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ROAD REHABILITATION AND SAFETY PROJECT

MAIN DESIGN FOR HEAVY MAINTENANCE OF THE STATE ROAD IB 21

LOT 3: IB 21, road section: Ivanjica - Sjenica, from km 288+251 to km 311+287, L= 23.036 km

Contract ID: RRSP/CS3-RRD3-1/2016-11

ENVIRONMENTAL MANAGEMENT PLAN

Final

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ABBREVIATIONS

AADT	Annual Average Daily Traffic
ARAP	Abbreviated Resettlement Action Plan
CEP	Contractor's Environmental Plan
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EMP	Environmental Management Plan
HSE	Health, Safety and Environment
IFIs	International Financing Institutions
INCS	Institute for Nature Conservation of Serbia
IPCMK	Institute for the Protection of Cultural Monuments of Kraljevo
MoEP	Ministry of Environmental Protection
MoCTI	Ministry of Construction, Transport and Infrastructure
NRNRP	National Road Network Rehabilitation Program
OP	Operational Policy
PAP	Project Affected Person
PIT	Project Implementation Team
PERS	Public Enterprise "Roads of Serbia"
PSC	Project Supervision Consultant
RE	Resident Engineer
RRSP	Road Rehabilitation and Safety Project
SE	Site Engineer
SLMP	Safety Labour Management Plan
SSIP	Site Specific Implementation Plan
TA	Technical Assistance
WB	The World Bank Group
WMP	Waste Management Plan

INTRODUCTION

The Environmental Management Plan has been prepared for the proposed Design for Heavy Maintenance of the State Road IB 21 road section: Ivanjica – Sjenica in order to ensure application of good environmental practice and document compliance with the requirements of the International Financing Institutions (IFI's) which will finance this Project.

In accordance with the guidelines issued by IFIs, the project was classified as B Category of environmental risk, and it requires development of Environmental Management Plan (EMP).

The Project Proponent is the Government of Serbia, acting through its Ministry of Construction, Transport and Infrastructure (MoCTI). Project implementing entity is Public Enterprise "Roads of Serbia" (PERS).

The aim of the EMP is to identify potential negative environmental impacts and management problems during the execution of construction works, as well as the necessary mitigation measures that the Contractor must apply. The key components of the EMP are: Environmental Mitigation Plan and Environmental Monitoring Plan.

The EMP analyses the rehabilitation phase and operational phase of the relevant section thus defining measures which are the obligation of the Contractor during the execution of rehabilitation works.

Project elaboration will be compliant with Serbian legislation, rules, regulations and provisions, as well as with the international conventions and protection guidelines, issued by the IFIs. According to the Project Implementation Plan, the aim of the project is increasing the usability and durability of the road, promoting traffic safety, including the requirements of local community (social aspect) and complying with the environmental requirements to the greatest extent given the circumstances of spatial limitations and the constraints arising from types of allowed constructive and traffic measures.

For the suggested section, the Environmental Management Plan is focused on activities connected to scope of civil works related to heavy maintenance and eliminating negative environmental impacts and it will be a part of the civil works contract. The activities connected to the regular maintenance of the road section, even though they are not brought into focus of this plan, will be included in EMP for the sake of completeness. The preparation of this EMP was undertaken through theoretical studies and field investigations, including consultations with regional level representatives and local stakeholders. The EMP is based primarily on field investigations performed during April and May 2018.

EXECUTIVE SUMMARY

Project Description

Road Rehabilitation and Safety Project (RRSP) is the project in which IFIs (World Bank, European Investment Bank and European Bank for Reconstruction and Development) provide support to the Government of the Republic of Serbia in implementing the National Program for Rehabilitation of the State Road Network. This project represents the realization of the Government's program for the period from 2014 to 2019.

One of the goals of the project is improving the conditions and road safety on the state road IB 21 road section: Ivanjica- Sjenica.

Location Description

The subject road section belongs to the Moravica and Zlatibor administrative districts of the municipalities of Ivanjica and Sjenica. The road section in length of 61.336 km belongs to the state road IB 21 (an old road mark R-117) (Decree on the categorization of state roads, ''Official Gazette of RS'', No. 93/2015) and represents a part of the communication facility through the western part of Serbia. In this EMP, the subject is a part of the road section from the Third Year of the Program, from administrative border of the Municipality of Sjenica to the node 2134 in Sjenica.

***Figure 1**. The location of the subject road section according to the state roads Reference System map, December 2015*

Rehabilitation Works Description

The type of works planned mainly involve widening and reinforcement of existing carriageway structure with the existing and rehabilitated drainage system and design of all elements which prolong durability of executed works and promote road safety system. They are completely regulated by the provision (Article 69) of the Law on Roads ("Official Gazette of RS", Nos. 41/2018 and 95/2018).[1] These types of works are described in detail in the following chapter - ***1. PROJECT DESCRIPTION; Rehabilitation Works Description.*** Also, it is planned to construct sidewalks in the width of 1.50 m (with certain deviations on critical locations) on both sides of the carriageway on a part of the route through the settlement Sjenica (Jezdimir Lovic Street, from km 309+150 to km 311+287, in length of 2.137 km) at the end of the road section, which is characterized by passing through the settlement. In this regard, relocation of 274.21 m^2 of illigaly built fences within RoW and expropriation of 37.48 m^2 of private land must be done. For that reason, Abbreviated Ressetlement Action Plan (ARAP) is in preparation. For more information, please see chapter - ***1. PROJECT DESCRIPTION; Rehabilitation Works Description.***

In order to comply with the project conditions and reduce negative impact of the road section on the environment, all measures that can be taken within the framework of economic possibilities and requirements of the ToR have been carefully considered and taken.

Policy, Legal and Administrative Framework

The Ministry of Environmental Protection (MoEP) is the key institution in the Republic of Serbia responsible for formulation and implementation of environmental policy matters.

The other aspects of environmental protection connected to road rehabilitation projects, have been dealt with several other institutions, among which are the Institute for Nature Conservation of Serbia (INCS), Institute for the Protection of Cultural Monuments of Kraljevo (IPCMK), PWMC “Srbijavode” and Public Enterprise “Roads of Serbia” (PERS).

Environmental protection in the Republic of Serbia is regulated by various laws at the national and municipal levels as well as by statutes.

Lender requirements that are applied to this project of road rehabilitation include the following Policies:

- Operational Policy of Environmental Impact Assessment (OP 4.01),
- Operational Policy of Involuntary Resettlement (OP 4.12),
- Resettlement Policy Framework (RPF) prepared for the Road Rehabilitation and Safety Project (RRSP),

[1] https://www.paragraf.rs/propisi/zakon-o-putevima.html

- European Investment Bank (EIB): Statement of Environmental and Social Principles and Standards (2008).

The World Bank and EIB require that the design complies with the Republic of Serbia national laws, EU standards and IFI's guidelines as noted above.

Baseline Conditions Assessed during Route Survey

Based on the Conditions of the Institute for Nature Conservation of Serbia (No. 019-580/3 dated from April 10th, 2018), the subject road section is located within the protected area, Special Nature Reserve "Uvac", in the second degree protection regime, as well as in the scope of ecological network - an ecologically significant area of "Uvac and Milesevka". The rehabilitation works are allowed to be done in compliance with the requirements stated in these Conditions (Appendix 6).

Also, during the site visit of the observed road section in May 2019, it was noticed that a stork nested on the pole of public lighting in the Jezdimir Lovic Street. Additional Conditions of the Institute for Nature Conservation of Serbia were optained (no. 019-1904/2 dated from August 1st 2019) (Appendix 6). These Conditions stipulates that execution of works in the immediate vicinity of a nest should be organized exclusively when it is not the reproduction period and when storks are not in the nest, namely until March 15th and after July 20th.

Regarding the cultural heritage and protected resources on the subject road section, according to the data from the Conditions of the Institute for Protection of Cultural Monuments of Kraljevo (No. 293/3 issued on March 20th, 2018), several sites with archaeological content are located in the immediate vicinity of the route:

- Vlach grave (N:4804507; E:7422943, position from km 295+780 to km 295+850)
- Muslim graveyard (N:4793782; E:7418690, position from km 310+170 to km 310+260)

The rehabilitation works are allowed to be done. However, if earthworks are carried out in these areas (construction of drainage canal, road widening, and connections with local roads), they should be completed under the direct supervision of an expert in the field of archaeology in compliance with the requirements stated in these Conditions.

Along the observed section, during route survey the following facilities have been identified:

- Mosque at ~km 310+160 (the right side);
- Muslim cemetery from ~km 310+170 to ~km 310+260 (the right side).

There are no controlled bicycle paths on the observed road section.

A more detailed overview of the existing conditions on the observed road section is given under Chapter ***2. BASELINE CONDITIONS ASSESSED DURING ROUTE SURVEY***.

Summary of Environmental Impacts

The works concerning the road rehabilitation on the road section Ivanjica - Sjenica will have a smaller impact on the environment (B category of environmental protection). Most of the impacts are of a temporary character and they will disappear after the works on heavy maintenance, i.e. road rehabilitation and sidewalks' construction have been completed.

The EMP refers to the phase of execution of works and its implementation is a future obligation of the Contractor.

During the execution of construction activities, there may be disruption of current traffic flow, movement of the inhabitants of the neighbouring settlements, reduced road safety, damages to access roads, noise production, dust, waste and air pollution, impact on soil, water, plant and animal life.

Environmental Management Plan

Environmental impacts of the Design for Heavy Maintenance on the road section Ivanjica - Sjenica can have some temporary cumulative impacts (disturbance in pedestrial movement of residents, noise, air pollution, water and soil pollution), and they will not cause a significant impact on the environmental conditions. Mitigation measures provided in the EMP, relating to the design, road rehabilitation and operational phase, must be carried out appropriately. The EMP consists of the Environmental Mitigation Plan and Environmental Monitoring Plan. It is based on the types of environmental impacts, their scope and duration. During the rehabilitation, the Contractor will work according to the Contractor's Environmental Plan (CEP) based on the EMP. PERS is in charge of designing, supervision and execution of works applying the EMP.

Mitigation Plan

Impacts and proposed mitigation measures have been compiled into the Environmental Mitigation Plan (Appendix 1). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the design, rehabilitation and operational phases. It makes reference to the conditions issued by the authorized institutions (Institute for Nature Conservation of Serbia, Institute for the Protection of Cultural Monuments of Kraljevo, PWMC "Srbijavode"), law and contract documents, approximate location, time frame and the responsibility for its implementation and supervision.

Monitoring Plan

A Monitoring Plan for the proposed Design (Appendix 2) has been prepared. A monitoring control list will be prepared on the basis of EMP and Monitoring Plan (Appendix 2). The list will be used by the supervision engineer on the construction site. Signed control lists will be submitted to PERS, which is responsible for monitoring and reporting.

Stakeholder Engagement – Information Disclosure, Consultations and Participation of Public

As requested by IFI's safeguard policies, public consultations were held in the EMP preparation phase. The EMP and other project-related information was disclosed to the public and made available to the local community

A detailed report on the public consultation process is shown in Appendix 5 of this document and it contains a list of identified participants.

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

Considering that relocation of 274.21 m^2 of illigaly built fences within RoW and expropriation of 37.48 m^2 of private land must be done for the purpose of sidewalks' construction, draft Abbreviated Ressetlement Action Plan (ARAP) is in final stage of preparation. The preliminary survey among potential PAPs was conducted from January 8th to January 11th 2019. Presentation of approved Preliminary Design Solution was held in Sjenica on May 8th 2019. In parallel with the presentation, the Socio-Economic Survey was conducted from May 6th to May 10th 2019. A more detailed overview of the ARAP preparation and stakeholder engagement is given under Chapter ***6. STAKEHOLDER ENGAGEMENT – INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION***.

1. PROJECT DESCRIPTION

Road Rehabilitation and Safety Project – RRSP is a project of support of the International Financial Institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementing the National Program for Rehabilitation of the State Road Network. This project represents the realization of the first phase of the Government program for the period from 2014 to 2019 and includes the following:

- improving the conditions of the state road network by rehabilitating around 1,100 km of the existing roads,
- raising the safety level on the roads by applying measures for enhancing the traffic safety in all phases of Project implementation, and
- strengthening capacities and improving institutional coordination in the area of traffic safety by implementing a greater number of different services.

The institution in charge of realization of the Project is Public Enterprise “Roads of Serbia” (PERS). Within PERS, a Project implementation team (PIT) was formed, which should conduct all the necessary activities for successful management and completion of the Project, with the help of other professional departments in the company and in cooperation with the other interested institutions of the Government of the Republic of Serbia. One of the goals of the project is increasing road safety on the state road IB 21, section: Ivanjica – Sjenica.

Road Section Description

According to the Reference system of the National Road Network from 2009, the road section Ivanjica - Sjenica 1 (Lake Sjenica) is 61.478 km long. When Regulation on the Classification of State Roads ("Official Gazette of RS", No. 93/2015) was adopted and entered into force, a new Reference System was established and the following changes were made: instead of "Sjenica 1 (Lake Sjenica)", a new name of the traffic node "Sjenica" was defined.

Total length of the road section is 61.336 km. The subject road section belongs to the Moravica and Zlatibor administrative districts of the municipalities of Ivanjica and Sjenica. The road section belongs to the state road IB 21, and represents a part of the communication facility through the western part of Serbia. Also, the subject road section is a part of the Design planned for heavy maintenance within the Third and Fourth Year of its implementation. In this Design, the subject matter is a part of the road section from the Third Year of the Program from the administrative border of Municipality of Sjenica to the node 2134 in Sjenica, in length of 23.036 km. All chainages in this report are given in accordance to the new Reference System from December 2015. An excerpt from the Reference System is given in Table 1.

Table 1: The road sections and nodes according to the Reference System

No.	Previous label of the section*	Section label	Label of the initial node	Label of the final node	Name of the initial node	Name of the final node	Length of the road section (km)
1	1047	02135	2133	2134	Ivanjica	Sjenica	61.336 (**23.036)
						Total:	**23.036**

** Label of the road section according to the old Reference System 2008/2009 (JV CPL- Nievelt)*

*** Length of the subsection which should be repaired*

Figure 2. represents the position of the subject road section within the Road Reference System of the Republic of Serbia in 2015.

Figure1. The location of the observed road section according to the Road Reference System in 2015

Figure 3. represents a scheme of the road section intended for rehabilitation (heavy maintenance).

Figure 2. The length of the road section intended for rehabilitation (heavy maintenance)

The beginning of the road section was defined at the border of the municipalities of Ivanjica and Sjenica (at approximate chainage of km 288+251) (Figure 4) and the end at the node 2134 Sjenica (Figure 5).

Figure 3. The beginning of the observed road section

Figure 4. The end of the subject road section

The majority of the subject road section can be characterized as a rural one with passage through inhabited areas with numerous local access roads. There are no sidewalks or bus stops identified.

Rehabilitation Works Description

The current width of the carriageway, without widening, is predominantly about 6 m. According to the Terms of Reference, issued by the Employer, it is foreseen to keep the existing dimensions of traffic profile (Table 2). In this sense, type of works planned mainly involve widening and reinforcement of existing carriageway structure with the existing and rehabilitated drainage system and design of all elements which prolong durability of executed works and improve road safety.

Table 2: The existing traffic profile

Road section	Traffic lanes	Edge strip	Number of lanes	Total carriageway width
Ivanjica-Sjenica	2.75	0.25	2	6.0

The Design will include the development of new solutions for existing at-grade intersections. Furthermore, locations of new bus stops will be considered in

compliance with the needs of the local population and the possibilities of construction.

All access roads will be regulated. Special access roads (trackout pads)[2] will be designed on the district roads, while at the intersections with local roads, the arrangement of circular arcs and opening of necessary banquettes to control the visibility will be performed.

It is planned to construct sidewalks in the width of 1.50 m (with certain deviations on critical locations) on both sides of the carriageway on a part of the route through the settlement Sjenica (Jezdimir Lovic Street, from km 309+150 to km 311+287, in length of 2.137 km) at the end of the road section, which is characterized by passing through the settlement.

Such concept mostly correlates with dimensions of cross-sections by a certain plan document of the Municipality of Sjenica (*General Regulation Plan - Traffic Plan, Categorization of the Traffic Network*) - Permanent acquisition of private land through expropriation by 10 private owners in total area of 37.48 m^2 is neccessery.

Considering the fact that there are also problems with the usurpation of the right-of-way of the existing road for the construction of the sidewalks and that it is necessary to move a certain number of fences and pillars along the road section through the inhabited place, on September 20th 2018 the Designer initiated a meeting along with the Client and representatives of the local community. The meeting was also attended by representatives of the Technical Control (TC) and the Technical Assistance (TA to PIT). The Employer's Representative, in cooperation with the Designer, introduced the participants with problems related to the construction of sidewalks on a part of the route of the road section that passes through the settlement Sjenica. After consultations and site visit, the attitude of all participants, led by the President of the Municipality of Sjenica, was confirmed that the construction of the sidewalks is an absolute priority for the local community and that it is the right measure for increasing the safety of road users in that part of the road section. Accordingly, the local government, led by its representative, expressed its willingness to do everything in the shortest possible time to solve this problem in an adequate manner.

Concrete steps in this regard were primarily undertaken by the Employer who had hired Technical Assistance (TA to PIT) i.e. ARUP consulting house to conduct a preliminary survey of potentially vulnerable citizens under the impact of the Design and record critical sites and places that needs to be avoided, as well as to inform local population about the Design and assess citizens' mood regarding the possible construction of sidewalks which would consequently require expropriation and relocation of illegally built fences on road lots. Preliminary survey was conducted from January 8th till January 11th 2019.

On places which were during Preliminary Survey characterized as problematic (locations with the auxiliary structures and locations where fence owners were explicitly unwilling to cooperate), through adjustment of the Preliminary Design

[2] Translator's note: Roads constructed in a way that prevent mud and dirt from the tires from entering the main roads

solution a compromise was found between something that was technically acceptable and objectively feasible - The width of the sidewalks is reduced to a certain extent, taking into account that it corresponds to a minimum required for one pedestrian module (sidewalk width is nowhere less than 1 m). In this sense, all critical locations (locations with the auxiliary structures and locations where fence owners were explicitly unwilling to cooperate) have been avoided.

Preliminary Design solution was approved by TC and PERS in April 2019. Within the approved Preliminary Design solution, the following impacts have been identified:

- Permanent acquisition of private land through expropriation in total area of 37.48 m^2;
- Relocation of private fences built within the Right-of-Way and clearance of public land in total area of 274.21 m^2;
- Administrative transfer of public land in the area of 0.93 m^2 and relocation of fence in the total area of 0.21 m^2;
- During the survey, various types of fences (46 fences in total), plot uses, 36 plants (30 firs, 1 birch, 2 quicksets and 3 willows), 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances were identified in the area of influence for all 53 affected plots in total;
- A total of 78 affected owners were identified.

Presentation of Preliminary Design Solution was held in Sjenica on May 8th 2019. In parallel with the presentation, the Socio-Economic Survey was conducted by Technical Assistance to Project Implementation Team (TA to PIT), i.e. ARUP from May 6th to May 10th 2019. Socio-Economic Survey data was used for preparation of Abbreviated Ressetlement Action Plan (ARAP). The objective of the ARAP is to specify the procedures to be followed and the actions to be taken to properly acquire land, relocate fences built on the state-owned land and compensate affected people by allowing and providing for adequate participation, consultations and full functioning of the grievance mechanism. Furthermore, the plan sets out actions on how to avoid and mitigate future impacts and provide prompt and effective compensation for residual impacts if any to those eligible. Draft ARAP was prepared according to the Laws and Regulations of the Republic of Serbia and the Resettlement Policy Framework (RPF) prepared for this Project, which is consistent with the World Bank Policies and Procedures on Involuntary Resettlement OP 4.12.

Draft ARAP is in final stage of preparation and it is expected to be finished soon. Approved i.e. final ARAP will be submitted to the PERS's Sector for legal, staff and common affairs for further action and implementation. Final ARAP will also be delivered to the Contractor and implementation of the measures envisaged by ARAP will be an integral part of the Contractor's Environmental Plan (CEP).

If there is a need for widening the carriageway (correction of geometry at certain places characterized as problematic ones from the aspect of road safety, road widening in a curve for the purpose of passing the vehicles, lay-bys, etc.) during the development of the design, the design will also plan widening of existing road culverts for which it is determined through the analysis of the situation that they are

without damage. In case that the analysis determines that the possible rehabilitation of the culvert is economically unjustified, the design will envisage a new culvert of adequate throughput capacity. Considering the terrain conditions where the route passes, the Main Design will pay particular attention to the improvement of the existing drainage system (new gutters and open canals) and to define the most suitable recipients in accordance with the measures planned.

Drainage from the carriageway in the zone of collision with registered watercourses, in the bridge zone across the Kladnica River, at the beginning of the road section, and across the Vapa River, in the end of the road section, will be solved by piping the existing bridge drainage system. Therefore, discharge into the recipient must be arranged by concrete or stone lining to prevent erosion of the recipient's slopes.

The hydraulic throughput capacity of structures is checked and adequate measures will be applied with the aim of efficient and controlled discharge of atmospheric water. The required dimensions of structures will be proposed in places where existing structures do not have sufficient throughput capacity, which will be implemented in the Drainage Design of the observed road section.

The Terms of Reference required regulation of river beds of the Kladnicka River at ~km 292+810 and the Vapa River at ~km 305+350 was required. The regulation of river beds of watercourses involves covering of slopes and bottom of the river bed in length of 20 m, both sides, in relation to the bridge. The flow profile of watercourses will be temporary reduced and works will be performed in the period of the lowest water level.

In accordance with the ToR and based on site visits, Design will provide appropriate solutions for rehabilitation and development of structures within the roadbase. The width of the bridge carriageway and paths (traffic profile) will keep the same dimensions compared to the current state.

All works regarding bridges refer to the reinforcement of existing carriageway structure, the rehabilitation of the existing sidewalks and the installation of new curbs, and safety barriers for vehicles and pedestrians etc. The Design will also include controlled drainage of water in front of and behind bridges, as well as the solution how to connect road shoulders to the bridges.

In order to comply with the project conditions and to reduce the negative impact of the observed road section on the environment, all measures within the framework of the economic possibilities and requirements of the ToR have been carefully considered and taken.

Traffic regulation in the zone of works will be performed:

- by using road signs;
- manually (a traffic control person);
- by using a traffic light.

Traffic signage that is not in accordance with the traffic conditions in the work zone will be adequately removed or covered by appropriate non-reflecting tape.

Traffic signage in the zone of works will be placed on the road and in a proper condition while works are taking place. The location on the road where the first traffic sighn I-19 „construction zone" will be placed depending on the length, sight distance and visibility of the warning zone.

Temporary traffic signage in the zone of works will be completely removed from the road immediately after the works have been executed and the latest within 24 hours after the completion of works and reinstatement of the initial traffic regime.

It is essential to have on-call traffic engineer on the construction site at every moment that will take care about traffic signage and traffic safety in the construction site zone. During the holidays, or at the time when no works are done, it is necessary to hire a person who will control the signalization system (ensure that the wind will not knock over the vertical signs, that the horizontal signage is always visible, etc.) and who will react appropriately in case of any irregularities.

2. Baseline Conditions Assessed during Route Survey

There are 78 culverts on the road section (69 pipe culverts in size from Ø300 to Ø1600, 4 combined and 5 arched culverts), as well as a certain number of retaining walls (different types and different dimensions).

Figure 5. Typical parts of the observed road section

The main elements of the drainage system concerning the observed road section are gutters (Figure 7.), which discharge collected runoff from the carriageway through the culverts or into the canals, evacuating water to the recipient. They are generally in poor condition. Degradation of concrete related to gutters as well as the intensive decay of the curb is observed.

Figure 6. Gutters on the observed road section

On certain parts of the road section, where the road is located on the embankment, a dispersive drainage system was used, i.e. all water from the carriageway flows down the road shoulders and slopes to the surface of terrain or perimeter canals. Canals

are also overgrown with vegetation and altered cross section, compared to the designed one, due to the lack of maintenance (Figure 8.).

Figure 7. Canal on the observed road section

Culverts are predominantly in poor condition, primarily due to the lack of maintenance. Certain culverts are clogged and there is degradation of concrete of inlet and outlet structures. In some cases, there are even structural damages to the culverts' elements.

Retaining walls are recorded on the observed road section in the following lengths shown in Table 3:

Table 3: Retaining walls

No.	Chainage (from/to) [km]	Length L=[m]	Type of wall	Position of wall
1	291+871 291+881	10.0	concrete retaining wall	to the right above the road base
2	291+905 291+937	32.0	concrete retaining wall	To the left under the road base
3	291+902 291+943	41.0	concrete retaining wall	To the right above the road base
4	291+977 292+001	24.0	concrete retaining wall	To the right above the road base
5	292+030 292+058	28.0	concrete retaining wall	To the right above the road base
6	292+135 292+197	62.0	concrete retaining wall	To the right above the road base
7	292+189 292+222	33.0	concrete retaining wall	To the left under the road base
8	292+660 292+688	28.0	concrete retaining wall	To the right above the road base
9	293+045 293+055	10.0	stone retaining wall	To the left under the road base
10	304+646 304+708	62.0	concrete retaining wall	To the left above the road base
11	305+212 305+240	28.0	concrete retaining wall	To the right under the road base
12	305+268 305+287	19.0	concrete retaining wall	To the right under the road base
13	305+301	21.0	concrete retaining wall	To the right under the road base

No.	Chainage (from/to) [km]	Length L=[m]	Type of wall	Position of wall
	305+322			
14	305+699 305+744	45.0	concrete retaining wall	To the left under the road base
15	305+949 305+981	32.0	concrete retaining wall	To the left under the road base
16	306+001 307+027	26.0	concrete retaining wall	To the left under the road base
17	306+052 306+085	33.0	concrete retaining wall	To the left under the road base
18	306+089 306+104	15.0	concrete retaining wall	To the left under the road base
19	306+111 306+119	8.0	concrete retaining wall	To the left under the road base
20	306+127 306+275	148.0	concrete retaining wall	To the left under the road base
21	307+270 307+286	16.0	concrete retaining wall	To the left under the road base
22	310+588 310+640	52.0	concrete retaining wall	To the left under the road base

Regarding the structure, walls are in satisfactory condition. Degradation of concrete of walls is indicated. The Design plans rehabilitation of walls through remediation of degraded surfaces of concrete, as well as smaller cracks and fissures.

Settlements

The Municipality of Sjenica covers an area of 1,059 square kilometers. It is located in the southwestern part of Serbia. It is a part of the Zlatibor district. The center of the municipality, the settlement of Sjenica, is at latitude 43°16'14" N and longitude 19°59'35" E, at an altitude of about 1,000 m. It is located on the right side of the Uvac River and along the Grabovica River, in the Sjenica basin, in the western part of Sandzak. The border municipalities are Prijepolje, Tutin, Nova Varos, Ivanjica, Novi Pazar and Bijelo Polje, the municipality of Montenegro.

The Municipality of Sjenica consists of 1 urban and 100 village settlements. They are: Aliverovici, Bagacic, Bare, Bacija, Bioc, Blato, Boguti, Bozov Potok, Boljare, Borisice, Borovice, Breza, Brnjica, Budjevo, Vapa, Veskovice, Visocka, Visnjeva Visnjice, Vrapci, Vrbnica, Vrsjenice, Goluban, Gornje Lopize, Gosevo, Grabovica, Gradac, Grgaje, Dolice, Donje Goracice, Donje Lopize, Dragojlovice, Drazevice, Druzinice, Dubnica, Duga Poljana, Dujke, Dunisice, Zabren, Zitnice, Zabrdje, Zajecice, Zahumsko, Jevik, Jezero, Kalipolje, Kamesnica, Kanjevina, Karajukica Bunari, Kijevci, Kladnica, Knezevac, Koznik, Kokosice, Krajinovice, Krivaja, Krnja Jela, Krstac, Krce, Lijeva Reka, Ljutaje, Masovice, Medare, Medjugor, Milici, Papici, Petrovo Polje, Plana, Poda, Ponorac, Pralja, Razdaginja, Rasno, Raspogance, Rastenovice, Raskovice, Skradnik, Strajinice, Stup, Sugubine, Susica, Tresnjevica, Trijebine, Tuzinje, Tutice, Uvac, Ugao, Ursule, Usak, Fijulj, Caricina, Cetanovice, Crvsko, Crcevo, Cedovo, Cipalje, Citluk, Sare, Stavalj and Susure.

The municipality is located in the Sjenica-Pester plateau and surrounded by mountains: Jadovnik, Golija, Zlatar, Ozren, Javor, Ninaja, Giljeve, Zilindara and

Jaruta. The road Novi Pazar-Sjenica-Nova Varos connects Ibar with Zlatibor highway and Sjenica has good traffic connections with eastern and western parts of the Raska region.

The observed road section regarding aforementioned inhabited places passes only through Sjenica at the very end of the route. The subject road section goes through the following cadastral municipalities:

- CM Kladnica
- CM Ponorac
- CM Krstac
- CM Cedovo
- CM Sjenica.

The observed road section of approximate chainage from km 309+ 460 to km 311+287 passes through the inhabited part. On this part of the section construction along road without sidewalks is expressed. This is a very dangerous part for pedestrians and special attention is paid to improve this part of the route.

There are neither structures for public purpose (schools, nursery schools, hospitals, etc.) nor illegal landfills along the observed road section. There are no sidewalks or cycle paths identified on the observed road section.

Natural Resources and Cultural Heritage

Based on the Conditions of the Institute for Nature Conservation of Serbia (No. 019-580/3 dated from April 10th, 2018), the subject road section is located within the protected area, Special Nature Reserve "Uvac", in the second degree regime of protection, as well as in the scope of ecological network - an ecologically significant area of "Uvac and Milesevka". The rehabilitation works are allowed to be done in compliance with the requirements stated in these Conditions (Appendix 6).

It is necessary to inform the manager of protected natural heritage "Reserve Uvac" ltd. from Nova Varos about the commencement of works.

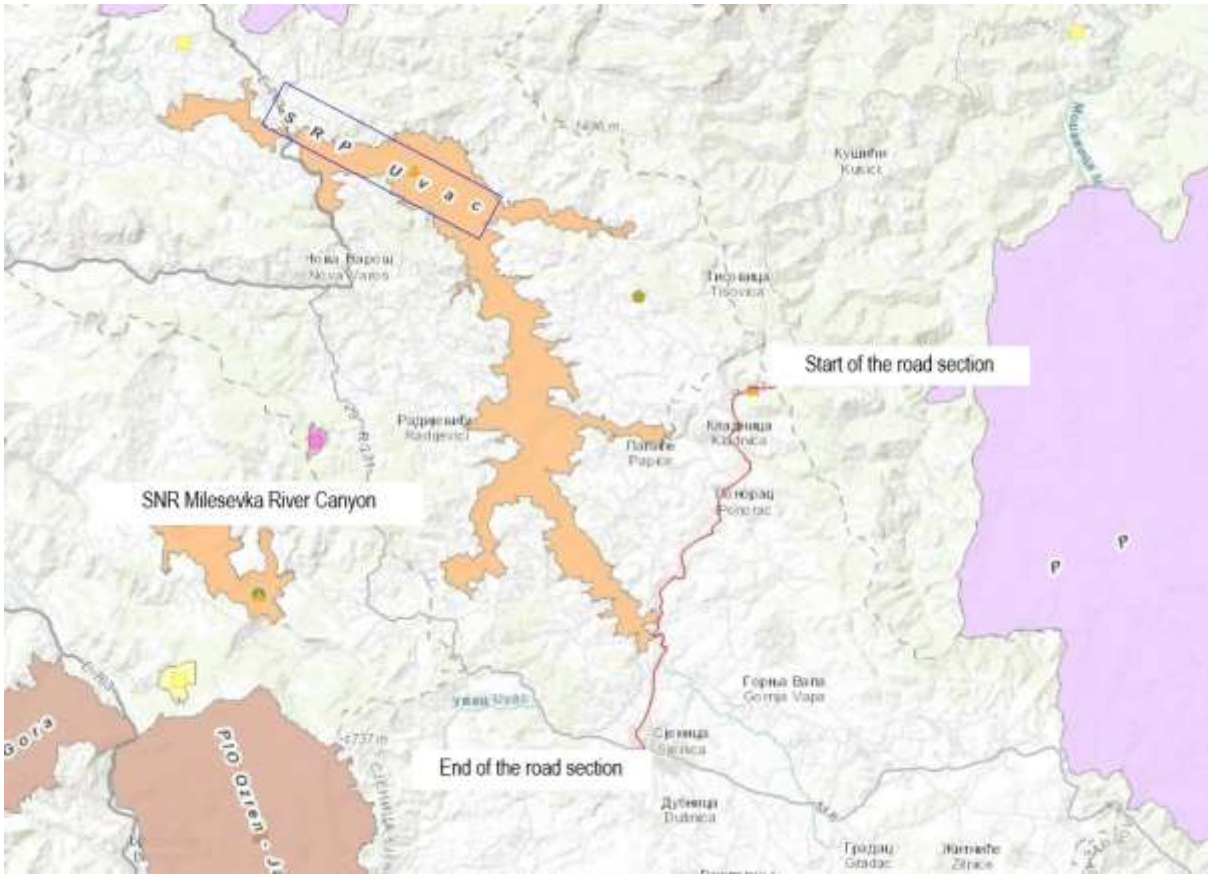


Figure 8. General map of protected areas in the immediate vicinity of the road section

Figure 9. shows a general map of protected areas (Special Nature Reserve "Uvac" and Nature Reserve of the Milesevka River Canyon) and their position in relation to the observed road section.

Regarding the cultural heritage and protected resources on the subject road section, according to the data from the conditions of the Institute for the Protection of Cultural Monuments of Kraljevo (no. 293/3 issued on March 20th, 2018), several sites with archaeological content are located in the immediate vicinity of the route:

- Vlach grave (N:4804507; E:7422943, position from km 295+780 to km 295+850) (Figure 910. and 11.)
- Muslim graveyard (N:4793782; E:7418690, position from km 310+170 to km 310+260) (Figure 1112.)

Figure 9. Vlach grave from km 295+780 to km 295+850

Figure 10. General map, Vlach grave

Figure 11. Muslim graveyard in the immediate vicinity of mosque in Sjenica from km 310+170 to km 310+260

The rehabilitation works are allowed to be done. However, if earthworks are carried out in these areas (construction of drainage canal, road widening, connections with local roads), they should be completed under the direct supervision of an expert in the field of archaeology in compliance with the requirements stated in the Conditions.

Bicycle and Pedestrian Traffic

On the observed road section of the state road, there are increased flows of pedestrians in the area of settlements (Kladnica, Ponoroc, Cedovo, etc.) with particular emphasis on the situation at last cca 2 km of the section, namely the segment of the road section that passes through Sjenica. Although the existing General Regulation Plan provides the possibility of constructing the sidewalks on both sides of the carriageway, pedestrians can not move freely and safely due to the existing occupation of road lots by the third parties (structures i.e. auxiliary facilities, fences, garages, etc.) (Figure 13.). Daily migration of local population, especially children who go to school and use this route every day, require taking all available measures that would solve the existing situation in favor of increasing the safety of pedestrians.

The Design will plan the construction of sidewalks in the width of 1.50 m (with certain deviations) on both sides of the carriageway on a part of the route through the settlement Sjenica.

Based on geodetic surveying map and site visit, it was established that there are no registered/marked bus stops at this location. However, some 500 m ahead of the intersection where local uncategorized road leads to the Kladnica settlement (in the direction of increasing chainage), there is a widen area defined by geometric elements that associate on lay-bys for vehicles to pull over. Since this area is mainly used by locals to park private vehicles, buses stop along the carriageway, because there are no registered bus stops (Figure 14.).

Figure 12. A characteristic situation observed during the site visit where children and vehicles are moving along the carriageway

Figure 13. Lay-by (right in front of the curve to the village of Kladnica)

Flora and Fauna

During the site visit of the observed road section in May 2019, it was noticed that a stork nested on the pole of public lighting in the Jezdimir Lovic Street (Figure 15.). Since the stork belongs to the group of strictly protected species, it is necessary to treat it in accordance with Conditions obtained from the competent institution.

The Conditions of the Institute for Nature Conservation of Serbia (no. 019-580/3 dated from April 10th, 2018) did not define the treatment in case of encountering birds' nest in the work zone. The Designer sent a request to the Institute for Nature Conservation of Serbia asking for additional opinion and further procedure in case of encountering stork's nest on the observed road section on July 3rd 2019. The Conditions were obtained (no. 019-1904/2 dated from August 1st 2019) and inclosed within Appendix 6. These Conditions stipulates that execution of works in the immediate vicinity of a nest should be organized exclusively when it is not the reproduction period and when storks are not in the nest, namely until March 15th and after July 20th. Also, it is stated in these Conditions that additional Conditions for

relocation of the existing stork's nest placed on a pole of public lighting should be obtained in case of relocation of the pole.

The adopted Design solution does not envisage the relocation of the pole and therefore the nest. The issued Conditions will be strictly respected and rehabilitation works and construction of the sidewalks will be performed until March 15th and after July 20th when storks are not in the nest.

Figure 14. Stork nest on the pole of public lighting in Sjenica

Railway Traffic

There is no identified railway traffic on the observed road section, as well as grade separated intersection with the road.

Watercourses

The Uvac River and Sjenica Lake are located near the subject road section.

The observed road section is placed at grade intersection with the following watercourses:

- The Kladnica River at ~km 292+810 (Figure 156.)
- The Vapa River at ~km 305+350 (Figure 167.).

The route is parallel with the Uvac River and Lake Sjenica from chainage km 304+480.

According to the Decision on Establishment of List of First Class Water ("Official Gazette of RS" No. 83/2010), the Uvac River belongs to natural watercourses and first class water. The Uvac River is also classified as interstate water. Considering the quality of water, according to Decree on Watercourses' Classification ("Official Gazette of RS" No.5/68), it belongs to the second class watercouse suitable for

swimming, recreation and water sports, for the cultivation of less valuable fish species and with the usual methods of treatment (coagulation, filtration and disinfection) can be used for drinking and industry.

Observing the quality of water, the Kladnica and Vapa Rivers belong to the second class watercourse according to Decree on Watercourses' Classification ("Official Gazette of RS", No. 5/68).

Figure 156. The Bridge over the Kladnica River at km 292+810

Figure 167. The Bridge over the Vapa River at km 305+350

The Terms of Reference required regulation of river beds of the Kladnicka River at ~km 292+810 and Vapa River at ~km 305+350. The regulation of river beds of watercourses involves covering of slopes and bottom of the river bed in length of 20m, both sides, in relation to the bridge. The flow profile of watercourses will be temporary reduced and works will be perfomed in the period of the lowest water level.

Culverts

There are 78 culverts on the road section (69 pipe culverts in size from Ø300 to Ø1600, 4 combined and 5 arched culverts). All the recorded culverts on the road section are presented in Table 3.

Table 4: The list of recorded culverts on the subject road section

No.	Chainage	Shape	Cross section	Material
1	288+305	Pipe	Ø1000mm	Concrete pipe
2	289+101	Pipe	Ø400mm	Concrete pipe
3	289+288	Pipe	Ø800mm	Concrete pipe
4	289+347	Pipe	Ø300mm	Concrete pipe
5	289+394	Pipe	Ø750mm	Concrete pipe
6	289+615	Pipe	Ø800mm	Concrete pipe
7	289+906	Pipe	Ø500mm	Concrete pipe
8	290+054	Pipe	Ø800mm	Concrete pipe
9	290+418	Pipe	Ø500mm	Concrete pipe
10	290+507	Pipe	3x Ø750mm	Concrete pipe
11	290+599	Pipe	Ø300mm	Concrete pipe
12	290+734	Pipe	Ø750mm	Concrete pipe
13	290+947	Pipe	Ø1000mm	Concrete pipe
14	291+217	Pipe	Ø1000mm	Concrete pipe
15	291+281	Pipe	Ø400mm	Concrete pipe
16	291+381	Pipe	Ø1000mm	Concrete pipe
17	291+463	Pipe	Ø800mm	Concrete pipe
18	291+527	Pipe	Ø400mm	Concrete pipe
19	291+806	Pipe	Ø800mm	Concrete pipe
20	291+930	Pipe	Ø500mm	Concrete pipe
21	292+050	Pipe	Ø1000mm	Concrete pipe
22	292+265	Pipe	Ø750mm	Concrete pipe
23	292+661	Pipe	Ø500mm	Concrete pipe
24	292+967	Pipe	Ø1000mm	Concrete pipe
25	293+183	Pipe	2 x Ø1000mm	Concrete pipe
26	293+245	Pipe	Ø1000mm	Concrete pipe
27	294+054	Pipe	Ø1000mm	Concrete pipe
28	294+200	Pipe	Ø1000mm	Concrete pipe
29	294+575	Pipe	Ø1000mm	Concrete pipe
30	294+925	Pipe	Ø1000mm	Concrete pipe
31	295+455	Pipe	Ø1000mm	Concrete pipe
32	296+895	Pipe	Ø1000mm	Concrete pipe
33	297+012	Pipe	2 x Ø1000mm	Concrete pipe
34	297+402	Pipe	Ø800mm	Concrete pipe
35	297+621	Pipe	Ø800mm	Concrete pipe

No.	Chainage	Shape	Cross section	Material
36	297+863	Pipe	Ø800mm	Concrete pipe
37	298+043	Pipe	Ø800mm	Concrete pipe
38	298+718	Arched	H=2400mm B=2900mm	Concrete
39	299+123	Pipe	Ø400mm	Concrete pipe
40	299+332	Pipe	Ø400mm	Concrete pipe
41	299+637	Pipe	Ø400mm	Concrete pipe
42	299+818	Pipe	Ø400mm	Concrete pipe
43	300+599	Pipe	Ø300mm	Concrete pipe
44	300+775	Pipe	Ø500mm	Concrete pipe
45	300+903	Pipe	Ø800mm outlet Ø1000mm	Concrete pipe
46	301+086	Pipe	Ø1000mm	Concrete pipe
47	301+293	Pipe	Ø500mm	Concrete pipe
48	301+749	Pipe	Ø800mm	Concrete pipe
49	302+049	Pipe	Ø1000mm	Concrete pipe
52	302+335	Pipe	Ø600mm	Concrete pipe
51	302+452	Pipe	Ø300mm	Concrete pipe
52	302+520	Pipe	Ø800mm	Concrete pipe
53	303+067	Pipe	Ø500mm	Concrete pipe
54	303+202	Pipe	Ø1000mm	Concrete pipe
55	303+416	Pipe	Ø1000mm	Concrete pipe
56	303+487	Pipe	Ø400mm	Concrete pipe
57	303+691	Pipe	Ø900mm	Concrete pipe
58	303+834	Pipe	Ø800mm	Concrete pipe
59	303+949	Pipe	Ø750mm	Concrete pipe
60	304+053	Pipe	Ø400mm	Concrete pipe
61	304+178	Pipe	Ø400mm	Concrete pipe
62	304+313	Pipe	Ø900mm	Concrete pipe
63	304+491	Pipe	Ø750mm	Concrete pipe
64	304+581	Pipe	Ø1600mm	Concrete pipe
65	304+731	Pipe	Ø900mm	Concrete pipe
66	304+980	Pipe	Ø900mm	Concrete pipe
67	305+532	R: Arched L: Pipe	R: H=900mm L: Ø600m	R: Concrete L: Concrete pipe
68	305+803	R: Arched L: Pipe	R: H=900mm L: Ø600m	R: Concrete L: Concrete pipe
69	305+922	R: Arched L: Pipe	R: H=900mm L: Ø600m	R: Concrete L: Concrete pipe
70	306+212	R: Arched L: Pipe	R: H=900mm L: Ø600m	R: Concrete L: Concrete pipe
71	306+670	Arched	H=1000mm B=1000mm	Concrete
72	306+725	Arched	?	Concrete
73	307+277	Arched	H=1700mm B=1400mm	Concrete arch and stone walls
74	307+825	Arched	H=1000mm B=1000mm	Concrete
75	308+626	Pipe	Ø600mm	Concrete pipe
76	309+195	Pipe	Ø800mm	Concrete pipe

No.	Chainage	Shape	Cross section	Material
77	309+594	Pipe	Ø600mm	Concrete pipe
78	310+552	Pipe	Ø1000mm	Concrete pipe

Figure 178. The arched culvert at km 306+725

Figure 189. The pipe culvert at km 301+293

Figure 20. The combined culvert at km 305+922

Generally, arched culverts are in better condition than pipe culverts. Arched culverts are less clogged in comparison to pipe culverts. Heads of outlet structures of culverts

are overgrown with high vegetation. They are not regulated and generally, there is no connection between the culvert and the recipient.

Air

There are no current resources of air pollution within the observed road section Ivanjica - Sjenica. The data on the values of air pollution which were measured on the observed corridor were not available.

Based on experience and expected traffic intensity during and after planned rehabilitation work, a significant increase in traffic intensity on the corridor of the relevant road section is not expected, therefore, increase in the level of air pollution as a product of exhaust gases is also not expected.

In the phase of rehabilitation of the road, it is expected to increase the concentration of pollutants in the air, but just temporary.

Noise

Data on measured noise values on the observed corridor were not available. It is expected to have a temporary increase in the noise level during the rehabilitation phase of the road.

3. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

Relevant Institutions

Ministry of Environmental Protection (MoEP) is the key institution in the Republic of Serbia responsible for formulation and implementation of environmental policy matters.

The other aspects of environmental management related to road rehabilitation projects are dealt by several other institutions, among which are the Institute for Nature Conservation of Serbia (INCS), Institute for the Protection of Cultural Monuments of Kraljevo (IPCMK), PWMC "Srbijavode" and Public Enterprise "Roads of Serbia" (PERS).

For the needs of this design, the opinions/conditions from following institutions were obtained:

- Institute for the Protection of Cultural Monuments of Kraljevo No. 293/3 from March 20th 2018;
- Institute for Nature Conservation of the Republic of Serbia, No. 019-580/3 from April 10th 2018;
- Institute for Nature Conservation of the Republic of Serbia No. 019-1904/2 from August 1st 2019;
- Ministry of Environmental Protection, No. 011-00-00348/2018-03 from May 3rd 2018;
- PWMC "Srbijavode", WMC "Sava-Danube" No. 3843/1 from May 31st 2018.

All obtained opinions and conditions for the subject section are inclosed within Appendix 6.

Existing Serbian Legislation

Environmental protection in the Republic of Serbia is regulated by various laws and regulations at national and municipal level. The environmental legislation in force in Serbia is summarized in Appendix 3.

The Procedure of Environmental Impact Assessment in the Republic of Serbia

In the juridical system of the Republic of Serbia, the EIA procedure is regulated by the Law on Environmental Impact Assessment ("Official Gazette of RS" Nos. 135/2004 and 36/2009), which is completely in accordance with the European EIA Directive - 85/337/EEC. Therefore, the EIA study is not necessary for road rehabilitation projects, except for those road sections which are located within or in the vicinity of natural and cultural protected areas. In this case the proponent of the design needs to submit the request for Opinion about the need for making the Environmental Impact Assessment to the relevant ministry. Depending on the

estimation and significance of potential environmental impacts, the opinion is made about whether it is necessary to conduct the full procedure of Environmental Impact Assessment.

The request for opinion on the need for EIA with other accompanying documentation has been submitted to The Ministry of Environmental Protection (MoEP).

The opinion states that projects of heavy maintenance, rehabilitation and elimination of road damages **are not** on the prescribed List of projects for which the EIA is required or for which the EIA can be required (''Official Gazette of RS'', No. 114/08).

The opinion was obtained from The Ministry of Environmental Protection (MoEP) (No. 011-00-00348/2018-03 dated from May 3rd, 2018) that **it is not necessary to conduct the EIA study.**

On the basis of the aforementioned criteria, this project does not require the EIA study. However, **the policy of the World Bank requires the development of a partial evaluation - EIA and a preparation of the specific EMP for the construction site.**

Relevant International Financial Institutions (IFIs) – Policies and Statements

IFIs request that the following requirements must be applied:

- World Bank: Operational Policy OP 4.01 Environmental Impact Assessment, which requires a partial Environmental Impact Study and development of site specific EMPs for projects belonging to Category B;
- Operational Policy OP 4.12 Involuntary Resettlement;
- Resettlement Policy Framework – RPF;
- EIB: Statement of Environmental and Social Principles and Standards (2008).

The World Bank and EIB require that the project complies with the Republic of Serbia national laws and EU standards. However, the regulations of the Republic of Serbia do not provide the design of EMP for this type of investment, while the World Bank policy requires a partial EIA and EMP for each road section.

4. SUMMARY OF ENVIRONMENTAL IMPACTS

The following table presents a short overview of environmental impacts foreseen by the design:

Impact	Significance	Comment
Impacts on land use/settlements	Moderate	For the purposes of sidewalks' construction, problem regarding the usurpation of the Right-of-Way of the existing road must be solved based on IFI's principles and operational policies. The Designer made a compromise between technically acceptable and objectively feasible solution for the construction of sidewalks so auxiliary facilities are unaffected and critical locations are avoided. Relocation of 274.21 m^2 of illigaly built fences within RoW (46 fences in total) and expropriation of 37.48 m^2 of private land must be done. There are 78 PAPs under impact and 36 non-bearing plants in total, 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances. Draft ARAP is in final stage of preparation. Implementation of the measures envisaged by ARAP will be an integral part of the Contractor's Environmental Plan (CEP).
Underground 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 during the execution of works
Flora and fauna (protected areas and species)	Moderate	Execution of works in the immediate vicinity of a stork's nest placed on a pole of public lighting will be organized exclusively when it is not the reproduction period and when storks are not in the nest, namely until March 15th and after July 20th.

Impact	Significance	Comment
Noise	Moderate	Temporarily, rehabilitation works may lead to increase of noise levels during construction in a residential part of Sjenica.
Access to/intersections of the main road and local roads	Low	Rehabilitation will not have a negative impact on the existing intersections
Soil management	Low	With the application of appropriate measures of waste management
Waste management	Low	According to the plan of waste and waste water management
Cumulative impacts	Moderate / Low	Temporarily, rehabilitation works may cause a slight increase of noise levels and air pollutants concentrations during the works only. Also, pedestrian movement of local population may be slightly disturbed during relocation of fences and sidewalks' construction.

The works on road rehabilitation on the road section Ivanjica – Sjenica will have a smaller impact on the environment (the environmental protection category B). Most impacts are temporary and will disappear after the completion of works on heavy maintenance i.e. road rehabilitation and sidewalks' construction.

The following problems may occur during the rehabilitation works: disturbance in 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 construction 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

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

Possible temporary impacts which may occur as a consequence of construction activities, among other things consist of:

- execution of works in the immediate vicinity of a stork's nest placed on a pole of public lighting in Jezdimir Lovic Street;

- relocation of 274.21 m^2 of illigaly built fences (46 in total) within RoW and expropriation of 37.48 m^2 of private land in Jezdimir Lovic Street (including all assets under impact (46 fences, 36 plants, 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances);
- disturbance in the regular traffic flow;
- road safety;
- damages of the access roads;
- inconveniences caused by noise, waste and dust;
- emission of gases;
- potential impact on soil and water;
- short-term disturbance of flora and fauna;
- temporary disturbance of nearby settlements during the execution of construction and operative activities.

Noise and Air Pollution in Residential Areas

The quality of air on the site may cause temporary pollution due to dust caused by traffic on the construction site, and the main pollutants are increased levels of nitrogen oxides (NOx) and Sulphur oxides (SOx), which are found in the exhaust fumes from the construction machinery. Dust can be collected on vegetation and surrounding structures and can partially cause adverse impacts.

In the phase of the execution of works (during the period when certain types of work are expected to have increased dust emission), the construction site needs to be wet with the aim of reducing dust emission. It is necessary to have at least two tanks of water on the construction site, one of which is a backup one. In this way the “idle time” will be avoided when the tanks are refilled with water.

It is obligatory to cover the truckload.

Noise caused by rehabilitation works is temporary. Since there are no significant residential buildings near the road, it can be concluded that the noise prevention barriers will not be used in this design.

Contractor shall limit his works to the period from 7 am to 5 pm, especially during the execution of works in the inhabited part of the road section.

Possible Water Contamination

Water pollution may occur on the construction site, on the locations where the equipment, vehicles and machinery are washed, as well as on parking lots. The contaminated water shall be filtered through a gravity oil-water separator. In case of a spillage on the road 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. The Contractor is obliged to wash vehicles in the registered vehicle washing place. In this way the possible soil and watercourses pollution will be avoided near construction sites.

Potential Cumulative Impacts

The execution of works on heavy maintenance on the road section Ivanjica - Sjenica can have some temporary cumulative impacts (disturbance in pedestrial movement of residents, noise, air pollution, water and soil pollution), and they will not cause a significant impact on the environmental conditions.

Other Impacts

- Social impacts: largest social impacts are relocation of 274.21 m^2 of illigaly built fences within RoW and expropriation of 37.48 m^2 of private land in Jezdimir Lovic Street. Also, during the Socio-Economic Survey, various types of fences (46 fences in total), plot uses, 36 plants (30 firs, 1 birch, 2 quicksets and 3 willows), 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances were identified in the area of influence. All social-economic conflicts are taken into consideration, including health and safety during Works. 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 here. 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, but 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 will be collected on the site and transported onto a landfill, outside the site construction zone.

Disposal of waste in the territory of the Municipality of Sjenica is done according to the Regional Waste Management Plan for the municipalities of Prijepolje, Nova Varos, Priboj and Sjenica[3] and the Local Waste Management Plan for Sjenica municipality[4].

[3] http://www.priboj.rs/docs/razvoj_opstine/regionalni%20plan%20upravljanja%20otpadom.pdf
[4] https://www.paragraf.rs/opstinska-glasila/sjenica/sjenica_pdf/sjenica-33-2016.pdf

5. ENVIRONMENTAL MANAGEMENT PLAN

Environmental impacts of the project for heavy maintenance on the road section Ivanjica - Sjenica will be moderate to low. Mitigation measures provided in the EMP, relating to the design, road rehabilitation and operational phase, must be implemented appropriately. The EMP consists of Mitigation Plan and Monitoring Plan. It is based on the types of environmental impact, their scope and duration. PERS manages the design, supervision and execution of works applying the EMP.

A. MITIGATION PLAN

Impacts and proposed mitigation measures have been compiled into the Environmental Mitigation Plan (Appendix 1). It summarizes all the anticipated environmental impacts and its associated mitigation measures during the design, constraction and operational phases. It makes reference to the conditions issued by the authorized institutions (Institute for Nature Conservation of Serbia, the Institute for the Protection of Cultural Monuments of Kraljevo and PWMC “Srbijavode”, WMC “Sava-Danube”), law and contract documents, approximate location, time frame and the responsibility for its implementation and supervision.

The Contractor’s Management

The recommendations and proposed mitigation measures for the negative impact on environment, as shown in Appendix 1, represent the commitment of the Contractor. Mitigation measures will be incorporated as an integral part of the design and execution of works on heavy maintenance, and as such, their costs will be included in the rehabilitation price.

The EMP is a part of works program and the Contractor shall apply it through qualified and experienced staff that will be responsible for fulfilling the requests connected to the environmental protection from EMP. The Contractor and his subcontractors will work entirely in compliance with the laws of the Republic of Serbia, EU standards and the requests of the Creditors.

The Contractor will use this document to check the compliance with the CEP. It is the Contractor’s obligation to calculate the implementation of environmental mitigation measures in his overall cost.

The Contractor is obliged to confirm that:

- The EMP conditions have been included into the bid price;
- The Contractor has a qualified and experienced person in a team who will be responsible for the environmental compliance requirements of the EMP;
- The Contractor and its sub-contractors will comply with Republic of Serbia national laws, EU standards and requirements of the Creditors.

Site Organization Plan

Contractor shall carry out and follow the Site Organization Plan. Conditions issued by INCS shall be included in the Site Organization Plan. Location of the facilities (warehouses, workshops, asphalt and concrete plant etc.) shall be approved by an engineer who is always present. 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 riverbank area of the Vapa, Kladnica and Uvac (flood zone) and area with high vegetation and limited only to the duration of the works;
- Temporary or permanent locations must be provided (the existing organized communal facilities/landfills) for disposal muck and other waste in any form, as well as communal waste produced during the works; Waste disposal/dumping in the riverbank area of the Vapa, Kladnica and Uvac (flood zone) rivers or smaller temporary watercourses, as well as on the agricultural land shall be prohibited;
- After the completion of the works, all areas, which were in any way degraded by construction and other works, should be remedied as soon as possible (levelling and resoiling degraded surfaces up to the level and condition in which this area was found before the beginning of works);
- During the execution of works should be strictly adhere to the corridor of the road so that when handling vehicles and machines, no consequences are left to the wider area;
- During the works on the road that is located in the immediate vicinity of the Vapa, Kladnica and Uvac (flood zone) rivers or smaller temporary watercourses, the banks and river bank vegetation should be preserved as much as possible, in other words it is forbidden to destroy the wild species and disturb their habitats;
- During the execution of works, it is forbidden to dispose and leave any kind of waste neither in the zone of the Vapa, Kladnica and Uvac (flood zone) rivers nor in any other watercourse;
- In the zone of crossing the road (bridges over the Vapa and Kladnica rivers) across the watercourse, where it is necessary to make arrangements in accordance with the design, the use of stones and other natural materials should be anticipated thus largely avoiding the use of concrete on the banks and river beds watercourses;
- Servicing vehicle and machinery on the road section shall be prohibited. In case of a road traffic accident resulting in oil or service fluids spill, the road area must be cleaned, rehabilitated and reinstated (removing the contaminated soil layer, then levelling the surface);

- The works must be performed only during the day from 7 am to 5 pm on the parts where the road section is located in a populated area to minimize the impact of noise from local construction machines and vehicles;
- The installation of safety barriers, pedestrian crossings and passageways should be foreseen on places where it is useful, especially at locations near the existing settlements, on the basis of the Temporary Traffic Signage Design;
- Maintain the maximum level of communal hygiene throughout the works along the entire route. Define the locations for placement of containers for temporary disposal of waste within the roadside area (to locate containers for the temporary disposal of municipal waste on road extensions on the roadway) and to ensure their emptying on a daily basis, at the end of the working day;
- The area for Contractor's facilities must be of the smallest possible size, to avoid unnecessary removal of vegetation;
- All Contractor's facilities should be fenced appropriately;
- Appropriate drainage of the construction site must be provided. Asphalt areas including locations used for parking lot, workshops and fuel storages must be drained toward the oil-water separator;
- Sanitary waste water and polluted water must be treated before water is discharged into the recipient (surface water flow system), in compliance with the Law on Waters (''Official Gazette of RS'', Nos. 30/2010, 93/2012, 101/2016 and 95/2018);
- Fuel storage areas must not be located within 20 m of a water course;
- Where fuel in excess of 5,000 litres is stored on site, it will be stored in sealed tanks on a concrete base that is designed to hold 110% of the tank capacity;
- All workshops must have oil and water separators;
- The Contractor must have trained staff, which is competent to handle oil and remove the consequences of an accidental spill;
- Waste oil, oil filters and fuel must be stored on safe locations (in closed reservoirs on the concrete base). When the site is ready to be closed, all contaminated soil must be excavated and replaced with a new layer of soil;
- Cleared material is to be piled into manageable size heaps, according to disposal or re-use requirements;
- Limit the amount of excavation to reduce soil erosion. The Contractor should provide protection measures to prevent soil erosion;
- Apply a methodology for the protection of soil from the areas susceptible to erosion, in order to reduce the runoff of atmospheric water carrying erodive material from the location;
- 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;

- At the end of works, it is obligatory to cultivate terrain in all endangered areas using appropriate flora and species that are biologically stable in given climatic conditions, more resistant to adverse effects (exhaust gases) and correlated with the surrounding area and purpose.

Contractor's Environmental Plan

Bearing in mind all the identified impacts, it is necessary for the Contractor to prepare and later consciously apply Contractor's Enviromental Plan (CEP) during the project duration in order to ensure compliance with the requirements of the legislation and the Creditors.
The Contractor is required to have a qualified and experienced person in Contractor's team, who will be responsible for coherence between the works, the environment and the Environmental Management Plan. For this part of the work on the construction site, the presence of a responsible person is mandatory on a daily basis.

PERS will independently monitor the works, and if any irregularity is noticed, it will be transmitted to continuously present Supervision, and then to the Contractor who will be requested to rectify such irregularities.

For the purposes of sidewalks' construction in the Jezdimir Lovic Street in Sjenica, relocation of 274.21 m^2 of illigaly built fences within RoW i.e. on the state-owned land and expropriation of 37.48 m^2 of private land must be done. Draft ARAP is in final stage of preparation and it is expected to be finished soon. Implementation of the measures envisaged by the approved i.e. Final ARAP will be an integral part of the Contractor's Environmental Plan (CEP).

Contractor's Environmental Plan (CEP) shall also include the following:

- Site Management Plan: CEP should consist of the procedures for setting up and functioning of a construction site with a view in order to preserve the local community and natural resources;
- Construction Site Organization Plan: Description and arrangement of areas, with maintenance equipment and oil and lubricant storage facilities, including the distance from water areas and the details about proposed measures should indicate the environmental impact caused by their placement;
- Oil and Fuel Storage Management Plan: CEP should cover all the procedures for storing, transporting and using oil and fuel, refuelling the facilities and machines, procedures for decreasing the risk of water and soil pollution. All kinds of oil and fuel should be stored in the secondary storages whose capacity is at least 110% and each spill should be cleaned immediately. Fuel tanks will have the equipment for the treatment of

spillage in order to have it cleaned as soon as possible in the case of spillage. All types of spills will be reported in compliance with the Plan which should be made by the Contractor. A short training of workers should be organized as a 'continuous training' as well as after each accident;

- Waste Management Plan: All waste materials from the construction site, including barrels, wood, sand and gravel, cement bags, etc. should be disposed in an appropriate manner. If there is no possibility for recycling, incurring some reasonable costs, these materials should be transported to the approved landfill and deposited there. Disposal of waste in the territory of the Municipality of Sjenica is done according to the Regional Waste Management Plan for the municipalities of Prijepolje, Nova Varos, Priboj and Sjenica[5] and the Local Waste Management Plan for the municipality of Sjenica [6]. Hazardous waste will be stored and removed from the site after demobilization, in accordance with the Law on Waste Management ("Official Gazette of RS", Nos. 36/2009, 88/2010 and 14/2016). CEP should cover the aspects of waste management, including the application of practical standards, such as reduction, re-usage and recycling. CEP is to define the final location for disposing all types of waste and show that it has been done in accordance with the law and good waste management practice. The Waste Management Plan will include, at least, details of temporary waste disposal, waste transportation and pre-treatment process that precede the final disposal or recycling. Licensed/approved organizations must be used for collecting and storing solid and liquid waste. All types of waste leaving the site must be controlled and recorded. As part of the Plan, the 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 and get the signature on the final landfill. The Contractor shall keep all records for audit purposes and as a proof that this project applies the best practice and complies with the legal regulations;
- Sewage and Waste Water Management Plan presents the list of mesures for provision of sanitary latrines and proper sewage collection and disposal system to prevent pollution of watercourses;
- Soil Management Plan must define measures to be undertaken to minimize effects of wind and water erosion, measures to minimize loss of fertility of topsoil, time frames, haul routes and landfills;
- Noise: All equipment is to be licenced and approved in accordance with the EU standards. This applies to all machinery, vehicles and sites where noise and vibrations may affect susceptible receptors. In accordance with the Law on Noise Protection (“Official Gazette of RS” Nos. 36/2009 and 88/2010), the Contractor is responsible for ensuring the noise and

[5] http://www.priboj.rs/docs/razvoj_opstine/regionalni%20plan%20upravljanja%20otpadom.pdf
[6] https://www.paragraf.rs/opstinska-glasila/sjenica/sjenica_pdf/sjenica-33-2016.pdf

vibrations do not affect the local community. The Contractor shall limit his works to a period of daylight (from 7 am to 7 pm);

- Dust Emission Reduction Plan should have the water wetting schedule for the access roads and the settlements nearby the road that is being rehabilitated, as well as a list of machinery that is to be used. This applies to all of construction sites and haul roads. During rehabilitation, when dust may be generated, the Contractor will monitor the worksite conditions and apply dust control measures, which include reducing construction traffic movements and spraying water on exposed areas. It is necessary to have at least two tanks of water on the construction site, one of which is a backup one - This way the "idle time" will be avoided when the tanks are refilled with water;
- Material Excavation and Extraction Location Plan as well as the reparation measures should be implemented for the areas of borrow-pits and access roads when the project is finished;
- Management Plan for Works on the River: CEP should cover procedures and plans for water habitat and fish preservation during the works on the river (the Kladnica and Vapa river) and it should be an integral part of the Construction Technology;
- Emergency Response Plan: CEP should set out the procedures for emergency response in the event of accidents or major incidents, in order to protect people, property and environmental resources. Details of the spill response equipment should be specified and provided on site;
- Plan of Environmental Grievances (grievance mechanisms and organization) will show how local community and third parties affected by the project could define complaints which are the consequence of rehabilitation and to whom these complaints should be addressed (e.g. through conversations, consultations etc.) (see Appendix 4, Project Grievance Mechanism).

Safety

The Contractor should identify potential risks before the commencement of works. Provisions for emergency responses are to be included in the Construction Site Safety Plan, which shall include nomination of a person who will be immediately contacted if an accident occurs. The Site Safety Plan should be submitted to the Project Supervision Consultant for approval one week before the commencement of the works.

- The Contractor shall ensure that drugs and alcohol are not used on the construction site;
- The Contractor's Site Safety Plan will include 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;

- The Site Safety Plan will include provision for first aid facilities on-site and employ a trained first aid person, in accordance with the Law on Safety and Health at Work ("Official Gazette of RS" Nos. 101/2005, 91/2015 and 113/2017);
- The Contractor shall provide potable water supply, toilets and water supply for washing to the workers;
- Safety Labour Management Plan (SLMP), is required to ensure health and safety provisions during the works on heavy maintenance;
- The Contractor shall perform all project activities by respecting the SLMP, all Serbian laws and regulations regarding health and safety issues.

PERS and the Contractor are responsible for reporting and investigating incidents.

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

The Contractor is to ensure that:

- all trucks and equipment is maintained in a safe operating condition,
- all drivers and machinery operators are trained and act responsibly (to be stipulated in the Contractor's Site Safety Plan and Health and Occupational Safety on site),
- all truck loads are secured and all loads with potential dust generating materials (e.g. excavated soil and sand) are covered,
- safety and immediate removal of any driver that ignore any of the community safety requirements,
- speed limits are respected.

Prior to commencement of construction activities/site works, all of the above plans will be submitted by the Contractor to the Sector for Investments within the PERS for approval. Site restoration will follow the completion of works. It is Contractor's obligation to restore location of the project as it was at beginning of the project.

Operational Phase

In the road operational phase, special attention must be paid to safety of pedestrians, by using measures for traffic deceleration in the vicinity of populated areas, improving road signs and markings, paying attention to traffic accidents that are repeated in the same places by placing a "black spot" signs. Regular road maintenance consists of the following: grass cutting, clearing of drainage systems, pothole patching and various repairs, together with regular controls and maintenance of drainage structures. Seasonal maintenance, regular maintenance of safety features and road signs will be undertaken as necessary. Major maintenance, that

include resurfacing and bigger repairs are typically scheduled over periods of several years.

B. MONITORING PLAN

Monitoring plan is prepared in relation to the proposed Design (Appendix 2). The main components include:

- Environmental issue to be monitored and the means of verification;
- Specific areas, locations and parameters to be monitored;
- Applicable standards and criteria;
- Monitoring of noise levels near residential areas;
- Monitoring of the procurement of materials (checks that valid permits are in place);
- Duration, frequency and estimated monitoring costs;
- Institutional responsibilities for monitoring and supervision.

A field monitoring checklist will be prepared based on the EMP and Monitoring Plan (Appendix 2). The field monitoring checklist will be used by the supervising field engineer. The signed checklists will be provided to the PERS, who will be responsible for the follow-up and compliance reporting.

The PERS will maintain a Grievance Database, which will contain all the information on complaints or grievances received from the communities or other stakeholders. This includes: the type of complaint, location, time, actions to address these complaints and final outcome.

C. INSTITUTIONAL IMPLEMENTATION AND REPORTING ARRANGEMENTS

Project Implementation

PERS is the institution responsible for implementation of the Project and will be responsible for the implementation and compliance with the EMP and Monitoring Plan. Day-to-day implementation of the Project and monitoring its compliance will be the task of the Project Supervision Consultant.

Prior to the commencement of works, PERS will submit to the Bank for its approval a specific EMP.

The Contractor will provide the results of “zero monitoring” prior to commencement of earth works, during its own mobilization phase.

The Project Proponent shall do the following to ensure that the Contractor implements the proposed mitigation measures in the construction phase:

I. Clearly set out in the tender and contract documents the Contractor’s obligation to prepare the CEP and undertake environmental mitigation measures as specified in the Environmental Mitigation Plan (Appendix 1);

II. No compensation for the costs of the required environmental mitigation measures and monitoring activities in the form of the particular item in the Bill of Quantity (BoQ) shall be given to the Contractor, except for the water quality analysis and noise measurement. It shall be regarded as if the Contractor has included these costs in the other items of the BoQ. The actual costs of analyzing water quality and noise measurement within the defined Contract will be reimbursed to the Contractor in the form of a specific item in the total price. For non-compliance with the requested measures for mitigating the environmental impact and monitoring activities, the Contractor will receive a specific penalty in the form of demerit points. Demerit points are provided as a measure that should stimulate the Contractor to carry out his obligations in an organized and timely way and to perform his duty in a quality manner. Demerit points have in the same time two meanings - numeric and monetary. Each demerit point has associated monetary value which represents permanent payments reduction for determined noncompliance of the contracted obligations. The number of demerit points received will have a cumulative effect. If during the contract the Contractor receives more than certain number of demerit points specified in the Contract, the Contractor will not be allowed, for a period of 2 years, to compete for any other PERS works contract. Also, if the Contractor is awarded over a specified number of demerit points, the Employer has a right to terminate the Contract. The monetary value of each demerit point, as well as the deadlines for other possible actions by the Employer must be clearly stated in the Contract. The explanation for the application of these two measures - compensation for specific costs and penalties for non-compliance, should ensure the implementation of all required measures to mitigation of environmental impact and monitoring activities.

III. The Contractor must be explicitly required to recruit an environmental specialist. The Contractor will be responsible for the implementation of environmental mitigation measures during construction and shall employ an environmental specialist who will supervise implementation of the Contractor's environmental responsibilities. He will coordinate between the Contractor, PERS and the relevant Ministry, and will address any complaints during project implementation in cooperation with PERS. During project implementation, the PERS shall monitor the compliance of the Contractor with the EMP provisions. It is proposed that the Project Supervision Consultant employs an environment specialist (with civil engineering/environmental management background) to assist the environmental supervision.

PERS shall also be responsible for the following:

- Implementation of the requests for environmental protection provided by: State environmental authorities, IFIs and other institutions, Law on

Environmental Protection (''Official Gazette of RS'' Nos. 135/2004, 36/2009, 72/2009, 43/2011, 14/2016, 76/2018 and 95/2018);

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

The Contractor, during a pre-construction period, will make a proposal for environmental protection, including safety of persons associated with the works and the public, within the EMP. This proposal will be reviewed by PERS in order to obtain its acceptance.

In this regard, attention will be given to:

- taking all reasonable steps to protect the environment on and off site and avoid damage or nuisance to persons or property arising from its operations;
- maintaining safe conditions for all persons entitled to be on site;
- provision of all lights, guards, fencing, warning signs, traffic control, aiming to protect the works and other property as well as the safety and public interests.

The relevant Ministry (MoEP) will have the authority for immediate suspension of works, if performance is not in accordance with environmental standards and regulations. Inspection will then inform the PERS about suspension and order to proceed according to its directive.

Reporting Procedures

Public disclosure and the presentation of EMP were held and the report has been incorporated into EMP in Appendix 5.

The Contractor will prepare quarterly progress reports for PERS, which would present all the mitigation measures and measures for environmental protection along with the anticipated activities for monitoring, which were performed during the reporting period. The Contractor will take 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 reports to PERS.

In case of any accidents or environmental threats, there will be immediate reporting about these events. The Contractor shall inform the Project Manager and local authorities immediately after the accident. If the Project Manager is not available, the Contractor shall inform PERS about the accident.

The 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 grievance form is inclosed in the Appendix 4, while hard copies will be available in local community centres.

6. STAKEHOLDER ENGAGEMENT – INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

As required by the IFIs Safeguards Policies, public consultations were held during the preparation of EMP. The EMP and other project information were disclosed to the public and made available to the local community.

Detailed Report on Public Consultation process is shown in Appendix 5 of this EMP and contains a list of identified stakeholders.

Beneficiary consultations will be conducted during the construction phase, and records of environmental and social issues raised, and complaints received during consultations, field visits, informal discussions, formal letters, etc., will be followed up and the records will be kept in PERS.

As it was already mentioned, the dominant problem on this road section is the usurpation of the right-of-way of the existing road by private owners who build their fences on the state-owned land on the road section that passes through the inhabited part of Sjenica (Jezdimir Lovic Street).

Concrete steps in this regard were primarily undertaken by the Employer who had hired Technical Assistance (TA to PIT) i.e. ARUP consulting house to conduct a preliminary survey of potentially vulnerable citizens under the impact of the Design and record critical sites and places that needs to be avoided, as well as to inform local population about the Design and assess citizens' mood regarding the possible construction of sidewalks which would consequently require expropriation and relocation of illegally built fences on road lots. Preliminary survey was conducted from January 8th till January 11th 2019.

On places which were during Preliminary Survey characterized as problematic (locations with the auxiliary structures and locations where fence owners were explicitly unwilling to cooperate), through adjustment of the Preliminary Design solution a compromise was found between something that was technically acceptable and objectively feasible - The width of the sidewalks is reduced to a certain extent, taking into account that it corresponds to a minimum required for one pedestrian module (sidewalk width is nowhere less than 1 m). In this sense, all critical locations (locations with the auxiliary structures and locations where fence owners were explicitly unwilling to cooperate) have been avoided. Presentation of approved Preliminary Design Solution was held in Sjenica on May 8th 2019. In parallel with the presentation, the Socio-Economic Survey was conducted by TA to PIT, i.e. ARUP from May 6th to May 10th 2019.

Socio-Economic Survey data was used for preparation of Abbreviated Ressetlement Action Plan (ARAP). The objective of the ARAP is to specify the procedures to be followed and the actions to be taken to properly acquire land, relocate fences built on

the state-owned land and compensate affected people by allowing and providing for adequate participation, consultations and full functioning of the grievance mechanism. Furthermore, the plan sets out actions on how to avoid and mitigate future impacts and provide prompt and effective compensation for residual impacts if any to those eligible. Draft ARAP was prepared according to the Laws and Regulations of the Republic of Serbia and the Resettlement Policy Framework (RPF) prepared for this Project, which is consistent with the World Bank Policies and Procedures on Involuntary Resettlement OP 4.12.

Draft ARAP is in final stage of preparation and it is expected to be finished soon. Approved i.e. final ARAP will be submitted to the PERS's Sector for legal, staff and common affairs for further action and implementation. Final ARAP will also be delivered to the Contractor and implementation of the measures envisaged by ARAP will be an integral part of the Contractor's Environmental Plan (CEP).

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

- Newspaper articles in one national and also in one local media,
- Posters on main notice board at all community centres of potentially affected communities,
- Radio announcements about traffic diversions,
- Providing contact details of responsible person appointed to work with local communities.

A Grievance Mechanism will be implemented to ensure that all complaints from local communities regarding Works are dealt appropriately, with corrective actions being implemented, and the complainant being informed of the outcome. It will be applied to all complaints from affected parties. A grievance form is attached in Appendix 4, and hard copies will be made available at community centres.

Also, regarding ARAP, special Grievance Commission (GC) will be established by the Beneficiary of Expropriation (PERS), together with the Municipality of Sjenica and PAP's representatives. The objective of the independent Grievance Commission will be to provide guidance/advice, and to deal with any complaint/grievance associated with expropriation or fence relocation carried out in Jezdimir Lovic Street.

7. REFERENCE

- Environmental Assessment Sourcebook 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, Environmetal and Social Policy (2008);
- EIB, Statement of Environmental and Social Principles and Standards (2008);
- EMP for the rehabilitation of roads, bridges and tunnels, under the World Bank project, Road Management and Traffic Safety Project, Republic of Srpska, Roads Directorate, Banja Luka, (2001);
- Environmental Assessment Report and EMP for Serbian Transport Rehabilitation Project, report No: E866, project name/ID: YF – Transport Rehabilitation Project – No. P075207, document date November 30th 2003.

APPENDIX 1

MITIGATION PLAN

Phase	Issue	Mitigation measures	Responsibility		Comments
			Implementation	Supervision	
Pre-construction	**Main Design Phase**				
	The respect for the procedures related to the protection of the environment	The Designer obtained and implemented the conditions from the relevant institutions regarding the environmental protection (Ministry of Environmental Protection, Institute for Nature Conservation of Serbia, Institute for the Protection of Cultural Monuments of Kraljevo and PWMC "Srbijavode") in order to avoid environmental risks during the heavy maintenance.	PERS/Main Design Consultant	Technical control/PERS	
	The choice of the location for the Contractor facilities and a construction site organization	The location must be approved by PERS. • The location (construction site), as well as space for temporary disposal i.e. storage of required construction and other material and storage, have to be outside the riverbank zone of the Vapa, Kladnica and Uvac (flood zone) rivers, as well as outside the space with high vegetation. • The locations will be chosen in a way that has no impact on the environment and the local community (noise, dust, vibrations). • Contractor should minimize the size of the facilities in order to minimize the unnecessary removal of vegetation • The sanitary wastewater must be treated before the water is discharged into the surface water system. • Paved areas, including parking areas, workshops and fuel storages must be drained toward an oil-water separator and the areas for fuel storage must be located at a distance larger than 20 m away from the watercourses. • Mechanical topsoil degradation should be avoided. • Soil erosion on site should be prevented. Contractor should limit the scope of the excavations to mitigate possible soil erosion and should avoid excavation and machine operations in damp site conditions.	PERS/Contractor	Supervison Consultant/PERS	
	Site selection for construction camps, near or within existing settlements. Impact on public health and sociological setting	• Minimum distance must be kept (buffer zone) between the site and the nearest populated area. • Influence of the local conditions must be taken into account (wind) to avoid or minimize harmful effects. • The Contractor's EMP should define health and safety and environmental measures. • Independent water and electricity supply, in addition to a medical service station with a trained employee in the construction camp must be planned.	Contractor	Supervision Consultant/PERS	
	Safety of pedestrians and suitable crossings	Plan for safe and adequate pedestrian crossing facilities that will be equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams.	Main Design Consultant	Technical control/PERS	

	Stakeholder engagement	Details of the proposed road alignment, access points and safety features will be disclosed in the locality of the planned works. Feedback from local stakeholders will be sought and recorded. Evidence of how feedback has been considered in the final design will be recorded.	PERS/Main Design Consultant	Technical control/PERS	
	Relocation of 274.21 m^2 of illegally built fences within the RoW and expropriation of 37.48 m^2 of private land for the purpose of sidewalks' construction in the Jezdimir Lovic Street, including all assets under impact (46 fences, 36 plants, 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances)	Abbreviated Resettlement Action Plan (ARAP): The objective of the ARAP is to specify the procedures to be followed and the actions to be taken to properly acquire land and compensate affected people by allowing and providing for adequate participation, consultations and full functioning of the grievance mechanism. Furthermore, the plan sets out actions on how to avoid and mitigate future impacts and provide prompt and effective compensation for residual impacts if any to those eligible. Approved i.e. final ARAP will be submitted to the PERS's Sector for legal, staff and common affairs for further action and implementation. Final ARAP will also be submitted to the Contractor. Implementation of the measures envisaged by ARAP will be an integral part of the Contractor's Environmental Plan (CEP).	Main Design Consultant/TA to PIT/PERS	Technical control/PERS/IFIs	
Construction	**Management Plans**				
	Contractor shall prepare the following 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 – Grievance mechanism – Soil Management Plan – Dust Management Plan – Location of the proposed material extraction site, as well as rehabilitation measures to be implemented for the borrow areas and access roads upon project completion – Waste and Wastewater Management Plan, in line with the Law on Waste Management ("Official Gazette of RS" Nos. 36/2009, 88/2010, 14/2016 and 95/2018) – Oil and Fuel Storage Management Plan – In-river Works Management Plan – Site Management Plan – Emergency Response Plan – Recultivation Plan – Safety and Hazard Assessment - Safety and Labour Management Plan.		Contractor	Supervision Consultant	
	Relocation of 274.21 m^2 of illegally built fences within the RoW and expropriation of 37.48 m^2 of private land for the purpose of sidewalks' construction in the Jezdimir Lovic Street, including all assets under impact (46 fences, 36 plants, 2 gravel access roads, 1 raised concrete plateau (10.17 m^2) and 3 concrete entrances)	Abbreviated Resettlement Action Plan (ARAP): ARAP specifies the procedures to be followed and the actions to be taken to properly acquire land and compensate affected people by allowing and providing for adequate participation, consultations and full functioning of the grievance mechanism. Also, ARAP sets out actions on how to avoid and mitigate future impacts and provide prompt and effective compensation for residual impacts if any to those eligible. Implementation of the measures envisaged by ARAP should be an integral part of the Contractor's Environmental Plan (CEP).	PERS/Contractor	Supervision Consultant/PERS	
Construction	**Construction Site Induction**				

	Construction site safety	All workers and visitors to the site shall be given a health and safety induction and instructed on the need to use PPE.	The Contractor's expert for H&S and environmental issues	Supervision Consultant	
Construction	**Material Supply**				
	Asphalt plant: dust, fumes, health and safety effects, ecosystem disturbance	Usage of the existing asphalt plants, requirement for official approval or valid operating license	Asphalt plant	Asphalt plant / Supervision Consultant	Bid suppliier / Approved supplier
	Quarry: dust, health and safety of workers, ecosystem disturbance	Usage of the existing quarries, requirement for official approval or valid operating license	Quarry	Quarry / Supervision Consultant	
	Sand and gravel borrow-pits: riverbed 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 / Supervision Consultant	
	Concrete plant: dust, fumes, health and safety effects, ecosystem disturbance	Use the existing concrete plants or buy concrete from licensed suppliers. The material should have appropriate quality attestations	Concrete plant	Concrete plant / Supervision Consultant	
Construction	**Material Transportation**				
	Asphalt /Dust, fumes	All truck loads need to be covered	Truck operator	Truck operator / Supervision Consultant	
	Stone/Dust	Wet/covered truck load	Truck operator	Truck operator / Supervision Consultant	
	Sand, Gravel/Dust	Wet/covered truck load	Truck operator	Truck operator / Supervision Consultant	
	Cement, concrete	Remove the fresh concrete which was negligently spilled from the mixer from the transport roads within 6 hours.	Truck operator	Truck operator / Supervision Consultant	
	Traffic noise exhaust fumes and road congestion	Obeying the working hours (desirable from 9 am to 2 pm); the use of alternative routes to reduce the usage of the main roads to the minimum. Adequate temporary road signalization	Person in charge of transportation / truck operator	Person in charge of transportation / truck operator / Supervision Consultant	
Construction	**Construction Site**				
	Negative impact of noise on workers and local community and fauna	– To limit the activities to daylight working hours (without works between 8 pm and 7 am) or work during the specified period, but with the approval of the population and management; – Use of construction machines with equipment that reduces sound; ensure the maximum functionality of machines by regular inspections (periodic) or an exceptional technical inspection of vehicles and equipment; – To use equipment with noise mufflers, licensed and approved in accordance with the EU standards; – To use noise barriers for noisy works for those longer than one day in the same location / area.	Contractor	Supervision Consultant	

	Dust	Measures to be introduces: – Avoiding / reducing to a minimum dust emission – Wetting / spraying the construction site – Construction site access – Material landfills during loading / discharging activities – Covering the vehicles which carry dusty materials – Spraying / cleaning wheels on the vehicles – Limiting the speed of movement for vehicles – Cleaning the construction site.	Contractor	Supervision Consultant	
	Vibrations	To limit activities to daylight working hours (without works between 8 pm and 7 am) or work during the aforementioned period, upon obtaining the permission from the inhabitants and management. Locate the equipment for earthworks as far away as possible from the vibration-sensitive receptors.	Contractor	Supervision Consultant	
	Traffic disruption during construction activities	– Traffic Management Plan with measures to redirect traffic, that are easily seen or easy to follow, – Including traffic police assistance if needed, – Preparation of Traffic Management Plan that establishes a speed limit for construction vehicles and organizes traffic so that it is mostly performed outside the populated areas, – During work execution, maximize the existing network of roads and avoid the construction of new roads for temporary use, which would further increase the fragmentation of space and existing habitats, – To inform the local community about planned works.	Contractor	Supervision Consultant /PERS	
	Reduced access to roadside activities	Provide an alternative access to roadside activities at all times.	Contractor	Supervision Consultant	
	Safety of vehicles and pedestrians when there are no construction activities	Lighting and well-defined safety signs and protection measures.	Contractor	Supervision Consultant	

	Soil and water pollution from improper material storage, management and use	– To organize and cover material storage areas; – To isolate the concrete, asphalt and other from the watercourses by using sealed formwork or covers; – Washing the trucks for concrete and asphalt, as well as washing other machinery is to be done exclusively in registered car washes; – To organize the construction site so as to minimize the risk of generating sediments and accumulating waste water, which could cause pollution of the surrounding soil and water (consider situations such as drainage for atmospheric water, waste water collected from the structures on the construction site such as the structure for washing the wheels); – The Soil Management Plan must be prepared to control removal, storage and re-use of topsoil; – To use localized controlled measures to prevent sediment flowing into surface water and drainage canals. Some of the measures include physical obstacles such as fences for sediments, checking barriers, mulch barriers, e.g. protective leaves covers, geotextile, rock groynes, and sediment basin), marking them in order to make the road slope optimal and the slope edges sharp (steep); – To prevent sediment flowing into surface water, slope of the soil and protection from wind erosion must also be considered, by installing fences, covers etc.	Contractor	Supervision Consultant	
	Soil and water pollution from improper material storage, management and use	– To dispose waste material at a location protected from washing out, on a marked location, if not on site, then on an authorized landfill. Disposal of waste in the territory of the Municipality of Sjenica is done according to the Regional Waste Management Plan for the municipalities of Prijepolje, Nova Varos, Priboj and Sjenica (http://www.priboj.rs/docs/razvoj_opstine/regionalni%20plan%20upravljanja%20otpadom.pdf) and according to the local waste management plan for Sjenica municipality (https://www.paragraf.rs/opstinska-glasila/sjenica/sjenica_pdf/sjenica-33-2016.pdf). – Storage of waste according to international best practice (IFC, EHS – General Guidelines). – Apply additional measures for storing hazardous waste (such as secondary containment, limiting the access, providing PPE equipment etc.) to prevent negative effects on the workers, construction site staff, environment or the local community. – Using and labelling the containers planned for waste collection, as well as the areas for disposing different types of waste (hazardous and non-hazardous). – Transport the waste in marked vehicles designed for waste transport, to minimize the risk of releasing substances (hazardous and non-hazardous substances) as well as remains that can be carried by the wind. – To 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	Supervision Consultant	

	Potential contamination of soil and water from improper maintenance and fueling of equipment	– Disposing of and handling lubricants, fuel and solvents is to be performed exclusively in the secured area and storage with concrete base; – To ensure proper loading of fuel and equipment maintenance; – To collect all waste and dispose it on authorized recycling locations.	Contractor	Supervision Consultant	
	Possible water contamination during execution of works on bridges	– Storage and oil, fuel and solvents handlin should only be carried out in a secured space and warehouse with a concrete base; – During the execution of works, it is forbidden to dispose and leave any kind of waste, especially waste from construction site, in the zone of any other watercourse; – Provide free space for tanks that would receive hazardous and toxic substances in the bridge zone. It is necessary to ensure that the spilled liquid (in case it happens by accident) is led in a controlled manner to the tank (minimum volume 220l), so that water quality of the watercourse is not contaminated.	Contractor	Supervision Consultant	
	Safety of workers	– Provide workers with safety instructions and PPE; – Provide a safe alternative traffic flow.	Contractor	Supervision Consultant	
	Soft/hard landscaping	– Take measures to gradually establish vegetation again by covering crops and natural endemic species and monitoring their effectiveness. – In places where the initial planting failed, plant replacements will be made. – Avoid invasive and allergenic species.	Contractor	Supervision Consultant	
	Possibility of an archaeological site existence	In case the Contractor comes across an archaeological site (special attention is paid to the parts of the road section indicated under the conditions of the Institute for the Protection of Cultural Monuments of Kraljevo), he is obliged to stop the works immediately and inform the relevant Institute for the Protection of Cultural Monuments of Kraljevo and PERS.	Contractor	Supervision Consultant	
	Registered stork's nest in Jezdimir Lovic Street	According to the conditions of the Institute for Nature Conservation of Serbia (no. 019-1904/2 dated from August 1st, 2019), execution of works in the immediate vicinity of a nest should be organized exclusively when it is not the reproduction period and when storks are not in the nest, namely until March 15th and after July 20th.	Contractor	Supervision Consultant / Representative of the Competent Institution	
Construction	**Special Measures Defined by the Conditions of Relevant Institutions**				

	The Institute for Nature Conservation of Serbia	– The Design for Heavy Maintenance of the road section IB 21 plans such solutions and measures that will provide conditions for the preservation of air, soil, underground and surface water in the immediate environment (especially the Uvac river and Sjenica Lake) – Prior to the commencement of the works, it is necessary to inform the manager of the protected Nature Reserve "Uvac" Itd. from Nova Varos, as well as the competent institution, about time intended for the commencement of works in order that the authorized person could monitor the implementation of the conditions and take environmental protection measures. – When carrying out works on the road section IB 21 that passes along and across the Uvac River, it is necessary to foresee maximal preservation of the riverbed and riverbank, as well as any kind of vegetation. – It is necessary to maximally preserve vegetation, especially dendroflora, namely old and high-quality trees and unusual, rare and other important species of trees and shrubs. This is particularly important for the part of the route that passes through the protected natural resource of the first category. – Trees in the vicinity of the route of the carriageway IB 21 should be protected from damaging while handling of vehicles and construction machinery. In case of digging, the root system must remain undamaged. – It should be envisaged by the Design to undertake anti-erosion protection measures from landslides, rockfalls, etc. It is desirable to apply biological and biotechnical measures as much as possible, in combination with technical measures, to the level of functional stabilization of the terrain. – The drainage of the road must be carried out by gravity surface water drainage and, if necessary, by the construction of open canals for the reception of surface water. – For road surfaces use materials that provide noise and vibration reduction and allow efficient drainage of water from the surface of the carriageway – Works on the road that passes through protected area should be carried out only in the daytime due to the possible negative impact of the noise produced by the construction machinery and vehicles on the animal world in the immediate environment. – When carrying out the works, a strict adherence to the route and corridor of the road is demanded in order not to leave an impact on a wider space using vehicles and machinery. Also, use an existing road network without building new roads, in order to prevent the fragmentation of space and existing habitats. – Service of vehicles and maintenance of construction machines in the area of protected natural resources is not permitted. If there is a fuel, oil or any other hazardous materials spill by accident, in order to protect the land, an immediate remediation is required. – During the execution of works along the entire route of the road section IB 21, the maximum level of communal order should be maintained. – In order to prevent accidents, preventative measures should be foreseen. If accidents occur, an appropriate rehabilitation should be carried out with the obligation to notify competent inspection services and institutions. – If there is a fuel, oil or any other hazardous materials spill by accident, in order to protect the land, an immediate remediation in order to return to the original condition is required. – During the execution of works, the maximum level of communal order should be maintained. Carry out systematic collection of solid waste that occurs in the process of construction and waste provided by workers who stay in the zone of construction sites. – Construction and communal waste generated during the works should be collected in containers designed for this purpose and regularly evacuated in cooperation with the competent communal service. – It is not allowed to dispose any waste in the protected area. – An integral part of the Design should be related to the organization of the site, where it is necessary to define and provide: • Temporary locations for the storage of the necessary construction and other materials and equipment, which must be located outside the area with high vegetation as well as the flood zones of the Uvac River and be limited only during the execution of works; • Temporary or permanent locations must be provided (the existing organized communal facilities/ landfills) for disposal and deposing muck and other waste in any form, as well as communal waste produced during the works. Waste disposal in the area of the riverbank of Uvac and Lake Sjenica, as well as on the agricultural land shall be prohibited, except in the locations defined by the Design; • When the works are done, all surfaces that are degraded in any way should be rehabilitated as soon as possible.			

	The Institute for Nature Conservation of Serbia	– Once construction works are completed, it is necessary to remove all mechanization, building materials and other materials as soon as possible. – If there is a violation of the subject area (terrain along the road section IB 21), that road must be rehabilitated by establishing a plant cover (cultivate terrain) in all places that are damaged, renaming appropriate flora and species that are biologically stable under given climate conditions, relatively resistant to harmful effects (exhaust gases, etc.). – The selection of plant species for terrain rehabilitation should be correlated with the surrounding area and its purpose. Avoid plants that are recognized as invasive for our climate: Acer negundo or Boxelder maple, Amorpha fruticosa or False indigo bush, Robinia pseudoacacia, Ailanthus altissima, Fraxinus americana, Fraxinus pennsylvanica, Celtis occidentalis, Ulmus pumila, Prunus padus and Prunus serotina and species that are determined as allergens (cottonwoods, etc.). – If during the works it encounters geological-palaeontological or mineralogical-petrochemical objects, which are presumed to be a property of the natural good, the Contractor is obliged to notify the Ministry responsible for environmental protection within eight days, and to take all measures in order not to damage the natural good until the arrival of an authorized person.			
	The Institute for Nature Conservation of Serbia Amended conditions (no. 019-1904/2 dated from August 1st, 2019)	– Execution of works on road infrastructure maintenance in immediate vicinity of the stork's nest may be carried out exclusively out of the reproduction period and when storks are not in the nest, namely, when the offspring flys out of the nest and leaves the territory to move to another region and before the next breeding cycle, no later than March 15th and after July 20th. – If it is planned to move pole of public lighting in the final design solution, it is necessary to inform the Institute for Nature Conservation of Serbia and submit a request for getting a decision on the conditions of nature protection for displacement of nests, in accordance with Article 9 of the Law on Nature Protection.			

	The Institute for the Protection of Cultural Monuments of Kraljevo	There are the following sites with archaeological contents in the immediate vicinity of the route: – Vlach grave (N 4804507; E 7422943, position from km 295+780 to km 295+850) – Muslim graveyard (N 4793782; E 7418690, position from km 310+170 to km 310+260) – If earthworks are carried out in these areas (making of drainage canals, widening of roads, connection with local rural roads etc.), supervision of an expert - archeologist should be provided in order not to devastate cultural layers. – Professional supervision can be carried out by the Institute for the Protection of Cultural Monuments with the appropriate professional staff. The costs of supervision over the execution of works are funded by the Employer. The institution is obliged to prepare a report on this, which is permanently kept in the documentation of the Institute. – If during the execution of works on the state road IB 21, road section Ivanjica - Sjenica, in length of 23.036 km, movable or immovable remains of archaeological origin are found out, the Employer or Contractor is obliged to suspend further works immediately and without any delay notify the competent institution. – The expert of the Institute is entitled to allow monitoring of works or archaeological excavations after insight into the discovered material. – The unauthorized collection of archaeological material is prohibited. – The Contractor/Investor is obliged to take protective measures if the finding would not be destroyed or damaged. It should stay safe and in the position in which it was discovered. – It is the duty of the Investor to provide funds for research, safekeeping, monitoring, protection and preservation of the discovered remains which require previous protection - until the handing over the property to an authorized protection institution. – It is necessary to obtain new conditions of the Institute in order to change something in the Design.			

	Public Water Management Company „Srbijavode”, Belgrade Water management center „Sava – Danube”	– Investor should provide project documentation in accordance with existing legal regulations, as well as the applicable standards for this type of work, according to the ToR. – Perform detailed geodetic survey and make a geodetic surveying map (cadastral - topographic plan). Show the exact position of all lots on the cadastral - topographic plan. - Solve all property legal relations with regard to land involvement. - Regarding the technical documentation, a detailed description of the technology of execution of works, bill of quantities and preliminary estimate of works, as well as all necessary graphical attachments should be given, whereby the works concerned must not endanger water regime in quantitative and qualitative terms. – Works should be carried out in accordance with technical regulations and norms for this type of work. – Perform and check through calculation the control of throughput capacity of these facilities. During rehabilitation process, there should be no reduction in bridge span and culverts. – Timely inform PWMC “Srbijavode” - WMC “Sava-Danube” in written form about the commencement of the work in order to control the works and their influence on water regime. – The works should be carried out with expert supervision (according to the provisions of the Law on Planning and Construction) – Works should be executed and adapted to the hydrological period of low water levels. – Upon completion of the work, Contractor should remove all material and equipment used during the execution of works. – If certain damages occurred as a consequence of works, they should be compensated and eliminated at the expense of Employer as soon as possible. – During the execution of works, flood defense system should not be jeopardized.			
Operational	**Maintenance**				
	Noise disturbance to human and animal population and workers	– limit activities to daylight working hours (no works between 8 pm and 7 am or in accordance with the public consent); – use the equipment with noise mufflers installed.	Maintenance Contractor	Maintenance Contractor\PERS	It should be specified in the contract maintenance documentation - Technical Specifications for the performance of maintenance works
	Possible air, water and soil pollution	– apply the best engineering practice in handling and safe storage of lubricants, fuel and oil in secured storages; – ensure proper loading of fuel and maintenance of equipment; – collect and dispose all waste in accordance with the Law on Waste Management; – properly organize and cover the areas for material storage; – isolate concrete and asphalt works from the watercourse by using sealed formwork; – washing the vehicles and construction machines should be done exclusively in registered car washes.	Maintenance Contractor	Maintenance Contractor\PERS	

	Vibrations	limit activities to daylight working hours (no works between 8 pm and 7 am, or as agreed with the public and authorities)	Maintenance Contractor	Maintenance Contractor\PERS	
	Safety of workers	– Provide workers with safety instructions and PPE; – Organize safe traffic bypass using alternative roads and appropriate traffic signage; – All the workers and visitors to the construction site will be introduced to the basics of environmental protection and safety measures and protection at work and will be given instructions for using the PPE.	Maintenance Contractor	Maintenance Contractor\PERS	
	Maintenance	– Regularly maintain curbs; – Mow and maintain grass and take it to the landfill; – Regularly clean drainage structures (gullies) and dispose waste material on specially designated landfill; – Regularly clean the road surface; – Fill in the holes, joints and cracks; – The remains of asphalt after works should be transported and stored on an appropriate landfill designated for construction materials; – Clean the road surfaces regularly and timely, as well as the surrounding road structures in case of a traffic accident or overturning of tanks or other trucks; – Make repairs.	Maintenance Contractor	Maintenance Contractor\PERS	
	Increased vehicle speed	- Install speed limit signs	Maintenance Contractor	Maintenance Contractor\PERS	It should be specified in TS in the part about maintenance works
	Erosion, rockfall, hazardous situation	– Install suitable warning signs (rockfall, landslide, wet or slippery conditions, dangerous curve, animal or pedestrian crossing, school, slow traffic zone, merging); – Reflective markings indicating steep slopes or convex mirrors in curves where there is a lack of visibility; – Put warning signs on locations considered necessary by good engineering practice, or as agreed in writing with authorities.	Maintenance Contractor	Maintenance Contractor\PERS	

APPENDIX 2

MONITORING PLAN

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored? Type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored?	Institutional responsibility Implementation
Construction	**Material Supply**					
Asphalt plant	Possession of an official approval or valid (operating) license	Asphalt plant	Inspection/Supervision	Prior to the commencement of works	Assure plants, quarry and borrow-pit compliance with environment, health and safety requirements	Plant Manager / Contractor's supervision / Supervision Consultant
Quarry	Possession of an official approval or valid (operating) license	Quarry	Inspection/Supervision	Prior to the commencement of works		Quarry Operator / Contractor's supervision / Supervision Consultant
Sand and gravel borrow-pit	Possession of an official approval or valid (operating) license	Sand and gravel borrow-pit	Inspection/Supervision	Prior to the commencement of works		Borrow-pit or separation facility operator / Contractor's supervision / Supervision Consultant
Concrete plant	Possession of an official approval or valid (operating) license	Concrete plant	Inspection/Supervision	Prior to the commencement of works		Operator of a concrete plant / Contractor's supervision / Supervision Consultant
Construction	**Material Transport**					
Asphalt	Truck load covered	Construction Site	Supervision	Unannounced inspections during the works, at least once a week	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible	Contractor's supervision / Supervision Consultant
Stone	Truck load covered or wetted	Construction Site	Supervision	Unannounced inspections during the works, at least once a week	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible	Contractor's supervision / Supervision Consultant
Sand and gravel	Truck load covered or wetted	Construction Site	Supervision	Unannounced inspections during the works, at least once a week	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible	Contractor's supervision / Supervision Consultant

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored? Type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored?	Institutional responsibility Implementation
Concrete plant	Removing fresh concrete that was accidentally spilled from the mixer on the transport roads within 6 hours	Construction Site	Supervision	Unannounced inspections during the works	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible	Contractor's supervision / Supervision Consultant
Traffic guidance	Hours and routes selected	Construction Site	Supervision	Unannounced inspections during the works	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible	Contractor's supervision / Supervision Consultant
Construction	**Construction Site**					
Noise disturbance to workers and neighbouring population	Noise levels	Construction site, nearby houses along the construction site	Equipment – manual equipment for analysing (detecting the level of noise) with the software for its application	– Once, at the beginning of the project, – quarterly, – due to grievances, – If the tracking results are not satisfactory, it is to be prepared on a monthly level.	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible.	Contractor's supervision (monitoring) / Supervision Consultant
Water and soil pollution resulting from improper material storage, management and use	Soil and water quality (suspended solids, oils, PH values, conductivity)	Watercourses near the storage places	– Unannounced sampling, – Analysis in a certified laboratory possessing the required equipment	Monitoring should be performed prior to the construction (at the reference point up creek from the construction site) and once during the rehabilitation works. If the tracking results are not satisfactory, it should be performed at a monthly basis until the works on the site are finished.	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible.	Contractor's supervision (monitoring) / Supervision Consultant
Dust	Air pollution (solid particles)	On and near the construction site, quarry, inhabited settlements	Inspection and visual observation	Unannounced inspections during the delivery of materials and construction	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible.	Contractor's supervision (monitoring) / Supervision Consultant
Vibrations	Limited time of the activities	Construction Site	Supervision	Unannounced inspections during the active works and due to grievances	Assure compliance with environment, health and safety requirements and enable as little disruption to traffic as possible.	Contractor's supervision (monitoring) / Supervision Consultant

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored? Type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored?	Institutional responsibility Implementation
Traffic disruption during construction activity	The existence of the Traffic Management Plan and traffic pattern	On the construction site and area nearby it	Inspection; Supervision	– Prior to the commencement of works – once a week in the periods with the largest amount of works and – calm periods when the quantity of activities is not the highest	Minimal disruptions of traffic	Contractor's supervision / Supervision Consultant
Reduced access to roadside activities	Alternative access provided	Construction Site	Supervision	Random checks at least once a week during construction site activities	Minimal disruptions of traffic	Contractor's supervision / Supervision Consultant
Safety of vehicles and pedestrians where there are no construction activities	Visibility and suitability	On the construction site and area nearby it	Observation	Random checks at least once a week at evening hours	Assure the compliance with the health and safety and environmental requirements. Minimal disruptions of traffic	Contractor's supervision / Supervision Consultant
Safety of workers	PPE; bypass traffic organization	Construction Site	Inspection	Unannounced inspections during the works	Assure the compliance with the health and safety and environmental requirements. Minimal disruptions of traffic	Contractor's supervision / Supervision Consultant
Stork's nest In Jezdimir Lovic Street	Time and period of execution of works	Immediate vicinity of the stork's nest in Jezdimir Lovic Street	Supervision	Continuously during the works	Assure the compliance with conditions of the Institute for Nature Conservation of Serbia in order to protect strictly protected species	Contractor's supervision / Supervision Consultant / Representative of the Competent Institution
Construction of sidewalks	Acting according to ARAP	Construction Site (Jezdimir Lovic Street)	Inspection; Supervision	Continuously during the works	In order to ensure to properly acquire land and relocate fences built within RoW that interfere with sidewalks' construction	Contractor's supervision / Supervision Consultant / PERS

Phase	What is the parameter to be monitored?	Where the parameter should be monitored?	How the parameter should be monitored? Type of monitoring equipment	When the parameter should be monitored? (frequency of measurement or continuous)	Why the parameter should be monitored?	Institutional responsibility Implementation
Works on bridges	Possible water contamination during execution of works on bridges	In immediate vicinity of bridges and on bridges themselves	Supervision / Water quality control	Continuously during the works	Ensure compliance with the requirements of environmental protection, health and safety at work as well as the requirements for the preservation of surface water quality.	Contractor's supervision / Supervision Consultant / Representative of the Competent Institution
Operational	**Maintenance**					
Negative effect of noise on the workers and local residents	Noise levels	Construction Site; nearby houses	Equipment – manual equipment for analysing (detecting the level of noise) with the sutable software	Unannounced inspections during the maintenance activities and due to grievances	Ensure the compliance with the health and safety and environmental requirements	PERS
Vibrations	Limited time of activities	Construction Site	Supervision	Unannounced inspections during the maintenance activities and due to grievances	Ensure the compliance with the health and safety and environmental requirements	PERS
Safety of workers	PPE; bypass traffic organization	Construction Site	Inspection	Unannounced inspections during the maintenance activities and due to grievances	Ensure the compliance with the health and safety and environmental requirements	PERS
Operational	**Road Safety**					
Increasing the speed of vehicles	The conditions of traffic signs, the vehicle speed	Road section included in the design	Visual observation; Speed detection	During the activities, unannounced	Ensure safe and economical traffic flow	Maintenance Contractor; Traffic police
Erosion, rockfall and hazardous situations	The condition of danger warning signs	Road section included in the design	Visual observation	During the activities	Ensure safe and economical traffic flow	Maintenance Contractor

1. General		
Is the project compliant with all relevant 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, lead to 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 possible violations:
How many inspections were carried out by 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 were carried out by 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 sub-contractors for project related work?	Yes ❑ No ❑	If yes, please state for which types of work, and how the company has monitored the compliance of contractors with specified requirements:
Were there any violations stated above regarding the responsibility of contractors?	Yes ❑ No ❑	If yes, please provide details, including how the Company is ensuring those corrective actions implemented by the Contractor?

Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or legislation reasons?	Yes ❑ No ❑	If yes, please describe:
Please describe any environment or social programs, 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). If the ESAP has been updated during the reporting period, please attach a copy of the new plan.

3. Environmental Monitoring Data [7]

Please provide the name and contact details for your environmental manager:				
Parameter[8]	**Value[9]**	**Unit**	**Compliance status[10]**	**Comments[11]**
Waste water				
Total waste water generated				
BOD				
COD				
Suspended Solids				

[7]Please provide the results of monitoring environmental parameters carried out by the Company or its consultants. If you have already had all the necessary information available in another format, you can use that format instead of the one provided here
[8] Not all parameters will necessarily be applied. Please complete those rows that are most relevant to the industry sector. Additional parameters can be added as necessary.
[9] Please ensure that the units of measurement are clearly stated.
[10]Please state the standards applied in this project (typically local, EU and/or World Bank Group)
[11] In addition to any other comments, please indicate whether the measurements reported apply to all, or only some process operations at the facility

3. Environmental Monitoring Data [7]				
Please provide the name and contact details for your environmental manager:				
Parameter[8]	**Value[9]**	**Unit**	**Compliance status[10]**	**Comments[11]**
Phosphorus				
Nitrates				
Heavy metals				
[Other]				
Air Emissions				
SO_2				
NO_X				
Particles				
CO_2				
CH_4				
N_2O				
HFCs				
PFCs				
SF_6				
[Other]				
Other Parameters				
Noise				
[Other]				

3. Environmental Monitoring Data [7]				
Please provide the name and contact details for your environmental manager:				
Parameter[8]	**Value[9]**	**Unit**	**Compliance status[10]**	**Comments[11]**
Solid Waste				
Please provide details of the types and amounts of solid wastes generated by the project. Indicate places where waste is 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[12]**
Fuels used			
Oil			
Gas			
Coal			
Lignite			
Grid Electricity			
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

[12] 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)

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 summarize engagement with trade unions during reporting period:		
Are there any other worker representatives (e.g. in the absence of a trade union)?	Yes ❑ No ❑	If yes, please provide details and summarize 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 expressed any grievance regarding the project during the reporting period?	Yes ❑ No ❑	If yes, please state how many, split by gender, summarize the issues expressed by male and female staff and explain how the Company has addressed them:		
Have employees expressed any complaint about harassment or bullying during the reporting period?	Yes ❑ No ❑	If yes, please state how many, split by gender, summarize the issues expressed in grievances by male and female staff and explain how the Company has addressed them:		

Were there any strikes or other collective disputes related to labour and working conditions at the Company in the reporting period?	Yes ❑ No ❑	If yes, please summarize nature of, and reasons for, disputes and explain how they were resolved
Were there any strikes or other collective disputes related to labour and working conditions at the Company in the reporting period?	Yes ❑ No ❑	If yes, please summarize nature of, and reasons for, disputes and explain how they were resolved:
Were there 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 • Working hours • Flexible working/work-life balance • Grievance mechanism for workers • Health & safety	Yes ❑ No ❑	If yes, please give details, including some new initiatives:

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**
The amount of work that the average worker does in the reporting period in an hour:			Number of fatalities[13]:		
Budget spent on OHS in this period (total amount and currency):			Number of injuries:		
OHS training provided in this period among employees-days:			Number of Lost Time Incidents (including vehicles)[14]:		
Number of lost workdays[15] resulting from incidents			Number of cases of occupational disease:		
Number of days when people are on sick leave:					
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, including total compensation paid due to occupational injury or illness (amount and currency):					
Please summarize any emergency prevention and response training that has been provided for Company's personnel during the report period:					
Please summarize any emergency response exercises or drills that have been carried out during the report period:					

[13] If you have not done it yet, please provide a separate report on the circumstances of each fatality in a great detail.
[14] Incapacity to work for at least one full workday on the day when the accident or illness occurred.
[15] The number of workdays is related to lost 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.

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 and summarize interaction with stakeholders during the reporting period, including: - Meeting or other initiatives to engage with the members of public or public organizations during the report period, - information provided for the members of public and other stakeholders during the report period concerning 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:	
How many complaints or grievances did the project receive from the members of public or civil society organizations during the reporting period? Please split by stakeholder group. Summarize 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 are there 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 the affected communities on the progress made in implementing the RAP?	Yes❑ No❑	If yes, please state how many meetings were held and how many participants attended those meetings
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.		
Are there any persons that physically have been displaced?	Yes❑ No❑	If yes, how many?
Are there any persons that economically have been displaced?	Yes❑ No❑	If yes, how many?
Will the government assist that resettlement?	Yes❑ No❑	

9. Community Interaction and Development

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

APPENDIX 3

LEGISLATION

REGULATIONS AND REQUIREMENTS

This section deals with the regulatory context in terms of consultation and publicity in the Republic of Serbia, and it relates to the Design. Particular emphasis is placed on the importance of the relevant Serbian legislation and regional regulatory instruments.

BASIC NATIONAL LEGISLATION:

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

1. **Law on Planning and Construction** ("Official Gazette of RS", Nos. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014, 83/2018, 31/2019 and 37/2019);
2. **Law on Nature Protection** ("Official Gazette of RS", Nos. 36/2009, 88/2010, 91/2010, 14/2016 and 95/2018);
3. **Law on Environmental Protection** ("Official Gazette of RS", Nos. 135/2004, 36/2009, 36/2009, 72/2009, 43/2011, 14/2016, 76/2018 and 95/2018);
4. **Law on EIA** ("Official Gazette of RS", Nos. 135/2004 and 36/2009);
5. **Law on Strategic EIA** ("Official Gazette of RS" Nos. 135/2004 and 88/2010);
6. **Law on Waste Management** ("Official Gazette of RS", Nos. 36/2009, 88/2010, 14/2016 and 95/2018);
7. **Law on Noise Protection** ("Official Gazette of RS", Nos. 36/2009 and 88/2010);
8. **Law on Water** ("Official Gazette of RS", Nos. 30/2010, 93/2012, 101/2016 and 95/2018);
9. **Law on Forests** ("Official Gazette of RS", Nos. 30/2010, 93/2012, 89/2015 and 95/2018);
10. **Law on Air Protection** ("Official Gazette of RS", Nos. 36/2009 and 10/2013);
11. **Law on Occupational Safety and Health** ("Official Gazette of RS", Nos. 101/2005, 91/2015 and 113/2017);
12. **Law on Roads** ("Official Gazette of RS", Nos. 41/2018 and 95/2018);
13. **Law on Cultural Property** ("Official Gazette of RS", Nos. 71/94, 52/2011 and 99/2011).

Regulations formed based on the aforementioned Laws:

1. Decree of Establishing the List of Projects for Which the Impact Assessment is Mandatory and the List of Projects for Which the EIA Can Be Requested (‘’Official Gazette of RS’’ No. 114/08);
2. Rulebook of the Contents of Requests for the Necessity of Impact Assessment and on the Contents of Requests for Specification of Scope and Contents of the EIA Study (“Official Gazette of RS” No. 69/05);
3. Manual of the Contents of the EIA Study (“Official Gazette of RS” No. 69/05);
4. Manual of the Procedure of Public Inspection, Presentation and Public Consultation About the EIA Study (“Official Gazette of RS” No. 69/05);
5. Manual of the Work of the Technical Committee for the EIA Study (“Official Gazette of RS” No. 69/05);
6. Regulations on Permitted Noise Level in the Environment (“Official Gazette of RS” No. 54/92);
7. Decree on Watercourses’ Classification (“Official Gazette of RS” No. 5/68);
8. Regulations of Dangerous Pollutants in Waters (“Official Gazette of RS” No. 31/82);
9. Regulation on Limit Values for Emissions of Pollutants in Water and Deadlines for Their Achievement ("Official Gazette of RS" Nos. 67/2011, 48/2012 and 1/2016);
10. Regulation on Limit Values of Polluting Substances in Surface and Ground Waters and Sediments and Deadlines for Their Achievement (‘’Official Gazette of RS’’, No. 50/2012);
11. Decision on Establishment of List of First Class Water ("Official Gazette of RS" No. 83/2010);
12. Decree on the Categorization of State Roads, ("Official Gazette of RS", No. 93/2015).

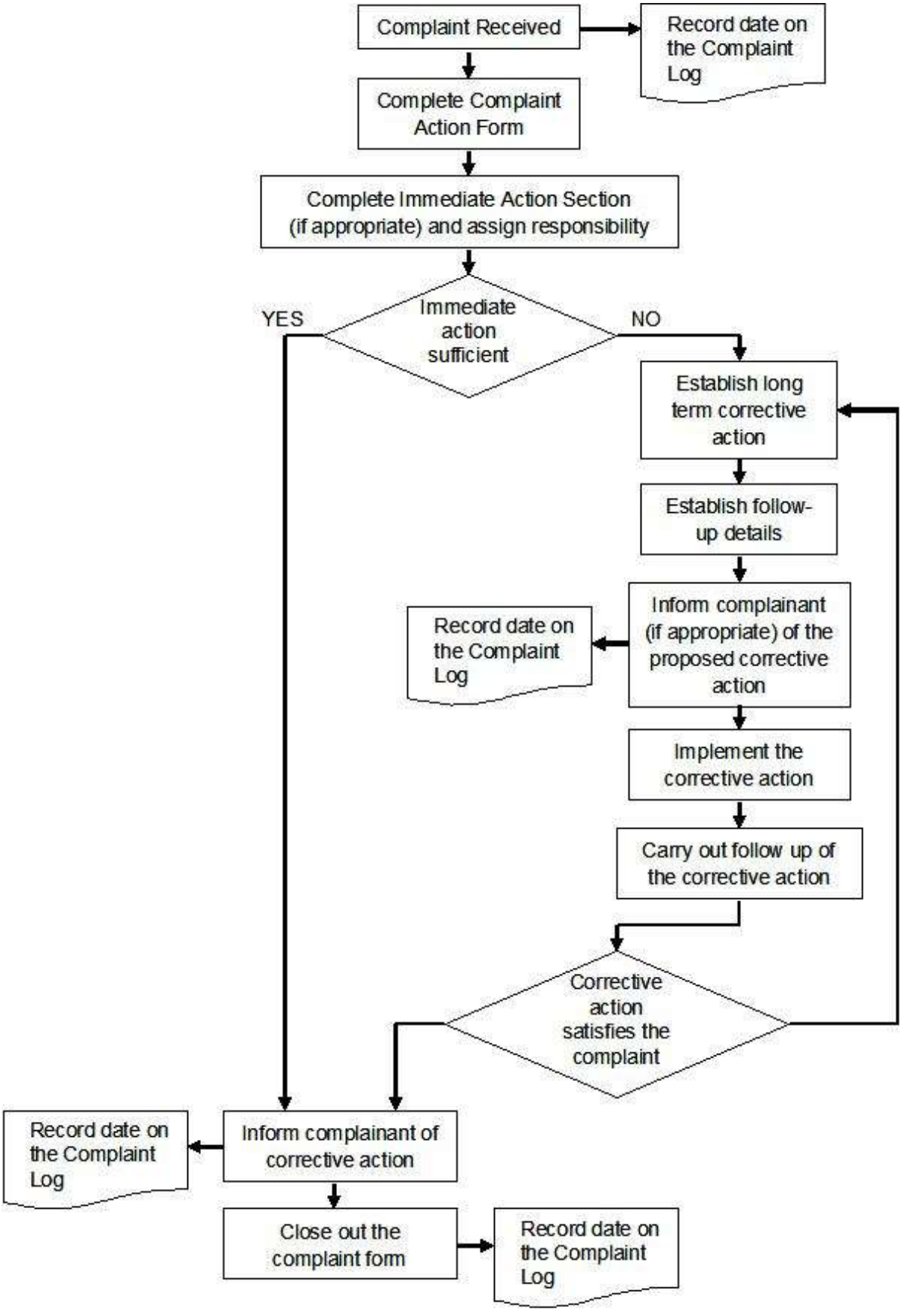
Other relevant Serbian legislation:

1. Law on Confirmation of Convention on Information Disclosure, Public Involvement in Process of Decision Making and Legal Protection in the Environmental Area (“Official Gazette of RS”, No. 38/09).

APPENDIX 4

THE GRIEVANCE MECHANISM AND FORM

Flowchart of Complaints/Grievance Procedure:



<table>
<tr><td colspan="4">Grievance Reference Number:</td></tr>
<tr><td rowspan="3">Contact details</td><td colspan="3">Name:</td></tr>
<tr><td colspan="3">Address:</td></tr>
<tr><td colspan="3">Tel:</td></tr>
<tr><td></td><td colspan="3">e-mail:</td></tr>
<tr><td>How would you prefer to be contacted? Please tick a box</td><td>by post</td><td>by phone</td><td>by e-mail</td></tr>
<tr><td colspan="4">Name and personal information (a unique identification citizen number from identity card)</td></tr>
<tr><td colspan="4">Details of your grievance (Please describe the problems, whom they occurred to, when, where and how many times, as relevant)</td></tr>
<tr><td colspan="4">What is your suggested resolution for the grievance?</td></tr>
<tr><td rowspan="3">How to submit this form to the authorized persons</td><td colspan="3">by post:</td></tr>
<tr><td colspan="3">by hand:
Please drop this form at:</td></tr>
<tr><td colspan="3">by e - mail: Please e-mail your grievance, proposed resolution and contact details to the following e – mail address:</td></tr>
<tr><td>Signature:</td><td colspan="3">Date:</td></tr>
</table>

APPENDIX 5

PUBLIC CONSULTATIONS

INTRODUCTION

Road Rehabilitation and Safety Project – RRSP is a project of support of the international financial institutions (World Bank, European Investment Bank and European Bank for Reconstruction and Development) to the Government of the Republic of Serbia in implementing the National program for rehabilitation of the state road network. This project represents the realization of the Government's program for the period from 2014 to 2019 and includes the following:

- improving the conditions of the state road network by rehabilitating around 1,100 km of the existing roads,
- raising the safety level on the roads by applying measures for enhancing the traffic safety in all phases of Project implementation, and
- strengthening capacities and improving institutional coordination in the area of traffic safety by implementing greater number of different services.

Designer prepared a draft document of the Environmental Management Plan for the rehabilitation of the State Road IB 21, road section: Ivanjica - Sjenica. The Environmental Management Plan has been created with the aim to ensure the implementation of best practices in accordance with the requirements of International Financial Institutions which will fund the Road Rehabilitation and Safety Project. Creating the Environmental Management Plan was carried out through study and research in the field, including consultations with representatives at regional and local level.

The length of the road section planned for rehabilitation is 23.036 km. The beginning of the road section was defined at the border of the municipalities of Ivanjica and Sjenica (at approximate chainage of km 288+251) and the end at the node 2134 Sjenica.

PE "Roads of Serbia" issued a call for a public discussion to the authorities, organizations and the public concerned for the Environmental Management Plan for the Road Rehabilitation and Safety Project regarding the road section: Ivanjica - Sjenica. The call was published on the PE Roads of Serbia's website (December 3rd, 2019), as well as in ''Politika'' newspapers (December 5th, 2019).

Public auditorium, organizations and other interested parties were invited to participate in the public debate on the pre-final document of Environmental Management Plan. This plan was sent to the Municipality of Sjenica. Municipal representatives informed the public through local media and Municipality's website about the time and place of the public discussion.

Access to the Environmental Management Plan was provided at the following addresses:

- the headquarters of PE "Roads of Serbia", Sector for Investments, Vlajkoviceva 19a Street, Belgrade, on the first floor, every working day from

11:00 AM to 01:00 PM, within 14 days from the date of publication of the notice;

- within the premises of the Municipality of Sjenica, office no. 25, Kralja Petra I Street, no. 1, 36310 Sjenica, on working days from 08:00 AM to 03:00 PM (local time), within 14 days from the date of publication of this invitation;
- on the PE ''Roads of Serbia'' website: www.putevi-srbije.rs.

Public consultation and presentation of the Environmental Management Plan was held in the Municipality of Sjenica, at the President's office, Kralja Petra I Street, no. 1, 36310 Sjenica on December 25th, 2019, from 12:00 to 13:00 PM. There were no remarks referring to the presented Environmental Management Plan. There were no questions or concerns about the presented Plan.

REPORT ON PUBLIC CONSULTATION, SJENICA DECEMBER 25th, 2019

According to the operative politics of the World Bank OP 4.01, the Environmental Management Plan of Road Rehabilitation and Safety Project for the State Road IB 21, road section: Ivanjica - Sjenica in length of 23.036 km has been prepared.

Environmental Management Plan was published and PE ''Roads of Serbia'' invited all stakeholders, public and relevant institutions to inspect all works which were proposed during the road rehabilitation and environmental impacts with review of measures for mitigation and monitoring. Prior to announcement in the newspapers, the document was delivered to the Municipality of Sjenica.

Representatives of local self-government informed the public through local media about the time and place of the public consultation. The insight into the draft of the Environmental Management Plan was completed on December 25th, 2019, when public consultations were held in Sjenica.

Public consultations were attended by 8 people[16]. Among the participants were the representatives of the City Administration of Sjenica and Public Company for the Regulation of Construction Land Sjenica.

People who participated on public consultations were:

No.	Name and Surname	Working organization-institution
1.	Miroslav Stojanovic	„MHM-Projekt“
2.	Jovana Marinkovic	„MHM-Projekt“
3.	Admir Mahmutović	City Administration of Sjenica
4.	Edis Mumiković	City Administration of Sjenica - LED
5.	Hadiša Rastić	City Administration of Sjenica
6.	Adelina Avdić	City Administration of Sjenica - Urbanism
7.	Muhedin Fijuljanin	City Administration of Sjenica
8.	Rejhan Pandirović	PC for the Regulation of Construction Land Sjenica

[16] The list of participants is in Chapter ***„LIST OF PARTICIPANTS“***

***Figure 21**. Public consultations held in the Municipality of Sjenica at the President's office on December 25th, 2019*

***Figure 22**. Public consultations held in the Municipality of Sjenica at the President's office on December 25th, 2019*

Public consultations of the Environmental Management Plan for the project of Road Rehabilitation and Safety Project for the State Road IB 21, road section: Ivanjica - Sjenica started at 12:00. The Environmental Management Plan was presented by Designers. During the public consultations, there were no remarks or questions regarding the presented plan.

COMPLAINTS, QUESTIONS AND ANSWERS

After the presentation of the Plan, there were no questions or doubts about planned works on the observed road section.

LIST OF PARTICIPANTS

ПРОЈЕКАТ РЕХАБИЛИТАЦИЈЕ ПУТЕВА И УНАПРЕЂЕЊА БЕЗБЕДНОСТИ САОБРАЋАЈА
ИЗРАДА ГЛАВНОГ ПРОЈЕКТА ПОЈАЧАНОГ ОДРЖАВАЊА ДРЖАВНОГ ПУТА ІБ РЕДА БР. 21
ДЕОНИЦА: ИВАЊИЦА - СЈЕНИЦА

Присутни учесници на јавној консултацији Плана управљања заштитом животне средине

Редни број	Име и презиме	Радна организација - установа	Потпис
1.	Miroslav Stojanović	MHM-projekt doo	
2.	Jovan Marinković	MHM-projekt doo	
3.	Admir Mahmutović	Opštinska uprava	
4.	Edis Mehmedović	Opštinska uprava Sjenica - LER	
5.	Hadiša Rastić	Opštinska uprava	Rastić
6.	Adelina Avdić	Opštinska uprava – urbanizam	
7.	Muhedin Fijuljanin	Općina Sjenica	
8.	Rejhan Šaudinović	Javno preduzeće gradevinsko	
9.			
10.			
11.			
12.			

Датум: 25.12.2019.

Figure 23. *A list of people present at Public consultations held in the Municipality of Sjenica at the President's office on December 25th, 2019*

DOCUMENTATION

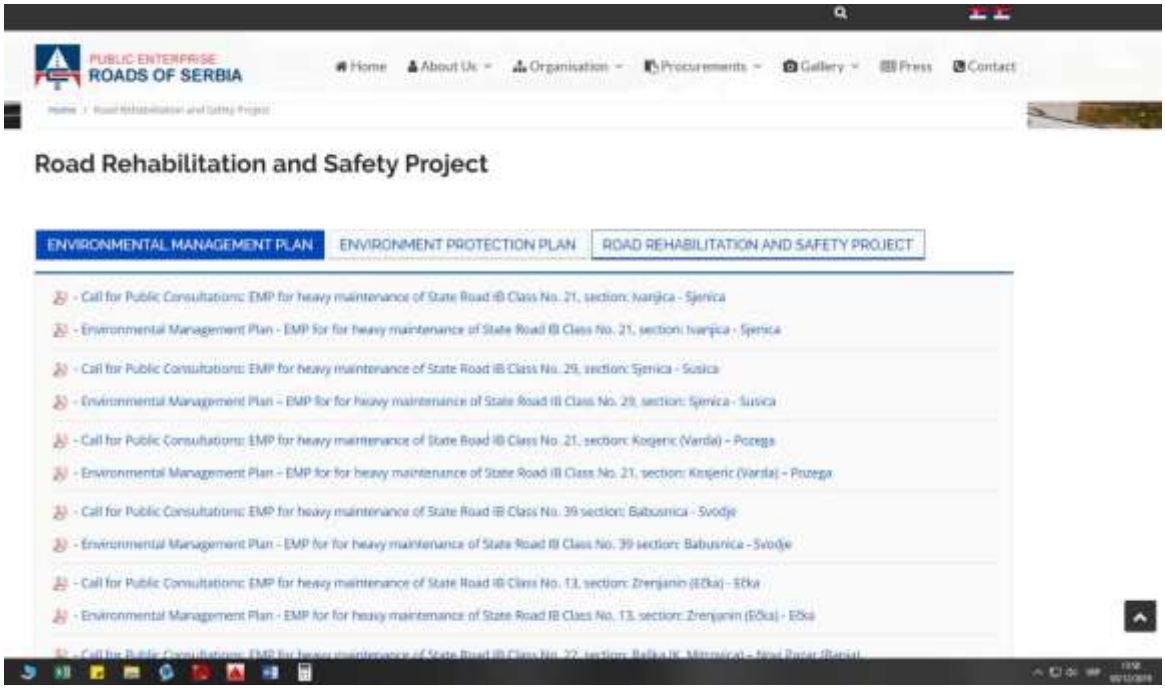
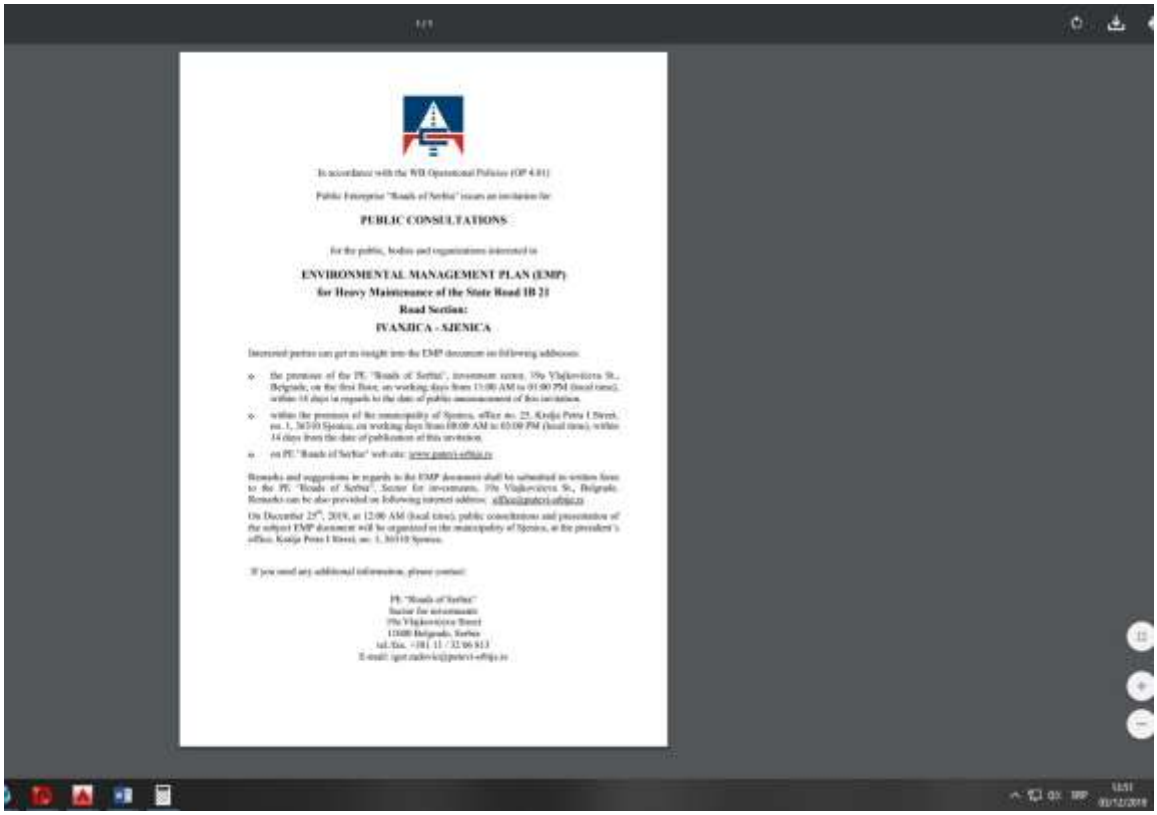
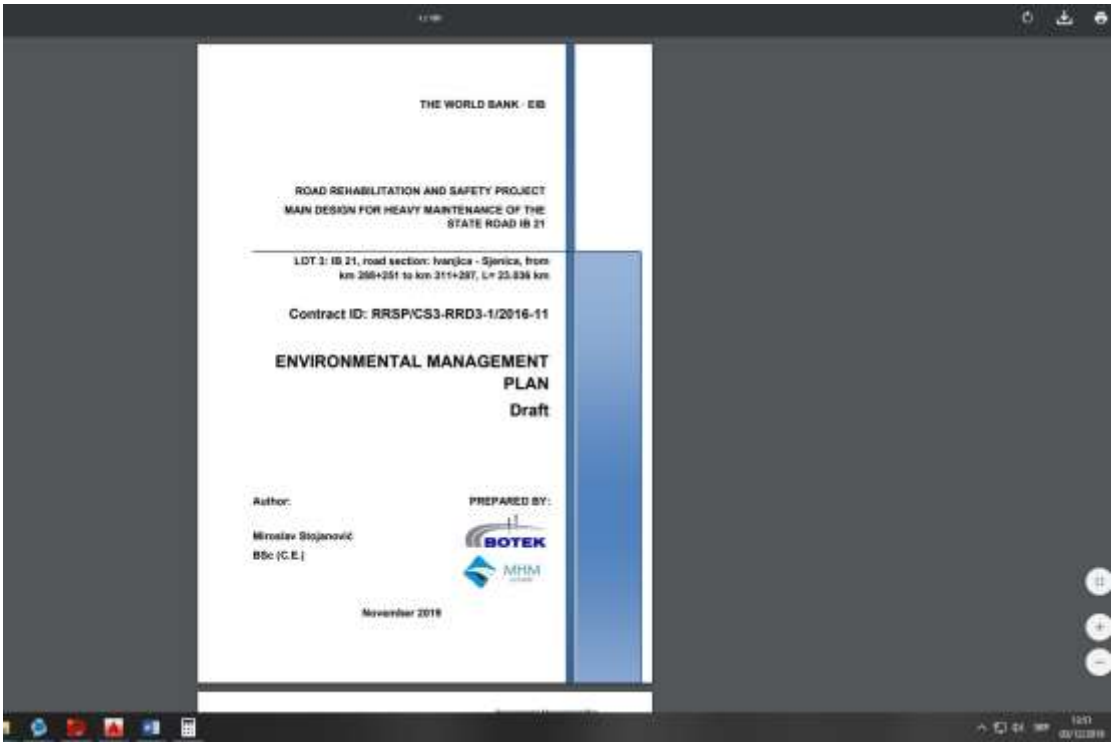


Figure 24. *Call for Public consultations posted on the website of PE ‘’Roads of Serbia’’*


PUBLIC CONSULTATIONS

ENVIRONMENTAL MANAGEMENT PLAN (EMP)
for Heavy Maintenance of the State Road IB 21
Road Section:
IVANJICA - SJENICA

Figure 25. *Announcement of Public consultations posted on the website of PE "Roads of Serbia"*



THE WORLD BANK - EIB

ROAD REHABILITATION AND SAFETY PROJECT
MAIN DESIGN FOR HEAVY MAINTENANCE OF THE STATE ROAD IB 21

LOT 1: IB 21, road section: Ivanjica - Sjenica, from km 268+251 to km 311+297, L= 23.836 km

Contract ID: RRSP/CS3-RRD3-1/2016-11

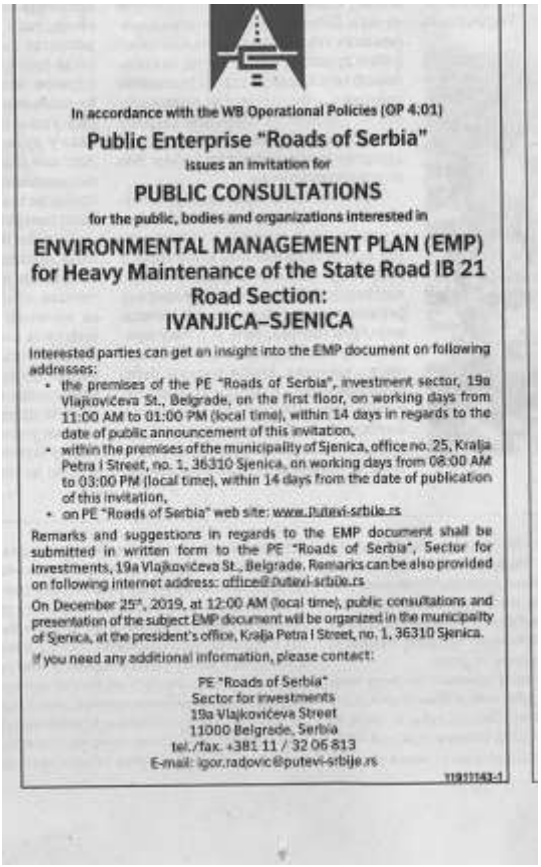
ENVIRONMENTAL MANAGEMENT PLAN
Draft

Author:
Miroslav Stojanović
BSc (C.E.)

PREPARED BY:
BOTEK
MHM

November 2019

Figure 26. *Environmental Management Plan posted on the website of PE "Roads of Serbia"*



In accordance with the WB Operational Policies (OP 4.01)

Public Enterprise "Roads of Serbia"

issues an invitation for

PUBLIC CONSULTATIONS

for the public, bodies and organizations interested in

ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Heavy Maintenance of the State Road IB 21 Road Section: IVANJICA–SJENICA

Interested parties can get an insight into the EMP document on following addresses:

- the premises of the PE "Roads of Serbia", investment sector, 19a Vlajkovićeva St., Belgrade, on the first floor, on working days from 11:00 AM to 01:00 PM (local time), within 14 days in regards to the date of public announcement of this invitation,
- within the premises of the municipality of Sjenica, office no. 25, Kralja Petra I Street, no. 1, 36310 Sjenica, on working days from 08:00 AM to 03:00 PM (local time), within 14 days from the date of publication of this invitation,
- on PE "Roads of Serbia" web site: www.putevi-srbije.rs

Remarks and suggestions in regards to the EMP document shall be submitted in written form to the PE "Roads of Serbia", Sector for investments, 19a Vlajkovićeva St., Belgrade. Remarks can be also provided on following internet address: office@putevi-srbije.rs

On December 25th, 2019, at 12:00 AM (local time), public consultations and presentation of the subject EMP document will be organized in the municipality of Sjenica, at the president's office, Kralja Petra I Street, no. 1, 36310 Sjenica.

If you need any additional information, please contact:

PE "Roads of Serbia"
Sector for investments
19a Vlajkovićeva Street
11000 Belgrade, Serbia
tel./fax. +381 11 / 32 06 813
E-mail: igor.radovic@putevi-srbije.rs

Figure 27. *Announcement published in newspapers „Politika“*

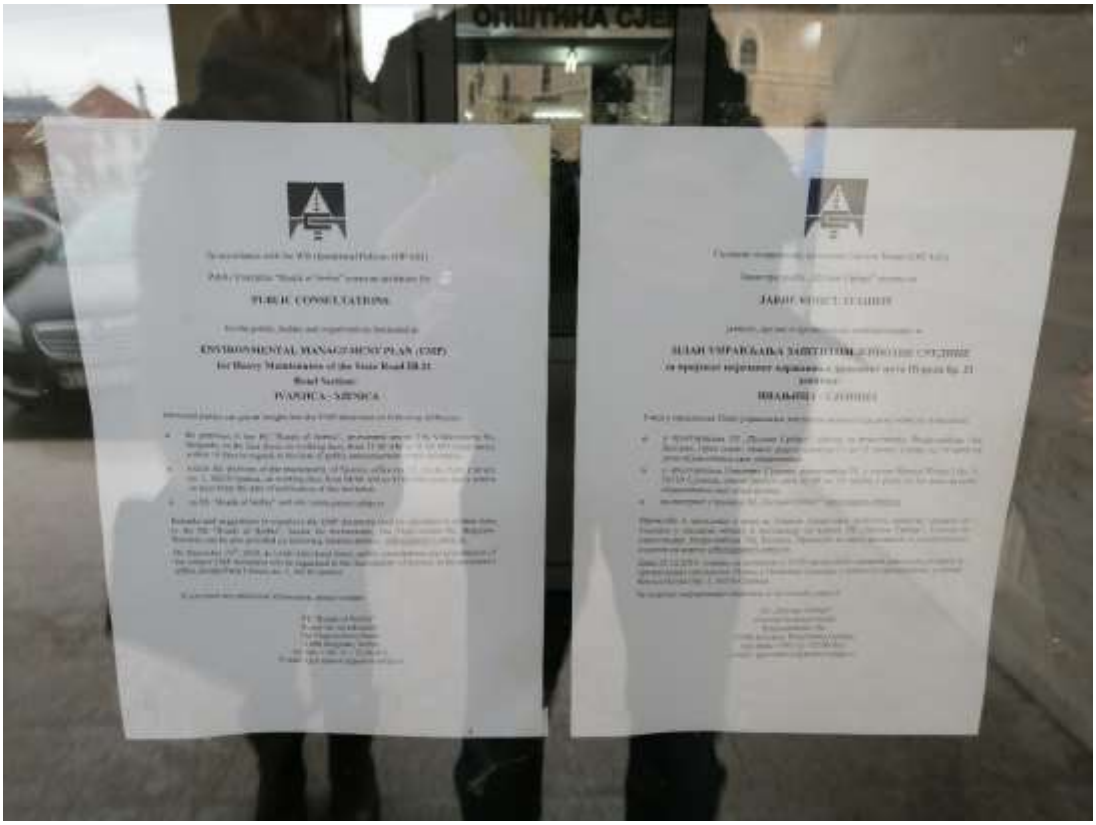


Figure 28. *Notice of Public consultation meeting hung on the main entrance to the Municipality of Sjenica*

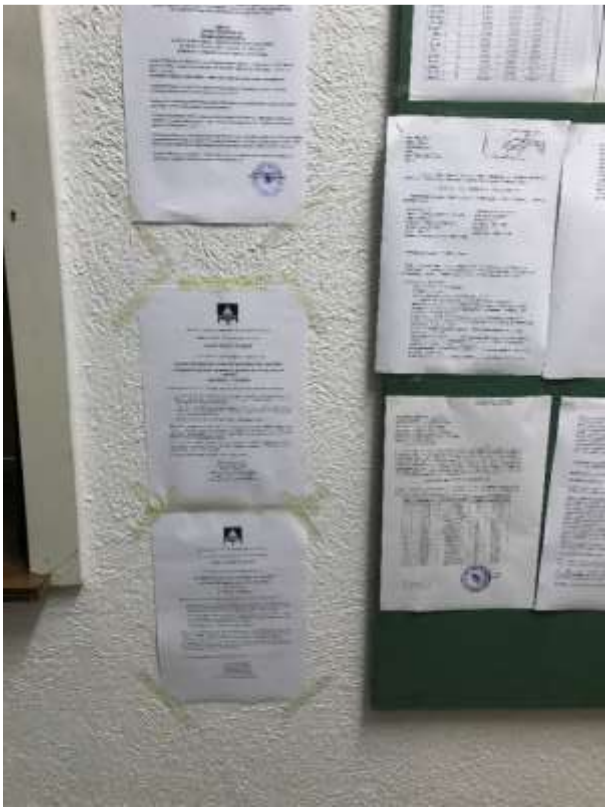


Figure 29. *Notice of Public consultation meeting hung on the bulletin board in the Municipality*

APPENDIX 6

OPINIONS AND CONDITIONS FROM RELEVANT PUBLIC INSTITUTIONS

РЕПУБЛИКА СРБИЈА
ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ
НОВИ БЕОГРАД, Др Ивана Рибара бр. 91
Тел: +381 11/2093-802; 2093-803
Факс: + 381 11/2093-867

Завод за заштиту природе Србије, Београд, Ул. др Ивана Рибара бр. 91, на основу члана 9. и члана 57. Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 – исправка и 14/2016) и члана 136. Закона о општем управном поступку („Службени гласник РС", бр. 18/2016), поступајући по захтеву бр. 11-230218/8S21-05 од 23.02.2018. године предузећа „JV BOTEK Bosphorus Technical Consulting Corp. & MHM-PROJEKT" д.о.о. из Новог Сада, ул. Браничева Гиздића бр. 2, за издавање услова заштите природе за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 21 (стара ознака: R-117), деоница Ивањица-Сеница 1, L=23.036 km, дана 16.04. 2018. године под 03 бр. 019-580/3 доноси

РЕШЕЊЕ

1. Предметна деоница пута IБ реда бр. 21 (у даљем тексту: Деоница пута IБ 21) се налази у оквиру заштићеног подручја Специјални резерват природе „Увац", у режиму заштите II (другог) степена, као и у обухвату еколошке мреже - еколошки значајног подручја „Увац и Милешевка". Сходно томе, издају се следећи услови заштите природе:

   1) Пројектом Појачаног одржавања Деонице пута IБ 21 предвидети таква решења и мере који ће обезбедити услове за очување ваздуха, земљишта, подземних и површинских вода у непосредном окружењу (посебно реке Увац и Сјеничког језера).
   2) Пре почетка извођења предметних радова неопходно је обавестити управљача заштићеног природног добра „Резерват Увац" д.о.о. из Нове Вароши, као и надлежну инспекцијску службу, о времену извођења радова како би овлашћено лице могло да обавља надзор над спровођењем услова и мера заштите природе.
   3) При извођењу радова на делу Деонице пута IБ 21 који пролази уз и прелази преко реке Увац, предвидети максимално очување корита и обала реке, као и приобалне вегетације.
   4) Потребно је максимално очувати околну вегетацију, посебно дендрофлору, односно стара и квалитетна стабла и примерке заштићених, ретких и у другом погледу значајних врста дрвећа и жбуња. Ово је посебно значајно за део трасе који пролази кроз заштићено природно добро I (прве) категорије.
   5) Стабла у близини трасе Деонице пута IБ 21 обезбедити од оштећења за време манипулације возилима и грађевинским машинама. Приликом земљаних радова коренов систем мора остати неоштећен.
   6) Предвидети Пројектом предузимање противерозионих мера заштите од клизишта, одрона и сл. При томе је пожељна што је могуће већа примена биолошких и биотехничких мера, у комбинацији са одговарајућим техничким мерама, до нивоа функционалне стабилизације терена.
   7) Дефинисати да се одводњавање врши гравитационим отицањем површинских вода и по потреби изградњом отворених канала за пријем површинских вода.

8) За коловозне засторе користити материјале који обезбеђују смањење нивоа буке и вибрација и омогућавају ефикасно дренирање воде са површине коловоза.

9) Предметне радове на траси пута која пролази кроз заштићено подручје изводити само у дневном периоду, због могућег негативног утицаја буке коју производе грађевинске машине и возила на животињски свет у непосредном окружењу.

10) При извођењу радова строго се придржавати трасе и коридора пута како манипулација возилима и машинама не би оставила негативне последице на шири простор. Такође, користити постојећу путну мрежу без изградње нових путева, у циљу спречавања фрагментације простора и постојећих станишта.

11) Није дозвољено сервисирање возила и одржавање грађевинских машина на подручју заштићеног природног добра. Уколико дође до хаваријског изливања горива, уља или било којих штетних материја, обавезна је санација површине у циљу заштите земљишта и подземних вода.

12) Током извођења радова дуж целе трасе Деонице пута ІБ 21 је потребно одржавати максимални ниво комуналне хигијене.

13) Предвидети превентивне мере ради спречавања акцидентних ситуација, као и одговарајуће активности санације уколико до њих дође, уз обавезу обавештавања надлежних инспекцијских служби.

14) Уколико дође до хаваријског изливања горива, уља/мазива и других штетних материја обавезна је санација површине и враћање у првобитно стање.

15) У току извођења предметних радова потребно је одржавати максимални ниво комуналне хигијене. Спровести систематско прикупљање чврстог отпада који се јавља у процесу градње и боравка радника у зони градилишта.

16) Грађевински, као и комунални отпад настао у току радова сакупљати у судове који су за ту сврху намењени и редовно га евакуисати у сарадњи са надлежном комуналном службом.

17) Није дозвољено одлагање било каквог отпада на заштићеном подручју.

18) Саставни део Пројекта треба да буде и део који се односи на организацију градилишта, при чему је неопходно дефинисати и обезбедити:
- привремене локације за складиштење потребног грађевинског и другог материјала и опреме, које је неопходно лоцирати ван простора са високом вегетацијом, као и плавних зона реке Ување, и ограничити искључиво на време трајања радова;
- привремене или трајне локације (постојеће уређене комуналне објекте/депоније) за одлагање и депоновање шута и другог отпадног грађевинског материјала у било каквом стању, као и комуналног отпада насталог у току извођења радова, односно забрану њиховог депоновања у приобаљу реке Ување и Сјеничког језера, као и на пољопривредном земљишту, осим на локацијама дефинисаним Пројектом;
- да се након завршетка предметних радова све површине које су на било који начин деградиране што пре санирају.

19) По изведеним грађевинским радовима обавезно је уклонити у најкраћем року сву механизацију, грађевински материјал и друго.

20) Уколико је дошло до нарушавања предметног подручја (терена дуж Деонице пута ІБ 21), потребно га је санирати, тако што ће се успоставити биљни покривач (култивисати терен) на свим радовима угроженим местима, применом одговарајуће флоре и врста које су биолошки постојане у датим климатским условима, релативно отпорне на штетне утицаје (издувне гасове и сл.).

21) Избор биљних врста за санацију терена треба ускладити са околном просторном и његовом наменом. Избегавати врсте које су за наше поднебље препознате као инвазивне: *Acer negundo* (јасенолисни јавор или негундовац), *Amorpha fruticosa* (багремац), *Robinia pseudoacacia* (багрем), *Ailanthus altissima* (висско дрво), *Fraxinus americana* (амерички јасен), *Fraxinus pennsylvanica* (пенсилванијски јасен), *Celtis occidentalis* (амерички копривић), *Ulmus pumila* (сибирски или сибирски брест), *Prunus padus* (сремза) и *Prunus serotina* (касна сремза), као и врсте које су означене као алергене (тополе и сл.).

22) Уколико се током радова нађе на геолошко-палеонтолошке или минералошко-петролошке објекте, за које се претпоставља да имају својство природног добра, извођач радова је дужан да у року од осам дана обавести Министарство заштите животне средине, односно предузме све мере како се природно добро не би оштетило до доласка овлашћеног лица.

2. Ово Решење не ослобађа подносиоца захтева да прибави и друге услове, дозволе и сагласности предвиђене позитивним прописима.
3. За све друге радове/активности на предметном подручју или промене пројектне документације, потребно је Заводу за заштиту природе Србије поднети нови захтев.
4. Уколико подносилац захтева у року од две године од дана достављања овог Решења не отпочне радове и активности за које је ово Решење о условима заштите природе издато, дужан је да од Завода прибави ново решење о условима.
5. Такса за издавање овог Решења у износу од 30.000,00 динара је одређена у складу са чланом 2. став 5. тачка 1. Правилника о висини и начину обрачуна и наплате таксе за издавање аката о условима заштите („Службени гласник РС", бр. 73/2011, 106/2013). Подносилац захтева је дужан да наведену таксу уплати у корист рачуна Завода у року од 5 дана од дана достављања предрачуна.

Образложење

Завод за заштиту природе Србије примио је дана 05.03.2018. године захтев бр. 019-580/1 предузећа „JV BOTEK Bosphorus Technical Consulting Corp. & MHM-PROJEKT" д.о.о. из Новог Сада за издавање услова заштите природе за израду техничке документације пројекта Појачаног одржавања деонице државног пута IБ реда бр. 21 (стара ознака: R-117), деоница Ивањица-Сјеница 1.

На основу достављеног захтева утврђено је да је израда наведеног Пројекта предвиђена Пројектом рехабилитације путева и унапређења безбедности саобраћаја на мрежи државних путева, који представља подршку међународних финансијских институција Националном програму рехабилитације државних путева Републике Србије. Институција задужена за реализацију Пројекта рехабилитације путева и унапређења безбедности саобраћаја је Јавно предузеће „Путеви Србије", од стране кога је подносилац захтева ангажован као консултант при предметног Пројекта. Планирани радови обухватају радове пречника постојеће коловодне конструкције, у постојећим габаритима коловодне конструкције са постојећом и санираном системом одводњавања, уз пројектовање свих елемената који побољшавају трајност радова и унапређују систем безбедности саобраћаја.

Увидом у Централни регистар заштићених природних добара, документацију Завода, а у складу са прописима који регулишу област заштите природе, утврђени су услови заштите природе из диспозитива овог Решења. При томе се имало у виду да се предметно подручје налази у обухвату режима заштите II (другог) степена заштићеног подручја Специјални резерват природе „Увац", као и у обухвату еколошке мреже Републике Србије - еколошки значајног подручја „Увац и Милошева" (наведено под бр. 66 према Уредби о еколошкој мрежи) и међународно и национално значајног подручја за птице (IBA подручје „Увац и Милошева", са класификационим кодом „RS027IBA").

Законски основ за доношење решења: Уредба о заштити Специјалног резервата природе „Увац" („Службени гласник РС", бр. 25/2006); Уредба о изменама и допунама Уредбе о заштити специјалног резервата природе Увац („Службени гласник РС", бр. 110/ 2006); Закон о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 – исправка и 14/2016); Уредба о режимима заштите („Службени гласник РС", бр. 31/2012); Уредба о еколошкој мрежи („Службени гласник РС", бр. 102/2010).

Предметни радови могу се реализовати под условима дефинисаним овим Решењем, јер је процењено да неће угрозити природне вредности подручја.

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

Подносилац захтева је ослобођен од плаћања таксе у складу са чланом 18. Закона о републичким административним таксама („Службени гласник РС", бр. 43/2003, 51/2003, 61/2005, 5/2009, 54/2009, 50/2011, 93/2012, 83/2015, 112/2015, 50/2016, 61/2017 и 113/2017).

Упутство о правном средству: Против овог решења може се изјавити жалба Министарству заштите животне средине у року од 15 дана од дана пријема решења. Жалба се предаје писмено или изјављује усмено на записник Заводу за заштиту природе Србије.

ДИРЕКТОР
Александар Драгишић

Достављено:
- Подносиоцу захтева
- Архиви х 2

ЗАВОД ЗА ЗАШТИТУ ПРИРОДЕ СРБИЈЕ

Текући рачун: 840-518664-16, отворен код Управе за трезор ♦ ПИБ 106844260 ♦ Матични број 17798561 ♦ Шифра делатности 9104

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03 број 019-1904/2

датум 01-08-2019.

Предузеће
„JV BOTEK Bosphorus
Technical Consulting Corp. &
MHM-PROJEKT" д.о.о.

21000 НОВИ САД
ул. Јована Поповића бр. 40

На основу вашег дописа бр. MS/11-030719/21-2 од 03.07.2019. године, који се односи на поступање са гнездом беле роде (*Ciconia ciconia*) на траси деонице Иванџица-Сјеница, L=23.036 km, државног пута IB 21, током спровођења пројекта његовог појачаног одржавања, констатујемо следеће:

- Предузеће „JV BOTEK Bosphorus Technical Consulting Corp. & MHM-PROJEKT" д.о.о. из Новог Сада, ул. Јована Поповића бр. 40, је у име ЈП „Путеви Србије" израдио Главне пројекте појачаног одржавања на деоницама државних путева, између осталих и државног пута IB 21, деонице Иванџица-Сјеница, L=23.036 km, укључујући и прибављање свих законом прописаних услова, мишљења и сагласности од надлежних државних органа, јавних предузећа и других организација;
- Завод за заштиту природе Србије је за израду техничке документације горенаведеног пројекта издао услове заштите природе решењем 03 бр. 019-580/3 од 10.04.2018. године;
- Обиласком наведене деонице од стране обрађивача пројекта у мају 2019. године уочено је гнездо беле роде на стубу јавне расвете у насељу Сјеница, на месту на којем је пројектом предвиђена изградња пешачке стазе и рехабилитација коловоза, што би потенцијално могло негативно да утиче на ову строго заштићену врсту, у складу са Правилником о проглашењу и заштити строго заштићених и заштићених дивљих врста биљака, животиња и гљива („Службени гласник РС", бр. 5/2010, 47/2011, 32/2016 и 98/2016);
- У појединим варијантама пројектног решења предвиђа се и измештање стуба јавне расвете на којем се налази гнездо;
- У складу са чл. 4. наведеног Правилника, заштита строго заштићених дивљих врста спроводи се забраном коришћења, уништавања и предузимања свих активности којима се могу угрозити дивље врсте и њихова станишта. Чланом 74. Закона о заштити природе („Службени гласник РС", бр. 36/2009, 88/2010, 91/2010 - испр., 14/2016 и 95/2018 - други закон), дефинисано је да је забрањено: хватати, држати и/или убијати строго заштићене врсте животиња у свим фазама биолошког

циклуса, оштећивати или уништавати њихове развојне облике, јаја, гнезда и легла, као и подручја њиховог размножавања, одмарања и угрожавати или уништавати њихова станишта; узнемиравати, нарочито у време размножавања, подизања младих, миграције и хибернације и пресецати миграторне путеве.

У складу са наведеним, извођење радова на одржавању путне инфраструктуре у непосредној близини гнезда, може се реализовати искључиво ван периода репродукције и када роде нису у гнезду, односно након излетања младунаца из гнезда и напуштања територије у циљу сеобе, а пре следећег циклуса размножавања, најкасније до 15. марта и после 20. јула током године.

Уколико се према коначном пројектом решењу предвиђа измештање стуба јавне расвете, потребно је обавестити Заводу за заштиту природе Србије и упутити захтев за издавање решења о условима заштите природе за измештање гнезда, у складу са чланом 9. Закона о заштити природе.

Овим путем вам се захваљујемо на иницијативи за очување гнезда беле роде, строго заштићене врсте у Србији, као и на залагању за проналажење компромисног решења проблема, а у складу са законским прописима из области заштите природе.

С поштовањем,

ДИРЕКТОР

Александар Драгишић

Достављено:
- Подносиоцу захтева
- Архива x 2

Завод за заштиту споменика културе Краљево
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тел. 036 331 866, тел/факс 036 321 025, e-mail: zzzskv@gmail.com
жиро рачун: 840-69664-74, 840-69668-62

ЗАВОД ЗА ЗАШТИТУ СПОМЕНИКА КУЛТУРЕ
Број 293/3
20.03.2018. год.
К Р А Љ Е В О

Завод за заштиту споменика културе Краљево, Краљево, Улица Цара Лазара бр. 24, на основу члана 36 став 1, тачка 4, чл. 99 став 2. тачка 1 и 3, члана 100 став 1 и члана 104.109. и 110. Закона о културним добрима („Службени гласник РС ", бр.71/94, 52/2011-др.закон, 99/2011-др.закон), као и члана 104. Закона о општем управном поступку („Службени гласник РС", бр.18/2016), поступајући по захтеву *JV BOTEK Bospohorus Technical Consulting Corp. & MHM-Projekt* доо Нови Сад, број 11-230218/IS21-06 од 23.02.2018. године, по пуномоћју ЈП „ПУТЕВИ СРБИЈЕ", Београд, Бул. Краља Александра 282, II број 953-1827 од 23.01.2018. год, за издавање услова за предузимање мера техничке заштите за израду техничке документације Главног пројекта појачаног одржавања деоница државног пута IB реда бр. 21 (стара ознака пута R-117), деоница Ивањица-Сјеница, запримљеног у овом Заводу под бројем 293/1 од 28.02.2018. године, доноси

Р Е Ш Е Њ Е

I – Подносиоцу захтева, издају се услови за предузимање мера техничке заштите за израду техничке документације Главног пројекта појачаног одржавања деоница државног пута IB реда бр. 21 (стара ознака пута R-117), деоница Ивањица-Сјеница и могу се предузети према следећим условима:

1. У непосредној близини трасе налазе се следећи локалитети са археолошким садржајем:
   - Влашки гроб (N: 4804507 E 7422943, позиција: 7+500.00 до 7+600.00)
   - Муслиманско гробље (N: 4793782, E. 7418690: позиција: 21+900.00 до 22.000.00)
   - Уколико се буду изводили земљани радови на овим просторима (израда дренажног канала, проширење пута, везе са локалним сеоским путевима...) предвидети стручни надзор – археолога како не би дошло до девастације културних слојева.
   - Стручни надзор може да врши установа заштите са одговарајућим стручним кадром. Трошкове надзора сноси Инвеститор. Установа која врши надзор дужна је да о томе сачини извештај, који се трајно чува у документацији Завода.
2. Уколико се током радова на одржавању и отклањању оштећења на државном путу IB реда бр. 21, деоница Ивањица-Сјеница 1, у дужини од 23.036 км, нађе на непокретне или покретне остатке археолошког порекла, инвеститор или извођач дужан је да одмах без одлагања обустави даље радове и о томе обавести надлежни Завод.
3. Стручно лице Завода има право да након увида у откривени материјал пропише праћење радова или археолошка ископавања.
4. Забрањује се неовлашћено прикупљање археолошког материјала.
5. Извођач/Инвеститор је у обавези да предузме мере заштите како налаз не би био уништен или оштећен, и да сачува на лицу места и у положају у коме је откривен.
6. Трошкове истраживања, конзервације, чувања, публиковања и излагања добра које ужива претходну заштиту, све до предаје добра на чување овлашћеној установи заштите, сноси Инвеститор.
7. За промене у Пројекту неопходно је прибавити нове услове Завода.

Завод за заштиту споменика културе Краљево
36000 Краљево, Цара Лазара 24, ПИБ 100239951, матични број 07101104
тел. 036 331 866, тел/факс 036 321 025, e-mail: zzzskv@gmail.com
жиро рачун: 840-69664-74, 840-69668-62

II - Инвеститор је дужан да према условима из тачке 1) овог Решења сачини пројектну документацију и на исту прибави сагласност овог Завода.
III – Ово Решење не ослобађа подносиоца захтева обавезе прибављања и других услова, дозвола и сагласности предвиђених прописима о планирању и уређењу простора и насеља, изградњи објеката и осталих важећих законских прописа.
IV - Ово Решење важи две године од дана издавања.
V – Жалба на Решење не задржава извршење овог Решења.

О б р а з л о ж е њ е

Овом Заводу обратило се *JV BOTEK Bosphorus Technical Consulting Corp. & MHM-Projekt* doo Нови Сад, захтевом за прибављање услова за предузимање мера техничке заштите за израду техничке документације Главног пројекта појачаног одржавања деоница државног пута IB реда бр. 21 (стара ознака пута R-117), деоница Ивањица-Сјеница.

Увидом у документацију овог Завода и на лицу места, као и на основу Извештаја број 293/2 од 09.03.2018. године, сачињеног од стране стручних сарадника овог Завода, није утврђено на предметној деоници пута постојање културних добара, нити евидентираних добара која уживају заштиту на основу Закона о културним добрима („Службени гласник РС", бр. 71/94, 52/2011-др.закона, 99/2011-др. закон).

Међутим, у непосредној близини трасе налазе се локалитети са археолошким садржајем наведени у тачки 1) диспозитива овог Решења. Археолошки локалитети специфични са становишта заштите, јер се налазе испод површине земље и често није могуће знати за њихово постојање, приликом било каквих земљаних радова могуће је наићи на остатке материјалне културе из прошлости, те је у том случају неопходно организовати праћење спровођења мера заштите од стране археолога Завода.

На основу чл. 36. став 1 тачка 4. Закона о културним добрима прописано је да је сопственик дужан да прибави услове за предузимање мера техничке заштите и прибави сагласност надлежне установе за предузимање мера и радова на добру којима се могу проузроковати промене изгледа, облика или намене добра или повредити његова својства.

На основу чл. 99. став 2. тачка 3. Закона о културним добрима прописано је да се мере техничке заштите и други радови којима се могу проузроковати промене облика или изгледа непокретног културног добра или повредити његова својства, могу предузимати ако се прибаве потребни услови и одобрења на основу прописа о планирању и уређењу простора и изградњи објеката.

Чланом 109. Закона о културним добрима прописано је да уколико се у току извођења земљаних и других радова наиђе на археолошко налазиште или археолошке предмете, извођач радова дужан је да одмах, без одлагања, прекине радове и о томе обавести надлежни Завод за заштиту споменика културе, као и да обезбеди средства за заштитна археолошка истраживања и конзервацију налаза.

Чланом 110. Закона о културним добрима прописано је да је Инвеститор дужан да обезбеди средства за истраживања, заштиту, чување, публиковање и излагање добра које уживa претходну заштиту, све до предаје добра на чување овлашћеној установи заштите.

Са изложеног, одлучено је као у диспозитиву овог Решења.

Завод за заштиту споменика културе Краљево
36000 Краљево, Цара Лазара 24, ПИБ 100239951, матични број 07101104
тел. 036 331 866, тел/факс 036 321 025, e-mail: zzzskv@gmail.com
жиро рачун: 840-69654-74, 840-69668-62

На основу члана 104. став 3. Закона о културним добрима, жалба не одлаже извршење решења.

ПРАВНА ПОУКА: Против овог Решења дозвољена је жалба Републичком заводу за заштиту споменика културе - Београд у року од 15 дана од дана достављања решења. Жалба се подноси преко доносиоца овог Решења, а на основу члана 16. Закона о културним добрима ослобођена је плаћања републичке административне таксе.

Обрађивачи:
мр Катарина Грујовић Брковић, етнолог-антрополог
Марија Алексић Чворовић, дипл. археолог
Љиљана Александрић, дипл. правник

Доставити:

- Подносиоцу захтева
- Републичком заводу за заштиту споменика културе - Београд
- Архиви Завода

В.Д. ДИРЕКТОРА ЗАВОДА,

Иван Милуновић

Република Србија
МИНИСТАРСТВО ЗАШТИТЕ
ЖИВОТНЕ СРЕДИНЕ
Број: 011-00-00348/2018-03
Датум: 03.05.2018.
Београд

ЈП ПУТЕВИ СРБИЈЕ
Тим за имплементацију Пројекта
11 000 БЕОГРАД
Влајковићева 19а

Предмет: Допис у вези са захтевом

Министарству заштите животне средине обратили сте се Захтевом за давање мишљења о потреби израде студије о процени утицаја на животну средину пројекта појачаног одржавања државног пута IB21 (стара ознака пута R-117), деоница Ивањица-Сјеница L=23,036 км (Contact ID: RRSP/CS3-1/2016-11), заведен под бројем 011-00-00348/2018-03 од 27.04.2018.

У допису наводите да је пројекат обухваћен и интегралним "Пројектом рехабилитације путева и безбедности саобраћаја (Road Rehabilitation and Safety Projekt – RRSP)" који се финансира уз подршку међународних финансијских институција ради реализације програма који обухвата:

- Унапређење стања државне путне мреже кроз рехабилитацију око 1 100 км путева
- Подизање нивоа безбедности на путевима
- Јачање капацитетаи унапређење институционалне координације у области безбедности саобраћаја

Пројектним решењем је предвиђено ојачање постојеће коловозне конструкције на предметној деоници државног пута, уз задржавање постојећег габарита саобраћајног профила. Постојећа ширина коловоза износи 6,0 м. Додатно су и обухваћене мере на санацији система за одводњавање, као и сви елементи који продужавају трајност радова.

Уз Захтев је приложена и додатна документација:

- Правилник о ургентном одржавању државног пута („Сл. гласник РС" 74/2014 и 87/2014), којим су дефинисане врсте радова, технички услови и начин извођења радова;
- Графички прилози;
  -ортофото снимак
  -шематски приказ деонице предвиђене за рехабилитацију
  -ситуациони план
- Решење бр. 019-580/3 од 18.09.2017.и 2000/3 од 10.04.2018. које је издао Завод за заштиту природе Србије;
- Решење бр. 293/3 од 20.03.2018. које је издао Завод за заштиту споменика културе Краљево;
- Пуномоћје бр. 953-1827 од 23.01.2018. за JV BOTEK Bosphorus Tehnical Consulting Corp. & MHM –PROJEKT doo Novi Sad, које је издало ЈП ПУТЕВИ СРБИЈЕ;

На основу члана 4. ст. 1. и 3. Закона о процени утицаја на животну средину („Сл. гласник РС", 135/04 и 36/09) донета Уредба о утврђивању Листе пројеката за које је обавезна процена утицаја и Листе пројеката за које се може захтевати процена утицаја на животну средину („Сл. гласник РС", 114/08), којом су утврђени пројекти за које се обавезно израђује процена утицаја-Листа I и пројекти за које се процењује значајан или могућ утицај на животну средину-Листа II.

Пројекат ургентног одржавања, рехабилитације и отклањања оштећења на путевима не налази се на прописаним Листама и, сагласно томе, *носилац пројекта није у обавези* да уђе у процедуру процене утицаја, у складу са Законом о процени утицаја на животну средину („Сл. гласник РС" 135/04 и 36/09).

Носилац пројектаје у обавези да у потпуности испоштује услове и мишљења других надлежних органа издатих по другим законима, посебно имајући у виду да се предметна деоница налази у оквиру заштићеног подручја Специјални резерват природе "Увац", у режиму II степена заштите, као и у обухвату еколошке мреже-еколошки значајног подручја "Увац и Милешевка".

Помоћник министра
По решењу о овлашћењу
бр. 021-01-5/4/2017-09 од 11.12.2017.

Александар Весић

Доставити:
-наслову
-JV BOTEK Bosphorus Technical Consulting Corp,
211 000 Нови Сад, Јована Поповића 40
-архиви

Јавно водопривредно предузеће „Србијаводе" Београд
Водопривредни центар „Сава - Дунав"
11070 Нови Београд, Бродарска 3; www.srbijavode.rs, vpcsavadunav@srbijavode.rs;
Текући рачун: 200-2402180101045-97; ПИБ: 100283824; Матични број: 17117106;
Наменски рачун трезора: 840-78723-57; ЈБКЈС: 81448; Телефон: 011/201-81-00, 311-43-25;
Факс: 011/311-29-27

Број: 3843/1 Датум: 31 MAY 2018

АК

JV BOTEK Bosphorus Technical
Consulting Corp. & MHM-PROJEKT d.o.o.
Ул. Јована Поповића бр.40
21000 Нови Сад

ПРЕДМЕТ: Одговор на захтев за издавање пројектних услова за израду техничке документације за појачано одржавање државног пута IБ реда бр. 21, Ивањица-Сјеница L=23,036 km

Ваш број: MS/11-180418/1 од 18.04.2018. год.
Наш број: 3843 од 19.04.2018. год

Вашим захтевом обратили сте се ЈВП „Србијаводе", ВПЦ „Сава-Дунав" за издавање пројектних услова за израду техничке документације за појачано одржавање државног пута IБ реда бр. 21, Ивањица-Сјеница L=23,036 km.

Уз Захтев је достављена следећа документација:
- Пуномоћје издато од стране ЈП „Путеви Србије" под бр.953-1827 од 23.01.2018. године.
- Технички опис предвиђених радова;
- Прегледна ситуација.

Чланом 115. став 1 Закона о водама-ЗОВ („Сл. гласник РС" број 30/2010, 93/2012 и 101/2016) прописано је да се водни услови издају у поступку припреме техничке документације за изградњу нових и реконструкцију постојећих објеката.

Обзиром да се у предметном случају ради о појачаном одржавању јавног пута, а имајући у виду одредбе члана 59 . ***Закона о јавним путевима*** („Сл. гласник РС" број *101/2005, 123/2007, 101/2011, 93/2012 и104/2013*) и члана 115. став 1 ЗОВ-а, ***инвеститор није у обавези да за предметне радове прибавља водна акта.***

Планираном пројектном документацијом биће обухваћено проширење коловоза, решење раскрсница и прикључци, уређен приступ државном путу, решено кретање пешака, чиме ће се у многоме повећати безбедност свих учесника у саобраћају.

Постојећа ширина коловоза, без проширења, претежно износи око 6m. Планирани грађевински радови ће се превасходно односити на појачање постојеће коловозне конструкције, санацију постојећег система одводњавања коловоза и трупа пута и пројектовање свих елемената који продужавају трајност радова и унапређују систем безбедности саобраћаја.

Пројектом ће бити обухваћена израда нових решења постојећих раскрсница у нивоу и сагледане локације нових аутобуских стајалишта, у складу за захтевима локалног становништва и могућностима изградње.

Сви прикључци ће се уређивати. На атарским путевима пројектују се отресишта, док ће се код раскрсница са локалним путевима вршити уређење лепеза и отварање потребних берми прегледности.

На крају деонице, који карактерише пролазак кроз насеље, предвиђена је изградња тротоара. С обзиром на проблеме са ширином путном појаса на овом делу, тротоар ће се углавном налазити само са једне стране коловоза, мењајући их наизменично у зависности од датих околности на терену.

Обзиром на теренске услове у којима се пружа предметна траса, пројектом ће се посебно обратити пажња на унапређење постојећег система за одводњавање (израда ригола и отворених канала) и у складу са предвиђеним мерама дефинисати најповољнији реципијенти.

Одводњавање са коловоза у зони колизије пута са регистрованим водотоцима, у зони мостова преко Кладничке реке, на почетку деонице, и преко реке Вапе, пред крај предметне деонице, биће решено постављањем бетонских каналета у зони ножице насипа у коју ће се

сливати вода са коловоза преливањем преко "стабилизоване" банкине. Каналом ће се вода прикупљена са коловоза и мостова и доводити до система за пречишћавање који ће укључивати таложнике и сепараторе уља и масти који ће бити постављени пред изливом у реципијент, како би се прикупљене воде са коловоза и мостова третирале пре упуштања у рецепиент, а све у складу са условима Завода за заштиту природе Србије.

Ширине коловоза и стаза на мостовима (саобраћајни профил) остају непромењених димензија у односу на постојеће стање. За реконструкцију моста преко Кладничке реке тј. реке Вапе не предвиђају се радови из водотокова.

Деоница пута обухваћена техничком документацијом се укршта са реком Кладницом на km 292+810 и реком Вапом на km 305+350. Ови водотоци на предметним деоницама (у зони мостова) нису регулисани и нису обухваћени Оперативним планом за одбрану од поплава.

За предметне радове Инвеститор је у обавези да:

1. Уради техничку документацију за појачано одржавање предметног објекта у складу са важећим техничким прописима и нормативима, на основу пројектног задатка, од стране пројектног привредног друштва, односно другог правног лица или предузетника, регистрованих за израду техничке документације објеката ове врсте, у складу са одредбама Закона о планирању и изградњи ("Сл. гласник РС", број 72/2009, 81/2009 – испр., 64/2010 – одлука УС, 24/2011 и 121/2012,42/2013-одлука УС, 50/2013- одлука УС, 98/2013- одлука УС, 132/2014 и 145/2014) и Закона о водама („Сл. гласник РС“ број 30/2010,93/2012 и 101/2016).
2. Претходно извршити детаљно геодетско снимање и израдити геодетску подлогу (катастарско топографски план). На катастарско-топографском плану приказати тачан положај свих парцела.
3. Реши све имовинско правне односе везане за ангажовање земљишта.
4. У техничкој документацији да детаљан опис технологије извођења радова, предмер и предрачун радова као и све потребне графичке прилоге, при чему предметни радови несмеју угрозити водни режим у квантитативном и квалитативном смислу.
5. Радове изведе у свему према техничким прописима и нормативима за ову врсту радова у складу са одредбама Закона о планирању и изградњи ("Сл. гласник РС", број 72/2009, 81/2009 – испр., 64/2010 – одлука УС, 24/2011 и 121/2012,42/2013-одлука УС, 50/2013-одлука УС, 98/2013- одлука УС, 132/2014 и 145/2014) и Закона о водама („Сл. гласник РС“ број 30/2010,93/2012 и 101/2016).
6. Изврши рачунску контролу пропусне моћи ових објеката. Приликом рехабилитације не сме вршити смањење светлог отвора мостова и пропуста.
7. Благовремено писменим путем о почетку извођења радова обавести ЈВП "Србијаводе" – ВПЦ "Сава-Дунав" ради контроле радова и њиховог утицаја на режим вода.
8. Радове изводи уз стручни надзор (према одредбама Закона о планирању и изградњи).
9. Одвијање радова прилагоди хидролошком периоду ниских водостаја.
10. По завршетку радова уклонити сав материјал и опрему који су коришћени приликом извођења радова.
11. Све евентуално настале штете, као последице изведених радова надокнади, а њихове узроке отклони о свом трошку у најкраћем року.
12. За време извођења радова не сме се угрозити вршење одбране од поплава.

РУКОВОДИЛАЦ
ВПЦ „САВА-ДУНАВ“
Душан Павић, дипл. инж.

Доставити:
- Наслову ,
- Одељењу за коришћење и газдовање водама (x2),
- Архиви .