ЈАВНО ПРЕДУЗЕЋЕ
ПУТЕВИ СРБИЈЕ

ENVIRONMENTAL MANAGEMENT PLAN

- FINAL -

Contract ID: RRSP/CS3-IB15KVS/2016-2

PREPARATION OF MAIN DESIGN FOR HEAVY MAINTENANCE (ROAD REHABILITATION - UPGRADING) OF THE STATE ROAD IB 15, SECTION: VRBAS (ZMAJEVO) – SRBOBRAN (FEKETIC), L=9,492 km

ENVIRONMENTAL CATEGORY B

utiber PROJECT BIRO

utiber®

ÚT-TESZT
Mérnöki és Szolgáltató Kft.

panpro team
www.panpro.rs

February 2018.

Document Information

General Information

Author	Marina Komad, dipl.ing. Civil – Liaison Person
Project Title	Preparation of Main Design for Heavy Maintenance (Road Rehabilitation - Upgrading) of the State road IB 15, Section: VRBAS (ZMAJEVO) – SRBOBRAN (FEKETIC), L = 9.492 km
Document Title	Environmental Management Plan
Date	February 2018.

Addressed to:

Mail to:		
Name:	Organisation	Date of sending
Gordana Suboticki - Djordjevic, dipl.ing. Civil	PE '' Roads of Serbia''	20.02.2018.

Copy send to:		
Name:	Organisation	Date of sending
Velimir Kopanja, dipl.ing. Civil	PE '' Roads of Serbia''	20.02.2018.
Igor Radovic, dipl.ing. Civil	PE '' Roads of Serbia''	20.02.2018.
Gordana Jelkic, dipl.ing. Civil	''Putinvest'' d.o.o.	20.02.2018.

Corrections History

Version	Date	Author	Approved and signed by
Draft 2	11.12.2017.	Marina Komad, dipl.ing. Civil	Marina Komad, dipl.ing. Civil
Pre Final	21.12.2017.	Marina Komad, dipl.ing. Civil	Marina Komad, dipl.ing. Civil
Final	20.02.2018.	Marina Komad, dipl.ing. Civil	Marina Komad, dipl.ing. Civil

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

CEP	Contractor's Environmental Plan
DTD	Danube – Tisa – Danube Canal System
EBRD	European Bank for Reconstruction and Development
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
IFIs	International Financing Institutions
IFC	International Finance Corporation
PINP	Provincial Institute for Nature Protection
MoEP	Ministry of Environmental Protection
MoCTI	Ministry of Construction, Transport and Infrastructure
PE	Public Enterprise
PERS	Public Enterprise "Roads of Serbia"
PIPCM	Provincial Institute for Protection of Cultural Monuments
PPE	Personal Protective Equipment
PSC	Project Supervision Consultant
PWMCVV	Public Water Management Company Vode Vojvodine
RE	Resident Engineer
RRSP	Road Rehabilitation and Safety Project
SLMP	Safety Labor Management Plan
WB	The World Bank Group
WMP	Waste Management Plan

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 State road IB 15 section: Vrbas (Zmajevo) – Srbobran (Feketic), km 78+298,00 to km 87+790,00.

This Environmental Management Plan (EMP) has been prepared for subject road section, Vrbas (Zmajevo) – Srbobran (Feketic), to ensure application of good environmental practice and document compliance with the requirements of the International Financing Institutions (IFIs) which finance Road Rehabilitation and Safety Project (RRSP).

The subject road section is located in Vojvodina and belongs to the state road IB 15 (old road numeration M-3), and it is part of the transversal traffic connection through Backa and Banat, and part of the connections of state borders with Hungary (Backi Breg) and with Romania (Nakovo). The road section begins at the exit from Vrbas, at the intersection of streets Dr Momcila Novkovica and Ivana Milutinovica, and ends at the entrance in Srbobran, at the intersection of streets Vrbaska and Vardarska. The Project has been classified as Environmental Category B. i.e. a project requiring an EMP pursuant to IFIs Safeguard Policies.

The purpose of the EMP is to present the potential negative environmental impacts and management problems during the rehabilitation works, as well as the necessary mitigation measures and appropriate monitoring program.

Project Proponent is the Government of the Republic of Serbia, represented by the relevant Ministry, and the project is realized by “Public Enterprise Roads of Serbia” (hereinafter PERS).

The design is under preparation in accordance with Serbian legislation, procedures and policies and IFIs safeguard policies. The preparation of this EMP is undertaken through a desk study and field investigations, including consultations with regional level representatives and local stakeholders.

EXECUTIVE SUMMARY

Project description

The subject road section belongs to South Backa and West Backa Administrative District located in the Province Vojvodina. Road section Vrbas (Zmajevo) – Srbobran (Feketic) in the length of 10.726.km belongs to state road IB 15 (old road numeration M-3) (Official Gazzete RS no. 93/2015).

The beginning of the section is at the exit from Vrbas, at the chainage km 78+298,00, at the intersection of streets Dr Momcila Novkovica and Ivana Milutinovica (0.327 km from

node 1507 Vrbas (Zmajevo) in the direction opposite from chainage increase. Mentioned intersection is not a subject of this design (Fig. 1).

The end of the road section is at the entrance in Srbobran, at the chainage km 87+790,00, at the intersection of the streets Vrbaska and Vardarska (4km from node 109 – loop Vrbas in direction of chainage increase). Mentioned intersection is not a subject of this design (Fig. 2).

Figure 1. The beginning of the road secftion - exit from the municipality Vrbas


Figure 2. The end of the road section – enterance in the municipality Srbobran

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.

PERS submitted a request to the Provincial Institute for Nature Protection (PINP) in order to acquire the conditions under which the proposed design should be implemented. Acting on request by PERS, the PINP issued a statement on conditions for nature protection no. 03-662/2 dated 04.04.2017.

PERS submitted a request to the Provincial Institute for Protection of Cultural Monuments (PIPCM) in order to acquire the conditions under which the proposed design should be implemented. Acting on the request by PERS, PIPCM issued a statement on conditions for protection of cultural monuments no. 02-124/2-2017 dated 06.04.2017.

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 PINP and PIPCM.

Final Environmental Approval is obtained from the Provincial Secretariat for Urban Planning and Environmental Protection (No. 140-501-641/2017-05 dated 13.06.2017.) 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 PINP and PIPCM 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 PINP, the subject road section is not located within a protected area for which a procedure for protection was carried out or initiated, but subject road section intersects the regional ecological corridor Grand Canal. Due to the proximity of the Hydro-System Danube-Tisa-Danube(HS DTD), it is requested to provide, through design,a proposal for the functionality of the ecological corridors.

In the preconditions of the PIPCM it is written that along the subject road section there is no immovable and movable cultural property of great importance. Since the subject road section is passing close to registered archeological localities, by the preconditions of the PIPCM is requested not to leave the corridor of subject road section, and that the Investor has to notify the Institute before beginning the works, if earth works are planned at the location of registered archeological localities. Also, if in the case of excavation archaeological remains are found, it is necessary to stop the works and notify the Institute. The archaeologist can prescribe additional requirements according to the situation on site.
IFIs request that the design be prepared in line with laws of the Republic of Serbia, but also with the EU standards.
Creditors require that the following be 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 project 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.

Baseline conditions assessed during route survey

The subject road section belongs to South Backa and West Backa Administrative District located in Province Vojvodina. Road Vrbas (Zmajevo) – Srbobran (Feketic) in the length od 10.726.km belongs to state road IB 15 (old road numeration M-3) (Official Gazzete RS no. 93/2015).

The subject road sections passes through municipality Vrbas and Srbobran.

The road section is located along the canal Danube – Tisa - Danube (DTD) or intersects it at several points, as well as many other amelioration canals which are listed in the preconditions issued by the Public Water Management Company Vode Vojvodine(PWMCVV) in Novi Sad (I-703 / 9-17). Mentioned network of amelioration canals and canals of HS DTD are main recipients for whole subject area.

Existing drainage system of the subject road section characterizes:

- open drainage system - with rainwater draining from the roadway by longitudinal and transverse inclination over the grass shoulders, the slope of the road into the open ditches which further gravitate towards a certain recipient, or if there is no defined slope towards a recipient, they are recipients themselves meaning that they are self-absorbing ditches where water infiltrates into the ground or evaporates in the air.

Subject road section characterizes 5 intersections of the main road with water canals at the fallowing chainages:

- km 78+880 the bridge over canal DTD (Canal Veliki Backi)
- km 80+517 the bridge over canal DTD
- km 81+014 the bridge over watered canal DTD
- km 82+474 culvert (after S type curve in the road chainage increase
- km 84+060 culvert after leveling intersection with highway E-75)

<u>Intersection no. 1 at km 80+525 (0+570)</u>
At the intersection no.1 there is bridge at tha chainage km 80+525 (Fig. 3).

Figure 3 Bridge at the road chainage km 80+525

Intersection no. 2 at km 82+475 (0+269)

Intersection of the road and canal is at km 82+475 (Fig. 4). At that point there is a concrete culvert with a hole 1.1m tall, measured from the existing bottom at the enterance in the culvert to the ceiling. The width of the hole in the middel area is 1.15m and in the bottom is 0.95m.

Figure 4 Intersection of the canal and road at the road chainage km 82+475

Intersection no. 3 at km 84+075 (0+405)

Figure 5 Intersection at km 84+075

The culvert is built from reinforced concrete with the hole 2m wide and the height of the hole is 1.6m (Fig. 5)

Storm water that drains from the roadway into the amelioration canals (drains, manholes and pipelines) will be treated prior to the outlets through adequate filtering systems (installation of grease and oil separator in order to suit the quality of the effluents by the class II regulation concerning Regulation on Water Classification (Official Gazette of SRS, no. 5/68) and in accordance with Regulation on limit values for emissions of pollutants in water and deadlines for their achievement (Official Gazette, no. 67/11, 48/12 and 1/16).

It is important to point out that the water is of class II,water which is suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which after normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water and in the food industry.

At the road section Vrbas – Srbobran there is an existing ditch network of self-absorbing open ditches, and the design solution of the road drainage will be concentrated on position (layout plan) and height (profile) embedded in the existing canal system without previously purifying the stormwater draining from the roadway (Fig. 6).

Figure 6 Self-absorbent ditches

In the conditions of PWMCVV it is defined that conditionally clean atmospheric waters, which correspond to II class of water, can be used without purification and through arranged discharge be released into the canal, ameliorative canals, streams, and other water courses, where the quality of the water as defined by the Regulation on limit values for emissions of pollutants in water and deadlines for their achievement (Official Gazette, no. 67/11, 48/12 and 1/16).

Also, by the same previous conditions it is defined that for atmospheric water from dirty and oily areas (traffic areas, handling areas, parking space, etc.) appropriate controlled reception and treatment at the facility for primary treatment before discharge to the recipient shall be provided, the quality of effluent (purified water) complies with class II

according to the Regulation on Water Classification (Official Gazette of SRS, no. 5/68) and in accordance with the limit values for the emission of pollutants in water and deadlines for their achievement (Official Gazette, no. 67/11, 48/12 and 1/16). Surfaces from which oiled atmospheric water are collected must be waterproof.

In addition to the aforementioned Regulation, it is important to note that in the Republic of Serbia the Regulation on limit values of pollutants in surface and ground waters and sediments and deadlines for their achievement is applicable aswell ("Official Gazette of RS, no. 50/2012).

Since the above mentioned condition PWMCVV defines that during the discharge of pollutants into water bodies pollutant values must not exceed values that are defined for class II by the regulations, it is important to point out that the water of class II are the waters which are suitable for swimming, recreation and water sports, the cultivation of less noble species of fish (cyprinids) and waters which after normal processing methods (coagulation, filtration and disinfection) may be used to supply the village with drinking water and in the food industry.

In addition to the conditions which are defined in conditions of PWMCVV, the specified requirements in relation to the drainage of rain water from the pavement of the subject state road and other roads in the area, are defined also in the context of urban planning documentation for the Municipality Kula and Vrbas. Within the analyzed urban-planning documents, strict restrictions with regard to the requirements relating to the controlled collection and treatment of atmospheric water from the road pavement are defined in the zones of the water intake (water supply source). However, since the section of the state road that is the subject of this design is nowhere in contact with the water source protection zones for the settlements Vrbas and Srbobran, it means that in this respect there are no special restrictions for the definition of design solutions.

In addition to the mentioned intersection of the road with water management canals at the chainage of the subject road km 83+790, there is an overpass over the E75 motorway. The denivelised crossing was achieved through a denivelised intersection with full channeling of the left and right turns out / to subject state road.

From the beginning of the section to the three-way intersection at the km 80+010 which represents the intersection of the subject state road IB number 15 and IIA number 113, there are three other intersections. The first of the aforementioned intersections is at km 78+625 and that is a crossroads with the street Svetozar Markovic. The second intersection is at the km 79+165 and is a crossroad with the street Sivc Jovgen. The third intersection is at approximate station 79+324 and represents a crossroad with the street of Milivoje Cobanski. All three of these intersections have separate lanes for left turns.

In addition to the aforementioned crossings on the subject road there is a large number of connections from private plots and vilage roads.

At the beginning of the section, at the chainage of the subject road km 78+454 there is a petrol station "Petrol", for whose access there is no separated inlet or outlet lane.

In addition to the aforementioned petrol station at the exit from Vrbas and at the entrance to Srbobran, at km 87+263 there is a gas station "Paroski Petrol", which is accessed through a separate lane from the state road, however, there is no separate lane for the inclusion on the state road.

On the subject road section at the km 81+006.16 there is a connection for one waste dump in the Municipality of Vrbas, which is about 150m away from the road section (Fig. 7).

Figure 7 Waste dump in the vicinity of subject road section in the municipality Vrbas

In accordance with the National Waste Management Strategy, pursuant to Article 13 of the Law on Waste Management ("Official Gazette of the Republic of Serbia" No. 36/2009 and 88/2010), and the Agreement on Inter-Municipal Cooperation on the realization of the project "Development of Local Waste Management Plans in aiming to preserve the environment and sustainable development in the region of South Backa", the Faculty of Technical Sciences from Novi Sad has developed the Local Waste Management Plan for the Municipality of Vrbas in order to define the waste management goals based on the analysis of the existing problems with waste and the state of the main and wild waste dumps in the territory of Vrbas.

For section Vrbas (Zmajevo) – Srbobran (Feketic), a seven-days continuous traffic counting was performed and the existing traffic load of 5,336 vehicles/day is collected.

Along the subject road section there is 2 bus stops, at the part of the section which belongs to municipality Srbobran. According to the plan of detailed regulation for the part of the working zone along the state road in the Srbobran cadastral municipality, the bus stops are kept at the existing location. Bus stops are out of the road but thay should be organized and properly marked, to enable safe in/out bus from/to the main road.

Existing road section belongs to network of local and regional roads and after rehabilitation works no increase of road traffic is expected, as well as increase of the vehicle speed.

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 and damages on access roads, dust and gas emissions and temporary disturbance of residents of the neighboring 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, increase of road traffic is not expected. The vehicle speed after the upgrading will not increase.

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.

Impact on the quality of water in the canal HS DTD is expected to be minimal or negligible, since the expected amount of water drained from the carriageway is small.

In the course 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. In 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, No 30/10, 93/12 and 101/16), 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.

Environmental Management Plan

EMP consists of the following: Mitigation Plan, Monitoring Plan and Institutional Arrangements and Reporting Procedures. As regards 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 Environmental Protection Plan (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.

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 consultation 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)

Summary of public disclosure process

EMP will be presented to public and all the comments will be collected, but the conclusions will be presented in the report from public presentation, which will be included in this document.

1. PROJECT DESCRIPTION

In regards to the cross section or better said to the width of existing pavement, this road section could be split in two parts. The width of the first part is about 7.5m, from the beginning of the road section to the intersection at chainage km 80+010, except at the intersections where, because of the additional lane for left turns, existing width is about 11m. At the second part, section from km 80+010 to the end of the subject road section, existing width is with two traffic lane, about 7.0m.

Shoulder width varies from 1.2 to 1.5 m,

The major part of the section is in the classic embankment, and the pavement is in double sided slope so water runs down from the carriageway via a shoulder to the trench.

Bicycle paths are not built along the subject road section, and pedestrian path is only in municipality Vrbas between intersection of the state road and town street Svetozara Markovica and intersection of the state road and street Sivc Jovgena, Mentioned pedestrian path is located left next to the road in the chainage increase and it is width of 1.6m.

New designed geometrical profile consists of:

- two traffic lanes	tv =3,25 m
- two marginal strips	ti = 0,35 m
- shoulders	b = 1,25 m
- mixed bicycle / pedestrian path	t_{bic} =2,00 m

On the section from the beginning to the three-way intersection at the chainage of the subject road km 80+010, a wider geometric crossection is adopted with a width of 7,5m, which is the existing width of the carriageway, except at intersections where the width of the roadway increases due to the left turning lane of 3m. In the second part of the intersection from km 80+010 until the end of the section, the width of the pavement is 7.2m, which is the minimum width of the two-lane pavement for the calculation speed of 80km/h.

The newly-designed alignment is conditioned by the position of the existing route, that is, by the boundaries of the road reserve, as well as the configuration of the terrain.

Design of the new road alignment was developed, taking into account the Terms of Reference, all obtained requirements and approvals of the responsible institutions, and rulebooks and standards in road design. Given that the existing roadway width and geometric elements generally correspond to the range of the road, in the framework of the design proposal, the biggest changes will relate to the forming of the mixed bicycle-pedestrian path in the cross-section of the road.

From the beginning of the section to the intersection at the chainage of the state road km 80+010, it is planned a combined path in width of 2m along the left edge of the roadway in direction of the growth of the chainage in the municipality of Vrbas. In the Srbobran municipality, the path is designed from the working zone to the entrance to Srbobran, next to the left edge of the roadway in the direction of the growth of the chainage.

On the subject road section, in accordance with the existing state, bus stops are planned off-road. The width of the bus stop is 3.0 m.

Location Description

The subject road section belongs to South Backa and West Backa Administrative District located in Province Vojvodina. Road section Vrbas (Zmajevo) – Srbobran (Feketic) belongs to state road IB 15 (old road numeration M-3) (Official Gazzete RS no. 93/2015), and it is part of the transversal traffic connection through Backa and Banat, and a serves a part in connecting state borders, with Hungary (Backi Breg) and with Romania (Nakovo).

Subject road section passes through the municipalities Vrbas and Srbobran.

The beginning of the section is at the exit from Vrbas, at the chainage km 78+298,00, at the intersection of streets Dr Momcila Novkovica and Ivana Milutinovica (0.327km from node 1507 Vrbas (Zmajevo) in the direction opposite from chainage increase. Mentioned intersection is not subject of this design.

The end of the road section is at the entrance in Srbobran, at the chainage km 87+790,00, at the intersection of the streets Vrbaska and Vardarska (4km from node 109 – loop Vrbas in direction of chainage increase). Mentioned intersection is not subject of this design.

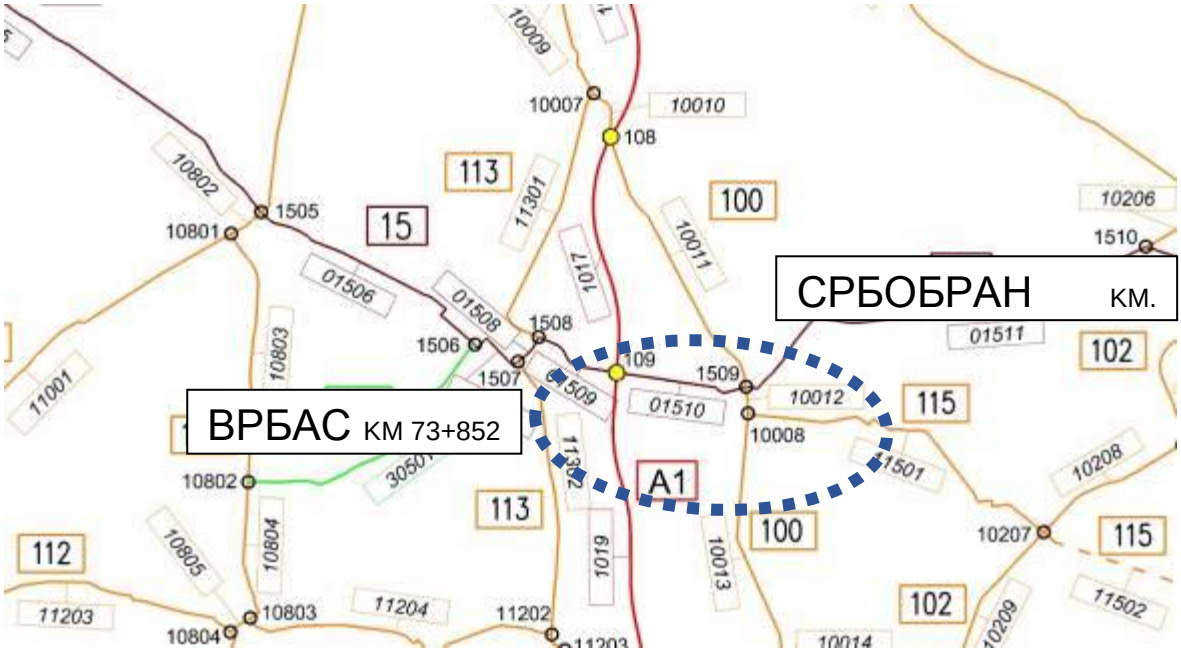


Figure 8 Location of road section

Rehabilitation works description

From the beginning upto the intersection at the chainage km 80+010, width of pavement is cca. 7,5m, with two lanes except at intersections where the width of the roadway is cca. 11m due to the addition of the left turning lane. In this road section where existing width is 7.5m width of pavement is kept through the design. In the second part of the intersection from km 80+010 until the end of the section, the existing width of the pavement is cca. 7.0m. For the calculation speed of 80km/h it is demand that pavement width is 7.2m (2*3.25+2*0.35), so where existing width is 7.0m, the widening of the existing pavement to the necessary width will be performed.

In addition to the extension of the carriageway, it is envisaged to produce combined pedestrian and bicycle paths and arranging bus stops.

Also, within the scope of this documentation, the arrangement of the side connections is foreseen. In addition, in order to increase traffic safety, it is envisaged to set up the appropriate horizontal signalization including checking whether the existing signs comply with the valid standards, as well as supplementation of the vertical signalization.

In addition to the aforementioned subject documentation, rehabilitation of existing facilities, culverts, bridges, as well as the renovation of the protective pedestrian and safety protective fence is foreseen.

Generally, the goal of developing this technical documentation is remediation of all damages, with the elimination of causes that have led to damage, which increases the usability value and road life and improves the safety of traffic.

The next 5 photos show the status of the road section through several selected characteristic locations.

Figure 9. The curve at the beginning of the road section

Figure 10 Gas station ''Paroski'' at the beginning of the road section at the exit from Vrbas

Figure 11 Gas station ''Paroski'' at the beginning of the road section at the exit from Vrbas

Figure 12 Bridge over Canal Veliki Backi

Figure 13 Three-way intersection at km 80+010

The designed drainage system is caused by the terrain characteristics, spatial and urban constraints, conditions issued by the Public Water Management Company “Vode

Vojvodine" (PWMCVV), and other requirements dictated by the local government. Along the subject state road there are some typical solutions of drainage systems, as follows:

- newly designed closed drainage system at the intersection with amelioration canals and canal DTD. Due to the demands of PWMCVV which prohibits the direct discharge of contaminated water from the carriageway in amelioration canals, at the intersection of the road with the canals it is foreseen to collect water from the carriageway along the curbs and longitudinally lead the water by slope gutters which will take it further down the slope of the embankment to the concrete canals which flow to irrigation canal. Before being discharged into amelioration canals collected water will be purified through a suitable separator for fats and oils. This system is designed in approximate lengths of 100-150m before and after the intersection with the amelioration canal and the exact length will be determined by a detailed elaboration of this design. Crossings that have provided such a system drains are:
    - intersection with the canal DTD and I-64 at the exit from Vrbas (km~78+880), interswection with canal I-5 (km~80+518),
    - intersection with the canal (km~81+016),
    - intersection with the canal I-2 (km~82+474),
    - intersection with the canal I-1 (km~84+060).

- open drainage system - with the rainwater draining from the roadway by longitudinal and transverse inclination over the shoulders, and the slope of the road in the open self-absorbing ditches in which water filtrates into the ground or evaporates in the air. This solution was applied to all subsections in which such a drainage system figures and in the context of the current situation, and where there are no spatial or urban hinderance/restrictions for this kind of drainage, both, outside of populated areas, as well as where the state road passes through the village.

It is important to note that although the applicable urban planning documentation states that the drainage system of roads in populated areas of Vrbas makes a network of closed storm sewers and open road ditches that all gravitate towards the network of amelioration canals, this still can not be accepted as accurate information because the network of open ditches is greatly destroyed (buried, interrupted, etc.). This fact is of particular importance for the proper sizing and defining of design solutions for drainage system of the road trunk and carriageway, and it is confirmed in the minutes of meetings with representatives of the PE Komunalac which manages these systems in Vrbas.

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Relevant Institutions

The Ministry of Environmental Protection of the Republic of Serbia is responsible for producing and implementing the environmental policy. Other relevant institutions are: PERS, Provincial Secretariat for Urban Planning and Environmental Protection, INCVP and Provincial Institute for Protection of Cultural Monuments (PIPCM).

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 MoEP. The Law on Environmental Impact Assessment regulates the EIA procedure and is in accordance with European Directive EIA - 85/337/EEC.

In the statement no. 03-662/2 dated 04.04.2017. the Provincial Institute for Nature Protection (PINP) issued conditions under which a road rehabilitation works for the subject road section should be performed. By reviewing the Central Register of Protected Goods and documentation of the PINP, and in accordance with the legislation governing the field of nature protection concluded that the subject area is not situated within a protected area, but subject road section crosses regional ecological corridor Grand Canal. Since the works are planned only in the existing road area, planned works do not endanger nearby area of ecological corridor.

In the statement no. 02-124/2-2017 dated 06.04.2017. PIPCM 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, as well as obligations of the Contractor/Investor during the project implementation.

Final Environmental Approval is obtained from the Provincial Secretariat for Urban Planning and Environmental Protection (No. 140-501-641/2017-05 dated 13.06.2017.) stating that Project Carrier (PERS) is not obliged to conduct EIA procedure for this project. (see Appendix 6). Consequently, the 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 EMP for each section.

3. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY

The subject road section (Vrbas - Srbobran) belongs to South Backa and West Backa Administrative District located in Province Vojvodina, to municipalities Vrbas and Srbobran.

There are no protected natural or cultural properties in the vicinity of the subject road section. On the other side, part of the subject road section intersects regional ecological corridor Grand Canal. Anyhow the ecosystem of canal DTD is not exposed to risk from existing road, since there is an appropriate existing system for runoff water, which will be kept and improved according to this rehabilitation design, and all other works which are proposed with this design will be conducted only in the existing road area and completely in accordance with Statement no 03-662/2 dated 04.04.2017. issued by INCVP.

At the beginning of the section, at the exit from Vrbas after the L curve, the urban section ends and rural road section begins. However, this part of the section is characterized by three intersections with local streets, which generate local traffic flows. For this reason, the beginning of the section to the intersection with Milivoj Cobanski street could be defined as a mixed-type road.

After the mentioned intersection with the street Milivoj Cobanski and until the end of the road section at the entrance to Srbobran, the subject road can be characterized as a typical rural.

The existing drainage system in the concerned section of the state road is characterized by:
- open system for drainage of rain water from the carriageway roads by means of longitudinal and transverse inclination over slopes (covered with grass) to open road ditches that flows to a given recipient, or if they do not have a clearly defined inclination toward a water stream (the recipient), they themselves are recipients for the purposes of self-absorbing canal where the water infiltrates into the ground or evaporate.

It is important to note that although in the applicable urban planning documentation states that the drainage system of roads in populated areas of Vrbas makes network of closed storm sewer and open road ditches that all gravitate towards the network of amelioration canals, this still can not be accepted as accurate information because the network of open ditches is greatly destroyed (buried, interrupted, etc.). This fact is of particular importance for the proper sizing and defining of design solutions for drainage system of the road trunk and carriageway, and it is confirmed in the minutes of meetings with representatives of the PE Komunalac which manages these systems in Vrbas.

Along the subject road section there are no large industrial facilities that would lead to a cumulative effect on the environment. Although the municipality has a problem with unregulated landfills (waste dumps), in the immediate environment of the road, within the road belt, i.e. in the zone where the works on roadway rehabilitation will be carried out, the designer did not identify the existing landfills.

At the beginning of the section, at the chainage of the subject road km 78+454 there is a petrol station "Petrol", for whose access there is no separated inlet or outlet lane. In addition to the mentioned petrol station at the exit from Vrbas and at the entrance to Srbobran, at 87+263 km there is a petrol station "Paroski petrol"

For the section Vrbas (Zmajevo) – Srbobran (Feketic), continuous seven-days traffic counting was performed and an existing traffic load of 5336 vehicles/day was obtained.

On the route there is a large number of connections with municipal roads and local streets, as well as numerous individual approaches to private facilities and plots.

There are no protected natural areas along the subject road section that could be influenced by the works on heavy maintenance, and also there are no protected cultural areas. Subject road crosses the regional environmental corridor Grand Canal so importance of following of this document is even more emphasized. 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 the public land (in the road area).

Settlements

Municipality Vrbas

The area of the Municipality of Vrbas covers an area of 37,562.85 ha.

The territory of the municipalities of Kula and Vrbas is dotted with a network of canals belonging to the DTD hydrosystem: Vrbas-Bezdan canal from km 0+000 to km 11+800, canal Becej-Bogojevo from km 28+300 to km 61+200, canal Novi Sad-Savino Selo from km 38+000 to km 39+100 and canal Jegricka from km 43+200 to km 65+140.

In the area of municipalities there are also melioration canals belonging to the subsystems KC-III, K-IV, SV, VKC-V, Jegricka, BB and 02 Vrbas. Subject canals are in functional condition.

Canal Veliki Backi, the most important in the DTD canal system in the territory of the Municipality of Vrbas, is III category, but it is very polluted and muddy through the Municipality of Vrbas, which completely disrupts biodiversity and the canal is closed for sailing.

Planning documents of the municipality of Vrbas define the development of the traffic infrastructure, since the increase in the intensity of road traffic is expected due to the increasing number of work trips. The development of the major town streets aims to eliminate transit traffic flows in order to preserve the settlement content as well as to quickly and efficiently conduct the traffic both transit and source-targeted traffic.

The development of the main roads within the municipality is reflected in the formation of the northern, southern, western and eastern bypass around the settlement of Vrbas, while at the low-level roads it is planned to define new directions that would be formed by cutting the existing blocks, thus enabling the creation of new blocks, new building plots. In order to increase security, at intersections where small and medium traffic loads are expected, it is proposed to build round abouts, and the same proposals are given for the reconstruction of existing intersections.

Municipality Srbobran

Srbobran municipality is located in the central part of Vojvodina and Backa.

This space tangles and intersects the most important routes that connect with central and southern Europe, as well as with the Danube and the Potisje. Thanks to the central position in Backa and Vojvodina, this municipality has good communication links with neighboring municipalities, Becej, Vrbas, Temerin, Zabalj, Mali Idjos, as well as with the most developed centers in the region (Novi Sad, Subotica, Becej, Vrbas). Through the Srbobran municipality, through the municipal center, the DTD channel passes through, which provides communication with all the settlements along this canal in Vojvodina, and

through the Danube and Tisa the inclusion in all water courses and communications with the surroundings and Europe.

The administrative municipality of Srbobran includes three settlements: Srbobran, Turija and Nadalj. The Srbobran settlement has the status of a local center and is of a city character, while other settlements are of rural character and have settlement status - local (local) communities.

According to the latest 2011 census, 16,252 inhabitants live in Srbobran municipality.

In the planning period, as before, the municipality of Srbobran will be primarily serviced by road traffic, while rail and water transport will be used only for the transport of mass goods with integrated connection. The basic conceptual definition in the road infrastructure would be the modernization and construction of new capacities, which would improve the connection of this area with the surroundings, as well as improve the exploitation conditions within the framework of the connection with the surroundings.

By plan documents is planned to establish new corridors of bypasses that would bypass the urban area of Srbobran, in the direction north - west - south and south - east direction.

By detailed plan of regulation of the working zone is defined the working zone next to Srbobran along the existing state road I and the service road along the state road that would have the function of connecting the working zone with the state road.

Bicycle traffic

The promotion of cycling traffic should be at the highest level in order to make this type of transport as popular as possible. During the preparation of planning documents, within the street crossection, it is necessary to plan cycling routes on all major roads throughout the territory of the municipality of Vrbas. The planning of bicycle paths should be directed towards connecting Vrbas with settlements, as well as their interconnection along the state and local roads, as well as along the canals of DTD system.

A special accent is given to the tourist and recreational cycling path that should connect the most important tourist sites and the largest part of the settlement of Vrbas municipality.

Watercourses

Subject network of network of amelioration canals and canals HS DTD are the main recipients of the whole subject area.

Subjet road section Kula - Vrbas intersects with fallowing canals:

No.	Canal Name	Canal Chainage	Road Chainage
1	DTD		~78+880
2	I-5	0+570	~80+518
3			~81+016
4	I-2	0+269	~82+474
5	I-1	0+405	~84+060

Air

There are no significant additional sources of air pollution within the planned road section Vrbas - Srbobran. No information on the measured air pollution values on the subject section was available.

On the basis of traffic counting performed in recent years (information available on PERS website), 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.

4. 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 settlements	low	During the realization of the project, there will be no expropriation of land
Ground and surface water	low	Due to low amount of water that can come to the recipient by drainage, the consequential impact is minimal to negligible
Air quality	low	Temporary impact
Flora and fauna (protected areas and species)	low	Under the terms of the Institute for Nature Conservation of Vojvodina Province
Monuments	low	Under the terms of the Provincial Institute for Protection of Cultural Monuments
Noise	low	Temporary impact
Access/crossing points of the main road and local roads	low	The rehabilitation and widening works will not affect existing crossing points. Without impact.
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	Moderate/minor	Temporary, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only

Most of the impacts on the environment are temporary and stops after the completion of works on heavy maintenance on the section Vrbas - Srbobran. 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.

EMP 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

EMP focuses more on the heavy maintenance phase, while activities on the regular maintenance will not be detailed in this EMP, 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 be temporarily impacted by non-significant air and noise pollution and dust emission.

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 canal DTD, 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.

Potential Cumulative Impacts

If any industrial facilities are built in the vicinity of the section in the future, this may have cumulative negative effects on the environment. Whether this will be the case depends also on the nature of industrial facilities and if they cause pollution themselves. If the EMP is properly implemented, all negative effects on the people and the environment resulting from cumulative impacts will be reduced.

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 onto a landfill, outside the site zone.

5. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance on the section Vrbas - Srbobran will be insignificant and reversible. Mitigation measures provided in the EMP, relating to the design, road rehabilitation and operational phase, must be carried out appropriately. EMP 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 EMP

A. 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 PINP and PIPCM and valid laws. It specified 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 INCVP 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. Waste disposal/ dumping into the canal DTD littoral zone shall be prohibited, as well as at the unorganized local waste dumps;

- ❖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, so that the earthworks and machinery do not affect the surrounding areas. Also, the existing road network must be used, without building new roads, to prevent habitat fragmentation;
- ❖During the road works directly along the canal DTD, river bed, river bank and littoral vegetation 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 (RS Official Gazette of RS, No 30/10, 93/12);
- ❖Contractor must provide safety measures to prevent soil erosion and use the methods to decrease the stormwater 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 EMP and Safety Labour Management Plan (SLMP).

Environmental Protection Plan

Based on the EMP, the Contractor shall prepare his Environmental Protection Plan and submit it to PERS for approval, and by the financier. Contractor shell 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. PERS 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 (RS Official Gazette No 36/09, 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 (RS Official Gazette No 36/09, 88/10, 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 (RS Official Gazette No 135/04, 36/09, 72/09,43/11, 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 (RS Official Gazette No 101/05, 91/15);
- ❖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 by-laws 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 behavior 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. 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 (RS Official Gazette No 135/04, 36/09, 72/09, 43/11, 14/16);
- ❖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 EMP. 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 EMP 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 EMP 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 – Ministry of Transport, 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 Ministry of Transport 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.

6. STAKEHOLDER ENGAGEMENT - INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

As requested by IFI safeguard policy, public consultations were held in the EMP preparation. EMP and other project-related information were disclosed to the public and made available to the local community.

PERS office	Vlajkoviceva St. 19 a, Belgrade, Contact person: Igor Radovic, 011 3206811
Local community centres	Municipality Srbobran, Municipality Vrbas
Web site - PERS	www.putevi-srbije.rs

A detailed report on the public consultation process is shown in Appendix 7 to this document and contains 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 7 to this EMP.

7. 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

APPENDICES

APPENDIX 1 MITIGATION PLAN

MITIGATION PLAN

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
Pre-construction	**Main Design**			
	Following the environmental protection procedure	Conditions from the Institute for Nature Conservation of Vojvodina Province and Provincial Institute for Protection of Cultural Monuments, Petrovaradin are obtained to avoid environmental risks	PERS And Main Design Designer- Consultant	PERS
	Site location and organization will be approved by PERS and selected so as to:	- be outside of the regional ecological corridor of canal DTD - have no impact on the environment and the local community (noise, dust, vibrations etc.) - be outside the high vegetation area - minimize the size of the facilities to minimize the unnecessary removal of vegetation - have the sanitary waste water treated before the water is discharged into the surface water system, in accordance with the Law on Water (RS Official Gazette No 30/10, 93/12) - properly drain the locations. Paved areas, including 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	PERS Contractor	PERS

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		- 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 sociological circumstances	- 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 EMP defines health and safety and environmental measures - independent water and electricity supply, in addition to a medical service station on site must be planned for.	Contractor	PERS
	Safety of pedestrians and suitable crossings	- a suitable pedestrian crossing must be provided, equipped with kerb ramps that allow the use of wheelchairs, trolleys, bicycles and prams.	Main Design Designer- Consultant	Main Design Technical Control PERS
	Stakeholder engagement	Details of the proposed road section, 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 Designer- Consultant	Main Design Technical Control PERS
Construction	**Management plans**			

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	Contractor shall prepare the implementation of the Plans described in the EMP, to ensure that the legislation and Creditor's requirements have been met: - Site Organization Plan - Sewerage and Wastewater Management Plan - Soil Management Plan - Dust Management Plan - A plan indicating the location of borrow-pits, and measures for recultivation of borrow-pits 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 36/09, 88/10, 14/16) - 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 site shall be given a health and safety induction and instructed on the need to use PPE.			
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
	quarry: dust, health and safety of workers, ecosystem disturbance	- use the existing quarries; - requirement for official approval or valid operating license	quarry	quarry

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	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
	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 minimize 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 PIPCM and PERS.	contractor	contractor's supervision
Construction	**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.	contractor	contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		- locate noise-making equipment as far away as possible form residential buildings and other noise-sensitive receptors.		
	dust	- spray the problematic areas on site with water - cover the material stored and limit vehicle speed - 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.	contractor	contractor
	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	
			Implementation	Supervision
	reduced access to roadside activities	provide an alternative access to roadside activities at all times	contractor	contractor
	safety of vehicles and pedestrians 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	- organize 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 canals. Some of the measures include physical obstacles such as fences, mulch barriers, geotextile, rock groynes, and sediment basins. - to prevent sediment flowing into surface water, slope of the soil and protection form wind erosion must also be 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.	contractor	contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	soil and water pollution from improper waste material disposal	- dispose waste material at a location protected from washing out, on a marked location, if not on site, then on an authorized landfill - dispose waste in accordance with best international practice (IFC, EHS – general guidelines). - 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 - nominate a person responsible for waste collection and storage (hazardous and non-hazardous)	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 disposal	- transport the waste in marked vehicles designed for waste transport, to minimize the risk of releasing 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	contractor	contractor
	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 re-planting	contractor	contractor
Operation	**Maintenance**			

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
	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, oil and lubricants	- apply the best engineering practice in handling and safe storage of lubricants, fuel and oil - ensure proper loading of fuel and maintenance of equipment - collect and dispose all waste in accordance with the Law on Waste Disposal - properly organize 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 watercourses - dispose the waste material to suitable locations protected from washing out	maintenance contractor	maintenance contractor
	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
	erosion, rockfall, hazardous situation	install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal or	maintenance contractor	maintenance contractor

Phase	Issue	Mitigation measure	Institutional responsibility	
			Implementation	Supervision
		pedestrian crossing, school, 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		

APPENDIX 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**					
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

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
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**					
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)

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
dust	air pollution (suspended solids)	on and near the site	inspection and visual observation	unannounced inspections during material delivery and road rehabilitation	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 road rehabilitation 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
disruptions to traffic during road rehabilitation 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 road rehabilitation works	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
safety of vehicles and pedestrians 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
water and soil pollution resulting from improper material storage, management and use	soil and water quality (suspended solids, oils, Ph values, conductivity)	Canal DTD	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 during) 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 ❑ No ❑	If yes, please describe, including status of implementing corrective actions to address any violations found:
Has the Company engaged any contractors for project-related work in the reporting period?	Yes ❑ No ❑	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:

Were any of the violations stated above the responsibility of contractors?	Yes ❑ No ❑	If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Contractor?
Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labour reasons?	Yes ❑ No ❑	If yes, please describe:
Please describe any environment or social programmes, initiatives or sub-projects undertaking during the reporting period to improve the company's environmental or social performance and/or management systems: 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[1]

Please provide the name and contact details for your environmental manager:				
Parameter[2]	**Value[3]**	**Unit**	**Compliance Status[4]**	**Comments[5]**
Waste Water				
Total waste water generated				
BOD				
COD				
Suspended Solids				
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO_2				
NO_X				
Particulates				
CO_2				
CH_4				
N_2O				

[1] 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.
[2] 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.
[3] Please ensure that the units of measurement are clearly stated
[4] Please report on compliance against the standards agreed with EBRD for this project (typically local, EU and/or World Bank Group)
[5] 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:				
Parameter[2]	**Value[3]**	**Unit**	**Compliance Status[4]**	**Comments[5]**
HFCs				
PFCs				
SF_6				
[Other]				
Other Parameters				
Noise				
[Other]				
Solid Waste				
Please provide details of the types and amounts of solid wastes generated by the project. Indicate where wastes are classified as hazardous. Indicate the final re-use, recycle or disposal method for each waste type.				

4. Resource Usage and Product Output

Parameter	Value	Measurement Unit	Comments[6]
Fuels used			
Oil			
Gas			
Coal			

[6] 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[6]
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

5. Human Resources Management

Please provide the name and contact details for your Human Resources manager:			
	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 reporting period?	Yes ❑ No ❑	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were selected, consultation undertaken, and measures to mitigate the effects of redundancy:
Are there any planned redundancies to the workforce in the next year?	Yes ❑ No ❑	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:
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 ❑ No ❑	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 following policies or terms and conditions during the reporting 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	Yes ❑ No ❑	If yes, please give details, including of any new initiatives:

• Working hours • Flexible working / work-life balance • Grievance mechanism for workers • Health & safety		

6. Occupational Health and Safety Data

Please provide the name and contact details for your Health and Safety manager:					
	Direct employees	**Contracted workers**		**Direct employees**	**Contracted workers**
Number of man-hours worked this reporting period:			Number of Fatalities[7]:		
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)[8]:		
Number of lost workdays[9] 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 reported to EBRD, including total compensation paid due to occupational injury or illness (amount and currency):					

[7] If you have not already done so, please provide a separate report detailing the circumstances of each fatality.
[8] Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.
[9] 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 prevention and response training that has been provided for company personnel during the report period:
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 engagement plan agreed with EBRD and summarise interaction with stakeholders during the reporting period, including:

- Meeting or other initiatives to engage with members of the public or public organisations during the report period,
- information provided to members of the public and other stakeholders during the report period relating to environmental, social or safety issues
- coverage in media,
- and interaction with any environmental or other community groups.

Please describe any changes to the Stakeholder Engagement Plan agreed with EBRD:

How many complaints or grievances did the project receive from members of the public or civil society organisations during the reporting period? Please split by stakeholder group. Summarise any issues raised in the complaints or grievances and explain how they were resolved:

8. Status and Reporting on Resettlement Action Plan/Livelihood Restoration Framework

Existing Land Acquisitions

Please report any further progress made during this reporting period in the implementation of the Resettlement Action Plan (RAP) or Livelihood Restoration Framework (LRF), using the monitoring indicators as detailed in the RAP or LRF, and complete the table below. Please provide the results of any other related monitoring carried out by the Company or its consultants and attach any additional information you think would be useful.

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 ❑	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 compensation.		
Have any persons been physically displaced?	Yes ❑ No ❑	If yes, how many?
Have any persons been economically displaced?	Yes ❑ No ❑	If yes, how many?
Was it a government assisted resettlement?	Yes ❑ No ❑	

9. Community Interaction and Development

Please summarise any social or community development initiatives undertaken by the company during the reporting period, and any associated expenditure:

APPENDIX 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 (RS Official Gazette No 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014);
- Law on nature protection (RS Official Gazette No 36/09, 88/10, 91/10, 14/16);
- Law on environmental protection (RS Official Gazette No 135/04, 36/09, 72/09, 43/11, 14/16);
- Law on EIA (RS Official Gazette No 135/2004, 36/2009,);
- Law on Strategic EIA (RS Official Gazette No 135/2004, 88/10);
- Law on waste management (RS Official Gazette No 36/09, 88/10, 14/16);
- Law on noise protection (RS Official Gazette No 36/09, 88/10);
- Law on water (RS Official Gazette No 30/10, 93/12);
- Law on forests (RS Official Gazette No 30/10, 93/12, 89/15);
- Law on air protection (RS Official Gazette No 36/09, 10/13);
- Law on safety and health at work (RS Official Gazette No 101/05, 91/15).

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 (RS Official Gazette 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 (RS Official Gazette No 69/05);
- Rulebook on the contents of the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study (RS Official Gazette No 69/05);
- Rulebook on the work of the Technical Committee for the EIA Study (RS Official Gazette No 69/05);
- Regulations on permitted noise level in the environment (RS Official Gazette No 72/10);
- Decree on establishing class of water bodies (RS Official Gazette No 5/68);
- Regulations on dangers pollutants in waters (RS Official Gazette 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 (RS Official Gazette No 38/09);

Law on public roads (RS Official Gazette No 101/2005, 123/07, 101/11, 93/12, 104/13).

APPENDIX 4 STAKEHOLDER ENGAGEMENT

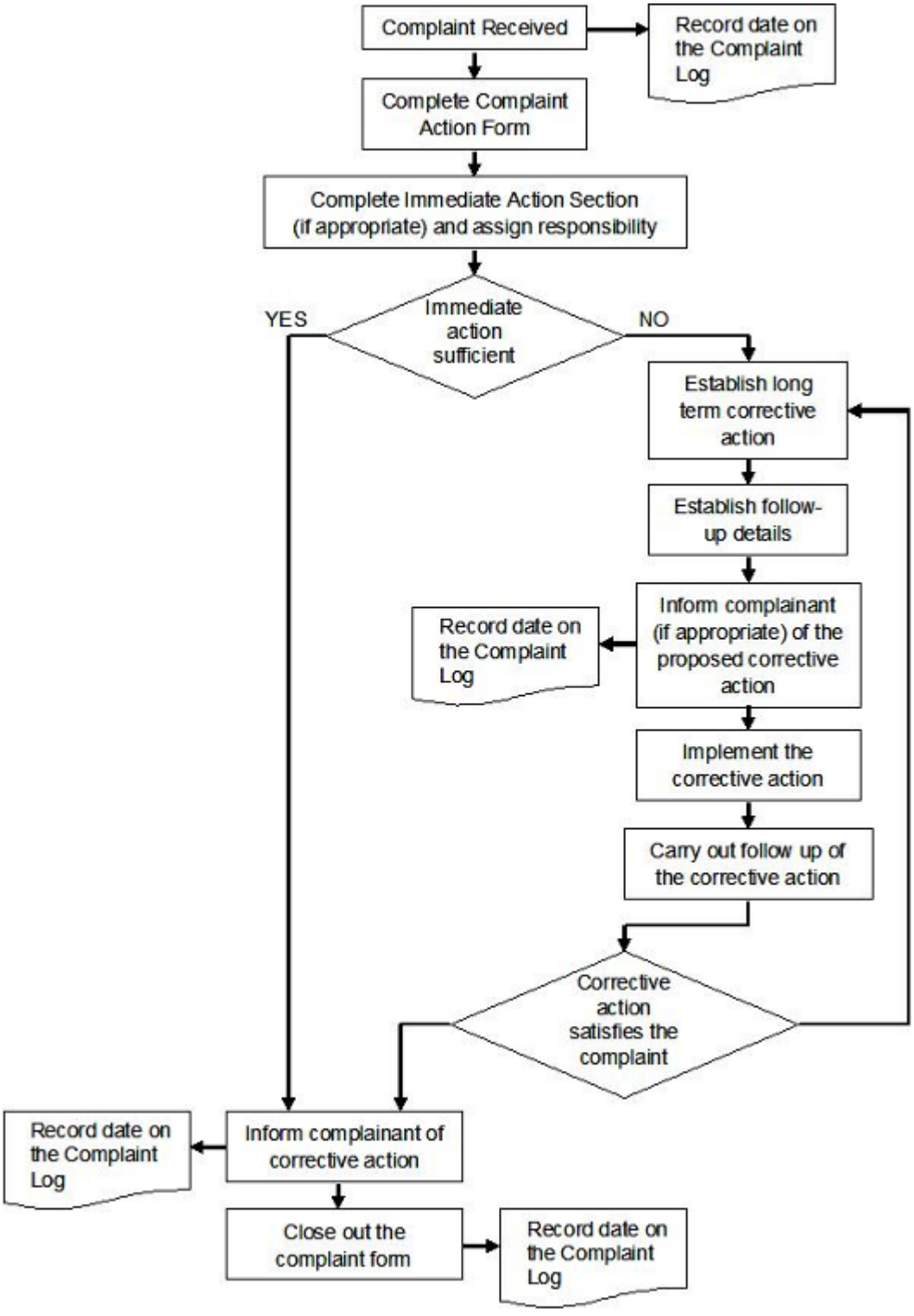
Identification of stakeholders

The stakeholders are people and organizations 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:		
How would you prefer to be contacted? Please tick a box	by post	by phone	by 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	

APPENDIX 5 CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

ПОКРАЈИНСКИ ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ
INSTITUTE FOR NATURE CONSERVATION OF VOJVODINA PROVINCE

Број: 03–662/2
Датум: 4.4.2017.

ЈП ПУТЕВИ СРБИЈЕ
Булевар краља Александра 282
Поштански фах 17
11059 БЕОГРАД

IV 953-5766/17-1
06-04-2017

Покрајински завод за заштиту природе на основу чланова 9., 57. и 102. Закона о заштити природе („Службени гласник РС", бр. 36/09, 88/10 и 91/10) и члана 192. Закона о општем управном поступку („Службени гласник РС", 33/97 и 31/01) решавајући по захтеву ЈП „Путеви Србије" у предмету за добијање услова заштите природе за израду техничке документације пројекта Појачаног одржавања пута деонице државног пута IБ реда бр. 15 (стара ознака М-3), деоница Врбас (Змајево) – Србобран (Фекетић), доноси следеће

РЕШЕЊЕ

I Израда техничке документације пројекта Појачаног одржавања пута IБ реда бр. 15 (стара ознака М-3), деоница Врбас (Змајево) – Србобран (Фекетић) може се извршити поштујући следеће услове заштите природе:

1. За обнављање коловозног застора, користити материјал који са аспекта заштите треба да обезбеди следеће захтеве: смањење нивоа буке и вибрација, омогућавање ефикасног дренирања воде са површине коловоза, и сл.;
2. На обалама водотока, где је путни правац са мостом који служи и као прелаз за ситне животиње, потребно је сачувати ниску жбунасту вегетацију која усмерава кретање животиња према прелазу;
3. Вегетација испред прелаза треба да буде физички повезана са природном вегетацијом околине и отвореног типа (травнатог или нискожбунастог) у централном делу простора, са обе стране моста или пропуста;
4. Обавити равнање терена после завршетка радова ради смањења могућности ширења корова;
5. За одлагање чврстог отпада користити контејнере који обезбеђују изолацију отпадних материја од околног простора. Контејнери се морају редовно празнити од стране одговарајуће комуналне службе;
6. Мазиво и гориво потребно за снабдевање механизације неопходно је транспортовати, депоновати (чувати) и њима руковати поштујући при том мере заштите прописане законском регулативом која се односи на опасне материје;
7. У случају акцидентног изливања загађујућих материја на простору станишта заштићених и строго заштићених дивљих врста биљака, животиња и гљива или у зони утицаја, загађени слој земљишта мора се хитно отклонити и исти ставити у амбалажу која се може празнити само на, за ту сврху, предвиђеној депонији, изван природних станишта. На место акцидента нанети нови, незагађени слој земљишта. Услове за ревитализацију терестичних и акватичних станишта тражити од овог Завода.

II Подносилац захтева је дужан да радове и активности изведе у свему у складу са условима из тачке I овог решења.

Уколико подносилац захтева у року од две године од дана достављања акта не отпочне радове и активности за које је акт о условима заштите природе издат, дужан је да прибави нови акт. Такође, уколико дође до измена захтевом наведених активности, или промене локације/подручја, носилац активности дужан је да поднесе Покрајинском заводу за заштиту природе нов захтев за издавање акта о условима заштите природе;

Ово решење не ослобађа обавезе подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима;

Обрађивач је обавезан да поштује и све друге одредбе заштите животне средине утврђене Законом о заштити природе, другим прописима као и важећим плановима вишег реда.

ОБРАЗЛОЖЕЊЕ

„Путеви Србије" из Београда, Булевар краља Александра 282 обратило се Покрајинском заводу за заштиту природе са захтевом бр. 953-5766 од 21.03. 2017. за израду техничке документације пројекта Појачаног одржавања пута IБ реда бр. 15 (пута ознака М-3), деоница Врбас (Змајево) – Србобран (Фекетић). Према информационој бази Покрајинског завода за заштиту природе у еколошкој мрежи, предметна траса пута не прелази преко станишта строго заштићених и заштићених врста али пролази поред регионалног еколошког коридора Канал ДТД.

Чланом 38. Закона о заштити природе предвиђено је да је успостављањем еколошке мреже омогућено очување станишта дивље флоре и фауне. На основу прилога 3. Уредбе о еколошкој мрежи, на еколошким коридорима који се налазе унутар еколошке мреже, забрањено је, између осталог, промена морфолошких и хидролошких особина подручја од којих зависи функционалност коридора. Према члану 14. наведене Уредбе станишта еколошки значајна подручја су потенцијална НАТУРА 2000 станишта у складу са Дурективама ЕУ (Директиве Савета Европе 79/409/ЕЕС о очувању дивљих птица и Директиве Савета Европе 92/43/ЕЕС о очувању природних станишта дивље флоре и фауне)

Чланом 15. ***Закона о заштити природе*** (у даљем тексту Закон), заштита врста се остварује спровођењем мера и активности на очувању самих врста, њихових популација и станишта, екосистема и коридора који их повезују", а у складу са чланом 16., заштита станишта врши се „спровођењем мера и активности на заштити и очувању природе, одрживом коришћењу природних ресурса и заштићених природних добара, планирањем и уређењем простора." На основу чланова 71. и 72., повољно стање дивљих врста обезбеђује се заштитом њихових станишта и заштитним мерама за појединe врсте... а очување дивљих врста и њихових станишта саставни је део мера и услова заштите природе из члана 9. закона...". Члан 74. ***Закона*** забрањује угрожавања или уништавања станишта строго заштићених врста, њихово узнемиравање, нарочито у време размножавања, подизања младих, миграције и хибернације, као и пресецање миграторних путева.

Чланом 5., став 7 ***Закона*** изражено је начело непосредне примене међународних уговора којим „државни органи и органи аутономне покрајине и органи јединице локалне самоуправе, организације и институције, као и друга правна лица, предузетници и физичка лица, при вршењу својих послова и задатака непосредно примењују општеприхваћена правила међународног права и потврђене међународне уговоре као саставни део правног система."

У складу са **Конвенцијом о биолошкој разноврсности** ("Сл. лист СРЈ - Међународни уговори", бр. 11/2001), дужни смо да спречавамо уношење и контролишемо или искорењујемо „оне стране врсте које које угрожавају природне екосистеме, станишта или (аутохтоне) врсте". На нашим подручјима сматрају се инвазивним следеће **биљне**

врсте: циганско перје (*Asclepias syriaca*), јасенолисни јавор (*Acer negundo*), кисело дрво (*Ailanthus glandulosa*), багремац (*Amorpha fruticosa*), западни копривић (*Celtis occidentalis*), дафина (*Eleagnus angustifolia*), пенсилвански длакави јасен (*Fraxinus pennsylvanica*), трновац (*Gledichia triachantos*), жива ограда (*Lycium halimifolium*), петолисни бршљан (*Parthenocissus inserta*), касна сремза (*Prunus serotina*), јапанска фалопа (*Reynouria syn. Fallopia japonica*), багрем (*Robinia pseudoacacia*), сибирски брест (*Ulmus pumila*).

Увидом у достављену документацију и документацију овог Завода донето је решење као у диспозитиву.

Прилог: Карта предметне деонице пута са приказом локалних еколошких коридора

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 ("Сл. гласник РС", бр. 43/2003, 51/2003 - испр., 61/2005, 101/2005 - др. закон, 5/2009, 54/2009, 50/2011, 70/2011 - усклађени дин. изн., 55/2012 - усклађени дин. изн., 93/2012 и 47/2013 - ускл. дин. изн.)

Поука о правном леку:
Против овог Решења може се поднети жалба Покрајинском секретаријату за урбанизам, градитељство и заштиту животне средине, а преко Покрајинског завода за заштиту природе, у року од 15 дана од дана достављања овог Решења уз доказ о уплати Републичке административне таксе у износу од 440,00 динара на текући рачун бр. 840-742221843-57, позив на број 59013 по моделу 97.

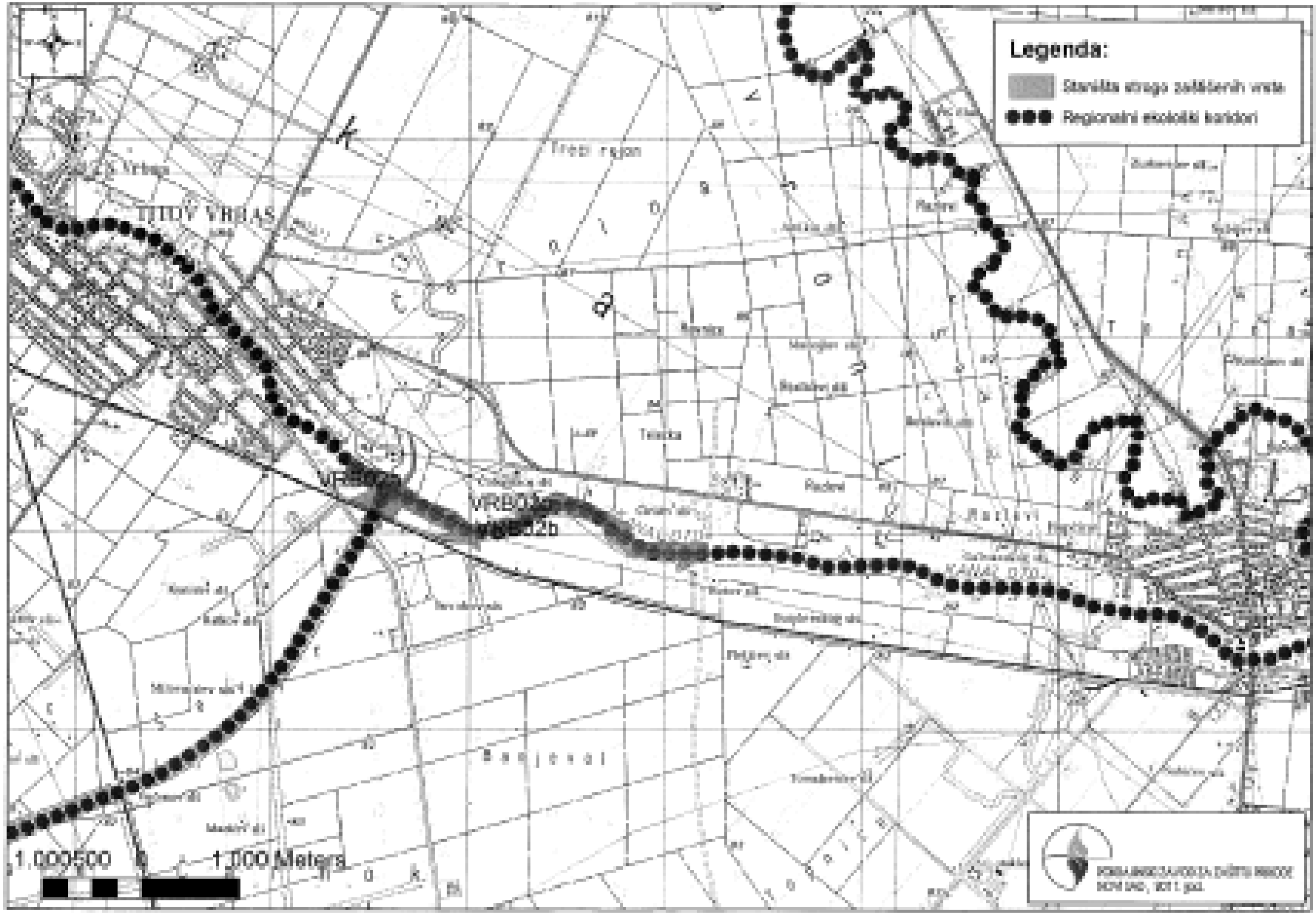
Решено у Покрајинском заводу за заштиту природе, под бројем 03–662/2, дана 4.4.2017. године.

Директор:

др Биљана Паньковић

Доставити:

1. Наслову
2. Архиви
3. Документацији


Legenda:
Staništa strogo zaštićenih vrsta
Regionalni ekološki koridori
1:000500
1 000 Meters

Република Србија
Аутономна покрајина Војводина
Покрајински завод за заштиту споменика културе, Петроварадин
Установа културе од националног значаја
Штросмајерова 22, 21131 Петроварадин
Т: 021 431211факс:021 64 31 198
office@pzzzsk.rs, www.pzzzsk.rs

Republic of Serbia
Autonomous Province of Vojvodina
The Provincial Institute for the Protection of Cultural Monuments, Petrovaradin
Cultural Institution of National Significanse
Štrosmajerova 22, 21131 Petrovaradin
T: +381 21 431211 Fax:+381 21 64 31 198
office@pzzzsk.rs, www.pzzzsk.rs

Број/ Number: 02-124/2-2017 Датум/ Date: 06.04.2017.

Јавно предузеће "Путеви Србије"
Сектор за инвестиције
Булевар краља Александра 282
11050 Београд

Предмет: Услови за израду техничке документације пројекта Појачаног одржавања деонице пута IБ реда бр. 15, деоница Врбас - Србобран

Захтевом упућеним Покрајинском заводу за заштиту споменика културе, заведеним под бр. *02-124/1-2017 од 21.03.2017. год.* обратили сте се за издавање услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 15 (стара ознака: магистрални пут М-3), деоница Врбас (Змајево) – Србобран (Фекетић).

Покрајински завод за заштиту споменика културе Петроварадин,

овим актом утврђује следеће

Услове:

- Уколико се буду изводили земљани радови и ископи на простору регистрованих археолошких локалитета (приказаних на карти у прилогу), неопходно је пре ових радова спровести претходна заштитна археолошка ископавања или спроводити археолошку контролу радова. Заштитна археолошка ископавања и контролу радова обавља Покрајински завод за заштиту споменика културе, према Програму мера заштите, који ће сачинити након добијања Пројекта на увид.
- У случају да се приликом радова на траси пута открију до тада нерегистровани непокретни и покретни археолошки налази, инвеститор је у обавези да зауставља радове и предузме мере заштите према посебним условима које ће издати надлежни завод за заштиту споменика културе и омогући стручној служби да обави археолошка истраживања и документовање на површини са откривеним непокретним и покретним културним добрима;
- Инвеститор је дужан да обезбеди средства за археолошки надзор, истраживање, заштиту, чување, публиковање и излагање добара која уживају претходну заштиту у случају вршења земљаних, грађевинских и осталих радова на површинама где се налазе археолошки локалитети и добра под претходном заштитом.

Образложење:

Покрајински завод за заштиту споменика културе добио је од Јавног предузећа "Путеви Србије" из Београда, Булевар краља Александра 282, захтев за издавање Услова за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 15 (стара ознака: магистрални пут М-3), деоница Врбас (Змајево) – Србобран (Фекетић).

Стручна служба Покрајинског завода је, на основу поднетог Захтева, извршила увид у евиденцију Покрајинског завода о археолошким локалитетима на територији Војводине и обавила теренску проспекцију. На предметној траси пута и у непосредној близини постоји више археолошких локалитета (приказаних на карти у прилогу). С обзиром на наведено, могуће је да приликом земљаних радова дође до откривања археолошких налазишта, па је у том случају неопходно спроводити заштитне археолошке радове.

Овај акт важи годину дана од дана издавања.

Обрађивач:

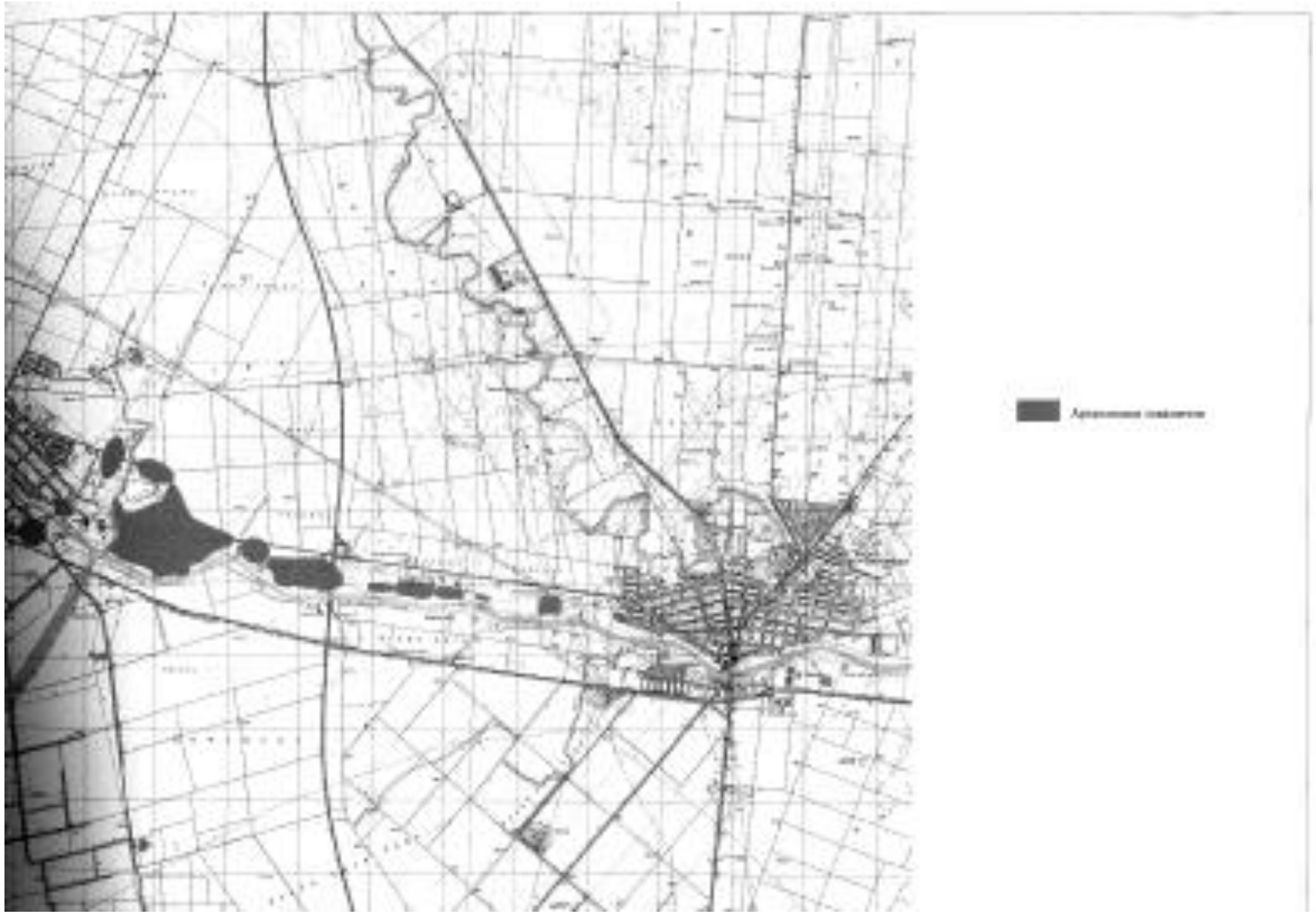
Ивана Пашић, археолог

С поштовањем,

директор

Доставити:
1. Наслову
2. Документацији
3. Архиви

Зоран Ваја



APPENDIX 6 FINAL ENVIRONMENTAL APPROVAL

Република Србија
Аутономна покрајина Војводина
Покрајински секретаријат за урбанизам и заштиту животне средине
Булевар Михајла Пупина 16, 21000 Нови Сад
Т: +381 21 487 4719 Ф: +381 21 456 238
ekourb@vojvodina.gov.rs | www.ekourb.vojvodina.gov.rs
БРОЈ: 140-501-641/2017-05 ДАТУМ: 13. 06. 2017. година

ПРОЈЕКТ БИРО УТИБЕР д.о.о.
Војводе Мишића бр. 2
Н О В И С А Д

Предмет: Захтев за давање мишљења у вези подношења захтева за одлучивање о потреби процене утицаја на животну средину

Покрајинском секретаријату за урбанизам и заштиту животне средине достављен је захтев за давање мишљења да ли је за пројекат појачаног одржавања државног пута IБ реда бр. 15 Врбас (Змајево) – Србобран (Фенетић), дужине 9,492km, неопходна процедура процене утицаја на животну средину, односно подношење захтева за одлучивање о потреби процене утицаја предметног пројекта на животну средину. На основу достављеног захтева може се закључити да предметни пројекат подразумева грађевинско – путарске радове у оквиру трасе постојећег пута.

У вези са достављеним захтевом обавештавамо вас да се процена утицаја врши, на основу члана 4. Закона о процени утицаја на животну средину („Службени гласник РС", број 135/2004 и 36/2009), за пројекте који су наведени у Уредби 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 РС", број 114/2008). У Листи I, која садржи пројекте за које је обавезна студија о процени утицаја на животну средину, под тачком 7. подтачка 2) наводи се изградња магистралних аутопутева и путева са четири или више трака, или реконструкција и/или проширење постојећег пута са две траке или мање, са циљем добијања пута са четири или више трака, у случају да такав нови пут или реконструисана и/или проширена деоница имају непрекидну дужину од преко 10km или више, укључујући припадајуће објекте, осим пратећих садржаја магистралног пута, док се у Листи II, која садржи пројекте за које се може захтевати процена утицаја на животну средину , под тачком 12. Подтачка 5) наводе регионални путеви укључујући припадајуће објекте, осим пратећих садржаја пута – сви објекти.

Како ЈП „Путеви Србије" планира извођење грађевинско – путарских радова у оквиру трасе постојећег пута, односно појачано одржавање државног пута IБ реда бр. 15 Врбас (Змајево) – Србобран (Фекетић), дужине 9,492km, према критеријумима наведеним у Уредби, не постоји обавеза вршења процене утицаја на животну средину.

ВРШИЛАЦ ДУЖНОСТИ ПОМОЋНИКА
ПОКРАЈИНСКОГ СЕКРЕТАРА

Немања Ерцег

Доставити:
1. Наслову
2. Архиви

APPENDIX 7 REPORT ON PUBLIC CONSULTATIONS

1. REPORT ON PUBLIC CONSULTATION, VRBAS, 30.01.2018.

In accordance with OP 4.01 World Bank, PE "Roads of Serbia" has prepared a document - Environmental Management Plan for work on urgent maintenance and rehabilitation of State road No. IB. 15, section: Vrbas (Zmajevo) – Srbobran (Feketic) of the length of 9.492 km.

Presentation of the Environmental Management Plan began on January 17th 2018, the invitation to interested parties in the daily newspaper Politika was published, which was inviting the public auditorium, authorities and institutions to inspect the proposed rehabilitation works and environmental impact with present mitigation measures and monitoring. Prior to announcement in the newspapers, all the documents were submitted to the Municipality of Vrbas and publicly available on the spot, and also placed on the website of PE "Roads of Serbia".

Representatives of local self-government informed the public through local media about the time and place of the public consultation. Publication of the pre-final document of the Environmental Management Plan ended on January 30th 2018. when the public meeting was held in the Municipality of Vrbas.

Photo 1: Public discussion in Vrbas, January 30th 2018

Photo 2: Public discussion in Vrbas, January 30th 2018

Photo 3: Public discussion in Vrbas, January 30th 2018

Photo 4: Public discussion in Vrbas, January 30th 2018

Public discussion in Vrbas was attended by 7 people, from wich 6 persons were from municipality of Vrbas, and one person from Srbobran. Representatives of local services for the environment, and representatives for traffic in Vrbas were present.

The meeting was attended by the Panpro Team, represented by Road Designers Miroslav Cupic and Ana Knezevic.

The meeting began as planned at 10:30 AM. A representative of the Panpro Team, environmental specialist Marina Komad, dipl.ing.civil., presented in detail the Environmental Management Plan to the participants. During the public discussion, there were no complaints regarding to the environmental issues.

In the last 10 minutes of the presentation, a representative of the municipal administration Vrbas in charge of traffic had no questions on the subject of EMP documents, but he asked questions concerning the subject road improvement design, which were discussed with the road designers. On that occasion he requested further clarification regarding the terminology of bicycle paths and bicycle lanes, and drainage solutions, as well as the date of the public presentation of the preliminary design solution of the subject road section. The above issues will be discussed during further elaboration of project solutions for the road and drainage, and about the term of public presentation of preliminary design solution all interested will be informed in the municipalities through which the subject road section passes, when design solutions will be presented in more detail.

The public discussion ended at 11:30 PM local time.