

# PORTFOLIO



AIDA RAIŽYTĖ SA-0

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# Historic timeline

## 14th - 15th centuries

Birštonas castle and the town become a hunting palace and royal resort.



## 1382

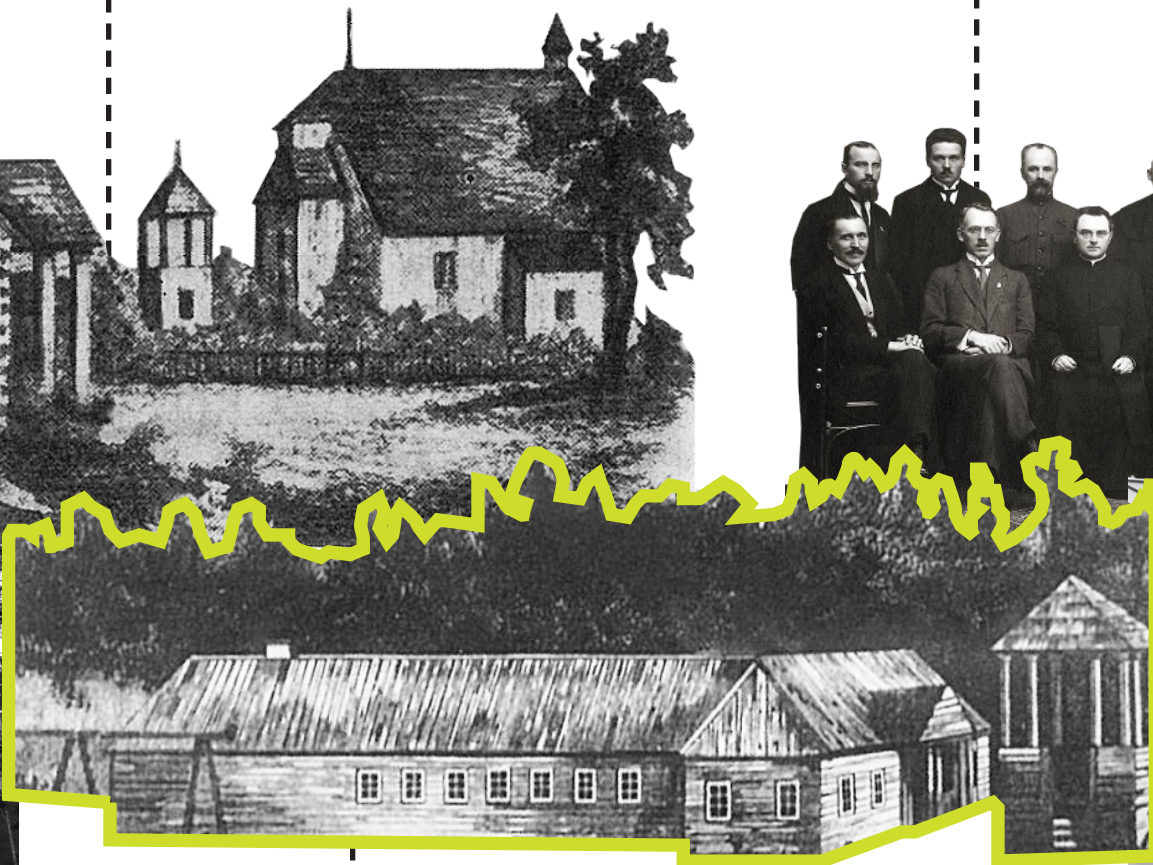
Birštonas name first times mentioned in historic written sources

## 1539

Birštonas gains city rights

## 1851

In the middle of the 19th century, people started to examine mineral springs in Birštonas. In 1851, the town was declared a resort, which led to the rapid construction of medical buildings and spas.



## 1905

Fire in Birštonas that destroys the majority of buildings.

## 1918

End of World War, during it Birštonas suffered heavily. Declaration of Independence.



## 1923

Red Cross and the Lithuanian Ministry of health signed a pact that Birštonas now belongs to the Red Cross. Beginning of modernization of the town.

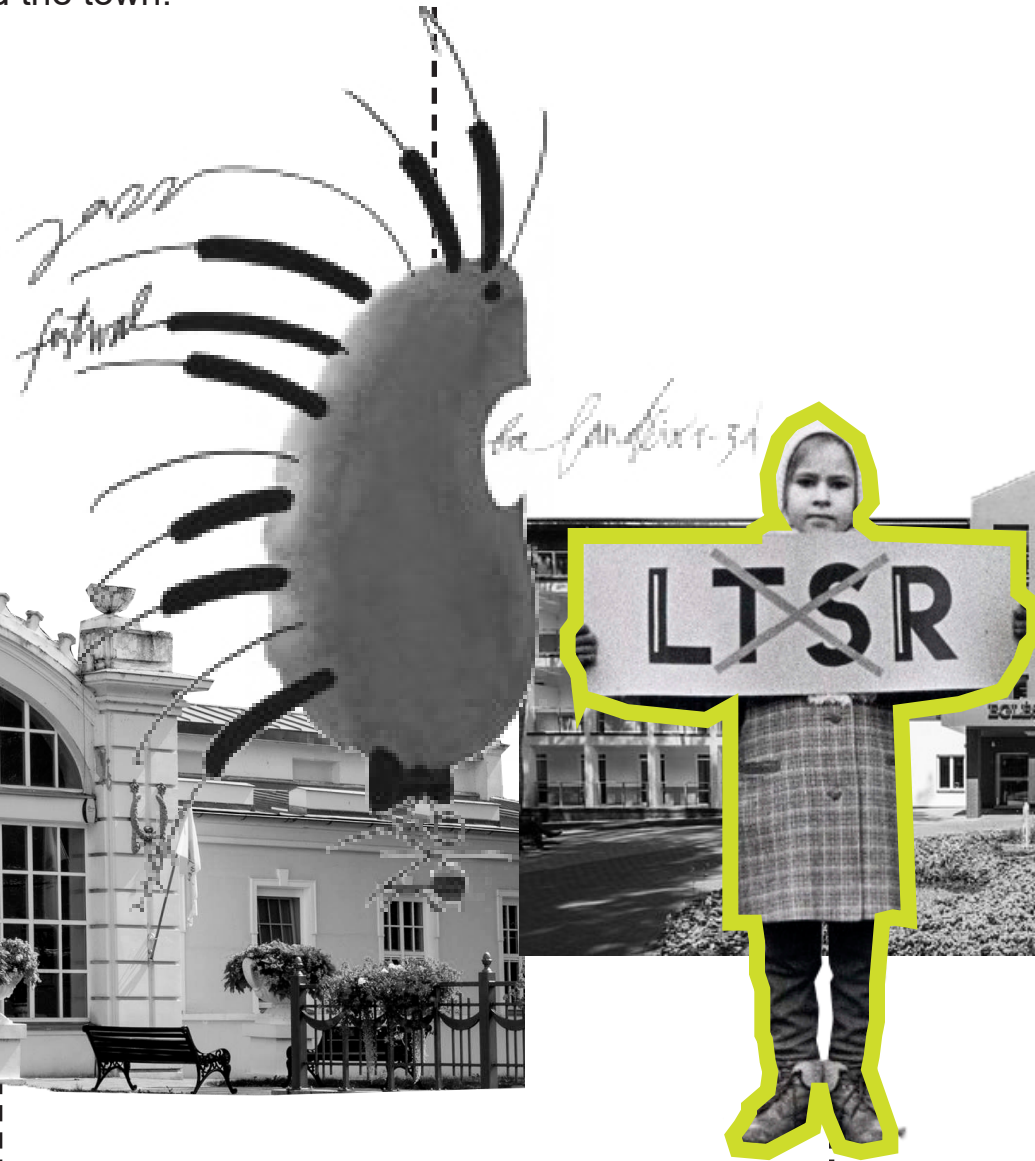


## 1932

Lithuanian government introduced a new resort law by which Birštonas was recognized as one of few resort towns in Lithuania. This law helps to modernize and expand the town.

## 1980

First Birštonas Jazz festival



## 2013

Construction of Eglė spa. Nowadays, Birštonas is one of the few resort towns in Lithuania. It goes through a new era of expansion.

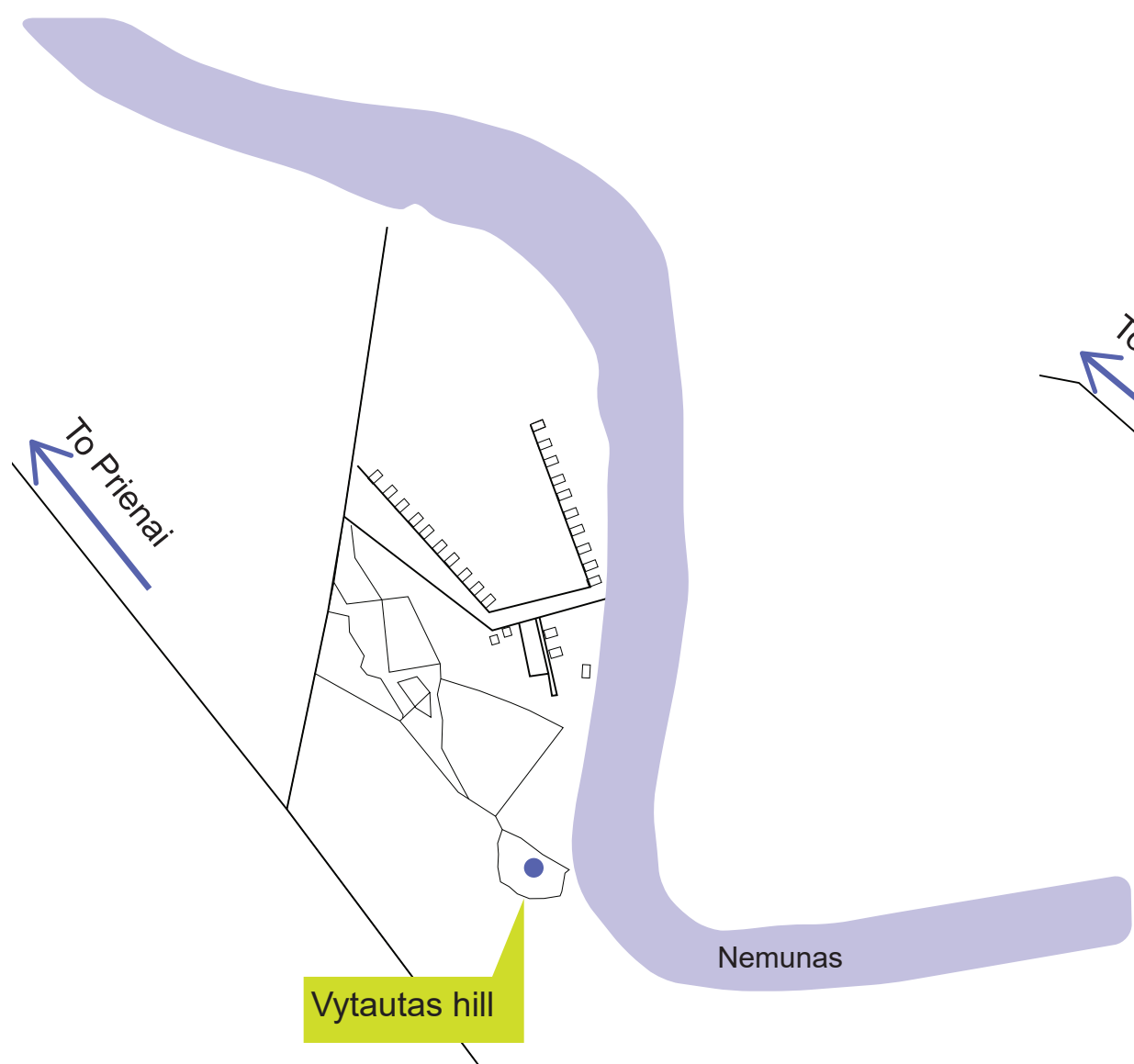


## 1991

Lithuania regains independence.

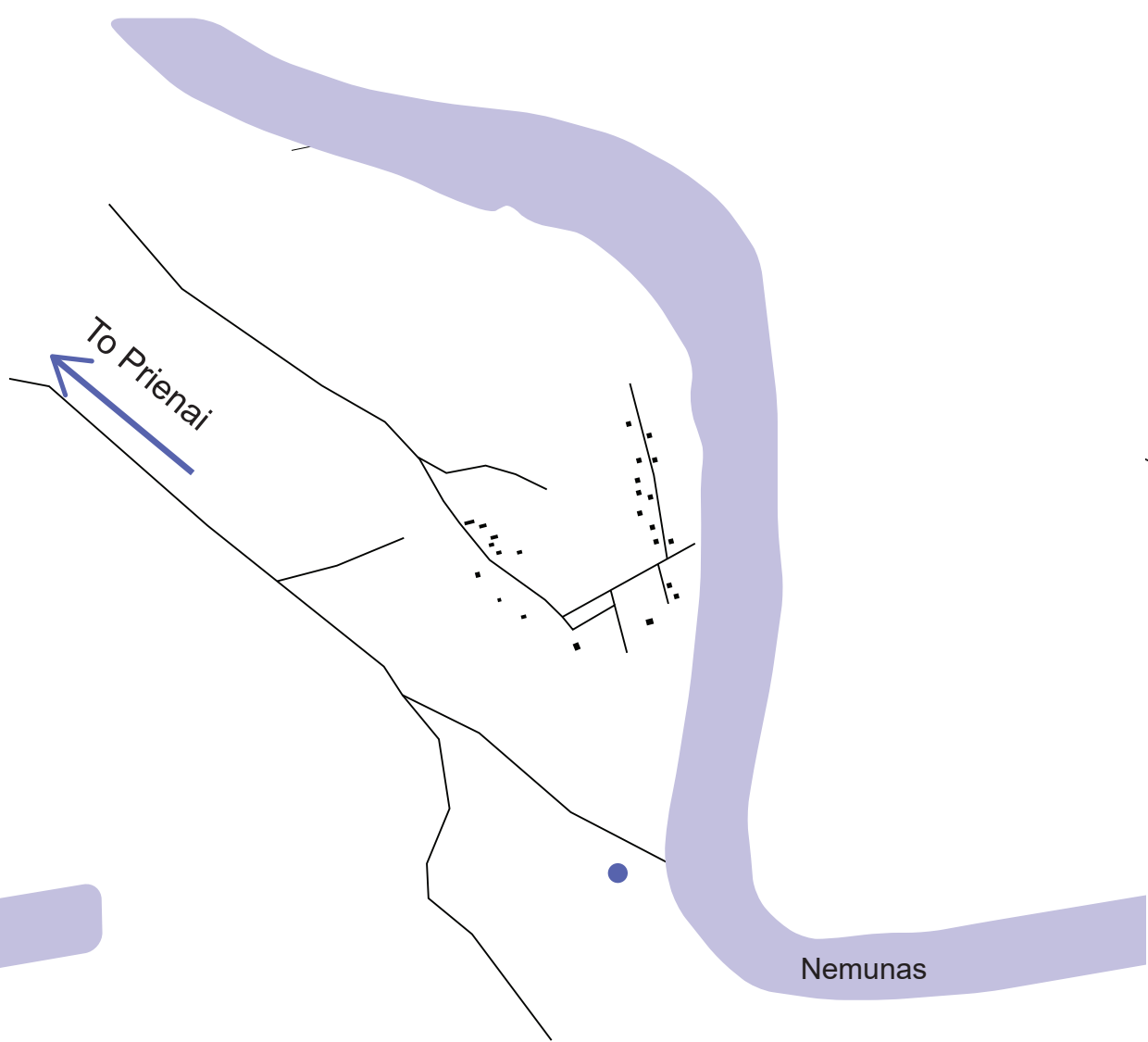


# Town's development through out history



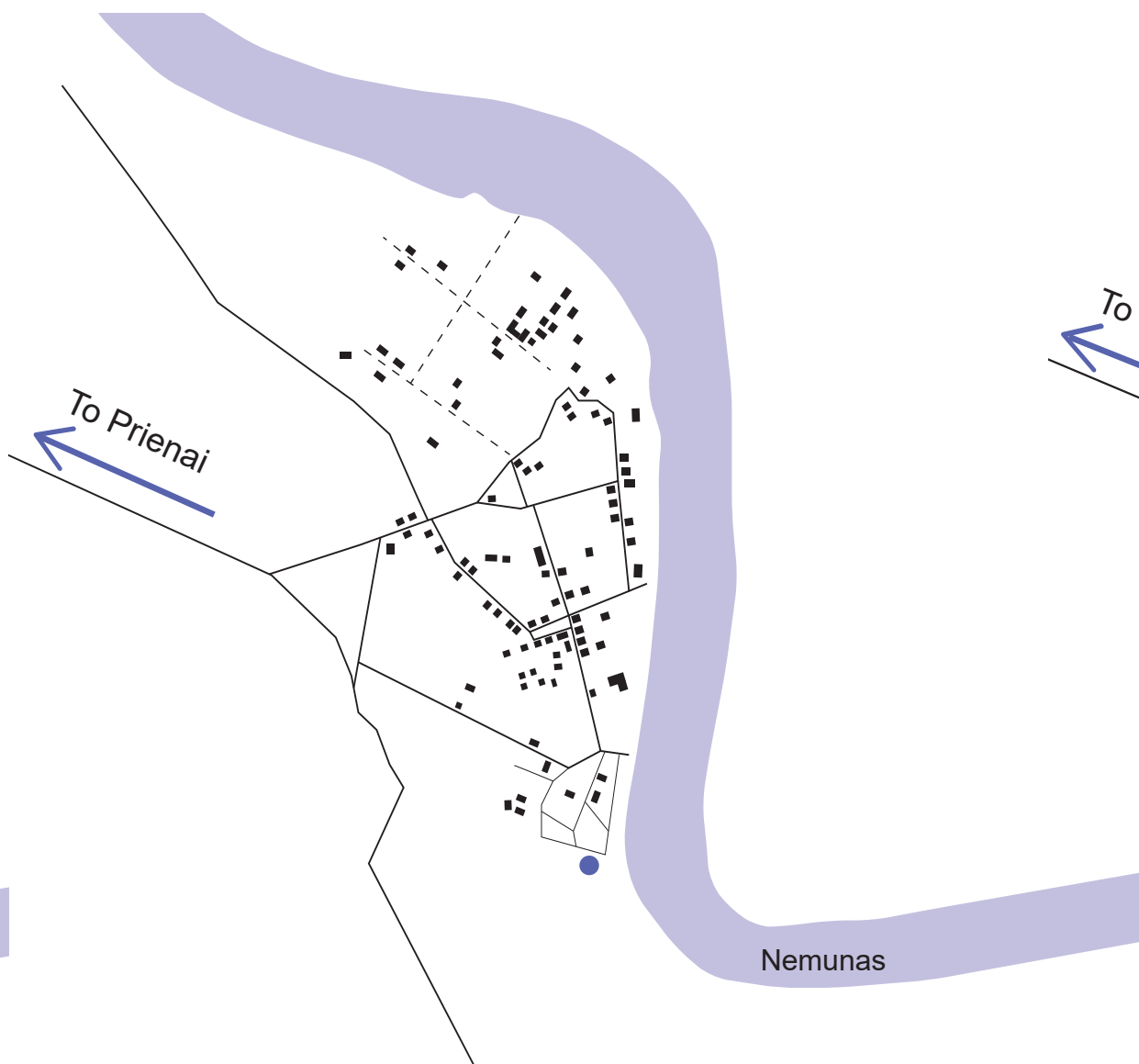
## Bištonas in 1826

At the beginning of the 19th century, Birštonas was a church-owned small village near Nemunas. It has three main roads that are surrounded by small plots. Near town, a connection with the bigger neighboring town Prienai can be seen. The map shows that near Vytautas Hill there were low-importance roads, most likely pedestrian, that went through the forest.



## Bištonas in 1869

In 1859 Birštonas was declared as a resort. It pushed the town into the development. Construction of medical and public buildings began at that period. The town plan becomes more detailed, visible that U-shaped street net is expanding. Living quarters begin to form around Algirdas, Nemunas, Tulpių, and Kęstučio streets.



## Bištonas in 1947

The largest urban expansion for the town was the Interwar period. Due to the new Resort Town law and investments from the Red Cross, Birštonas became one the most important tourist and health towns in Lithuania. New medical, public, and entertainment buildings appeared during the Interwar, as well as private residential houses and vacation villas.



## Bištonas in 1984

During the Soviet occupation, Birštonas was viewed as a resort town. During this period, a number of private residential houses, alongside modernistic apartments, were constructed, this changed wooden towns' faces, but it still holds its identity. Nowadays, Birštonas is going through a new era of development, and a lot of new projects appear in the area.

The town is thankful for its neighbour’s disaster because without it, it would be just a regular village instead of a resort.

# Town’s formation during 19th century

Modern Birštonas history begins in the middle 19th century when the healing properties of the mineral waters gushing in this area became known. It is known that in 1846, a doctor named Benediktas Balinskis, who worked at the Staklišiai resort, sent a patient to Birštonas, whom the waters of this place helped to recover. By 1854, an official permission to treat with mineral water in Birštonas had already been obtained. The exploitation of the healing waters required the creation of appropriate infrastructure, which prompted the urban development of Birštonas as a balneological resort.

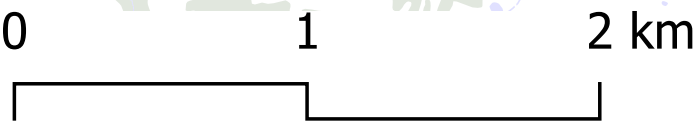
At that time, there were only about 30 houses in Birštonas, but by 1861, the number had increased to 52. The urban development of Birštonas was prompted by a fire in the nearby Staklišiai resort in 1857, after which the significance of that area diminished. Birštonas was built according to the street network that emerged in the early 19th century: “along the street to the resort (in the southern part of the city) and along the road to Prienai. These were modest wooden peasant homesteads.”

Although by the second half of the 19th century Birštonas had already become a well-known balneological resort throughout the Russian Empire, its appearance did not differ much from that of most Lithuanian villages. The typical urban composition of the town was acquired only in the early 20th century with the emergence of a neo-Gothic church, larger residential and public buildings, and medical institutions. “Just before the First World War, there were 72 baths operating in the spas, and 3 hotels were built, offering 200 rooms.”

- Nemunas river
- Greenery
- Border of 21st century Birštonas town
- Border of 19th century Birštonas town
- Streets that formed during 19th century



Scheme of Birštonas during 19th century





# Urban frame of Birštonas during 19th century

During the 19th century, Birštonas was recognized as a balneological resort in the Russian empire. The town developed on the south side of modern-day town between Nemunas River, the road to Prienai, the forest that later became central Birštonas Park and Vytautas Hill. The street net consisted of four main streets that formed a square U-shaped net and intersected next to the church, forming the main town's square.

The building composition is linear, formed around four main streets: Algirdo, S. Dariaus ir S. Girėno, Nemuno, and Birutės. Alongside the town's square, buildings are built quite squared. The dominants of this period consisted of public buildings that were important for this time: churches, kurhauz, and clegery houses. Also, some of the more wealthy residents' houses stood out from the local context.

- Border of Birštonas town during 19th century
- Greenery
- Nemunas river
- Dominating buildings
- Buildings
- Streets that formed during 19th century



Wooden Birštonas church. Source: kvr.kpd.lt



Birštonas kurhauz. Source: archmede.lt



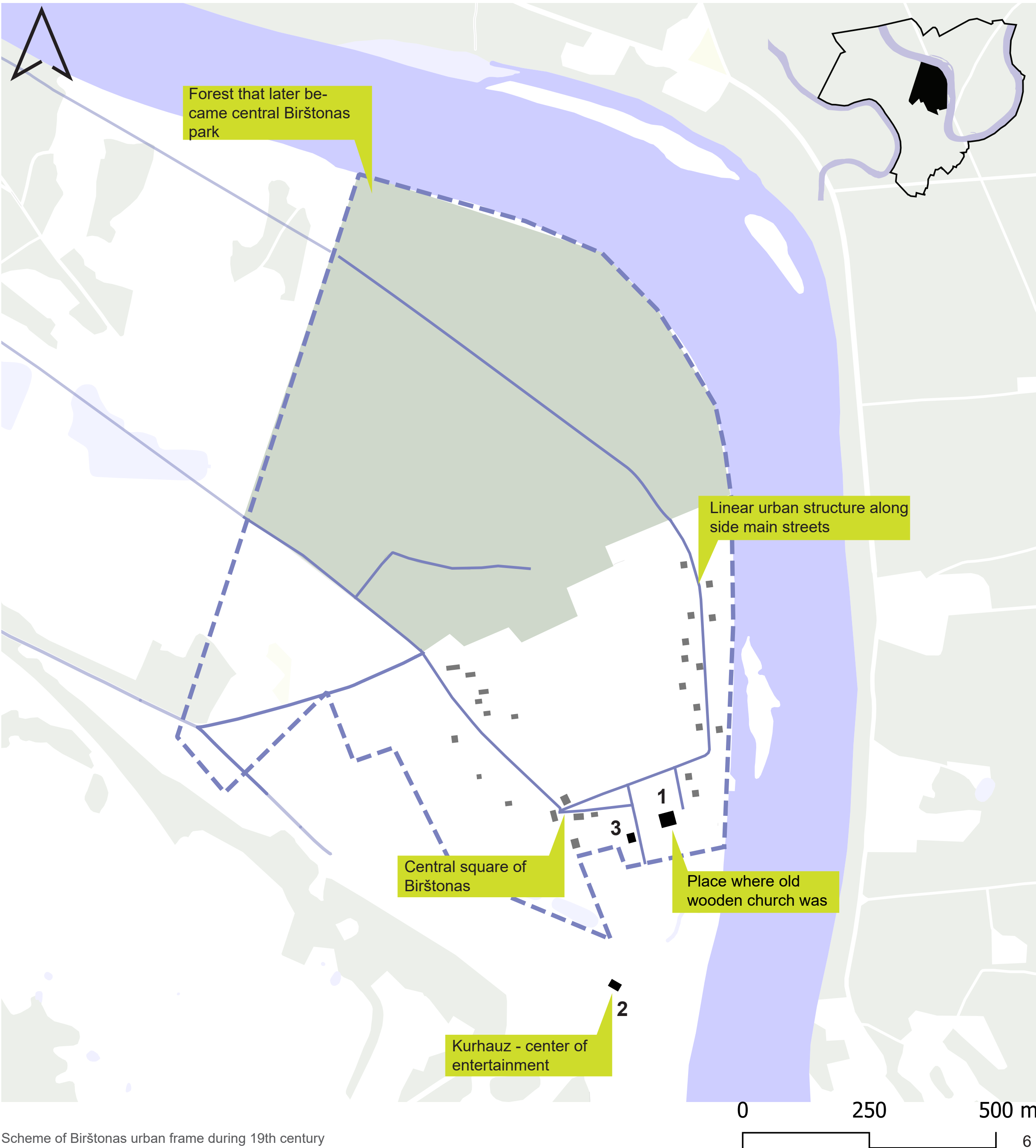
Birštonas Clergy house (now Birštonas sacred museum). Source: archmede.lt



Ponios Orvid vasarnamis Birštone. Source: Limis.lt



Birštono Šv. Panteleimono orthodox church. Source: Lietuvos nacionalinis muziejus



Scheme of Birštonas urban frame during 19th century

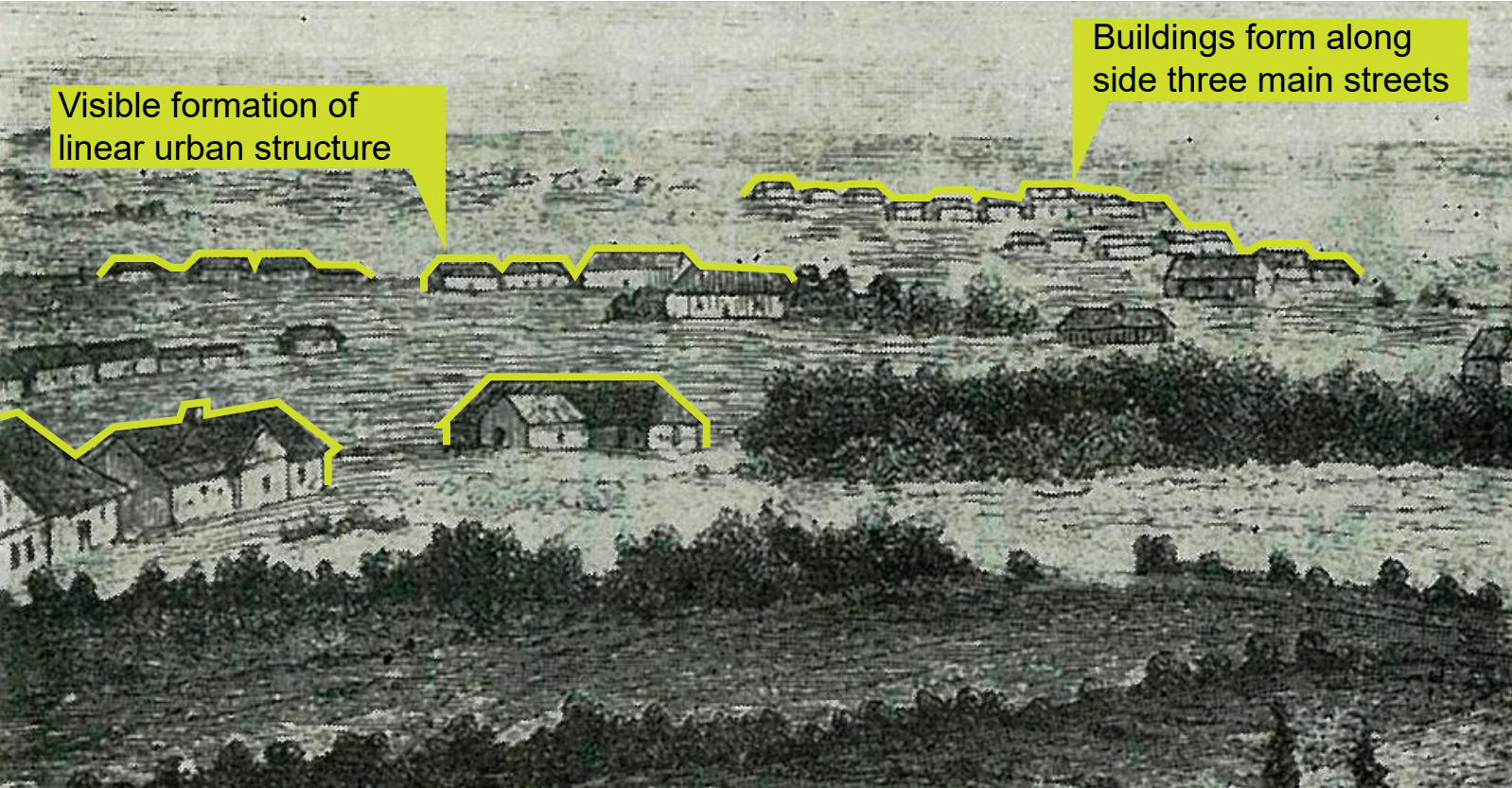


# Townscape of Birštonas during 19th century

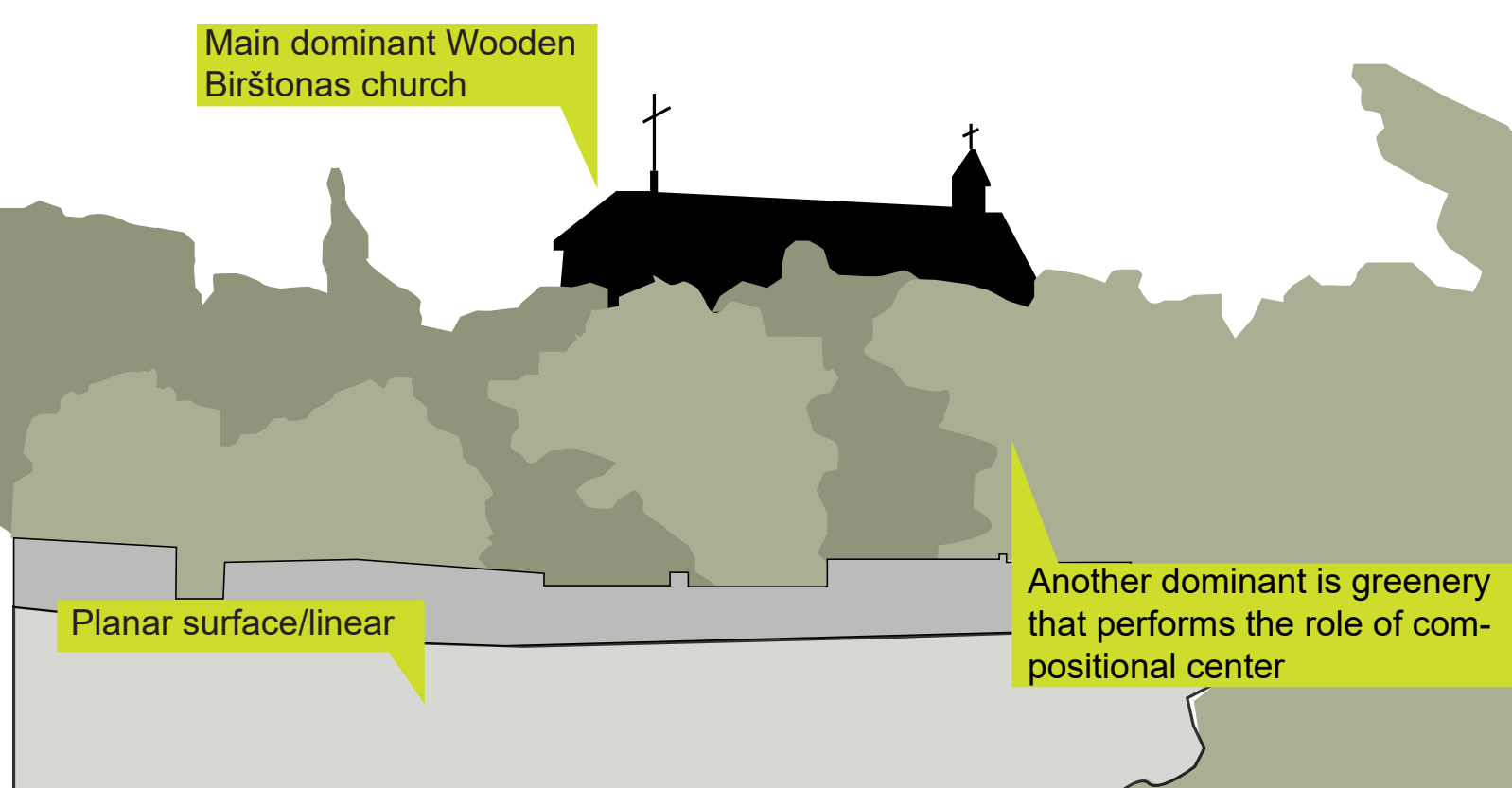
The townscape of Birštonas can be analyzed using K. Jakovlevas-Mateckis proposed three factors that evaluate the city as a visual environment: volumetric, linear, and planar. Volumetric elements can be identified as the church, houses, greenery, linear streets and paths alongside residential buildings, and planar water bodies and meadows. From the analysis, it is visible that the main dominants during the 19th century were churches, hills (elements of relief), and greenery.

Even though in the 19th century, Birštonas was already considered a resort and had several sanatoriums, the man-built structures, excluding the church, were not the dominating aspect. This can be explained by the popular typology of that time: one-story wooden buildings with pitched roofs built alongside existing topography. Church, on the other hand, to show its importance was the most visible and dominating object in the townscape.

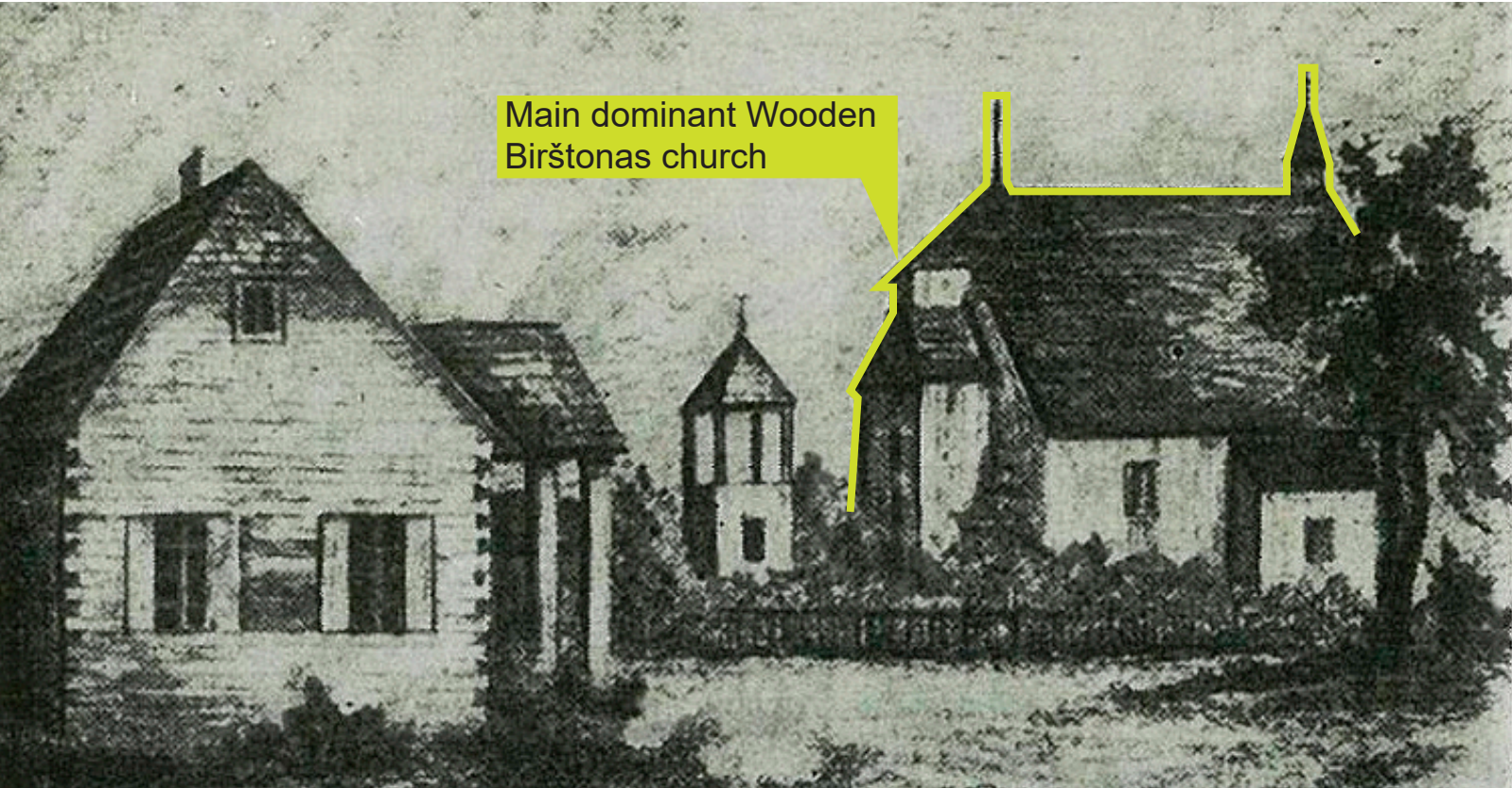
Talking about the urban composition of the Birštonas during the 19th century the town formed next to the Nemunas River, alongside four main streets. This formed a linear urban structure that intervenes in the natural frame of the territory.



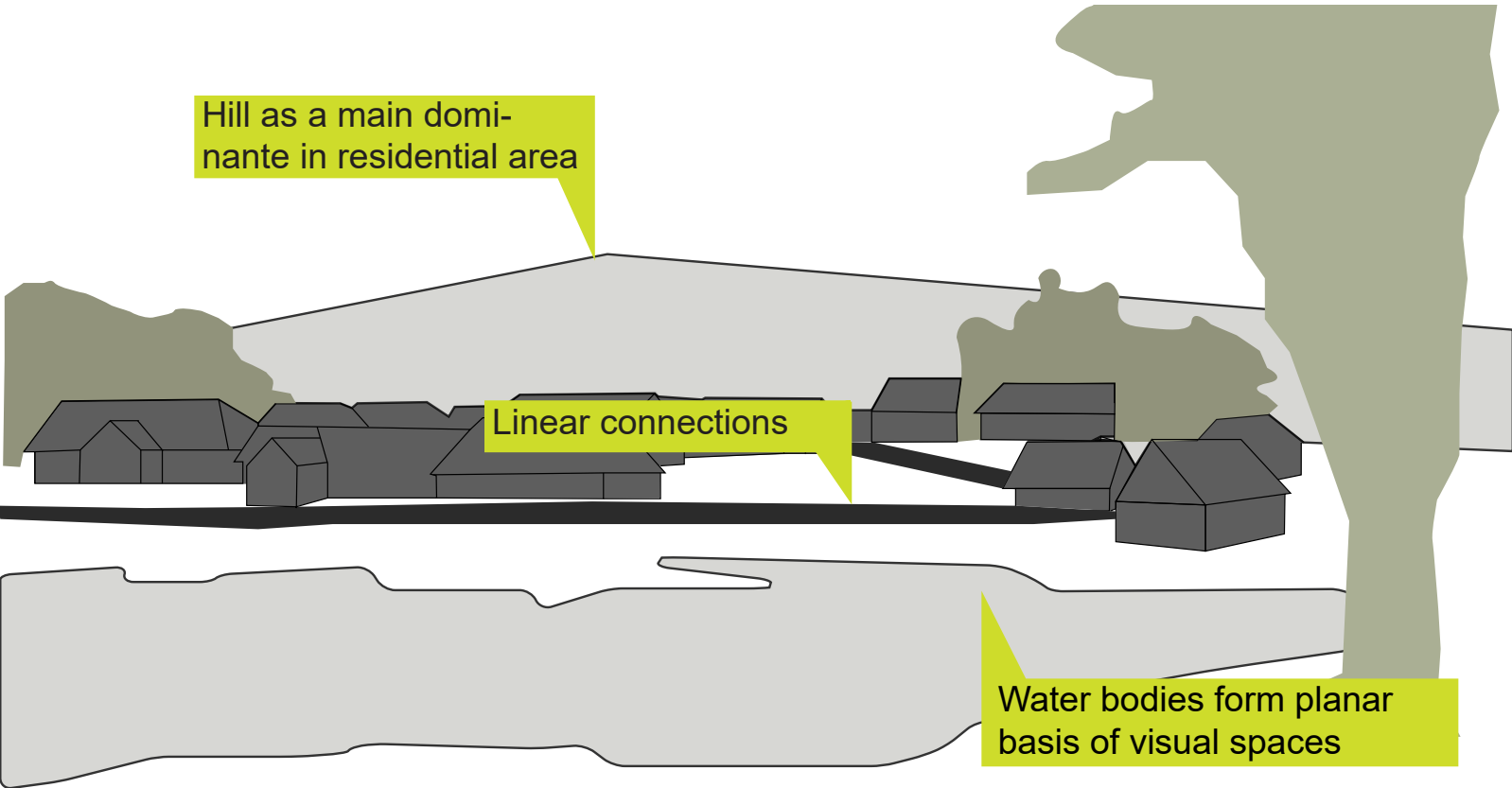
Birštonas townscape during the middle of 19th century. Source: kvr.kpd.lt



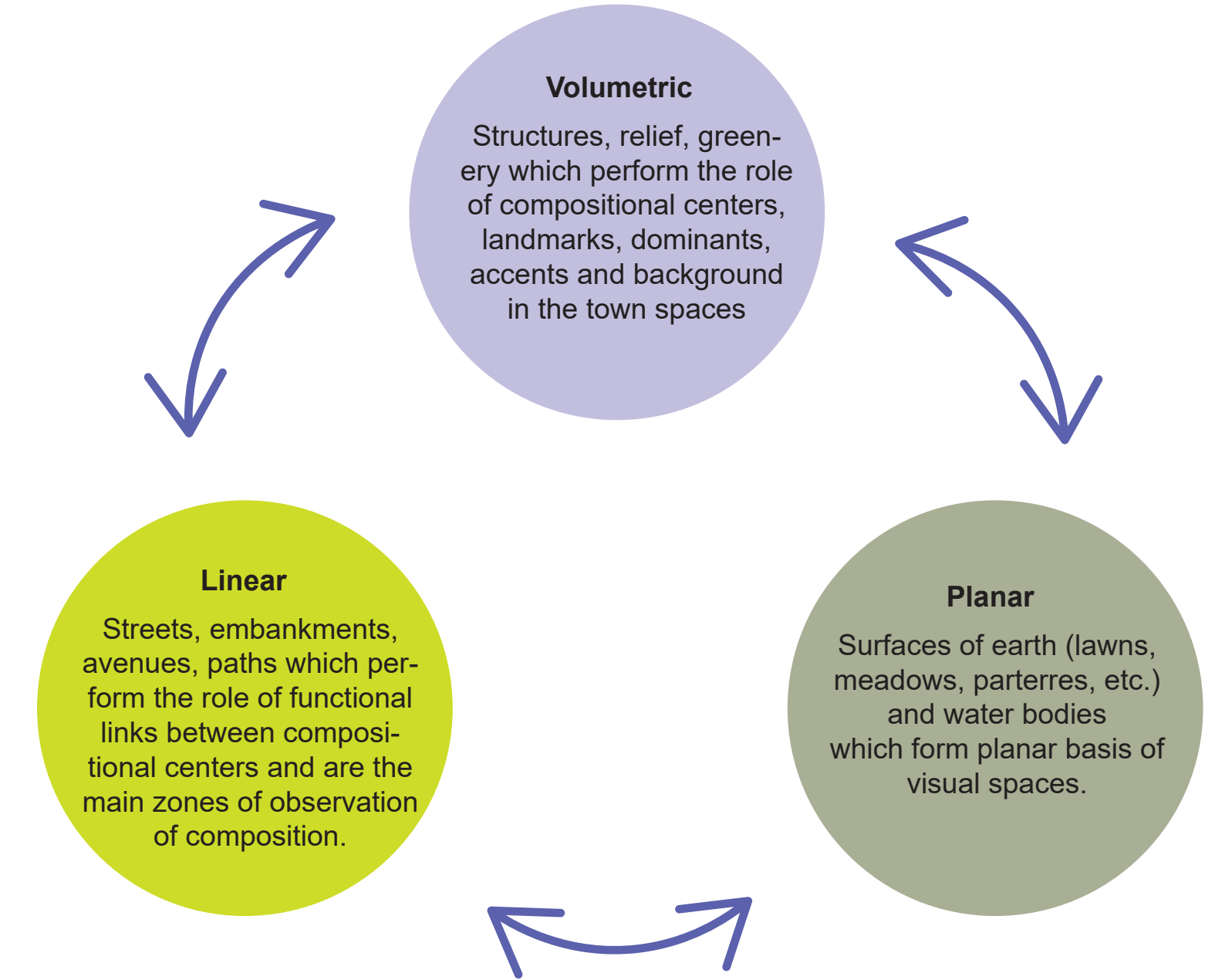
Birštonas townscape of town's center during the middle of 19th century.



Birštonas townscape and old church during the middle of 19th century. Source: kvr.kpd.lt



Birštonas townscape of residential buildings during the middle of 19th century.



Components, which form townscape spatial pattern and its composition (K. Jakovlevas-Mateckis, 2008)



# Architecture in Birštonas during 19th century

In the middle of the 19th century in Birštonas there were few wooden peasants sheds. They were simple, did not have any decorative elements, and had four-sided pitched roofs, covered by straws. Though the 19th century's second half, Birštonas was already a well-known balneological resort in the Russian empire, but its urban image and architectural identity were no different from most Lithuanian villages. More wealthy residences started to build bigger houses with pitched roofs, following the concept of Swiss resort buildings, but with traditional Lithuanian decorations.

The peasants still built simple sheds covered in straw, but the public buildings, that were used for ordinary people, like sanatoriums and clegery, took the shape of the pesant houses but with more durable building materials. The urban composition characteristic was acquired only in the 20th century, after the building the neo-gothic church here, larger ones for residential and public buildings, and medical institutions. "Right before the First World War, 72 baths operated in hospitals, three hotels were built with 200 numbers".



Birštonas Kurhauz. Photo: Limis.It



Birštonas Clergy house (now Birštonas sacred museum. Source: archmede.lt



Mr. Orvid summerhouse in Birštonas Photo: Limis.It



Peasant house during late 19th century in Birštonas. Photo: Limis.It



Postcard of Birštonas during 1900 - 1914. Photo: Limis.It



# Town's development during interwar period

## During WW1

Birštonas resort and park suffered greatly. The Germans took away almost everything; buildings were left without windows, doors, floors, ceilings, and roofs. Moreover, one of the most valuable resort buildings at the time, the Orviduvka summer cottage, was burned down.

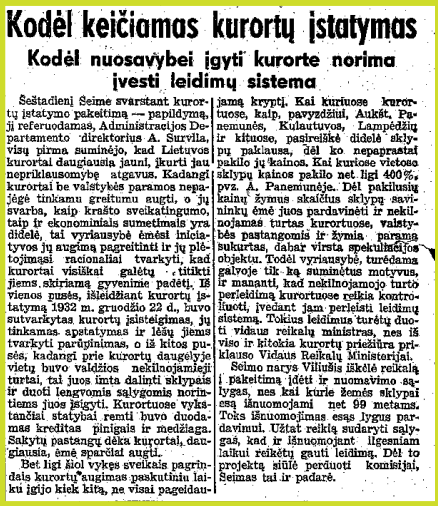


## Until WW1

Before the First World War, Birštonas had spa resorts with operating 72 baths and 3 hotels with 200 rooms. It was one of the more well known resorts in Russian empire

## 1924

The destroyed resort faced the threat of extinction because the government lacked funds for its restoration. Initiatives were taken by the Lithuanian Red Cross. In a treaty signed in 1924 between the Lithuanian Red Cross and the Department of Health, it was stated that the organization aimed to modernize the resort to meet the sanitary and technical requirements of the time.



## 1932

In 1932, the Law on Lithuanian Resorts was adopted. The government paid great attention to health and leisure. This resulted in the interwar period being considered a golden age for resorts.

## 1933

Birštonas became the center of the district. The resort was developed according to the urban composition that had formed in the 19th century. Sanatoriums, clinics, a Kurhaus, hotels, and villas were built separately, forming a complex of residential buildings.



## WW2

During the Second World War, Birštonas avoided any major damage. During this period, Birštonas did not provide any resort services. Almost right away after the war, it once again provided medical and recreational services.



## 1930s

The modernization and prosperity period of the town. Birštonas was one of the most important resorts in Lithuania. A lot of new medical, entertainment, and residential villas were built. During this time, Birštonas was a vacation destination for the majority of the Lithuanian elite of that time.



Interwar period - the period of prosperity when Birštonas became the most important resort town in Lithuania.

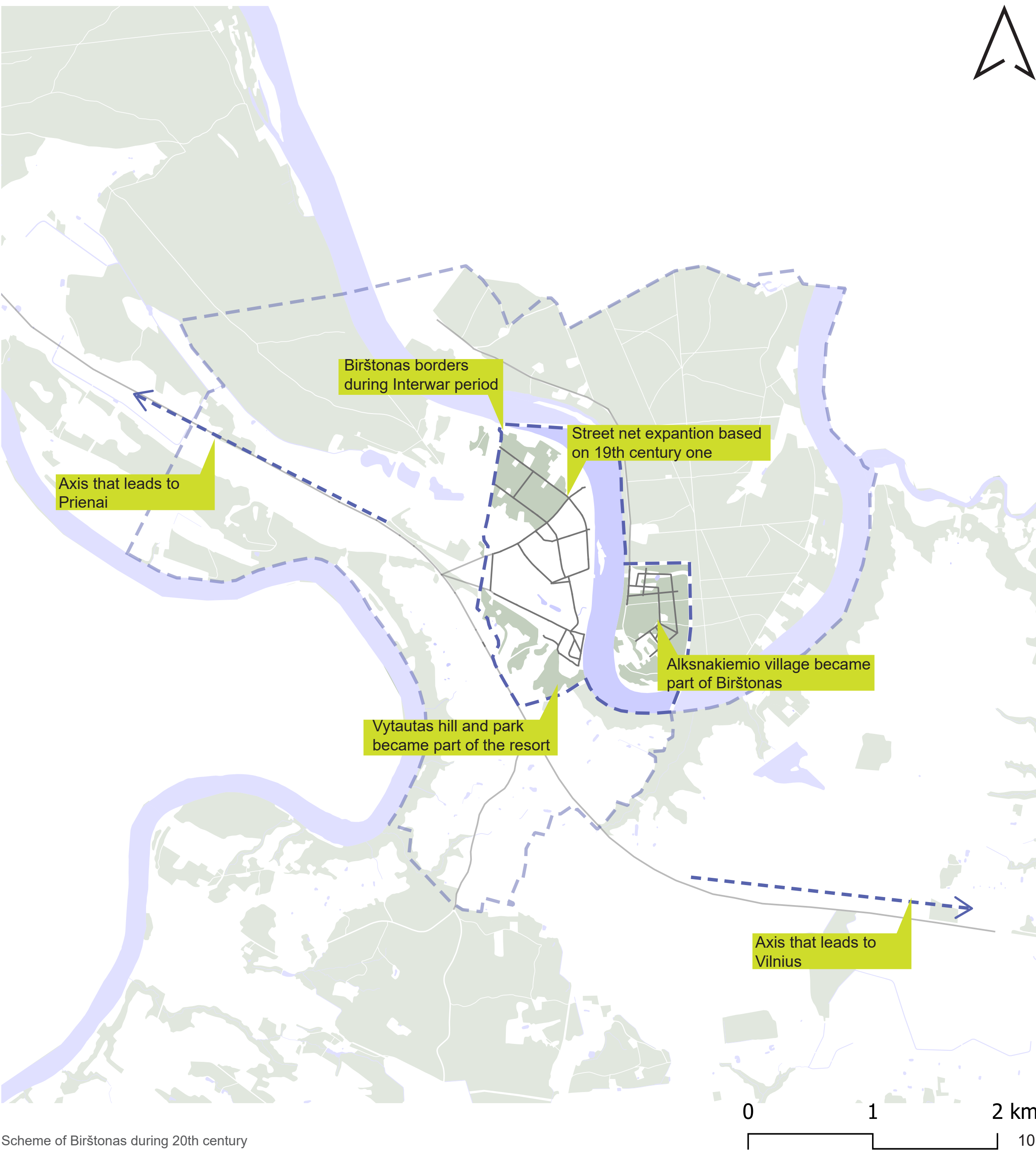
# Town’s formation during Interwar period

During the First World War, Birštonas suffered greatly, and at the beginning of Lithuania's independence, without funds for its reconstruction, it was on the verge of collapse. The Lithuanian Red Cross organization played a decisive role here, having committed in 1924 to modernize Birštonas and establish the first modern clinics. All profits from the Red Cross sanatorium were allocated for the development of the resort infrastructure. Thanks to this organization, a modern Red Cross treatment complex was established, electricity, water supply, and sewage were introduced in hotels, and by the fourth decade,

the only Lithuanian medical resort was ready to serve a considerable number of vacationers. In Birštonas, not only sanatoriums and villas were built, but the town itself flourished and expanded". In 1933, when Birštonas became the center of the district, there were bustling markets and several trading establishments. At that time, the city expanded according to the same composition formed in the 19th century, the central square was restored at the intersection of streets.

At the end of the fourth decade, town redevelopment projects were drawn up, which were supposed to radically change the historical plan of Birštonas, but with the outbreak of the Second World War, they were not implemented. During the Soviet era, the cityscape of Birštonas, where until then single-story wooden houses with attics predominated, changed significantly: residential areas were filled with typical apartment buildings, and new massive healthcare facility complexes were designed.

- Nemunas river
- Greenery
- Border of 21st century Birštonas town
- Border of 20th century Birštonas town
- Streets that formed during 20th century



Scheme of Birštonas during 20th century



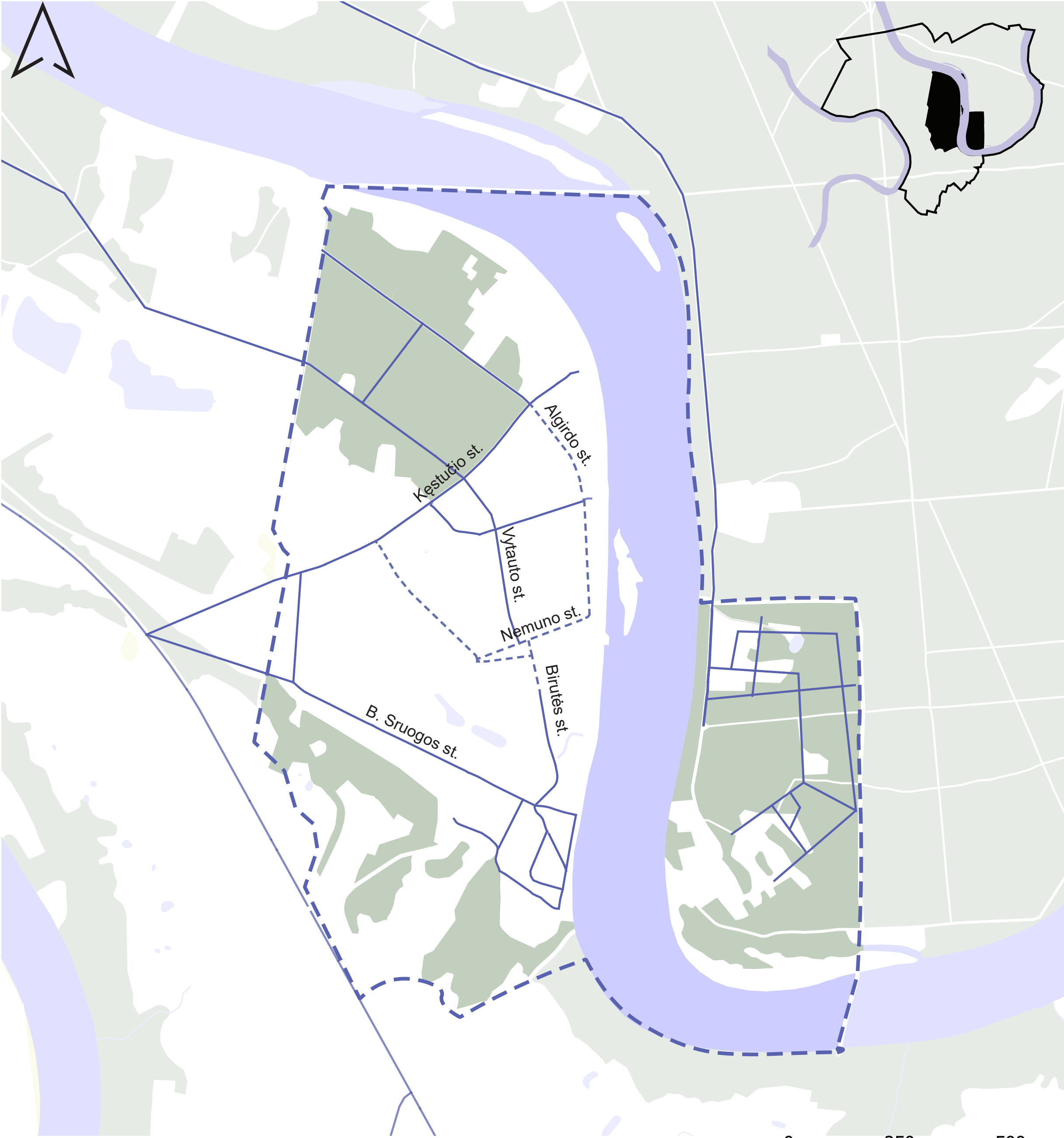
# Street structure of Birštonas during Interwar period

After the Red Cross signed the pact with the Lithuanian government in 1925, the rapid expansion of the town began. The new streets that formed during the Interwar period were expanding following the urban structure and street net of the 19th century. The streets started to form on the North and South sides of Birštonas. On the South, new sanatoriums and parks emerged and were added to the structure of Vytautas Hill with a surrounding territory.

On the north side, central Birštonas Park was planed. This resulted in a new street net and residential building quarters. While the North and south parts of the city adapted to the existing street net and formed new parks, the West and East sides of the Birštonas had a completely new approach. On the west side, the connection with Prienai expanded and it was possible to travel to Vilnius and other southern Lithuanian cities.

On the East - on the shore of Nemuna, Alksniakiemio village became part of Birštonas, due to plans to make it a pine forest surrounded by high-class resort quartal. The planned street net was radiant expanding from a square-like structure towards the forest. It is unknown if it was adapted to real life or if it was just a concept, but the plans of the Alksniakiemis expedition were abducted due to the beginning of the war.

- Border of Birštonas town during 20th century
- Forest and parks
- New formed streets
- Already existing streets



Scheme of Birštonas street net during 20th century



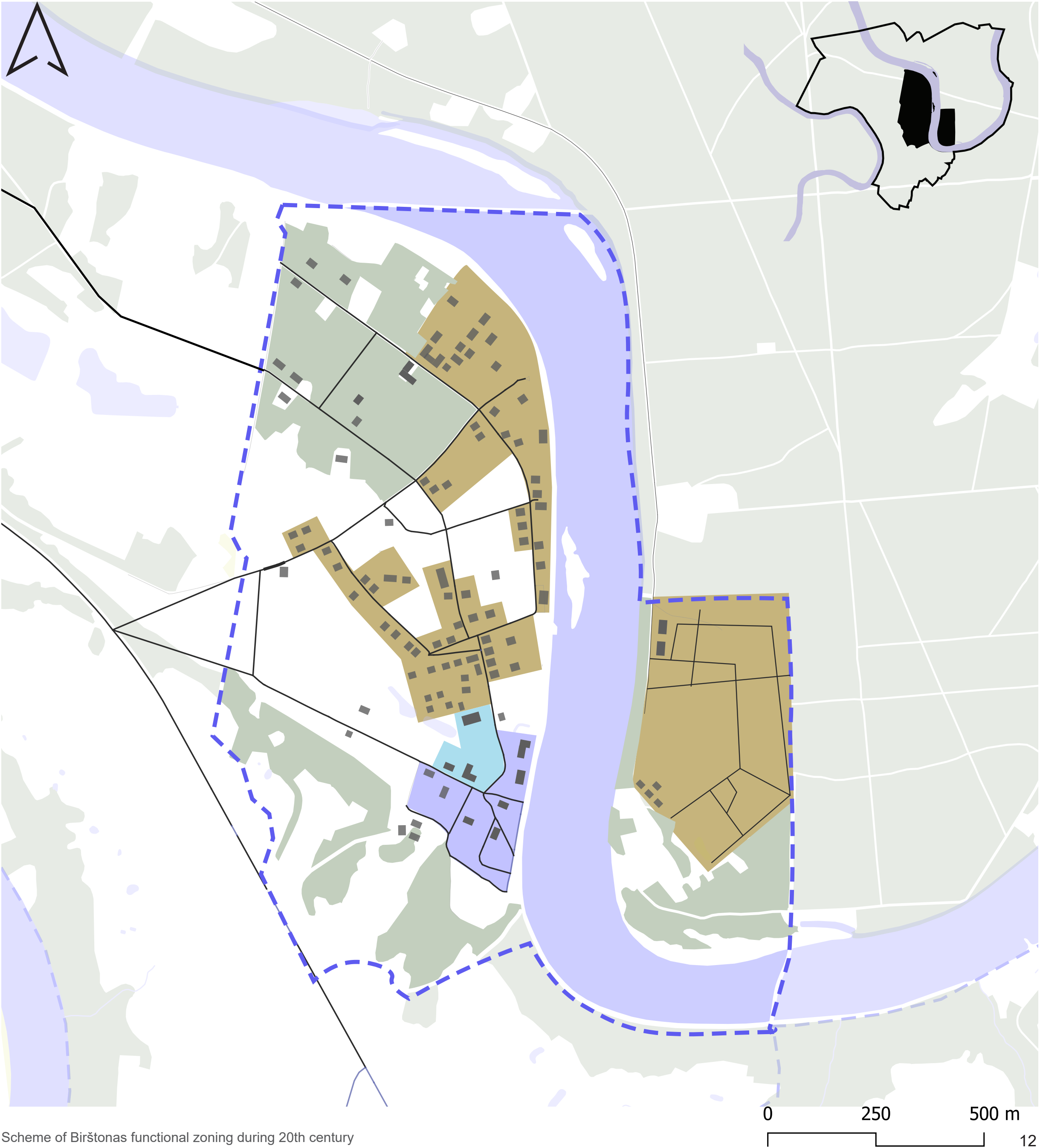
# Functional zoning of Birštonas during Interwar

During the interwar period, a period of prosperity began in Birštonas. From 1925 onwards, many changes and improvements were made to the resort. People visited the town not only expecting medical services but also seeking to spend their leisure time meaningfully. Taking into account the needs of vacationers, the infrastructure for activities expanded alongside the medical facilities. The resort rapidly modernized, fostering a culture of health and leisure. Different functional zones of the city were planned accordingly. As people's attitudes towards health and entertainment changed, so did architectural forms and types.

During the interwar period, sanatoriums, clinics, restaurants, concert halls were built, villas and summerhouses were constructed, commercial areas were set up, and the resort infrastructure was improved. Green areas were landscaped, a fountain was built, and an administrative building was constructed. A new hotel with all amenities was erected, while existing hotels were upgraded. The buildings blended well with the environment and harmonized with the resort landscape. The town became more beautiful as more houses were built, replacing the old ones.

After the First World War, the Birštonas resort revived, expanded, and modernized, becoming a favored leisure and health destination for officials, civil servants, politicians, and cultural and artistic figures of the Independent Lithuania. One of the main tasks set by the planners was to expand the resort park, as it became too small. At that time, the best conditions for park development were found on the left bank of the Nemunas River – in Alksniakiemis. From the only surviving Birštonas park development project from 1937, it can be seen that the expansion of the park and the resort took place specifically, but after Second World war it was abducted.

- Border of Birštonas town during 20th century
- Street net during 20th century
- Forest and parks
- Residential area
- Sanatoriums and spas
- Important buildings for the town



Scheme of Birštonas functional zoning during 20th century



# Landmarks of Birštonas during Interwar period

The dominants during this period in Birštonas mainly consists of healthcare buildings such as sanatoriums. These structures not only stood out of local context due to their scale but also because they were the reason why Birštonas developed as a resort. Several people during warmer seasons come here for medical and vacation purposes. Other Buildings that dominated the townscape can be described as important for the community, resort, and people. This consists of structures that hold the government of the resort and were used for entertainment purposes, for example, parties in the Kurhauz.

- Forest and parks
- Buildings
- Dominants and landmarks
- Street net



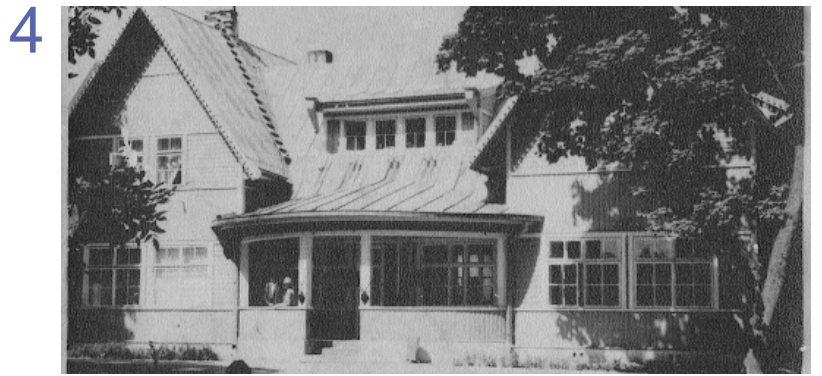
Ligonių kasos sanatorium. Source: AUTC. Foto: J.Kiškis



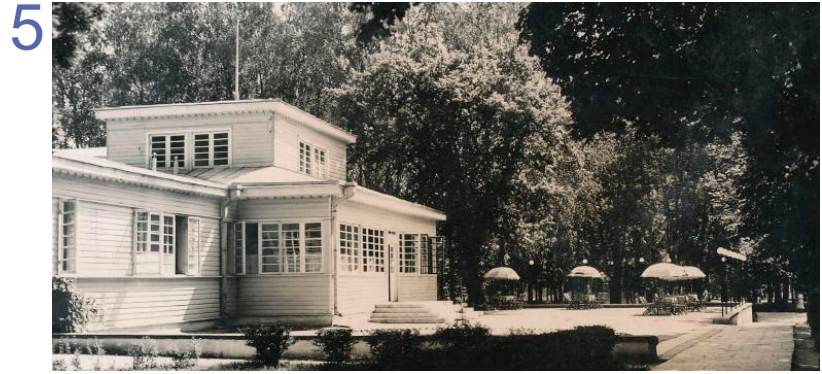
Town square. Source: Limis.lt



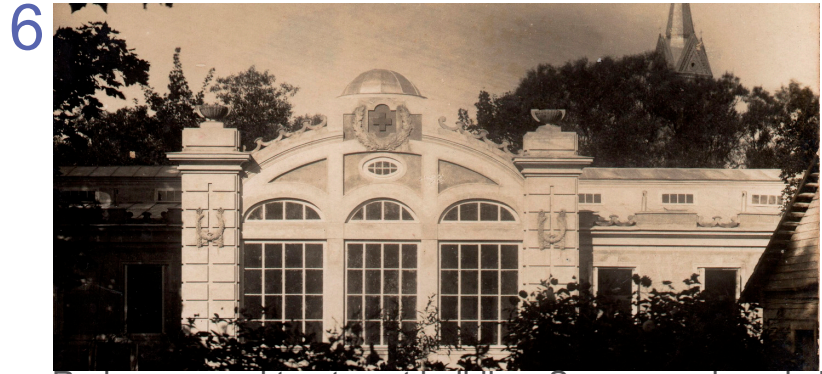
Birštonas Šv Antano Paduviečio church.  
Source: Limis.lt



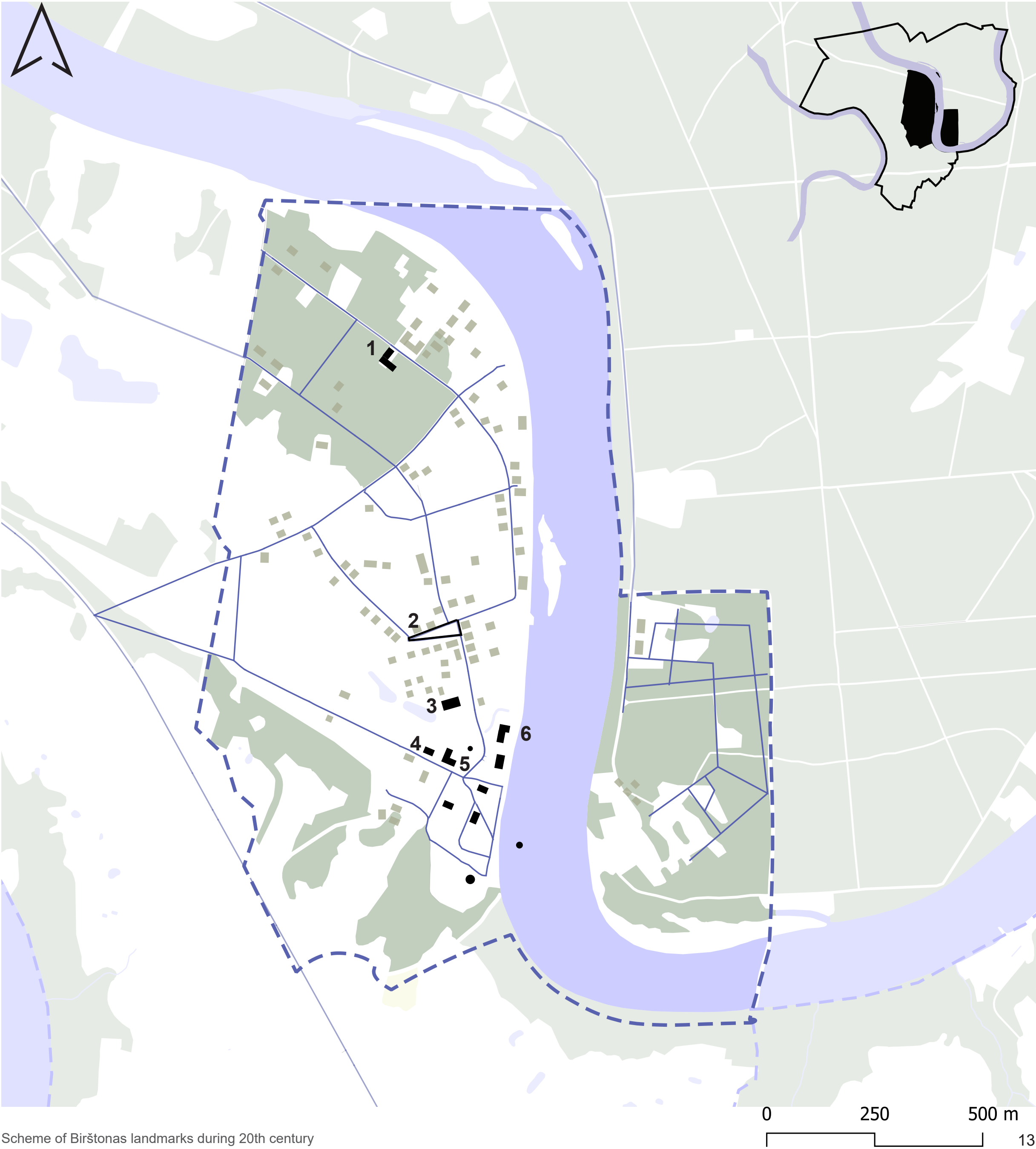
Birštonas resort administration building  
Source: archmede.lt



Birštonas kurhauz. Source: archmede.lt



Red cross mud treatment building. Source: archmede.lt



Scheme of Birštonas landmarks during 20th century



# Landmarks of Birštonas during Interwar period

The buildings were not the only landmarks of the Birštonas during this period. Natural elements such as mineral springs, hills, forests, and water bodies were also considered as identity-forming elements. The most famous one is the Vytautas mineral spring, unfortunately due to the Kaunas hydroelectrical dam, submerged underwater. The spring was marked by a stone statue of whale fish that shot mineral water out of its mouth. Another important landmark, that is considered a Birštonas symbol to this day is Vytautas hill. From the top of the hill, it is possible to observe the whole town and the curves of the Nemunas River.

- Forest and parks
- Buildings
- Dominants and landmarks
- Street net



Sanatorium "Tulpė". Source: kvr.kpd.lt



Villa "Rūta". Source: Limis.lt



Birštonas white villa. Source: archmede.lt



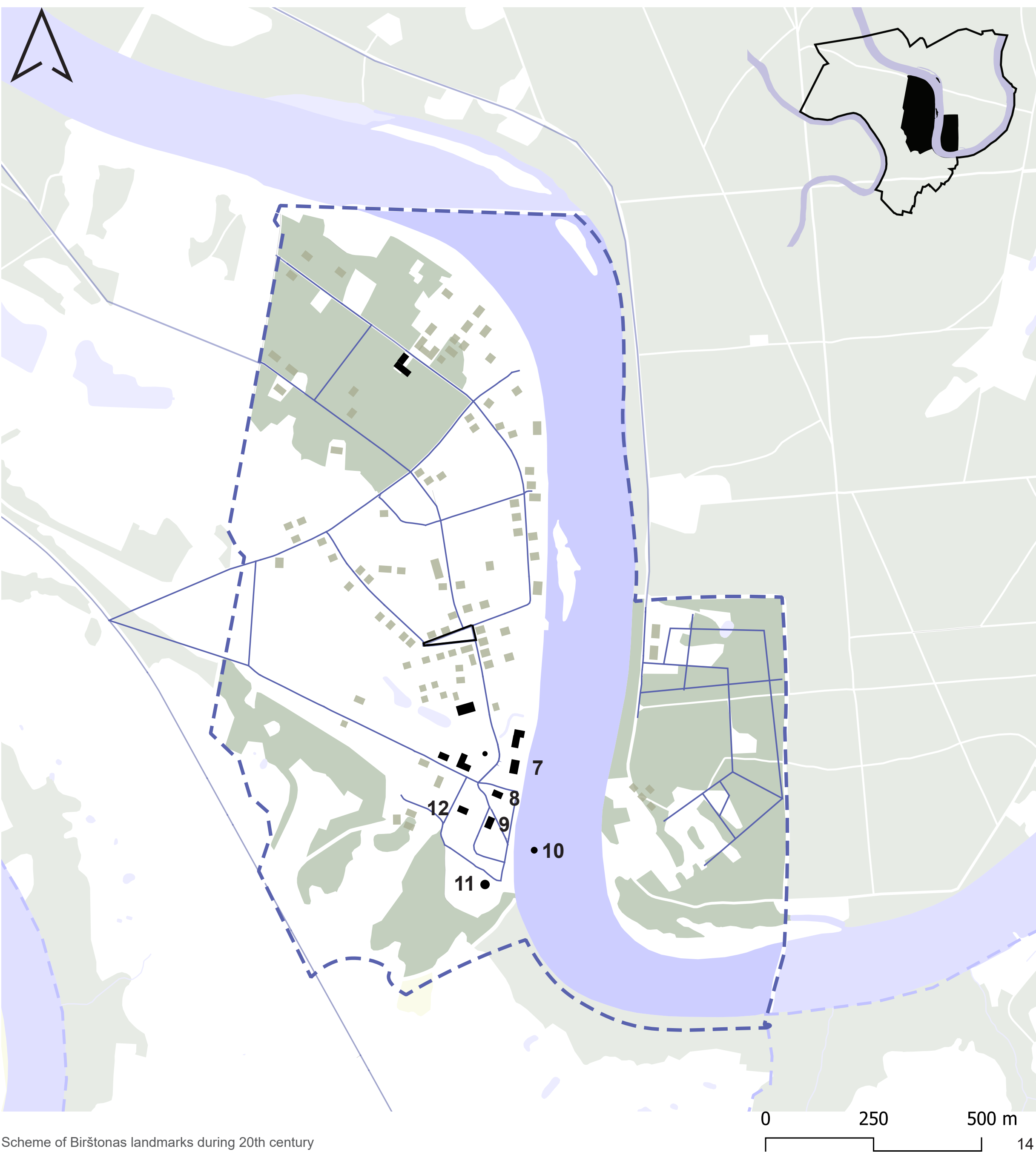
Vytautas mineral spring and whale sculpture  
Source: Limis.lt



Vytautas hill. Source: Limis.lt



Birštonas Grand hotel. Source: Limis.lt



Scheme of Birštonas landmarks during 20th century



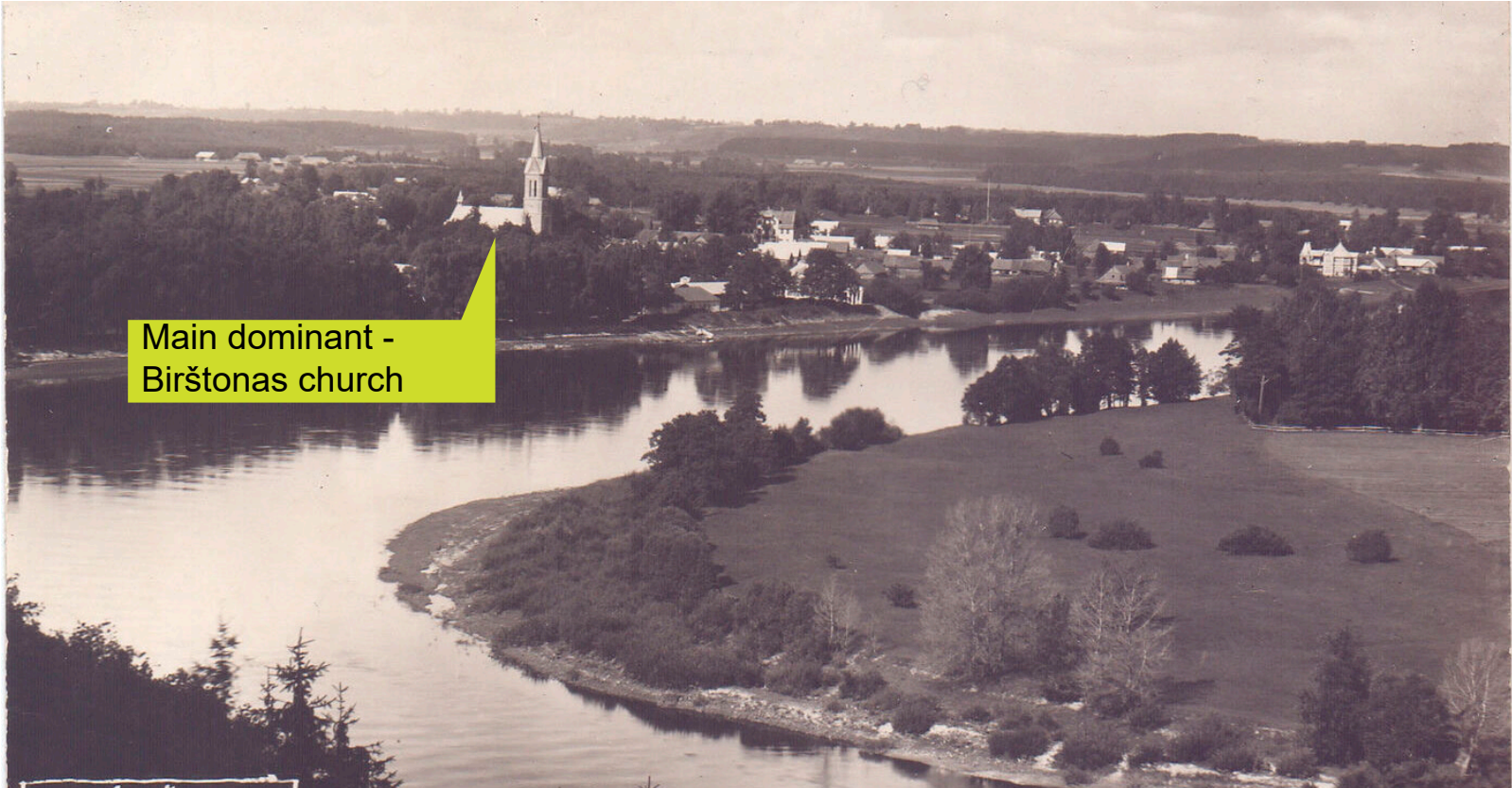
# Townscape of Birštonas during Interwar period

The townscape of Birštonas during the Interwar period can be evaluated using the same K. Jakovlevas-Mateckis proposed three factors: volumetric, linear, and planar. These three factors form the townscape's spatial pattern and composition. Since the 20th century period of Birštonas has several historical sources and photographs, the outside and inside perspectives of the townscape can be evaluated. The outside perspective criteria consist of townscape form aero view or panoramic view. This can be evaluated using: background building height, vertical landmark, panorama view, silhouette, and building morphotype.

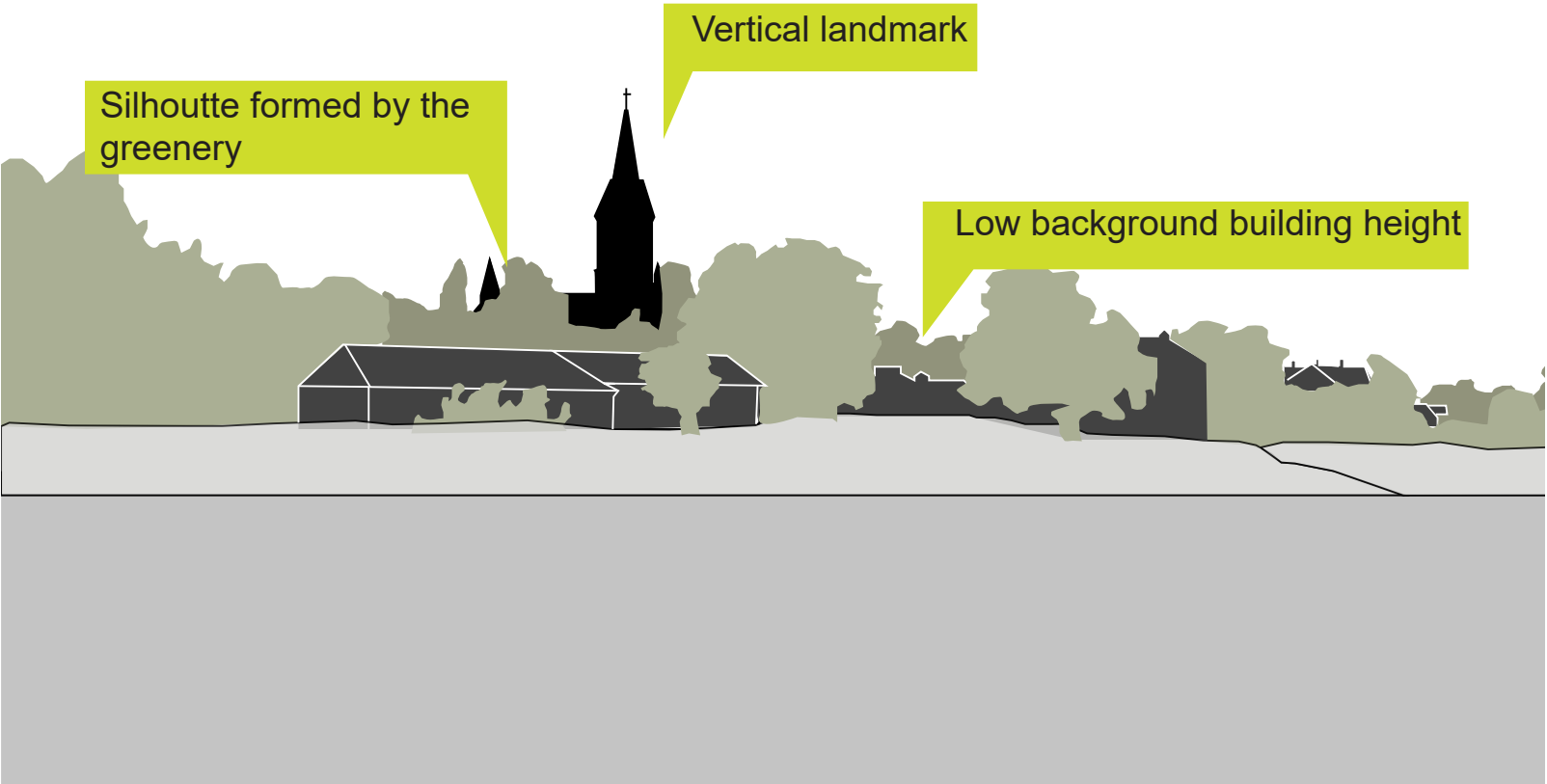
Looking at Birštonas, the vertical dominant is the church. This element always stands out from any view of the city, another important part is nature. This element covers the majority of the lower-height buildings, making it look like the town has a small number of buildings. The silhouette of Birštonas consists of small-scale pitched roof residential houses and villas and bigger scale also one to two-floor height sanatoriums and public buildings that merge from the natural frame. The plain element that highlights the city is the Nemunas river and its slopes. Another evaluation criterion of the townscape is inside perspective.

This evaluates the town from a human's eyes and its perspective. This criterion consists of closed perspective, deflection, projection, recess, narrow, and closure. Talking about Birštonas case the townscape form persons perspective can be understood as a closure perspective: the division of a linear urban system into visually understandable and consistent quantities, while maintaining a sense of progress.

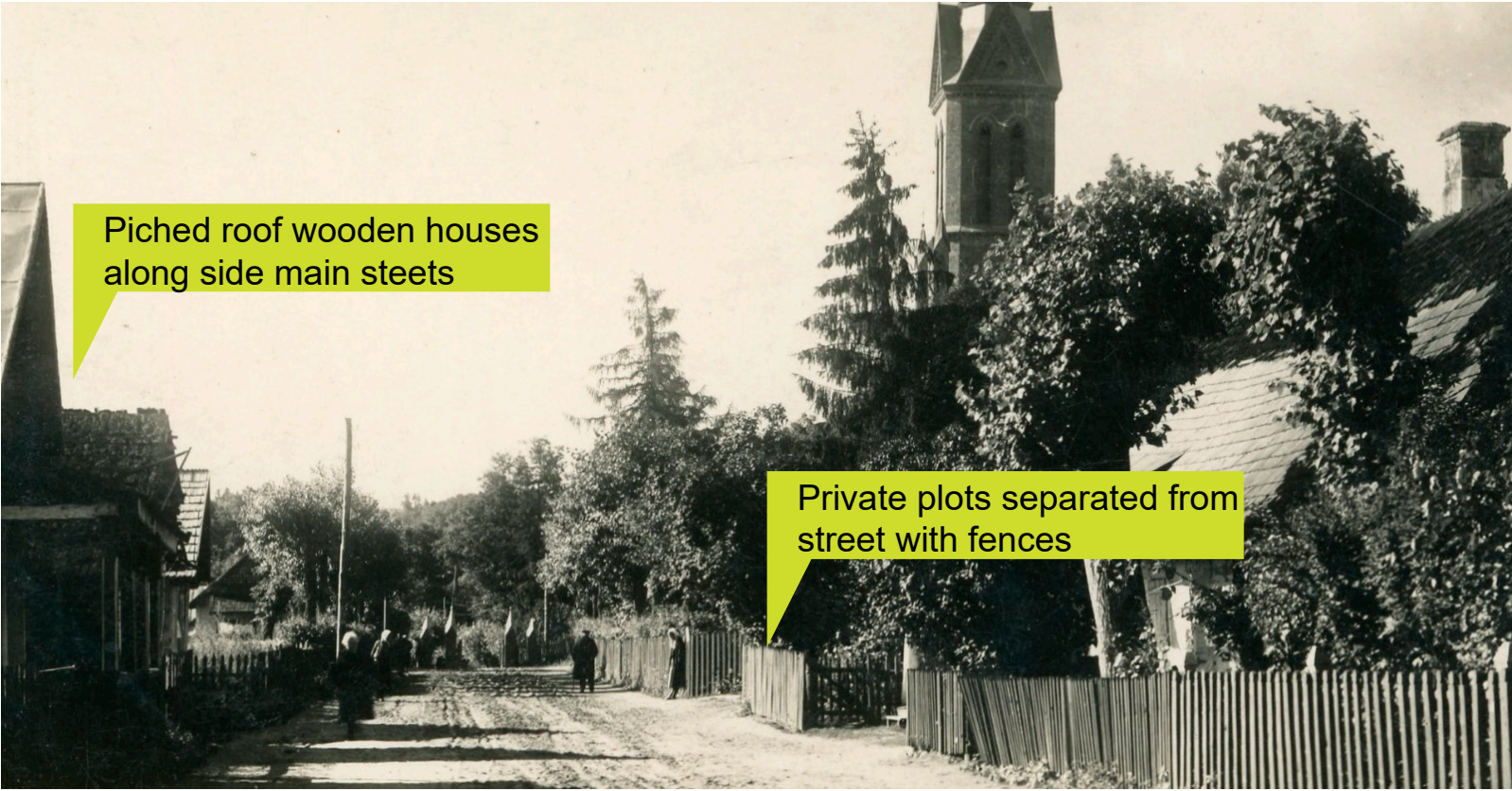
The private plots along side streets are closed with fences, headhogs and trees form alleys and the houses are hidden in between greenery. Also, Biršonas streets have deflection - an angled (turned) object causing curiosity and the desire to move in a certain direction, this is used with the streets axis. It allows the pedestrian to move forward and explore what is at the end of the street.



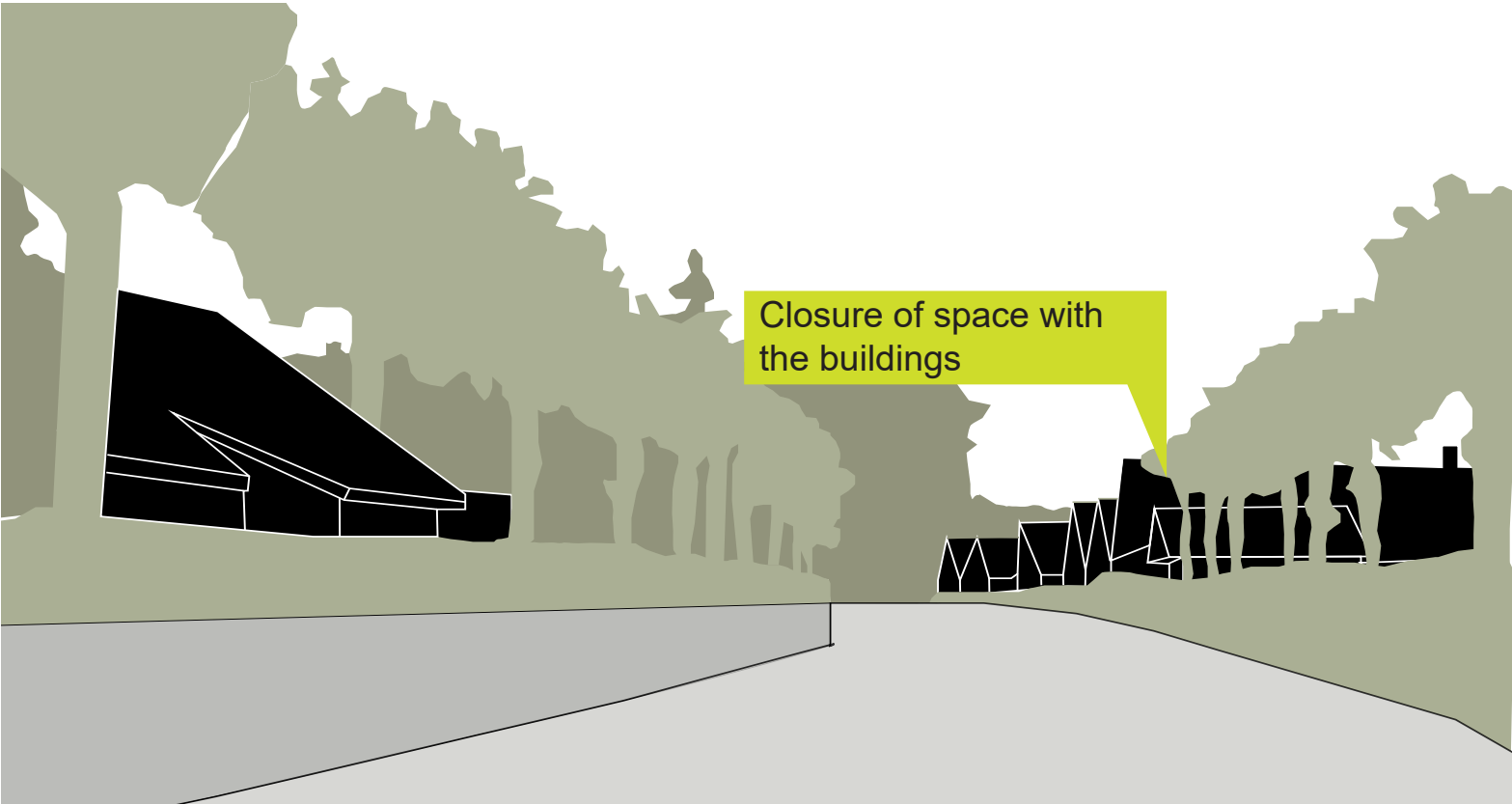
Birštonas townscape from other shore of Nemunas. Source: Limis.lt



Birštonas townscape from other shore of Nemunas. Source: Limis.lt

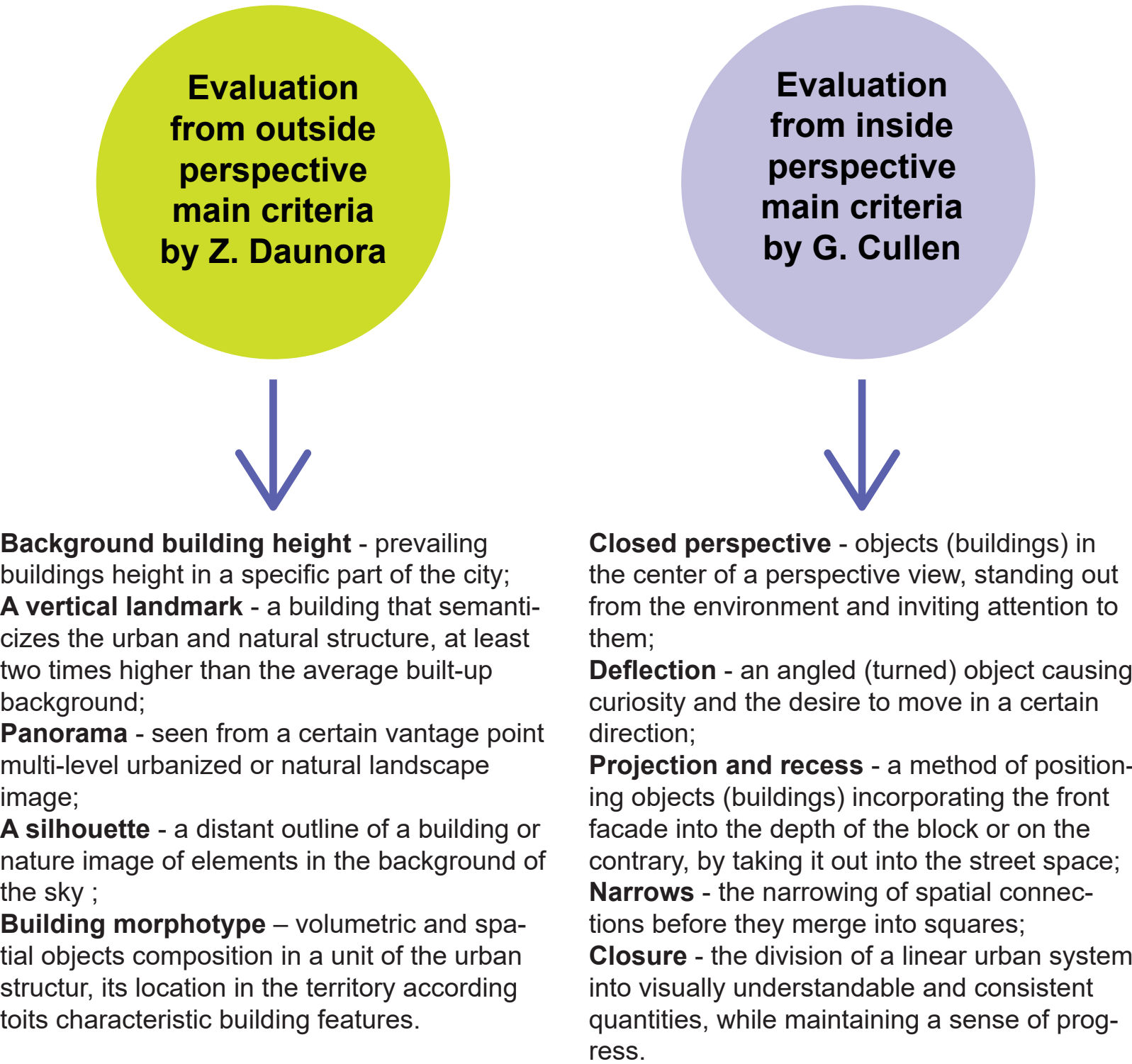


Birštonas Bažnyčios street. Source: Limis.lt



Bažnyčios street during 1930s. Source: Limis.lt

## Townscape as visual environment evaluation method



Components, by which townscape spcan be evaluated by G. Cullen (2007) and Z. Daunora (2004)



# Architecture in Birštonas during Interwar period

Since Birštonas revival after the First world war, the resort's most popular architectural style for residential villas and houses was the Swiss resort style. The Swiss-style hotels and leisure homes were characterized by an asymmetrical composition, tall roofs with intricate configurations, abundance of towers, bay windows, and steep pediments, all adorned with carved wooden ornaments. Wood began to dominate as the main building material rather than a decorative element. It was a comprehensive integration of folk architecture and local traditions into professional design. The compact, large volume was covered with a continuous gable roof, surrounded by wooden terraces, which were connected with living room, covered with an extended roof plane.

The main structures were decorated with carved ornaments. Swiss-style elements were similar to traditional Lithuanian architecture, but with fewer decorative elements. Lithuanian architecture emphasised on folk carvings. Wood as the main building material helped to adapt the buildings to the spaces, and forms of nature. The practice of painting entire houses began only in the interwar period. Soft, natural colors were used, harmonizing with the surroundings, while windows, doors, or entrances were highlighted by contrast.



Resort administration building. Source: Limis.lt



Grand hotel of Birštonas. Source: Limis.lt



Kurhauz building. Source: Limis.lt



Birštonas museum building. Source: Birštono muziejus



Military officers sanatorium. Source: Trakų istorijos muziejus



# Architecture in Birštonas during Interwar period

In comperasment to the wooden villas and residential houses, the public building were build using more modern and expensive materials such as concrete and bricks. In newly constructed buildings, there is a sense of combining modern and traditional Lithuanian architecture. In modernist buildings, intricate decoration was abandoned in favor of functionality, with more emphasis placed on functionality, and aesthetics gave way to convenience. The most modernistic building from this time can be considered the Kaunas Patient Fund sanatorium.

It has the front vertical elements that is seen in modernistic buildings, the shape and division of windows on the facade indicated that it was influenced by popular Kaunas modernism movement. The more decorative and historic style building in Birštonas is Red Cross sanatorium. This building is one of the symbols of the rapidly revitalized resort during the interwar period, as until 1935, old buildings were being actively demolished, and new buildings were rising. With its architecture, the brick clinic stands out from other mostly wooden buildings of the Interwar period in the resort.

It is distinguished by its elegant volumes, with the glazed facade giving it a sense of lightness. A dome covers the vestibule, where a waiting room and ticket counters are located. The building aslo has few wings that held at that time inovative purposes, such as inside sunbathing rooms. Talking about other modernistic structures from this time, like hotels and earlyer built sanatoriums, they also had the elements of modernistic movement, but were more stylized following the traditional Lithuanian architecture.



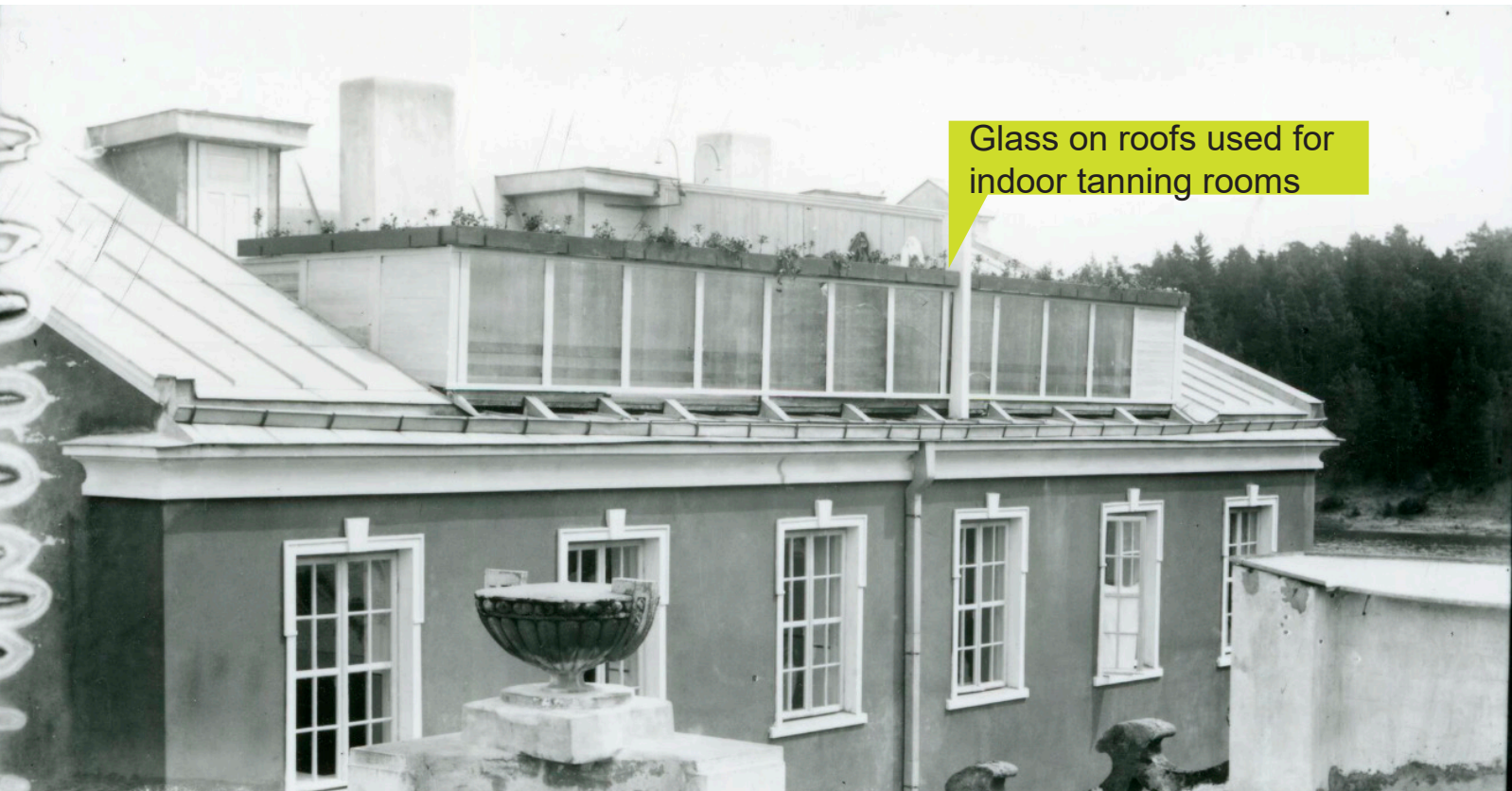
Birštonas Red Cross sanatorium. Source: Limis.lt



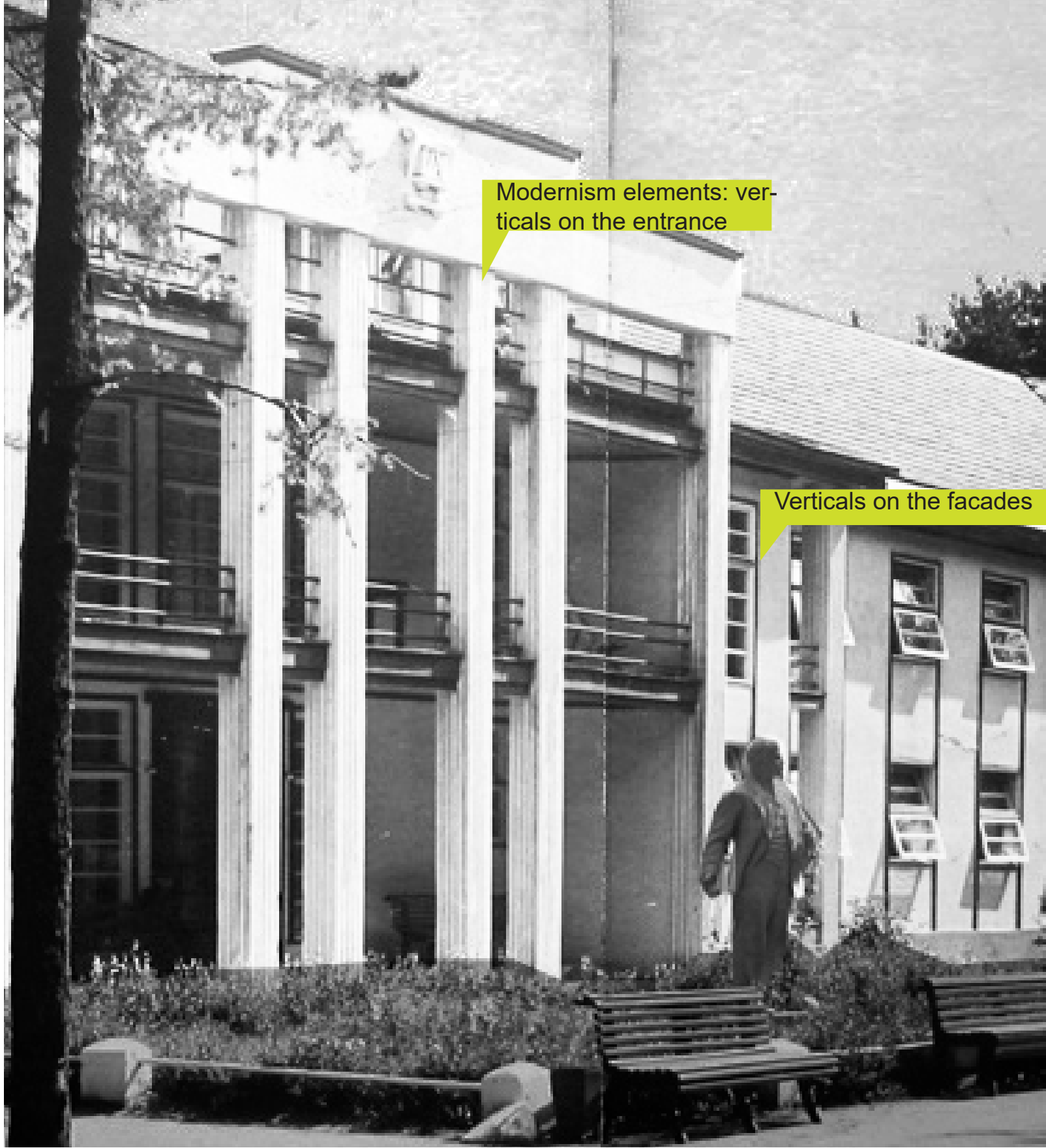
Birštonas sanatorium "Rūta". Source: Limis.lt



One of the Birštonas sanatoriums. Source: Limis.lt



Red Cross sanatorium sun bathing wing. Source: Limis.lt



Kaunas Ligonijų kasų sanatorium. Source: Limis.lt



One of the most popular destination points for health tourism.

# Town’s formation during late 20th and 21st centuries

After the war, during the soviet occupation, Birštonas continued to be a resort. It became a national-level prestigious resort town that was used not only in the warmer season but all year round. During Soviet times, Birštonas also became the main base for the Olympic rows. An infrastructure was built to fulfill the needs. Differently from other towns in the soviet union it did not have any clear industrial zones, it just stayed as a resort.

Later after gaining independence, Biršonas, to be considered a town and not a village expanded gradually while connecting nearby villages, such as Birštono vienkiemis. This increased population number allowed Biršonas to officially gain town rights and become the center of the municipality. The Birštonas Vienkiemis, now a developing residential area that will have the majority of commercial buildings, to preserve the historical authenticity of the center

Nowadays, Birštonas is on the edge of new development. A number of projects are implemented in this town. The main problem is the fragmentation in the town. Residential areas are separated form the center, it's hard to reach one part from another by foot.

- Border of 21st century Birštonas town
- Border of Birštonas Vienkiemis village
- Streets
- Greenery
- Buildings



Scheme of Birštonas during 20th and 21st centuries



# Street net of Birštonas during late 20th and 21st centuries

The street structure barely changed from the Interwar period, it just expanded. The street net became more dense due to new quarters that were formed during the 20th century. Added villages such as Birštono vienkiemis have square street nets that most likely formed during the Soviet occupation. It was typical for residential quarters to have such an urban composition. The Alksniakiemio village which is on the other side of Nemunas, disappeared completely.

The street net that was planned during the Interwar period is not visible anymore. Now there are just a few roads that go through the forest. This part is also unreachable by foot or even car due to lack of connections. The only way to reach Alksniakiemis is to drive through Prienai, that are few kilometers away. But in future perspective, new pedestrian bridge is planned to be built.

- Border of 21st century Birštonas town
- Streets that formed during Soviet times
- Nowday street net
- Greenery



Scheme of Birštonas street net during 20th and 21st centuries



# Functional zoning of Birštonas during late 20th and 21st centuries

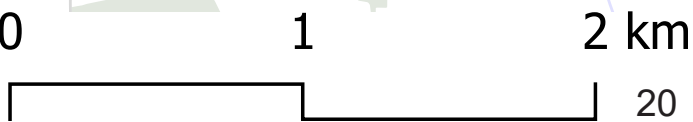
The functional zoning was evaluated according to the general plan of Birštonas. Since the late 20th century, government started to protect the heritage by the law. That is why in general plan the historical center area of Birštonas is singled out and protected by the law. Surrounding it is the already existing specialized complex zones and residential territories. The Birštonas Vienkiemis, consists of almost only residential parts with a pockets of commercial functions lands.

It can be seen that in the future perspective the town plans to expand South with new residential projects. The most important and biggest function of the Birštonas is the green areas. This consists of the forests, parks, lawns that are protected from many urbanization and destruction by construction. Interesting that the Alksniakiemis, according to the general plan is almost completely dedicated to socialized complexes, but now it looks like it only consists of village farmers houses.

- Border of Birštonas
- Street net
- Buildings
- Forest and parks
- Residential area
- Town center area
- Specialized complexes
- Commercial zones
- Industry zones



Scheme of Birštonas functional zoning during 20th and 21st centuries





# Functional zoning of Birštonas during late 20th and 21st centuries

During the 21st century, Birštonas face changed once again. The projects have a unique architectural identity that at one point tries to respect the wooden past of the town but at the same time destroys it. The landmarks nowadays consist of attraction sites. These can be categorized as monuments and statues, places of interest, entertainment, and health facilities.

Similar to the Interwar period, a lot of attention is given to the monuments, but now they respect the past instead of the present. They are used to understand the history and existing identity of the town, for example, the Vytautas monument and the Birštonas tower. Other landmarks are used for health, like the mineral water vapor tower or Vytautas mineral spa.

- Forest and parks
- Buildings
- Dominants and landmarks
- Street net



Vytautas mineral spa. Source: vytautasmineralspa.lt



Mineral water evaporation tower "Druskupis". Source: KAUNAS.KASVYKSTA.LT



Birštonas tower. Source: Vaidoas Grigas



Sport and wellness center. Source: Birštono sporto centras



Vytautas statule



"Versmė" sanatorium and statue



Scheme of Birštonas landmarks during 20th and 21st centuries

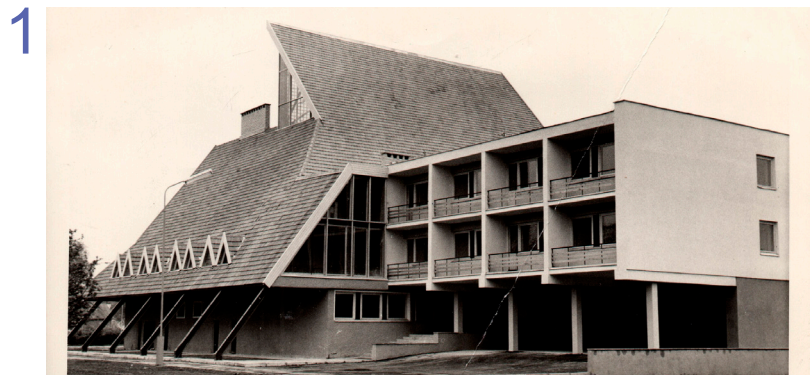


# Functional zoning of Birštonas during late 20th and 21st centuries

During the Soviet times in Birštonas, new completely different scale and identity buildings started to appear. From modernistic Interwar sanatoriums, it turned to postmodernistic public buildings. The most noticeable landmark from this time is the Olympic Rowing Center. Its unusual architectural expression, forms, and materials completely stand out from the local context. This can be said about the post-modern Social Security Center and Cultural Center.

During this time some of the sanatoriums and spas also started to appear. They were way bigger compared to interwar ones and had a completely different aesthetic. The most popular style was either post-modern or typical soviet modernism. Talking about the residential houses, the unseen blocked apartment quarters formed in Birštonas this way changing the resort's face forever. Wooden villas were overshadowed by typical soviet apartment blocks.

- Forest and parks
- Buildings
- Dominants and landmarks
- Street net



Olympic rowing center. Source: Limis.lt



State Social Insurance Institution. Source: autc.lt



Birštonas park. Source: Limis.lt



"Spalis" sanatorium. Source: Limis.lt



Birštonas culture center. Source: Limis.lt



Residential apartments. Source: Limis.lt



Scheme of Birštonas landmarks during 20th and 21st centuries



# Architecture in Birštonas during late 20th and 21st centuries

After the Second World War in Birštonas, the dominating building type was small-scale one to two-story wooden houses and villas. Soviet occupation completely changed Birštonas face. More and more brick houses were constructed, and a new typology emerged next to the center: soviet apartment blocks. Most of them were typical up to five-story high apartments that appeared in any Lithuanian town, but some of them had resort identity apied into architectural details. For example, the pitched roof shapes, villas imitating volumes, balconies, and wooden accents.

Unfortunately, during the Soviet occupation, the trend of villas almost disappeared, and residential houses emerged in Birštonas. Near the historical center, the houses tried to keep the identity of wooden villas but the buildings that were constructed on the newly added quartals followed the trend of soviet residential houses. This can be seen in the Birštonas Vilenkiemis, which was rapidly developed in the late 20th century.

After the independence, the possibility of constructing private houses was possible, so people rapidly started to build their homes. Typically the style did not follow the identity of Birštonas, but rather a trend of that time and available materials, such as silicate bricks. Also, some of the kolkhoz baroque that was a popular style during the 90s still can be found in Birštonas.

Nowadays, the land price in the town is really high, so only wealthy residences and investors develop any new projects. The houses usually follow popular threads, while trying to adapt to the historical identity of Birštonas, because it is highly regulated by the Cultural Heritage Department and the municipality.



Residential apartments in Birštonas. Source: Limis.lt



Residential house in Birštonas. Source: Limis.lt



Residential house in Birštonas. Source: Limis.lt



Residential apartments in Birštonas. Source: Limis.lt



Residential house in Birštonas. Source: Limis.lt

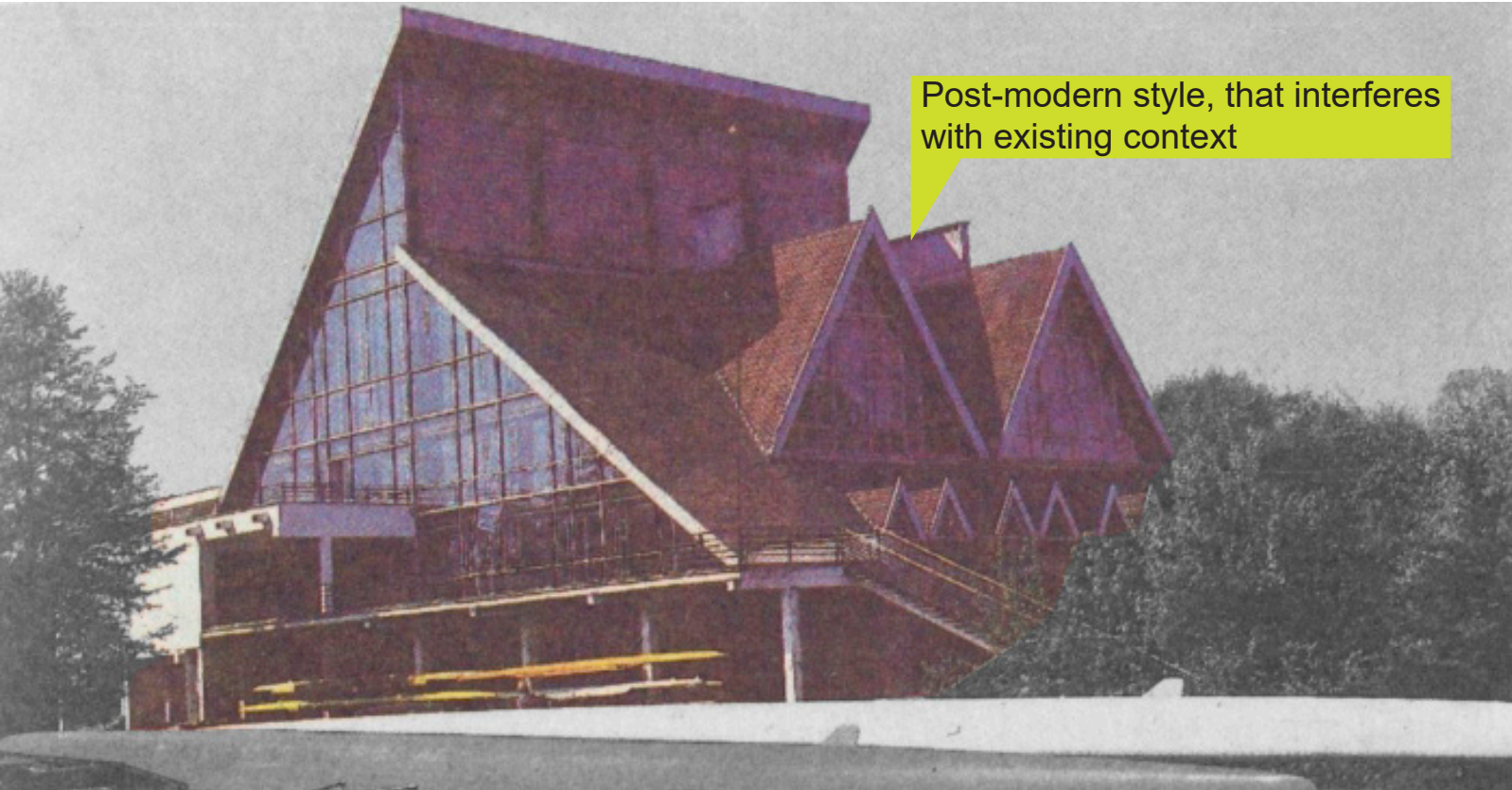


# Architecture in Birštonas during late 20th and 21st centuries

The public buildings in Birštonas during the 20th and 21st centuries changed resort towns drastically. The buildings dominate the historical area by their architectural expression, materials, shapes, and volumes. The late 20th century was a period of post-modern movement and it can be seen in that period buildings. For example, the Olympic Rowing Center has expressive rooftops that stand out not only from Birštonas Center but form the whole townscape. Savings bank buildings are an example of the postmodernism movement. Symmetrical, with triangle shapes and wide glass curtain walls wrapped around the perimeter.

Totalitarian modernism and brutalism were less popular due to Birštonas being the prestigious resort. But these styles can be visible in structures like Birštonas books store and some of the apartment blocks. The book store stands out in the local context with its unique round shape and curtain walls that wrap the structure. It looks like the two slabs are floating in the air. The apartments on the other hand were less light. They were just typical projects adapted to any town that they were constructed in.

Modern 21st-century architecture just like the residential one, tries to integrate into local historical context and identity, but uses a completely different style, that matches the soviet architecture. For example, the new sports center of Birštonas is enormous in size, but with the wood as a facade material it a little bit merges with local natural context. Another example of new projects is the "reconstruction" of the old center structures. This reconstruction completely changes the building, sometimes upscaling its size or height.



Olympic rowing center. Source: Limis.lt



Bank building. Source: Limis.lt



Sport and wellness center. Source: Birštono sporto ir sveikatingumo centras



Bookstore in Birštonas. Source: Limis.lt



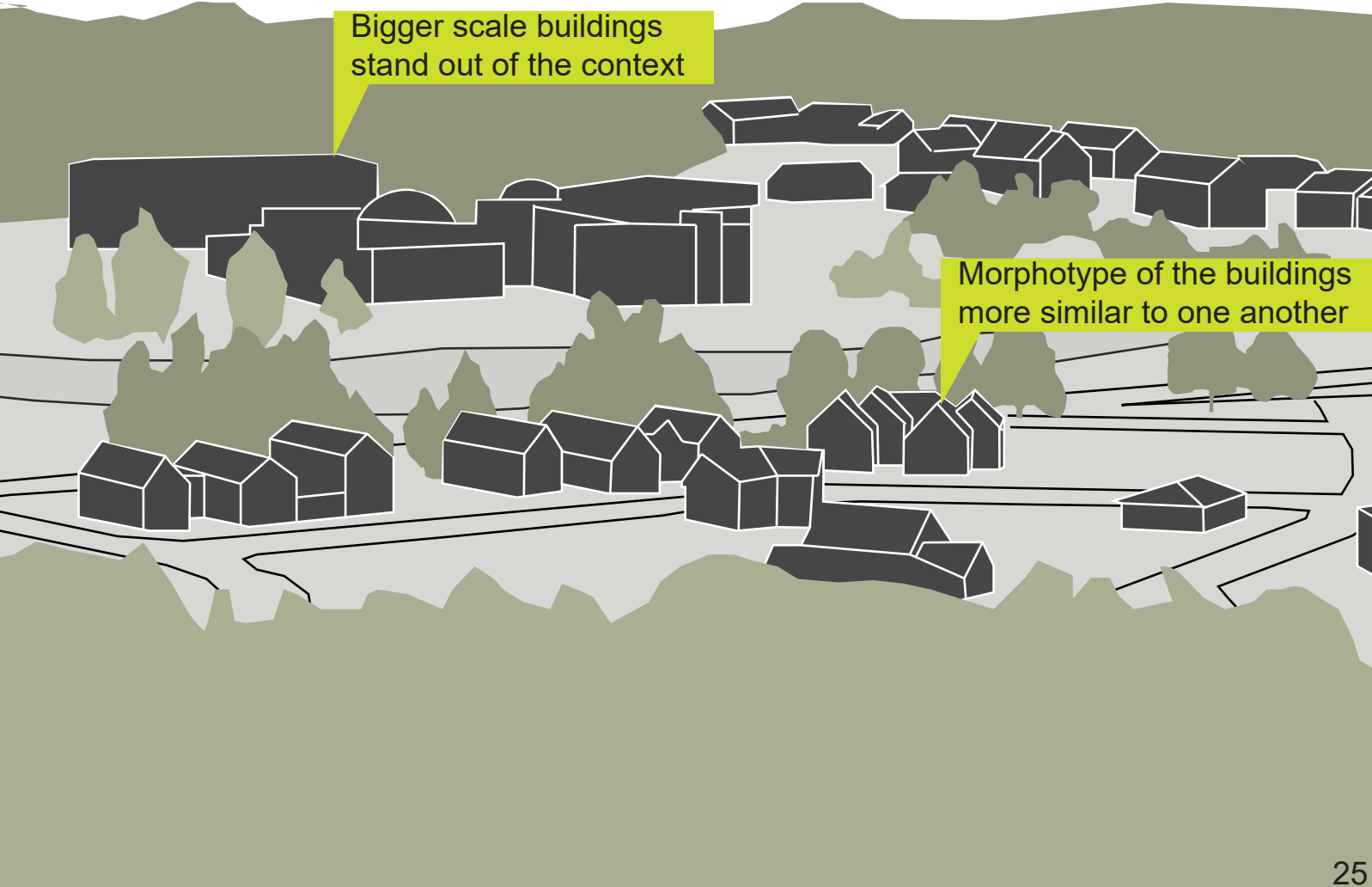
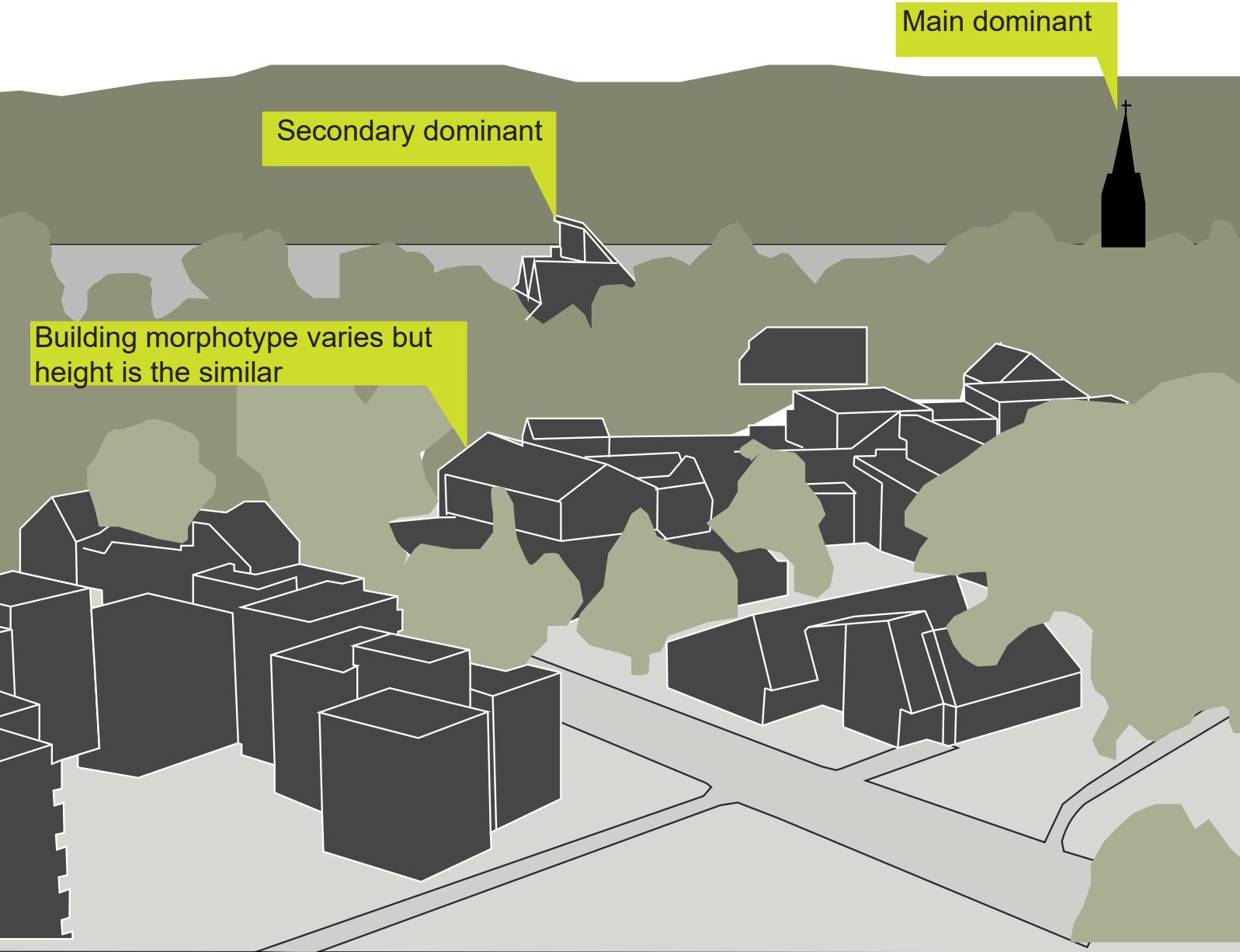
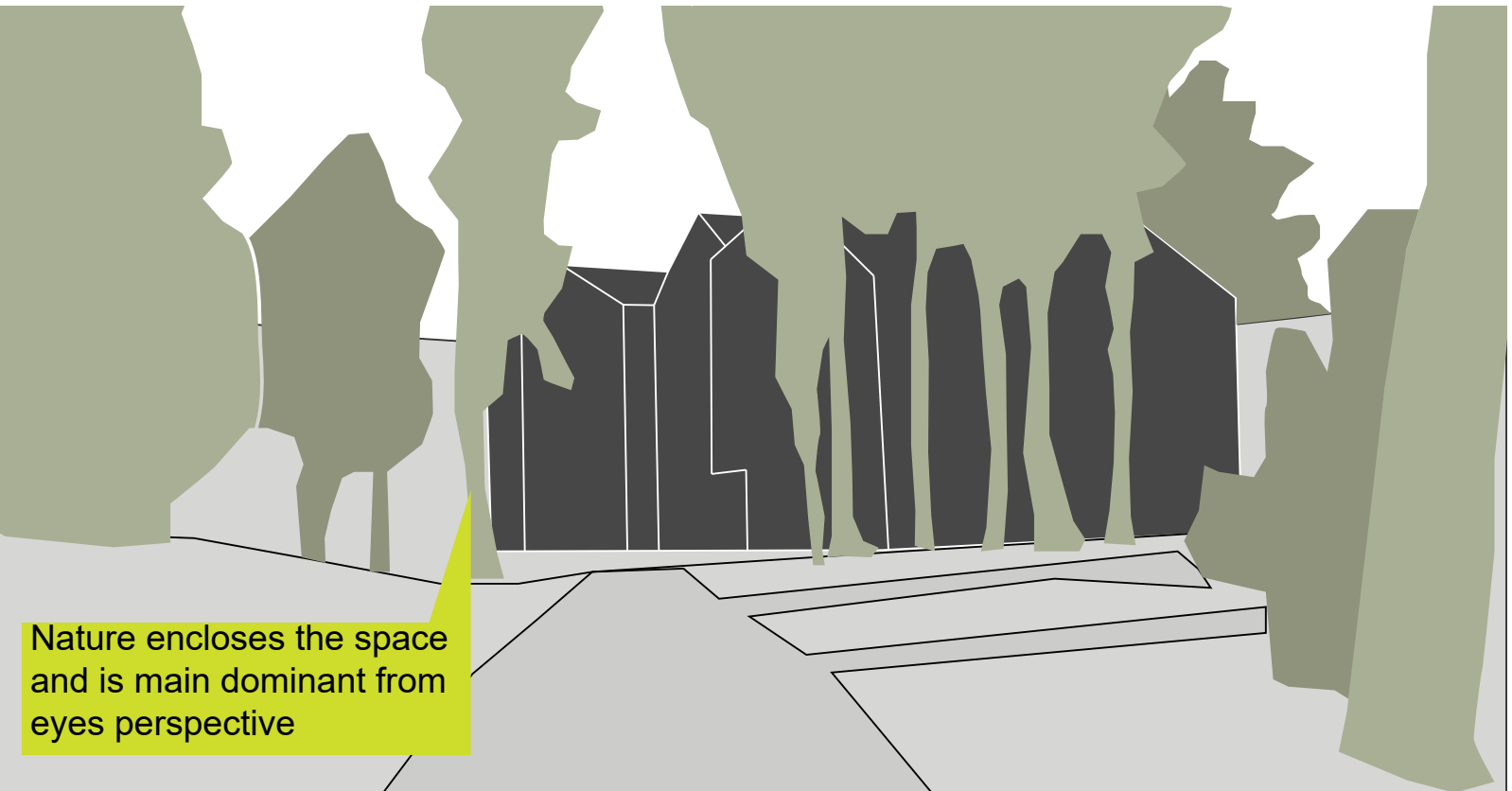
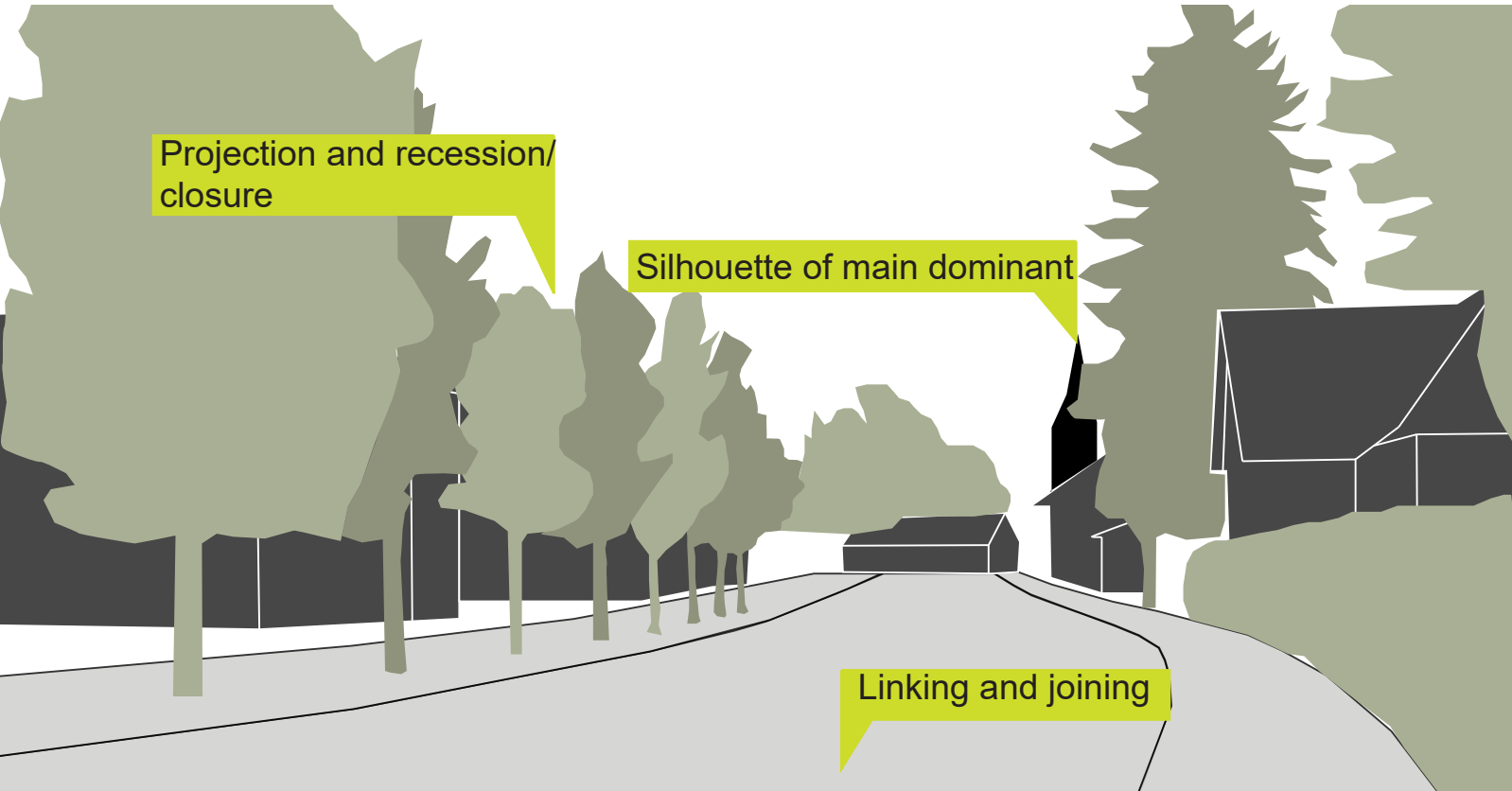
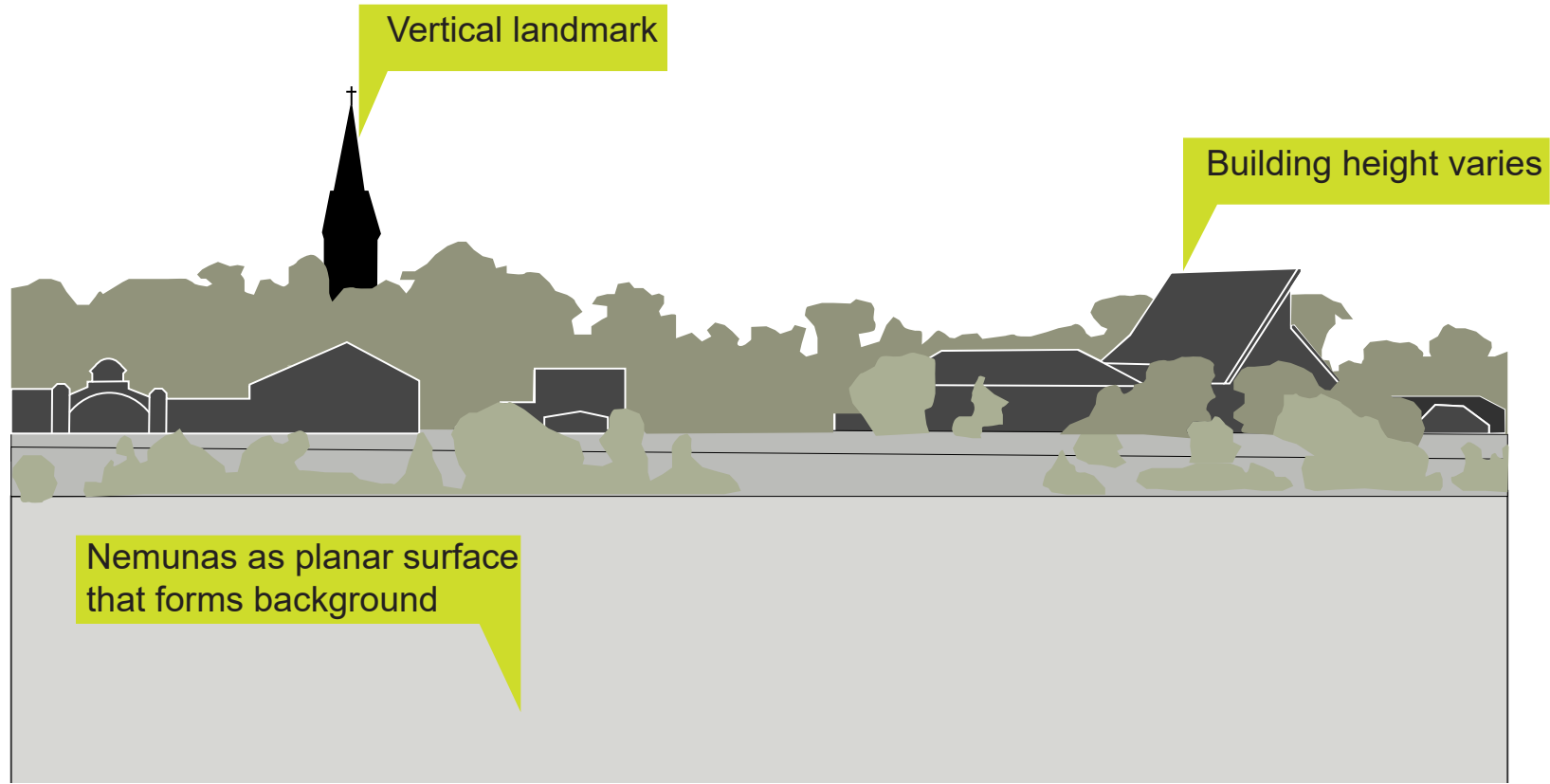
"Versmes" sanatorium administration building. Limis.lt



# Townscape in Birštonas during late 20th and 21st centuries

The townscape of Birštonas after the Second World War started to change drastically due to the soviet occupation of the region. The town was still a resort, but new construction projects slowly changed the resort's townscape. New bigger scale buildings were constructed near the town's center, this way interfering and overshadowing valuable heritage. Later, after gaining independence, the townscape was protected by the cultural heritage law, but the building that is constructed now, still with their expression interferes with the existing identity.

Looking from the townscape analysis perspective, the church is still the main dominant of the town, but another or secondary dominant can be pointed out as the Olympic rowing center. Besides that, the soviet block apartment buildings near the center destroy the resort's identity. Looking from the human eye's perspective the townscape is quite the same while walking around the center area in other parts of Birštonas it looks completely different.



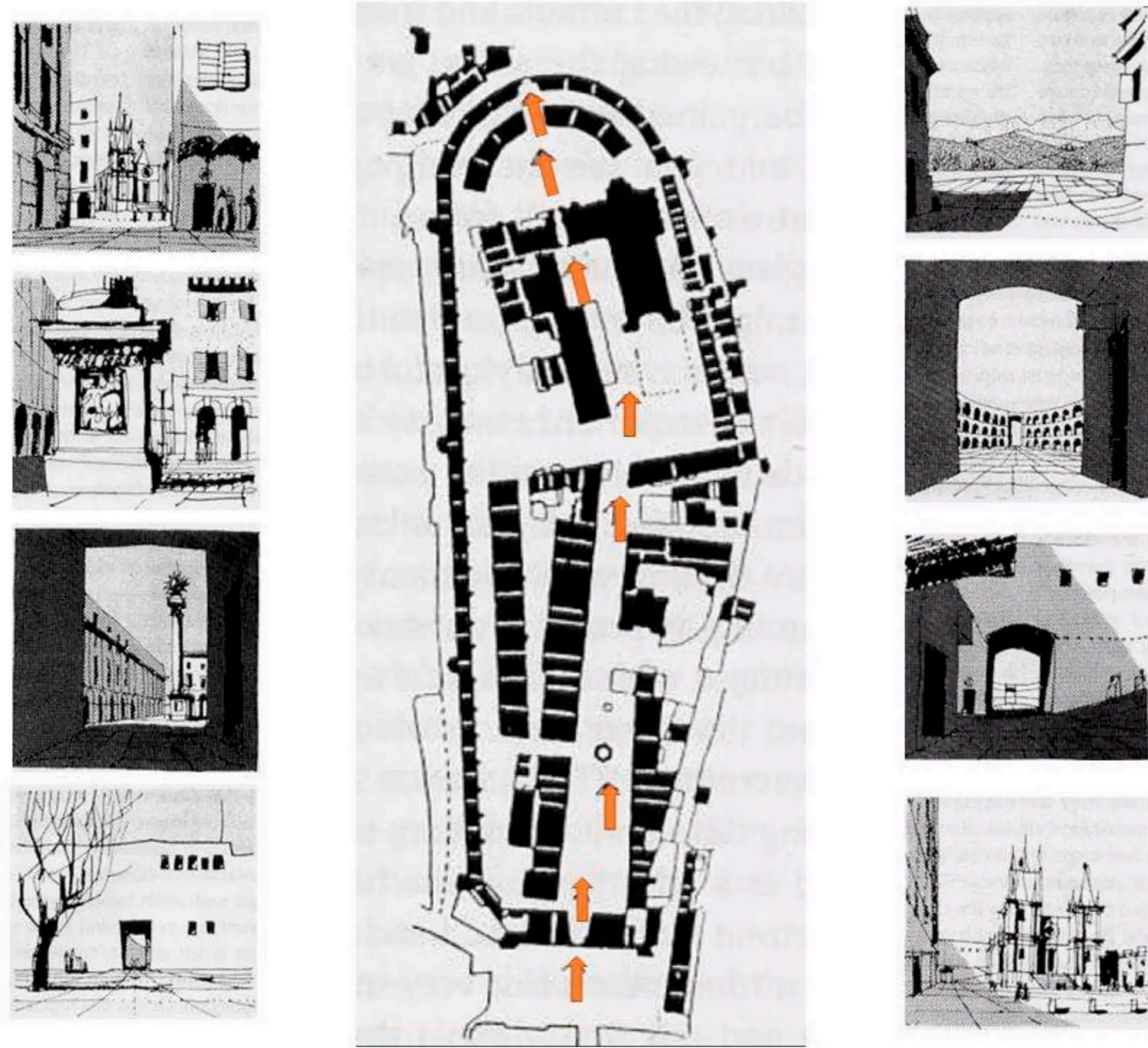


# Townscape evaluation by Gordon Cullen

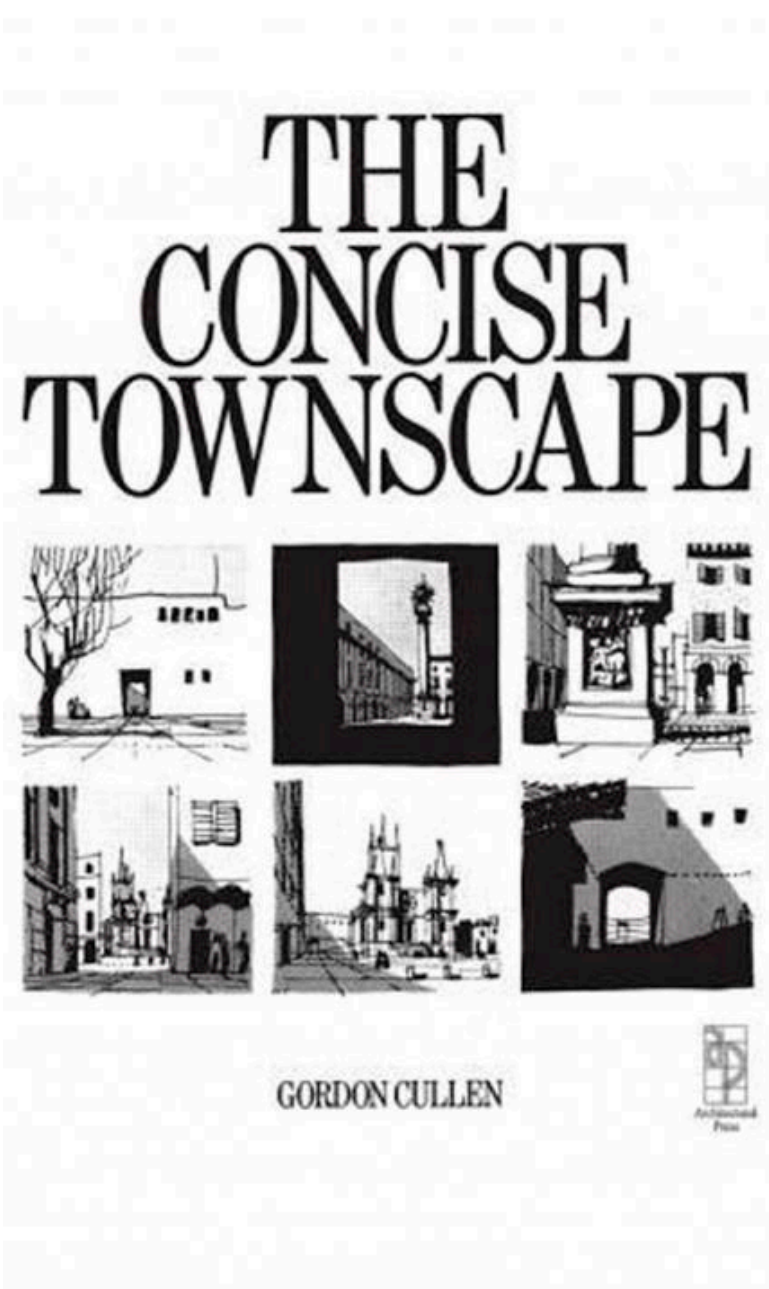
The Gordon Cullen was a motivator in the Townscape movement and presented a theory and methodology for urban visual analysis and design based on the psychology of perception. The visual perception of the town in an objective manner through an understanding of the emotional effects created by the juxtaposition of physical elements of the environment. 'Townscape' is the art of giving visual coherence and organization to the jumble of buildings, streets and space that make up the urban environment.

The townscape using the Gordon Cullen empirical models is evaluated using three main aspects: concerning optics – serial vision, sense of position HERE - THERE, Concerning content – fabric of towns THIS -THAT. The serial vision is the aim – to manipulate the elements of the town so that an impact on the emotions is achieved. The sense of position HERE - THERE can be described as some of the greatest townscape effects are created by a skillful relationship between the two.

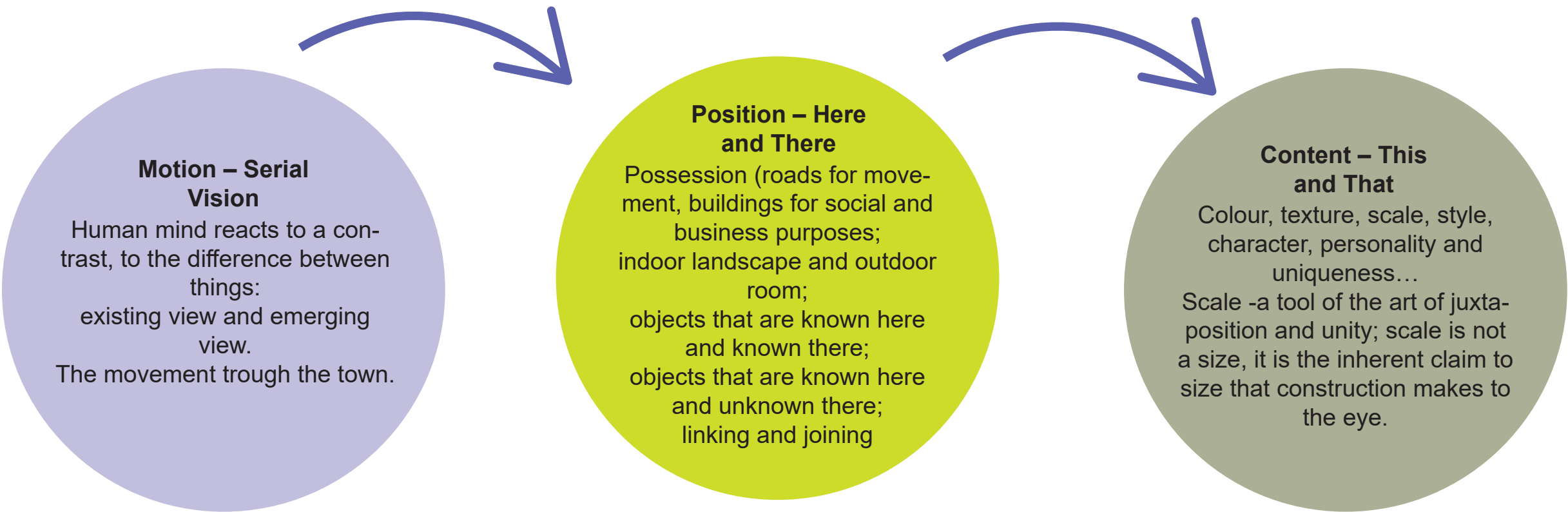
It covers the composition of the place and how you feel in it. Concerning CONTENT – fabric of towns THIS -THAT is described as colour, texture, scale, style, character, personality and uniqueness. This aspect describes the details of the place that are noticeable and forms the overall view and sence of the place.



Serial vision by Gordon Cullen. (1961). *The concise townscape*. 17p.



Gordon Cullen. *The concise townscape*. (1961)

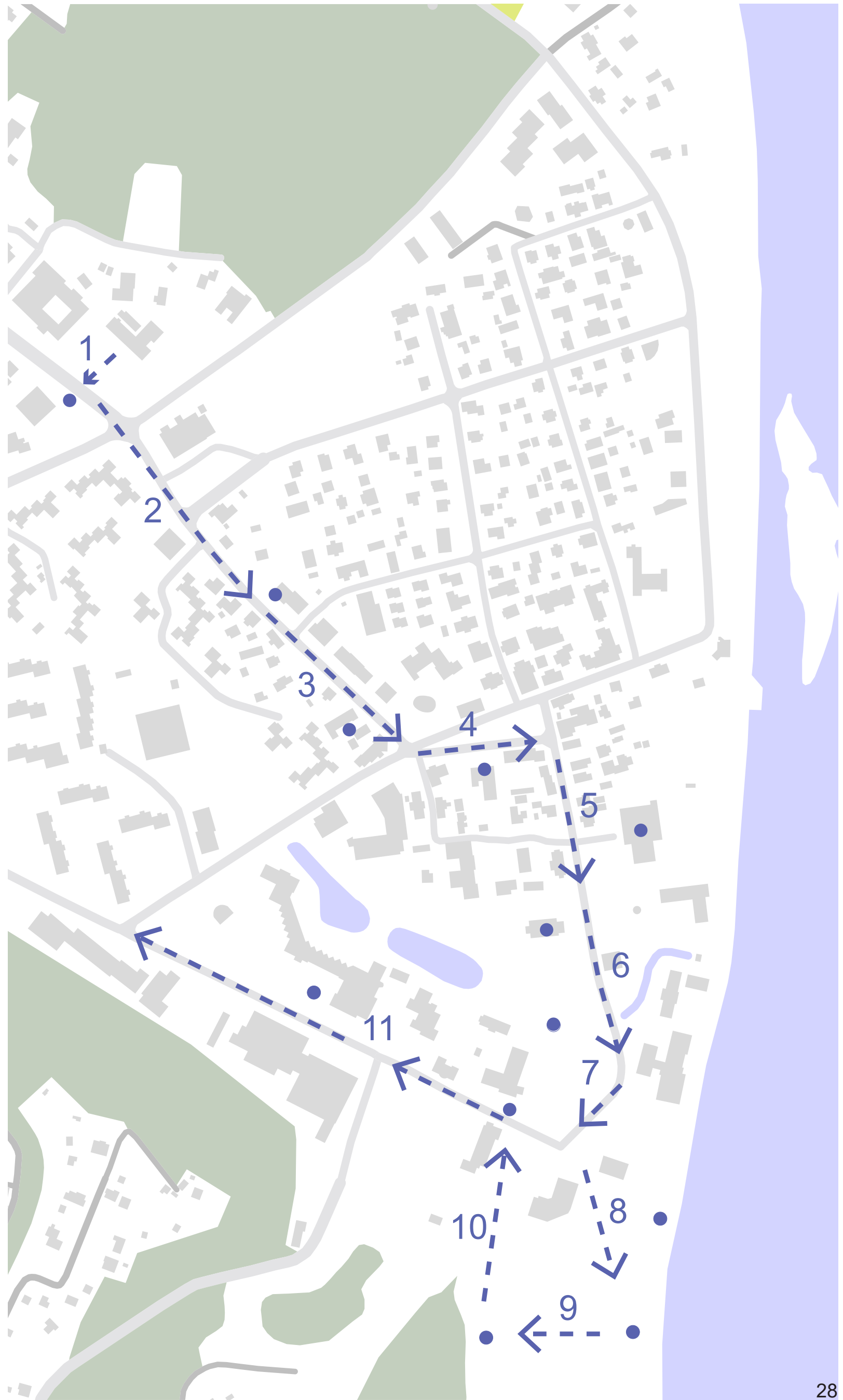
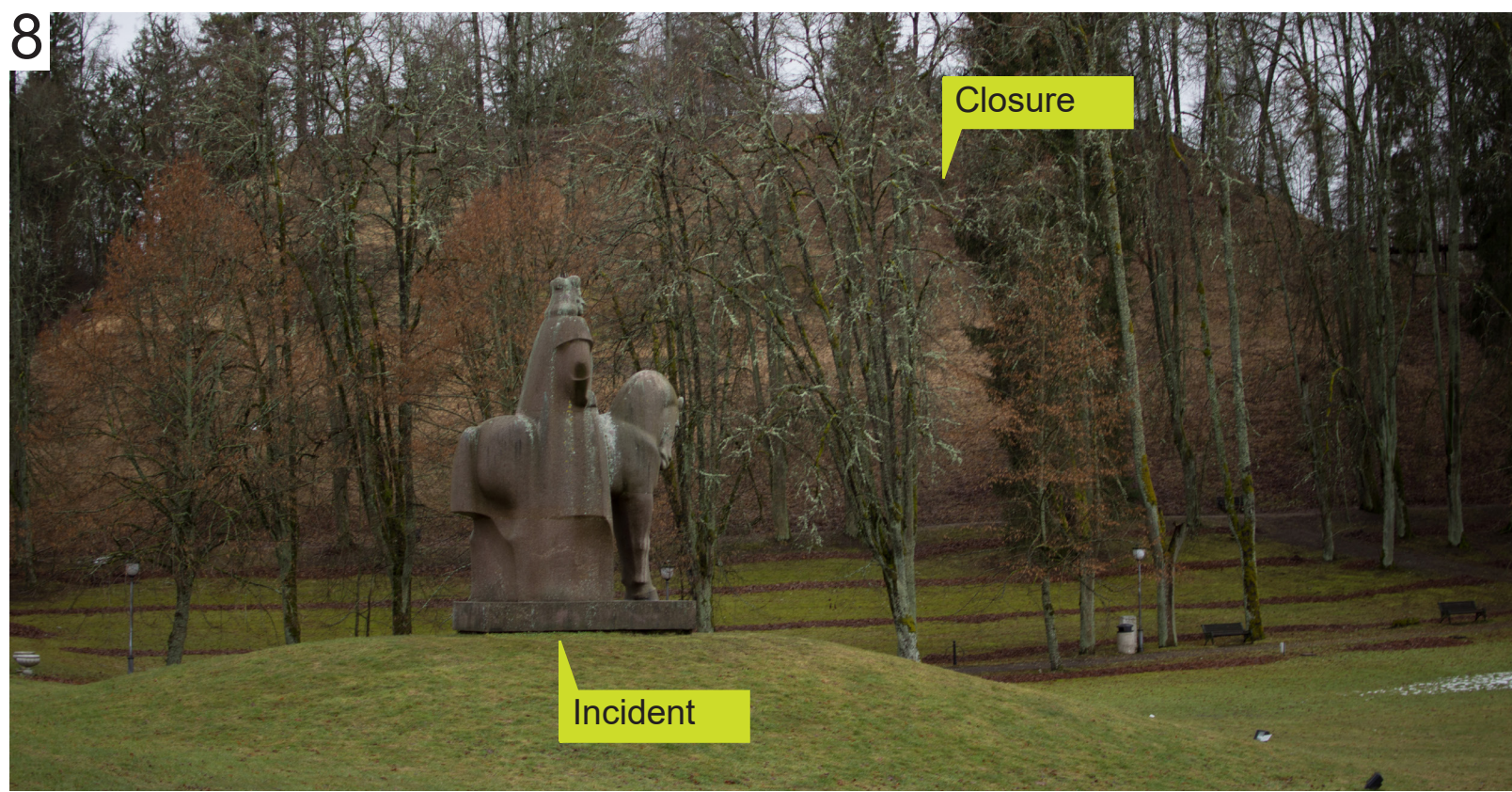
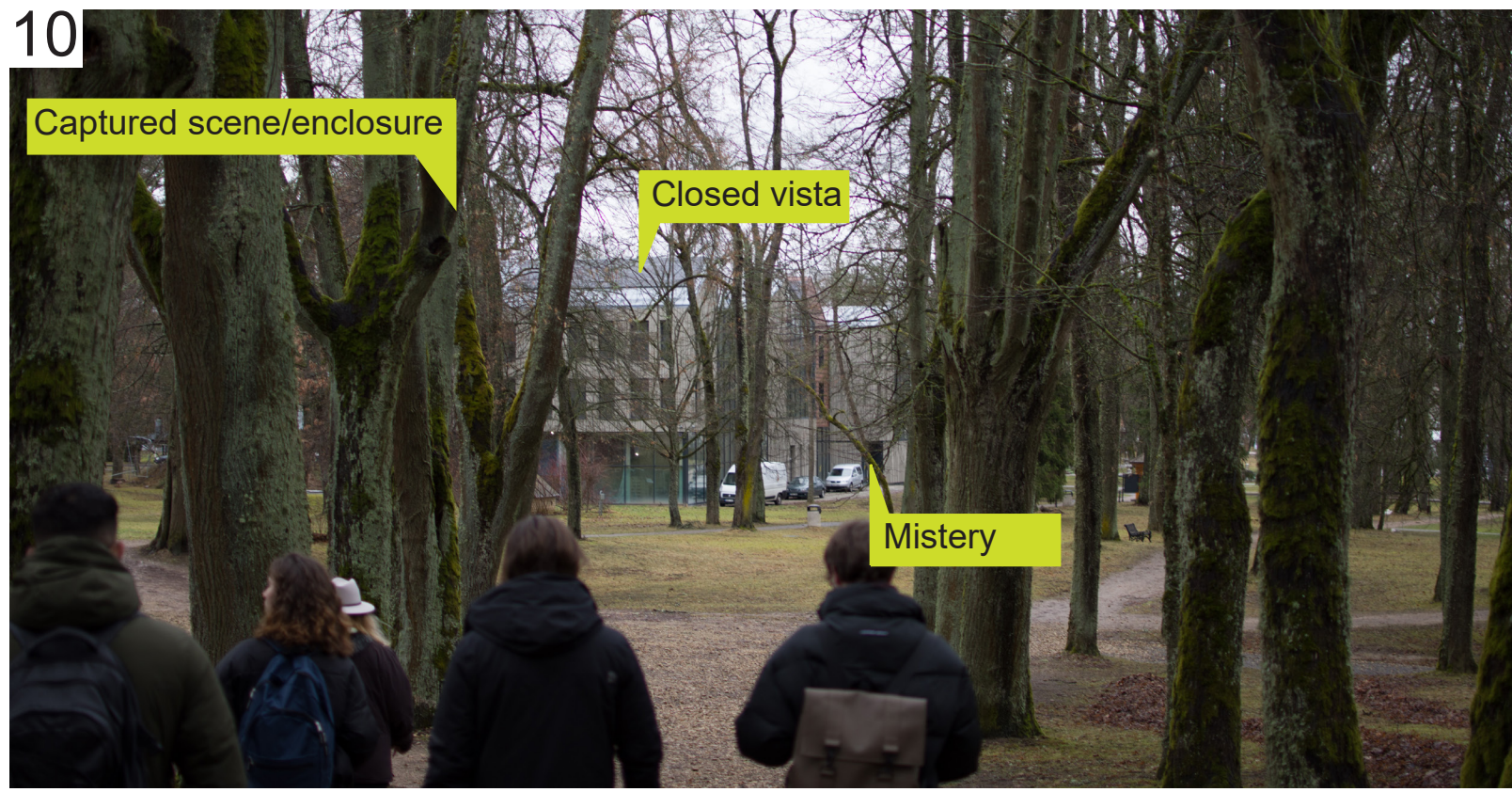
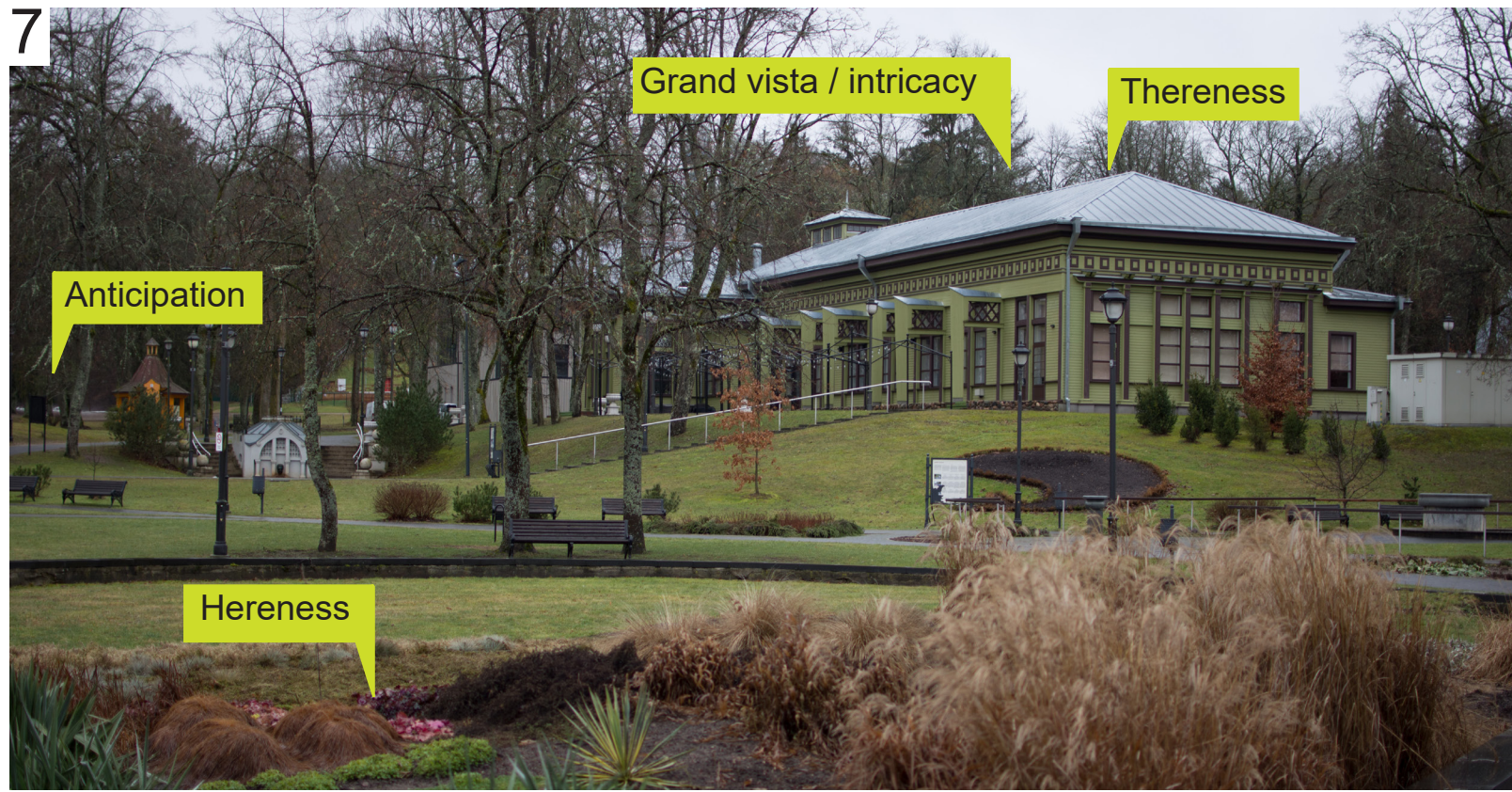




# Townscape evaluation by Gordon Cullen









# Townscape identity evaluation using Michael Cole theory

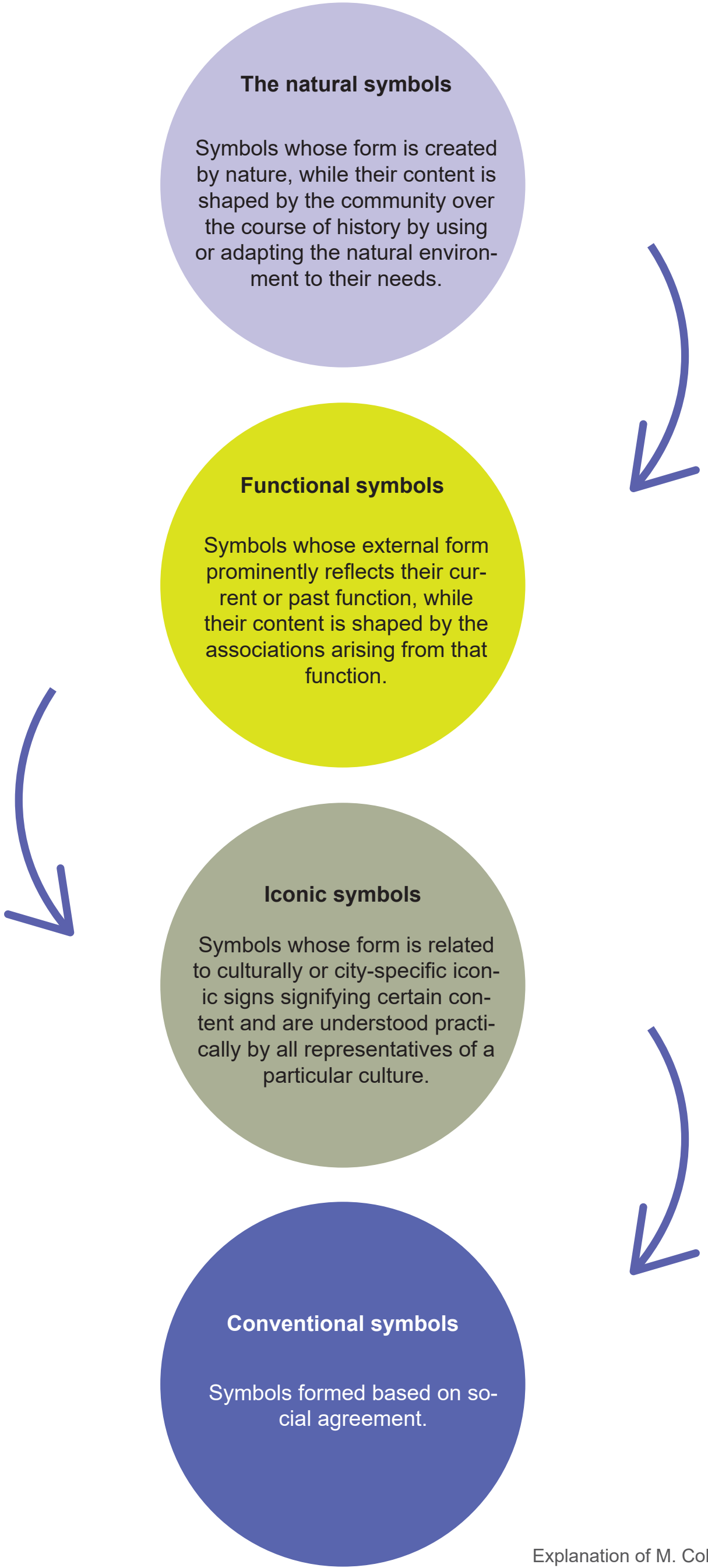
The objects shaping the identity of the Birštonas are determined based on M. Cole's theories of cultural-historical artifacts and semiotics. According to his theory, that was proposed in Cultural Psychology: A Once and Future Discipline (1996), objects used/created by humans, due to the cultural associations become symbols - a kind of external form of collective memory of the community, transmitting information from one generation, to another. The symbols in the meaning of time are re-read, interpreted, and supplemented by each generation. According to semiotics, a symbol consists of its content and form, the connection of which is formed on the basis of social agreement - i.e., it cannot be changed by the individual decisions of individuals or the community, and can likely be interpreted/ determined by individual representatives of society. According to the culturological theories the symbols form four main groups:

1. The natural symbols - these are symbols whose form is created by nature, while their content is shaped by the community over the course of history by using or adapting the natural environment to their needs. Throughout history, any sufficiently large and concentrated green area used for specific societal needs, expressive relief forms, intensively utilized water bodies, etc., can become symbols.

2. Functional symbols - symbols whose external form prominently reflects their current or past function, while their content is shaped by the associations arising from that function. Objects characterized by expressive stylistic features stemming from the functions or periods of buildings, possessing architecture reflecting specific historical periods and their ways of life, can become such symbols. These may include urban complexes, engineering structures, etc.

3. Iconic symbols - symbols whose form is related to culturally or city-specific iconic signs signifying certain content and are understood practically by all representatives of a particular culture. In a specific urban landscape, such symbols can include widely-known structures that, to many residents, even without seeing a broader context, are associated with a specific city or its part.

4. Conventional symbols - symbols formed based on social agreement. In the urban landscape, forms of such agreements can include historical events, legends, or myths fixed in the collective memory, as well as specific traditions of space/territory usage.





# Birštonas identity map using Michael Cole theory

## Explication table

-  Border of Birštonas
-  Main visual dominant of the town (The church)

## Symbols that form Birštonas town identity

### Natural symbols

-  Territories
  - 1. Central Birštonas park
  - 2. Vytautas park
  - 3. Forest along side shore of Nemunas
  - 4. Birštonas forest
-  Linear
  - 1. Nemunas river
  - 2. Nemunas slopes
-  Points
  - 1. Vytautas hill

### Functional symbols

-  Territories
  - 1. Center of Birštonas
  - 2. Alksniakiemis village
-  Linear
  - 1. A6 highway
  - 2. B. Sruogos st.
  - 3. Kęstučio st.
  - 4. Turistų
-  Points
  - 1. Birštonas port
  - 2. Olympic rowing center

### Iconic symbols

-  Points
  - 1. Vytautas spa
  - 2. Birštonas tower
  - 3. Eglės sanatorium
  - 4. Birštonas museum
  - 5. Restaurant "Pieva"
  - 6. "Versmės" sanatorium
  - 7. Kurhauz
  - 8. Red cross sanatorium
  - 9. "Tulpė" sanatorium
  - 10. Villa
  - 11. Vytautas statule
  - 12. Birštonas tourism infocenter

### Conventional symbols

-  Points
  - 1. Central Birštonas park
  - 2. Birštonas forest
  - 3. Vytautas hill

## Symbols that mean more then one thing

-  Natural-functional-iconic symbols
  - 1. Birutės mineral spring
  - 2. Kunigiškių mineral spring
  - 3. "Druskupis"
-  Functional-conventional symbols
  - 1. Birštonas town square
-  Iconic-conventional symbols
  - 1. Birštonas kurhauz



Birštonas identity map

0 1 2 km  
30



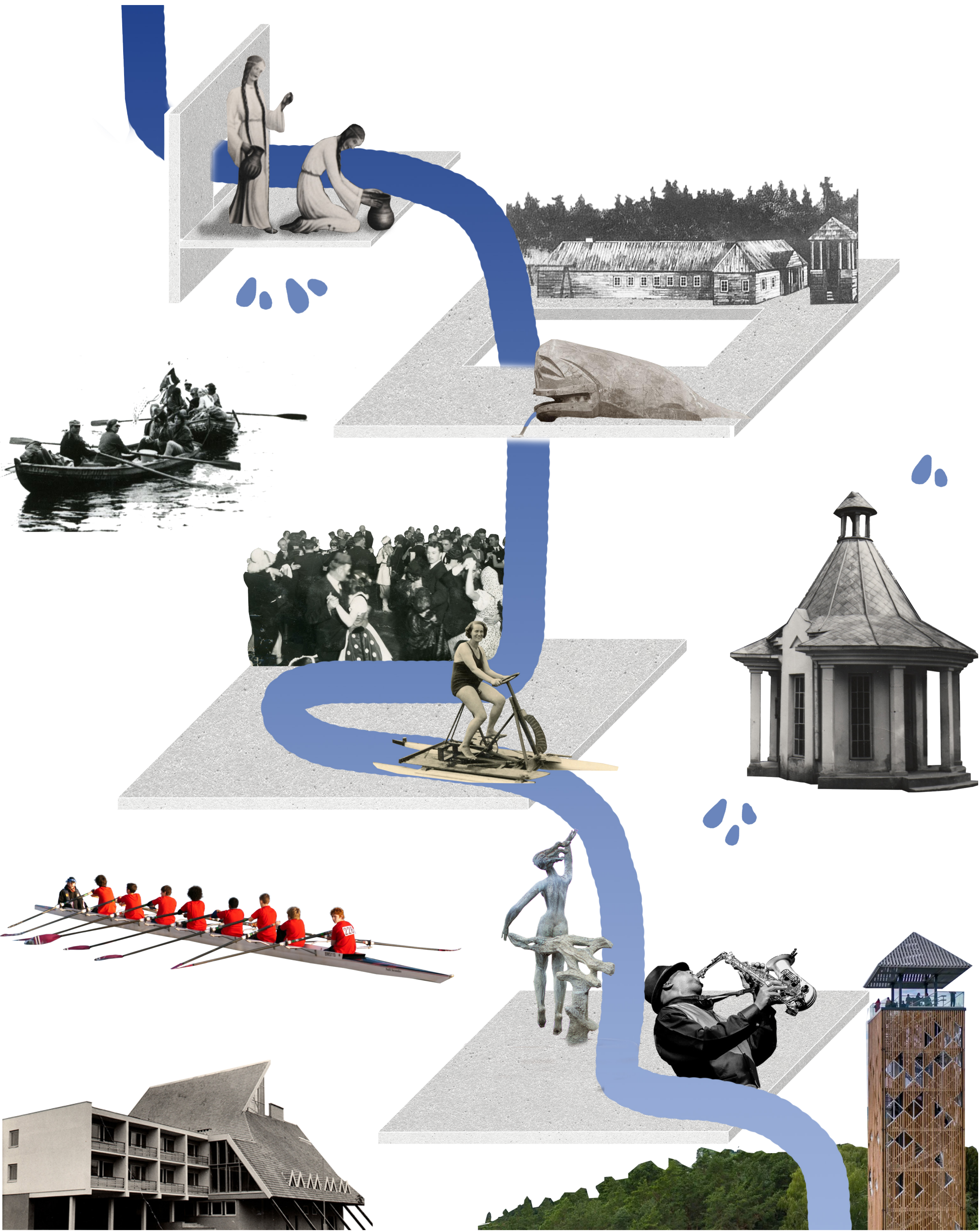
Making Birštonas into a vibrant and lively town as it once was

# Manifesto to Birštonas

The manifesto comes from the analysis of the history and cityscape identity. The main idea is that to make Birštonas a vibrant lively town as it once was, it's necessary to look back in time and to adapt it in today's Birštonas development. The platforms show the four main periods of the town's development. On them and near them are the things that form the Birštonas identity and what should be taken to modern day development.

The first platform symbolizes the mineral springs that are found in the region. They are the reason why this town became a resort. The second platform shows the 19th century and first sanatoriums. From this period, Birštonas was known as a medical resort town. The third one is, Interwar period. This period is the most important for the resort town because it became the most famous vacation point and for its medical and entertainment facilities.

Lastly, the last platform symbolizes the period from the late 20th and 21st centuries, where Birštonas became a base for the rowers and Nemunas was used as much as ever before. The line symbolizes Nemunas' bends and the flow of the time.





# SWOT analysis

## STRENGTHS

**1. Strong community engagement**

The community in Birštonas understands the importance of the town and fosters a rich cultural and historical identity. People strongly oppose the possibly harmful activities that could disrupt the peaceful town. The community also engages in activities that strengthen the connection with one another and the town.

**2. Strong sense of identity**

Birštonas identity is defined by two main factors: the water and nature. Nemunas river that loops around the town and mineral springs are the reason why this town became a resort. To this day these factors are the main indicators that make Birštonas unique.

**3. The understanding of the heritage and history importance**

The community proudly talks about the town's heritage and history. The importance of it is also visible in the efforts to restore and foster the historic center of the resort and its buildings. Most of them are renovated and reconstructed, while still used as their original function.

**4. Fostering the townscape that was formed throughout the history**

Nowadays the new construction is highly regimented. The scale of the new buildings can not be bigger than already existing historical ones. In this way, the shape and the identity of the townscape in the center part of Birštonas is changed minimally.

**5. Appropriat use of the natural recorses**

Birštonas bases its economy on the health tourism that comes from the natural mineral springs. It is also used for the production of bottled mineral water. This usage of the natural resources not only formed the strong identity of the town but also helped its economy.

## WEAKNESSES

**1. The hyper fixation on the health tourism**

Birštonas is highly dependent on health tourism, which for most people is unaffordable. The resort has a lot of potential sectors that tourism can be expanded to.

**2. Lack of all year round entertainment**

The resort is highly dependent on the warmer seasons, during the winter season the town is almost completely deserted. Looking back on history, nowadays Birštonas lacks places that can be used all year round.

**3. Dependency on the tourism**

Birštonas nowadays place their economy mostly on tourism and on mineral water. Looking back in history, it once was the center of the rowing camps. The river was used heavily, but now only a few commercial boats pass by.

**4. Lack of the regulations on the architecture**

Birštonas has a strong identity that is connected with rivers, mineral springs, health tourism, and nature, but they do not seem to put as much effort into architectural values. The old buildings are taken care of perfectly but the lack of a distinguished architectural identity is noticeable in new projects that are constructed. Most of them are just generic and can be placed in any Lithuanian town.

**5. Lack of connections with historical parts of the town**

The resort has multiple historical places, for example: the center, the part next to Central Park, and the Alksniakiemio village on the other shore of Nemunas. These parts lack the needed infrastructure with one another and some of them are hard to reach.

## OPPORTUNITIES

**1. Improvement of the tourism so it would be less seasonally dependent**

Birštonas can expand their tourism sector way beyond health tourism. For example, it has a rich history, strong identity, architectural and urban heritage that can be used in this sector. The other approach would be the improvement of nature tourism: the Nemunas bends, forests, and existing wildlife.

**2. Bringing back the usage of the Nemunas River**

During the 20th century, Birštonas was the center of the Olympic training center for the rowers. Right now the popularity of rowing has decreased significantly. By bringing back this sport and its importance it can create all year round economic benefit to the resort.

**3. Establishment of the entertainment places**

Even though originally Birštonas was only a resort town that focused on medical tourism, during the Interwar period more and more entertainment places were opened. This turned the town into a vibrant and lively place. Right now, especially during the colder seasons, Birštonas completely lacks this kind of place, where people can have fun and relax.

**4. Improvement of links between parts of Birštonas**

Adding the right infrastructure and popularising the tourism routes or pedestrian/cyclist paths between the quite distant parts of Birštonas, can help to make the town more compact while preserving the historical identity of the places.

**5. Distinguish the architectural identity**

Right now Birštonas only forster already existing heritage, but does not regulate the new architectural projects. This way the town's identity slowly is overshadowed. By distinguishing the architectural identity even the parts that are further away from the center can have the same constant architecture and the townscape.

## THREATS

**1. Pollution due to increased tourism**

While increasing tourism the town must find ways to do it sustainably so it would not increase air, noise, water, or soil pollution.

**2. Expansion of the town can change the historical townscape identity**

The new building that will be constructed due to the increased number of people that come to this town, if not regulated, can change the identity of the town.

**3. Increased usage of the Nemunas River can be harmful to natural wild life and landscape**

The infrastructure that will be adapted to the Nemunas, can be harmful to the wild birds that live and nest near the river, also the noise from the people and their constant movement can disturb the lives of the wildlife. The adaptation to fulfill the needs of water tourism and usage can damage the naturally protected landscapes of the Nemunas Valley.

**4. New tourism sectors can weaken the original town's identity**

The original identity of Birštonas is the water (mineral and the Nemunas River) the sanatoriums and health tourism. Introducing the new tourism sectors that will generate the all year round incomes, can weaken the health tourism.



# STRATEGY PHASE

Development of Birštonas under one joined identity in order to make it less seasonaly dependant





# Opportunities and constrains map

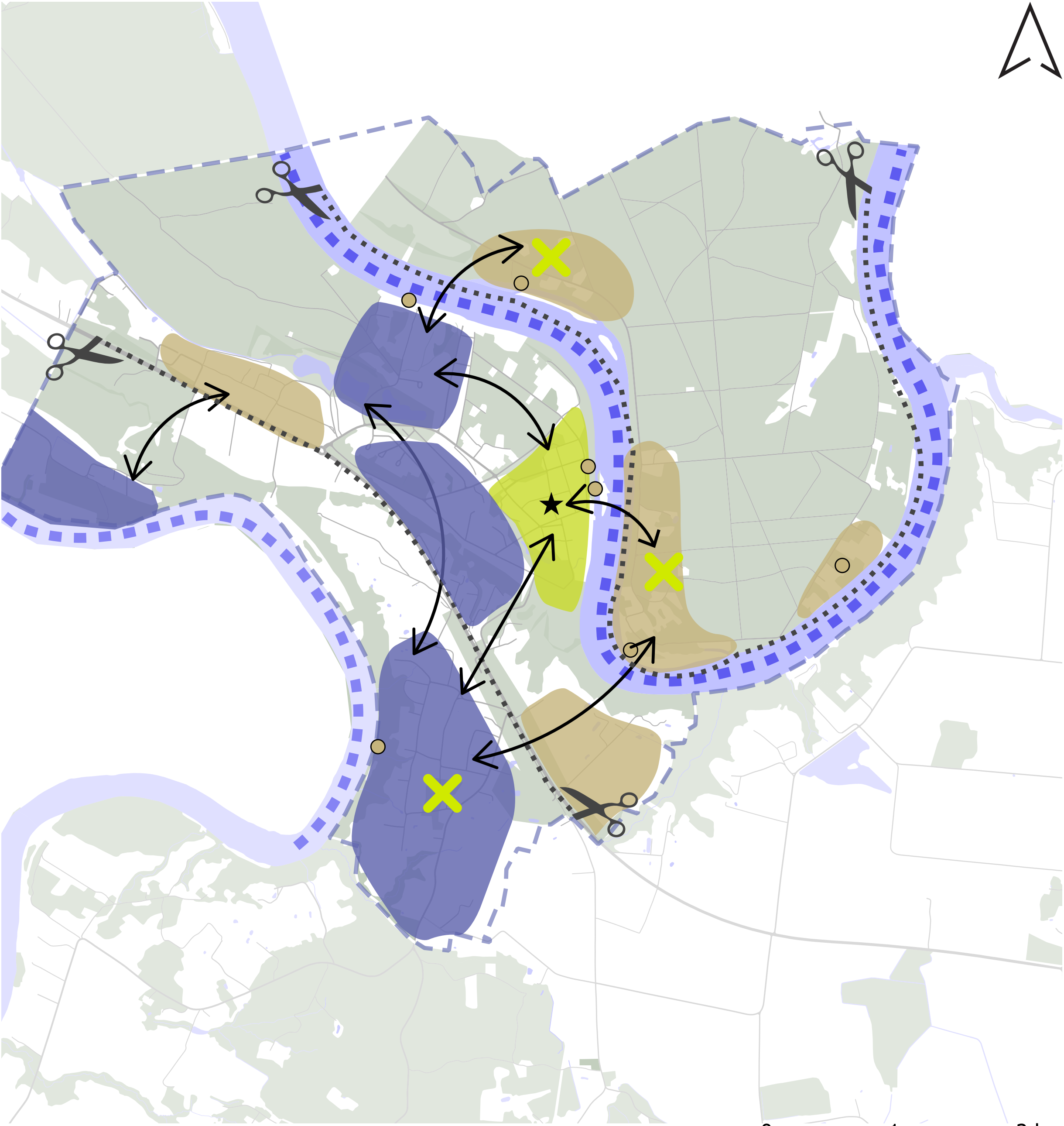
-  Border of Birštonas
-  Nemunas river
-  Historic Birštonas center

## Opportunities

-  Increasing usage of Nemunas river for recreational, sport related purposes
-  Possible ports
-  Improved connections with Birštonas parts
-  Improved townscape identity in order to create consistant and vibrant resort town

## Constrains

-  Objects that divide Birštonas in two
-  Lack of landmarks and attraction points
-  Abandoned places or places that are not urbanized
-  Areas of changed identity



Birštonas identity map



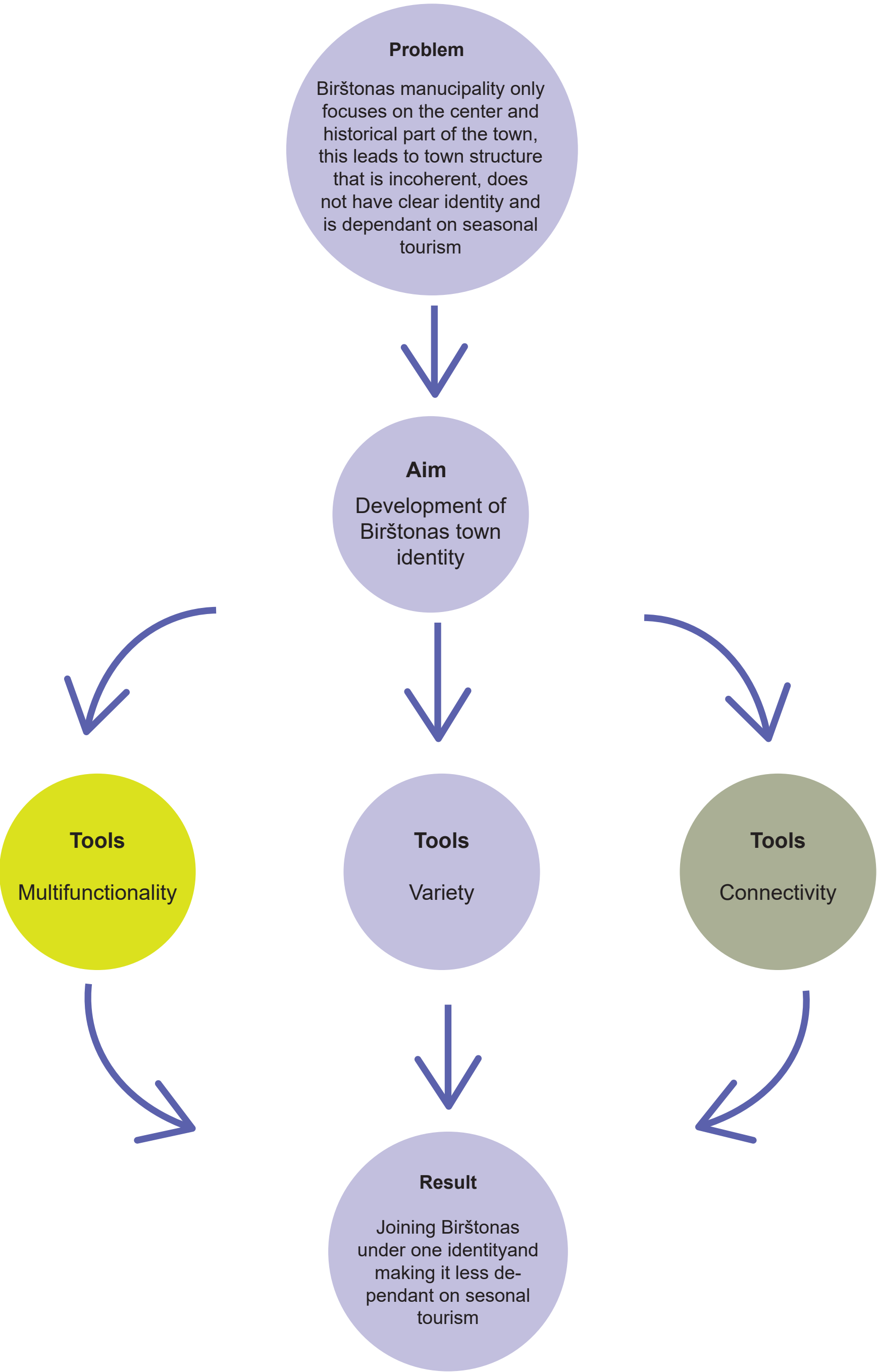
# Research hypothesis

**Increase of multifunctionality, variety and connectivity would help to develop identity of Birštonas in coherent way making it livable all year round**

Current day Birštonas can be described as a multilayered and divided town that is quite dull in colder months. The only sector that keeps this town alive during these seasonal periods is health tourism. During the summer months, it welcomes a large number of tourists that only gather in the town center, which is adapted to the entertainment and social infrastructure. This way, the other Birštonas parts are forgotten, underdeveloped, and have a completely different identity from the historic center.

This only increases the division and separation of the town. The proposed hypothesis tries to join the whole town under one joined identity to make it livable all year round. It includes the development of social, recreational, and infrastructural systems while adapting historical elements to reach the set goal.

Making Birštonas less seasonally dependent will benefit the town economically, gaining a passive income all year round, helping the tourism sector that almost stops in colder months, adding more workplaces for the residents, preventing constant overcrowding, and connecting the town under one identity.





# Now existing identity of Birštonas

The current identity of Birštonas can be described by three main nouns: nature, water and health. Each represent the most important objects that form Birštonas as we understand. The nature includes greenery in the town, forests that surround the town, untouched nemunas shores and clean air. Water - one of the most important identity aspects for Birštonas because with out its mineral springs and Nemunas it would not gain resort name.

Lastly, the health represents the sanatoriums and spas that makes Birštionas popular today. Everyone of the mentioned aspects are important for towns development, tourism and economical development, because this is what attracts people to this place. In order to develop town further it is mandatory to keep these aspects preserved and add other ones that would help to develop joined towns identity.

**Nature**

Greenery in the town  
Forests  
Nemunas shores  
fields  
clean air  
Hiking

**Water**

Nemunas river  
Mineral springs  
Healing mud

**Health**

Sanatoriums  
Spas  
Recovery centers



Photo: visitbaltics.net



Photo: travelblog.lt



Photo: D. Umbrasas, LRT.lt



# Identity of Birštonas that would help to connect the town

To enhance the social and economic benefits and to join the town under one identity, a suggestion is to look into authentic elements that are located in the town. A good practice is to look at how Birštonas looked like in the past. As the municipality mentions in its strategy development, Nemunas is underdeveloped. This river loops around town and is one of the most noticibal and authantic feature its ac-tivities could become one of the identities of Birštonas.

Other elements that would enhance the Birštonas identity could be the functional im-plementation of the different activities. In the past, Birštonas was a vibrant resort with a number of entertainment places. Right now, during colder months, it's completely gone. Lastly, different architectural elements can be adapted in different parts of the town.

**Leisure and entertainment**  
  
Places of interest  
Active entertainment  
Sports  
Music and art  
Quite/isolation relaxation

**Water sports and transportation**  
  
Increased water transporta-tion that is affordable  
Water sports  
Beaches

**Architecture**  
  
Simmilar architectural ex-pression and identity



Photo: Skonis.lt



Photo: nemunoturas.lt



Visualization: Vilniaus Architektūros Studija



# Tools that help to reach set goal

### Multifunctionality

Opposition to functional zoning, the implementation of the multifunctionality principle, is one of the most important priorities for sustainable development (Juškevius, Jauneikaitė 2008). Multifunctional centers are important elements of urban structure – nodes of various levels where trade, services, entertainment, and public functions are concentrated.

### Variety

Diversity and mix of land uses, functions, building types, architectural styles, social and transportation infrastructure. It creates a balance between different uses and activities to enhance the livability, functionality, and vibrancy of the urban environment. It can uplift the needs and preferences of residents and visitors.

### Connectivity

Various parts of a city or urban area are interconnected through transportation networks, pedestrian pathways, and other infrastructure elements. For Birštonas this can be achieved transforming towns urban model into decentralized concentration town. Where created compact central town and “sustainable islands” connected transportation lines.

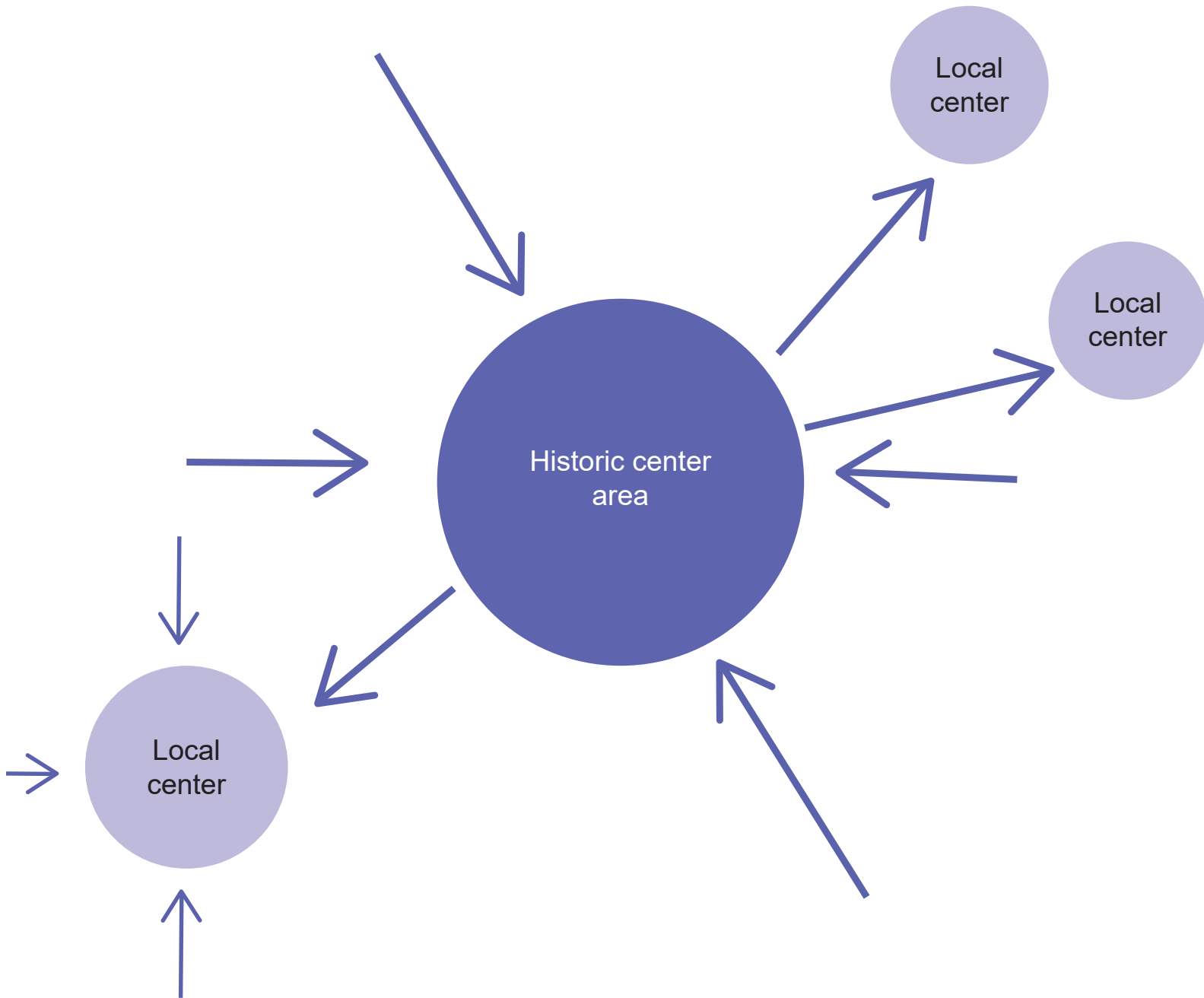
10 factors creating multifunctional urban development by K. Campbell (1999)



Birštonas town needs and opportunities from Birštono municipality strategical development plan and L. Ramanauskaitė



Town of decentralized concentration model



Decentralized concentration model - model of cities development in Europe. There are compact central town and “sustainable islands” connected by transportation or pedestrian infrastructure

This sustainable development tool can help to connect the town and create local centers through out different zones of the Birštonas.



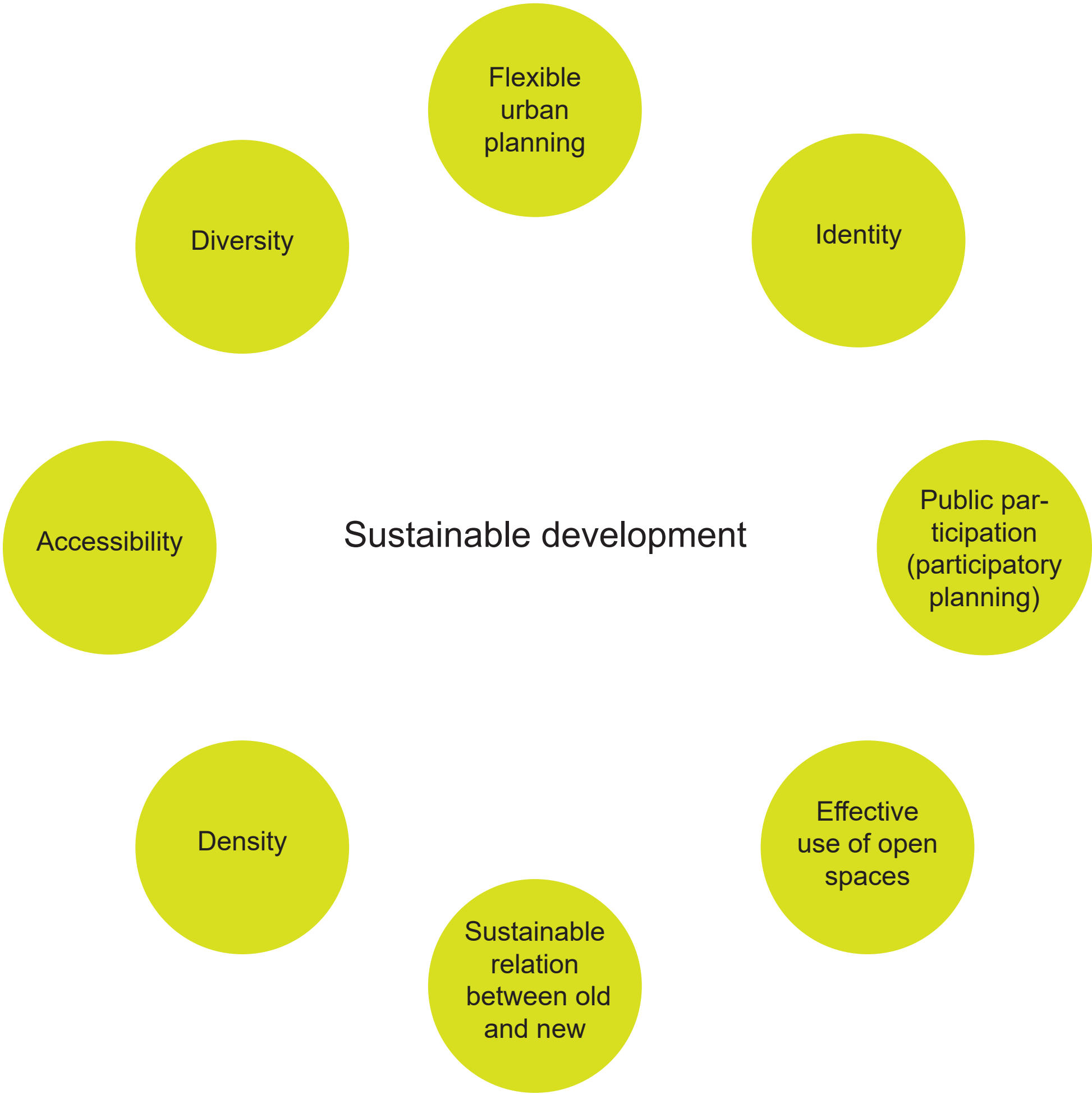
Relative Sustainability is a more useful concept than Absolute Sustainability.

# Strategy objectives: Sustainable development

After analyzing the needed tools in order to develop propozed hypothesis, the conclusion is to develop Birštonas using principles of sustainable development. This includes all needed aspects such as identity, connectivity, participation of community, diversity, multi-functionality. The sustainable development is used as a tool to expand or redevelop cities in order to fullfill moder day needs as also protect the environment.

Improving the relative sustainability of an urban landscape requires an evaluation of those features which affect the pattern of inputs and outputs. This is likely to include earth, water, vegetation, building types, transport systems and spatial organization. One can then assess the potential for change through landscape (territory, urban) planning.

The social, physical and biological systems in urban areas are as complex as natural systems. Sustainability planners need to study, model and make proposals for the urban landscape at all scales and levels, in time and space, and beyond the usual span of three generations (Turner T., 2003)





# Key objectives

## Dividing Birštonas into local centers

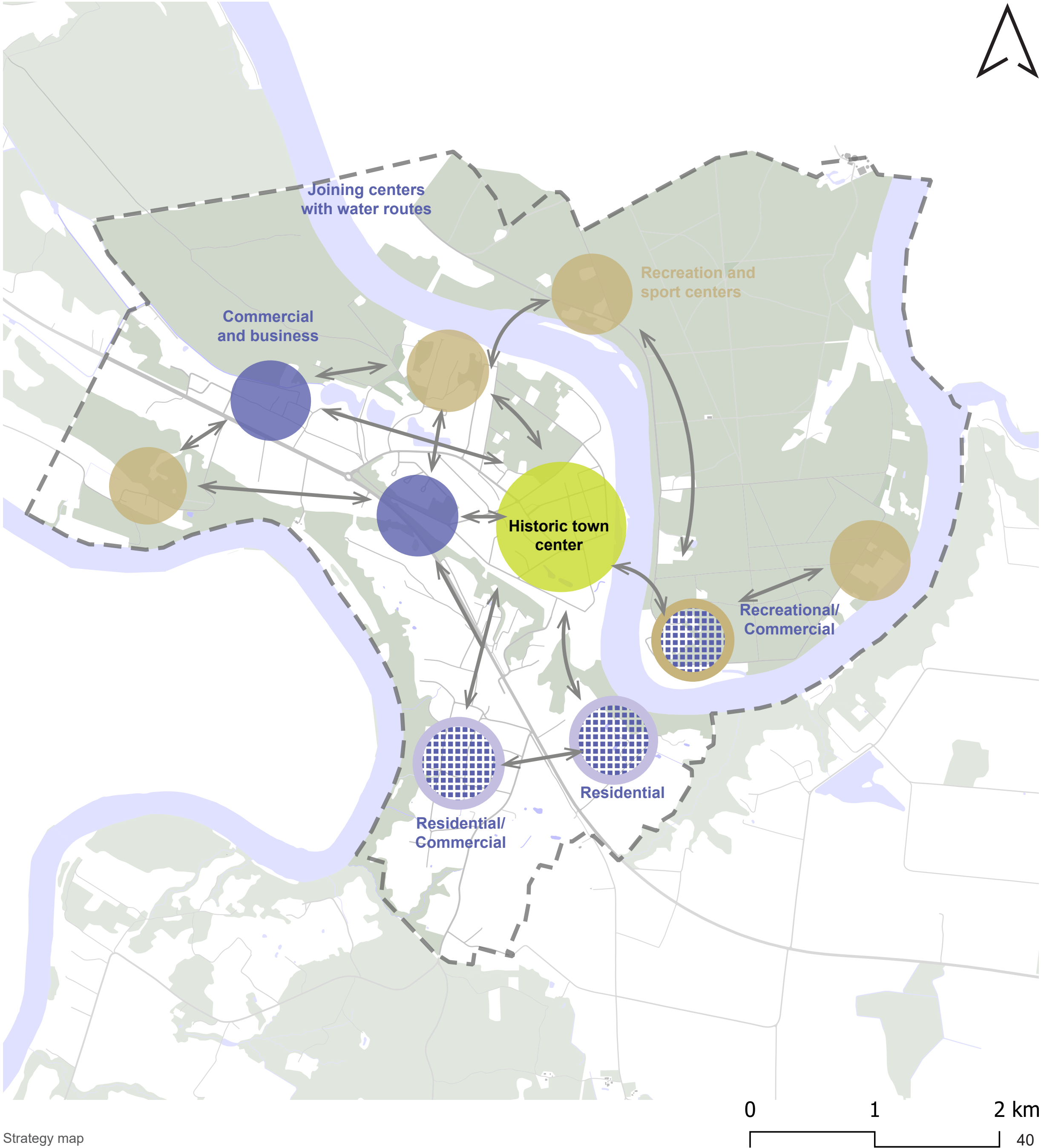
### Ten Principles for Developing Successful Town Centers by Urban Land Institute (2007):

1. Create an Enduring and Memorable Public Realm;
2. Respect Market Realities;
3. Share the Risk, Share the Reward;
4. Plan for Development and Financial Complexity;
5. Integrate Multiple Uses;
6. Balance Flexibility with a Long-Term Vision;
7. Capture the Benefits That Density Offers;
8. Connect to the Community;
9. Invest for Sustainability;
10. Commit to Intensive On-Site Management and Programming

In order to create coherent Birštonas under one joined identity the first step is to make consistent town. To achieve this, a proposal is to divide Birštonas into local centers that are defined by their function, geographical location, identity and importance for the town. The division was made using decentralized concentration model that allowed to divide big portion of economical, social and functional benefits from historic center area and distribute it throughout whole town. To better understand what it takes to develop successful town centers 10 principles were adapted from

Urban Land Institute recommendations (2007). The town local centers are developed in territories that are divided by two main obstructions: river and highway. This way the town will minimize the division. Some of the territories right now are not developed or are abandoned, so looking into future perspective of the area, they should be developed accordingly to reach set goal. The historic part is still the main center from where all other local centers will either take some functions and identity elements or replenish the missing ones.

- Border of Birštonas
- Street net
- Links between the local centers
- Forest and parks
- Commercial and business local centers
- Residential local centers
- Residential/commercial local center
- Recreational/commercial local center
- Recreational local centers
- Old town



Strategy map



# Example of proposed objective

## Uplands development in Hampshire County, UK

The Uplands Development consists of two sites owned by Hampshire County Council - west of Woodhouse Lane in Hedge End and north and east of Winchester Street in Botley, England. Together they will create sustainable extensions to the existing communities and will deliver up to 980 new homes (including 35% affordable housing), a new secondary school, a Local Centre, areas of open space and playing fields, additional public gardens

The Uplands development project shows that in order to create functional and attractive place for residents and community it can be developed in smaller scales. These two local centers have somewhat simmlar function of residential quartals, but also different functional elements that prevents them from being completely isolated. They are joined by the one route, that is unfortunately seems to be orentated to cars.



Visualization: Riverside Group



Visualization: Riverside Group



Master plan of Uplands Development



# Example of proposed objective

Paupys neighbourhood in Vilnius, Lithuania

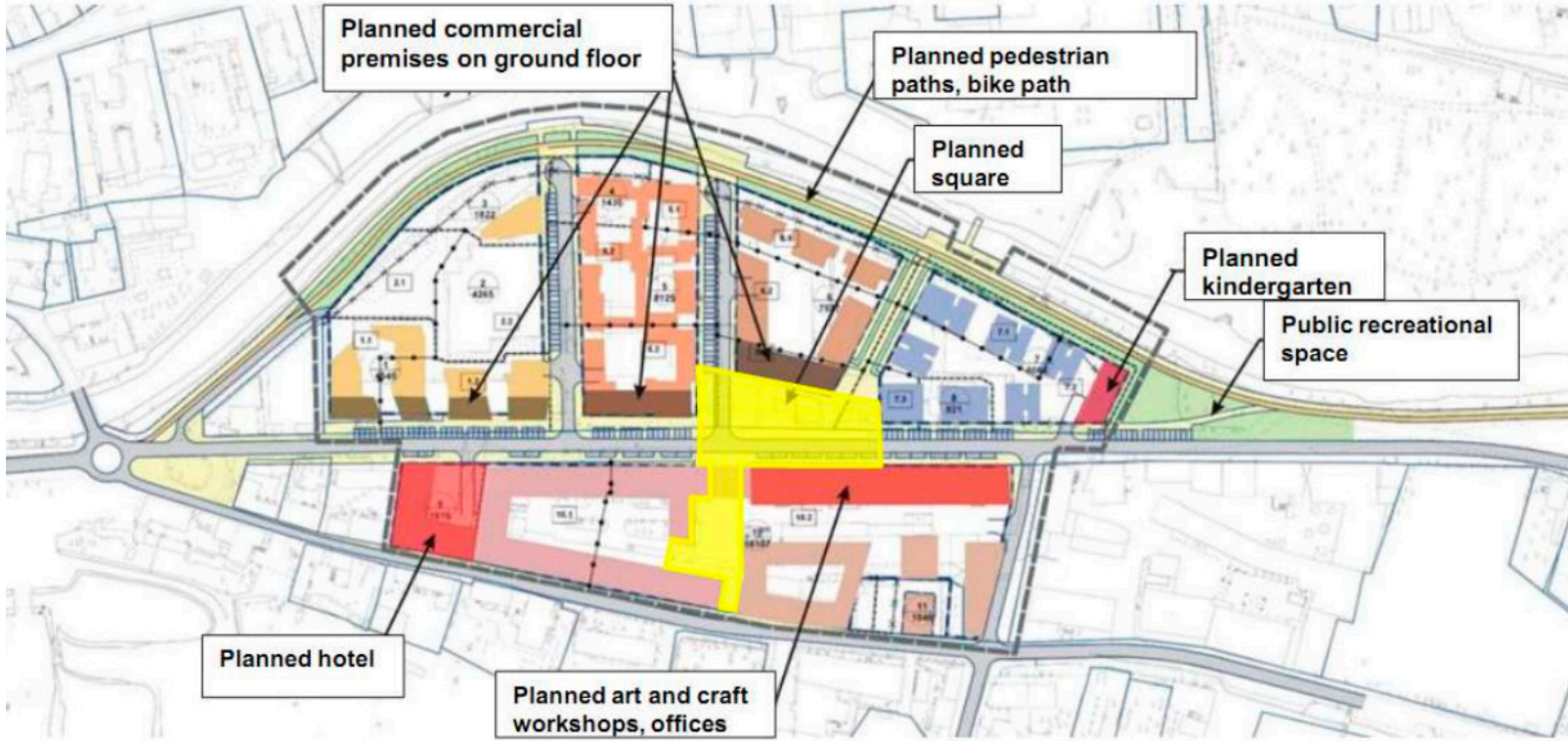
As the DARNU group describes this quarter: "When designing the district and thinking of the community that will spend their time here, preserving the harmony between nature, urban planning, and the unique history of Paupys was vital. Modern, high-end amenities were integrated in the most sustainable way possible."

This part of Vilnius was once an abandoned electronics factory Skaiteks. Right now it is made into vibrant, multifunctional and attractive local center near the Old Town of Vilnius. This part of the town is divided into number of apartment blocks with private yards, public spaces, education and care facilities. The emements that make Paupys so successfull

is the professionally implemented local centers aspats that create vibrant and functional spaces. Not only locals want to spend time here, but also residents and tourists of Vilnius. Paupys is walkable, has different functions is reachable from most parts of the Vilnius center.



Olympic rowing center. Source: Limis.lt



Paupys urban conception



Paupys. Photo: realu.lt



Paupuys market. Photo: E. Činga



Paupys market. Photo: E. Činga



# Key objectives

## Implementing different functions in order to create less seasonal urban development

To create Birštonas into a coherent town, that is not seasonally dependent, the second key objective is to develop a strategy how different local centers could work as one system. Right now, almost the whole social and economic infrastructure is orientated into the town center (historic part and near the bus station), and other parts do not have any attraction points or functions to attract tourists.

A proposal is to distribute different functions throughout the whole town of Birštonas. This way, the town will be connected functionally and distribute the flow of the tourists, bringing economic and social benefits. Distribution through out the town is also beneficial to create the coherent identity of the town since it could be applied to new territories.

Another suggestion for this key objective is to use a river. The municipality, in the strategy plan, mentioned that the usage of Nemunas River is underdeveloped. The proposal is to create new water routes, floating structures such as public islands or saunas, and camping infrastructure that could be used all year round.

- Border of Birštonas

Street net

Missing links between the local centers

Floating saunas and public places

River route

New port system

Existing port

Implementing features of center area
- Forest and parks

Commercial and business local centers

Densifying the area

Residential zone

Recreational local centers

Old town





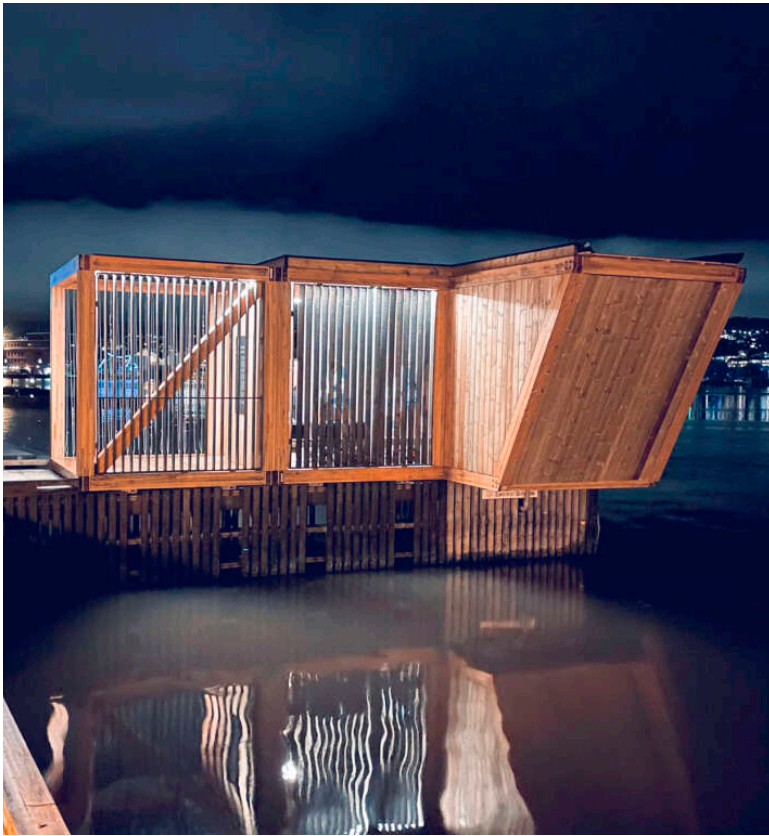
# Example of proposed objective

## Floating public saunas in Norway and floating public spaces

Birštonas is best known in Lithuania for its health tourism, mineral springs, and Nemunas bends, but the river is not exploited as it could be. The proposal is to enhance the river's identity and create a system of different entertainment and recreational spots. One of those are floating Saunas and public spaces. The practices would strengthen the usage of the Nemunas and create tourism benefits that are not dependant on warmer seasons while enhancing the identity of Birštonas as a resort and minimizing the side effects of seasonal dependency.

One of the examples of such practice is floating public saunas in Norway. These floating structures are widely used in different Norwegian cities and are open to the public. Some are used as installations or pavilions others are entirely for bathing. For example, Oslo in Norway has seen an uptick in public saunas located in convenient downtown locations where visitors and locals alike can sweat it out year-round. Everyone is welcome in the saunas visitors just must follow some established rules.

Another proposal is to create floating public spaces, like an example in Bruges, Belgium. The structure intends to make a small change in the town's beautiful landscapes by installing: “The Floating Island”, a pavilion in a long streamlined shape floating on the water. Architects try to blur the rigid boundary of the canal and guide people to the waterside. In this way, by planning the canal as a place where visitors can walk, rest, reflect, and enjoy the water, not just as a borrowed scenery.



Floating sauna in Norway. Photo: N. R. Coates



Floating public space in Mantova, Italy.  
Photo: contemporist.com



The floating island in Belgium. Photo: K. Shin



Floating sauna in Norway. Photo: D. J. Moss



Floating sauna in Norway. Photo: D. J. Moss



# Key objectives

## Enhancing links between parts of Birštonas

The main problem in Birštonas is the lack of connectivity between parts of the town. Elements like the highway and the Nemunas River contribute even more to this problem. From the Birštonas town center to the Vienkiemis neighborhood, it is almost impossible to reach by foot. There is a pedestrian bridge, but it goes from nowhere to the Birštonas Tower instead of the residential area. The same problem is with the Alksniakiemio forest.

It is impossible to reach by foot because the only way is to drive through Prienai, which is 7 kilometers away. In order to join the town under one identity and implement the proposed development new connections and infrastructure should be made. Considering the existing infrastructure and proposed function and local center, the route alongside Birštonas is created. It joins every part of the town.

The map also shows that the existing pedestrian bridge through the highway and the planned bridge do not contribute to the coherent system that would make Birštonas more consistent. The proposed connections should be adapted: to pedestrians, cyclists, and people with disabilities. It could become the new hiking, tourism path, or iconic symbol of the town. Every section of the trail begins and ends with a point of attraction or some sort of landmark.

- Border of Birštonas
- Street net
- Existing infrastructure
- - → Proposed infrastructure links
- Existing infrastructure inside the central area
- Forest and parks
- Commercial and business local centers
- Residential zone
- Recreational local centers
- Old town



Strategy map



# Example of proposed objective

## Green loop project in Portland, USA

An example of the proposed key objective that is orientated into the connections between different town parts is the green loop conception. This is quite a new proposal in urban design that was adapted only in a few different locations in the world. The most famous one is the Green Loop project in Portland, USA. It's an innovative way for people to move in the city that orientates in activity, safety, fun, and different mobility for people of all ages and abilities to move around Portland.

A bold new concept of the Central City 2035 Plan, the Green Loop will be a six-mile linear park that connects people through the heart of the city, improving access to and linking regional attractions, cultural institutions, employment centers, and shopping districts. The Green Loop will connect to places within and beyond Portland's downtown neighborhoods and the Willamette River.

The concept of Green Loop concept is only adapted for the central part of the town because it will support businesses and social services, improving access to places where people can get the staples and support they need. And it will reconfirm Portland's commitment to greater access to parks, nature, and active transportation. It also can become the iconic symbol for the city enhancing its identity.



Street view visualization. Credits: Portland.gov



Street view visualization. Credits: Portland.gov



Street view visualization. Credits: Portland.gov



Street view visualization. Credits: Portland.gov



Green Loop scheme in Portland, USA. Credits: The Green Loop



# Example of proposed objective

## Green loop project in Jyväskylä, Finland

Another example of the Green Loop planning concept is already implemented in Jyväskylä, Finland. It is a chain of green spaces and lush cultural environments around the city center. The Green Loop can be regarded as a local recreational area for around 20,000 residents. It is adapted not only as a green space but also as a connection between parts of the town and the points of interest.

Through cooperation, the Green Loop will be developed into a new type of central park, the significance of which will increase in the future, with the urban structures in the city center becoming denser and the population of the area growing. The Green Loop is an area intended for its users. For this reason, its development is based on their needs and wishes.

The vision and action plan for the concept, will guide the systematic development of the area over the long term. Town plans and other land use plans will be used to ensure favorable conditions for the development and to improve the accessibility of the Green Loop and the continuity of the Green zone



Green loop bikepaths. Photo: Hanna-Kaissa



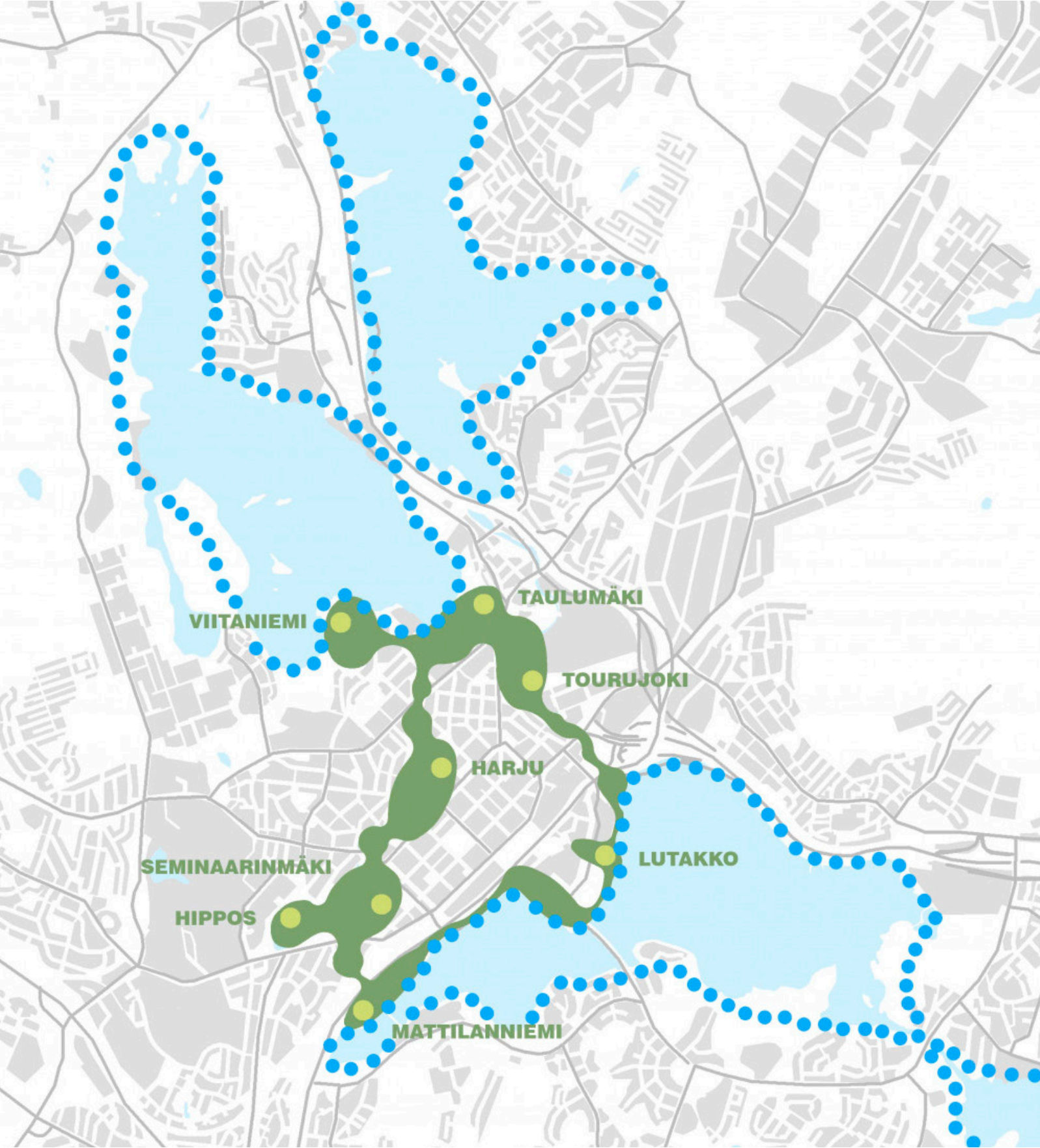
Lutakko park. Photo: Mauri Mahlamäki



Viitaniemi waterfront route. Photo: Mervi Vallinkoski



Lutakko Marina. Photo: Ari Heinonen.



Green loop in Jyväskylä, Finland scheme. Source: jyvaskyla.fi



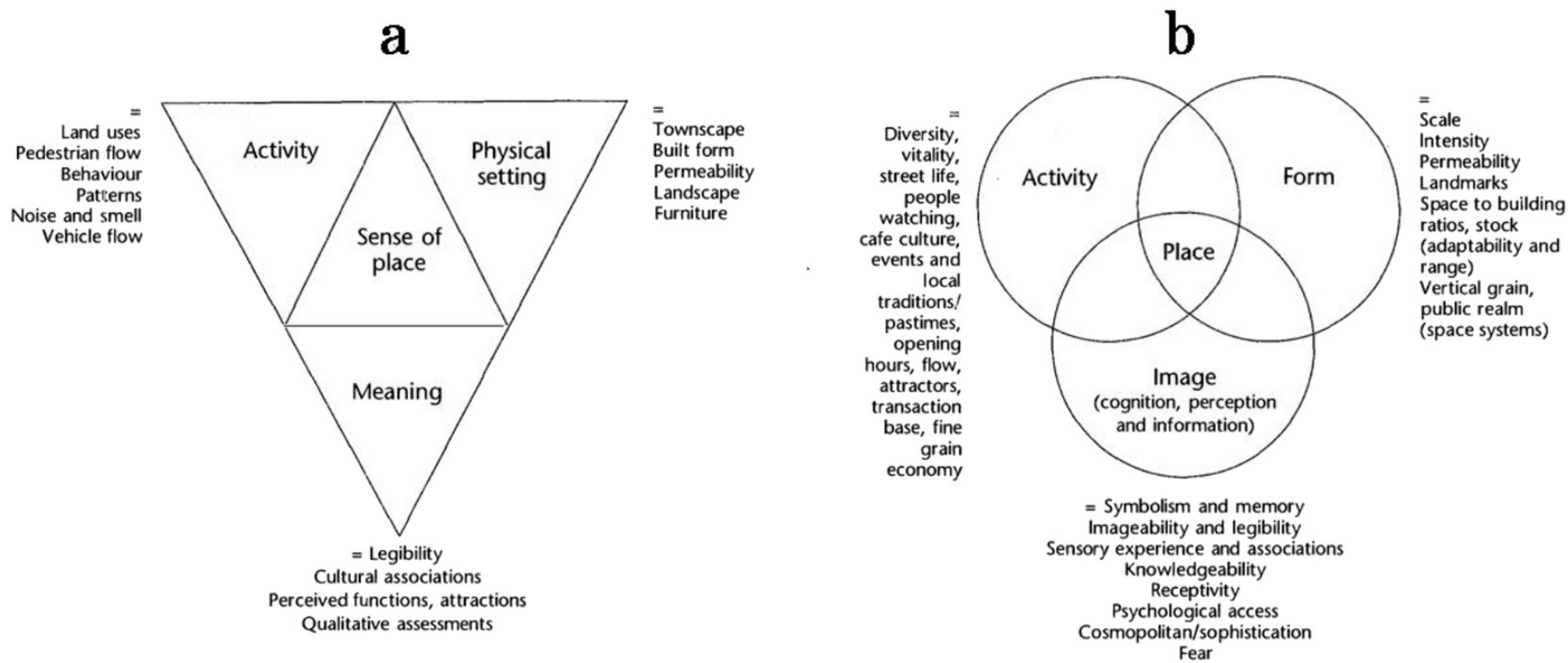
# Key objectives

## Joining Birštonas under one identity while preserving local centers authenticity

Birštonas town has strong identity that is mostly implemented into the center area. Other parts either do not have it or this identity is too weak. In order to mentally join Birštonas and glue together all of the key objectives, the proposal is to join the town under one identity. The identity should not be implemented blindly, for example demolishing existing structures in order to make copies of the certain parts, but rather be adapted in existing context. Right now the existing Birštonas identity is: health tourism, nature, river and mineral springs.

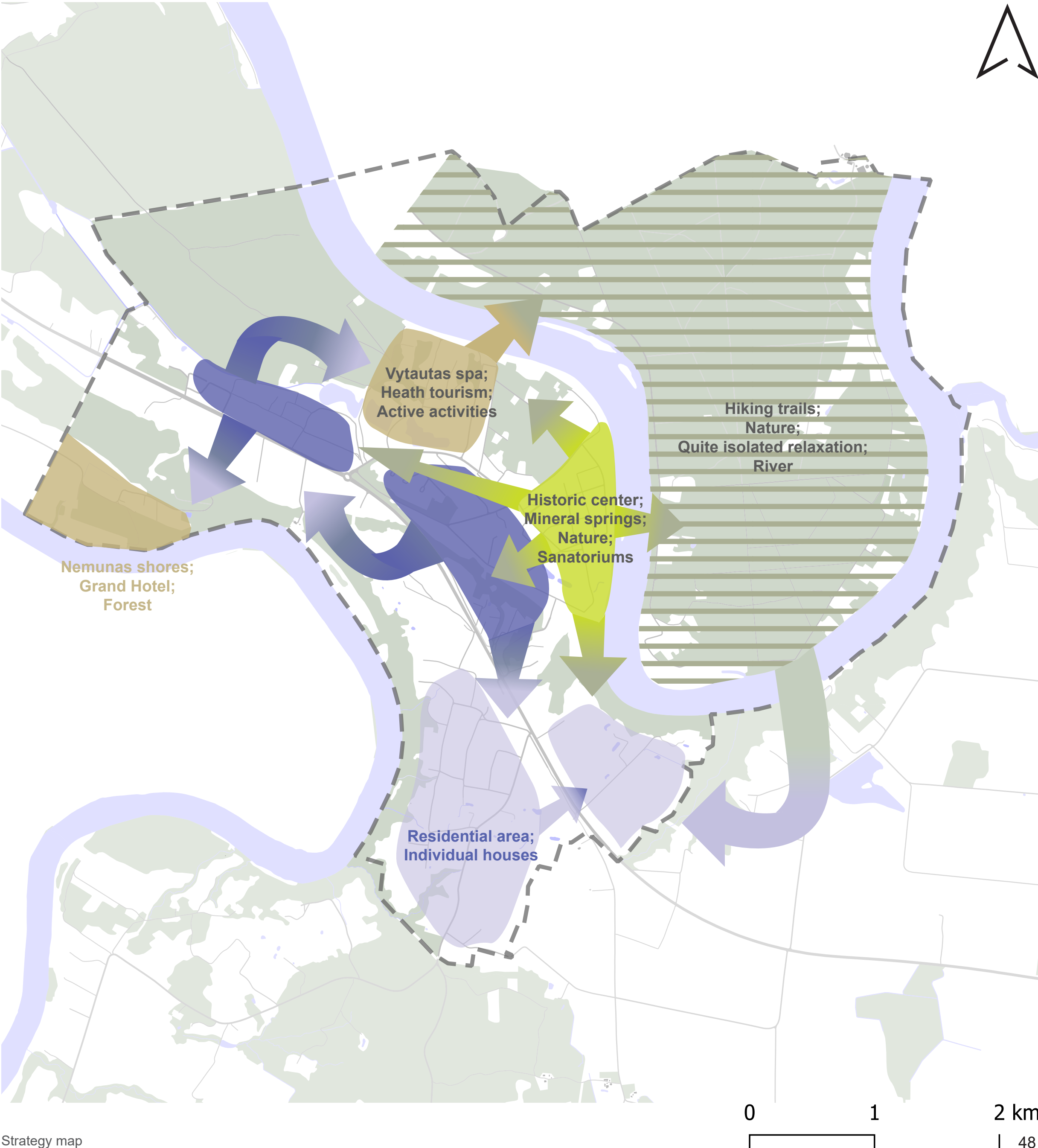
The additions that would help to reach common one are: entertainments, architecture elements, active tourism (hiking, river sports). According to Carmona et al. (2010) proposed people need to experience sense of identity through their living environments; then, a successful public space should be capable to support this demand. Punter (1991) suggested such factors as (I) physical settings, (II) activities and (III) meanings.

Montgomery (1998) made a similar study and categorized elements determining user's cognition of a place as (I) forms, (II) activities and (III) images. Visual elements are mainly the first accessible and perceptible features of the place to be realized. Then, activities, meanings and images features concern some non-visible perceptual factors behind the visual ones. They principally vary depending on our experiences in different urban spaces.



Descriptive components of place identity suggested by (a) Punter (1991), and (b) Montgomery (1998). Diagrams are adapted from Carmona et al. (2010).

- Border of Birštonas
- Street net
- Forest and parks
- Commercial and business local centers
- Residential local centers
- Recreational local centers
- Old town
- Recreational/commercial local center



Strategy map







# Combined strategy for masterplan

The combined strategy that will be adapted to the master plan consists of the key objectives that were proposed from the hypothesis. strategy is orientated towards the creation of a coherent town, that shares one identity. Different local centers preserve the area's authentic features while adapting joined identity elements.

Local centers adapt different functions and various elements that help to decentralize Birštonas and open up various parts of the town for tourism. The connectivity problem that Birštonas faces now is solved by implementing new connection routes and needed infrastructure. All of the mentioned features joined Birštonas as a coherent town.

To reach the set goal of minimalized seasonal dependency, a proposal to uplift the usage of the Nemunas River. This will enhance the existing identity and even more join the town. All year-round used activities such as water sports and travel, floating saunas, and public spaces will become attraction points even in the colder seasons.

- Border of Birštonas

Street net

Existing infrastructure

Proposed infrastructure links

Existing infrastructure inside the central area

Floating saunas and public spaces

River route
- Forest and parks

Commercial and business local centers

Residential zone

Recreational local centers

Old town

Adapting joindes identity
- New port system

Implementing features of center area

Implementing features of buisness area

Implementing features of green area

Implementing features of recreatonal area



Combined strategy map



# Community participation game

To encourage community participation in urban planning and strategy development a proposal is to create a card game that will help to determine the objects that form Birštonas identity that will later help to develop the coherent town. In the beginning, the community will help to determine how much of a value the object shown in the card has on a scale from 1-10.

It will later be visible on the top of the card and will show the strength of the particular card. The gameplay is similar to an old game called Fool (durak). The objective of the game is to shed all one's cards when there are no more cards left in the deck

Each person has 6 cards in their hands then the participant places cards on the table while the other one sitting clockwise has to defend himself. The game is finished when no more cards are left and the person who has the most on their hands is a loser.

Birštonas Red Cross Sanatorium

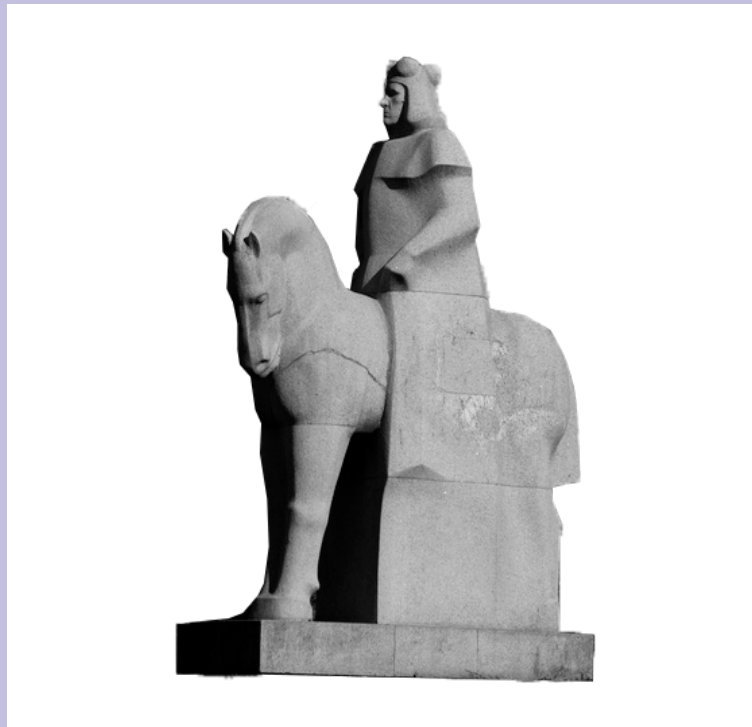
★★★★★★



Sanatorium project was made in 1930 by architect Roman Steikūnas. Compared to other Red Cross buildings, is indeed of exceptional volume. The clinic is of symmetrical plan, brick-built, with two floors and a dome (only one floor was built when the project was implemented), featuring a spacious vestibule in the interior, where several cash points and waiting rooms are installed.

Vytautas the Great statule

★★★★★



The monument to "Vytautas the Great" was carved from light pink Ukrainian granite by sculptor Gediminas Jokūbonis, with architect Vytautas Čekanauskas. The sculptor realized the thoughts of many residents - to "return" Vytautas with his horse to his hunting grounds. Jokūbonis' sculpture seems to witness the Grand Duke's enjoyment of the resort of Birštonas.

Birštonas Jazz Festival

★★★★★★



The Birštonas Jazz Festival is one of the oldest jazz festivals in Lithuania, presenting the widest range of Lithuanian jazz aspects, genres, and styles. Its extensive program is a true jazz marathon, typically featuring about 20 ensembles over a 3-day weekend. The stage of the Festival is open not only to mature, renowned jazzmen but also to young debutant musicians.

Vienkiemis Soviet Residential Architecture

★



After the independence, the possibility of constructing private houses was possible, so people rapidly started to build their homes. Typically the style did not follow the identity of Birštonas, but rather a trend of that time and available materials, such as silicate bricks. Also, some of the kolkhoz baroque that was a popular style during the 90s still can be found in Birštonas.

Mineral Water Vytautas

★★★★



The Birštonas mineral water products "Vytautas" is perhaps the most popular in Lithuania. This has been influenced by decades of consumption, the favorable mineral composition and an active advertising campaign. The manufacturers claim that "Vytautas" is the mineral water with the highest content of minerals in the Baltic countries, being the first and oldest Lithuanian mineral water, produced since 1924.



# DESIGN PHASE

Development of Birštonas under one  
joined identity



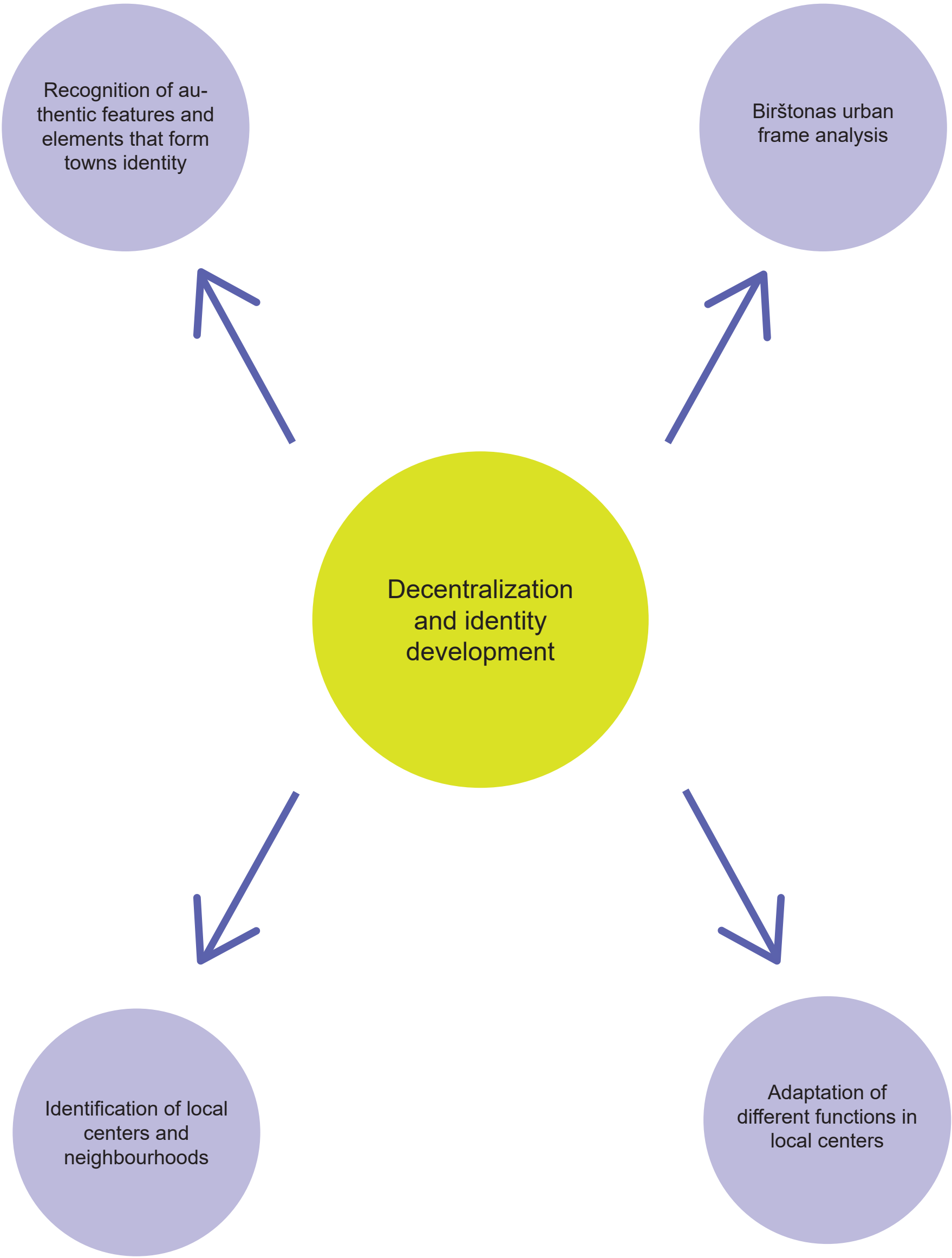


# Development of masterplan

The development of the masterplan for Birštonas consists of four main parts: the recognition of the authentic features and elements that form the town's identity; identification of local centers; Birštonas urban frame analysis and adaptation of different functions in local centers. The master plan, which is based on the analysis, focuses on the decentralization and the identity development of the resort.

Birštonas main problem is that it is focused on the central part of the town. The majority of the commerce, entertainment, and public places are located in the area, while the other parts of the town are quite abandoned. To minimize this issue, decentralization development is proposed. It focuses on the creation of local centers in other neighborhoods of the resort.

Alongside the problem of centralization, the identity-forming objects are also clustered around the center area of Birštonas. This creates an uncoherent town mental frame and further divides the town. So to create coherency, new identity-forming objects should be added to the frame of the town.





# Birštonas authentic features that form towns identity

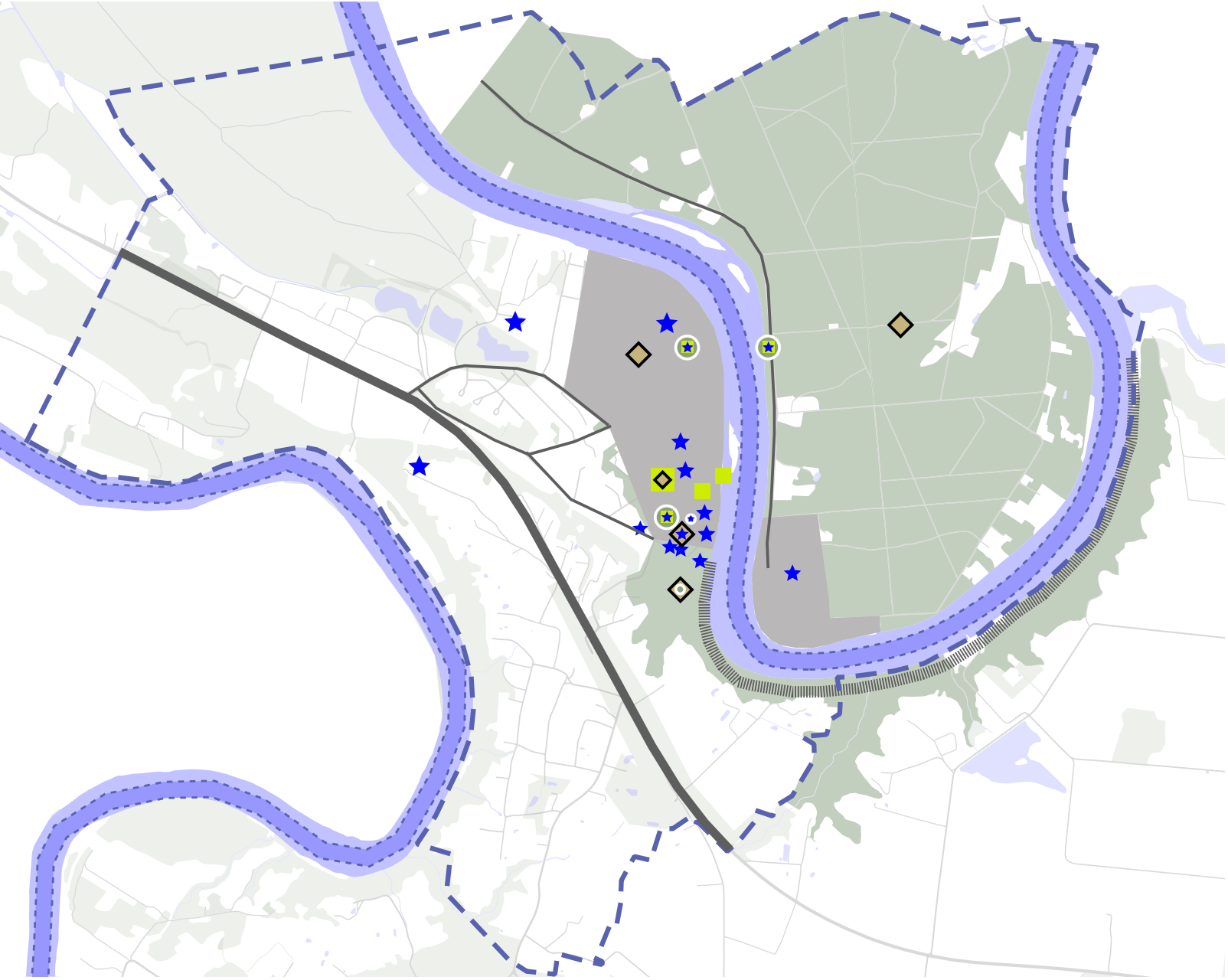
Symbols that could contibute in forming joined identity of Birštonas

- Natural symbols**

  - Territories
    - 1. Žvėrinčius forest
    - 2. Škėvonių forest
  - Linear
    - 1. Nemunas water routes
    - 2. Nemunas slopes in Škėvonių forest
  - Points
    - 1. Škėvonių outcrop
- Functional symbols**

  - Territories
    - 1. New residential center of Birštonas
    - 2. Vienkiemis village
- Conventional symbols**

  - Points
    - 1. Vienkiemis park
    - 2. Vienkiemis bakery



Birštonas existing identity map (page 30)

- Iconic symbols**
- Points
    - 1. Royal spa
    - 2. Didysis apuokas stop and sculpture
    - 3. Pedestrian bridge
    - 4. Tourist base
    - 5. Nemuno slėnis villa



Birštonas identity map with added possible identity forming elements



# Urban frame of Birštonas

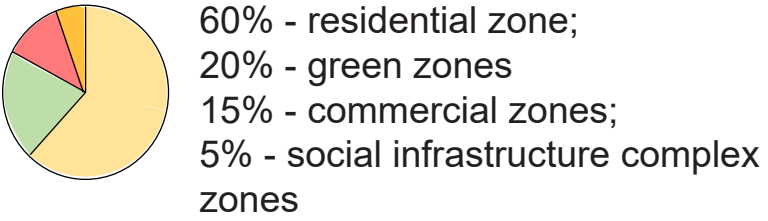
The urban framework is the main part of the spatial structure of the resort territory, including the territorial zones of the most active processes of mass activity of the population, the most intensively absorbed spaces. It is the main structure of the territory's functional structure, the system of supporting elements of the resort territory. The spatial structure distinguishes the most important axes of the urban framework.

The most important compositional axis of the urbanised part is at the spatial corridor of Jau-nimo, S. Darius and S. Girėnas streets. This spatial structure is formed at the intersection of the main streets of the square - the compositional centre. The spatial composition of the centre is anchored by the Church of St. Antanas Paduvietis - the complexes of sanatorium buildings on the banks of the Nemunas River, the park, and the predominantly low-rise residential buildings. Other centers - new center with soviet apartment buildings and social infrastructure and Vienkiemis village.

Main urban centers functional zoning pie chart according to the general plan of Birštonas



Secondary urban centers functional zoning pie chart according to the general plan of Birštonas



## Explanation of the codes of the priority zones:

Residential priority  
G1- Birštonas residential zone  
G2 - Vienkiemis village residential zone

Recreational function priority zones  
R1- Birštonas beach zones  
R2 - Švėkonių recreation complex  
R3 - Druskų forest (salt forest) park  
R4 - Recreational Birštonas zone

Conservation priority zones  
K1 - Birštonas town urban heritage reserve  
K2 - Škėvonys geomorphological reserve

Protection priority zones  
A1 - Žvėrinčiaus forest  
A2 - Druskų park (Salt park)  
A3 - Kernuvės

- Border of Birštonas
- Main urban axis (regional importance road)
- Municipality importance roads
- Local importance roads
- Recreational function priority zones
- Residential functional priority zones
- Protection priority zones
- Conservation priority zones



Birštonas urban frame analysis map



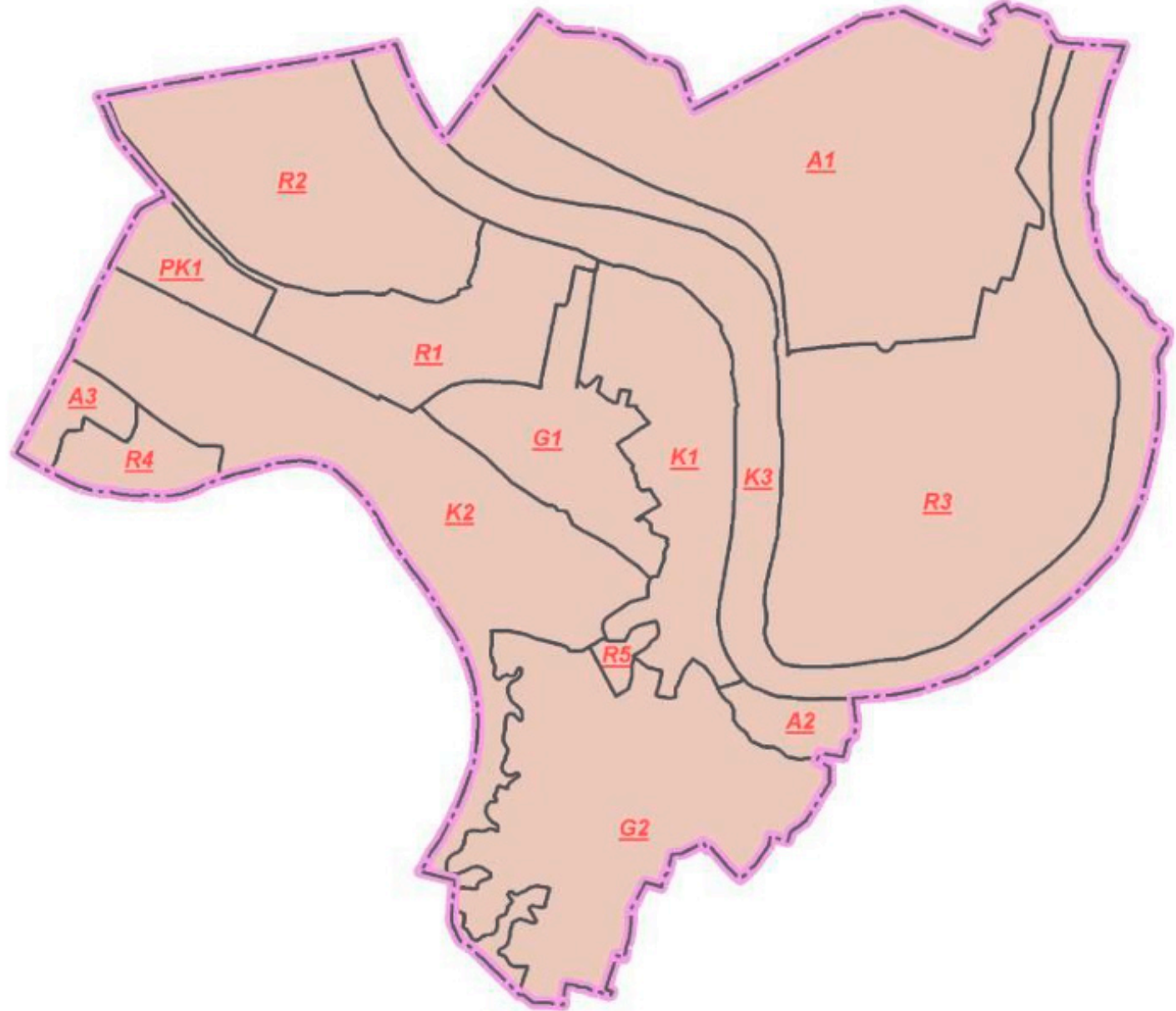
# Dividing Birštonas into local centers — neighbourhoods

- A1 Alksniakiemis protection zone
- A2 Širvinių protection zone
- A3 Škėvonių protection zone
- G1 Residential - mixed use zone
- G2 Residential zone
- K1 Birštonas urban reserve
- K2 Škėvonių geomorfological reserve
- K3 Nemunas loops hydrographical reserve
- PK1 Birštonas communal area
- R1 Druskupis recreational - entertainment zone
- R2 Žvėrinčius recreational zone
- R3 Alksniakiemis recreational zone
- R4 Škėvonių recreational zone
- R5 Birštonas recreational zone

Functional priority zones from the Birštonas general plan

The Birštonas functional priority zones drawing that is presented in the "Ajustements of the Birštonas resort master plan" (2019) shows how the town can be divided into different parts. The zones include the natural protection and reserve territories as well as the residential and mixed-use zones. According to the functional priority zones drawing the new proposed divisions of the resort are proposed. They are based on the New Urbanism ideas and divide the town into three main zones: neighborhoods, specialized districts, and natural frame territories.

- Neighbourhoods
- Specialized districts
- Nature frame territories



Proposed Birštonas functional priority zones

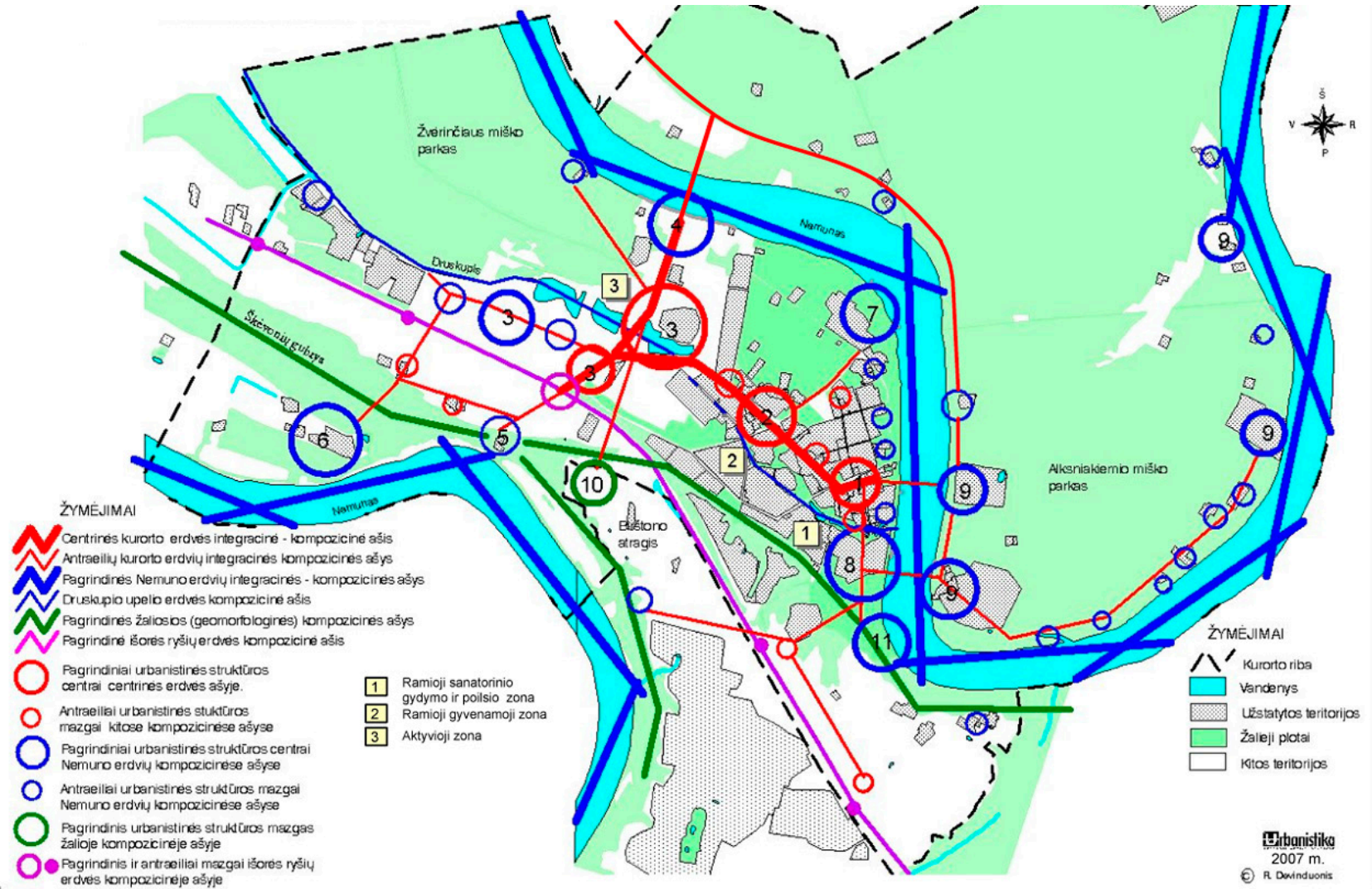


# Proposed spatial composition in Birštonas

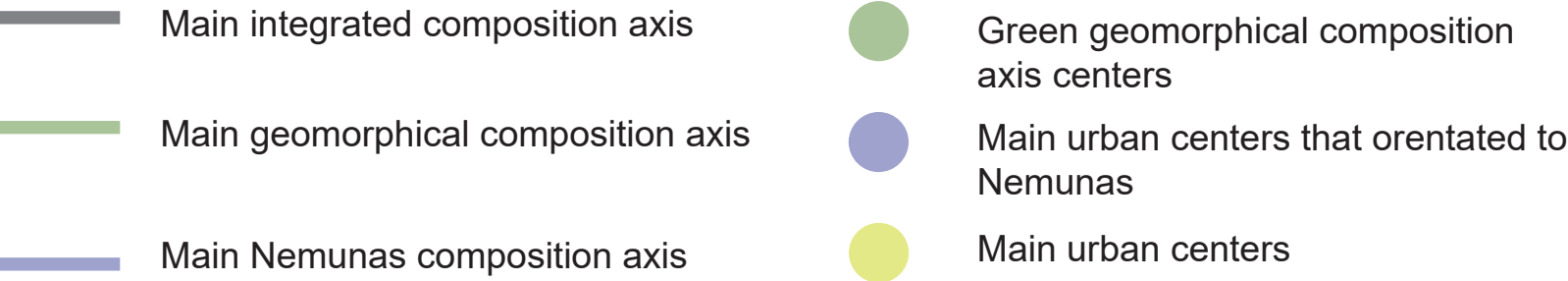
According to the master plan of the Birštonas and its spatial composition development scheme it is proposed to follow the concept of spatial differentiation of the resort area according to the criteria of the activity of the processes that will take place there (and thus noise): from the quiet (1) historically established sanatorium treatment zone

and the developing zone of quiet recreation and meditative-spiritual character and the new quiet residential zone in the south, to the intermediate quiet (2) residential zone with relatively active axes in the south, and the active (3) zone with particularly active wellness, entertainment and recreational facilities in the north.

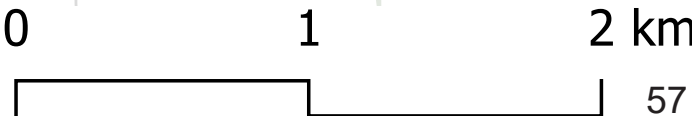
For the proposed spatial composition development scheme, the one proposal in the master plan is used as a base point. The proposal focused on the south side of the Birštonas to create a coherent town structure and develop a local center in that area.



Perspective spatial composition of Birštonas from Birštonas masterplan



Combined strategy map





# Special plan

## Decentralization and identity development

● Points that mark identity forming objects

1. Royal Spa Residence

2. Škėvonių outcrop

3. Birštonas tower

4. Pedestrian bridge

5. Vienkiemis bakery

6. Vienkiemis park

7. Vytautas hill

8. "Tulpė" sanatorium

9. "Versmė" sanatorium

10. Red cross mud treatment building

11. Kurhauz
12. Šv. Antano Pūduviečio church

13. Town square

14. Olympic rowing center

15. Birštonas port

16. Birštonas museum

17. Birštonas central town park

18. Vytautas spa

19. Kunigo spring

20. Birštonas tourist base

21. Nemuno slėnis villa

- Border of Birštonas

Street net

Borders of neighborhoods and functional priority zones

Buildings

### Existing functional zones

- Main centre area

Intensive built-up residential area

Low density residential zone

Social infrastructure complex zones

The area of specialised complexes - intensive recreation

Mixed use zone
- Common-use areas, green areas

Conservation areas

Agriculture and specialised farms area

Wooded and forested area

Waters

### Proposed functional zones

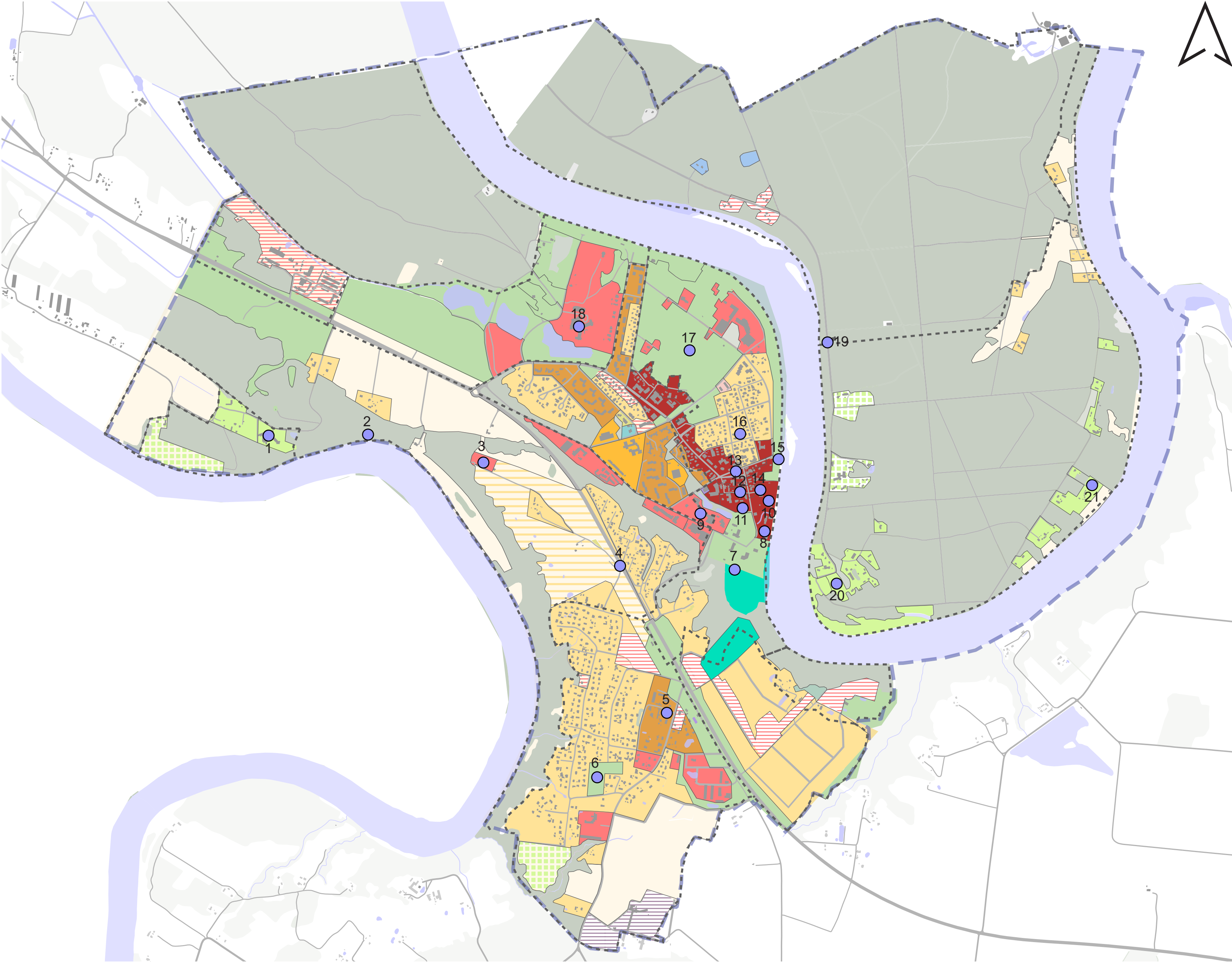
- The area of specialised complexes - intensive recreation

Low density residential zone

Common-use areas, green areas

Mixed use zone

Industrial zone



Birštonas special plan



# Functional zoning in selected pilot area

The functional zoning in the zoom-in area was based on the existing Birštonas general plan and the proposed solutions in the special plan of decentralization and identity development. The west side alongside the 3315 road consists of residential single-family houses, a little zone of the existing commercial and mixed-use territory, and the green zones of the Škėvonių forest and Vienkiemis park.

A proposal is to change the zoning of the territories alongside the wood production center and undeveloped territory on the south side of the area into mixed-use zones. The area between the Škėvonių forest changed into the area of specialized intensive recreation complexes. The east side of the 3315 road is proposed to develop in an agricultural direction.

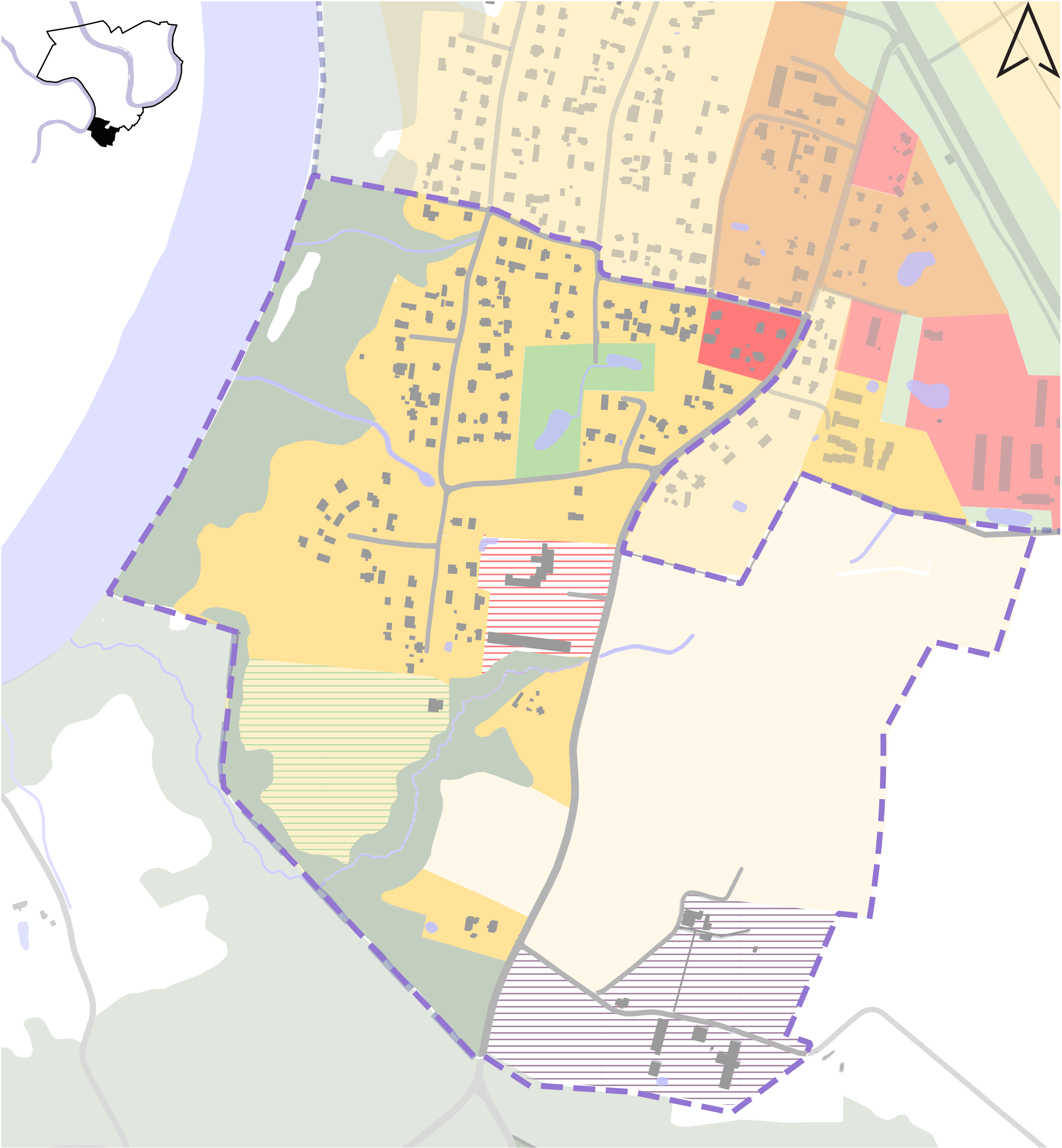
The municipality wants to change the agricultural fields into residential quarters, but a proposal is to leave them and use them for the benefit of the community. The south side of this territory is used for industrial purposes - distribution of vegetables and fruits, wood production, and waste management.

## Existing functional zones

- Low density residential zone
- Mixed use zone
- Agriculture and specialised farms area
- Common-use areas, green areas
- Wooded and forested area
- Waters

## Proposed functional zones

- Mixed use zone
- Industrial zone
- The area of specialised complexes - intensive recreation





# Selected territory

The chosen zoom-in territory is on the south side of the Birštonas, Vienkiemis village territory that is called Kernuvės. This is quite an underdeveloped territory that is occupied by single-family farmhouses, fields used for agriculture, and protected natural elements such as Škėvonių forest and Nemunas slopes.

The territory has a park that lacks social infrastructure elements. The streets only focus on car traffic, there is a lack of pedestrian infrastructure and attention to the disabled. There are almost no public places or commercial establishments instead, the area has an automobile junkyard, a wood production center, a waste management center, solar panels field.



Birštonas wood production station



Automobile junkyard



Street view in Vienkiemis



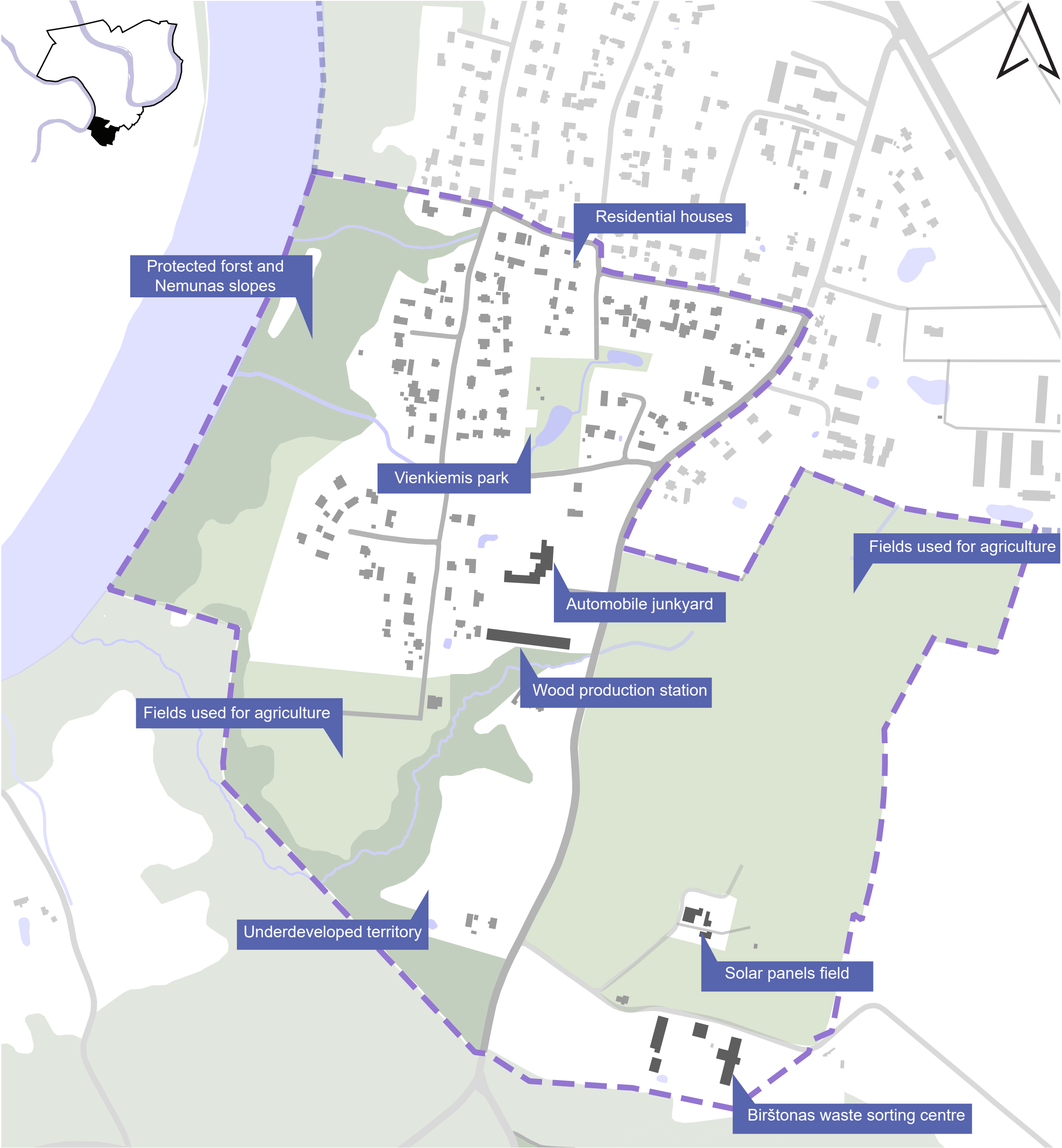
Street view in Vienkiemis



Vienkiemis park



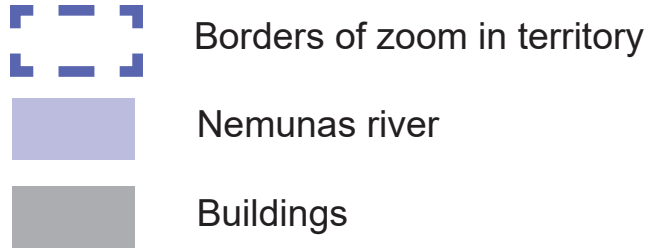
Waste sorting center



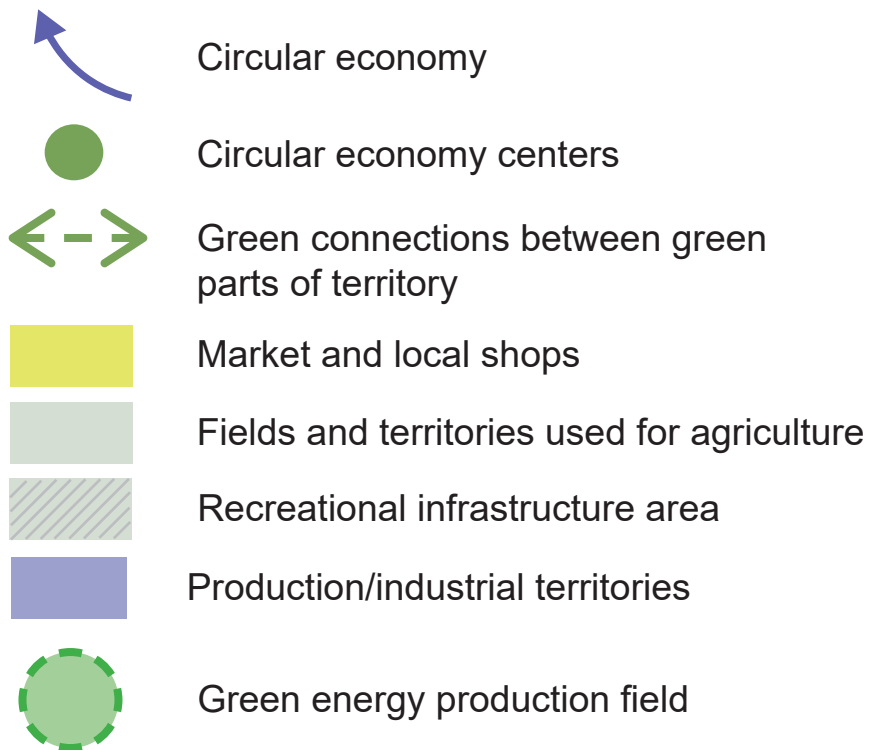
Zoom in territory map



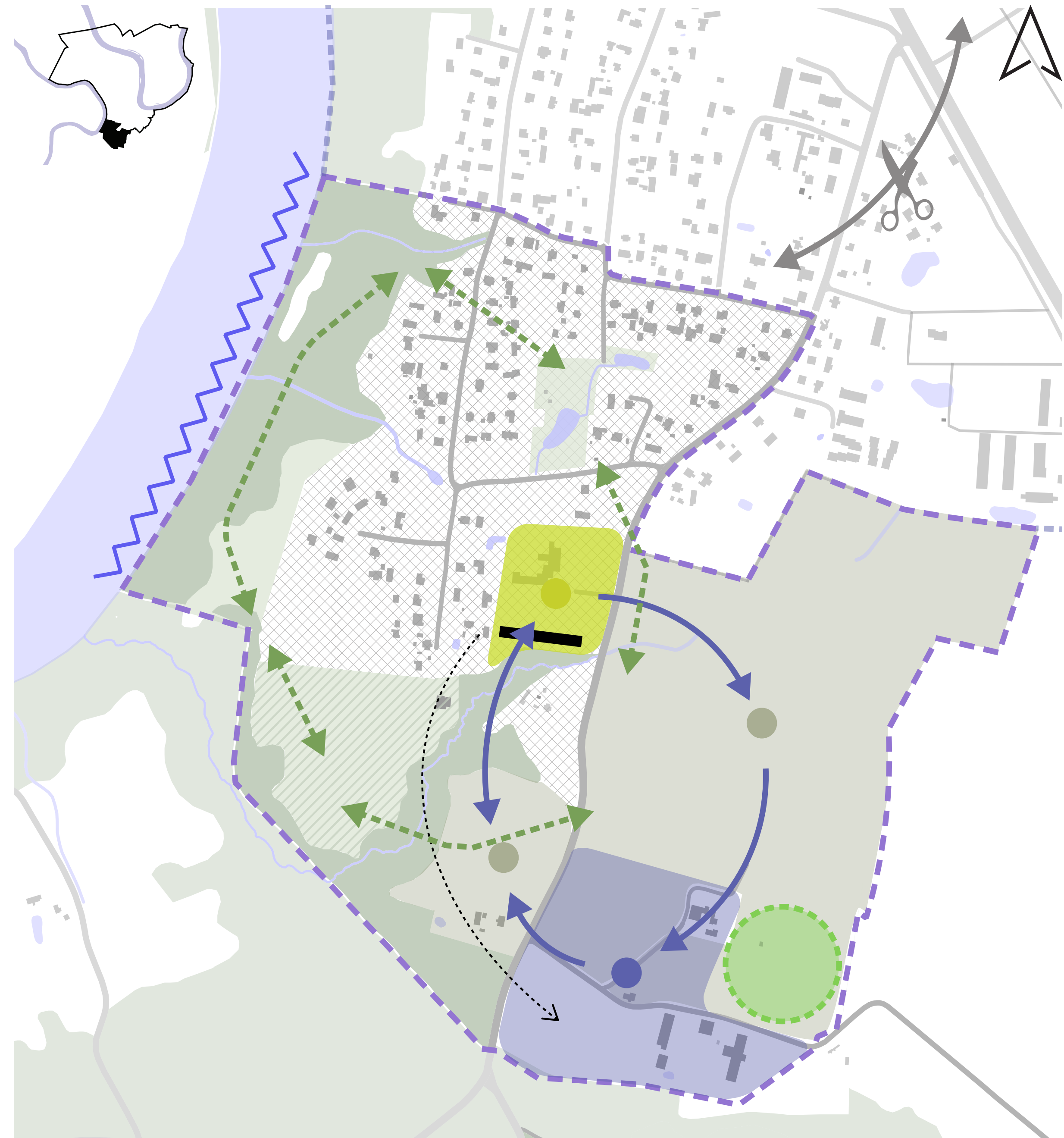
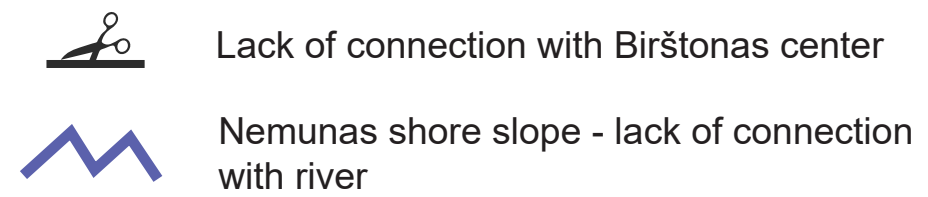
# Opportunities and constraints in selected pilot area



## Opportunities



## Constrains



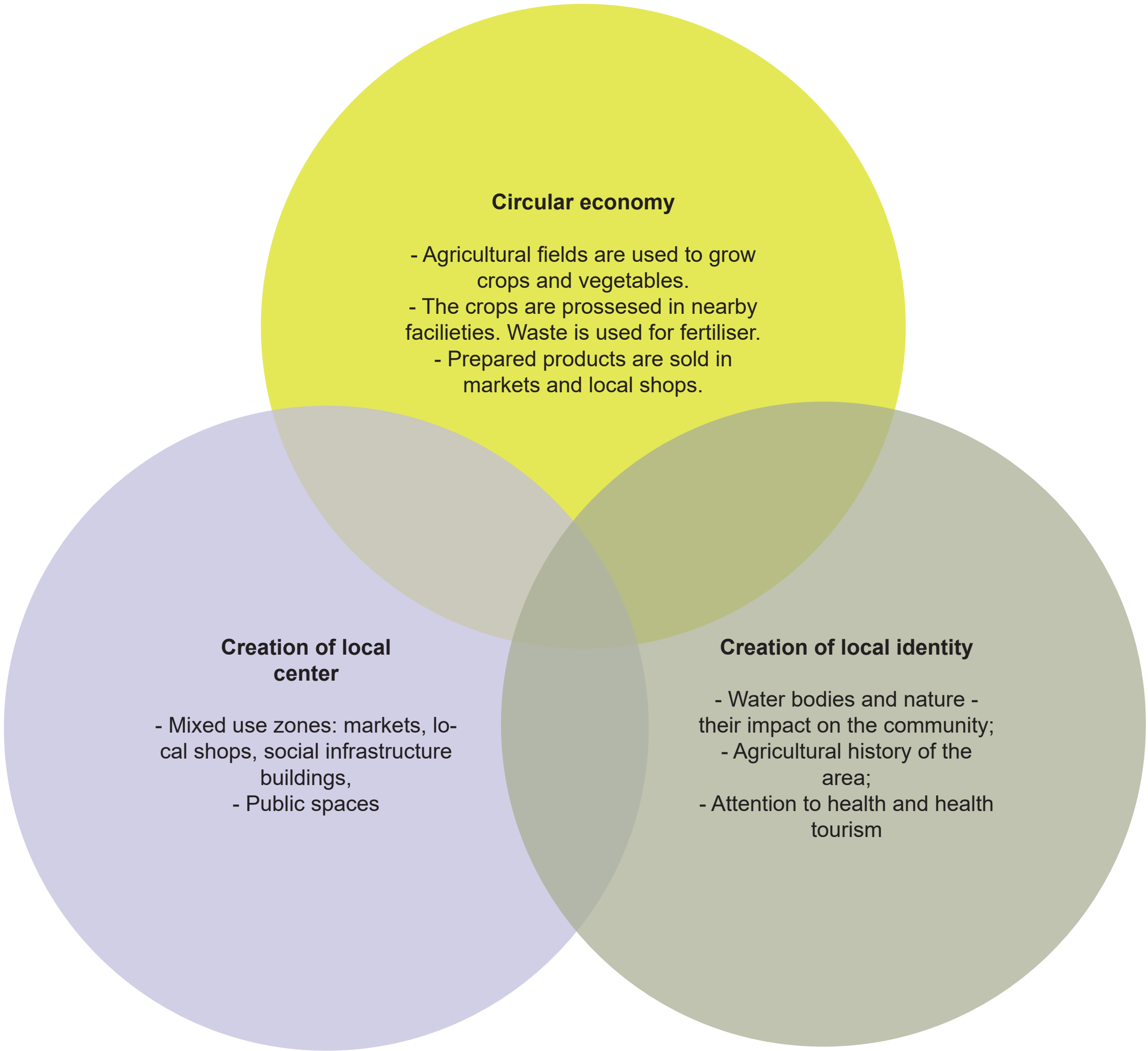


# Strategies for selected pilot area

Development of selected pilot area consist of three strategies: circular economy, creation of local center and creation of local identity. The circular economy in this particular case, can be implemented to prioritize closed-loop systems, optimizing resource use and minimizing waste. Local sourcing supports regional economies and reduces carbon emissions from transportation. Regenerative practices enhance ecosystem health, while community engagement fosters ownership and promotes sustainable living. Together, these principles create resilient, inclusive, and sustainable cities where urban agriculture plays a central role in fostering environmental and social well-being while creating a local self sustaining urban center.

Creation of local centers typically includes amenities such as shops, markets, restaurants, recreational facilities, and community centers. The purpose of a local center is to provide residents with convenient access to essential goods and services, promote social interaction, and enhance the overall quality of life within the neighborhood. It serves as a walkable destination where people can meet, shop, socialize, and participate in community events, contributing to a vibrant and sustainable urban environment.

Local identity is a unique characteristics, values, and cultural traits that distinguish one place or community from another. It encompasses the collective experiences, traditions, customs, and heritage of a specific locality, shaping its distinct identity. Local identity often fosters a sense of belonging and pride among residents, as well as strengthens community. In the pilot area the identity is the residential function and agricultural practises that are promoted and enhanced.

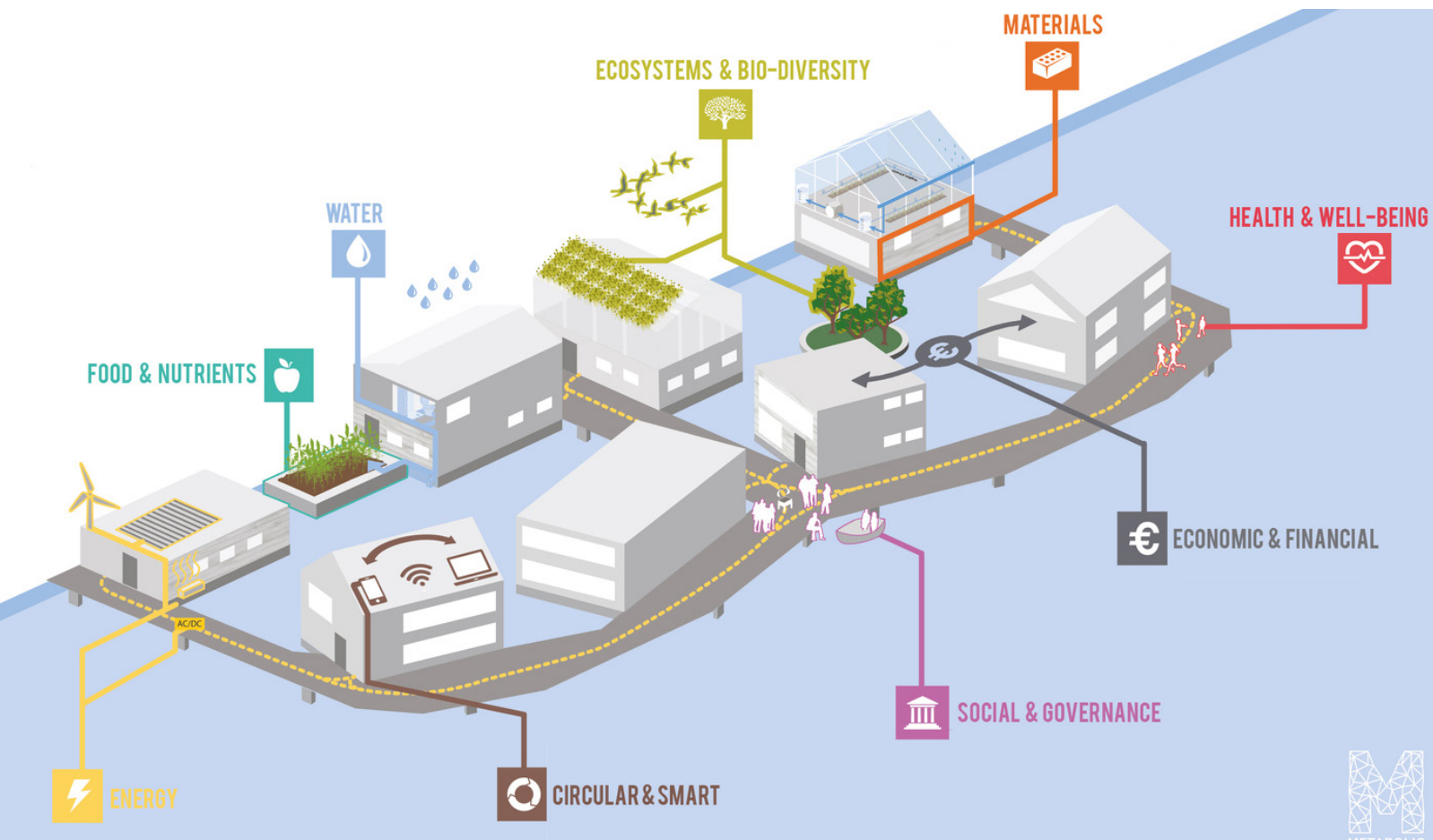




# Examples of proposed strategies

**Circular economy.**  
**Schoonschip by pace&Matter**  
Home to more than 100 residents, the project features decentralized and sustainable energy, water and waste systems. A smart grid of solar panels helps residents trade energy among themselves while water treatment technologies retrieve energy and nutrients from wastewater.

On a small scale, Schoonschip explores and applies innovative solutions to some of the most pressing challenges brought forth by climate change. Schoonschip's residents live in highly eco-efficient buildings that were remotely manufactured, and share everything from electric cars and cargo bikes to the clean energy they generate on the houseboat roofs.



Schoonschip by Space&Matter. Image Courtesy of Space & Matter



Schoonschip by Space&Matter. Image © Isabel Nabuurs

**Local centers. BRANCH Yokohama Nanbu Market by STGK.**  
Branch Yokohama Nanbu Market opened at the location where it used to be Yokohama City Nanbu central wholesale market. With the concept of a “living market for food – a hub for the interaction of people and the community through food”, the market houses some

30 tenants, including fish and vegetable speciality stores, “food outlet stores” selling local groceries at reasonable prices, hands-on facilities, an open café and a communal space. The location is hoped to attract people to the Kanazawa area. Materials used in the exterior to concrete, wooden pallets, and paint that would also have been used in the old market.



BRANCH Yokohama Nanbu Market. Photo: Takahiro Shimizu



BRANCH Yokohama Nanbu Market. Photo: Takahiro Shimizu

**Creation of local identity.**  
**The Unbound by Felixx.**  
The Unbound, an imaginative design for a tourist resort based on being with the landscape, observing nature, and participating in food production. Despite the non-site-specific design language that unnecessarily neglects this area's history as a characteristic dutch

polder, the design for this high-end tourist resort adds to the bigger picture of a new, more natural green recreational wedge in the city of Amsterdam that brings tourists and inhabitants closer to the landscape and nature. Resort guests are invited to take part in the outside world, by which it gives new meaning to recreation in a city like Amsterdam.



The Unbound, Amsterdam, The Netherlands



The Unbound, Amsterdam, The Netherlands



# Masterplan of the pilot area

The main idea for the areas masterplan is to develop this distant and quite underdeveloped area of Birštonas into local center. The identity of this place mostly focused on the existing single family house residential function, agriculture and lush forest on the Nemunas slopes. The main focus points are the created circular economy

which is based on agriculture, created attraction points for the tourist, implementation of recreational system in the forests and lastly the creation of local center where all the goods can be sold by the locals. The center also consists of the bakery, cafe, second hand shops, market, community center and public places.

- Existing buildings
- New added buildings
- Greenery
- Agriculture fields
- Water bodies
- Recreational paths





# Masterplan of the pilot area

The developed pilot area can be divided into two main parts, agricultural and mixed-use. The first one is developed on the right side of the 3315 road. Existing fields are joined under one system with expanded solar panels field, added vegetable and fruit tree gardens. They are open to the community, where the residents can go and grow, pick, and work in there.

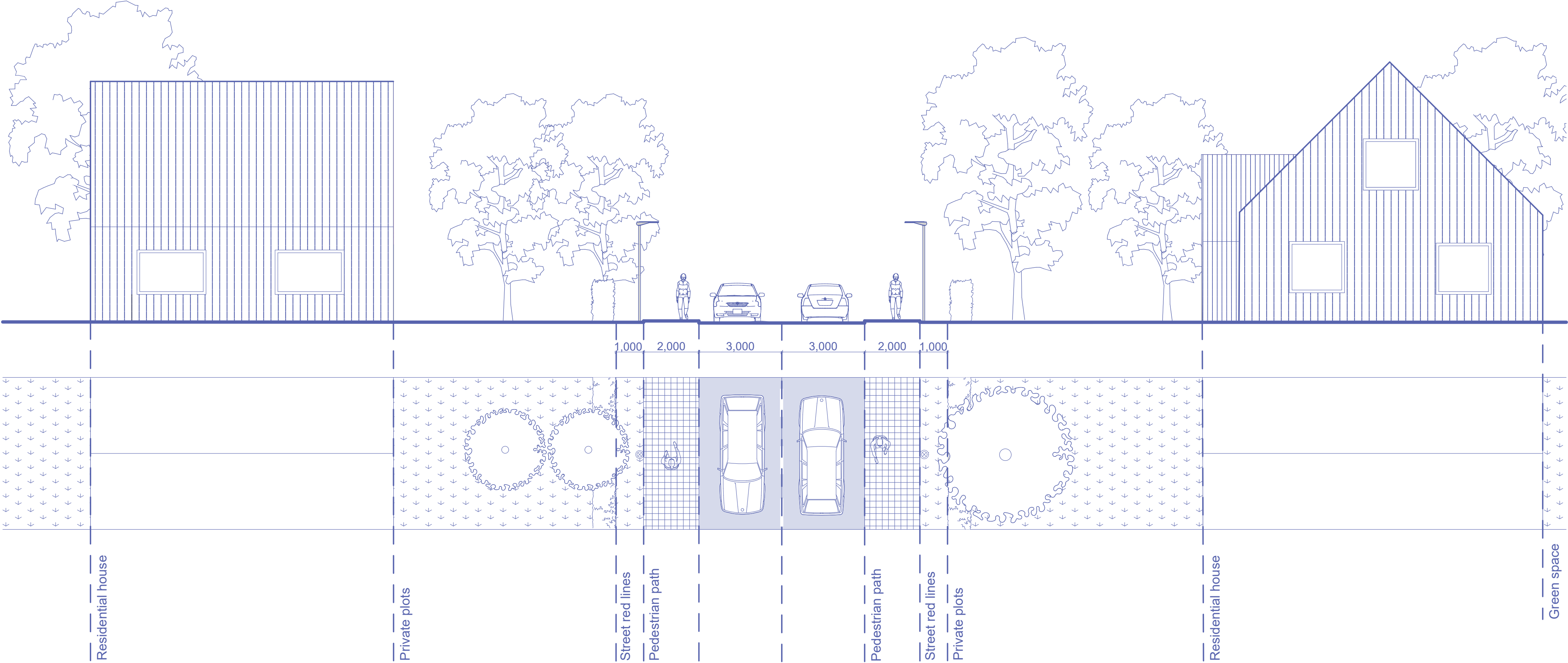
The left side of the area is oriented to the mixed-use, residential, and recreations functions. Expanded residential areas, and added new streets and public places contribute to the community and its growth. Added paths and attraction points will lure more tourists to the area. Reused industrial buildings are transformed into community needs facilities.

- Existing buildings
- New added buildings
- Greenery
- Agriculture fields
- Water bodies
- Recreational paths





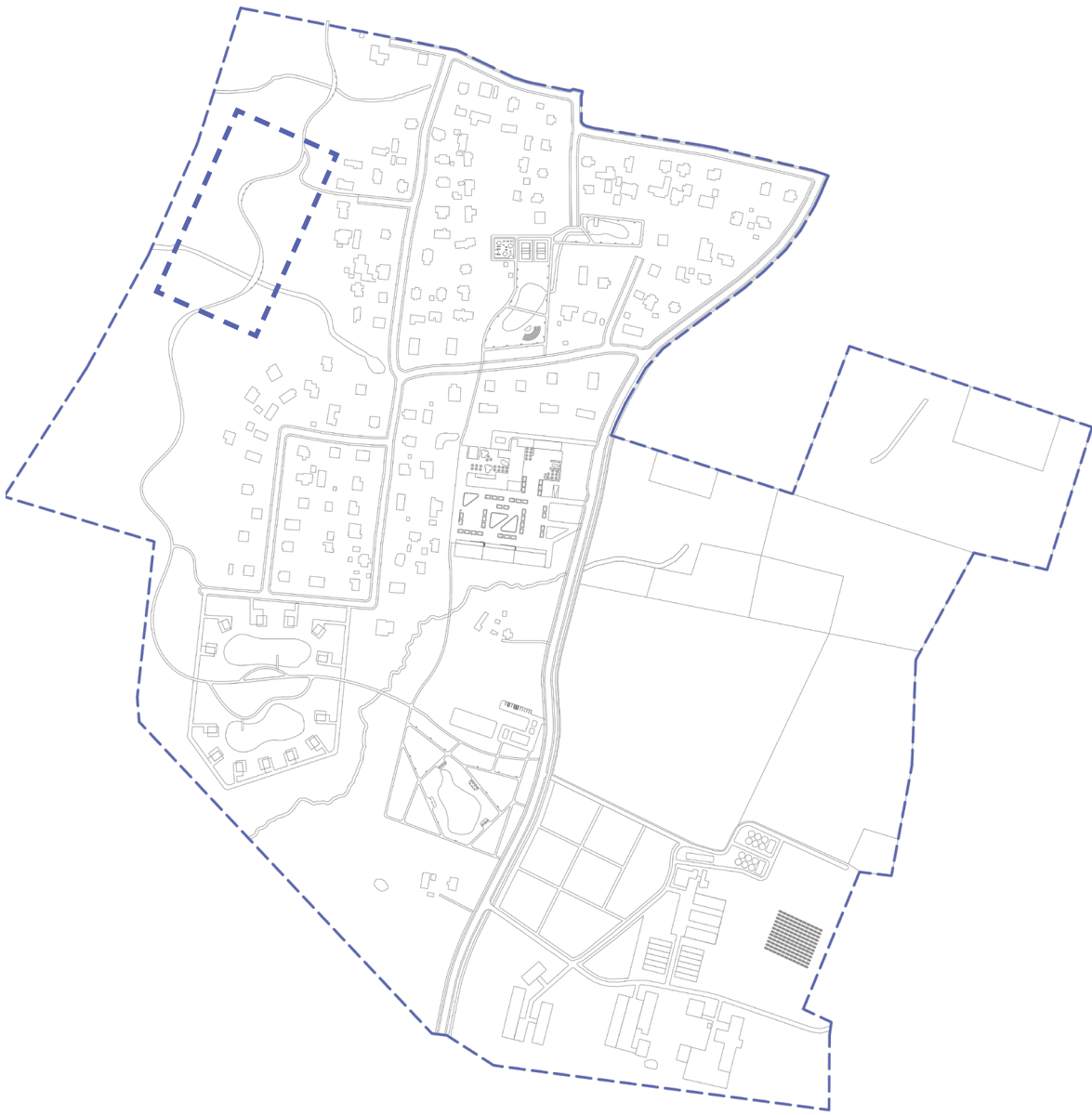
# Section of newly formed street and residential houses





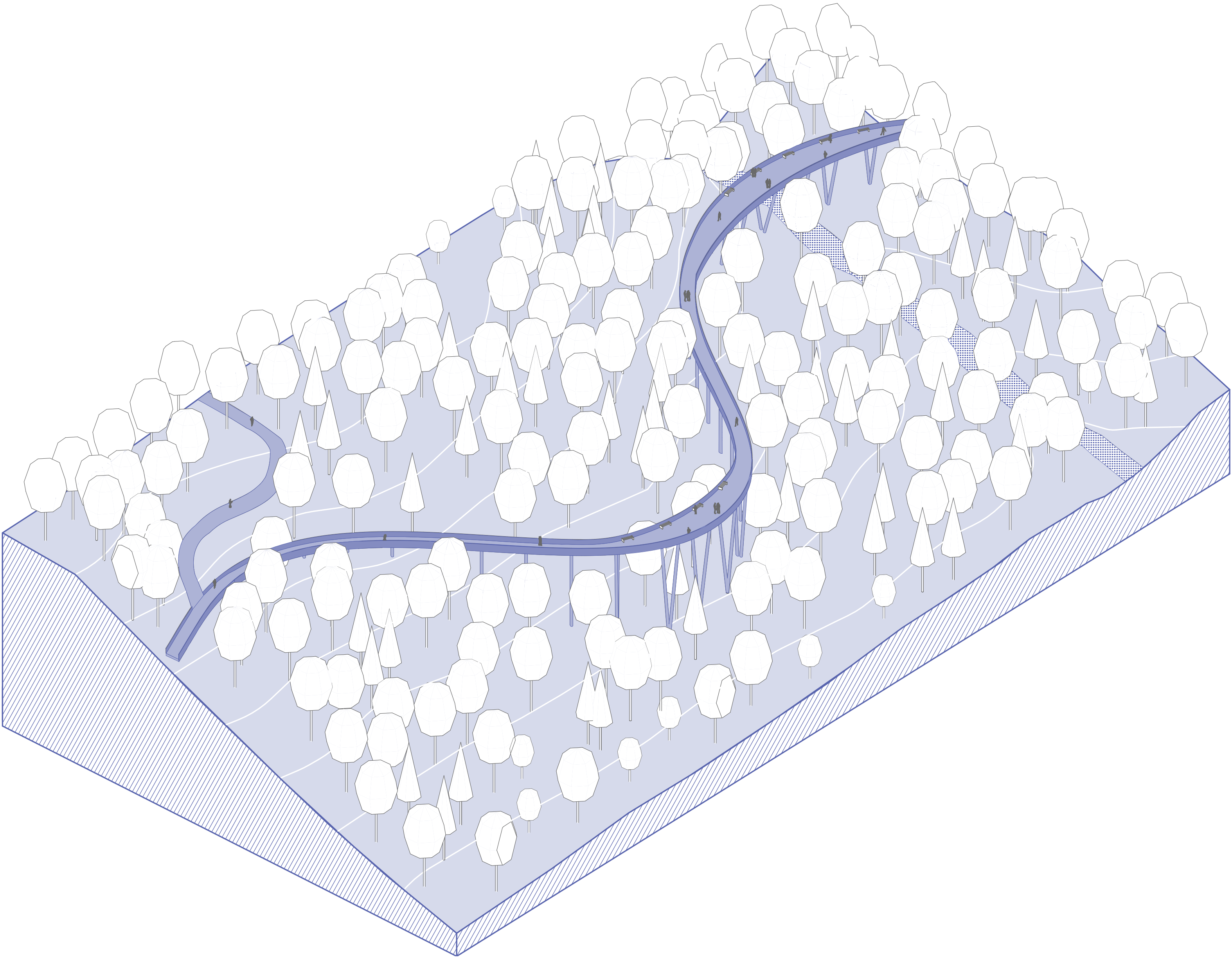
# Axonometry of lifted forest path and observation decks

The hiking trail that loops around the Švėkonių forest is not only the attraction of this pilot area but also a connection with other parts of Birštonas that would attract pedestrians and cyclists to this area. The path is lifted and it creates an observation and education trail through the Nemunas slopes from where the distinguished views open up.



Area of the axonometry

This path would not only attract the visitors but also educate them about the flora and fauna of the forest, the Nemunas its slopes, and their formation. The train has wider parts that become observation decks. There people can sit and enjoy the marvelous views.

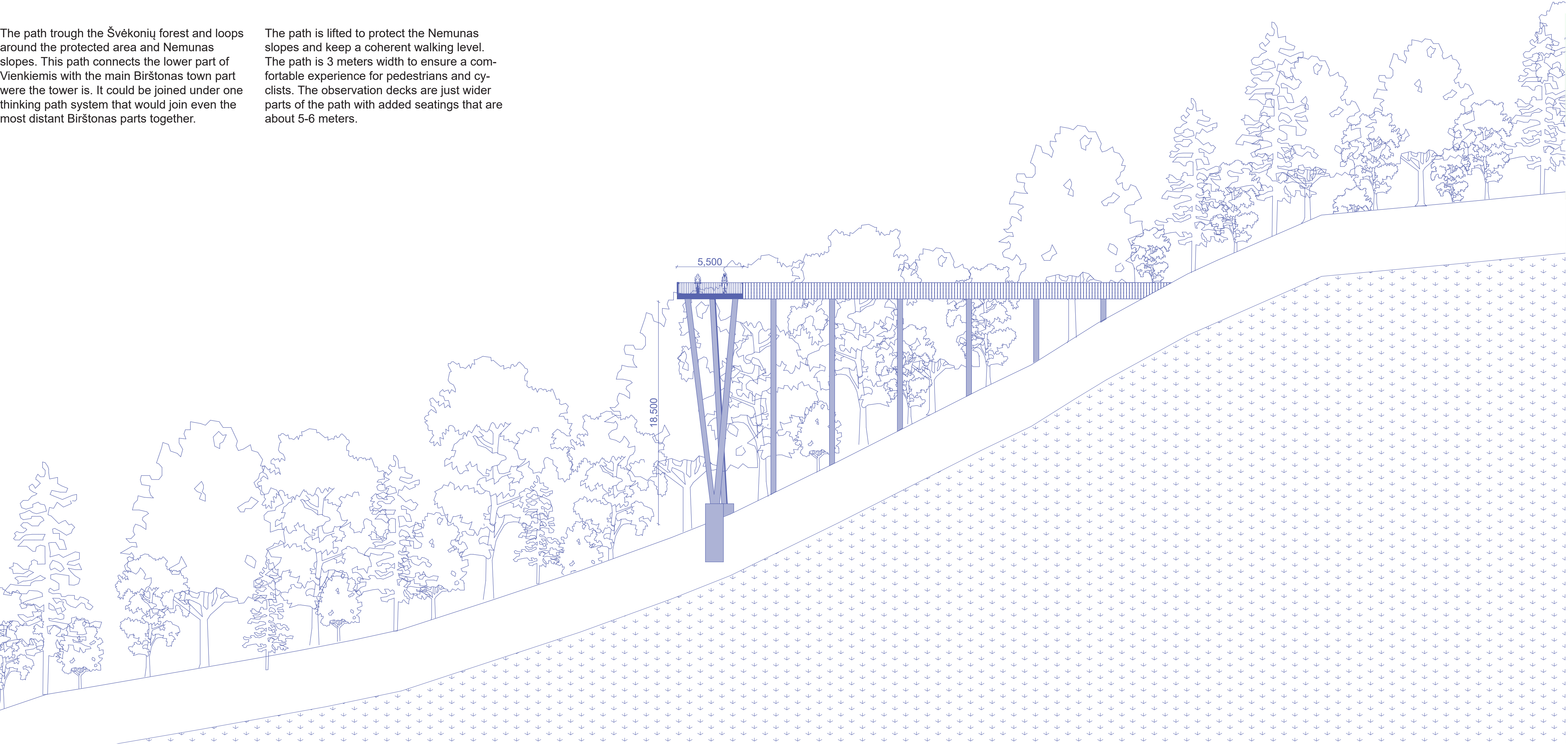




# Section of the lifted forest path and observation deck

The path trough the Švėkonių forest and loops around the protected area and Nemunas slopes. This path connects the lower part of Vienkiemis with the main Birštonas town part were the tower is. It could be joined under one thinking path system that would join even the most distant Birštonas parts together.

The path is lifted to protect the Nemunas slopes and keep a coherent walking level. The path is 3 meters width to ensure a comfortable experience for pedestrians and cyclists. The observation decks are just wider parts of the path with added seatings that are about 5-6 meters.





# Perspective of the path

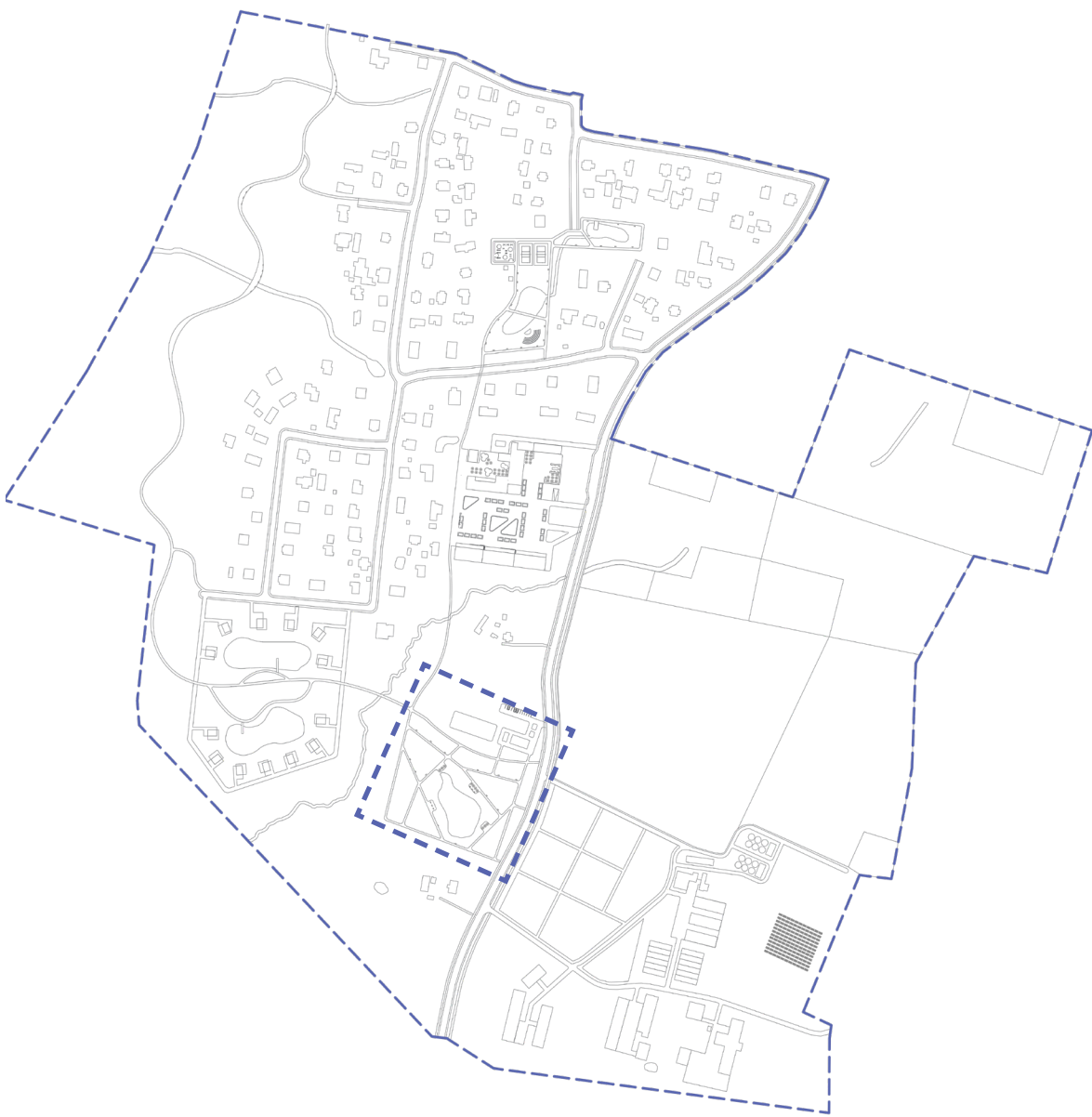




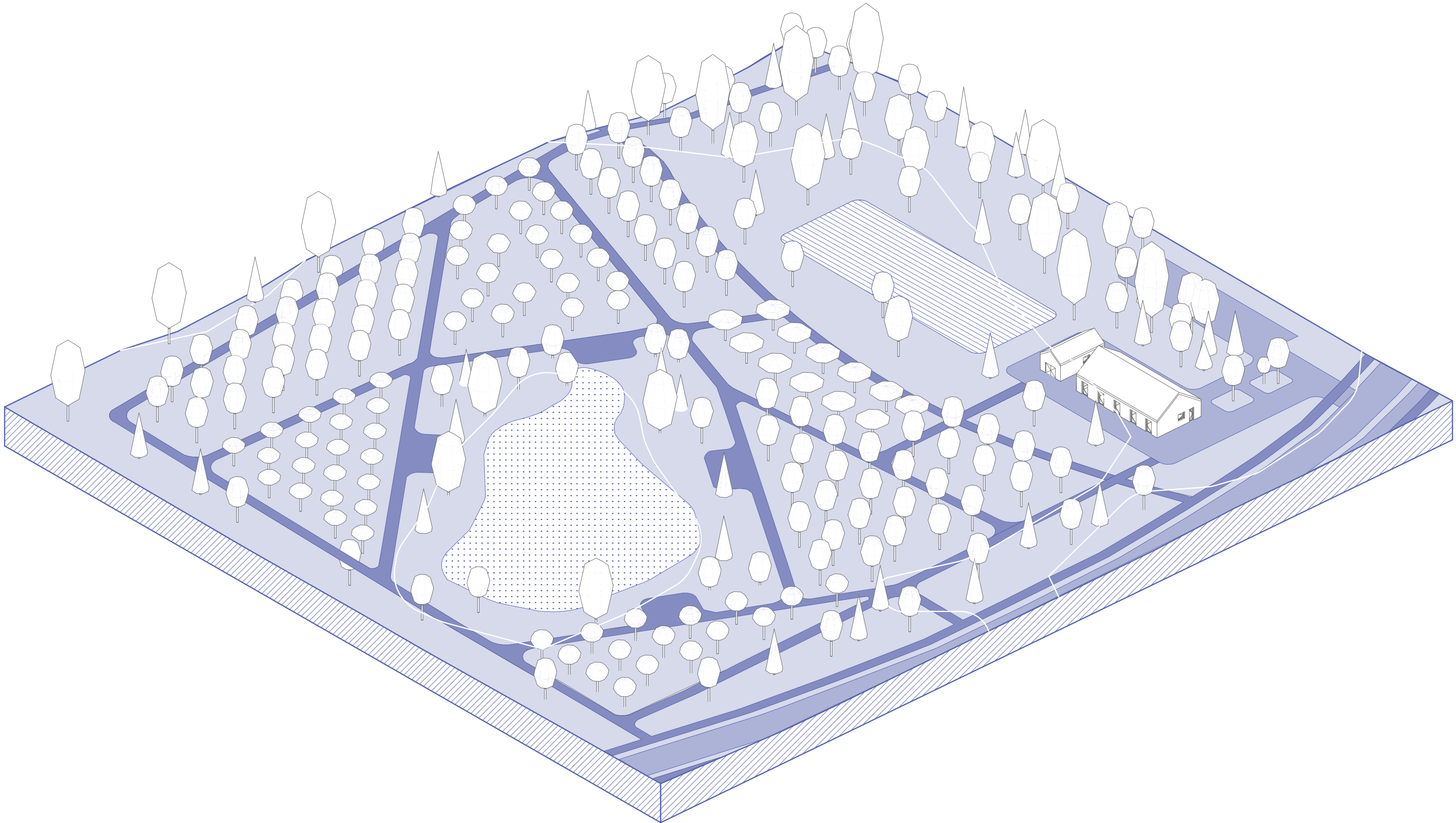
# Axonometry of fruit garden and tree nursery

The “Fruit Tree Garden-Park” aims to revitalize an underdeveloped greenery and wetland area by transforming it into a vibrant community space. By planting a variety of fruit trees and creating recreational spaces, the project seeks to provide a beautiful, productive, and accessible green space for local residents. Sustainable food production will be achieved by establishing a fruit orchard that offers free, fresh fruit to the community. Community engagement will be fostered through the creation of welcoming spaces

for residents to gather, picnic, and enjoy nature. The project will provide numerous benefits, including environmental impacts such as improved water quality, increased biodiversity, and enhanced local climate regulation through tree planting. Community well-being will be enhanced by providing access to fresh, organic fruit, a safe and welcoming green space for recreation and socialization, and opportunities for outdoor learning and community bonding.

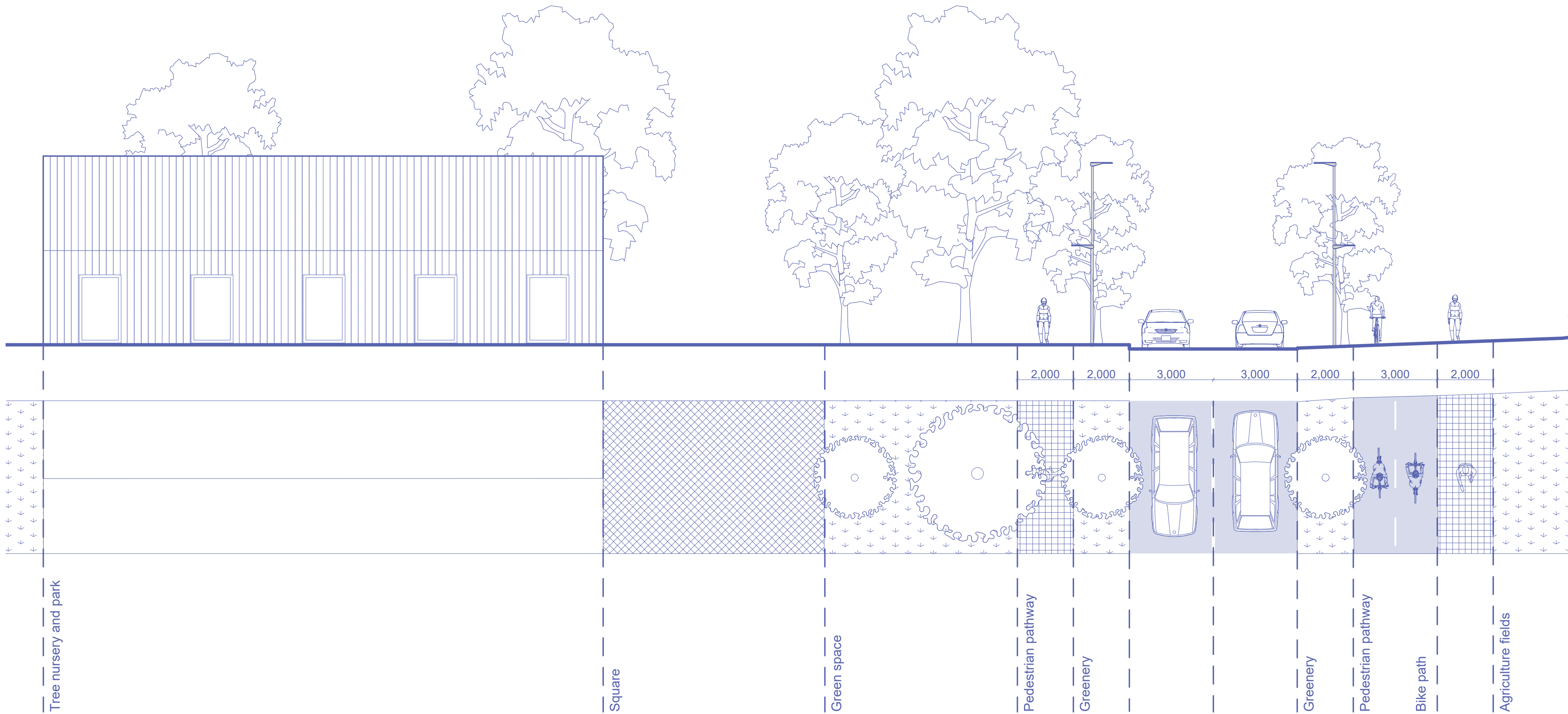


Area of the axonometry





# Section of 3315 road near tree nursery



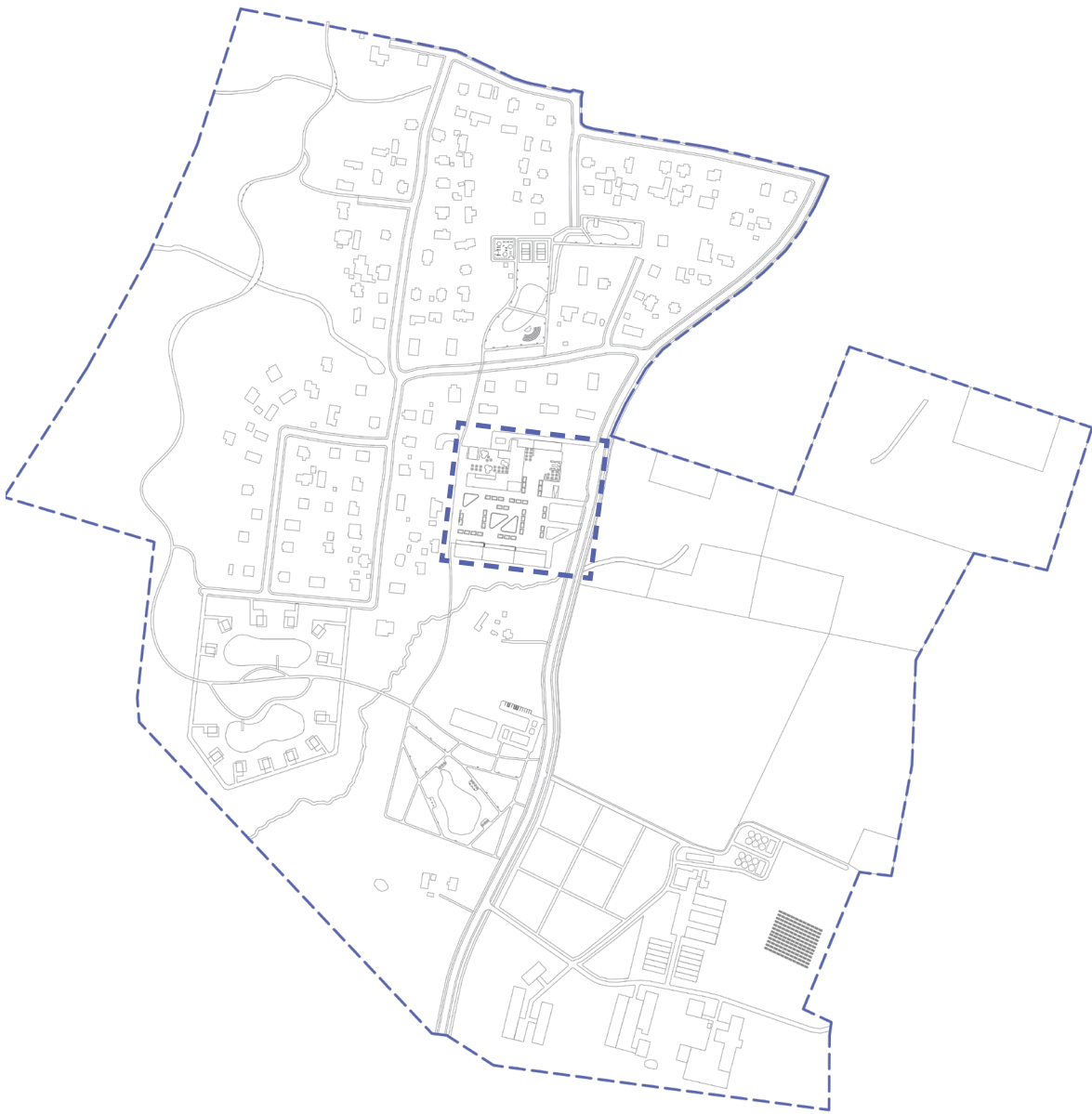






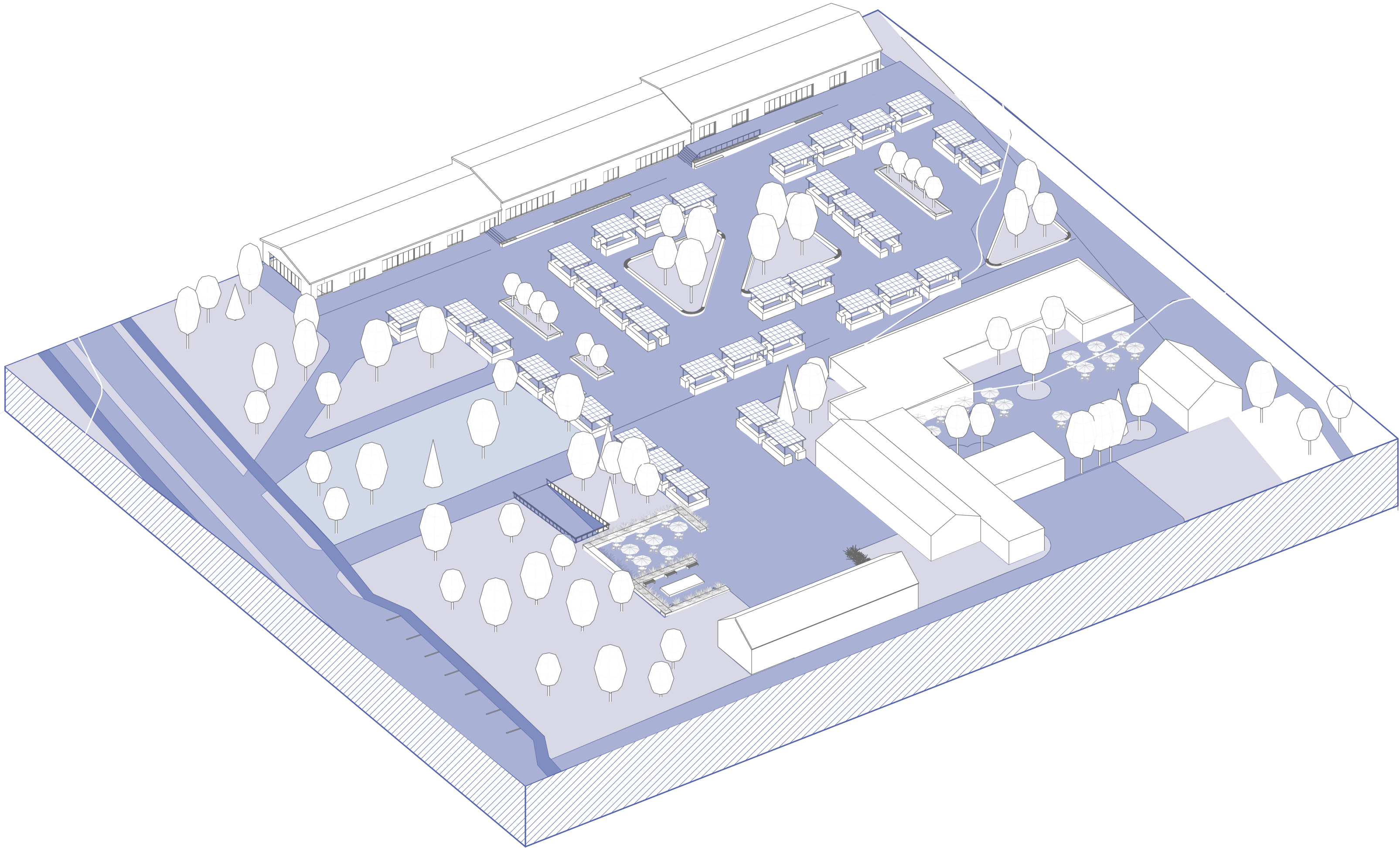
# Axonometry of the market

The main market pavilion is transformed from the wood production center. The building volume is preserved as it already exist, just the windows, entrances, materials of the facades and floor plan is rearranged. Near the market small pavilions are distributed trough out the area, where residents can come and sell their goods.



Area of the axonometry

The market paths loops around the green areas this way creating shade and minimizing hot island patches. These green areas also could be used as a picnic and relaxation spot for the visitors. The market square connects with the community building and local store, bakery and cafe, this way creating one local center in past industrial territory.





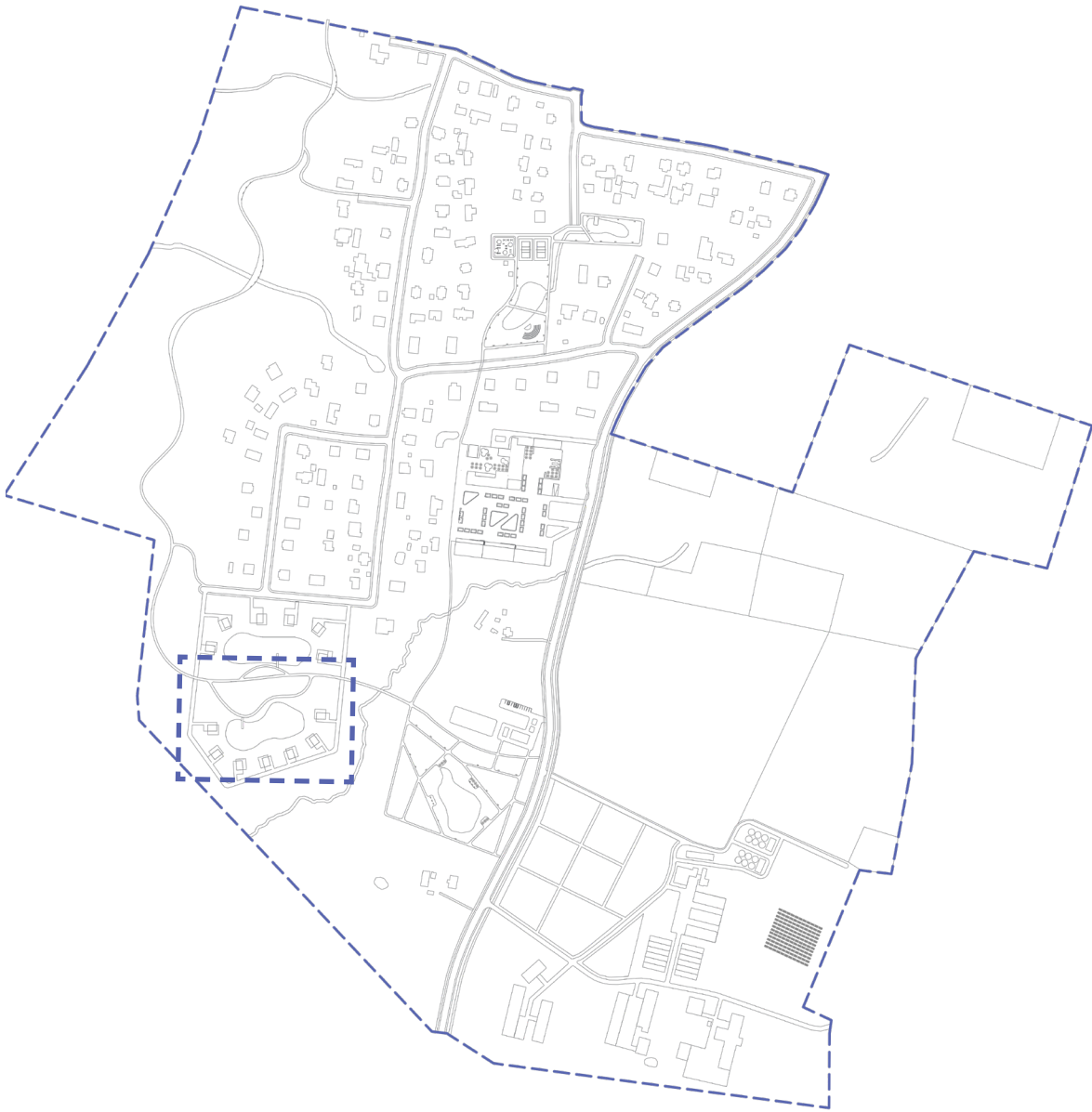
# Perspectives of the market





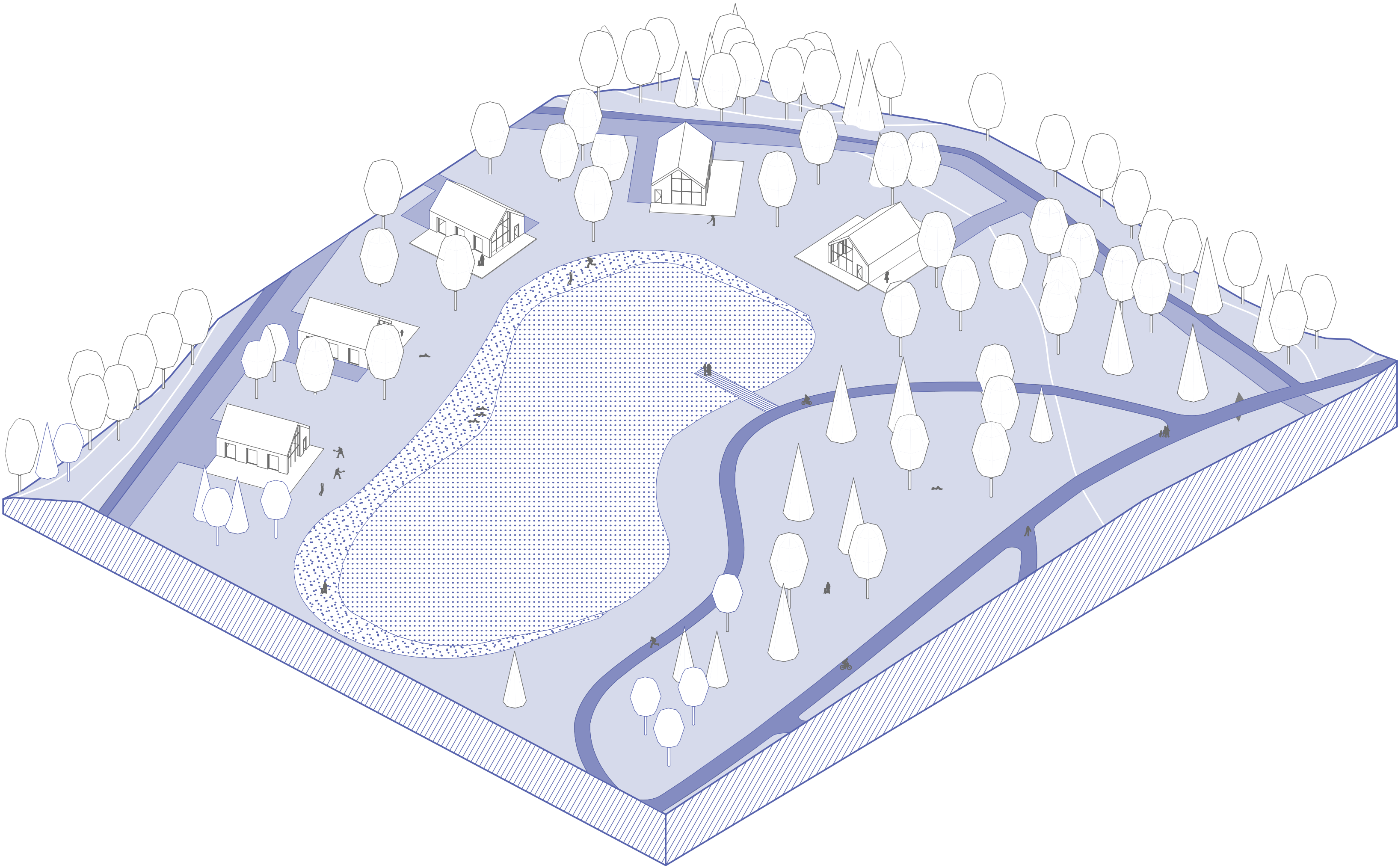
# Axonometry of camping site

The agricultural fields, between the Švėkonių forests and Nemunas slopes, can be transformed into recreational areas. The owners of the fields could be compensated for the price of the fields or given new ones in the agricultural area of the pilot plot. The recreational area is used as the camping site around created water bodies for tourists and anyone who wants to come to relax in this remote quiet area between forests.



Area of the axonometry

Birštonas town has the distinguished identity of natural, water, and recreational tourism, so in quite a distant area of the town, it is proposed to add a little piece of it. This would attract the tourists and create an attraction point for the area. This area also could be used for people who like active activities like hiking, that's why it is connected with the hiking trail.





# Perspective of camping houses





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