

Państwowe Gospodarstwo Wodne Wody Polskie [State Water Holding Polish Waters]

*Regionalny Zarząd Gospodarki Wodnej we Wrocławiu
[Regional Water Management Authority in Wrocław]*

ANNEXE TO THE ENVIRONMENTAL MANAGEMENT PLAN

DRAFT

ODRA-VISTULA FLOOD MANAGEMENT PROJECT - 8524 PI

Environmental category B – pursuant to OP 4.01 BŚ

Component 2:

Flood protection for Kłodzka Valley

Contract for works 2A.1:

Construction of “Boboszew” - a dry flood control reservoir on Nysa Kłodzka River and construction of “Roztoki Bystrzyckie” - a dry flood control reservoir on Goworówka Stream

Task 2A.1/2:

Construction of Roztoki Bystrzyckie - a dry flood control reservoir on Goworówka stream

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ENVIRONMENTAL MANAGEMENT PLAN

Component: *2 - Flood protection for Kotlina Kłodzka*

Sub-component: *2A – Active protection*

Contract: *2A.1 - 2A.1 - Construction of "Boboszew" - a dry flood control reservoir on Nysa Kłodzka River and construction of "Roztoki Bystrzyckie" - a dry flood control reservoir on Goworówka Stream*

Part of the Contract: *Implementation 2A.1/2 task - Construction of Roztoki Bystrzyckie — a dry flood control reservoir on Goworówka stream*

Project Implementation Unit:

Państwowe Gospodarstwo Wodne Wody Polskie [State Water Holding Polish Waters]

Regionalny Zarząd Gospodarki Wodnej we Wrocławiu [Regional Water Management Authority in Wrocław]

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Wrocław, February 2020

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1. INTRODUCTION

Characteristics of the works involving renovation of the first section of 3233D county road at km 0+000 – 0+249

One of the elements involving 2A.1/2 Contract for works implementation is relocation of 3233D county road section along 1.24 km length outside the dry flood control reservoir basin in Roztoki. As far as the initial 0.25 km long road section is concerned, the scope of works only involved the road widening to 5 m and making 0.75 m wide shoulders using so-called lane closure method. At the same time the provisions stipulated in the insofar EMP oblige the Contractor to maintain/keep a continuous road connection between Roztoki Bystrzyckie and Gajnik.

This initial 3233D county road section at km 0+000 – 0+249 is, for the construction works period, a part of the main transport route for construction materials. Owing to a damage risk involving the section, its renovation has been planned in this period.

Owing to the trees growing along the road shoulders, it is not possible to proceed with the planned widening of the roadway, making shoulders and, at the same time, leaving all of the trees located along the road shoulders at this section. Thus, in order to minimise the number of trees that will be felled along the county road section, an alternative solution has been adopted, i.e. temporary closure of the road section subject to renovation and providing a diversion from Gajnik through the DK 33 national road to Roztoki.

The renovation technology for the initial road section requires temporary total closure of the initial county road section and thus setting a diversion for passenger vehicles, lorries and buses, in order to maintain the road connection between Roztoki and Gajnik during the period. The diversion will be routed through the county roads and DK 33, in accordance with Fig. 1. Detailed solutions concerning the diversion route will be provided in the *Temporary traffic organization* design that needs to be approved by the roads administrator.

Works execution, owing to small traffic intensity (the road is for local traffic only), should not have a negative impact on the traffic flow along the diversion route.

All works described in this chapter will be executed by the insofar Contractor implementing 2A.1/2 Contract. However, owing to the necessity of implementing modifications in the wording of some mitigating activities, which refer to the works on the 3233D county road, it is necessary to make changes in the currently binding EMP. The annexe contains and orders the necessary supplements, which, when proceeded in accordance with the Bank's requirements, will become for the Parties the Contract conditions for the works execution along the described road section.

Location

The road section Roztoki – Gajnik within the works area is located within the county road No. 3233D, running from DK (national road) 33 and Roztoki through Gajnik, Michałowice and, again, to the DK 33. The entire road section is located in Klodzko Powiat, Lower Silesia Province (see: Fig. 1).

The diversion route for the temporarily close section of 3233D road will run through: Gajnik – Michałowice – Goworów – DK 33 – Roztoki (Fig. 2). The planned renovation of the initial county road section will take up to two months. The administrator of the 3233D road section under repair, as well as the section within which diversion will be provided, is County Roads Management Authority [Zarząd

Dróg Powiatowych] in Klodzko and this is the administrative authority with whom the traffic organization plan will be agreed upon.

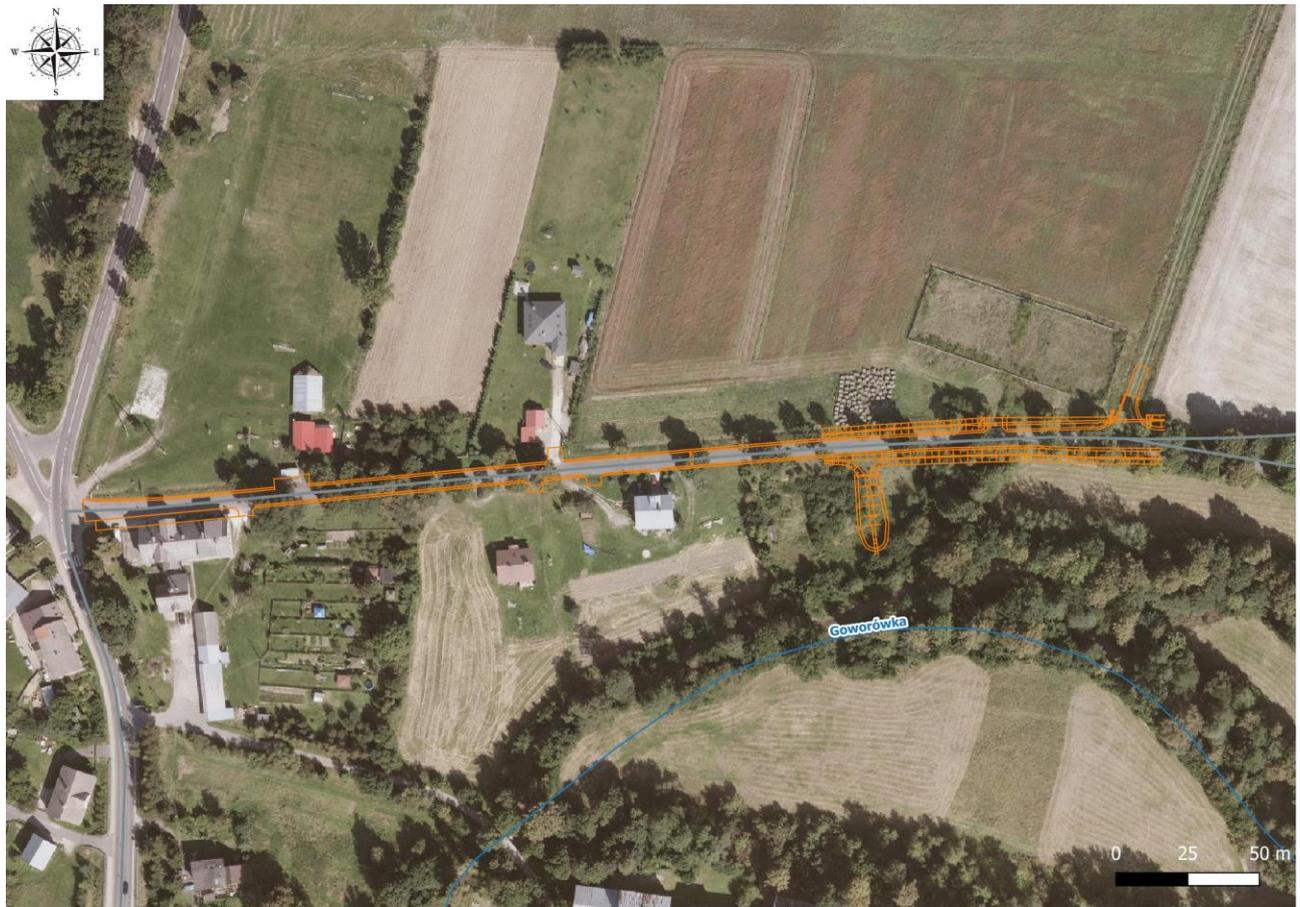


Fig. 1 Planned 3233D county road section to be renovated, length 0.25 km

2. ENVIRONMENTAL CONDITIONS FOR THE IMPLEMENTATION

The planned changes pertaining to renovation of the 3233D county road section result from the need of maintaining the highest possible number of trees growing along the road shoulders. Therefore the temporarily set diversion of the county road section will have a positive impact on the local biodiversity and landscape values (by maintaining the majority of 70-80 years old trees forming the avenue). The trees species present within the avenue are: *Acer platanoides*, sycamore *Acer pseudoplatanus*, large-leaved linden *Tilia platyphyllos*, small-leaved linden *Tilia cordata*.

Following the trees survey carried out by an expert dendrologist along the 3233D county road section, along with its condition assessment, 6 trees have been qualified for felling. The trees' location in relation to the road shows a significant part of the root system is within the road while the other part of the system has been limited by the ditch or fencing. The trees' crowns are of asymmetric shape. The required works involving renovation of the road section will result in the necessity of removing a significant part of the trees' root system. Thus, if left, the trees would constitute a safety hazard and impair the road's technical condition (as a result of greatly disturbed dendrometric parameters). When analysing the aforelisted circumstances, removal of the selected 6 trees is recommended. The trees classified for felling include the following species: large-leaved linden (4 pcs.) (IUCN endangered status: LC¹) (*Acer platanoides* (2 pcs.) (IUCN endangered status: LC²)) (location of the trees is specified in Fig. 3).

Felling of 6 trees does not cause a negative impact on the local natural conditions, biodiversity and landscape values. Along the entire county road section, translocated outside the reservoir basin, new plantings of trees and bushes will be provided and they effectively make up for felling of trees within the neighbouring initial section of the road.

Temporary closure of the county road section and setting the diversion will cause elongation (by approx. 8 km) of the distance and travelling time for Gajnik inhabitants towards Klodzko and Roztoki. Lengthened travel time during the renovation period will also include the inhabitants of Roztoki, who will be travelling to Gajnik along the specified diversion - though Nagodzice and Michałowice (route extended by approx. 7 km).

Local traffic difficulties will last approx. 2 months (this is the assumed works execution period, taking into account the short section covered by renovation as well as full equipment and staff mobilization of 2A.1/2 Contractor). The road renovation and setting the diversion is planned for the holiday period, i.e. July and August, so that to minimise the local traffic inconvenience, including school transport for the teenagers.

¹ Khela, S. 2013. *Tilia platyphyllos* (errata version published in 2017). *The IUCN Red List of Threatened Species* 2013: e.T203361A119230833. <https://dx.doi.org/10.2305/IUCN.UK.2013-2.RLTS.T203361A2764367.en>. Downloaded on 13 February 2020.

² Crowley, D. & Barstow, M. 2017. *Acer platanoides*. *The IUCN Red List of Threatened Species* 2017: e.T193853A2286184. <https://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T193853A2286184.en>. Downloaded on 13 February 2020

3. MITIGATING AND MONITORING ACTIVITIES

The works Contractor is obliged to exercise all measures that might be adequate for the type of the performed works, conditions of works execution defined in appendices to EMP for 2A.1/2 Contract: Appendix 1 Mitigation and monitoring activities plan, Appendix 2 Plan for monitoring activities.

Should such need be determined at the works execution stage, any required administrative decisions shall be obtained by the Contractor.

For the works execution purposes involving renovation of the county road section the following EMP conditions stipulated in App. 1 and 2 need to be modified:

- **item 3 Maintaining the road connection between Roztoki Bystrzyckie and Gajnik**

[insofar text]

During the entire construction period direct road connection between Roztoki Bystrzyckie and Gajnik needs to be provided (within the county road 3233D, along the section subject to relocation in connection with the reservoir construction), available for passenger cars, lorries and buses. An optimum solution would be to construct a new 3233D county road section prior to commencing with the works stage that requires closure and liquidation of the insofar section of the road).

[after modification]

During the construction period direct road connection between Roztoki Bystrzyckie and Gajnik needs to be provided (within the county road 3233D, along the section subject to relocation in connection with the reservoir construction), available for passenger cars, lorries and buses.

For the works period involving renovation of the existing 3233D county road section at km 0+000 – 0+249 it is possible to exclude the road section from vehicular traffic, however it is necessary to set and properly mark the diversion route from Gajnik to Roztoki. For the diversion route the Contractor is obliged to develop, agree upon and obtain an approval from the roads administrators for the *Temporary traffic organization* design

The assumed optimum solution is to construct a new 3233D county road section prior to commencing with the works stage that requires closure and liquidation of the insofar section of the road).

- **item 17 Completion of the works involving felling of trees and shrubs**

[insofar text]

The entire works related to felling of trees and shrubs, on the *Task implementation area* (along with stubbing of root and timber transportation) should be carried out during the first 12 months since beginning the Contract: part involving the Task implementation (following the deadlines referred to in item 13, 16 and 24).

[after modification]

The entire works related to felling of trees and shrubs, on the *Task implementation area* (along with stubbing of root and timber transportation) should be carried out during the first 12 months since beginning the Contract: part involving the Task implementation (following the deadlines referred to in item 13, 16 and 24).

Felling of trees related to renovation of the 3233D county road section at 0+000 – 0+249 should be carried out during the Task implementation period.

- **item 20 Maintaining the land level in direct vicinity of the tree trunks**

[insofar text]

If earthworks are performed within direct vicinity of the trees, they should be carried out in such a way as not to change the land level within at least 1.5-2.0 m radius from the trunk.

Possible land level difference further from the trunk should be protected with a retaining wall or reinforced slope of a greater inclination.

[after modification]

If earthworks are performed within direct vicinity of the trees, they should be carried out in such a way as not to change the land level within at least 1.5-2.0 m radius from the trunk.

Possible land level difference further from the trunk should be protected with a retaining wall or reinforced slope of a greater inclination. For the works involving renovation of the 3233D county road section at km 0+000 – 0+249 works changing the land level are allowed within a distance of less than 1.5-2.0 m from the trunk.

4. PUBLIC CONSULTATIONS

The chapter will be supplemented once the public consultations are over. The public consultations process will be carried out analogically to other EMPs and the document will be made public for all the interested parties. An open informative meeting will also take place.



Fig. 2 Layout of temporary traffic organization for the renovation period of the 3233D county road section is executed.

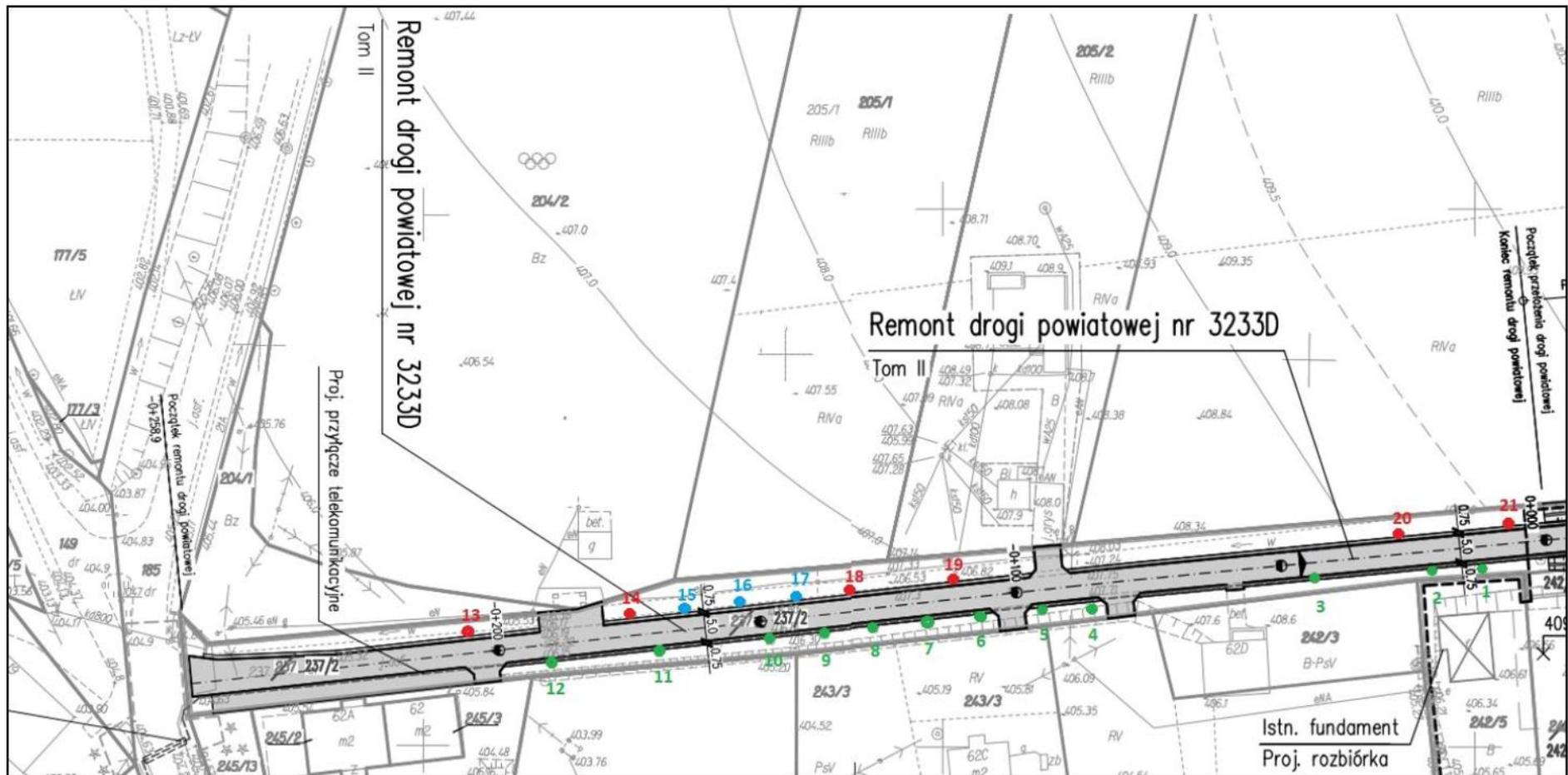


Fig. 3 Trees present along the 3233D county road section under renovation. Green colour means the trees to remain, red - the ones classified for felling, blue - tree trunks. (specimen cut within the works not related to the 2A.1/2 Contract execution).