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pages: 92 - 105

THE DIRECTIONS AND INDICATORS CONCERNING THE PROCESS OF SHAPING THE ENVIRONMENT ON THE BASIS OF CHANGES IN THE LOCAL ZONING PLAN AND LAND USE IN THE RURAL ADMINISTRATIVE DISTRICT OF BIAŁOWIEŻA

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Abstract

The paper attempts to describe the possibilities of shaping the environment and spatial development of the rural administrative areas of Białowieża, using the tools of planning documents. The natural and cultural space of Białowieża rural administrative district is particularly sensitive to any investment activities. It is impossible to overestimate its value, and the need to take care of it is a natural necessity, determining all activities, especially planning and architectural-urban planning ones, responsible for its future shape. The aim of the study is to indicate ways of searching for such possibilities so that the two – natural and cultural – structures harmoniously interpenetrate each other. Subsequent steps and activities are described in detail, starting with a very precise identification of the resources of the space under analysis, followed by the execution of an architectural and urban planning inventory, conducting a nature and landscape study up to the development of a list of parameters and indicators, and ending with the development of a three-dimensional model of the settlement units of the rural district, based on the provisions of the draft local spatial development plan.

Keywords: architecture; regional wooden architecture; integrated rural compositions; dispersed settlements; rural and forestry development

INTRODUCTION

The appropriate development of space in which a human being lives is associated directly with the maintenance of the balance in the range of three components, i.e. '(...) social environment, natural environment and material culture environment, which base should be constituted by the so-called open areas (...). The mutual interdependences of these environments and their components can be of a positive, negative, or restrictive character' [M. Nowakowski, 1993, pp. 177-178]. Nevertheless, it involves the process of rationalising the use of the areas, which are already covered

with buildings, e.g. the use of the already built up structure. Such structure must be continually reorganized and/or reconstructed; furthermore, the old depreciated structures must be reused. Additionally, special attention must be paid to the existing natural resources creating ecosystems so that they could function properly [H. Łapińska, 2010]. Both structures, i.e. natural and material ones, interpenetrating each other in a harmonious way, constitute the basis of a healthy developing society. This also refers to the fundamental function of planning activities, not to mention the regulations found

¹The Spatial Planning and Land Development Act of 27 March 2003 (Journal of Law of 10 May 2013 – Polish Dz. U. z dnia 10 maja 2003 r.)

in the Spatial Planning and Land Development Act, according to which' (Article 2, paragraph 1): 'spatial order – should be understood as such spatial organisation which creates a harmonious whole, and takes into account ordered relations, any conditions and requirements: functional, social and economic, environmental, cultural, compositional and aesthetic ones' [J. Gil-Mastalerczyk, 2014, p. 78]. There arises a question: how should one shape the space in the rural administrative district of Białowieża, where the dominance of the natural components is significant?

1. THE RURAL ADMINISTRATIVE DISTRICT OF BIAŁOWIEŻA

The rural administrative district of Białowieża² (an area of 203 km², its total population 2,298³), from the east and the south-east, is located on the border with the Republic of Belarus, from the west with the Hajnówka municipality, and from the north with Naręwka rural administrative district. Specifically, it is the

rural administrative district located in Hajnówka County (Figure 1).

The area of this administrative district is situated in the macro-region (referring to the physical and geographical characteristics) called the Bielsk Plain. More than 90% of the area of the Białowieża administrative district is covered with forests, most of which is considered to be a protected area. One of the most valuable forest complexes in Europe can be found there, namely the Białowieża Primeval Forest together with its most precious site, i.e. the Białowieża National Park, within which the Strictly Protected Reserve can be discovered. The Białowieża Forest is the last natural plain forest complex covering both sides of the Belarusian and Polish border. In 1977, the Białowieża National Park was announced to be the World Biosphere Reserve and found its place on the UNESCO list of World Heritage Sites. Today, the entire Białowieża Forest is a UNESCO World Heritage Site. The last characteristic features of the natural forest with rich flora and fauna are preserved here.

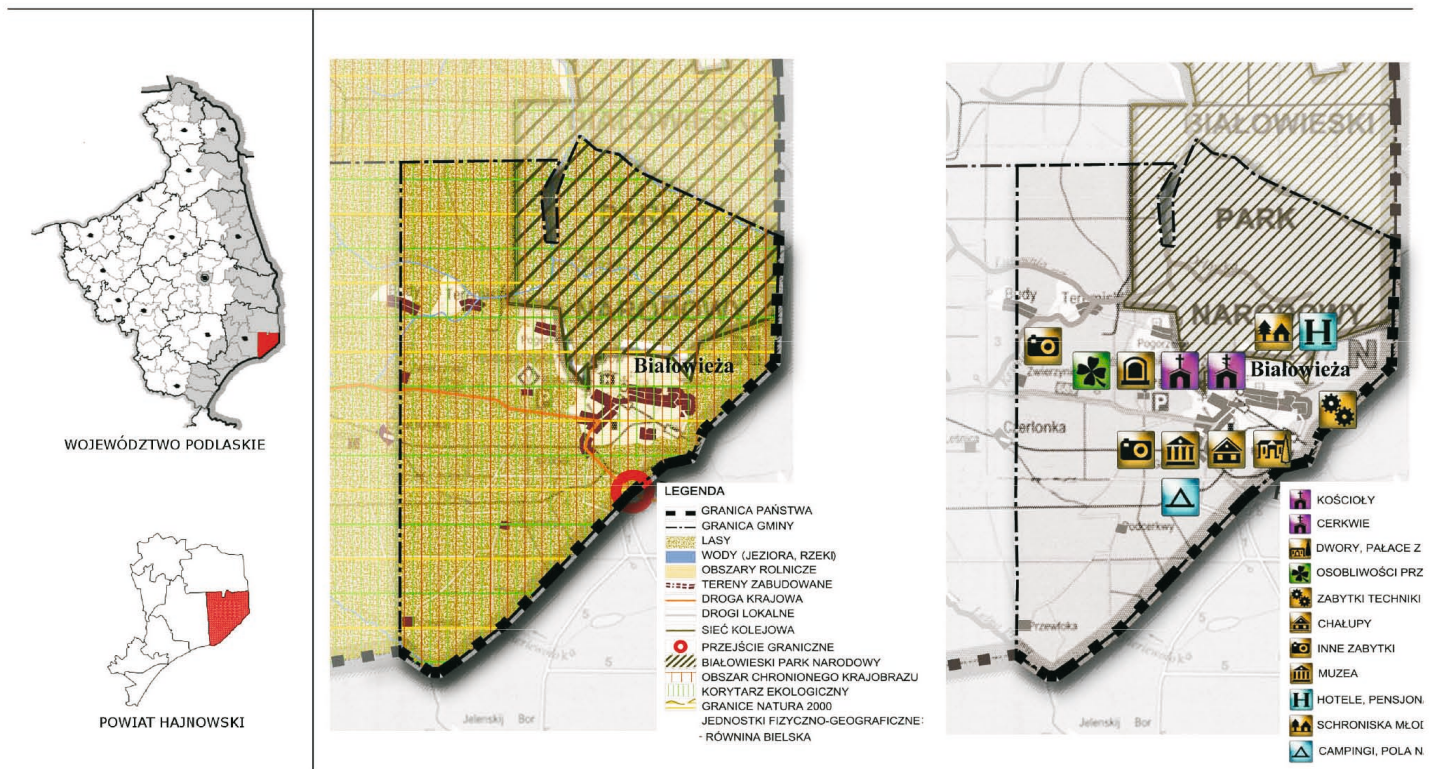


Fig. 1. The rural administrative district of Białowieża– characteristics of the natural and cultural space; source: H. Łapińska 2016, p. 112.

² The data concerning the rural administrative district come from the following documents: the study of conditions and directions for spatial development of the rural administrative district of Białowieża, the district development strategy, websites and other studies concerning the district. Fragments of the text characterising the rural administrative district come from publications: [H. Łapińska, 2016].

³ Available on: [www. http://region.e-podlasie.pl/gminy/bialowieza.html](http://region.e-podlasie.pl/gminy/bialowieza.html) [19.09.2014], *data until 31.12.2010*; and: http://bialystok.stat.gov.pl/vademecum/vademecum_podlaskie/portrety_gmin/powiat_hajnowski/gmina_bialowieza.pdf [06.01.2015] & <http://lot.bialowieza.pl/to-warto-zwiedzic/gmina-bialowieza/> [06.01.2015].

The Białowieża National Park constitutes the European Bison Show Reserve, where one can observe not only bison, but also lynxes, wild boars, deer and roe-deer. There area also offers other tourist attractions, namely the Nature and Forest Museum – modern museum demonstrating the fauna and flora of the Białowieża Forest, as well as the Protected Area Reserve – the most valuable part of the Białowieża Forest, protecting the unique nature. The nature reserve called ‘Podolany’ attracts people with its 300-year-old pedunculate oak stands, and the reserve called ‘Wysokie Bagno’ demonstrates the extensive peat bogs covered with the spruce forest. The Białowieża Forest was recognized as the resting place for Polish kings and princes (dukes).

In the rural administrative district, the monuments in Białowieża include e.g.: the Palace Park of the Tsarist Hunting Residence with elements of the 19th-century English style park, with such buildings as: the Palace Gate, the Court of Russian Grand Dukes, the Kozak Stables, the Directorial Park (by the former Forest Board), St. Nicholas Orthodox Church and St. Teresa Catholic Church with the beautiful decorations of the chapel of St. Hubert (the decorations created with the use of roots and horns).

The old huts, an old Orthodox chapel, a windmill and beehives are found in the Chelm Open Air Architecture Museum (Skansen) of the Russian People from Podlasie. The renovated railway complex with the earlier railway station building – formerly known as ‘Białowieża Towarowa’, now the ‘Tsarskaya Restaurant’ can be observed there. In Budy, the Open Air Museum (Skansen) of ‘Sioło Budy’ is famous for its historic houses, a barn, a cowshed, a forge, a rick, a well and a willow fence.

In the rural administrative district, different nationalities have been living together for centuries. Polish, Belarusian and Ukrainian cultures have created a unique ‘ecosystem’ that attracts people due to its dialect, customs and architecture. The exhibitions of the local artists are organized there, namely of sculpture, painting, pottery, ceramics, cooperage, weaving, double carnate carpet and lace making.

Due to the arrangement of touristic routes and educational paths one can admire the wildlife and local sights. The educational paths called the ‘Landscapes of the Forest’ leads through the reserve called ‘Wysokie Bagno’, which protects the natural part of the spruce marsh forest and the Narewka river valley. The educational paths called ‘the Ribs of the Bison’ (Polish: Żebra Żubra), one of the oldest paths in Poland, leads through the wooden dikes and footbridges, showing the swampy parts of the forest, to the European Bison Show Reserve. The path called ‘the Trees of the Forest’

leads through the landscape reserve named after Professor Szafer, through the playgrounds to the European Bison Show Reserve. The path called ‘the Royal Oaks and Lithuanian Dukes’ in ‘Stara Białowieża’ sacred spot leads through the areas with the oaks named after the kings and dukes who once hunted in the forest. The path called ‘the Place of Power’ is believed to be the most mysterious place in the forest, namely the place of the ancient worship of the Praslovian and pagan tribes known from the so-called ‘positive radiation’, stone circle and trees of an unusual shape of the crown. Apart from that, the area of the rural administrative district can be visited by ‘Białowieża Drezyna’ (English: draisine). It is the railroad vehicle ride, powered by the force of one’s own muscles, which allows reaching the most interesting places in the forest. ‘Nordic Walking Park of Białowieża’ constitutes over 30 km of Nordic walking routes. The Park consists of 4 routes marked by different colours, namely: yellow – 3.6 km long, green – 8.8 km, red – 8.9 km and black – 10.6 km.

The most important outdoor events in this rural administrative district include ‘the Kupala Night’ – the first Saturday of July, ‘Peretocze’ – an event demonstrating various cultures, such as: Polish, Belarusian, Gypsy, Lemko, Lithuanian, Jewish, Russian, German, and ‘King Jagiello’s Hunting’.

The main function of the rural administrative district is the ecological function associated with the functioning of the Białowieża Primeval Forest and the touristic as well as scientific functions. In Białowieża there is a number of scientific institutions of national importance as well as a number of institutions of regional significance.

2. ANALYSIS OF THE STATISTICAL DATA

A comparative analysis of the statistics from 2002, 2004 and 2011 and from 2012, 2013 as well as 2014, considering the rural administrative district of Białowieża, demonstrates the trends and directions of the changes. The objective of the research studies was to investigate the phenomena associated with the time changes. The data were compared with the data from the Podlaskie Voivodeship and the country.

The total number of residents in the rural administrative district decreased during the investigated period (Table 1). The similar tendency was presented by Podlaskie (i.e. from 1,207,704 in 2002 to 1,200,982 in 2011), while in the whole country, the number increased (from 38.23 million in 2002 to 38.51 million in 2011). The population density in the rural administrative district decreased in 2011 similar to the situation in the entire Podlaskie Voivodeship (from 60 people/km² to 59

THE DIRECTIONS AND INDICATORS CONCERNING THE PROCESS OF SHAPING THE ENVIRONMENT ...

Table 1. Demographic data: population and population density, number of people working (total) and by sector, i.e. sectors of the economy, such as: agriculture, hunting, forestry, industry and construction, and services in the rural administrative district of Białowieża in 2002, 2004 and 2011

Population Total			Population density /km2			Working											
						Total			Agriculture, hunting, forestry			Industry and construction			Services		
2002	2004	2011	2002	2004	2011	2002	2004	2011	2002	2004	2011	2002	2004	2011	2002	2004	2011
2714	2671	2297	13	13	11	552	641	636	46	#	#	36	#	#	470	545	582

Source: own research based on data from the Central Statistical Office of Poland (Polish: GUS); Available on: <http://bialystok.stat.gov.pl/publikacje-i-foldery/roczniki-statystyczne/województwo-podlaskie-2013-podregiony-powiaty-gminy,8,2.html> [07.07.2015].

Table 2. Data comparison in the range of water surface, built-up and urbanized areas, communication areas: roads and railways, as well as recreation and leisure areas in the rural administrative district of Białowieża in 2012, 2013 and 2014

Area of the rural administrative district [km2]	Water surface [ha]			Areas:											
				Built-up and urbanized areas (residential areas, and recreation and leisure areas, communication areas [ha])			INCLUDING:								
							communication areas: roads [ha]			communication areas: railways [ha]			built-up areas: recreation and leisure [ha]		
				2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
203	29	29	29	286	286	286	109	110	109	65	65	65	48	48	48

Source: own research based on data from the Central Statistical Office of Poland (Polish: GUS); Available on: <http://bialystok.stat.gov.pl/publikacje-i-foldery/roczniki-statystyczne/województwo-podlaskie-2013-podregiony-powiaty-gminy,8,2.html> [07.07.2015].

Table 3. Data comparison of the protected areas, i.e. forest areas, agricultural areas and other areas as well as the number of natural monuments in the rural administrative district of Białowieża in 2002, 2004 and 2011

Areas:												natural monuments [number]		
protected areas [ha]			forest areas [ha]			agricultural areas [ha]			other areas [ha]					
2002	2004	2011	2002	2004	2011	2002	2004	2011	2002	2004	2011	2002	2004	2011
19023	(93,6)	19057	17812	18007	18048	1125	1388	1506	1383	877	746	547	547	527

In brackets – % of the entire administrative district area

Source: own research based on data from the Central Statistical Office of Poland (Polish: GUS); Available on: <http://bialystok.stat.gov.pl/publikacje-i-foldery/roczniki-statystyczne/województwo-podlaskie-2013-podregiony-powiaty-gminy,8,2.html> [07.07.2015].

people/km²), in the country in 2011, the country rate increased (from 122 people/km² to 123 people/km²), (Table 1).

The comparison of the total number of people working in the rural administrative district and according to the sectors of the economy, i.e. agriculture, hunting, forestry, industry and construction, and services in 2002, 2004 and 2011, demonstrates trends towards changes. In the rural administrative district of Białowieża, the total number of people working and working in the sector of services increased. In Podlaskie Voivodeship, the level of this indicator was lower in 2004 than in 2002, and in 2011 it increased signi-

ficantly. A complete analysis of the number of people working in this rural administrative district, according to the sectors of the economy, was not possible to make on account of confidentiality status of the data.

Table 2 presents a comparison of the data considering the areas of this rural administrative district together with the water surfaces, built-up and urban areas, communication areas: roads and railways as well as recreation and leisure areas in 2012, 2013 and 2014. The results show that the size of these areas remained at the same level.

Table 3 shows a comparison of the size of protected areas, forest areas and agricultural areas and

other kinds of areas as well as the number of natural monuments in the border administrative districts of Podlaskie Voivodeship in 2002, 2004 and 2011. Protected areas, forest areas and agricultural areas as well as other kinds of areas increased. The greatest increase can be observed in the size of protected areas in this rural administrative district (about 34 ha), the remaining areas as well as the number of natural monuments decreased. This can be understood as a trend that occurred in both in Podlaskie Voivodeship and in the whole country.

3. ANALYSIS OF SPATIAL AND CULTURAL SOURCES OF THE RURAL ADMINISTRATIVE DISTRICT

The affluence of elements belonging to the cultural space of this rural administrative district allows for discovering the historical treasures of the settlement of these areas. The existing buildings in the rural administrative district of Białowieża, in many parts of it, are characterized by the regional architecture strongly related to the tradition of the 'forest timber construction'. The maintenance of this character of construction, associating it with the existing characteristic features of the new investments, allows for the preservation of the local character of the cultural space. 'The singularity of the Białowieża Primeval Forest and the preservation of its nature were determined by the history, and specifically, the relatively late colonization, which was intensified just in the 17th and 18th centuries' [K. Falińska, 1999, p. 9]. It is impossible to misjudge its value, and the need to take care of its preservation tends to be a 'natural necessity', which determines all actions related to its natural and cultural space, especially in the range of planning as well as architectural and urban activities, responsible for its future form.

The history of Białowieża is closely related to the history of the Białowieża Forest, which constitutes its closest surrounding. The spatially growing settlement gradually covered all the larger areas for the development of buildings and farming. Białowieża, which is now formed in this way, creates a dense complex of buildings of great landscape values, both due to its topographic location and the important architectural values of many historic buildings as well as the characteristic scale of this kind of building construction (Fig. 2).

Nowadays, the so-called Białowieża glade covers 13.67 km² and has been created for many centuries, i.e. 'its surface area covered respectively 0.12 km² in 1696, 7.65 km² in 1784, 12.67 km² in 1902, and 13.67 km² in 1954 [K. Falińska, 1999, p. 10].

In 1895, Walerian Kronenberg designed the so-called Palace Park project for Białowieża. It was in the

style of English naturalism with a free compositional arrangement of tree groups on extensive glades, two ponds with islands in the middle and a levee between them. At present, the Palace Park is connected to the Directorial Park of that period. The basic compositional elements of this project have survived until now.

Both valuable and co-existing natural and cultural spaces in Białowieża introduce the need to solve important problems. The residents of this rural administrative district feel dominated by the co-existence with the natural environment of such great value and the amount of forms of its protection. They cannot see the benefits, apart from the various restrictions, prohibitions and, as they call them, nuisances associated with being in such close neighbourhood of valuable nature. The rural administrative district of Białowieża is perceived as a place particularly favoured by the potential investors from all over Poland and even people living in remote parts of the world. The enormous pressure in the range of investments is reflected in the applications for changing the use of agricultural areas for construction purposes, namely housing, crofts, agrotourism infrastructure, guesthouses or services referring to sports, recreation and/or tourism. Such changes, regarding building up the glades of the rural administrative district of Białowieża, are considered to be fearsome and often cause protests of people who are interested in the protection of the landscape. They believe that the projects concerning new built-up areas would destroy the 'delicate historical structure', which will have an unfavourable impact on the unique nature.

4. THE STUDY ON LAND USE CONDITIONS AND DIRECTIONS OF SPATIAL DEVELOPMENT OF THE RURAL ADMINISTRATIVE DISTRICT OF BIAŁOWIEŻA' AND THE SPATIAL AND CULTURAL RESOURCES OF THE DISTRICT

The rural administrative district of Białowieża has its own urban study called 'The Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża,' which was accepted by Resolution No. 23/121/08 of the Rural District Council of Białowieża of 30 December 2008. Due to continuous investment pressure, the Białowieża Rural District Council adopted a resolution to proceed with the preparation of an amendment to the Study on Białowieża Rural District Spatial Development Conditions and Directions, the preparation of which was completed in 2018, but the document was not adopted. The author, as before, was a member of the team developing the new document. The new study of the conditions and directions of spatial development of the



Fig. 2. The rural administrative district of Białowieża – rural built-up development of forest glades;
source: photos by the author and M. Capin

rural administrative district of Białowieża continued major directions of the district's spatial policy, as well as verified and updated the provisions in the text and graphic annexes. In addition, in accordance with the Act on Spatial Planning and Development, it 'specified the scope and methods of proceedings in matters of designating areas for specific purposes and established the principles of their development and construction.' This section has been treated with particular care. The detailed records concern the way of management, the rules of development, including parameters of the development, in all functional areas of this rural administrative district.

The fundamental and most significant are as follows:

- requirements for the spatial order (including urban and architectural ones),
- architectural and landscape values of the area,
- requirements for the environmental protection (all forms of protection),

- requirements for re-establishing cultural heritage,
- economic values of the space and the right to the property (ownership).

The Study in its contents includes:

- establishments considering the directions of changes in the spatial structure of the rural administrative district and in the use of the areas,
- guidelines for determining the changes in the local spatial development plan (zoning plan),
- indicators, i.e. the smallest and the greatest parameters considering the requirements of the spatial order, including urban planning and architectural planning and sustainable development of areas,
- arrangements concerning the principles of environmental protection and its resources, nature protection, cultural landscape protection (but mainly the guidelines for their specification in the local spatial development plan – zoning plan),

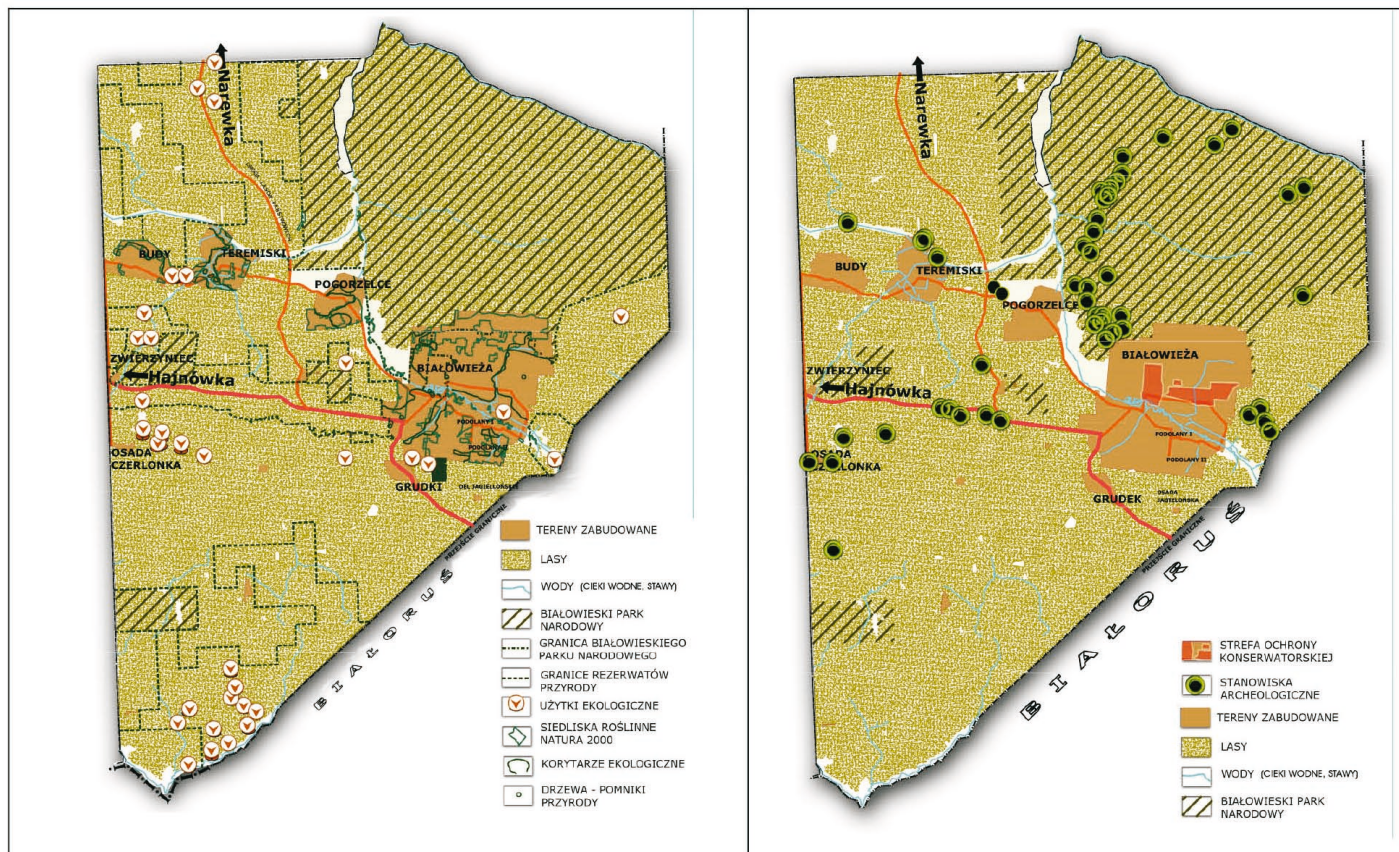


Fig. 3. The rural administrative district of Białowieża – scheme of natural and cultural resources; source: prepared by the author

- arrangements considering development directions in the sphere of communication systems and technical infrastructure,
- arrangements related to the rules of shaping the areas associated with agricultural and forestry production.

The contents of the document, which is now being developed, also involves the scheme of the natural and cultural resources of the rural administrative district (Figure 3), the scheme of the communication and technical infrastructure (water supplies, sanitation and electricity) (Figure 4), showing the changes that appeared after 2008.

All activities associated with the work, defined in the procedure of preparing the conditions and directions of spatial development of the rural administrative district of Białowieża under ‘The Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża’ were preceded by preliminary work. This involved a thorough examination of the state of the existing spatial development of this rural administrative district. The scientific description prepared in July 2016 was particularly useful. It was prepared during the urban inven-

tory student practice by the students of Architecture at Białystok University of Technology and supervised by the author. The inventory map of the urbanization of the existing development of Białowieża was created with colour technology, using the appropriate scale, namely 1:1.000 (Figure 5). It contains the following data: functions of buildings (single family housing, farm, service, sports, recreation, technical infrastructure, additional constructions), detailed records of the functions, time of construction, renovation or modernization of buildings, technical conditions of buildings, type and materials for building walls, roof coverings, type and materials of the pavement and drives (asphalt, concrete, stone, gravel, soil, grass) and other elements of development, such as green areas, fences, small architecture.

The data was collected during the interviews with the owners of the properties and residents as well as based on the materials received from the Białowieża Rural District Office. The drawings of the street frontages (a scale of 1:200) showed their current character (Figure 6). The data were completed by the ‘Photo-Inventory Table’, which included a complete photo service illustrating the described area. There were also very important hand-drawn sketches, which also in de-

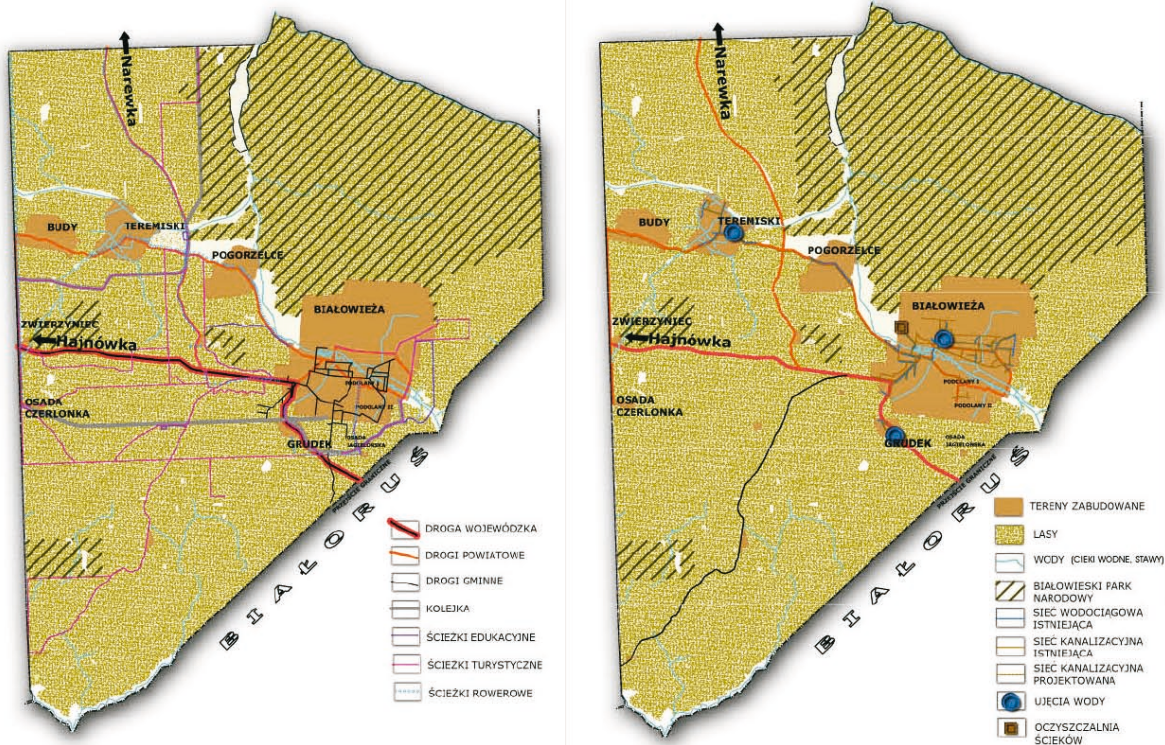
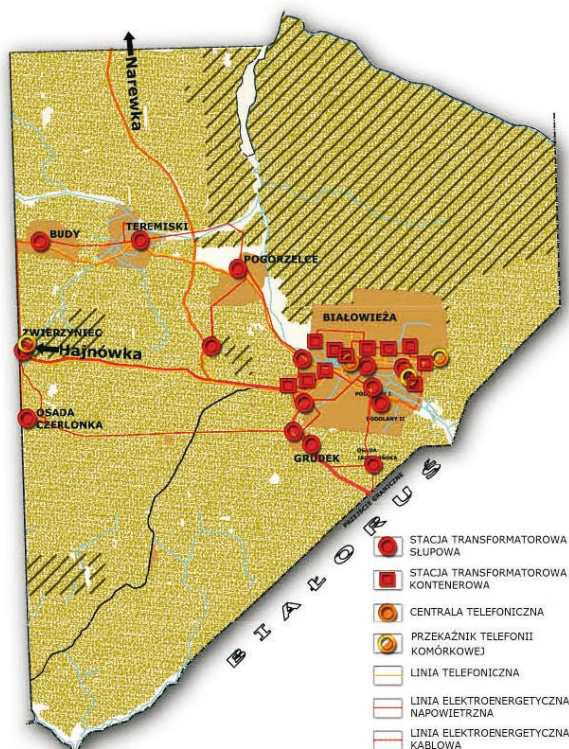


Fig. 4. The rural administrative district of Białowieża – communication scheme and technical infrastructure (water supplies, sanitation and electricity); source: prepared by the author



tail illustrated some selected fragments of the streets, squares, urban interiors and individual buildings. They could show the so-called 'spirit of the place'. They reflected the students' perceptions related to the visited places, showing the residents the beauty of their surroundings, which they could not usually be aware of. As a result, the exhibition of students' work was organized at the District Office and the Cultural Centre.

All of the above mentioned actions were preceded by design and planning decisions that were also meeting the needs of the residents and the owners of the properties who applied for having the use of their property changed for various purposes. The potential investors have their properties in different places of the Białowieża glade. Currently, their investments refer to the buildings along the main streets connecting the glade and the villages. The existing systems of the rural development create a compact rural composition and the dispersed settlement agricultural or forestry places. This can be clearly observed by looking at the village inventory, namely the village of Teremiski (Figure 7). In order not to destroy it, the clear as well as possible directions of the location and development of new buildings have been indicated. Such decisions are written



Fig. 5. Urban inventory of Białowieża performed during the student practice by the students of the 4th semester - Faculty of Architecture, Białystok University of Technology, in July 2016.



Fig. 6. Sections of street frontage, i.e. Południowa Street in Białowieża;
source: Halicka J., Praktyka inwentaryzacyjna urbanistyczna, Białowieża, 2016.



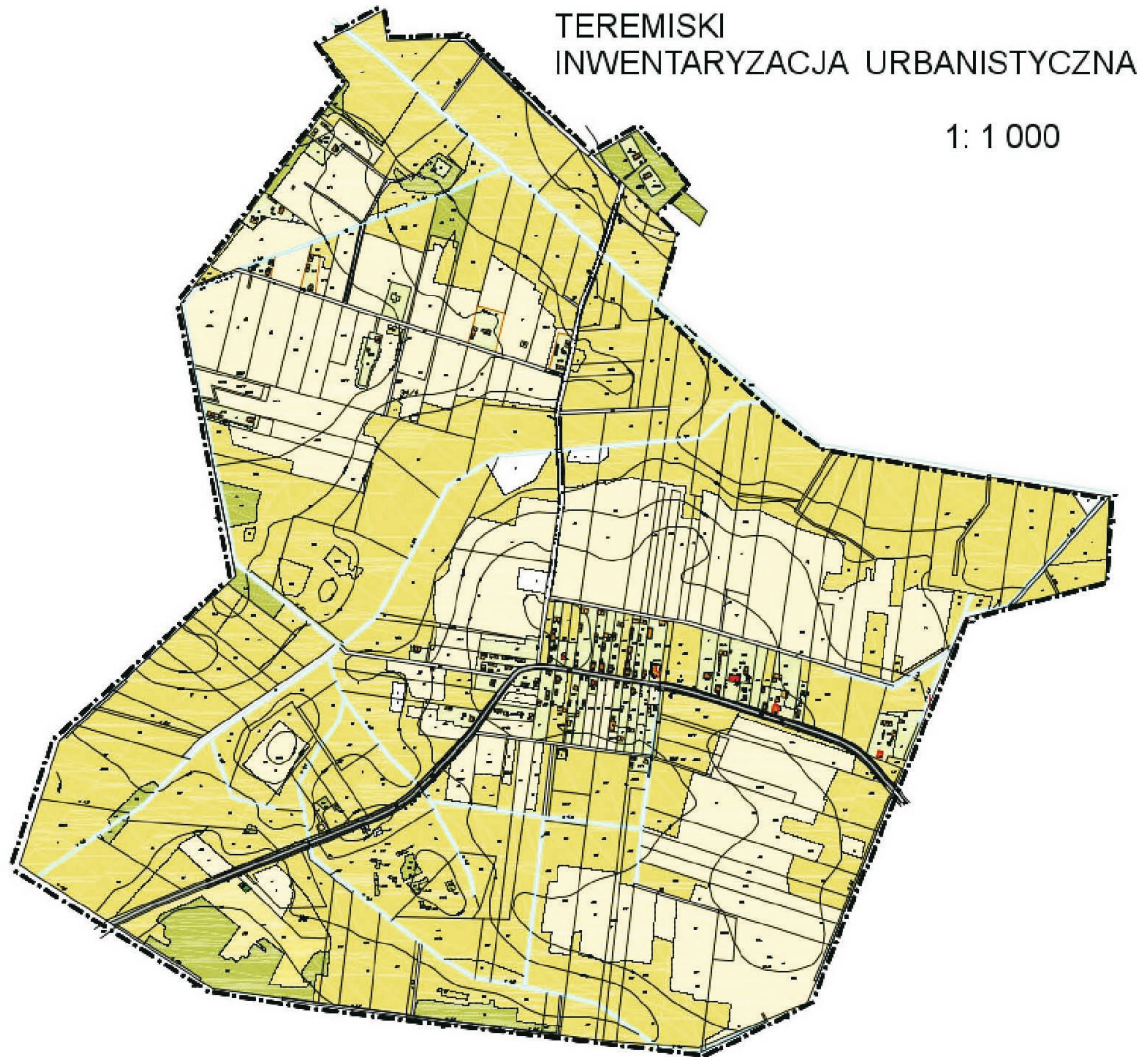


Fig. 7. Urban inventory of the state of the existing development of the village called Teremiski

in 'The Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża' for this particular village (Fig. 8).

The text of 'the Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża' formed a basis of the project in the sphere of the local spatial development plan (zoning plan)⁴. Figure 9 shows a part of the zoning

plan of the village Teremiski and includes the following aspects: zoning plans and functions of the areas, demarcation lines, development lines and spatial suggestions for the future development of the existing and designed spaces. The graphic appendices, justifying the prepared solutions, are attached to the text so as to illustrate the recently designed space that will be incorporated in the new regulations (Figure 10). For this

⁴ Parts of the document entitled 'The Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża,' accepted in Resolution No 23/121/08 of The Rural District Council of Białowieża of 30 December 2008. General rules and regulations of land development and building constructions: according to the spatial policy of the Rural Administrative District concerning land development and building constructions, the following rules should be obeyed:

- 1) rational and economical management of the natural resources by excluding from the development of the indicated areas of the land;
- 2) renewal and proper display of values found in the cultural resources of this Rural Administrative District;
- 3) co-operation with the appropriate authorities in the sphere of land protection for the realization of supra-local public investments (purposes);
- 4) building areas associated with inoffensive production and craft services require the establishment of the condition in the form of an administrative decision, i.e. the offensive impact of such facilities cannot be observed outside the property of the investor;
- 5) spatial planning arrangements would complement the principles and regulations included in the Study, once the protection plan has been established for the Białowieża National Park;



Fig. 8. Study of conditions and directions of development of the village Teremiski; source: [11].

6) areas with no right to build in, with the exception of the facilities associated with their function constitute the Białowieża National Park and forest areas;

7) areas with no right to build on their land, with the exception of the realization of some building:

- areas of river valleys,
- agricultural land,
- areas of the so-called ecological corridors,
- areas covered by the 'Natura 2000' Network of the protected areas concerning the Habitats Directive (the areas of the potential vegetation habitats have been indicated on the basis of the NATURA 2000 listed sites, as specified in the graphic form),
- areas directly attached to the Białowieża National Par.

The main directions in the range of housing construction will involve:

- 1) preserving the historically formed communication and parcel systems and arrangements as well as adjusting the new elements of the spatial layout to the historical composition;
- 2) modernization and revitalization of the existing buildings by referring to the best historical examples, taking into consideration their dimensions, architectural forms, material and constructional solutions;
- 3) preserving farm buildings in the villages (Budy, Teremiski, Pogorzelce) as well as the historical character of settlement buildings in the village of Teremiski;
- 4) arranging housing resources of the settlement Czerlonka and the settlement Grudki;
- 5) realisation of the new housing development:
 - maintenance, modernization, replacement and additional dwellings in the open space for a new construction (not built up) area between the existing housing (infills),
 - identification of new housing areas in the very close neighbourhood of the existing buildings, taking into consideration the historical arrangements of settlement units and the natural structures of the rural administrative district.

Table 4. Guidelines for the local spatial development plan (zoning plans) included in 'the Study on Land Use Conditions and Directions of Spatial Development of the Rural Administrative District of Białowieża,' Resolution No. 23/121/08 of the Rural District Council of Białowieża of 30 December 2008.

Settlement Unit:	Arrangements
Teremiski	1) basic unit of area development (of a plot) is a farmstead consisting of a farm house and a group of farm buildings;
Type of building:	2) plot area – its minimum size – 2.500 m ² with the minimum front line of 30 m, the biologically active area no less than 60%, built up area no more than 25%;
Farmsteads (Polish: RM)	3) maximum height of the building: 2 storeys (second storey as the functional attic), simple compact body of the building of a rectangular shape, maximum width of the façade approx. 8.0 m, maximum storey height above the ground: 0.65 m;
	4) shape of the roof must be symmetrical: gable (like an inverted V), inclination angle – 43°-45°, maximum height of the ridge (from the ground level) – approx. 8.0 m;
	5) material for walls: recommended – wood, stone (foundation), accepted – substrates: ceramic and silicate materials, only if the facade is made of wood in the form of boards or profiled planks;
	6) roofing materials: recommended – lath wooden shingles, timber shingles, wood chips, shavings (possibly straw, thatch), accepted – ceramic tiles, cement tiles, metal tiles in dark grey (graphite), dark brown colours;
	7) use of the attic lighting: recommended – windows at the top of the building, accepted – roof windows, forbidden – dormer windows;
	8) building facades: recommended - wooden boards made of timber or profiled planks in the natural colour or painted, forbidden – any plastic material (the so-called plastic siding);
	9) windows: recommended – traditional wooden box windows, accepted – modern wooden windows with composite glass, forbidden – plastic windows and windows with thin metal interstitial glazing;
	10) surface of paths and drives: recommended - stone and wood paving, gravel, 'stone in the grass'; forbidden – cast concrete and prefabricated elements, asphalt, forbidden use of prefabricated concrete elements in the fencing.

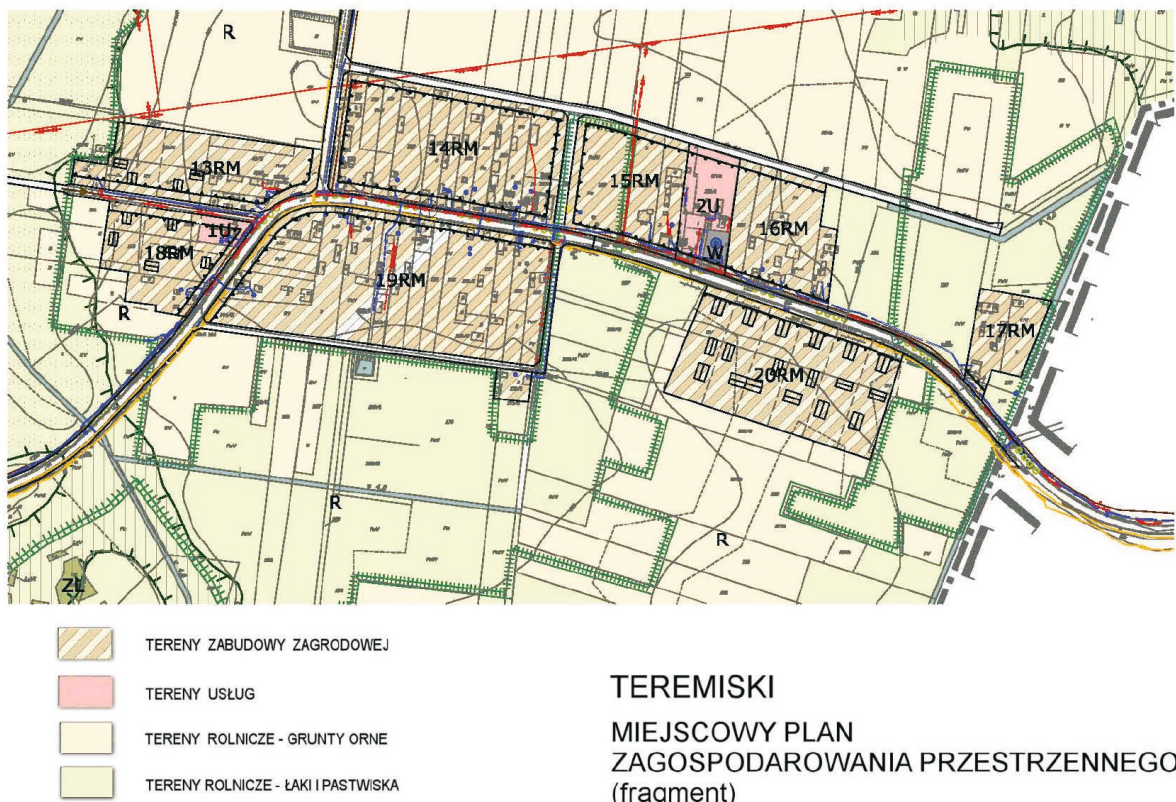


Fig. 9. Sections of the local spatial development plan (zoning) concerning the village of Teremiski; source: own research

reason the following things are needed, i.e.: the axonometric projection and views of the whole development areas, showing cubature dimensions, elevations of the entire development lines and street frontages together with the colours and the used materials. The text itself,

which provides a resolution of the local spatial development plan (zoning plan), does not usually suffice to present the prepared document to the residents. However, it becomes an important element for the public discussion, where it can be visually demonstrated.

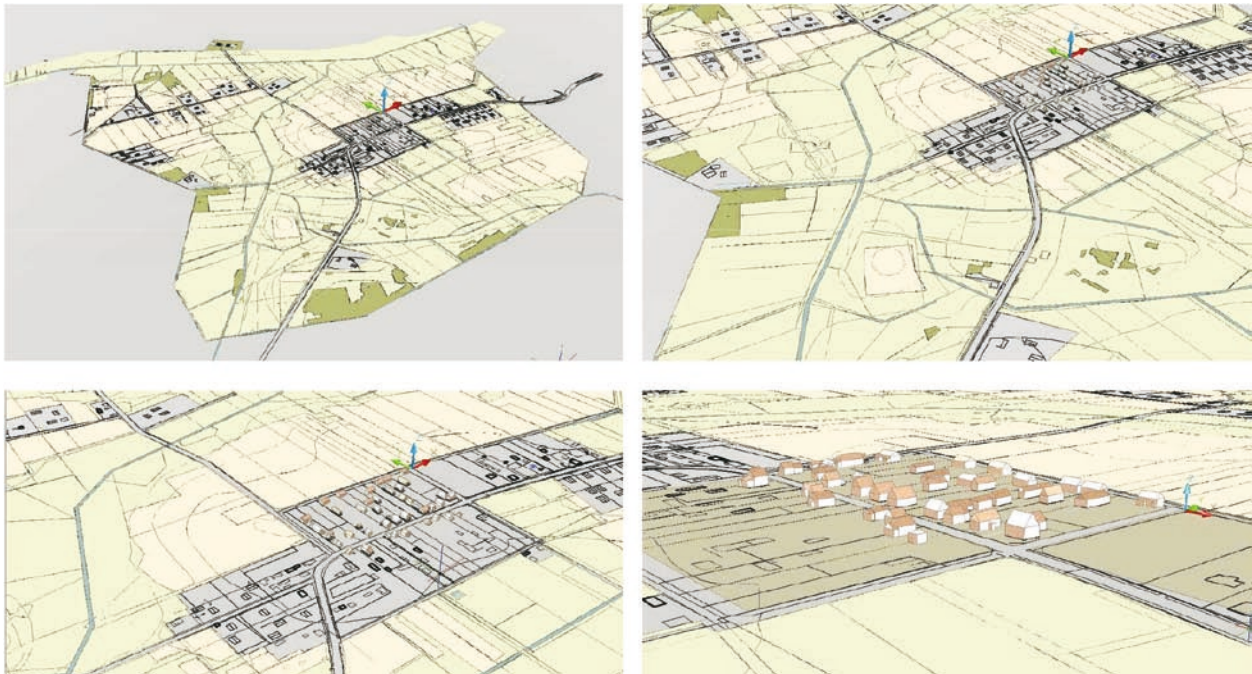


Fig. 10. Records of local spatial development plans (zoning) shown in the axonometric projection and views (example of the appendix involving development parameters and spatial development parameters)

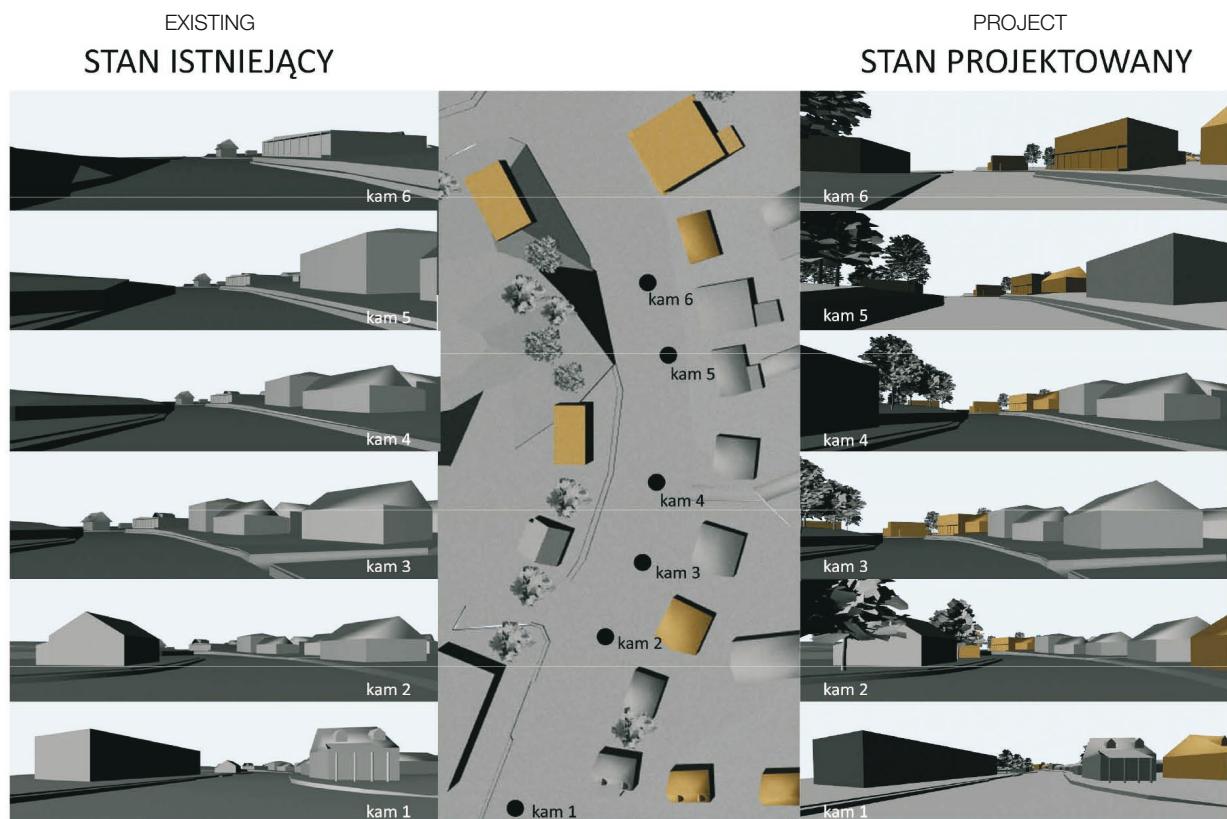


Fig. 11. Records of local spatial development plans (zoning) shown in the street frontage (example of the appendix involving development parameters and spatial development parameters); prepared by the author

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