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GEOCONSTRUCT LTD.

telephone: 0899 822 691, fax: 02/416 53 02

Translation from Bulgarian

address: 19 Zholio Kyuri str., fl. 6, ap. 10

e-mail: office@geoconstruct-bg.com

WORKING DESIGN

Amendment under Art. 154 according to the Spatial Development Act

SITE: "INCREASING THE HYDRAULIC CONDUCTIVITY OF R.
TSAPAREVSKA ON THE TERRITORY OF THE VILLAGE OF MIKREVO,
TOTAL. FLOWED BY INNOVATIVE METHODS FOR WATER
MANAGEMENT (GEOCELLS) "

ASSIGNOR: MUNICIPALITY OF STRUMYANI

CONTRACTOR: GEOCONSTRUKT LTD.

PART: GEODESY

Manager:

Nikolay Mihaylov

Designers:

eng. Tatyana Kukumisheva

2019



SITE: INCREASE OF THE HYDRAULIC CONDUCTIVITY OF THE R. TSAPAREVSKA ON THE TERRITORY OF THE VILLAGE OF MIKREVO, TOTAL. FLOWED BY INNOVATIVE METHODS FOR WATER MANAGEMENT (GEOCELLS) "

Phase: WD, Amendment under Art. 154 according to the Spatial Development Act

Part: GEODESY

1. Introduction

The site was assigned in order to increase the hydraulic conductivity of the Tsaparevska River in the village of Mikrevo. For the needs of the design, a detailed tachymetric photograph of the riverbed, the two banks and the facilities along the considered section was provided by the Assignor. It has been revised and evaluated through field activities to assess its applicability to date.

2. Geodetic working network

For geodetic working basis, on the provided geodetic surveys, during the implementation of the site working points WP №№ 151, 153, 161 of the geodetic network with local purpose of the village of Mikrevo were used. An additional polygon network has been developed for the purpose of detailed survey of the site. Trigonometric leveling was used to determine the altitudes of the points. Angular and longitudinal measurements were performed with a Leica-WILD-TCR 303 total station with a direct reading accuracy of 2 cc. Geodetic coordinates X and Y in the 1970 coordinate system and H altitudes in the Baltic Altitude System were used in the site documentation.

3. Geodetic survey

The survey works for the geodetic data provided by the Assignor were performed by the polar method with the same total station. The captured points are defined both horizontally and in height. In connection with the purpose of the photo, objects on the territory are photographed in detail - bridges, fences, electric poles. The attached geodetic photograph is in M 1: 1000. In order to accurately determine the excavation - embankment works on the retaining walls, 59 transverse profiles are situated, which are shown in the situation. A longitudinal profile of the river for the section under consideration has also been prepared. When performing all measurements and processing the results from them, the requirements for elaboration and maintenance of cadastral plans, as well as the respective requirements of the Instruction for elaboration, maintenance and updating of leveling plans have been observed.

Compiled by:

Eng. Tatyana Kukumisheva

