

Works on arrangement of left bank of the Navigable Begej canal from km 26+500 to km 26+720 in Zrenjanin - II phase

1. INTRODUCTION

II Phase of the Works on arrangement of left bank of the Navigable Begej canal from km 26+500 to km 26+720 in Zrenjanin represent continuation of works on sludge removal completion within the turning platform in order to make it fully operational and thus enable navigation during minimum water levels.

Phase 1 included reed removal throughout the entire section as well as sludge removal in accordance with the designed stream bed at different levels and bank stabilization construction in order to enable construction of the floating dock. Sludge removal has been performed at the surrounding bank stabilization up to the slope at 71.50 masl and the remaining section of the turning platform is located within the slopes at 72.30 and 72.70 masl.

Works planned for II Phase would cover sludge removal for the stream bed designed at 71.50 masl.

2. DESIGN BASES

Conducted for the needs of design was the geodetic surveying of cross sections of the canal bed and banks on every 25 m, on the Navigable Begej canal, at chainage from km 26+500 to km 26+720.

The geodetic survey is submitted within the graphical part of the project.

3. DESCRIPTION OF WORKS

Technology of works represents a combination land and aquatic machinery. Amphibious dredgers and floating machines would be used for works performed at the bank stabilization. They would transport the removed material to the disposal point where all works would be performed by using land machinery.

Sludge removal is performed by excavation in order to reach the slope designed at 71.50 masl by using hydraulic dredgers with amphibious crawlers and direct loading. The material is loaded into the specified loading space of the adequate floating machine which then provides transport to the disposal point at maximum 2 km distance which already includes the reloading plateau constructed in Phase 1 of this project. Total amount of sludge for removal is approximately 11,500.00 m³.

Sludge disposed at the reloading plateau is transferred from the floating vehicle to a tipper truck by using land hydraulic dredgers with 15 m reach excavator. Tipper trucks would use the downward ramps and access roads constructed in Phase 1 to transport the removed sludge to the disposal point where the material is unloaded and left to dry out. After the material has dried out, it would be spread within the spoil bank. That would be the last activity which would mark completion of works on sludge removal from the turning platform planned by this project.

4. CONCLUSION

Riverbank landscape works and the construction of a floating structure - dock for the needs of recreational vessels would achieve primarily the beginning of implementation of tourist potential of DTD Hydro system, as well as a life-long wish and intention of the citizens of Zrenjanin to turn to the canal and continue the long-standing regional cooperation with Romania.

The technology of works and technical solutions applied are the common ones and mainly belong to regular maintenance works ("Technical documentation for regulation canal bank and installation of the floating dock on Canal Begej in Zrenjanin, Vojvodinaprojekt AD Novi Sad, 2018.")