

# CONCEPT OF THE STREET NETWORK FOR LAGATOR RESIDENTIAL AREA AT LOZNICA

## KONCEPT ULIČNE MREŽE STAMBENOG NASELJA LAGATOR U LOZNICI

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**Summary:** Expanding the capacity of residential and commercial area of the City of Loznica requires a specific traffic infrastructure which would satisfy the demand. This paper presents concept of traffic areas that service the entire part of the city, as well as the arrangement of park areas in the part designated for sport and recreation.

**Keywords:** traffic areas, parking lots, arrangement of green areas

**Rezime:** Proširenje kapaciteta stambenog i poslovnog prostora teritorije Grada Loznice zahteva i određenu saobraćajnu infrastrukturu koja bi zadovoljila potražnju. U radu je prikazan koncept saobraćajnih površina koje servisiraju kompletan deo grada, kao i uređenje parkovskih površina na delu predviđenom za sport i rekreaciju.

**Ključne reči:** saobraćajne površine, parking mesta, obrada zelenih površina

### 1. INTRODUCTION

As part of the concept of expansion of residential and commercial capacity of the city of Loznica in the zone of Lagator, construction of new streets is planned in line with modern standards and urban concepts, along with integration into existing terrain forms and facilities that are foreseen or partly built in this part of the city.

The planned construction of commercial and residential complex Lagator, i.e. a new part of the city of Loznica, required the development of conceptual solution for traffic areas. This concept includes finding solution for traffic areas consisting of driving, walking and cycling areas, parking lots and arrangement of green areas. The concept anticipates that primary

### 1. UVOD

U okviru koncepta proširenja stambenog i poslovnog kapaciteta grada Loznice u području zone Lagator planirana je izgradnja novih uličnih kapaciteta po modernim standardima i urbanističkim konceptima, uz uklapanje u postojeće terenske oblike i objekte koji su predviđeni ili delom već izgrađeni u ovom delu grada.

Planirana izgradnja stambeno-poslovnog kompleksa Lagator, odnosno novog dela grada Loznice, zahtevala je izradu konceptualnog rešenja saobraćajnih površina. Ovim konceptom je obuhvaćeno rešavanje saobraćajnih površina, koje se sastoje od kolskih, pešačkih i biciklističkih površina, parking mesta, te obrade zelenih površina.

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traffic infrastructure services central part of planned space and provide main connection between the Lagator settlement and other parts of the city, and the secondary traffic infrastructure connects with them to enable access to individual facilities. Profile of primary traffic infrastructure should contain bicycle tracks as well. Park area would have sporting activities, such as running tracks, open gym and tennis court.

The area located in the scope of settlement Lagator consists of 15 streets with different characteristics, and is located on multiple lots belonging to the Cadastral Area of the City of Loznica.

Konceptom je planirano da primarne saobraćajnice opslužuju centralni deo planiranog prostora i obezbede glavnu vezu naselja Lagator sa ostalim delovima grada, a da se na njih priključuju sekundarne saobraćajnice putem kojih bi se obezbedio pristup pojedinačnim sadržajima. Profil primarnih saobraćajnica bi sadržao i biciklističke staze. Parkovski prostor bi imao sportske sadržaje kao što je staza za trčanje, otvorena teretana i teren za tenis.

Prostor koji se nalazi u obuhvatu naselja Lagator se sastoji od 15 ulica različitih karakteristika, i nalazi se na više katastarskih parcela koje pripadaju K.O. Grad Loznica.



Figure 1 - Current condition at the zone of Lagator settlement  
Slika 1 - Postojeće stanje u zoni naselja Lagator

## 2. EXISTING CONDITION

The existing condition in the area of Lagator settlement is specific by relatively low level of lot coverage (Figure 1).

In the south-west part of the area there is a building belonging to the Fire-fighting Unit with supporting elements and parking area for approximately 50

## 2. POSTOJEĆE STANJE

Postojeće stanje u zoni naselja Lagator je karakteristično po relativno malom stepenu izgrađenosti (Slika 1).

U jugo-zapadnom delu područja se nalazi objekat koji pripada Vatrogasnoj jedinici uz prateće elemente i parking prostor za oko 50 vozila. Nasuprot tome, u jugo-istočnom delu, se nalazi

vehicles. On the opposite side, in south-east area, there is a petrol station with parking space which is not arranged.

In central part of this space there are illegally built residential one-storey buildings made of light materials.

At the north, the area is surrounded by the Institution for the Physical Culture "Lagator" and an independent restaurant named "Plavi restoran". These two buildings are connected with sidewalk made of concrete slabs. Along the path there are street lights, but the area around the path is not arranged, there are no garbage baskets or benches for sitting and resting.

The remaining, much bigger portion of the observed area is completely undeveloped and disorganized.

The concept envisages the construction of all traffic infrastructure, landscaping of green areas, arrangement of parking lots, bicycle tracks and sidewalks.

In defining the concept, the common principles of selecting the elements of cross section were used, as well as those for planning and designing of primary and secondary urban traffic infrastructure [1-3]. Additionally, modern settings for the formation of cross sections of streets are taken into account expressed through recommendations for defining the so-called complete streets [4-5], which contain the principles of sustainable urban mobility.

### 3. TRAFFIC SOLUTION

#### Improvement of current condition for traffic areas

The planned solution enables improvement of the existing condition of parking areas and sidewalks, as well as the arrangement of green areas.

Improvement of the existing condition of parking areas and sidewalks is foreseen by removing existing wearing courses and by placing new ones. The sidewalk will get a new overall

stanica za snabdevanje gorivom sa neuređenim parkingom.

U centralnom delu prostora se nalaze bespravno izgrađeni stambeni prizemni objekti od lakih materijala.

Na severnoj strani prostor je oivičen Ustanovom za fizičku kulturu „Lagator“ i samostalnim ugostiteljskim objektom „Plavi restoran“. Ova dva objekta su povezana pešačkom stazom od betonskih ploča. Duž staze postoji ulična rasveta, ali prostor oko staze nije uređen, ne postoje kante za otpad, kao ni klupe za sedenje i odmor.

Preostali znatno veći deo sagledavanog prostora je potpuno neizgrađen i neuređen.

U okviru koncepta je predviđena izgradnja svih saobraćajnica, uređenje zelenih površina, uređenje parkirališta, biciklističkih i pešačkih staza.

Prilikom definisanja koncepta korišćeni su ustaljeni principi izbora elemenata poprečnog profila, kao i planiranja i projektovanja primarnih i sekundarnih gradskih saobraćajnica [1-3]. Dodatno, u obzir su uzete i moderne postavke formiranja poprečnih profila ulica iskazane kroz preporuke za definisanje tzv. kompletnih ulica [4-5], koje u sebi sadrže principe održive urbane mobilnosti.

### 3. SAOBRAĆAJNO REŠENJE

#### Poboljšanje trenutnog stanja saobraćajnih površina

Predviđeno rešenje omogućava poboljšanje postojećeg stanja parking površina i pešačkih staza, kao i uređenje zelenih površina.

Poboljšanje postojećeg stanja parking površina i pešačke staze predviđeno je uklanjanjem postojećih habajućih površina i postavljanjem novih.

Pešačka staza će dobiti novi ukupan doživljaj postavljanjem nove habajuće podloge, klupica za odmor, mesta za

experience by installing a new wearing courses, rest benches, waste disposal sites and lighting improvements that will create a much greater sense of security.

### Construction of new traffic infrastructure

When designing new traffic infrastructure, a light truck, or a vehicle that reflects the characteristics of the delivery and utility vehicles, was adopted as the relevant vehicle.

The construction of new traffic infrastructure is designed through the construction of 15 new streets that will spawn space and be interconnected to make this new part of the city accessible to both interesting investors and citizens. The project is designed to make this new part of the city more productive and modern than the old city. Finishing is foreseen using asphalt concrete. Table 1, as well as Figures 2-5 show basic characteristics of cross sections of new traffic infrastructure. The layout plan of traffic infrastructure of the settlement Lagator is shown in Figure 6.

odlaganje otpada i poboljšanjem rasvete koja će stvoriti mnogo veći osećaj sigurnosti.

### Izgradnja novih saobraćajnica

Prilikom projektovanja novih saobraćajnica kao merodavno vozilo usvojeno je lako teretno vozilo, odnosno vozilo koje odražava karakteristike dostavnog i komunalnog vozila.

Mreža novih saobraćajnica je osmišljena kroz izgradnju novih 15 saobraćajnica, koje će ispresecati prostor i međusobno biti povezane kako bi činile ovaj novi deo grada pristupačnim i interesantnim investitorima i građanima. Projekat je tako sačinjen da ovaj novi deo grada postane mnogo produktivniji i moderniji od starog grada. Završna obrada je predviđena uz korišćenje asfalt-betona.

U Tabeli 1, kao i na Slikama 2-5 su prikazane osnovne karakteristike poprečnih profila novih saobraćajnica. Situaciono rešenje saobraćajnica u naselju Lagator je prikazano na Slici 6.

Table 1 - Characteristics of geometric cross sections for new streets  
Tabela 1 - Karakteristike geometrijskih poprečnih profila novih ulica

street ulica	total width [m] ukupna širina [m]	pedestrian walkway [m] pešačka staza [m]	bicycle track [m] biciklistička staza [m]	median [m] srednji razdelni pojas [m]	carriageway [m] kolovoz [m]	side verge [m] ivični razdelni pojas [m]	parking [m] parking [m]
Bulevar patrijarha Pavla	28	2 x 2	2 x 2	6	2 x 6,5	2 x 0,5	-
Momčila Gavrića	25,5	2	2	1	2 x 6,5	0,5	5
Planirana 1 Planirana 2 Planirana 3 Planirana 5 Planirana 7 Planirana 8 Planirana 9	14,5	2 x 2	-	-	6,5	-	2 x 2

street ulica	total width [m] ukupna širina [m]	pedestrian walkway [m] pešačka staza [m]	bicycle track [m] biciklistička staza [m]	median [m] srednji razdelni pojas [m]	carriageway [m] kolovoz [m]	side verge [m] ivični razdelni pojas [m]	parking [m] parking [m]
Planirana 10 Nova							
Planirana 4	12,5	2 x 2	-	-	6,5	-	2
Planirana 6	20,5	2 x 2	-	-	6,5	-	2 x 5
Planirana 11 Planirana 12	25,5	2	2	1	2 x 6,5	0,5	5

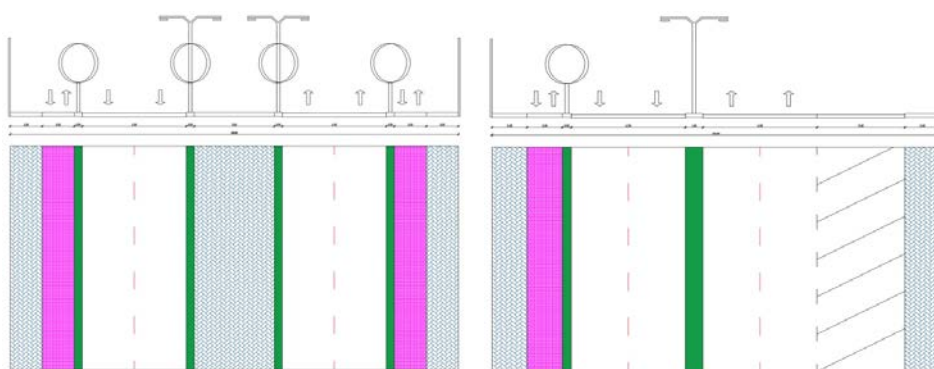


Figure 2 - Geometric cross sections of streets Bulevar patrijarha Pavla (left) and Momčila Gavrića (right)

Slika 2 - Geometrijski poprečni profili ulica Bulevar patrijarha Pavla (levo) and Momčila Gavrića (desno)

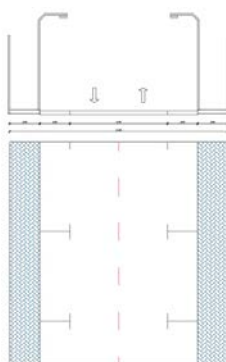


Figure 3 - Geometric cross section of streets Planirana 1, Planirana 2, Planirana 3, Planirana 5, Planirana 7, Planirana 8, Planirana 9, Planirana 10 and Nova Slika

Slika 3 - Geometrijski poprečni profil ulica Planirana 1, Planirana 2, Planirana 3, Planirana 5, Planirana 7, Planirana 8, Planirana 9, Planirana 10 i Nova

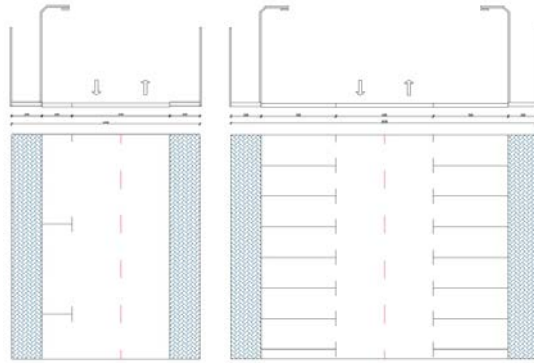


Figure 4 - Geometric cross sections of streets Planirana 4 (left) and Planirana 6 (right)  
 Slika 4 - Geometrijski poprečni profili ulica Planirana 4 (levo) i Planirana 6 (desno)

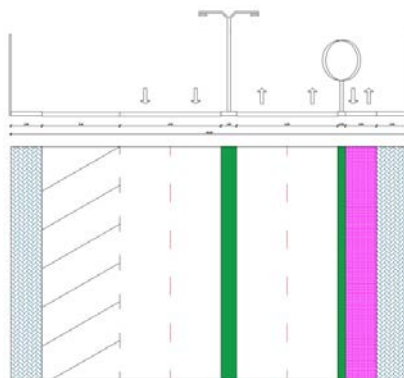


Figure 5 - Geometric cross section of streets Planirana 11 and Planirana 12  
 Slika 5 - Geometrijski poprečni profil ulica Planirana 11 i Planirana 12



Figure 6 - Layout solution of traffic infrastructure at Lagator residential area  
Slika 6 - Situaciono rešenje saobraćajnica u stambenom naselju Lagator

The only street in which there are no capacities for still traffic is Bulevar patrijarha Pavla as this is the main traffic route in the settlement of magistral type. Bulevar is also distinctive due to the fact that in the median area there is a sidewalk (promenade) 5 m wide.

According to the functional classification, the streets of Momičilo Gavrić, Planned 11 and Planned 12 represent collector streets with separate pavements and inclined parking under the angle of 60°. Other streets are typical access streets without a bicycle track because it has been estimated that due to small amount of motor vehicles traffic there will be no need for its isolation in the

Jedina ulica u kojoj ne postoje kapaciteti za mirujući saobraćaj je Bulevar patrijarha Pavla kao glavna saobraćajnica u naselju tipa gradske magistrale. Bulevar je karakterističan i po tome što se u srednjem razdelnom pojasu nalazi pešačka staza (promenada) širine 5 m.

Po funkcionalnoj klasifikaciji, ulice Momičila Gavrića, Planirana 11 i Planirana 12 predstavljaju sabirne ulice sa odvojenim kolovozima i kosim parkiranjem pod uglom od 60°. Ostale ulice su klasične pristupne ulice u kojima nema biciklističke staze jer je procenjeno da zbog male količine motornog saobraćaja neće biti potrebe za njihovo izdvajanje u posebnu zonu. Predviđeno je i paralelno parkiranje,

separate zone. Parallel parking was also anticipated, except in the street Planned 6 where the parking is perpendicular.

All streets are illuminated with public lighting.

### Intersections

All planned intersections are at-grade and, as a central part of all streams, a roundabout is planned at the connection between the Bulevar patrijarha Pavla and the streets of Momčilo Gavrić and Planned 12 (Figure 7).

Intersections at the connection of the internal traffic infrastructure of the Lagator residential area and the surrounding primary traffic infrastructure are regulated by channelling the flows and they are all of the functional level D. These are intersections of the following streets:

- Vojvode Putnika and Bulevar patrijarha Pavla (Figure 8);
- Vojvode Putnika and Marka Radulovića (Figure 9);
- Marka Radulovića and Planirana 11 (Figure 10).

Other intersections are of the functional level F (Figure 11).

osim u ulici Planirana 6 gde je ono upravnog tipa.

Sve ulice su osvetljene javnom rasvetom.

### Raskrsnice

Sve planirane raskrsnice su površinske, a kao centralni deo svih tokova je predviđena raskrsnica sa kružnim tokom na spoju Bulevara patrijarha Pavla i ulica Momčila Gavrića i Planirana 12 (Slika 7).

Raskrsnice na spoju internih saobraćajnica stambenog naselja Lagator i okolnih primarnih saobraćajnica su regulisane kanalisanjem tokova i sve su funkcionalnog nivoa D. To su raskrsnice sledećih ulica:

- Vojvode Putnika i Bulevar patrijarha Pavla (Slika 8);
- Vojvode Putnika i Marka Radulovića (Slika 9);
- Marka Radulovića i Planirana 11 (Slika 10).

Ostale raskrsnice su funkcionalnog nivoa F (Slika 11).

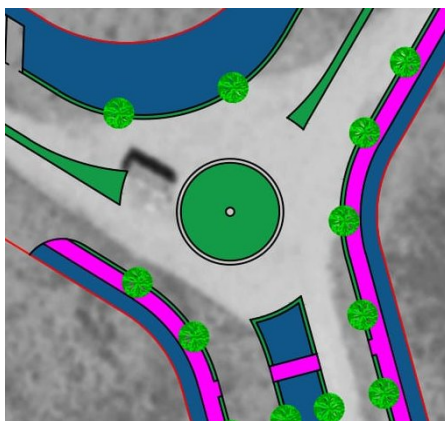


Figure 7 - Roundabout at intersections of Bulevar patrijarha Pavla and streets Momčilo Gavrića and Planirana 12

Slika 7 - Raskrsnica sa kružnim tokom na spoju Bulevara patrijarha Pavla i ulica Momčila Gavrića i Planirana 12





Figure 8 - Intersection between Vojvode Putnika street and Bulevar patrijarha Pavla  
Slika 8 - Raskrsnica između ulice Vojvode Putnika i Bulevara patrijarha Pavla



Figure 9 - Intersection between Vojvode Putnika and Marka Radulovića streets  
Slika 9 - Raskrsnica između ulica Vojvode Putnika i Marka Radulovića



Figure 10 - Intersection between Planirana 11 i Marka Radulovića streets  
Slika 10 - Raskrsnica između ulica Planirana 11 i Marka Radulovića



Figure 11 - Typical solution for the type F intersection  
Slika 11 - Tipično rešenje raskrsnice funkcionalnog nivoa F

### Parking areas

Parking lots are provided depending on the functional rank of the street. They are designed so that their level is in the level of the finished pavement level. The finishing layer is made of asphalt-concrete.

Parking areas in the streets Momčila Gavrića, Planned 11 and Planned 12 are positioned under the 60° angle on one side. The width of the parking lot is 2.5 m.

Street Planned 6 has parking space under the angle of 90°, 2.5 m wide. Parking areas in other streets, except in Bulevar patrijarha Pavla, are designed with parallel parking, with 2 m wide and 6 m long parking lots. Typical shape of these parking areas is shown in Figure 12.

In front of the Institution for Physical Culture "Lagator" there is a specially designed parking area with perpendicular parking (Figure 13, left). Number of parking lots is 41. On the right side of the petrol station there is also a specially designed parking area with 23 perpendicular and 4 parallel parking lots (Figure 13, right).

### Parking površine

Parking mesta su predviđena u zavisnosti od funkcionalnog ranga ulice. Projektovana su tako da im visinska kota bude u nivou kote nivelete kolovoza. Završna obrada je od asfalt-betona.

Parking površine u ulicama Momčila Gavrića, Planirana 11 i Planirana 12 su postavljene pod uglom od 60° sa jedne strane. Širina parking mesta iznosi 2,5 m.

Ulica Planirana 6 ima parking pod uglom od 90°, širine 2,5m. Parkinzi u ostalim ulicama, osim Bulevara patrijarha Pavla su projektovane sa podužnim parkiranjem, pri čemu je parking mesto širine 2 m, a dužine 6 m. Tipičan izgled ovih parking mesta je prikazan na Slici 12.

Ispred Ustanove za fizičku kulturu „Lagator“ nalazi se posebno projektovan parking prostor sa upravnim parkiranjem (Slika 13, levo). Broj parking mesta iznosi 41. Sa desne strane stanice za snabdevanje gorivom se takođe nalazi posebno projektovan parking prostor sa ukupno 23 upravno i 4 podužno orijentisana parking mesta (Slika 13, desno).

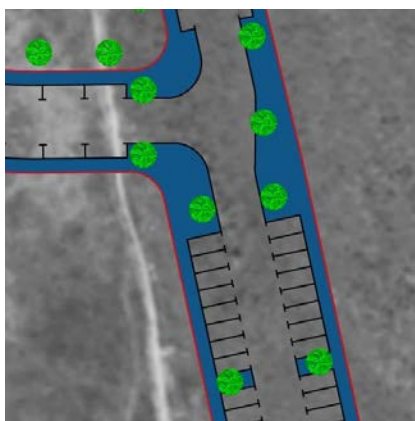


Figure 12 - Typical view of zone with orthogonal and longitudinal parking area  
Slika 12 - Tipičan izgled zone sa upravnim i podužnim parking prostorom

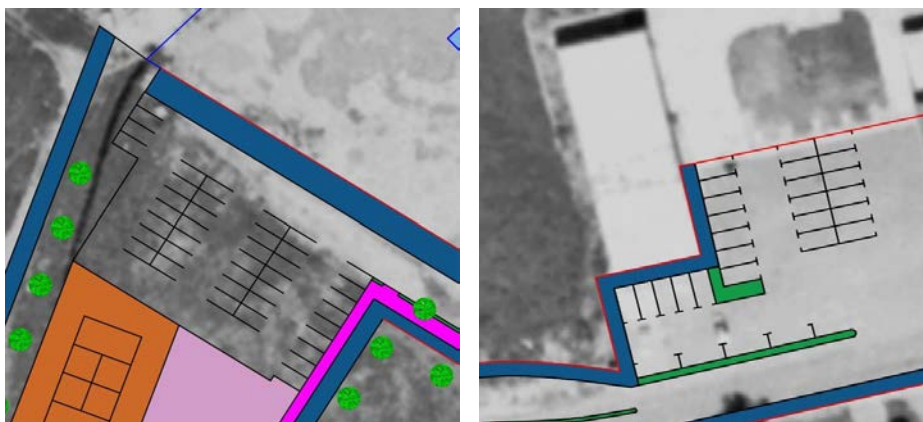


Figure 13 - Parking areas in front of Institution for Physical Culture „Lagator“ (left) and at gas supply station (right)  
Slika 13 - Parking površine ispred Ustanove za fizičku kulturu „Lagator“ (levo) i uz stanicu za snabdevanje gorivom (desno)

### Sidewalks

Minimum width of sidewalks is 2 m, and their surface shall be made of behaton slabs.

Specially designed sidewalk is located in the central part of Bulevar patrijarha Pavla (Figure 14). This pedestrian zone begins from the junction with the street Vojvode Putnika, and ends in front of the roundabout.

Institution for Physical Culture „Lagator“ and independent restaurant „Plavi Restoran“ are connected with sidewalk

### Pešačke staze

Pešačke staze su minimalne širine 2 m, a površina im je predviđena od behaton ploča.

Posebno projektovana pešačka staza se nalazi u centralnom delu Bulevara patrijarha Pavla (Slika 14). Ova pešačka zona počinje od raskrsnice sa ulicom Vojvode Putnika, a završava se ispred kružne raskrsnice.

Ustanovu za fizičku kulturu „Lagator“ i samostalni ugostiteljski objektat „Plavi restoran“ povezuje pešačka staza koja

which is also paved with behaton slabs (Figure 15). Sidewalk is illuminated, and equipped with benches for resting.

je takođe popločana behaton pločama (Slika 15). Pešačka staza je osvetljena, uz istu se nalaze klupice za odmor.

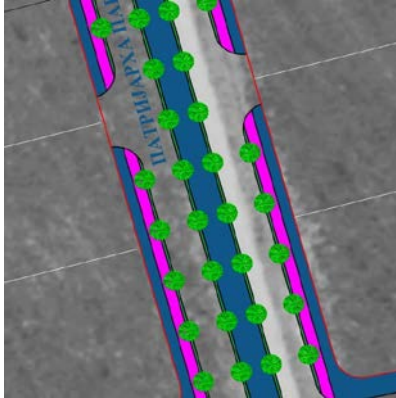


Figure 14 - Pedestrian zone at Bulevar patrijarha Pavla  
Slika 14 - Pešačka zona u Bulevaru patrijarha Pavla

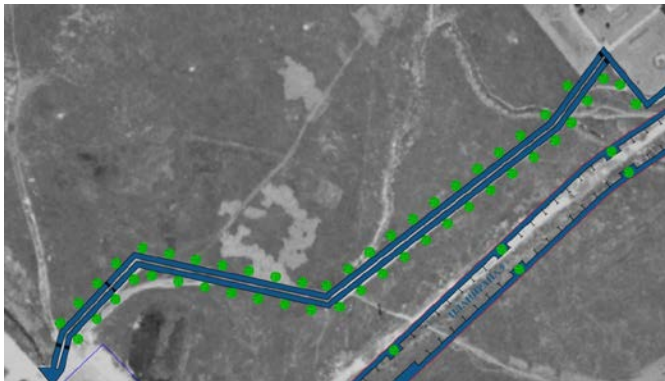


Figure 15 - Pedestrian path between UFK „Lagator“ and SUR „Plavi restoran“  
Slika 15 - Pešačka staza između UFK „Lagator“ i SUR „Plavi restoran“

### Bicycle tracks

Bicycle tracks are located in the profiles of streets Momčila Gavrića, Planned 11 and Planned 12 on one side, while the profile of Bulevar patrijarha Pavla has tracks placed on both sides. Width of the track is 2 m. Finishing layer is made of concrete with polished surface. Bicycle tracks are placed alongside the sidewalks, and they are separated from the pavement by a narrow edge strip (0.5 m).

### Biciklističke staze

Biciklističke staze se nalaze u profilima ulica Momčila Gavrića, Planirana 11 i Planirana 12 sa jedne strane, dok su u profilu Bulevara patrijarha Pavla staze postavljene obostrano. Širina staza iznosi 2 m. Završna obrada je urađena od betona sa uglačanom površinom. Biciklističke staze se nalaze uz pešačke staze, a od kolovoza su odvojene uzanim ivičnim razdelnim pojasom (0,5 m).

### **Public lighting**

Illumination of traffic surfaces in access roads shall be provided by placing external lighting above the traffic infrastructure and parking areas, 5 m high. Central lighting is placed in Bulevar patrijarha Pavla, as well as in the streets Momčila Gavrilovića, Planned 11 and Planned 12.

### **Greenery around the traffic surfaces**

As vegetation around the traffic areas and parking areas platanus was planned. Platanus belongs to fast growing trees with maximum height of 35 m. As such they belong to ideal plants for covering traffic areas.

### **Protection of green areas**

To prevent parking of vehicles on green surface within the edge strip, the protective curbs are placed on both sides of traffic infrastructure. Dimensions of protective curbs are standardized.

## **4. ARRANGEMENT OF PARK AREA**

The development of green area arrangement solution has come from the aspect of improving the sociological awareness of tenants who will inhabit this part of the city. The aim was to achieve the maximum utilization of space that would contribute to the ecological balance of this part of the city (Figure 16).

Since in the immediate vicinity of the park there is a football stadium of the FC Loznica and the sports hall of Institution for Physical Education "Lagator", as well as the open-air city swimming pool, it has been accepted that the park also has sports facilities. Thus, the running tracks of total length 1,000 m were designed, and along the running tracks there are tennis court

### **Javna rasveta**

Osvetljenje saobraćajnih površina u pristupnim ulicama je predviđeno postavljanjem spoljašnje rasvete iznad saobraćajnica i parking mesta, visine 5m. Centralno osvetljenje je postavljeno u Bulevaru patrijarha Pavla, kao i u ulicama Momčila Gavrića, Planirana 11 i Planirana 12.

### **Zelenilo oko saobraćajnih površina**

Kao vegetacija oko saobraćajnih površina i parking mesta su predviđeni platani. Platani spadaju u brzorastuće drveće, maksimalne visine do 35 m. Kao takvi spadaju u idealne za pokrivanje saobraćajnih površina.

### **Zaštita zelenih površina**

Kako bi se sprečilo parkiranje vozila na zelenu površinu u okviru ivičnog pojasa su postavljeni zaštitni ivičnjaci sa obe strane saobraćajnice. Dimenzije zaštitnih ivičnjaka su standardizovane.

## **4. UREĐENJE PARKOVSKIH POVRŠINA**

Izradi rešenja obrade zelenih površina se pristupilo sa aspekta poboljšanja sociološke svesti stanara koji će naseljavati ovaj deo grada. Težilo se maksimalnoj iskorišćenosti prostora koji će doprineti ekološkoj ravnoteži ovog dela grada (Slika 16).

Pošto se u neposrednoj blizini parka nalazi fudbalski stadion FK Loznica i sportska hala ustanove za fizičku kulturu „Lagator“, kao i gradsko kupalište na otvorenom, usvojeno je da se u parku takođe nalaze sportski sadržaji. Tako je projektovana staze za trčanje u dužini od 1.000 m, a pored staze za trčanje se nalaze teniski teren i teretana na otvorenom.

Centralni deo parka zauzima dominantno polukružno veštačko jezero, koje se idealno uklapa i razbija

and an open gym.

The central part of the park is occupied by a dominant semi-round artificial lake, which is a perfect fit and breaks the monotony of greenery. Footpaths and bicycle tracks are provided throughout the park. Benches for rest are envisaged besides footpaths, and as a central point for gathering of citizens an outdoor amphitheatre is designed. The park is greened with park grass and planting of various flowers. Planting the Platanus tree is foreseen.

monotoniju zelenila. Kroz park su predviđene pešačke i biciklističke staze. Pored pešačkih staza su predviđene klupice za odmor, a kao centralno mesto za okupljanje građana je osmišljen amfiteatar na otvorenom. Park je ozelenjen parkovskom travom i zasadima raznog cveća. Predviđena je sadnja drveta platana.



Figure 16 - Arrangement of park area  
Slika 16 - Uređenje parkovskih površina

## 5. CONCLUSION

Planning and designing the traffic infrastructure in cities is a very complex task that comprises of different levels, starting from the planning considerations of urban development as a whole to the separate technical solutions of the individual elements of the traffic structure. City streets should be shaped in accordance with the cultural environment and the way of life of the particular city. Their design must provide a response to a number of important limiting factors and required services. Streets should be made more efficient not only by means of expansion, but also by positioning of individual elements - maximum utilization in order to obtain maximum performance during operation.

In particular, this paper observes a whole complex within the urban tissue that should provide the highest standards for the development and life of people, as well as for a better business environment. Wide streets with sufficient capacity for pedestrian and bicycle traffic, as well as for parking of vehicles, are something to strive for in the development of new urban settlements. In addition to fulfilling the requirements of motor traffic, new settlements must also provide conditions for sustainable forms of urban mobility.

## 5. ZAKLJUČAK

Planiranje i projektovanje saobraćajnica u gradovima je veoma složen zadatak koji se javlja na različitim nivoima, počev od planerskih razmatranja razvoja grada kao celine pa do pojedinačnih tehničkih rešenja individualnih elemenata saobraćajnog objekta. Ulice u gradovima treba oblikovati u skladu sa kulturnim okruženjem i načinom života konkretnog grada. Njihovo oblikovanje mora da pruži odgovor na mnoštvo bitnih ograničavajućih faktora i zahtevanih usluga. Ulice treba praviti da budu efikasnije ne samo u širenju, već i u pozicioniranju pojedinih elemenata - maksimalna iskorišćenost zarad dobijanja maksimalnog učinka u toku eksploatacije.

Konkretno u ovom radu je razmatran čitav jedan kompleks u urbanom tkivu koji treba da priušti najviše standarde za razvoj i život ljudi, kao i za što bolje poslovno okruženje. Široke ulice sa dovoljno kapaciteta za pešački i biciklistički saobraćaj, kao i parkiranje vozila, su nešto čemu treba težiti u razvoju novih gradskih naselja. Nova naselja moraju, osim ispunjenja zahteva motornog saobraćaja, omogućiti i uslove za održive vidove urbane mobilnosti.

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