

PROJECT PROPOSAL FOR LANDSCAPE DEVELOPMENT AT THE PUBLIC GARDEN IN BISTRIȚA COUNTY

PROPUNERE DE REAMENAJARE A GRĂDINII PUBLICE DIN BISTRIȚA

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Abstract. *Once with the urban development, increase of industrial activity, extended auto traffic, the creation and design of the green spaces has become an imperative solution for the modern urbanism. The green spaces are creating healthy and beautiful conditions for work and life development, with direct impact upon the modulation of microclimate, acting as a green filter for dust and toxic substances. Also they provide oxygene needed for maintaining life support, with a special particularity related to the beauty of these spaces, providing physical and psychological recreation for the human kind. The landscape development of the Public Garden in Bistrita County has it's beginnings in 1900, projected to fit in the urban development of the city, with a soft combination between architectural aspects and natural ones. Through the General Urbanity Plan, the public garden has been declared "Green space with severe regime for protection and controlled interventions". It's imperative to promote a new conception upon landscape development, with rules for maintaining the biodiversity, the natural potential of the specific zone, the landscape fond and not at least maintaining the environmental conditions. In the Public Garden of Bistrita County its imperative the rehabilitation of all the structural components, through controlled interventions, in successive stages.*

Rezumat. *Odată cu dezvoltarea orașelor, intensificarea industrializării și sporirea traficului rutier, crearea zonelor verzi a devenit un imperativ al urbanismului modern. Ele înfrumusețează locul de viață și de muncă, îmbracă într-o haină vegetală plăcută cadrul arhitectural al orașelor, contribuind la ameliorarea microclimatului, purificând atmosfera de praf și substanțe nocive, furnizează oxigenul necesar vieții, constituind în același timp medii stenice și estetice pentru recrearea fizică și psihică a oamenilor.*

Amenajarea Grădinii Publice din Bistrița începe în jurul anului 1900, ea fiind gândită astfel încât să se integreze în peisajul urban, îmbinându-se armonios atât elementele arhitecturale cât și cele naturale. Prin Planul Urbanistic General, grădina publică a fost declarată "Zonă verde cu regim sever de protecție și intervenții controlate". Este evidentă necesitatea promovării unei concepții despre modul de reamenajare a zonelor verzi și de recreare, ținându-se cont de conservarea biodiversității, menținerea potențialului natural al zonei, a fondului peisagistic și de rolul de asigurare a calității factorului de mediu. În grădina publică bistrițeană se impune o reabilitare a tuturor elementelor sale componente prin intervenții controlate realizate în etape succesive.

EXISTENT SITUATION

Before it was conceived as a public garden, the terrain made part of the medieval area, with his nordic area related to the fortification system from the XV century plus a dig of water.

The landscape development of this public garden was conceived to be fully integrated in the urban landscape, with a good balance between architectural elements (Dogarilor Tower, the fortress fence of defence, the existing villas) and also with the environmental elements (Bistrița river, Codrișor forest).

After the year 1953 the public garden has suffered major modifications through constructions of new paths and insertion of the urban furniture. In the present time, the public garden reaches a surface of 58,831 m², 18,509 m² occupied by pedestrian walkings, 3.622 m² occupied by semi-paths and 36.700 m² occupied by green spaces.

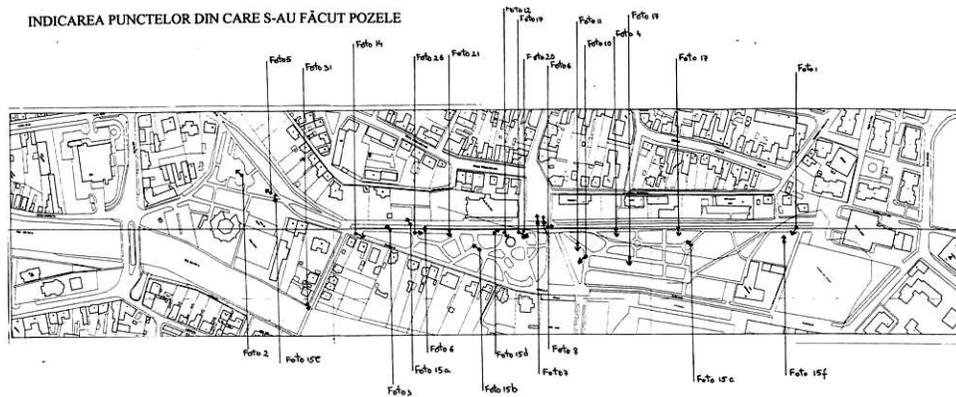


Fig.1. Points of perspective upon the existing situation

The existing situation of the vegetation. The public garden is divided in 76 parcels, with different sizes and shapes. In this parcels we can distinguish 3 main zones (I. : parcels between 43-76 with a play field in parcel no. 65; II : parcels between 42-18, pavilion and main entrance in the park; III. : parcels between 17-1, with the second play field). The whole landscape architecture in the parc is relatively conservatory, with organization on the transversal axis, all around the main entry in the park, pavilion area and the statue of George Coșbuc. Also another organization is made on the longitudinal axis of the park on the principal pedestrian path with an alignment made from horse chestnut-tree (*Aesculus hippocastanum*). The woody vegetation witch outcomes the optimum density is made from 1487 trees and 352 shrubs, representative beeing secular trees (with diameters on trunk over 1 m), the maple tree (in front of the sport building) plane trees and other species near the patio. The attraction of the public garden stays between two species of trees that are considered monument of nature): *Ginko biloba* (original from China) and *Lyriodendron tulipifera* (tulip tree - original from North America).

On the public garden surface are created two play fields, situated on the nord-east extremity of the park (with a surface of 913 m²) (fig. 2) and on south-vest extremity (with a surface of 844 m²) (fig. 2)



Fig.2. Playing fields

The decorative and functional constructions meet in the public garden of Bistrita are damaged with need for reconstruction and maintenance. Some of the decorative and functional construction in the public garden will be conserved others will be replaced. The existing ones will suffer restoration and maintenance works.

Stairs. Their need is to compensate the difference between different levels.

They are made with concrete prefabricated boards. The form of the stairs is simple. In the present time the stairs are in a state of decay, in some area the construction material is missing and also the borders between the green spaces and stairs



Fig. 4. Drinking fountain

The lightning system. The existing lightning system in insufficient and old, we propose a lightning system for public lightning and ambient lightning.

At the present time in the public garden exists a single source of potable water and nether one public WC.

Pedestrian paths. The pedestrian paths are made of asphalt, mostly deteriorated and in some areas the borders between the paths and green area are missing.

External furniture made for the rest area. We can observe external furniture made for the rest area along the pedestrian paths and also in large area of the public garden. In the patio area and parcel no. 54 area. Parcel no. 54 is considered the best illuminated parcel.



Fig.3. Lightning system

Pergolas and columns don't exist in the public garden.

Jardinières. The existing jardinières will be kept, but with works for maintenance and rehabilitation.

Protected spaces in the public garden. In the public garden exists a traditional patio, witch is a point of interest for some band concerts, different static

games, creative activities. This patio will be kept because it's a traditional point of interest of the public garden in Bistrița. **Benches.** The existing benches in the public garden are sufficient but are unaesthetic (damaged and with a brute design), proposing the replacement of all benches.

Art exponats. The art exponents in the public garden of Bistrița consist in different statues and architectural objects.

Equipment for sorts and games. The equipments for sports and games will be kept, and some of them that doesn't correspond from the functional point of view will be repaired and maintained.

Accessory. Indication panels In the public garden exists a single panel with a map of the garden and a brief history description of the garden. **Garbage cans** are enough and with adequate design.

LANDSCAPE PROPOSAL

Disposal of vegetative species. After the maintenance works or elimination upon the vegetative species, it's recommended to improve the landscape design by introduction of new vegetative species in the public garden of Bistrița county:

- Development of an alignment in the Nordic part of the public garden, in order to hide the estates from Ecaterina Teodoroiu Street. The alignment will be made from *Malus floribunda* specie.

- The buildings that will be functional as public W.C. will be covered with perennial twining plants.

- For accomplishment of color games, it's recommended the application of jardinières with annual flowers, biennale flowers, perennial flowers, shrubs (*Buxus*, *Cotoneaster*, *Ligustrum*) or conifers. The decorative effect is assured through port, leaf colors, flower colors and fruit colors.

- The jardinières will be placed near George Coșbuc statue with a plant mixture (*Hedera helix*, *Fuchsia*, *Coleus* ș.a.); in the existing jardinières will be planted flowers that will be decorative from early spring till autumn fall.

- In parcel no. 59 will be made a rondo with flowers, witch will assure the decorative design from early spring till autumn fall, (with biannual flower species: *Bellis*, *Myosotis*, *Viola*) till autumn fall (with flower species decorative through leafs : *Alternanthera*, *Cineraria*, *Coleus*, *Echeveria*, *Iresine*, *Santolina*);

- The talus that maxes the difference between the two walk areas will be planted with different shrub species (*Cotoneaster*, *Ilex*, *Juniperus*, *Lonicera* etc.), perennial flower species (*Hosta*, *Primula*, *Rosa* etc.) and different ferns (*Adiantum*, *Athyrium*, *Dryopteris*). The most favorable places (wit natural light) will be chosen for planting the mentioned above species

- At the junction of pedestrian paths will be planted shrub species (*Cytissus*, *Cotoneaster*, *Hibiscus*, *Ilex*, *Juniperus*, *Lonicera*, *Rhododendron*, *Thuja* ș.a.) in order to block the access for the green areas.

- Suspended pot flowers will be with (*Alternanthera*, *Begonia*, *Bellis*, *Coleus*, *Hedera*, *Impatiens*, *Lobelia*, *Myosotis*, *Pelargonium*, *Petunia*, *Salvia*, *Tropaeolum*, *Viola*) for the patio design, lightning system, children playgrounds ;

- will be planted replacement species for the turf (*Vinca*) in the shaded places of the public garden, in order to obtain a green carpet;

- In parcel no. 54 the existing turf will be replaced with a new one. Will be adopted carpet turf or rustic turf.

- Near the bole trees will be planted perennial flower species rustic (*Colchicum*, *Convallaria*, *Crocus*, *Hyacinthus*, *Muscari*, *Narcissus*, *Tulipa*), which will assure the spring design;

- The concrete post which are placed in parcel no 55 will take the place of columns and will be dressed with annual plants and lianas.

- The stone wall in parcel no. 22 will be dressed with lianas (*Parthenocissus*, *Hedera*) in order to mask the unaesthetic wall.

At the planting and association of the flower species will be accorded attention to the vegetation period, height of plants, decoration period, leaf color, fruit color, flower color. The main criteria are to use a large palette of flower species, in order to ensure a large period of decoration.

The evergreen species and shrub ones will be disposed solitary and in groups, alone and in association with other species. Identical to the flower species the attention will be kept on association of plants with decorative elements existing in the public garden, decorative elements of the plants, height of plants. Species with a distinct decorative aspect will be planted solitary in order to expose their qualities. Group plants will be made from single species. The mixtures made from conifer plants and deciduous ones will be made with deciduous plants in the first plan of view, and conifer one on the second plan of view.

At the borders of shrub groups will be planted different species of ferns, miniature roses, and *Hosta* species. In order to obtain the desired design effect will be placed decorative stones like marble, with an excellent esthetic property and soil fixation property for the existing slopes.

The lightning system. We propose the alignment of the lightning system along the main pedestrian path and the secondary ones.

We propose the building of 11 drinking fountains and two sanitary groups for women, men and disabled persons. The drinking fountains will be spread all over the surface of the public garden, and the sanitary groups will be placed near the playgrounds.

Pedestrian paths. We propose the removal of the asphalt on the pedestrian paths with ornamental bricks made by granite. The pedestrian paths will be delimited by the green space with small border stones. The secondary pedestrian paths will be made with the same material as the main pedestrian paths.

Stairs. After the several studies we came to the conclusion that the stairs will be kept in their original form, with maintenance works. Delimitation between green spaces and stairs will be made with balustrades.

Pergolas and columns. We propose the emplacement in the public garden, in areas which are free of vegetation, more precisely parcel no. 54, and near George Coşbuc statue. The concrete post in parcel no. 55 will be used as columns, dressed with lianas.

Jardinières. The existing jardinières will be kept, and for some jardinières that are decayed, restoration work will continue. Jardinières will be placed on all pedestrian paths (principal and secondary ones), in the same time these jardinières will be used to block the access of the vehicles in the park.

Protected spaces in the public garden. The patio will be kept because it is a traditional point of interest in the public garden. Maintenance works will be made on the wood constructions, with special care for maintaining their original shape.

Benches. We propose their replacement with benches made by wrought iron in combination with wood.

Art exponents. George Coşbuc statue will remain because it's in good shape. The busts will be replaced because of their poor condition, and replaced with other art objects.

Equipment for sports and games. The sport and game equipments will be kept, and those that aren't corresponding from functional point of view will be repaired.

Accessory. Indications panels The main indicator panel will be kept and other seven indicators will be mounted in the public garden, providing a map of the public garden

with all the utilities and the place where the visitor stays. **Garbage cans** will be kept, and the destroyed ones will be replaced.

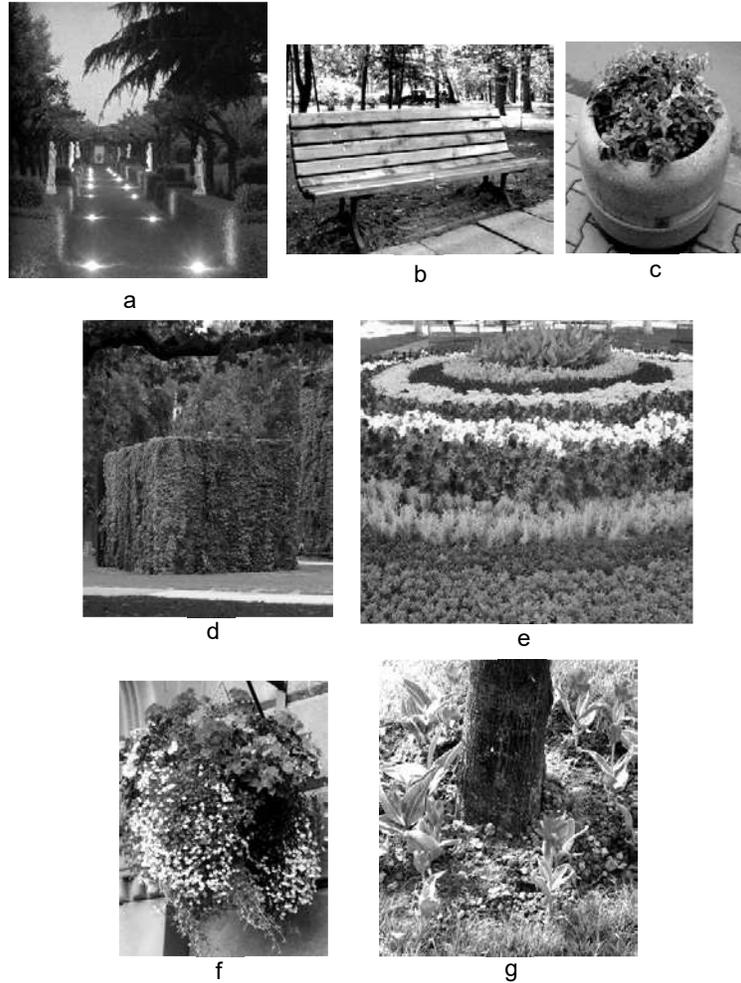


Fig. 5 Landscape proposal: a) lightning system, b) bench, c) jardinière, d) sanitary group covered with perennial plants, e) flower round, f) suspended pot, g) spring landscape arrangement

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