

#### CONTRACT ID: RRSP/CS3-RRD4-1/2017-03

PREPARATION OF MAIN DESIGNS FOR HEAVY MAINTENANCE (ROAD REHABILITATION-UPGRADING) OF THE STATE ROADS IA 1 AND IB 22:

LOT 1: IA 1, BRESTOVAC (INTERCHANGE) - DOLJEVAC (INTERCHANGE), L=6.022 KM

LOT 2: IB 22, UŠĆE-RAŠKA (KOSOVSKA MITROVICA), L=32.127 KM LOT 3: IB 22, NOVI PAZAR (BRDJANI) - RIBARIĆE, L=24.360 KM







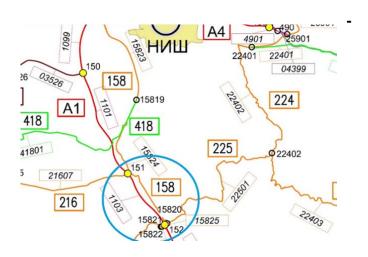




## **ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN:**

#### **DRAFT No. 2:**

LOT 1: IA1, BRESTOVAC (INTERCHANGE) – DOLJEVAC (INTERCHANGE), KM 457+272 – KM 451+250, L=6.022 KM





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#### **ABBREVIATIONS**

CEP Contractor's Environmental Plan European Bank for Reconstruction and EBRD Development EΙΑ **Environmental Impact Assessment** EIB European Investment Bank **ESMP Environmental and Social Management Plan** IFIs **International Financing Institutions** INCS Institute for Nature Conservation of Serbia Institute for Protection of Cultural **IPCMN Monuments Nis** Ministry of Environmental Protection MoEP Ministry of Construction, Transport, and MoCTI Infrastructure **PERS** Public Enterprise "Roads of Serbia" PSC **Project Supervision Consultant** RE Resident Engineer **RRSP** Road Rehabilitation and Safety Project SE Site Engineer SLMP Safety Labour Management Plan WB The World Bank Group WMP Waste Management Plan

### I. INTRODUCTION

The Republic of Serbia has applied for financing towards the costs of the Road Rehabilitation Project (RRSP). International financing institutions are: World Bank, European Investment Bank and European Bank for Reconstruction and Development. The Republic of Serbia plans to invest part of the funds for the project of heavy maintenance (road rehabilitation – upgrading) of the road IA 1 section: Brestovac (Interchange)- Doljevac (Interchange), L=6.022 km.

Environmental and Social Management Plan (EMP) relates to the heavy maintenance and road rehabilitation-upgrading on the IA 1 Brestovac (Interchange) - Doljevac (Interchange), L=6.022 km.

The subject section belongs to the Nisavski Administrative district. The section Interchange Brestovac - Interchange Doljevac, in length of 6,022 km (left carriageway) belongs to the State Road of class IA 1 (old road mark M-1) and represents a part of the longitudinal highway traffic link through the northern and southern part of the Republic of Serbia, i.e. direction of Corridor 10 which connects the northern part from the State border with Hungary (border crossing Horgos) and the southern part of the Republic of Serbia i.e. State border with Macedonia (border crossing-Presevo).

The purpose of the ESMP is to highlight the negative environmental impacts and management problems during the construction works and the necessary mitigation measures to the Contractor must apply. Key components of the Environmental and Social Management Plan are: Environmental Mitigation Plan and Environmental Monitoring Plan.

International financing institutions (IFI) have classified the project as environment category B, which requires an Environmental Management Plan to be carried out.

Road rehabilitation and Safety Project (RRSP) is a project of support of support of international financing institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementation of the National State Road Network Rehabilitation Program. This Project represents the implementation of the first phase of the Government's Program for the period 2014-2022. The project is realized by PE "Roads of Serbia" (hereinafter PERS).

The design will be made in accordance with Serbian legislation and the conventions and safeguard guidelines issued by IFI. The Environmental and Social Management Plan was carried out using theoretical studies, on-site investigation, and consultation with representatives of local and regional authorities.

#### II. SUMMARY

#### II.1. Description

The subject road section belongs to Nisavski Administrative District located in southeastern part of Republic of Serbia. The subject road section can be classified into interstate road, since it belongs to the state road IA 1 (old designation M-1) (Decree on the Categorization of the State Roads, "Official Gazette of RS", No. 93/2015), and represents link towards north and south of Serbia, and belongs to the international Corridor 10. Due to the traffic - geographic nature, the level of development and position in the road network, the road corridor, and therefore subject road section is of the utmost importance for the Republic of Serbia in the international connections between the countries of Europe, the Near and Far East, Asia and North Africa. It is necessary to remedy the damage at the subject road section caused by erosive action of water and winter maintenance, to eliminate the causes of damage to the greatest possible extent, enhance operational value, durability of the road and road safety.

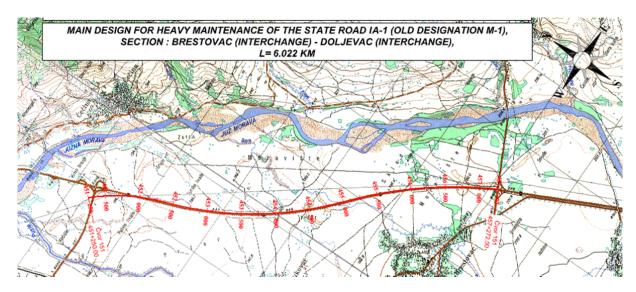
The subject of the Services is preparation of ESMP document for the section: Brestovac (Interchange) - Doljevac (Interchange) length of 6,022 km. determined based on filed diagnostics. In this regard, the beginning of the section is on chainage km 457+272 (node 152 interchange Brestovac), while the end of the section is on chainage km 451+250 (node 151 interchange Doljevac). The subject of the project is the left carriageway of the highway of the subject section, state road of IA 1.

Table 1: Traffic sections	and nodes a	according to	reference system
Table II Hame Cockette	uuuuu .	4000 i 411 i g 10	i di di di i da di di di di i i

lotai	ı.						6,022 (**)
Total							6,022
1	074	1104	152	151	interchange Brestovac	interchange Doljevac	6,022 6,022 (**)
Ite mn o.	Old mark of section*	Mark of section	Mark of start node	Marko of end node	Title of start node	Title of end node	Section length(k m)

<sup>\*</sup> mark of section according to old reference system /2009 (JV CPL- Nievelt)

<sup>\*\*</sup> length of section to be rehabilitated



Map No. 1: Location of the subject section

### II.2. Policy, legal and administrative framework

The Ministry of Environmental Protection (MoEP), former Ministry of Agriculture and Environmental Protection, is the key institution in the Republic of Serbia, responsible for producing and implementing the environmental policy.

Legislation in the field of environmental protection that is currently in force in the Republic of Serbia is summarized in the Appendix 3.

In the Republic of Serbia, the procedure for Environmental Impact Assessment is governed by the Law on Environmental Impact Assessment, which is fully in accordance with the European Directive 85/337/EEC. Therefore, an environmental impact assessment is not required for road

rehabilitation projects, except when a section is in the vicinity or passes through protected natural or cultural properties.

PE "Roads of Serbia" (PERS) submitted a request to the Institute for Nature Conservation of Serbia (INCS) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PERS, the INCS issued a statement on conditions for nature protection 03 no. 020-3558/3 dated January 25<sup>th</sup> 2019.

Panpro team d.o.o. submitted a request on behalf of PE "Roads of Serbia" to the Institute for Protection of Cultural Monuments Nis (IPCMN) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by Panpro team d.o.o., IPCMN issued a statement on conditions for protection of cultural monuments no. 804/2-02 dated August 20<sup>th</sup> 2020.

A request for decision on the need for producing EIA Study is submitted to the MoEP together with other relevant technical documentation, including the conditions of the INCS and IPCMN.

Final Environmental Approval is obtained from the Ministry of Environmental Protection (MoEP) (No. 011-00-00934/2020-03 dated September 29<sup>th</sup> 2020) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (Appendix 6).

Upon receiving mentioned documentation (the conditions of the INCS and IPCMN and the decision of the Ministry of Environmental Protection), as well as based on the conditions set in the Environmental Management Plan, PERS will ensure full implementation of environmental protection measures defined by the design and thus reduce the impact on local population and natural environment.

In accordance with a statement issued by the INCS, the subject road section is not located within a protected area for which a procedure for protection was carried out or initiated. It is not in the scope of the ecological network, nor in the area of natural resources. It is requested to provide, through design proposal the functionality of the ecological corridors.

In the conditions of the IPCMN, they did not list any registered cultural or archaeological sites. The prescribed technical protection measures are: Investor needs to provide and plan the costs of constant archaeological supervision and monitoring during the entire duration of earthworks, it is also necessary to inform the IPCMN about the start of works no later than 8 days prior the start of works. Investor is obliged to provide constant archaeological supervision during the execution of earthworks. In the case that an unrecorded site or part is discovered during earthworks, the investor is obliged to immediately stop the works and notify the IPCMN without delay, provide conditions for archaeological research, conservation and presentation. Investor is obliged to provide funds for research, protection, publication and presentation of the same. International financial institutions demand that the project be in accordance with the laws of the Republic of Serbia, but also with the standards of the European Union.

Creditors require that the following is applied:

- Environmental Impact Assessment Operational Policy (OP 4.01)
- Environmental and Social Policy, EBRD (2008)
- Environmental and Social Principles and Standards, EIB (2008).

The European Bank for Reconstruction and Development, European Investment Bank and the World Bank demand that the RRSP complies with the laws of the Republic of Serbia and the European Union standards. World Bank Group requires that the project complies with the Serbian legislation and operational policies of the World Bank.

#### II.3. Baseline conditions assessed during route survey

The section of the road that is the subject of heavy maintenance (road rehabilitation), is in the Nisava administrative district located in the southeastern part of the Republic of Serbia. Section:

Brestovac (Interchange) -Doljevac (Interchange), L = 6,022 km. The subject section passes through the territory of the City of Leskovac and the Municipality of Doljevac.

Based on the starting and ending point of the subject section of the motorway, which are defined in the nodes of the reference system located in the interchange "Doljevac" and "Brestovac", as well as given that the subject of the project is only the left lane of the motorway, within this project of heavy maintenance enters:

- part of decelaration lane of the ramp of the interchange "Doljevac" for direction Leskovac-Doljevac
- the whole acceleration lane of the ramp of the interchange "Brestovac" for direction Brestovac-Niš, and
- part of the deceleration lane of the ramp of the interchange "Brestovac" for direction Leskovac-Brestovac

In accordance with the terrain-plain conditions through which the motorway stretches, it can be stated that the route of the section in question is laid along the entire length on a shallow embankment 1-2 m high.

## II.3.1. Existing condition of road ditches

Drainage system road section loop Brestovac – loop Doljevac in length 6,022 km (state road IA . 1) is partly made from pipe stormwater system with outflow into open road canals (65%) and in one part open road ditches (35%) located on both sides of the road.

Ditches (self-absorbing canals) extend along the entire length on both sides of the highway. This canals are in the most part self-absorbing ditches, which means that part of the collected atmospheric water infiltrates underground, while the remaining part evaporates into the atmosphere.

Characteristics of ditches in the area of interest in view of their existing performance and condition are diverse, and as such are given in the Table 2.

Table 2 - Tabular presentation of existing road canals

Characteristics of road channals - ditches						
Road station (km) from	Road station (km) to	Condition / Performance	Side (in the direction of station	Picture no.		
451+185	451+447	Earth overgrown channal. The slope of the road ends with a fence. There is no clearly defined channel at the base of the foot.	On both sides	1		
451+447	451+737	The bottom of the channel is lined with concrete. The water is retained in the channel completely. The channel is located in front of the fence.	Right	2		
451+447	452+537	Earth overgrown channel. The slope of the road ends with a fence. There is no clearly defined channel at the base of the foot (behind the fence). Significant water retention was observed in certain parts.	Left	3		
451+737	452+672	Earth overgrown channel. The slope of the road ends with a fence. There is no clearly defined channel at the base of the foot (behind the fence).	Right	4		
452+537	453+026	Earth overgrown channel in the gas station zone.	Left	5		
452+672	453+026	The bottom of the channel is lined with concrete. Channel is in relatively good condition. No water retention.	Right	6		
453+026	454+202	The bottom of the channel is lined with concrete. Channel is in relatively good condition. No water retention.	Left	7		
453+026	454+202	This zone does not have to be considered a channel.  The curve of the road is to the left and all the outlets of the pipeline are to the left in the zone of the concrete channel.	Right	1		
454+202	454+935	Earth overgrown channel. The slope of the road ends with a fence. There is no clearly defined channel at the base of the foot (behind the fence). Significant water retention was observed in certain parts.	On both sides	8		
454+935	456+234	The bottom of the channel is lined with concrete. The channel is in relatively good condition, partially overgrown. No water retention.	On both sides	9		
456+234	457+317	Water flows down the bank into the surrounding terrain.	On both sides	1		

Images of ditches that are listed in Table 2 are shown below.



## II.3.2. The existing condition of the culvert under the road

In the area of the project there is one box culvert at the station km 454+935 with opening 4.0m, below which passes a watercourse "Bara". Image of the culvert is given in the picture 10.



Picture 10 - Box culvert at the station km 454+935

Besides the mentioned box culvert, three more pipe culverts are located in the area of the project.

Table 3 - Tabular presentation of existing road canals

Serial number	Road station (km)	Diameter	Length (m)	Condition left (station growth direction)	Condition right(station growth direction)	Picture
1	451+923	Geodetic survey required	40	Overgrown and clogged. Located behind a fence.	Right - cleaning required. Located in front of the fence	11,12
2	454+437	Geodetic survey required	39	Overgrown and clogged. Located behind a fence.	Partially filled with water. Located behind a fence.	13,14
3	454+708	Geodetic survey required	37	Relatively clean Located behind a fence.	Relatively clean Located behind a fence. A culvert inflow is under a earth road.	15,16

Images of inflows/outflows walls listed in Table 3 are shown in continuation.

Concrete surfaces of the inflow/outflow walls of pipe culverts are in relatively good condition.

The functionality of the culverts is mostly based on the principles of connecting vessels for potential water reliefs on both sides of the road , since it is about area where there are practically no natural flows.



The place that can be considered as the recipient for the inflow of road canals is the watercourse "Bara". In this zone the box culvert with the opening 4.0m on the station km 454+935 is located. By visiting the terrain during the summer it was noticed that there was no water in the mentioned zone. For that reason, it is considered that the amounts of water flowed from the catchment area of the highway compared to the capacity of the canal and culvert on the mentioned station will be negligible.

Second place which can also be considered as a recipient is a canal on the station km 454+707 where pipe culvert is located.

#### II.3.3. The existing condition of the pipe system

According to that pipe system occurs from stationary km 451+185.20 (beginning of section) to the km 455+066.60. The rest of the section characterized by the overflow of water over the embankment into the existing terrain where the water evaporates or infiltrates into the soil.

The principle of water inflow is such that water is carried along the curb to the drainage niche in which a manhole-unit is located, equipped with lids in the form of a grate for receiving water (Picture 17). Each manhole has a sedimentation tank. The condition of all sedimentation tank is mostly bad, they need to be cleaned.



Picture 17 - Standard manhole with cover for water passage

The conclusion related to the condition of the pipeline system is that the biggest problems occur in the zone from the beginning of the section all the way to the gas station zone, due to the generally poor condition of the drainage system and the accumulated water in the manholes.



Picture 18 - Water retention in the manhole

#### II.3.4. Current condition of culverts under overpass

Existing culverts under the overpass that serve to conduct water along the road channels are partially blocked due to irregular maintenance.

The specific condition of the inlet/outlet heads is shown in Table 4.

Table 4 - Tabular representation of culverts below the overpass

Serial number of overpass	Road station (km)	Culvert diameter under overpass (mm)	Culvert length (m)	Culvert condition left (station growth direction)	Culvert condition right (station growth direction)	Picture
1	451+250	300	42m left, 35m right	Completely overgrown on both sides.	Partially overgrown on both sides.	19,20,21,22
2	454+036	No recording	32m	Partially overgrown on both sides.	/	23,24



The grips are generally in relatively good condition, but they have overgrown in certain parts, so they need to be cleaned (Picture 25).



Picture 25 - Typical appearance of the grip condition

### II.3.5. The existing condition of the box passage under the highway

At the station km 451+737, the passage of the earth road under the highway is located. By visiting the terrain, the morphology of the terrain was determined, which conditions the creation of a "tub" in which water accumulates.



Picture 26 - Box passage at km 451+737

### II.3.6. Current situation in the gas station zone

The culverts under the access roads to the gas station are in relatively good condition (Picture 27 and 28), with the highway channel being quite overgrown and visibly unmaintained (Picture 29). Storm water discharges from the gas station into the highway channel are in the form of corrugated plastic pipes lined with concrete (Picture 30).



#### II.3.7. Current situation in the service passage zone

On the part of the section from km 452+375 to km 452+320, on the part of the overpass lane along the service passage, surface water is retained. This statement, also mentioned in the terms of reference, was confirmed by the visiting of terrain. The longitudinal fall of the road is very small (almost 0%) and this zone is close to the place of change of the winding of the highway, which is the reason for keeping the water at this place.

#### II.3.8. Condition of existing bridges

On the subject section exists one bridge ID 287 (left bridge) at km 456+234 over the local road. Bridge at km 456+234 is a reinforced concrete bridge within the left lane of the highway Nis - Leskovac, across the local road. The bridge has one span, of a static length of 8.89m. The width of the bridge is 12.7m.

Nothing has been done on the bridge since it was made, except for the replacement of asphalt and occasional "patching" with mortar of the edges of the slab and parts of the substructure.

In the area under the bridge, there is a lot of rubbish, waste and garbage of various origins. There is also a lot of vegetation (shrubby trees) 1.0 - 3.0 m high, both on the skittles and in the range under the bridge. The skittles sprouted and the cladding plates were shifted in places.

There are no drains or arranged zones for the outflow of surface atmospheric water alongside the embankment, so that the water, making that way itself, undermines and "rolls out" the concrete paving slabs on the neighbouring bridge - the twin one in the right lane.

As for the left bridge, which is the subject of rehabilitation, the water also descends into the substructure at the place of the joint in the crown between the pavement slab and the parapet wall.

The road is quite damaged and sprayed with mesh, the transverse crack in the asphalt on the side towards Leskovac, where the "bearing" is movable, is especially visible.



Picture 31- Side view to the bridge, of the local road



Unchanneled water flow damages the skittles

Bridge view in the median



Picture 34- Bottom slopes overgrown by vegetation, unmaintained zone under the bridge, cornices damages

## II.4. Other conditions assessed during route survey

Pursuant to Article No.117 of the Law on Water ("Official Gazette of the RS", Nos. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018) for the reconstruction of state roads of I and II order, culverts and bridges do not issue water conditions. This statement was confirmed in the opinion obtained by the designer from PWME "Srbijavode" No. 5500/1 from July 13<sup>th</sup> 2020.

Close to the subject section, within the obtained conditions of the competent institutions, the existence of water intake and existing and/or special protection measures is not stated. In addition, the existence of an ecological corridor in the area of the subject section is not stated. In terms of urban planning documentation regarding the drainage of roads of the subject section there is no data.

Close to the watercourse, and during the tour of the terrain and review of the available documentation, the existence of any landfills or industrial systems was not noticed.

By checking the lengths of the deceleration / acceleration lanes on the geodetic surveys but also satellite images outside the geodetic surveyed area, we determined that they are in accordance with the requirements arising from the regulations. Also, based on the same substrates, it can be determined that the elements of the geometry of the ramps in question in the area of motorway connections are in accordance with the parameters of the norms, so it can be stated that there is no need to correct lengths or geometry of acceleration/deceleration lanes.

In addition, the existing connections include the exit/enter lanes of the existing "OMV" gas station at station km 452+803.

The existing section belongs to the network of state roads and the highway network of the IA No. 1, and according with the conducted traffic analyses and forecasts on the subject section, traffic is expected to moderately increase.

## III. Summary of Environmental Impacts

Due to the rehabilitation works involved, temporary negative impacts may occur at the location of the subject works, and may include interruption of traffic flow, decreased road safety, damages on access roads, dust and gas emissions and temporary disturbance of residents of the neighbouring areas (due to air pollution and increased noise pollution). Short-term biocenosis disturbance may occur, and potential pollution of soil and water. Works in the quarry, borrow-pits and asphalt plants are performed outside the site and may cause negative impact if not managed properly. The existing road section belongs to a network of state roads and represents significant road with large traffic load, and after road rehabilitation, in accordance with the declared traffic analyses and forecasts, moderate increase of road traffic is expected.

The road maintenance works will be performed entirely on public land, without any collision with private properties. In respect with the provisions of WB OP 4.12 (Involuntary Resettlement), Design does not require any land acquisition, resettlement or long-term disturbance of human activities.

The designer provided drainage solutions with controlled collection and purification through oil and fat separators before discharge into the recipient. This solution was adopted due to the high traffic load on the subject section. The calculation of pollution according to CEDR (Conférence Européenne des Directeurs des Routes) was performed and the amount of pollutants poured from the asphalt in the "Bara" recipient was estimated and compared with the values prescribed by the Regulation on emission limit values for pollutants and deadlines for reaching them ("Official Gazette of RS", Nos. 67/11, 48/12 and 1/16).

In addition to the previously mentioned Regulation, it is important to note that in the Republic of Serbia, the Regulation on Limit Values of Pollutants in Surface and Groundwater and Sediment and Deadlines for Reaching Them ("Official Gazette of RS", No. 50/2012) is in force.

Impact to the quality of water in the recipient "Bara" is expected to be minimal or negligible, because all additional measures for additional water protection have been implemented.

#### During the co

urse of the works, wastewater may negatively affect the quality of ground and surface water. Because of this, appropriate mitigation measures and a monitoring plan have been provided for. During the road operational phase, only environmental accidents may lead to water pollution, in which case the relevant procedures (setting out actions to be conducted in accident situations), defined by Ministry of the Interior and in accordance with the Law on Water (Official Gazette of RS, Nos. 30/10, 93/12, 101/16, 95/18 and 95/18-oth.law), are applied. Negative cumulative effects may occur in the future (noise and air pollution) as a result of potential construction of new facilities near the road.

If measures from the Mitigation Plan are properly applied, occurrence of cumulative effects will be prevented or reduced to minimum.

#### III.1. Environmental Management Plan

EMP consists of the following: Mitigation Plan, Monitoring Plan and Institutional Arrangements and Reporting Procedures. As regards to the time, environmental mitigation refers to the design, heavy maintenance and operational phase of the road. Environmental Mitigation Plan sums up all the anticipated impacts, suitable mitigation measures in the design, heavy maintenance and operational phase, approximate location, time frame and responsibility for implementation and supervision. Monitoring Plan defines the parameters to be monitored and how they are checked, locations, duration, incidence, valid standards and criteria and also institutional responsibility for monitoring and supervision.

Contractor shall execute the works in accordance with the laws of the Republic of Serbia, EU standards and creditor's requests. During rehabilitation works, the Contractor is obligated to perform in accordance with Contractor's Environmental Protection Plan - CEP (which is based on EMP) and which is approved by PERS. Contractor shall include all costs of the implementation of environmental mitigation measures into the total costs. Contractor shall also provide an expert responsible for coordinating the Environmental Protection Plan and EMP.

# III.2. Stakeholder engagement - Information disclosure, consultations and public participation

In accordance with IFIs safeguard policy, public consultations will be organized and performed during the EMP preparation. In accordance with the World Bank Operational Policy OP 4.01 draft EMP document will be available to local communities within the premises of the local Municipalities, in the premises of PERS and on the PERS website.

Participation of stakeholders is significant in order to understand the nature and intensity of social and environmental impacts, as well as proposed measures for their mitigation. Public consultations is one of the ways to get feedback from stakeholders and enhance involvement of the local community in design implementation. The stakeholders may use a complaint mechanism that is publicly available. (see Appendix 4)

#### III.3. Summary of public disclosure process

EMP will be presented to public and all the comments will be collected. The conclusions will be presented in the report from public presentation, which will be included in this document (Appendix 4).

#### IV. PROJECT DESCRIPTION

The geometrical profile, since it is a standard highway section, consists of a pavement divided by a central reserve along directions. Both pavements consist of overtaking, centre and nearside lanes, total width 10.70m, with the width 3.75 m of the overtaking and centre lane and the width of nearside lane is 2.50 m. The central reserve width is about 4.00 m.

In accordance with the terrain-plain conditions through which the motorway stretches, it can be stated that the route of the section in question is laid along the entire length on a shallow embankment 1-2 m high. Accordingly, the geometry of the highway route is characterized by elements of horizontal and vertical geometry that are far outside the area of boundary elements.

New designed geometrical profile consists of:

```
15.00m
   Traffic lane
                    4x3.75
                                      =
   Nearside lane
                    2x2.50
                                      =
                                               5.00m
                    2x(0.50+0.20)
                                      =
                                               1.40m

    Marginal strip

   Central reserve
                    1x4.00m
                                               4.00m
   Shoulders
                    2x1.50m
                                               3.00m
```

IN TOTAL = 28.40m

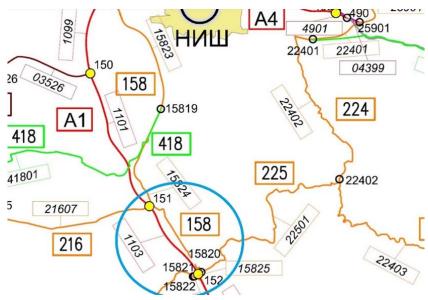
Observed in relation to the defined width of the median lane, but also in relation to the alignment of the motorway, the edges of the median lane vary 10-20 cm, sometimes more, but the elements of horizontal and vertical geometry and transverse profile are such that these deviations from the defined values have no negative impact on driving-dynamic characteristics of vehicle movement. In accordance with all previous when defining project solutions, no corrections of horizontal geometry will be made, but works on road rehabilitation in transverse profiles will be processed within the existing edges of the road, except on parts where it is necessary for some other reasons.

Given that the subject section extends in a shallow embankment without pronounced elements of horizontal and vertical geometry, it is obvious that the requirements for any type of visibility are met and there is no need for a more detailed analysis.

#### IV.1. Location Description

The subject section belongs to the Nisavski Administrative district. The section Interchange Brestovac - Interchange Doljevac in length of 6,022 km. (left carriageway) belongs to the State Road of IA 1 (old road mark M-1) (,,Official Gazette of RS", No. 93/2015), and represents a part of the longitudinal highway traffic link through the northern and southern part of the Republic of Serbia, i.e. direction of Corridor 10 which connects the northern part from the State border with Hungary (border crossing Horgos) and the southern part of the Republic of Serbia i.e. State border with Macedonia (border crossing - Presevo). In addition, the subject section is a part of the RRSP planned for heavy maintenance during the fourth year of the Project implementation.

In the ToR's the beginning of the section is on chainage km 457+272 (node 152 interchange Brestovac), while the end of the section is on chainage km 451+250 (node 151 interchange Doljevac). The subject of the project is the left carriageway of the highway of the subject section, state road of IA 1 in the defined length.



Picture 35- Location of the subject section

#### IV.2. Rehabilitation works description

The project provided rehabilitation of the existing pavement of the highway with an inconsiderable widening in the zones of parallel exit/enter lanes.

For rehabilitation is left traffic lane of the subject section of the highway.

In addition to this, in order to increase traffic safety, it is provided to set up the corresponding horizontal traffic signs with checking whether the existing traffic signs are in accordance with the applicable standards, as well as amendment of vertical traffic signs.

The project solution provided the rehabilitation of all elements of the drainage system and bringing it into functional condition.

Apart from the mentioned, by subject documentation is required the rehabilitation of existing structures, culverts, bridges, and the rehabilitation of the protective the safety barriers.

The general aim of preparation of the subject technical documentation is rehabilitation of all damages by removal of the causes that led to damage thereby increasing the durability and use-value and improving traffic safety.

As already mentioned, the subject section is a typical highway and there are no local connections of factory complexes and significant facilities in the immediate vicinity. Also, in the immediate vicinity there is no landfill, quarry, schools or any content that has an impact on traffic flows.

The concept of drainage in the project solution is considered within the following units, which are divided into types:

Type 1 - Pipe system with outflow into open road ditches

Type 2 - Road ditch on both sides of the highway

### Type 3 - Shoulder on both sides of the highway

Only the elements on the left side are designed (since the subject of the project is the left lane of the highway).

The new elements provided within the subject section, which complement the existing drainage system, are the following:

- Line canal with grid
- Separators of light petroleum products
- Absorbent wells
- Arrangement of watercourses in the zones of existing culverts

#### Type 1 - Pipe system with outflow into open road ditches

The drainage of the dividing strip of the subject section is mostly based on a pipe system. The location of the pipeline is dictated by the superelevation of pavement that exist in the existing highway concept. Therefore, the pipe section with the outflow into the road ditches occurs from the chainage km 451 + 185.20 (beginning of the section) to km 455 + 066.

Since the subject of the project is the left traffic lane of the highway, the following are the ditches that represent the recipients of the pipe system:

- Canal left 1 self-absorbing
- Canal left 2 self-absorbing
- Canal left 3 self-absorbing
- Canal left 4 flow Recipient "Canal" at the chainage km 454 + 707.

Within the subject project is provided cleaning and deepening of road ditches, as well as dismantling of the concrete lining at the self-absorbing canals. It is planned to dismantle the existing concrete lining in order to improve the possibility of water infiltration into the soil. In this zone, all canals except "Canal Left 4" are self-absorbing. Therefore, only at "Canal left 4" as the final recipient is provided "Canal" at the chainage km 454 + 707. At the same time, a separator of light petroleum products is planned at the outlet of "Canal left 4".

#### Type 2 - Road ditch on both sides of the highway

Drainage of the highway is done by pouring water from the surface of the highway into road ditches on both sides of the highway, from the chainage km 455 + 066 to km 456 + 230.

Road ditch also collects water from the pavement and the water from the surrounding terrain. From the ditch, atmospheric water, with a corresponding longitudinal fall of the road, leads to a road culvert that is placed transversely in relation to the road. A road ditch called "Canal Left 5" is located in this zone. The final recipient of this ditch is the "Bara" watercourse.

Within the subject project, it is planned to clean and deepen the road ditch and direct it towards the box culvert in the zone of the watercourse "Bara". At the same time, a separator of light petroleum products is planned at the outlet of "Canal Left 5".

### Type 3 - Shoulder on both sides of the highway

Type 3 - "Shoulder on both sides of the highway" is an open drainage system that involves drainage of atmospheric water from the road - in the embankment zone, through longitudinal and transverse slopes over shoulders and hull slopes into existing road bed, where water infiltrates or evaporates. No special works on the arrangement of the shoulder are planned within the drainage project. This type of drainage occurs from the chainage km 456 + 230 to km 457 + 260.

#### Bridge on the left side over the local road (chainage km 456+234)

In the traffic profile, it is necessary to do new waterproofing and a new asphalt curtain. It is necessary to install the so-called "asphalt" expansion joints at both ends of the bridge, in the zones between the parapet walls and the structure. The area under the bridge as well as the skittles need to be cleared of vegetation, waste of various kinds. It is necessary to install channels for drainage of atmospheric water from the road alongside the embankments. Also, a detailed description of the works was provided by the designer in the Preliminary Design.

## V. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

#### **Relevant Institutions**

The relevant Ministry of Environmental Protection of the Republic of Serbia is responsible for producing and implementing the environmental policy. Other relevant institutions are: PERS, Institute for Nature Conservation of Serbia (INCS) and Institute for Protection of Cultural Monuments Nis (IPCMN).

#### **Existing Serbian legislation**

The environmental laws and by-laws in force in the Republic of Serbia are summarized in Appendix 3.

## EIA procedure in the Republic of Serbia

According to the Serbian Law on EIA (Official Gazette 135/04, 36/09) full EIA procedure, including preparation of EIA Study are not necessary for road rehabilitation projects, except when there are protected natural or cultural properties nearby. In such cases the Project Proponent shall submit a Request for Decision about Need for Environmental Impact Assessment to the Ministry of Environmental Protection. The Law on Environmental Impact Assessment regulates the EIA procedure and is in accordance with European Directive EIA - 85/337/EEC.

In the statement 03 No. 020-3558/3 dated January 25<sup>th</sup> ,2019 Institute for Nature Conservation of Serbia (INCS) the issued conditions for the subject road section. By reviewing the Central Register of Protected Goods and documentation of the INCS, and in accordance with the legislation governing the field of nature protection concluded that the subject area is not situated within a protected area, for which the protection procedure has been carried out or initiated, is not within the scope of the ecological network, nor in the area of recorded natural resources.

In the statement No. 804/2 dated August 20<sup>th</sup>, 2020 Institute of Protection of Cultural Monuments Nis (IPCMN) issued technical protection measures needed for development of project technical documentation. It states that there is no immovable cultural property of great importance and that it is necessary to notify Institute when the works are about to begin, but the obligations of the Contractor / Investor during the realization of the project are stated.

Final Environmental Approval is obtained from the Ministry of Environmental Protection (MoEP) (No. 011-00-00934/2020-03 dated 29.09.2020.) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (see Appendix 6). Consequently, that there is no need for producing the Environmental Impact Study of the subject section of the state road.

#### **Relevant IFIs Policies and Statements**

IFIs request that the following requirements be applied to all of the works:

- World Bank: Operational Policy OP 4.01, environmental impact assessment, which requires a partial Environmental Impact Study and a suitable EMP for environmental category B projects;
- > EBRD: Environmental and Social Guidelines 2008;
- ➤ EIB: Statement on Ecological and Social Principles and Standards (2008).

EBRD and EIB request that the design be made in line with the laws of the Republic of Serbia and EU standards. However, the regulations of the Republic of Serbia do not provide for an EMP to be made for this type of investment, while the World Bank guidelines require a partial Environmental Impact Assessment and ESMP for each section.

#### VI. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

The subject road section Brestovac (Interchange) - Doljevac (Interchange) belongs to Nisavski Administrative District located in southeastern part of Republic of Serbia, to the City of Leskovac (Brestovac) and Municipality Doljevac.

There are no protected natural or cultural properties in the vicinity of the subject road section.

Considering the fact that the subject section passes through the territory of two municipalities (Doljevac, City of Leskovac-Brestovac) and the social aspect of the ESMP document, information on the requests of the local community was collected from representatives of both municipalities.

Regarding the question of the municipality of Leskovac, in a short electronic response to the request sent by the designer, the answer was that when it comes to the section of the motorway itself, they do not have any special request. On the other hand, the representatives of this local community pointed out the need for the realization of a roundabout at the intersection of state roads IIA 158 and 225 in the zone of the "Doljevac" interchange. However, the intersection in question goes beyond the scope of this heavy maintenance project.

The Designer was also informed by the local self-government (Municipality of Doljevac) about the planned supporting facilities that causes the construction of new acceleration / deceleration lanes and service road. In response to the request for information, the Municipality of Doljevac expressed a request to implement project solutions related to the documentation for CONSTRUCTION OF SUPPORTING FACILITIES FOR MOTORWAY USERS - BASIC CONTENT OF PARKING LOT (deceleration lane from the motorway, service road, acceleration lane on the motorway and reconstruction of the direct and indirect external ramp of the "Doljevac" interchange with the associated infrastructure), made by the designer "Hidroprojekat Saobraćaj" from Belgrade, 2020.

There are no protected natural areas along the subject section that could be influenced by the works on heavy maintenance, and also there are no protected cultural areas. In the implementation of the project, there will be no new land acquisition, as defined by OP 4.12. since the road widening will be done on public land (in the road area).

Record of pavement surface deterioration after analysis of the surveying results of pavement damages as dominant types of damages were defined which shall be used as reference for the analysis of the pavement existing condition:

- Longitudinal and Transversal cracks as a result of thermal influence and the impact of traffic load during exploitation,
- Mash cracking as the consequence of pavement fatigue.

On sections where there is a drop in percentage of Fatigue, transverse and longitudinal cracking occupying interventions of heavy maintenance of the pavement (overlay / replacement of one layer - wearing course by asphalt layer) of recent date were noticed.

In the following pictures characteristic damages recorded during investigation works in the field are presented which will be eliminated by the Main Design for Heavy Maintenance.



Picture 36. Damage of pavement



Picture 38. Damage of pavement



Picture 37. Damage of pavement



Picture 39. Damage of pavement

## **Settlements**

#### The City of Leskovac

The subject section passes through Brestovac, a settlement in the town of Leskovac in the Jablanica District, according to the 2011 census, there were 2,027 inhabitants.

The geographical and traffic position of the Leskovac valley has a transit character. Important international roads pass through it, but also other traffic routes. The main traffic route connects Western and Central Europe with Macedonia, Greece and Asia Minor.

The city of Leskovac has an area of 1,025 km<sup>2</sup> and includes 144 settlements and the city, according to the 2011 census, has a population of 144,206. After the City of Nis, the City of Leskovac is the largest in the south of Serbia.

## **Municipality Doljevac**

Doljevac is a municipality in the Nisava district in southeastern Serbia. The municipality of Doljevac, with an area of 121 km² and 18,463 inhabitants, according to the 2011 census is one of the six municipalities in the Nisava district. It is the last in terms of the size of the territory, and the second largest in the district in terms of the number of agricultural areas and population density. The administrative area of the municipality of Doljevac consists of 16 settlements.

#### Bicycle traffic

It is particularly important to note that this documentation does not consider pedestrian and bicycle traffic because IA road it is a highway. According to the subject section there are no bus stops.

#### Railway traffic

The subject section does not intersect with the railway, considering that this type of traffic has not been considered.

#### Watercourses

The watercourse listed below passes and intersects with the section Brestovac (Interchange) – Doljevac (Interchange):

#### Watercourse "Bara"

Watercourse "Bara" (name taken from the military topographic base 1: 25000) which flows into the South Morava, that can be considered as the recipient for the inflow of road canals, in this zone the box culvert with the opening 4.0m on the station km 454+935 is located (Picture 10). By visiting the terrain during the summer, it was noticed that there was no water in the mentioned zone. For that reason it is considered that the amounts of water flowed from the catchment area of the highway compared to the capacity of the canal and culvert on the mentioned station will be negligible

#### Air

There are no significant additional sources of air pollution within the planned road section Brestovac (Interchange) – Doljevac (Interchange). No information on the measured air pollution values on the subject section was available.

On the basis of traffic counting performed in recent years, no increase in the traffic volume is anticipated after heavy maintenance. In the road rehabilitation and operational phase, no increase in the air pollutants concentration is expected.

#### Noise

Based on the current and expected traffic loading during and after the works, no increase in the existing noise level is expected.

## VII. SUMMARY OF ENVIRONMENTAL IMPACTS

During the road rehabilitation and operational phase, there are certain environmental impacts listed below, together with the intensity of their actions.

INFLUENCE	SIGNIFICANCE	COMMENT
Impacts on land use and	Does not exist	During the realization of the project,
settlements		there will be no expropriation of land.
Ground and surface water	Low	Due to low amount of water that can

		some to the reginient by drainers, the
		come to the recipient by drainage, the consequential impact is minimal to
		· · · · · · · · · · · · · · · · · · ·
		negligible and separators of oil and oil
		derivatives are planned, which will
		prevent pollution of both groundwater
		and surface water.
Air quality	Low	Temporary impact.
Flora and fauna (protected	Low	Under the terms of the Institute for
areas and species)		Nature Conservation of Serbia.
Monuments	Low	Under the terms of the Institute for
		Protection of Cultural Monuments Nis.
Noise	Low	Temporary impact.
Access/crossing points of	Low	The rehabilitation and widening works
the main road and local		will not affect existing crossing points.
roads		
Soil management	Low	With the application of appropriate
		measures of waste management.
Waste	Low	Ensured through environmental
		management – waste and wastewater
		management plan will be prepared and
		implemented
Cumulative impacts	Minor	Temporary, rehabilitation works may
		cause a slight increase of noise levels
		and air pollutants concentrations during
		the works only
		<u> </u>

Most of the impacts on the environment are temporary and stops after the completion of works on heavy maintenance on the section Brestovac (Interchange) – Doljevac (Interchange). The project is classified as environmental category B due to a small impact on the environment. After completion of the works, increase of road traffic is not anticipated, and potential increase of vehicle speed will be regulated through a safety design, by applying active and passive speed control measures.

The road maintenance works will be performed entirely on public land, without any collision with private properties. In respect with the provisions of WB OP 4.12 (Involuntary Resettlement), Design does not require any land acquisition, resettlement or long-term disturbance of human activities.

ESMP relates to the road rehabilitation phase and is part of the relevant agreement for implementation and future commitment of the Contractor. The following problems may occur during the rehabilitation works: disturbance in the traffic and movement of residents from local settlements, decreased road safety, damages on access roads, noise pollution, dust emission, inefficient waste disposal, air pollution, impact on the soil, water, flora and fauna. The works outside the site area, such as the works in a quarry, asphalt plant and borrow-pits may have local negative impact and must therefore be managed properly.

#### **Overview of Key Impacts**

ESMP focuses more on the heavy maintenance phase, while activities on the regular maintenance will not be detailed in this ESMP, but will only be presented in order to have an overall view of the situation.

#### Noise and Air Pollution in Residential Areas

During the rehabilitation works, use of construction machinery and equipment with exhaust fumes leads to an increase in the concentration of nitrogen oxide and sulfur-oxide in the air. Local residents will not be temporarily impacted by non-significant air and noise pollution and dust emission, since there is no residential zone nearby.

#### Possible water contamination

Water pollution may occur on site, on the locations where the equipment, vehicles and machinery are washed and also on the parking area. The contaminated water shall be filtered through a gravity oil-water separator. If there is a spillage on the road, especially near the watercourses, the Contractor shall use absorbent materials and remove the contaminated layer of soil, which is then transported to a location defined in the Law on Water ("Official Gazette RS" Nos. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018).

#### **Potential Cumulative Impacts**

If the ESMP is properly implemented, all negative effects on the people and the environment resulting from cumulative impacts will be reduced.

Determining the location for landfilling is a very big problem in the Republic of Serbia, given the small number of regulated sanitary landfills, the recommendation of the Environmental and Social Management Plan is to use a regulated and sanitary landfill of municipal and construction waste, all in accordance with valid planning and urban documentation for the subject section and all in accordance with the Local Waste Management Plan on the territory of the City of Leskovac for the period 2010-2020.¹ and the Local Waste Management Plan in the Municipality of Doljevac for the period 2011-2020.² and or any other that is according to the European standards and in accordance with the legal regulations of the Republic of Serbia.

#### Other Impacts:

- ➤ Social impacts: in the construction phase, these include all social-economic conflicts, including health and safety. All temporary locations used for activities that have short-term impact are included, such as quarries and borrow-pits, locations for stockpiling surplus soil and asphalt plants are included in this. Impact of these types of activities is expected to cease when the Project is ended and the Contractor leaves the subject location;
- ➤ Pollution: during the heavy maintenance works, a steady, though not significant emission of pollutants is expected. These include: air pollution, water pollution, soil pollution, noise and vibrations:
- ➤ Solid waste: activities on the heavy road maintenance are expected to generate a certain amount of solid waste, which is collected on site and transported into a landfill, outside the site zone.

#### VIII. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance and road rehabilitation- upgrading on the section Brestovac (Interchange)- Doljevac (Interchange) will be insignificant and reversible.

<sup>&</sup>lt;sup>1</sup>Source: http://www.sepa.gov.rs/download/UpravOtpad/LeskovacLPUO.pdf

<sup>&</sup>lt;sup>2</sup>Source: https://www.opstinadoljevac.rs/doc/Lokalni%20plan%20upravljanja%20otpadom%20opstine%20Doljevac%20Do

Mitigation measures provided in the ESMP, relating to the design, construction and operational phase, must be carried out appropriately. ESMP consists of the Mitigation Plan and Monitoring Plan and is based on the types of environmental impact, their scope and duration. PERS manages the design, supervision and the contractor in the implementation of ESMP.

#### A. Environmental Mitigation Plan

The Environmental Mitigation Plan defines the environmental impacts and measures to be implemented during the design, construction and operational phase (Appendix 1). The Plan conforms to the conditions received from the Institute for Nature Conservation of Serbia and valid laws. It states the locations, time frame, responsibility for its implementation and supervision. Costs of mitigation measures are included in the cost of the works. Contractor shall implement the environmental mitigation measures, include them in the total costs, and execute the works in accordance with national laws, EU standards and creditor's requests.

#### **Site Organization Plan**

Contractor shall carry out and follow the Site Organization Plan. Conditions issued by INCS shall be included in the Site Organization Plan. Location of the facilities (warehouses, workshops, asphalt and concrete plant etc.) shall be approved by a Resident Engineer. The following conditions have to be met when selecting the location and organizing the site:

- Temporary locations for storing the construction and other material and equipment must be outside the area with high vegetation and river flood areas and limited only to the duration of the works;
- ➤ Temporary or permanent locations must be provided (the existing organized communal facilities/landfills) for disposal and tipping of debris and other waste material in any form and communal waste produced during the works. Prohibit disposal/dumping into the zone of the watercourses.
- After the completion of the works, all areas that have been degraded in any way by road rehabilitation works must be rehabilitated as soon as possible;
- > During the works, the planned road sections and corridors around it must be followed (monitored), so that the earthworks and machinery do not affect the surrounding areas and its quality. Also, the existing road network must be used, without building new roads, to prevent habitat fragmentation;
- ➤ During the road works directly along the river or watercourse, riverbed and river bank must be preserved as much as possible;
- ➤ Vehicle and machinery servicing on the road section shall be prohibited. In the event of a road traffic accident resulting in oil or service fluids spillage, the road area must be cleaned and reinstated:
- > On the parts where the section is located in a populated area the works must be performed only during the day, to minimize the impact of noise on local residents;
- Guardrails and pedestrian crossings must be placed where necessary;
- Locations for containers for temporary tipping of communal waste produced during the works must be determined:
- ➤ The area for Contractor's facilities must be of the smallest possible size, to avoid unnecessary removal of vegetation. All facilities must be fenced;
- ➤ Appropriate drainage of the site must be provided. Locations used for car parking, workshops and fuel storages must be drained toward the oil-water separator;
- Only trained workers, who can remove any consequences of accidental spillage, may handle the fuel;

- ➤ Waste oil, oil filters and fuel must be stored on safe locations; Sanitary wastewater and polluted water must be treated before the water is discharged into the surface water flow system, in line with the Law on Water ("Official Gazette of RS", Nos. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018);
- ➤ Contractor must provide safety measures to prevent soil erosion and use the methods to decrease the storm water runoff that carries eroded material;
- > Excavations and machinery works must be avoided when the soil is damp;
- ➤ Upon the completion of works, machinery, construction material, containers and all other equipment must be removed in due time;
- ➤ When the site is ready to be closed, all contaminated soil must be excavated and replaced with a new layer of soil;
- > Upon the completion of works, the soil must be cultivated on all the critical locations, using suitable plants which are biologically adapted to the subject climatic conditions, resistant to air pollution and visually fitting for the surrounding area. Invasive species, such as the black locust, Indigo bush, ash leaf maple, ailanthus, American ash and species that cause allergic reactions, such as poplar, should be avoided.

PERS is responsible for checking, via his Supervision Consultant, if the Site Organization Plan includes the requirements from ESMP and Safety Labour Management Plan (SLMP).

#### **Environmental Protection Plan**

Based on the ESMP, the Contractor shall prepare his Environmental Protection Plan and submit it to PERS for approval. Contractor shall be obligated to follow and to implement the plan with continuous supervision of plan implementation by consultant for supervision of road rehabilitation works at the site.

The contractor is required to have a qualified and experienced person in the team, which will be responsible for coherence between the works, the environment and the Environmental Management Plan. Public Enterprise "Roads of Serbia" will independently monitor the works, and if any irregularity is noticed, it will be transmitted to continuously present Supervision, and The Contractor will be requested to rectify such irregularities.

Environmental Protection Plan consists of the following:

- 1. Site Management Plan defines the procedures for setting up and functioning of a site with a view to preserving the local community and natural resources.
- 2. Site Organization Plan description and arrangement of areas, with maintenance equipment and oil and lubricant storage facilities, including the distance from water areas;
- 3. Oil and Fuel Storage Management Plan procedures for storing, transporting and using oil and fuel, refueling the facilities and machines, procedures for decreasing the risk of water and soil pollution. Vehicles used for refueling will have the suitable equipment used for cleaning fuel spills. All classes of spills will be reported in line with the Plan;
- 4. Waste Management Plan contains details of temporary waste storage, waste transport and treatment before its final disposal or recycling. Licensed facilities must be used for storing solid and liquid waste and the waste leaving the site must be traceable, in accordance with the jurisdictions. As part of the Plan, Contractor shall provide chain-of-responsibility forms for the waste that leaves the site. Therefore, waste controller shall keep one copy of the form, and the driver shall have a copy, to make sure that all the listed waste is brought to the landfill. Contractor shall keep all records for audit purposes.
- 5. Sewerage and Waste Water Management Plan
- 6. Soil Management Plan steps to be taken to minimize the effect of erosion, measures to reduce topsoil depletion, transport roads and landfills;

- 7. Noise all the equipment must have a license and must be approved in accordance with the EU standards. This applies to all machinery, vehicles and sites where noise and vibrations affect the noise-sensitive receptors. In accordance with the Law on Protection against Environmental Noise ("Official Gazette of RS" Nos. 36/09 and 88/10), Contractor is responsible for ensuring the noise and vibrations do not affect the local community. Contractor shall limit his works to a period from 07:00 am to 07:00 pm.
- 8. Dust Emission Reduction Plan during the works, when dust may form, Contractor shall monitor the conditions on site and application of measures to control dust emissions, which include reduced traffic during road rehabilitation works and spraying water on the exposed surfaces:
- 9. *Material Excavation and Extraction Location Plan* defines the reparation measures to be implemented for the areas of borrow-pits and access roads after the project is finished;
- 10. *Management Plan for Works on the River* includes plans and procedures for water habitat and fish preservation during the works.
- 11. Emergency Response Plan sets out the procedures for reacting in case of emergency or accidents of a bigger or smaller scale, to protect the people, property and natural resources. Equipment to be brought on site to minimize the effects of the spillage of polluting substances must be included in the Plan.
- 12. Recultivation Plan cleaning and recultivation of the site and removal of Contractor's facilities. Contractor is responsible for clearing the site. This includes the removal of all waste material, machinery and contaminated soil. In line with the Law on Waste Management ("Official Gazette of RS" Nos. 36/09, 88/10 and 14/10), Contractor shall develop a plan for handover, selling or removal of all vehicles and machinery, to remove them from site. All site and work areas will be rehabilitated, in order to be reinstated as much as possible. This includes stabilization and landscaping of all sites. In line with the Law on Environmental Protection ("Official Gazette of RS" Nos 135/04, 36/09, 72/09,43/11 and 14/16), after the works are completed, waste must not remain on site. If waste is not removed by the Contractor, PERS is entitled to withhold payment and organize the cleaning of the area. The costs of the cleaning and the administrative costs will be included in the final payment.
- 13. Plan of Environmental Complaints means used by the local residents and third parties affected by the project to call attention to environmental issues and file a complaint, defining how and to whom these should be addressed (Appendix 4, Grievance Mechanism);

#### Safety

Contractor should identify potential risks before the commencement of works. The emergency response provisions should include a Site Safety Plan, which includes a proposal for a contact person available in the event of an accident. Site Safety Plan is submitted to the Project Supervision Consultant for approval.

- Contractor shall ensure that drugs and alcohol are not used on site;
- ➤ Contractor is to include in his Site Safety Plan a provision for safe working environment and safety measures and personal protective equipment (PPE) for all workers, including gloves, hard hats, goggles, ear protection and safety footwear;
- ➤ Site Safety Plan is to include a provision for first aid to be administered on site and a trained person must be engaged in line with the Law on Occupational Health and Safety (Official Gazette RS No 101/05, 91/15 and 113/17-oth. law);
- Contractor shall provide to his workers potable water supply, toilets and water supply for washing;
- ➤ Safety Labour Management Plan is required to ensure health and safety provisions during the works on heavy maintenance;
- Contractor shall perform all project activities following the SLMP and all Serbian laws and bylaws regarding health and safety;

PERS and the Contractor are jointly responsible for reporting on and investigating any incidents.

Due to the increased number of vehicles on the roads through populated places, safety of local residents must be considered. Contractor shall ensure that the traffic passing through populated places is managed safely. Contractor shall provide the following:

- Safe maintenance of all trucks and equipment;
- Appropriate training and responsible behaviour of all drivers and machine operators (prescribed in the Contractor's Site Safety Plan);
- Ensuring that all the truck load which may create dust emissions is covered and secured (e.g. excavated soil and sand);
- ❖ Safety and instant removal from site of the drivers who disregard any of the conditions regarding the safety of the local community;
- Obeying speed limits.

Before the works start, Contractor shall submit all the above listed plans to PERS Sector for Investments for their approval. After the works are completed Contractor shall reinstate the location into its original condition.

#### **Operational Phase**

In the road operational phase, special attention must be paid to safety of pedestrians, by using measures for traffic calming in the vicinity of schools and populated areas, improving road signs and markings, keeping a record of traffic accidents that are recurring on some locations, and marking them as black spots.

Regular road maintenance consists of the following: grass mowing, cleaning the drainage system, road patching and various repairs and regular checks and maintenance of drainage structures. Seasonal maintenance, regular maintenance of safety characteristics and road signs shall be performed as needed. Primary road maintenance, which includes asphalting and major repairs, is usually planned for a period of a few years.

#### **B. Environmental Monitoring Plan**

Basic components of the Monitoring Plan are:

- > Environmental issue to be monitored and means of verification;
- Specific areas, locations and parameters to be monitored;
- Valid standards and criteria;
- Monitoring noise levels near populated areas;
- Monitoring material supply (verification of valid licenses);
- Duration, frequency and evaluation of monitoring costs;
- Institutional responsibility for monitoring and supervision.

A monitoring control list is prepared on the basis of EMP and Monitoring Plan (Appendix 2). The list is used by the supervision engineer on site. Signed control lists are submitted to PERS, which is responsible for compliance monitoring and reporting. PERS will have a Database of grievances, listing the information on complaints received from local communities and other interested parties. This includes: type of grievance, place, time, actions to be taken to resolve the grievance and the final outcome.

#### C. INSTITUTIONAL IMPLEMENTATION AND REPORTING ARRANGEMENTS

#### **Project Implementation**

PERS is the institution responsible for implementing the project in accordance with the EMP and Monitoring Plan. Day-to-day project implementation and monitoring its compliance is the responsibility of the Project Supervision Consultant.

Before the start of the works on this section, PERS will submit to the Bank for their approval a specific EMP. Contractor will provide the results of "zero monitoring" prior to the start of the works, during the mobilization stage. Project Proponent shall do the following to ensure that the Contractor implements the proposed mitigation measures in the construction phase:

- ➤ Contractor shall prepare Environmental Protection Plan and take all steps to mitigate ecological effects as stated in the Environmental Mitigation Plan (Appendix 1);
- > Contractor should not be compensated for the costs of the required mitigation measures and monitoring activities in the form of a specific item in the total price, except for the analysis of the quality of water and noise measuring. Contractor will be deemed to have included these costs in the total price. The actual costs of the analysis of water quality and noise measuring will be paid to the Contractor as part of a specific item in the total price. Failure to follow the requested environmental mitigation measures on the Contractor's part will result in penalizing the Contractor in the form of negative points. Negative points have been established as a measure to stimulate the Contractor to perform his obligations in an organized and timely manner and perform his duty with a high degree of excellence. Negative points consist of two elements - numerical and financial. Each negative point is connected to a sum, representing a permanent reduction in payment for the determined non-conformances in contractual obligations. The number of negative points earned has a cumulative effect. Should the Contractor receive more than a certain number of negative points stated in the Contract, he will not be allowed to participate in PERS tenders in the next two years. Also, if the Contractor is awarded a certain number of negative points, the employer has the right to break the contract. Monetary value of each negative point and the deadlines for other possible actions by the employer must be clearly stated in the contract. Explanation for the application of these two measures - fees for specific costs and penalties for non-compliance should provide the implementation of all the requested environmental mitigation measures and monitoring activities.
- ➤ Contractor must be explicitly requested to employ an environmental expert. Contractor will be responsible for implementing environmental mitigation measures during road rehabilitation works and should employ an environmental specialist who will supervise the implementation of Contractor's environmental responsibilities. This person will coordinate the work of the Contractor, PERS and the relevant ministry and will deal with every complaint received during the project implementation. In the course of the project, PERS will monitor if the Contractor complies with EMP provisions. Project Supervision Consultant is advised to employ an environmental expert (with knowledge of civil engineering and environmental management), to assist in environmental monitoring.

When the project is completed, PERS will be responsible for the operation and maintenance of roads. Routine and random monitoring will be undertaken as scheduled in the Monitoring Plan.

PERS shall also be responsible for the following:

➤ Implementation of the requests for environmental protection provided by: State environmental authorities, IFIs and other institutions, Law on Environmental Protection ("Official Gazette of RS" Nos. 135/04, 36/09, 36/0972/09, 43/11, 14/16, 76/18, 95/18- and 95/18);

- ➤ Implementation of the requests for environmental protection through Contractor's specifications;
- Project supervision via consulting services for supervision and project implementation;
- > Environmental monitoring supervision via consulting services for environmental monitoring;
- Preparation of final environmental reports.

Before the start of the road rehabilitation works, the Contractor will provide a proposal for environmental protection, including the safety of persons involved with the works, as part of the ESMP. The proposal will be reviewed by PERS for acceptance. With respect to that, particular emphasis must be placed on:

- Taking all reasonable steps to protect the environment during the commencement and completion of site works, so as to avoid damage of property or disturbance to the people, resulting from the existence of a site;
- Maintaining safe conditions for all persons entitled to be on site;
- Providing lighting, security guard, fences, warning signs and traffic controls, aiming to protect the works and other property, but also public safety and interest.

MoEP will have the authority to stop the works directly if the performance is not in line with the environmental standards and regulations. The inspection will then inform PERS about the suspension. The Design will be amended subsequently with public disclosure feedback.

#### **The Contractor Reporting Arrangements**

#### 1. Contractor to PERS

Contractor will prepare his compliance reports in respect to EMP and Contractor's Project Implementation Plan as quarterly progress reports and will submit them to PERS in English and Serbian, both in hard copy and in electronic copy.

Contractor will provide quarterly reports to PERS which document environmental mitigation measures, together with the prescribed monitoring activities performed in the reporting period. Contractor will take due care of the quality of the environment, in accordance with Mitigation Plan and Monitoring Plan, which form an integral part of the ESMP and will provide quarterly reports to PERS.

In the event of any accidents or environmental threats, there will be immediate reporting about these events. Contractor shall inform the project manager and local authorities immediately after the accident. If the project manager is not available, Contractor shall inform PERS about the accident (phone number +381113040701 or by e-mail: office@putevi-srbije.rs).

Contractor shall monitor the quality of the environment in line with the Monitoring Plan which is an integral part of the ESMP and will report to PERS on quarterly basis. These reports will include a list and details of all the activities performed on the location and the results of on-site investigation, in addition to the recommendations for future site activities and safeguard measures.

## 2. Project Supervisor Consultant to PERS

Conclusions of regular monitoring activities, including the activities stated in the Monitoring Plan, performed by the Contractor, will be included in the quarterly progress report.

In the case of an accident or environmental threat, these events must be reported immediately.

#### 3. PERS – MoCTI, World Bank, EBRD and EIB

Annual Health and Safety and Environmental Report, including the indicators for monitoring and reporting on the implementation of the conditions established in the EMP will be prepared by PERS and submitted to IFIs for their consideration. IFIs will review the reports and verify their content in

periodic site visits. PERS will provide annual reports to the MoCTI and IFIs regarding the status of the Contractor's implementation of mitigation measures, additional mitigation measures to be realized, cases of non-compliance, complaints received form the local residents, NGOs etc. and the manner in which they were addressed.

In the event of any lethal or major incidents on site, PERS will immediately report those to the Bank that finances the section of the road.

# VIII.4. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

As requested by IFI safeguard policy, public consultations will be held during the ESMP preparation. ESMP and other project-related information will be disclosed to the public and made available to the local community.

PERS office	Vlajkoviceva St. 19 a, Belgrade,
	Contact person: Igor Radovic, dipl.ing. and Jelena Cvetkovic, mast.geogr.
	011 3206811
Local community centres	City of Leskovac, Municipality Doljevac
Web site - PERS	www.putevi-srbije.rs

A detailed report on the public consultation process will be shown in Appendix 4 to this document and will contain a list of participants identified, which will be updated accordingly.

Consultation with users will be made during the road rehabilitation stage, while all the records of environmental and social issues, complaints received during consultation, site visits, informal discussions, formal reports etc. will be monitored, recorded and kept in PERS Project office.

Before the start of the works, PERS will provide information using the following:

- > Newspaper articles in one of the national and one of the local media,
- Posters on the main notice board in all local community offices of communities potentially at risk,
- Radio announcements on traffic diversions,
- Providing contact with the person responsible and nominated for working with the local communities.

A grievance mechanism will be implemented to ensure that the complaints from local communities are appropriately addressed, corrective measures taken and complainants informed about the outcome. This applies to the complaints of all interested parties. The complaint form is shown in the Appendix 4, while hard copies will be available in local community centres.

The Report on Public Consultation is presented in Appendix 4 to this ESMP.

#### IX. REFERENCES

- ➤ Environmental Assessment No 25, Environmental Management Plans, World Bank Environment Department, January 1999.
- Roads and the Environment: A Handbook, World Bank Environment Department.
- ➤ EIB, Environmental and Social Practices Handbook, Environmental and Social Office, version 2 24/02/2010.
- ➤ EBRD, Environmental and Social Policy 2008.
- ➤ EIB, Environmental and Social Principles and Standards (2008)
- ➤ EMP for the rehabilitation of roads, bridges and tunnels, as part of the World Bank project, Road Management and Traffic Safety, Republika Srpska, Roads Directorate, Banja Luka, 2001.
- ➤ Environmental Assessment Report and EMP for the Serbian Transport Rehabilitation Project, report ref: E866, project title: YF Transport Rehabilitation Project Br. P075207, document date 30/11/2003
- ➤ Environmental Management Framework Document EFD, PE Roads of Serbia, february 2013. Available on the link: <a href="http://www.putevi-srbije.rs/images/pdf/investicije/rrsp">http://www.putevi-srbije.rs/images/pdf/investicije/rrsp</a> environmental management.pdf

# X. APPENDIXES

# Appendix 1

# X.1. MITIGATION PLAN

#### **MITIGATION PLAN**

Phase	Issue	Mitigation measure	Institutional responsibility	
1			Implementation	Supervision
Pre-construction		Main Design		
	Following the environmental protection procedure	Conditions from the Institute for Nature Protection of Serbia is obtained to avoid environmental risks.  Conditions from the Institute for Cultural Monuments Nis is obtained to avoid cultural and historical heritage risks.	PERS And Main Design- Consultant	PERS
	Site location and organisation will be approved by PERS and selected so as to:	<ul> <li>be outside of the river banks and river flood area of the close rivers</li> <li>have no impact on the environment and the local community (noise, dust, vibrations etc.)</li> <li>be outside the high vegetation area</li> <li>minimise the size of the facilities to minimise the unnecessary removal of vegetation</li> <li>have the sanitary waste water treated before the water is discharged into the surface water system, in accordance with the Law on Water ("Official Gazette of RS" Nos. 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018)</li> <li>properly drain the locations. Paved areas, including</li> </ul>	PERS Contractor	PERS

Phase	Issue	Mitigation measure	Institutional responsibility	
Tildae	issue	Willigation measure	Implementation	Supervision
		parking areas, workshops and fuel storages must be drained toward an oil-water separator  - whenever possible, limit the area to be cleared and avoid topsoil degradation  - the material removed will be collected, disposed and/ or re-used as needed  - prevent soil erosion on site  - contractor is responsible for implementing the measures for erosion protection  - contractor shall limit the scope of the excavations to mitigate soil erosion  - contractor shall implement soil conservation method in sensitive areas to prevent or minimize the storm water runoff, which causes material erosion  - contractor is to avoid excavation and machine operations in damp site conditions.		
	Selection of the location for temporary settlement construction, in the vicinity of or within an existing settlement  Influence on public health and	- minimum distance must be kept (buffer zone) between the site and the nearest populated area  - influence of the local conditions must be accounted for (wind) to avoid or minimise harmful effects  -contractor's ESMP defines health and safety and environmental measures	Contractor	PERS

Phase	Issue	Mitigation measure	Institutional responsibility	
1			Implementation	Supervision
	sociological circumstances	- independent water and electricity supply, in addition to a medical service station on site must be planned for.		
	Safety of pedestrians and suitable crossings during the execution of works	- a suitable pedestrian crossing must be provided, equipped with curb ramps that allow the use of of equipment in progress execution of works	Main Design	Safety of pedestrians and suitable crossings
	Stakeholder engagement	Details of the proposed road route, access points and safety features will be disclosed at the location of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered will be recorded in the Main Design.	PERS and Main Design- Consultant	Main Design Technical Control PERS
				FLIXO
Construction		Management plans		
	Contractor shall prepare the imp	lementation of the Plans described in the EMP, to ensure s requirements have been met:		
	- Site Organisation Plan			
	- Sewerage and Wastewater Ma	nagement Plan		
	- Soil Management Plan			
	- Dust Management Plan			
	- A plan indicating the location of	f borrow-pits, and measures for recultivation of borrow-pits		

Phase	Issue	Mitigation measure	Institutional responsibility	
Tildse	13340		Implementation	Supervision
	and access roads after the project is completed  - Waste and Wastewater Management Plan, in line with the Law on Waste Management (RS Official Gazette No 36/2009, 88/2010, 14/2016 и 95/2018)  - Oil and Fuel Storage Management Plan  - In-river Works Management Plan  - Emergency Response Plan  - Complaints Procedure  - Safety and Hazard Assessment  - Safety and Labour Management Plan			
Construction		Site Induction		
	All workers and visitors to the sit on the need to use PPE.	e shall be given a health and safety induction and instructed		
Construction		Material Supply		
	asphalt plant: dust, fumes, health and safety of workers, ecosystem disturbance	- use the existing asphalt plants;  - requirement for official approval or valid operating license	asphalt plant	asphalt plant

Phase	Issue	Mitigation measure	Institutional re	esponsibility
			Implementation	Supervision
	quarry: dust, health and safety of workers, ecosystem disturbance	- use the existing quarries;  - requirement for official approval or valid operating license	quarry	quarry
	sand and gravel borrow-pits: river bed disturbance, quality of water, ecosystem disturbance	- use the existing borrow pits or buy material from licensed separation facilities;  - requirement for official approval or valid operating license	Contractor or gravel and sand separation facility	Contractor or gravel and sand separation facility
Construction		Material Transport		
	asphalt: dust, fumes	- all trucks need to be covered  - contractor's machinery to be carefully selected	truck operator	truck operator
	stone: dust	wet truck load	Truck operator	Truck operator
	sand and gravel: dust	wet truck load	Truck operator	Truck operator

Phase	Issue	Mitigation measure	Institutional re	esponsibility
1 1100	10000	magaton moderato	Implementation	Supervision
	management of traffic noise, exhaust fumes and road congestion	- haul material at off-peak traffic hours (9-14h)  - use alternative roads to avoid main roads  - proper road signs and markings of the site, to minimise chances of a wrong turn	Transport manager  Truck operator	Transport manager  Truck operator
	Possibility of encountering an archaeological site	if an archaeological site is encountered, contractor shall immediately suspend the works and inform IPCM and PERS.	Contractor	Contractor's supervision
Construction	n Construction Site			
	negative impact of noise on the workers and local community	- limit the activities to daylight working hours  - use equipment with noise mufflers, licensed and approved in accordance with the EU standards  - use noise barriers for the works that produce noise for more than one day on the same location.  - locate noise-making equipment as far away as possible form residential buildings and other noise-sensitive receptors.	Contractor	Contractor
	dust	- spray the problematic areas on site with water - cover the material stored and limit vehicle speed	Contractor	Contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
Filase	issue	magation incusare	Implementation	Supervision
		- implement the Dust Management Plan: measures for avoiding dust emission, including hoarding, spraying the problematic areas, accesses, material and stockpiles during the loading and unloading activities, covering the trucks that carry dusty material, washing the trucks etc.		
	vibrations	- limit activities to daylight working hours  - if there is material damage to the local houses, buildings and infrastructure (access roads included) caused by the works, the damage will be compensated for and will have to be rectified  - locate the equipment for earth works as far away as possible form vibration-sensitive receptors	Contractor	Contractor
	traffic disruption during construction activities	- Traffic Management Plan with appropriate measures for traffic diversions that can be easily noted and followed, including traffic police assistance  - Traffic Management Plan which will define a speed limit for the construction vehicles and organise traffic in such a way that populated areas are avoided as much as possible  - during the works, maximum use of the existing road network. Avoid the construction of new temporary roads, which would increase the habitat fragmentation  - inform the local community about the works planned	Contractor	Contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
FildSe	issue	minganon measure	Implementation Supervision	Supervision
	reduced access to roadside activities	provide an alternative access to roadside activities at all times	Contractor	Contractor
	safety of vehicles when / where there are no construction activities	lighting and well-defined safety signs and protection measures	Contractor	Contractor
	soil and water pollution from improper material storage, management and use	- organise and cover material storage areas  - isolate the concrete, asphalt and other from the watercourse by using sealed formwork or covers  -isolate the areas for washing the concrete or asphalt trucks and other equipment from the watercourse by choosing areas for washing which are not freely drained directly or indirectly into the watercourse  - organize the site so as to minimize the risk of generating sediments and accumulating waste water, which could cause pollution of the surrounding soil and water  - Soil Management Plan to provide controlled removal, storage and re-use of topsoil  - use local controlled measures to prevent sediment flowing into surface water and drainage channels. Some of the measures include physical obstacles such as fences, mulch barriers, geotextile, rock groynes, sediment basins.  - to prevent sediment flowing into surface water, slope of the soil and protection form wind erosion must also be	Contractor	Contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		considered, by installing fences, covers etc.  - any deposits of excess soil, stone etc. may only be temporary, until the works have been completed. After that, excess soil, stone and other waste material must be removed and complete rehabilitation of all areas degraded by the works must be done.		
	soil and water pollution from improper waste material disposal	<ul> <li>dispose waste material at a location protected from washing out, on a marked location, if not on site, then on an authorised landfill</li> <li>dispose waste in accordance with best international practice (IFC, EHS – general guidelines).</li> <li>apply additional measures for storing hazardous waste (secondary containment, limiting the access, providing PPE etc.) to prevent negative effects on the workers, local community or environment</li> <li>nominate a person responsible for waste collection and storage (hazardous and non-hazardous)</li> </ul>	Contractor	Contractor
	potential contamination of soil and water from improper maintenance and fuelling of equipment	apply the best engineering practice in handling and safe storage of lubricants, fuel and solvents, ensure proper loading of fuel and equipment maintenance, collect all waste and dispose it on authorised recycling locations	Contractor	Contractor
	soil and water pollution from improper waste material	- transport the waste in marked vehicles designed for waste transport, to minimise the risk of releasing	Contractor	Contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
TildSe	issue	Willigation measure	Implementation	Supervision
	disposal	hazardous and non-hazardous substances  - train the drivers in handling and disposal of the load they transport and transport documents describing the nature of the load (waste) and its degree of hazard		
	safety of workers	- provide workers with safety instructions and PPE - provide a safe alternative traffic flow	Contractor	Contractor
	areas temporarily occupied	- undertake re-vegetation with native species and monitor the effects (avoid invasive species those that cause allergic reactions)  -where initial plantings were not successful, carry out replanting	Contractor	Contractor
Operation	Maintenance			
	negative impact of noise on local residents and workers	- limit activities to daylight working hours, or as agreed with the authorities  - use the equipment with noise mufflers installed	Maintenance contractor	Maintenance contractor
	potential air, water and soil pollution: dust, exhaust fumes, spilt fuel,	- apply the best engineering practice in handling and safe storage of lubricants, fuel and oil  - ensure proper loading of fuel and maintenance of	Maintenance contractor	Maintenance contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
Tilase	issue	willigation measure	Implementation	Supervision
	oil and lubricants	equipment  - collect and dispose all waste in accordance with the Law on Waste Disposal  - properly organise and cover the areas for material storage  - isolate concrete and asphalt works from the watercourse by using sealed formwork  - isolate the area for washing trucks for the transport of concrete and asphalt and all other equipment from the watercourse, by choosing the area for washing where the water is not freely drained directly or indirectly into the rivers  - dispose the waste material to suitable locations protected from washing out		
	vibrations	limit activities to daylight working hours, or as agreed with the authorities	Maintenance contractor	Maintenance contractor
	safety of workers	- provide workers with safety instructions and PPE  - organise safe traffic bypass	Maintenance contractor	Maintenance contractor
	increased vehicle speed	install speed limit signs	Maintenance contractor	Maintenance contractor

Phase	Issue	Mitigation measure	Institutional re	sponsibility
1 11450			Implementation	Supervision
	erosion, rockfall, hazardous situation	install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal crossing, slow traffic zone), reflective markings indicating steep slopes or convex mirrors in curves where there is a lack of visibility, warning signs on locations considered appropriate in line with good engineering practice or as agreed with the authorities	Maintenance contractor	Maintenance contractor

# Appendix 2

X.2. MONITORING PLAN

### **MONITORING PLAN**

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
Construction				Material supply		
asphalt plant	possession of an official approval or valid (operating) license	asphalt plant	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the plant with the health and safety and environmental requirements	plant manager
quarry	possession of an official approval or valid (operating) license	quarry	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the quarry with the health and safety and environmental requirements	quarry manager
sand and gravel borrow-pit	possession of an official approval or valid (operating) license	sand and gravel borrow-pit or separation facility	inspection / supervision engineer	prior to the start of the works	ensure the compliance of the borrow-pit with the health and safety and environmental requirements	borrow-pit or separation facility manager
Construction	Material transport					

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
asphalt	truck load covered	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
stone	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
sand and gravel	truckload covered or wetted	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements	Contractor's supervision
traffic management	hours and routes selected	site	supervision	unannounced inspections during the works, at least once a week	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
Construction				Construction site		

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
negative effects of noise on the workers and local residents	noise levels	site; nearest homes in the local settlement	sound meter with suitable software	-once at the beginning of the project and later quarterly -after receiving a complaint -if the monitoring results are not satisfactory, monitoring to be done on monthly basis	ensure the compliance with the health and safety and environmental requirements and minimal disruptions to traffic	contractor (monitoring)
dust	air pollution (suspended solids)	on and near the site	inspection and visual observation	unannounced inspections during material delivery and construction works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision (monitoring)
vibrations	limited time of activities	site	supervision	unannounced inspections during construction works and after a complaint is received	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
disruptions to traffic during construction works	existence of a Traffic Management Plan and traffic pattern	on and near the site	inspection and visual observation	prior to the start of the works; once a week in peak and non- peak hours	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
reduced access to roadside activities	alternative access provided	site	supervision	random checks at least once a week during the construction works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision
safety of vehicles where there are no construction activities	visibility and suitability	on and near the site	observation	random checks at least once a week in the evening	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor's supervision

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
water and soil pollution resulting from improper material storage, management and use	soil and water quality (suspended solids, oils, ph values, conductivity)	the watercourses	unannounced sampling, analysis in a certified laboratory possessing the required equipment	at least three times for the entire Project duration, monitoring to be done before the construction (or at a reference point upstream of the site if performed during the works) and after the rehabilitation works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	Contractor (monitoring)
safety of workers	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the works	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	supervision contractor
Operation	Maintenance					
negative effect of noise on the workers and local residents	noise levels	site; nearest homes	sound meter with suitable software	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS

Phase	Parameter to be monitored	Location where the parameter is monitored	How the parameter is monitored	When the parameter is monitored (frequency or continuous)	Why the parameter is monitored	Institutional responsibility  Implementation
vibrations	limited time of activities	site	supervision	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
safety of workers	PPE; bypass traffic organisation	site	inspection	unannounced inspections during the maintenance activities and after receiving a complaint	ensure the compliance of works with the health and safety and environmental requirements and minimal disruptions to traffic	PERS
Operation				Road safety		
increased vehicle speed	condition of traffic signs; vehicle speed	road section included in the design	visual observation; radar speed detectors	during the maintenance activities; unannounced	ensure a safe and economical traffic flow	maintenance contractor; traffic police
erosion, rockfall and hazardous situations	condition of traffic signs	road section included in the design	visual observation	during the maintenance activities	ensure a safe and economical traffic flow	maintenance contractor, monitoring

EBRD Template - additional data required that should be incorporated into monitoring plans:

1. General		
Is the project materially compliant with all relevant EBRD Performance Requirements (taking account of agreed action plans, exemptions or derogations)?	Yes  No	If No, please provide details of any material non-compliances:
Is the project materially compliant with all applicable environmental and social laws and regulations?	Yes □ No □	If No, please provide details of any material non-compliances:
Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities, affected project labour or local communities, affected cultural property, or created liabilities for the company?	Yes □ No □	If yes, please describe, including details of actions to repair and prevent reoccurrence:
Have there been any changes to environment, social, labour or health and safety laws or regulations that have materially affected the company?	Yes □ No □	If yes, please describe:
How many inspections did you receive from the environmental authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
How many inspections did you receive from the health and safety authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found

How many inspections did you receive from the labour authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:
Have these visits resulted in any penalties, fines and/or corrective action plans?	Yes 🗆	If yes, please describe, including status of implementing corrective actions to address any violations found:
	No 🗖	
Has the Company engaged any contractors for project-related work in the reporting period?	Yes □	If yes, please state for which types of work, and how the company has monitored the compliance of contractors with EBRD Performance Requirements and the Environmental and Social Action Plan:
	No 🗖	
Were any of the violations stated above the responsibility of contractors?	Yes 🗖	If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Contractor?
	No 🗖	
Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labour reasons?	Yes □	If yes, please describe:
	No 🗖	
Please describe any environment or social programs, initiatives or sub and/or management systems:	p-projects unde	ertaking during the reporting period to improve the company's environmental or social performance

Please indicate the level of associated expenditure (capital expenditure and operating expenditure), and whether this relates to the requirements of the Environmental and Social Action Plan, or to any other initiative:

## 2. Status of the Environmental and Social Action Plan

Please provide information on the status of each item in the Environmental and Social Action Plan (ESAP) agreed with EBRD. If the ESAP has been updated during the reporting period, please attach a copy of the new plan.

## 3. Environmental Monitoring Data<sup>3</sup>

Please provide the name and contact details for your environmental manager:				
Parameter⁴	Value <sup>5</sup>	Unit	Compliance Status <sup>6</sup>	Comments <sup>7</sup>
Waste Water				
Total waste water generated				
BOD				
COD				
Suspended Solids				
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO <sub>2</sub>				
NO <sub>X</sub>				

<sup>&</sup>lt;sup>3</sup> Please provide the results of any environmental monitoring carried out by the Company or its consultants. If you already have all the data requested available in another format, then this can used instead.

Not all parameters will necessarily apply. Please complete those rows that are most relevant to the industry sector. Additional parameters can be added as necessary.

<sup>&</sup>lt;sup>6</sup> Please report on compliance against the standards agreed with EBRD for this project (typically local, EU and/or World Bank Group)

<sup>&</sup>lt;sup>7</sup> In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility

Please provide the name and contact details for your environmental manager:				
Parameter⁴	Value <sup>5</sup>	Unit	Compliance Status <sup>6</sup>	Comments <sup>7</sup>
Particulates				
CO <sub>2</sub>				
CH <sub>4</sub>				
N <sub>2</sub> O				
HFCs				
PFCs				
SF <sub>6</sub>				
[Other]				
Other Parameters				
Noise				
[Other]				
Solid Waste				
Please provide details of the method for each waste type.	types and amounts	of solid wastes gene	erated by the project. Indicate where wastes are classified as hazardous. Ir	dicate the final re-use, recycle or disposal

Please provide the name and contact details for your environmental manager:		or your		
Parameter <sup>4</sup>	Value <sup>5</sup>	Unit	Compliance Status <sup>6</sup>	Comments <sup>7</sup>

4. Resource Usage and Product Output				
Parameter	Value	Measurement Unit	Comments <sup>8</sup>	
Fuels used				
Oil				
Gas				
Coal				
Lignite				
Grid Electricity				
Heat Purchased				
Feedstocks and raw materials consumed				
Name 1				
Name 2				
Product output				

<sup>&</sup>lt;sup>8</sup> In addition to any other comments, please indicate whether the measurements reported apply to all or only some process operations at the facility Please include any fuel quality parameters (e.g. calorific value)

4. Resource Usage and Product Output			
Parameter	Value	Measurement Unit	Comments <sup>8</sup>
Product 1			
Product 2			

5. Human Resources Management				
Please provide the name and Human Resources manager:	contact details for y	our		
	Total		Recruited in this reporting period	Dismissed in this reporting period
Number of direct employees:				
Number of contracted workers:				
Were there any collective redundancies during the reportir period?				n, including reasons for redundancies, number of workers involved, how they did measures to mitigate the effects of redundancy:
			, please describe the redundancy plan tion and consultation process:	i, including reasons for redundancies, number of workers involved, and

Were there any changes in trade union representation at Company facilities during the reporting period?	Yes 🗆 No 🗅	If yes, please provide details, and summarise engagement with trade unions during reporting period:
Were there any other worker representatives (e.g. in the absence of a trade union)?	Yes 🗆 No 🗅	If yes, please provide details and summarise engagement with them during reporting period:
Were there any changes in the status of Collective Agreements?	Yes □ No □	If yes, please provide details:
Have employees raised any grievances with the project during the reporting period?	Yes 🗆	If yes, please state how many, split by gender, summarise the issues raised in grievances by male and female staff and explain how the Company has addressed them:
Have employees raised any complaints about harassment or bullying during the reporting period?	Yes □ No □	If yes, please state how many, split by gender, summarise the issues raised by male and female staff and explain how the Company has addressed them:
Have there been any strikes or other collective disputes related to labour and working conditions at the Company in the reporting period?	Yes □ No □	If yes, please summarise nature of, and reasons for, disputes and explain how they were resolved
Have there been any court cases related to labour issues during the reporting period?	Yes □ No □	If yes, please summarise the issues contested and outcome:

Have there been any changes to the	Yes □	If yes, please give	ve details, including o	f any new initiatives:			
following policies or terms and							
conditions during the reporting	No □						
period in any of the following areas:							
Union recognition     Collective Agreement     Non-discrimination and equal opportunity     Equal pay for equal work     Gender Equality     Bullying and harassment, including sexual harassment     Employment of young persons under age 18     Wages (wage level, normal and overtime)     Overtime     Working hours     Flexible working / work-life balance     Grievance mechanism for							
workers							
Health & safety							
6. Occupational Health and S			ı				
Please provide the name and contact	ct details for y	our Health and					
Safety manager:							
	Direct	employees	Contracted		Direct employees	Contracted	
	Direct	on pioyecs	workers		Direct employees	workers	
Number of man-hours worked this				Number of Fatalities <sup>9</sup> :			

reporting period:

<sup>&</sup>lt;sup>9</sup> If you have not already done so, please provide a separate report detailing the circumstances of each fatality.

Budget spent on OHS in this period (total amount and currency):	Number of disabling injuries:				
OHS training provided in this period in person-days:	Number of Lost Time Incidents (including vehicular) <sup>10</sup> :				
Number of lost workdays <sup>11</sup> resulting from incidents:	Number of cases of occupational disease:				
Number of sick days:					
Accident causes (falling, heavy loads, struck by object, contact with energy source etc.):					
Please provide details of any fatalities or major accidents that have not previously been reand currency):	Please provide details of any fatalities or major accidents that have not previously been reported to EBRD, including total compensation paid due to occupational injury or illness (amount and currency):				
Please summarise any emergency prevention and response training that has been provide	d for company personnel during the report period:				

Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.

11 Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

Please summarise any emergency response exercises or drills that have been carried out during the report period:				
7. Stakeholder Engagement				
Please provide the name and contact details for your external				
relations or community engagement manager:				
Please provide information on the implementation of the stakeholder en including:	gagement plan agreed with EBRD and summarise interaction with stakeholders during the reporting period,			
coverage in media,     and interaction with any environmental or other community gro Please describe any changes to the Stakeholder Engagement Plan agre	holders during the report period relating to environmental, social or safety issues  ups. eed with EBRD:			
How many complaints or grievances did the project receive from member Summarize any issues raised in the complaints or grievances and explaints	ers of the public or civil society organizations during the reporting period? Please split by stakeholder group.  in how they were resolved:			

		Environmental and Social Management Plan
8. Status and Reporting on Resettlement Act	tion Plan/Livelihood Re	storation Framework
monitoring indicators as detailed in the RAP or LRF, and c consultants and attach any additional information you think	omplete the table below. Plea k would be useful.	on of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), using the use provide the results of any other related monitoring carried out by the Company or its
Have all the affected persons been fully compensated for their physical displacement and, if applicable, any economic losses resulting from the project?	Yes  No	If no, specify how many compensation payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payments will be made:
Has the land acquisition had any additional, unforeseen impacts on affected persons' standard of living or access to livelihoods that were not previously covered in the RAP?	Yes  No	If yes, quantify these impacts and specify what measures have been undertaken to minimize and mitigate these impacts. If no, specify how potential impacts on livelihoods have been monitored.

Have any vulnerable groups been identified?	Yes 🗆 No 🗅	If yes, list the groups that were identified and describe any additional measures undertaken in order to mitigate impacts specific to these groups.
If applicable, have all transit allowances been paid?	Yes 🗆 No 🗅	If no, specify how many payments are still outstanding (in terms of number and percentage of recipients and payment amounts) and state when these payments will be made.
Has legal support been provided to all the affected persons?	Yes 🗆 No 🗅	If yes, specify how many persons effectively made use of the legal support.
Have all outstanding land and/or resource claims been settled?	Yes □ No □  Not applicable □	If no, specify how many claims are still outstanding and state what the expected timing is for settling them.
Have there been any new land acquisition-related complaints or grievances?	Yes □ No □	If yes, please state how many and summarize their content.
Has the company regularly reported to the affected communities on progress made in implementing the RAP?	Yes No D	If yes, please state how many meetings were held and how many participants attended.
New Land Acquisitions		

If the company acquired any new land for the project during the reporting year, please provide documents to show closure of land acquisition transactions. Please attach new/revised RAP covering the new land acquisition and describe mitigation measures, compensation, agreements reached, etc., and provide in tabular form a list of affected people and status of

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Environmenta	l and Social	l Management	Plan
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Yes □ No □	If yes, how many?
Yes □ No □	If yes, how many?
Yes D No D	
nitiatives undertaken by the ear	mpany during the reporting period, and any associated expenditure:
illuatives undertaken by the col	mpany during the reporting period, and any associated expenditure.
	Yes  No

X.3. LEGISLATION

### **RELEVANT SERBIAN ENVIRONMENTAL LEGISLATION:**

The main laws and regulations currently in force in Republic of Serbia which are relevant to the environmental protection are listed below:

- Law on planning and construction ("Official Gazette of RS", Nos. 72/2009, 81/2009, 64/10, 24/11, 121/12, 42/13,50/13, 98/13, 132/14, 145/14, 83/18, 31/19, 37/19 and 9/20);
- Law on nature protection ("Official Gazette of RS", Nos. 36/09, 88/10, 91/10, 14/16 and 95/18);
- Law on environmental protection ("Official Gazette of RS", Nos. 135/04, 36/09, 72/09, 43/11-decision US, 14/16, 76/18, 95/18 and 95/18);
- Law on EIA ("Official Gazette of RS", Nos. 135/2004, 36/2009,);
- Law on Strategic EIA ( "Official Gazette of RS", Nos. 135/2004, 88/10);
- Law on waste management ("Official Gazette of RS", Nos. 36/09, 88/10, 14/16 and 95/18);
- Law on noise protection ("Official Gazette of RS", Nos. 36/09, 88/10);
- Law on water ("Official Gazette of RS", Nos. 30/10, 93/12, 101/16, 95/18 and 95/18);
- Law on forests ("Official Gazette of RS", Nos. 30/10, 93/12, 89/15 and 95/18);
- ↓ Law on air protection ("Official Gazette of RS", Nos. 36/09 and 10/13);
- Law on safety and health at work ("Official Gazette of RS", Nos. 101/05, 91/15 and 113/17).

### Regulations established on the basis of the Law on EIA include the following:

- ♣ Decree on establishing the List of Projects for which the Impact Assessment is mandatory and the List of projects for which the EIA can be requested ("Official Gazette of RS", No. 114/08):
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of RS", No. 69/05);
- Rulebook on the contents of the EIA Study ("Official Gazette of RS", No. 69/05);
- ♣ Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of RS", No. 69/05);
- Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of RS", No. 69/05);
- Regulations on permitted noise level in the environment ("Official Gazette of RS", No. 72/10);
- Decree on establishing class of water bodies ("Official Gazette of RS", No. 5/68);
- ♣ Decree on limit values of pollutants in surface and deadlines for their achievement ("Official Gazette of RS", Nos. 67/11, 48/12 and 1/16);
- → Decree on limit values of pollutants in surface and groundwater and sediment and deadlines for their reach ("Official Gazette of RS", No. 50/12)
- Regulations on dangers pollutants in waters ("Official Gazette of RS", No. 31/82).

### Other relevant Serbian legislation

- ↓ Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of RS", No. 38/09);
- ↓ Law on Roads ("Official Gazette of RS", No. 41/18 and 95/18).

## X.4. STAKEHOLDER ENGAGEMENT

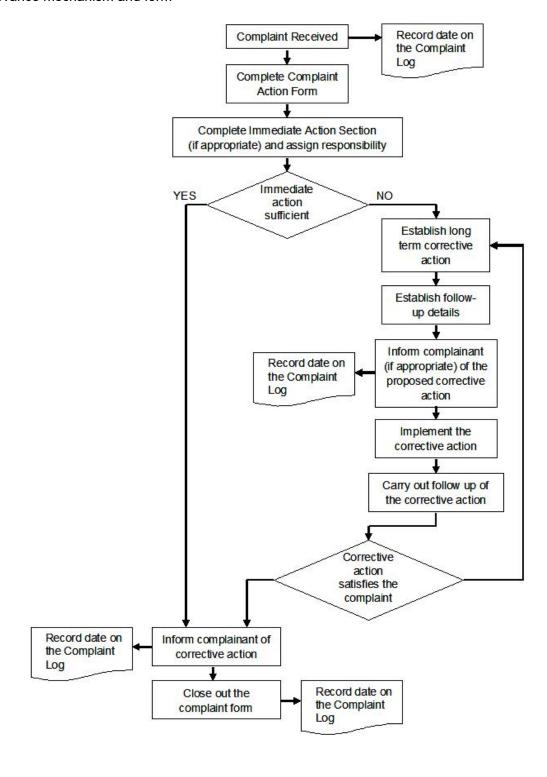
### Identification of stakeholders

The stakeholders are people and organisations which may affect, be affected by, or believe to have been affected by a decision or activity. The stakeholders on this Project may be classified as follows:

- 1. Potentially affected parties:
  - PERS employees and Contractors;
  - Representatives of companies directly bordering the Project;
  - \* Residents of areas in the Project Influence zone;
  - ❖ Local or regional authorities within the legal framework, such as: local land-owners and tenants and potentially affected industry and businesses.
- 2. Other interested parties:
  - Public;
  - Other companies operating in the National Network;
  - ❖ NGOs.

As the Project develops, more stakeholders may appear. Once it is identified, each stakeholder will be characterised as regards its interests, problems and requests and included in the list accordingly.

### Grievance mechanism and form



Grievances are to be resolved within 15 working days.

Grievance reference number:				
Contact details	Name:			
	Address:			
	Tel:			
	e - mail:			
	e - maii:			
How would you prefer to be contacted? Please tick a box	by post	by phone	by e	e - mail
Name and personal information (JMBG from identity card).				
Details of your grievance. Please describe the problems, whom they occurred to, when, where and how many times, as relevant  What is your proposal for resolving the grievance?				
How to submit this form to the authorised persons	by post:			
	by hand:			
	please drop this form at:			
	by e - mail:			
	Please e-mail your grievance, proposed resolution and contact details to the following e – mail address:			
Signature			Date	

## **REPORT ON PUBLIC CONSULTATION**

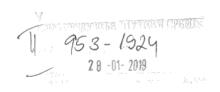
The report will be inserted later, after the public presentation and consultations.

X.5. CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

РЕПУБЛИКА СРБИЈА ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ НОВИ БЕОГРАД, Др Ивана Рибара бр. 91 Тел: +381 11/2093-802; 2093-803;

Факс: + 381 11/2093-867

. . . . . .



Завод за заштиту природе Србије, Београд, Др Ивана Рибара бр. 91, на основу члана 9. Закона о заштити природе ("Службени гласник РС", бр. 36/2009, 88/2010, 91/2010-исправка, 14/2016 и 95/2018-други закон) и члана 136. Закона о општем управном поступку ("Службени гласник РС", бр. 18/2016), поступајући по Захтеву II бр. 953-27206 од 24.12.2018. године ЈП "Путеви Србије" из Београда, Булевар краља Александра бр. 282, за издавање услова заштите природе за израду техничке документације пројекта Појачаног одржавања деонице државног пута IA реда бр. 1 (аутопут Е-75), деоница Брестовац – петља Дољевац, дана 25 01 2019. године под 03 бр. 020-3558/3, доноси:

#### РЕШЕЊЕ

- Траса државног пута за који се планира израда техничке документације на деоници Брестовац – петља Дољевац не налази се унутар заштићеног подручја за које је спроведен или покренут поступак заштите, није у обухвату еколошке мреже, нити на простору евидентираних природних добара. Сходно томе, издају се следећи услови заштите природе:
  - Предвидети да се одводњавање саобраћајнице врши гравитационим отицањем површинских вода и по потреби изградњом отворених канала за њихов прихват;
  - За воде које настају спирањем са коловоза и оптерећене су уљима и другим нафтним дериватима мора се предвидети изградња таложника и сепаратора масти и уља, а пре упуштања у реципијент или канализацију, обавезна је контрола њиховог квалитета;
  - Као коловозни застор користити материјале који могу, са аспекта заштите, обезбедити смањење нивоа буке и вибрација и омогућити ефикасно дренирање воде са површине коловоза;
  - Дефинисати ужу и ширу зону утицаја саобраћајнице на животну средину (посебно са аспекта очувања пољопривредног земљишта и производње хране одговарајућег квалитета), на основу тога утврдити мере и препоруке за коришћење земљишта;
  - 5) Дуж саобраћајнице предвидети заштитно зеленило формирати травњаке, уз примену ниског зеленила, чиме би се омогућила визуелна заштита контактних зона и естетско обликовање простора. За озелењавање високом вегетацијом, препоручује се примена претежно аутохтоних, брзорастућих врста, које имају фитоцидно и бактерицидно дејство и изражене естетске вредности. Избегавати врсте које су детерминисане као алергене (тополе и сл.), као и инвазивне (багрем, кисело дрво и др.);
  - Предвидети изградњу заштитних ограда уз насеља као појас заштите од букс, али и прелета птица и слепих мишева и страдања истих на траси пута;
  - Очувати потенцијална гнездилишта колонијалних врста птица, одморншта и зимовалишта уз водотокове и друге површине дуж трасе пута;
  - У периоду гнежђења птица од 15. марта до 30. јуна очувати гнезда крупних птица грабљивица и врста из породице врана (Corvidue);

- Након реконструкције планирати чишћење агрегата соли са површине пута, нарочито у зимском периоду;
- Прибавити сагласност надлежних институција за извођење радова који изискују евентуалну сечу одраслих, вредних примерака дендрофлоре, како би се уклањање вегетације свело на најмању меру;
- 11) Утврдити обавезу санације или рекултивације свих деградираних површина. Уз сагласност надлежне комуналне службе, предвидети локације на којима ће се трајно депоновати неискоришћени геолошки грађевински и остали материјал настао предметним радовима;
- Предвидети постављање специјалних судова за сакупљање отпада на одговарајућим бетонским површинама;
- Предвидети све мере заштите природе у акцидентним ситуацијама уз обавезу обавештавања надлежних инспекцијских служби и установа;
- 14) Уколико се током радова наиђе на геолошко-палеонтолошке или минералошко-петролошке објекте, за које се претпоставља да имају својство природног добра, извођач радова је дужан да у року од осам дана обавести Министарство заштите животне средине, односно предузме све мере како се природно добро не би оштетило до доласка овлашћеног лица.
- Ово решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
- За све друге радове/активности на предметном подручју или промене пројектне документације, потребно је поднети нови захтев.
- 4. Уколико подносилац захтева у року од две године од дана достављања овог решења не отпочне радове и активности за које је ово решење издато, дужан је да поднесе захтев за издавање новог решења.
- Такса за издавање овог Решења у износу од 20.000.00 динара је одређена у складу са члан 2. став 4. тачка 7. Правилника о висини и начину обрачуна и наплате таксе за издавање акта о условима заштите природе ("Службени гласник РС", бр. 73/2011, 106/2013).

### Образложенье

Завод за заштиту природе Србије примио је дана 25.12.2018. године Захтев заведен под 03 бр. 020–3558/1 ЈП "Путеви Србије" из Београда, за израду техничке документације пројекта Појачаног одржавања деонице државног пута IA реда бр. 1 (аутопут Е75), деоница Брестовац – петља Дољевац.

На основу достављеног захтева и документације утврђено је да је техничка документација пројекта Појачаног одржавања предметног пута саставни део Пројекта рехабилитације путева и унапређења безбедности саобраћаја на мрежи државних путева, који је подршка међународних финансијских институција Националном програму рехабилитације државних путева Републике Србије. Почетак деонице је петља Брестовац на Е 75 — крај деонице је петља Дољевац на Е 75. Планиране активности обухватају радове на постојећој саобраћајници и у постојећим габаритима коловозне конструкције.

Након увида у Централни регистар заштићених природних добара Србије и документацију Завода утврђени су услови и мере заштите природе за извођење активности из диспозитива овог решења. При томе се имало у виду да на локалитету нема заштићених подручја за које је спроведен или покренут поступак заштите, утврђених еколошки значајних подручја и еколошких коридора од међународног

значаја еколошке мреже Републике Србије, објеката геонаслеђа, као ни евидентираних природних добара.

Законски основ за доношење решења је Закон о заштити природе ("Службени гласник РС", бр. 36/2009, 88/2010, 91/2010, 14/2016 и 95/2018-други закон).

Планиране активности могу се реализовати под условима дефинисаним овим Решењем, јер је процењено да неће утицати на природне вредности подручја.

На основу свега наведеног, одлучено је као у диспозитиву овог Решења.

Такса на захтев и такса за решење, по Тар. бр. 1. и Тар. бр. 9. су наплаћене у складу са Законом о републичким административним таксама ("Службени гласник РС", бр. 43/2003, 51/2003, 61/2005, 5/2009, 54/2009, 50/2011, 93/2012, 83/2015, 112/2015, 50/2016, 61/2017, 113/2017, 3/2018-испр. и 95/2018).

Упутство о правном средству: Против овог решења може се изјавити жалба Министарству заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје писмено или изјављује усмено на записник Заводу за заштиту природе Србије, уз доказ о уплати Републичке административне таксе у износу од 470,00 динара на текући рачун бр. 840-742221843-57, позив на број 59013 по моделу 97.

ДИРРКТОР Александар Драгишић

Достављено:

- Подносиоцу захтева
- Архива х 2

PANPRO TEAM d.o.o.

Broj: 326-A-5 120

Datum: 31.08.2020.



Република Србија **ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА КУЛТУРЕ НИШ**Ниш, Добричка 2, тел. 018/523-414, факс 018/523-412

E-mail: kontakt@zzsknis.rs

Број: 804/2-02

Датум: 20.08.2020. год.

Завод за заштиту споменика културе Ниш, на основу чл. 104 Закона о културним добрима (Службени гласник РС бр. 71/94) и чл. 104 Закона о општем управном поступку (Сл. гласник РС 18/16) а у вези са чл. 99 и 27 Закона о културним добрима, решавајући по захтеву "Рапрто team" д.о.о., са седиштем у Београду у ул. Генерала Рајевског бр. 1/10, доноси

# $\begin{picture}(100,0) \put(0,0){$P \to W \to W$} \put(0,0){$E \to W$} \put(0,0){$$

- I Мере техничке заштите: израда техничке документације пројекта Појачаног одржавања деонице државног пута IA-1, деоница петља Брестовац петља Дољевац, могу се предузети под следећим условима:
  - Подносилац захтева је дужан да обезбеди и предвиди трошкове за ангажовање сталног археолошког праћења извођења земљаних радова, током читавог трајања земљаних радова;
  - Подносилац захтева је дужан да благовремено, односно најкасније у року од 8 дана пре почетка радова, о томе званично обавести овај Завод;
  - 3. Ако се у току извођења радова наиђе на археолошке и/или историјске локалитете или археолошке предмете, односно предмете из прошлости, извођач радова је дужан да одмах, без одлагања на том месту обустави радове и обавести надлежни Завод за заштиту споменика културе Ниш и да предузме мере да се налаз не уништи и не оштети и да се сачува на месту и у положају у коме је откривен, као и да обезбеди услове за заштитна археолошка истраживања;
  - 4. У случају да се радови обављају на површини на којој се налази археолошки или историјски локалитет чије постојање до сада није регистровано, подносилац захтева је дужан да обезбеди средства за археолошка истраживања, заштиту, чување, публиковање и презентацију истог, а што ће се регулисати посебним уговором између Подносиоца захтева и Завода.
- II Подносилац захтева дужан је да изради пројекат у свему у складу са издатим условима из тачке I овог решења.
- III Инвеститор је у обавези да по изради пројектне документације исту достави Заводу ради добијања сагласности да је урађена према прописаним условима. Један примерак пројектне документације се доставља за потребе Завода.
- IV Ово решење важи годину дана.
- V Жалба на решење не задржава извршење.

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### Образложење

"Panpro team" д.о.о., са седиштем у Београду у ул. Генерала Рајевског бр. 1/10, поднело је захтев наш број 804/1-02 од 30.07.2020. године за утврђивање услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IA-1, деоница петља Брестовац – петља Дољевац.

У циљу заштите н.к.д. и археолошког наслеђа "Panpro team" д.о.о., са седиштем у Београду дужно је да поступи по мерама прописаним овим решењем.

Имајући у виду наведено као и одредбе Закона о културним добрима које прописују обавезу предузимања мера техничке заштите у циљу очувања непокретног културног добра, донето је решење као у диспозитиву.

Чланом 104 став 3 "Закона о културним добрима" је прописано да жалба не задржава извршење решења.

ПРАВНИ ЛЕК: Против овог решења може се изјавити жалба Републичком заводу за заштиту споменика културе Београд у року од 15 дана од дана пријема решења. Жалба се непосредно предаје или шаље поштом доносиоцу овог решења.

Обрадио:

мр Александар Алексић, археолог

Доставити:

- Подносиоцу захтева

- Документацији Завода

ДИРЕКТОР ЗАВОДА,

Бильана Берић



Јавно водопривредно предузеће "Србијаводе" Београд Водопривредни центар "Морава" Ниш www.srbijavode.rs, Ујединитеља 2, Трг краља Александра Ниш, vpcmorava@srbijavode.rs; Текући рачун: 200-2402180103002-46; ПИБ: 100283824; Матични број: 17117106; Наменски рачун трезора: 840-78723-57, ЈБКЈС: 81448;

Телефон: 018/425-81-85; 425-81-86 Факс: 018/451-38-20

Број:

PANPRO TEAM d.o.o. Broj: 233-1-5120

Datum: 14.07.2020

Panpro team d.o.o. 11.000 Beograd Generala Rajevskog 1

У вези Вашег захтева бр.160/1-2-5/20 од 03.07.2020.год. (наш бр.5500 од 03.07.2020.год.) којим тражите да "у складу са Закључком Министарства грађевинарства, саобраћаја и инфраструктуре бр.06-00-00126/2016-03 од 09.09.2016.год. издамо мишљење у поступку израде Главног пројекта појачаног одржавања државног пута пута IA-1 реда, деоница Брестовац (петља)-Дољевац (петља)" обавештавамо Вас да је 08.12.2018. год. у "Сл.гласнику РС" бр.95 објављен Указ о проглашењу Закона о изменама и допунама Закона о водама. Чланом 5 промењен је чл.117 ЗОВ-а односно "водни услови се издају за изградњу нових објеката, реконструкцију постојећих објеката осим за реконструкцију државног пута I и II реда, пропуста и мостова на њима, ...".

Измене Закона су извршене после заједничког састанка где су били и ваши представници, представници Министарства пољопривреде, шумарства и водопривреде, републичке дирекције за воде и ЈВП-а (јуна 2018.год.)

Руководилац ВПЦ"Морава"

Ірагана Симић, дипл.правник.

X.6. FINAL ENVIRONMENTAL APPROVAL



### Република Србија МИНИСТАРСТВО ЗАШТИТЕ ЖИВОТНЕ СРЕДИНЕ

Број: 011-00-00934/2020-03 Датум:29.09.2020.године Београд PANPRO TEAM d.o.o. Broj: 424-4-5120 Datum: 15.10.2020.

#### ПАНПРО ТИМ, д.о.о.

Генерала Рајевског бр.1 Београд

**ПРЕДМЕТ:** Захтев за информацију о потреби израде студије процене утицаја на животну средину за пројекат појачаног одржавања државног пута IA 1, деоница: Брестовац (петља) – Дољевац (петља), L=6,022 km.

У складу са вашим дописом бр. 263-2-5/20 од 03.09.2020.године у којем нам се обраћате са захтевом за информацију о потреби израде студије процене утицаја на животну средину за пројекат појачаног одржавања државног пута IA 1, деоница: Брестовац (петља) – Дољевац (петља), L=6,022 km, обавештавамо вас о следећем:

На основу Закона о процени утицаја на животну средину, чл. 3. став 1. и став 2. ("Службени гласник Републике Србије", број 135/04, 36/09), предмет процене утицаја су пројекти који се планирају и изводе, промене технологије, реконструкције, проширење капацитета, престанак рада и уклањање пројекта који могу имати значајан утицај на животну средину, а немају одобрење за изградњу или се користе без употребне дозволе.

Такође, у складу са критеријумима за одлучивање о потреби израде Студије о процени утицаја на животну средину, а на основу Уредбе о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину ("Службени гласник Републике Србије", број 114/08) којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II, дефинисани су пројекти за које је неопходно отпочети процедуру процене утицаја

У предметном случају ради се о пројекат појачаног одржавања државног пута IA 1, деоница: Брестовац (петља) — Дољевац (петља), L=6,022 km, и исти се не налази на Листама I и II Уредбе.

У складу са изнетим, не постоји законска обавеза покретања процедуре процене утицаја на животну средину за наведени пројекат.

Доставити:

- Наслову
- Архиви