

Protection of the cultural heritage in the recomposition project of the manor house and park complex in Medyka

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Summary

Medyka, located on the Polish-Ukrainian border in south-eastern Poland, was well known across Europe in the 19th century for exporting plants thanks to its manor house, park complex together with the horticultural school. Research on this estate provides evidence that an analysis of historical maps is necessary for the protection of cultural heritage in modern landscape design. The three Austrian Empire Military Surveys and the Austrian Cadastre, created in the 18th and 19th centuries, are four of the most important maps of the Austrian Empire for modern landscape analysis and design. Comparative analysis of these maps enables us to reconstruct brilliant spatial solutions and elements that no longer exist or are difficult to identify. The recomposition design of the manor house and park complex in Medyka supports the protection of cultural heritage and the adoption of appropriate spatial solutions. It also allows for the adaptation of historical forms to modern needs and the restoration of elements that have disappeared over the years. Almost all historical forms and solutions were incorporated into the recomposition design. Moreover, new functions have been designed for the park and its surroundings, on both sides of the river, that is the natural boundary of the estate. Realising the recomposition design could make the complex in Medyka more famous and attract more tourists.

Keywords

Austrian military surveys • Galician cadaster • history of garden art • historical rules of the composing space • modern landscape designing • hGIS

1. Introduction

Civilisational progress often has a negative impact on the landscape, exposing it to permanent changes. The rapid development of the surroundings of the manor house and park complex in Medyka and its overgrowth with self-sown vegetation results in the fading of 19th-century design ideas and the disappearance of individual elements of the space and compositional arrangements. This has a negative impact on the landscape shaped over centuries and also poses a threat to the functioning of the complex and its integrity with the surroundings. The park, which in the 19th century was a famous in Europe arboretum, botanical garden and horticultural school [Kość 2010], is turning into a place that is difficult to access, hardly ever visited and forgotten.

The manor and park complex in Medyka, as a site with a rich history, cannot remain merely a witness to the past. Its value lies in its ability to re-integrate into social and cultural life – as an open, vibrant and inspiring space. The recomposition of the manor and park complex, undertaken in a spirit of responsibility towards future generations, creates an opportunity to restore the entire place to its rightful status – both as a witness to history and as an active place serving educational, cultural and recreational functions.

The aim of the recomposition of the manor and park complex in Medyka was to create a project inspired by 19th-century manor and city parks in the naturalistic (landscape) style, based on analyses of maps and historical information, while also taking into account the spatial changes of the 20th and 21st centuries. It combined spatial solutions recreated on the basis of historical map analysis – appropriate to the current conditions and needs of residents – with contemporary design ideas. The guiding principle during the design work was to protect cultural heritage for future generations by taking into account its key role as a local centre of culture and education.

2. Subject and methodology

The design of the manor and park complex in Medyka envisages not only spatial changes in the surroundings of the manor itself, but also the recomposition of the park and the restoration of its former compositional ties with the landscape. Thanks to this, the most beautiful elements can be highlighted, such as the island, the old trees of the historic manor park, the banks of the San River oxbow lake, the mound, the peninsula with a viewpoint overlooking the park, the historic access avenues and the nearby farmlands formerly known as the 'Medyka błonie' [Orłowicz 1917]. The location, function and compositional interrelations of these elements were determined on the basis of an analysis of Austrian historical maps. In order to achieve optimal results, the methodology of design resource-valorisation-guidelines-project, commonly used in the field of landscape architecture, was applied [Bogdanowski 1999, 2000]. The valorisation was applied within the designed complex, while in the surrounding rural and agricultural areas, a multi-faceted landscape assessment modelled on the method of T. Bajerowski [Bajerowski 1996, Baster and Litwin 2021] was adopted.

The study brings together respect for the heritage of the past with a modern approach to landscape design, keeping in mind the needs of modern users. Its material basis is

provided primarily by international acts that have shaped contemporary standards in the field of cultural heritage protection. Especially important are the Athens Charter (International Congress of Architects and Technicians of Historic Monuments, Athens 1931), the Venice Charter (International Council on Monuments and Sites – ICOMOS, Venice 1964), the Florence Charter (ICOMOS, Florence 1981) and the Krakow Charter (Krakow 2000). These documents, which constitute the foundation of global conservation principles, not only formulated universal guidelines for dealing with historic buildings, but also initiated global trends, raising issues of great importance for the preservation of cultural heritage.

At the local level, the analysis is based on the *Municipal Programme for the Protection of Historic Monuments in the Municipality of Medyka for 2016–2019 and 2020–2023*, which includes a diagnosis of the condition and directions for action in the field of municipal heritage protection. In addition, the project uses information contained in the study *Inventory of the park tree stand in Medyka* by Zbigniew Kość [Kość 2010], which provides detailed data on the species composition and condition of the historic park's greenery.

Archival materials and monographic studies also represent a significant group of sources, enabling a thorough and detailed reconstruction of the history and cultural values of this village. Among the most important is the manuscript *Historical and Architectural Study of the Manor House in Medyka* by K. Eysymontt, enriched with photographs by W. Garkuszenka [Eysymontt 1970]. The document provides a reliable record and analysis of the manor house and park complex. Also worth mentioning is M. Krajewski's monograph *Dzieje Medyki* (The History of Medyka) [Krajewski 1982], which presents a comprehensive history of the village, paying special attention to its cultural heritage, traditions and socio-economic conditions.

Moreover, the project includes information from the County Governor and the results of public consultations with the residents of Medyka.

3. Results

3.1. General information

The manor and park complex in question is located in the border village of Medyka, in the Podkarpackie Voivodeship. It is situated in an area with a low risk of flooding and drought, on good quality soil (class I-III). The name of the village most likely derives from the Ruthenian language, from the word 'med', meaning 'honey', which refers to the famous Medyka linden forests, where the inhabitants planted beehives. The complex consists of an island on which the main residence (manor house) is located, as well as a landscape (naturalistic) park on the site of the former garden. The manor house and park are surrounded by: sports facilities on the site of the former kitchen gardens (on the north side), the other bank of the river with a characteristic peninsula (on the south side), State Farm Land (PGR), a farmyard and floodplains (on the east side) and agricultural land (on the west side). Main access roads in the form of avenues lead to the complex from the south-east and north-west.

3.2. Historical overview of the manor and park complex in Medyka

The garden in Medyka already existed in the second half of the 16th century and was mentioned by Jan Długosz. In 1772, the Austrian government handed Medyka over to Antoni and Zofia Lubomirska, née Krasińska, who transformed the geometric garden into a landscape (naturalistic) park covering an area of approximately 28 hectares, with a particular emphasis on linden trees. In the 19th century, under the management of the Pawlikowski family, the park reached its 'golden age'. Most notably, between 1830 and 1850, Józef Gwałbert Pawlikowski founded the first horticultural school in Galicia in Medyka in the first half of the 19th century and developed extensive plant collections, numbering hundreds of thousands of species and varieties. The park served as an arboretum and botanical garden, where many trees and shrubs from all over the world were cultivated – the 1834 plant inventory listed over 10,000 species and varieties, including 5,000 camellias, palms, vanilla, figs and oranges. At that time, the park was also a venue for literary and cultural meetings. After its heyday, it gradually declined in the wake of historical events. During the First World War, many elements of the garden were destroyed, including the conservatories and buildings. After the Second World War, the estate was taken over by the state, and the current park, covering an area of approximately 22 hectares, is under the care of the municipality of Medyka [Piórecki 1989].

3.3. Architecture within the manor and park complex (current state)

The most valuable existing architectural structures in the complex include: the 'Guest House' (a manor house) from 1898 (currently the Community Centre), the 'Sędziówka' manor outbuilding from the first half of the 19th century (currently the municipal library), and the stable from the early 20th century (currently a utility building and public toilets).



Source: www.geoportal.pl. Designations and graphic design by K. Półtorak

Fig. 1. Orthophotomap showing the manor and park complex in Medyka and elements of the surrounding landscape (area marked with a red dotted line) and the area analysed during the design process (area marked with a blue line)

Remains of the former park buildings have also survived: the fence wall of the orangery and pineapple house from the first half of the 19th century and fragments of the manor house (cellars and foundations) from the 16th/17th century. The designed area is enclosed within the zone of monuments and the exhibition protection zone (Fig. 1).

3.4. Dendrological analysis of the manor and park grounds (current state)

Until today, the park has retained only fragments of its original layout, including some historic trees: lindens, oaks, ash trees, sycamores, ginkgo trees and black walnut trees. Only traces remain of the former avenues, and most of the trees and plantings date from the post-war period. Nevertheless, the park contrasts with modest greenery in other parts of the municipality, and the overall health of the tree stand can be assessed as satisfactory.

The park's tree cover is composed mainly of deciduous, angiosperm species (99.41%), with a small proportion of coniferous, gymnosperm trees (0.59%), represented by single specimens from the Ginkgoaceae and Pinaceae families. The most numerous group of trees (deciduous) from the angiosperm group consists of: 24.14% sycamore maple (*Acer pseudoplatanus* L.), common ash (*Fraxinus excelsior* L.) 22.97% and black locust (*Robinia pseudoacacia* L.) -16.13% [Kość 2010]. One of the oldest trees is a mighty London planetree, which was set on fire. Its trunk, partially preserved, now serves as an exhibit, and the tree sprouted shoots a few years after the incident. There are 18 natural monuments located in the park (Order of the Przemyśl Voivodeship Governor of 8 February 1988, No. 4/88), including: *Quercus robur* L. – 2 specimens, *Fraxinus excelsior* L. – 3, *Acer pseudoplatanus* L. – 2, *Acer platanoides* L. – 1, *Tilia cordata* Mill. – 3.

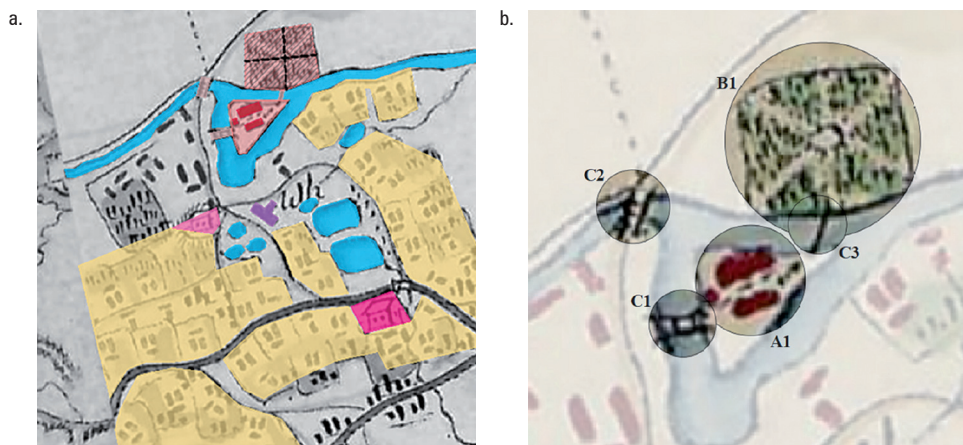
3.5. Analysis of the Medyka complex based on Austrian historical maps

Some spatial solutions of the 19th-century park complex in Medyka can only be found on historical maps. Research and analysis of military measurements and the Galician cadastre have allowed for the recomposition of the complex. Many of the spatial solutions that were found there can be successfully applied to the present context and adapted to contemporary functions. Three Austrian military geodetic surveys are a phenomenal geodetic achievement that we can still use today – in spatial planning, cultural heritage protection and landscape design. These maps, commissioned by the authorities in Vienna, are famous for their incredibly high accuracy in depicting land use. While the Austrian cadastre has been fairly well documented and is widely used in practice, the military surveys are still relatively unknown, which is why their comparative analysis can paradoxically be considered a modern methodology for applying surveying to landscape design.

The first military survey, also known as the Joseph's map, was the first comprehensive cartographic study of the Habsburg lands in Europe, carried out for strategic and military purposes in the second half of the 18th century. The work was conducted between 1763 and 1815(45) and included systematic topographical measurements of

the entire empire, including the newly annexed lands of Galicia and Lodomeria after the First Partition of Poland. Works in this area were undertaken under the supervision of Colonel F. von Mieg between 1779 and 1783, hence the name of this fragment of the map – the Mieg map. The result of the survey was a series of hand-drawn, colour maps, distinguished (for their time) by their high accuracy in depicting the settlement network, road layout, watercourses, terrain and land use boundaries.

An analysis of Mieg's map indicates that at the end of the 18th century, an unrestrained park did not yet exist in Medyka (Figs. 2a, 2b). Instead, there was a Baroque garden (B1). Its geometric shape and outlines demonstrate the adoption of formal and aesthetic patterns typical of the era, which emphasises the care taken to compose the space in accordance with the prevailing canons of garden art. The island was similar in shape to the present one; access to it was provided by bridges: from the village side (C1, C2) and from the garden side (C3). The two wings of the buildings (A1) located on the island served as residences, which is confirmed by their location on the island, which was the 'heart' of the complex.



Source: mapire.eu. Designations and graphic design by K. Póltorak

Fig. 2. Analysis of fragment of the first military survey (Joseph's map, Mieg, 1779–1783), depicting: the manor and park complex together with Medyka (2a, left), the manor and park complex with its elements specified (2b, right)

Analysing the first military survey reveals the basic structure of the composition, in which the clear connection between the park area, the island and the palace plays a key role. Already at this stage, a mixed layout is visible – geometric (garden) and unrestrained (island). This layout, developed and refined in later years, contained the main determinants of the composition at this stage.

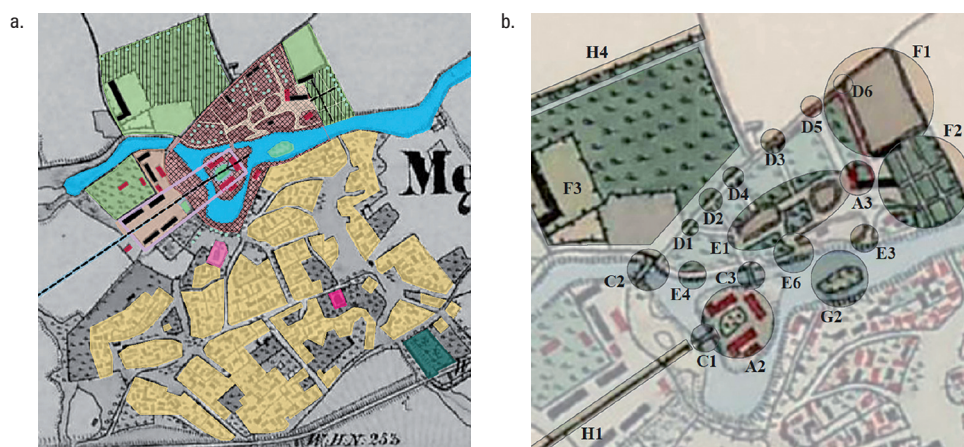
In light of the above analyses, conclusions regarding the contemporary use and revitalisation of the space should take into account the need to restore the geometric component of the park, which is a key element of the historical structure of the

complex. The restoration of this space will not only preserve its historical authenticity, but also highlight the aesthetic and functional qualities of the area, serving contemporary recreational and educational purposes.

The second military survey, also known as the Francis' map, was the second phase of systematic cartographic work carried out between 1806 and 1869, with the main stage falling during the reign of Emperor Francis I (hence the name). The aim of the project was to update and improve earlier Joseph's studies based on more precise measurement methods and to include new topographical information relevant to military, administrative and economic planning. In Galicia, the work was undertaken between 1864 and 1869. The result was a hand-drawn colour map, with greater accuracy in the representation of terrain, hydrography and settlement patterns than the first military survey. An improved hatching method and varied colours were used. The degree of precision of the study allows it to be useful today as a valuable source material in historical and geographical research and in analyses of landscape changes.

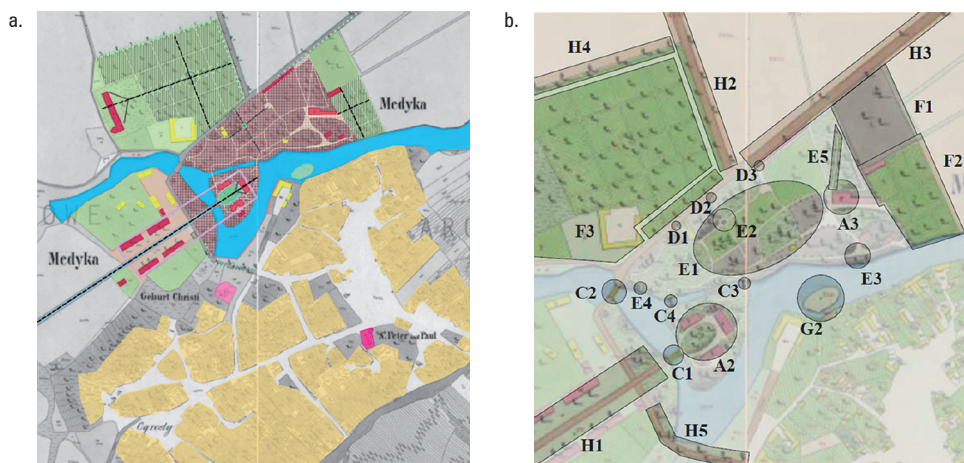
The Galician cadastre, completed at around the same time as the second survey, was a separate project. It presented the division into plots, precisely showing their buildings, numbering and boundaries, unlike the military studies discussed above, which focused on information about spatial development useful for military operations. Therefore, its comparative analysis with the second survey provides a wealth of information about the landscape and cultural heritage of Galicia in the mid-19th century [Baster 2022].

A spatial and functional analysis of the discussed site, based on the second military survey and the Galician cadastre, reveals an already complex manor and park composition. The Francis' map presents the landscape in a more synthetic form (Figs. 3a, 3b), while the cadastre is more detailed (Figs. 4a, 4b).



Source: mapire.eu. Designations and graphic design by K. Półtorak

Fig. 3. Analysis of a fragment of the second military survey (Francis' map, 1864–1869), showing: the manor and park complex with Medyka (3a, left), the manor and park complex with its elements specified (3b, right)



Source: www.skany.przemysl.ap.gov.pl. Designations and graphic design by K. Półtorak

Fig. 4. Analysis of a fragment of the Galician cadastre (mid-19th century), showing: a manor and park complex with Medyka (4a, left), a manor and park complex with its elements specified (4b, right)

The island with the main residence (A1) retains its shape and two communication links with the mainland: from the village (C1, C2) and from the former garden (C3). The entrance to the island from Medyka (H1) is clearly accentuated by the buildings framing the road leading to it. On the island itself, there are two outhouses, situated so as to frame the space of the driveway in front of the manor house, which is the central point of the composition (A2). It can be concluded that the island offered wide views in almost every direction, in particular towards the park, the palace located in its depths (A3), the square located by the old river bed (E3), as well as along both banks of the old river bed. This layout suggests both attention to the aesthetics of the views and the functional connections between the various parts of the complex.

The park section, created on the site of a former garden, floodplains and earthworks, has a predominantly free-form character, with only partial geometric features (mainly in the place of the former garden). The layout is distinguished by two straight paths (E1), running through the entire park and arranged parallel to each other, leading from the island directly to the palace located in the depths of the park (A3) and constituting a visual closure. The geometric character of this section of the park is also emphasised by a circular square with greenery (E2). The remaining paths have a free layout; it is worth noting that two of them, together with the square, are located by the old river bed (E3, E4).

Interesting landscape elements can also be found on the cadastral map at the park border and just beyond it. The park can be accessed from the island via two bridges (C3, C4). On the other side of the river, there is a peninsula (G1), likely an important vantage point from which most of the park could be admired. In the western part of the

complex, there are two clearly distinct areas, bordering each other but serving different functions: probably greenhouses (F1) and cold frames (F2). On the northern side, there are as many as six exits (D1–D6) from the park, leading towards the school and horticultural farm (F3) and farmland. To the east, just beyond the exit from the island, there is a utility yard and floodplains stretching along the old riverbed.

The third military survey, also known as the Francis-Joseph map, represented the third and most advanced phase of Austrian topographic surveys carried out in the 19th century in the Austro-Hungarian Empire. The work was undertaken between 1869 and 1887, and its aim was to create a uniform, highly accurate cartographic study based on the then modern geodetic and topographic standards.

In the case of the manor and park complex in question, the slight gap between the second and third measurements meant that both provide similar information (Figs. 5a, 5b). Furthermore, the technique used to create the Francis-Joseph map makes it preferable to rely on the second measurement for landscape studies, even in Medyka, where the third measurement was made unusually in colour rather than black and white, additionally compared with the Galician cadastre.



Source: mapire.eu. Designations and graphic design by K. Póltorak

Fig. 5. Analysis of a fragment of the third military survey (Francis-Joseph map, 1869–1887) showing: the manor and park complex with Medyka (5a, left), the manor and park complex with its elements specified (5b, right)

3.6. Guidelines for the recomposition of the manor and park complex in Medyka

The primary aim of the guidelines is to maintain a balance between the protection of cultural heritage and the development of new functions, while reinforcing the cohesion and spatial order of the studied area. Where new spatial development requires the adoption of contemporary functions (mainly in the area neighbouring the park), as

In the park section, two paths were considered particularly important within the traffic layout, forming the main compositional axis in the park section, leading from the island towards the exposed ruins. They were emphasised with plants (flower beds and rows of trees) and squares with seats and flower beds. In addition, a gloriette was designed at the end of one of them (offering a view of the large lawn with a solitary tree and a preserved row of trees), and at the end of the other, a memorial of the palace that once stood there was placed. This layout was complemented by smoothly drawn paths leading to existing facilities located in the vicinity of the park – the stadium, cemetery, fence wall of the former pineapple pit, vases and memorial sites (existing monuments) – as well as to newly designed elements (maze, large lawn or gloriette). A ring road surrounding the park area was also introduced, typical of layouts in the complex style since the 19th century. Although an analysis of the cadastre raises some doubts as to whether it was so prominently featured in the park before. The layout of the paths was designed in such a way as to allow access to the impressive specimens of linden (*Tilia* sp.) and ash (*Fraxinus* sp.) trees, as well as to expose them from different sides of the park.

The most important architectural element in the park are the ruins of the palace. They are emphasised by rose beds and columns covered with climbing plants, reminiscent of the arcades of its façade. From this spot, a view opens up onto a large lawn with a solitary tree and a peninsula on the other side of the old river bed. Another landmark in the park is the existing Jagiełło Mound, which has been highlighted by removing trees from the viewing axis on the north side. Some of the self-sown vegetation surrounding the mound has also been removed so that visitors can once again admire the views of the entire complex and its surroundings. A relaxed path runs from the mound along the river. On the large lawn, it is complemented by a square with two viewing terraces, directing the view towards the former palace (with arcades) and the peninsula with a viewing point.

A large part of the self-sown vegetation was left in the park, and only those trees and shrubs that prevented the implementation of the naturalistic park concept were removed – mainly young specimens growing in the place of former viewpoints and lawns. In the unrestrained section, the arrangement of trees was designed to showcase solitary specimens, groups and dense stands, ensuring the visibility of natural monuments and other valuable trees. A backdrop for views exposing a particularly valuable solitary specimen of *Ginkgo biloba* L. was also created. The selection of plant species for the project took into account the specific cultural and natural landscape of the 18th-19th century landscape park. Preference was given to native tree and shrub species typical of the region [Seneta and Dolatowski 2000]. Additionally, species that produce honey were introduced [Latocha 2010], which is significant in relation to the beekeeping traditions of the village. Particular attention was paid to existing natural monuments and trees of exceptional natural, landscape and historical value, which may be subject to legal protection. Only specimen restricting access to light and living space by colliding with the crowns of older trees were removed in order to highlight these natural monuments. Similar measures were taken with regard to preserved historic avenues. In addition, trees growing on recomposed sightlines or in overly dense clusters were to

be uprooted. Large lawns were created in locations indicated in the Galician cadastre, which enabled the recomposition of sightlines between the palace, the mound, the old river bed and the peninsula. The most important traffic routes were accentuated with flower beds, giving them a representative appearance, while in the vicinity of the manor house, a garden parterre was designed to emphasise the importance of the building and serve as an indispensable element of the 18th-19th century layout.

The design also incorporates contemporary solutions, such as a footbridge to the peninsula on the other side of the old riverbed (as a 'blind path' commonly used in the 19th century), from where there was undoubtedly a picturesque view towards the park and its deliberately exposed elements mentioned above: the mound, ruins and the large lawn. In the northern part of the park, highlighted in the Galician cadastre, a maze was designed, ending with a viewing platform. From there, a historical prospect was led to the surrounding farmlands, thus achieving an effect analogous to an 'aha' moment. In addition, the project also included several additional contemporary compositional solutions and elements that would facilitate the functioning of the park in accordance with the expectations of the residents, including a large car park, two sports fields, a playground, and a mini zoo to make the programme more attractive. These changes are appropriate for the recomposition of certain historical compositional solutions and landscape forms in the contemporary context.

The above design guidelines formed the basis for the recomposition of the manor and park complex in Medyka (Fig. 7).



Source: www.geoportal.pl. Project, designation and graphic design by K. Póltorak

Fig. 7. Project for the recomposition of the manor and park complex in Medyka, orthophotomap

4. Summary and conclusions

The developed project proves that it is possible to harmoniously combine tradition and modernity – not through confrontation, but through the synergy of spatial solutions that bring out the potential of the site and endow it with contemporary significance. The recomposition of the manor and park complex in Medyka, known in Europe in the first half of the 19th century, makes it possible to restore many historical solutions and elements, apply them to the current reality and adapt them to contemporary functions. The implementation of this project can significantly contribute to the protection of cultural and historical heritage, which has been passed down through many generations. Today it can be the foundation of modern civilisation, functioning in a socially useful way. This project would also help to regain the lost popularity of this place, improve the quality of life of its residents, and develop tourism in this small border village, whose values and cultural heritage deserve greater appreciation. After all, beautiful poems have even been written about the landscape of Medyka: *I know a meadow in Medyka, I know a spacious meadow / Where after winter it is green and fragrant / Where the wind is the freshest, the dew the most abundant / Where sometimes in the summer dew the heavens lean down* [Żyga 1969]. These words, portraying the beauty of nature, bear witness to the former splendour of this place. They inspired the revival of its former significance and the preservation of the values hidden in the landscape.

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