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FOREST REVIEW

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CONTENTS

For. review 45: 30-36. Skopje, 2014 ISSN 1857-9507 on-line: www.sf.ukim.edu.mk/sumarski_pregled.htm
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THE GREENERY OF FOUR MOST IMPORTANT BOULEVARDS IN SKOPJE

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ABSTRACT: The boulevard greenery in Skopje, besides the other greenery in the city should fulfill particular functions for an urban environment. The most important one is to be a purifier of the polluted air close to the roads or boulevards. Besides that, it has to be decorative, contributing to the aesthetic image of the city. The most important for functioning of this type of greenery in this climate conditions, is: the proper irrigation system, the place of growth, the influence of the conditions of the environment and the human factor. It aims to be effective and functional, in accordance with the current conditions on the location, as well as using proper measures for its maintenance.
Keywords: boulevard greenery, urban environment, aesthetic image, City of Skopje.

1 INTRODUCTION

The greenery in an urban environment has positive influences on many aspects of people's life. In first place it influence in seizing the air pollution and high summer temperatures but there are other benefits too, considering the life in a big city with a lot of traffic and industry..Boulevards could be understood as open systems that have multiple functions and provide: safety to the traffic, open green spaces, usage of the boulevards for cycling and pedestrians, sustaining the life of the city streets and prevention of traffic jam. Through the years, boulevards were changing according urban planning of the cities.

Boulevards date from XVI century when medieval towns left their fortresses and transformed them into wide tree pathways. The cities of Amsterdam and Strasbourg were among the first that developed in that direction. In 1670 the walls around Paris were taken down and replaced with promenade streets used only by aristocrats. The boulevards then became important and were also widely used for different aims. There were attempts for creating system of boulevards as they are in Brooklyn, called avenues. They were meant to be for suburbs as opposition to the traditional ones, but still they have the characteristics of the boulevards. They could be:

- main inner city streets,
- commercial arteries of the suburbs,
- existing highways that pass through the city,
- wide arteries of the suburbs planted with trees and flowers,
- main traffic streets.

At the beginning of the XX century in Skopje, were raised up avenues and lawns and especially important, a green area that through the years become bigger, on location where today's City Park is built. Nowadays, it is spread out and enriched with many elements. As the city extends the need for parks and green areas grows more. So, there were built up many of them after the II World War and especially after the catastrophic earthquake in Skopje in 1963. In that time with the urban planning there were built many parks and different kinds of green areas. But after that planned planting period (the renewal of the city), there was a period when they were raised more spontaneously. The reasons for that were diverse.

In Skopje today we have various attitudes considering the greenery. Mostly, in the parts of the city where new settlements are situated, there are raised up parks and other types of green areas. Among them the boulevard greenery is taking a great part. Some very important streets were renewed, the old trees were replaced with new ones, and new vegetation was planted too.

This type of greenery is present in the bigger avenues in a different way, more functional and decorative as it was before, considering the conditions as very specific: pollution inconvenient conditions relating their ecology and dimensions.

There are four boulevards in Skopje that can be considered as most frequent ones. They are built up with plants situated in jardinières in split bars in the middle of the roads and the ones in the greenery on the sidewalk.

2 MATERIAL AND METHOD

The subject of research of this article is boulevard greenery on four boulevards of the wider central area. These boulevards are: „Ilinden" Aleksandar Makedonski". „Partizanski Odredi" and „Jane Sandanski". They are most frequent and can be considered as the most important city arteries.

The aim of investigation relates with the behavior of this kind of greenery in the specific conditions in a way they fulfill the basic aim they are planted for, or are they functional and decorative in both ways considering the main aspects for their planting, which is mostly in a role of improving the urban environment.

The method of work is based on theoretical-conceptual, practical and research approach which means that the analysis includes research realized in phases:

In first phase proper literature and concrete projects had to be gathered.

Second phase means that there were analyzed the ecological conditions of the locations, like climate and hydrology considering there anthropogenic factor too.

The third phase consists of field research analysis and recognition of condition of the boulevard greenery from many aspects: functionality, efficiency and taxa composition considering the characteristics of the locations. During the process of research it was prepared photo documentation, which was later used in the phase of analyses and processing of the gathered information.

The fourth phase is office work analyzing the information and data over the following elements:

- prevalence of the greenery in the boulevards,
- determination and analysis of the plant species in the researched location,
- existence of the specific floral compositions (figures) that are part of the boulevard greenery,

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- analysis of the functionality of the boulevard greenery,
- analysis on condition of the adaptive plant species according location conditions.
- These researches further give answers on many questions connected to the main aims of the article and give realistic view on this type of urban greenery which further leaded to concrete conclusions.

3 THE ROLE OF THE BOULEVARD GREENING FOR THE URBAN ENVIRONMNET

Boulevards can be new streets, main streets, existing boulevards adjusted after long period of neglecting [1]. The boulevards are functioning as big arterial streets or small commercial roads. They have social component as well as transit function depending on the activities. They are axis of a bigger street net so they should be on locations that can enable improvement of the existing system of the streets. When building the boulevards it should be ensured all the components for its functionality.

Considering today's way of living, we are facing a fact of devastation of the natural landscapes. Green areas are used more and more for the needs of the community for: commercial, industrial or recreate purposes. In an urban environment beside the other elements there are plants as natural elements that can appear in various forms and in different types of greenery. Planting trees, shrubs or flowers in order of editing the boulevards greenery is according a plan of which they should be set on proper locations considering their age, height, morphological specifics and characteristics of the location, resistant on the conditions of the habitat, or on changes as a result of the negative affection of the anthropogenic factor. Examples for that are trample of the soil, exposure on harmful substances, among others, the damage that salt is making in winter days in the zone of the root system.

The plants used in this kind of greening should have these characteristics: to be resistant on air pollution, to stand the specific conditions of the habitats and to be decorative in the same time. So, there should be used species with decorative flowers, leaves or habitus, but avoid fruitful species, for they can mess up the space on the ground. In Skopje, in the older boulevards there are *Platanus acerifolia* (Aiton) Willd, *Platanus orientalis* L., *Tilia tomentosa* Moench, *Tilia cordata* Mill. *Fraxinus americana* L., *Fraxinus angustifolia* Vahl., *Acer pseudoplatanus* L., *Acer platanoides* L., *Aesculus hippocastanum* L., *Catalpa bignonioides* Walter.

Through the ages, there appears some kind of weaknesses on the greenery. They are exposed on diseases and calamities, especially avenue trees because they are built up of one kind of specie in a line or simply because they are affected of urbanization. It often happened in urban areas with bigger air pollution and restriction on conditions of their habitats, that directly affects the physiognomy of the plants, the condition of their habitus, trunk or root. In some cases authorities approve that the price for common maintenance of the avenues is much bigger in spite the pollution for a longer period of time. It is recommended to grow up species with endurance on dry conditions that further means financial savings considering irrigation expenses. Projects made nowadays follow the needs of a concrete urban environment.

Every urban area has its own specifics which can make changes in the life conditions of the plants. The concentration of smoke, dust, toxically gases and mechanical substances there are very big and can influence on physiological processes of the plants such as photosynthesis and transpiration which means that the harmful substances damage the chlorophyll and the leaves. Over the wider central area of Skopje very often there are thick layers of fog and smog where big amounts of CO_2 and other toxic substances, in condition of aerosols, are concentrating. The smoke consists of many harmful substances among them acids in gas condition. They are much more dangerous if they appear together with fog and water, so leaves of the trees susceptible on smoke dry up and fall earlier. Later the branches start to dry up and the whole plant wither.

The soil quality can change with a continuous mechanical pressure over which it becomes more compressed without much air in it and the plants have difficulties in using the air from the soil, or they just couldn't use it at all during their growth.

Maybe the biggest influence of the anthropogenic factor on the city greenery is polluted water. Especially dangerous are detergents and pesticides. Trees that grow near the water flows, together with water take harmful substances. But the biggest damage is done by humans. They make:

- bark and trunk damage (engraved signs and letters on trees near the paths, streets, parking zones),
- damage on roots (by building objects, paths),
- damage with various objects and installations.

4 RESULTS AND DISCUSSION

Boulevard greenery is very important segment of any urban environment. It is raised up near boulevards, streets, pedestrian or bicycle paths, in the split bars of the roads in forms of trees, shrubs, or various flower compositions. We can say that boulevards are wide city streets, with monumental architecture used by everyone that takes part in the traffic. They are often "monumental connections between the different destinations [1].

In some countries the term "boulevard" is replaced with the term "avenue" The boulevards are characteristic of the big cities and metropolises and each of them have its own style and aesthetic according the standards of the city and its urban planning. Greenery there gives the boulevards decorative and ecological dimension. It could be realized over the projects from the city authorities. It must be framed in the street open space. It depends on: location, type of the soil, microclimate conditions of the area, anthropogenic factor when choosing the kind of species (trees, shrubs and flowers) for planting.. Speaking of anthropogenic influence, in some parts of the city (Skopje) the sidewalks near the streets are occupied with parked cars so the pedestrians must go over the nearby lawn. In that case there should be planted small groups of plants chosen not to block the view to the drivers. Usually there are set groundcovers.

City greenery consists of few categories green areas and the boulevard greenery belongs to the category of public greenery. In Skopje, at the beginning of the XX century there were green areas, avenues with trees and

lawns. In that time, a park area was raised up on the location where today's "first part" of Skopje City Park is situated. Small part of that area exists even now. After the World War II and especially after the 1963 catastrophic earthquake together with the renewal of the city, there were built up more green areas from various categories such as squares and small parks. In that time the City Park was reconstructed and rebuilt on wider area which permanently, through the years spread out in today's borders.

In Skopje continually were built up various types of green areas which in general brought benefits to the citizens. But they were not always in good condition. The standards for green areas in Skopje per capita according its urban planning is 14-15 m^2. The total area of green spaces in the city as public greenery is 1 302 457 m^2 and is shown in Table I according JP Parkovi i zelenilo (Public Enterprise "Parks and greenery").

Table I: Overview on the green areas in Skopje

	Green areas in Skopje	
	Park areas	**m^2**
1	City Park, I and "Opatia"	904,223
2	City Park II	98,910
3	Park "Zena - Borec"	290,385
4	Boulevard greenery	8,939
	Sum	**1,302,457**
	Block green/Municipality	**m^2**
1	Centar	195,484
2	Karpos	610,063
3	Gorce Petrov	87,735
4	Kisela Voda	196,327
5	Aerodrom	804,519
6	Gazi Baba	192,151
7	Cair	297,700
8	Butel	74,946
9	Suto Orizari	1,300
	Sum	**2,460,225**
	Suburban greenery	**ha**
1	Park forest Vodno (summary)	4,537
2	Park forest Vodno (under wood)	2,168
3	Bare land ground and degraded areas	1,555
4	Agriculture rural area (objects, yards)	850
5	Park-forest „Gazi Baba"	105
6	„Francuski grobista"	7
7	„Zajcev Rid"	5
	Sum	**9,227**
	Sport-recreate centers	**m^2**
1	Treska Lake	185,678
2	Saraj	240,000
	Sum	**425,678**

The Table I shows that from the whole sum of green areas 1,302,457 m^2,on boulevard greenery is 8,939 m^2, the suburban greenery is 9 227 m^2 and sport-recreate centers have 425 678 m^2 greenery.

The boulevard greenery in an urban environment recognizes the basic criteria for using the vegetation in function of putting an ecological dimension, providing that way proper balance in complex urban system. That influences the efficiency of the greenery.

According to relevant data from "Local Action Plan for Environment of The City of Skopje", LEAP 2) the need for planned renewal and reconstruction of the greenery is highlighted "with purpose of preserving and improvement of the quality of an urban environment through various solutions" [2].

The research for this article was made on the biggest, most frequent boulevards with a lot of traffic and greenery: "Partizanski Odredi", "Ilinden", "Jane Sandanski" and "Aleksandar Makedonski". These boulevards were recently reconstructed; especially boulevard "Ilinden", where the old trees were cut and replaced with new ones. Similar happened to the other boulevards; they were reconstructed with various kinds of plants, especially their jardinières.in the split bars on the roads. There were planted shrubs and trees (with bigger and smaller dimensions) and flower figures in various forms: butterfly, turtle, swan, stork and snail in different locations along the boulevards. They are made of wire constructions filled with turf in which flower compositions were set. They are made of: *Aurinia saxatilis* (L.) Desv., *Begonia cucullata* var. *hookeri* (A.DC.) L.B.Sm. & B.G.Schub., *Brassica oleracea* L.- wild cabbage, *Viola tricolor* L., *Verbena hybrida* Groenl. & Rumpler, *Tagetes erecta* L., *Impatiens walleriana* Hook.f., *Ageratum houstonianum* Mill. *Myosotis sylvatica* Hoffm., *Plectranthus scutellarioides* (L.) R. Br., *Petunia hybrida* Vilm. They are being replaced by seasons after the blossom fade away.

For irrigation of this flower figures it is used „drip ieregation" system. Decision for their location bring up city authorities. For their maintenance cares PE „Parkovi i zelenilo".

In past decade public enterprise "Parkovi i zelenilo" under the city authorities, were working in phases on improvement on the conditions of the locations for setting up new plants by putting new layers of qualitative, fertile soil and setting irrigation systems.

4.1 The "Ilinden" Boulevard

In 2010 the Ilinden boulevard was reconstructed in a way that it was widen up with new traffic lines and enriched with proper greenery especially in the split bar. The underground installation of irrigation systems was destroyed by the work on various objects. So the vegetation there had to be irrigated by water tanks. Later, when the hydrant net was rebuilt there was installed equipment even for manual watering.

With the rebuilt of the boulevard, the greenery was enriched with flower compositions, shrubs and trees. There were planted very specific exotic trees with decorative morphological characteristics.

Starting with the crossing of the boulevards "St Kliment Ohridski" and "Ilinden" along to the City Park were planted 66 plants. The part of the boulevard where it cross the boulevard 8th September" was planted with 78 trees The jardinière in the middle of the boulevard was widen, 2.5-5 m and has about 2000 m^2. At the sidewalk near to the boulevard were planted 120 plants, most of them *Malus floribunda Van Houtte.* Along the boulevard,

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near the Zoo there is parking place where *Prunus serrulata Lindl.*was planted. There was built up lawn and flower compositions on it too. The whole area was set with drip irrigation system.

Figure 1: Floral sculpture at "Ilinden" Boulevard

Figure 1 presents a floral sculpture "turtle" made of wire construction where considering the seasons are set different kinds of species. Here are *V. tricolor* and *B. oleracea - wild cabbage* .

The greenery of "Ilinden" Boulevard will be presented here.

Plant species at "Ilinden" Boulevar:

- *Cedrus atlantica* (Endl.) Manetti ex Carrière
- *Chamaecyparis lawsoniana* (A.Murray bis) Parl.
- *Picea pungens* Engelm.
- *Thuja occidentalis* L.
- *Thuja orientalis* L.
- *Juniperus horizontalis* Moench.
- *pseudoplatanus*
- *bignonioides*
- *Fraxinus ornus* L.
- *Malus floribunda* Siebold ex Van Houtte
- *Cedrus deodara* (Roxb). C.Don f.*"pendula*
- *P. orientalis*
- *Prunus serrulata* Lindl.
- *Robinia pseudoacacia* L.
- *T. tomentosa*
- *Cotoneaster horizontalis* Decne
- *Euonymus alatus* (Thunb.) Siebold
- *Forsythia suspensa* (Thunb.) Vahl.
- *Photinia x fraseri* Dress.
- *Mahonia aquifolium* (Pursh) Nutt.
- *Prunus laurocerassus* L.
- *Pyracantha coccinea* M. Roem
- *Rosa rubiginosa* L.
- *Ageratum houstonianum* Mill.
- *Aurinia saxatilis* (L.) Desv.
- *Begonia cucullata* var. *hookeri* (A.DC.) L.B.Sm. & B.G.Schub.
- *Brassica oleracea* L. *Wild cabbage "Osaka"*
- *Celosia argentea* L.var. *cristata* L.
- *Chrysanthemum morifolium* Ramat.
- *Dianthus chinensis* L
- *Impatiens walleriana* Hook.f.
- *Myosotis sylvatica* Hoffm.
- *Petunia hybrida* Vilm.
- *Tagetes erecta* L.
- *Verbena hybrida* Groenl. & Rumpler.
- *Viola tricolor* L.
- *Vinca major* L.

4.2 The "Aleksandar Makedonski" Boulevard

This boulevard is situated on the north-east part of the city. Its renewal was recently approved by the city authorities and was done by the public enterprise "Parks and greenery". With that the new qualitative soil was laid out on the sidewalk near the boulevard and in the jardinières in the split bar of the road where many plants were planted.

Figure 2: "Aleksandar Makedonski" Boulevard

The Figure 2 presents part of the sidewalk greenery of Aleksandar Makedonski Boulevard, where there is tree line of *A. pseudoplatanus* and flower composition of *V. tricolor.*

Here are the plant species of the boulevard.

Plant species at "Aleksandar Makedonski" Boulevar:

- *C. atlantica*
- *Ch. lawsoniana*
- *Chamaecyparis obtusa* (Siebold & Zucc.) Endl.
- *Cryptomeria japonica* (L.f.) D.Don
- *Pinus mugo* Turra
- *Thuja plicata* Donn *ex* D.Don
- *Thuja orientalis* L.*"Pyramidalis Aurea"*
- *Thuja occidentalis* L.*"Smaragd"*
- *Taxus baccata L.*
- *T. baccata."fastigiata"*
- *J. horizontalis*
- *pseudoplatanus*
- *platanoides. "Crimson King"*
- *Betula pendula Roth.*
- *bignonioides* f.*"nana"*
- *F. americana*
- *Fraxinus ornus L.*
- *Populus alba L.*
- *Populus nigra L.*
- *Quercus trojana* Webb
- *Salix caprea* L.
- *T. tomentosa*
- *horizontalis*
- *Euonimus fortunei* (Turcz.) Hand.-Maz.
- *alatus*
- *Hibiscus syriacus* L.
- *Lonicera sempervirens* L.
- *M. aquifolium*
- *P. laurocerassus*
- *Photinia x fraseri* Dress
- *P. coccinea*

- *Viburnum opulus* L.
- *R. rubiginosa*
- *Ageratum houstonianum* Mill.
- *oleracea „wild cabbage "Osaka"*
- *argentea*
- *Ch. morifolium*
- *Plectranthus scutellarioides* (L.) R. Br..
- *chinensis*
- *waleriana* f.
- *Iris× germanica* L.
- *M. sylvatica*
- *Pelargonium peltatum* (L.) L'Hér.
- *P. hybrida*
- *T.erecta*
- *Verbena hybrida* Groenl. & Rumpler
- *V. tricolor*

4.3 The "Partizanski odredi" Boulevard

In 2011 together with the reconstruction of the roadway it was renewed the boulevard greenery too. The jardinière along it was rebuilt and new fertile soil was layered down, in order to improve its quality. It was set up an irrigation system which now provides proper conditions for many conifer and deciduous plants planted there. With this reconstruction it was removed the metal fence in the jardinière in "Vlae" settlement. Now, the jardinière is 2113 m long with hydrant net of 552 m. Together with many different plants, there were planted roses along the split bar of the road. This frequent boulevard in some locations is planted with too many species; some of them with dimensions not proper for the place of growth. In few locations because of the dense vegetation the drivers and pedestrians have limited view on the traffic. That is the case with Bunjakovec place where a green market is situated so the frequency of people is very big. In recent time some activities are done in maintaining the greenery of the jardinière plants, so some of them were removed improving the situation with the traffic, proving that way the importance of keeping boulevard greenery in good shape.

Figure 3: "Partizanski Odredi" Boulevard

Figure 3 shows part of "Partizanski Odredi" Boulevard where Bunjakovec market is placed. There is many traffic, and a lot of people trying to get from one to the other side of the boulevard. The dimensions of the plants there interferes the view and the participants in the traffic should be more careful when using the boulevard.

In the jardinière in a split bar and on the sidewalk there are various plants and the list of them is presented below.

Plant species at "Partizanski Odredi" Boulevar:

- *Ch. lawsoniana*
- *Ch. obtusa*
- *C. japonica*
- *P. mugo*
- *T. baccata*
- *T. baccata "fastigiata"*
- *Th. plicata*
- *Th. occidentalis*
- *Th. occidentalis "Pyramidalis"*
- *J. horizontalis*
- *Acer palmatum* Thunb.*"dissectum"*
- *A. platanoides*
- *A. pseudoplatanus*
- *Aesculus hippocastanum*
- *B. pendula*
- *C. bignonioides*
- *F. ornus*
- *P. occidentalis*
- *Prunus avium* (L.) L
- *Q. trojana*
- *S. caprea*
- *T. tomentosa*
- *C. horizontalis*
- *H. syriacus*
- *Lonicera sempervirens* L.
- *M. aquifolium*
- *Ph. x fraseri*
- *P. coccinea*
- *P. laurocerasus*
- *Euonymus japonica* Thunb.
- *V. opulus*
- *R. rubiginosa*
- *A. houstonianum*
- *B. oleracea - "Osaka"*
- *Celosia plumosa* L.
- *Ch. hortorum*
- *Plectranthus scutellarioides* (L.) R.Br.
- *D. chinensis*
- *I. waleriana* f.
- *I. germanica*
- *M. sylvatica*
- *P. peltatum*
- *P. hybrida*
- *Salvia splendens* Sellow ex Schult.
- *T. erecta*
- *V. hybrida*
- *V. minor*
- *V. tricolor*

The high vegetation in the jardinières should be planted minimum 6 m from the pedestrian crossing. Along the boulevard there are planted a lot of trees and shrubs with various dimensions

4.4 The "Jane Sandanski" Boulevard

The renewal of this boulevard in Skopje was similar as the other ones. The greenery there was enriched with trees, shrubs, flower compositions, even floral figures. In the split bar of the roadway it was made a jardinière formed of reinforced concrete elements, long about a kilometer. To irrigate the greenery there was set hydrant net of "drip irrigation" system, and quality soil on which along the boulevard were planted many different plants as it is presented in a list below.

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Plant species at "Jane Sandanski" Boulevard:

- *Abies concolor* (Gordon) Lindley ex Hildebrand
- *C. atlantica*
- *C. deodara*
- *Cupressus arizonica* Greene
- *pseudoplatanus*
- *pendula*
- *bignonioides*
- *P. orientalis*
- *Q. trojana*
- *T. tomentosa*
- *F. suspensa*
- *P. coccinea*
- *R. rubiginosa*
- *A. houstonianum*
- *B. oleracea "Osaka"*
- *plumosa*
- *P. scutellarioides.*
- *D. chinensis*
- *I. waleriana.*f.
- *M. sylvatica*
- *Portulaca oleracea* L.
- *P. hybrida*
- *S. splendens*
- *Jacobaea maritima* (L.) Pelser & Meijden.
- *T. erecta*
- *V. hybrida*
- *V. minor*
- *V. tricolor*

Specific type of flower compositions are floral figures of storks, swans, butterflies and a snail that are set in the jardinière of the boulevard. They complete the decorative aspect of this kind of greenery.

Figure 4: "Jane Sandanski" Boulevard

The Figure 4 shows "stork" floral sculpture which is one of the three positioned in the jardinière in the split bar of the boulevard. They are especially effective considering their dimensions. This one is planted with *V. tricolor* and it is set among the group of roses *Rosa rubiginosa* and *A. concolor.*

5 CONCLUSION

The boulevard greenery is one of the most important categories of greenery in an urban environment. It has direct influence on improvement of the air and in same time is decorative element in the city structure.

The subject of research of this article is boulevard greenery on four boulevards of the wider central area: "Ilinden", "Aleksandar Makedonski",."Partizanski odredi" and "Jane Sandanski". They are most frequent and can be considered as the most important city arteries.

They are planted with species that are more or less identical in all of the researched boulevards, mostly because they come from the same nursery garden. Comparing the four boulevards, their central jardinières are mostly planted with groups of trees and shrubs, rarely with solitaires. In some of them ("Partizanski odredi") plants are too crowded, so the public enterprise should maintenance the greenery more carefully, because dense vegetation in part of it bothers regular traffic activity..

At "Jane Sandanski" boulevard the vegetation is in good shape because of the constant care of the workers of the public enterprise. "Parkovi I zelenilo". There and in the greenery of "Ilinden" boulevard are set up floral sculptures in form of:: turtle, snail, swan, stork and butterfly, making that way the areas more decorative.

There are other aspects of human behavior in the urban living considering the frequency and importance of the boulevards so the vegetation is mostly in a role of improvement of the urban environment.

The whole sum of green areas is 1,302,457m^2, boulevard greenery is 8,939 m^2,, the suburban greenery is 9 227 m^2 and sport-recreate centers have 425 678 m^2 greenery.

The „Ilinden", ",Aleksandar Makedonski", "Partizanski odredi" and „Jane Sandanski".boulevards were recently renewed where:

- new layers of quality soil were set,
- the hydrant net with irrigation system was reconstructed,
- the old trees in tree lines were replaced with new ones
- new trees, shrubs and flower plants were planted in the jardinières and near the sidewalks.

The accent was put on species planted in the split bar of the roadways, in the jardinières, as well as on the sidewalks of the boulevards. There were planted shrubs and trees (with bigger and smaller dimensions). Also, there were situated flower figures in forms of: butterfly, turtle, swan, stork and snail. Some of them were situated in the greenery on locations along the boulevards, near the sidewalks. The base for flower forms was made of wire constructions filled with turf where flower compositions were set up.

Planting trees, shrubs or flowers in order of editing the boulevards greenery is according urban planning of which they should be set on proper locations considering their morphological characteristics and ecological needs considering the specifics of the locations/habitats. They should be resistant on the negative affection of the anthropogenic factor and be decorative in the same time. To fulfill all the tasks take care the public enterprise "Parkovi I zelenilo" which maintenance the public greenery in the City of Skopje.

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