastructure and new residential districts were built. By the need of expansion a framework was set in which the city was planned to grow.

### First Republic

Although urbanisation trends came with a noticeable delay, in the first two decades of the 20th century Bratislava managed to apply all the essential elements of modern urban planning, like hygienic principles, transport systematisation, rational forms of construction and creation of public and green areas. With the independence of Czechoslovakia in 1918 the city has undergone rapid changes. Becoming the center of Slovak Republic and influx of new inhabitants caused a gradual shift in city's character from Hungarian to a Czechoslovak one. Even though Bratislava managed to consider a broad city regulatory plan in the inter-war period, the construction developed mostly spontaneously. Growing demands for road capacity were underscored by the reorganisation of traffic in the central districts.



Historical map from 1742 illustrates Danube's outbranching.  
Source: imhd.sk



Map from 1820 illustrates Danube's outbranching.  
Source: imhd.sk

### Socialist Planning

In the post-war years the city has undergone major repair works and implemented new development plans. The focus was upon housing construction which was very important for planned economy and its development plans.

In favour of private automobile transport, existing central districts were demolished to make space for extending and finishing of the ring roads to ensure future transportation to newly planned districts like petralka. New bridges connecting two river banks allowed for further expansion of the city. Greatest period of urban growth took place in 20th century of rapid change. The physical form of the city has been most deeply marked by the rapid extension of area and population in the 2nd half of the 20th century.

### The City of Today

Today the city has grown to become a satellite city with many bedroom communities with single family housing surrounding the city. The satellites have no or very little public amenities to sustain life within themselves. This brings a lot of daily traffic congestion as commuters need to travel into the city for work and personal needs.



Map from 1930 illustrating city's development on both sides of Danube.  
Source: imhd.sk

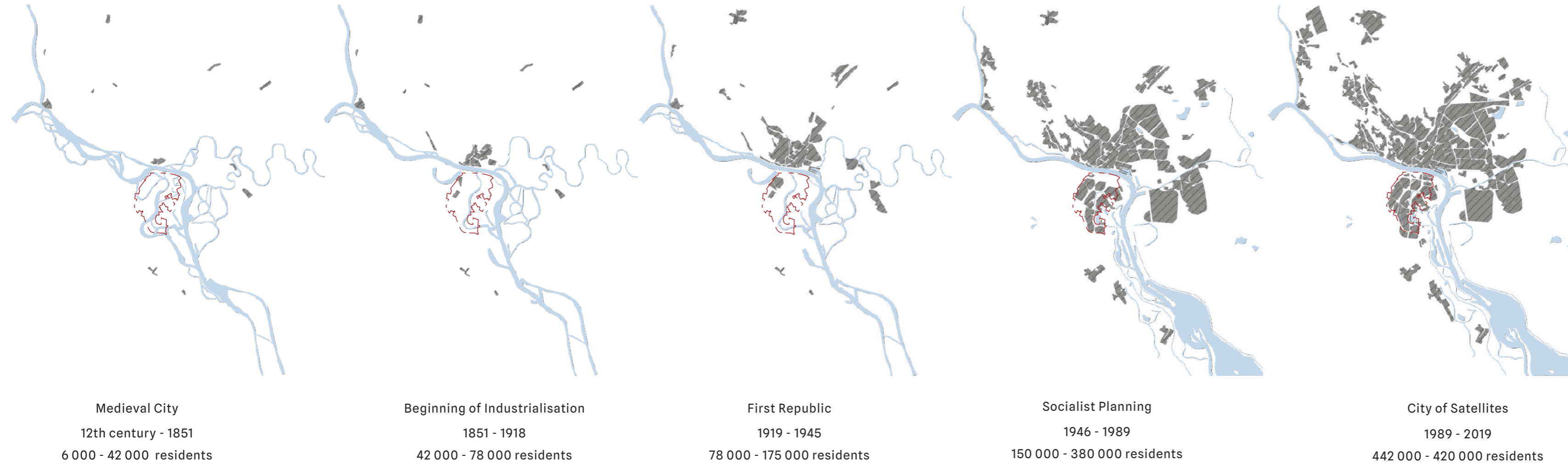


Latest land-use plan developed in 2007  
Source: uzemneplany.sk



# EVOLUTION OF THE CITY

## Morphological Development



Apart from the city form, the maps represent morphological change within the Danube. For a long time the multiple branching of the river was constantly flooded and could not be inhabited. But with time and technological evolution the waters were redirected into more joint element.

Other element effecting the city's shape are the Less Carpathian mountains that forced Bratislava to spread to the east and west.

# SOCIALIST CITY

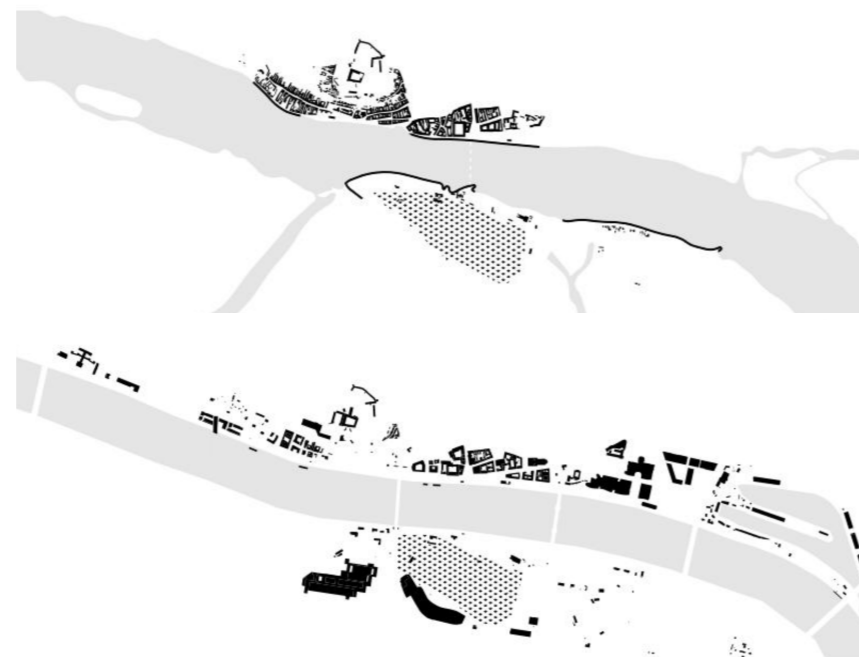
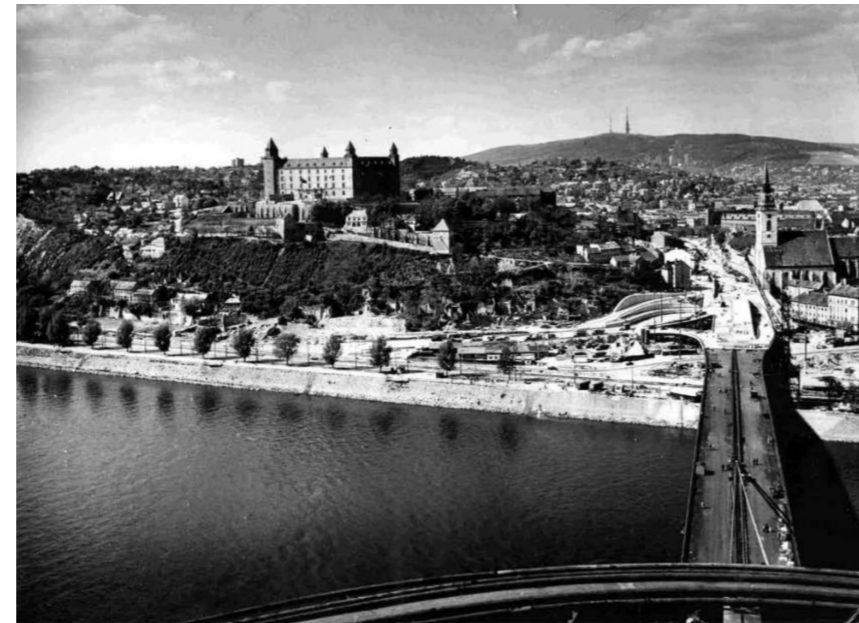
## Bratislava

With the declaration of Czechoslovak independence in 1918, Bratislava became the capital of the state, and its multi-ethnic German-Hungarian-Slovak composition shifted into a Czechoslovak city. The need to reflect the new status and power was translated into the urban form which altered city's identity and strived to reflect the national ideologies.

The recent Hapsburg past was erased by removing the memorials and renaming the streets. The planned economy, including construction, formed an integral part of the totalitarian organisation.

The plans and urban studies focused on the functional zoning of future development and organisation of the wider transport system. During the post-war years, the city focused on infrastructural repair which followed implementation of development plans. Among the terms of modernisation ring roads and major city's arteries were designed, many times realized at the expense of existing urban fabric.

In the 1950s, the long term development plans envisioned to transform city into metropolis with 300,000 inhabitants. To achieve this, the housing fund was raised by 60% and residential districts. The design group had a vision of Bratislava gradually expanding in all directions and eventually absorbing the surrounding settlements. The old city centre was viewed as provincial and was needed to overcome.



Major transformation of the river bank evolving over time, from 19th to 21st century with introduction of ring-road. Most of the original fabric under the castle hill was either destroyed by fire or demolished to execute the proposal which was planned for a century ahead.

Source: (UN) Planned Bratislava



Original urban fabric consisted of a residential block that was demolished.



Almost whole area resulted in transformation in order to create a cultural and commercial center in adjacent to old town.



Transformation of Kammene Namestie from residential settlement to commercial center.

Source: (UN) Planned Bratislava

One of the major transformation occurred under the castle hill. For the construction of the bridge SNP, Bratislava's icon, and its ring road, whole districts were demolished to make space for the infrastructure. Including, lowering of the terrain which resulted in literal division of the historic area between the old town and the castle.

Coming into the 1980s, the attention shifted onto protection of the surrounding nature, modernisation of central districts by turning them into cultural and commercial centers, and eliminating industrial production within the city.

With the decreasing economy towards the end of socialism, development and zoning plans became less frequent and the realisations even more. Eventhough, the modernist framework became highly criticized and rejected, the latest land-use plan from 2007 still has many of modernists views implied.

# THE ESTATES OF BRATISLAVA

## Introduction

The case of Bratislava was no different to other eastern cities. What has been an extremely rural society turned into an urban one within the second half of the 20th century. Mass-produced public housing became both a result and a necessary component of the process of modernization and social change. But, the speed and political circumstances under which this process occurred influenced, and continues to influence the Slovak society's understanding of housing construction.

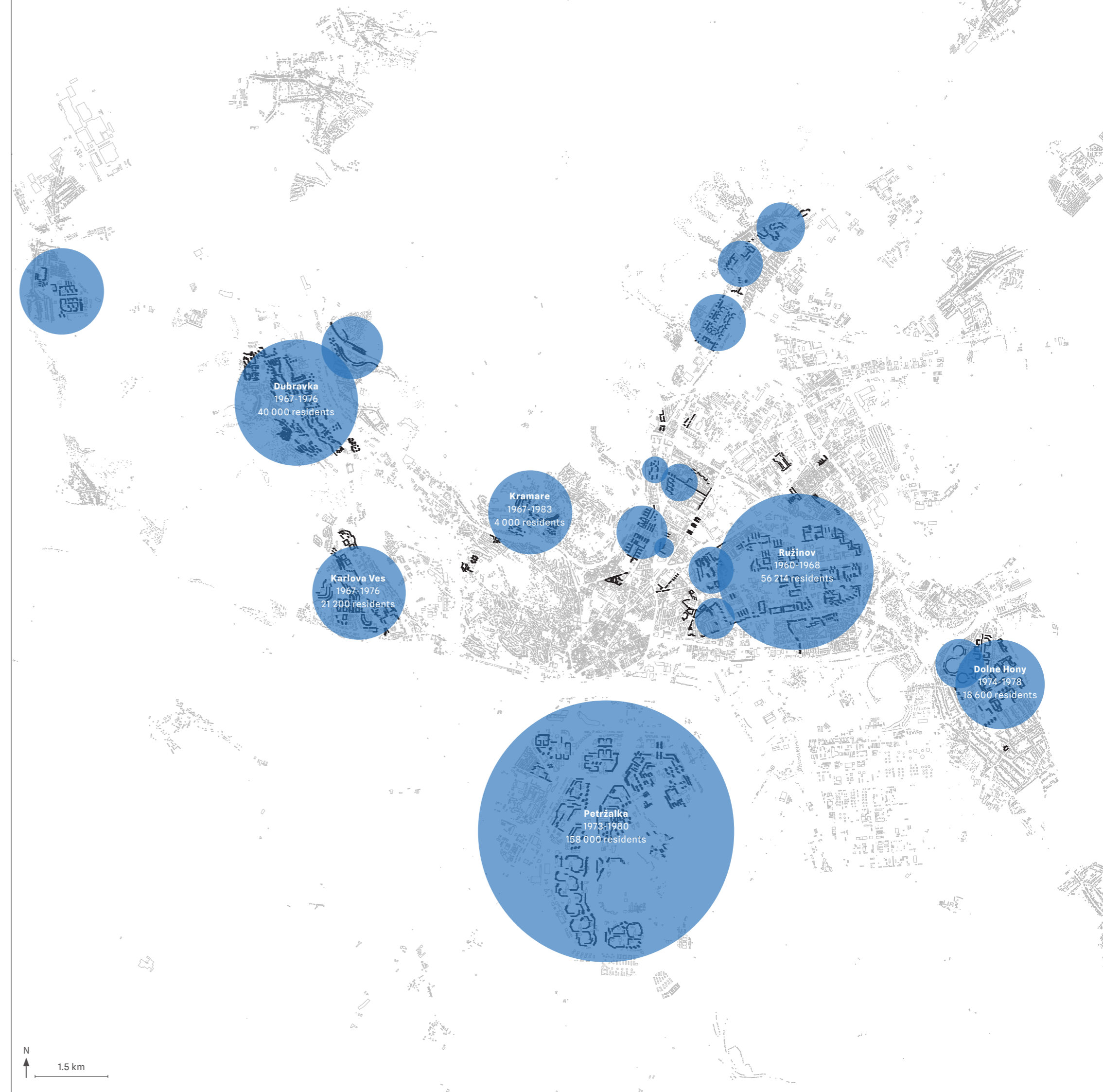
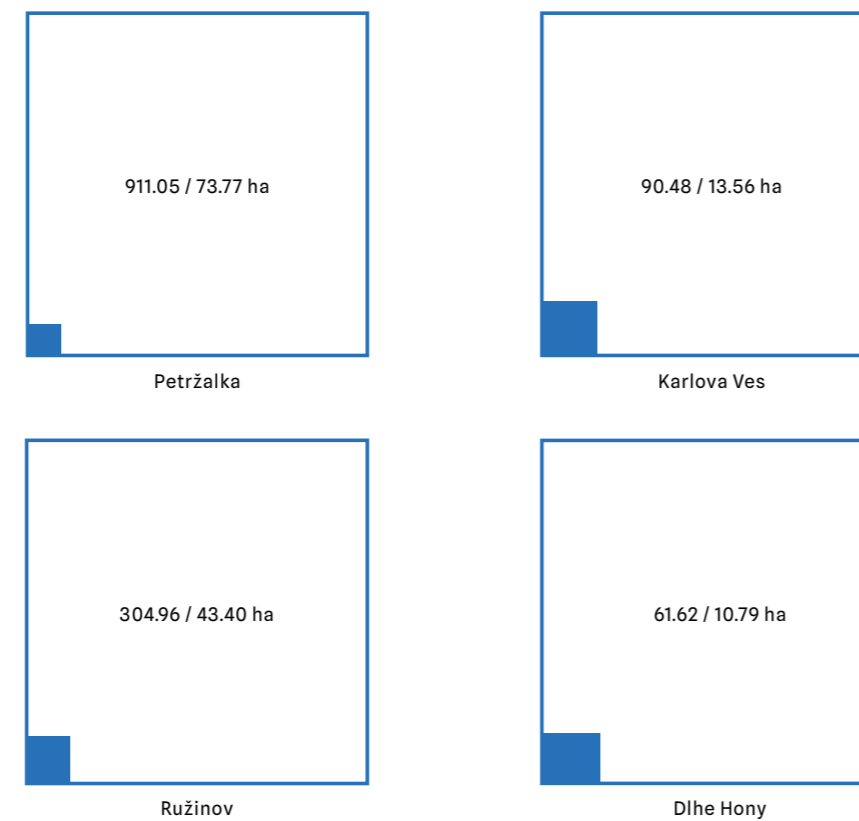
In terms of territorial competence, the Bratislava office of Stavprojekt was in complete control of housing construction in the city, thus designed and realized the estates. The main feature of the estates was the spatial dominance of new housing estates over the original urban fabric, and even alienation of the new population and loss of city's cultural continuity while establishing its new identity.

Despite the first attempts, the first apartment block built from prefabricated panels appeared in Bratislava only in the 1950s. From the early 1960s to the mid-1970s, Bratislava experienced its most intense period of housing estate construction.

The statistics of this housing project are shocking. Approximately 1.2 mil. apartments were built, in which almost half of the population of Slovakia lived. Most housing estates (21) were established in Bratislava, which till this day houses up to 70% of the city's population. The largest Slovak housing estate is Petržalka in Bratislava, designed for 150,000 inhabitants, which would become third the largest city in Slovakia if separated from the capital.

### Complete Residential Construction

It was the key concept of housing estates construction in Slovakia. The implied concept was the unity and completeness of the entire project preparation and construction process, which included not only the spatial arrangement of the estates, the structural design of the apartment blocks, and the interior layout of the flats, but also the formation of open spaces and the provision of public facilities. The architectural results formed a significant indicator of the success of the specific realisation, at least in the first and second stages of housing-estate construction.



# THE ESTATES OF BRATISLAVA

## Evolution in four stages

### 1955-1960

The first stage of mass housing construction was directly tied to a five-year development plan which included introduction of individual parameters of housing estates and the construction of the first such typologies within the city. During these years, mass housing construction in Bratislava was limited to the construction of smaller estates of 300 to 3000 flats within the city's original boundaries, or at most on its outskirts.

The first estates are marked by rows of free standing apartment blocks, arranged to create peaceful setting with public facilities. Despite the introduction strict right-angled grid, the estate itself was directly tied to the surrounding urban fabric. Towards the end of 1950s the floor area of the flat decreased from 53 m<sup>2</sup> to only 34.1m<sup>2</sup>.



Februarka, one of the first estates of Bratislava.  
Source: bratislava.ame.sk



Podunajske Biskupice, an example of courtyard formation.  
Source: bafoxy.sk

### 1961-1975

In the next stage, the confrontation of old and new became urgent and there were three methods identified while working with the original urban fabric: complete or partial destruction, interconnection and simply proximity. With the rapid growth in population, the dimensions of estates expanded significantly, reaching an average size of 5,000 to 15,000 flats per estate. Such plans were possible by the widespread use of prefabricated construction, which by the 1960s had become the only building technology used in the process of mass housing construction.

The streets were transformed into two basic forms. One being a traffic corridor with major public use free standing objects forming the compositional axis of the estate. And the second form was a service street linking the individual smaller sections of the estate. By the late 60s, the organisation of pedestrian movement transformed to bi-level separation of automobile traffic and pedestrian routes. During this period the free standing blocks came to be organized in more less enclosed form creating an interior courtyard.

### 1976-1981

The growth of housing estates resulted in a radical shift in the structure of the housing fund: while estates housed more than half of the city's residents in the early 1970s, by the 1980s, the number increased to as high as 90%. Architects and urban planners gradually started to return to themes of more traditional urban design which was translated in form urban boulevards and squares.

As the planned economy started to worsen in the mid 70s, projects were realized in their severely reduced forms, or even not realized at all. The pressure on standardisation increased as cost-cutting construction manifested itself in standardised public buildings, making individual authorial input obsolete. With shrinking funds available for construction, public spaces, landscaping and public artworks were the last priority for realisation.



Standardised school in Petržalka.  
Source: register-architektury.sk



Park Andreja Hlinku, last of its kind with actually realized artworks.  
Source: register-architektury.sk

### 1982-1995

The final period of mass housing construction is marked by attempts to revise both urban and architectural aspects of construction. This period is also associated with difficulties in locating new building sites, and therefore positioning estates in somewhat controversial areas of earlier rural village or natural landscapes. In comparison with the 70s, the average residential area of an apartment rose from 43.6m<sup>2</sup> to 45.7m<sup>2</sup>

The very last Bratislava housing estate, Dlhé diely, was in fact built in part after the socialist regime's fall; thus, the final date of mass housing construction in the city is 1995, when the construction of this estate came to an end.

## POST-SOCIALIST CITY

### The new Image of Bratislava

With the fall of communism, Bratislava underwent major transformations that followed introduction of market-led economy. The process of transition began with institutional reforms, like democratic elections, foreign trade and privatization. Privatization of the housing led to having a choice in living, and many choose to upgrade their housing from standardized pre-fab units to private houses in suburbs, newly developed areas, or even re-viving apartments of the old city.

The city's suburbs became extremely popular and satellite towns and communities began to emerge, which led to Bratislava becoming a city of satellites. Today, the daily commuters induce congestion, which is one of the major problems within the operations of the city.

The economic optimism of capitalism in the beginning of 21st century, introduced powerful private investors and developers demanding quick decisions and clear construction guidelines that the municipal government still fails to deliver today. The latest land use plan is from 2007, after which city has transformed significantly. However, in order to allow big developers projects the government provided updates for specific zones which tried to provide detailed regulation in direct reaction to the interests of private investors and failed to reflect Bratislava's residents.

As dozens of new residential and commercial districts emerged, the city started to lose its identity as the projects are not guided with a single vision of what Bratislava is today. Downtown, an emerging district of highrise is starting to dominate the skyline and soon will become a postcard icon. As the "problem" of identity is becoming more visible, governing bodies are slowly waking up and starting to take incentive in the city's development and definition the city's character, which is manifested in the establishment of Metropolitan Institute of Bratislava in the 2019.



**| PETRŽALKA |**

# PETRŽALKA

## Introduction

Total area: 911.05 ha  
Built-up area: 73.77 ha  
Free area: 873.28 ha

Number of residents: 158 000  
Number of flats: 50 000  
Population density: 173 persons/ha

Terrain: flat  
Access from old town: 2 km  
Relation to city: suburban

Sitting on the right bank of river Danube and bordering with Austria, Petržalka is the largest borough and largest construction project in Slovakia, housing over 100 000 residents.

The district primarily operates as a residential area, with most people living in paneláks (prefabricated panel buildings), with no clearly defined centre. Petržalka consists of three official parts, Dvory, Luky and Haje, and into further informal parts. The district is mostly lowland area surrounded by green-lands with two lakes Malý and Veľký Draždiak. Sad Janka Kráľa, across the Old Town, is one of the oldest city parks in Europe.

Constructed on the territory of the original rural village and open landscape of the city's edge, the housing estate has altered the right bank of Danube significantly. Designed as a modern satellite within the city, Petržalka quickly became the icon of panel housing. But at the same time, it quickly became a bedroom community as the plan for the neighbourhood was never fully executed.

With the disappearing want to live in housing estates, Petržalka is undergoing transformations, both positive and negative. A decade ago, the estate suffered its reputation as the crime rates went up, and it was even named the Bronx of Bratislava. However, the strength of community and small interventions managed to improve the situation. As the rest of the city is undergoing construction boom, Petržalka is a bit slower with these transformations, which creates a risk that if not transformed at the right time, it might become unwanted left-over estate in between of new, more appealing areas.



View of Petržalka with colourfully renovated facades of the panel blocks.

Source: picfair.com



# HISTORICAL CONTEXT

The area of Petržalka was known as Engerau (meaning narrow meadow) and consisted of multiple islands as Danube had many distributaries. It was always an important strategic area on the border.

Petržalka became part of the city in the 1436, before that the south bank was used by the city's residents as gardens. After, the city started to connect the two banks, first wooden bridge was constructed in 1473. Gradual filling-in of the Danube's distributaries led finally to first official settlement in the 18th century. The settlement was growing in the north-west direction.

In the second half of 19th century park Sad Janka Kráľa was established, in the north-east side. Establishment of road and rail bridge across Danube in the 1891 brought extensive development into the area. From 1914, there was a public transport connection with Vienna, known as the Vienna's tram. With industrialisation booming and the newly constructed bridge, a village rapidly transformed into an industrial centre. The labour force of the factories required living, which was built in close proximity to the production and the population of the neighbourhood was growing ever since. During city's modernisation after the second world war, Petržalka becomes part of the city in the 1946 and its transformation begins.

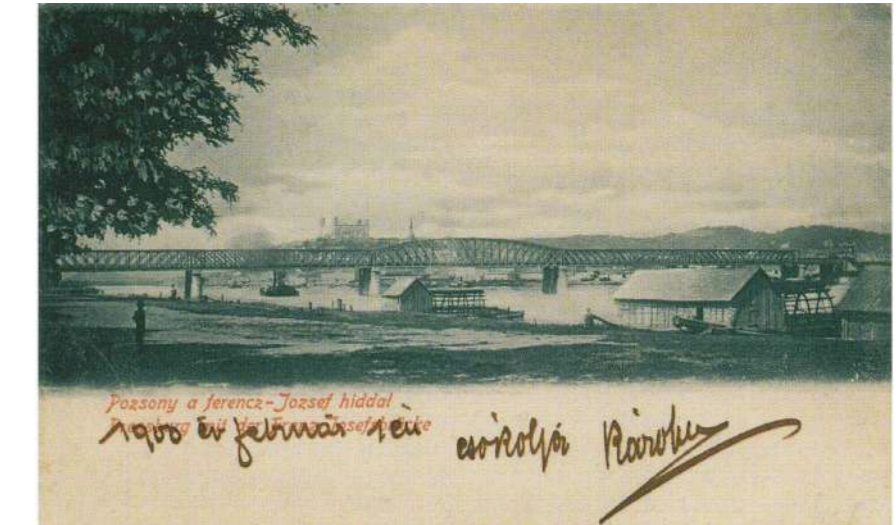
Few decades of extensive city expansion planning and an international competition later, Petržalka as we know it today is created.



Map of Petržalka from the 17th century showing Danube's distributaries.  
Source: Petržalka during years 1919 - 1946



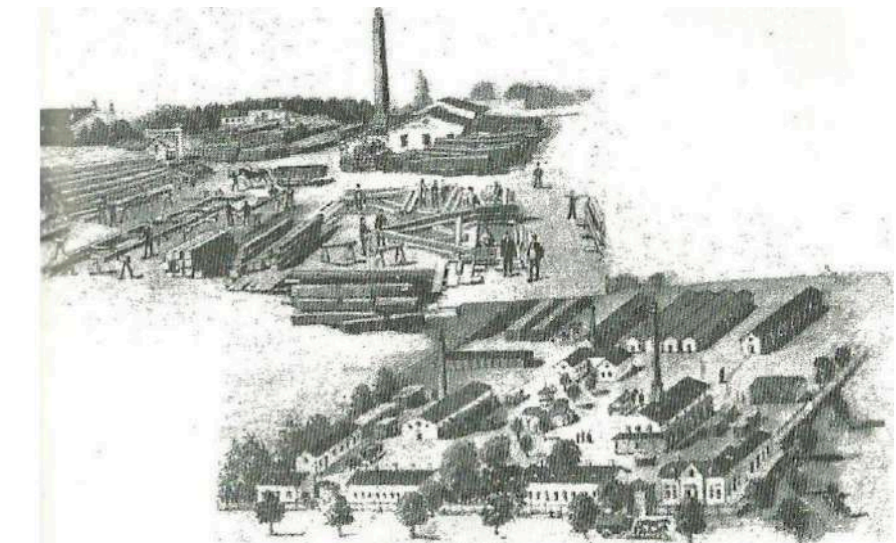
Depiction of Petržalka as a settlement and its prominent park in the 19th century.  
Source: Petržalka during years 1919 - 1946



Right bank (Petržalka) during the Austro-Hungarian empire.  
Source: Petržalka during years 1919 - 1946



Map of Petržalka from 1949, illustrating the development of right bank with establishment of industries.  
Source: Petržalka during years 1919 - 1946



Brick factory in Petržalka.  
Source: Petržalka during years 1919 - 1946



# PLANNING OF PETRŽALKA

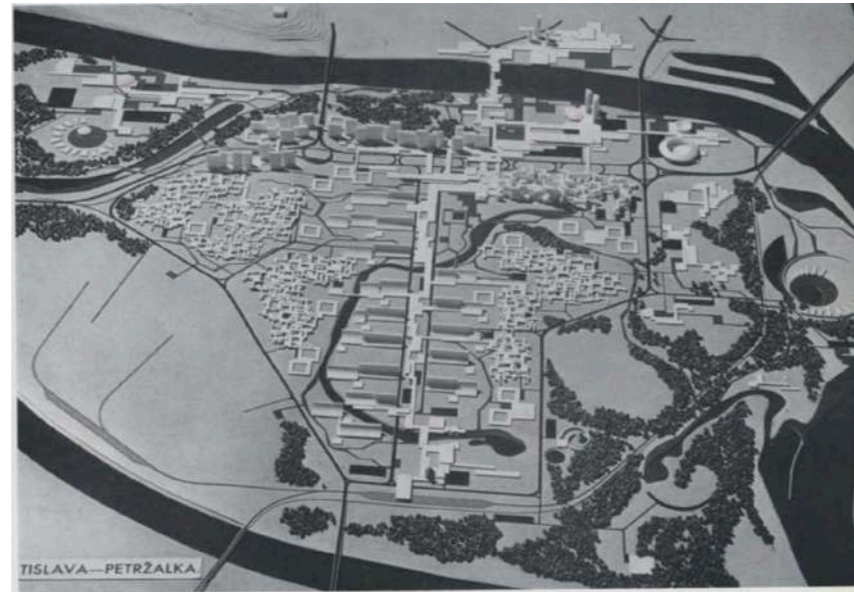
## International Competition

The increase of inhabitants in the post-war period and the influx of countryside residents into the city resulted in running out of spatial capacity within the existing city boundaries and soon for that reason urban development moved to the other side of the river.

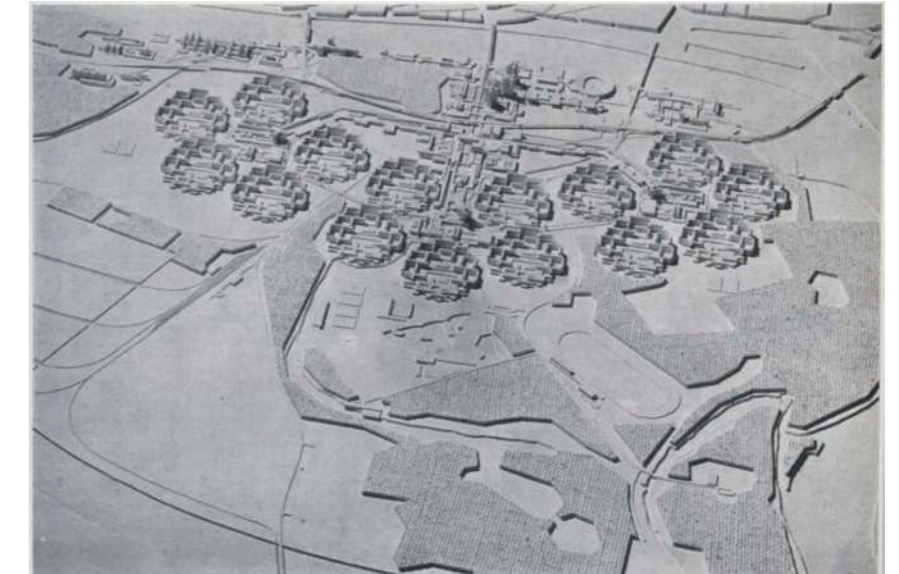
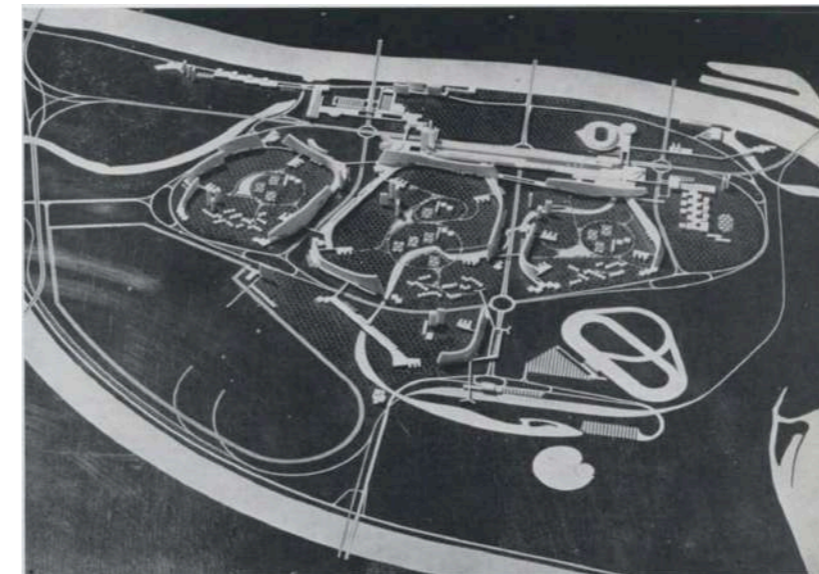
To provide optimal foundations for urban development on the neglected southern side of Bratislava, the city administration initiated an international urban competition. The competition attracted more than 700 applicants from 35 countries, but finally only 84 proposals from 19 countries were submitted in may 1967. The assignment was to design a new residential area for 60,000 people with all the public facilities and create a new city district fully functional and independent from other parts of the city. It was demanded that it is designed according to the Athens Charter.

As mentioned above, Danube was controlled and filled in multiple stages and on the moment of competition introduction, it was still necessary to resolve flooding risks within the district. Therefore resolution of flooding was among the priority objectives. There was a need to invent a new infrastructure which would represent the new age of cars and allow people to travel from Petržalka to the old town immediately.

There were five winning proposals, not a single definitive one. Shortly after the end of evaluation of the competition, the government demanded that the new residential area is prepared by the state owned company Stavprojekt.



Winning proposal that resembles today's Petržalka the most  
Source: all images from the International Urbanistic Competition Bratislava-Petržalka



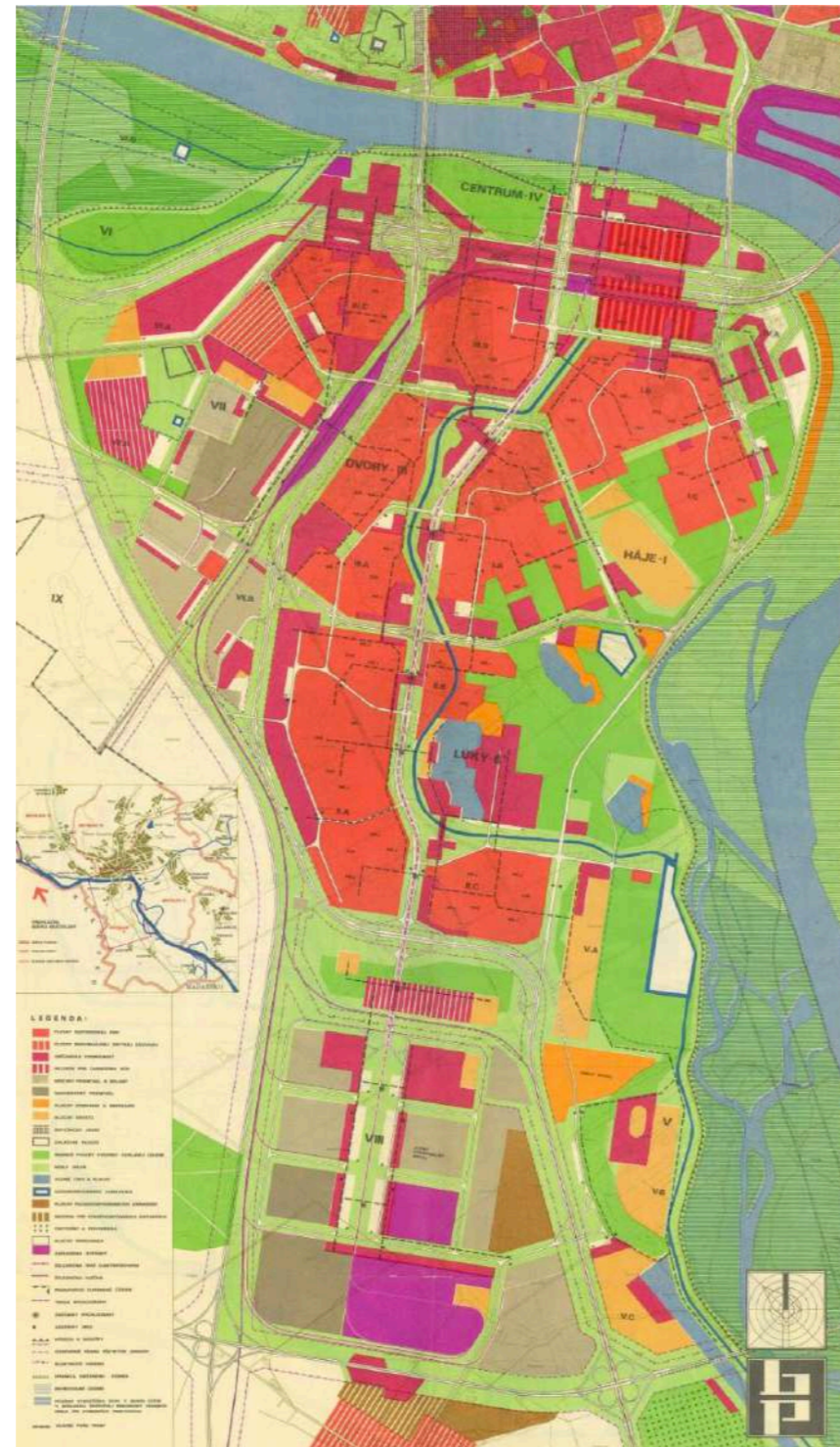
# PLANNING OF PETRŽALKA

## The Project

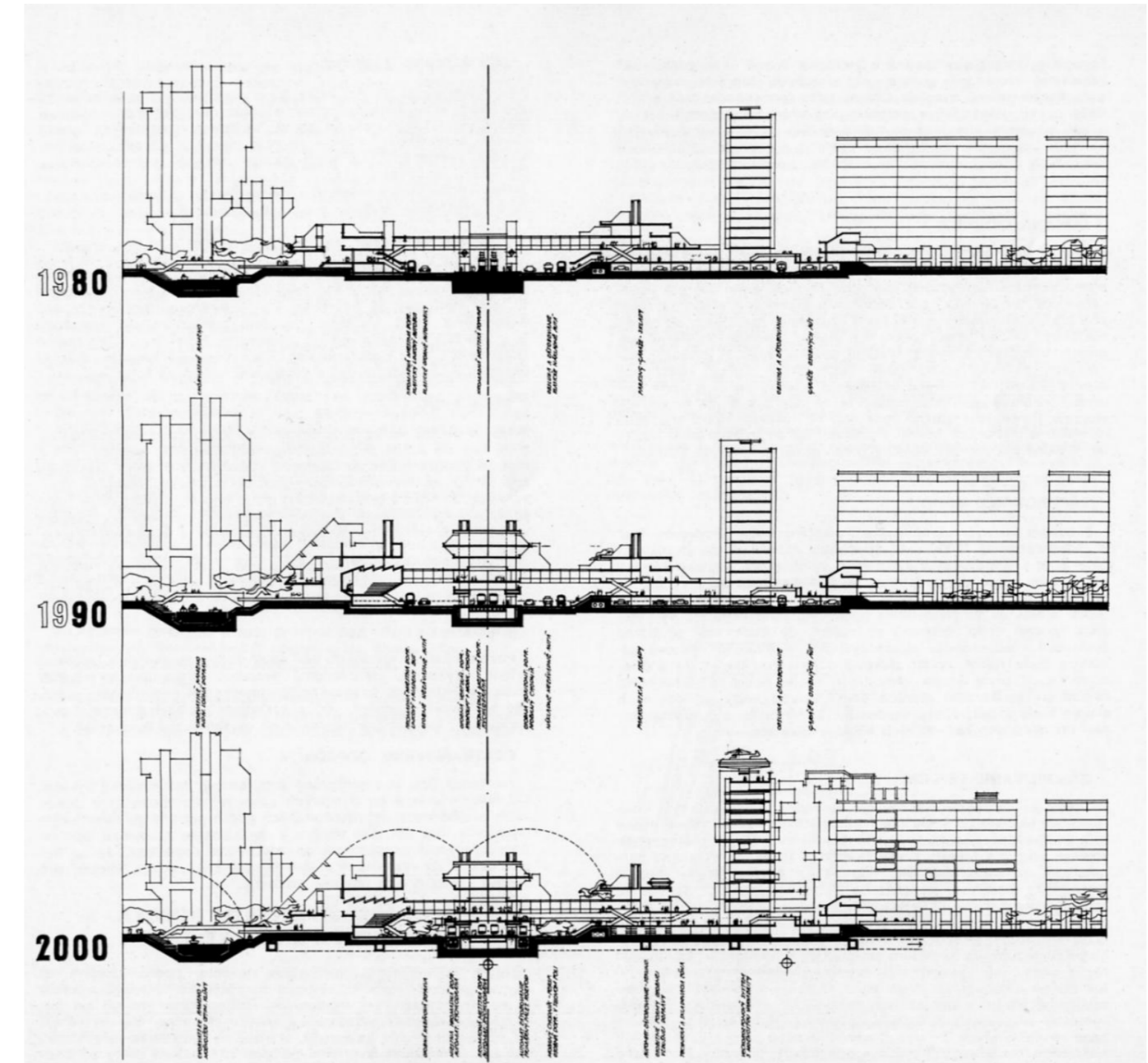
As the only result of the international competition were only formulated conclusions of guidelines the future project, the construction company Stavprojekt fused winning proposals and their needs into a project of Petržalka's estate.

Petržalka's construction, with its 50,000 housing units is the most characteristic project of the period of mass housing construction in Bratislava. The project was planned as a modern satellite town within the city. Its proposed central axis envisioned to be evolved over time, easily adapting to the contemporary needs and always providing the needed infrastructure to be self-sufficient in terms of civic amenities.

However, this estate was one of the last ones constructed under the communist rule and by the end of it the budgets for construction were immensely cut. This resulted in an unfinished project where only the bare minimums were executed. For example, the central axis of Petržalka never reached its 1980s vision. The incompleteness of the project led the estate to become a bedroom community and previous actions still affect the urban form and its residents negatively today.



Proposed land use.  
Source: City sector Bratislava-Petržalka



Proposed development of central axis in stages.  
Source: City sector Bratislava-Petržalka

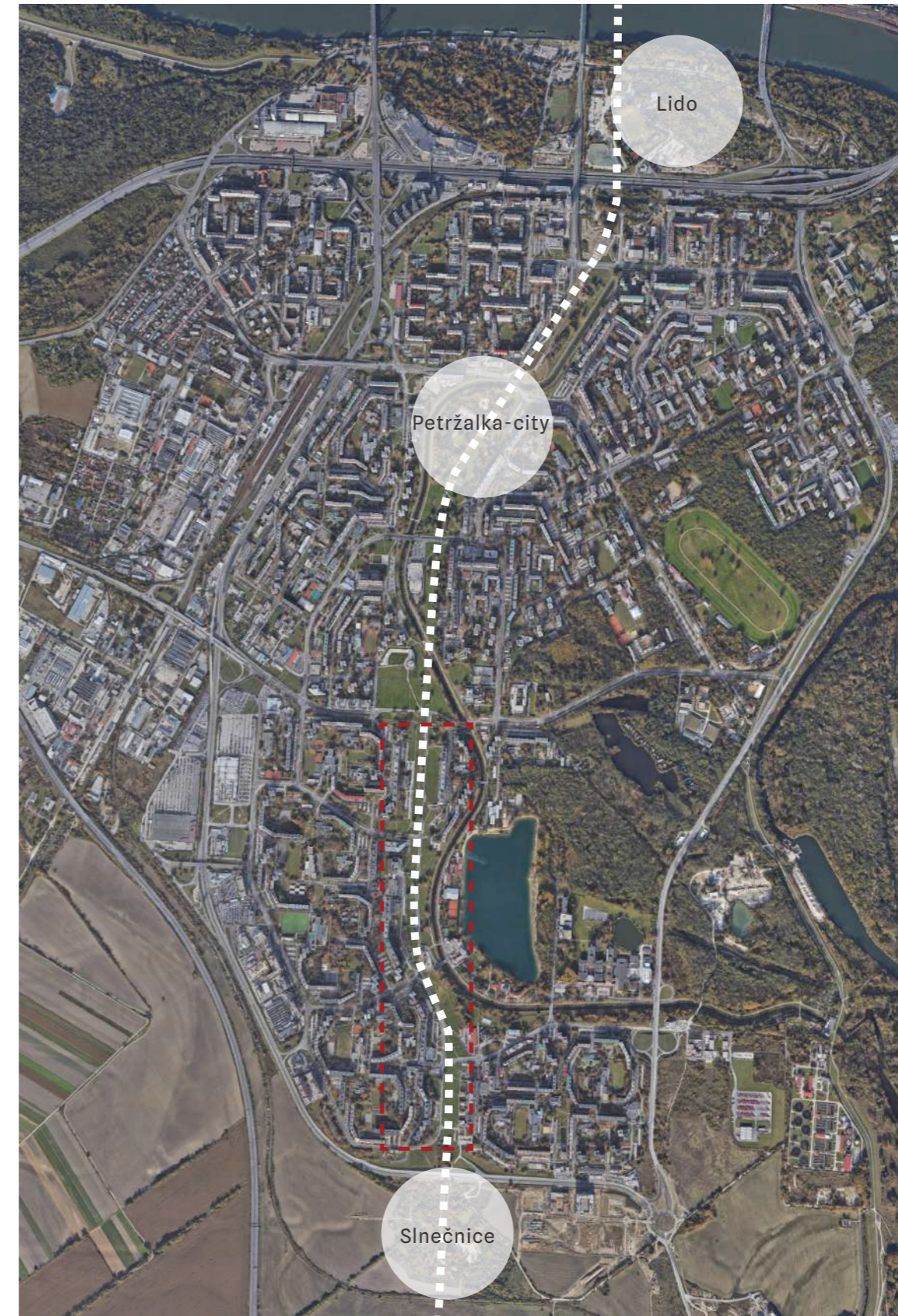
# CENTRAL AXIS

## Future Plans

Today, Petržalka is undergoing few changes. The ongoing construction of the tram line extension connecting southern edge of the city and the old town, presents an immense potential for new developments. There are currently three main projects planned for the district. Nevertheless, none of them resolve the current problems of the estate itself. Rather than enhancing existing, iconic and familiar urban form the new projects focus on new luxurious residential developments. This might create a problem in the future if the area will gentrify, leaving the estate in unwanted and deteriorated state.



Vision of the central axis  
Source: Bohumil Kovac



Proposed tram line extension and location of projects currently under construction. Highlighted in red is the site of the project.



Urban study from 2014, still no sign of implementation  
Source: Bohumil Kovac

## WIDER CONTEXT

Petržalka is connected to the rest of the city by five bridges, one of which, Sary Most, is only used by public transport. City's major artery in a form of a motorway passes through and around the district leading to adjacent countries.

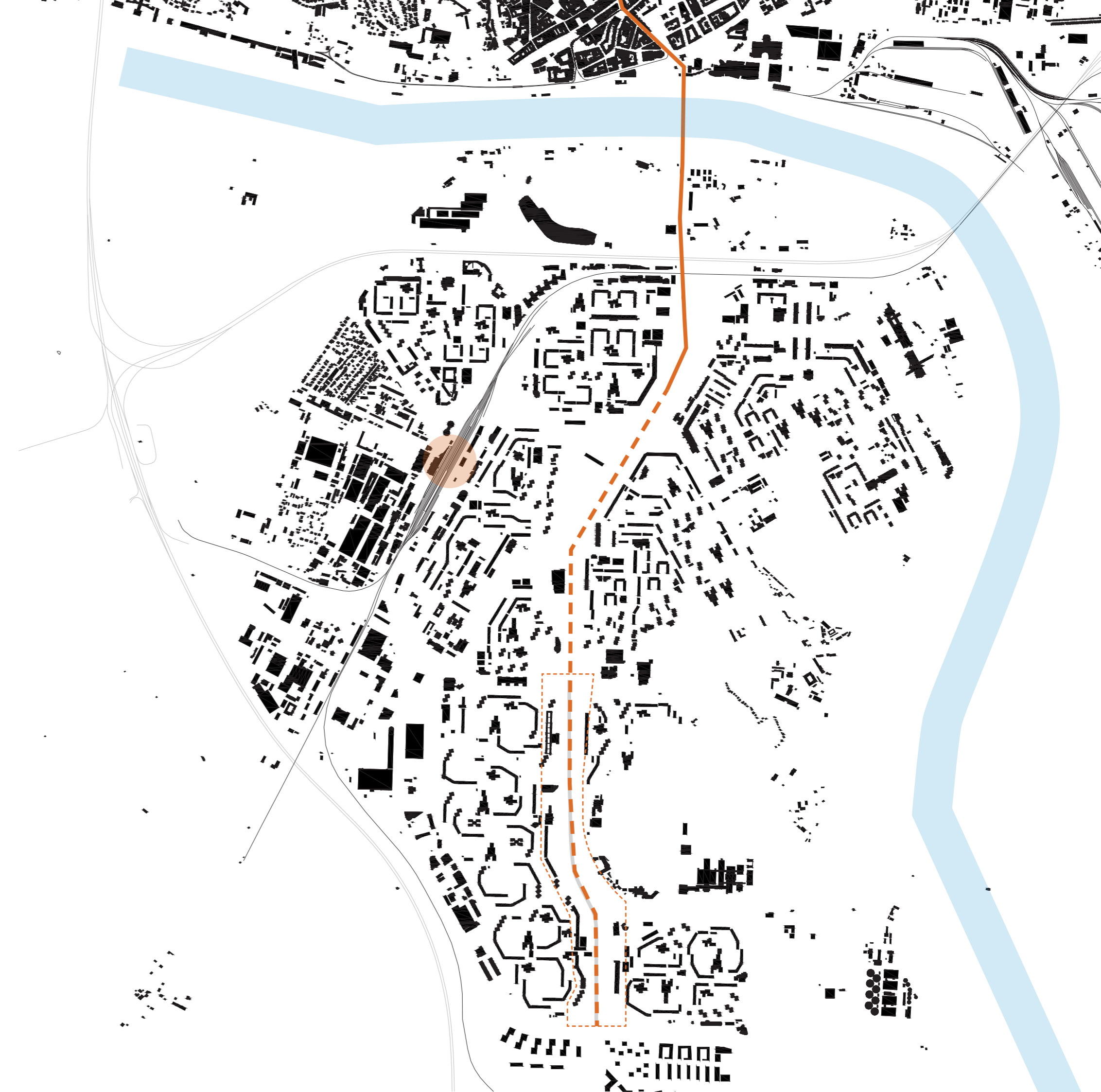
Bratislava-Petržalka railway station, located in the western part, is primarily used for international traffic to and from Vienna.

In terms of public transport, Petržalka is well connected by buses and there is an ongoing project of tram line extension connecting southern part with the city's center through Sary Most, creating a central axis of the district.

Petržalka provides extensive education services with high number of kindergartens and elementary schools in the district. Few high schools and a campus of University of Economics are situated here.

There are also several sport facilities in the district, like the hippodrome that regularly hosts important horse-races.

Overall the locality provides wide range and necessary functions, however lack of job opportunities force residents to daily commute, leaving Petržalka quite inactive.



# PHOTOS



**| THE SITE |**

# INTRODUCTION TO SITE

## Locality

The site is located on the most southern edge of Petržalka. The area is characterized by the vast openness of the envisioned central axis, framed by long panel housing structures. Although, the initial project for the area included highly active central axis and the composition of the built form was designed according to that, today, the emptiness pushes the activity out of the central axis and into the back courtyards leaving the “heart” of the estate very abandoned.

The central axis is also defined by height of the built form, towards the center the buildings get higher, creating almost like a buffer wall between the envisioned busy artery and the calmer inner courtyards for the families.

The locality is quite rich with leisure activities as the site is located within close proximity to Draždiak lake.

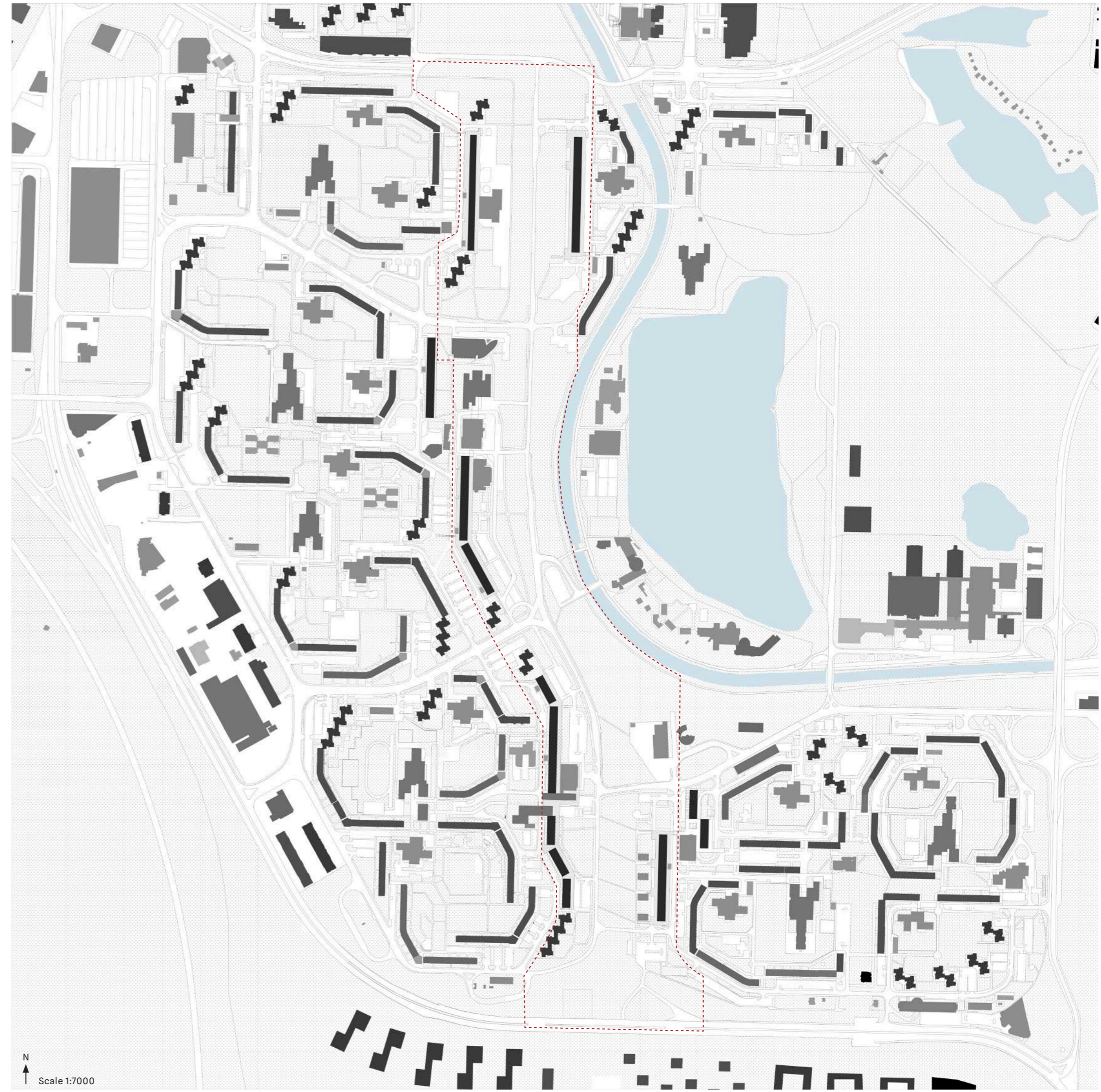
Legend:



Site boundary



Building heights in gradient  
(from dark, high, to low, light grey)

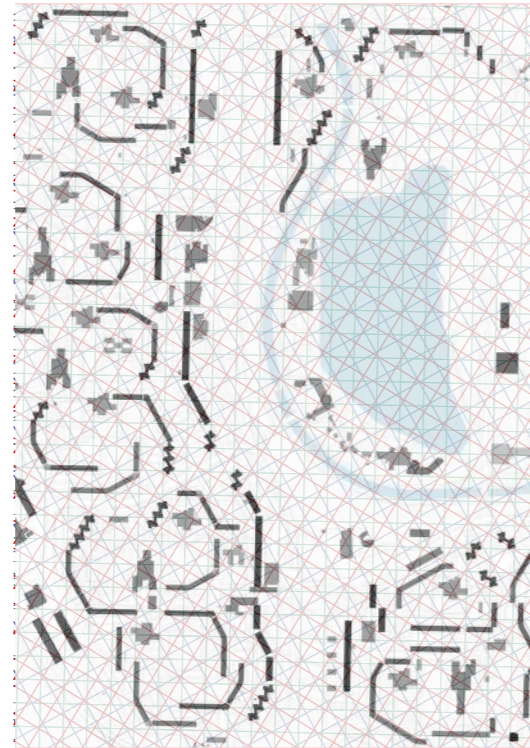


# ANALYSIS

## Urban Form and Usability

### Urban Form

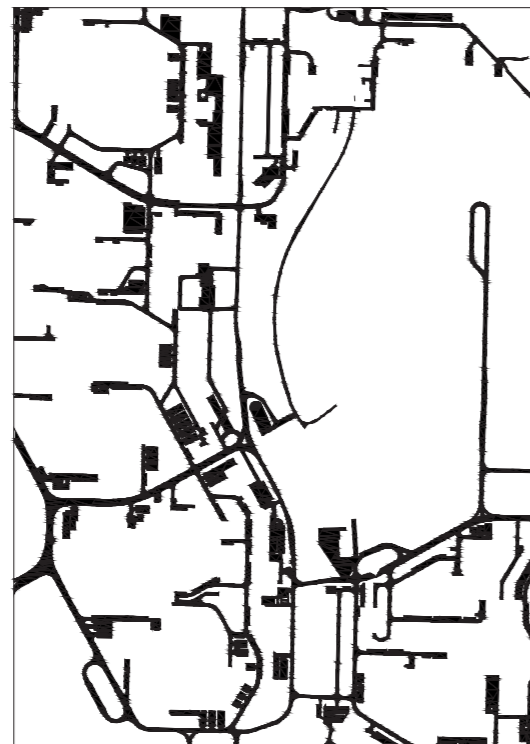
Urban form is defined by solitary buildings in green open space. They are organised by overlaying three grids. Within the estates, it is very common to have one defined central axis in different urban form than the rest of the estate. Same is present on the site, the central axis is defined by long structures, whereas behind this wall of concrete the long structures are formed into courtyards, in which schools are usually situated.



Overlaid grid over the urban form.



Building plots.

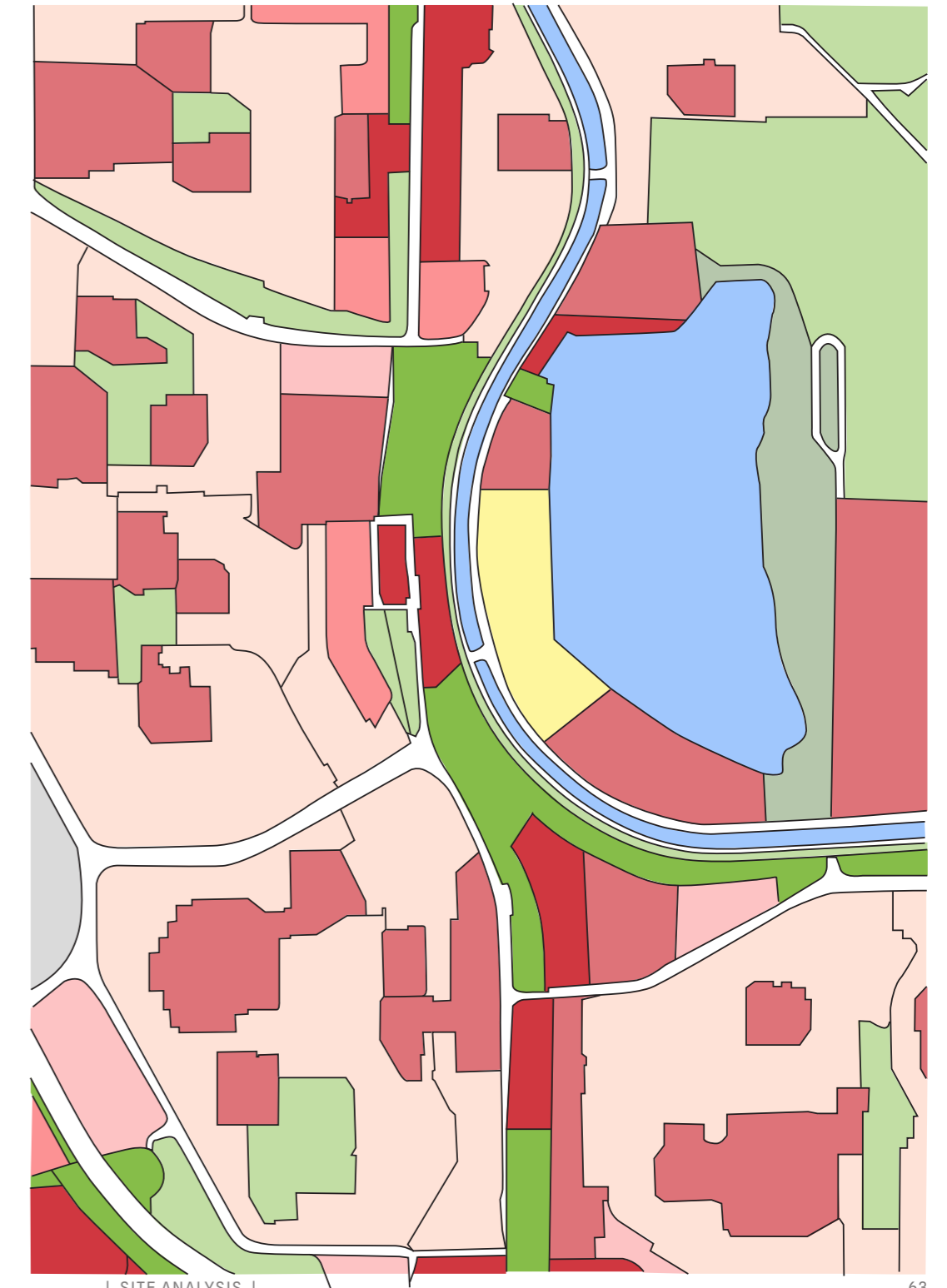


Street network.



Built-up form.

### Land Use



| SITE ANALYSIS |



# ANALYSIS

## Functionality

### Transportation

The site is dominated by the number of parking places. The central axis does not operate as a major collector because of lacking infrastructure. The roads are divided into two main categories, the main road and the inner collectors accessing all the free standing structures. In terms of public transport, southern edge of Petrzalka is supplied only by buses. As during the estate's construction car was prioritized, the site lacks uninterrupted sidewalks throughout the locality.

Legend:

- Highway
- Main Road
- Inner collectors
- Cycling route
- Parking
- Public Transport



### Functions

Even-though the site does not respond to the contemporary needs of the society. The area is well supplied by schools and healthcare, but lacks job opportunity and entertainment for the residents.

Legend:

- Residential
- Cultural
- Sports
- Administration
- Services
- Commercial
- Playground/Leisure
- Kindergarten
- Elementary school
- High School
- Other educational facilities
- Church
- Police station
- Medical institution
- Empty/Abandoned



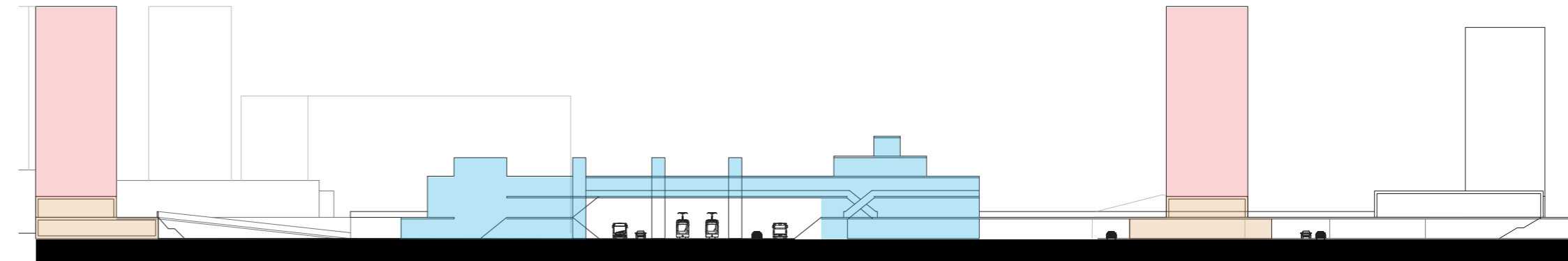
## URBAN SPACE

### Public/private & built up/open

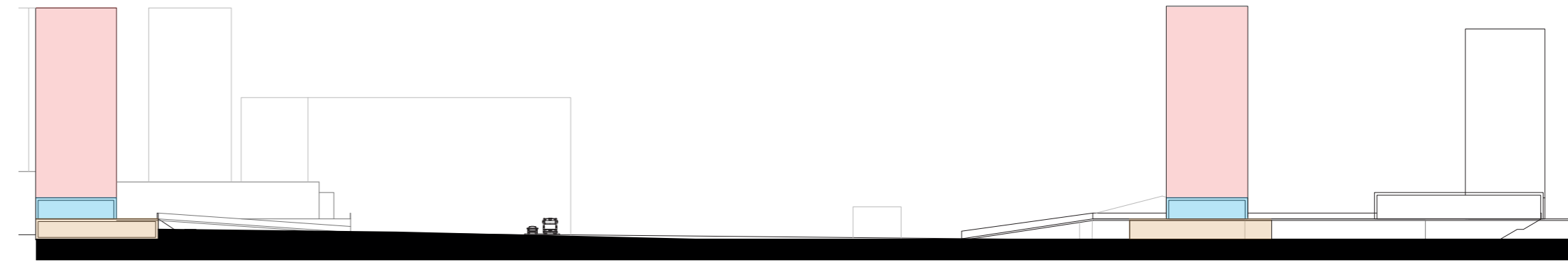
The urban space of the site lacks definition. The public space is prioritized by cars, with many parkings. The only defined public spaces are sport fields and few playgrounds in deteriorating state. The urban space lacks definition and has no hierarchial order, this becomes problematic when the question of maintenance of the public space rises. The open space is for everyone and everyone's but at the same time is used by almost no one and no one is responsible for it.



| SITE ANALYSIS |



Envisioned section of the proposed project for Petržalka sitting in current context.



Existing situation on the site. The structures are more that 180m apart from each other without any formal or informal pleasant connection. The vast openness separates the two parts of the site even more.

| THE PROJECT |  
| STITCHING PETRŽALKA'S INCOMPLETE FABRIC |

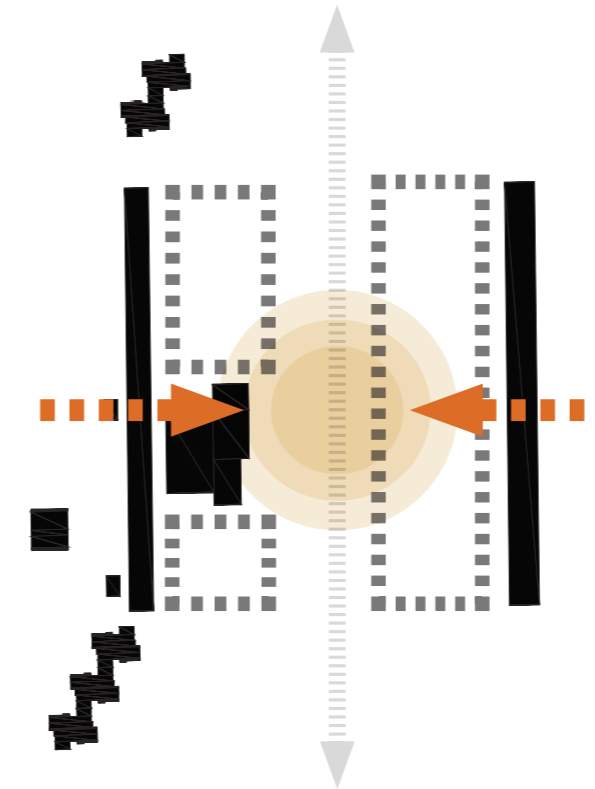
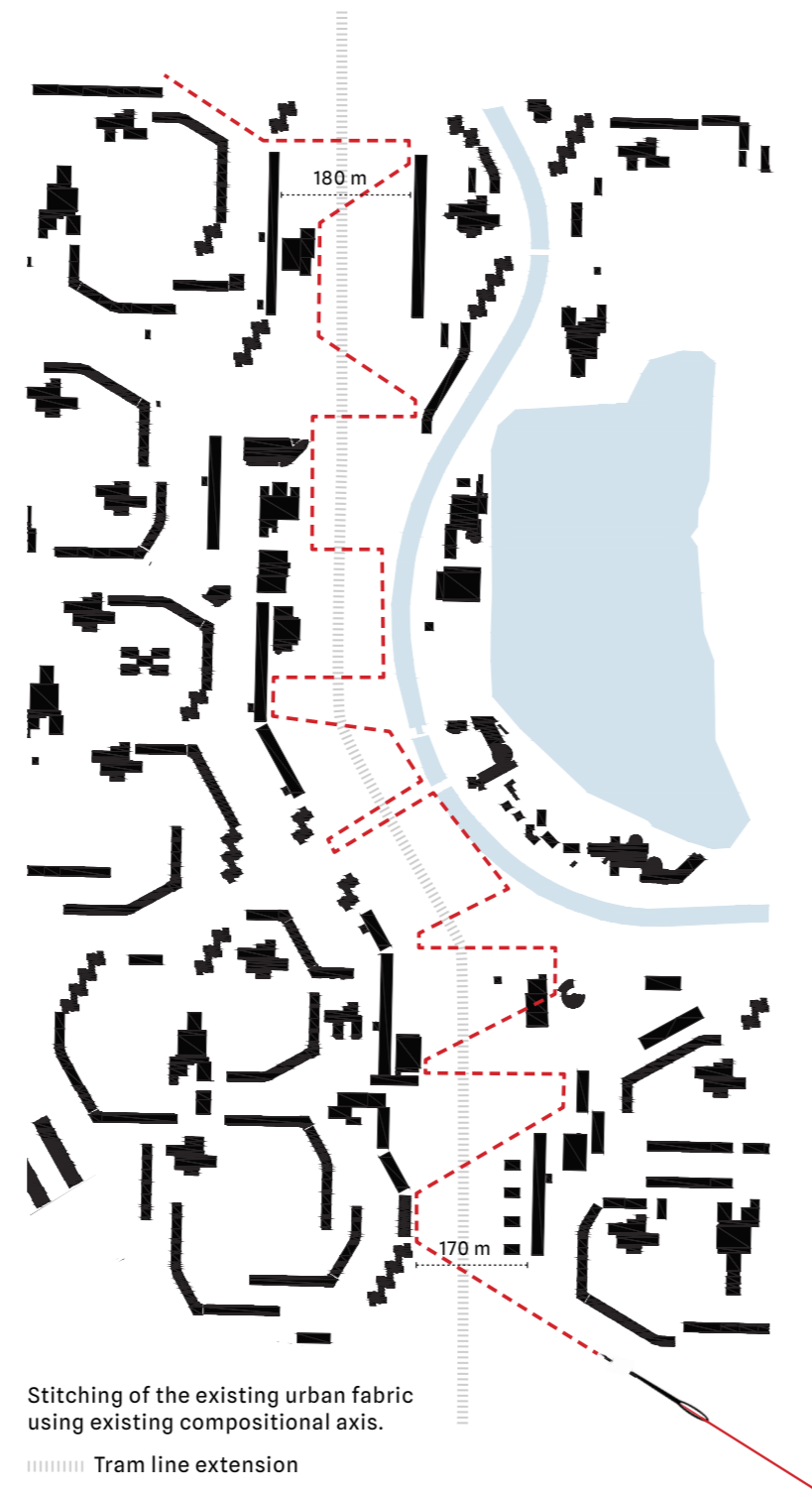
# URBAN STITCHING

## Concept

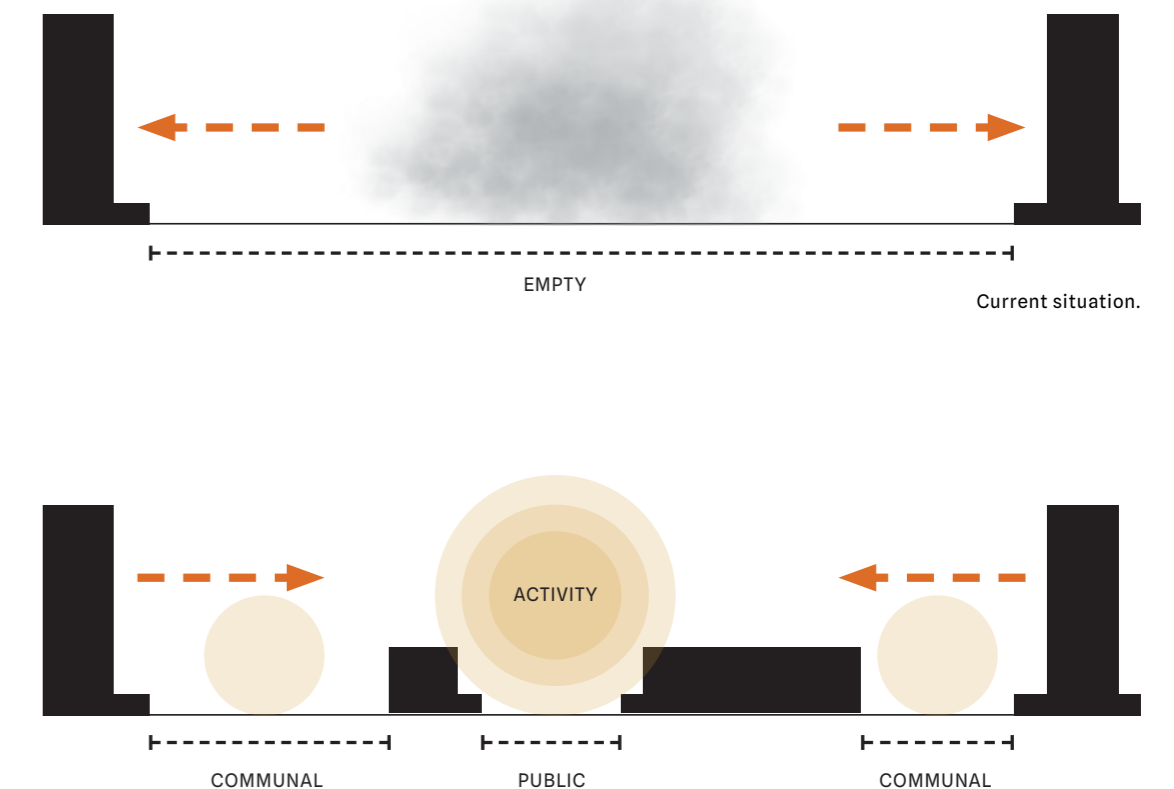
The site is currently separated by what was supposed to be the central axis, which was never realized, resulting in vast un-built and undefined space that disconnects functions, forms and people.

Based on the research carried out, the regeneration of the estate is approached through densification to “fill-in” this gap. The concept behind this is to stitch the right and the left side of the central axis with a new urban fabric and defined public space. The idea is to transform the deteriorating open space but to maintain the character of Petržalka. The “stitch” maximises the program with civic infrastructure to feed the contemporary needs of the urban lifestyle and enhance public activity.

The regeneration approach is to enrich the existing and complete the missing links with new elements, thereby not transforming but enhancing the local character.



Reinforcing the vertical connection with the city centre and creating a missing link a missing horizontal link between the existing structures.



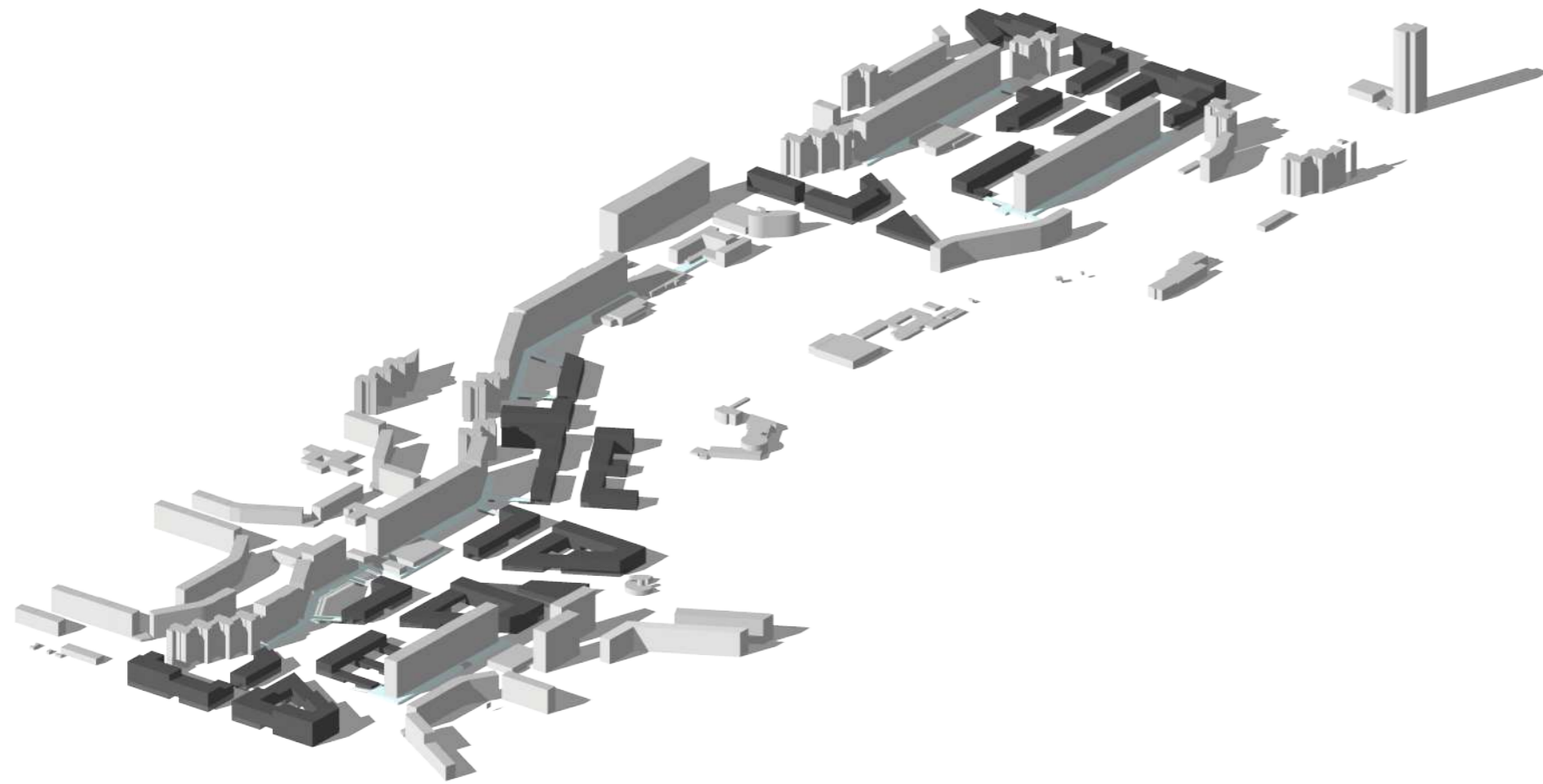
Through densification, concentration of activity along the vertical axis is achieved.







The envisioned central axis is currently empty and undefined. The unpleasant open space forces activity away from this vertical connection, making it even more deserted, left to deteriorate. The idea of densification defines the hierarchy of urban space (public vs. communal) and concentrates public activity along the vertical axis through introduction of new urban forms .

# MASTERPLAN

The proposed masterplan presents new urban forms along the central axis that is developed into a boulevard full of civic infrastructure. A masterplan proposes new types of city blocks integrating proposed structures with the existing ones, and resolution of the obsolete open spaces.

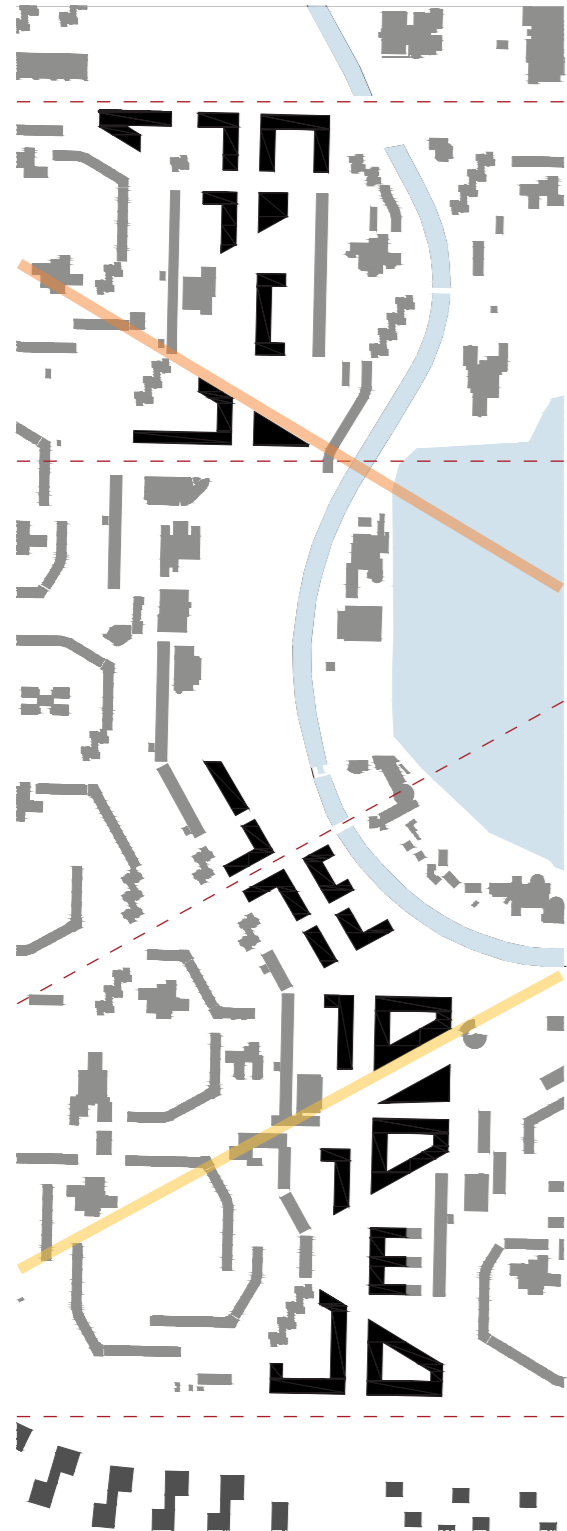
The site is divided into three zones, the first zone is a commercial node, where retail is concentrated. The leisure node is defined by a large park with waterfront access and aggregation of sports facilities. The last zone is a cultural node with an existing culture centre and a newly introduced art centre. These local centres are created to provide identity, and orientation and will aim to strengthen the locality's character.



- Legend:
- Site boundary 
  - Proposed structure 
  - Existing structure 
  - Under construction 
  - Terraces 
  - Greenery 
  - Commercial node **1.**
  - Leisure node **2.**
  - Culture node **3.**



# DESCRIPTION



## Urban Form

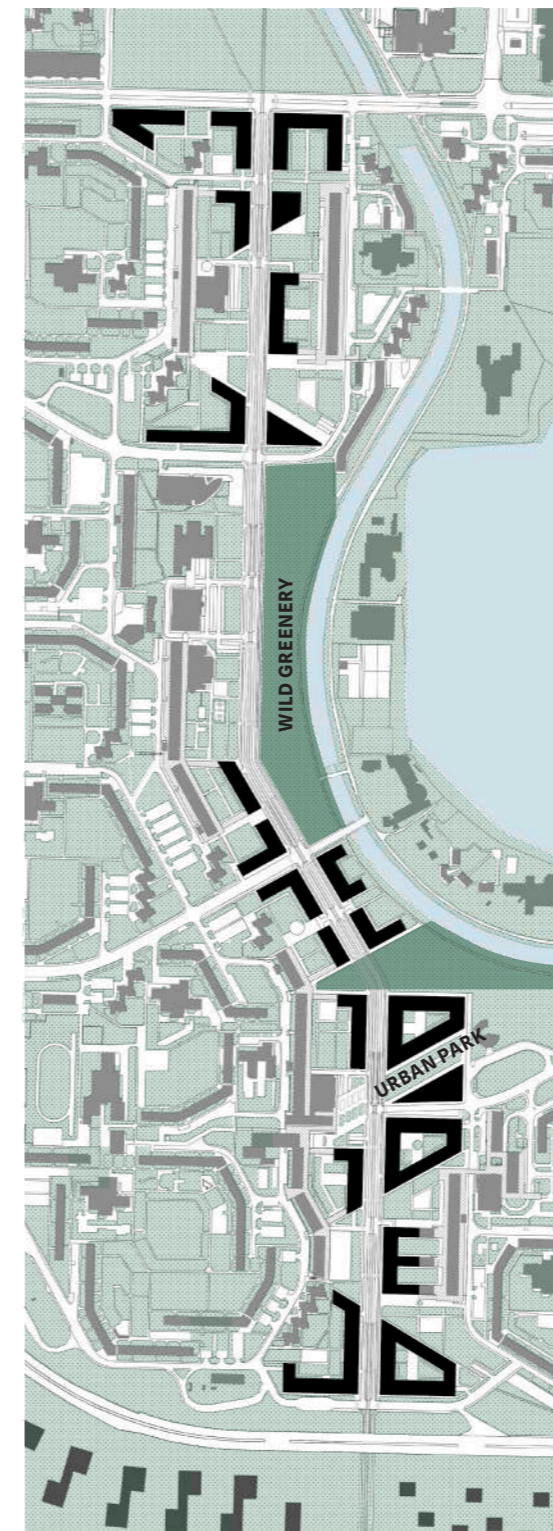
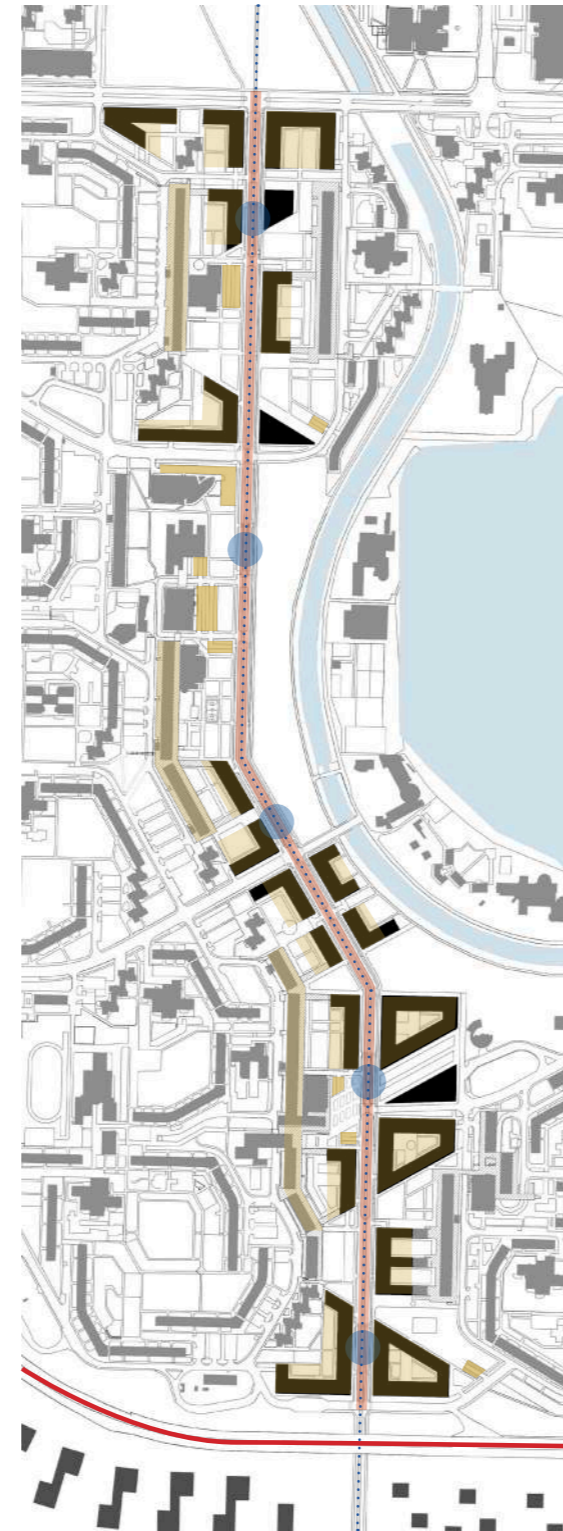
The proposal is divided into three zones, the first and last maximise the density, while the middle one is preserving and enhancing the existing greenery. The shape of the urban form is defined by compositional axis present on site.

- Zone division
- Compositional axis
- Proposed structure
- Existing structure
- Under construction

## Transportation

The boulevard acts as a main artery and provides access to new structures. Public transport stops and pedestrian crossings are equally distributed within short walking distances, public transport within the radius of 400m and pedestrian crossing, on average, every 100m. The existing parking problem is solved by underground parking in the new structures and transformation of the panelák's unused technical floor into parking.

- Public transport stop
- Proposed tram line
- Highway
- Boulevard
- Underground parking
- Outdoor parking



## Greenery

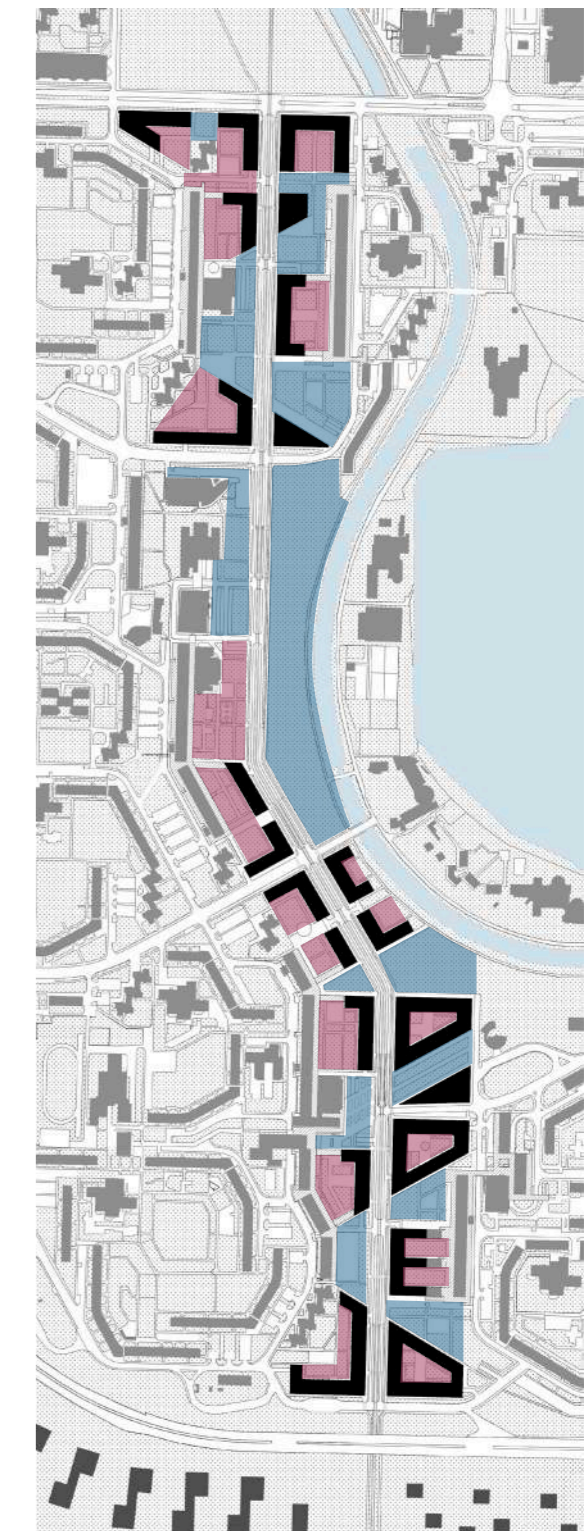
The proposal tries to sustain the valued nature of the area. Greenery is divided into two hierarchies in order to define and program.

- Greenery
- Significant greenery

## Urban Space

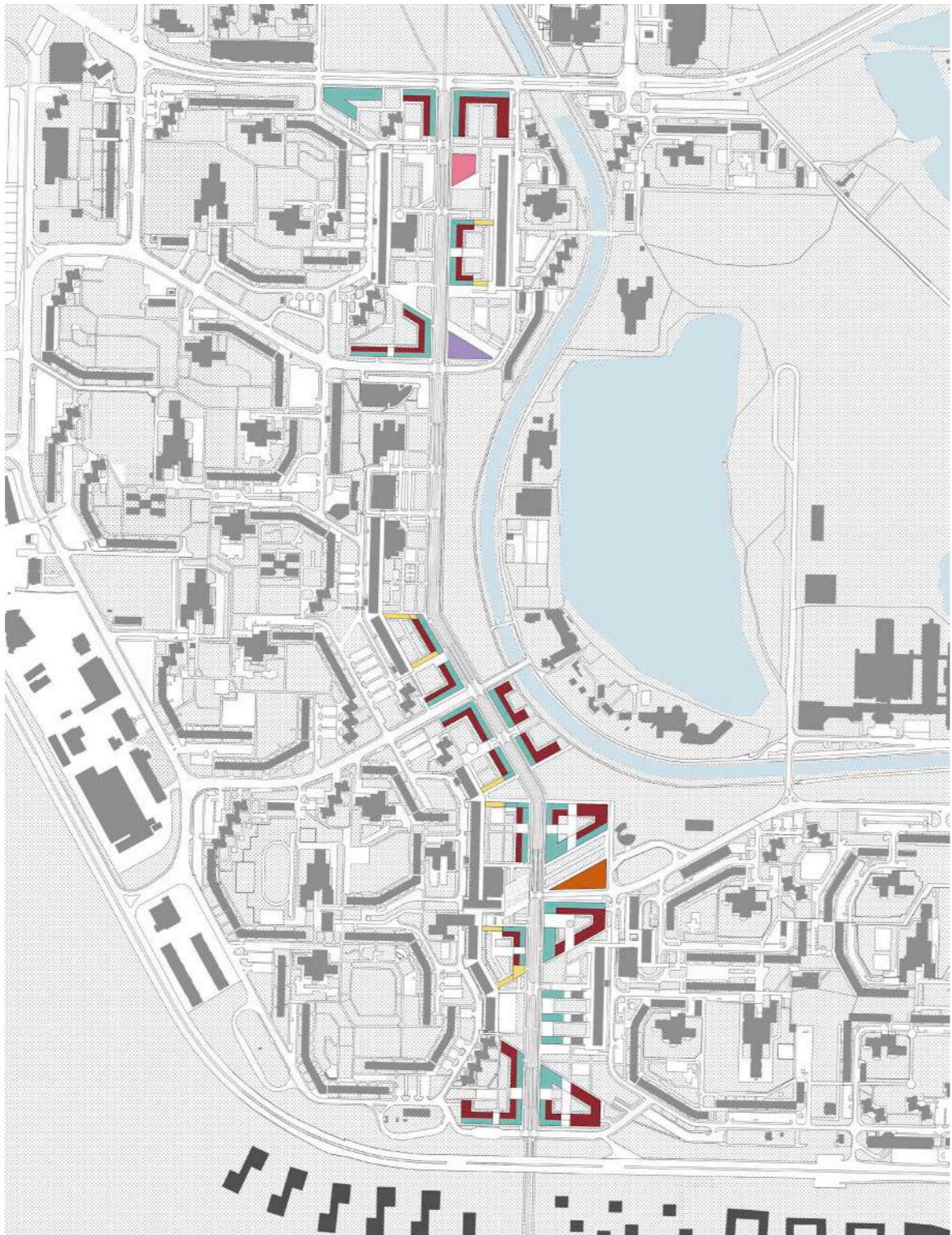
The masterplan defines public space into two categories, public space, accessible for all and communal space within the block's courtyards for its residents. These are further programmed accordingly, functions like urban park or a market are situated along the boulevard for easy access, whereas more private program like communal gardening is within the courtyard.

- Public
- Communal

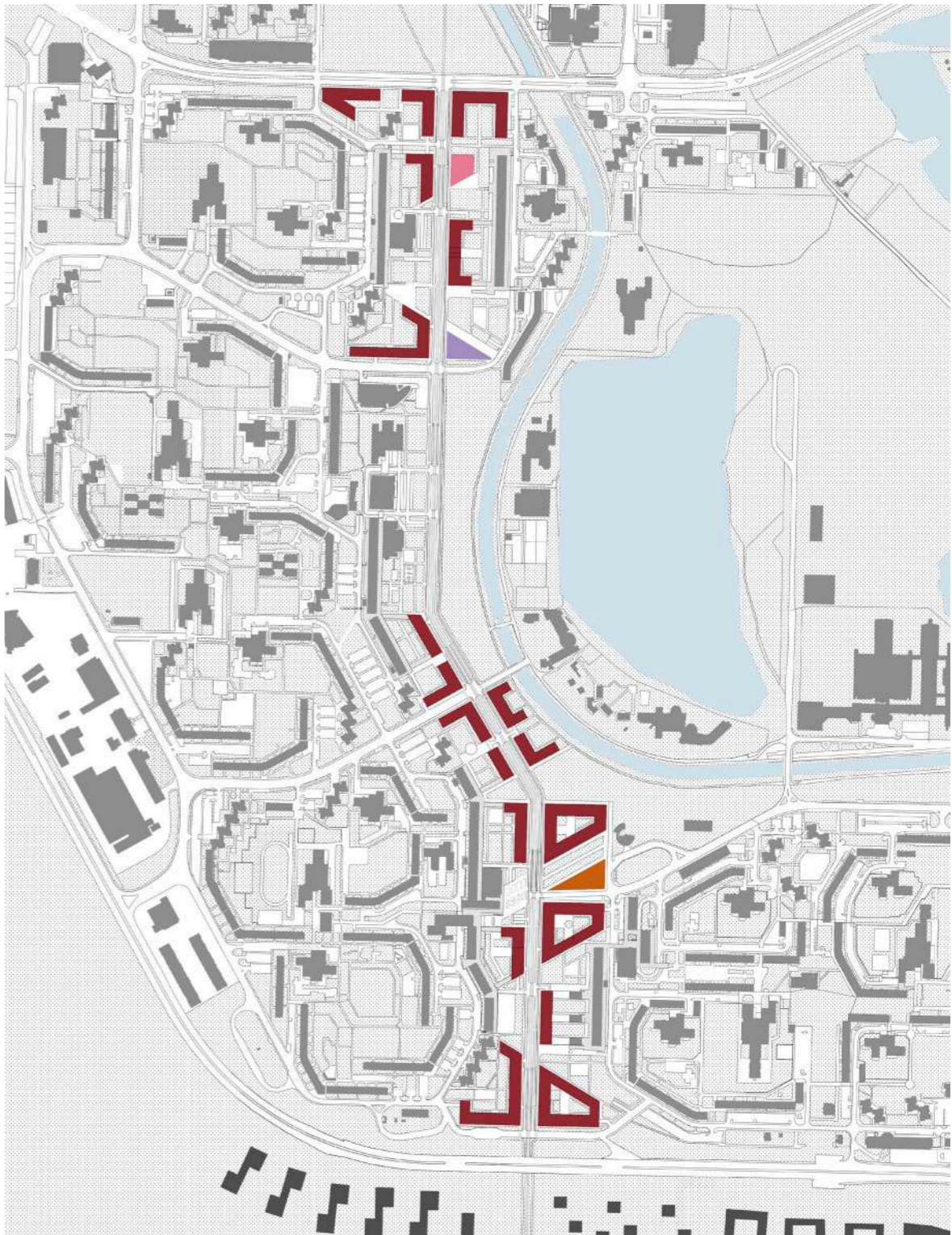


# FUNCTIONS

- Legend:
- Rent-able space
  - Communal space
  - Residential
  - Cultural
  - Administration
  - Retail



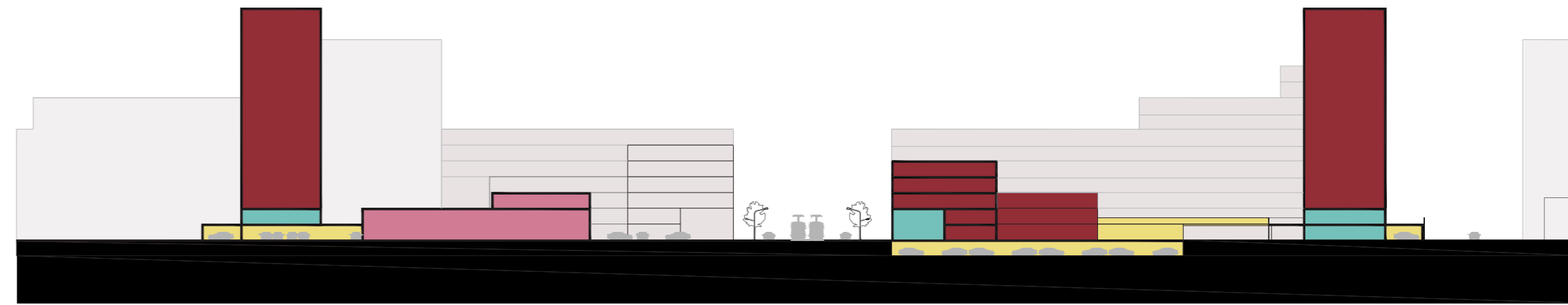
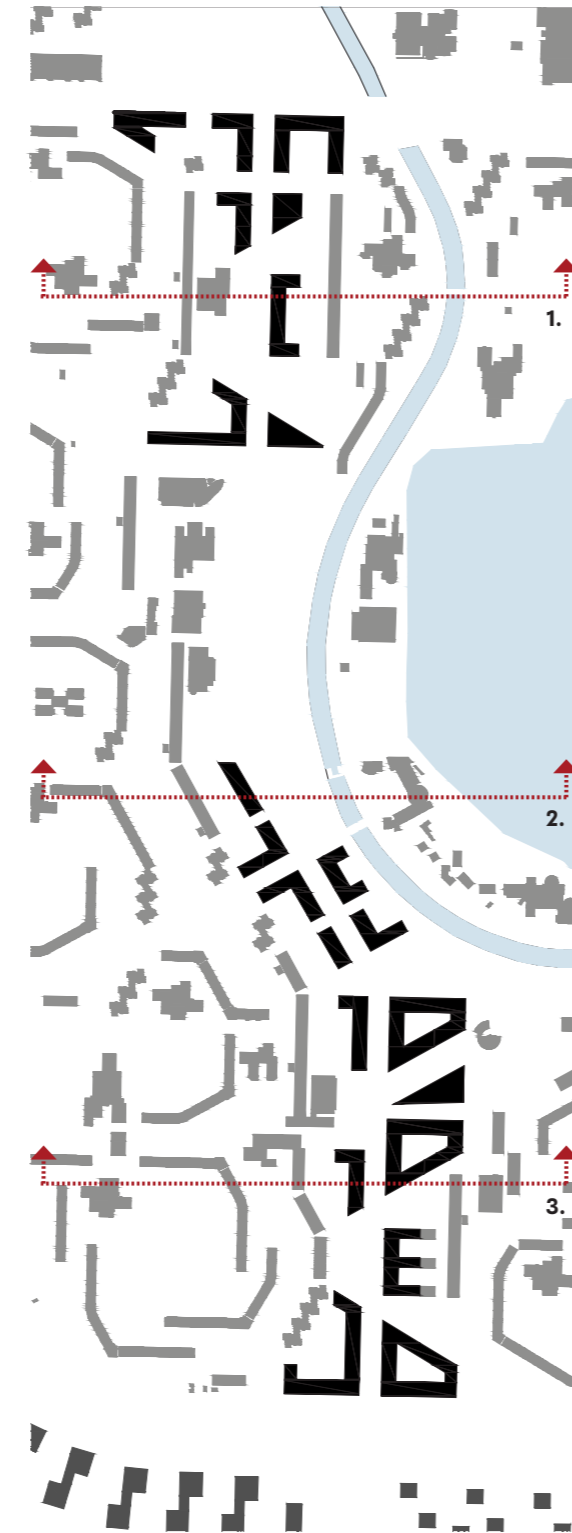
| PROPOSAL |



| PROPOSAL |

# SITE SECTIONS

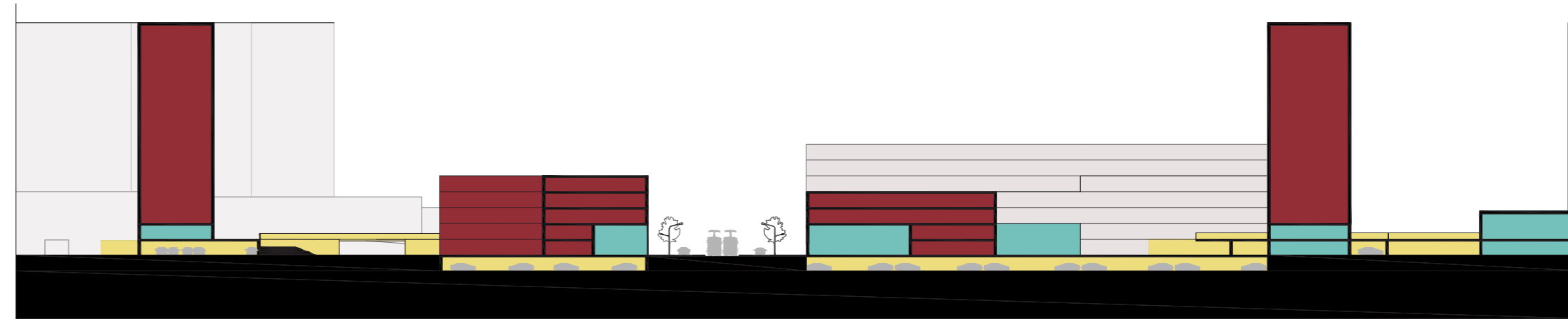
- Legend:
- Rent-able space
  - Communal space
  - Residential
  - Cultural
  - Administration
  - Retail



1.



2.

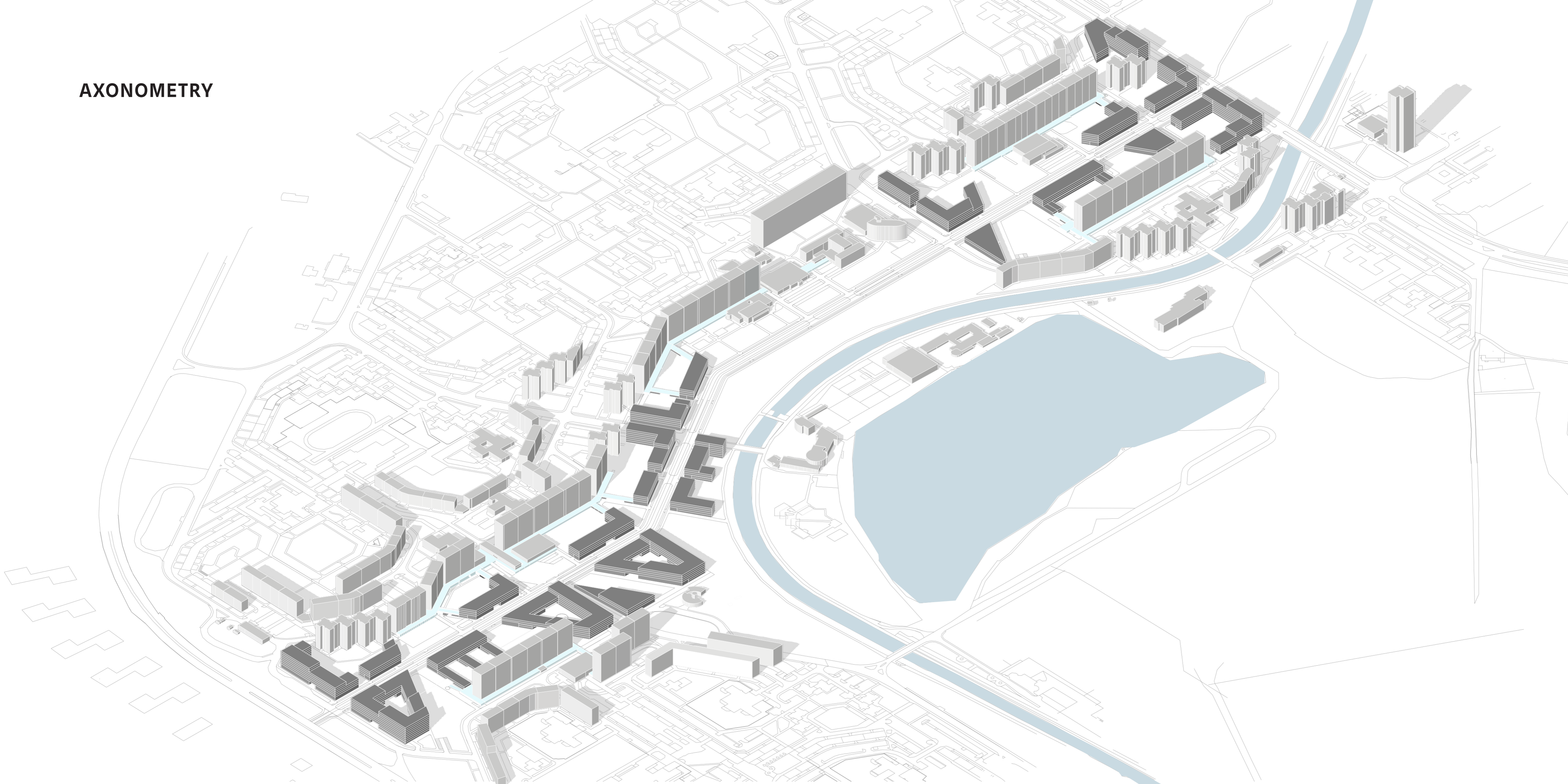


3.

Scale 1:1000

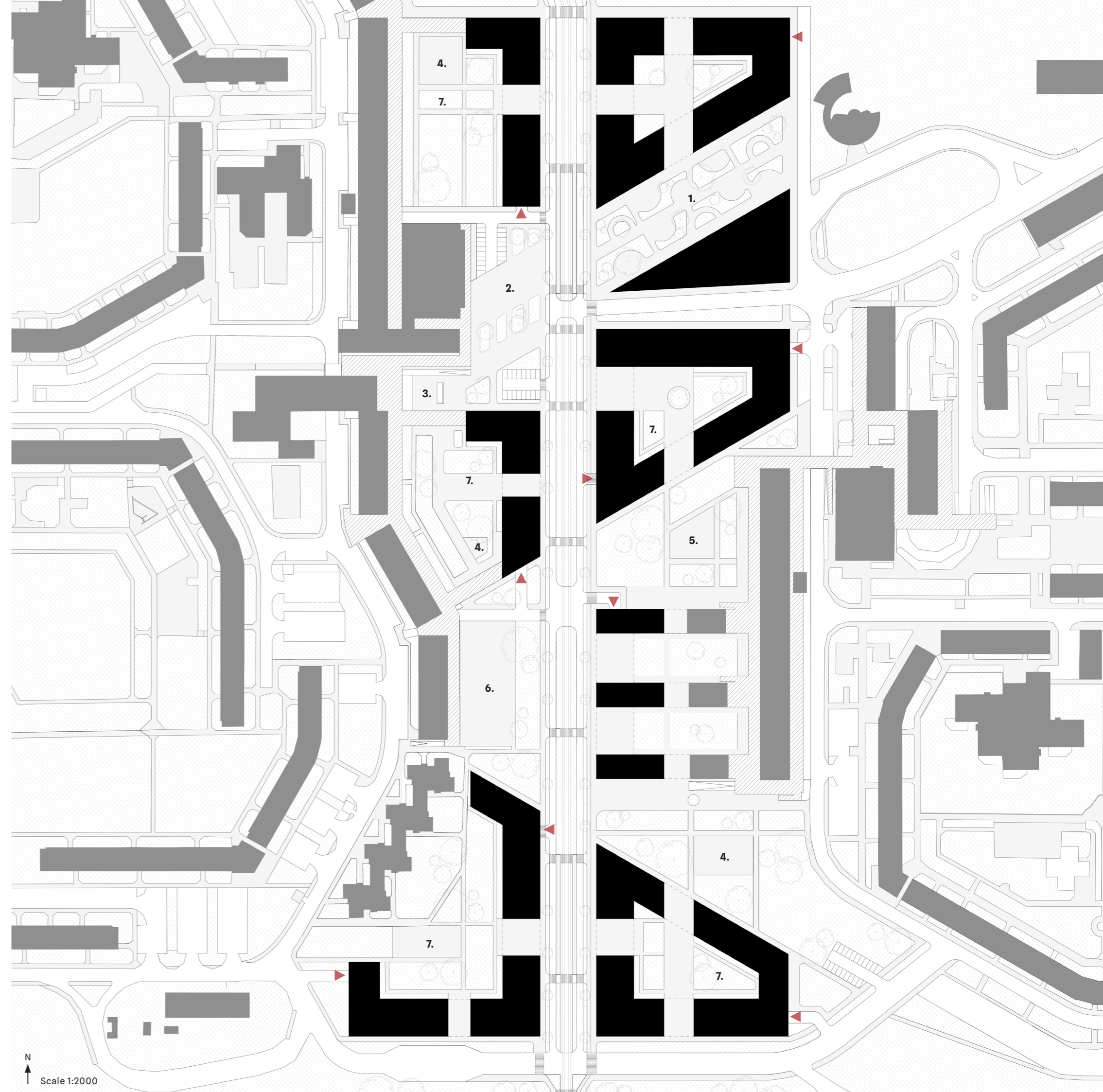


# AXONOMETRY



# THEMES OF PUBLIC SPACE






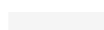
- Legend:
- Proposed structure
  - Existing structure
  - Under construction
  - Terraces
  - Greenery
  - Sidewalk
- 1. Urban park
  - 2. Outdoor market
  - 3. Outdoor stage
  - 4. Playground
  - 5. Outdoor gym
  - 6. Cafe plaza
  - 7. Communal gardening



# URBAN LIFE

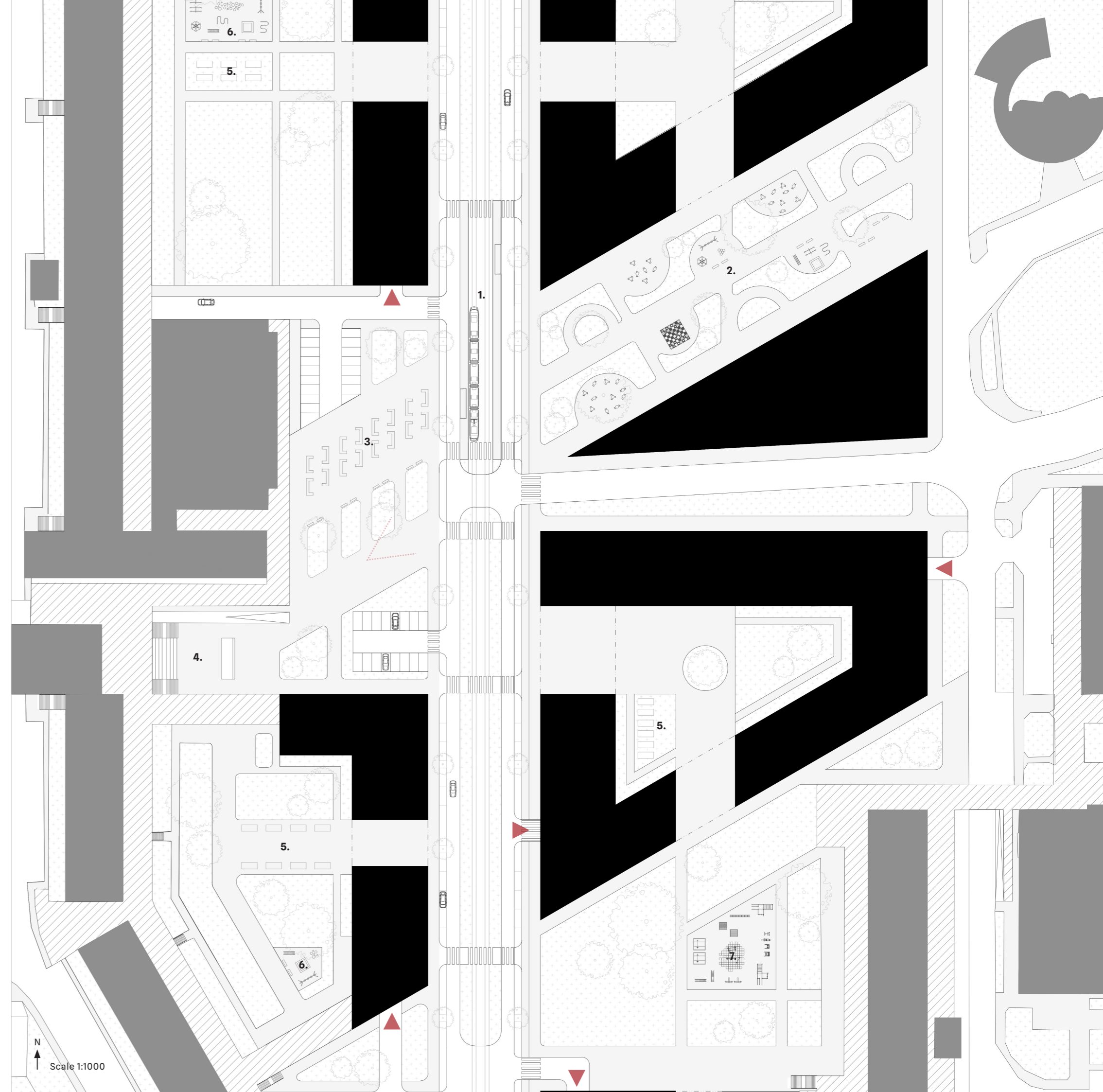
## Node of public activity

Legend:

- |                                                                                     |                    |                          |
|-------------------------------------------------------------------------------------|--------------------|--------------------------|
|  | Proposed structure | 1. Public transport stop |
|  | Existing structure | 2. Urban park            |
|  | Under construction | 3. Outdoor market        |
|  | Terraces           | 4. Outdoor stage         |
|  | Greenery           | 5. Communal gardening    |
|  | Sidewalk           | 6. Playground            |
|                                                                                     |                    | 7. Outdoor gym           |



View of the public node towards the church.

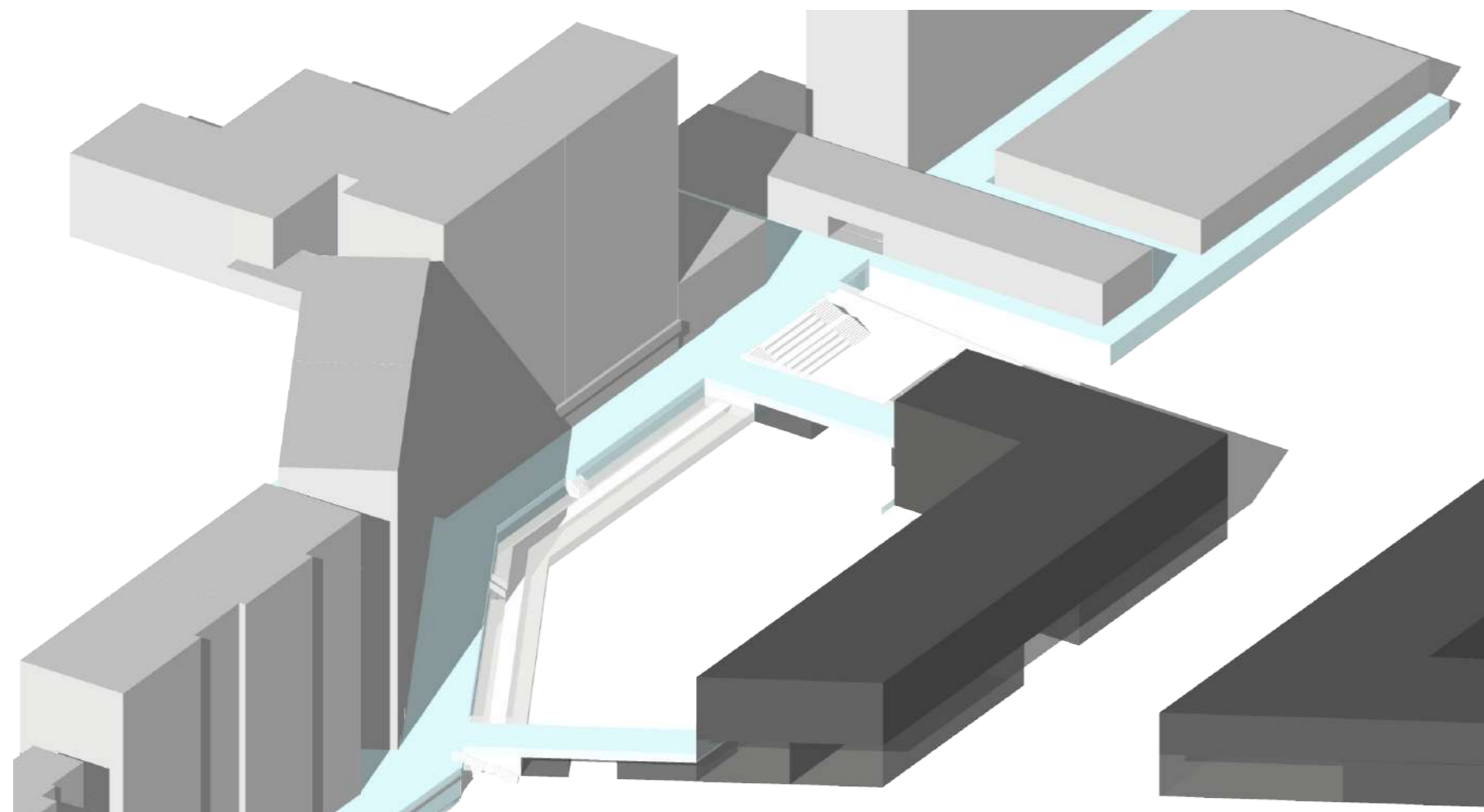


# BLOCK CONFIGURATION

## Underground Plan

New type of city block created by connecting panelák and proposed structure through the raised terrace level. This creates needed separation of public and communal outdoor space. The base of existing structure is reconfigured, the technical floor is transformed into parking garage allowing to conceal most of the existing outdoor parking. The deteriorated terrace floor of the panel building is reconstructed and redesigned to create active raised street frontage.

- Legend:
- Terrain cut
  - Outline of panel building
  - 1. Parking
  - 2. Bike storage
  - 3. Building's maintenance



# BLOCK CONFIGURATION

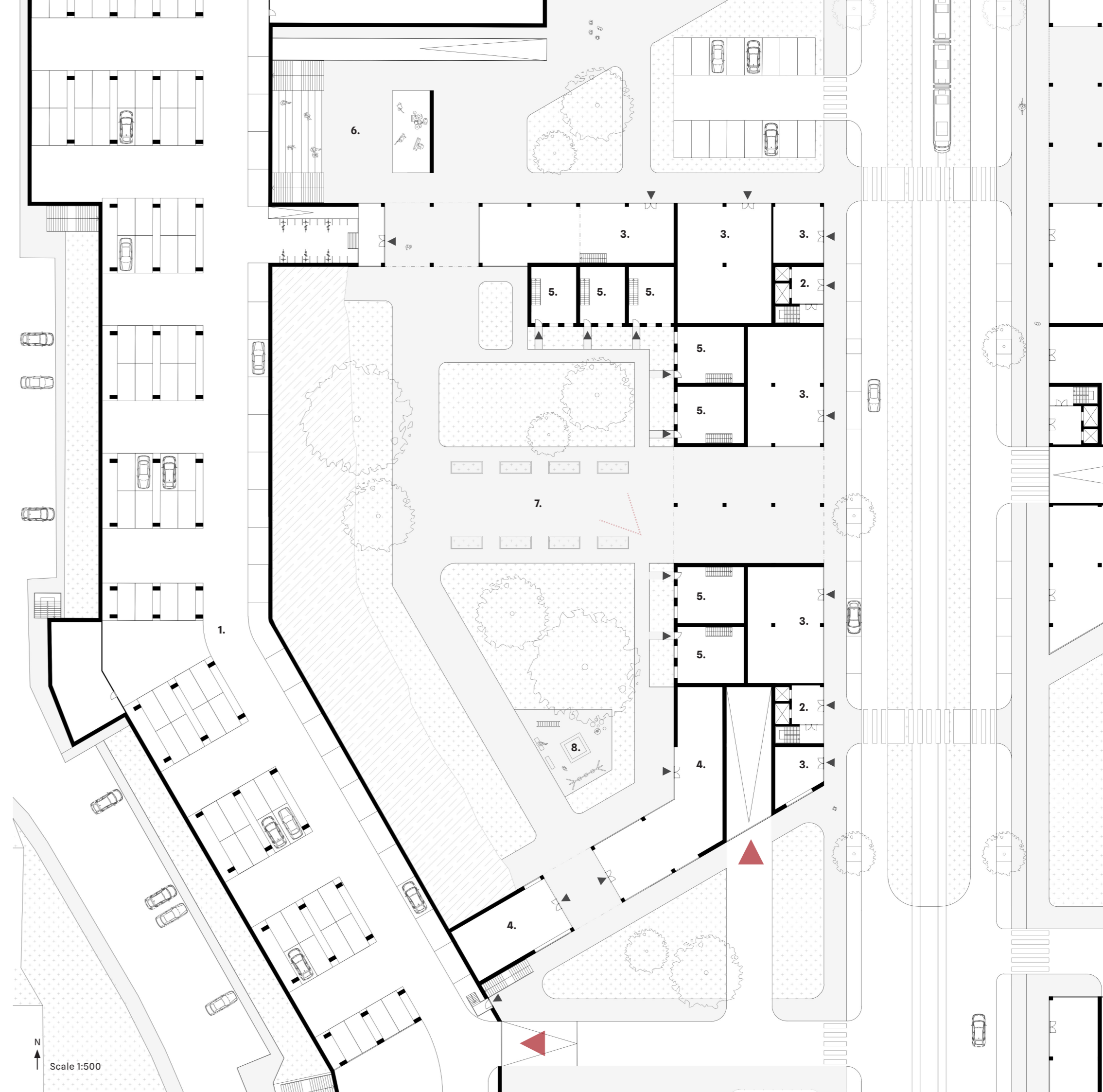
## Groundfloor Plan

Legend:

- 1. Parking
- 2. Proposed building's core
- 3. Rent-able space
- 4. Communal space
- 5. Residential unit (townhouse typology)
- 6. Outdoor stage
- 7. Communal gardening
- 8. Playground



Inner courtyard used for communal activities, like gardening.



# BLOCK CONFIGURATION

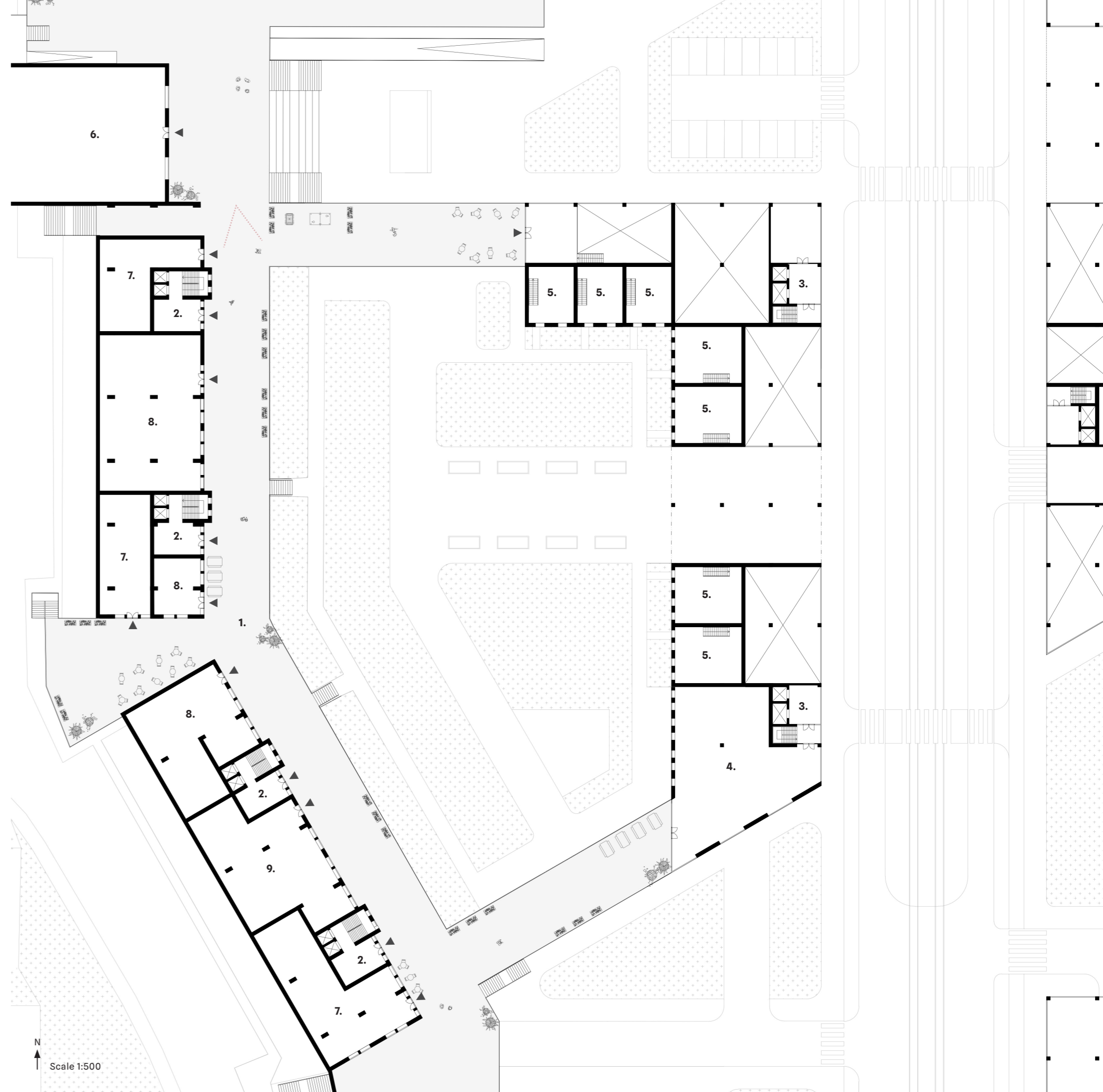
## First Floor

Legend:

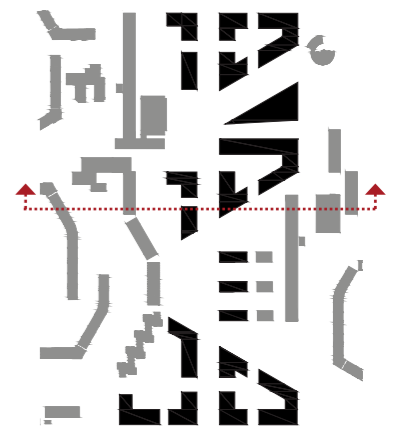
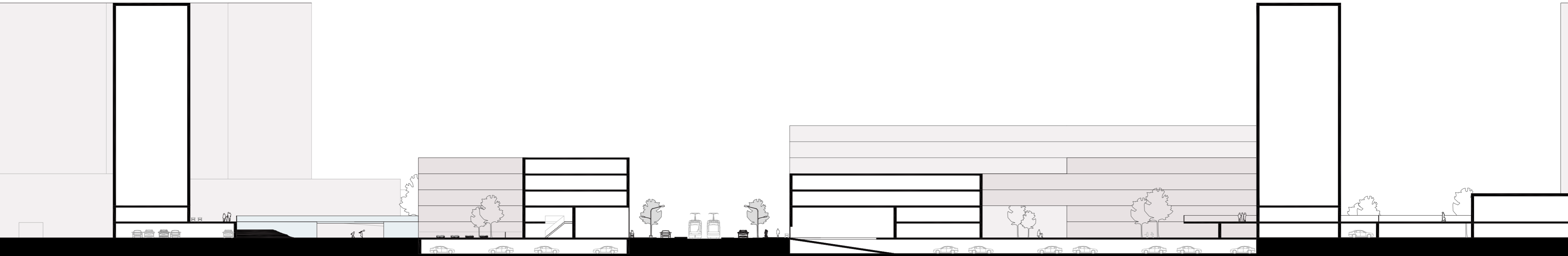
- |                             |                    |
|-----------------------------|--------------------|
| 1. Terrace                  | 6. Culture centre  |
| 2. Panel building's core    | 7. Store           |
| 3. Proposed building's core | 8. Gym             |
| 4. Communal space           | 9. Unused space    |
| 5. Residential unit         | * existing program |



Bringing life to terrace through reconstruction and introduction of new program.

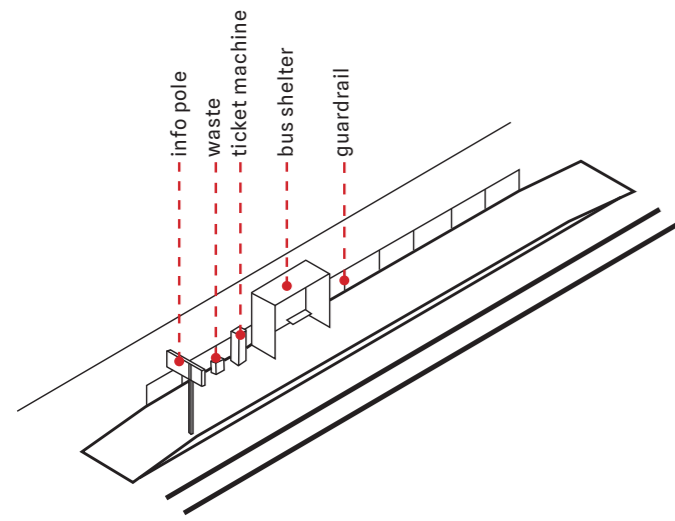


# SECTION

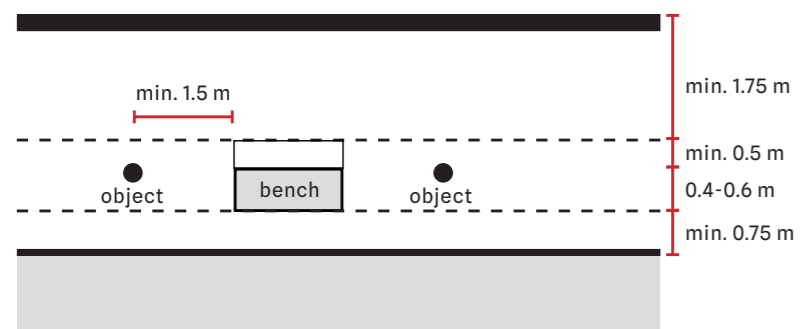


# URBAN SPACE DETAIL

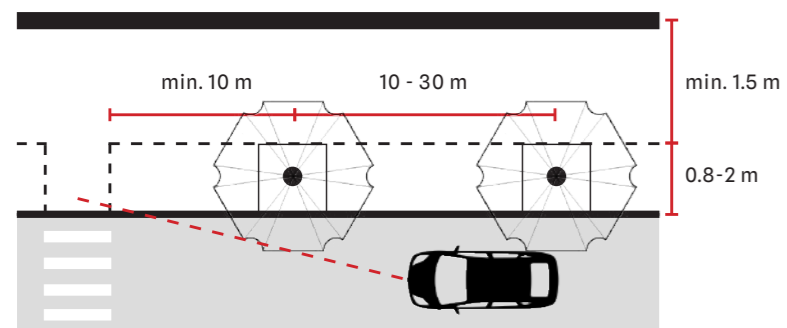
## Design principles



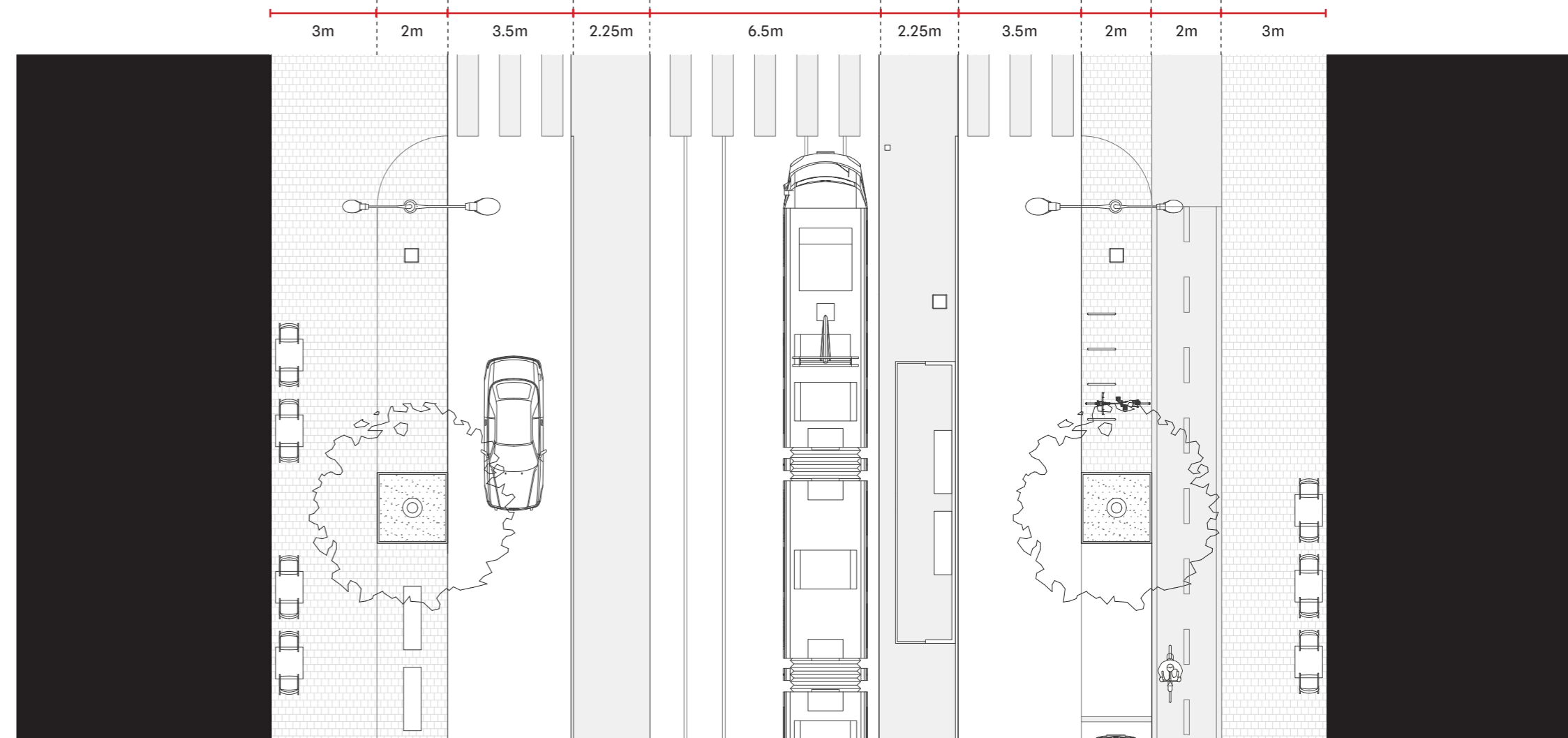
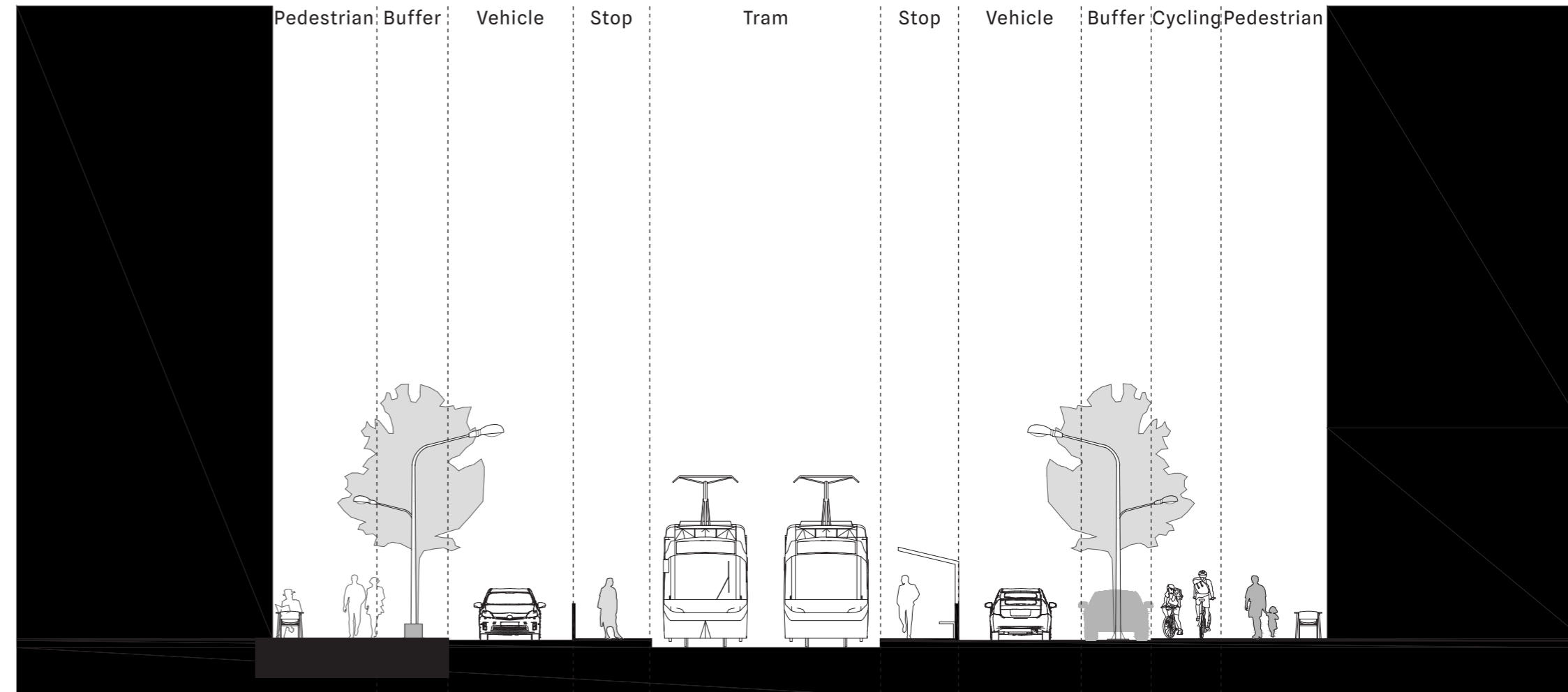
Typical Tram Stop



Seating Arrangement



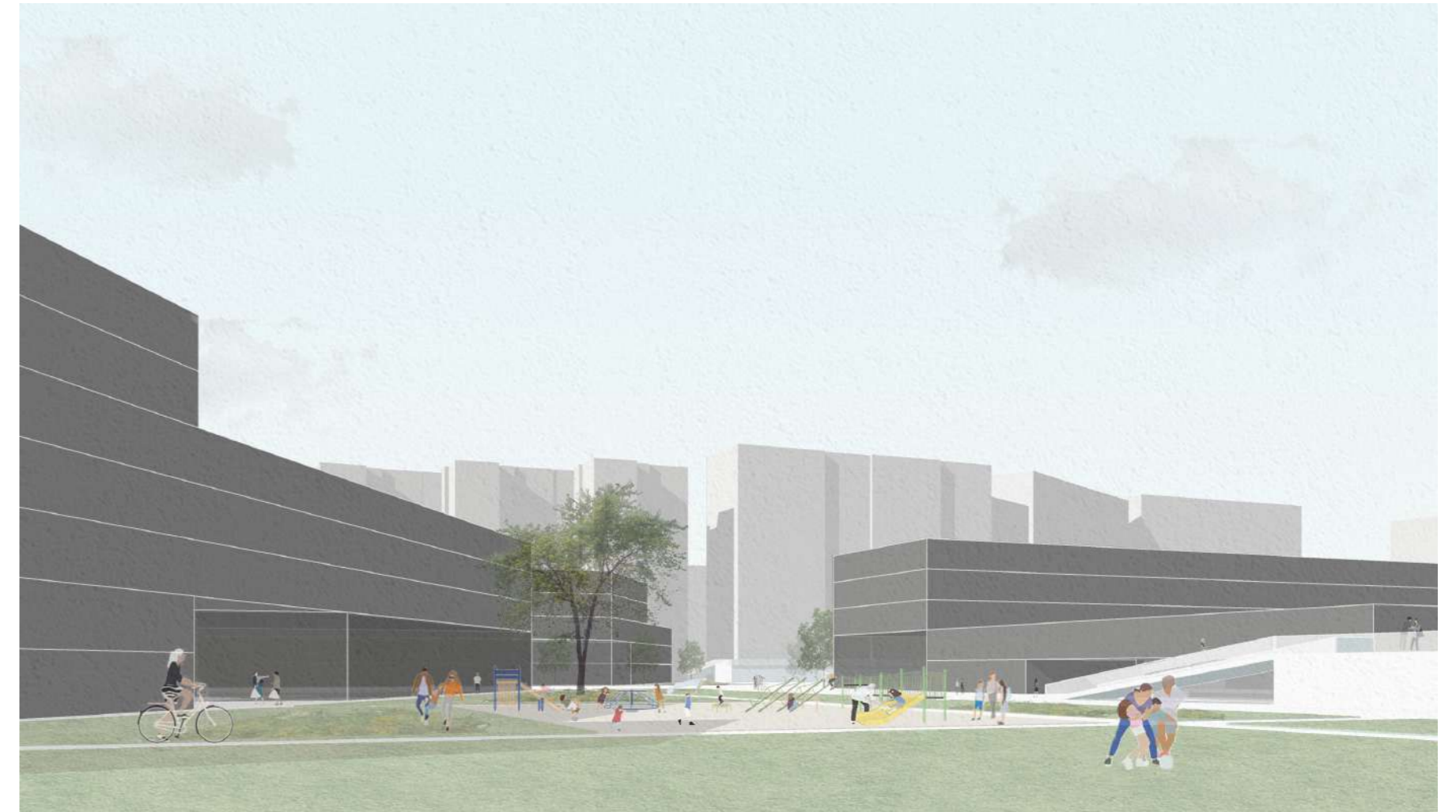
Vegetation Arrangement



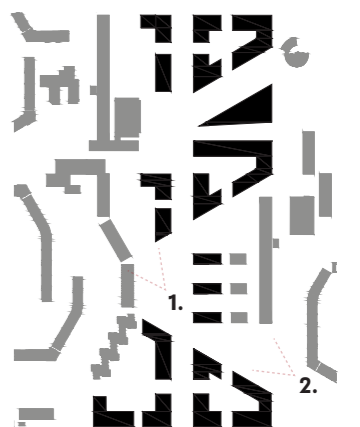




1. Deteriorating garages and parking lot transformed into a cafe plaza.



2. View of a playground within the semi-public space frames the existing structures by the urban form.



## **Conclusion**

Through critical examination of the unique condition of the socialist estates a model for regeneration was created that cherishes the existing context and fills-in the empty voids by densifying wide range of activities.

The proposal allows the old system, form and composition to interweave with new development and become an inseparable part of the city, rather than being pushed away by it.

Moreover, the project illustrates that the housing estates have potential to become attractive and vital neighbourhoods within the city, avoiding deterioration and abandonment when transformed.

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