



## Regeneration of urban space in Romania: A case study of Bistrita municipality

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### ABSTRACT

#### Key words:

landscaping, planning, regeneration, urban landscape, urban space

This study aims to analyze urban landscapes by assessing the development of built space, one of the most dynamic elements within them. The spatial development of built environments is a phenomenon present in most urban areas. The study looks at the relationship between patterns of built space and urban green spaces. Implications on the connectivity of urban space, the planning of urban functions in their proximity, and the spatial distribution of recreational potential based on the perceived recreational value of the landscape by the local community are investigated. The theme of the paper is a topical issue in the study of urban landscapes, while at the same time it is an ongoing phenomenon - the growth of built space - for which optimal planning solutions are being sought. The analysis and results presented seek to increase understanding and awareness in addressing the dynamics of built space in the urban environment. The data used are collected both from official sources and from the ground. Urban regeneration aims to revitalize distressed urban spaces: The development and beautification of public spaces - squares, squares, parks, street furniture. The links between this category of urban space and the rest of the urban infrastructure are analyzed, as well as the role that urban planning plays in the development of built space in the vicinity of forest areas. The study area comprises territories in the municipality of Bistrita. The socio-economic context of the area has been the basis for understanding the patterns of evolution identified in the urban landscape, as well as being a driver in ongoing urban transformations and processes.

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### 1. Introduction

The urban landscape emerged with the development of cities, influenced by the interaction of three dimensions: society, culture, and economy. Seen as a coherent organization of customs, traditions, and attitudes, the city is a physical mechanism that supports the social processes of the people who form it. It sits at the heart of the urban landscape alongside issues and challenges of urban design, planning, and management. The urban landscape brings into a confined space several functionalities such as residential, industrial, institutional, commercial, etc. functions, sometimes they are incompatible with each other. Development that, by meeting the needs of the present generation, makes it easier for future generations to make their own choices, is sustainable growth (Ionaşcu, 2003).

The urban landscape is a component of the cultural landscape with the highest proportion of anthropogenic components compared to the natural landscape (Ciangă, 2013). It can be interpreted as an expression of the socio-cultural environment in the city (Ciangă, 2013). It shows the lifestyle of its inhabitants, together with the set of values and activities that characterize them, highlighting the adaptation of the urban area to geographical conditions.

The evolution of the concept of the urban landscape shows a transition between four approaches to the urban landscape, as follows: the artistic approach based on aesthetics, the functional approach adding functionality to aesthetics, the contextual approach based on perception, and the sustainable approach including the ecological pillar of the landscape.



In terms of spatial planning, it is not possible to separate land use (natural, agricultural, urban) from the distribution of activities (housing, trade, production).

Urban planning aims to encourage the complex development of localities by developing medium and long-term development strategies. Urban planning activity covers all the country's localities organized in a network based on their hierarchical and balanced distribution in the territory. Urban planning aims to establish the spatial development directions of localities following their potential and the aspirations of their inhabitants (Dragoş and Dumitrică, 2020).

Planning sets out the development objectives, the stages of achievement, and the financial resources needed to achieve them. At the same time, constant improvement of this process together with sustainable landscape management can lead to a balance and sustainability of urban environments together with the surrounding areas they polarize. Urban planning considers the development of cities by trying to control the changes generated in the landscape through coherent decisions taken at appropriate scales of organization (Antrop, 2004).

Functional conversion is another pattern of built space evolution that involves a transformation of an existing space with a change in functionality. An example is the conversion of former industrial warehouses into art galleries or service buildings, shopping centres etc.

## 2. Conceptual theories

Green space planning can be interpreted from a socio-ecological point of view and is determined by factors such as location, demand for recreation/open space, and the structure of the administration responsible for the process. Urban projects involving the creation of new green spaces can be implemented by both public and private actors together with and/or non-profit organizations. Important aspects based on which sustainable planning of green spaces is carried out are multifunctionality, connectivity, and the corroboration of plans, more specifically integrated into the functionality of the urban area. The percentage of green space near the place of residence correlates positively with the overall good health of the population, especially the social groups represented by the elderly and children. Therefore, the evolution of built space in urban environments is also closely linked to the evolution of green spaces, which should be able to support this expansion.

The planning of urban green spaces is carried out according to the ownership of the occupied land. For public green spaces, the local administration is responsible for their management, maintenance, and development. Those located on private property are managed by the landowners following the legislation in force (Niță 2016).

Thus, urban development is not about population growth or territorial expansion of cities, but about eliminating the consequences of both phenomena. Urban development aims to build cities that ensure the well-being and happiness of their inhabitants, i.e., inclusive, safe, resilient, sustainable, and anti-fragile.

The term 'development' means the action of territorial transformation and its outcome (Manecă, 1986). "To develop" means "to pass from an old qualitative state to a new one, from a lower to a higher step, from simple to complex", but also "to expand, to grow, to increase" (Manecă, 2000).

Urban development aims at economic prosperity and social welfare through the creation of a favourable environment for business, while integrating vulnerable groups into the community, using endogenous resources, and developing the private sector (Dragoş and Dumitrică 2020).

The Explanatory Dictionary of the Romanian Language considers that "urbanism is the science whose object is the systematization of

existing settlements and the design of new settlements, the word itself comes from the Latin *Urbis* which means the city, urbanism is, therefore, the science of the development of cities and settlements (Explanatory Dictionary of the Romanian Language 1996).

In terms of spatial planning, it is impossible to separate its use (natural space, agricultural space, urban space) from the distribution of activities (housing, trade, production) (Dragoş and Dumitrică 2020).

## 3. The theoretical basis of planning

An urban system is a system of urban localities between which economic cooperation is established, social and cultural cooperation, land-use planning, environmental protection, and technical and public facilities, each of which retains administrative autonomy. System of neighbouring localities between which relations of economic, social, and cultural cooperation, land-use planning and environmental protection, and technical and sanitary equipment are established, each preserving its administrative autonomy (oar-bucuresti.ro/).

For national or regional urban systems, development balanced development is a desideratum. In social terms, sustainable development means making economic efficiency compatible with profit, as attributes of the competitive market, with social justice and equity, through a fair distribution of benefits from environmental protection activities (Petrişor, 2006).

At the international level, the Rio Conference showed that rich countries must help poor countries break out of this vicious circle. (Petrişor, 2006). This has been called forever since the United Nations summit in Stockholm (1972) when poor countries were the theses of the Club of Rome as an expression of the selfish interests of poor countries. developed countries and calling on them to reduce polluting emissions and resource consumption (Petrişor, 2006). The priorities of sustainable development have also been revisited in the work of the United Nations Summit in Johannesburg (2002), where the focus was on the social agenda, poverty eradication, health, and sanitation issue (Petrişor, 2006).

Urban regeneration refers to the process of demographic, socio-economic renewal, reduction of unemployment or deterioration of buildings. Urban regeneration brings underused assets back to life and redistributes opportunities, increasing urban prosperity and quality of life. Urban regeneration initiatives are complex, long-term, and risk-enriching private space or privatising public space (unhabitat.org). The city and their corresponding projects, the analysis is carried out in terms of how these projects meet the criteria of commonly used urban interventions such as renovation, reconstruction, modernisation, revitalisation, and restructuring. Thus, we can see that in terms of space use there is a transition to a mixed-use area that is manifested through construction. (Dumitrescu, 2016).

From the perspective of spatial planning as a component of local development, the following elements should be considered:

- human settlements and building in general;
- urban and spatial development projects;
- functional zoning of the territory.

Land and its resources are a fundamental element in urban development, a process that is based primarily on endogenous resources. Spatial management of the national territory is an obligatory, continuous, and forward-looking activity, carried out in the interests of the local communities that use it to the values and aspirations of society and the requirements of integration into the European area (Dragoş and Dumitrică, 2020).

Development is based on human resources, so at a local level, there must be responsibilities in terms of workforce qualification and increasing the capacity to adapt to environmental changes (Morin, 1999).

In terms of education and training, seven elements must be considered in urban development processes:

1. the need to introduce and develop applied studies;
2. the promotion of knowledge capable of grasping global, fundamental problems to incorporate local knowledge;
3. the human condition must be at the heart of learning processes;
4. knowledge of human identity and evolution;
5. learning must eliminate uncertainty;
6. learning must develop understanding;
7. education must contribute to the realization of a link between the individual and society.

An approach to urban development requires a diagnosis, which places the community in the environment, anticipates the difficulties, and evaluates the opportunities. Depending on these aspects, a defensive development approach can be taken (support for existing local actors, specific support for businesses, emphasis on eliminating weak points) or an offensive one (implementation of a global development project, in partnership with various actors, exploiting strong points).

In this period, competition between different communities is evident, so efforts are needed to attract population, investments, and economic agents. The dynamics of a community can also be measured by demographic trends, so the conditions for attracting new inhabitants must be ensured at a community level by knowing the determinants of the choice of an area (Huron and Spindler 1998).

Town planning documents concern urban and rural areas and regulate the use of land and the conditions for its occupation by buildings. Urban planning documents transpose the proposals contained in national, regional, and county land-use plans to the local level (Dragoş and Dumitrică 2020).

The urban planning documents have a specific regulatory character and lay down rules that apply directly to localities and parts of them down to the level of cadastral parcels, constituting mandatory elements for the issuance of urban planning certificates.

The urban planning documents are as follows, according to Law 350/2001:

- the general urban plan and the local by-law relating to it;
- the zoning urban plan and the local regulations relating to it;
- the detailed urban plan.

The detailed urban plan used in the study is exclusive of a specific regulatory nature, which ensures the conditions of location, dimensioning, compliance, and building service of one or more objectives on one or more adjacent plots, on one or more sites, in correlation with the immediate surroundings.

The detailed urban plan includes regulations on:

- ensuring accessibility and connection to the building networks;
- urban planning permissions and constraints on built volumes and development;
- functional and aesthetic relations with the neighbourhood;
- compatibility of functions and conformity of buildings, installations and planting;
- the legal status and movement of land and buildings.

The detailed urban plan is drawn up only for the detailed regulation of the provisions laid down in the General Urban Plan, the Zoning Plan, or for the establishment of building conditions (Dragoş and Dumitrică, 2020).

The General Town Planning Regulation is the system of technical, legal, and economic rules underlying the elaboration of town planning plans and local town planning regulations.

The local urban planning regulations for the entire administrative-territorial unit, related to the General Urban Plan, or for a part of it, related to the Zonal Urban Plan, include, and detail

the provisions of the General Urban Plan and the Zonal Urban Plan regarding the concrete way of land use, as well as the location, dimensioning and realization of built volumes, improvements, and plantations (Dragoş and Dumitrică, 2020).

The implementation of the approved spatial planning and urban planning documents is ensured by issuing the urban planning certificate. The urban planning certificate is the binding information document by which the county or local public administration authority makes known the legal, economic, and technical regime of the real estate and the conditions required for investments, real estate transactions, or other real estate operations, according to the law.

The planning certificate is issued at the request of any applicant, natural or legal person, who may be interested in knowing the data and regulations to which the property is subject (Dragoş and Dumitrică, 2020).

The town planning certificate does not confer the right to carry out building, landscaping, or planting works. The urban planning certificate must state the purpose for which it was issued.

#### 4. Urban Development Strategy

A strategy is simply the framework for action. It considers the problems of the area, the possibilities, means and resources and defines a planned approach to economic development and job creation. The strategy is an indispensable element in the work of a local development agency in so far as it indicates the problems and opportunities and, it structures, coordinates, and gives meaning to a whole potentially different activity (Lucica 2005).

Urban Development Strategies (UDS) is a major and recent initiative of the World Bank and reflect the growing importance of urban regions as population centres and drivers of economic development. The world's population is becoming more urbanized, and prosperity prevails in urban regions. Moreover, the process of democratization and the development of social welfare is most often taking place in urban regions. Cities are and will continue to be important for national development. SDUs are part of recent development policies. Development issues increasingly emphasize the importance of a complex approach, giving equal weight to economic, political, institutional, social, and cultural factors. This parallel between complex development issues demonstrates that democracy is a vital component of development and not an outcome of the process. Moreover, participation, involvement, ownership, accountability, and transparency in governance are seen as important processes for ensuring democracy and hence development. This is directly reflected in the definition of an SDU as given by the World Bank: "City development strategies ... originate and are wholly owned by city managers" (<https://www.undp.org>).

SDU should lead to integrated plans, not just land use planning or simple investment plans. Moreover, they should present a strategic vision to help make decisions and allocate resources that lead to poverty reduction and economic growth. The choice of priorities should also be a matter of public choice, with general participation. In this way, both sectors can expect to achieve a better allocation of public and private resources.

The SDU is based on the following principles of a sustainable city:

- sustainability - implies both better living conditions for the urban poor and a minimum of conditions necessary for decent living and the health and well-being of all;
- competitiveness - enables the city to develop its economy in a national and international context, generate economic wealth, and ensure consistency between approaches to social equity and social security and systems that promote a productive and competitive private sector;

- financial support - the city must have as much financial strength as possible to enable it to own or access a wide variety of funding sources (own sources, shared revenues, loans, access to capital markets) to meet investment and development needs;
- good governance - responding efficiently and effectively to urban problems through the empowerment of local authorities and partnership with civil society. To achieve these objectives, good governance - responding efficiently and effectively to urban problems through the empowerment of local authorities and partnership with civil society. To achieve these objectives,

In this context, the overall objectives of the SDU are:

- to steer the city towards economic development to create more jobs;
- to develop a joint organizational bliss in the city's priorities, strategies, and actions;
- support the local authority in presenting financial and investment strategies;
- to support the local authority in presenting financial and investment strategies.

Advantages of SDU. The strategic planning exercise is completed when its objectives are clearly explained to all those directly involved in the project and to the community at large. To ensure the continuity of the project the local authorities and the city's investors themselves must steer the process. This can only be achieved when local authorities are convinced of the benefits of the process.

Good knowledge of the mechanics of the urban environment. The first step in carrying out the strategic planning process is systematic documentation linked to the relevant database for the city. The result of this documentation is then subjected to the thorough and collective research required for the SDU. In this way, the SDU's strategic planning process succeeds in providing a detailed scenario of the city that will be useful not only to planners and interested citizens but also to potential investors.

The main normative acts in this field, already mentioned, are Law 50/1991 on the authorization of construction works and some measures for the construction of housing and Law No 350/2001 on the town and country planning and urban development, which were adopted ten years apart from each other, which has required numerous changes to harmonize them (Duțu, 2008).

LAW No 350 of 6 June 2001 on town and country planning  
ISSUER PARLIAMENT of Romania

Published in the OFFICIAL MONITOR No 373 of 10 July 2001

Chapter II Scope of activity

Section I Spatial planning

The basic aim of spatial planning is to harmonize economic, social, environmental, and cultural policies, established at the national and local levels, throughout the territory to ensure a balance in the development of the various areas of the country, to increase the cohesion and efficiency of economic and social relations between them.

Article 9

The main objectives of spatial planning are the following:

- the balanced economic and social development of regions and areas, respecting their specific features;
- improving the quality of life of people and communities.

## 5. Data used

In the research we used OpenStreetMap (abbreviated OSM) a collaborative, open-source project that aims to build a global geographic database such as road atlases, using both manually entered data against a background of spatial images and data collected from GPS devices.

GPS Fields Area Tracker - The Area Tracker app is a smart app that is used to measure the distance and area between two points. The user can measure routes, terrain, and field area on maps. For agricultural use, you can measure the area and distance of gardens, farms, plots, etc.

The free field area calculator can be used for surveying purposes. The area mapping app covers functions like distance calculator, coordinate finder, compass, and unit converter.

To design the layout, we used the software application SketchUp makes it easy to deliver your 3D urban planning models as accessible illustrations and animations.

## 6. Regeneration of urban space Mori Square, Bistrita, Bistrita-Nasaud County

Being a citizen of Bistrita, I know the problems the city is facing, so through this study, I want to contribute to the development of the community by improving an area that is in a state of degradation (Fig. 1).

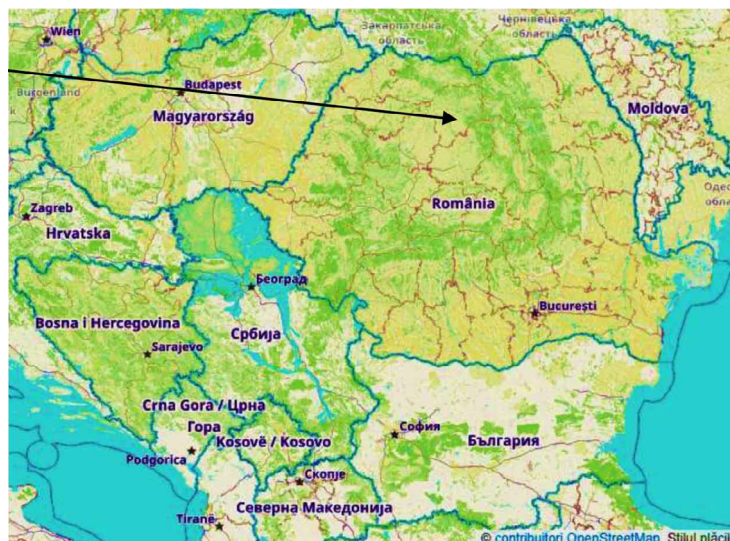


Figure 1. Location of the case study area of Bistrita-Nasaud county.



Figure 2. Image of Delimited Space



Figure 6. Space condition.

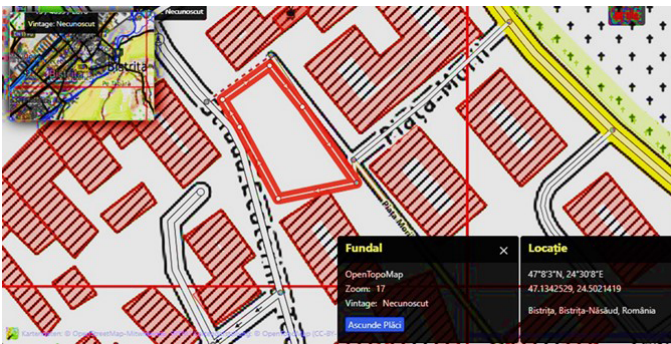


Figure 3. Topo Image Delimited Space.

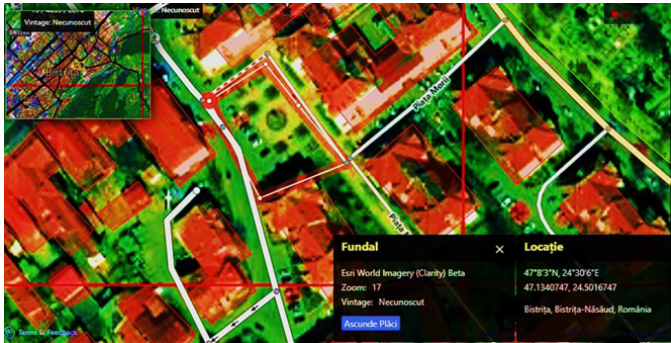


Figure 4. Delimiting Esri Space.



Figure 5. Space Model.

Delimitation of the analyzed space by using three types of background, namely (Figs 2-4):

- Free map.SK Outdoor;
- Open Topo Map;
- Esri World Imagery Beta.

The research explores the possibility of making Mori Square a useful space for the community by transforming it into a green recreational space. The area is in a state of decay with damaged museum objects and broken paving (Fig. 5-6).

The objective of the present project is the development of green spaces and parks in Bistrita (Table 1).

The landscaping itself aims at preserving the environment and enhancing the natural element. The visual harmony of the component elements has also been considered to satisfy the various desires related to the use of the land in question, under the conditions of achieving a quality landscape.

The works planned are digging and clearing the land of weeds, stones, and concrete, procuring, levelling, and spreading fertile soil, laying out paths with concrete slabs, seeding areas for lawns, and landscaping areas with decorative shrubs, and planting several species of deciduous and coniferous trees (Table 2).

Table 1. Data Mori Square.

Distance	Area
508.55m, 0.51km	547m <sup>2</sup> usable

Along the main alleys, resting places, ergonomic benches, lighting fixtures, and litter bins have been proposed, with street furniture designed simply and appropriately for the site.

The proposed sidewalks will be approximately 580 square meters (pavement + curbs). They will be made of vibrated concrete pavers with a thickness of 6 cm. Vibrated concrete curbs will be used to frame them. The curbs will be of pedestrian type. Pedestrian walkways will follow the slope of the land in a longitudinal profile, and transversally will be made with a maximum slope of 2.00%.

The pathways will be paved on a base layer of 4-8 mm gravel 5 cm thick, crushed stone with a capillary breaking roll 15 cm thick, and a layer of compacted ballast 15 cm thick.

The landscaping consists of the following types of works:

- tree planting by specialists;
- creation of the vegetation layer;
- seeding the vegetation layer.

The site will be equipped with the following street furniture:

- Cast iron and wooden benches - 22 pcs;

**Table 2.** Component elements / description of functions.**The present technical documentation has been drawn up for the development of a park for rest and recreation**

Realization of park lighting

Landscaping green spaces

Artificial fountain

Urban facilities

Earthworks

Existing tree grooming

Development of a playground for children

Creation of a central longitudinal pathway linking the different areas of the park

Creation of type 2 artesian fountain, "Fountain with sphere"

Asphalted platforms bordered by concrete curbs

Placement of classic benches

Installation of cast-iron drinking water cisterns

Automatic public toilets

Placement of bins for household waste

Placement of pavilion with table and benches

Landscaping green spaces

Creation of an automated irrigation system

Landscaping green areas with turf rolls

The driveway will be made of vibrated concrete pavers set on a bed of sand. These alternate with concrete and asphalt areas. The perimeter intended for children will be installed

Synthetic rubber paving stones

The vegetation will consist of palms of fossil trees, shrubs, and large and small resinous trees

Arranged in palms that develop into decorative terraces all year round

The arrangement of the deciduous and coniferous trees will be such that the colours offered are diverse in all seasons

The playground will be surrounded by a metal fence

- Litter bins - 21 pcs;
- Decorative lampposts - 52 pcs.

According to Law no. 24 of 15 January 2007 republished under Article IV of Law no. 313/2009 for the modification and completion of Law no. 24/2007 on the regulation and management of green spaces in urban areas, published in the Official Gazette of Romania, Part I, no. 694 of 15 October 2009, for buildings and sports facilities, green spaces and plants, playgrounds and rest areas must be provided in an area of at least 40% of the total area of the land.

At present, there are only mains and electricity supply in the study area, and connection works are required up to the study objective. The electricity supply will be from the existing grid in the area.

The development will be carried out in the existing park with a total area of 560 sqm. The proposed project is important to increase the quality of the green areas to bring them closer to the European norms and standards for green space, i.e., to increase the area of green spaces.

The proposed works on the site are as follows:

- Pedestrian platform development;
- Realization of park lighting;

- Landscaping green spaces;
- Urban amenities.

Fountains and water fountains have always been places that have attracted and attracted audiences of all ages. The image of water, the play of the jets, the sound of falling water, and the ozonated air around us are some of the reasons that make us stop by them, no matter how much we are in a hurry.

We propose two options for the creation of an artesian fountain. Their realization involves approximately the same costs. The beneficiary will decide the type of fountain to be made in the park.

The "water lily fountain" is made of reinforced concrete and has a general plan size of 3,00 x 3,30 m. The walls of the basin are 30 cm thick, and the total height is 1.20 m, exceeding the pavement level by 40 cm.

The interior is covered with elastic waterproofing. Both inside and outside the walls are clad with grey "Residue" type limestone tiles.

For the installation of the circulation and water supply installations in the immediate vicinity, a buried reinforced concrete basin of 1,80 x 1,80 m is built. The pre-filling installation of the fountain will be connected to the existing sewage network in the

**Table 3.** Additional technical data.**Stone concrete side road - 1 MP**

Type 3 (paving and playground slabs): compacted sand – 0.35 m, crushed stone mix – 0.12 m, CPS M 100 – 0.03 m, concrete slabs.  
Sidewalk (Factory Gothic or equivalent) – 0.08 m, side stone device (Factory Gothic)

Type 4 (lawn grids): compacted sand - 0.35 m, crushed stone wedge - 0.15 m, crushed stone with soil - 0.07 m, concrete tile (Gothic Factory) with fruit soil and grass seeding - 0.1 m, side stone mounting (Gothic Factory);

Type 5 (platform covering): sand compaction - 0,1 m, gravel mixture - 0,15 m, PVC foil 200 MCR, asphalt grade III type B - 0,07 m, colored covering from cut crumbs (Mastrefibr) - 0,015 m, side stones mounting (Factory Gothic)

Type 6 (floor covering): sealing sand - 0.15 m, concrete B 15 - 0.15 m, composite beams 50x70; flooring - 0.026 m, side stones (Factory Gothic)

Type 1 (asphalt concrete driveway): compacted sand - 0.35 m, laminated concrete B7.5 - 0.18 m, asphalt concrete grade III with crushed stone type B - 0.07 m, T-Grid with mastic bit, asphalt concrete grade I type B - 0.07 m, asphalt concrete grade I team B - 0.05 m, side stones device (Factory Gothic)

Type 2 (paving stone with access for fire equipment): sand sealing - 0.35 m, laminated concrete B7.5 - 0.18 m, asphalt concrete grade III with crushed stone type B - 0.07 m, T-Grid with mastic bit, asphalt concrete grade I type B - 0.07 m, CPS M 100 - 0.03 m, paving slabs (Factory Gothic or equivalent) - 0.1 m, side stone mounting (Factory Gothic)

Type 7 (fire equipment platforms): sealing sand - 0.35m, crushed stone with a wedge - 0.15m, B15 concrete with mesh - 0.2m, CPS M 100 - 0.03m, concrete paving slabs (Factory Gothic or equivalent) - 0.1m, side stone fitting (Factory Gothic)

Red maple with one bulb 1,5x1,5x0,65m, h - 5-6 m

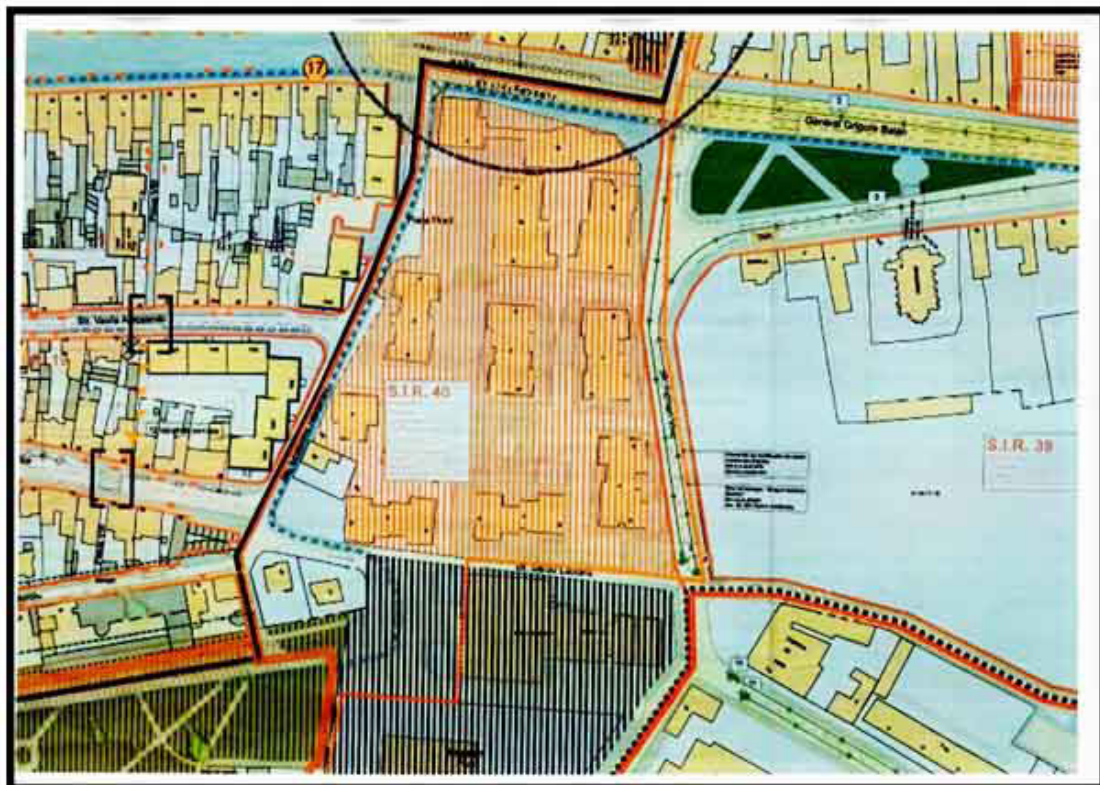
Arranging flower beds of 0.5 m high perennials (reed grass, rogoz, Vesperia, meadow grass, canary grass)

Lawn management for seeding (meadow grass - 40%, perennial ryegrass - 30%, red couch grass - 30%)

Lawn device arranged in a lawn trellis

Sloping lawn device with double grass seeding

Creation of artificial relief elements: high flower beds, artificial hills along a building facades 1.2



**Figure 7.** PUD (Detailed Urban Plan) space proposed for development. Source: Bistrita City Hall

area. For the complete description of the project, the construction of an additional technical data set is considered (Table 3).

There are regulations for building paths. Standard width: 3-10 meters. They must be located away from places where mass events take place. Equip with benches, and gazebos for a short break from walking.

Children's playgrounds and sports fields are located separately from crowded places. Their size depends on the size of the park and its capacity. Site equipment is standard. You should take care of the safety of the cover, and the quality of installation of equipment for active games.

From the Detailed Urban Plan PUD (provided by Bistrita City Hall), it appears that the study area corresponds to the urban district (Fig. 7).

Surface = 46 650 m<sup>2</sup>, Permitted uses.

In principle, the general characteristics of the area (functional, structural, expressive) should be maintained, preferably maintaining the current public uses of the buildings and those uses that still preserve the original use of the buildings. For the plots south of Barbu Lăutaru Street, in the event of a change of the current function, the only permitted functions will be for sport and leisure. Those functions that can constitute a public attraction will be supported.

Functional conversions compatible with the character of the area and the protection status of the buildings are allowed for public functions of supra-municipal and municipal interest, administrative, cultural, educational, higher territorial functions, commerce, professional and personal services, leisure, and tourism.

The project is the basis for the development of the Green Urban Axes. The Green Urban Axes are a central element of analysis in the research of the PhD thesis.

## 7. Conclusions

Built space is a dynamic element in the landscape of Bistrita, Bistrita-Nasaud County, Romania. Although there are no high values of urban sprawl, it is a dynamic area in terms of urban expansion. Along with buildings, other use classes have also shown a positive evolution: forest and agricultural land classes. Semi-natural areas are declining in landscape terms but remain strategic areas in urban development because of the benefits they bring and at the same time, more attention needs to be paid to their management.

Cities are changing under the influence of economic development. The planning of open spaces not occupied by buildings is becoming complex. In the urban environment, there is a wide range of land uses that need to be managed together. In this context, green spaces are seen as strategic areas because they provide multiple benefits to the urban community and improve the quality of life.

The study on the planning of the suburban territory of the Municipality of Bistrita was developed to solve the territorial dysfunctions in the suburban area of the municipality (definition of interdependence relations in the fields of economy, infrastructure, urban development, ensuring the need for green and recreational spaces, food products, etc.), the relations of the municipality with its suburban territory, taking into account that this territory constitutes the development reserve for the municipality.

This paper seeks to highlight the major principles, directions, and concepts of planning this category of territory through a set of complex policies concentrated at the urban-local, regional, and sectoral levels, to achieve a balance in local development.

The study is a scientific tool to support local public administration, with the help of which the problems affecting the main processes and phenomena in the area will be identified and prioritized. I prioritized outlines the optimal measures concerning

the aspects of urban housing, with effects on the limitation of urban mobility, the judicious exploitation, and management of resources, the management of risk factors, the harmonious and continuous development of the natural and man-made environment, to encourage local autonomy in the coordination and management of the sustainable development of the municipality of Bistrita. The study focuses on the spatial dimension of the relationship between urban forests and urban planning. The master plan has proved to be a useful source of data in this area for an assessment at the urban landscape level. Future research is recommended to broaden the scope of analysis to social, economic, and ecological aspects.

Planning of areas in the vicinity of urban forests is a complex and difficult process as it must align several interests: socio-economic and ecological. Thus, these actions need to be carried out carefully so as not to put too much pressure on forest resources and not to diminish the benefits obtained from them. The project complies with the planning rules imposed by the municipality.

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